

**Data Report on the Acid Deposition in the East Asian Region**

**2004**

**September 2005**

**Network Center for EANET**

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## **1.Introduction**

The East Asian region faces increasing risks of problems related to excessive deposition of acidic substances as a result of enforced industrialization for last decades. At this background the First Session of the Intergovernmental Meeting on the Acid Deposition Monitoring Network in East Asia (EANET) was held in March 1998 with remarkable decision to start the preparatory-phase activities of the Network on an interim basis from 1998. During this preparatory-phase participating countries had launched the monitoring of acid deposition as well as the ecological impact monitoring. The main technical documents were prepared to conduct continuous monitoring as well as some proposals were carried out to enhance the results at the common level. The Second Session of the Intergovernmental Meeting held in October 2000 concluded that the preparatory-phase activities had been successful, and the participating countries had developed the basis to start regular monitoring using their experiences obtained through preparatory-phase activities from 1998 to 2000. And it was decided that the participating countries would cooperatively start the activities of EANET on the regular basis from January 2001.

Acid deposition monitoring of EANET covers four environmental items – wet deposition, dry deposition (started as air concentration monitoring), soil and vegetation, and inland aquatic environment. Monitoring of wet and dry deposition has been implemented in order to observe concentrations and to evaluate fluxes of acidic substances onto the land surface, while monitoring for soil/vegetation and inland aquatic environment was put into action to assess adverse impacts on terrestrial and aquatic ecosystems. These monitoring data will be utilized to evaluate the state of acid deposition as well as impacts on ecosystems.

The participating countries were requested to submit their data and related information obtained through the monitoring activities of EANET for the calendar year 2004 to the Network Center (NC) by 30 April 2005 based on the “Work program and Budget for EANET in 2005” adopted at the Sixth Session of the Intergovernmental Meeting. NC had prepared a draft Data Report on the Acid Deposition Monitoring Network in East Asian Region 2004 with data from the participating countries by the Fifth Session of Scientific Advisory Committee (SAC5) held in September 2005 in Niigata, Japan. The draft Data Report was considered at SAC5 by the experts from participating countries. Following the comments and guidance at SAC5, NC has elaborated and finalized the report.

This report presents the EANET monitoring data in 2004 as the fourth one based on the regular-phase activities of EANET.

## **2. Network Description**

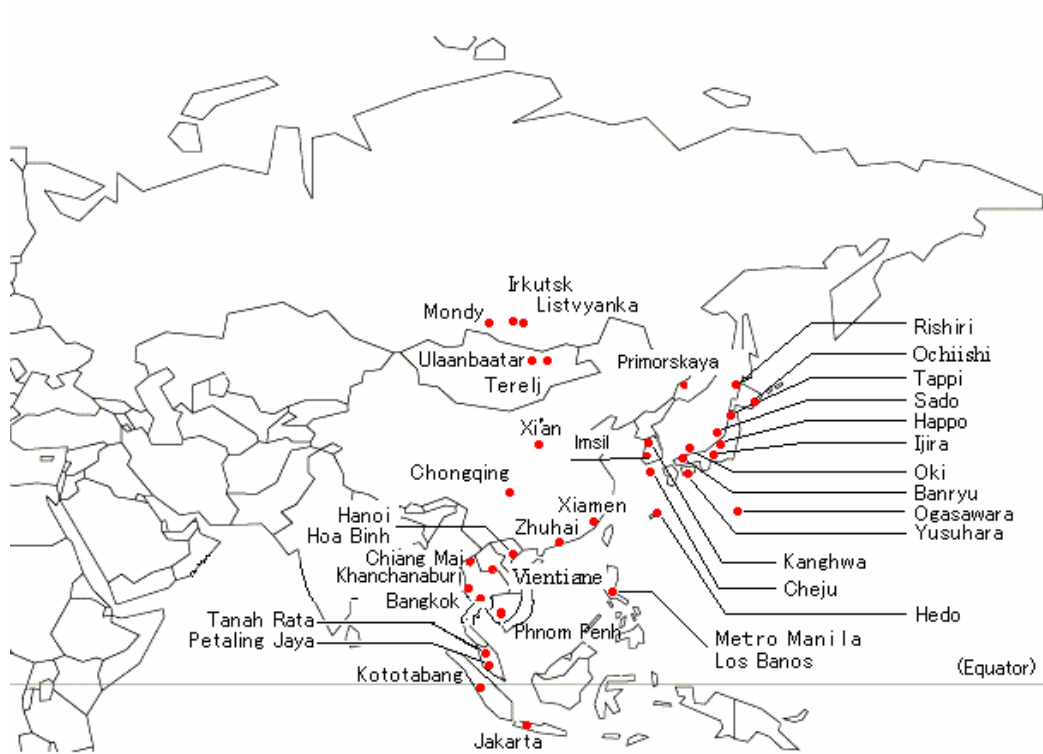
Twelve countries conducted a regular monitoring of the regular-phase activities of EANET during 2004, namely, China, Japan, Mongolia, Republic of Korea and Russian Federation of the North-East Asian region, and Cambodia, Indonesia, Malaysia, Lao PDR, Philippines, Thailand and Vietnam of the South-East Asian region. EANET monitoring sites were

classified into two categories under their purposes: Acid Deposition Monitoring Site and Ecological Survey Site, with criteria presented in [Table 2.1](#). The list of Acid deposition monitoring sites in 2004 is presented in [Table 2.2](#) and their locations are indicated at [Fig.2.1](#). Forty-six EANET monitoring sites are located within a vast area of East Asia between 51° N to 6°S across twelve participating countries, including 17 “remote”, 12 “rural”, and 17 “urban” sites. As described in [Table 2.3](#), wet deposition monitoring was conducted at 46 sites. The equipment for filter pack measurements of pollutant concentrations for dry deposition monitoring were in operation at 30 sites. Automatic or manual gas monitor for NO<sub>x</sub> and SO<sub>2</sub> were operated at 22 sites, and 17 sites were equipped with monitor for ozone concentration measurement. Concentrations of particulate matter as PM<sub>10</sub> were measured by automatic or manual instruments at the 20 sites. Meteorological conditions such as wind speed, wind direction, air temperature, relative humidity, and solar radiation were measured by equipments installed at the sites or nearby at the meteorological observatories. Ecological survey sites established for soil and vegetation monitoring and inland aquatic monitoring are basically located in the vicinity of the Acid Deposition Monitoring Site. Information on the ecological survey sites is

**Table 2.1. Classification of Monitoring Sites**

Site Category	Site Classification	Main Purpose and Siting Criteria
<b>Acid Deposition Monitoring Site</b> for wet deposition and dry deposition monitoring	Urban Site	<ul style="list-style-type: none"> <li>- Assessment of the state of acid deposition in urban areas</li> <li>- Urbanized and industrial areas, and the areas immediately outside the urban area</li> <li>- Data can be used for evaluation of acid deposition effect on buildings and historical monuments or human health</li> </ul>
	Rural Site	<ul style="list-style-type: none"> <li>- Assessment of the state of acid deposition in rural areas and/or hinterlands</li> <li>- Data can be used for the evaluation of acid deposition on agricultural crops, forests and etc.</li> <li>- More than 20km apart from large pollution sources like cities, power plants and highways</li> </ul>
	Remote Site	<ul style="list-style-type: none"> <li>- Assessment of the state of acid deposition in background areas</li> <li>- Data can be used for evaluation of long-range transport and deposition models</li> <li>- More than 50km apart from large pollution sources like cities, power plants and highways</li> <li>- More than 500m apart from main roads (more than 500 vehicles per day)</li> </ul>
<b>Ecological Survey Site</b> for soil and vegetation monitoring and Inland aquatic monitoring	Basic survey site	<ul style="list-style-type: none"> <li>- Accumulation of basic data on soil, forest, and inland aquatic environment and disclose trends in their properties</li> <li>- In the vicinity of the acid deposition monitoring site</li> </ul>
	Ecosystem analysis site	<ul style="list-style-type: none"> <li>- Assessment of acid deposition impacts on whole ecosystem through application of terrestrial ecosystem analysis and/or catchment analysis</li> <li>- Area which is sensitive to changes in atmospheric acidity and ecologically conserved area</li> </ul>

presented further in the chapter 5 and 6.



**Fig. 2.1 Locations of EANET Sites in 2004**

(Note: “Xi’an” includes 3 sites, and “Chongqing”, “Xiamen”, “Zhuhai” includes 2 sites, respectively. “Jakarta” includes also nearby “Serpong” and “Bandung” sites, and “Bangkok” includes also nearby “Samutprakarn” and “Patumthan” sites. “Metro Manila”/“Los Banos” and “Hanoi”/“Hoa Binh” are described as one point, respectively due to map scale. Khao Lam Dam and Vachiralongkorn Dam (of earlier Data Reports 2000-2003) was renamed into Khanchanaburi and also Mae Hia was renamed into Chiang Mai in 2004.)

**Table 2.2 Profile of Wet and Dry Deposition (Air Concentration) Monitoring Sites**

Country	Name of sites	Characteristics of sites	Latitude	Longitude	Height above sea
Cambodia	Phnom Penh	Urban	11° 33' N	104° 50' E	10m
China	Chongqing-Guanyinqiao	Urban	29° 34' N	106° 31' E	262m
	- Jinyunshan	Rural	29° 49' N	106° 22' E	800m
	Xi'an - Shizhan	Urban	34° 14' N	108° 57' E	400m
	- Weishuiyuan	Rural	34° 22' N	108° 51' E	366m
	- Jiwozi	Remote	33° 50' N	108° 48' E	1,800m
	Xiamen -Hongwen	Urban	24° 28' N	118° 08' E	50m
	- Xiaoping	Remote	24° 51' N	118° 02' E	686m
Zhuhai - Xiang Zhou	Urban	22° 16' N	113° 34' E	40m	
- Zhuxian Cavern	Urban	22° 12' N	113° 31' E	45m	
Indonesia	Jakarta	Urban	6° 11' S	106° 50' E	7m
	Serpong	Rural	6° 15' S	106° 34' E	46m
	Kototabang	Remote	0° 12' S	100° 19' E	864m
	Bandung	Urban	6° 54' S	107° 35' E	743m
Japan	Rishiri	Remote	45° 07' N	141° 12' E	40m
	Ochiishi	Remote	43° 09' N	145° 30' E	49m
	Tappi	Remote	41° 15' N	140° 21' E	105m
	Ogasawara	Remote	27° 05' N	142° 13' E	230m
	Sado-seki	Remote	38° 14' N	138° 24' E	136m
	Happo	Remote	36° 42' N	137° 48' E	1,850m
	Oki	Remote	36° 17' N	133° 11' E	90m
	Yusuhara	Remote	33° 22' N	132° 56' E	790m
	Hedo	Remote	26° 52' N	128° 15' E	60m
	Ijira	Rural	35° 34' N	136° 41' E	140m
Banryu	Urban	34° 41' N	131° 48' E	53m	
Lao PDR	Vientiane	Urban	17° N	102° E	
Malaysia	Petaling Jaya	Urban	03° 06' N	101° 39' E	87m
	Tanah Rata	Remote	04° 28' N	101° 23' E	1,470m
Mongolia	Ulaanbaatar	Urban	47° 54' N	106° 49' E	1,282m
	Terelj	Remote	47° 59' N	107° 29' E	1,540m
Philippines	Metro Manila	Urban	14° 38' N	121° 04' E	54m
	Los Banos	Rural	14° 11' N	121° 15' E	35m
Republic of Korea	Kanghwa	Rural	37° 42' N	126° 17' E	150m
	Cheju(Kosan)	Remote	33° 18' N	126° 10' E	72m
	Imsil	Rural	35° 36' N	127° 11' E	
Russia	Mondy	Remote	51° 40' N	101° 0' E	2,000m
	Listvyanka	Rural	51° 51' N	104° 54' E	700m
	Irkutsk	Urban	52° 14' N	104° 15' E	400m
	Primorskaya	Rural	43° 42' N	132° 07' E	84m
Thailand	Bangkok	Urban	13° 46' N	100° 32' E	2m
	Samutprakarn	Urban	13° 44' N	100° 34' E	2m
	Patumthani	Rural	14° 02' N	100° 46' E	2m
	Khanchanaburi	Remote	14° 46' N	98° 35' E	170m
	(Vachiralongkorn Dam) Chiang Mai(Mae Hia)	Rural	18° 46' N	98° 56' E	350m
Vietnam	Hanoi	Urban	21° 01' N	105° 51' E	5m
	Hoa Binh	Rural	20° 49' N	105° 20' E	23m

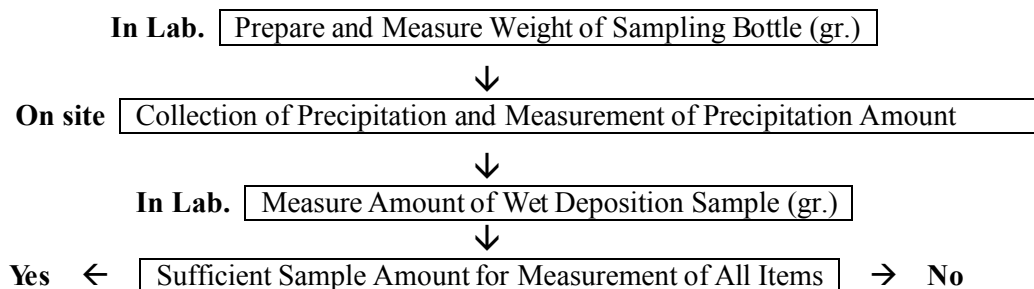
**Table 2.3 Outline of Wet and Dry Deposition (Air Concentration) Monitoring**

Country	Name of sites	Characteristics of sites	Wet Dep.	Dry Dep.			
				Automatic			Filter Pack
				SO <sub>2</sub> NO <sub>x</sub>	O <sub>3</sub>	PM	
Cambodia	Phnom Penh	Urban	✓	None	None	None	None
China	Chongqing-Guanyinqiao	Urban	✓	None	None	None	None
	- Jinyunshan	Rural	✓	✓	None	✓	None
	Xi'an - Shizhan	Urban	✓	None	None	None	None
	- Weishuiyuan	Rural	✓	✓	None	✓	None
	- Jiwozi	Remote	✓	None	None	None	None
	Xiamen -Hongwen	Urban	✓	✓	None	✓	None
	- Xiaoping	Remote	✓	None	None	None	None
	Zhuhai - Xiang Zhou	Urban	✓	✓	None	✓	None
- Zhuxiandong	Urban	✓	None	None	None	None	
Indonesia	Jakarta	Urban	✓	None	None	None	None
	Serpong	Rural	✓	None	None	None	✓
	Kototabang	Remote	✓	None	None	None	None
	Bandung	Urban	✓	None	None	None	None
Japan	Rishiri	Remote	✓	✓	✓	✓	✓
	Ochiishi	Remote	✓	None	None	None	None
	Tappi	Remote	✓	✓	✓	✓	✓
	Ogasawara	Remote	✓	✓	✓	✓	✓
	Sado-seki	Remote	✓	✓	✓	✓	✓
	Happo	Remote	✓	✓	✓	✓	✓
	Oki	Remote	✓	✓	✓	✓	✓
	Yusuhara	Remote	✓	✓	✓	✓	✓
	Hedo	Remote	✓	✓	✓	✓	✓
	Ijira	Rural	✓	✓	✓	✓	✓
	Banryu	Urban	✓	✓	✓	✓	✓
Lao PDR	Vientiane	Urban	✓	None	None	None	None
Malaysia	Petaling Jaya	Urban	✓	None	None	None	✓
	Tanah Rata	Remote	✓	None	None	None	✓
Mongolia	Ulaanbaatar	Urban	✓	None	None	None	✓
	Terelj	Remote	✓	None	None	None	✓
Philippines	Metro Manila	Urban	✓	None	None	None	✓
	Los Banos	Rural	✓	None	None	None	✓
Republic of Korea	Kanghwa	Rural	✓	✓	✓	✓	✓
	Cheju(Kosan)	Remote	✓	✓	✓	✓	✓
	Imsil	Rural	✓	✓	✓	✓	✓
Russia	Mondy	Remote	✓	None	✓	None	✓
	Listvyanka	Rural	✓	None	None	None	✓
	Irkutsk	Urban	✓	None	None	None	✓
	Primorskaya	Rural	✓	None	None	None	✓
Thailand	Bangkok	Urban	✓	✓	None	✓	✓
	Samutprakarn	Urban	✓	✓	✓	None	None
	Patumthani	Rural	✓	None	None	None	✓
	Khanchanaburi	Remote	✓	✓	✓	✓	✓
	(Vachiralongkorn Dam) Chiang Mai(Mae Hia)	Rural	✓	✓	✓	✓	✓
Vietnam	Hanoi	Urban	✓	None	None	None	✓
	Hoa Binh	Rural	✓	None	None	None	✓

### 3. Wet Deposition Monitoring

#### 3.1 Method

To obtain the equivalent quality of monitoring data, each participating country carries out acid deposition monitoring fundamentally by common methodologies specified in the “Technical Documents for Wet deposition Monitoring in East Asia” adopted at The Second Interim Scientific Advisory group Meeting in March 2000. An example of the flow chart that was carried out by participating countries is described in [Fig.3.1](#).



**Fig. 3.1** Flow chart of sampling and chemical analysis of wet deposition

#### 1) Field Operation

Most of the participating countries use the wet-only sampler designed to collect precipitation samples during the period of rainfall only by installing the precipitation sensor and motor-driven tightfitting lid to cover a collecting bucket or funnel. The wet-only sampler is a recommended method for sampling of precipitation. However, a manual sampler is installed at some sites with collection of rainwater by manual operation. Precipitation samples are collected on a daily basis at 30 sites of 46, while weekly collecting is performed at 11 sites and samples of every precipitation events are taken at other 5 sites, as presented in [Table 3.1](#). For wet deposition samples collected in a tropical region, a preservation of samples from microbial decomposition should be considered. Biocides such as Thymol are added for that purpose when a refrigerator is not available during sampling, shipping and storage periods. On the other hand, sampling of wet deposition in the higher latitude region such as Mongolia and Russia during winter seasons faces difficulties because of low air temperature has falling sometimes below minus 10 to 20°C. Collected samples without biocides were shipped to laboratories in charge of chemical analysis by cooling box to keep the sample temperature low enough to preserve the sample chemistry.

#### 2) Laboratory Operation

Procedures suggested for rainwater major constituent analysis by the manual are shown in [Table 3.2](#). Ion Chromatography is a major analytical method adopted by the participating countries for chemical analysis of both anions and cations contained in precipitation samples ([Table 3.3](#)). Atomic Absorption Spectrometry for Na<sup>+</sup>, K<sup>+</sup>, Ca<sup>2+</sup>, and Mg<sup>2+</sup>, and Spectrophotometry for NH<sub>4</sub><sup>+</sup> are also useful tools for the determination of these cations.

However, some countries have to solve a problem of poor detection limit because of they use traditional methods with not enough analytical sensitivity, such as titration ones.

### **3) Data Management**

Analytical data of precipitation samples were submitted from the participating laboratories to the National Centers. Then each National Center submitted the data to the Network Center. All the data were checked using ion balance and conductivity agreement by calculating ion balance ( $R_1$ ) and conductivity agreement ( $R_2$ ). If a sample or individual datum has problems including “insufficient sample volume” or “low precision”, the flags corresponding to the problems were attached to the data. Details of data management are described in the “Quality Assurance/Quality Control (QA/QC) Program for Wet Deposition Monitoring in East Asia” adopted at the Second Interim Scientific Advisory group Meeting in March 2000.

### **4) Meteorological Measurement**

Wind direction/speed, temperature, humidity, precipitation amount and solar radiation in relation to wet deposition should be measured at the nearest meteorological station in accordance with the measurement frequencies and methods of the meteorological monitoring system of each country.

**Table 3.1 Sampling Method for Wet Deposition Monitoring**

Country	Name of sites	Characteristics of sites	Sampling Interval	Starting Month
Cambodia	Phnom Penh	Urban	Weekly	April '04
China	Guanyinqiao (Chongqing)	Urban	Daily	April '99
	Jinyunshan (Chongqing)	Rural	Daily	April '99
	Shizhan (Xi'an)	Urban	Daily	April '99
	Weishuiyuan (Xi'an)	Rural	Daily	April '99
	Jiwozi (Xi'an)	Remote	Daily	April '99
	Hongwen (Xiamen)	Urban	Daily	April '99
	Xiaoping (Xiamen)	Remote	Daily	April '99
	Xiang Zhou (Zhuhai)	Urban	Daily	April '99
	Zhuxian Cavern (Zhuhai)	Urban	Daily	December '99
Indonesia	Jakarta	Urban	Weekly	April '98
	Serpong	Rural	Event	April '98
	Kototabang	Remote	Weekly	April '98
	Bandung	Urban	Event	January '99
Japan	Rishiri	Remote	Daily	April '98
	Ochiishi	Remote	Daily	January '03
	Tappi	Remote	Daily	April '98
	Sado-seki	Remote	Daily	April '99
	Happo	Remote	Daily	April '98
	Ijira	Rural	Weekly	June '99
	Oki	Remote	Daily	April '98
	Banryu	Urban	Weekly	May '99
	Yusuhara	Remote	Daily	December '99
	Hedo	Remote	Daily	December '99
	Ogasawara	Remote	Daily	May '99
Lao PDR	Vientian	Urban	Event	October '03
Malaysia	Petaling Jaya	Urban	Weekly	April '98
	Tanah Rata	Remote	Weekly	January '99
Mongolia	Ulaanbaatar	Urban	Daily	August '98
	Terej	Remote	Daily	September '98
Philippines	Metro Manila	Urban	Weekly	April '99
	Los Banos	Rural	Weekly	April '99
Republic of Korea	Kanghwa	Rural	Daily	March '99
	Cheju (Kosan)	Remote	Daily	April '99
	Imsil	Rural	Daily	January '01
Russia	Mondy	Remote	Daily	May '99
	Listvyanka	Rural	Daily	January '00
	Irkutsk	Urban	Event	January '00
	Primorskaya	Rural	Event	February '02
Thailand	Bangkok	Urban	Daily	April '99
	Samutprakarn	Urban	Daily	January '04
	Patumthani	Rural	Daily	March '99
	Khanchanaburi (Vachiralongkorn Dam)	Remote	Daily	April '99
	Chiang Mai (Mae Hia)	Rural	Daily	January '01
Viet Nam	Hanoi	Urban	Weekly	August '99
	Hoa Binh	Rural	Weekly	August '99

**Table 3.2 Procedures suggested for rainwater major constituent analysis**

Analysis	Instrumental Method
Electric Conductivity (EC)	Conductivity Cell
pH	Glass electrode (preferably with the Electrode of non-leak inner cell)
Cl <sup>-</sup> , NO <sub>3</sub> <sup>-</sup> , SO <sub>4</sub> <sup>2-</sup> , NO <sub>2</sub> <sup>-</sup> , F <sup>-</sup> , PO <sub>4</sub> <sup>3-</sup>	Ion Chromatography (preferably with suppressor) Spectrophotometry
NH <sub>4</sub> <sup>+</sup>	Ion Chromatography Spectrophotometry (Indophenol blue)*
Na <sup>+</sup> , K <sup>+</sup> , Ca <sup>2+</sup> , Mg <sup>2+</sup>	Ion Chromatography Atomic Absorption/ Emission Spectrometry
Heavy Metals, Al Hg	Atomic Absorption Spectrometry with Graphite Furnace, ICP Emission Spectrometry, ICP/MS, Mercury Analyzer With a Gold Trap
Organic Acids	Ion Chromatography

\* Not recommended if the biocide, thymol, is used in sample collection.

**Table 3.3 Analytical Method for Wet Deposition Monitoring**

Country	Name of sites	Characteristics of sites	Anion Analysis	Cation Analysis	
				NH <sub>4</sub> <sup>+</sup>	Other Cations
Cambodia	Phnom Penh	Urban	SP	SP	-
China	Guanyinqiao (Chongqing)	Urban	IC	IC	IC
	Jinyunshan (Chongqing)	Rural	IC	IC	IC
	Shizhan (Xi'an)	Urban	IC	IC	IC
	Weishuiyuan (Xi'an)	Rural	IC	IC	IC
	Jiwozi (Xi'an)	Remote	IC	IC	IC
	Hongwen (Xiamen)	Urban	IC	SP	IC
	Xiaoping (Xiamen)	Remote	IC	SP	IC
	Xiang Zhou (Zhuhai)	Urban	IC	IC	IC
	Zhuxian Cavern (Zhuhai)	Urban	IC	IC	IC
Indonesia	Jakarta	Urban	IC	IC	IC
	Serpong	Rural	IC	IC	IC
	Kototabang	Remote	IC	IC	IC
	Bandung	Urban	IC	IC	IC
Japan	Rishiri	Remote	IC	IC	IC
	Ochiishi	Remote	IC	IC	IC
	Tappi	Remote	IC	IC	IC
	Sado-seki	Remote	IC	IC	IC
	Happo	Remote	IC	IC	IC
	Ijira	Rural	IC	IC	IC
	Oki	Remote	IC	IC	IC
	Banryu	Urban	IC	IC	IC
	Yusuhara	Remote	IC	IC	IC
	Hedo	Remote	IC	IC	IC
	Ogasawara	Remote	IC	IC	IC
Lao PDR	Vientian	Urban	-	-	-
Malaysia	Petaling Jaya	Urban	IC	IC	IC
	Tanah Rata	Remote	IC	IC	IC
Mongolia	Ulaanbaatar	Urban	IC	IC	IC
	Terej	Remote	IC	IC	IC
Philippines	Metro Manila	Urban	IC	SP	AAS
	Los Banos	Rural	IC	SP	AAS
Republic of Korea	Kanghwa	Rural	IC	IC	IC
	Cheju (Kosan)	Remote	IC	IC	IC
	Imsil	Rural	IC	IC	IC
Russia	Mondy	Remote	LC	SP	AAS, FP
	Listvyanka	Rural	LC	SP	AAS, FP
	Irkutsk	Urban	LC	SP	AAS, FP
	Primorskaya	Rural	SP, TI	SP	AAS, FP
Thailand	Bangkok	Urban	IC	IC	IC
	Samutprakarn	Urban	IC	IC	IC
	Patumthani	Rural	IC	IC	IC
	Khanchanaburi	Remote	IC	IC	IC
	(Vachiralongkorn Dam) Chiang Mai (Mae Hia)	Rural	IC	IC	IC
Viet Nam	Hanoi	Urban	SP, TI	IC	IC
	Hoa Binh	Rural	SP, TI	IC	IC

(Note)

AAS: Atomic Absorption Spectrometry, FP: Flame Photometry, IC: Ion Chromatography, SP: Spectrophotometry, TI: Titration, LC: Liquid Chromatography, -: not analyzed

### 3.2 Results of Monitoring

The monthly summaries of each monitoring site in 2004 are shown in [Table 3.6](#) through [Table 3.51](#). The annual summaries of wet deposition monitoring in 2004 are shown in [Table 3.52](#) through [Table 3.54](#). The ion balance (R1) and the conductivity agreement (R2) of each monitoring site are shown in [Fig.3.2](#) through [Fig 3.45](#) and [Table 3.55](#). The summaries of annual data from 2000 to 2004 are shown in [Table 3.56](#) through [Table 3.80](#). The data in 2000 is based on the preparatory-phase activities of EANET. The summaries contain the precipitation amount weighted average, the maximum and minimum data reported over the year, data completeness (%PCL, %TP), the wet deposition amount, and the results of ion balance and conductivity agreement check.

#### 1) Overview of the statistics and definition

An Overview of the statistics and definition is given below.

**Weighted average:** the precipitation amount average concentration ( $\mu\text{mol/L}$ ) over the summary period. Calculated as:

$$C = \sum C_i P_i / \sum P_i$$

Where C: precipitation amount weighted average concentration

$C_i$  : measured valid concentration for sample i

$P_i$  : precipitation amount for the same sample i with valid concentration

**Deposition amount:** the wet deposition amount ( $\text{mmol/m}^2$ ) for the summary period. Calculated as:

$$\text{Deposition amount} = C * (\text{total precipitation amount for the summary period})$$

The concentrations for the sampling periods with missing data have consequently been assumed to be equal to the weighted average of the summary period.

**Non-sea-salt sulfate and non-sea-salt calcium ( $\text{mmol/L}$ ):** Equal to the measured sulfate (calcium) in the sample minus the sulfate (calcium) contributed by sea salt. Sea salt sulfate (calcium) is estimated from the concentration of sodium.

$$[\text{nss-SO}_4^{2-}] = [\text{SO}_4^{2-}] - 0.06028 * [\text{Na}^+]$$

$$[\text{nss-Ca}^{2+}] = [\text{Ca}^{2+}] - 0.02161 * [\text{Na}^+]$$

( $\text{Na}^+$  : 468.3  $\text{mmol/L}$ ,  $\text{SO}_4^{2-}$  : 28.23  $\text{mmol/L}$ ,  $\text{Ca}^{2+}$  : 10.12  $\text{mmol/L}$ ; "Guide to maritime observation" Oceanographic Society of Japan)

**Data completeness:**

- (i) **Percent precipitation coverage length (%PCL):** Percentage of days with measured precipitation plus no precipitation days in the summary period. Calculated as:

$$\%PCL = [(Number\ of\ days\ in\ the\ summary\ period) - (Number\ of\ days\ with\ missing\ or\ unknown\ precipitation)] / (Number\ of\ days\ in\ the\ summary\ period) * 100$$

- (ii) **Percent total precipitation (%TP):** Percentage of total precipitation amount over the summary period represented by valid component measurements. Calculated as:

$$\%TP = (Sum\ of\ precipitation\ amounts\ for\ samples\ with\ valid\ sample\ component\ measurements) / (Sum\ of\ precipitation\ amounts\ for\ all\ samples) * 100$$

- (iii) **Data completeness criteria for monthly and annual summaries:**

$$\%PCL = 80\%,\ and\ \%TP = 80\%$$

The low values on data completeness were caused by some trouble, such as contamination of sample and malfunction of the wet-only sampler or the rain gauge.

**Ion balance (R<sub>1</sub>):** Calculated as:

$$R_1 = (C - A) / (C + A) * 100 (\%)$$

Where C: total cation equivalent concentration (μeq/L)

A: total anion equivalent concentration (μeq/L)

$$C = 10^{(6-pH)} / 1.008 + SC_{Ci} \cdot V_i$$

Where C<sub>Ci</sub>: the concentration of i-th cation (μmol/L)

V<sub>i</sub>: the valence of the given ion

$$A = SC_{Ai} \cdot V_i$$

Where C<sub>Ai</sub>: the concentration of i-th anion (μmol/L)

If pH is greater than 6, hydrogen carbonate (HCO<sub>3</sub><sup>-</sup>) concentration is included for the computation of R<sub>1</sub> and R<sub>2</sub>. The HCO<sub>3</sub><sup>-</sup> concentration is calculated from the dissociation constant, K<sub>a</sub> and pH. (If the HCO<sub>3</sub><sup>-</sup> concentration is measured, the measured data is considered in the evaluation of R<sub>1</sub> and R<sub>2</sub>). Calculated as:

$$[HCO_3^-] = P_{CO_2} H_{CO_2} K_{a1} / [H^+] = (360 * 10^{-6}) * (3.4 * 10^{-2}) * 10^{(pH-6.35+6)} = 1.24 * 10^{(pH-5.35)}$$

Air concentration of CO<sub>2</sub> in equilibrium with precipitation samples is assumed to be 360ppm.

Dissociation constant in terms of pK<sub>a</sub> for carbonic acid is 6.35.

**Required criteria for R<sub>1</sub>:** The required ion balances of precipitation analyses are given in Table 3.4.

**Table 3.4 Required criteria for R<sub>1</sub>**

(C+A) (μeq/L)	R <sub>1</sub> (%)
<50	± 30
50 – 100	± 15
>100	± 8

**Conductivity agreement (R<sub>2</sub>)** : Calculated as:

$$R_2 = (\Lambda_{\text{calc}} - \Lambda_{\text{meas}}) / (\Lambda_{\text{calc}} + \Lambda_{\text{meas}}) * 100 (\%)$$

Where  $\Lambda_{\text{calc}}$  : the calculated conductivity (mS/m)

$\Lambda_{\text{meas}}$  : the measured conductivity (mS/m)

$$\Lambda_{\text{calc}} = \sum C_i \Lambda_i^0 * 10^{-4}$$

Where  $C_i$  : the ionic concentration of i-th ion ( $\mu\text{mol/L}$ )

$\Lambda_i^0$  : the molar conductivity at infinite dilution and 25°C ( $\text{Scm}^2/\text{mol}$ )

$$\Lambda_{\text{calc}} = \{349.7 * 10^{(6-\text{pH})} + 80.0 * 2c(\text{SO}_4^{2-}) + 71.5c(\text{NO}_3^-) + 76.3c(\text{Cl}^-) + 73.5c(\text{NH}_4^+) + 50.1c(\text{Na}^+) + 73.5c(\text{K}^+) + 59.8 * 2c(\text{Ca}^{2+}) + 53.3 * 2c(\text{Mg}^{2+})\} / 10000$$

Where  $c(\ )$  : the ionic concentrations ( $\mu\text{mol/L}$ )

The constants are the molar conductivity of the individual ion at infinite dilution at 25°C ( $\text{Scm}^2/\text{mol}$ ).

**Required criteria for R<sub>2</sub>** : The required conductivity comparison criteria are given in Table 3.5.

**Table 3.5 Required criteria for R<sub>2</sub>**

$\Lambda_{\text{meas}}$ (mS/m)	R <sub>2</sub> (%)
<0.5	± 20
0.5 – 3	± 13
>3	± 9

## 2) Terms and abbreviations

Terms and abbreviations indicate the followings:

- Data in hatched column (▨) : Rejected monthly (annual) value by the criteria [%PCL<80% and/or %TP<80%]
  - [--] : Precipitation was 0 mm.
  - [\*] : The constituent was not measured although precipitation was not 0 mm. [%TP<80%]
  - [\*\*] : Precipitation was not measured. [%PCL<80%]
- (In Table 3.56 through Table 3.80 Annual summaries from 2000 to 2004.)
- [\*\*\*] : No data or not measured
  - Black column (■) : Monitoring was not carried out.

In Table 3.6 -Table 3.51 Volume-weighted mean concentrations / precipitation / deposition (monthly)

- Max: Maximum monitoring data for a year
- Min: Minimum monitoring data for a year

For H<sup>+</sup> concentration,

- [<0.1] : <0.1 $\mu\text{mol/L}$

For concentration of other constituent,

- [<0.2], [<0.4], [<1.0] : The values are lower than each Recommended

Minimum Detectable Amount (MDA) given by the technical manual for wet deposition monitoring

- $\text{SO}_4^{2-}$ , nss- $\text{SO}_4^{2-}$ ,  $\text{NO}_3^-$ ,  $\text{Cl}^-$ ,  $\text{NH}_4^+$ ,  $\text{Na}^+$ ,  $\text{K}^+$  :  $<1.0\mu\text{mol/L}$
- $\text{Ca}^{2+}$ , nss- $\text{Ca}^{2+}$  :  $<0.2\mu\text{mol/L}$
- $\text{Mg}^{2+}$  :  $<0.4\mu\text{mol/L}$

For deposition,

- [0.00] : Deposition amount is zero. (Precipitation was 0 mm.)
- [ $<0.01$ ] :  $<0.01\text{mmol/m}^2$

In Table 3.55 Results of ion balance ( $R_1$ ) and conductivity agreement check ( $R_2$ ),

- Sample (N) : Number of samples
- $R_1$  (N) : Number of samples measured and calculated ion balance ( $R_1$ )
- $R_1$  (AA) : Number of samples within allowable ranges for  $R_1$
- $R_2$  (N) : Number of samples measured and calculated conductivity agreement ( $R_2$ )
- $R_2$  (AA) : Number of samples within allowable ranges for  $R_2$
- $R_1\&R_2$  (N) : Number of samples measured and calculated both  $R_1$  and  $R_2$
- $R_1\&R_2$  (AA) : Number of samples within allowable ranges of both  $R_1$  and  $R_2$

In Table 3.81 Site identification code

In Fig.3.2 - 3.45 descriptions are as follows.

(1) Ion Balance ( $R_1$ )

- (C + A) is logarithm scale
- Horizontal bar : The allowable range of  $R_1$  in each concentration range

(2) Conductivity Agreement ( $R_2$ )

- ( $\Delta_{\text{meas}}$ ) is logarithm scale
- Horizontal bar : The allowable range of  $R_2$  in each conductivity range

$R_1$  and  $R_2$  were calculated including the following items:

- Guanyinqiao (China):  $\text{F}^-$
- Jinyunshan (China):  $\text{F}^-$
- Mondy (Russia):  $\text{HCO}_3^-$ ,  $\text{NO}_2^-$ ,  $\text{Br}^-$
- Listvjanka (Russia):  $\text{HCO}_3^-$ ,  $\text{NO}_2^-$ ,  $\text{Br}^-$
- Irkutsk (Russia):  $\text{HCO}_3^-$ ,  $\text{NO}_2^-$ ,  $\text{Br}^-$
- Primorskaya (Russia):  $\text{HCO}_3^-$
- Petaling Jaya (Malaysia):  $\text{HCOO}^-$ ,  $\text{CH}_3\text{COO}^-$ ,  $\text{C}_2\text{O}_4^{2-}$
- Tanah Rata (Malaysia):  $\text{HCOO}^-$ ,  $\text{CH}_3\text{COO}^-$ ,  $\text{C}_2\text{O}_4^{2-}$
- Bangkok (Thailand):  $\text{HCOO}^-$ ,  $\text{CH}_3\text{COO}^-$ ,  $\text{PO}_4^{3-}$

**Table 3.6 Volume-weighted mean concentrations/ Precipitation (Monthly)**

2004	SO <sub>4</sub> <sup>2-</sup>	nss-SO <sub>4</sub> <sup>2-</sup>	NO <sub>3</sub> <sup>-</sup>	Cl <sup>-</sup>	NH <sub>4</sub> <sup>+</sup>	Na <sup>+</sup>	K <sup>+</sup>	Ca <sup>2+</sup>	nss-Ca <sup>2+</sup>	Mg <sup>2+</sup>	H <sup>+</sup>	pH	EC	Precip.
	μ mol/L	μ mol/L	μ mol/L	μ mol/L	μ mol/L	μ mol/L	μ mol/L	μ mol/L	μ mol/L	μ mol/L	μ mol/L			
Jan	--	--	--	--	--	--	--	--	--	--	--	--	--	0.0
Feb	--	--	--	--	--	--	--	--	--	--	--	--	--	0.0
Mar	--	--	--	--	--	--	--	--	--	--	--	--	--	0.0
Apr	*	*	6.4	*	8.2	*	<1.0	<0.2	*	<0.4	<0.1	7.54	3.29	9.1
May	*	*	6.3	*	9.6	*	<1.0	<0.2	*	<0.4	16.3	4.79	1.35	111.7
June	*	*	7.1	*	8.4	*	2.0	<0.2	*	<0.4	<0.1	7.17	0.89	121.7
July	*	*	10.5	*	18.5	*	1.9	<0.2	*	<0.4	0.4	6.38	1.04	78.2
Aug	*	*	7.8	*	9.1	*	3.0	<0.2	*	<0.4	1.5	5.83	1.21	98.3
Sept	--	--	--	--	--	--	--	--	--	--	--	--	--	0.0
Oct	--	--	--	--	--	--	--	--	--	--	--	--	--	0.0
Nov	--	--	--	--	--	--	--	--	--	--	--	--	--	0.0
Dec	--	--	--	--	--	--	--	--	--	--	--	--	--	0.0
<b>Annual</b>	*	*	<b>7.7</b>	*	<b>10.8</b>	*	<b>1.6</b>	<b>&lt;0.2</b>	*	<b>&lt;0.4</b>	<b>4.8</b>	<b>5.32</b>	<b>1.17</b>	<b>418.9<sup>1)</sup></b>
Max.	<1.0	<1.0	17.8	<1.0	28.6	<1.0	4.1	<0.2	<0.2	<0.4	26.9	7.62	3.29	
Min.	<1.0	<1.0	4.6	<1.0	6.3	<1.0	<1.0	<0.2	<0.2	<0.4	<0.1	4.57	0.59	

**Table 3.6 Wet deposition (Monthly)** unit: mmol m<sup>-2</sup>month<sup>-1</sup>

2004	SO <sub>4</sub> <sup>2-</sup>	nss-SO <sub>4</sub> <sup>2-</sup>	NO <sub>3</sub> <sup>-</sup>	Cl <sup>-</sup>	NH <sub>4</sub> <sup>+</sup>	Na <sup>+</sup>	K <sup>+</sup>	Ca <sup>2+</sup>	nss-Ca <sup>2+</sup>	Mg <sup>2+</sup>	H <sup>+</sup>
Jan	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Feb	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Mar	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Apr	*	*	0.06	*	0.07	*	0.00	0.00	*	0.00	<0.01
May	*	*	0.71	*	1.07	*	0.00	0.00	*	0.00	1.82
June	*	*	0.86	*	1.03	*	0.24	0.00	*	0.00	<0.01
July	*	*	0.82	*	1.45	*	0.15	0.00	*	0.00	0.03
Aug	*	*	0.77	*	0.89	*	0.29	0.00	*	0.00	0.14
Sept	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Oct	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Nov	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Dec	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
<b>Annual<sup>2)</sup></b>	*	*	<b>3.22</b>	*	<b>4.51</b>	*	<b>0.68</b>	<b>0.00</b>	*	<b>0.00</b>	<b>2.01</b>

**Table 3.6 Data completeness (Monthly)**

2004	SO <sub>4</sub> <sup>2-</sup>	nss-SO <sub>4</sub> <sup>2-</sup>	NO <sub>3</sub> <sup>-</sup>	Cl <sup>-</sup>	NH <sub>4</sub> <sup>+</sup>	Na <sup>+</sup>	K <sup>+</sup>	Ca <sup>2+</sup>	nss-Ca <sup>2+</sup>	Mg <sup>2+</sup>	H <sup>+</sup>	pH	EC	Precip.
	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP			
Jan	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Feb	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Mar	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Apr	0	0	100	0	100	0	100	100	0	100	100	100	100	100
May	0	0	100	0	100	0	100	100	0	100	100	100	100	100
June	0	0	100	0	100	0	100	100	0	100	100	100	100	100
July	0	0	100	0	100	0	100	100	0	100	100	100	100	100
Aug	0	0	100	0	100	0	100	100	0	100	100	100	100	100
Sept	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Oct	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Nov	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Dec	--	--	--	--	--	--	--	--	--	--	--	--	--	--
<b>Annual</b>	<b>0</b>	<b>0</b>	<b>100</b>	<b>0</b>	<b>100</b>	<b>0</b>	<b>100</b>	<b>100</b>	<b>0</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>

[--] for averages and completeness: Precipitation was 0 mm.

[0.00] for deposition: The deposition was 0 mmol/m<sup>2</sup> because precipitation was 0 mm.

[\*] for averages and deposition: The constituent was not measured although precipitation was not 0 mm. (%TP=0%)

[\*\*] for all: Precipitation was not measured. (%PCL=0%)

Data in hatched column for averages and deposition: Rejected monthly (annual) value by the criteria of EANET

(%PCL<80% or %TP<80%)

Units of 1) and 2) are mm y<sup>-1</sup> and mmol m<sup>-2</sup>y<sup>-1</sup>, respectively.

Table 3.7 Volume-weighted mean concentrations/ Precipitation (Monthly)

2004	SO <sub>4</sub> <sup>2-</sup>	nss-SO <sub>4</sub> <sup>2-</sup>	NO <sub>3</sub> <sup>-</sup>	Cl <sup>-</sup>	NH <sub>4</sub> <sup>+</sup>	Na <sup>+</sup>	K <sup>+</sup>	Ca <sup>2+</sup>	nss-Ca <sup>2+</sup>	Mg <sup>2+</sup>	H <sup>+</sup>	pH	EC	Precip.
	μ mol/L	μ mol/L	μ mol/L	μ mol/L	μ mol/L	μ mol/L	μ mol/L	μ mol/L	μ mol/L	μ mol/L	μ mol/L			
Jan	467	466	86.7	41.5	203	13.5	22.6	424	424	16.4	26.9	4.57	13.9	17.2
Feb	242	242	76.2	28.6	186	10.3	17.1	224	223	16.3	27.7	4.56	9.13	48.0
Mar	218	217	59.8	24.9	178	15.8	13.8	145	144	13.8	18.9	4.72	7.08	89.5
Apr	190	190	54.9	19.6	171	7.4	16.1	117	117	9.3	43.7	4.36	7.29	88.9
May	121	120	34.5	6.9	129	5.1	8.0	64.9	64.8	7.5	15.1	4.82	4.32	212.5
June	172	172	40.3	9.8	158	4.6	8.2	90.4	90.3	6.6	45.9	4.34	6.41	213.7
July	42.8	42.6	15.0	4.1	32.1	3.2	4.9	29.4	29.4	4.3	16.3	4.79	1.95	201.0
Aug	115	114	35.4	9.7	95.3	6.9	8.0	84.2	84.0	6.6	26.6	4.58	4.50	174.8
Sept	107	106	28.2	9.9	89.3	4.7	5.7	67.7	67.6	4.6	24.5	4.61	4.02	192.4
Oct	354	353	104	32.0	285	11.5	24.8	219	219	18.1	26.0	4.58	10.8	49.5
Nov	392	391	88.4	45.0	273	17.0	29.3	307	306	24.9	16.7	4.78	12.1	79.0
Dec	445	444	95.0	41.2	263	21.2	28.8	361	361	28.6	1.5	5.84	12.9	20.2
<b>Annual</b>	<b>165</b>	<b>165</b>	<b>43.9</b>	<b>14.7</b>	<b>137</b>	<b>7.3</b>	<b>10.9</b>	<b>110</b>	<b>110</b>	<b>9.1</b>	<b>25.9</b>	<b>4.59</b>	<b>5.82</b>	<b>1386.7<sup>1)</sup></b>
Max.	2030	2030	800	228	2270	124	222	1140	1140	147	263	7.18	54.4	
Min.	26.1	26.0	7.9	<1.0	14.5	1.2	1.6	11.9	11.9	<0.4	<0.1	3.58	1.34	

Table 3.7 Wet deposition (Monthly) unit: mmol m<sup>-2</sup> month<sup>-1</sup>

2004	SO <sub>4</sub> <sup>2-</sup>	nss-SO <sub>4</sub> <sup>2-</sup>	NO <sub>3</sub> <sup>-</sup>	Cl <sup>-</sup>	NH <sub>4</sub> <sup>+</sup>	Na <sup>+</sup>	K <sup>+</sup>	Ca <sup>2+</sup>	nss-Ca <sup>2+</sup>	Mg <sup>2+</sup>	H <sup>+</sup>
Jan	8.03	8.02	1.49	0.71	3.50	0.23	0.39	7.30	7.30	0.28	0.46
Feb	11.6	11.6	3.66	1.37	8.93	0.49	0.82	10.7	10.7	0.78	1.33
Mar	19.5	19.4	5.35	2.23	15.9	1.41	1.23	12.9	12.9	1.24	1.69
Apr	16.9	16.9	4.89	1.74	15.2	0.65	1.43	10.4	10.4	0.83	3.89
May	25.6	25.6	7.32	1.46	27.5	1.08	1.70	13.8	13.8	1.60	3.21
June	36.8	36.8	8.61	2.09	33.8	0.99	1.75	19.3	19.3	1.42	9.81
July	8.61	8.57	3.02	0.82	6.44	0.64	0.98	5.92	5.90	0.86	3.28
Aug	20.1	20.0	6.19	1.70	16.7	1.20	1.40	14.7	14.7	1.16	4.64
Sept	20.5	20.5	5.42	1.90	17.2	0.91	1.10	13.0	13.0	0.89	4.72
Oct	17.5	17.5	5.15	1.58	14.1	0.57	1.23	10.8	10.8	0.89	1.29
Nov	30.9	30.9	6.99	3.56	21.6	1.35	2.31	24.2	24.2	1.97	1.32
Dec	9.00	8.97	1.92	0.83	5.32	0.43	0.58	7.30	7.29	0.58	0.03
<b>Annual<sup>2)</sup></b>	<b>229</b>	<b>228</b>	<b>60.9</b>	<b>20.3</b>	<b>189</b>	<b>10.1</b>	<b>15.1</b>	<b>153</b>	<b>153</b>	<b>12.7</b>	<b>36.0</b>

Table 3.7 Data completeness (Monthly)

2004	SO <sub>4</sub> <sup>2-</sup>	nss-SO <sub>4</sub> <sup>2-</sup>	NO <sub>3</sub> <sup>-</sup>	Cl <sup>-</sup>	NH <sub>4</sub> <sup>+</sup>	Na <sup>+</sup>	K <sup>+</sup>	Ca <sup>2+</sup>	nss-Ca <sup>2+</sup>	Mg <sup>2+</sup>	H <sup>+</sup>	pH	EC	Precip.
	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP			
Jan	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Feb	100	100	100	100	100	100	100	100	100	100	99	99	99	100
Mar	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Apr	100	100	100	100	100	100	100	100	100	100	100	100	100	100
May	100	100	100	100	100	100	100	100	100	100	100	100	100	100
June	100	100	100	100	100	100	100	100	100	100	100	100	100	100
July	85	85	85	85	85	85	85	85	85	85	85	85	85	100
Aug	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Sept	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Oct	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Nov	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Dec	100	100	100	100	100	100	100	100	100	100	100	100	100	100
<b>Annual</b>	<b>98</b>	<b>98</b>	<b>98</b>	<b>98</b>	<b>98</b>	<b>98</b>	<b>98</b>	<b>98</b>	<b>98</b>	<b>98</b>	<b>98</b>	<b>98</b>	<b>98</b>	<b>100</b>

[--] for averages and completeness: Precipitation was 0 mm.

[0.00] for deposition: The deposition was 0 mmol/m<sup>2</sup> because precipitation was 0 mm.

[\*] for averages and deposition: The constituent was not measured although precipitation was not 0 mm. (%TP=0%)

[\*\*] for all: Precipitation was not measured. (%PCL=0%)

Data in hatched column for averages and deposition: Rejected monthly (annual) value by the criteria of EANET

(%PCL<80% or %TP<80%)

Units of 1) and 2) are mm y<sup>-1</sup> and mmol m<sup>-2</sup> y<sup>-1</sup>, respectively.

**Table 3.8 Volume-weighted mean concentrations/ Precipitation (Monthly)**

2004	SO <sub>4</sub> <sup>2-</sup>	nss-SO <sub>4</sub> <sup>2-</sup>	NO <sub>3</sub> <sup>-</sup>	Cl <sup>-</sup>	NH <sub>4</sub> <sup>+</sup>	Na <sup>+</sup>	K <sup>+</sup>	Ca <sup>2+</sup>	nss-Ca <sup>2+</sup>	Mg <sup>2+</sup>	H <sup>+</sup>	pH	EC	Precip.
	μ mol/L	μ mol/L	μ mol/L	μ mol/L	μ mol/L	μ mol/L	μ mol/L	μ mol/L	μ mol/L	μ mol/L	μ mol/L			
Jan	325	324	102	27.8	299	18.6	22.6	155	154	8.4	125	3.90	13.6	12.0
Feb	205	204	103	29.3	190	16.5	26.3	107	107	8.0	111	3.95	9.82	52.5
Mar	148	146	58.9	16.9	122	18.1	13.9	72.7	72.3	7.7	66.3	4.18	6.47	136.7
Apr	106	106	42.0	8.9	110	3.8	9.9	50.8	50.8	4.4	45.3	4.34	4.89	112.0
May	112	111	40.8	9.8	149	14.2	11.9	50.5	50.2	5.0	14.9	4.83	4.14	192.3
June	104	103	31.0	4.6	122	9.5	7.4	45.3	45.1	2.8	35.6	4.45	4.25	227.2
July	81.1	80.6	22.3	6.3	72.2	8.9	5.6	73.4	73.2	1.8	5.5	5.26	2.92	122.5
Aug	108	108	28.8	8.2	73.8	10.9	6.1	118	118	2.8	2.8	5.55	3.72	198.0
Sept	63.6	62.7	14.3	18.6	44.8	14.0	14.3	58.6	58.3	0.9	1.4	5.84	2.33	265.2
Oct	163	162	58.6	20.2	157	15.5	19.3	123	123	4.5	7.4	5.13	5.61	63.3
Nov	108	107	39.5	20.2	106	13.8	16.4	56.4	56.1	3.1	29.4	4.53	4.56	108.2
Dec	137	136	50.0	20.0	134	12.1	17.6	71.9	71.7	3.8	58.0	4.24	6.30	27.8
<b>Annual</b>	<b>109</b>	<b>109</b>	<b>36.8</b>	<b>12.8</b>	<b>105</b>	<b>12.3</b>	<b>11.7</b>	<b>70.5</b>	<b>70.2</b>	<b>3.5</b>	<b>25.9</b>	<b>4.59</b>	<b>4.35</b>	<b>1517.7<sup>1)</sup></b>
Max.	972	971	329	139	691	88.4	99.0	965	965	59.5	269	7.13	27.3	
Min.	41.0	40.5	10.0	1.1	22.4	<1.0	1.6	11.1	11.1	<0.4	<0.1	3.57	1.33	

**Table 3.8 Wet deposition (Monthly)** unit: mmol m<sup>-2</sup> month<sup>-1</sup>

2004	SO <sub>4</sub> <sup>2-</sup>	nss-SO <sub>4</sub> <sup>2-</sup>	NO <sub>3</sub> <sup>-</sup>	Cl <sup>-</sup>	NH <sub>4</sub> <sup>+</sup>	Na <sup>+</sup>	K <sup>+</sup>	Ca <sup>2+</sup>	nss-Ca <sup>2+</sup>	Mg <sup>2+</sup>	H <sup>+</sup>
Jan	3.90	3.88	1.22	0.33	3.59	0.22	0.27	1.86	1.85	0.10	1.51
Feb	10.8	10.7	5.40	1.54	10.0	0.86	1.38	5.64	5.62	0.42	5.83
Mar	20.2	20.0	8.05	2.32	16.7	2.47	1.90	9.93	9.88	1.05	9.07
Apr	11.9	11.8	4.70	1.00	12.3	0.43	1.11	5.69	5.68	0.49	5.08
May	21.6	21.4	7.85	1.88	28.7	2.74	2.29	9.72	9.66	0.96	2.86
June	23.5	23.4	7.05	1.04	27.8	2.15	1.68	10.3	10.3	0.63	8.09
July	9.93	9.87	2.73	0.78	8.84	1.09	0.68	8.99	8.97	0.22	0.67
Aug	21.5	21.3	5.69	1.62	14.6	2.17	1.20	23.4	23.3	0.55	0.56
Sept	16.9	16.6	3.80	4.94	11.9	3.72	3.79	15.5	15.5	0.23	0.38
Oct	10.3	10.3	3.71	1.28	9.96	0.98	1.22	7.80	7.78	0.28	0.47
Nov	11.6	11.5	4.28	2.19	11.4	1.50	1.78	6.10	6.07	0.34	3.18
Dec	3.81	3.79	1.39	0.56	3.73	0.34	0.49	2.00	1.99	0.11	1.61
<b>Annual<sup>2)</sup></b>	<b>166</b>	<b>165</b>	<b>55.9</b>	<b>19.5</b>	<b>160</b>	<b>18.7</b>	<b>17.8</b>	<b>107</b>	<b>107</b>	<b>5.39</b>	<b>39.3</b>

**Table 3.8 Data completeness (Monthly)**

2004	SO <sub>4</sub> <sup>2-</sup>	nss-SO <sub>4</sub> <sup>2-</sup>	NO <sub>3</sub> <sup>-</sup>	Cl <sup>-</sup>	NH <sub>4</sub> <sup>+</sup>	Na <sup>+</sup>	K <sup>+</sup>	Ca <sup>2+</sup>	nss-Ca <sup>2+</sup>	Mg <sup>2+</sup>	H <sup>+</sup>	pH	EC	Precip.
	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP			
Jan	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Feb	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Mar	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Apr	100	100	100	100	100	100	100	100	100	100	100	100	100	100
May	100	100	100	100	100	100	100	100	100	100	100	100	100	100
June	100	100	100	100	100	100	100	100	100	100	100	100	100	100
July	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Aug	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Sept	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Oct	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Nov	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Dec	100	100	100	100	100	100	100	100	100	100	100	100	100	100
<b>Annual</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>

[--] for averages and completeness: Precipitation was 0 mm.

[0.00] for deposition: The deposition was 0 mmol/m<sup>2</sup> because precipitation was 0 mm.

[\*] for averages and deposition: The constituent was not measured although precipitation was not 0 mm. (%TP=0%)

[\*\*] for all: Precipitation was not measured. (%PCL=0%)

Data in hatched column for averages and deposition: Rejected monthly (annual) value by the criteria of EANET

(%PCL<80% or %TP<80%)

Units of 1) and 2) are mm y<sup>-1</sup> and mmol m<sup>-2</sup> y<sup>-1</sup>, respectively.

**Table 3.9 Volume-weighted mean concentrations/ Precipitation (Monthly)**

2004	SO <sub>4</sub> <sup>2-</sup>	nss-SO <sub>4</sub> <sup>2-</sup>	NO <sub>3</sub> <sup>-</sup>	Cl <sup>-</sup>	NH <sub>4</sub> <sup>+</sup>	Na <sup>+</sup>	K <sup>+</sup>	Ca <sup>2+</sup>	nss-Ca <sup>2+</sup>	Mg <sup>2+</sup>	H <sup>+</sup>	pH	EC	Precip.
	μ mol/L	μ mol/L	μ mol/L	μ mol/L	μ mol/L	μ mol/L	μ mol/L	μ mol/L	μ mol/L	μ mol/L	μ mol/L			
Jan	--	--	--	--	--	--	--	--	--	--	--	--	--	0.0
Feb	217	216	55.4	34.2	112	16.1	7.8	180	180	14.6	0.2	6.64	7.25	100.4
Mar	226	224	89.7	71.7	194	30.6	13.3	182	181	17.0	0.5	6.26	7.94	90.2
Apr	208	200	44.7	50.1	79.4	135	16.0	331	328	28.1	<0.1	7.75	11.4	15.5
May	265	263	91.5	43.5	239	35.3	12.1	232	232	26.0	0.2	6.77	11.0	26.6
June	77.6	77.2	40.5	15.6	127	6.1	5.7	96.4	96.3	9.1	<0.1	7.02	4.03	113.5
July	146	144	49.0	12.7	194	36.2	14.7	147	147	29.3	0.2	6.77	5.60	74.0
Aug	216	216	58.2	16.2	178	2.1	17.1	96.2	96.1	12.6	2.0	5.69	6.22	30.6
Sept	96.9	96.9	33.4	16.4	74.8	<1.0	2.6	42.8	42.8	6.7	1.4	5.86	3.67	70.5
Oct	160	159	84.0	24.6	138	16.3	5.7	126	125	16.6	0.2	6.68	5.99	19.2
Nov	138	138	56.8	96.9	72.5	4.2	4.6	141	141	12.2	0.4	6.35	5.32	38.3
Dec	446	446	187	58.5	286	6.2	20.9	321	321	9.4	1.1	5.97	15.4	22.1
<b>Annual</b>	<b>173</b>	<b>171</b>	<b>61.7</b>	<b>36.1</b>	<b>146</b>	<b>19.1</b>	<b>9.6</b>	<b>147</b>	<b>147</b>	<b>15.3</b>	<b>0.5</b>	<b>6.30</b>	<b>6.47</b>	<b>600.9<sup>1)</sup></b>
Max.	603	603	226	972	553	177	250	492	491	72.2	13.2	7.87	18.8	
Min.	19.5	18.6	16.8	4.6	11.1	<1.0	<1.0	7.0	7.0	2.6	<0.1	4.88	2.31	

**Table 3.9 Wet deposition (Monthly)** unit: mmol m<sup>-2</sup> month<sup>-1</sup>

2004	SO <sub>4</sub> <sup>2-</sup>	nss-SO <sub>4</sub> <sup>2-</sup>	NO <sub>3</sub> <sup>-</sup>	Cl <sup>-</sup>	NH <sub>4</sub> <sup>+</sup>	Na <sup>+</sup>	K <sup>+</sup>	Ca <sup>2+</sup>	nss-Ca <sup>2+</sup>	Mg <sup>2+</sup>	H <sup>+</sup>
Jan	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Feb	21.8	21.7	5.57	3.44	11.2	1.62	0.79	18.1	18.0	1.47	0.02
Mar	20.4	20.2	8.09	6.46	17.5	2.76	1.20	16.4	16.3	1.53	0.05
Apr	3.22	3.10	0.69	0.78	1.23	2.10	0.25	5.13	5.09	0.44	<0.01
May	7.04	6.98	2.43	1.16	6.36	0.94	0.32	6.18	6.16	0.69	<0.01
June	8.81	8.76	4.60	1.77	14.4	0.70	0.65	10.9	10.9	1.03	0.01
July	10.8	10.7	3.63	0.94	14.4	2.68	1.09	10.9	10.9	2.17	0.01
Aug	6.60	6.60	1.78	0.50	5.44	0.07	0.52	2.94	2.94	0.39	0.06
Sept	6.83	6.83	2.36	1.16	5.27	0.03	0.18	3.01	3.01	0.47	0.10
Oct	3.07	3.05	1.61	0.47	2.64	0.31	0.11	2.41	2.40	0.32	<0.01
Nov	5.30	5.29	2.18	3.71	2.78	0.16	0.18	5.41	5.40	0.47	0.02
Dec	9.86	9.85	4.14	1.29	6.32	0.14	0.46	7.10	7.10	0.21	0.02
<b>Annual<sup>2)</sup></b>	<b>104</b>	<b>103</b>	<b>37.1</b>	<b>21.7</b>	<b>87.5</b>	<b>11.5</b>	<b>5.75</b>	<b>88.5</b>	<b>88.3</b>	<b>9.18</b>	<b>0.30</b>

**Table 3.9 Data completeness (Monthly)**

2004	SO <sub>4</sub> <sup>2-</sup>	nss-SO <sub>4</sub> <sup>2-</sup>	NO <sub>3</sub> <sup>-</sup>	Cl <sup>-</sup>	NH <sub>4</sub> <sup>+</sup>	Na <sup>+</sup>	K <sup>+</sup>	Ca <sup>2+</sup>	nss-Ca <sup>2+</sup>	Mg <sup>2+</sup>	H <sup>+</sup>	pH	EC	Precip.
	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP			
Jan	--	--	--	--	--	--	--	--	--	--	--	--	--	100
Feb	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Mar	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Apr	100	100	100	100	100	100	100	100	100	100	100	100	100	100
May	100	100	100	100	100	100	100	100	100	100	100	100	100	100
June	100	100	100	100	100	100	100	100	100	100	100	100	100	100
July	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Aug	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Sept	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Oct	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Nov	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Dec	100	100	100	100	100	100	100	100	100	100	100	100	100	97
<b>Annual</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>

[--] for averages and completeness: Precipitation was 0 mm.

[0.00] for deposition: The deposition was 0 mmol/m<sup>2</sup> because precipitation was 0 mm.

[\*] for averages and deposition: The constituent was not measured although precipitation was not 0 mm. (%TP=0%)

[\*\*] for all: Precipitation was not measured. (%PCL=0%)

Data in hatched column for averages and deposition: Rejected monthly (annual) value by the criteria of EANET

(%PCL<80% or %TP<80%)

Units of 1) and 2) are mm y<sup>-1</sup> and mmol m<sup>-2</sup> y<sup>-1</sup>, respectively.

**Table 3.10** Volume-weighted mean concentrations/ Precipitation (Monthly)

2004	SO <sub>4</sub> <sup>2-</sup>	nss-SO <sub>4</sub> <sup>2-</sup>	NO <sub>3</sub> <sup>-</sup>	Cl <sup>-</sup>	NH <sub>4</sub> <sup>+</sup>	Na <sup>+</sup>	K <sup>+</sup>	Ca <sup>2+</sup>	nss-Ca <sup>2+</sup>	Mg <sup>2+</sup>	H <sup>+</sup>	pH	EC	Precip.
	μ mol/L	μ mol/L	μ mol/L	μ mol/L	μ mol/L	μ mol/L	μ mol/L	μ mol/L	μ mol/L	μ mol/L	μ mol/L			
Jan	--	--	--	--	--	--	--	--	--	--	--	--	--	0.0
Feb	524	521	115	67.4	211	53.5	19.2	450	449	34.3	0.2	6.68	16.6	66.1
Mar	264	261	90.4	47.5	180	41.8	13.4	270	269	21.5	0.5	6.34	9.85	71.8
Apr	386	383	130	103	159	52.5	28.7	323	322	83.5	<0.1	7.02	14.5	14.2
May	224	221	78.6	45.2	161	45.3	14.2	256	255	26.7	0.1	6.93	10.1	14.0
June	72.2	72.0	43.2	13.3	118	3.2	4.3	96.5	96.4	8.7	<0.1	7.06	7.40	107.7
July	115	113	52.0	53.7	221	29.2	13.6	106	106	19.5	0.1	6.83	5.76	70.3
Aug	165	165	68.2	18.0	122	2.4	6.9	124	123	10.6	13.1	4.88	6.26	25.7
Sept	80.2	80.1	41.6	28.9	49.8	1.9	8.7	62.7	62.7	8.1	0.9	6.04	3.61	58.2
Oct	158	157	75.9	23.4	161	8.8	7.9	147	147	12.3	0.2	6.72	6.46	16.6
Nov	188	188	58.6	27.6	72.4	9.8	6.2	182	182	16.7	1.4	5.85	6.32	18.6
Dec	443	442	231	55.6	334	15.5	27.4	232	232	21.4	0.3	6.51	14.8	2.4
<b>Annual</b>	<b>202</b>	<b>201</b>	<b>69.6</b>	<b>39.4</b>	<b>151</b>	<b>23.3</b>	<b>11.3</b>	<b>190</b>	<b>189</b>	<b>19.3</b>	<b>1.1</b>	<b>5.98</b>	<b>8.55</b>	<b>465.6<sup>1)</sup></b>
Max.	783	773	283	160	456	165	45.8	775	771	86.7	49.0	7.75	30.3	
Min.	6.3	6.3	3.5	7.4	<1.0	<1.0	1.1	5.3	5.3	2.3	<0.1	4.31	2.20	

**Table 3.10** Wet deposition (Monthly) unit: mmol m<sup>-2</sup> month<sup>-1</sup>

2004	SO <sub>4</sub> <sup>2-</sup>	nss-SO <sub>4</sub> <sup>2-</sup>	NO <sub>3</sub> <sup>-</sup>	Cl <sup>-</sup>	NH <sub>4</sub> <sup>+</sup>	Na <sup>+</sup>	K <sup>+</sup>	Ca <sup>2+</sup>	nss-Ca <sup>2+</sup>	Mg <sup>2+</sup>	H <sup>+</sup>
Jan	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Feb	34.7	34.5	7.58	4.45	14.0	3.53	1.27	29.7	29.7	2.27	0.01
Mar	18.9	18.8	6.49	3.41	12.9	3.00	0.96	19.4	19.3	1.54	0.03
Apr	5.49	5.44	1.84	1.46	2.25	0.75	0.41	4.58	4.57	1.19	<0.01
May	3.14	3.10	1.10	0.63	2.25	0.63	0.20	3.58	3.57	0.37	<0.01
June	7.78	7.76	4.66	1.43	12.7	0.35	0.46	10.4	10.4	0.94	<0.01
July	8.07	7.95	3.66	3.78	15.5	2.05	0.96	7.49	7.44	1.37	0.01
Aug	4.24	4.23	1.75	0.46	3.14	0.06	0.18	3.17	3.17	0.27	0.34
Sept	4.67	4.66	2.42	1.68	2.90	0.11	0.51	3.65	3.65	0.47	0.05
Oct	2.62	2.61	1.26	0.39	2.68	0.15	0.13	2.44	2.44	0.20	<0.01
Nov	3.50	3.49	1.09	0.51	1.35	0.18	0.12	3.39	3.39	0.31	0.03
Dec	1.06	1.06	0.55	0.13	0.80	0.04	0.07	0.56	0.56	0.05	<0.01
<b>Annual<sup>2)</sup></b>	<b>94.2</b>	<b>93.5</b>	<b>32.4</b>	<b>18.3</b>	<b>70.5</b>	<b>10.9</b>	<b>5.25</b>	<b>88.3</b>	<b>88.1</b>	<b>8.99</b>	<b>0.49</b>

**Table 3.10** Data completeness (Monthly)

2004	SO <sub>4</sub> <sup>2-</sup>	nss-SO <sub>4</sub> <sup>2-</sup>	NO <sub>3</sub> <sup>-</sup>	Cl <sup>-</sup>	NH <sub>4</sub> <sup>+</sup>	Na <sup>+</sup>	K <sup>+</sup>	Ca <sup>2+</sup>	nss-Ca <sup>2+</sup>	Mg <sup>2+</sup>	H <sup>+</sup>	pH	EC	Precip.
	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP			
Jan	--	--	--	--	--	--	--	--	--	--	--	--	--	100
Feb	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Mar	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Apr	100	100	100	100	100	100	100	100	100	100	100	100	100	100
May	100	100	100	100	100	100	100	100	100	100	100	100	100	100
June	100	100	100	100	100	100	100	100	100	100	100	100	100	100
July	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Aug	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Sept	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Oct	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Nov	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Dec	100	100	100	100	100	100	100	100	100	100	100	100	100	100
<b>Annual</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>

[--] for averages and completeness: Precipitation was 0 mm.

[0.00] for deposition: The deposition was 0 mmol/m<sup>2</sup> because precipitation was 0 mm.

[\*] for averages and deposition: The constituent was not measured although precipitation was not 0 mm. (%TP=0%)

[\*\*] for all: Precipitation was not measured. (%PCL=0%)

Data in hatched column for averages and deposition: Rejected monthly (annual) value by the criteria of EANET

(%PCL<80% or %TP<80%)

Units of 1) and 2) are mm y<sup>-1</sup> and mmol m<sup>-2</sup> y<sup>-1</sup>, respectively.

**Table 3.11 Volume-weighted mean concentrations/ Precipitation (Monthly)**

2004	SO <sub>4</sub> <sup>2-</sup>	nss-SO <sub>4</sub> <sup>2-</sup>	NO <sub>3</sub> <sup>-</sup>	Cl <sup>-</sup>	NH <sub>4</sub> <sup>+</sup>	Na <sup>+</sup>	K <sup>+</sup>	Ca <sup>2+</sup>	nss-Ca <sup>2+</sup>	Mg <sup>2+</sup>	H <sup>+</sup>	pH	EC	Precip.
	μ mol/L	μ mol/L	μ mol/L	μ mol/L	μ mol/L	μ mol/L	μ mol/L	μ mol/L	μ mol/L	μ mol/L	μ mol/L			
Jan	--	--	--	--	--	--	--	--	--	--	--	--	--	0.0
Feb	--	--	--	--	--	--	--	--	--	--	--	--	--	0.0
Mar	--	--	--	--	--	--	--	--	--	--	--	--	--	0.0
Apr	22.4	21.7	16.3	13.9	8.3	11.3	2.2	62.8	62.5	7.0	<0.1	7.12	2.02	42.0
May	66.8	65.2	35.5	16.9	60.5	27.5	11.0	72.1	71.5	13.0	0.3	6.48	3.53	215.5
June	41.3	40.7	30.4	10.9	45.6	10.3	6.0	66.8	66.6	7.8	0.2	6.65	2.81	159.0
July	36.0	34.7	27.1	8.3	62.7	20.2	2.7	80.1	79.6	15.9	1.1	5.94	1.71	181.0
Aug	80.6	77.5	25.9	19.5	13.6	51.1	17.3	150	149	31.4	0.6	6.20	4.12	210.3
Sept	42.0	41.3	10.7	14.8	5.1	12.4	3.1	60.4	60.1	12.1	2.1	5.67	1.83	150.2
Oct	74.3	73.1	28.2	21.4	35.6	20.4	10.2	92.7	92.2	20.0	0.3	6.51	3.57	61.6
Nov	--	--	--	--	--	--	--	--	--	--	--	--	--	0.0
Dec	--	--	--	--	--	--	--	--	--	--	--	--	--	0.0
<b>Annual</b>	<b>55.2</b>	<b>53.7</b>	<b>26.4</b>	<b>14.8</b>	<b>37.1</b>	<b>25.1</b>	<b>8.5</b>	<b>88.0</b>	<b>87.4</b>	<b>16.6</b>	<b>0.8</b>	<b>6.11</b>	<b>2.91</b>	<b>1019.6<sup>1)</sup></b>
Max.	136	128	66.9	44.4	115	123	41.0	276	273	76.0	7.6	7.40	8.20	
Min.	17.4	17.0	6.6	3.6	<1.0	<1.0	<1.0	17.7	17.7	2.5	<0.1	5.12	0.85	

**Table 3.11 Wet deposition (Monthly)** unit: mmol m<sup>-2</sup> month<sup>-1</sup>

2004	SO <sub>4</sub> <sup>2-</sup>	nss-SO <sub>4</sub> <sup>2-</sup>	NO <sub>3</sub> <sup>-</sup>	Cl <sup>-</sup>	NH <sub>4</sub> <sup>+</sup>	Na <sup>+</sup>	K <sup>+</sup>	Ca <sup>2+</sup>	nss-Ca <sup>2+</sup>	Mg <sup>2+</sup>	H <sup>+</sup>
Jan	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Feb	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Mar	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Apr	0.94	0.91	0.68	0.59	0.35	0.47	0.09	2.64	2.63	0.30	<0.01
May	14.4	14.0	7.66	3.65	13.0	5.92	2.38	15.5	15.4	2.81	0.07
June	6.57	6.47	4.83	1.73	7.25	1.63	0.95	10.6	10.6	1.24	0.04
July	6.51	6.29	4.91	1.49	11.4	3.65	0.49	14.5	14.4	2.87	0.21
Aug	16.9	16.3	5.45	4.10	2.86	10.7	3.64	31.6	31.4	6.61	0.13
Sept	6.31	6.20	1.61	2.23	0.76	1.87	0.47	9.07	9.03	1.81	0.32
Oct	4.58	4.50	1.74	1.32	2.19	1.26	0.63	5.71	5.68	1.23	0.02
Nov	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Dec	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
<b>Annual<sup>2)</sup></b>	<b>56.3</b>	<b>54.7</b>	<b>26.9</b>	<b>15.1</b>	<b>37.8</b>	<b>25.5</b>	<b>8.65</b>	<b>89.7</b>	<b>89.1</b>	<b>16.9</b>	<b>0.79</b>

**Table 3.11 Data completeness (Monthly)**

2004	SO <sub>4</sub> <sup>2-</sup>	nss-SO <sub>4</sub> <sup>2-</sup>	NO <sub>3</sub> <sup>-</sup>	Cl <sup>-</sup>	NH <sub>4</sub> <sup>+</sup>	Na <sup>+</sup>	K <sup>+</sup>	Ca <sup>2+</sup>	nss-Ca <sup>2+</sup>	Mg <sup>2+</sup>	H <sup>+</sup>	pH	EC	Precip.
	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP			
Jan	--	--	--	--	--	--	--	--	--	--	--	--	--	100
Feb	--	--	--	--	--	--	--	--	--	--	--	--	--	100
Mar	--	--	--	--	--	--	--	--	--	--	--	--	--	100
Apr	100	100	100	100	100	100	100	100	100	100	100	100	100	100
May	100	100	100	100	100	100	100	100	100	100	100	100	100	100
June	100	100	100	100	100	100	100	100	100	100	100	100	100	100
July	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Aug	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Sept	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Oct	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Nov	--	--	--	--	--	--	--	--	--	--	--	--	--	100
Dec	--	--	--	--	--	--	--	--	--	--	--	--	--	100
<b>Annual</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>

[--] for averages and completeness: Precipitation was 0 mm.

[0.00] for deposition: The deposition was 0 mmol/m<sup>2</sup> because precipitation was 0 mm.

[\*] for averages and deposition: The constituent was not measured although precipitation was not 0 mm. (%TP=0%)

[\*\*] for all: Precipitation was not measured. (%PCL=0%)

Data in hatched column for averages and deposition: Rejected monthly (annual) value by the criteria of EANET

(%PCL<80% or %TP<80%)

Units of 1) and 2) are mm y<sup>-1</sup> and mmol m<sup>-2</sup> y<sup>-1</sup>, respectively.

**Table 3.12 Volume-weighted mean concentrations/ Precipitation (Monthly)**

2004	SO <sub>4</sub> <sup>2-</sup>	nss-SO <sub>4</sub> <sup>2-</sup>	NO <sub>3</sub> <sup>-</sup>	Cl <sup>-</sup>	NH <sub>4</sub> <sup>+</sup>	Na <sup>+</sup>	K <sup>+</sup>	Ca <sup>2+</sup>	nss-Ca <sup>2+</sup>	Mg <sup>2+</sup>	H <sup>+</sup>	pH	EC	Precip.
	μ mol/L	μ mol/L	μ mol/L	μ mol/L	μ mol/L	μ mol/L	μ mol/L	μ mol/L	μ mol/L	μ mol/L	μ mol/L			
Jan	*	*	*	*	*	*	*	*	*	*	*	*	*	4.8
Feb	64.4	63.0	35.9	27.9	31.7	23.0	14.6	3.5	3.0	9.6	20.7	4.68	2.53	80.2
Mar	185	181	147	90.1	171	78.7	18.7	190	189	23.3	25.3	4.60	3.02	67.9
Apr	56.3	54.8	51.9	26.5	69.1	24.9	4.8	51.6	51.0	7.0	29.4	4.53	3.52	98.6
May	39.0	37.7	29.9	24.2	44.4	22.1	2.7	27.6	27.1	5.3	25.4	4.60	2.73	202.8
June	60.4	58.1	62.4	42.1	28.6	37.3	4.9	101	99.7	8.6	3.7	5.44	3.31	57.4
July	47.2	43.9	45.3	58.1	37.9	54.4	4.4	64.9	63.7	10.6	3.2	5.50	2.93	80.5
Aug	31.9	27.6	20.9	72.8	30.2	71.0	7.4	36.4	34.8	12.7	5.3	5.28	2.44	213.4
Sept	23.4	22.1	4.3	21.4	26.7	21.1	1.9	12.0	11.5	4.4	32.3	4.49	1.94	232.9
Oct	--	--	--	--	--	--	--	--	--	--	--	--	--	0.0
Nov	--	--	--	--	--	--	--	--	--	--	--	--	--	0.0
Dec	850	821	609	766	50.1	480	58.6	1630	1620	110	0.2	6.68	34.4	26.5
<b>Annual</b>	<b>69.1</b>	<b>66.0</b>	<b>49.8</b>	<b>60.2</b>	<b>45.8</b>	<b>50.4</b>	<b>7.2</b>	<b>83.7</b>	<b>82.6</b>	<b>11.4</b>	<b>19.4</b>	<b>4.71</b>	<b>3.41</b>	<b>1064.9<sup>1)</sup></b>
Max.	850	821	609	766	327	480	66.1	1630	1620	110	75.9	6.68	34.4	
Min.	10.1	8.0	1.7	6.5	<1.0	3.9	<1.0	0.5	0.4	0.6	0.2	4.12	1.04	

**Table 3.12 Wet deposition (Monthly)** unit: mmol m<sup>-2</sup> month<sup>-1</sup>

2004	SO <sub>4</sub> <sup>2-</sup>	nss-SO <sub>4</sub> <sup>2-</sup>	NO <sub>3</sub> <sup>-</sup>	Cl <sup>-</sup>	NH <sub>4</sub> <sup>+</sup>	Na <sup>+</sup>	K <sup>+</sup>	Ca <sup>2+</sup>	nss-Ca <sup>2+</sup>	Mg <sup>2+</sup>	H <sup>+</sup>
Jan	*	*	*	*	*	*	*	*	*	*	*
Feb	5.16	5.05	2.88	2.24	2.54	1.84	1.17	0.28	0.24	0.77	1.66
Mar	12.6	12.2	9.94	6.12	11.6	5.34	1.27	12.9	12.8	1.58	1.72
Apr	5.55	5.40	5.12	2.61	6.81	2.45	0.47	5.08	5.03	0.69	2.90
May	7.91	7.64	6.07	4.90	8.99	4.48	0.54	5.59	5.50	1.07	5.14
June	3.47	3.34	3.58	2.42	1.64	2.14	0.28	5.77	5.73	0.49	0.21
July	3.80	3.53	3.65	4.68	3.05	4.38	0.35	5.22	5.13	0.85	0.25
Aug	6.80	5.89	4.46	15.5	6.44	15.2	1.59	7.76	7.43	2.70	1.13
Sept	5.44	5.14	0.99	4.99	6.21	4.92	0.43	2.80	2.69	1.02	7.52
Oct	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Nov	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Dec	22.5	21.8	16.1	20.3	1.33	12.7	1.55	43.3	43.0	2.92	<0.01
<b>Annual<sup>2)</sup></b>	<b>73.6</b>	<b>70.3</b>	<b>53.1</b>	<b>64.1</b>	<b>48.8</b>	<b>53.7</b>	<b>7.70</b>	<b>89.1</b>	<b>88.0</b>	<b>12.2</b>	<b>20.6</b>

**Table 3.12 Data completeness (Monthly)**

2004	SO <sub>4</sub> <sup>2-</sup>	nss-SO <sub>4</sub> <sup>2-</sup>	NO <sub>3</sub> <sup>-</sup>	Cl <sup>-</sup>	NH <sub>4</sub> <sup>+</sup>	Na <sup>+</sup>	K <sup>+</sup>	Ca <sup>2+</sup>	nss-Ca <sup>2+</sup>	Mg <sup>2+</sup>	H <sup>+</sup>	pH	EC	Precip.
	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP			
Jan	0	0	0	0	0	0	0	0	0	0	0	0	0	100
Feb	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Mar	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Apr	100	100	100	100	100	100	100	100	100	100	100	100	100	100
May	100	100	100	100	100	100	100	100	100	100	100	100	100	100
June	100	100	100	100	100	100	100	100	100	100	100	100	100	100
July	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Aug	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Sept	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Oct	--	--	--	--	--	--	--	--	--	--	--	--	--	100
Nov	--	--	--	--	--	--	--	--	--	--	--	--	--	100
Dec	100	100	100	100	100	100	100	100	100	100	100	100	100	100
<b>Annual</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>

[--] for averages and completeness: Precipitation was 0 mm.

[0.00] for deposition: The deposition was 0 mmol/m<sup>2</sup> because precipitation was 0 mm.

[\*] for averages and deposition: The constituent was not measured although precipitation was not 0 mm. (%TP=0%)

[\*\*] for all: Precipitation was not measured. (%PCL=0%)

Data in hatched column for averages and deposition: Rejected monthly (annual) value by the criteria of EANET

(%PCL<80% or %TP<80%)

Units of 1) and 2) are mm y<sup>-1</sup> and mmol m<sup>-2</sup> y<sup>-1</sup>, respectively.

**Table 3.13 Volume-weighted mean concentrations/ Precipitation (Monthly)**

2004	SO <sub>4</sub> <sup>2-</sup>	nss-SO <sub>4</sub> <sup>2-</sup>	NO <sub>3</sub> <sup>-</sup>	Cl <sup>-</sup>	NH <sub>4</sub> <sup>+</sup>	Na <sup>+</sup>	K <sup>+</sup>	Ca <sup>2+</sup>	nss-Ca <sup>2+</sup>	Mg <sup>2+</sup>	H <sup>+</sup>	pH	EC	Precip.
	μ mol/L	μ mol/L	μ mol/L	μ mol/L	μ mol/L	μ mol/L	μ mol/L	μ mol/L	μ mol/L	μ mol/L	μ mol/L			
Jan	115	114	86.9	43.4	<1.0	24.3	27.9	78.1	77.6	10.0	34.7	4.46	4.50	33.3
Feb	30.6	30.2	30.0	7.4	42.3	7.2	5.4	14.1	14.0	2.4	42.4	4.37	1.60	42.6
Mar	37.9	37.4	51.1	15.2	75.3	7.2	6.3	15.0	14.8	2.5	27.4	4.56	2.68	133.6
Apr	55.2	54.7	67.6	16.2	123	7.6	4.4	13.2	13.0	1.7	46.7	4.33	4.19	81.4
May	78.3	77.7	52.8	56.9	56.2	9.0	9.4	9.6	9.4	1.6	23.5	4.63	2.15	189.6
June	33.4	32.8	25.2	9.3	52.0	8.8	2.8	5.3	5.1	0.7	24.6	4.61	2.11	82.0
July	10.3	9.5	8.5	11.6	18.3	12.3	1.7	1.6	1.4	0.5	12.8	4.89	1.08	471.6
Aug	18.1	16.9	10.2	12.9	33.3	20.3	6.9	4.3	3.8	2.1	13.3	4.88	1.43	423.0
Sept	17.0	16.3	3.2	9.9	29.7	11.9	3.7	2.9	2.6	0.9	39.3	4.41	2.48	501.2
Oct	--	--	--	--	--	--	--	--	--	--	--	--	--	0.0
Nov	--	--	--	--	--	--	--	--	--	--	--	--	--	0.0
Dec	--	--	--	--	--	--	--	--	--	--	--	--	--	0.0
<b>Annual</b>	<b>27.2</b>	<b>26.4</b>	<b>19.6</b>	<b>16.6</b>	<b>38.0</b>	<b>13.0</b>	<b>5.1</b>	<b>6.4</b>	<b>6.1</b>	<b>1.4</b>	<b>24.6</b>	<b>4.61</b>	<b>1.97</b>	<b>1958.4<sup>1)</sup></b>
Max.	115	114	124	90.7	209	44.0	27.9	78.1	77.6	10.0	302	6.26	6.95	
Min.	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.2	<0.2	<0.4	0.5	3.52	0.43	

**Table 3.13 Wet deposition (Monthly)** unit: mmol m<sup>-2</sup> month<sup>-1</sup>

2004	SO <sub>4</sub> <sup>2-</sup>	nss-SO <sub>4</sub> <sup>2-</sup>	NO <sub>3</sub> <sup>-</sup>	Cl <sup>-</sup>	NH <sub>4</sub> <sup>+</sup>	Na <sup>+</sup>	K <sup>+</sup>	Ca <sup>2+</sup>	nss-Ca <sup>2+</sup>	Mg <sup>2+</sup>	H <sup>+</sup>
Jan	3.84	3.79	2.90	1.45	<0.01	0.81	0.93	2.60	2.59	0.33	1.16
Feb	1.30	1.29	1.28	0.32	1.80	0.30	0.23	0.60	0.59	0.10	1.80
Mar	5.06	5.00	6.82	2.03	10.1	0.97	0.84	2.00	1.98	0.33	3.66
Apr	4.49	4.45	5.50	1.32	10.0	0.62	0.36	1.07	1.06	0.14	3.80
May	14.8	14.7	10.0	10.8	10.7	1.71	1.79	1.82	1.78	0.30	4.46
June	2.74	2.69	2.06	0.77	4.26	0.72	0.23	0.43	0.42	0.06	2.02
July	4.84	4.50	3.99	5.45	8.61	5.80	0.79	0.77	0.65	0.24	6.03
Aug	7.66	7.15	4.30	5.46	14.1	8.59	2.92	1.81	1.62	0.88	5.61
Sept	8.54	8.18	1.60	4.96	14.9	5.96	1.86	1.44	1.31	0.44	19.7
Oct	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Nov	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Dec	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
<b>Annual<sup>2)</sup></b>	<b>53.3</b>	<b>51.8</b>	<b>38.5</b>	<b>32.5</b>	<b>74.4</b>	<b>25.5</b>	<b>9.96</b>	<b>12.5</b>	<b>12.0</b>	<b>2.81</b>	<b>48.3</b>

**Table 3.13 Data completeness (Monthly)**

2004	SO <sub>4</sub> <sup>2-</sup>	nss-SO <sub>4</sub> <sup>2-</sup>	NO <sub>3</sub> <sup>-</sup>	Cl <sup>-</sup>	NH <sub>4</sub> <sup>+</sup>	Na <sup>+</sup>	K <sup>+</sup>	Ca <sup>2+</sup>	nss-Ca <sup>2+</sup>	Mg <sup>2+</sup>	H <sup>+</sup>	pH	EC	Precip.
	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP			
Jan	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Feb	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Mar	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Apr	100	100	100	100	100	100	100	100	100	100	100	100	100	100
May	100	100	100	100	100	100	100	100	100	100	100	100	100	100
June	100	100	100	100	100	100	100	100	100	100	100	100	100	100
July	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Aug	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Sept	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Oct	--	--	--	--	--	--	--	--	--	--	--	--	--	100
Nov	--	--	--	--	--	--	--	--	--	--	--	--	--	100
Dec	--	--	--	--	--	--	--	--	--	--	--	--	--	100
<b>Annual</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>

[--] for averages and completeness: Precipitation was 0 mm.

[0.00] for deposition: The deposition was 0 mmol/m<sup>2</sup> because precipitation was 0 mm.

[\*] for averages and deposition: The constituent was not measured although precipitation was not 0 mm. (%TP=0%)

[\*\*] for all: Precipitation was not measured. (%PCL=0%)

Data in hatched column for averages and deposition: Rejected monthly (annual) value by the criteria of EANET

(%PCL<80% or %TP<80%)

Units of 1) and 2) are mm y<sup>-1</sup> and mmol m<sup>-2</sup> y<sup>-1</sup>, respectively.

