

**Acid Deposition Monitoring Network
in East Asia (EANET)**

Data Report 2009

February 2011

Network Center for EANET

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CHAPTER 1

Introduction

1. Introduction

The Acid Deposition Monitoring Network in East Asia (EANET) was established as an initiative for regional cooperation among the participating countries, creation of a common understanding on the state of acid deposition problems and for providing useful inputs to policy makers at various levels.

Monitoring activities started during the preparatory phase activities of EANET from March 1998 to December 2000. Regular monitoring of acid deposition started from January 2001 with the participation of 10 countries, namely China, Indonesia, Japan, Malaysia, Mongolia, Philippines, Republic of Korea, Russia, Thailand, and Viet Nam. Cambodia, Lao PDR and Myanmar joined EANET in 2001, 2002 and 2005, respectively. There are currently 13 countries participating in EANET activities.

Acid deposition monitoring of EANET covers four environmental items – wet deposition, dry deposition (air concentration), soil and vegetation, and inland aquatic environment. Monitoring of wet and dry deposition was implemented in order to measure atmospheric concentrations and to evaluate fluxes of acidic substances to the land surface, while monitoring for soil/vegetation and inland aquatic environment has been carried out to assess adverse impacts on terrestrial and aquatic ecosystems. The monitoring data were used to evaluate the state of acid deposition as well as impacts on ecosystems.

The participating countries are required to submit the data and related information obtained from the monitoring activities conducted at the EANET sites in their respective countries to the Network Center of EANET (NC) by the end of June of each calendar year based on the guidelines of EANET. The NC had prepared and presented a draft Data Report 2009, which contains the monitoring data from the participating countries at the Tenth Session of Scientific Advisory Committee (SAC10), held in October 2010. The draft Data Report was considered at SAC10 by the experts from the participating countries. Following the comments and guidance at the SAC10, the NC has elaborated and finalized the report.

The Data Report 2009 contains the data obtained from monitoring activities carried out in 2009.

CHAPTER 2

Network Description

2. Network Description

2.1 Classification of Monitoring Sites

EANET monitoring sites are classified into two basic categories, namely acid deposition monitoring sites and ecological survey sites. Acid deposition monitoring sites are sites collecting fundamental data on the temporal and spatial distribution of acid deposition, and they are further classified into 3 sub-categories: remote sites, rural sites and urban sites for the objectives of the monitoring. Ecological survey sites are those that provide basic data for assessing the effects of acidification on terrestrial ecosystems, and they are further classified into 2 sub-categories: survey sites and ecosystem analysis sites. The criteria used for classification of the sites are presented in Table 2.1.

Table 2.1 Classification of Monitoring Sites

Site Category	Site Classification	Main Purpose and Siting Criteria
Acid Deposition Monitoring Site for wet deposition and dry deposition monitoring	Urban Site	- Assessment of the state of acid deposition in urban areas - Urbanized and industrial areas, and the areas immediately outside the urban area - Data can be used for evaluation of acid deposition effect on buildings and historical monuments or human health
	Rural Site	- Assessment of the state of acid deposition in rural areas and/or hinterlands - Data can be used for the evaluation of acid deposition on agricultural crops, forests and etc. - More than 20km apart from large pollution sources like cities, power plants and highways
	Remote Site	- Assessment of the state of acid deposition in background areas - Data can be used for evaluation of long-range transport and deposition models - More than 50km apart from large pollution sources like cities, power plants and highways - More than 500m apart from main roads (more than 500 vehicles per day)
Ecological Survey Site for soil and vegetation monitoring and Inland aquatic monitoring	Basic survey site	- Accumulation of basic data on soil, forest, and inland aquatic environment and disclose trends in their properties - In the vicinity of the acid deposition monitoring site
	Ecosystem analysis site	- Assessment of acid deposition impacts on whole ecosystem through application of terrestrial ecosystem analysis and/or catchment analysis - Sensitive Areas to changes in atmospheric acidity and ecologically conserved area

2.2 Monitoring activities in 2009

Thirteen EANET countries, namely, China, Japan, Mongolia, Republic of Korea and Russian Federation of the North-East Asian region, and Cambodia, Indonesia, Malaysia, Myanmar, Lao PDR, Philippines, Thailand and Vietnam participated in monitoring of acid deposition in 2009. Monitoring data were submitted from a total of 54 monitoring sites, including 20 remote, 13 rural and 21 urban sites. A map showing the location of these sites is provided in [Figure 2.1](#). The details on the location of the monitoring sites are presented in [Table 2.2](#).



Figure 2.1 Locations of EANET Sites in 2009

(Note) Khao Lam Dam and Vachiralongkorn Dam (of earlier Data Reports in 2000-2003) were renamed Khanchanaburi and also Mae Hia was renamed Chiang Mai in 2004.

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

Country	Name of sites	Characteristics of sites	Latitude	Longitude	Ht. above sea level
Cambodia	Phnom Penh	Urban	11°33'N	104°50'E	10m
China	Chongqing-Haifu	Urban	29°37'N	106°30'E	317m
	- Jinyunshan	Rural	29°49'N	106°22'E	800m
	Xi'an - Shizhan	Urban	34°14'N	108°57'E	400m
	- 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
	- Zhuxiandong	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
	Maros	Rural	4°55' S	119°34' E	11m
Japan	Rishiri	Remote	45°07'11" N	141°12'33" E	40m
	Ochiishi	Remote	43°09'43" N	145°29'50" E	49m
	Tappi	Remote	41°15'06" N	140°20'59" E	106m
	Sado-seki	Remote	38°14'59" N	138°24'00" E	136m
	Happo	Remote	36°41'48" N	137°47'53" E	1,850m
	Ijira	Rural	35°34'20" N	136°41'38" E	140m
	Oki	Remote	36°17'19" N	133°11'06" E	90m
	Banryu	Urban	34°40'54" N	131°47'59" E	53m
	Yusuhara	Remote	33°22'45" N	132°56'05" E	790m
	Hedo	Remote	26°51'58" N	128°14'55" E	60m
	Ogasawara	Remote	27°05'30" N	142°12'58" E	47m
	Tokyo	Urban	35°41'18" N	139°45'22" E	26m
Lao PDR	Vientiane	Urban	17° N	102° E	
Malaysia	Tanah Rata	Remote	04°28' N	101°23' E	1,470m
	Petaling Jaya	Urban	03°06' N	101°39' E	87m
	Danum Valley	Remote	04°59' N	117°51' E	427m
	Kuching	Urban	01°29' N	110°28' E	22m
Mongolia	Ulaanbaatar	Urban	47°54' N	106°49' E	1,282m
	Terelj	Remote	47°59' N	107°29' E	1,540m
Myanmar	Yangon	Urban	16°30' N	96°07' E	22m
Philippines	Metro Manila	Urban	14°38' N	121°04' E	54m
	Los Banos	Rural	14°11' N	121°15' E	35m
	Mt. Sto. Tomas	Remote	16°25' N	120°36' E	1,500m
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	

Country	Name of sites	Characteristics of sites	Latitude	Longitude	Height above sea
Russia	Mondy	Remote	51° 40' N	101°00' 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 (Vachiralongkorn Dam)	Remote	14° 46' N	98°35' E	170m
	Chiang Mai (Mae Hia)	Rural	18° 46' N	98°56' E	350m
	Nakhon Ratchasima	Rural	14° 27' N	101°53' E	418m
Vietnam	Hanoi	Urban	21° 01' N	105°51' E	5m
	Hoa Binh	Rural	20° 49' N	105°20' E	23m
	Da Nang	Urban	16°02'34" N	108°12'23" E	60m
	Cuc Phuong	Remote	20°15' N	105°43' E	155m

Table 2.3 provides further details on the sites, including the types of measurements carried out and equipment used for making dry deposition (air concentration) measurements. Filter packs are used at 36 sites for measurements of air concentrations of pollutants for determination of dry deposition. Automatic or manual gas monitors for NO_x and SO₂ were used at 24 sites, while 22 sites used automatic instruments to monitor ozone concentration. Concentrations of particulate matter as PM₁₀ were measured by automatic or manual instruments at 23 sites. Meteorological conditions such as wind speed, wind direction, air temperature, relative humidity, and solar radiation were measured by meteorological equipment 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 sites. Further information on the ecological survey sites and their activities was described in Chapters 5 and 6.

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 ₂ ,NO _x	O ₃	PM	
Cambodia	Phnom Penh	Urban	✓	None	None	None	None
China	Chongqing-Haifu	Urban	✓	None	None	None	None
	- Jinyunshan	Rural	✓	✓	None	✓	None
	Xi'an - Shizhan	Urban	✓	None	None	None	None
	- Jiwozi	Remote	✓	None	None	None	None
	Xiamen - Hongwen	Urban	✓	✓	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	PS
	Serpong	Rural	✓	None	None	None	✓
	Kototabang	Remote	✓	None	None	None	PS
	Bandung	Urban	✓	None	None	None	PS
	Maros	Rural	✓	None	None	None	None
Japan	Rishiri	Remote	✓	✓	✓	✓	✓
	Ochiishi	Remote	✓	✓	✓	✓	✓
	Tappi	Remote	✓	✓	✓	✓	✓
	Sado-seki	Remote	✓	✓	✓	✓	✓
	Happo	Remote	✓	✓	✓	✓	✓
	Ijira	Rural	✓	✓	✓	✓	✓
	Oki	Remote	✓	✓	✓	✓	✓
	Banryu	Urban	✓	✓	✓	✓	✓
	Yusuhara	Remote	✓	✓	✓	✓	✓
	Hedo	Remote	✓	✓	✓	✓	✓
	Ogasawara	Remote	✓	✓	✓	✓	✓
	Tokyo	Urban	✓	None	None	None	✓
Lao PDR	Vientiane	Urban	✓	None	None	None	None
Malaysia	Tanah Rata	Remote	✓	✓	✓	None	✓
	Petaling Jaya	Urban	✓	None	None	None	✓
	Danum Valley	Remote	✓	None	None	None	✓
	Kuching	Urban	✓	None	None	None	None
Mongolia	Ulaanbaatar	Urban	✓	None	None	None	✓
	Terelj	Remote	✓	None	None	None	✓
Myanmar	Yangon	Urban	✓	None	None	None	None
Philippines	Metro Manila	Urban	✓	None	None	None	✓
	Los Banos	Rural	✓	None	None	None	✓
	Mt. Sto. Tomas	Remote	✓	None	None	None	✓
Republic of Korea	Kanghwa	Rural	✓	✓	✓	✓	✓
	Cheju (Kosan)	Remote	✓	✓	✓	✓	✓
	Imsil	Rural	✓	✓	✓	✓	✓

Country	Name of sites	Characteristics of sites	Wet Dep.	Dry Dep.			
				Automatic			Filter Pack
				SO ₂ ,NO _x	O ₃	PM	
Russia	Mondy	Remote	✓	None	✓	None	✓
	Listvyanka	Rural	✓	None	None	None	✓
	Irkutsk	Urban	✓	None	None	None	✓
	Primorskaya	Rural	✓	None	None	None	✓
Thailand	Bangkok	Urban	✓	✓	✓	✓	✓
	Samutprakarn	Urban	✓	✓	✓	✓	None
	Patumthani	Rural	✓	None	None	None	✓
	Khanchanaburi	Remote	✓	✓	✓	✓	✓
	(Vachiralongkorn Dam)						
	Chiang Mai (Mae Hia)	Rural	✓	✓	✓	✓	✓
Vietnam	Nakhon Ratchasima	Rural	✓	None	None	None	✓
	Hanoi	Urban	✓	None	None	None	✓
	Hoa Binh	Rural	✓	None	None	None	✓
	Da Nang	Urban	✓	✓	✓	✓	None
	Cuc Phuong	Remote	✓	✓	✓	✓	None

(Note 1) PS: Passive sampler

(Note 2) Monitoring on wet deposition started at Da Nang and Cuc Phuong in Vietnam in January 2009.

Outline of these new sites are as follows;

[Da Nang]

Address :

Site classification : Urban

Latitude : North, 16°02'33.8" Longitude : East, 108°12'23.1" Altitude : 60 m

Instruments : Wet; KIMOTO MCSAM-6-VB,

Dry; KIMOTO SA633-VB (SO₂), NA623-VB (NO_x), OA683-VB (O₃),

PM612-D (PM₁₀)

[Cuc Phuong]

Site classification : Remote

Latitude : North, 20°15' Longitude : East, 105°43' Altitude : 154.854 m

Instruments : Wet; KIMOTO MCSAM-6-VB,

Dry; KIMOTO SA633-VB (SO₂), NA623-VB (NO_x), OA683-VB (O₃),

PM612-D (PM₁₀)

CHAPTER 3

Wet Deposition Monitoring

3. Wet Deposition Monitoring

3.1 Method

Each participating country is required to carry out acid deposition monitoring using common methodologies as specified in the *Guidelines for Acid Deposition Monitoring in East Asia, Technical Documents on Wet Deposition Monitoring in East Asia* and related QA/QC documents, which were adopted at The Second Interim Scientific Advisory Group Meeting in March 2000 to obtain comparable, high quality monitoring data. [Figure 3.1](#) shows the flow chart that summarizes the procedures for sampling and chemical analysis by the participating countries.

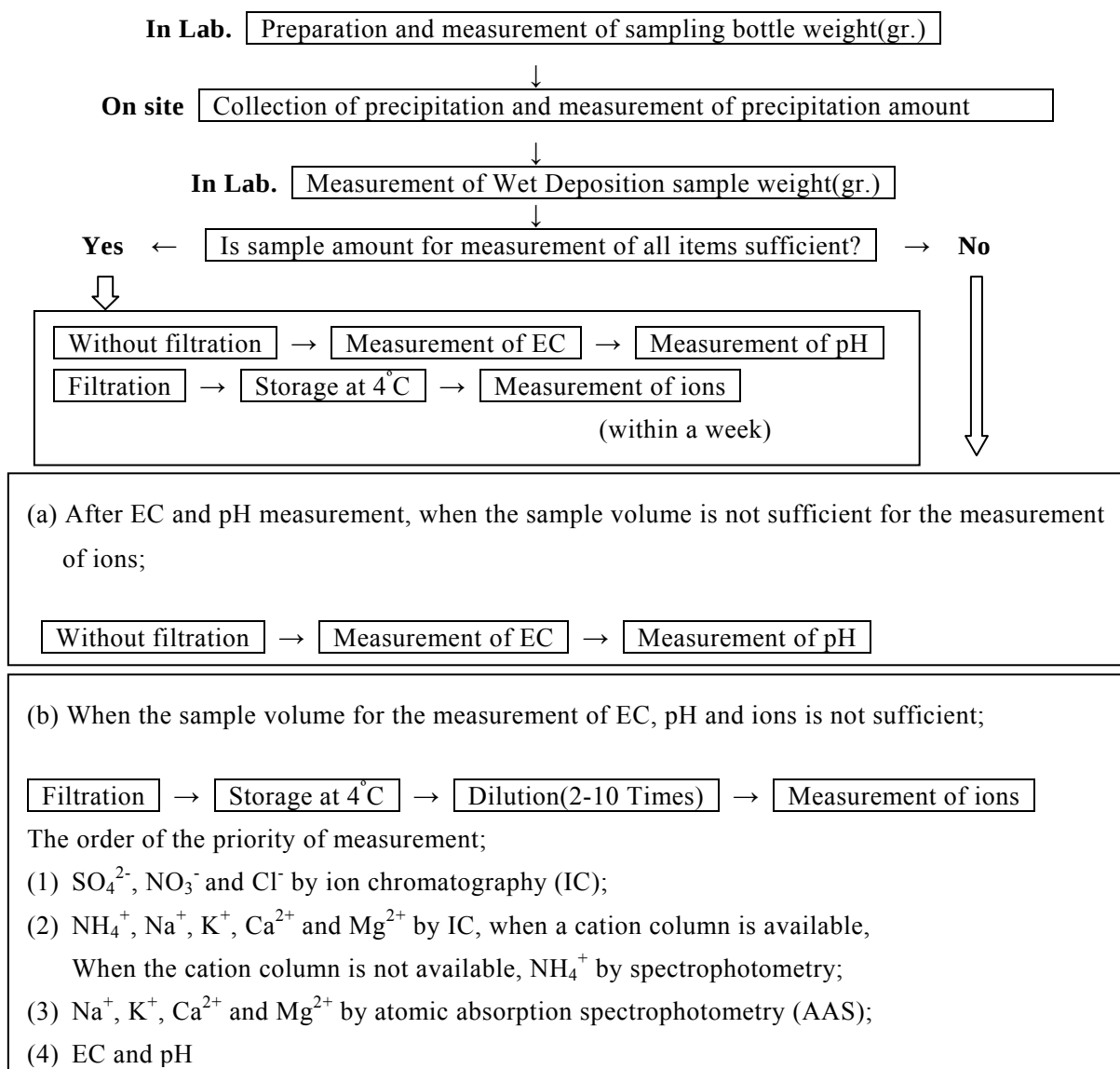


Figure 3.1 Flow chart of sampling and chemical analysis of Wet Deposition

3.1.1 Field Operation

The wet-only sampler is recommended to collect the precipitation samples. This instrument is designed to collect precipitation samples during the period of rainfall which is detected by equipped rain sensor by opening the lid on the collecting bucket or funnel. The lid of this instrument closed to avoid any collection into the collecting bucket or funnel, when the rainfall is not detected by the sensor.

On the other hand, when a manual sampler is used to collect the precipitation since an automatic instrument is not available, the sampling shall be done with ensuring the sample collection only during rainfall period.

The collected wet deposition samples in a tropical region have to be prevented from any microbiological degradation. Biocides such as thymol should be used to prevent the microbiological degradation when the storage during sampling, shipping and storage of the samples under the refrigeration is not possible.

Samples without biocides have to be shipped to the laboratories in charge of chemical analysis using a cooling box to keep the sample temperature low enough to preserve the sample chemistry. On the other hand, the special care for the sampling of wet deposition in the higher latitude region during winter seasons should be done. The collection of the wet deposition samples may encounter difficulties due to low ambient temperature particularly when the temperature falls below -10 to -20°C.

3.1.2 Laboratory Operation

Procedures for the analysis of major constituent in wet deposition sample according to the Technical Documents for Wet Deposition Monitoring in East Asia (2000) are shown in [Table 3.1](#). Ion chromatography is recommended as the major analytical method which has been adopted by the participating countries for chemical analysis of both anions and cations contained in precipitation samples. Atomic absorption spectrometry for Na^+ , K^+ , Ca^{2+} , and Mg^{2+} , and spectrophotometry for NH_4^+ are also useful techniques for the determination of these ions. Laboratories that use other non-recommended methods with insufficient analytical sensitivity, such as titration method, will encounter problems of unsatisfactory detection limit.

3.1.3 Data Management

The participating laboratories have to submit the analyzed data of the precipitation samples

to the National Centers of EANET (NC). By the end of June in the following year, each National Center is expected to submit the compiled data in the required format to the NC. All the data have to be checked calculating values of 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 should be recorded onto the data sheet. Participating countries can refer to the EANET document on “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 in details on the data management.

3.1.4 Meteorological Measurements

Wind direction/velocity, temperature, relative humidity, precipitation amount and solar radiation in relation to the sampling period of wet deposition have to be measured at the nearest meteorological station in accordance with the measurement frequencies and methods of the meteorological monitoring system of each country. The meteorological data should be submitted together with the data on wet and dry deposition (air concentration) and ecological surveys information.

Table 3.1 Recommended analytical method for the measurement of major constituent in wet deposition samples

Analysis	Method
Electric conductivity (EC)	Conductivity cell method
pH	Glass electrode method (preferably with the electrode of non-leak inner cell)
Cl^- , NO_3^- , SO_4^{2-} , NO_2^- , F^- , PO_4^{3-}	Ion chromatography (preferably with suppressor) Spectrophotometry
NH_4^+	Ion chromatography Spectrophotometry (Indophenol Blue)*
Na^+ , K^+ , Ca^{2+} , Mg^{2+}	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

* Indophenol Blue method was not recommended, if a biocide, thymol, is used for the sample collection.

3.1.5 Overview of the Statistics and Definition

An overview of the statistics and definitions used is given below.

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

Calculated as:

$$\hat{C} = \Sigma(C_i * P_i / \Sigma P_i)$$

where $\hat{C}$: 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 (mmol/m^2) for the summary period.

Calculated as:

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

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 ($\mu\text{mol/L}$): 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.

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

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

(Na^+ : 468.3 mmol/L, SO_4^{2-} : 28.23 mmol/L, Ca^{2+} : 10.12 mmol/L; Ref.: *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:

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

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

Calculated as:

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

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

$$\%PCL \geq 80\%, \text{ and } \%TP \geq 80\%$$

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_1):

Calculated as:

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

where C: total cation equivalent concentration ($\mu\text{eq/L}$)

A: total anion equivalent concentration ($\mu\text{eq/L}$)

$$C = 10^{(6-\text{pH})} + \sum(C_{Ci}V_i)$$

where C_{Ci} : the concentration of i-th cation ($\mu\text{mol/L}$)

V_i : the valence of the given ion

$$A = \sum(C_{Ai}V_i)$$

where C_{Ai} : the concentration of i-th anion ($\mu\text{mol/L}$)

Required criteria for R_1 :

The required ion balances of precipitation analyses are given in Table 3.2.

Table 3.2 Required criteria for R_1

(C+A) ($\mu\text{eq/L}$)	R_1 (%)
<50	± 30
50 – 100	± 15
>100	± 8

Conductivity agreement (R₂) :

Calculated as:

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

where Λ_{calc} : the calculated conductivity (mS/m)

Λ_{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 (μmol/L)

Λ_i^0 : the molar conductivity at infinite dilution and 25°C (Scm²/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 (μmol/L)

The constants are the molar conductivity of the individual ion at infinite dilution at 25°C (Scm²/mol).

Required criteria for R₂ :

The required conductivity comparison criteria are given in Table 3.3.

Table 3.3 Required criteria for R₂

Λ_{meas} (mS/m)	R ₂ (%)
<0.5	± 20
0.5 – 3	± 13
>3	± 9

If pH is greater than 6, hydrogen carbonate (HCO₃⁻) concentration is included for the calculation of R₁ and R₂. The HCO₃⁻ concentration is calculated from the dissociation constant, Ka and pH. (If the HCO₃⁻ concentration is measured, the measured data is considered in the evaluation of R₁ and R₂).

Calculated as:

$$[\text{HCO}_3^-] = P\text{CO}_2 \text{HCO}_2 \text{Ka}_1 / [\text{H}^+] = (360 * 10^{-6}) * (3.4 * 10^{-2}) * 10^{(\text{pH}-6.35+6)} = 1.24 * 10^{(\text{pH}-5.35)}$$

Air concentration of CO₂ in equilibrium with precipitation samples is assumed to be 360ppm. Dissociation constant in terms of pKa for carbonic acid is 6.35.

3.1.6 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=0%]
- [**]: Precipitation was not measured. [%PCL=0%]
- [***]: No data or not measured
- Black column (■) : Monitoring was not carried out.

Volume-weighted mean concentrations / precipitation / deposition (monthly)

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

Detection Limits

- i) For H^+ concentration,
 - [<0.1] : $<0.1\mu\text{mol/L}$
- ii) 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 Documents for Wet Deposition Monitoring in East Asia;
 - SO_4^{2-} , nss- SO_4^{2-} , NO_3^- , Cl^- , NH_4^+ , Na^+ , K^+ : $<1.0\mu\text{mol/L}$
 - Ca^{2+} , nss- Ca^{2+} : $<0.2\mu\text{mol/L}$
 - Mg^{2+} : $<0.4\mu\text{mol/L}$
- iii) For deposition,
 - [0.00] : Deposition amount is zero. (Precipitation was 0 mm.)
 - [<0.01] : $<0.01\text{mmol/m}^2$

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

3.1.7 Monitoring Sites

Precipitation samples are collected on a daily basis at 37 out of 54 sites, while weekly collection is performed at 15 sites, as presented in [Table 3.4](#). The analytical methods used in the laboratories for measuring the precipitation samples are presented in [Table 3.5](#).

Table 3.4 Sampling Frequencies of countries for Wet Deposition Monitoring

Country	Name of sites	Characteristics of sites	Sampling Interval	Starting Month
Cambodia	Phnom Penh	Urban	Weekly	April '04
China	Haifu (Chongqing)	Urban	Daily	January '08
	Jinyunshan (Chongqing)	Rural	Daily	April '99
	Shizhan (Xi'an)	Urban	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	Daily	April '98
	Kototabang	Remote	Weekly	April '98
	Bandung	Urban	Daily	January '99
	Maros	Rural	Weekly	January '08
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
	Tokyo	Urban	Daily	April '07
Lao PDR	Vientiane	Urban	Daily	October '03
Malaysia	Petaling Jaya	Urban	Weekly	April '98
	Tanah Rata	Remote	Weekly	January '99
	Danum Valley	Remote	Weekly	January '05
	Kuching	Urban	Weekly	January '08
Mongolia	Ulaanbaatar	Urban	Daily	August '98
	Terelj	Remote	Daily	September '98
Myanmar	Yangon	Urban	Daily	January '07
Philippines	Metro Manila	Urban	Weekly	April '99
	Los Banos	Rural	Weekly	April '99
	Mt. Sto. Tomas	Remote	Weekly	October '06
Republic of Korea	Kanghwa	Rural	Daily	March '99
	Cheju (Kosan)	Remote	Daily	April '99
	Imsil	Rural	Daily	January '01

**Table 3.4 Sampling Frequencies of countries for Wet Deposition Monitoring
(continued)**

Country	Name of sites	Characteristics of sites	Sampling Interval	Starting Month
Russia	Mondy	Remote	Daily	May '99
	Listvyanka	Rural	Daily	January '00
	Irkutsk	Urban	Daily	January '00
	Primorskaya	Rural	Daily	February '02
Thailand	Bangkok	Urban	Daily	April '99
	Samutprakarn	Urban	Daily	January '04
	Patumthani	Rural	Daily	March '99
	Khanchanaburi	Remote	Daily	April '99
	Chiang Mai (Mae Hia)	Rural	Daily	January '01
	Nakhon Ratchasima	Rural	Daily	January '06
Viet Nam	Hanoi	Urban	Weekly	August '99
	Hoa Binh	Rural	Weekly	August '99
	Cuc Phuong	Remote	10 days	January '09
	Da Nang	Urban	10 days	January '09

Table 3.5 Analytical methods used for Wet Deposition Monitoring

Country	Name of sites	Characteristics of sites	Anion Analysis	Cation Analysis	
				NH ₄ ⁺	Other Cations
Cambodia	Phnom Penh	Urban	IC	IC	IC
China	Haifu (Chongqing)	Urban	IC	IC	IC
	Jinyunshan (Chongqing)	Rural	IC	IC	IC
	Shizhan (Xi'an)	Urban	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
	Maros	Rural	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
	Tokyo	Urban	IC	IC	IC
Lao PDR	Vientiane	Urban	IC	IC	IC

Table 3.5 Analytical methods used for Wet Deposition Monitoring (continued)

Country	Name of sites	Characteristics of sites	Anion Analysis	Cation Analysis	
				NH ₄ ⁺	Other Cations
Malaysia	Petaling Jaya	Urban	IC	IC	IC
	Tanah Rata	Remote	IC	IC	IC
	Danum Valley	Remote	IC	IC	IC
	Kuching	Urban	IC	IC	IC
Mongolia	Ulaanbaatar	Urban	IC	IC	IC
	Terelj	Remote	IC	IC	IC
Myanmar	Yangon	Urban	IC	IC	IC
Philippines	Metro Manila	Urban	IC	SP	AAS
	Los Banos	Rural	IC	SP	AAS
	Mt. Sto. Tomas	Remote	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, NP
Thailand	Bangkok	Urban	IC	IC	IC
	Samutprakarn	Urban	IC	IC	IC
	Patumthani	Rural	IC	IC	IC
	Khanchanaburi	Remote	IC	IC	IC
	Chiang Mai (Mae Hia)	Rural	IC	IC	IC
	Nakhon Ratchasima	Rural	IC	IC	IC
Viet Nam	Hanoi	Urban	IC	IC	IC
	Hoa Binh	Rural	IC	IC	IC
	Cuc Phuong	Remote	IC	IC	IC, AAS
	Da Nang	Urban	IC	IC	IC, AAS

AAS: Atomic absorption spectrometry, FP: Flame photometry, IC: Ion chromatography,

SP: Spectrophotometry, TI: Titration, LC: Liquid chromatography, NP: Nephelometry

-: not analyzed

3.2 Results of Monitoring

The monthly summaries of each monitoring site in 2009 are shown in [Table 3.6](#) through [Table 3.59](#). The annual summaries of wet deposition monitoring in 2009 are shown in [Table 3.60](#) through [Table 3.62](#).

Results of ion balance (R_1) and the conductivity agreement (R_2) of each monitoring site are shown in [Table 3.63](#). [Figure 3.2](#) to [Figure 3.55](#) are plots of R_1 and R_2 for each site. The following information is provided to describe the figures:

(1) Ion Balance (R_1)

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

(2) Conductivity Agreement (R_2)

- (Λ_{meas}) is logarithmic scale
- Horizontal bar : The allowable range of R_2 in each conductivity range

R_1 and R_2 were calculated for some sites including the following items:

- Haifu, Jinyunshan, Hongwen and Xiaoping (China), Hanoi and Hoa Binh (Viet Nam): F^-
- Metro Manila, Los Banos and Mt. Sto. Tomas (Philippines): NO_2^-
- Mondy and Primorskaya (Russia): HCO_3^- , NO_2^- , Br^-
- Listvyanka and Irkutsk (Russia): HCO_3^- , NO_2^- , Br^- , F^-
- Terelj and Ulaanbaatar (Mongolia), Cuc Phuong and Da Nang (Viet Nam): HCO_3^-

The summaries of annual data from 2000 to 2009 are shown in [Table 3.64](#) through [Table 3.88](#). The site identification codes are given in [Table 3.89](#). Note that the data in 2000 is obtained during 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.

Table 3.6 Monthly results

Site: Phnom Penh

Country: Cambodia

Volume-weighted mean concentrations/ Precipitation (Monthly)

2009	SO ₄ ²⁻	nss-SO ₄ ²⁻	NO ₃ ⁻	Cl ⁻	NH ₄ ⁺	Na ⁺	K ⁺	Ca ²⁺	nss-Ca ²⁺	Mg ²⁺	H ⁺	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 ⁻¹ or mm year ⁻¹
Jan	**	**	**	**	**	**	**	**	**	**	**	**	**	**
Feb	46.2	46.0	60.8	53.1	143	2.77	5.62	35.3	35.3	1.04	0.692	6.16	4.52	2.53
Mar	12.0	11.3	16.3	12.0	15.3	11.6	2.71	25.6	25.3	2.98	0.827	6.08	3.69	40.1
Apr	16.9	16.7	17.0	15.7	6.33	2.55	<1.0	4.24	4.19	<0.4	1.74	5.76	1.37	150
May	12.1	11.7	13.2	9.95	15.2	5.28	1.49	15.2	15.0	3.37	0.790	6.10	0.856	165
June	12.5	12.0	7.85	14.2	7.51	7.10	1.70	16.2	16.1	1.07	0.162	6.79	0.876	177
July	24.2	23.7	14.7	14.7	16.9	7.30	1.59	28.1	27.9	2.62	0.309	6.51	1.18	83.5
Aug	6.76	5.56	6.68	7.63	9.78	19.9	4.17	63.5	63.1	4.09	0.305	6.52	0.526	160
Sept	10.3	10.2	9.71	8.03	19.4	2.70	<1.0	8.12	8.06	<0.4	0.452	6.34	0.629	317
Oct	7.45	7.05	5.31	6.28	8.63	6.58	1.28	21.9	21.8	1.54	0.857	6.07	0.516	212
Nov	7.86	7.27	12.2	9.30	33.0	9.66	<1.0	10.6	10.3	27.8	0.331	6.48	0.776	18.6
Dec	--	--	--	--	--	--	--	--	--	--	--	--	--	0
Annual	11.6	11.2	10.3	10.3	13.1	6.95	1.50	20.4	20.3	2.00	0.649	6.19	0.880	1326
Max.	46.2	46.0	60.8	53.1	143	63.3	14.0	185	183	27.8	1.91	6.83	4.77	
Min.	5.62	2.15	4.48	4.48	1.31	1.36	<1.0	3.36	3.31	<0.4	0.148	5.72	0.388	

Wet deposition (Monthly)

unit: mmol m⁻²month⁻¹ or mmol m⁻²year⁻¹

2009	SO ₄ ²⁻	nss-SO ₄ ²⁻	NO ₃ ⁻	Cl ⁻	NH ₄ ⁺	Na ⁺	K ⁺	Ca ²⁺	nss-Ca ²⁺	Mg ²⁺	H ⁺
Jan	**	**	**	**	**	**	**	**	**	**	**
Feb	0.117	0.116	0.154	0.134	0.362	<0.01	0.0142	0.0894	0.0893	<0.01	<0.01
Mar	0.482	0.454	0.655	0.480	0.615	0.466	0.109	1.03	1.02	0.120	0.0332
Apr	2.52	2.50	2.55	2.35	0.948	0.382	0.134	0.635	0.627	0.0357	0.261
May	1.99	1.93	2.17	1.64	2.49	0.870	0.246	2.50	2.48	0.554	0.130
June	2.21	2.13	1.39	2.50	1.33	1.26	0.301	2.87	2.84	0.190	0.0286
July	2.02	1.98	1.23	1.23	1.41	0.610	0.133	2.34	2.33	0.218	0.0258
Aug	1.08	0.891	1.07	1.22	1.57	3.20	0.669	10.2	10.1	0.655	0.0489
Sept	3.28	3.23	3.08	2.55	6.15	0.859	0.0875	2.58	2.56	0.0383	0.144
Oct	1.58	1.50	1.13	1.33	1.83	1.40	0.273	4.66	4.63	0.327	0.182
Nov	0.146	0.135	0.226	0.173	0.614	0.180	0.0172	0.196	0.192	0.517	<0.01
Dec	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	15.4	14.9	13.7	13.6	17.3	9.22	1.98	27.1	26.9	2.66	0.861

Data completeness (Monthly)

2009	SO ₄ ²⁻	nss-SO ₄ ²⁻	NO ₃ ⁻	Cl ⁻	NH ₄ ⁺	Na ⁺	K ⁺	Ca ²⁺	nss-Ca ²⁺	Mg ²⁺	H ⁺	pH	EC	Precip.
	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%PCL
Jan	**	**	**	**	**	**	**	**	**	**	**	**	**	0
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
Annual	100	100	100	100	100	100	100	100	100	100	100	100	100	96.4

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

[0.00] for deposition: The deposition was 0 mmol/m² 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%)

Table 3.7 Monthly results

Site: Haifu

Country: China

Volume-weighted mean concentrations/ Precipitation (Monthly)

2009	SO ₄ ²⁻	nss-SO ₄ ²⁻	NO ₃ ⁻	Cl ⁻	NH ₄ ⁺	Na ⁺	K ⁺	Ca ²⁺	nss-Ca ²⁺	Mg ²⁺	H ⁺	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 ⁻¹ or mm year ⁻¹
Jan	367	366	242	57.9	428	28.4	40.3	152	152	18.5	176	3.75	18.7	26.7
Feb	379	377	264	62.4	590	33.3	42.7	199	199	23.9	30.2	4.52	15.5	16.6
Mar	130	130	69.5	10.8	129	4.31	10.1	55.6	55.5	9.70	93.8	4.03	6.94	42.8
Apr	88.8	88.7	42.5	9.55	100.0	2.63	7.60	36.4	36.3	5.06	55.4	4.26	4.98	107
May	160	160	70.1	13.5	232	5.00	13.4	63.3	63.2	9.55	55.2	4.26	7.38	76.7
June	85.1	85.0	49.8	7.63	84.0	2.95	6.20	43.2	43.2	5.34	55.2	4.26	4.62	198
July	102	102	56.2	8.57	129	2.19	7.62	52.9	52.9	4.93	32.4	4.49	4.56	69.2
Aug	32.5	32.4	11.8	3.48	24.6	1.05	1.55	11.0	11.0	1.28	32.4	4.49	1.89	391
Sept	90.3	89.9	35.0	10.9	53.7	6.07	5.95	35.7	35.6	3.99	56.7	4.25	4.19	47.2
Oct	188	188	86.3	15.4	148	3.53	9.95	48.1	48.0	5.88	210	3.68	11.3	56.2
Nov	323	322	218	57.7	246	25.6	25.2	206	205	28.0	172	3.76	16.2	17.8
Dec	326	326	256	44.4	359	14.0	31.2	182	182	19.5	124	3.91	15.7	18.5
Annual	99.3	99.0	53.2	11.0	105	4.20	7.72	43.2	43.2	5.45	60.3	4.22	5.14	1066
Max.	1040	1030	1020	218	1640	206	128	595	593	164	871	6.82	60.5	
Min.	18.6	18.6	5.48	1.13	11.1	<1.0	<1.0	3.49	3.48	0.493	0.151	3.06	1.24	

Wet deposition (Monthly)

unit: mmol m⁻²month⁻¹ or mmol m⁻²year⁻¹

2009	SO ₄ ²⁻	nss-SO ₄ ²⁻	NO ₃ ⁻	Cl ⁻	NH ₄ ⁺	Na ⁺	K ⁺	Ca ²⁺	nss-Ca ²⁺	Mg ²⁺	H ⁺
Jan	9.81	9.76	6.47	1.55	11.4	0.759	1.08	4.07	4.05	0.494	4.70
Feb	6.28	6.25	4.39	1.04	9.79	0.553	0.709	3.31	3.30	0.397	0.501
Mar	5.58	5.57	2.97	0.463	5.52	0.185	0.431	2.38	2.38	0.415	4.01
Apr	9.46	9.44	4.52	1.02	10.6	0.280	0.809	3.87	3.87	0.539	5.90
May	12.3	12.3	5.37	1.04	17.8	0.383	1.03	4.85	4.84	0.732	4.23
June	16.8	16.8	9.85	1.51	16.6	0.583	1.23	8.55	8.53	1.06	10.9
July	7.06	7.05	3.89	0.593	8.93	0.152	0.528	3.66	3.66	0.341	2.24
Aug	12.7	12.6	4.61	1.36	9.63	0.409	0.606	4.30	4.29	0.499	12.7
Sept	4.26	4.24	1.65	0.514	2.53	0.286	0.281	1.69	1.68	0.188	2.68
Oct	10.6	10.6	4.85	0.865	8.32	0.199	0.559	2.70	2.70	0.330	11.8
Nov	5.76	5.73	3.89	1.03	4.38	0.456	0.448	3.67	3.66	0.499	3.07
Dec	6.04	6.02	4.74	0.822	6.64	0.259	0.578	3.38	3.37	0.360	2.29
Annual	106	106	56.7	11.7	112	4.48	8.23	46.1	46.0	5.81	64.3

Data completeness (Monthly)

2009	SO ₄ ²⁻	nss-SO ₄ ²⁻	NO ₃ ⁻	Cl ⁻	NH ₄ ⁺	Na ⁺	K ⁺	Ca ²⁺	nss-Ca ²⁺	Mg ²⁺	H ⁺	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	98.8	98.8	98.8	98.8	98.8	98.8	98.8	98.8	98.8	98.8	98.8	98.8	98.8	100
Mar	98.8	98.8	98.8	98.8	98.8	98.8	98.8	98.8	98.8	98.8	98.8	98.8	98.8	100
Apr	99.2	99.2	99.2	99.2	99.2	99.2	99.2	99.2	99.2	99.2	99.2	99.2	99.2	100
May	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5	100
June	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	100
July	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Aug	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	100
Sept	99.2	99.2	99.2	99.2	99.2	99.2	99.2	99.2	99.2	99.2	99.2	99.2	99.2	100
Oct	93.2	93.2	93.2	93.2	93.2	93.2	93.2	93.2	93.2	93.2	93.2	93.2	93.2	100
Nov	95.5	95.5	95.5	95.5	95.5	95.5	95.5	95.5	95.5	95.5	95.5	95.5	95.5	100
Dec	94.6	94.6	94.6	94.6	94.6	94.6	94.6	94.6	94.6	94.6	94.6	94.6	94.6	100
Annual	99.1	99.1	99.1	99.1	99.1	99.1	99.1	99.1	99.1	99.1	99.1	99.1	99.1	100

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

[0.00] for deposition: The deposition was 0 mmol/m² 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%)

Table 3.8 Monthly results

Site: Jinyunshan

Country: China

Volume-weighted mean concentrations/ Precipitation (Monthly)

2009	SO ₄ ²⁻	nss-SO ₄ ²⁻	NO ₃ ⁻	Cl ⁻	NH ₄ ⁺	Na ⁺	K ⁺	Ca ²⁺	nss-Ca ²⁺	Mg ²⁺	H ⁺	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 ⁻¹ or mm year ⁻¹
Jan	231	228	164	85.8	313	49.8	37.0	128	127	11.8	83.1	4.08	12.3	23.0
Feb	215	214	109	24.2	208	15.3	18.9	123	123	11.2	83.5	4.08	10.4	35.8
Mar	149	149	68.3	20.4	155	11.6	11.4	87.6	87.3	8.90	56.2	4.25	6.88	79.5
Apr	87.0	86.5	38.1	17.6	81.3	7.77	7.24	53.3	53.1	5.60	38.4	4.42	4.23	162
May	146	145	73.5	24.9	184	12.2	15.0	85.5	85.3	9.14	44.2	4.35	6.87	98.1
June	88.4	88.1	42.5	11.1	89.6	5.57	6.13	50.9	50.8	4.42	44.1	4.36	4.38	187
July	78.8	78.6	36.7	5.68	86.9	2.73	5.24	33.2	33.1	2.69	47.2	4.33	3.94	156
Aug	41.9	41.7	16.0	4.78	47.7	2.22	2.58	23.1	23.0	1.83	14.5	4.84	1.91	186
Sept	75.9	75.6	30.5	9.18	60.4	4.38	4.80	42.7	42.6	2.24	13.5	4.87	2.93	69.5
Oct	226	226	88.1	29.5	150	11.4	12.8	131	131	9.79	109	3.96	9.48	71.5
Nov	482	482	305	52.0	286	14.2	26.6	394	394	17.2	148	3.83	19.0	16.5
Dec	403	402	227	36.3	262	11.1	25.8	294	293	13.7	173	3.76	17.7	13.8
Annual	114	113	54.4	16.1	110	7.70	8.71	66.7	66.5	5.56	47.1	4.33	5.27	1098
Max.	1080	1080	796	261	665	190	72.6	857	856	37.4	316	5.70	41.2	
Min.	27.3	27.2	6.29	1.41	27.2	<1.0	1.10	7.98	7.93	0.822	2.00	3.50	1.23	

Wet deposition (Monthly)

unit: mmol m⁻²month⁻¹ or mmol m⁻²year⁻¹

2009	SO ₄ ²⁻	nss-SO ₄ ²⁻	NO ₃ ⁻	Cl ⁻	NH ₄ ⁺	Na ⁺	K ⁺	Ca ²⁺	nss-Ca ²⁺	Mg ²⁺	H ⁺
Jan	5.30	5.23	3.78	1.97	7.19	1.15	0.850	2.94	2.92	0.272	1.91
Feb	7.69	7.66	3.89	0.868	7.43	0.547	0.677	4.40	4.39	0.403	2.99
Mar	11.9	11.8	5.43	1.62	12.3	0.922	0.907	6.96	6.94	0.707	4.47
Apr	14.1	14.0	6.15	2.85	13.1	1.26	1.17	8.61	8.59	0.906	6.21
May	14.3	14.2	7.21	2.45	18.0	1.20	1.47	8.39	8.36	0.897	4.34
June	16.5	16.5	7.95	2.08	16.8	1.04	1.15	9.53	9.51	0.828	8.24
July	12.3	12.2	5.71	0.884	13.5	0.425	0.815	5.16	5.15	0.418	7.34
Aug	7.77	7.75	2.98	0.888	8.85	0.413	0.479	4.28	4.27	0.339	2.69
Sept	5.28	5.26	2.12	0.638	4.20	0.305	0.334	2.97	2.96	0.156	0.936
Oct	16.2	16.1	6.30	2.11	10.7	0.813	0.913	9.38	9.36	0.700	7.78
Nov	7.96	7.95	5.03	0.858	4.72	0.235	0.440	6.51	6.50	0.285	2.44
Dec	5.56	5.55	3.13	0.501	3.61	0.153	0.356	4.05	4.05	0.188	2.38
Annual	125	124	59.7	17.7	121	8.45	9.56	73.2	73.0	6.10	51.7

Data completeness (Monthly)

2009	SO ₄ ²⁻	nss-SO ₄ ²⁻	NO ₃ ⁻	Cl ⁻	NH ₄ ⁺	Na ⁺	K ⁺	Ca ²⁺	nss-Ca ²⁺	Mg ²⁺	H ⁺	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
Annual	100	100	100	100	100	100	100	100	100	100	100	100	100	100

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

[0.00] for deposition: The deposition was 0 mmol/m² 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%)

Table 3.9 Monthly results

Site: Shizhan

Country: China

Volume-weighted mean concentrations/ Precipitation (Monthly)

2009	SO ₄ ²⁻	nss-SO ₄ ²⁻	NO ₃ ⁻	Cl ⁻	NH ₄ ⁺	Na ⁺	K ⁺	Ca ²⁺	nss-Ca ²⁺	Mg ²⁺	H ⁺	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 ⁻¹ or mm year ⁻¹
Jan	--	--	--	--	--	--	--	--	--	--	--	--	--	0
Feb	538	537	295	82.9	640	31.2	35.8	441	440	41.8	0.212	6.67	18.4	18.7
Mar	215	212	54.6	47.9	102	46.6	35.1	243	242	43.0	<0.1	7.38	9.11	40.7
Apr	180	178	77.7	68.4	277	31.0	13.6	272	271	28.4	<0.1	7.35	10.3	26.4
May	126	125	46.4	25.9	174	15.2	9.11	99.8	99.5	10.4	0.228	6.64	5.11	116
June	41.0	40.7	25.7	13.4	103	3.91	3.73	174	174	6.01	<0.1	7.22	4.42	44.4
July	111	111	43.8	18.7	156	5.52	9.11	107	106	6.69	<0.1	7.13	4.63	71.1
Aug	105	104	48.0	17.4	149	8.21	5.07	91.9	91.8	6.17	0.464	6.33	4.32	146
Sept	131	131	62.5	21.6	145	8.54	7.33	103	103	6.01	0.728	6.14	5.06	76.8
Oct	186	186	106	32.9	240	8.70	10.3	170	170	18.1	0.123	6.91	9.05	8.20
Nov	134	133	46.7	18.2	130	8.30	7.31	156	156	13.7	0.225	6.65	5.45	43.6
Dec	--	--	--	--	--	--	--	--	--	--	--	--	--	0
Annual	136	135	57.7	26.2	169	13.4	10.2	138	138	12.4	0.297	6.53	5.80	592
Max.	694	692	380	98.2	861	58.9	49.4	562	561	52.5	1.05	7.68	19.9	
Min.	40.1	37.8	19.9	13.4	<1.0	2.65	3.09	40.3	40.1	0.987	<0.1	5.98	2.82	

Wet deposition (Monthly)

unit: mmol m⁻²month⁻¹ or mmol m⁻²year⁻¹

2009	SO ₄ ²⁻	nss-SO ₄ ²⁻	NO ₃ ⁻	Cl ⁻	NH ₄ ⁺	Na ⁺	K ⁺	Ca ²⁺	nss-Ca ²⁺	Mg ²⁺	H ⁺
Jan	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Feb	10.0	10.0	5.50	1.55	11.9	0.582	0.667	8.22	8.20	0.780	<0.01
Mar	8.75	8.63	2.22	1.95	4.15	1.90	1.43	9.90	9.86	1.75	<0.01
Apr	4.74	4.69	2.05	1.81	7.30	0.820	0.359	7.18	7.16	0.749	<0.01
May	14.5	14.4	5.36	2.99	20.1	1.75	1.05	11.5	11.5	1.20	0.0263
June	1.82	1.81	1.14	0.596	4.57	0.174	0.166	7.71	7.71	0.267	<0.01
July	7.89	7.86	3.11	1.33	11.1	0.393	0.648	7.58	7.57	0.476	<0.01
Aug	15.3	15.2	7.02	2.54	21.8	1.20	0.741	13.4	13.4	0.902	0.0679
Sept	10.1	10.1	4.80	1.66	11.2	0.656	0.563	7.94	7.93	0.461	0.0559
Oct	1.53	1.52	0.871	0.270	1.97	0.0713	0.0845	1.39	1.39	0.148	<0.01
Nov	5.84	5.82	2.04	0.793	5.65	0.362	0.319	6.79	6.79	0.598	<0.01
Dec	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	80.5	80.1	34.1	15.5	99.7	7.91	6.03	81.7	81.5	7.34	0.176

Data completeness (Monthly)

2009	SO ₄ ²⁻	nss-SO ₄ ²⁻	NO ₃ ⁻	Cl ⁻	NH ₄ ⁺	Na ⁺	K ⁺	Ca ²⁺	nss-Ca ²⁺	Mg ²⁺	H ⁺	pH	EC	Precip.
	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%PCL
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
Annual	100	100	100	100	100	100	100	100	100	100	100	100	100	100

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

[0.00] for deposition: The deposition was 0 mmol/m² 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%)

Table 3.10 Monthly results

Site: Jiwozi

Country: China

Volume-weighted mean concentrations/ Precipitation (Monthly)

2009	SO ₄ ²⁻	nss-SO ₄ ²⁻	NO ₃ ⁻	Cl ⁻	NH ₄ ⁺	Na ⁺	K ⁺	Ca ²⁺	nss-Ca ²⁺	Mg ²⁺	H ⁺	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 ⁻¹ or mm year ⁻¹
Jan	**	**	**	**	**	**	**	**	**	**	**	**	**	**
Feb	**	**	**	**	**	**	**	**	**	**	**	**	**	**
Mar	--	--	--	--	--	--	--	--	--	--	--	--	--	0
Apr	126	124	38.7	34.2	60.4	32.2	15.0	122	121	24.7	0.216	6.67	4.61	59.7
May	160	157	30.2	38.2	27.8	53.4	20.0	179	178	37.2	<0.1	7.07	5.88	129
June	103	101	32.5	28.2	79.4	29.4	14.7	108	107	18.0	<0.1	7.03	4.78	93.2
July	80.3	79.3	29.2	24.5	72.0	17.7	15.3	72.9	72.5	23.2	0.550	6.26	3.51	98.3
Aug	56.3	55.6	20.0	22.6	37.7	11.3	9.30	55.1	54.8	10.7	1.80	5.74	2.19	142
Sept	45.6	45.2	20.2	23.6	58.4	6.98	7.47	26.8	26.7	7.52	1.54	5.81	1.90	66.8
Oct	52.3	51.6	23.5	18.4	44.5	10.8	10.4	40.8	40.6	11.7	1.36	5.87	1.98	38.8
Nov	--	--	--	--	--	--	--	--	--	--	--	--	--	0
Dec	--	--	--	--	--	--	--	--	--	--	--	--	--	0
Annual	93.5	92.0	27.4	27.9	52.0	25.2	13.7	93.7	93.2	20.2	0.794	6.10	3.73	628
Max.	288	284	81.8	78.9	257	105	44.6	300	299	73.5	5.75	7.44	9.24	
Min.	11.2	10.9	2.55	10.5	<1.0	1.81	<1.0	5.74	5.64	2.28	<0.1	5.24	0.503	

Wet deposition (Monthly)

unit: mmol m⁻²month⁻¹ or mmol m⁻²year⁻¹

2009	SO ₄ ²⁻	nss-SO ₄ ²⁻	NO ₃ ⁻	Cl ⁻	NH ₄ ⁺	Na ⁺	K ⁺	Ca ²⁺	nss-Ca ²⁺	Mg ²⁺	H ⁺
Jan	**	**	**	**	**	**	**	**	**	**	**
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	7.52	7.40	2.31	2.04	3.60	1.92	0.895	7.28	7.24	1.48	0.0129
May	20.7	20.3	3.90	4.93	3.60	6.90	2.58	23.2	23.0	4.80	0.0110
June	9.55	9.39	3.03	2.63	7.40	2.74	1.37	10.0	9.99	1.68	<0.01
July	7.90	7.79	2.87	2.41	7.08	1.74	1.51	7.16	7.12	2.28	0.0541
Aug	7.99	7.90	2.84	3.21	5.35	1.61	1.32	7.82	7.78	1.51	0.256
Sept	3.04	3.02	1.35	1.58	3.90	0.466	0.499	1.79	1.78	0.502	0.103
Oct	2.03	2.00	0.913	0.713	1.73	0.418	0.403	1.58	1.57	0.452	0.0527
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
Annual	58.7	57.8	17.2	17.5	32.7	15.8	8.58	58.9	58.5	12.7	0.498

Data completeness (Monthly)

2009	SO ₄ ²⁻	nss-SO ₄ ²⁻	NO ₃ ⁻	Cl ⁻	NH ₄ ⁺	Na ⁺	K ⁺	Ca ²⁺	nss-Ca ²⁺	Mg ²⁺	H ⁺	pH	EC	Precip.
	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%PCL
Jan	**	**	**	**	**	**	**	**	**	**	**	**	**	0
Feb	**	**	**	**	**	**	**	**	**	**	**	**	**	0
Mar	--	--	--	--	--	--	--	--	--	--	--	--	--	6.45
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
Annual	100	100	100	100	100	100	100	100	100	100	100	100	100	75.9

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

[0.00] for deposition: The deposition was 0 mmol/m² 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%)

Table 3.11 Monthly results

Site: Hongwen

Country: China

Volume-weighted mean concentrations/ Precipitation (Monthly)

2009	SO ₄ ²⁻	nss-SO ₄ ²⁻	NO ₃ ⁻	Cl ⁻	NH ₄ ⁺	Na ⁺	K ⁺	Ca ²⁺	nss-Ca ²⁺	Mg ²⁺	H ⁺	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 ⁻¹ or mm year ⁻¹
Jan	110	107	84.4	71.4	224	42.6	10.8	28.0	27.1	10.4	8.71	5.06	5.20	2.41
Feb	82.7	80.8	74.0	45.1	113	31.7	4.73	22.2	21.5	2.53	114	3.94	6.26	20.4
Mar	32.5	31.3	32.7	23.2	63.0	19.2	3.96	10.8	10.4	1.41	42.7	4.37	2.80	123
Apr	32.7	31.7	25.8	24.5	75.8	17.0	1.81	5.87	5.50	2.61	44.0	4.36	2.69	96.9
May	19.8	18.5	17.4	21.6	23.7	22.0	1.71	11.1	10.6	4.89	28.5	4.54	1.89	44.1
June	23.6	20.6	17.9	62.6	24.9	50.8	2.54	23.5	22.4	9.07	23.8	4.62	2.35	165
July	3.59	3.19	2.55	12.6	25.2	6.62	<1.0	2.47	2.33	0.983	1.90	5.72	0.517	91.8
Aug	12.4	11.8	12.3	17.7	38.0	10.9	<1.0	13.1	12.8	3.20	5.33	5.27	1.07	87.2
Sept	52.4	49.2	72.6	58.1	75.4	52.8	7.74	46.0	44.8	9.36	19.0	4.72	2.93	10.4
Oct	--	--	--	--	--	--	--	--	--	--	--	--	--	0
Nov	23.6	23.1	19.4	21.0	27.1	8.51	<1.0	6.71	6.53	1.77	38.4	4.42	1.91	72.4
Dec	71.4	68.2	78.0	58.4	124	52.3	4.17	25.5	24.4	8.59	66.6	4.18	5.70	23.1
Annual	26.1	24.6	23.4	32.3	46.6	24.5	2.26	13.2	12.7	4.08	30.2	4.52	2.25	737
Max.	124	121	136	154	224	127	11.7	56.0	55.3	19.6	151	6.75	9.20	
Min.	<1.0	<1.0	<1.0	6.26	5.09	3.50	<1.0	1.83	1.67	0.417	0.178	3.82	0.406	

Wet deposition (Monthly)

unit: mmol m⁻²month⁻¹ or mmol m⁻²year⁻¹

2009	SO ₄ ²⁻	nss-SO ₄ ²⁻	NO ₃ ⁻	Cl ⁻	NH ₄ ⁺	Na ⁺	K ⁺	Ca ²⁺	nss-Ca ²⁺	Mg ²⁺	H ⁺
Jan	0.264	0.258	0.203	0.172	0.540	0.103	0.0259	0.0674	0.0652	0.0251	0.0210
Feb	1.69	1.65	1.51	0.921	2.30	0.646	0.0964	0.452	0.438	0.0516	2.32
Mar	4.01	3.87	4.04	2.87	7.77	2.37	0.489	1.34	1.28	0.174	5.27
Apr	3.17	3.07	2.50	2.37	7.35	1.64	0.175	0.569	0.533	0.253	4.27
May	0.872	0.813	0.765	0.951	1.04	0.970	0.0754	0.490	0.469	0.215	1.26
June	3.90	3.40	2.95	10.3	4.12	8.39	0.419	3.88	3.70	1.50	3.93
July	0.330	0.293	0.234	1.15	2.32	0.608	0.0844	0.227	0.214	0.0902	0.175
Aug	1.08	1.03	1.08	1.55	3.31	0.949	0.0593	1.14	1.12	0.279	0.464
Sept	0.543	0.510	0.753	0.602	0.782	0.548	0.0803	0.477	0.465	0.0971	0.198
Oct	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Nov	1.71	1.67	1.41	1.52	1.96	0.616	0.0625	0.486	0.473	0.128	2.78
Dec	1.65	1.58	1.80	1.35	2.87	1.21	0.0964	0.590	0.564	0.199	1.54
Annual	19.2	18.1	17.2	23.8	34.4	18.1	1.66	9.71	9.32	3.01	22.2

Data completeness (Monthly)

2009	SO ₄ ²⁻	nss-SO ₄ ²⁻	NO ₃ ⁻	Cl ⁻	NH ₄ ⁺	Na ⁺	K ⁺	Ca ²⁺	nss-Ca ²⁺	Mg ²⁺	H ⁺	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
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
Annual	100	100	100	100	100	100	100	100	100	100	100	100	100	100

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

[0.00] for deposition: The deposition was 0 mmol/m² 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%)

Table 3.12 Monthly results

Site: Xiaoping

Country: China

Volume-weighted mean concentrations/ Precipitation (Monthly)

2009	SO ₄ ²⁻	nss-SO ₄ ²⁻	NO ₃ ⁻	Cl ⁻	NH ₄ ⁺	Na ⁺	K ⁺	Ca ²⁺	nss-Ca ²⁺	Mg ²⁺	H ⁺	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 ⁻¹ or mm year ⁻¹
Jan	--	--	--	--	--	--	--	--	--	--	--	--	--	0
Feb	103	98.5	106	113	171	82.1	9.38	22.2	20.5	11.0	63.1	4.20	6.98	10.2
Mar	22.7	22.3	36.8	9.32	61.6	7.25	3.53	7.47	7.31	1.81	32.1	4.49	2.08	123
Apr	35.8	35.6	32.0	9.17	50.3	3.96	1.92	5.57	5.48	1.21	71.3	4.15	3.48	140
May	23.8	23.4	29.3	5.79	45.2	6.12	1.30	4.96	4.82	0.965	48.1	4.32	2.45	42.7
June	26.6	25.3	21.6	25.2	29.2	20.4	1.03	9.06	8.63	4.25	32.2	4.49	1.98	202
July	12.1	10.8	12.4	24.6	19.1	22.4	2.67	6.20	5.71	3.54	12.3	4.91	1.17	207
Aug	36.5	35.4	37.0	23.1	74.0	17.9	2.73	14.7	14.3	3.48	21.7	4.66	2.29	273
Sept	39.9	38.7	43.8	15.5	28.2	19.7	3.25	13.8	13.4	6.57	34.1	4.47	2.59	58.2
Oct	--	--	--	--	--	--	--	--	--	--	--	--	--	0
Nov	12.5	12.4	13.4	11.3	7.78	1.74	<1.0	1.00	0.962	0.417	47.9	4.32	1.59	38.9
Dec	38.6	36.8	45.0	28.6	42.2	29.7	2.21	3.53	2.89	4.85	84.4	4.07	4.23	38.2
Annual	28.2	27.3	29.3	20.1	45.8	16.4	2.33	9.04	8.69	3.24	34.1	4.47	2.26	1134
Max.	107	101	106	172	171	145	9.38	38.4	38.3	22.1	126	5.94	6.98	
Min.	2.92	2.63	3.06	<1.0	3.50	<1.0	<1.0	<0.2	<0.2	0.417	1.15	3.90	0.407	

Wet deposition (Monthly)

unit: mmol m⁻²month⁻¹ or mmol m⁻²year⁻¹

2009	SO ₄ ²⁻	nss-SO ₄ ²⁻	NO ₃ ⁻	Cl ⁻	NH ₄ ⁺	Na ⁺	K ⁺	Ca ²⁺	nss-Ca ²⁺	Mg ²⁺	H ⁺
Jan	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Feb	1.06	1.01	1.09	1.16	1.75	0.840	0.0960	0.228	0.209	0.112	0.646
Mar	2.80	2.75	4.54	1.15	7.59	0.894	0.434	0.920	0.901	0.223	3.96
Apr	5.02	4.99	4.48	1.29	7.06	0.556	0.269	0.781	0.769	0.170	10.00
May	1.02	1.00	1.25	0.247	1.93	0.261	0.0556	0.212	0.206	0.0412	2.06
June	5.36	5.11	4.36	5.08	5.90	4.12	0.208	1.83	1.74	0.857	6.49
July	2.50	2.22	2.56	5.07	3.94	4.62	0.551	1.28	1.18	0.730	2.53
Aug	9.98	9.68	10.1	6.33	20.2	4.89	0.746	4.02	3.91	0.951	5.94
Sept	2.32	2.25	2.55	0.904	1.64	1.15	0.189	0.804	0.779	0.382	1.98
Oct	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Nov	0.487	0.483	0.520	0.439	0.303	0.0677	<0.01	0.0389	0.0375	0.0162	1.86
Dec	1.48	1.41	1.72	1.09	1.61	1.13	0.0846	0.135	0.110	0.185	3.23
Annual	32.0	30.9	33.2	22.8	52.0	18.5	2.64	10.2	9.85	3.67	38.7

Data completeness (Monthly)

2009	SO ₄ ²⁻	nss-SO ₄ ²⁻	NO ₃ ⁻	Cl ⁻	NH ₄ ⁺	Na ⁺	K ⁺	Ca ²⁺	nss-Ca ²⁺	Mg ²⁺	H ⁺	pH	EC	Precip.
	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%PCL
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
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
Annual	100	100	100	100	100	100	100	100	100	100	100	100	100	100

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

[0.00] for deposition: The deposition was 0 mmol/m² 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%)

Table 3.13 Monthly results

Site: Xiang Zhou

Country: China

Volume-weighted mean concentrations/ Precipitation (Monthly)

2009	SO ₄ ²⁻	nss-SO ₄ ²⁻	NO ₃ ⁻	Cl ⁻	NH ₄ ⁺	Na ⁺	K ⁺	Ca ²⁺	nss-Ca ²⁺	Mg ²⁺	H ⁺	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 ⁻¹ or mm year ⁻¹
Jan	--	--	--	--	--	--	--	--	--	--	--	--	--	0
Feb	157	127	215	490	155	491	22.1	65.0	54.4	60.9	86.6	4.06	18.5	1.00
Mar	32.0	30.7	31.1	26.9	43.5	22.2	4.37	5.71	5.23	2.33	42.4	4.37	3.44	182
Apr	17.0	16.0	12.3	17.2	29.2	16.5	2.16	4.91	4.55	2.22	7.04	5.15	1.57	201
May	8.78	7.82	6.93	19.6	6.80	15.9	<1.0	1.85	1.51	1.67	10.1	4.99	0.926	377
June	11.6	10.7	16.0	16.0	18.4	14.4	<1.0	3.07	2.76	1.80	2.58	5.59	1.09	313
July	9.81	8.54	8.91	20.5	13.2	21.2	1.60	3.76	3.30	2.05	1.99	5.70	0.903	377
Aug	20.0	18.4	23.8	30.4	23.0	25.8	<1.0	4.89	4.33	3.10	22.5	4.65	2.08	284
Sept	29.5	14.7	15.3	271	28.2	246	8.18	12.1	6.82	27.5	9.02	5.04	4.97	176
Oct	66.0	63.4	118	45.0	81.8	43.9	3.62	19.9	19.0	5.37	24.8	4.61	6.43	24.5
Nov	21.3	20.7	17.4	13.5	18.1	11.2	<1.0	5.22	4.98	1.81	26.7	4.57	1.94	20.5
Dec	65.8	63.0	63.8	65.3	60.2	45.8	3.01	10.7	9.68	5.57	56.6	4.25	6.16	55.5
Annual	18.2	15.8	17.7	44.9	22.1	40.2	2.10	4.91	4.04	4.52	13.4	4.87	1.99	2010
Max.	250	194	366	925	382	922	37.9	103	82.9	113	97.7	6.29	31.1	
Min.	<1.0	<1.0	<1.0	3.10	1.11	2.17	<1.0	1.00	0.916	0.410	0.513	4.01	0.320	

Wet deposition (Monthly)

unit: mmol m⁻²month⁻¹ or mmol m⁻²year⁻¹

2009	SO ₄ ²⁻	nss-SO ₄ ²⁻	NO ₃ ⁻	Cl ⁻	NH ₄ ⁺	Na ⁺	K ⁺	Ca ²⁺	nss-Ca ²⁺	Mg ²⁺	H ⁺
Jan	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Feb	0.157	0.127	0.215	0.490	0.155	0.491	0.0221	0.0650	0.0544	0.0609	0.0866
Mar	5.83	5.59	5.65	4.90	7.91	4.04	0.795	1.04	0.953	0.424	7.73
Apr	3.40	3.20	2.47	3.44	5.86	3.30	0.434	0.984	0.912	0.444	1.41
May	3.31	2.95	2.61	7.38	2.56	5.98	0.212	0.697	0.568	0.630	3.82
June	3.62	3.35	5.00	5.00	5.76	4.51	0.216	0.960	0.862	0.563	0.806
July	3.69	3.21	3.36	7.71	4.96	7.97	0.601	1.42	1.24	0.774	0.749
Aug	5.67	5.23	6.75	8.63	6.54	7.33	0.236	1.39	1.23	0.880	6.40
Sept	5.19	2.58	2.68	47.6	4.96	43.2	1.44	2.13	1.20	4.83	1.58
Oct	1.62	1.55	2.89	1.10	2.00	1.08	0.0888	0.489	0.465	0.131	0.606
Nov	0.437	0.423	0.356	0.276	0.372	0.229	0.0176	0.107	0.102	0.0372	0.548
Dec	3.65	3.50	3.54	3.63	3.34	2.54	0.167	0.592	0.537	0.309	3.14
Annual	36.6	31.7	35.5	90.2	44.4	80.7	4.23	9.87	8.13	9.08	26.9

Data completeness (Monthly)

2009	SO ₄ ²⁻	nss-SO ₄ ²⁻	NO ₃ ⁻	Cl ⁻	NH ₄ ⁺	Na ⁺	K ⁺	Ca ²⁺	nss-Ca ²⁺	Mg ²⁺	H ⁺	pH	EC	Precip.
	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%PCL
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
Annual	100	100	100	100	100	100	100	100	100	100	100	100	100	100

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

[0.00] for deposition: The deposition was 0 mmol/m² 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%)

Table 3.14 Monthly results

Site: Zhuxiandong

Country: China

Volume-weighted mean concentrations/ Precipitation (Monthly)

2009	SO ₄ ²⁻	nss-SO ₄ ²⁻	NO ₃ ⁻	Cl ⁻	NH ₄ ⁺	Na ⁺	K ⁺	Ca ²⁺	nss-Ca ²⁺	Mg ²⁺	H ⁺	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 ⁻¹ or mm year ⁻¹
Jan	--	--	--	--	--	--	--	--	--	--	--	--	--	0
Feb	198	182	189	298	228	265	27.9	0.250	<0.2	81.1	77.6	4.11	14.7	1.00
Mar	32.6	31.2	28.0	29.9	48.0	23.9	3.76	3.59	3.25	12.4	32.0	4.50	3.05	126
Apr	19.4	18.4	11.2	16.9	32.2	15.8	3.00	8.42	8.07	2.70	24.3	4.61	1.68	258
May	12.4	11.2	10.2	24.4	13.3	19.4	1.20	2.79	2.37	2.32	10.6	4.97	1.13	372
June	12.7	11.7	16.1	18.4	13.6	15.6	<1.0	3.81	3.47	2.09	11.9	4.92	1.29	272
July	9.98	7.79	9.24	37.5	14.6	36.3	2.39	9.67	8.89	5.03	1.67	5.78	1.00	122
Aug	14.1	13.5	14.9	12.9	19.0	11.2	<1.0	4.88	4.64	1.60	15.8	4.80	1.33	175
Sept	40.8	26.1	30.8	272	41.5	244	7.45	21.1	15.8	26.4	19.1	4.72	5.72	168
Oct	82.9	77.4	148	98.4	86.6	91.4	7.88	27.8	25.8	10.7	80.1	4.10	8.37	36.5
Nov	14.8	14.6	9.50	6.20	11.6	2.90	<1.0	2.20	2.14	0.600	13.2	4.88	1.23	20.5
Dec	65.8	61.9	69.9	82.5	60.9	64.7	2.71	12.0	10.6	7.02	34.6	4.46	4.87	29.5
Annual	21.0	18.3	19.8	51.4	25.6	45.3	2.56	7.40	6.44	6.15	17.7	4.75	2.15	1580
Max.	198	182	312	384	228	341	27.9	72.1	70.0	81.1	97.7	6.69	14.7	
Min.	3.54	2.91	2.26	2.82	3.33	1.31	<1.0	0.250	<0.2	0.410	0.204	4.01	0.360	

Wet deposition (Monthly)

unit: mmol m⁻²month⁻¹ or mmol m⁻²year⁻¹

2009	SO ₄ ²⁻	nss-SO ₄ ²⁻	NO ₃ ⁻	Cl ⁻	NH ₄ ⁺	Na ⁺	K ⁺	Ca ²⁺	nss-Ca ²⁺	Mg ²⁺	H ⁺
Jan	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Feb	0.198	0.182	0.189	0.298	0.228	0.265	0.0279	<0.01	0.00	0.0811	0.0776
Mar	4.11	3.93	3.52	3.77	6.05	3.01	0.474	0.452	0.409	1.56	4.03
Apr	5.00	4.76	2.90	4.37	8.31	4.09	0.773	2.17	2.08	0.697	6.27
May	4.61	4.18	3.80	9.08	4.93	7.23	0.448	1.04	0.883	0.865	3.95
June	3.45	3.19	4.37	5.02	3.71	4.25	0.240	1.04	0.945	0.569	3.23
July	1.21	0.947	1.12	4.55	1.77	4.41	0.290	1.18	1.08	0.611	0.202
Aug	2.48	2.36	2.61	2.26	3.32	1.96	0.161	0.855	0.812	0.281	2.77
Sept	6.86	4.39	5.17	45.7	6.98	41.0	1.25	3.54	2.66	4.44	3.22
Oct	3.03	2.82	5.39	3.59	3.16	3.34	0.288	1.02	0.943	0.391	2.92
Nov	0.303	0.300	0.195	0.127	0.238	0.0595	<0.01	0.0451	0.0438	0.0123	0.270
Dec	1.94	1.83	2.06	2.43	1.80	1.91	0.0801	0.353	0.312	0.207	1.02
Annual	33.2	28.9	31.3	81.2	40.5	71.5	4.04	11.7	10.2	9.71	28.0

Data completeness (Monthly)

2009	SO ₄ ²⁻	nss-SO ₄ ²⁻	NO ₃ ⁻	Cl ⁻	NH ₄ ⁺	Na ⁺	K ⁺	Ca ²⁺	nss-Ca ²⁺	Mg ²⁺	H ⁺	pH	EC	Precip.
	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%PCL
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
Annual	100	100	100	100	100	100	100	100	100	100	100	100	100	100

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

[0.00] for deposition: The deposition was 0 mmol/m² 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%)

Table 3.15 Monthly results

Site: Jakarta

Country: Indonesia

Volume-weighted mean concentrations/ Precipitation (Monthly)

2009	SO ₄ ²⁻	nss-SO ₄ ²⁻	NO ₃ ⁻	Cl ⁻	NH ₄ ⁺	Na ⁺	K ⁺	Ca ²⁺	nss-Ca ²⁺	Mg ²⁺	H ⁺	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 ⁻¹ or mm year ⁻¹
Jan	15.6	14.8	4.45	12.7	9.16	12.8	1.06	2.42	2.15	1.72	19.3	4.71	1.59	421
Feb	15.3	14.9	3.78	10.00	4.43	7.13	1.63	4.94	4.79	1.25	23.5	4.63	1.51	228
Mar	14.5	14.1	6.77	8.42	10.3	6.35	1.50	7.40	7.26	1.54	17.6	4.75	1.38	79.4
Apr	7.90	7.45	9.18	8.77	7.86	7.54	2.93	10.1	9.91	1.55	9.28	5.03	0.815	19.5
May	16.7	16.3	21.9	9.88	24.0	7.56	1.47	13.5	13.3	1.77	13.0	4.88	1.36	222
June	55.7	54.6	73.9	24.7	78.5	16.7	7.29	53.6	53.3	7.50	15.2	4.82	4.05	48.0
July	38.0	36.3	43.6	37.5	60.5	27.9	3.35	63.7	63.1	7.69	2.51	5.60	3.01	10.0
Aug	22.1	21.5	17.7	10.4	17.7	9.33	1.45	12.3	12.1	1.99	33.9	4.47	2.29	2.00
Sept	23.1	22.5	19.4	10.8	<1.0	9.37	1.39	12.6	12.4	2.08	38.0	4.42	2.32	77.0
Oct	39.0	38.5	46.7	13.3	30.6	8.68	3.84	54.7	54.5	3.35	3.48	5.46	2.04	51.0
Nov	22.9	22.2	23.7	19.8	21.5	10.6	5.65	25.1	24.8	2.56	56.0	4.25	1.98	200
Dec	18.5	18.3	14.6	5.38	30.5	3.92	1.64	8.07	7.99	1.12	17.4	4.76	1.19	200
Annual	19.4	18.8	15.3	12.0	17.7	9.31	2.22	12.6	12.4	1.97	23.5	4.63	1.66	1557
Max.	92.9	87.5	106	117	98.3	89.6	19.7	694	692	37.7	87.1	5.92	14.6	
Min.	2.01	<1.0	<1.0	3.67	<1.0	1.20	<1.0	1.29	1.15	0.573	1.20	4.06	0.424	

Wet deposition (Monthly)

unit: mmol m⁻²month⁻¹ or mmol m⁻²year⁻¹

2009	SO ₄ ²⁻	nss-SO ₄ ²⁻	NO ₃ ⁻	Cl ⁻	NH ₄ ⁺	Na ⁺	K ⁺	Ca ²⁺	nss-Ca ²⁺	Mg ²⁺	H ⁺
Jan	6.54	6.22	1.87	5.33	3.86	5.39	0.446	1.02	0.903	0.723	8.14
Feb	3.48	3.38	0.859	2.27	1.01	1.62	0.370	1.12	1.09	0.284	5.35
Mar	1.15	1.12	0.537	0.668	0.817	0.504	0.119	0.587	0.576	0.122	1.40
Apr	0.154	0.145	0.179	0.171	0.153	0.147	0.0571	0.196	0.193	0.0302	0.181
May	3.72	3.62	4.86	2.19	5.32	1.68	0.326	3.00	2.96	0.394	2.90
June	2.67	2.62	3.55	1.18	3.77	0.802	0.350	2.57	2.56	0.360	0.730
July	0.380	0.363	0.436	0.375	0.605	0.279	0.0335	0.637	0.631	0.0769	0.0251
Aug	0.0442	0.0430	0.0355	0.0208	0.0354	0.0187	<0.01	0.0246	0.0242	<0.01	0.0678
Sept	1.78	1.73	1.49	0.829	0.0507	0.721	0.107	0.971	0.955	0.160	2.93
Oct	1.99	1.96	2.38	0.677	1.56	0.443	0.196	2.79	2.78	0.171	0.177
Nov	4.57	4.44	4.73	3.95	4.31	2.11	1.13	5.01	4.97	0.512	11.2
Dec	3.71	3.66	2.92	1.08	6.10	0.785	0.328	1.62	1.60	0.225	3.49
Annual	30.2	29.3	23.8	18.7	27.6	14.5	3.46	19.6	19.2	3.06	36.6

Data completeness (Monthly)

2009	SO ₄ ²⁻	nss-SO ₄ ²⁻	NO ₃ ⁻	Cl ⁻	NH ₄ ⁺	Na ⁺	K ⁺	Ca ²⁺	nss-Ca ²⁺	Mg ²⁺	H ⁺	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
Annual	100	100	100	100	100	100	100	100	100	100	100	100	100	100

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

[0.00] for deposition: The deposition was 0 mmol/m² 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%)

Table 3.16 Monthly results

Site: Serpong

Country: Indonesia

Volume-weighted mean concentrations/ Precipitation (Monthly)

2009	SO ₄ ²⁻	nss-SO ₄ ²⁻	NO ₃ ⁻	Cl ⁻	NH ₄ ⁺	Na ⁺	K ⁺	Ca ²⁺	nss-Ca ²⁺	Mg ²⁺	H ⁺	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 ⁻¹ or mm year ⁻¹
Jan	22.4	21.3	10.0	13.8	21.2	17.6	1.31	2.12	1.90	1.10	17.0	4.77	1.18	188
Feb	12.6	12.2	6.74	11.5	15.6	7.33	1.25	1.83	1.77	0.711	11.4	4.94	0.766	215
Mar	20.3	20.0	17.4	8.55	35.0	5.27	<1.0	0.648	0.630	<0.4	22.5	4.65	1.54	134
Apr	22.2	21.7	24.9	11.3	47.0	8.85	1.37	3.78	3.70	0.735	15.5	4.81	1.37	131
May	21.1	20.6	32.8	14.0	45.4	8.31	1.95	10.2	10.0	1.87	10.3	4.99	1.32	151
June	46.3	44.9	55.8	42.6	111	24.1	4.79	13.0	12.7	3.00	10.7	4.97	2.76	34.8
July	44.6	42.4	69.9	38.2	80.2	37.8	3.91	5.61	5.34	1.02	55.8	4.25	3.92	35.8
Aug	46.7	45.5	63.6	21.8	121	18.7	4.43	3.11	2.95	<0.4	19.6	4.71	2.77	15.2
Sept	28.7	27.9	46.0	26.4	73.0	13.3	3.19	10.9	10.6	2.94	14.6	4.83	2.31	59.4
Oct	30.3	30.0	40.0	14.3	53.3	5.33	1.74	7.06	6.94	1.56	35.3	4.45	2.50	171
Nov	19.3	18.9	21.1	27.8	45.9	7.93	2.25	6.03	5.86	2.34	16.2	4.79	1.69	117
Dec	24.3	23.9	31.2	36.2	57.8	6.70	1.29	8.38	8.24	2.16	23.8	4.62	2.31	91.6
Annual	23.1	22.5	25.4	17.6	43.0	10.2	1.75	5.17	5.03	1.36	19.3	4.71	1.66	1344
Max.	107	104	204	87.1	237	61.6	27.9	48.4	47.2	11.8	89.1	6.46	8.13	
Min.	2.75	2.36	<1.0	<1.0	<1.0	<1.0	<1.0	<0.2	<0.2	<0.4	0.347	4.05	0.283	

Wet deposition (Monthly)

unit: mmol m⁻²month⁻¹ or mmol m⁻²year⁻¹

2009	SO ₄ ²⁻	nss-SO ₄ ²⁻	NO ₃ ⁻	Cl ⁻	NH ₄ ⁺	Na ⁺	K ⁺	Ca ²⁺	nss-Ca ²⁺	Mg ²⁺	H ⁺
Jan	4.21	4.01	1.89	2.60	4.00	3.31	0.247	0.399	0.358	0.207	3.21
Feb	2.71	2.61	1.45	2.47	3.36	1.58	0.270	0.394	0.380	0.153	2.45
Mar	2.71	2.67	2.32	1.14	4.67	0.704	0.125	0.0866	0.0842	0.0327	3.01
Apr	2.91	2.84	3.25	1.48	6.15	1.16	0.179	0.495	0.484	0.0961	2.03
May	3.18	3.11	4.96	2.11	6.86	1.25	0.295	1.54	1.52	0.282	1.56
June	1.61	1.56	1.94	1.48	3.85	0.839	0.167	0.453	0.442	0.105	0.374
July	1.60	1.52	2.50	1.37	2.87	1.35	0.140	0.201	0.191	0.0364	2.00
Aug	0.709	0.692	0.967	0.331	1.83	0.285	0.0673	0.0473	0.0448	<0.01	0.298
Sept	1.71	1.66	2.73	1.57	4.34	0.787	0.189	0.648	0.631	0.175	0.869
Oct	5.18	5.13	6.85	2.45	9.13	0.913	0.297	1.21	1.19	0.268	6.05
Nov	2.27	2.21	2.48	3.26	5.39	0.931	0.264	0.708	0.688	0.274	1.90
Dec	2.23	2.19	2.85	3.32	5.30	0.614	0.118	0.768	0.755	0.198	2.18
Annual	31.0	30.2	34.2	23.6	57.7	13.7	2.36	6.95	6.76	1.83	25.9

Data completeness (Monthly)

2009	SO ₄ ²⁻	nss-SO ₄ ²⁻	NO ₃ ⁻	Cl ⁻	NH ₄ ⁺	Na ⁺	K ⁺	Ca ²⁺	nss-Ca ²⁺	Mg ²⁺	H ⁺	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
Annual	100	100	100	100	100	100	100	100	100	100	100	100	100	100

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

[0.00] for deposition: The deposition was 0 mmol/m² 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%)

Table 3.17 Monthly results

Site: Kototabang

Country: Indonesia

Volume-weighted mean concentrations/ Precipitation (Monthly)

2009	SO ₄ ²⁻	nss-SO ₄ ²⁻	NO ₃ ⁻	Cl ⁻	NH ₄ ⁺	Na ⁺	K ⁺	Ca ²⁺	nss-Ca ²⁺	Mg ²⁺	H ⁺	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 ⁻¹ or mm year ⁻¹
Jan	5.54	4.94	<1.0	11.4	<1.0	9.91	2.98	4.09	3.88	1.89	17.9	4.75	0.744	73.0
Feb	4.80	4.54	<1.0	2.08	<1.0	4.17	1.89	3.04	2.95	0.610	19.4	4.71	0.908	231
Mar	3.67	3.49	2.18	5.64	4.90	2.97	1.59	3.60	3.54	0.731	13.5	4.87	0.721	115
Apr	9.67	9.45	<1.0	2.72	1.75	3.78	2.29	3.26	3.18	0.623	18.9	4.72	0.801	308
May	5.77	5.47	<1.0	9.30	<1.0	4.98	6.76	2.60	2.49	0.780	14.6	4.83	0.772	101
June	7.07	6.76	2.12	2.44	24.6	5.22	3.06	3.11	3.00	0.986	20.9	4.68	1.06	202
July	8.54	8.07	<1.0	9.84	<1.0	7.89	4.59	45.6	45.5	2.25	14.6	4.83	1.81	58.0
Aug	4.25	3.96	<1.0	5.62	<1.0	4.73	2.74	15.6	15.5	1.39	20.6	4.69	0.727	207
Sept	4.60	4.19	<1.0	7.42	4.29	6.75	2.33	5.73	5.58	1.11	14.1	4.85	0.778	198
Oct	2.46	2.12	<1.0	4.92	<1.0	7.15	4.31	3.18	3.03	0.991	37.7	4.42	0.692	478
Nov	3.12	2.50	<1.0	13.0	<1.0	10.4	14.1	4.48	4.26	1.02	41.3	4.38	0.730	320
Dec	3.18	2.94	<1.0	39.6	<1.0	5.47	38.6	3.47	3.35	1.77	5.26	5.28	0.481	365
Annual	4.72	4.38	<1.0	10.7	2.69	6.12	9.35	5.47	5.34	1.10	22.6	4.65	0.766	2656
Max.	14.8	14.2	5.79	367	141	24.0	352	167	167	5.81	75.9	5.70	5.78	
Min.	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	1.43	1.32	<0.4	2.00	4.12	0.170	

Wet deposition (Monthly)

unit: mmol m⁻²month⁻¹ or mmol m⁻²year⁻¹

2009	SO ₄ ²⁻	nss-SO ₄ ²⁻	NO ₃ ⁻	Cl ⁻	NH ₄ ⁺	Na ⁺	K ⁺	Ca ²⁺	nss-Ca ²⁺	Mg ²⁺	H ⁺
Jan	0.405	0.361	<0.01	0.835	0.0401	0.723	0.217	0.299	0.283	0.138	1.31
Feb	1.11	1.05	<0.01	0.481	0.0267	0.964	0.437	0.701	0.680	0.141	4.48
Mar	0.422	0.401	0.250	0.649	0.563	0.342	0.183	0.414	0.407	0.0841	1.56
Apr	2.98	2.91	<0.01	0.838	0.539	1.16	0.706	1.01	0.980	0.192	5.82
May	0.582	0.552	<0.01	0.939	0.0778	0.503	0.683	0.262	0.252	0.0788	1.48
June	1.43	1.36	0.429	0.494	4.97	1.05	0.618	0.628	0.605	0.199	4.22
July	0.495	0.468	<0.01	0.571	0.0433	0.457	0.266	2.65	2.64	0.130	0.849
Aug	0.880	0.821	<0.01	1.16	0.0345	0.980	0.567	3.23	3.21	0.288	4.26
Sept	0.909	0.829	<0.01	1.47	0.849	1.33	0.461	1.13	1.10	0.220	2.80
Oct	1.18	1.01	<0.01	2.35	<0.01	3.42	2.06	1.52	1.45	0.474	18.0
Nov	1.000	0.799	<0.01	4.15	<0.01	3.33	4.53	1.43	1.36	0.327	13.2
Dec	1.16	1.07	<0.01	14.5	<0.01	2.00	14.1	1.27	1.22	0.648	1.92
Annual	12.5	11.6	0.679	28.4	7.15	16.3	24.8	14.5	14.2	2.92	59.9

Data completeness (Monthly)

2009	SO ₄ ²⁻	nss-SO ₄ ²⁻	NO ₃ ⁻	Cl ⁻	NH ₄ ⁺	Na ⁺	K ⁺	Ca ²⁺	nss-Ca ²⁺	Mg ²⁺	H ⁺	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
Annual	100	100	100	100	100	100	100	100	100	100	100	100	100	100

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

[0.00] for deposition: The deposition was 0 mmol/m² 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%)

Table 3.18 Monthly results

Site: Bandung

Country: Indonesia

Volume-weighted mean concentrations/ Precipitation (Monthly)

2009	SO ₄ ²⁻	nss-SO ₄ ²⁻	NO ₃ ⁻	Cl ⁻	NH ₄ ⁺	Na ⁺	K ⁺	Ca ²⁺	nss-Ca ²⁺	Mg ²⁺	H ⁺	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 ⁻¹ or mm year ⁻¹
Jan	17.5	17.1	13.6	5.07	23.8	5.63	1.15	9.37	9.24	2.55	3.68	5.43	1.02	186
Feb	17.6	17.3	9.70	7.33	27.2	6.31	1.46	12.2	12.1	2.31	0.658	6.18	1.04	76.5
Mar	18.1	17.8	14.4	5.58	27.1	4.87	1.12	9.03	8.92	2.34	4.35	5.36	1.06	352
Apr	31.6	30.7	24.3	14.3	50.8	15.1	5.66	17.9	17.6	4.95	1.69	5.77	1.63	1046
May	33.1	32.3	24.3	13.1	61.5	13.2	5.75	16.5	16.2	4.60	0.925	6.03	1.87	196
June	17.2	16.2	23.1	14.5	56.0	17.5	6.26	17.8	17.4	6.23	0.133	6.88	1.64	70.0
July	47.7	45.1	39.3	44.0	100	42.2	13.7	24.6	23.7	8.02	0.427	6.37	2.74	18.0
Aug	269	263	259	123	277	99.2	45.0	273	271	39.0	0.112	6.95	12.6	3.00
Sept	74.3	71.8	85.1	52.0	257	42.1	11.8	48.8	47.9	12.2	0.119	6.92	4.94	35.0
Oct	39.2	38.5	29.7	12.2	70.7	12.0	4.05	17.3	17.1	4.74	8.96	5.05	2.31	215
Nov	26.8	26.3	18.8	8.18	31.5	7.88	2.15	10.2	10.1	2.70	14.2	4.85	1.49	335
Dec	32.5	32.1	26.4	8.60	46.5	7.00	2.43	12.3	12.1	3.16	16.3	4.79	1.75	151
Annual	29.2	28.5	22.8	11.8	48.3	11.8	4.08	15.3	15.1	4.13	4.99	5.30	1.62	2683
Max.	269	263	259	123	341	99.2	45.0	273	271	39.0	68.4	7.30	12.6	
Min.	3.84	3.54	3.45	1.90	<1.0	1.81	<1.0	4.82	4.71	1.04	<0.1	4.17	0.400	

Wet deposition (Monthly)

unit: mmol m⁻² month⁻¹ or mmol m⁻² year⁻¹

2009	SO ₄ ²⁻	nss-SO ₄ ²⁻	NO ₃ ⁻	Cl ⁻	NH ₄ ⁺	Na ⁺	K ⁺	Ca ²⁺	nss-Ca ²⁺	Mg ²⁺	H ⁺
Jan	3.26	3.19	2.54	0.946	4.43	1.05	0.214	1.75	1.72	0.476	0.686
Feb	1.35	1.32	0.742	0.561	2.08	0.483	0.112	0.935	0.924	0.177	0.0503
Mar	6.36	6.26	5.09	1.97	9.53	1.71	0.394	3.18	3.14	0.825	1.53
Apr	33.1	32.1	25.4	14.9	53.2	15.8	5.92	18.8	18.4	5.18	1.77
May	6.46	6.31	4.76	2.56	12.0	2.58	1.12	3.22	3.17	0.899	0.181
June	1.20	1.13	1.62	1.01	3.92	1.23	0.439	1.25	1.22	0.436	<0.01
July	0.858	0.812	0.708	0.793	1.81	0.760	0.246	0.443	0.426	0.144	<0.01
Aug	0.807	0.789	0.777	0.370	0.832	0.298	0.135	0.819	0.812	0.117	<0.01
Sept	2.60	2.51	2.98	1.82	9.01	1.47	0.413	1.71	1.68	0.427	<0.01
Oct	8.43	8.28	6.39	2.63	15.2	2.58	0.870	3.73	3.67	1.02	1.93
Nov	8.96	8.80	6.28	2.73	10.5	2.64	0.720	3.43	3.37	0.904	4.75
Dec	4.91	4.85	3.98	1.30	7.02	1.06	0.366	1.85	1.83	0.476	2.47
Annual	78.3	76.4	61.3	31.6	130	31.6	11.0	41.1	40.4	11.1	13.4

Data completeness (Monthly)

2009	SO ₄ ²⁻	nss-SO ₄ ²⁻	NO ₃ ⁻	Cl ⁻	NH ₄ ⁺	Na ⁺	K ⁺	Ca ²⁺	nss-Ca ²⁺	Mg ²⁺	H ⁺	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
Annual	100	100	100	100	100	100	100	100	100	100	100	100	100	100

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

[0.00] for deposition: The deposition was 0 mmol/m² 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%)

Table 3.19 Monthly results

Site: Maros

Country: Indonesia

Volume-weighted mean concentrations/ Precipitation (Monthly)

2009	SO ₄ ²⁻	nss-SO ₄ ²⁻	NO ₃ ⁻	Cl ⁻	NH ₄ ⁺	Na ⁺	K ⁺	Ca ²⁺	nss-Ca ²⁺	Mg ²⁺	H ⁺	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 ⁻¹ or mm year ⁻¹
Jan	5.90	4.81	1.57	16.8	9.67	18.1	6.45	8.35	7.96	2.16	6.06	5.22	0.602	1193
Feb	5.91	5.11	3.32	15.7	8.12	13.4	3.61	4.14	3.85	1.59	4.84	5.32	0.512	716
Mar	4.84	4.37	4.40	10.7	6.15	7.82	<1.0	4.73	4.56	1.81	7.35	5.13	0.621	117
Apr	7.61	7.14	10.5	8.85	14.1	7.76	<1.0	9.67	9.51	1.25	3.22	5.49	0.675	147
May	12.9	12.6	12.4	9.88	38.1	5.57	1.27	12.7	12.6	1.31	1.58	5.80	0.873	228
June	23.4	22.8	23.9	39.2	13.3	8.93	2.89	10.0	9.85	1.36	1.89	5.72	0.576	83.4
July	5.91	5.36	3.25	8.51	9.42	8.96	2.03	15.7	15.5	1.81	2.25	5.65	0.613	46.5
Aug	--	--	--	--	--	--	--	--	--	--	--	--	--	0
Sept	29.6	27.5	38.1	68.9	61.8	35.4	11.3	80.7	80.0	12.9	0.868	6.06	3.27	17.2
Oct	15.8	14.1	19.3	40.4	25.7	28.2	7.17	50.1	49.5	7.38	1.21	5.92	1.94	16.4
Nov	8.36	7.60	13.1	15.9	17.1	12.6	2.22	13.7	13.4	2.51	3.81	5.42	0.773	107
Dec	4.86	4.46	6.54	11.1	13.3	8.69	1.59	5.68	5.49	1.42	3.42	5.47	3.03	567
Annual	6.96	6.18	5.36	15.3	12.7	13.3	3.89	8.11	7.83	1.86	4.64	5.33	1.06	3237
Max.	116	107	188	253	77.3	151	56.8	216	213	27.8	14.5	6.41	8.74	
Min.	<1.0	<1.0	<1.0	4.24	<1.0	4.34	<1.0	2.01	1.84	0.807	0.389	4.84	0.326	

Wet deposition (Monthly)

unit: mmol m⁻²month⁻¹ or mmol m⁻²year⁻¹

2009	SO ₄ ²⁻	nss-SO ₄ ²⁻	NO ₃ ⁻	Cl ⁻	NH ₄ ⁺	Na ⁺	K ⁺	Ca ²⁺	nss-Ca ²⁺	Mg ²⁺	H ⁺
Jan	7.04	5.74	1.87	20.1	11.5	21.6	7.69	9.97	9.50	2.58	7.23
Feb	4.23	3.66	2.37	11.2	5.82	9.56	2.58	2.97	2.76	1.14	3.47
Mar	0.564	0.509	0.514	1.25	0.718	0.912	0.113	0.552	0.533	0.212	0.858
Apr	1.12	1.05	1.54	1.30	2.07	1.14	0.128	1.42	1.39	0.183	0.472
May	2.94	2.87	2.83	2.25	8.68	1.27	0.289	2.90	2.88	0.299	0.359
June	1.95	1.90	1.99	3.27	1.11	0.745	0.241	0.837	0.821	0.113	0.157
July	0.275	0.249	0.151	0.396	0.438	0.417	0.0943	0.729	0.720	0.0842	0.105
Aug	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Sept	0.509	0.472	0.655	1.19	1.06	0.610	0.194	1.39	1.38	0.221	0.0149
Oct	0.258	0.231	0.317	0.663	0.422	0.462	0.118	0.822	0.812	0.121	0.0198
Nov	0.890	0.810	1.39	1.69	1.82	1.34	0.236	1.46	1.43	0.268	0.406
Dec	2.76	2.53	3.71	6.31	7.56	4.93	0.903	3.22	3.11	0.805	1.94
Annual	22.5	20.0	17.4	49.7	41.2	43.0	12.6	26.3	25.3	6.02	15.0

Data completeness (Monthly)

2009	SO ₄ ²⁻	nss-SO ₄ ²⁻	NO ₃ ⁻	Cl ⁻	NH ₄ ⁺	Na ⁺	K ⁺	Ca ²⁺	nss-Ca ²⁺	Mg ²⁺	H ⁺	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
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
Annual	100	100	100	100	100	100	100	100	100	100	100	100	100	100

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

[0.00] for deposition: The deposition was 0 mmol/m² 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%)

Table 3.20 Monthly results

Site: Rishiri

Country: Japan

Volume-weighted mean concentrations/ Precipitation (Monthly)

2009	SO ₄ ²⁻	nss-SO ₄ ²⁻	NO ₃ ⁻	Cl ⁻	NH ₄ ⁺	Na ⁺	K ⁺	Ca ²⁺	nss-Ca ²⁺	Mg ²⁺	H ⁺	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 ⁻¹ or mm year ⁻¹
Jan	56.3	31.1	32.4	453	33.8	418	11.7	15.6	6.56	49.7	26.0	4.59	8.83	60.5
Feb	28.2	15.9	12.9	215	15.9	204	5.08	10.9	6.45	25.3	10.3	4.99	4.29	89.8
Mar	50.0	35.8	48.0	232	44.4	236	7.42	68.8	63.7	31.0	11.5	4.94	6.01	50.1
Apr	35.4	25.7	36.9	177	47.8	161	6.27	18.0	14.6	20.5	10.9	4.96	4.26	29.0
May	14.5	11.5	10.8	46.7	15.7	49.8	1.82	4.06	3.14	5.33	10.8	4.97	1.69	55.5
June	39.3	38.8	42.5	11.8	45.8	8.57	2.16	10.5	10.3	2.23	40.0	4.40	3.45	143
July	9.00	7.67	6.38	18.1	9.57	22.0	<1.0	0.557	0.238	1.43	9.66	5.02	1.07	104
Aug	17.8	14.1	17.7	59.8	16.2	62.3	2.60	1.85	0.502	6.94	22.3	4.65	2.41	111
Sept	12.0	8.16	9.20	64.5	9.64	63.9	1.56	1.82	0.492	6.39	11.8	4.93	1.85	79.0
Oct	21.8	8.21	10.3	262	7.69	225	4.31	6.36	1.86	24.8	15.5	4.81	4.52	114
Nov	19.3	7.36	8.62	224	7.84	198	3.96	5.36	1.12	21.2	21.8	4.66	3.95	149
Dec	42.9	18.2	21.7	459	15.3	410	8.46	11.6	2.73	45.3	30.7	4.51	8.30	69.8
Annual	25.9	15.3	17.3	193	17.7	176	4.31	10.1	6.39	19.9	18.3	4.74	4.10	1054
Max.	641	405	450	4380	618	3910	137	641	630	428	275	6.92	77.7	
Min.	1.11	<1.0	<1.0	1.19	<1.0	3.01	<1.0	<0.2	<0.2	<0.4	0.120	3.56	0.324	

Wet deposition (Monthly)

unit: mmol m⁻²month⁻¹ or mmol m⁻²year⁻¹

2009	SO ₄ ²⁻	nss-SO ₄ ²⁻	NO ₃ ⁻	Cl ⁻	NH ₄ ⁺	Na ⁺	K ⁺	Ca ²⁺	nss-Ca ²⁺	Mg ²⁺	H ⁺
Jan	3.41	1.88	1.96	27.4	2.04	25.3	0.711	0.944	0.397	3.01	1.57
Feb	2.53	1.43	1.16	19.3	1.42	18.3	0.456	0.975	0.579	2.27	0.928
Mar	2.51	1.80	2.41	11.6	2.23	11.8	0.372	3.45	3.19	1.55	0.577
Apr	1.03	0.744	1.07	5.14	1.39	4.67	0.182	0.523	0.422	0.595	0.317
May	0.805	0.638	0.599	2.59	0.870	2.76	0.101	0.225	0.174	0.296	0.599
June	5.62	5.55	6.07	1.68	6.55	1.23	0.308	1.51	1.48	0.318	5.72
July	0.939	0.801	0.666	1.89	0.999	2.29	0.0448	0.0581	0.0249	0.149	1.01
Aug	1.97	1.55	1.95	6.61	1.79	6.89	0.287	0.204	0.0555	0.767	2.47
Sept	0.949	0.645	0.727	5.10	0.762	5.04	0.123	0.144	0.0389	0.505	0.932
Oct	2.48	0.936	1.17	29.9	0.877	25.7	0.491	0.726	0.212	2.83	1.77
Nov	2.88	1.10	1.28	33.4	1.17	29.6	0.589	0.799	0.167	3.16	3.25
Dec	3.00	1.27	1.51	32.0	1.07	28.6	0.590	0.807	0.191	3.16	2.14
Annual	27.4	16.2	18.3	203	18.7	185	4.54	10.6	6.74	21.0	19.3

Data completeness (Monthly)

2009	SO ₄ ²⁻	nss-SO ₄ ²⁻	NO ₃ ⁻	Cl ⁻	NH ₄ ⁺	Na ⁺	K ⁺	Ca ²⁺	nss-Ca ²⁺	Mg ²⁺	H ⁺	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	50.7	50.7	50.7	50.7	50.7	50.7	50.7	50.7	50.7	50.7	50.7	50.7	50.7	100
Mar	86.8	86.8	86.8	86.8	86.8	86.8	86.8	86.8	86.8	86.8	86.8	86.8	86.8	100
Apr	98.3	98.3	98.3	98.3	98.3	98.3	98.3	98.3	98.3	98.3	98.3	98.3	98.3	100
May	100	100	100	100	100	100	100	100	100	100	100	100	100	100
June	37.1	37.1	37.1	37.1	37.1	37.1	37.1	37.1	37.1	37.1	37.1	37.1	37.1	100
July	98.2	98.2	98.2	98.2	98.2	98.2	98.2	98.2	98.2	98.2	98.2	98.2	98.2	100
Aug	19.0	19.0	19.0	19.0	19.0	19.0	19.0	19.0	19.0	19.0	19.0	19.0	19.0	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	98.3	98.3	100	100
Dec	96.0	96.0	96.0	96.0	96.0	96.0	96.0	96.0	96.0	96.0	90.3	90.3	96.0	100
Annual	77.7	77.7	77.7	77.7	77.7	77.7	77.7	77.7	77.7	77.7	77.0	77.0	77.7	100

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

[0.00] for deposition: The deposition was 0 mmol/m² 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%)

Table 3.21 Monthly results

Site: Ochiishi

Country: Japan

Volume-weighted mean concentrations/ Precipitation (Monthly)

2009	SO ₄ ²⁻	nss-SO ₄ ²⁻	NO ₃ ⁻	Cl ⁻	NH ₄ ⁺	Na ⁺	K ⁺	Ca ²⁺	nss-Ca ²⁺	Mg ²⁺	H ⁺	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 ⁻¹ or mm year ⁻¹
Jan	48.1	8.21	2.61	756	23.6	662	16.0	18.7	4.38	75.5	12.0	4.92	10.7	26.6
Feb	*	*	*	*	*	*	*	*	*	*	*	*	*	30.5
Mar	36.2	7.79	5.39	564	31.0	471	10.1	15.9	5.72	52.1	5.61	5.25	7.71	81.3
Apr	20.8	14.1	9.06	132	20.4	111	2.92	4.56	2.15	13.4	14.6	4.83	2.70	85.1
May	17.6	14.2	10.8	63.6	14.6	55.7	2.31	5.84	4.64	6.84	15.1	4.82	1.95	121
June	11.7	9.27	6.67	47.8	9.34	40.7	1.20	2.37	1.49	5.01	8.99	5.05	1.47	159
July	5.81	5.01	5.35	15.4	7.87	13.1	<1.0	0.835	0.552	1.45	9.43	5.03	0.770	342
Aug	7.83	5.11	6.25	50.5	5.29	45.1	1.33	1.80	0.823	5.09	11.3	4.95	1.43	194
Sept	9.78	3.47	5.17	120	1.85	105	2.42	3.04	0.782	12.0	9.22	5.04	2.11	103
Oct	23.3	1.49	2.35	391	1.31	374	7.14	7.97	<0.2	39.0	6.52	5.19	5.68	260
Nov	28.7	3.17	2.13	516	1.90	424	9.07	7.83	0.362	44.5	8.30	5.08	6.35	78.4
Dec	32.7	6.95	7.63	527	5.71	426	10.0	12.4	3.17	50.4	12.0	4.92	7.34	99.8
Annual	16.7	5.88	5.42	205	8.40	182	4.09	5.20	1.38	19.9	9.64	5.02	3.31	1580
Max.	289	34.6	54.8	4970	358	4340	94.7	105	67.3	503	43.3	5.56	63.8	
Min.	<1.0	<1.0	<1.0	4.65	<1.0	4.09	<1.0	0.232	<0.2	0.403	2.73	4.36	0.263	

Wet deposition (Monthly)

unit: mmol m⁻²month⁻¹ or mmol m⁻²year⁻¹

2009	SO ₄ ²⁻	nss-SO ₄ ²⁻	NO ₃ ⁻	Cl ⁻	NH ₄ ⁺	Na ⁺	K ⁺	Ca ²⁺	nss-Ca ²⁺	Mg ²⁺	H ⁺
Jan	1.28	0.218	0.0693	20.1	0.626	17.6	0.424	0.496	0.116	2.00	0.317
Feb	*	*	*	*	*	*	*	*	*	*	*
Mar	2.95	0.634	0.439	45.8	2.52	38.4	0.822	1.29	0.465	4.24	0.457
Apr	1.77	1.20	0.771	11.3	1.73	9.48	0.248	0.388	0.183	1.14	1.25
May	2.13	1.72	1.30	7.70	1.77	6.75	0.279	0.708	0.562	0.830	1.83
June	1.86	1.47	1.06	7.57	1.48	6.45	0.191	0.375	0.236	0.795	1.42
July	1.99	1.72	1.83	5.28	2.69	4.49	0.276	0.286	0.189	0.496	3.23
Aug	1.52	0.992	1.21	9.79	1.03	8.76	0.258	0.349	0.160	0.988	2.19
Sept	1.00	0.356	0.530	12.3	0.189	10.7	0.249	0.312	0.0802	1.23	0.945
Oct	6.04	0.386	0.611	102	0.340	97.1	1.85	2.07	0.0188	10.1	1.69
Nov	2.25	0.249	0.167	40.4	0.149	33.2	0.711	0.614	0.0284	3.49	0.651
Dec	3.26	0.693	0.762	52.6	0.570	42.5	1.00	1.24	0.316	5.03	1.19
Annual	26.3	9.29	8.57	323	13.3	287	6.47	8.21	2.18	31.4	15.2

Data completeness (Monthly)

2009	SO ₄ ²⁻	nss-SO ₄ ²⁻	NO ₃ ⁻	Cl ⁻	NH ₄ ⁺	Na ⁺	K ⁺	Ca ²⁺	nss-Ca ²⁺	Mg ²⁺	H ⁺	pH	EC	Precip.
	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%PCL
Jan	92.5	92.5	92.5	92.5	92.5	92.5	92.5	92.5	92.5	92.5	90.6	90.6	90.6	100
Feb	0	0	0	0	0	0	0	0	0	0	0	0	0	60.7
Mar	80.9	80.9	80.9	80.9	80.9	80.9	80.9	80.9	80.9	80.9	80.9	80.9	80.9	74.2
Apr	95.8	95.8	95.8	95.8	95.8	95.8	95.8	95.8	95.8	95.8	95.8	95.8	95.8	100
May	54.2	54.2	54.2	54.2	54.2	54.2	54.2	54.2	54.2	54.2	52.9	52.9	53.8	100
June	52.7	52.7	52.7	52.7	52.7	52.7	52.7	52.7	52.7	52.7	52.7	52.7	52.7	56.7
July	77.7	77.7	77.7	77.7	77.7	77.7	77.7	77.7	77.7	77.7	78.9	78.9	78.9	96.8
Aug	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	100
Sept	61.5	61.5	61.5	61.5	61.5	61.5	61.5	61.5	61.5	61.5	61.5	61.5	61.5	100
Oct	94.1	94.1	94.1	94.1	94.1	94.1	94.1	94.1	94.1	94.1	94.1	94.1	94.1	100
Nov	61.9	61.9	61.9	61.9	61.9	61.9	61.9	61.9	61.9	61.9	69.5	69.5	69.5	93.3
Dec	48.9	48.9	48.9	48.9	48.9	48.9	48.9	48.9	48.9	48.9	48.9	48.9	48.9	100
Annual	74.9	74.9	74.9	74.9	74.9	74.9	74.9	74.9	74.9	74.9	75.4	75.4	75.5	90.4

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

[0.00] for deposition: The deposition was 0 mmol/m² 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%)

Table 3.22 Monthly results

Site: Tappi

Country: Japan

Volume-weighted mean concentrations/ Precipitation (Monthly)

2009	SO ₄ ²⁻	nss-SO ₄ ²⁻	NO ₃ ⁻	Cl ⁻	NH ₄ ⁺	Na ⁺	K ⁺	Ca ²⁺	nss-Ca ²⁺	Mg ²⁺	H ⁺	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 ⁻¹ or mm year ⁻¹
Jan	89.3	8.18	23.1	1500	13.0	1370	28.6	31.3	3.34	147	8.67	5.06	16.8	55.0
Feb	51.3	20.8	15.2	555	20.8	564	11.2	14.8	2.96	51.2	13.2	4.88	8.58	80.1
Mar	46.2	19.5	27.5	484	19.6	443	9.05	23.2	13.7	45.2	10.1	5.00	7.45	39.5
Apr	18.3	8.52	12.6	172	9.71	165	4.34	6.72	3.15	18.5	12.4	4.91	3.40	59.8
May	27.1	19.8	20.8	135	20.2	121	3.83	6.72	4.10	13.7	29.1	4.54	3.62	97.0
June	13.3	10.7	10.5	48.3	11.0	42.3	2.07	2.86	1.95	4.72	16.7	4.78	1.84	75.5
July	12.2	8.04	9.34	76.5	7.52	69.0	2.38	2.13	0.693	7.64	14.8	4.83	1.83	393
Aug	10.3	8.66	9.34	30.3	6.20	27.0	1.45	0.725	0.412	2.61	19.9	4.70	1.41	199
Sept	10.8	8.50	9.92	46.2	7.79	38.8	1.40	0.989	0.263	3.82	18.0	4.75	1.45	82.5
Oct	27.2	10.9	14.5	310	11.7	274	6.91	9.52	3.60	30.4	18.5	4.73	5.11	99.0
Nov	45.4	14.9	21.3	585	11.0	525	11.7	13.3	2.00	58.6	30.8	4.51	9.00	70.6
Dec	32.2	17.8	20.3	284	9.66	238	5.96	11.2	6.08	26.9	25.5	4.59	4.70	85.6
Annual	23.1	11.5	13.4	217	10.5	199	4.95	6.41	2.26	21.1	18.2	4.74	3.78	1337
Max.	623	149	271	12400	302	11400	177	193	87.4	1120	141	6.55	91.6	
Min.	2.10	<1.0	1.70	4.90	<1.0	3.60	<1.0	<0.2	<0.2	<0.4	0.282	3.85	0.350	

Wet deposition (Monthly)

unit: mmol m⁻² month⁻¹ or mmol m⁻² year⁻¹

2009	SO ₄ ²⁻	nss-SO ₄ ²⁻	NO ₃ ⁻	Cl ⁻	NH ₄ ⁺	Na ⁺	K ⁺	Ca ²⁺	nss-Ca ²⁺	Mg ²⁺	H ⁺
Jan	4.91	0.450	1.27	82.5	0.713	75.4	1.57	1.72	0.184	8.09	0.477
Feb	4.11	1.66	1.22	44.5	1.67	45.2	0.900	1.19	0.237	4.10	1.06
Mar	1.83	0.771	1.09	19.1	0.774	17.5	0.357	0.918	0.539	1.79	0.399
Apr	1.10	0.510	0.753	10.3	0.580	9.87	0.260	0.402	0.189	1.11	0.743
May	2.63	1.92	2.02	13.1	1.96	11.8	0.372	0.652	0.397	1.33	2.82
June	1.00	0.810	0.791	3.65	0.833	3.20	0.156	0.216	0.147	0.356	1.26
July	4.80	3.16	3.67	30.1	2.96	27.1	0.934	0.838	0.273	3.00	5.83
Aug	2.05	1.73	1.86	6.05	1.24	5.39	0.289	0.144	0.0822	0.520	3.96
Sept	0.894	0.701	0.819	3.81	0.643	3.20	0.116	0.0816	0.0217	0.315	1.48
Oct	2.69	1.08	1.43	30.7	1.15	27.1	0.684	0.943	0.357	3.01	1.83
Nov	3.21	1.05	1.51	41.3	0.778	37.1	0.829	0.941	0.141	4.14	2.18
Dec	2.76	1.53	1.74	24.3	0.826	20.4	0.510	0.961	0.520	2.30	2.18
Annual	30.9	15.4	18.0	290	14.0	266	6.62	8.58	3.02	28.2	24.4

Data completeness (Monthly)

2009	SO ₄ ²⁻	nss-SO ₄ ²⁻	NO ₃ ⁻	Cl ⁻	NH ₄ ⁺	Na ⁺	K ⁺	Ca ²⁺	nss-Ca ²⁺	Mg ²⁺	H ⁺	pH	EC	Precip.
	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%PCL
Jan	72.7	72.7	72.7	72.7	72.7	72.7	72.7	72.7	72.7	72.7	70.3	70.3	70.3	83.9
Feb	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Mar	87.3	87.3	87.3	87.3	87.3	87.3	87.3	87.3	87.3	87.3	87.3	87.3	87.3	80.6
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	98.5	98.5	98.5	100
June	86.1	86.1	86.1	86.1	86.1	86.1	86.1	86.1	86.1	86.1	85.4	85.4	85.4	100
July	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.6	99.6	99.6	100
Aug	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Sept	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	100
Oct	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Nov	97.2	97.2	97.2	97.2	97.2	97.2	97.2	97.2	97.2	97.2	97.2	97.2	97.2	100
Dec	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	97.3	97.3	97.3	90.3
Annual	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.0	97.0	97.0	96.2

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

[0.00] for deposition: The deposition was 0 mmol/m² 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%)

Table 3.23 Monthly results

Site: Sadoseki

Country: Japan

Volume-weighted mean concentrations/ Precipitation (Monthly)

2009	SO ₄ ²⁻	nss-SO ₄ ²⁻	NO ₃ ⁻	Cl ⁻	NH ₄ ⁺	Na ⁺	K ⁺	Ca ²⁺	nss-Ca ²⁺	Mg ²⁺	H ⁺	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 ⁻¹ or mm year ⁻¹
Jan	51.2	7.13	14.5	768	10.2	732	14.4	16.0	0.915	76.7	18.9	4.72	10.4	67.0
Feb	68.9	32.9	39.1	612	43.9	597	13.3	26.9	14.0	51.5	19.8	4.70	6.12	44.0
Mar	18.8	11.6	8.77	133	7.04	121	3.46	5.36	2.75	13.6	20.6	4.69	3.03	74.0
Apr	22.7	18.3	25.0	86.0	15.2	73.7	2.74	18.0	16.4	10.5	12.9	4.89	2.26	29.6
May	*	*	*	*	*	*	*	*	*	*	*	*	*	37.0
June	10.3	9.85	13.1	7.82	11.6	6.92	<1.0	3.06	2.92	1.81	15.6	4.81	1.19	90.5
July	13.2	9.70	12.5	67.9	9.40	58.7	2.19	3.60	2.34	6.81	14.1	4.85	1.86	220
Aug	19.0	15.2	18.1	65.1	13.0	63.5	3.03	3.34	1.97	6.57	20.7	4.68	1.98	62.0
Sept	26.0	21.9	29.1	68.5	22.5	68.9	3.51	5.47	3.98	8.28	33.5	4.48	3.14	18.5
Oct	50.7	10.2	10.6	796	8.15	672	16.0	19.3	4.74	79.1	9.99	5.00	11.5	179
Nov	30.3	17.7	17.3	243	11.9	209	6.15	6.67	2.16	24.0	27.9	4.55	4.48	128
Dec	65.2	22.2	29.2	809	15.0	714	16.8	21.8	6.42	83.6	31.1	4.51	11.6	87.3
Annual	33.0	13.7	16.6	364	12.5	321	7.96	11.1	4.20	36.2	17.7	4.75	5.65	1037
Max.	706	146	461	9240	484	9290	150	221	78.6	769	91.4	7.08	77.3	
Min.	3.93	<1.0	<1.0	3.07	<1.0	2.22	<1.0	<0.2	<0.2	0.823	<0.1	4.04	0.642	

Wet deposition (Monthly)

unit: mmol m⁻²month⁻¹ or mmol m⁻²year⁻¹

2009	SO ₄ ²⁻	nss-SO ₄ ²⁻	NO ₃ ⁻	Cl ⁻	NH ₄ ⁺	Na ⁺	K ⁺	Ca ²⁺	nss-Ca ²⁺	Mg ²⁺	H ⁺
Jan	3.43	0.478	0.973	51.4	0.685	49.0	0.967	1.08	0.0613	5.14	1.27
Feb	3.03	1.45	1.72	26.9	1.93	26.3	0.586	1.18	0.615	2.27	0.870
Mar	1.39	0.855	0.649	9.82	0.521	8.94	0.256	0.397	0.203	1.00	1.52
Apr	0.671	0.541	0.740	2.55	0.450	2.18	0.0812	0.534	0.487	0.311	0.382
May	*	*	*	*	*	*	*	*	*	*	*
June	0.929	0.891	1.19	0.708	1.05	0.627	0.0693	0.277	0.264	0.163	1.41
July	2.92	2.14	2.75	15.0	2.07	12.9	0.483	0.793	0.515	1.50	3.10
Aug	1.18	0.939	1.13	4.04	0.809	3.94	0.188	0.207	0.122	0.407	1.28
Sept	0.481	0.404	0.538	1.27	0.416	1.27	0.0649	0.101	0.0737	0.153	0.619
Oct	9.07	1.82	1.91	142	1.46	120	2.86	3.45	0.848	14.2	1.79
Nov	3.88	2.27	2.21	31.1	1.53	26.7	0.788	0.854	0.277	3.07	3.58
Dec	5.70	1.94	2.55	70.6	1.31	62.3	1.47	1.91	0.561	7.30	2.72
Annual	34.2	14.2	17.2	377	12.9	333	8.26	11.5	4.36	37.6	18.4

Data completeness (Monthly)

2009	SO ₄ ²⁻	nss-SO ₄ ²⁻	NO ₃ ⁻	Cl ⁻	NH ₄ ⁺	Na ⁺	K ⁺	Ca ²⁺	nss-Ca ²⁺	Mg ²⁺	H ⁺	pH	EC	Precip.
	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%PCL
Jan	73.9	73.9	73.9	73.9	73.9	73.9	73.9	73.9	73.9	73.9	70.9	70.9	70.9	100
Feb	100	100	100	100	100	100	100	100	100	100	95.5	95.5	95.5	100
Mar	55.4	55.4	55.4	55.4	55.4	55.4	55.4	55.4	55.4	55.4	54.1	54.1	54.1	100
Apr	89.3	89.3	89.3	89.3	89.3	89.3	89.3	89.3	89.3	89.3	87.8	87.8	87.8	100
May	0	0	0	0	0	0	0	0	0	0	0	0	0	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	97.7	97.7	97.7	100
Aug	100	100	100	100	100	100	100	100	100	100	91.1	91.1	91.1	100
Sept	96.4	96.4	96.4	94.6	96.4	96.4	96.4	96.4	96.4	96.4	89.2	89.2	89.2	100
Oct	100	100	100	100	100	100	100	100	100	100	99.4	99.4	99.4	100
Nov	57.4	57.4	57.4	57.4	57.4	57.4	57.4	57.4	57.4	57.4	57.0	57.0	57.0	100
Dec	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	89.1	89.1	89.1	100
Annual	85.9	85.9	85.9	85.9	85.9	85.9	85.9	85.9	85.9	85.9	83.2	83.2	83.2	100

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

[0.00] for deposition: The deposition was 0 mmol/m² 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%)

Table 3.24 Monthly results

Site: Happo

Country: Japan

Volume-weighted mean concentrations/ Precipitation (Monthly)

2009	SO ₄ ²⁻	nss-SO ₄ ²⁻	NO ₃ ⁻	Cl ⁻	NH ₄ ⁺	Na ⁺	K ⁺	Ca ²⁺	nss-Ca ²⁺	Mg ²⁺	H ⁺	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 ⁻¹ or mm year ⁻¹
Jan	17.0	16.4	13.2	15.2	13.5	11.4	1.12	7.01	6.77	1.68	21.9	4.66	1.63	94.0
Feb	19.4	18.9	12.7	10.3	19.0	7.66	2.01	7.57	7.40	1.74	17.9	4.75	1.50	230
Mar	27.3	26.1	22.5	14.8	23.9	19.6	1.96	23.1	22.7	4.39	12.6	4.90	1.69	129
Apr	19.6	19.3	15.4	8.06	19.8	6.32	<1.0	8.69	8.55	2.29	13.8	4.86	1.31	91.0
May	10.5	10.3	9.53	6.22	10.1	3.62	<1.0	4.75	4.67	1.23	13.0	4.88	0.938	156
June	11.4	11.3	8.32	2.86	14.2	1.14	<1.0	2.98	2.96	0.543	10.8	4.97	0.840	194
July	4.75	4.68	5.70	2.44	5.99	1.26	<1.0	1.46	1.43	0.404	6.67	5.18	0.489	604
Aug	5.62	5.55	5.12	2.56	5.52	1.19	<1.0	2.19	2.16	0.557	6.54	5.18	0.513	168
Sept	9.92	9.79	11.7	3.71	8.13	2.20	<1.0	2.40	2.36	0.733	17.6	4.76	1.06	112
Oct	4.31	4.12	3.78	4.19	2.54	3.17	<1.0	2.32	2.25	0.627	5.98	5.22	0.448	180
Nov	5.89	5.55	4.76	7.86	4.10	5.64	<1.0	2.60	2.48	1.07	9.38	5.03	0.627	133
Dec	4.32	3.70	3.92	13.1	2.75	10.2	<1.0	2.54	2.32	1.28	7.92	5.10	0.614	262
Annual	10.1	9.82	8.56	6.64	9.73	5.14	<1.0	4.66	4.55	1.16	10.7	4.97	0.860	2352
Max.	305	285	250	191	229	343	14.7	332	324	48.7	95.5	6.87	13.9	
Min.	<1.0	<1.0	1.10	<1.0	<1.0	<1.0	<1.0	0.500	0.439	<0.4	0.135	4.02	0.130	

Wet deposition (Monthly)

unit: mmol m⁻²month⁻¹ or mmol m⁻²year⁻¹

2009	SO ₄ ²⁻	nss-SO ₄ ²⁻	NO ₃ ⁻	Cl ⁻	NH ₄ ⁺	Na ⁺	K ⁺	Ca ²⁺	nss-Ca ²⁺	Mg ²⁺	H ⁺
Jan	1.60	1.54	1.24	1.43	1.27	1.07	0.106	0.659	0.636	0.158	2.06
Feb	4.46	4.36	2.91	2.36	4.36	1.76	0.462	1.74	1.70	0.400	4.12
Mar	3.52	3.37	2.90	1.91	3.08	2.53	0.253	2.99	2.93	0.567	1.62
Apr	1.79	1.75	1.40	0.734	1.80	0.575	0.0854	0.791	0.778	0.208	1.26
May	1.65	1.61	1.49	0.972	1.58	0.566	0.0862	0.742	0.730	0.193	2.04
June	2.21	2.20	1.61	0.555	2.76	0.220	0.167	0.578	0.574	0.105	2.10
July	2.87	2.82	3.44	1.47	3.62	0.762	0.0692	0.881	0.865	0.244	4.03
Aug	0.941	0.929	0.858	0.429	0.924	0.200	0.0354	0.366	0.362	0.0933	1.10
Sept	1.11	1.10	1.32	0.415	0.910	0.246	0.0368	0.269	0.264	0.0821	1.97
Oct	0.775	0.741	0.681	0.754	0.458	0.571	0.0343	0.417	0.405	0.113	1.08
Nov	0.781	0.736	0.631	1.04	0.543	0.747	0.0536	0.344	0.328	0.141	1.24
Dec	1.13	0.970	1.03	3.44	0.721	2.69	0.103	0.665	0.607	0.337	2.08
Annual	23.8	23.1	20.1	15.6	22.9	12.1	1.58	11.0	10.7	2.73	25.2

Data completeness (Monthly)

2009	SO ₄ ²⁻	nss-SO ₄ ²⁻	NO ₃ ⁻	Cl ⁻	NH ₄ ⁺	Na ⁺	K ⁺	Ca ²⁺	nss-Ca ²⁺	Mg ²⁺	H ⁺	pH	EC	Precip.
	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%PCL
Jan	94.1	94.1	94.1	94.1	94.1	94.1	94.1	94.1	94.1	94.1	89.9	89.9	89.9	100
Feb	99.1	99.1	99.1	99.1	99.1	99.1	99.1	99.1	99.1	99.1	98.9	98.9	98.9	100
Mar	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6	98.8	98.8	98.8	100
Apr	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5	100
May	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	100
June	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	100
July	78.8	78.8	78.8	78.8	78.8	78.8	78.8	78.8	78.8	78.8	78.8	78.8	78.8	90.3
Aug	100	100	100	100	100	100	100	100	100	100	99.1	99.1	99.1	100
Sept	99.1	99.1	99.1	99.1	99.1	99.1	99.1	99.1	99.1	99.1	98.7	98.7	98.7	100
Oct	100	100	100	100	100	100	100	100	100	100	99.4	99.4	99.4	100
Nov	92.5	92.5	92.5	92.5	92.5	92.5	92.5	92.5	92.5	92.5	92.5	92.5	92.5	96.7
Dec	78.5	78.5	78.5	78.5	78.5	78.5	78.5	78.5	78.5	78.5	78.5	78.5	78.5	100
Annual	91.3	91.3	91.3	91.3	91.3	91.3	91.3	91.3	91.3	91.3	90.9	90.9	90.9	98.9

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

[0.00] for deposition: The deposition was 0 mmol/m² 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%)

Table 3.25 Monthly results

Site: Ijira

Country: Japan

Volume-weighted mean concentrations/ Precipitation (Monthly)

2009	SO ₄ ²⁻	nss-SO ₄ ²⁻	NO ₃ ⁻	Cl ⁻	NH ₄ ⁺	Na ⁺	K ⁺	Ca ²⁺	nss-Ca ²⁺	Mg ²⁺	H ⁺	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 ⁻¹ or mm year ⁻¹
Jan	17.5	16.3	19.4	25.5	14.7	19.9	<1.0	2.00	1.58	2.26	32.7	4.49	2.12	141
Feb	28.6	26.3	30.0	44.4	27.3	37.5	2.13	8.66	7.85	4.98	33.2	4.48	2.83	162
Mar	13.9	12.5	15.1	27.9	14.4	23.5	1.02	3.59	3.08	2.97	16.3	4.79	1.49	273
Apr	19.2	18.1	16.4	20.9	18.3	18.5	<1.0	6.98	6.58	2.82	18.2	4.74	1.64	232
May	19.9	19.2	22.3	15.0	24.9	12.5	<1.0	2.88	2.61	1.58	27.8	4.56	1.99	202
June	19.2	18.9	18.8	6.00	27.1	4.66	<1.0	3.47	3.37	0.844	24.0	4.62	1.69	271
July	13.6	13.4	18.9	5.64	19.9	3.85	<1.0	0.937	0.871	<0.4	23.7	4.63	1.49	815
Aug	15.2	14.7	23.5	12.4	25.5	9.21	<1.0	2.49	2.30	1.19	24.8	4.61	1.73	153
Sept	32.5	31.1	49.1	28.1	32.1	24.5	<1.0	2.75	2.22	2.95	67.3	4.17	4.20	55.5
Oct	6.39	6.23	10.3	4.17	8.29	2.54	<1.0	1.10	1.05	0.655	13.4	4.87	0.851	202
Nov	4.65	4.43	6.76	4.63	2.50	3.65	<1.0	0.399	0.320	<0.4	12.1	4.92	0.702	169
Dec	11.7	9.13	14.1	48.5	6.98	42.5	<1.0	2.47	1.55	4.36	18.3	4.74	1.74	201
Annual	15.4	14.6	18.4	16.5	18.2	13.5	<1.0	2.74	2.46	1.67	23.0	4.64	1.65	2876
Max.	65.6	54.2	144.4	200.3	85.5	188	5.10	23.2	22.3	23.8	115	5.52	10.1	
Min.	1.40	1.30	2.70	1.40	1.00	<1.0	<1.0	<0.2	<0.2	<0.4	3.02	3.94	0.270	

Wet deposition (Monthly)

unit: mmol m⁻²month⁻¹ or mmol m⁻²year⁻¹

2009	SO ₄ ²⁻	nss-SO ₄ ²⁻	NO ₃ ⁻	Cl ⁻	NH ₄ ⁺	Na ⁺	K ⁺	Ca ²⁺	nss-Ca ²⁺	Mg ²⁺	H ⁺
Jan	2.45	2.28	2.73	3.59	2.07	2.80	0.139	0.281	0.222	0.317	4.60
Feb	4.63	4.26	4.85	7.19	4.42	6.08	0.346	1.40	1.27	0.806	5.38
Mar	3.79	3.40	4.11	7.61	3.94	6.41	0.278	0.980	0.842	0.811	4.46
Apr	4.44	4.18	3.80	4.85	4.24	4.29	0.228	1.62	1.52	0.653	4.22
May	4.03	3.88	4.50	3.04	5.04	2.52	0.197	0.581	0.526	0.319	5.61
June	5.20	5.12	5.09	1.63	7.35	1.26	0.161	0.941	0.914	0.229	6.52
July	11.1	10.9	15.4	4.59	16.2	3.14	0.241	0.764	0.710	0.248	19.3
Aug	2.33	2.24	3.60	1.90	3.89	1.41	0.0621	0.382	0.351	0.183	3.79
Sept	1.81	1.72	2.72	1.56	1.78	1.36	0.0478	0.153	0.123	0.164	3.73
Oct	1.29	1.26	2.08	0.843	1.67	0.512	0.0624	0.223	0.212	0.132	2.71
Nov	0.786	0.749	1.14	0.783	0.423	0.617	0.0232	0.0675	0.0542	0.0563	2.05
Dec	2.36	1.84	2.84	9.78	1.41	8.57	0.165	0.498	0.313	0.878	3.69
Annual	44.2	41.9	52.9	47.4	52.4	39.0	1.95	7.89	7.06	4.80	66.0

Data completeness (Monthly)

2009	SO ₄ ²⁻	nss-SO ₄ ²⁻	NO ₃ ⁻	Cl ⁻	NH ₄ ⁺	Na ⁺	K ⁺	Ca ²⁺	nss-Ca ²⁺	Mg ²⁺	H ⁺	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
Annual	100	100	100	100	100	100	100	100	100	100	100	100	100	100

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

[0.00] for deposition: The deposition was 0 mmol/m² 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%)

Table 3.26 Monthly results

Site: Oki

Country: Japan

Volume-weighted mean concentrations/ Precipitation (Monthly)

2009	SO ₄ ²⁻	nss-SO ₄ ²⁻	NO ₃ ⁻	Cl ⁻	NH ₄ ⁺	Na ⁺	K ⁺	Ca ²⁺	nss-Ca ²⁺	Mg ²⁺	H ⁺	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 ⁻¹ or mm year ⁻¹
Jan	83.2	15.2	24.5	1300	20.4	1130	26.3	31.6	7.23	128	25.7	4.59	18.0	104
Feb	69.6	36.0	37.1	633	36.8	557	15.6	37.9	25.9	64.5	18.2	4.74	10.4	68.0
Mar	48.2	27.0	45.8	404	37.9	351	10.5	24.5	16.9	41.6	26.3	4.58	7.61	78.3
Apr	29.6	14.9	22.3	290	19.2	246	6.48	12.2	6.87	29.6	18.9	4.72	5.21	54.7
May	34.7	27.1	33.5	145	27.7	126	5.24	8.43	5.71	14.5	41.8	4.38	4.58	48.3
June	9.43	7.88	11.6	30.1	9.82	25.9	1.12	2.34	1.78	3.18	11.5	4.94	1.26	151
July	17.8	9.89	13.9	156	12.1	131	4.30	5.62	2.79	15.5	14.9	4.83	3.00	204
Aug	21.7	18.2	13.5	68.3	15.8	59.1	2.05	2.41	1.13	6.30	30.6	4.51	2.66	104
Sept	21.7	19.4	27.7	45.9	15.1	38.0	1.52	3.23	2.41	5.47	39.9	4.40	2.91	16.6
Oct	13.4	9.01	5.80	87.9	3.80	72.1	2.60	4.11	2.55	9.16	9.90	5.00	1.96	72.8
Nov	49.8	6.45	10.6	851	10.7	720	20.4	19.9	4.35	81.1	11.1	4.95	12.0	145
Dec	81.5	23.6	37.1	1100	19.4	961	22.3	33.3	12.5	109	24.9	4.60	17.8	75.0
Annual	37.8	15.2	20.2	436	17.0	376	10.1	14.6	6.44	43.1	19.4	4.71	7.16	1123
Max.	471	230	222	7760	131	6600	150	287	213	745	156	6.21	126	
Min.	2.43	<1.0	1.50	7.97	<1.0	5.09	<1.0	0.821	0.256	1.21	0.617	3.81	0.432	

Wet deposition (Monthly)

unit: mmol m⁻²month⁻¹ or mmol m⁻²year⁻¹

2009	SO ₄ ²⁻	nss-SO ₄ ²⁻	NO ₃ ⁻	Cl ⁻	NH ₄ ⁺	Na ⁺	K ⁺	Ca ²⁺	nss-Ca ²⁺	Mg ²⁺	H ⁺
Jan	8.64	1.57	2.55	135	2.12	117	2.73	3.29	0.751	13.3	2.67
Feb	4.73	2.45	2.52	43.0	2.50	37.8	1.06	2.58	1.76	4.38	1.24
Mar	3.77	2.11	3.59	31.6	2.97	27.5	0.819	1.92	1.32	3.26	2.06
Apr	1.62	0.817	1.22	15.9	1.05	13.5	0.355	0.667	0.376	1.62	1.03
May	1.67	1.31	1.62	7.02	1.34	6.09	0.253	0.408	0.276	0.699	2.02
June	1.43	1.19	1.75	4.55	1.48	3.91	0.170	0.354	0.269	0.481	1.74
July	3.64	2.02	2.84	32.0	2.47	26.8	0.879	1.15	0.569	3.18	3.04
Aug	2.27	1.89	1.41	7.12	1.64	6.16	0.214	0.251	0.118	0.656	3.19
Sept	0.360	0.322	0.459	0.760	0.251	0.629	0.0252	0.0534	0.0398	0.0905	0.661
Oct	0.972	0.656	0.422	6.40	0.277	5.25	0.190	0.299	0.185	0.667	0.721
Nov	7.24	0.938	1.54	124	1.55	105	2.97	2.89	0.633	11.8	1.62
Dec	6.11	1.77	2.78	82.4	1.45	72.1	1.67	2.50	0.940	8.17	1.87
Annual	42.4	17.0	22.7	489	19.1	422	11.3	16.3	7.23	48.3	21.8

Data completeness (Monthly)