**Table 3.14 Volume-weighted mean concentrations/ Precipitation (Monthly)**

2004	SO <sub>4</sub> <sup>2-</sup>	nss-SO <sub>4</sub> <sup>2-</sup>	NO <sub>3</sub> <sup>-</sup>	Cl <sup>-</sup>	NH <sub>4</sub> <sup>+</sup>	Na <sup>+</sup>	K <sup>+</sup>	Ca <sup>2+</sup>	nss-Ca <sup>2+</sup>	Mg <sup>2+</sup>	H <sup>+</sup>	pH	EC	Precip.
	μ mol/L	μ mol/L	μ mol/L	μ mol/L	μ mol/L	μ mol/L	μ mol/L	μ mol/L	μ mol/L	μ mol/L	μ mol/L			
Jan	40.4	32.2	15.8	107	67.9	135	4.7	12.5	9.5	20.7	58.6	4.23	4.57	12.3
Feb	71.2	68.1	25.3	12.3	56.5	51.3	3.6	14.6	13.5	24.9	88.5	4.05	5.52	43.1
Mar	119	95.7	66.4	249	59.7	383	4.4	20.5	12.3	5.7	77.1	4.11	8.03	38.3
Apr	18.0	14.5	29.7	213	84.6	64.2	14.5	24.4	23.0	4.3	6.1	5.21	2.92	52.7
May	12.7	11.8	4.2	18.9	96.2	14.2	6.5	15.2	14.9	4.6	5.9	5.23	1.84	321.6
June	13.6	11.7	27.4	31.3	43.7	190	8.1	36.3	32.2	9.1	22.9	4.64	2.94	314.1
July	3.6	2.9	5.4	7.5	26.5	31.2	11.4	12.8	12.2	5.0	6.7	5.17	1.23	165.4
Aug	15.3	14.5	33.7	23.3	20.4	13.7	6.5	6.7	6.4	4.2	11.1	4.95	1.38	343.7
Sept	36.1	35.4	37.4	20.9	37.2	10.6	7.1	10.6	10.3	2.0	5.8	5.23	4.56	48.6
Oct	--	--	--	--	--	--	--	--	--	--	--	--	--	0.0
Nov	--	--	--	--	--	--	--	--	--	--	--	--	--	0.0
Dec	--	--	--	--	--	--	--	--	--	--	--	--	--	0.0
<b>Annual</b>	<b>18.7</b>	<b>16.7</b>	<b>22.1</b>	<b>36.4</b>	<b>50.7</b>	<b>72.1</b>	<b>7.7</b>	<b>18.0</b>	<b>16.4</b>	<b>6.3</b>	<b>16.5</b>	<b>4.78</b>	<b>2.37</b>	<b>1339.8<sup>1)</sup></b>
Max.	198	197	262	801	212	444	45.8	73.1	72.8	25.9	195	5.99	15.0	
Min.	<1.0	<1.0	<1.0	4.8	12.8	<1.0	1.5	1.7	0.6	0.8	1.0	3.71	0.76	

**Table 3.14 Wet deposition (Monthly)** unit: mmol m<sup>-2</sup> month<sup>-1</sup>

2004	SO <sub>4</sub> <sup>2-</sup>	nss-SO <sub>4</sub> <sup>2-</sup>	NO <sub>3</sub> <sup>-</sup>	Cl <sup>-</sup>	NH <sub>4</sub> <sup>+</sup>	Na <sup>+</sup>	K <sup>+</sup>	Ca <sup>2+</sup>	nss-Ca <sup>2+</sup>	Mg <sup>2+</sup>	H <sup>+</sup>
Jan	0.50	0.40	0.19	1.32	0.84	1.66	0.06	0.15	0.12	0.25	0.72
Feb	3.07	2.94	1.09	0.53	2.44	2.21	0.16	0.63	0.58	1.07	3.81
Mar	4.55	3.66	2.54	9.53	2.29	14.7	0.17	0.79	0.47	0.22	2.95
Apr	0.95	0.77	1.57	11.2	4.46	3.38	0.77	1.29	1.21	0.23	0.32
May	4.07	3.80	1.37	6.07	31.0	4.55	2.09	4.89	4.79	1.49	1.89
June	4.26	3.69	8.60	9.84	13.7	59.7	2.54	11.4	10.1	2.86	7.20
July	0.60	0.49	0.89	1.25	4.39	5.16	1.89	2.12	2.01	0.83	1.12
Aug	5.26	4.97	11.6	8.01	7.02	4.69	2.24	2.30	2.20	1.45	3.82
Sept	1.75	1.72	1.82	1.02	1.81	0.52	0.34	0.51	0.50	0.10	0.28
Oct	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Nov	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Dec	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
<b>Annual<sup>2)</sup></b>	<b>25.0</b>	<b>22.4</b>	<b>29.6</b>	<b>48.8</b>	<b>67.9</b>	<b>96.6</b>	<b>10.3</b>	<b>24.1</b>	<b>22.0</b>	<b>8.51</b>	<b>22.1</b>

**Table 3.14 Data completeness (Monthly)**

2004	SO <sub>4</sub> <sup>2-</sup>	nss-SO <sub>4</sub> <sup>2-</sup>	NO <sub>3</sub> <sup>-</sup>	Cl <sup>-</sup>	NH <sub>4</sub> <sup>+</sup>	Na <sup>+</sup>	K <sup>+</sup>	Ca <sup>2+</sup>	nss-Ca <sup>2+</sup>	Mg <sup>2+</sup>	H <sup>+</sup>	pH	EC	Precip.
	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP			
Jan	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Feb	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Mar	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Apr	100	100	100	100	100	100	100	100	100	100	100	100	100	100
May	100	100	100	100	100	100	100	100	100	100	100	100	100	100
June	100	100	100	100	100	100	100	100	100	100	100	100	100	100
July	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Aug	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Sept	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Oct	--	--	--	--	--	--	--	--	--	--	--	--	--	100
Nov	--	--	--	--	--	--	--	--	--	--	--	--	--	100
Dec	--	--	--	--	--	--	--	--	--	--	--	--	--	100
<b>Annual</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>

[--] for averages and completeness: Precipitation was 0 mm.

[0.00] for deposition: The deposition was 0 mmol/m<sup>2</sup> because precipitation was 0 mm.

[\*] for averages and deposition: The constituent was not measured although precipitation was not 0 mm. (%TP=0%)

[\*\*] for all: Precipitation was not measured. (%PCL=0%)

Data in hatched column for averages and deposition: Rejected monthly (annual) value by the criteria of EANET

(%PCL<80% or %TP<80%)

Units of 1) and 2) are mm y<sup>-1</sup> and mmol m<sup>-2</sup> y<sup>-1</sup>, respectively.

**Table 3.15 Volume-weighted mean concentrations/ Precipitation (Monthly)**

2004	SO <sub>4</sub> <sup>2-</sup>	nss-SO <sub>4</sub> <sup>2-</sup>	NO <sub>3</sub> <sup>-</sup>	Cl <sup>-</sup>	NH <sub>4</sub> <sup>+</sup>	Na <sup>+</sup>	K <sup>+</sup>	Ca <sup>2+</sup>	nss-Ca <sup>2+</sup>	Mg <sup>2+</sup>	H <sup>+</sup>	pH	EC	Precip.
	μ mol/L	μ mol/L	μ mol/L	μ mol/L	μ mol/L	μ mol/L	μ mol/L	μ mol/L	μ mol/L	μ mol/L	μ mol/L			
Jan	45.6	38.8	15.6	96.7	54.4	112	3.0	14.7	12.3	17.8	44.8	4.35	4.71	10.7
Feb	55.6	53.3	17.1	20.1	44.4	39.4	3.8	18.1	17.2	33.3	87.3	4.06	4.86	43.8
Mar	--	--	--	--	--	--	--	--	--	--	--	--	--	0.0
Apr	53.2	42.3	35.2	166	81.7	182	11.1	23.8	19.9	7.1	39.7	4.40	4.54	88.5
May	22.9	21.6	9.9	69.4	176	21.9	11.9	7.7	7.2	7.5	9.0	5.04	2.06	182.1
June	8.0	5.9	12.3	31.4	44.5	165	7.4	32.9	29.3	7.2	7.1	5.15	2.35	407.0
July	25.0	23.7	28.7	82.8	36.6	29.5	11.6	8.9	8.3	3.7	27.0	4.57	3.06	201.3
Aug	41.8	37.4	53.7	30.5	22.7	73.1	81.0	18.5	16.9	6.9	38.7	4.41	4.38	220.0
Sept	40.9	37.0	27.8	78.0	29.7	65.8	19.4	63.3	61.9	16.3	27.0	4.57	3.57	123.4
Oct	--	--	--	--	--	--	--	--	--	--	--	--	--	0.0
Nov	--	--	--	--	--	--	--	--	--	--	--	--	--	0.0
Dec	--	--	--	--	--	--	--	--	--	--	--	--	--	0.0
<b>Annual</b>	<b>26.9</b>	<b>23.8</b>	<b>25.0</b>	<b>58.8</b>	<b>59.5</b>	<b>94.4</b>	<b>22.7</b>	<b>24.7</b>	<b>22.7</b>	<b>8.5</b>	<b>23.2</b>	<b>4.63</b>	<b>3.15</b>	<b>1276.8<sup>1)</sup></b>
Max.	190	189	350	522	216	388	225	369	363	85.2	275	6.73	15.2	
Min.	<1.0	<1.0	<1.0	5.6	5.5	<1.0	<1.0	1.5	1.3	0.8	0.2	3.56	0.53	

**Table 3.15 Wet deposition (Monthly)** unit: mmol m<sup>-2</sup> month<sup>-1</sup>

2004	SO <sub>4</sub> <sup>2-</sup>	nss-SO <sub>4</sub> <sup>2-</sup>	NO <sub>3</sub> <sup>-</sup>	Cl <sup>-</sup>	NH <sub>4</sub> <sup>+</sup>	Na <sup>+</sup>	K <sup>+</sup>	Ca <sup>2+</sup>	nss-Ca <sup>2+</sup>	Mg <sup>2+</sup>	H <sup>+</sup>
Jan	0.49	0.42	0.17	1.03	0.58	1.20	0.03	0.16	0.13	0.19	0.48
Feb	2.44	2.33	0.75	0.88	1.94	1.73	0.16	0.79	0.75	1.46	3.82
Mar	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Apr	4.71	3.75	3.12	14.7	7.23	16.1	0.98	2.11	1.76	0.63	3.51
May	4.17	3.93	1.81	12.6	32.0	3.99	2.17	1.40	1.31	1.36	1.65
June	3.26	2.40	5.01	12.8	18.1	67.3	3.02	13.4	11.9	2.92	2.89
July	5.03	4.78	5.78	16.7	7.38	5.94	2.34	1.79	1.66	0.75	5.43
Aug	9.20	8.23	11.8	6.70	4.99	16.1	17.8	4.07	3.73	1.53	8.51
Sept	5.05	4.57	3.43	9.63	3.67	8.13	2.40	7.82	7.64	2.01	3.33
Oct	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Nov	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Dec	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
<b>Annual<sup>2)</sup></b>	<b>34.3</b>	<b>30.4</b>	<b>31.9</b>	<b>75.1</b>	<b>75.9</b>	<b>120</b>	<b>28.9</b>	<b>31.5</b>	<b>28.9</b>	<b>10.8</b>	<b>29.6</b>

**Table 3.15 Data completeness (Monthly)**

2004	SO <sub>4</sub> <sup>2-</sup>	nss-SO <sub>4</sub> <sup>2-</sup>	NO <sub>3</sub> <sup>-</sup>	Cl <sup>-</sup>	NH <sub>4</sub> <sup>+</sup>	Na <sup>+</sup>	K <sup>+</sup>	Ca <sup>2+</sup>	nss-Ca <sup>2+</sup>	Mg <sup>2+</sup>	H <sup>+</sup>	pH	EC	Precip.
	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP			
Jan	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Feb	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Mar	--	--	--	--	--	--	--	--	--	--	--	--	--	100
Apr	100	100	100	100	100	100	100	100	100	100	100	100	100	100
May	100	100	100	100	100	100	100	100	100	100	100	100	100	100
June	100	100	100	100	100	100	100	100	100	100	100	100	100	100
July	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Aug	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Sept	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Oct	--	--	--	--	--	--	--	--	--	--	--	--	--	100
Nov	--	--	--	--	--	--	--	--	--	--	--	--	--	100
Dec	--	--	--	--	--	--	--	--	--	--	--	--	--	100
<b>Annual</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>

[--] for averages and completeness: Precipitation was 0 mm.

[0.00] for deposition: The deposition was 0 mmol/m<sup>2</sup> because precipitation was 0 mm.

[\*] for averages and deposition: The constituent was not measured although precipitation was not 0 mm. (%TP=0%)

[\*\*] for all: Precipitation was not measured. (%PCL=0%)

Data in hatched column for averages and deposition: Rejected monthly (annual) value by the criteria of EANET

(%PCL<80% or %TP<80%)

Units of 1) and 2) are mm y<sup>-1</sup> and mmol m<sup>-2</sup> y<sup>-1</sup>, respectively.

**Table 3.16** Volume-weighted mean concentrations/ Precipitation (Monthly)

2004	SO <sub>4</sub> <sup>2-</sup>	nss-SO <sub>4</sub> <sup>2-</sup>	NO <sub>3</sub> <sup>-</sup>	Cl <sup>-</sup>	NH <sub>4</sub> <sup>+</sup>	Na <sup>+</sup>	K <sup>+</sup>	Ca <sup>2+</sup>	nss-Ca <sup>2+</sup>	Mg <sup>2+</sup>	H <sup>+</sup>	pH	EC	Precip.
	μ mol/L	μ mol/L	μ mol/L	μ mol/L	μ mol/L	μ mol/L	μ mol/L	μ mol/L	μ mol/L	μ mol/L	μ mol/L			
Jan	34.3	33.9	39.4	36.2	23.6	5.6	10.9	8.6	8.5	1.3	11.0	4.96	2.91	173.0
Feb	15.5	14.5	13.3	36.8	9.9	16.7	4.6	3.3	3.0	0.9	8.9	5.05	1.70	233.0
Mar	11.3	10.7	15.8	23.4	20.7	13.3	9.5	17.9	17.6	1.5	7.6	5.12	1.87	257.0
Apr	21.6	19.3	21.5	17.4	28.1	38.8	13.0	42.2	41.3	3.9	3.0	5.53	2.78	378.1
May	34.8	7.1	46.3	41.5	72.5	480	33.4	18.6	13.1	4.8	1.9	5.73	5.13	29.8
June	--	--	--	--	--	--	--	--	--	--	--	--	--	0.0
July	154	151	224	127	9.9	54.7	4.6	179	178	16.5	92.2	4.04	7.62	52.2
Aug	--	--	--	--	--	--	--	--	--	--	--	--	--	0.0
Sept	141	137	257	57.0	118	73.5	54.4	116	115	28.4	41.7	4.38	7.41	32.2
Oct	226	220	407	165	67.7	102	31.3	395	393	38.4	21.9	4.66	12.1	5.5
Nov	128	126	206	79.6	19.8	42.4	9.2	123	123	12.0	64.9	4.19	7.34	84.5
Dec	112	110	228	56.4	8.9	35.8	4.1	115	114	17.1	49.8	4.30	6.77	223.4
<b>Annual</b>	<b>48.6</b>	<b>46.4</b>	<b>77.6</b>	<b>39.1</b>	<b>22.4</b>	<b>37.2</b>	<b>10.3</b>	<b>50.9</b>	<b>50.2</b>	<b>6.3</b>	<b>20.4</b>	<b>4.69</b>	<b>3.69</b>	<b>1468.7<sup>1)</sup></b>
Max.	226	220	447	165	118	591	54.4	395	393	38.4	97.7	6.88	12.1	
Min.	<1.0	<1.0	<1.0	<1.0	<1.0	2.3	<1.0	1.3	<0.2	<0.4	0.1	4.01	0.89	

**Table 3.16** Wet deposition (Monthly) unit: mmol m<sup>-2</sup> month<sup>-1</sup>

2004	SO <sub>4</sub> <sup>2-</sup>	nss-SO <sub>4</sub> <sup>2-</sup>	NO <sub>3</sub> <sup>-</sup>	Cl <sup>-</sup>	NH <sub>4</sub> <sup>+</sup>	Na <sup>+</sup>	K <sup>+</sup>	Ca <sup>2+</sup>	nss-Ca <sup>2+</sup>	Mg <sup>2+</sup>	H <sup>+</sup>
Jan	5.93	5.87	6.82	6.26	4.09	0.96	1.89	1.50	1.47	0.23	1.91
Feb	3.61	3.38	3.09	8.57	2.30	3.89	1.06	0.77	0.69	0.20	2.08
Mar	2.91	2.74	4.05	6.03	5.31	3.42	2.45	4.60	4.53	0.38	1.96
Apr	8.17	7.29	8.14	6.58	10.6	14.7	4.91	15.9	15.6	1.47	1.12
May	1.04	0.21	1.38	1.24	2.16	14.3	1.00	0.55	0.39	0.14	0.06
June	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
July	8.04	7.87	11.7	6.63	0.52	2.86	0.24	9.37	9.30	0.86	4.81
Aug	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Sept	4.55	4.41	8.28	1.84	3.79	2.37	1.75	3.75	3.70	0.91	1.34
Oct	1.24	1.21	2.24	0.91	0.37	0.56	0.17	2.17	2.16	0.21	0.12
Nov	10.8	10.6	17.4	6.72	1.68	3.59	0.77	10.4	10.4	1.02	5.48
Dec	25.1	24.6	50.8	12.6	1.98	7.99	0.91	25.7	25.6	3.82	11.1
<b>Annual<sup>2)</sup></b>	<b>71.4</b>	<b>68.2</b>	<b>114</b>	<b>57.4</b>	<b>32.8</b>	<b>54.6</b>	<b>15.2</b>	<b>74.8</b>	<b>73.8</b>	<b>9.25</b>	<b>30.0</b>

**Table 3.16** Data completeness (Monthly)

2004	SO <sub>4</sub> <sup>2-</sup>	nss-SO <sub>4</sub> <sup>2-</sup>	NO <sub>3</sub> <sup>-</sup>	Cl <sup>-</sup>	NH <sub>4</sub> <sup>+</sup>	Na <sup>+</sup>	K <sup>+</sup>	Ca <sup>2+</sup>	nss-Ca <sup>2+</sup>	Mg <sup>2+</sup>	H <sup>+</sup>	pH	EC	Precip.
	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP			
Jan	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Feb	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Mar	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Apr	100	100	100	100	100	100	100	100	100	100	100	100	100	100
May	100	100	100	100	100	100	100	100	100	100	100	100	100	100
June	--	--	--	--	--	--	--	--	--	--	--	--	--	100
July	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Aug	--	--	--	--	--	--	--	--	--	--	--	--	--	100
Sept	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Oct	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Nov	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Dec	100	100	100	100	100	100	100	100	100	100	100	100	100	100
<b>Annual</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>

[--] for averages and completeness: Precipitation was 0 mm.

[0.00] for deposition: The deposition was 0 mmol/m<sup>2</sup> because precipitation was 0 mm.

[\*] for averages and deposition: The constituent was not measured although precipitation was not 0 mm. (%TP=0%)

[\*\*] for all: Precipitation was not measured. (%PCL=0%)

Data in hatched column for averages and deposition: Rejected monthly (annual) value by the criteria of EANET

(%PCL<80% or %TP<80%)

Units of 1) and 2) are mm y<sup>-1</sup> and mmol m<sup>-2</sup> y<sup>-1</sup>, respectively.

Table 3.17 Volume-weighted mean concentrations/ Precipitation (Monthly)

2004	SO <sub>4</sub> <sup>2-</sup>	nss-SO <sub>4</sub> <sup>2-</sup>	NO <sub>3</sub> <sup>-</sup>	Cl <sup>-</sup>	NH <sub>4</sub> <sup>+</sup>	Na <sup>+</sup>	K <sup>+</sup>	Ca <sup>2+</sup>	nss-Ca <sup>2+</sup>	Mg <sup>2+</sup>	H <sup>+</sup>	pH	EC	Precip.
	μ mol/L	μ mol/L	μ mol/L	μ mol/L	μ mol/L	μ mol/L	μ mol/L	μ mol/L	μ mol/L	μ mol/L	μ mol/L			
Jan	20.5	19.8	19.1	14.3	27.9	11.0	1.7	3.6	3.3	2.1	20.4	4.69	1.59	201.7
Feb	16.5	15.3	17.5	25.6	21.0	19.9	3.3	6.0	5.6	2.9	10.5	4.98	1.30	229.6
Mar	7.3	6.9	8.0	16.2	14.6	6.6	5.3	3.1	2.9	1.5	3.0	5.53	0.63	135.2
Apr	35.6	34.2	48.1	23.7	55.2	23.7	1.2	12.0	11.5	5.5	29.2	4.53	2.71	299.1
May	32.6	31.4	50.2	43.8	58.4	19.6	22.5	13.5	13.1	4.2	19.3	4.71	2.95	159.4
June	35.7	32.5	88.5	51.1	64.1	54.1	9.5	30.8	29.7	9.3	11.5	4.94	3.08	36.7
July	33.4	32.1	44.5	19.5	65.3	21.1	4.7	14.0	13.5	4.8	11.2	4.95	2.33	128.0
Aug	104	100	146	16.8	95.6	59.1	10.0	30.8	29.5	12.1	72.4	4.14	6.74	49.3
Sept	37.2	34.6	92.8	47.8	81.9	42.7	4.9	37.1	36.1	7.6	11.5	4.94	3.18	36.8
Oct	--	--	--	--	--	--	--	--	--	--	--	--	--	0.0
Nov	24.2	23.7	44.5	17.2	32.7	8.3	5.6	7.1	7.0	2.4	34.1	4.47	2.51	124.3
Dec	19.4	18.8	24.7	11.5	18.0	10.2	2.4	6.5	6.3	2.1	26.3	4.58	2.19	62.3
<b>Annual</b>	<b>28.1</b>	<b>26.9</b>	<b>39.7</b>	<b>23.8</b>	<b>42.3</b>	<b>19.6</b>	<b>5.6</b>	<b>10.5</b>	<b>10.1</b>	<b>4.0</b>	<b>20.8</b>	<b>4.68</b>	<b>2.25</b>	<b>1462.4<sup>1)</sup></b>
Max.	104	100	309	231	209	115	180	80.8	78.3	24.2	79.4	6.60	8.35	
Min.	3.1	2.8	1.8	5.3	2.6	1.3	<1.0	<0.2	<0.2	0.4	0.3	4.10	0.45	

Table 3.17 Wet deposition (Monthly) unit: mmol m<sup>-2</sup>month<sup>-1</sup>

2004	SO <sub>4</sub> <sup>2-</sup>	nss-SO <sub>4</sub> <sup>2-</sup>	NO <sub>3</sub> <sup>-</sup>	Cl <sup>-</sup>	NH <sub>4</sub> <sup>+</sup>	Na <sup>+</sup>	K <sup>+</sup>	Ca <sup>2+</sup>	nss-Ca <sup>2+</sup>	Mg <sup>2+</sup>	H <sup>+</sup>
Jan	4.14	4.00	3.86	2.89	5.62	2.23	0.35	0.72	0.67	0.42	4.12
Feb	3.78	3.50	4.02	5.87	4.81	4.56	0.77	1.39	1.29	0.66	2.41
Mar	0.99	0.94	1.08	2.19	1.97	0.89	0.72	0.42	0.40	0.20	0.40
Apr	10.6	10.2	14.4	7.09	16.5	7.08	0.37	3.59	3.44	1.63	8.73
May	5.20	5.01	8.01	6.99	9.31	3.12	3.59	2.16	2.09	0.67	3.08
June	1.31	1.19	3.25	1.87	2.35	1.99	0.35	1.13	1.09	0.34	0.42
July	4.27	4.11	5.69	2.49	8.36	2.70	0.60	1.79	1.73	0.61	1.43
Aug	5.13	4.95	7.22	0.83	4.72	2.92	0.49	1.52	1.46	0.60	3.57
Sept	1.37	1.28	3.42	1.76	3.02	1.57	0.18	1.36	1.33	0.28	0.42
Oct	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Nov	3.01	2.95	5.53	2.13	4.06	1.03	0.70	0.89	0.87	0.30	4.24
Dec	1.21	1.17	1.54	0.71	1.12	0.64	0.15	0.40	0.39	0.13	1.64
<b>Annual<sup>2)</sup></b>	<b>41.0</b>	<b>39.3</b>	<b>58.0</b>	<b>34.8</b>	<b>61.9</b>	<b>28.7</b>	<b>8.26</b>	<b>15.4</b>	<b>14.7</b>	<b>5.84</b>	<b>30.5</b>

Table 3.17 Data completeness (Monthly)

2004	SO <sub>4</sub> <sup>2-</sup>	nss-SO <sub>4</sub> <sup>2-</sup>	NO <sub>3</sub> <sup>-</sup>	Cl <sup>-</sup>	NH <sub>4</sub> <sup>+</sup>	Na <sup>+</sup>	K <sup>+</sup>	Ca <sup>2+</sup>	nss-Ca <sup>2+</sup>	Mg <sup>2+</sup>	H <sup>+</sup>	pH	EC	Precip.
	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP			
Jan	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Feb	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Mar	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Apr	100	100	100	100	100	100	100	100	100	100	100	100	100	97
May	100	100	100	100	100	100	100	100	100	100	100	100	100	100
June	100	100	100	100	100	100	100	100	100	100	100	100	100	100
July	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Aug	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Sept	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Oct	--	--	--	--	--	--	--	--	--	--	--	--	--	94
Nov	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Dec	100	100	100	100	100	100	100	100	100	100	100	100	100	100
<b>Annual</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>

[--] for averages and completeness: Precipitation was 0 mm.

[0.00] for deposition: The deposition was 0 mmol/m<sup>2</sup> because precipitation was 0 mm.

[\*] for averages and deposition: The constituent was not measured although precipitation was not 0 mm. (%TP=0%)

[\*\*] for all: Precipitation was not measured. (%PCL=0%)

Data in hatched column for averages and deposition: Rejected monthly (annual) value by the criteria of EANET

(%PCL<80% or %TP<80%)

Units of 1) and 2) are mm y<sup>-1</sup> and mmol m<sup>-2</sup> y<sup>-1</sup>, respectively.

**Table 3.18** Volume-weighted mean concentrations/ Precipitation (Monthly)

2004	SO <sub>4</sub> <sup>2-</sup>	nss-SO <sub>4</sub> <sup>2-</sup>	NO <sub>3</sub> <sup>-</sup>	Cl <sup>-</sup>	NH <sub>4</sub> <sup>+</sup>	Na <sup>+</sup>	K <sup>+</sup>	Ca <sup>2+</sup>	nss-Ca <sup>2+</sup>	Mg <sup>2+</sup>	H <sup>+</sup>	pH	EC	Precip.
	μmol/L	μmol/L	μmol/L	μmol/L	μmol/L	μmol/L	μmol/L	μmol/L	μmol/L	μmol/L	μmol/L		mS/m	mm month <sup>-1</sup>
Jan	1.6	1.5	<1.0	9.8	<1.0	<1.0	2.9	1.1	1.1	0.8	4.1	5.38	0.79	34.8
Feb	2.5	1.9	5.9	8.9	6.6	9.4	8.8	6.1	5.9	4.0	9.9	5.00	1.20	256.1
Mar	4.0	3.6	10.2	18.1	18.2	6.7	7.0	4.5	4.4	2.1	9.1	5.04	1.14	199.0
Apr	4.6	2.4	17.0	10.7	28.7	37.7	13.2	6.0	5.2	2.7	22.5	4.65	1.56	342.2
May	4.8	4.4	<1.0	23.4	10.5	6.1	4.8	3.4	3.3	2.6	17.6	4.76	1.07	90.8
June	4.5	4.4	1.1	17.4	13.0	4.4	6.0	46.2	46.1	2.1	35.5	4.45	1.36	93.4
July	5.2	5.0	<1.0	20.2	26.3	4.4	12.1	13.3	13.2	1.8	8.9	5.05	1.08	179.1
Aug	4.9	3.7	<1.0	17.6	23.4	19.0	10.8	16.8	16.4	3.4	24.1	4.62	0.95	45.4
Sept	5.1	4.7	2.5	10.9	8.4	7.3	3.9	6.2	6.1	1.3	11.8	4.93	0.96	49.4
Oct	9.8	9.6	<1.0	9.3	4.0	4.5	1.8	3.4	3.3	0.7	36.1	4.44	1.00	345.1
Nov	5.0	4.7	<1.0	5.7	2.5	3.7	1.1	2.0	1.9	<0.4	13.8	4.86	0.82	410.8
Dec	3.9	3.7	<1.0	10.4	<1.0	3.8	<1.0	1.7	1.6	0.4	6.6	5.18	0.77	64.8
<b>Annual</b>	<b>5.2</b>	<b>4.6</b>	<b>4.7</b>	<b>11.8</b>	<b>12.3</b>	<b>10.9</b>	<b>6.3</b>	<b>7.0</b>	<b>6.7</b>	<b>1.8</b>	<b>18.5</b>	<b>4.73</b>	<b>1.11</b>	<b>2110.9<sup>1)</sup></b>
Max.	15.2	14.9	51.2	57.3	108	60.3	49.7	97.1	97.0	6.6	79.4	5.76	2.67	
Min.	<1.0	<1.0	<1.0	2.3	<1.0	<1.0	<1.0	0.2	<0.2	<0.4	1.7	4.10	0.49	

**Table 3.18** Wet deposition (Monthly) unit: mmol m<sup>-2</sup> month<sup>-1</sup>

2004	SO <sub>4</sub> <sup>2-</sup>	nss-SO <sub>4</sub> <sup>2-</sup>	NO <sub>3</sub> <sup>-</sup>	Cl <sup>-</sup>	NH <sub>4</sub> <sup>+</sup>	Na <sup>+</sup>	K <sup>+</sup>	Ca <sup>2+</sup>	nss-Ca <sup>2+</sup>	Mg <sup>2+</sup>	H <sup>+</sup>
Jan	0.05	0.05	0.00	0.34	0.00	0.03	0.10	0.04	0.04	0.03	0.14
Feb	0.64	0.50	1.51	2.29	1.70	2.42	2.26	1.57	1.52	1.03	2.54
Mar	0.81	0.73	2.03	3.61	3.62	1.33	1.39	0.90	0.87	0.43	1.82
Apr	1.58	0.80	5.83	3.67	9.82	12.9	4.53	2.04	1.77	0.91	7.70
May	0.43	0.40	<0.01	2.12	0.95	0.55	0.44	0.31	0.30	0.24	1.60
June	0.42	0.41	0.10	1.63	1.21	0.41	0.56	4.32	4.31	0.20	3.32
July	0.94	0.89	<0.01	3.61	4.70	0.79	2.17	2.38	2.36	0.33	1.59
Aug	0.22	0.17	0.02	0.80	1.06	0.86	0.49	0.76	0.74	0.15	1.10
Sept	0.25	0.23	0.13	0.54	0.42	0.36	0.19	0.31	0.30	0.06	0.58
Oct	3.40	3.30	<0.01	3.22	1.37	1.54	0.63	1.17	1.14	0.23	12.5
Nov	2.03	1.94	0.30	2.32	1.01	1.51	0.47	0.83	0.80	0.12	5.67
Dec	0.25	0.24	<0.01	0.67	<0.01	0.25	<0.01	0.11	0.11	0.03	0.43
<b>Annual<sup>2)</sup></b>	<b>11.0</b>	<b>9.66</b>	<b>9.94</b>	<b>24.8</b>	<b>25.9</b>	<b>23.0</b>	<b>13.2</b>	<b>14.7</b>	<b>14.2</b>	<b>3.76</b>	<b>39.0</b>

**Table 3.18** Data completeness (Monthly)

2004	SO <sub>4</sub> <sup>2-</sup>	nss-SO <sub>4</sub> <sup>2-</sup>	NO <sub>3</sub> <sup>-</sup>	Cl <sup>-</sup>	NH <sub>4</sub> <sup>+</sup>	Na <sup>+</sup>	K <sup>+</sup>	Ca <sup>2+</sup>	nss-Ca <sup>2+</sup>	Mg <sup>2+</sup>	H <sup>+</sup>	pH	EC	Precip.
	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%PCL
Jan	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Feb	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Mar	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Apr	100	100	100	100	100	100	100	100	100	100	100	100	100	100
May	100	100	100	100	100	100	100	100	100	100	100	100	100	100
June	100	100	100	100	100	100	100	100	100	100	100	100	100	100
July	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Aug	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Sept	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Oct	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Nov	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Dec	100	100	100	100	100	100	100	100	100	100	100	100	100	100
<b>Annual</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>

[--] for averages and completeness: Precipitation was 0 mm.

[0.00] for deposition: The deposition was 0 mmol/m<sup>2</sup> because precipitation was 0 mm.

[\*] for averages and deposition: The constituent was not measured although precipitation was not 0 mm. (%TP=0%)

[\*\*] for all: Precipitation was not measured. (%PCL=0%)

Data in hatched column for averages and deposition: Rejected monthly (annual) value by the criteria of EANET

(%PCL<80% or %TP<80%)

Units of 1) and 2) are mm y<sup>-1</sup> and mmol m<sup>-2</sup> y<sup>-1</sup>, respectively.

**Table 3.19** Volume-weighted mean concentrations/ Precipitation (Monthly)

2004	SO <sub>4</sub> <sup>2-</sup>	nss-SO <sub>4</sub> <sup>2-</sup>	NO <sub>3</sub> <sup>-</sup>	Cl <sup>-</sup>	NH <sub>4</sub> <sup>+</sup>	Na <sup>+</sup>	K <sup>+</sup>	Ca <sup>2+</sup>	nss-Ca <sup>2+</sup>	Mg <sup>2+</sup>	H <sup>+</sup>	pH	EC	Precip.
	μ mol/L	μ mol/L	μ mol/L	μ mol/L	μ mol/L	μ mol/L	μ mol/L	μ mol/L	μ mol/L	μ mol/L	μ mol/L			
Jan	23.2	23.1	25.1	12.6	35.7	2.0	1.0	10.4	10.3	1.5	22.5	4.65	1.77	172.5
Feb	10.1	9.8	17.9	13.6	15.9	4.4	1.2	12.6	12.5	2.6	6.9	5.16	1.15	79.7
Mar	13.1	12.7	10.6	8.5	16.2	6.4	<1.0	9.2	9.1	1.1	2.7	5.57	0.85	213.7
Apr	25.0	24.8	28.0	25.0	56.9	3.0	<1.0	15.2	15.1	1.5	2.8	5.55	1.52	69.5
May	19.7	18.9	24.6	14.8	19.0	12.4	2.4	15.4	15.1	3.6	5.8	5.23	1.46	74.8
June	43.4	41.9	38.4	26.5	44.8	24.7	4.3	42.8	42.3	5.8	2.1	5.67	2.38	50.3
July	27.9	26.8	5.3	30.1	24.4	17.8	4.1	27.0	26.6	4.6	0.9	6.05	1.47	9.3
Aug	47.0	45.5	56.9	31.9	95.0	24.3	10.3	41.8	41.3	7.5	0.5	6.33	3.52	8.5
Sept	59.1	57.5	63.9	36.5	86.4	27.3	15.1	43.4	42.8	8.9	5.1	5.29	3.61	88.0
Oct	97.5	96.0	95.4	27.4	104	25.2	10.5	38.0	37.5	7.1	36.3	4.44	5.53	31.7
Nov	--	--	--	--	--	--	--	--	--	--	--	--	--	0.0
Dec	29.1	28.1	24.1	17.8	25.7	17.1	3.6	16.4	16.0	4.6	10.0	5.00	1.68	96.5
<b>Annual</b>	<b>27.7</b>	<b>27.0</b>	<b>28.2</b>	<b>17.4</b>	<b>36.8</b>	<b>10.8</b>	<b>3.3</b>	<b>18.3</b>	<b>18.0</b>	<b>3.3</b>	<b>9.3</b>	<b>5.03</b>	<b>1.80</b>	<b>894.5<sup>1)</sup></b>
Max.	172	169	242	191	303	155	30.3	134	130	35.4	45.7	6.68	9.42	
Min.	4.8	4.6	2.0	2.1	<1.0	<1.0	<1.0	1.5	1.2	<0.4	0.2	4.34	0.37	

**Table 3.19** Wet deposition (Monthly) unit: mmol m<sup>-2</sup>month<sup>-1</sup>

2004	SO <sub>4</sub> <sup>2-</sup>	nss-SO <sub>4</sub> <sup>2-</sup>	NO <sub>3</sub> <sup>-</sup>	Cl <sup>-</sup>	NH <sub>4</sub> <sup>+</sup>	Na <sup>+</sup>	K <sup>+</sup>	Ca <sup>2+</sup>	nss-Ca <sup>2+</sup>	Mg <sup>2+</sup>	H <sup>+</sup>
Jan	4.00	3.98	4.32	2.17	6.16	0.34	0.18	1.79	1.78	0.26	3.88
Feb	0.80	0.78	1.43	1.08	1.27	0.35	0.10	1.00	0.99	0.20	0.55
Mar	2.81	2.72	2.27	1.82	3.46	1.37	0.09	1.97	1.94	0.24	0.57
Apr	1.74	1.72	1.94	1.74	3.96	0.21	0.04	1.05	1.05	0.11	0.19
May	1.47	1.42	1.84	1.11	1.42	0.92	0.18	1.15	1.13	0.27	0.44
June	2.18	2.11	1.93	1.33	2.25	1.24	0.22	2.15	2.13	0.29	0.11
July	0.26	0.25	0.05	0.28	0.23	0.17	0.04	0.25	0.25	0.04	<0.01
Aug	0.40	0.39	0.48	0.27	0.81	0.21	0.09	0.36	0.35	0.06	<0.01
Sept	5.20	5.06	5.63	3.21	7.61	2.40	1.33	3.82	3.77	0.78	0.45
Oct	3.09	3.04	3.02	0.87	3.30	0.80	0.33	1.20	1.19	0.22	1.15
Nov	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Dec	2.81	2.71	2.33	1.71	2.48	1.65	0.35	1.58	1.55	0.45	0.97
<b>Annual<sup>2)</sup></b>	<b>24.8</b>	<b>24.2</b>	<b>25.2</b>	<b>15.6</b>	<b>32.9</b>	<b>9.66</b>	<b>2.95</b>	<b>16.3</b>	<b>16.1</b>	<b>2.93</b>	<b>8.31</b>

**Table 3.19** Data completeness (Monthly)

2004	SO <sub>4</sub> <sup>2-</sup>	nss-SO <sub>4</sub> <sup>2-</sup>	NO <sub>3</sub> <sup>-</sup>	Cl <sup>-</sup>	NH <sub>4</sub> <sup>+</sup>	Na <sup>+</sup>	K <sup>+</sup>	Ca <sup>2+</sup>	nss-Ca <sup>2+</sup>	Mg <sup>2+</sup>	H <sup>+</sup>	pH	EC	Precip.
	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP			
Jan	100	100	100	100	100	100	100	100	100	100	100	100	100	94
Feb	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Mar	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Apr	100	100	100	100	100	100	100	100	100	100	100	100	100	53
May	100	100	100	100	100	100	100	100	100	100	100	100	100	81
June	100	100	100	100	100	100	100	100	100	100	100	100	100	100
July	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Aug	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Sept	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Oct	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Nov	--	--	--	--	--	--	--	--	--	--	--	--	--	67
Dec	100	100	100	100	100	100	100	100	100	100	100	100	100	87
<b>Annual</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>90</b>

[--] for averages and completeness: Precipitation was 0 mm.

[0.00] for deposition: The deposition was 0 mmol/m<sup>2</sup> because precipitation was 0 mm.

[\*] for averages and deposition: The constituent was not measured although precipitation was not 0 mm. (%TP=0%)

[\*\*] for all: Precipitation was not measured. (%PCL=0%)

Data in hatched column for averages and deposition: Rejected monthly (annual) value by the criteria of EANET

(%PCL<80% or %TP<80%)

Units of 1) and 2) are mm y<sup>-1</sup> and mmol m<sup>-2</sup> y<sup>-1</sup>, respectively.

**Table 3.20** Volume-weighted mean concentrations/ Precipitation (Monthly)

2004	SO <sub>4</sub> <sup>2-</sup>	nss-SO <sub>4</sub> <sup>2-</sup>	NO <sub>3</sub> <sup>-</sup>	Cl <sup>-</sup>	NH <sub>4</sub> <sup>+</sup>	Na <sup>+</sup>	K <sup>+</sup>	Ca <sup>2+</sup>	nss-Ca <sup>2+</sup>	Mg <sup>2+</sup>	H <sup>+</sup>	pH	EC	Precip.
	μ mol/L	μ mol/L	μ mol/L	μ mol/L	μ mol/L	μ mol/L	μ mol/L	μ mol/L	μ mol/L	μ mol/L	μ mol/L			
Jan	35.1	20.1	10.8	278	18.0	249	6.5	6.9	1.6	28.3	23.9	4.62	5.35	128.5
Feb	39.1	20.4	9.5	359	17.3	310	8.8	10.1	3.4	38.8	18.9	4.72	6.16	65.0
Mar	80.9	52.7	55.2	536	55.3	468	13.8	54.3	44.2	56.0	4.6	5.34	9.75	45.5
Apr	25.2	17.1	13.8	155	25.6	133	5.1	9.6	6.7	16.4	6.1	5.21	3.12	52.0
May	11.9	10.0	8.2	35.4	12.1	32.2	1.9	2.4	1.7	3.4	10.2	4.99	1.34	122.0
June	18.5	17.5	16.7	18.7	26.4	17.2	1.4	2.9	2.5	2.4	19.7	4.71	1.69	67.5
July	12.5	11.8	10.0	12.6	19.1	11.4	<1.0	0.9	0.7	1.3	15.0	4.82	1.17	103.3
Aug	11.8	7.3	8.2	82.7	11.4	75.2	1.7	1.7	0.3	6.7	16.7	4.78	2.09	42.3
Sept	31.1	5.8	4.2	453	3.7	420	9.8	10.6	1.5	51.0	6.0	5.22	7.16	107.3
Oct	47.2	16.6	14.7	575	27.7	507	12.3	14.6	3.6	55.2	17.2	4.77	9.33	41.9
Nov	44.4	13.5	10.1	556	14.3	513	12.0	14.5	3.4	58.4	16.2	4.79	9.01	59.6
Dec	33.7	13.6	9.8	388	12.0	334	7.5	9.4	2.2	37.0	15.9	4.80	6.51	110.5
<b>Annual</b>	<b>28.6</b>	<b>14.7</b>	<b>11.6</b>	<b>256</b>	<b>17.1</b>	<b>229</b>	<b>6.0</b>	<b>8.6</b>	<b>3.7</b>	<b>26.4</b>	<b>14.4</b>	<b>4.84</b>	<b>4.72</b>	<b>945.4<sup>1)</sup></b>
Max.	215	115	151	2620	150	2490	51.3	182	145	311	74.1	6.15	39.1	
Min.	<1.0	<1.0	<1.0	2.8	<1.0	1.9	<1.0	<0.2	<0.2	<0.4	0.7	4.13	0.23	

**Table 3.20** Wet deposition (Monthly) unit: mmol m<sup>-2</sup> month<sup>-1</sup>

2004	SO <sub>4</sub> <sup>2-</sup>	nss-SO <sub>4</sub> <sup>2-</sup>	NO <sub>3</sub> <sup>-</sup>	Cl <sup>-</sup>	NH <sub>4</sub> <sup>+</sup>	Na <sup>+</sup>	K <sup>+</sup>	Ca <sup>2+</sup>	nss-Ca <sup>2+</sup>	Mg <sup>2+</sup>	H <sup>+</sup>
Jan	4.52	2.59	1.39	35.7	2.31	32.0	0.84	0.89	0.20	3.63	3.07
Feb	2.54	1.33	0.62	23.3	1.12	20.1	0.57	0.66	0.22	2.52	1.23
Mar	3.68	2.40	2.51	24.4	2.52	21.3	0.63	2.47	2.01	2.55	0.21
Apr	1.31	0.89	0.72	8.07	1.33	6.94	0.27	0.50	0.35	0.85	0.32
May	1.45	1.22	0.99	4.32	1.48	3.93	0.23	0.29	0.20	0.42	1.25
June	1.25	1.18	1.12	1.26	1.78	1.16	0.09	0.20	0.17	0.16	1.33
July	1.29	1.22	1.04	1.31	1.97	1.18	0.09	0.09	0.07	0.13	1.55
Aug	0.50	0.31	0.35	3.50	0.48	3.18	0.07	0.07	0.01	0.28	0.71
Sept	3.34	0.62	0.45	48.6	0.39	45.1	1.05	1.14	0.16	5.48	0.65
Oct	1.98	0.70	0.62	24.1	1.16	21.3	0.52	0.61	0.15	2.31	0.72
Nov	2.64	0.80	0.60	33.1	0.85	30.6	0.72	0.86	0.20	3.48	0.97
Dec	3.73	1.50	1.09	42.9	1.32	36.9	0.83	1.04	0.24	4.09	1.75
<b>Annual<sup>2)</sup></b>	<b>27.0</b>	<b>13.9</b>	<b>11.0</b>	<b>242</b>	<b>16.2</b>	<b>217</b>	<b>5.68</b>	<b>8.13</b>	<b>3.46</b>	<b>25.0</b>	<b>13.6</b>

**Table 3.20** Data completeness (Monthly)

2004	SO <sub>4</sub> <sup>2-</sup>	nss-SO <sub>4</sub> <sup>2-</sup>	NO <sub>3</sub> <sup>-</sup>	Cl <sup>-</sup>	NH <sub>4</sub> <sup>+</sup>	Na <sup>+</sup>	K <sup>+</sup>	Ca <sup>2+</sup>	nss-Ca <sup>2+</sup>	Mg <sup>2+</sup>	H <sup>+</sup>	pH	EC	Precip.
	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP			
Jan	95	95	95	95	95	95	95	95	95	95	95	95	95	100
Feb	28	28	28	28	28	28	28	28	28	28	28	28	28	100
Mar	69	69	69	69	69	69	69	69	69	69	69	69	69	97
Apr	99	99	99	99	99	99	99	99	99	99	99	99	99	100
May	100	100	100	100	100	100	100	100	100	100	100	100	100	100
June	98	98	98	98	98	98	98	98	98	98	98	98	98	100
July	99	99	99	99	99	99	99	99	99	99	99	99	99	100
Aug	99	99	99	99	99	99	99	99	99	99	99	99	99	100
Sept	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Oct	99	99	99	99	99	99	99	99	99	99	99	99	99	100
Nov	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Dec	100	100	100	100	100	100	100	100	100	100	100	100	100	100
<b>Annual</b>	<b>92</b>	<b>92</b>	<b>92</b>	<b>92</b>	<b>92</b>	<b>92</b>	<b>92</b>	<b>92</b>	<b>92</b>	<b>92</b>	<b>92</b>	<b>92</b>	<b>92</b>	<b>100</b>

[--] for averages and completeness: Precipitation was 0 mm.

[0.00] for deposition: The deposition was 0 mmol/m<sup>2</sup> because precipitation was 0 mm.

[\*] for averages and deposition: The constituent was not measured although precipitation was not 0 mm. (%TP=0%)

[\*\*] for all: Precipitation was not measured. (%PCL=0%)

Data in hatched column for averages and deposition: Rejected monthly (annual) value by the criteria of EANET

(%PCL<80% or %TP<80%)

Units of 1) and 2) are mm y<sup>-1</sup> and mmol m<sup>-2</sup> y<sup>-1</sup>, respectively.

**Table 3.21 Volume-weighted mean concentrations/ Precipitation (Monthly)**

2004	SO <sub>4</sub> <sup>2-</sup>	nss-SO <sub>4</sub> <sup>2-</sup>	NO <sub>3</sub> <sup>-</sup>	Cl <sup>-</sup>	NH <sub>4</sub> <sup>+</sup>	Na <sup>+</sup>	K <sup>+</sup>	Ca <sup>2+</sup>	nss-Ca <sup>2+</sup>	Mg <sup>2+</sup>	H <sup>+</sup>	pH	EC	Precip.
	μ mol/L	μ mol/L	μ mol/L	μ mol/L	μ mol/L	μ mol/L	μ mol/L	μ mol/L	μ mol/L	μ mol/L	μ mol/L		mS/m	mm month <sup>-1</sup>
Jan	128	4.5	6.7	2370	11.3	2070	43.9	53.6	8.8	245	6.7	5.18	31.5	35.0
Feb	35.7	20.7	18.5	292	21.5	257	6.1	10.4	4.8	30.0	30.6	4.51	5.73	38.0
Mar	53.1	16.0	43.2	663	16.5	615	14.2	32.6	19.3	77.1	10.2	4.99	7.41	17.1
Apr	27.0	20.2	36.8	126	28.0	113	4.5	16.7	14.3	15.7	18.5	4.73	3.38	52.7
May	32.0	21.1	18.6	204	19.8	180	4.6	10.6	6.7	21.2	26.8	4.57	4.25	90.0
June	10.8	8.7	10.5	39.1	9.8	34.5	1.6	4.1	3.3	5.1	14.8	4.83	1.41	34.5
July	17.1	16.5	9.7	12.1	8.2	11.1	<1.0	1.3	1.1	1.4	30.3	4.52	1.78	42.0
Aug	18.3	4.6	4.6	260	3.3	227	4.6	5.3	0.6	25.4	13.1	4.88	4.27	78.0
Sept	24.3	8.8	7.6	299	4.8	257	5.5	7.0	1.5	29.8	19.7	4.71	5.11	128.7
Oct	23.5	9.7	10.2	261	8.4	229	5.0	7.9	3.0	29.1	16.6	4.78	4.60	36.3
Nov	38.9	13.1	11.0	493	9.7	428	9.2	11.2	2.0	48.7	25.8	4.59	8.10	75.9
Dec	98.2	16.5	16.0	1500	15.8	1350	29.7	36.0	6.7	152	25.1	4.60	22.1	19.7
<b>Annual</b>	<b>34.5</b>	<b>12.9</b>	<b>13.5</b>	<b>410</b>	<b>11.8</b>	<b>360</b>	<b>8.1</b>	<b>12.2</b>	<b>4.5</b>	<b>42.2</b>	<b>20.7</b>	<b>4.68</b>	<b>6.72</b>	<b>648.0<sup>1)</sup></b>
Max.	403	308	279	7740	563	6810	141	206	137	808	162	5.76	101	
Min.	3.7	<1.0	<1.0	8.4	<1.0	9.2	<1.0	0.6	<0.2	0.8	1.7	3.79	0.60	

**Table 3.21 Wet deposition (Monthly)** unit: mmol m<sup>-2</sup> month<sup>-1</sup>

2004	SO <sub>4</sub> <sup>2-</sup>	nss-SO <sub>4</sub> <sup>2-</sup>	NO <sub>3</sub> <sup>-</sup>	Cl <sup>-</sup>	NH <sub>4</sub> <sup>+</sup>	Na <sup>+</sup>	K <sup>+</sup>	Ca <sup>2+</sup>	nss-Ca <sup>2+</sup>	Mg <sup>2+</sup>	H <sup>+</sup>
Jan	4.49	0.16	0.23	82.9	0.40	72.7	1.54	1.88	0.31	8.57	0.23
Feb	1.35	0.79	0.70	11.1	0.82	9.76	0.23	0.39	0.18	1.14	1.16
Mar	0.91	0.27	0.74	11.3	0.28	10.5	0.24	0.56	0.33	1.32	0.17
Apr	1.42	1.06	1.94	6.65	1.48	5.95	0.24	0.88	0.75	0.83	0.97
May	2.88	1.90	1.67	18.3	1.78	16.2	0.42	0.95	0.60	1.91	2.41
June	0.37	0.30	0.36	1.35	0.34	1.19	0.06	0.14	0.11	0.18	0.51
July	0.72	0.69	0.41	0.51	0.34	0.47	0.03	0.06	0.05	0.06	1.27
Aug	1.43	0.36	0.36	20.3	0.25	17.7	0.36	0.42	0.05	1.98	1.02
Sept	3.13	1.13	0.98	38.5	0.62	33.1	0.70	0.91	0.20	3.84	2.54
Oct	0.85	0.35	0.37	9.48	0.30	8.32	0.18	0.29	0.11	1.06	0.60
Nov	2.95	1.00	0.83	37.4	0.74	32.5	0.69	0.85	0.15	3.70	1.96
Dec	1.94	0.33	0.32	29.6	0.31	26.7	0.59	0.71	0.13	3.01	0.50
<b>Annual<sup>2)</sup></b>	<b>22.3</b>	<b>8.33</b>	<b>8.78</b>	<b>266</b>	<b>7.64</b>	<b>233</b>	<b>5.23</b>	<b>7.92</b>	<b>2.90</b>	<b>27.3</b>	<b>13.4</b>

**Table 3.21 Data completeness (Monthly)**

2004	SO <sub>4</sub> <sup>2-</sup>	nss-SO <sub>4</sub> <sup>2-</sup>	NO <sub>3</sub> <sup>-</sup>	Cl <sup>-</sup>	NH <sub>4</sub> <sup>+</sup>	Na <sup>+</sup>	K <sup>+</sup>	Ca <sup>2+</sup>	nss-Ca <sup>2+</sup>	Mg <sup>2+</sup>	H <sup>+</sup>	pH	EC	Precip.
	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%PCL
Jan	99	99	99	99	99	99	99	99	99	99	99	99	99	100
Feb	99	99	99	99	99	99	99	99	99	99	99	99	99	100
Mar	71	71	71	71	71	71	71	71	71	71	62	62	62	100
Apr	100	100	100	100	100	100	100	100	100	100	99	99	99	100
May	99	99	99	99	99	99	99	99	99	99	97	97	97	100
June	100	100	100	100	100	100	100	100	100	100	96	96	96	100
July	100	100	100	100	100	100	100	100	100	100	98	98	98	100
Aug	99	99	99	99	99	99	99	99	99	99	99	99	99	100
Sept	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Oct	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Nov	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Dec	100	100	100	100	100	100	100	100	100	100	100	100	100	100
<b>Annual</b>	<b>99</b>	<b>99</b>	<b>99</b>	<b>99</b>	<b>99</b>	<b>99</b>	<b>99</b>	<b>99</b>	<b>99</b>	<b>99</b>	<b>98</b>	<b>98</b>	<b>98</b>	<b>100</b>

[--] for averages and completeness: Precipitation was 0 mm.

[0.00] for deposition: The deposition was 0 mmol/m<sup>2</sup> because precipitation was 0 mm.

[\*] for averages and deposition: The constituent was not measured although precipitation was not 0 mm. (%TP=0%)

[\*\*] for all: Precipitation was not measured. (%PCL=0%)

Data in hatched column for averages and deposition: Rejected monthly (annual) value by the criteria of EANET

(%PCL<80% or %TP<80%)

Units of 1) and 2) are mm y<sup>-1</sup> and mmol m<sup>-2</sup> y<sup>-1</sup>, respectively.

**Table 3.22 Volume-weighted mean concentrations/ Precipitation (Monthly)**

2004	SO <sub>4</sub> <sup>2-</sup>	nss-SO <sub>4</sub> <sup>2-</sup>	NO <sub>3</sub> <sup>-</sup>	Cl <sup>-</sup>	NH <sub>4</sub> <sup>+</sup>	Na <sup>+</sup>	K <sup>+</sup>	Ca <sup>2+</sup>	nss-Ca <sup>2+</sup>	Mg <sup>2+</sup>	H <sup>+</sup>	pH	EC	Precip.
	μ mol/L	μ mol/L	μ mol/L	μ mol/L	μ mol/L	μ mol/L	μ mol/L	μ mol/L	μ mol/L	μ mol/L	μ mol/L			
Jan	44.5	13.1	17.2	567	10.3	519	11.1	14.5	3.3	60.6	32.0	4.49	9.90	78.6
Feb	46.5	29.3	31.7	335	39.1	286	8.1	19.4	13.2	35.9	36.7	4.44	7.06	104.5
Mar	238	45.9	82.9	3540	83.8	3190	55.9	102	32.8	366	24.0	4.62	50.4	20.0
Apr	227	191	192	641	252	597	37.9	138	125	89.9	19.5	4.71	16.6	91.6
May	23.8	19.7	24.7	74.2	21.2	66.6	2.4	7.4	6.0	8.3	34.3	4.47	2.97	171.5
June	27.5	16.7	22.4	219	27.1	180	4.6	9.8	6.2	21.8	23.2	4.63	4.49	74.0
July	24.3	22.8	22.5	29.6	29.2	23.4	1.2	2.3	1.9	3.3	37.4	4.43	2.54	124.2
Aug	10.9	5.8	6.7	102	5.4	84.2	1.5	2.2	0.4	9.8	18.8	4.73	2.28	190.0
Sept	12.9	5.5	7.4	147	4.5	123	2.4	3.1	0.6	14.8	16.5	4.78	2.46	247.0
Oct	23.4	11.6	12.4	235	12.4	196	4.4	6.2	2.0	24.6	22.5	4.65	4.44	68.5
Nov	29.2	11.8	13.3	341	8.7	288	8.7	7.2	1.0	32.2	20.9	4.68	5.78	143.5
Dec	33.3	13.0	12.4	393	9.7	337	8.1	10.3	3.0	38.7	22.5	4.65	6.68	159.5
<b>Annual</b>	<b>26.2</b>	<b>14.2</b>	<b>16.3</b>	<b>231</b>	<b>15.6</b>	<b>199</b>	<b>4.9</b>	<b>7.8</b>	<b>3.5</b>	<b>23.4</b>	<b>25.4</b>	<b>4.59</b>	<b>4.57</b>	<b>1473.0<sup>1)</sup></b>
Max.	3360	191	407	69000	832	57000	1130	1530	303	6480	148	5.95	117	
Min.	1.4	<1.0	<1.0	3.1	<1.0	2.3	<1.0	<0.2	<0.2	<0.4	1.1	3.83	0.60	

**Table 3.22 Wet deposition (Monthly)** unit: mmol m<sup>-2</sup> month<sup>-1</sup>

2004	SO <sub>4</sub> <sup>2-</sup>	nss-SO <sub>4</sub> <sup>2-</sup>	NO <sub>3</sub> <sup>-</sup>	Cl <sup>-</sup>	NH <sub>4</sub> <sup>+</sup>	Na <sup>+</sup>	K <sup>+</sup>	Ca <sup>2+</sup>	nss-Ca <sup>2+</sup>	Mg <sup>2+</sup>	H <sup>+</sup>
Jan	3.49	1.03	1.35	44.5	0.81	40.8	0.88	1.14	0.26	4.76	2.51
Feb	4.86	3.06	3.31	35.1	4.08	29.9	0.84	2.03	1.38	3.75	3.84
Mar	4.76	0.92	1.66	70.8	1.68	63.8	1.12	2.03	0.66	7.33	0.48
Apr	20.8	17.5	17.6	58.7	23.1	54.7	3.47	12.7	11.5	8.23	1.79
May	4.08	3.39	4.24	12.7	3.64	11.4	0.41	1.27	1.02	1.43	5.88
June	2.04	1.24	1.66	16.2	2.00	13.3	0.34	0.73	0.46	1.61	1.72
July	3.01	2.84	2.79	3.68	3.62	2.90	0.15	0.29	0.23	0.41	4.64
Aug	2.08	1.11	1.27	19.3	1.03	16.0	0.29	0.42	0.08	1.87	3.58
Sept	3.19	1.37	1.83	36.4	1.12	30.4	0.60	0.76	0.14	3.65	4.07
Oct	1.60	0.79	0.85	16.1	0.85	13.5	0.30	0.43	0.14	1.69	1.54
Nov	4.19	1.70	1.91	48.9	1.25	41.4	1.24	1.04	0.14	4.62	2.99
Dec	5.31	2.07	1.97	62.6	1.55	53.8	1.30	1.64	0.48	6.17	3.60
<b>Annual<sup>2)</sup></b>	<b>38.6</b>	<b>21.0</b>	<b>24.0</b>	<b>341</b>	<b>22.9</b>	<b>292</b>	<b>7.28</b>	<b>11.4</b>	<b>5.19</b>	<b>34.5</b>	<b>37.5</b>

**Table 3.22 Data completeness (Monthly)**

2004	SO <sub>4</sub> <sup>2-</sup>	nss-SO <sub>4</sub> <sup>2-</sup>	NO <sub>3</sub> <sup>-</sup>	Cl <sup>-</sup>	NH <sub>4</sub> <sup>+</sup>	Na <sup>+</sup>	K <sup>+</sup>	Ca <sup>2+</sup>	nss-Ca <sup>2+</sup>	Mg <sup>2+</sup>	H <sup>+</sup>	pH	EC	Precip.
	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP			
Jan	73	73	73	73	73	73	73	73	73	73	73	73	73	100
Feb	97	97	97	97	97	97	97	97	97	97	97	97	97	100
Mar	28	28	28	28	28	28	28	28	28	28	28	28	28	84
Apr	1	1	1	1	1	1	1	1	1	1	1	1	1	87
May	97	97	97	97	97	97	97	97	97	97	97	97	97	100
June	99	99	99	99	99	99	99	99	99	99	99	99	99	100
July	91	91	91	91	91	91	91	91	91	91	91	91	91	100
Aug	100	100	100	100	100	100	100	100	100	100	99	99	99	100
Sept	73	73	73	73	73	73	73	73	73	73	73	73	73	100
Oct	97	97	97	97	97	97	97	97	97	97	95	95	95	100
Nov	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Dec	98	98	98	98	98	98	98	98	98	98	98	98	98	100
<b>Annual</b>	<b>85</b>	<b>85</b>	<b>85</b>	<b>85</b>	<b>85</b>	<b>85</b>	<b>85</b>	<b>85</b>	<b>85</b>	<b>85</b>	<b>85</b>	<b>85</b>	<b>85</b>	<b>98</b>

[--] for averages and completeness: Precipitation was 0 mm.

[0.00] for deposition: The deposition was 0 mmol/m<sup>2</sup> because precipitation was 0 mm.

[\*] for averages and deposition: The constituent was not measured although precipitation was not 0 mm. (%TP=0%)

[\*\*] for all: Precipitation was not measured. (%PCL=0%)

Data in hatched column for averages and deposition: Rejected monthly (annual) value by the criteria of EANET

(%PCL<80% or %TP<80%)

Units of 1) and 2) are mm y<sup>-1</sup> and mmol m<sup>-2</sup> y<sup>-1</sup>, respectively.

**Table 3.23 Volume-weighted mean concentrations/ Precipitation (Monthly)**

2004	SO <sub>4</sub> <sup>2-</sup>	nss-SO <sub>4</sub> <sup>2-</sup>	NO <sub>3</sub> <sup>-</sup>	Cl <sup>-</sup>	NH <sub>4</sub> <sup>+</sup>	Na <sup>+</sup>	K <sup>+</sup>	Ca <sup>2+</sup>	nss-Ca <sup>2+</sup>	Mg <sup>2+</sup>	H <sup>+</sup>	pH	EC	Precip.	
	μ mol/L	μ mol/L	μ mol/L	μ mol/L	μ mol/L	μ mol/L	μ mol/L	μ mol/L	μ mol/L	μ mol/L	μ mol/L				mS/m
Jan	59.6	34.4	39.2	431	42.4	419	10.2	18.3	9.3	50.1	47.5	4.32	9.36	70.8	
Feb	*	*	*	*	*	*	*	*	*	*	*	*	*	*	61.5
Mar	*	*	*	*	*	*	*	*	*	*	*	*	*	*	66.0
Apr	*	*	*	*	*	*	*	*	*	*	*	*	*	*	86.5
May	10.3	9.5	7.8	17.8	10.4	13.6	<1.0	2.1	1.8	2.4	16.1	4.79	1.15	289.0	
June	14.5	10.2	17.9	84.4	17.2	70.6	3.0	4.2	2.7	9.0	20.3	4.69	2.36	119.5	
July	15.3	10.6	12.8	89.6	10.0	79.2	4.3	2.6	0.9	8.5	25.4	4.60	2.45	139.0	
Aug	3.8	1.0	2.4	54.2	1.0	46.1	1.2	1.0	0.2	5.3	6.5	5.19	1.09	275.5	
Sept	17.0	8.8	11.1	160	7.6	137	2.9	4.2	1.3	15.9	23.1	4.64	3.32	175.8	
Oct	20.5	10.6	13.5	192	11.6	165	3.8	5.0	1.5	19.8	23.3	4.63	3.96	100.2	
Nov	35.9	23.7	22.6	239	18.6	203	5.7	10.4	6.0	24.0	38.6	4.41	5.42	45.9	
Dec	45.5	14.3	13.7	581	12.4	517	11.7	14.3	3.2	56.7	25.5	4.59	8.44	109.5	
<b>Annual</b>	<b>17.7</b>	<b>9.5</b>	<b>11.2</b>	<b>154</b>	<b>10.1</b>	<b>135</b>	<b>3.6</b>	<b>4.7</b>	<b>1.9</b>	<b>15.6</b>	<b>19.7</b>	<b>4.70</b>	<b>3.10</b>	<b>1539.2<sup>1)</sup></b>	
Max.	1770	178	184	30400	251	26400	534	882	312	2850	110	5.62	140		
Min.	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.2	<0.2	<0.4	2.4	3.96	0.22		

**Table 3.23 Wet deposition (Monthly)** unit: mmol m<sup>-2</sup> month<sup>-1</sup>

2004	SO <sub>4</sub> <sup>2-</sup>	nss-SO <sub>4</sub> <sup>2-</sup>	NO <sub>3</sub> <sup>-</sup>	Cl <sup>-</sup>	NH <sub>4</sub> <sup>+</sup>	Na <sup>+</sup>	K <sup>+</sup>	Ca <sup>2+</sup>	nss-Ca <sup>2+</sup>	Mg <sup>2+</sup>	H <sup>+</sup>
Jan	4.22	2.44	2.78	30.5	3.00	29.6	0.72	1.30	0.66	3.55	3.37
Feb	*	*	*	*	*	*	*	*	*	*	*
Mar	*	*	*	*	*	*	*	*	*	*	*
Apr	*	*	*	*	*	*	*	*	*	*	*
May	2.98	2.74	2.24	5.14	3.00	3.94	0.18	0.59	0.53	0.70	4.67
June	1.73	1.22	2.14	10.1	2.05	8.44	0.36	0.50	0.32	1.07	2.42
July	2.13	1.47	1.77	12.5	1.39	11.0	0.60	0.36	0.13	1.18	3.53
Aug	1.05	0.29	0.65	14.9	0.29	12.7	0.32	0.27	0.06	1.46	1.80
Sept	2.99	1.55	1.94	28.1	1.33	24.0	0.51	0.74	0.23	2.79	4.06
Oct	2.06	1.06	1.35	19.2	1.16	16.5	0.38	0.50	0.15	1.99	2.33
Nov	1.65	1.09	1.04	11.0	0.86	9.32	0.26	0.48	0.28	1.10	1.77
Dec	4.98	1.57	1.50	63.6	1.36	56.6	1.28	1.56	0.35	6.21	2.79
<b>Annual<sup>2)</sup></b>	<b>27.2</b>	<b>14.7</b>	<b>17.3</b>	<b>236</b>	<b>15.5</b>	<b>208</b>	<b>5.48</b>	<b>7.23</b>	<b>2.90</b>	<b>24.1</b>	<b>30.4</b>

**Table 3.23 Data completeness (Monthly)**

2004	SO <sub>4</sub> <sup>2-</sup>	nss-SO <sub>4</sub> <sup>2-</sup>	NO <sub>3</sub> <sup>-</sup>	Cl <sup>-</sup>	NH <sub>4</sub> <sup>+</sup>	Na <sup>+</sup>	K <sup>+</sup>	Ca <sup>2+</sup>	nss-Ca <sup>2+</sup>	Mg <sup>2+</sup>	H <sup>+</sup>	pH	EC	Precip.
	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP			
Jan	60	60	60	60	60	60	60	60	60	60	60	60	60	100
Feb	0	0	0	0	0	0	0	0	0	0	0	0	0	100
Mar	0	0	0	0	0	0	0	0	0	0	0	0	0	100
Apr	0	0	0	0	0	0	0	0	0	0	0	0	0	97
May	54	54	54	54	54	54	54	54	54	54	54	54	54	100
June	83	83	83	83	83	83	83	83	83	83	83	83	83	100
July	82	82	82	82	82	82	82	82	82	82	82	82	82	100
Aug	100	100	100	100	100	100	100	100	100	100	99	99	99	100
Sept	99	99	99	99	99	99	99	99	99	99	99	99	99	100
Oct	99	99	99	99	99	99	99	99	99	99	98	98	98	100
Nov	99	99	99	99	99	99	99	99	99	99	94	94	94	100
Dec	91	91	91	91	91	91	91	91	91	91	89	89	89	100
<b>Annual</b>	<b>72</b>	<b>72</b>	<b>72</b>	<b>72</b>	<b>72</b>	<b>72</b>	<b>72</b>	<b>72</b>	<b>72</b>	<b>72</b>	<b>71</b>	<b>71</b>	<b>71</b>	<b>100</b>

[--] for averages and completeness: Precipitation was 0 mm.

[0.00] for deposition: The deposition was 0 mmol/m<sup>2</sup> because precipitation was 0 mm.

[\*] for averages and deposition: The constituent was not measured although precipitation was not 0 mm. (%TP=0%)

[\*\*] for all: Precipitation was not measured. (%PCL=0%)

Data in hatched column for averages and deposition: Rejected monthly (annual) value by the criteria of EANET

(%PCL<80% or %TP<80%)

Units of 1) and 2) are mm y<sup>-1</sup> and mmol m<sup>-2</sup> y<sup>-1</sup>, respectively.

Table 3.24 Volume-weighted mean concentrations/ Precipitation (Monthly)

2004	SO <sub>4</sub> <sup>2-</sup>	nss-SO <sub>4</sub> <sup>2-</sup>	NO <sub>3</sub> <sup>-</sup>	Cl <sup>-</sup>	NH <sub>4</sub> <sup>+</sup>	Na <sup>+</sup>	K <sup>+</sup>	Ca <sup>2+</sup>	nss-Ca <sup>2+</sup>	Mg <sup>2+</sup>	H <sup>+</sup>	pH	EC	Precip.
	μ mol/L	μ mol/L	μ mol/L	μ mol/L	μ mol/L	μ mol/L	μ mol/L	μ mol/L	μ mol/L	μ mol/L	μ mol/L			
Jan	18.5	16.7	14.1	42.2	13.7	31.2	1.3	2.8	2.1	4.1	31.9	4.50	2.02	141.0
Feb	19.3	17.6	16.8	35.1	18.3	28.8	1.7	5.5	4.9	4.1	24.7	4.61	1.75	259.0
Mar	8.7	8.5	10.4	5.3	7.2	3.7	<1.0	7.5	7.4	1.9	6.7	5.17	0.71	88.5
Apr	18.7	18.1	19.3	11.7	18.9	10.2	1.3	13.6	13.4	3.3	7.2	5.14	1.18	166.1
May	7.0	6.5	13.3	49.2	4.5	8.4	1.0	12.2	12.0	12.9	3.3	5.48	1.19	491.5
June	8.6	8.5	9.4	3.2	12.5	1.2	<1.0	2.3	2.3	0.8	9.7	5.02	0.75	193.0
July	11.5	11.3	10.3	4.7	13.1	3.1	<1.0	1.0	0.9	<0.4	18.8	4.73	1.12	492.9
Aug	3.6	3.5	4.6	2.8	3.6	1.3	<1.0	0.4	0.4	<0.4	8.4	5.07	0.48	211.9
Sept	4.5	4.4	5.2	2.6	3.9	1.5	<1.0	0.4	0.3	<0.4	10.3	4.99	0.57	336.4
Oct	7.3	7.2	4.0	3.6	6.9	2.8	<1.0	0.7	0.6	0.4	16.0	4.80	0.85	375.5
Nov	10.1	9.7	6.1	9.6	5.8	7.1	<1.0	1.3	1.1	1.1	17.3	4.76	1.03	167.3
Dec	9.7	9.1	4.9	12.5	5.2	10.1	<1.0	1.5	1.3	1.7	15.4	4.81	0.99	165.0
<b>Annual</b>	<b>9.1</b>	<b>8.8</b>	<b>8.0</b>	<b>8.7</b>	<b>8.3</b>	<b>5.9</b>	<b>&lt;1.0</b>	<b>2.4</b>	<b>2.2</b>	<b>1.3</b>	<b>13.9</b>	<b>4.86</b>	<b>0.91</b>	<b>3088.1<sup>1)</sup></b>
Max.	139	138	157	222	201	195	19.9	64	63	29.9	186	7.19	10.6	
Min.	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.2	<0.2	<0.4	<0.1	3.73	0.11	

Table 3.24 Wet deposition (Monthly) unit: mmol m<sup>-2</sup> month<sup>-1</sup>

2004	SO <sub>4</sub> <sup>2-</sup>	nss-SO <sub>4</sub> <sup>2-</sup>	NO <sub>3</sub> <sup>-</sup>	Cl <sup>-</sup>	NH <sub>4</sub> <sup>+</sup>	Na <sup>+</sup>	K <sup>+</sup>	Ca <sup>2+</sup>	nss-Ca <sup>2+</sup>	Mg <sup>2+</sup>	H <sup>+</sup>
Jan	2.61	2.35	1.99	5.96	1.93	4.39	0.18	0.39	0.30	0.58	4.50
Feb	5.00	4.55	4.35	9.10	4.73	7.46	0.44	1.43	1.27	1.06	6.40
Mar	0.77	0.75	0.92	0.47	0.64	0.32	0.04	0.66	0.65	0.17	0.60
Apr	3.11	3.00	3.20	1.94	3.15	1.69	0.21	2.26	2.22	0.55	1.20
May	3.44	3.19	6.54	24.2	2.21	4.13	0.49	6.00	5.91	6.34	1.63
June	1.66	1.64	1.82	0.61	2.42	0.22	0.12	0.44	0.44	0.15	1.86
July	5.65	5.56	5.09	2.30	6.48	1.54	0.27	0.47	0.44	0.17	9.26
Aug	0.77	0.75	0.98	0.60	0.75	0.27	0.02	0.09	0.08	0.05	1.79
Sept	1.51	1.49	1.76	0.89	1.31	0.50	0.03	0.12	0.11	0.06	3.45
Oct	2.75	2.69	1.52	1.37	2.57	1.05	0.19	0.26	0.24	0.16	6.00
Nov	1.69	1.62	1.02	1.60	0.97	1.18	0.07	0.21	0.19	0.19	2.89
Dec	1.60	1.51	0.80	2.06	0.86	1.67	0.08	0.25	0.21	0.27	2.54
<b>Annual<sup>2)</sup></b>	<b>28.2</b>	<b>27.1</b>	<b>24.7</b>	<b>27.0</b>	<b>25.6</b>	<b>18.4</b>	<b>1.55</b>	<b>7.29</b>	<b>6.91</b>	<b>3.90</b>	<b>43.0</b>

Table 3.24 Data completeness (Monthly)

2004	SO <sub>4</sub> <sup>2-</sup>	nss-SO <sub>4</sub> <sup>2-</sup>	NO <sub>3</sub> <sup>-</sup>	Cl <sup>-</sup>	NH <sub>4</sub> <sup>+</sup>	Na <sup>+</sup>	K <sup>+</sup>	Ca <sup>2+</sup>	nss-Ca <sup>2+</sup>	Mg <sup>2+</sup>	H <sup>+</sup>	pH	EC	Precip.
	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP			
Jan	34	34	34	34	34	34	34	34	34	34	34	34	34	100
Feb	29	29	29	29	29	29	29	29	29	29	29	29	29	100
Mar	54	54	54	54	54	54	54	54	54	54	54	54	54	100
Apr	70	70	70	70	70	70	70	70	70	70	70	70	70	100
May	7	7	7	7	7	7	7	7	7	7	7	7	7	100
June	38	38	38	38	38	38	38	38	38	38	37	37	37	100
July	56	56	56	56	56	56	56	56	56	56	55	55	55	95
Aug	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Sept	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Oct	53	53	53	53	53	53	53	53	53	53	53	53	53	100
Nov	99	99	99	99	99	99	99	99	99	99	98	98	98	100
Dec	99	99	99	99	99	99	99	99	99	99	99	99	99	100
<b>Annual</b>	<b>56</b>	<b>56</b>	<b>56</b>	<b>56</b>	<b>56</b>	<b>56</b>	<b>56</b>	<b>56</b>	<b>56</b>	<b>56</b>	<b>56</b>	<b>56</b>	<b>56</b>	<b>99</b>

[--] for averages and completeness: Precipitation was 0 mm.

[0.00] for deposition: The deposition was 0 mmol/m<sup>2</sup> because precipitation was 0 mm.

[\*] for averages and deposition: The constituent was not measured although precipitation was not 0 mm. (%TP=0%)

[\*\*] for all: Precipitation was not measured. (%PCL=0%)

Data in hatched column for averages and deposition: Rejected monthly (annual) value by the criteria of EANET

(%PCL<80% or %TP<80%)

Units of 1) and 2) are mm y<sup>-1</sup> and mmol m<sup>-2</sup> y<sup>-1</sup>, respectively.

**Table 3.25 Volume-weighted mean concentrations/ Precipitation (Monthly)**

2004	SO <sub>4</sub> <sup>2-</sup>	nss-SO <sub>4</sub> <sup>2-</sup>	NO <sub>3</sub> <sup>-</sup>	Cl <sup>-</sup>	NH <sub>4</sub> <sup>+</sup>	Na <sup>+</sup>	K <sup>+</sup>	Ca <sup>2+</sup>	nss-Ca <sup>2+</sup>	Mg <sup>2+</sup>	H <sup>+</sup>	pH	EC	Precip.
	μ mol/L	μ mol/L	μ mol/L	μ mol/L	μ mol/L	μ mol/L	μ mol/L	μ mol/L	μ mol/L	μ mol/L	μ mol/L			
Jan	29.0	23.7	35.7	132	22.2	87.3	3.1	6.0	4.1	14.0	49.0	4.31	4.57	62.0
Feb	24.1	20.1	24.9	99.6	22.9	67.1	3.3	10.1	8.6	11.5	23.0	4.64	2.99	171.5
Mar	23.6	20.9	35.5	53.1	32.0	44.8	2.0	10.0	9.1	6.8	21.7	4.66	2.56	43.5
Apr	14.5	13.6	15.4	18.7	14.3	14.8	1.1	4.2	3.9	2.6	18.7	4.73	1.49	355.4
May	16.9	16.6	13.4	6.1	18.6	4.9	<1.0	1.2	1.1	0.8	22.5	4.65	1.47	485.0
June	12.9	11.4	12.5	27.2	21.2	23.8	<1.0	1.0	0.5	2.3	14.5	4.84	1.34	440.5
July	12.1	11.5	16.6	13.0	15.1	10.1	<1.0	1.9	1.7	1.6	18.7	4.73	1.39	183.0
Aug	*	*	*	*	*	*	*	*	*	*	*	*	*	391.5
Sept	15.7	14.5	23.2	23.2	13.6	19.4	<1.0	1.2	0.7	1.8	41.6	4.38	2.12	611.5
Oct	5.3	4.0	5.6	24.9	2.5	21.4	<1.0	0.7	0.3	1.9	11.6	4.93	0.89	414.0
Nov	15.6	14.5	17.4	21.6	9.0	18.0	1.1	1.7	1.3	1.3	37.0	4.43	1.99	99.0
Dec	6.1	4.8	7.1	25.6	3.7	22.1	<1.0	0.4	0.4	2.3	10.2	4.99	0.84	167.5
<b>Annual</b>	<b>14.0</b>	<b>12.7</b>	<b>15.4</b>	<b>27.5</b>	<b>14.7</b>	<b>21.6</b>	<b>1.1</b>	<b>2.3</b>	<b>1.9</b>	<b>2.8</b>	<b>22.1</b>	<b>4.65</b>	<b>1.62</b>	<b>3424.4<sup>1)</sup></b>
Max.	171	168	175	337	132	237	11.2	91.3	90.4	43.4	151	5.62	10.0	
Min.	3.3	2.0	2.1	2.1	<1.0	1.6	<1.0	<0.2	<0.2	0.4	2.4	3.82	0.47	

**Table 3.25 Wet deposition (Monthly)** unit: mmol m<sup>-2</sup> month<sup>-1</sup>

2004	SO <sub>4</sub> <sup>2-</sup>	nss-SO <sub>4</sub> <sup>2-</sup>	NO <sub>3</sub> <sup>-</sup>	Cl <sup>-</sup>	NH <sub>4</sub> <sup>+</sup>	Na <sup>+</sup>	K <sup>+</sup>	Ca <sup>2+</sup>	nss-Ca <sup>2+</sup>	Mg <sup>2+</sup>	H <sup>+</sup>
Jan	1.80	1.47	2.22	8.19	1.38	5.41	0.19	0.37	0.26	0.87	3.04
Feb	4.14	3.45	4.28	17.1	3.93	11.5	0.57	1.73	1.48	1.98	3.94
Mar	1.03	0.91	1.54	2.31	1.39	1.95	0.09	0.44	0.39	0.29	0.94
Apr	5.16	4.84	5.47	6.63	5.10	5.27	0.41	1.48	1.37	0.93	6.65
May	8.22	8.07	6.51	2.96	9.00	2.40	0.45	0.60	0.54	0.39	10.9
June	5.67	5.04	5.50	12.0	9.32	10.5	0.41	0.46	0.23	1.02	6.37
July	2.22	2.11	3.05	2.38	2.76	1.85	0.13	0.35	0.31	0.29	3.42
Aug	*	*	*	*	*	*	*	*	*	*	*
Sept	9.57	8.86	14.2	14.2	8.32	11.9	0.46	0.71	0.46	1.07	25.4
Oct	2.19	1.66	2.32	10.3	1.04	8.85	0.28	0.31	0.11	0.77	4.82
Nov	1.54	1.44	1.72	2.14	0.89	1.78	0.10	0.16	0.13	0.13	3.66
Dec	1.02	0.80	1.20	4.28	0.62	3.70	0.14	0.07	0.07	0.39	1.70
<b>Annual<sup>2)</sup></b>	<b>48.0</b>	<b>43.6</b>	<b>52.6</b>	<b>94.2</b>	<b>50.2</b>	<b>74.0</b>	<b>3.75</b>	<b>7.92</b>	<b>6.39</b>	<b>9.43</b>	<b>75.8</b>

**Table 3.25 Data completeness (Monthly)**

2004	SO <sub>4</sub> <sup>2-</sup>	nss-SO <sub>4</sub> <sup>2-</sup>	NO <sub>3</sub> <sup>-</sup>	Cl <sup>-</sup>	NH <sub>4</sub> <sup>+</sup>	Na <sup>+</sup>	K <sup>+</sup>	Ca <sup>2+</sup>	nss-Ca <sup>2+</sup>	Mg <sup>2+</sup>	H <sup>+</sup>	pH	EC	Precip.
	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP			
Jan	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Feb	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Mar	98	98	98	98	98	98	98	98	98	98	98	98	98	100
Apr	100	100	100	100	100	100	100	100	100	100	100	100	100	100
May	100	100	100	100	100	100	100	100	100	100	100	100	100	100
June	100	100	100	100	100	100	100	100	100	100	100	100	100	100
July	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Aug	0	0	0	0	0	0	0	0	0	0	0	0	0	100
Sept	64	64	64	64	64	64	64	64	64	64	64	64	64	100
Oct	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Nov	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Dec	73	73	73	73	73	73	73	73	73	73	73	73	73	100
<b>Annual</b>	<b>81</b>	<b>81</b>	<b>81</b>	<b>81</b>	<b>81</b>	<b>81</b>	<b>81</b>	<b>81</b>	<b>81</b>	<b>81</b>	<b>81</b>	<b>81</b>	<b>81</b>	<b>100</b>

[--] for averages and completeness: Precipitation was 0 mm.

[0.00] for deposition: The deposition was 0 mmol/m<sup>2</sup> because precipitation was 0 mm.

[\*] for averages and deposition: The constituent was not measured although precipitation was not 0 mm. (%TP=0%)

[\*\*] for all: Precipitation was not measured. (%PCL=0%)

Data in hatched column for averages and deposition: Rejected monthly (annual) value by the criteria of EANET

(%PCL<80% or %TP<80%)

Units of 1) and 2) are mm y<sup>-1</sup> and mmol m<sup>-2</sup> y<sup>-1</sup>, respectively.

**Table 3.26 Volume-weighted mean concentrations/ Precipitation (Monthly)**

2004	SO <sub>4</sub> <sup>2-</sup>	nss-SO <sub>4</sub> <sup>2-</sup>	NO <sub>3</sub> <sup>-</sup>	Cl <sup>-</sup>	NH <sub>4</sub> <sup>+</sup>	Na <sup>+</sup>	K <sup>+</sup>	Ca <sup>2+</sup>	nss-Ca <sup>2+</sup>	Mg <sup>2+</sup>	H <sup>+</sup>	pH	EC	Precip.
	μ mol/L	μ mol/L	μ mol/L	μ mol/L	μ mol/L	μ mol/L	μ mol/L	μ mol/L	μ mol/L	μ mol/L	μ mol/L			
Jan	124	20.1	37.0	1900	23.7	1780	43.5	48.1	9.1	201	36.2	4.44	35.6	76.5
Feb	80.1	38.3	49.0	846	35.6	693	21.1	47.9	33.0	84.8	21.4	4.67	12.7	43.1
Mar	37.5	17.1	18.2	374	17.1	338	9.5	18.9	11.6	41.1	14.3	4.84	6.44	137.6
Apr	30.2	27.5	25.9	49.0	23.6	45.0	3.8	17.0	16.1	4.6	17.1	4.77	2.25	82.0
May	10.2	8.6	10.3	27.1	6.0	26.1	3.3	2.9	2.3	3.5	10.4	4.98	1.13	227.5
June	10.2	8.0	9.6	39.7	7.9	37.6	1.5	2.3	1.5	4.6	12.8	4.89	1.30	99.5
July	12.2	11.0	19.8	21.0	11.5	19.7	<1.0	1.9	1.5	2.5	25.9	4.59	1.73	47.1
Aug	11.9	4.4	6.5	131	3.6	145	4.2	4.8	1.6	17.1	9.2	5.03	2.86	168.0
Sept	12.1	3.5	6.3	172	3.2	152	8.0	4.6	1.4	16.9	6.9	5.16	2.54	280.8
Oct	34.2	5.8	11.0	521	6.5	471	16.0	13.6	3.5	53.4	12.2	4.91	7.83	88.0
Nov	92.8	33.6	99.6	1130	30.8	982	36.3	37.1	15.8	121	48.6	4.31	18.5	33.5
Dec	36.1	15.8	20.2	359	11.9	338	8.9	9.3	2.5	38.5	30.0	4.52	6.35	125.0
<b>Annual</b>	<b>29.3</b>	<b>11.9</b>	<b>17.0</b>	<b>321</b>	<b>10.9</b>	<b>295</b>	<b>9.6</b>	<b>11.9</b>	<b>5.5</b>	<b>34.4</b>	<b>15.9</b>	<b>4.80</b>	<b>5.86</b>	<b>1408.6<sup>1)</sup></b>
Max.	2400	220	392	50300	241	45200	1020	1060	286	5330	229	6.72	1220	
Min.	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.2	<0.2	<0.4	0.2	3.64	0.40	

**Table 3.26 Wet deposition (Monthly)** unit: mmol m<sup>-2</sup> month<sup>-1</sup>

2004	SO <sub>4</sub> <sup>2-</sup>	nss-SO <sub>4</sub> <sup>2-</sup>	NO <sub>3</sub> <sup>-</sup>	Cl <sup>-</sup>	NH <sub>4</sub> <sup>+</sup>	Na <sup>+</sup>	K <sup>+</sup>	Ca <sup>2+</sup>	nss-Ca <sup>2+</sup>	Mg <sup>2+</sup>	H <sup>+</sup>
Jan	9.52	1.54	2.83	146	1.82	136	3.33	3.68	0.70	15.4	2.77
Feb	3.45	1.65	2.11	36.4	1.54	29.8	0.91	2.07	1.42	3.66	0.92
Mar	5.16	2.36	2.51	51.4	2.35	46.5	1.31	2.60	1.60	5.66	1.97
Apr	2.47	2.25	2.13	4.02	1.94	3.69	0.31	1.40	1.32	0.38	1.40
May	2.31	1.95	2.34	6.17	1.38	5.93	0.75	0.65	0.53	0.80	2.37
June	1.02	0.79	0.96	3.95	0.79	3.74	0.15	0.23	0.15	0.46	1.27
July	0.57	0.52	0.93	0.99	0.54	0.93	0.04	0.09	0.07	0.12	1.22
Aug	1.99	0.73	1.10	22.0	0.61	24.4	0.71	0.80	0.27	2.87	1.55
Sept	3.41	0.98	1.77	48.4	0.91	42.7	2.24	1.31	0.38	4.75	1.95
Oct	3.01	0.51	0.97	45.9	0.57	41.5	1.41	1.20	0.30	4.70	1.07
Nov	3.11	1.12	3.34	37.8	1.03	32.9	1.22	1.24	0.53	4.05	1.63
Dec	4.51	1.97	2.52	44.9	1.49	42.3	1.11	1.16	0.32	4.81	3.75
<b>Annual<sup>2)</sup></b>	<b>41.3</b>	<b>16.8</b>	<b>24.0</b>	<b>453</b>	<b>15.3</b>	<b>416</b>	<b>13.6</b>	<b>16.7</b>	<b>7.76</b>	<b>48.4</b>	<b>22.4</b>

**Table 3.26 Data completeness (Monthly)**

2004	SO <sub>4</sub> <sup>2-</sup>	nss-SO <sub>4</sub> <sup>2-</sup>	NO <sub>3</sub> <sup>-</sup>	Cl <sup>-</sup>	NH <sub>4</sub> <sup>+</sup>	Na <sup>+</sup>	K <sup>+</sup>	Ca <sup>2+</sup>	nss-Ca <sup>2+</sup>	Mg <sup>2+</sup>	H <sup>+</sup>	pH	EC	Precip.
	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP			
Jan	99	99	99	98	99	99	99	99	99	99	98	98	98	100
Feb	98	98	98	98	98	98	98	98	98	98	94	94	94	100
Mar	100	100	100	100	100	100	100	100	100	100	99	99	99	100
Apr	99	99	99	99	99	99	99	99	99	99	99	99	99	100
May	100	100	100	100	100	100	100	100	100	100	100	100	100	100
June	100	100	100	100	100	100	100	100	100	100	100	100	100	100
July	99	99	99	99	99	99	99	99	99	99	99	99	99	100
Aug	100	100	100	100	100	100	100	100	100	100	99	99	99	100
Sept	82	82	82	82	82	82	82	82	82	82	77	77	77	90
Oct	100	100	100	100	100	100	100	100	100	100	99	99	99	100
Nov	99	99	99	99	99	99	99	99	99	99	99	99	99	100
Dec	99	99	99	99	99	99	99	99	99	99	99	99	99	100
<b>Annual</b>	<b>96</b>	<b>96</b>	<b>96</b>	<b>96</b>	<b>96</b>	<b>96</b>	<b>96</b>	<b>96</b>	<b>96</b>	<b>96</b>	<b>95</b>	<b>95</b>	<b>95</b>	<b>99</b>

[--] for averages and completeness: Precipitation was 0 mm.

[0.00] for deposition: The deposition was 0 mmol/m<sup>2</sup> because precipitation was 0 mm.

[\*] for averages and deposition: The constituent was not measured although precipitation was not 0 mm. (%TP=0%)

[\*\*] for all: Precipitation was not measured. (%PCL=0%)

Data in hatched column for averages and deposition: Rejected monthly (annual) value by the criteria of EANET

(%PCL<80% or %TP<80%)

Units of 1) and 2) are mm y<sup>-1</sup> and mmol m<sup>-2</sup> y<sup>-1</sup>, respectively.

**Table 3.27 Volume-weighted mean concentrations/ Precipitation (Monthly)**

2004	SO <sub>4</sub> <sup>2-</sup>	nss-SO <sub>4</sub> <sup>2-</sup>	NO <sub>3</sub> <sup>-</sup>	Cl <sup>-</sup>	NH <sub>4</sub> <sup>+</sup>	Na <sup>+</sup>	K <sup>+</sup>	Ca <sup>2+</sup>	nss-Ca <sup>2+</sup>	Mg <sup>2+</sup>	H <sup>+</sup>	pH	EC	Precip.
	μ mol/L	μ mol/L	μ mol/L	μ mol/L	μ mol/L	μ mol/L	μ mol/L	μ mol/L	μ mol/L	μ mol/L	μ mol/L			
Jan	85.3	63.7	95.3	405	78.2	358	14.3	18.2	10.5	43.5	113	3.95	11.9	38.5
Feb	40.4	29.3	37.0	207	32.7	184	6.2	17.5	13.5	22.5	34.2	4.47	5.06	42.0
Mar	24.8	18.0	20.8	130	20.4	113	3.4	13.6	11.1	14.6	12.6	4.90	3.07	91.5
Apr	34.3	29.5	27.2	92.8	28.6	79.8	3.7	15.8	14.1	10.9	18.8	4.73	3.05	113.0
May	9.6	9.4	10.7	6.4	8.0	4.6	<1.0	1.4	1.3	0.5	14.7	4.83	0.98	231.5
June	12.6	7.7	9.3	99.2	6.2	82.0	1.8	2.4	0.7	9.2	14.4	4.84	2.18	124.5
July	12.6	9.7	15.0	64.6	9.8	48.3	1.3	1.9	0.8	5.4	17.4	4.76	1.85	82.5
Aug	12.1	9.1	13.6	60.1	6.1	49.6	1.1	1.5	0.4	5.5	20.2	4.70	1.90	115.5
Sept	15.4	9.8	9.2	112	4.5	91.8	2.1	2.6	0.6	10.2	18.1	4.74	2.44	352.0
Oct	22.9	7.9	8.4	286	4.7	249	5.5	6.4	1.0	28.6	12.4	4.91	4.66	285.0
Nov	27.7	22.5	32.4	98.9	18.5	86.6	3.3	4.4	2.5	10.7	42.5	4.37	3.74	29.8
Dec	17.9	10.5	16.3	146	9.9	123	3.1	3.8	1.2	14.1	23.7	4.63	3.33	231.8
<b>Annual</b>	<b>19.8</b>	<b>13.0</b>	<b>15.6</b>	<b>133</b>	<b>11.2</b>	<b>113</b>	<b>3.0</b>	<b>5.3</b>	<b>2.9</b>	<b>13.2</b>	<b>19.9</b>	<b>4.70</b>	<b>3.02</b>	<b>1737.6<sup>1)</sup></b>
Max.	128	103	195	824	118	757	21.8	103	93.7	89.6	170	5.38	19.9	
Min.	4.4	<1.0	2.6	3.6	<1.0	2.1	<1.0	0.3	<0.2	<0.4	4.2	3.77	0.56	

**Table 3.27 Wet deposition (Monthly)** unit: mmol m<sup>-2</sup> month<sup>-1</sup>

2004	SO <sub>4</sub> <sup>2-</sup>	nss-SO <sub>4</sub> <sup>2-</sup>	NO <sub>3</sub> <sup>-</sup>	Cl <sup>-</sup>	NH <sub>4</sub> <sup>+</sup>	Na <sup>+</sup>	K <sup>+</sup>	Ca <sup>2+</sup>	nss-Ca <sup>2+</sup>	Mg <sup>2+</sup>	H <sup>+</sup>
Jan	3.28	2.45	3.67	15.6	3.01	13.8	0.55	0.70	0.40	1.67	4.36
Feb	1.69	1.23	1.55	8.68	1.38	7.71	0.26	0.73	0.57	0.95	1.44
Mar	2.27	1.65	1.90	11.9	1.86	10.3	0.31	1.24	1.02	1.33	1.16
Apr	3.88	3.33	3.07	10.5	3.23	9.02	0.42	1.79	1.59	1.24	2.12
May	2.23	2.17	2.48	1.48	1.86	1.05	0.12	0.31	0.29	0.13	3.39
June	1.57	0.95	1.16	12.3	0.78	10.2	0.22	0.30	0.08	1.14	1.79
July	1.04	0.80	1.24	5.33	0.81	3.99	0.11	0.15	0.07	0.44	1.43
Aug	1.39	1.05	1.57	6.95	0.70	5.73	0.13	0.17	0.05	0.63	2.33
Sept	5.41	3.47	3.23	39.6	1.57	32.3	0.72	0.91	0.21	3.61	6.37
Oct	6.54	2.26	2.40	81.5	1.34	70.9	1.56	1.81	0.28	8.14	3.54
Nov	0.83	0.67	0.97	2.95	0.55	2.58	0.10	0.13	0.07	0.32	1.27
Dec	4.14	2.43	3.77	33.9	2.28	28.4	0.72	0.87	0.28	3.26	5.49
<b>Annual<sup>2)</sup></b>	<b>34.4</b>	<b>22.5</b>	<b>27.0</b>	<b>232</b>	<b>19.5</b>	<b>197</b>	<b>5.25</b>	<b>9.20</b>	<b>4.97</b>	<b>23.0</b>	<b>34.7</b>

**Table 3.27 Data completeness (Monthly)**

2004	SO <sub>4</sub> <sup>2-</sup>	nss-SO <sub>4</sub> <sup>2-</sup>	NO <sub>3</sub> <sup>-</sup>	Cl <sup>-</sup>	NH <sub>4</sub> <sup>+</sup>	Na <sup>+</sup>	K <sup>+</sup>	Ca <sup>2+</sup>	nss-Ca <sup>2+</sup>	Mg <sup>2+</sup>	H <sup>+</sup>	pH	EC	Precip.
	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP			
Jan	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Feb	100	100	100	100	100	100	100	100	100	100	99	99	99	100
Mar	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Apr	100	100	100	100	100	100	100	100	100	100	100	100	100	100
May	100	100	100	100	100	100	100	100	100	100	100	100	100	100
June	100	100	100	100	100	100	100	100	100	100	100	100	100	100
July	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Aug	87	87	87	87	87	87	87	87	87	87	87	87	87	100
Sept	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Oct	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Nov	98	98	98	98	98	98	98	98	98	98	98	98	98	100
Dec	99	99	99	99	99	99	99	99	99	99	99	99	99	100
<b>Annual</b>	<b>99</b>	<b>99</b>	<b>99</b>	<b>99</b>	<b>99</b>	<b>99</b>	<b>99</b>	<b>99</b>	<b>99</b>	<b>99</b>	<b>99</b>	<b>99</b>	<b>99</b>	<b>100</b>

[--] for averages and completeness: Precipitation was 0 mm.

[0.00] for deposition: The deposition was 0 mmol/m<sup>2</sup> because precipitation was 0 mm.

[\*] for averages and deposition: The constituent was not measured although precipitation was not 0 mm. (%TP=0%)

[\*\*] for all: Precipitation was not measured. (%PCL=0%)

Data in hatched column for averages and deposition: Rejected monthly (annual) value by the criteria of EANET

(%PCL<80% or %TP<80%)

Units of 1) and 2) are mm y<sup>-1</sup> and mmol m<sup>-2</sup> y<sup>-1</sup>, respectively.

**Table 3.28** Volume-weighted mean concentrations/ Precipitation (Monthly)

2004	SO <sub>4</sub> <sup>2-</sup>	nss-SO <sub>4</sub> <sup>2-</sup>	NO <sub>3</sub> <sup>-</sup>	Cl <sup>-</sup>	NH <sub>4</sub> <sup>+</sup>	Na <sup>+</sup>	K <sup>+</sup>	Ca <sup>2+</sup>	nss-Ca <sup>2+</sup>	Mg <sup>2+</sup>	H <sup>+</sup>	pH	EC	Precip.
	μ mol/L	μ mol/L	μ mol/L	μ mol/L	μ mol/L	μ mol/L	μ mol/L	μ mol/L	μ mol/L	μ mol/L	μ mol/L			
Jan	30.1	22.1	79.4	163	29.3	133	4.5	10.5	7.6	16.7	72.0	4.14	5.87	57.5
Feb	30.5	27.7	26.0	53.2	27.7	46.7	3.3	11.7	10.7	6.7	26.2	4.58	2.72	95.4
Mar	15.0	13.1	14.2	40.6	8.8	32.2	1.4	8.4	7.7	4.6	15.1	4.82	1.65	131.0
Apr	5.7	5.2	5.8	8.7	5.7	7.1	<1.0	2.3	2.2	1.1	9.6	5.02	0.69	251.0
May	5.6	5.4	4.4	3.2	4.1	2.6	<1.0	1.5	1.4	0.4	9.6	5.02	0.65	335.0
June	5.6	4.8	4.9	14.8	4.9	12.3	<1.0	0.9	0.7	1.6	9.6	5.02	0.83	365.5
July	9.2	8.6	6.5	10.0	10.7	8.8	<1.0	1.0	0.8	1.2	15.7	4.80	1.13	260.5
Aug	5.2	2.6	3.0	47.0	2.2	41.8	1.0	1.2	0.3	4.6	8.8	5.06	1.10	967.5
Sept	5.9	3.7	3.2	43.7	2.9	37.0	1.4	1.6	0.8	4.2	9.0	5.04	1.12	832.0
Oct	2.9	2.4	3.0	10.0	1.1	8.4	<1.0	0.5	0.3	1.0	8.6	5.06	0.61	341.8
Nov	8.1	7.0	4.6	21.6	6.2	18.2	1.2	0.9	0.5	2.1	14.1	4.85	1.09	136.5
Dec	4.9	4.1	7.2	16.1	3.9	13.3	<1.0	1.3	1.0	1.7	9.5	5.02	0.83	196.5
<b>Annual</b>	<b>6.7</b>	<b>5.3</b>	<b>5.3</b>	<b>28.1</b>	<b>4.8</b>	<b>24.1</b>	<b>&lt;1.0</b>	<b>1.8</b>	<b>1.3</b>	<b>2.9</b>	<b>10.6</b>	<b>4.97</b>	<b>1.03</b>	<b>3970.3<sup>1)</sup></b>
Max.	173	164	296	436	253	376	34.5	117	111	46.1	148	6.22	14.0	
Min.	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.2	<0.2	<0.4	0.6	3.83	0.12	

**Table 3.28** Wet deposition (Monthly) unit: mmol m<sup>-2</sup> month<sup>-1</sup>

2004	SO <sub>4</sub> <sup>2-</sup>	nss-SO <sub>4</sub> <sup>2-</sup>	NO <sub>3</sub> <sup>-</sup>	Cl <sup>-</sup>	NH <sub>4</sub> <sup>+</sup>	Na <sup>+</sup>	K <sup>+</sup>	Ca <sup>2+</sup>	nss-Ca <sup>2+</sup>	Mg <sup>2+</sup>	H <sup>+</sup>
Jan	1.73	1.27	4.56	9.40	1.68	7.63	0.26	0.60	0.44	0.96	4.14
Feb	2.91	2.65	2.48	5.08	2.65	4.46	0.31	1.12	1.02	0.64	2.50
Mar	1.97	1.71	1.87	5.31	1.15	4.22	0.18	1.10	1.01	0.60	1.98
Apr	1.42	1.31	1.45	2.19	1.44	1.79	0.14	0.59	0.55	0.27	2.41
May	1.88	1.82	1.47	1.08	1.37	0.87	0.09	0.50	0.48	0.14	3.20
June	2.04	1.77	1.78	5.41	1.80	4.50	0.22	0.35	0.25	0.59	3.49
July	2.39	2.25	1.70	2.60	2.80	2.28	0.18	0.27	0.22	0.32	4.10
Aug	4.99	2.56	2.92	45.5	2.11	40.4	0.97	1.20	0.33	4.42	8.50
Sept	4.95	3.09	2.66	36.3	2.39	30.8	1.20	1.30	0.63	3.50	7.52
Oct	0.98	0.81	1.01	3.42	0.38	2.85	0.10	0.18	0.12	0.36	2.95
Nov	1.11	0.96	0.62	2.95	0.85	2.48	0.16	0.13	0.07	0.28	1.93
Dec	0.96	0.81	1.42	3.15	0.77	2.61	0.11	0.25	0.19	0.33	1.88
<b>Annual<sup>2)</sup></b>	<b>26.7</b>	<b>20.9</b>	<b>20.9</b>	<b>112</b>	<b>19.0</b>	<b>95.8</b>	<b>3.72</b>	<b>7.32</b>	<b>5.25</b>	<b>11.4</b>	<b>42.1</b>

**Table 3.28** Data completeness (Monthly)

2004	SO <sub>4</sub> <sup>2-</sup>	nss-SO <sub>4</sub> <sup>2-</sup>	NO <sub>3</sub> <sup>-</sup>	Cl <sup>-</sup>	NH <sub>4</sub> <sup>+</sup>	Na <sup>+</sup>	K <sup>+</sup>	Ca <sup>2+</sup>	nss-Ca <sup>2+</sup>	Mg <sup>2+</sup>	H <sup>+</sup>	pH	EC	Precip.
	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP			
Jan	10	10	10	10	10	10	10	10	10	10	10	10	10	100
Feb	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Mar	99	99	99	99	99	99	99	99	99	99	99	99	98	100
Apr	92	92	92	92	92	92	92	92	92	92	92	92	92	100
May	74	74	74	74	74	74	74	74	74	74	74	74	74	100
June	100	100	100	100	100	100	100	100	100	100	100	100	100	100
July	100	100	100	100	100	100	100	100	100	100	99	99	99	100
Aug	76	76	76	76	76	76	76	76	76	76	75	75	75	94
Sept	86	86	86	86	86	86	86	86	86	86	85	85	85	97
Oct	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Nov	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Dec	99	99	99	99	99	99	99	99	99	99	99	99	99	100
<b>Annual</b>	<b>87</b>	<b>87</b>	<b>87</b>	<b>87</b>	<b>87</b>	<b>87</b>	<b>87</b>	<b>87</b>	<b>87</b>	<b>87</b>	<b>87</b>	<b>87</b>	<b>87</b>	<b>99</b>

[--] for averages and completeness: Precipitation was 0 mm.

[0.00] for deposition: The deposition was 0 mmol/m<sup>2</sup> because precipitation was 0 mm.

[\*] for averages and deposition: The constituent was not measured although precipitation was not 0 mm. (%TP=0%)

[\*\*] for all: Precipitation was not measured. (%PCL=0%)

Data in hatched column for averages and deposition: Rejected monthly (annual) value by the criteria of EANET

(%PCL<80% or %TP<80%)

Units of 1) and 2) are mm y<sup>-1</sup> and mmol m<sup>-2</sup> y<sup>-1</sup>, respectively.

**Table 3.29 Volume-weighted mean concentrations/ Precipitation (Monthly)**

2004	SO <sub>4</sub> <sup>2-</sup>	nss-SO <sub>4</sub> <sup>2-</sup>	NO <sub>3</sub> <sup>-</sup>	Cl <sup>-</sup>	NH <sub>4</sub> <sup>+</sup>	Na <sup>+</sup>	K <sup>+</sup>	Ca <sup>2+</sup>	nss-Ca <sup>2+</sup>	Mg <sup>2+</sup>	H <sup>+</sup>	pH	EC	Precip.
	μ mol/L	μ mol/L	μ mol/L	μ mol/L	μ mol/L	μ mol/L	μ mol/L	μ mol/L	μ mol/L	μ mol/L	μ mol/L			
Jan	103	36.5	34.0	1160	27.2	1110	31.2	29.7	9.9	112	38.8	4.41	19.2	65.3
Feb	26.5	13.4	7.5	243	13.1	217	6.8	10.2	5.5	18.0	19.1	4.72	4.66	100.5
Mar	41.9	22.4	23.2	363	26.0	323	8.7	14.3	7.3	26.5	24.2	4.62	6.72	108.6
Apr	21.0	15.3	12.2	124	16.3	94.3	2.4	5.8	3.8	10.5	14.5	4.84	2.50	110.0
May	7.1	4.7	7.5	57.7	6.3	41.3	<1.0	3.2	2.3	4.8	11.1	4.96	1.25	176.0
June	*	*	*	*	*	*	*	*	*	*	*	*	*	323.5
July	8.6	7.4	7.6	26.0	5.4	20.2	<1.0	1.7	1.2	2.7	14.3	4.84	1.08	160.5
Aug	22.4	8.3	2.3	278	<1.0	234	4.7	5.6	0.5	23.2	12.4	4.91	4.33	61.0
Sept	*	*	*	*	*	*	*	*	*	*	*	*	*	304.0
Oct	258	56.6	6.7	3780	31.2	3330	89.7	72.9	1.9	349	4.1	5.38	50.8	157.2
Nov	16.7	9.7	8.1	147	7.6	116	5.9	3.7	1.2	13.8	9.9	5.00	2.41	96.0
Dec	75.8	28.4	21.4	832	6.5	786	27.7	24.3	7.4	92.8	26.7	4.57	12.4	115.5
<b>Annual</b>	<b>77.0</b>	<b>24.4</b>	<b>13.4</b>	<b>982</b>	<b>17.2</b>	<b>873</b>	<b>24.6</b>	<b>22.7</b>	<b>4.3</b>	<b>91.0</b>	<b>16.5</b>	<b>4.78</b>	<b>14.2</b>	<b>1778.2<sup>1)</sup></b>
Max.	1460	404	150	18100	249	17600	389	345	158	1550	95.5	6.62	248	
Min.	1.7	<1.0	<1.0	13.7	<1.0	9.5	<1.0	1.0	<0.2	1.4	0.2	4.02	0.38	

**Table 3.29 Wet deposition (Monthly)** unit: mmol m<sup>-2</sup> month<sup>-1</sup>

2004	SO <sub>4</sub> <sup>2-</sup>	nss-SO <sub>4</sub> <sup>2-</sup>	NO <sub>3</sub> <sup>-</sup>	Cl <sup>-</sup>	NH <sub>4</sub> <sup>+</sup>	Na <sup>+</sup>	K <sup>+</sup>	Ca <sup>2+</sup>	nss-Ca <sup>2+</sup>	Mg <sup>2+</sup>	H <sup>+</sup>
Jan	6.73	2.38	2.22	76.0	1.78	72.2	2.04	1.94	0.64	7.32	2.53
Feb	2.67	1.35	0.76	24.4	1.32	21.8	0.68	1.02	0.55	1.81	1.92
Mar	4.55	2.44	2.52	39.4	2.82	35.1	0.95	1.55	0.79	2.88	2.63
Apr	2.31	1.68	1.34	13.6	1.79	10.4	0.27	0.64	0.42	1.15	1.59
May	1.26	0.82	1.32	10.2	1.11	7.28	0.11	0.56	0.40	0.85	1.95
June	*	*	*	*	*	*	*	*	*	*	*
July	1.39	1.19	1.22	4.17	0.87	3.25	0.08	0.27	0.20	0.43	2.30
Aug	1.37	0.51	0.14	17.0	0.04	14.3	0.29	0.34	0.03	1.41	0.75
Sept	*	*	*	*	*	*	*	*	*	*	*
Oct	40.5	8.90	1.06	595	4.91	524	14.1	11.5	0.30	54.9	0.65
Nov	1.60	0.93	0.77	14.1	0.73	11.2	0.57	0.35	0.11	1.33	0.95
Dec	8.75	3.28	2.47	96.1	0.75	90.8	3.20	2.81	0.85	10.7	3.09
<b>Annual<sup>2)</sup></b>	<b>137</b>	<b>43.4</b>	<b>23.8</b>	<b>1750</b>	<b>30.6</b>	<b>1550</b>	<b>43.7</b>	<b>40.3</b>	<b>7.64</b>	<b>162</b>	<b>29.4</b>

**Table 3.29 Data completeness (Monthly)**

2004	SO <sub>4</sub> <sup>2-</sup>	nss-SO <sub>4</sub> <sup>2-</sup>	NO <sub>3</sub> <sup>-</sup>	Cl <sup>-</sup>	NH <sub>4</sub> <sup>+</sup>	Na <sup>+</sup>	K <sup>+</sup>	Ca <sup>2+</sup>	nss-Ca <sup>2+</sup>	Mg <sup>2+</sup>	H <sup>+</sup>	pH	EC	Precip.
	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP			
Jan	99	99	99	99	99	99	99	99	99	99	99	99	99	100
Feb	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Mar	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Apr	100	100	100	100	100	100	100	100	100	100	100	100	100	100
May	44	44	44	44	44	44	44	44	44	44	44	44	44	100
June	0	0	0	0	0	0	0	0	0	0	0	0	0	100
July	28	28	28	28	28	28	28	28	28	28	28	28	28	97
Aug	12	12	12	12	12	12	12	12	12	12	12	12	12	87
Sept	0	0	0	0	0	0	0	0	0	0	0	0	0	93
Oct	99	99	99	99	99	99	99	99	99	99	99	99	99	100
Nov	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Dec	70	70	70	70	70	70	70	70	70	70	69	69	69	100
<b>Annual</b>	<b>48</b>	<b>48</b>	<b>48</b>	<b>48</b>	<b>48</b>	<b>48</b>	<b>48</b>	<b>48</b>	<b>48</b>	<b>48</b>	<b>47</b>	<b>47</b>	<b>47</b>	<b>98</b>

[--] for averages and completeness: Precipitation was 0 mm.

[0.00] for deposition: The deposition was 0 mmol/m<sup>2</sup> because precipitation was 0 mm.

[\*] for averages and deposition: The constituent was not measured although precipitation was not 0 mm. (%TP=0%)

[\*\*] for all: Precipitation was not measured. (%PCL=0%)

Data in hatched column for averages and deposition: Rejected monthly (annual) value by the criteria of EANET

(%PCL<80% or %TP<80%)

Units of 1) and 2) are mm y<sup>-1</sup> and mmol m<sup>-2</sup> y<sup>-1</sup>, respectively.

**Table 3.30** Volume-weighted mean concentrations/ Precipitation (Monthly)

2004	SO <sub>4</sub> <sup>2-</sup>	nss-SO <sub>4</sub> <sup>2-</sup>	NO <sub>3</sub> <sup>-</sup>	Cl <sup>-</sup>	NH <sub>4</sub> <sup>+</sup>	Na <sup>+</sup>	K <sup>+</sup>	Ca <sup>2+</sup>	nss-Ca <sup>2+</sup>	Mg <sup>2+</sup>	H <sup>+</sup>	pH	EC	Precip.
	μ mol/L	μ mol/L	μ mol/L	μ mol/L	μ mol/L	μ mol/L	μ mol/L	μ mol/L	μ mol/L	μ mol/L	μ mol/L			
Jan	14.8	6.2	5.4	164	5.2	142	3.6	3.9	0.9	15.2	13.2	4.88	2.57	82.0
Feb	13.2	5.9	3.9	138	4.1	120	2.8	8.9	6.3	7.6	12.3	4.91	2.51	62.5
Mar	12.3	5.5	6.7	148	7.8	131	3.6	6.0	3.1	16.8	6.4	5.20	2.37	161.5
Apr	23.7	8.7	10.5	282	15.7	256	6.5	6.1	1.1	27.5	12.0	4.92	4.27	51.2
May	6.9	2.9	4.3	70.7	5.3	66.5	1.6	1.7	0.3	6.4	7.2	5.15	1.39	49.5
June	8.2	2.4	3.6	106	4.1	97	2.1	2.6	0.5	10.1	6.0	5.22	1.81	128.5
July	7.6	3.0	3.4	83.0	3.2	75.4	2.1	1.8	<0.2	7.8	9.9	5.01	1.63	55.8
Aug	7.1	1.1	<1.0	120	4.6	103	2.8	1.6	<0.2	10.5	3.7	5.43	1.96	165.5
Sept	7.6	1.8	2.2	112	1.9	99.5	2.3	2.1	<0.2	10.3	5.5	5.26	1.73	66.5
Oct	7.2	<1.0	<1.0	121	3.3	114	2.5	1.7	<0.2	10.8	4.1	5.39	1.98	142.0
Nov	9.5	3.3	3.7	107	4.6	102	2.4	1.8	<0.2	10.1	9.6	5.02	1.91	74.5
Dec	13.6	3.7	3.6	182	3.3	167	3.8	3.0	<0.2	17.5	9.7	5.01	3.08	131.0
<b>Annual</b>	<b>10.7</b>	<b>3.4</b>	<b>3.7</b>	<b>139</b>	<b>5.1</b>	<b>125</b>	<b>3.1</b>	<b>3.4</b>	<b>1.0</b>	<b>13.0</b>	<b>7.5</b>	<b>5.13</b>	<b>2.29</b>	<b>1170.5<sup>1)</sup></b>
Max.	158	86.0	123	2570	131	2430	50.7	121	95.6	242	63.1	6.29	24.2	
Min.	<1.0	<1.0	<1.0	21.3	<1.0	18.6	<1.0	<0.2	<0.2	<0.4	0.5	4.20	0.53	

**Table 3.30** Wet deposition (Monthly) unit: mmol m<sup>-2</sup> month<sup>-1</sup>

2004	SO <sub>4</sub> <sup>2-</sup>	nss-SO <sub>4</sub> <sup>2-</sup>	NO <sub>3</sub> <sup>-</sup>	Cl <sup>-</sup>	NH <sub>4</sub> <sup>+</sup>	Na <sup>+</sup>	K <sup>+</sup>	Ca <sup>2+</sup>	nss-Ca <sup>2+</sup>	Mg <sup>2+</sup>	H <sup>+</sup>
Jan	1.21	0.51	0.44	13.5	0.43	11.7	0.30	0.32	0.07	1.25	1.08
Feb	0.82	0.37	0.25	8.60	0.26	7.50	0.17	0.55	0.39	0.47	0.77
Mar	1.99	0.89	1.09	23.9	1.25	21.2	0.57	0.96	0.50	2.72	1.03
Apr	1.21	0.44	0.54	14.4	0.81	13.1	0.33	0.31	0.06	1.41	0.61
May	0.34	0.14	0.21	3.50	0.26	3.29	0.08	0.08	0.02	0.32	0.35
June	1.06	0.31	0.46	13.6	0.53	12.5	0.27	0.33	0.07	1.30	0.77
July	0.42	0.17	0.19	4.63	0.18	4.20	0.12	0.10	0.01	0.43	0.55
Aug	1.18	0.18	0.11	19.8	0.77	17.0	0.47	0.26	0.01	1.74	0.62
Sept	0.50	0.12	0.15	7.45	0.13	6.62	0.15	0.14	<0.01	0.69	0.37
Oct	1.02	0.07	0.11	17.2	0.46	16.2	0.36	0.24	<0.01	1.54	0.58
Nov	0.70	0.25	0.28	7.99	0.34	7.59	0.18	0.13	<0.01	0.75	0.72
Dec	1.78	0.48	0.47	23.8	0.43	21.9	0.49	0.39	0.01	2.30	1.27
<b>Annual<sup>2)</sup></b>	<b>12.5</b>	<b>4.02</b>	<b>4.30</b>	<b>162</b>	<b>5.96</b>	<b>146</b>	<b>3.59</b>	<b>3.93</b>	<b>1.22</b>	<b>15.3</b>	<b>8.75</b>

**Table 3.30** Data completeness (Monthly)

2004	SO <sub>4</sub> <sup>2-</sup>	nss-SO <sub>4</sub> <sup>2-</sup>	NO <sub>3</sub> <sup>-</sup>	Cl <sup>-</sup>	NH <sub>4</sub> <sup>+</sup>	Na <sup>+</sup>	K <sup>+</sup>	Ca <sup>2+</sup>	nss-Ca <sup>2+</sup>	Mg <sup>2+</sup>	H <sup>+</sup>	pH	EC	Precip.
	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP			
Jan	99	99	99	99	99	99	99	99	99	99	96	96	96	100
Feb	100	100	100	100	100	100	100	100	100	100	99	99	99	100
Mar	100	100	100	100	100	100	100	100	100	100	98	98	98	100
Apr	99	99	99	99	99	99	99	99	99	99	97	97	97	100
May	100	100	100	100	100	100	100	100	100	100	99	99	99	100
June	41	41	41	41	41	41	41	41	41	41	41	41	41	94
July	53	53	53	53	53	53	53	53	53	53	52	52	52	97
Aug	99	99	99	99	99	99	99	99	99	99	99	99	99	100
Sept	100	100	100	100	100	100	100	100	100	100	98	98	98	100
Oct	100	100	100	100	100	100	100	100	100	100	99	99	99	100
Nov	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Dec	100	100	100	100	100	100	100	100	100	100	99	99	99	100
<b>Annual</b>	<b>91</b>	<b>91</b>	<b>91</b>	<b>91</b>	<b>91</b>	<b>91</b>	<b>91</b>	<b>91</b>	<b>91</b>	<b>91</b>	<b>90</b>	<b>90</b>	<b>90</b>	<b>99</b>

[--] for averages and completeness: Precipitation was 0 mm.

[0.00] for deposition: The deposition was 0 mmol/m<sup>2</sup> because precipitation was 0 mm.

[\*] for averages and deposition: The constituent was not measured although precipitation was not 0 mm. (%TP=0%)

[\*\*] for all: Precipitation was not measured. (%PCL=0%)

Data in hatched column for averages and deposition: Rejected monthly (annual) value by the criteria of EANET

(%PCL<80% or %TP<80%)

Units of 1) and 2) are mm y<sup>-1</sup> and mmol m<sup>-2</sup> y<sup>-1</sup>, respectively.

Table 3.31 Volume-weighted mean concentrations/ Precipitation (Monthly)

2004	SO <sub>4</sub> <sup>2-</sup>	nss-SO <sub>4</sub> <sup>2-</sup>	NO <sub>3</sub> <sup>-</sup>	Cl <sup>-</sup>	NH <sub>4</sub> <sup>+</sup>	Na <sup>+</sup>	K <sup>+</sup>	Ca <sup>2+</sup>	nss-Ca <sup>2+</sup>	Mg <sup>2+</sup>	H <sup>+</sup>	pH	EC	Precip.
	μmol/L	μmol/L	μmol/L	μmol/L	μmol/L	μmol/L	μmol/L	μmol/L	μmol/L	μmol/L	μmol/L		mS/m	mm month <sup>-1</sup>
Jan	--	--	--	--	--	--	--	--	--	--	--	--	--	0.0
Feb	--	--	--	--	--	--	--	--	--	--	--	--	--	0.0
Mar	--	--	--	--	--	--	--	--	--	--	--	--	--	0.0
Apr	*	*	*	*	*	*	*	*	*	*	5.9	5.23	1.28	68.1
May	*	*	*	*	*	*	*	*	*	*	*	*	*	72.6
June	*	*	*	*	*	*	*	*	*	*	*	*	*	143.8
July	*	*	*	*	*	*	*	*	*	*	0.8	6.11	3.44	130.1
Aug	--	--	--	--	--	--	--	--	--	--	--	--	--	0.0
Sept	*	*	*	*	*	*	*	*	*	*	0.3	6.46	2.30	27.1
Oct	--	--	--	--	--	--	--	--	--	--	--	--	--	0.0
Nov	--	--	--	--	--	--	--	--	--	--	--	--	--	0.0
Dec	--	--	--	--	--	--	--	--	--	--	--	--	--	0.0
<b>Annual</b>	*	*	*	*	*	*	*	*	*	*	<b>2.3</b>	<b>5.65</b>	<b>2.65</b>	<b>441.8<sup>1)</sup></b>
Max.	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.2	<0.2	<0.4	10.5	6.72	4.96	
Min.	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.2	<0.2	<0.4	0.2	4.98	1.09	

Table 3.31 Wet deposition (Monthly) unit: mmol m<sup>-2</sup> month<sup>-1</sup>

2004	SO <sub>4</sub> <sup>2-</sup>	nss-SO <sub>4</sub> <sup>2-</sup>	NO <sub>3</sub> <sup>-</sup>	Cl <sup>-</sup>	NH <sub>4</sub> <sup>+</sup>	Na <sup>+</sup>	K <sup>+</sup>	Ca <sup>2+</sup>	nss-Ca <sup>2+</sup>	Mg <sup>2+</sup>	H <sup>+</sup>
Jan	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Feb	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Mar	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Apr	*	*	*	*	*	*	*	*	*	*	0.40
May	*	*	*	*	*	*	*	*	*	*	*
June	*	*	*	*	*	*	*	*	*	*	*
July	*	*	*	*	*	*	*	*	*	*	0.10
Aug	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Sept	*	*	*	*	*	*	*	*	*	*	<0.01
Oct	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Nov	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Dec	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
<b>Annual<sup>2)</sup></b>	*	*	*	*	*	*	*	*	*	*	<b>1.00</b>

Table 3.31 Data completeness (Monthly)

2004	SO <sub>4</sub> <sup>2-</sup>	nss-SO <sub>4</sub> <sup>2-</sup>	NO <sub>3</sub> <sup>-</sup>	Cl <sup>-</sup>	NH <sub>4</sub> <sup>+</sup>	Na <sup>+</sup>	K <sup>+</sup>	Ca <sup>2+</sup>	nss-Ca <sup>2+</sup>	Mg <sup>2+</sup>	H <sup>+</sup>	pH	EC	Precip.
	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%PCL
Jan	--	--	--	--	--	--	--	--	--	--	--	--	--	100
Feb	--	--	--	--	--	--	--	--	--	--	--	--	--	100
Mar	--	--	--	--	--	--	--	--	--	--	--	--	--	100
Apr	0	0	0	0	0	0	0	0	0	0	100	100	100	100
May	0	0	0	0	0	0	0	0	0	0	0	0	0	100
June	0	0	0	0	0	0	0	0	0	0	0	0	0	100
July	0	0	0	0	0	0	0	0	0	0	100	100	100	100
Aug	--	--	--	--	--	--	--	--	--	--	--	--	--	100
Sept	0	0	0	0	0	0	0	0	0	0	100	100	100	100
Oct	--	--	--	--	--	--	--	--	--	--	--	--	--	100
Nov	--	--	--	--	--	--	--	--	--	--	--	--	--	100
Dec	--	--	--	--	--	--	--	--	--	--	--	--	--	100
<b>Annual</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>51</b>	<b>51</b>	<b>51</b>	<b>100</b>

[--] for averages and completeness: Precipitation was 0 mm.

[0.00] for deposition: The deposition was 0 mmol/m<sup>2</sup> because precipitation was 0 mm.

[\*] for averages and deposition: The constituent was not measured although precipitation was not 0 mm. (%TP=0%)

[\*\*] for all: Precipitation was not measured. (%PCL=0%)

Data in hatched column for averages and deposition: Rejected monthly (annual) value by the criteria of EANET

(%PCL<80% or %TP<80%)

Units of 1) and 2) are mm y<sup>-1</sup> and mmol m<sup>-2</sup> y<sup>-1</sup>, respectively.

**Table 3.32 Volume-weighted mean concentrations/ Precipitation (Monthly)**

2004	SO <sub>4</sub> <sup>2-</sup>	nss-SO <sub>4</sub> <sup>2-</sup>	NO <sub>3</sub> <sup>-</sup>	Cl <sup>-</sup>	NH <sub>4</sub> <sup>+</sup>	Na <sup>+</sup>	K <sup>+</sup>	Ca <sup>2+</sup>	nss-Ca <sup>2+</sup>	Mg <sup>2+</sup>	H <sup>+</sup>	pH	EC	Precip.
	μ mol/L	μ mol/L	μ mol/L	μ mol/L	μ mol/L	μ mol/L	μ mol/L	μ mol/L	μ mol/L	μ mol/L	μ mol/L			
Jan	17.8	17.6	19.1	6.5	7.0	2.7	<1.0	5.2	5.1	<0.4	47.3	4.33	1.89	349.3
Feb	38.0	37.4	63.8	7.7	26.0	10.3	3.4	15.0	14.8	2.4	85.0	4.07	4.33	140.5
Mar	23.2	22.9	35.1	6.6	25.7	4.6	2.2	7.5	7.4	<0.4	43.3	4.36	2.33	206.2
Apr	8.0	7.9	38.9	5.4	19.2	1.3	1.6	3.0	3.0	<0.4	64.6	4.19	2.73	399.3
May	17.2	16.7	27.8	6.0	16.8	7.0	1.2	4.5	4.4	1.4	34.6	4.46	1.93	313.0
June	14.6	13.3	15.4	12.4	8.9	21.9	3.1	5.7	5.2	1.3	*	*	*	13.8
July	16.5	15.9	27.0	8.8	8.6	9.9	1.5	5.6	5.4	1.1	41.6	4.38	2.30	396.6
Aug	26.9	26.0	35.4	18.4	13.5	14.8	2.0	9.9	9.6	2.2	46.9	4.33	2.87	53.8
Sept	29.3	28.8	33.4	12.8	17.7	8.5	2.6	3.2	3.0	2.1	60.2	4.22	2.82	306.9
Oct	17.9	17.5	24.3	7.0	8.9	6.2	1.5	4.7	4.6	1.1	34.2	4.47	1.60	272.9
Nov	12.1	11.9	18.5	4.1	3.0	2.3	1.4	2.8	2.8	0.5	33.8	4.47	1.53	387.7
Dec	18.3	18.0	33.9	9.3	10.7	5.2	1.2	5.7	5.6	<0.4	42.4	4.37	2.06	156.0
<b>Annual</b>	<b>18.2</b>	<b>17.9</b>	<b>29.8</b>	<b>7.4</b>	<b>13.1</b>	<b>5.7</b>	<b>1.6</b>	<b>5.1</b>	<b>4.9</b>	<b>0.9</b>	<b>47.3</b>	<b>4.33</b>	<b>2.26</b>	<b>2996.0<sup>1)</sup></b>
Max.	61.2	60.7	120	55.0	88.9	50.6	8.1	32.8	32.6	7.1	110	4.99	5.99	
Min.	<1.0	<1.0	4.6	1.6	<1.0	<1.0	<1.0	<0.2	<0.2	<0.4	10.2	3.96	0.70	

**Table 3.32 Wet deposition (Monthly)** unit: mmol m<sup>-2</sup>month<sup>-1</sup>

2004	SO <sub>4</sub> <sup>2-</sup>	nss-SO <sub>4</sub> <sup>2-</sup>	NO <sub>3</sub> <sup>-</sup>	Cl <sup>-</sup>	NH <sub>4</sub> <sup>+</sup>	Na <sup>+</sup>	K <sup>+</sup>	Ca <sup>2+</sup>	nss-Ca <sup>2+</sup>	Mg <sup>2+</sup>	H <sup>+</sup>
Jan	6.22	6.16	6.68	2.26	2.45	0.95	0.26	1.80	1.78	0.03	16.5
Feb	5.34	5.25	8.96	1.08	3.65	1.45	0.47	2.10	2.07	0.34	11.9
Mar	4.78	4.72	7.25	1.36	5.30	0.96	0.45	1.54	1.52	0.06	8.94
Apr	3.18	3.16	15.5	2.14	7.67	0.53	0.66	1.21	1.19	<0.01	25.8
May	5.37	5.24	8.69	1.89	5.25	2.20	0.39	1.42	1.37	0.45	10.8
June	0.20	0.18	0.21	0.17	0.12	0.30	0.04	0.08	0.07	0.02	*
July	6.53	6.30	10.7	3.51	3.40	3.91	0.58	2.21	2.13	0.44	16.5
Aug	1.45	1.40	1.90	0.99	0.72	0.80	0.11	0.53	0.52	0.12	2.53
Sept	8.99	8.84	10.3	3.93	5.44	2.62	0.79	0.97	0.92	0.65	18.5
Oct	4.89	4.79	6.62	1.90	2.42	1.68	0.42	1.29	1.25	0.31	9.34
Nov	4.68	4.63	7.16	1.59	1.18	0.90	0.55	1.09	1.07	0.20	13.1
Dec	2.85	2.80	5.29	1.46	1.67	0.82	0.18	0.89	0.87	0.05	6.61
<b>Annual<sup>2)</sup></b>	<b>54.5</b>	<b>53.5</b>	<b>89.4</b>	<b>22.2</b>	<b>39.4</b>	<b>17.0</b>	<b>4.91</b>	<b>15.1</b>	<b>14.8</b>	<b>2.66</b>	<b>142</b>

**Table 3.32 Data completeness (Monthly)**

2004	SO <sub>4</sub> <sup>2-</sup>	nss-SO <sub>4</sub> <sup>2-</sup>	NO <sub>3</sub> <sup>-</sup>	Cl <sup>-</sup>	NH <sub>4</sub> <sup>+</sup>	Na <sup>+</sup>	K <sup>+</sup>	Ca <sup>2+</sup>	nss-Ca <sup>2+</sup>	Mg <sup>2+</sup>	H <sup>+</sup>	pH	EC	Precip.
	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP			
Jan	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Feb	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Mar	100	100	100	100	100	100	100	100	100	100	97	97	97	100
Apr	100	100	100	100	100	100	100	100	100	100	99	99	99	100
May	100	100	100	100	100	100	100	100	100	100	100	100	100	100
June	70	70	70	70	70	70	70	70	70	70	0	0	0	100
July	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Aug	98	98	98	98	98	98	98	98	98	98	96	96	96	100
Sept	100	100	100	100	100	100	100	100	100	100	99	99	99	100
Oct	95	95	95	95	95	95	95	95	95	95	89	89	89	100
Nov	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Dec	100	100	100	100	100	100	100	100	100	100	84	84	84	100
<b>Annual</b>	<b>99</b>	<b>99</b>	<b>99</b>	<b>99</b>	<b>99</b>	<b>99</b>	<b>99</b>	<b>99</b>	<b>99</b>	<b>99</b>	<b>97</b>	<b>97</b>	<b>97</b>	<b>100</b>

[--] for averages and completeness: Precipitation was 0 mm.

[0.00] for deposition: The deposition was 0 mmol/m<sup>2</sup> because precipitation was 0 mm.

[\*] for averages and deposition: The constituent was not measured although precipitation was not 0 mm. (%TP=0%)

[\*\*] for all: Precipitation was not measured. (%PCL=0%)

Data in hatched column for averages and deposition: Rejected monthly (annual) value by the criteria of EANET

(%PCL<80% or %TP<80%)

Units of 1) and 2) are mm y<sup>-1</sup> and mmol m<sup>-2</sup> y<sup>-1</sup>, respectively.

**Table 3.33** Volume-weighted mean concentrations/ Precipitation (Monthly)

2004	SO <sub>4</sub> <sup>2-</sup>	nss-SO <sub>4</sub> <sup>2-</sup>	NO <sub>3</sub> <sup>-</sup>	Cl <sup>-</sup>	NH <sub>4</sub> <sup>+</sup>	Na <sup>+</sup>	K <sup>+</sup>	Ca <sup>2+</sup>	nss-Ca <sup>2+</sup>	Mg <sup>2+</sup>	H <sup>+</sup>	pH	EC	Precip.
	μ mol/L	μ mol/L	μ mol/L	μ mol/L	μ mol/L	μ mol/L	μ mol/L	μ mol/L	μ mol/L	μ mol/L	μ mol/L			
Jan	<1.0	<1.0	<1.0	4.2	<1.0	<1.0	<1.0	1.0	1.0	<0.4	11.5	4.94	0.51	49.9
Feb	9.2	8.9	7.4	<1.0	13.0	4.9	2.0	9.2	9.1	1.2	15.2	4.82	1.00	98.1
Mar	4.5	4.3	5.5	2.8	<1.0	2.3	1.5	5.1	5.0	<0.4	13.9	4.86	0.70	241.5
Apr	4.4	4.4	4.5	2.0	1.8	<1.0	<1.0	0.7	0.7	<0.4	20.0	4.70	0.79	302.4
May	1.7	1.7	2.6	<1.0	<1.0	<1.0	<1.0	1.4	1.4	<0.4	17.7	4.75	0.80	222.5
June	4.6	4.4	6.0	5.5	2.1	4.5	<1.0	2.6	2.5	0.6	23.1	4.64	1.15	74.2
July	3.5	3.4	4.7	<1.0	1.1	1.4	<1.0	2.0	1.9	<0.4	13.1	4.88	0.73	240.5
Aug	5.7	5.6	11.5	5.1	<1.0	2.4	1.1	3.5	3.4	<0.4	21.1	4.67	1.28	135.6
Sept	5.2	5.0	4.4	2.3	5.2	2.4	3.1	1.8	1.8	0.5	9.7	5.01	0.78	398.2
Oct	3.3	3.2	3.8	2.4	1.9	2.0	2.0	1.8	1.7	0.8	7.1	5.15	0.53	376.2
Nov	2.8	2.7	2.5	4.0	<1.0	1.7	1.4	1.3	1.3	<0.4	11.4	4.94	0.64	147.1
Dec	1.8	1.8	2.6	2.3	<1.0	1.6	<1.0	0.7	0.7	<0.4	10.6	4.97	0.60	129.2
<b>Annual</b>	<b>4.0</b>	<b>3.9</b>	<b>4.6</b>	<b>2.4</b>	<b>2.4</b>	<b>1.8</b>	<b>1.5</b>	<b>2.3</b>	<b>2.3</b>	<b>&lt;0.4</b>	<b>13.7</b>	<b>4.86</b>	<b>0.76</b>	<b>2415.4<sup>1)</sup></b>
Max.	11.2	10.9	20.5	15.7	21.6	8.1	3.5	9.5	9.4	2.0	45.7	5.69	1.89	
Min.	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.2	<0.2	<0.4	2.0	4.34	0.29	

**Table 3.33** Wet deposition (Monthly) unit: mmol m<sup>-2</sup>month<sup>-1</sup>

2004	SO <sub>4</sub> <sup>2-</sup>	nss-SO <sub>4</sub> <sup>2-</sup>	NO <sub>3</sub> <sup>-</sup>	Cl <sup>-</sup>	NH <sub>4</sub> <sup>+</sup>	Na <sup>+</sup>	K <sup>+</sup>	Ca <sup>2+</sup>	nss-Ca <sup>2+</sup>	Mg <sup>2+</sup>	H <sup>+</sup>
Jan	0.04	0.04	<0.01	0.21	0.00	0.00	0.03	0.05	0.05	0.00	0.57
Feb	0.90	0.87	0.73	0.05	1.28	0.48	0.20	0.90	0.89	0.12	1.49
Mar	1.08	1.05	1.34	0.68	0.21	0.56	0.37	1.23	1.22	0.00	3.36
Apr	1.32	1.32	1.36	0.62	0.56	0.09	0.22	0.22	0.22	0.00	6.05
May	0.38	0.37	0.57	0.22	0.19	0.07	0.12	0.32	0.32	0.00	3.94
June	0.34	0.32	0.44	0.41	0.16	0.33	0.06	0.19	0.19	0.04	1.72
July	0.84	0.82	1.13	0.19	0.27	0.34	0.18	0.47	0.46	0.04	3.16
Aug	0.78	0.76	1.56	0.70	0.11	0.32	0.15	0.47	0.47	0.05	2.87
Sept	2.07	2.01	1.76	0.94	2.09	0.94	1.23	0.74	0.71	0.19	3.88
Oct	1.23	1.19	1.41	0.89	0.71	0.77	0.76	0.67	0.66	0.29	2.67
Nov	0.40	0.39	0.36	0.58	0.00	0.24	0.21	0.19	0.18	0.00	1.67
Dec	0.24	0.23	0.34	0.30	0.04	0.21	0.05	0.10	0.09	<0.01	1.37
<b>Annual<sup>2)</sup></b>	<b>9.74</b>	<b>9.48</b>	<b>11.1</b>	<b>5.86</b>	<b>5.77</b>	<b>4.42</b>	<b>3.68</b>	<b>5.60</b>	<b>5.51</b>	<b>0.75</b>	<b>33.1</b>

**Table 3.33** Data completeness (Monthly)

2004	SO <sub>4</sub> <sup>2-</sup>	nss-SO <sub>4</sub> <sup>2-</sup>	NO <sub>3</sub> <sup>-</sup>	Cl <sup>-</sup>	NH <sub>4</sub> <sup>+</sup>	Na <sup>+</sup>	K <sup>+</sup>	Ca <sup>2+</sup>	nss-Ca <sup>2+</sup>	Mg <sup>2+</sup>	H <sup>+</sup>	pH	EC	Precip.
	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP			
Jan	53	53	53	53	53	53	53	53	53	53	53	53	53	100
Feb	97	97	97	97	97	97	97	97	97	97	97	97	97	100
Mar	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Apr	100	100	100	100	100	100	100	100	100	100	100	100	100	100
May	99	99	99	99	99	99	99	99	99	99	99	99	99	100
June	100	100	100	100	100	100	100	100	100	100	100	100	100	100
July	69	69	69	69	69	69	69	69	69	69	69	69	69	100
Aug	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Sept	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Oct	100	100	100	100	100	100	100	100	100	100	94	94	94	100
Nov	91	91	91	91	91	91	91	91	91	91	91	91	91	100
Dec	100	100	100	100	100	100	100	100	100	100	93	93	93	100
<b>Annual</b>	<b>95</b>	<b>95</b>	<b>95</b>	<b>95</b>	<b>95</b>	<b>95</b>	<b>95</b>	<b>95</b>	<b>95</b>	<b>95</b>	<b>94</b>	<b>94</b>	<b>94</b>	<b>100</b>

[--] for averages and completeness: Precipitation was 0 mm.

[0.00] for deposition: The deposition was 0 mmol/m<sup>2</sup> because precipitation was 0 mm.

[\*] for averages and deposition: The constituent was not measured although precipitation was not 0 mm. (%TP=0%)

[\*\*] for all: Precipitation was not measured. (%PCL=0%)

Data in hatched column for averages and deposition: Rejected monthly (annual) value by the criteria of EANET

(%PCL<80% or %TP<80%)

Units of 1) and 2) are mm y<sup>-1</sup> and mmol m<sup>-2</sup> y<sup>-1</sup>, respectively.

**Table 3.34** Volume-weighted mean concentrations/ Precipitation (Monthly)

2004	SO <sub>4</sub> <sup>2-</sup>	nss-SO <sub>4</sub> <sup>2-</sup>	NO <sub>3</sub> <sup>-</sup>	Cl <sup>-</sup>	NH <sub>4</sub> <sup>+</sup>	Na <sup>+</sup>	K <sup>+</sup>	Ca <sup>2+</sup>	nss-Ca <sup>2+</sup>	Mg <sup>2+</sup>	H <sup>+</sup>	pH	EC	Precip.
	μ mol/L	μ mol/L	μ mol/L	μ mol/L	μ mol/L	μ mol/L	μ mol/L	μ mol/L	μ mol/L	μ mol/L	μ mol/L			
Jan	--	--	--	--	--	--	--	--	--	--	--	--	--	0.0
Feb	--	--	--	--	--	--	--	--	--	--	--	--	--	0.0
Mar	--	--	--	--	--	--	--	--	--	--	--	--	--	0.0
Apr	34.2	33.6	16.6	13.3	94.2	9.6	4.4	60.6	60.4	9.9	0.3	6.58	2.73	2.9
May	12.5	12.3	3.8	5.1	26.1	3.0	2.3	15.8	15.8	5.7	0.6	6.24	0.88	23.0
June	--	--	--	--	--	--	--	--	--	--	--	--	--	0.0
July	25.1	24.5	36.0	15.0	75.1	10.2	3.6	59.5	59.3	6.7	0.3	6.58	2.38	11.9
Aug	35.9	35.5	26.1	11.7	58.9	5.8	3.8	89.0	88.9	6.4	0.1	6.88	2.79	11.0
Sept	21.3	21.0	13.1	5.4	41.9	4.8	2.1	36.0	35.9	4.9	0.3	6.51	1.44	33.4
Oct	42.9	40.8	27.4	23.3	33.4	35.2	13.2	142	142	12.1	<0.1	7.16	3.89	1.2
Nov	--	--	--	--	--	--	--	--	--	--	--	--	--	0.0
Dec	--	--	--	--	--	--	--	--	--	--	--	--	--	0.0
<b>Annual</b>	<b>22.1</b>	<b>21.8</b>	<b>15.8</b>	<b>8.0</b>	<b>46.2</b>	<b>5.8</b>	<b>2.8</b>	<b>43.2</b>	<b>43.0</b>	<b>5.9</b>	<b>0.3</b>	<b>6.46</b>	<b>1.68</b>	<b>83.4<sup>1)</sup></b>
Max.	76.7	73.8	58.2	29.9	104	48.7	20.5	239	238	16.5	0.7	7.61	6.16	
Min.	8.3	8.1	3.1	3.7	20.5	<1.0	1.5	12.7	12.6	3.7	<0.1	6.13	0.82	

**Table 3.34** Wet deposition (Monthly) unit: mmol m<sup>-2</sup> month<sup>-1</sup>

2004	SO <sub>4</sub> <sup>2-</sup>	nss-SO <sub>4</sub> <sup>2-</sup>	NO <sub>3</sub> <sup>-</sup>	Cl <sup>-</sup>	NH <sub>4</sub> <sup>+</sup>	Na <sup>+</sup>	K <sup>+</sup>	Ca <sup>2+</sup>	nss-Ca <sup>2+</sup>	Mg <sup>2+</sup>	H <sup>+</sup>
Jan	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Feb	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Mar	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Apr	0.10	0.10	0.05	0.04	0.28	0.03	0.01	0.18	0.18	0.03	<0.01
May	0.29	0.28	0.09	0.12	0.60	0.07	0.05	0.36	0.36	0.13	0.01
June	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
July	0.30	0.29	0.43	0.18	0.89	0.12	0.04	0.71	0.71	0.08	<0.01
Aug	0.39	0.39	0.29	0.13	0.65	0.06	0.04	0.98	0.98	0.07	<0.01
Sept	0.71	0.70	0.44	0.18	1.40	0.16	0.07	1.20	1.20	0.16	0.01
Oct	0.05	0.05	0.03	0.03	0.04	0.04	0.02	0.17	0.17	0.01	<0.01
Nov	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Dec	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
<b>Annual<sup>2)</sup></b>	<b>1.84</b>	<b>1.81</b>	<b>1.32</b>	<b>0.67</b>	<b>3.86</b>	<b>0.48</b>	<b>0.24</b>	<b>3.60</b>	<b>3.59</b>	<b>0.49</b>	<b>0.03</b>

**Table 3.34** Data completeness (Monthly)

2004	SO <sub>4</sub> <sup>2-</sup>	nss-SO <sub>4</sub> <sup>2-</sup>	NO <sub>3</sub> <sup>-</sup>	Cl <sup>-</sup>	NH <sub>4</sub> <sup>+</sup>	Na <sup>+</sup>	K <sup>+</sup>	Ca <sup>2+</sup>	nss-Ca <sup>2+</sup>	Mg <sup>2+</sup>	H <sup>+</sup>	pH	EC	Precip.
	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP			
Jan	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Feb	--	--	--	--	--	--	--	--	--	--	--	--	--	100
Mar	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Apr	100	100	100	100	100	100	100	100	100	100	100	100	100	100
May	100	100	100	100	100	100	100	100	100	100	100	100	100	100
June	--	--	--	--	--	--	--	--	--	--	--	--	--	--
July	100	100	100	100	100	100	100	100	100	100	100	100	100	14
Aug	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Sept	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Oct	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Nov	--	--	--	--	--	--	--	--	--	--	--	--	--	100
Dec	--	--	--	--	--	--	--	--	--	--	--	--	--	--
<b>Annual</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>

[--] for averages and completeness: Precipitation was 0 mm.

[0.00] for deposition: The deposition was 0 mmol/m<sup>2</sup> because precipitation was 0 mm.

[\*] for averages and deposition: The constituent was not measured although precipitation was not 0 mm. (%TP=0%)

[\*\*] for all: Precipitation was not measured. (%PCL=0%)

Data in hatched column for averages and deposition: Rejected monthly (annual) value by the criteria of EANET

(%PCL<80% or %TP<80%)

Units of 1) and 2) are mm y<sup>-1</sup> and mmol m<sup>-2</sup> y<sup>-1</sup>, respectively.

**Table 3.35 Volume-weighted mean concentrations/ Precipitation (Monthly)**

2004	SO <sub>4</sub> <sup>2-</sup>	nss-SO <sub>4</sub> <sup>2-</sup>	NO <sub>3</sub> <sup>-</sup>	Cl <sup>-</sup>	NH <sub>4</sub> <sup>+</sup>	Na <sup>+</sup>	K <sup>+</sup>	Ca <sup>2+</sup>	nss-Ca <sup>2+</sup>	Mg <sup>2+</sup>	H <sup>+</sup>	pH	EC	Precip.
	μ mol/L	μ mol/L	μ mol/L	μ mol/L	μ mol/L	μ mol/L	μ mol/L	μ mol/L	μ mol/L	μ mol/L	μ mol/L			
Jan	5.2	5.0	4.8	12.7	21.6	3.5	6.9	14.0	13.9	2.9	0.7	6.16	0.82	2.6
Feb	5.8	5.6	5.6	11.9	8.3	3.0	2.3	19.0	18.9	5.8	0.9	6.04	0.79	6.5
Mar	33.8	31.1	10.7	17.2	24.9	44.5	7.5	66.4	65.4	11.7	0.7	6.15	2.49	6.9
Apr	19.7	18.6	9.1	17.3	47.5	17.4	8.9	37.0	36.7	7.0	0.4	6.45	1.67	5.0
May	6.0	5.8	6.3	7.5	9.8	3.6	2.6	10.9	10.8	2.4	3.0	5.52	0.65	20.5
June	29.6	28.9	30.2	13.3	49.2	11.2	7.3	27.1	26.9	7.9	1.7	5.76	1.71	37.2
July	9.6	9.5	18.1	8.0	42.5	2.4	4.4	11.8	11.7	5.0	1.3	5.90	1.05	78.2
Aug	9.8	9.7	19.2	11.2	67.9	2.0	6.4	13.1	13.1	3.3	2.3	5.63	1.31	14.0
Sept	6.9	6.6	6.6	3.1	14.6	4.8	2.3	5.9	5.8	3.4	2.0	5.71	0.57	35.9
Oct	16.0	15.3	10.6	6.5	56.0	12.2	5.1	21.5	21.2	3.7	0.2	6.72	1.40	0.5
Nov	--	--	--	--	--	--	--	--	--	--	--	--	--	0.0
Dec	--	--	--	--	--	--	--	--	--	--	--	--	--	0.0
<b>Annual</b>	<b>13.3</b>	<b>12.9</b>	<b>16.1</b>	<b>9.0</b>	<b>35.6</b>	<b>6.3</b>	<b>4.7</b>	<b>16.2</b>	<b>16.1</b>	<b>5.2</b>	<b>1.6</b>	<b>5.78</b>	<b>1.12</b>	<b>207.1<sup>1)</sup></b>
Max.	59.7	58.3	52.6	33.9	99.2	84.8	25.6	106	104	18.5	7.2	6.91	5.03	
Min.	2.0	1.0	<1.0	<1.0	1.1	<1.0	<1.0	2.3	2.2	<0.4	0.1	5.14	0.38	

**Table 3.35 Wet deposition (Monthly)** unit: mmol m<sup>-2</sup> month<sup>-1</sup>

2004	SO <sub>4</sub> <sup>2-</sup>	nss-SO <sub>4</sub> <sup>2-</sup>	NO <sub>3</sub> <sup>-</sup>	Cl <sup>-</sup>	NH <sub>4</sub> <sup>+</sup>	Na <sup>+</sup>	K <sup>+</sup>	Ca <sup>2+</sup>	nss-Ca <sup>2+</sup>	Mg <sup>2+</sup>	H <sup>+</sup>
Jan	0.01	0.01	0.01	0.03	0.06	<0.01	0.02	0.04	0.04	<0.01	<0.01
Feb	0.04	0.04	0.04	0.08	0.05	0.02	0.01	0.12	0.12	0.04	<0.01
Mar	0.23	0.21	0.07	0.12	0.17	0.31	0.05	0.46	0.45	0.08	<0.01
Apr	0.10	0.09	0.04	0.09	0.24	0.09	0.04	0.18	0.18	0.03	<0.01
May	0.12	0.12	0.13	0.15	0.20	0.07	0.05	0.22	0.22	0.05	0.06
June	1.10	1.08	1.12	0.49	1.83	0.41	0.27	1.01	1.00	0.29	0.06
July	0.75	0.74	1.41	0.62	3.32	0.19	0.35	0.92	0.92	0.39	0.10
Aug	0.14	0.14	0.27	0.16	0.95	0.03	0.09	0.18	0.18	0.05	0.03
Sept	0.25	0.24	0.24	0.11	0.52	0.17	0.08	0.21	0.21	0.12	0.07
Oct	<0.01	<0.01	<0.01	<0.01	0.03	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Nov	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Dec	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
<b>Annual<sup>2)</sup></b>	<b>2.75</b>	<b>2.67</b>	<b>3.34</b>	<b>1.85</b>	<b>7.37</b>	<b>1.31</b>	<b>0.97</b>	<b>3.36</b>	<b>3.33</b>	<b>1.07</b>	<b>0.34</b>

**Table 3.35 Data completeness (Monthly)**

2004	SO <sub>4</sub> <sup>2-</sup>	nss-SO <sub>4</sub> <sup>2-</sup>	NO <sub>3</sub> <sup>-</sup>	Cl <sup>-</sup>	NH <sub>4</sub> <sup>+</sup>	Na <sup>+</sup>	K <sup>+</sup>	Ca <sup>2+</sup>	nss-Ca <sup>2+</sup>	Mg <sup>2+</sup>	H <sup>+</sup>	pH	EC	Precip.
	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP			
Jan	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Feb	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Mar	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Apr	100	100	100	100	100	100	100	100	100	100	100	100	100	100
May	100	100	100	100	100	100	100	100	100	100	100	100	100	100
June	100	100	100	100	100	100	100	100	100	100	100	100	100	100
July	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Aug	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Sept	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Oct	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Nov	--	--	--	--	--	--	--	--	--	--	--	--	--	100
Dec	--	--	--	--	--	--	--	--	--	--	--	--	--	--
<b>Annual</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>

[--] for averages and completeness: Precipitation was 0 mm.

[0.00] for deposition: The deposition was 0 mmol/m<sup>2</sup> because precipitation was 0 mm.

[\*] for averages and deposition: The constituent was not measured although precipitation was not 0 mm. (%TP=0%)

[\*\*] for all: Precipitation was not measured. (%PCL=0%)

Data in hatched column for averages and deposition: Rejected monthly (annual) value by the criteria of EANET

(%PCL<80% or %TP<80%)

Units of 1) and 2) are mm y<sup>-1</sup> and mmol m<sup>-2</sup> y<sup>-1</sup>, respectively.

**Table 3.36 Volume-weighted mean concentrations/ Precipitation (Monthly)**

2004	SO <sub>4</sub> <sup>2-</sup>	nss-SO <sub>4</sub> <sup>2-</sup>	NO <sub>3</sub> <sup>-</sup>	Cl <sup>-</sup>	NH <sub>4</sub> <sup>+</sup>	Na <sup>+</sup>	K <sup>+</sup>	Ca <sup>2+</sup>	nss-Ca <sup>2+</sup>	Mg <sup>2+</sup>	H <sup>+</sup>	pH	EC	Precip.
	μ mol/L	μ mol/L	μ mol/L	μ mol/L	μ mol/L	μ mol/L	μ mol/L	μ mol/L	μ mol/L	μ mol/L	μ mol/L			
Jan	--	--	--	--	--	--	--	--	--	--	--	--	--	0.0
Feb	18.1	17.9	10.7	6.9	81.5	4.1	4.1	27.4	27.4	3.3	0.6	6.21	1.66	31.0
Mar	--	--	--	--	--	--	--	--	--	--	--	--	--	0.0
Apr	61.2	60.0	82.1	23.0	164	19.6	12.0	31.7	31.3	6.5	<0.1	7.20	4.27	77.4
May	15.9	15.2	12.7	17.3	27.8	10.6	4.9	8.6	8.4	1.6	1.6	5.78	1.02	227.9
June	33.5	30.1	15.8	80.7	95.1	57.1	3.8	10.7	9.5	11.3	1.7	5.78	2.42	191.7
July	24.2	23.8	24.5	8.7	34.9	5.9	2.5	16.6	16.5	6.2	7.7	5.12	1.29	311.6
Aug	12.8	12.1	5.8	22.0	15.2	12.4	3.5	4.8	4.5	3.3	10.0	5.00	1.21	789.0
Sept	25.5	25.1	24.7	7.9	32.7	6.8	3.9	20.1	20.0	4.1	4.8	5.32	1.48	263.5
Oct	60.7	58.8	48.2	40.9	61.5	30.9	4.4	28.2	27.5	6.1	60.3	4.22	4.50	30.2
Nov	10.4	8.9	2.6	29.7	14.8	24.7	3.9	7.1	6.6	2.2	1.0	6.00	1.00	241.3
Dec	--	--	--	--	--	--	--	--	--	--	--	--	--	0.0
<b>Annual</b>	<b>20.4</b>	<b>19.4</b>	<b>15.4</b>	<b>24.0</b>	<b>35.4</b>	<b>16.3</b>	<b>3.9</b>	<b>11.1</b>	<b>10.8</b>	<b>4.4</b>	<b>6.6</b>	<b>5.18</b>	<b>1.48</b>	<b>2163.6<sup>1)</sup></b>
Max.	61.2	60.0	82.1	258	164	212	15.0	40.9	40.8	41.5	60.3	7.20	5.47	
Min.	4.3	3.1	1.5	2.6	3.3	1.6	<1.0	1.9	1.7	1.0	<0.1	4.22	0.46	

**Table 3.36 Wet deposition (Monthly)** unit: mmol m<sup>-2</sup>month<sup>-1</sup>

2004	SO <sub>4</sub> <sup>2-</sup>	nss-SO <sub>4</sub> <sup>2-</sup>	NO <sub>3</sub> <sup>-</sup>	Cl <sup>-</sup>	NH <sub>4</sub> <sup>+</sup>	Na <sup>+</sup>	K <sup>+</sup>	Ca <sup>2+</sup>	nss-Ca <sup>2+</sup>	Mg <sup>2+</sup>	H <sup>+</sup>
Jan	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Feb	0.56	0.55	0.33	0.21	2.53	0.13	0.13	0.85	0.85	0.10	0.02
Mar	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Apr	4.74	4.65	6.35	1.78	12.7	1.52	0.93	2.45	2.42	0.50	<0.01
May	3.62	3.47	2.90	3.94	6.33	2.41	1.13	1.96	1.90	0.37	0.38
June	6.43	5.77	3.02	15.5	18.2	11.0	0.72	2.05	1.82	2.16	0.32
July	7.54	7.43	7.63	2.72	10.9	1.85	0.76	5.17	5.13	1.92	2.39
Aug	10.1	9.51	4.57	17.3	12.0	9.75	2.72	3.77	3.56	2.61	7.93
Sept	6.72	6.61	6.51	2.09	8.62	1.80	1.03	5.31	5.27	1.08	1.27
Oct	1.83	1.78	1.46	1.24	1.86	0.93	0.13	0.85	0.83	0.19	1.82
Nov	2.51	2.15	0.62	7.17	3.58	5.97	0.95	1.71	1.58	0.54	0.24
Dec	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
<b>Annual<sup>2)</sup></b>	<b>44.0</b>	<b>41.9</b>	<b>33.4</b>	<b>52.0</b>	<b>76.6</b>	<b>35.3</b>	<b>8.50</b>	<b>24.1</b>	<b>23.4</b>	<b>9.47</b>	<b>14.4</b>

**Table 3.36 Data completeness (Monthly)**

2004	SO <sub>4</sub> <sup>2-</sup>	nss-SO <sub>4</sub> <sup>2-</sup>	NO <sub>3</sub> <sup>-</sup>	Cl <sup>-</sup>	NH <sub>4</sub> <sup>+</sup>	Na <sup>+</sup>	K <sup>+</sup>	Ca <sup>2+</sup>	nss-Ca <sup>2+</sup>	Mg <sup>2+</sup>	H <sup>+</sup>	pH	EC	Precip.
	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP			
Jan	--	--	--	--	--	--	--	--	--	--	--	--	--	100
Feb	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Mar	--	--	--	--	--	--	--	--	--	--	--	--	--	100
Apr	100	100	100	100	100	100	100	100	100	100	100	100	100	100
May	100	100	100	100	100	100	100	100	100	100	100	100	100	100
June	100	100	100	100	100	100	100	100	100	100	100	100	100	100
July	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Aug	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Sept	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Oct	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Nov	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Dec	--	--	--	--	--	--	--	--	--	--	--	--	--	100
<b>Annual</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>

[--] for averages and completeness: Precipitation was 0 mm.

[0.00] for deposition: The deposition was 0 mmol/m<sup>2</sup> because precipitation was 0 mm.

[\*] for averages and deposition: The constituent was not measured although precipitation was not 0 mm. (%TP=0%)

[\*\*] for all: Precipitation was not measured. (%PCL=0%)

Data in hatched column for averages and deposition: Rejected monthly (annual) value by the criteria of EANET

(%PCL<80% or %TP<80%)

Units of 1) and 2) are mm y<sup>-1</sup> and mmol m<sup>-2</sup> y<sup>-1</sup>, respectively.

**Table 3.37** Volume-weighted mean concentrations/ Precipitation (Monthly)

2004	SO <sub>4</sub> <sup>2-</sup>	nss-SO <sub>4</sub> <sup>2-</sup>	NO <sub>3</sub> <sup>-</sup>	Cl <sup>-</sup>	NH <sub>4</sub> <sup>+</sup>	Na <sup>+</sup>	K <sup>+</sup>	Ca <sup>2+</sup>	nss-Ca <sup>2+</sup>	Mg <sup>2+</sup>	H <sup>+</sup>	pH	EC	Precip.
	μ mol/L	μ mol/L	μ mol/L	μ mol/L	μ mol/L	μ mol/L	μ mol/L	μ mol/L	μ mol/L	μ mol/L	μ mol/L			
Jan	--	--	--	--	--	--	--	--	--	--	--	--	--	0.0
Feb	6.1	4.4	4.4	40.3	17.7	29.6	1.8	14.0	13.4	9.9	0.3	6.51	1.00	51.2
Mar	--	--	--	--	--	--	--	--	--	--	--	--	--	0.0
Apr	53.8	52.9	57.6	18.8	72.1	15.7	6.3	12.6	12.3	4.1	69.2	4.16	4.58	10.2
May	7.9	7.1	5.8	17.7	13.3	14.1	2.1	5.7	5.4	1.7	3.5	5.45	0.75	147.3
June	7.7	7.2	4.0	8.5	17.2	8.0	1.9	4.2	4.0	1.8	3.6	5.44	0.73	218.5
July	12.1	11.7	8.7	8.6	17.0	6.9	1.7	7.2	7.0	5.8	7.9	5.10	0.76	386.1
Aug	7.4	6.7	5.9	11.7	9.7	10.6	1.3	2.6	2.4	3.9	5.9	5.23	0.75	263.3
Sept	8.1	7.8	7.4	6.7	12.5	4.8	1.7	4.5	4.4	2.2	6.0	5.22	0.68	238.9
Oct	7.5	3.8	3.7	60.1	27.8	61.0	7.1	14.9	13.6	9.6	0.2	6.68	1.92	64.7
Nov	5.7	4.9	3.5	18.0	9.5	13.4	2.7	3.8	3.5	1.8	4.2	5.38	0.73	307.3
Dec	3.7	2.9	2.5	13.5	1.8	14.0	3.1	2.7	2.4	1.3	3.3	5.48	0.57	55.8
<b>Annual</b>	<b>8.4</b>	<b>7.7</b>	<b>6.1</b>	<b>14.3</b>	<b>13.9</b>	<b>12.0</b>	<b>2.1</b>	<b>5.4</b>	<b>5.1</b>	<b>3.6</b>	<b>5.5</b>	<b>5.26</b>	<b>0.80</b>	<b>1743.3<sup>1)</sup></b>
Max.	53.8	52.9	57.6	78	81.5	63.1	9.4	21.2	20.4	19.6	69.2	6.90	4.58	
Min.	2.1	1.8	1.8	1.4	1.8	<1.0	<1.0	1.3	1.1	<0.4	0.1	4.16	0.31	

**Table 3.37** Wet deposition (Monthly) unit: mmol m<sup>-2</sup>month<sup>-1</sup>

2004	SO <sub>4</sub> <sup>2-</sup>	nss-SO <sub>4</sub> <sup>2-</sup>	NO <sub>3</sub> <sup>-</sup>	Cl <sup>-</sup>	NH <sub>4</sub> <sup>+</sup>	Na <sup>+</sup>	K <sup>+</sup>	Ca <sup>2+</sup>	nss-Ca <sup>2+</sup>	Mg <sup>2+</sup>	H <sup>+</sup>
Jan	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Feb	0.31	0.22	0.22	2.06	0.91	1.51	0.09	0.72	0.69	0.51	0.02
Mar	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Apr	0.55	0.54	0.59	0.19	0.74	0.16	0.06	0.13	0.13	0.04	0.71
May	1.17	1.04	0.85	2.61	1.96	2.08	0.31	0.84	0.79	0.25	0.52
June	1.68	1.58	0.88	1.86	3.77	1.75	0.41	0.92	0.88	0.40	0.79
July	4.67	4.51	3.34	3.32	6.55	2.66	0.66	2.77	2.72	2.25	3.04
Aug	1.94	1.77	1.54	3.09	2.56	2.79	0.35	0.68	0.62	1.03	1.57
Sept	1.92	1.85	1.77	1.60	3.00	1.14	0.41	1.07	1.04	0.53	1.43
Oct	0.49	0.25	0.24	3.89	1.80	3.95	0.46	0.97	0.88	0.62	0.01
Nov	1.74	1.49	1.06	5.52	2.91	4.11	0.82	1.16	1.07	0.55	1.28
Dec	0.21	0.16	0.14	0.75	0.10	0.78	0.17	0.15	0.13	0.07	0.18
<b>Annual<sup>2)</sup></b>	<b>14.7</b>	<b>13.4</b>	<b>10.6</b>	<b>24.9</b>	<b>24.3</b>	<b>20.9</b>	<b>3.74</b>	<b>9.41</b>	<b>8.95</b>	<b>6.25</b>	<b>9.54</b>

**Table 3.37** Data completeness (Monthly)

2004	SO <sub>4</sub> <sup>2-</sup>	nss-SO <sub>4</sub> <sup>2-</sup>	NO <sub>3</sub> <sup>-</sup>	Cl <sup>-</sup>	NH <sub>4</sub> <sup>+</sup>	Na <sup>+</sup>	K <sup>+</sup>	Ca <sup>2+</sup>	nss-Ca <sup>2+</sup>	Mg <sup>2+</sup>	H <sup>+</sup>	pH	EC	Precip.
	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP			
Jan	--	--	--	--	--	--	--	--	--	--	--	--	--	100
Feb	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Mar	--	--	--	--	--	--	--	--	--	--	--	--	--	100
Apr	100	100	100	100	100	100	100	100	100	100	100	100	100	100
May	100	100	100	100	100	100	100	100	100	100	100	100	100	100
June	100	100	100	100	100	100	100	100	100	100	100	100	100	100
July	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Aug	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Sept	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Oct	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Nov	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Dec	100	100	100	100	100	100	100	100	100	100	100	100	100	100
<b>Annual</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>

[--] for averages and completeness: Precipitation was 0 mm.

[0.00] for deposition: The deposition was 0 mmol/m<sup>2</sup> because precipitation was 0 mm.

[\*] for averages and deposition: The constituent was not measured although precipitation was not 0 mm. (%TP=0%)

[\*\*] for all: Precipitation was not measured. (%PCL=0%)

Data in hatched column for averages and deposition: Rejected monthly (annual) value by the criteria of EANET

(%PCL<80% or %TP<80%)

Units of 1) and 2) are mm y<sup>-1</sup> and mmol m<sup>-2</sup> y<sup>-1</sup>, respectively.

**Table 3.38 Volume-weighted mean concentrations/ Precipitation (Monthly)**

2004	SO <sub>4</sub> <sup>2-</sup>	nss-SO <sub>4</sub> <sup>2-</sup>	NO <sub>3</sub> <sup>-</sup>	Cl <sup>-</sup>	NH <sub>4</sub> <sup>+</sup>	Na <sup>+</sup>	K <sup>+</sup>	Ca <sup>2+</sup>	nss-Ca <sup>2+</sup>	Mg <sup>2+</sup>	H <sup>+</sup>	pH	EC	Precip.
	μ mol/L	μ mol/L	μ mol/L	μ mol/L	μ mol/L	μ mol/L	μ mol/L	μ mol/L	μ mol/L	μ mol/L	μ mol/L			
Jan	--	--	--	--	--	--	--	--	--	--	--	--	--	0.0
Feb	90.5	85.7	61.3	124	134	78.9	21.7	32.2	30.5	12.4	25.1	4.60	5.48	43.0
Mar	94.3	86.6	110	191	188	127	34.5	49.6	46.9	22.7	26.2	4.58	8.43	24.3
Apr	43.9	41.5	53.5	60.6	83.1	39.8	14.4	21.9	21.0	5.7	7.4	5.13	2.77	58.3
May	58.1	55.1	58.1	78.6	89.6	49.5	12.9	22.2	21.1	7.2	13.2	4.88	3.42	161.9
June	36.9	36.1	36.1	29.3	66.2	12.7	14.4	10.2	9.9	2.8	17.3	4.76	2.29	175.9
July	55.0	53.5	38.8	58.9	98.4	25.1	7.7	11.6	11.1	5.7	68.9	4.16	4.87	172.5
Aug	9.6	8.6	11.8	19.7	5.4	16.4	7.1	1.9	1.6	0.7	12.6	4.90	0.99	29.1
Sept	14.7	13.9	14.7	21.8	14.3	13.4	5.3	3.8	3.5	2.7	14.2	4.85	1.38	141.5
Oct	--	--	--	--	--	--	--	--	--	--	--	--	--	0.0
Nov	39.2	37.2	39.0	49.0	86.3	33.3	5.9	5.5	4.8	4.1	31.1	4.51	3.13	67.5
Dec	57.6	49.5	45.8	115	25.7	134	22.7	18.1	15.2	22.1	41.0	4.39	4.56	3.6
<b>Annual</b>	<b>44.8</b>	<b>42.9</b>	<b>41.1</b>	<b>55.8</b>	<b>75.6</b>	<b>32.5</b>	<b>11.4</b>	<b>14.0</b>	<b>13.3</b>	<b>5.5</b>	<b>27.2</b>	<b>4.57</b>	<b>3.25</b>	<b>877.6<sup>1)</sup></b>
Max.	104	100.0	141	197	203	144	37.3	61.4	58.6	29.8	158	5.76	11.0	
Min.	5.2	4.6	6.8	11.3	3.5	9.0	2.7	0.9	0.7	0.6	1.7	3.80	0.60	

**Table 3.38 Wet deposition (Monthly)** unit: mmol m<sup>-2</sup>month<sup>-1</sup>

2004	SO <sub>4</sub> <sup>2-</sup>	nss-SO <sub>4</sub> <sup>2-</sup>	NO <sub>3</sub> <sup>-</sup>	Cl <sup>-</sup>	NH <sub>4</sub> <sup>+</sup>	Na <sup>+</sup>	K <sup>+</sup>	Ca <sup>2+</sup>	nss-Ca <sup>2+</sup>	Mg <sup>2+</sup>	H <sup>+</sup>
Jan	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Feb	3.89	3.69	2.63	5.33	5.77	3.39	0.93	1.38	1.31	0.53	1.08
Mar	2.29	2.10	2.67	4.65	4.58	3.09	0.84	1.21	1.14	0.55	0.64
Apr	2.56	2.42	3.12	3.53	4.84	2.32	0.84	1.28	1.23	0.33	0.43
May	9.40	8.92	9.41	12.7	14.5	8.01	2.08	3.60	3.42	1.16	2.15
June	6.49	6.35	6.35	5.16	11.6	2.24	2.53	1.80	1.75	0.50	3.04
July	9.49	9.23	6.69	10.2	17.0	4.34	1.33	2.01	1.91	0.98	11.9
Aug	0.28	0.25	0.34	0.57	0.16	0.48	0.21	0.06	0.05	0.02	0.37
Sept	2.08	1.97	2.08	3.08	2.02	1.89	0.75	0.54	0.50	0.38	2.01
Oct	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Nov	2.65	2.51	2.63	3.31	5.83	2.25	0.40	0.37	0.32	0.28	2.10
Dec	0.21	0.18	0.16	0.41	0.09	0.48	0.08	0.07	0.05	0.08	0.15
<b>Annual<sup>2)</sup></b>	<b>39.3</b>	<b>37.6</b>	<b>36.1</b>	<b>48.9</b>	<b>66.4</b>	<b>28.5</b>	<b>10.00</b>	<b>12.3</b>	<b>11.7</b>	<b>4.82</b>	<b>23.8</b>

**Table 3.38 Data completeness (Monthly)**

2004	SO <sub>4</sub> <sup>2-</sup>	nss-SO <sub>4</sub> <sup>2-</sup>	NO <sub>3</sub> <sup>-</sup>	Cl <sup>-</sup>	NH <sub>4</sub> <sup>+</sup>	Na <sup>+</sup>	K <sup>+</sup>	Ca <sup>2+</sup>	nss-Ca <sup>2+</sup>	Mg <sup>2+</sup>	H <sup>+</sup>	pH	EC	Precip.
	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP			
Jan	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Feb	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Mar	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Apr	100	100	100	100	100	100	100	100	100	100	100	100	100	100
May	100	100	100	100	100	100	100	100	100	100	100	100	100	100
June	100	100	100	100	100	100	100	100	100	100	100	100	100	100
July	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Aug	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Sept	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Oct	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Nov	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Dec	100	100	100	100	100	100	100	100	100	100	100	100	100	100
<b>Annual</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>

[--] for averages and completeness: Precipitation was 0 mm.

[0.00] for deposition: The deposition was 0 mmol/m<sup>2</sup> because precipitation was 0 mm.

[\*] for averages and deposition: The constituent was not measured although precipitation was not 0 mm. (%TP=0%)

[\*\*] for all: Precipitation was not measured. (%PCL=0%)

Data in hatched column for averages and deposition: Rejected monthly (annual) value by the criteria of EANET

(%PCL<80% or %TP<80%)

Units of 1) and 2) are mm y<sup>-1</sup> and mmol m<sup>-2</sup>y<sup>-1</sup>, respectively.

**Table 3.39 Volume-weighted mean concentrations/ Precipitation (Monthly)**

2004	SO <sub>4</sub> <sup>2-</sup>	nss-SO <sub>4</sub> <sup>2-</sup>	NO <sub>3</sub> <sup>-</sup>	Cl <sup>-</sup>	NH <sub>4</sub> <sup>+</sup>	Na <sup>+</sup>	K <sup>+</sup>	Ca <sup>2+</sup>	nss-Ca <sup>2+</sup>	Mg <sup>2+</sup>	H <sup>+</sup>	pH	EC	Precip.
	μ mol/L	μ mol/L	μ mol/L	μ mol/L	μ mol/L	μ mol/L	μ mol/L	μ mol/L	μ mol/L	μ mol/L	μ mol/L			
Jan	90.1	83.3	110	253	107	113	54.2	47.7	45.2	27.7	102	3.99	10.3	19.1
Feb	47.2	44.7	42.2	117	95.8	40.8	14.6	14.2	13.3	14.4	25.1	4.60	4.23	64.4
Mar	38.5	32.7	65.2	98.6	53.5	96.4	13.7	20.8	18.7	17.7	4.3	5.36	3.49	70.8
Apr	23.0	20.2	18.9	64.5	55.0	46.1	6.4	7.0	6.0	3.5	8.0	5.10	1.87	106.2
May	26.6	25.1	26.3	45.6	54.3	23.8	6.6	3.3	2.8	2.0	31.4	4.50	2.51	131.4
June	20.5	17.0	23.8	43.6	37.5	57.3	7.2	6.1	4.9	3.3	2.3	5.63	1.59	86.8
July	25.2	19.3	27.5	115	46.2	98.8	10.8	9.8	7.7	17.5	15.8	4.80	3.29	42.4
Aug	17.7	14.1	17.1	88.0	21.3	61.1	5.1	4.4	3.1	5.2	18.2	4.74	2.05	343.8
Sept	6.5	4.3	7.0	44.7	7.9	35.9	3.1	3.4	2.6	2.5	7.9	5.10	1.05	177.0
Oct	37.4	32.5	44.2	84.0	34.5	81.0	8.8	9.5	7.8	12.6	46.7	4.33	4.20	23.0
Nov	39.4	34.6	38.1	97.1	13.0	79.7	9.4	8.3	6.6	11.3	55.8	4.25	4.32	21.0
Dec	41.7	33.4	22.0	155	11.9	138	22.5	19.1	16.2	27.0	22.9	4.64	3.92	38.0
<b>Annual</b>	<b>23.8</b>	<b>20.3</b>	<b>24.8</b>	<b>79.1</b>	<b>36.0</b>	<b>57.8</b>	<b>8.1</b>	<b>7.7</b>	<b>6.5</b>	<b>7.3</b>	<b>18.2</b>	<b>4.74</b>	<b>2.45</b>	<b>1123.9<sup>1)</sup></b>
Max.	117	103	170	349	164	245	95.4	105	100	68.0	126	6.90	12.0	
Min.	4.1	2.6	4.8	14.1	1.7	9.9	1.2	2.4	0.7	0.4	0.1	3.90	0.69	

**Table 3.39 Wet deposition (Monthly)** unit: mmol m<sup>-2</sup>month<sup>-1</sup>

2004	SO <sub>4</sub> <sup>2-</sup>	nss-SO <sub>4</sub> <sup>2-</sup>	NO <sub>3</sub> <sup>-</sup>	Cl <sup>-</sup>	NH <sub>4</sub> <sup>+</sup>	Na <sup>+</sup>	K <sup>+</sup>	Ca <sup>2+</sup>	nss-Ca <sup>2+</sup>	Mg <sup>2+</sup>	H <sup>+</sup>
Jan	1.72	1.59	2.11	4.82	2.05	2.16	1.04	0.91	0.86	0.53	1.94
Feb	3.04	2.88	2.72	7.56	6.17	2.63	0.94	0.91	0.86	0.93	1.62
Mar	2.73	2.31	4.61	6.98	3.79	6.83	0.97	1.47	1.32	1.25	0.31
Apr	2.44	2.14	2.01	6.85	5.85	4.90	0.68	0.74	0.64	0.37	0.85
May	3.49	3.30	3.46	5.99	7.13	3.13	0.86	0.43	0.36	0.26	4.12
June	1.78	1.48	2.06	3.78	3.26	4.97	0.62	0.53	0.43	0.29	0.20
July	1.07	0.82	1.17	4.88	1.96	4.19	0.46	0.42	0.33	0.74	0.67
Aug	6.10	4.83	5.89	30.3	7.31	21.0	1.74	1.51	1.06	1.80	6.25
Sept	1.14	0.76	1.24	7.92	1.40	6.36	0.56	0.60	0.47	0.44	1.41
Oct	0.86	0.75	1.02	1.93	0.79	1.86	0.20	0.22	0.18	0.29	1.07
Nov	0.83	0.73	0.80	2.04	0.27	1.67	0.20	0.17	0.14	0.24	1.17
Dec	1.59	1.27	0.84	5.90	0.45	5.23	0.85	0.73	0.61	1.03	0.87
<b>Annual<sup>2)</sup></b>	<b>26.8</b>	<b>22.9</b>	<b>27.9</b>	<b>88.9</b>	<b>40.4</b>	<b>64.9</b>	<b>9.11</b>	<b>8.66</b>	<b>7.25</b>	<b>8.17</b>	<b>20.5</b>

**Table 3.39 Data completeness (Monthly)**

2004	SO <sub>4</sub> <sup>2-</sup>	nss-SO <sub>4</sub> <sup>2-</sup>	NO <sub>3</sub> <sup>-</sup>	Cl <sup>-</sup>	NH <sub>4</sub> <sup>+</sup>	Na <sup>+</sup>	K <sup>+</sup>	Ca <sup>2+</sup>	nss-Ca <sup>2+</sup>	Mg <sup>2+</sup>	H <sup>+</sup>	pH	EC	Precip.
	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP			
Jan	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Feb	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Mar	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Apr	100	100	100	100	100	100	100	100	100	100	100	100	100	100
May	100	100	100	100	100	100	100	100	100	100	100	100	100	100
June	100	100	100	100	100	100	100	100	100	100	100	100	100	100
July	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Aug	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Sept	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Oct	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Nov	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Dec	100	100	100	100	100	100	100	100	100	100	100	100	100	100
<b>Annual</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>

[--] for averages and completeness: Precipitation was 0 mm.