2009	SO ₄ ²⁻	nss-SO ₄ ²⁻	NO ₃ ⁻	Cl ⁻	NH ₄ ⁺	Na ⁺	K ⁺	Ca ²⁺	nss-Ca ²⁺	Mg ²⁺	H ⁺	pH	EC	Precip.
	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%PCL
Jan	99.2	99.2	99.2	99.2	99.2	99.2	99.2	99.2	99.2	99.2	99.2	99.2	99.2	100
Feb	98.4	98.4	98.4	98.4	98.4	98.4	98.4	98.4	98.4	98.4	98.4	98.4	98.4	100
Mar	98.9	98.9	98.9	98.9	98.9	98.9	98.9	98.9	98.9	98.9	98.9	98.9	98.9	100
Apr	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6	100
May	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6	100
June	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6	96.7
July	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	100
Aug	98.8	98.8	98.8	98.8	98.8	98.8	98.8	98.8	98.8	98.8	98.8	98.8	98.8	100
Sept	90.6	90.6	90.6	90.6	90.6	90.6	90.6	90.6	90.6	90.6	90.6	90.6	90.6	100
Oct	98.6	98.6	98.6	98.6	98.6	98.6	98.6	98.6	98.6	98.6	98.6	98.6	98.6	100
Nov	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	100
Dec	98.4	98.4	98.4	98.4	98.4	98.4	98.4	98.4	98.4	98.4	92.4	92.4	98.4	100
Annual	99.1	99.1	99.1	99.1	99.1	99.1	99.1	99.1	99.1	99.1	98.7	98.7	99.1	99.7

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

[0.00] for deposition: The deposition was 0 mmol/m² 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%)

Table 3.27 Monthly results

Site: Banryu

Country: Japan

Volume-weighted mean concentrations/ Precipitation (Monthly)

2009	SO ₄ ²⁻	nss-SO ₄ ²⁻	NO ₃ ⁻	Cl ⁻	NH ₄ ⁺	Na ⁺	K ⁺	Ca ²⁺	nss-Ca ²⁺	Mg ²⁺	H ⁺	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 ⁻¹ or mm year ⁻¹
Jan	50.0	29.0	59.5	396	37.8	349	9.94	18.8	11.3	40.3	51.2	4.29	8.49	131
Feb	23.6	21.1	21.1	47.3	15.0	41.6	2.04	7.88	6.98	5.19	25.2	4.60	2.43	93.5
Mar	30.5	25.6	36.7	91.4	29.5	81.2	3.54	9.35	7.59	9.95	34.6	4.46	3.66	67.5
Apr	31.0	23.7	32.4	136	29.9	122	3.73	7.12	4.49	14.1	33.6	4.47	4.14	109
May	40.3	32.2	39.3	133	39.5	134	5.24	12.4	9.51	14.3	28.0	4.55	4.07	27.1
June	17.7	17.0	17.0	13.7	16.8	11.8	<1.0	2.36	2.11	1.98	23.1	4.64	1.72	125
July	5.66	5.31	6.81	8.37	6.99	5.89	<1.0	0.627	0.500	1.14	6.88	5.16	0.671	661
Aug	21.8	21.2	19.3	13.6	19.4	9.93	<1.0	1.37	1.15	1.61	36.0	4.44	2.24	79.5
Sept	32.3	30.9	30.0	27.9	29.6	22.2	1.35	2.57	2.09	2.86	54.5	4.26	3.44	59.0
Oct	46.9	23.2	24.9	456	20.7	392	9.02	13.3	4.86	45.8	37.5	4.43	8.61	111
Nov	15.8	6.67	6.02	176	2.91	152	3.09	3.99	0.701	17.8	10.7	4.97	3.12	187
Dec	41.0	26.5	50.8	270	35.8	239	10.4	16.5	11.3	28.5	34.2	4.47	6.19	86.7
Annual	20.9	15.0	20.0	114	16.3	98.8	3.00	5.45	3.32	11.8	22.1	4.66	3.02	1735
Max.	303	136	318	2680	231	2780	48.7	147	131	235	157	5.58	46.5	
Min.	2.92	2.54	3.64	4.47	2.13	2.59	<1.0	0.536	0.400	0.985	2.61	3.81	0.435	

Wet deposition (Monthly)

unit: mmol m⁻²month⁻¹ or mmol m⁻²year⁻¹

2009	SO ₄ ²⁻	nss-SO ₄ ²⁻	NO ₃ ⁻	Cl ⁻	NH ₄ ⁺	Na ⁺	K ⁺	Ca ²⁺	nss-Ca ²⁺	Mg ²⁺	H ⁺
Jan	6.53	3.78	7.77	51.6	4.93	45.6	1.30	2.45	1.47	5.26	6.68
Feb	2.20	1.97	1.97	4.42	1.40	3.89	0.191	0.737	0.653	0.485	2.36
Mar	2.06	1.73	2.48	6.17	1.99	5.48	0.239	0.631	0.513	0.672	2.33
Apr	3.37	2.57	3.52	14.8	3.24	13.2	0.405	0.773	0.487	1.53	3.65
May	1.09	0.872	1.06	3.59	1.07	3.61	0.142	0.335	0.257	0.387	0.758
June	2.20	2.11	2.12	1.71	2.09	1.47	0.116	0.294	0.262	0.247	2.87
July	3.74	3.51	4.50	5.53	4.62	3.89	0.225	0.414	0.330	0.754	4.55
Aug	1.74	1.69	1.53	1.08	1.54	0.789	0.0559	0.109	0.0915	0.128	2.86
Sept	1.90	1.83	1.77	1.64	1.75	1.31	0.0796	0.151	0.123	0.169	3.22
Oct	5.18	2.56	2.75	50.4	2.29	43.4	0.996	1.47	0.537	5.06	4.14
Nov	2.95	1.24	1.12	32.8	0.542	28.4	0.576	0.744	0.131	3.31	1.99
Dec	3.55	2.30	4.41	23.4	3.10	20.8	0.905	1.43	0.983	2.47	2.96
Annual	36.3	25.9	34.8	197	28.3	171	5.20	9.46	5.76	20.4	38.3

Data completeness (Monthly)

2009	SO ₄ ²⁻	nss-SO ₄ ²⁻	NO ₃ ⁻	Cl ⁻	NH ₄ ⁺	Na ⁺	K ⁺	Ca ²⁺	nss-Ca ²⁺	Mg ²⁺	H ⁺	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	51.9	51.9	51.9	51.9	51.9	51.9	51.9	51.9	51.9	51.9	51.9	51.9	51.9	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	99.7	99.7	99.7	100
Dec	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Annual	99.2	99.2	99.2	99.2	99.2	99.2	99.2	99.2	99.2	99.2	99.2	99.2	99.2	100

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

[0.00] for deposition: The deposition was 0 mmol/m² 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%)

Table 3.28 Monthly results

Site: Yusuhara

Country: Japan

Volume-weighted mean concentrations/ Precipitation (Monthly)

2009	SO ₄ ²⁻	nss-SO ₄ ²⁻	NO ₃ ⁻	Cl ⁻	NH ₄ ⁺	Na ⁺	K ⁺	Ca ²⁺	nss-Ca ²⁺	Mg ²⁺	H ⁺	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 ⁻¹ or mm year ⁻¹
Jan	28.8	24.8	32.8	78.4	24.9	66.5	2.62	5.46	4.02	8.34	52.9	4.28	3.84	126
Feb	15.4	14.4	7.62	19.7	10.1	17.0	<1.0	2.77	2.41	2.33	22.9	4.64	1.56	192
Mar	11.7	10.8	9.05	17.6	12.5	15.6	1.13	5.87	5.53	2.13	12.5	4.90	1.24	164
Apr	13.5	12.6	7.94	15.6	7.81	14.0	<1.0	2.55	2.25	1.92	19.1	4.72	1.39	91.0
May	19.3	18.5	17.4	14.6	23.4	13.5	<1.0	5.78	5.49	1.96	18.0	4.74	1.52	75.0
June	12.1	11.9	4.68	3.75	7.41	3.02	<1.0	0.955	0.889	0.441	14.4	4.84	0.859	310
July	13.8	13.6	4.44	5.00	8.05	4.27	<1.0	0.720	0.628	<0.4	15.0	4.82	0.922	270
Aug	5.37	4.88	4.06	8.53	3.05	8.03	<1.0	0.684	0.511	1.39	10.4	4.98	0.663	342
Sept	12.8	12.3	11.9	10.5	8.70	8.26	<1.0	0.806	0.627	1.01	24.5	4.61	1.37	57.4
Oct	3.65	3.52	3.40	2.97	<1.0	2.21	<1.0	0.570	0.522	0.430	10.6	4.97	0.537	127
Nov	5.43	5.02	4.23	8.48	2.31	6.75	<1.0	0.759	0.613	0.752	12.2	4.91	0.668	213
Dec	20.6	18.9	42.7	34.6	9.84	28.0	1.52	4.25	3.65	3.89	44.7	4.35	2.59	101
Annual	11.7	10.9	7.83	13.9	8.25	12.0	<1.0	1.97	1.71	1.61	17.2	4.77	1.15	2068
Max.	203	194	195	1590	559	1140	36.6	86.8	76.5	132	209	6.06	13.2	
Min.	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.2	<0.2	<0.4	0.871	3.68	0.190	

Wet deposition (Monthly)

unit: mmol m⁻²month⁻¹ or mmol m⁻²year⁻¹

2009	SO ₄ ²⁻	nss-SO ₄ ²⁻	NO ₃ ⁻	Cl ⁻	NH ₄ ⁺	Na ⁺	K ⁺	Ca ²⁺	nss-Ca ²⁺	Mg ²⁺	H ⁺
Jan	3.63	3.12	4.13	9.87	3.13	8.38	0.330	0.688	0.506	1.05	6.66
Feb	2.95	2.76	1.46	3.78	1.94	3.26	0.169	0.533	0.462	0.447	4.39
Mar	1.93	1.77	1.48	2.88	2.05	2.57	0.185	0.962	0.907	0.349	2.05
Apr	1.23	1.15	0.722	1.42	0.711	1.28	0.0734	0.232	0.205	0.175	1.74
May	1.45	1.39	1.30	1.09	1.75	1.01	0.0708	0.434	0.412	0.147	1.35
June	3.76	3.71	1.45	1.16	2.30	0.937	0.0949	0.296	0.276	0.137	4.48
July	3.73	3.66	1.20	1.35	2.17	1.15	0.110	0.194	0.169	0.0930	4.04
Aug	1.83	1.67	1.39	2.91	1.04	2.74	0.293	0.234	0.175	0.476	3.57
Sept	0.734	0.706	0.686	0.601	0.499	0.474	0.0196	0.0463	0.0360	0.0577	1.41
Oct	0.463	0.447	0.432	0.377	0.125	0.280	0.0576	0.0724	0.0663	0.0547	1.35
Nov	1.15	1.07	0.900	1.80	0.491	1.43	0.103	0.161	0.130	0.160	2.60
Dec	2.08	1.91	4.31	3.50	0.994	2.83	0.154	0.430	0.368	0.393	4.51
Annual	24.1	22.6	16.2	28.8	17.1	24.9	1.59	4.07	3.53	3.33	35.5

Data completeness (Monthly)

2009	SO ₄ ²⁻	nss-SO ₄ ²⁻	NO ₃ ⁻	Cl ⁻	NH ₄ ⁺	Na ⁺	K ⁺	Ca ²⁺	nss-Ca ²⁺	Mg ²⁺	H ⁺	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	99.6	99.6	99.6	100
Feb	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	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	99.4	99.4	99.4	100
June	100	100	100	100	100	100	100	100	100	100	99.9	99.9	99.9	100
July	99.1	99.1	99.1	99.1	99.1	99.1	99.1	99.1	99.1	99.1	98.8	98.8	98.8	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	98.4	98.4	98.4	100
Oct	100	100	100	100	100	100	100	100	100	100	100	100	100	90.3
Nov	100	100	100	100	100	100	100	100	100	100	99.8	99.8	99.8	100
Dec	6.44	6.44	6.44	6.44	6.44	6.44	6.44	6.44	6.44	6.44	5.45	5.45	5.45	100
Annual	95.3	95.3	95.3	95.3	95.3	95.3	95.3	95.3	95.3	95.3	95.1	95.1	95.1	99.2

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

[0.00] for deposition: The deposition was 0 mmol/m² 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%)

Table 3.29 Monthly results

Site: Hedo

Country: Japan

Volume-weighted mean concentrations/ Precipitation (Monthly)

2009	SO ₄ ²⁻	nss-SO ₄ ²⁻	NO ₃ ⁻	Cl ⁻	NH ₄ ⁺	Na ⁺	K ⁺	Ca ²⁺	nss-Ca ²⁺	Mg ²⁺	H ⁺	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 ⁻¹ or mm year ⁻¹
Jan	42.8	12.7	15.3	545	14.4	511	12.2	16.1	5.03	54.6	10.6	4.98	7.25	95.0
Feb	25.9	10.1	12.9	288	13.0	262	6.58	8.95	3.29	29.9	10.9	4.96	4.99	44.5
Mar	18.0	7.48	10.9	196	11.0	174	4.63	5.72	2.16	19.7	10.8	4.97	3.63	162
Apr	14.4	8.49	15.6	117	10.1	98.2	2.90	5.23	3.11	11.7	10.2	4.99	2.48	69.0
May	13.7	11.4	10.0	42.5	14.5	39.0	1.60	2.84	1.99	4.82	14.6	4.84	1.40	60.3
June	5.18	3.39	4.09	33.4	4.44	29.7	<1.0	1.62	0.981	3.66	5.94	5.23	0.879	479
July	6.05	3.70	6.72	43.7	3.90	39.0	<1.0	1.54	0.695	4.79	9.03	5.04	1.12	102
Aug	14.8	3.06	3.97	227	5.32	197	4.78	8.78	4.51	22.9	4.44	5.35	3.62	77.0
Sept	8.94	3.85	4.14	93.1	4.11	84.3	2.53	4.81	2.99	10.1	5.47	5.26	1.65	33.6
Oct	11.2	3.26	3.50	148	4.32	132	3.45	4.03	1.17	15.4	4.20	5.38	2.34	553
Nov	12.7	5.59	5.00	127	4.46	118	2.84	3.42	0.882	13.6	10.1	5.00	2.59	185
Dec	18.3	12.2	9.74	119	8.57	100	2.86	4.49	2.33	11.8	17.3	4.76	2.43	116
Annual	13.1	5.55	6.43	141	6.43	127	3.29	4.47	1.75	14.5	7.81	5.11	2.44	1975
Max.	927	417	455	16600	278	16300	351	364	194	1580	87.5	6.30	227	
Min.	<1.0	<1.0	<1.0	5.95	<1.0	4.53	<1.0	0.481	<0.2	0.740	0.501	4.06	0.267	

Wet deposition (Monthly)

unit: mmol m⁻²month⁻¹ or mmol m⁻²year⁻¹

2009	SO ₄ ²⁻	nss-SO ₄ ²⁻	NO ₃ ⁻	Cl ⁻	NH ₄ ⁺	Na ⁺	K ⁺	Ca ²⁺	nss-Ca ²⁺	Mg ²⁺	H ⁺
Jan	4.07	1.21	1.45	51.8	1.37	48.5	1.16	1.53	0.478	5.19	1.00
Feb	1.15	0.449	0.575	12.8	0.581	11.7	0.293	0.398	0.146	1.33	0.486
Mar	2.91	1.21	1.76	31.8	1.79	28.2	0.749	0.926	0.351	3.19	1.75
Apr	0.994	0.586	1.08	8.10	0.698	6.78	0.200	0.361	0.214	0.806	0.705
May	0.829	0.687	0.606	2.56	0.873	2.35	0.0964	0.171	0.120	0.290	0.880
June	2.48	1.62	1.96	16.0	2.12	14.2	0.435	0.777	0.470	1.75	2.84
July	0.614	0.375	0.682	4.44	0.396	3.96	0.100	0.156	0.0705	0.486	0.917
Aug	1.14	0.236	0.306	17.5	0.410	15.2	0.368	0.676	0.347	1.77	0.342
Sept	0.300	0.130	0.139	3.13	0.138	2.83	0.0852	0.162	0.101	0.341	0.184
Oct	6.20	1.80	1.94	81.8	2.39	72.9	1.91	2.22	0.649	8.49	2.32
Nov	2.34	1.03	0.925	23.6	0.825	21.7	0.526	0.633	0.163	2.51	1.87
Dec	2.12	1.42	1.13	13.9	0.996	11.6	0.333	0.522	0.270	1.38	2.01
Annual	25.9	11.0	12.7	278	12.7	250	6.49	8.83	3.46	28.6	15.4

Data completeness (Monthly)

2009	SO ₄ ²⁻	nss-SO ₄ ²⁻	NO ₃ ⁻	Cl ⁻	NH ₄ ⁺	Na ⁺	K ⁺	Ca ²⁺	nss-Ca ²⁺	Mg ²⁺	H ⁺	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	98.9	98.9	98.9	100
Feb	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Mar	81.2	81.2	81.2	81.2	81.2	81.2	81.2	81.2	81.2	81.2	81.2	81.2	81.2	100
Apr	98.6	98.6	98.6	98.6	98.6	98.6	98.6	98.6	98.6	98.6	98.6	98.6	98.6	100
May	100	100	100	100	100	100	100	100	100	100	97.2	97.2	97.2	100
June	75.5	75.5	75.5	75.5	75.5	75.5	75.5	75.5	75.5	75.5	75.5	75.5	75.5	93.3
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	98.0	98.0	98.0	100
Sept	100	100	100	100	100	100	100	100	100	100	96.7	96.7	96.7	96.7
Oct	98.9	98.9	98.9	98.9	98.9	98.9	98.9	98.9	98.9	98.9	98.5	98.5	98.5	100
Nov	97.3	97.3	97.3	97.3	97.3	97.3	97.3	97.3	97.3	97.3	97.3	97.3	97.3	96.7
Dec	100	100	100	100	100	100	100	100	100	100	97.4	97.4	97.4	100
Annual	91.9	91.9	91.9	91.9	91.9	91.9	91.9	91.9	91.9	91.9	91.4	91.4	91.4	98.9

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

[0.00] for deposition: The deposition was 0 mmol/m² 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%)

Table 3.30 Monthly results

Site: Ogasawara

Country: Japan

Volume-weighted mean concentrations/ Precipitation (Monthly)

2009	SO ₄ ²⁻	nss-SO ₄ ²⁻	NO ₃ ⁻	Cl ⁻	NH ₄ ⁺	Na ⁺	K ⁺	Ca ²⁺	nss-Ca ²⁺	Mg ²⁺	H ⁺	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 ⁻¹ or mm year ⁻¹
Jan	7.52	3.00	2.49	85.3	2.69	75.1	2.00	1.84	0.221	10.2	7.51	5.12	1.62	155
Feb	11.1	7.10	5.62	71.6	3.84	65.7	1.98	1.67	0.443	8.59	12.6	4.90	1.78	47.8
Mar	24.9	16.3	13.3	166	21.2	145	5.32	8.15	5.07	18.2	16.1	4.79	3.39	88.5
Apr	6.69	4.72	6.07	38.1	7.92	32.6	1.20	1.65	0.944	3.86	7.01	5.15	1.04	313
May	8.69	1.93	3.00	127	4.73	112	2.84	3.51	1.08	12.8	3.87	5.41	2.01	116
June	2.98	2.23	2.80	14.4	4.74	12.5	<1.0	0.802	0.531	1.57	6.38	5.20	0.585	98.0
July	6.46	3.04	3.44	68.2	2.89	56.6	1.37	1.91	0.691	6.51	9.19	5.04	1.35	88.0
Aug	7.14	1.53	1.11	108	2.04	93.1	2.29	2.88	0.869	10.7	4.94	5.31	1.75	128
Sept	63.1	12.4	<1.0	1040	1.51	841	18.5	20.6	2.40	96.8	2.69	5.57	12.8	249
Oct	2.32	<1.0	<1.0	35.3	2.24	30.7	1.00	1.06	0.396	3.27	3.22	5.49	0.662	166
Nov	17.8	3.46	3.57	272	5.82	237	6.33	4.91	0.314	26.0	10.9	4.96	3.99	55.1
Dec	10.8	4.21	2.91	129	3.05	110	2.73	3.07	0.688	12.7	9.75	5.01	2.23	171
Annual	16.5	5.21	3.39	227	4.82	188	4.55	5.20	1.16	21.9	6.79	5.17	3.27	1675
Max.	423	89.7	69.6	6760	47.2	5520	115	134	53.1	644	52.4	6.23	83.1	
Min.	<1.0	<1.0	<1.0	3.85	<1.0	3.04	<1.0	0.279	<0.2	0.514	0.587	4.28	0.281	

Wet deposition (Monthly)

unit: mmol m⁻²month⁻¹ or mmol m⁻²year⁻¹

2009	SO ₄ ²⁻	nss-SO ₄ ²⁻	NO ₃ ⁻	Cl ⁻	NH ₄ ⁺	Na ⁺	K ⁺	Ca ²⁺	nss-Ca ²⁺	Mg ²⁺	H ⁺
Jan	1.17	0.465	0.386	13.2	0.416	11.6	0.310	0.285	0.0342	1.58	1.16
Feb	0.529	0.340	0.269	3.43	0.184	3.14	0.0947	0.0798	0.0212	0.411	0.601
Mar	2.21	1.44	1.17	14.7	1.88	12.8	0.471	0.721	0.448	1.61	1.42
Apr	2.09	1.48	1.90	11.9	2.48	10.2	0.375	0.516	0.295	1.21	2.19
May	1.01	0.223	0.347	14.7	0.548	13.0	0.329	0.406	0.125	1.48	0.448
June	0.292	0.218	0.275	1.41	0.464	1.23	0.0568	0.0786	0.0521	0.154	0.625
July	0.568	0.268	0.302	6.00	0.255	4.98	0.121	0.168	0.0608	0.573	0.809
Aug	0.914	0.195	0.141	13.9	0.261	11.9	0.293	0.369	0.111	1.37	0.633
Sept	15.7	3.10	0.107	258	0.377	210	4.60	5.13	0.598	24.1	0.671
Oct	0.384	0.0802	0.0699	5.84	0.371	5.09	0.166	0.176	0.0657	0.541	0.533
Nov	0.979	0.191	0.197	15.0	0.321	13.1	0.349	0.271	0.0173	1.43	0.600
Dec	1.85	0.719	0.497	22.0	0.521	18.8	0.466	0.524	0.117	2.16	1.67
Annual	27.7	8.72	5.67	379	8.07	315	7.61	8.71	1.95	36.6	11.4

Data completeness (Monthly)

2009	SO ₄ ²⁻	nss-SO ₄ ²⁻	NO ₃ ⁻	Cl ⁻	NH ₄ ⁺	Na ⁺	K ⁺	Ca ²⁺	nss-Ca ²⁺	Mg ²⁺	H ⁺	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	98.3	98.3	98.3	98.3	98.3	98.3	98.3	98.3	98.3	98.3	98.3	98.3	98.3	100
Apr	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	96.7
May	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.1	99.1	99.1	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	99.0	99.0	99.0	99.0	99.0	99.0	99.0	99.0	99.0	99.0	98.9	98.9	98.9	100
Oct	96.5	96.5	96.5	96.5	96.5	96.5	96.5	96.5	96.5	96.5	96.5	96.5	96.5	100
Nov	92.6	92.6	92.6	92.6	92.6	92.6	92.6	92.6	92.6	92.6	92.6	92.6	92.6	100
Dec	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5	100
Annual	99.1	99.1	99.1	99.1	99.1	99.1	99.1	99.1	99.1	99.1	99.0	99.0	99.0	99.7

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

[0.00] for deposition: The deposition was 0 mmol/m² 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%)

Table 3.31 Monthly results

Site: Tokyo

Country: Japan

Volume-weighted mean concentrations/ Precipitation (Monthly)

2009	SO ₄ ²⁻	nss-SO ₄ ²⁻	NO ₃ ⁻	Cl ⁻	NH ₄ ⁺	Na ⁺	K ⁺	Ca ²⁺	nss-Ca ²⁺	Mg ²⁺	H ⁺	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 ⁻¹ or mm year ⁻¹
Jan	10.8	9.68	12.9	20.9	22.4	18.0	<1.0	2.01	1.63	2.18	13.3	4.88	1.18	138
Feb	45.5	42.8	52.3	65.8	74.8	45.4	2.46	12.7	11.7	6.00	39.0	4.41	4.08	48.0
Mar	21.8	17.2	19.4	84.8	28.3	75.4	1.65	9.04	7.42	9.07	15.9	4.80	2.26	94.1
Apr	12.2	11.6	15.8	10.5	18.3	8.84	1.19	2.46	2.27	1.29	18.2	4.74	1.23	157
May	20.6	18.9	23.1	33.7	38.0	28.0	1.22	3.61	3.01	3.50	20.1	4.70	2.01	234
June	21.7	21.4	24.5	6.86	36.5	5.19	<1.0	2.56	2.45	0.861	28.3	4.55	2.05	217
July	27.4	26.4	35.2	18.9	50.0	15.7	1.05	6.03	5.69	2.33	26.1	4.58	2.33	76.2
Aug	7.10	6.82	7.35	5.61	9.95	4.75	<1.0	2.39	2.29	0.839	7.47	5.13	0.696	242
Sept	30.5	29.8	31.5	13.9	36.4	11.7	1.23	6.04	5.78	1.81	42.5	4.37	2.89	48.7
Oct	11.4	8.68	13.6	53.1	16.2	45.5	1.46	3.08	2.10	5.40	13.1	4.88	1.64	271
Nov	12.0	10.5	12.6	27.9	19.4	24.1	<1.0	2.35	1.83	2.93	11.6	4.93	1.38	126
Dec	11.0	9.89	13.4	23.1	24.7	19.3	<1.0	2.27	1.85	2.42	9.49	5.02	1.21	75.5
Annual	16.0	14.5	18.1	27.8	26.2	23.5	1.10	3.42	2.91	2.97	17.7	4.75	1.66	1727
Max.	297	292	220	2940	204	2540	52.5	145	144	281	117	6.00	9.53	
Min.	1.92	<1.0	<1.0	1.46	<1.0	<1.0	<1.0	<0.2	<0.2	<0.4	1.01	3.93	0.287	

Wet deposition (Monthly)

unit: mmol m⁻²month⁻¹ or mmol m⁻²year⁻¹

2009	SO ₄ ²⁻	nss-SO ₄ ²⁻	NO ₃ ⁻	Cl ⁻	NH ₄ ⁺	Na ⁺	K ⁺	Ca ²⁺	nss-Ca ²⁺	Mg ²⁺	H ⁺
Jan	1.48	1.33	1.78	2.87	3.09	2.47	0.118	0.277	0.224	0.299	1.83
Feb	2.18	2.05	2.51	3.16	3.59	2.18	0.118	0.608	0.561	0.288	1.87
Mar	2.05	1.62	1.82	7.99	2.66	7.09	0.156	0.851	0.698	0.854	1.50
Apr	1.91	1.83	2.48	1.65	2.87	1.39	0.186	0.386	0.356	0.202	2.86
May	4.84	4.44	5.42	7.89	8.92	6.56	0.287	0.847	0.706	0.821	4.72
June	4.71	4.64	5.31	1.49	7.91	1.13	0.189	0.556	0.532	0.187	6.14
July	2.09	2.02	2.68	1.44	3.82	1.19	0.0803	0.460	0.434	0.178	1.99
Aug	1.72	1.65	1.78	1.36	2.41	1.15	0.132	0.579	0.554	0.203	1.81
Sept	1.48	1.45	1.53	0.674	1.77	0.570	0.0599	0.294	0.281	0.0881	2.07
Oct	3.09	2.35	3.69	14.4	4.38	12.3	0.395	0.834	0.568	1.46	3.54
Nov	1.51	1.33	1.59	3.52	2.45	3.03	0.109	0.297	0.231	0.370	1.47
Dec	0.834	0.746	1.01	1.74	1.87	1.46	0.0732	0.172	0.140	0.182	0.717
Annual	27.6	25.1	31.3	48.0	45.3	40.7	1.90	5.91	5.03	5.13	30.6

Data completeness (Monthly)

2009	SO ₄ ²⁻	nss-SO ₄ ²⁻	NO ₃ ⁻	Cl ⁻	NH ₄ ⁺	Na ⁺	K ⁺	Ca ²⁺	nss-Ca ²⁺	Mg ²⁺	H ⁺	pH	EC	Precip.
	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%PCL
Jan	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5	100
Feb	40.7	40.7	40.7	40.7	40.7	40.7	40.7	40.7	40.7	40.7	40.7	40.7	40.7	96.4
Mar	88.8	88.8	88.8	88.8	88.8	88.8	88.8	88.8	88.8	88.8	88.2	88.2	88.2	100
Apr	100	100	100	100	100	100	100	100	100	100	100	100	100	100
May	93.4	93.4	93.4	93.4	93.4	93.4	93.4	93.4	93.4	93.4	93.0	93.0	93.0	100
June	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.1	99.1	99.1	100
July	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	97.7	97.7	97.7	100
Aug	70.5	70.5	70.5	70.5	70.5	70.5	70.5	70.5	70.5	70.5	69.9	69.9	69.9	100
Sept	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	97.7	97.7	97.7	100
Oct	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Nov	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.2	99.2	99.2	100
Dec	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	100
Annual	92.5	92.5	92.5	92.5	92.5	92.5	92.5	92.5	92.5	92.5	92.1	92.1	92.1	99.7

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

[0.00] for deposition: The deposition was 0 mmol/m² 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%)

Table 3.32 Monthly results

Site: Vientian

Country: Lao PDR

Volume-weighted mean concentrations/ Precipitation (Monthly)

2009	SO ₄ ²⁻	nss-SO ₄ ²⁻	NO ₃ ⁻	Cl ⁻	NH ₄ ⁺	Na ⁺	K ⁺	Ca ²⁺	nss-Ca ²⁺	Mg ²⁺	H ⁺	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 ⁻¹ or mm year ⁻¹
Jan	**	**	**	**	**	**	**	**	**	**	**	**	**	**
Feb	**	**	**	**	**	**	**	**	**	**	**	**	**	**
Mar	**	**	**	**	**	**	**	**	**	**	**	**	**	**
Apr	**	**	**	**	**	**	**	**	**	**	**	**	**	**
May	**	**	**	**	**	**	**	**	**	**	**	**	**	**
June	**	**	**	**	**	**	**	**	**	**	**	**	**	**
July	**	**	**	**	**	**	**	**	**	**	**	**	**	**
Aug	**	**	**	**	**	**	**	**	**	**	**	**	**	**
Sept	4.05	3.50	9.73	6.19	17.3	9.14	<1.0	5.50	5.30	0.722	3.31	5.48	0.534	181
Oct	--	--	--	--	--	--	--	--	--	--	--	--	--	0
Nov	--	--	--	--	--	--	--	--	--	--	--	--	--	0
Dec	--	--	--	--	--	--	--	--	--	--	--	--	--	0
Annual	4.05	3.50	9.73	6.19	17.3	9.14	<1.0	5.50	5.30	0.722	3.31	5.48	0.534	181
Max.	9.57	8.19	16.0	11.6	32.5	22.9	1.53	10.2	9.72	1.64	4.79	5.66	0.863	
Min.	<1.0	<1.0	7.09	4.79	9.97	1.17	<1.0	1.89	1.75	<0.4	2.19	5.32	0.300	

Wet deposition (Monthly)

unit: mmol m⁻²month⁻¹ or mmol m⁻²year⁻¹

2009	SO ₄ ²⁻	nss-SO ₄ ²⁻	NO ₃ ⁻	Cl ⁻	NH ₄ ⁺	Na ⁺	K ⁺	Ca ²⁺	nss-Ca ²⁺	Mg ²⁺	H ⁺
Jan	**	**	**	**	**	**	**	**	**	**	**
Feb	**	**	**	**	**	**	**	**	**	**	**
Mar	**	**	**	**	**	**	**	**	**	**	**
Apr	**	**	**	**	**	**	**	**	**	**	**
May	**	**	**	**	**	**	**	**	**	**	**
June	**	**	**	**	**	**	**	**	**	**	**
July	**	**	**	**	**	**	**	**	**	**	**
Aug	**	**	**	**	**	**	**	**	**	**	**
Sept	0.733	0.633	1.76	1.12	3.13	1.66	0.168	0.996	0.960	0.131	0.600
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
Annual	0.733	0.633	1.76	1.12	3.13	1.66	0.168	0.996	0.960	0.131	0.600

Data completeness (Monthly)

2009	SO ₄ ²⁻	nss-SO ₄ ²⁻	NO ₃ ⁻	Cl ⁻	NH ₄ ⁺	Na ⁺	K ⁺	Ca ²⁺	nss-Ca ²⁺	Mg ²⁺	H ⁺	pH	EC	Precip.
	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%PCL
Jan	**	**	**	**	**	**	**	**	**	**	**	**	**	0
Feb	**	**	**	**	**	**	**	**	**	**	**	**	**	0
Mar	**	**	**	**	**	**	**	**	**	**	**	**	**	0
Apr	**	**	**	**	**	**	**	**	**	**	**	**	**	0
May	**	**	**	**	**	**	**	**	**	**	**	**	**	0
June	**	**	**	**	**	**	**	**	**	**	**	**	**	0
July	**	**	**	**	**	**	**	**	**	**	**	**	**	0
Aug	**	**	**	**	**	**	**	**	**	**	**	**	**	0
Sept	100	100	100	100	100	100	100	100	100	100	100	100	100	96.7
Oct	--	--	--	--	--	--	--	--	--	--	--	--	--	100
Nov	--	--	--	--	--	--	--	--	--	--	--	--	--	100
Dec	--	--	--	--	--	--	--	--	--	--	--	--	--	100
Annual	100	100	100	100	100	100	100	100	100	100	100	100	100	33.2

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

[0.00] for deposition: The deposition was 0 mmol/m² 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%)

Table 3.33 Monthly results

Site: Petaling Jaya

Country: Malaysia

Volume-weighted mean concentrations/ Precipitation (Monthly)

2009	SO ₄ ²⁻	nss-SO ₄ ²⁻	NO ₃ ⁻	Cl ⁻	NH ₄ ⁺	Na ⁺	K ⁺	Ca ²⁺	nss-Ca ²⁺	Mg ²⁺	H ⁺	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 ⁻¹ or mm year ⁻¹
Jan	21.5	21.0	59.1	10.1	31.8	8.30	2.03	6.09	5.91	0.981	48.5	4.31	3.02	226
Feb	12.2	12.1	36.8	5.97	16.7	2.97	1.33	3.82	3.75	<0.4	33.6	4.47	1.99	224
Mar	11.0	10.6	40.5	9.94	9.03	7.37	3.09	5.15	4.99	0.888	36.5	4.44	2.08	379
Apr	9.10	8.93	39.2	5.08	2.86	2.93	<1.0	2.89	2.83	<0.4	42.2	4.37	2.07	262
May	20.4	20.1	88.8	12.0	<1.0	5.02	<1.0	11.7	11.6	1.46	74.9	4.13	3.88	95.6
June	30.0	29.6	81.5	15.8	37.2	7.46	3.23	8.85	8.69	1.23	69.5	4.16	4.49	128
July	19.7	19.4	72.3	10.6	1.35	5.00	1.76	5.96	5.85	<0.4	81.3	4.09	4.16	149
Aug	10.9	10.6	31.4	8.25	<1.0	4.82	<1.0	6.56	6.46	0.785	37.9	4.42	2.04	171
Sept	16.2	16.1	44.8	5.81	<1.0	2.66	1.13	4.56	4.51	<0.4	57.2	4.24	2.78	380
Oct	9.44	9.25	45.0	6.30	<1.0	3.07	<1.0	3.82	3.76	<0.4	44.0	4.36	2.36	256
Nov	8.10	7.93	33.6	6.05	2.17	2.88	<1.0	3.76	3.70	<0.4	34.5	4.46	1.83	330
Dec	8.71	8.42	43.1	7.43	3.49	4.79	1.71	4.35	4.25	<0.4	32.2	4.49	1.82	368
Annual	13.2	12.9	46.4	7.89	7.57	4.59	1.51	4.97	4.87	0.467	45.2	4.35	2.46	2968
Max.	55.9	55.0	282	40.1	112	30.8	17.1	40.3	40.0	4.90	138	5.08	7.95	
Min.	2.64	2.50	9.25	2.50	<1.0	<1.0	<1.0	0.800	0.783	<0.4	8.32	3.86	0.533	

Wet deposition (Monthly)

unit: mmol m⁻²month⁻¹ or mmol m⁻²year⁻¹

2009	SO ₄ ²⁻	nss-SO ₄ ²⁻	NO ₃ ⁻	Cl ⁻	NH ₄ ⁺	Na ⁺	K ⁺	Ca ²⁺	nss-Ca ²⁺	Mg ²⁺	H ⁺
Jan	4.86	4.75	13.4	2.28	7.20	1.88	0.460	1.38	1.34	0.222	11.0
Feb	2.74	2.70	8.23	1.34	3.74	0.666	0.298	0.855	0.840	0.0613	7.51
Mar	4.18	4.01	15.4	3.77	3.42	2.79	1.17	1.95	1.89	0.337	13.8
Apr	2.39	2.34	10.3	1.33	0.749	0.767	0.228	0.758	0.742	0.0136	11.1
May	1.95	1.92	8.49	1.15	<0.01	0.480	0.0602	1.12	1.11	0.140	7.16
June	3.85	3.79	10.4	2.02	4.76	0.956	0.414	1.14	1.11	0.158	8.91
July	2.92	2.88	10.7	1.57	0.201	0.743	0.262	0.886	0.870	0.0588	12.1
Aug	1.85	1.80	5.36	1.41	<0.01	0.823	0.0795	1.12	1.10	0.134	6.47
Sept	6.16	6.10	17.0	2.20	0.352	1.01	0.427	1.73	1.71	0.0658	21.7
Oct	2.41	2.36	11.5	1.61	0.0218	0.784	0.183	0.977	0.961	0.0850	11.2
Nov	2.68	2.62	11.1	2.00	0.718	0.950	0.262	1.24	1.22	<0.01	11.4
Dec	3.21	3.10	15.9	2.74	1.29	1.76	0.628	1.60	1.56	0.110	11.9
Annual	39.2	38.4	138	23.4	22.5	13.6	4.47	14.8	14.5	1.39	134

Data completeness (Monthly)

2009	SO ₄ ²⁻	nss-SO ₄ ²⁻	NO ₃ ⁻	Cl ⁻	NH ₄ ⁺	Na ⁺	K ⁺	Ca ²⁺	nss-Ca ²⁺	Mg ²⁺	H ⁺	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	99.4	99.4	99.4	100
Feb	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	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	98.3	98.3	98.3	100
May	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	97.5	97.5	97.5	100
June	100	100	100	100	100	100	100	100	100	100	100	100	100	100
July	98.8	98.8	98.8	98.8	98.8	98.8	98.8	98.8	98.8	98.8	90.7	90.7	90.7	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	91.4	91.4	91.4	100
Annual	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	98.2	98.2	98.2	100

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

[0.00] for deposition: The deposition was 0 mmol/m² 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%)

Table 3.34 Monthly results

Site: Tanah Rata

Country: Malaysia

Volume-weighted mean concentrations/ Precipitation (Monthly)

2009	SO ₄ ²⁻	nss-SO ₄ ²⁻	NO ₃ ⁻	Cl ⁻	NH ₄ ⁺	Na ⁺	K ⁺	Ca ²⁺	nss-Ca ²⁺	Mg ²⁺	H ⁺	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 ⁻¹ or mm year ⁻¹
Jan	1.01	<1.0	1.70	4.04	3.85	3.94	3.37	0.287	0.267	<0.4	6.20	5.21	0.413	256
Feb	4.76	4.54	7.41	3.20	7.10	3.64	<1.0	2.49	2.43	<0.4	7.20	5.14	0.578	238
Mar	3.75	3.72	6.64	1.56	1.83	<1.0	<1.0	1.05	1.04	<0.4	12.8	4.89	0.657	338
Apr	2.42	2.30	4.61	2.51	1.05	1.87	<1.0	0.292	0.277	<0.4	7.75	5.11	0.459	171
May	2.70	2.64	5.99	1.84	1.67	<1.0	<1.0	1.16	1.14	<0.4	10.1	4.99	0.518	307
June	5.12	5.10	8.28	1.40	6.60	<1.0	<1.0	0.700	0.691	<0.4	15.5	4.81	0.832	143
July	4.43	4.36	8.12	2.10	12.2	1.16	<1.0	2.32	2.30	<0.4	7.89	5.10	0.628	246
Aug	4.18	4.09	5.18	2.01	18.0	1.46	3.03	1.47	1.43	<0.4	3.31	5.48	0.500	274
Sept	4.58	4.48	4.06	2.56	5.42	1.72	<1.0	1.46	1.43	<0.4	7.01	5.15	0.580	251
Oct	3.15	3.08	5.68	2.31	2.32	1.06	<1.0	0.481	0.466	<0.4	9.68	5.01	0.563	449
Nov	1.25	1.21	2.65	1.08	1.85	<1.0	<1.0	0.201	<0.2	<0.4	4.11	5.39	0.260	277
Dec	2.27	2.14	1.05	2.76	5.65	2.28	<1.0	0.227	0.206	<0.4	8.67	5.06	0.570	127
Annual	3.27	3.19	5.19	2.26	5.41	1.58	<1.0	1.03	1.01	<0.4	8.31	5.08	0.544	3077
Max.	12.2	11.7	20.3	15.5	91.7	19.2	5.87	9.30	9.09	1.10	29.5	6.25	1.56	
Min.	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.2	<0.2	<0.4	0.562	4.53	0.172	

Wet deposition (Monthly)

unit: mmol m⁻² month⁻¹ or mmol m⁻² year⁻¹

2009	SO ₄ ²⁻	nss-SO ₄ ²⁻	NO ₃ ⁻	Cl ⁻	NH ₄ ⁺	Na ⁺	K ⁺	Ca ²⁺	nss-Ca ²⁺	Mg ²⁺	H ⁺
Jan	0.258	0.244	0.435	1.03	0.984	1.01	0.861	0.0733	0.0683	<0.01	1.58
Feb	1.13	1.08	1.76	0.762	1.69	0.867	0.210	0.594	0.577	0.0501	1.71
Mar	1.27	1.26	2.24	0.527	0.618	0.158	0.152	0.356	0.352	0.00	4.34
Apr	0.414	0.394	0.789	0.431	0.180	0.319	0.0678	0.0500	0.0474	<0.01	1.33
May	0.829	0.811	1.84	0.566	0.512	0.297	0.0123	0.356	0.350	<0.01	3.11
June	0.732	0.728	1.18	0.200	0.942	0.0571	0.0743	0.1000	0.0987	0.00	2.21
July	1.09	1.07	2.00	0.517	3.00	0.285	0.233	0.572	0.566	0.0126	1.94
Aug	1.14	1.12	1.42	0.550	4.93	0.401	0.831	0.401	0.393	0.00	0.905
Sept	1.15	1.12	1.02	0.642	1.36	0.432	0.246	0.367	0.358	0.0103	1.76
Oct	1.41	1.38	2.55	1.04	1.04	0.477	0.135	0.216	0.209	0.00	4.34
Nov	0.347	0.334	0.733	0.299	0.514	0.209	0.0910	0.0558	0.0545	0.00	1.14
Dec	0.288	0.271	0.133	0.351	0.716	0.290	0.0708	0.0287	0.0261	0.00	1.10
Annual	10.0	9.80	16.0	6.96	16.7	4.87	3.05	3.17	3.10	0.0927	25.6

Data completeness (Monthly)

2009	SO ₄ ²⁻	nss-SO ₄ ²⁻	NO ₃ ⁻	Cl ⁻	NH ₄ ⁺	Na ⁺	K ⁺	Ca ²⁺	nss-Ca ²⁺	Mg ²⁺	H ⁺	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	25.0	25.0	25.0	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	81.7	81.7	81.7	81.7	81.7	81.7	81.7	81.7	81.7	81.7	79.3	79.3	79.3	100
June	81.4	81.4	81.4	81.4	81.4	81.4	81.4	81.4	81.4	81.4	81.4	81.4	81.4	100
July	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	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	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	93.7	93.7	93.7	100
Annual	97.2	97.2	97.2	97.2	97.2	97.2	97.2	97.2	97.2	97.2	90.5	90.5	90.5	100

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

[0.00] for deposition: The deposition was 0 mmol/m² 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%)

Table 3.35 Monthly results

Site: Danum Valley

Country: Malaysia

Volume-weighted mean concentrations/ Precipitation (Monthly)

2009	SO ₄ ²⁻	nss-SO ₄ ²⁻	NO ₃ ⁻	Cl ⁻	NH ₄ ⁺	Na ⁺	K ⁺	Ca ²⁺	nss-Ca ²⁺	Mg ²⁺	H ⁺	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 ⁻¹ or mm year ⁻¹
Jan	2.21	1.08	<1.0	19.0	<1.0	18.7	<1.0	0.286	<0.2	1.28	4.01	5.40	0.510	369
Feb	2.00	1.49	1.39	8.02	<1.0	8.55	1.26	0.822	0.638	0.713	4.04	5.39	0.361	342
Mar	2.84	2.46	2.13	5.30	1.08	6.41	1.70	0.437	0.369	0.633	7.10	5.15	0.474	207
Apr	1.53	1.42	1.04	2.97	<1.0	1.85	<1.0	0.333	0.315	<0.4	4.53	5.34	0.305	221
May	2.63	2.50	1.67	3.60	1.66	2.20	1.24	0.365	0.324	<0.4	6.85	5.16	0.408	369
June	3.91	3.68	1.72	5.79	6.65	3.80	3.73	6.19	6.10	2.02	3.32	5.48	0.517	211
July	1.78	1.72	<1.0	2.24	<1.0	1.03	<1.0	1.15	1.13	<0.4	3.94	5.40	0.351	332
Aug	3.57	3.36	3.74	3.40	3.32	3.52	4.13	1.29	1.22	0.791	5.34	5.27	0.485	141
Sept	3.68	3.57	1.44	3.96	2.80	1.81	1.56	1.78	1.74	0.409	8.55	5.07	0.553	142
Oct	5.14	4.94	2.97	4.93	10.1	3.28	2.14	1.64	1.57	<0.4	13.6	4.87	0.610	457
Nov	1.71	1.57	1.72	4.09	<1.0	2.30	1.01	0.576	0.544	<0.4	4.94	5.31	0.352	433
Dec	3.22	2.44	2.40	15.2	19.5	12.9	2.34	<0.2	<0.2	0.498	0.771	6.11	0.548	168
Annual	2.82	2.47	1.65	6.79	3.44	5.83	1.59	1.01	0.919	0.549	6.00	5.22	0.445	3391
Max.	9.80	8.52	8.85	60.3	42.6	57.3	8.53	9.30	9.14	4.59	26.3	6.43	1.15	
Min.	<1.0	<1.0	<1.0	1.40	<1.0	<1.0	<1.0	<0.2	<0.2	<0.4	0.372	4.58	0.190	

Wet deposition (Monthly)

unit: mmol m⁻² month⁻¹ or mmol m⁻² year⁻¹

2009	SO ₄ ²⁻	nss-SO ₄ ²⁻	NO ₃ ⁻	Cl ⁻	NH ₄ ⁺	Na ⁺	K ⁺	Ca ²⁺	nss-Ca ²⁺	Mg ²⁺	H ⁺
Jan	0.816	0.399	0.0481	7.00	0.0158	6.92	0.353	0.106	0.00	0.474	1.48
Feb	0.684	0.508	0.474	2.74	0.187	2.92	0.431	0.281	0.218	0.244	1.38
Mar	0.588	0.508	0.440	1.10	0.223	1.33	0.352	0.0904	0.0764	0.131	1.47
Apr	0.338	0.313	0.230	0.657	0.107	0.408	0.203	0.0735	0.0697	0.0285	1.00
May	0.971	0.922	0.614	1.33	0.611	0.813	0.456	0.135	0.119	0.0326	2.53
June	0.822	0.774	0.363	1.22	1.40	0.800	0.785	1.30	1.29	0.426	0.698
July	0.590	0.570	0.0879	0.744	0.0209	0.342	0.260	0.383	0.376	0.0651	1.31
Aug	0.504	0.474	0.528	0.479	0.468	0.496	0.582	0.183	0.172	0.112	0.753
Sept	0.522	0.507	0.204	0.563	0.397	0.257	0.222	0.252	0.247	0.0580	1.21
Oct	2.35	2.26	1.36	2.26	4.60	1.50	0.978	0.748	0.716	0.175	6.20
Nov	0.740	0.681	0.746	1.77	0.289	0.994	0.438	0.249	0.236	0.0959	2.14
Dec	0.539	0.409	0.402	2.55	3.27	2.16	0.393	0.0212	0.0143	0.0834	0.129
Annual	9.56	8.36	5.61	23.0	11.7	19.8	5.39	3.43	3.12	1.86	20.4

Data completeness (Monthly)

2009	SO ₄ ²⁻	nss-SO ₄ ²⁻	NO ₃ ⁻	Cl ⁻	NH ₄ ⁺	Na ⁺	K ⁺	Ca ²⁺	nss-Ca ²⁺	Mg ²⁺	H ⁺	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	86.8	86.8	86.8	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	94.2	94.2	94.2	100
June	60.5	60.5	60.5	60.5	60.5	60.5	60.5	60.5	60.5	60.5	42.5	42.5	42.5	100
July	70.7	70.7	70.7	70.7	70.7	70.7	70.7	70.7	70.7	70.7	70.7	70.7	70.7	100
Aug	100	100	100	100	100	100	100	100	100	100	94.3	94.3	94.3	100
Sept	100	100	100	100	100	100	100	100	100	100	91.6	91.6	91.6	100
Oct	100	100	100	100	100	100	100	100	100	100	79.8	79.8	79.8	100
Nov	81.9	81.9	81.9	81.9	81.9	81.9	81.9	81.9	81.9	81.9	81.9	81.9	81.9	100
Dec	92.0	92.0	92.0	92.0	92.0	92.0	92.0	92.0	92.0	92.0	75.3	75.3	75.3	100
Annual	92.0	92.0	92.0	92.0	92.0	92.0	92.0	92.0	92.0	92.0	85.3	85.3	85.3	100

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

[0.00] for deposition: The deposition was 0 mmol/m² 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%)

Table 3.36 Monthly results

Site: Kuching

Country: Malaysia

Volume-weighted mean concentrations/ Precipitation (Monthly)

2009	SO ₄ ²⁻	nss-SO ₄ ²⁻	NO ₃ ⁻	Cl ⁻	NH ₄ ⁺	Na ⁺	K ⁺	Ca ²⁺	nss-Ca ²⁺	Mg ²⁺	H ⁺	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 ⁻¹ or mm year ⁻¹
Jan	2.96	1.90	1.46	19.4	2.21	17.5	<1.0	0.487	0.212	1.20	3.69	5.43	0.531	1343
Feb	4.29	4.09	4.40	3.95	6.03	3.32	<1.0	1.50	1.46	<0.4	5.46	5.26	0.420	215
Mar	4.41	4.33	6.23	2.12	3.06	1.36	<1.0	2.15	2.12	<0.4	7.33	5.14	0.507	290
Apr	2.71	2.65	3.63	1.73	2.11	1.05	<1.0	1.19	1.17	<0.4	5.90	5.23	0.406	404
May	5.33	5.11	8.30	4.32	6.98	3.68	<1.0	3.85	3.77	<0.4	6.80	5.17	0.588	268
June	3.80	3.64	6.90	4.05	8.31	2.77	<1.0	1.73	1.67	<0.4	5.90	5.23	0.514	319
July	3.31	3.11	4.85	4.56	3.02	3.32	1.13	2.52	2.47	<0.4	5.17	5.29	0.485	158
Aug	6.57	6.28	9.25	4.99	24.4	4.81	1.82	2.95	2.85	<0.4	6.86	5.16	0.842	231
Sept	9.69	9.19	12.2	7.58	28.1	8.30	3.19	6.40	6.22	0.482	6.51	5.19	0.985	133
Oct	3.92	3.77	6.07	3.62	2.73	2.56	<1.0	1.83	1.77	<0.4	8.11	5.09	0.531	627
Nov	2.66	2.45	3.96	3.96	2.27	3.51	<1.0	2.19	2.12	<0.4	4.26	5.37	0.373	294
Dec	2.96	2.65	2.92	6.00	<1.0	5.26	<1.0	2.49	2.37	<0.4	4.06	5.39	0.391	391
Annual	3.78	3.33	4.55	8.41	4.94	7.35	<1.0	1.79	1.66	<0.4	5.47	5.26	0.521	4671
Max.	22.4	21.8	34.0	69.2	265	61.4	12.4	41.7	41.3	5.60	19.1	6.79	3.53	
Min.	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.2	<0.2	<0.4	0.162	4.72	0.199	

Wet deposition (Monthly)

unit: mmol m⁻² month⁻¹ or mmol m⁻² year⁻¹

2009	SO ₄ ²⁻	nss-SO ₄ ²⁻	NO ₃ ⁻	Cl ⁻	NH ₄ ⁺	Na ⁺	K ⁺	Ca ²⁺	nss-Ca ²⁺	Mg ²⁺	H ⁺
Jan	3.98	2.56	1.95	26.0	2.97	23.5	0.620	0.654	0.284	1.61	4.96
Feb	0.921	0.878	0.944	0.848	1.29	0.713	0.0874	0.321	0.313	<0.01	1.17
Mar	1.28	1.26	1.80	0.613	0.887	0.393	0.136	0.623	0.614	<0.01	2.12
Apr	1.10	1.07	1.46	0.698	0.854	0.426	0.151	0.481	0.472	<0.01	2.38
May	1.43	1.37	2.22	1.16	1.87	0.986	0.219	1.03	1.01	0.0294	1.82
June	1.21	1.16	2.20	1.29	2.65	0.884	0.255	0.551	0.532	<0.01	1.88
July	0.521	0.490	0.764	0.719	0.476	<0.01	0.178	0.397	0.389	<0.01	0.815
Aug	1.52	1.45	2.14	1.15	5.65	1.11	0.421	0.683	0.659	0.0467	1.59
Sept	1.29	1.23	1.63	1.01	3.75	1.11	0.426	0.854	0.830	0.0643	0.868
Oct	2.46	2.36	3.80	2.27	1.71	1.60	0.367	1.15	1.11	<0.01	5.09
Nov	0.781	0.719	1.16	1.16	0.666	1.03	0.202	0.643	0.621	<0.01	1.25
Dec	1.16	1.03	1.14	2.34	0.318	2.06	0.183	0.971	0.927	0.0892	1.58
Annual	17.6	15.6	21.2	39.3	23.1	34.3	3.24	8.35	7.76	1.84	25.5

Data completeness (Monthly)

2009	SO ₄ ²⁻	nss-SO ₄ ²⁻	NO ₃ ⁻	Cl ⁻	NH ₄ ⁺	Na ⁺	K ⁺	Ca ²⁺	nss-Ca ²⁺	Mg ²⁺	H ⁺	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
Annual	100	100	100	100	100	100	100	100	100	100	100	100	100	100

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

[0.00] for deposition: The deposition was 0 mmol/m² 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%)

Table 3.37 Monthly results

Site: Ulaanbaatar

Country: Mongolia

Volume-weighted mean concentrations/ Precipitation (Monthly)

2009	SO ₄ ²⁻	nss-SO ₄ ²⁻	NO ₃ ⁻	Cl ⁻	NH ₄ ⁺	Na ⁺	K ⁺	Ca ²⁺	nss-Ca ²⁺	Mg ²⁺	H ⁺	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 ⁻¹ or mm year ⁻¹
Jan	--	--	--	--	--	--	--	--	--	--	--	--	--	0
Feb	--	--	--	--	--	--	--	--	--	--	--	--	--	0
Mar	--	--	--	--	--	--	--	--	--	--	--	--	--	0
Apr	11.5	10.9	10.6	13.5	29.9	8.30	1.30	38.9	38.7	5.35	0.219	6.66	1.71	3.28
May	15.5	15.0	12.3	14.0	40.8	8.35	3.63	51.3	51.2	7.39	2.18	5.66	1.72	38.2
June	15.0	14.7	14.7	10.8	39.3	5.12	3.19	57.9	57.8	7.01	0.152	6.82	1.90	32.3
July	18.1	17.8	22.7	10.1	51.7	3.58	1.75	36.6	36.5	5.22	0.467	6.33	1.63	84.6
Aug	31.5	31.3	24.8	5.84	56.3	3.00	2.49	34.4	34.3	3.38	0.843	6.07	1.97	49.0
Sept	20.5	19.9	13.4	7.18	33.4	9.48	3.80	55.2	55.0	4.84	0.189	6.72	1.94	14.1
Oct	8.10	7.94	6.10	3.10	15.0	2.60	1.00	15.5	15.4	1.25	0.719	6.14	0.836	6.44
Nov	--	--	--	--	--	--	--	--	--	--	--	--	--	0
Dec	--	--	--	--	--	--	--	--	--	--	--	--	--	0
Annual	19.9	19.6	19.1	9.63	46.7	4.88	2.53	42.2	42.1	5.32	0.777	6.11	1.76	228
Max.	260	250	257	71.1	311	158	40.9	857	853	78.6	2.88	7.79	19.6	
Min.	4.15	4.15	5.50	2.30	14.4	<1.0	<1.0	6.50	6.50	<0.4	<0.1	5.54	0.747	

Wet deposition (Monthly)

unit: mmol m⁻²month⁻¹ or mmol m⁻²year⁻¹

2009	SO ₄ ²⁻	nss-SO ₄ ²⁻	NO ₃ ⁻	Cl ⁻	NH ₄ ⁺	Na ⁺	K ⁺	Ca ²⁺	nss-Ca ²⁺	Mg ²⁺	H ⁺
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	0.0376	0.0359	0.0348	0.0443	0.0981	0.0272	<0.01	0.128	0.127	0.0176	<0.01
May	0.594	0.574	0.472	0.536	1.56	0.319	0.139	1.96	1.96	0.283	0.0833
June	0.486	0.476	0.474	0.351	1.27	0.166	0.103	1.87	1.87	0.227	<0.01
July	1.53	1.51	1.92	0.855	4.37	0.303	0.148	3.09	3.09	0.442	0.0395
Aug	1.54	1.54	1.21	0.286	2.76	0.147	0.122	1.68	1.68	0.166	0.0413
Sept	0.289	0.281	0.189	0.101	0.471	0.134	0.0536	0.779	0.776	0.0682	<0.01
Oct	0.0522	0.0512	0.0393	0.0200	0.0966	0.0167	<0.01	0.0995	0.0992	<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
Annual	4.53	4.47	4.35	2.20	10.6	1.11	0.577	9.63	9.60	1.21	0.177

Data completeness (Monthly)

2009	SO ₄ ²⁻	nss-SO ₄ ²⁻	NO ₃ ⁻	Cl ⁻	NH ₄ ⁺	Na ⁺	K ⁺	Ca ²⁺	nss-Ca ²⁺	Mg ²⁺	H ⁺	pH	EC	Precip.
	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%PCL
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	72.3	100	100	100	100
Aug	100	100	100	100	100	100	94.4	100	100	100	100	100	100	100
Sept	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Oct	96.2	96.2	96.2	96.2	96.2	96.2	96.2	96.2	96.2	96.2	100	100	100	100
Nov	--	--	--	--	--	--	--	--	--	--	--	--	--	100
Dec	--	--	--	--	--	--	--	--	--	--	--	--	--	100
Annual	99.9	99.9	99.9	99.9	99.9	99.9	98.7	99.9	99.9	89.6	100	100	100	100

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

[0.00] for deposition: The deposition was 0 mmol/m² 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%)

Table 3.38 Monthly results

Site: Terelj

Country: Mongolia

Volume-weighted mean concentrations/ Precipitation (Monthly)

2009	SO ₄ ²⁻	nss-SO ₄ ²⁻	NO ₃ ⁻	Cl ⁻	NH ₄ ⁺	Na ⁺	K ⁺	Ca ²⁺	nss-Ca ²⁺	Mg ²⁺	H ⁺	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 ⁻¹ or mm year ⁻¹
Jan	--	--	--	--	--	--	--	--	--	--	--	--	--	0
Feb	--	--	--	--	--	--	--	--	--	--	--	--	--	0
Mar	46.5	43.3	19.0	24.8	65.4	51.8	11.5	128	127	20.6	0.110	6.96	4.64	1.81
Apr	4.15	4.13	5.50	4.20	12.7	<1.0	<1.0	8.75	8.74	4.10	0.615	6.21	0.745	4.48
May	23.8	23.2	14.4	8.53	35.8	9.91	5.33	75.1	74.9	7.30	0.569	6.25	4.08	17.7
June	10.3	9.94	17.0	8.31	28.9	5.48	3.79	29.8	29.7	4.71	0.418	6.38	1.25	28.4
July	16.5	16.3	25.2	8.99	47.0	2.42	2.41	23.7	23.7	4.82	0.784	6.11	1.74	41.2
Aug	24.5	23.3	38.1	15.2	80.0	19.5	8.40	43.1	42.7	6.89	0.296	6.53	2.80	10.4
Sept	16.9	16.6	18.2	9.90	12.7	4.30	<1.0	14.2	14.1	2.05	0.933	6.03	1.08	2.90
Oct	7.55	6.06	12.3	23.1	26.0	24.7	9.66	13.0	12.5	2.48	1.10	5.96	1.27	4.12
Nov	--	--	--	--	--	--	--	--	--	--	--	--	--	0
Dec	--	--	--	--	--	--	--	--	--	--	--	--	--	0
Annual	16.5	16.0	21.0	9.95	41.0	7.60	4.10	35.8	35.6	5.45	0.608	6.22	2.06	111
Max.	146	145	115	67.1	157	80.0	36.1	255	254	21.4	3.55	7.09	16.7	
Min.	2.50	2.50	<1.0	3.40	<1.0	<1.0	<1.0	<0.2	<0.2	<0.4	<0.1	5.45	0.341	

Wet deposition (Monthly)

unit: mmol m⁻²month⁻¹ or mmol m⁻²year⁻¹

2009	SO ₄ ²⁻	nss-SO ₄ ²⁻	NO ₃ ⁻	Cl ⁻	NH ₄ ⁺	Na ⁺	K ⁺	Ca ²⁺	nss-Ca ²⁺	Mg ²⁺	H ⁺
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	0.0842	0.0785	0.0344	0.0449	0.119	0.0939	0.0208	0.231	0.229	0.0372	<0.01
Apr	0.0186	0.0185	0.0246	0.0188	0.0569	<0.01	<0.01	0.0392	0.0391	0.0184	<0.01
May	0.420	0.410	0.254	0.151	0.632	0.175	0.0940	1.33	1.32	0.129	0.0100
June	0.292	0.282	0.482	0.236	0.820	0.155	0.108	0.847	0.844	0.134	0.0119
July	0.679	0.673	1.04	0.370	1.94	0.0996	0.0995	0.977	0.975	0.198	0.0323
Aug	0.253	0.241	0.395	0.158	0.829	0.201	0.0870	0.446	0.442	0.0714	<0.01
Sept	0.0488	0.0481	0.0527	0.0287	0.0368	0.0125	<0.01	0.0411	0.0409	<0.01	<0.01
Oct	0.0311	0.0249	0.0506	0.0951	0.107	0.102	0.0398	0.0536	0.0514	0.0102	<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
Annual	1.83	1.78	2.33	1.10	4.54	0.843	0.455	3.97	3.95	0.604	0.0675

Data completeness (Monthly)

2009	SO ₄ ²⁻	nss-SO ₄ ²⁻	NO ₃ ⁻	Cl ⁻	NH ₄ ⁺	Na ⁺	K ⁺	Ca ²⁺	nss-Ca ²⁺	Mg ²⁺	H ⁺	pH	EC	Precip.
	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%PCL
Jan	--	--	--	--	--	--	--	--	--	--	--	--	--	100
Feb	--	--	--	--	--	--	--	--	--	--	--	--	--	100
Mar	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Apr	94.5	94.5	94.5	94.5	94.5	94.5	94.5	94.5	94.5	94.5	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	99.4	99.4	99.4	99.4	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
Annual	99.5	99.5	99.5	99.5	99.8	99.8	99.8	99.8	99.8	99.8	100	100	100	100

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

[0.00] for deposition: The deposition was 0 mmol/m² 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%)

Table 3.39 Monthly results

Site: Yangon

Country: Myanmar

Volume-weighted mean concentrations/ Precipitation (Monthly)

2009	SO ₄ ²⁻	nss-SO ₄ ²⁻	NO ₃ ⁻	Cl ⁻	NH ₄ ⁺	Na ⁺	K ⁺	Ca ²⁺	nss-Ca ²⁺	Mg ²⁺	H ⁺	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 ⁻¹ or mm year ⁻¹
Jan	--	--	--	--	--	--	--	--	--	--	--	--	--	0
Feb	--	--	--	--	--	--	--	--	--	--	--	--	--	0
Mar	*	*	*	*	*	*	*	*	*	*	0.550	6.26	7.72	6.21
Apr	*	*	*	*	*	*	*	*	*	*	0.285	6.54	2.23	27.7
May	*	*	*	*	*	*	*	*	*	*	0.264	6.58	2.14	478
June	*	*	*	*	*	*	*	*	*	*	0.302	6.52	2.59	458
July	10.4	8.87	6.71	38.6	13.4	24.9	12.4	12.0	11.5	3.62	0.299	6.52	1.40	1033
Aug	9.53	7.93	10.6	34.5	19.8	26.6	7.13	16.3	15.7	4.26	0.238	6.62	1.40	378
Sept	4.73	4.09	5.13	10.7	13.8	10.6	1.23	3.79	3.57	1.59	0.670	6.17	0.582	319
Oct	5.66	5.28	6.18	5.81	19.2	6.31	1.19	3.69	3.56	1.10	0.492	6.31	0.468	311
Nov	--	--	--	--	--	--	--	--	--	--	--	--	--	0
Dec	--	--	--	--	--	--	--	--	--	--	--	--	--	0
Annual	8.01	6.90	7.23	25.0	16.2	18.5	6.46	9.66	9.26	2.84	0.346	6.46	1.54	3010
Max.	27.0	26.6	27.2	64.7	98.1	58.6	19.5	24.5	23.6	8.35	1.26	6.67	7.72	
Min.	3.06	2.39	2.85	2.31	9.98	2.48	<1.0	2.62	2.38	0.864	0.214	5.90	0.390	

Wet deposition (Monthly)

unit: mmol m⁻²month⁻¹ or mmol m⁻²year⁻¹

2009	SO ₄ ²⁻	nss-SO ₄ ²⁻	NO ₃ ⁻	Cl ⁻	NH ₄ ⁺	Na ⁺	K ⁺	Ca ²⁺	nss-Ca ²⁺	Mg ²⁺	H ⁺
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	*	*	*	*	*	*	*	*	*	*	<0.01
Apr	*	*	*	*	*	*	*	*	*	*	<0.01
May	*	*	*	*	*	*	*	*	*	*	0.126
June	*	*	*	*	*	*	*	*	*	*	0.138
July	10.7	9.16	6.93	39.9	13.8	25.7	12.8	12.4	11.9	3.74	0.309
Aug	3.60	3.00	4.00	13.1	7.48	10.1	2.70	6.16	5.94	1.61	0.0899
Sept	1.51	1.30	1.63	3.39	4.38	3.38	0.391	1.21	1.14	0.506	0.213
Oct	1.76	1.64	1.92	1.81	5.96	1.96	0.370	1.15	1.11	0.341	0.153
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
Annual	24.1	20.8	21.8	75.3	48.9	55.7	19.4	29.1	27.9	8.54	1.04

Data completeness (Monthly)

2009	SO ₄ ²⁻	nss-SO ₄ ²⁻	NO ₃ ⁻	Cl ⁻	NH ₄ ⁺	Na ⁺	K ⁺	Ca ²⁺	nss-Ca ²⁺	Mg ²⁺	H ⁺	pH	EC	Precip.
	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%PCL
Jan	--	--	--	--	--	--	--	--	--	--	--	--	--	100
Feb	--	--	--	--	--	--	--	--	--	--	--	--	--	100
Mar	0	0	0	0	0	0	0	0	0	0	100	100	100	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	100	100	100	100
June	0	0	0	0	0	0	0	0	0	0	100	100	100	100
July	49.4	49.4	49.4	49.4	49.4	49.4	49.4	49.4	49.4	49.4	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
Annual	50.4	50.4	50.4	50.4	50.4	50.4	50.4	50.4	50.4	50.4	100	100	100	100

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

[0.00] for deposition: The deposition was 0 mmol/m² 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%)

Table 3.40 Monthly results

Site: Metro Manila

Country: Philippines

Volume-weighted mean concentrations/ Precipitation (Monthly)

2009	SO ₄ ²⁻	nss-SO ₄ ²⁻	NO ₃ ⁻	Cl ⁻	NH ₄ ⁺	Na ⁺	K ⁺	Ca ²⁺	nss-Ca ²⁺	Mg ²⁺	H ⁺	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 ⁻¹ or mm year ⁻¹
Jan	*	*	*	*	*	*	*	*	*	*	*	*	*	241
Feb	21.9	19.9	12.2	11.6	13.0	32.6	4.81	14.3	13.6	<0.4	0.525	6.28	2.46	10.4
Mar	36.0	<1.0	20.5	2130	<1.0	1740	135	96.8	59.2	33.0	457	3.34	45.9	430
Apr	18.2	17.5	14.1	7.93	13.3	13.0	1.93	12.2	11.9	2.63	1.67	5.78	0.971	136
May	17.4	16.9	9.34	10.4	22.2	8.22	1.36	13.4	13.2	<0.4	3.47	5.46	0.874	197
June	14.1	13.1	16.0	18.3	24.2	16.9	2.94	7.23	6.86	3.13	1.83	5.74	1.14	546
July	12.0	10.6	11.6	22.3	21.6	22.0	1.84	6.50	6.02	1.99	1.16	5.94	1.03	625
Aug	9.82	7.47	2.43	56.6	17.8	39.0	3.52	5.26	4.42	5.06	5.79	5.24	1.99	336
Sept	9.13	8.76	1.17	8.93	3.56	6.09	3.30	2.82	2.68	1.83	10.1	5.00	0.770	993
Oct	34.0	37.7	31.6	49.7	98.5	34.4	13.1	14.2	13.4	2.20	1.55	5.81	2.30	204
Nov	19.7	16.0	7.37	77.9	142	61.8	32.5	<0.2	<0.2	6.95	<0.1	7.34	6.03	56.8
Dec	*	*	*	*	*	*	*	*	*	*	*	*	*	6.40
Annual	13.6	12.6	8.68	24.6	21.1	20.2	3.99	6.41	5.98	2.56	5.87	5.23	1.24	3782
Max.	66.7	64.1	59.7	2130	192	1740	135	96.8	59.2	33.0	457	7.34	45.9	
Min.	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.2	<0.2	<0.4	<0.1	3.34	0.533	

Wet deposition (Monthly)

unit: mmol m⁻²month⁻¹ or mmol m⁻²year⁻¹

2009	SO ₄ ²⁻	nss-SO ₄ ²⁻	NO ₃ ⁻	Cl ⁻	NH ₄ ⁺	Na ⁺	K ⁺	Ca ²⁺	nss-Ca ²⁺	Mg ²⁺	H ⁺
Jan	*	*	*	*	*	*	*	*	*	*	*
Feb	0.227	0.207	0.127	0.121	0.135	0.339	0.0500	0.149	0.142	<0.01	<0.01
Mar	15.5	<0.01	8.80	914	<0.01	748	58.1	41.6	25.5	14.2	197
Apr	2.48	2.38	1.92	1.08	1.82	1.77	0.263	1.66	1.62	0.358	0.228
May	3.42	3.32	1.84	2.05	4.36	1.62	0.266	2.63	2.59	<0.01	0.682
June	7.70	7.14	8.73	10.0	13.2	9.22	1.61	3.95	3.75	1.71	1.000
July	7.48	6.65	7.24	13.9	13.5	13.7	1.15	4.06	3.76	1.24	0.725
Aug	3.30	2.51	0.817	19.1	5.99	13.1	1.18	1.77	1.49	1.70	1.95
Sept	9.06	8.70	1.16	8.87	3.53	6.05	3.28	2.80	2.67	1.82	10.0
Oct	6.94	7.69	6.45	10.1	20.1	7.02	2.67	2.89	2.74	0.449	0.317
Nov	1.12	0.906	0.419	4.42	8.06	3.51	1.84	<0.01	<0.01	0.395	<0.01
Dec	*	*	*	*	*	*	*	*	*	*	*
Annual	51.3	47.7	32.8	92.9	79.7	76.5	15.1	24.2	22.6	9.69	22.2

Data completeness (Monthly)

2009	SO ₄ ²⁻	nss-SO ₄ ²⁻	NO ₃ ⁻	Cl ⁻	NH ₄ ⁺	Na ⁺	K ⁺	Ca ²⁺	nss-Ca ²⁺	Mg ²⁺	H ⁺	pH	EC	Precip.
	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%PCL
Jan	0	0	0	0	0	0	0	0	0	0	0	0	0	100
Feb	75.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0	100
Mar	0.698	0.698	0.698	0.698	0.698	0.698	0.698	0.698	0.698	0.698	0.698	0.698	0.698	100
Apr	94.1	94.1	94.1	94.1	94.1	94.1	94.1	94.1	94.1	94.1	94.1	94.1	94.1	100
May	57.7	57.7	57.7	57.7	57.7	57.7	57.7	57.7	57.7	57.7	57.7	57.7	57.7	100
June	63.7	63.7	63.7	63.7	63.7	63.7	63.7	63.7	63.7	63.7	63.7	63.7	63.7	100
July	61.1	61.1	61.1	61.1	61.1	61.1	61.1	61.1	61.1	61.1	61.1	61.1	61.1	100
Aug	100	100	100	100	100	100	100	100	100	100	67.7	67.7	67.7	100
Sept	85.3	85.3	85.3	100	85.3	85.3	85.3	85.3	85.3	85.3	85.3	85.3	85.3	100
Oct	100	85.6	85.6	85.6	85.6	85.6	85.6	85.6	85.6	85.6	85.6	85.6	85.6	100
Nov	30.8	30.8	30.8	30.8	30.8	30.8	30.8	30.8	30.8	30.8	30.8	30.8	30.8	100
Dec	0	0	0	0	0	0	0	0	0	0	0	0	0	100
Annual	63.1	62.3	62.3	66.2	62.3	62.3	62.3	62.3	62.3	62.3	59.5	59.5	59.5	100

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

[0.00] for deposition: The deposition was 0 mmol/m² 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%)

Table 3.41 Monthly results

Site: Los Banos

Country: Philippines

Volume-weighted mean concentrations/ Precipitation (Monthly)

2009	SO ₄ ²⁻	nss-SO ₄ ²⁻	NO ₃ ⁻	Cl ⁻	NH ₄ ⁺	Na ⁺	K ⁺	Ca ²⁺	nss-Ca ²⁺	Mg ²⁺	H ⁺	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 ⁻¹ or mm year ⁻¹
Jan	21.9	20.6	36.0	12.4	47.3	21.3	4.27	18.6	18.2	7.45	0.355	6.45	1.98	216
Feb	*	*	*	*	*	*	*	*	*	*	*	*	*	54.6
Mar	9.54	7.83	5.14	31.8	<1.0	28.4	4.42	5.53	4.92	4.57	1.84	5.74	0.889	131
Apr	11.8	10.8	5.43	21.1	2.25	16.5	3.44	7.44	7.08	4.09	2.78	5.56	0.671	278
May	6.67	5.55	6.13	15.7	4.28	18.6	3.60	3.72	3.32	3.02	1.54	5.81	0.606	307
June	9.15	8.12	7.34	17.1	2.67	17.1	2.84	4.08	3.71	3.33	2.75	5.56	0.767	282
July	9.25	8.33	9.92	13.1	10.3	15.3	5.93	5.00	4.67	3.54	2.29	5.64	0.812	295
Aug	11.4	10.0	8.08	88.9	8.64	22.2	58.5	9.11	8.63	5.70	4.15	5.38	1.21	289
Sept	5.10	4.70	5.00	10.7	12.3	6.53	1.86	2.11	1.97	2.09	2.59	5.59	0.451	472
Oct	5.51	4.85	5.20	12.0	17.5	10.8	2.36	1.12	0.914	2.61	3.99	5.40	0.576	466
Nov	8.02	3.64	2.35	76.2	22.9	72.6	4.67	3.79	2.22	6.67	0.350	6.46	1.29	94.4
Dec	10.1	5.75	1.52	113	44.4	72.2	6.29	5.14	3.58	6.75	2.57	5.59	1.83	14.8
Annual	8.82	7.77	8.01	25.0	11.7	17.4	9.08	5.08	4.71	3.73	2.64	5.58	0.802	2900
Max.	31.9	31.4	49.8	202	150	151	142	18.6	18.2	13.9	36.3	6.72	2.82	
Min.	1.89	1.47	<1.0	4.57	<1.0	<1.0	<1.0	<0.2	<0.2	<0.4	0.191	4.44	0.263	

Wet deposition (Monthly)

unit: mmol m⁻²month⁻¹ or mmol m⁻²year⁻¹

2009	SO ₄ ²⁻	nss-SO ₄ ²⁻	NO ₃ ⁻	Cl ⁻	NH ₄ ⁺	Na ⁺	K ⁺	Ca ²⁺	nss-Ca ²⁺	Mg ²⁺	H ⁺
Jan	4.73	4.45	7.78	2.67	10.2	4.61	0.924	4.03	3.93	1.61	0.0768
Feb	*	*	*	*	*	*	*	*	*	*	*
Mar	1.25	1.03	0.674	4.16	0.0431	3.73	0.579	0.725	0.645	0.600	0.241
Apr	3.29	3.01	1.51	5.86	0.625	4.58	0.955	2.07	1.97	1.14	0.773
May	2.05	1.70	1.88	4.82	1.31	5.71	1.10	1.14	1.02	0.926	0.472
June	2.58	2.29	2.07	4.82	0.755	4.84	0.802	1.15	1.05	0.940	0.776
July	2.73	2.46	2.93	3.86	3.05	4.52	1.75	1.48	1.38	1.04	0.676
Aug	3.29	2.90	2.33	25.7	2.49	6.41	16.9	2.63	2.49	1.65	1.20
Sept	2.41	2.22	2.36	5.06	5.82	3.08	0.880	0.998	0.932	0.989	1.22
Oct	2.57	2.26	2.42	5.61	8.18	5.06	1.10	0.521	0.426	1.22	1.86
Nov	0.757	0.344	0.222	7.19	2.16	6.85	0.441	0.358	0.210	0.630	0.0331
Dec	0.149	0.0850	0.0224	1.67	0.657	1.07	0.0931	0.0761	0.0530	0.0998	0.0380
Annual	25.6	22.5	23.2	72.6	33.9	50.5	26.3	14.7	13.7	10.8	7.64

Data completeness (Monthly)

2009	SO ₄ ²⁻	nss-SO ₄ ²⁻	NO ₃ ⁻	Cl ⁻	NH ₄ ⁺	Na ⁺	K ⁺	Ca ²⁺	nss-Ca ²⁺	Mg ²⁺	H ⁺	pH	EC	Precip.
	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%PCL
Jan	75.5	75.5	75.5	75.5	75.5	75.5	75.5	75.5	75.5	75.5	75.5	75.5	75.5	100
Feb	0	0	0	0	0	0	0	0	0	0	0	0	0	100
Mar	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	100
Apr	99.1	99.1	99.1	99.1	99.1	99.1	99.1	99.1	99.1	99.1	99.1	99.1	99.1	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	93.6	93.6	93.6	93.6	93.6	93.6	93.6	93.6	93.6	93.6	93.6	93.6	93.6	100
Dec	60.1	60.1	60.1	60.1	60.1	60.1	60.1	60.1	60.1	60.1	60.1	60.1	60.1	100
Annual	95.8	95.8	95.8	95.8	95.8	95.8	95.8	95.8	95.8	95.8	95.8	95.8	95.8	100

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

[0.00] for deposition: The deposition was 0 mmol/m² 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%)

Table 3.42 Monthly results

Site: Mt. Sto. Tomas

Country: Philippines

Volume-weighted mean concentrations/ Precipitation (Monthly)

2009	SO ₄ ²⁻	nss-SO ₄ ²⁻	NO ₃ ⁻	Cl ⁻	NH ₄ ⁺	Na ⁺	K ⁺	Ca ²⁺	nss-Ca ²⁺	Mg ²⁺	H ⁺	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 ⁻¹ or mm year ⁻¹
Jan	*	*	*	*	*	*	*	*	*	*	*	*	*	26.4
Feb	3.78	3.58	7.27	4.31	21.9	3.38	2.22	5.14	5.07	0.872	0.493	6.31	0.474	81.4
Mar	5.53	5.22	8.88	6.91	21.5	5.19	1.89	6.76	6.65	0.926	0.496	6.30	0.525	79.2
Apr	4.01	3.70	5.79	3.54	18.8	5.07	1.96	4.91	4.80	0.562	0.628	6.20	0.369	470
May	2.48	2.19	5.18	1.55	11.1	4.85	2.36	5.28	5.17	<0.4	0.528	6.28	0.289	391
June	5.25	4.65	4.27	10.3	31.2	10.1	3.09	5.17	4.96	2.83	2.15	5.67	0.699	643
July	3.92	3.69	3.27	2.49	11.9	3.71	<1.0	3.45	3.37	0.627	1.04	5.98	0.273	768
Aug	10.2	8.42	6.79	34.6	13.0	29.8	3.19	4.93	4.29	3.78	4.25	5.37	0.985	599
Sept	3.51	3.42	2.81	1.83	13.1	1.52	<1.0	8.67	8.64	0.778	0.757	6.12	0.376	553
Oct	5.04	4.73	1.40	4.93	4.71	5.18	2.18	7.69	7.58	1.46	1.06	5.98	0.448	1113
Nov	*	*	*	*	*	*	*	*	*	*	*	*	*	2.40
Dec	--	--	--	--	--	--	--	--	--	--	--	--	--	0
Annual	5.04	4.54	3.94	8.31	14.1	8.26	1.95	5.87	5.69	1.53	1.47	5.83	0.495	4727
Max.	15.6	12.3	15.0	64.8	92.5	54.6	7.75	27.3	27.1	8.39	7.41	7.28	1.56	
Min.	1.98	1.69	<1.0	<1.0	3.16	<1.0	<1.0	0.998	0.977	<0.4	<0.1	5.13	0.185	

Wet deposition (Monthly)

unit: mmol m⁻²month⁻¹ or mmol m⁻²year⁻¹

2009	SO ₄ ²⁻	nss-SO ₄ ²⁻	NO ₃ ⁻	Cl ⁻	NH ₄ ⁺	Na ⁺	K ⁺	Ca ²⁺	nss-Ca ²⁺	Mg ²⁺	H ⁺
Jan	*	*	*	*	*	*	*	*	*	*	*
Feb	0.308	0.291	0.592	0.351	1.78	0.275	0.180	0.419	0.413	0.0709	0.0401
Mar	0.438	0.414	0.703	0.547	1.71	0.411	0.150	0.535	0.526	0.0734	0.0393
Apr	1.88	1.74	2.72	1.66	8.81	2.38	0.919	2.31	2.25	0.264	0.295
May	0.970	0.856	2.03	0.606	4.34	1.90	0.922	2.06	2.02	0.149	0.206
June	3.38	2.99	2.74	6.62	20.1	6.49	1.99	3.33	3.19	1.82	1.38
July	3.01	2.84	2.51	1.91	9.18	2.85	0.321	2.65	2.58	0.482	0.802
Aug	6.12	5.04	4.07	20.7	7.81	17.8	1.91	2.95	2.57	2.26	2.55
Sept	1.94	1.89	1.55	1.01	7.22	0.842	0.362	4.79	4.78	0.430	0.419
Oct	5.61	5.27	1.55	5.49	5.25	5.76	2.43	8.56	8.44	1.62	1.18
Nov	*	*	*	*	*	*	*	*	*	*	*
Dec	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	23.8	21.5	18.6	39.3	66.7	39.1	9.24	27.8	26.9	7.23	6.96

Data completeness (Monthly)

2009	SO ₄ ²⁻	nss-SO ₄ ²⁻	NO ₃ ⁻	Cl ⁻	NH ₄ ⁺	Na ⁺	K ⁺	Ca ²⁺	nss-Ca ²⁺	Mg ²⁺	H ⁺	pH	EC	Precip.
	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%PCL
Jan	0	0	0	0	0	0	0	0	0	0	0	0	0	100
Feb	95.8	95.8	95.8	95.8	95.8	95.8	95.8	95.8	95.8	95.8	95.8	95.8	95.8	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	98.8	98.8	98.8	98.8	98.8	98.8	98.8	98.8	98.8	98.8	98.8	98.8	98.8	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	98.3	98.3	98.3	98.3	98.3	98.3	98.3	98.3	98.3	98.3	98.3	98.3	98.3	100
Nov	0	0	0	0	0	0	0	0	0	0	0	0	0	100
Dec	--	--	--	--	--	--	--	--	--	--	--	--	--	100
Annual	98.8	98.8	98.8	98.8	98.8	98.8	98.8	98.8	98.8	98.8	98.8	98.8	98.8	100

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

[0.00] for deposition: The deposition was 0 mmol/m² 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%)

Table 3.43 Monthly results

Site: Kanghwa

Country: Republic of Korea

Volume-weighted mean concentrations/ Precipitation (Monthly)

2009	SO ₄ ²⁻	nss-SO ₄ ²⁻	NO ₃ ⁻	Cl ⁻	NH ₄ ⁺	Na ⁺	K ⁺	Ca ²⁺	nss-Ca ²⁺	Mg ²⁺	H ⁺	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 ⁻¹ or mm year ⁻¹
Jan	46.4	41.0	130	119	48.7	88.9	23.3	10.9	9.01	46.4	100	4.00	9.50	0.500
Feb	98.7	92.4	75.9	114	99.6	105	13.2	9.38	7.12	45.3	34.4	4.46	7.64	14.5
Mar	27.0	24.5	46.1	45.0	22.0	42.5	38.1	14.8	13.9	4.29	19.8	4.70	2.83	55.6
Apr	34.1	31.7	43.5	43.3	43.6	39.9	24.1	3.40	2.53	27.3	8.51	5.07	2.77	30.2
May	52.6	51.1	28.0	43.0	55.7	25.8	16.1	9.87	9.31	3.96	37.6	4.43	4.71	84.6
June	36.6	34.4	16.4	44.9	40.1	36.3	7.92	10.8	10.0	6.47	16.4	4.79	3.45	150
July	12.6	11.1	7.55	33.7	14.0	24.9	3.01	1.13	0.610	0.913	11.9	4.93	1.28	517
Aug	38.3	33.8	19.7	103	41.7	74.6	9.51	4.56	2.95	7.38	44.3	4.35	3.69	327
Sept	33.8	31.6	21.1	44.4	41.5	35.9	3.71	7.17	6.39	3.86	31.6	4.50	3.40	29.1
Oct	41.5	37.7	24.1	92.7	27.6	63.0	6.04	9.97	8.61	7.02	75.7	4.12	7.22	32.4
Nov	72.7	59.6	86.6	169	7.08	216	39.3	37.4	32.7	13.7	42.1	4.38	6.74	6.50
Dec	63.7	55.7	88.0	198	45.8	134	27.5	10.6	7.71	15.9	50.1	4.30	6.48	19.5
Annual	29.2	26.5	18.9	60.2	30.5	45.1	8.97	5.19	4.23	5.27	25.9	4.59	2.88	1266
Max.	154	147	130	253	197	371	61.2	67.6	59.6	67.0	158	5.40	13.8	
Min.	2.45	2.27	5.54	1.50	<1.0	3.06	<1.0	0.322	<0.2	<0.4	3.98	3.80	0.570	

Wet deposition (Monthly)

unit: mmol m⁻²month⁻¹ or mmol m⁻²year⁻¹

2009	SO ₄ ²⁻	nss-SO ₄ ²⁻	NO ₃ ⁻	Cl ⁻	NH ₄ ⁺	Na ⁺	K ⁺	Ca ²⁺	nss-Ca ²⁺	Mg ²⁺	H ⁺
Jan	0.0232	0.0205	0.0648	0.0595	0.0243	0.0445	0.0116	<0.01	<0.01	0.0232	0.0500
Feb	1.43	1.34	1.10	1.66	1.44	1.52	0.191	0.136	0.103	0.657	0.498
Mar	1.50	1.36	2.56	2.50	1.22	2.36	2.12	0.823	0.772	0.238	1.10
Apr	1.03	0.957	1.31	1.31	1.32	1.20	0.727	0.103	0.0765	0.823	0.257
May	4.45	4.32	2.37	3.64	4.72	2.18	1.36	0.835	0.788	0.335	3.18
June	5.50	5.17	2.45	6.73	6.01	5.44	1.19	1.62	1.50	0.971	2.45
July	6.52	5.74	3.90	17.4	7.22	12.9	1.56	0.583	0.315	0.472	6.12
Aug	12.5	11.0	6.44	33.6	13.6	24.4	3.10	1.49	0.962	2.41	14.5
Sept	0.984	0.921	0.615	1.29	1.21	1.05	0.108	0.209	0.186	0.112	0.920
Oct	1.34	1.22	0.782	3.00	0.893	2.04	0.196	0.323	0.279	0.228	2.45
Nov	0.472	0.388	0.563	1.10	0.0460	1.41	0.255	0.243	0.213	0.0888	0.274
Dec	1.24	1.09	1.72	3.87	0.893	2.61	0.536	0.207	0.150	0.310	0.977
Annual	37.0	33.6	23.9	76.2	38.6	57.1	11.3	6.57	5.35	6.67	32.7

Data completeness (Monthly)

2009	SO ₄ ²⁻	nss-SO ₄ ²⁻	NO ₃ ⁻	Cl ⁻	NH ₄ ⁺	Na ⁺	K ⁺	Ca ²⁺	nss-Ca ²⁺	Mg ²⁺	H ⁺	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
Annual	100	100	100	100	100	100	100	100	100	100	100	100	100	100

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

[0.00] for deposition: The deposition was 0 mmol/m² 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%)

Table 3.44 Monthly results

Site: Cheju

Country: Republic of Korea

Volume-weighted mean concentrations/ Precipitation (Monthly)

2009	SO ₄ ²⁻	nss-SO ₄ ²⁻	NO ₃ ⁻	Cl ⁻	NH ₄ ⁺	Na ⁺	K ⁺	Ca ²⁺	nss-Ca ²⁺	Mg ²⁺	H ⁺	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 ⁻¹ or mm year ⁻¹
Jan	38.9	24.5	24.8	265	10.8	239	16.4	19.9	14.8	26.7	23.2	4.63	7.61	20.5
Feb	16.7	14.1	24.9	58.0	25.6	43.4	6.18	6.25	5.31	8.40	7.12	5.15	1.93	127
Mar	20.7	18.1	44.7	58.1	43.0	44.0	11.9	6.30	5.35	6.80	23.3	4.63	2.86	8.10
Apr	11.1	7.95	14.9	41.3	12.9	53.1	6.38	1.33	0.245	3.62	3.55	5.45	1.29	112
May	34.0	33.5	65.8	7.81	11.4	8.08	24.1	13.5	13.3	24.2	16.0	4.80	2.81	54.9
June	23.4	20.0	11.8	45.3	21.4	55.9	3.83	3.42	2.21	3.40	7.67	5.12	2.04	188
July	22.3	17.1	21.7	87.2	54.6	87.6	13.9	2.35	0.566	3.67	2.59	5.59	2.78	145
Aug	73.6	72.6	11.8	61.6	182	16.2	8.28	5.48	5.15	7.10	7.65	5.12	3.29	97.4
Sept	33.0	31.3	14.4	84.0	109	28.0	17.1	2.45	1.85	7.22	6.44	5.19	2.52	73.7
Oct	3.64	3.09	4.08	30.9	26.1	9.13	7.73	2.93	2.74	1.22	0.794	6.10	0.750	70.5
Nov	18.2	13.6	14.3	85.4	10.3	76.5	10.8	1.24	0.245	2.44	14.3	4.84	1.47	141
Dec	64.8	48.5	97.2	249	52.1	270	14.5	9.91	4.08	21.7	130	3.89	7.38	1.00
Annual	25.3	22.1	18.6	63.7	45.2	53.6	9.75	4.08	3.03	6.02	7.79	5.11	2.20	1039
Max.	113	112	160	702	313	586	64.2	37.8	30.1	52.1	222	6.80	16.6	
Min.	3.64	2.76	2.57	1.55	<1.0	1.85	<1.0	<0.2	<0.2	<0.4	0.16	3.65	0.470	

Wet deposition (Monthly)

unit: mmol m⁻²month⁻¹ or mmol m⁻²year⁻¹

2009	SO ₄ ²⁻	nss-SO ₄ ²⁻	NO ₃ ⁻	Cl ⁻	NH ₄ ⁺	Na ⁺	K ⁺	Ca ²⁺	nss-Ca ²⁺	Mg ²⁺	H ⁺
Jan	0.797	0.501	0.507	5.43	0.221	4.90	0.336	0.409	0.303	0.548	0.476
Feb	2.12	1.79	3.16	7.35	3.24	5.51	0.783	0.793	0.674	1.07	0.903
Mar	0.168	0.147	0.362	0.471	0.348	0.356	0.0961	0.0511	0.0434	0.0551	0.188
Apr	1.24	0.886	1.66	4.61	1.44	5.92	0.711	0.148	0.0273	0.404	0.396
May	1.87	1.84	3.61	0.429	0.623	0.444	1.32	0.741	0.731	1.33	0.879
June	4.40	3.77	2.23	8.52	4.02	10.5	0.721	0.643	0.416	0.640	1.44
July	3.24	2.47	3.15	12.6	7.93	12.7	2.02	0.341	0.0822	0.532	0.376
Aug	7.17	7.07	1.15	6.00	17.8	1.58	0.806	0.534	0.501	0.691	0.745
Sept	2.43	2.31	1.06	6.19	8.04	2.06	1.26	0.181	0.136	0.532	0.475
Oct	0.257	0.218	0.288	2.18	1.84	0.644	0.545	0.207	0.193	0.0861	0.0560
Nov	2.57	1.92	2.02	12.0	1.46	10.8	1.52	0.175	0.0346	0.345	2.02
Dec	0.0648	0.0485	0.0972	0.249	0.0521	0.270	0.0145	<0.01	<0.01	0.0217	0.130
Annual	26.3	23.0	19.3	66.1	47.0	55.7	10.1	4.23	3.15	6.25	8.09

Data completeness (Monthly)

2009	SO ₄ ²⁻	nss-SO ₄ ²⁻	NO ₃ ⁻	Cl ⁻	NH ₄ ⁺	Na ⁺	K ⁺	Ca ²⁺	nss-Ca ²⁺	Mg ²⁺	H ⁺	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
Annual	100	100	100	100	100	100	100	100	100	100	100	100	100	100

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

[0.00] for deposition: The deposition was 0 mmol/m² 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%)

Table 3.45 Monthly results

Site: Imsil

Country: Republic of Korea

Volume-weighted mean concentrations/ Precipitation (Monthly)

2009	SO ₄ ²⁻	nss-SO ₄ ²⁻	NO ₃ ⁻	Cl ⁻	NH ₄ ⁺	Na ⁺	K ⁺	Ca ²⁺	nss-Ca ²⁺	Mg ²⁺	H ⁺	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 ⁻¹ or mm year ⁻¹
Jan	12.2	11.2	39.3	21.2	25.4	15.6	3.57	5.92	5.59	6.08	31.6	4.50	2.36	7.00
Feb	14.8	13.7	31.7	17.3	30.4	18.6	4.28	1.83	1.42	9.77	2.00	5.70	1.52	49.5
Mar	15.6	13.2	35.4	46.6	23.0	40.1	9.28	6.20	5.34	9.84	3.61	5.44	2.17	31.5
Apr	23.5	20.7	31.0	47.5	21.3	46.0	9.21	12.6	11.6	3.38	10.9	4.96	2.47	35.0
May	22.9	20.3	23.1	16.4	31.8	43.3	6.91	1.29	0.513	0.705	7.37	5.13	1.72	120
June	26.1	22.8	13.2	44.1	41.2	54.0	15.3	3.66	2.50	3.01	1.40	5.85	2.26	141
July	12.6	10.7	10.6	22.8	17.0	32.5	5.57	1.23	0.528	0.966	3.77	5.42	1.10	451
Aug	13.8	10.4	24.0	135	70.7	56.6	19.2	1.79	0.703	8.31	21.3	4.67	3.06	116
Sept	7.95	6.46	17.3	94.0	65.1	24.6	7.70	1.27	0.742	6.00	24.2	4.62	2.18	35.5
Oct	42.6	37.5	39.0	65.7	70.5	84.9	27.8	8.46	6.62	3.19	1.61	5.79	2.98	30.0
Nov	92.3	75.0	143	310	95.2	288	40.8	42.1	35.9	27.6	11.5	4.94	7.51	18.4
Dec	53.9	41.5	93.2	181	80.6	206	36.2	25.4	21.0	13.6	41.4	4.38	5.47	34.3
Annual	19.6	16.6	22.3	51.9	35.2	50.3	10.9	3.88	2.83	3.88	8.06	5.09	1.98	1069
Max.	192	160	304	759	379	654	184	126	112	81.2	126	7.10	16.4	
Min.	3.33	2.07	3.43	<1.0	<1.0	11.4	1.48	0.236	<0.2	<0.4	<0.1	3.90	0.490	

Wet deposition (Monthly)

unit: mmol m⁻²month⁻¹ or mmol m⁻²year⁻¹

2009	SO ₄ ²⁻	nss-SO ₄ ²⁻	NO ₃ ⁻	Cl ⁻	NH ₄ ⁺	Na ⁺	K ⁺	Ca ²⁺	nss-Ca ²⁺	Mg ²⁺	H ⁺
Jan	0.0853	0.0787	0.275	0.149	0.178	0.109	0.0250	0.0415	0.0391	0.0426	0.221
Feb	0.734	0.679	1.57	0.857	1.51	0.921	0.212	0.0904	0.0705	0.483	0.0988
Mar	0.492	0.416	1.12	1.47	0.725	1.26	0.292	0.195	0.168	0.310	0.114
Apr	0.821	0.724	1.09	1.66	0.745	1.61	0.322	0.439	0.405	0.118	0.383
May	2.75	2.44	2.77	1.97	3.82	5.20	0.829	0.155	0.0616	0.0846	0.884
June	3.66	3.21	1.86	6.19	5.78	7.58	2.14	0.515	0.351	0.423	0.197
July	5.70	4.81	4.80	10.3	7.66	14.7	2.51	0.552	0.238	0.436	1.70
Aug	1.61	1.21	2.78	15.7	8.21	6.58	2.22	0.208	0.0816	0.965	2.48
Sept	0.282	0.229	0.614	3.34	2.31	0.873	0.273	0.0452	0.0263	0.213	0.860
Oct	1.28	1.13	1.17	1.97	2.11	2.55	0.834	0.254	0.199	0.0956	0.0482
Nov	1.70	1.38	2.64	5.70	1.75	5.30	0.752	0.775	0.661	0.508	0.212
Dec	1.85	1.42	3.20	6.23	2.76	7.08	1.24	0.872	0.719	0.467	1.42
Annual	21.0	17.7	23.9	55.5	37.6	53.7	11.7	4.14	3.02	4.14	8.62

Data completeness (Monthly)

2009	SO ₄ ²⁻	nss-SO ₄ ²⁻	NO ₃ ⁻	Cl ⁻	NH ₄ ⁺	Na ⁺	K ⁺	Ca ²⁺	nss-Ca ²⁺	Mg ²⁺	H ⁺	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
Annual	100	100	100	100	100	100	100	100	100	100	100	100	100	100

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

[0.00] for deposition: The deposition was 0 mmol/m² 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%)

Table 3.46 Monthly results

Site: Mondy

Country: Russia

Volume-weighted mean concentrations/ Precipitation (Monthly)

2009	SO ₄ ²⁻	nss-SO ₄ ²⁻	NO ₃ ⁻	Cl ⁻	NH ₄ ⁺	Na ⁺	K ⁺	Ca ²⁺	nss-Ca ²⁺	Mg ²⁺	H ⁺	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 ⁻¹ or mm year ⁻¹
Jan	--	--	--	--	--	--	--	--	--	--	--	--	--	0
Feb	20.8	20.5	21.9	1.70	9.40	5.22	4.90	36.9	36.8	7.00	0.525	6.28	1.37	2.90
Mar	13.9	13.5	18.2	2.30	17.8	7.39	3.30	41.9	41.7	7.80	0.282	6.55	1.54	1.10
Apr	--	--	--	--	--	--	--	--	--	--	--	--	--	0
May	--	--	--	--	--	--	--	--	--	--	--	--	--	0
June	5.72	5.57	8.61	2.94	22.2	2.47	1.19	4.92	4.87	1.11	1.78	5.75	0.565	28.6
July	7.72	7.63	6.87	2.93	14.8	1.52	1.98	3.60	3.57	0.718	4.88	5.31	0.545	64.3
Aug	12.5	12.2	9.70	6.80	52.7	4.80	14.3	4.70	4.60	1.60	0.389	6.41	1.01	14.1
Sept	1.25	1.22	2.40	2.30	1.10	<1.0	<1.0	0.500	0.491	0.400	4.37	5.36	0.230	4.20
Oct	3.23	3.07	5.50	1.40	5.00	2.61	2.30	6.20	6.14	2.10	1.38	5.86	0.460	3.50
Nov	--	--	--	--	--	--	--	--	--	--	--	--	--	0
Dec	--	--	--	--	--	--	--	--	--	--	--	--	--	0
Annual	7.82	7.69	7.90	3.29	20.2	2.28	3.29	5.19	5.14	1.17	3.33	5.48	0.621	119
Max.	20.8	20.5	22.6	7.90	52.7	7.39	14.3	41.9	41.7	7.80	7.76	6.55	1.54	
Min.	1.25	1.22	2.40	<1.0	1.10	<1.0	<1.0	0.500	0.491	0.400	0.282	5.11	0.230	

Wet deposition (Monthly)

unit: mmol m⁻²month⁻¹ or mmol m⁻²year⁻¹

2009	SO ₄ ²⁻	nss-SO ₄ ²⁻	NO ₃ ⁻	Cl ⁻	NH ₄ ⁺	Na ⁺	K ⁺	Ca ²⁺	nss-Ca ²⁺	Mg ²⁺	H ⁺
Jan	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Feb	0.0604	0.0595	0.0635	<0.01	0.0273	0.0151	0.0142	0.107	0.107	0.0203	<0.01
Mar	0.0153	0.0149	0.0200	<0.01	0.0196	<0.01	<0.01	0.0461	0.0459	<0.01	<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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
June	0.164	0.159	0.246	0.0840	0.636	0.0707	0.0341	0.141	0.139	0.0317	0.0510
July	0.497	0.491	0.442	0.189	0.952	0.0979	0.127	0.232	0.230	0.0462	0.314
Aug	0.176	0.172	0.137	0.0959	0.743	0.0677	0.202	0.0663	0.0648	0.0226	<0.01
Sept	<0.01	<0.01	0.0101	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.0183
Oct	0.0113	0.0107	0.0193	<0.01	0.0175	<0.01	<0.01	0.0217	0.0215	<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
Annual	0.929	0.912	0.938	0.391	2.40	0.270	0.390	0.616	0.610	0.138	0.395

Data completeness (Monthly)

2009	SO ₄ ²⁻	nss-SO ₄ ²⁻	NO ₃ ⁻	Cl ⁻	NH ₄ ⁺	Na ⁺	K ⁺	Ca ²⁺	nss-Ca ²⁺	Mg ²⁺	H ⁺	pH	EC	Precip.
	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%PCL
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
May	--	--	--	--	--	--	--	--	--	--	--	--	--	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
Annual	100	100	100	100	100	100	100	100	100	100	100	100	100	100

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

[0.00] for deposition: The deposition was 0 mmol/m² 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%)

Table 3.47 Monthly results

Site: Listvyanka

Country: Russia

Volume-weighted mean concentrations/ Precipitation (Monthly)

2009	SO ₄ ²⁻	nss-SO ₄ ²⁻	NO ₃ ⁻	Cl ⁻	NH ₄ ⁺	Na ⁺	K ⁺	Ca ²⁺	nss-Ca ²⁺	Mg ²⁺	H ⁺	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 ⁻¹ or mm year ⁻¹
Jan	14.6	14.3	67.7	3.90	6.70	5.20	3.10	17.5	17.4	4.10	29.5	4.53	2.01	1.68
Feb	23.5	22.8	62.1	5.71	9.36	10.9	4.04	28.1	27.9	7.58	9.10	5.04	1.77	7.26
Mar	43.6	42.6	60.3	5.07	25.9	16.6	3.92	33.2	32.8	9.38	12.5	4.90	2.47	6.09
Apr	39.4	38.7	33.4	8.39	31.2	10.3	3.57	24.6	24.4	4.68	21.5	4.67	2.39	14.3
May	33.3	32.7	19.2	8.55	23.5	10.5	10.2	61.2	61.0	8.08	6.80	5.17	2.62	14.4
June	15.1	15.0	7.77	2.30	10.3	1.75	1.17	3.30	3.26	1.04	20.8	4.68	1.16	74.4
July	17.9	17.8	10.0	1.94	17.5	2.07	<1.0	8.83	8.78	1.59	12.5	4.90	1.13	50.5
Aug	13.6	13.5	7.46	1.41	9.50	1.55	<1.0	5.07	5.04	1.63	12.6	4.90	0.880	80.6
Sept	24.1	23.9	13.5	1.36	14.1	2.21	2.39	12.1	12.0	3.60	13.9	4.86	1.40	33.7
Oct	33.6	33.0	50.4	6.77	6.10	10.0	4.90	27.5	27.3	5.63	15.6	4.81	2.39	3.77
Nov	22.1	21.3	28.8	9.71	10.4	13.5	4.97	28.5	28.2	6.80	1.41	5.85	1.37	8.61
Dec	15.6	15.3	51.6	4.86	11.9	5.61	2.93	28.5	28.4	5.74	6.10	5.21	1.38	7.49
Annual	19.3	19.1	16.4	3.02	13.4	3.82	2.07	12.6	12.5	2.84	14.4	4.84	1.31	312
Max.	218	214	135	49.4	157	62.2	35.8	282	281	54.2	70.8	6.52	12.0	
Min.	7.39	7.34	3.40	<1.0	<1.0	<1.0	<1.0	<0.2	<0.2	<0.4	0.302	4.15	0.580	

Wet deposition (Monthly)

unit: mmol m⁻²month⁻¹ or mmol m⁻²year⁻¹

2009	SO ₄ ²⁻	nss-SO ₄ ²⁻	NO ₃ ⁻	Cl ⁻	NH ₄ ⁺	Na ⁺	K ⁺	Ca ²⁺	nss-Ca ²⁺	Mg ²⁺	H ⁺
Jan	0.0245	0.0240	0.114	<0.01	0.0113	<0.01	<0.01	0.0294	0.0292	<0.01	0.0496
Feb	0.170	0.166	0.451	0.0415	0.0679	0.0792	0.0294	0.204	0.203	0.0550	0.0661
Mar	0.266	0.260	0.367	0.0309	0.158	0.101	0.0239	0.202	0.200	0.0571	0.0763
Apr	0.564	0.555	0.478	0.120	0.447	0.148	0.0512	0.352	0.349	0.0670	0.308
May	0.481	0.472	0.278	0.123	0.340	0.152	0.148	0.884	0.881	0.117	0.0982
June	1.13	1.12	0.578	0.171	0.770	0.130	0.0872	0.246	0.243	0.0773	1.55
July	0.905	0.899	0.506	0.0977	0.882	0.105	0.0472	0.446	0.443	0.0805	0.632
Aug	1.09	1.09	0.601	0.114	0.765	0.125	0.0643	0.409	0.406	0.131	1.01
Sept	0.810	0.806	0.453	0.0457	0.474	0.0744	0.0806	0.406	0.404	0.121	0.467
Oct	0.127	0.124	0.190	0.0255	0.0230	0.0378	0.0185	0.104	0.103	0.0212	0.0586
Nov	0.190	0.183	0.248	0.0836	0.0895	0.116	0.0428	0.245	0.243	0.0585	0.0122
Dec	0.117	0.115	0.387	0.0364	0.0893	0.0420	0.0220	0.214	0.213	0.0430	0.0457
Annual	6.02	5.94	5.10	0.942	4.18	1.19	0.646	3.92	3.89	0.884	4.49

Data completeness (Monthly)

2009	SO ₄ ²⁻	nss-SO ₄ ²⁻	NO ₃ ⁻	Cl ⁻	NH ₄ ⁺	Na ⁺	K ⁺	Ca ²⁺	nss-Ca ²⁺	Mg ²⁺	H ⁺	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	78.2	78.2	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
Annual	100	100	100	100	100	100	100	100	100	100	99.7	99.7	100	100

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

[0.00] for deposition: The deposition was 0 mmol/m² 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%)

Table 3.48 Monthly results

Site: Irkutsk

Country: Russia

Volume-weighted mean concentrations/ Precipitation (Monthly)

2009	SO ₄ ²⁻	nss-SO ₄ ²⁻	NO ₃ ⁻	Cl ⁻	NH ₄ ⁺	Na ⁺	K ⁺	Ca ²⁺	nss-Ca ²⁺	Mg ²⁺	H ⁺	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 ⁻¹ or mm year ⁻¹
Jan	37.8	36.6	39.7	23.3	44.8	20.2	4.54	35.9	35.5	7.41	2.36	5.63	2.27	15.5
Feb	50.2	44.1	49.9	116	32.9	101	6.04	56.0	53.8	10.2	3.28	5.48	4.15	7.64
Mar	114	94.3	78.2	352	68.8	333	10.7	111	104	19.5	1.73	5.76	8.60	6.68
Apr	63.6	61.1	27.9	43.1	70.9	41.6	11.2	61.2	60.3	10.4	1.15	5.94	3.55	5.66
May	24.6	24.0	9.97	11.8	56.3	9.28	15.0	25.7	25.5	8.28	4.31	5.37	1.90	54.3
June	27.3	27.2	17.6	7.43	36.7	2.31	60.0	15.8	15.8	6.67	5.69	5.24	2.27	89.9
July	22.4	22.2	15.9	16.0	38.6	3.84	7.29	22.1	22.0	4.82	3.24	5.49	1.52	62.3
Aug	21.3	21.1	6.54	5.20	20.4	2.96	8.49	18.2	18.1	3.61	2.98	5.53	1.13	51.8
Sept	24.6	24.1	7.89	10.6	25.1	7.76	13.9	22.1	21.9	4.93	5.05	5.30	1.52	79.3
Oct	63.4	61.5	9.04	46.3	31.3	30.6	102	68.1	67.4	21.1	1.56	5.81	4.23	25.8
Nov	42.9	38.8	32.7	75.4	27.7	69.2	10.00	58.0	56.5	12.4	2.00	5.70	3.12	19.6
Dec	52.2	48.9	50.5	67.4	60.3	55.2	13.8	61.6	60.4	13.0	1.11	5.95	3.43	11.9
Annual	31.2	30.1	16.8	24.9	36.4	18.7	26.6	29.2	28.8	7.55	3.89	5.41	2.18	430
Max.	518	409	313	1950	212	1810	550	774	738	108	28.8	7.20	40.0	
Min.	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.2	<0.2	<0.4	<0.1	4.54	0.350	

Wet deposition (Monthly)

unit: mmol m⁻²month⁻¹ or mmol m⁻²year⁻¹

2009	SO ₄ ²⁻	nss-SO ₄ ²⁻	NO ₃ ⁻	Cl ⁻	NH ₄ ⁺	Na ⁺	K ⁺	Ca ²⁺	nss-Ca ²⁺	Mg ²⁺	H ⁺
Jan	0.586	0.567	0.616	0.361	0.695	0.314	0.0704	0.557	0.550	0.115	0.0366
Feb	0.383	0.337	0.381	0.885	0.251	0.769	0.0461	0.428	0.411	0.0778	0.0251
Mar	0.764	0.630	0.522	2.35	0.459	2.22	0.0716	0.742	0.694	0.130	0.0115
Apr	0.360	0.346	0.158	0.244	0.401	0.235	0.0632	0.346	0.341	0.0588	<0.01
May	1.34	1.30	0.541	0.641	3.06	0.504	0.815	1.39	1.38	0.450	0.234
June	2.45	2.44	1.58	0.668	3.30	0.208	5.39	1.42	1.42	0.600	0.512
July	1.40	1.38	0.991	0.994	2.40	0.239	0.454	1.38	1.37	0.300	0.202
Aug	1.10	1.09	0.339	0.269	1.05	0.153	0.440	0.942	0.939	0.187	0.154
Sept	1.95	1.91	0.625	0.840	1.99	0.615	1.10	1.75	1.74	0.391	0.400
Oct	1.64	1.59	0.233	1.19	0.809	0.789	2.63	1.76	1.74	0.544	0.0402
Nov	0.840	0.758	0.639	1.48	0.542	1.35	0.196	1.13	1.11	0.242	0.0392
Dec	0.622	0.582	0.602	0.803	0.718	0.657	0.164	0.734	0.720	0.155	0.0132
Annual	13.4	12.9	7.23	10.7	15.7	8.06	11.4	12.6	12.4	3.25	1.67

Data completeness (Monthly)

2009	SO ₄ ²⁻	nss-SO ₄ ²⁻	NO ₃ ⁻	Cl ⁻	NH ₄ ⁺	Na ⁺	K ⁺	Ca ²⁺	nss-Ca ²⁺	Mg ²⁺	H ⁺	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
Annual	100	100	100	100	100	100	100	100	100	100	100	100	100	100

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

[0.00] for deposition: The deposition was 0 mmol/m² 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%)

Table 3.49 Monthly results

Site: Primorskaya

Country: Russia

Volume-weighted mean concentrations/ Precipitation (Monthly)

2009	SO ₄ ²⁻	nss-SO ₄ ²⁻	NO ₃ ⁻	Cl ⁻	NH ₄ ⁺	Na ⁺	K ⁺	Ca ²⁺	nss-Ca ²⁺	Mg ²⁺	H ⁺	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 ⁻¹ or mm year ⁻¹
Jan	25.0	24.0	33.6	20.0	21.6	16.6	4.02	18.7	18.3	2.79	18.5	4.73	1.90	34.1
Feb	20.1	19.0	24.8	17.5	20.1	19.7	3.02	17.3	16.8	2.78	8.79	5.06	1.46	28.1
Mar	39.5	36.9	34.9	35.1	23.8	43.7	5.78	51.5	50.5	7.62	1.01	5.99	2.57	32.4
Apr	27.1	26.4	18.9	17.5	29.7	11.8	5.73	14.5	14.3	2.70	10.4	4.98	1.51	44.2
May	97.3	94.5	74.8	34.9	151	45.1	31.5	68.8	67.9	15.9	1.29	5.89	5.65	13.7
June	21.4	21.1	15.7	8.24	30.4	4.54	2.04	7.90	7.80	1.73	9.94	5.00	1.22	156
July	17.7	17.4	17.0	8.89	42.2	4.09	3.17	3.25	3.18	1.57	9.07	5.04	1.20	128
Aug	13.3	13.0	11.4	7.55	16.1	4.76	2.20	5.31	5.20	1.52	10.2	4.99	0.963	144
Sept	12.2	11.3	8.43	16.1	13.0	14.6	2.94	5.93	5.61	1.60	6.39	5.19	0.887	94.2
Oct	39.0	37.7	16.4	22.4	47.5	20.2	9.48	9.20	8.76	5.10	25.0	4.60	2.52	92.5
Nov	28.7	26.3	27.3	35.1	26.2	38.8	12.4	27.1	26.2	8.39	1.82	5.74	1.88	23.2
Dec	18.8	17.7	27.9	16.4	10.4	18.3	3.30	17.7	17.3	5.81	8.04	5.09	1.38	73.5
Annual	22.6	21.8	18.6	14.7	28.8	12.8	4.40	11.7	11.4	3.11	10.5	4.98	1.48	864
Max.	179	177	190	199	512	200	97.4	201	197	38.6	74.1	7.35	10.5	
Min.	2.10	2.10	<1.0	2.00	<1.0	<1.0	<1.0	<0.2	<0.2	<0.4	<0.1	4.13	0.240	

Wet deposition (Monthly)

unit: mmol m⁻²month⁻¹ or mmol m⁻²year⁻¹

2009	SO ₄ ²⁻	nss-SO ₄ ²⁻	NO ₃ ⁻	Cl ⁻	NH ₄ ⁺	Na ⁺	K ⁺	Ca ²⁺	nss-Ca ²⁺	Mg ²⁺	H ⁺
Jan	0.851	0.817	1.14	0.682	0.735	0.566	0.137	0.638	0.625	0.0952	0.630
Feb	0.566	0.533	0.698	0.491	0.565	0.553	0.0850	0.485	0.473	0.0782	0.247
Mar	1.28	1.19	1.13	1.14	0.770	1.42	0.187	1.67	1.64	0.247	0.0328
Apr	1.20	1.16	0.835	0.776	1.31	0.522	0.253	0.641	0.630	0.119	0.462
May	1.33	1.30	1.02	0.477	2.06	0.618	0.431	0.943	0.930	0.217	0.0177
June	3.34	3.30	2.45	1.29	4.74	0.708	0.319	1.23	1.22	0.270	1.55
July	2.26	2.23	2.19	1.14	5.41	0.525	0.407	0.416	0.408	0.202	1.16
Aug	1.91	1.87	1.65	1.09	2.32	0.685	0.316	0.764	0.749	0.219	1.46
Sept	1.15	1.07	0.794	1.52	1.22	1.38	0.277	0.558	0.528	0.151	0.602
Oct	3.60	3.49	1.52	2.07	4.40	1.87	0.877	0.851	0.810	0.472	2.31
Nov	0.665	0.611	0.634	0.815	0.609	0.900	0.288	0.628	0.608	0.195	0.0423
Dec	1.38	1.30	2.05	1.21	0.766	1.34	0.243	1.30	1.27	0.427	0.591
Annual	19.5	18.8	16.1	12.7	24.9	11.0	3.81	10.1	9.86	2.68	9.11

Data completeness (Monthly)

2009	SO ₄ ²⁻	nss-SO ₄ ²⁻	NO ₃ ⁻	Cl ⁻	NH ₄ ⁺	Na ⁺	K ⁺	Ca ²⁺	nss-Ca ²⁺	Mg ²⁺	H ⁺	pH	EC	Precip.
	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%PCL
Jan	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	100	100	99.4	100
Feb	98.6	98.6	98.6	98.6	98.6	98.6	98.6	98.6	98.6	98.6	100	100	98.6	100
Mar	99.1	99.1	99.1	99.1	99.1	99.1	99.1	99.1	99.1	99.1	100	100	99.1	100
Apr	100	100	100	100	100	100	100	100	100	100	100	100	100	100
May	97.1	97.1	97.1	97.1	97.1	97.1	97.1	97.1	97.1	97.1	100	100	97.1	100
June	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	100	100	99.4	100
July	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Aug	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	100	100	99.4	100
Sept	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	100	100	99.8	100
Oct	99.1	99.1	99.1	99.1	99.1	99.1	99.1	99.1	99.1	99.1	100	100	99.1	100
Nov	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4	100	100	97.4	100
Dec	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Annual	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5	100	100	99.5	100

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

[0.00] for deposition: The deposition was 0 mmol/m² 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%)

Table 3.50 Monthly results

Site: Bangkok

Country: Thailand

Volume-weighted mean concentrations/ Precipitation (Monthly)

2009	SO ₄ ²⁻	nss-SO ₄ ²⁻	NO ₃ ⁻	Cl ⁻	NH ₄ ⁺	Na ⁺	K ⁺	Ca ²⁺	nss-Ca ²⁺	Mg ²⁺	H ⁺	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 ⁻¹ or mm year ⁻¹
Jan	--	--	--	--	--	--	--	--	--	--	--	--	--	0
Feb	--	--	--	--	--	--	--	--	--	--	--	--	--	0
Mar	44.7	43.7	139	20.0	175	15.5	6.55	65.9	65.5	5.50	15.8	4.80	4.92	35.0
Apr	17.5	16.9	47.8	9.38	74.7	9.08	2.23	11.5	11.3	1.80	22.9	4.64	2.24	374
May	12.0	11.5	22.6	5.95	68.7	8.59	2.52	7.29	7.11	1.82	3.37	5.47	1.22	368
June	6.63	6.11	12.9	7.30	53.9	8.52	1.14	8.62	8.43	1.44	0.718	6.14	0.827	101
July	12.8	12.2	17.0	9.55	56.1	9.60	1.60	15.9	15.7	2.02	0.541	6.27	1.10	180
Aug	4.88	4.61	10.7	3.85	29.9	4.48	1.08	4.17	4.07	0.944	2.30	5.64	0.601	363
Sept	7.62	6.54	15.3	8.00	33.3	17.9	1.44	6.45	6.07	0.815	2.24	5.65	0.829	355
Oct	19.5	19.2	39.2	7.85	125	5.83	1.99	12.7	12.6	1.10	13.5	4.87	1.65	216
Nov	25.0	24.6	56.4	6.89	118	7.32	4.30	14.5	14.3	1.29	19.5	4.71	2.90	61.2
Dec	26.1	23.5	70.0	31.2	130	43.4	5.12	12.6	11.7	4.28	23.4	4.63	3.65	19.2
Annual	12.7	12.1	28.1	7.65	64.9	9.79	1.98	10.0	9.81	1.49	8.07	5.09	1.38	2072
Max.	71.2	68.4	156	142	369	189	16.1	113	111	18.5	34.7	7.49	6.68	
Min.	2.08	1.87	1.61	<1.0	11.6	<1.0	<1.0	0.749	0.692	0.411	<0.1	0.00	0.00	

Wet deposition (Monthly)

unit: mmol m⁻²month⁻¹ or mmol m⁻²year⁻¹

2009	SO ₄ ²⁻	nss-SO ₄ ²⁻	NO ₃ ⁻	Cl ⁻	NH ₄ ⁺	Na ⁺	K ⁺	Ca ²⁺	nss-Ca ²⁺	Mg ²⁺	H ⁺
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	1.56	1.53	4.87	0.700	6.12	0.544	0.229	2.31	2.29	0.193	0.553
Apr	6.53	6.33	17.9	3.51	28.0	3.40	0.836	4.30	4.23	0.675	8.55
May	4.43	4.23	8.30	2.19	25.3	3.16	0.926	2.68	2.62	0.670	1.24
June	0.672	0.620	1.31	0.741	5.46	0.864	0.116	0.874	0.855	0.147	0.0728
July	2.30	2.20	3.05	1.72	10.1	1.73	0.288	2.86	2.83	0.363	0.0973
Aug	1.77	1.68	3.88	1.40	10.9	1.63	0.391	1.51	1.48	0.343	0.835
Sept	2.70	2.32	5.42	2.84	11.8	6.35	0.512	2.29	2.15	0.289	0.794
Oct	4.21	4.14	8.45	1.69	27.0	1.26	0.428	2.75	2.72	0.238	2.91
Nov	1.53	1.50	3.45	0.422	7.19	0.448	0.263	0.887	0.877	0.0792	1.19
Dec	0.502	0.451	1.34	0.599	2.49	0.834	0.0982	0.242	0.224	0.0821	0.450
Annual	26.3	25.1	58.2	15.9	134	20.3	4.10	20.8	20.3	3.09	16.7

Data completeness (Monthly)

2009	SO ₄ ²⁻	nss-SO ₄ ²⁻	NO ₃ ⁻	Cl ⁻	NH ₄ ⁺	Na ⁺	K ⁺	Ca ²⁺	nss-Ca ²⁺	Mg ²⁺	H ⁺	pH	EC	Precip.
	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%PCL
Jan	--	--	--	--	--	--	--	--	--	--	--	--	--	100
Feb	--	--	--	--	--	--	--	--	--	--	--	--	--	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	98.8	98.8	98.8	98.8	98.8	98.8	98.8	98.8	98.8	98.8	98.8	98.8	98.8	100
June	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	100
July	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	98.4	98.4	99.4	100
Aug	96.7	96.7	96.7	96.7	96.7	96.7	96.7	96.7	96.7	96.7	96.7	96.7	96.7	100
Sept	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5	100
Oct	97.7	97.7	97.7	97.7	97.7	97.7	97.7	97.7	97.7	97.7	94.0	94.0	97.7	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	89.6	89.6	89.6	100
Annual	98.8	98.8	98.8	98.8	98.8	98.8	98.8	98.8	98.8	98.8	98.3	98.3	98.7	100

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

[0.00] for deposition: The deposition was 0 mmol/m² 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%)

Table 3.51 Monthly results

Site: Samutprakarn

Country: Thailand

Volume-weighted mean concentrations/ Precipitation (Monthly)

2009	SO ₄ ²⁻	nss-SO ₄ ²⁻	NO ₃ ⁻	Cl ⁻	NH ₄ ⁺	Na ⁺	K ⁺	Ca ²⁺	nss-Ca ²⁺	Mg ²⁺	H ⁺	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 ⁻¹ or mm year ⁻¹
Jan	--	--	--	--	--	--	--	--	--	--	--	--	--	0
Feb	--	--	--	--	--	--	--	--	--	--	--	--	--	0
Mar	36.3	34.7	83.8	24.6	132	26.6	15.9	74.8	74.3	10.1	0.381	6.42	5.04	39.2
Apr	21.5	20.8	37.8	14.4	75.7	12.1	4.54	15.6	15.3	2.97	21.4	4.67	2.67	209
May	17.0	16.4	19.2	7.23	57.6	10.6	3.95	11.2	11.0	3.19	8.15	5.09	1.48	290
June	8.30	7.36	5.11	10.9	25.0	15.7	2.84	12.1	11.8	4.53	2.02	5.69	1.07	167
July	14.8	14.0	8.86	11.4	29.9	13.9	2.44	15.8	15.5	3.56	2.75	5.56	1.29	120
Aug	10.2	9.50	11.6	9.12	21.2	10.8	1.47	9.65	9.42	2.52	4.03	5.39	1.05	308
Sept	12.9	12.4	16.5	6.39	36.6	7.79	2.11	14.1	14.0	2.49	3.24	5.49	1.20	434
Oct	16.5	16.1	22.1	4.70	33.2	5.74	1.98	9.51	9.38	1.53	9.95	5.00	1.36	400
Nov	49.9	49.2	108	13.0	126	12.4	6.76	39.7	39.4	5.45	19.8	4.70	4.42	23.4
Dec	--	--	--	--	--	--	--	--	--	--	--	--	--	0
Annual	15.1	14.5	20.0	8.45	41.0	10.0	2.77	13.2	13.0	2.80	7.40	5.13	1.48	1989
Max.	64.7	59.3	144	79.5	180	94.0	32.8	152	151	24.3	71.9	6.71	8.03	
Min.	5.34	4.98	2.55	2.14	7.99	1.62	<1.0	2.24	2.16	<0.4	0.195	4.14	0.602	

Wet deposition (Monthly)

unit: mmol m⁻²month⁻¹ or mmol m⁻²year⁻¹

2009	SO ₄ ²⁻	nss-SO ₄ ²⁻	NO ₃ ⁻	Cl ⁻	NH ₄ ⁺	Na ⁺	K ⁺	Ca ²⁺	nss-Ca ²⁺	Mg ²⁺	H ⁺
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	1.42	1.36	3.28	0.966	5.16	1.04	0.623	2.93	2.91	0.396	0.0149
Apr	4.49	4.34	7.90	3.01	15.8	2.52	0.948	3.25	3.19	0.621	4.46
May	4.92	4.74	5.57	2.09	16.7	3.08	1.14	3.25	3.18	0.924	2.36
June	1.38	1.23	0.852	1.82	4.17	2.61	0.473	2.03	1.97	0.754	0.337
July	1.77	1.67	1.06	1.37	3.59	1.66	0.293	1.89	1.86	0.427	0.330
Aug	3.13	2.93	3.57	2.81	6.52	3.33	0.451	2.97	2.90	0.775	1.24
Sept	5.59	5.38	7.17	2.77	15.9	3.38	0.914	6.13	6.06	1.08	1.41
Oct	6.58	6.45	8.85	1.88	13.3	2.30	0.793	3.80	3.75	0.611	3.98
Nov	1.17	1.15	2.53	0.303	2.95	0.289	0.158	0.929	0.923	0.128	0.464
Dec	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	30.0	28.8	39.7	16.8	81.5	19.9	5.51	26.2	25.8	5.57	14.7

Data completeness (Monthly)

2009	SO ₄ ²⁻	nss-SO ₄ ²⁻	NO ₃ ⁻	Cl ⁻	NH ₄ ⁺	Na ⁺	K ⁺	Ca ²⁺	nss-Ca ²⁺	Mg ²⁺	H ⁺	pH	EC	Precip.
	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%PCL
Jan	--	--	--	--	--	--	--	--	--	--	--	--	--	100
Feb	--	--	--	--	--	--	--	--	--	--	--	--	--	100
Mar	57.9	57.9	57.9	57.9	57.9	57.9	57.9	57.9	57.9	57.9	57.9	57.9	57.9	100
Apr	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	100
May	79.4	79.4	79.4	79.4	79.4	79.4	79.4	79.4	79.4	79.4	98.5	98.5	98.5	100
June	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5	100
July	95.4	95.4	95.4	95.4	95.4	95.4	95.4	95.4	95.4	95.4	95.4	95.4	95.4	100
Aug	99.0	99.0	99.0	99.0	99.0	99.0	99.0	99.0	99.0	99.0	99.0	99.0	99.0	100
Sept	99.2	99.2	99.2	99.2	99.2	99.2	99.2	99.2	99.2	99.2	99.2	99.2	99.2	100
Oct	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	100
Nov	94.0	94.0	94.0	94.0	94.0	94.0	94.0	94.0	94.0	94.0	94.0	94.0	94.0	100
Dec	--	--	--	--	--	--	--	--	--	--	--	--	--	100
Annual	95.3	95.3	95.3	95.3	95.3	95.3	95.3	95.3	95.3	95.3	98.1	98.1	98.1	100

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

[0.00] for deposition: The deposition was 0 mmol/m² 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%)

Table 3.52 Monthly results

Site: Patumthani

Country: Thailand

Volume-weighted mean concentrations/ Precipitation (Monthly)

2009	SO ₄ ²⁻	nss-SO ₄ ²⁻	NO ₃ ⁻	Cl ⁻	NH ₄ ⁺	Na ⁺	K ⁺	Ca ²⁺	nss-Ca ²⁺	Mg ²⁺	H ⁺	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 ⁻¹ or mm year ⁻¹
Jan	--	--	--	--	--	--	--	--	--	--	--	--	--	0
Feb	18.7	18.3	42.1	17.1	67.9	6.08	3.96	6.68	6.55	1.36	37.2	4.43	2.82	4.50
Mar	23.4	22.5	77.7	21.7	91.2	15.4	6.10	35.1	34.8	4.36	18.2	4.74	3.25	27.1
Apr	16.0	15.6	37.9	9.67	54.5	6.74	3.15	7.88	7.74	1.30	30.3	4.52	2.50	63.8
May	6.66	6.37	15.1	4.41	28.1	4.84	1.02	7.86	7.75	1.08	4.31	5.37	0.814	228
June	7.75	7.29	15.3	7.97	37.0	7.60	1.22	14.5	14.3	1.83	2.55	5.59	1.10	123
July	5.85	5.51	6.64	6.78	27.7	5.74	2.83	5.72	5.60	1.21	0.555	6.26	0.672	253
Aug	9.38	8.78	14.7	11.5	33.7	9.84	1.48	11.0	10.7	1.80	6.31	5.20	1.05	129
Sept	7.57	7.31	9.96	4.14	28.4	4.41	<1.0	6.26	6.17	0.918	4.18	5.38	0.781	239
Oct	11.8	11.7	20.9	2.30	29.3	2.51	<1.0	7.71	7.66	0.663	14.7	4.83	1.31	217
Nov	13.9	13.7	42.5	7.68	55.7	3.47	1.86	33.7	33.7	1.50	8.10	5.09	1.76	29.5
Dec	--	--	--	--	--	--	--	--	--	--	--	--	--	0
Annual	8.89	8.56	16.6	6.23	33.0	5.58	1.61	9.19	9.07	1.24	7.05	5.15	1.07	1314
Max.	106	101	156	89.1	236	89.0	76.6	128	128	19.9	58.9	6.57	5.73	
Min.	1.38	1.25	2.60	<1.0	3.30	<1.0	<1.0	0.932	0.811	<0.4	0.269	4.23	0.311	

Wet deposition (Monthly)

unit: mmol m⁻²month⁻¹ or mmol m⁻²year⁻¹

2009	SO ₄ ²⁻	nss-SO ₄ ²⁻	NO ₃ ⁻	Cl ⁻	NH ₄ ⁺	Na ⁺	K ⁺	Ca ²⁺	nss-Ca ²⁺	Mg ²⁺	H ⁺
Jan	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Feb	0.0839	0.0823	0.190	0.0768	0.305	0.0273	0.0178	0.0301	0.0295	<0.01	0.167
Mar	0.634	0.608	2.11	0.587	2.47	0.418	0.165	0.951	0.942	0.118	0.494
Apr	1.02	0.998	2.42	0.617	3.48	0.430	0.201	0.503	0.494	0.0830	1.94
May	1.52	1.46	3.45	1.01	6.41	1.11	0.232	1.80	1.77	0.246	0.985
June	0.951	0.894	1.88	0.978	4.54	0.933	0.150	1.78	1.76	0.224	0.313
July	1.48	1.39	1.68	1.71	7.00	1.45	0.716	1.45	1.42	0.306	0.140
Aug	1.21	1.13	1.89	1.49	4.35	1.27	0.191	1.41	1.39	0.233	0.813
Sept	1.81	1.75	2.38	0.991	6.80	1.06	0.205	1.50	1.48	0.220	1.00
Oct	2.56	2.52	4.53	0.497	6.34	0.544	0.186	1.67	1.66	0.144	3.18
Nov	0.411	0.405	1.25	0.226	1.64	0.102	0.0549	0.995	0.993	0.0443	0.239
Dec	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	11.7	11.2	21.8	8.18	43.3	7.34	2.12	12.1	11.9	1.62	9.26

Data completeness (Monthly)

2009	SO ₄ ²⁻	nss-SO ₄ ²⁻	NO ₃ ⁻	Cl ⁻	NH ₄ ⁺	Na ⁺	K ⁺	Ca ²⁺	nss-Ca ²⁺	Mg ²⁺	H ⁺	pH	EC	Precip.
	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%PCL
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	99.5	99.5	99.5	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	99.6	99.6	99.6	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
Annual	100	100	100	100	100	100	100	100	100	100	99.9	99.9	99.9	100

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

[0.00] for deposition: The deposition was 0 mmol/m² 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%)

Table 3.53 Monthly results

Site: Khanchanaburi

Country: Thailand

Volume-weighted mean concentrations/ Precipitation (Monthly)