[0.00] for deposition: The deposition was 0 mmol/m<sup>2</sup> because precipitation was 0 mm.

[\*] for averages and deposition: The constituent was not measured although precipitation was not 0 mm. (%TP=0%)

[\*\*] for all: Precipitation was not measured. (%PCL=0%)

Data in hatched column for averages and deposition: Rejected monthly (annual) value by the criteria of EANET

(%PCL<80% or %TP<80%)

Units of 1) and 2) are mm y<sup>-1</sup> and mmol m<sup>-2</sup> y<sup>-1</sup>, respectively.

**Table 3.40** Volume-weighted mean concentrations/ Precipitation (Monthly)

2004	SO <sub>4</sub> <sup>2-</sup>	nss-SO <sub>4</sub> <sup>2-</sup>	NO <sub>3</sub> <sup>-</sup>	Cl <sup>-</sup>	NH <sub>4</sub> <sup>+</sup>	Na <sup>+</sup>	K <sup>+</sup>	Ca <sup>2+</sup>	nss-Ca <sup>2+</sup>	Mg <sup>2+</sup>	H <sup>+</sup>	pH	EC	Precip.
	μ mol/L	μ mol/L	μ mol/L	μ mol/L	μ mol/L	μ mol/L	μ mol/L	μ mol/L	μ mol/L	μ mol/L	μ mol/L			
Jan	--	--	--	--	--	--	--	--	--	--	--	--	--	0.0
Feb	60.5	57.2	65.4	141	94.2	53.9	22.4	32.7	31.5	22.6	4.0	5.40	5.00	18.0
Mar	94.5	88.2	140	195	259	103	59.6	46.7	44.5	38.4	0.9	6.03	8.43	20.8
Apr	29.5	28.0	39.2	36.5	55.4	26.4	11.9	19.7	19.2	3.7	11.9	4.92	2.30	55.5
May	26.0	25.1	23.5	39.0	27.3	14.6	7.8	3.8	3.4	0.6	53.7	4.27	2.98	72.0
June	8.8	8.2	12.1	10.7	13.4	9.5	3.6	1.3	1.1	0.4	9.0	5.04	0.77	177.5
July	12.4	11.9	15.3	13.9	13.7	8.2	3.6	3.3	3.1	0.7	21.2	4.67	1.28	202.0
Aug	6.3	5.6	5.2	16.6	13.8	10.6	2.7	1.0	0.8	<0.4	2.2	5.65	0.48	367.5
Sept	27.3	25.8	37.2	27.6	51.8	24.9	4.7	17.9	17.4	3.7	6.8	5.17	1.74	181.5
Oct	8.3	6.6	11.3	33.8	7.8	27.8	11.8	9.5	8.9	2.1	1.3	5.90	0.80	2.5
Nov	14.3	12.2	26.2	36.7	15.2	34.3	7.4	6.0	5.2	3.8	13.3	4.88	1.79	86.0
Dec	30.3	27.3	27.5	72.9	39.9	50.6	8.1	7.3	6.2	5.5	20.0	4.70	2.74	24.0
<b>Annual</b>	<b>16.5</b>	<b>15.4</b>	<b>20.5</b>	<b>26.7</b>	<b>28.2</b>	<b>17.9</b>	<b>5.7</b>	<b>6.8</b>	<b>6.4</b>	<b>2.4</b>	<b>11.8</b>	<b>4.93</b>	<b>1.42</b>	<b>1207.3<sup>1)</sup></b>
Max.	104	96.8	161	240	288	122	75.2	49.9	47.3	49.5	79.4	6.30	10.00	
Min.	4.5	4.0	1.5	7.1	4.4	7.7	1.8	0.8	0.6	<0.4	0.5	4.10	0.34	

**Table 3.40** Wet deposition (Monthly) unit: mmol m<sup>-2</sup>month<sup>-1</sup>

2004	SO <sub>4</sub> <sup>2-</sup>	nss-SO <sub>4</sub> <sup>2-</sup>	NO <sub>3</sub> <sup>-</sup>	Cl <sup>-</sup>	NH <sub>4</sub> <sup>+</sup>	Na <sup>+</sup>	K <sup>+</sup>	Ca <sup>2+</sup>	nss-Ca <sup>2+</sup>	Mg <sup>2+</sup>	H <sup>+</sup>
Jan	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Feb	1.09	1.03	1.18	2.54	1.70	0.97	0.40	0.59	0.57	0.41	0.07
Mar	1.96	1.84	2.91	4.06	5.39	2.15	1.24	0.97	0.93	0.80	0.02
Apr	1.64	1.55	2.17	2.03	3.07	1.46	0.66	1.09	1.06	0.20	0.66
May	1.87	1.81	1.69	2.81	1.97	1.05	0.56	0.27	0.25	0.04	3.87
June	1.56	1.46	2.14	1.89	2.38	1.68	0.63	0.24	0.20	0.08	1.60
July	2.51	2.41	3.10	2.81	2.78	1.65	0.72	0.66	0.62	0.14	4.28
Aug	2.30	2.06	1.90	6.11	5.07	3.88	0.98	0.37	0.29	0.08	0.82
Sept	4.96	4.69	6.76	5.00	9.40	4.53	0.85	3.26	3.16	0.67	1.24
Oct	0.02	0.02	0.03	0.08	0.02	0.07	0.03	0.02	0.02	<0.01	<0.01
Nov	1.23	1.05	2.26	3.16	1.31	2.95	0.64	0.51	0.45	0.33	1.15
Dec	0.73	0.65	0.66	1.75	0.96	1.22	0.20	0.17	0.15	0.13	0.48
<b>Annual<sup>2)</sup></b>	<b>19.9</b>	<b>18.6</b>	<b>24.8</b>	<b>32.2</b>	<b>34.0</b>	<b>21.6</b>	<b>6.90</b>	<b>8.16</b>	<b>7.70</b>	<b>2.89</b>	<b>14.2</b>

**Table 3.40** Data completeness (Monthly)

2004	SO <sub>4</sub> <sup>2-</sup>	nss-SO <sub>4</sub> <sup>2-</sup>	NO <sub>3</sub> <sup>-</sup>	Cl <sup>-</sup>	NH <sub>4</sub> <sup>+</sup>	Na <sup>+</sup>	K <sup>+</sup>	Ca <sup>2+</sup>	nss-Ca <sup>2+</sup>	Mg <sup>2+</sup>	H <sup>+</sup>	pH	EC	Precip.
	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP			
Jan	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Feb	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Mar	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Apr	100	100	100	100	100	100	100	100	100	100	100	100	100	100
May	100	100	100	100	100	100	100	100	100	100	100	100	100	100
June	100	100	100	100	100	100	100	100	100	100	100	100	100	100
July	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Aug	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Sept	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Oct	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Nov	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Dec	100	100	100	100	100	100	100	100	100	100	100	100	100	100
<b>Annual</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>

[--] for averages and completeness: Precipitation was 0 mm.

[0.00] for deposition: The deposition was 0 mmol/m<sup>2</sup> because precipitation was 0 mm.

[\*] for averages and deposition: The constituent was not measured although precipitation was not 0 mm. (%TP=0%)

[\*\*] for all: Precipitation was not measured. (%PCL=0%)

Data in hatched column for averages and deposition: Rejected monthly (annual) value by the criteria of EANET

(%PCL<80% or %TP<80%)

Units of 1) and 2) are mm y<sup>-1</sup> and mmol m<sup>-2</sup> y<sup>-1</sup>, respectively.

**Table 3.41 Volume-weighted mean concentrations/ Precipitation (Monthly)**

2004	SO <sub>4</sub> <sup>2-</sup>	nss-SO <sub>4</sub> <sup>2-</sup>	NO <sub>3</sub> <sup>-</sup>	Cl <sup>-</sup>	NH <sub>4</sub> <sup>+</sup>	Na <sup>+</sup>	K <sup>+</sup>	Ca <sup>2+</sup>	nss-Ca <sup>2+</sup>	Mg <sup>2+</sup>	H <sup>+</sup>	pH	EC	Precip.
	μ mol/L	μ mol/L	μ mol/L	μ mol/L	μ mol/L	μ mol/L	μ mol/L	μ mol/L	μ mol/L	μ mol/L	μ mol/L			
Jan	--	--	--	--	--	--	--	--	--	--	--	--	--	0.0
Feb	--	--	--	--	--	--	--	--	--	--	--	--	--	0.0
Mar	14.3	14.1	12.2	2.8	4.9	3.7	2.5	19.7	19.6	4.9	0.7	6.17	0.82	7.8
Apr	--	--	--	--	--	--	--	--	--	--	--	--	--	0.0
May	14.0	13.8	14.0	<1.0	22.8	3.9	3.3	8.0	7.9	3.3	0.6	6.20	0.81	17.5
June	8.9	8.8	8.2	2.2	10.8	1.6	4.7	5.9	5.9	1.0	5.2	5.28	0.60	124.3
July	4.7	4.5	5.1	3.0	14.1	2.0	1.8	4.6	4.6	1.2	3.1	5.51	0.47	95.3
Aug	3.0	3.0	3.7	2.8	5.3	<1.0	<1.0	0.4	0.4	<0.4	7.7	5.11	0.34	72.0
Sept	6.5	6.3	6.7	3.5	12.6	3.0	2.0	5.4	5.3	1.4	4.0	5.40	0.54	27.7
Oct	12.0	11.6	12.7	8.2	16.1	6.1	6.1	16.0	15.9	6.6	1.4	5.86	1.02	2.6
Nov	15.8	15.4	11.4	9.3	13.3	7.0	4.3	13.0	12.8	3.3	2.4	5.62	0.78	4.6
Dec	7.4	7.1	7.1	5.8	8.6	5.4	3.5	20.6	20.5	4.1	1.1	5.96	0.88	8.0
<b>Annual</b>	<b>6.8</b>	<b>6.7</b>	<b>6.8</b>	<b>2.8</b>	<b>11.2</b>	<b>1.9</b>	<b>2.7</b>	<b>5.3</b>	<b>5.3</b>	<b>1.3</b>	<b>4.6</b>	<b>5.34</b>	<b>0.54</b>	<b>359.8<sup>1)</sup></b>
Max.	25.2	25.1	40.5	39.5	40.5	13.5	15.4	44.4	44.1	9.9	11.0	6.51	2.04	
Min.	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	0.3	0.3	<0.4	0.3	4.96	0.25	

**Table 3.41 Wet deposition (Monthly)** unit: mmol m<sup>-2</sup>month<sup>-1</sup>

2004	SO <sub>4</sub> <sup>2-</sup>	nss-SO <sub>4</sub> <sup>2-</sup>	NO <sub>3</sub> <sup>-</sup>	Cl <sup>-</sup>	NH <sub>4</sub> <sup>+</sup>	Na <sup>+</sup>	K <sup>+</sup>	Ca <sup>2+</sup>	nss-Ca <sup>2+</sup>	Mg <sup>2+</sup>	H <sup>+</sup>
Jan	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Feb	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Mar	0.11	0.11	0.10	0.02	0.04	0.03	0.02	0.15	0.15	0.04	<0.01
Apr	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
May	0.24	0.24	0.24	0.00	0.40	0.07	0.06	0.14	0.14	0.06	0.01
June	1.11	1.10	1.02	0.27	1.35	0.20	0.58	0.74	0.73	0.12	0.65
July	0.44	0.43	0.48	0.29	1.35	0.19	0.17	0.44	0.44	0.11	0.29
Aug	0.21	0.21	0.26	0.20	0.38	0.04	0.02	0.03	0.03	0.02	0.56
Sept	0.18	0.18	0.18	0.10	0.35	0.08	0.05	0.15	0.15	0.04	0.11
Oct	0.03	0.03	0.03	0.02	0.04	0.02	0.02	0.04	0.04	0.02	<0.01
Nov	0.07	0.07	0.05	0.04	0.06	0.03	0.02	0.06	0.06	0.02	0.01
Dec	0.06	0.06	0.06	0.05	0.07	0.04	0.03	0.17	0.16	0.03	<0.01
<b>Annual<sup>2)</sup></b>	<b>2.46</b>	<b>2.43</b>	<b>2.44</b>	<b>0.99</b>	<b>4.03</b>	<b>0.69</b>	<b>0.96</b>	<b>1.92</b>	<b>1.90</b>	<b>0.46</b>	<b>1.64</b>

**Table 3.41 Data completeness (Monthly)**

2004	SO <sub>4</sub> <sup>2-</sup>	nss-SO <sub>4</sub> <sup>2-</sup>	NO <sub>3</sub> <sup>-</sup>	Cl <sup>-</sup>	NH <sub>4</sub> <sup>+</sup>	Na <sup>+</sup>	K <sup>+</sup>	Ca <sup>2+</sup>	nss-Ca <sup>2+</sup>	Mg <sup>2+</sup>	H <sup>+</sup>	pH	EC	Precip.
	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP			
Jan	--	--	--	--	--	--	--	--	--	--	--	--	--	100
Feb	--	--	--	--	--	--	--	--	--	--	--	--	--	100
Mar	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Apr	--	--	--	--	--	--	--	--	--	--	--	--	--	100
May	100	100	100	100	100	100	100	100	100	100	100	100	100	100
June	100	100	100	100	100	100	100	100	100	100	100	100	100	100
July	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Aug	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Sept	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Oct	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Nov	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Dec	100	100	100	100	100	100	100	100	100	100	100	100	100	100
<b>Annual</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>

[--] for averages and completeness: Precipitation was 0 mm.

[0.00] for deposition: The deposition was 0 mmol/m<sup>2</sup> because precipitation was 0 mm.

[\*] for averages and deposition: The constituent was not measured although precipitation was not 0 mm. (%TP=0%)

[\*\*] for all: Precipitation was not measured. (%PCL=0%)

Data in hatched column for averages and deposition: Rejected monthly (annual) value by the criteria of EANET

(%PCL<80% or %TP<80%)

Units of 1) and 2) are mm y<sup>-1</sup> and mmol m<sup>-2</sup> y<sup>-1</sup>, respectively.

Table 3.42 Volume-weighted mean concentrations/ Precipitation (Monthly)

2004	SO <sub>4</sub> <sup>2-</sup>	nss-SO <sub>4</sub> <sup>2-</sup>	NO <sub>3</sub> <sup>-</sup>	Cl <sup>-</sup>	NH <sub>4</sub> <sup>+</sup>	Na <sup>+</sup>	K <sup>+</sup>	Ca <sup>2+</sup>	nss-Ca <sup>2+</sup>	Mg <sup>2+</sup>	H <sup>+</sup>	pH	EC	Precip.
	μ mol/L	μ mol/L	μ mol/L	μ mol/L	μ mol/L	μ mol/L	μ mol/L	μ mol/L	μ mol/L	μ mol/L	μ mol/L			
Jan	11.5	11.3	28.6	3.4	1.6	3.7	1.6	17.0	16.9	4.0	6.5	5.19	1.06	48.2
Feb	15.7	15.4	32.0	5.8	5.6	4.3	1.9	20.2	20.1	5.3	6.4	5.19	1.20	39.9
Mar	19.6	19.4	22.5	9.5	8.2	4.1	2.0	21.5	21.4	4.8	5.4	5.27	1.27	28.0
Apr	34.4	33.8	40.6	6.1	13.5	9.6	4.5	36.5	36.3	8.4	1.2	5.90	1.89	30.4
May	63.2	62.9	38.2	12.3	29.7	5.3	12.6	56.4	56.3	9.8	1.8	5.73	2.84	22.3
June	25.8	25.4	16.2	2.2	26.8	6.8	1.9	11.0	10.9	1.8	18.6	4.73	1.63	93.8
July	13.2	13.1	13.3	3.3	8.3	1.2	1.8	6.1	6.1	1.6	18.8	4.73	1.14	119.2
Aug	9.4	9.3	6.5	1.4	10.7	<1.0	<1.0	4.0	4.0	0.7	7.3	5.14	0.69	64.9
Sept	15.0	14.8	9.7	1.7	16.3	2.2	1.4	6.2	6.2	2.3	8.0	5.10	0.98	19.0
Oct	28.8	28.5	17.4	5.1	8.9	4.8	2.3	10.2	10.1	3.0	29.6	4.53	1.76	26.0
Nov	13.3	12.3	19.8	19.5	8.0	16.8	4.0	13.8	13.4	4.6	5.2	5.29	1.16	35.1
Dec	11.6	11.4	27.2	2.5	4.6	4.0	1.6	12.9	12.8	2.6	12.7	4.90	1.02	24.3
<b>Annual</b>	<b>19.2</b>	<b>18.9</b>	<b>19.8</b>	<b>4.9</b>	<b>12.2</b>	<b>4.7</b>	<b>2.4</b>	<b>14.1</b>	<b>14.0</b>	<b>3.2</b>	<b>12.1</b>	<b>4.92</b>	<b>1.30</b>	<b>551.1<sup>1)</sup></b>
Max.	87.5	87.2	61.9	82.6	68.9	69.1	16.4	76.4	76.2	13.1	44.7	6.71	3.70	
Min.	5.9	1.8	2.9	<1.0	<1.0	<1.0	<1.0	1.5	1.4	<0.4	0.2	4.35	0.54	

Table 3.42 Wet deposition (Monthly) unit: mmol m<sup>-2</sup>month<sup>-1</sup>

2004	SO <sub>4</sub> <sup>2-</sup>	nss-SO <sub>4</sub> <sup>2-</sup>	NO <sub>3</sub> <sup>-</sup>	Cl <sup>-</sup>	NH <sub>4</sub> <sup>+</sup>	Na <sup>+</sup>	K <sup>+</sup>	Ca <sup>2+</sup>	nss-Ca <sup>2+</sup>	Mg <sup>2+</sup>	H <sup>+</sup>
Jan	0.55	0.54	1.38	0.17	0.08	0.18	0.08	0.82	0.81	0.19	0.31
Feb	0.63	0.62	1.28	0.23	0.22	0.17	0.08	0.81	0.80	0.21	0.26
Mar	0.55	0.54	0.63	0.27	0.23	0.11	0.06	0.60	0.60	0.13	0.15
Apr	1.05	1.03	1.23	0.19	0.41	0.29	0.14	1.11	1.10	0.26	0.04
May	1.41	1.40	0.85	0.27	0.66	0.12	0.28	1.26	1.25	0.22	0.04
June	2.42	2.38	1.52	0.21	2.51	0.64	0.18	1.03	1.02	0.17	1.74
July	1.57	1.56	1.58	0.39	0.99	0.14	0.21	0.73	0.73	0.19	2.24
Aug	0.61	0.60	0.42	0.09	0.69	0.06	0.02	0.26	0.26	0.04	0.47
Sept	0.28	0.28	0.18	0.03	0.31	0.04	0.03	0.12	0.12	0.04	0.15
Oct	0.75	0.74	0.45	0.13	0.23	0.12	0.06	0.27	0.26	0.08	0.77
Nov	0.47	0.43	0.69	0.68	0.28	0.59	0.14	0.48	0.47	0.16	0.18
Dec	0.28	0.28	0.66	0.06	0.11	0.10	0.04	0.31	0.31	0.06	0.31
<b>Annual<sup>2)</sup></b>	<b>10.6</b>	<b>10.4</b>	<b>10.9</b>	<b>2.72</b>	<b>6.74</b>	<b>2.57</b>	<b>1.30</b>	<b>7.80</b>	<b>7.74</b>	<b>1.76</b>	<b>6.67</b>

Table 3.42 Data completeness (Monthly)

2004	SO <sub>4</sub> <sup>2-</sup>	nss-SO <sub>4</sub> <sup>2-</sup>	NO <sub>3</sub> <sup>-</sup>	Cl <sup>-</sup>	NH <sub>4</sub> <sup>+</sup>	Na <sup>+</sup>	K <sup>+</sup>	Ca <sup>2+</sup>	nss-Ca <sup>2+</sup>	Mg <sup>2+</sup>	H <sup>+</sup>	pH	EC	Precip.
	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP			
Jan	100	100	100	100	100	100	100	100	100	100	100	100	100	87
Feb	100	100	100	100	100	100	100	100	100	100	100	100	100	86
Mar	100	100	100	100	100	100	100	100	100	100	100	100	100	97
Apr	100	100	100	100	100	100	100	100	100	100	100	100	100	97
May	100	100	100	100	100	100	100	100	100	100	100	100	100	94
June	100	100	100	100	100	100	100	100	100	100	100	100	100	100
July	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Aug	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Sept	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Oct	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Nov	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Dec	100	100	100	100	100	100	100	100	100	100	100	100	100	97
<b>Annual</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>96</b>

[--] for averages and completeness: Precipitation was 0 mm.

[0.00] for deposition: The deposition was 0 mmol/m<sup>2</sup> because precipitation was 0 mm.

[\*] for averages and deposition: The constituent was not measured although precipitation was not 0 mm. (%TP=0%)

[\*\*] for all: Precipitation was not measured. (%PCL=0%)

Data in hatched column for averages and deposition: Rejected monthly (annual) value by the criteria of EANET

(%PCL<80% or %TP<80%)

Units of 1) and 2) are mm y<sup>-1</sup> and mmol m<sup>-2</sup> y<sup>-1</sup>, respectively.

**Table 3.43 Volume-weighted mean concentrations/ Precipitation (Monthly)**

2004	SO <sub>4</sub> <sup>2-</sup>	nss-SO <sub>4</sub> <sup>2-</sup>	NO <sub>3</sub> <sup>-</sup>	Cl <sup>-</sup>	NH <sub>4</sub> <sup>+</sup>	Na <sup>+</sup>	K <sup>+</sup>	Ca <sup>2+</sup>	nss-Ca <sup>2+</sup>	Mg <sup>2+</sup>	H <sup>+</sup>	pH	EC	Precip.
	μ mol/L	μ mol/L	μ mol/L	μ mol/L	μ mol/L	μ mol/L	μ mol/L	μ mol/L	μ mol/L	μ mol/L	μ mol/L			
Jan	42.6	42.1	31.0	3.3	46.9	8.8	3.7	62.5	62.3	16.6	0.1	6.87	2.88	20.6
Feb	57.5	56.1	43.6	16.9	46.6	24.2	7.5	65.9	65.4	20.9	0.3	6.47	3.69	11.6
Mar	75.7	72.3	34.0	44.6	54.2	56.0	10.7	90.9	89.7	18.8	0.4	6.44	4.61	10.9
Apr	91.1	87.2	57.3	39.6	56.7	64.1	9.5	116	115	21.8	0.1	6.90	6.08	7.9
May	40.1	39.7	28.3	8.3	48.6	6.4	5.0	28.5	28.4	9.5	6.2	5.21	2.32	50.2
June	25.1	24.7	22.1	12.1	38.9	6.6	3.3	14.7	14.6	3.0	17.6	4.75	2.00	127.2
July	26.8	26.6	11.4	6.9	19.4	2.5	1.4	15.7	15.6	2.6	24.9	4.60	1.81	130.0
Aug	9.5	9.5	5.8	1.3	9.2	<1.0	<1.0	6.7	6.7	0.9	4.1	5.39	0.58	101.8
Sept	17.4	17.3	7.7	3.0	15.7	2.1	1.5	12.3	12.3	2.9	9.1	5.04	1.18	41.2
Oct	22.2	21.9	10.1	6.5	22.6	6.3	2.8	25.5	25.4	4.0	1.1	5.95	1.32	24.5
Nov	34.7	33.3	15.0	22.7	28.4	21.7	7.7	61.7	61.2	8.3	0.6	6.20	2.61	7.6
Dec	22.0	21.6	27.5	10.5	13.9	6.1	2.2	26.0	25.9	5.8	6.4	5.19	1.46	19.9
<b>Annual</b>	<b>26.6</b>	<b>26.2</b>	<b>17.1</b>	<b>8.5</b>	<b>27.2</b>	<b>6.6</b>	<b>2.7</b>	<b>21.9</b>	<b>21.7</b>	<b>4.8</b>	<b>12.2</b>	<b>4.91</b>	<b>1.80</b>	<b>553.2<sup>1)</sup></b>
Max.	292	289	219	201	219	177	60.1	269	266	75.9	81.3	7.74	15.9	
Min.	1.6	1.6	1.1	<1.0	1.1	<1.0	<1.0	0.8	0.8	<0.4	<0.1	4.09	0.20	

**Table 3.43 Wet deposition (Monthly)** unit: mmol m<sup>-2</sup> month<sup>-1</sup>

2004	SO <sub>4</sub> <sup>2-</sup>	nss-SO <sub>4</sub> <sup>2-</sup>	NO <sub>3</sub> <sup>-</sup>	Cl <sup>-</sup>	NH <sub>4</sub> <sup>+</sup>	Na <sup>+</sup>	K <sup>+</sup>	Ca <sup>2+</sup>	nss-Ca <sup>2+</sup>	Mg <sup>2+</sup>	H <sup>+</sup>
Jan	0.88	0.86	0.64	0.07	0.96	0.18	0.08	1.28	1.28	0.34	<0.01
Feb	0.66	0.65	0.50	0.20	0.54	0.28	0.09	0.76	0.76	0.24	<0.01
Mar	0.82	0.79	0.37	0.49	0.59	0.61	0.12	0.99	0.98	0.20	<0.01
Apr	0.72	0.69	0.45	0.31	0.45	0.51	0.08	0.92	0.91	0.17	<0.01
May	2.01	1.99	1.42	0.42	2.44	0.32	0.25	1.43	1.42	0.48	0.31
June	3.19	3.14	2.81	1.54	4.94	0.83	0.43	1.87	1.85	0.38	2.24
July	3.48	3.46	1.48	0.90	2.52	0.33	0.18	2.04	2.03	0.33	3.23
Aug	0.97	0.96	0.59	0.13	0.93	0.09	0.07	0.68	0.68	0.09	0.41
Sept	0.72	0.71	0.32	0.12	0.65	0.09	0.06	0.51	0.51	0.12	0.38
Oct	0.54	0.53	0.25	0.16	0.55	0.15	0.07	0.62	0.62	0.10	0.03
Nov	0.26	0.25	0.11	0.17	0.22	0.16	0.06	0.47	0.46	0.06	<0.01
Dec	0.44	0.43	0.55	0.21	0.28	0.12	0.04	0.52	0.51	0.11	0.13
<b>Annual<sup>2)</sup></b>	<b>14.7</b>	<b>14.5</b>	<b>9.48</b>	<b>4.71</b>	<b>15.1</b>	<b>3.68</b>	<b>1.50</b>	<b>12.1</b>	<b>12.0</b>	<b>2.64</b>	<b>6.74</b>

**Table 3.43 Data completeness (Monthly)**

2004	SO <sub>4</sub> <sup>2-</sup>	nss-SO <sub>4</sub> <sup>2-</sup>	NO <sub>3</sub> <sup>-</sup>	Cl <sup>-</sup>	NH <sub>4</sub> <sup>+</sup>	Na <sup>+</sup>	K <sup>+</sup>	Ca <sup>2+</sup>	nss-Ca <sup>2+</sup>	Mg <sup>2+</sup>	H <sup>+</sup>	pH	EC	Precip.
	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP			
Jan	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Feb	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Mar	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Apr	100	100	100	100	100	100	100	100	100	100	100	100	100	100
May	100	100	100	100	100	100	100	100	100	100	100	100	100	100
June	100	100	100	100	100	100	100	100	100	100	100	100	100	100
July	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Aug	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Sept	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Oct	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Nov	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Dec	100	100	100	100	100	100	100	100	100	100	100	100	100	100
<b>Annual</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>

[--] for averages and completeness: Precipitation was 0 mm.

[0.00] for deposition: The deposition was 0 mmol/m<sup>2</sup> because precipitation was 0 mm.

[\*] for averages and deposition: The constituent was not measured although precipitation was not 0 mm. (%TP=0%)

[\*\*] for all: Precipitation was not measured. (%PCL=0%)

Data in hatched column for averages and deposition: Rejected monthly (annual) value by the criteria of EANET

(%PCL<80% or %TP<80%)

Units of 1) and 2) are mm y<sup>-1</sup> and mmol m<sup>-2</sup> y<sup>-1</sup>, respectively.

Table 3.44 Volume-weighted mean concentrations/ Precipitation (Monthly)

2004	SO <sub>4</sub> <sup>2-</sup>	nss-SO <sub>4</sub> <sup>2-</sup>	NO <sub>3</sub> <sup>-</sup>	Cl <sup>-</sup>	NH <sub>4</sub> <sup>+</sup>	Na <sup>+</sup>	K <sup>+</sup>	Ca <sup>2+</sup>	nss-Ca <sup>2+</sup>	Mg <sup>2+</sup>	H <sup>+</sup>	pH	EC	Precip.
	μ mol/L	μ mol/L	μ mol/L	μ mol/L	μ mol/L	μ mol/L	μ mol/L	μ mol/L	μ mol/L	μ mol/L	μ mol/L			
Jan	15.3	14.1	6.6	10.3	21.5	20.0	6.9	14.1	13.6	5.3	0.6	6.21	1.03	27.6
Feb	36.5	33.9	19.1	40.3	26.8	41.9	9.3	29.2	28.3	9.1	1.7	5.76	2.16	40.0
Mar	55.1	53.5	21.2	30.7	38.9	25.0	6.7	44.3	43.7	12.6	1.2	5.93	2.56	44.4
Apr	69.1	65.9	30.7	53.9	40.5	52.2	10.2	58.0	56.9	23.2	0.4	6.41	3.38	18.0
May	34.2	33.8	14.7	9.0	44.6	7.9	3.7	10.2	10.0	3.4	18.9	4.72	2.43	113.8
June	37.3	35.8	23.0	19.5	28.3	25.4	7.1	22.7	22.2	7.2	7.2	5.14	2.04	47.1
July	24.3	23.9	9.4	8.7	17.7	7.7	5.0	7.6	7.4	5.7	14.4	4.84	1.31	99.0
Aug	23.3	21.9	17.4	21.5	25.4	22.7	8.5	11.5	11.0	6.9	7.8	5.11	1.50	29.8
Sept	31.3	29.9	16.6	18.7	34.4	23.2	12.6	10.6	10.1	2.9	19.2	4.72	2.07	80.6
Oct	46.3	44.9	20.7	14.8	37.5	23.0	3.4	9.6	9.1	4.8	29.7	4.53	2.68	45.2
Nov	34.6	33.3	34.8	23.9	22.3	21.7	6.9	25.5	25.0	7.7	22.6	4.65	2.72	106.9
Dec	35.3	33.8	50.5	26.9	35.2	24.8	6.6	31.9	31.4	7.4	18.2	4.74	2.75	39.1
<b>Annual</b>	<b>37.2</b>	<b>35.8</b>	<b>21.4</b>	<b>21.3</b>	<b>30.4</b>	<b>22.5</b>	<b>7.2</b>	<b>21.5</b>	<b>21.0</b>	<b>7.0</b>	<b>14.5</b>	<b>4.84</b>	<b>2.20</b>	<b>691.5<sup>1)</sup></b>
Max.	342	335	375	329	284	326	409	499	492	82.2	85.1	7.74	18.4	
Min.	4.4	3.4	<1.0	3.9	<1.0	<1.0	<1.0	<0.2	<0.2	<0.4	<0.1	4.07	0.41	

Table 3.44 Wet deposition (Monthly) unit: mmol m<sup>-2</sup>month<sup>-1</sup>

2004	SO <sub>4</sub> <sup>2-</sup>	nss-SO <sub>4</sub> <sup>2-</sup>	NO <sub>3</sub> <sup>-</sup>	Cl <sup>-</sup>	NH <sub>4</sub> <sup>+</sup>	Na <sup>+</sup>	K <sup>+</sup>	Ca <sup>2+</sup>	nss-Ca <sup>2+</sup>	Mg <sup>2+</sup>	H <sup>+</sup>
Jan	0.42	0.39	0.18	0.28	0.59	0.55	0.19	0.39	0.38	0.15	0.02
Feb	1.46	1.36	0.76	1.61	1.07	1.68	0.37	1.17	1.13	0.37	0.07
Mar	2.44	2.38	0.94	1.36	1.73	1.11	0.30	1.97	1.94	0.56	0.05
Apr	1.24	1.19	0.55	0.97	0.73	0.94	0.18	1.04	1.02	0.42	<0.01
May	5.56	5.41	1.83	2.34	4.83	2.48	0.71	2.90	2.84	0.72	1.87
June	1.76	1.69	1.09	0.92	1.33	1.20	0.34	1.07	1.04	0.34	0.34
July	2.41	2.36	0.93	0.87	1.75	0.76	0.50	0.75	0.73	0.56	1.42
Aug	0.69	0.65	0.52	0.64	0.76	0.68	0.25	0.34	0.33	0.21	0.23
Sept	2.52	2.41	1.34	1.50	2.77	1.87	1.02	0.85	0.81	0.24	1.55
Oct	2.09	2.03	0.94	0.67	1.69	1.04	0.15	0.43	0.41	0.22	1.34
Nov	3.70	3.56	3.72	2.55	2.38	2.32	0.74	2.73	2.68	0.82	2.42
Dec	1.38	1.32	1.97	1.05	1.38	0.97	0.26	1.25	1.23	0.29	0.71
<b>Annual<sup>2)</sup></b>	<b>25.7</b>	<b>24.8</b>	<b>14.8</b>	<b>14.7</b>	<b>21.0</b>	<b>15.6</b>	<b>5.01</b>	<b>14.9</b>	<b>14.5</b>	<b>4.87</b>	<b>10.0</b>

Table 3.44 Data completeness (Monthly)

2004	SO <sub>4</sub> <sup>2-</sup>	nss-SO <sub>4</sub> <sup>2-</sup>	NO <sub>3</sub> <sup>-</sup>	Cl <sup>-</sup>	NH <sub>4</sub> <sup>+</sup>	Na <sup>+</sup>	K <sup>+</sup>	Ca <sup>2+</sup>	nss-Ca <sup>2+</sup>	Mg <sup>2+</sup>	H <sup>+</sup>	pH	EC	Precip.
	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP			
Jan	99	99	99	99	99	99	99	99	99	99	100	100	99	100
Feb	98	98	98	98	98	98	98	98	98	98	100	100	98	100
Mar	98	98	98	98	98	98	98	98	98	98	100	100	98	100
Apr	99	99	99	99	99	99	99	99	99	99	99	99	99	100
May	100	100	100	100	100	100	100	100	100	100	100	100	100	100
June	99	99	99	99	99	99	99	99	99	99	100	100	99	100
July	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Aug	97	97	97	97	97	97	97	97	97	97	100	100	97	100
Sept	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Oct	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Nov	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Dec	98	98	98	98	98	98	98	98	98	98	100	100	98	100
<b>Annual</b>	<b>99</b>	<b>99</b>	<b>99</b>	<b>99</b>	<b>99</b>	<b>99</b>	<b>99</b>	<b>99</b>	<b>99</b>	<b>99</b>	<b>100</b>	<b>100</b>	<b>99</b>	<b>100</b>

[--] for averages and completeness: Precipitation was 0 mm.

[0.00] for deposition: The deposition was 0 mmol/m<sup>2</sup> because precipitation was 0 mm.

[\*] for averages and deposition: The constituent was not measured although precipitation was not 0 mm. (%TP=0%)

[\*\*] for all: Precipitation was not measured. (%PCL=0%)

Data in hatched column for averages and deposition: Rejected monthly (annual) value by the criteria of EANET

(%PCL<80% or %TP<80%)

Units of 1) and 2) are mm y<sup>-1</sup> and mmol m<sup>-2</sup> y<sup>-1</sup>, respectively.

**Table 3.45** Volume-weighted mean concentrations/ Precipitation (Monthly)

2004	SO <sub>4</sub> <sup>2-</sup>	nss-SO <sub>4</sub> <sup>2-</sup>	NO <sub>3</sub> <sup>-</sup>	Cl <sup>-</sup>	NH <sub>4</sub> <sup>+</sup>	Na <sup>+</sup>	K <sup>+</sup>	Ca <sup>2+</sup>	nss-Ca <sup>2+</sup>	Mg <sup>2+</sup>	H <sup>+</sup>	pH	EC	Precip.
	μ mol/L	μ mol/L	μ mol/L	μ mol/L	μ mol/L	μ mol/L	μ mol/L	μ mol/L	μ mol/L	μ mol/L	μ mol/L			
Jan	41.0	40.1	71.3	21.0	84.6	15.9	4.4	27.6	27.2	4.4	27.7	4.56	3.36	66.5
Feb	11.7	10.5	9.7	20.9	30.5	20.0	1.0	2.7	2.3	2.5	12.9	4.89	1.22	67.4
Mar	30.4	29.5	33.1	17.5	74.8	15.7	5.4	14.0	13.6	2.9	12.9	4.89	2.30	7.5
Apr	12.6	12.2	10.0	7.1	29.4	6.1	1.5	3.0	2.9	0.8	13.5	4.87	1.33	89.0
May	23.6	22.3	22.7	23.1	50.7	21.1	1.8	15.6	15.1	3.5	2.9	5.53	1.64	99.1
June	15.7	15.0	12.6	14.1	41.1	11.8	1.5	12.6	12.3	2.6	1.9	5.72	0.95	162.8
July	10.3	9.8	8.5	9.9	29.6	9.2	1.2	6.4	6.2	1.3	0.6	6.22	0.75	149.9
Aug	14.1	13.6	9.1	9.8	36.2	9.6	1.4	10.3	10.1	2.1	0.6	6.26	0.94	182.8
Sept	15.5	15.2	16.8	6.8	32.1	5.9	1.4	10.5	10.4	1.8	10.8	4.97	1.35	302.4
Oct	21.3	21.0	22.0	4.6	43.1	4.9	2.5	17.0	16.9	1.8	6.0	5.22	1.51	81.8
Nov	70.9	69.0	75.6	34.1	114	32.2	8.2	101	100	11.1	*	*	*	2.2
Dec	--	--	--	--	--	--	--	--	--	--	--	--	--	0.0
<b>Annual</b>	<b>16.3</b>	<b>15.7</b>	<b>15.9</b>	<b>11.3</b>	<b>37.8</b>	<b>10.2</b>	<b>1.6</b>	<b>11.0</b>	<b>10.7</b>	<b>2.1</b>	<b>6.5</b>	<b>5.19</b>	<b>1.25</b>	<b>1211.4<sup>1)</sup></b>
Max.	70.9	69.0	94.5	78.4	114	68.7	8.2	101	100	13.2	72.4	6.97	4.47	
Min.	2.1	2.0	2.6	1.4	6.7	1.3	<1.0	1.0	0.9	0.4	0.1	4.14	0.24	

**Table 3.45** Wet deposition (Monthly) unit: mmol m<sup>-2</sup>month<sup>-1</sup>

2004	SO <sub>4</sub> <sup>2-</sup>	nss-SO <sub>4</sub> <sup>2-</sup>	NO <sub>3</sub> <sup>-</sup>	Cl <sup>-</sup>	NH <sub>4</sub> <sup>+</sup>	Na <sup>+</sup>	K <sup>+</sup>	Ca <sup>2+</sup>	nss-Ca <sup>2+</sup>	Mg <sup>2+</sup>	H <sup>+</sup>
Jan	2.73	2.67	4.74	1.39	5.63	1.05	0.30	1.83	1.81	0.29	1.84
Feb	0.79	0.70	0.65	1.41	2.05	1.35	0.07	0.18	0.16	0.17	0.87
Mar	0.23	0.22	0.25	0.13	0.56	0.12	0.04	0.10	0.10	0.02	0.10
Apr	1.12	1.09	0.89	0.63	2.61	0.54	0.14	0.27	0.25	0.07	1.20
May	2.34	2.21	2.25	2.29	5.03	2.09	0.18	1.55	1.50	0.35	0.29
June	2.55	2.44	2.06	2.30	6.68	1.93	0.24	2.05	2.01	0.43	0.31
July	1.55	1.46	1.27	1.48	4.44	1.38	0.18	0.96	0.93	0.19	0.09
Aug	2.59	2.48	1.66	1.79	6.61	1.75	0.25	1.89	1.85	0.39	0.10
Sept	4.70	4.59	5.09	2.06	9.71	1.79	0.43	3.19	3.15	0.55	3.27
Oct	1.74	1.72	1.80	0.37	3.52	0.40	0.20	1.39	1.38	0.15	0.49
Nov	0.16	0.15	0.17	0.08	0.25	0.07	0.02	0.22	0.22	0.02	*
Dec	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
<b>Annual<sup>2)</sup></b>	<b>19.8</b>	<b>19.1</b>	<b>19.3</b>	<b>13.7</b>	<b>45.8</b>	<b>12.3</b>	<b>1.96</b>	<b>13.3</b>	<b>13.0</b>	<b>2.59</b>	<b>7.86</b>

**Table 3.45** Data completeness (Monthly)

2004	SO <sub>4</sub> <sup>2-</sup>	nss-SO <sub>4</sub> <sup>2-</sup>	NO <sub>3</sub> <sup>-</sup>	Cl <sup>-</sup>	NH <sub>4</sub> <sup>+</sup>	Na <sup>+</sup>	K <sup>+</sup>	Ca <sup>2+</sup>	nss-Ca <sup>2+</sup>	Mg <sup>2+</sup>	H <sup>+</sup>	pH	EC	Precip.
	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP			
Jan	56	56	56	56	56	56	56	56	56	56	56	56	56	100
Feb	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Mar	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Apr	80	80	80	80	80	80	80	80	80	80	80	80	80	100
May	96	96	96	96	96	96	96	96	96	96	96	96	96	100
June	100	100	100	100	100	100	100	100	100	100	100	100	100	100
July	99	99	99	99	99	99	99	99	99	99	98	98	97	100
Aug	100	100	100	100	100	100	100	100	100	100	99	99	99	100
Sept	100	100	100	100	100	100	100	100	100	100	99	99	99	100
Oct	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Nov	100	100	100	100	100	100	100	100	100	100	0	0	0	100
Dec	--	--	--	--	--	--	--	--	--	--	--	--	--	100
<b>Annual</b>	<b>96</b>	<b>96</b>	<b>96</b>	<b>96</b>	<b>96</b>	<b>96</b>	<b>96</b>	<b>96</b>	<b>96</b>	<b>96</b>	<b>95</b>	<b>95</b>	<b>95</b>	<b>100</b>

[--] for averages and completeness: Precipitation was 0 mm.

[0.00] for deposition: The deposition was 0 mmol/m<sup>2</sup> because precipitation was 0 mm.

[\*] for averages and deposition: The constituent was not measured although precipitation was not 0 mm. (%TP=0%)

[\*\*] for all: Precipitation was not measured. (%PCL=0%)

Data in hatched column for averages and deposition: Rejected monthly (annual) value by the criteria of EANET

(%PCL<80% or %TP<80%)

Units of 1) and 2) are mm y<sup>-1</sup> and mmol m<sup>-2</sup> y<sup>-1</sup>, respectively.

**Table 3.46 Volume-weighted mean concentrations/ Precipitation (Monthly)**

2004	SO <sub>4</sub> <sup>2-</sup>	nss-SO <sub>4</sub> <sup>2-</sup>	NO <sub>3</sub> <sup>-</sup>	Cl <sup>-</sup>	NH <sub>4</sub> <sup>+</sup>	Na <sup>+</sup>	K <sup>+</sup>	Ca <sup>2+</sup>	nss-Ca <sup>2+</sup>	Mg <sup>2+</sup>	H <sup>+</sup>	pH	EC	Precip.	
	μ mol/L	μ mol/L	μ mol/L	μ mol/L	μ mol/L	μ mol/L	μ mol/L	μ mol/L	μ mol/L	μ mol/L	μ mol/L				mS/m
Jan	13.9	12.3	17.7	15.0	71.9	26.4	11.6	13.3	12.7	2.6	0.7	6.18	1.40	74.3	
Feb	*	*	*	*	*	*	*	*	*	*	*	*	*	*	118.5
Mar	--	--	--	--	--	--	--	--	--	--	--	--	--	0.0	
Apr	*	*	*	*	*	*	*	*	*	*	*	*	*	*	58.3
May	24.4	23.3	7.3	22.4	35.3	19.7	4.3	8.2	7.8	2.3	1.5	5.83	1.07	93.3	
June	17.9	16.8	11.9	11.7	39.6	18.1	4.6	6.0	5.7	1.2	2.8	5.55	1.45	178.1	
July	14.2	12.9	5.9	17.6	31.3	21.8	5.8	10.5	10.0	3.0	3.2	5.50	1.10	179.7	
Aug	19.1	18.1	6.1	10.7	37.8	16.8	3.6	9.6	9.2	2.5	0.7	6.16	0.87	163.3	
Sept	14.3	13.6	10.0	8.3	23.9	10.6	3.3	5.9	5.7	1.4	5.8	5.24	0.82	342.6	
Oct	17.8	16.6	12.9	22.2	38.5	21.0	8.2	7.0	6.6	1.0	2.5	5.60	0.80	51.9	
Nov	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0.4
Dec	--	--	--	--	--	--	--	--	--	--	--	--	--	0.0	
<b>Annual</b>	<b>16.5</b>	<b>15.5</b>	<b>9.8</b>	<b>12.8</b>	<b>34.5</b>	<b>16.5</b>	<b>4.9</b>	<b>7.8</b>	<b>7.5</b>	<b>1.9</b>	<b>3.4</b>	<b>5.47</b>	<b>1.01</b>	<b>1260.4<sup>1)</sup></b>	
Max.	263	259	148	65.2	438	74.8	49.1	107	105	20.6	13.5	6.83	8.92		
Min.	4.9	3.9	2.6	4.2	7.2	4.8	1.5	0.7	0.4	<0.4	0.1	4.87	0.43		

**Table 3.46 Wet deposition (Monthly)** unit: mmol m<sup>-2</sup> month<sup>-1</sup>

2004	SO <sub>4</sub> <sup>2-</sup>	nss-SO <sub>4</sub> <sup>2-</sup>	NO <sub>3</sub> <sup>-</sup>	Cl <sup>-</sup>	NH <sub>4</sub> <sup>+</sup>	Na <sup>+</sup>	K <sup>+</sup>	Ca <sup>2+</sup>	nss-Ca <sup>2+</sup>	Mg <sup>2+</sup>	H <sup>+</sup>
Jan	1.03	0.91	1.32	1.11	5.34	1.96	0.86	0.99	0.95	0.19	0.05
Feb	*	*	*	*	*	*	*	*	*	*	*
Mar	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Apr	*	*	*	*	*	*	*	*	*	*	*
May	2.28	2.17	0.68	2.09	3.30	1.84	0.40	0.77	0.73	0.21	0.14
June	3.18	2.99	2.12	2.08	7.05	3.23	0.83	1.08	1.01	0.21	0.50
July	2.56	2.32	1.07	3.16	5.63	3.93	1.04	1.88	1.80	0.54	0.57
Aug	3.13	2.96	0.99	1.74	6.18	2.74	0.59	1.56	1.50	0.40	0.11
Sept	4.88	4.66	3.42	2.85	8.20	3.63	1.12	2.03	1.95	0.49	1.97
Oct	0.92	0.86	0.67	1.15	2.00	1.09	0.43	0.36	0.34	0.05	0.13
Nov	*	*	*	*	*	*	*	*	*	*	*
Dec	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
<b>Annual<sup>2)</sup></b>	<b>20.7</b>	<b>19.5</b>	<b>12.3</b>	<b>16.2</b>	<b>43.5</b>	<b>20.8</b>	<b>6.15</b>	<b>9.88</b>	<b>9.43</b>	<b>2.36</b>	<b>4.29</b>

**Table 3.46 Data completeness (Monthly)**

2004	SO <sub>4</sub> <sup>2-</sup>	nss-SO <sub>4</sub> <sup>2-</sup>	NO <sub>3</sub> <sup>-</sup>	Cl <sup>-</sup>	NH <sub>4</sub> <sup>+</sup>	Na <sup>+</sup>	K <sup>+</sup>	Ca <sup>2+</sup>	nss-Ca <sup>2+</sup>	Mg <sup>2+</sup>	H <sup>+</sup>	pH	EC	Precip.
	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP			
Jan	98	98	98	98	98	98	98	98	98	98	98	98	98	100
Feb	0	0	0	0	0	0	0	0	0	0	0	0	0	100
Mar	--	--	--	--	--	--	--	--	--	--	--	--	--	100
Apr	0	0	0	0	0	0	0	0	0	0	0	0	0	100
May	86	86	86	86	86	86	86	86	86	86	86	86	86	100
June	66	66	66	66	66	66	66	66	66	66	66	66	66	100
July	61	61	61	61	61	61	61	61	61	61	61	61	61	100
Aug	69	69	69	69	69	69	69	69	69	69	69	69	69	100
Sept	99	99	99	99	99	99	99	99	99	99	99	99	99	100
Oct	99	99	99	99	99	99	99	99	99	99	99	99	99	100
Nov	0	0	0	0	0	0	0	0	0	0	0	0	0	100
Dec	--	--	--	--	--	--	--	--	--	--	--	--	--	100
<b>Annual</b>	<b>70</b>	<b>70</b>	<b>70</b>	<b>70</b>	<b>70</b>	<b>70</b>	<b>70</b>	<b>70</b>	<b>70</b>	<b>70</b>	<b>70</b>	<b>70</b>	<b>70</b>	<b>100</b>

[--] for averages and completeness: Precipitation was 0 mm.

[0.00] for deposition: The deposition was 0 mmol/m<sup>2</sup> because precipitation was 0 mm.

[\*] for averages and deposition: The constituent was not measured although precipitation was not 0 mm. (%TP=0%)

[\*\*] for all: Precipitation was not measured. (%PCL=0%)

Data in hatched column for averages and deposition: Rejected monthly (annual) value by the criteria of EANET

(%PCL<80% or %TP<80%)

Units of 1) and 2) are mm y<sup>-1</sup> and mmol m<sup>-2</sup> y<sup>-1</sup>, respectively.

Table 3.47 Volume-weighted mean concentrations/ Precipitation (Monthly)

2004	SO <sub>4</sub> <sup>2-</sup>	nss-SO <sub>4</sub> <sup>2-</sup>	NO <sub>3</sub> <sup>-</sup>	Cl <sup>-</sup>	NH <sub>4</sub> <sup>+</sup>	Na <sup>+</sup>	K <sup>+</sup>	Ca <sup>2+</sup>	nss-Ca <sup>2+</sup>	Mg <sup>2+</sup>	H <sup>+</sup>	pH	EC	Precip.
	μ mol/L	μ mol/L	μ mol/L	μ mol/L	μ mol/L	μ mol/L	μ mol/L	μ mol/L	μ mol/L	μ mol/L	μ mol/L			
Jan	*	*	*	*	*	*	*	*	*	*	*	*	*	6.8
Feb	117	114	170	182	110	42.2	6.7	27.5	26.6	7.4	72.4	4.14	6.74	108.5
Mar	46.4	35.3	107	63.0	147	184	11.5	56.1	52.1	12.4	12.3	4.91	5.35	0.9
Apr	36.8	35.9	76.8	19.7	79.1	15.7	4.5	38.8	38.5	5.1	25.0	4.60	3.48	12.2
May	16.2	15.4	27.3	14.8	45.2	13.3	1.2	15.6	15.3	2.7	18.4	4.74	1.55	98.6
June	13.0	12.4	20.4	11.0	32.8	9.5	1.0	13.9	13.7	2.1	10.2	4.99	1.38	106.2
July	14.5	14.0	16.1	10.4	31.5	7.8	<1.0	10.7	10.5	1.7	3.1	5.51	0.97	165.4
Aug	12.7	12.2	13.0	10.1	27.5	8.4	<1.0	12.6	12.4	1.5	4.6	5.34	0.99	142.7
Sept	13.9	13.6	20.5	5.1	28.5	4.5	<1.0	7.4	7.3	<0.4	14.9	4.83	1.36	260.5
Oct	13.5	13.2	15.2	4.5	17.9	5.3	<1.0	5.5	5.3	0.6	18.7	4.73	1.30	49.3
Nov	20.8	20.2	12.2	9.1	32.0	9.0	1.7	4.4	4.2	1.1	39.8	4.40	2.45	25.1
Dec	--	--	--	--	--	--	--	--	--	--	--	--	--	0.0
<b>Annual</b>	<b>17.5</b>	<b>17.0</b>	<b>24.0</b>	<b>14.3</b>	<b>34.0</b>	<b>8.9</b>	<b>1.2</b>	<b>11.4</b>	<b>11.2</b>	<b>1.6</b>	<b>13.6</b>	<b>4.87</b>	<b>1.47</b>	<b>976.2<sup>1)</sup></b>
Max.	117	114	236	182	147	184	11.5	132	131	19.4	97.7	6.74	7.39	
Min.	3.9	3.7	2.0	2.9	4.4	2.6	<1.0	0.4	0.3	<0.4	0.2	4.01	0.31	

Table 3.47 Wet deposition (Monthly) unit: mmol m<sup>-2</sup> month<sup>-1</sup>

2004	SO <sub>4</sub> <sup>2-</sup>	nss-SO <sub>4</sub> <sup>2-</sup>	NO <sub>3</sub> <sup>-</sup>	Cl <sup>-</sup>	NH <sub>4</sub> <sup>+</sup>	Na <sup>+</sup>	K <sup>+</sup>	Ca <sup>2+</sup>	nss-Ca <sup>2+</sup>	Mg <sup>2+</sup>	H <sup>+</sup>
Jan	*	*	*	*	*	*	*	*	*	*	*
Feb	12.7	12.4	18.4	19.8	11.9	4.58	0.73	2.99	2.89	0.80	7.86
Mar	0.04	0.03	0.10	0.06	0.13	0.17	0.01	0.05	0.05	0.01	0.01
Apr	0.45	0.44	0.94	0.24	0.97	0.19	0.05	0.47	0.47	0.06	0.30
May	1.60	1.52	2.70	1.46	4.46	1.31	0.12	1.54	1.51	0.27	1.81
June	1.38	1.32	2.17	1.17	3.49	1.01	0.11	1.48	1.46	0.22	1.08
July	2.39	2.32	2.67	1.72	5.21	1.28	0.14	1.77	1.74	0.29	0.52
Aug	1.81	1.74	1.85	1.44	3.93	1.19	0.12	1.79	1.77	0.22	0.66
Sept	3.63	3.56	5.33	1.33	7.41	1.18	0.25	1.93	1.90	0.09	3.88
Oct	0.67	0.65	0.75	0.22	0.88	0.26	0.04	0.27	0.26	0.03	0.92
Nov	0.52	0.51	0.31	0.23	0.80	0.22	0.04	0.11	0.10	0.03	1.00
Dec	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
<b>Annual<sup>2)</sup></b>	<b>17.1</b>	<b>16.6</b>	<b>23.4</b>	<b>13.9</b>	<b>33.2</b>	<b>8.72</b>	<b>1.16</b>	<b>11.1</b>	<b>11.0</b>	<b>1.55</b>	<b>13.3</b>

Table 3.47 Data completeness (Monthly)

2004	SO <sub>4</sub> <sup>2-</sup>	nss-SO <sub>4</sub> <sup>2-</sup>	NO <sub>3</sub> <sup>-</sup>	Cl <sup>-</sup>	NH <sub>4</sub> <sup>+</sup>	Na <sup>+</sup>	K <sup>+</sup>	Ca <sup>2+</sup>	nss-Ca <sup>2+</sup>	Mg <sup>2+</sup>	H <sup>+</sup>	pH	EC	Precip.
	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP			
Jan	0	0	0	0	0	0	0	0	0	0	0	0	0	100
Feb	24	24	24	24	24	24	24	24	24	24	24	24	24	100
Mar	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Apr	100	100	100	100	100	100	100	100	100	100	100	100	100	100
May	100	100	100	100	100	100	100	100	100	100	100	100	100	100
June	100	100	100	100	100	100	100	100	100	100	100	100	100	100
July	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Aug	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Sept	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Oct	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Nov	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Dec	--	--	--	--	--	--	--	--	--	--	--	--	--	100
<b>Annual</b>	<b>91</b>	<b>91</b>	<b>91</b>	<b>91</b>	<b>91</b>	<b>91</b>	<b>91</b>	<b>91</b>	<b>91</b>	<b>91</b>	<b>91</b>	<b>91</b>	<b>91</b>	<b>100</b>

[--] for averages and completeness: Precipitation was 0 mm.

[0.00] for deposition: The deposition was 0 mmol/m<sup>2</sup> because precipitation was 0 mm.

[\*] for averages and deposition: The constituent was not measured although precipitation was not 0 mm. (%TP=0%)

[\*\*] for all: Precipitation was not measured. (%PCL=0%)

Data in hatched column for averages and deposition: Rejected monthly (annual) value by the criteria of EANET

(%PCL<80% or %TP<80%)

Units of 1) and 2) are mm y<sup>-1</sup> and mmol m<sup>-2</sup> y<sup>-1</sup>, respectively.

**Site: Khanchanaburi (Vachiralongkorn Dam) Country: Thailand**

**Table 3.48 Volume-weighted mean concentrations/ Precipitation (Monthly)**

2004	SO <sub>4</sub> <sup>2-</sup>	nss-SO <sub>4</sub> <sup>2-</sup>	NO <sub>3</sub> <sup>-</sup>	Cl <sup>-</sup>	NH <sub>4</sub> <sup>+</sup>	Na <sup>+</sup>	K <sup>+</sup>	Ca <sup>2+</sup>	nss-Ca <sup>2+</sup>	Mg <sup>2+</sup>	H <sup>+</sup>	pH	EC	Precip.
	μ mol/L	μ mol/L	μ mol/L	μ mol/L	μ mol/L	μ mol/L	μ mol/L	μ mol/L	μ mol/L	μ mol/L	μ mol/L			
Jan	*	*	*	*	*	*	*	*	*	*	*	*	*	2.8
Feb	*	*	*	*	*	*	*	*	*	*	*	*	*	14.2
Mar	*	*	*	*	*	*	*	*	*	*	*	*	*	15.7
Apr	*	*	*	*	*	*	*	*	*	*	*	*	*	5.1
May	3.7	3.3	5.3	7.7	12.0	7.1	<1.0	2.8	2.6	1.2	1.2	5.94	0.43	457.4
June	3.1	2.5	3.2	11.2	4.2	10.0	<1.0	6.5	6.3	1.8	0.6	6.25	0.35	398.5
July	1.5	<1.0	3.9	9.6	3.8	8.5	1.1	2.5	2.3	1.3	0.4	6.40	0.34	153.1
Aug	4.9	3.9	10.1	20.9	11.9	17.2	4.6	11.4	11.0	3.1	0.4	6.39	0.64	247.7
Sept	1.6	1.2	3.1	5.4	2.7	6.1	<1.0	2.2	2.1	2.6	0.9	6.03	0.25	87.2
Oct	*	*	*	*	*	*	*	*	*	*	*	*	*	9.9
Nov	--	--	--	--	--	--	--	--	--	--	--	--	--	0.0
Dec	--	--	--	--	--	--	--	--	--	--	--	--	--	0.0
<b>Annual</b>	<b>3.4</b>	<b>2.8</b>	<b>4.8</b>	<b>10.0</b>	<b>8.4</b>	<b>9.0</b>	<b>1.1</b>	<b>4.8</b>	<b>4.6</b>	<b>1.6</b>	<b>0.8</b>	<b>6.07</b>	<b>0.41</b>	<b>1391.6<sup>1)</sup></b>
Max.	14.9	11.5	21.6	67.1	43.8	57.0	128	54.4	53.2	16.5	3.2	6.94	1.90	
Min.	<1.0	<1.0	<1.0	1.4	1.1	1.7	<1.0	0.7	0.7	<0.4	0.1	5.49	0.08	

**Table 3.48 Wet deposition (Monthly)** unit: mmol m<sup>-2</sup> month<sup>-1</sup>

2004	SO <sub>4</sub> <sup>2-</sup>	nss-SO <sub>4</sub> <sup>2-</sup>	NO <sub>3</sub> <sup>-</sup>	Cl <sup>-</sup>	NH <sub>4</sub> <sup>+</sup>	Na <sup>+</sup>	K <sup>+</sup>	Ca <sup>2+</sup>	nss-Ca <sup>2+</sup>	Mg <sup>2+</sup>	H <sup>+</sup>
Jan	*	*	*	*	*	*	*	*	*	*	*
Feb	*	*	*	*	*	*	*	*	*	*	*
Mar	*	*	*	*	*	*	*	*	*	*	*
Apr	*	*	*	*	*	*	*	*	*	*	*
May	1.69	1.50	2.42	3.50	5.49	3.26	0.32	1.26	1.19	0.53	0.53
June	1.22	0.98	1.26	4.46	1.66	4.00	0.32	2.58	2.50	0.71	0.22
July	0.22	0.15	0.59	1.47	0.58	1.30	0.17	0.39	0.36	0.20	0.06
Aug	1.22	0.96	2.50	5.18	2.94	4.26	1.13	2.81	2.72	0.77	0.10
Sept	0.14	0.11	0.27	0.47	0.24	0.53	0.07	0.20	0.18	0.22	0.08
Oct	*	*	*	*	*	*	*	*	*	*	*
Nov	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Dec	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
<b>Annual<sup>2)</sup></b>	<b>4.71</b>	<b>3.96</b>	<b>6.65</b>	<b>13.9</b>	<b>11.7</b>	<b>12.5</b>	<b>1.52</b>	<b>6.65</b>	<b>6.38</b>	<b>2.29</b>	<b>1.18</b>

**Table 3.48 Data completeness (Monthly)**

2004	SO <sub>4</sub> <sup>2-</sup>	nss-SO <sub>4</sub> <sup>2-</sup>	NO <sub>3</sub> <sup>-</sup>	Cl <sup>-</sup>	NH <sub>4</sub> <sup>+</sup>	Na <sup>+</sup>	K <sup>+</sup>	Ca <sup>2+</sup>	nss-Ca <sup>2+</sup>	Mg <sup>2+</sup>	H <sup>+</sup>	pH	EC	Precip.
	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP			
Jan	0	0	0	0	0	0	0	0	0	0	0	0	0	100
Feb	0	0	0	0	0	0	0	0	0	0	0	0	0	100
Mar	0	0	0	0	0	0	0	0	0	0	0	0	0	100
Apr	0	0	0	0	0	0	0	0	0	0	0	0	0	100
May	93	93	93	93	93	93	93	93	93	93	93	93	93	100
June	81	81	81	81	81	81	81	81	81	81	81	81	81	100
July	15	15	15	15	15	15	15	15	15	15	15	15	15	100
Aug	32	32	32	32	32	32	32	32	32	32	32	32	32	100
Sept	69	69	69	69	69	69	69	69	69	69	69	69	69	100
Oct	0	0	0	0	0	0	0	0	0	0	0	0	0	100
Nov	--	--	--	--	--	--	--	--	--	--	--	--	--	100
Dec	--	--	--	--	--	--	--	--	--	--	--	--	--	100
<b>Annual</b>	<b>65</b>	<b>65</b>	<b>65</b>	<b>65</b>	<b>65</b>	<b>65</b>	<b>65</b>	<b>65</b>	<b>65</b>	<b>65</b>	<b>65</b>	<b>65</b>	<b>65</b>	<b>100</b>

[--] for averages and completeness: Precipitation was 0 mm.

[0.00] for deposition: The deposition was 0 mmol/m<sup>2</sup> because precipitation was 0 mm.

[\*] for averages and deposition: The constituent was not measured although precipitation was not 0 mm. (%TP=0%)

[\*\*] for all: Precipitation was not measured. (%PCL=0%)

Data in hatched column for averages and deposition: Rejected monthly (annual) value by the criteria of EANET

(%PCL<80% or %TP<80%)

Units of 1) and 2) are mm y<sup>-1</sup> and mmol m<sup>-2</sup> y<sup>-1</sup>, respectively.

**Table 3.49** Volume-weighted mean concentrations/ Precipitation (Monthly)

2004	SO <sub>4</sub> <sup>2-</sup>	nss-SO <sub>4</sub> <sup>2-</sup>	NO <sub>3</sub> <sup>-</sup>	Cl <sup>-</sup>	NH <sub>4</sub> <sup>+</sup>	Na <sup>+</sup>	K <sup>+</sup>	Ca <sup>2+</sup>	nss-Ca <sup>2+</sup>	Mg <sup>2+</sup>	H <sup>+</sup>	pH	EC	Precip.
	μ mol/L	μ mol/L	μ mol/L	μ mol/L	μ mol/L	μ mol/L	μ mol/L	μ mol/L	μ mol/L	μ mol/L	μ mol/L			
Jan	9.0	8.9	25.0	9.2	40.8	<1.0	3.7	5.1	5.1	<0.4	0.5	6.29	1.06	4.4
Feb	40.2	39.8	78.9	21.0	150	6.4	15.3	25.8	25.7	3.3	1.1	5.94	3.64	0.4
Mar	--	--	--	--	--	--	--	--	--	--	--	--	--	0.0
Apr	16.3	15.5	57.4	18.1	165	13.2	9.8	46.3	46.1	10.0	0.6	6.22	2.57	4.7
May	5.3	4.9	10.5	7.6	31.3	6.0	1.7	7.9	7.8	4.0	4.1	5.38	0.72	215.4
June	5.3	5.2	4.8	2.1	14.0	1.0	<1.0	3.4	3.4	0.8	5.3	5.27	0.50	162.2
July	3.1	3.0	3.7	2.9	11.0	1.0	<1.0	3.0	3.0	0.9	0.5	6.34	0.32	230.4
Aug	2.5	2.4	2.2	1.4	6.8	<1.0	<1.0	2.9	2.9	0.6	0.3	6.46	0.25	132.9
Sept	4.4	4.3	4.3	2.1	6.1	1.8	<1.0	2.0	1.9	0.7	0.5	6.31	0.25	352.5
Oct	66.5	65.3	18.8	14.3	52.2	21.0	16.9	25.0	24.6	10.1	17.4	4.76	2.29	48.6
Nov	--	--	--	--	--	--	--	--	--	--	--	--	--	0.0
Dec	--	--	--	--	--	--	--	--	--	--	--	--	--	0.0
<b>Annual</b>	<b>6.9</b>	<b>6.7</b>	<b>6.1</b>	<b>3.8</b>	<b>15.7</b>	<b>3.1</b>	<b>1.4</b>	<b>4.8</b>	<b>4.7</b>	<b>1.8</b>	<b>2.5</b>	<b>5.59</b>	<b>0.49</b>	<b>1151.5<sup>1)</sup></b>
Max.	92.3	92.1	167	130	172	337	260	396	389	171	31.6	7.77	9.70	
Min.	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.2	<0.2	<0.4	<0.1	4.50	0.14	

**Table 3.49** Wet deposition (Monthly) unit: mmol m<sup>-2</sup> month<sup>-1</sup>

2004	SO <sub>4</sub> <sup>2-</sup>	nss-SO <sub>4</sub> <sup>2-</sup>	NO <sub>3</sub> <sup>-</sup>	Cl <sup>-</sup>	NH <sub>4</sub> <sup>+</sup>	Na <sup>+</sup>	K <sup>+</sup>	Ca <sup>2+</sup>	nss-Ca <sup>2+</sup>	Mg <sup>2+</sup>	H <sup>+</sup>
Jan	0.04	0.04	0.11	0.04	0.18	<0.01	0.02	0.02	0.02	<0.01	<0.01
Feb	0.02	0.02	0.03	<0.01	0.06	<0.01	<0.01	0.01	0.01	<0.01	<0.01
Mar	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Apr	0.08	0.07	0.27	0.09	0.78	0.06	0.05	0.22	0.22	0.05	<0.01
May	1.14	1.06	2.27	1.64	6.74	1.29	0.36	1.70	1.67	0.87	0.89
June	0.85	0.84	0.77	0.34	2.27	0.17	0.03	0.56	0.55	0.14	0.87
July	0.71	0.70	0.86	0.67	2.53	0.23	0.12	0.70	0.70	0.21	0.10
Aug	0.33	0.32	0.29	0.18	0.90	0.11	0.07	0.39	0.38	0.08	0.05
Sept	1.55	1.51	1.52	0.73	2.14	0.63	0.16	0.69	0.67	0.26	0.17
Oct	3.23	3.17	0.91	0.69	2.54	1.02	0.82	1.22	1.19	0.49	0.85
Nov	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Dec	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
<b>Annual<sup>2)</sup></b>	<b>7.95</b>	<b>7.74</b>	<b>7.04</b>	<b>4.40</b>	<b>18.1</b>	<b>3.52</b>	<b>1.62</b>	<b>5.50</b>	<b>5.42</b>	<b>2.10</b>	<b>2.93</b>

**Table 3.49** Data completeness (Monthly)

2004	SO <sub>4</sub> <sup>2-</sup>	nss-SO <sub>4</sub> <sup>2-</sup>	NO <sub>3</sub> <sup>-</sup>	Cl <sup>-</sup>	NH <sub>4</sub> <sup>+</sup>	Na <sup>+</sup>	K <sup>+</sup>	Ca <sup>2+</sup>	nss-Ca <sup>2+</sup>	Mg <sup>2+</sup>	H <sup>+</sup>	pH	EC	Precip.
	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP			
Jan	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Feb	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Mar	--	--	--	--	--	--	--	--	--	--	--	--	--	100
Apr	100	100	100	100	100	100	100	100	100	100	100	100	94	100
May	100	100	100	100	100	100	100	100	100	100	100	100	100	100
June	100	100	100	100	100	100	100	100	100	100	100	100	99	100
July	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Aug	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Sept	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Oct	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Nov	--	--	--	--	--	--	--	--	--	--	--	--	--	100
Dec	--	--	--	--	--	--	--	--	--	--	--	--	--	100
<b>Annual</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>

[--] for averages and completeness: Precipitation was 0 mm.

[0.00] for deposition: The deposition was 0 mmol/m<sup>2</sup> because precipitation was 0 mm.

[\*] for averages and deposition: The constituent was not measured although precipitation was not 0 mm. (%TP=0%)

[\*\*] for all: Precipitation was not measured. (%PCL=0%)

Data in hatched column for averages and deposition: Rejected monthly (annual) value by the criteria of EANET

(%PCL<80% or %TP<80%)

Units of 1) and 2) are mm y<sup>-1</sup> and mmol m<sup>-2</sup> y<sup>-1</sup>, respectively.

**Table 3.50** Volume-weighted mean concentrations/ Precipitation (Monthly)

2004	SO <sub>4</sub> <sup>2-</sup>	nss-SO <sub>4</sub> <sup>2-</sup>	NO <sub>3</sub> <sup>-</sup>	Cl <sup>-</sup>	NH <sub>4</sub> <sup>+</sup>	Na <sup>+</sup>	K <sup>+</sup>	Ca <sup>2+</sup>	nss-Ca <sup>2+</sup>	Mg <sup>2+</sup>	H <sup>+</sup>	pH	EC	Precip.
	μ mol/L	μ mol/L	μ mol/L	μ mol/L	μ mol/L	μ mol/L	μ mol/L	μ mol/L	μ mol/L	μ mol/L	μ mol/L			
Jan	377	370	199	168	603	111	27.6	160	158	30.7	7.1	5.15	16.6	9.3
Feb	131	130	67.4	45.4	181	21.2	16.5	54.4	53.9	10.1	38.0	4.42	6.67	26.0
Mar	191	191	99.3	54.1	358	14.9	9.9	65.6	65.2	12.2	1.7	5.78	8.02	44.8
Apr	66.1	65.8	41.3	20.1	117	5.0	2.6	32.5	32.4	5.9	1.1	5.97	2.98	162.7
May	17.7	17.6	15.1	5.7	24.4	2.6	1.2	13.7	13.6	2.4	1.2	5.91	0.94	360.5
June	30.0	29.5	27.2	18.3	41.9	7.5	4.1	20.6	20.5	4.9	5.5	5.26	1.76	202.8
July	10.5	10.3	5.5	5.3	15.7	3.5	2.2	8.5	8.4	1.0	0.9	6.07	0.63	367.3
Aug	22.9	22.6	20.2	9.4	30.3	6.0	1.1	22.7	22.6	2.7	0.7	6.17	1.30	179.5
Sept	22.1	21.7	19.6	9.2	11.5	6.2	2.2	27.2	27.1	2.2	1.7	5.78	1.20	166.5
Oct	296	289	190	141	104	116	16.4	365	363	8.2	0.2	6.75	14.1	3.2
Nov	255	248	162	114	250	112	10.6	208	206	25.1	0.2	6.72	11.6	24.4
Dec	31.4	29.8	18.1	25.3	32.4	26.6	5.5	43.4	42.9	8.2	<0.1	7.02	2.08	27.9
<b>Annual</b>	<b>37.0</b>	<b>36.5</b>	<b>25.2</b>	<b>14.7</b>	<b>52.7</b>	<b>8.1</b>	<b>3.0</b>	<b>25.0</b>	<b>24.8</b>	<b>3.8</b>	<b>2.3</b>	<b>5.65</b>	<b>1.85</b>	<b>1574.9<sup>1)</sup></b>
Max.	502	495	291	288	758	197	91.8	365	363	48.7	44.6	7.37	22.6	
Min.	8.0	7.8	3.8	3.3	6.3	1.4	<1.0	6.6	6.6	0.7	<0.1	4.35	0.47	

**Table 3.50** Wet deposition (Monthly) unit: mmol m<sup>-2</sup> month<sup>-1</sup>

2004	SO <sub>4</sub> <sup>2-</sup>	nss-SO <sub>4</sub> <sup>2-</sup>	NO <sub>3</sub> <sup>-</sup>	Cl <sup>-</sup>	NH <sub>4</sub> <sup>+</sup>	Na <sup>+</sup>	K <sup>+</sup>	Ca <sup>2+</sup>	nss-Ca <sup>2+</sup>	Mg <sup>2+</sup>	H <sup>+</sup>
Jan	3.50	3.44	1.85	1.56	5.61	1.04	0.26	1.49	1.47	0.29	0.07
Feb	3.41	3.38	1.75	1.18	4.72	0.55	0.43	1.41	1.40	0.26	0.99
Mar	8.58	8.54	4.45	2.42	16.1	0.67	0.44	2.94	2.92	0.55	0.07
Apr	10.8	10.7	6.72	3.28	19.1	0.81	0.42	5.29	5.28	0.96	0.17
May	6.40	6.34	5.46	2.05	8.80	0.92	0.44	4.94	4.92	0.86	0.44
June	6.08	5.99	5.52	3.72	8.49	1.53	0.83	4.18	4.15	0.99	1.12
July	3.86	3.78	2.03	1.95	5.76	1.29	0.82	3.13	3.10	0.38	0.31
Aug	4.11	4.05	3.63	1.68	5.44	1.08	0.20	4.08	4.06	0.49	0.12
Sept	3.68	3.62	3.26	1.53	1.91	1.04	0.36	4.53	4.51	0.37	0.27
Oct	0.95	0.92	0.61	0.45	0.33	0.37	0.05	1.17	1.16	0.03	<0.01
Nov	6.22	6.05	3.96	2.79	6.11	2.73	0.26	5.08	5.02	0.61	<0.01
Dec	0.88	0.83	0.51	0.71	0.90	0.74	0.15	1.21	1.20	0.23	<0.01
<b>Annual<sup>2)</sup></b>	<b>58.3</b>	<b>57.5</b>	<b>39.7</b>	<b>23.2</b>	<b>83.0</b>	<b>12.7</b>	<b>4.65</b>	<b>39.3</b>	<b>39.1</b>	<b>5.98</b>	<b>3.56</b>

**Table 3.50** Data completeness (Monthly)

2004	SO <sub>4</sub> <sup>2-</sup>	nss-SO <sub>4</sub> <sup>2-</sup>	NO <sub>3</sub> <sup>-</sup>	Cl <sup>-</sup>	NH <sub>4</sub> <sup>+</sup>	Na <sup>+</sup>	K <sup>+</sup>	Ca <sup>2+</sup>	nss-Ca <sup>2+</sup>	Mg <sup>2+</sup>	H <sup>+</sup>	pH	EC	Precip.
	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP			
Jan	97	97	97	97	97	97	97	97	97	97	97	97	97	100
Feb	97	97	97	97	97	97	97	97	97	97	97	97	97	100
Mar	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Apr	100	100	100	100	100	100	100	100	100	100	100	100	100	100
May	100	100	100	100	100	100	100	100	100	100	100	100	100	100
June	100	100	100	100	100	100	100	100	100	100	100	100	100	100
July	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Aug	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Sept	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Oct	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Nov	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Dec	90	90	90	90	90	90	90	90	90	90	90	90	90	100
<b>Annual</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>

[--] for averages and completeness: Precipitation was 0 mm.

[0.00] for deposition: The deposition was 0 mmol/m<sup>2</sup> because precipitation was 0 mm.

[\*] for averages and deposition: The constituent was not measured although precipitation was not 0 mm. (%TP=0%)

[\*\*] for all: Precipitation was not measured. (%PCL=0%)

Data in hatched column for averages and deposition: Rejected monthly (annual) value by the criteria of EANET

(%PCL<80% or %TP<80%)

Units of 1) and 2) are mm y<sup>-1</sup> and mmol m<sup>-2</sup> y<sup>-1</sup>, respectively.

**Table 3.51 Volume-weighted mean concentrations/ Precipitation (Monthly)**

2004	SO <sub>4</sub> <sup>2-</sup>	nss-SO <sub>4</sub> <sup>2-</sup>	NO <sub>3</sub> <sup>-</sup>	Cl <sup>-</sup>	NH <sub>4</sub> <sup>+</sup>	Na <sup>+</sup>	K <sup>+</sup>	Ca <sup>2+</sup>	nss-Ca <sup>2+</sup>	Mg <sup>2+</sup>	H <sup>+</sup>	pH	EC	Precip.
	μ mol/L	μ mol/L	μ mol/L	μ mol/L	μ mol/L	μ mol/L	μ mol/L	μ mol/L	μ mol/L	μ mol/L	μ mol/L			
Jan	38.6	38.4	12.7	14.5	50.4	1.9	<1.0	7.6	7.5	0.9	40.0	4.40	2.63	3.0
Feb	93.7	93.6	33.2	18.1	147	1.7	2.8	41.7	41.6	4.2	8.5	5.07	3.95	20.5
Mar	92.1	92.0	41.2	30.9	157	2.8	2.3	44.4	44.4	6.3	1.1	5.94	3.94	10.4
Apr	63.7	63.6	54.5	21.9	90.7	1.4	2.4	47.6	47.6	4.5	1.8	5.74	3.07	254.1
May	17.4	17.4	14.2	7.4	22.2	<1.0	<1.0	13.9	13.9	1.6	1.2	5.93	0.89	300.7
June	24.7	24.6	14.4	10.2	27.9	1.9	1.4	15.4	15.3	2.6	3.3	5.48	1.20	183.0
July	23.1	23.0	11.6	8.7	49.2	2.5	<1.0	9.4	9.4	2.1	1.3	5.89	1.18	518.5
Aug	17.8	17.4	15.7	10.2	13.7	5.3	2.5	18.8	18.7	2.4	1.3	5.89	1.01	293.9
Sept	22.4	21.7	13.0	8.2	9.4	12.2	1.8	21.8	21.5	1.6	1.0	6.02	1.05	187.8
Oct	*	*	*	*	*	*	*	*	*	*	*	*	*	1.0
Nov	69.9	68.6	21.5	42.8	76.8	21.9	10.8	27.8	27.4	4.9	33.1	4.48	4.01	45.2
Dec	26.3	25.7	33.0	17.9	50.2	9.5	3.4	13.3	13.1	3.2	12.0	4.92	1.87	12.7
<b>Annual</b>	<b>29.4</b>	<b>29.2</b>	<b>19.9</b>	<b>11.8</b>	<b>41.0</b>	<b>3.9</b>	<b>1.7</b>	<b>19.9</b>	<b>19.8</b>	<b>2.5</b>	<b>2.5</b>	<b>5.60</b>	<b>1.48</b>	<b>1830.8<sup>1)</sup></b>
Max.	117	117	76.7	48.6	208	27.2	12.3	70.6	70.6	10.0	41.7	6.74	4.98	
Min.	10.2	10.1	6.1	2.6	2.1	<1.0	<1.0	5.7	5.7	0.8	0.2	4.38	0.55	

**Table 3.51 Wet deposition (Monthly)** unit: mmol m<sup>-2</sup> month<sup>-1</sup>

2004	SO <sub>4</sub> <sup>2-</sup>	nss-SO <sub>4</sub> <sup>2-</sup>	NO <sub>3</sub> <sup>-</sup>	Cl <sup>-</sup>	NH <sub>4</sub> <sup>+</sup>	Na <sup>+</sup>	K <sup>+</sup>	Ca <sup>2+</sup>	nss-Ca <sup>2+</sup>	Mg <sup>2+</sup>	H <sup>+</sup>
Jan	0.12	0.12	0.04	0.04	0.15	<0.01	<0.01	0.02	0.02	<0.01	0.12
Feb	1.92	1.92	0.68	0.37	3.02	0.03	0.06	0.85	0.85	0.09	0.17
Mar	0.96	0.96	0.43	0.32	1.63	0.03	0.02	0.46	0.46	0.07	0.01
Apr	16.2	16.2	13.9	5.55	23.1	0.35	0.62	12.1	12.1	1.14	0.46
May	5.24	5.23	4.28	2.23	6.66	0.15	0.06	4.18	4.18	0.48	0.35
June	4.53	4.51	2.63	1.87	5.10	0.35	0.26	2.81	2.80	0.47	0.61
July	12.0	11.9	6.04	4.51	25.5	1.29	0.45	4.89	4.86	1.10	0.68
Aug	5.22	5.13	4.62	3.01	4.03	1.55	0.73	5.53	5.49	0.70	0.38
Sept	4.21	4.08	2.43	1.53	1.76	2.29	0.33	4.09	4.04	0.31	0.18
Oct	*	*	*	*	*	*	*	*	*	*	*
Nov	3.16	3.10	0.97	1.94	3.47	0.99	0.49	1.26	1.24	0.22	1.49
Dec	0.33	0.33	0.42	0.23	0.64	0.12	0.04	0.17	0.17	0.04	0.15
<b>Annual<sup>2)</sup></b>	<b>53.9</b>	<b>53.5</b>	<b>36.4</b>	<b>21.6</b>	<b>75.0</b>	<b>7.16</b>	<b>3.06</b>	<b>36.4</b>	<b>36.2</b>	<b>4.62</b>	<b>4.61</b>

**Table 3.51 Data completeness (Monthly)**

2004	SO <sub>4</sub> <sup>2-</sup>	nss-SO <sub>4</sub> <sup>2-</sup>	NO <sub>3</sub> <sup>-</sup>	Cl <sup>-</sup>	NH <sub>4</sub> <sup>+</sup>	Na <sup>+</sup>	K <sup>+</sup>	Ca <sup>2+</sup>	nss-Ca <sup>2+</sup>	Mg <sup>2+</sup>	H <sup>+</sup>	pH	EC	Precip.
	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP			
Jan	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Feb	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Mar	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Apr	100	100	100	100	100	100	100	100	100	100	100	100	100	100
May	100	100	100	100	100	100	100	100	100	100	100	100	100	100
June	100	100	100	100	100	100	100	100	100	100	100	100	100	100
July	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Aug	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Sept	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Oct	0	0	0	0	0	0	0	0	0	0	0	0	0	100
Nov	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Dec	96	96	96	96	96	96	96	96	96	96	96	96	96	100
<b>Annual</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>

[--] for averages and completeness: Precipitation was 0 mm.

[0.00] for deposition: The deposition was 0 mmol/m<sup>2</sup> because precipitation was 0 mm.

[\*] for averages and deposition: The constituent was not measured although precipitation was not 0 mm. (%TP=0%)

[\*\*] for all: Precipitation was not measured. (%PCL=0%)

Data in hatched column for averages and deposition: Rejected monthly (annual) value by the criteria of EANET

(%PCL<80% or %TP<80%)

Units of 1) and 2) are mm y<sup>-1</sup> and mmol m<sup>-2</sup> y<sup>-1</sup>, respectively.

**Table 3.52 Annual precipitation and volume-weighted mean concentrations in 2004**

Country	Name of sites	Code	Precip.	SO <sub>4</sub> <sup>2-</sup>	nss-SO <sub>4</sub> <sup>2-</sup>	NO <sub>3</sub> <sup>-</sup>	Cl <sup>-</sup>	NH <sub>4</sub> <sup>+</sup>	Na <sup>+</sup>	K <sup>+</sup>	Ca <sup>2+</sup>	nss-Ca <sup>2+</sup>	Mg <sup>2+</sup>	H <sup>+</sup>	pH	EC
			mm y <sup>-1</sup>	μmol/L	μmol/L	μmol/L	μmol/L	μmol/L	μmol/L	μmol/L	μmol/L	μmol/L	μmol/L	μmol/L	μmol/L	μmol/L
Cambodia	Phnom Penh	KH 11052	418.9	***	***	7.7	***	10.8	***	1.6	<0.2	***	<0.4	4.8	5.32	1.17
China	Guanyinqiao	CN 11001	1386.7	165	165	43.9	14.7	137	7.3	10.9	110	110	9.1	25.9	4.59	5.82
	Jinyunshan	CN 11003	1517.7	109	109	36.8	12.8	105	12.3	11.7	70.5	70.2	3.5	25.9	4.59	4.35
	Shizhan	CN 11004	600.9	173	171	61.7	36.1	146	19.1	9.6	147	147	15.3	0.5	6.30	6.47
	Weishuiyuan	CN 11005	465.6	202	201	69.6	39.4	151	23.3	11.3	190	189	19.3	1.1	5.98	8.55
	Jiwozi	CN 11007	1019.6	55.2	53.7	26.4	14.8	37.1	25.1	8.5	88.0	87.4	16.6	0.8	6.11	2.91
	Hongwen	CN 11008	1064.9	69.1	66.0	49.8	60.2	45.8	50.4	7.2	83.7	82.6	11.4	19.4	4.71	3.41
	Xiaoping	CN 11009	1958.4	27.2	26.4	19.6	16.6	38.0	13.0	5.1	6.4	6.1	1.4	24.6	4.61	1.97
	Xiang Zhou Zhuxian Cavern	CN 11010 CN 11011	1339.8 1276.8	18.7 26.9	16.7 23.8	22.1 25.0	36.4 58.8	50.7 59.5	72.1 94.4	7.7 22.7	18.0 24.7	16.4 22.7	6.3 8.5	16.5 23.2	4.78 4.63	2.37 3.15
Indonesia	Jakarta	ID 11012	1468.7	48.6	46.4	77.6	39.1	22.4	37.2	10.3	50.9	50.2	6.3	20.4	4.69	3.69
	Serpong	ID 11013	1462.4	28.1	26.9	39.7	23.8	42.3	19.6	5.6	10.5	10.1	4.0	20.8	4.68	2.25
	Kototabang	ID 11014	2110.9	5.2	4.6	4.7	11.8	12.3	10.9	6.3	7.0	6.7	1.8	18.5	4.73	1.11
	Bandung	ID 11015	894.5	27.7	27.0	28.2	17.4	36.8	10.8	3.3	18.3	18.0	3.3	9.3	5.03	1.80
Japan	Rishiri	JP 11016	945.4	28.6	14.7	11.6	256	17.1	229	6.0	8.6	3.7	26.4	14.4	4.84	4.72
	Ochiishi	JP 11050	648.0	34.5	12.9	13.5	410	11.8	360	8.1	12.2	4.5	42.2	20.7	4.68	6.72
	Tappi	JP 11017	1473.0	26.2	14.2	16.3	231	15.6	199	4.9	7.8	3.5	23.4	25.4	4.59	4.57
	Sado-seki	JP 11019	1539.2	17.7	9.5	11.2	154	10.1	135	3.6	4.7	1.9	15.6	19.7	4.70	3.10
	Happo	JP 11021	3088.1	9.1	8.8	8.0	8.7	8.3	5.9	<1.0	2.4	2.2	1.3	13.9	4.86	0.91
	Ijira	JP 11022	3424.4	14.0	12.7	15.4	27.5	14.7	21.6	1.1	2.3	1.9	2.8	22.1	4.65	1.62
	Oki	JP 11023	1408.6	29.3	11.9	17.0	321	10.9	295	9.6	11.9	5.5	34.4	15.9	4.80	5.86
	Banryu	JP 11024	1737.6	19.8	13.0	15.6	133	11.2	113	3.0	5.3	2.9	13.2	19.9	4.70	3.02
	Yusuhara	JP 11025	3970.3	6.7	5.3	5.3	28.1	4.8	24.1	<1.0	1.8	1.3	2.9	10.6	4.97	1.03
	Hedo	JP 11027	1778.2	77.0	24.4	13.4	982	17.2	873	24.6	22.7	4.3	91.0	16.5	4.78	14.2
Ogasawara	JP 11018	1170.5	10.7	3.4	3.7	139	5.1	125	3.1	3.4	1.0	13.0	7.5	5.13	2.29	
Lao PDR	Vientian	LA 11051	441.8	***	***	***	***	***	***	***	***	***	***	2.3	5.65	2.65
Malaysia	Petaling Jaya	MY 11029	2996.0	18.2	17.9	29.8	7.4	13.1	5.7	1.6	5.1	4.9	0.9	47.3	4.33	2.26
	Tanah Rata	MY 11030	2415.4	4.0	3.9	4.6	2.4	2.4	1.8	1.5	2.3	2.3	<0.4	13.7	4.86	0.76
Mongolia	Ulaanbaatar	MN 11031	83.4	22.1	21.8	15.8	8.0	46.2	5.8	2.8	43.2	43.0	5.9	0.3	6.46	1.68
	Terelj	MN 11032	207.1	13.3	12.9	16.1	9.0	35.6	6.3	4.7	16.2	16.1	5.2	1.6	5.78	1.12
Philippines	Metro Manila	PH 11033	2163.6	20.4	19.4	15.4	24.0	35.4	16.3	3.9	11.1	10.8	4.4	6.6	5.18	1.48
	Los Banos	PH 11034	1743.3	8.4	7.7	6.1	14.3	13.9	12.0	2.1	5.4	5.1	3.6	5.5	5.26	0.80
Republic of Korea	Kanghwa	KR 11035	877.6	44.8	42.9	41.1	55.8	75.6	32.5	11.4	14.0	13.3	5.5	27.2	4.57	3.25
	Cheju (Kosan)	KR 11036	1123.9	23.8	20.3	24.8	79.1	36.0	57.8	8.1	7.7	6.5	7.3	18.2	4.74	2.45
	Imsil	KR 11037	1207.3	16.5	15.4	20.5	26.7	28.2	17.9	5.7	6.8	6.4	2.4	11.8	4.93	1.42
Russia	Mondy	RU 11038	359.8	6.8	6.7	6.8	2.8	11.2	1.9	2.7	5.3	5.3	1.3	4.6	5.34	0.54
	Listvyanka	RU 11039	551.1	19.2	18.9	19.8	4.9	12.2	4.7	2.4	14.1	14.0	3.2	12.1	4.92	1.30
	Irkutsk	RU 11040	553.2	26.6	26.2	17.1	8.5	27.2	6.6	2.7	21.9	21.7	4.8	12.2	4.91	1.80
	Primorskaya	RU 11041	691.5	37.2	35.8	21.4	21.3	30.4	22.5	7.2	21.5	21.0	7.0	14.5	4.84	2.20
Thailand	Bangkok	TH 11042	1211.4	16.3	15.7	15.9	11.3	37.8	10.2	1.6	11.0	10.7	2.1	6.5	5.19	1.25
	Samutprakarn	TH 11043	1260.4	16.5	15.5	9.8	12.8	34.5	16.5	4.9	7.8	7.5	1.9	3.4	5.47	1.01
	Patumthani	TH 11044	976.2	17.5	17.0	24.0	14.3	34.0	8.9	1.2	11.4	11.2	1.6	13.6	4.87	1.47
	Khanchanaburi (Vachiralongkorn Dam)	TH 11045	1391.6	3.4	2.8	4.8	10.0	8.4	9.0	1.1	4.8	4.6	1.6	0.8	6.07	0.41
	Chiang Mai (Mae Hia)	TH 11046	1151.5	6.9	6.7	6.1	3.8	15.7	3.1	1.4	4.8	4.7	1.8	2.5	5.59	0.49
Viet Nam	Hanoi	VN 11047	1574.9	37.0	36.5	25.2	14.7	52.7	8.1	3.0	25.0	24.8	3.8	2.3	5.65	1.85
	Hoa Binh	VN 11048	1830.8	29.4	29.2	19.9	11.8	41.0	3.9	1.7	19.9	19.8	2.5	2.5	5.60	1.48

Data in hatched column: Rejected annual value by the criteria of EANET (%PCL<80% or %TP<80%)

[\*\*\*] Not measured

**Table 3.53 Annual deposition in 2004**

Country	Name of sites	Code	SO <sub>4</sub> <sup>2-</sup>	nss-SO <sub>4</sub> <sup>2-</sup>	NO <sub>3</sub> <sup>-</sup>	Cl <sup>-</sup>	NH <sub>4</sub> <sup>+</sup>	Na <sup>+</sup>	K <sup>+</sup>	Ca <sup>2+</sup>	nss-Ca <sup>2+</sup>	Mg <sup>2+</sup>	H <sup>+</sup>
			mmol m <sup>-2</sup> y <sup>-1</sup>	mmol m <sup>-2</sup> y <sup>-1</sup>	mmol m <sup>-2</sup> y <sup>-1</sup>	mmol m <sup>-2</sup> y <sup>-1</sup>	mmol m <sup>-2</sup> y <sup>-1</sup>	mmol m <sup>-2</sup> y <sup>-1</sup>	mmol m <sup>-2</sup> y <sup>-1</sup>	mmol m <sup>-2</sup> y <sup>-1</sup>	mmol m <sup>-2</sup> y <sup>-1</sup>	mmol m <sup>-2</sup> y <sup>-1</sup>	mmol m <sup>-2</sup> y <sup>-1</sup>
Cambodia	Phnom Penh	KH 11052	***	***	3.22	***	4.51	***	0.68	0.00	***	0.00	2.01
China	Guanyinqiao	CN 11001	229	228	60.9	20.3	189	10.1	15.1	153	153	12.7	36.0
	Jinyunshan	CN 11003	166	165	55.9	19.5	160	18.7	17.8	107	107	5.39	39.3
	Shizhan	CN 11004	104	103	37.1	21.7	87.5	11.5	5.75	88.5	88.3	9.18	0.30
	Weishuiyuan	CN 11005	94.2	93.5	32.4	18.3	70.5	10.9	5.25	88.3	88.1	8.99	0.49
	Jiwozi	CN 11007	56.3	54.7	26.9	15.1	37.8	25.5	8.65	89.7	89.1	16.9	0.79
	Hongwen	CN 11008	73.6	70.3	53.1	64.1	48.8	53.7	7.70	89.1	88.0	12.2	20.6
	Xiaoping	CN 11009	53.3	51.8	38.5	32.5	74.4	25.5	9.96	12.5	12.0	2.81	48.3
	Xiang Zhou	CN 11010	25.0	22.4	29.6	48.8	67.9	96.6	10.3	24.1	22.0	8.51	22.1
Zhuxian Cavern	CN 11011	34.3	30.4	31.9	75.1	75.9	120	28.9	31.5	28.9	10.8	29.6	
Indonesia	Jakarta	ID 11012	71.4	68.2	114	57.4	32.8	54.6	15.2	74.8	73.8	9.25	30.0
	Serpong	ID 11013	41.0	39.3	58.0	34.8	61.9	28.7	8.26	15.4	14.7	5.84	30.5
	Kototabang	ID 11014	11.0	9.66	9.94	24.8	25.9	23.0	13.2	14.7	14.2	3.76	39.0
	Bandung	ID 11015	24.8	24.2	25.2	15.6	32.9	9.66	2.95	16.3	16.1	2.93	8.31
Japan	Rishiri	JP 11016	27.0	13.9	11.0	242	16.2	217	5.68	8.13	3.46	25.0	13.6
	Ochiishi	JP 11050	22.3	8.33	8.78	266	7.64	233	5.23	7.92	2.90	27.3	13.4
	Tappi	JP 11017	38.6	21.0	24.0	341	22.9	292	7.28	11.4	5.19	34.5	37.5
	Sado-seki	JP 11019	27.2	14.7	17.3	236	15.5	208	5.48	7.23	2.90	24.1	30.4
	Happo	JP 11021	28.2	27.1	24.7	27.0	25.6	18.4	1.55	7.29	6.91	3.90	43.0
	Ijira	JP 11022	48.0	43.6	52.6	94.2	50.2	74.0	3.75	7.92	6.39	9.43	75.8
	Oki	JP 11023	41.3	16.8	24.0	453	15.3	416	13.6	16.7	7.76	48.4	22.4
	Banryu	JP 11024	34.4	22.5	27.0	232	19.5	197	5.25	9.20	4.97	23.0	34.7
	Yusuhara	JP 11025	26.7	20.9	20.9	112	19.0	95.8	3.72	7.32	5.25	11.4	42.1
	Hedo	JP 11027	137	43.4	23.8	1750	30.6	1550	43.7	40.3	7.64	162	29.4
Ogasawara	JP 11018	12.5	4.02	4.30	162	5.96	146	3.59	3.93	1.22	15.3	8.75	
Lao PDR	Vientian	LA 11051	***	***	***	***	***	***	***	***	***	***	1.00
Malaysia	Petaling Jaya	MY 11029	54.5	53.5	89.4	22.2	39.4	17.0	4.91	15.1	14.8	2.66	142
	Tanah Rata	MY 11030	9.74	9.48	11.1	5.86	5.77	4.42	3.68	5.60	5.51	0.75	33.1
Mongolia	Ulaanbaatar	MN 11031	1.84	1.81	1.32	0.67	3.86	0.48	0.24	3.60	3.59	0.49	0.03
	Terej	MN 11032	2.75	2.67	3.34	1.85	7.37	1.31	0.97	3.36	3.33	1.07	0.34
Philippines	Metro Manila	PH 11033	44.0	41.9	33.4	52.0	76.6	35.3	8.50	24.1	23.4	9.47	14.4
	Los Banos	PH 11034	14.7	13.4	10.6	24.9	24.3	20.9	3.74	9.41	8.95	6.25	9.5
Republic of Korea	Kanghwa	KR 11035	39.3	37.6	36.1	48.9	66.4	28.5	10.0	12.3	11.7	4.82	23.8
	Cheju (Kosan)	KR 11036	26.8	22.9	27.9	88.9	40.4	64.9	9.11	8.66	7.25	8.17	20.5
	Imsil	KR 11037	19.9	18.6	24.8	32.2	34.0	21.6	6.90	8.16	7.70	2.89	14.2
Russia	Mondy	RU 11038	2.46	2.43	2.44	0.99	4.03	0.69	0.96	1.92	1.90	0.46	1.64
	Listvyanka	RU 11039	10.6	10.4	10.9	2.72	6.74	2.57	1.30	7.80	7.74	1.76	6.67
	Irkutsk	RU 11040	14.7	14.5	9.48	4.71	15.1	3.68	1.50	12.1	12.0	2.64	6.74
	Primorskaya	RU 11041	25.7	24.8	14.8	14.7	21.0	15.6	5.01	14.9	14.5	4.87	10.0
Thailand	Bangkok	TH 11042	19.8	19.1	19.3	13.7	45.8	12.3	1.96	13.3	13.0	2.59	7.86
	Samutprakarn	TH 11043	20.7	19.5	12.3	16.2	43.5	20.8	6.15	9.88	9.43	2.36	4.29
	Patumthani	TH 11044	17.1	16.6	23.4	13.9	33.2	8.72	1.16	11.1	11.0	1.55	13.3
	Khanchanaburi	TH 11045	4.71	3.96	6.65	13.9	11.7	12.5	1.52	6.65	6.38	2.29	1.18
	(Vachiralongkorn Dam)												
	Chiang Mai (Mae Hia)	TH 11046	7.95	7.74	7.04	4.40	18.1	3.52	1.62	5.50	5.42	2.10	2.93
Viet Nam	Hanoi	VN 11047	58.3	57.5	39.7	23.2	83.0	12.7	4.65	39.3	39.1	5.98	3.56
	Hoa Binh	VN 11048	53.9	53.5	36.4	21.6	75.0	7.16	3.06	36.4	36.2	4.62	4.61

Data in hatched column: Rejected annual value by the criteria of EANET (%PCL<80% or %TP<80%)

[\*\*\*] Not measured

**Table 3.54 Data completeness for annual summaries in 2004 (%PCL, %TP)**

Country	Name of sites	Code	Precip.	SO <sub>4</sub> <sup>2-</sup>	nss-SO <sub>4</sub> <sup>2-</sup>	NO <sub>3</sub> <sup>-</sup>	Cl	NH <sub>4</sub> <sup>+</sup>	Na <sup>+</sup>	K <sup>+</sup>	Ca <sup>2+</sup>	nss-Ca <sup>2+</sup>	Mg <sup>2+</sup>	H <sup>+</sup>	pH	EC
			%	%	%	%	%	%	%	%	%	%	%	%	%	%
Cambodia	Phnom Penh	<i>KH 11052</i>	100	0	0	100	0	100	0	100	100	0	100	100	100	100
China	Guanyinqiao	<i>CN 11001</i>	100	98	98	98	98	98	98	98	98	98	98	98	98	98
	Jinyunshan	<i>CN 11003</i>	100	100	100	100	100	100	100	100	100	100	100	100	100	100
	Shizhan	<i>CN 11004</i>	100	100	100	100	100	100	100	100	100	100	100	100	100	100
	Weishuiyuan	<i>CN 11005</i>	100	100	100	100	100	100	100	100	100	100	100	100	100	100
	Jiwozi	<i>CN 11007</i>	100	100	100	100	100	100	100	100	100	100	100	100	100	100
	Hongwen	<i>CN 11008</i>	100	100	100	100	100	100	100	100	100	100	100	100	100	100
	Xiaoping	<i>CN 11009</i>	100	100	100	100	100	100	100	100	100	100	100	100	100	100
	Xiang Zhou	<i>CN 11010</i>	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Zhuxian Cavern	<i>CN 11011</i>	100	100	100	100	100	100	100	100	100	100	100	100	100	100	
Indonesia	Jakarta	<i>ID 11012</i>	100	100	100	100	100	100	100	100	100	100	100	100	100	100
	Serpong	<i>ID 11013</i>	100	100	100	100	100	100	100	100	100	100	100	100	100	100
	Kototabang	<i>ID 11014</i>	100	100	100	100	100	100	100	100	100	100	100	100	100	100
	Bandung	<i>ID 11015</i>	90	100	100	100	100	100	100	100	100	100	100	100	100	100
Japan	Rishiri	<i>JP 11016</i>	100	92	92	92	92	92	92	92	92	92	92	92	92	92
	Ochiishi	<i>JP 11050</i>	100	99	99	99	99	99	99	99	99	99	99	99	98	98
	Tappi	<i>JP 11017</i>	98	85	85	85	85	85	85	85	85	85	85	85	85	85
	Sado-seki	<i>JP 11019</i>	100	72	72	72	72	72	72	72	72	72	72	71	71	71
	Happo	<i>JP 11021</i>	99	56	56	56	56	56	56	56	56	56	56	56	56	56
	Ijira	<i>JP 11022</i>	100	81	81	81	81	81	81	81	81	81	81	81	81	81
	Oki	<i>JP 11023</i>	99	96	96	96	96	96	96	96	96	96	96	96	95	95
	Banryu	<i>JP 11024</i>	100	99	99	99	99	99	99	99	99	99	99	99	99	99
	Yusuhara	<i>JP 11025</i>	99	87	87	87	87	87	87	87	87	87	87	87	87	87
	Hedo	<i>JP 11027</i>	98	48	48	48	48	48	48	48	48	48	48	47	47	47
Ogasawara	<i>JP 11018</i>	99	91	91	91	91	91	91	91	91	91	91	91	90	90	
Lao PDR	Vientian	<i>LA 11051</i>	100	0	0	0	0	0	0	0	0	0	0	51	51	51
Malaysia	Petaling Jaya	<i>MY 11029</i>	100	99	99	99	99	99	99	99	99	99	99	97	97	97
	Tanah Rata	<i>MY 11030</i>	100	95	95	95	95	95	95	95	95	95	95	94	94	94
Mongolia	Ulaanbaatar	<i>MN 11031</i>	100	100	100	100	100	100	100	100	100	100	100	100	100	100
	Terej	<i>MN 11032</i>	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Philippines	Metro Manila	<i>PH 11033</i>	100	100	100	100	100	100	100	100	100	100	100	100	100	100
	Los Banos	<i>PH 11034</i>	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Republic of Korea	Kanghwa	<i>KR 11035</i>	100	100	100	100	100	100	100	100	100	100	100	100	100	100
	Cheju (Kosan)	<i>KR 11036</i>	100	100	100	100	100	100	100	100	100	100	100	100	100	100
	Imsil	<i>KR 11037</i>	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Russia	Mondy	<i>RU 11038</i>	100	100	100	100	100	100	100	100	100	100	100	100	100	100
	Listvyanka	<i>RU 11039</i>	96	100	100	100	100	100	100	100	100	100	100	100	100	100
	Irkutsk	<i>RU 11040</i>	100	100	100	100	100	100	100	100	100	100	100	100	100	100
	Primorskaya	<i>RU 11041</i>	100	99	99	99	99	99	99	99	99	99	99	99	100	100
Thailand	Bangkok	<i>TH 11042</i>	100	96	96	96	96	96	96	96	96	96	96	95	95	95
	Samutprakarn	<i>TH 11043</i>	100	70	70	70	70	70	70	70	70	70	70	70	70	70
	Patumthani	<i>TH 11044</i>	100	91	91	91	91	91	91	91	91	91	91	91	91	91
	Khanchanaburi (Vachiralongkorn Dam)	<i>TH 11045</i>	100	65	65	65	65	65	65	65	65	65	65	65	65	65
	Chiang Mai (Mae Hia)	<i>TH 11046</i>	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Viet Nam	Hanoi	<i>VN 11047</i>	100	100	100	100	100	100	100	100	100	100	100	100	100	100
	Hoa Binh	<i>VN 11048</i>	100	100	100	100	100	100	100	100	100	100	100	100	100	100

Data in hatched column: Below the criteria of EANET (%PCL<80% or %TP<80%)

**Table 3.55 Results of ion balance and conductivity agreement check in 200**

Country	Name of sites	Code	Sample (N)	R <sub>1</sub> (N)	R <sub>1</sub> (AA)	%	R <sub>2</sub> (N)	R <sub>2</sub> (AA)	%	R <sub>1</sub> &R <sub>2</sub> (N)	R <sub>1</sub> &R <sub>2</sub> (AA)	%
Cambodia	Phnom Penh	KH 11052	15	-	-	-	-	-	-	-	-	-
China	Guanyinqiao	CN 11001	128	126	106	84	126	100	79	126	81	64
	Jinyunshan	CN 11003	116	115	90	78	115	109	95	115	85	74
	Shizhan	CN 11004	51	50	35	70	50	43	86	50	34	68
	Weishuiyuan	CN 11005	45	44	27	61	44	40	91	44	26	59
	Jiwozi	CN 11007	34	37	14	38	37	29	78	37	13	35
	Hongwen	CN 11008	54	51	17	33	51	33	65	51	12	24
	Xiaoping	CN 11009	51	50	20	40	50	29	58	50	13	26
	Xiang Zhou	CN 11010	48	47	12	26	47	20	43	47	8	17
	Zhuxian Cavern	CN 11011	57	56	15	27	56	25	45	56	10	18
Indonesia	Jakarta	ID 11012	34	32	6	19	32	13	41	32	0	0
	Serpong	ID 11013	59	59	59	100	59	58	98	59	58	98
	Kototabang	ID 11014	45	44	13	30	44	16	36	44	4	9
	Bandung	ID 11015	63	98	87	89	98	94	96	98	86	88
Japan	Rishiri	JP 11016	164	124	124	100	124	122	98	124	122	98
	Ochiishi	JP 11050	119	96	96	100	96	96	100	96	96	100
	Tappi	JP 11017	196	109	109	100	109	109	100	109	109	100
	Sado-seki	JP 11019	136	87	87	100	87	87	100	87	87	100
	Happo	JP 11021	148	117	115	98	117	117	100	117	115	98
	Ijira	JP 11022	49	42	42	100	42	42	100	42	42	100
	Oki	JP 11023	174	133	128	96	133	130	98	133	127	95
	Banryu	JP 11024	53	49	49	100	49	49	100	49	49	100
	Yusuhara	JP 11025	143	132	119	90	129	127	98	129	115	89
	Hedo	JP 11027	114	84	82	98	84	83	99	84	81	96
Ogasawara	JP 11018	132	109	100	92	109	108	99	109	99	91	
Lao PDR	Vientian	LA 11051	23	-	-	-	-	-	-	-	-	-
Malaysia	Petaling Jaya	MY 11029	50	40	30	75	40	39	98	40	30	75
	Tanah Rata	MY 11030	47	39	20	51	39	32	82	39	16	41
Mongolia	Ulaanbaatar	MN 11031	18	17	0	0	17	17	100	17	0	0
	Terelj	MN 11032	49	48	8	17	48	45	94	48	8	17
Philippines	Metro Manila	PH 11033	30	29	25	86	29	27	93	29	23	79
	Los Banos	PH 11034	30	29	23	79	29	25	86	29	22	76
Republic of Korea	Kanghwa	KR 11035	28	27	27	100	27	27	100	27	27	100
	Cheju (Kosan)	KR 11036	47	46	37	80	46	46	100	46	37	80
	Imsil	KR 11037	31	30	30	100	30	30	100	30	30	100
Russia	Mondy	RU 11038	30	29	29	100	29	29	100	29	29	100
	Listvyanka	RU 11039	57	56	53	95	56	56	100	56	53	95
	Irkutsk	RU 11040	104	103	102	99	103	103	100	103	102	99
	Primorskaya	RU 11041	108	83	80	96	83	82	99	83	80	96
Thailand	Bangkok	TH 11042	75	65	37	57	64	61	95	64	33	52
	Samutprakarn	TH 11043	58	57	20	35	57	38	67	57	11	19
	Patumthani	TH 11044	77	75	29	39	75	70	93	75	29	39
	Khanchanaburi (Vachiralongkorn Dam)	TH 11045	57	54	33	61	54	47	87	54	29	54
	Chiang Mai (Mae Hia)	TH 11046	111	106	27	25	95	79	83	95	25	26
Viet Nam	Hanoi	VN 11047	39	38	38	100	38	38	100	38	38	100
	Hoa Binh	VN 11048	40	37	37	100	37	37	100	37	37	100

Sample(N) : Number of samples

R<sub>1</sub>(N) : Number of samples measured and calculated ion balance (R<sub>1</sub>)

R<sub>1</sub>(AA) : Number of samples within allowable ranges for R<sub>1</sub>

R<sub>2</sub>(N) : Number of samples measured and calculated conductivity agreement (R<sub>2</sub>)

R<sub>2</sub>(AA) : Number of samples within allowable ranges for R<sub>2</sub>

R<sub>1</sub>&R<sub>2</sub>(N) : Number of samples measured and calculated both R<sub>1</sub> and R<sub>2</sub>

R<sub>1</sub>&R<sub>2</sub>(AA) : Number of samples within allowable ranges for both R<sub>1</sub> and R<sub>2</sub>

Guanyinqiao, Jinyunshan, Petaring Jaya, Tanah Rata, Mondy, Listvyanka, Irkutsk, Primorskaya, Bangkok

: R<sub>1</sub> and R<sub>2</sub>, calculated including concentrations of additional measured constituents

Phnom Penh, Vientian : Ions for calculating R<sub>1</sub> and R<sub>2</sub> were not analyzed.

**Table 3.56 Annual precipitation**

			unit: mm y <sup>-1</sup>				
Country	Name of sites	Code	2000	2001	2002	2003	2004
Cambodia	Phnom Penh	<i>KH 11052</i>					418.9
China	Guanyinqiao	<i>CN 11001</i>	1081.1	751.6	1445.3	986.7	1386.7
	Nanshan	<i>CN 11002</i>	1259.4				
	Jinyunshan	<i>CN 11003</i>		710.1	1606.6	1232.5	1517.7
	Shizhan	<i>CN 11004</i>	559.1	363.9	349.0	1273.2	600.9
	Weishuiyuan	<i>CN 11005</i>	447.4	69.3	232.0	1302.1	465.6
	Dabagou	<i>CN 11006</i>	829.3				
	Jiwozi	<i>CN 11007</i>		208.8	141.7	610.8	1019.6
	Hongwen	<i>CN 11008</i>	1517.2	295.5	1567.5	1301.3	1064.9
	Xiaoping	<i>CN 11009</i>	1566.4	2681.5	2170.7	1767.8	1958.4
	Xiang Zhou	<i>CN 11010</i>	2030.5	1989.5	1731.4	1726.0	1339.8
	Zhuxian Cavern	<i>CN 11011</i>	1778.8	2570.8	1581.0	1754.9	1276.8
Indonesia	Jakarta	<i>ID 11012</i>	1577.4	1236.7	1572.3	1617.3	1468.7
	Serpong	<i>ID 11014</i>	***	1606.7	2505.2	2142.8	1462.4
	Kototabang	<i>ID 11013</i>	2339.8	1208.7	1797.6	3126.7	2110.9
	Bandung	<i>ID 11015</i>	893.3	2604.7	2540.7	1606.1	894.5
Japan	Rishiri	<i>JP 11016</i>	769.9	614.9	957.0	708.6	945.4
	Ochiishi	<i>JP 11050</i>				781.8	648.0
	Tappi	<i>JP 11017</i>	1048.8	1081.6	1329.4	1149.6	1473.0
	Sado-seki	<i>JP 11019</i>	1067.7	970.5	1432.9	1126.3	1539.2
	Happo	<i>JP 11021</i>	2187.9	2345.1	2607.3	2461.4	3088.1
	Ijira	<i>JP 11022</i>	2685.2	2236.5	2648.3	2967.0	3424.4
	Oki	<i>JP 11023</i>	1209.1	1245.8	1570.8	1596.9	1408.6
	Banryu	<i>JP 11024</i>	1565.2	1788.0	1303.0	1752.1	1737.6
	Yusuhara	<i>JP 11025</i>	2800.7	2080.1	2345.9	2839.3	3970.3
	Hedo	<i>JP 11027</i>	2906.8	2125.6	2032.4	1392.6	1778.2
Ogasawara	<i>JP 11018</i>	1984.9	1805.7	1330.5	1398.4	1170.5	
Lao PDR	Vientian	<i>LA 11051</i>				88.6	441.8
Malaysia	Petaling Jaya	<i>MY 11029</i>	3417.4	3085.3	2660.4	3040.5	2996.0
	Tanah Rata	<i>MY 11030</i>	3127.4	2626.3	2782.6	3009.5	2415.4
Mongolia	Ulaanbaatar	<i>MN 11031</i>	196.5	165.8	178.5	297.2	83.4
	Terelj	<i>MN 11032</i>	207.6	88.6	246.0	311.7	207.1
Philippines	Metro Manila	<i>PH 11033</i>	4035.6	2291.2	2974.6	2204.8	2163.6
	Los Banos	<i>PH 11034</i>	2635.2	1816.5	1701.6	1608.2	1743.3
Republic of Korea	Kanghwa	<i>KR 11035</i>	1117.6	1139.4	824.1	1573.3	877.6
	Cheju (Kosan)	<i>KR 11036</i>	1058.4	1113.7	1016.8	1291.3	1123.9
	Imsil	<i>KR 11037</i>		1299.1	992.6	1875.5	1207.3
Russia	Mondy	<i>RU 11038</i>	304.7	319.3	203.7	408.5	359.8
	Listvyanka	<i>RU 11039</i>	441.6	493.6	360.3	540.1	551.1
	Irkutsk	<i>RU 11040</i>	534.4	468.4	302.5	456.7	553.2
	Primorskaya	<i>RU 11041</i>			834.7	322.7	691.5
Thailand	Bangkok	<i>TH 11042</i>	1147.9	1173.9	1300.3	1384.7	1211.4
	Samutprakarn	<i>TH 11043</i>	977.7				1260.4
	Patumthani	<i>TH 11044</i>	955.6	1348.5	948.0	1658.0	976.2
	Khanchanaburi (Vachiralongkorn Dam)	<i>TH 11045</i>	881.3	1516.0	2199.7	1626.9	1391.6
	Chiang Mai (Mae Hia)	<i>TH 11046</i>		1083.9	1472.6	808.0	1151.5
Viet Nam	Hanoi	<i>VN 11047</i>	1256.3	2254.7	1416.1	1585.6	1574.9
	Hoa Binh	<i>VN 11048</i>	1893.6	2223.2	1625.9	1691.3	1830.8

[\*\*\*]: No data or not measured

Data in hatched column: Rejected annual value by the criteria of EANET (%PCL<80% or %TP<80%)

Black column: Monitoring was not carried out

**Table 3.57 Volume-weighted annual mean concentrations of SO<sub>4</sub><sup>2-</sup>**

unit: µmol/L

Country	Name of sites	Code	2000	2001	2002	2003	2004
Cambodia	Phnom Penh	<i>KH 11052</i>					***
China	Guanyinqiao	<i>CN 11001</i>	152	205	114	110	165
	Nanshan	<i>CN 11002</i>	130				
	Jinyunshan	<i>CN 11003</i>		124	78	83.2	109
	Shizhan	<i>CN 11004</i>	356	470	850	203	173
	Weishuiyuan	<i>CN 11005</i>	538	1510	1010	143	202
	Dabagou	<i>CN 11006</i>	141				
	Jiwozi	<i>CN 11007</i>		326	305	90.6	55.2
	Hongwen	<i>CN 11008</i>	20.2	56.5	42.8	36.9	69.1
	Xiaoping	<i>CN 11009</i>	14.6	18.3	16.7	23.6	27.2
	Xiang Zhou	<i>CN 11010</i>	22.4	15.7	27.9	20.5	18.7
	Zhuxian Cavern	<i>CN 11011</i>	48.0	19.3	32.0	18.5	26.9
Indonesia	Jakarta	<i>ID 11012</i>	58.7	62.7	38.5	66.7	48.6
	Serpong	<i>ID 11014</i>	***	38.2	25.7	23.1	28.1
	Kototabang	<i>ID 11013</i>	3.7	4.7	7.5	9.2	5.2
	Bandung	<i>ID 11015</i>	67.4	33.7	27.7	20.4	27.7
Japan	Rishiri	<i>JP 11016</i>	39.0	31.0	27.3	23.5	28.6
	Ochiishi	<i>JP 11050</i>				19.1	34.5
	Tappi	<i>JP 11017</i>	21.9	22.9	22.7	21.8	26.2
	Sado-seki	<i>JP 11019</i>	34.4	41.0	28.2	16.5	17.7
	Happo	<i>JP 11021</i>	13.3	11.7	7.6	7.5	9.1
	Ijira	<i>JP 11022</i>	19.9	22.0	19.7	19.1	14.0
	Oki	<i>JP 11023</i>	40.5	33.8	35.3	21.5	29.3
	Banryu	<i>JP 11024</i>	15.6	19.0	19.0	17.4	19.8
	Yusuhara	<i>JP 11025</i>	11.1	9.2	11.2	9.3	6.7
	Hedo	<i>JP 11027</i>	32.2	15.9	36.9	35.2	77.0
Ogasawara	<i>JP 11018</i>	11.4	11.4	18.1	18.0	10.7	
Lao PDR	Vientian	<i>LA 11051</i>				***	***
Malaysia	Petaling Jaya	<i>MY 11029</i>	23.5	22.2	23.7	21.0	18.2
	Tanah Rata	<i>MY 11030</i>	4.1	3.7	4.6	3.8	4.0
Mongolia	Ulaanbaatar	<i>MN 11031</i>	24.3	25.2	24.7	19.5	22.1
	Terej	<i>MN 11032</i>	16.4	9.7	15.1	8.3	13.3
Philippines	Metro Manila	<i>PH 11033</i>	23.4	37.3	26.3	17.1	20.4
	Los Banos	<i>PH 11034</i>	10.5	15.6	16.1	7.1	8.4
Republic of Korea	Kanghwa	<i>KR 11035</i>	31.6	25.0	34.5	26.1	44.8
	Cheju (Kosan)	<i>KR 11036</i>	23.2	20.7	28.0	22.7	23.8
	Imsil	<i>KR 11037</i>		16.4	22.9	16.3	16.5
Russia	Mondy	<i>RU 11038</i>	7.2	11.0	10.8	8.5	6.8
	Listvyanka	<i>RU 11039</i>	15.4	13.4	18.2	19.1	19.2
	Irkutsk	<i>RU 11040</i>	30.1	29.6	34.2	26.3	26.6
	Primorskaya	<i>RU 11041</i>			29.0	43.1	37.2
Thailand	Bangkok	<i>TH 11042</i>	21.6	18.2	18.6	18.5	16.3
	Samutprakarn	<i>TH 11043</i>	25.5				16.5
	Patumthani	<i>TH 11044</i>	19.6	17.2	15.0	12.4	17.5
	Khanchanaburi (Vachiralongkorn Dam)	<i>TH 11045</i>	3.6	5.2	5.6	3.6	3.4
	Chiang Mai (Mae Hia)	<i>TH 11046</i>		2.8	4.5	4.1	6.9
Viet Nam	Hanoi	<i>VN 11047</i>	30.1	14.0	33.7	30.1	37.0
	Hoa Binh	<i>VN 11048</i>	16.3	14.7	18.8	22.5	29.4

[\*\*\*]: No data or not measured

Data in hatched column: Rejected annual value by the criteria of EANET  
(%PCL<80% or %TP<80%)

Black column: Monitoring was not carried out

**Table 3.58 Volume-weighted annual mean concentrations of nss-SO<sub>4</sub><sup>2-</sup>**

unit: µmol/L

Country	Name of sites	Code	2000	2001	2002	2003	2004
Cambodia	Phnom Penh	<i>KH 11052</i>					***
China	Guanyinqiao	<i>CN 11001</i>	151	205	114	109	165
	Nanshan	<i>CN 11002</i>	130				
	Jinyunshan	<i>CN 11003</i>		123	78	82.9	109
	Shizhan	<i>CN 11004</i>	353	460	835	199	171
	Weishuiyuan	<i>CN 11005</i>	534	1500	994	136	201
	Dabagou	<i>CN 11006</i>	140				
	Jiwozi	<i>CN 11007</i>		316	295	84.5	53.7
	Hongwen	<i>CN 11008</i>	18.8	55.9	39.4	34.8	66.0
	Xiaoping	<i>CN 11009</i>	14.1	17.6	15.7	22.1	26.4
	Xiang Zhou	<i>CN 11010</i>	19.9	14.6	25.4	18.3	16.7
	Zhuxian Cavern	<i>CN 11011</i>	46.3	18.0	29.3	16.4	23.8
Indonesia	Jakarta	<i>ID 11012</i>	55.6	60.3	36.4	65.1	46.4
	Serpong	<i>ID 11014</i>	***	36.8	24.2	22.4	26.9
	Kototabang	<i>ID 11013</i>	***	4.4	7.1	8.6	4.6
	Bandung	<i>ID 11015</i>	***	32.5	27.2	20.0	27.0
Japan	Rishiri	<i>JP 11016</i>	19.4	18.2	15.6	12.9	14.7
	Ochiishi	<i>JP 11050</i>				7.5	12.9
	Tappi	<i>JP 11017</i>	12.9	14.8	12.9	13.4	14.2
	Sado-seki	<i>JP 11019</i>	18.9	19.5	13.1	10.9	9.5
	Happo	<i>JP 11021</i>	12.9	11.3	7.4	7.2	8.8
	Ijira	<i>JP 11022</i>	18.7	20.2	18.0	18.3	12.7
	Oki	<i>JP 11023</i>	16.9	14.8	13.5	10.3	11.9
	Banryu	<i>JP 11024</i>	13.9	14.3	14.2	12.5	13.0
	Yusuhara	<i>JP 11025</i>	10.1	8.4	9.4	8.5	5.3
	Hedo	<i>JP 11027</i>	5.9	6.5	7.4	11.3	24.4
	Ogasawara	<i>JP 11018</i>	3.1	5.1	3.9	4.1	3.4
Lao PDR	Vientian	<i>LA 11051</i>				***	***
Malaysia	Petaling Jaya	<i>MY 11029</i>	23.2	22.0	23.4	20.7	17.9
	Tanah Rata	<i>MY 11030</i>	4.0	3.6	4.5	3.7	3.9
Mongolia	Ulaanbaatar	<i>MN 11031</i>	23.9	24.6	24.3	19.3	21.8
	Terej	<i>MN 11032</i>	16.0	8.8	14.3	8.0	12.9
Philippines	Metro Manila	<i>PH 11033</i>	21.6	22.7	25.4	16.0	19.4
	Los Banos	<i>PH 11034</i>	8.5	13.2	14.8	6.2	7.7
Republic of Korea	Kanghwa	<i>KR 11035</i>	28.2	22.5	31.5	24.6	42.9
	Cheju (Kosan)	<i>KR 11036</i>	14.0	16.2	24.5	19.9	20.3
	Imsil	<i>KR 11037</i>		15.5	20.5	14.9	15.4
Russia	Mondy	<i>RU 11038</i>	7.1	10.8	10.7	8.4	6.7
	Listvyanka	<i>RU 11039</i>	15.1	13.2	18.0	18.8	18.9
	Irkutsk	<i>RU 11040</i>	29.6	29.1	33.6	25.9	26.2
	Primorskaya	<i>RU 11041</i>			27.6	41.1	35.8
Thailand	Bangkok	<i>TH 11042</i>	21.2	17.7	17.6	18.0	15.7
	Samutprakarn	<i>TH 11043</i>	24.9				15.5
	Patumthani	<i>TH 11044</i>	18.9	16.7	14.4	12.1	17.0
	Khanchanaburi	<i>TH 11045</i>	3.1	4.5	5.1	3.0	2.8
	(Vachiralongkorn Dam) Chiang Mai (Mae Hia)	<i>TH 11046</i>		2.6	3.9	4.0	6.7
Viet Nam	Hanoi	<i>VN 11047</i>	29.0	13.3	33.4	29.6	36.5
	Hoa Binh	<i>VN 11048</i>	15.5	14.1	18.6	22.3	29.2

[\*\*\*]: No data or not measured

Data in hatched column: Rejected annual value by the criteria of EANET  
(%PCL<80% or %TP<80%)

Black column: Monitoring was not carried out

**Table 3.59 Volume-weighted annual mean concentrations of NO<sub>3</sub><sup>-</sup>**

unit: µmol/L

Country	Name of sites	Code	2000	2001	2002	2003	2004
Cambodia	Phnom Penh	<i>KH 11052</i>					7.7
China	Guanyinqiao	<i>CN 11001</i>	42.1	52.8	34.4	38.9	43.9
	Nanshan	<i>CN 11002</i>	41.6				
	Jinyunshan	<i>CN 11003</i>		40.3	29.4	34.4	36.8
	Shizhan	<i>CN 11004</i>	87.0	153	150	68.0	61.7
	Weishuiyuan	<i>CN 11005</i>	95.8	210	168	54.1	69.6
	Dabagou	<i>CN 11006</i>	29.1				
	Jiwozi	<i>CN 11007</i>		140	89.8	42.8	26.4
	Hongwen	<i>CN 11008</i>	18.7	37.9	30.7	33.6	49.8
	Xiaoping	<i>CN 11009</i>	14.6	18.7	14.8	22.6	19.6
	Xiang Zhou	<i>CN 11010</i>	15.6	14.1	17.8	20.9	22.1
	Zhuxian Cavern	<i>CN 11011</i>	33.5	22.2	20.8	11.5	25.0
Indonesia	Jakarta	<i>ID 11012</i>	17.6	53.7	28.2	58.4	77.6
	Serpong	<i>ID 11014</i>	***	50.7	32.6	30.8	39.7
	Kototabang	<i>ID 11013</i>	6.2	2.7	5.6	49.3	4.7
	Bandung	<i>ID 11015</i>	34.4	26.9	26.3	20.4	28.2
Japan	Rishiri	<i>JP 11016</i>	18.1	18.0	13.5	12.2	11.6
	Ochiishi	<i>JP 11050</i>				8.0	13.5
	Tappi	<i>JP 11017</i>	12.9	15.3	16.9	16.9	16.3
	Sado-seki	<i>JP 11019</i>	18.3	22.2	15.0	13.9	11.2
	Happo	<i>JP 11021</i>	11.1	8.9	7.0	6.6	8.0
	Ijira	<i>JP 11022</i>	24.1	21.7	21.8	21.7	15.4
	Oki	<i>JP 11023</i>	18.6	15.7	15.1	12.9	17.0
	Banryu	<i>JP 11024</i>	13.9	17.4	19.1	15.9	15.6
	Yusuhara	<i>JP 11025</i>	7.0	6.8	8.4	6.9	5.3
	Hedo	<i>JP 11027</i>	5.7	6.6	9.5	9.5	13.4
	Ogasawara	<i>JP 11018</i>	2.4	3.7	2.7	4.7	3.7
Lao PDR	Vientian	<i>LA 11051</i>				***	***
Malaysia	Petaling Jaya	<i>MY 11029</i>	27.2	23.7	36.8	32.9	29.8
	Tanah Rata	<i>MY 11030</i>	3.3	3.4	6.0	4.7	4.6
Mongolia	Ulaanbaatar	<i>MN 11031</i>	19.9	20.7	23.7	15.5	15.8
	Terej	<i>MN 11032</i>	17.6	9.2	18.1	12.4	16.1
Philippines	Metro Manila	<i>PH 11033</i>	12.1	18.5	17.6	13.1	15.4
	Los Banos	<i>PH 11034</i>	5.4	13.9	8.2	4.9	6.1
Republic of Korea	Kanghwa	<i>KR 11035</i>	42.4	28.6	32.7	27.3	41.1
	Cheju (Kosan)	<i>KR 11036</i>	15.3	18.4	24.0	23.0	24.8
	Imsil	<i>KR 11037</i>		15.6	32.0	16.9	20.5
Russia	Mondy	<i>RU 11038</i>	10.0	10.6	13.5	6.8	6.8
	Listvyanka	<i>RU 11039</i>	18.7	14.7	25.0	29.8	19.8
	Irkutsk	<i>RU 11040</i>	21.0	18.4	21.8	17.8	17.1
	Primorskaya	<i>RU 11041</i>			10.2	15.4	21.4
Thailand	Bangkok	<i>TH 11042</i>	21.6	17.9	24.6	23.1	15.9
	Samutprakarn	<i>TH 11043</i>	15.4				9.8
	Patumthani	<i>TH 11044</i>	18.6	19.6	18.5	17.2	24.0
	Khanchanaburi (Vachiralongkorn Dam)	<i>TH 11045</i>	5.7	6.8	6.1	4.9	4.8
	Chiang Mai (Mae Hia)	<i>TH 11046</i>		4.1	6.6	6.5	6.1
Viet Nam	Hanoi	<i>VN 11047</i>	16.1	5.1	15.1	24.8	25.2
	Hoa Binh	<i>VN 11048</i>	9.7	8.8	20.2	13.4	19.9

[\*\*\*]: No data or not measured

Data in hatched column: Rejected annual value by the criteria of EANET  
(%PCL<80% or %TP<80%)

Black column: Monitoring was not carried out

**Table 3.60 Volume-weighted annual mean concentrations of CI**

unit:  $\mu\text{mol/L}$

Country	Name of sites	Code	2000	2001	2002	2003	2004
Cambodia	Phnom Penh	<i>KH 11052</i>					***
China	Guanyinqiao	<i>CN 11001</i>	24.0	29.8	15.6	16.2	14.7
	Nanshan	<i>CN 11002</i>	15.6				
	Jinyunshan	<i>CN 11003</i>		56.8	12.9	10.3	12.8
	Shizhan	<i>CN 11004</i>	49.0	81.3	349	83.3	36.1
	Weishuiyuan	<i>CN 11005</i>	91.6	278	285	99.4	39.4
	Dabagou	<i>CN 11006</i>	32.3				
	Jiwozi	<i>CN 11007</i>		98.9	185	70.1	14.8
	Hongwen	<i>CN 11008</i>	32.0	35.8	42.9	51.3	60.2
	Xiaoping	<i>CN 11009</i>	20.7	28.8	9.1	23.5	16.6
	Xiang Zhou	<i>CN 11010</i>	49.8	37.8	68.9	47.4	36.4
	Zhuxian Cavern	<i>CN 11011</i>	39.4	27.7	59.5	40.2	58.8
Indonesia	Jakarta	<i>ID 11012</i>	21.5	38.9	28.1	52.2	39.1
	Serpong	<i>ID 11014</i>	***	32.3	23.0	27.2	23.8
	Kototabang	<i>ID 11013</i>	6.8	6.6	16.8	27.8	11.8
	Bandung	<i>ID 11015</i>	105	25.0	20.3	13.0	17.4
Japan	Rishiri	<i>JP 11016</i>	372	235	217	201	256
	Ochiishi	<i>JP 11050</i>				227	410
	Tappi	<i>JP 11017</i>	178	156	191	154	231
	Sado-seki	<i>JP 11019</i>	274	378	307	107	154
	Happo	<i>JP 11021</i>	10.7	8.8	5.0	7.3	8.7
	Ijira	<i>JP 11022</i>	23.0	32.7	33.3	19.1	27.5
	Oki	<i>JP 11023</i>	449	359	419	201	321
	Banryu	<i>JP 11024</i>	31.0	86.5	88.9	92.5	133
	Yusuhara	<i>JP 11025</i>	18.7	12.3	31.8	16.0	28.1
	Hedo	<i>JP 11027</i>	515	175	593	451	982
Ogasawara	<i>JP 11018</i>	164	123	278	286	139	
Lao PDR	Vientian	<i>LA 11051</i>				***	***
Malaysia	Petaling Jaya	<i>MY 11029</i>	8.5	7.5	7.3	9.2	7.4
	Tanah Rata	<i>MY 11030</i>	6.8	3.0	2.3	2.4	2.4
Mongolia	Ulaanbaatar	<i>MN 11031</i>	9.0	9.7	7.7	7.6	8.0
	Terelj	<i>MN 11032</i>	9.0	8.7	11.4	6.6	9.0
Philippines	Metro Manila	<i>PH 11033</i>	25.6	115	18.8	24.3	24.0
	Los Banos	<i>PH 11034</i>	33.0	34.5	24.6	16.2	14.3
Republic of Korea	Kanghwa	<i>KR 11035</i>	54.9	42.6	43.0	61.3	55.8
	Cheju (Kosan)	<i>KR 11036</i>	210	112	83.8	68.5	79.1
	Imsil	<i>KR 11037</i>		28.7	36.9	38.1	26.7
Russia	Mondy	<i>RU 11038</i>	2.6	1.4	8.9	3.1	2.8
	Listvyanka	<i>RU 11039</i>	5.0	2.2	6.8	4.1	4.9
	Irkutsk	<i>RU 11040</i>	11.6	12.2	18.0	17.7	8.5
	Primorskaya	<i>RU 11041</i>			33.9	35.6	21.3
Thailand	Bangkok	<i>TH 11042</i>	12.6	9.4	13.9	8.7	11.3
	Samutprakarn	<i>TH 11043</i>	12.9				12.8
	Patumthani	<i>TH 11044</i>	10.4	7.8	11.6	6.4	14.3
	Khanchanaburi (Vachiralongkorn Dam)	<i>TH 11045</i>	17.6	10.0	14.1	8.8	10.0
	Chiang Mai (Mae Hia)	<i>TH 11046</i>		4.5	10.1	4.7	3.8
Viet Nam	Hanoi	<i>VN 11047</i>	24.3	27.1	9.5	21.3	14.7
	Hoa Binh	<i>VN 11048</i>	20.3	22.1	7.0	6.9	11.8

[\*\*\*]: No data or not measured

Data in hatched column: Rejected annual value by the criteria of EANET  
(%PCL<80% or %TP<80%)

Black column: Monitoring was not carried out

**Table 3.61 Volume-weighted annual mean concentrations of NH<sub>4</sub><sup>+</sup>**

unit: µmol/L

Country	Name of sites	Code	2000	2001	2002	2003	2004
Cambodia	Phnom Penh	<i>KH 11052</i>					10.8
China	Guanyinqiao	<i>CN 11001</i>	161	211	120	132	137
	Nanshan	<i>CN 11002</i>	105				
	Jinyunshan	<i>CN 11003</i>		111	83.5	85.6	105
	Shizhan	<i>CN 11004</i>	421	255	203	144	146
	Weishuiyuan	<i>CN 11005</i>	426	354	319	144	151
	Dabagou	<i>CN 11006</i>	199				
	Jiwozi	<i>CN 11007</i>		171	71.2	82.7	37.1
	Hongwen	<i>CN 11008</i>	31.6	64.9	44.2	29.4	45.8
	Xiaoping	<i>CN 11009</i>	19.8	33.2	31.1	38.2	38.0
	Xiang Zhou	<i>CN 11010</i>	20.5	25.0	95.8	34.0	50.7
	Zhuxian Cavern	<i>CN 11011</i>	51.0	30.3	48.4	29.9	59.5
Indonesia	Jakarta	<i>ID 11012</i>	77.3	66.2	31.7	20.8	22.4
	Serpong	<i>ID 11014</i>	***	67.6	46.0	45.0	42.3
	Kototabang	<i>ID 11013</i>	1.1	2.4	5.1	1.8	12.3
	Bandung	<i>ID 11015</i>	32.8	37.9	29.9	32.7	36.8
Japan	Rishiri	<i>JP 11016</i>	34.0	26.0	20.1	18.3	17.1
	Ochiishi	<i>JP 11050</i>				7.6	11.8
	Tappi	<i>JP 11017</i>	9.6	12.7	14.7	16.2	15.6
	Sado-seki	<i>JP 11019</i>	16.9	19.7	14.5	15.6	10.1
	Happo	<i>JP 11021</i>	14.2	10.8	7.7	6.4	8.3
	Ijira	<i>JP 11022</i>	23.8	17.6	22.8	18.1	14.7
	Oki	<i>JP 11023</i>	19.4	14.7	12.4	8.8	10.9
	Banryu	<i>JP 11024</i>	11.6	13.8	17.9	12.5	11.2
	Yusuhara	<i>JP 11025</i>	5.1	5.2	7.6	6.0	4.8
	Hedo	<i>JP 11027</i>	7.2	4.5	18.5	10.9	17.2
Ogasawara	<i>JP 11018</i>	2.3	4.8	5.4	3.6	5.1	
Lao PDR	Vientian	<i>LA 11051</i>				***	***
Malaysia	Petaling Jaya	<i>MY 11029</i>	43.7	58.1	16.2	12.2	13.1
	Tanah Rata	<i>MY 11030</i>	41.1	35.4	4.0	2.3	2.4
Mongolia	Ulaanbaatar	<i>MN 11031</i>	52.0	49.9	72.8	47.5	46.2
	Terelj	<i>MN 11032</i>	44.3	30.5	65.7	31.6	35.6
Philippines	Metro Manila	<i>PH 11033</i>	35.6	77.1	46.2	23.7	35.4
	Los Banos	<i>PH 11034</i>	13.6	22.4	34.5	14.5	13.9
Republic of Korea	Kanghwa	<i>KR 11035</i>	37.6	37.5	40.1	57.6	75.6
	Cheju (Kosan)	<i>KR 11036</i>	20.2	32.3	43.3	41.9	36.0
	Imsil	<i>KR 11037</i>		42.3	42.2	32.5	28.2
Russia	Mondy	<i>RU 11038</i>	11.4	22.2	33.8	14.7	11.2
	Listvyanka	<i>RU 11039</i>	16.5	10.8	26.8	20.8	12.2
	Irkutsk	<i>RU 11040</i>	32.1	25.1	43.0	42.1	27.2
	Primorskaya	<i>RU 11041</i>			35.9	39.1	30.4
Thailand	Bangkok	<i>TH 11042</i>	41.3	36.2	46.8	37.5	37.8
	Samutprakarn	<i>TH 11043</i>	31.8				34.5
	Patumthani	<i>TH 11044</i>	38.3	35.5	34.2	29.1	34.0
	Khanchanaburi (Vachiralongkorn Dam)	<i>TH 11045</i>	6.8	11.0	10.9	12.5	8.4
	Chiang Mai (Mae Hia)	<i>TH 11046</i>		15.8	18.5	15.8	15.7
Viet Nam	Hanoi	<i>VN 11047</i>	27.5	20.3	55.5	55.1	52.7
	Hoa Binh	<i>VN 11048</i>	8.0	12.5	28.2	28.7	41.0

[\*\*\*]: No data or not measured

Data in hatched column: Rejected annual value by the criteria of EANET  
(%PCL<80% or %TP<80%)

Black column: Monitoring was not carried out

**Table 3.62 Volume-weighted annual mean concentrations of Na<sup>+</sup>**

unit: µmol/L

Country	Name of sites	Code	2000	2001	2002	2003	2004
Cambodia	Phnom Penh	KH 11052					***
China	Guanyinqiao	CN 11001	11.8	10.8	5.5	4.9	7.3
	Nanshan	CN 11002	7.7				
	Jinyunshan	CN 11003		10.2	5.9	5.0	12.3
	Shizhan	CN 11004	44.1	164	246	69.2	19.1
	Weishuiyuan	CN 11005	68.9	219	207	113	23.3
	Dabagou	CN 11006	23.8				
	Jiwozi	CN 11007		158	171	102	25.1
	Hongwen	CN 11008	23.8	10.8	55.6	34.8	50.4
	Xiaoping	CN 11009	8.7	11.8	16.4	24.7	13.0
	Xiang Zhou	CN 11010	42.1	24.6	41.5	39.1	72.1
	Zhuxian Cavern	CN 11011	31.2	27.5	45.2	36.0	94.4
Indonesia	Jakarta	ID 11012	52.4	39.4	35.3	27.1	37.2
	Serpong	ID 11014	***	23.8	25.2	11.3	19.6
	Kototabang	ID 11013	***	4.5	6.3	9.7	10.9
	Bandung	ID 11015	***	20.2	8.6	7.1	10.8
Japan	Rishiri	JP 11016	325	212	197	176	229
	Ochiishi	JP 11050				198	360
	Tappi	JP 11017	149	134	165	141	199
	Sado-seki	JP 11019	258	355	268	93.8	135
	Happo	JP 11021	7.8	6.2	3.4	4.8	5.9
	Ijira	JP 11022	19.9	29.7	28.5	13.3	21.6
	Oki	JP 11023	396	316	363	185	295
	Banryu	JP 11024	28.9	78.2	79.4	80.9	113
	Yusuhara	JP 11025	15.2	11.8	28.9	14.4	24.1
	Hedo	JP 11027	454	160	515	430	873
Ogasawara	JP 11018	139	104	236	251	125	
Lao PDR	Vientian	LA 11051				***	***
Malaysia	Petaling Jaya	MY 11029	5.0	3.7	5.1	5.6	5.7
	Tanah Rata	MY 11030	1.9	1.9	1.6	1.9	1.8
Mongolia	Ulaanbaatar	MN 11031	7.9	9.1	6.3	3.8	5.8
	Terelj	MN 11032	6.5	15.9	16.9	4.5	6.3
Philippines	Metro Manila	PH 11033	30.6	205	14.6	18.4	16.3
	Los Banos	PH 11034	34.8	37.2	21.1	15.3	12.0
Republic of Korea	Kanghwa	KR 11035	56.3	41.7	49.2	25.4	32.5
	Cheju (Kosan)	KR 11036	152	74.7	58.3	46.7	57.8
	Imsil	KR 11037		15.4	38.6	22.8	17.9
Russia	Mondy	RU 11038	1.8	2.3	1.9	2.3	1.9
	Listvyanka	RU 11039	4.6	3.4	3.8	5.1	4.7
	Irkutsk	RU 11040	8.8	8.3	9.2	6.6	6.6
	Primorskaya	RU 11041			23.1	33.7	22.5
Thailand	Bangkok	TH 11042	6.9	8.3	16.1	7.6	10.2
	Samutprakarn	TH 11043	10.1				16.5
	Patumthani	TH 11044	10.9	8.1	9.6	4.7	8.9
	Khanchanaburi	TH 11045	9.7	11.3	8.3	10.3	9.0
	(Vachiralongkorn Dam)						
Chiang Mai (Mae Hia)	TH 11046		3.9	9.7	3.2	3.1	
Viet Nam	Hanoi	VN 11047	18.1	11.5	5.9	9.0	8.1
	Hoa Binh	VN 11048	12.7	9.8	2.1	2.4	3.9

[\*\*\*]: No data or not measured

Data in hatched column: Rejected annual value by the criteria of EANET (%PCL<80% or %TP<80%)

Black column: Monitoring was not carried out

**Table 3.63 Volume-weighted annual mean concentrations of K<sup>+</sup>**

unit: µmol/L

Country	Name of sites	Code	2000	2001	2002	2003	2004
Cambodia	Phnom Penh	<i>KH 11052</i>					1.6
China	Guanyinqiao	<i>CN 11001</i>	14.2	18.7	10.6	11.0	10.9
	Nanshan	<i>CN 11002</i>	16.3				
	Jinyunshan	<i>CN 11003</i>		44.4	10.3	8.6	11.7
	Shizhan	<i>CN 11004</i>	26.5	42.2	40.5	18.7	9.6
	Weishuiyuan	<i>CN 11005</i>	34.7	74.9	76.6	20.3	11.3
	Dabagou	<i>CN 11006</i>	17.9				
	Jiwozi	<i>CN 11007</i>		43.6	42.2	21.3	8.5
	Hongwen	<i>CN 11008</i>	5.0	10.4	4.3	4.3	7.2
	Xiaoping	<i>CN 11009</i>	2.8	4.2	3.8	4.7	5.1
	Xiang Zhou	<i>CN 11010</i>	6.6	4.0	17.6	5.7	7.7
	Zhuxian Cavern	<i>CN 11011</i>	6.2	5.9	13.2	6.6	22.7
Indonesia	Jakarta	<i>ID 11012</i>	***	24.3	11.3	9.3	10.3
	Serpong	<i>ID 11014</i>	***	7.0	3.9	8.0	5.6
	Kototabang	<i>ID 11013</i>	***	1.3	5.1	20.0	6.3
	Bandung	<i>ID 11015</i>	***	12.6	2.0	4.1	3.3
Japan	Rishiri	<i>JP 11016</i>	9.9	6.0	5.1	4.9	6.0
	Ochiishi	<i>JP 11050</i>				4.6	8.1
	Tappi	<i>JP 11017</i>	3.6	3.3	4.1	3.4	4.9
	Sado-seki	<i>JP 11019</i>	6.4	8.2	6.5	2.5	3.6
	Happo	<i>JP 11021</i>	<1.0	<1.0	<1.0	<1.0	<1.0
	Ijira	<i>JP 11022</i>	2.9	4.1	2.1	1.2	1.1
	Oki	<i>JP 11023</i>	10.5	8.8	9.5	5.4	9.6
	Banryu	<i>JP 11024</i>	1.4	2.7	2.9	2.5	3.0
	Yusuhara	<i>JP 11025</i>	<1.0	<1.0	1.0	<1.0	<1.0
	Hedo	<i>JP 11027</i>	9.1	3.6	12.0	10.1	24.6
	Ogasawara	<i>JP 11018</i>	3.6	4.1	6.2	5.6	3.1
Lao PDR	Vientian	<i>LA 11051</i>				***	***
Malaysia	Petaling Jaya	<i>MY 11029</i>	1.8	1.4	1.3	3.0	1.6
	Tanah Rata	<i>MY 11030</i>	1.1	<1.0	<1.0	<1.0	1.5
Mongolia	Ulaanbaatar	<i>MN 11031</i>	3.9	4.6	3.8	3.4	2.8
	Terelj	<i>MN 11032</i>	4.5	3.8	10.2	4.1	4.7
Philippines	Metro Manila	<i>PH 11033</i>	15.5	23.2	9.9	2.5	3.9
	Los Banos	<i>PH 11034</i>	1.7	9.5	6.4	1.8	2.1
Republic of Korea	Kanghwa	<i>KR 11035</i>	5.6	4.7	8.8	9.4	11.4
	Cheju (Kosan)	<i>KR 11036</i>	6.3	9.4	6.4	8.2	8.1
	Imsil	<i>KR 11037</i>		14.8	6.5	11.2	5.7
Russia	Mondy	<i>RU 11038</i>	1.2	2.1	2.3	1.6	2.7
	Listvyanka	<i>RU 11039</i>	4.7	1.7	2.2	2.6	2.4
	Irkutsk	<i>RU 11040</i>	4.4	7.4	2.3	2.6	2.7
	Primorskaya	<i>RU 11041</i>			5.3	10.1	7.2
Thailand	Bangkok	<i>TH 11042</i>	3.2	4.1	3.4	2.6	1.6
	Samutprakarn	<i>TH 11043</i>	5.3				4.9
	Patumthani	<i>TH 11044</i>	2.3	1.7	1.5	1.2	1.2
	Khanchanaburi (Vachiralongkorn Dam)	<i>TH 11045</i>	8.9	5.0	2.4	2.0	1.1
	Chiang Mai (Mae Hia)	<i>TH 11046</i>		2.9	4.4	4.0	1.4
Viet Nam	Hanoi	<i>VN 11047</i>	4.1	3.8	2.1	2.6	3.0
	Hoa Binh	<i>VN 11048</i>	3.6	2.3	1.5	1.5	1.7

[\*\*\*]: No data or not measured

Data in hatched column: Rejected annual value by the criteria of EANET  
(%PCL<80% or %TP<80%)

Black column: Monitoring was not carried out

**Table 3.64 Volume-weighted annual mean concentrations of Ca<sup>2+</sup>**

unit: µmol/L

Country	Name of sites	Code	2000	2001	2002	2003	2004
Cambodia	Phnom Penh	<i>KH 11052</i>					<0.2
China	Guanyinqiao	<i>CN 11001</i>	63.0	137	65.4	65.4	110
	Nanshan	<i>CN 11002</i>	55.2				
	Jinyunshan	<i>CN 11003</i>		44.9	29.7	30.7	70.5
	Shizhan	<i>CN 11004</i>	229	675	479	258	147
	Weishuiyuan	<i>CN 11005</i>	305	1160	617	241	190
	Dabagou	<i>CN 11006</i>	124				
	Jiwozi	<i>CN 11007</i>		429	276	230	88.0
	Hongwen	<i>CN 11008</i>	6.7	36.3	49.1	30.7	83.7
	Xiaoping	<i>CN 11009</i>	0.8	5.1	10.6	17.3	6.4
	Xiang Zhou	<i>CN 11010</i>	21.2	8.0	15.5	22.8	18.0
	Zhuxian Cavern	<i>CN 11011</i>	25.0	14.3	20.7	20.2	24.7
Indonesia	Jakarta	<i>ID 11012</i>	87.6	64.4	42.9	101	50.9
	Serpong	<i>ID 11014</i>	***	13.6	9.9	6.6	10.5
	Kototabang	<i>ID 11013</i>	4.0	1.4	4.9	5.5	7.0
	Bandung	<i>ID 11015</i>	***	24.2	17.1	10.9	18.3
Japan	Rishiri	<i>JP 11016</i>	13.7	10.1	10.2	7.7	8.6
	Ochiishi	<i>JP 11050</i>				5.7	12.2
	Tappi	<i>JP 11017</i>	6.4	5.8	9.0	7.0	7.8
	Sado-seki	<i>JP 11019</i>	11.7	15.8	9.1	5.1	4.7
	Happo	<i>JP 11021</i>	3.9	4.3	2.0	1.9	2.4
	Ijira	<i>JP 11022</i>	6.8	5.6	4.2	2.9	2.3
	Oki	<i>JP 11023</i>	16.0	12.9	11.5	6.9	11.9
	Banryu	<i>JP 11024</i>	4.2	6.0	5.4	3.4	5.3
	Yusuhara	<i>JP 11025</i>	2.7	3.4	1.8	1.4	1.8
	Hedo	<i>JP 11027</i>	10.1	4.9	14.0	10.9	22.7
	Ogasawara	<i>JP 11018</i>	5.1	5.4	8.6	8.0	3.4
Lao PDR	Vientian	<i>LA 11051</i>				***	***
Malaysia	Petaling Jaya	<i>MY 11029</i>	6.8	6.3	7.4	7.8	5.1
	Tanah Rata	<i>MY 11030</i>	2.3	3.1	3.1	3.3	2.3
Mongolia	Ulaanbaatar	<i>MN 11031</i>	37.7	47.4	49.9	26.5	43.2
	Terej	<i>MN 11032</i>	15.2	15.0	27.3	10.7	16.2
Philippines	Metro Manila	<i>PH 11033</i>	14.5	71.6	8.7	8.8	11.1
	Los Banos	<i>PH 11034</i>	7.0	65.3	7.2	7.8	5.4
Republic of Korea	Kanghwa	<i>KR 11035</i>	26.5	14.0	11.1	11.3	14.0
	Cheju (Kosan)	<i>KR 11036</i>	13.8	5.9	9.4	8.1	7.7
	Imsil	<i>KR 11037</i>		5.8	9.8	5.4	6.8
Russia	Mondy	<i>RU 11038</i>	5.8	7.0	8.5	3.8	5.3
	Listvyanka	<i>RU 11039</i>	12.8	7.3	11.4	14.3	14.1
	Irkutsk	<i>RU 11040</i>	28.0	34.8	31.5	23.9	21.9
	Primorskaya	<i>RU 11041</i>			18.1	25.3	21.5
Thailand	Bangkok	<i>TH 11042</i>	11.4	12.0	15.7	11.9	11.0
	Samutprakarn	<i>TH 11043</i>	11.1				7.8
	Patumthani	<i>TH 11044</i>	13.2	13.0	17.4	6.3	11.4
	Khanchanaburi (Vachiralongkorn Dam)	<i>TH 11045</i>	4.8	9.0	4.9	8.4	4.8
	Chiang Mai (Mae Hia)	<i>TH 11046</i>		6.9	18.0	5.7	4.8
Viet Nam	Hanoi	<i>VN 11047</i>	20.9	10.7	16.8	17.8	25.0
	Hoa Binh	<i>VN 11048</i>	13.1	10.4	12.6	12.0	19.9

[\*\*\*]: No data or not measured

Data in hatched column: Rejected annual value by the criteria of EANET  
(%PCL<80% or %TP<80%)

Black column: Monitoring was not carried out

**Table 3.65 Volume-weighted annual mean concentrations of nss-Ca<sup>2+</sup>**

unit: µmol/L

Country	Name of sites	Code	2000	2001	2002	2003	2004
Cambodia	Phnom Penh	<i>KH 11052</i>					***
China	Guanyinqiao	<i>CN 11001</i>	62.8	137	65.3	65.3	110
	Nanshan	<i>CN 11002</i>	55.0				
	Jinyunshan	<i>CN 11003</i>		44.7	29.6	30.6	70.2
	Shizhan	<i>CN 11004</i>	228	672	474	257	147
	Weishuiyuan	<i>CN 11005</i>	303	1150	612	238	189
	Dabagou	<i>CN 11006</i>	123				
	Jiwozi	<i>CN 11007</i>		425	273	227	87.4
	Hongwen	<i>CN 11008</i>	6.3	36.1	47.9	30.0	82.6
	Xiaoping	<i>CN 11009</i>	0.6	4.9	10.3	16.8	6.1
	Xiang Zhou	<i>CN 11010</i>	20.3	7.4	14.6	21.9	16.4
	Zhuxian Cavern	<i>CN 11011</i>	24.3	13.7	19.7	19.4	22.7
Indonesia	Jakarta	<i>ID 11012</i>	86.4	63.5	42.2	101	50.2
	Serpong	<i>ID 11014</i>	***	13.1	9.4	6.4	10.1
	Kototabang	<i>ID 11013</i>	***	1.4	4.8	5.3	6.7
	Bandung	<i>ID 11015</i>	***	23.7	16.9	10.7	18.0
Japan	Rishiri	<i>JP 11016</i>	6.7	5.5	5.9	4.0	3.7
	Ochiishi	<i>JP 11050</i>				1.6	4.5
	Tappi	<i>JP 11017</i>	3.2	3.0	5.5	3.9	3.5
	Sado-seki	<i>JP 11019</i>	6.2	8.3	3.4	3.1	1.9
	Happo	<i>JP 11021</i>	3.7	4.2	1.9	1.8	2.2
	Ijira	<i>JP 11022</i>	6.3	5.0	3.6	2.6	1.9
	Oki	<i>JP 11023</i>	7.5	6.1	3.9	2.9	5.5
	Banryu	<i>JP 11024</i>	3.7	4.3	3.7	1.7	2.9
	Yusuhara	<i>JP 11025</i>	2.4	3.2	1.2	1.1	1.3
	Hedo	<i>JP 11027</i>	0.8	1.7	2.9	3.5	4.3
	Ogasawara	<i>JP 11018</i>	2.1	3.2	3.6	2.6	1.0
Lao PDR	Vientian	<i>LA 11051</i>				***	***
Malaysia	Petaling Jaya	<i>MY 11029</i>	6.7	6.2	7.3	7.7	4.9
	Tanah Rata	<i>MY 11030</i>	2.2	3.1	3.0	3.3	2.3
Mongolia	Ulaanbaatar	<i>MN 11031</i>	37.6	47.2	49.8	26.4	43.0
	Terej	<i>MN 11032</i>	15.1	14.6	26.3	10.6	16.1
Philippines	Metro Manila	<i>PH 11033</i>	13.9	67.2	8.4	8.4	10.8
	Los Banos	<i>PH 11034</i>	6.2	64.5	6.8	7.5	5.1
Republic of Korea	Kanghwa	<i>KR 11035</i>	25.3	13.1	10.0	10.8	13.3
	Cheju (Kosan)	<i>KR 11036</i>	10.5	4.3	8.1	7.1	6.5
	Imsil	<i>KR 11037</i>		5.5	9.0	4.9	6.4
Russia	Mondy	<i>RU 11038</i>	5.7	6.9	8.5	3.8	5.3
	Listvyanka	<i>RU 11039</i>	12.7	7.2	11.3	14.1	14.0
	Irkutsk	<i>RU 11040</i>	27.8	34.6	31.3	23.7	21.7
	Primorskaya	<i>RU 11041</i>			17.6	24.6	21.0
Thailand	Bangkok	<i>TH 11042</i>	11.2	11.8	15.4	11.7	10.7
	Samutprakarn	<i>TH 11043</i>	10.8				7.5
	Patumthani	<i>TH 11044</i>	12.9	12.8	17.2	6.2	11.2
	Khanchanaburi	<i>TH 11045</i>	4.6	8.8	4.7	8.2	4.6
	(Vachiralongkorn Dam)						
	Chiang Mai (Mae Hia)	<i>TH 11046</i>		6.9	17.8	5.6	4.7
Viet Nam	Hanoi	<i>VN 11047</i>	20.5	10.4	16.7	17.6	24.8
	Hoa Binh	<i>VN 11048</i>	12.8	10.2	12.6	11.9	19.8

[\*\*\*]: No data or not measured

Data in hatched column: Rejected annual value by the criteria of EANET (%PCL<80% or %TP<80%)

Black column: Monitoring was not carried out

**Table 3.66 Volume-weighted annual mean concentrations of Mg<sup>2+</sup>**

unit: µmol/L

Country	Name of sites	Code	2000	2001	2002	2003	2004
Cambodia	Phnom Penh	KH 11052					<0.4
China	Guanyinqiao	CN 11001	8.5	11.6	6.0	4.5	9.1
	Nanshan	CN 11002	7.0				
	Jinyunshan	CN 11003		5.8	3.4	2.9	3.5
	Shizhan	CN 11004	23.6	48.5	67.9	33.5	15.3
	Weishuiyuan	CN 11005	31.7	88.4	91.1	40.0	19.3
	Dabagou	CN 11006	14.6				
	Jiwozi	CN 11007		41.1	50.1	33.9	16.6
	Hongwen	CN 11008	4.2	6.3	9.6	6.0	11.4
	Xiaoping	CN 11009	1.3	2.5	1.6	4.0	1.4
	Xiang Zhou	CN 11010	6.9	2.9	5.5	7.1	6.3
	Zhuxian Cavern	CN 11011	7.9	3.3	7.1	7.4	8.5
Indonesia	Jakarta	ID 11012	219	69.0	13.1	12.7	6.3
	Serpong	ID 11014	***	3.5	4.5	2.7	4.0
	Kototabang	ID 11013	***	1.0	2.6	6.8	1.8
	Bandung	ID 11015	***	4.1	1.6	1.7	3.3
Japan	Rishiri	JP 11016	36.3	24.8	22.3	20.3	26.4
	Ochiishi	JP 11050				22.1	42.2
	Tappi	JP 11017	17.5	15.5	19.6	16.8	23.4
	Sado-seki	JP 11019	29.0	40.5	30.7	11.3	15.6
	Happo	JP 11021	1.7	1.6	0.9	1.2	1.3
	Ijira	JP 11022	2.9	4.0	3.5	2.2	2.8
	Oki	JP 11023	45.0	36.6	40.6	21.2	34.4
	Banryu	JP 11024	3.3	9.1	9.3	9.3	13.2
	Yusuhara	JP 11025	2.2	1.8	3.6	1.8	2.9
	Hedo	JP 11027	50.0	16.9	59.0	49.3	91.0
Ogasawara	JP 11018	19.2	13.3	32.4	31.1	13.0	
Lao PDR	Vientian	LA 11051				***	***
Malaysia	Petaling Jaya	MY 11029	1.4	1.3	1.4	0.7	0.9
	Tanah Rata	MY 11030	0.4	0.4	0.4	0.5	<0.4
Mongolia	Ulaanbaatar	MN 11031	4.1	5.4	3.6	3.7	5.9
	Terelj	MN 11032	3.2	2.5	4.1	2.3	5.2
Philippines	Metro Manila	PH 11033	6.3	15.0	3.3	3.0	4.4
	Los Banos	PH 11034	3.7	11.1	2.9	2.6	3.6
Republic of Korea	Kanghwa	KR 11035	9.3	5.3	6.3	2.9	5.5
	Cheju (Kosan)	KR 11036	18.6	10.0	7.5	5.9	7.3
	Imsil	KR 11037		1.9	3.3	1.6	2.4
Russia	Mondy	RU 11038	1.1	1.5	2.2	0.8	1.3
	Listvyanka	RU 11039	2.9	1.8	3.0	3.6	3.2
	Irkutsk	RU 11040	5.0	5.5	5.7	4.3	4.8
	Primorskaya	RU 11041			5.7	11.2	7.0
Thailand	Bangkok	TH 11042	2.0	3.2	3.5	2.3	2.1
	Samutprakarn	TH 11043	2.4				1.9
	Patumthani	TH 11044	2.4	2.2	2.8	1.1	1.6
	Khanchanaburi	TH 11045	1.7	2.5	1.7	2.2	1.6
	(Vachiralongkorn Dam)						
	Chiang Mai (Mae Hia)	TH 11046		1.1	3.5	2.1	1.8
Viet Nam	Hanoi	VN 11047	5.0	4.0	3.0	3.6	3.8
	Hoa Binh	VN 11048	4.7	3.7	1.4	2.1	2.5

[\*\*\*]: No data or not measured

■ Data in hatched column: Rejected annual value by the criteria of EANET (%PCL<80% or %TP<80%)

■ Black column: Monitoring was not carried out

**Table 3.67 Volume-weighted annual mean concentrations of H<sup>+</sup>**

unit: µmol/L

Country	Name of sites	Code	2000	2001	2002	2003	2004
Cambodia	Phnom Penh	<i>KH 11052</i>					4.8
China	Guanyinqiao	<i>CN 11001</i>	46.7	16.1	25.2	32.2	25.9
	Nanshan	<i>CN 11002</i>	60.5				
	Jinyunshan	<i>CN 11003</i>		65.4	43.6	50.3	25.9
	Shizhan	<i>CN 11004</i>	2.1	0.4	0.6	1.0	0.5
	Weishuiyuan	<i>CN 11005</i>	0.4	0.5	0.9	0.8	1.1
	Dabagou	<i>CN 11006</i>	3.8				
	Jiwozi	<i>CN 11007</i>		0.6	1.0	0.9	0.8
	Hongwen	<i>CN 11008</i>	19.1	29.6	16.2	34.4	19.4
	Xiaoping	<i>CN 11009</i>	12.2	12.6	33.6	41.4	24.6
	Xiang Zhou	<i>CN 11010</i>	7.0	11.4	7.8	7.9	16.5
	Zhuxian Cavern	<i>CN 11011</i>	23.0	16.7	12.8	7.9	23.2
Indonesia	Jakarta	<i>ID 11012</i>	6.6	3.8	16.9	7.0	20.4
	Serpong	<i>ID 11014</i>	***	23.7	22.6	24.1	20.8
	Kototabang	<i>ID 11013</i>	31.2	8.5	4.9	5.0	18.5
	Bandung	<i>ID 11015</i>	***	10.1	34.9	10.0	9.3
Japan	Rishiri	<i>JP 11016</i>	15.7	16.8	15.0	13.3	14.4
	Ochiishi	<i>JP 11050</i>				12.2	20.7
	Tappi	<i>JP 11017</i>	19.0	23.0	20.9	27.0	25.4
	Sado-seki	<i>JP 11019</i>	26.9	23.2	22.7	21.5	19.7
	Happo	<i>JP 11021</i>	18.6	14.6	11.8	12.4	13.9
	Ijira	<i>JP 11022</i>	30.1	37.1	30.4	38.7	22.1
	Oki	<i>JP 11023</i>	22.8	17.0	18.6	17.5	15.9
	Banryu	<i>JP 11024</i>	22.9	21.9	20.4	23.3	19.9
	Yusuhara	<i>JP 11025</i>	19.5	14.9	17.4	18.4	10.6
	Hedo	<i>JP 11027</i>	7.4	10.9	11.3	12.5	16.5
Ogasawara	<i>JP 11018</i>	5.9	8.1	8.2	9.1	7.5	
Lao PDR	Vientian	<i>LA 11051</i>				0.3	2.3
Malaysia	Petaling Jaya	<i>MY 11029</i>	44.9	56.0	58.8	52.1	47.3
	Tanah Rata	<i>MY 11030</i>	16.1	12.7	10.8	12.7	13.7
Mongolia	Ulaanbaatar	<i>MN 11031</i>	0.5	0.6	0.4	1.9	0.3
	Terelj	<i>MN 11032</i>	3.0	0.9	1.8	4.0	1.6
Philippines	Metro Manila	<i>PH 11033</i>	3.3	3.9	8.1	36.2	6.6
	Los Banos	<i>PH 11034</i>	3.6	3.0	1.8	32.5	5.5
Republic of Korea	Kanghwa	<i>KR 11035</i>	10.0	10.2	22.2	21.3	27.2
	Cheju (Kosan)	<i>KR 11036</i>	14.1	12.9	24.3	15.0	18.2
	Imsil	<i>KR 11037</i>		8.0	2.0	8.3	11.8
Russia	Mondy	<i>RU 11038</i>	5.5	3.1	4.1	4.5	4.6
	Listvyanka	<i>RU 11039</i>	8.6	11.0	13.2	9.7	12.1
	Irkutsk	<i>RU 11040</i>	7.8	5.3	9.4	4.2	12.2
	Primorskaya	<i>RU 11041</i>			6.3	13.2	14.5
Thailand	Bangkok	<i>TH 11042</i>	11.1	10.7	7.9	29.5	6.5
	Samutprakarn	<i>TH 11043</i>	14.8				3.4
	Patumthani	<i>TH 11044</i>	5.7	7.4	4.6	13.7	13.6
	Khanchanaburi (Vachiralongkorn Dam)	<i>TH 11045</i>	2.7	5.5	2.3	3.5	0.8
	Chiang Mai (Mae Hia)	<i>TH 11046</i>		1.9	1.9	2.5	2.5
Viet Nam	Hanoi	<i>VN 11047</i>	3.6	1.5	2.8	1.5	2.3
	Hoa Binh	<i>VN 11048</i>	7.8	9.1	6.5	4.2	2.5

[\*\*\*]: No data or not measured

Data in hatched column: Rejected annual value by the criteria of EANET  
(%PCL<80% or %TP<80%)

Black column: Monitoring was not carried out

**Table 3.68 Volume-weighted annual mean pH**

Country	Name of sites	Code	2000	2001	2002	2003	2004
Cambodia	Phnom Penh	<i>KH 11052</i>					5.32
China	Guanyinqiao	<i>CN 11001</i>	4.33	4.79	4.60	4.49	4.59
	Nanshan	<i>CN 11002</i>	4.22				
	Jinyunshan	<i>CN 11003</i>		4.18	4.36	4.30	4.59
	Shizhan	<i>CN 11004</i>	5.68	6.38	6.24	6.00	6.30
	Weishuiyuan	<i>CN 11005</i>	6.42	6.32	6.03	6.11	5.98
	Dabagou	<i>CN 11006</i>	5.42				
	Jiwozi	<i>CN 11007</i>		6.24	6.00	6.05	6.11
	Hongwen	<i>CN 11008</i>	4.72	4.53	4.79	4.46	4.71
	Xiaoping	<i>CN 11009</i>	4.91	4.90	4.47	4.38	4.61
	Xiang Zhou	<i>CN 11010</i>	5.15	4.94	5.11	5.10	4.78
	Zhuxian Cavern	<i>CN 11011</i>	4.64	4.78	4.89	5.10	4.63
	Indonesia	Jakarta	<i>ID 11012</i>	5.18	5.42	4.77	5.16
Serpong		<i>ID 11014</i>	***	4.63	4.65	4.62	4.68
Kototabang		<i>ID 11013</i>	4.51	5.07	5.31	5.30	4.73
Bandung		<i>ID 11015</i>	***	4.99	4.46	5.00	5.03
Japan	Rishiri	<i>JP 11016</i>	4.80	4.77	4.82	4.88	4.84
	Ochiishi	<i>JP 11050</i>				4.91	4.68
	Tappi	<i>JP 11017</i>	4.72	4.64	4.68	4.57	4.59
	Sado-seki	<i>JP 11019</i>	4.57	4.63	4.64	4.67	4.70
	Happo	<i>JP 11021</i>	4.73	4.84	4.93	4.91	4.86
	Ijira	<i>JP 11022</i>	4.52	4.43	4.52	4.41	4.65
	Oki	<i>JP 11023</i>	4.64	4.77	4.73	4.76	4.80
	Banryu	<i>JP 11024</i>	4.64	4.66	4.69	4.63	4.70
	Yusuhara	<i>JP 11025</i>	4.71	4.83	4.76	4.73	4.97
	Hedo	<i>JP 11027</i>	5.13	4.96	4.95	4.90	4.78
	Ogasawara	<i>JP 11018</i>	5.23	5.09	5.09	5.04	5.13
Lao PDR	Vientian	<i>LA 11051</i>				6.51	5.65
Malaysia	Petaling Jaya	<i>MY 11029</i>	4.35	4.25	4.23	4.28	4.33
	Tanah Rata	<i>MY 11030</i>	4.79	4.90	4.97	4.90	4.86
Mongolia	Ulaanbaatar	<i>MN 11031</i>	6.26	6.19	6.38	5.72	6.46
	Terelj	<i>MN 11032</i>	5.52	6.04	5.75	5.40	5.78
Philippines	Metro Manila	<i>PH 11033</i>	5.48	5.41	5.09	4.44	5.18
	Los Banos	<i>PH 11034</i>	5.44	5.53	5.74	4.49	5.26
Republic of Korea	Kanghwa	<i>KR 11035</i>	5.00	4.99	4.65	4.67	4.57
	Cheju (Kosan)	<i>KR 11036</i>	4.85	4.89	4.61	4.83	4.74
	Imsil	<i>KR 11037</i>		5.09	5.69	5.08	4.93
Russia	Mondy	<i>RU 11038</i>	5.26	5.50	5.39	5.35	5.34
	Listvyanka	<i>RU 11039</i>	5.07	4.96	4.88	5.01	4.92
	Irkutsk	<i>RU 11040</i>	5.11	5.28	5.02	5.37	4.91
	Primorskaya	<i>RU 11041</i>			5.20	4.88	4.84
Thailand	Bangkok	<i>TH 11042</i>	4.95	4.97	5.10	4.53	5.19
	Samutprakarn	<i>TH 11043</i>	4.83				5.47
	Patumthani	<i>TH 11044</i>	5.25	5.13	5.33	4.86	4.87
	Khanchanaburi (Vachiralongkorn Dam)	<i>TH 11045</i>	5.56	5.26	5.64	5.46	6.07
	Chiang Mai (Mae Hia)	<i>TH 11046</i>		5.71	5.72	5.61	5.59
Viet Nam	Hanoi	<i>VN 11047</i>	5.45	5.83	5.55	5.81	5.65
	Hoa Binh	<i>VN 11048</i>	5.11	5.04	5.19	5.38	5.60

[\*\*\*]: No data or not measured

Data in hatched column: Rejected annual value by the criteria of EANET  
(%PCL<80% or %TP<80%)

Black column: Monitoring was not carried out

**Table 3.69 Volume-weighted annual mean EC**

unit: mS/m

Country	Name of sites	Code	2000	2001	2002	2003	2004
Cambodia	Phnom Penh	<i>KH 11052</i>					1.17
China	Guanyinqiao	<i>CN 11001</i>	5.61	7.00	4.36	4.89	5.82
	Nanshan	<i>CN 11002</i>	5.20				
	Jinyunshan	<i>CN 11003</i>		6.23	3.69	4.19	4.35
	Shizhan	<i>CN 11004</i>	11.4	19.5	16.1	7.50	6.47
	Weishuiyuan	<i>CN 11005</i>	15.1	27.7	21.7	7.80	8.55
	Dabagou	<i>CN 11006</i>	7.71				
	Jiwozi	<i>CN 11007</i>		9.65	4.02	5.19	2.91
	Hongwen	<i>CN 11008</i>	1.66	3.87	2.64	2.88	3.41
	Xiaoping	<i>CN 11009</i>	0.88	1.44	1.60	2.15	1.97
	Xiang Zhou	<i>CN 11010</i>	2.05	1.95	3.20	2.19	2.37
	Zhuxian Cavern	<i>CN 11011</i>	3.04	2.08	3.63	2.42	3.15
Indonesia	Jakarta	<i>ID 11012</i>	5.06	26.4	2.97	4.78	3.69
	Serpong	<i>ID 11014</i>	***	2.94	1.87	2.26	2.25
	Kototabang	<i>ID 11013</i>	1.00	0.43	4.94	1.96	1.11
	Bandung	<i>ID 11015</i>	3.37	2.08	1.68	1.50	1.80
Japan	Rishiri	<i>JP 11016</i>	6.37	4.51	4.23	3.80	4.72
	Ochiishi	<i>JP 11050</i>				3.45	6.72
	Tappi	<i>JP 11017</i>	3.69	3.52	3.89	3.74	4.57
	Sado-seki	<i>JP 11019</i>	4.76	5.64	4.99	2.65	3.10
	Happo	<i>JP 11021</i>	1.22	0.96	0.67	0.69	0.91
	Ijira	<i>JP 11022</i>	2.11	2.44	2.18	2.12	1.62
	Oki	<i>JP 11023</i>	7.28	5.90	6.59	3.82	5.86
	Banryu	<i>JP 11024</i>	1.82	2.52	2.56	2.56	3.02
	Yusuhara	<i>JP 11025</i>	1.17	0.98	1.42	1.16	1.03
	Hedo	<i>JP 11027</i>	7.21	2.95	8.85	7.10	14.2
Ogasawara	<i>JP 11018</i>	2.59	2.20	3.95	4.31	2.29	
Lao PDR	Vientian	<i>LA 11051</i>				2.07	2.65
Malaysia	Petaling Jaya	<i>MY 11029</i>	2.08	2.13	2.81	2.32	2.26
	Tanah Rata	<i>MY 11030</i>	0.73	0.54	0.59	0.61	0.76
Mongolia	Ulaanbaatar	<i>MN 11031</i>	1.79	1.91	2.20	1.56	1.68
	Terelj	<i>MN 11032</i>	1.28	0.93	1.93	1.05	1.12
Philippines	Metro Manila	<i>PH 11033</i>	2.20	6.49	1.85	1.36	1.48
	Los Banos	<i>PH 11034</i>	1.13	2.08	1.22	1.99	0.80
Republic of Korea	Kanghwa	<i>KR 11035</i>	2.50	1.98	2.68	2.54	3.25
	Cheju (Kosan)	<i>KR 11036</i>	3.37	2.56	3.03	2.22	2.45
	Imsil	<i>KR 11037</i>		1.31	1.80	1.42	1.42
Russia	Mondy	<i>RU 11038</i>	0.58	0.68	0.96	0.59	0.54
	Listvyanka	<i>RU 11039</i>	1.04	0.95	1.39	1.36	1.30
	Irkutsk	<i>RU 11040</i>	1.71	1.79	2.10	1.67	1.80
	Primorskaya	<i>RU 11041</i>			1.77	2.66	2.20
Thailand	Bangkok	<i>TH 11042</i>	1.64	1.50	1.32	1.67	1.25
	Samutprakarn	<i>TH 11043</i>	1.52				1.01
	Patumthani	<i>TH 11044</i>	1.48	1.80	1.07	1.24	1.47
	Khanchanaburi (Vachiralongkorn Dam)	<i>TH 11045</i>	0.52	0.56	0.51	0.35	0.41
	Chiang Mai (Mae Hia)	<i>TH 11046</i>		0.88	0.48	0.46	0.49
Viet Nam	Hanoi	<i>VN 11047</i>	1.55	0.92	1.52	1.70	1.85
	Hoa Binh	<i>VN 11048</i>	1.15	1.04	1.06	1.12	1.48