2009	SO ₄ ²⁻	nss-SO ₄ ²⁻	NO ₃ ⁻	Cl ⁻	NH ₄ ⁺	Na ⁺	K ⁺	Ca ²⁺	nss-Ca ²⁺	Mg ²⁺	H ⁺	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 ⁻¹ or mm year ⁻¹
Jan	--	--	--	--	--	--	--	--	--	--	--	--	--	0
Feb	*	*	*	*	*	*	*	*	*	*	*	*	*	1.90
Mar	5.99	5.82	9.94	3.52	27.9	2.88	2.58	8.61	8.55	1.56	4.33	5.36	0.973	196
Apr	7.99	7.20	12.1	11.7	35.6	13.1	2.52	7.13	6.85	2.21	0.545	6.26	0.737	80.3
May	2.71	2.25	5.31	6.02	24.6	7.58	1.29	1.83	1.66	1.03	2.96	5.53	0.391	183
June	3.51	2.52	4.77	16.7	6.23	16.6	1.15	2.60	2.24	1.55	2.47	5.61	0.609	279
July	3.59	2.82	2.64	11.9	8.87	12.7	1.11	7.48	7.21	1.50	0.779	6.11	0.490	398
Aug	3.92	3.29	5.06	9.39	24.4	10.4	<1.0	4.84	4.62	1.85	1.63	5.79	0.487	433
Sept	1.56	1.31	1.49	3.40	55.0	4.12	<1.0	3.13	3.04	0.588	3.09	5.51	0.254	235
Oct	2.80	2.62	3.12	2.30	69.1	3.02	<1.0	2.65	2.59	1.34	2.31	5.64	0.385	192
Nov	--	--	--	--	--	--	--	--	--	--	--	--	--	0
Dec	--	--	--	--	--	--	--	--	--	--	--	--	--	0
Annual	3.60	3.03	4.55	8.84	26.1	9.49	1.21	4.93	4.72	1.44	2.18	5.66	0.511	1998
Max.	24.8	19.6	41.1	101	154	85.7	7.67	54.6	52.8	16.5	7.94	7.84	2.82	
Min.	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.2	<0.2	<0.4	<0.1	5.10	0.150	

Wet deposition (Monthly)

unit: mmol m⁻²month⁻¹ or mmol m⁻²year⁻¹

2009	SO ₄ ²⁻	nss-SO ₄ ²⁻	NO ₃ ⁻	Cl ⁻	NH ₄ ⁺	Na ⁺	K ⁺	Ca ²⁺	nss-Ca ²⁺	Mg ²⁺	H ⁺
Jan	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Feb	*	*	*	*	*	*	*	*	*	*	*
Mar	1.17	1.14	1.95	0.689	5.46	0.563	0.505	1.69	1.67	0.306	0.847
Apr	0.642	0.579	0.969	0.941	2.86	1.05	0.202	0.572	0.550	0.177	0.0437
May	0.495	0.412	0.969	1.10	4.49	1.39	0.235	0.334	0.304	0.188	0.541
June	0.981	0.702	1.33	4.67	1.74	4.63	0.320	0.725	0.625	0.433	0.689
July	1.43	1.12	1.05	4.73	3.53	5.04	0.440	2.97	2.87	0.597	0.310
Aug	1.69	1.42	2.19	4.06	10.6	4.52	0.382	2.10	2.00	0.799	0.703
Sept	0.367	0.309	0.350	0.799	12.9	0.970	0.199	0.736	0.715	0.138	0.727
Oct	0.539	0.504	0.601	0.443	13.3	0.581	0.163	0.510	0.498	0.259	0.444
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
Annual	7.19	6.05	9.10	17.6	52.1	19.0	2.41	9.85	9.44	2.87	4.35

Data completeness (Monthly)

2009	SO ₄ ²⁻	nss-SO ₄ ²⁻	NO ₃ ⁻	Cl ⁻	NH ₄ ⁺	Na ⁺	K ⁺	Ca ²⁺	nss-Ca ²⁺	Mg ²⁺	H ⁺	pH	EC	Precip.
	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%PCL
Jan	--	--	--	--	--	--	--	--	--	--	--	--	--	100
Feb	0	0	0	0	0	0	0	0	0	0	0	0	0	100
Mar	85.7	85.7	85.7	85.7	85.7	85.7	85.7	85.7	85.7	85.7	85.7	85.7	85.7	100
Apr	48.4	48.4	48.4	48.4	48.4	48.4	48.4	48.4	48.4	48.4	48.4	48.4	48.4	100
May	83.7	83.7	83.7	83.7	83.7	83.7	83.7	83.7	83.7	83.7	83.7	83.7	83.7	100
June	79.6	79.6	79.6	79.6	79.6	79.6	79.6	79.6	79.6	79.6	66.4	66.4	66.4	100
July	95.2	95.2	95.2	95.2	95.2	95.2	95.2	95.2	95.2	95.2	85.0	85.0	85.0	100
Aug	87.2	87.2	87.2	87.2	87.2	87.2	87.2	87.2	87.2	87.2	87.2	87.2	87.2	100
Sept	91.5	91.5	91.5	91.5	91.5	91.5	91.5	91.5	91.5	91.5	91.5	91.5	91.5	100
Oct	58.8	58.8	58.8	58.8	58.8	58.8	58.8	58.8	58.8	58.8	58.8	58.8	58.8	100
Nov	--	--	--	--	--	--	--	--	--	--	--	--	--	100
Dec	--	--	--	--	--	--	--	--	--	--	--	--	--	100
Annual	83.4	83.4	83.4	83.4	83.4	83.4	83.4	83.4	83.4	83.4	79.5	79.5	79.5	100

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

[0.00] for deposition: The deposition was 0 mmol/m² 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%)

Table 3.54 Monthly results

Site: Chang Mai (Mae Hia)

Country: Thailand

Volume-weighted mean concentrations/ Precipitation (Monthly)

2009	SO ₄ ²⁻	nss-SO ₄ ²⁻	NO ₃ ⁻	Cl ⁻	NH ₄ ⁺	Na ⁺	K ⁺	Ca ²⁺	nss-Ca ²⁺	Mg ²⁺	H ⁺	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 ⁻¹ or mm year ⁻¹
Jan	--	--	--	--	--	--	--	--	--	--	--	--	--	0
Feb	--	--	--	--	--	--	--	--	--	--	--	--	--	0
Mar	31.9	31.6	75.8	24.1	186	4.29	15.8	20.6	20.5	8.82	36.4	4.44	4.49	14.0
Apr	13.0	12.7	18.3	6.23	51.9	4.28	4.76	12.0	11.9	2.92	0.897	6.05	1.33	95.6
May	3.80	3.60	7.90	4.54	16.8	3.32	<1.0	7.07	7.00	7.43	0.533	6.27	0.481	243
June	3.83	3.56	7.22	6.05	15.2	4.52	1.36	4.33	4.23	<0.4	0.546	6.26	0.427	113
July	1.46	1.41	3.66	6.75	11.8	<1.0	<1.0	5.14	5.12	3.94	0.290	6.54	0.388	96.0
Aug	1.69	1.59	5.02	3.38	11.6	1.77	<1.0	4.26	4.22	<0.4	0.502	6.30	0.415	147
Sept	2.33	2.23	3.69	3.69	9.11	1.72	1.05	2.23	2.20	0.704	0.363	6.44	0.332	187
Oct	4.19	4.08	9.71	3.70	19.8	2.49	<1.0	4.96	4.91	<0.4	2.13	5.67	0.816	148
Nov	8.81	8.44	18.9	13.2	93.8	6.08	5.71	14.9	14.7	4.48	0.204	6.69	1.61	0.800
Dec	9.01	8.86	19.2	6.69	56.7	2.52	5.45	11.4	11.3	1.79	0.537	6.27	0.970	8.30
Annual	4.30	4.14	8.44	4.91	20.2	2.69	1.47	5.69	5.63	2.73	1.20	5.92	0.608	1052
Max.	68.6	68.1	153	72.2	314	32.3	75.0	90.3	89.6	62.2	38.9	6.94	4.51	
Min.	<1.0	<1.0	1.49	1.25	2.09	<1.0	<1.0	0.761	0.749	<0.4	0.115	4.41	0.190	

Wet deposition (Monthly)

unit: mmol m⁻²month⁻¹ or mmol m⁻²year⁻¹

2009	SO ₄ ²⁻	nss-SO ₄ ²⁻	NO ₃ ⁻	Cl ⁻	NH ₄ ⁺	Na ⁺	K ⁺	Ca ²⁺	nss-Ca ²⁺	Mg ²⁺	H ⁺
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	0.446	0.443	1.06	0.337	2.60	0.0601	0.222	0.288	0.286	0.124	0.509
Apr	1.24	1.22	1.74	0.596	4.96	0.410	0.455	1.15	1.14	0.279	0.0857
May	0.925	0.876	1.92	1.11	4.09	0.809	0.216	1.72	1.70	1.81	0.130
June	0.431	0.400	0.812	0.681	1.71	0.508	0.153	0.487	0.476	0.0355	0.0614
July	0.140	0.136	0.352	0.648	1.14	0.0737	0.0885	0.493	0.492	0.378	0.0278
Aug	0.248	0.233	0.735	0.495	1.70	0.260	0.0875	0.625	0.619	0.0542	0.0736
Sept	0.435	0.416	0.689	0.690	1.70	0.321	0.195	0.417	0.410	0.132	0.0678
Oct	0.620	0.605	1.44	0.549	2.93	0.369	0.101	0.735	0.727	0.0438	0.316
Nov	<0.01	<0.01	0.0151	0.0105	0.0750	<0.01	<0.01	0.0119	0.0118	<0.01	<0.01
Dec	0.0748	0.0735	0.159	0.0555	0.471	0.0209	0.0452	0.0947	0.0942	0.0148	<0.01
Annual	4.52	4.36	8.88	5.16	21.2	2.83	1.55	5.98	5.92	2.87	1.26

Data completeness (Monthly)

2009	SO ₄ ²⁻	nss-SO ₄ ²⁻	NO ₃ ⁻	Cl ⁻	NH ₄ ⁺	Na ⁺	K ⁺	Ca ²⁺	nss-Ca ²⁺	Mg ²⁺	H ⁺	pH	EC	Precip.
	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%PCL
Jan	--	--	--	--	--	--	--	--	--	--	--	--	--	100
Feb	--	--	--	--	--	--	--	--	--	--	--	--	--	100
Mar	100	100	100	100	100	100	100	100	100	100	97.1	97.1	97.1	100
Apr	94.1	94.1	94.1	94.1	94.1	94.1	94.1	94.1	94.1	94.1	94.1	94.1	94.1	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	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.6	99.6	99.6	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	98.8	98.8	98.8	100
Annual	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	100

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

[0.00] for deposition: The deposition was 0 mmol/m² 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%)

Table 3.55 Monthly results

Site: Nakhon Ratchasima

Country: Thailand

Volume-weighted mean concentrations/ Precipitation (Monthly)

2009	SO ₄ ²⁻	nss-SO ₄ ²⁻	NO ₃ ⁻	Cl ⁻	NH ₄ ⁺	Na ⁺	K ⁺	Ca ²⁺	nss-Ca ²⁺	Mg ²⁺	H ⁺	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 ⁻¹ or mm year ⁻¹
Jan	--	--	--	--	--	--	--	--	--	--	--	--	--	0
Feb	18.4	17.9	34.5	11.6	55.9	7.69	4.14	6.57	6.41	2.33	23.9	4.62	2.07	57.2
Mar	10.2	10.1	22.1	6.18	36.8	2.03	1.83	1.48	1.44	0.901	35.6	4.45	2.01	171
Apr	6.00	5.88	14.5	3.51	24.0	1.87	1.37	1.46	1.42	0.699	18.1	4.74	1.10	147
May	5.11	4.86	13.3	5.34	21.3	4.01	1.29	4.71	4.62	1.38	12.7	4.90	0.831	75.0
June	6.25	5.19	13.3	15.4	17.8	17.7	1.55	4.73	4.35	3.00	10.8	4.97	0.950	35.6
July	3.19	3.00	6.49	5.19	7.51	3.26	<1.0	5.61	5.54	1.24	5.46	5.26	0.523	123
Aug	4.34	4.27	11.9	2.40	29.1	1.21	1.20	2.45	2.43	0.698	7.42	5.13	0.818	148
Sept	5.24	5.18	9.08	2.83	18.4	1.02	<1.0	1.25	1.23	1.08	8.15	5.09	0.660	342
Oct	4.71	4.53	4.46	3.60	10.7	2.89	1.36	1.79	1.73	2.25	4.66	5.33	0.480	149
Nov	26.1	25.6	25.7	11.9	40.0	8.07	3.20	6.89	6.72	3.50	32.2	4.49	2.84	11.2
Dec	--	--	--	--	--	--	--	--	--	--	--	--	--	0
Annual	6.44	6.27	12.7	4.62	22.9	2.73	1.31	2.53	2.48	1.27	13.6	4.87	0.981	1259
Max.	49.4	48.7	77.1	38.6	103	48.3	12.3	89.1	88.4	11.5	100	6.26	6.07	
Min.	1.46	1.40	2.42	<1.0	<1.0	<1.0	<1.0	<0.2	<0.2	0.411	0.550	4.00	0.220	

Wet deposition (Monthly)

unit: mmol m⁻²month⁻¹ or mmol m⁻²year⁻¹

2009	SO ₄ ²⁻	nss-SO ₄ ²⁻	NO ₃ ⁻	Cl ⁻	NH ₄ ⁺	Na ⁺	K ⁺	Ca ²⁺	nss-Ca ²⁺	Mg ²⁺	H ⁺
Jan	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Feb	1.05	1.03	1.97	0.661	3.20	0.440	0.237	0.376	0.366	0.134	1.37
Mar	1.74	1.72	3.77	1.05	6.27	0.346	0.311	0.252	0.245	0.154	6.07
Apr	0.880	0.863	2.12	0.515	3.52	0.274	0.200	0.214	0.208	0.103	2.65
May	0.383	0.365	0.996	0.400	1.60	0.301	0.0968	0.353	0.347	0.104	0.953
June	0.223	0.185	0.475	0.549	0.634	0.629	0.0553	0.169	0.155	0.107	0.385
July	0.393	0.369	0.800	0.640	0.925	0.401	0.105	0.692	0.683	0.153	0.672
Aug	0.643	0.632	1.77	0.356	4.31	0.179	0.178	0.364	0.360	0.103	1.10
Sept	1.79	1.77	3.11	0.966	6.30	0.348	0.228	0.428	0.421	0.369	2.79
Oct	0.703	0.677	0.666	0.538	1.59	0.432	0.203	0.267	0.258	0.336	0.696
Nov	0.292	0.287	0.288	0.133	0.449	0.0904	0.0358	0.0772	0.0752	0.0392	0.361
Dec	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	8.11	7.90	16.0	5.81	28.8	3.44	1.65	3.19	3.12	1.60	17.1

Data completeness (Monthly)

2009	SO ₄ ²⁻	nss-SO ₄ ²⁻	NO ₃ ⁻	Cl ⁻	NH ₄ ⁺	Na ⁺	K ⁺	Ca ²⁺	nss-Ca ²⁺	Mg ²⁺	H ⁺	pH	EC	Precip.
	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%PCL
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	99.3	99.3	99.3	100
May	100	100	100	100	100	100	100	100	100	100	96.3	96.3	96.3	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	99.4	99.4	99.4	100
Aug	100	100	100	100	100	100	100	100	100	100	99.6	99.6	99.6	100
Sept	100	100	100	100	100	100	100	100	100	100	98.9	98.9	98.9	100
Oct	100	100	100	100	100	100	100	100	100	100	98.7	98.7	98.7	100
Nov	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Dec	--	--	--	--	--	--	--	--	--	--	--	--	--	100
Annual	100	100	100	100	100	100	100	100	100	100	99.1	99.1	99.1	100

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

[0.00] for deposition: The deposition was 0 mmol/m² 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%)

Table 3.56 Monthly results

Site: Hanoi

Country: Viet Nam

Volume-weighted mean concentrations/ Precipitation (Monthly)

2009	SO ₄ ²⁻	nss-SO ₄ ²⁻	NO ₃ ⁻	Cl ⁻	NH ₄ ⁺	Na ⁺	K ⁺	Ca ²⁺	nss-Ca ²⁺	Mg ²⁺	H ⁺	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 ⁻¹ or mm year ⁻¹
Jan	*	*	*	*	*	*	*	*	*	*	*	*	*	4.90
Feb	*	*	*	*	*	*	*	*	*	*	*	*	*	8.00
Mar	99.5	98.8	42.7	16.2	168	12.4	6.63	41.6	41.3	9.10	1.19	5.92	4.19	49.1
Apr	53.7	52.8	24.2	17.4	70.1	15.6	1.85	26.9	26.5	12.6	2.94	5.53	2.40	74.3
May	22.3	21.5	12.9	12.7	34.2	13.1	1.15	9.45	9.16	5.13	4.46	5.35	1.23	229
June	27.3	26.9	22.0	9.37	56.8	7.43	1.72	14.7	14.6	5.43	2.70	5.57	1.58	185
July	23.5	23.2	13.3	5.52	51.0	3.83	<1.0	7.99	7.91	2.29	1.12	5.95	1.12	635
Aug	8.66	8.36	7.70	5.35	21.9	5.07	<1.0	7.02	6.91	2.67	1.21	5.92	0.704	187
Sept	23.4	22.8	13.7	9.05	38.0	9.77	1.28	9.98	9.77	4.76	2.44	5.61	1.25	151
Oct	59.4	56.8	44.8	33.8	87.5	43.7	6.37	29.2	28.3	17.0	3.81	5.42	3.24	83.3
Nov	*	*	*	*	*	*	*	*	*	*	*	*	*	1.20
Dec	*	*	*	*	*	*	*	*	*	*	*	*	*	0.700
Annual	27.4	26.8	16.6	9.65	50.6	9.17	1.57	12.0	11.8	4.78	2.15	5.67	1.41	1609
Max.	153	152	71.2	89.4	275	143	12.1	89.5	87.8	50.6	20.9	7.43	6.25	
Min.	4.06	4.04	4.75	2.39	14.4	<1.0	<1.0	2.76	2.75	0.678	<0.1	4.68	0.395	

Wet deposition (Monthly)

unit: mmol m⁻²month⁻¹ or mmol m⁻²year⁻¹

2009	SO ₄ ²⁻	nss-SO ₄ ²⁻	NO ₃ ⁻	Cl ⁻	NH ₄ ⁺	Na ⁺	K ⁺	Ca ²⁺	nss-Ca ²⁺	Mg ²⁺	H ⁺
Jan	*	*	*	*	*	*	*	*	*	*	*
Feb	*	*	*	*	*	*	*	*	*	*	*
Mar	4.89	4.85	2.10	0.795	8.25	0.611	0.326	2.04	2.03	0.447	0.0587
Apr	3.99	3.92	1.80	1.29	5.21	1.16	0.138	2.00	1.97	0.939	0.219
May	5.11	4.93	2.95	2.91	7.83	2.99	0.263	2.16	2.10	1.18	1.02
June	5.06	4.98	4.08	1.74	10.5	1.38	0.319	2.73	2.70	1.01	0.500
July	14.9	14.8	8.44	3.50	32.4	2.43	0.589	5.07	5.02	1.45	0.711
Aug	1.62	1.56	1.44	1.00	4.10	0.948	0.180	1.31	1.29	0.499	0.226
Sept	3.54	3.45	2.08	1.37	5.75	1.48	0.194	1.51	1.48	0.721	0.370
Oct	4.95	4.73	3.73	2.82	7.29	3.64	0.531	2.43	2.35	1.41	0.317
Nov	*	*	*	*	*	*	*	*	*	*	*
Dec	*	*	*	*	*	*	*	*	*	*	*
Annual	44.1	43.2	26.7	15.5	81.4	14.8	2.53	19.3	19.0	7.70	3.46

Data completeness (Monthly)

2009	SO ₄ ²⁻	nss-SO ₄ ²⁻	NO ₃ ⁻	Cl ⁻	NH ₄ ⁺	Na ⁺	K ⁺	Ca ²⁺	nss-Ca ²⁺	Mg ²⁺	H ⁺	pH	EC	Precip.
	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%PCL
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	88.8	88.8	88.8	88.8	88.8	88.8	88.8	88.8	88.8	88.8	88.8	88.8	88.8	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	0	0	0	0	0	0	0	0	0	0	0	0	0	100
Dec	0	0	0	0	0	0	0	0	0	0	0	0	0	100
Annual	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	100

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

[0.00] for deposition: The deposition was 0 mmol/m² 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%)

Table 3.57 Monthly results

Site: Hoa Binh

Country: Viet Nam

Volume-weighted mean concentrations/ Precipitation (Monthly)

2009	SO ₄ ²⁻	nss-SO ₄ ²⁻	NO ₃ ⁻	Cl ⁻	NH ₄ ⁺	Na ⁺	K ⁺	Ca ²⁺	nss-Ca ²⁺	Mg ²⁺	H ⁺	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 ⁻¹ or mm year ⁻¹
Jan	*	*	*	*	*	*	*	*	*	*	*	*	*	3.50
Feb	65.5	64.9	25.4	27.9	92.8	10.1	4.87	45.1	44.9	3.38	0.275	6.56	2.97	3.80
Mar	88.1	87.4	85.8	19.8	150	11.5	15.4	64.6	64.3	13.0	0.173	6.76	4.69	11.0
Apr	27.8	27.6	17.4	6.42	47.3	3.48	2.43	27.1	27.0	1.68	1.21	5.92	1.61	70.6
May	7.76	7.55	8.63	3.69	16.2	3.43	1.59	8.15	8.08	1.90	0.541	6.27	0.638	133
June	13.8	13.7	15.0	4.54	32.4	1.76	1.52	9.75	9.71	2.01	0.524	6.28	0.926	106
July	7.65	7.50	7.62	4.30	28.0	2.44	2.27	3.99	3.94	1.48	0.400	6.40	0.675	574
Aug	8.12	7.98	11.4	3.62	19.9	2.40	5.53	6.44	6.39	2.15	0.341	6.47	0.758	138
Sept	24.3	24.1	15.6	6.22	31.1	4.33	3.01	12.1	12.0	1.11	13.6	4.87	1.48	197
Oct	46.3	45.9	27.8	10.9	54.6	7.41	2.12	16.7	16.6	3.02	31.9	4.50	2.85	119
Nov	226	224	144	42.9	188	40.6	30.2	210	209	28.6	<0.1	7.10	9.62	2.30
Dec	--	--	--	--	--	--	--	--	--	--	--	--	--	0
Annual	16.1	15.9	12.9	5.38	31.4	3.39	2.72	9.44	9.37	1.85	5.13	5.29	1.10	1357
Max.	226	224	144	42.9	188	40.6	84.9	210	209	28.6	72.9	7.51	9.62	
Min.	5.20	5.09	6.06	2.01	10.9	<1.0	<1.0	0.819	0.779	<0.4	<0.1	4.14	0.480	

Wet deposition (Monthly)

unit: mmol m⁻²month⁻¹ or mmol m⁻²year⁻¹

2009	SO ₄ ²⁻	nss-SO ₄ ²⁻	NO ₃ ⁻	Cl ⁻	NH ₄ ⁺	Na ⁺	K ⁺	Ca ²⁺	nss-Ca ²⁺	Mg ²⁺	H ⁺
Jan	*	*	*	*	*	*	*	*	*	*	*
Feb	0.249	0.247	0.0965	0.106	0.353	0.0384	0.0185	0.171	0.171	0.0128	<0.01
Mar	0.969	0.961	0.944	0.218	1.65	0.126	0.170	0.710	0.707	0.143	<0.01
Apr	1.96	1.95	1.23	0.454	3.34	0.246	0.172	1.91	1.91	0.119	0.0854
May	1.03	1.01	1.15	0.493	2.16	0.457	0.212	1.09	1.08	0.254	0.0721
June	1.46	1.45	1.58	0.481	3.43	0.186	0.161	1.03	1.03	0.213	0.0554
July	4.39	4.30	4.37	2.47	16.1	1.40	1.30	2.29	2.26	0.850	0.229
Aug	1.12	1.10	1.58	0.499	2.74	0.332	0.764	0.888	0.881	0.297	0.0471
Sept	4.78	4.73	3.06	1.22	6.11	0.852	0.592	2.37	2.35	0.218	2.67
Oct	5.49	5.44	3.30	1.29	6.47	0.879	0.252	1.98	1.96	0.358	3.78
Nov	0.520	0.515	0.330	0.0986	0.433	0.0935	0.0694	0.482	0.480	0.0658	<0.01
Dec	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	21.8	21.5	17.5	7.30	42.6	4.60	3.69	12.8	12.7	2.51	6.96

Data completeness (Monthly)

2009	SO ₄ ²⁻	nss-SO ₄ ²⁻	NO ₃ ⁻	Cl ⁻	NH ₄ ⁺	Na ⁺	K ⁺	Ca ²⁺	nss-Ca ²⁺	Mg ²⁺	H ⁺	pH	EC	Precip.
	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%PCL
Jan	0	0	0	0	0	0	0	0	0	0	0	0	0	100
Feb	89.5	89.5	89.5	89.5	89.5	89.5	89.5	89.5	89.5	89.5	89.5	89.5	89.5	100
Mar	78.2	78.2	78.2	78.2	78.2	78.2	78.2	78.2	78.2	78.2	78.2	78.2	78.2	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	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	100
July	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Aug	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6	100
Sept	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Oct	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	100
Nov	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Dec	--	--	--	--	--	--	--	--	--	--	--	--	--	100
Annual	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	100

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

[0.00] for deposition: The deposition was 0 mmol/m² 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%)

Table 3.58 Monthly results

Site: Cuc Phuong

Country: Viet Nam

Volume-weighted mean concentrations/ Precipitation (Monthly)

2009	SO ₄ ²⁻	nss-SO ₄ ²⁻	NO ₃ ⁻	Cl ⁻	NH ₄ ⁺	Na ⁺	K ⁺	Ca ²⁺	nss-Ca ²⁺	Mg ²⁺	H ⁺	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 ⁻¹ or mm year ⁻¹
Jan	106	104	61.5	256	122	28.8	228	61.8	61.2	18.2	5.13	5.29	10.1	15.4
Feb	86.9	82.0	61.5	160	203	82.1	18.4	102	100.0	24.6	0.320	6.49	7.90	14.6
Mar	69.2	67.9	31.6	68.4	92.7	21.7	27.5	75.8	75.3	11.3	3.39	5.47	5.08	68.4
Apr	34.8	32.9	5.21	216	<1.0	31.4	150	52.5	51.8	8.52	39.5	4.40	6.58	91.4
May	6.86	5.89	7.43	47.9	<1.0	16.0	2.70	17.9	17.6	5.39	3.26	5.49	0.984	841
June	15.9	15.7	5.41	81.8	<1.0	2.84	61.2	28.3	28.2	5.12	8.09	5.09	2.32	51.2
July	9.08	8.77	6.66	19.9	<1.0	5.11	2.94	11.9	11.8	1.65	8.03	5.10	0.863	413
Aug	17.6	17.6	<1.0	16.9	<1.0	<1.0	2.63	28.9	28.9	3.17	4.74	5.32	1.08	217
Sept	21.5	21.2	11.0	20.0	3.07	5.14	5.35	19.9	19.8	1.66	16.6	4.78	1.73	403
Oct	40.1	39.9	29.2	25.2	4.41	4.13	7.49	35.4	35.3	4.12	42.3	4.37	2.40	123
Nov	87.4	85.2	74.7	51.1	8.92	35.8	19.1	123	122	9.38	1.20	5.92	4.95	16.8
Dec	307	301	241	138	180	93.3	284	263	261	30.8	1.35	5.87	15.5	11.2
Annual	18.5	17.8	10.9	44.2	6.30	11.2	14.0	24.8	24.6	4.37	10.3	4.99	1.74	2266
Max.	307	301	241	321	268	93.3	284	263	261	34.7	61.7	7.48	15.5	
Min.	3.89	3.22	<1.0	2.20	<1.0	<1.0	<1.0	9.68	9.52	0.411	<0.1	4.21	0.650	

Wet deposition (Monthly)

unit: mmol m⁻²month⁻¹ or mmol m⁻²year⁻¹

2009	SO ₄ ²⁻	nss-SO ₄ ²⁻	NO ₃ ⁻	Cl ⁻	NH ₄ ⁺	Na ⁺	K ⁺	Ca ²⁺	nss-Ca ²⁺	Mg ²⁺	H ⁺
Jan	1.63	1.60	0.947	3.94	1.87	0.443	3.51	0.951	0.942	0.280	0.0790
Feb	1.27	1.20	0.898	2.33	2.97	1.20	0.269	1.49	1.46	0.359	<0.01
Mar	4.73	4.64	2.16	4.68	6.34	1.48	1.88	5.18	5.15	0.770	0.232
Apr	3.18	3.01	0.476	19.8	0.0861	2.87	13.7	4.79	4.73	0.779	3.61
May	5.77	4.96	6.25	40.3	<0.01	13.4	2.27	15.1	14.8	4.54	2.74
June	0.814	0.805	0.277	4.19	0.0318	0.145	3.13	1.45	1.44	0.262	0.414
July	3.74	3.62	2.75	8.19	<0.01	2.11	1.21	4.90	4.85	0.679	3.31
Aug	3.82	3.82	0.0892	3.66	<0.01	<0.01	0.571	6.26	6.26	0.688	1.03
Sept	8.66	8.54	4.44	8.07	1.24	2.07	2.16	8.03	7.99	0.671	6.68
Oct	4.92	4.89	3.58	3.10	0.542	0.507	0.920	<0.01	4.33	0.506	5.20
Nov	1.47	1.43	1.25	0.859	0.150	0.601	0.321	2.06	2.05	0.158	0.0202
Dec	3.44	3.38	2.70	1.54	2.02	1.05	3.18	2.95	2.92	0.345	0.0151
Annual	41.9	40.4	24.6	100	14.3	25.5	31.7	56.2	55.7	9.89	23.4

Data completeness (Monthly)

2009	SO ₄ ²⁻	nss-SO ₄ ²⁻	NO ₃ ⁻	Cl ⁻	NH ₄ ⁺	Na ⁺	K ⁺	Ca ²⁺	nss-Ca ²⁺	Mg ²⁺	H ⁺	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	97.9	97.9	97.9	97.9	97.9	97.9	97.9	97.9	97.9	97.9	97.9	97.9	97.9	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	53.6	53.6	53.6	53.6	53.6	53.6	53.6	53.6	53.6	53.6	53.6	53.6	53.6	100
Annual	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	100

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

[0.00] for deposition: The deposition was 0 mmol/m² 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%)

Table 3.59 Monthly results

Site: Da Nang

Country: Viet Nam

Volume-weighted mean concentrations/ Precipitation (Monthly)

2009	SO ₄ ²⁻	nss-SO ₄ ²⁻	NO ₃ ⁻	Cl ⁻	NH ₄ ⁺	Na ⁺	K ⁺	Ca ²⁺	nss-Ca ²⁺	Mg ²⁺	H ⁺	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 ⁻¹ or mm year ⁻¹
Jan	46.4	35.5	32.5	201	33.4	181	10.4	12.5	8.64	24.0	37.0	4.43	5.88	160
Feb	35.5	31.7	5.18	53.2	16.4	62.7	2.93	12.8	11.5	5.01	5.25	5.28	1.73	22.7
Mar	29.2	22.6	6.19	123	5.50	109	8.70	14.4	12.0	11.7	23.3	4.63	3.14	23.0
Apr	13.6	10.8	12.0	53.3	12.5	47.3	5.98	7.23	6.21	4.15	11.1	4.96	1.64	180
May	9.54	8.59	1.66	30.3	<1.0	15.9	2.94	7.90	7.56	4.49	11.7	4.93	0.997	65.3
June	16.7	16.1	6.13	11.1	6.87	9.66	1.43	4.97	4.76	2.96	18.6	4.73	1.19	35.6
July	14.5	10.3	2.69	84.1	8.06	69.4	4.03	9.00	7.50	7.59	8.56	5.07	1.54	137
Aug	14.3	13.5	7.09	17.4	7.13	13.4	4.56	8.79	8.50	2.50	4.97	5.30	0.685	153
Sept	12.3	6.11	3.06	121	7.28	102	6.98	4.55	2.35	10.2	9.82	5.01	2.16	1376
Oct	14.3	12.8	8.58	31.1	19.4	26.0	5.03	4.15	3.59	2.52	12.2	4.91	1.04	455
Nov	25.9	16.7	10.9	164	9.65	152	4.11	10.7	7.37	16.0	8.12	5.09	3.83	194
Dec	63.5	47.3	85.4	303	52.8	269	8.60	8.57	2.76	30.7	105	3.98	9.40	165
Annual	18.8	13.1	11.4	110	13.5	94.6	6.27	6.35	4.31	10.2	16.8	4.77	2.53	2966
Max.	138	122	103	328	124	290	17.7	28.6	23.6	38.1	107	6.38	12.6	
Min.	7.54	3.92	<1.0	11.1	<1.0	9.05	<1.0	2.59	1.49	1.97	0.417	3.97	0.550	

Wet deposition (Monthly)

unit: mmol m⁻²month⁻¹ or mmol m⁻²year⁻¹

2009	SO ₄ ²⁻	nss-SO ₄ ²⁻	NO ₃ ⁻	Cl ⁻	NH ₄ ⁺	Na ⁺	K ⁺	Ca ²⁺	nss-Ca ²⁺	Mg ²⁺	H ⁺
Jan	7.40	5.66	5.19	32.1	5.33	28.9	1.65	2.00	1.38	3.83	5.90
Feb	0.805	0.719	0.118	1.21	0.372	1.42	0.0664	0.292	0.261	0.114	0.119
Mar	0.671	0.520	0.142	2.82	0.127	2.52	0.200	0.331	0.277	0.268	0.535
Apr	2.45	1.94	2.17	9.58	2.25	8.50	1.08	1.30	1.12	0.746	1.99
May	0.623	0.561	0.108	1.98	0.0448	1.04	0.192	0.516	0.494	0.293	0.761
June	0.594	0.573	0.218	0.394	0.245	0.344	0.0510	0.177	0.169	0.105	0.663
July	1.98	1.41	0.369	11.5	1.10	9.50	0.552	1.23	1.03	1.04	1.17
Aug	2.18	2.06	1.08	2.66	1.09	2.04	0.697	1.34	1.30	0.383	0.759
Sept	16.9	8.41	4.21	167	10.0	141	9.60	6.26	3.23	14.0	13.5
Oct	6.52	5.80	3.90	14.2	8.85	11.8	2.29	1.89	1.63	1.15	5.57
Nov	5.04	3.25	2.12	31.8	1.88	29.6	0.798	2.07	1.43	3.10	1.58
Dec	10.5	7.83	14.1	50.0	8.73	44.4	1.42	1.42	0.456	5.08	17.3
Annual	55.6	38.7	33.7	325	40.0	281	18.6	18.8	12.8	30.1	49.9

Data completeness (Monthly)

2009	SO ₄ ²⁻	nss-SO ₄ ²⁻	NO ₃ ⁻	Cl ⁻	NH ₄ ⁺	Na ⁺	K ⁺	Ca ²⁺	nss-Ca ²⁺	Mg ²⁺	H ⁺	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
Annual	100	100	100	100	100	100	100	100	100	100	100	100	100	100

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

[0.00] for deposition: The deposition was 0 mmol/m² 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%)

Table 3.60 Annual precipitation and volume-weighted mean concentrations in 2009

Country	Name of sites	Code	Precip.	SO ₄ ²⁻	nss-SO ₄ ²⁻	NO ₃ ⁻	Cl ⁻	NH ₄ ⁺	Na ⁺	K ⁺	Ca ²⁺	nss-Ca ²⁺	Mg ²⁺	H ⁺	pH	EC
			mm y ⁻¹	μmol/L	μmol/L	μmol/L	μmol/L	μmol/L	μmol/L	μmol/L	μmol/L	μmol/L	μmol/L	μmol/L		mS/m
Cambodia	Phnom Penh	KH 11052	1326	11.6	11.2	10.3	10.3	13.1	6.95	1.50	20.4	20.3	2.00	0.649	6.19	0.880
China	Haifu	CN 11058	1066	99.3	99.0	53.2	11.0	105	4.20	7.72	43.2	43.2	5.45	60.3	4.22	5.14
	Jinyunshan	CN 11003	1098	114	113	54.4	16.1	110	7.70	8.71	66.7	66.5	5.56	47.1	4.33	5.27
	Shizhan	CN 11004	592	136	135	57.7	26.2	169	13.4	10.2	138	138	12.4	0.297	6.53	5.80
	Jiwozi	CN 11007	628	93.5	92.0	27.4	27.9	52.0	25.2	13.7	93.7	93.2	20.2	0.794	6.10	3.73
	Hongwen	CN 11008	737	26.1	24.6	23.4	32.3	46.6	24.5	2.26	13.2	12.7	4.08	30.2	4.52	2.25
	Xiaoping	CN 11009	1134	28.2	27.3	29.3	20.1	45.8	16.4	2.33	9.04	8.69	3.24	34.1	4.47	2.26
	Xiang Zhou	CN 11010	2010	18.2	15.8	17.7	44.9	22.1	40.2	2.10	4.91	4.04	4.52	13.4	4.87	1.99
	Zhuxiandong	CN 11011	1580	21.0	18.3	19.8	51.4	25.6	45.3	2.56	7.40	6.44	6.15	17.7	4.75	2.15
Indonesia	Jakarta	ID 11012	1557	19.4	18.8	15.3	12.0	17.7	9.31	2.22	12.6	12.4	1.97	23.5	4.63	1.66
	Serpong	ID 11013	1344	23.1	22.5	25.4	17.6	43.0	10.2	1.75	5.17	5.03	1.36	19.3	4.71	1.66
	Kototabang	ID 11014	2656	4.72	4.38	<1.0	10.7	2.69	6.12	9.35	5.47	5.34	1.10	22.6	4.65	0.766
	Bandung	ID 11015	2683	29.2	28.5	22.8	11.8	48.3	11.8	4.08	15.3	15.1	4.13	4.99	5.30	1.62
	Maros	ID 11059	3237	6.96	6.18	5.36	15.3	12.7	13.3	3.89	8.11	7.83	1.86	4.64	5.33	1.06
Japan	Rishiri	JP 11016	1054	25.9	15.3	17.3	193	17.7	176	4.31	10.1	6.39	19.9	18.3	4.74	4.10
	Ochiishi	JP 11050	1580	16.7	5.88	5.42	205	8.40	182	4.09	5.20	1.38	19.9	9.64	5.02	3.31
	Tappi	JP 11017	1337	23.1	11.5	13.4	217	10.5	199	4.95	6.41	2.26	21.1	18.2	4.74	3.78
	Sado-seki	JP 11019	1037	33.0	13.7	16.6	364	12.5	321	7.96	11.1	4.20	36.2	17.7	4.75	5.65
	Happo	JP 11021	2352	10.1	9.82	8.56	6.64	9.73	5.14	<1.0	4.66	4.55	1.16	10.7	4.97	0.860
	Ijira	JP 11022	2876	15.4	14.6	18.4	16.5	18.2	13.5	<1.0	2.74	2.46	1.67	23.0	4.64	1.65
	Oki	JP 11023	1123	37.8	15.2	20.2	436	17.0	376	10.1	14.6	6.44	43.1	19.4	4.71	7.16
	Banryu	JP 11024	1735	20.9	15.0	20.0	114	16.3	98.8	3.00	5.45	3.32	11.8	22.1	4.66	3.02
	Yusuhara	JP 11025	2068	11.7	10.9	7.83	13.9	8.25	12.0	<1.0	1.97	1.71	1.61	17.2	4.77	1.15
	Hedo	JP 11027	1975	13.1	5.55	6.43	141	6.43	127	3.29	4.47	1.75	14.5	7.81	5.11	2.44
	Ogasawara	JP 11018	1675	16.5	5.21	3.39	227	4.82	188	4.55	5.20	1.16	21.9	6.79	5.17	3.27
	Tokyo	JP 11057	1727	16.0	14.5	18.1	27.8	26.2	23.5	1.10	3.42	2.91	2.97	17.7	4.75	1.66
Lao PDR	Vientian	LA 11051	181	4.05	3.50	9.73	6.19	17.3	9.14	<1.0	5.50	5.30	0.722	3.31	5.48	0.534
Malaysia	Petaling Jaya	MY 11029	2968	13.2	12.9	46.4	7.89	7.57	4.59	1.51	4.97	4.87	0.467	45.2	4.35	2.46
	Tanah Rata	MY 11030	3077	3.27	3.19	5.19	2.26	5.41	1.58	<1.0	1.03	1.01	<0.4	8.31	5.08	0.544
	Danum Valley	MY 11053	3391	2.82	2.47	1.65	6.79	3.44	5.83	1.59	1.01	0.919	0.549	6.00	5.22	0.445
	Kuching	MY 11060	4671	3.78	3.33	4.55	8.41	4.94	7.35	<1.0	1.79	1.66	<0.4	5.47	5.26	0.521
Mongolia	Ulaanbaatar	MN 11031	228	19.9	19.6	19.1	9.63	46.7	4.88	2.53	42.2	42.1	5.32	0.777	6.11	1.76
	Terelj	MN 11032	111	16.5	16.0	21.0	9.95	41.0	7.60	4.10	35.8	35.6	5.45	0.608	6.22	2.06
Myanmar	Yangon	MM 11056	3010	8.01	6.90	7.23	25.0	16.2	18.5	6.46	9.66	9.26	2.84	0.346	6.46	1.54
Philippines	Metro Manila	PH 11033	3782	13.6	12.6	8.68	24.6	21.1	20.2	3.99	6.41	5.98	2.56	5.87	5.23	1.24
	Los Banos	PH 11034	2900	8.82	7.77	8.01	25.0	11.7	17.4	9.08	5.08	4.71	3.73	2.64	5.58	0.802
	Mt. Sto. Tomas	PH 11055	4727	5.04	4.54	3.94	8.31	14.1	8.26	1.95	5.87	5.69	1.53	1.47	5.83	0.495
Republic of Korea	Kanghwa	KR 11035	1266	29.2	26.5	18.9	60.2	30.5	45.1	8.97	5.19	4.23	5.27	25.9	4.59	2.88
	Cheju (Kosan)	KR 11036	1039	25.3	22.1	18.6	63.7	45.2	53.6	9.75	4.08	3.03	6.02	7.79	5.11	2.20
	Imsil	KR 11037	1069	19.6	16.6	22.3	51.9	35.2	50.3	10.9	3.88	2.83	3.88	8.06	5.09	1.98
Russia	Mondy	RU 11038	119	7.82	7.69	7.90	3.29	20.2	2.28	3.29	5.19	5.14	1.17	3.33	5.48	0.621
	Listvyanka	RU 11039	312	19.3	19.1	16.4	3.02	13.4	3.82	2.07	12.6	12.5	2.84	14.4	4.84	1.31
	Irkutsk	RU 11040	430	31.2	30.1	16.8	24.9	36.4	18.7	26.6	29.2	28.8	7.55	3.89	5.41	2.18
	Primorskaya	RU 11041	864	22.6	21.8	18.6	14.7	28.8	12.8	4.40	11.7	11.4	3.11	10.5	4.98	1.48
Thailand	Bangkok	TH 11042	2072	12.7	12.1	28.1	7.65	64.9	9.79	1.98	10.0	9.81	1.49	8.07	5.09	1.38
	Samutprakarn	TH 11043	1989	15.1	14.5	20.0	8.45	41.0	10.00	2.77	13.2	13.0	2.80	7.40	5.13	1.48
	Patumthani	TH 11044	1314	8.89	8.56	16.6	6.23	33.0	5.58	1.61	9.19	9.07	1.24	7.05	5.15	1.07
	Khanchanaburi	TH 11045	1998	3.60	3.03	4.55	8.84	26.1	9.49	1.21	4.93	4.72	1.44	2.18	5.66	0.511
	Chiang Mai (Mae Hia)	TH 11046	1052	4.30	4.14	8.44	4.91	20.2	2.69	1.47	5.69	5.63	2.73	1.20	5.92	0.608
	Nakhon Ratchasima	TH 11054	1259	6.44	6.27	12.7	4.62	22.9	2.73	1.31	2.53	2.48	1.27	13.6	4.87	0.981
Viet Nam	Hanoi	VN 11047	1609	27.4	26.8	16.6	9.65	50.6	9.17	1.57	12.0	11.8	4.78	2.15	5.67	1.41
	Hoa Binh	VN 11048	1357	16.1	15.9	12.9	5.38	31.4	3.39	2.72	9.44	9.37	1.85	5.13	5.29	1.10
	Cuc Phuong	VN 11061	2266	18.5	17.8	10.9	44.2	6.30	11.2	14.0	24.8	24.6	4.37	10.3	4.99	1.74
	Da Nang	VN 11062	2966	18.8	13.1	11.4	110	13.5	94.6	6.27	6.35	4.31	10.2	16.8	4.77	2.53

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

***] Not measured

Table 3.61 Annual deposition in 2009

Country	Name of sites	Code	SO ₄ ²⁻ mmol m ⁻² y ⁻¹	nss-SO ₄ ²⁻ mmol m ⁻² y ⁻¹	NO ₃ ⁻ mmol m ⁻² y ⁻¹	Cl ⁻ mmol m ⁻² y ⁻¹	NH ₄ ⁺ mmol m ⁻² y ⁻¹	Na ⁺ mmol m ⁻² y ⁻¹	K ⁺ mmol m ⁻² y ⁻¹	Ca ²⁺ mmol m ⁻² y ⁻¹	nss-Ca ²⁺ mmol m ⁻² y ⁻¹	Mg ²⁺ mmol m ⁻² y ⁻¹	H ⁺ mmol m ⁻² y ⁻¹
Cambodia	Phnom Penh	KH 11052	15.4	14.9	13.7	13.6	17.3	9.22	1.98	27.1	26.9	2.66	0.861
China	Haifu	CN 11058	106	106	56.7	11.7	112	4.48	8.23	46.1	46.0	5.81	64.3
	Jinyunshan	CN 11003	125	124	59.7	17.7	121	8.45	9.56	73.2	73.0	6.10	51.7
	Shizhan	CN 11004	80.5	80.1	34.1	15.5	99.7	7.91	6.03	81.7	81.5	7.34	0.176
	Jiwozi	CN 11007	58.7	57.8	17.2	17.5	32.7	15.8	8.58	58.9	58.5	12.7	0.498
	Hongwen	CN 11008	19.2	18.1	17.2	23.8	34.4	18.1	1.66	9.71	9.32	3.01	22.2
	Xiaoping	CN 11009	32.0	30.9	33.2	22.8	52.0	18.5	2.64	10.2	9.85	3.67	38.7
	Xiang Zhou	CN 11010	36.6	31.7	35.5	90.2	44.4	80.7	4.23	9.87	8.13	9.08	26.9
	Zhuxiandong	CN 11011	33.2	28.9	31.3	81.2	40.5	71.5	4.04	11.7	10.2	9.71	28.0
Indonesia	Jakarta	ID 11012	30.2	29.3	23.8	18.7	27.6	14.5	3.46	19.6	19.2	3.06	36.6
	Serpong	ID 11013	31.0	30.2	34.2	23.6	57.7	13.7	2.36	6.95	6.76	1.83	25.9
	Kototabang	ID 11014	12.5	11.6	0.679	28.4	7.15	16.3	24.8	14.5	14.2	2.92	59.9
	Bandung	ID 11015	78.3	76.4	61.3	31.6	130	31.6	11.0	41.1	40.4	11.1	13.4
	Maros	ID 11059	22.5	20.0	17.4	49.7	41.2	43.0	12.6	26.3	25.3	6.02	15.0
Japan	Rishiri	JP 11016	27.4	16.2	18.3	203	18.7	185	4.54	10.6	6.74	21.0	19.3
	Ochiishi	JP 11050	26.3	9.29	8.57	323	13.3	287	6.47	8.21	2.18	31.4	15.2
	Tappi	JP 11017	30.9	15.4	18.0	290	14.0	266	6.62	8.58	3.02	28.2	24.4
	Sado-seki	JP 11019	34.2	14.2	17.2	377	12.9	333	8.26	11.5	4.36	37.6	18.4
	Happo	JP 11021	23.8	23.1	20.1	15.6	22.9	12.1	1.58	11.0	10.7	2.73	25.2
	Ijira	JP 11022	44.2	41.9	52.9	47.4	52.4	39.0	1.95	7.89	7.06	4.80	66.0
	Oki	JP 11023	42.4	17.0	22.7	489	19.1	422	11.3	16.3	7.23	48.3	21.8
	Banryu	JP 11024	36.3	25.9	34.8	197	28.3	171	5.20	9.46	5.76	20.4	38.3
	Yusuhara	JP 11025	24.1	22.6	16.2	28.8	17.1	24.9	1.59	4.07	3.53	3.33	35.5
	Hedo	JP 11027	25.9	11.0	12.7	278	12.7	250	6.49	8.83	3.46	28.6	15.4
	Ogasawara	JP 11018	27.7	8.72	5.67	379	8.07	315	7.61	8.71	1.95	36.6	11.4
	Tokyo	JP 11057	27.6	25.1	31.3	48.0	45.3	40.7	1.90	5.91	5.03	5.13	30.6
Lao PDR	Vientian	LA 11051	0.733	0.633	1.76	1.12	3.13	1.66	0.168	0.996	0.960	0.131	0.600
Malaysia	Petaling Jaya	MY 11029	39.2	38.4	138	23.4	22.5	13.6	4.47	14.8	14.5	1.39	134
	Tanah Rata	MY 11030	10.0	9.80	16.0	6.96	16.7	4.87	3.05	3.17	3.10	0.0927	25.6
	Danum Valley	MY 11053	9.56	8.36	5.61	23.0	11.7	19.8	5.39	3.43	3.12	1.86	20.4
	Kuching	MY 11060	17.6	15.6	21.2	39.3	23.1	34.3	3.24	8.35	7.76	1.84	25.5
Mongolia	Ulaanbaatar	MN 11031	4.53	4.47	4.35	2.20	10.6	1.11	0.577	9.63	9.60	1.21	0.177
	Terej	MN 11032	1.83	1.78	2.33	1.10	4.54	0.843	0.455	3.97	3.95	0.604	0.0675
Myanmar	Yangon	MM 11056	24.1	20.8	21.8	75.3	48.9	55.7	19.4	29.1	27.9	8.54	1.04
Philippines	Metro Manila	PH 11033	51.3	47.7	32.8	92.9	79.7	76.5	15.1	24.2	22.6	9.69	22.2
	Los Banos	PH 11034	25.6	22.5	23.2	72.6	33.9	50.5	26.3	14.7	13.7	10.8	7.64
	Mt. Sto. Tomas	PH 11055	23.8	21.5	18.6	39.3	66.7	39.1	9.24	27.8	26.9	7.23	6.96
Republic of Korea	Kanghwa	KR 11035	37.0	33.6	23.9	76.2	38.6	57.1	11.3	6.57	5.35	6.67	32.7
	Cheju (Kosan)	KR 11036	26.3	23.0	19.3	66.1	47.0	55.7	10.1	4.23	3.15	6.25	8.09
	Imsil	KR 11037	21.0	17.7	23.9	55.5	37.6	53.7	11.7	4.14	3.02	4.14	8.62
Russia	Mondy	RU 11038	0.929	0.912	0.938	0.391	2.40	0.270	0.390	0.616	0.610	0.138	0.395
	Listvyanka	RU 11039	6.02	5.94	5.10	0.942	4.18	1.19	0.646	3.92	3.89	0.884	4.49
	Irkutsk	RU 11040	13.4	12.9	7.23	10.7	15.7	8.06	11.4	12.6	12.4	3.25	1.67
	Primorskaya	RU 11041	19.5	18.8	16.1	12.7	24.9	11.0	3.81	10.1	9.86	2.68	9.11
Thailand	Bangkok	TH 11042	26.3	25.1	58.2	15.9	134	20.3	4.10	20.8	20.3	3.09	16.7
	Samutprakarn	TH 11043	30.0	28.8	39.7	16.8	81.5	19.9	5.51	26.2	25.8	5.57	14.7
	Patumthani	TH 11044	11.7	11.2	21.8	8.18	43.3	7.34	2.12	12.1	11.9	1.62	9.26
	Khanchanaburi	TH 11045	7.19	6.05	9.10	17.6	52.1	19.0	2.41	9.85	9.44	2.87	4.35
	Chiang Mai (Mae Hia)	TH 11046	4.52	4.36	8.88	5.16	21.2	2.83	1.55	5.98	5.92	2.87	1.26
	Nakhon Ratchasima	TH 11054	8.11	7.90	16.0	5.81	28.8	3.44	1.65	3.19	3.12	1.60	17.1
Viet Nam	Hanoi	VN 11047	44.1	43.2	26.7	15.5	81.4	14.8	2.53	19.3	19.0	7.70	3.46
	Hoa Binh	VN 11048	21.8	21.5	17.5	7.30	42.6	4.60	3.69	12.8	12.7	2.51	6.96
	Cuc Phuong	VN 11061	41.9	40.4	24.6	100	14.3	25.5	31.7	56.2	55.7	9.89	23.4
	Da Nang	VN 11062	55.6	38.7	33.7	325	40.0	281	18.6	18.8	12.8	30.1	49.9

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

[***] Not measured

Table 3.62 Data completeness for annual summaries in 2009 (%PCL, %TP)

Country	Name of sites	Code	Precip.	SO ₄ ²⁻	nss-SO ₄ ²⁻	NO ₃ ⁻	Cl ⁻	NH ₄ ⁺	Na ⁺	K ⁺	Ca ²⁺	nss-Ca ²⁺	Mg ²⁺	H ⁺	pH	EC
			%PCL	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP
Cambodia	Phnom Penh	KH 11052	96.4	100	100	100	100	100	100	100	100	100	100	100	100	100
China	Haifu	CN 11058	100	99.1	99.1	99.1	99.1	99.1	99.1	99.1	99.1	99.1	99.1	99.1	99.1	99.1
	Jinyunshan	CN 11003	100	100	100	100	100	100	100	100	100	100	100	100	100	100
	Shizhan	CN 11004	100	100	100	100	100	100	100	100	100	100	100	100	100	100
	Jiwozi	CN 11007	75.9	100	100	100	100	100	100	100	100	100	100	100	100	100
	Hongwen	CN 11008	100	100	100	100	100	100	100	100	100	100	100	100	100	100
	Xiaoping	CN 11009	100	100	100	100	100	100	100	100	100	100	100	100	100	100
	Xiang Zhou	CN 11010	100	100	100	100	100	100	100	100	100	100	100	100	100	100
	Zhuxiandong	CN 11011	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Indonesia	Jakarta	ID 11012	100	100	100	100	100	100	100	100	100	100	100	100	100	100
	Serpong	ID 11013	100	100	100	100	100	100	100	100	100	100	100	100	100	100
	Kototabang	ID 11014	100	100	100	100	100	100	100	100	100	100	100	100	100	100
	Bandung	ID 11015	100	100	100	100	100	100	100	100	100	100	100	100	100	100
	Maros	ID 11059	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Japan	Rishiri	JP 11016	100	77.7	77.7	77.7	77.7	77.7	77.7	77.7	77.7	77.7	77.7	77.0	77.0	77.7
	Ochiishi	JP 11050	90.4	74.9	74.9	74.9	74.9	74.9	74.9	74.9	74.9	74.9	74.9	75.4	75.4	75.5
	Tappi	JP 11017	96.2	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.0	97.0	97.0
	Sado-seki	JP 11019	100	85.9	85.9	85.9	85.9	85.9	85.9	85.9	85.9	85.9	85.9	83.2	83.2	83.2
	Happo	JP 11021	98.9	91.3	91.3	91.3	91.3	91.3	91.3	91.3	91.3	91.3	91.3	90.9	90.9	90.9
	Ijira	JP 11022	100	100	100	100	100	100	100	100	100	100	100	100	100	100
	Oki	JP 11023	99.7	99.1	99.1	99.1	99.1	99.1	99.1	99.1	99.1	99.1	99.1	98.7	98.7	99.1
	Banryu	JP 11024	100	99.2	99.2	99.2	99.2	99.2	99.2	99.2	99.2	99.2	99.2	99.2	99.2	99.2
	Yusuhara	JP 11025	99.2	95.3	95.3	95.3	95.3	95.3	95.3	95.3	95.3	95.3	95.3	95.1	95.1	95.1
	Hedo	JP 11027	98.9	91.9	91.9	91.9	91.9	91.9	91.9	91.9	91.9	91.9	91.9	91.4	91.4	91.4
	Ogasawara	JP 11018	99.7	99.1	99.1	99.1	99.1	99.1	99.1	99.1	99.1	99.1	99.1	99.0	99.0	99.0
	Tokyo	JP 11057	99.7	92.5	92.5	92.5	92.5	92.5	92.5	92.5	92.5	92.5	92.5	92.1	92.1	92.1
Lao PDR	Vientian	LA 11051	33.2	100	100	100	100	100	100	100	100	100	100	100	100	100
Malaysia	Petaling Jaya	MY 11029	100	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	98.2	98.2	98.2
	Tanah Rata	MY 11030	100	97.2	97.2	97.2	97.2	97.2	97.2	97.2	97.2	97.2	97.2	90.5	90.5	90.5
	Danum Valley	MY 11053	100	92.0	92.0	92.0	92.0	92.0	92.0	92.0	92.0	92.0	92.0	85.3	85.3	85.3
	Kuching	MY 11060	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Mongolia	Ulaanbaatar	MN 11031	100	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	89.6	100	100
	Terelj	MN 11032	100	99.5	99.5	99.5	99.5	99.8	99.8	99.8	99.8	99.8	99.8	100	100	100
Myanmar	Yangon	MM 11056	100	50.4	50.4	50.4	50.4	50.4	50.4	50.4	50.4	50.4	50.4	100	100	100
Philippines	Metro Manila	PH 11033	100	63.1	62.3	62.3	66.2	62.3	62.3	62.3	62.3	62.3	62.3	59.5	59.5	59.5
	Los Banos	PH 11034	100	95.8	95.8	95.8	95.8	95.8	95.8	95.8	95.8	95.8	95.8	95.8	95.8	95.8
	Mt. Sto. Tomas	PH 11055	100	98.8	98.8	98.8	98.8	98.8	98.8	98.8	98.8	98.8	98.8	98.8	98.8	98.8
Republic of Korea	Kanghwa	KR 11035	100	100	100	100	100	100	100	100	100	100	100	100	100	100
	Cheju (Kosan)	KR 11036	100	100	100	100	100	100	100	100	100	100	100	100	100	100
	Imsil	KR 11037	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Russia	Mondy	RU 11038	100	100	100	100	100	100	100	100	100	100	100	100	100	100
	Listvyanka	RU 11039	100	100	100	100	100	100	100	100	100	100	100	99.7	99.7	100
	Irkutsk	RU 11040	100	100	100	100	100	100	100	100	100	100	100	100	100	100
	Primorskaya	RU 11041	100	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5	100.0	100.0	99.5
Thailand	Bangkok	TH 11042	100	98.8	98.8	98.8	98.8	98.8	98.8	98.8	98.8	98.8	98.8	98.3	98.3	98.7
	Samutprakarn	TH 11043	100	95.3	95.3	95.3	95.3	95.3	95.3	95.3	95.3	95.3	95.3	98.1	98.1	98.1
	Patumthani	TH 11044	100	100	100	100	100	100	100	100	100	100	100	99.9	99.9	99.9
	Khanchanaburi	TH 11045	100	83.4	83.4	83.4	83.4	83.4	83.4	83.4	83.4	83.4	83.4	79.5	79.5	79.5
	Chiang Mai (Mae Hia)	TH 11046	100	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4
	Nakhon Ratchasima	TH 11054	100	100	100	100	100	100	100	100	100	100	100	99.1	99.1	99.1
Viet Nam	Hanoi	VN 11047	100	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7
	Hoa Binh	VN 11048	100	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4
	Cuc Phuong	VN 11061	100	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8
	Da Nang	VN 11062	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%)

*** Not measured

Table 3.63 Results of ion balance and conductivity agreement check in 2009

Country	Name of sites	Code	Sample (N)	R ₁ (N)	R ₁ (AA)	%	R ₂ (N)	R ₂ (AA)	%	R ₁ &R ₂ (N)	R ₁ &R ₂ (AA)	%
Cambodia	Phnom Penh	KH 11052	32	30	12	40.0	30	20	66.7	30	10	33.3
China	Haifu	CN 11058	103	102	95	93.1	102	101	99.0	102	94	92.2
	Jinyunshan	CN 11003	84	83	80	96.4	83	80	96.4	83	78	94.0
	Shizhan	CN 11004	33	32	20	62.5	32	26	81.3	32	18	56.3
	Jiwozi	CN 11007	82	81	64	79.0	81	71	87.7	81	57	70.4
	Hongwen	CN 11008	42	41	27	65.9	41	37	90.2	41	23	56.1
	Xiaoping	CN 11009	50	49	34	69.4	49	43	87.8	49	33	67.3
	Xiang Zhou	CN 11010	86	85	62	72.9	85	76	89.4	85	60	70.6
	Zhuxiandong	CN 11011	60	59	41	69.5	59	50	84.7	59	39	66.1
Indonesia	Jakarta	ID 11012	32	31	17	54.8	31	25	80.6	31	15	48.4
	Serpong	ID 11013	76	75	75	100	75	75	100	75	75	100
	Kototabang	ID 11014	46	45	8	17.8	45	26	57.8	45	5	11.1
	Bandung	ID 11015	91	90	88	97.8	90	90	100	90	88	97.8
	Maros	ID 11059	39	38	10	26.3	38	32	84.2	38	7	18.4
Japan	Rishiri	JP 11016	206	134	128	95.5	134	118	88.1	134	115	85.8
	Ochiishi	JP 11050	109	86	85	98.8	86	85	98.8	86	84	97.7
	Tappi	JP 11017	129	117	117	100	117	116	99.1	117	116	99.1
	Sado-seki	JP 11019	145	93	92	98.9	93	93	100	93	92	98.9
	Happo	JP 11021	197	178	176	98.9	178	178	100	178	176	98.9
	Ijira	JP 11022	50	49	49	100	49	49	100	49	49	100
	Oki	JP 11023	250	140	140	100	140	140	100	140	140	100
	Banryu	JP 11024	51	48	48	100	48	48	100	48	48	100
	Yusuhara	JP 11025	151	130	124	95.4	130	130	100	130	124	95.4
	Hedo	JP 11027	156	124	124	100	124	124	100	124	124	100
	Ogasawara	JP 11018	151	130	126	96.9	130	130	100	130	126	96.9
	Tokyo	JP 11057	147	109	104	95.4	109	107	98.2	109	103	94.5
Lao PDR	Vientiane	LA 11051	7	6	1	16.7	6	5	83.3	6	1	16.7
Malaysia	Petaling Jaya	MY 11029	52	44	30	68.2	44	43	97.7	44	30	68.2
	Tanah Rata	MY 11030	49	41	34	82.9	41	38	92.7	41	33	80.5
	Danum Valley	MY 11053	50	40	30	75.0	40	34	85.0	40	27	67.5
	Kuching	MY 11060	52	51	41	80.4	51	51	100	51	41	80.4
Mongolia	Ulaanbaatar	MN 11031	36	14	13	92.9	14	13	92.9	14	12	85.7
	Terelj	MN 11032	40	14	10	71.4	14	12	85.7	14	9	64.3
Myanmar	Yangon	MM 11056	30	14	11	78.6	14	11	78.6	14	10	71.4
Philippines	Metro Manila	PH 11033	28	23	23	100	23	20	87.0	23	20	87.0
	Los Banos	PH 11034	44	35	33	94.3	35	32	91.4	35	31	88.6
	Mt. Sto. Tomas	PH 11055	31	30	30	100	30	30	100	30	30	100
Republic of Korea	Kanghwa	KR 11035	37	36	28	77.8	36	21	58.3	36	16	44.4
	Cheju (Kosan)	KR 11036	55	54	46	85.2	54	31	57.4	54	29	53.7
	Imsil	KR 11037	54	53	44	83.0	53	32	60.4	53	26	49.1
Russia	Mondy	RU 11038	13	12	12	100	12	12	100	12	12	100
	Listvyanka	RU 11039	72	69	67	97.1	69	67	97.1	69	67	97.1
	Irkutsk	RU 11040	99	96	95	99.0	96	96	100	96	95	99.0
	Primorskaya	RU 11041	112	91	91	100	91	91	100	91	91	100
Thailand	Bangkok	TH 11042	72	67	8	11.9	67	51	76.1	67	7	10.4
	Samutprakarn	TH 11043	97	95	15	15.8	95	57	60.0	95	10	10.5
	Patumthani	TH 11044	93	90	12	13.3	90	79	87.8	90	10	11.1
	Khanchanaburi	TH 11045	112	104	38	36.5	104	84	80.8	104	37	35.6
	Chiang Mai (Mae Hia)	TH 11046	101	95	40	42.1	95	84	88.4	95	37	38.9
	Nakhon Ratchasima	TH 11054	107	93	20	21.5	93	78	83.9	93	18	19.4
Viet Nam	Hanoi	VN 11047	33	32	32	100	32	32	100	32	32	100
	Hoa Binh	VN 11048	32	31	31	100	31	31	100	31	31	100
	Cuc Phuong	VN 11061	33	29	28	96.6	29	25	86.2	29	24	82.8
	Da Nang	VN 11062	34	33	32	97.0	33	29	87.9	33	28	84.8

Sample(N) : Number of samples

R₁(N) : Number of samples measured and calculated ion balance (R₁)

R₁(AA) : Number of samples within allowable ranges for R₁

R₂(N) : Number of samples measured and calculated conductivity agreement (R₂)

R₂(AA) : Number of samples within allowable ranges for R₂

R₁&R₂(N) : Number of samples measured and calculated both R₁ and R₂

R₁&R₂(AA) : Number of samples within allowable ranges for both R₁ and R₂

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: R₁ and R₂, calculated including concentrations of additional measured constituents

Table 3.64 Annual precipitation

unit: mm y⁻¹

Country	Name of sites	Code	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Cambodia	Phnom Penh	KH 11052					419	1308	949	1374	1834	1326
China	Guanyinqiao	CN 11001	1081	752	1445	987	1387	1077	842	1299		
	Nanshan	CN 11002	1259									
	Haifu	CN 11058									1010	1066
	Jinyunshan	CN 11003		710	1607	1233	1518	1461	1196	1645	1213	1098
	Shizhan	CN 11004	559	364	349	1273	601	509	483	527	385	592
	Weishuiyuan	CN 11005	447	69.3	232	1302	466	439	316			
	Jiwozi	CN 11007	829	209	142	611	1020	362	234	100	438	628
	Hongwen	CN 11008	1517	296	1568	1301	1065	1702	2134	1347	945	737
	Xiaoping	CN 11009	1566	2682	2171	1768	1958	2921	2352	1044	2000	1134
	Xiang Zhou	CN 11010	2031	1990	1731	1726	1340	1179	1529	1442	2815	2010
	Zhuxiandong	CN 11011	1779	2571	1581	1755	1277	1062	887	***	2311	1580
Indonesia	Jakarta	ID 11012	1577	1237	1572	1617	1469	2125	1481	2171	1717	1557
	Serpong	ID 11014	***	1607	2505	2143	1462	824	1603	2015	2370	1344
	Kototabang	ID 11013	2340	1209	1798	3127	2111	2194	1248	2772	2481	2656
	Bandung	ID 11015	893	2605	2541	1606	894	1749	1311	1969	2334	2683
	Maros	ID 11059									3037	3237
Japan	Rishiri	JP 11016	770	615	957	709	945	961	1294	883	828	1054
	Ochiishi	JP 11050				782	648	822	997	866	730	1580
	Tappi	JP 11017	1049	1082	1329	1150	1473	1240	964	1055	824	1337
	Sado-seki	JP 11019	1068	971	1433	1126	1539	1143	1264	1163	1021	1037
	Happo	JP 11021	2188	2345	2607	2461	3088	2997	2755	2329	1645	2352
	Ijira	JP 11022	2685	2237	2648	2967	3424	2569	2829	2263	2250	2876
	Okii	JP 11023	1209	1246	1571	1597	1409	1313	1396	1160	1110	1123
	Banryu	JP 11024	1565	1788	1303	1752	1738	1290	1960	1273	1268	1735
	Yusuhara	JP 11025	2801	2080	2346	2839	3970	2321	3160	2373	2189	2068
	Hedo	JP 11027	2907	2126	2032	1393	1778	1780	1863	2701	1961	1975
	Ogasawara	JP 11018	1985	1806	1331	1398	1171	2050	1585	1567	1674	1675
	Tokyo	JP 11057								1080	1860	1727
Lao PDR	Vientian	LA 11051				88.6	442	665	709	1399	1668	181
Malaysia	Petaling Jaya	MY 11029	3417	3085	2660	3041	2996	2848	4009	3021	3747	2968
	Tanah Rata	MY 11030	3127	2626	2783	3010	2415	2886	2785	2968	3925	3077
	Danum Valley	MY 11053						1256	3005	2988	2999	3391
	Kuching	MY 11060									4286	4671
Mongolia	Ulaanbaatar	MN 11031	197	166	179	297	83.4	150	188	126	155	228
	Terelj	MN 11032	208	88.6	246	312	207	246	215	185	206	111
Myanmar	Yangon	MM 11056								3981	6375	3010
Philippines	Metro Manila	PH 11033	4036	2291	2975	2205	2164	2377	2696	3505	2381	3782
	Los Banos	PH 11034	2635	1817	1702	1608	1743	1643	2222	3097	1894	2900
	Mt. Sto. Tomas	PH 11055							431	3379	5078	4727
Republic of Korea	Kanghwa	KR 11035	1118	1139	824	1573	878	811	1092	883	1546	1266
	Cheju (Kosan)	KR 11036	1058	1114	1017	1291	1124	699	1127	1244	843	1039
	Imsil	KR 11037		1299	993	1876	1207	1248	709	1344	854	1069
Russia	Mondy	RU 11038	305	319	204	409	360	286	410	351	206	119
	Listvyanka	RU 11039	442	494	360	540	551	452	311	408	391	312
	Irkutsk	RU 11040	534	468	303	457	553	442	357	478	527	430
	Primorskaya	RU 11041			835	323	692	737	623	989	553	864
Thailand	Bangkok	TH 11042	1148	1174	1300	1385	1211	2006	1589	1579	1776	2072
	Samutprakarn	TH 11043	978				1260	1625	1420	1871	1734	1989
	Patumthani	TH 11044	956	1349	948	1658	976	1268	1608	1381	1670	1314
	Khanchanaburi	TH 11045	881	1516	2200	1627	1392	2043	2518	1704	1962	1998
	Chiang Mai (Mae Hia)	TH 11046		1084	1473	808	1151	1430	1420	937	1286	1052
	Nakhon Ratchasima	TH 11054							1190	1386	1722	1259
Viet Nam	Hanoi	VN 11047	1256	2255	1416	1586	1575	1761	1231	1659	2267	1609
	Hoa Binh	VN 11048	1894	2223	1626	1691	1831	2279	1546	1949	1978	1357
	Cuc Phuong	VN 11061										2266
	Da Nang	VN 11062										2966

[***]: 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 SO₄²⁻

			unit: µmol/L									
Country	Name of sites	Code	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Cambodia	Phnom Penh	KH 11052					***	5.68	5.31	22.5	11.6	11.6
China	Guanyinqiao	CN 11001	152	205	114	110	165	186	177	130		
	Nanshan	CN 11002	130									
	Haifu	CN 11058									144	99.3
	Jinyunshan	CN 11003		124	78.3	83.2	109	102	141	90.4	120	114
	Shizhan	CN 11004	356	470	850	203	173	126	274	183	191	136
	Weishuiyuan	CN 11005	538	1510	1010	143	202	107	330			
	Jiwozi	CN 11007	141	326	305	90.6	55.2	118	128	182	145	93.5
	Hongwen	CN 11008	20.2	56.5	42.8	36.9	69.1	47.2	28.6	75.5	31.7	26.1
	Xiaoping	CN 11009	14.6	18.3	16.7	23.6	27.2	20.2	16.9	28.0	29.2	28.2
	Xiang Zhou	CN 11010	22.4	15.7	27.9	20.5	18.7	23.8	29.2	21.7	16.5	18.2
	Zhuxiandong	CN 11011	48.0	19.3	32.0	18.5	26.9	29.5	19.3	***	21.5	21.0
Indonesia	Jakarta	ID 11012	58.7	62.7	38.5	66.7	48.6	40.3	26.2	27.9	22.7	19.4
	Serpong	ID 11014	***	38.2	25.7	23.1	28.1	33.3	28.2	30.5	27.8	23.1
	Kototabang	ID 11013	3.69	4.68	7.47	9.18	5.23	5.50	7.65	6.99	2.91	4.72
	Bandung	ID 11015	67.4	33.7	27.7	20.4	27.7	35.3	26.8	26.4	28.0	29.2
	Maros	ID 11059									5.38	6.96
Japan	Rishiri	JP 11016	39.0	31.0	27.3	23.5	28.6	27.9	22.9	28.3	29.4	25.9
	Ochiishi	JP 11050				19.1	34.5	22.6	27.7	21.3	18.7	16.7
	Tappi	JP 11017	21.9	22.9	22.7	21.8	26.2	29.6	35.8	29.6	28.3	23.1
	Sado-seki	JP 11019	34.4	41.0	28.2	16.5	17.7	34.2	28.3	34.9	31.0	33.0
	Happo	JP 11021	13.3	11.7	7.59	7.53	9.13	12.0	10.3	12.2	10.9	10.1
	Ijira	JP 11022	19.9	22.0	19.7	19.1	14.0	18.9	20.6	19.0	18.2	15.4
	Okii	JP 11023	40.5	33.8	35.3	21.5	29.3	55.7	29.5	36.3	35.6	37.8
	Banryu	JP 11024	15.6	19.0	19.0	17.4	19.8	26.9	22.0	27.9	25.8	20.9
	Yusuhara	JP 11025	11.1	9.16	11.2	9.33	6.72	12.1	10.1	9.50	10.2	11.7
	Hedo	JP 11027	32.2	15.9	36.9	35.2	77.0	36.0	19.2	14.4	14.2	13.1
	Ogasawara	JP 11018	11.4	11.4	18.1	18.0	10.7	13.1	10.2	12.7	8.97	16.5
	Tokyo	JP 11057								17.1	19.6	16.0
Lao PDR	Vientian	LA 11051				***	***	***	3.46	4.67	5.06	4.05
Malaysia	Petaling Jaya	MY 11029	23.5	22.2	23.7	21.0	18.2	23.3	20.6	13.8	17.5	13.2
	Tanah Rata	MY 11030	4.12	3.73	4.62	3.79	4.03	5.58	4.43	3.52	3.28	3.27
	Danum Valley	MY 11053						4.40	3.41	2.29	2.49	2.82
	Kuching	MY 11060									4.14	3.78
Mongolia	Ulaanbaatar	MN 11031	24.3	25.2	24.7	19.5	22.1	26.7	25.4	37.1	27.9	19.9
	Terelj	MN 11032	16.4	9.72	15.1	8.26	13.3	17.5	23.8	25.0	16.5	16.5
Myanmar	Yangon	MM 11056								***	***	8.01
Philippines	Metro Manila	PH 11033	23.4	37.3	26.3	17.1	20.4	24.0	17.6	22.3	24.9	13.6
	Los Banos	PH 11034	10.5	15.6	16.1	7.08	8.42	9.86	10.8	8.38	18.0	8.82
	Mt. Sto. Tomas	PH 11055							1.37	5.74	3.47	5.04
Republic of Korea	Kanghwa	KR 11035	31.6	25.0	34.5	26.1	44.8	46.8	37.0	41.2	27.9	29.2
	Cheju (Kosan)	KR 11036	23.2	20.7	28.0	22.7	23.8	34.3	28.1	37.9	26.2	25.3
	Imsil	KR 11037		16.4	22.9	16.3	16.5	22.8	26.8	28.8	21.0	19.6
Russia	Mondy	RU 11038	7.18	11.0	10.8	8.51	6.85	5.37	4.70	9.31	7.13	7.82
	Listvyanka	RU 11039	15.4	13.4	18.2	19.1	19.2	17.3	19.0	17.1	21.3	19.3
	Irkutsk	RU 11040	30.1	29.6	34.2	26.3	26.6	27.8	26.0	33.6	38.5	31.2
	Primorskaya	RU 11041			29.0	43.1	37.2	38.2	46.0	30.8	40.6	22.6
Thailand	Bangkok	TH 11042	21.6	18.2	18.6	18.5	16.3	19.5	22.3	17.2	18.0	12.7
	Samutprakarn	TH 11043	25.5				16.5	19.1	20.7	14.8	15.7	15.1
	Patumthani	TH 11044	19.6	17.2	15.0	12.4	17.5	13.2	13.4	12.0	10.6	8.89
	Khanchanaburi	TH 11045	3.64	5.22	5.62	3.56	3.39	2.80	4.04	2.47	3.78	3.60
	Chiang Mai (Mae Hia)	TH 11046		2.79	4.46	4.13	6.90	5.90	4.54	6.00	4.96	4.30
	Nakhon Ratchasima	TH 11054							8.24	6.44	7.36	6.44
Viet Nam	Hanoi	VN 11047	30.1	14.0	33.7	30.1	37.0	51.4	46.9	33.6	20.2	27.4
	Hoa Binh	VN 11048	16.3	14.7	18.8	22.5	29.4	17.8	24.9	17.0	13.6	16.1
	Cuc Phuong	VN 11061										18.5
	Da Nang	VN 11062										18.8

[***]: 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 nss-SO₄²⁻

			unit: µmol/L									
Country	Name of sites	Code	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Cambodia	Phnom Penh	KH 11052					***	***	5.08	22.0	8.67	11.2
China	Guanyinqiao	CN 11001	151	205	114	109	165	185	177	130		
	Nanshan	CN 11002	130									
	Haifu	CN 11058									144	99.0
	Jinyunshan	CN 11003		123	78.0	82.9	109	101	140	90.0	120	113
	Shizhan	CN 11004	353	460	835	199	171	125	271	182	190	135
	Weishuiyuan	CN 11005	534	1500	994	136	201	106	326			
	Jiwozi	CN 11007	140	316	295	84.5	53.7	115	124	177	140	92.0
	Hongwen	CN 11008	18.8	55.9	39.4	34.8	66.0	44.1	27.0	74.0	30.3	24.6
	Xiaoping	CN 11009	14.1	17.6	15.7	22.1	26.4	19.6	16.1	27.2	27.8	27.3
	Xiang Zhou	CN 11010	19.9	14.6	25.4	18.3	16.7	21.5	27.0	20.5	14.4	15.8
	Zhuxiandong	CN 11011	46.3	18.0	29.3	16.4	23.8	26.1	18.0	***	19.0	18.3
Indonesia	Jakarta	ID 11012	55.6	60.3	36.4	65.1	46.4	38.9	25.4	27.0	22.1	18.8
	Serpong	ID 11014	***	36.8	24.2	22.4	26.9	32.3	27.7	29.8	27.2	22.5
	Kototabang	ID 11013	***	4.41	7.09	8.59	4.58	5.16	7.28	6.47	2.61	4.38
	Bandung	ID 11015	***	32.5	27.2	20.0	27.0	34.6	25.7	26.0	27.5	28.5
	Maros	ID 11059									4.43	6.18
Japan	Rishiri	JP 11016	19.4	18.2	15.6	12.9	14.7	15.7	16.3	19.7	14.5	15.3
	Ochiishi	JP 11050				7.47	12.9	10.1	11.3	10.1	8.41	5.88
	Tappi	JP 11017	12.9	14.8	12.9	13.4	14.2	16.6	18.4	15.7	16.4	11.5
	Sado-seki	JP 11019	18.9	19.5	13.1	10.9	9.53	16.8	14.8	21.3	18.3	13.7
	Happo	JP 11021	12.9	11.3	7.39	7.24	8.78	11.5	10.1	12.0	10.7	9.82
	Ijira	JP 11022	18.7	20.2	18.0	18.3	12.7	18.0	20.0	17.7	17.3	14.6
	Okii	JP 11023	16.9	14.8	13.5	10.3	11.9	19.3	15.8	19.7	16.4	15.2
	Banryu	JP 11024	13.9	14.3	14.2	12.5	13.0	21.3	18.0	23.1	21.4	15.0
	Yusuhara	JP 11025	10.1	8.45	9.44	8.46	5.27	10.6	9.39	8.69	9.69	10.9
	Hedo	JP 11027	5.89	6.49	7.44	11.3	24.4	13.0	7.86	6.58	6.73	5.55
	Ogasawara	JP 11018	3.13	5.11	3.94	4.08	3.44	7.32	4.15	4.85	3.81	5.21
	Tokyo	JP 11057								15.0	18.4	14.5
Lao PDR	Vientian	LA 11051				***	***	***	3.03	4.53	4.88	3.50
Malaysia	Petaling Jaya	MY 11029	23.2	22.0	23.4	20.7	17.9	22.9	20.3	13.6	17.2	12.9
	Tanah Rata	MY 11030	4.01	3.61	4.52	3.68	3.92	5.18	4.34	3.43	3.21	3.19
	Danum Valley	MY 11053						4.13	3.07	2.04	2.30	2.47
	Kuching	MY 11060									3.82	3.33
Mongolia	Ulaanbaatar	MN 11031	23.9	24.6	24.3	19.3	21.8	26.3	24.9	36.8	27.3	19.6
	Terelj	MN 11032	16.0	8.77	14.3	7.99	12.9	16.8	23.0	24.5	15.8	16.0
Myanmar	Yangon	MM 11056								***	***	6.90
Philippines	Metro Manila	PH 11033	21.6	22.7	25.4	16.0	19.4	23.0	16.5	21.1	23.4	12.6
	Los Banos	PH 11034	8.50	13.2	14.8	6.25	7.70	8.83	9.44	7.32	16.9	7.77
	Mt. Sto. Tomas	PH 11055							1.20	5.40	3.17	4.54
Republic of Korea	Kanghwa	KR 11035	28.2	22.5	31.5	24.6	42.9	44.7	35.2	38.5	25.6	26.5
	Cheju (Kosan)	KR 11036	14.0	16.2	24.5	19.9	20.3	29.2	22.9	31.8	18.2	22.1
	Imsil	KR 11037		15.5	20.5	14.9	15.4	21.5	24.9	27.9	19.0	16.6
Russia	Mondy	RU 11038	7.08	10.8	10.7	8.37	6.75	5.28	4.60	9.12	7.02	7.69
	Listvyanka	RU 11039	15.1	13.2	18.0	18.8	18.9	17.1	18.8	17.0	21.2	19.1
	Irkutsk	RU 11040	29.6	29.1	33.6	25.9	26.2	27.4	25.4	33.0	37.9	30.1
	Primorskaya	RU 11041			27.6	41.1	35.8	36.9	45.0	29.6	39.3	21.8
Thailand	Bangkok	TH 11042	21.2	17.7	17.6	18.0	15.7	18.7	21.8	16.8	17.4	12.1
	Samutprakarn	TH 11043	24.9				15.5	17.9	19.7	14.1	14.8	14.5
	Patumthani	TH 11044	18.9	16.7	14.4	12.1	17.0	12.8	13.0	11.7	10.3	8.56
	Khanchanaburi	TH 11045	3.09	4.54	5.11	2.96	2.84	2.40	3.67	2.04	3.22	3.03
	Chiang Mai (Mae Hia)	TH 11046		2.56	3.92	3.97	6.72	5.84	4.34	5.82	4.81	4.14
	Nakhon Ratchasima	TH 11054							7.97	6.18	7.11	6.27
Viet Nam	Hanoi	VN 11047	29.0	13.3	33.4	29.6	36.5	50.4	46.1	33.1	19.6	26.8
	Hoa Binh	VN 11048	15.5	14.1	18.6	22.3	29.2	17.4	24.6	16.8	13.4	15.9
	Cuc Phuong	VN 11061										17.8
	Da Nang	VN 11062										13.1

[***]: 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 NO₃⁻

			unit: µmol/L									
Country	Name of sites	Code	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Cambodia	Phnom Penh	KH 11052					7.68	***	9.05	8.26	9.40	10.3
China	Guanyinqiao	CN 11001	42.1	52.8	34.4	38.9	43.9	41.3	60.7	48.8		
	Nanshan	CN 11002	41.6									
	Haifu	CN 11058									65.0	53.2
	Jinyunshan	CN 11003		40.3	29.4	34.4	36.8	34.4	46.1	31.5	46.5	54.4
	Shizhan	CN 11004	87.0	153	150	68.0	61.7	12.1	81.7	75.9	40.2	57.7
	Weishuiyuan	CN 11005	95.8	210	168	54.1	69.6	11.4	104			
	Jiwozi	CN 11007	29.1	140	89.8	42.8	26.4	9.31	50.7	66.8	103	27.4
	Hongwen	CN 11008	18.7	37.9	30.7	33.6	49.8	37.3	22.4	37.6	22.9	23.4
	Xiaoping	CN 11009	14.6	18.7	14.8	22.6	19.6	18.1	16.0	26.2	24.6	29.3
	Xiang Zhou	CN 11010	15.6	14.1	17.8	20.9	22.1	17.2	21.8	16.6	12.3	17.7
	Zhuxiandong	CN 11011	33.5	22.2	20.8	11.5	25.0	21.5	13.2	***	14.7	19.8
Indonesia	Jakarta	ID 11012	17.6	53.7	28.2	58.4	77.6	53.9	20.5	31.1	14.1	15.3
	Serpong	ID 11014	***	50.7	32.6	30.8	39.7	39.4	28.3	30.4	30.3	25.4
	Kototabang	ID 11013	6.16	2.74	5.64	49.3	4.71	1.58	1.40	3.57	2.79	<1.0
	Bandung	ID 11015	34.4	26.9	26.3	20.4	28.2	19.2	23.1	21.6	20.7	22.8
	Maros	ID 11059									3.51	5.36
Japan	Rishiri	JP 11016	18.1	18.0	13.5	12.2	11.6	12.6	14.0	15.6	14.7	17.3
	Ochiishi	JP 11050				7.95	13.5	9.31	11.4	9.57	8.44	5.42
	Tappi	JP 11017	12.9	15.3	16.9	16.9	16.3	18.2	22.5	21.6	22.4	13.4
	Sado-seki	JP 11019	18.3	22.2	15.0	13.9	11.2	18.6	18.9	25.8	23.9	16.6
	Happo	JP 11021	11.1	8.88	6.97	6.57	8.01	9.53	8.25	9.82	11.0	8.56
	Ijira	JP 11022	24.1	21.7	21.8	21.7	15.4	24.1	24.2	21.8	24.1	18.4
	Okii	JP 11023	18.6	15.7	15.1	12.9	17.0	21.8	18.2	23.8	19.3	20.2
	Banryu	JP 11024	13.9	17.4	19.1	15.9	15.6	25.5	19.5	29.2	24.6	20.0
	Yusuhara	JP 11025	7.02	6.85	8.45	6.95	5.27	9.41	7.56	7.19	8.98	7.83
	Hedo	JP 11027	5.73	6.57	9.49	9.48	13.4	11.0	8.09	6.41	6.90	6.43
	Ogasawara	JP 11018	2.38	3.69	2.71	4.69	3.67	3.21	4.78	4.88	3.75	3.39
	Tokyo	JP 11057								19.5	24.4	18.1
Lao PDR	Vientian	LA 11051				***	***	***	6.94	6.90	5.96	9.73
Malaysia	Petaling Jaya	MY 11029	27.2	23.7	36.8	32.9	29.8	35.9	30.0	26.6	36.1	46.4
	Tanah Rata	MY 11030	3.32	3.39	5.99	4.70	4.61	6.04	5.34	4.17	4.53	5.19
	Danum Valley	MY 11053						2.50	1.41	<1.0	1.37	1.65
	Kuching	MY 11060									4.98	4.55
Mongolia	Ulaanbaatar	MN 11031	19.9	20.7	23.7	15.5	15.8	18.8	18.6	26.0	20.1	19.1
	Terelj	MN 11032	17.6	9.20	18.1	12.4	16.1	11.8	15.5	18.3	18.3	21.0
Myanmar	Yangon	MM 11056								***	***	7.23
Philippines	Metro Manila	PH 11033	12.1	18.5	17.6	13.1	15.4	21.5	12.3	14.1	21.1	8.68
	Los Banos	PH 11034	5.44	13.9	8.21	4.87	6.10	9.83	8.13	6.25	7.97	8.01
	Mt. Sto. Tomas	PH 11055							1.87	5.47	3.92	3.94
Republic of Korea	Kanghwa	KR 11035	42.4	28.6	32.7	27.3	41.1	45.0	33.0	39.0	31.0	18.9
	Cheju (Kosan)	KR 11036	15.3	18.4	24.0	23.0	24.8	27.5	25.5	15.1	26.5	18.6
	Imsil	KR 11037		15.6	32.0	16.9	20.5	26.4	27.7	18.1	22.6	22.3
Russia	Mondy	RU 11038	9.97	10.6	13.5	6.80	6.78	5.03	5.10	8.51	7.48	7.90
	Listvyanka	RU 11039	18.7	14.7	25.0	29.8	19.8	11.8	14.6	20.4	15.4	16.4
	Irkutsk	RU 11040	21.0	18.4	21.8	17.8	17.1	16.4	16.5	18.3	17.1	16.8
	Primorskaya	RU 11041			10.2	15.4	21.4	21.6	29.2	19.1	33.1	18.6
Thailand	Bangkok	TH 11042	21.6	17.9	24.6	23.1	15.9	23.2	33.0	28.0	31.2	28.1
	Samutprakarn	TH 11043	15.4				9.79	17.9	14.1	16.6	17.4	20.0
	Patumthani	TH 11044	18.6	19.6	18.5	17.2	24.0	19.6	22.0	22.8	21.5	16.6
	Khanchanaburi	TH 11045	5.74	6.75	6.06	4.89	4.78	2.50	6.15	2.94	5.02	4.55
	Chiang Mai (Mae Hia)	TH 11046		4.13	6.64	6.53	6.12	8.36	7.87	7.97	9.11	8.44
	Nakhon Ratchasima	TH 11054							11.3	11.4	11.5	12.7
Viet Nam	Hanoi	VN 11047	16.1	5.06	15.1	24.8	25.2	30.8	24.9	15.6	9.76	16.6
	Hoa Binh	VN 11048	9.68	8.77	20.2	13.4	19.9	12.9	16.1	10.5	10.2	12.9
	Cuc Phuong	VN 11061										10.9
	Da Nang	VN 11062										11.4

[***]: 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 3.68 Volume-weighted annual mean concentrations of Cl⁻

unit: µmol/L

Country	Name of sites	Code	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Cambodia	Phnom Penh	KH 11052					***	6.21	6.20	12.6	8.68	10.3
China	Guanyinqiac	CN 11001	24.0	29.8	15.6	16.2	14.7	18.3	19.3	13.8		
	Nanshan	CN 11002	15.6									
	Haifu	CN 11058									13.8	11.0
	Jinyunshar	CN 11003		56.8	12.9	10.3	12.8	15.5	13.6	8.70	15.4	16.1
	Shizhan	CN 11004	49.0	81.3	349	83.3	36.1	34.4	35.8	39.9	33.6	26.2
	Weishuiyuar	CN 11005	91.6	278	285	99.4	39.4	36.5	51.1			
	Jiwozi	CN 11007	32.3	98.9	185	70.1	14.8	38.4	33.2	44.1	33.8	27.9
	Hongwen	CN 11008	32.0	35.8	42.9	51.3	60.2	66.0	45.9	39.0	31.2	32.3
	Xiaoping	CN 11009	20.7	28.8	9.15	23.5	16.6	11.9	22.3	14.6	18.6	20.1
	Xiang Zhou	CN 11010	49.8	37.8	68.9	47.4	36.4	65.8	44.6	30.9	34.8	44.9
	Zhuxiandong	CN 11011	39.4	27.7	59.5	40.2	58.8	52.6	29.3	***	45.6	51.4
Indonesia	Jakarta	ID 11012	21.5	38.9	28.1	52.2	39.1	41.6	15.6	18.7	11.4	12.0
	Serpong	ID 11014	***	32.3	23.0	27.2	23.8	19.8	10.9	14.3	17.0	17.6
	Kototabang	ID 11013	6.76	6.60	16.8	27.8	11.8	7.13	7.80	13.8	3.88	10.7
	Bandung	ID 11015	105	25.0	20.3	13.0	17.4	14.6	14.1	7.53	8.33	11.8
	Maros	ID 11059									20.1	15.3
Japan	Rishiri	JP 11016	372	235	217	201	256	233	126	161	268	193
	Ochiishi	JP 11050				227	410	232	317	219	194	205
	Tappi	JP 11017	178	156	191	154	231	250	326	262	226	217
	Sado-seki	JP 11019	274	378	307	107	154	337	256	257	236	364
	Happo	JP 11021	10.7	8.84	4.97	7.26	8.74	8.69	5.68	4.36	5.60	6.64
	Ijira	JP 11022	23.0	32.7	33.3	19.1	27.5	16.8	14.4	24.8	18.9	16.5
	Oki	JP 11023	449	359	419	201	321	696	253	312	371	436
	Banryu	JP 11024	31.0	86.5	88.9	92.5	133	110	76.0	89.2	82.5	114
	Yusuhara	JP 11025	18.7	12.3	31.8	16.0	28.1	29.9	14.0	16.2	10.0	13.9
	Hedo	JP 11027	515	175	593	451	982	488	217	146	138	141
	Ogasawara	JP 11018	164	123	278	286	139	115	119	154	98.8	227
	Tokyo	JP 11057								41.1	23.7	27.8
Lao PDR	Vientian	LA 11051				***	***	***	4.77	7.42	7.41	6.19
Malaysia	Petaling Jaya	MY 11029	8.51	7.50	7.33	9.24	7.42	8.78	6.94	5.70	7.50	7.89
	Tanah Rata	MY 11030	6.80	3.00	2.26	2.39	2.43	2.64	2.10	1.70	1.47	2.26
	Danum Valley	MY 11053						6.00	7.15	4.90	6.10	6.79
	Kuching	MY 11060									6.35	8.41
Mongolia	Ulaanbaatar	MN 11031	8.96	9.65	7.69	7.64	8.03	7.75	7.77	9.38	10.1	9.63
	Terelj	MN 11032	8.96	8.66	11.4	6.59	8.96	9.92	9.28	10.3	9.22	9.95
Myanmar	Yangon	MM 11056								***	***	25.0
Philippines	Metro Manila	PH 11033	25.6	115	18.8	24.3	24.0	14.2	23.1	27.9	28.7	24.6
	Los Banos	PH 11034	33.0	34.5	24.6	16.2	14.3	18.1	21.0	24.4	18.8	25.0
	Mt. Sto. Tomas	PH 11055							1.57	7.38	5.24	8.31
Republic of Korea	Kanghwa	KR 11035	54.9	42.6	43.0	61.3	55.8	56.1	36.0	57.7	45.6	60.2
	Cheju (Kosan)	KR 11036	210	112	83.8	68.5	79.1	105	102	104	136	63.7
	Imsil	KR 11037		28.7	36.9	38.1	26.7	44.0	77.5	22.4	36.6	51.9
Russia	Mondy	RU 11038	2.58	1.45	8.87	3.07	2.75	5.92	4.47	3.94	4.22	3.29
	Listvyanka	RU 11039	5.04	2.16	6.81	4.13	4.94	5.38	3.50	4.29	5.13	3.02
	Irkutsk	RU 11040	11.6	12.2	18.0	17.7	8.52	12.4	12.5	13.2	15.9	24.9
	Primorskaya	RU 11041			33.9	35.6	21.3	21.7	18.0	18.6	25.6	14.7
Thailand	Bangkok	TH 11042	12.6	9.41	13.9	8.67	11.3	12.3	10.8	8.23	11.3	7.65
	Samutprakarn	TH 11043	12.9				12.8	19.0	12.5	11.2	12.8	8.45
	Patumthani	TH 11044	10.4	7.75	11.6	6.39	14.3	7.13	6.83	6.64	6.61	6.23
	Khanchanabur	TH 11045	17.6	9.96	14.1	8.80	9.96	7.79	6.30	6.62	10.3	8.84
	Chiang Mai (Mae Hia)	TH 11046		4.53	10.1	4.71	3.82	4.21	3.73	5.85	4.59	4.91
	Nakhon Ratchasima	TH 11054							5.52	5.11	5.93	4.62
Viet Nam	Hanoi	VN 11047	24.3	27.1	9.53	21.3	14.7	27.2	15.6	11.8	8.74	9.65
	Hoa Binh	VN 11048	20.3	22.1	6.95	6.92	11.8	13.5	6.46	6.30	4.22	5.38
	Cuc Phuong	VN 11061										44.2
	Da Nang	VN 11062										110

[***]: 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 concentrations of NH₄⁺

			unit: µmol/L									
Country	Name of sites	Code	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Cambodia	Phnom Penh	KH 11052					10.8	16.3	17.9	19.7	11.8	13.1
China	Guanyinqiao	CN 11001	161	211	120	132	137	157	179	140		
	Nanshan	CN 11002	105									
	Haifu	CN 11058									148	105
	Jinyunshan	CN 11003		111	83.5	85.6	105	105	121	75.2	98.8	110
	Shizhan	CN 11004	421	255	203	144	146	77.2	167	206	164	169
	Weishuiyuan	CN 11005	426	354	319	144	151	64.4	239			
	Jiwozi	CN 11007	199	171	71.2	82.7	37.1	37.8	48.6	11.2	31.6	52.0
	Hongwen	CN 11008	31.6	64.9	44.2	29.4	45.8	35.4	29.1	38.5	34.7	46.6
	Xiaoping	CN 11009	19.8	33.2	31.1	38.2	38.0	32.2	21.5	52.7	33.0	45.8
	Xiang Zhou	CN 11010	20.5	25.0	95.8	34.0	50.7	103	56.7	19.4	19.5	22.1
	Zhuxiandong	CN 11011	51.0	30.3	48.4	29.9	59.5	26.1	27.4	***	18.6	25.6
Indonesia	Jakarta	ID 11012	77.3	66.2	31.7	20.8	22.4	12.4	17.4	24.2	25.4	17.7
	Serpong	ID 11014	***	67.6	46.0	45.0	42.3	44.6	40.3	44.3	47.2	43.0
	Kototabang	ID 11013	1.14	2.38	5.12	1.85	12.3	9.46	9.88	18.2	7.55	2.69
	Bandung	ID 11015	32.8	37.9	29.9	32.7	36.8	35.8	46.5	47.9	44.8	48.3
	Maros	ID 11059									8.85	12.7
Japan	Rishiri	JP 11016	34.0	26.0	20.1	18.3	17.1	18.9	17.5	25.9	23.6	17.7
	Ochiishi	JP 11050				7.65	11.8	7.51	15.6	7.84	6.45	8.40
	Tappi	JP 11017	9.65	12.7	14.7	16.2	15.6	15.8	18.9	17.7	18.2	10.5
	Sado-seki	JP 11019	16.9	19.7	14.5	15.6	10.1	18.3	16.6	25.2	21.7	12.5
	Happo	JP 11021	14.2	10.8	7.74	6.37	8.30	10.8	8.96	11.1	10.1	9.73
	Ijira	JP 11022	23.8	17.6	22.8	18.1	14.7	20.3	22.8	20.7	18.0	18.2
	Okii	JP 11023	19.4	14.7	12.4	8.82	10.9	15.8	12.8	15.7	15.7	17.0
	Banryu	JP 11024	11.6	13.8	17.9	12.5	11.2	21.8	14.9	22.3	19.2	16.3
	Yusuhara	JP 11025	5.06	5.17	7.57	6.02	4.78	8.88	7.52	7.45	7.52	8.25
	Hedo	JP 11027	7.22	4.48	18.5	10.9	17.2	13.3	8.55	7.49	6.11	6.43
	Ogasawara	JP 11018	2.33	4.82	5.40	3.63	5.09	3.46	4.59	7.70	3.43	4.82
	Tokyo	JP 11057								27.7	29.9	26.2
Lao PDR	Vientian	LA 11051				***	***	***	7.72	10.9	8.39	17.3
Malaysia	Petaling Jaya	MY 11029	43.7	58.1	16.2	12.2	13.1	20.1	23.3	19.1	20.8	7.57
	Tanah Rata	MY 11030	41.1	35.4	4.02	2.30	2.39	2.82	3.53	3.91	3.10	5.41
	Danum Valley	MY 11053						2.03	2.05	1.32	9.76	3.44
	Kuching	MY 11060									4.61	4.94
Mongolia	Ulaanbaatar	MN 11031	52.0	49.9	72.8	47.5	46.2	54.4	53.7	87.1	53.3	46.7
	Terelj	MN 11032	44.3	30.5	65.7	31.6	35.6	36.1	54.6	38.8	51.1	41.0
Myanmar	Yangon	MM 11056								***	***	16.2
Philippines	Metro Manila	PH 11033	35.6	77.1	46.2	23.7	35.4	29.9	40.5	33.6	62.2	21.1
	Los Banos	PH 11034	13.6	22.4	34.5	14.5	13.9	15.0	16.3	16.8	19.6	11.7
	Mt. Sto. Tomas	PH 11055							<1.0	8.69	10.5	14.1
Republic of Korea	Kanghwa	KR 11035	37.6	37.5	40.1	57.6	75.6	66.4	53.0	58.4	35.4	30.5
	Cheju (Kosan)	KR 11036	20.2	32.3	43.3	41.9	36.0	30.9	26.1	28.8	26.2	45.2
	Imsil	KR 11037		42.3	42.2	32.5	28.2	32.4	50.2	40.0	29.9	35.2
Russia	Mondy	RU 11038	11.4	22.2	33.8	14.7	11.2	9.76	3.70	30.1	9.86	20.2
	Listvyanka	RU 11039	16.5	10.8	26.8	20.8	12.2	16.6	15.5	15.6	18.9	13.4
	Irkutsk	RU 11040	32.1	25.1	43.0	42.1	27.2	35.3	24.9	33.9	34.4	36.4
	Primorskaya	RU 11041			35.9	39.1	30.4	41.6	49.8	29.6	50.6	28.8
Thailand	Bangkok	TH 11042	41.3	36.2	46.8	37.5	37.8	43.4	56.1	57.8	53.8	64.9
	Samutprakarn	TH 11043	31.8				34.5	37.4	49.9	47.1	56.4	41.0
	Patumthani	TH 11044	38.3	35.5	34.2	29.1	34.0	31.2	33.5	34.4	29.7	33.0
	Khanchanaburi	TH 11045	6.84	11.0	10.9	12.5	8.40	4.96	17.5	13.9	10.1	26.1
	Chiang Mai (Mae Hia)	TH 11046		15.8	18.5	15.8	15.7	21.0	15.2	18.8	19.9	20.2
	Nakhon Ratchasima	TH 11054							23.1	18.3	21.1	22.9
Viet Nam	Hanoi	VN 11047	27.5	20.3	55.5	55.1	52.7	98.8	45.7	48.3	30.6	50.6
	Hoa Binh	VN 11048	8.01	12.5	28.2	28.7	41.0	30.1	27.6	21.3	17.1	31.4
	Cuc Phuong	VN 11061										6.30
	Da Nang	VN 11062										13.5

[***]: 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 3.70 Volume-weighted annual mean concentrations of Na⁺

			unit: µmol/L									
Country	Name of sites	Code	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Cambodia	Phnom Penh	KH 11052					***	***	1.85	8.25	10.3	6.95
China	Guanyinqiao	CN 11001	11.8	10.8	5.54	4.91	7.28	8.35	7.92	5.92		
	Nanshan	CN 11002	7.73									
	Haifu	CN 11058									6.99	4.20
	Jinyunshan	CN 11003		10.2	5.90	4.99	12.3	15.3	6.65	6.20	10.3	7.70
	Shizhan	CN 11004	44.1	164	246	69.2	19.1	16.1	45.2	15.6	24.4	13.4
	Weishuiyuan	CN 11005	68.9	219	207	113	23.3	20.5	66.9			
	Jiwozi	CN 11007	23.8	158	171	102	25.1	59.6	65.6	85.8	81.1	25.2
	Hongwen	CN 11008	23.8	10.8	55.6	34.8	50.4	51.4	30.8	24.1	22.9	24.5
	Xiaoping	CN 11009	8.66	11.8	16.4	24.7	13.0	9.67	23.2	12.4	22.5	16.4
	Xiang Zhou	CN 11010	42.1	24.6	41.5	39.1	72.1	44.1	35.5	19.4	34.6	40.2
	Zhuxiandong	CN 11011	31.2	27.5	45.2	36.0	94.4	60.9	22.6	***	40.7	45.3
Indonesia	Jakarta	ID 11012	52.4	39.4	35.3	27.1	37.2	23.2	13.1	15.8	9.95	9.31
	Serpong	ID 11014	***	23.8	25.2	11.3	19.6	16.0	7.46	11.7	10.5	10.2
	Kototabang	ID 11013	***	4.52	6.29	9.65	10.9	5.69	6.21	8.65	5.33	6.12
	Bandung	ID 11015	***	20.2	8.64	7.10	10.8	11.9	18.3	6.65	8.62	11.8
	Maros	ID 11059									15.7	13.3
Japan	Rishiri	JP 11016	325	212	197	176	229	203	110	143	247	176
	Ochiishi	JP 11050				198	360	208	278	186	171	182
	Tappi	JP 11017	149	134	165	141	199	218	289	234	197	199
	Sado-seki	JP 11019	258	355	268	93.8	135	290	224	227	215	321
	Happo	JP 11021	7.85	6.22	3.39	4.78	5.94	7.04	4.13	3.13	4.12	5.14
	Ijira	JP 11022	19.9	29.7	28.5	13.3	21.6	13.6	10.8	20.8	15.4	13.5
	Okii	JP 11023	396	316	363	185	295	602	225	275	324	376
	Banryu	JP 11024	28.9	78.2	79.4	80.9	113	92.1	66.4	78.6	72.2	98.8
	Yusuhara	JP 11025	15.2	11.8	28.9	14.4	24.1	25.2	11.9	13.5	8.61	12.0
	Hedo	JP 11027	454	160	515	430	873	449	189	129	124	127
	Ogasawara	JP 11018	139	104	236	251	125	97.3	103	133	86.2	188
	Tokyo	JP 11057								34.5	19.5	23.5
Lao PDR	Vientian	LA 11051				***	***	***	7.10	2.38	2.91	9.14
Malaysia	Petaling Jaya	MY 11029	4.97	3.70	5.08	5.60	5.69	6.64	4.27	3.61	4.22	4.59
	Tanah Rata	MY 11030	1.90	1.92	1.64	1.89	1.83	6.64	1.41	1.54	1.20	1.58
	Danum Valley	MY 11053						4.45	5.64	4.15	3.22	5.83
	Kuching	MY 11060									5.39	7.35
Mongolia	Ulaanbaatar	MN 11031	7.88	9.09	6.29	3.84	5.79	7.16	8.43	5.25	3.59	4.88
	Terelj	MN 11032	6.47	15.9	16.9	4.50	6.32	11.5	12.5	9.42	5.47	7.60
Myanmar	Yangon	MM 11056								***	***	18.5
Philippines	Metro Manila	PH 11033	30.6	205	14.6	18.4	16.3	15.9	17.2	20.2	24.6	20.2
	Los Banos	PH 11034	34.8	37.2	21.1	15.3	12.0	17.2	22.7	17.6	19.1	17.4
	Mt. Sto. Tomas	PH 11055							2.81	5.68	5.11	8.26
Republic of Korea	Kanghwa	KR 11035	56.3	41.7	49.2	25.4	32.5	33.7	28.8	44.3	39.3	45.1
	Cheju (Kosan)	KR 11036	152	74.7	58.3	46.7	57.8	84.8	85.0	101	133	53.6
	Imsil	KR 11037		15.4	38.6	22.8	17.9	21.7	31.1	15.0	32.0	50.3
Russia	Mondy	RU 11038	1.84	2.27	1.93	2.27	1.93	1.52	1.57	3.13	1.84	2.28
	Listvyanka	RU 11039	4.57	3.38	3.80	5.10	4.66	3.01	2.80	2.57	2.49	3.82
	Irkutsk	RU 11040	8.85	8.27	9.19	6.59	6.65	6.89	10.0	9.94	10.0	18.7
	Primorskaya	RU 11041			23.1	33.7	22.5	21.7	16.8	19.8	22.9	12.8
Thailand	Bangkok	TH 11042	6.93	8.33	16.1	7.65	10.2	12.8	8.72	7.08	9.77	9.79
	Samutprakarn	TH 11043	10.1				16.5	19.8	14.6	12.2	15.4	10.0
	Patumthani	TH 11044	10.9	8.06	9.65	4.73	8.94	6.56	7.49	5.77	5.96	5.58
	Khanchanaburi	TH 11045	9.71	11.3	8.34	10.3	8.99	6.70	6.86	7.05	9.23	9.49
	Chiang Mai (Mae Hia)	TH 11046		3.94	9.66	3.21	3.05	***	3.53	2.93	2.61	2.69
	Nakhon Ratchasima	TH 11054							4.45	4.45	4.20	2.73
Viet Nam	Hanoi	VN 11047	18.1	11.5	5.94	8.96	8.05	17.7	13.5	8.20	9.59	9.17
	Hoa Binh	VN 11048	12.7	9.80	2.06	2.36	3.91	7.47	4.49	3.20	3.07	3.39
	Cuc Phuong	VN 11061										11.2
	Da Nang	VN 11062										94.6

[***]: 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 3.71 Volume-weighted annual mean concentrations of K⁺

			unit: µmol/L									
Country	Name of sites	Code	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Cambodia	Phnom Penh	KH 11052					1.63	***	1.48	3.64	10.3	1.50
China	Guanyinqiao	CN 11001	14.2	18.7	10.6	11.0	10.9	12.4	12.6	8.81		
	Nanshan	CN 11002	16.3									
	Haifu	CN 11058									11.5	7.72
	Jinyunshan	CN 11003		44.4	10.3	8.60	11.7	11.4	11.4	6.78	9.54	8.71
	Shizhan	CN 11004	26.5	42.2	40.5	18.7	9.57	15.4	18.0	19.3	13.3	10.2
	Weishuiyuan	CN 11005	34.7	74.9	76.6	20.3	11.3	12.6	33.6			
	Jiwozi	CN 11007	17.9	43.6	42.2	21.3	8.48	27.7	20.8	28.0	29.0	13.7
	Hongwen	CN 11008	4.99	10.4	4.30	4.33	7.23	5.08	3.35	3.73	2.12	2.26
	Xiaoping	CN 11009	2.81	4.20	3.76	4.75	5.09	2.76	13.5	7.31	10.2	2.33
	Xiang Zhou	CN 11010	6.59	4.02	17.6	5.74	7.65	2.66	8.16	8.27	1.65	2.10
	Zhuxiandong	CN 11011	6.18	5.86	13.2	6.62	22.7	5.60	2.62	***	4.50	2.56
Indonesia	Jakarta	ID 11012	***	24.3	11.3	9.28	10.3	5.73	8.01	11.2	3.51	2.22
	Serpong	ID 11014	***	7.04	3.95	7.96	5.65	6.18	4.46	2.76	2.21	1.75
	Kototabang	ID 11013	***	1.32	5.10	20.0	6.27	4.36	4.56	8.40	3.40	9.35
	Bandung	ID 11015	***	12.6	2.04	4.13	3.29	4.66	4.81	2.03	2.31	4.08
	Maros	ID 11059									5.76	3.89
Japan	Rishiri	JP 11016	9.95	6.04	5.08	4.90	6.01	5.09	3.75	4.13	6.58	4.31
	Ochiishi	JP 11050				4.63	8.08	5.28	7.66	4.58	3.81	4.09
	Tappi	JP 11017	3.64	3.28	4.07	3.45	4.95	4.99	7.12	5.66	5.36	4.95
	Sado-seki	JP 11019	6.37	8.19	6.49	2.46	3.56	6.65	5.69	5.88	7.16	7.96
	Happo	JP 11021	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	Ijira	JP 11022	2.95	4.06	2.10	1.24	1.10	<1.0	<1.0	1.15	<1.0	<1.0
	Okii	JP 11023	10.5	8.77	9.53	5.45	9.62	15.5	6.56	9.12	11.9	10.1
	Banryu	JP 11024	1.35	2.73	2.89	2.49	3.02	3.69	2.23	3.06	2.54	3.00
	Yusuhara	JP 11025	<1.0	<1.0	1.01	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	Hedo	JP 11027	9.06	3.56	12.0	10.1	24.6	11.3	4.71	3.31	3.18	3.29
	Ogasawara	JP 11018	3.58	4.08	6.17	5.60	3.07	2.28	2.53	3.17	2.61	4.55
	Tokyo	JP 11057								1.40	1.14	1.10
Lao PDR	Vientian	LA 11051				***	***	***	3.51	1.69	1.69	<1.0
Malaysia	Petaling Jaya	MY 11029	1.77	1.42	1.27	3.04	1.64	2.46	1.55	<1.0	1.19	1.51
	Tanah Rata	MY 11030	1.09	<1.0	<1.0	<1.0	1.52	<1.0	<1.0	<1.0	<1.0	<1.0
	Danum Valley	MY 11053						1.17	1.01	1.08	2.53	1.59
	Kuching	MY 11060									<1.0	<1.0
Mongolia	Ulaanbaatar	MN 11031	3.92	4.64	3.81	3.39	2.84	4.33	5.15	1.28	2.81	2.53
	Terelj	MN 11032	4.50	3.81	10.2	4.11	4.68	6.48	8.98	3.80	6.46	4.10
Myanmar	Yangon	MM 11056								***	***	6.46
Philippines	Metro Manila	PH 11033	15.5	23.2	9.87	2.52	3.93	3.90	12.6	5.38	15.6	3.99
	Los Banos	PH 11034	1.74	9.51	6.38	1.83	2.14	2.20	2.49	4.92	2.91	9.08
	Mt. Sto. Tomas	PH 11055							1.32	2.29	<1.0	1.95
Republic of Korea	Kanghwa	KR 11035	5.61	4.74	8.83	9.39	11.4	6.49	4.86	10.8	5.40	8.97
	Cheju (Kosan)	KR 11036	6.32	9.38	6.45	8.16	8.11	8.61	6.04	7.18	10.4	9.75
	Imsil	KR 11037		14.8	6.55	11.2	5.72	48.6	42.1	14.3	5.61	10.9
Russia	Mondy	RU 11038	1.19	2.07	2.32	1.61	2.68	1.05	1.11	2.47	2.02	3.29
	Listvyanka	RU 11039	4.67	1.73	2.22	2.64	2.36	1.15	1.54	1.28	3.38	2.07
	Irkutsk	RU 11040	4.38	7.37	2.32	2.63	2.72	3.39	7.64	7.77	8.99	26.6
	Primorskaya	RU 11041			5.35	10.1	7.24	7.07	5.47	6.18	8.99	4.40
Thailand	Bangkok	TH 11042	3.22	4.11	3.35	2.62	1.62	2.17	2.83	1.57	2.03	1.98
	Samutprakarn	TH 11043	5.29				4.88	4.92	4.31	2.88	6.12	2.77
	Patumthani	TH 11044	2.26	1.68	1.49	1.17	1.19	1.20	1.66	1.61	1.50	1.61
	Khanchanaburi	TH 11045	8.88	4.98	2.38	2.02	1.09	<1.0	2.44	<1.0	1.15	1.21
	Chiang Mai (Mae Hia)	TH 11046		2.94	4.41	3.95	1.41	<1.0	1.70	2.87	2.63	1.47
	Nakhon Ratchasima	TH 11054							<1.0	1.38	1.24	1.31
Viet Nam	Hanoi	VN 11047	4.09	3.81	2.07	2.57	2.95	5.22	3.78	2.70	2.77	1.57
	Hoa Binh	VN 11048	3.56	2.33	1.48	1.48	1.67	3.64	2.43	2.24	3.24	2.72
	Cuc Phuong	VN 11061										14.0
	Da Nang	VN 11062										6.27

[***]: 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 Volume-weighted annual mean concentrations of Ca²⁺

			unit: µmol/L									
Country	Name of sites	Code	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Cambodia	Phnom Penh	KH 11052					<0.2	***	9.11	19.2	32.6	20.4
China	Guanyinqiao	CN 11001	63.0	137	65.4	65.4	110	156	143	75.2		
	Nanshan	CN 11002	55.2									
	Haifu	CN 11058									65.3	43.2
	Jinyunshan	CN 11003		44.9	29.7	30.7	70.5	57.7	98.3	55.1	68.3	66.7
	Shizhan	CN 11004	229	675	479	258	147	107	301	116	150	138
	Weishuiyuan	CN 11005	305	1160	617	241	190	91.0	330			
	Jiwozi	CN 11007	124	429	276	230	88.0	129	221	347	266	93.7
	Hongwen	CN 11008	6.75	36.3	49.1	30.7	83.7	37.4	25.5	54.9	14.1	13.2
	Xiaoping	CN 11009	0.773	5.10	10.6	17.3	6.41	10.6	10.5	16.7	15.6	9.04
	Xiang Zhou	CN 11010	21.2	7.96	15.5	22.8	18.0	7.31	14.1	4.71	5.43	4.91
	Zhuxiandong	CN 11011	25.0	14.3	20.7	20.2	24.7	17.0	17.1	***	13.6	7.40
Indonesia	Jakarta	ID 11012	87.6	64.4	42.9	101	50.9	17.4	18.8	13.9	4.36	12.6
	Serpong	ID 11014	***	13.6	9.93	6.60	10.5	12.0	7.19	7.37	7.97	5.17
	Kototabang	ID 11013	3.97	1.43	4.92	5.53	6.98	3.38	5.19	4.70	4.86	5.47
	Bandung	ID 11015	***	24.2	17.1	10.9	18.3	15.9	14.8	9.50	11.3	15.3
	Maros	ID 11059									8.39	8.11
Japan	Rishiri	JP 11016	13.7	10.1	10.2	7.74	8.60	7.62	5.33	5.83	8.72	10.1
	Ochiishi	JP 11050				5.74	12.2	8.96	10.2	6.96	5.29	5.20
	Tappi	JP 11017	6.37	5.78	9.01	6.98	7.76	10.7	12.7	11.0	10.3	6.41
	Sado-seki	JP 11019	11.7	15.8	9.08	5.08	4.70	10.2	12.1	11.8	10.3	11.1
	Happo	JP 11021	3.88	4.31	2.00	1.92	2.36	4.15	6.28	2.91	2.70	4.66
	Ijira	JP 11022	6.77	5.62	4.18	2.88	2.31	2.82	2.89	3.63	2.20	2.74
	Okii	JP 11023	16.0	12.9	11.5	6.91	11.9	18.6	11.4	13.6	10.9	14.6
	Banryu	JP 11024	4.24	5.97	5.37	3.39	5.29	5.87	9.51	7.36	7.41	5.45
	Yusuhara	JP 11025	2.69	3.41	1.78	1.42	1.84	2.39	2.61	1.96	1.69	1.97
	Hedo	JP 11027	10.1	4.88	14.0	10.9	22.7	14.1	9.21	4.92	4.18	4.47
	Ogasawara	JP 11018	5.11	5.43	8.61	8.00	3.36	2.56	3.58	4.36	2.55	5.20
	Tokyo	JP 11057								4.99	4.09	3.42
Lao PDR	Vientian	LA 11051				***	***	***	8.75	3.04	5.77	5.50
Malaysia	Petaling Jaya	MY 11029	6.84	6.30	7.44	7.83	5.05	6.07	3.80	3.94	3.94	4.97
	Tanah Rata	MY 11030	2.26	3.10	3.08	3.35	2.32	1.83	1.15	1.05	0.772	1.03
	Danum Valley	MY 11053						1.35	1.26	0.513	0.353	1.01
	Kuching	MY 11060									1.91	1.79
Mongolia	Ulaanbaatar	MN 11031	37.7	47.4	49.9	26.5	43.2	49.8	45.9	41.2	42.9	42.2
	Terelj	MN 11032	15.2	15.0	27.3	10.7	16.2	13.6	24.8	13.6	17.9	35.8
Myanmar	Yangon	MM 11056								***	***	9.66
Philippines	Metro Manila	PH 11033	14.5	71.6	8.71	8.76	11.1	10.6	13.7	10.4	13.7	6.41
	Los Banos	PH 11034	6.95	65.3	7.23	7.75	5.40	3.54	6.92	5.19	3.75	5.08
	Mt. Sto. Tomas	PH 11055							5.64	23.4	3.09	5.87
Republic of Korea	Kanghwa	KR 11035	26.5	14.0	11.1	11.3	14.0	11.1	15.8	12.4	10.8	5.19
	Cheju (Kosan)	KR 11036	13.8	5.89	9.37	8.10	7.70	11.3	9.05	10.6	10.5	4.08
	Imsil	KR 11037		5.85	9.84	5.39	6.76	5.00	14.7	13.7	6.92	3.88
Russia	Mondy	RU 11038	5.79	7.00	8.54	3.80	5.33	4.17	5.46	6.91	7.97	5.19
	Listvyanka	RU 11039	12.8	7.25	11.4	14.3	14.1	8.23	8.81	9.02	8.18	12.6
	Irkutsk	RU 11040	28.0	34.8	31.5	23.9	21.9	21.6	29.9	26.5	29.5	29.2
	Primorskaya	RU 11041			18.1	25.3	21.5	21.1	25.0	14.0	19.4	11.7
Thailand	Bangkok	TH 11042	11.4	12.0	15.7	11.9	11.0	18.6	18.4	13.6	16.1	10.0
	Samutprakarn	TH 11043	11.1				7.84	9.68	14.8	11.0	13.8	13.2
	Patumthani	TH 11044	13.2	13.0	17.4	6.30	11.4	8.48	12.8	8.50	11.6	9.19
	Khanchanaburi	TH 11045	4.76	9.05	4.92	8.45	4.78	2.45	2.71	3.03	4.59	4.93
	Chiang Mai (Mae Hia)	TH 11046		6.95	18.0	5.72	4.77	3.75	4.74	8.03	6.68	5.69
	Nakhon Ratchasima	TH 11054							9.54	3.75	3.35	2.53
Viet Nam	Hanoi	VN 11047	20.9	10.7	16.8	17.8	25.0	26.1	35.2	18.1	11.8	12.0
	Hoa Binh	VN 11048	13.1	10.4	12.6	12.0	19.9	14.3	17.8	9.33	14.5	9.44
	Cuc Phuong	VN 11061										24.8
	Da Nang	VN 11062										6.35

[***]: 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 Volume-weighted annual mean concentrations of nss-Ca²⁺

			unit: µmol/L									
Country	Name of sites	Code	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Cambodia	Phnom Penh	KH 11052					***	***	9.07	19.1	32.5	20.3
China	Guanyinqiao	CN 11001	62.8	137	65.3	65.3	110	156	143	75.1		
	Nanshan	CN 11002	55.0									
	Haifu	CN 11058									65.2	43.2
	Jinyunshan	CN 11003		44.7	29.6	30.6	70.2	57.4	98.2	55.0	68.1	66.5
	Shizhan	CN 11004	228	672	474	257	147	107	300	116	149	138
	Weishuiyuan	CN 11005	303	1150	612	238	189	90.6	328			
	Jiwozi	CN 11007	123	425	273	227	87.4	128	220	345	264	93.2
	Hongwen	CN 11008	6.32	36.1	47.9	30.0	82.6	36.3	24.8	54.4	13.6	12.7
	Xiaoping	CN 11009	0.599	4.90	10.3	16.8	6.13	10.4	9.99	16.4	15.1	8.69
	Xiang Zhou	CN 11010	20.3	7.43	14.6	21.9	16.4	6.46	13.3	4.33	4.68	4.04
	Zhuxiandong	CN 11011	24.3	13.7	19.7	19.4	22.7	15.7	16.7	***	12.7	6.44
Indonesia	Jakarta	ID 11012	86.4	63.5	42.2	101	50.2	16.9	18.5	13.6	4.14	12.4
	Serpong	ID 11014	***	13.1	9.40	6.38	10.1	11.7	7.03	7.19	7.75	5.03
	Kototabang	ID 11013	***	1.36	4.78	5.32	6.75	3.26	5.06	4.51	4.76	5.34
	Bandung	ID 11015	***	23.7	16.9	10.7	18.0	15.4	14.4	9.36	11.1	15.1
	Maros	ID 11059									8.05	7.83
Japan	Rishiri	JP 11016	6.68	5.53	5.91	3.98	3.66	3.27	2.99	2.76	3.40	6.39
	Ochiishi	JP 11050				1.60	4.48	4.44	4.30	2.96	1.66	1.38
	Tappi	JP 11017	3.20	3.01	5.49	3.94	3.52	6.15	6.50	6.01	6.09	2.26
	Sado-seki	JP 11019	6.18	8.32	3.39	3.06	1.88	3.90	7.28	6.87	5.67	4.20
	Happo	JP 11021	3.71	4.18	1.92	1.81	2.24	4.00	6.19	2.85	2.61	4.55
	Ijira	JP 11022	6.34	4.97	3.57	2.60	1.87	2.53	2.65	3.18	1.87	2.46
	Okii	JP 11023	7.50	6.10	3.91	2.85	5.51	5.51	6.85	7.68	3.94	6.44
	Banryu	JP 11024	3.67	4.29	3.66	1.65	2.86	3.89	8.08	5.66	5.85	3.32
	Yusuhara	JP 11025	2.43	3.21	1.24	1.14	1.32	1.85	2.35	1.67	1.51	1.71
	Hedo	JP 11027	0.807	1.71	2.89	3.48	4.30	4.39	5.15	2.13	1.50	1.75
	Ogasawara	JP 11018	2.14	3.19	3.58	2.63	1.04	0.575	1.37	1.50	0.862	1.16
	Tokyo	JP 11057								4.24	3.67	2.91
Lao PDR	Vientian	LA 11051				***	***	***	8.59	2.99	5.70	5.30
Malaysia	Petaling Jaya	MY 11029	6.73	6.22	7.33	7.71	4.93	5.93	3.71	3.86	3.85	4.87
	Tanah Rata	MY 11030	2.21	3.06	3.04	3.31	2.28	1.70	1.12	1.02	0.753	1.01
	Danum Valley	MY 11053						1.26	1.16	0.453	0.315	0.919
	Kuching	MY 11060									1.81	1.66
Mongolia	Ulaanbaatar	MN 11031	37.6	47.2	49.8	26.4	43.0	49.6	45.7	41.1	42.9	42.1
	Terelj	MN 11032	15.1	14.6	26.3	10.6	16.1	13.3	24.5	13.4	17.7	35.6
Myanmar	Yangon	MM 11056								***	***	9.26
Philippines	Metro Manila	PH 11033	13.9	67.2	8.40	8.40	10.8	10.3	13.3	9.96	13.2	5.98
	Los Banos	PH 11034	6.20	64.5	6.77	7.46	5.14	3.18	6.43	4.82	3.34	4.71
	Mt. Sto. Tomas	PH 11055							5.58	23.3	2.98	5.69
Republic of Korea	Kanghwa	KR 11035	25.3	13.1	10.0	10.8	13.3	10.3	15.2	11.5	10.0	4.23
	Cheju (Kosan)	KR 11036	10.5	4.30	8.15	7.09	6.45	9.45	7.21	8.43	7.63	3.03
	Imsil	KR 11037		5.51	9.00	4.89	6.37	4.53	14.0	13.3	6.23	2.83
Russia	Mondy	RU 11038	5.75	6.95	8.50	3.75	5.29	4.14	5.43	6.84	7.93	5.14
	Listvyanka	RU 11039	12.7	7.18	11.3	14.1	14.0	8.16	8.76	8.96	8.12	12.5
	Irkutsk	RU 11040	27.8	34.6	31.3	23.7	21.7	21.4	29.7	26.3	29.2	28.8
	Primorskaya	RU 11041			17.6	24.6	21.0	20.7	24.7	13.5	18.9	11.4
Thailand	Bangkok	TH 11042	11.2	11.8	15.4	11.7	10.7	18.4	18.2	13.5	15.9	9.81
	Samutprakarn	TH 11043	10.8				7.48	9.25	14.5	10.7	13.5	13.0
	Patumthani	TH 11044	12.9	12.8	17.2	6.20	11.2	8.34	12.7	8.38	11.5	9.07
	Khanchanaburi	TH 11045	4.56	8.81	4.74	8.22	4.59	2.31	2.56	2.88	4.39	4.72
	Chiang Mai (Mae Hia)	TH 11046		6.86	17.8	5.65	4.71	3.73	4.68	7.97	6.63	5.63
	Nakhon Ratchasima	TH 11054							9.45	3.66	3.26	2.48
Viet Nam	Hanoi	VN 11047	20.5	10.4	16.7	17.6	24.8	25.7	35.0	17.9	11.6	11.8
	Hoa Binh	VN 11048	12.8	10.2	12.6	11.9	19.8	14.1	17.7	9.26	14.4	9.37
	Cuc Phuong	VN 11061										24.6
	Da Nang	VN 11062										4.31

[***]: 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 Volume-weighted annual mean concentrations of Mg²⁺

unit: µmol/L												
Country	Name of sites	Code	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Cambodia	Phnom Penh	KH 11052					<0.4	***	0.661	3.27	3.45	2.00
China	Guanyinqiac	CN 11001	8.54	11.6	6.00	4.46	9.12	12.7	12.6	8.04		
	Nanshan	CN 11002	7.05									
	Haifu	CN 11058									7.08	5.45
	Jinyunshar	CN 11003		5.76	3.37	2.89	3.55	3.17	4.00	2.81	4.64	5.56
	Shizhan	CN 11004	23.6	48.5	67.9	33.5	15.3	13.2	28.3	21.4	45.4	12.4
	Weishuiyuar	CN 11005	31.7	88.4	91.1	40.0	19.3	10.9	42.0			
	Jiwozi	CN 11007	14.6	41.1	50.1	33.9	16.6	30.9	40.6	48.8	77.3	20.2
	Hongwen	CN 11008	4.22	6.30	9.64	5.96	11.4	9.04	5.44	6.18	4.92	4.08
	Xiaoping	CN 11009	1.32	2.50	1.61	4.04	1.44	1.15	2.77	2.06	3.39	3.24
	Xiang Zhou	CN 11010	6.95	2.93	5.52	7.15	6.35	6.87	12.0	2.38	3.97	4.52
	Zhuxiandong	CN 11011	7.91	3.33	7.08	7.37	8.49	9.08	4.99	***	5.70	6.15
Indonesia	Jakarta	ID 11012	219	69.0	13.1	12.7	6.30	3.63	8.59	2.21	1.67	1.97
	Serpong	ID 11014	***	3.53	4.52	2.69	3.99	3.74	1.73	2.65	4.12	1.36
	Kototabang	ID 11013	***	1.04	2.58	6.76	1.78	0.939	2.26	3.81	1.000	1.10
	Bandung	ID 11015	***	4.07	1.64	1.70	3.28	2.45	3.26	1.68	4.40	4.13
	Maros	ID 11059									2.56	1.86
Japan	Rishiri	JP 11016	36.3	24.8	22.3	20.3	26.4	23.3	12.6	17.0	30.0	19.9
	Ochiishi	JP 11050					22.1	42.2	22.2	31.2	21.5	19.8
	Tappi	JP 11017	17.5	15.5	19.6	16.8	23.4	24.2	33.3	26.4	23.1	21.1
	Sado-seki	JP 11019	29.0	40.5	30.7	11.3	15.6	33.0	25.9	26.1	23.5	36.2
	Happo	JP 11021	1.67	1.59	0.926	1.25	1.26	1.20	0.958	0.676	0.697	1.16
	Ijira	JP 11022	2.89	3.99	3.53	2.16	2.75	1.75	1.64	2.75	1.74	1.67
	Oki	JP 11023	45.0	36.6	40.6	21.2	34.4	69.9	26.9	31.7	36.7	43.1
	Banryu	JP 11024	3.33	9.11	9.30	9.29	13.2	10.8	8.34	9.85	8.91	11.8
	Yusuhara	JP 11025	2.18	1.83	3.55	1.83	2.86	3.04	1.66	1.80	1.11	1.61
	Hedo	JP 11027	50.0	16.9	59.0	49.3	91.0	47.3	21.8	14.8	14.2	14.5
	Ogasawara	JP 11018	19.2	13.3	32.4	31.1	13.0	10.7	11.4	15.0	10.6	21.9
	Tokyo	JP 11057								4.22	2.78	2.97
Lao PDR	Vientian	LA 11051				***	***	***	3.49	0.698	1.31	0.722
Malaysia	Petaling Jaya	MY 11029	1.39	1.30	1.43	0.707	0.888	0.842	0.710	<0.4	0.520	0.467
	Tanah Rata	MY 11030	0.415	0.406	0.422	0.451	<0.4	0.492	<0.4	<0.4	<0.4	<0.4
	Danum Valley	MY 11053						<0.4	0.481	0.402	0.528	0.549
	Kuching	MY 11060									<0.4	<0.4
Mongolia	Ulaanbaatar	MN 11031	4.14	5.41	3.56	3.69	5.86	5.21	4.39	4.75	3.67	5.32
	Terelj	MN 11032	3.16	2.53	4.09	2.26	5.15	3.67	4.85	2.07	3.00	5.45
Myanmar	Yangon	MM 11056								***	***	2.84
Philippines	Metro Manila	PH 11033	6.32	15.0	3.27	2.99	4.38	2.46	5.46	4.13	4.64	2.56
	Los Banos	PH 11034	3.71	11.1	2.94	2.60	3.59	2.34	3.44	3.46	4.65	3.73
	Mt. Sto. Tomas	PH 11055							0.971	2.08	<0.4	1.53
Republic of Korea	Kanghwa	KR 11035	9.31	5.26	6.34	2.86	5.49	6.20	5.10	6.74	2.75	5.27
	Cheju (Kosan)	KR 11036	18.6	9.96	7.48	5.86	7.27	15.0	9.59	7.30	9.68	6.02
	Imsil	KR 11037		1.92	3.31	1.60	2.39	1.82	3.99	3.57	1.99	3.88
Russia	Mondy	RU 11038	1.09	1.46	2.20	0.775	1.27	0.961	0.986	1.78	1.98	1.17
	Listvyanka	RU 11039	2.94	1.78	3.04	3.65	3.20	1.58	1.71	1.85	1.76	2.84
	Irkutsk	RU 11040	4.99	5.55	5.66	4.32	4.77	5.08	5.76	6.27	6.44	7.55
	Primorskaya	RU 11041			5.66	11.2	7.05	5.67	5.50	4.30	6.26	3.11
Thailand	Bangkok	TH 11042	2.01	3.16	3.54	2.33	2.13	3.78	2.34	1.68	2.34	1.49
	Samutprakarn	TH 11043	2.39				1.87	3.43	4.63	2.69	3.99	2.80
	Patumthani	TH 11044	2.41	2.17	2.77	1.06	1.58	1.31	1.76	1.28	1.70	1.24
	Khanchanabur	TH 11045	1.67	2.52	1.75	2.23	1.64	1.13	0.983	0.997	1.61	1.44
	Chiang Mai (Mae Hia)	TH 11046		1.10	3.54	2.08	1.82	1.00	2.42	1.24	1.78	2.73
	Nakhon Ratchasima	TH 11054							1.98	1.78	1.22	1.27
Viet Nam	Hanoi	VN 11047	4.99	3.97	2.95	3.64	3.80	8.64	8.55	4.17	3.65	4.78
	Hoa Binh	VN 11048	4.67	3.71	1.42	2.14	2.52	4.21	5.28	2.76	1.60	1.85
	Cuc Phuong	VN 11061										4.37
	Da Nang	VN 11062										10.2