[\*\*\*]: No data or not measured

Data in hatched column: Rejected annual value by the criteria of EANET  
(%PCL<80% or %TP<80%)

Black column: Monitoring was not carried out

**Table 3.70 Annual SO<sub>4</sub><sup>2-</sup> deposition**

unit: mmol m<sup>-2</sup> y<sup>-1</sup>

Country	Name of sites	Code	2000	2001	2002	2003	2004
Cambodia	Phnom Penh	<i>KH 11052</i>					***
China	Guanyinqiao	<i>CN 11001</i>	164	154	165	108	229
	Nanshan	<i>CN 11002</i>	164				
	Jinyunshan	<i>CN 11003</i>		87.7	126	103	166
	Shizhan	<i>CN 11004</i>	199	171	297	258	104
	Weishuiyuan	<i>CN 11005</i>	241	105	234	186	94.2
	Dabagou	<i>CN 11006</i>	117				
	Jiwozi	<i>CN 11007</i>		68.0	43.2	55.3	56.3
	Hongwen	<i>CN 11008</i>	30.7	16.7	67.0	48.0	73.6
	Xiaoping	<i>CN 11009</i>	22.8	49.1	36.3	41.7	53.3
	Xiang Zhou	<i>CN 11010</i>	45.5	31.2	48.3	35.3	25.0
	Zhuxian Cavern	<i>CN 11011</i>	85.4	49.5	50.6	32.4	34.3
Indonesia	Jakarta	<i>ID 11012</i>	92.7	77.5	60.5	108	71.4
	Serpong	<i>ID 11014</i>	***	61.4	64.3	49.5	41.0
	Kototabang	<i>ID 11013</i>	8.65	5.66	13.4	28.7	11.0
	Bandung	<i>ID 11015</i>	60.2	87.8	70.4	32.8	24.8
Japan	Rishiri	<i>JP 11016</i>	30.0	19.1	26.1	16.6	27.0
	Ochiishi	<i>JP 11050</i>				14.9	22.3
	Tappi	<i>JP 11017</i>	22.9	24.7	30.2	25.1	38.6
	Sado-seki	<i>JP 11019</i>	36.8	39.8	40.4	18.6	27.2
	Happo	<i>JP 11021</i>	29.2	27.4	19.8	18.5	28.2
	Ijira	<i>JP 11022</i>	53.3	49.1	52.2	56.7	48.0
	Oki	<i>JP 11023</i>	49.0	42.1	55.4	34.3	41.3
	Banryu	<i>JP 11024</i>	24.4	33.9	24.8	30.5	34.4
	Yusuhara	<i>JP 11025</i>	31.0	19.0	26.2	26.5	26.7
	Hedo	<i>JP 11027</i>	93.6	33.9	75.0	49.0	137
Ogasawara	<i>JP 11018</i>	22.6	20.7	24.1	25.2	12.5	
Lao PDR	Vientian	<i>LA 11051</i>				***	***
Malaysia	Petaling Jaya	<i>MY 11029</i>	80.4	68.4	63.1	63.9	54.5
	Tanah Rata	<i>MY 11030</i>	12.9	9.79	12.8	11.4	9.74
Mongolia	Ulaanbaatar	<i>MN 11031</i>	4.78	4.17	4.41	5.80	1.84
	Terej	<i>MN 11032</i>	3.41	0.86	3.72	2.57	2.75
Philippines	Metro Manila	<i>PH 11033</i>	94.4	85.5	78.2	37.6	44.0
	Los Banos	<i>PH 11034</i>	27.7	28.4	27.3	11.4	14.7
Republic of Korea	Kanghwa	<i>KR 11035</i>	35.3	28.5	28.4	41.1	39.3
	Cheju (Kosan)	<i>KR 11036</i>	24.5	23.0	28.5	29.3	26.8
	Imsil	<i>KR 11037</i>		21.3	22.7	30.6	19.9
Russia	Mondy	<i>RU 11038</i>	2.19	3.51	2.20	3.48	2.46
	Listvyanka	<i>RU 11039</i>	6.79	6.60	6.56	10.3	10.6
	Irkutsk	<i>RU 11040</i>	16.1	13.9	10.3	12.0	14.7
	Primorskaya	<i>RU 11041</i>			24.2	13.9	25.7
Thailand	Bangkok	<i>TH 11042</i>	24.8	21.3	24.2	25.6	19.8
	Samutprakarn	<i>TH 11043</i>	25.0				20.7
	Patumthani	<i>TH 11044</i>	18.7	23.2	14.2	20.5	17.1
	Khanchanaburi	<i>TH 11045</i>	3.21	7.91	12.4	5.78	4.71
	(Vachiralongkorn Dam) Chiang Mai (Mae Hia)	<i>TH 11046</i>		3.02	6.57	3.34	7.95
Viet Nam	Hanoi	<i>VN 11047</i>	37.9	31.5	47.8	47.7	58.3
	Hoa Binh	<i>VN 11048</i>	30.8	32.6	30.5	38.0	53.9

[\*\*\*]: No data or not measured

■ Data in hatched column: Rejected annual value by the criteria of EANET (%PCL<80% or %TP<80%)

■ Black column: Monitoring was not carried out

**Table 3.71 Annual nss-SO<sub>4</sub><sup>2-</sup> deposition**

unit: mmol m<sup>-2</sup>y<sup>-1</sup>

Country	Name of sites	Code	2000	2001	2002	2003	2004
Cambodia	Phnom Penh	KH 11052					***
China	Guanyinqiao	CN 11001	163	154	164	108	228
	Nanshan	CN 11002	164				
	Jinyunshan	CN 11003		87.3	125	102	165
	Shizhan	CN 11004	198	167	291	253	103
	Weishuiyuan	CN 11005	239	104	231	177	93.5
	Dabagou	CN 11006	116				
	Jiwozi	CN 11007		66.0	41.7	51.6	54.7
	Hongwen	CN 11008	28.5	16.5	61.8	45.3	70.3
	Xiaoping	CN 11009	22.0	47.2	34.1	39.0	51.8
	Xiang Zhou	CN 11010	40.3	29.1	44.0	31.6	22.4
	Zhuxian Cavern	CN 11011	82.4	46.2	46.3	28.8	30.4
Indonesia	Jakarta	ID 11012	87.7	74.6	57.3	105	68.2
	Serpong	ID 11014	***	59.1	60.5	48.0	39.3
	Kototabang	ID 11013	***	5.33	12.7	26.9	9.66
	Bandung	ID 11015	***	84.6	69.1	32.1	24.2
Japan	Rishiri	JP 11016	14.9	11.2	14.9	9.1	13.9
	Ochiishi	JP 11050				5.84	8.33
	Tappi	JP 11017	13.5	16.0	17.1	15.4	21.0
	Sado-seki	JP 11019	20.2	18.9	18.8	12.3	14.7
	Happo	JP 11021	28.1	26.6	19.3	17.8	27.1
	Ijira	JP 11022	50.1	45.1	47.6	54.3	43.6
	Oki	JP 11023	20.4	18.4	21.2	16.4	16.8
	Banryu	JP 11024	21.7	25.5	18.6	22.0	22.5
	Yusuhara	JP 11025	28.4	17.6	22.1	24.0	20.9
	Hedo	JP 11027	17.1	13.8	15.1	15.7	43.4
Ogasawara	JP 11018	6.22	9.23	5.25	5.71	4.02	
Lao PDR	Vientian	LA 11051				***	***
Malaysia	Petaling Jaya	MY 11029	79.3	67.7	62.3	62.9	53.5
	Tanah Rata	MY 11030	12.5	9.49	12.6	11.1	9.48
Mongolia	Ulaanbaatar	MN 11031	4.69	4.08	4.34	5.73	1.81
	Terelj	MN 11032	3.33	0.78	3.51	2.49	2.67
Philippines	Metro Manila	PH 11033	87.0	52.0	75.6	35.2	41.9
	Los Banos	PH 11034	22.4	23.9	25.1	10.0	13.4
Republic of Korea	Kanghwa	KR 11035	31.6	25.6	26.0	38.6	37.6
	Cheju (Kosan)	KR 11036	14.8	18.0	24.9	25.6	22.9
	Imsil	KR 11037		20.1	20.4	28.0	18.6
Russia	Mondy	RU 11038	2.16	3.46	2.17	3.42	2.43
	Listvyanka	RU 11039	6.67	6.50	6.47	10.1	10.4
	Irkutsk	RU 11040	15.8	13.6	10.2	11.8	14.5
	Primorskaya	RU 11041			23.0	13.3	24.8
Thailand	Bangkok	TH 11042	24.4	20.7	22.9	24.9	19.1
	Samutprakarn	TH 11043	24.4				19.5
	Patumthani	TH 11044	18.1	22.5	13.7	20.1	16.6
	Khanchanaburi (Vachiralongkorn Dam)	TH 11045	2.72	6.89	11.2	4.81	3.96
	Chiang Mai (Mae Hia)	TH 11046		2.78	5.78	3.21	7.74
Viet Nam	Hanoi	VN 11047	36.5	30.0	47.3	46.9	57.5
	Hoa Binh	VN 11048	29.4	31.3	30.3	37.8	53.5

[\*\*\*]: No data or not measured

Data in hatched column: Rejected annual value by the criteria of EANET  
(%PCL<80% or %TP<80%)


Black column: Monitoring was not carried out

**Table 3.72 Annual NO<sub>3</sub><sup>-</sup> deposition**

unit: mmol m<sup>-2</sup>y<sup>-1</sup>

Country	Name of sites	Code	2000	2001	2002	2003	2004
Cambodia	Phnom Penh	KH 11052					3.22
China	Guanyinqiao	CN 11001	45.5	39.7	49.7	38.4	60.9
	Nanshan	CN 11002	52.4				
	Jinyunshan	CN 11003		28.6	47.3	42.5	55.9
	Shizhan	CN 11004	48.6	55.8	52.2	86.6	37.1
	Weishuiyuan	CN 11005	42.9	14.5	39.0	70.5	32.4
	Dabagou	CN 11006	24.1				
	Jiwozi	CN 11007		29.3	12.7	26.2	26.9
	Hongwen	CN 11008	28.4	11.2	48.2	43.7	53.1
	Xiaoping	CN 11009	22.8	50.1	32.0	39.9	38.5
	Xiang Zhou	CN 11010	31.8	28.0	30.9	36.0	29.6
	Zhuxian Cavern	CN 11011	59.6	57.1	32.9	20.2	31.9
Indonesia	Jakarta	ID 11012	27.8	66.4	44.3	94.5	114
	Serpong	ID 11014	***	81.4	81.6	66.1	58.0
	Kototabang	ID 11013	14.4	3.32	10.1	154	9.94
	Bandung	ID 11015	30.7	70.0	66.7	32.7	25.2
Japan	Rishiri	JP 11016	13.9	11.1	12.9	8.65	11.0
	Ochiishi	JP 11050				6.22	8.78
	Tappi	JP 11017	13.5	16.5	22.5	19.4	24.0
	Sado-seki	JP 11019	19.5	21.6	21.4	15.7	17.3
	Happo	JP 11021	24.3	20.8	18.2	16.2	24.7
	Ijira	JP 11022	64.8	48.5	57.8	64.5	52.6
	Okii	JP 11023	22.4	19.5	23.7	20.7	24.0
	Banryu	JP 11024	21.7	31.1	25.0	27.9	27.0
	Yusuhara	JP 11025	19.7	14.2	19.8	19.7	20.9
	Hedo	JP 11027	16.7	14.0	19.3	13.2	23.8
	Ogasawara	JP 11018	4.73	6.67	3.61	6.55	4.30
Lao PDR	Vientian	LA 11051				***	***
Malaysia	Petaling Jaya	MY 11029	92.9	73.2	97.9	100	89.4
	Tanah Rata	MY 11030	10.4	8.90	16.7	14.1	11.1
Mongolia	Ulaanbaatar	MN 11031	3.91	3.43	4.23	4.62	1.32
	Terelj	MN 11032	3.65	0.81	4.45	3.87	3.34
Philippines	Metro Manila	PH 11033	48.9	42.5	52.3	28.8	33.4
	Los Banos	PH 11034	14.3	25.3	14.0	7.84	10.6
Republic of Korea	Kanghwa	KR 11035	47.4	32.6	27.0	42.9	36.1
	Cheju (Kosan)	KR 11036	16.2	20.5	24.4	29.7	27.9
	Imsil	KR 11037		20.2	31.8	31.7	24.8
Russia	Mondy	RU 11038	3.04	3.38	2.75	2.78	2.44
	Listvyanka	RU 11039	8.25	7.26	8.99	16.1	10.9
	Irkutsk	RU 11040	11.2	8.61	6.59	8.15	9.48
	Primorskaya	RU 11041			8.51	4.97	14.8
Thailand	Bangkok	TH 11042	24.8	21.0	32.0	31.9	19.3
	Samutprakarn	TH 11043	15.1				12.3
	Patumthani	TH 11044	17.8	26.5	17.6	28.4	23.4
	Khanchanaburi	TH 11045	5.06	10.2	13.3	7.96	6.65
	(Vachiralongkorn Dam)						
Chiang Mai (Mae Hia)	TH 11046		4.47	9.78	5.27	7.04	
Viet Nam	Hanoi	VN 11047	20.2	11.4	21.4	39.4	39.7
	Hoa Binh	VN 11048	18.3	19.5	32.8	22.6	36.4

[\*\*\*]: No data or not measured

 Data in hatched column: Rejected annual value by the criteria of EANET (%PCL<80% or %TP<80%)

 Black column: Monitoring was not carried out

**Table 3.73 Annual Cl<sup>-</sup> deposition**

unit: mmol m<sup>-2</sup> y<sup>-1</sup>

Country	Name of sites	Code	2000	2001	2002	2003	2004
Cambodia	Phnom Penh	<i>KH 11052</i>					***
China	Guanyinqiao	<i>CN 11001</i>	25.9	22.4	22.5	16.0	20.3
	Nanshan	<i>CN 11002</i>	19.7				
	Jinyunshan	<i>CN 11003</i>		40.3	20.8	12.6	19.5
	Shizhan	<i>CN 11004</i>	27.4	29.6	122	106	21.7
	Weishuiyuan	<i>CN 11005</i>	41.0	19.3	66.0	129	18.3
	Dabagou	<i>CN 11006</i>	26.8				
	Jiwozi	<i>CN 11007</i>		20.7	26.2	42.8	15.1
	Hongwen	<i>CN 11008</i>	48.6	10.6	67.3	66.7	64.1
	Xiaoping	<i>CN 11009</i>	32.4	77.3	19.9	41.6	32.5
	Xiang Zhou	<i>CN 11010</i>	101	75.2	119	81.8	48.8
	Zhuxian Cavern	<i>CN 11011</i>	70.2	71.2	94.1	70.5	75.1
Indonesia	Jakarta	<i>ID 11012</i>	33.9	48.2	44.2	84.4	57.4
	Serpong	<i>ID 11014</i>	***	51.8	57.6	58.2	34.8
	Kototabang	<i>ID 11013</i>	15.8	7.97	30.1	87.0	24.8
	Bandung	<i>ID 11015</i>	93.7	65.1	51.5	20.9	15.6
Japan	Rishiri	<i>JP 11016</i>	286	145	207	142	242
	Ochiishi	<i>JP 11050</i>				178	266
	Tappi	<i>JP 11017</i>	187	169	253	178	341
	Sado-seki	<i>JP 11019</i>	292	367	439	121	236
	Happo	<i>JP 11021</i>	23.4	20.7	13.0	17.9	27.0
	Ijira	<i>JP 11022</i>	61.8	73.0	88.2	56.6	94.2
	Oki	<i>JP 11023</i>	543	448	658	321	453
	Banryu	<i>JP 11024</i>	48.5	154.6	115.9	162	232
	Yusuhara	<i>JP 11025</i>	52.4	25.6	74.6	45.4	112
	Hedo	<i>JP 11027</i>	1500	373	1200	628	1750
	Ogasawara	<i>JP 11018</i>	325	222	370	400	162
Lao PDR	Vientian	<i>LA 11051</i>				***	***
Malaysia	Petaling Jaya	<i>MY 11029</i>	29.1	23.2	19.5	28.1	22.2
	Tanah Rata	<i>MY 11030</i>	21.3	7.87	6.29	7.19	5.86
Mongolia	Ulaanbaatar	<i>MN 11031</i>	1.76	1.60	1.37	2.27	0.67
	Terelj	<i>MN 11032</i>	1.86	0.77	2.80	2.06	1.85
Philippines	Metro Manila	<i>PH 11033</i>	103	264	55.9	53.5	52.0
	Los Banos	<i>PH 11034</i>	87.1	62.7	41.9	26.1	24.9
Republic of Korea	Kanghwa	<i>KR 11035</i>	61.4	48.6	35.5	96.4	48.9
	Cheju (Kosan)	<i>KR 11036</i>	222	125	85.3	88.4	88.9
	Imsil	<i>KR 11037</i>		37.3	36.7	71.5	32.2
Russia	Mondy	<i>RU 11038</i>	0.79	0.46	1.81	1.25	0.99
	Listvyanka	<i>RU 11039</i>	2.22	1.07	2.45	2.23	2.72
	Irkutsk	<i>RU 11040</i>	6.19	5.72	5.45	8.07	4.71
	Primorskaya	<i>RU 11041</i>			28.3	11.5	14.7
Thailand	Bangkok	<i>TH 11042</i>	14.4	11.1	18.0	12.0	13.7
	Samutprakarn	<i>TH 11043</i>	12.6				16.2
	Patumthani	<i>TH 11044</i>	10.0	10.5	11.0	10.6	13.9
	Khanchanaburi	<i>TH 11045</i>	15.5	15.1	30.9	14.3	13.9
	(Vachiralongkorn Dam)						
	Chiang Mai (Mae Hia)	<i>TH 11046</i>		4.91	14.8	3.81	4.40
Viet Nam	Hanoi	<i>VN 11047</i>	30.5	61.2	13.5	33.7	23.2
	Hoa Binh	<i>VN 11048</i>	38.4	49.2	11.3	11.7	21.6

[\*\*\*]: No data or not measured

■ Data in hatched column: Rejected annual value by the criteria of EANET (%PCL<80% or %TP<80%)

■ Black column: Monitoring was not carried out

**Table 3.74 Annual NH<sub>4</sub><sup>+</sup> deposition**

unit: mmol m<sup>-2</sup>y<sup>-1</sup>

Country	Name of sites	Code	2000	2001	2002	2003	2004
Cambodia	Phnom Penh	KH 11052					4.51
China	Guanyinqiao	CN 11001	174	158	173	131	189
	Nanshan	CN 11002	132				
	Jinyunshan	CN 11003		79.1	134	106	160
	Shizhan	CN 11004	235	92.8	70.7	183	87.5
	Weishuiyuan	CN 11005	190	24.5	74.1	188	70.5
	Dabagou	CN 11006	165				
	Jiwozi	CN 11007		35.7	10.1	50.5	37.8
	Hongwen	CN 11008	47.9	19.2	69.3	38.3	48.8
	Xiaoping	CN 11009	31.0	88.9	67.5	67.5	74.4
	Xiang Zhou	CN 11010	41.7	49.8	166	58.7	67.9
	Zhuxian Cavern	CN 11011	90.7	77.8	76.5	52.5	75.9
Indonesia	Jakarta	ID 11012	122	81.9	49.8	33.6	32.8
	Serpong	ID 11014	***	109	115	96.4	61.9
	Kototabang	ID 11013	2.66	2.88	9.21	5.78	25.9
	Bandung	ID 11015	29.3	98.8	75.9	52.6	32.9
Japan	Rishiri	JP 11016	26.2	16.0	19.2	12.9	16.2
	Ochiishi	JP 11050				5.98	7.64
	Tappi	JP 11017	10.1	13.8	19.6	18.6	22.9
	Sado-seki	JP 11019	18.1	19.2	20.7	17.6	15.5
	Happo	JP 11021	31.0	25.3	20.2	15.7	25.6
	Ijira	JP 11022	63.8	39.4	60.4	53.6	50.2
	Oki	JP 11023	23.5	18.4	19.5	14.1	15.3
	Banryu	JP 11024	18.2	24.6	23.4	21.9	19.5
	Yusuhara	JP 11025	14.2	10.7	17.8	17.1	19.0
	Hedo	JP 11027	21.0	9.52	37.6	15.2	30.6
Ogasawara	JP 11018	4.62	8.70	7.18	5.07	5.96	
Lao PDR	Vientian	LA 11051				***	***
Malaysia	Petaling Jaya	MY 11029	149	179	43.0	37.1	39.4
	Tanah Rata	MY 11030	129	93.0	11.2	6.92	5.77
Mongolia	Ulaanbaatar	MN 11031	10.2	8.28	13.0	14.1	3.86
	Terej	MN 11032	9.20	2.70	16.2	9.86	7.37
Philippines	Metro Manila	PH 11033	143	177	137	52.2	76.6
	Los Banos	PH 11034	35.9	40.7	58.8	23.3	24.3
Republic of Korea	Kanghwa	KR 11035	42.0	42.7	33.0	90.6	66.4
	Cheju (Kosan)	KR 11036	21.3	36.0	44.0	54.1	40.4
	Imsil	KR 11037		54.9	41.9	61.0	34.0
Russia	Mondy	RU 11038	3.47	7.08	6.89	6.00	4.03
	Listvyanka	RU 11039	7.29	5.34	9.66	11.3	6.74
	Irkutsk	RU 11040	17.2	11.7	13.0	19.2	15.1
	Primorskaya	RU 11041			30.0	12.6	21.0
Thailand	Bangkok	TH 11042	47.4	42.5	60.9	51.9	45.8
	Samutprakarn	TH 11043	31.1				43.5
	Patumthani	TH 11044	36.6	47.9	32.4	48.2	33.2
	Khanchanaburi (Vachiralongkorn Dam)	TH 11045	6.03	16.7	24.0	20.3	11.7
	Chiang Mai (Mae Hia)	TH 11046		17.1	27.3	12.8	18.1
Viet Nam	Hanoi	VN 11047	34.5	45.7	78.6	87.4	83.0
	Hoa Binh	VN 11048	15.2	27.8	45.9	48.5	75.0

[\*\*\*]: No data or not measured

Data in hatched column: Rejected annual value by the criteria of EANET  
(%PCL<80% or %TP<80%)

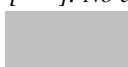
Black column: Monitoring was not carried out


**Table 3.75 Annual Na<sup>+</sup> deposition**

unit: mmol m<sup>-2</sup> y<sup>-1</sup>

Country	Name of sites	Code	2000	2001	2002	2003	2004
Cambodia	Phnom Penh	<i>KH 11052</i>					***
China	Guanyinqiao	<i>CN 11001</i>	12.8	8.11	8.01	4.85	10.1
	Nanshan	<i>CN 11002</i>	9.73				
	Jinyunshan	<i>CN 11003</i>		7.25	9.48	6.15	18.7
	Shizhan	<i>CN 11004</i>	24.7	59.8	85.7	88.1	11.5
	Weishuiyuan	<i>CN 11005</i>	30.8	15.1	48.0	147	10.9
	Dabagou	<i>CN 11006</i>	19.8				
	Jiwozi	<i>CN 11007</i>		33.1	24.2	62.2	25.5
	Hongwen	<i>CN 11008</i>	36.1	3.20	87.2	45.2	53.7
	Xiaoping	<i>CN 11009</i>	13.6	31.7	35.6	43.6	25.5
	Xiang Zhou	<i>CN 11010</i>	85.4	49.0	71.9	67.5	96.6
	Zhuxian Cavern	<i>CN 11011</i>	55.5	70.7	71.4	63.2	120
Indonesia	Jakarta	<i>ID 11012</i>	82.6	48.8	55.6	43.8	54.6
	Serpong	<i>ID 11014</i>	***	38.2	63.2	24.2	28.7
	Kototabang	<i>ID 11013</i>	***	5.46	11.3	30.2	23.0
	Bandung	<i>ID 11015</i>	***	52.7	22.0	11.4	9.66
Japan	Rishiri	<i>JP 11016</i>	250	130	188	125	217
	Ochiishi	<i>JP 11050</i>				155	233
	Tappi	<i>JP 11017</i>	156	145	219	162	292
	Sado-seki	<i>JP 11019</i>	275	345	384	106	208
	Happo	<i>JP 11021</i>	17.2	14.6	8.85	11.8	18.4
	Ijira	<i>JP 11022</i>	53.5	66.4	75.6	39.4	74.0
	Oki	<i>JP 11023</i>	479	394	570	296	416
	Banryu	<i>JP 11024</i>	45.2	139.9	103.5	142	197
	Yusuhara	<i>JP 11025</i>	42.6	24.5	67.8	40.7	95.8
	Hedo	<i>JP 11027</i>	1320	341	1050	599	1550
	Ogasawara	<i>JP 11018</i>	277	189	314	351	146
Lao PDR	Vientian	<i>LA 11051</i>				***	***
Malaysia	Petaling Jaya	<i>MY 11029</i>	17.0	11.4	13.5	17.0	17.0
	Tanah Rata	<i>MY 11030</i>	5.94	5.05	4.56	5.70	4.42
Mongolia	Ulaanbaatar	<i>MN 11031</i>	1.55	1.51	1.12	1.14	0.48
	Terelj	<i>MN 11032</i>	1.34	1.41	4.15	1.40	1.31
Philippines	Metro Manila	<i>PH 11033</i>	123	470	43.3	40.5	35.3
	Los Banos	<i>PH 11034</i>	91.7	67.6	35.9	24.6	20.9
Republic of Korea	Kanghwa	<i>KR 11035</i>	62.9	47.5	40.6	40.0	28.5
	Cheju (Kosan)	<i>KR 11036</i>	161	83.2	59.3	60.3	64.9
	Imsil	<i>KR 11037</i>		20.0	38.3	42.7	21.6
Russia	Mondy	<i>RU 11038</i>	0.56	0.73	0.39	0.93	0.69
	Listvyanka	<i>RU 11039</i>	2.02	1.67	1.37	2.76	2.57
	Irkutsk	<i>RU 11040</i>	4.73	3.88	2.78	3.01	3.68
	Primorskaya	<i>RU 11041</i>			19.3	10.9	15.6
Thailand	Bangkok	<i>TH 11042</i>	7.95	9.78	20.94	10.6	12.3
	Samutprakarn	<i>TH 11043</i>	9.91				20.8
	Patumthani	<i>TH 11044</i>	10.4	10.9	9.15	7.84	8.72
	Khanchanaburi	<i>TH 11045</i>	8.55	17.1	18.3	16.7	12.5
	(Vachiralongkorn Dam)						
	Chiang Mai (Mae Hia)	<i>TH 11046</i>		4.27	14.2	2.60	3.52
Viet Nam	Hanoi	<i>VN 11047</i>	22.8	25.9	8.41	14.2	12.7
	Hoa Binh	<i>VN 11048</i>	24.1	21.8	3.34	3.98	7.16

[\*\*\*]: No data or not measured

 Data in hatched column: Rejected annual value by the criteria of EANET (%PCL<80% or %TP<80%)


 Black column: Monitoring was not carried out

**Table 3.76 Annual K<sup>+</sup> deposition**

unit: mmol m<sup>-2</sup>y<sup>-1</sup>

Country	Name of sites	Code	2000	2001	2002	2003	2004
Cambodia	Phnom Penh	KH 11052					0.68
China	Guanyinqiao	CN 11001	15.3	14.0	15.3	10.9	15.1
	Nanshan	CN 11002	20.5				
	Jinyunshan	CN 11003		31.6	16.5	10.6	17.8
	Shizhan	CN 11004	14.8	15.3	14.1	23.9	5.75
	Weishuiyuan	CN 11005	15.5	5.19	17.8	26.5	5.25
	Dabagou	CN 11006	14.8				
	Jiwozi	CN 11007		9.11	5.99	13.0	8.65
	Hongwen	CN 11008	7.56	3.06	6.73	5.63	7.70
	Xiaoping	CN 11009	4.40	11.3	8.17	8.39	9.96
	Xiang Zhou	CN 11010	13.4	8.00	30.4	9.91	10.3
	Zhuxian Cavern	CN 11011	11.0	15.1	20.8	11.6	28.9
Indonesia	Jakarta	ID 11012	***	30.1	17.8	15.0	15.2
	Serpong	ID 11014	***	11.3	9.89	17.0	8.26
	Kototabang	ID 11013	***	1.59	9.16	62.6	13.2
	Bandung	ID 11015	***	32.7	5.19	6.63	2.95
Japan	Rishiri	JP 11016	7.66	3.71	4.86	3.47	5.68
	Ochiishi	JP 11050				3.62	5.23
	Tappi	JP 11017	3.82	3.55	5.41	3.97	7.28
	Sado-seki	JP 11019	6.80	7.95	9.30	2.78	5.48
	Happo	JP 11021	1.76	1.50	1.03	0.94	1.55
	Ijira	JP 11022	7.91	9.09	5.57	3.69	3.75
	Oki	JP 11023	12.7	10.9	15.0	8.70	13.6
	Banryu	JP 11024	2.12	4.89	3.76	4.36	5.25
	Yusuhara	JP 11025	2.15	1.05	2.37	1.30	3.72
	Hedo	JP 11027	26.3	7.57	24.3	14.0	43.7
Ogasawara	JP 11018	7.10	7.37	8.21	7.82	3.59	
Lao PDR	Vientian	LA 11051				***	***
Malaysia	Petaling Jaya	MY 11029	6.06	4.39	3.37	9.25	4.91
	Tanah Rata	MY 11030	3.41	2.40	2.21	2.15	3.68
Mongolia	Ulaanbaatar	MN 11031	0.77	0.77	0.68	1.01	0.24
	Tereelj	MN 11032	0.93	0.34	2.50	1.28	0.97
Philippines	Metro Manila	PH 11033	62.6	53.1	29.4	5.55	8.50
	Los Banos	PH 11034	4.58	17.3	10.9	2.94	3.74
Republic of Korea	Kanghwa	KR 11035	6.27	5.40	7.28	14.8	10.0
	Cheju (Kosan)	KR 11036	6.69	10.4	6.55	10.5	9.11
	Imsil	KR 11037		19.3	6.50	21.0	6.90
Russia	Mondy	RU 11038	0.36	0.66	0.47	0.66	0.96
	Listvyanka	RU 11039	2.06	0.86	0.80	1.42	1.30
	Irkutsk	RU 11040	2.34	3.45	0.70	1.20	1.50
	Primorskaya	RU 11041			4.47	3.25	5.01
Thailand	Bangkok	TH 11042	3.70	4.83	4.36	3.63	1.96
	Samutprakarn	TH 11043	5.17				6.15
	Patumthani	TH 11044	2.16	2.27	1.41	1.93	1.16
	Khanchanaburi	TH 11045	7.82	7.54	5.23	3.29	1.52
	(Vachiralongkorn Dam) Chiang Mai (Mae Hia)	TH 11046		3.19	6.49	3.19	1.62
Viet Nam	Hanoi	VN 11047	5.14	8.59	2.93	4.08	4.65
	Hoa Binh	VN 11048	6.74	5.19	2.40	2.50	3.06

[\*\*\*]: No data or not measured

 Data in hatched column: Rejected annual value by the criteria of EANET (%PCL<80% or %TP<80%)


 Black column: Monitoring was not carried out

**Table 3.77 Annual Ca<sup>2+</sup> deposition**

unit: mmol m<sup>-2</sup> y<sup>-1</sup>

Country	Name of sites	Code	2000	2001	2002	2003	2004
Cambodia	Phnom Penh	<i>KH 11052</i>					0.00
China	Guanyinqiao	<i>CN 11001</i>	68.1	103	94.5	64.5	153
	Nanshan	<i>CN 11002</i>	69.5				
	Jinyunshan	<i>CN 11003</i>		31.9	47.7	37.8	107
	Shizhan	<i>CN 11004</i>	128	246	167	329	88.5
	Weishuiyuan	<i>CN 11005</i>	136	80.0	143	313	88.3
	Dabagou	<i>CN 11006</i>	103				
	Jiwozi	<i>CN 11007</i>		89.5	39.1	140	89.7
	Hongwen	<i>CN 11008</i>	10.2	10.7	77.0	40.0	89.1
	Xiaoping	<i>CN 11009</i>	1.21	13.8	23.0	30.6	12.5
	Xiang Zhou	<i>CN 11010</i>	43.1	15.8	26.9	39.3	24.1
	Zhuxian Cavern	<i>CN 11011</i>	44.4	36.8	32.7	35.5	31.5
Indonesia	Jakarta	<i>ID 11012</i>	138	79.6	67.5	164	74.8
	Serpong	<i>ID 11014</i>	***	21.8	24.9	14.1	15.4
	Kototabang	<i>ID 11013</i>	9.28	1.73	8.84	17.3	14.7
	Bandung	<i>ID 11015</i>	***	63.0	43.4	17.5	16.3
Japan	Rishiri	<i>JP 11016</i>	10.6	6.21	9.73	5.49	8.13
	Ochiishi	<i>JP 11050</i>				4.49	7.92
	Tappi	<i>JP 11017</i>	6.68	6.25	12.0	8.02	11.4
	Sado-seki	<i>JP 11019</i>	12.5	15.4	13.0	5.72	7.23
	Happo	<i>JP 11021</i>	8.49	10.1	5.21	4.72	7.29
	Ijira	<i>JP 11022</i>	18.2	12.6	11.1	8.55	7.92
	Okii	<i>JP 11023</i>	19.4	16.1	18.1	11.0	16.7
	Banryu	<i>JP 11024</i>	6.6	10.7	7.0	5.95	9.20
	Yusuhara	<i>JP 11025</i>	7.55	7.09	4.17	4.04	7.32
	Hedo	<i>JP 11027</i>	29.3	10.4	28.5	15.1	40.3
	Ogasawara	<i>JP 11018</i>	10.1	9.81	11.5	11.2	3.93
Lao PDR	Vientian	<i>LA 11051</i>				***	***
Malaysia	Petaling Jaya	<i>MY 11029</i>	23.4	19.4	19.8	23.8	15.1
	Tanah Rata	<i>MY 11030</i>	7.06	8.13	8.56	10.1	5.60
Mongolia	Ulaanbaatar	<i>MN 11031</i>	7.41	7.86	8.91	7.88	3.60
	Terej	<i>MN 11032</i>	3.16	1.33	6.72	3.32	3.36
Philippines	Metro Manila	<i>PH 11033</i>	58.6	164	25.9	19.3	24.1
	Los Banos	<i>PH 11034</i>	18.3	119	12.3	12.5	9.41
Republic of Korea	Kanghwa	<i>KR 11035</i>	29.6	15.9	9.14	17.9	12.3
	Cheju (Kosan)	<i>KR 11036</i>	14.6	6.56	9.53	10.5	8.66
	Imsil	<i>KR 11037</i>		7.60	9.76	10.1	8.16
Russia	Mondy	<i>RU 11038</i>	1.76	2.24	1.74	1.55	1.92
	Listvyanka	<i>RU 11039</i>	5.66	3.58	4.11	7.70	7.80
	Irkutsk	<i>RU 11040</i>	14.9	16.3	9.53	10.9	12.1
	Primorskaya	<i>RU 11041</i>			15.1	8.16	14.9
Thailand	Bangkok	<i>TH 11042</i>	13.0	14.1	20.5	16.5	13.3
	Samutprakarn	<i>TH 11043</i>	10.8				9.88
	Patumthani	<i>TH 11044</i>	12.6	17.5	16.5	10.5	11.1
	Khanchanaburi	<i>TH 11045</i>	4.19	13.7	10.8	13.7	6.65
	(Vachiralongkorn Dam)						
	Chiang Mai (Mae Hia)	<i>TH 11046</i>		7.53	26.5	4.62	5.50
Viet Nam	Hanoi	<i>VN 11047</i>	26.2	24.1	23.8	28.2	39.3
	Hoa Binh	<i>VN 11048</i>	24.8	23.1	20.5	20.2	36.4

[\*\*\*]: No data or not measured

 Data in hatched column: Rejected annual value by the criteria of EANET (%PCL<80% or %TP<80%)


 Black column: Monitoring was not carried out

**Table 3.78 Annual nss-Ca<sup>2+</sup> deposition**

unit: mmol m<sup>-2</sup>y<sup>-1</sup>

Country	Name of sites	Code	2000	2001	2002	2003	2004
Cambodia	Phnom Penh	KH 11052					***
China	Guanyinqiao	CN 11001	67.9	103	94.3	64.4	153
	Nanshan	CN 11002	69.3				
	Jinyunshan	CN 11003		31.7	47.5	37.7	107
	Shizhan	CN 11004	128	244	165	327	88.3
	Weishuiyuan	CN 11005	136	79.7	142	310	88.1
	Dabagou	CN 11006	102				
	Jiwozi	CN 11007		88.8	38.6	139	89.1
	Hongwen	CN 11008	9.59	10.7	75.1	39.0	88.0
	Xiaoping	CN 11009	0.94	13.1	22.3	29.6	12.0
	Xiang Zhou	CN 11010	41.3	14.8	25.3	37.9	22.0
	Zhuxian Cavern	CN 11011	43.2	35.3	31.1	34.1	28.9
Indonesia	Jakarta	ID 11012	136	78.5	66.3	163	73.8
	Serpong	ID 11014	***	21.0	23.5	13.7	14.7
	Kototabang	ID 11013	***	1.65	8.60	16.6	14.2
	Bandung	ID 11015	***	61.8	42.9	17.2	16.1
Japan	Rishiri	JP 11016	5.14	3.40	5.66	2.82	3.46
	Ochiishi	JP 11050				1.25	2.90
	Tappi	JP 11017	3.36	3.25	7.30	4.53	5.19
	Sado-seki	JP 11019	6.60	8.08	4.86	3.44	2.90
	Happo	JP 11021	8.12	9.80	5.02	4.46	6.91
	Ijira	JP 11022	17.0	11.1	9.45	7.71	6.39
	Oki	JP 11023	9.07	7.60	6.14	4.55	7.76
	Banryu	JP 11024	5.7	7.7	4.76	2.89	4.97
	Yusuhara	JP 11025	6.80	6.68	2.91	3.23	5.25
	Hedo	JP 11027	2.35	3.64	5.87	4.84	7.64
Ogasawara	JP 11018	4.24	5.77	4.77	3.68	1.22	
Lao PDR	Vientian	LA 11051				***	***
Malaysia	Petaling Jaya	MY 11029	23.0	19.2	19.5	23.4	14.8
	Tanah Rata	MY 11030	6.93	8.02	8.46	9.95	5.51
Mongolia	Ulaanbaatar	MN 11031	7.38	7.83	8.88	7.85	3.59
	Terelj	MN 11032	3.13	1.30	6.46	3.29	3.33
Philippines	Metro Manila	PH 11033	56.0	154	25.0	18.5	23.4
	Los Banos	PH 11034	16.3	117	11.5	12.0	8.95
Republic of Korea	Kanghwa	KR 11035	28.2	14.9	8.27	17.0	11.7
	Cheju (Kosan)	KR 11036	11.1	4.79	8.28	9.16	7.25
	Imsil	KR 11037		7.16	8.93	9.18	7.70
Russia	Mondy	RU 11038	1.75	2.22	1.73	1.53	1.90
	Listvyanka	RU 11039	5.61	3.54	4.08	7.64	7.74
	Irkutsk	RU 11040	14.8	16.2	9.47	10.8	12.0
	Primorskaya	RU 11041			14.7	7.92	14.5
Thailand	Bangkok	TH 11042	12.9	13.9	20.0	16.2	13.0
	Samutprakarn	TH 11043	10.6				9.43
	Patumthani	TH 11044	12.3	17.3	16.3	10.3	11.0
	Khanchanaburi	TH 11045	4.02	13.4	10.4	13.4	6.38
	(Vachiralongkorn Dam) Chiang Mai (Mae Hia)	TH 11046		7.44	26.2	4.57	5.42
Viet Nam	Hanoi	VN 11047	25.7	23.5	23.6	27.8	39.1
	Hoa Binh	VN 11048	24.2	22.6	20.4	20.1	36.2

[\*\*\*]: No data or not measured

 Data in hatched column: Rejected annual value by the criteria of EANET (%PCL<80% or %TP<80%)

 Black column: Monitoring was not carried out

**Table 3.79 Annual Mg<sup>2+</sup> deposition**

 unit: mmol m<sup>-2</sup> y<sup>-1</sup>

Country	Name of sites	Code	2000	2001	2002	2003	2004
Cambodia	Phnom Penh	<i>KH 11052</i>					0.00
China	Guanyinqiao	<i>CN 11001</i>	9.23	8.73	8.67	4.40	12.7
	Nanshan	<i>CN 11002</i>	8.87				
	Jinyunshan	<i>CN 11003</i>		4.09	5.41	3.56	5.39
	Shizhan	<i>CN 11004</i>	13.2	17.6	23.7	42.7	9.18
	Weishuiyuan	<i>CN 11005</i>	14.2	6.13	21.1	52.0	8.99
	Dabagou	<i>CN 11006</i>	12.1				
	Jiwozi	<i>CN 11007</i>		8.58	7.09	20.7	16.9
	Hongwen	<i>CN 11008</i>	6.40	1.86	15.1	7.76	12.2
	Xiaoping	<i>CN 11009</i>	2.07	6.77	3.50	7.15	2.81
	Xiang Zhou	<i>CN 11010</i>	14.1	5.83	9.56	12.3	8.51
	Zhuxian Cavern	<i>CN 11011</i>	14.1	8.56	11.2	12.9	10.8
Indonesia	Jakarta	<i>ID 11012</i>	346	85.3	20.7	20.6	9.25
	Serpong	<i>ID 11014</i>	***	5.67	11.3	5.76	5.84
	Kototabang	<i>ID 11013</i>	***	1.25	4.63	21.1	3.76
	Bandung	<i>ID 11015</i>	***	10.6	4.16	2.73	2.93
Japan	Rishiri	<i>JP 11016</i>	28.0	15.2	21.4	14.4	25.0
	Ochiishi	<i>JP 11050</i>				17.3	27.3
	Tappi	<i>JP 11017</i>	18.3	16.7	26.1	19.3	34.5
	Sado-seki	<i>JP 11019</i>	30.9	39.3	44.0	12.7	24.1
	Happo	<i>JP 11021</i>	3.66	3.73	2.42	3.06	3.90
	Ijira	<i>JP 11022</i>	7.75	8.93	9.34	6.42	9.43
	Okii	<i>JP 11023</i>	54.4	45.6	63.8	33.9	48.4
	Banryu	<i>JP 11024</i>	5.22	16.29	12.12	16.3	23.0
	Yusuhara	<i>JP 11025</i>	6.09	3.80	8.34	5.21	11.4
	Hedo	<i>JP 11027</i>	145	35.8	120	68.7	162
	Ogasawara	<i>JP 11018</i>	38.2	23.9	43.1	43.5	15.3
Lao PDR	Vientian	<i>LA 11051</i>				***	***
Malaysia	Petaling Jaya	<i>MY 11029</i>	4.74	4.02	3.79	2.15	2.66
	Tanah Rata	<i>MY 11030</i>	1.30	1.07	1.17	1.36	0.75
Mongolia	Ulaanbaatar	<i>MN 11031</i>	0.81	0.90	0.64	1.10	0.49
	Terej	<i>MN 11032</i>	0.66	0.22	1.01	0.71	1.07
Philippines	Metro Manila	<i>PH 11033</i>	25.5	34.4	9.72	6.60	9.47
	Los Banos	<i>PH 11034</i>	9.78	20.1	5.00	4.18	6.25
Republic of Korea	Kanghwa	<i>KR 11035</i>	10.4	6.00	5.22	4.50	4.82
	Cheju (Kosan)	<i>KR 11036</i>	19.7	11.1	7.60	7.57	8.17
	Imsil	<i>KR 11037</i>		2.49	3.28	3.00	2.89
Russia	Mondy	<i>RU 11038</i>	0.33	0.47	0.45	0.32	0.46
	Listvyanka	<i>RU 11039</i>	1.30	0.88	1.10	1.97	1.76
	Irkutsk	<i>RU 11040</i>	2.66	2.60	1.71	1.97	2.64
	Primorskaya	<i>RU 11041</i>			4.73	3.60	4.87
Thailand	Bangkok	<i>TH 11042</i>	2.30	3.71	4.61	3.22	2.59
	Samutprakarn	<i>TH 11043</i>	2.33				2.36
	Patumthani	<i>TH 11044</i>	2.30	2.93	2.63	1.76	1.55
	Khanchanaburi	<i>TH 11045</i>	1.47	3.82	3.85	3.63	2.29
	(Vachiralongkorn Dam)						
	Chiang Mai (Mae Hia)	<i>TH 11046</i>		1.19	5.22	1.68	2.10
Viet Nam	Hanoi	<i>VN 11047</i>	6.27	8.94	4.18	5.77	5.98
	Hoa Binh	<i>VN 11048</i>	8.84	8.25	2.31	3.62	4.62

[\*\*\*]: No data or not measured

 Data in hatched column: Rejected annual value by the criteria of EANET  
 (%PCL<80% or %TP<80%)

Black column: Monitoring was not carried out

**Table 3.80 Annual H<sup>+</sup> deposition**

 unit: mmol m<sup>-2</sup>y<sup>-1</sup>

Country	Name of sites	Code	2000	2001	2002	2003	2004
Cambodia	Phnom Penh	KH 11052					2.01
China	Guanyinqiao	CN 11001	50.5	12.1	36.4	31.7	36.0
	Nanshan	CN 11002	76.2				
	Jinyunshan	CN 11003		46.5	70.1	62.0	39.3
	Shizhan	CN 11004	1.17	0.15	0.20	1.27	0.30
	Weishuiyuan	CN 11005	0.17	0.03	0.22	1.02	0.49
	Dabagou	CN 11006	3.14				
	Jiwozi	CN 11007		0.12	0.14	0.54	0.79
	Hongwen	CN 11008	29.0	8.75	25.4	44.8	20.6
	Xiaoping	CN 11009	19.1	33.8	72.9	73.2	48.3
	Xiang Zhou	CN 11010	14.2	22.7	13.5	13.6	22.1
	Zhuxian Cavern	CN 11011	40.8	43.0	20.3	13.8	29.6
Indonesia	Jakarta	ID 11012	10.4	4.68	26.5	11.3	30.0
	Serpong	ID 11014	***	38.0	56.6	51.6	30.5
	Kototabang	ID 11013	73.0	10.3	8.78	15.6	39.0
	Bandung	ID 11015	***	26.4	88.7	16.1	8.31
Japan	Rishiri	JP 11016	12.1	10.3	14.4	9.43	13.6
	Ochiishi	JP 11050				9.53	13.4
	Tappi	JP 11017	19.9	24.9	27.8	31.0	37.5
	Sado-seki	JP 11019	28.7	22.5	32.5	24.2	30.4
	Happo	JP 11021	40.6	34.1	30.7	30.5	43.0
	Ijira	JP 11022	80.7	82.9	80.5	115	75.8
	Okii	JP 11023	27.6	21.1	29.2	27.9	22.4
	Banryu	JP 11024	35.9	39.1	26.5	40.7	34.7
	Yusuhara	JP 11025	54.7	31.1	40.8	52.3	42.1
	Hedo	JP 11027	21.5	23.1	22.9	17.4	29.4
	Ogasawara	JP 11018	11.7	14.6	10.9	12.7	8.75
Lao PDR	Vientian	LA 11051				0.03	1.00
Malaysia	Petaling Jaya	MY 11029	153	173	157	158	142
	Tanah Rata	MY 11030	50.4	33.4	30.1	38.3	33.1
Mongolia	Ulaanbaatar	MN 11031	0.11	0.11	0.07	0.56	0.03
	Tereelj	MN 11032	0.63	0.08	0.44	1.24	0.34
Philippines	Metro Manila	PH 11033	13.2	8.86	24.1	79.8	14.4
	Los Banos	PH 11034	9.58	5.41	3.07	52.2	9.54
Republic of Korea	Kanghwa	KR 11035	11.2	11.6	18.3	33.5	23.8
	Cheju (Kosan)	KR 11036	15.0	14.4	24.8	19.3	20.5
	Imsil	KR 11037		10.5	2.00	15.7	14.2
Russia	Mondy	RU 11038	1.68	1.00	0.83	1.83	1.64
	Listvyanka	RU 11039	3.78	5.42	4.74	5.24	6.67
	Irkutsk	RU 11040	4.15	2.49	2.86	1.94	6.74
	Primorskaya	RU 11041			5.26	4.27	10.0
Thailand	Bangkok	TH 11042	12.8	12.6	10.3	40.8	7.86
	Samutprakarn	TH 11043	14.5				4.29
	Patumthani	TH 11044	5.41	10.0	4.39	22.7	13.3
	Khanchanaburi (Vachiralongkorn Dam)	TH 11045	2.41	8.29	5.05	5.65	1.18
	Chiang Mai (Mae Hia)	TH 11046		2.10	2.79	2.00	2.93
Viet Nam	Hanoi	VN 11047	4.48	3.31	3.95	2.45	3.56
	Hoa Binh	VN 11048	14.7	20.2	10.6	7.02	4.61

[\*\*\*]: No data or not measured

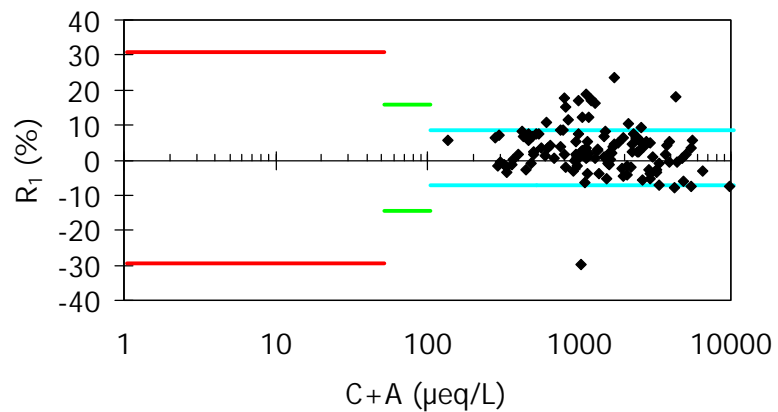
 Data in hatched column: Rejected annual value by the criteria of EANET  
 (%PCL<80% or %TP<80%)

Black column: Monitoring was not carried out

**Table 3.81 Site Code**

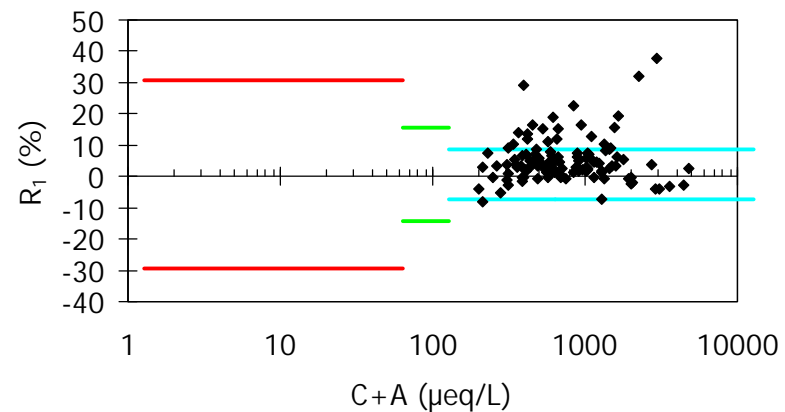
Country	Name of sites	Code
Cambodia	Phnom Penh	KH 11052
China	Guanyinqiao	CN 11001
	Nanshan	CN 11002
	Jinyunshan	CN 11003
	Shizhan	CN 11004
	Weishuiyuan	CN 11005
	Dabagou	CN 11006
	Jiwozi	CN 11007
	Hongwen	CN 11008
	Xiaoping	CN 11009
	Xiang Zhou	CN 11010
	Zhuxian Cavern	CN 11011
Indonesia	Jakarta	ID 11012
	Kototabang	ID 11013
	Serpong	ID 11014
	Bandung	ID 11015
Japan	Rishiri	JP 11016
	Ochiishi	JP 11050
	Tappi	JP 11017
	Sado-seki	JP 11019
	Happo	JP 11021
	Ijira	JP 11022
	Oki	JP 11023
	Banryu	JP 11024
	Yusuhara	JP 11025
	Hedo	JP 11027
	Ogasawara	JP 11018
	Sado	JP 11020
	Ashizuri	JP 11026
	Kunigami	JP 11028
Lao PDR	Vientian	LA 11051
Malaysia	Petaling Jaya	MY 11029
	Tanah Rata	MY 11030
Mongolia	Ulaanbaatar	MN 11031
	Terelj	MN 11032
Philippines	Metro Manila	PH 11033
	Los Banos	PH 11034
Republic of Korea	Kanghwa	KR 11035
	Cheju (Kosan)	KR 11036
	Imsil	KR 11037
Russia	Mondy	RU 11038
	Listvyanka	RU 11039
	Irkutsk	RU 11040
	Primorskaya	RU 11041
Thailand	Bangkok	TH 11042
	Samutprakarn	TH 11043
	Patumthani	TH 11044
	Khanchanaburi (Vachiralongkorn Dam)	TH 11045
	Chiang Mai (Mae Hia)	TH 11046
Viet Nam	Hanoi	VN 11047
	Hoa Binh	VN 11048

*Including the sites working only for preparatory-phase activities*



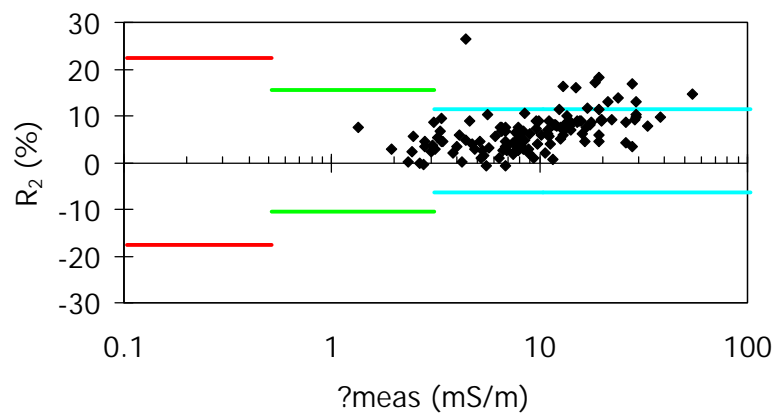
**Fig. 3.2 a) Guanyinqiao Ion Balance ( $R_1$ )**

*Calculated including  $F^-$*



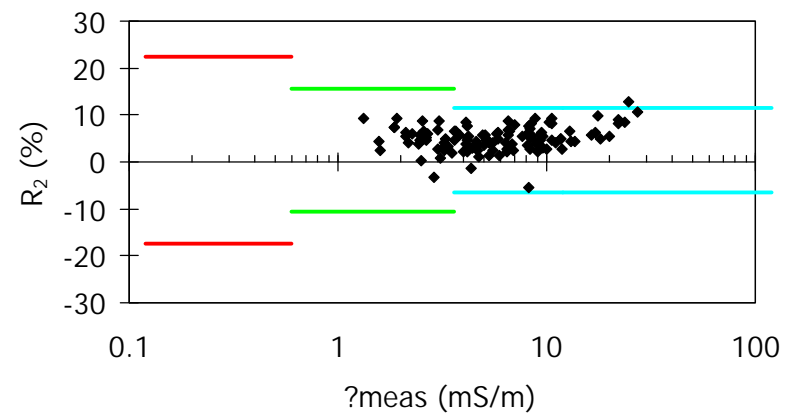
**Fig. 3.3 a) Jinyunshan Ion Balance ( $R_1$ )**

*Calculated including  $F^-$*



**Fig. 3.2 b) Guanyinqiao Conductivity Agreement ( $R_2$ )**

*Calculated including  $F^-$*



**Fig. 3.3 b) Jinyunshan Conductivity Agreement ( $R_2$ )**

*Calculated including  $F^-$*

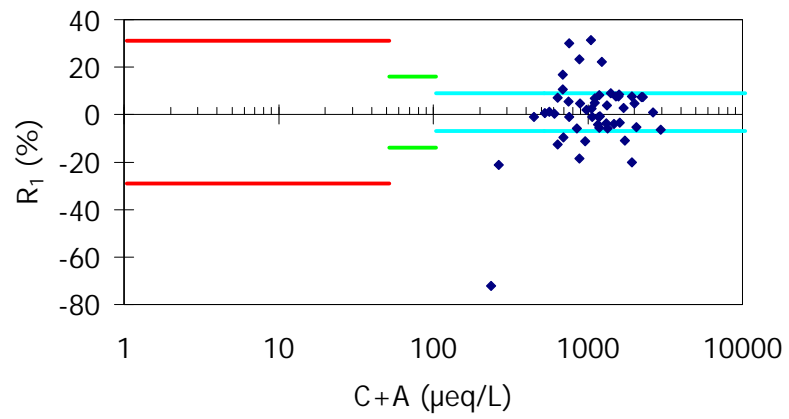


Fig. 3.4 a) Shizhan Ion Balance ( $R_1$ )

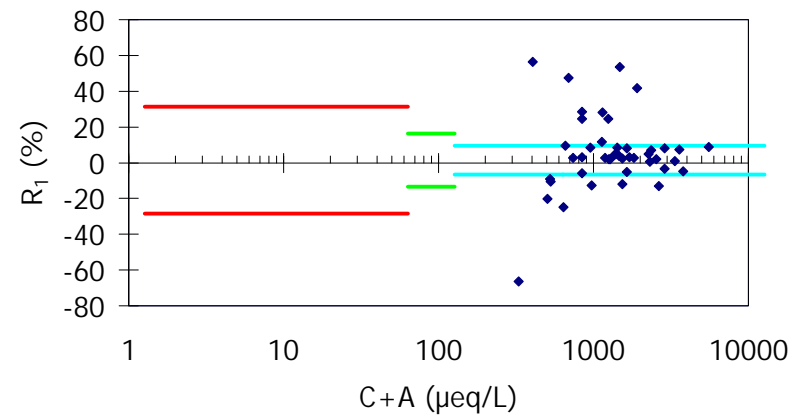


Fig. 3.5 a) Weishuiyuan Ion Balance ( $R_1$ )

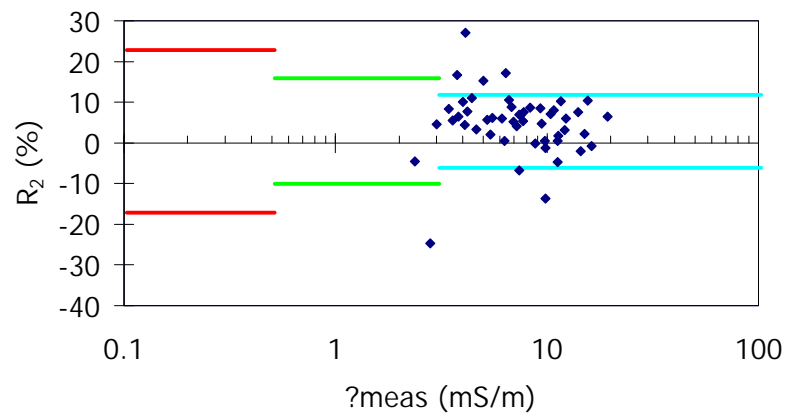


Fig. 3.4 b) Shizhan Conductivity Agreement ( $R_2$ )

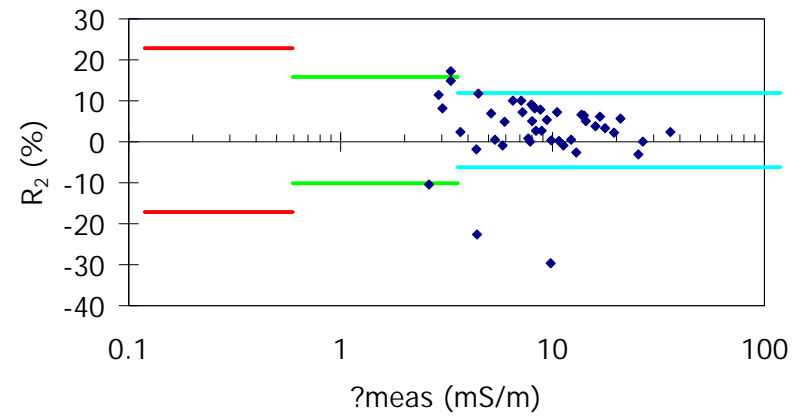


Fig. 3.5 b) Weishuiyuan Conductivity Agreement ( $R_2$ )

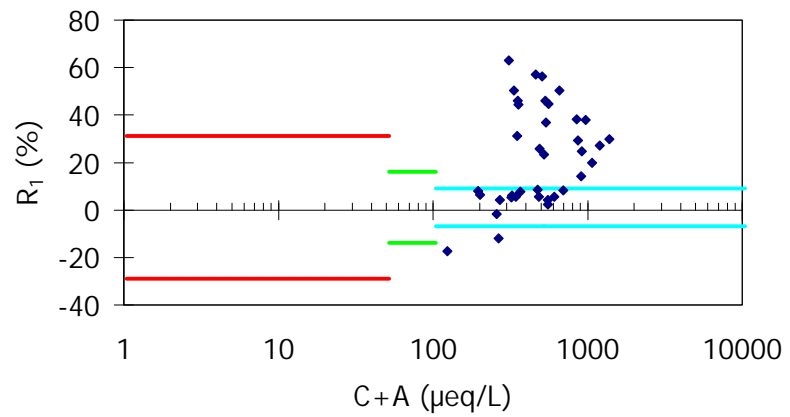


Fig. 3.6 a) Jiwozi Ion Balance ( $R_1$ )

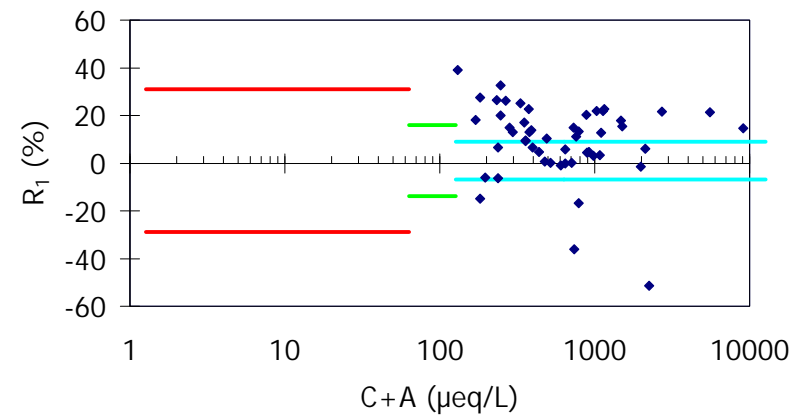


Fig. 3.7 a) Hongwen Ion Balance ( $R_1$ )

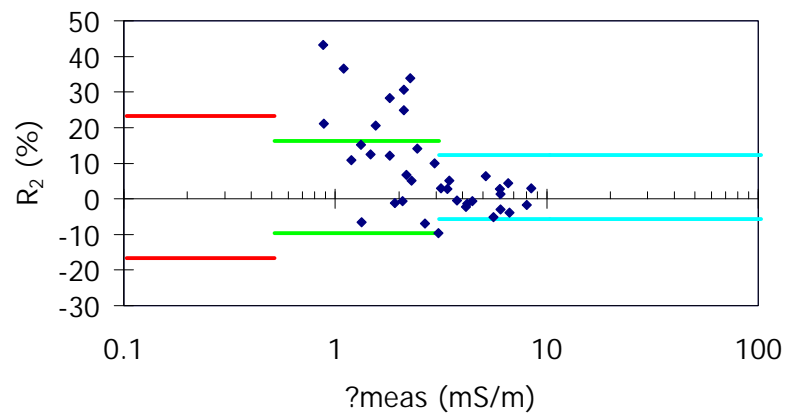


Fig. 3.6 b) Jiwozi Conductivity Agreement ( $R_2$ )

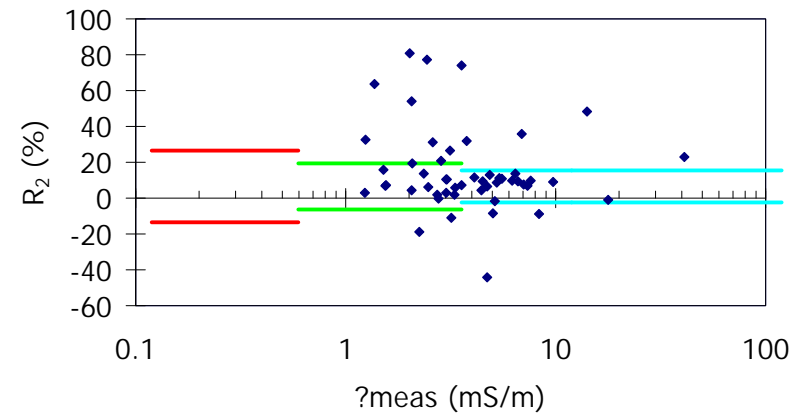


Fig. 3.7 b) Hongwen Conductivity Agreement ( $R_2$ )

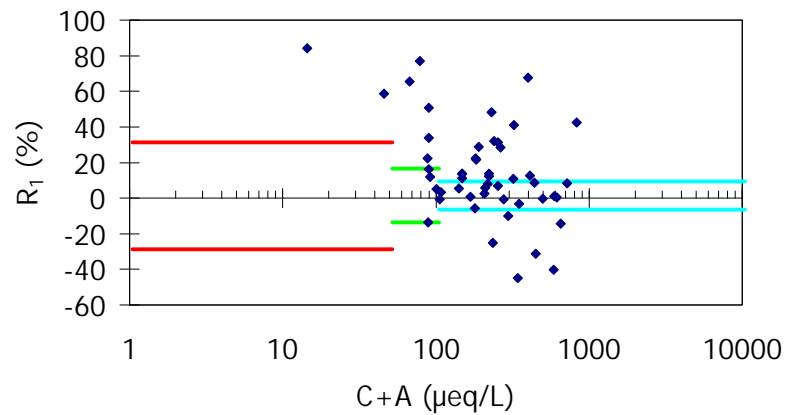


Fig. 3.8 a) Xiaoping Ion Balance ( $R_1$ )

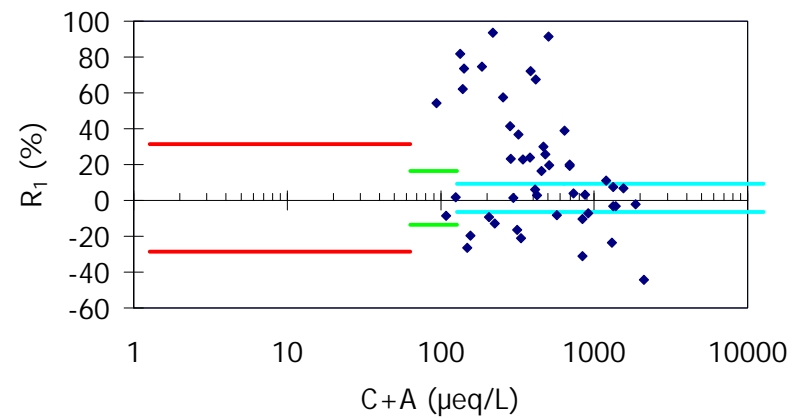


Fig. 3.9 a) XiangZhou Ion Balance ( $R_1$ )

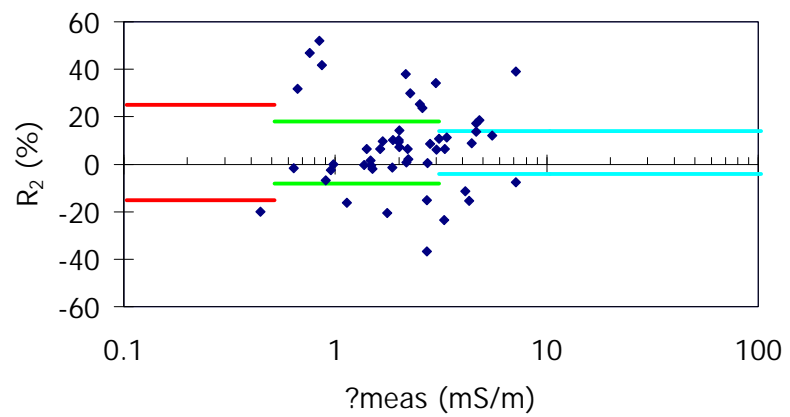


Fig. 3.8 b) Xiaoping Conductivity Agreement ( $R_2$ )

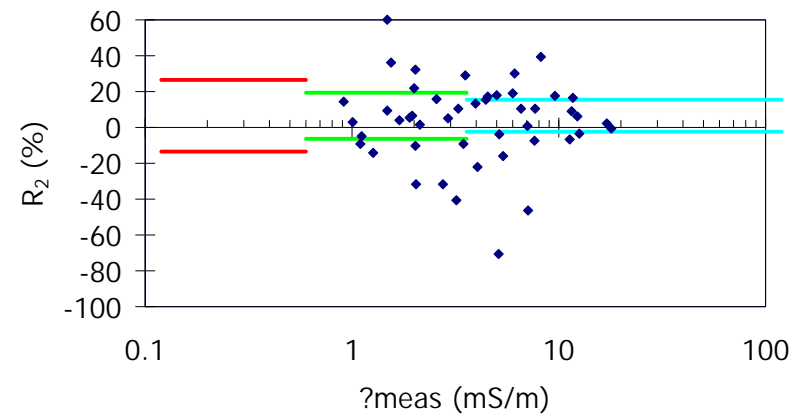


Fig. 3.9 b) XiangZhou Conductivity Agreement ( $R_2$ )

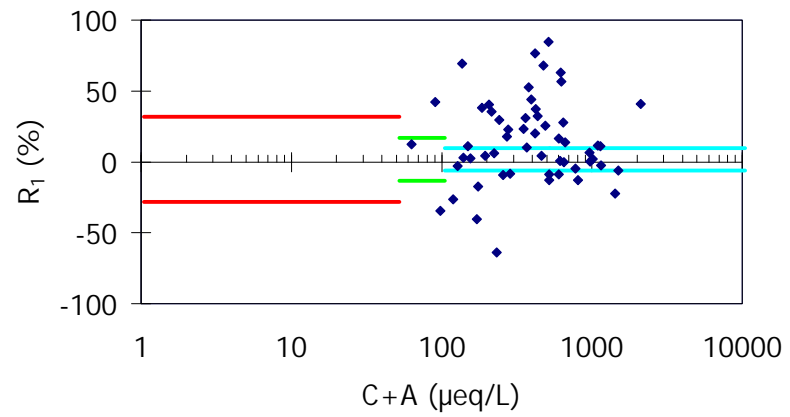


Fig. 3.10 a) Zhuxian Cavern Ion Balance ( $R_1$ )

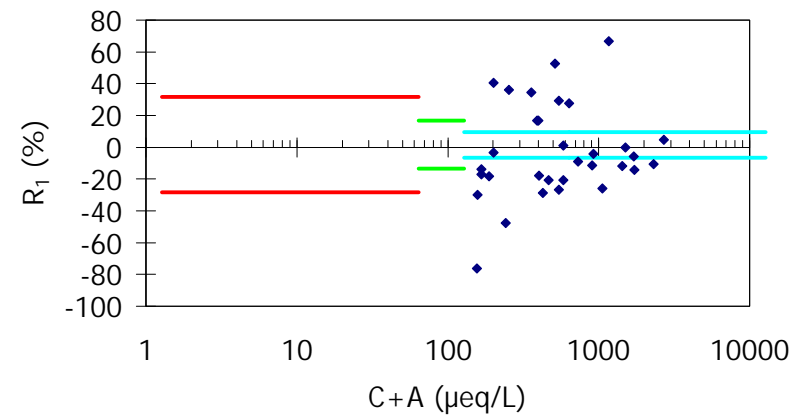


Fig. 3.11 a) Jakarta Ion Balance ( $R_1$ )

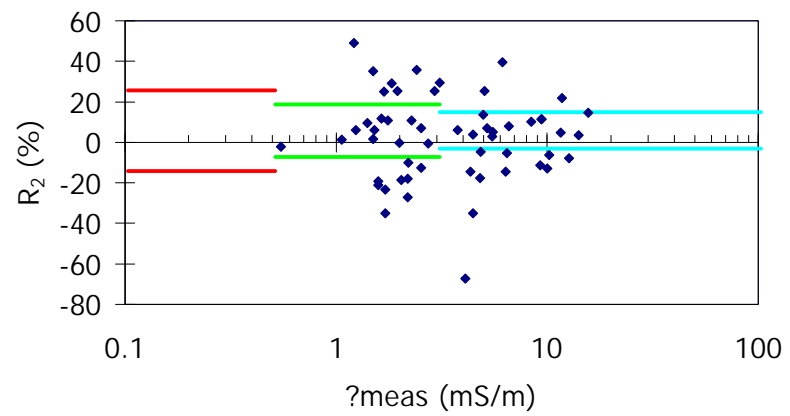


Fig. 3.10 b) Zhuxian Cavern Conductivity Agreement ( $R_2$ )

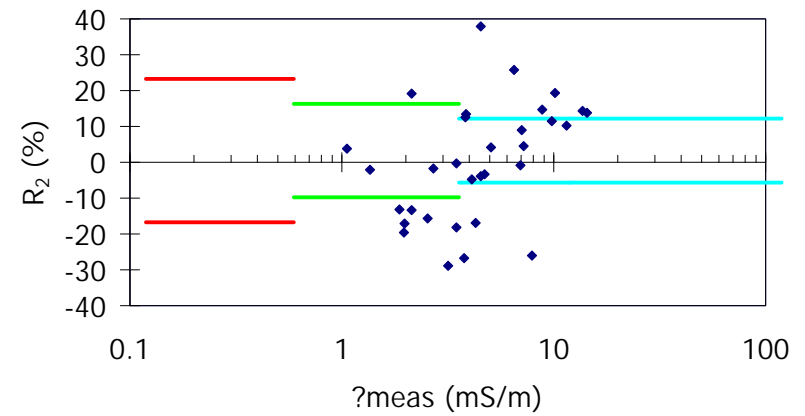


Fig. 3.11 b) Jakarta Conductivity Agreement ( $R_2$ )

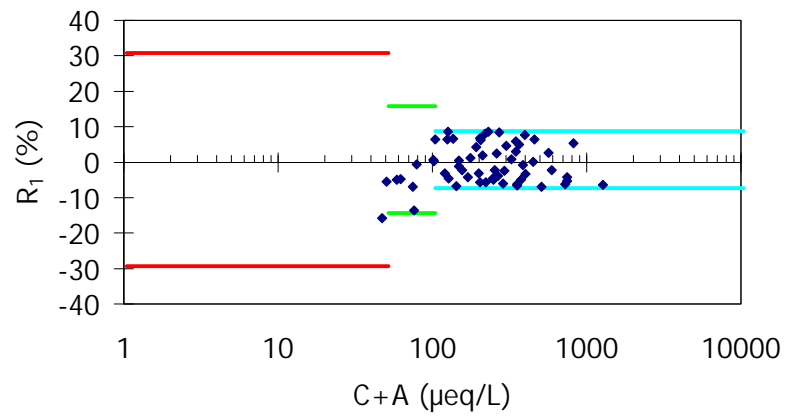


Fig. 3.12 a) Serpong Ion Balance ( $R_1$ )

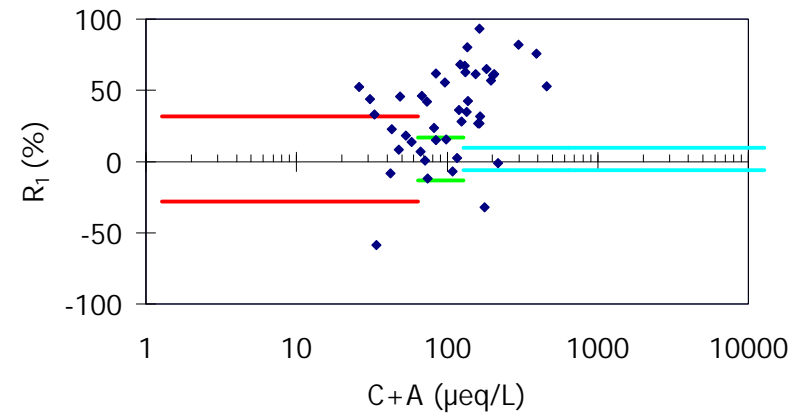


Fig. 3.13 a) Kototabang Ion Balance ( $R_1$ )

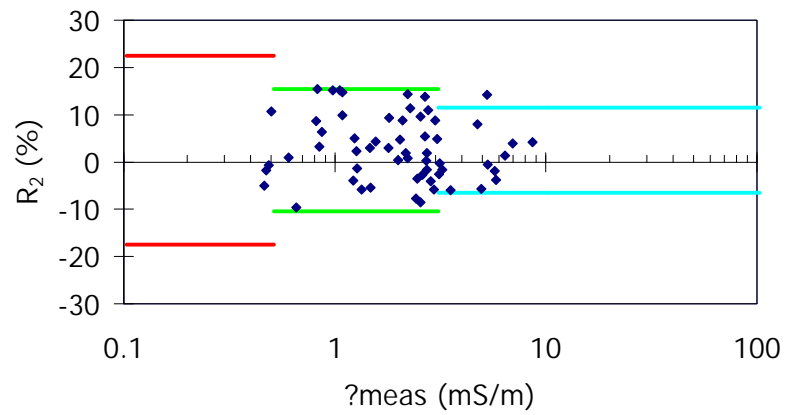


Fig. 3.12 b) Serpong Conductivity Agreement ( $R_2$ )

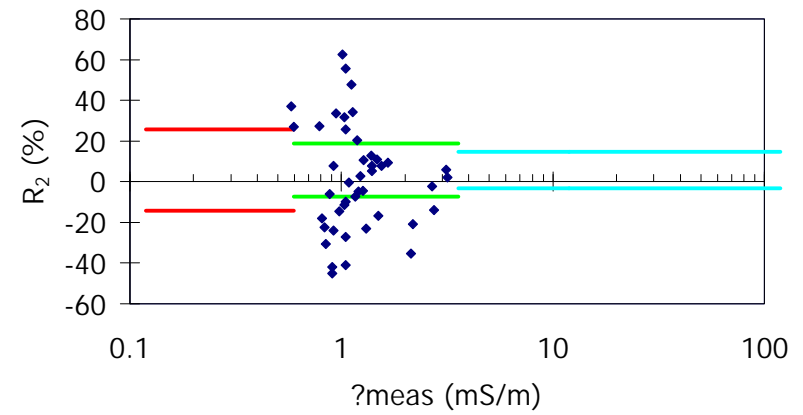


Fig 3.13 b) Kototabang Conductivity Agreement ( $R_2$ )

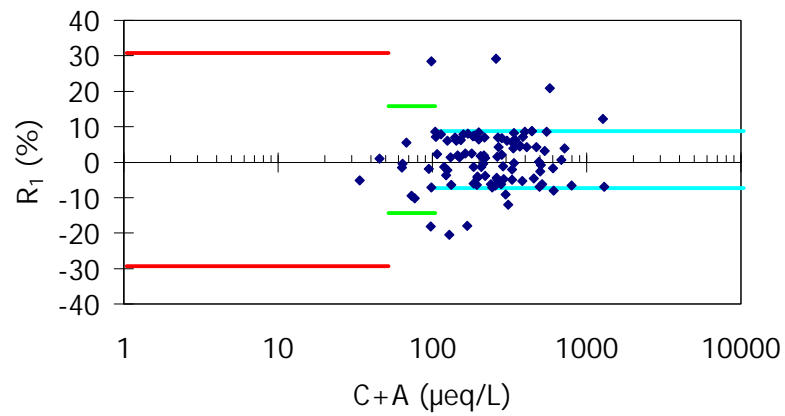


Fig. 3.14 a) Bandung Ion Balance ( $R_1$ )

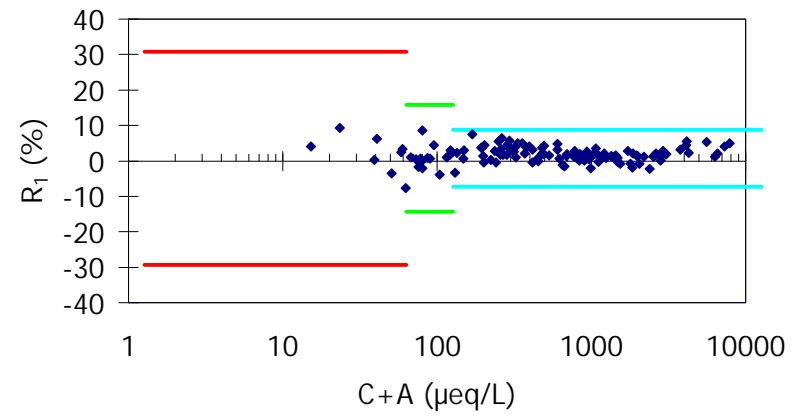


Fig. 3.15 a) Rishiri Ion Balance ( $R_1$ )

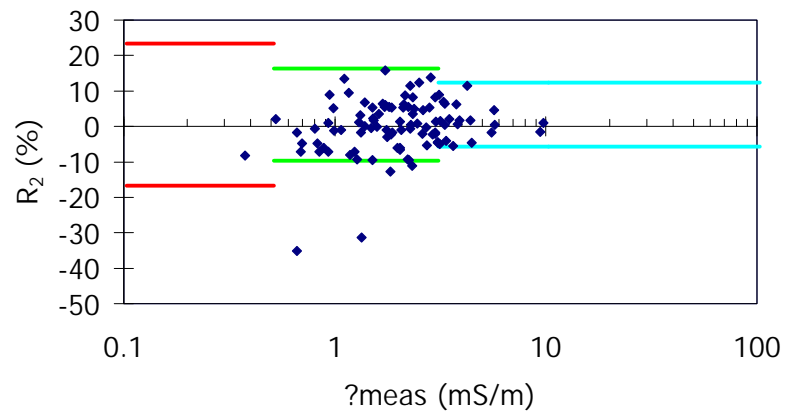


Fig. 3.14 b) Bandung Conductivity Agreement ( $R_2$ )

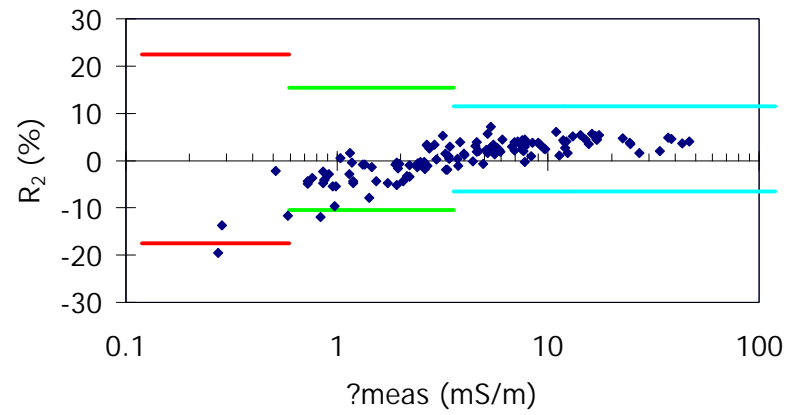


Fig. 3.15 b) Rishiri Conductivity Agreement ( $R_2$ )

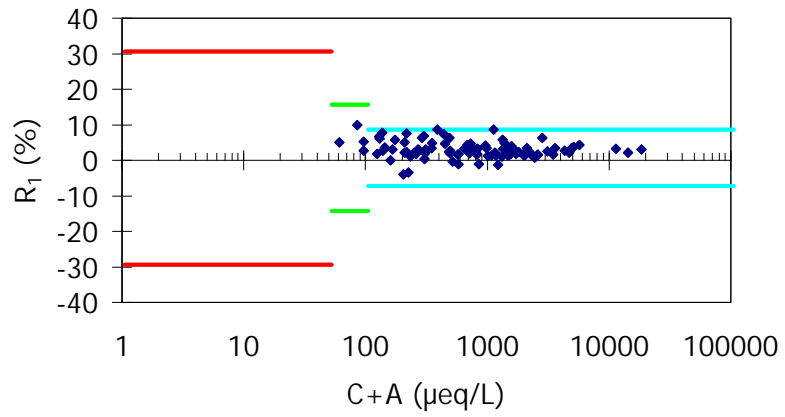


Fig. 3.16 a) Ochiishi Ion Balance ( $R_1$ )

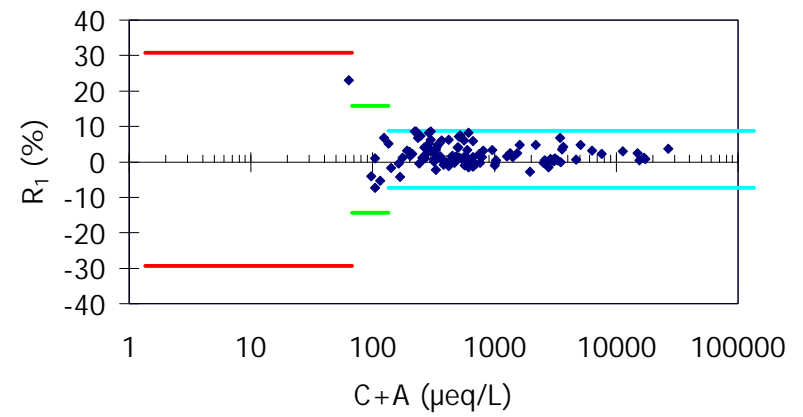


Fig. 3.17 a) Tappi Ion Balance ( $R_1$ )

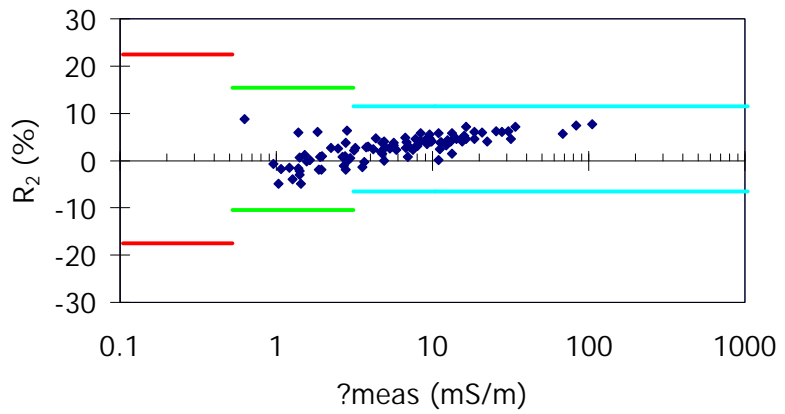


Fig. 3.16 b) Ochiishi Conductivity Agreement ( $R_2$ )

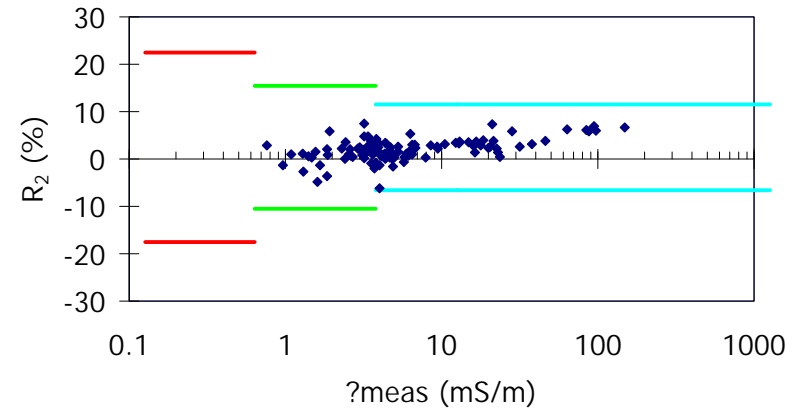


Fig. 3.17 b) Tappi Conductivity Agreement ( $R_2$ )