[***]: 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 3.75 Volume-weighted annual mean concentrations of H⁺

			unit: µmol/L									
Country	Name of sites	Code	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Cambodia	Phnom Penh	KH 11052					4.79	0.478	0.191	0.203	1.45	0.649
China	Guanyinqiao	CN 11001	46.7	16.1	25.2	32.2	25.9	11.2	13.7	22.6		
	Nanshan	CN 11002	60.5									
	Haifu	CN 11058									63.5	60.3
	Jinyunshan	CN 11003		65.4	43.6	50.3	25.9	23.7	20.4	30.0	44.0	47.1
	Shizhan	CN 11004	2.09	0.420	0.576	1.00	0.505	3.86	2.75	3.03	0.402	0.297
	Weishuiyuan	CN 11005	0.381	0.484	0.931	0.784	1.05	7.04	1.46			
	Jiwozi	CN 11007	3.79	0.573	0.999	0.890	0.776	0.627	1.36	0.143	0.114	0.794
	Hongwen	CN 11008	19.1	29.6	16.2	34.4	19.4	19.9	14.7	16.2	25.7	30.2
	Xiaoping	CN 11009	12.2	12.6	33.6	41.4	24.6	16.5	16.5	25.4	27.9	34.1
	Xiang Zhou	CN 11010	7.00	11.4	7.83	7.87	16.5	27.3	13.4	23.3	11.7	13.4
	Zhuxiandong	CN 11011	23.0	16.7	12.8	7.88	23.2	24.4	15.0	***	13.1	17.7
Indonesia	Jakarta	ID 11012	6.57	3.79	16.9	6.96	20.4	49.1	41.5	27.5	22.5	23.5
	Serpong	ID 11014	***	23.7	22.6	24.1	20.8	25.6	25.0	25.8	23.9	19.3
	Kototabang	ID 11013	31.2	8.53	4.89	5.00	18.5	20.9	29.4	5.31	6.00	22.6
	Bandung	ID 11015	***	10.1	34.9	10.0	9.30	9.33	7.00	11.8	6.81	4.99
	Maros	ID 11059									2.35	4.64
Japan	Rishiri	JP 11016	15.7	16.8	15.0	13.3	14.4	18.4	21.5	26.3	12.3	18.3
	Ochiishi	JP 11050				12.2	20.7	14.6	13.8	16.7	13.5	9.64
	Tappi	JP 11017	19.0	23.0	20.9	27.0	25.4	24.9	26.5	23.8	26.0	18.2
	Sado-seki	JP 11019	26.9	23.2	22.7	21.5	19.7	27.6	19.7	31.4	27.9	17.7
	Happo	JP 11021	18.6	14.6	11.8	12.4	13.9	15.9	10.7	16.2	14.7	10.7
	Ijira	JP 11022	30.1	37.1	30.4	38.7	22.1	30.9	31.0	29.3	35.7	23.0
	Okii	JP 11023	22.8	17.0	18.6	17.5	15.9	27.4	18.7	23.1	25.0	19.4
	Banryu	JP 11024	22.9	21.9	20.4	23.3	19.9	32.7	20.5	32.3	29.3	22.1
	Yusuhara	JP 11025	19.5	14.9	17.4	18.4	10.6	22.8	14.4	15.3	21.6	17.2
	Hedo	JP 11027	7.38	10.9	11.3	12.5	16.5	14.7	10.1	10.2	10.0	7.81
	Ogasawara	JP 11018	5.91	8.07	8.21	9.10	7.48	15.4	10.1	9.38	10.0	6.79
	Tokyo	JP 11057								16.3	24.8	17.7
Lao PDR	Vientian	LA 11051				0.313	2.26	0.481	0.325	2.16	0.987	3.31
Malaysia	Petaling Jaya	MY 11029	44.9	56.0	58.8	52.1	47.3	43.1	37.8	27.6	37.2	45.2
	Tanah Rata	MY 11030	16.1	12.7	10.8	12.7	13.7	14.3	11.3	11.1	8.01	8.31
	Danum Valley	MY 11053						10.5	8.93	8.03	6.02	6.00
	Kuching	MY 11060									5.55	5.47
Mongolia	Ulaanbaatar	MN 11031	0.550	0.643	0.419	1.90	0.347	1.02	0.354	0.550	0.521	0.777
	Terelj	MN 11032	3.02	0.913	1.77	3.96	1.64	5.44	6.89	6.04	3.72	0.608
Myanmar	Yangon	MM 11056								2.66	0.392	0.346
Philippines	Metro Manila	PH 11033	3.28	3.87	8.11	36.2	6.64	11.3	5.01	5.33	2.84	5.87
	Los Banos	PH 11034	3.64	2.98	1.81	32.5	5.47	7.27	2.44	2.91	11.2	2.64
	Mt. Sto. Tomas	PH 11055							0.475	2.97	3.22	1.47
Republic of Korea	Kanghwa	KR 11035	10.0	10.2	22.2	21.3	27.2	56.9	21.0	24.0	28.4	25.9
	Cheju (Kosan)	KR 11036	14.1	12.9	24.3	15.0	18.2	28.5	45.9	30.7	21.5	7.79
	Imsil	KR 11037		8.05	2.02	8.34	11.8	0.997	6.45	1.85	13.1	8.06
Russia	Mondy	RU 11038	5.50	3.15	4.06	4.47	4.57	4.34	4.08	3.03	6.72	3.33
	Listvyanka	RU 11039	8.57	11.0	13.2	9.71	12.1	14.7	22.8	21.6	23.2	14.4
	Irkutsk	RU 11040	7.76	5.31	9.44	4.24	12.2	7.61	7.04	11.7	17.1	3.89
	Primorskaya	RU 11041			6.30	13.2	14.5	8.67	15.0	14.5	16.3	10.5
Thailand	Bangkok	TH 11042	11.1	10.7	7.90	29.5	6.49	12.7	6.91	8.96	5.29	8.07
	Samutprakarn	TH 11043	14.8				3.41	3.42	1.36	2.46	5.08	7.40
	Patumthani	TH 11044	5.66	7.42	4.64	13.7	13.6	12.9	13.0	15.6	9.24	7.05
	Khanchanaburi	TH 11045	2.73	5.47	2.30	3.47	0.847	2.87	1.78	1.66	2.19	2.18
	Chiang Mai (Mae Hia)	TH 11046		1.94	1.89	2.47	2.54	5.94	2.00	1.12	1.04	1.20
	Nakhon Ratchasima	TH 11054							7.61	8.30	9.31	13.6
Viet Nam	Hanoi	VN 11047	3.57	1.47	2.79	1.55	2.26	0.710	1.85	2.61	1.43	2.15
	Hoa Binh	VN 11048	7.79	9.09	6.50	4.15	2.52	2.03	2.57	8.71	3.25	5.13
	Cuc Phuong	VN 11061										10.3
	Da Nang	VN 11062										16.8

[***]: 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 3.76 Volume-weighted annual mean pH

Country	Name of sites	Code	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Cambodia	Phnom Penh	KH 11052					5.32	6.32	6.72	6.69	5.84	6.19
China	Guanyinqiao	CN 11001	4.33	4.79	4.60	4.49	4.59	4.95	4.86	4.65		
	Nanshan	CN 11002	4.22									
	Haifu	CN 11058									4.20	4.22
	Jinyunshan	CN 11003		4.18	4.36	4.30	4.59	4.62	4.69	4.52	4.36	4.33
	Shizhan	CN 11004	5.68	6.38	6.24	6.00	6.30	5.41	5.56	5.52	6.40	6.53
	Weishuiyuan	CN 11005	6.42	6.32	6.03	6.11	5.98	5.15	5.84			
	Jiwozi	CN 11007	5.42	6.24	6.00	6.05	6.11	6.20	5.87	6.85	6.94	6.10
	Hongwen	CN 11008	4.72	4.53	4.79	4.46	4.71	4.70	4.83	4.79	4.59	4.52
	Xiaoping	CN 11009	4.91	4.90	4.47	4.38	4.61	4.78	4.78	4.60	4.55	4.47
	Xiang Zhou	CN 11010	5.15	4.94	5.11	5.10	4.78	4.56	4.87	4.63	4.93	4.87
	Zhuxiandong	CN 11011	4.64	4.78	4.89	5.10	4.63	4.61	4.82	***	4.88	4.75
Indonesia	Jakarta	ID 11012	5.18	5.42	4.77	5.16	4.69	4.31	4.38	4.56	4.65	4.63
	Serpong	ID 11014	***	4.63	4.65	4.62	4.68	4.59	4.60	4.59	4.62	4.71
	Kototabang	ID 11013	4.51	5.07	5.31	5.30	4.73	4.68	4.53	5.27	5.22	4.65
	Bandung	ID 11015	***	4.99	4.46	5.00	5.03	5.03	5.15	4.93	5.17	5.30
	Maros	ID 11059									5.63	5.33
Japan	Rishiri	JP 11016	4.80	4.77	4.82	4.88	4.84	4.74	4.67	4.58	4.91	4.74
	Ochiishi	JP 11050				4.91	4.68	4.84	4.86	4.78	4.87	5.02
	Tappi	JP 11017	4.72	4.64	4.68	4.57	4.59	4.60	4.58	4.62	4.59	4.74
	Sado-seki	JP 11019	4.57	4.63	4.64	4.67	4.70	4.56	4.70	4.50	4.55	4.75
	Happo	JP 11021	4.73	4.84	4.93	4.91	4.86	4.80	4.97	4.79	4.83	4.97
	Ijira	JP 11022	4.52	4.43	4.52	4.41	4.65	4.51	4.51	4.53	4.45	4.64
	Okii	JP 11023	4.64	4.77	4.73	4.76	4.80	4.56	4.73	4.64	4.60	4.71
	Banryu	JP 11024	4.64	4.66	4.69	4.63	4.70	4.49	4.69	4.49	4.53	4.66
	Yusuhara	JP 11025	4.71	4.83	4.76	4.73	4.97	4.64	4.84	4.81	4.67	4.77
	Hedo	JP 11027	5.13	4.96	4.95	4.90	4.78	4.83	4.99	4.99	5.00	5.11
	Ogasawara	JP 11018	5.23	5.09	5.09	5.04	5.13	4.81	4.99	5.03	5.00	5.17
	Tokyo	JP 11057								4.79	4.60	4.75
Lao PDR	Vientian	LA 11051				6.51	5.65	6.32	6.49	5.67	6.01	5.48
Malaysia	Petaling Jaya	MY 11029	4.35	4.25	4.23	4.28	4.33	4.37	4.42	4.56	4.43	4.35
	Tanah Rata	MY 11030	4.79	4.90	4.97	4.90	4.86	4.84	4.95	4.95	5.10	5.08
	Danum Valley	MY 11053						4.98	5.05	5.10	5.22	5.22
	Kuching	MY 11060									5.26	5.26
Mongolia	Ulaanbaatar	MN 11031	6.26	6.19	6.38	5.72	6.46	5.99	6.45	6.26	6.28	6.11
	Terelj	MN 11032	5.52	6.04	5.75	5.40	5.78	5.26	5.16	5.22	5.43	6.22
Myanmar	Yangon	MM 11056								5.57	6.41	6.46
Philippines	Metro Manila	PH 11033	5.48	5.41	5.09	4.44	5.18	4.95	5.30	5.27	5.55	5.23
	Los Banos	PH 11034	5.44	5.53	5.74	4.49	5.26	5.14	5.61	5.54	4.95	5.58
	Mt. Sto. Tomas	PH 11055							6.32	5.53	5.49	5.83
Republic of Korea	Kanghwa	KR 11035	5.00	4.99	4.65	4.67	4.57	4.25	4.68	4.62	4.55	4.59
	Cheju (Kosan)	KR 11036	4.85	4.89	4.61	4.83	4.74	4.55	4.34	4.51	4.67	5.11
	Imsil	KR 11037		5.09	5.69	5.08	4.93	6.00	5.19	5.73	4.88	5.09
Russia	Mondy	RU 11038	5.26	5.50	5.39	5.35	5.34	5.36	5.39	5.52	5.17	5.48
	Listvyanka	RU 11039	5.07	4.96	4.88	5.01	4.92	4.83	4.64	4.67	4.63	4.84
	Irkutsk	RU 11040	5.11	5.28	5.02	5.37	4.91	5.12	5.15	4.93	4.77	5.41
	Primorskaya	RU 11041			5.20	4.88	4.84	5.06	4.83	4.84	4.79	4.98
Thailand	Bangkok	TH 11042	4.95	4.97	5.10	4.53	5.19	4.89	5.16	5.05	5.28	5.09
	Samutprakarn	TH 11043	4.83				5.47	5.47	5.87	5.61	5.29	5.13
	Patumthani	TH 11044	5.25	5.13	5.33	4.86	4.87	4.89	4.89	4.81	5.03	5.15
	Khanchanaburi	TH 11045	5.56	5.26	5.64	5.46	6.07	5.54	5.75	5.78	5.66	5.66
	Chiang Mai (Mae Hia)	TH 11046		5.71	5.72	5.61	5.59	5.23	5.70	5.95	5.98	5.92
	Nakhon Ratchasima	TH 11054							5.12	5.08	5.03	4.87
Viet Nam	Hanoi	VN 11047	5.45	5.83	5.55	5.81	5.65	6.15	5.73	5.58	5.84	5.67
	Hoa Binh	VN 11048	5.11	5.04	5.19	5.38	5.60	5.69	5.59	5.06	5.49	5.29
	Cuc Phuong	VN 11061										4.99
	Da Nang	VN 11062										4.77

[***]: 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 Volume-weighted annual mean EC

unit: mS/m

Country	Name of sites	Code	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Cambodia	Phnom Penh	KH 11052					1.17	0.807	1.17	1.37	1.53	0.880
China	Guanyinqiao	CN 11001	5.61	7.00	4.36	4.89	5.82	6.70	6.70	5.01		
	Nanshan	CN 11002	5.20									
	Haifu	CN 11058									6.46	5.14
	Jinyunshan	CN 11003		6.23	3.69	4.19	4.35	4.23	5.45	3.76	5.13	5.27
	Shizhan	CN 11004	11.4	19.5	16.1	7.50	6.47	5.18	9.81	7.21	7.96	5.80
	Weishuiyuan	CN 11005	15.1	27.7	21.7	7.80	8.55	4.61	13.4			
	Jiwozi	CN 11007	7.71	9.65	4.02	5.19	2.91	5.82	6.95	10.3	8.46	3.73
	Hongwen	CN 11008	1.66	3.87	2.64	2.88	3.41	2.63	2.31	2.68	2.15	2.25
	Xiaoping	CN 11009	0.879	1.44	1.60	2.15	1.97	1.91	2.19	2.01	2.09	2.26
	Xiang Zhou	CN 11010	2.05	1.95	3.20	2.19	2.37	2.41	2.20	1.99	1.84	1.99
	Zhuxiandong	CN 11011	3.04	2.08	3.63	2.42	3.15	2.49	2.67	***	1.94	2.15
Indonesia	Jakarta	ID 11012	5.06	26.4	2.97	4.78	3.69	3.37	1.92	2.23	1.78	1.66
	Serpong	ID 11014	***	2.94	1.87	2.26	2.25	2.63	2.10	2.14	2.10	1.66
	Kototabang	ID 11013	0.997	0.427	4.94	1.96	1.11	0.843	0.881	0.816	0.556	0.766
	Bandung	ID 11015	3.37	2.08	1.68	1.50	1.80	1.75	1.69	1.64	1.58	1.62
	Maros	ID 11059									0.623	1.06
Japan	Rishiri	JP 11016	6.37	4.51	4.23	3.80	4.72	4.46	3.04	3.72	4.86	4.10
	Ochiishi	JP 11050				3.45	6.72	4.01	5.00	3.69	3.33	3.31
	Tappi	JP 11017	3.69	3.52	3.89	3.74	4.57	4.18	5.98	4.92	4.32	3.78
	Sado-seki	JP 11019	4.76	5.64	4.99	2.65	3.10	5.05	3.81	4.92	4.28	5.65
	Happo	JP 11021	1.22	0.965	0.667	0.692	0.915	1.10	0.840	1.08	1.03	0.860
	Ijira	JP 11022	2.11	2.44	2.18	2.12	1.62	2.11	2.15	2.05	2.18	1.65
	Okii	JP 11023	7.28	5.90	6.59	3.82	5.86	11.3	4.77	5.91	6.60	7.16
	Banryu	JP 11024	1.82	2.52	2.56	2.56	3.02	3.50	2.54	3.36	3.10	3.02
	Yusuhara	JP 11025	1.17	0.981	1.42	1.16	1.03	1.59	1.08	1.06	1.14	1.15
	Hedo	JP 11027	7.21	2.95	8.85	7.10	14.2	7.10	3.58	2.54	2.61	2.44
	Ogasawara	JP 11018	2.59	2.20	3.95	4.31	2.29	2.33	2.14	2.59	1.86	3.27
	Tokyo	JP 11057								1.80	1.96	1.66
Lao PDR	Vientian	LA 11051				2.07	2.65	1.01	0.764	0.396	0.644	0.534
Malaysia	Petaling Jaya	MY 11029	2.08	2.13	2.81	2.32	2.26	2.12	1.81	1.40	1.98	2.46
	Tanah Rata	MY 11030	0.725	0.543	0.594	0.613	0.763	0.684	0.510	0.506	0.471	0.544
	Danum Valley	MY 11053						0.562	0.465	0.347	0.461	0.445
	Kuching	MY 11060									0.443	0.521
Mongolia	Ulaanbaatar	MN 11031	1.79	1.91	2.20	1.56	1.68	1.87	1.92	2.18	1.92	1.76
	Terelj	MN 11032	1.28	0.933	1.93	1.05	1.12	1.18	1.95	2.02	1.34	2.06
Myanmar	Yangon	MM 11056								0.595	0.949	1.54
Philippines	Metro Manila	PH 11033	2.20	6.49	1.85	1.36	1.48	1.66	1.66	1.40	2.88	1.24
	Los Banos	PH 11034	1.13	2.08	1.22	1.99	0.801	1.01	1.08	0.859	1.76	0.802
	Mt. Sto. Tomas	PH 11055							0.221	1.03	0.347	0.495
Republic of Korea	Kanghwa	KR 11035	2.50	1.98	2.68	2.54	3.25	4.14	2.75	3.49	2.72	2.88
	Cheju (Kosan)	KR 11036	3.37	2.56	3.03	2.22	2.45	3.43	3.64	3.43	3.47	2.20
	Imsil	KR 11037		1.31	1.80	1.42	1.42	1.72	2.51	1.58	1.75	1.98
Russia	Mondy	RU 11038	0.578	0.680	0.964	0.586	0.536	0.485	0.428	0.799	0.727	0.621
	Listvyanka	RU 11039	1.04	0.945	1.39	1.36	1.30	1.19	1.51	1.38	1.58	1.31
	Irkutsk	RU 11040	1.71	1.79	2.10	1.67	1.80	1.66	1.76	2.02	2.48	2.18
	Primorskaya	RU 11041			1.77	2.66	2.20	2.03	2.47	1.90	2.58	1.48
Thailand	Bangkok	TH 11042	1.64	1.50	1.32	1.67	1.25	1.66	1.94	1.41	1.54	1.38
	Samutprakarn	TH 11043	1.52				1.01	1.30	1.56	1.34	1.66	1.48
	Patumthani	TH 11044	1.48	1.80	1.07	1.24	1.47	1.31	1.42	1.50	1.19	1.07
	Khanchanaburi	TH 11045	0.519	0.559	0.508	0.352	0.406	0.315	0.462	0.292	0.496	0.511
	Chiang Mai (Mae Hia)	TH 11046		0.885	0.476	0.458	0.486	0.812	0.593	0.630	0.622	0.608
	Nakhon Ratchasima	TH 11054							0.918	0.775	0.833	0.981
Viet Nam	Hanoi	VN 11047	1.55	0.917	1.52	1.70	1.85	2.75	2.18	1.57	1.11	1.41
	Hoa Binh	VN 11048	1.15	1.04	1.06	1.12	1.48	1.15	1.22	1.08	0.918	1.10
	Cuc Phuong	VN 11061										1.74
	Da Nang	VN 11062										2.53

[***]: 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 SO₄²⁻ deposition

			unit: mmol m ⁻² y ⁻¹									
Country	Name of sites	Code	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Cambodia	Phnom Penh	KH 11052					***	7.43	5.04	30.9	21.3	15.4
China	Guanyinqiao	CN 11001	164	154	165	108	229	200	149	169		
	Nanshan	CN 11002	164									
	Haifu	CN 11058									145	106
	Jinyunshan	CN 11003		87.7	126	103	166	149	169	149	146	125
	Shizhan	CN 11004	199	171	297	258	104	63.9	132	96.7	73.6	80.5
	Weishuiyuan	CN 11005	241	105	234	186	94.2	47.1	104			
	Jiwozi	CN 11007	117	68.0	43.2	55.3	56.3	42.8	30.0	18.2	63.6	58.7
	Hongwen	CN 11008	30.7	16.7	67.0	48.0	73.6	80.4	61.1	102	29.9	19.2
	Xiaoping	CN 11009	22.8	49.1	36.3	41.7	53.3	59.0	39.7	29.2	58.3	32.0
	Xiang Zhou	CN 11010	45.5	31.2	48.3	35.3	25.0	28.0	44.6	31.2	46.5	36.6
	Zhuxiandong	CN 11011	85.4	49.5	50.6	32.4	34.3	31.3	17.1	***	49.6	33.2
Indonesia	Jakarta	ID 11012	92.7	77.5	60.5	108	71.4	85.6	38.7	60.6	38.9	30.2
	Serpong	ID 11014	***	61.4	64.3	49.5	41.0	27.5	45.2	61.5	65.9	31.0
	Kototabang	ID 11013	8.65	5.66	13.4	28.7	11.0	12.1	9.55	19.4	7.21	12.5
	Bandung	ID 11015	60.2	87.8	70.4	32.8	24.8	61.7	35.1	52.0	65.4	78.3
	Maros	ID 11059									16.3	22.5
Japan	Rishiri	JP 11016	30.0	19.1	26.1	16.6	27.0	26.8	29.6	24.9	24.3	27.4
	Ochiishi	JP 11050				14.9	22.3	18.6	27.6	18.4	13.7	26.3
	Tappi	JP 11017	22.9	24.7	30.2	25.1	38.6	36.8	34.5	31.2	23.3	30.9
	Sado-seki	JP 11019	36.8	39.8	40.4	18.6	27.2	39.1	35.7	40.6	31.6	34.2
	Happo	JP 11021	29.2	27.4	19.8	18.5	28.2	35.8	28.4	28.4	18.0	23.8
	Ijira	JP 11022	53.3	49.1	52.2	56.7	48.0	48.5	58.3	43.0	41.0	44.2
	Oki	JP 11023	49.0	42.1	55.4	34.3	41.3	73.2	41.1	42.1	39.5	42.4
	Banryu	JP 11024	24.4	33.9	24.8	30.5	34.4	34.6	43.1	35.5	32.7	36.3
	Yusuhara	JP 11025	31.0	19.0	26.2	26.5	26.7	28.0	31.9	22.5	22.4	24.1
	Hedo	JP 11027	93.6	33.9	75.0	49.0	137	64.1	35.8	38.8	27.8	25.9
	Ogasawara	JP 11018	22.6	20.7	24.1	25.2	12.5	26.9	16.2	19.9	15.0	27.7
	Tokyo	JP 11057								18.4	36.5	27.6
Lao PDR	Vientian	LA 11051				***	***	***	2.45	6.54	8.43	0.733
Malaysia	Petaling Jaya	MY 11029	80.4	68.4	63.1	63.9	54.5	66.4	82.5	41.8	65.6	39.2
	Tanah Rata	MY 11030	12.9	9.79	12.8	11.4	9.74	16.1	12.3	10.4	12.9	10.0
	Danum Valley	MY 11053						5.53	10.2	6.85	7.46	9.56
	Kuching	MY 11060									17.8	17.6
Mongolia	Ulaanbaatar	MN 11031	4.78	4.17	4.41	5.80	1.84	4.01	4.78	4.67	4.33	4.53
	Terelj	MN 11032	3.41	0.861	3.72	2.57	2.75	4.29	5.10	4.63	3.40	1.83
Myanmar	Yangon	MM 11056								***	***	24.1
Philippines	Metro Manila	PH 11033	94.4	85.5	78.2	37.6	44.0	57.1	47.4	78.1	59.2	51.3
	Los Banos	PH 11034	27.7	28.4	27.3	11.4	14.7	16.2	23.9	26.0	34.2	25.6
	Mt. Sto. Tomas	PH 11055							0.592	19.4	17.6	23.8
Republic of Korea	Kanghwa	KR 11035	35.3	28.5	28.4	41.1	39.3	37.9	40.3	36.4	43.2	37.0
	Cheju (Kosan)	KR 11036	24.5	23.0	28.5	29.3	26.8	24.0	31.6	47.1	22.1	26.3
	Imsil	KR 11037		21.3	22.7	30.6	19.9	28.4	19.0	38.8	17.9	21.0
Russia	Mondy	RU 11038	2.19	3.51	2.20	3.48	2.46	1.54	1.93	3.26	1.47	0.929
	Listvyanka	RU 11039	6.79	6.60	6.56	10.3	10.6	7.80	5.90	6.99	8.33	6.02
	Irkutsk	RU 11040	16.1	13.9	10.3	12.0	14.7	12.3	9.28	16.0	20.3	13.4
	Primorskaya	RU 11041			24.2	13.9	25.7	28.2	28.6	30.4	22.5	19.5
Thailand	Bangkok	TH 11042	24.8	21.3	24.2	25.6	19.8	39.1	35.5	27.2	32.0	26.3
	Samutprakarn	TH 11043	25.0				20.7	31.1	29.4	27.7	27.2	30.0
	Patumthani	TH 11044	18.7	23.2	14.2	20.5	17.1	16.7	21.6	16.6	17.8	11.7
	Khanchanaburi	TH 11045	3.21	7.91	12.4	5.78	4.71	5.72	10.2	4.20	7.41	7.19
	Chiang Mai (Mae Hia)	TH 11046		3.02	6.57	3.34	7.95	8.43	6.44	5.62	6.38	4.52
	Nakhon Ratchasima	TH 11054							9.80	8.93	12.7	8.11
Viet Nam	Hanoi	VN 11047	37.9	31.5	47.8	47.7	58.3	90.6	57.7	55.8	45.8	44.1
	Hoa Binh	VN 11048	30.8	32.6	30.5	38.0	53.9	40.6	38.5	33.1	26.9	21.8
	Cuc Phuong	VN 11061										41.9
	Da Nang	VN 11062										55.6

[***]: 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 3.79 Annual nss-SO₄²⁻ deposition

			unit: mmol m ⁻² y ⁻¹									
Country	Name of sites	Code	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Cambodia	Phnom Penh	KH 11052					***	***	4.82	30.2	15.9	14.9
China	Guanyinqiao	CN 11001	163	154	164	108	228	200	149	169		
	Nanshan	CN 11002	164									
	Haifu	CN 11058									145	106
	Jinyunshan	CN 11003		87.3	125	102	165	148	168	148	145	124
	Shizhan	CN 11004	198	167	291	253	103	63.4	131	96.2	73.0	80.1
	Weishuiyuan	CN 11005	239	104	231	177	93.5	46.6	103			
	Jiwozi	CN 11007	116	66.0	41.7	51.6	54.7	41.5	29.1	17.7	61.5	57.8
	Hongwen	CN 11008	28.5	16.5	61.8	45.3	70.3	75.1	57.7	99.7	28.6	18.1
	Xiaoping	CN 11009	22.0	47.2	34.1	39.0	51.8	57.3	37.9	28.4	55.6	30.9
	Xiang Zhou	CN 11010	40.3	29.1	44.0	31.6	22.4	25.3	41.3	29.5	40.6	31.7
	Zhuxiandong	CN 11011	82.4	46.2	46.3	28.8	30.4	27.7	15.9	***	44.0	28.9
Indonesia	Jakarta	ID 11012	87.7	74.6	57.3	105	68.2	82.7	37.6	58.5	37.9	29.3
	Serpong	ID 11014	***	59.1	60.5	48.0	39.3	26.7	44.4	60.1	64.5	30.2
	Kototabang	ID 11013	***	5.33	12.7	26.9	9.66	11.3	9.08	17.9	6.47	11.6
	Bandung	ID 11015	***	84.6	69.1	32.1	24.2	60.5	33.7	51.2	64.2	76.4
	Maros	ID 11059									13.5	20.0
Japan	Rishiri	JP 11016	14.9	11.2	14.9	9.12	13.9	15.0	21.0	17.4	12.0	16.2
	Ochiishi	JP 11050				5.84	8.33	8.28	11.3	8.73	6.14	9.29
	Tappi	JP 11017	13.5	16.0	17.1	15.4	21.0	20.6	17.8	16.6	13.5	15.4
	Sado-seki	JP 11019	20.2	18.9	18.8	12.3	14.7	19.2	18.7	24.7	18.7	14.2
	Happo	JP 11021	28.1	26.6	19.3	17.8	27.1	34.5	27.8	28.0	17.6	23.1
	Ijira	JP 11022	50.1	45.1	47.6	54.3	43.6	46.3	56.5	40.1	39.0	41.9
	Oki	JP 11023	20.4	18.4	21.2	16.4	16.8	25.3	22.0	22.8	18.2	17.0
	Banryu	JP 11024	21.7	25.5	18.6	22.0	22.5	27.5	35.3	29.5	27.2	25.9
	Yusuhara	JP 11025	28.4	17.6	22.1	24.0	20.9	24.5	29.7	20.6	21.2	22.6
	Hedo	JP 11027	17.1	13.8	15.1	15.7	43.4	23.1	14.7	17.8	13.2	11.0
	Ogasawara	JP 11018	6.22	9.23	5.25	5.71	4.02	15.0	6.58	7.61	6.38	8.72
	Tokyo	JP 11057								16.2	34.3	25.1
Lao PDR	Vientian	LA 11051				***	***	***	2.15	6.34	8.14	0.633
Malaysia	Petaling Jaya	MY 11029	79.3	67.7	62.3	62.9	53.5	65.3	81.4	41.2	64.6	38.4
	Tanah Rata	MY 11030	12.5	9.49	12.6	11.1	9.48	14.9	12.1	10.2	12.6	9.80
	Danum Valley	MY 11053						5.19	9.23	6.11	6.89	8.36
	Kuching	MY 11060									16.4	15.6
Mongolia	Ulaanbaatar	MN 11031	4.69	4.08	4.34	5.73	1.81	3.95	4.68	4.63	4.22	4.47
	Terelj	MN 11032	3.33	0.776	3.51	2.49	2.67	4.12	4.93	4.53	3.26	1.78
Myanmar	Yangon	MM 11056								***	***	20.8
Philippines	Metro Manila	PH 11033	87.0	52.0	75.6	35.2	41.9	54.8	44.6	73.9	55.7	47.7
	Los Banos	PH 11034	22.4	23.9	25.1	10.0	13.4	14.5	21.0	22.7	32.0	22.5
	Mt. Sto. Tomas	PH 11055							0.519	18.2	16.1	21.5
Republic of Korea	Kanghwa	KR 11035	31.6	25.6	26.0	38.6	37.6	36.3	38.5	34.0	39.5	33.6
	Cheju (Kosan)	KR 11036	14.8	18.0	24.9	25.6	22.9	20.4	25.9	39.5	15.3	23.0
	Imsil	KR 11037		20.1	20.4	28.0	18.6	26.8	17.6	37.5	16.3	17.7
Russia	Mondy	RU 11038	2.16	3.46	2.17	3.42	2.43	1.51	1.89	3.20	1.45	0.912
	Listvyanka	RU 11039	6.67	6.50	6.47	10.1	10.4	7.72	5.85	6.93	8.27	5.94
	Irkutsk	RU 11040	15.8	13.6	10.2	11.8	14.5	12.1	9.07	15.8	20.0	12.9
	Primorskaya	RU 11041			23.0	13.3	24.8	27.2	28.0	29.2	21.7	18.8
Thailand	Bangkok	TH 11042	24.4	20.7	22.9	24.9	19.1	37.6	34.6	26.5	31.0	25.1
	Samutprakarn	TH 11043	24.4				19.5	29.1	28.0	26.3	25.6	28.8
	Patumthani	TH 11044	18.1	22.5	13.7	20.1	16.6	16.2	20.8	16.1	17.2	11.2
	Khanchanaburi	TH 11045	2.72	6.89	11.2	4.81	3.96	4.89	9.24	3.48	6.33	6.05
	Chiang Mai (Mae Hia)	TH 11046		2.78	5.78	3.21	7.74	8.36	6.16	5.46	6.18	4.36
	Nakhon Ratchasima	TH 11054							9.48	8.56	12.2	7.90
Viet Nam	Hanoi	VN 11047	36.5	30.0	47.3	46.9	57.5	88.7	56.7	55.0	44.5	43.2
	Hoa Binh	VN 11048	29.4	31.3	30.3	37.8	53.5	39.6	38.1	32.7	26.5	21.5
	Cuc Phuong	VN 11061										40.4
	Da Nang	VN 11062										38.7

[***]: 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 3.80 Annual NO₃⁻ deposition

			unit: mmol m ⁻² y ⁻¹									
Country	Name of sites	Code	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Cambodia	Phnom Penh	KH 11052					3.22	***	8.59	11.3	17.2	13.7
China	Guanyinqiao	CN 11001	45.5	39.7	49.7	38.4	60.9	44.5	51.1	63.3		
	Nanshan	CN 11002	52.4									
	Haifu	CN 11058									65.6	56.7
	Jinyunshan	CN 11003		28.6	47.3	42.5	55.9	50.2	55.2	51.8	56.4	59.7
	Shizhan	CN 11004	48.6	55.8	52.2	86.6	37.1	6.16	39.4	40.0	15.5	34.1
	Weishuiyuan	CN 11005	42.9	14.5	39.0	70.5	32.4	5.01	32.8			
	Jiwozi	CN 11007	24.1	29.3	12.7	26.2	26.9	3.37	11.9	6.68	44.9	17.2
	Hongwen	CN 11008	28.4	11.2	48.2	43.7	53.1	63.4	47.7	50.6	21.6	17.2
	Xiaoping	CN 11009	22.8	50.1	32.0	39.9	38.5	52.9	37.7	27.3	49.2	33.2
	Xiang Zhou	CN 11010	31.8	28.0	30.9	36.0	29.6	20.3	33.3	23.9	34.7	35.5
	Zhuxiandong	CN 11011	59.6	57.1	32.9	20.2	31.9	22.8	11.7	***	33.9	31.3
Indonesia	Jakarta	ID 11012	27.8	66.4	44.3	94.5	114	115	30.4	67.4	24.1	23.8
	Serpong	ID 11014	***	81.4	81.6	66.1	58.0	32.5	45.4	61.3	71.8	34.2
	Kototabang	ID 11013	14.4	3.32	10.1	154	9.94	3.46	1.74	9.88	6.93	0.679
	Bandung	ID 11015	30.7	70.0	66.7	32.7	25.2	33.5	30.3	42.4	48.4	61.3
	Maros	ID 11059									10.7	17.4
Japan	Rishiri	JP 11016	13.9	11.1	12.9	8.65	11.0	12.1	18.2	13.8	12.1	18.3
	Ochiishi	JP 11050				6.22	8.78	7.65	11.3	8.29	6.16	8.57
	Tappi	JP 11017	13.5	16.5	22.5	19.4	24.0	22.5	21.7	22.8	18.5	18.0
	Sado-seki	JP 11019	19.5	21.6	21.4	15.7	17.3	21.3	23.9	30.0	24.4	17.2
	Happo	JP 11021	24.3	20.8	18.2	16.2	24.7	28.6	22.7	22.9	18.2	20.1
	Ijira	JP 11022	64.8	48.5	57.8	64.5	52.6	61.9	68.5	49.4	54.3	52.9
	Oki	JP 11023	22.4	19.5	23.7	20.7	24.0	28.7	25.4	27.6	21.5	22.7
	Banryu	JP 11024	21.7	31.1	25.0	27.9	27.0	32.8	38.3	37.1	31.2	34.8
	Yusuhara	JP 11025	19.7	14.2	19.8	19.7	20.9	21.8	23.9	17.1	19.7	16.2
	Hedo	JP 11027	16.7	14.0	19.3	13.2	23.8	19.6	15.1	17.3	13.5	12.7
	Ogasawara	JP 11018	4.73	6.67	3.61	6.55	4.30	6.58	7.57	7.64	6.27	5.67
	Tokyo	JP 11057								21.0	45.5	31.3
Lao PDR	Vientian	LA 11051				***	***	***	4.92	9.65	9.95	1.76
Malaysia	Petaling Jaya	MY 11029	92.9	73.2	97.9	100	89.4	102	120	80.5	135	138
	Tanah Rata	MY 11030	10.4	8.90	16.7	14.1	11.1	17.4	14.9	12.4	17.8	16.0
	Danum Valley	MY 11053						3.14	4.24	2.02	4.11	5.61
	Kuching	MY 11060									21.3	21.2
Mongolia	Ulaanbaatar	MN 11031	3.91	3.43	4.23	4.62	1.32	2.83	3.50	3.27	3.12	4.35
	Terelj	MN 11032	3.65	0.815	4.45	3.87	3.34	2.89	3.32	3.39	3.77	2.33
Myanmar	Yangon	MM 11056								***	***	21.8
Philippines	Metro Manila	PH 11033	48.9	42.5	52.3	28.8	33.4	51.1	33.1	49.4	50.2	32.8
	Los Banos	PH 11034	14.3	25.3	14.0	7.84	10.6	16.2	18.1	19.4	15.1	23.2
	Mt. Sto. Tomas	PH 11055							0.804	18.5	19.9	18.6
Republic of Korea	Kanghwa	KR 11035	47.4	32.6	27.0	42.9	36.1	36.5	36.1	34.5	48.0	23.9
	Cheju (Kosan)	KR 11036	16.2	20.5	24.4	29.7	27.9	19.2	28.8	18.7	22.3	19.3
	Imsil	KR 11037		20.2	31.8	31.7	24.8	32.9	19.6	24.4	19.3	23.9
Russia	Mondy	RU 11038	3.04	3.38	2.75	2.78	2.44	1.44	2.09	2.99	1.54	0.938
	Listvyanka	RU 11039	8.25	7.26	8.99	16.1	10.9	5.34	4.54	8.33	6.02	5.10
	Irkutsk	RU 11040	11.2	8.61	6.59	8.15	9.48	7.25	5.89	8.76	9.02	7.23
	Primorskaya	RU 11041			8.51	4.97	14.8	15.9	18.2	18.9	18.3	16.1
Thailand	Bangkok	TH 11042	24.8	21.0	32.0	31.9	19.3	46.6	52.4	44.1	55.4	58.2
	Samutprakarn	TH 11043	15.1				12.3	29.1	20.0	31.0	30.2	39.7
	Patumthani	TH 11044	17.8	26.5	17.6	28.4	23.4	24.8	35.4	31.4	35.9	21.8
	Khanchanaburi	TH 11045	5.06	10.2	13.3	7.96	6.65	5.11	15.5	5.01	9.85	9.10
	Chiang Mai (Mae Hia)	TH 11046		4.47	9.78	5.27	7.04	12.0	11.2	7.47	11.7	8.88
	Nakhon Ratchasima	TH 11054							13.5	15.7	19.8	16.0
Viet Nam	Hanoi	VN 11047	20.2	11.4	21.4	39.4	39.7	54.3	30.6	25.8	22.1	26.7
	Hoa Binh	VN 11048	18.3	19.5	32.8	22.6	36.4	29.5	25.0	20.4	20.2	17.5
	Cuc Phuong	VN 11061										24.6
	Da Nang	VN 11062										33.7

[***]: 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 3.81 Annual Cl⁻ depositionunit: mmol m⁻² y⁻¹

Country	Name of sites	Code	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Cambodia	Phnom Penh	KH 11052					***	8.12	5.88	17.4	15.9	13.6
China	Guanyinqiao	CN 11001	25.9	22.4	22.5	16.0	20.3	19.7	16.2	17.9		
	Nanshan	CN 11002	19.7									
	Haifu	CN 11058									13.9	11.7
	Jinyunshan	CN 11003		40.3	20.8	12.6	19.5	22.6	16.2	14.3	18.6	17.7
	Shizhan	CN 11004	27.4	29.6	122	106	21.7	17.5	17.3	21.0	12.9	15.5
	Weishuiyuan	CN 11005	41.0	19.3	66.0	129	18.3	16.0	16.1			
	Jiwozi	CN 11007	26.8	20.7	26.2	42.8	15.1	13.9	7.77	4.41	14.8	17.5
	Hongwen	CN 11008	48.6	10.6	67.3	66.7	64.1	112	98.0	52.6	29.5	23.8
	Xiaoping	CN 11009	32.4	77.3	19.9	41.6	32.5	34.9	52.4	15.2	37.1	22.8
	Xiang Zhou	CN 11010	101	75.2	119	81.8	48.8	77.6	68.1	44.5	98.1	90.2
	Zhuxiandong	CN 11011	70.2	71.2	94.1	70.5	75.1	55.9	25.9	***	105	81.2
Indonesia	Jakarta	ID 11012	33.9	48.2	44.2	84.4	57.4	88.4	23.0	40.7	19.6	18.7
	Serpong	ID 11014	***	51.8	57.6	58.2	34.8	16.3	17.4	28.8	40.3	23.6
	Kototabang	ID 11013	15.8	7.97	30.1	87.0	24.8	15.6	9.74	38.2	9.62	28.4
	Bandung	ID 11015	93.7	65.1	51.5	20.9	15.6	25.5	18.6	14.8	19.4	31.6
	Maros	ID 11059									60.9	49.7
Japan	Rishiri	JP 11016	286	145	207	142	242	224	163	142	222	203
	Ochiishi	JP 11050				178	266	191	316	189	142	323
	Tappi	JP 11017	187	169	253	178	341	310	314	276	186	290
	Sado-seki	JP 11019	292	367	439	121	236	385	324	298	241	377
	Happo	JP 11021	23.4	20.7	13.0	17.9	27.0	26.1	15.6	10.1	9.21	15.6
	Ijira	JP 11022	61.8	73.0	88.2	56.6	94.2	43.3	40.8	56.1	42.5	47.4
	Oki	JP 11023	543	448	658	321	453	914	353	362	412	489
	Banryu	JP 11024	48.5	155	116	162	232	142	149	114	105	197
	Yusuhara	JP 11025	52.4	25.6	74.6	45.4	112	69.4	44.4	38.5	22.0	28.8
	Hedo	JP 11027	1500	373	1200	628	1750	869	404	394	270	278
	Ogasawara	JP 11018	325	222	370	400	162	235	188	241	165	379
	Tokyo	JP 11057								44.4	44.0	48.0
Lao PDR	Vientian	LA 11051				***	***	***	3.38	10.4	12.4	1.12
Malaysia	Petaling Jaya	MY 11029	29.1	23.2	19.5	28.1	22.2	25.0	27.8	17.2	28.1	23.4
	Tanah Rata	MY 11030	21.3	7.87	6.29	7.19	5.86	7.61	5.85	5.05	5.78	6.96
	Danum Valley	MY 11053						7.54	21.5	14.6	18.3	23.0
	Kuching	MY 11060									27.2	39.3
Mongolia	Ulaanbaatar	MN 11031	1.76	1.60	1.37	2.27	0.670	1.17	1.46	1.18	1.56	2.20
	Terelj	MN 11032	1.86	0.767	2.80	2.06	1.85	2.44	1.99	1.91	1.90	1.10
Myanmar	Yangon	MM 11056								***	***	75.3
Philippines	Metro Manila	PH 11033	103	264	55.9	53.5	52.0	33.7	62.3	97.8	68.4	92.9
	Los Banos	PH 11034	87.1	62.7	41.9	26.1	24.9	29.7	46.7	75.5	35.5	72.6
	Mt. Sto. Tomas	PH 11055							0.677	24.9	26.6	39.3
Republic of Korea	Kanghwa	KR 11035	61.4	48.6	35.5	96.4	48.9	45.5	39.2	50.9	70.5	76.2
	Cheju (Kosan)	KR 11036	222	125	85.3	88.4	88.9	73.1	116	130	114	66.1
	Imsil	KR 11037		37.3	36.7	71.5	32.2	54.9	54.9	30.1	31.2	55.5
Russia	Mondy	RU 11038	0.785	0.463	1.81	1.25	0.991	1.69	1.83	1.38	0.869	0.391
	Listvyanka	RU 11039	2.22	1.07	2.45	2.23	2.72	2.43	1.09	1.75	2.00	0.942
	Irkutsk	RU 11040	6.19	5.72	5.45	8.07	4.71	5.47	4.48	6.30	8.39	10.7
	Primorskaya	RU 11041			28.3	11.5	14.7	16.0	11.2	18.3	14.2	12.7
Thailand	Bangkok	TH 11042	14.4	11.1	18.0	12.0	13.7	24.7	17.1	13.0	20.1	15.9
	Samutprakarn	TH 11043	12.6				16.2	30.9	17.7	21.0	22.1	16.8
	Patumthani	TH 11044	9.96	10.5	11.0	10.6	13.9	9.04	11.0	9.17	11.0	8.18
	Khanchanaburi	TH 11045	15.5	15.1	30.9	14.3	13.9	15.9	15.9	11.3	20.1	17.6
	Chiang Mai (Mae Hia)	TH 11046		4.91	14.8	3.81	4.40	6.01	5.29	5.48	5.90	5.16
	Nakhon Ratchasima	TH 11054							6.56	7.08	10.2	5.81
Viet Nam	Hanoi	VN 11047	30.5	61.2	13.5	33.7	23.2	47.9	19.2	19.5	19.8	15.5
	Hoa Binh	VN 11048	38.4	49.2	11.3	11.7	21.6	30.9	9.99	12.3	8.35	7.30
	Cuc Phuong	VN 11061										100
	Da Nang	VN 11062										325

[***]: 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 3.82 Annual NH₄⁺ deposition

			unit: mmol m ⁻² y ⁻¹									
Country	Name of sites	Code	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Cambodia	Phnom Penh	KH 11052					4.51	21.3	17.0	27.0	21.6	17.3
China	Guanyinqiao	CN 11001	174	158	173	131	189	169	151	181		
	Nanshan	CN 11002	132									
	Haifu	CN 11058									149	112
	Jinyunshan	CN 11003		79.1	134	106	160	154	145	124	120	121
	Shizhan	CN 11004	235	92.8	70.7	183	87.5	39.3	80.7	109	63.3	99.7
	Weishuiyuan	CN 11005	190	24.5	74.1	188	70.5	28.2	75.4			
	Jiwozi	CN 11007	165	35.7	10.1	50.5	37.8	13.7	11.4	1.12	13.8	32.7
	Hongwen	CN 11008	47.9	19.2	69.3	38.3	48.8	60.2	62.0	51.8	32.8	34.4
	Xiaoping	CN 11009	31.0	88.9	67.5	67.5	74.4	94.0	50.5	55.0	65.9	52.0
	Xiang Zhou	CN 11010	41.7	49.8	166	58.7	67.9	121	86.6	28.0	55.0	44.4
	Zhuxiandong	CN 11011	90.7	77.8	76.5	52.5	75.9	27.8	24.3	***	42.9	40.5
Indonesia	Jakarta	ID 11012	122	81.9	49.8	33.6	32.8	26.4	25.7	52.6	43.6	27.6
	Serpong	ID 11014	***	109	115	96.4	61.9	36.8	64.6	89.2	112	57.7
	Kototabang	ID 11013	2.66	2.88	9.21	5.78	25.9	20.7	12.3	50.5	18.7	7.15
	Bandung	ID 11015	29.3	98.8	75.9	52.6	32.9	62.6	61.0	94.3	104	130
	Maros	ID 11059									26.9	41.2
Japan	Rishiri	JP 11016	26.2	16.0	19.2	12.9	16.2	18.1	22.6	22.9	19.5	18.7
	Ochiishi	JP 11050				5.98	7.64	6.17	15.6	6.79	4.71	13.3
	Tappi	JP 11017	10.1	13.8	19.6	18.6	22.9	19.6	18.2	18.7	15.0	14.0
	Sado-seki	JP 11019	18.1	19.2	20.7	17.6	15.5	20.9	21.0	29.3	22.2	12.9
	Happo	JP 11021	31.0	25.3	20.2	15.7	25.6	32.3	24.7	25.8	16.6	22.9
	Ijira	JP 11022	63.8	39.4	60.4	53.6	50.2	52.1	64.5	46.8	40.6	52.4
	Oki	JP 11023	23.5	18.4	19.5	14.1	15.3	20.8	17.8	18.3	17.4	19.1
	Banryu	JP 11024	18.2	24.6	23.4	21.9	19.5	28.1	29.1	28.4	24.3	28.3
	Yusuhara	JP 11025	14.2	10.7	17.8	17.1	19.0	20.6	23.8	17.7	16.5	17.1
	Hedo	JP 11027	21.0	9.52	37.6	15.2	30.6	23.6	15.9	20.2	12.0	12.7
	Ogasawara	JP 11018	4.62	8.70	7.18	5.07	5.96	7.10	7.27	12.1	5.74	8.07
	Tokyo	JP 11057								29.9	55.6	45.3
Lao PDR	Vientian	LA 11051				***	***	***	5.47	15.3	14.0	3.13
Malaysia	Petaling Jaya	MY 11029	149	179	43.0	37.1	39.4	57.3	93.3	57.7	77.9	22.5
	Tanah Rata	MY 11030	129	93.0	11.2	6.92	5.77	8.13	9.84	11.6	12.2	16.7
	Danum Valley	MY 11053						2.55	6.15	3.95	29.3	11.7
	Kuching	MY 11060									19.7	23.1
Mongolia	Ulaanbaatar	MN 11031	10.2	8.28	13.0	14.1	3.86	8.18	10.1	11.0	8.26	10.6
	Terelj	MN 11032	9.20	2.70	16.2	9.86	7.37	8.87	11.7	7.19	10.5	4.54
Myanmar	Yangon	MM 11056								***	***	48.9
Philippines	Metro Manila	PH 11033	143	177	137	52.2	76.6	71.0	109	118	148	79.7
	Los Banos	PH 11034	35.9	40.7	58.8	23.3	24.3	24.7	36.2	52.1	37.1	33.9
	Mt. Sto. Tomas	PH 11055							0.293	29.4	53.3	66.7
Republic of Korea	Kanghwa	KR 11035	42.0	42.7	33.0	90.6	66.4	53.8	57.9	51.5	54.8	38.6
	Cheju (Kosan)	KR 11036	21.3	36.0	44.0	54.1	40.4	21.6	29.5	35.9	22.1	47.0
	Imsil	KR 11037		54.9	41.9	61.0	34.0	40.5	35.5	53.7	25.5	37.6
Russia	Mondy	RU 11038	3.47	7.08	6.89	6.00	4.03	2.79	1.52	10.6	2.03	2.40
	Listvyanka	RU 11039	7.29	5.34	9.66	11.3	6.74	7.50	4.82	6.35	7.40	4.18
	Irkutsk	RU 11040	17.2	11.7	13.0	19.2	15.1	15.6	8.89	16.2	18.1	15.7
	Primorskaya	RU 11041			30.0	12.6	21.0	30.7	31.0	29.2	28.0	24.9
Thailand	Bangkok	TH 11042	47.4	42.5	60.9	51.9	45.8	87.1	89.0	91.3	95.5	134
	Samutprakarn	TH 11043	31.1				43.5	60.8	70.8	88.1	97.8	81.5
	Patumthani	TH 11044	36.6	47.9	32.4	48.2	33.2	39.6	53.9	47.5	49.6	43.3
	Khanchanaburi	TH 11045	6.03	16.7	24.0	20.3	11.7	10.1	44.1	23.7	19.8	52.1
	Chiang Mai (Mae Hia)	TH 11046		17.1	27.3	12.8	18.1	30.1	21.6	17.7	25.6	21.2
	Nakhon Ratchasima	TH 11054							27.5	25.4	36.4	28.8
Viet Nam	Hanoi	VN 11047	34.5	45.7	78.6	87.4	83.0	174	56.2	80.1	69.4	81.4
	Hoa Binh	VN 11048	15.2	27.8	45.9	48.5	75.0	68.5	42.7	41.4	33.8	42.6
	Cuc Phuong	VN 11061										14.3
	Da Nang	VN 11062										40.0

[***]: 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 3.83 Annual Na⁺ deposition

			unit: mmol m ⁻² y ⁻¹									
Country	Name of sites	Code	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Cambodia	Phnom Penh	KH 11052					***	***	1.75	11.3	18.8	9.22
China	Guanyinqiao	CN 11001	12.8	8.11	8.01	4.85	10.1	8.99	6.66	7.69		
	Nanshan	CN 11002	9.73									
	Haifu	CN 11058									7.06	4.48
	Jinyunshan	CN 11003		7.25	9.48	6.15	18.7	22.3	7.95	10.2	12.5	8.45
	Shizhan	CN 11004	24.7	59.8	85.7	88.1	11.5	8.18	21.8	8.22	9.41	7.91
	Weishuiyuan	CN 11005	30.8	15.1	48.0	147	10.9	9.01	21.1			
	Jiwozi	CN 11007	19.8	33.1	24.2	62.2	25.5	21.6	15.4	8.58	35.5	15.8
	Hongwen	CN 11008	36.1	3.20	87.2	45.2	53.7	87.4	65.6	32.4	21.7	18.1
	Xiaoping	CN 11009	13.6	31.7	35.6	43.6	25.5	28.3	54.5	13.0	44.9	18.5
	Xiang Zhou	CN 11010	85.4	49.0	71.9	67.5	96.6	52.0	54.3	27.9	97.5	80.7
	Zhuxiandong	CN 11011	55.5	70.7	71.4	63.2	120	64.7	20.0	***	94.1	71.5
Indonesia	Jakarta	ID 11012	82.6	48.8	55.6	43.8	54.6	49.4	19.3	34.4	17.1	14.5
	Serpong	ID 11014	***	38.2	63.2	24.2	28.7	13.2	12.0	23.7	24.8	13.7
	Kototabang	ID 11013	***	5.46	11.3	30.2	23.0	12.5	7.75	24.0	13.2	16.3
	Bandung	ID 11015	***	52.7	22.0	11.4	9.66	20.9	24.0	13.1	20.1	31.6
	Maros	ID 11059									47.5	43.0
Japan	Rishiri	JP 11016	250	130	188	125	217	195	142	126	204	185
	Ochiishi	JP 11050				155	233	171	277	161	125	287
	Tappi	JP 11017	156	145	219	162	292	270	278	247	162	266
	Sado-seki	JP 11019	275	345	384	106	208	332	283	264	219	333
	Happo	JP 11021	17.2	14.6	8.85	11.8	18.4	21.1	11.4	7.29	6.77	12.1
	Ijira	JP 11022	53.5	66.4	75.6	39.4	74.0	34.9	30.7	47.1	34.5	39.0
	Oki	JP 11023	479	394	570	296	416	791	315	319	360	422
	Banryu	JP 11024	45.2	140	104	142	197	119	130	100	91.6	171
	Yusuhara	JP 11025	42.6	24.5	67.8	40.7	95.8	58.5	37.5	32.1	18.8	24.9
	Hedo	JP 11027	1320	341	1050	599	1550	800	351	349	243	250
	Ogasawara	JP 11018	277	189	314	351	146	199	163	209	144	315
	Tokyo	JP 11057								37.3	36.2	40.7
Lao PDR	Vientian	LA 11051				***	***	***	5.04	3.32	4.86	1.66
Malaysia	Petaling Jaya	MY 11029	17.0	11.4	13.5	17.0	17.0	18.9	17.1	10.9	15.8	13.6
	Tanah Rata	MY 11030	5.94	5.05	4.56	5.70	4.42	19.2	3.93	4.57	4.73	4.87
	Danum Valley	MY 11053						5.59	16.9	12.4	9.65	19.8
	Kuching	MY 11060									23.1	34.3
Mongolia	Ulaanbaatar	MN 11031	1.55	1.51	1.12	1.14	0.483	1.08	1.58	0.660	0.556	1.11
	Terelj	MN 11032	1.34	1.41	4.15	1.40	1.31	2.83	2.68	1.74	1.13	0.843
Myanmar	Yangon	MM 11056								***	***	55.7
Philippines	Metro Manila	PH 11033	123	470	43.3	40.5	35.3	37.9	46.3	70.8	58.7	76.5
	Los Banos	PH 11034	91.7	67.6	35.9	24.6	20.9	28.3	50.5	54.4	36.2	50.5
	Mt. Sto. Tomas	PH 11055							1.21	19.2	25.9	39.1
Republic of Korea	Kanghwa	KR 11035	62.9	47.5	40.6	40.0	28.5	27.3	31.5	39.1	60.8	57.1
	Cheju (Kosan)	KR 11036	161	83.2	59.3	60.3	64.9	59.3	95.8	126	112	55.7
	Imsil	KR 11037		20.0	38.3	42.7	21.6	27.0	22.0	20.2	27.3	53.7
Russia	Mondy	RU 11038	0.560	0.726	0.392	0.927	0.693	0.436	0.643	1.10	0.379	0.270
	Listvyanka	RU 11039	2.02	1.67	1.37	2.76	2.57	1.36	0.870	1.05	0.972	1.19
	Irkutsk	RU 11040	4.73	3.88	2.78	3.01	3.68	3.04	3.58	4.75	5.29	8.06
	Primorskaya	RU 11041			19.3	10.9	15.6	16.0	10.5	19.6	12.7	11.0
Thailand	Bangkok	TH 11042	7.95	9.78	20.9	10.6	12.3	25.6	13.8	11.2	17.3	20.3
	Samutprakarn	TH 11043	9.91				20.8	32.2	20.8	22.8	26.8	19.9
	Patumthani	TH 11044	10.4	10.9	9.15	7.84	8.72	8.32	12.0	7.97	9.95	7.34
	Khanchanaburi	TH 11045	8.55	17.1	18.3	16.7	12.5	13.7	17.3	12.0	18.1	19.0
	Chiang Mai (Mae Hia)	TH 11046		4.27	14.2	2.60	3.52	1.31	5.02	2.75	3.35	2.83
	Nakhon Ratchasima	TH 11054							5.30	6.17	7.24	3.44
Viet Nam	Hanoi	VN 11047	22.8	25.9	8.41	14.2	12.7	31.2	16.6	13.6	21.7	14.8
	Hoa Binh	VN 11048	24.1	21.8	3.34	3.98	7.16	17.0	6.94	6.23	6.08	4.60
	Cuc Phuong	VN 11061										25.5
	Da Nang	VN 11062										281

[***]: 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 3.84 Annual K⁺ deposition

			unit: mmol m ⁻² y ⁻¹									
Country	Name of sites	Code	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Cambodia	Phnom Penh	KH 11052					0.682	***	1.41	5.00	19.0	1.98
China	Guanyinqiao	CN 11001	15.3	14.0	15.3	10.9	15.1	13.4	10.6	11.4		
	Nanshan	CN 11002	20.5									
	Haifu	CN 11058									11.6	8.23
	Jinyunshan	CN 11003		31.6	16.5	10.6	17.8	16.6	13.6	11.1	11.6	9.56
	Shizhan	CN 11004	14.8	15.3	14.1	23.9	5.75	7.85	8.67	10.2	5.11	6.03
	Weishuiyuan	CN 11005	15.5	5.19	17.8	26.5	5.25	5.52	10.6			
	Jiwozi	CN 11007	14.8	9.11	5.99	13.0	8.65	10.0	4.88	2.80	12.7	8.58
	Hongwen	CN 11008	7.56	3.06	6.73	5.63	7.70	8.65	7.14	5.03	2.00	1.66
	Xiaoping	CN 11009	4.40	11.3	8.17	8.39	9.96	8.06	31.7	7.63	20.3	2.64
	Xiang Zhou	CN 11010	13.4	8.00	30.4	9.91	10.3	3.13	12.5	11.9	4.65	4.23
	Zhuxiandong	CN 11011	11.0	15.1	20.8	11.6	28.9	5.95	2.32	***	10.4	4.04
Indonesia	Jakarta	ID 11012	***	30.1	17.8	15.0	15.2	12.2	11.9	24.3	6.03	3.46
	Serpong	ID 11014	***	11.3	9.89	17.0	8.26	5.09	7.14	5.56	5.24	2.36
	Kototabang	ID 11013	***	1.59	9.16	62.6	13.2	9.57	5.69	23.3	8.42	24.8
	Bandung	ID 11015	***	32.7	5.19	6.63	2.95	8.15	6.31	4.01	5.38	11.0
	Maros	ID 11059									17.5	12.6
Japan	Rishiri	JP 11016	7.66	3.71	4.86	3.47	5.68	4.89	4.85	3.65	5.44	4.54
	Ochiishi	JP 11050				3.62	5.23	4.34	7.64	3.97	2.78	6.47
	Tappi	JP 11017	3.82	3.55	5.41	3.97	7.28	6.19	6.86	5.97	4.42	6.62
	Sado-seki	JP 11019	6.80	7.95	9.30	2.78	5.48	7.60	7.20	6.84	7.31	8.26
	Happo	JP 11021	1.76	1.50	1.03	0.942	1.55	2.14	1.42	1.41	0.962	1.58
	Ijira	JP 11022	7.91	9.09	5.57	3.69	3.75	2.39	2.77	2.60	1.43	1.95
	Oki	JP 11023	12.7	10.9	15.0	8.70	13.6	20.4	9.16	10.6	13.2	11.3
	Banryu	JP 11024	2.12	4.89	3.76	4.36	5.25	4.76	4.37	3.89	3.22	5.20
	Yusuhara	JP 11025	2.15	1.05	2.37	1.30	3.72	2.27	2.15	1.51	0.928	1.59
	Hedo	JP 11027	26.3	7.57	24.3	14.0	43.7	20.2	8.77	8.95	6.23	6.49
	Ogasawara	JP 11018	7.10	7.37	8.21	7.82	3.59	4.68	4.01	4.97	4.36	7.61
	Tokyo	JP 11057								1.51	2.12	1.90
Lao PDR	Vientian	LA 11051				***	***	***	2.49	2.37	2.82	0.168
Malaysia	Petaling Jaya	MY 11029	6.06	4.39	3.37	9.25	4.91	6.99	6.23	2.97	4.45	4.47
	Tanah Rata	MY 11030	3.41	2.40	2.21	2.15	3.68	2.57	1.74	1.92	1.70	3.05
	Danum Valley	MY 11053						1.47	3.05	3.22	7.58	5.39
	Kuching	MY 11060									2.77	3.24
Mongolia	Ulaanbaatar	MN 11031	0.771	0.770	0.679	1.01	0.237	0.651	0.968	0.161	0.435	0.577
	Terelj	MN 11032	0.935	0.337	2.50	1.28	0.970	1.59	1.93	0.703	1.33	0.455
Myanmar	Yangon	MM 11056								***	***	19.4
Philippines	Metro Manila	PH 11033	62.6	53.1	29.4	5.55	8.50	9.28	34.0	18.9	37.1	15.1
	Los Banos	PH 11034	4.58	17.3	10.9	2.94	3.74	3.62	5.53	15.2	5.51	26.3
	Mt. Sto. Tomas	PH 11055							0.569	7.73	3.57	9.24
Republic of Korea	Kanghwa	KR 11035	6.27	5.40	7.28	14.8	10.00	5.26	5.31	9.51	8.35	11.3
	Cheju (Kosan)	KR 11036	6.69	10.4	6.55	10.5	9.11	6.02	6.80	8.94	8.78	10.1
	Imsil	KR 11037		19.3	6.50	21.0	6.90	60.6	29.9	19.2	4.79	11.7
Russia	Mondy	RU 11038	0.361	0.661	0.473	0.659	0.965	0.300	0.455	0.867	0.416	0.390
	Listvyanka	RU 11039	2.06	0.855	0.800	1.42	1.30	0.520	0.479	0.521	1.32	0.646
	Irkutsk	RU 11040	2.34	3.45	0.703	1.20	1.50	1.50	2.73	3.72	4.74	11.4
	Primorskaya	RU 11041			4.47	3.25	5.01	5.21	3.41	6.11	4.97	3.81
Thailand	Bangkok	TH 11042	3.70	4.83	4.36	3.63	1.96	4.34	4.50	2.48	3.61	4.10
	Samutprakarn	TH 11043	5.17				6.15	7.99	6.12	5.38	10.6	5.51
	Patumthani	TH 11044	2.16	2.27	1.41	1.93	1.16	1.52	2.67	2.23	2.51	2.12
	Khanchanaburi	TH 11045	7.82	7.54	5.23	3.29	1.52	1.40	6.16	1.21	2.26	2.41
	Chiang Mai (Mae Hia)	TH 11046		3.19	6.49	3.19	1.62	1.02	2.41	2.69	3.38	1.55
	Nakhon Ratchasima	TH 11054							0.791	1.91	2.13	1.65
Viet Nam	Hanoi	VN 11047	5.14	8.59	2.93	4.08	4.65	9.19	4.65	4.48	6.28	2.53
	Hoa Binh	VN 11048	6.74	5.19	2.40	2.50	3.06	8.29	3.76	4.36	6.40	3.69
	Cuc Phuong	VN 11061										31.7
	Da Nang	VN 11062										18.6

[***]: 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 3.85 Annual Ca²⁺ deposition

			unit: mmol m ⁻² y ⁻¹									
Country	Name of sites	Code	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Cambodia	Phnom Penh	KH 11052					0	***	8.64	26.4	59.9	27.1
China	Guanyinqiao	CN 11001	68.1	103	94.5	64.5	153	168	120	97.7		
	Nanshan	CN 11002	69.5									
	Haifu	CN 11058									66.0	46.1
	Jinyunshan	CN 11003		31.9	47.7	37.8	107	84.3	118	90.7	82.9	73.2
	Shizhan	CN 11004	128	246	167	329	88.5	54.4	145	61.3	57.6	81.7
	Weishuiyuan	CN 11005	136	80.0	143	313	88.3	39.9	104			
	Jiwozi	CN 11007	103	89.5	39.1	140	89.7	46.7	51.9	34.7	116	58.9
	Hongwen	CN 11008	10.2	10.7	77.0	40.0	89.1	63.7	54.4	74.0	13.3	9.71
	Xiaoping	CN 11009	1.21	13.8	23.0	30.6	12.5	30.9	24.7	17.4	31.2	10.2
	Xiang Zhou	CN 11010	43.1	15.8	26.9	39.3	24.1	8.62	21.6	6.78	15.3	9.87
	Zhuxiandong	CN 11011	44.4	36.8	32.7	35.5	31.5	18.1	15.2	***	31.4	11.7
Indonesia	Jakarta	ID 11012	138	79.6	67.5	164	74.8	36.9	27.9	30.2	7.48	19.6
	Serpong	ID 11014	***	21.8	24.9	14.1	15.4	9.89	11.5	14.9	18.9	6.95
	Kototabang	ID 11013	9.28	1.73	8.84	17.3	14.7	7.42	6.48	13.0	12.1	14.5
	Bandung	ID 11015	***	63.0	43.4	17.5	16.3	27.7	19.4	18.7	26.4	41.1
	Maros	ID 11059									25.5	26.3
Japan	Rishiri	JP 11016	10.6	6.21	9.73	5.49	8.13	7.32	6.90	5.15	7.22	10.6
	Ochiishi	JP 11050				4.49	7.92	7.37	10.2	6.03	3.86	8.21
	Tappi	JP 11017	6.68	6.25	12.0	8.02	11.4	13.3	12.3	11.7	8.52	8.58
	Sado-seki	JP 11019	12.5	15.4	13.0	5.72	7.23	11.6	15.3	13.7	10.5	11.5
	Happo	JP 11021	8.49	10.1	5.21	4.72	7.29	12.4	17.3	6.77	4.44	11.0
	Ijira	JP 11022	18.2	12.6	11.1	8.55	7.92	7.25	8.17	8.23	4.94	7.89
	Oki	JP 11023	19.4	16.1	18.1	11.0	16.7	24.4	15.9	15.8	12.1	16.3
	Banryu	JP 11024	6.64	10.7	6.99	5.95	9.20	7.57	18.6	9.37	9.40	9.46
	Yusuhara	JP 11025	7.55	7.09	4.17	4.04	7.32	5.55	8.25	4.66	3.71	4.07
	Hedo	JP 11027	29.3	10.4	28.5	15.1	40.3	25.1	17.2	13.3	8.19	8.83
	Ogasawara	JP 11018	10.1	9.81	11.5	11.2	3.93	5.25	5.68	6.83	4.27	8.71
	Tokyo	JP 11057								5.38	7.61	5.91
Lao PDR	Vientian	LA 11051				***	***	***	6.20	4.25	9.62	0.996
Malaysia	Petaling Jaya	MY 11029	23.4	19.4	19.8	23.8	15.1	17.3	15.2	11.9	14.7	14.8
	Tanah Rata	MY 11030	7.06	8.13	8.56	10.1	5.60	5.28	3.20	3.11	3.03	3.17
	Danum Valley	MY 11053						1.70	3.79	1.53	1.06	3.43
	Kuching	MY 11060									8.19	8.35
Mongolia	Ulaanbaatar	MN 11031	7.41	7.86	8.91	7.88	3.60	7.49	8.63	5.19	6.66	9.63
	Terelj	MN 11032	3.16	1.33	6.72	3.32	3.36	3.33	5.32	2.52	3.68	3.97
Myanmar	Yangon	MM 11056								***	***	29.1
Philippines	Metro Manila	PH 11033	58.6	164	25.9	19.3	24.1	25.2	36.8	36.4	32.7	24.2
	Los Banos	PH 11034	18.3	119	12.3	12.5	9.41	5.82	15.4	16.1	7.10	14.7
	Mt. Sto. Tomas	PH 11055							2.43	79.0	15.7	27.8
Republic of Korea	Kanghwa	KR 11035	29.6	15.9	9.14	17.9	12.3	8.98	17.2	11.0	16.8	6.57
	Cheju (Kosan)	KR 11036	14.6	6.56	9.53	10.5	8.66	7.89	10.2	13.2	8.86	4.23
	Imsil	KR 11037		7.60	9.76	10.1	8.16	6.24	10.4	18.4	5.91	4.14
Russia	Mondy	RU 11038	1.76	2.24	1.74	1.55	1.92	1.19	2.24	2.42	1.64	0.616
	Listvyanka	RU 11039	5.66	3.58	4.11	7.70	7.80	3.72	2.74	3.68	3.19	3.92
	Irkutsk	RU 11040	14.9	16.3	9.53	10.9	12.1	9.53	10.7	12.7	15.5	12.6
	Primorskaya	RU 11041			15.1	8.16	14.9	15.6	15.6	13.8	10.7	10.1
Thailand	Bangkok	TH 11042	13.0	14.1	20.5	16.5	13.3	37.4	29.2	21.5	28.7	20.8
	Samutprakarn	TH 11043	10.8				9.88	15.7	21.0	20.5	24.0	26.2
	Patumthani	TH 11044	12.6	17.5	16.5	10.5	11.1	10.8	20.6	11.7	19.4	12.1
	Khanchanaburi	TH 11045	4.19	13.7	10.8	13.7	6.65	5.01	6.82	5.16	9.00	9.85
	Chiang Mai (Mae Hia)	TH 11046		7.53	26.5	4.62	5.50	5.36	6.72	7.53	8.60	5.98
	Nakhon Ratchasima	TH 11054							11.4	5.20	5.78	3.19
Viet Nam	Hanoi	VN 11047	26.2	24.1	23.8	28.2	39.3	45.9	43.4	30.0	26.7	19.3
	Hoa Binh	VN 11048	24.8	23.1	20.5	20.2	36.4	32.6	27.5	18.2	28.7	12.8
	Cuc Phuong	VN 11061										56.2
	Da Nang	VN 11062										18.8

[***]: 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 3.86 Annual nss-Ca²⁺ deposition

			unit: mmol m ⁻² y ⁻¹									
Country	Name of sites	Code	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Cambodia	Phnom Penh	KH 11052					***	***	8.61	26.2	59.5	26.9
China	Guanyinqiao	CN 11001	67.9	103	94.3	64.4	153	168	120	97.5		
	Nanshan	CN 11002	69.3									
	Haifu	CN 11058									65.8	46.0
	Jinyunshan	CN 11003		31.7	47.5	37.7	107	83.9	117	90.4	82.6	73.0
	Shizhan	CN 11004	128	244	165	327	88.3	54.3	145	61.2	57.4	81.5
	Weishuiyuan	CN 11005	136	79.7	142	310	88.1	39.8	104			
	Jiwozi	CN 11007	102	88.8	38.6	139	89.1	46.2	51.6	34.5	116	58.5
	Hongwen	CN 11008	9.59	10.7	75.1	39.0	88.0	61.8	53.0	73.3	12.8	9.32
	Xiaoping	CN 11009	0.938	13.1	22.3	29.6	12.0	30.3	23.5	17.1	30.2	9.85
	Xiang Zhou	CN 11010	41.3	14.8	25.3	37.9	22.0	7.62	20.4	6.25	13.2	8.13
	Zhuxiandong	CN 11011	43.2	35.3	31.1	34.1	28.9	16.7	14.8	***	29.3	10.2
Indonesia	Jakarta	ID 11012	136	78.5	66.3	163	73.8	35.9	27.5	29.5	7.11	19.2
	Serpong	ID 11014	***	21.0	23.5	13.7	14.7	9.60	11.3	14.5	18.4	6.76
	Kototabang	ID 11013	***	1.65	8.60	16.6	14.2	7.15	6.31	12.5	11.8	14.2
	Bandung	ID 11015	***	61.8	42.9	17.2	16.1	26.9	18.9	18.4	25.9	40.4
	Maros	ID 11059									24.4	25.3
Japan	Rishiri	JP 11016	5.14	3.40	5.66	2.82	3.46	3.15	3.87	2.44	2.81	6.74
	Ochiishi	JP 11050				1.25	2.90	3.65	4.29	2.56	1.21	2.18
	Tappi	JP 11017	3.36	3.25	7.30	4.53	5.19	7.62	6.26	6.34	5.02	3.02
	Sado-seki	JP 11019	6.60	8.08	4.86	3.44	2.90	4.46	9.20	7.99	5.79	4.36
	Happo	JP 11021	8.12	9.80	5.02	4.46	6.91	12.0	17.0	6.63	4.30	10.7
	Ijira	JP 11022	17.0	11.1	9.45	7.71	6.39	6.49	7.51	7.21	4.21	7.06
	Oki	JP 11023	9.07	7.60	6.14	4.55	7.76	7.24	9.57	8.91	4.37	7.23
	Banryu	JP 11024	5.74	7.68	4.76	2.89	4.97	5.02	15.8	7.21	7.42	5.76
	Yusuhara	JP 11025	6.80	6.68	2.91	3.23	5.25	4.28	7.44	3.97	3.30	3.53
	Hedo	JP 11027	2.35	3.64	5.87	4.84	7.64	7.81	9.59	5.75	2.95	3.46
	Ogasawara	JP 11018	4.24	5.77	4.77	3.68	1.22	1.18	2.17	2.34	1.44	1.95
	Tokyo	JP 11057								4.58	6.83	5.03
Lao PDR	Vientian	LA 11051				***	***	***	6.09	4.18	9.51	0.960
Malaysia	Petaling Jaya	MY 11029	23.0	19.2	19.5	23.4	14.8	16.9	14.9	11.7	14.4	14.5
	Tanah Rata	MY 11030	6.93	8.02	8.46	9.95	5.51	4.92	3.13	3.02	2.95	3.10
	Danum Valley	MY 11053						1.58	3.49	1.36	0.944	3.12
	Kuching	MY 11060									7.77	7.76
Mongolia	Ulaanbaatar	MN 11031	7.38	7.83	8.88	7.85	3.59	7.46	8.59	5.17	6.64	9.60
	Terelj	MN 11032	3.13	1.30	6.46	3.29	3.33	3.27	5.26	2.48	3.66	3.95
Myanmar	Yangon	MM 11056								***	***	27.9
Philippines	Metro Manila	PH 11033	56.0	154	25.0	18.5	23.4	24.4	35.8	34.9	31.4	22.6
	Los Banos	PH 11034	16.3	117	11.5	12.0	8.95	5.22	14.3	14.9	6.32	13.7
	Mt. Sto. Tomas	PH 11055							2.40	78.7	15.1	26.9
Republic of Korea	Kanghwa	KR 11035	28.2	14.9	8.27	17.0	11.7	8.39	16.6	10.1	15.5	5.35
	Cheju (Kosan)	KR 11036	11.1	4.79	8.28	9.16	7.25	6.61	8.13	10.5	6.43	3.15
	Imsil	KR 11037		7.16	8.93	9.18	7.70	5.65	9.93	17.9	5.32	3.02
Russia	Mondy	RU 11038	1.75	2.22	1.73	1.53	1.90	1.18	2.23	2.40	1.63	0.610
	Listvyanka	RU 11039	5.61	3.54	4.08	7.64	7.74	3.69	2.72	3.66	3.17	3.89
	Irkutsk	RU 11040	14.8	16.2	9.47	10.8	12.0	9.46	10.6	12.6	15.4	12.4
	Primorskaya	RU 11041			14.7	7.92	14.5	15.2	15.4	13.4	10.4	9.86
Thailand	Bangkok	TH 11042	12.9	13.9	20.0	16.2	13.0	36.8	28.9	21.3	28.3	20.3
	Samutprakarn	TH 11043	10.6				9.43	15.0	20.6	20.0	23.4	25.8
	Patumthani	TH 11044	12.3	17.3	16.3	10.3	11.0	10.6	20.4	11.6	19.2	11.9
	Khanchanaburi	TH 11045	4.02	13.4	10.4	13.4	6.38	4.72	6.44	4.90	8.61	9.44
	Chiang Mai (Mae Hia)	TH 11046		7.44	26.2	4.57	5.42	5.33	6.64	7.47	8.52	5.92
	Nakhon Ratchasima	TH 11054							11.2	5.07	5.62	3.12
Viet Nam	Hanoi	VN 11047	25.7	23.5	23.6	27.8	39.1	45.2	43.0	29.7	26.2	19.0
	Hoa Binh	VN 11048	24.2	22.6	20.4	20.1	36.2	32.2	27.4	18.0	28.5	12.7
	Cuc Phuong	VN 11061										55.7
	Da Nang	VN 11062										12.8

[***]: 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 3.87 Annual Mg²⁺ deposition

			unit: mmol m ⁻² y ⁻¹									
Country	Name of sites	Code	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Cambodia	Phnom Penh	KH 11052					0.00	***	0.627	4.49	6.33	2.66
China	Guanyinqiao	CN 11001	9.23	8.73	8.67	4.40	12.7	13.7	10.6	10.4		
	Nanshan	CN 11002	8.87									
	Haifu	CN 11058									7.15	5.81
	Jinyunshan	CN 11003		4.09	5.41	3.56	5.39	4.63	4.78	4.61	5.62	6.10
	Shizhan	CN 11004	13.2	17.6	23.7	42.7	9.18	6.69	13.6	11.3	17.5	7.34
	Weishuiyuan	CN 11005	14.2	6.13	21.1	52.0	8.99	4.77	13.3			
	Jiwozi	CN 11007	12.1	8.58	7.09	20.7	16.9	11.2	9.51	4.88	33.8	12.7
	Hongwen	CN 11008	6.40	1.86	15.1	7.76	12.2	15.4	11.6	8.32	4.65	3.01
	Xiaoping	CN 11009	2.07	6.77	3.50	7.15	2.81	3.35	6.52	2.16	6.78	3.67
	Xiang Zhou	CN 11010	14.1	5.83	9.56	12.3	8.51	8.10	18.3	3.43	11.2	9.08
	Zhuxiandong	CN 11011	14.1	8.56	11.2	12.9	10.8	9.65	4.43	***	13.2	9.71
Indonesia	Jakarta	ID 11012	346	85.3	20.7	20.6	9.25	7.72	12.7	4.79	2.87	3.06
	Serpong	ID 11014	***	5.67	11.3	5.76	5.84	3.09	2.78	5.33	9.76	1.83
	Kototabang	ID 11013	***	1.25	4.63	21.1	3.76	2.06	2.82	10.6	2.48	2.92
	Bandung	ID 11015	***	10.6	4.16	2.73	2.93	4.29	4.27	3.31	10.3	11.1
	Maros	ID 11059									7.77	6.02
Japan	Rishiri	JP 11016	28.0	15.2	21.4	14.4	25.0	22.4	16.3	15.0	24.8	21.0
	Ochiishi	JP 11050				17.3	27.3	18.2	31.1	18.6	14.5	31.4
	Tappi	JP 11017	18.3	16.7	26.1	19.3	34.5	30.0	32.1	27.9	19.1	28.2
	Sado-seki	JP 11019	30.9	39.3	44.0	12.7	24.1	37.7	32.7	30.3	24.0	37.6
	Happo	JP 11021	3.66	3.73	2.42	3.06	3.90	3.59	2.64	1.57	1.15	2.73
	Ijira	JP 11022	7.75	8.93	9.34	6.42	9.43	4.51	4.63	6.23	3.92	4.80
	Oki	JP 11023	54.4	45.6	63.8	33.9	48.4	91.8	37.6	36.8	40.8	48.3
	Banryu	JP 11024	5.22	16.3	12.1	16.3	23.0	13.9	16.3	12.5	11.3	20.4
	Yusuhara	JP 11025	6.09	3.80	8.34	5.21	11.4	7.07	5.25	4.27	2.42	3.33
	Hedo	JP 11027	145	35.8	120	68.7	162	84.3	40.7	40.0	27.9	28.6
	Ogasawara	JP 11018	38.2	23.9	43.1	43.5	15.3	21.8	18.1	23.4	17.7	36.6
	Tokyo	JP 11057								4.56	5.17	5.13
Lao PDR	Vientian	LA 11051				***	***	***	2.47	0.977	2.18	0.131
Malaysia	Petaling Jaya	MY 11029	4.74	4.02	3.79	2.15	2.66	2.40	2.85	1.16	1.95	1.39
	Tanah Rata	MY 11030	1.30	1.07	1.17	1.36	0.749	1.42	0.452	0.329	0.192	0.0927
	Danum Valley	MY 11053						0.406	1.45	1.20	1.58	1.86
	Kuching	MY 11060									1.24	1.84
Mongolia	Ulaanbaatar	MN 11031	0.814	0.897	0.636	1.10	0.488	0.783	0.825	0.597	0.568	1.21
	Terelj	MN 11032	0.656	0.224	1.01	0.706	1.07	0.901	1.04	0.384	0.619	0.604
Myanmar	Yangon	MM 11056								***	***	8.54
Philippines	Metro Manila	PH 11033	25.5	34.4	9.72	6.60	9.47	5.86	14.7	14.5	11.1	9.69
	Los Banos	PH 11034	9.78	20.1	5.00	4.18	6.25	3.84	7.65	10.7	8.80	10.8
	Mt. Sto. Tomas	PH 11055							0.418	7.03	1.76	7.23
Republic of Korea	Kanghwa	KR 11035	10.4	6.00	5.22	4.50	4.82	5.03	5.57	5.95	4.26	6.67
	Cheju (Kosan)	KR 11036	19.7	11.1	7.60	7.57	8.17	10.5	10.8	9.09	8.16	6.25
	Imsil	KR 11037		2.49	3.28	3.00	2.89	2.27	2.83	4.80	1.70	4.14
Russia	Mondy	RU 11038	0.333	0.467	0.447	0.316	0.456	0.275	0.405	0.623	0.408	0.138
	Listvyanka	RU 11039	1.30	0.881	1.10	1.97	1.76	0.715	0.532	0.755	0.687	0.884
	Irkutsk	RU 11040	2.66	2.60	1.71	1.97	2.64	2.24	2.06	3.00	3.40	3.25
	Primorskaya	RU 11041			4.73	3.60	4.87	4.18	3.43	4.25	3.46	2.68
Thailand	Bangkok	TH 11042	2.30	3.71	4.61	3.22	2.59	7.58	3.72	2.65	4.15	3.09
	Samutprakarn	TH 11043	2.33				2.36	5.57	6.57	5.03	6.91	5.57
	Patumthani	TH 11044	2.30	2.93	2.63	1.76	1.55	1.66	2.82	1.77	2.84	1.62
	Khanchanaburi	TH 11045	1.47	3.82	3.85	3.63	2.29	2.30	2.47	1.70	3.16	2.87
	Chiang Mai (Mae Hia)	TH 11046		1.19	5.22	1.68	2.10	1.43	3.44	1.16	2.29	2.87
	Nakhon Ratchasima	TH 11054							2.36	2.47	2.11	1.60
Viet Nam	Hanoi	VN 11047	6.27	8.94	4.18	5.77	5.98	15.2	10.5	6.91	8.27	7.70
	Hoa Binh	VN 11048	8.84	8.25	2.31	3.62	4.62	9.59	8.17	5.38	3.17	2.51
	Cuc Phuong	VN 11061										9.89
	Da Nang	VN 11062										30.1

[***]: 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 3.88 Annual H⁺ deposition

			unit: mmol m ⁻² y ⁻¹									
Country	Name of sites	Code	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Cambodia	Phnom Penh	KH 11052					2.01	0.625	0.181	0.279	2.65	0.861
China	Guanyinqiao	CN 11001	50.5	12.1	36.4	31.7	36.0	12.1	11.6	29.3		
	Nanshan	CN 11002	76.2									
	Haifu	CN 11058									64.1	64.3
	Jinyunshan	CN 11003		46.5	70.1	62.0	39.3	34.7	24.4	49.4	53.3	51.7
	Shizhan	CN 11004	1.17	0.153	0.201	1.27	0.304	1.96	1.33	1.60	0.155	0.176
	Weishuiyuan	CN 11005	0.171	0.0335	0.216	1.02	0.489	3.09	0.460			
	Jiwozi	CN 11007	3.14	0.120	0.142	0.543	0.791	0.227	0.318	0.0143	0.0498	0.498
	Hongwen	CN 11008	29.0	8.75	25.4	44.8	20.6	33.8	31.4	21.8	24.3	22.2
	Xiaoping	CN 11009	19.1	33.8	72.9	73.2	48.3	48.1	38.9	26.5	55.8	38.7
	Xiang Zhou	CN 11010	14.2	22.7	13.5	13.6	22.1	32.2	20.4	33.7	33.0	26.9
	Zhuxiandong	CN 11011	40.8	43.0	20.3	13.8	29.6	25.9	13.3	***	30.2	28.0
Indonesia	Jakarta	ID 11012	10.4	4.68	26.5	11.3	30.0	104	61.4	59.7	38.6	36.6
	Serpong	ID 11014	***	38.0	56.6	51.6	30.5	21.1	40.1	52.0	56.7	25.9
	Kototabang	ID 11013	73.0	10.3	8.78	15.6	39.0	46.0	36.6	14.7	14.9	59.9
	Bandung	ID 11015	***	26.4	88.7	16.1	8.31	16.3	9.18	23.2	15.9	13.4
	Maros	ID 11059									7.15	15.0
Japan	Rishiri	JP 11016	12.1	10.3	14.4	9.43	13.6	17.7	27.8	23.3	10.2	19.3
	Ochiishi	JP 11050				9.53	13.4	12.0	13.8	14.5	9.86	15.2
	Tappi	JP 11017	19.9	24.9	27.8	31.0	37.5	30.9	25.5	25.1	21.4	24.4
	Sado-seki	JP 11019	28.7	22.5	32.5	24.2	30.4	31.5	24.9	36.5	28.5	18.4
	Happo	JP 11021	40.6	34.1	30.7	30.5	43.0	47.6	29.4	37.8	24.2	25.2
	Ijira	JP 11022	80.7	82.9	80.5	115	75.8	79.4	87.6	66.3	80.2	66.0
	Oki	JP 11023	27.6	21.1	29.2	27.9	22.4	36.0	26.1	26.8	27.7	21.8
	Banryu	JP 11024	35.9	39.1	26.5	40.7	34.7	42.2	40.1	41.1	37.2	38.3
	Yusuhara	JP 11025	54.7	31.1	40.8	52.3	42.1	52.9	45.4	36.4	47.3	35.5
	Hedo	JP 11027	21.5	23.1	22.9	17.4	29.4	26.2	18.9	27.7	19.6	15.4
	Ogasawara	JP 11018	11.7	14.6	10.9	12.7	8.75	31.5	16.1	14.7	16.8	11.4
	Tokyo	JP 11057								17.6	46.2	30.6
Lao PDR	Vientian	LA 11051				0.0277	0.999	0.320	0.231	3.02	1.65	0.600
Malaysia	Petaling Jaya	MY 11029	153	173	157	158	142	123	151	83.2	140	134
	Tanah Rata	MY 11030	50.4	33.4	30.1	38.3	33.1	41.4	31.3	33.0	31.4	25.6
	Danum Valley	MY 11053						13.1	26.8	24.0	18.1	20.4
	Kuching	MY 11060									23.8	25.5
Mongolia	Ulaanbaatar	MN 11031	0.108	0.107	0.0749	0.564	0.0289	0.153	0.0666	0.0692	0.0807	0.177
	Terelj	MN 11032	0.626	0.0809	0.436	1.24	0.340	1.34	1.48	1.12	0.768	0.0675
Myanmar	Yangon	MM 11056								10.6	2.50	1.04
Philippines	Metro Manila	PH 11033	13.2	8.86	24.1	79.8	14.4	26.8	13.5	18.7	6.75	22.2
	Los Banos	PH 11034	9.58	5.41	3.07	52.2	9.54	11.9	5.42	9.01	21.2	7.64
	Mt. Sto. Tomas	PH 11055							0.204	10.0	16.3	6.96
Republic of Korea	Kanghwa	KR 11035	11.2	11.6	18.3	33.5	23.8	46.1	23.0	21.2	43.9	32.7
	Cheju (Kosan)	KR 11036	15.0	14.4	24.8	19.3	20.5	19.9	51.8	38.2	18.1	8.09
	Imsil	KR 11037		10.5	2.00	15.7	14.2	1.24	4.57	2.49	11.2	8.62
Russia	Mondy	RU 11038	1.68	1.00	0.828	1.83	1.64	1.24	1.67	1.06	1.38	0.395
	Listvyanka	RU 11039	3.78	5.42	4.74	5.24	6.67	6.62	7.10	8.82	9.06	4.49
	Irkutsk	RU 11040	4.15	2.49	2.86	1.94	6.74	3.36	2.52	5.59	9.01	1.67
	Primorskaya	RU 11041			5.26	4.27	10.0	6.39	9.32	14.4	9.02	9.11
Thailand	Bangkok	TH 11042	12.8	12.6	10.3	40.8	7.86	25.6	11.0	14.1	9.39	16.7
	Samutprakarn	TH 11043	14.5				4.29	5.55	1.93	4.60	8.81	14.7
	Patumthani	TH 11044	5.41	10.0	4.39	22.7	13.3	16.4	20.9	21.5	15.4	9.26
	Khanchanaburi	TH 11045	2.41	8.29	5.05	5.65	1.18	5.86	4.48	2.83	4.30	4.35
	Chiang Mai (Mae Hia)	TH 11046		2.10	2.79	2.00	2.93	8.50	2.83	1.05	1.34	1.26
	Nakhon Ratchasima	TH 11054							9.06	11.5	16.0	17.1
Viet Nam	Hanoi	VN 11047	4.48	3.31	3.95	2.45	3.56	1.25	2.28	4.32	3.24	3.46
	Hoa Binh	VN 11048	14.7	20.2	10.6	7.02	4.61	4.63	3.98	17.0	6.42	6.96
	Cuc Phuong	VN 11061										23.4
	Da Nang	VN 11062										49.9

[***]: 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 3.89 Site Code

Country	Name of sites	Code
Cambodia	Phnom Penh	KH 11052
China	Guanyinqiao	CN 11001
	Nanshan	CN 11002
	Haifu	CN 11058
	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
	Zhuxiandong	CN 11011
Indonesia	Jakarta	ID 11012
	Kototabang	ID 11013
	Serpong	ID 11014
	Bandung	ID 11015
	Maros	ID 11059
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
	Tokyo	JP 11057
	Sado	JP 11020
	Ashizuri	JP 11026
	Kunigami	JP 11028
Lao PDR	Vientiane	LA 11051

Country	Name of sites	Code
Malaysia	Petaling Jaya	MY 11029
	Tanah Rata	MY 11030
	Danum Valley	MY 11053
	Kuching	MY 11060
Mongolia	Ulaanbaatar	MN 11031
	Terelj	MN 11032
Myanmar	Yangon	MM 11056
Philippines	Metro Manila	PH 11033
	Los Banos	PH 11034
	Mt. Sto. Tomas	PH 11055
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	TH 11045
	Chiang Mai (Mae Hia)	TH 11046
	Nakhon Ratchasima	TH 11054
Viet Nam	Hanoi	VN 11047
	Hoa Binh	VN 11048
	Cuc Phuong	VN 11061
	Da Nang	VN 11062

Including the sites working only for preparatory-phase activities

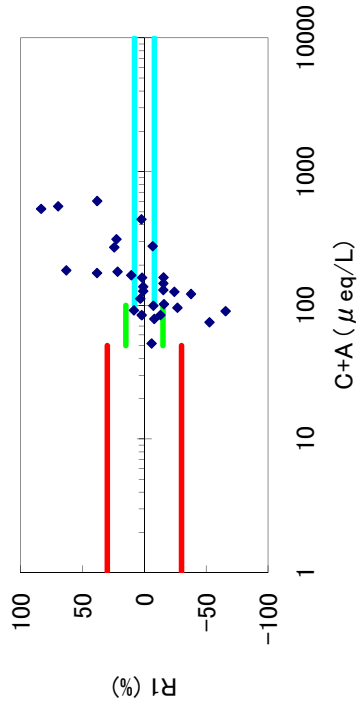


Fig. 3.2 a) Phnom Penh Ion Balance (R_1)

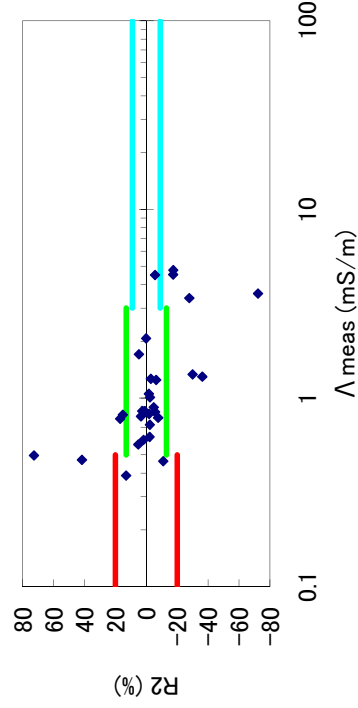


Fig. 3.2 b) Phnom Penh Conductivity Agreement (R_2)

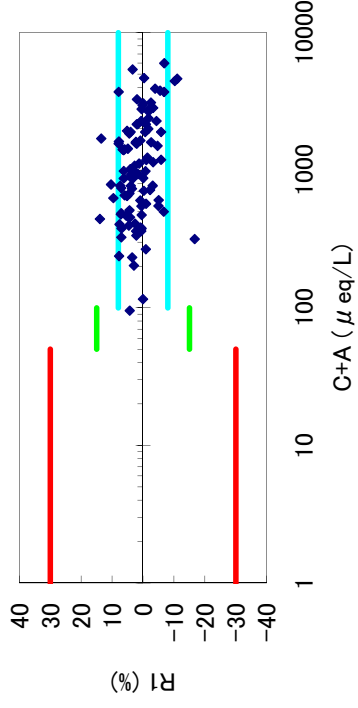


Fig. 3.3 a) Haifu Ion Balance (R_1)

Calculated including F^-

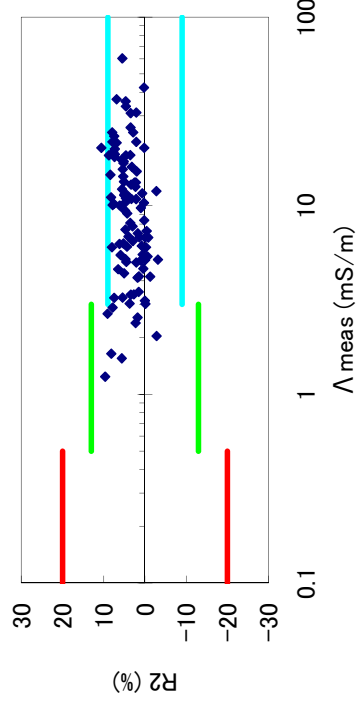


Fig. 3.3 b) Haifu Conductivity Agreement (R_2)

Calculated including F^-

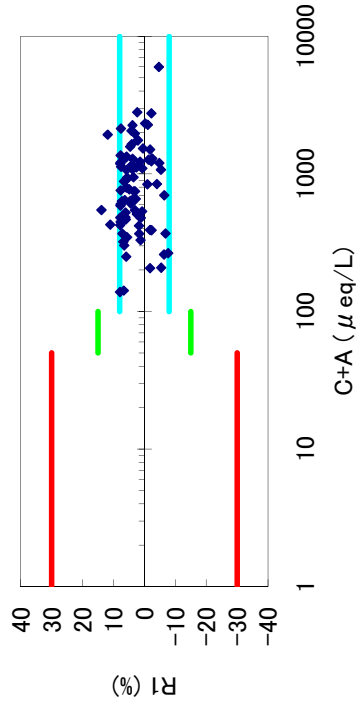


Fig. 3.4 a) Jinyunshan Ion Balance (R_1)
Calculated including F^-

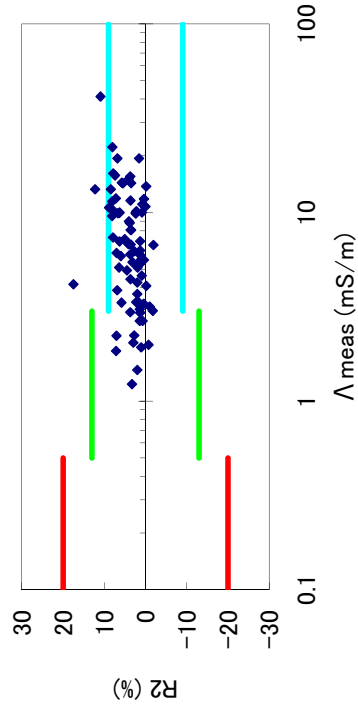


Fig 3.4 b) Jinyunshan Conductivity Agreement (R_2)
Calculated including F^-

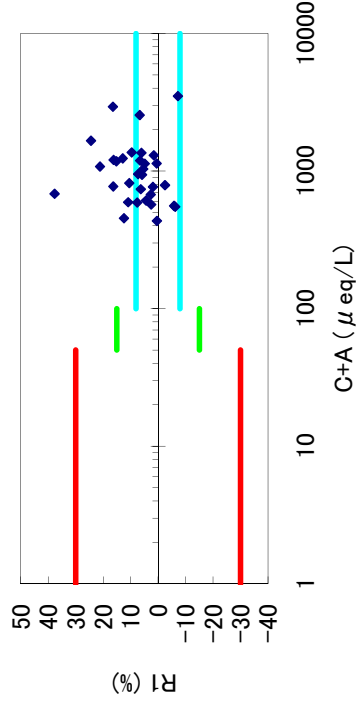


Fig. 3.5 a) Shizhan Ion Balance (R_1)

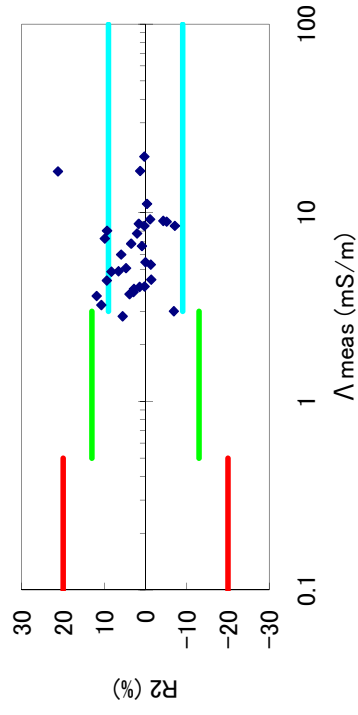


Fig. 3.5 b) Shizhan Conductivity Agreement (R_2)

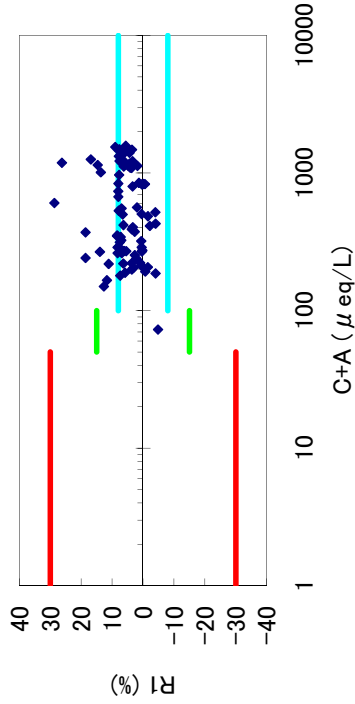


Fig. 3.6 a) Jiwozi Ion Balance (R_1)

Calculated including F^-

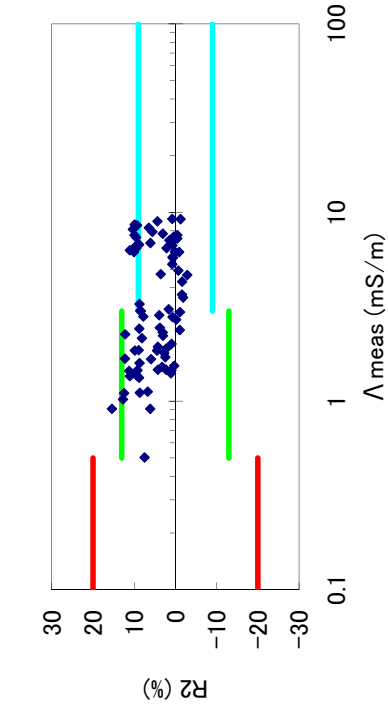


Fig. 3.6 b) Jiwozi Conductivity Agreement (R_2)

Calculated including F^-

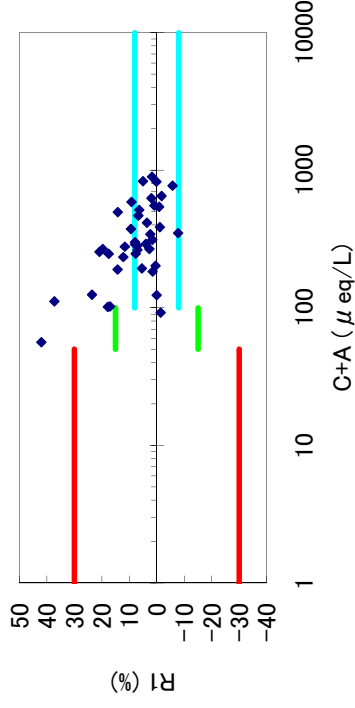


Fig. 3.7 a) Hongwen Ion Balance (R_1)

Calculated including F^-

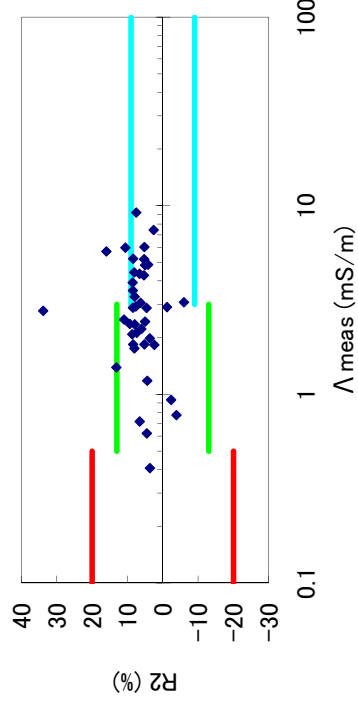


Fig 3.7 b) Hongwen Conductivity Agreement (R_2)

Calculated including F^-

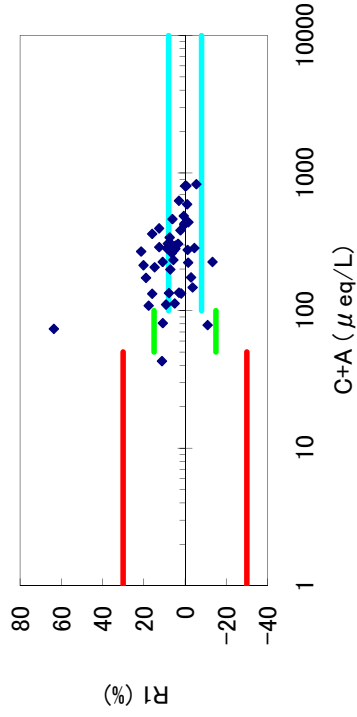


Fig. 3.8 a) Xiaoping Ion Balance (R_1)
Calculated including F^-

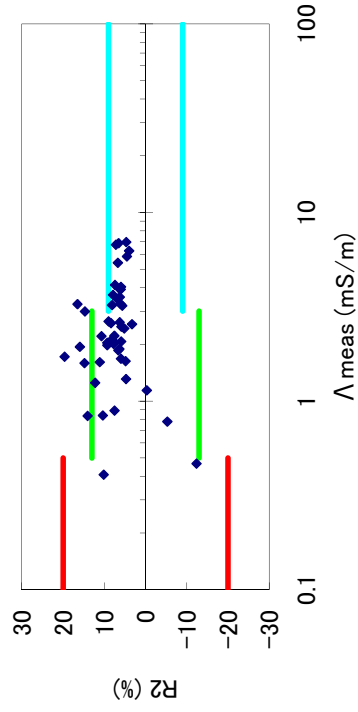


Fig. 3.8 b) Xiaoping Conductivity Agreement (R_2)
Calculated including F^-

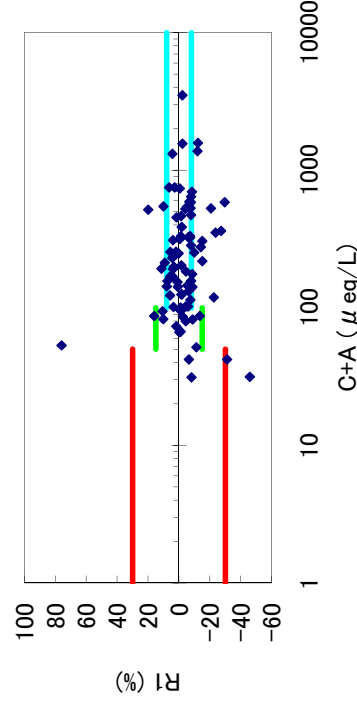


Fig. 3.9 a) Xiang Zhou Ion Balance (R_1)

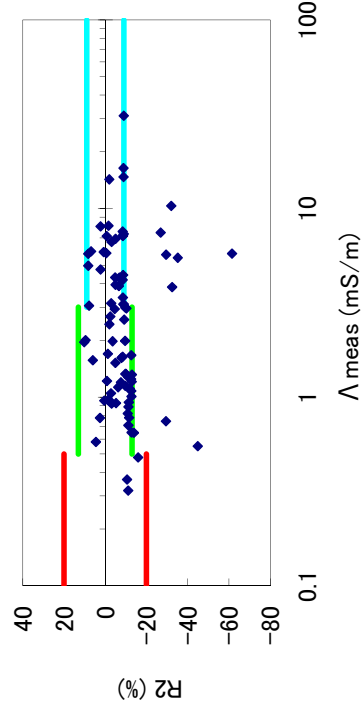


Fig 3.9 b) Xiang Zhou Conductivity Agreement (R_2)

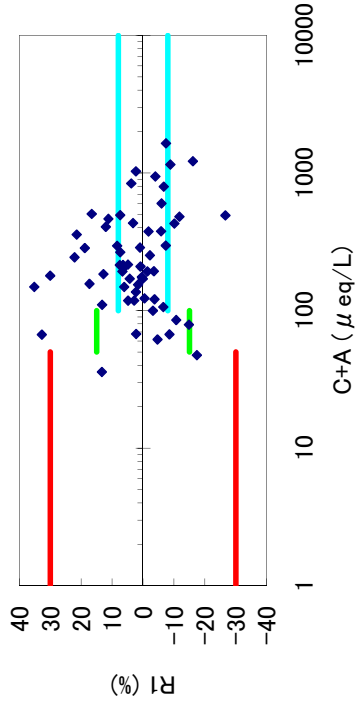


Fig. 3.10 a) Zhuxiandong Ion Balance (R_1)

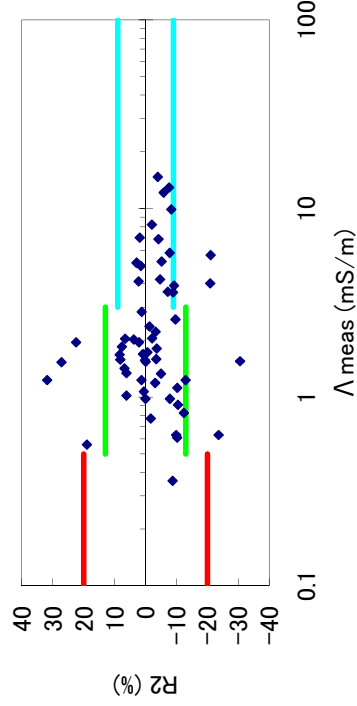


Fig 3.10 b) Zhuxiandong Conductivity Agreement (R_2)

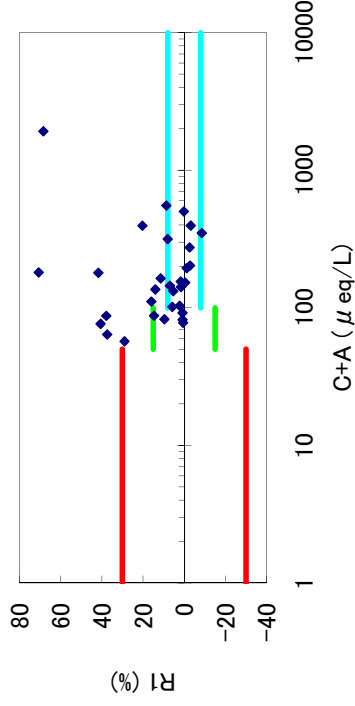


Fig. 3.11 a) Jakarta Ion Balance (R_1)

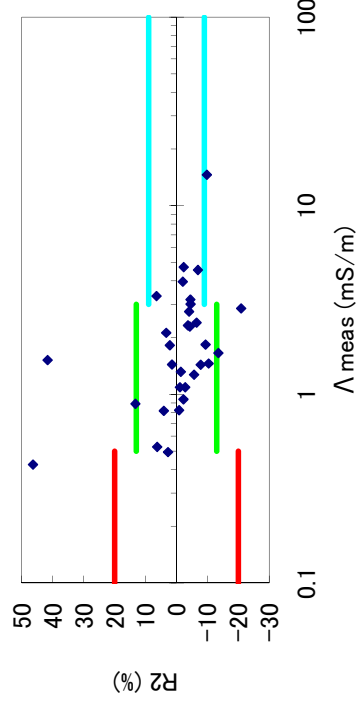


Fig 3.11 b) Jakarta Conductivity Agreement (R_2)

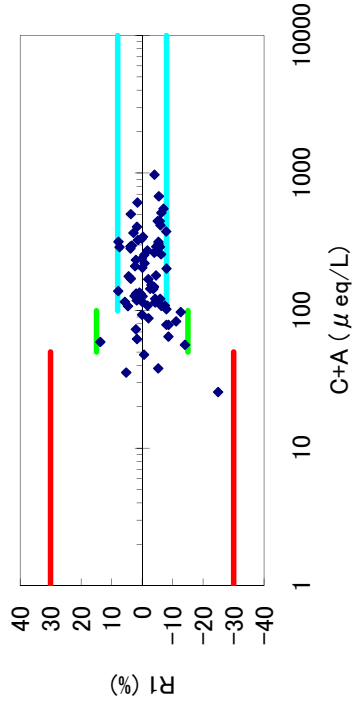


Fig. 3.12 a) Serpong Ion Balance (R_1)

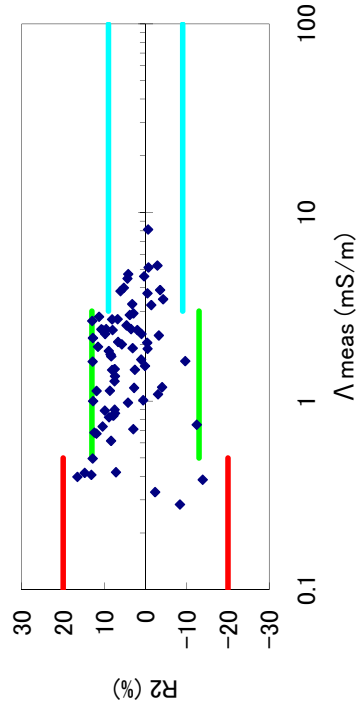


Fig. 3.12 b) Serpong Conductivity Agreement (R_2)

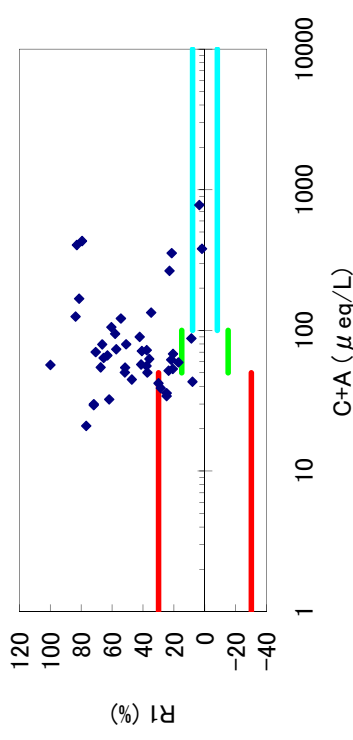


Fig. 3.13 a) Kototabang Ion Balance (R_1)

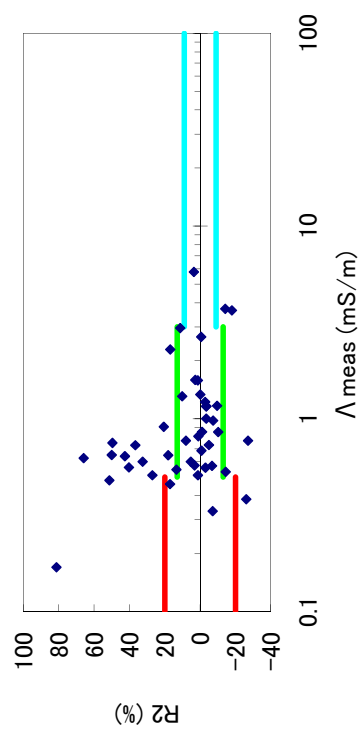


Fig. 3.13 b) Kototabang Conductivity Agreement (R_2)

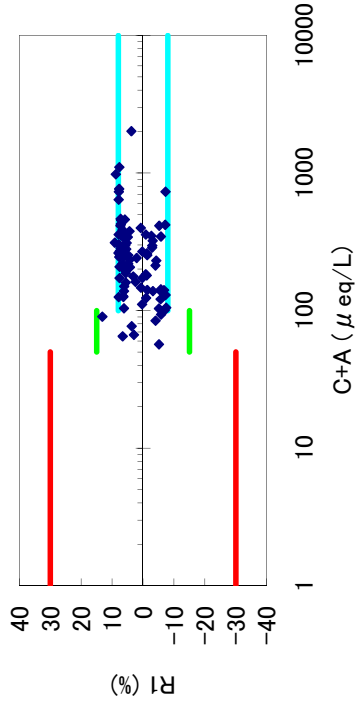


Fig. 3.14 a) Bandung Ion Balance (R_1)

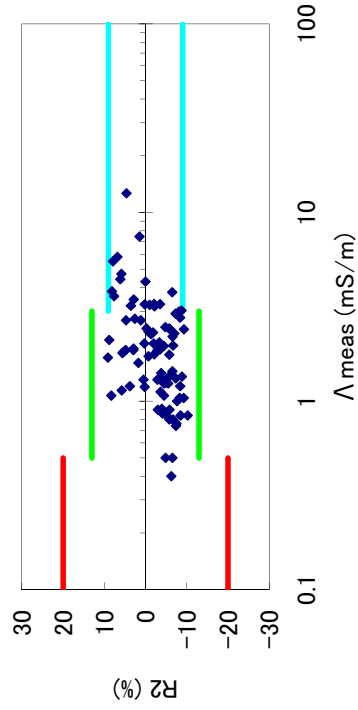


Fig. 3.14 b) Bandung Conductivity Agreement (R_2)

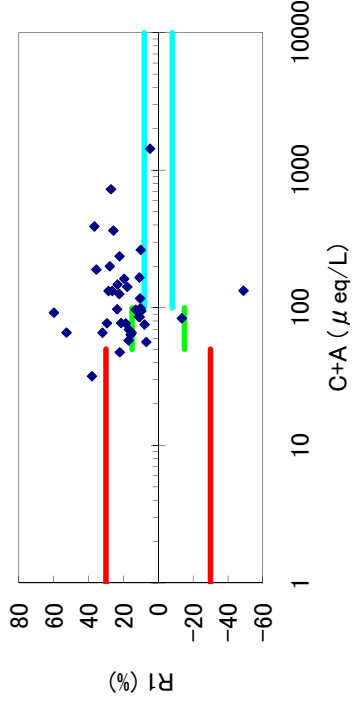


Fig. 3.15 a) Maros Ion Balance (R_1)

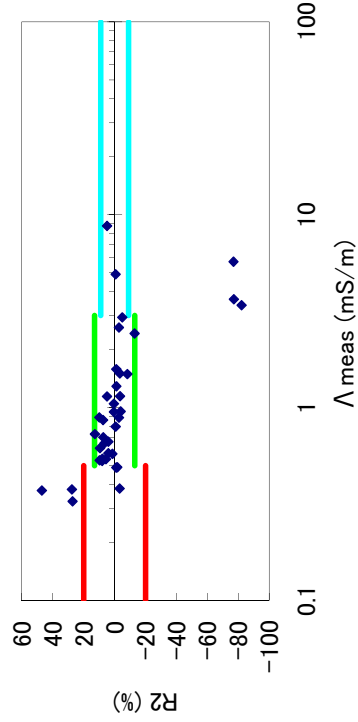


Fig. 3.15 b) Maros Conductivity Agreement (R_2)

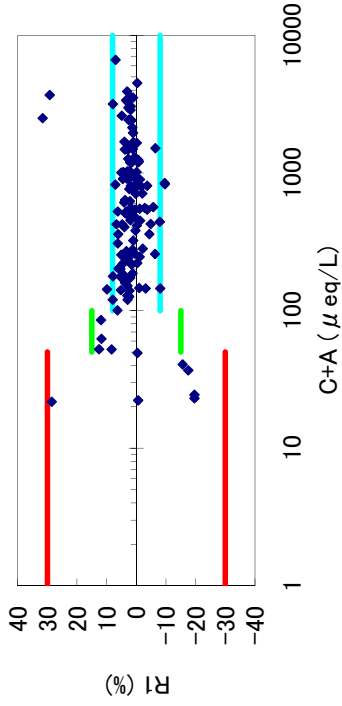


Fig. 3.16 a) Rishiri Ion Balance (R_1)

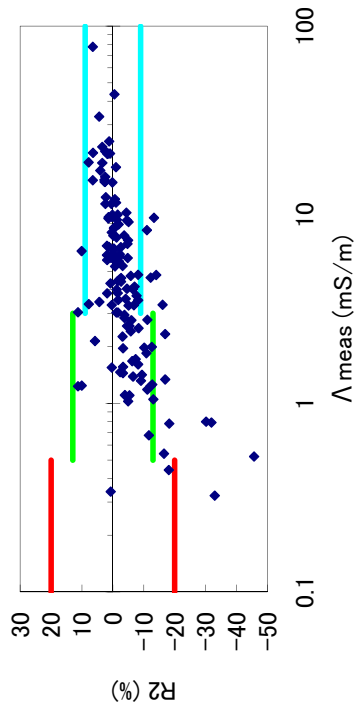


Fig. 3.16 b) Rishiri Conductivity Agreement (R_2)

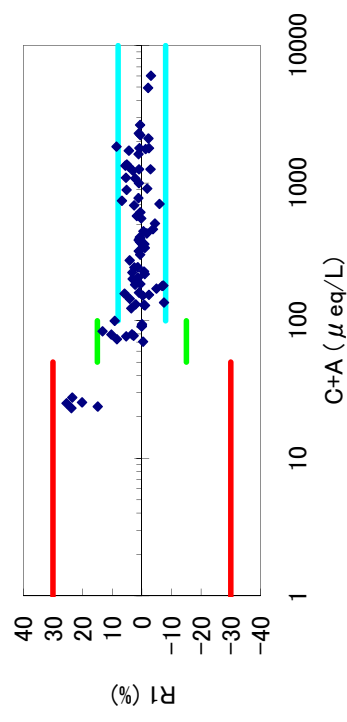


Fig. 3.17 a) Ochiishi Ion Balance (R_1)

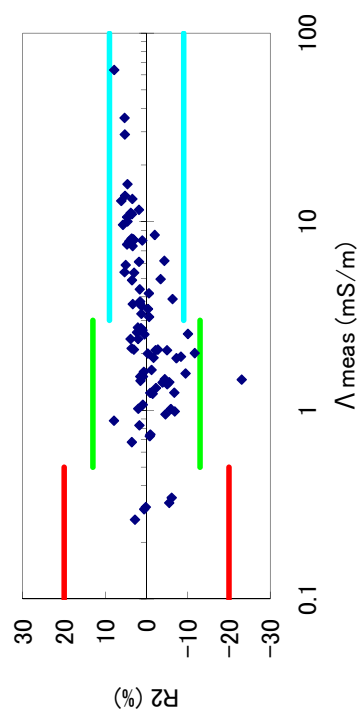


Fig. 3.17 b) Ochiishi Conductivity Agreement (R_2)

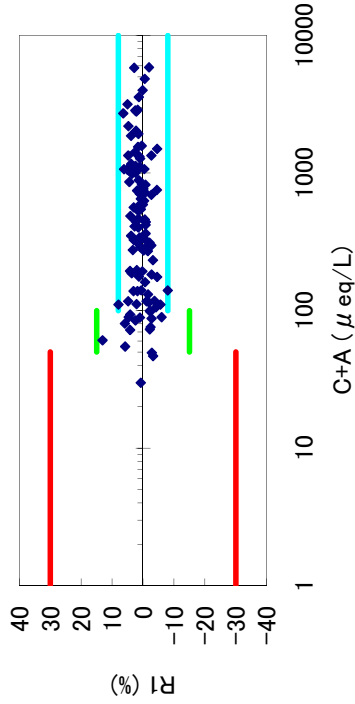


Fig. 3.18 a) Tappi Ion Balance (R_1)

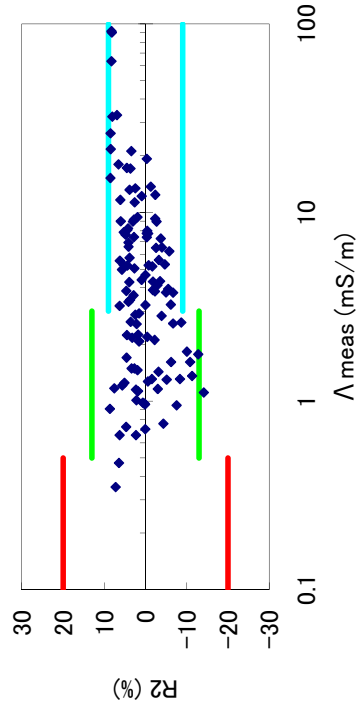


Fig. 3.18 b) Tappi Conductivity Agreement (R_2)

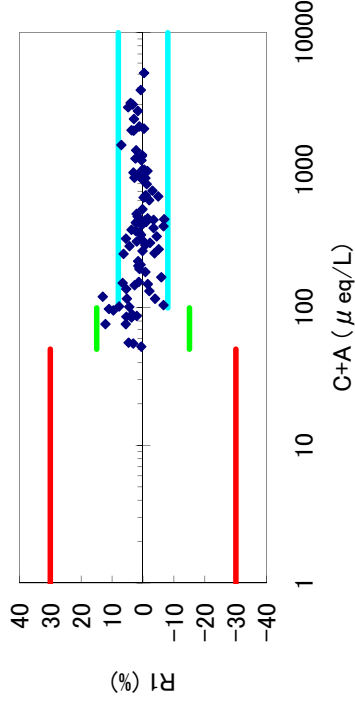


Fig. 3.19 a) Sado-seki Ion Balance (R_1)

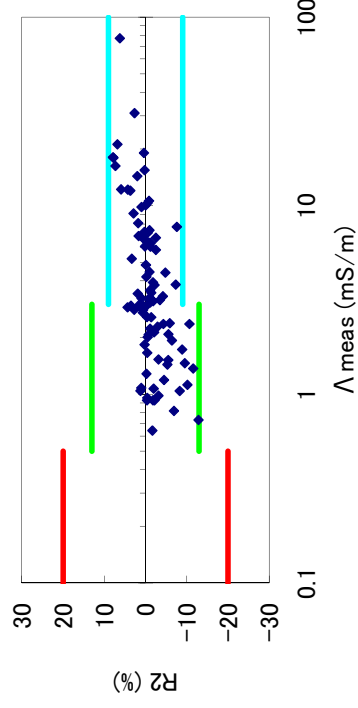


Fig. 3.19 b) Sado-seki Conductivity Agreement (R_2)

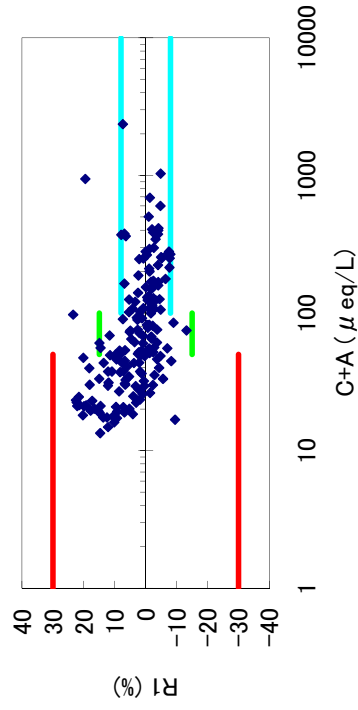


Fig. 3.20 a) Happo Ion Balance (R_1)

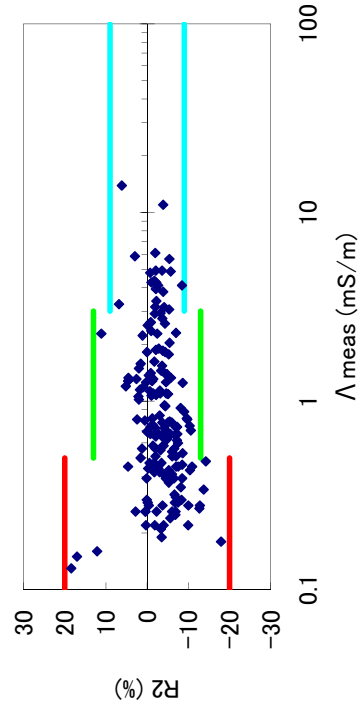


Fig. 3.20 b) Happo Conductivity Agreement (R_2)

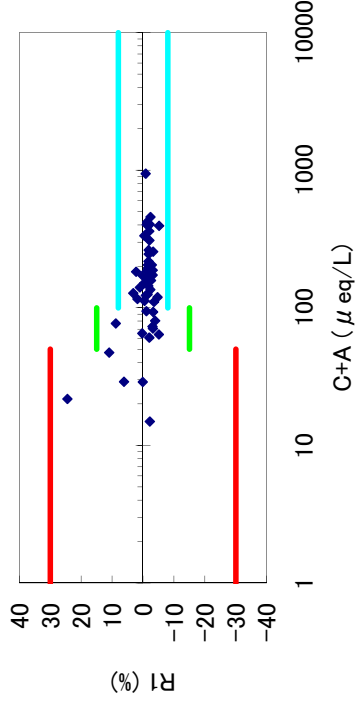


Fig. 3.21 a) Ijira Ion Balance (R_1)

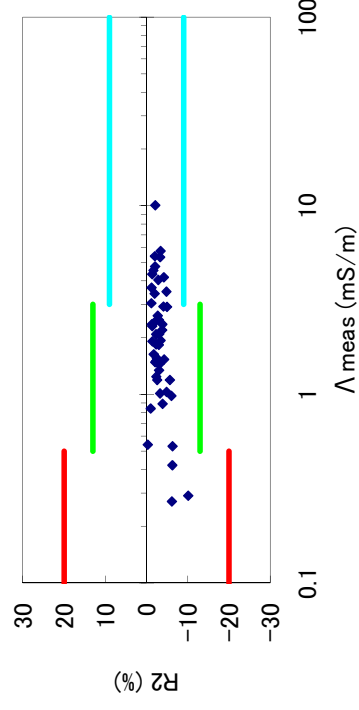


Fig. 3.21 b) Ijira Conductivity Agreement (R_2)

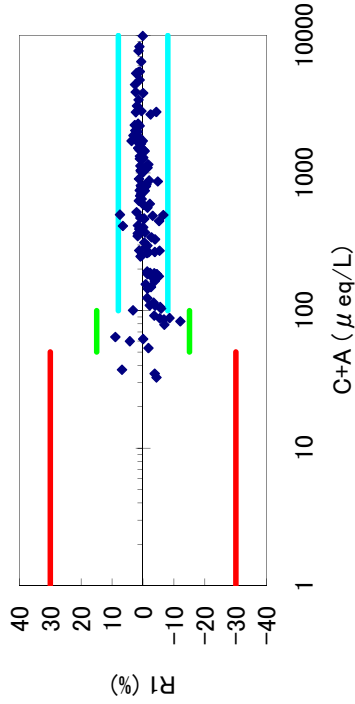


Fig. 3.22 a) Oki Ion Balance (R_1)

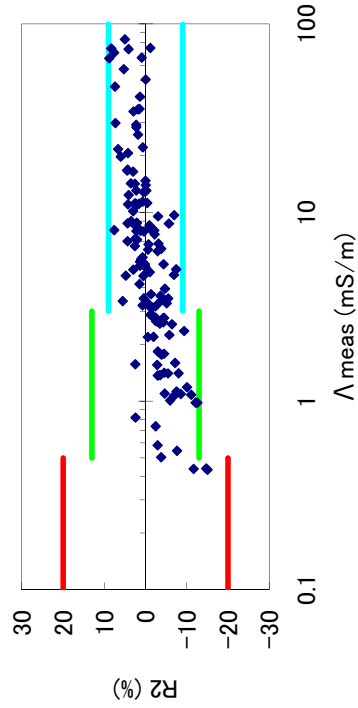


Fig. 3.22 b) Oki Conductivity Agreement (R_2)

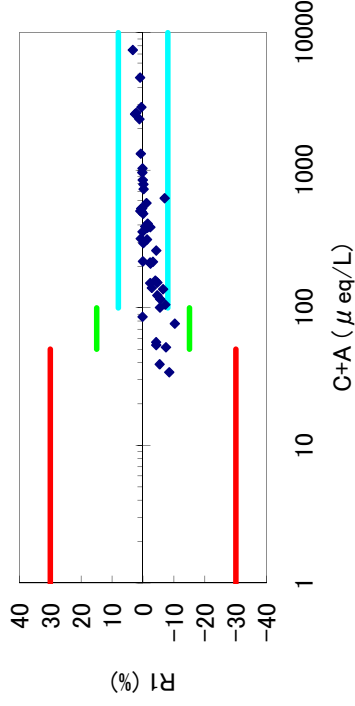


Fig. 3.23 a) Banryu Ion Balance (R_1)

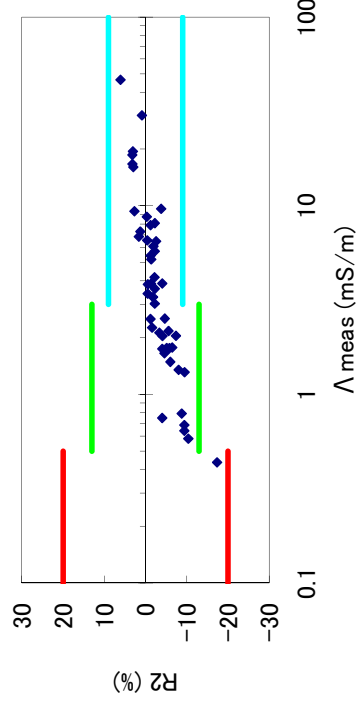


Fig. 3.23 b) Banryu Conductivity Agreement (R_2)

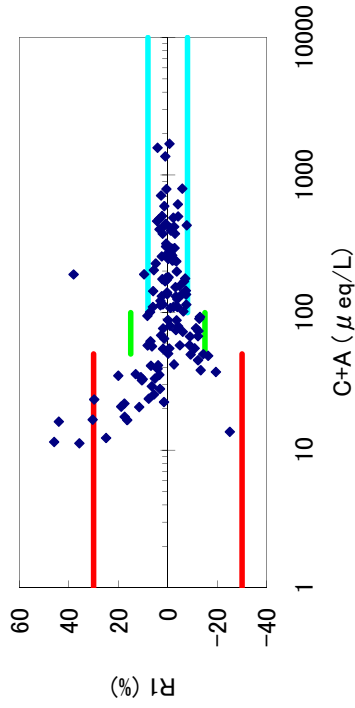


Fig. 3.24 a) Yusuhara Ion Balance (R_1)

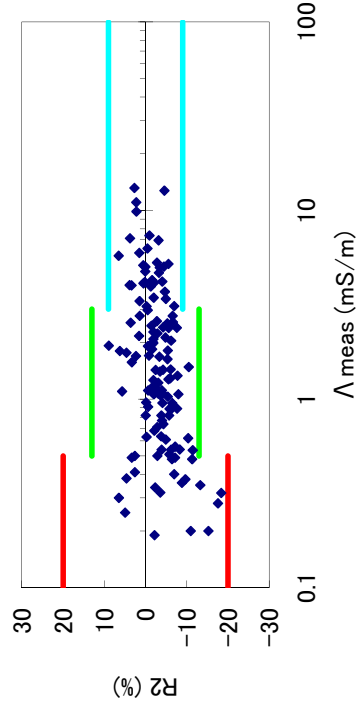


Fig. 3.24 b) Yusuhara Conductivity Agreement (R_2)

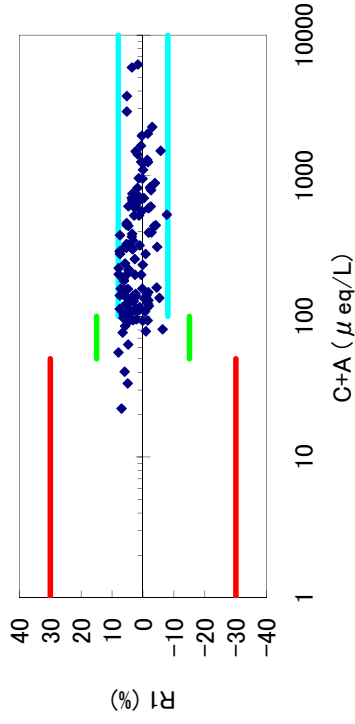


Fig. 3.25 a) Hedo Ion Balance (R_1)

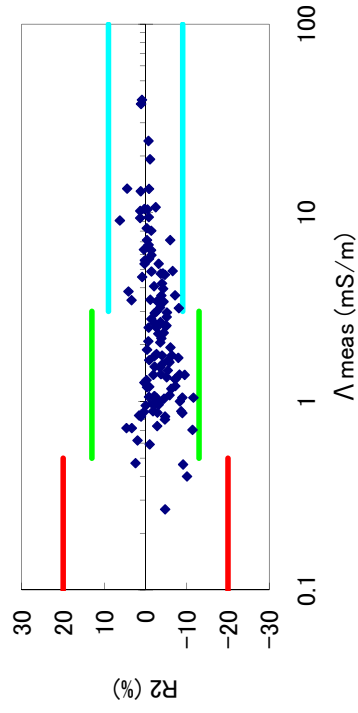


Fig. 3.25 b) Hedo Conductivity Agreement (R_2)

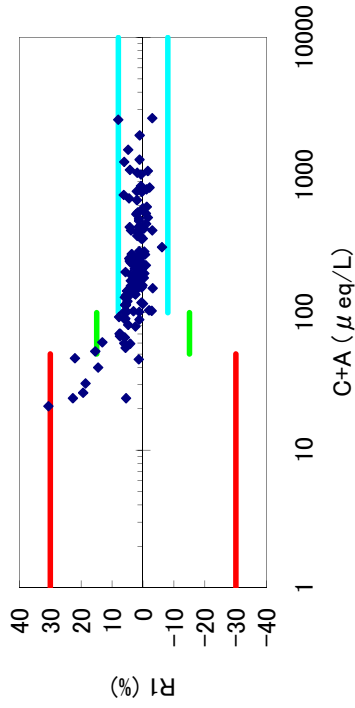


Fig. 3.26 a) Ogasawara Ion Balance (R_1)

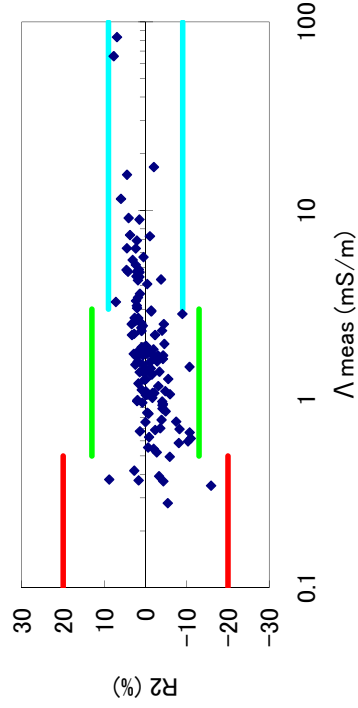


Fig. 3.26 b) Ogasawara Conductivity Agreement (R_2)

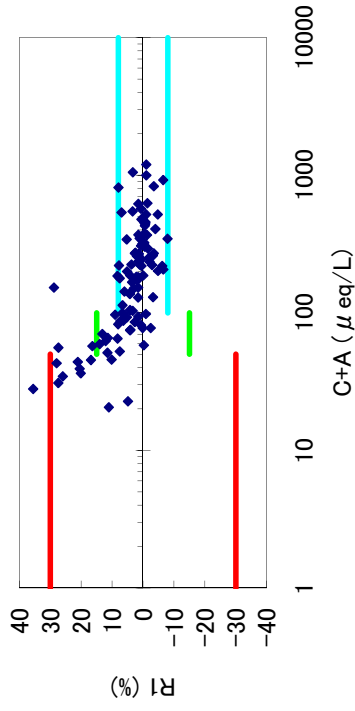


Fig. 3.27 a) Tokyo Ion Balance (R_1)

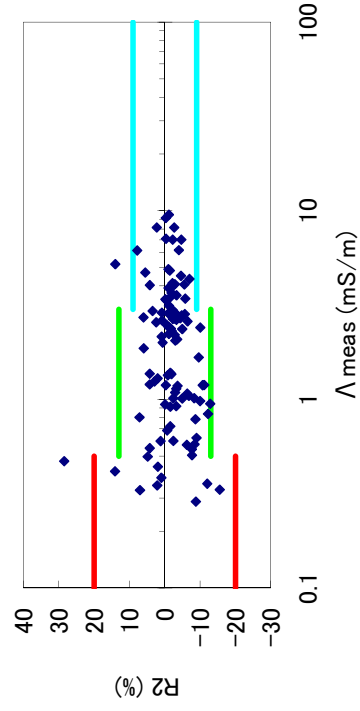


Fig. 3.27 b) Tokyo Conductivity Agreement (R_2)

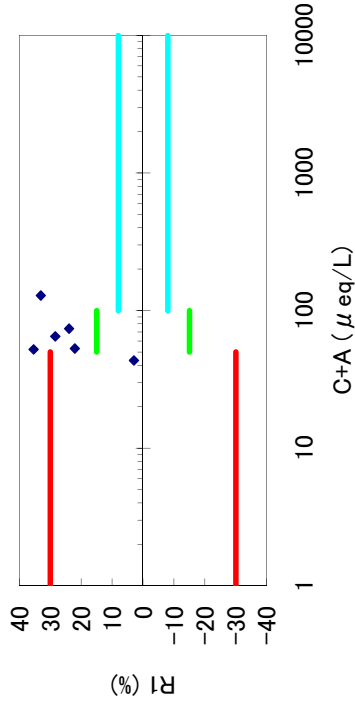


Fig. 3.28 a) Vientiane Ion Balance (R_1)

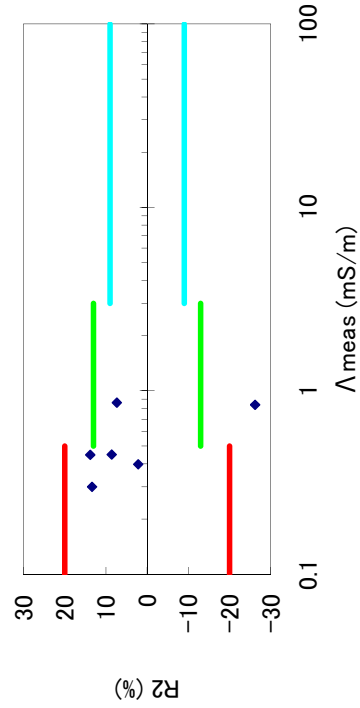


Fig. 3.28 b) Vientiane Conductivity Agreement (R_2)

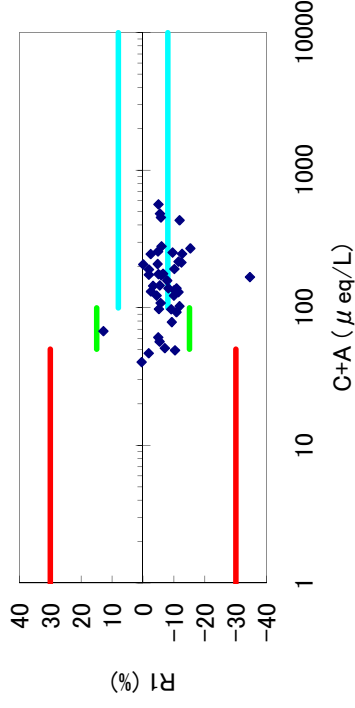


Fig. 3.29 a) Petaling Jaya Ion Balance (R_1)

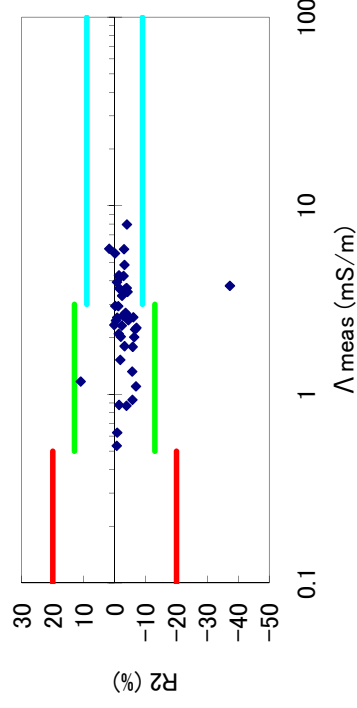


Fig. 3.29 b) Petaling Jaya Conductivity Agreement (R_2)

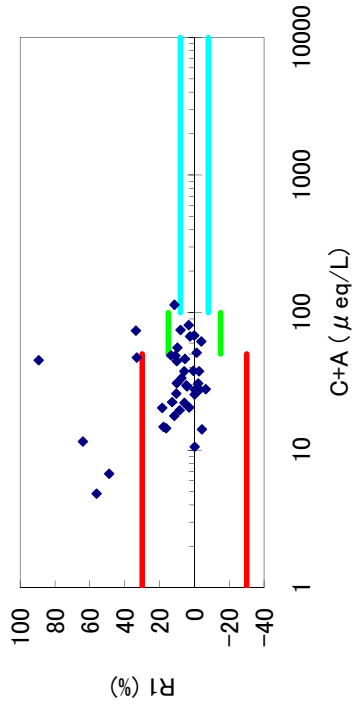


Fig. 3.30 a) Tanah Rata Ion Balance (R_1)

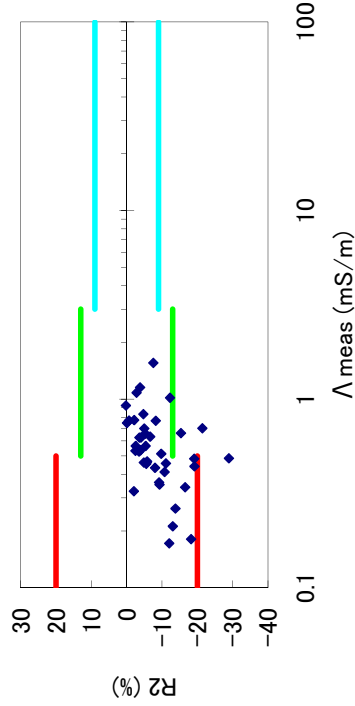


Fig. 3.30 b) Tanah Rata Conductivity Agreement (R_2)

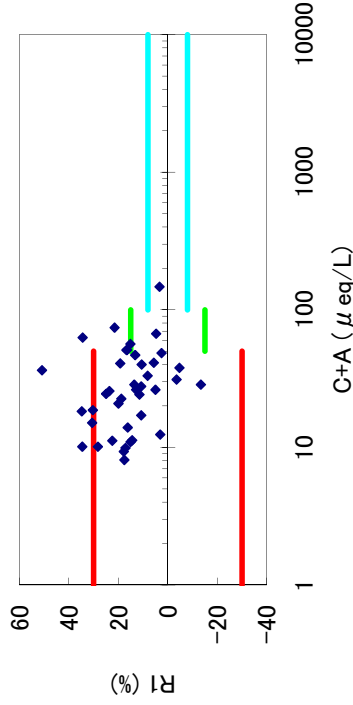


Fig. 3.31 a) Danum Valley Ion Balance (R_1)

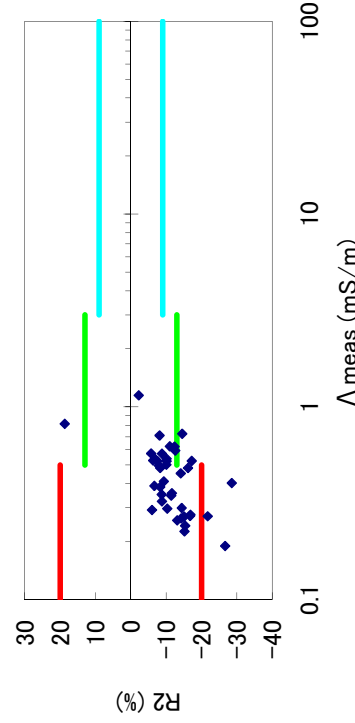


Fig. 3.31 b) Danum Valley Conductivity Agreement (R_2)

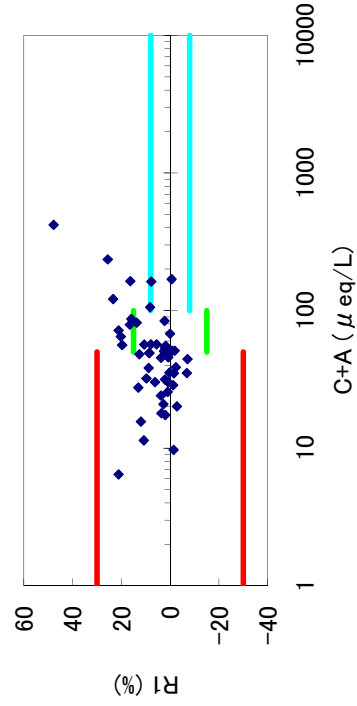


Fig. 3.32 a) Kuching Ion Balance (R₁)

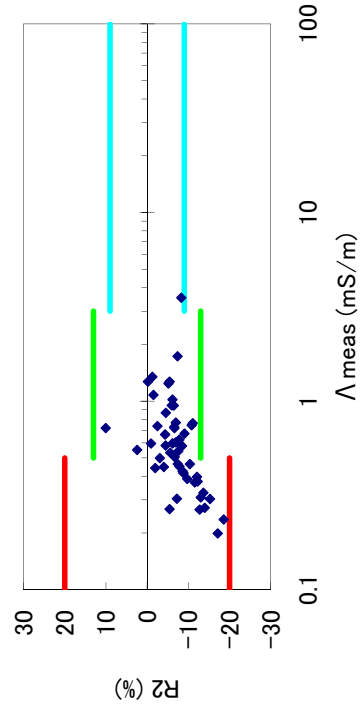


Fig. 3.32 b) Kuching Conductivity Agreement (R₂)

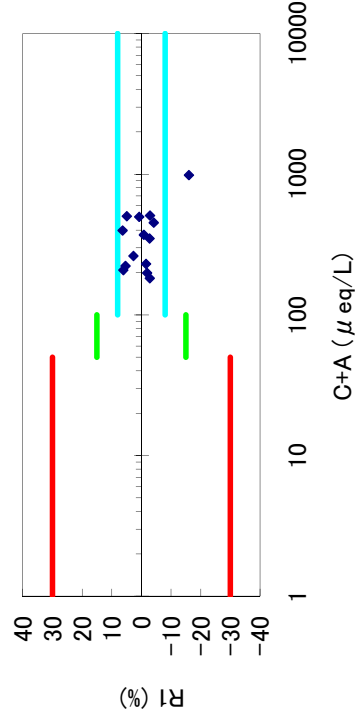


Fig. 3.33 a) Ulaanbaatar Ion Balance (R₁)

Calculated including HCO_3^-

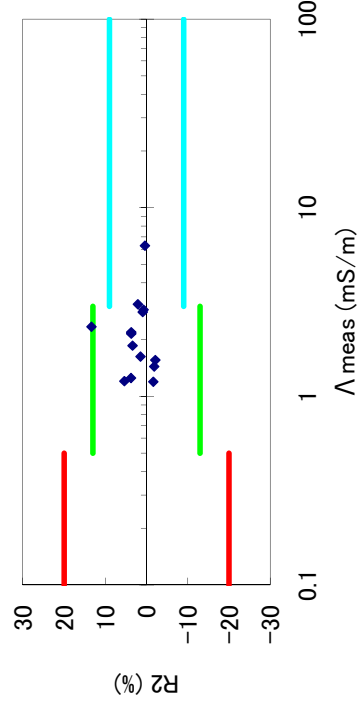


Fig. 3.33 b) Ulaanbaatar Conductivity Agreement (R₂)

Calculated including HCO_3^-

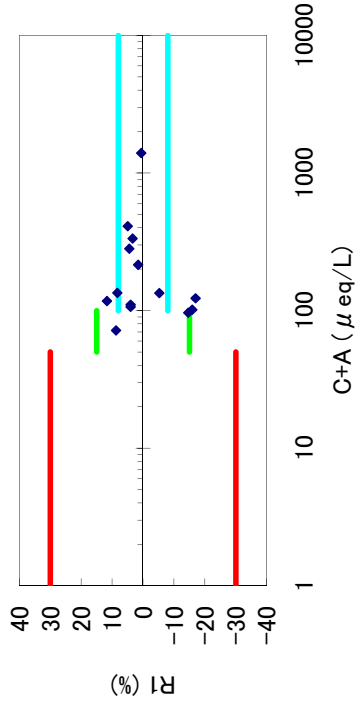


Fig. 3.34 a) Terelj Ion Balance (R_1)
Calculated including HCO_3^-

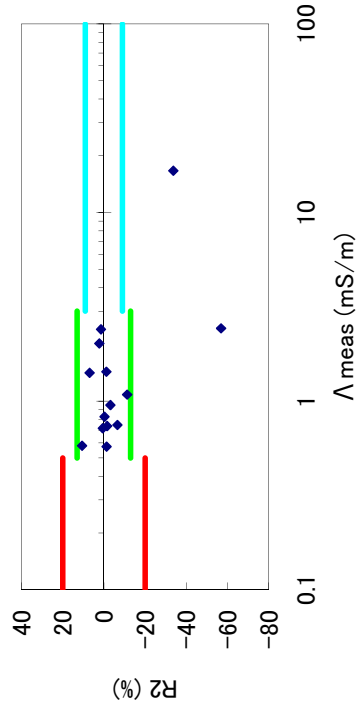


Fig. 3.34 b) Terelj Conductivity Agreement (R_2)
Calculated including HCO_3^-

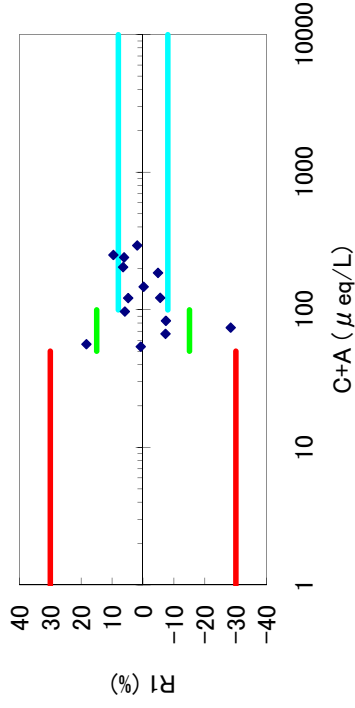


Fig. 3.35 a) Yangon Ion Balance (R_1)

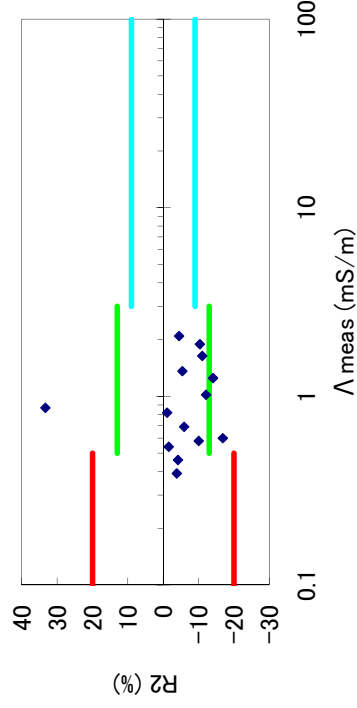


Fig. 3.35 b) Yangon Conductivity Agreement (R_2)

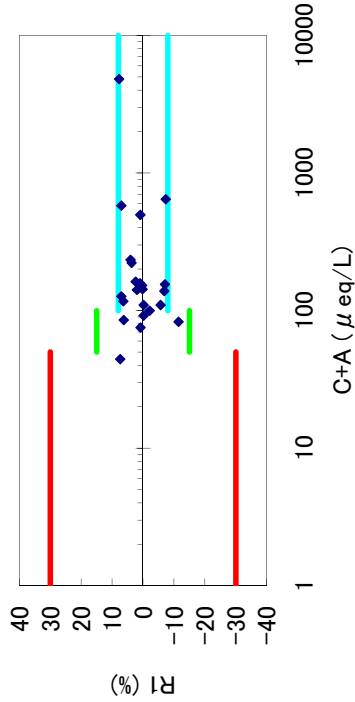


Fig. 3.36 a) Metro Manila Ion Balance (R_1)
Calculated including NO_2^-

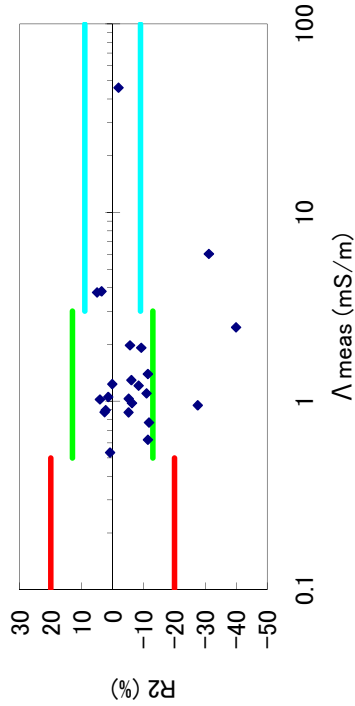


Fig. 3.36 b) Metro Manila Conductivity Agreement (R_2)
Calculated including NO_2^-

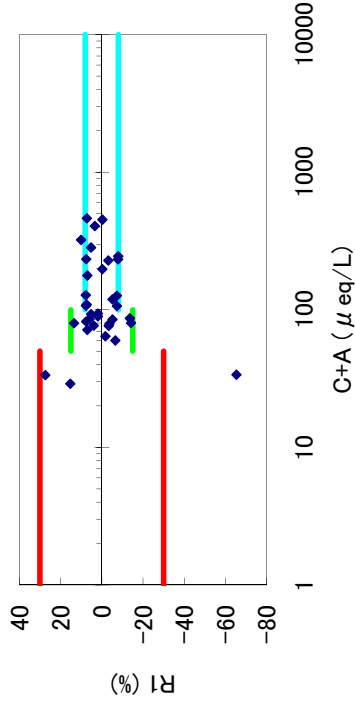


Fig. 3.37 a) Los Banos Ion Balance (R_1)
Calculated including NO_2^-

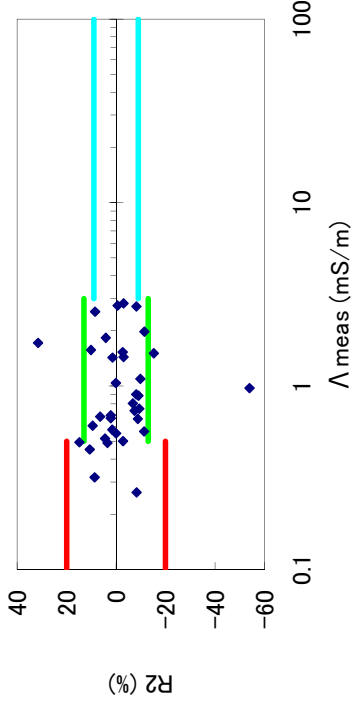


Fig. 3.37 b) Los Banos Conductivity Agreement (R_2)
Calculated including NO_2^-

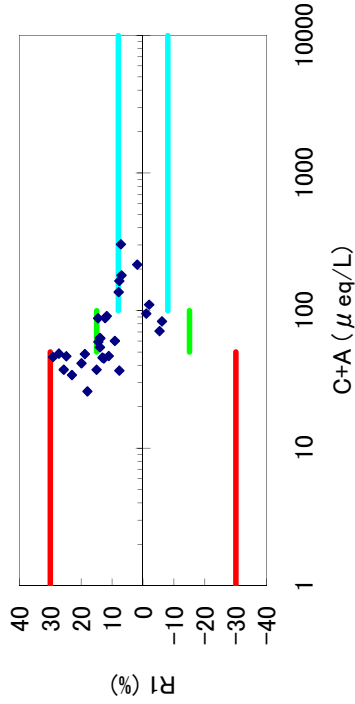


Fig. 3.38 a) Mt. St. Tomas Ion Balance (R_1)

Calculated including NO_2^-

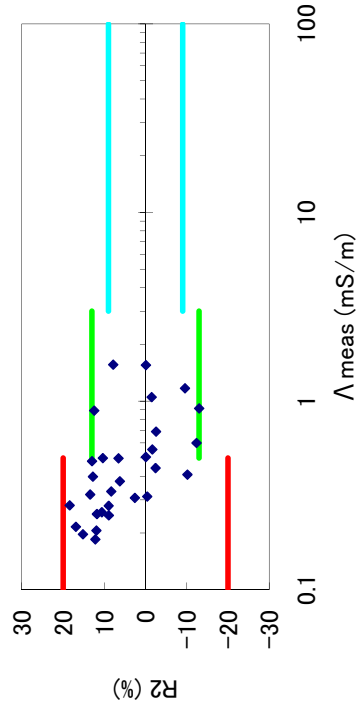


Fig. 3.38 b) Mt. St. Tomas Conductivity Agreement (R_2)

Calculated including NO_2^-

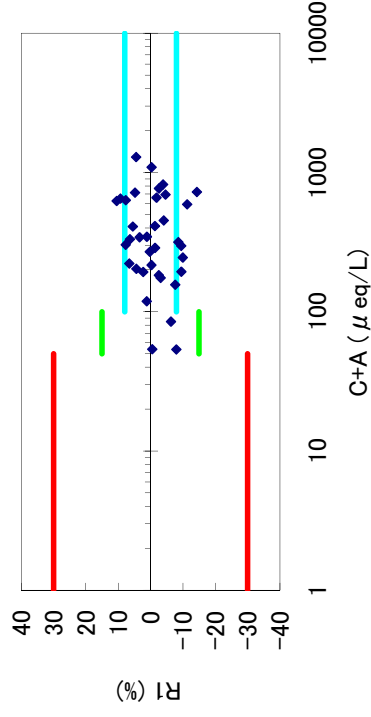


Fig. 3.39 a) Kanghwa Ion Balance (R_1)

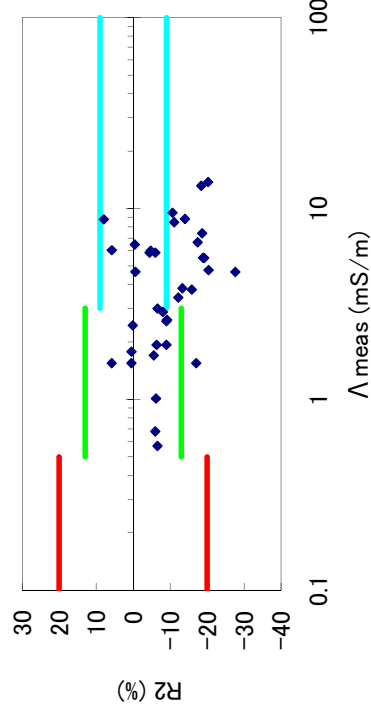


Fig. 3.39 b) Kanghwa Conductivity Agreement (R_2)

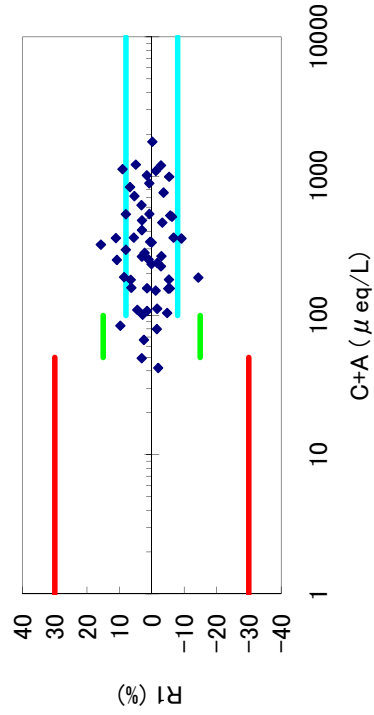


Fig. 3.40 a) Cheju Ion Balance (R_1)

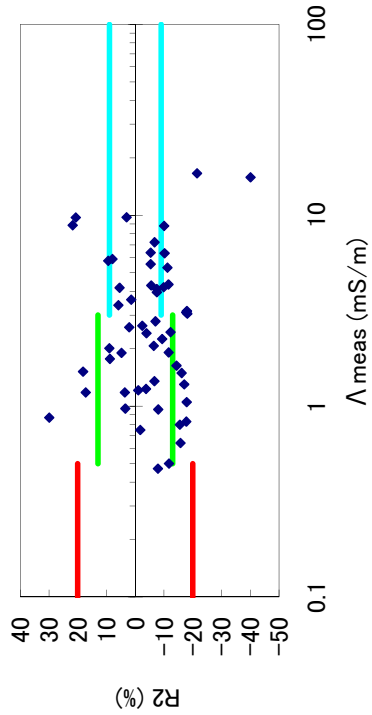


Fig. 3.40 b) Cheju Conductivity Agreement (R_2)

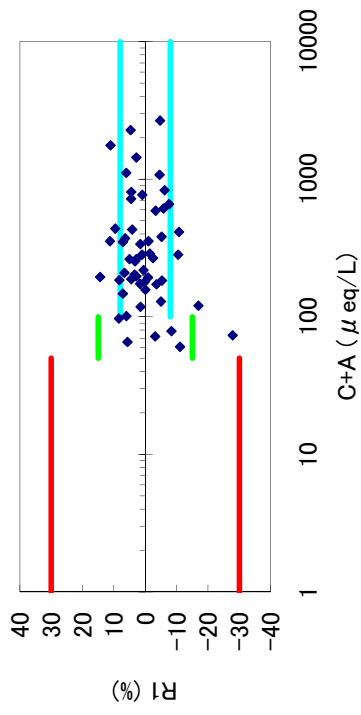


Fig. 3.41 a) Imsil Ion Balance (R_1)

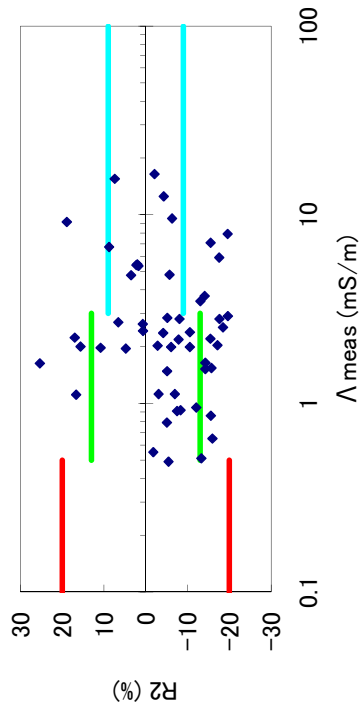


Fig. 3.41 a) Imsil Ion Balance (R_1)

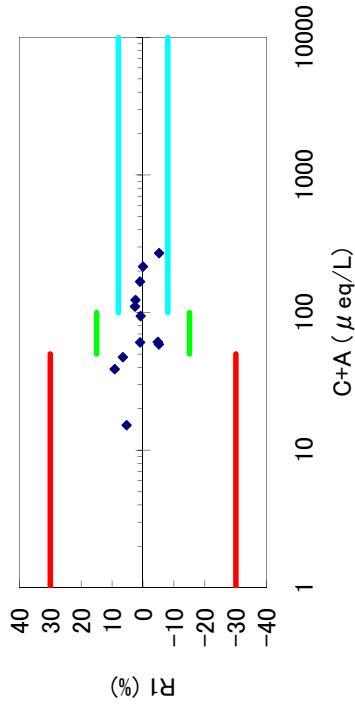


Fig. 3.42 a) Mondy Ion Balance (R₁)
Calculated including HCO_3^- , NO_2^- and Br^-

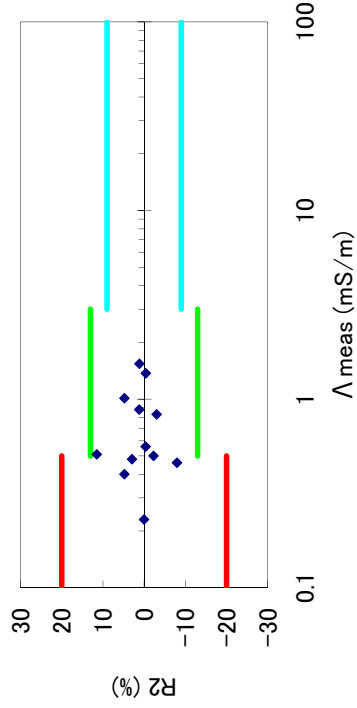


Fig 3.42 b) Mondy Conductivity Agreement (R₂)
Calculated including HCO_3^- , NO_2^- and Br^-

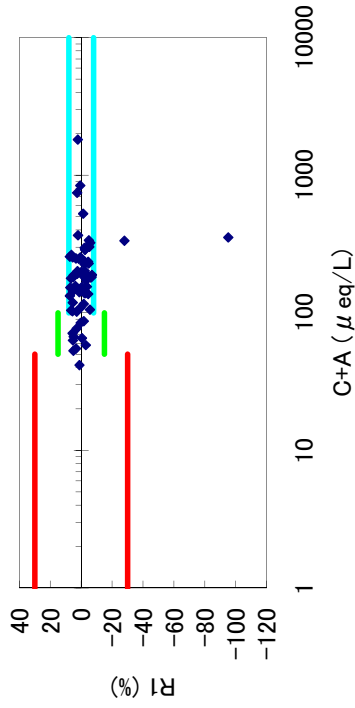


Fig. 3.43 a) Listvyanka Ion Balance (R₁)
Calculated including HCO_3^- , NO_2^- , Br^- and F^-

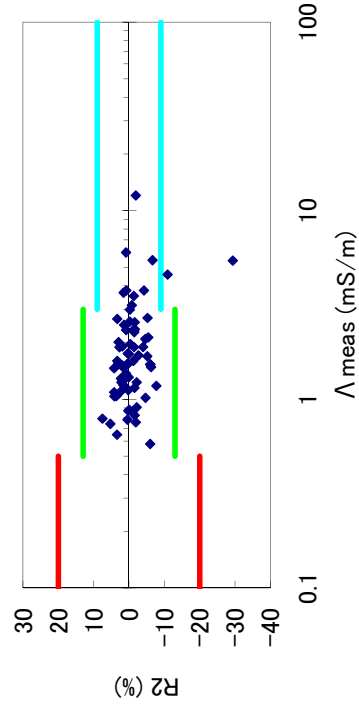


Fig. 3.43 b) Listvyanka Conductivity Agreement (R₂)
Calculated including HCO_3^- , NO_2^- , Br^- and F^-

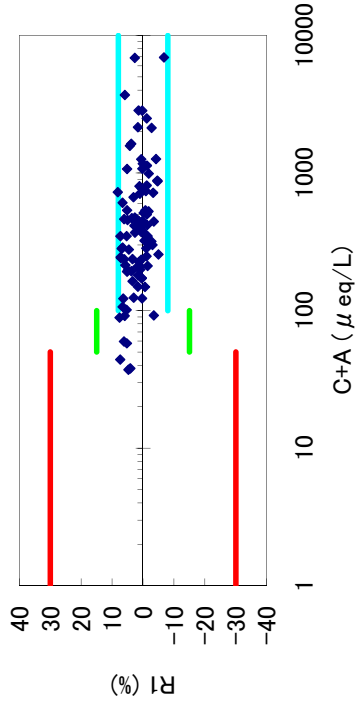


Fig. 3.44 a) Irkutsk Ion Balance (R_1)
Calculated including HCO_3^- , NO_2^- , Br^- and F^-

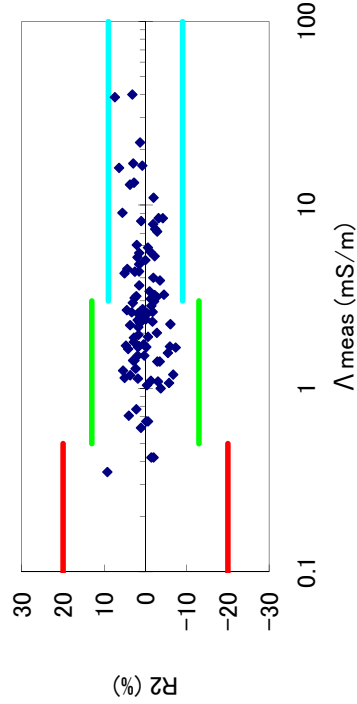


Fig. 3.44 b) Irkutsk Conductivity Agreement (R_2)
Calculated including HCO_3^- , NO_2^- , Br^- and F^-

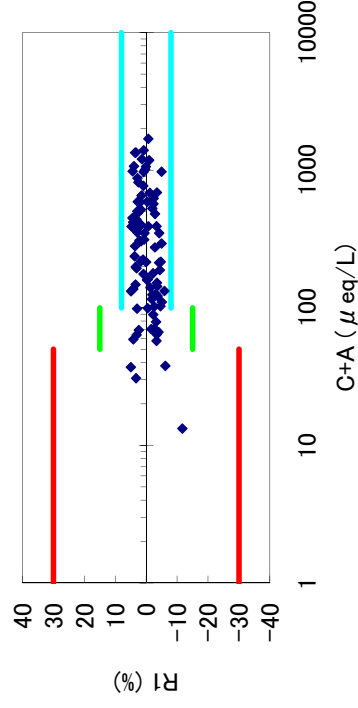


Fig. 3.45 a) Primorskaya Ion Balance (R_1)
Calculated including HCO_3^- , NO_2^- and Br^-

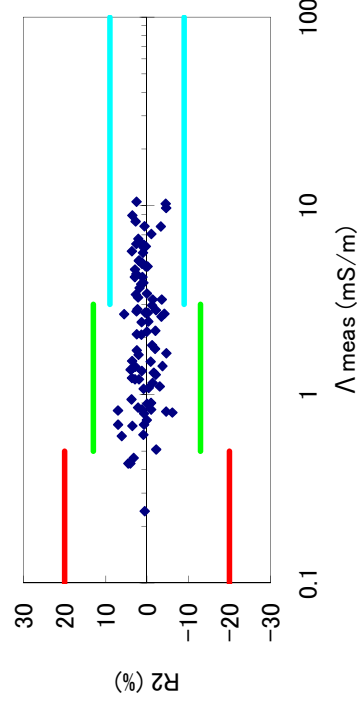


Fig. 3.45 b) Primorskaya Conductivity Agreement (R_2)
Calculated including HCO_3^- , NO_2^- and Br^-

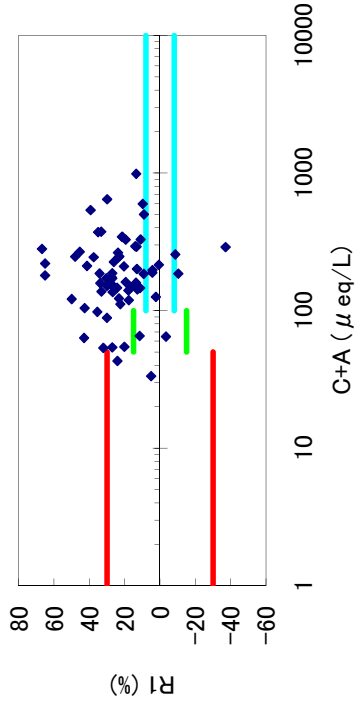


Fig. 3.46 a) Bangkok Ion Balance (R_1)

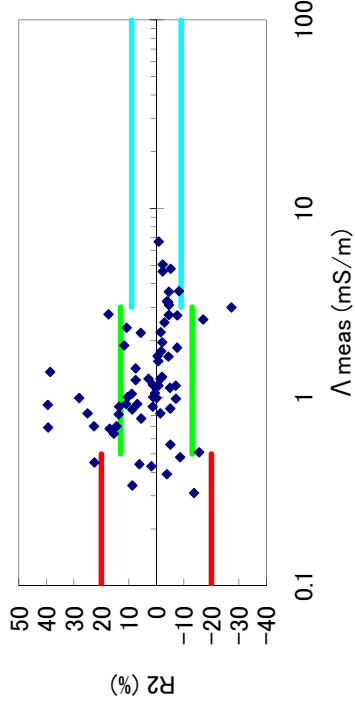


Fig. 3.46 b) Bangkok Conductivity Agreement (R_2)

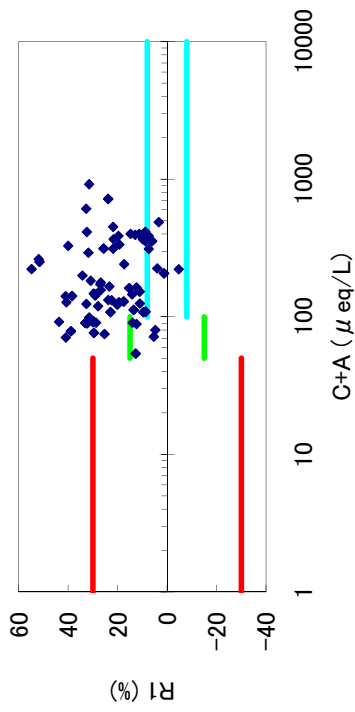


Fig. 3.47 a) Samutprakarn Ion Balance (R_1)

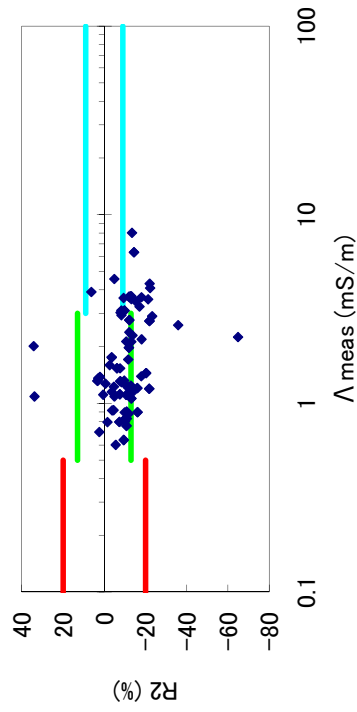


Fig. 3.47b) Samutprakarn Conductivity Agreement (R_2)

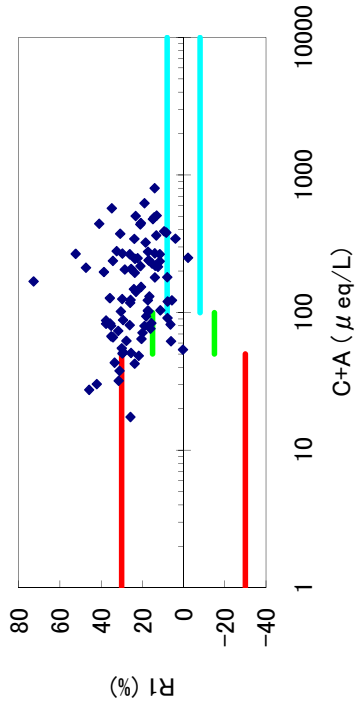


Fig. 3.48 a) Patumthani Ion Balance (R_1)

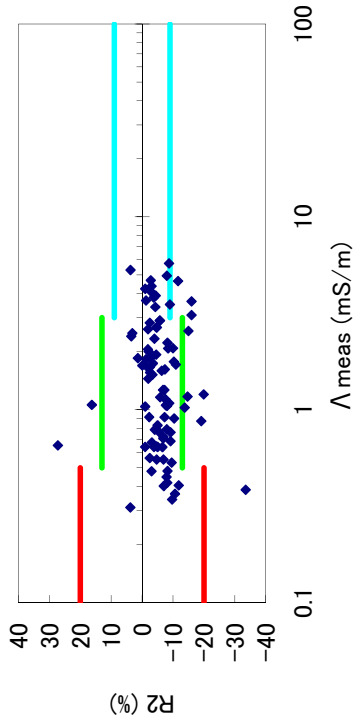


Fig. 3.48 b) Patumthani Conductivity Agreement (R_2)

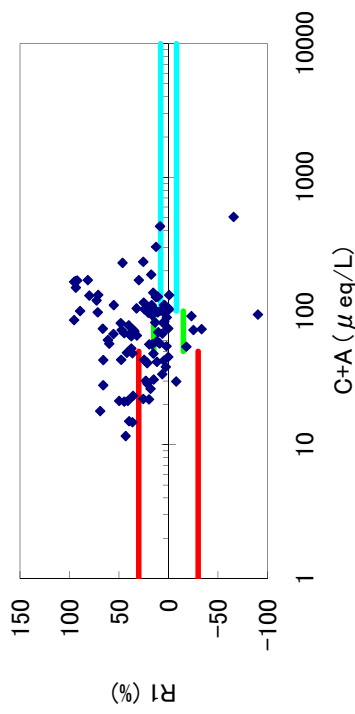


Fig. 3.49 a) Khanchanaburi Ion Balance (R_1)

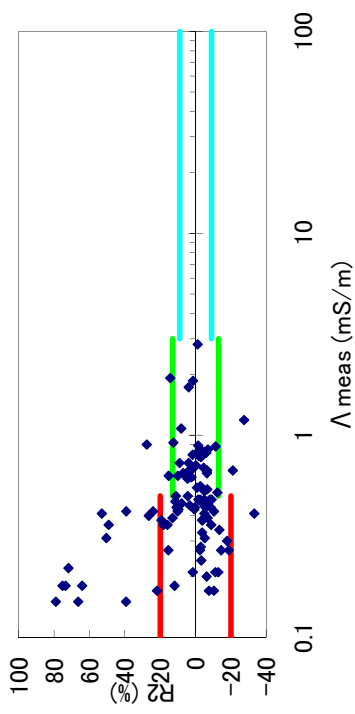


Fig. 3.49 b) Khanchanaburi Conductivity Agreement (R_2)

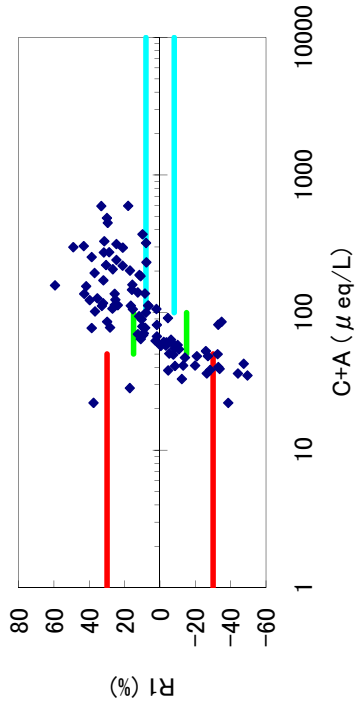


Fig. 3.50 a) Chiang Mai (Mae Hia) Ion Balance (R_1)

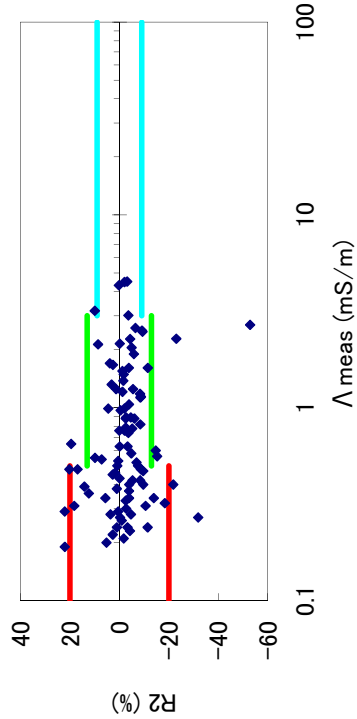


Fig. 3.50 b) Chiang Mai (Mae Hia) Conductivity Agreement (R_2)

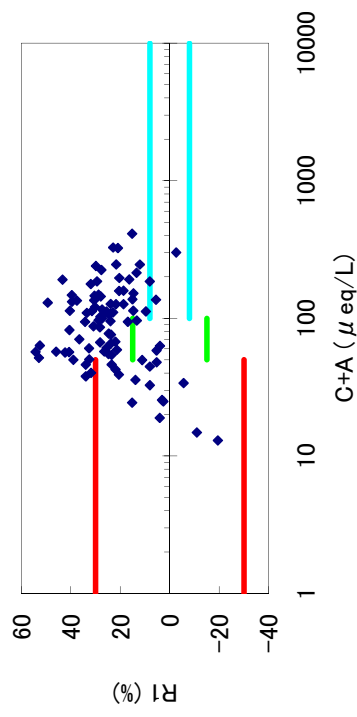


Fig. 3.51 a) Nakhon Ratchasima Ion Balance (R_1)

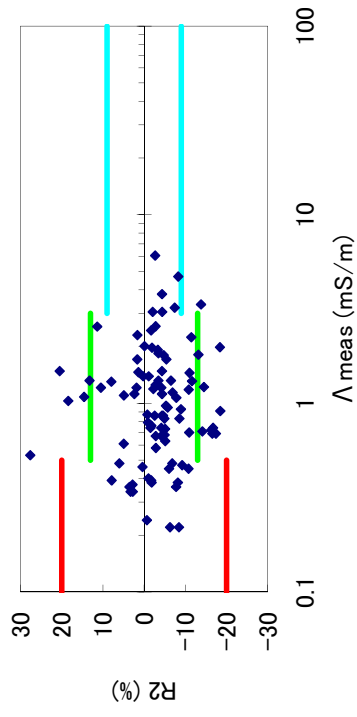


Fig. 3.51 b) Nakhon Ratchasima Conductivity Agreement (R_2)

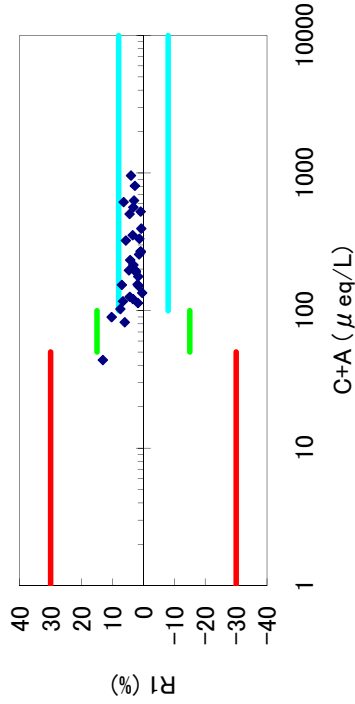


Fig. 3.52 a) Hanoi Ion Balance (R_1)
Calculated including F^-

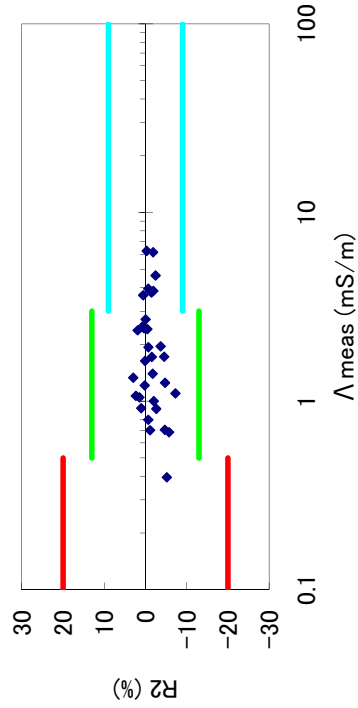


Fig. 3.52 b) Hanoi Conductivity Agreement (R_2)
Calculated including F^-

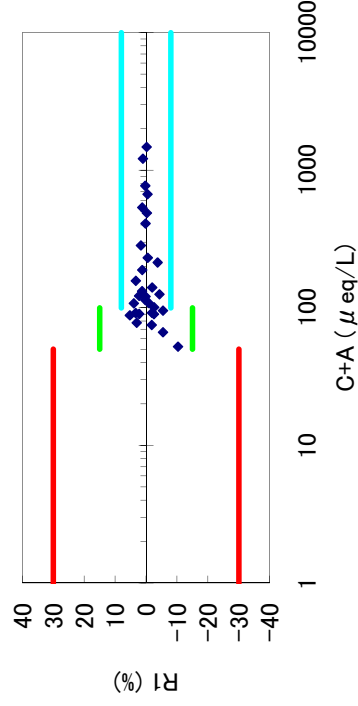


Fig. 3.53 a) Hoa Binh Ion Balance (R_1)
Calculated including F^-

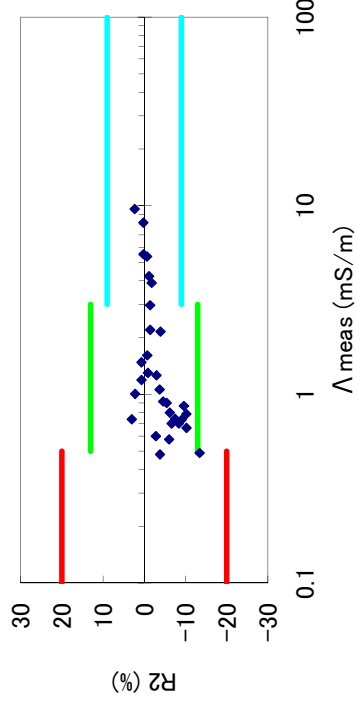


Fig. 3.53 b) Hoa Binh Conductivity Agreement (R_2)
Calculated including F^-

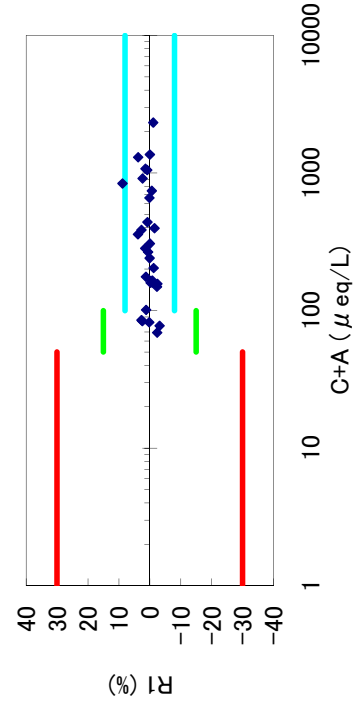


Fig. 3.54 a) Cuc Phuong Ion Balance (R_1)
Calculated including HCO_3^-

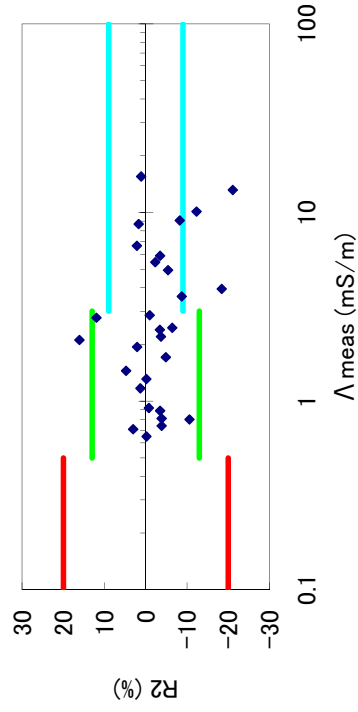


Fig. 3.54 b) Cuc Phuong Conductivity Agreement (R_2)
Calculated including HCO_3^-

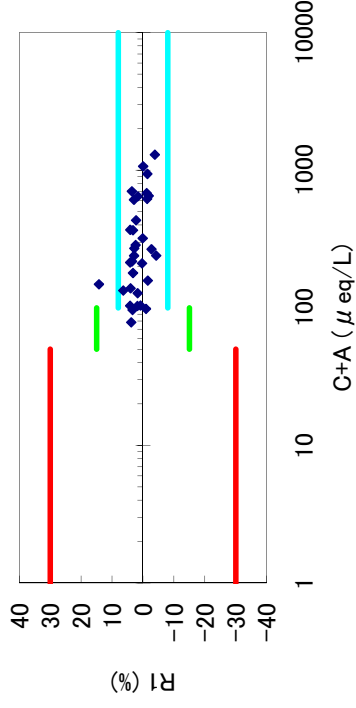


Fig. 3.55 a) Da Nang Ion Balance (R_1)
Calculated including HCO_3^-

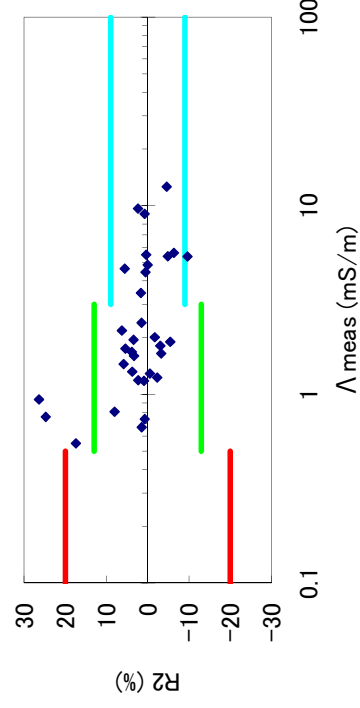


Fig. 3.55 b) Da Nang Conductivity Agreement (R_2)
Calculated including HCO_3^-

Appendix Results of the additional items in 2009

Appendix Table 1 Concentration, deposition and data completeness of F⁻

Volume-weighted mean concentrations (Monthly)														
unit : $\mu\text{mol/L}$														
Country	Name of sites	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
China	Haifu	15.2	26.5	5.53	3.36	6.33	2.95	4.81	1.03	4.00	7.39	15.3	25.8	4.27
	Jinyunshan	7.35	9.00	6.80	2.79	4.70	3.75	3.48	1.05	3.77	7.68	31.9	20.7	4.56
	Hongen	32.6	7.17	10.7	1.43	<1.0	3.14	3.16	1.37	12.2	--	4.54	19.9	4.81
	Xiaoping	--	12.0	9.73	1.15	<1.0	3.27	2.50	4.89	5.81	--	<1.0	4.31	4.01
Russia	Listvyanka	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	Irkutsk	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Viet Nam	Hanoi	*	*	9.24	4.05	3.04	17.7	3.11	3.99	1.88	10.8	*	*	5.40
	Hoa Binh	*	<1.0	14.4	2.96	<1.0	3.20	2.16	<1.0	2.13	3.72	29.8	--	2.23
Wet deposition(Monthly)														
unit: $\text{mmol m}^{-2}\text{month}^{-1}$ or $\text{mmol m}^{-2}\text{year}^{-1}$														
Country	Name of sites	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
China	Haifu	0.406	0.440	0.237	0.358	0.485	0.584	0.333	0.401	0.189	0.415	0.272	0.478	4.55
	Jinyunshan	0.169	0.322	0.541	0.451	0.461	0.701	0.542	0.194	0.262	0.549	0.526	0.285	5.00
	Hongen	0.0785	0.146	1.31	0.139	0.0232	0.518	0.290	0.120	0.127	0.00	0.329	0.460	3.54
	Xiaoping	0.00	0.122	1.20	0.161	0.0225	0.661	0.516	1.34	0.338	0.00	0.0205	0.165	4.54
Russia	Listvyanka	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
	Irkutsk	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Viet Nam	Hanoi	*	*	0.454	0.301	0.695	3.28	1.97	0.746	0.285	0.902	*	*	8.70
	Hoa Binh	*	<0.01	0.158	0.209	0.121	0.339	1.24	0.0446	0.419	0.441	0.0686	0.00	3.02
Data completeness (Monthly)														
%TP														
Country	Name of sites	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
China	Haifu	100	98.8	98.8	99.2	99.5	100	100	100	99.2	93.2	95.5	94.6	99.1
	Jinyunshan	100	100	100	100	100	100	100	100	100	100	100	100	100
	Hongen	100	100	100	100	100	100	100	100	100	--	100	100	100
	Xiaoping	--	100	100	100	100	100	100	100	100	--	100	100	100
Russia	Listvyanka	100	100	100	100	100	100	100	100	100	100	100	100	100
	Irkutsk	100	100	100	100	100	100	100	100	100	100	100	100	100
Viet Nam	Hanoi	0	0	88.8	100	100	100	100	100	100	100	0	0	98.7
	Hoa Binh	0	89.5	78.2	100	100	99.4	100	100	100	99.3	100	--	99.4

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

[0.00] for deposition: The deposition was 0 mmol/m^2 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%)

Appendix Table 2 Concentration, deposition and data completeness of Br⁻

Volume-weighted mean concentrations (Monthly)										unit : $\mu\text{mol/L}$				
Country	Name of sites	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
Russia	Mondy	--	<1.0	<1.0	--	--	<1.0	<1.0	<1.0	<1.0	<1.0	--	--	<1.0
	Listvyanka	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	Irkutsk	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	Primorskaya	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Wet deposition(Monthly)unit: $\text{mmol m}^{-2}\text{month}^{-1}$ or $\text{mmol m}^{-2}\text{year}^{-1}$														
Country	Name of sites	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
Russia	Mondy	0.00	<0.01	<0.01	0.00	0.00	<0.01	<0.01	<0.01	<0.01	<0.01	0.00	0.00	<0.01
	Listvyanka	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
	Irkutsk	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
	Primorskaya	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Data completeness (Monthly)%TP														
Country	Name of sites	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
Russia	Mondy	--	100	100	--	--	100	100	100	100	100	--	--	100
	Listvyanka	100	100	100	100	100	100	100	100	100	100	100	100	100
	Irkutsk	100	100	100	100	100	100	100	100	100	100	100	100	100
	Primorskaya	99.4	98.6	99.1	100	97.1	99.4	100	99.4	100	99.1	97.4	100	99.5

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

[0.00] for deposition: The deposition was 0 mmol/m^2 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%)

Appendix Table 3 Concentration, deposition and data completeness of NO₂⁻

Volume-weighted mean concentrations (Monthly)															unit : $\mu\text{mol/L}$	
Country	Name of sites	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual		
Philippines	Metro Manila	*	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	*	<1.0		
	Los Banos	<1.0	*	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0		
	Mt. Sto. Tomas	*	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	*	--	<1.0		
Russia	Mondy	--	<1.0	<1.0	--	--	<1.0	<1.0	<1.0	<1.0	<1.0	--	--	<1.0		
	Listvyanka	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0		
	Irkutsk	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	8.27	<1.0	<1.0		
	Primorskaya	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0		
Wet deposition(Monthly)															unit: $\text{mmol m}^{-2}\text{month}^{-1}$ or $\text{mmol m}^{-2}\text{year}^{-1}$	
Country	Name of sites	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual		
Philippines	Metro Manila	*	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	*	<0.01		
	Los Banos	<0.01	*	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01		
	Mt. Sto. Tomas	*	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	*	0.00	<0.01		
Russia	Mondy	0.00	<0.01	<0.01	0.00	0.00	<0.01	<0.01	<0.01	<0.01	<0.01	0.00	0.00	0.0205		
	Listvyanka	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.0296		
	Irkutsk	<0.01	<0.01	<0.01	<0.01	0.0296	0.0207	0.0159	0.0104	0.0462	0.213	<0.01	<0.01	0.363		
	Primorskaya	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01		
Data completeness (Monthly)															%TP	
Country	Name of sites	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual		
Philippines	Metro Manila	0	75.0	0.698	94.1	57.7	63.7	61.1	100	85.3	100	30.8	0	63.1		
	Los Banos	75.5	0	100	99.1	100	100	100	100	100	100	93.6	60.1	95.8		
	Mt. Sto. Tomas	0	95.8	100	100	98.8	100	100	100	100	98.3	0.00	--	98.8		
Russia	Mondy	--	100	100	--	--	100	100	100	100	100	--	--	100		
	Listvyanka	100	100	100	100	100	100	100	100	100	100	100	100	100		
	Irkutsk	100	100	100	100	100	100	100	100	100	100	100	100	100		
	Primorskaya	99.4	98.6	99.1	100	97.1	99.4	100	99.4	100	99.1	97.4	100	99.5		

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

[0.00] for deposition: The deposition was 0 mmol/m^2 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%)

Appendix Table 4 Concentration, deposition and data completeness of HCO_3^-

Volume-weighted mean concentrations (Monthly)														
unit : $\mu\text{mol/L}$														
Country	Name of sites	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
Mongolia	Ulaanbaatar	--	--	--	*	*	103	65.3	63.7	130	*	--	--	78.2
	Terelj	--	--	*	*	144	77.6	24.8	*	10.0	*	--	--	63.2
Russia	Mondy	--	42.6	93.7	--	--	17.3	4.32	41.3	<1.0	17.4	--	--	13.8
	Listvyanka	<1.0	<1.0	<1.0	10.7	87.8	<1.0	7.45	<1.0	<1.0	22.8	20.4	5.68	6.74
	Irkutsk	16.8	20.6	46.8	62.2	70.7	66.5	25.8	18.1	31.9	156	57.0	53.1	50.5
	Primorskaya	4.58	10.3	42.8	1.50	78.6	3.61	7.02	2.29	3.38	9.44	23.8	3.06	7.75
Viet Nam	Cuc Phuong	<1.0	154	60.2	6.14	<1.0	19.9	<1.0	19.9	1.30	<1.0	28.0	180	6.32
	Da Nang	<1.0	1.85	<1.0	<1.0	2.17	<1.0	<1.0	<1.0	<1.0	<1.0	8.97	<1.0	<1.0
Wet deposition(Monthly)														
unit: $\text{mmol m}^{-2}\text{month}^{-1}$ or $\text{mmol m}^{-2}\text{year}^{-1}$														
Country	Name of sites	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
Mongolia	Ulaanbaatar	0.00	0.00	0.00	*	*	3.34	5.52	3.12	1.83	*	0.00	0.00	17.8
	Terelj	0.00	0.00	*	*	2.53	2.20	1.02	*	0.0290	*	0.00	0.00	7.01
Russia	Mondy	0.00	0.124	0.103	0.00	0.00	0.495	0.278	0.582	<0.01	0.0609	0.00	0.00	1.64
	Listvyanka	<0.01	<0.01	<0.01	0.153	1.27	<0.01	0.376	<0.01	<0.01	0.0860	0.175	0.0425	2.10
	Irkutsk	0.260	0.158	0.313	0.352	3.84	5.98	1.60	0.939	2.53	4.02	1.12	0.632	21.7
	Primorskaya	0.156	0.290	1.39	0.0663	1.08	0.563	0.900	0.329	0.318	0.873	0.551	0.225	6.70
Viet Nam	Cuc Phuong	<0.01	2.26	4.12	0.561	<0.01	1.02	<0.01	4.31	0.525	<0.01	0.470	2.02	14.3
	Da Nang	<0.01	0.0420	<0.01	<0.01	0.142	<0.01	<0.01	<0.01	<0.01	<0.01	1.74	<0.01	1.93
Data completeness (Monthly)														
%TP														
Country	Name of sites	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
Mongolia	Ulaanbaatar	--	--	--	0	0	100	46.8	95.6	51.0	0	--	--	55.3
	Terelj	--	--	0	0.00	76.5	61.4	74.7	0	100	0	--	--	58.3
Russia	Mondy	--	100	100	--	--	100	100	100	100	100	--	--	100
	Listvyanka	100	100	100	100	100	100	100	100	100	100	100	100	100
	Irkutsk	100	100	100	100	100	100	100	100	100	100	100	100	100
	Primorskaya	99.4	98.6	99.1	100	97.1	99.4	100	99.4	100	99.1	97.4	100	99.5
Viet Nam	Cuc Phuong	100	97.9	100	100	100	100	100	100	100	100	100	53.6	100
	Da Nang	100	100	100	100	100	100	100	100	100	100	100	100	100

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

[0.00] for deposition: The deposition was 0 mmol/m^2 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%)

Appendix Table 5 Concentration, deposition and data completeness of Formic Acid

Volume-weighted mean concentrations (Monthly)										unit : $\mu\text{mol/L}$				
Country	Name of sites	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
Malaysia	Petaling Jaya	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	Tanah Rata	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	Danum Valley	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	Kuching	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Thailand	Bangkok	--	--	18.4	11.3	4.94	4.41	4.09	<1.0	<1.0	5.75	21.4	<1.0	5.25
	Samutprakarn	--	--	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	--	<1.0
	Patumthani	--	<1.0	13.9	1.17	2.11	6.71	2.28	6.70	2.59	5.89	10.9	--	4.12
	Khanchanaburi	--	*	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	--	--	<1.0
	Chiang Mai	--	--	42.8	11.0	1.90	<1.0	<1.0	2.95	<1.0	<1.0	14.6	<1.0	2.41
	Nakhon Ratchasima	--	32.2	21.9	11.6	8.04	5.00	4.15	6.08	3.00	2.22	19.2	--	8.77
Wet deposition(Monthly)														
unit: $\text{mmol m}^{-2}\text{month}^{-1}$ or $\text{mmol m}^{-2}\text{year}^{-1}$														
Country	Name of sites	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
Malaysia	Petaling Jaya	<0.01	<0.01	<0.01	<0.01	<0.01	0.0302	0.0134	<0.01	<0.01	<0.01	0.0330	0.0253	0.103
	Tanah Rata	0.0109	<0.01	<0.01	<0.01	<0.01	0.0286	0.0224	0.0285	<0.01	<0.01	<0.01	<0.01	0.113
	Danum Valley	0.0480	0.0631	0.0438	<0.01	0.0256	0.0530	<0.01	0.0273	0.0169	0.0439	0.0140	<0.01	0.348
	Kuching	<0.01	<0.01	<0.01	<0.01	<0.01	0.0104	<0.01	0.0479	0.0198	0.0411	<0.01	<0.01	0.126
Thailand	Bangkok	0.00	0.00	0.65	4.22	1.82	0.447	0.734	0.104	0.275	1.24	1.31	0.0119	10.9
	Samutprakarn	0.00	0.00	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.00	<0.01
	Patumthani	0.00	<0.01	0.376	0.0746	0.482	0.824	0.577	0.864	0.619	1.28	0.323	0.00	5.42
	Khanchanaburi	0.00	*	0.0559	0.0243	0.0331	0.0252	0.0376	0.0515	0.0109	0.0727	0.00	0.00	0.289
	Chiang Mai	0.00	0.00	0.599	1.05	0.462	0.0187	<0.01	0.432	<0.01	<0.01	0.0117	<0.01	2.54
	Nakhon Ratchasima	0.00	1.84	3.74	1.70	0.603	0.178	0.511	0.901	1.03	0.332	0.216	0.00	11.0
Data completeness (Monthly)														
%TP														
Country	Name of sites	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
Malaysia	Petaling Jaya	100	100	100	100	100	100	98.8	100	100	100	100	100	100
	Tanah Rata	100	100	100	100	81.7	81.4	98.7	100	100	100	100	100	97.2
	Danum Valley	100	100	100	100	100	60.5	70.7	100	100	100	81.9	92.0	92.0
	Kuching	100	100	100	100	100	100	100	100	100	100	100	100	100
Thailand	Bangkok	--	--	100	100	98.8	100	99.4	96.7	99.5	97.7	100	100	98.8
	Samutprakarn	--	--	57.9	99.4	79.4	100	95.4	99.0	99.2	100	94.0	--	95.3
	Patumthani	--	100	100	100	100	100	100	100	100	100	100	--	100
	Khanchanaburi	--	0	85.7	48.4	83.7	79.6	95.2	87.2	91.5	58.8	--	--	83.4
	Chiang Mai	--	--	100	94.1	100	100	100	100	100	100	100	100	99.4
	Nakhon Ratchasima	--	100	100	100	100	100	100	100	100	100	100	--	100

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

[0.00] for deposition: The deposition was 0 mmol/m^2 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%)

Appendix Table 6 Concentration, deposition and data completeness of Acetic Acid

Volume-weighted mean concentrations (Monthly)										unit : $\mu\text{mol/L}$				
Country	Name of sites	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
Malaysia	Petaling Jaya	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	Tanah Rata	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	Danum Valley	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	Kuching	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Thailand	Bangkok	--	--	11.1	8.95	3.49	4.21	3.38	4.19	1.28	13.7	21.0	<1.0	5.93
	Samutprakarn	--	--	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	--	<1.0
	Patumthani	--	<1.0	3.77	1.13	<1.0	4.23	2.06	6.02	2.91	4.11	5.63	--	2.95
	Khanchanaburi	--	*	1.75	1.05	<1.0	<1.0	<1.0	<1.0	<1.0	1.21	--	--	<1.0
	Chiang Mai	--	--	71.3	13.6	1.85	1.47	<1.0	2.85	<1.0	<1.0	1.67	1.07	3.24
	Nakhon Ratchasima	--	20.8	18.2	8.28	8.19	4.61	3.59	4.27	3.41	4.01	15.9	--	7.39
Wet deposition(Monthly)														
unit: $\text{mmol m}^{-2}\text{month}^{-1}$ or $\text{mmol m}^{-2}\text{year}^{-1}$														
Country	Name of sites	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
Malaysia	Petaling Jaya	0.0253	<0.01	0.291	0.234	<0.01	0.0145	<0.01	<0.01	<0.01	<0.01	0.0128	<0.01	0.596
	Tanah Rata	<0.01	0.0200	0.0537	0.0131	0.0406	0.0243	0.0140	0.0181	0.0259	<0.01	0.0228	<0.01	0.253
	Danum Valley	0.1074	0.0603	<0.01	0.0120	0.0179	0.0447	<0.01	0.0223	0.0235	0.0751	0.0424	0.0380	0.458
	Kuching	<0.01	0.0121	<0.01	<0.01	<0.01	<0.01	<0.01	0.0189	0.0104	<0.01	<0.01	<0.01	0.0578
Thailand	Bangkok	0.00	0.00	0.390	3.35	1.28	0.427	0.607	1.52	0.455	2.96	1.28	0.0152	12.3
	Samutprakarn	0.00	0.00	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.00	<0.01
	Patumthani	0.00	<0.01	0.1021	0.0723	0.132	0.519	0.520	0.777	0.697	0.889	0.166	0.00	3.88
	Khanchanaburi	0.00	*	0.343	0.0846	0.110	0.197	0.174	0.182	0.217	0.233	0.00	0.00	1.49
	Chiang Mai	0.00	0.00	1.00	1.30	0.450	0.166	<0.01	0.418	0.0392	0.0794	<0.01	<0.01	3.40
	Nakhon Ratchasima	0.00	1.19	3.10	1.22	0.615	0.164	0.443	0.633	1.17	0.600	0.178	0.00	9.30
Data completeness (Monthly)														
%TP														
Country	Name of sites	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
Malaysia	Petaling Jaya	100	100	100	100	100	100	98.8	100	100	100	100	100	100
	Tanah Rata	100	100	100	100	81.7	81.4	98.7	100	100	100	100	100	97.2
	Danum Valley	100	100	100	100	100	60.5	70.7	100	100	100	81.9	92.0	92.0
	Kuching	100	100	100	100	100	100	100	100	100	100	100	100	100
Thailand	Bangkok	--	--	100	100	98.8	100	99	97	100	98	100	100	98.8
	Samutprakarn	--	--	57.9	99.4	79.4	100	95.4	99.0	99.2	100	94.0	--	95.3
	Patumthani	--	100	100	100	100	100	100	100	100	100	100	--	100
	Khanchanaburi	--	0	85.7	48.4	83.7	79.6	95.2	87.2	91.5	58.8	--	--	83.4
	Chiang Mai	--	--	100	94.1	100	100	100	100	100	100	100	100	99.4
	Nakhon Ratchasima	--	100	100	100	100	100	100	100	100	100	100	--	100

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

[0.00] for deposition: The deposition was 0 mmol/m^2 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%)

Appendix Table 7 Concentration, deposition and data completeness of Oxaric Acid

Volume-weighted mean concentrations (Monthly)										unit : $\mu\text{mol/L}$				
Country	Name of sites	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
Malaysia	Petaling Jaya	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	Tanah Rata	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	Danum Valley	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	Kuching	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Wet deposition(Monthly)		unit: $\text{mmol m}^{-2}\text{month}^{-1}$ or $\text{mmol m}^{-2}\text{year}^{-1}$												
Country	Name of sites	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
Malaysia	Petaling Jaya	0.0103	<0.01	<0.01	<0.01	<0.01	0.019	<0.01	<0.01	0.0151	<0.01	<0.01	<0.01	0.0489
	Tanah Rata	<0.01	0.0151	0.0106	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.0354
	Danum Valley	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
	Kuching	<0.01	<0.01	<0.01	<0.01	<0.01	0.03	<0.01	<0.01	0.0122	<0.01	<0.01	<0.01	<0.01
Data completeness (Monthly)		%TP												
Country	Name of sites	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
Malaysia	Petaling Jaya	100	100	100	100	100	100	98.8	100	100	100	100	100	100
	Tanah Rata	100	100	100	100	81.7	81.4	98.7	100	100	100	100	100	97.2
	Danum Valley	100	100	100	100	100	60.5	70.7	100	100	100	81.9	92.0	92.0
	Kuching	100	100	100	100	100	100	100	100	100	100	100	100	100

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

[0.00] for deposition: The deposition was 0 mmol/m^2 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%)

Appendix Table 8 Concentration, deposition and data completeness of PO₄³⁻

Volume-weighted mean concentrations (Monthly)										unit : µmol/L				
Country	Name of sites	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
Thailand	Bangkok	--	--	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	Samutprakarn	--	--	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	--	<1.0
	Patumthani	--	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	--	<1.0
	Khanchanaburi	--	*	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	--	--	<1.0
	Chiang Mai	--	--	1.73	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	1.54	<1.0	<1.0
	Nakhon Ratchasima	--	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	--	<1.0
Wet deposition(Monthly)										unit: mmol m ⁻² month ⁻¹ or mmol m ⁻² year ⁻¹				
Country	Name of sites	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
Thailand	Bangkok	0.00	0.00	<0.01	0.0118	<0.01	<0.01	<0.01	0.0415	<0.01	0.104	<0.01	<0.01	0.165
	Samutprakarn	0.00	0.00	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.00	<0.01
	Patumthani	0.00	<0.01	0.0123	0.0170	0.0105	<0.01	0.173	<0.01	<0.01	<0.01	<0.01	0.00	0.238
	Khanchanaburi	0.00	*	<0.01	<0.01	0.0121	<0.01	0.0872	0.0169	0.07395	<0.01	0.00	0.00	0.225
	Chiang Mai	0.00	0.00	0.0242	0.0758	0.0905	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.216
	Nakhon Ratchasima	0.00	0.0293	<0.01	0.0388	0.0157	0.0140	<0.01	0.0155	0.232	0.0589	<0.01	0.00	0.414
Data completeness (Monthly)										%TP				
Country	Name of sites	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
Thailand	Bangkok	--	--	100	100	98.8	100	99.4	96.7	100	97.7	100	100	98.8
	Samutprakarn	--	--	57.9	99.4	79.4	100	95.4	99.0	99.2	100	94.0	--	95.3
	Patumthani	--	100	100	100	100	100	100	100	100	100	100	--	100
	Khanchanaburi	--	0	85.7	48.4	83.7	79.6	95.2	87.2	91.5	58.8	--	--	83.4
	Chiang Mai	--	--	100	94.1	100	100	100	100	100	100	100	100	99.4
	Nakhon Ratchasima	--	100	100	100	100	100	100	100	100	100	100	--	100

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

[0.00] for deposition: The deposition was 0 mmol/m² 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%)

CHAPTER 4

Dry Deposition Monitoring

(Air Concentration)

4. Dry Deposition (Air Concentration) Monitoring

4.1 Method

Automatic monitoring methods and filter pack method were mainly used to implement the dry deposition (air concentration) monitoring in 2009. The monitoring items were selected, taking into account priority of the chemical species defined in the “Strategy Paper for Future Direction of Dry Deposition Monitoring of EANET (Second Edition, 2005)”.

4.1.1 Automatic Monitoring Method

In the “Strategy Paper for Future Direction of Dry Deposition Monitoring of EANET”, it was mentioned that the first priority chemical species for dry deposition monitoring, namely SO₂, NO, NO₂ (urban), O₃, and PM could be monitored by use of automatic monitoring methods. The quality assurance/quality control (QA/QC) program for monitoring SO₂, NO, NO₂ (urban), O₃, and PM using automatic monitors is described in the “QA/QC Program for the Air Concentration Monitoring in East Asia (2001)”.

4.1.2 Filter Pack Method

The filter pack method could be used to determine gaseous substances (SO₂, HNO₃, HCl, NH₃) and particulate matter components (SO₄²⁻, NO₃⁻, Cl⁻, NH₄⁺, Na⁺, K⁺, Mg²⁺, Ca²⁺).

The “Technical Document of Filter Pack Monitoring in East Asia” was endorsed at the Third Session of the Science Advisory Committee (SAC3) held in November 2003. The recommended monitoring method by means of the four-stage filter pack was explained in the technical document. Basic specification of the four-stage filter pack method is shown in [Fig. 4.1](#).

4.1.3 Monitoring Sites

The measurement methods and parameters in each monitoring site for dry deposition (air concentration) monitoring in 2009 are shown in [Table 4.1](#). Automatic monitors were used by China, Japan, Republic of Korea, Russia and Thailand. The individual methods adopted at each site are shown in [Table 4.2](#).

The filter pack methods were used by China, Indonesia, Japan, Malaysia, Mongolia, Philippines, Republic of Korea, Russia, Thailand and Vietnam in 2009.

Preparation of filter pack

Stage	Specification of filter	Collected species
1 st (F0)	PTFE filter (pore size: 0.8 μm , diameter: 47 mm)	Aerosols
2 nd (F1)	Polyamide filter (pore size: 0.45 μm , diameter: 47 mm)	HNO_3 , SO_2 , HCl , NH_3
3 rd (F2)	Impregnated cellulose filter Solution: 6% K_2CO_3 + 2% glycerin	SO_2 , HCl
4 th (F3)	Impregnated cellulose filter Solution: 5% H_3PO_4 + 2% glycerin	NH_3



Sampling on site

Air flow rate: approximately 1 liter/minute
Sampling period: one week or two weeks



Pretreatment of filter pack

Stage	Solvent	Extracted species
F0	Extracted with 20 mL of deionized water	SO_4^{2-} , NO_3^- , Cl^- , NH_4^+ , Na^+ , K^+ , Ca^{2+} , Mg^{2+}
F1	Extracted with 20 mL of deionized water	SO_4^{2-} , NO_3^- , Cl^- , NH_4^+
F2	Extracted with 20mL of 0.05% H_2O_2	SO_4^{2-} , Cl^-
F3	Extracted with 20mL of deionized water	NH_4^+



Chemical analysis

By Ion chromatography or other suitable analytical methods

Fig. 4.1 Specification of four-stage filter pack method

Table 4.1 Sampling Method and Parameter for Dry Deposition (Air Concentration) Monitoring in 2009

Country	Name of sites	Characteristics of sites	Method	Parameter
China	Chongqing	Rural	AT	SO ₂ , NO, NO _x *, PM ₁₀
	- Jinyunshan			
	Xiamen	Urban	AT	SO ₂ , NO ₂ , PM ₁₀
	- Hongwen		FP	HNO ₃ , HCl, NH ₃ , PMC
	Zhuhai			
	- Xiang Zhou	Urban	AT	SO ₂ , NO ₂ , PM ₁₀
Indonesia	Jakarta	Urban	PS	SO ₂ , NO ₂
	Serpong	Rural	FP	SO ₂ , HNO ₃ , HCl, NH ₃ , PMC
	Kototabang	Remote	PS	SO ₂ , NO ₂
	Bandung	Urban	PS	SO ₂ , NO ₂
Japan	Rishiri	Remote	AT	SO ₂ , NO, NO _x *, O ₃ , PM _{10/2.5}
			FP	HNO ₃ , HCl, NH ₃ , PMC
	Ochiichi	Remote	AT	SO ₂ , NO, NO _x *, O ₃ , PM _{10/2.5}
			FP	HNO ₃ , HCl, NH ₃ , PMC
	Tappi	Remote	AT	SO ₂ , NO, NO _x *, O ₃ , PM ₁₀
			FP	HNO ₃ , HCl, NH ₃ , PMC
	Sado-seki	Remote	AT	SO ₂ , NO, NO _x *, O ₃ , PM ₁₀
			FP	HNO ₃ , HCl, NH ₃ , PMC
	Happo	Remote	AT	SO ₂ , NO, NO _x *, O ₃ , PM ₁₀
			FP	HNO ₃ , HCl, NH ₃ , PMC
	Ijira	Rural	AT	SO ₂ , NO, NO _x *, O ₃ , PM ₁₀
			FP	HNO ₃ , HCl, NH ₃ , PMC
	Oki	Remote	AT	SO ₂ , NO, NO _x *, O ₃ , PM _{10/2.5}
			FP	HNO ₃ , HCl, NH ₃ , PMC
	Banryu	Urban	AT	SO ₂ , NO, NO ₂ , NO _x , O ₃ , PM ₁₀
			FP	HNO ₃ , HCl, NH ₃ , PMC
	Yusuhara	Remote	AT	SO ₂ , NO, NO _x *, O ₃ , PM ₁₀
			FP	HNO ₃ , HCl, NH ₃ , PMC
	Hedo	Remote	AT	SO ₂ , NO, NO _x *, O ₃ , PM ₁₀
			FP	HNO ₃ , HCl, NH ₃ , PMC
	Ogasawara	Remote	AT	SO ₂ , NO, NO _x *, O ₃ , PM ₁₀
			FP	HNO ₃ , HCl, NH ₃ , PMC
	Tokyo	Urban	FP	SO ₂ , HNO ₃ , HCl, NH ₃ , PMC
Malaysia	Tanah Rata	Remote	FP	SO ₂ , HNO ₃ , HCl, NH ₃ , PMC
	Petaling Jaya	Urban	FP	SO ₂ , HNO ₃ , HCl, NH ₃ , PMC
	Danum Valley	Remote	FP	SO ₂ , HNO ₃ , HCl, NH ₃ , PMC
Mongolia	Ulaanbaatar	Urban	FP	SO ₂ , HNO ₃ , HCl, NH ₃ , PMC
	Terelj	Remote	FP	SO ₂ , HNO ₃ , HCl, NH ₃ , PMC
Philippines	Mt. Sto. Tomas	Remote	FP	SO ₂ , HNO ₃ , HCl, NH ₃ , PMC

**Table 4.1 Sampling Method and Parameter for Dry Deposition (Air Concentration)
Monitoring in 2009 (continued)**

Country	Name of sites	Characteristics of sites	Method	Parameter
Republic of Korea	Kanghwa	Rural	AT	SO ₂ , NO ₂ , O ₃ , PM ₁₀
	Cheju (Kosan)	Remote	FP	HNO ₃ , HCl, NH ₃ , PMC in PM _{2.5}
			AT	SO ₂ , NO ₂ , O ₃ , PM ₁₀
	Imsil	Rural	FP	HNO ₃ , HCl, NH ₃ , PMC in PM _{2.5}
			AT	SO ₂ , NO ₂ , O ₃ , PM ₁₀
Russia	Mondy	Remote	AT	O ₃
			FP	SO ₂ , HNO ₃ , HCl, NH ₃ , PMC
	Listvyanka	Rural	FP	SO ₂ , HNO ₃ , HCl, NH ₃ , PMC
	Irkutsk	Urban	FP	SO ₂ , HNO ₃ , HCl, NH ₃ , PMC
	Primorskaya	Rural	FP	SO ₂ , HNO ₃ , HCl, NH ₃ , PMC
Thailand	Bangkok	Urban	AT	SO ₂ , NO, NO ₂ , NO _x , O ₃ , PM ₁₀
			FP	HNO ₃ , HCl, NH ₃ , PMC
	Samutprakarn	Urban	AT	SO ₂ , NO, NO ₂ , NO _x , O ₃ , PM ₁₀
	Patumthani	Rural	FP	SO ₂ , HNO ₃ , HCl, NH ₃ , PMC
	Khanchanaburi (Vachiralongkorn Dam)	Remote	AT	SO ₂ , NO, NO _x [*] , O ₃ , PM ₁₀
			FP	HNO ₃ , HCl, NH ₃ , PMC
	Chiang Mai (Mae Hia)	Rural	AT	SO ₂ , NO, NO _x [*] , O ₃ , PM ₁₀
	Nakhon Ratchasima	Remote	FP	HNO ₃ , HCl, NH ₃ , PMC
Vietnam	Hanoi	Urban	FP	SO ₂ , HNO ₃ , HCl, NH ₃ , PMC
	Hoa Binh	Rural	FP	SO ₂ , HNO ₃ , HCl, NH ₃ , PMC

(Note 1) AT: Automatic monitor, PS: Passive sampler, FP: Filter pack, PMC: particulate matter components.

(Note 2) NO_x^{*}: NO_x measured by CLD in remote or rural sites.

(Note 3) Purposely monitor for 2 weeks and 4 times per year at Khanchanaburi (Vachiralongkorn Dam) due to the site located in remote area.

Table 4.2 Methods of automatic monitors in 2009

Country	Sites	Parameter			
		SO ₂	NO _x	O ₃	PM ₁₀ (PM _{2.5})
China	Jinyunshan	UVF	CLD	–	β-ray
	Hongwen	DOAS	DOAS	–	TEOM
	Xianzhou	DOAS	DOAS	–	TEOM
Japan	Rishiri	UVF	CLD	UVP	β-ray (TEOM)
	Ochiishi	UVF	CLD	UVP	β-ray (β-ray)
	Tappi	UVF	CLD	UVP	TEOM
	Sado-seki	UVF	CLD	UVP	TEOM
	Happo	UVF	CLD	UVP	β-ray
	Ijira	UVF	CLD	UVP	TEOM
	Oki	UVF	CLD	UVP	TEOM (TEOM)
	Banryu	UVF	CLD	UVP	TEOM
	Yusuhara	UVF	CLD	UVP	β-ray
	Hedo	UVF	CLD	UVP	β-ray
	Ogasawara	UVF	CLD	UVP	β-ray
Republic of Korea	Kanghwa	UVF	CLD	UVP	β-ray
	Cheju (Kosan)	UVF	CLD	UVP	β-ray
	Imsil	UVF	CLD	UVP	β-ray
Russia	Mondy	–	–	UVP	–
Thailand	Bangkok	UVF	CLD	UVP	TEOM
	Samutprakarn	UVF	CLD	UVP	–
	Khanchanaburi	UVF	CLD	UVP	β-ray
	Chiang Mai	UVF	CLD	UVP	TEOM

(Note) UVF: Ultraviolet fluorescent method, CLD: Chemiluminescence detection method, UVP: Ultraviolet photometric method, β-ray: β-ray absorption method, TEOM: Tapered element oscillating microbalance method, DOAS: Differential optical absorption spectroscopy method.

4.2 Results of Monitoring

Monitoring data were summarized into monthly averaged values accompanied with maximum, minimum and data completeness for a month. For the calculations of monthly averages, non-detected data were regarded as zero. Summarized data are presented in [Table 4.3](#) through [Table 4.20](#).

In these tables, terms and abbreviations indicate the followings:

Mean	:	monthly or annual arithmetic average values,
Max-d	:	maximum values of daily data,
Min-d	:	minimum values of daily data,
Max-10d	:	maximum values of 10 days term data,
Min-10d	:	minimum values of 10 days term data,
Max-w	:	maximum values of weekly data,
Min-w	:	minimum values of weekly data,
Max-2w	:	maximum values of biweekly data,
Min-2w	:	minimum values of biweekly data,
Max-m	:	maximum values of monthly data,
Min-m	:	minimum values of monthly data,
%	:	monthly or annual percentages of period of available data,

For information on long-term trends of air concentrations, annual averages of gases and particulate matter concentrations from 2000 to 2009 are summarized in [Table 4.21](#) through [Table 4.38](#).

In the [Table 4.3](#) through [Table 4.38](#), ppb unit was used for gases and $\mu\text{g}/\text{m}^3$ unit was used for particulate matter. Approximate conversion ratios from ppb to $\mu\text{g}/\text{m}^3$, which are based on 20 °C, 1 atm, were shown in [Table 4.39](#).

Detection limits for individual species depend on specification of instrument or procedures of sampling and analysis. NC set up expedient detection limits as shown in [Table 4.40](#) taking into account methods adopted by each country. Data under the detection limit were treated as “N.D.” in the tables. Regarding the particulate matter components measured by filter pack method, the detection limits for particulate matter components were determined as $0.01 \mu\text{g}/\text{m}^3$ for sampled air volume of 20.16 m^3 considering the value of 3σ , where σ is the standard deviation of blank values obtained at Japan sites since 2003.

Table 4.3 SO₂

Unit : ppb			2009												Annual
Country	Site		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
China	Jinyunshan	Mean	19.1	12.3	15.7	7.0	5.3	5.5	9.5	9.8	12.3	10.8	20.4	22.3	12.5
		%	100	97	100	100	100	100	100	100	100	100	100	100	100
		Max-d	44.3	33.4	43.1	18.8	10.1	14.6	20.3	19.9	25.1	24.4	39.0	73.9	73.9
		Min-d	6.0	2.6	2.6	1.5	0.8	0.8	2.6	2.6	1.9	1.9	6.8	7.5	0.8
	Hongwen	Mean	8.3	7.0	7.5	6.3	6.1	3.0	2.5	3.8	3.3	3.6	3.5	7.4	5.2
		%	100	97	100	100	100	100	100	100	100	100	100	100	100
		Max-d	16.1	15.0	14.3	10.5	10.5	8.3	6.8	9.0	9.0	7.5	7.1	18.0	18.0
		Min-d	1.5	2.6	2.6	2.3	1.9	0.4	0.4	0.4	0.4	0.8	0.8	2.3	0.4
	Xiang Zhou	Mean	9.2	4.5	9.1	5.6	3.2	2.9	2.7	4.2	4.7	7.0	8.8	9.2	5.9
		%	100	97	100	100	100	100	100	100	100	100	100	100	100
		Max-d	21.4	19.1	20.6	14.3	8.3	11.3	7.5	10.1	15.4	13.5	18.4	17.6	21.4
		Min-d	1.9	1.9	3.4	1.9	1.5	1.1	1.1	1.5	1.9	2.6	1.9	2.3	1.1
Indonesia	Jakarta	Mean	7.1	5.3	10.5	12.2	9.9	7.9	10.1	5.4	6.4	6.2	7.0	9.6	8.3
		%	100	100	100	100	100	100	100	80	60	100	100	100	97
		Max-w	8.7	11.1	21.0	28.5	15.2	12.8	15.7	7.8	9.7	6.7	8.8	13.2	28.5
		Min-w	5.4	0.9	4.5	5.8	5.4	3.0	6.3	3.7	4.7	5.8	5.4	4.5	0.9
	Serpong	Mean	0.8	0.4	0.5	0.8	1.3	1.1	1.8	2.6	1.7	1.0	0.5	0.5	1.1
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-2w	1.1	0.4	0.7	0.9	1.7	1.3	1.8	2.9	2.0	1.2	0.5	0.7	2.9
		Min-2w	0.4	0.4	0.3	0.6	0.9	0.8	1.8	2.2	1.4	0.8	0.4	0.4	0.3
	Kototabang	Mean	7.3	10.0	3.5	5.8	5.2	6.8	3.2	8.0	22.7	5.9	11.8	9.7	7.9
		%	100	100	100	75	47	100	100	100	74	80	100	100	90
		Max-w	8.4	23.6	6.0	6.9	5.4	10.2	5.5	17.4	29.1	7.9	19.7	11.1	29.1
		Min-w	6.1	4.3	2.2	4.8	4.9	3.9	N.D.	2.6	16.2	3.5	8.5	8.1	N.D.
	Bandung	Mean	2.4	2.4	3.3	3.7	4.4	5.3	3.4	12.6	2.4	5.6	5.1	5.6	4.7
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-m	2.4	2.4	3.3	3.7	4.4	5.3	3.4	12.6	2.4	5.6	5.1	5.6	12.6
		Min-m	2.4	2.4	3.3	3.7	4.4	5.3	3.4	12.6	2.4	5.6	5.1	5.6	2.4
Japan	Rishiri	Mean	0.5	0.4	0.3	0.1	0.2	0.1	N.D.	N.D.	N.D.	N.D.	0.5	0.8	0.3
		%	98	95	98	98	98	82	32	96	98	98	99	98	91
		Max-d	2.6	1.4	1.0	0.3	1.0	0.4	N.D.	0.3	0.2	0.3	2.6	7.8	7.8
		Min-d	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
	Ochiishi	Mean	0.3	0.4	0.2	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.4	0.2
		%	97	100	99	97	100	100	100	100	100	100	100	100	99
		Max-d	1.3	0.9	0.7	0.4	0.6	0.7	0.8	0.5	0.7	0.5	0.9	4.6	4.6
		Min-d	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
	Tappi	Mean	0.4	0.5	0.3	0.2	0.2	N.D.	N.D.	N.D.	0.1	0.1	0.3	0.5	0.2
		%	98	95	97	98	98	90	99	98	90	90	95	91	95
		Max-d	2.2	1.6	1.2	0.4	0.4	0.2	0.1	0.2	0.3	0.3	0.9	3.2	3.2
		Min-d	0.1	0.1	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	0.1	N.D.
	Sado-seki	Mean	0.6	0.6	0.5	0.5	0.4	0.6	N.D.	0.3	0.1	0.3	0.3	0.5	0.4
		%	99	99	99	98	99	89	98	15	98	98	98	98	90
		Max-d	3.1	2.4	1.7	2.0	2.3	3.9	0.3	0.5	0.7	1.1	0.7	1.6	3.9
		Min-d	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
	Happo	Mean	0.6	0.6	0.4	0.6	0.9	0.5	N.D.	0.4	0.1	0.3	0.1	0.2	0.4
		%	93	99	99	99	99	88	98	98	98	98	98	98	97
		Max-d	2.4	2.4	1.7	2.2	3.7	3.8	0.2	5.9	1.1	1.1	0.6	1.3	5.9
		Min-d	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
	Ijira	Mean	N.D.	0.2	0.2	0.5	0.3	0.3	0.1	0.1	0.1	0.1	0.1	N.D.	0.2
		%	98	99	99	99	99	71	98	99	99	99	91	98	96
		Max-d	0.5	0.9	0.5	2.6	1.2	1.3	0.4	0.6	0.5	0.5	0.6	0.3	2.6
		Min-d	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
	Oki	Mean	0.9	1.0	0.6	0.9	0.6	0.6	0.2	0.3	0.2	0.6	0.4	0.8	0.6
		%	97	95	96	95	97	86	94	98	98	98	98	90	95
		Max-d	5.2	3.7	2.3	3.0	2.2	2.8	1.0	2.2	0.7	1.7	1.3	2.8	5.2
		Min-d	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
	Banryu	Mean	1.1	1.1	0.7	0.8	0.6	0.7	0.3	0.3	0.3	0.5	0.5	0.8	0.6
		%	93	94	93	97	98	76	98	98	98	98	98	98	95
		Max-d	4.2	3.2	2.5	2.6	1.7	2.0	1.4	1.9	0.8	1.8	1.6	2.7	4.2
		Min-d	N.D.	0.3	N.D.	0.1	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
	Yusuhara	Mean	1.3	1.2	0.8	1.0	0.8	0.7	0.8	0.3	0.5	0.9	0.7	1.3	0.9
		%	97	98	96	98	98	98	98	38	89	98	98	98	92
		Max-d	5.4	4.2	2.8	2.9	5.7	3.6	2.3	0.4	3.0	3.6	2.6	4.4	5.7
		Min-d	0.2	0.2	0.1	N.D.	N.D.	N.D.	0.1	0.1	N.D.	N.D.	N.D.	0.3	N.D.
	Hedo	Mean	0.5	0.3	0.2	0.3	0.2	N.D.	N.D.	N.D.	0.2	0.3	0.2	0.5	0.2
		%	98	77	97	98	98	96	97	97	97	98	96	98	96
		Max-d	3.1	1.2	1.5	1.5	1.0	0.5	0.1	0.8	2.6	1.6	0.7	2.3	3.1
		Min-d	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
	Ogasawara	Mean	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
		%	97	95	95	95	95	66	96	97	95	97	96	97	93
		Max-d	0.6	0.5	0.7	0.3	0.5	0.1	N.D.	0.1	N.D.	0.1	0.1	0.3	0.7
		Min-d	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
	Tokyo	Mean	1.6	1.9	1.8	2.2	3.0	2.5	2.0	2.8	1.6	1.5	1.4	1.4	2.0
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-2w	1.7	2.2	1.8	3.1	4.0	2.7	2.2	3.2	1.8	1.8	1.5	1.5	4.0
		Min-2w	1.6	1.6	1.7	1.3	2.0	2.2	1.8	2.5	1.3	1.2	1.2	1.3	1.2

Table 4.3 SO₂

Unit : ppb			2009												Annual
Country	Site		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
Malaysia	Tanah Rata	Mean	N.D.	N.D.	N.D.	N.D.	0.1	0.1	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-w	N.D.	0.1	N.D.	N.D.	0.3	0.2	0.1	N.D.	N.D.	N.D.	N.D.	0.2	0.3
		Min-w	N.D.	N.D.	N.D.	N.D.	N.D.	0.1	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
	Petaling Jaya	Mean	2.0	2.0	1.7	1.7	2.2	2.2	1.7	1.3	1.5	1.5	1.4	1.8	1.8
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-w	2.7	3.0	3.0	2.0	2.8	2.6	2.6	1.7	2.0	2.0	1.7	2.1	3.0
		Min-w	1.2	0.8	0.9	1.1	1.4	1.7	1.0	0.8	1.1	1.2	0.9	1.7	0.8
	Danum Valley	Mean	N.D.	N.D.	N.D.	N.D.	N.D.	0.1	0.1	0.2	0.2	0.2	0.1	0.2	0.1
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-2w	N.D.	0.1	N.D.	N.D.	N.D.	0.1	0.1	0.2	0.4	0.3	0.2	0.2	0.4
		Min-2w	N.D.	N.D.	N.D.	N.D.	N.D.	0.1	N.D.	0.1	N.D.	N.D.	N.D.	0.1	N.D.
Mongolia	Ulaanbaatar	Mean	-	-	-	2.4	1.7	0.6	1.1	2.2	1.0	3.5	6.7	17.6	4.3
		%	0	0	0	80	100	100	100	100	100	100	100	100	75
		Max-w	-	-	-	4.2	3.0	1.1	1.5	2.8	2.0	5.9	10.9	27.4	27.4
		Min-w	-	-	-	0.8	0.7	0.1	0.7	1.7	0.4	1.2	0.5	12.9	0.1
	Terelj	Mean	3.2	1.4	0.9	0.4	0.4	0.2	0.1	0.1	0.2	0.5	1.3	0.7	0.7
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-2w	4.9	1.4	1.1	0.4	0.4	0.4	0.1	0.2	0.3	0.5	1.8	1.3	4.9
		Min-2w	1.5	1.4	0.7	0.3	0.3	0.1	N.D.	N.D.	N.D.	0.4	0.9	0.2	N.D.
	Mt. Sto. Tomas	Mean	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	0.1	0.1	N.D.	N.D.	N.D.	N.D.
		%	17	100	100	100	100	100	100	100	100	100	100	100	92
Republic of Korea	Kanghwa	Max-w	N.D.	N.D.	0.1	N.D.	0.1	N.D.	N.D.	0.1	0.2	N.D.	N.D.	N.D.	0.2
		Min-w	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
		Mean	5.3	2.9	4.0	3.5	2.6	3.0	1.9	1.8	2.7	2.4	4.3	4.4	3.2
		%	98	98	100	99	98	100	100	99	100	99	98	98	99
	Cheju (Kosan)	Max-d	7.4	4.6	5.4	11.7	4.9	4.4	3.5	2.7	4.1	4.4	9.0	9.3	11.7
		Min-d	2.7	1.8	3.1	0.6	0.8	2.2	1.1	0.7	1.2	0.9	1.1	2.4	0.6
		Mean	1.6	1.7	2.0	3.4	3.4	0.9	1.4	2.7	3.0	4.6	3.3	4.9	2.7
		%	100	98	78	100	80	99	98	100	100	97	97	99	96
	Imsil	Max-d	3.5	2.5	4.8	5.3	3.8	2.0	2.2	3.1	3.4	6.7	4.0	9.4	9.4
		Min-d	0.7	0.7	0.3	2.6	2.8	0.2	0.8	2.2	2.3	3.3	2.8	3.5	0.2
		Mean	-	1.8	1.9	1.2	0.7	1.3	0.6	0.9	1.3	1.8	1.5	2.3	1.4
		%	0	90	96	100	100	99	100	99	99	99	97	91	89
		Max-d	-	3.0	3.2	4.1	1.2	4.0	0.7	1.5	1.8	3.7	2.1	4.2	4.2
		Min-d	-	0.8	0.7	0.3	0.0	0.5	0.5	0.8	0.9	1.0	0.9	1.6	0.0
	Mondy	Mean	0.4	0.3	-	-	-	N.D.	-	N.D.	N.D.	0.2	0.1	0.1	0.1
		%	88	100	0	0	0	100	0	100	100	100	100	100	67
		Max-m	0.4	0.3	-	-	-	N.D.	-	N.D.	N.D.	0.2	0.1	0.1	0.4
		Min-m	0.4	0.3	-	-	-	N.D.	-	N.D.	N.D.	0.2	0.1	0.1	N.D.
	Listvianka	Mean	8.3	8.8	5.6	3.6	2.2	1.3	0.7	0.7	0.6	1.8	7.8	7.5	4.0
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-w	14.6	29.4	10.8	4.9	2.6	1.6	1.2	1.5	0.9	2.9	14.9	13.0	29.4
		Min-w	1.3	1.3	3.0	2.3	1.5	0.5	0.4	0.2	0.2	0.7	4.3	3.0	0.2
	Irkutsk	Mean	1.5	12.9	6.7	3.1	2.5	0.7	0.4	1.9	0.5	0.8	8.8	17.5	4.6
		%	100	100	100	100	100	100	100	100	100	100	83	100	98
		Max-w	2.2	15.0	12.0	5.1	3.5	1.0	0.9	5.0	1.0	2.5	11.8	21.0	21.0
		Min-w	0.9	9.2	1.2	2.3	1.3	0.3	N.D.	0.6	0.1	0.2	5.4	10.2	N.D.
	Primorskaya	Mean	2.3	2.5	1.3	0.9	0.6	0.3	0.2	0.3	0.3	0.4	1.3	1.9	1.0
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-2w	2.9	2.8	1.4	1.3	0.7	0.3	0.3	0.4	0.5	0.8	1.6	2.0	2.9
		Min-2w	1.7	2.1	1.2	0.6	0.6	0.3	0.2	0.1	0.2	N.D.	1.0	1.8	N.D.
Thailand	Bangkok	Mean	2.1	3.2	1.6	1.2	1.6	1.5	1.3	1.5	1.5	1.8	2.4	2.7	1.9
		%	19	97	94	53	94	93	100	87	100	97	97	100	86
		Max-d	3.1	12.0	2.8	2.7	4.6	3.0	3.3	2.9	3.1	4.0	6.0	5.9	12.0
		Min-d	1.1	1.3	0.5	0.2	0.2	0.2	0.4	0.7	0.7	0.3	0.9	0.7	0.2
	Samutprakarn	Mean	3.6	4.6	4.2	5.7	4.5	6.2	5.3	5.4	4.4	4.6	4.4	5.3	4.9
		%	94	93	87	100	97	90	100	84	93	100	97	97	95
		Max-d	6.9	7.6	8.8	10.2	8.8	8.9	9.4	10.2	8.5	8.4	12.5	9.5	12.5
		Min-d	1.9	2.3	0.4	1.5	0.7	2.2	2.3	0.6	1.9	0.8	0.9	2.5	0.4
	Patumthani	Mean	0.9	1.5	1.2	1.7	1.4	1.0	0.9	0.8	1.1	1.1	0.9	-	1.1
		%	100	100	100	100	68	63	72	100	100	100	100	0	83
		Max-10d	1.0	1.8	1.3	2.9	1.7	1.1	1.0	0.9	1.7	1.2	1.3	-	2.9
		Min-10d	0.8	1.0	1.0	0.9	1.2	0.9	0.8	0.4	0.7	1.0	0.5	-	0.4
	Khanchanaburi (Vachiralongkorn Dam)	Mean	-	-	N.D.	-	-	-	0.4	-	-	-	2.6	-	1.2
		%	0	0	13	0	0	0	58	0	0	0	47	0	10
		Max-d	-	-	N.D.	-	-	-	1.0	-	-	-	12.9	-	12.9
		Min-d	-	-	N.D.	-	-	-	N.D.	-	-	-	0.4	-	N.D.
	Chiangmai (Mae Hia)	Mean	0.5	1.0	1.6	0.5	0.2	0.3	0.3	0.8	0.3	0.5	0.4	0.6	0.6
		%	65	45	74	70	32	73	48	32	47	42	43	61	53
		Max-d	1.3	2.7	3.2	1.4	0.7	1.7	1.1	1.7	0.7	1.3	0.8	1.3	3.2
		Min-d	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	0.2	N.D.	0.1	0.2	N.D.	N.D.
	Nakhon Ratchasima	Mean	0.1	0.2	0.2	0.1	0.2	0.1	0.1	N.D.	0.2	0.1	0.2	0.2	0.2
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-d	0.2	0.4	0.3	0.2	0.2	0.2	0.1	0.1	0.2	0.2	0.2	0.4	0.4
		Min-d	N.D.	N.D.	0.1	N.D.	0.1	N.D.	0.1	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.

Table 4.3 SO₂

Unit : ppb			2009												Annual
Country	Site		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
Viet Nam	Ha Noi	Mean	0.8	1.0	0.8	1.1	1.0	1.2	1.4	1.8	1.8	1.5	1.8	1.2	1.3
		%	100	100	100	100	100	100	100	100	75	100	100	100	98
		Max-w	1.0	1.1	0.9	2.0	1.2	1.6	3.2	3.9	2.0	1.9	2.8	1.3	3.9
		Min-w	0.7	0.8	0.8	0.8	0.9	0.9	0.6	0.7	1.7	1.1	1.3	1.0	0.6
	Hoa Binh	Mean	0.8	0.8	0.7	2.2	1.0	0.3	0.6	0.6	0.5	0.6	1.3	1.3	0.9
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-w	1.0	0.9	0.9	6.9	1.8	0.4	1.5	0.8	1.0	1.4	2.3	2.6	6.9
		Min-w	0.7	0.7	0.5	0.6	0.5	0.2	0.2	0.4	0.3	N.D.	0.7	0.6	N.D.

Mean : monthly or annual arithmetic average values

Max-d : maximum values of daily data

Min-d : minimum values of daily data

Max-10d : maximum values of 10-day interval data

Min-10d : minimum values of 10-day interval data

Max-w : maximum values of weekly data

Min-w : minimum values of weekly data

Max-2w : maximum values of biweekly data

Min-2w : minimum values of biweekly data

Max-m : maximum values of monthly data

Min-m : minimum values of monthly data

% : monthly or annual percentages of period of available data

Table 4.4 HNO₃

Unit : ppb			2009												Annual
Country	Site		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
China	Hongwen	Mean	0.7	0.9	0.7	1.1	2.0	1.7	0.2	1.8	1.0	1.1	0.6	0.6	1.1
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-w	0.9	1.0	1.4	1.6	3.2	2.7	0.4	2.9	1.7	2.1	1.1	1.0	3.2
		Min-w	0.5	0.7	0.3	0.2	1.0	0.4	N.D.	0.4	0.5	0.5	N.D.	0.3	N.D.
Indonesia	Serpong	Mean	N.D.	0.1	0.1	0.3	0.5	0.2	0.3	0.4	0.4	0.6	0.1	N.D.	0.3
		%	100	100	100	100	100	100	100	100	100	100	100	100	
		Max-2w	0.1	0.1	0.3	0.5	0.7	0.2	0.3	0.4	0.4	1.4	0.2	0.1	1.4
		Min-2w	N.D.	0.1	N.D.	0.2	0.3	0.2	0.3	0.4	0.3	0.2	N.D.	N.D.	N.D.
Japan	Rishiri	Mean	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
		%	100	100	100	100	100	100	100	100	100	100	50	67	92
		Max-2w	N.D.	N.D.	N.D.	N.D.	N.D.	0.1	N.D.	0.2	N.D.	N.D.	N.D.	N.D.	0.2
		Min-2w	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
	Ochiishi	Mean	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
		%	100	100	100	100	100	100	100	100	100	69	100	100	96
		Max-2w	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	0.1	N.D.	N.D.	N.D.	N.D.	0.1
		Min-2w	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
	Tappi	Mean	N.D.	N.D.	N.D.	0.1	0.2	0.2	0.1	0.1	N.D.	N.D.	N.D.	N.D.	0.1
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-2w	N.D.	0.1	0.1	0.1	0.3	0.3	0.2	0.2	N.D.	N.D.	N.D.	N.D.	0.3
		Min-2w	N.D.	N.D.	N.D.	0.1	N.D.	N.D.	N.D.	0.1	N.D.	N.D.	N.D.	N.D.	N.D.
	Sado-seki	Mean	N.D.	N.D.	N.D.	0.4	0.3	0.5	0.2	0.4	0.1	0.1	0.1	N.D.	0.2
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-2w	0.1	0.1	0.1	0.4	0.4	0.7	0.2	0.5	0.1	0.1	0.3	0.1	0.7
		Min-2w	N.D.	N.D.	N.D.	0.3	0.2	0.3	0.2	0.3	0.1	N.D.	N.D.	N.D.	N.D.
	Happo	Mean	-	-	N.D.	N.D.	0.1	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
		%	0	0	50	44	100	100	100	100	100	100	100	100	77
		Max-2w	-	-	N.D.	N.D.	0.2	0.1	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	0.2
		Min-2w	-	-	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
	Ijira	Mean	0.1	0.1	0.1	0.5	0.4	0.6	0.3	0.6	0.4	0.2	0.1	N.D.	0.3
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-2w	0.1	0.2	0.2	0.6	0.4	0.7	0.3	0.7	0.5	0.3	0.2	N.D.	0.7
		Min-2w	N.D.	N.D.	0.1	0.4	0.4	0.5	0.2	0.4	0.3	0.2	N.D.	N.D.	N.D.
	Oki	Mean	N.D.	N.D.	N.D.	0.5	0.2	0.2	0.1	0.2	N.D.	0.1	N.D.	N.D.	0.1
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-2w	N.D.	0.2	0.1	0.8	0.4	0.4	0.2	0.3	N.D.	0.1	N.D.	0.1	0.8
		Min-2w	N.D.	N.D.	N.D.	0.1	0.1	N.D.	N.D.	0.1	N.D.	N.D.	N.D.	N.D.	N.D.
	Banryu	Mean	0.1	0.2	0.1	0.4	0.5	0.7	0.3	0.4	0.2	0.2	0.2	0.2	0.3
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-2w	0.2	0.3	0.1	0.7	0.7	1.0	0.3	0.5	0.2	0.3	0.3	0.2	1.0
		Min-2w	N.D.	N.D.	0.1	0.2	0.3	0.3	0.2	0.3	0.1	0.2	N.D.	N.D.	N.D.
	Yusuhara	Mean	0.1	0.3	0.2	0.7	0.6	0.5	0.2	0.2	0.2	0.2	0.3	0.2	0.3
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-2w	0.2	0.6	0.2	0.9	0.6	0.7	0.4	0.3	0.4	0.2	0.4	0.3	0.9
		Min-2w	N.D.	N.D.	0.2	0.5	0.5	0.4	N.D.	0.2	N.D.	0.1	0.1	N.D.	N.D.
	Hedo	Mean	0.2	0.1	N.D.	0.1	0.2	0.1	N.D.	N.D.	N.D.	0.1	N.D.	0.1	0.1
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-2w	0.2	0.2	N.D.	0.1	0.2	0.2	N.D.	N.D.	0.1	0.2	N.D.	0.1	0.2
		Min-2w	0.1	N.D.	N.D.	0.1	0.1	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
	Ogasawara	Mean	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
		%	100	100	100	100	100	100	100	100	50	100	44	100	92
		Max-2w	N.D.	N.D.	N.D.	N.D.	0.1	0.2	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	0.2
		Min-2w	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
	Tokyo	Mean	0.2	0.2	0.2	0.8	1.3	1.9	0.7	1.2	0.7	0.8	0.2	0.6	0.8
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-2w	0.2	0.3	0.3	1.3	1.7	2.3	0.8	1.5	0.7	1.1	0.3	1.1	2.3
		Min-2w	0.1	0.2	0.2	0.3	0.9	1.1	0.7	0.8	0.6	0.5	0.2	0.2	0.1
Malaysia	Tanah Rata	Mean	N.D.	0.2	N.D.	N.D.	0.2	0.4	0.3	N.D.	0.2	N.D.	N.D.	N.D.	0.1
		%	100	100	100	100	100	100	100	100	100	100	100	100	
		Max-w	N.D.	0.3	N.D.	0.1	0.3	0.5	0.3	0.2	0.2	0.2	N.D.	N.D.	0.5
		Min-w	N.D.	N.D.	N.D.	N.D.	N.D.	0.2	0.1	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
	Petaling Jaya	Mean	1.0	1.1	1.1	0.9	1.0	1.6	0.9	0.9	1.2	0.9	0.8	1.0	1.0
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-w	1.5	2.0	2.5	1.5	2.0	3.2	1.4	1.9	1.9	1.4	1.2	1.7	3.2
		Min-w	0.3	0.5	0.2	0.4	0.6	0.4	N.D.	0.2	0.7	0.6	0.3	0.4	N.D.
	Danum Valley	Mean	N.D.	0.2	N.D.	0.2	0.2	0.1	0.2	0.3	0.5	0.3	0.1	0.3	0.2
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-2w	N.D.	0.3	N.D.	0.3	0.2	0.2	0.2	0.4	0.8	0.3	0.2	0.3	0.8
		Min-2w	N.D.	N.D.	N.D.	N.D.	0.2	N.D.	N.D.	0.2	0.2	0.2	N.D.	0.2	N.D.
Mongolia	Ulaanbaatar	Mean	-	-	-	0.1	0.2	N.D.	0.1	0.1	N.D.	0.1	0.3	0.6	0.2
		%	0	0	0	80	100	100	100	100	100	100	100	75	
		Max-w	-	-	-	0.2	0.2	0.2	0.2	0.1	0.2	0.1	0.9	1.4	1.4
		Min-w	-	-	-	N.D.	0.1	N.D.	N.D.	0.1	N.D.	N.D.	N.D.	0.1	N.D.
	Terelj	Mean	0.1	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-2w	0.2	N.D.	N.D.	N.D.	0.1	0.1	N.D.	0.1	N.D.	N.D.	N.D.	N.D.	0.2
		Min-2w	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.

Table 4.4 HNO₃

Unit : ppb			2009												Annual
Country	Site		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
Philippines	Mt. Sto. Tomas	Mean	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
		%	17	100	100	100	100	100	100	100	100	100	100	100	92
		Max-w	N.D.	N.D.	N.D.	N.D.	0.1	0.1	N.D.	0.1	0.1	N.D.	N.D.	N.D.	0.1
		Min-w	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
Republic of Korea	Kanghwa	Mean	N.D.	0.3	0.4	0.8	0.7	0.5	0.7	0.7	0.7	0.9	0.3	N.D.	0.5
		%	10	18	16	40	16	43	16	19	17	16	17	45	23
		Max-d	N.D.	0.4	0.6	2.2	1.8	1.3	1.6	1.5	1.3	2.3	0.7	0.4	2.3
		Min-d	N.D.	N.D.	0.3	0.1	0.2	N.D.	0.2	0.3	0.3	0.3	0.1	N.D.	N.D.
	Cheju (Kosan)	Mean	0.7	1.2	1.3	0.8	0.6	0.3	0.3	0.4	0.5	0.6	0.2	0.4	0.6
		%	16	18	13	40	13	40	16	19	17	16	17	42	22
		Max-d	1.0	2.5	3.2	1.7	0.8	0.9	1.7	1.1	1.0	1.0	0.4	3.1	3.2
		Min-d	0.3	0.8	0.2	0.3	0.4	N.D.	N.D.	N.D.	N.D.	0.3	N.D.	N.D.	N.D.
	Imsil	Mean	0.4	0.2	0.5	0.8	0.7	0.5	0.5	0.5	0.5	0.4	0.2	N.D.	0.5
		%	3	18	13	43	16	43	13	19	17	16	17	42	22
		Max-d	0.4	0.3	0.8	1.3	1.5	1.0	0.9	1.1	0.8	0.7	0.6	N.D.	1.5
		Min-d	0.4	0.2	0.3	0.3	0.3	N.D.	0.3	0.1	0.2	0.3	N.D.	N.D.	N.D.
Russia	Mondy	Mean	N.D.	N.D.	-	-	-	N.D.	-	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
		%	88	100	0	0	0	100	0	100	100	100	100	100	67
		Max-m	N.D.	N.D.	-	-	-	N.D.	-	N.D.	N.D.	N.D.	N.D.	N.D.	0.0
		Min-m	N.D.	N.D.	-	-	-	N.D.	-	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
	Listvianka	Mean	N.D.	N.D.	N.D.	0.1	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-w	0.1	0.2	0.2	0.4	0.2	0.2	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	0.4
		Min-w	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
	Irkutsk	Mean	N.D.	N.D.	N.D.	0.2	0.2	1.2	0.2	0.7	N.D.	N.D.	N.D.	N.D.	0.2
		%	100	100	100	100	100	100	100	100	100	100	83	100	98
		Max-w	N.D.	N.D.	N.D.	0.7	0.7	2.8	0.5	3.2	N.D.	N.D.	N.D.	0.1	3.2
		Min-w	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
	Primorskaya	Mean	N.D.	0.1	N.D.	0.3	0.4	0.1	0.1	0.1	N.D.	N.D.	N.D.	N.D.	0.1
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-2w	N.D.	0.1	N.D.	0.4	0.6	0.2	0.2	0.2	N.D.	0.1	N.D.	0.1	0.6
		Min-2w	N.D.	N.D.	N.D.	0.3	0.2	0.1	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
Thailand	Bangkok	Mean	1.2	1.1	0.5	0.6	1.0	N.D.	0.2	0.2	0.1	0.5	N.D.	-	0.5
		%	100	100	100	100	100	100	100	100	100	100	100	0	92
		Max-10d	1.8	1.9	0.6	0.9	1.2	0.1	0.2	0.3	0.2	1.0	N.D.	-	1.9
		Min-10d	0.4	0.2	0.4	0.3	0.6	N.D.	N.D.	0.1	N.D.	N.D.	N.D.	-	N.D.
	Patumthani	Mean	1.5	1.4	1.0	0.8	0.4	N.D.	0.2	0.5	0.3	0.9	0.1	-	0.7
		%	100	100	100	100	68	63	72	100	100	100	100	0	83
		Max-10d	2.4	2.3	1.5	1.2	0.6	0.1	0.2	0.7	0.5	1.0	0.4	-	2.4
		Min-10d	0.7	0.6	0.7	0.4	0.1	N.D.	0.1	0.1	0.2	0.7	N.D.	-	N.D.
	Khanchanaburi (Vachiralongkorn Dam)	Mean	-	-	0.5	-	-	-	N.D.	-	-	-	1.1	-	0.5
		%	0	0	69	0	0	0	63	0	0	0	62	0	13
		Max-2w	-	-	0.5	-	-	-	N.D.	-	-	-	1.1	-	1.1
		Min-2w	-	-	0.5	-	-	-	N.D.	-	-	-	1.1	-	N.D.
	Chiangmai (Mae Hia)	Mean	0.2	0.9	1.2	0.5	0.3	N.D.	2.2	1.9	0.2	0.4	0.5	0.6	0.7
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-10d	0.4	1.1	1.4	0.8	0.5	0.1	2.8	2.7	0.4	0.5	0.9	1.3	2.8
		Min-10d	N.D.	0.8	0.8	N.D.	0.1	N.D.	1.1	1.2	N.D.	0.3	0.1	0.2	N.D.
	Nakhon Ratchasima	Mean	0.3	0.6	0.3	0.2	0.2	N.D.	N.D.	N.D.	N.D.	0.2	0.2	0.3	0.2
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-10d	0.5	0.8	0.5	0.3	0.3	N.D.	N.D.	N.D.	N.D.	0.4	0.2	0.5	0.8
		Min-10d	0.2	0.5	N.D.	0.2	N.D.	N.D.	N.D.	N.D.	N.D.	0.1	N.D.	N.D.	N.D.
Viet Nam	Ha Noi	Mean	0.2	0.2	0.2	0.4	0.6	1.1	0.5	1.4	2.1	1.6	1.6	0.8	0.9
		%	100	100	100	100	100	100	100	100	75	100	100	100	98
		Max-w	0.2	0.4	0.2	0.7	0.7	1.4	1.0	2.4	4.1	2.4	2.8	1.0	4.1
		Min-w	0.1	0.1	0.2	0.2	0.4	0.5	0.3	0.8	1.0	0.6	0.9	0.6	0.1
	Hoa Binh	Mean	0.2	0.1	0.1	0.3	0.9	0.3	0.3	0.3	0.3	0.4	0.5	0.4	0.3
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-w	0.3	0.1	0.1	0.8	2.5	0.3	0.4	0.3	0.4	0.4	0.7	0.6	2.5
		Min-w	N.D.	0.1	0.1	0.1	0.3	0.2	0.2	0.3	0.3	0.3	0.3	0.3	N.D.