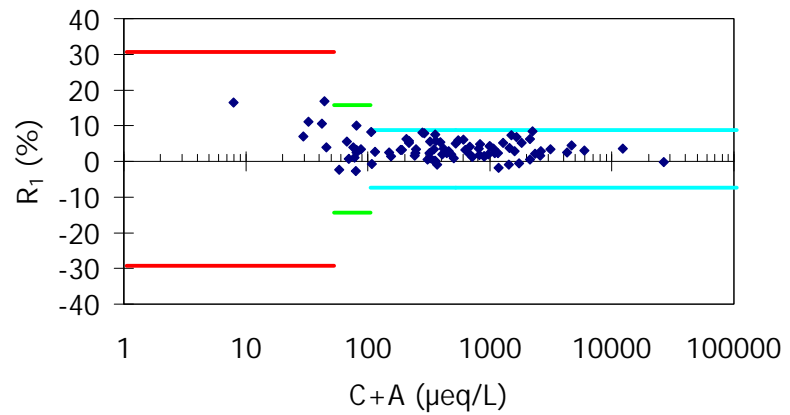


Fig. 3.18 a) Sado-seki Ion Balance ( $R_1$ )

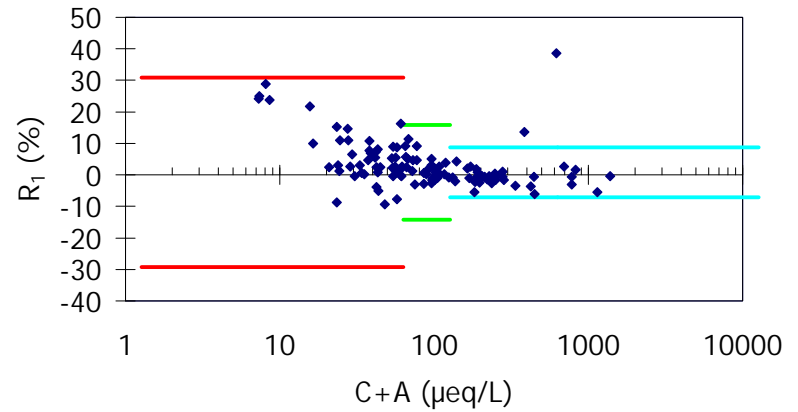


Fig. 3.19 a) Happo Ion Balance ( $R_1$ )

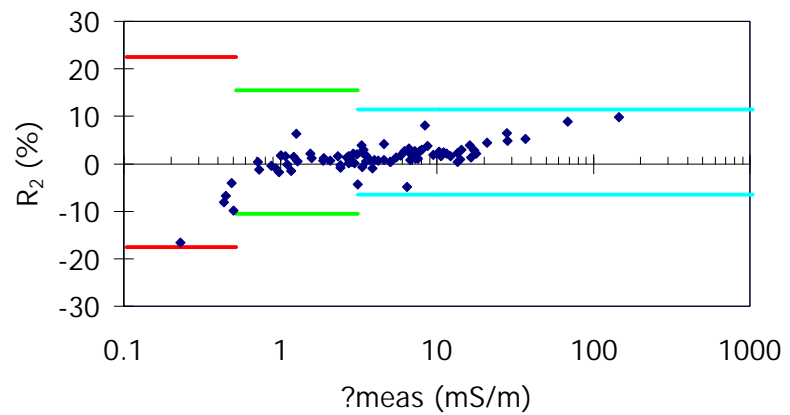


Fig. 3.18 b) Sado-seki Conductivity Agreement ( $R_2$ )

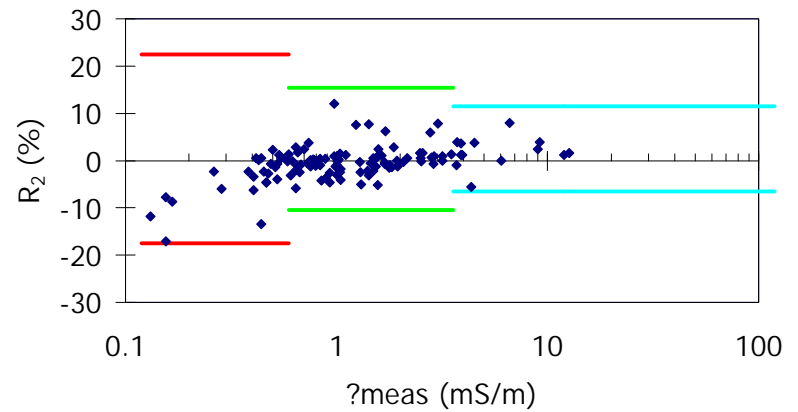


Fig. 3.19 b) Happo Conductivity Agreement ( $R_2$ )

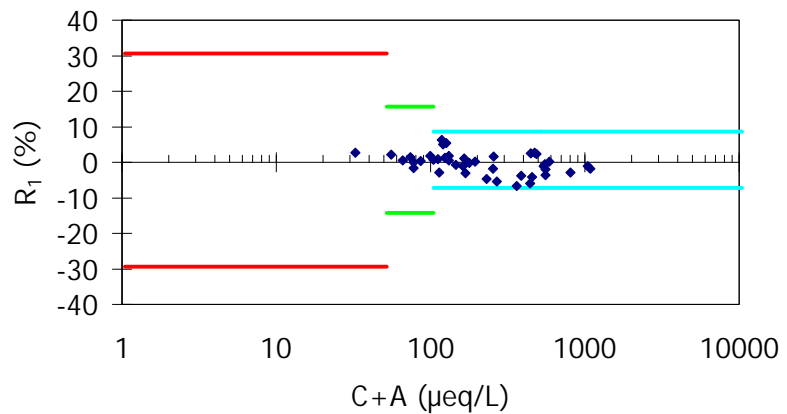


Fig. 3.20 a) Ijira Ion Balance ( $R_1$ )

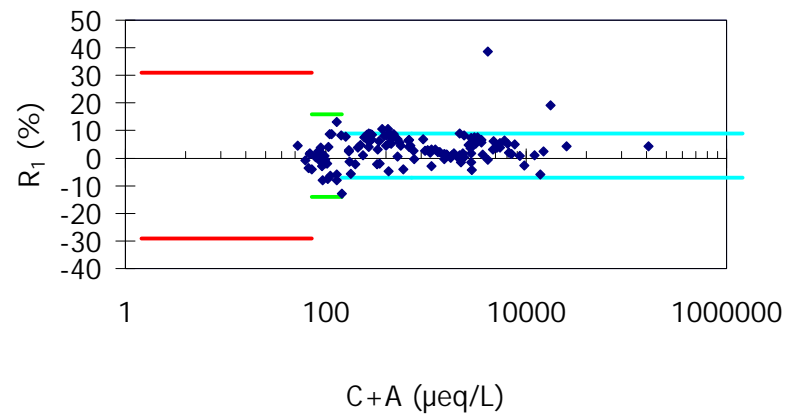


Fig. 3.21 a) Oki Ion Balance ( $R_1$ )

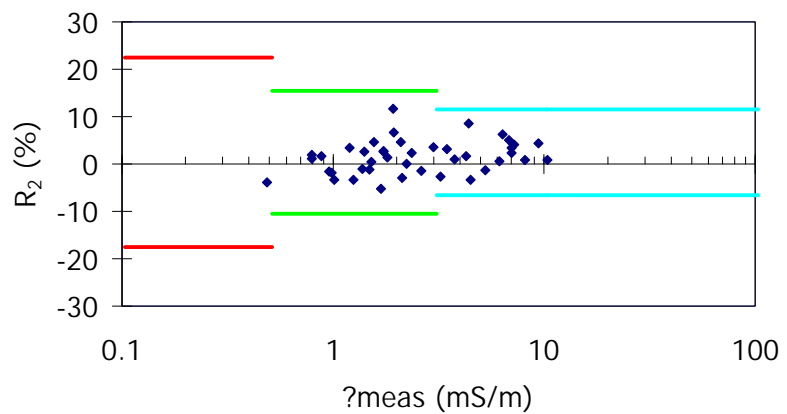


Fig. 3.20 b) Ijira Conductivity Agreement ( $R_2$ )

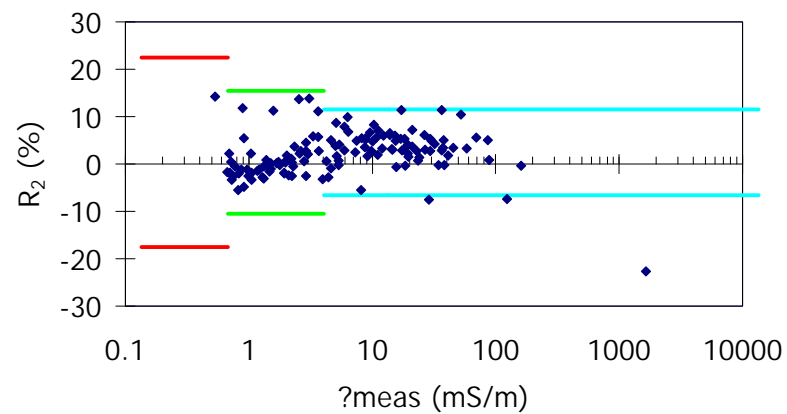


Fig. 3.21 b) Oki Conductivity Agreement ( $R_2$ )

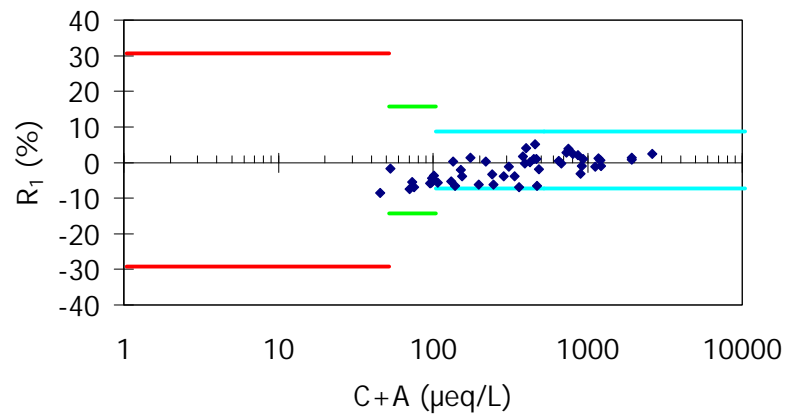


Fig. 3.22 a) Banryu Ion Balance ( $R_1$ )

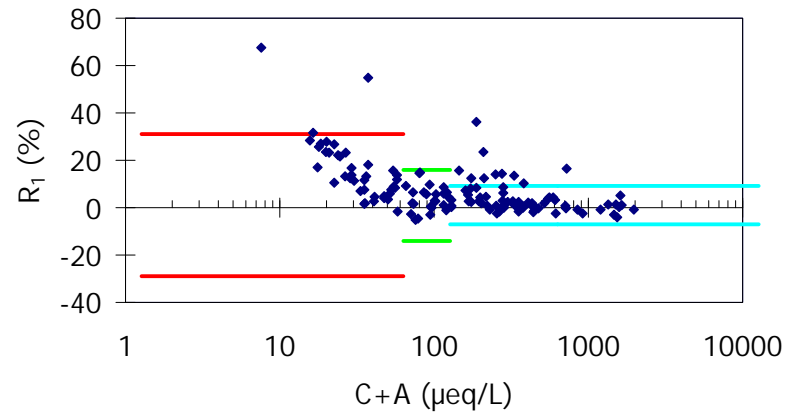


Fig. 3.23 a) Yusuhara Ion Balance ( $R_1$ )

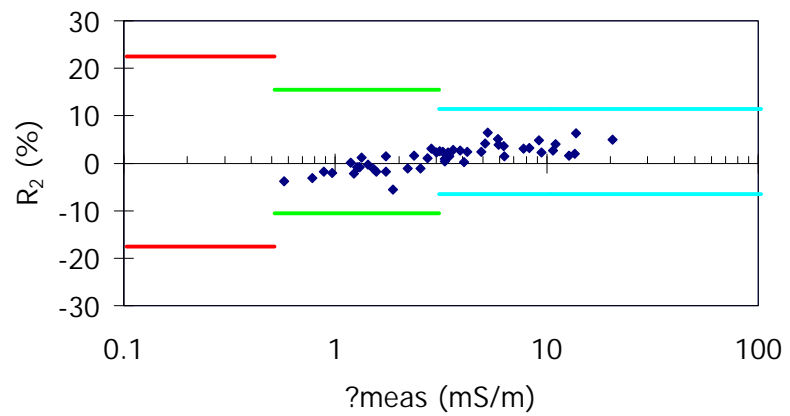


Fig. 3.22 b) Banryu Conductivity Agreement ( $R_2$ )

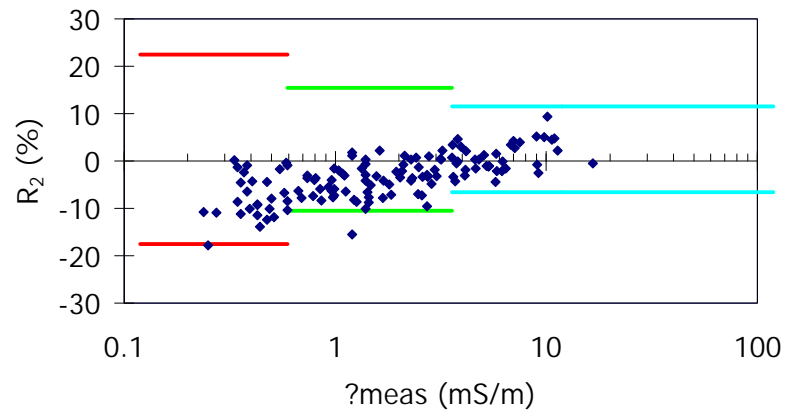


Fig. 3.23 b) Yusuhara Conductivity Agreement ( $R_2$ )

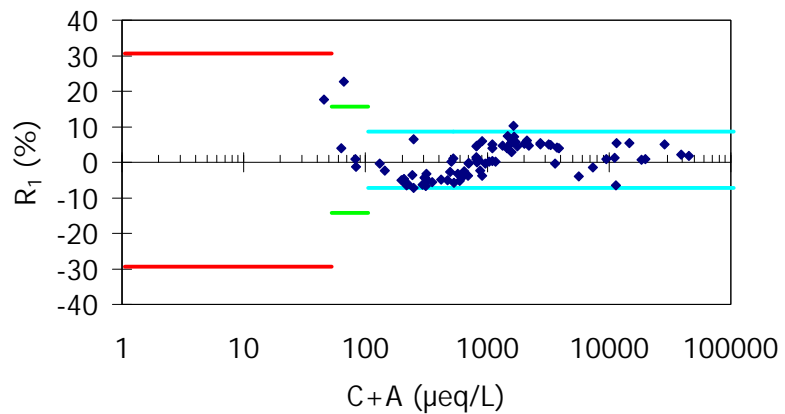


Fig. 3.24 a) Hedo Ion Balance ( $R_1$ )

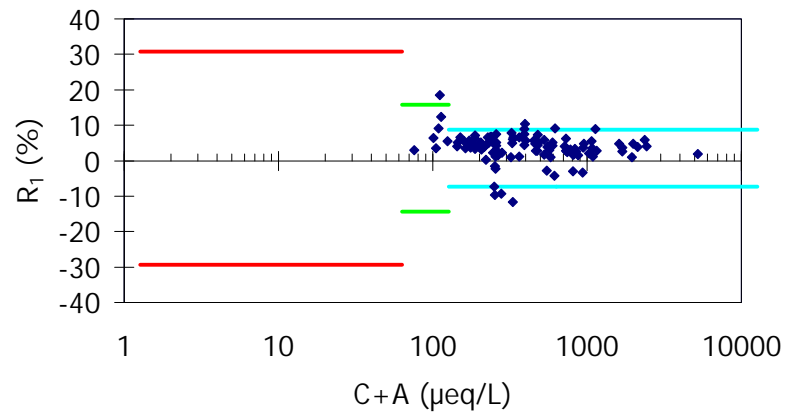


Fig. 3.25 a) Ogasawara Ion Balance ( $R_1$ )

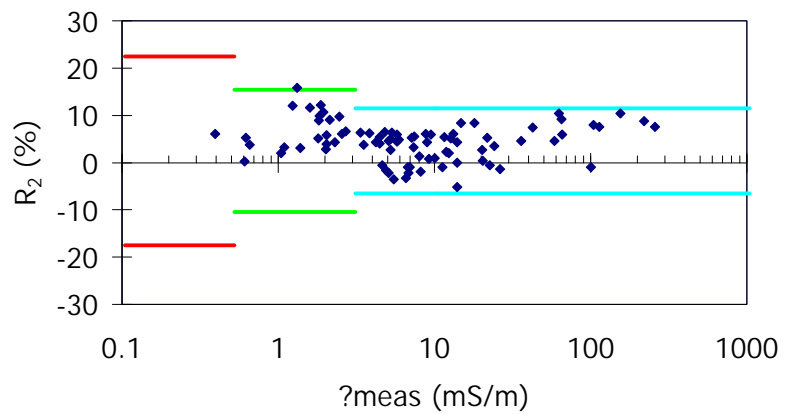


Fig. 3.24 b) Hedo Conductivity Agreement ( $R_2$ )

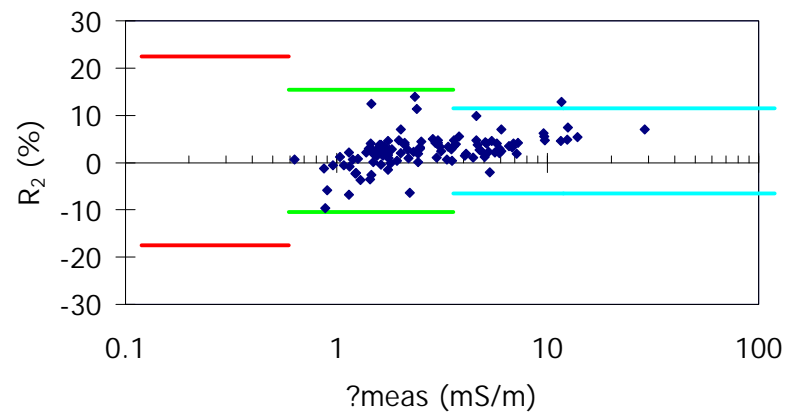
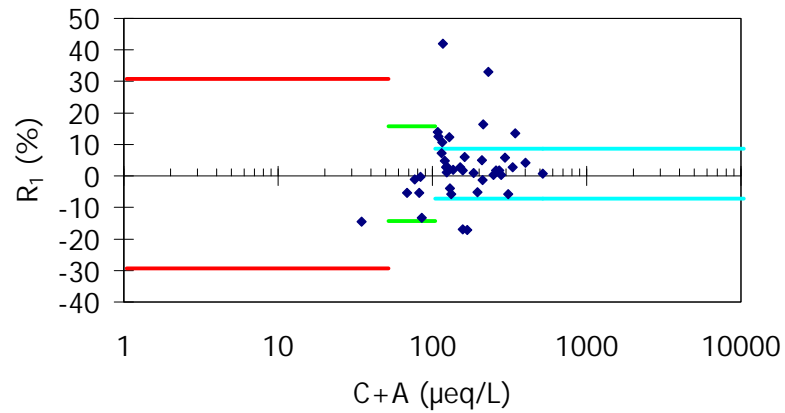
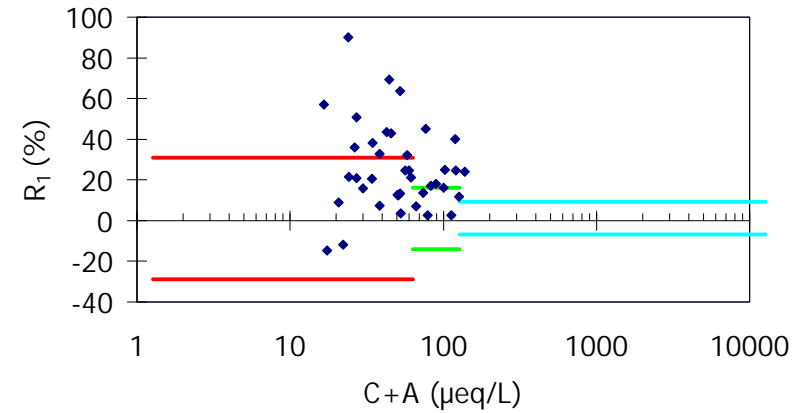


Fig. 3.25 b) Ogasawara Conductivity Agreement ( $R_2$ )



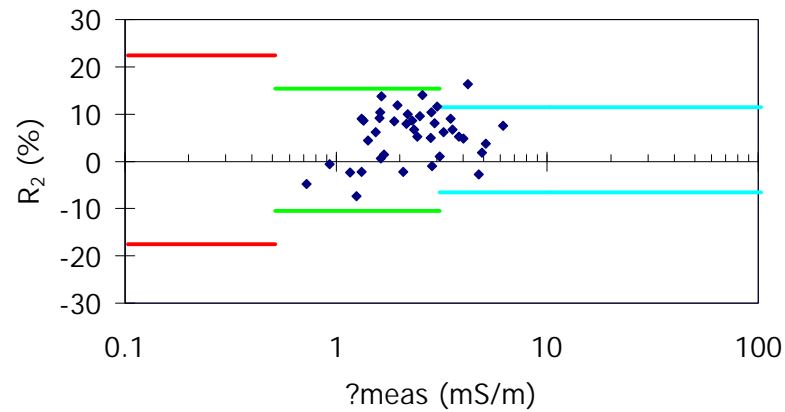
**Fig. 3.26 a) Petaling Jaya Ion Balance ( $R_1$ )**

*Calculated including  $HCOO^-$ ,  $CH_3COO^-$  and  $C_2O_4^{2-}$*



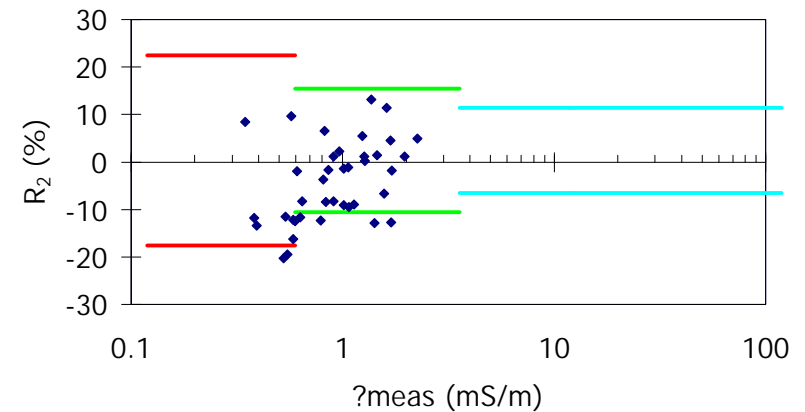
**Fig. 3.27 a) Tanah Rata Ion Balance ( $R_1$ )**

*Calculated including  $HCOO^-$ ,  $CH_3COO^-$  and  $C_2O_4^{2-}$*



**Fig. 3.26 b) Petaling Jaya Conductivity Agreement ( $R_2$ )**

*Calculated including  $HCOO^-$ ,  $CH_3COO^-$  and  $C_2O_4^{2-}$*



**Fig. 3.27 b) Tanah Rata Conductivity Agreement ( $R_2$ )**

*Calculated including  $HCOO^-$ ,  $CH_3COO^-$  and  $C_2O_4^{2-}$*

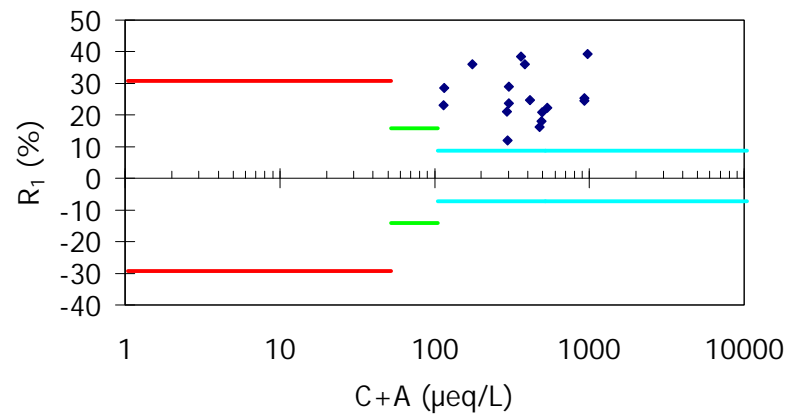


Fig. 3.28 a) Ulaanbaatar Ion Balance ( $R_1$ )

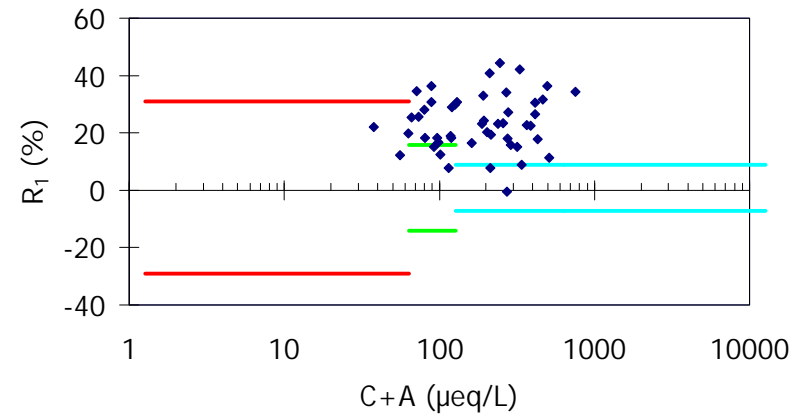


Fig. 3.29 a) Terelj Ion Balance ( $R_1$ )

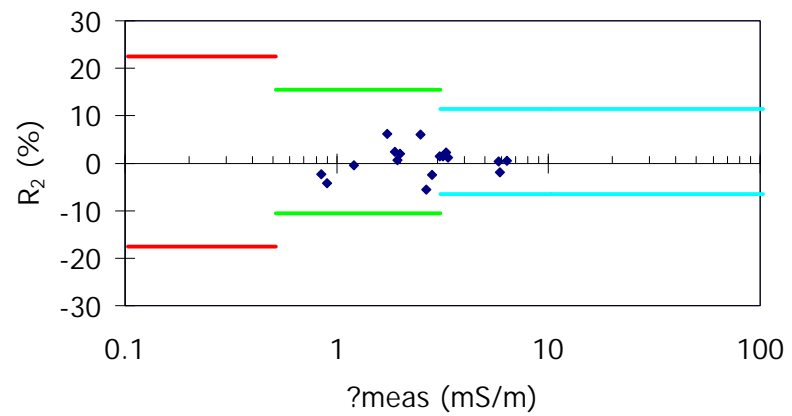


Fig. 3.28 b) Ulaanbaatar Conductivity Agreement ( $R_2$ )

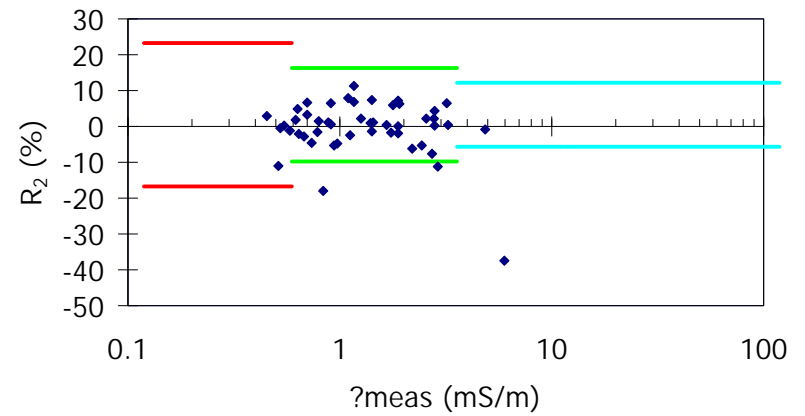


Fig. 3.29 b) Terelj Conductivity Agreement ( $R_2$ )

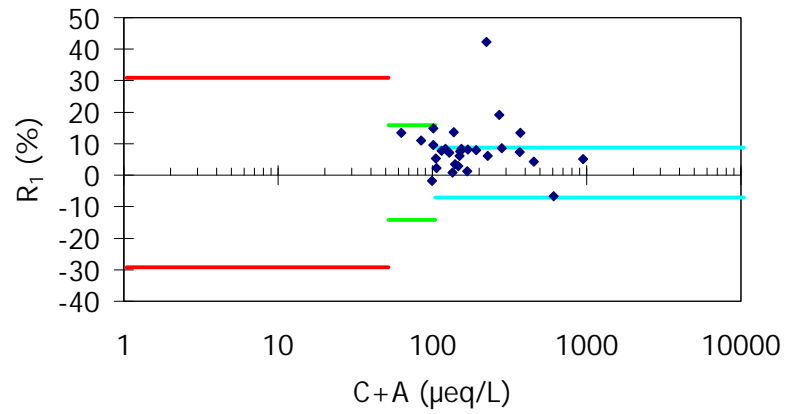


Fig. 3.30 a) Metro Manila Ion Balance ( $R_1$ )

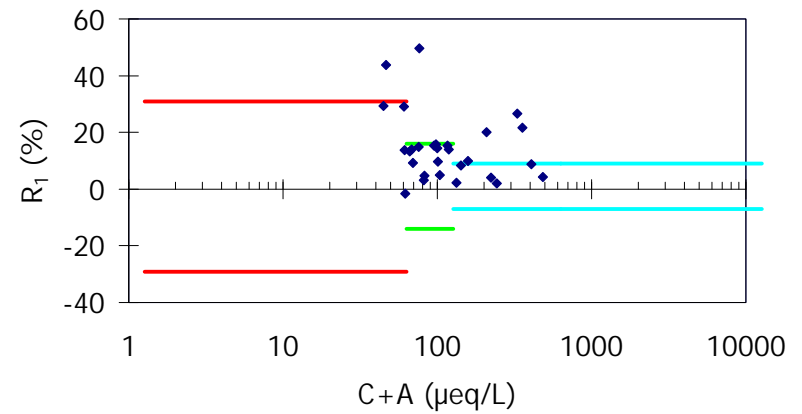


Fig. 3.31 a) Los Banos Ion Balance ( $R_1$ )

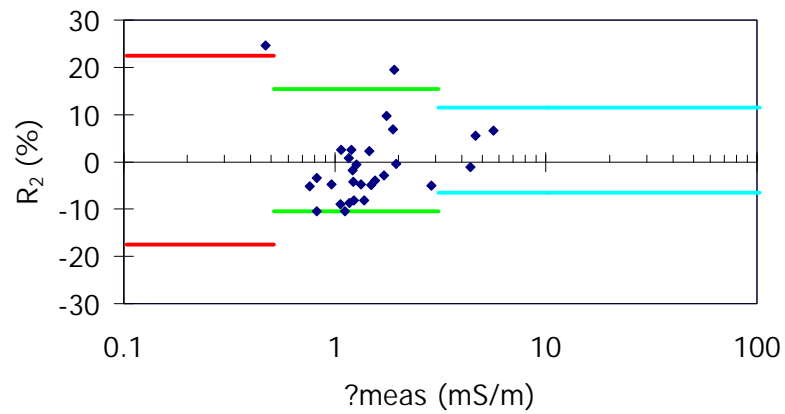


Fig. 3.30 b) Metro Manila Conductivity Agreement ( $R_2$ )

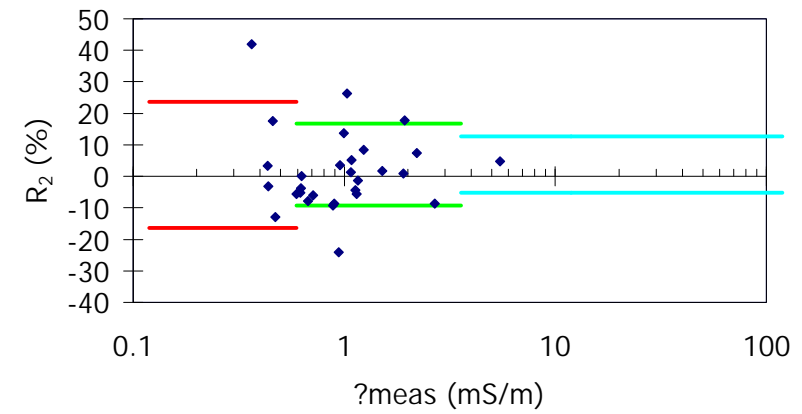


Fig. 3.31 b) Los Banos Conductivity Agreement ( $R_2$ )

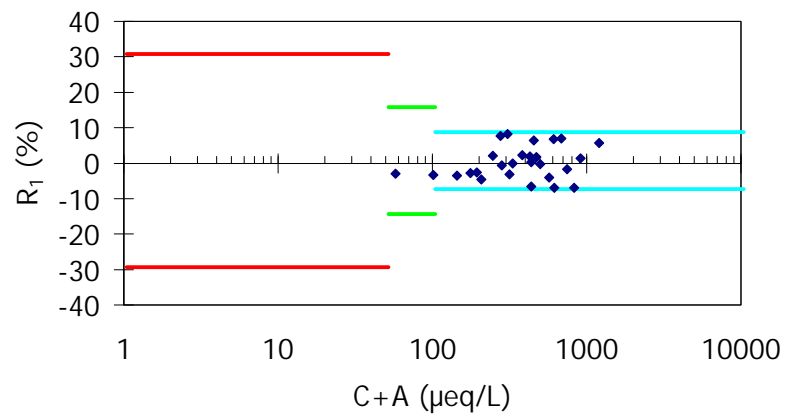


Fig. 3.32 a) Kanghwa Ion Balance ( $R_1$ )

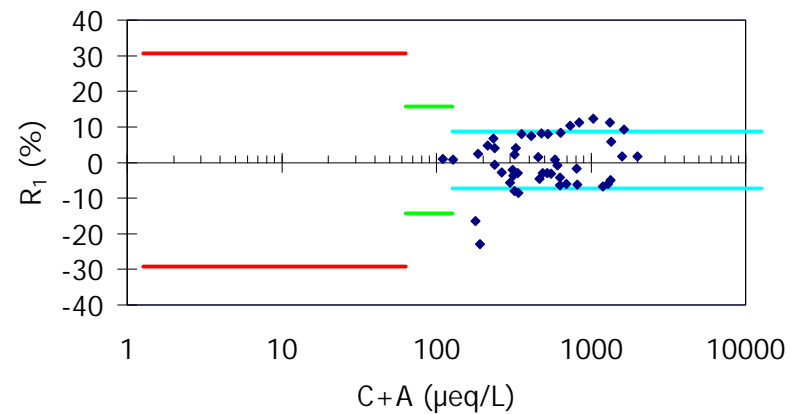


Fig. 3.33 a) Cheju Ion Balance ( $R_1$ )

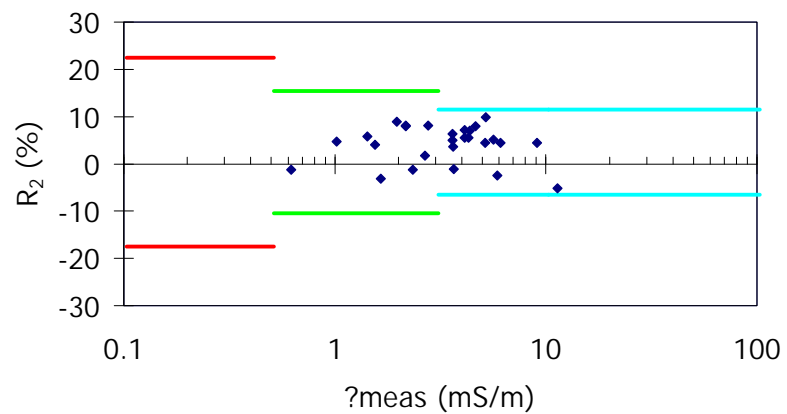


Fig. 3.32 b) Kanghwa Conductivity Agreement ( $R_2$ )

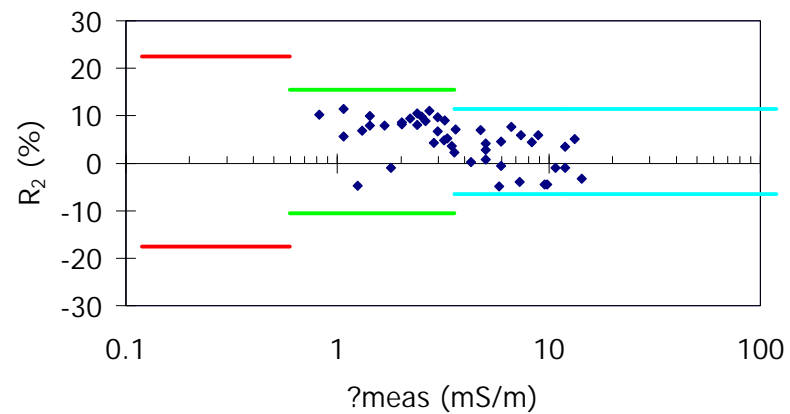
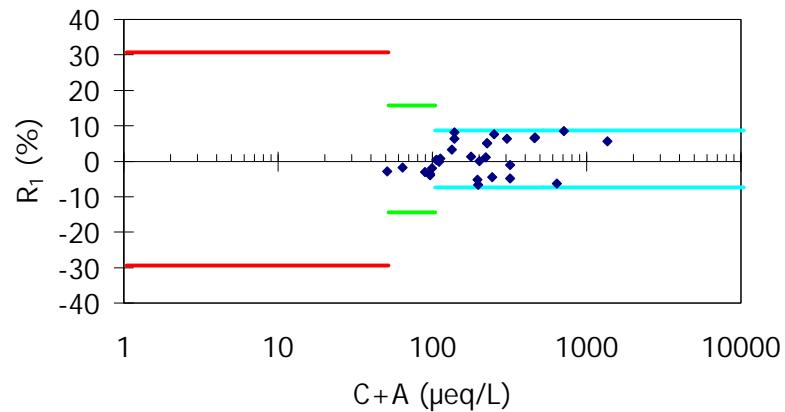
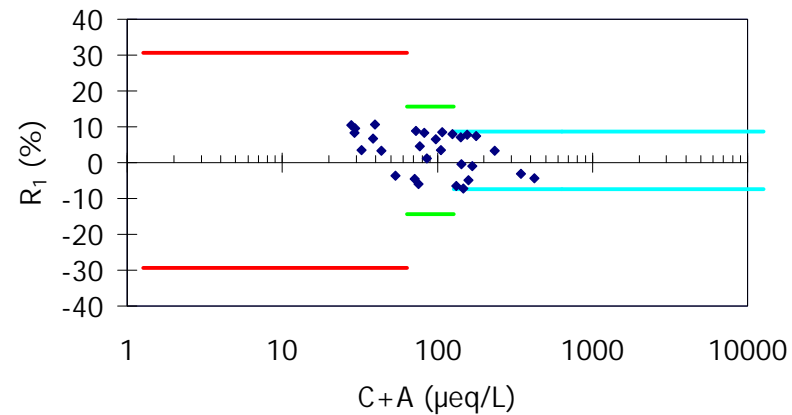


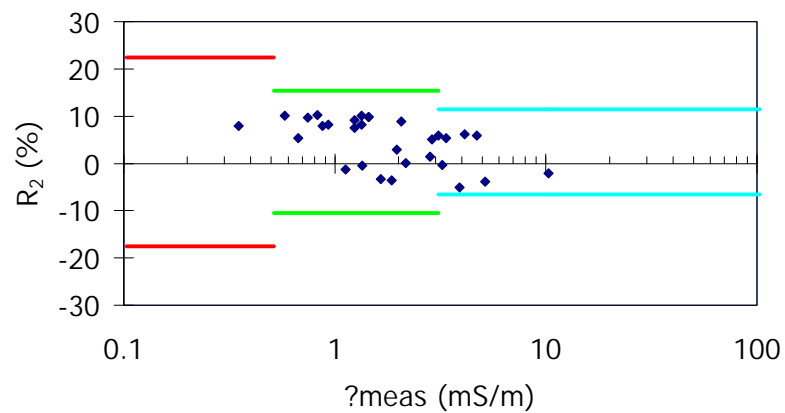
Fig. 3.33 b) Cheju Conductivity Agreement ( $R_2$ )



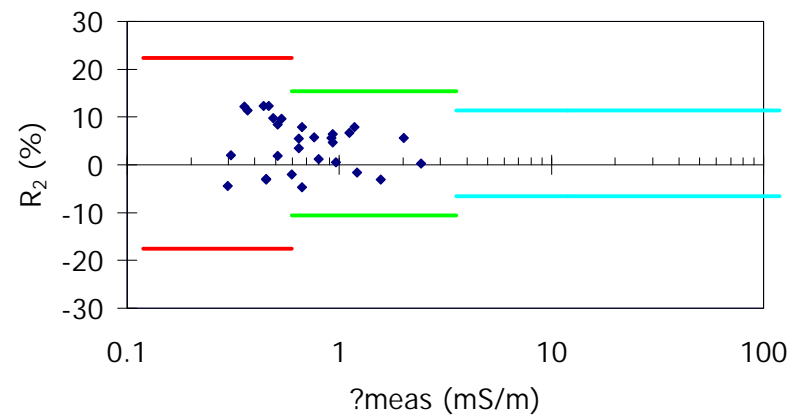
**Fig. 3.34 a) Imsil Ion Balance ( $R_1$ )**



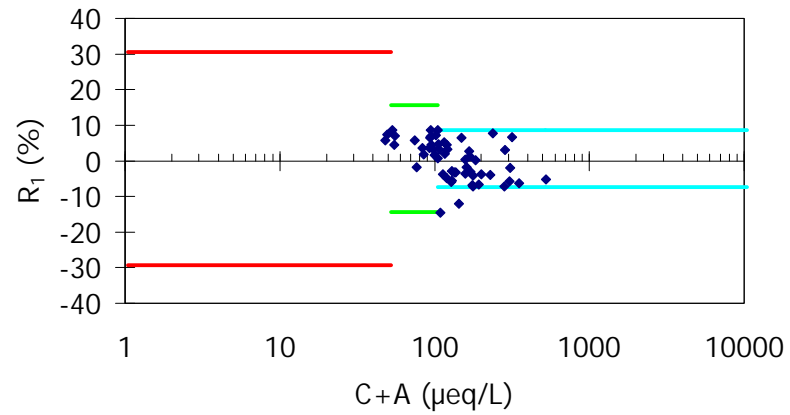
**Fig. 3.35 a) Mondy Ion Balance ( $R_1$ )**  
*Calculated including  $HCO_3^-$ ,  $NO_2^-$  and  $Br^-$*



**Fig. 3.34 b) Imsil Conductivity Agreement ( $R_2$ )**

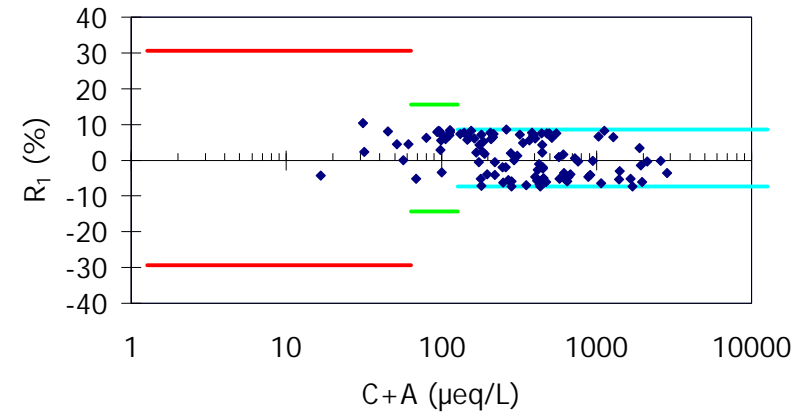


**Fig. 3.35 b) Mondy Conductivity Agreement ( $R_2$ )**  
*Calculated including  $HCO_3^-$ ,  $NO_2^-$  and  $Br^-$*



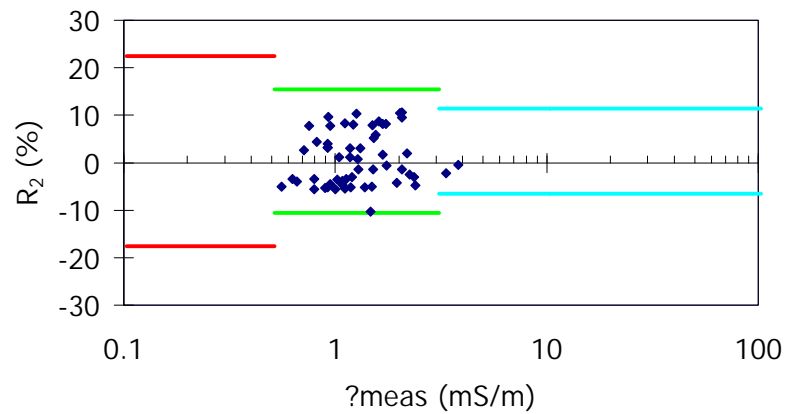
**Fig. 3.36 a) Listvyanka Ion Balance ( $R_1$ )**

*Calculated including  $HCO_3^-$ ,  $NO_2^-$  and  $Br^-$*



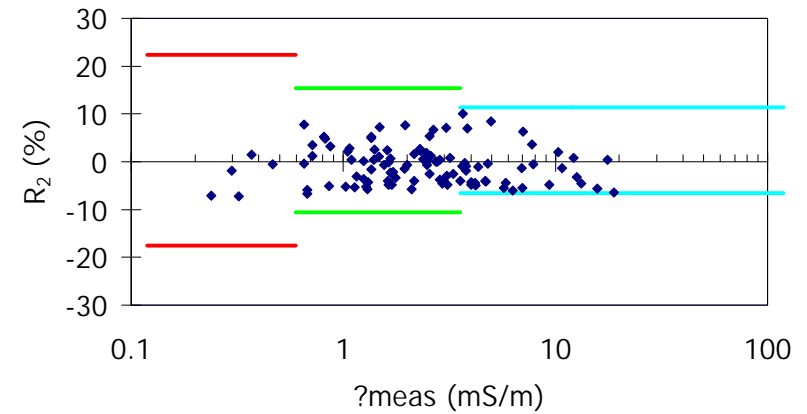
**Fig. 3.37 a) Irkutsk Ion Balance ( $R_1$ )**

*Calculated including  $HCO_3^-$ ,  $NO_2^-$  and  $Br^-$*



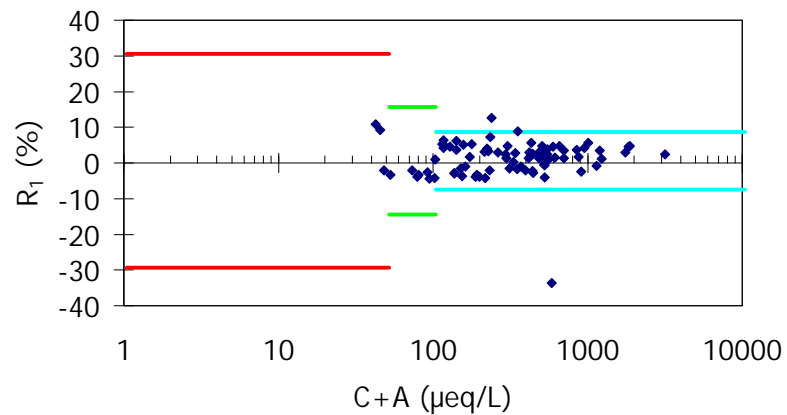
**Fig. 3.36 b) Listvyanka Conductivity Agreement ( $R_2$ )**

*Calculated including  $HCO_3^-$ ,  $NO_2^-$  and  $Br^-$*



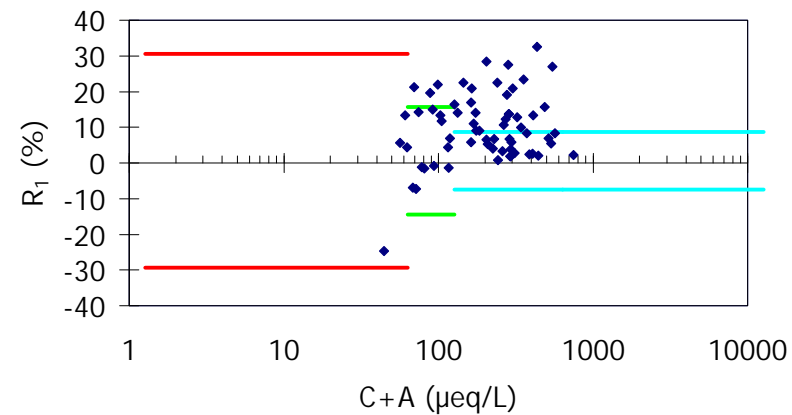
**Fig. 3.37 b) Irkutsk Conductivity Agreement ( $R_2$ )**

*Calculated including  $HCO_3^-$ ,  $NO_2^-$  and  $Br^-$*



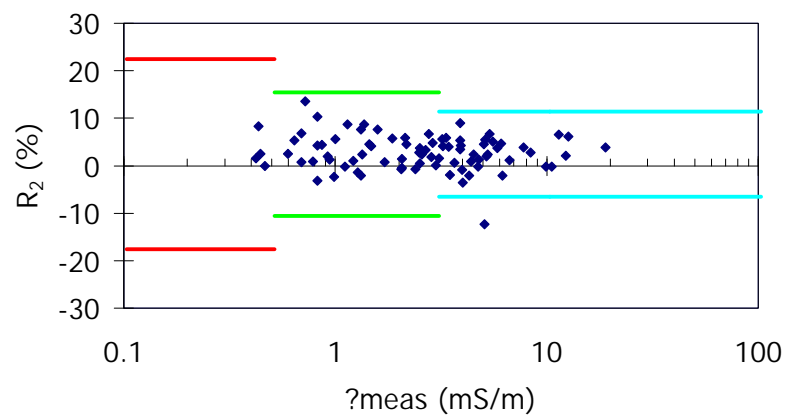
**Fig. 3.38 a) Primorskaya Ion Balance ( $R_1$ )**

*Calculated including  $HCO_3^-$*



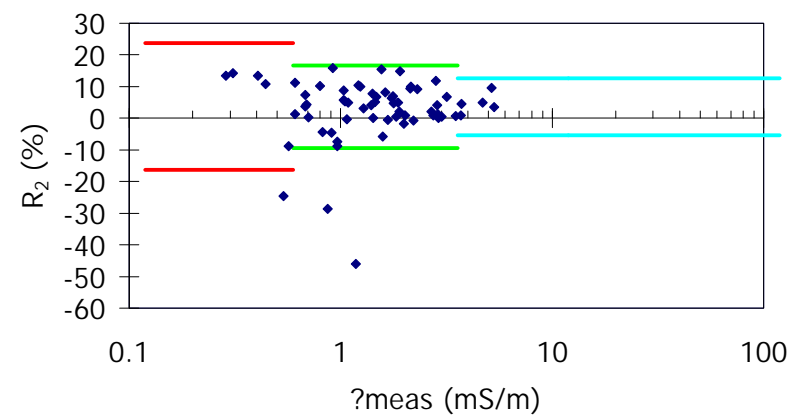
**Fig. 3.39 a) Bangkok Ion Balance ( $R_1$ )**

*Calculated including  $HCOO^-$ ,  $CH_3COO^-$  and  $PO_4^{3-}$*



**Fig. 3.38 b) Primorskaya Conductivity Agreement ( $R_2$ )**

*Calculated including  $HCO_3^-$*



**Fig. 3.39 b) Bangkok Conductivity Agreement ( $R_2$ )**

*Calculated including  $HCOO^-$ ,  $CH_3COO^-$  and  $PO_4^{3-}$*

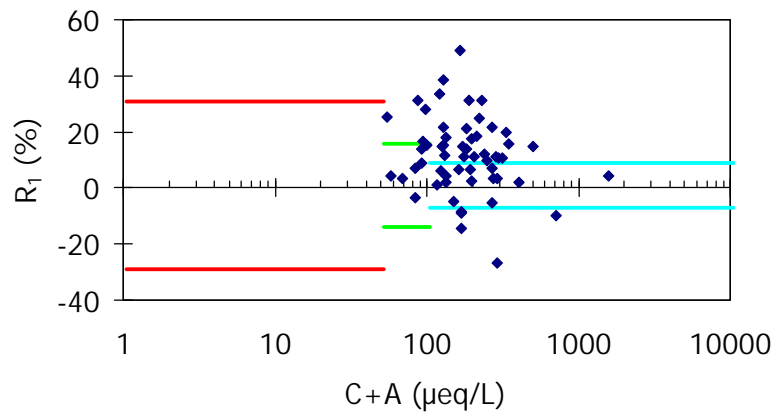


Fig. 3.40 a) Samutprakarn Ion Balance ( $R_1$ )

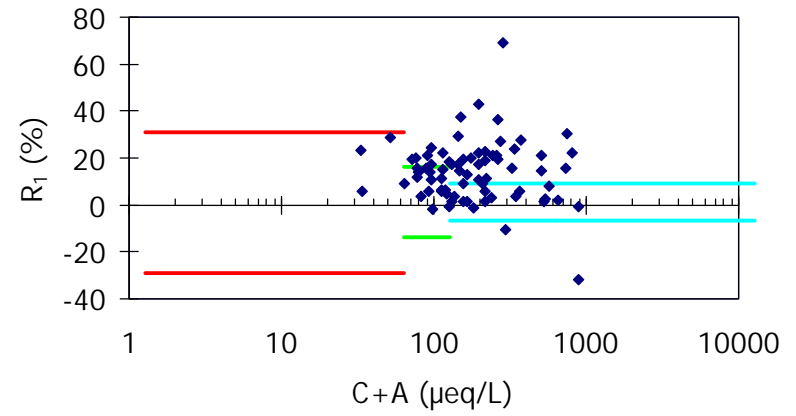


Fig. 3.41 a) Patumthani Ion Balance ( $R_1$ )

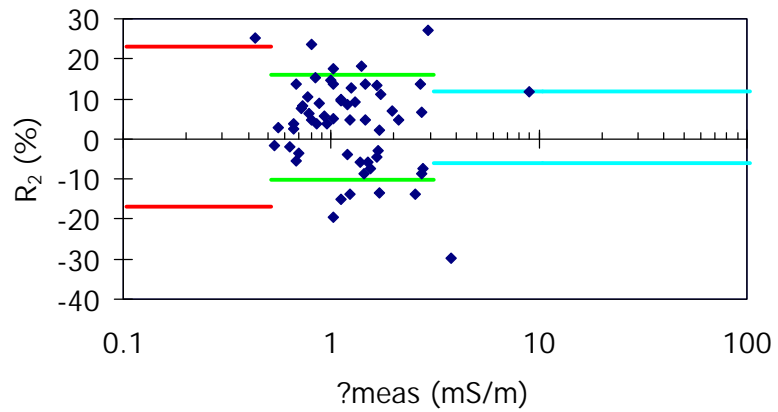


Fig. 3.40 b) Samutprakarn Conductivity Agreement ( $R_2$ )

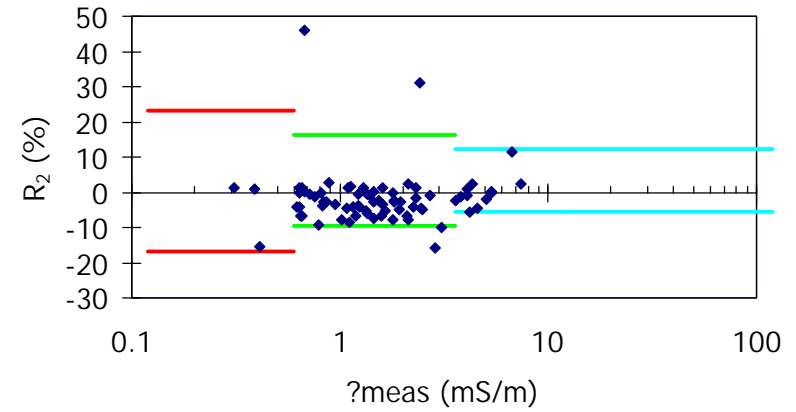


Fig. 3.41 b) Patumthani Conductivity Agreement ( $R_2$ )

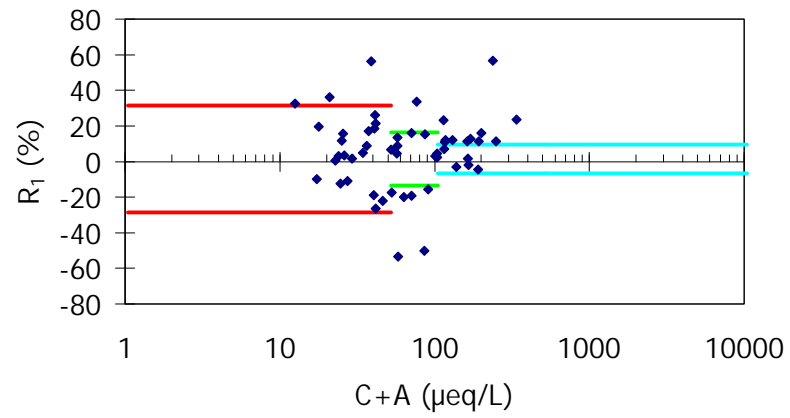


Fig. 3.42 a) Khanchanaburi (Vachiralongkorn Dam) Ion Balance ( $R_1$ )

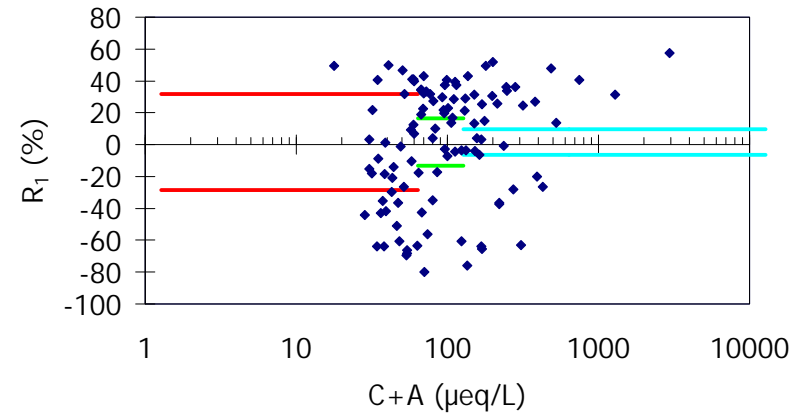


Fig. 3.43 a) Chiang Mai (Mae Hia) Ion Balance ( $R_1$ )

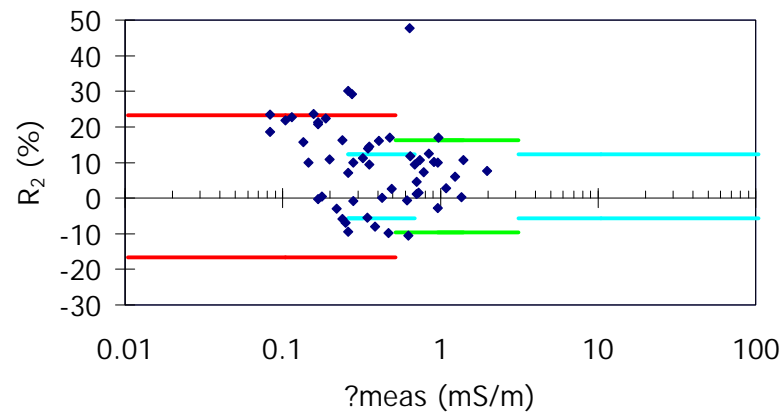


Fig. 3.42 b) Khanchanaburi (Vachiralongkorn Dam) Conductivity Agreement ( $R_2$ )

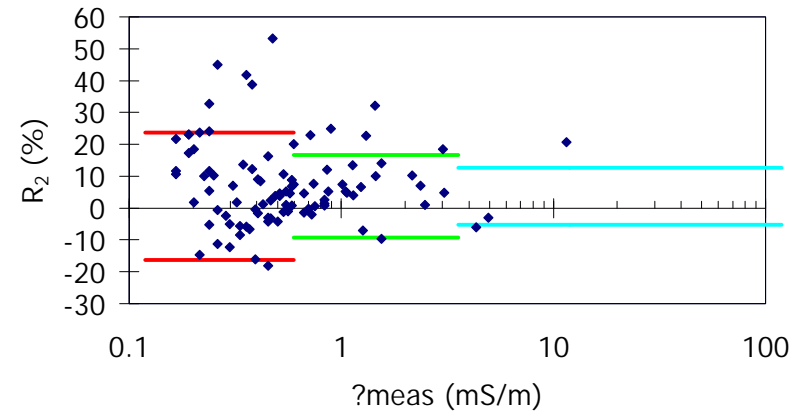


Fig. 3.43 b) Chiang Mai (Mae Hia) Conductivity Agreement ( $R_2$ )

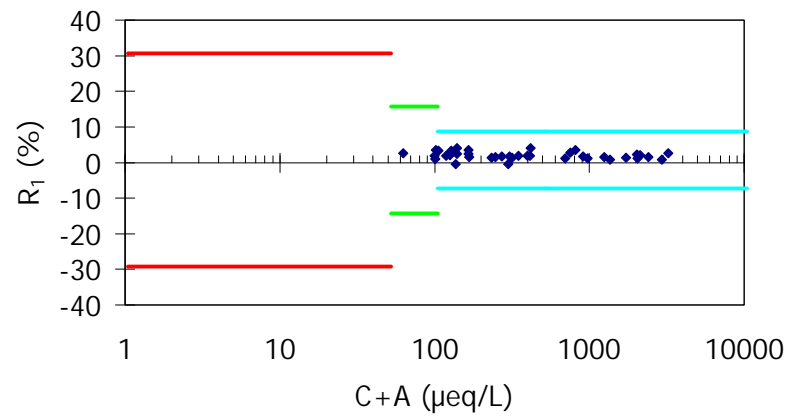


Fig. 3.44 a) Hanoi Ion Balance ( $R_1$ )

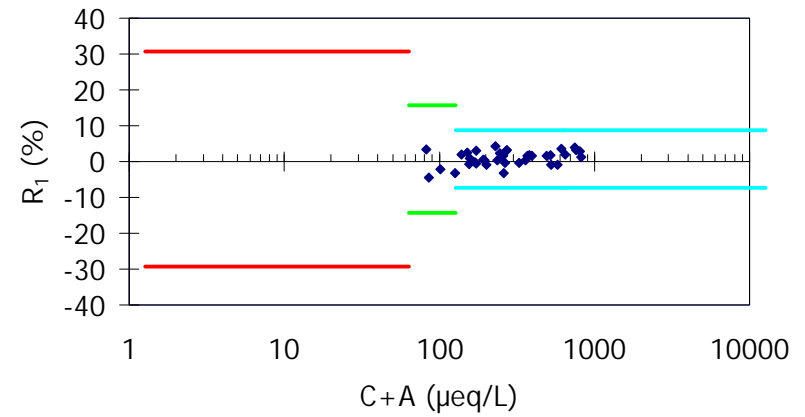


Fig. 3.45 a) Hoa Binh Ion Balance ( $R_1$ )

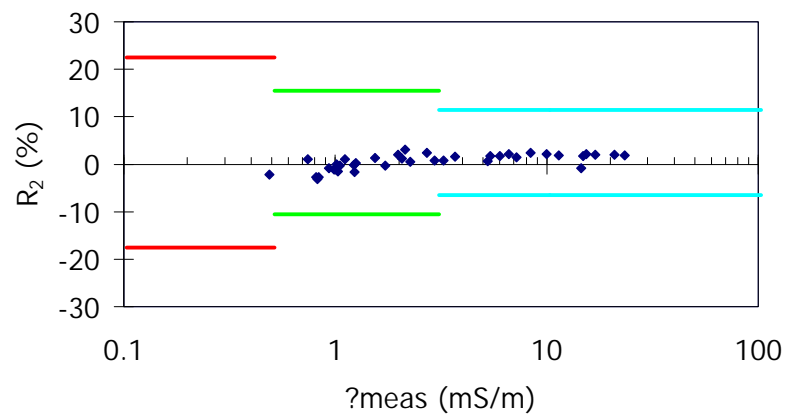


Fig. 3.44 b) Hanoi Conductivity Agreement ( $R_2$ )

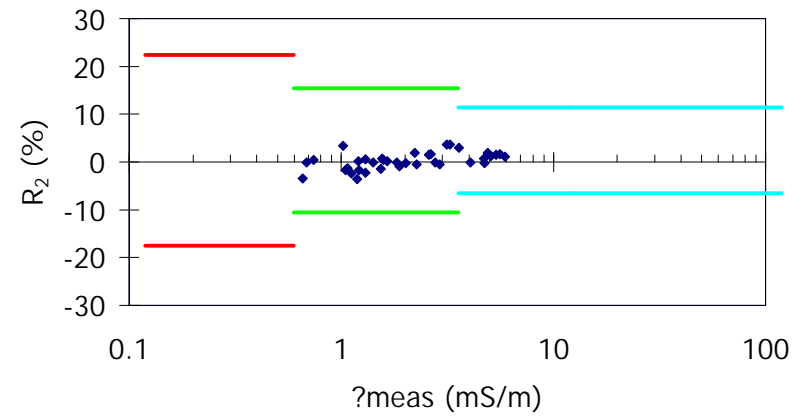


Fig. 3.45 b) Hoa Binh Conductivity Agreement ( $R_2$ )

## 5. Soil and Vegetation Monitoring

### 5.1 Method

The basic survey was principally carried out for the initial objectives (namely, establishment of baseline data and early detection of possible impact) in the participating countries in accordance with the Technical Manual on Soil and Vegetation Monitoring in East Asia. General items are described in the [Table 5.1](#) but actual implementation of item sets was dependent on respective site.

**Table 5.1. Basic survey for soil and forest**

Item	Parameters
Soil	<ul style="list-style-type: none"> <li>- pH(H<sub>2</sub>O), pH(KCl), Exchangeable base cations (Na, K, Ca, and Mg), Exchangeable acidity, Effective cation exchange capacity (ECEC), Carbonate content (if pH &gt; 7)</li> <li>- Exchangeable Al and H, Total C content, Total N content (optional)</li> <li>- Available P, Sulfate (voluntary)</li> <li>- Physical properties (Fine earth bulk density, and Penetration resistance)(optional)</li> </ul>
Forest	<ul style="list-style-type: none"> <li>- General description of the forest (Description of trees, and Understory vegetation), Observation of tree decline</li> <li>- Photographic record of tree decline, Estimation of decline causes (optional)</li> </ul>

#### 1) Monitoring Sites

Since the interval of soil and vegetation monitoring was decided as 3-5 years in the Technical Manual, most sites, which were reported in 2003, were not surveyed in 2004. Forest data of three areas of two countries were submitted this year. The list of monitoring site and reported items for 2004 was shown in [Table 5.2](#).

**Table 5.2. Outline of the Monitoring Sites in 2004**

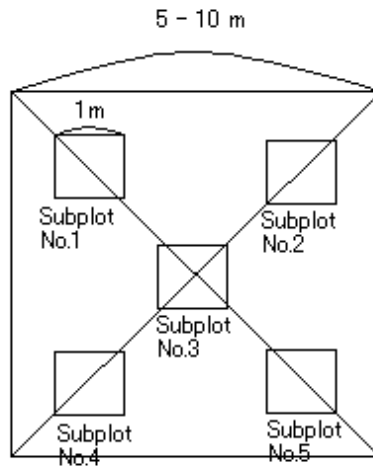
Country	Nearest deposition monitoring site	Site: Name of forest area	Soil type	Items <sup>*1</sup>
Japan	Banryu	Banryu-2	Cambisols	F <sup>*3</sup>
		Iwami “rinku” Factory Park	(Acrisols) <sup>*2</sup>	F <sup>*3</sup>
	Ijira	Lake Ijira	Dystric Cambisols	F <sup>*3</sup>
		Yamato	Andosols	F <sup>*3</sup>
Philippines	Los Banos	Mt. Maliking	Eutric Cambisols	S, F

Country	Nearest deposition monitoring site	Site: Name of forest area	Soil type	Items <sup>*1</sup>
		UP-Quezon-Laguna Land Grant	Dystric Nitosols	S, F
Republic of Korea	Imsil	Mt. Naejang	Not reported (one type)	S, F
Russia	Mondy	Mondy	<i>Calcic Gleysols</i>	F

\*1. S, Soil monitoring; F, Forest monitoring \*2. Soils have not been clearly classified in accordance with FAO/UNESCO. 3. Observation of tree decline was only carried out.

## 2) Field Operation

Basically, two forest areas, whose soils have different sensitivities to acid deposition, are recommended to be selected in an area. Several plots (at least two ones) of areas from 5m\*5m to 10m\*10m should be chosen randomly at each forest area (each soil type). Five subplots with 1m\*1m square of each are set up for soil sampling at the center and along the diagonal lines of the plot (Fig.5.1). Three coaxial round plots are established for general description of trees with areas of 1000, 400 and 200 square meters respectively (Fig. 5.2). Observation of tree decline is carried out basically for selected twenty trees with average height of around 20m.



**Figure 5.1 Plot for soil sampling**

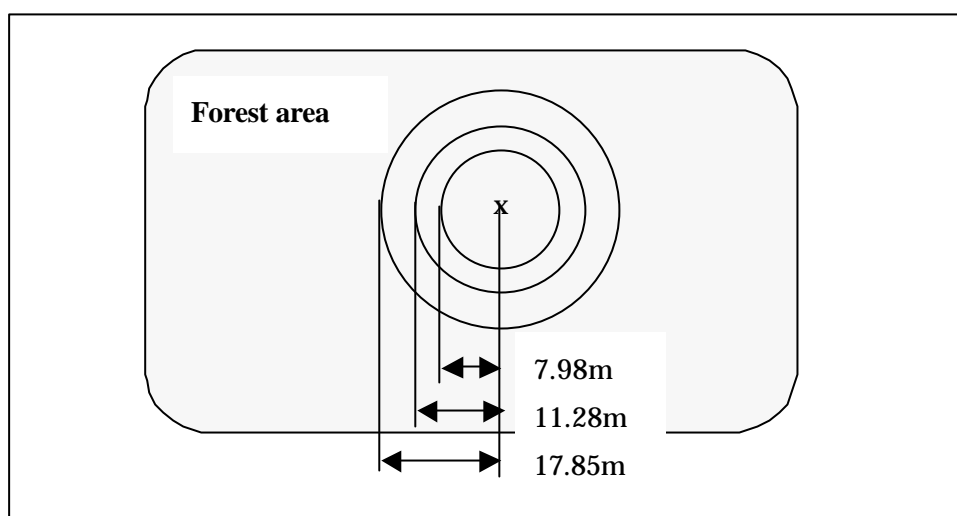


Figure 5.2. Plots for description of trees

### 3) Laboratory Operation

Analytical methods recommended in the Manual are presented in [Table 5.3](#).

Table 5.3. Analytical equipment and methods for soil monitoring

Parameters	Equipment/methods
<b>Chemical Properties of Soil</b>	
a) Moisture Content	Drying oven, Balance
b) pH (H <sub>2</sub> O) and pH (KCl)	Glass electrode
c) Exchangeable Base Cations (Ca, Mg, K and Na)	AAS, ICP-AES or ICP-MS (CH <sub>3</sub> COONH <sub>4</sub> -Extraction)
d) Exchangeable Acidity	Titration (KCl-Extraction)
e) Exchangeable Al, H	ibid.
f) Effective Cation Exchange Capacity (ECEC)	Calculation (as sum of exchangeable cations)
g) Carbonate Content (for calcareous soil)	Volumetric calcimeter
h) Total Carbon Content	Titration (Walkley-Black method) or CN-analyzer
i) Total Nitrogen Content	Titration (Kjeldahl method) or CN-analyzer
j) Available Phosphate	Spectrophotometry (Bray-1 test)
k) Sulfate	Turbidimetry, IC, ICP-AES or ICP-MS
<b>Physical Properties of Soil</b>	
a) Fine Earth Bulk Density	Metal sampling cylinder, Drying oven, Balance
b) Penetration Resistance (in the fieldwork)	Pocket penetrometer

## **5.2 Results of Monitoring**

Results of basic survey for soil and forest were reported in the following tables:

Table 5.4: Soil chemical analysis

Table 5.5: Description of trees

Table 5.6: Understory vegetation survey

Table 5.7: Observation of tree decline

Figure 5.3: Photographic record of tree decline

**Table 5.4 a-1-1) Soil chemical analysis: Los Banos-1-1**

Sampling date: 3 Mar 2005

Name of analysis laboratory: Department of Soil Science,UPLB

Sample No.	Location	Soil type	Plot No.	Subplot No.	Layer analyzed (cm)	Repeat* analysis	Moisture content (wt %)	pH		Exchangeable base cations				Ex-acidity	Ex-acid cations		ECEC	Base saturation %
								H <sub>2</sub> O	KCl	Ca	Mg	K	Na		Al	H		
1	Mt. Makiling, Los Baños, Laguna	Eutric Cambisol	1	1	0 - 10	1st	1.1	5.9	4.6	15.37	12.45	5.36	2.65	0.33	0.00	0.33	36.16	99.1
				2			1.1	6.0	4.6	16.05	12.95	5.55	3.39	0.33	0.00	0.33	38.27	99.1
				3			1.1	5.7	4.3	13.17	13.22	5.07	2.91	0.33	0.00	0.33	34.70	99.0
				4			1.1	5.7	4.1	11.92	13.56	5.11	2.91	0.59	0.00	0.59	34.09	98.3
				5			1.1	5.4	4.0	11.46	13.02	4.90	2.92	0.95	0.21	0.74	33.25	97.1
2			1st	1	10 - 20	1.1	5.8	4.4	13.52	12.99	5.32	2.43	0.40	0.00	0.40	34.66	98.8	
				2		1.1	5.7	4.3	12.39	13.09	5.28	2.43	0.46	0.00	0.46	33.65	98.6	
				3		1.1	5.2	3.8	9.91	13.00	4.72	2.19	1.67	0.99	0.68	31.49	94.7	
				4		1.1	5.1	3.6	6.86	12.35	4.59	2.44	3.54	2.89	0.65	29.78	88.1	
				5		1.1	5.3	3.8	8.57	13.68	4.93	2.67	1.37	0.69	0.68	31.22	95.6	
3	2	1	0 - 10	1.1	6.7	5.4	23.39	10.79	6.10	3.88	0.18	0.00	0.18	44.34	99.6			
		2		1.1	6.8	5.3	23.50	10.03	5.77	4.39	0.18	0.00	0.18	43.87	99.6			
		3		1.1	6.7	5.2	21.83	10.90	5.99	5.09	0.18	0.00	0.18	43.99	99.6			
		4		1.1	6.6	5.1	21.40	12.04	6.15	5.14	0.18	0.00	0.18	44.91	99.6			
		5		1.1	6.6	5.2	21.12	11.42	6.06	5.12	0.18	0.00	0.18	43.90	99.6			
4	1st	1	10 - 20	1.1	6.8	5.4	19.86	11.27	5.97	3.64	0.20	0.00	0.20	40.94	99.5			
		2		1.1	6.7	5.1	20.63	10.54	5.55	3.87	0.18	0.00	0.18	40.77	99.6			
		3		1.1	6.7	5.0	19.03	11.61	5.86	4.86	0.18	0.00	0.18	41.54	99.6			
		4		1.1	6.5	4.7	16.81	12.20	5.69	4.86	0.23	0.00	0.23	39.79	99.4			
		5		1.1	6.5	4.9	18.53	11.88	5.63	5.12	0.18	0.00	0.18	41.34	99.6			

**Table 5.4 a-1-2) Soil chemical analysis: Los Banos-1-2**

Sampling date: 3 Mar 2005

Name of analysis laboratory: Department of Soil Science,UPLB

Sample No.	Location	Soil type	Plot No.	Subplot No.	Layer analyzed (cm)	Repeat* analysis	Moisture content (wt %)	pH		Exchangeable base cations				Ex-acidity	Ex-acid cations		ECEC	Base saturation %
								H <sub>2</sub> O	KCl	Ca	Mg	K	Na		Al	H		
1	Mt. Makiling, Los Baños, Laguna	Eutric Cambisol	1	1	0 - 10	2nd	1.1	5.9	4.6	15.37	12.45	5.36	2.90	0.33	0.00	0.33	36.41	99.1
				2			1.1	6.0	4.6	15.35	12.95	5.48	3.15	0.33	0.00	0.33	37.26	99.1
				3			1.1	5.7	4.3	13.17	13.22	5.07	2.91	0.33	0.00	0.33	34.70	99.0
				4			1.1	5.7	4.1	11.92	13.56	5.11	2.91	0.45	0.00	0.45	33.95	98.7
				5			1.1	5.4	4.0	12.15	13.02	4.98	2.92	0.95	0.21	0.74	34.02	97.2
2			10 - 20	2nd	1	1.1	5.8	4.4	12.82	12.99	5.32	2.43	0.40	0.00	0.40	33.96	98.8	
					2	1.1	5.7	4.3	12.39	13.09	5.28	2.43	0.46	0.00	0.46	33.65	98.6	
					3	1.1	5.2	3.8	9.91	13.00	4.72	1.43	1.67	0.99	0.68	30.73	94.6	
					4	1.1	5.1	3.6	7.56	12.35	4.70	2.44	3.54	2.89	0.65	30.59	88.4	
					5	1.1	5.3	3.8	8.57	13.68	4.82	2.43	1.37	0.69	0.68	30.87	95.6	
3	0 - 10	2nd	1	1.1	6.7	5.4	22.69	10.79	6.10	3.88	0.18	0.00	0.18	43.64	99.6			
			2	1.1	6.8	5.3	23.50	10.03	5.77	4.39	0.18	0.00	0.18	43.87	99.6			
			3	1.1	6.7	5.2	21.83	10.90	5.99	5.09	0.18	0.00	0.18	43.99	99.6			
			4	1.1	6.6	5.1	21.40	12.04	6.15	5.14	0.18	0.00	0.18	44.91	99.6			
			5	1.1	6.6	5.2	21.82	11.42	6.06	5.12	0.18	0.00	0.18	44.60	99.6			
4	10 - 20	2nd	1	1.1	6.8	5.4	19.86	11.27	5.97	3.64	0.18	0.00	0.18	40.92	99.6			
			2	1.1	6.7	5.1	19.94	10.54	5.55	3.87	0.18	0.00	0.18	40.08	99.6			
			3	1.1	6.7	5.0	19.03	11.61	5.86	4.86	0.18	0.00	0.18	41.54	99.6			
			4	1.1	6.5	4.7	17.51	12.20	5.69	4.86	0.18	0.00	0.18	40.44	99.6			
			5	1.1	6.5	4.9	18.53	11.88	5.63	5.12	0.18	0.00	0.18	41.34	99.6			

**Table 5.4 a-2-1) Soil chemical analysis: Los Banos-2-1**

Sampling date: 10 Mar 2005

Name of analysis laboratory: Department of Soil Science,UPLB

Sample No.	Location	Soil type	Plot No.	Subplot No.	Layer analyzed (cm)	Repeat* analysis	Moisture content (wt %)	pH		Exchangeable basecations				Ex-acidity	Ex-acid cations		ECEC	Base saturatio %
								H <sub>2</sub> O	KCl	Ca	Mg	K	Na		Al	H		
1	UP Quezon - Laguna Land Grant	Dystric Nitosol	1	1	0 - 10	1st	1.1	4.2	3.6	0.17	0.48	0.39	0.34	5.63	4.62	1.01	7.01	19.7
				2			1.1	4.2	3.7	0.06	0.38	0.37	0.33	5.41	4.50	0.91	6.55	17.4
				3			1.1	4.2	3.7	0.11	0.48	0.42	0.37	4.95	4.17	0.78	6.33	21.8
				4			1.1	4.3	3.7	0.15	0.51	0.34	0.34	4.56	3.77	0.79	5.90	22.7
				5			1.1	4.2	3.6	0.16	0.56	0.41	0.37	5.04	4.14	0.90	6.54	22.9
2			10 - 20	1st	1	1.1	4.2	3.7	0.13	0.31	0.28	0.29	5.10	3.91	1.19	6.11	16.5	
					2	1.1	4.2	3.7	0.10	0.31	0.30	0.33	4.53	3.85	0.68	5.57	18.7	
					3	1.1	4.2	3.7	0.09	0.34	0.31	0.36	4.29	3.64	0.65	5.39	20.4	
					4	1.1	4.4	3.8	0.11	0.39	0.27	0.30	4.28	3.64	0.64	5.35	20.0	
					5	1.1	4.3	3.7	0.12	0.44	0.28	0.31	4.54	3.89	0.65	5.69	20.2	
3	0 - 10	1st	1	1.1	4.2	3.6	0.10	0.53	0.32	0.32	7.19	6.23	0.96	8.46	15.0			
			2	1.1	4.2	3.6	0.09	0.44	0.31	0.32	7.67	6.62	1.05	8.83	13.1			
			3	1.1	4.3	3.6	0.13	0.55	0.33	0.37	6.37	5.50	0.87	7.75	17.8			
			4	1.1	4.2	3.6	0.13	0.49	0.29	0.34	6.55	5.75	0.80	7.80	16.0			
			5	1.1	4.2	3.6	0.09	0.54	0.28	0.31	6.91	6.00	0.91	8.13	15.0			
4	10 - 20	1st	1	1.1	4.3	3.6	0.08	0.41	0.25	0.28	6.51	5.75	0.76	7.53	13.5			
			2	1.1	4.2	3.6	0.11	0.40	0.26	0.32	6.96	6.10	0.86	8.05	13.5			
			3	1.1	4.4	3.6	0.08	0.35	0.23	0.30	5.16	4.47	0.69	6.12	15.7			
			4	1.1	4.3	3.6	0.10	0.40	0.23	0.31	6.17	5.59	0.58	7.21	14.4			
			5	1.1	4.3	3.6	0.07	0.44	0.23	0.28	6.04	5.38	0.66	7.06	14.4			

**Table 5.4 a-2-2) Soil chemical analysis: Los Banos-2-2**

Sampling date: 10 Mar 2005

Name of analysis laboratory: Department of Soil Science,UPLB

Sample No.	Location	Soil type	Plot No.	Subplot No.	Layer analyzed (cm)	Repeat* analysis	Moisture content (wt %)	pH		Exchangeable basecations				Ex-acidity	Ex-acid cations		ECEC	Base saturatio %
								H <sub>2</sub> O	KCl	Ca	Mg	K	Na		Al	H		
1	UP Quezon - Laguna Land Grant	Dystric Nitosol	1	1	0 - 10	2nd	1.1	4.2	3.6	0.17	0.48	0.39	0.35	5.63	4.62	1.01	7.02	19.8
				2			1.1	4.2	3.7	0.06	0.47	0.37	0.33	5.41	4.50	0.91	6.64	18.5
				3			1.1	4.2	3.7	0.11	0.48	0.41	0.37	4.95	4.17	0.78	6.32	21.7
				4			1.1	4.3	3.7	0.15	0.51	0.36	0.34	4.56	3.77	0.79	5.92	23.0
				5			1.1	4.2	3.6	0.16	0.47	0.41	0.36	5.04	4.14	0.90	6.44	21.7
2			10 - 20	2nd	1	1.1	4.2	3.7	0.13	0.31	0.28	0.29	5.10	3.91	1.19	6.11	16.5	
					2	1.1	4.2	3.7	0.10	0.35	0.30	0.33	4.53	3.85	0.68	5.61	19.3	
					3	1.1	4.2	3.7	0.09	0.34	0.30	0.36	4.29	3.64	0.65	5.38	20.3	
					4	1.1	4.4	3.8	0.11	0.39	0.27	0.30	4.28	3.64	0.64	5.35	20.0	
					5	1.1	4.3	3.7	0.12	0.40	0.28	0.31	4.54	3.89	0.65	5.65	19.6	
3	2	2nd	1	0 - 10	1.1	4.2	3.6	0.10	0.53	0.32	0.32	7.19	6.23	0.96	8.46	15.0		
			2		1.1	4.2	3.6	0.09	0.50	0.31	0.32	7.67	6.62	1.05	8.89	13.7		
			3		1.1	4.3	3.6	0.13	0.51	0.33	0.37	6.37	5.50	0.87	7.71	17.4		
			4		1.1	4.2	3.6	0.13	0.49	0.29	0.34	6.55	5.75	0.80	7.80	16.0		
			5		1.1	4.2	3.6	0.09	0.52	0.28	0.31	6.91	6.00	0.91	8.11	14.8		
4	10 - 20	2nd	1	1.1	4.3	3.6	0.08	0.41	0.25	0.28	6.51	5.75	0.76	7.53	13.5			
			2	1.1	4.2	3.6	0.11	0.38	0.26	0.32	6.96	6.10	0.86	8.03	13.3			
			3	1.1	4.4	3.6	0.08	0.40	0.23	0.30	5.16	4.47	0.69	6.17	16.4			
			4	1.1	4.3	3.6	0.10	0.39	0.23	0.31	6.17	5.59	0.58	7.20	14.3			
			5	1.1	4.3	3.6	0.07	0.42	0.23	0.28	6.04	5.38	0.66	7.04	14.2			

**Table 5.4 b) Soil chemical analysis: Mt. Naejang (Republic of Korea)**

Sampling date: 16 Dec 2004

Name of analysis laboratory: Soil Environmental Division, National Institute of Environmental Research

Sample No.	Location	Soil type	Plot No.	Sub-plot No.	Layer analyzed (cm)	Moisture content (wt%)	pH		Exchangeable base cations				Ex-acidity	Ex-acid cations		ECEC	Base saturation %
							H <sub>2</sub> O	KCl	Ca	Mg	K	Na		Al	H		
							(cmol(+)kg <sup>-1</sup> )										
Mt. Naejang			1	1	0-10	1.74	5.0	4.2	0.25	0.08	0.18	0.02	4.39	2.75	0.38	3.66	14.5
				2		1.98	4.9	4.0	0.27	0.10	0.12	0.04	5.60	3.91	0.33	4.77	11.1
				3		2.02	4.8	4.0	0.41	0.12	0.11	0.06	5.76	4.15	0.46	5.31	13.2
				4		2.06	4.7	4.0	0.38	0.12	0.08	0.02	5.68	3.91	0.40	4.91	12.2
				5		1.87	4.8	4.0	0.28	0.08	0.08	0.03	4.61	3.16	0.54	4.17	11.3
				1	10-20	1.5	4.7	4.1	0.10	0.05	0.06	0.06	3.76	2.67	0.07	3.01	9.0
				2		1.86	4.8	4.1	0.18	0.09	0.06	0.03	4.11	2.92	0.24	3.52	10.2
				3		1.8	4.7	4.1	0.07	0.04	0.06	0.04	4.41	3.26	0.24	3.71	5.7
				4		1.75	4.9	4.1	0.23	0.11	0.08	0.04	4.45	3.25	0.20	3.91	11.8
				5		1.85	5.0	4.2	0.14	0.05	0.09	0.02	3.73	2.88	0.20	3.38	8.9
Mt. Naejang			2	1	0-10	1.7	5.0	4.1	0.27	0.11	0.06	0.03	4.21	3.02	0.34	3.83	12.3
				2		2.08	4.9	4.1	0.17	0.06	0.08	0.03	5.14	3.47	0.50	4.31	7.9
				3		1.4	5.0	4.0	0.27	0.11	0.09	0.03	4.99	3.38	0.44	4.32	11.6
				4		1.86	4.9	3.9	0.24	0.07	0.12	0.03	5.43	3.84	0.37	4.67	9.9
				5		1.77	4.7	4.1	0.53	0.14	0.06	0.03	4.69	3.29	0.40	4.45	17.1
				1	10-20	1.61	4.9	4.2	0.11	0.06	0.06	0.02	3.69	2.68	0.18	3.11	8.0
				2		1.9	5.0	4.3	0.16	0.07	0.16	0.03	3.28	2.38	0.18	2.98	14.1
				3		1.91	5.0	4.1	0.27	0.13	0.09	0.01	4.94	3.74	0.23	4.47	11.2
				4		1.75	4.6	4.1	0.05	0.03	0.07	0.01	4.75	3.43	0.30	3.89	4.1
				5		1.74	4.7	4.1	0.25	0.08	0.05	0.01	3.55	2.71	0.20	3.30	11.8

Note: Repeat analyses were not reported.