Mean : monthly or annual arithmetic average values

Max-d : maximum values of daily data

Min-d : minimum values of daily data

Max-10d : maximum values of 10-day interval data

Min-10d : minimum values of 10-day interval data

Max-w : maximum values of weekly data

Min-w : minimum values of weekly data

Max-2w : maximum values of biweekly data

Min-2w : minimum values of biweekly data

Max-m : maximum values of monthly data

Min-m : minimum values of monthly data

% : monthly or annual percentages of period of available data

Table 4.5 HCl

Unit : ppb			2009												Annual
Country	Site		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
China	Hongwen	Mean	0.9	1.6	1.2	1.9	1.6	1.8	1.1	1.5	2.0	1.9	0.9	1.2	1.5
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-w	1.2	2.2	1.9	2.3	2.3	2.4	1.2	2.2	2.5	2.3	1.5	1.9	2.5
		Min-w	0.5	1.0	0.6	1.0	0.7	1.3	1.0	0.8	1.3	1.5	N.D.	0.8	N.D.
Indonesia	Serpong	Mean	0.7	0.5	0.6	0.3	0.3	0.2	0.4	0.7	0.5	0.5	0.1	0.1	0.4
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-2w	1.0	0.5	0.9	0.5	0.4	0.4	0.4	0.7	0.5	0.9	0.1	0.2	1.0
		Min-2w	0.4	0.5	0.3	0.1	0.2	N.D.	0.4	0.6	0.4	0.2	0.1	0.1	N.D.
Japan	Rishiri	Mean	0.4	0.4	0.6	0.7	0.8	0.6	0.4	0.3	0.4	0.4	0.3	0.4	0.5
		%	100	100	100	100	100	100	100	100	100	100	100	50	67
		Max-2w	0.6	0.4	0.9	1.0	1.0	0.9	0.6	0.4	0.5	0.4	0.3	0.4	1.0
		Min-2w	0.2	0.4	0.4	0.4	0.7	0.4	0.2	0.3	0.3	0.3	0.3	0.3	0.2
	Ochiishi	Mean	0.2	0.3	0.2	0.4	0.4	0.5	0.5	0.6	0.5	0.1	0.2	0.4	0.4
		%	100	100	100	100	100	100	100	100	100	69	100	100	96
		Max-2w	0.3	0.3	0.3	0.4	0.5	0.7	0.6	0.7	0.5	0.2	0.2	0.8	0.8
		Min-2w	0.1	0.2	0.2	0.4	0.3	0.4	0.4	0.5	0.5	N.D.	0.2	0.1	N.D.
	Tappi	Mean	0.6	0.5	0.4	0.7	0.8	0.7	0.6	0.6	0.4	0.5	0.5	0.3	0.5
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-2w	0.8	0.6	0.5	0.9	0.9	1.3	0.8	0.8	0.5	0.6	1.0	0.5	1.3
		Min-2w	0.5	0.4	0.3	0.5	0.7	0.2	0.5	0.5	0.3	0.4	N.D.	N.D.	N.D.
	Sado-seki	Mean	0.7	0.8	0.6	1.3	1.1	1.3	0.9	1.1	0.7	0.6	1.0	0.7	0.9
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-2w	0.9	1.2	0.6	1.6	1.1	1.5	1.1	1.4	0.8	0.8	1.6	0.9	1.6
		Min-2w	0.5	0.5	0.6	1.0	1.0	1.0	0.6	0.8	0.7	0.5	0.3	0.5	0.3
	Happo	Mean	-	-	N.D.	N.D.	0.2	0.1	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
		%	0	0	50	44	100	100	100	100	100	100	100	100	77
		Max-2w	-	-	N.D.	N.D.	0.4	0.3	N.D.	N.D.	N.D.	0.1	N.D.	N.D.	0.4
		Min-2w	-	-	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
	Ijira	Mean	0.1	0.2	0.3	0.3	0.3	0.2	0.1	0.2	0.2	0.2	N.D.	0.1	0.2
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-2w	0.2	0.3	0.3	0.3	0.3	0.2	0.1	0.3	0.3	0.3	0.2	0.3	0.3
		Min-2w	0.1	0.1	0.2	0.3	0.2	0.1	0.1	0.2	0.2	0.2	N.D.	N.D.	N.D.
	Okii	Mean	0.8	0.8	0.6	1.3	1.1	0.9	0.7	1.0	0.3	0.7	0.6	0.6	0.8
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-2w	1.2	1.2	0.7	1.6	1.2	1.5	1.0	1.3	0.5	0.8	0.7	0.9	1.6
		Min-2w	0.3	0.5	0.6	1.0	1.0	0.3	0.5	0.6	0.1	0.6	0.4	0.4	0.1
	Banryu	Mean	0.7	0.8	0.6	1.0	0.7	0.8	0.6	0.8	0.9	0.9	0.7	0.6	0.8
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-2w	0.9	1.1	0.6	1.1	0.8	1.1	0.7	0.8	1.0	1.0	0.9	0.6	1.1
		Min-2w	0.5	0.4	0.6	0.8	0.6	0.6	0.5	0.8	0.9	0.9	0.6	0.6	0.4
	Yusuhara	Mean	0.3	0.4	0.4	0.4	0.3	0.2	0.4	0.4	0.4	0.3	0.1	0.3	0.3
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-2w	0.4	0.7	0.5	0.4	0.4	0.2	0.4	0.4	0.5	0.4	0.1	0.5	0.7
		Min-2w	0.1	0.1	0.3	0.4	0.3	0.1	0.3	0.4	0.3	0.2	0.1	0.1	0.1
	Hedo	Mean	1.1	1.1	0.7	1.2	1.1	0.9	0.2	0.7	1.3	1.0	0.7	1.1	0.9
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-2w	1.2	1.4	0.7	1.2	1.2	1.8	0.2	0.7	1.3	1.1	0.8	1.5	1.8
		Min-2w	1.0	0.8	0.6	1.1	1.0	0.3	0.1	0.6	1.3	0.9	0.6	0.7	0.1
	Ogasawara	Mean	0.6	0.6	0.6	0.6	0.8	0.6	0.3	0.3	0.5	0.4	0.2	0.6	0.5
		%	100	100	100	100	100	100	100	100	50	100	44	100	92
		Max-2w	0.6	0.7	0.6	0.7	0.9	1.1	0.4	0.4	0.5	0.6	0.2	0.8	1.1
		Min-2w	0.6	0.6	0.5	0.6	0.7	0.3	0.2	0.1	0.5	0.2	0.2	0.2	0.1
	Tokyo	Mean	0.3	0.5	0.5	1.1	1.3	0.9	1.0	1.1	1.4	1.0	0.4	0.7	0.8
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-2w	0.3	0.7	0.5	1.4	1.8	1.0	1.1	1.1	1.5	1.0	0.5	1.2	1.8
		Min-2w	0.3	0.3	0.5	0.7	0.8	0.8	0.9	1.0	1.2	1.0	0.4	0.4	0.3
Malaysia	Tanah Rata	Mean	0.4	0.1	N.D.	N.D.	0.1	0.1	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	0.1
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-w	0.5	0.3	0.1	0.2	0.2	0.2	0.1	0.1	N.D.	0.2	N.D.	N.D.	0.5
		Min-w	0.3	N.D.	N.D.	N.D.	0.1	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
	Petaling Jaya	Mean	2.2	0.7	0.9	0.5	0.8	0.6	0.5	0.4	0.5	0.4	0.4	0.4	0.7
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-w	4.2	0.9	2.2	0.9	1.0	1.1	0.7	0.7	0.9	0.6	0.7	0.8	4.2
		Min-w	1.5	0.5	0.1	0.3	0.6	0.3	0.4	0.1	0.1	0.3	0.1	0.3	0.1
	Danum Valley	Mean	0.5	0.7	0.5	0.3	0.2	0.1	0.2	0.4	0.6	0.3	0.2	2.3	0.5
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-2w	0.6	0.7	0.6	0.3	0.2	0.1	0.2	0.6	1.2	0.3	0.3	2.7	2.7
		Min-2w	0.4	0.6	0.3	0.2	0.2	0.1	0.1	0.3	0.2	0.3	0.2	1.8	0.1
Mongolia	Ulaanbaatar	Mean	-	-	-	1.3	0.7	0.4	0.6	0.6	0.5	0.7	0.8	0.4	0.7
		%	0	0	0	80	100	100	100	100	100	100	100	100	75
		Max-w	-	-	-	3.6	0.8	0.6	0.7	0.7	0.7	0.9	1.8	0.8	3.6
		Min-w	-	-	-	0.5	0.5	N.D.	0.6	0.4	0.4	0.4	0.3	N.D.	N.D.
	Terelj	Mean	0.4	0.3	0.3	0.4	0.3	0.4	0.3	0.3	0.3	0.4	0.3	0.3	0.3
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-2w	0.6	0.3	0.3	0.5	0.3	0.5	0.3	0.3	0.4	0.4	0.3	0.4	0.6
		Min-2w	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.4	0.3	0.2	0.2

Table 4.5 HCl

Unit : ppb			2009												Annual
Country	Site		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
Philippines	Mt. Sto. Tomas	Mean	N.D.	N.D.	N.D.	0.2	0.2	0.1	0.1	0.1	0.1	0.2	0.3	0.3	0.2
		%	17	100	100	100	100	100	100	100	100	100	100	100	92
		Max-w	N.D.	N.D.	0.1	0.3	0.2	0.1	0.2	0.2	0.2	0.3	0.3	0.4	0.4
		Min-w	N.D.	N.D.	N.D.	N.D.	0.1	N.D.	N.D.	N.D.	N.D.	N.D.	0.2	0.2	N.D.
Republic of Korea	Kanghwa	Mean	N.D.	0.2	0.2	0.2	0.2	0.1	0.2	N.D.	0.2	0.3	0.2	N.D.	0.1
		%	10	18	16	40	16	43	16	19	17	16	17	45	23
		Max-d	N.D.	0.3	0.3	0.3	0.3	0.2	0.3	0.2	0.3	0.3	0.5	0.3	0.5
		Min-d	N.D.	0.1	0.2	0.1	0.1	N.D.	N.D.	N.D.	0.1	0.2	N.D.	N.D.	N.D.
	Cheju (Kosan)	Mean	N.D.	0.2	0.3	0.3	0.4	0.2	N.D.	0.3	0.3	0.4	0.2	0.1	0.2
		%	16	18	13	40	13	40	16	19	17	16	17	42	22
		Max-d	0.1	0.4	0.4	0.6	0.4	0.3	0.3	0.6	0.7	0.5	0.2	0.3	0.7
		Min-d	N.D.	0.2	0.2	0.2	0.3	N.D.	N.D.	N.D.	N.D.	0.3	N.D.	N.D.	N.D.
	Imsil	Mean	0.7	0.2	0.3	0.2	0.2	0.1	0.1	0.2	0.2	0.2	0.1	N.D.	0.2
		%	3	18	13	43	16	43	13	19	17	16	17	42	22
		Max-d	0.7	0.2	0.5	0.3	0.4	0.4	0.2	0.2	0.2	0.2	0.3	N.D.	0.7
		Min-d	0.7	0.2	0.2	0.2	0.1	N.D.	N.D.	0.1	0.1	0.1	N.D.	N.D.	N.D.
Russia	Mondy	Mean	N.D.	N.D.	-	-	-	N.D.	-	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
		%	88	100	0	0	0	100	0	100	100	100	100	100	67
		Max-m	N.D.	N.D.	-	-	-	N.D.	-	N.D.	N.D.	N.D.	N.D.	N.D.	0.0
		Min-m	N.D.	N.D.	-	-	-	N.D.	-	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
	Listvianka	Mean	0.2	N.D.	0.1	0.2	0.1	N.D.	N.D.	0.2	0.4	0.4	0.3	0.4	0.2
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-w	0.3	0.1	0.2	0.3	0.1	0.2	N.D.	0.5	0.5	0.4	0.5	0.4	0.5
		Min-w	N.D.	N.D.	N.D.	0.1	N.D.	N.D.	N.D.	0.2	0.3	N.D.	0.3	N.D.	0.2
	Irkutsk	Mean	0.4	0.5	0.2	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.1	0.2	0.2
		%	100	100	100	100	100	100	100	100	100	100	83	100	98
		Max-w	1.0	0.8	0.3	0.4	0.5	0.5	0.3	0.2	0.3	0.3	0.1	0.3	1.0
		Min-w	N.D.	0.3	0.2	0.2	0.1	0.1	N.D.	0.1	0.1	0.2	0.1	0.1	N.D.
	Primorskaya	Mean	0.1	0.2	0.2	0.5	0.4	0.2	0.2	0.2	0.2	0.3	0.2	0.2	0.2
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-2w	0.1	0.2	0.3	0.5	0.5	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.5
		Min-2w	N.D.	0.2	0.2	0.4	0.3	0.2	0.1	0.1	0.2	0.2	0.1	0.2	N.D.
Thailand	Bangkok	Mean	2.4	2.1	1.0	0.7	1.4	0.2	0.3	0.3	0.4	0.2	0.4	-	0.9
		%	100	100	100	100	100	100	100	100	100	100	100	0	92
		Max-10d	2.9	2.7	1.3	0.8	3.7	0.4	0.4	0.4	0.7	0.2	0.7	-	3.7
		Min-10d	1.9	1.6	0.6	0.6	0.3	N.D.	0.3	0.3	0.2	N.D.	0.2	-	N.D.
	Patumthani	Mean	2.1	2.6	1.0	0.7	0.3	0.3	0.3	0.5	0.3	0.2	0.4	-	0.9
		%	100	100	100	100	68	63	72	100	100	100	100	0	83
		Max-10d	2.5	3.2	1.1	1.0	0.3	0.4	0.4	0.7	0.5	0.2	0.7	-	3.2
		Min-10d	1.5	1.7	1.0	0.6	0.3	0.3	0.3	0.2	0.2	0.2	0.2	-	0.2
	Khanchanaburi (Vachiralongkorn Dam)	Mean	-	-	0.4	-	-	-	N.D.	-	-	-	0.1	-	0.2
		%	0	0	69	0	0	0	63	0	0	0	62	0	13
		Max-2w	-	-	0.4	-	-	-	N.D.	-	-	-	0.1	-	0.4
		Min-2w	-	-	0.4	-	-	-	N.D.	-	-	-	0.1	-	N.D.
	Chiangmai (Mae Hia)	Mean	N.D.	0.3	0.3	0.6	0.8	0.1	0.2	0.2	0.1	0.2	0.2	0.2	0.3
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-10d	0.1	0.4	0.4	1.4	2.0	0.2	0.3	0.2	0.2	0.2	0.3	0.2	2.0
		Min-10d	N.D.	0.2	0.2	0.1	0.2	N.D.	N.D.	0.1	N.D.	0.2	0.1	0.1	N.D.
	Nakhon Ratchasima	Mean	0.2	0.3	0.2	0.3	0.2	0.2	0.2	0.2	0.1	0.3	0.2	0.3	0.2
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-10d	0.4	0.4	0.3	0.3	0.3	0.3	0.2	0.3	0.1	0.5	0.3	0.5	0.5
		Min-10d	0.1	0.3	0.1	0.1	N.D.	N.D.	0.2	0.1	0.1	N.D.	0.1	0.2	N.D.
Viet Nam	Ha Noi	Mean	1.2	1.2	1.2	1.4	1.4	2.0	1.2	2.4	1.6	1.4	1.9	1.3	1.5
		%	100	100	100	100	100	100	100	100	75	100	100	100	98
		Max-w	1.3	1.4	1.3	1.7	1.6	3.1	1.8	4.9	2.1	1.7	3.8	1.8	4.9
		Min-w	1.0	1.1	1.0	1.2	1.2	1.1	0.9	1.2	1.1	0.8	0.9	0.9	0.8
	Hoa Binh	Mean	1.2	1.3	1.2	2.6	1.1	1.0	1.5	1.1	0.8	0.8	0.9	0.9	1.2
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-w	1.5	1.5	1.4	8.1	1.3	1.1	2.1	1.5	0.9	1.3	1.5	1.3	8.1
		Min-w	1.1	1.0	1.2	1.1	0.9	0.6	0.9	0.8	0.7	0.4	0.5	0.7	0.4

Mean : monthly or annual arithmetic average values

Max-d : maximum values of daily data

Min-d : minimum values of daily data

Max-10d : maximum values of 10-day interval data

Min-10d : minimum values of 10-day interval data

Max-w : maximum values of weekly data

Min-w : minimum values of weekly data

Max-2w : maximum values of biweekly data

Min-2w : minimum values of biweekly data

Max-m : maximum values of monthly data

Min-m : minimum values of monthly data

% : monthly or annual percentages of period of available data

Table 4.6 NH₃

Unit : ppb			2009												Annual
Country	Site		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
China	Hongwen	Mean	7.2	9.3	8.8	12.0	11.9	12.0	16.2	15.2	9.2	11.5	13.1	8.8	11.2
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-w	8.3	10.0	13.3	14.8	15.2	13.2	17.4	19.2	12.6	12.4	17.0	12.3	19.2
		Min-w	5.4	8.7	6.2	7.5	8.0	10.7	14.9	12.9	4.5	10.9	8.4	6.0	4.5
Indonesia	Serpong	Mean	4.0	2.1	5.8	6.8	8.7	9.8	1.7	4.8	2.3	7.8	5.7	6.1	5.9
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-2w	4.4	2.1	6.9	7.8	12.8	11.1	1.7	7.4	2.6	9.2	6.2	6.6	12.8
		Min-2w	3.6	2.1	4.7	5.8	4.6	8.4	1.7	2.2	2.0	6.6	5.3	5.7	1.7
Japan	Rishiri	Mean	N.D.	N.D.	0.3	0.4	0.8	0.6	0.6	0.5	0.5	0.4	0.2	0.1	0.4
		%	100	100	100	100	100	100	100	100	100	100	50	67	92
		Max-2w	N.D.	N.D.	0.4	0.4	0.9	1.0	0.7	0.6	0.6	0.5	0.2	0.1	1.0
		Min-2w	N.D.	N.D.	0.2	0.3	0.7	0.2	0.4	0.4	0.4	0.4	0.2	0.1	N.D.
	Ochiishi	Mean	0.4	0.2	0.3	0.6	6.2	0.5	0.7	0.7	0.6	0.6	0.4	0.2	1.0
		%	100	100	100	100	100	100	100	100	100	69	100	100	96
		Max-2w	0.4	0.3	0.4	0.7	11.7	0.6	0.8	1.0	0.7	0.7	0.4	0.4	11.7
		Min-2w	0.3	0.1	0.3	0.5	0.6	0.4	0.6	0.4	0.4	0.4	0.4	N.D.	N.D.
	Tappi	Mean	0.2	0.2	0.3	0.5	0.7	0.7	0.5	1.3	0.9	0.6	0.4	0.2	0.5
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-2w	0.2	0.2	0.3	0.5	0.8	1.0	0.7	1.7	1.1	0.6	0.6	0.2	1.7
		Min-2w	0.1	0.2	0.3	0.4	0.7	0.5	0.2	0.9	0.6	0.5	0.2	0.1	0.1
	Sado-seki	Mean	0.1	0.3	0.5	0.8	0.8	1.2	0.9	1.0	0.5	0.6	0.5	0.2	0.6
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-2w	0.1	0.4	0.7	1.0	0.9	1.7	0.9	1.3	0.5	0.7	0.8	0.2	1.7
		Min-2w	0.1	0.1	0.2	0.7	0.6	1.0	0.9	0.6	0.4	0.5	N.D.	0.2	N.D.
	Happo	Mean	-	-	0.2	0.1	0.2	0.3	0.3	0.4	0.3	0.2	0.2	0.1	0.2
		%	0	0	50	44	100	100	100	100	100	100	100	100	77
		Max-2w	-	-	0.2	0.1	0.4	0.3	0.3	0.5	0.3	0.2	0.3	0.1	0.5
		Min-2w	-	-	0.2	0.1	0.1	0.3	0.2	0.3	0.3	0.2	N.D.	N.D.	N.D.
	Ijira	Mean	0.3	0.3	0.5	0.9	1.6	1.5	1.4	1.6	1.5	0.8	0.6	0.2	1.0
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-2w	0.3	0.3	0.8	0.9	1.9	1.6	1.5	1.7	2.1	0.8	0.6	0.3	2.1
		Min-2w	0.2	0.2	0.3	0.9	1.4	1.4	1.3	1.5	1.0	0.8	0.6	0.2	0.2
	Okii	Mean	0.5	0.6	0.6	1.4	1.1	1.8	1.6	1.0	1.0	0.8	0.8	0.4	1.0
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-2w	0.7	0.6	0.8	2.0	1.1	2.1	2.8	1.4	1.4	0.9	1.2	0.7	2.8
		Min-2w	0.4	0.6	0.4	0.9	1.0	1.5	0.9	0.7	0.5	0.6	0.3	0.2	0.2
	Banryu	Mean	0.5	0.7	0.7	1.3	1.1	1.4	1.3	1.3	1.2	1.2	0.6	0.5	1.0
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-2w	0.6	0.8	0.8	1.5	1.2	1.6	1.6	1.4	1.3	1.3	0.8	0.6	1.6
		Min-2w	0.3	0.6	0.6	1.1	1.0	1.4	1.1	1.3	1.0	1.1	0.4	0.4	0.3
	Yusuhara	Mean	0.2	0.4	0.5	0.7	1.0	0.8	0.5	0.7	0.6	0.4	0.3	0.2	0.5
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-2w	0.2	0.4	0.6	0.9	1.2	0.9	0.5	0.7	0.7	0.6	0.4	0.2	1.2
		Min-2w	0.1	0.4	0.5	0.5	0.8	0.6	0.5	0.7	0.6	0.3	0.2	0.1	0.1
	Hedo	Mean	0.8	0.8	0.8	1.5	1.4	1.7	1.4	1.9	1.5	1.4	0.9	0.5	1.2
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-2w	1.2	1.0	0.8	1.5	1.7	1.9	1.8	1.9	1.6	1.5	1.1	0.6	1.9
		Min-2w	0.4	0.6	0.8	1.5	1.2	1.6	1.0	1.8	1.5	1.3	0.7	0.5	0.4
	Ogasawara	Mean	0.5	0.4	0.7	0.5	0.7	0.7	0.6	0.5	0.7	0.6	0.4	0.3	0.5
		%	100	100	100	100	100	100	100	100	50	100	44	100	92
		Max-2w	0.7	0.6	0.9	0.5	0.8	1.0	0.8	0.5	0.7	0.6	0.4	0.4	1.0
		Min-2w	0.3	0.2	0.6	0.5	0.5	0.4	0.4	0.4	0.7	0.5	0.4	0.3	0.2
	Tokyo	Mean	3.9	3.8	3.4	3.9	5.6	5.5	6.1	6.7	6.0	5.4	5.1	4.3	5.0
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-2w	4.0	4.9	3.8	4.2	6.0	6.4	6.6	7.4	6.1	5.6	5.4	5.3	7.4
		Min-2w	3.8	2.7	3.0	3.6	5.3	4.9	5.6	6.0	5.9	5.3	4.8	3.8	2.7
Malaysia	Tanah Rata	Mean	0.9	0.6	0.4	0.6	1.0	1.0	1.2	0.7	0.6	0.6	0.7	0.8	0.8
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-w	1.9	0.9	0.7	0.8	2.0	1.5	2.0	1.3	1.0	1.0	0.8	1.2	2.0
		Min-w	N.D.	0.3	N.D.	0.4	0.5	0.2	0.3	N.D.	N.D.	0.2	0.6	0.6	N.D.
	Petaling Jaya	Mean	6.0	7.3	10.4	6.4	7.8	9.8	9.5	6.4	6.6	6.3	5.8	5.5	7.3
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-w	8.7	9.7	21.0	7.8	9.4	11.6	10.2	9.3	7.0	6.9	6.9	6.5	21.0
		Min-w	1.0	5.5	5.1	3.9	5.7	8.1	8.3	3.2	5.7	5.6	5.2	4.8	1.0
	Danum Valley	Mean	0.9	1.5	1.2	1.3	1.4	1.4	1.7	2.2	3.3	1.9	1.7	3.7	1.9
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-2w	1.0	1.6	1.3	1.3	1.4	1.5	1.7	2.6	5.4	2.1	1.9	4.9	5.4
		Min-2w	0.9	1.5	1.2	1.3	1.4	1.4	1.6	1.9	1.9	1.7	1.4	2.6	0.9
Mongolia	Ulaanbaatar	Mean	-	-	-	11.3	9.2	5.2	6.0	8.7	7.1	8.5	6.3	4.7	7.4
		%	0	0	0	80	100	100	100	100	100	100	100	100	75
		Max-w	-	-	-	21.4	11.5	11.3	7.7	10.3	8.3	13.8	12.6	7.8	21.4
		Min-w	-	-	-	6.4	5.7	1.0	3.8	7.8	6.3	5.9	3.5	2.4	1.0
	Terelj	Mean	0.6	0.7	1.1	1.0	1.9	2.8	6.4	4.3	1.8	0.5	0.7	0.4	1.9
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-2w	1.0	0.7	1.4	1.5	2.4	3.7	8.6	5.6	2.6	0.8	0.8	0.7	8.6
		Min-2w	0.3	0.7	0.7	0.8	1.4	2.0	4.3	3.1	1.4	0.3	0.7	0.2	0.2

Table 4.6 NH₃

Unit : ppb			2009												Annual
Country	Site		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
Philippines	Mt. Sto. Tomas	Mean	N.D.	0.4	0.9	0.6	0.4	0.3	0.3	0.3	0.3	0.1	0.3	0.4	0.4
		%	17	100	100	100	100	100	100	100	100	100	100	100	92
		Max-w	N.D.	0.6	2.0	1.3	1.1	0.3	0.7	0.3	0.5	0.1	0.8	0.9	2.0
		Min-w	N.D.	0.3	0.1	0.3	N.D.	0.2	0.2	0.2	0.2	N.D.	0.2	0.2	N.D.
Republic of Korea	Kanghwa	Mean	1.9	2.1	1.2	2.7	3.3	5.3	7.5	7.3	4.2	2.9	1.1	0.3	3.2
		%	10	18	16	40	16	43	16	19	17	16	17	45	23
		Max-d	2.3	2.9	2.0	6.0	4.8	9.6	10.4	10.0	6.1	4.2	2.0	1.0	10.4
		Min-d	1.6	1.8	N.D.	0.6	1.0	1.8	4.0	4.5	3.0	1.8	0.4	N.D.	N.D.
	Cheju (Kosan)	Mean	2.0	1.8	8.9	7.1	5.7	6.2	2.9	7.2	9.5	5.1	2.3	1.1	4.9
		%	16	18	13	40	13	40	16	19	17	16	17	42	22
		Max-d	3.4	3.3	13.4	11.8	8.5	8.7	8.9	22.7	12.2	5.8	3.8	2.2	22.7
		Min-d	0.3	0.4	7.1	2.0	2.7	2.6	0.3	0.8	7.9	3.4	1.2	0.2	0.2
	Imsil	Mean	0.7	6.0	8.8	5.7	6.2	9.1	8.8	8.1	5.6	4.4	3.3	2.7	6.0
		%	3	18	13	43	16	43	13	19	17	16	17	42	22
		Max-d	0.7	9.1	12.8	10.0	8.3	14.0	9.9	13.2	6.7	5.3	5.2	5.6	14.0
		Min-d	0.7	3.7	6.5	2.5	5.3	2.9	7.3	4.6	4.4	3.4	1.9	1.2	0.7
Russia	Mondy	Mean	0.4	0.3	-	-	-	0.2	-	N.D.	0.9	0.7	0.3	0.5	0.4
		%	88	100	0	0	0	100	-	100	100	100	100	100	67
		Max-m	0.4	0.3	-	-	-	0.2	-	N.D.	0.9	0.7	0.3	0.5	0.9
		Min-m	0.4	0.3	-	-	-	0.2	-	N.D.	0.9	0.7	0.3	0.5	N.D.
	Listvianka	Mean	1.7	3.4	3.1	4.3	2.1	1.7	3.4	2.8	1.6	2.2	2.3	0.8	2.4
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-w	3.1	8.6	7.2	13.0	3.8	2.4	4.9	6.1	3.0	3.4	3.3	1.2	13.0
		Min-w	0.1	1.0	0.9	0.4	0.7	0.3	2.5	1.4	0.5	1.5	1.0	0.4	0.1
	Irkutsk	Mean	2.6	6.2	4.8	2.3	2.4	1.9	3.9	3.1	2.4	1.6	2.2	1.9	2.9
		%	100	100	100	100	100	100	100	100	100	100	83	100	98
		Max-w	5.6	8.6	8.7	3.6	4.0	6.2	6.3	5.2	4.3	3.0	2.7	2.5	8.7
		Min-w	0.9	4.7	1.3	1.1	0.3	0.2	0.3	0.3	0.8	0.4	1.5	1.3	0.2
	Primorskaya	Mean	0.4	2.2	2.3	3.0	2.5	2.0	1.7	1.1	2.0	1.7	1.3	1.9	1.8
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-2w	0.6	3.6	3.9	4.0	2.6	2.6	2.1	1.1	2.1	2.1	1.7	3.6	4.0
		Min-2w	0.2	0.8	0.8	1.9	2.3	1.3	1.2	1.0	1.8	1.4	0.9	0.3	0.2
Thailand	Bangkok	Mean	12.8	12.1	10.0	11.5	8.4	12.8	6.3	6.9	3.9	4.0	7.0	-	8.7
		%	100	100	100	100	100	100	100	100	100	100	100	0	92
		Max-10d	15.5	15.1	11.4	13.3	13.1	27.1	6.8	7.1	5.8	4.3	8.9	-	27.1
		Min-10d	11.4	8.7	7.5	8.8	0.9	5.5	6.1	6.5	2.9	3.6	4.8	-	0.9
	Patumthani	Mean	9.8	14.1	11.6	11.0	8.4	5.7	5.6	6.4	2.9	3.1	7.1	-	8.1
		%	100	100	100	100	68	63	72	100	100	100	100	0	83
		Max-10d	13.1	16.7	12.1	12.1	8.4	5.7	6.0	7.1	3.3	3.3	8.0	-	16.7
		Min-10d	7.6	11.3	11.3	9.9	8.3	5.6	5.3	5.4	2.3	2.9	6.1	-	2.3
	Khanchanaburi (Vachiralongkorn Dam)	Mean	-	-	5.4	-	-	-	0.8	-	-	-	1.6	-	2.6
		%	0	0	69	0	0	0	63	0	0	0	62	0	13
		Max-2w	-	-	5.4	-	-	-	0.8	-	-	-	1.6	-	5.4
		Min-2w	-	-	5.4	-	-	-	0.8	-	-	-	1.6	-	0.8
	Chiangmai (Mae Hia)	Mean	4.9	7.1	10.4	9.0	4.6	4.8	9.0	6.2	3.3	3.3	2.7	4.1	5.8
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-10d	6.9	9.1	15.1	12.3	7.8	6.7	13.6	8.8	4.0	4.2	4.0	5.5	15.1
		Min-10d	3.3	5.4	7.2	6.8	0.4	3.7	3.9	4.8	2.6	2.5	1.2	1.4	0.4
	Nakhon Ratchasima	Mean	2.3	3.3	2.5	2.6	2.1	2.1	1.8	2.3	2.4	0.4	2.5	2.9	2.3
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-10d	3.2	3.6	3.2	3.2	2.6	2.4	2.0	2.5	3.0	0.4	2.9	3.3	3.6
		Min-10d	1.9	3.0	2.0	2.3	1.8	1.7	1.6	2.2	1.9	0.3	2.1	2.2	0.3
Viet Nam	Ha Noi	Mean	6.6	6.9	6.5	5.3	4.8	4.9	4.0	5.1	3.4	3.4	3.2	3.5	4.8
		%	100	100	100	100	100	100	100	100	75	100	100	100	98
		Max-w	7.2	7.2	6.7	5.9	5.9	5.4	4.3	6.7	5.0	3.8	4.4	3.8	7.2
		Min-w	5.2	6.6	6.1	5.0	4.1	4.6	3.7	3.5	2.5	3.0	2.3	2.9	2.3
	Hoa Binh	Mean	5.4	5.3	4.8	7.3	2.3	2.3	2.7	2.8	3.1	3.3	3.2	3.4	3.9
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-w	6.0	5.9	6.3	20.3	2.5	2.8	3.2	3.0	3.4	3.5	3.6	3.8	20.3
		Min-w	4.1	4.6	4.3	4.0	2.0	1.5	2.5	2.6	3.0	2.8	2.8	2.5	1.5

Mean : monthly or annual arithmetic average values

Max-d : maximum values of daily data

Min-d : minimum values of daily data

Max-10d : maximum values of 10-day interval data

Min-10d : minimum values of 10-day interval data

Max-w : maximum values of weekly data

Min-w : minimum values of weekly data

Max-2w : maximum values of biweekly data

Min-2w : minimum values of biweekly data

Max-m : maximum values of monthly data

Min-m : minimum values of monthly data

% : monthly or annual percentages of period of available data

Table 4.7 NO

Unit : ppb			2009												Annual
Country	Site		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
China	Jinyunshan	Mean	2.2	4.6	6.1	6.7	7.7	2.5	2.1	1.4	0.9	1.1	1.5	3.1	3.3
		%	100	97	100	100	100	100	100	100	100	100	100	100	100
		Max-d	4.8	8.0	12.8	10.4	17.6	5.6	7.2	5.6	1.6	1.6	3.2	12.0	17.6
		Min-d	0.8	2.4	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	0.8	0.8	0.8	1.6	N.D.
Japan	Rishiri	Mean	N.D.	N.D.	N.D.	N.D.	N.D.	0.2	0.3	N.D.	0.4	0.1	0.1	N.D.	0.1
		%	99	99	99	98	98	84	31	95	98	98	98	98	91
		Max-d	N.D.	0.3	0.1	0.2	0.2	0.7	0.8	0.2	1.0	0.3	0.5	0.5	1.0
		Min-d	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
	Ochiishi	Mean	N.D.	N.D.	N.D.	N.D.	0.1	0.1	0.2	0.2	0.1	N.D.	N.D.	N.D.	N.D.
		%	97	97	99	100	100	100	100	100	100	100	100	100	99
		Max-d	N.D.	0.1	0.1	0.3	0.6	0.3	0.9	0.7	0.4	0.1	N.D.	0.1	0.9
		Min-d	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
	Tappi	Mean	N.D.	N.D.	N.D.	N.D.	N.D.	0.4	0.6	0.6	0.4	0.3	0.2	0.2	0.2
		%	98	94	98	98	99	88	99	95	98	99	96	89	96
		Max-d	N.D.	0.1	0.2	0.2	0.2	1.0	2.0	1.5	0.8	0.6	0.5	0.4	2.0
		Min-d	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	0.2	0.2	N.D.	N.D.	N.D.	N.D.	N.D.
	Sado-seki	Mean	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
		%	99	99	99	98	99	88	97	97	98	97	98	97	97
		Max-d	0.3	N.D.	N.D.	N.D.	N.D.	N.D.	0.2	0.1	0.1	0.1	0.1	0.1	0.3
		Min-d	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
	Happo	Mean	0.1	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	0.1	N.D.	N.D.	N.D.	0.1	N.D.
		%	93	99	99	99	99	87	98	97	98	98	98	98	97
		Max-d	0.3	0.3	0.3	0.2	0.2	N.D.	0.1	0.3	0.2	0.1	0.2	0.2	0.3
		Min-d	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
	Ijira	Mean	0.1	N.D.	N.D.	N.D.	N.D.	0.2	0.7	0.6	0.2	0.1	0.1	0.1	0.2
		%	98	99	99	99	98	98	99	99	99	99	91	98	98
		Max-d	0.7	0.1	0.1	0.1	0.5	1.3	3.5	2.5	0.5	0.3	0.6	0.3	3.5
		Min-d	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
	Oki	Mean	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
		%	97	95	96	95	97	86	93	98	98	98	97	98	96
		Max-d	0.1	N.D.	0.2	N.D.	N.D.	N.D.	0.2	0.3	N.D.	N.D.	N.D.	N.D.	0.3
		Min-d	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
	Banryu	Mean	0.3	0.2	0.1	N.D.	N.D.	0.1	0.2	0.3	0.2	0.2	0.2	0.2	0.2
		%	91	94	93	97	98	91	97	98	98	98	98	98	96
		Max-d	1.5	0.4	0.4	0.4	0.2	0.6	0.6	0.8	0.8	0.4	0.7	0.6	1.5
		Min-d	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	0.1	0.1	N.D.	N.D.	N.D.
	Yusuhara	Mean	0.2	N.D.	N.D.	N.D.	0.1	N.D.	0.2	0.2	N.D.	N.D.	N.D.	N.D.	N.D.
		%	97	98	96	98	98	98	98	29	90	98	98	98	91
		Max-d	0.3	0.2	0.3	0.2	0.2	0.2	0.3	1.2	0.3	N.D.	0.2	0.2	1.2
		Min-d	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
	Hedo	Mean	N.D.	N.D.	0.1	N.D.	N.D.	N.D.	0.1	0.2	0.2	N.D.	0.1	N.D.	N.D.
		%	98	77	97	98	98	96	88	97	97	89	96	98	94
		Max-d	0.1	0.2	0.3	N.D.	0.2	0.2	0.4	0.5	0.6	0.1	0.3	0.2	0.6
		Min-d	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
	Ogasawara	Mean	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	0.1	0.2	N.D.	N.D.	N.D.	0.2	N.D.
		%	97	95	95	95	95	66	95	96	89	96	95	96	92
		Max-d	0.2	0.5	0.2	0.1	0.2	0.3	0.8	1.6	0.2	0.2	0.2	0.4	1.6
		Min-d	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
Thailand	Bangkok	Mean	7.8	9.3	4.3	8.5	12.8	8.4	11.2	9.0	14.8	16.8	12.8	19.1	11.6
		%	23	97	100	93	100	87	100	94	100	100	100	100	91
		Max-d	16.7	50.4	12.3	40.2	39.5	40.5	24.5	25.7	59.0	41.5	54.0	67.7	67.7
		Min-d	0.3	0.9	0.4	0.5	1.0	0.9	1.9	2.6	3.5	4.2	1.4	0.9	0.3
	Samutprakarn	Mean	15.6	10.5	7.4	12.3	11.3	11.0	15.8	15.3	22.4	17.8	16.1	27.4	15.2
		%	97	97	100	93	100	100	87	93	100	100	100	100	98
		Max-d	77.0	31.7	25.5	26.7	27.8	24.7	34.7	30.0	46.0	32.7	67.2	60.0	77.0
		Min-d	0.7	0.9	1.2	3.3	3.0	2.4	5.7	5.3	4.7	6.1	3.7	3.4	0.7
	Khanchanaburi (Vachiralongkorn Dam)	Mean	-	-	1.5	-	-	-	N.D.	-	-	-	0.4	-	0.2
		%	0	0	3	0	0	0	58	0	0	0	47	0	9
		Max-d	-	-	1.5	-	-	-	0.1	-	-	-	1.2	-	1.5
		Min-d	-	-	1.5	-	-	-	N.D.	-	-	-	N.D.	-	N.D.
	Chiangmai (Mae Hia)	Mean	4.0	2.1	1.9	1.1	0.4	1.7	1.0	1.2	3.1	2.0	2.3	5.3	2.1
		%	42	97	97	87	97	97	100	100	87	100	100	100	92
		Max-d	8.7	4.2	6.5	2.3	1.4	3.7	3.1	4.0	5.6	3.8	5.9	17.0	17.0
		Min-d	2.0	N.D.	0.2	N.D.	N.D.	0.1	N.D.	0.2	0.4	0.9	0.6	0.5	N.D.

Mean : monthly or annual arithmetic average values

Max-d : maximum values of daily data

Min-d : minimum values of daily data

% : monthly or annual percentages of period of available data

Table 4.8 NO₂

Unit : ppb			2009												Annual
Country	Site		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
China	Hongwen	Mean	22.0	21.5	23.8	20.6	19.5	15.2	13.7	16.2	13.3	13.6	19.1	27.0	18.8
		%	100	97	100	100	100	100	100	100	100	100	100	100	100
		Max-d	46.3	53.6	47.3	39.0	39.0	35.9	27.6	34.3	28.1	24.4	35.9	44.2	53.6
		Min-d	9.4	11.4	11.4	9.9	9.9	4.7	6.8	6.2	7.8	8.3	10.4	13.5	4.7
	Xiang Zhou	Mean	24.4	16.9	20.5	14.8	9.7	10.2	7.7	9.5	9.6	15.8	21.9	24.3	15.4
		%	100	97	100	100	100	100	100	100	100	100	100	100	100
		Max-d	41.6	34.8	35.9	23.4	15.6	15.1	14.0	17.7	18.2	29.6	52.0	35.4	52.0
		Min-d	10.4	6.8	10.4	7.8	5.2	5.7	4.7	5.2	3.1	6.8	5.2	15.1	3.1
Indonesia	Jakarta	Mean	28.0	26.5	42.6	58.0	56.4	50.4	69.1	51.0	77.1	57.4	32.7	35.8	48.5
		%	100	80	100	100	100	100	100	100	60	100	100	100	97
		Max-w	32.6	42.0	59.2	89.7	95.2	55.6	132.8	71.0	111.7	81.0	51.4	46.4	132.8
		Min-w	24.7	20.2	29.5	33.5	41.1	45.5	52.9	16.6	55.7	29.2	23.1	30.9	16.6
	Kototabang	Mean	3.9	4.0	4.0	3.2	4.1	5.5	4.1	3.7	-	3.3	1.4	0.8	3.5
		%	100	100	100	100	100	100	100	100	0	100	100	75	92
		Max-w	5.1	4.7	4.5	5.4	5.4	7.3	4.4	7.5	-	12.0	4.1	1.0	12.0
		Min-w	1.4	3.5	3.3	1.4	3.5	4.4	3.6	2.0	-	0.2	0.2	0.5	0.2
	Bandung	Mean	5.7	4.1	4.5	5.0	7.2	9.2	6.3	12.1	25.8	26.4	28.1	24.8	13.3
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-m	5.7	4.1	4.5	5.0	7.2	9.2	6.3	12.1	25.8	26.4	28.1	24.8	28.1
		Min-m	5.7	4.1	4.5	5.0	7.2	9.2	6.3	12.1	25.8	26.4	28.1	24.8	4.1
Japan	Banryu	Mean	3.9	4.2	3.2	3.5	2.5	2.8	1.7	1.7	1.7	2.0	2.3	2.7	2.7
		%	91	94	93	97	98	91	97	98	98	98	98	98	96
		Max-d	9.2	6.9	6.3	4.8	4.2	5.3	2.5	2.7	2.7	3.3	4.2	4.9	9.2
		Min-d	0.7	1.8	2.2	1.6	1.0	0.9	0.9	0.8	0.9	0.6	1.2	1.6	0.6
Republic of Korea	Kanghwa	Mean	16.2	8.7	8.0	6.2	5.4	5.9	4.4	3.8	4.5	6.1	10.2	6.2	7.1
		%	98	97	100	99	98	100	100	99	100	99	98	98	99
		Max-d	29.1	13.8	13.8	13.6	9.0	19.4	6.0	5.7	9.8	20.3	27.2	28.3	29.1
		Min-d	7.8	6.7	2.1	3.3	2.7	2.8	2.6	2.3	2.8	1.6	2.0	1.6	1.6
	Cheju (Kosan)	Mean	2.6	4.2	3.1	4.2	3.1	1.7	1.4	2.6	3.3	3.7	3.7	4.1	3.1
		%	100	99	85	100	78	98	98	100	100	97	97	99	96
		Max-d	5.6	7.5	4.6	7.0	3.9	4.3	3.6	4.3	4.7	6.5	4.8	9.6	9.6
		Min-d	1.1	2.0	1.5	2.4	2.1	0.4	0.0	1.6	1.3	2.3	2.3	2.4	0.0
	Imsil	Mean	-	6.5	6.6	6.6	3.6	3.5	1.8	2.1	3.6	3.7	4.8	7.2	4.5
		%	0	100	96	100	100	99	100	99	99	99	97	98	91
		Max-d	-	10.9	8.6	10.0	4.9	5.0	2.6	2.8	6.0	5.5	7.6	11.4	11.4
		Min-d	-	3.0	5.0	3.2	2.3	2.0	1.0	1.4	2.3	2.3	2.1	3.9	1.0
Thailand	Bangkok	Mean	28.2	32.8	22.0	21.9	23.5	16.5	15.6	19.1	15.8	25.3	29.7	35.6	23.6
		%	23	97	100	93	100	87	100	94	100	100	100	100	91
		Max-d	39.3	71.8	48.0	51.8	41.0	23.5	23.5	42.1	27.9	38.8	44.6	57.3	71.8
		Min-d	13.5	14.2	12.6	6.4	11.2	10.0	8.7	10.1	11.7	14.1	17.0	19.4	6.4
	Samutprakarn	Mean	25.6	18.6	12.7	19.5	17.9	11.9	14.9	15.6	15.3	21.4	25.3	28.8	19.0
		%	100	97	100	100	100	100	100	87	93	100	100	100	98
		Max-d	52.1	54.0	38.5	34.3	38.4	21.0	20.8	32.3	24.3	40.9	44.8	55.6	55.6
		Min-d	6.1	2.3	2.3	3.4	6.3	4.3	7.7	5.9	9.8	12.4	14.3	5.3	2.3

Mean : monthly or annual arithmetic average values

Max-d : maximum values of daily data

Min-d : minimum values of daily data

Max-w : maximum values of weekly data

Min-w : minimum values of weekly data

Max-2w : maximum values of biweekly data

Min-2w : minimum values of biweekly data

% : monthly or annual percentages of period of available data

Table 4.9 NOx

Unit : ppb			2009												Annual
Country	Site		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
China	Jinyunshan (NOx*)	Mean	11.5	12.4	13.2	9.8	8.9	3.6	3.3	3.9	4.3	5.9	7.8	14.4	8.2
		%	100	97	100	100	100	100	100	100	100	100	100	100	100
		Max-d	19.1	20.5	20.8	16.1	19.7	7.2	9.3	9.4	7.8	8.4	13.3	36.9	36.9
		Min-d	5.0	7.9	4.7	2.1	0.5	0.5	0.5	1.0	2.4	3.4	5.2	6.3	0.5
Japan	Rishiri (NOx*)	Mean	0.8	1.0	1.2	1.1	1.1	1.3	0.9	0.4	1.0	0.6	0.7	0.8	0.9
		%	99	99	99	98	98	84	31	95	98	98	98	98	91
		Max-d	2.4	2.0	2.3	1.8	2.1	5.6	2.9	0.8	1.8	1.1	2.3	4.0	5.6
		Min-d	0.2	0.5	0.2	0.5	0.3	0.2	0.1	N.D.	0.2	0.2	N.D.	0.2	N.D.
	Ochiishi (NOx*)	Mean	0.7	0.9	1.0	1.1	1.4	1.2	1.3	1.6	1.2	0.8	0.7	0.9	1.1
		%	97	97	99	100	100	100	100	100	100	100	100	100	99
		Max-d	1.4	1.4	2.0	2.4	3.3	2.3	3.8	3.1	3.1	1.7	1.7	2.3	3.8
		Min-d	0.2	0.4	0.3	0.4	0.2	0.4	0.3	0.6	0.3	N.D.	N.D.	0.4	N.D.
	Tappi (NOx*)	Mean	1.0	0.9	1.3	2.1	2.1	2.3	2.4	2.1	1.8	1.5	1.3	1.2	1.7
		%	97	94	98	98	99	88	99	95	98	99	96	89	96
		Max-d	2.6	1.7	2.7	5.1	4.3	4.6	6.0	5.3	3.0	2.2	3.1	4.4	6.0
		Min-d	0.3	0.3	0.6	0.5	0.5	0.6	1.0	0.9	0.7	0.7	0.5	0.5	0.3
	Sado-seki (NOx*)	Mean	1.3	1.2	1.2	1.8	1.2	1.0	0.5	0.5	0.5	0.7	0.7	0.9	0.9
		%	99	99	99	98	99	88	97	97	98	97	98	97	97
		Max-d	3.4	2.2	2.8	3.2	2.7	2.2	1.3	1.4	1.2	1.6	1.5	2.1	3.4
		Min-d	0.3	0.5	0.4	0.4	0.3	0.3	0.1	0.1	N.D.	0.1	N.D.	0.2	N.D.
	Happo (NOx*)	Mean	1.5	1.3	1.6	2.0	1.7	1.8	0.7	0.8	0.8	1.0	0.8	1.2	1.3
		%	93	99	99	99	99	87	98	97	98	98	98	98	97
		Max-d	2.7	2.4	2.3	3.8	3.5	3.6	1.5	2.1	2.1	2.3	1.7	2.2	3.8
		Min-d	0.6	0.7	0.6	0.8	N.D.	0.7	0.3	0.3	0.3	0.3	N.D.	0.5	N.D.
	Ijira (NOx*)	Mean	1.7	1.4	1.9	2.3	2.8	3.0	3.3	3.4	3.0	2.3	1.8	2.5	2.5
		%	98	99	99	99	98	98	99	99	99	99	91	98	98
		Max-d	6.8	4.9	5.5	5.2	6.5	5.8	9.3	6.4	5.4	6.3	5.1	12.7	12.7
		Min-d	0.5	0.4	0.6	0.7	0.8	1.1	0.9	1.1	1.1	0.6	0.3	0.5	0.3
	Oki (NOx*)	Mean	1.5	1.7	1.7	2.4	1.4	1.3	0.7	0.8	0.6	1.2	1.1	1.5	1.3
		%	97	95	96	95	97	86	93	98	98	98	97	98	96
		Max-d	3.5	4.0	3.6	4.7	3.4	2.3	1.5	1.7	1.5	2.2	2.5	2.9	4.7
		Min-d	0.6	0.4	0.6	0.9	0.5	0.5	N.D.	0.2	0.2	0.3	0.2	0.5	N.D.
	Banryu	Mean	4.2	4.4	3.4	3.6	2.6	3.0	2.1	2.2	2.2	2.4	2.7	3.1	3.0
		%	91	94	93	97	98	91	97	98	98	98	98	98	96
		Max-d	10.7	7.3	6.7	4.9	4.4	6.0	3.3	3.2	3.6	3.7	4.9	5.4	10.7
		Min-d	0.7	1.9	2.2	1.6	1.0	0.9	1.1	1.1	1.3	0.9	1.4	1.9	0.7
	Yusuhabara (NOx*)	Mean	1.9	1.7	1.4	1.4	0.9	0.6	0.4	0.5	0.7	0.8	1.0	1.7	1.1
		%	97	98	96	98	98	98	98	29	90	98	98	98	91
		Max-d	3.6	4.4	3.5	3.2	1.7	1.3	1.2	1.3	1.4	1.9	2.7	3.1	4.4
		Min-d	0.2	0.3	0.6	0.3	0.1	N.D.	N.D.	0.2	0.2	N.D.	0.1	0.8	N.D.
	Hedo (NOx*)	Mean	0.8	1.0	0.6	0.7	0.5	0.7	0.6	0.5	0.8	0.5	0.8	1.0	0.7
		%	98	77	97	98	98	96	88	97	97	89	96	98	94
		Max-d	2.6	1.7	1.2	1.3	0.9	1.6	1.6	1.3	1.6	1.1	1.4	2.6	2.6
		Min-d	0.3	0.4	0.1	0.1	0.2	0.2	0.1	0.2	0.3	0.2	0.4	0.5	0.1
	Ogasawara (NOx*)	Mean	0.7	0.8	0.5	0.4	0.1	0.2	0.4	0.6	N.D.	0.1	0.3	1.6	0.5
		%	97	95	95	95	95	66	96	96	89	96	95	96	93
		Max-d	3.3	2.6	3.8	2.2	0.7	1.0	1.5	4.0	0.5	0.8	0.8	6.4	6.4
		Min-d	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	0.1	0.2	N.D.	N.D.	N.D.	0.1	N.D.
Thailand	Bangkok	Mean	35.9	42.1	26.3	30.3	36.3	24.9	26.9	28.1	30.7	42.0	42.6	54.7	35.2
		%	23	97	100	93	100	87	100	94	100	100	100	100	91
		Max-d	55.5	122.3	54.9	82.2	65.8	63.6	45.6	57.8	86.8	75.6	90.5	122.9	122.9
		Min-d	13.8	15.7	14.8	6.8	12.1	10.8	10.7	12.6	15.9	19.8	22.2	22.6	6.8
	Samutprakarn	Mean	40.7	29.1	20.1	31.2	29.2	22.8	30.7	31.0	37.6	39.1	41.4	56.2	34.1
		%	100	97	100	100	100	100	100	87	93	100	100	100	98
		Max-d	129.0	85.8	57.0	54.4	48.5	41.8	54.8	47.2	66.0	67.1	108.7	114.1	129.0
		Min-d	6.7	7.1	7.9	6.5	9.4	6.9	13.9	11.1	14.5	18.9	18.3	13.9	6.5
	Khanchanaburi (Vachiralongkorn Dam) (NOx*)	Mean	-	-	1.5	-	-	-	1.3	-	-	-	1.5	-	1.4
		%	0	0	3	0	0	0	58	0	0	0	47	0	9
		Max-d	-	-	1.5	-	-	-	3.3	-	-	-	2.3	-	3.3
		Min-d	-	-	1.5	-	-	-	1.0	-	-	-	0.7	-	0.7
	Chiangmai (Mae Hia) (NOx*)	Mean	18.4	21.0	21.9	8.5	3.8	5.7	6.0	6.4	6.9	6.3	11.7	17.8	10.8
		%	42	97	97	100	100	100	100	100	87	100	100	100	94
		Max-d	21.3	33.1	38.4	15.5	8.7	9.0	9.6	12.4	12.3	10.3	21.0	32.4	38.4
		Min-d	13.8	12.0	8.6	3.6	0.4	2.3	1.7	3.1	3.5	3.0	3.7	8.9	0.4

Mean : monthly or annual arithmetic average values

Max-d : maximum values of daily data

Min-d : minimum values of daily data

% : monthly or annual percentages of period of available data

NOx* : NOx measured by CLD in remote or rural sites

Table 4.10 O₃

Unit : ppb			2009												Annual
Country	Site		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
Japan	Rishiri	Mean	45	48	55	59	55	37	25	27	33	36	39	37	42
		%	98	98	98	98	98	91	32	97	99	99	100	99	92
		Max-d	56	57	61	88	82	68	36	44	46	55	55	44	88
		Min-d	38	45	49	49	33	22	16	16	24	19	30	32	16
	Ochiishi	Mean	39	42	46	50	48	35	25	27	33	35	36	34	37
		%	98	100	100	81	96	100	100	100	100	100	96	100	98
		Max-d	42	46	49	66	71	56	38	45	43	50	49	39	71
		Min-d	34	38	41	44	29	24	15	19	26	26	30	29	15
	Tappi	Mean	27	43	46	46	26	24	21	17	25	32	34	34	31
		%	99	95	98	97	98	93	97	98	98	97	99	92	97
		Max-d	42	51	58	80	56	48	43	45	44	50	53	44	80
		Min-d	10	24	21	27	9	N.D.	7	6	8	9	13	14	N.D.
	Sado-seki	Mean	40	44	49	61	59	59	45	43	50	52	48	45	49
		%	98	99	98	98	98	89	99	99	99	99	99	99	98
		Max-d	48	51	59	83	85	86	70	73	60	68	57	49	86
		Min-d	34	39	45	47	41	39	32	19	43	38	40	38	19
	Happo	Mean	44	52	54	68	65	63	43	43	49	51	45	43	52
		%	93	99	99	99	99	88	99	99	99	99	99	99	98
		Max-d	49	61	63	85	89	82	62	65	61	63	54	51	89
		Min-d	39	40	47	50	44	26	22	16	40	32	21	34	16
	Ijira	Mean	19	26	29	34	25	21	7	12	18	21	20	18	21
		%	99	99	99	99	99	99	99	100	99	99	92	99	99
		Max-d	29	39	39	46	42	32	22	25	34	31	33	30	46
		Min-d	7	10	18	20	9	1	1	1	3	7	3	7	1
	Oki	Mean	39	45	49	66	58	53	41	35	41	46	40	37	46
		%	97	95	96	95	97	86	95	99	99	100	99	99	97
		Max-d	45	52	66	90	80	78	66	65	56	61	48	43	90
		Min-d	33	39	41	45	43	37	16	17	31	33	31	30	16
	Banryu	Mean	30	36	42	53	48	43	28	27	31	35	30	32	36
		%	93	97	93	97	98	91	99	99	99	99	99	99	97
		Max-d	44	49	54	68	64	69	47	53	50	51	40	40	69
		Min-d	16	25	24	34	31	18	8	14	14	20	15	18	8
	Yusuhara	Mean	39	44	48	61	54	45	25	18	37	41	34	35	41
		%	98	99	97	99	99	99	99	38	91	99	99	99	93
		Max-d	45	62	58	77	67	73	47	28	48	56	41	45	77
		Min-d	34	31	37	42	42	14	8	7	15	14	25	28	7
	Hedo	Mean	44	43	49	58	52	31	16	20	32	44	40	43	39
		%	99	78	99	99	99	98	99	99	99	99	99	99	97
		Max-d	55	61	62	73	85	67	36	49	62	69	55	50	85
		Min-d	35	15	34	37	7	7	8	5	8	14	23	37	5
	Ogasawara	Mean	38	37	43	42	36	15	8	12	19	24	38	41	30
		%	97	95	95	95	95	66	81	98	86	99	98	98	92
		Max-d	43	49	54	60	62	42	20	20	48	47	47	48	62
		Min-d	31	12	21	20	7	4	4	5	4	9	20	22	4
Republic of Korea	Kanghwa	Mean	29	37	45	58	60	49	48	40	49	43	34	29	43
		%	98	98	100	99	97	98	100	99	100	99	98	98	99
		Max-d	34	41	51	94	79	66	58	59	58	61	47	37	94
		Min-d	20	29	35	42	47	25	33	20	42	23	26	12	12
	Cheju (Kosan)	Mean	38	44	49	50	50	38	32	35	53	59	39	38	44
		%	100	99	85	100	80	98	98	100	99	97	97	99	96
		Max-d	42	53	54	66	59	60	59	49	76	70	46	52	76
		Min-d	36	39	44	36	35	20	11	16	27	45	34	32	11
	Imsil	Mean	-	33	35	18	54	48	33	28	35	31	25	23	33
		%	0	100	96	100	100	99	100	99	99	99	97	98	91
		Max-d	-	38	52	30	69	73	41	37	56	47	32	29	73
		Min-d	-	27	20	12	45	24	25	13	18	20	17	16	12
Russia	Mondy	Mean	44	43	52	54	55	44	39	37	38	37	44	42	45
		%	97	97	97	93	100	100	97	87	13	65	67	77	83
		Max-d	48	50	59	62	69	61	49	45	40	42	47	46	69
		Min-d	36	35	47	48	37	31	29	27	35	32	40	35	27

Table 4.10 O₃

Unit : ppb			2009												Annual
Country	Site		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
Thailand	Bangkok	Mean	19	24	16	16	18	16	13	16	11	14	22	24	17
		%	13	34	13	93	71	97	100	94	100	100	100	100	76
		Max-d	24	38	19	32	43	28	21	27	19	25	30	36	43
		Min-d	14	5	14	4	1	9	5	4	4	3	13	12	1
	Samutprakarn	Mean	24	23	22	27	23	15	12	14	13	15	11	18	18
		%	81	97	100	97	97	100	97	81	83	84	87	84	91
		Max-d	31	36	47	47	45	29	20	28	26	26	19	32	47
		Min-d	17	17	15	14	9	7	6	5	5	7	2	10	2
	Khanchanaburi (Vachiralongkorn Dam)	Mean	-	-	24	-	-	-	12	-	-	-	10	-	14
		%	0	0	23	0	0	0	58	0	0	0	20	0	8
		Max-d	-	-	47	-	-	-	18	-	-	-	14	-	47
	Chiangmai (Mae Hia)	Min-d	-	-	10	-	-	-	6	-	-	-	8	-	6
		Mean	26	36	37	37	31	24	17	19	17	19	23	25	26
		%	100	97	97	100	100	100	100	100	100	100	100	100	100
		Max-d	40	46	44	54	43	32	23	29	27	29	39	35	54
		Min-d	15	28	21	16	18	14	9	10	10	11	13	14	9

Mean : monthly or annual arithmetic average values

Max-d : maximum values of daily data

Min-d : minimum values of daily data

% : monthly or annual percentages of period of available data

Table 4.11 PM₁₀

Unit : µg/m ³			2009												Annual
Country	Site		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
China	Jinyunshan	Mean	84	57	61	30	34	41	32	21	20	15	23	60	40
		%	100	97	100	100	100	100	100	100	100	100	100	100	100
		Max-d	169	145	196	109	72	107	79	45	68	28	72	156	196
		Min-d	8	4	4	5	4	7	5	6	7	7	7	11	4
	Hongwen	Mean	70	70	69	78	64	48	32	48	48	59	45	86	60
		%	100	97	100	100	100	100	100	100	100	100	100	100	100
		Max-d	159	180	140	196	121	126	80	112	82	128	101	202	202
		Min-d	10	19	15	29	17	17	16	16	17	4	3	17	3
	Xiang Zhou	Mean	66	43	54	51	33	32	24	37	43	75	61	63	48
		%	100	97	100	100	100	100	100	100	100	100	100	100	100
		Max-d	120	72	113	88	81	103	50	92	90	135	147	117	147
		Min-d	35	20	30	25	18	18	15	18	21	30	18	25	15
Japan	Rishiri	Mean	12	11	19	20	22	15	10	15	13	16	18	13	16
		%	100	85	100	88	87	88	32	97	31	87	88	88	81
		Max-d	37	26	51	60	61	51	32	54	19	61	52	56	61
		Min-d	4	3	7	3	5	2	5	3	5	3	3	4	2
	Ochiishi	Mean	24	21	N.D.	30	35	19	17	19	25	29	25	18	24
		%	95	74	0	54	99	99	99	99	100	100	100	100	85
		Max-d	56	45	N.D.	78	146	91	46	53	57	63	65	54	146
		Min-d	8	10	N.D.	13	8	2	6	5	14	13	8	8	N.D.
	Tappi	Mean	18	18	34	5	6	16	12	11	14	16	15	20	16
		%	100	80	99	72	100	100	100	100	100	100	100	99	96
		Max-d	39	34	153	10	11	57	29	26	27	28	37	153	153
		Min-d	9	N.D.	3	N.D.	3	4	3	5	8	6	2	3	N.D.
	Sado-seki	Mean	16	27	29	31	27	24	15	16	17	22	19	20	22
		%	100	100	100	96	100	100	100	98	100	85	98	83	97
		Max-d	43	51	110	70	58	65	31	30	40	61	35	56	110
		Min-d	9	14	8	9	8	6	6	4	9	N.D.	7	6	N.D.
	Happo	Mean	5	9	13	16	19	19	8	13	12	15	7	6	12
		%	97	94	96	98	100	100	91	99	100	100	97	67	95
		Max-d	10	24	52	40	49	35	15	29	23	30	17	11	52
		Min-d	N.D.	3	3	5	3	7	3	4	3	3	2	1	N.D.
	Ijira	Mean	10	18	20	23	21	26	20	19	17	19	12	11	18
		%	100	95	100	100	100	100	100	100	100	100	100	99	100
		Max-d	19	58	90	44	50	47	32	29	30	34	29	44	90
		Min-d	3	7	8	8	7	11	9	8	7	6	3	3	3
	Oki	Mean	25	35	33	34	31	29	18	15	15	29	20	30	26
		%	99	98	99	83	59	97	93	81	99	99	100	98	92
		Max-d	59	84	156	59	71	74	43	34	33	55	34	158	158
		Min-d	9	11	12	9	15	10	8	7	9	11	7	6	6
	Banryu	Mean	20	35	31	31	28	32	19	22	20	31	18	26	26
		%	100	100	100	99	99	99	97	100	100	99	99	97	99
		Max-d	51	92	120	70	45	77	37	34	30	61	29	140	140
		Min-d	8	13	10	12	18	9	8	9	11	6	7	9	6
	Yusuhara	Mean	12	23	18	23	20	22	16	11	-	-	11	16	18
		%	98	100	95	100	100	100	100	29	0	0	95	100	76
		Max-d	36	87	84	39	45	55	32	19	-	-	20	88	88
		Min-d	3	2	4	6	9	3	8	3	-	-	2	4	2
	Hedo	Mean	30	37	29	30	31	24	14	21	26	32	23	34	28
		%	100	100	100	99	100	99	77	92	99	100	98	94	96
		Max-d	73	111	72	58	54	46	23	41	51	71	47	108	111
		Min-d	9	12	12	8	12	8	10	7	11	14	10	10	7
	Ogasawara	Mean	11	14	17	11	13	6	7	11	15	11	11	12	12
		%	100	100	100	99	100	100	100	100	100	100	100	100	100
		Max-d	20	30	43	30	30	23	13	23	34	21	19	21	43
		Min-d	4	4	5	2	2	3	4	4	4	4	6	3	2
Republic of Korea	Kanghwa	Mean	43	47	64	50	47	46	47	42	56	57	59	54	51
		%	98	100	100	99	97	100	100	99	100	98	98	97	99
		Max-d	53	59	81	141	77	69	77	70	96	96	96	107	141
		Min-d	29	39	46	25	21	17	22	21	37	38	21	24	17
	Cheju (Kosan)	Mean	26	55	52	48	46	37	46	39	41	61	25	40	43
		%	100	100	100	100	80	98	98	100	99	99	97	98	97
		Max-d	32	94	75	84	55	52	70	47	58	98	30	105	105
		Min-d	18	33	27	29	32	20	33	28	23	34	19	23	18
	Imsil	Mean	-	50	42	40	26	41	27	26	27	42	28	30	34
		%	0	99	96	100	100	100	100	100	100	97	96	97	90
		Max-d	-	83	60	88	41	64	50	44	40	87	50	78	88
		Min-d	-	34	25	10	9	12	12	10	16	20	7	9	7

Table 4.11 PM₁₀

Unit : µg/m ³			2009												Annual
Country	Site		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
Thailand	Bangkok	Mean	42	55	32	39	35	24	29	32	26	36	51	68	39
		%	23	97	97	87	100	97	100	94	100	100	100	100	91
		Max-d	57	106	113	70	78	31	45	53	47	57	89	111	113
		Min-d	19	18	6	15	18	18	17	14	16	19	21	23	6
	Samutprakarn	Mean	70	57	31	40	34	43	42	34	30	35	47	61	43
		%	81	97	87	100	97	67	100	90	93	100	100	100	93
		Max-d	123	108	93	63	79	61	88	58	45	62	83	102	123
		Min-d	17	25	15	16	18	23	23	16	21	18	25	23	15
	Khanchanaburi (Vachiralongkorn Dam)	Mean	-	-	52	35	38	-	9	-	-	-	30	-	28
		%	0	0	23	7	6	0	35	0	0	0	33	0	9
		Max-d	-	-	111	36	39	-	14	-	-	-	36	-	111
		Min-d	-	-	26	33	37	-	6	-	-	-	24	-	6
	Chiangmai (Mae Hia)	Mean	37	75	111	51	28	23	23	22	22	26	39	49	42
		%	100	90	100	100	100	100	100	100	100	100	100	100	99
		Max-d	58	154	196	108	46	38	39	33	45	40	54	69	196
		Min-d	15	41	45	18	13	14	11	14	14	14	23	27	11

Mean : monthly or annual arithmetic average values

Max-d : maximum values of daily data

Min-d : minimum values of daily data

% : monthly or annual percentages of period of available data

Table 4.12 PM_{2.5}

Unit : µg/m ³			2009												Annual
Country	Site		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
Japan	Rishiri	Mean	8	8	9	12	12	9	5	6	6	8	10	6	8
		%	100	100	100	100	99	100	22	97	100	99	100	100	93
		Max-d	22	13	25	38	27	30	7	11	13	27.7	23	26	38
		Min-d	3	3	4	2	5	3	4	3	2	2.1	2	2	2
	Ochiishi	Mean	14	14	N.D.	14	21	12	11	8	9	10	10	8	12
		%	95	74	0	54	99	99	99	99	100	100	100	100	85
		Max-d	31	19	N.D.	51	99	95	40	18	14	22	25	29	99
		Min-d	4	7	N.D.	6	4	N.D.	3	3	5	4	4	4	N.D.
	Oki	Mean	10	13	10	17	14	18	9	9	8	15	11	11	12
		%	98	98	98	98	99	97	98	99	100	99	98	96	98
		Max-d	25	29	29	33	35	39	30	23	16	35	25	32	39
		Min-d	5	6	4	4	5	6	4	4	5	5	4	4	4

Mean : monthly or annual arithmetic average values

Max-d : maximum values of daily data

Min-d : minimum values of daily data

% : monthly or annual percentages of period of available data

Table 4.13 Particulate matter component: SO₄²⁻

Unit : µg/m ³			2009												Annual
Country	Site		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
China	Hongwen	Mean	12.39	21.54	14.75	11.90	16.34	11.79	8.07	12.39	12.79	13.94	4.57	13.80	12.72
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-w	13.91	24.57	23.10	16.57	20.37	16.14	10.81	18.15	13.92	19.25	8.28	18.08	24.57
		Min-w	10.48	18.51	9.01	1.40	12.56	6.66	5.32	6.58	11.35	9.48	2.32	8.85	1.40
Indonesia	Serpong	Mean	0.39	1.41	1.34	1.54	0.29	0.35	0.43	0.84	0.31	1.61	0.20	0.08	0.79
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-2w	0.56	1.41	2.54	2.61	0.46	0.39	0.43	1.42	0.46	3.98	0.28	0.14	3.98
		Min-2w	0.22	1.41	0.14	0.43	0.12	0.31	0.43	0.25	0.16	0.25	0.13	0.02	0.02
Japan	Rishiri	Mean	2.29	2.15	2.84	3.44	4.15	3.14	1.98	2.32	1.72	2.09	1.55	1.52	2.50
		%	100	100	100	100	100	100	100	100	100	100	50	67	92
		Max-2w	3.47	2.26	3.02	4.57	4.18	4.15	2.58	2.49	2.10	2.33	1.55	1.65	4.57
		Min-2w	1.11	2.03	2.66	2.30	4.13	2.10	1.39	2.14	1.35	1.85	1.55	1.38	1.11
	Ochiishi	Mean	4.50	2.66	4.28	4.01	1.84	2.50	2.08	2.40	2.26	1.04	3.70	0.58	2.61
		%	100	100	100	100	100	100	100	100	100	69	100	100	96
		Max-2w	6.56	4.39	5.62	4.11	2.26	3.33	2.09	2.48	2.40	1.57	3.70	0.69	6.56
		Min-2w	2.43	0.94	2.95	3.91	1.42	1.68	2.07	2.33	2.12	0.52	3.70	0.47	0.47
	Tappi	Mean	3.45	4.19	9.78	4.05	5.34	4.60	3.53	1.77	4.36	2.10	5.16	3.46	4.29
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-2w	4.30	4.41	14.89	7.45	5.66	8.57	4.81	3.43	5.79	3.31	5.77	6.71	14.89
		Min-2w	2.60	3.97	4.66	0.65	5.02	1.25	2.25	0.11	2.92	0.90	4.55	N.D.	N.D.
	Sado-seki	Mean	2.11	2.75	2.41	5.25	5.57	5.93	1.69	4.44	3.42	2.54	3.08	2.92	3.58
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-2w	2.97	3.04	3.62	9.74	5.84	7.77	2.78	5.28	4.13	3.81	5.66	3.23	9.74
		Min-2w	1.25	2.45	1.21	0.76	5.30	4.95	0.60	3.60	2.72	1.27	0.49	2.39	0.49
	Happo	Mean	-	-	0.36	0.79	0.43	0.83	0.23	0.59	0.64	0.93	0.79	0.30	0.59
		%	0	0	50	44	100	100	100	100	100	100	100	100	77
		Max-2w	-	-	0.36	0.79	0.66	1.02	0.30	0.70	0.87	1.44	1.26	0.35	1.44
		Min-2w	-	-	0.36	0.79	0.19	0.73	0.16	0.48	0.41	0.42	0.32	0.23	0.16
	Ijira	Mean	2.11	3.69	3.05	5.99	4.08	6.25	3.45	4.80	3.50	3.66	3.63	2.10	3.88
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-2w	2.26	5.19	3.78	7.01	4.61	8.49	3.47	6.31	5.84	4.57	4.93	2.47	8.49
		Min-2w	1.96	2.20	2.32	4.98	3.55	4.52	3.43	3.29	1.17	2.75	2.32	1.60	1.17
	Oki	Mean	3.87	4.91	4.41	8.79	6.28	3.71	3.38	4.07	1.69	4.04	3.07	3.93	4.29
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-2w	5.16	8.21	4.51	12.88	6.96	6.56	4.17	5.91	3.09	5.10	3.57	6.15	12.88
		Min-2w	2.57	1.62	4.32	4.69	5.60	0.85	2.14	2.24	0.28	2.97	2.58	2.41	0.28
	Banryu	Mean	4.53	7.18	4.44	7.62	6.29	8.46	3.69	5.07	4.62	4.78	4.97	3.21	5.44
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-2w	4.56	10.51	5.43	10.65	6.59	10.37	3.84	6.36	5.26	5.61	6.43	3.87	10.65
		Min-2w	4.51	3.85	3.44	4.58	6.00	6.09	3.55	3.79	3.97	3.95	3.51	2.16	2.16
	Yusuhara	Mean	2.05	7.27	3.63	7.14	5.45	7.75	5.13	4.26	4.69	4.31	4.72	4.21	5.16
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-2w	3.51	12.34	4.13	7.89	6.07	11.45	5.97	5.77	6.53	5.75	6.64	4.37	12.34
		Min-2w	0.58	2.20	3.12	6.38	4.82	4.41	4.28	2.75	2.85	2.86	2.81	4.06	0.58
	Hedo	Mean	6.29	8.07	5.77	7.14	7.09	4.57	0.93	3.85	6.08	5.52	5.04	6.92	5.62
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-2w	6.53	10.77	5.89	7.31	7.41	8.74	1.19	4.37	6.22	6.59	5.67	8.28	10.77
		Min-2w	6.05	5.36	5.64	6.97	6.76	2.12	0.66	3.32	5.95	4.45	4.41	5.92	0.66
	Ogasawara	Mean	2.92	3.33	4.11	3.19	3.61	2.03	1.25	1.95	2.24	2.06	1.74	2.82	2.64
		%	100	100	100	100	100	100	100	100	50	100	44	100	92
		Max-2w	3.00	3.57	4.65	3.33	3.72	3.87	1.77	3.03	2.24	2.35	1.74	3.55	4.65
		Min-2w	2.83	3.09	3.58	3.06	3.50	0.67	0.73	0.88	2.24	1.76	1.74	1.67	0.67
	Tokyo	Mean	2.37	4.17	3.83	6.43	6.15	7.52	4.42	5.61	4.02	4.65	4.02	2.06	4.62
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-2w	2.94	5.01	4.75	8.80	7.92	9.60	4.56	6.44	4.29	4.95	5.42	2.91	9.60
		Min-2w	1.81	3.34	2.91	4.05	4.37	4.82	4.28	4.79	3.76	4.34	2.62	0.63	0.63
Malaysia	Tanah Rata	Mean	0.89	1.48	0.98	0.46	1.69	2.63	2.21	1.25	1.83	1.60	0.61	0.85	1.39
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-w	1.98	2.87	1.16	0.84	2.77	4.03	3.15	2.14	3.43	2.68	0.96	1.03	4.03
		Min-w	0.03	0.57	0.77	0.11	0.47	1.44	1.36	0.11	1.22	0.79	0.11	0.59	0.03
	Petaling Jaya	Mean	2.77	2.86	1.52	2.41	3.06	6.18	3.44	2.40	3.83	2.80	2.21	2.65	3.01
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-w	3.92	6.19	3.17	4.39	5.92	10.29	5.56	5.59	6.05	4.78	3.42	5.13	10.29
		Min-w	1.13	0.12	0.03	1.22	0.11	2.73	0.15	0.01	1.64	0.12	0.97	0.04	0.01
	Danum Valley	Mean	1.01	2.05	1.55	2.80	2.57	1.98	2.28	1.35	10.40	3.78	2.60	8.98	3.64
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-2w	1.28	2.72	1.87	3.69	2.88	2.09	3.05	2.53	15.97	3.93	3.43	11.30	15.97
		Min-2w	0.74	1.37	1.37	1.92	2.26	1.87	1.51	0.17	7.21	3.63	1.77	6.66	0.17
Mongolia	Ulaanbaatar	Mean	-	-	-	1.81	1.40	0.93	1.06	1.32	0.62	2.06	2.22	7.70	2.24
		%	0	0	0	80	100	100	100	100	100	100	100	100	75
		Max-w	-	-	-	3.4	1.50	1.54	1.48	1.42	0.93	2.87	8.0	15.2	15.20
		Min-w	-	-	-	0.6	1.26	0.10	0.39	1.23	0.30	1.37	0.2	1.3	0.10
	Tereij	Mean	3.39	2.19	1.01	1.17	0.71	0.85	0.73	0.61	0.36	0.63	1.69	0.33	1.07
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-2w	5.17	2.19	1.96	2.01	1.36	1.30	0.86	0.90	0.60	1.02	1.97	0.66	5.17
		Min-2w	1.60	2.19	0.06	0.27	0.05	0.39	0.60	0.31	0.14	0.24	1.41	N.D.	N.D.

Table 4.13 Particulate matter component: SO₄²⁻

Unit : µg/m ³			2009												Annual
Country	Site		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
Philippines	Mt. Sto. Tomas	Mean	0.10	0.05	0.20	0.08	0.14	0.46	0.13	0.19	0.27	0.19	0.0	0.0	0.16
		%	17	100	100	100	100	100	100	100	100	100	100	100	92
		Max-w	0.10	0.13	0.45	0.23	0.21	1.16	0.17	0.37	0.30	0.47	0.1	0.1	1.16
		Min-w	0.10	N.D.	0.04	0.03	0.05	0.13	0.07	0.09	0.19	0.03	N.D.	N.D.	N.D.
Republic of Korea	Kanghwa	Mean	5.25	4.31	5.68	6.36	4.84	7.54	9.95	8.08	6.56	7.31	4.85	3.23	6.04
		%	10	18	13	40	16	43	16	19	17	16	17	45	22
		Max-d	8.06	6.96	10.40	20.57	9.34	11.81	20.92	20.02	10.85	17.47	8.77	13.23	20.92
		Min-d	3.09	1.35	2.27	2.00	1.95	0.81	1.15	1.28	4.30	1.50	0.83	N.D.	N.D.
	Cheju (Kosan)	Mean	1.99	6.40	3.99	9.37	4.81	3.2	0.81	1.82	6.92	6.6	2.57	3.89	4.68
		%	3	14	10	37	16	40	16	19	17	16	17	42	21
		Max-d	1.99	11.56	6.92	28.50	12.31	11.5	2.34	5.57	13.02	11.0	4.56	17.89	28.50
		Min-d	1.99	2.97	0.15	4.64	1.55	0.3	0.36	0.51	1.41	1.9	0.64	N.D.	N.D.
	Imsil	Mean	2.71	8.40	6.26	6.53	4.13	3.2	4.8	5.22	4.48	5.2	4.10	2.24	4.66
		%	3	18	13	43	16	43	13	19	17	16	17	42	22
		Max-d	2.71	20.01	9.06	23.98	6.15	4.1	7.7	13.24	7.91	9.9	8.67	7.59	23.98
		Min-d	2.71	2.56	3.67	2.30	2.73	2.0	0.4	0.87	2.15	2.2	N.D.	N.D.	N.D.
Russia	Mondy	Mean	0.69	0.82	-	-	-	0.42	-	0.38	0.21	0.41	0.12	0.08	0.39
		%	88	100	0	0	0	100	0	100	100	100	100	100	67
		Max-m	0.69	0.82	-	-	-	0.42	-	0.38	0.21	0.41	0.12	0.08	0.82
		Min-m	0.69	0.82	-	-	-	0.42	-	0.38	0.21	0.41	0.12	0.08	0.08
	Listvianka	Mean	2.58	2.20	1.29	2.14	1.75	1.07	1.20	1.79	1.62	1.30	1.02	0.92	1.58
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-w	3.92	3.98	1.97	3.91	3.20	1.63	1.73	3.48	3.00	2.11	1.84	1.80	3.98
		Min-w	1.43	0.95	0.68	0.33	0.51	0.56	0.56	0.71	0.71	0.61	0.59	0.41	0.33
	Irkutsk	Mean	3.95	4.13	2.89	1.73	1.34	0.63	0.60	1.94	1.39	0.58	3.03	6.79	2.36
		%	100	100	100	100	100	100	100	100	100	100	83	100	98
		Max-w	5.79	5.93	5.56	2.17	2.57	0.93	1.63	3.20	1.58	1.39	3.88	8.26	8.26
		Min-w	0.15	2.70	1.93	1.06	0.32	0.16	0.10	0.80	1.19	0.17	2.06	6.02	0.10
	Primorskaya	Mean	5.38	4.79	4.07	4.02	4.18	3.05	1.76	3.60	2.02	2.55	4.84	4.30	3.71
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-2w	5.86	5.63	4.83	5.00	4.72	3.44	1.87	4.76	2.40	4.71	4.99	4.67	5.86
		Min-2w	4.89	3.95	3.31	3.04	3.65	2.66	1.65	2.45	1.63	0.40	4.68	3.92	0.40
Thailand	Bangkok	Mean	7.04	5.79	2.89	2.51	3.49	0.55	0.92	0.79	0.96	2.39	2.53	-	2.71
		%	100	100	100	100	100	100	100	100	100	100	100	0	92
		Max-10d	10.80	6.89	4.04	5.28	5.97	0.98	1.57	1.55	2.52	4.06	4.16	-	10.80
		Min-10d	3.31	3.75	2.02	0.07	1.55	0.10	0.59	N.D.	0.04	0.27	0.15	-	N.D.
	Patumthani	Mean	8.56	6.00	3.96	3.00	0.17	0.18	0.69	1.71	0.79	4.46	2.43	-	3.12
		%	100	100	100	100	68	63	72	100	100	100	100	0	83
		Max-10d	10.55	7.84	5.06	6.07	0.19	0.35	0.93	1.90	1.86	6.39	5.11	-	10.55
		Min-10d	7.36	4.02	3.09	0.04	0.15	N.D.	0.44	1.62	0.10	2.53	0.08	-	N.D.
	Khanchanaburi (Vachiralongkom Dam)	Mean	-	-	3.21	-	-	-	0.02	-	-	-	0.75	-	1.32
		%	0	0	69	0	0	0	63	0	0	0	62	0	13
		Max-2w	-	-	3.21	-	-	-	0.02	-	-	-	0.75	-	3.21
		Min-2w	-	-	3.21	-	-	-	0.02	-	-	-	0.75	-	0.02
	Chiangmai (Mae Hia)	Mean	0.91	4.54	4.53	3.35	2.17	0.80	0.42	0.18	0.49	2.22	3.14	0.90	1.97
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-10d	1.32	5.34	5.58	5.59	2.68	1.20	0.73	0.38	1.39	3.67	7.83	1.28	7.83
		Min-10d	0.52	3.79	3.85	0.47	1.65	0.53	0.12	0.05	N.D.	0.45	0.54	0.19	N.D.
	Nakhon Ratchasima	Mean	5.94	4.64	2.42	2.94	0.92	0.84	1.42	2.23	1.35	7.55	5.45	5.59	3.44
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-10d	10.53	5.21	4.57	4.59	1.39	1.67	1.75	2.93	1.98	15.01	6.83	10.09	15.01
		Min-10d	3.58	4.05	N.D.	1.39	0.14	0.33	1.13	1.23	0.84	3.76	4.01	0.20	N.D.
Viet Nam	Ha Noi	Mean	2.25	1.39	2.91	4.55	5.11	6.68	1.70	5.63	22.43	25.01	15.35	14.55	8.77
		%	100	100	100	100	100	100	100	100	75	100	100	100	98
		Max-w	3.55	2.12	4.09	6.20	6.20	10.29	3.70	9.44	48.09	37.29	21.06	23.11	48.09
		Min-w	0.75	0.91	0.92	1.70	4.18	0.11	0.11	1.27	8.52	21.10	5.99	6.59	0.11
	Hoa Binh	Mean	1.88	1.30	0.37	3.21	0.84	0.01	0.19	0.79	2.15	5.44	6.29	6.26	2.49
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-w	3.67	2.48	0.48	10.35	2.35	0.02	0.37	1.95	8.16	10.27	9.41	12.19	12.19
		Min-w	1.06	0.76	0.24	0.58	0.01	N.D.	N.D.	0.18	0.02	0.01	0.12	1.63	N.D.

Mean : monthly or annual arithmetic average values

Max-d : maximum values of daily data

Min-d : minimum values of daily data

Max-10d : maximum values of 10-day interval data

Min-10d : minimum values of 10-day interval data

Max-w : maximum values of weekly data

Min-w : minimum values of weekly data

Max-2w : maximum values of biweekly data

Min-2w : minimum values of biweekly data

Max-m : maximum values of monthly data

Min-m : minimum values of monthly data

% : monthly or annual percentages of period of available data

Table 4.14 Particulate matter component: NO₃⁻

Unit : µg/m ³			2009												Annual
Country	Site		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
China	Hongwen	Mean	11.75	15.09	12.10	7.60	7.25	5.18	5.61	5.14	5.84	7.47	2.53	11.10	7.98
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-w	13.27	15.42	18.18	11.93	8.91	5.86	7.59	6.34	6.61	10.04	5.14	17.31	18.18
		Min-w	9.30	14.76	7.68	0.28	3.96	4.25	3.63	4.04	5.44	4.53	0.30	4.93	0.28
Indonesia	Serpong	Mean	0.06	0.34	0.04	0.19	0.04	0.15	0.11	0.21	0.13	0.20	0.05	0.02	0.13
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-2w	0.07	0.34	0.07	0.29	0.06	0.19	0.11	0.31	0.16	0.42	0.07	0.04	0.42
		Min-2w	0.05	0.34	N.D.	0.11	0.02	0.11	0.11	0.10	0.10	0.04	0.03	N.D.	N.D.
Japan	Rishiri	Mean	0.44	0.44	0.84	0.93	1.33	0.71	0.25	0.32	0.68	0.65	0.59	0.45	0.64
		%	100	100	100	100	100	100	100	100	100	100	50	67	92
		Max-2w	0.69	0.49	0.99	1.33	1.43	1.32	0.29	0.55	0.76	0.72	0.59	0.52	1.43
		Min-2w	0.19	0.39	0.69	0.53	1.23	0.26	0.22	0.10	0.60	0.59	0.59	0.37	0.10
	Ochiishi	Mean	0.53	0.50	0.74	1.67	0.64	0.86	0.41	0.72	0.89	0.30	0.74	0.09	0.67
		%	100	100	100	100	100	100	100	100	100	69	100	100	96
		Max-2w	0.74	0.90	0.89	1.87	0.85	1.30	0.45	0.99	1.17	0.51	0.74	0.11	1.87
		Min-2w	0.32	0.10	0.59	1.47	0.44	0.42	0.38	0.45	0.61	0.08	0.74	0.07	0.07
	Tappi	Mean	0.97	0.83	1.83	1.89	2.64	1.33	1.41	0.89	0.87	0.74	1.83	0.58	1.29
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-2w	1.45	1.00	2.21	3.61	3.15	2.33	1.91	1.26	1.57	1.25	2.97	1.02	3.61
		Min-2w	0.49	0.67	1.45	0.17	2.13	0.52	0.91	0.53	0.18	0.23	0.69	N.D.	N.D.
	Sado-seki	Mean	0.59	0.70	0.66	2.30	1.97	1.18	0.38	0.86	1.47	0.80	1.17	0.65	1.05
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-2w	0.89	0.84	1.00	4.48	2.16	1.44	0.58	1.19	1.81	1.41	2.16	0.75	4.48
		Min-2w	0.29	0.55	0.31	0.12	1.78	0.84	0.18	0.52	1.13	0.19	0.19	0.59	0.12
	Happo	Mean	-	-	0.13	0.16	0.21	0.09	N.D.	0.02	N.D.	0.28	0.12	0.04	0.10
		%	0	0	50	44	100	100	100	100	100	100	100	100	77
		Max-2w	-	-	0.13	0.16	0.35	0.18	N.D.	0.03	N.D.	0.48	0.18	0.07	0.48
		Min-2w	-	-	0.13	0.16	0.07	N.D.	N.D.	N.D.	N.D.	0.08	0.07	N.D.	N.D.
	Ijira	Mean	0.46	0.52	1.03	0.55	0.26	0.12	0.19	0.12	0.22	0.51	0.64	0.31	0.40
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-2w	0.54	0.66	1.36	0.58	0.33	0.14	0.21	0.13	0.33	0.81	0.65	0.38	1.36
		Min-2w	0.37	0.37	0.70	0.53	0.18	0.08	0.18	0.11	0.12	0.21	0.63	0.20	0.08
	Oki	Mean	1.37	1.57	2.02	2.51	1.69	0.62	0.70	0.86	0.63	1.64	1.00	1.41	1.31
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-2w	1.91	2.61	2.74	3.49	1.88	1.03	1.37	1.25	1.19	2.37	1.50	2.59	3.49
		Min-2w	0.83	0.52	1.31	1.53	1.50	0.21	0.26	0.46	0.07	0.91	0.49	0.65	0.07
	Banryu	Mean	1.85	2.70	2.32	2.04	1.17	0.75	0.51	0.71	1.36	1.65	1.27	1.28	1.43
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-2w	2.32	3.74	2.68	2.15	1.79	1.68	0.57	0.77	1.63	2.36	1.29	1.73	3.74
		Min-2w	1.38	1.66	1.96	1.93	0.54	0.29	0.46	0.65	1.08	0.95	1.25	1.01	0.29
	Yusuhabara	Mean	0.26	1.19	1.46	0.52	0.22	0.03	0.08	0.09	0.69	0.89	0.25	0.77	0.52
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-2w	0.50	1.81	1.71	0.63	0.34	0.10	0.13	0.15	1.20	1.49	0.30	0.95	1.81
		Min-2w	0.02	0.57	1.21	0.42	0.10	N.D.	0.03	0.04	0.18	0.29	0.19	0.60	N.D.
	Hedo	Mean	1.90	1.70	1.58	2.12	2.18	1.25	0.33	1.07	1.81	1.46	1.44	2.46	1.63
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-2w	2.02	1.88	1.69	2.24	2.60	2.39	0.35	1.17	1.83	1.88	1.68	3.08	3.08
		Min-2w	1.79	1.53	1.46	1.99	1.76	0.57	0.32	0.98	1.80	1.03	1.20	2.08	0.32
	Ogasawara	Mean	0.61	0.84	1.21	0.94	0.90	0.29	0.23	0.33	0.42	0.34	0.35	0.65	0.60
		%	100	100	100	100	100	100	100	100	50	100	44	100	92
		Max-2w	0.67	0.91	1.39	1.07	0.96	0.43	0.32	0.50	0.42	0.37	0.35	0.96	1.39
		Min-2w	0.55	0.76	1.03	0.80	0.84	0.16	0.15	0.17	0.42	0.32	0.35	0.46	0.15
	Tokyo	Mean	3.47	4.99	3.86	4.70	4.44	3.47	2.97	2.81	4.14	3.82	4.42	3.46	3.85
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-2w	4.19	5.33	4.51	6.77	5.28	3.78	3.45	2.92	4.49	5.03	5.63	6.18	6.77
		Min-2w	2.75	4.64	3.20	2.62	3.59	2.95	2.50	2.70	3.79	2.60	3.22	0.53	0.53
Malaysia	Tanah Rata	Mean	0.15	0.12	0.06	0.08	0.15	0.31	0.30	0.10	0.14	0.13	0.10	0.14	0.15
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-w	0.38	0.25	0.10	0.26	0.35	0.85	0.67	0.16	0.29	0.29	0.18	0.19	0.85
		Min-w	N.D.	0.04	0.02	0.01	0.04	0.04	0.07	0.03	0.05	0.03	0.03	0.08	N.D.
	Petaling Jaya	Mean	1.71	1.04	0.90	1.20	1.41	1.20	1.13	0.65	1.25	1.22	1.33	1.43	1.22
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-w	3.22	1.87	1.72	1.87	2.57	2.12	1.70	1.25	1.75	1.70	1.95	2.55	3.22
		Min-w	0.91	0.09	0.01	0.55	0.05	0.63	0.33	0.03	0.82	0.14	0.49	0.06	0.01
	Danum Valley	Mean	0.21	0.11	0.36	0.16	0.02	0.01	0.03	0.02	0.02	0.01	0.18	1.42	0.21
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-2w	0.23	0.20	0.39	0.31	0.04	0.02	0.04	0.02	0.04	0.02	0.35	1.97	1.97
		Min-2w	0.19	0.02	0.30	N.D.	N.D.	N.D.	N.D.	0.01	N.D.	0.01	0.02	0.87	N.D.
Mongolia	Ulaanbaatar	Mean	-	-	-	0.63	0.47	0.33	0.68	0.74	0.28	1.40	0.73	2.62	0.93
		%	0	0	0	80	100	100	100	100	100	100	100	100	75
		Max-w	-	-	-	1.1	0.71	0.78	0.87	0.91	0.57	2.91	2.1	5.8	5.84
		Min-w	-	-	-	0.3	0.22	0.01	0.33	0.65	0.10	0.77	0.1	0.3	0.01
	Tereij	Mean	0.65	0.26	0.31	0.17	0.22	0.22	0.11	0.13	0.11	0.15	0.54	0.12	0.24
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-2w	0.98	0.26	0.50	0.27	0.42	0.29	0.13	0.14	0.13	0.18	0.69	0.22	0.98
		Min-2w	0.31	0.26	0.12	0.08	0.01	0.14	0.08	0.11	0.09	0.12	0.38	0.01	0.01

Table 4.14 Particulate matter component: NO₃⁻

Unit : µg/m ³			2009												Annual
Country	Site		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
Philippines	Mt. Sto. Tomas	Mean	0.10	N.D.	0.18	0.09	0.11	0.16	0.17	0.17	0.28	0.19	0.1	0.0	0.12
		%	17	100	100	100	100	100	100	100	100	100	100	100	92
		Max-w	0.10	N.D.	0.32	0.16	0.17	0.16	0.24	0.21	0.39	0.51	0.2	0.1	0.51
		Min-w	0.10	N.D.	0.08	0.04	N.D.	0.15	0.08	0.11	0.17	N.D.	N.D.	N.D.	N.D.
Republic of Korea	Kanghwa	Mean	3.27	5.13	3.72	2.52	1.32	0.89	0.88	0.42	0.59	2.81	4.84	3.45	2.38
		%	10	18	13	40	16	43	16	19	17	16	17	45	22
		Max-d	4.87	8.98	8.99	6.89	4.75	3.73	2.65	0.60	1.16	10.47	11.11	15.41	15.41
		Min-d	0.76	1.68	1.45	0.47	0.32	0.24	0.22	0.33	0.31	0.47	N.D.	0.31	N.D.
	Cheju (Kosan)	Mean	1.21	1.67	0.86	0.97	0.22	0.2	0.05	0.14	0.23	0.3	0.20	0.59	0.49
		%	3	14	10	37	16	40	16	19	17	16	17	42	21
		Max-d	1.21	2.78	1.44	3.77	0.52	0.4	0.24	0.31	0.29	0.4	0.30	3.21	3.77
		Min-d	1.21	1.02	0.46	0.22	0.08	0.1	N.D.	N.D.	0.18	0.1	0.14	N.D.	N.D.
	Imsil	Mean	1.88	7.10	6.11	4.74	0.70	1.6	0.5	0.48	0.45	1.0	3.77	2.71	2.67
		%	3	18	13	43	16	43	13	19	17	16	17	42	22
		Max-d	1.88	17.79	9.78	10.41	1.65	3.8	1.2	1.12	0.52	2.0	7.98	6.63	17.79
		Min-d	1.88	2.57	0.95	0.69	0.28	0.5	0.2	0.16	0.39	0.3	0.78	N.D.	N.D.
Russia	Mondy	Mean	0.06	0.04	-	-	-	0.01	-	0.01	N.D.	0.01	0.01	0.01	0.02
		%	88	100	0	0	0	100	0	100	100	100	100	100	67
		Max-m	0.06	0.04	-	-	-	0.01	-	0.01	N.D.	0.01	0.01	0.01	0.06
		Min-m	0.06	0.04	-	-	-	0.01	-	0.01	N.D.	0.01	0.01	0.01	N.D.
	Listvianka	Mean	0.21	0.16	0.20	0.33	0.86	0.07	0.06	0.07	0.24	0.28	0.19	0.18	0.25
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-w	0.45	0.28	0.32	0.85	3.40	0.13	0.14	0.11	0.34	0.71	0.40	0.39	3.40
		Min-w	N.D.	N.D.	0.08	N.D.	0.08	0.04	N.D.	0.03	0.14	0.07	0.06	N.D.	N.D.
	Irkutsk	Mean	1.36	0.82	1.17	0.59	0.41	0.68	0.20	0.28	0.30	0.26	1.24	2.82	0.83
		%	100	100	100	100	100	100	100	100	100	100	83	100	98
		Max-w	2.14	0.95	2.58	0.85	0.52	1.07	0.56	0.41	0.78	0.56	1.79	4.42	4.42
		Min-w	0.29	0.61	0.60	0.25	0.13	0.44	N.D.	N.D.	N.D.	0.02	0.67	1.80	N.D.
	Primorskaya	Mean	2.27	1.82	1.86	1.65	0.47	0.42	0.19	0.21	0.33	0.73	1.65	1.62	1.10
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-2w	2.29	1.92	2.22	2.11	0.48	0.50	0.20	0.23	0.41	1.24	1.71	2.06	2.29
		Min-2w	2.25	1.72	1.49	1.20	0.47	0.34	0.17	0.19	0.26	0.22	1.58	1.17	0.17
Thailand	Bangkok	Mean	3.67	3.91	3.02	1.81	2.02	0.59	0.80	0.74	0.77	0.47	N.D.	-	1.62
		%	100	100	100	100	100	100	100	100	100	100	100	0	92
		Max-10d	5.47	4.99	4.23	3.84	3.25	1.01	1.34	1.27	1.92	0.69	N.D.	-	5.47
		Min-10d	2.07	3.26	2.32	N.D.	1.15	0.10	0.18	0.01	0.04	0.18	N.D.	-	N.D.
	Patumthani	Mean	3.16	4.70	3.23	1.89	0.24	0.30	1.24	1.64	0.50	0.57	N.D.	-	1.73
		%	100	100	100	100	68	63	72	100	100	100	100	0	83
		Max-10d	4.01	4.95	3.94	3.94	0.31	0.60	1.56	2.03	0.75	0.78	N.D.	-	4.95
		Min-10d	1.99	4.32	2.82	N.D.	0.17	N.D.	0.91	1.45	N.D.	0.35	N.D.	-	N.D.
	Khanchanaburi (Vachiralongkom Dam)	Mean	-	-	0.33	-	-	-	0.21	-	-	-	10.12	-	3.55
		%	0	0	69	0	0	0	63	0	0	0	62	0	13
		Max-2w	-	-	0.33	-	-	-	0.21	-	-	-	10.12	-	10.12
		Min-2w	-	-	0.33	-	-	-	0.21	-	-	-	10.12	-	0.21
	Chiangmai (Mae Hia)	Mean	0.14	0.99	1.40	1.10	0.90	0.82	N.D.	1.07	0.15	0.34	0.40	0.55	0.66
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-10d	0.22	1.17	2.05	2.16	0.99	1.32	N.D.	3.20	0.33	0.39	0.51	0.68	3.20
		Min-10d	0.08	0.76	0.48	0.41	0.74	0.36	N.D.	N.D.	N.D.	0.29	0.20	0.34	N.D.
	Nakhon Ratchasima	Mean	0.54	0.06	0.12	0.31	0.32	0.30	0.81	0.73	0.24	0.29	0.08	0.24	0.34
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-10d	0.90	0.08	0.21	0.52	0.52	0.63	1.10	1.43	0.31	0.59	0.25	0.38	1.43
		Min-10d	0.18	0.05	N.D.	0.03	0.14	0.10	0.41	0.13	0.12	0.07	N.D.	0.04	N.D.
Viet Nam	Ha Noi	Mean	0.70	0.58	1.55	2.54	3.10	3.31	1.11	3.59	4.30	6.53	6.72	8.09	3.52
		%	100	100	100	100	100	100	100	100	75	100	100	100	98
		Max-w	1.85	1.25	2.27	3.49	3.42	4.62	3.14	6.40	6.43	12.64	9.66	14.59	14.59
		Min-w	0.22	0.14	0.24	1.00	2.55	0.48	0.13	0.49	2.51	3.25	3.92	3.19	0.13
	Hoa Binh	Mean	0.53	0.40	0.09	0.72	0.09	N.D.	0.03	0.25	0.30	0.71	0.99	1.46	0.49
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-w	1.11	0.86	0.14	2.25	0.27	N.D.	0.15	0.44	0.83	1.58	1.75	2.95	2.95
		Min-w	0.35	0.17	0.07	0.10	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.

Mean : monthly or annual arithmetic average values

Max-d : maximum values of daily data

Min-d : minimum values of daily data

Max-10d : maximum values of 10-day interval data

Min-10d : minimum values of 10-day interval data

Max-w : maximum values of weekly data

Min-w : minimum values of weekly data

Max-2w : maximum values of biweekly data

Min-2w : minimum values of biweekly data

Max-m : maximum values of monthly data

Min-m : minimum values of monthly data

% : monthly or annual percentages of period of available data

Table 4.15 Particulate matter component: CI

Unit : $\mu\text{g}/\text{m}^3$			2009												Annual
Country	Site		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
China	Hongwen	Mean	2.49	2.53	2.12	1.32	1.14	1.11	3.72	0.96	1.54	1.84	1.13	2.17	1.73
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-w	3.39	3.10	2.71	2.60	1.23	1.77	4.92	1.62	2.06	3.11	1.78	2.40	4.92
		Min-w	1.68	1.95	1.70	0.18	1.05	0.64	2.51	0.61	1.08	0.97	0.49	1.58	0.18
		Mean	0.08	0.46	0.04	0.03	0.03	0.04	0.07	0.08	0.06	0.17	0.13	0.03	0.09
Indonesia	Serpong	%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-2w	0.10	0.46	0.08	0.06	0.05	0.05	0.07	0.15	0.10	0.36	0.17	0.05	0.46
		Min-2w	0.06	0.46	N.D.	N.D.	N.D.	0.04	0.07	N.D.	0.02	N.D.	0.09	N.D.	N.D.
	Japan	Mean	1.74	1.33	3.69	3.24	4.24	0.77	0.26	2.97	2.51	5.19	2.13	1.70	2.42
		%	100	100	100	100	100	100	100	100	100	100	50	67	92
		Max-2w	2.56	1.39	5.10	3.59	4.33	1.83	0.46	5.91	3.04	5.88	2.13	1.75	5.91
		Min-2w	0.93	1.27	2.29	2.88	4.15	0.13	0.06	0.02	1.97	4.51	2.13	1.66	0.02
		Mean	21.29	7.29	19.41	5.47	3.18	1.60	1.71	1.90	5.02	4.07	13.32	1.51	6.88
	Ochiishi	%	100	100	100	100	100	100	100	100	100	69	100	100	96
		Max-2w	31.79	10.10	30.59	5.75	5.38	2.02	1.83	3.12	5.55	4.83	13.32	2.02	31.79
		Min-2w	10.79	4.47	8.23	5.19	0.97	1.19	1.58	0.68	4.50	3.31	13.32	0.99	0.68
	Tappi	Mean	4.80	15.43	44.30	2.07	2.72	0.51	4.31	2.01	0.72	5.50	14.80	12.79	8.97
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-2w	6.28	16.00	79.58	3.18	4.68	0.69	8.29	3.85	1.40	7.78	22.22	26.36	79.58
		Min-2w	3.33	14.87	9.02	0.95	0.77	0.41	0.33	0.16	0.04	3.21	7.39	N.D.	N.D.
	Sado-seki	Mean	3.95	5.19	4.48	1.06	2.68	0.59	0.94	1.08	2.26	6.89	2.67	7.88	3.38
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-2w	5.62	5.62	5.47	1.33	4.96	1.14	1.47	1.82	3.08	6.97	4.41	9.10	9.10
		Min-2w	2.28	4.75	3.50	0.80	0.40	0.09	0.41	0.35	1.43	6.82	0.92	6.28	0.09
	Happo	Mean	-	-	0.02	N.D.	0.08	0.05	N.D.	N.D.	N.D.	0.02	N.D.	N.D.	0.02
		%	0	0	50	44	100	100	100	100	100	100	100	100	77
		Max-2w	-	-	0.02	N.D.	0.16	0.14	N.D.	N.D.	N.D.	0.05	0.01	N.D.	0.16
		Min-2w	-	-	0.02	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
	Ijira	Mean	0.05	0.07	0.17	0.05	0.01	0.02	N.D.	N.D.	0.03	0.05	0.16	0.07	0.06
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-2w	0.06	0.08	0.21	0.07	0.01	0.04	N.D.	N.D.	0.03	0.06	0.30	0.09	0.30
		Min-2w	0.05	0.07	0.13	0.02	N.D.	N.D.	N.D.	N.D.	0.02	0.05	0.02	0.03	N.D.
	Okii	Mean	7.63	3.89	5.89	3.11	1.29	0.16	1.57	1.25	0.83	4.67	5.56	7.53	3.69
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-2w	10.95	5.98	6.13	5.93	2.17	0.23	3.82	2.19	1.61	4.75	7.95	10.09	10.95
		Min-2w	4.31	1.80	5.65	0.28	0.40	0.09	0.04	0.31	0.05	4.58	3.16	2.66	0.04
	Banryu	Mean	2.41	1.86	2.88	1.47	0.29	0.56	0.47	0.65	0.74	3.61	2.58	1.94	1.59
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-2w	2.84	2.28	3.65	2.60	0.48	1.64	0.70	1.22	0.97	6.15	4.78	2.47	6.15
		Min-2w	1.99	1.44	2.10	0.35	0.10	0.01	0.23	0.07	0.50	1.07	0.38	1.55	0.01
	Yusuhabara	Mean	0.02	0.09	0.14	0.03	0.02	N.D.	0.02	0.02	2.02	0.14	N.D.	0.16	0.21
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-2w	0.05	0.14	0.15	0.06	0.02	N.D.	0.04	0.04	4.04	0.23	N.D.	0.18	4.04
		Min-2w	N.D.	0.04	0.12	N.D.	0.01	N.D.	N.D.	0.01	N.D.	0.04	N.D.	0.13	N.D.
	Hedo	Mean	7.03	4.74	6.81	4.82	3.39	3.06	1.93	5.01	7.79	10.71	10.57	7.23	6.02
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-2w	7.54	7.35	9.06	5.27	5.94	3.98	3.19	7.68	8.48	12.25	11.38	8.52	12.25
		Min-2w	6.52	2.14	4.55	4.37	0.83	1.66	0.66	2.33	7.10	9.18	9.77	5.96	0.66
	Ogasawara	Mean	4.12	3.64	5.99	3.70	3.40	0.93	2.57	5.17	6.16	4.32	6.48	4.35	3.93
		%	100	100	100	100	100	100	100	100	50	100	44	100	92
		Max-2w	4.89	3.83	6.09	3.89	5.18	1.31	2.98	6.88	6.16	6.08	6.48	6.43	6.88
		Min-2w	3.36	3.44	5.90	3.51	1.61	0.39	2.17	3.45	6.16	2.55	6.48	2.27	0.39
	Tokyo	Mean	0.98	1.61	1.30	0.31	0.18	0.18	0.22	0.23	0.66	0.78	0.96	0.93	0.68
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-2w	1.09	1.84	1.56	0.44	0.25	0.21	0.23	0.30	1.10	0.95	0.98	1.32	1.84
		Min-2w	0.87	1.38	1.03	0.18	0.12	0.16	0.22	0.17	0.21	0.62	0.94	0.72	0.12
Malaysia	Tanah Rata	Mean	0.04	0.02	N.D.	0.01	N.D.	0.02	0.02	N.D.	0.01	0.05	0.04	0.11	0.03
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-w	0.10	0.05	0.01	0.03	0.01	0.04	0.04	0.01	0.03	0.18	0.09	0.23	0.23
		Min-w	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	0.01	N.D.
	Petaling Jaya	Mean	0.10	0.06	0.13	0.14	0.16	0.10	0.08	0.03	0.12	0.13	0.13	0.15	0.11
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-w	0.23	0.08	0.30	0.41	0.32	0.13	0.17	0.07	0.17	0.30	0.24	0.35	0.41
		Min-w	0.03	0.02	0.03	0.04	N.D.	0.05	0.02	N.D.	0.07	0.03	0.07	N.D.	N.D.
	Danum Valley	Mean	0.40	0.09	0.15	0.02	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	0.07	1.16	0.15
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-2w	0.67	0.18	0.22	0.04	N.D.	N.D.	N.D.	N.D.	0.01	0.01	0.14	2.21	2.21
		Min-2w	0.13	N.D.	0.04	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	0.12	N.D.
	Mongolia	Mean	-	-	-	1.31	0.33	0.45	0.28	0.36	0.49	5.00	5.48	2.30	1.84
		%	0	0	0	80	100	100	100	100	100	100	100	100	75
		Max-w	-	-	-	3.8	0.52	0.60	0.51	0.44	0.81	21.16	10.3	4.3	21.16
		Min-w	-	-	-	0.4	0.24	0.33	0.18	0.16	0.25	0.66	0.2	0.7	0.16
	Terelj	Mean	0.16	0.12	0.09	0.23	0.26	0.58	0.18	0.15	0.15	0.22	0.31	0.16	0.22
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-2w	0.23	0.12	0.11	0.34	0.38	0.89	0.23	0.16	0.20	0.27	0.35	0.21	0.89
		Min-2w	0.08	0.12	0.07	0.13	0.14	0.27	0.12	0.13	0.10	0.17	0.27	0.10	0.07

Table 4.15 Particulate matter component: CI

Unit : µg/m ³			2009												Annual
Country	Site		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
Philippines	Mt. Sto. Tomas	Mean	0.03	0.02	0.04	0.02	0.01	0.03	0.03	0.02	0.01	0.14	0.2	0.1	0.05
		%	17	100	100	100	100	100	100	100	100	100	100	100	92
		Max-w	0.03	0.03	0.08	0.04	0.02	0.05	0.08	0.04	0.03	0.31	0.4	0.3	0.36
		Min-w	0.03	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	0.01	0.05	0.02	N.D.
Republic of Korea	Kanghwa	Mean	4.24	1.92	0.49	0.36	0.37	0.19	0.39	0.28	0.27	0.45	0.45	0.72	0.64
		%	10	18	13	40	16	43	16	19	17	16	17	45	22
		Max-d	6.89	8.32	0.84	0.49	0.51	0.25	0.51	0.34	0.30	0.68	1.11	2.62	8.32
		Min-d	1.03	0.16	0.32	0.17	0.28	0.15	0.31	0.19	0.25	0.29	N.D.	0.01	N.D.
	Cheju (Kosan)	Mean	0.66	0.34	0.27	0.32	0.58	0.1	0.33	0.12	0.14	0.2	0.41	0.40	0.29
		%	3	14	10	37	16	40	16	19	17	16	17	42	21
		Max-d	0.66	0.62	0.33	0.44	1.50	0.2	0.52	0.17	0.20	0.3	0.51	0.93	1.50
		Min-d	0.66	0.17	0.21	0.12	0.10	0.0	0.19	0.05	0.10	0.1	0.33	N.D.	N.D.
	Imsil	Mean	0.64	0.96	0.54	0.48	0.36	0.2	0.6	0.30	0.31	0.3	0.57	0.54	0.45
		%	3	18	13	43	16	43	13	19	17	16	17	42	22
		Max-d	0.64	1.65	0.89	1.07	0.49	0.3	1.2	0.34	0.39	0.3	0.73	0.84	1.65
		Min-d	0.64	0.68	0.28	0.17	0.30	0.1	0.2	0.24	0.26	0.2	0.48	N.D.	N.D.
Russia	Mondy	Mean	N.D.	N.D.	-	-	-	N.D.	-	N.D.	N.D.	N.D.	N.D.	0.02	N.D.
		%	88	100	0	0	0	100	0	100	100	100	100	100	67
		Max-m	N.D.	N.D.	-	-	-	N.D.	-	N.D.	N.D.	N.D.	N.D.	0.02	0.02
		Min-m	N.D.	N.D.	-	-	-	N.D.	-	N.D.	N.D.	N.D.	N.D.	0.02	N.D.
	Listvianka	Mean	0.10	0.16	0.07	0.07	0.06	0.04	0.02	0.03	0.05	0.36	0.04	0.29	0.11
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-w	0.34	0.47	0.23	0.11	0.18	0.08	0.06	0.17	0.14	0.88	0.06	0.44	0.88
		Min-w	N.D.	0.01	0.02	0.01	N.D.	0.01	N.D.	N.D.	N.D.	0.02	0.02	0.08	N.D.
	Irkutsk	Mean	0.22	0.27	0.82	0.34	0.09	0.12	0.05	0.06	0.07	0.41	1.35	0.95	0.40
		%	100	100	100	100	100	100	100	100	100	100	83	100	98
		Max-w	0.68	0.40	1.18	0.59	0.17	0.37	0.09	0.18	0.17	1.37	2.69	2.08	2.69
		Min-w	0.01	0.13	0.25	0.21	0.05	0.03	0.02	N.D.	N.D.	0.01	0.18	0.14	N.D.
	Primorskaya	Mean	0.21	0.14	0.32	0.06	0.06	0.13	0.02	0.02	0.06	0.36	0.06	0.20	0.14
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-2w	0.37	0.16	0.38	0.08	0.08	0.15	0.04	0.04	0.08	0.51	0.08	0.28	0.51
		Min-2w	0.05	0.13	0.26	0.04	0.05	0.11	N.D.	N.D.	0.03	0.22	0.05	0.12	N.D.
Thailand	Bangkok	Mean	0.15	0.18	0.40	0.23	0.22	0.69	0.40	0.25	0.17	0.02	0.17	-	0.26
		%	100	100	100	100	100	100	100	100	100	100	100	0	92
		Max-10d	0.19	0.23	0.81	0.39	0.43	1.16	0.90	0.65	0.39	0.02	0.23	-	1.16
		Min-10d	0.09	0.12	0.16	0.02	0.10	0.06	0.03	N.D.	0.02	0.01	0.11	-	N.D.
	Patumthani	Mean	0.15	0.36	0.28	0.07	0.08	0.03	0.27	0.37	0.25	0.27	0.05	-	0.20
		%	100	100	100	100	68	63	72	100	100	100	100	0	83
		Max-10d	0.20	0.61	0.50	0.11	0.08	0.06	0.29	0.93	0.60	0.54	0.09	-	0.93
		Min-10d	0.10	0.20	0.15	N.D.	0.08	N.D.	0.25	0.08	0.02	N.D.	0.02	-	N.D.
	Khanchanaburi (Vachiralongkorn Dam)	Mean	-	-	0.03	-	-	-	0.08	-	-	-	N.D.	-	0.04
		%	0	0	69	0	0	0	63	0	0	0	62	0	13
		Max-2w	-	-	0.03	-	-	-	0.08	-	-	-	N.D.	-	0.08
		Min-2w	-	-	0.03	-	-	-	0.08	-	-	-	N.D.	-	N.D.
	Chiangmai (Mae Hia)	Mean	N.D.	N.D.	0.15	0.06	0.44	0.08	0.04	0.03	0.05	0.08	0.07	0.08	0.09
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-10d	0.01	0.01	0.26	0.15	1.06	0.13	0.08	0.05	0.06	0.09	0.10	0.09	1.06
		Min-10d	N.D.	N.D.	0.05	0.01	0.06	0.01	N.D.	0.01	0.03	0.08	0.05	0.07	N.D.
	Nakhon Ratchasima	Mean	0.02	0.02	0.05	0.05	0.04	0.16	0.22	0.20	0.02	0.03	N.D.	N.D.	0.07
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-10d	0.06	0.06	0.14	0.09	0.08	0.39	0.36	0.55	0.04	0.08	0.01	N.D.	0.55
		Min-10d	N.D.	N.D.	N.D.	0.03	N.D.	0.04	0.02	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
Viet Nam	Ha Noi	Mean	0.57	0.48	0.38	0.70	0.66	0.31	0.14	0.35	0.36	0.60	0.96	1.30	0.58
		%	100	100	100	100	100	100	100	100	75	100	100	100	98
		Max-w	0.83	1.05	0.51	1.43	1.73	0.58	0.56	0.59	0.50	1.22	1.65	2.74	2.74
		Min-w	0.14	0.18	0.17	0.23	0.14	N.D.	N.D.	0.06	0.13	0.18	0.44	0.40	N.D.
	Hoa Binh	Mean	0.22	0.15	0.12	0.32	N.D.	N.D.	0.04	0.04	0.07	N.D.	0.05	0.18	0.11
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-w	0.48	0.19	0.23	1.08	N.D.	N.D.	0.19	0.14	0.29	0.04	0.16	0.69	1.08
		Min-w	0.10	0.11	0.07	0.08	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.

Mean : monthly or annual arithmetic average values

Max-d : maximum values of daily data

Min-d : minimum values of daily data

Max-10d : maximum values of 10-day interval data

Min-10d : minimum values of 10-day interval data

Max-w : maximum values of weekly data

Min-w : minimum values of weekly data

Max-2w : maximum values of biweekly data

Min-2w : minimum values of biweekly data

Max-m : maximum values of monthly data

Min-m : minimum values of monthly data

% : monthly or annual percentages of period of available data

Table 4.16 Particulate matter component: NH₄⁺

Unit : µg/m ³			2009												Annual
Country	Site		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
China	Hongwen	Mean	6.40	11.47	8.34	5.60	6.08	3.62	1.44	4.09	3.98	4.08	2.16	7.84	5.48
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-w	7.24	13.90	13.48	8.42	9.46	4.75	1.51	6.32	4.49	6.17	4.01	11.48	13.90
		Min-w	5.42	9.04	5.88	0.23	4.31	1.89	1.37	0.85	3.50	2.18	0.59	3.14	0.23
Indonesia	Serpong	Mean	N.D.	0.03	0.03	0.02	0.07	0.16	0.12	0.16	0.17	0.33	0.03	0.03	0.11
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-2w	N.D.	0.03	0.06	0.05	0.12	0.18	0.12	0.24	0.23	0.68	0.07	0.07	0.68
		Min-2w	N.D.	0.03	N.D.	N.D.	0.02	0.14	0.12	0.09	0.10	0.08	N.D.	N.D.	N.D.
Japan	Rishiri	Mean	0.39	0.38	0.51	0.73	0.63	0.69	0.37	0.43	0.24	0.27	0.32	0.29	0.45
		%	100	100	100	100	100	100	100	100	100	100	50	67	92
		Max-2w	0.61	0.39	0.57	1.06	0.68	0.86	0.41	0.66	0.24	0.34	0.32	0.34	1.06
		Min-2w	0.18	0.37	0.45	0.40	0.59	0.45	0.33	0.19	0.24	0.20	0.32	0.24	0.18
	Ochiishi	Mean	0.21	0.70	0.91	0.75	0.27	0.47	0.25	0.30	0.26	0.13	0.51	0.05	0.40
		%	100	100	100	100	100	100	100	100	100	69	100	100	96
		Max-2w	0.26	1.34	1.30	0.76	0.33	0.64	0.26	0.36	0.31	0.22	0.51	0.07	1.34
		Min-2w	0.15	0.06	0.52	0.73	0.22	0.29	0.24	0.25	0.22	0.05	0.51	0.02	0.02
	Tappi	Mean	0.56	0.46	0.83	1.05	1.08	0.99	0.67	0.22	0.99	0.19	0.63	0.28	0.66
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-2w	0.77	0.54	1.01	1.95	1.22	1.83	0.85	0.40	1.39	0.29	0.98	0.54	1.95
		Min-2w	0.34	0.38	0.65	0.14	0.94	0.25	0.50	0.04	0.58	0.09	0.28	N.D.	N.D.
	Sado-seki	Mean	0.26	0.32	0.27	1.46	0.84	1.00	0.21	0.58	0.59	0.20	0.34	0.24	0.53
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-2w	0.37	0.40	0.41	2.82	0.91	1.34	0.35	0.62	0.78	0.33	0.61	0.32	2.82
		Min-2w	0.16	0.23	0.13	0.10	0.78	0.75	0.07	0.54	0.40	0.08	0.06	0.19	0.06
	Happo	Mean	-	-	0.06	0.26	0.09	0.23	0.05	0.16	0.17	0.24	0.20	0.05	0.15
		%	0	0	50	44	100	100	100	100	100	100	100	100	77
		Max-2w	-	-	0.06	0.26	0.16	0.32	0.07	0.19	0.24	0.38	0.32	0.07	0.38
		Min-2w	-	-	0.06	0.26	0.03	0.17	0.03	0.12	0.10	0.10	0.07	0.03	0.03
	Ijira	Mean	0.66	0.97	0.67	1.83	1.04	1.79	0.95	1.21	0.93	0.98	0.91	0.60	1.06
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-2w	0.67	1.36	0.75	2.28	1.10	2.58	1.00	1.62	1.57	1.25	1.51	0.75	2.58
		Min-2w	0.64	0.58	0.59	1.38	0.97	1.19	0.89	0.79	0.28	0.72	0.31	0.43	0.28
	Oki	Mean	0.69	1.13	0.76	2.36	1.43	0.77	0.60	0.67	0.36	0.68	0.48	0.63	0.86
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-2w	0.95	1.97	0.76	3.89	1.70	1.33	0.95	0.90	0.65	0.87	0.58	1.06	3.89
		Min-2w	0.43	0.30	0.76	0.83	1.16	0.21	0.38	0.44	0.07	0.48	0.37	0.37	0.07
	Banryu	Mean	1.24	1.98	0.95	2.09	1.71	2.18	0.72	0.94	0.87	0.87	1.09	0.80	1.30
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-2w	1.33	3.15	1.11	3.18	1.76	2.77	0.73	1.33	1.05	1.27	1.45	0.99	3.18
		Min-2w	1.15	0.81	0.79	1.00	1.66	1.22	0.71	0.56	0.69	0.48	0.73	0.46	0.46
	Yusuhara	Mean	0.50	1.68	0.85	2.09	1.43	1.99	1.05	0.88	0.92	1.10	1.09	1.05	1.25
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-2w	0.83	2.91	0.99	2.44	1.50	3.08	1.26	1.33	1.46	1.48	1.50	1.14	3.08
		Min-2w	0.17	0.44	0.70	1.75	1.36	1.03	0.85	0.43	0.38	0.73	0.68	0.97	0.17
	Hedo	Mean	0.95	1.45	0.89	1.27	1.64	0.61	0.12	0.54	0.70	0.52	0.50	1.11	0.86
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-2w	1.07	2.42	1.04	1.30	1.73	1.20	0.12	0.83	0.73	0.65	0.57	1.53	2.42
		Min-2w	0.83	0.48	0.75	1.24	1.54	0.29	0.12	0.25	0.66	0.39	0.42	0.74	0.12
	Ogasawara	Mean	0.17	0.30	0.37	0.30	0.28	0.13	0.12	0.19	0.15	0.13	0.12	0.21	0.21
		%	100	100	100	100	100	100	100	100	100	50	100	44	100
		Max-2w	0.27	0.43	0.39	0.31	0.32	0.19	0.19	0.32	0.15	0.14	0.12	0.29	0.43
		Min-2w	0.07	0.17	0.35	0.30	0.24	0.05	0.04	0.06	0.15	0.12	0.12	0.06	0.04
	Tokyo	Mean	1.74	2.39	1.27	2.41	1.84	2.74	1.21	1.40	1.10	1.51	2.05	1.86	1.83
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-2w	2.34	2.63	1.30	3.75	2.22	3.64	1.37	1.67	1.11	2.09	2.76	2.44	3.75
		Min-2w	1.15	2.14	1.24	1.06	1.46	1.65	1.06	1.12	1.09	0.93	1.34	1.40	0.93
Malaysia	Tanah Rata	Mean	0.22	0.34	0.21	0.13	0.36	0.72	0.31	0.21	0.34	0.30	0.12	0.17	0.29
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-w	0.52	0.61	0.25	0.26	0.67	1.04	0.65	0.32	0.63	0.53	0.20	0.22	1.04
		Min-w	N.D.	0.11	0.16	0.03	0.07	0.41	0.15	0.01	0.21	0.08	0.02	0.13	N.D.
	Petaling Jaya	Mean	0.56	0.80	0.40	0.69	0.80	1.68	0.75	0.69	0.88	0.56	0.48	0.52	0.73
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-w	1.13	1.60	0.85	1.13	1.48	2.38	1.36	1.27	1.31	0.85	0.71	1.10	2.38
		Min-w	0.12	0.08	N.D.	0.36	0.04	0.98	0.12	0.04	0.61	0.02	0.23	0.08	N.D.
	Danum Valley	Mean	0.05	0.11	0.07	0.27	0.24	0.20	0.17	0.49	1.64	0.34	0.27	0.31	0.39
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-2w	0.06	0.17	0.11	0.42	0.29	0.20	0.18	0.60	2.47	0.38	0.40	0.48	2.47
		Min-2w	0.04	0.06	0.05	0.12	0.18	0.19	0.16	0.39	1.18	0.30	0.15	0.14	0.04
Mongolia	Ulaanbaatar	Mean	-	-	-	0.08	0.41	0.09	0.02	0.11	N.D.	0.67	1.14	5.23	0.95
		%	0	0	0	80	100	100	100	100	100	100	100	100	75
		Max-w	-	-	-	0.3	0.52	0.34	0.04	0.24	N.D.	1.03	4.4	14.1	14.06
		Min-w	-	-	-	N.D.	0.35	N.D.	N.D.	N.D.	N.D.	0.20	N.D.	0.4	N.D.
	Terelj	Mean	0.83	0.51	0.23	0.43	0.17	0.28	0.14	0.14	0.08	0.20	0.39	0.14	0.28
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-2w	1.35	0.51	0.40	0.57	0.33	0.47	0.18	0.24	0.13	0.27	0.48	0.28	1.35
		Min-2w	0.30	0.51	0.05	0.27	0.01	0.09	0.10	0.04	0.03	0.13	0.30	N.D.	N.D.

Table 4.16 Particulate matter component: NH₄⁺

Unit : µg/m ³			2009												Annual
Country	Site		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
Philippines	Mt. Sto. Tomas	Mean	0.03	N.D.	0.06	0.01	0.05	0.09	0.07	0.01	0.04	N.D.	N.D.	0.0	0.03
		%	17	100	100	100	100	100	100	100	100	100	100	100	92
		Max-w	0.03	N.D.	0.17	0.05	0.09	0.10	0.09	0.04	0.07	0.02	0.0	0.1	0.17
		Min-w	0.03	N.D.	N.D.	N.D.	N.D.	0.08	0.02	N.D.	0.02	N.D.	N.D.	N.D.	N.D.
Republic of Korea	Kanghwa	Mean	0.91	2.29	3.14	2.57	2.00	2.56	3.40	2.48	1.98	3.07	3.20	2.29	2.51
		%	10	18	13	40	16	43	16	19	17	16	17	45	22
		Max-d	1.71	4.34	5.67	7.58	3.93	4.74	7.17	5.93	3.13	9.99	6.49	9.67	9.99
		Min-d	0.17	1.34	1.55	0.76	0.72	0.34	0.43	0.29	1.49	0.17	0.35	0.48	0.17
	Cheju (Kosan)	Mean	0.29	2.14	1.97	3.48	1.33	0.9	0.17	0.53	2.01	1.7	0.94	1.35	1.54
		%	3	14	10	37	16	40	16	19	17	16	17	42	21
		Max-d	0.29	3.54	2.50	10.22	4.09	3.4	0.79	1.80	3.79	2.9	1.45	6.28	10.22
		Min-d	0.29	1.02	1.63	1.39	0.26	0.0	0.01	N.D.	0.40	0.4	0.37	0.28	N.D.
	Imsil	Mean	1.24	4.74	3.10	3.60	1.35	1.7	2.2	2.19	1.35	1.6	2.05	1.82	2.34
		%	3	18	13	43	16	43	13	19	17	16	17	42	22
		Max-d	1.24	11.27	5.73	13.28	2.19	3.0	5.3	4.75	2.31	3.0	3.81	4.48	13.28
		Min-d	1.24	2.31	1.30	0.95	0.69	N.D.	0.0	0.43	0.59	0.7	0.33	0.55	N.D.
Russia	Mondy	Mean	0.16	0.16	-	-	-	0.02	-	0.07	0.04	0.10	N.D.	N.D.	0.07
		%	88	100	0	0	0	100	0	100	100	100	100	100	67
		Max-m	0.16	0.16	-	-	-	0.02	-	0.07	0.04	0.10	N.D.	N.D.	0.16
		Min-m	0.16	0.16	-	-	-	0.02	-	0.07	0.04	0.10	N.D.	N.D.	N.D.
	Listvianka	Mean	0.20	0.24	0.14	0.51	0.57	0.13	0.08	0.19	0.09	0.29	0.22	0.19	0.24
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-w	0.27	0.64	0.29	1.07	1.11	0.33	0.22	0.31	0.12	0.69	0.46	0.37	1.11
		Min-w	0.13	N.D.	N.D.	0.05	0.08	0.02	N.D.	0.05	0.03	0.09	0.09	0.10	N.D.
	Irkutsk	Mean	1.03	0.84	1.04	0.56	0.24	0.02	0.03	0.25	0.39	0.22	1.07	2.33	0.66
		%	100	100	100	100	100	100	100	100	100	100	83	100	98
		Max-w	1.61	0.98	2.04	0.76	0.43	0.03	0.10	0.56	0.56	0.63	1.52	2.99	2.99
		Min-w	0.02	0.73	0.53	0.22	0.02	0.02	N.D.	0.02	0.27	0.02	0.62	1.96	N.D.
	Primorskaya	Mean	1.67	1.53	1.10	1.30	0.87	0.65	0.43	0.72	0.52	0.70	1.38	0.98	0.99
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-2w	1.84	1.68	1.19	1.53	1.00	0.86	0.57	0.97	0.68	1.31	1.44	1.61	1.84
		Min-2w	1.50	1.39	1.02	1.07	0.73	0.43	0.30	0.47	0.36	0.09	1.33	0.36	0.09
Thailand	Bangkok	Mean	1.97	1.86	1.16	1.15	0.61	0.19	0.16	0.15	0.08	0.31	N.D.	-	0.70
		%	100	100	100	100	100	100	100	100	100	100	100	0	92
		Max-10d	3.62	2.40	1.80	1.25	1.54	0.45	0.20	0.19	0.25	0.47	N.D.	-	3.62
		Min-10d	1.10	0.97	0.44	1.00	0.04	N.D.	0.13	0.09	N.D.	0.09	N.D.	-	N.D.
	Patumthani	Mean	3.20	2.02	1.30	0.74	N.D.	0.55	0.10	0.77	0.09	0.55	5.61	-	1.50
		%	100	100	100	100	68	63	72	100	100	100	100	0	83
		Max-10d	4.13	2.65	1.60	1.38	N.D.	0.95	0.16	1.68	0.17	0.87	7.62	-	7.62
		Min-10d	2.47	1.26	1.14	0.09	N.D.	0.15	0.04	0.22	N.D.	0.22	4.15	-	N.D.
	Khanchanaburi (Vachiralongkom Dam)	Mean	-	-	0.84	-	-	-	0.03	-	-	-	1.62	-	0.83
		%	0	0	69	0	0	0	63	0	0	0	62	0	13
		Max-2w	-	-	0.84	-	-	-	0.03	-	-	-	1.62	-	1.62
		Min-2w	-	-	0.84	-	-	-	0.03	-	-	-	1.62	-	0.03
	Chiangmai (Mae Hia)	Mean	0.18	1.34	1.33	0.81	0.45	0.26	N.D.	0.45	0.15	0.63	1.05	0.34	0.58
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-10d	0.22	1.48	1.61	1.34	0.79	0.47	N.D.	1.34	0.45	1.08	2.65	0.53	2.65
		Min-10d	0.13	1.16	1.13	0.02	0.21	0.11	N.D.	N.D.	N.D.	0.19	0.15	0.08	N.D.
	Nakhon Ratchasima	Mean	1.51	1.05	0.72	0.60	0.30	0.22	0.39	0.59	0.55	1.18	1.64	1.71	0.87
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-10d	2.65	1.18	1.28	0.74	0.50	0.40	0.42	0.69	0.94	2.67	1.77	3.09	3.09
		Min-10d	0.79	0.87	0.04	0.34	0.02	0.10	0.35	0.41	0.19	0.42	1.47	0.07	0.02
Viet Nam	Ha Noi	Mean	0.82	0.75	1.84	1.85	1.26	0.76	0.24	1.16	2.28	3.40	2.26	3.40	1.68
		%	100	100	100	100	100	100	100	100	75	100	100	100	98
		Max-w	1.27	1.33	3.02	2.74	2.09	1.32	0.44	1.69	2.92	4.18	3.62	6.04	6.04
		Min-w	0.38	0.20	0.46	0.96	0.80	0.09	N.D.	0.58	1.22	1.87	1.37	1.67	N.D.
	Hoa Binh	Mean	1.56	0.97	0.55	1.78	0.17	0.01	0.03	0.19	0.50	1.43	1.31	1.75	0.90
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-w	2.95	1.49	0.89	4.88	0.46	0.03	0.08	0.51	1.87	2.55	2.24	3.43	4.88
		Min-w	0.33	0.66	0.31	0.47	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	0.04	0.08	N.D.

Mean : monthly or annual arithmetic average values

Max-d : maximum values of daily data

Min-d : minimum values of daily data

Max-10d : maximum values of 10-day interval data

Min-10d : minimum values of 10-day interval data

Max-w : maximum values of weekly data

Min-w : minimum values of weekly data

Max-2w : maximum values of biweekly data

Min-2w : minimum values of biweekly data

Max-m : maximum values of monthly data

Min-m : minimum values of monthly data

% : monthly or annual percentages of period of available data

Table 4.17 Particulate matter component: Na⁺

Unit : µg/m ³			2009												Annual
Country	Site		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
China	Hongwen	Mean	1.23	1.28	1.17	0.98	1.60	1.55	3.52	1.56	2.77	2.48	0.51	1.31	1.55
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-w	1.44	1.51	1.53	1.52	2.20	2.04	4.59	1.93	3.07	3.36	0.66	1.64	4.59
		Min-w	0.90	1.04	0.65	0.03	1.17	1.09	2.46	0.99	2.61	1.61	0.39	0.98	0.03
		Mean	0.08	0.45	0.10	0.03	0.02	0.13	N.D.	0.04	N.D.	0.31	0.12	0.04	0.10
Indonesia	Serpong	%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-2w	0.11	0.45	0.21	0.04	0.03	0.22	N.D.	0.09	N.D.	0.74	0.18	0.07	0.74
		Min-2w	0.04	0.45	N.D.	N.D.	0.02	0.03	N.D.	N.D.	N.D.	0.05	0.06	N.D.	N.D.
Japan	Rishiri	Mean	1.46	1.20	2.75	2.54	3.31	1.04	0.64	2.06	1.89	3.44	1.48	1.34	1.91
		%	100	100	100	100	100	100	100	100	100	100	50	67	92
		Max-2w	2.13	1.22	3.64	2.94	3.37	2.05	1.02	3.93	2.31	3.84	1.48	1.38	3.93
		Min-2w	0.80	1.18	1.87	2.14	3.24	0.45	0.26	0.19	1.48	3.04	1.48	1.30	0.19
		Mean	12.70	4.76	11.79	3.78	2.08	1.35	1.45	1.80	3.40	2.37	7.81	0.92	4.37
	Ochiishi	%	100	100	100	100	100	100	100	100	100	69	100	100	96
		Max-2w	18.81	6.91	18.66	3.90	3.03	1.56	1.53	2.56	3.61	2.91	7.81	1.19	18.81
		Min-2w	6.60	2.61	4.93	3.65	1.12	1.14	1.37	1.03	3.20	1.83	7.81	0.64	0.64
	Tappi	Mean	3.39	9.44	27.64	2.08	2.83	1.20	3.28	1.62	0.96	3.67	9.30	8.11	6.01
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-2w	4.07	9.76	49.18	3.40	3.49	2.04	5.81	3.09	1.50	5.29	13.26	16.48	49.18
		Min-2w	2.70	9.11	6.10	0.76	2.18	0.57	0.74	0.16	0.42	2.06	5.34	N.D.	N.D.
	Sado-seki	Mean	2.63	3.27	2.73	1.39	2.38	1.44	0.93	1.65	2.11	4.30	2.33	4.97	2.56
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-2w	3.77	3.58	3.45	1.94	3.79	1.86	0.93	2.36	2.46	4.72	4.07	5.66	5.66
		Min-2w	1.49	2.95	2.00	0.84	0.97	1.21	0.93	0.94	1.75	3.88	0.58	4.08	0.58
	Happo	Mean	-	-	0.02	0.01	0.08	0.04	N.D.	N.D.	0.03	0.07	0.03	N.D.	0.03
		%	0	0	50	44	100	100	100	100	100	100	100	100	77
		Max-2w	-	-	0.02	0.01	0.16	0.10	N.D.	N.D.	0.04	0.11	0.04	0.01	0.16
		Min-2w	-	-	0.02	0.01	0.01	N.D.	N.D.	N.D.	0.02	0.02	0.02	N.D.	N.D.
		Mean	0.18	0.32	0.46	0.32	0.27	0.15	0.12	0.28	0.28	0.31	0.26	0.17	0.25
	Ijira	%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-2w	0.23	0.43	0.50	0.42	0.34	0.20	0.15	0.38	0.44	0.41	0.27	0.22	0.50
		Min-2w	0.14	0.21	0.42	0.21	0.20	0.11	0.10	0.19	0.12	0.21	0.25	0.14	0.10
	Okii	Mean	4.95	2.96	4.09	2.91	1.80	0.77	1.45	1.50	0.70	3.27	3.60	4.71	2.75
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-2w	6.99	4.70	4.25	4.35	2.24	1.37	3.29	2.49	1.37	3.41	4.99	6.27	6.99
		Min-2w	2.91	1.21	3.94	1.47	1.37	0.17	0.28	0.51	0.04	3.14	2.22	1.85	0.04
	Banryu	Mean	2.13	1.97	2.37	1.82	0.85	1.11	0.81	1.14	1.37	2.73	2.19	1.50	1.64
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-2w	2.32	2.10	2.89	2.45	1.19	2.10	1.01	1.49	1.51	4.22	3.26	1.81	4.22
		Min-2w	1.94	1.85	1.86	1.18	0.51	0.44	0.60	0.80	1.23	1.24	1.11	1.31	0.44
	Yusuhabara	Mean	0.24	0.51	0.65	0.49	0.35	0.24	0.40	0.44	1.92	0.51	0.38	0.53	0.54
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-2w	0.47	0.73	0.66	0.65	0.44	0.28	0.57	0.45	3.11	0.68	0.42	0.55	3.11
		Min-2w	N.D.	0.29	0.64	0.34	0.26	0.22	0.23	0.44	0.72	0.33	0.33	0.52	N.D.
	Hedo	Mean	5.56	4.13	4.56	4.42	3.27	2.97	1.30	3.67	6.10	7.81	6.82	5.37	4.63
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-2w	5.75	5.19	5.19	4.64	4.77	4.53	2.10	5.18	6.54	9.16	7.03	6.53	9.16
		Min-2w	5.37	3.07	3.93	4.19	1.78	1.70	0.50	2.15	5.65	6.46	6.61	3.94	0.50
	Ogasawara	Mean	3.16	2.94	4.10	2.73	2.99	1.04	1.68	3.23	3.95	2.81	3.82	2.98	2.80
		%	100	100	100	100	100	100	100	100	50	100	44	100	92
		Max-2w	3.66	3.08	4.15	2.77	3.98	1.22	1.79	4.40	3.95	3.64	3.82	3.93	4.40
		Min-2w	2.67	2.80	4.05	2.68	2.01	0.72	1.57	2.06	3.95	1.99	3.82	1.92	0.72
	Tokyo	Mean	0.28	0.97	1.08	1.10	1.23	0.72	1.10	0.96	1.54	1.18	0.83	0.61	0.94
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-2w	0.38	1.30	1.34	1.11	1.57	0.74	1.36	1.04	1.70	1.20	0.87	0.73	1.70
		Min-2w	0.18	0.65	0.81	1.09	0.88	0.70	0.83	0.88	1.39	1.15	0.78	0.42	0.18
Malaysia	Tanah Rata	Mean	0.15	0.15	0.03	0.08	0.06	0.11	0.09	0.08	0.11	0.12	0.08	0.16	0.10
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-w	0.30	0.24	0.06	0.22	0.07	0.17	0.20	0.20	0.17	0.23	0.18	0.22	0.30
		Min-w	N.D.	0.05	0.01	0.01	0.05	0.05	0.02	N.D.	0.04	0.03	0.02	0.07	N.D.
		Mean	0.27	0.20	0.07	0.30	0.25	0.30	0.29	0.22	0.26	0.21	0.14	0.37	0.24
	Petaling Jaya	%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-w	0.51	0.36	0.16	0.83	0.60	0.38	0.41	0.46	0.42	0.36	0.21	0.69	0.83
		Min-w	0.11	N.D.	0.02	0.05	N.D.	0.15	0.11	0.01	0.14	0.01	0.04	N.D.	N.D.
	Danum Valley	Mean	0.54	0.49	0.47	0.29	0.13	0.11	0.16	0.57	0.55	0.33	0.40	3.15	0.59
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-2w	0.80	0.53	0.51	0.41	0.13	0.13	0.19	0.81	0.85	0.35	0.46	4.33	4.33
		Min-2w	0.28	0.44	0.40	0.17	0.12	0.09	0.12	0.32	0.25	0.30	0.35	1.97	0.09
Mongolia	Ulaanbaatar	Mean	-	-	-	0.47	0.05	0.09	0.04	N.D.	N.D.	0.01	0.02	0.05	0.08
		%	0	0	0	80	100	100	100	100	100	100	100	100	75
		Max-w	-	-	-	0.6	0.10	0.27	0.09	0.02	N.D.	0.04	0.1	0.1	0.59
		Min-w	-	-	-	0.4	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
	Terelj	Mean	0.30	0.51	0.19	0.08	0.14	0.13	0.01	0.03	0.01	0.06	0.12	0.08	0.11
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-2w	0.50	0.51	0.27	0.12	0.24	0.24	0.02	0.05	0.02	0.07	0.14	0.15	0.51
		Min-2w	0.09	0.51	0.10	0.01	0.03	0.02	N.D.	N.D.	N.D.	0.04	0.09	N.D.	N.D.

Table 4.17 Particulate matter component: Na⁺

Unit : µg/m ³			2009												Annual
Country	Site		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
Philippines	Mt. Sto. Tomas	Mean	0.06	0.09	0.12	0.06	0.13	0.32	0.12	0.11	0.24	0.23	0.1	0.2	0.16
		%	17	100	100	100	100	100	100	100	100	100	100	100	92
		Max-w	0.06	0.23	0.26	0.09	0.17	0.67	0.18	0.19	0.32	0.46	0.2	0.6	0.67
		Min-w	0.06	0.04	0.07	0.05	0.09	0.15	0.02	N.D.	0.13	0.10	0.09	0.09	N.D.
Republic of Korea	Kanghwa	Mean	1.46	1.09	3.14	2.57	0.43	0.34	0.34	0.38	0.34	0.46	0.42	0.44	0.52
		%	10	18	13	40	16	43	16	19	17	16	17	45	22
		Max-d	2.32	3.47	5.67	7.58	0.60	0.71	0.48	0.48	0.39	0.60	0.57	0.63	7.58
		Min-d	0.54	0.19	1.55	0.76	0.34	0.16	0.19	0.27	0.29	0.39	0.31	0.34	0.16
	Cheju (Kosan)	Mean	1.25	0.85	0.58	0.56	0.91	0.4	0.50	0.26	0.42	0.4	0.39	0.43	0.51
		%	3	14	10	37	16	40	16	19	17	16	17	42	21
		Max-d	1.25	1.37	0.76	0.90	2.10	0.6	0.67	0.43	0.59	0.6	0.55	0.73	2.10
		Min-d	1.25	0.49	0.39	0.30	0.43	0.2	0.36	0.18	0.30	0.2	0.32	0.33	0.18
	Imsil	Mean	0.86	0.99	0.72	0.60	0.51	0.6	0.6	0.40	0.37	0.4	0.40	0.45	0.54
		%	3	18	13	43	16	43	13	19	17	16	17	42	22
		Max-d	0.86	2.46	1.36	1.08	0.70	1.0	0.6	0.52	0.41	0.4	0.45	0.60	2.46
		Min-d	0.86	0.53	0.42	0.34	0.39	0.2	0.5	0.23	0.33	0.3	0.34	0.34	0.23
Russia	Mondy	Mean	0.04	0.03	-	-	-	0.02	-	N.D.	0.02	0.05	0.03	0.02	0.03
		%	88	100	0	0	0	100	0	100	100	100	100	100	67
		Max-m	0.04	0.03	-	-	-	0.02	-	N.D.	0.02	0.05	0.03	0.02	0.05
		Min-m	0.04	0.03	-	-	-	0.02	-	N.D.	0.02	0.05	0.03	0.02	N.D.
	Listvianka	Mean	0.22	0.22	0.13	0.13	0.05	0.07	0.08	0.10	0.52	0.28	0.10	0.07	0.16
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-w	0.50	0.50	0.23	0.32	0.11	0.08	0.14	0.13	1.16	0.58	0.14	0.10	1.16
		Min-w	0.11	0.07	0.09	0.02	N.D.	0.05	0.06	0.05	0.06	0.06	0.06	0.03	N.D.
	Irkutsk	Mean	0.20	1.68	0.68	0.29	0.24	0.79	0.13	0.62	0.50	0.21	0.65	0.29	0.50
		%	100	100	100	100	100	100	100	100	100	100	83	100	98
		Max-w	0.31	2.07	1.14	0.49	0.38	2.68	0.28	1.85	1.64	0.73	1.31	0.47	2.68
		Min-w	0.05	0.97	0.28	0.12	0.11	0.12	0.06	0.15	0.09	0.02	0.11	0.14	0.02
	Primorskaya	Mean	0.28	0.28	0.42	0.32	0.32	0.21	0.13	0.16	0.21	0.18	0.33	0.17	0.25
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-2w	0.42	0.32	0.46	0.38	0.32	0.22	0.13	0.20	0.23	0.23	0.34	0.20	0.46
		Min-2w	0.14	0.24	0.38	0.26	0.31	0.20	0.12	0.13	0.18	0.14	0.32	0.14	0.12
Thailand	Bangkok	Mean	0.79	1.04	0.79	0.75	0.46	0.52	0.35	1.21	0.13	0.08	0.13	-	0.57
		%	100	100	100	100	100	100	100	100	100	100	100	0	92
		Max-10d	1.20	1.44	1.10	0.94	0.66	0.82	0.70	3.48	0.33	0.16	0.19	-	3.48
		Min-10d	0.49	0.59	0.49	0.54	0.31	0.04	0.05	N.D.	N.D.	N.D.	0.07	-	N.D.
	Patumthani	Mean	0.62	0.96	0.74	0.42	0.02	0.06	0.29	0.35	0.13	0.24	0.07	-	0.38
		%	100	100	100	100	68	63	72	100	100	100	100	0	83
		Max-10d	0.84	1.35	1.29	0.86	0.03	0.11	0.37	0.59	0.18	0.44	0.09	-	1.35
		Min-10d	0.44	0.63	0.42	N.D.	N.D.	N.D.	0.21	0.20	0.07	0.05	0.04	-	N.D.
	Khanchanaburi (Vachiralongkom Dam)	Mean	-	-	0.14	-	-	-	0.11	-	-	-	N.D.	-	0.09
		%	0	0	69	0	0	0	63	0	0	0	62	0	13
		Max-2w	-	-	0.14	-	-	-	0.11	-	-	-	N.D.	-	0.14
		Min-2w	-	-	0.14	-	-	-	0.11	-	-	-	N.D.	-	N.D.
	Chiangmai (Mae Hia)	Mean	0.07	0.21	0.13	1.41	1.84	1.39	0.02	0.14	0.09	0.12	0.11	0.19	0.48
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-10d	0.12	0.44	0.15	2.94	3.20	3.96	0.07	0.33	0.15	0.16	0.19	0.39	3.96
		Min-10d	0.04	0.02	0.09	0.16	0.24	0.07	N.D.	N.D.	0.04	0.07	0.05	0.08	N.D.
	Nakhon Ratchasima	Mean	0.30	0.29	0.13	0.32	0.13	0.27	0.32	0.32	0.09	0.05	0.15	0.18	0.21
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-10d	0.47	0.36	0.27	0.44	0.20	0.63	0.44	0.61	0.12	0.07	0.27	0.38	0.63
		Min-10d	0.15	0.24	N.D.	0.13	0.02	0.07	0.20	0.03	0.05	0.03	0.04	N.D.	N.D.
Viet Nam	Ha Noi	Mean	0.18	0.31	0.22	0.98	0.81	0.51	0.24	0.46	0.55	0.86	0.71	0.99	0.58
		%	100	100	100	100	100	100	100	100	75	100	100	100	98
		Max-w	0.40	0.89	0.31	1.50	1.67	0.67	0.69	1.04	1.02	2.29	0.99	1.62	2.29
		Min-w	0.02	N.D.	0.06	0.68	0.29	0.13	N.D.	0.22	0.18	0.27	0.24	0.44	N.D.
	Hoa Binh	Mean	0.10	0.15	N.D.	0.27	0.06	N.D.	0.11	0.09	0.07	0.17	0.16	0.32	0.13
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-w	0.27	0.50	N.D.	0.82	0.10	0.01	0.41	0.25	0.17	0.58	0.36	0.63	0.82
		Min-w	0.01	0.02	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	0.02	0.03	N.D.

Mean : monthly or annual arithmetic average values

Max-d : maximum values of daily data

Min-d : minimum values of daily data

Max-10d : maximum values of 10-day interval data

Min-10d : minimum values of 10-day interval data

Max-w : maximum values of weekly data

Min-w : minimum values of weekly data

Max-2w : maximum values of biweekly data

Min-2w : minimum values of biweekly data

Max-m : maximum values of monthly data

Min-m : minimum values of monthly data

% : monthly or annual percentages of period of available data

Table 4.18 Particulate matter component: K⁺

Unit : µg/m ³			2009												Annual
Country	Site		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
China	Hongwen	Mean	1.25	1.19	0.57	0.51	0.57	0.68	0.55	0.35	0.34	0.75	0.89	0.86	0.68
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-w	1.43	1.57	0.79	0.89	0.73	1.14	0.76	0.42	0.37	1.06	2.81	1.00	2.81
		Min-w	0.92	0.80	0.35	0.01	0.35	0.20	0.34	0.29	0.31	0.48	0.02	0.59	0.01
Indonesia	Serpong	Mean	0.02	0.15	0.15	0.02	0.02	0.05	0.03	0.06	0.02	0.28	0.04	0.02	0.08
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-2w	0.02	0.15	0.30	0.04	0.02	0.05	0.03	0.10	0.03	0.71	0.04	0.03	0.71
		Min-2w	0.02	0.15	N.D.	N.D.	0.01	0.05	0.03	0.02	N.D.	0.03	0.03	N.D.	N.D.
Japan	Rishiri	Mean	0.14	0.11	0.18	0.20	0.22	0.12	0.06	0.12	0.11	0.19	0.11	0.10	0.14
		%	100	100	100	100	100	100	100	100	100	100	50	67	92
		Max-2w	0.23	0.11	0.22	0.26	0.22	0.18	0.08	0.18	0.12	0.19	0.11	0.11	0.26
		Min-2w	0.05	0.10	0.14	0.14	0.21	0.06	0.04	0.05	0.09	0.18	0.11	0.09	0.04
	Ochiishi	Mean	0.45	0.18	0.40	0.21	0.09	0.08	0.09	0.13	0.15	0.10	0.34	0.05	0.18
		%	100	100	100	100	100	100	100	100	100	69	100	100	96
		Max-2w	0.68	0.28	0.62	0.21	0.13	0.09	0.11	0.15	0.17	0.14	0.34	0.05	0.68
		Min-2w	0.21	0.09	0.19	0.21	0.05	0.06	0.08	0.11	0.14	0.06	0.34	0.04	0.04
	Tappi	Mean	0.18	0.36	1.05	0.21	0.21	0.14	0.20	0.08	0.11	0.31	0.42	0.46	0.31
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-2w	0.20	0.39	1.79	0.39	0.23	0.22	0.33	0.17	0.11	0.35	0.48	0.71	1.79
		Min-2w	0.17	0.32	0.31	0.03	0.19	0.05	0.07	N.D.	0.10	0.26	0.35	N.D.	N.D.
	Sado-seki	Mean	0.19	0.22	0.13	0.22	0.17	0.17	0.13	0.13	0.14	0.24	0.20	0.24	0.18
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-2w	0.27	0.29	0.19	0.43	0.24	0.17	0.21	0.16	0.16	0.30	0.38	0.27	0.43
		Min-2w	0.11	0.16	0.07	0.02	0.11	0.17	0.06	0.09	0.11	0.17	0.01	0.19	0.01
	Happo	Mean	-	-	N.D.	0.02	0.07	0.05	0.02	0.02	N.D.	0.02	0.01	N.D.	0.02
		%	0	0	50	44	100	100	100	100	100	100	100	100	77
		Max-2w	-	-	N.D.	0.02	0.13	0.08	0.02	0.02	0.01	0.03	0.02	0.01	0.13
		Min-2w	-	-	N.D.	0.02	N.D.	0.02	0.01	0.02	N.D.	N.D.	N.D.	N.D.	N.D.
	Ijira	Mean	0.07	0.15	0.09	0.15	0.14	0.20	0.14	0.16	0.10	0.15	0.11	0.06	0.13
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-2w	0.08	0.22	0.11	0.19	0.16	0.30	0.16	0.16	0.14	0.18	0.14	0.06	0.30
		Min-2w	0.06	0.09	0.07	0.11	0.13	0.14	0.12	0.15	0.05	0.11	0.07	0.05	0.05
	Okii	Mean	0.28	0.27	0.25	0.36	0.21	0.13	0.11	0.11	0.05	0.24	0.18	0.25	0.20
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-2w	0.39	0.46	0.25	0.48	0.24	0.23	0.19	0.17	0.09	0.29	0.24	0.40	0.48
		Min-2w	0.17	0.07	0.24	0.24	0.19	0.02	0.06	0.06	N.D.	0.19	0.12	0.10	N.D.
	Banryu	Mean	0.24	0.32	0.20	0.29	0.21	0.29	0.09	0.14	0.13	0.28	0.19	0.13	0.21
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-2w	0.25	0.47	0.23	0.38	0.24	0.40	0.11	0.15	0.14	0.29	0.20	0.16	0.47
		Min-2w	0.22	0.17	0.16	0.19	0.18	0.21	0.07	0.13	0.12	0.28	0.19	0.10	0.07
	Yusuvara	Mean	0.05	0.23	0.13	0.23	0.15	0.21	0.09	0.10	0.19	0.25	0.11	0.19	0.16
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-2w	0.09	0.35	0.14	0.28	0.17	0.36	0.10	0.12	0.28	0.33	0.16	0.25	0.36
		Min-2w	N.D.	0.11	0.12	0.19	0.12	0.13	0.08	0.08	0.11	0.17	0.07	0.14	N.D.
	Hedo	Mean	0.38	0.32	0.28	0.31	0.30	0.29	0.06	0.21	0.30	0.42	0.34	0.30	0.29
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-2w	0.42	0.36	0.29	0.32	0.32	0.39	0.10	0.30	0.32	0.42	0.36	0.37	0.42
		Min-2w	0.33	0.28	0.27	0.30	0.29	0.21	0.03	0.13	0.29	0.42	0.33	0.25	0.03
	Ogasawara	Mean	0.17	0.15	0.22	0.15	0.17	0.10	0.21	0.17	0.18	0.13	0.16	0.13	0.16
		%	100	100	100	100	100	100	100	100	50	100	44	100	92
		Max-2w	0.18	0.16	0.22	0.17	0.20	0.13	0.29	0.23	0.18	0.15	0.16	0.17	0.29
		Min-2w	0.16	0.15	0.21	0.14	0.15	0.09	0.13	0.11	0.18	0.12	0.16	0.11	0.09
	Tokyo	Mean	0.10	0.21	0.14	0.20	0.22	0.19	0.18	0.20	0.18	0.38	0.21	0.30	0.21
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-2w	0.14	0.27	0.17	0.27	0.27	0.21	0.18	0.22	0.20	0.47	0.26	0.49	0.49
		Min-2w	0.06	0.14	0.11	0.14	0.17	0.17	0.17	0.18	0.15	0.29	0.16	0.14	0.06
Malaysia	Tanah Rata	Mean	0.07	0.15	0.06	0.03	0.09	0.19	0.12	0.07	0.06	0.08	0.03	0.03	0.08
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-w	0.16	0.30	0.07	0.06	0.17	0.25	0.20	0.12	0.10	0.14	0.04	0.05	0.30
		Min-w	N.D.	0.05	0.04	N.D.	0.01	0.11	0.04	N.D.	0.03	0.03	0.01	0.01	N.D.
	Petaling Jaya	Mean	0.18	0.20	0.14	0.18	0.21	0.35	0.26	0.24	0.26	0.31	0.22	0.18	0.23
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-w	0.26	0.37	0.25	0.28	0.37	0.57	0.48	0.59	0.41	0.56	0.30	0.31	0.59
		Min-w	0.03	0.01	0.02	0.07	N.D.	0.13	0.04	N.D.	0.01	0.01	0.07	N.D.	N.D.
	Danum Valley	Mean	0.23	0.26	0.22	0.27	0.30	0.30	0.29	0.66	0.86	0.49	0.34	0.79	0.43
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-2w	0.24	0.34	0.23	0.31	0.33	0.32	0.36	0.84	1.22	0.51	0.38	1.03	1.22
		Min-2w	0.22	0.18	0.21	0.24	0.27	0.28	0.23	0.48	0.64	0.47	0.31	0.55	0.18
Mongolia	Ulaanbaatar	Mean	-	-	-	0.55	0.12	0.12	0.10	0.12	0.05	0.11	0.10	0.22	0.16
		%	0	0	0	80	100	100	100	100	100	100	100	100	75
		Max-w	-	-	-	0.7	0.20	0.22	0.14	0.28	0.10	0.13	0.3	0.6	0.70
		Min-w	-	-	-	0.4	0.05	0.02	0.06	0.04	0.02	0.07	N.D.	N.D.	N.D.
	Terelj	Mean	0.13	0.46	0.17	0.12	0.08	0.18	0.05	0.12	0.12	0.22	0.27	0.20	0.16
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-2w	0.21	0.46	0.25	0.19	0.13	0.30	0.08	0.17	0.15	0.24	0.27	0.33	0.46
		Min-2w	0.05	0.46	0.09	0.04	0.02	0.05	0.02	0.07	0.09	0.20	0.27	0.06	0.02

Table 4.18 Particulate matter component: K⁺

Unit : µg/m ³			2009												Annual
Country	Site		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
Philippines	Mt. Sto. Tomas	Mean	0.08	0.06	0.05	0.03	0.08	0.04	0.02	0.01	0.02	1.53	0.0	0.1	0.14
		%	17	100	100	100	100	100	100	100	100	100	100	100	92
		Max-w	0.08	0.09	0.06	0.04	0.15	0.08	0.05	0.03	0.03	4.39	0.1	0.6	4.39
		Min-w	0.08	0.03	0.05	0.02	0.04	0.02	N.D.	N.D.	N.D.	0.08	N.D.	0.02	N.D.
Republic of Korea	Kanghwa	Mean	2.55	1.59	0.67	0.43	0.74	0.22	0.22	0.21	0.22	0.44	0.33	0.20	0.49
		%	10	18	13	40	16	43	16	19	17	16	17	45	22
		Max-d	6.40	6.38	0.86	0.89	3.30	0.47	0.44	0.62	0.37	0.81	0.65	0.89	6.40
		Min-d	0.48	0.12	0.52	0.15	0.04	0.03	0.04	0.07	0.11	0.15	0.04	0.04	0.03
	Cheju (Kosan)	Mean	0.91	0.55	0.22	0.35	0.27	0.1	0.21	0.05	0.18	0.3	0.11	0.10	0.21
		%	3	14	10	37	16	40	16	19	17	16	17	42	21
		Max-d	0.91	1.31	0.26	1.16	0.79	0.3	0.42	0.12	0.32	0.4	0.16	0.69	1.31
		Min-d	0.91	0.20	0.13	0.13	0.07	0.0	0.09	0.02	0.07	0.1	0.05	N.D.	N.D.
	Imsil	Mean	0.61	0.59	1.65	0.36	0.13	0.5	0.2	0.14	0.14	0.3	0.23	0.09	0.35
		%	3	18	13	43	16	43	13	19	17	16	17	42	22
		Max-d	0.61	1.20	6.00	0.82	0.26	1.0	0.4	0.34	0.19	0.5	0.42	0.30	6.00
		Min-d	0.61	0.23	0.12	0.06	0.04	0.2	0.1	0.05	0.09	0.1	0.04	N.D.	N.D.
Russia	Mondy	Mean	0.02	0.02	-	-	-	0.03	-	0.02	0.05	N.D.	N.D.	N.D.	0.02
		%	88	100	0	0	0	100	0	100	100	100	100	100	67
		Max-m	0.02	0.02	-	-	-	0.03	-	0.02	0.05	N.D.	N.D.	N.D.	0.05
		Min-m	0.02	0.02	-	-	-	0.03	-	0.02	0.05	N.D.	N.D.	N.D.	N.D.
	Listvianka	Mean	0.16	0.13	0.09	0.13	0.07	0.09	0.06	0.06	0.17	0.18	0.06	0.12	0.11
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-w	0.24	0.29	0.20	0.20	0.13	0.15	0.09	0.07	0.33	0.32	0.09	0.21	0.33
		Min-w	0.13	0.04	0.05	0.08	N.D.	0.07	0.05	0.05	0.02	0.02	0.05	0.04	N.D.
	Irkutsk	Mean	0.41	0.20	0.11	0.10	0.10	0.19	0.12	0.10	0.06	0.06	0.14	0.34	0.16
		%	100	100	100	100	100	100	100	100	100	100	83	100	98
		Max-w	0.72	0.22	0.19	0.13	0.16	0.53	0.20	0.19	0.08	0.11	0.19	0.41	0.72
		Min-w	0.08	0.17	0.08	0.09	0.06	0.06	0.07	0.03	0.03	0.01	0.07	0.24	0.01
	Primorskaya	Mean	0.71	0.54	0.39	0.40	0.26	0.18	0.13	0.13	0.16	0.27	0.54	0.75	0.37
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-2w	0.79	0.62	0.41	0.51	0.34	0.25	0.14	0.14	0.18	0.44	0.59	0.84	0.84
		Min-2w	0.63	0.45	0.37	0.29	0.19	0.12	0.13	0.11	0.15	0.10	0.49	0.67	0.10
Thailand	Bangkok	Mean	1.26	1.06	0.43	0.49	0.51	0.20	0.17	0.15	0.11	0.13	0.24	-	0.43
		%	100	100	100	100	100	100	100	100	100	100	100	0	92
		Max-10d	1.53	1.39	0.67	0.66	0.78	0.32	0.30	0.30	0.27	0.22	0.47	-	1.53
		Min-10d	1.08	0.44	0.24	0.24	0.37	0.14	0.08	N.D.	0.02	0.02	0.05	-	N.D.
	Patumthani	Mean	1.41	1.53	0.76	0.52	0.11	0.04	0.19	0.35	0.08	0.19	0.19	-	0.54
		%	100	100	100	100	68	63	72	100	100	100	100	0	83
		Max-10d	1.62	2.00	0.87	0.92	0.15	0.07	0.28	0.40	0.15	0.24	0.31	-	2.00
		Min-10d	1.11	0.64	0.59	N.D.	0.06	N.D.	0.10	0.32	0.03	0.14	0.04	-	N.D.
	Khanchanaburi (Vachiralongkom Dam)	Mean	-	-	0.69	-	-	-	0.05	-	-	-	0.08	-	0.27
		%	0	0	69	0	0	0	63	0	0	0	62	0	13
		Max-2w	-	-	0.69	-	-	-	0.05	-	-	-	0.08	-	0.69
		Min-2w	-	-	0.69	-	-	-	0.05	-	-	-	0.08	-	0.05
	Chiangmai (Mae Hia)	Mean	0.24	1.37	1.49	0.41	0.66	0.23	0.05	0.08	N.D.	0.32	0.39	0.38	0.47
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-10d	0.33	1.85	1.90	1.07	1.73	0.32	0.15	0.25	N.D.	0.43	0.64	0.50	1.90
		Min-10d	0.07	0.73	1.04	0.05	0.02	0.13	N.D.	N.D.	N.D.	0.24	0.16	0.31	N.D.
	Nakhon Ratchasima	Mean	0.74	0.78	0.25	0.35	0.10	0.05	0.22	0.16	0.17	0.12	0.29	0.50	0.31
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-10d	1.00	1.12	0.46	0.47	0.13	0.11	0.39	0.18	0.22	0.26	0.34	0.83	1.12
		Min-10d	0.35	0.36	N.D.	0.26	0.08	0.01	0.14	0.14	0.09	0.05	0.22	0.04	N.D.
Viet Nam	Ha Noi	Mean	0.17	0.22	0.34	0.72	0.45	0.95	0.41	0.49	1.62	1.71	1.33	1.18	0.79
		%	100	100	100	100	100	100	100	100	75	100	100	100	98
		Max-w	0.37	0.51	0.41	1.40	0.53	1.43	1.20	0.79	3.13	2.51	2.59	1.57	3.13
		Min-w	0.11	0.03	0.24	0.38	0.31	0.23	0.04	0.05	0.75	1.35	0.41	0.64	0.03
	Hoa Binh	Mean	0.61	0.78	0.13	2.29	0.33	0.04	0.23	0.24	0.33	0.82	1.09	1.08	0.70
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-w	1.10	1.18	0.48	8.57	0.60	0.05	0.41	0.35	0.93	1.72	1.74	2.32	8.57
		Min-w	0.16	0.44	N.D.	0.39	0.06	N.D.	N.D.	0.15	0.10	0.09	0.10	0.09	N.D.

Mean : monthly or annual arithmetic average values

Max-d : maximum values of daily data

Min-d : minimum values of daily data

Max-10d : maximum values of 10-day interval data

Min-10d : minimum values of 10-day interval data

Max-w : maximum values of weekly data

Min-w : minimum values of weekly data

Max-2w : maximum values of biweekly data

Min-2w : minimum values of biweekly data

Max-m : maximum values of monthly data

Min-m : minimum values of monthly data

% : monthly or annual percentages of period of available data

Table 4.19 Particulate matter component: Mg²⁺

Unit : µg/m ³			2009												Annual
Country	Site		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
China	Hongwen	Mean	0.29	0.26	0.29	0.23	0.33	0.28	0.58	0.32	0.55	0.60	0.14	0.31	0.33
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-w	0.33	0.27	0.59	0.40	0.39	0.36	0.74	0.41	0.57	0.74	0.23	0.37	0.74
		Min-w	0.22	0.24	0.09	0.03	0.21	0.14	0.43	0.24	0.53	0.34	0.09	0.26	0.03
		Min-2w	N.D.	0.02	0.02	0.01	0.02	0.03	0.01	0.03	N.D.	0.06	0.01	N.D.	0.02
Indonesia	Serpong	Mean	N.D.	0.02	0.02	0.01	0.02	0.03	0.01	0.03	N.D.	0.06	0.01	N.D.	0.02
		%	100	100	100	100	100	100	100	100	100	100	100	100	
		Max-2w	N.D.	0.02	0.04	0.02	0.03	0.04	0.01	0.06	0.01	0.14	0.01	N.D.	0.14
		Min-2w	N.D.	0.02	N.D.	N.D.	N.D.	0.02	0.01	N.D.	N.D.	N.D.	0.01	N.D.	N.D.
		Min-2w	N.D.	0.02	N.D.	N.D.	N.D.	0.02	0.01	N.D.	N.D.	N.D.	0.01	N.D.	N.D.
Japan	Rishiri	Mean	0.19	0.16	0.34	0.32	0.41	0.14	0.06	0.24	0.24	0.42	0.18	0.16	0.24
		%	100	100	100	100	100	100	100	100	100	100	50	67	92
		Max-2w	0.27	0.16	0.44	0.38	0.43	0.27	0.10	0.45	0.29	0.45	0.18	0.17	0.45
		Min-2w	0.11	0.16	0.24	0.27	0.40	0.07	0.02	0.03	0.19	0.39	0.18	0.16	0.02
		Min-2w	0.11	0.16	0.24	0.27	0.40	0.07	0.02	0.03	0.19	0.39	0.18	0.16	0.02
	Ochiishi	Mean	1.80	0.64	1.40	0.47	0.26	0.18	0.18	0.22	0.41	0.28	0.95	0.12	0.56
		%	100	100	100	100	100	100	100	100	100	69	100	100	96
		Max-2w	2.49	0.85	2.23	0.49	0.39	0.22	0.18	0.31	0.44	0.35	0.95	0.14	2.49
		Min-2w	1.11	0.44	0.57	0.45	0.14	0.14	0.18	0.14	0.39	0.22	0.95	0.09	0.09
		Min-2w	1.11	0.44	0.57	0.45	0.14	0.14	0.18	0.14	0.39	0.22	0.95	0.09	0.09
	Tappi	Mean	0.38	1.00	3.14	0.25	0.34	0.15	0.38	0.17	0.10	0.40	1.11	0.91	0.68
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-2w	0.43	1.06	5.56	0.43	0.42	0.27	0.68	0.34	0.17	0.61	1.55	1.84	5.56
		Min-2w	0.32	0.93	0.71	0.06	0.27	0.04	0.07	N.D.	0.04	0.19	0.67	N.D.	N.D.
		Min-2w	0.32	0.93	0.71	0.06	0.27	0.04	0.07	N.D.	0.04	0.19	0.67	N.D.	N.D.
	Sado-seki	Mean	0.29	0.38	0.33	0.19	0.30	0.21	0.10	0.21	0.26	0.46	0.29	0.59	0.31
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-2w	0.43	0.41	0.44	0.29	0.46	0.23	0.11	0.30	0.28	0.52	0.51	0.74	0.74
		Min-2w	0.16	0.35	0.22	0.08	0.13	0.19	0.09	0.12	0.23	0.41	0.07	0.45	0.07
		Min-2w	0.16	0.35	0.22	0.08	0.13	0.19	0.09	0.12	0.23	0.41	0.07	0.45	0.07
	Happo	Mean	-	-	N.D.	N.D.	0.03	0.01	N.D.	N.D.	N.D.	0.01	N.D.	N.D.	0.01
		%	0	0	50	44	100	100	100	100	100	100	100	100	77
		Max-2w	-	-	N.D.	N.D.	0.06	0.04	N.D.	N.D.	N.D.	0.03	0.01	N.D.	0.06
		Min-2w	-	-	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
		Min-2w	-	-	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
	Ijira	Mean	0.02	0.05	0.08	0.05	0.05	0.03	0.02	0.04	0.03	0.05	0.04	0.02	0.04
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-2w	0.02	0.07	0.11	0.05	0.06	0.04	0.03	0.05	0.06	0.07	0.04	0.03	0.11
		Min-2w	0.01	0.03	0.05	0.04	0.03	0.02	0.02	0.03	N.D.	0.03	0.03	0.01	N.D.
		Min-2w	0.01	0.03	0.05	0.04	0.03	0.02	0.02	0.03	N.D.	0.03	0.03	0.01	N.D.
	Okii	Mean	0.59	0.36	0.51	0.36	0.22	0.08	0.17	0.18	0.08	0.43	0.44	0.59	0.34
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-2w	0.84	0.60	0.51	0.51	0.28	0.16	0.39	0.30	0.16	0.47	0.60	0.82	0.84
		Min-2w	0.33	0.13	0.50	0.20	0.17	0.01	0.04	0.06	N.D.	0.39	0.27	0.22	N.D.
		Min-2w	0.33	0.13	0.50	0.20	0.17	0.01	0.04	0.06	N.D.	0.39	0.27	0.22	N.D.
	Banryu	Mean	0.24	0.25	0.30	0.22	0.11	0.15	0.09	0.14	0.15	0.37	0.27	0.19	0.20
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-2w	0.26	0.28	0.40	0.29	0.15	0.27	0.11	0.19	0.17	0.51	0.39	0.21	0.51
		Min-2w	0.21	0.22	0.20	0.15	0.07	0.08	0.07	0.09	0.14	0.23	0.16	0.17	0.07
		Min-2w	0.21	0.22	0.20	0.15	0.07	0.08	0.07	0.09	0.14	0.23	0.16	0.17	0.07
	Yusuhabara	Mean	0.03	0.11	0.10	0.09	0.07	0.05	0.04	0.04	0.21	0.08	0.04	0.07	0.08
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-2w	0.05	0.17	0.12	0.12	0.08	0.05	0.06	0.06	0.33	0.13	0.06	0.09	0.33
		Min-2w	N.D.	0.05	0.09	0.06	0.06	0.04	0.02	0.03	0.09	0.03	0.02	0.06	N.D.
		Min-2w	N.D.	0.05	0.09	0.06	0.06	0.04	0.02	0.03	0.09	0.03	0.02	0.06	N.D.
	Hedo	Mean	0.67	0.54	0.57	0.56	0.42	0.38	0.16	0.46	0.73	0.97	0.87	0.69	0.58
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-2w	0.69	0.65	0.63	0.59	0.60	0.60	0.25	0.65	0.79	1.11	0.89	0.83	1.11
		Min-2w	0.65	0.42	0.50	0.53	0.25	0.22	0.06	0.27	0.68	0.83	0.85	0.54	0.06
		Min-2w	0.65	0.42	0.50	0.53	0.25	0.22	0.06	0.27	0.68	0.83	0.85	0.54	0.06
	Ogasawara	Mean	0.46	0.46	0.53	0.35	0.38	0.14	0.20	0.39	0.47	0.34	0.46	0.37	0.36
		%	100	100	100	100	100	100	100	100	50	100	44	100	92
		Max-2w	0.54	0.49	0.55	0.36	0.49	0.18	0.22	0.54	0.47	0.44	0.46	0.48	0.55
		Min-2w	0.38	0.43	0.51	0.35	0.26	0.09	0.19	0.25	0.47	0.24	0.46	0.25	0.09
		Min-2w	0.38	0.43	0.51	0.35	0.26	0.09	0.19	0.25	0.47	0.24	0.46	0.25	0.09
	Tokyo	Mean	0.04	0.16	0.16	0.16	0.17	0.10	0.14	0.13	0.18	0.15	0.09	0.07	0.13
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-2w	0.06	0.22	0.22	0.18	0.22	0.11	0.17	0.15	0.21	0.16	0.10	0.09	0.22
		Min-2w	0.03	0.10	0.11	0.13	0.12	0.09	0.10	0.11	0.15	0.14	0.08	0.04	0.03
		Min-2w	0.03	0.10	0.11	0.13	0.12	0.09	0.10	0.11	0.15	0.14	0.08	0.04	0.03
Malaysia	Tanah Rata	Mean	0.02	0.02	N.D.	0.01	0.01	0.02	0.02	N.D.	0.01	N.D.	N.D.	0.01	0.01
		%	100	100	100	100	100	100	100	100	100	100	100	100	
		Max-w	0.03	0.03	0.01	0.03	0.02	0.04	0.03	0.02	0.02	0.02	0.02	0.02	0.04
		Min-w	N.D.	N.D.	N.D.	N.D.	N.D.	0.01	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
		Min-w	N.D.	N.D.	N.D.	N.D.	N.D.	0.01	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
	Petaling Jaya	Mean	0.04	0.04	0.04	0.05	0.05	0.04	0.04	0.03	0.04	0.02	N.D.	0.02	0.03
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-w	0.07	0.07	0.10	0.14	0.09	0.05	0.06	0.06	0.05	0.04	0.03	0.05	0.14
		Min-w	0.02	N.D.	N.D.	0.01	N.D.	0.01	0.02	N.D.	0.02	N.D.	N.D.	N.D.	N.D.
		Min-w	0.02	N.D.	N.D.	0.01	N.D.	0.01	0.02	N.D.	0.02	N.D.	N.D.	N.D.	N.D.
	Danum Valley	Mean	0.07	0.07	0.06	0.05	0.03	0.03	0.03	0.08	0.06	0.04	0.05	0.32	0.07
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-2w	0.10	0.07	0.07	0.05	0.03	0.04	0.04	0.11	0.08	0.04	0.05	0.44	0.44
		Min-2w	0.04	0.06	0.05	0.04	0.03	0.02	0.02	0.05	0.04	0.04	0.04	0.20	0.02
		Min-2w	0.04	0.06	0.05	0.04	0.03	0.02	0.02	0.05	0.04	0.04	0.04	0.20	0.02
Mongolia	Ulaanbaatar	Mean	-	-	-	-	0.05	0.12	0.09	0.03	0.02	N.D.	N.D.	N.D.	0.03
		%	0	0	0	80	100	100	100	100	100	100	100	100	75
		Max-w	-	-	-	0.1	0.29	0.28	0.10	0.04	0.02	0.02	N.D.	0.1	0.29
		Min-w	-	-	-	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
		Min-w	-	-	-	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
	Terelj	Mean	0.07	0.09	0.04	0.05	0.07	0.14	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	0.04
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-2w	0.09	0.09	0.04	0.08	0.13	0.19	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	0.19
		Min-2w	0.04	0.09	0.03	N.D.	N.D.	0.08	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.

Table 4.19 Particulate matter component: Mg²⁺

Unit : µg/m ³			2009												Annual
Country	Site		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
Philippines	Mt. Sto. Tomas	Mean	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	0.02	0.0	0.0	N.D.
		%	17	100	100	100	100	100	100	100	100	100	100	100	92
		Max-w	N.D.	N.D.	N.D.	N.D.	0.02	0.01	N.D.	N.D.	0.01	0.04	0.0	0.0	0.04
		Min-w	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	0.01	N.D.
Republic of Korea	Kanghwa	Mean	0.23	0.10	0.04	0.01	N.D.	0.02	0.02	0.01	N.D.	0.02	N.D.	0.01	0.03
		%	10	18	13	40	16	43	16	19	17	16	17	45	22
		Max-d	0.34	0.45	0.04	0.04	0.02	0.03	0.03	0.02	0.02	0.02	0.01	0.04	0.45
		Min-d	0.07	N.D.	0.03	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
	Cheju (Kosan)	Mean	0.05	0.02	N.D.	N.D.	0.01	N.D.	N.D.	N.D.	N.D.	0.0	N.D.	N.D.	0.01
		%	3	14	10	37	16	40	16	19	17	16	17	42	21
		Max-d	0.05	0.04	N.D.	0.02	0.02	N.D.	0.02	0.01	0.02	0.0	N.D.	0.02	0.05
		Min-d	0.05	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
	Imsil	Mean	0.05	0.07	0.03	0.02	N.D.	N.D.	N.D.	N.D.	N.D.	0.0	N.D.	N.D.	0.02
		%	3	18	13	43	16	43	13	19	17	16	17	42	22
		Max-d	0.05	0.29	0.10	0.14	N.D.	0.0	0.0	N.D.	N.D.	0.0	0.01	0.02	0.29
		Min-d	0.05	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
Russia	Mondy	Mean	0.01	0.01	-	-	-	N.D.	-	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
		%	88	100	0	0	0	100	0	100	100	100	100	100	67
		Max-m	0.01	0.01	-	-	-	N.D.	-	N.D.	N.D.	N.D.	N.D.	N.D.	0.01
		Min-m	0.01	0.01	-	-	-	N.D.	-	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
	Listvianka	Mean	0.04	0.04	0.02	0.04	0.05	0.03	0.03	0.03	0.01	0.03	0.02	0.02	0.03
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-w	0.06	0.08	0.03	0.07	0.09	0.04	0.06	0.05	0.03	0.06	0.04	0.03	0.09
		Min-w	0.02	0.01	N.D.	N.D.	0.01	0.02	N.D.	0.01	N.D.	N.D.	N.D.	N.D.	N.D.
	Irkutsk	Mean	0.09	0.07	0.09	0.14	0.10	0.04	0.04	0.07	0.05	0.03	0.08	0.09	0.08
		%	100	100	100	100	100	100	100	100	100	100	83	100	98
		Max-w	0.15	0.08	0.12	0.21	0.14	0.06	0.12	0.11	0.06	0.10	0.13	0.13	0.21
		Min-w	N.D.	0.06	0.07	0.06	0.01	0.03	N.D.	N.D.	N.D.	N.D.	0.03	0.06	N.D.
	Primorskaya	Mean	0.09	0.09	0.12	0.10	0.09	0.05	0.03	0.05	0.04	0.05	0.09	0.06	0.07
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-2w	0.13	0.09	0.13	0.12	0.10	0.05	0.04	0.05	0.04	0.10	0.09	0.07	0.13
		Min-2w	0.05	0.08	0.11	0.07	0.08	0.05	0.03	0.05	0.04	N.D.	0.09	0.05	N.D.
Thailand	Bangkok	Mean	0.16	0.18	0.12	0.14	0.11	0.08	0.06	0.03	0.02	0.02	0.01	-	0.09
		%	100	100	100	100	100	100	100	100	100	100	100	0	92
		Max-10d	0.21	0.20	0.14	0.20	0.16	0.12	0.11	0.07	0.04	0.03	0.03	-	0.21
		Min-10d	0.08	0.16	0.08	0.10	0.07	0.02	0.02	N.D.	0.01	0.01	N.D.	-	N.D.
	Patumthani	Mean	0.12	0.16	0.13	0.09	0.08	0.02	0.06	0.06	0.02	0.03	0.01	-	0.07
		%	100	100	100	100	68	63	72	100	100	100	100	0	83
		Max-10d	0.14	0.21	0.19	0.18	0.15	0.02	0.06	0.10	0.02	0.03	0.02	-	0.21
		Min-10d	0.08	0.13	0.09	0.02	0.02	0.02	0.05	0.03	0.01	0.02	N.D.	-	N.D.
	Khanchanaburi (Vachiralongkorn Dam)	Mean	-	-	0.07	-	-	-	0.02	-	-	-	N.D.	-	0.03
		%	0	0	69	0	0	0	63	0	0	0	62	0	13
		Max-2w	-	-	0.07	-	-	-	0.02	-	-	-	N.D.	-	0.07
		Min-2w	-	-	0.07	-	-	-	0.02	-	-	-	N.D.	-	N.D.
	Chiangmai (Mae Hia)	Mean	N.D.	0.06	0.06	0.22	0.08	0.02	N.D.	N.D.	N.D.	0.02	0.04	0.01	0.04
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-10d	N.D.	0.10	0.10	0.65	0.24	0.03	N.D.	N.D.	N.D.	0.07	0.11	0.04	0.65
		Min-10d	N.D.	N.D.	0.03	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
	Nakhon Ratchasima	Mean	0.06	0.06	0.03	0.08	0.03	0.03	0.07	0.06	0.03	N.D.	0.02	0.04	0.04
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-10d	0.09	0.06	0.08	0.11	0.05	0.09	0.09	0.11	0.05	0.01	0.04	0.08	0.11
		Min-10d	0.05	0.06	N.D.	0.05	0.02	N.D.	0.05	0.01	0.02	N.D.	N.D.	N.D.	N.D.
Viet Nam	Ha Noi	Mean	0.01	0.05	0.07	0.15	0.32	0.42	0.21	0.44	0.61	0.57	0.54	0.55	0.32
		%	100	100	100	100	100	100	100	100	75	100	100	100	98
		Max-w	0.03	0.09	0.13	0.26	0.43	0.68	0.40	0.72	0.88	0.80	0.70	0.79	0.88
		Min-w	N.D.	N.D.	0.01	0.05	0.24	0.13	N.D.	0.21	0.28	0.48	0.32	0.37	N.D.
	Hoa Binh	Mean	0.02	0.02	N.D.	0.05	0.12	0.08	0.11	0.14	0.11	0.15	0.24	0.23	0.11
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-w	0.04	0.04	0.03	0.17	0.21	0.10	0.15	0.19	0.19	0.26	0.31	0.33	0.33
		Min-w	N.D.	N.D.	N.D.	N.D.	0.05	0.05	0.07	0.10	N.D.	0.09	0.13	0.16	N.D.

Mean : monthly or annual arithmetic average values

Max-d : maximum values of daily data

Min-d : minimum values of daily data

Max-10d : maximum values of 10-day interval data

Min-10d : minimum values of 10-day interval data

Max-w : maximum values of weekly data

Min-w : minimum values of weekly data

Max-2w : maximum values of biweekly data

Min-2w : minimum values of biweekly data

Max-m : maximum values of monthly data

Min-m : minimum values of monthly data

% : monthly or annual percentages of period of available data

Table 4.20 Particulate matter component: Ca²⁺

Unit : µg/m ³			2009												Annual
Country	Site		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
China	Hongwen	Mean	4.30	1.86	2.39	2.15	2.70	2.32	3.92	2.91	2.91	4.17	1.49	2.58	2.73
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-w	8.76	1.89	2.85	2.74	3.02	3.28	5.81	3.76	3.01	5.39	2.67	2.94	8.76
		Min-w	1.49	1.84	1.87	0.82	2.37	1.77	2.02	2.29	2.82	3.02	0.56	2.04	0.56
		Min-2w	N.D.	0.05	N.D.	N.D.	0.03	0.08	0.14	N.D.	N.D.	N.D.	0.30	0.04	N.D.
Indonesia	Serpong	Mean	0.02	0.05	0.05	0.03	0.08	0.14	N.D.	N.D.	N.D.	0.30	0.04	N.D.	0.07
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-2w	0.03	0.05	0.10	0.06	0.12	0.14	N.D.	N.D.	N.D.	0.76	0.05	N.D.	0.76
		Min-2w	N.D.	0.05	N.D.	N.D.	0.03	0.13	N.D.	N.D.	N.D.	0.02	0.03	N.D.	N.D.
		Min-2w	N.D.	0.05	N.D.	N.D.	0.03	0.13	N.D.	N.D.	N.D.	0.02	0.03	N.D.	N.D.
Japan	Rishiri	Mean	0.14	0.16	0.28	0.22	0.31	0.12	0.03	0.12	0.13	0.21	0.12	0.11	0.16
		%	100	100	100	100	100	100	100	100	100	100	50	67	92
		Max-2w	0.23	0.17	0.32	0.27	0.36	0.17	0.04	0.19	0.14	0.22	0.12	0.14	0.36
		Min-2w	0.06	0.15	0.24	0.16	0.26	0.03	0.03	0.04	0.12	0.20	0.12	0.08	0.03
		Min-2w	0.06	0.15	0.24	0.16	0.26	0.03	0.03	0.04	0.12	0.20	0.12	0.08	0.03
	Ochiishi	Mean	0.51	0.40	0.48	0.21	0.21	0.14	0.08	0.16	0.16	0.11	0.28	0.12	0.24
		%	100	100	100	100	100	100	100	100	100	69	100	100	96
		Max-2w	0.76	0.70	0.81	0.22	0.32	0.14	0.10	0.16	0.17	0.15	0.28	0.19	0.81
		Min-2w	0.26	0.11	0.15	0.19	0.09	0.14	0.07	0.15	0.16	0.08	0.28	0.05	0.05
		Min-2w	0.26	0.11	0.15	0.19	0.09	0.14	0.07	0.15	0.16	0.08	0.28	0.05	0.05
	Tappi	Mean	0.22	0.52	1.47	0.24	0.41	0.18	0.16	0.19	0.17	0.20	0.53	0.44	0.39
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-2w	0.26	0.56	2.27	0.48	0.63	0.30	0.24	0.24	0.24	0.33	0.59	0.86	2.27
		Min-2w	0.17	0.47	0.67	N.D.	0.19	N.D.	0.09	0.14	0.11	0.07	0.47	N.D.	N.D.
		Min-2w	0.17	0.47	0.67	N.D.	0.19	N.D.	0.09	0.14	0.11	0.07	0.47	N.D.	N.D.
	Sado-seki	Mean	0.14	0.31	0.36	0.30	0.39	0.30	0.06	0.15	0.17	0.31	0.21	0.29	0.25
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-2w	0.20	0.34	0.56	0.52	0.57	0.38	0.06	0.22	0.20	0.46	0.37	0.42	0.57
		Min-2w	0.09	0.29	0.16	0.07	0.21	0.18	0.05	0.08	0.14	0.15	0.05	0.19	0.05
		Min-2w	0.09	0.29	0.16	0.07	0.21	0.18	0.05	0.08	0.14	0.15	0.05	0.19	0.05
	Happo	Mean	-	-	0.08	0.03	0.31	0.12	N.D.	N.D.	0.02	0.06	0.05	N.D.	0.07
		%	0	0	50	44	100	100	100	100	100	100	100	100	77
		Max-2w	-	-	0.08	0.03	0.61	0.35	0.01	0.02	0.03	0.13	0.09	N.D.	0.61
		Min-2w	-	-	0.08	0.03	N.D.	N.D.	N.D.	N.D.	0.01	N.D.	0.01	N.D.	N.D.
		Min-2w	-	-	0.08	0.03	N.D.	N.D.	N.D.	N.D.	0.01	N.D.	0.01	N.D.	N.D.
	Ijira	Mean	0.04	0.19	0.36	0.19	0.23	0.15	0.05	0.10	0.08	0.14	0.09	0.07	0.14
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-2w	0.06	0.24	0.59	0.25	0.28	0.17	0.06	0.13	0.12	0.21	0.14	0.10	0.59
		Min-2w	0.03	0.15	0.13	0.14	0.17	0.13	0.04	0.07	0.03	0.07	0.04	0.06	0.03
		Min-2w	0.03	0.15	0.13	0.14	0.17	0.13	0.04	0.07	0.03	0.07	0.04	0.06	0.03
	Okii	Mean	0.28	0.34	0.66	0.42	0.38	0.11	0.09	0.12	0.09	0.46	0.20	0.43	0.30
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-2w	0.41	0.52	0.94	0.51	0.45	0.20	0.17	0.20	0.18	0.68	0.26	0.87	0.94
		Min-2w	0.16	0.16	0.39	0.32	0.30	0.03	0.04	0.04	N.D.	0.24	0.14	0.12	N.D.
		Min-2w	0.16	0.16	0.39	0.32	0.30	0.03	0.04	0.04	N.D.	0.24	0.14	0.12	N.D.
	Banryu	Mean	0.20	0.49	0.65	0.34	0.31	0.25	0.06	0.11	0.12	0.50	0.23	0.24	0.29
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-2w	0.22	0.57	0.89	0.37	0.39	0.33	0.06	0.16	0.12	0.72	0.26	0.46	0.89
		Min-2w	0.18	0.41	0.42	0.30	0.24	0.17	0.06	0.06	0.11	0.28	0.20	0.12	0.06
		Min-2w	0.18	0.41	0.42	0.30	0.24	0.17	0.06	0.06	0.11	0.28	0.20	0.12	0.06
	Yusuvara	Mean	0.21	0.63	0.53	1.60	0.29	0.17	0.05	0.07	0.18	0.23	0.23	0.24	0.36
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-2w	0.32	0.68	0.57	2.89	0.33	0.24	0.05	0.11	0.21	0.43	0.26	0.32	2.89
		Min-2w	0.10	0.58	0.49	0.30	0.25	0.13	0.04	0.03	0.16	0.04	0.19	0.16	0.03
		Min-2w	0.10	0.58	0.49	0.30	0.25	0.13	0.04	0.03	0.16	0.04	0.19	0.16	0.03
	Hedo	Mean	0.45	0.59	0.47	0.53	0.42	0.29	0.09	0.30	0.34	0.59	0.45	0.59	0.43
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-2w	0.51	0.66	0.50	0.65	0.55	0.55	0.14	0.36	0.34	0.74	0.56	0.84	0.84
		Min-2w	0.39	0.52	0.43	0.41	0.28	0.14	0.04	0.23	0.33	0.44	0.35	0.38	0.04
		Min-2w	0.39	0.52	0.43	0.41	0.28	0.14	0.04	0.23	0.33	0.44	0.35	0.38	0.04
	Ogasawara	Mean	0.19	0.28	0.46	0.22	0.25	0.09	0.12	0.17	0.17	0.12	0.16	0.19	0.20
		%	100	100	100	100	100	100	100	100	100	50	100	44	92
		Max-2w	0.21	0.35	0.61	0.26	0.27	0.16	0.14	0.25	0.17	0.15	0.16	0.23	0.61
		Min-2w	0.16	0.21	0.31	0.19	0.23	0.04	0.10	0.09	0.17	0.10	0.16	0.16	0.04
		Min-2w	0.16	0.21	0.31	0.19	0.23	0.04	0.10	0.09	0.17	0.10	0.16	0.16	0.04
	Tokyo	Mean	0.53	0.76	0.74	0.52	0.63	0.39	0.40	0.55	0.44	0.47	0.46	0.39	0.51
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-2w	0.64	1.04	1.07	0.75	0.89	0.42	0.48	0.56	0.52	0.63	0.53	0.47	1.07
		Min-2w	0.43	0.48	0.41	0.29	0.38	0.37	0.32	0.54	0.36	0.30	0.39	0.33	0.29
		Min-2w	0.43	0.48	0.41	0.29	0.38	0.37	0.32	0.54	0.36	0.30	0.39	0.33	0.29
Malaysia	Tanah Rata	Mean	0.03	0.03	0.04	0.06	0.06	0.13	0.20	0.10	0.05	0.06	0.01	0.01	0.07
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-w	0.08	0.10	0.06	0.14	0.10	0.33	0.35	0.27	0.07	0.09	0.02	0.03	0.35
		Min-w	N.D.	N.D.	N.D.	N.D.	0.02	0.05	N.D.	N.D.	N.D.	0.04	N.D.	N.D.	N.D.
		Min-2w	N.D.	N.D.	N.D.	N.D.	0.02	0.05	N.D.	N.D.	N.D.	0.04	N.D.	N.D.	N.D.
	Petaling Jaya	Mean	0.30	0.24	0.55	0.49	0.43	0.28	0.38	0.29	0.18	0.40	0.36	0.22	0.34
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-w	0.67	0.37	1.21	0.78	0.63	0.40	0.53	0.47	0.24	0.60	0.63	0.34	1.21
		Min-w	0.11	0.09	0.04	0.26	0.02	0.08	0.13	0.04	0.03	0.12	0.14	0.02	0.02
		Min-2w	0.11	0.09	0.04	0.26	0.02	0.08	0.13	0.04	0.03	0.12	0.14	0.02	0.02
	Danum Valley	Mean	0.02	0.02	0.03	0.05	N.D.	N.D.	0.05	0.06	0.07	0.07	0.02	0.10	0.04
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-2w	0.02	0.03	0.04	0.06	N.D.	0.02	0.10	0.10	0.10	0.07	0.03	0.12	0.12
		Min-2w	0.01	0.02	0.03	0.04	N.D.	N.D.	N.D.	0.03	0.03	0.07	0.02	0.08	N.D.
		Min-2w	0.01	0.02	0.03	0.04	N.D.	N.D.	N.D.	0.03	0.03	0.07	0.02	0.08	N.D.
Mongolia	Ulaanbaatar	Mean	-	-	-	1.09	1.01	1.70	1.80	1.87	0.92	1.36	0.64	2.21	1.43
		%	0	0	0	80	100	100	100	100	100	100	100	100	75
		Max-w	-	-	-	1.9	2.57	2.59	2.64	2.23	1.96	1.75	2.1	5.0	5.04
		Min-w	-	-	-	0.5	0.41	0.29	1.00	1.43	0.14	1.16	0.1	0.1	0.08
		Min-2w	-	-	-	0.5	0.41	0.29	1.00	1.43	0.14	1.16	0.1	0.1	0.08
	Terelj	Mean	0.80	0.93	0.30	0.41	0.38	0.35	0.17	0.15	0.07	0.14	0.38	0.15	0.32
		%	100	100	100	100	100	100	100	100	100	100	100	100	100

Table 4.20 Particulate matter component: Ca²⁺

Unit : µg/m ³			2009												Annual
Country	Site		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
Philippines	Mt. Sto. Tomas	Mean	0.18	0.16	0.16	0.12	0.13	0.05	N.D.	0.03	0.06	0.47	0.5	0.7	0.22
		%	17	100	100	100	100	100	100	100	100	100	100	100	92
		Max-w	0.18	0.24	0.18	0.13	0.19	0.07	0.03	0.05	0.16	0.99	0.7	1.4	1.44
		Min-w	0.18	0.08	0.09	0.10	0.06	0.02	N.D.	N.D.	N.D.	N.D.	0.34	0.24	N.D.
Republic of Korea	Kanghwa	Mean	1.30	0.41	0.34	0.19	0.09	0.03	0.05	0.13	0.08	0.17	0.06	0.08	0.17
		%	10	18	13	40	16	43	16	19	17	16	17	45	22
		Max-d	2.12	1.88	0.38	0.39	0.25	0.06	0.07	0.29	0.14	0.19	0.10	0.15	2.12
		Min-d	0.37	N.D.	0.28	0.09	0.04	0.01	0.01	0.06	0.05	0.12	0.02	0.05	N.D.
	Cheju (Kosan)	Mean	0.71	0.04	0.08	0.10	0.15	0.1	0.08	0.08	0.06	0.1	0.04	0.02	0.08
		%	3	14	10	37	16	40	16	19	17	16	17	42	21
		Max-d	0.71	0.08	0.09	0.22	0.21	0.1	0.15	0.14	0.08	0.2	0.07	0.07	0.71
		Min-d	0.71	N.D.	0.07	N.D.	0.09	0.0	0.06	0.05	0.04	0.1	0.03	N.D.	N.D.
	Imsil	Mean	0.31	0.06	0.07	0.09	0.09	0.1	0.1	0.08	0.07	0.1	0.06	0.02	0.08
		%	3	18	13	43	16	43	13	19	17	16	17	42	22
		Max-d	0.31	0.16	0.20	0.34	0.13	0.3	0.1	0.12	0.09	0.2	0.10	0.07	0.34
		Min-d	0.31	N.D.	N.D.	N.D.	0.05	0.0	0.0	0.06	0.05	0.1	0.02	N.D.	N.D.
Russia	Mondy	Mean	0.08	0.08	-	-	-	0.10	-	0.05	0.02	0.07	0.01	0.02	0.05
		%	88	100	0	0	0	100	0	100	100	100	100	100	67
		Max-m	0.08	0.08	-	-	-	0.10	-	0.05	0.02	0.07	0.01	0.02	0.10
		Min-m	0.08	0.08	-	-	-	0.10	-	0.05	0.02	0.07	0.01	0.02	0.01
	Listvianka	Mean	0.27	0.20	0.16	0.18	0.27	0.20	0.18	0.12	0.11	0.25	0.19	0.17	0.19
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-w	0.37	0.31	0.23	0.34	0.51	0.31	0.33	0.19	0.25	0.44	0.33	0.26	0.51
		Min-w	0.23	0.11	0.11	0.01	0.06	0.09	0.10	0.03	0.03	0.07	0.09	0.11	0.01
	Irkutsk	Mean	0.64	0.51	0.41	0.62	0.59	0.48	0.42	0.44	0.36	0.23	0.62	0.54	0.49
		%	100	100	100	100	100	100	100	100	100	100	83	100	98
		Max-w	1.16	0.63	0.66	0.89	0.91	0.71	1.07	0.74	0.49	0.66	1.13	0.84	1.16
		Min-w	0.07	0.44	0.30	0.39	0.09	0.26	0.02	0.02	0.21	0.02	0.28	0.36	0.02
	Primorskaya	Mean	0.51	0.34	0.55	0.45	0.48	0.28	0.14	0.15	0.28	0.28	0.48	0.45	0.37
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-2w	0.55	0.39	0.71	0.61	0.50	0.33	0.17	0.15	0.30	0.45	0.48	0.54	0.71
		Min-2w	0.47	0.29	0.39	0.29	0.46	0.23	0.12	0.15	0.26	0.12	0.47	0.36	0.12
Thailand	Bangkok	Mean	2.03	1.55	1.06	1.18	1.23	0.45	0.70	0.44	0.25	0.25	0.52	-	0.88
		%	100	100	100	100	100	100	100	100	100	100	100	0	92
		Max-10d	2.56	1.75	1.21	1.54	1.60	0.67	1.24	0.68	0.52	0.51	0.98	-	2.56
		Min-10d	1.59	1.17	0.90	0.54	0.99	0.08	0.21	0.03	0.06	0.04	0.03	-	0.03
	Patumthani	Mean	1.63	2.09	1.45	0.87	0.15	0.13	0.79	0.95	0.17	0.31	0.58	-	0.90
		%	100	100	100	100	68	63	72	100	100	100	100	0	83
		Max-10d	1.66	2.55	1.57	1.73	0.20	0.22	0.88	1.10	0.33	0.32	1.21	-	2.55
		Min-10d	1.55	1.73	1.32	N.D.	0.09	0.04	0.71	0.72	0.04	0.30	0.03	-	N.D.
	Khanchanaburi (Vachiralongkorn Dam)	Mean	-	-	0.27	-	-	-	0.11	-	-	-	N.D.	-	0.12
		%	0	0	69	0	0	0	63	0	0	0	62	0	13
		Max-2w	-	-	0.27	-	-	-	0.11	-	-	-	N.D.	-	0.27
		Min-2w	-	-	0.27	-	-	-	0.11	-	-	-	N.D.	-	N.D.
	Chiangmai (Mae Hia)	Mean	0.28	0.86	1.08	0.71	3.42	0.51	0.34	0.12	0.19	0.42	0.43	0.29	0.72
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-10d	0.43	1.23	1.62	1.21	8.44	0.86	0.65	0.18	0.34	0.60	0.80	0.47	8.44
		Min-10d	0.16	0.54	0.75	0.21	0.71	0.06	0.05	0.04	0.12	0.31	0.13	0.15	0.04
	Nakhon Ratchasima	Mean	0.30	0.33	0.08	0.29	0.09	0.01	0.53	0.38	0.13	0.10	0.20	0.20	0.22
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-10d	0.38	0.56	0.20	0.54	0.14	0.03	0.78	0.66	0.22	0.20	0.27	0.30	0.78
		Min-10d	0.23	0.15	N.D.	0.15	0.03	N.D.	0.20	0.09	N.D.	0.03	0.12	0.01	N.D.
Viet Nam	Ha Noi	Mean	0.74	1.63	1.98	4.44	2.59	3.06	0.84	2.97	4.94	4.95	4.02	2.86	2.87
		%	100	100	100	100	100	100	100	100	75	100	100	100	98
		Max-w	1.02	2.76	3.01	5.97	5.07	4.87	3.16	4.38	9.29	7.91	6.13	4.19	9.29
		Min-w	0.51	0.86	0.74	1.40	1.69	0.12	N.D.	1.49	1.86	4.07	2.53	1.71	N.D.
	Hoa Binh	Mean	3.35	2.90	0.35	1.51	2.04	0.69	0.57	0.90	0.58	0.60	0.47	0.94	1.27
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-w	10.94	5.13	0.43	2.39	3.15	0.85	0.71	1.31	1.15	0.98	0.68	2.10	10.94
		Min-w	0.21	0.25	0.27	0.69	0.63	0.55	0.39	0.52	0.15	0.25	0.15	0.29	0.15

Mean : monthly or annual arithmetic average values

Max-d : maximum values of daily data

Min-d : minimum values of daily data

Max-10d : maximum values of 10-day interval data

Min-10d : minimum values of 10-day interval data

Max-w : maximum values of weekly data

Min-w : minimum values of weekly data

Max-2w : maximum values of biweekly data

Min-2w : minimum values of biweekly data

Max-m : maximum values of monthly data

Min-m : minimum values of monthly data

% : monthly or annual percentages of period of available data

Table 4.21 Annual SO₂ concentration

unit: ppb

Country	Name of sites	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
China	Jinyunshan		10.0	11.0	16.3	15.8	17.8	17.2	12.2	13.3	12.5
	Weishuiyuan	6.2	5.1	4.6	3.8	8.9	11.7	15.4			
	Hongwen	5.9	8.5	10.2	10.0	7.2	8.2	9.4	10.9	9.1	5.2
	Xiang Zhou	7.9	10.0	9.4	10.1	8.2	6.3	8.2	6.3	6.6	5.9
Indonesia	Jakarta								11.0	7.4	8.3
	Serpong	2.2	0.9	1.0	1.7	1.0	1.4	0.5	1.5	1.6	1.1
	Kototabang								3.3	6.3	7.9
	Bandung									2.7	4.7
Japan	Rishiri	N.D.	0.2	0.1	0.2	0.2	0.1	0.2	0.3	0.2	0.3
	Ochiishi									0.2	0.2
	Tappi	0.3	0.5	0.3	0.5	0.5	0.5	0.5	0.5	0.4	0.2
	Sado-seki	0.2	0.6	0.5	0.4	0.7	0.6	0.5	0.6	0.4	0.4
	Happo	0.2	0.9	0.5	0.4	0.7	0.7	0.6	0.8	0.6	0.4
	Ijira	0.1	0.9	0.5	0.4	0.6	0.4	0.2	0.4	0.2	0.2
	Oki	0.3	0.6	0.4	0.4	0.7	0.7	0.7	0.9	0.8	0.6
	Banryu	0.5	1.0	0.9	1.0	0.9	1.0	0.6	1.1	1.0	0.6
	Yusuhara	0.6	1.1	0.8	0.9	1.0	1.1	0.9	1.2	1.0	0.9
	Hedo	0.2	0.3	0.3	0.3	0.2	0.4	0.3	0.4	0.3	0.2
	Ogasawara	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
	Tokyo								2.2	2.2	2.0
Malaysia	Tanah Rata	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	0.1	3.3	N.D.	N.D.
	Petaling Jaya		5.3	5.0	4.0	1.3	3.8	6.3	2.0	1.9	1.8
	Danum Valley							0.1	0.1	N.D.	0.1
Mongolia	Ulaanbaatar	1.5	1.7	1.0	1.7	2.9	4.3	4.8	4.3	1.8	4.3
	Terelj	0.4	0.5	0.3	0.4	0.5	0.5	0.5	1.4	0.5	0.7
Philippines	Metro Manila	4.8	4.2	4.3	4.4	3.4	3.1	2.1	2.7	1.2	***
	Los Banos	0.8	0.7	0.9	0.9	0.4	0.2	0.3	0.4	0.3	***
	Mt. Sto. Tomas							N.D.	N.D.	0.4	N.D.
Republic of Korea	Kanghwa			3.6	1.9	3.6	2.8	3.4	2.8	2.9	3.2
	Cheju (Kosan)			1.3	3.9	1.8	2.2	3.4	2.3	2.2	2.7
	Imsil			2.3	1.5	1.2	2.5	1.8	2.1	2.3	1.4
Russia	Mondy	N.D.	0.2	N.D.	0.2	0.2	1.2	0.7	0.4	0.3	0.1
	Listvyanka	1.0	2.1	1.1	1.0	0.7	6.0	3.5	1.1	1.2	4.0
	Irkutsk	3.4	3.0	0.7	1.0	1.4	5.1	4.0	2.4	2.2	4.6
	Primorskaya			0.5	0.4	0.5	1.6	1.2	0.7	0.9	1.0
Thailand	Bangkok	4.2	2.8	2.5	2.4	3.3	7.3	4.1	0.8	2.1	1.9
	Samutprakarn	4.1	4.7	4.4	5.5	5.9	6.6	6.5	5.8	4.8	4.9
	Patumthani				2.4	1.3	1.6	0.3	1.8	0.5	1.1
	Khanchanaburi	1.0	0.5	1.4	***	1.7	1.2	1.3	1.3	1.6	1.2
	Chiang Mai (Mae Hia)		0.5	0.5	1.4	1.5	1.0	0.8	0.9	0.8	0.6
	Nakhon Ratchasima							2.7	0.4	2.7	0.2
Viet Nam	Hanoi	0.8	3.5	2.7	2.2	4.8	2.4	3.9	1.7	1.3	1.3
	Hoa Binh	0.9	2.6	2.4	1.3	2.1	2.7	2.0	1.2	1.0	0.9

[***]: No data or not measured

Black column: Monitoring was not carried out

Table 4.22 Annual HNO₃ concentration

unit: ppb

Country	Name of sites	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
China	Jinyunshan										
	Weishuiyuan										
	Hongwen								0.9	1.7	1.1
	Xiang Zhou										
Indonesia	Jakarta										
	Serpong		0.4	1.3	0.7	0.6	0.5	0.2	0.4	0.2	0.3
	Kototabang										
	Bandung										
Japan	Rishiri			N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
	Ochiishi									N.D.	N.D.
	Tappi				0.2	0.2	0.1	0.1	0.2	0.2	0.1
	Sado-seki				0.3	0.3	0.3	0.3	0.2	0.2	0.2
	Happo				0.4	0.3	0.2	0.3	0.4	0.4	N.D.
	Ijira				0.3	0.4	0.4	0.4	0.3	0.3	0.3
	Oki			0.1	N.D.	N.D.	0.2	0.2	0.2	0.2	0.1
	Banryu				0.2	0.3	0.4	0.3	0.4	0.3	0.3
	Yusuhara				0.3	0.4	0.5	0.5	0.5	0.3	0.3
	Hedo				N.D.	0.1	N.D.	N.D.	0.1	0.1	0.1
	Ogasawara				N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
	Tokyo								1.1	1.0	0.8
Malaysia	Tanah Rata	N.D.	N.D.	N.D.	N.D.	N.D.	0.1	N.D.	0.2	0.1	0.1
	Petaling Jaya		1.4	1.8	2.3	0.5	0.7	1.8	0.7	0.8	1.0
	Danum Valley							N.D.	N.D.	N.D.	0.2
Mongolia	Ulaanbaatar	0.2	0.1	N.D.	0.2	N.D.	N.D.	0.1	0.2	0.2	0.2
	Terelj	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	0.1	0.1	N.D.
Philippines	Metro Manila	0.7	0.3	0.2	0.4	0.5	0.4	0.3	0.4	0.4	***
	Los Banos	0.3	0.2	0.1	0.2	0.2	N.D.	N.D.	0.2	0.1	***
	Mt. Sto. Tomas							N.D.	N.D.	0.3	N.D.
Republic of Korea	Kanghwa				0.2	0.3	***	0.4	0.7	0.5	0.5
	Cheju (Kosan)				0.2	0.9	***	0.5	***	0.7	0.6
	Imsil		0.5	***	1.7	0.4	***	0.6	0.4	0.4	0.5
Russia	Mondy	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
	Listvyanka	0.2	0.2	0.4	0.1	0.1	N.D.	0.2	N.D.	N.D.	N.D.
	Irkutsk	N.D.	0.4	0.1	0.2	N.D.	0.4	N.D.	0.2	0.2	0.2
	Primorskaya		0.2	0.1	N.D.	N.D.	N.D.	0.5	N.D.	0.1	0.1
Thailand	Bangkok				0.7	0.9	0.5	1.0	0.5	0.5	0.5
	Samutprakarn										
	Patumthani				0.6	1.3	0.3	0.3	0.8	0.3	0.7
	Khanchanaburi			0.2	***	0.6	N.D.	0.2	N.D.	0.2	0.5
	Chiang Mai (Mae Hia)		0.2	0.2	0.1	0.4	0.4	0.2	0.5	0.4	0.7
	Nakhon Ratchasima							0.6	0.3	0.2	0.2
Viet Nam	Hanoi	0.6	0.5	1.9	0.7	1.5	1.0	0.9	1.0	0.5	0.9
	Hoa Binh	0.5	0.2	1.8	0.4	0.5	0.8	0.3	0.4	0.4	0.3

[***]: No data or not measured

Black column: Monitoring was not carried out

Table 4.23 Annual HCl concentration

unit: ppb

Country	Name of sites	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
China	Jinyunshan										
	Weishuiyuan										
	Hongwen								1.5	1.2	1.5
	Xiang Zhou										
Indonesia	Jakarta										
	Serpong		0.4	2.6	1.8	1.5	1.1	0.5	1.7	0.5	0.4
	Kototabang										
	Bandung										
Japan	Rishiri			0.3	0.4	0.5	0.4	0.4	0.4	0.5	0.5
	Ochiishi									0.4	0.4
	Tappi				0.7	0.6	0.5	0.5	0.6	0.6	0.5
	Sado-seki				0.9	1.0	1.1	0.9	0.9	0.8	0.9
	Happo				0.2	0.2	0.2	0.2	0.2	0.2	N.D.
	Ijira				0.2	0.3	0.2	0.2	0.3	0.2	0.2
	Oki			0.2	0.3	0.5	0.9	0.9	1.1	0.9	0.8
	Banryu				0.2	0.6	0.9	0.8	0.9	0.7	0.8
	Yusuhara				0.3	0.3	0.4	0.4	0.4	0.3	0.3
	Hedo				0.9	1.0	0.9	0.9	1.0	0.9	0.9
	Ogasawara				0.3	0.5	0.5	0.4	0.7	0.6	0.5
	Tokyo								1.0	0.8	0.8
Malaysia	Tanah Rata	0.1	N.D.	***	***	0.3	0.1	N.D.	0.1	0.4	0.1
	Petaling Jaya		1.4	***	***	0.7	0.9	1.6	0.7	1.1	0.7
	Danum Valley							0.2	0.2	0.3	0.5
Mongolia	Ulaanbaatar	0.3	0.1	0.4	1.0	0.9	0.7	1.0	0.9	0.7	0.7
	Terelj	0.1	N.D.	0.3	0.7	0.6	0.4	0.4	0.5	0.4	0.3
Philippines	Metro Manila	5.4	0.3	0.9	1.2	1.0	0.9	0.5	0.7	0.7	***
	Los Banos	1.5	0.2	0.6	1.2	0.5	0.3	0.3	0.8	0.4	***
	Mt. Sto. Tomas							0.2	N.D.	0.6	0.2
Republic of Korea	Kanghwa				0.3	0.1	***	0.2	0.2	N.D.	0.1
	Cheju (Kosan)				0.1	0.9	***	0.2	***	0.2	0.2
	Imsil		0.5	***	0.2	2.0	***	0.3	0.2	0.1	0.2
Russia	Mondy	N.D.	N.D.	N.D.	0.1	0.1	N.D.	N.D.	N.D.	N.D.	N.D.
	Listvyanka	0.3	0.2	0.4	0.3	0.2	N.D.	0.2	N.D.	0.1	0.2
	Irkutsk	0.3	0.4	0.3	0.4	0.1	0.2	0.1	0.2	0.2	0.2
	Primorskaya		0.2	0.5	0.5	0.3	0.1	0.2	0.2	0.2	0.2
Thailand	Bangkok				0.7	0.9	1.5	1.5	0.7	0.8	0.9
	Samutprakarn										
	Patumthani				0.5	0.8	0.6	0.4	1.2	0.4	0.9
	Khanchanaburi			0.7	***	0.5	0.1	0.3	0.2	0.3	0.2
	Chiang Mai (Mae Hia)		0.2	0.3	0.2	0.4	0.4	0.5	0.2	0.2	0.3
	Nakhon Ratchasima							1.1	0.3	0.2	0.2
Viet Nam	Hanoi	0.8	0.5	4.1	2.2	2.2	2.9	2.5	2.5	1.8	1.5
	Hoa Binh	0.1	0.2	4.4	3.3	1.5	2.3	1.5	2.1	1.8	1.2

[***]: No data or not measured

Black column: Monitoring was not carried out

Table 4.24 Annual NH₃ concentration

unit: ppb

Country	Name of sites	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
China	Jinyunshan										
	Weishuiyuan										
	Hongwen								7.9	8.1	11.2
	Xiang Zhou										
Indonesia	Jakarta										
	Serpong		4.6	5.1	12.9	10.2	11.2	6.2	8.5	6.3	5.9
	Kototabang										
	Bandung										
Japan	Rishiri			0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
	Ochiishi									0.6	1.0
	Tappi				0.6	0.5	0.3	0.3	0.4	0.5	0.5
	Sado-seki				0.6	0.7	0.6	0.6	0.6	0.7	0.6
	Happo				0.5	0.3	0.6	0.4	0.3	0.4	0.2
	Ijira				1.2	1.2	1.1	1.3	1.2	1.1	1.0
	Oki			1.1	0.6	0.8	0.8	0.7	0.8	1.0	1.0
	Banryu				1.1	1.3	1.2	1.1	1.0	1.0	1.0
	Yusuhara				0.7	0.5	0.4	0.4	0.5	0.5	0.5
	Hedo				0.8	0.9	0.8	0.9	1.0	1.2	1.2
	Ogasawara				0.2	0.5	0.9	0.5	0.5	0.5	0.5
	Tokyo								6.1	5.2	5.0
Malaysia	Tanah Rata	0.5	0.2	0.6	0.3	0.7	1.3	1.2	0.9	1.0	0.8
	Petaling Jaya		10.1	***	***	3.5	10.4	16.9	7.5	6.1	7.3
	Danum Valley							1.2	0.9	0.9	1.9
Mongolia	Ulaanbaatar	8.4	7.3	9.8	11.3	9.2	9.2	10.3	10.4	10.7	7.4
	Terelj	1.0	0.7	1.5	1.7	1.3	1.4	1.6	1.3	1.2	1.9
Philippines	Metro Manila	N.D.	7.1	10.0	9.3	9.1	12.5	3.8	6.6	9.2	***
	Los Banos	N.D.	4.2	6.2	5.0	4.1	4.5	2.0	2.7	3.1	***
	Mt. Sto. Tomas							0.2	0.9	6.4	0.4
Republic of Korea	Kanghwa				14.1	13.7	***	4.8	9.7	3.4	3.2
	Cheju (Kosan)				1.4	1.1	***	***	***	3.7	4.9
	Imsil		4.9	***	4.6	6.0	***	5.9	5.0	5.0	6.0
Russia	Mondy	0.6	0.2	0.7	0.7	0.5	0.8	1.9	0.8	0.7	0.4
	Listvyanka	1.1	0.2	0.8	1.7	1.6	0.8	4.4	2.5	2.7	2.4
	Irkutsk	1.8	0.5	1.3	2.2	4.4	1.8	3.7	3.8	3.3	2.9
	Primorskaya			12.0	10.8	7.8	1.2	2.7	3.6	2.9	1.8
Thailand	Bangkok				5.8	11.1	7.8	10.1	10.2	8.2	8.7
	Samutprakarn										
	Patumthani				6.5	8.5	6.3	2.8	9.2	3.1	8.1
	Khanchanaburi			6.5	***	6.2	1.9	2.1	3.2	2.3	2.6
	Chiang Mai (Mae Hia)		6.5	3.9	6.9	5.5	3.0	3.2	4.7	3.8	5.8
	Nakhon Ratchasima							7.0	2.4	2.6	2.3
Viet Nam	Hanoi	9.6	5.8	4.1	5.4	13.9	4.0	2.8	4.1	5.0	4.8
	Hoa Binh	6.8	2.7	2.8	7.5	8.9	3.8	2.7	2.3	4.0	3.9

[***]: No data or not measured

Black column: Monitoring was not carried out

Table 4.25 Annual NO concentration

unit: ppb

Country	Name of sites	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
China	Jinyunshan						1.0	2.6	1.5	6.7	3.3
	Weishuiyuan						5.1	9.8			
	Hongwen										
	Xiang Zhou										
Indonesia	Jakarta										
	Serpong										
	Kototabang										
	Bandung										
Japan	Rishiri	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	0.1
	Ochiishi									N.D.	N.D.
	Tappi	0.1	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	0.1	0.2
	Sado-seki	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
	Happo	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
	Ijira	0.1	0.3	0.5	0.4	0.4	0.3	0.3	0.3	0.2	0.2
	Oki	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
	Banryu	0.1	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.2
	Yusuhara	0.2	0.1	N.D.	0.1	0.2	0.3	0.1	N.D.	0.2	N.D.
	Hedo	N.D.	0.1	0.2	N.D.	N.D.	0.2	N.D.	N.D.	0.1	N.D.
	Ogasawara	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
	Tokyo										
Malaysia	Tanah Rata								10.1	***	***
	Petaling Jaya										
	Danum Valley										
Mongolia	Ulaanbaatar										
	Terelj										
Philippines	Metro Manila										
	Los Banos										
	Mt. Sto. Tomas										
Republic of Korea	Kanghwa										
	Cheju (Kosan)										
	Imsil										
Russia	Mondy										
	Listvyanka										
	Irkutsk										
	Primorskaya										
Thailand	Bangkok		25.0	21.6	***	15.3	11.2	11.1	11.5	13.6	11.6
	Samutprakarn	23.0	18.9	18.0	14.5	15.5	14.4	16.4	16.7	15.3	15.2
	Patumthani										
	Khanchanaburi	N.D.	1.2	0.3	***	1.0	1.0	0.6	1.8	0.7	0.2
	Chiang Mai (Mae Hia)				7.1	3.0	2.9	2.5	3.1	2.0	2.1
	Nakhon Ratchasima									5.9	***
Viet Nam	Hanoi										
	Hoa Binh										

[***]: No data or not measured

Black column: Monitoring was not carried out

Table 4.26 Annual NO₂ concentration

unit: ppb											
Country	Name of sites	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
China	Jinyunshan										
	Weishuiyuan										
	Hongwen		11.3	12.6	13.6	13.8	16.4	23.8	22.9	19.9	18.8
	Xiang Zhou		18.6	24.2	22.1	21.0	18.8	20.7	19.5	21.1	15.4
Indonesia	Jakarta								4.2	32.8	48.5
	Serpong	6.3									
	Kototabang								0.7	1.9	3.5
	Bandung									11.3	13.3
Japan	Rishiri										
	Ochiishi										
	Tappi										
	Sado-seki										
	Happo										
	Ijira										
	Oki										
	Banryu	3.8	3.9	3.7	3.8	3.5	3.4	2.5	3.3	3.4	2.7
	Yusuhara										
	Hedo										
	Ogasawara										
	Tokyo										
Malaysia	Tanah Rata										
	Petaling Jaya		26.6	29.4	30.9						
	Danum Valley										
Mongolia	Ulaanbaatar										
	Terelj										
Philippines	Metro Manila										
	Los Banos										
	Mt. Sto. Tomas										
Republic of Korea	Kanghwa								5.3	6.9	7.1
	Cheju (Kosan)								4.3	2.9	3.1
	Imsil								4.2	4.1	4.5
Russia	Mondy										
	Listvyanka										
	Irkutsk										
	Primorskaya										
Thailand	Bangkok	***	25.3	28.5	***	23.8	21.5	23.6	16.4	20.5	23.6
	Samutprakarn	18.4	21.0	15.2	17.6	13.8	16.9	19.3	19.5	16.4	19.0
	Patumthani										
	Khanchanaburi										
	Chiang Mai (Mae Hia)										
	Nakhon Ratchasima										
Viet Nam	Hanoi										
	Hoa Binh										

[***]: No data or not measured

Black column: Monitoring was not carried out

Table 4.27 Annual NOx concentration

unit: ppb

Country	Name of sites	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
China	Jinyunshan (NOx*)						7.2	8.7	8.1	11.8	8.2
	Weishuiyuan (NOx*)						14.7	26.8			
	Hongwen										
	Xiang Zhou										
Indonesia	Jakarta										
	Serpong										
	Kototabang										
	Bandung										
Japan	Rishiri (NOx*)	0.7	0.7	0.8	1.0	0.9	0.9	1.0	1.0	1.0	0.9
	Ochiishi (NOx*)									1.0	1.1
	Tappi (NOx*)	0.9	1.2	1.3	1.4	1.5	1.4	1.2	1.3	1.6	1.7
	Sado-seki (NOx*)	0.9	1.2	1.6	1.9	1.7	1.3	1.3	1.2	1.1	0.9
	Happo (NOx*)	1.9	1.7	2.3	2.2	2.1	2.2	1.9	2.3	2.1	1.3
	Ijira (NOx*)	2.1	3.4	3.2	2.9	3.6	3.5	3.1	3.2	2.2	2.5
	Oki (NOx*)	1.2	1.3	1.6	1.3	1.5	1.6	1.5	1.5	1.5	1.3
	Banryu	3.9	4.3	4.0	4.3	3.7	4.0	2.8	3.5	3.6	3.0
	Yusuhara (NOx*)	1.9	1.8	1.7	1.7	1.4	1.8	1.5	1.3	1.5	1.1
	Hedo (NOx*)	0.6	0.9	0.9	0.8	0.9	0.7	0.8	0.5	0.7	0.7
	Ogasawara (NOx*)	0.3	0.7	0.5	0.5	0.4	0.6	0.5	0.5	0.5	0.5
	Tokyo										
Malaysia	Tanah Rata (NOx*)								12.2	***	***
	Petaling Jaya										
	Danum Valley										
Mongolia	Ulaanbaatar										
	Terelj										
Philippines	Metro Manila										
	Los Banos										
	Mt. Sto. Tomas										
Republic of Korea	Kanghwa										
	Cheju (Kosan)										
	Imsil										
Russia	Mondy										
	Listvyanka										
	Irkutsk										
	Primorskaya										
Thailand	Bangkok		50.7	50.3	43.7	37.9	32.7	34.6	28.1	34.4	35.2
	Samutprakarn	40.4	38.9	32.7	***	29.0	30.7	35.6	36.2	31.5	34.1
	Patumthani										
	Khanchanaburi	2.5	2.2	4.2	***	3.4	5.5	2.8	3.0	1.2	1.4
	Chiang Mai (Mae Hia)					14.0	8.8	10.4	12.6	10.4	10.8
	(NOx*)										
	Nakhon Ratchasima									16.9	***
	(NOx*)										
Viet Nam	Hanoi										
	Hoa Binh										

[***]: No data or not measured

Black column: Monitoring was not carried out

Table 4.28 Annual O₃ concentration

unit: ppb

Country	Name of sites	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
China	Jinyunshan										
	Weishuiyuan										
	Hongwen										
	Xiang Zhou										
Indonesia	Jakarta										
	Serpong										
	Kototabang										
	Bandung										
Japan	Rishiri	39	39	41	43	43	42	43	46	42	42
	Ochiishi									38	37
	Tappi	47	46	46	45	47	51	51	54	39	31
	Sado-seki	44	41	43	49	49	48	48	48	47	49
	Happo	53	54	55	56	56	58	59	63	50	52
	Ijira	30	30	24	30	27	23	17	35	20	21
	Oki	45	44	40	39	45	45	44	45	45	46
	Banryu	36	36	37	36	37	37	34	34	35	36
	Yusuhara	39	29	29	33	39	43	42	40	40	41
	Hedo	41	41	42	39	32	35	40	38	39	39
	Ogasawara	22	27	29	30	30	33	31	32	28	30
	Tokyo										
Malaysia	Tanah Rata								15	***	***
	Petaling Jaya										
	Danum Valley										
Mongolia	Ulaanbaatar										
	Terelj										
Philippines	Metro Manila										
	Los Banos										
	Mt. Sto. Tomas										
Republic of Korea	Kanghwa			42	43	40	41	27	43	41	43
	Cheju (Kosan)			41	28	38	40	35	38	42	44
	Imsil			31	22	24	30	30	30	20	33
Russia	Mondy			44	42	45	42	45	39	35	45
	Listvyanka										
	Irkutsk										
	Primorskaya										
Thailand	Bangkok									10	17
	Samutprakarn		4	12	17	13	14	14	14	18	18
	Patumthani										
	Khanchanaburi	20	10	14	***	15	17	10	7	16	14
	Chiang Mai (Mae Hia)				13	22	20	19	23	22	26
	Nakhon Ratchasima									22	***
Viet Nam	Hanoi										
	Hoa Binh										

[***]: No data or not measured

Black column: Monitoring was not carried out

Table 4.29 Annual PM₁₀ concentration

 unit: µg/m³

Country	Name of sites	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
China	Jiayunshan		96	73	70	64	60	78	65	50	40
	Weishuiyuan		123	138	112	128	118	121			
	Hongwen		61	62	68	64	66	97	71	59	60
	Xiang Zhou		51	48	56	48	40	47	50	51	48
Indonesia	Jakarta Serpong Kototabang Bandung										
Japan	Rishiri	16	18	18	16	17	14	15	14	16	16
	Ochiishi									30	24
	Tappi	64	19	26	16	20	19	18	17	22	16
	Sado-seki	24	25	27	22	28	24	24	22	23	22
	Happo	13	14	12	10	15	15	13	12	14	12
	Ijira	24	22	24	20	21	21	22	22	20	18
	Oki	26	29	31	23	27	28	30	29	26	26
	Banryu	29	31	35	25	29	29	31	31	27	26
	Yusuhara	15	22	22	18	20	20	20	19	18	18
	Hedo		46	48	26	34	35	37	29	27	28
	Ogasawara	11	12	13	11	13	12	13	13	10	12
	Tokyo										
Malaysia	Tanah Rata										
	Petaling Jaya	37	***	39	41						
	Danum Valley										
Mongolia	Ulaanbaatar Terelj										
Philippines	Metro Manila Los Banos Mt. Sto. Tomas										
Republic of Korea	Kanghwa			53	56	54	58	46	52	48	51
	Cheju (Kosan)			43	41	36	39	51	54	50	43
	Imsil			57	42	44	54	57	43	59	34
Russia	Mondy Listvyanka Irkutsk Primorskaya										
Thailand	Bangkok	56	49	***	***	51	42	44	45	43	39
	Samutprakarn									45	43
	Patumthani										
	Khanchanaburi	38	21	79	***	41	60	37	31	37	28
	Chiang Mai (Mae Hia)				48	59	52	41	52	38	42
	Nakhon Ratchasima									47	***
Viet Nam	Hanoi Hoa Binh										

[***]: No data or not measured

Black column: Monitoring was not carried out

Table 4.30 Annual PM_{2.5} concentration

 unit: µg/m³

Country	Name of sites	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
China	Jinyunshan Weishuiyuan Hongwen Xiang Zhou										
Indonesia	Jakarta Serpong Kototabang Bandung										
Japan	Rishiri		9	8	10	8	8	8	8	9	8
	Ochiishi									16	12
	Tappi										
	Sado-seki										
	Happo										
	Ijira										
	Oki		12	14	12	13	15	15	15	14	12
	Banryu										
	Yusuhara										
	Hedo										
	Ogasawara										
	Tokyo										
Malaysia	Tanah Rata Petaling Jaya Danum Valley										
Mongolia	Ulaanbaatar Terelj										
Philippines	Metro Manila Los Banos Mt. Sto. Tomas										
Republic of Korea	Kanghwa Cheju (Kosan) Imsil										
Russia	Mondy Listvyanka Irkutsk Primorskaya										
Thailand	Bangkok Samutprakarn Patumthani Khanchanaburi Chiang Mai (Mae Hia) Nakhon Ratchasima										
Viet Nam	Hanoi Hoa Binh										

[***]: No data or not measured

Black column: Monitoring was not carried out

Table 4.31 Annual SO₄²⁻ in PM concentration

unit: µg/m³

Country	Name of sites	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
China	Jinyunshan										
	Weishuiyuan										
	Hongwen								10.58	13.38	12.72
	Xiang Zhou										
Indonesia	Jakarta										
	Serpong		1.81	1.49	0.53	0.82	1.50	0.56	0.50	0.71	0.79
	Kototabang										
	Bandung										
Japan	Rishiri			1.76	2.55	2.40	2.61	2.39	2.44	2.94	2.50
	Ochiishi									2.73	2.61
	Tappi				3.32	3.89	3.92	4.10	4.02	4.67	4.29
	Sado-seki				3.11	3.55	4.08	3.07	3.64	4.17	3.58
	Happo				2.11	2.30	2.59	2.79	2.58	2.52	0.59
	Ijira				3.72	4.10	5.07	4.89	4.76	4.78	3.88
	Okii			4.38	3.91	3.94	6.29	5.73	5.21	4.54	4.29
	Banryu				3.82	4.43	6.33	6.55	6.41	5.11	5.44
	Yusuhara				4.09	5.16	6.15	5.81	6.44	4.54	5.16
	Hedo				4.01	3.40	5.32	6.51	5.95	5.69	5.62
	Ogasawara				1.26	1.36	0.87	1.65	3.91	2.72	2.64
	Tokyo								5.36	5.15	4.62
Malaysia	Tanah Rata	1.23	0.67	0.46	0.50	0.81	1.07	1.38	1.37	1.59	1.39
	Petaling Jaya		3.61	3.89	3.36	1.42	2.26	2.60	3.00	3.32	3.01
	Danum Valley							0.69	0.76	1.12	3.64
Mongolia	Ulaanbaatar	2.14	2.54	1.76	3.59	3.63	5.10	5.68	4.20	1.33	2.24
	Terelj	1.12	1.54	0.74	0.78	1.24	0.85	1.40	1.41	1.42	1.07
Philippines	Metro Manila	2.00	1.87	2.26	3.74	3.19	3.31	2.63	3.15	2.37	***
	Los Banos	0.50	0.85	1.54	2.59	1.64	1.71	1.52	2.29	1.86	***
	Mt. Sto. Tomas							0.14	0.22	0.91	0.16
Republic of Korea	Kanghwa		4.86	6.95	5.65	4.26	6.56	3.43	2.35	3.11	6.04
	Cheju (Kosan)		2.68	6.74	6.99	8.90	7.11	8.05	6.75	5.51	4.68
	Imsil		2.06	5.12	8.23	10.12	9.29	10.31	5.90	4.18	4.66
Russia	Mondy	0.52	0.75	0.49	0.99	0.66	0.34	0.49	0.22	0.38	0.39
	Listvyanka	1.42	2.47	1.70	2.75	1.79	0.79	1.16	1.57	1.02	1.58
	Irkutsk	2.35	3.83	3.89	2.51	1.70	2.67	2.13	2.91	2.55	2.36
	Primorskaya		3.87	2.12	2.59	3.32	3.77	4.11	4.89	3.59	3.71
Thailand	Bangkok				3.63	4.02	2.13	4.71	2.97	2.65	2.71
	Samutprakarn										
	Patumthani				2.34	3.46	1.39	3.64	4.69	1.41	3.12
	Khanchanaburi			N.D.	***	5.59	0.15	2.74	3.24	2.54	1.32
	Chiang Mai (Mae Hia)		0.88	2.04	2.11	3.93	1.11	2.22	2.60	1.75	1.97
	Nakhon Ratchasima							3.14	4.80	3.78	3.44
Viet Nam	Hanoi	1.05	1.41	8.65	16.19	19.30	20.33	16.46	20.35	9.53	8.77
	Hoa Binh	2.25	2.57	4.16	2.34	2.13	12.41	7.80	8.38	4.51	2.49

[***]: No data or not measured

Black column: Monitoring was not carried out

Table 4.32 Annual NO₃⁻ in PM concentration

unit: µg/m³

Country	Name of sites	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
China	Jinyunshan										
	Weishuiyuan										
	Hongwen								5.81	8.10	7.98
	Xiang Zhou										
Indonesia	Jakarta										
	Serpong		0.69	1.37	0.61	0.81	1.55	0.37	0.17	0.18	0.13
	Kototabang										
	Bandung										
Japan	Rishiri			0.34	0.59	0.66	0.53	0.58	0.60	0.76	0.64
	Ochiishi									0.71	0.67
	Tappi				1.24	1.13	0.92	1.17	1.18	1.23	1.29
	Sado-seki				0.77	0.89	0.68	0.80	0.96	1.07	1.05
	Happo				0.27	0.36	0.27	0.25	0.20	0.22	0.10
	Ijira				0.41	0.49	0.48	0.54	0.49	0.39	0.40
	Okii			0.87	0.71	1.03	1.26	1.28	1.34	1.22	1.31
	Banryu				0.69	1.09	1.43	1.54	1.57	1.35	1.43
	Yusuhara				0.30	0.59	0.59	0.59	0.55	0.29	0.52
	Hedo				1.50	1.16	1.11	1.65	1.48	1.52	1.63
	Ogasawara				0.32	0.29	0.12	0.36	0.74	0.57	0.60
	Tokyo								3.86	4.03	3.85
Malaysia	Tanah Rata	0.19	0.03	0.12	0.11	0.18	0.18	0.18	0.13	0.16	0.15
	Petaling Jaya		0.59	0.24	0.10	0.56	0.97	0.81	1.18	1.17	1.22
	Danum Valley							0.05	0.04	0.06	0.21
Mongolia	Ulaanbaatar	0.85	1.37	1.02	1.71	1.53	1.61	1.74	1.66	0.90	0.93
	Terelj	0.23	0.17	0.20	0.16	0.15	0.18	0.19	0.71	0.65	0.24
Philippines	Metro Manila	0.66	1.07	0.92	2.26	1.77	1.11	1.03	1.27	0.99	***
	Los Banos	0.18	0.76	0.46	1.18	0.64	0.42	0.29	0.39	0.27	***
	Mt. Sto. Tomas							0.02	0.07	1.15	0.12
Republic of Korea	Kanghwa		0.50	2.31	4.19	1.12	1.85	2.03	1.03	1.92	2.38
	Cheju (Kosan)		0.09	0.32	0.53	1.44	0.27	0.39	0.57	0.34	0.49
	Imsil		0.35	0.59	0.51	1.23	1.56	3.99	3.05	2.86	2.67
Russia	Mondy	0.03	0.12	0.14	0.11	0.02	0.02	0.06	0.01	0.13	0.02
	Listvyanka	0.55	0.44	0.18	0.68	0.19	0.17	0.19	0.19	0.20	0.25
	Irkutsk	0.78	1.24	1.52	0.96	0.53	0.68	0.69	0.61	0.89	0.83
	Primorskaya		1.83	0.31	0.39	0.57	1.24	1.18	1.04	1.03	1.10
Thailand	Bangkok				1.51	2.07	2.83	1.60	1.51	1.44	1.62
	Samutprakarn										
	Patumthani				0.63	1.11	1.13	0.52	2.02	0.77	1.73
	Khanchanaburi			N.D.	***	0.58	0.06	0.09	0.10	0.15	3.55
	Chiang Mai (Mae Hia)		0.65	0.19	0.28	0.64	0.33	0.67	0.62	0.36	0.66
	Nakhon Ratchasima							0.81	0.48	0.41	0.34
Viet Nam	Hanoi	0.26	0.30	1.88	5.33	8.74	10.52	5.34	6.21	2.89	3.52
	Hoa Binh	0.52	0.38	0.86	0.54	0.69	1.71	1.09	1.46	1.24	0.49

[***]: No data or not measured

Black column: Monitoring was not carried out

Table 4.33 Annual Cl⁻ in PM concentration

unit: µg/m³

Country	Name of sites	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
China	Jinyunshan										
	Weishuiyuan										
	Hongwen								2.07	1.85	1.73
	Xiang Zhou										
Indonesia	Jakarta										
	Serpong		0.13	1.55	1.24	0.79	1.07	0.21	0.46	0.10	0.09
	Kototabang										
	Bandung										
Japan	Rishiri			2.37	2.04	2.73	2.35	2.03	2.25	2.20	2.42
	Ochiishi									4.44	6.88
	Tappi				3.38	7.64	6.02	8.08	6.51	8.26	8.97
	Sado-seki				3.08	3.88	3.08	3.56	3.30	4.61	3.38
	Happo				0.02	0.03	0.02	0.03	0.02	0.01	0.02
	Ijira				0.05	0.05	0.04	0.05	0.05	0.04	0.06
	Okii			1.40	1.30	2.12	2.55	2.42	2.36	2.71	3.69
	Banryu				0.41	1.31	1.43	1.47	0.97	1.13	1.59
	Yusuhara				0.03	0.07	0.07	0.08	0.04	0.03	0.21
	Hedo				6.12	4.60	7.29	6.35	5.79	4.40	6.02
	Ogasawara				2.86	1.66	0.94	2.69	3.82	3.04	3.93
	Tokyo								0.62	0.63	0.68
Malaysia	Tanah Rata	0.06	N.D.	0.05	0.08	0.03	0.03	0.04	0.03	0.02	0.03
	Petaling Jaya		0.05	0.02	0.02	0.10	0.18	0.10	0.13	0.09	0.11
	Danum Valley							0.04	0.02	0.04	0.15
Mongolia	Ulaanbaatar	0.55	0.73	0.37	0.82	1.02	1.06	1.25	0.87	0.47	1.84
	Terelj	0.06	0.20	0.09	0.20	0.18	0.30	0.19	0.36	0.24	0.22
Philippines	Metro Manila	2.61	0.49	0.45	0.86	0.77	0.39	0.62	0.62	0.59	***
	Los Banos	1.06	0.93	0.89	1.09	0.65	0.58	0.67	1.15	0.82	***
	Mt. Sto. Tomas							0.03	0.07	0.35	0.05
Republic of Korea	Kanghwa		0.33	0.34	0.24	0.16	0.18	0.15	0.19	0.19	0.64
	Cheju (Kosan)		0.28	0.34	0.41	0.53	0.14	0.13	0.30	0.32	0.29
	Imsil		0.33	0.32	0.31	0.14	0.12	0.29	0.38	0.50	0.45
Russia	Mondy	0.03	0.08	N.D.	0.12	0.02	N.D.	0.03	0.01	N.D.	N.D.
	Listvyanka	0.37	0.80	0.31	0.13	0.26	0.03	0.08	0.12	0.11	0.11
	Irkutsk	0.12	0.44	0.42	0.24	0.15	0.12	0.19	0.30	0.32	0.40
	Primorskaya		0.53	0.20	0.25	0.18	0.21	0.12	0.19	0.17	0.14
Thailand	Bangkok				0.22	1.06	0.59	0.19	0.29	0.18	0.26
	Samutprakarn										
	Patumthani				0.07	0.11	0.31	0.09	0.39	0.07	0.20
	Khanchanaburi			N.D.	***	0.06	0.02	0.08	0.02	0.06	0.04
	Chiang Mai (Mae Hia)		0.09	0.12	0.03	0.30	0.08	0.29	0.11	0.05	0.09
	Nakhon Ratchasima							0.09	0.06	0.06	0.07
Viet Nam	Hanoi	0.39	1.49	1.78	1.22	1.67	3.10	2.90	2.81	0.79	0.58
	Hoa Binh	0.31	0.14	1.75	1.17	0.94	1.41	0.65	0.58	0.64	0.11

[***]: No data or not measured

Black column: Monitoring was not carried out

Table 4.34 Annual NH₄⁺ in PM concentration

unit: µg/m³

Country	Name of sites	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
China	Jinyunshan										
	Weishuiyuan										
	Hongwen								3.66	5.55	5.48
	Xiang Zhou										
Indonesia	Jakarta										
	Serpong		0.40	0.61	0.09	0.18	0.25	0.08	0.24	0.08	0.11
	Kototabang										
	Bandung										
Japan	Rishiri			0.34	0.48	0.35	0.44	0.41	0.39	0.53	0.45
	Ochiishi									0.40	0.40
	Tappi				0.60	0.67	0.57	0.63	0.64	0.77	0.66
	Sado-seki				0.45	0.49	0.83	0.48	0.54	0.68	0.53
	Happo				0.58	0.57	0.69	0.64	0.65	0.66	0.15
	Ijira				1.24	1.17	1.45	1.39	1.32	1.36	1.06
	Oki			0.83	0.60	0.68	1.27	1.19	1.07	0.97	0.86
	Banryu				0.62	0.97	1.43	1.51	1.60	1.32	1.30
	Yusuhara				0.88	1.15	1.40	1.41	1.53	1.12	1.25
	Hedo				0.56	0.46	0.67	0.80	0.88	0.98	0.86
	Ogasawara				0.10	0.15	0.08	0.17	0.46	0.24	0.21
	Tokyo								1.82	1.96	1.83
Malaysia	Tanah Rata	0.34	0.32	0.26	0.13	0.23	0.23	0.40	0.32	0.35	0.29
	Petaling Jaya		0.88	1.30	1.01	0.30	0.59	0.76	0.76	0.82	0.73
	Danum Valley							0.10	0.08	0.12	0.39
Mongolia	Ulaanbaatar	0.39	0.41	0.46	0.67	0.92	1.60	1.95	1.96	0.23	0.95
	Terelj	0.28	0.42	0.27	0.29	0.33	0.28	0.43	0.40	0.37	0.28
Philippines	Metro Manila	N.D.	0.31	0.93	1.09	0.48	0.73	0.25	0.43	0.42	***
	Los Banos	N.D.	0.39	0.34	0.70	0.21	0.67	0.23	0.28	0.34	***
	Mt. Sto. Tomas							0.03	0.09	0.33	0.03
Republic of Korea	Kanghwa		1.96	2.58	2.69	1.59	2.23	1.38	0.85	1.34	2.51
	Cheju (Kosan)		0.67	2.00	2.44	2.98	2.05	2.39	2.15	1.61	1.54
	Imsil		0.53	1.41	2.59	2.85	2.66	3.67	2.37	1.82	2.34
Russia	Mondy	0.13	0.24	0.21	0.36	0.17	0.12	0.09	0.02	0.09	0.07
	Listvyanka	0.75	1.16	0.77	0.92	0.63	0.37	0.27	0.33	0.21	0.24
	Irkutsk	1.02	1.62	1.49	0.76	0.59	0.69	0.46	0.93	0.80	0.66
	Primorskaya		1.20	1.13	0.78	0.74	1.10	1.32	1.43	0.94	0.99
Thailand	Bangkok				1.08	0.71	0.42	1.30	1.29	1.15	0.70
	Samutprakarn										
	Patumthani				0.46	0.73	0.38	1.13	1.37	0.71	1.50
	Khanchanaburi			N.D.	***	1.41	0.04	0.65	0.91	1.10	0.83
	Chiang Mai (Mae Hia)		0.61	0.26	1.23	0.72	0.59	0.67	0.74	0.49	0.58
	Nakhon Ratchasima							0.86	1.37	1.13	0.87
Viet Nam	Hanoi	1.02	1.52	2.14	3.86	4.97	7.30	3.18	3.99	2.20	1.68
	Hoa Binh	0.78	0.85	2.12	6.25	1.46	4.27	2.29	2.24	0.84	0.90

[***]: No data or not measured

Black column: Monitoring was not carried out

Table 4.35 Annual Na⁺ in PM concentration

 unit: µg/m³

Country	Name of sites	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
China	Jiayunshan										
	Weishuiyuan										
	Hongwen								1.39	1.40	1.55
	Xiang Zhou										
Indonesia	Jakarta										
	Serpong		0.42	0.96	0.47	0.63	0.22	0.32	0.11	0.06	0.10
	Kototabang										
	Bandung										
Japan	Rishiri			1.68	1.65	2.02	1.76	1.62	1.78	1.82	1.91
	Ochiishi									3.09	4.37
	Tappi				2.99	4.99	4.18	5.23	4.30	5.31	6.01
	Sado-seki				2.39	2.92	2.22	2.52	2.53	3.32	2.56
	Happo				0.09	0.14	0.08	0.08	0.08	0.10	0.03
	Ijira				0.26	0.27	0.27	0.26	0.29	0.25	0.25
	Oki			2.32	2.00	1.59	2.38	2.26	2.21	2.26	2.75
	Banryu				1.18	1.42	1.61	1.68	1.33	1.32	1.64
	Yusuhara				0.34	0.44	0.43	0.45	0.43	0.26	0.54
	Hedo				4.85	3.18	5.22	4.85	4.54	3.77	4.63
	Ogasawara				1.86	1.24	0.68	1.78	2.95	2.38	2.80
	Tokyo								0.99	0.80	0.94
Malaysia	Tanah Rata	0.11	0.11	0.14	0.09	0.08	0.09	0.13	0.14	0.13	0.10
	Petaling Jaya		0.25	0.25	0.17	0.24	0.18	0.21	0.32	0.34	0.24
	Danum Valley							0.13	0.13	0.16	0.59
Mongolia	Ulaanbaatar	0.29	0.32	0.19	0.60	0.49	0.47	0.38	0.32	0.09	0.08
	Terelj	0.07	0.10	0.09	0.09	0.17	0.14	0.11	0.12	0.08	0.11
Philippines	Metro Manila	1.26	1.11	0.33	0.92	0.89	0.62	0.61	0.79	0.97	***
	Los Banos	0.60	1.39	0.84	0.72	0.64	0.65	0.70	0.98	0.67	***
	Mt. Sto. Tomas							0.05	0.05	0.38	0.16
Republic of Korea	Kanghwa		0.29	0.61	0.33	0.19	0.33	0.25	0.26	0.34	0.52
	Cheju (Kosan)		0.09	0.37	0.52	0.72	0.35	0.40	0.39	0.41	0.51
	Imsil		0.32	0.35	0.52	0.52	0.44	0.39	0.42	0.46	0.54
Russia	Mondy	0.03	0.02	N.D.	0.04	0.04	0.02	0.04	N.D.	0.02	0.03
	Listvyanka	0.02	0.17	0.05	0.18	0.20	0.05	0.06	0.07	0.12	0.16
	Irkutsk	0.14	0.07	0.13	0.19	0.13	0.21	0.17	0.12	0.23	0.50
	Primorskaya		0.28	0.18	0.21	0.26	0.22	0.22	0.25	0.26	0.25
Thailand	Bangkok				0.46	1.53	0.48	0.68	0.38	0.33	0.57
	Samutprakarn										
	Patumthani				0.23	0.54	0.27	0.17	0.40	0.27	0.38
	Khanchanaburi			N.D.	***	0.38	0.01	0.17	0.12	0.17	0.09
	Chiang Mai (Mae Hia)		0.13	0.10	0.12	0.33	0.08	0.21	0.23	0.15	0.48
	Nakhon Ratchasima							0.34	0.28	0.24	0.21
Viet Nam	Hanoi	0.61	0.45	0.54	0.57	1.21	1.95	1.99	1.64	0.56	0.58
	Hoa Binh	0.27	0.16	0.55	0.12	0.61	0.92	0.52	0.25	0.24	0.13

[***]: No data or not measured

Black column: Monitoring was not carried out

Table 4.36 Annual K⁺ in PM concentration

 unit: µg/m³

Country	Name of sites	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
China	Jinyunshan										
	Weishuiyuan										
	Hongwen								0.57	0.62	0.68
	Xiang Zhou										
Indonesia	Jakarta										
	Serpong		0.42	0.46	0.28	0.15	0.25	0.11	0.05	0.07	0.08
	Kototabang										
	Bandung										
Japan	Rishiri			0.06	0.13	0.14	0.13	0.15	0.13	0.16	0.14
	Ochiishi									0.16	0.18
	Tappi				0.19	0.27	0.21	0.28	0.25	0.26	0.31
	Sado-seki				0.11	0.17	0.14	0.15	0.16	0.19	0.18
	Happo				0.05	0.06	0.06	0.06	0.05	0.05	0.02
	Ijira				0.16	0.14	0.18	0.17	0.15	0.14	0.13
	Oki			0.19	0.19	0.22	0.26	0.23	0.21	0.18	0.20
	Banryu				0.18	0.19	0.21	0.25	0.21	0.19	0.21
	Yusuhara				0.11	0.18	0.21	0.21	0.18	0.11	0.16
	Hedo				0.23	0.19	0.29	0.32	0.31	0.27	0.29
	Ogasawara				0.10	0.07	0.03	0.08	0.16	0.16	0.16
	Tokyo								0.20	0.19	0.21
Malaysia	Tanah Rata	0.12	0.13	0.29	0.07	0.09	0.21	0.10	0.08	0.09	0.08
	Petaling Jaya		0.33	0.36	0.25	0.24	0.23	0.19	0.25	0.23	0.23
	Danum Valley							0.09	0.09	0.12	0.43
Mongolia	Ulaanbaatar	0.21	0.33	0.22	0.53	0.42	0.61	0.60	0.25	0.12	0.16
	Terelj	0.07	0.16	0.17	0.24	0.24	0.20	0.13	0.14	0.09	0.16
Philippines	Metro Manila	14.26	1.00	0.28	0.74	0.33	0.26	0.46	0.41	0.43	***
	Los Banos	0.44	1.00	0.25	0.26	0.17	0.22	0.22	0.28	0.17	***
	Mt. Sto. Tomas							0.03	0.06	0.39	0.14
Republic of Korea	Kanghwa		0.46	0.50	0.61	0.27	0.48	0.33	0.30	0.25	0.49
	Cheju (Kosan)		0.21	0.37	1.29	0.72	0.45	0.46	0.40	0.33	0.21
	Imsil		0.30	0.53	1.17	0.84	0.55	0.50	0.32	0.37	0.35
Russia	Mondy	0.10	N.D.	0.01	0.08	0.05	0.02	0.04	0.01	0.02	0.02
	Listvyanka	0.25	0.23	N.D.	0.23	0.15	0.09	0.05	0.06	0.09	0.11
	Irkutsk	0.47	0.21	0.11	0.21	0.09	0.18	0.10	0.11	0.21	0.16
	Primorskaya		0.52	0.25	0.38	0.35	0.28	0.37	0.44	0.37	0.37
Thailand	Bangkok				0.59	0.98	0.28	0.65	0.43	0.36	0.43
	Samutprakarn										
	Patumthani				0.49	0.61	0.47	0.25	1.82	0.26	0.54
	Khanchanaburi			N.D.	***	0.88	0.99	0.34	0.16	0.19	0.27
	Chiang Mai (Mae Hia)		0.48	0.53	0.37	0.54	0.29	0.86	0.58	0.37	0.47
	Nakhon Ratchasima							0.48	0.37	0.34	0.31
Viet Nam	Hanoi	0.13	0.24	0.78	0.82	1.90	2.61	1.70	2.04	1.00	0.79
	Hoa Binh	0.35	0.38	1.19	0.39	0.61	2.37	1.19	1.41	0.94	0.70

[***]: No data or not measured

Black column: Monitoring was not carried out

Table 4.37 Annual Mg²⁺ in PM concentration

unit: µg/m³

Country	Name of sites	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
China	Jinyunshan										
	Weishuiyuan										
	Hongwen								0.28	0.31	0.33
	Xiang Zhou										
Indonesia	Jakarta										
	Serpong		0.16	0.09	0.04	0.12	0.08	0.04	0.05	0.03	0.02
	Kototabang										
	Bandung										
Japan	Rishiri			0.20	0.20	0.24	0.21	0.20	0.22	0.24	0.24
	Ochiishi									0.44	0.56
	Tappi				0.39	0.61	0.49	0.63	0.52	0.56	0.68
	Sado-seki				0.30	0.36	0.31	0.28	0.31	0.39	0.31
	Happo				0.02	0.03	0.02	0.02	0.03	0.03	0.01
	Ijira				0.05	0.04	0.04	0.04	0.05	0.04	0.04
	Okii			0.21	0.23	0.27	0.31	0.30	0.29	0.28	0.34
	Banryu				0.15	0.19	0.23	0.26	0.22	0.17	0.20
	Yusuhara				0.07	0.08	0.08	0.09	0.09	0.05	0.08
	Hedo				0.61	0.38	0.67	0.60	0.58	0.47	0.58
	Ogasawara				0.25	0.14	0.08	0.22	0.37	0.33	0.36
	Tokyo								0.15	0.12	0.13
Malaysia	Tanah Rata	N.D.	0.03	N.D.	0.01	0.01	0.01	0.02	0.04	0.02	0.01
	Petaling Jaya		0.03	N.D.	0.02	0.03	0.03	0.03	0.09	0.05	0.03
	Danum Valley							0.01	0.04	0.05	0.07
Mongolia	Ulaanbaatar	0.15	0.30	0.14	0.40	0.33	0.35	0.26	0.19	0.11	0.04
	Terelj	N.D.	0.04	N.D.	0.04	0.06	0.06	0.06	0.02	0.02	0.04
Philippines	Metro Manila	2.69	0.07	0.04	0.15	0.10	0.11	0.24	0.14	0.17	***
	Los Banos	0.13	0.09	0.13	0.10	0.07	0.06	0.09	0.14	0.11	***
	Mt. Sto. Tomas							0.01	N.D.	0.07	N.D.
Republic of Korea	Kanghwa		N.D.	N.D.	0.07	0.01	0.01	0.01	N.D.	0.01	0.03
	Cheju (Kosan)		N.D.	N.D.	0.05	0.04	0.01	0.02	0.09	0.02	0.01
	Imsil		N.D.	0.01	0.06	0.05	0.03	0.04	0.03	0.01	0.02
Russia	Mondy	N.D.	N.D.	N.D.	N.D.	0.01	N.D.	N.D.	N.D.	N.D.	0.01
	Listvyanka	0.07	0.04	N.D.	0.04	0.04	0.02	0.02	0.03	0.02	0.03
	Irkutsk	0.14	0.06	0.07	0.08	0.06	0.07	0.08	0.09	0.13	0.08
	Primorskaya		0.07	N.D.	0.03	0.19	0.08	0.07	0.07	0.08	0.07
Thailand	Bangkok				0.12	0.43	0.10	0.13	0.09	0.08	0.09
	Samutprakarn										
	Patumthani				0.05	0.80	0.05	0.05	0.08	0.06	0.07
	Khanchanaburi			N.D.	***	0.14	N.D.	0.04	0.04	0.10	0.03
	Chiang Mai (Mae Hia)		0.06	0.02	0.32	0.03	0.02	0.22	0.07	0.04	0.04
	Nakhon Ratchasima							0.05	0.06	0.05	0.04
Viet Nam	Hanoi	0.14	0.18	0.42	0.16	0.51	0.67	0.52	0.44	0.18	0.32
	Hoa Binh	0.13	0.06	0.21	0.04	0.66	0.49	0.13	0.15	0.09	0.11

[***]: No data or not measured

Black column: Monitoring was not carried out

Table 4.38 Annual Ca²⁺ in PM concentration

unit: µg/m³

Country	Name of sites	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
China	Jinyunshan										
	Weishuiyuan										
	Hongwen								2.84	2.79	2.73
	Xiang Zhou										
Indonesia	Jakarta										
	Serpong		0.36	0.32	0.22	0.61	0.28	0.36	0.26	0.13	0.07
	Kototabang										
	Bandung										
Japan	Rishiri			0.07	0.13	0.16	0.14	0.13	0.14	0.17	0.16
	Ochiishi									0.15	0.24
	Tappi				0.22	0.38	0.27	0.35	0.30	0.30	0.39
	Sado-seki				0.16	0.31	0.22	0.23	0.25	0.29	0.25
	Happo				0.06	0.16	0.15	0.17	0.14	0.12	0.07
	Ijira				0.12	0.16	0.16	0.18	0.17	0.13	0.14
	Okii			0.24	0.19	0.28	0.33	0.29	0.28	0.22	0.30
	Banryu				0.17	0.22	0.27	0.31	0.30	0.22	0.29
	Yusuhara				0.16	0.27	0.25	0.27	0.28	0.14	0.36
	Hedo				0.32	0.36	0.37	0.48	0.43	0.34	0.43
	Ogasawara				0.11	0.10	0.04	0.13	0.22	0.16	0.20
	Tokyo								0.56	0.52	0.51
Malaysia	Tanah Rata	0.05	0.16	0.04	0.02	0.18	0.06	0.07	0.10	0.08	0.07
	Petaling Jaya		0.49	0.19	0.07	0.76	0.20	0.39	0.68	0.47	0.34
	Danum Valley							0.02	0.03	0.02	0.04
Mongolia	Ulaanbaatar	3.64	4.38	3.59	6.76	4.76	4.86	4.64	3.69	3.38	1.43
	Terelj	0.31	0.40	0.30	0.26	0.30	0.27	0.30	0.43	0.42	0.32
Philippines	Metro Manila	0.37	0.79	0.60	1.37	1.00	0.75	1.09	1.18	0.87	***
	Los Banos	1.03	0.57	1.80	0.69	0.38	0.14	0.13	0.23	0.27	***
	Mt. Sto. Tomas							0.02	0.07	0.77	0.22
Republic of Korea	Kanghwa		0.25	0.21	0.34	0.09	0.10	0.04	0.05	0.07	0.17
	Cheju (Kosan)		0.01	0.16	0.25	0.20	0.08	0.05	0.09	0.11	0.08
	Imsil		0.09	0.33	0.42	0.13	0.11	0.12	0.28	0.11	0.08
Russia	Mondy	0.10	0.06	N.D.	0.08	0.08	0.03	0.07	0.03	0.05	0.05
	Listvyanka	0.46	0.30	0.15	0.26	0.19	0.07	0.13	0.22	0.15	0.19
	Irkutsk	0.64	0.48	0.48	0.45	0.29	0.46	0.47	0.62	0.82	0.49
	Primorskaya		0.65	0.20	0.23	0.25	0.36	0.38	0.40	0.45	0.37
Thailand	Bangkok				1.17	1.03	1.20	1.39	1.07	0.80	0.88
	Samutprakarn										
	Patumthani				0.77	0.80	0.47	0.17	0.93	0.36	0.90
	Khanchanaburi			0.14	***	0.65	0.06	0.18	0.12	0.22	0.12
	Chiang Mai (Mae Hia)		0.47	0.41	1.17	0.42	0.29	0.61	0.57	0.44	0.72
	Nakhon Ratchasima							0.65	0.23	0.28	0.22
Viet Nam	Hanoi	2.01	2.26	3.22	4.43	7.58	8.47	8.97	7.59	2.83	2.87
	Hoa Binh	1.24	0.80	1.47	0.95	3.25	4.51	2.39	2.19	1.27	1.27

[***]: No data or not measured

Black column: Monitoring was not carried out

Table 4.39 Approximate conversion ratios from ppb to $\mu\text{g}/\text{m}^3$ (20°C, 1 atm)

Species	SO ₂	HNO ₃	HCl	NH ₃	NO	NO ₂	O ₃
Ratio	x 2.66	x 2.62	x 1.52	x 0.71	x 1.25	x 1.91	x 2.00

Table 4.40 Expedient detection limits for summarizing air concentration data

Species	Detection limits
SO ₂	0.1 ppb
HNO ₃	0.1 ppb
HCl	0.1 ppb
NH ₃	0.1 ppb
NO, NO ₂ , NO _x	0.1 ppb
O ₃	1 ppb
PM	1 $\mu\text{g}/\text{m}^3$
Particulate matter components	0.01 $\mu\text{g}/\text{m}^3$

CHAPTER 5

Soil and Vegetation Monitoring

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	- pH(H₂O), pH(KCl), Exchangeable base cations (Na, K, Ca, and Mg), Exchangeable acidity, Effective cation exchange capacity (ECEC), Carbonate content (if pH > 7) - Exchangeable Al and H, Total C content, Total N content (optional) - Available P, Sulfate (voluntary) - Physical properties (Fine earth bulk density, and Penetration resistance)(optional)
Forest	- General description of the forest (Description of trees, and Understory vegetation) - Observation of tree decline - Photographic record of tree decline, Estimation of decline causes (optional)

5.1.1 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) of areas from 5m x 5m to 10m x 10m should be chosen randomly at each forest area (each soil type). Five subplots with 1m x 1m square of each are set up for soil sampling at the center and along the diagonal lines of the plot ([Figure 5.1](#)).

Three coaxial round plots are established for general description of trees with areas of 1000, 400 and 200 square meters respectively ([Figure 5.2](#)). Observation of tree decline is carried out basically for selected twenty dominant trees in four directions. The Sub-Manual on Forest Vegetation Monitoring, which was endorsed in 2006, recommended that the observation should be done at least once a year to detect possible effects of meteorological events. Decline symptoms of the observation trees were recorded according to the decline scale shown in [Table 5.2](#).

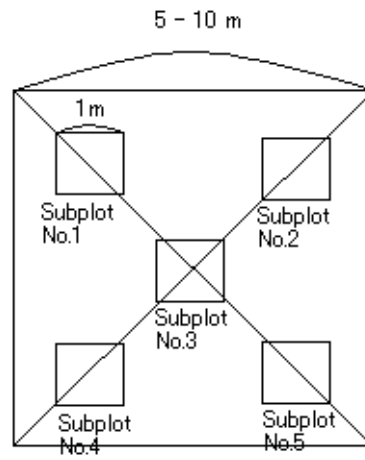


Figure 5.1 Plot for soil sampling

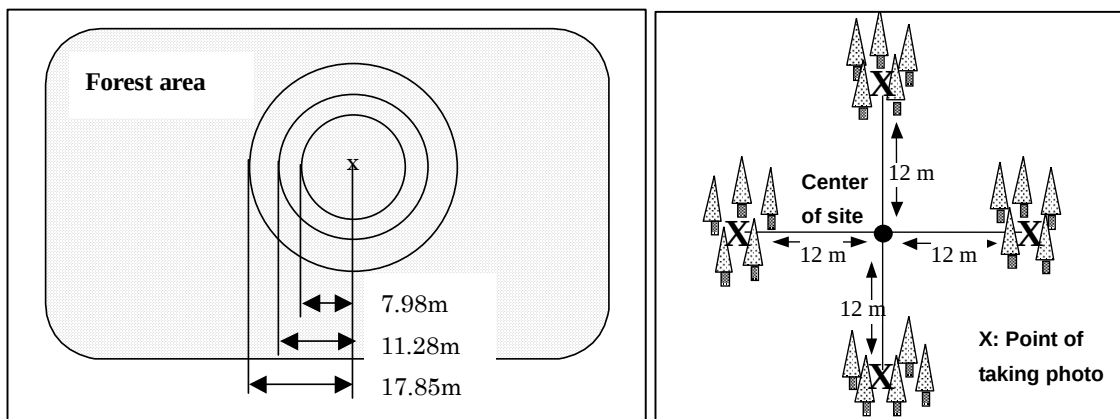


Figure 5.2 Plots for description of trees (Left) and selection of observation trees (Right)

Table 5.2 Observation items and decline scale

Items	Decline scale and observations
Vitality of tree	0. No damage, 1. Slightly damaged, 2. Evidently damaged, 3. Severely damaged, 4. Dead
Form of tree	0. Normal, 1. Some branches lacking, 2. Evidently wanting, 3. Severely wanting, 4. Dead or almost dead
Branch growth	0. Normal growth, 1. Somewhat reduced, 2. Short and slender, 3. Extremely short
Dieback of stem	0. Not found, 1. Slightly dieback, 2. Evidently dieback, 3. Severe dieback if found, 4. Completely dead
Defoliation of crown ^{*1}	0. Not defoliated (0–10%), 1. Slightly defoliated (>10–25%), 2. Moderately defoliated (>25–60%), 3. Severely defoliated (>60%), 4. Dead
Deformation of leaves	0. Normal, 1. Slightly deformed, 2. Evidently deformed, 3. Completely deformed
Size of leaves	0. Normal, 1. Somewhat small, 2. Evidently small, 3. Very small
Discoloration of leaves ^{*1}	0. None (0–10%), 1. Slight (>10–25%), 2. Moderate (>25–60%), 3. Severe (>60%)
Injury of leaves	0. No symptoms, 1. Slightly injured, 2. Evidently injured, 3. Severely injured

Note: ^{*1}. Definition of the scale was updated in the Sub-Manual on Forest Vegetation Monitoring (2006).

5.1.2 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
<i>Chemical Properties of Soil</i>	
a) Moisture Content	Drying oven, Balance
b) pH (H ₂ O) and pH (KCl)	Glass electrode
c) Exchangeable Base Cations (Ca, Mg, K and Na)	AAS, ICP-AES or ICP-MS (CH ₃ COONH ₄ -Extraction) Titration (KCl-Extraction)
d) Exchangeable Acidity	ibid.
e) Exchangeable Al, H	Calculation (as sum of exchangeable cations)
f) Effective Cation Exchange Capacity (ECEC)	Volumetric calcimeter
g) Carbonate Content (for calcareous soil)	Titration (Walkley-Black method) or CN-analyzer
h) Total Carbon Content	Titration (Kjeldahl method) or CN-analyzer
i) Total Nitrogen Content	Spectrophotometry (Bray-1 test)
j) Available Phosphate	Turbidimetry, IC, ICP-AES or ICP-MS
k) Sulfate	

<i>Physical Properties of Soil</i>	
a) Fine Earth Bulk Density b) Penetration Resistance (in the fieldwork)	Metal sampling cylinder, Drying oven, Balance Pocket penetrometer

5.1.3 Monitoring Sites

Forest data and/or soil data of 7 areas of 3 countries were submitted this year. The 2008 data at the Boneco Long Term Ecological Research Site in the Philippines and the Irkutsk Site in Russia, which were not included in the Data Report 2008 because of the editorial mistake, were also shown here. The list of monitoring site and reported items in 2009 was shown in [Table 5.4](#). Observation of the tree decline was done annually in the most plots according to suggestion of the Sub-Manual on Forest Vegetation Monitoring (2006). The fourth survey on soil and forest vegetation monitoring were carried out in Jinyunshan.

Table 5.4 Outline of the Monitoring Sites in 2009

Country	Nearest deposition monitoring site	Site: Name of forests	Soil type	Items ^{*1}
China	Jinyunshan (Chongqing)	Jinyunshan (2 plots for soil and forest)	(Acidi-Udic Argosols) ^{*2}	S, F
	Jiwozi (Xi'an)	Jiwozi (2 plots for soil; 1 plot for forest)	(Brown soil) ^{*2}	S, F
	Xiaoping (Xiamen)	Xiaoping (1 plot for soil and forest)	(Red soil) ^{*2}	S, F
	Zhuxiandong (Zhuhai)	Zhuxiandong (3 plots for soil and forest)	(Ochinic Udic Ferrosols) ^{*2}	S, F
Indonesia	Serpong	Research Forest Station of Center and Development of Forestry Research	Typic Dystrudepts	S
Japan	Banryu	Banryu-2	Cambisols	F^{*3}
		Iwami “rinku” Factory Park	Acrisols	F^{*3}
	Ijira	Lake Ijira	Dystric Cambisol	F^{*3}
		Yamato	Andosols	F^{*3}
Philippines	Mt. Sto. Tomas	Boneco Long Term Ecological Research Site		S^{*4}, F^{*5}

Country	Nearest deposition monitoring site	Site: Name of forests	Soil type	Items ^{*1}
Russia	Irkutsk	Irkutsk	Eutric Regosols/ Calcaric Luvisols	F^{*4}
Thailand	Vachiralongkorn	Dam	Ferric Acrisols	F^{*6}
		Puye	Luvisols	F^{*6}

*1. S, Soil monitoring; F, Forest monitoring; 2. Soil type has not been classified by the FAO/UNESCO or relevant taxonomies; 3. Observation of tree decline was only conducted; 4. The data in 2008 is shown, which was not included in the Data Report 2008 because of the editorial mistake; 5. Correction table for the Data Report 2008 was shown; 6. Observation of tree decline and understory vegetation was not conducted.

5.2 Results of Monitoring

Results of basic survey for soil and forest were reported in the following tables:

Table 5.5: Soil chemical analysis

Table 5.6: Observation of tree decline

Table 5.7: Description of trees

Table 5.8: Understory vegetation survey

Correction: Data Report 2008, Table 5.6 d-3)

Figure 5.3: Photographic record of tree decline

Appendix Fig. 3: Changes in pH (H₂O) and base saturation of surface soil (0-10 cm) and sub soil (10-20 cm) from 2000 to 2009

Appendix Fig. 4: Correlation coefficients between pH (H₂O) and time (2000 - 2009)

Table 5.5 a-1) Soil chemical analysis: Jinyunshan (Chongqing, China)

Sampling date: 10 October 2009

Name of analysis laboratory:

Sample No.	Location	Soil type	Plot No.	Subplot No.	Layer analyzed (cm)	Moisture content	pH		Exchangeable basecations (B)				Ex-acidity (A)	Ex-acid cations		ECEC (A)+(B)	Base saturation
									Ca	Mg	K	Na		Al	H		
						(wt%)	H ₂ O	KCl	(cmol(+)kg ⁻¹)								
1	Jinyunshan	Acidi-Udic Argosols	1#	1	0-10	4.5	4.1	3.5	0.21	0.04	0.08	0.02	7.16	6.36	0.80	7.51	4.7
				2		4.1	4.1	3.4	0.11	0.06	0.08	0.00	6.95	6.02	0.93	7.20	3.5
				3		3.8	4.2	3.5	0.22	0.04	0.08	0.00	7.28	6.32	0.96	7.62	4.5
				4		4.0	3.9	3.3	0.18	0.07	0.06	0.02	7.08	5.95	1.13	7.41	4.5
				5		3.4	4.2	3.6	0.13	0.04	0.08	0.00	5.11	4.32	0.79	5.36	4.7
2				1	4.5	4.2	3.6	0.11	0.03	0.08	0.02	6.38	5.47	0.91	6.62	3.6	
				2	3.6	4.1	3.5	0.13	0.03	0.08	0.02	6.81	5.87	0.94	7.07	3.7	
				3	3.5	4.2	3.6	0.14	0.04	0.06	0.00	6.67	5.77	0.90	6.91	3.5	
				4	3.5	4.0	3.3	0.07	0.04	0.05	0.02	4.35	4.28	0.07	4.53	4.0	
				5	3.9	4.2	3.6	0.10	0.03	0.07	0.02	5.65	4.80	0.85	5.87	3.7	
3	Jinyunshan	Acidi-Udic Argosols	2#	1	0-10	3.5	4.1	3.4	0.12	0.03	0.06	0.03	6.47	5.47	1.00	6.71	3.6
				2		2.5	4.3	3.6	0.12	0.04	0.09	0.00	4.20	3.35	0.85	4.45	5.6
				3		3.7	4.1	3.5	0.17	0.04	0.09	0.00	6.22	5.48	0.74	6.52	4.6
				4		3.2	4.2	3.5	0.19	0.03	0.06	0.02	5.39	4.38	1.01	5.69	5.3
				5		3.0	4.2	3.5	0.07	0.04	0.10	0.03	4.57	3.65	0.92	4.81	5.0
4				1	4.2	4.2	3.5	0.06	0.02	0.06	0.02	5.56	4.81	0.75	5.72	2.8	
				2	3.5	5.2	3.9	0.19	0.16	0.11	0.02	1.26	0.80	0.46	1.74	27.6	
				3	3.5	4.2	3.7	0.21	0.15	0.12	0.01	5.58	4.65	0.93	6.07	8.1	
				4	3.9	4.2	3.5	0.23	0.04	0.06	0.03	5.35	4.39	0.96	5.71	6.3	
				5	3.3	4.9	3.8	0.20	0.14	0.13	0.02	2.08	1.45	0.63	2.57	19.1	

Note: Repeat analysis was not reported.

Table 5.5 a-2) Soil chemical analysis: Jiwozi (Dabagou, China)

Sampling date: 30 October 2009

Name of analysis laboratory:

Sample No.	Location	Soil type	Plot No.	Subplot No.	Layer analyzed (cm)	Moisture content	pH		Exchangeable basecations (B)				Ex-acidity (A)	Ex-acid cations		ECEC (A)+(B)	Base saturation
							(wt%)	H ₂ O	KCl	Ca	Mg	K		Na	Al		
						(cmol(+)kg ⁻¹)										%	
1	JiWoZi	Brown soil	1#	1	0-10	4.8	6.4	5.4	6.24	0.51	0.39	0.20	1.68	0.21	1.47	9.02	81.4
				2		4.6	6.2	5.3	6.37	0.52	0.41	0.16	1.68	0.20	1.48	9.13	81.6
				3		4.7	6.1	5.1	6.42	0.62	0.41	0.14	1.68	0.21	1.47	9.27	81.9
				4		3.3	6.3	5.2	6.24	0.52	0.41	0.15	1.47	0.21	1.26	8.78	83.3
				5		2.8	6.2	5.3	6.29	0.61	0.41	0.17	1.68	0.21	1.47	9.16	81.7
2			10-20	1	5.0	7.0	5.7	7.44	0.73	0.51	0.10	1.47	0.11	1.36	10.26	85.7	
				2	3.9	6.6	5.5	6.26	0.52	0.42	0.11	1.47	0.10	1.37	8.77	83.3	
				3	3.9	6.4	5.2	6.28	0.62	0.42	0.05	1.47	0.11	1.36	8.83	83.4	
				4	4.6	6.9	5.7	6.44	0.52	0.40	0.11	1.26	0.13	1.13	8.72	85.6	
				5	2.6	6.5	5.5	6.25	0.61	0.42	0.08	1.47	0.10	1.37	8.82	83.4	
3	JiWoZi	Brown soil	2#	1	0-10	4.7	6.4	5.4	6.36	0.79	0.62	0.15	1.24	0.19	1.05	9.16	86.5
				2		4.3	6.5	5.4	6.21	0.58	0.42	0.13	1.68	0.24	1.44	9.02	81.3
				3		4.2	6.3	5.3	6.25	0.53	0.54	0.19	1.64	0.19	1.45	9.14	82.0
				4		4.3	6.4	5.2	6.16	0.61	0.51	0.15	1.72	0.36	1.37	9.15	81.2
				5		4.5	6.4	5.3	6.29	0.72	0.64	0.20	1.29	0.16	1.13	9.14	85.9
4			10-20	1	4.5	6.5	5.3	5.14	0.62	0.50	0.16	1.35	0.20	1.15	7.77	82.6	
				2	3.7	6.6	5.4	5.15	0.57	0.45	0.16	1.37	0.21	1.15	7.69	82.2	
				3	3.8	6.5	5.5	5.17	0.54	0.46	0.14	1.55	0.18	1.36	7.86	80.3	
				4	3.9	6.3	5.4	4.78	0.50	0.42	0.12	1.24	0.06	1.18	7.06	82.5	
				5	4.1	6.2	5.1	5.39	0.54	0.44	0.10	1.36	0.19	1.16	7.82	82.7	

Note: Repeat analysis was not reported.

Table 5.5 a-3) Soil chemical analysis: Xiaoping (China)

Sampling date: 21 September 2009
Name of analysis laboratory:Mr.Zhang Yashuang

Sample No.	Location	Soil type	Plot No.	Subplot No.	Layer analyzed (cm)	Moisture content	pH		Exchangeable basecations				Ex-acidity (A)	Ex-acid cations		ECEC (A)+(B)	Base saturation	T-C	T-N
									Ca	Mg	K	Na			H				
						(wt%)	H ₂ O	KCl	(cmol(+)kg ⁻¹)								%	(g kg ⁻¹)	
1	Xiaoping	Red soil	XPT-01	1	0-10	2.69%	4.45	3.88	0.03	0.05	0.15	0.02	8.99	6.88	2.12	9.24	2.70	2.0	1.7
				2		2.95%	4.39	3.74	0.01	0.07	0.25	0.03	7.10	5.19	1.90	7.46	4.84	2.9	1.8
				3		2.88%	4.31	3.66	0.02	0.06	0.18	0.02	7.34	5.62	1.72	7.62	3.67	2.8	2.1
				4		2.57%	4.42	3.87	0.03	0.04	0.16	0.02	5.12	3.88	1.23	5.37	4.72	1.7	2.1
				5		2.83%	4.43	3.87	0.03	0.06	0.17	0.04	6.68	4.92	1.75	6.98	4.41	2.2	2.0
2				1	10-20	2.60%	4.5	3.94	0.03	0.04	0.12	0.02	5.29	4.16	1.14	5.51	3.92	1.6	0.6
				2		2.44%	4.54	3.93	0.03	0.04	0.19	0.03	4.62	3.13	1.49	4.92	6.16	1.6	1.2
				3		2.51%	4.46	3.83	0.01	0.05	0.15	0.03	5.30	3.91	1.39	5.54	4.26	1.8	1.4
				4		2.33%	4.47	3.92	0.01	0.04	0.15	0.03	4.45	3.42	1.03	4.68	4.87	1.4	1.0
				5		2.56%	4.39	3.79	0.03	0.05	0.16	0.03	4.61	3.61	1.00	4.88	5.47	1.9	1.4

Note: Repeat analysis was not reported.

Table 5.5 a-4) Soil chemical analysis: Zhuxiandong (China)

Sampling date: 28-29 November 2009
Name of analysis laboratory: Mr. Zhems

Sample No.	Location	Soil type	Plot No.	Subplot No.	Layer analyzed (cm)	Moisture content	pH		Exchangeable basecations				Ex-acidity (A)	Ex-acid cations		ECEC (A)+(B)	Base saturation	T-C	T-N
									(B)		Al	H							
						(wt%)	H ₂ O	KCl	Ca	Mg			K	Na	(cmol(+)kg ⁻¹)	%	(g kg ⁻¹)		
1	22°12' 37" N 113°30' 36" E	Ochic Udic Ferrosols	1#	1	0-10	3.96	4.0	3.5	0.18	0.06	0.12	0.07	3.40	2.09	1.31	3.84	11.30	18.8	1.2
				2		2.33	4.0	3.5	0.20	0.08	0.12	0.10	3.26	1.96	1.29	3.75	13.13	16.6	1.0
				3		2.62	4.4	3.7	0.32	0.13	0.13	0.04	2.26	1.08	1.18	2.88	21.52	15.8	1.1
				4		2.61	4.1	3.5	0.17	0.07	0.12	0.05	2.96	2.09	0.88	3.38	12.42	18.0	1.5
				5		3.54	3.9	3.4	0.12	0.06	0.13	0.03	3.00	2.48	0.52	3.35	10.21	17.3	1.2
1				10-20	2.65	4.1	3.8	0.08	0.03	0.09	0.02	2.69	1.47	1.22	2.92	7.89	10.1	0.5	
2					2.81	4.1	3.7	0.12	0.04	0.09	0.10	2.67	1.42	1.25	3.02	11.61	11.3	0.7	
3					2.47	4.4	3.8	0.19	0.08	0.11	0.04	2.08	1.44	0.64	2.51	16.94	9.1	0.8	
4					1.63	4.2	3.7	0.12	0.03	0.09	0.03	2.54	1.93	0.61	2.81	9.42	9.9	0.7	
5					3.84	4.1	3.6	0.09	0.04	0.12	0.12	2.64	2.03	0.61	3.00	12.07	9.9	0.8	
2	22°12' 00" N 113°31' 00" E	Ochic Udic Ferrosols	2#	1	0-10	1.03	4.6	3.9	0.16	0.05	0.12	0.02	1.41	0.65	0.76	1.76	19.79	7.8	0.9
				2		2.80	4.3	3.6	0.18	0.06	0.13	0.05	2.01	0.88	1.13	2.43	17.38	14.2	1.2
				3		3.31	4.3	3.8	0.37	0.17	0.24	0.09	2.34	1.36	0.99	3.22	27.12	20.9	1.9
				4		3.96	4.3	3.4	0.18	0.09	0.26	0.05	3.63	2.79	0.83	4.22	13.99	21.6	2.0
				5		2.16	4.1	3.5	0.13	0.06	0.14	0.02	2.84	1.91	0.92	3.18	10.91	14.1	1.2
1				10-20	1.13	4.8	4.0	0.21	0.08	0.18	0.07	1.33	0.48	0.85	1.87	28.46	5.6	0.5	
2					1.45	4.3	3.8	0.25	0.07	0.13	0.02	1.62	0.86	0.76	2.09	22.4	7.7	0.6	
3					3.09	4.4	3.7	0.26	0.12	0.21	0.04	1.99	0.96	1.03	2.62	23.85	15.7	1.2	
4					5.33	4.1	3.7	0.14	0.06	0.21	0.10	3.21	2.25	0.96	3.73	13.87	12.9	1.3	
5					1.86	4.0	3.6	0.13	0.04	0.11	0.02	2.60	1.61	0.99	2.89	10.2	14.3	0.8	
3	22°12' 20" N 113°31' 02" E	Ochic Udic Ferrosols	3#	1	0-10	2.87	4.1	3.5	0.07	0.06	0.10	0.04	4.16	3.39	0.76	4.43	6.26	20.0	0.9
				2		2.26	4.5	3.7	0.26	0.10	0.16	0.12	2.38	1.63	0.75	3.02	21.25	14.1	0.9
				3		4.20	4.5	3.7	0.42	0.19	0.22	0.07	2.63	1.84	0.79	3.53	25.60	5.7	0.5
				4		2.03	4.3	3.5	0.34	0.15	0.13	0.06	3.75	3.21	0.54	4.44	15.40	21.2	1.6
				5		2.80	4.3	3.4	0.10	0.07	0.10	0.03	3.81	3.09	0.73	4.12	7.48	15.8	1.0
1				10-20	1.67	4.1	3.6	0.06	0.04	0.10	0.05	3.92	2.99	0.93	4.17	5.83	11.4	0.5	
2					1.94	4.2	3.6	0.09	0.04	0.11	0.03	2.60	2.00	0.60	2.87	9.4	6.6	0.5	
3					2.84	4.1	3.5	0.18	0.10	0.16	0.05	3.12	2.46	0.67	3.61	13.55	14.1	0.7	
4					2.34	4.2	3.6	0.25	0.08	0.11	0.04	3.73	2.91	0.82	4.21	11.34	12.1	0.8	
5					2.24	4.2	3.6	0.07	0.04	0.11	0.05	3.71	3.11	0.59	3.97	6.5	12.8	0.7	

Note: Repeat analysis was not reported.