Table 5.5 a-1) Description of trees: Los Banos-1

Name of Plot: Mt. Makiling

Date : 4 Feb 2005

Survey area 1: radius 7.98 m (Height > 1.3 m)

Survey area 2: radius 11.28 m (DBH > 4 cm)

Survey area 3: radius 17.85 m (DBH > 18cm)

Serial No.	Species Name	DBH (cm)	Height (m)	Serial No.	Species Name	DBH (cm)	Height (m)	Serial No.	Species Name	DBH (cm)	Height (m)
1	<i>Celtis luzonica</i>	7.5	7.2	081*	<i>Nephelium ramboutan-ake</i>	Cut	Cut	109	<i>Turpinia ovalifolia</i>	45.3	20.0
2	<i>Palaquium foxworthyi</i>	4.6	4.5	82	<i>Diplodiscus paniculatus</i>	7.2	6.8	110	<i>Pterocymbium tinctorium</i>	31.0	20.8
3	<i>Chisocheton pentandrus</i> ssp. <i>pentandrus</i>	12.3	11.2	83	<i>Knema glomerata</i>	8.0	7.8	111	<i>Gomandra</i> spp.	28.0	17.5
4	<i>Diplodiscus paniculatus</i>	4.5	13.5	84	<i>Diplodiscus paniculatus</i>	9.3	8.9	112	<i>Celtis luzonica</i>	30.2	15.2
5	<i>Celtis luzonica</i>	3.4	3.8	85	<i>Psychotria luzoniensis</i>	17.2	10.6	113	<i>Pterocymbium tinctorium</i>	50.8	19.0
6	<i>Myristica philippinensis</i>	4.4	4.4	86	<i>Chisocheton pentandrus</i> ssp. <i>pentandrus</i>	24.2	12.9	114	<i>Dysoxylum arborescens</i>	24.8	15.0
7	<i>Celtis luzonica</i>	8.8	9.8	87	<i>Duguan Myristica philippinensis</i>	18.5	14.5	115	<i>Parashorea malaanonan</i>	42.0	39.3
8	<i>Parashorea malaanonan</i>	4.8	4.8	88	<i>Nephelium ramboutan-ake</i>	12.3	10.6	116	<i>Diplodiscus paniculatus</i>	53.2	21.9
9	<i>Diplodiscus paniculatus</i>	Dead	Dead	89	<i>Parashorea malaanonan</i>	7.1	6.1	117	<i>Litsea garciae</i>	81.0	26.6
10	<i>Parashorea malaanonan</i>	3.7	3.7	90	<i>Nephelium ramboutan-ake</i>	Topped	Topped	118	<i>Parashorea malaanonan</i>	22.6	13.7
11	<i>Celtis luzonica</i> Warb.	3.4	4.3	91	<i>Lagerstroemia speciosa</i>	11.4	7.2	119	<i>Turpinia ovalifolia</i>	32.2	14.9
12	<i>Dysoxylum arborescens</i>	2.2	4.0	92	<i>Palaquium foxworthyi</i>	5.1	4.7	120	<i>Parashorea malaanonan</i>	51.0	25.7
13	<i>Diospyrus philippinensis</i>	2.0	2.5	93	<i>Diplodiscus paniculatus</i>	10.5	9.0	121	<i>Solenospermum toxicum</i>	110.0	21.4
14	<i>Casearia fuliginosa</i>	15.5	14.4	94	<i>Celtis luzonica</i>	5.3	4.8	122	<i>Knema glomerata</i>	18.4	11.4
15	<i>Celtis luzonica</i>	3.2	4.1	95	<i>Alangium meyeri</i>	9.0	5.9	123	<i>Parashorea malaanonan</i>	40.0	20.7
16	<i>Drypetes maquilengensis</i>	1.6	2.8	96	<i>Pseudo pinanga</i>	14.3	15.6	124	<i>Kingiodendron alternifolium</i>	100.0	15.5
17	<i>Dracontomelon dao</i>	11.5	12.8	97	<i>Parashorea malaanonan</i>	5.1	5.2	125	<i>Diplodiscus paniculatus</i>	21.4	13.0
18	<i>Drypetes maquilengensis</i>	1.3	2.6	98	<i>Pterocymbium tinctorium</i>	7.1	4.8	126	<i>Planchonia spectabilis</i>	24.6	17.6
19	<i>Celtis luzonica</i>	3.8	2.8	99	<i>Nephelium ramboutan-ake</i>	Topped	Topped	127	<i>Celtis luzonica</i>	46.6	21.9
20	<i>Celtis luzonica</i>	7.8	6.6	100	<i>Litsea garciae</i>	50.3	17.1	128	<i>Celtis luzonica</i>	53.0	21.6
21	<i>Coffea arabica</i>	2.2	4.9	101	<i>Dendrocnide meyeniana</i>	7.9	7.2	129	<i>Diplodiscus paniculatus</i>	32.2	21.7
22	<i>Diplodiscus paniculatus</i>	37.4	15.9	102	<i>Celtis luzonica</i>	5.0	6.1	130	<i>Sterculia montana</i>	49.0	23.8
23	<i>Celtis luzonica</i>	7.7	8.2	103	<i>Cynometra ramiflora</i>	4.5	5.1	Note: Trees within the survey area 2 were omitted.			
24	<i>Celtis luzonica</i>	1.8	4.2	104	<i>Diplodiscus paniculatus</i>	22.2	14.3				
25	<i>Celtis luzonica</i>	1.7	8.0	105	<i>Leea philippinensis</i>	Dead	Dead	Note: Trees within the survey area 1 were omitted.			
26	<i>Knema glomerata</i>	11.2	7.3	106	<i>Celtis luzonica</i>	34.1	19.2				
27	<i>Drypetes maquilengensis</i>	Dead	Dead	107	<i>Celtis luzonica</i>	5.6	6.0	Survey area 1: continued			
28	<i>Neotrewia cumingii</i>	Dead	Dead	108	<i>Voacanga globosa</i>	Dead	Dead				
29	<i>Strombosia philippinensis</i>	2.4	3.1	Survey area 1: continued							
30	<i>Diplodiscus paniculatus</i>	2.5	2.1								
31	<i>Dimorphocalyx luzoniensis</i>	1.3	2.2	57	<i>Coffea arabica</i>	2.6	4.3	Note: Dead/cut/overtopped trees were damaged by strong winds when a typhoon passed through the area last December 2004.			
32	<i>Celtis luzonica</i>	0.8	3.3	58	<i>Drypetes maquilengensis</i>	2.0	3.8				
33	<i>Radermachera pinnata</i> ssp. <i>pinnata</i>	2.0	2.5	59	<i>Neotrewia cumingii</i>	5.8	5.0	Note: Dead/cut/overtopped trees were damaged by strong winds when a typhoon passed through the area last December 2004.			
34	<i>Micromelum compressum</i>	1.2	2.2	60	<i>Coffea arabica</i>	2.1	3.5				
35	<i>Drypetes maquilengensis</i>	1.2	2.5	61	<i>Coffea arabica</i>	1.3	3.5	Note: Dead/cut/overtopped trees were damaged by strong winds when a typhoon passed through the area last December 2004.			
36	<i>Syzygium calubcob</i>	1.5	3.3	62	<i>Drypetes maquilengensis</i>	2.2	3.5				
37	<i>Strombosia philippinensis</i>	1.0	3.0	63	<i>Syzygium nitidum</i>	19.5	12.8	Note: Dead/cut/overtopped trees were damaged by strong winds when a typhoon passed through the area last December 2004.			
38	<i>Celtis luzonica</i>	9.2	7.8	64	<i>Knema glomerata</i>	Cut	Cut				
39	<i>Parashorea malaanonan</i>	3.4	1.65 (cut)	65	<i>Dysoxylum arborescens</i>	4.1	4.4	Note: Dead/cut/overtopped trees were damaged by strong winds when a typhoon passed through the area last December 2004.			
40	<i>Ficus congesta</i>	Dead	Dead	66	<i>Celtis luzonica</i>	1.8	2.8				
41	<i>Aglaiia edulis</i>	2.5	3.4	67	<i>Diplodiscus paniculatus</i>	1.2	2.5	Note: Dead/cut/overtopped trees were damaged by strong winds when a typhoon passed through the area last December 2004.			
42	<i>Alangium meyeri</i>	7.1	6.4	68	<i>Camelia lanceolata</i>	6.6	5.3				
43	<i>Parashorea malaanonan</i>	1.2	2.9	69	<i>Camelia lanceolata</i>	4.2	5.5	Note: Dead/cut/overtopped trees were damaged by strong winds when a typhoon passed through the area last December 2004.			
44	<i>Dysoxylum arborescens</i>	3.6	3.2	70	<i>Neolitsea vidalii</i>	8.3	8.2				
45	<i>Celtis luzonica</i>	2.0	3.4	71	<i>Celtis luzonica</i>	2.7	3.8	Note: Dead/cut/overtopped trees were damaged by strong winds when a typhoon passed through the area last December 2004.			
46	<i>Celtis luzonica</i>	2.6	3.6	72	<i>Pisonia umbellifera</i>	30.7	12.3				
47	<i>Dillenia philippinensis</i>	6.4	5.3	73	<i>Celtis luzonica</i>	3.1	3.8	Note: Dead/cut/overtopped trees were damaged by strong winds when a typhoon passed through the area last December 2004.			
48	<i>Celtis luzonica</i>	2.2	4.2	74	<i>Pseudo pinanga</i>	9.0	4.6				
49	<i>Parashorea malaanonan</i>	5.5	4.6	75	<i>Dysoxylum arborescens</i>	2.0	2.9	Note: Dead/cut/overtopped trees were damaged by strong winds when a typhoon passed through the area last December 2004.			
50	<i>Alangium meyeri</i>	5.0	4.0	76	<i>Parashorea malaanonan</i>	3.8	4.2				
51	<i>Aglaiia edulis</i>	3.1	3.1	77	<i>Diplodiscus paniculatus</i>	2.8	3.9	Note: Dead/cut/overtopped trees were damaged by strong winds when a typhoon passed through the area last December 2004.			
52	<i>Drypetes maquilengensis</i>	2.5	2.9	78	<i>Pseudo pinanga</i>	8.7	3.6				
53	<i>Syzygium curranii</i>	47.0	16.9	79	<i>Nephelium ramboutan-ake</i>	9.1	11.3	Note: Dead/cut/overtopped trees were damaged by strong winds when a typhoon passed through the area last December 2004.			
54	<i>Nephelium ramboutan-ake</i>	18.0	10.6	80	<i>Dysoxylum arborescens</i>	2.5	3.6				
55	<i>Pisonia umbellifera</i>	30.7	10.4								
56	<i>Coffea arabica</i>	2.1	4.0								

Note: Dead/cut/overtopped trees were damaged by strong winds when a typhoon passed through the area last December 2004.

Table 5.5 a-2) Description of trees: Los Banos-2

Name of Plot: UP Quezon-Laguna Land Grant

Date : 11 Feb 2005

Survey area 1: radius 7.98 m (Height &gt; 1.3 m)

Survey area 2: radius 11.28 m (DBH &gt; 4 cm)

Survey area 3: radius 17.85 m (DBH &gt; 18cm)

Serial No.	Species Name	DBH (cm)	Height (m)	Serial No.	Species Name	DBH (cm)	Height (m)	Serial No.	Species Name	DBH (cm)	Height (m)
1	<i>Pterocarpus indicus</i>	17.2	9.4	56	<i>Macaranga bicolor</i>	11.3	5.0	90	<i>Baccaurea philippinensis</i>	28.4	13.5
2	<i>Pterocarpus indicus</i>	11.3	6.2	57	<i>Trichadenia philippinensis</i> <i>/Broussonetia papyrifera</i>	Uprooted	Uprooted	91	<i>Lüchi chinensis</i> spp. <i>philippinensis</i>	22.8	11.7
3	<i>Syzygium nitidum</i>	Cut	Cut	58	<i>Dimocarpus longan</i> ssp. <i>malesianus</i> var. <i>malesianus</i>	6.2	5.9	92	<i>Paraserianthes falcataria</i>	24.2	11.7
4	<i>Buchanania arborescens</i>	Cut	Cut	59	<i>Pterocarpus indicus</i>	6.8	5.6	Note: Trees within the survey area 2 were omitted.			
5	<i>Hopea foxworthyi</i>	7.3	5.0	60	<i>Beilschmiedia glomerata</i>	4.5	4.1				
6	<i>Sandoricum dubium</i>	6.8	6.1	61	Unidentified	Uprooted	Uprooted	Note: Trees within the survey area 1 were omitted.			
7	<i>Vitex parviflora</i>	8.2	6.2	62	<i>Baccaurea philippinensis</i>	4.1	3.6				
8	<i>Syzygium decipiens</i>	8.5	5.9	63	<i>Polyscias nodosa</i>	Cut	Cut	Note: Trees within the survey area 1 were omitted.			
9	<i>Syzygium striatulum</i>	11.5	9.0	64	<i>Polyscias nodosa</i>	Cut	Cut				
10	<i>Buchanania arborescens</i>	12.3	9.1	65	<i>Artocarpus rubrovenius</i>	8.0	5.2	Note: Trees within the survey area 1 were omitted.			
11	<i>Dimocarpus longan</i> ssp. <i>malesianus</i> var. <i>echinatus</i>	7.8	4.2	66	<i>Delonix regia</i>	22.1	11.5				
12	<i>Hopea foxworthyi</i>	4.2	5.7	67	<i>Pay-at</i>	10.1	7.8	Note: Trees within the survey area 1 were omitted.			
13	<i>Baccaurea philippinensis</i>	9.1	8.0	68	<i>Ficus callosa</i>	Uprooted	Uprooted				
14	<i>Ficus cumingii</i> var. <i>terminalifolia</i>	6.3	5.2	69	<i>Pterocarpus indicus</i>	14.0	9.1	Note: Trees within the survey area 1 were omitted.			
15	<i>Microcos stylocarpa</i>	6.4	6.2	70	<i>Artocarpus rubrovenius</i>	9.4	6.2				
16	<i>Pandanus</i> spp.	Cut	Cut	71	<i>Dipterocarpus philippinensis</i>	6.4	6.3	Note: Trees within the survey area 1 were omitted.			
17	<i>Xanthophyllum flavescens</i>	4.6	4.1	72	<i>Pandanaceae</i> spp.	9.2	4.6				
18	<i>Cryptocaria glauca</i>	7.5	5.3	73	<i>Ficus callosa</i>	Cut	Cut	Note: Trees within the survey area 1 were omitted.			
19	<i>Neonauclea puberula</i>	3.6	4.2	74	<i>Pterocarpus indicus</i>	6.4	9.9				
20	<i>Syzygium brevistylum</i>	5.3	4.3	75	<i>Ficus congesta</i> var. <i>congesta</i>	8.5	7.1	Note: Trees within the survey area 1 were omitted.			
21	<i>Macaranga bicolor</i>	9.1	6.8	76	<i>Pterocarpus indicus</i>	7.7	8.1				
22	<i>Baccaurea philippinensis</i>	5.2	4.0	77	<i>Acacia mangium</i>	Cut	Cut	Note: Trees within the survey area 1 were omitted.			
23	<i>Pterocarpus indicus</i>	Uprooted	Uprooted	78	<i>Pterocarpus indicus</i>	12.7	7.2				
24	<i>Cinnamomum mercadoi</i>	6.8	5.4	79	<i>Artocarpus blancoi</i>	6.0	7.7	Note: Trees within the survey area 1 were omitted.			
25	<i>Canarium vrieseanum</i> forma <i>stenophyllum</i>	8.7	5.0	80	<i>Pterocarpus indicus</i>	17.5	8.5				
26	<i>Ficus callosa</i>	7.2	6.1	81	<i>Calophyllum inophyllum</i>	Cut	Cut	Note: Trees within the survey area 1 were omitted.			
27	<i>Ficus callosa</i>	8.0	6.0	82	<i>Macaranga bicolor</i>	13.0	4.6				
28	<i>Baccaurea philippinensis</i>	Uprooted	Uprooted	83	<i>Antidesma catanduanense</i>	9.9	7.4	Note: Trees within the survey area 1 were omitted.			
29	<i>Cratoxylum sumatranum</i> ssp. <i>sumatranum</i>	5.0	5.4	84	<i>Palagium merrillii</i>	Uprooted	Uprooted				
30	<i>Cinnamomum mercadoi</i>	Uprooted	Uprooted	85	<i>Microcos stylocarpa</i>	Uprooted	Uprooted	Note: Trees within the survey area 1 were omitted.			
31	<i>Baccaurea philippinensis</i>	4.8	4.3	86	<i>Ficus callosa</i>	7.6	5.5				
32	<i>Mallotus korthalsii</i>	13.1	5.7	87	<i>Mallotus korthalsii</i>	11.0	8.1	Note: Trees within the survey area 1 were omitted.			
33	<i>Syzygium striatulum</i>	7.5	5.5	88	<i>Ficus ampelas</i>	Cut	Cut				
34	<i>Nauclea orientalis</i>	5.6	4.8	89	<i>Ficus ampelas</i>	Cut	Cut	Note: Trees within the survey area 1 were omitted.			
35	<i>Nauclea orientalis</i>	5.2	4.7								
36	<i>Diospyros pilosanthera</i> var. <i>philosanthera</i>	3.1	4.4					Note: Trees within the survey area 1 were omitted.			
37	<i>Ficus nota</i>	Uprooted	Uprooted								
38	<i>Baccaurea philippinensis</i>	6.8	5.3					Note: Trees within the survey area 1 were omitted.			
39	<i>Guioa myriadenia</i>	6.2	5.5								
40	<i>Aglaiia</i> spp.	Uprooted	Uprooted					Note: Trees within the survey area 1 were omitted.			
41	<i>Broussonetia papyrifera</i>	8.3	7.3								
42	<i>Hopea foxworthyi</i>	Cut	Cut					Note: Trees within the survey area 1 were omitted.			
43	<i>Hopea foxworthyi</i>	Cut	Cut								
44	Mangkunai	Uprooted	Uprooted					Note: Trees within the survey area 1 were omitted.			
45	<i>Solanum erianthum</i>	Uprooted	Uprooted								
46	<i>Dipterocarpus philippinensis</i>	9.1	6.7					Note: Trees within the survey area 1 were omitted.			
47	<i>Elaeocarpus candollei</i>	3.3	4.2								
48	<i>Cratoxylum formosum</i>	3.6	4.5					Note: Trees within the survey area 1 were omitted.			
49	<i>Ficus callosa</i>	5.1	6.7								
50	<i>Ficus callosa</i>	8.6	5.7					Note: Trees within the survey area 1 were omitted.			
51	<i>Cratoxylum formosum</i>	Uprooted	Uprooted								
52	mangkunai	5.9	4.9					Note: Trees within the survey area 1 were omitted.			
53	<i>Dipterocarpus philippinensis</i>	13.0	6.7								
54	<i>Macaranga bicolor</i>	5.0	5.7					Note: Trees within the survey area 1 were omitted.			
55	<i>Mangifera altissima</i>	10.4	6.2								

Note: The trees marked cut and/or uprooted were damaged during the heavy typhoon that visited the area last December 2004.

Table 5.5 b) Description of trees: Mt. Naejang

Name of Plot: Mt. Naejang

Date : 30 Jul - 1 Aug 2004

Survey area 2 (nested quadrat; 20 \* 20m<sup>2</sup>): DBH > 4cm

Survey area 3 (nested quadrat; 30 \* 30m<sup>2</sup>): DBH > 18cm

Serial No.	Species Name	DBH(cm)	Height(m)	Survey area 2: continued				Serial No.	Species Name	DBH(cm)	Height(m)
1	<i>Pinus densiflora</i>	20	13	70	<i>Styrax japonica</i>	5.0	8.0	1	<i>Pinus densiflora</i>	20	11
2	<i>Pinus densiflora</i>	17	11	71	<i>Styrax japonica</i>	6.0	8.0	2	<i>Pinus densiflora</i>	18	11
3	<i>Pinus densiflora</i>	34	13	72	<i>Styrax japonica</i>	10.0	9.0	3	<i>Pinus densiflora</i>	18	14
4	<i>Pinus densiflora</i>	9	11	73	<i>Styrax japonica</i>	11.0	10.0	4	<i>Pinus densiflora</i>	20	11
5	<i>Pinus densiflora</i>	21	13	74	<i>Styrax japonica</i>	5.0	8.0	5	<i>Pinus densiflora</i>	19	11
6	<i>Pinus densiflora</i>	16	13	75	<i>Styrax japonica</i>	5.0	7.0	6	<i>Pinus densiflora</i>	20	12
7	<i>Pinus densiflora</i>	28	15	76	<i>Styrax japonica</i>	5.0	8.0	7	<i>Pinus densiflora</i>	20	10
8	<i>Pinus densiflora</i>	23	14	77	<i>Styrax japonica</i>	4.0	7.0	8	<i>Pinus densiflora</i>	21	13
9	<i>Pinus densiflora</i>	27	14	78	<i>Prunus maximowiczii</i>	8.0	7.0	9	<i>Pinus densiflora</i>	20	13
10	<i>Pinus densiflora</i>	19	12	79	<i>Prunus maximowiczii</i>	5.0	10.0	10	<i>Pinus densiflora</i>	21	10
11	<i>Pinus densiflora</i>	28	12	80	<i>Prunus maximowiczii</i>	8.0	7.0	11	<i>Pinus densiflora</i>	21	11
12	<i>Pinus densiflora</i>	31	15	81	<i>Prunus maximowiczii</i>	8.0	8.0	12	<i>Pinus densiflora</i>	21	12
13	<i>Pinus densiflora</i>	19	11	82	<i>Prunus maximowiczii</i>	5.0	6.0	13	<i>Pinus densiflora</i>	20	8
14	<i>Pinus densiflora</i>	27	15	83	<i>Prunus maximowiczii</i>	5.0	4.0	14	<i>Pinus densiflora</i>	23	14
15	<i>Pinus densiflora</i>	16	11	84	<i>Prunus maximowiczii</i>	8.0	8.0	15	<i>Pinus densiflora</i>	24	11
16	<i>Pinus densiflora</i>	38	12	85	<i>Prunus maximowiczii</i>	6.0	5.0	16	<i>Pinus densiflora</i>	23	14
17	<i>Pinus densiflora</i>	30	14	86	<i>Prunus maximowiczii</i>	7.0	6.0	17	<i>Pinus densiflora</i>	25	13
18	<i>Pinus densiflora</i>	14	11	87	<i>Prunus maximowiczii</i>	9.0	8.0	18	<i>Pinus densiflora</i>	23	12
19	<i>Pinus densiflora</i>	14	11	88	<i>Prunus maximowiczii</i>	5.0	10.0	19	<i>Pinus densiflora</i>	24	13
20	<i>Pinus densiflora</i>	20	11	89	<i>Platycarya strobilacea</i>	13.0	9.0	20	<i>Pinus densiflora</i>	27	12
21	<i>Pinus densiflora</i>	27	12	90	<i>Platycarya strobilacea</i>	5.0	6.0	21	<i>Pinus densiflora</i>	25	12
22	<i>Pinus densiflora</i>	29	10	91	<i>Platycarya strobilacea</i>	6.0	4.0	22	<i>Pinus densiflora</i>	25	12
23	<i>Pinus densiflora</i>	18	11	92	<i>Albizia julibrissin</i>	11.0	8.0	23	<i>Pinus densiflora</i>	25	11
24	<i>Pinus densiflora</i>	27	11	93	<i>Albizia julibrissin</i>	11.0	9.0	24	<i>Pinus densiflora</i>	24	15
25	<i>Pinus densiflora</i>	30	9	94	<i>Albizia julibrissin</i>	13.0	8.0	25	<i>Pinus densiflora</i>	24	11
26	<i>Pinus densiflora</i>	30	11	95	<i>Carpinus tschonoskii</i>	13.0	12.0	26	<i>Pinus densiflora</i>	25	12
27	<i>Pinus densiflora</i>	28	11	96	<i>Carpinus tschonoskii</i>	7.0	8.0	27	<i>Pinus densiflora</i>	27	15
28	<i>Pinus densiflora</i>	21	11	97	<i>Juniperus rigida</i>	4.0	6.0	28	<i>Pinus densiflora</i>	27	15
29	<i>Pinus densiflora</i>	25	11	98	<i>Quercus serrata</i>	4.0	6.0	29	<i>Pinus densiflora</i>	27	11
30	<i>Pinus densiflora</i>	25	13	99	<i>Pyrus sp.</i>	7.0	6.0	30	<i>Pinus densiflora</i>	27	16
31	<i>Pinus densiflora</i>	14	12	100	<i>Sorbus alnifolia</i>	4.0	6.0	31	<i>Pinus densiflora</i>	26	11
32	<i>Pinus densiflora</i>	37	13					32	<i>Pinus densiflora</i>	27	14
33	<i>Pinus rigida</i>	16	12					33	<i>Pinus densiflora</i>	28	15
34	<i>Pinus rigida</i>	17	13					34	<i>Pinus densiflora</i>	27	14
35	<i>Pinus rigida</i>	15	11					35	<i>Pinus densiflora</i>	28	14
36	<i>Pinus rigida</i>	14	12					36	<i>Pinus densiflora</i>	28	12
37	<i>Pinus rigida</i>	9	10					37	<i>Pinus densiflora</i>	30	11
38	<i>Pinus rigida</i>	15	12					38	<i>Pinus densiflora</i>	30	13
39	<i>Pinus rigida</i>	14	10					39	<i>Pinus densiflora</i>	28	11
40	<i>Pinus rigida</i>	16	10					40	<i>Pinus densiflora</i>	30	9
41	<i>Pinus rigida</i>	13	10					41	<i>Pinus densiflora</i>	30	13
42	<i>Pinus rigida</i>	26	14					42	<i>Pinus densiflora</i>	30	13
43	<i>Pinus rigida</i>	23	15					43	<i>Pinus densiflora</i>	29	10
44	<i>Styrax japonica</i>	10	8					44	<i>Pinus densiflora</i>	31	16
45	<i>Styrax japonica</i>	4	5					45	<i>Pinus densiflora</i>	30	14
46	<i>Styrax japonica</i>	6	5					46	<i>Pinus densiflora</i>	31	14
47	<i>Styrax japonica</i>	5	7					47	<i>Pinus densiflora</i>	32	12
48	<i>Styrax japonica</i>	5	7					48	<i>Pinus densiflora</i>	31	11
49	<i>Styrax japonica</i>	5	7					49	<i>Pinus densiflora</i>	31	15
50	<i>Styrax japonica</i>	5	6					50	<i>Pinus densiflora</i>	33	14
51	<i>Styrax japonica</i>	5	8					51	<i>Pinus densiflora</i>	34	13
52	<i>Styrax japonica</i>	4	7					52	<i>Pinus densiflora</i>	35	15
53	<i>Styrax japonica</i>	5	7					53	<i>Pinus densiflora</i>	37	11
54	<i>Styrax japonica</i>	5	7					54	<i>Pinus densiflora</i>	35	11
55	<i>Styrax japonica</i>	5	7					55	<i>Pinus densiflora</i>	35	14
56	<i>Styrax japonica</i>	5	4					56	<i>Pinus densiflora</i>	34	12
57	<i>Styrax japonica</i>	7	9					57	<i>Pinus densiflora</i>	38	12
58	<i>Styrax japonica</i>	6	8					58	<i>Pinus densiflora</i>	39	14
59	<i>Styrax japonica</i>	5	8					59	<i>Pinus densiflora</i>	38	12
60	<i>Styrax japonica</i>	7	9					60	<i>Pinus densiflora</i>	37	13
61	<i>Styrax japonica</i>	8	9					61	<i>Pinus densiflora</i>	39	12
62	<i>Styrax japonica</i>	5	5					62	<i>Pinus densiflora</i>	19	12
63	<i>Styrax japonica</i>	5	10					63	<i>Pinus densiflora</i>	19	11
64	<i>Styrax japonica</i>	5	5					64	<i>Pinus rigida</i>	18	11
65	<i>Styrax japonica</i>	4	6					65	<i>Pinus rigida</i>	19	12
66	<i>Styrax japonica</i>	5	7					66	<i>Pinus rigida</i>	21	14
67	<i>Styrax japonica</i>	6	8					67	<i>Pinus rigida</i>	23	15
68	<i>Styrax japonica</i>	5	7					68	<i>Pinus rigida</i>	26	14
69	<i>Styrax japonica</i>	5	7					69	<i>Pinus rigida</i>	21	12

Note: Plot shape was modified from three coaxial circles to three quadrates. Data of the survey area 1 (10 \* 10 m<sup>2</sup>) was not reported.

**Table 5.5 c) Description of trees: Mondy**

Name of Plot: Mondy  
 Date : 20 Jul 2004

**Survey area 1: radius 7.98 m  
 (Height > 1.3 m)**

**Survey area 2: radius 11.28 m  
 (DBH > 4 cm)**

**Survey area 3: radius 17.85 m  
 (DBH > 18cm)**

Serial No.	Species Name	DBH (cm)	Height (m)	Serial No.	Species Name	DBH (cm)	Height (m)	Serial No.	Species Name	DBH (cm)	Height (m)
1	<i>Larix sibirica</i>	1.3	1.5	40	<i>Larix</i>	20.4	10.5	No tree, whose DBH is larger than 18 cm, was found.			
2	<i>Larix sibirica</i>	4.3	3.4	41	<i>Larix</i>	7.6	3.4				
3	<i>Larix sibirica</i>	3.7	2.9	42	<i>Larix</i>	4.3	3.2				
4	<i>Larix sibirica</i>	17.5	10.3	43	<i>Larix</i>	4.5	3.2				
5	<i>Larix sibirica</i>	1.6	1.9	44	<i>Larix</i>	5.9	3.5				
6	<i>Larix sibirica</i>	1.9	3.5	45	<i>Larix</i>	8.8	6.2				
7	<i>Larix sibirica</i>	2.2	3.4	46	<i>Larix</i>	4.5	3.2				
8	<i>Larix sibirica</i>	2.0	3.1	47	<i>Larix</i>	5.7	3.4				
9	<i>Larix sibirica</i>	5.4	6.3	48	<i>Larix</i>	9.2	5.5				
10	<i>Larix sibirica</i>	2.1	2.5	49	<i>Larix</i>	7.5	4.4				
11	<i>Larix sibirica</i>	2.4	2.7	50	<i>Larix</i>	11.6	6.1				
12	<i>Larix sibirica</i>	2.4	2.9	51	<i>Larix</i>	8.8	5.6				
13	<i>Larix sibirica</i>	1.4	2.8	52	<i>Larix</i>	12.1	6.1				
14	<i>Larix sibirica</i>	3.7	5.2	53	<i>Larix</i>	8.0	3.5				
15	<i>Larix sibirica</i>	1.6	1.9	54	<i>Larix</i>	4.5	3.0				
16	<i>Larix sibirica</i>	15.3	7.6	55	<i>Larix</i>	5.4	4.5				
17	<i>Larix sibirica</i>	1.9	3.2	56	<i>Larix</i>	6.1	4.2				
18	<i>Larix sibirica</i>	5.9	4.2	57	<i>Larix</i>	4.5	3.5				
19	<i>Larix sibirica</i>	3.7	4.3	58	<i>Larix</i>	6.9	4.1				
20	<i>Larix sibirica</i>	8.1	6.1	59	<i>Larix</i>	7.3	4.5				
21	<i>Larix sibirica</i>	2.2	2.1	60	<i>Larix</i>	5.9	4.0				
22	<i>Larix sibirica</i>	7.5	5.1	61	<i>Larix</i>	5.4	3.8				
23	<i>Larix sibirica</i>	3.4	3.1	62	<i>Larix</i>	4.2	2.9				
24	<i>Larix sibirica</i>	4.3	3.2	Note: Trees within the survey area 1 were omitted.							
25	<i>Larix sibirica</i>	16.2	9.3								
26	<i>Larix sibirica</i>	1.9	2.0								
27	<i>Larix sibirica</i>	5.3	5.5								
28	<i>Larix sibirica</i>	1.9	1.9								
29	<i>Larix sibirica</i>	1.3	1.8								
30	<i>Larix sibirica</i>	2.9	2.6								
31	<i>Larix sibirica</i>	1.8	2.5								
32	<i>Larix sibirica</i>	1.8	1.8								
33	<i>Larix sibirica</i>	3.5	2.9								
34	<i>Larix sibirica</i>	1.1	1.8								
35	<i>Larix sibirica</i>	1.1	2.5								
36	<i>Larix sibirica</i>	1.6	1.9								
37	<i>Larix sibirica</i>	2.1	2.3								
38	<i>Larix sibirica</i>	9.4	4.2								
39	<i>Larix sibirica</i>	29.0	12.3								

**Table 5.6 a-1) Understory vegetation survey: Los Banos-1**

Name of Plot: Mt. Makiling

Date :4 Feb 2005

Number of Species: 32

Species Name	Dom.	Species Name	Dom.
<i>Callophyllum blancoi</i>	2	<i>Planchonella nitida</i>	0
<i>Diospyrus pyrrocarpa</i>	0	<i>Drypetes maquilingsis</i>	1
<i>Celtis luzonica</i>	3	<i>Syzygium curranii</i>	0
<i>Nephelium lappaceum</i> var. <i>pallens</i>	2	<i>Chisocheton pentandrus</i> ssp. <i>pentandrus</i>	0
<i>Aphanamixis polystachya</i>	1	<i>Knema glomerata</i>	0
<i>Palaquium foxworthyii</i>	0	<i>Beilschmiedia glomerata</i>	0
<i>Neotrewia cumingii</i>	0	<i>Litsea garciae</i>	0
<i>Alseodaphne malabonga</i>	0	<i>Syzygium xanthophyllum</i>	0
<i>Garcinia dulcis</i>	0	<i>Sterculia oblongata</i>	0
<i>Pterocymbium tinctorium</i>	0	<i>Pisonia umbellifera</i>	0
<i>Diplodiscus paniculatus</i>	0	<i>Planchonia spectabilis</i>	1
<i>Alangium javanicum</i> var. <i>jaheri</i>	0	<i>Parashorea malaanonan</i>	0
<i>Palaquium philippense</i>	0	<i>Dimorphocalyx luzoniensis</i>	0
<i>Coffea</i> spp.	0	<i>Diospyrus diepenhorstii</i>	0
<i>Aglaia edulis</i>	0	<i>Canarium luzonicum</i>	0
<i>Strombosia philippinensis</i>	0	<i>Swietenia macrophylla</i>	0

**Table 5.6 a-2) Understory vegetation survey: Los Banos-2**

Name of Plot: UP-Quezon-Laguna Land Grant

Date :11 Feb 2005

Number of Species: 18

Species Name	Dom.	Species Name	Dom.
<i>Diospyrus phylosanthera</i> var. <i>philosanthera</i>	1	<i>Elaeocarpus calomala</i>	+
<i>Neonauclea puberola</i>	0	<i>Microcos stylocarpa</i>	0
<i>Gnetum gnemon</i> var. <i>gnemon</i>	0	<i>Ardisia clementis</i>	0
<i>Callophyllum blancoi</i>	+	<i>Elaeocarpus candollei</i>	+
<i>Nauclea undulata</i>	+	<i>Lithocarpus budii</i>	+
<i>Syzygium subcaudatum</i>	0	<i>Antidesma angustifolium</i>	+
<i>Cryptocaria glauca</i>	+	<i>Mangkunai</i>	+
<i>Xanthophyllum flavescens</i>	0	<i>Glochidion album</i>	+
<i>Dimocarpus longan</i> ssp. <i>malesianus</i> var. <i>echinatus</i>	0	<i>Wikstroemia lanceolata</i>	+

**Table 5.6 b) Understory vegetation survey: Mt. Naejang**

Name of Plot: Mt. Naejang

Date :30 Jul - 1 Aug 2004

Number of Species:42

Species Name	Dom.	Species Name	Dom.
<i>Fraxinus sieboldiana</i>	3	<i>Acer pseudosieboldianum</i>	+
<i>Oplismenus undulatifolius</i>	3	<i>Vitis thunbergii</i> var. <i>sinuata</i>	+
<i>Lindera erythrocarpa</i>	1	<i>Parthenocissus tricuspidata</i>	+
<i>Rubus corchorifolius</i>	1	<i>Viola chaerophylloides</i>	+
<i>Pyrola japonica</i>	1	<i>Viola keiskei</i>	+
<i>Syneilesis palmata</i>	1	<i>Viola rossii</i>	+
<i>Artemisia keiskeana</i>	1	<i>Prunus maximowiczii</i>	+
<i>Disporum smilacinum</i>	2	<i>Symplocos chinensis</i> var. <i>leucocarpa</i> for. <i>pilos</i>	+
<i>Pteridium aquilinum</i> var. <i>latiusculum</i>	+	<i>Styrax japonica</i>	+
<i>Platycarya strobilacea</i>	+	<i>Isodon inflexus</i>	+
<i>Quercus variabilis</i> Bl.	+	<i>Paederia scandens</i>	+
<i>Quercus mongolica</i>	+	<i>Viburnum wrightii</i>	+
<i>Hepatica asiatica</i>	+	<i>Viburnum erosum</i>	+
<i>Thalictrum actaeifolium</i>	+	<i>Aster scaber</i>	+
<i>Akebia quinata</i>	+	<i>Carex humilis</i>	+
<i>Lindera obtusiloba</i>	+	<i>Carex lanceolata</i>	+
<i>Stephanandra incisa</i>	+	<i>Arisaema amurense</i> var. <i>serratum</i>	+
<i>Sorbus alnifolia</i>	+	<i>Polygonatum odoratum</i> var. <i>pluriflorum</i>	+
<i>Albizzia julibrissin</i>	+	<i>Smilax china</i>	+
<i>Zanthoxylum schinifolium</i> var. <i>inermis</i>	+	<i>Dioscorea nipponica</i>	+
<i>Rhus trichocarpa</i>	+	<i>Cymbidium goeringii</i>	+

**Table 5.6 c) Understory vegetation survey: Mondy**

Name of Plot: Mondy

Date 20 July 2004

Number of Species:46

Species Name	Dominance	Species Name	Dominance
<i>Aulacomnium palustre</i>	4	<i>Equisetum scirpoides</i>	+
<i>Rhododendron lapponicum subsp.</i>	3	<i>Equisetum pratense</i>	+
<i>Rhytidium rugosum</i>	2	<i>Delphinium crassifolium</i>	+
<i>Betula fruticosa</i>	2	<i>Dianthus superbus</i>	+
<i>Betula nana subsp. Exilis</i>	2	<i>Pedicularis verticillata</i>	+
<i>Pentaphragmoides fruticosa</i>	2	<i>Saxifraga bronchialis</i>	+
<i>Arctous alpina subsp. Erythrocarpa</i>	2	<i>Orthilia obtusata</i>	+
<i>Salix rhamnifolia</i>	1	<i>Trollius kytmanovii</i>	+
<i>Salix rosmarinifolia</i>	1	<i>Saussurea denticulate</i>	+
<i>Salix Lanata</i>	1	<i>Saussurea stubendorffii</i>	+
<i>Salix pseudopentandra</i>	1	<i>Saussurea parviflora</i>	+
<i>Vaccinium uliginosum</i>	1	<i>Hansenia mongolica</i>	+
<i>Dryas oxydonta</i>	1	<i>Seseli condensatum</i>	+
<i>Carex cespitosa</i>	1	<i>Claytonia joanneana</i>	+
<i>Trisetum sibiricum</i>	1	<i>Mertensia ochroleuca</i>	+
<i>Festuca ovina</i>	1	<i>Spiraea alpina</i>	+
<i>Poa sibirica</i>	1	<i>Dasystephana algida</i>	+
<i>Dicranum elongatum</i>	1	<i>Angelica tenuifolia</i>	+
<i>Cladonia alpestris</i>	1	<i>Pinguicula alpina</i>	+
<i>Cladonia sylvatica</i>	1	<i>Sanguisorba officinalis</i>	+
<i>Cetraria islandica</i>	1	<i>Eriophorum polystachyon</i>	+
		<i>Astragalus frigidus</i>	+
		<i>Bistorta viripara</i>	+
		<i>Parnasia palustris</i>	+
		<i>Campanula dasyantha</i>	+

**Table 5.7 a-1-1). Results of observation of tree decline: Lake Banryu-1**

Name of Plot: Banryu-2

Nearest deposition monitoring site: Banryu

Date: 30 September 2004

Individual No.	72	82	76	63	64	65	54	83	34	35	37			
Direction	N	N	N	E	E	E	S	S	W	W	W			
Plant Name	<i>Castanopsis cuspidata</i> var. <i>sieboldii</i>	<i>Machilus thunbergii</i>	<i>Symplocos lucida</i>	<i>Machilus thunbergii</i>	<i>Syrax japonica</i>	<i>Machilus thunbergii</i>	<i>Clerba borviniensis</i>	<i>Quercus serrata</i>	<i>Machilus thunbergii</i>	<i>Machilus thunbergii</i>	<i>Acanthopanax sciadaphylloides</i>			
Relative height	+	+	+	+	+	+	+	+	+	+	+			
Vitality of tree														
Form of tree														
Branch growth														
Dieback of stem														
Density of foliage														
Deformation of leaves														
Size of leaves														
Color of leaves														
Injury of leaves														

Estimated cause of decline: No.46 recorded in 2003 was cutdown due to the management and not included in this table.

**Table 5.7 a-1-2). Results of observation of tree decline: Lake Banryu-2**

Name of Plot: Iwami "rinku" Factory Park

Nearest deposition monitoring site: Banryu

Date: 1 October 2004

Individual No.	92	93	122	100	104	108	127	128	63	137	138	140	112	113	114	142	141
Direction	N	N	N	E	E	E	E	E	S	S	S	S	W	W	W	W	W
Plant Name	<i>Machilus thunbergii</i>	<i>Machilus thunbergii</i>	<i>Ilex micrococca</i>	<i>Quercus serrata</i>	<i>Castanopsis cuspidata</i> var. <i>sieboldii</i>	<i>Castanopsis cuspidata</i> var. <i>sieboldii</i>	<i>Castanopsis cuspidata</i> var. <i>sieboldii</i>	<i>Castanopsis cuspidata</i> var. <i>sieboldii</i>	<i>Castanopsis cuspidata</i> var. <i>sieboldii</i>	<i>Quercus serrata</i>	<i>Castanopsis cuspidata</i> var. <i>sieboldii</i>	<i>Quercus serrata</i>	<i>Machilus thunbergii</i>	<i>Machilus thunbergii</i>	<i>Machilus thunbergii</i>	<i>Quercus serrata</i>	<i>Machilus thunbergii</i>
Relative height			+		+						-						-
Vitality of tree																	
Form of tree																	
Branch growth																	
Dieback of stem																2	
Density of foliage																	
Deformation of leaves																	
Size of leaves																1	
Color of leaves																1	
Injury of leaves																	

Estimated cause of decline: Insect attack and/or fungal infection (No. 142)

**Table 5.7 a-2-1). Results of observation of tree decline: Lake Ijira-1**

Name of Plot: Lake Ijira

Nearest deposition monitoring site: Ijira

Date: 21 October 2004

Individual No.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Direction	N	N	N	N	N	E	E	E	E	E	S	S	S	S	S	W	W	W	W	W
Plant Name	<i>Chamaecyparis obtusa</i>																			
Relative height					-													-	-	
Vitality of tree					3			1				1	1					1	1	
Form of tree								1				1	1					1	1	
Branch growth																				
Dieback of stem					4															
Density of foliage					3															
Deformation of leaves																				
Size of leaves																				
Color of leaves																				
Injury of leaves																				

Estimated cause of decline: Suppression by other trees (No. 5, 8, 18 and 19); broken stems/branches (No. 5, 12 and 13)

**Table 5.7 a-2-2). Results of observation of tree decline: Lake Ijira-2**

Name of Plot: Yamato

Nearest deposition monitoring site: Ijira

Date: 4 November 2004

Individual No.	22	21	9	10	23	46	47	45	42	5	36	33	14	15	37	30	29	11	12	31	
Direction	N	N	N	N	N	E	E	E	E	E	S	S	S	S	S	W	W	W	W	W	
Plant Name	<i>Chamaecyparis obtusa</i>																				
Relative height													-	-							-
Vitality of tree																					
Form of tree				1									1	1							
Branch growth																					
Dieback of stem				1																	
Density of foliage													1	1							
Deformation of leaves																					
Size of leaves																					
Color of leaves																					
Injury of leaves																					

Estimated cause of decline: broken stems/branches (No.10); suppression by other trees in past (No. 14 and 15).

**Table 5.7 b-1) Results of observation of tree decline: Los Banos-1**

Name of Plot: Mt. Makiling

Nearest deposition monitoring site: Los Banos

Date: 4 Feb 2005

Tree No.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Plant Name	<i>Nephelium ramboutan-dke</i>	<i>Aleurites moluccana</i>	<i>Diplodiscus paniculatus</i>	<i>Shorea contorta</i>	<i>Diplodiscus paniculatus</i>	<i>Planchonia spectabilis</i>	<i>Ardisia pyramidalis</i>	<i>Shorea contorta</i>	<i>Shorea contorta</i>	<i>Litsea garciae</i>	<i>Myrsine philippinensis</i>	<i>Myrsine philippinensis</i>	<i>Parashorea malanonan</i>	<i>Calophyllum blancoi</i>	<i>Parashorea malanonan</i>	<i>Krueia glomerata</i>	<i>Litsea garciae</i>	<i>Pisonia umbilifera</i>	<i>Shorea contorta</i>	<i>Diplodiscus paniculatus</i>
Relative height																				
Vitality of tree	1	1										1								
Form of tree																				
Branch growth																				
Dieback of stem																				
Density of foliage	1	1																		
Deformation of leaves																				
Size of leaves																				
Color of leaves																				
Injury of leaves																				

Estimated cause of decline :

**Table 5.7 b-2) Results of observation of tree decline: Los Banos-2**

Name of Plot: UP Quezon-Laguna Land Grant

Nearest deposition monitoring site: Los Banos

Date: 11 Feb 2005

Individual No.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Plant Name	<i>Paraserianthes falcataria</i>	<i>Pteris tripartita</i>	Unidentified	<i>Astoria macrophylla</i>	<i>Astoria macrophylla</i>	<i>Trichadenia philippinensis</i>	<i>Macaranga bicolor</i>	<i>Macaranga bicolor</i>	<i>Macaranga bicolor</i>	<i>Ficus callosa</i>	<i>Pterocarpus indicus</i>	<i>Randia stenophylla</i>	<i>Syzygium nitidum</i>	<i>Pteris tripartita</i>	<i>Ficus callosa</i>	<i>Paraserianthes falcataria</i>	<i>Trichadenia philippinensis</i>	<i>Vaccanga globosa</i>	<i>Syzygium calubecob</i>	<i>Ceiba pentandra</i>
Relative height																				
Vitality of tree																				
Form of tree																				
Branch growth																				
Dieback of stem																				
Density of foliage																				
Deformation of leaves																				
Size of leaves																				
Color of leaves																				
Injury of leaves																				

Estimated cause of decline : No decline symptom

**Table 5.7 c) Results of observation of tree decline: Mt. Naejang**

Name of Plot: Mt. Naejang

Nearest deposition monitoring site: Imsil

Date: 30 Jul - 1 Aug 2004

Individual No.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Plant Name	<i>Pinus densiflora</i>																			
Relative height																				
Vitality of tree																				
Form of tree																				
Branch growth																				
Dieback of stem																				
Density of foliage																				
Deformation of leaves																				
Size of leaves																				
Color of leaves																				
Injury of leaves																				

Estimated cause of decline : No decline symptom

**Table 5.7 d) Results of observation of tree decline: Mondy**

Name of Plot: Mondy

Nearest deposition monitoring site: Mondy

Date: 20 July 2004

Individual No	4	6	7	12	13	14	20	22	23	24	25	38	39	40	44	50	51
Plant Name	<i>Larix sibirica</i>																
Vitality of tree																	
Form of tree												1					
Branch growth				1													
Dieback of stem																	
Density of foliage																	
Deformation of																	
Size of leaves																	
Color of leaves				1	1	1	1		1								
Injury of leaves				1	1	1											

Estimated cause of decline: Light diseases of leaves caused by insects and micromycetes.

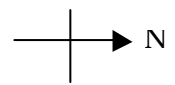


Figure 5.3. a-1-1) Photographic record of tree decline: Banryu-2

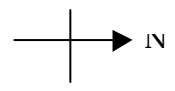
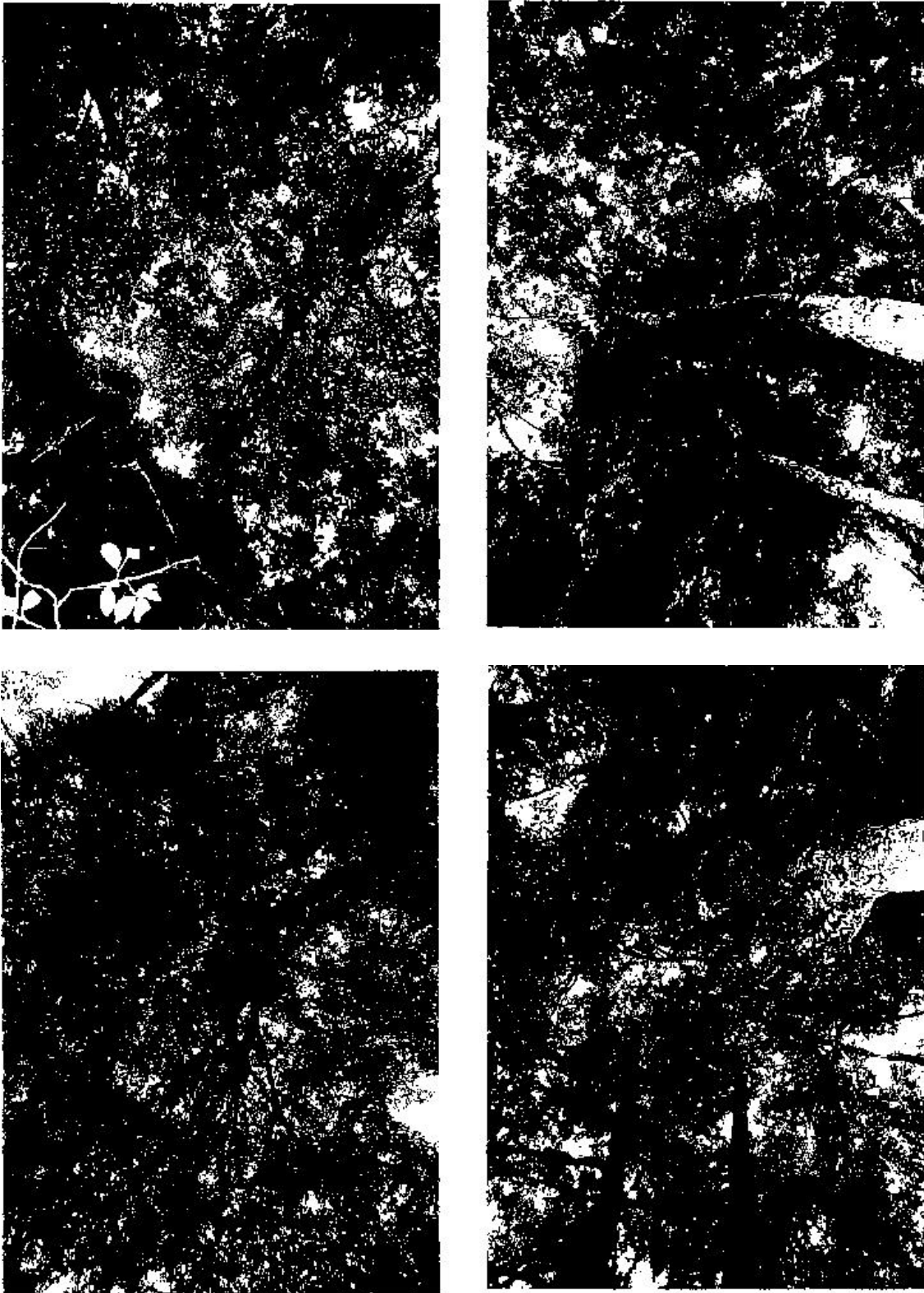
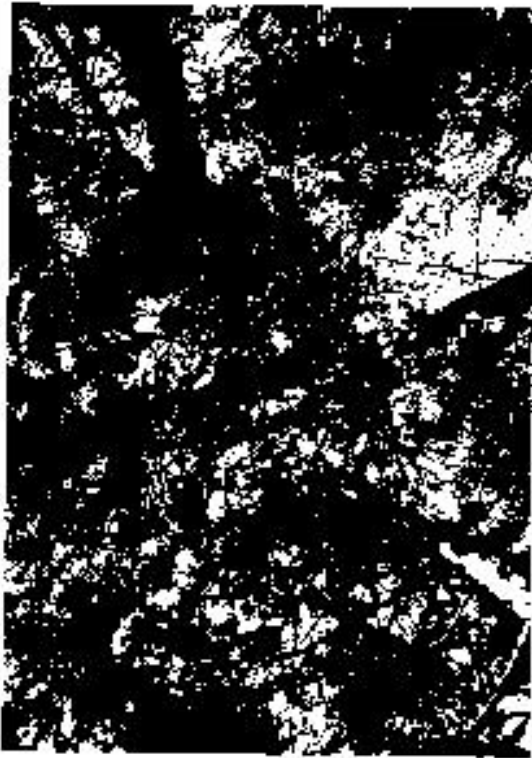


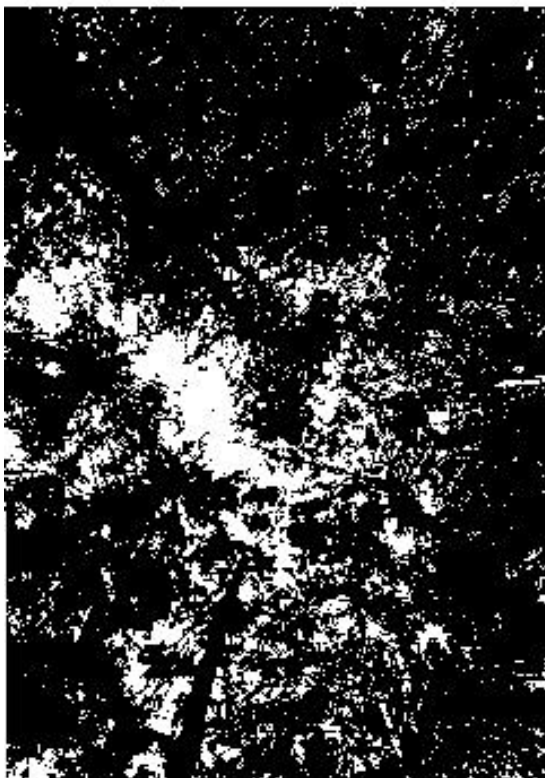
Figure 5.3. a-1-2) Photographic record of tree decline: Iwami “rinku” FP



N



W



S



E

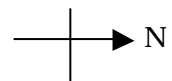


Figure 5.3. a-2-1) Photographic record of tree decline: Lake Ijira



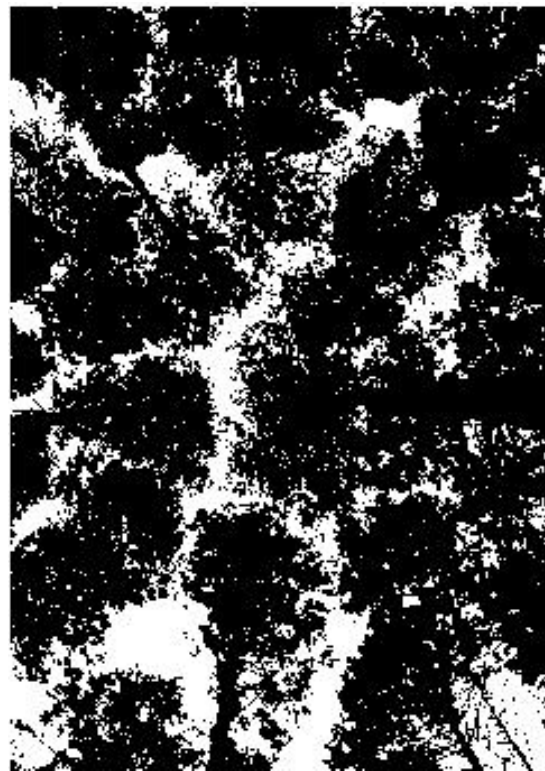
N



W



S



E

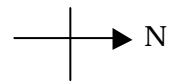


Figure 5.3. a-2-2) Photographic record of tree decline: Yamato



N



W

Figure 5.3. b) Photographic record of tree decline: Mondy



S



E

Figure 5.3. b) continued

Corrections of Data Report 2003

**Corrections: Table 5.7 b-1-1) of Data Report 2003**

Name of Plot: Banryu-2

Nearest deposition monitoring site: Banryu

Date: October 10, 2003

	72	82	76	84	85	63	64	65	46	54	81	83	34	35	37	38
	N	N	N	N	N	E	E	E	S	S	S	S	W	W	W	W
Plant Name	<i>Castanopsis cuspidata</i> var. <i>sieboldii</i>	<i>Machilus thunbergii</i>	<i>Symplocos lucida</i>	<i>Symplocos lucida</i>	<i>Symplocos lucida</i>	<i>Machilus thunbergii</i>	<i>Styrax japonica</i>	<i>Machilus thunbergii</i>	<i>Quercus serrata</i>	<i>Clethra barbinervis</i>	<i>Pinus densiflora</i>	<i>Quercus serrata</i>	<i>Machilus thunbergii</i>	<i>Machilus thunbergii</i>	<i>Acanthopanax sciadophylloides</i>	<i>Pinus densiflora</i>
Relative height	+	+		/	/	+	+	+			+		+	+		/
Vitality of tree				/	/						4					/
Form of tree				/	/						4					/
Branch growth				/	/											/
Dieback of stem				/	/											/
Density of foliage				/	/											/
Deformation of leaves				/	/											/
Size of leaves				/	/											/
Color of leaves				/	/											/
Injury of leaves				/	/											/
Notes	New			*	*				New	New			New	New		*

**Estimated cause of decline: Trees of No. 38, 84, and 85 were cutdown due to the management for the pine wilting disease.**

**Corrections: Figure 5.3 a) and b) of Data Report 2003**

Direction of the photographs in the west and south was upside-down; the top was south in these photographs.

## 6. Inland Aquatic Environment

### 6.1 Method

There were evidences over Northern Europe and North America that the lake water pH levels decreased in the 1970's compared to the levels in the 1930's and the damages were appeared as the results of this decrease, such as decline of fish population. The cause of this pH decline is believed to be the deposition of acidic substances into lakes in excess amounts of their neutralization or buffering capacity. In general, inland bodies of water with low alkalinity and low electric conductivities are prone to be sensitive to acidification by acid deposition. Therefore it is important to conduct continuous monitoring of water bodies and aquatic fauna and so on. The participating countries of EANET are expected to carry out the monitoring of Water temperature, pH, electric conductivity (EC), alkalinity and concentration of  $\text{SO}_4^{2-}$ ,  $\text{NO}_3^-$ ,  $\text{Cl}^-$ ,  $\text{NH}_4^+$ ,  $\text{Na}^+$ ,  $\text{K}^+$ ,  $\text{Ca}^{2+}$ , and  $\text{Mg}^{2+}$  of targeted lakes/rivers at least four times a year (seasonally), and, transparency, water color, DOC (if impossible, COD),  $\text{NO}_2^-$ ,  $\text{PO}_4^{3-}$  more than once a year. While, another items are specified as optional parameters to be monitored.

#### 1) Selection of Monitoring Sites

As described in [Table 6.1](#), 8 countries (China, Indonesia, Japan, Mongolia, Philippines, Russia, Thailand, and Vietnam) carried out inland aquatic environment monitoring. These monitoring sites were established for 8 lakes / reservoirs and 4 streams. (Properties of these monitoring sites are shown on [Table 6.3](#). However it is not completed yet.)

According to the Manual for Monitoring Inland Aquatic Environment, the lakes chosen for monitoring should be harmonic type lakes, preferably with depths of approximately 10m or less, a water residence time of 1 year or less, an area of 1 ha or more, with low alkalinity and electric conductivity, minimal anthropogenic water pollution and no coverage of the surface with aquatic organisms. For the monitoring of springs, it is desirable to locate in nature protection areas, and a minimum of human activities such as deforestation, and cultivation should be conducted or planned in the upstream area.

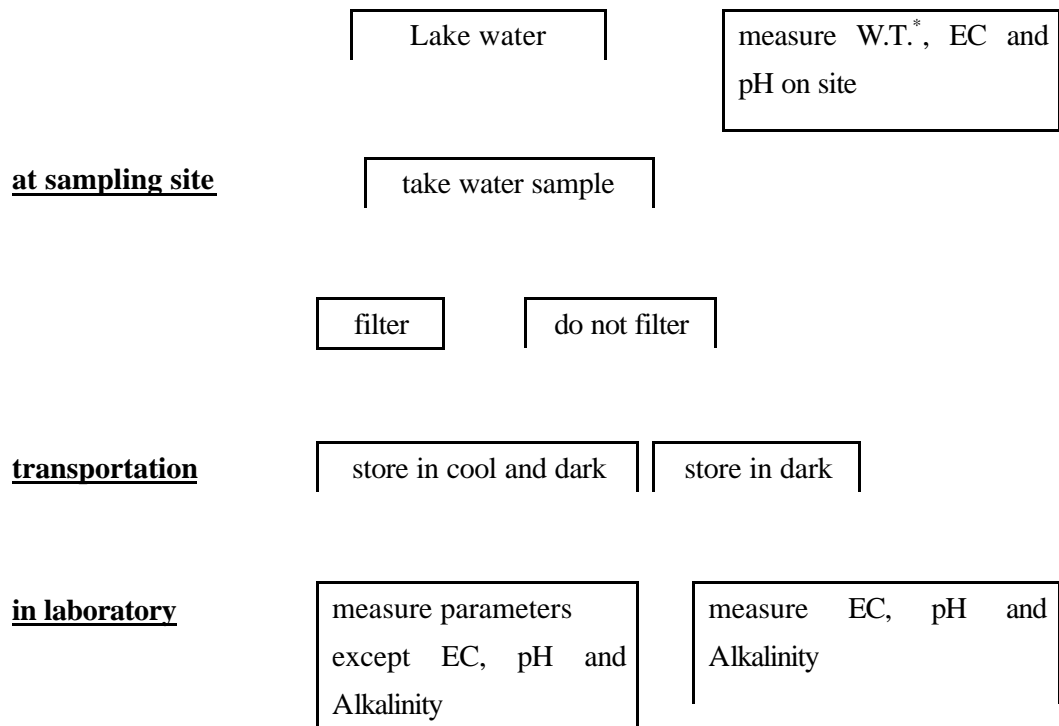
#### 2) Field Operation

Surface water was sampled at one location at the center of the lake. In principle, measurement of pH and electric conductivity was conducted at the site before a precise measurement in the laboratory. Water samples for later analysis were put in a tightly stoppered polyethylene bottle and kept in a cool dark place. The samples were shipped to the laboratory for chemical analysis. The water samples for analysis of chemical components other than alkalinity are filtered at the sampling site with a glass fiber filter. An example of treatment procedure is described in [Fig.6.1](#).

**Table 6.1 Outline of Inland Aquatic Environment Monitoring**

Country	Name of Lake	Nearest deposition monitoring	Parameter	Interval
China	Jiayunshan Lake (Chongqing)	Rural	Water quality of Jiayunshan lake	4times/yr.
	Jiwozi River (Xi'an)	Remote	Water quality of Jiwozi River	4times/yr.
	Xiaoping Dam (Xiamen)	Remote	Water quality of Xiaoping Dam	4times/yr.
	Zhuxiandong Stream (Zhuhai)	Urban	Water quality of Zhuxiandong Stream	4times/yr.
Indonesia	Patenggang Lake	Rural	Water quality of Patenggang Lake	2times/yr.
Japan	Lake Ijira	Rural/Ecolog.	Water quality of Lake Ijira	4times/yr.
	Lake Banryu	Urban/Ecolog.	Water quality of Lake Banryu	4times/yr.
Mongolia	Terej River	Rural	Water quality of Terej River	6times/yr.
Philippines	Pandin Lake	Rural	Water quality of Pandin Lake	4times/yr.
Russia	Pereemnaya River	Rural	Water quality of Pereemnaya River	4times/yr.
Thailand	Vachiralongorn Dam	Remote	Water quality of Vachiralongorn Dam	4times/yr.
Vietnam	Hoa Binh Reservoir	Rural	Water quality of Hoa Binh Reservoir	4times/yr.

**New monitoring site from 2004.**



W.T.\* : Water Temperature

Fig.6.1 Example of treatment procedure of lake water sample

### 3) Laboratory Operation

Collected samples were analyzed by analytical methods specified in Table 6.2 immediately or after stored in a refrigerator.

**Table 6.2 Parameters and recommended analytical methods**

Parameter	Analytical method
pH	pH meter (glass electrode)
Electric Conductivity	Conductivity meter
Alkalinity	Titration by burette or digital burette with pH meter
$\text{NH}_4^+$ , $\text{NO}_3^-$ , $\text{NO}_2^-$ , $\text{PO}_4^{3-}$	Ion Chromatography or spectrometry
$\text{K}^+$ , $\text{Mg}^{2+}$ , $\text{Ca}^{2+}$ , $\text{Na}^+$	Ion Chromatography or atomic absorption spectrometry
$\text{SO}_4^{2-}$	Ion Chromatography or Turbidimetry
DOC	Combustion- infrared method or wet-oxidation method

### 6.2 Results of Monitoring

Properties of lakes are presented in Table 6.3. In 2004 three monitoring sites were changed from last year. Those are shown the Table 6.1. The results of measurements for pH, EC and concentrations of major ions are summarized in Table 6.4. Data within or exceeded the criteria of  $R_1, R_2$  were treated as judge " O " or " X " in Table 6.4 according to the Manual for Monitoring Inland Aquatic Environment.

$R_1$  and  $R_2$  of the data at Jinyunshan Lake, Xiaoping Dam, Jiwozi River and Zhuxiandong Stream in China, Patenggang Lake in Indonesia, Terelj River in Mongolia and Vachiralongorn Dam in Thailand seemed to be over the allowable range. However it was not able to specify the main reasons.

Until last year there was a lot of monitoring site with high alkalinity. However some of them were changed to the monitoring sites with low alkalinity in 2004.

**Table 6.3(1) Properties of lakes or streams**

Lake Name: Jinyunshan Lake

Country	China
Location	Chongqing Prefecture
Altitude	-
Origin	Artificial lake
Area and shape	9990m <sup>2</sup>
Shore line length	About 2km
Lake hydrologic type	Reservoir
Lake trophic type	Oligotrophic to Mesotrophic
Water depth	6-13m
Water volume	60000m <sup>3</sup>
Annual water level fluctuation	2-4m
Precipitation	1232.5mm/year (2003)
Solar radiation	Daylight time Ave.73hr/month (2003)
Wind speed	1.4-2.1 (Ave. 1.7) m/s (2003)
Wind direction	NW, NNW (2003)
Residence time of water	-
Lake utilization	For drink, Irrigation water
Watershed area	-
River (flows into)	-

- : no information

**Table 6.3(2) Properties of lakes or streams**

Lake Name: Xiaoping Dam

Country	China
Location	Xiaoping, Xiamen
Altitude	595m
Origin	Artificial lake
Area and shape	264000m <sup>2</sup>
Shore line length	100m
Lake hydrologic type	Natural
Lake trophic type	Normal
Water depth	57.5m
Water volume	4080000m <sup>3</sup>
Annual water level fluctuation	-
Precipitation	1767.8mm/year (2003)
Solar radiation	Daylight time Ave.179hr/month (2003)
Wind speed	4-6m/s
Wind direction	West
Residence time of water	15days
Lake utilization	Water power
Watershed area	18.1km <sup>2</sup>
River (flows into)	Dingxi lake

- : no information

**Table 6.3(3) Properties of lakes or streams**

Lake Name: Jiwozi River

Country	China
Location	Xi'an
Origin	Natural stream
River length	-
Drainage area	-
The mean height of the river basin	-
Annual air temperature	-
Precipitation	884mm/year (2003)
Solar radiation	Daylight time Ave. 138hr/month (2003)
Wind speed	4-12 (Ave. 8) m/s (2003)
Wind direction	NE, SW, (2003)
Lake (flows into)	-

- : no information

**Table 6.3(4) Properties of lakes or streams**

Lake Name: Zhuxiandong Stream

Country	China
Location	Zhuhai
Origin	Natural stream
River length	-
Drainage area	-
The mean height of the river basin	-
Annual air temperature	-
Precipitation	1890mm/year (2003)
Solar radiation	Daylight time Ave. 182hr/month (2003)
Wind speed	2.3-3.6 (Ave.2.9) m/s (2003)
Wind direction	E, SE, W
Lake (flows into)	-

- : no information

**Table 6.3(5) Properties of lakes or streams**

Lake Name: Patenggang Lake

Country	Indonesia
Location	Bandung
Altitude	-
Origin	Natural lake
Area and shape	-
Shore line length	-
Lake hydrologic type	-
Lake trophic type	-
Water depth	-
Water volume	-
Annual water level fluctuation	-
Precipitation	1606mm/year (2003)
Solar radiation	-
Wind speed	-
Wind direction	-
Residence time of water	-
Lake utilization	-
Watershed area	-
River (flows into)	-

- : no information

**Table 6.3(6) Properties of lakes or streams**

Lake Name: Ijira Lake

Country	Japan
Location	Gifu prefecture
Altitude	110m
Origin	Artificial (dam-made lake)
Area and shape	0.1km <sup>2</sup>
Shore line length	1.8km
Lake hydrologic type	Reservoir
Lake trophic type	Oligotrophic or mesotrophic
Water depth	Ave. 5.4m (Max 10.9m)
Water volume	0.00054km <sup>3</sup>
Annual water level fluctuation	0-0.74m (Ave. 0.22m)
Precipitation	2562mm/year (2003)
Solar radiation	Ave. 345MJ/m <sup>2</sup> /month
Wind speed	0.5-0.9 (Ave. 0.7) m/s (2003)
Wind direction	W (2003)
Residence time of water	23 days
Lake utilization	Irrigation and fishing
Watershed area	5.4 km <sup>2</sup>
River (flows into)	Ijira River, Takabora River

**Table 6.3(7) Properties of lakes or streams**

Lake Name: Banryu Lake

Country	Japan
Location	Shimane prefecture
Altitude	25m
Origin	Natural damming lake
Area and shape	0.13km <sup>2</sup>
Shore line length	5.7km
Lake hydrologic type	-
Lake trophic type	Mesotrophic
Water depth	Ave. 8-8.5m
Water volume	-
Annual water level fluctuation	1.5 m
Precipitation	1314mm/year (2003)
Solar radiation	Ave. 393MJ/m <sup>2</sup> /month
Wind speed	2.6-4.1 (Ave. 3.1) m/s (2003)
Wind direction	S, SSE, W (2003)
Residence time of water	-
Lake utilization	Irrigation
Watershed area	0.73 km <sup>2</sup>
River (flows into)	none

- : no information

**Table 6.3(8) Properties of lakes or streams**

Lake Name: Terelj River

Country	Mongolia
Location	Telelj
Origin	Natural stream
River length	-
Drainage area	-
The mean height of the river basin	-
Annual air temperature	-
Precipitation	374mm/year (2003)
Solar radiation	-
Wind speed	0.7-2.2 (Ave. 1.2) m/s (2003)
Wind direction	W, N
Lake (flows into)	-

- : no information

**Table 6.3(9) Properties of lakes or streams**

Lake Name: Pandin Lake

Country	Philippines
Location	San Pablo City
Altitude	200m
Origin	Natural lake
Area and shape	0.25km <sup>2</sup>
Shore line length	-
Lake hydrologic type	-
Lake trophic type	-
Water depth	63m
Water volume	-
Annual water level fluctuation	-
Precipitation	1593mm/year (2003)
Solar radiation	Ave. 497MJ/m <sup>2</sup> /month (2003)
Wind speed	1-5 (Ave. 2.5) m/s (2003)
Wind direction	NE, E, W, NNW
Residence time of water	-
Lake utilization	-
Watershed area	-
River (flows into)	-

- : no information

**Table 6.3(10) Properties of lakes or stream**

Stream Name: Pereemnaya River

Country	Russian Federation
Location	Southern Baikal
Origin	Natural stream
River length	42km
Drainage area	About 360km <sup>2</sup>
The mean height of the river basin	1260m
Annual air temperature	-3.4
Precipitation	About 800mm/year
Solar radiation	-
Wind speed	-
Wind direction	-
Lake (flows into)	Kholodnoe lake

- : no information

**Table 6.3(11) Properties of lakes or streams**

Lake Name: Vachiralongorn Dam

Country	Thailand
Location	Kanchanaburi Province
Altitude	170m
Origin	Artificial (Dam made lake)
Area and shape	3,720 km <sup>2</sup>
Shore line length	-
Lake hydrologic type	Reservoir
Lake trophic type	-
Water depth	Avg. 149.08 m ( max:153.21 m )
Water volume	6.7276 km <sup>3</sup>
Annual water level fluctuation	0-18 m (avg. 9m)
Precipitation	1659mm/year (2003)
Solar radiation	-
Wind speed	3.7-5.3 (Ave. 4.3) m/s (2003)
Wind direction	SE, NW (2003)
Residence time of water	165 days
Lake utilization	Irrigation and Electric power
Watershed area	3720 km <sup>2</sup>
River (flows into)	-

- : no information

**Table 6.3(12) Properties of lakes or streams**

Lake Name: Hoa Binh Reservoir

Country	Vietnam
Location	Hoa Binh Province
Altitude	23m
Origin	Artificial (dam-made lake)
Area and shape	208 km <sup>2</sup> -25km <sup>2</sup> (*)
Shore line length	208km-16.7km(*)
Lake hydrologic type	Reservoir
Lake trophic type	Mesotrophic
Water depth	60m (max: 120m)
Water volume	9.45 km <sup>3</sup> -2.5 km <sup>3</sup> (*)
Annual water level fluctuation	80m- 120m (Ave.100m)
Precipitation	1693mm/year (2003)
Solar radiation	Daylight time Ave. 162hr/month (2003)
Wind speed	0-2.0 (Ave. 0.9) m/s (2003)
Wind direction	N (2003)
Residence time of water	365 days
Lake utilization	Electric power and flood control
Watershed area	51700 km <sup>2</sup> -13700km <sup>2</sup> (*)
River (flows into)	Da River

(\*)The second values are in affected area of reservoir.



➤ Page 40, table 3.31

Data of Vientian in 2004 are incorrect. The corrected figures are as follows.

**Table 3.31 Volume-weighted mean concentrations/ Precipitation (Monthly)**

2004	SO <sub>4</sub> <sup>2-</sup>	nss-SO <sub>4</sub> <sup>2-</sup>	NO <sub>3</sub> <sup>-</sup>	Cl <sup>-</sup>	NH <sub>4</sub> <sup>+</sup>	Na <sup>+</sup>	K <sup>+</sup>	Ca <sup>2+</sup>	nss-Ca <sup>2+</sup>	Mg <sup>2+</sup>	H <sup>+</sup>	pH	EC	Precip.
	μmol/L	μmol/L	μmol/L	μmol/L	μmol/L	μmol/L	μmol/L	μmol/L	μmol/L	μmol/L	μmol/L		mS/m	mm month <sup>-1</sup>
Jan	--	--	--	--	--	--	--	--	--	--	--	--	--	<b>0.0</b>
Feb	--	--	--	--	--	--	--	--	--	--	--	--	--	<b>0.0</b>
Mar	--	--	--	--	--	--	--	--	--	--	--	--	--	<b>0.0</b>
Apr	*	*	*	*	*	*	*	*	*	*	5.9	5.23	1.28	68.1
May	*	*	*	*	*	*	*	*	*	*	*	*	*	72.6
June	*	*	*	*	*	*	*	*	*	*	*	*	*	143.8
July	*	*	*	*	*	*	*	*	*	*	<b>0.8</b>	<b>6.11</b>	<b>3.44</b>	<b>130.1</b>
Aug	--	--	--	--	--	--	--	--	--	--	--	--	--	<b>0.0</b>
Sept	*	*	*	*	*	*	*	*	*	*	0.3	6.46	2.30	<b>27.1</b>
Oct	--	--	--	--	--	--	--	--	--	--	--	--	--	<b>0.0</b>
Nov	--	--	--	--	--	--	--	--	--	--	--	--	--	<b>0.0</b>
Dec	--	--	--	--	--	--	--	--	--	--	--	--	--	<b>0.0</b>
<b>Annual</b>	*	*	*	*	*	*	*	*	*	*	<b>2.3</b>	<b>5.65</b>	<b>2.65</b>	<b>441.8<sup>1)</sup></b>
Max.	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.2	<0.2	<0.4	10.5	<b>6.72</b>	<b>4.96</b>	
Min.	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.2	<0.2	<0.4	<b>0.2</b>	4.98	<b>1.09</b>	

**Table 3.31 Wet deposition (Monthly)** unit: mmol m<sup>-2</sup>month<sup>-1</sup>

2004	SO <sub>4</sub> <sup>2-</sup>	nss-SO <sub>4</sub> <sup>2-</sup>	NO <sub>3</sub> <sup>-</sup>	Cl <sup>-</sup>	NH <sub>4</sub> <sup>+</sup>	Na <sup>+</sup>	K <sup>+</sup>	Ca <sup>2+</sup>	nss-Ca <sup>2+</sup>	Mg <sup>2+</sup>	H <sup>+</sup>
Jan	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>
Feb	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>
Mar	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>
Apr	*	*	*	*	*	*	*	*	*	*	0.40
May	*	*	*	*	*	*	*	*	*	*	*
June	*	*	*	*	*	*	*	*	*	*	*
July	*	*	*	*	*	*	*	*	*	*	<b>0.10</b>
Aug	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>
Sept	*	*	*	*	*	*	*	*	*	*	< <b>0.01</b>
Oct	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>
Nov	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>
Dec	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>
<b>Annual<sup>2)</sup></b>	*	*	*	*	*	*	*	*	*	*	<b>1.00</b>

**Table 3.31 Data completeness (Monthly)**

2004	SO <sub>4</sub> <sup>2-</sup>	nss-SO <sub>4</sub> <sup>2-</sup>	NO <sub>3</sub> <sup>-</sup>	Cl <sup>-</sup>	NH <sub>4</sub> <sup>+</sup>	Na <sup>+</sup>	K <sup>+</sup>	Ca <sup>2+</sup>	nss-Ca <sup>2+</sup>	Mg <sup>2+</sup>	H <sup>+</sup>	pH	EC	Precip.
	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%PCL
Jan	--	--	--	--	--	--	--	--	--	--	--	--	--	<b>100</b>
Feb	--	--	--	--	--	--	--	--	--	--	--	--	--	<b>100</b>
Mar	--	--	--	--	--	--	--	--	--	--	--	--	--	<b>100</b>
Apr	0	0	0	0	0	0	0	0	0	0	100	100	100	100
May	0	0	0	0	0	0	0	0	0	0	0	0	0	100
June	0	0	0	0	0	0	0	0	0	0	0	0	0	100
July	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>
Aug	--	--	--	--	--	--	--	--	--	--	--	--	--	<b>100</b>
Sept	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>
Oct	--	--	--	--	--	--	--	--	--	--	--	--	--	<b>100</b>
Nov	--	--	--	--	--	--	--	--	--	--	--	--	--	<b>100</b>
Dec	--	--	--	--	--	--	--	--	--	--	--	--	--	<b>100</b>
<b>Annual</b>	0	0	0	0	0	0	0	0	0	0	<b>51</b>	<b>51</b>	<b>51</b>	<b>100</b>



➤ **Page 65-89, table 3.56-3.80**

Data of Xiaoping in 2001 are incorrect. The corrected figures are as follows.

Table No.	Correct	Error
Table 3.56	2681.5	4481.9
Table 3.57	18.3	17.4
Table 3.58	17.6	16.8
Table 3.59	18.7	18.3
Table 3.60	28.8	29.2
Table 3.61	33.2	31.4
Table 3.62	11.8	9.6
Table 3.63	4.2	2.9
Table 3.64	5.1	5.3
Table 3.65	4.9	5
Table 3.66	2.5	2.8
Table 3.67	12.6	12.4
Table 3.68	4.90	4.91
Table 3.69	1.44	1.42
Table 3.70	49.1	77.8
Table 3.71	47.2	75.2
Table 3.72	50.1	82.2
Table 3.73	77.3	131
Table 3.74	88.9	141
Table 3.75	31.7	11.3
Table 3.76	11.3	13.1
Table 3.77	13.8	23.5
Table 3.78	13.1	22.6
Table 3.79	6.77	12.4
Table 3.80	33.8	55.5

➤ **Page 65-89, table 3.56-3.80**

Data of Kototabang in 2004 are incorrect. The corrected figures are as follows.

Table No.	Correct	Error
Table 3.56	2110.9	1621.0
Table 3.57	5.2	5.9
Table 3.58	4.6	5.2
Table 3.59	4.7	3.9
Table 3.60	11.8	11.5
Table 3.61	12.3	12.7
Table 3.62	10.9	11.8
Table 3.63	6.3	5.9
Table 3.64	7.0	7.5
Table 3.65	6.7	7.3
Table 3.66	1.8	1.4
Table 3.67	18.5	21.3
Table 3.68	4.73	4.67
Table 3.69	1.11	1.10
Table 3.70	11.0	9.53
Table 3.71	9.66	8.39
Table 3.72	9.94	6.39
Table 3.73	24.8	18.6
Table 3.74	25.9	20.6
Table 3.75	23.0	19.2
Table 3.76	13.2	9.49
Table 3.77	14.7	12.2
Table 3.78	14.2	11.8
Table 3.79	3.76	2.28
Table 3.80	39.0	34.5

➤ **Page 65,76,77,78,89, table 3.56,3.67,3.68,3.69,3.80**

Data of Vientian in 2003 and 2004 are incorrect. The corrected figures are as follows.

Table No.	Correct	Error
Data 2004		
Table 3.56	441.8	284.6
Table 3.67	2.3	2.5
Table 3.68	5.65	5.60
Table 3.69	2.65	7.3
Table 3.80	1.00	0.72
Data 2003		
Table 3.69	2.07	20.7

➤ **Page 80, table 3.71**

Data of Ulaanbaatar and Terelj in 2002 are incorrect. The corrected figures are as follows.

Name of sites	Correct	Error
Ulaanbaatar	4.34	3.54
Terelj	3.51	3.12

➤ **Page 121, 123, 125, 127, 136, 138, 140, 142, 144, 146 148,150 (table 4.3-4.6, table 4.13-4.20)**

Data of Ha Noi are incorrect. Below are the corrected figures indicated by boldface.

**(Table 4.3)**

Ha Noi	Mean	1.5	0.7	5.5	4.8	4.0	<b>4.1</b>	<b>4.8</b>	1.8	1.4	2.5	<b>5.2</b>	<b>4.1</b>
	%	100	100	100	100	100	<b>50</b>	<b>40</b>	100	100	100	<b>75</b>	<b>60</b>
	Max-w	4.7	0.8	7.4	5.3	4.4	<b>4.4</b>	<b>7.5</b>	2.3	2.0	4.8	<b>7.4</b>	<b>4.8</b>
	Min-w	0.4	0.4	3.6	4.2	3.4	3.8	2.0	1.5	0.7	0.8	3.4	3.5

**(Table 4.4)**

Ha Noi	Mean	0.3	0.2	0.2	0.3	0.5	<b>0.6</b>	<b>0.7</b>	1.7	2.2	4.3	<b>3.9</b>	<b>3.2</b>
	%	100	100	100	100	100	<b>50</b>	<b>40</b>	100	100	100	<b>75</b>	<b>60</b>
	Max-w	0.9	0.6	0.4	0.6	0.6	<b>0.6</b>	<b>0.7</b>	2.7	3.7	6.1	<b>5.3</b>	<b>4.3</b>
	Min-w	N.D.	N.D.	N.D.	0.1	0.4	0.6	<b>0.7</b>	0.6	0.1	N.D.	2.9	2.0

**(Table 4.5)**

Ha Noi	Mean	0.9	0.5	2.1	1.7	1.3	<b>1.1</b>	<b>0.5</b>	1.2	1.6	3.4	<b>7.0</b>	<b>4.5</b>
	%	100	100	100	100	100	<b>50</b>	<b>40</b>	100	100	100	<b>75</b>	<b>60</b>
	Max-w	1.6	0.8	3.3	2.7	1.7	<b>1.2</b>	<b>0.6</b>	1.9	3.1	6.8	<b>8.2</b>	<b>5.9</b>
	Min-w	0.3	0.1	1.1	1.1	0.9	1.1	<b>0.5</b>	0.4	0.4	1.4	5.0	3.7

**(Table 4.6)**

Ha Noi	Mean	6.5	3.5	33.1	25.8	19.5	<b>18.9</b>	<b>15.3</b>	13.1	7.3	9.1	<b>8.0</b>	<b>6.8</b>
	%	100	100	100	100	100	<b>50</b>	<b>40</b>	100	100	100	<b>75</b>	<b>60</b>
	Max-w	16.0	4.2	43.4	34.1	20.8	<b>19.1</b>	<b>16.5</b>	35.6	17.5	15.8	<b>11.3</b>	<b>7.6</b>
	Min-w	2.8	2.8	20.3	22.1	17.8	18.7	14.0	4.2	1.3	3.4	6.3	6.1

**(Table 4.13)**

Ha Noi	Mean	14.93	13.51	12.82	8.44	7.15	<b>5.83</b>	<b>6.72</b>	16.50	31.33	38.57	<b>31.05</b>	<b>44.75</b>
	%	100	100	100	100	100	<b>50</b>	<b>40</b>	100	100	100	<b>75</b>	<b>60</b>
	Max-w	40.52	21.21	14.60	12.98	9.40	<b>6.00</b>	<b>6.86</b>	23.29	61.10	54.75	<b>41.84</b>	<b>54.82</b>
	Min-w	0.03	9.87	9.10	4.24	4.13	<b>5.67</b>	<b>6.58</b>	10.32	4.32	11.73	23.93	38.67

**(Table 4.14)**

Ha Noi	Mean	11.45	7.77	9.94	5.64	4.31	<b>1.95</b>	<b>2.83</b>	6.97	7.85	11.10	<b>13.79</b>	<b>21.30</b>
	%	100	100	100	100	100	<b>50</b>	<b>40</b>	100	100	100	<b>75</b>	<b>60</b>
	Max-w	36.16	11.62	12.05	8.52	6.82	<b>2.12</b>	<b>3.95</b>	9.03	22.88	19.75	<b>17.31</b>	<b>22.14</b>
	Min-w	0.32	5.30	6.48	2.41	2.18	1.78	1.71	5.02	1.76	7.77	8.29	20.85

**(Table 4.15)**

Ha Noi	Mean	1.32	1.15	1.46	0.55	0.84	<b>0.12</b>	<b>0.66</b>	1.50	1.12	2.28	<b>4.84</b>	<b>4.17</b>
	%	100	100	100	100	100	<b>50</b>	<b>40</b>	100	100	100	<b>75</b>	<b>60</b>
	Max-w	3.33	1.64	1.81	0.65	2.25	<b>0.13</b>	<b>0.88</b>	2.56	2.97	6.01	<b>10.05</b>	<b>4.83</b>
	Min-w	0.17	0.83	1.07	0.44	0.15	0.11	<b>0.44</b>	0.92	0.21	1.03	0.90	<b>2.91</b>

**(Table 4.16)**

Ha Noi	Mean	11.85	4.52	3.58	1.99	1.32	<b>1.46</b>	<b>0.26</b>	1.30	5.37	12.06	<b>7.35</b>	<b>8.53</b>
	%	100	100	100	100	100	<b>50</b>	<b>40</b>	100	100	100	<b>75</b>	<b>60</b>
	Max-w	46.35	7.30	4.05	3.12	2.54	<b>1.67</b>	<b>0.43</b>	2.50	11.55	14.85	<b>17.58</b>	<b>13.24</b>
	Min-w	0.25	3.47	3.25	0.44	0.72	1.25	0.10	0.34	0.58	7.30	0.57	4.34

**(Table 4.17)**

Ha Noi	Mean	0.47	0.71	0.96	0.28	1.41	<b>0.21</b>	<b>0.08</b>	0.34	0.23	0.51	<b>3.69</b>	<b>5.67</b>
	%	100	100	100	100	100	<b>50</b>	<b>40</b>	100	100	100	<b>75</b>	<b>60</b>
	Max-w	1.68	1.25	1.42	0.53	4.29	<b>0.25</b>	<b>0.10</b>	0.59	0.55	0.74	<b>7.60</b>	<b>10.61</b>
	Min-w	0.08	0.24	0.56	0.05	0.10	0.17	0.07	0.05	0.03	0.32	0.82	<b>2.09</b>

**(Table 4.18)**

Ha Noi	Mean	1.58	2.41	2.50	1.26	1.00	<b>0.96</b>	<b>0.58</b>	1.23	1.25	2.06	<b>4.97</b>	<b>3.01</b>
	%	100	100	100	100	100	<b>50</b>	<b>40</b>	100	100	100	<b>75</b>	<b>60</b>
	Max-w	3.11	3.79	2.96	1.97	1.69	<b>1.12</b>	<b>0.66</b>	1.89	2.03	2.28	<b>9.81</b>	<b>5.14</b>
	Min-w	0.12	1.59	1.59	0.44	0.13	0.80	<b>0.51</b>	0.25	0.10	1.88	1.08	1.48

**(Table 4.19)**

Ha Noi	Mean	0.32	0.58	0.66	0.28	0.34	<b>0.22</b>	<b>0.15</b>	0.34	0.44	0.44	<b>1.12</b>	<b>1.22</b>
	%	100	100	100	100	100	<b>50</b>	<b>40</b>	100	100	100	<b>75</b>	<b>60</b>
	Max-w	0.68	0.80	0.84	0.35	0.65	<b>0.23</b>	<b>0.25</b>	0.46	0.99	0.63	<b>1.71</b>	<b>1.53</b>
	Min-w	0.15	0.46	0.50	0.18	0.17	0.22	<b>0.05</b>	0.26	0.04	0.09	0.12	0.99

**(Table 4.20)**

Ha Noi	Mean	3.09	4.22	6.32	3.20	5.05	<b>3.15</b>	<b>2.88</b>	8.18	8.61	11.11	<b>19.64</b>	<b>15.50</b>
	%	100	100	100	100	100	<b>50</b>	<b>40</b>	100	100	100	<b>75</b>	<b>60</b>
	Max-w	8.26	6.54	7.54	4.25	9.74	<b>3.51</b>	<b>4.08</b>	12.68	17.52	16.34	<b>29.32</b>	<b>16.55</b>
	Min-w	0.22	2.25	3.59	1.77	3.18	2.79	<b>1.67</b>	0.40	0.56	7.94	8.24	13.82