Table 5.5 b) Soil chemical analysis: Bogor (Indonesia)

Sampling date: 21 October 2009

Name of analysis laboratory: Soil Chemistry Laboratory of Centre for Soil and Agroclimate Research and Development at Bogor

Sample No.	Location	Soil type	Plot No.	Subplot No.	Layer analyzed (cm)	Moisture content	pH		Exchangeable basecations (B)				Ex-acidity	Ex-acid cations (A)		ECEC (A)+(B)	Base saturation	Organic		CEC*
								Ca	Mg	K	Na	Al		H	C			N		
						(wt%)	H ₂ O	KCl	(cmol(+)kg ⁻¹)								%	(%)	(cmol(+) kg ⁻¹)	
1	The Research Forest Station of Center and Development of Forest Research	Typic Dystrudepts	I	1	0 - 10	4.2	3.8	0.32	0.20	0.06	0.02	5.44	4.76	0.68	6.04	9.93	19.20	1.70	18.14	
3				2	0 - 10	4.3	3.8	1.21	0.36	0.10	0.04	5.55	4.89	0.66	7.26	23.6	23.80	1.90	20.96	
5				3	0 - 10	4.2	3.7	1.04	0.32	0.08	0.04	4.84	4.36	0.48	6.32	23.4	14.80	1.60	18.98	
7				4	0 - 10	4.3	3.8	1.34	0.46	0.08	0.02	4.50	3.86	0.64	6.40	29.7	15.40	1.60	18.90	
9				5	0 - 10	4.2	3.7	0.72	0.20	0.06	0.03	4.90	4.42	0.48	5.91	17.1	15.60	1.70	20.68	
2				1	10 - 20	4.2	3.8	0.42	0.22	0.06	0.02	4.86	4.30	0.56	5.58	12.9	12.30	1.20	18.04	
4				2	10 - 20	4.3	3.8	0.96	0.34	0.08	0.04	5.00	4.54	0.46	6.42	22.1	10.50	1.30	20.34	
6				3	10 - 20	4.3	3.8	0.84	0.26	0.06	0.02	4.08	3.62	0.46	5.26	22.4	13.70	1.30	18.64	
8				4	10 - 20	4.4	3.8	1.32	0.42	0.05	0.04	3.54	3.12	0.42	5.37	34.1	11.20	1.30	18.82	
10				5	10 - 20	4.2	3.7	0.82	0.21	0.06	0.04	3.84	3.60	0.24	4.97	22.7	13.20	1.40	20.64	

Note:*, CEC was measured by the Schollenberger method.

Table 5.5 c) Soil chemical analysis: Boneco LETR site (Philippines)

Sampling date: 17 April 2006

Name of analysis laboratory: Department of Soil Science, UPLJ

Sample No.	Location	Plot No.	Subplot No.	Layer analyzed (cm)	Repeat* analysis	Moisture content (wt %)	pH		Exchangeable basecations (B)				Ex-acidity (A) (cmol[+] kg ⁻¹)	Ex-acid cations		ECEC (A)+(B)	Base saturation %
							H ₂ O	KCl	Ca	Mg	K	Na		Al	H		
1	Boneco LTER site	1	1	0 - 10	1st	1.0	5.3	5.1	8.58	0.95	0.25	0.43	2.02	1.72	0.30	12.2	83.5
			2			1.0	5.5	5.0	8.74	1.02	0.26	0.41	1.79	1.60	0.19	12.2	85.4
			3			1.0	5.2	5.0	8.49	0.88	0.24	0.40	1.61	1.35	0.26	11.6	86.1
			4			1.0	5.6	5.1	8.13	1.18	0.27	0.54	1.32	1.06	0.25	11.4	88.5
			5			1.0	5.1	5.0	8.23	1.11	0.22	0.49	1.48	1.17	0.31	11.5	87.2
2			1	10 - 20	1st	1.0	5.1	4.9	6.24	0.77	0.20	0.37	2.02	1.60	0.42	9.59	79.0
			2			1.0	5.1	4.8	6.48	0.76	0.16	0.33	2.02	1.40	0.62	9.75	79.3
			3			1.0	4.9	4.7	5.87	0.85	0.21	0.39	1.88	1.49	0.40	9.20	79.5
			4			1.0	5.4	5.1	5.86	0.73	0.24	0.50	1.64	1.34	0.30	8.97	81.7
			5			1.0	5.1	4.8	5.74	0.78	0.20	0.40	1.86	1.53	0.32	8.98	79.3
3		2	1	0 - 10	1st	1.0	5.3	5.1	7.04	1.09	0.25	0.45	1.86	1.30	0.56	10.7	82.6
			2			1.0	5.5	5.1	7.24	0.84	0.24	0.36	2.27	1.94	0.33	11.0	79.3
			3			1.0	5.5	5.2	7.64	1.01	0.21	0.41	2.10	1.86	0.24	11.4	81.5
			4			1.0	5.5	5.1	7.76	0.72	0.22	0.32	2.29	2.04	0.25	11.3	79.8
			5			1.0	5.1	4.9	7.37	0.62	0.22	0.31	2.76	2.37	0.39	11.3	75.6
4			1	10 - 20	1st	1.0	5.1	4.9	4.99	0.88	0.20	0.41	1.86	1.49	0.37	8.33	77.7
			2			1.0	5.2	4.9	5.36	0.73	0.24	0.38	2.77	2.43	0.34	9.48	70.8
			3			1.0	5.3	4.9	5.13	0.94	0.16	0.40	2.22	1.81	0.41	8.85	74.9
			4			1.0	5.1	4.9	5.12	0.55	0.16	0.26	2.53	2.16	0.37	8.62	70.7
			5			1.0	5.1	4.9	4.85	0.48	0.16	0.28	2.77	2.27	0.50	8.53	67.5

Sample No.	Location	Plot No.	Subplot No.	Layer analyzed (cm)	Repeat* analysis	Moisture content (wt %)	pH		Exchangeable basecations (B)				Ex-acidity (A) (cmol[+]/kg ⁻¹)	Ex-acid cations		ECEC (A)+(B)	Base saturation %
							H ₂ O	KCl	Ca	Mg	K	Na		Al	H		
1	Boneco LTER site	1	1	0 - 10	2nd	1.0	5.3	5.1	8.10	0.97	0.24	0.44	1.78	1.48	0.30	11.5	84.6
			2			1.0	5.5	5.0	8.36	1.02	0.25	0.40	1.67	1.25	0.42	11.7	85.7
			3			1.0	5.2	5.0	8.72	0.97	0.24	0.42	1.61	1.35	0.26	12.0	86.5
			4			1.0	5.6	5.1	8.71	1.09	0.27	0.48	1.52	1.27	0.25	12.1	87.4
			5			1.0	5.1	5.0	8.61	1.12	0.22	0.50	1.56	1.25	0.31	12.0	87.0
2			1	10 - 20	2nd	1.0	5.1	4.9	7.70	0.77	0.20	0.38	2.00	1.58	0.42	11.0	81.9
			2			1.0	5.1	4.8	7.98	0.72	0.16	0.34	2.00	1.61	0.39	11.2	82.1
			3			1.0	4.9	4.7	7.35	0.86	0.21	0.39	1.88	1.49	0.40	10.7	82.4
			4			1.0	5.4	5.1	7.76	0.75	0.24	0.47	1.64	1.34	0.30	10.9	84.9
			5			1.0	5.1	4.8	7.86	0.78	0.20	0.39	1.84	1.52	0.32	11.1	83.4
3		1	2	0 - 10	2nd	1.0	5.3	5.1	7.60	0.95	0.25	0.46	1.86	1.60	0.26	11.1	83.3
		2				1.0	5.5	5.1	7.48	0.85	0.24	0.36	2.27	1.94	0.33	11.2	79.7
		3				1.0	5.5	5.2	7.48	0.93	0.20	0.43	2.20	1.96	0.24	11.2	80.4
		4				1.0	5.5	5.1	7.78	0.82	0.22	0.34	2.19	1.94	0.25	11.4	80.7
		5				1.0	5.1	4.9	7.49	0.73	0.22	0.32	2.36	1.97	0.39	11.1	78.8
4		1		10 - 20	2nd	1.0	5.1	4.9	6.09	0.79	0.20	0.38	2.06	1.69	0.37	9.52	78.4
		2				1.0	5.2	4.9	6.17	0.75	0.24	0.35	2.47	2.13	0.34	9.97	75.2
		3				1.0	5.3	4.9	6.11	0.74	0.17	0.37	2.32	1.91	0.41	9.71	76.1
		4				1.0	5.1	4.9	6.16	0.64	0.16	0.29	2.43	2.06	0.37	9.68	74.9
		5				1.0	5.1	4.9	5.99	0.67	0.16	0.31	2.57	2.07	0.50	9.70	73.5

Note: The data was not included in the Data Report 2008 because of the editorial mistake

Table 5.6 a-1-1) Results of observation of tree decline: Jinyunshan-1 (Chongqing, China)

Name of Plot: Jinyunshan 1#

Nearest deposition monitoring site: Jinyunshan

Date: 10 October 2009

Individual No.	1(3)	2(2)	3(58)	4(101)	5(105)	6(70)	7(71)	8(72)	9(103)	10(104)
Direction (E, W, S, or N)	E	E	E	S	S	W	W	W	N	N
Plant Name	<i>Cunninghamia lanceolata</i>	<i>Symplocos setchuensis</i>	<i>Symplocos setchuensis</i>	<i>Symplocos setchuensis</i>	<i>Symplocos setchuensis</i>	<i>Symplocos setchuensis</i>	<i>Symplocos setchuensis</i>	<i>Symplocos setchuensis</i>	<i>Symplocos setchuensis</i>	<i>Symplocos setchuensis</i>
Relative height										
Tree height (m)	16.7	8.1	5.8	12.1	10.8	7	7.2	9	1.03	10.6
DBH (cm)	18.3	11.4	9.7	11.8	12.4	7.5	8.8	11.2	10.7	9.7
Vitality of tree										
Form of tree	1									
Branch growth										
Dieback of stem										
Defoliation of crown										
Deformation of leaves										
Size of leaves										
Discoloration of leaves										
Injury of leaves										
Damage class ^{*1}										

Estimated cause of decline:**Table 5.6 a-1-2) Results of observation of tree decline: Jinyunshan-2 (Chongqing, China)**

Name of Plot: Jinyunshan 1#

Nearest deposition monitoring site: Jinyunshan

Date: 10 October 2009

Name of laboratory: Resources and Environment department of South-west Agriculture University

Individual No.	1(67)	2(68)	3(74)	4(76)	5	6(41)	7	8(71)	9(70)	10(69)
Direction (E, W, S, or N)	E	E	S	S		W		N	N	N
Plant Name	<i>Symplocos setchuensis</i>	<i>Symplocos setchuensis</i>	<i>Adinandra bockiana</i>	<i>Symplocos setchuensis</i>		<i>Adinandra bockiana</i>		<i>Symplocos lancifolia</i>	<i>Elaeocarpus japonicus</i>	<i>Michilus pingii</i>
Relative height										
Tree height (m)	9.2	8.1	14.1	15.2		18.2		12.9	16.2	14.1
DBH (cm)	9.3	12.5	14.8	24.3		18.9		15	37.8	19.7
Vitality of tree										
Form of tree				1						
Branch growth										
Dieback of stem										
Defoliation of crown										
Deformation of leaves			1							
Size of leaves										
Discoloration of leaves										
Injury of leaves								1		
Damage class ^{*1}										

Estimated cause of decline:

Note: *1. Damage class will be decided based on combination of defoliation and discoloration classes

Table 5.6 a-2) Results of observation of tree decline: : Jiwozi (Dabagou, China)

Name of plot: DaBaGou

Nearest deposition monitoring site: Jiwozi (Xi'an)

Data: 2009-10-30

Individual No.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Direction (E, W, S, or N)	E	E	E	E	E	S	S	S	S	S	W	W	W	W	W	N	N	N	N	N
Plant Name	<i>Pinus armandi Fanch</i>																			
Relative height																				
Tree height (m)	22.4	21.7	15.8	20.8	23.2	15.6	12.5	18.1	14.3	18	22.5	19	14.5	21.2	15	21.7	15.8	21.5	12.8	8.6
DBH (cm)	15.3	12.9	11.3	13.7	10.5	10.8	8.8	7.5	9.4	13.3	13	10.2	9.9	14.2	9.8	12.2	10.8	12.7	9.8	8.3
Vitality of tree	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Form of tree	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Branch growth	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Dieback of stem	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Defoliation of crown	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Deformation of leaves																				
Size of leaves																				
Discoloration of leaves																				1
Injury of leaves																				
Damage class ^{*1}	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1

Estimated cause of decline: leaves are too much

Note: *1. Damage class will be decided based on combination of defoliation and discoloration classes

Table 5.6 a-3) Results of observation of tree decline: Xiaoping

Name of Plot: XPT-01

Nearest deposition monitoring site: Xiaoping (Xiamen)

Data: 2009.09.23

Individual No.	120	210	211	116	203	225	227	301	220	221	337	334	333	313	314	310	309	308
Direction (E, W, S, or N)	E	E	E	E	S	S	S	S	W	W	W	W	W	N	N	N	N	N
Plant Name	<i>Michelia.Macclurei Dandy</i>	<i>Michelia.Macclurei Dandy</i>	<i>Michelia.Macclurei Dandy</i>	<i>Michelia.Macclurei Dandy</i>	<i>Michelia.Macclurei Dandy</i>	<i>Michelia.Macclurei Dandy</i>	<i>Michelia.Macclurei Dandy</i>	<i>Michelia.Macclurei Dandy</i>	<i>Michelia.Macclurei Dandy</i>	<i>Michelia.Macclurei Dandy</i>	<i>Michelia.Macclurei Dandy</i>	<i>Michelia.Macclurei Dandy</i>	<i>Michelia.Macclurei Dandy</i>	<i>Michelia.Macclurei Dandy</i>	<i>Michelia.Macclurei Dandy</i>	<i>Michelia.Macclurei Dandy</i>	<i>Michelia.Macclurei Dandy</i>	<i>Michelia.Macclurei Dandy</i>
Relative height																		
Tree height (m)	15.5	16.5	18.3	17.2	16.4	17.7	18.3	17.5	17.7	18.2	17.9	17.7	18.9	16.4	16.8	16.9	16.9	19.2
DBH (cm)	17.2	20.8	19.4	19.8	21.5	24.7	21.2	20.0	18.2	22.8	20.3	20.4	18.7	21.4	20.3	20.3	21.4	30.1
Vitality of tree										1								
Form of tree																		
Branch growth																		
Dieback of stem										1								
Defoliation of crown																		
Deformation of leaves																		
Size of leaves																		
Discoloration of leaves																		
Injury of leaves																		
Damage class ^{*1}										1								

Estimated cause of decline:

Note: *1. Damage class will be decided based on combination of defoliation and discoloration classes

Table 5.6 a-4-1) Results of observation of tree decline: Zhuxiandong-1

Name of plot: Zhuxian Park, Zhuhai

Nearest deposition monitoring site: Zhuxiandong (Zhuhai)

Data: Nov.29, 2009

Individual No.	1	2	3	4	5
Direction (E, W, S, or N)					
Plant Name	<i>Pinus massoniana</i>	<i>Acacia confusa</i>	<i>Pinus elliotii</i>	<i>Pinus massoniana</i>	<i>Pinus massoniana</i>
Relative height					
Tree height (m)	9.7	9.3	9.5	7.8	10
DBH (cm)	36	10.8	19.1	24.8	19.7
Vitality of tree	2		2	2	2
Form of tree	2		2	3	2
Branch growth					
Dieback of stem					
Defoliation of crown	1		1	1	1
Deformation of leaves					
Size of leaves					
Discoloration of leaves					
Injury of leaves	1		1	1	1
Damage class ^{*1}	1		1	1	1

Estimated cause of decline: aging — aging aging aging

Note: *1. Damage class will be decided based on combination of defoliation and discoloration classes

Table 5.6 a-4-2) Results of observation of tree decline: Zhuxiandong-2

Name of plot: Zhuxian Park, Zhuhai

Nearest deposition monitoring site: Zhuxiandong (Zhuhai)

Data: Nov.28, 2009

Individual No.	1	2	3	4	5
Direction (E, W, S, or N)					
Plant Name	<i>Acacia confusa</i>	<i>Acacia confusa</i>	<i>Litsea glutinosa</i>	<i>Acacia confusa</i>	<i>Acacia confusa</i>
Relative height					
Tree height (m)	10	9.5	6.5	9.5	9.5
DBH (cm)	26.8	23.9	10.2	16.9	14
Vitality of tree					
Form of tree	1	1		1	1
Branch growth	1				
Dieback of stem					
Defoliation of crown					
Deformation of leaves					
Size of leaves					
Discoloration of leaves					
Injury of leaves					
Damage class ^{*1}					

Estimated cause of decline:

Note: *1. Damage class will be decided based on combination of defoliation and discoloration classes

Table 5.6 a-4-3) Results of observation of tree decline: Zhuxiandong-3

Name of plot: Zhuxian Park, Zhuhai

Nearest deposition monitoring site: Zhuxiandong (Zhuhai)

Data: Nov.28, 2009

Individual No.	1	2	3	4	5
Direction (E, W, S, or N)					
Plant Name	<i>Sapium discolor</i>	<i>Machilus velutina</i>	<i>Sapium discolor</i>	<i>Acacia confusa</i>	<i>Machilus velutina</i>
Relative height					
Tree height (m)	2.8	8	4	6.7	5
DBH (cm)	6.4	14	17.8	23.6	6.7
Vitality of tree					
Form of tree					
Branch growth					
Dieback of stem					
Defoliation of crown					
Deformation of leaves					
Size of leaves					
Discoloration of leaves					
Injury of leaves					
Damage class ^{*1}					

Estimated cause of decline:

Note: *1. Damage class will be decided based on combination of defoliation and discoloration classes

Table 5.6 b-1-2) Results of observation of tree decline: Lake Banryu-2

Name of Plot: Iwami "rinku" Factory Parl

Nearest deposition monitoring site: Banryu

Date: 7-8 October 2009

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			+		+												
Tree height (m)	14.7	18.1	22.5	19.2	18.2	18.5	18.7	17.9	16.3		14.6		18.0	18.7	17.9	13.1	15.7
DBH (cm)	23.6	27.9	28.6	28.8	28.5	25.7	29.2	34.9	31.7		23.9		21.3	22.6	27.9	34.9	24.5
Vitality of tree									1							2	
Form of tree									1								
Branch growth																	
Dieback of stem									1							2	
Defoliation of crown																2	
Deformation of leaves																	
Size of leaves																	
Discoloration of leaves																1	
Injury of leaves																1	
Damage class																2	

Estimated cause of decline: No. 142, declining by specific disease for Fagaceae tree species (infection of *Raffaelea quercivora*, through the beetle, *Platypus quercivorus*), No. 63, broken by collision of a fallen tree; No. 63, 104, 108, 127, and 128, perforations by the beetle, *Platypus quercivorus*, but no symptom of disease; No. 137 & 140, dead recorded in 2006 and 2008, respectively.

Note: *1. Damage class was decided based on combination of defoliation and discoloration classes

Table 5.6 b-2-1) Results of observation of tree decline: Lake Ijira-1

Name of Plot: Lake Ijira

Nearest deposition monitoring site: Ijira

Date: 9 October 2009

Date: 5 October 2003

Individual No.	1	2	3	3-2	4	5	5-2	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Direction	N	N	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>	<i>Chamaecyparis obtusa</i>	<i>Chamaecyparis obtusa</i>	<i>Chamaecyparis obtusa</i>	<i>Chamaecyparis obtusa</i>	<i>Chamaecyparis obtusa</i>	<i>Chamaecyparis obtusa</i>	<i>Chamaecyparis obtusa</i>	<i>Cryptomeria japonica</i>	<i>Chamaecyparis obtusa</i>	<i>Chamaecyparis obtusa</i>	<i>Chamaecyparis obtusa</i>	<i>Chamaecyparis obtusa</i>	<i>Chamaecyparis obtusa</i>	<i>Chamaecyparis obtusa</i>	<i>Chamaecyparis obtusa</i>	<i>Chamaecyparis obtusa</i>	<i>Chamaecyparis obtusa</i>	<i>Chamaecyparis obtusa</i>	<i>Chamaecyparis obtusa</i>	<i>Chamaecyparis obtusa</i>	
Relative height	+								+													
Tree height (m)								14	13.7	13.5		14.4					15.9	12.8	12.8			
DBH (cm)								20.4	23.5	19.6		18.1					13.5	20.4	16			
Vitality of tree									1					1	1					2	1	
Form of tree	2								1					2	2					2	1	
Branch growth																						
Dieback of stem																						
Defoliation of crown																						
Deformation of leaves																						
Size of leaves																						
Discoloration of leaves																						
Injury of leaves																						
Damage class																						

Estimated cause of decline: No. 1, suppression by other surrounding trees and broken top of the tree; No. 8, 18 & 19, suppression by other surrounding trees; No. 12 & 13, broken top of the trees; No. 3-2, cut by the management (thinning) in 2009.

Table 5.6 b-2-2) Results of observation of tree decline: Lake Ijira-2

Name of Plot: Yamato

Nearest deposition monitoring site: Ijira

Date: 9 October 2009

Individual No.	22	21	9	10	23	46	47	45	42	7	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	Chamaecyparis obtusa	Chamaecyparis obtusa	Chamaecyparis obtusa	Chamaecyparis obtusa	Chamaecyparis obtusa	Chamaecyparis obtusa	Chamaecyparis obtusa	Chamaecyparis obtusa	Chamaecyparis obtusa	Chamaecyparis obtusa	Chamaecyparis obtusa	Chamaecyparis obtusa	Chamaecyparis obtusa	Chamaecyparis obtusa	Chamaecyparis obtusa	Chamaecyparis obtusa	Chamaecyparis obtusa	Chamaecyparis obtusa	Chamaecyparis obtusa	Chamaecyparis obtusa
Relative height				—							—	—	—							—
Tree height (m)	29.2	27.2	28.7	27.5	30.4	29.2	28.1	27.9	28.6	27.6	23.7	26.3	24.9	26.1	27.3	28.8	25.6	28.3	29.5	25.2
DBH (cm)	36	37.5	29.8	41.2	38.8	42.4	37.4	35.3	40.5	37.6	31.5	30.8	31.2	32.4	39.3	29.3	33.3	41.9	36.7	33.9
Vitality of tree											1	1	1	4						1
Form of tree											1	1	1	4						1
Branch growth																				
Dieback of stem				1							2			4						
Defoliation of crown																				
Deformation of leaves																				
Size of leaves																				
Discoloration of leaves																				
Injury of leaves																				
Damage class																				

Estimated cause of decline: No. 10 & 36, broken tip of trunk; No. 14, past effects of suppression by other surrounding trees; No. 15 dead by heavy snow; No. 31 & 33, curved shape by possibly heavy snow

Table 5.6 c) Results of observation of tree decline: Irkutsk

Name of Plot: Irkutsk

Nearest deposition monitoring site: Irkutsk

Date: 15 July 2008

Individual No.	4	5	6	7	8	12	13	14	15	16	21	22	23	24	25	30	31	32	33	34
Direction	N	N	N	N	N	W	W	W	W	W	S	S	S	S	S	E	E	E	E	E
Plant Name	<i>Pinus sylvestris</i>	<i>Pinus sylvestris</i>	<i>Pinus sylvestris</i>	<i>Pinus sylvestris</i>	<i>Pinus sylvestris</i>	<i>Pinus sylvestris</i>	<i>Pinus sylvestris</i>	<i>Pinus sylvestris</i>	<i>Pinus sylvestris</i>	<i>Pinus sylvestris</i>	<i>Betula pendula</i>	<i>Betula pendula</i>	<i>Pinus sylvestris</i>	<i>Pinus sylvestris</i>	<i>Betula pendula</i>	<i>Pinus sylvestris</i>	<i>Betula pendula</i>	<i>Pinus sylvestris</i>	<i>Pinus sylvestris</i>	<i>Pinus sylvestris</i>
Relative height																				
Tree height (m)	14.5	17.4	17.5	19.4	14.3	15.1	19.0	18.1	15.4	18.2	17.1	18.7	19.0		20.0	21.0	18.2	18.0	17.0	16.6
DBH (cm)	17.8	24.2	20.4	23.6	14.7	15.4	23.2	23.3	12.4	19.2	14.4	16.2	27.4		22.9	24.5	20.2	24.5	22.3	20.2
Vitality of tree	1	2	2	2	3	2	1	2	2	2	1	1	1	4	1	1	1	1	2	2
Form of tree	2	2	2	3	3	2	1	2	2	2	1	1	1		1	1	1	2	2	2
Branch growth	1	1	2	2	3	2	2	2	2	2	1	1	1		1	1	1	1	2	2
Dieback of stem																				
Defoliation of crown	1	2	2	2	3	2	1	1	2	2	1	1	1		1	1		1	1	2
Deformation of leaves	1	1	1	1	1	1	1	1	1	1	1	1	1					1	1	1
Size of leaves	1	1	1	1	2	1	1	1	2	1	1	1	1			1		1	1	1
Discoloration of leaves	1	1	1	1	1	1	1	1	1	1	1	1	1			1		1	1	1
Injury of leaves	1	1	1	2	2	1	2	1	2	1	1	1	1			1		1	1	2
Damage class ^{*1}	1	2	2	2	3	2	1	1	2	2	1	1	1	4	1	1		1	1	2

Estimated cause of decline: Air pollution, recreation loads, and/or fires

Note: *1. Damage class was decided based on combination of defoliation and discoloration classes

Table 5.7 a-1-1) Description of trees: Jinyunshan-1 (Chongqing, China)

Name of Plot: Jinyunshan 1#

Date: 10 October 2009

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 > 18 cm)			
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>Michilus pingii</i>	16.3	16.2	58	<i>Symplocos setchuenensis</i>	9.7	5.8	87	<i>Castanopsis carlesii</i> var. <i>spinulosa</i>	38.9	22.9
2	<i>Symplocos setchuenensis</i>	11.4	8.1	59	<i>Pinus massoniana</i>	46.4	25	88	<i>Castanopsis carlesii</i> var. <i>spinulosa</i>	31.3	20.6
3	<i>Cunninghamia lanceolata</i>	18.3	16.7	60	<i>Randia cochinchinensis</i>	6.6	5.9	90	<i>Castanopsis fargesii</i>	40.8	24.5
5	<i>Michilus pingii</i>	17.7	14.5	61	<i>Pinus massoniana</i>	30.0	20.5	91	<i>Michilus pingii</i>	22.5	22.8
6	<i>Symplocos setchuenensis</i>	11.7	7.8	62	<i>Symplocos setchuenensis</i>	7.0	4.5	92	<i>Michilus pingii</i>	22.4	20.5
7	<i>Pinus massoniana</i>	40.9	22.8	63	<i>Adinandra bockiana</i>	7.0	5.9	93	<i>Pinus massoniana</i>	55.6	27.4
8	<i>Randia cochinchinensis</i>	3.5	3	64	<i>Castanopsis carlesii</i> var. <i>spinulosa</i>	39.6	17.5	94	<i>Cunninghamia lanceolata</i>	24.5	22.3
11	<i>Symplocos setchuenensis</i>	2.1	2.9	65	<i>Symplocos setchuenensis</i>	10.6	8.5	95	<i>Castanopsis carlesii</i> var. <i>spinulosa</i>	31.0	18.4
12	<i>Randia cochinchinensis</i>	2.9	3.9	66	<i>Cunninghamia lanceolata</i>	20.3	17	96	<i>Castanopsis carlesii</i> var. <i>spinulosa</i>	25.3	16.5
13	<i>Randia cochinchinensis</i>	2.5	3.2	67	<i>Michilus pingii</i>	27.9	22.5	99	<i>Castanopsis carlesii</i> var. <i>spinulosa</i>	38.8	22.4
15	<i>Symplocos setchuenensis</i>	10.2	9.4	68	<i>Michilus pingii</i>	24.3	18.5	100	<i>Cunninghamia lanceolata</i>	26.5	15.6
17	<i>Symplocos setchuenensis</i>	11.6	9.5	70	<i>Symplocos setchuenensis</i>	7.5	7	101	<i>Symplocos setchuenensis</i>	11.8	12.1
18	<i>Symplocos setchuenensis</i>	5.9	9.5	71	<i>Symplocos setchuenensis</i>	8.8	7.2	102	<i>Symplocos setchuenensis</i>	7.5	9.4
20	<i>Elaeocarpus japonicus</i>	6.3	9.6	72	<i>Symplocos setchuenensis</i>	11.2	9	103	<i>Symplocos setchuenensis</i>	10.7	10.3
22	<i>Symplocos setchuenensis</i>	8.7	8.9	73	<i>Symplocos setchuenensis</i>	6.9	6.9	104	<i>Symplocos setchuenensis</i>	9.7	10.6
24	<i>Symplocos setchuenensis</i>	7.4	10.3	74	<i>Symplocos setchuenensis</i>	12.6	11.8	105	<i>Symplocos setchuenensis</i>	12.4	10.8
25	<i>Symplocos setchuenensis</i>	7.8	10.5	75	<i>Michilus pingii</i>	13.5	14.1				
26	<i>Pinus massoniana</i>	26.3	19	76	<i>Symplocos setchuenensis</i>	13.7	12.8				
27	<i>Castanopsis carlesii</i> var. <i>spinulosa</i>	3.9	6	77	<i>Symplocos setchuenensis</i>	7.9	9.5				
28	<i>Diospyros morrisiana</i>	1.8	3	78	<i>Symplocos setchuenensis</i>	19.3	14.1				
31	<i>Elaeocarpus japonicus</i>	24.8	15.1	79	<i>Symplocos lancifolia</i>	6.4	8.1				
32	<i>Symplocos setchuenensis</i>	3.3	5	80	<i>Michilus pingii</i>	25.5	20.1				
33	<i>Castanopsis carlesii</i> var. <i>spinulosa</i>	40	21.5	81	<i>Michilus pingii</i>	20.2	20.2				
34	<i>Symplocos setchuenensis</i>	10.7	12.1	82	<i>Castanopsis carlesii</i> var. <i>spinulosa</i>	19.6	17.2				
35	<i>Symplocos setchuenensis</i>	9.2	10.3	83	<i>Cunninghamia lanceolata</i>	17.7	14.5				
36	<i>Symplocos lancifolia</i>	8.9	8	84	<i>Symplocos setchuenensis</i>	6.9	6				
39	<i>Randia cochinchinensis</i>	2	2.8	85	<i>Symplocos setchuenensis</i>	10.9	8.2				
40	<i>Symplocos setchuenensis</i>	8.1	9								
41	<i>Symplocos setchuenensis</i>	2.3	4								
43	<i>Castanopsis carlesii</i> var. <i>spinulosa</i>	2.4	4.2								
44	<i>Eurya nitida</i>	3.5	5								
45	<i>Castanopsis carlesii</i> var. <i>spinulosa</i>	2.3	2.9								
46	<i>Castanopsis carlesii</i> var. <i>spinulosa</i>	24.9	20.2								
48	<i>Symplocos setchuenensis</i>	15.7	13.5								
49	<i>Castanopsis carlesii</i> var. <i>spinulosa</i>	2.6	4.3								
51	<i>Castanopsis carlesii</i> var. <i>spinulosa</i>	2.3	2.8								
52	<i>Castanopsis carlesii</i> var. <i>spinulosa</i>	2.1	2.5								
53	<i>Castanopsis carlesii</i> var. <i>spinulosa</i>	4.4	4.5								
54	<i>Randia cochinchinensis</i>	1.7	2.8								
57	<i>Michilus pingii</i>	19.6	18.1								

Table 5.7 a-1-2) Description of trees: Jinyunshan-2 (Chongqing, China)

Name of Plot: Jinyunshan 2#

Date: 10 October 2009

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 > 18 cm)			
Serial No.	Species Name	DBH(cm)	Height(m)	Serial No.	Species Name	DBH(cm)	Height(m)	Serial No.	Species Name	DBH(cm)	Height(m)
2	<i>Eurya loquaniensis</i>	3.2	2.9	39	<i>Michilus pingii</i>	13.6	16.0	50	<i>Elaeocarpus japonicus</i>	44.4	18.9
3	<i>Eurya loquaniensis</i>	3.9	2.4	40	<i>Michilus pingii</i>	31.0	25.0	51	<i>Castanopsis carlesii</i> var. <i>spinulosa</i>	36.0	24.0
6	<i>Michilus pingii</i>	34.7	24.8	41	<i>Adinandra bockiana</i>	18.9	18.2	52	<i>Michilus pingii</i>	29.1	23.4
7	<i>Michilus pingii</i>	26.7	26.1	42	<i>Symplocos lancifolia</i>	15.6	14.5	53	<i>Michilus pingii</i>	30.1	26.9
8	<i>Michilus pingii</i>	23.4	24.5	43	<i>Symplocos setchuenensis</i>	8.8	14.2	54	<i>Michilus pingii</i>	28.4	27.2
12	<i>Michilus pingii</i>	33.2	23.1	44	<i>Symplocos setchuenensis</i>	21.6	20.5	55	<i>Michilus pingii</i>	31.4	28.4
13	<i>Michilus pingii</i>	40.1	26.8	45	<i>Elaeocarpus japonicus</i>	42.0	17.2	56	<i>Michilus pingii</i>	26.1	24.5
15	<i>Symplocos botryantha</i>	5.4	3.7	46	<i>Symplocos setchuenensis</i>	7.5	13.2	57	<i>Michilus pingii</i>	28.9	25.1
18	<i>Symplocos setchuenensis</i>	5.8	4.4	48	<i>Castanopsis carlesii</i> var. <i>spinulosa</i>	6.1	9.8	58	<i>Elaeocarpus japonicus</i>	37.7	18.0
20	<i>Symplocos lancifolia</i>	4.4	7.2	49	<i>Viburnum sambucinum</i> var. <i>tomentosum</i>	9.2	10.2	59	<i>Castanopsis fargesii</i>	52.3	25.6
21	<i>Symplocos setchuenensis</i>	4.1	5.3					61	<i>Symplocos setchuenensis</i>	23.0	14.6
23	<i>Symplocos lancifolia</i>	4.3	5.2					62	<i>Michilus pingii</i>	35.3	28.5
24	<i>Quercus fabri</i>	25.6	22.9					63	<i>Michilus pingii</i>	39.7	28.5
25	<i>Elaeocarpus japonicus</i>	30.3	21.2					65	<i>Michilus pingii</i>	10.9	13.6
26	<i>Symplocos setchuenensis</i>	2.9	3.0					66	<i>Michilus pingii</i>	9.8	12.1
27	<i>Stranvaesia tomentosa</i>	1.3	2.9					67	<i>Symplocos setchuenensis</i>	9.3	9.2
28	<i>Symplocos setchuenensis</i>	4.9	6.2					68	<i>Symplocos setchuenensis</i>	12.5	8.1
32	<i>Eurya loquaniensis</i>	3.1	4.0					69	<i>Michilus pingii</i>	19.7	14.1
33	<i>Symplocos setchuenensis</i>	5.4	4.5					70	<i>Elaeocarpus japonicus</i>	37.8	16.2
35	<i>Symplocos setchuenensis</i>	5.5	6.0					71	<i>Symplocos lancifolia</i>	15.0	12.9
37	<i>Eurya loquaniensis</i>	3.6	4.5					74	<i>Adinandra bockiana</i>	14.8	14.1
								76	<i>Symplocos setchuenensis</i>	24.3	15.2

Table 5.7 a-2) Description of trees: Jiwozi (Dabagou)

Name of Plot: Dabagou

Date: 30 October 2009

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 > 18 cm)

Serial No.	Species Name	DBH(cm)	Height(m)	Serial No.	Species Name	DBH(cm)	Height(m)	Serial No.	Species Name	DBH(cm)	Height(m)
0	<i>Pinus armandi Fanch</i>	19	11	36	<i>Pinus armandi Fanch</i>	10.3	6.8	60	<i>Pinus armandi Fanch</i>	25.8	15.3
1	<i>Pinus armandi Fanch</i>	18	14	37	<i>Pinus armandi Fanch</i>	8.9	8.8	61	<i>Pinus armandi Fanch</i>	24.0	15
2	<i>Larix gmelini Rupr.</i>	10	12.8	38	<i>Larix gmelini Rupr.</i>	9.0	7.5	62	<i>Larix gmelini Rupr.</i>	24.2	15
3	<i>Larix gmelini Rupr.</i>	15.6	13.5	39	<i>Larix gmelini Rupr.</i>	9.2	9.3	63	<i>Pinus armandi Fanch</i>	24.0	16.6
4	<i>Crataegus hupehensis</i>	3	3.5	40	<i>Larix gmelini Rupr.</i>	10.5	9	64	<i>Pinus armandi Fanch</i>	23.0	13
5	<i>Viburnum kansuense</i>	2.5	2.7	41	<i>Quercus aliena var.acuteserrata</i>	7.6	10.2	65	<i>Pinus armandi Fanch</i>	22.5	18.6
6	<i>Viburnum betulifolium</i>	1.7	4.2	42	<i>Larix gmelini Rupr.</i>	10.5	7.6	66	<i>Pinus armandi Fanch</i>	21.5	13.8
7	<i>Rosa omeiensis</i>	1.7	2.1	43	<i>Larix gmelini Rupr.</i>	10.2	8.6				
8	<i>Quercus aliena var.acuteserrata</i>	5	5.5	44	<i>Larix gmelini Rupr.</i>	10.0	11.2				
9	<i>Pinus armandi Fanch</i>	24	15	45	<i>Larix gmelini Rupr.</i>	6.8	9.4				
10	<i>Carpinus cordata</i>	2	3	46	<i>Larix gmelini Rupr.</i>	9.0	8.5				
11	<i>Quercus aliena var.acuteserrata</i>	3.8	5.5	47	<i>Larix gmelini Rupr.</i>	13.5	11.6				
12	<i>Lespedeza formosa</i>	2.5	3	48	<i>Larix gmelini Rupr.</i>	8.5	8.2				
13	<i>Pinus armandi Fanch</i>	24	9	49	<i>Larix gmelini Rupr.</i>	26.5	14				
14	<i>Pinus armandi Fanch</i>	22	12	50	<i>Larix gmelini Rupr.</i>	6.4	8.8				
15	<i>Pinus armandi Fanch</i>	16	9	51	<i>Pinus armandi Fanch</i>	14.5	8.3				
16	<i>Pinus armandi Fanch</i>	15	17.5	52	<i>Larix gmelini Rupr.</i>	6.5	7.5				
17	<i>Quercus aliena var.acuteserrata</i>	3.8	5.8	53	<i>Larix gmelini Rupr.</i>	6.2	8.2				
18	<i>Elaeagnus henryi</i>	5.5	7.3	54	<i>Larix gmelini Rupr.</i>	6.0	7.5				
19	<i>Pinus armandi Fanch</i>	13.4	11	55	<i>Larix gmelini Rupr.</i>	6.4	7.2				
20	<i>Larix gmelini Rupr.</i>	9.9	8.5	56	<i>Pinus armandi Fanch</i>	26.5	18.1				
21	<i>Acer grosseri</i>	5	6	57	<i>Larix gmelini Rupr.</i>	6.5	7.2				
22	<i>Carpinus cordata</i>	4.5	5	58	<i>Larix gmelini Rupr.</i>	17.8	15.8				
23	<i>Larix gmelini Rupr.</i>	20.5	12.7	59	<i>Pinus armandi Fanch</i>	23.0	14				
24	<i>Larix gmelini Rupr.</i>	23.4	14.4								
25	<i>Larix gmelini Rupr.</i>	11.8	11.6								
26	<i>Quercus aliena var.acuteserrata</i>	5	7.5								
27	<i>Quercus aliena var.acuteserrata</i>	4.8	6.2								
28	<i>Larix gmelini Rupr.</i>	14.5	12.5								
29	<i>Berberis</i>	1.8	3								
30	<i>Larix gmelini Rupr.</i>	8	9.1								
31	<i>Acer grosseri</i>	3.5	6.7								
32	<i>Prunus venosa</i>	3.3	7.1								
33	<i>Celastrus orbiculatus Thunb</i>	4.2	9								
34	<i>Quercus aliena var.acuteserrata</i>	3.8	5.8								
35	<i>Pinus armandi Fanch</i>	23.5	12.7								

Table 5.7 a-3) Description of trees: Xiaoping (China)

Name of Plot: XPZ-01

Date: 23 September 2009

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 > 18 cm)

Serial No.	Species Name	DBH(cm)	Height(m)	Serial No.	Species Name	DBH(cm)	Height(m)	Serial No.	Species Name	DBH(cm)	Height(m)
101	<i>Michelia.Macclurei Dandy</i>	19.4	15.4	201	<i>Michelia.Macclurei Dandy</i>	21.7	15.2	301	<i>Michelia.Macclurei Dandy</i>	20.0	17.5
102	<i>Michelia.Macclurei Dandy</i>	13.1	5.5	202	<i>Michelia.Macclurei Dandy</i>	14.7	8.5	302	<i>Michelia.Macclurei Dandy</i>	15.6	5.7
103	<i>Michelia.Macclurei Dandy</i>	20.7	16.2	203	<i>Michelia.Macclurei Dandy</i>	21.5	16.4	303	<i>Michelia.Macclurei Dandy</i>	23.5	15.6
104	<i>Michelia.Macclurei Dandy</i>	23.2	15.7	204	<i>Michelia.Macclurei Dandy</i>	5.7	6.8	304	(dead)		
105	(dead)			205	<i>Michelia.Macclurei Dandy</i>	16.7	10.8	305	<i>Michelia.Macclurei Dandy</i>	23.7	19
106	<i>Michelia.Macclurei Dandy</i>	19.8	14.7	206	<i>Michelia.Macclurei Dandy</i>	12.8	10.8	306	<i>Michelia.Macclurei Dandy</i>	21.1	16.5
107	<i>Michelia.Macclurei Dandy</i>	13.2	9.4	207	<i>Michelia.Macclurei Dandy</i>	21.6	17.8	307	<i>Michelia.Macclurei Dandy</i>	21.0	16.2
108	<i>Michelia.Macclurei Dandy</i>	14.5	8.8	208	<i>Michelia.Macclurei Dandy</i>	15.3	9.6	308	<i>Michelia.Macclurei Dandy</i>	30.1	19.2
109	<i>Michelia.Macclurei Dandy</i>	18.6	16.3	209	<i>Michelia.Macclurei Dandy</i>	13.5	11.5	309	<i>Michelia.Macclurei Dandy</i>	21.4	16.9
110	<i>Michelia.Macclurei Dandy</i>	5	8.1	210	<i>Michelia.Macclurei Dandy</i>	20.8	16.5	310	<i>Michelia.Macclurei Dandy</i>	20.3	16.9
111	(dead)			211	<i>Michelia.Macclurei Dandy</i>	19.4	18.3	311	<i>Michelia.Macclurei Dandy</i>	13.0	7.5
112	<i>Michelia.Macclurei Dandy</i>	14	9.3	212	<i>Michelia.Macclurei Dandy</i>	15.7	10.6	312	<i>Michelia.Macclurei Dandy</i>	14.2	11.2
113	<i>Michelia.Macclurei Dandy</i>	18.6	15.5	213	<i>Michelia.Macclurei Dandy</i>	23.7	16.5	313	<i>Michelia.Macclurei Dandy</i>	21.4	16.4
114	<i>Michelia.Macclurei Dandy</i>	14.5	9.5	214	<i>Michelia.Macclurei Dandy</i>	22.4	17.3	314	<i>Michelia.Macclurei Dandy</i>	20.3	16.8
115	<i>Michelia.Macclurei Dandy</i>	14.6	8.4	215	<i>Sapimsebiferum</i>	11.8	9.8	315	<i>Michelia.Macclurei Dandy</i>	15.6	9.8
116	<i>Michelia.Macclurei Dandy</i>	19.8	17.2	216	<i>Michelia.Macclurei Dandy</i>	22.6	17.9	316	<i>Michelia.Macclurei Dandy</i>	22.1	16.6
117	<i>Michelia.Macclurei Dandy</i>	18.5	16.8	217	<i>Michelia.Macclurei Dandy</i>	19.8	17.8	317	(dead)		
118	<i>Michelia.Macclurei Dandy</i>	12.8	7.5	218	<i>Schima Su-perba Gardn.et Champ</i>	11.1	12.8	318	<i>Schima Su-perba Gardn.et Champ</i>	10.0	11.5
119	<i>Michelia.Macclurei Dandy</i>	16.2	10.5	219	<i>Michelia.Macclurei Dandy</i>	17.1	17.7	319	<i>Michelia.Macclurei Dandy</i>	14.8	11.2
120	<i>Michelia.Macclurei Dandy</i>	17.2	15.5	220	<i>Michelia.Macclurei Dandy</i>	18.2	17.7	320	<i>Michelia.Macclurei Dandy</i>	15.3	12.3
				221	<i>Michelia.Macclurei Dandy</i>	22.8	18.2	321	<i>Michelia.Macclurei Dandy</i>	15.4	11.8
				222	(dead)			322	<i>Michelia.Macclurei Dandy</i>	18.0	15.5
				223	<i>Michelia.Macclurei Dandy</i>	18.8	16.3	323	<i>Pinus Massoniana</i>	8.6	11.3
				224	<i>Michelia.Macclurei Dandy</i>	14.5	8.6	324	<i>Michelia.Macclurei Dandy</i>	9.2	10.5
				225	<i>Michelia.Macclurei Dandy</i>	24.7	17.7	325	<i>Michelia.Macclurei Dandy</i>	21.7	16.3
				226	<i>Alnus rubra</i>	3.2	4.2	326	<i>Michelia.Macclurei Dandy</i>	20.8	16.8
				227	<i>Michelia.Macclurei Dandy</i>	21.2	18.3	327	(dead)		
								328	<i>Michelia.Macclurei Dandy</i>	17.2	15.8
								329	<i>Michelia.Macclurei Dandy</i>	21.4	16.8
								330	<i>Michelia.Macclurei Dandy</i>	14.9	7.8
								331	<i>Michelia.Macclurei Dandy</i>	22.7	16.2
								332	<i>Michelia.Macclurei Dandy</i>	14.2	10.9
								333	<i>Michelia.Macclurei Dandy</i>	18.7	18.9
								334	<i>Michelia.Macclurei Dandy</i>	20.4	17.7
								335	<i>Michelia.Macclurei Dandy</i>	13.7	11.8
								336	<i>Michelia.Macclurei Dandy</i>	4.2	4.5
								337	<i>Michelia.Macclurei Dandy</i>	20.3	17.9
								338	<i>Michelia.Macclurei Dandy</i>	20.4	16.3
								339	<i>Michelia.Macclurei Dandy</i>	14.5	11.8
								340	<i>Michelia.Macclurei Dandy</i>	20.1	15.6

Table 5.7 a-4-1) Description of trees: Zhuxiandong-1

Name of Plot: No.1 plot of Zhuhai (Mixed forest of *Pinus elliptica* and *Acacia confusa*)

Date: 29 November 2009

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 > 18 cm)

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>Ficus variolosa</i> Lindl. ex Benth.	< 2	2.5	1	<i>Ficus variolosa</i> Lindl. ex Benth.	4.3	2.5	1	<i>Pinus massoniana</i> Lamb.	22.7	9.3
2	<i>Ficus variolosa</i> Lindl. ex Benth.	4.3	2.5	2	<i>Litsea rotundifolia</i> Hemsl. var. <i>Oblongifolia</i> (Nees) Allen	16.1	6.3	2	<i>Pinus elliptica</i> Engelm.	22.0	8.5
3	<i>Ficus variolosa</i> Lindl. ex Benth.	< 2	2.3	3	<i>Litsea rotundifolia</i> Hemsl. var. <i>Oblongifolia</i> (Nees) Allen	13.6	3.6	3	<i>Pinus elliptica</i> Engelm.	18.7	8
4	<i>Ficus variolosa</i> Lindl. ex Benth.	2	3.6	4	<i>Litsea rotundifolia</i> Hemsl. var. <i>Oblongifolia</i> (Nees) Allen	23.2	3.8	4	<i>Pinus elliptica</i> Engelm.	24.2	7
5	<i>Ficus variolosa</i> Lindl. ex Benth.	2.6	1.7	5	<i>Cratogeomys cochinchinense</i> (Lour.) Bl.	4.3	5.6	5	<i>Pinus elliptica</i> Engelm.	18.1	4.5
6	<i>Litsea rotundifolia</i> Hemsl. var. <i>Oblongifolia</i> (Nees) Allen	7.7	3.7	6	<i>Cratogeomys cochinchinense</i> (Lour.) Bl.	6.8	5.5	6	<i>Pinus elliptica</i> Engelm.	19.3	5.3
7	<i>Litsea rotundifolia</i> Hemsl. var. <i>Oblongifolia</i> (Nees) Allen	< 2	2.5	7	<i>Cratogeomys cochinchinense</i> (Lour.) Bl.	5.6	6.8	7	<i>Pinus elliptica</i> Engelm.	19.8	5.5
8	<i>Litsea rotundifolia</i> Hemsl. var. <i>Oblongifolia</i> (Nees) Allen	10.7	5	8	<i>Cratogeomys cochinchinense</i> (Lour.) Bl.	5.5	5.5	8	<i>Pinus elliptica</i> Engelm.	18.3	5.5
9	<i>Litsea rotundifolia</i> Hemsl. var. <i>Oblongifolia</i> (Nees) Allen	< 2	1.8	9	<i>Archidendron lucidum</i> (Benth.) Nielsen	16.5	9.5	9	<i>Pinus elliptica</i> Engelm.	34.2	10.6
10	<i>Litsea rotundifolia</i> Hemsl. var. <i>Oblongifolia</i> (Nees) Allen	9.4	4	10	<i>Pinus massoniana</i> Lamb.	10.6	10.3	10	<i>Pinus elliptica</i> Engelm.	28.9	14
11	<i>Litsea rotundifolia</i> Hemsl. var. <i>Oblongifolia</i> (Nees) Allen	6.9	3.3	11	<i>Pinus massoniana</i> Lamb.	13.1	10.8	11	<i>Pinus elliptica</i> Engelm.	26.7	14
12	<i>Litsea rotundifolia</i> Hemsl. var. <i>Oblongifolia</i> (Nees) Allen	16.9	3.6	12	<i>Pinus massoniana</i> Lamb.	22.7	9.3	12	<i>Pinus elliptica</i> Engelm.	21.7	11
13	<i>Litsea rotundifolia</i> Hemsl. var. <i>Oblongifolia</i> (Nees) Allen	< 2	2.7	13	<i>Pinus massoniana</i> Lamb.	15.6	10.5	13	<i>Pinus elliptica</i> Engelm.	19.9	7
14	<i>Litsea rotundifolia</i> Hemsl. var. <i>Oblongifolia</i> (Nees) Allen	2.8	2.5	14	<i>Microcos paniculata</i> L.	8.1	5.9	14	<i>Pinus elliptica</i> Engelm.	19.5	8
15	<i>Litsea rotundifolia</i> Hemsl. var. <i>Oblongifolia</i> (Nees) Allen	2	3.2	15	<i>Pinus elliptica</i> Engelm.	12.8	8.6	15	<i>Pinus elliptica</i> Engelm.	19.3	15
16	<i>Litsea rotundifolia</i> Hemsl. var. <i>Oblongifolia</i> (Nees) Allen	< 2	2.1	16	<i>Pinus elliptica</i> Engelm.	16.2	11	16	<i>Pinus elliptica</i> Engelm.	18.1	14
17	<i>Litsea rotundifolia</i> Hemsl. var. <i>Oblongifolia</i> (Nees) Allen	2.1	1.4	17	<i>Pinus elliptica</i> Engelm.	12.7	8	17	<i>Acacia confusa</i> Merr.	18.1	5.5
18	<i>Litsea rotundifolia</i> Hemsl. var. <i>Oblongifolia</i> (Nees) Allen	< 2	3	18	<i>Pinus elliptica</i> Engelm.	26.7	14	18	<i>Acacia confusa</i> Merr.	32.1	8
19	<i>Litsea rotundifolia</i> Hemsl. var. <i>Oblongifolia</i> (Nees) Allen	2.3	2.8	19	<i>Pinus elliptica</i> Engelm.	13.7	10.1	19	<i>Acacia confusa</i> Merr.	19.1	8
20	<i>Litsea rotundifolia</i> Hemsl. var. <i>Oblongifolia</i> (Nees) Allen	26.4	3.8	20	<i>Pinus elliptica</i> Engelm.	34.2	10.6	20	<i>Acacia confusa</i> Merr.	18.1	6.5
21	<i>Litsea rotundifolia</i> Hemsl. var. <i>Oblongifolia</i> (Nees) Allen	6.2	2.3	21	<i>Pinus elliptica</i> Engelm.	13.4	13.5	21	<i>Acacia confusa</i> Merr.	45.8	8.5
22	<i>Litsea rotundifolia</i> Hemsl. var. <i>Oblongifolia</i> (Nees) Allen	< 2	2.3	22	<i>Pinus elliptica</i> Engelm.	18.1	14	22	<i>Acacia confusa</i> Merr.	18.5	10.6
23	<i>Litsea rotundifolia</i> Hemsl. var. <i>Oblongifolia</i> (Nees) Allen	< 2	2.6	23	<i>Pinus elliptica</i> Engelm.	15.9	13	23	<i>Acacia confusa</i> Merr.	18.3	6
24	<i>Litsea rotundifolia</i> Hemsl. var. <i>Oblongifolia</i> (Nees) Allen	< 2	2.6	24	<i>Pinus elliptica</i> Engelm.	19.3	15				
25	<i>Litsea glutinosa</i> (Lour.) C. B. Rob.	< 2	2	25	<i>Pinus elliptica</i> Engelm.	28.9	14				
26	<i>Raphiolepis indica</i> (L.) Lindl.	< 2	1.8	26	<i>Pinus elliptica</i> Engelm.	21.7	11				
27	<i>Raphiolepis indica</i> (L.) Lindl.	< 2	1.1	27	<i>Pinus elliptica</i> Engelm.	16.4	12				
28	<i>Raphiolepis indica</i> (L.) Lindl.	2.1	2.8	28	<i>Pinus elliptica</i> Engelm.	19.9	7				
29	<i>Glochidion lanceolarium</i> (Roxb.) Voigt.	3.7	4.5	29	<i>Pinus elliptica</i> Engelm.	16.3	11.5				
30	<i>Fagerlindia depauperata</i> (Drake) Tirveng.	2.1	1.7	30	<i>Pinus elliptica</i> Engelm.	19.5	8				
31	<i>Fagerlindia depauperata</i> (Drake) Tirveng.	< 2	1.7	31	<i>Wendlandia uvariifolia</i> Hance	5.8	5				
32	<i>Fagerlindia depauperata</i> (Drake) Tirveng.	< 2	1.5	32	<i>Acacia confusa</i> Merr.	18.5	10.6				
33	<i>Fagerlindia depauperata</i> (Drake) Tirveng.	< 2	3	33	<i>Acacia confusa</i> Merr.	9.1	8.4				
34	<i>Psychotria asiatica</i> L.	2.4	2.6	34	<i>Acacia confusa</i> Merr.	11.5	11.2				
35	<i>Zanthoxylum avicennae</i> (Lam.) DC.	2.7	3.5	35	<i>Acacia confusa</i> Merr.	18.3	6				
36	<i>Zanthoxylum nitidum</i> (Roxb.) DC.	< 2	4	36	<i>Eurya nitida</i> Korthals	4.5	5				
37	<i>Ilex asprella</i> (Hook. et Arn.) Champ. ex Benth.	4	2	37	<i>Schefflera heptaphylla</i> (L.) Frodin	4.1	3.3				
38	<i>Ilex asprella</i> (Hook. et Arn.) Champ. ex Benth.	< 2	1.6	38	<i>Schefflera heptaphylla</i> (L.) Frodin	4.3	3.3				
39	<i>Ilex asprella</i> (Hook. et Arn.) Champ. ex Benth.	2.1	1.6	39	<i>Schefflera heptaphylla</i> (L.) Frodin	4.6	3.3				
40	<i>Ilex asprella</i> (Hook. et Arn.) Champ. ex Benth.	2.7	2.5	40	<i>Schefflera heptaphylla</i> (L.) Frodin	13.7	4				
41	<i>Ilex asprella</i> (Hook. et Arn.) Champ. ex Benth.	2.1	2.3	41	<i>Strophanthus divaricatus</i> (Lour.) Hook. et Arn.	4.1	8.6				
42	<i>Ilex asprella</i> (Hook. et Arn.) Champ. ex Benth.	4	3.5	42	<i>Strophanthus divaricatus</i> (Lour.) Hook. et Arn.	5.3	9				
43	<i>Ilex asprella</i> (Hook. et Arn.) Champ. ex Benth.	2.2	1.9	43	<i>Toxicodendron sylvestris</i> (Sieb. et Zucc.) Tardieu	6.4	4				
44	<i>Ilex asprella</i> (Hook. et Arn.) Champ. ex Benth.	12.8	2.5	44	<i>Toxicodendron sylvestris</i> (Sieb. et Zucc.) Tardieu	4.3	7.3				
45	<i>Toxicodendron sylvestris</i> (Sieb. et Zucc.) Tardieu	2	1.5								
46	<i>Toxicodendron sylvestris</i> (Sieb. et Zucc.) Tardieu	2.3	2.5								
47	<i>Toxicodendron sylvestris</i> (Sieb. et Zucc.) Tardieu	2	1.5								
48	<i>Pinus elliptica</i> Engelm.	2.1	3.7								
49	<i>Pinus elliptica</i> Engelm.	13.4	13.5								
50	<i>Pinus elliptica</i> Engelm.	18	14								
51	<i>Pinus elliptica</i> Engelm.	15.9	13								
52	<i>Pinus elliptica</i> Engelm.	19.3	15								
53	<i>Pinus elliptica</i> Engelm.	28.9	14								
54	<i>Pinus elliptica</i> Engelm.	21.7	11								
55	<i>Pinus elliptica</i> Engelm.	16.4	12								
56	<i>Pinus elliptica</i> Engelm.	19.9	7								
57	<i>Pinus elliptica</i> Engelm.	16.3	11.5								
58	<i>Pinus elliptica</i> Engelm.	19.5	8								
59	<i>Wendlandia uvariifolia</i> Hance	5.8	5								
60	<i>Acacia confusa</i> Merr.	18.3	6								
61	<i>Ficus hirta</i> Vahl	< 2	2.7								
62	<i>Ficus hirta</i> Vahl	< 2	1.4								
63	<i>Ficus hirta</i> Vahl	< 2	1.9								
64	<i>Ficus variolosa</i> Lindl. ex Benth.	4.5	5								
65	<i>Ficus variolosa</i> Lindl. ex Benth.	6.9	3								
66	<i>Ficus variolosa</i> Lindl. ex Benth.	14.2	3.3								
67	<i>Ficus variolosa</i> Lindl. ex Benth.	< 2	2.2								
68	<i>Ficus variolosa</i> Lindl. ex Benth.	17.4	4								
69	<i>Litsea rotundifolia</i> Hemsl. var. <i>Oblongifolia</i> (Nees) Allen	5.3	9								
70	<i>Litsea rotundifolia</i> Hemsl. var. <i>Oblongifolia</i> (Nees) Allen	< 2	1.6								
71	<i>Litsea rotundifolia</i> Hemsl. var. <i>Oblongifolia</i> (Nees) Allen	2.2	7								
72	<i>Litsea rotundifolia</i> Hemsl. var. <i>Oblongifolia</i> (Nees) Allen	< 2	2.5								
73	<i>Litsea rotundifolia</i> Hemsl. var. <i>Oblongifolia</i> (Nees) Allen	2	1.8								
74	<i>Litsea rotundifolia</i> Hemsl. var. <i>Oblongifolia</i> (Nees) Allen	< 2	1.6								

Table 5.7 a-4-2) Description of trees: Zhuxiandong-2

Name of Plot: No.2 plot of Zhuhai (Acacia confusa forest)

Date: 28 November 2009

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 > 18 cm)

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>Mallotus paniculatus</i> (Lam.) Muell. Arg.	<2	2.0	1	<i>Syzygium levinei</i> (Merr.) Merr.	11.0	6.5	1	<i>Acacia confusa</i> Merr.	36.6	6.5
2	<i>Mallotus paniculatus</i> (Lam.) Muell. Arg.	8.8	5.0	2	<i>Mallotus paniculatus</i> (Lam.) Muell. Arg.	8.3	8.8	2	<i>Acacia confusa</i> Merr.	23.3	8.0
3	<i>Mallotus paniculatus</i> (Lam.) Muell. Arg.	10.2	6.3	3	<i>Mallotus paniculatus</i> (Lam.) Muell. Arg.	8.8	5.0	3	<i>Acacia confusa</i> Merr.	31.8	7.5
4	<i>Litsea rotundifolia</i> Hemsl. var. <i>oblongifolia</i> (Nees) Allen	2.5	4.0	4	<i>Mallotus paniculatus</i> (Lam.) Muell. Arg.	10.2	6.3	4	<i>Acacia confusa</i> Merr.	57.6	7.5
5	<i>Litsea rotundifolia</i> Hemsl. var. <i>oblongifolia</i> (Nees) Allen	25.4	4.5	5	<i>Litsea rotundifolia</i> Hemsl. var. <i>oblongifolia</i> (Nees) Allen	4.1	4.7	5	<i>Acacia confusa</i> Merr.	31.5	8.0
6	<i>Litsea rotundifolia</i> Hemsl. var. <i>oblongifolia</i> (Nees) Allen	6.5	3.2	6	<i>Litsea rotundifolia</i> Hemsl. var. <i>oblongifolia</i> (Nees) Allen	4.8	—	6	<i>Acacia confusa</i> Merr.	59.5	6.5
7	<i>Litsea rotundifolia</i> Hemsl. var. <i>oblongifolia</i> (Nees) Allen	<2	2.5	7	<i>Litsea rotundifolia</i> Hemsl. var. <i>oblongifolia</i> (Nees) Allen	4.0	4.1	7	<i>Acacia confusa</i> Merr.	26.2	10.9
8	<i>Litsea rotundifolia</i> Hemsl. var. <i>oblongifolia</i> (Nees) Allen	<2	3.8	8	<i>Litsea rotundifolia</i> Hemsl. var. <i>oblongifolia</i> (Nees) Allen	13.2	4.0				
9	<i>Litsea rotundifolia</i> Hemsl. var. <i>oblongifolia</i> (Nees) Allen	3.7	4.8	9	<i>Litsea rotundifolia</i> Hemsl. var. <i>oblongifolia</i> (Nees) Allen	9.8	4.3				
10	<i>Litsea rotundifolia</i> Hemsl. var. <i>oblongifolia</i> (Nees) Allen	2.3	2.3	10	<i>Litsea rotundifolia</i> Hemsl. var. <i>oblongifolia</i> (Nees) Allen	6.5	3.2				
11	<i>Litsea rotundifolia</i> Hemsl. var. <i>oblongifolia</i> (Nees) Allen	2.3	3.2	11	<i>Litsea rotundifolia</i> Hemsl. var. <i>oblongifolia</i> (Nees) Allen	4.5	5.0				
12	<i>Litsea rotundifolia</i> Hemsl. var. <i>oblongifolia</i> (Nees) Allen	<2	2.8	12	<i>Litsea rotundifolia</i> Hemsl. var. <i>oblongifolia</i> (Nees) Allen	4.5	3.1				
13	<i>Litsea rotundifolia</i> Hemsl. var. <i>oblongifolia</i> (Nees) Allen	<2	2.5	13	<i>Litsea rotundifolia</i> Hemsl. var. <i>oblongifolia</i> (Nees) Allen	4.1	3.5				
14	<i>Litsea rotundifolia</i> Hemsl. var. <i>oblongifolia</i> (Nees) Allen	2.5	3.5	14	<i>Fagerlindia depauperata</i> (Drake) Tirveng.	4.3	6.0				
15	<i>Litsea rotundifolia</i> Hemsl. var. <i>oblongifolia</i> (Nees) Allen	2.6	3.5	15	<i>Scolopia saeva</i> (Hance) Hance	4.5	4.3				
16	<i>Litsea rotundifolia</i> Hemsl. var. <i>oblongifolia</i> (Nees) Allen	20.4	3.7	16	<i>Archidendron lucidum</i> (Benth.) Nielsen	9.3	5.7				
17	<i>Litsea rotundifolia</i> Hemsl. var. <i>oblongifolia</i> (Nees) Allen	2.5	4.0	17	<i>Archidendron lucidum</i> (Benth.) Nielsen	9.2	10.0				
18	<i>Litsea rotundifolia</i> Hemsl. var. <i>oblongifolia</i> (Nees) Allen	2.8	3.8	18	<i>Archidendron lucidum</i> (Benth.) Nielsen	7.2	6.5				
19	<i>Litsea rotundifolia</i> Hemsl. var. <i>oblongifolia</i> (Nees) Allen	<2	2.7	19	<i>Archidendron lucidum</i> (Benth.) Nielsen	9.2	9.0				
20	<i>Litsea rotundifolia</i> Hemsl. var. <i>oblongifolia</i> (Nees) Allen	15.6	4.0	20	<i>Microcos paniculata</i> L.	4.7	5.0				
21	<i>Litsea rotundifolia</i> Hemsl. var. <i>oblongifolia</i> (Nees) Allen	<2	4.0	21	<i>Microcos paniculata</i> L.	5.1	5.5				
22	<i>Litsea rotundifolia</i> Hemsl. var. <i>oblongifolia</i> (Nees) Allen	4.5	5.0	22	<i>Microcos paniculata</i> L.	6.7	7.2				
23	<i>Litsea rotundifolia</i> Hemsl. var. <i>oblongifolia</i> (Nees) Allen	5.2	3.5	23	<i>Microcos paniculata</i> L.	13.2	4.2				
24	<i>Litsea rotundifolia</i> Hemsl. var. <i>oblongifolia</i> (Nees) Allen	15.2	3.1	24	<i>Microcos paniculata</i> L.	7.3	5.9				
25	<i>Litsea rotundifolia</i> Hemsl. var. <i>oblongifolia</i> (Nees) Allen	<2	3.2	25	<i>Microcos paniculata</i> L.	4.0	4.5				
26	<i>Litsea rotundifolia</i> Hemsl. var. <i>oblongifolia</i> (Nees) Allen	<2	3.5	26	<i>Microcos paniculata</i> L.	7.1	6.5				
27	<i>Litsea rotundifolia</i> Hemsl. var. <i>oblongifolia</i> (Nees) Allen	7.0	3.5	27	<i>Microcos paniculata</i> L.	6.8	4.3				
28	<i>Litsea rotundifolia</i> Hemsl. var. <i>oblongifolia</i> (Nees) Allen	<2	2.5	28	<i>Microcos paniculata</i> L.	5.3	3.5				
29	<i>Litsea rotundifolia</i> Hemsl. var. <i>oblongifolia</i> (Nees) Allen	5.5	4.4	29	<i>Microcos paniculata</i> L.	4.9	3.2				
30	<i>Litsea rotundifolia</i> Hemsl. var. <i>oblongifolia</i> (Nees) Allen	<2	2.6	30	<i>Machilus velutina</i> Champ. ex Benth.	4.6	6.2				
31	<i>Litsea rotundifolia</i> Hemsl. var. <i>oblongifolia</i> (Nees) Allen	5.0	3.1	31	<i>Machilus velutina</i> Champ. ex Benth.	5.4	7.9				
32	<i>Litsea rotundifolia</i> Hemsl. var. <i>oblongifolia</i> (Nees) Allen	<2	2.0	32	<i>Acacia confusa</i> Merr.	4.8	3.9				
33	<i>Litsea rotundifolia</i> Hemsl. var. <i>oblongifolia</i> (Nees) Allen	2.3	1.2	33	<i>Acacia confusa</i> Merr.	7.3	5.8				
34	<i>Litsea rotundifolia</i> Hemsl. var. <i>oblongifolia</i> (Nees) Allen	8.8	2.6	34	<i>Acacia confusa</i> Merr.	8.2	12.0				
35	<i>Litsea rotundifolia</i> Hemsl. var. <i>oblongifolia</i> (Nees) Allen	2.5	3.7	35	<i>Acacia confusa</i> Merr.	5.0	7.5				
36	<i>Litsea rotundifolia</i> Hemsl. var. <i>oblongifolia</i> (Nees) Allen	6.2	2.8	36	<i>Acacia confusa</i> Merr.	6.2	11.0				
37	<i>Litsea rotundifolia</i> Hemsl. var. <i>oblongifolia</i> (Nees) Allen	<2	2.0	37	<i>Acacia confusa</i> Merr.	4.6	5.3				
38	<i>Litsea rotundifolia</i> Hemsl. var. <i>oblongifolia</i> (Nees) Allen	2.0	3.8	38	<i>Acacia confusa</i> Merr.	12.8	7.5				
39	<i>Litsea rotundifolia</i> Hemsl. var. <i>oblongifolia</i> (Nees) Allen	6.9	3.4	39	<i>Acacia confusa</i> Merr.	5.5	6.5				
40	<i>Litsea rotundifolia</i> Hemsl. var. <i>oblongifolia</i> (Nees) Allen	<2	2.6	40	<i>Acacia confusa</i> Merr.	5.8	5.5				
41	<i>Litsea rotundifolia</i> Hemsl. var. <i>oblongifolia</i> (Nees) Allen	2.2	3.5	41	<i>Acacia confusa</i> Merr.	4.7	6.0				
42	<i>Litsea rotundifolia</i> Hemsl. var. <i>oblongifolia</i> (Nees) Allen	2.0	3.2	42	<i>Acacia confusa</i> Merr.	16.7	10.5				
43	<i>Litsea rotundifolia</i> Hemsl. var. <i>oblongifolia</i> (Nees) Allen	<2	2.8	43	<i>Acacia confusa</i> Merr.	8.0	4.2				
44	<i>Litsea rotundifolia</i> Hemsl. var. <i>oblongifolia</i> (Nees) Allen	2.5	3.5	44	<i>Acacia confusa</i> Merr.	7.3	4.0				
45	<i>Litsea rotundifolia</i> Hemsl. var. <i>oblongifolia</i> (Nees) Allen	<2	2.0	45	<i>Acacia confusa</i> Merr.	8.8	8.5				
46	<i>Litsea rotundifolia</i> Hemsl. var. <i>oblongifolia</i> (Nees) Allen	<2	0.7	46	<i>Acacia confusa</i> Merr.	14.0	11.5				
47	<i>Litsea glutinosa</i> (Lour.) C. B. Rob.	3.0	2.6	47	<i>Acacia confusa</i> Merr.	9.2	7.5				
48	<i>Fagerlindia depauperata</i> (Drake) Tirveng.	4.3	6.0	48	<i>Acacia confusa</i> Merr.	4.4	7.2				
49	<i>Fagerlindia depauperata</i> (Drake) Tirveng.	<2	2.7	49	<i>Acacia confusa</i> Merr.	3.8	11.2				
50	<i>Fagerlindia depauperata</i> (Drake) Tirveng.	<2	2.2	50	<i>Acacia confusa</i> Merr.	11.4	10.9				
51	<i>Fagerlindia depauperata</i> (Drake) Tirveng.	2.3	4.5	51	<i>Acacia confusa</i> Merr.	7.8	—				
52	<i>Fagerlindia depauperata</i> (Drake) Tirveng.	2.8	2.5	52	<i>Acacia confusa</i> Merr.	9.5	9.6				
53	<i>Fagerlindia depauperata</i> (Drake) Tirveng.	4.4	3.0	53	<i>Acacia confusa</i> Merr.	5.5	—				
54	<i>Syzygium levinei</i> (Merr.) Merr.	11.0	6.5	54	<i>Acacia confusa</i> Merr.	6.7	8.3				
55	<i>Elaeagnus pungens</i> Thunb	<2	5.5	55	<i>Acacia confusa</i> Merr.	4.5	7.1				
56	<i>Cratogeomys cochinchinensis</i> (Lour.) Bl.	2.2	3.8	56	<i>Acacia confusa</i> Merr.	9.4	11.3				
57	<i>Cratogeomys cochinchinensis</i> (Lour.) Bl.	4.5	2.4	57	<i>Acacia confusa</i> Merr.	7.5	9.4				
58	<i>Desmos chinensis</i> Lour.	4.0	9.0	58	<i>Acacia confusa</i> Merr.	7.8	8.7				
59	<i>Archidendron lucidum</i> (Benth.) Nielsen	7.2	6.5	59	<i>Acacia confusa</i> Merr.	13.8	10.5				
60	<i>Archidendron lucidum</i> (Benth.) Nielsen	9.2	9.0	60	<i>Acacia confusa</i> Merr.	5.4	7.5				
61	<i>Archidendron lucidum</i> (Benth.) Nielsen	<2	2.1	61	<i>Acacia confusa</i> Merr.	36.5	12.6				
62	<i>Ilex asprella</i> (Hook. et Arn.) Champ. ex Benth.	8.5	2.8	62	<i>Acacia confusa</i> Merr.	26.9	11.6				
63	<i>Ilex asprella</i> (Hook. et Arn.) Champ. ex Benth.	<2	1.8	63	<i>Acacia confusa</i> Merr.	4.9	—				
64	<i>Microcos paniculata</i> L.	7.1	6.5	64	<i>Acacia confusa</i> Merr.	26.2	10.9				
65	<i>Microcos paniculata</i> L.	<2	1.5	65	<i>Acacia confusa</i> Merr.	16.2	12.2				
66	<i>Microcos paniculata</i> L.	<2	1.8	66	<i>Acacia confusa</i> Merr.	6.3	6.9				
67	<i>Microcos paniculata</i> L.	3.2	1.9	67	<i>Acacia confusa</i> Merr.	6.3	11.7				
68	<i>Microcos paniculata</i> L.	1.7	3.8	68	<i>Acacia confusa</i> Merr.	7.8	11.5				
69	<i>Microcos paniculata</i> L.	6.8	4.3	69	<i>Acacia confusa</i> Merr.	13.4	11.5				
70	<i>Microcos paniculata</i> L.	5.3	3.5	70	<i>Acacia confusa</i> Merr.	5.7	5.5				
71	<i>Microcos paniculata</i> L.	3.8	4.1	71	<i>Acacia confusa</i> Merr.	4.3	5.6				
72	<i>Microcos paniculata</i> L.	7.2	3.2	72	<i>Acacia confusa</i> Merr.	11.1	12.5				
73	<i>Microcos paniculata</i> L.	<2	1.6	73	<i>Acacia confusa</i> Merr.	12.9	15.5				
74	<i>Microcos paniculata</i> L.	<2	3.3	74	<i>Acacia confusa</i> Merr.	5.4	7.5				
75	<i>Indocalamus tessellatus</i> (Munro) Keng. f.	0.2	1.6	75	<i>Acacia confusa</i> Merr.	12.0	12.5				
76	<i>Acacia confusa</i> Merr.	7.8	11.5	76	<i>Acacia confusa</i> Merr.	9.0	10.0				
77	<i>Acacia confusa</i> Merr.	13.4	11.5	77	<i>Acacia confusa</i> Merr.	12.0	12.0				
78	<i>Acacia confusa</i> Merr.	5.7	5.5	78	<i>Acacia confusa</i> Merr.	8.5	9.0				
79	<i>Acacia confusa</i> Merr.	4.3	5.6	79	<i>Acacia confusa</i> Merr.	6.9	5.0				
80	<i>Acacia confusa</i> Merr.	11.1	12.5	80	<i>Acacia confusa</i> Merr.	15.6	6.0				
81	<i>Acacia confusa</i> Merr.	12.9	15.5	81	<i>Acacia confusa</i> Merr.	9.3	5.5				
82	<i>Acacia confusa</i> Merr.	5.4	7.5	82	<i>Acacia confusa</i> Merr.	10.9	4.5				
83	<i>Acacia confusa</i> Merr.	3.7	5.0	83	<i>Bridelia tomentosa</i> Bl.	5.9	7.5				
84	<i>Acacia confusa</i> Merr.	3.8	11.0	84	<i>Syzygium odoratum</i> (Lour.) DC.	6.8	4.0				
85	<i>Acacia confusa</i> Merr.	12.0	12.5	85	<i>Aporosa dioica</i> Muell. Arg.	6.7	4.1				
86	<i>Acacia confusa</i> Merr.	9.0	10.0								
87	<i>Acacia confusa</i> Merr.	12.0	12.0								
88	<i>Acacia confusa</i> Merr.	8.5	9.0								
89	<i>Acacia confusa</i> Merr.	6.9	5.0								
90	<i>Acacia confusa</i> Merr.	15.6	6.0								
91	<i>Acacia confusa</i> Merr.	3.1	2.6								
92	<i>Acacia confusa</i> Merr.	9.3	5.5								
93	<i>Acacia confusa</i> Merr.	10.9	4.5								
94	<i>Ficus hirta</i> Vahl	<2	1.8								
95	<i>Syzygium odoratum</i> (Lour.) DC.	6.8	4.0								
96	<i>Syzygium odoratum</i> (Lour.) DC.	<2	2.4								
97	<i>Aporosa dioica</i> Muell. Arg.	6.7	4.1								
98	<i>Aporosa dioica</i> Muell. Arg.	<2	1.6								

Table 5.7 a-4-3) Description of trees: Zhuxiandong-3

Name of Plot: No.3 plot of Zhuhai(Bush)

Date: 28 November 2009

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 > 18 cm)

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>Mallotus paniculatus</i> (Lam.) Muell. Arg.	3.3	3.0	1	<i>Mallotus paniculatus</i> (Lam.) Muell. Arg.	4.3	5.5	1	<i>Acacia confusa</i> Merr.	21.0	6.3
2	<i>Mallotus paniculatus</i> (Lam.) Muell. Arg.	2.2	3.2	2	<i>Mallotus paniculatus</i> (Lam.) Muell. Arg.	10.9	3.3				
3	<i>Mallotus paniculatus</i> (Lam.) Muell. Arg.	4.0	2.5	3	<i>Mallotus paniculatus</i> (Lam.) Muell. Arg.	9.5	2.5				
4	<i>Litsea rotundifolia</i> Hemsl. var. <i>Oblongifolia</i> (Nees) Allen	20.0	3.6	4	<i>Litsea rotundifolia</i> Hemsl. var. <i>Oblongifolia</i> (Nees) Allen	4.4	3.3				
5	<i>Litsea rotundifolia</i> Hemsl. var. <i>Oblongifolia</i> (Nees) Allen	15.2	3.1	5	<i>Litsea glutinosa</i> (Lour.) C. B. Rob.	4.0	4.2				
6	<i>Litsea rotundifolia</i> Hemsl. var. <i>Oblongifolia</i> (Nees) Allen	23.1	3.3	6	<i>Litsea glutinosa</i> (Lour.) C. B. Rob.	4.5	3.8				
7	<i>Litsea rotundifolia</i> Hemsl. var. <i>Oblongifolia</i> (Nees) Allen	<2	2.6	7	<i>Archidendron lucidum</i> (Benth.) Nielsen	16.4	7.0				
8	<i>Litsea rotundifolia</i> Hemsl. var. <i>Oblongifolia</i> (Nees) Allen	2.0	3.0	8	<i>Archidendron lucidum</i> (Benth.) Nielsen	6.8	4.2				
9	<i>Litsea rotundifolia</i> Hemsl. var. <i>Oblongifolia</i> (Nees) Allen	<2	2.3	9	<i>Machilus velutina</i> Champ. ex Benth.	14.1	3.2				
10	<i>Litsea rotundifolia</i> Hemsl. var. <i>Oblongifolia</i> (Nees) Allen	<2	2.3	10	<i>Machilus velutina</i> Champ. ex Benth.	14.4	4.0				
11	<i>Litsea rotundifolia</i> Hemsl. var. <i>Oblongifolia</i> (Nees) Allen	<2	1.4	11	<i>Machilus velutina</i> Champ. ex Benth.	14.1	8.0				
12	<i>Litsea rotundifolia</i> Hemsl. var. <i>Oblongifolia</i> (Nees) Allen	2.0	1.9	12	<i>Machilus velutina</i> Champ. ex Benth.	6.2	3.7				
13	<i>Litsea glutinosa</i> (Lour.) C. B. Rob.	4.0	4.2	13	<i>Machilus velutina</i> Champ. ex Benth.	5.8	3.6				
14	<i>Litsea glutinosa</i> (Lour.) C. B. Rob.	13.1	3.8	14	<i>Machilus velutina</i> Champ. ex Benth.	4.4	4.4				
15	<i>Litsea glutinosa</i> (Lour.) C. B. Rob.	<2	1.8	15	<i>Machilus velutina</i> Champ. ex Benth.	10.3	5.5				
16	<i>Raphiolepis indica</i> (L.) Lindl.	<2	1.5	16	<i>Machilus velutina</i> Champ. ex Benth.	4.3	5.5				
17	<i>Raphiolepis indica</i> (L.) Lindl.	<2	1.5	17	<i>Sapium discolor</i> (Champ. ex Benth.) Muell. Arg.	10.9	4.5				
18	<i>Raphiolepis indica</i> (L.) Lindl.	<2	1.4	18	<i>Sapium discolor</i> (Champ. ex Benth.) Muell. Arg.	9.0	4.6				
19	<i>Raphiolepis indica</i> (L.) Lindl.	<2	1.5	19	<i>Sapium discolor</i> (Champ. ex Benth.) Muell. Arg.	17.0	3.9				
20	<i>Cratogeomys cochinchinense</i> (Lour.) Bl.	2.2	3.8	20	<i>Sapium discolor</i> (Champ. ex Benth.) Muell. Arg.	16.2	5.3				
21	<i>Cratogeomys cochinchinense</i> (Lour.) Bl.	<2	2.2	21	<i>Sapium discolor</i> (Champ. ex Benth.) Muell. Arg.	7.8	6.5				
22	<i>Cratogeomys cochinchinense</i> (Lour.) Bl.	2.0	3.7	22	<i>Sapium discolor</i> (Champ. ex Benth.) Muell. Arg.	11.0	3.2				
23	<i>Cratogeomys cochinchinense</i> (Lour.) Bl.	3.1	4.2	23	<i>Acacia confusa</i> Merr.	5.4	5.5				
24	<i>Psychotria asiatica</i> L.	<2	1.4	24	<i>Acacia confusa</i> Merr.	21.0	6.3				
25	<i>Archidendron lucidum</i> (Benth.) Nielsen	6.8	4.2	25	<i>Acacia confusa</i> Merr.	11.5	4.7				
26	<i>Archidendron lucidum</i> (Benth.) Nielsen	<2	1.6	26	<i>Acacia confusa</i> Merr.	6.3	5.6				
27	<i>Archidendron lucidum</i> (Benth.) Nielsen	<2	1.5	27	<i>Acacia confusa</i> Merr.	6.3	2.4				
28	<i>Clerodendron canescens</i> Wall.	<2	3.5	28	<i>Acacia confusa</i> Merr.	8.9	5.5				
29	<i>Ilex asprella</i> (Hook. et Arn.) Champ. ex Benth.	8.7	3.3	29	<i>Schefflera heptaphylla</i> (L.) Frodin	5.6	3.0				
30	<i>Ilex asprella</i> (Hook. et Arn.) Champ. ex Benth.	<2	2.1	30	<i>Aporosa dioica</i> Muell. Arg.	16.1	4.5				
31	<i>Toxicodendron sylvestris</i> (Sieb. et Zucc.) Tardieu	10.1	3.4	31	<i>Melastoma normale</i> D. Don	4.4	1.2				
32	<i>Machilus velutina</i> Champ. ex Benth.	14.1	3.2								
33	<i>Machilus velutina</i> Champ. ex Benth.	16.4	4.0								
34	<i>Machilus velutina</i> Champ. ex Benth.	3.6	1.6								
35	<i>Machilus velutina</i> Champ. ex Benth.	14.1	8.0								
36	<i>Sapium discolor</i> (Champ. ex Benth.) Muell. Arg.	2.0	3.5								
37	<i>Sapium discolor</i> (Champ. ex Benth.) Muell. Arg.	11.0	3.2								
38	<i>Acacia confusa</i> Merr.	9.1	2.4								
39	<i>Acacia confusa</i> Merr.	8.9	5.5								
40	<i>Rhodomyrtus tomentosa</i> (Ait.) Hassk.	<2	1.5								
41	<i>Rhodomyrtus tomentosa</i> (Ait.) Hassk.	<2	1.3								
42	<i>Dalbergia hancei</i> Benth.	<2	4.0								
43	<i>Dalbergia hancei</i> Benth.	<2	4.0								
44	<i>Eurya nitida</i> Korthals	4.4	2.5								
45	<i>Eurya nitida</i> Korthals	8.4	2.7								
46	<i>Eurya nitida</i> Korthals	5.2	3.5								
47	<i>Eurya nitida</i> Korthals	5.2	3.7								
48	<i>Eurya nitida</i> Korthals	2.0	0.8								
49	<i>Eurya nitida</i> Korthals	7.0	1.7								
50	<i>Eurya nitida</i> Korthals	<2	1.6								
51	<i>Eurya nitida</i> Korthals	<2	1.4								
52	<i>Eurya nitida</i> Korthals	15.6	3.2								
53	<i>Eurya nitida</i> Korthals	12.3	3.3								
54	<i>Eurya nitida</i> Korthals	3.0	2.3								
55	<i>Eurya nitida</i> Korthals	14.7	2.2								
56	<i>Eurya nitida</i> Korthals	9.9	2.1								
57	<i>Eurya nitida</i> Korthals	9.7	2.4								
58	<i>Schefflera heptaphylla</i> (L.) Frodin	5.6	3.0								
59	<i>Melastoma normale</i> D. Don	2.3	0.3								
60	<i>Melastoma normale</i> D. Don	4.4	1.2								

Table 5.7 b) Description of trees: Irkutsk

Name of Plot: Irkutsk

Date: 15 July 2008.

Survey area 1: radius 7.98 m (Height > 1.3 m)

Survey area 2: radius 11.28 m (DBH > 4 cm)

Serial No.	Species Name	DBH (cm)	Height (m)	Serial No.	Species Name	DBH (cm)	Height (m)
1	<i>Pinus sylvestris</i>	18	15.5	32	<i>Pinus sylvestris</i>	24.5	18
2	<i>Pinus sylvestris</i>	23.6	17.5	33	<i>Pinus sylvestris</i>	22.3	17
3	<i>Pinus sylvestris</i>	22.9	18	34	<i>Pinus sylvestris</i>	20.2	16.6
4	<i>Pinus sylvestris</i>	17.8	14.5	35	<i>Pinus sylvestris</i>	15.5	16.5
5	<i>Pinus sylvestris</i>	24.2	17.4	36	<i>Pinus sylvestris</i>	29.9	18
6	<i>Pinus sylvestris</i>	20.4	17.5	37	<i>Pinus sylvestris</i>	25.5	16.5
7	<i>Pinus sylvestris</i>	23.6	19.4	38	<i>Betula pendula</i>	14	15.5
8	<i>Pinus sylvestris</i>	14.7	14.3	39	<i>Betula pendula</i>	21.7	18.5
9	<i>Larix sibirica</i>	21.3	20.5	40	<i>Pinus sylvestris</i>	21.5	16
10	<i>Pinus sylvestris</i>	17.5	17	41	<i>Betula pendula</i>	16.2	16.4
11	<i>Pinus sylvestris</i>	17.2	14	42	<i>Betula pendula</i>	18	17
12	<i>Pinus sylvestris</i>	15.4	15.1	43	<i>Betula pendula</i>	22.3	19
13	<i>Pinus sylvestris</i>	23.2	19	44	<i>Pinus sylvestris</i>	9.7	6.5
14	<i>Pinus sylvestris</i>	23.3	18.1	45	<i>Betula pendula</i>	22.2	18.1
15	<i>Pinus sylvestris</i>	12.4	15.4	46	<i>Pinus sylvestris</i>	12.2	16.6
16	<i>Pinus sylvestris</i>	19.2	18.2	47	<i>Pinus sylvestris</i>	16.5	16
17	<i>Pinus sylvestris</i>	25.1	19.5	48	<i>Pinus sylvestris</i>	23.2	18.8
18	<i>Betula pendula</i>	14.6	18	49	<i>Pinus sylvestris</i>	17.3	17
19	<i>Betula pendula</i>	20.4	18.5	50	<i>Pinus sylvestris</i>	25.4	17.6
20	<i>Pinus sylvestris</i>	19.1	18	51	<i>Pinus sylvestris</i>	17.2	16.1
21	<i>Betula pendula</i>	14.4	17.1	52	<i>Pinus sylvestris</i>	22.9	17
22	<i>Betula pendula</i>	16.2	18.7	53	<i>Pinus sylvestris</i>	25.2	18.4
23	<i>Pinus sylvestris</i>	27.4	19	54	<i>Pinus sylvestris</i>	23	18.3
24	<i>Pinus sylvestris</i>	broken	broken	55	<i>Betula pendula</i>	broken	broken
25	<i>Betula pendula</i>	22.9	20	56	<i>Pinus sylvestris</i>	22.6	16.1
26	<i>Pinus sylvestris</i>	17.1	16.1	57	<i>Pinus sylvestris</i>	22.7	17.2
27	<i>Pinus sylvestris</i>	20.4	18.5				
28	<i>Pinus sylvestris</i>	15.2	16				
29	<i>Betula pendula</i>	17.4	18				
30	<i>Pinus sylvestris</i>	24.5	21				
31	<i>Betula pendula</i>	20.2	18.2				

Note: No tree, whose DBH is larger than 18 cm, was found.

Table 5.7 c-1) Vachiralongkorn Dam (Thailand)

Name of Plot:

Date: 28 Apr 2009

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 > 18 cm)

Serial	Species Name	DBH(cm)	Height(m)	Serial	Species Name	DBH(cm)	Height(m)	Serial	Species Name	DBH(cm)	Height(m)
	no tree	-	-	1	<i>Sterculia guttata (Por daeng)</i>	10.7	15.5	1	<i>Terminalia calamansanai (Tin nok)</i>	82.0	44.3
				2	<i>Clinber (Khrua chan)</i>	9.0	18.3	2	<i>Lagerstroemia tomentosa (Sa lao)</i>	147.5	52.6
				3	<i>Albizia myriophylla (Aoi charng)</i>	9.8	7.7	3	<i>Xylia xylocarpa (Dang) (T4)</i>	49.4	30.5
								4	<i>Xylia xylocarpa (Dang) (T1)</i>	47.0	22.7
								5	<i>Millettia brandisiana (Jun)</i>	33.0	20.3
								6	Ni	31.2	19.5

Bamboo species

NI, Latin name was not identified.

Table 5.7 c-2) Vachiralongkorn Puye (Thailand)

Name of Plot:

Date: 28 Apr 2009

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 > 18 cm)

Serial	Species Name	DBH(cm)	Height(m)	Serial	Species Name	DBH(cm)	Height(m)	Serial	Species Name	DBH(cm)	Height(m)
1	<i>Baccaurea ramiflora (ma fai)</i>	2.7	3.8	1	<i>Fraxinus chinensis (Khae)</i>	7.0	5.2	1	<i>Dipterocarpus turbinatus (Yang dang)</i>	44.8	25.9
2	<i>Dipterocarpus turbinatus (Yang dang)</i>	2.1	2.6	2	Ni	5.6	5.6	2	<i>Dipterocarpus turbinatus (Yang dang)</i>	44.6	47.9
3	<i>Dipterocarpus turbinatus (Yang dang)</i>	2.6	3.0	3	<i>Millettia brandisiana kurz (Kra pi jan)</i>	12.2	11.3	3	<i>Microcos tomentosa (Plubpla)</i>	25.1	22.8
4	Ni	3.3	3.6	4	<i>Caryota bacsanensis (Toa rang)</i>	10.0	5.7	4	<i>Aphaenandra polystachya (Ta suae)</i>	80.0	28.3
				5	Ni	6.0	5.8	5	<i>Strychnos nux-blanda (Tumka khao)</i>	78.1	33.7
				6	<i>Fraxinus chinensis (Khae)</i>	5.0	4.4	6	<i>Dipterocarpus turbinatus (Yang dang)</i>	73.5	27.0
								7	Ni	18.0	19.1
								8	<i>Dipterocarpus turbinatus (Yang dang)</i>	57.5	38.9
								9	Ni	50.8	40.0
								10	Ni	60.9	28.0
								11	<i>Vitex limonifolia (Sawong)</i>	23.2	13.5
								12	<i>Paranepelium xestophyllum (Lum vai pa)</i>	26.0	18.9
								13	Ni	28.2	21.2

NI, Latin name was not identified.

Gigantochloa hasskarliana (Pai phak dam) 2 clumps 10 cul
Bambusa longispiculata (Pai ta yai) 10 clumps 46 culms

Table 5.8 a-1-1) Understory vegetation survey: Jinyunshan-1 (Chongqing, China)

Name of Plot: Jinyunshan 1#

Date: 10 October 2009

Number of Species: 41

Species Name	Dom.	Species Name	Dom.	Species Name	Dom.
<i>Simplocos setchuenensis</i>	2	<i>Stranvaesia tomentosa</i>	1	<i>Symplocos laurina</i>	*
<i>Lophatherum gracile</i>	3	<i>Dryopteris erythrosora</i>	*	<i>Neolitea aurata</i> var. <i>glauca</i>	*
<i>Castanopsis carlesii</i> var. <i>spinulosa</i>	1	<i>Diospyros morrisiana</i>	*	<i>Ficus heteromorpha</i>	*
<i>Elaeocarpus duclouxii</i>	*	<i>Embelia rudis</i>	*	<i>Adinandra bockiana</i>	*
<i>Vaccinium sprengelii</i>	*	<i>Myrsine africana</i>	*	<i>Gordonia acuminata</i>	*
<i>Sarcandra glabra</i>	1	<i>Antidesma decicatalum</i>	*	<i>Balanophora henryi</i>	*
<i>Castanopsis fargesii</i>	*	<i>Arachniodes chinensis</i>	*	<i>Toxicodendron succedaneum</i>	*
<i>Measa japonica</i>	1	<i>Ardisia crenata</i>	*	<i>Caesalpinia crista</i>	*
<i>Diplopterygium chinensis</i>	2	<i>Lysimachia paridiformis</i>	*	<i>Engelhardtia roxburghiana</i>	*
<i>Elaeocarpus japonicus</i>	*	<i>Rhododendron simsii</i>	*	<i>Lindera kwantungensis</i>	*
<i>Eurya loquana</i>	*	<i>Woodwardia japonica</i>	*	<i>Symplocos lancifolia</i>	*
<i>Ardisia crispa</i> var. <i>dielsii</i>	*	<i>Michilus pingii</i>	3	<i>Cunninghamia lanceolata</i>	*
<i>Camellia tsofuii</i>	*	<i>Alpinia japonica</i>	*	<i>Randia cochinchinensis</i>	*
<i>Litsea elongata</i>	*	<i>Smilax china</i>	*		

Table 5.8 a-1-2) Understory vegetation survey: Jinyunshan-2 (Chongqing, China)

Name of Plot: Jinyunshan 2#

Date: 10 October 2009

Number of Species: 47

Species Name	Dom.	Species Name	Dom.	Species Name	Dom.
<i>Diplopterygium chinensis</i>	3	<i>Myrsine africana</i>	*	<i>Eurya loquana</i>	1
<i>Michilus pingii</i>	4	<i>Castanopsis fargesii</i>	*	<i>Smilax china</i>	*
<i>Castanopsis carlesii</i> var. <i>spinulosa</i>	2	<i>Elaeocarpus japonicus</i>	*	<i>Alpinia japonica</i>	*
<i>Symplocos lancifolia</i>	*	<i>Lysimachia paridiformis</i>	*	<i>Schefflera delavayi</i>	*
<i>Symplocos setchuenensis</i>	3	<i>Adinandra bockiana</i>	*	<i>Symplocos laurina</i>	*
<i>Camellia sinensis</i>	*	<i>Ilex viridis</i> var. <i>brevipedicelata</i>	*	<i>Sapium discolor</i>	*
<i>Rubus assamensis</i>	*	<i>Symplocos botryantha</i>	*	<i>Litsea mollifolia</i>	*
<i>Measa japonica</i>	*	<i>Microlepia marginata</i>	*	<i>Neolitsea aurata</i> var. <i>glauca</i>	*
<i>Embelia rudis</i>	*	<i>Trachycarpa fortunei</i>	*	<i>Disporum cantoniense</i>	*
<i>Sarcandra glabra</i>	2	<i>Liriope</i> sp.	*	<i>Toxicodendron succedaneum</i>	*
<i>Lophatherum gracile</i>	*	<i>Ardisia crispa</i> var. <i>dielsii</i>	*	<i>Rubus buergeri</i>	*
<i>Woodwardia japonica</i>	*	<i>Sabia swinboei</i>	*	<i>Balanophora henryi</i>	*
<i>Stranvaesia tomentosa</i>	*	<i>Elaeocarpus duclouxii</i>	*	<i>Oplismenus undulatifolius</i>	*
<i>Caesalpinia crista</i>	3	<i>Woodwardia unigemmata</i>	*	<i>Mahonia eurybracteata</i>	*
<i>Arachniodes omaena</i>	*	<i>Dichroa febrifuga</i>	*	<i>Cinnamomum appelianum</i>	*
<i>Dicranopteris pedata</i>	*	<i>Daphniphyllum oldhami</i>	*		

**Table 5.8 a-2) Understory vegetation survey
: Dabagou**

Name of Plot: DaBaGou
Date: 30 October 2009
Number of Species: 13

Species Name	Dom.
<i>Equisetum hiemale</i>	1
<i>fargesia spathacea</i>	+
<i>chimaphila japonica</i>	+
<i>Aquilegia ecalcarata</i>	+
<i>Sanguisorba offiinalis</i>	+
<i>euonymus alatus</i>	+
<i>Reineckea carnea</i>	+
<i>Cardamina leucantha</i>	+
<i>Glechoma lonituba</i>	+
<i>Celastrus orbiculatus Thunb</i>	+
<i>Rubia ovatifolia</i>	+
<i>Agrimonia pilosa</i>	+
<i>rubus masogaeus</i>	+

**Table 5.8 a-3-1) Understory vegetation survey
: Jinyunshan-1 (Chongqing, China)**

Name of Plot: XPZ-01
Date: 23 September 2009
Number of Species: 12

Species Name	Dom.
<i>Ilex purpurea Hassk</i>	3
<i>Dicranopteris linearis</i>	2
<i>Mussaenda pubescens Ait</i>	2
<i>Sapiumsebiferum</i>	2
<i>Schima Su-perba Gardn.et Champ</i>	2
<i>Litsea cubeba</i>	2
<i>Schefflera octophylla (Lour.) Ha</i>	1
<i>Adina pilulifera</i>	1
<i>Blechnum orientale Linn</i>	1
<i>Michelia.Macclurei Dandy</i>	1
<i>Common Melastoma Herb,Commo</i>	1
<i>rhododendron</i>	1

Table 5.8 a-1-1) Understory vegetation survey: : Zhuxiandong 1

Name of Plot: Mixed forest of *Pinus elliottii* and *Acacia confusa*
Date: 29 November 2009
Number of Species: 20

Species Name	Dom.	Species Name	Dom.
<i>Ficus variolosa</i>	2	<i>Zanthoxylum nitidum</i>	1
<i>Litsea rotundifolia var. oblongifoli</i>	3	<i>Archidendron lucidum</i>	1
<i>Litsea glutinosa</i>	1	<i>Ilex asprella</i>	2
<i>Raphiolepis indica</i>	1	<i>Microcos paniculata</i>	1
<i>Glochidion lanceolarium</i>	1	<i>Toxicodendron sylvestris</i>	2
<i>Eurya nitida</i>	1	<i>Wendlandia uvariifolia</i>	1
<i>Cratoxylum cochinchinense</i>	1	<i>Ficus hirta</i>	1
<i>Fagerlindia depauperata</i>	1	<i>Schefflera heptaphylla</i>	2
<i>Psychotria asiatica</i>	1	<i>Strophanthus divaricatus</i>	2
<i>Zanthoxylum avicennae</i>	1	<i>Gardenia jasminoides</i>	1

Table 5.8 a-1-2) Understory vegetation survey: : Zhuxiandong 2

Name of Plot : *Acacia confusa* forest
Date: 28 November 2009
Number of Species: 18

Species Name	Dom.	Species Name	Dom.
<i>Mallotus paniculatus</i>	1	<i>Archidendron lucidum</i>	1
<i>Litsea rotundifolia var. oblongifoli</i>	1	<i>Ilex asprella</i>	1
<i>Litsea glutinosa</i>	1	<i>Microcos paniculata</i>	2
<i>Fagerlindia depauperata</i>	2	<i>Machilus velutina</i>	1
<i>Scolopia saeva</i>	1	<i>Indocalamus tessellatus</i>	1
<i>Syzygium levinei</i>	1	<i>Bridelia tomentosa</i>	1
<i>Elaeagnus pungens</i>	1	<i>Ficus hirta</i>	1
<i>Cratoxylum cochinchinense</i>	1	<i>Syzygium odoratum</i>	1
<i>Desmos chinensis</i>	1	<i>Aporosa dioica</i>	1

Table 5.8 a-1-3) Understory vegetation survey: : Zhuxiandong 2

Name of Plot: *Fruticeta*
Date: 28 November 2009
Number of Species: 19

Species Name	Dom.	Species Name	Dom.
<i>Mallotus paniculatus</i>	2	<i>Sapium discolor</i>	2
<i>Litsea rotundifolia var. oblongifoli</i>	2	<i>Acacia confusa</i>	2
<i>Litsea glutinosa</i>	1	<i>Rhodomyrtus tomentosa</i>	1
<i>Raphiolepis indica</i>	1	<i>Dalbergia hancei</i>	1
<i>Cratoxylum cochinchinense</i>	1	<i>Eurya nitida</i>	2
<i>Psychotria asiatica</i>	1	<i>Schefflera heptaphylla</i>	1
<i>Archidendron lucidum</i>	1	<i>Toxicodendron succedaneum</i>	1
<i>Clerodendron canescens</i>	1	<i>Aporosa dioica.</i>	1
<i>Ilex asprella</i>	1	<i>Melastoma normale</i>	1
<i>Machilus velutina</i>	2		

Table 5.8 b) Understory vegetation survey: : Irkutsk

Name of Plot: Irkutsk

Date: 15 July 2008

Number of species: 18

Species Name	Dominance
<i>Sanguisorba officinalis</i>	+
<i>Rubus saxatilis</i>	+
<i>Achillea asiatica</i>	1
<i>Pteridium aquilinum</i>	+
<i>Spiraea media</i>	+
<i>Salix carpea</i>	1
<i>Malus pallasiana</i>	+
<i>Padus avium</i>	1
<i>Swida alba</i>	+
<i>Lathyrus humilis</i>	1
<i>Rosa acicularis</i>	1
<i>Equisetum sylvaticum</i>	1
<i>Vicia unijuga</i>	1
<i>Trifolium lupinaster</i>	1
<i>Carex sp.</i>	1
<i>Vicia cracca</i>	1
<i>Poa pratensis</i>	1
<i>Plantago media</i>	1

Correction: Data Report 2008

Table 5.6 d-3) Observation of tree decline: Boneco LTER Site

Name of Plot: Boneco Long Term Ecological Research Site

Nearest deposition monitoring site: Mt. Sto. Tomas

Date: 17 April 2008

Individual No.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Direction	East					West					North					South				
	<i>Pinus kesiya</i>	<i>Pinus kesiya</i>	<i>Pinus kesiya</i>	<i>Pinus kesiya</i>		<i>Pinus kesiya</i>	<i>Pinus kesiya</i>	<i>Pinus kesiya</i>			<i>Pinus kesiya</i>	<i>Pinus kesiya</i>	<i>Pinus kesiya</i>			<i>Pinus kesiya</i>	<i>Pinus kesiya</i>	<i>Pinus kesiya</i>	<i>Pinus kesiya</i>	
Relative height																				
Tree Height																				
DBH (cm)																				
Vitality of tree												2	1			1	1	1		
Form of tree												1	1			1	1	1		
Branch growth												1				1		1		
Dieback of stem																				
Defoliation of crown																				
Density of foliage																				
Deformation of leaves																				
Size of leaves																				
Discoloration of leaves																				
Injury of leaves																				
Damage class																				

Estimate cause of decline: presence of termites and trees leaning

Note: Damage class to be decided based on combination of defoliation and discoloration classes

Figure 5.3 a-1) Japan: Banryu2



North



South

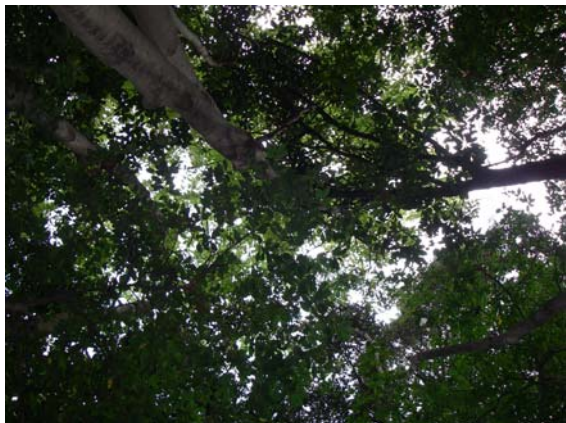


West

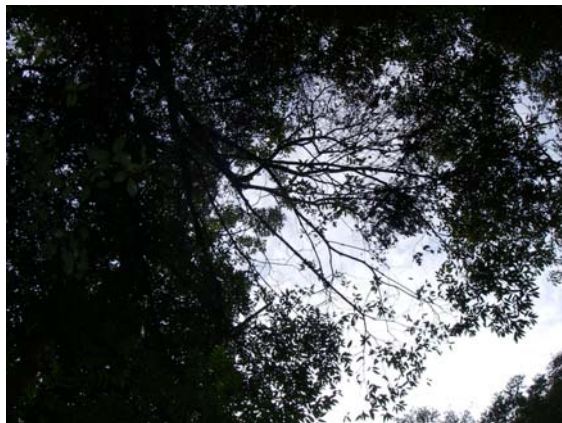


East

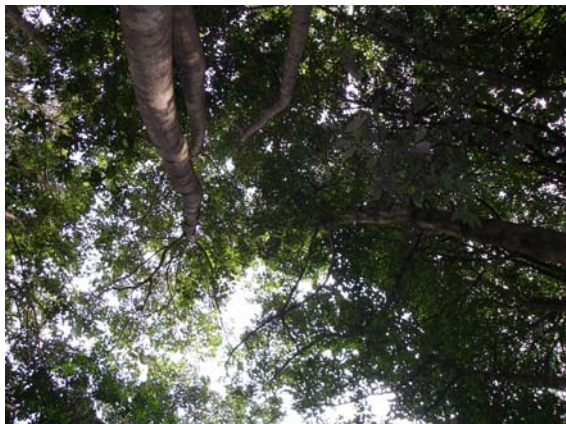
Figure 5.3 a-2) Japan: Iwami RFP



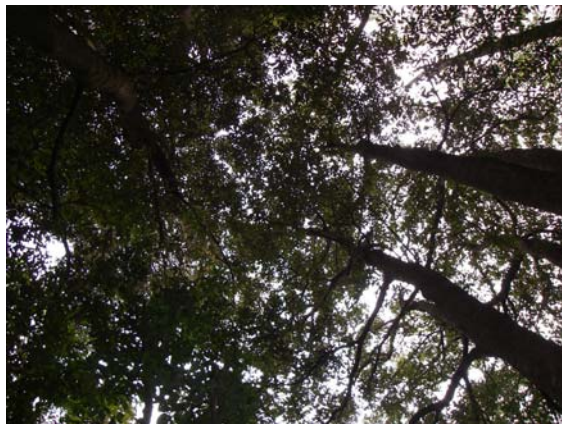
North



South



West



East

Figure 5.3 a-3) Japan: Ijira



North



South



West



East

Figure 5.3 a-4) Japan: Yamato



North



South



West



East

Figure 5.3 b) Irkutsk



North



South



West



East

CHAPTER 6

Inland Aquatic Environment Monitoring

6. Inland Aquatic Environment Monitoring

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 noted as a results of this decrease, include 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.

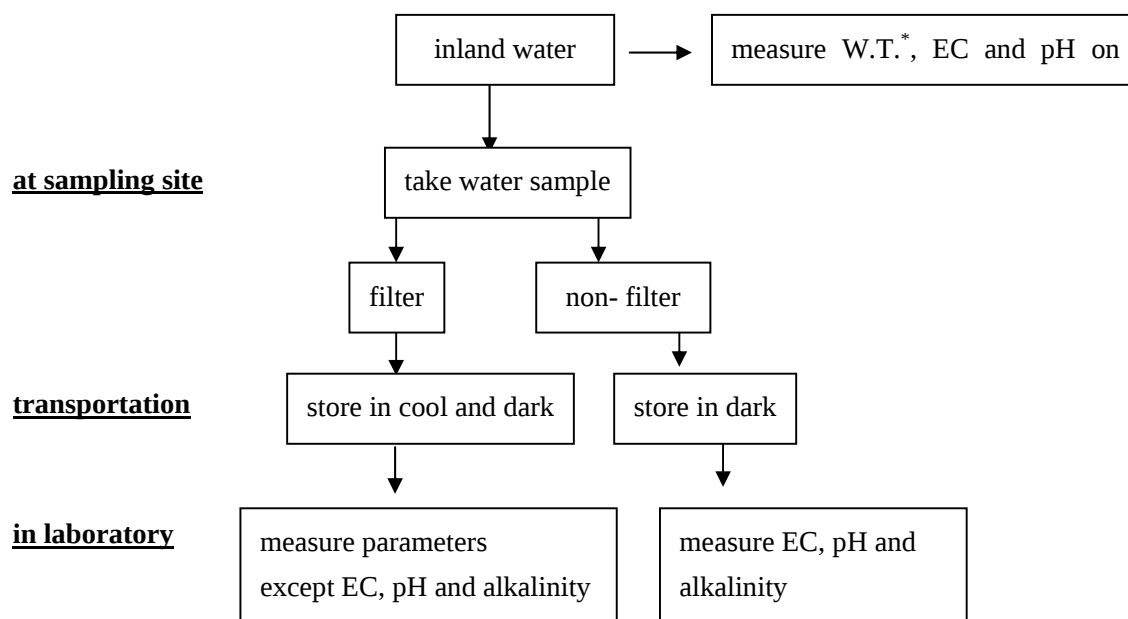
The participating countries of EANET are expected to carry out the monitoring of water temperature, pH, electric conductivity (EC), alkalinity and concentration of SO_4^{2-} , NO_3^- , Cl^- , NH_4^+ , Na^+ , K^+ , Ca^{2+} , and Mg^{2+} of targeted lakes/rivers at least four times a year (seasonally), and, transparency, water color, DOC (if impossible, COD), NO_2^- , PO_4^{3-} more than once a year while some other items are specified as optional parameters to be monitored.

6.1.1 Selection of Sampling Sites

According to the Manual for Monitoring Inland Aquatic Environment, the lakes chosen for monitoring should be harmonic type lakes, preferably with depths of approximately 10 m 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 sites, 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.

6.1.2 Field Operation

Surface water are sampled at one location at the center of the lake or river. In principle, measurement of pH and electric conductivity are conducted at the site before a more precise measurement is taken in the laboratory. Water samples for later analysis are kept in a tightly stoppered polyethylene bottle and stored in a cool dark place. The samples are 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 [Figure 6.1](#).



W.T.* : Water Temperature

Figure 6.1 Example of treatment procedure of inland water sample

6.1.3 Laboratory Operation

Collected samples are analyzed by analytical methods specified in [Table 6.1](#) immediately, otherwise they are stored in a refrigerator.

Table 6.1 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
NH_4^+ , NO_3^- , NO_2^- , PO_4^{3-}	Ion Chromatography or spectrometry
K^+ , Mg^{2+} , Ca^{2+} , Na^+	Ion Chromatography or atomic absorption spectrometry
SO_4^{2-}	Ion Chromatography or turbidimetry
DOC	Combustion- infrared method or wet-oxidation method

6.1.4 Monitoring Sites

As described in [Table 6.2](#), 9 countries (China, Indonesia, Japan, Malaysia, Mongolia, Philippines, Russia, Thailand, and Vietnam) carried out inland aquatic environment monitoring. These monitoring sites were established for 11 lakes / reservoirs and 6 streams. Properties of these monitoring sites are shown on [Table 6.3](#). However many of these tables are not complete.

Table 6.2 Outline of Inland Aquatic Environment Monitoring of 2009

Country	Name of site	Distance from the site	Nearest deposition monitoring site	Start year	Interval
China	Jinyunshan Lake (Chongqing)	-	Rural	2001	4times/yr.
	Xiaoping Dam (Xiamen)	-	Remote	2001	4times/yr.
	Jiwozi River (Xi'an)	-	Remote	2001	4times/yr.
	Zhuxiandong Stream (Zhuhai)	-	Urban	2004	4times/yr.
Indonesia	Patenggang Lake (Bandung)	47km	Urban	2001	5times/yr.
	Gunung Lake (Skabumi)	-	-	2008	5times/yr.
Japan	Ijira Lake (Gifu Pref.)	1.1km	Rural/Ecolog. (Ijira)	2001	4times/yr.
	Banryu Lake (Shimane Pref.)	0.5km	Urban/Ecolog. (Banryu)	2001	4times/yr.
Lao PDR	Nam Hum Lake (Vientiane province)	-	Vientiane	2009	2times/yr.
Malaysia	Semenyih Dam	26km	Urban (Petaling Jaya)	2005	3times/yr.
	Tembaling River (Sabah)	-	Remote (Danum Valley)	2007	4times/yr.
Mongolia	Terelj River	-	Remote (Terelj)	2002	6times/yr.
Philippines	Pandin Lake (Los Banos)	30km	Rural (	2004	4times/yr.
	Ambulalakao Lake	-	Remote (Mt. Sto. Tomas)	2005	2times/yr.
Russia	Pereemnaya River (Listvyanka)	48km	Rural (Listvyanka)	2004	4times/yr.
	Komarovka River (Primorskaya)	0.5km	Rural (Primorskaya)	2005	5times/yr.

Thailand	Vachiralongkorn Dam (Kanchanaburi Province)	-	Remote	2002	4times/yr.
Viet Nam	Hoa Binh Reservoir	-	Rural	2001	4times/yr.

6.2 Results of Monitoring

The results of monitoring of each parameter are respectively shown in Table 6.4(1) to (10). Data within or exceeded the criteria of R1,R2 are judged “O” or “X” in Table 6.4(1) to (10) respectively according to the Manual for Monitoring Inland Aquatic Environment. The annual mean values of each monitoring sites are summarized in Table 6.4 (11).

As described in Table 6.4(11), the values of pH and alkalinity at Jinyunshan Lake in China were lowest. On the other hand, the values of alkalinity and Ca^{2+} at Semenyih Dam in Malaysia, Pandin Lake in Philippines, Vachiralongkorn Dam in Thailand and Hoa Binh Reservoir in Viet Nam were relatively high. The concentrations of Na^+ and Cl^- at Banryu Lake in Japan were higher than other sites. It may be caused by sea salt.

R1 and R2 of the data at Jinyunshan Lake in China(one data), Gunung Lake in Indonesia(one data), Semenyih Dam in Malaysia, Terelj River in Mongolia, Ambulalakao Lake in Philippines and Vachiralongkorn Dam(one data) in Thailand seemed to be out the allowable range. However the main reasons could not be identified.

The annual mean values of each parameter from 2000 to 2009 are shown in Table 6.5(1) to (18).

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	0.999ha
Shore line length	About 2km
Lake hydrologic type	Reservoir
Lake trophic type	Oligotrophic to Mesotrophic
Water depth	6-13m
Water volume	60,000m ³
Annual water level fluctuation	2-4m
Annual air temperature	19.0°C (mean)*1
Precipitation	1198.9mm/year*1
Solar radiation	-
Wind speed	Mean 1.4 m/s *1
Wind direction	NW, NNW (dominant)*1
Residence time of water	-
Lake utilization	For drink, Irrigation water
Watershed area	-
River (inflow)	-

- : no information

*1 chongqing, 2009

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	26.4ha
Shore line length	100m
Lake hydrologic type	Natural
Lake trophic type	Normal
Water depth	57.5m
Water volume	4,080,000m ³
Annual water level fluctuation	-
Precipitation	About 2,500mm/year
Solar radiation	-
Wind speed	-
Wind direction	-
Residence time of water	15days
Lake utilization	Water power
Watershed area	18.1km ²
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	-
Solar radiation	-
Wind speed	-
Wind direction	-
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	23.1°C (mean)*1
Precipitation	1996.5 mm*1
Solar radiation	-
Wind speed	Mean 2.7 m/s
Wind direction	ESE (dominant)*1
Lake (flows into)	-

- : no information

*1 Zhuhai, 2009

The monitoring was conducted from 2001 to 2003 at Zhuxiandong reservoir and it was selected a new site, Zhuxiandong Stream for inland water monitoring in 2004, which is located in the upstream of Zhuxiandong Reservoir. Therefore continuous monitoring has been conducted from 2004 at Zhuxiandong Stream.

Table 6.3(5) Properties of lakes or streams

Lake Name: Patenggang Lake

Country	Indonesia
Location	Bandung
Altitude(including watershed)	1600-1700m
Origin	Natural lake
Area and shape	65 km ²
Shore line length	-
Lake hydrologic type	-
Lake trophic type	-
Water depth	7m (max)
Water volume	4.98 x 10 ⁶ m ³
Annual water level fluctuation	1.42 m - 4.20 m
Precipitation	2357mm/yr ^{*1} , 2686mm/yr ^{*2}
Solar radiation	-
Wind speed	0.8-1.0(mean;0.9)m/s ^{*1} , 3-7(mean;5.2)m/s ^{*2}
Wind direction	SW ^{*1} , W, E ^{*2}
Residence time of water	-
Lake utilization	sightseeing
River (inflow)	-

Watershed area	650 km ²
Vegetation (dominant plants)	Strawberry, tea

- : no information

*1: EMC(Serpong)2007

*2: BMG(Jakarta)2007

Table 6.3(6) Properties of lakes or streams

Lake Name: Gunung Lake

Country	Indonesia
Location	Skabumi, West Java
Altitude (including watershed)	950 -1036m
Origin	Natural lake
Area and shape	9.5ha
Shore line length	-
Lake hydrologic type	Reservoir
Lake trophic type	Eutrophic
Water depth	Ave 2.75 m (< 10 m)
Water volume	-
Annual water level fluctuation	-
Precipitation	1611 – 4311 mm/year
Solar radiation	-
Wind speed	-
Wind direction	-
Residence time of water	-
Lake utilization	Irrigation
River (inflow)	1

Watershed area	120ha
Vegetation (dominant plants)	Pine Tree, <i>Agathis Damara</i>
Land uses	Agricultural area (5%), Residential area (1%, population <500)

- : no information

Meteorological observation is conducted in Rainfall Station of Ciraden (8 km far from the lake)

Table 6.3(7) 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 ²
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 ³
Annual water level fluctuation	0-0.74m (Ave. 0.22m)
Precipitation	1,942.0mm/year *1
Solar radiation	Daylight time Ave.169hr/month *1
Wind speed	2.1-3.1 (Ave. 2.5) m/s*1
Wind direction	SSW(summer), NW(winter) *1
Residence time of water	23 days
Lake utilization	Irrigation and fishing
River (inflow)	Ijira River, Takabora River

Watershed area	5.4 km ²
Surface geology	chert
Vegetation (dominant plants)	<i>Pinus densiflora</i> , <i>Chamaecyparis obtuse</i> , <i>Cryptomeria japonica</i>

*1 Gifu Local Meteorological Observatory (2009)

Table 6.3(8) 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 ²
Shore line length	5.7km
Lake hydrologic type	Reservoir
Lake trophic type	Mesotrophic
Water depth	Ave. 8-8.5m
Water volume	Unknown (Max 500,000m ³)
Annual water level fluctuation	0-1.1 m
Precipitation	1,749.5mm/year *1
Solar radiation	Daylight time Ave.141hr/month*2
Wind speed	2.1-3.4(Ave. 2.8) m/s*1
Wind direction	S *1
Residence time of water	222days(2004)
Lake utilization	Irrigation and sightseeing
River (inflow)	none

- : no information

*1 Lake Banryu national acid rain monitoring station (2009)

*2 Masuda AMeDAS of Japan Meteorological Agency (2009)

Watershed area	0.73 km ²
Surface geology	grave, sand, clay
Vegetation (dominant plants)	<i>pinus thunbergii</i> , <i>Pinus densiflora</i>

Table 6.3(9) Properties of lakes or streams

Lake Name: Nam Hum Lake

Country	Lao PDR
Location	Vientiane Province
Latitude and longitude	18° 10'44.41" N, 102° 27'35.45" E
Altitude	185m
Area and shape	
Shore line length	
Lake hydrologic type	
Lake trophic type	
Water depth	
Water volume	
Annual water level fluctuation	
Precipitation	
Solar radiation	
Wind speed	
Wind direction	
Residence time of water	
Lake utilization	
Watershed area	
River (inflow)	

- : no information

Table 6.3(10) Properties of lakes or streams

Lake Name: Semenyih Dam

Country	Malaysia
Location	
Altitude	30m
Origin	Dam
Area and shape	3.6 km ²
Shore line length	800m
Lake hydrologic type	Reservoir
Lake trophic type	-
Water depth	Mean: 110 m
Water volume	-
Annual water level fluctuation	-
Precipitation	-
Solar radiation	-
Wind speed	-
Wind direction	-
Residence time of water	More than 1 year
Lake utilization	-
Watershed area	-
River (inflow)	-

- : no information

Table 6.3(11) Properties of lakes or streams

Lake Name: Tembaling River

Country	Malaysia
Location	Danum Valley, Sabah
Latitude and longitude	04° 57' N, 117° 48' E
Altitude	-
Origin	Natural stream
Water depth	-
Water Volume	-
Watershed area	-
River length	-
Drainage area	-
The mean height of the river basin	-
Annual air temperature	-
Precipitation	-
Solar radiation	-
Wind speed	-
Wind direction	-
River (meet in 10m from sampling point)	Segama river

- : no information

Table 6.3(12) Properties of lakes or streams

Lake Name: Terelj River

Country	Mongolia
Location	Terelj
Origin	Natural stream
River length	65km
Drainage area	1220km ²
The mean height of the river basin	-
Annual air temperature	-3.85 °C *1
Precipitation	240.6 mm*1
Solar radiation	-
Wind speed	Mean 2.1 m/s
Wind direction	WSW (dominant)
Lake (flows into)	-

- : no information

*1 Terelj, 2009

Table 6.3(13) Properties of lakes or streams

Lake Name: Pandin Lake

Country	Philippines
Location	San Pablo City
Altitude	200m
Origin	Natural lake
Area and shape	0.24km ²
Shore line length	-
Lake hydrologic type	-
Lake trophic type	oligatrophic
Water depth	61.75m(mean), 63m(max)
Water volume	6600 m ³
Annual water level fluctuation	-
Precipitation	-
Solar radiation	-
Wind speed	-
Wind direction	-
Residence time of water	-
Lake utilization	domestic, electric power and tourism
Watershed area	-
River (inflow)	-

- : no information

Table 6.3(14) Properties of lakes or streams

Lake Name: Ambulalakao Lake

Country	Philippines
Location	Kabayan, Benguet
Altitude	2400m
Origin	Natural lake
Area and shape	0.006087km ²
Shore line length	-
Lake hydrologic type	-
Lake trophic type	-
Water depth	1.5m (mean), 4.0m(max), 0.2m(min)
Water volume	11476 m ³
Annual water level fluctuation	-
Precipitation	-
Solar radiation	-
Wind speed	-
Wind direction	-
Residence time of water	-
Lake utilization	tourism
Watershed area	-
River (inflow)	-

- : no information

Table 6.3(15) Properties of lakes or stream

Stream Name: Pereemnaya River

Country	Russian Federation
Location	Southern Baikal
Origin	Natural stream
Altitude(including watershed)	460m-1500m
Water depth	0.9m (mean), 2m (max)
River length	42km
Drainage area	About 360km ²
The mean height of the river basin	1,260m
Annual air temperature	-3.4°C
Precipitation	About 800mm/year
Solar radiation	-
Wind speed	-
Wind direction	-
Lake (flows into)	Kholodnoe lake

Watershed area	About 360km ²
Surface geology	Archaean rocks, presented mainly by gneisses, crystal schists, and pegmatites
Vegetation (dominant plants)	The larger part of the basin belongs to the zone of mountain-taiga soils. The lower taiga border begins from the lake's shore, and the upper border rises up to 900-1800 m depending on the slopes exposition. Above, within loach zone, waste-mountain landscapes with undersized motley grass and lichens prevail. Coniferous forest

- : no information

Table 6.3(16) Properties of lakes or stream

Stream Name: Komarovka River

Country	Russian Federation
Location	Primorskli Kray, Ussuriyskii district, near Kamenushka settlement
Latitude	43°42'N
Altitude	386m
Origin	Natural stream
Water depth	Mean 0.8m Maximum 1.5m
Water discharge	0.14m ³ /sec
River length	66 km
Drainage area	-
Annual air temperature	-
Precipitation	737mm/year (2005)
Solar radiation	-
Wind speed	1.1-2.2 (mean-1.7) m/s(2005)
Wind direction	E, NE
Lake (flows into)	River Razdolnaya, Amurskiy Bay

Watershed area	About 1490km ²
Surface geology Rocks, sandstones, clayey schist	Rocks, sandstones, clayey schist
Soil type Mountain	Mountain- forest brown type of soil
Vegetation (dominant plants)	Komarovka valley is situated near Komarovskiy reserve surrounded by hills which protect the site from winds. The valley is covered by the mixed forest from broad-leaves to conifer.
Population	About 2000

- : no information

Table 6.3(17) Properties of lakes or streams

Lake Name: Vachiralongkorn Dam

Country	Thailand
Location	Kanchanaburi Province
Altitude	170m
Origin	Artificial (Dam made lake)
Area and shape	3,720 km ²
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 ³
Annual water level fluctuation	0-18 m (Avg. 9m)
Precipitation	2049.0mm*1
Solar radiation	-
Wind speed	-
Wind direction	-
Residence time of water	165 days
Lake utilization	Irrigation and Electric power
Watershed area	3,720 km ²
River (inflow)	

- : no information

*1 Vachiralongkorn Dam, 2009

Table 6.3(18) Properties of lakes or streams

Lake Name: Hoa Binh Reservoir

Country	Viet Nam
Location	Hoa Binh Provinces
Altitude	23m
Origin	Artificial (dam-made lake)
Area and shape	208 km ² -25km ² (*)
Shore line length	208km-16.7km(*)
Lake hydrologic type	Reservoir
Lake trophic type	Mesotrophic
Water depth	60m (max: 120m)
Water volume	9.45 km ³ -2.5 km ³ (*)
Annual water level fluctuation	80m- 120m (Ave.100m)
Precipitation	-
Solar radiation	-
Wind speed	-
Wind direction	-
Residence time of water	365 days
Lake utilization	electric power and flood control
Watershed area	51,700 km ² -13,700km ² (*)
River (inflow)	Da River

- : no information

(*)The second value is in affected area of reservoir.

Table 6.4(1) Result of Inland Aquatic Environment Monitoring

Duration: 2009.3.-2009.12.
Country: China
Lake Name: See below

Site	Sampling Date	Mandatory Parameters : 4 times/year										Mandatory Parameters : Once /year									
		Temp. (°C)	pH	EC (mS/m)	Alkalinity (meq/L)	SO ₄ ²⁻ (mg/L)	NO ₃ ⁻ (mg/L)	Cl ⁻ (mg/L)	NH ₄ ⁺ (mg/L)	Na ⁺ (mg/L)	K ⁺ (mg/L)	Ca ²⁺ (mg/L)	Mg ²⁺ (mg/L)	PO ₄ ³⁻ (mg/l)	NO ₂ ⁻ (mg/l)	DOC (mg/l)	COD (mg/l)	Transparency (m)	Mn ²⁺ (mg/l)	Chl-a (µg/l)	Water color
Chongqing -Jinyunshan Lake	14-Mar-09	11.0	6.44	12.3	0.061	31.30	10.85	3.21	0.11	2.96	1.89	11.86	4.25	-	-	-	-	2.6	-	-	-
	26-Jun-09	27.0	5.39	11.3	0.010	31.58	11.85	2.90	0.02	2.27	1.81	9.96	3.47	-	-	-	-	4.1	-	-	-
	18-Sep-09	26.0	6.02	10.3	0.050	27.94	7.37	3.09	0.12	2.09	2.13	8.99	3.09	-	-	-	-	1.5	-	-	-
	19-Dec-09	10.0	6.35	10.8	0.071	26.27	3.10	2.58	0.67	3.05	2.02	9.78	3.69	*1	*1	-	<10 ^{*1}	1.0	-	-	-
	mean ^{*2}	-	5.84	11.2	0.048	29.27	8.29	2.95	0.23	2.59	1.96	10.15	3.63	*1	*1	-	<10 ^{*1}	2.3	-	-	-
Xiamen -Xiaoping Dam	31-Mar-09	17.4	6.61	7.42	0.170	2.11	3.84	7.56	0.11	6.34	3.87	2.36	0.84	-	0.005	-	5.96	-	-	-	-
	29-Jun-09	24.0	6.78	8.21	0.190	3.75	2.65	8.21	0.05	7.31	2.79	2.98	0.69	-	0.003	-	3.39	-	-	-	-
	25-Sep-09	27.7	7.11	7.63	0.220	3.94	2.80	7.40	0.13	7.44	3.82	2.04	0.89	-	0.017	-	2.42	-	-	-	-
	27-Nov-09	15.2	6.57	6.84	0.190	2.74	3.53	6.59	0.09	6.53	3.60	2.32	0.87	0.01	0.008	-	2.24	1.7	-	-	-
	mean ^{*2}	-	6.72	7.53	0.193	3.14	2.67	7.44	0.10	6.91	3.52	2.43	0.82	0.01	0.008	-	3.50	-	-	-	-
Xi'an -Jiwozi River	31-Mar-09	3.00	7.20	8.06	0.260	18.38	2.28	1.87	0.08	1.82	0.86	10.15	1.27	-	-	-	-	-	-	-	-
	29-Jun-09	10.0	7.12	8.85	0.290	15.24	1.95	1.22	0.09	1.99	1.05	10.60	1.35	-	-	-	-	-	-	-	-
	25-Sep-09	16.0	6.79	8.02	0.310	15.56	1.60	1.05	0.18	2.01	1.25	10.62	1.75	-	-	-	-	-	-	-	-
	27-Nov-09	5.00	6.94	8.19	0.250	12.84	2.43	1.22	0.20	1.70	0.99	8.03	1.16	<0.01*1	<0.003*1	-	2.5	-	-	-	-
	mean ^{*2}	-	6.98	8.28	0.278	15.51	2.07	1.34	0.14	1.88	1.04	9.85	1.38	<0.01*1	<0.003*1	-	2.5	-	-	-	-
Zhuhai -Zhuxiandong stream	08-Jan-09	15.5	7.33	8.79	0.381	4.28	1.91	6.08	0.07	7.78	1.77	0.03	3.16	*1	*1	-	1.1	1.1	-	-	-
	08-Apr-09	23.0	7.01	7.58	0.422	3.55	1.40	5.10	0.08	7.23	1.38	4.83	1.95	*1	*1	-	1.2	1.0	-	-	-
	08-Jul-09	25.5	7.10	7.50	0.450	1.93	1.46	4.80	0.08	6.88	0.94	4.03	1.72	*1	*1	-	1.5	0.9	-	-	-
	08-Oct-09	20.0	7.30	7.09	0.213	2.13	12.03	9.23	0.00	9.55	2.19	2.18	1.01	*1	*1	-	1.3	1.2	-	-	-
	mean ^{*2}	-	7.16	7.74	0.367	2.97	4.20	6.30	0.06	7.86	1.57	2.77	1.96	*1	*1	-	1.3	1.1	-	-	-

note

-: Items were not analyzed

*1: Items were not detected

*2: Mean of pH takes an average of hydrogen ion.

		Anion	Cation	RI	Judge ^{*3}
Chongqing -Jinyunshan Lake	14-Mar-09	978.2	1124.9	7.0	O
	26-Jun-09	930.4	932.7	0.1	O
	18-Sep-09	837.7	855.7	1.1	O
Xiamen -Xiaoping	19-Dec-09	740.7	1013.4	15.5	X
	31-Mar-09	489.1	569.1	7.6	O
	29-Jun-09	542.4	597.8	4.9	O
	25-Sep-09	555.9	603.7	4.1	O
	27-Nov-09	489.9	568.5	7.4	O
Xi'an -Jiwozi	31-Mar-09	732.3	715.9	-1.1	O
	29-Jun-09	673.1	758.2	5.9	O
	25-Sep-09	689.4	803.1	7.6	O
Zhuhai -Zhuxiandong stream	27-Nov-09	590.9	606.4	1.3	O
	08-Jan-09	672.4	649.0	-1.8	O
	08-Apr-09	662.4	755.7	6.6	O
	08-Jul-09	649.1	670.4	1.6	O
	08-Oct-09	711.7	663.3	-3.5	O

*3 : Concerning "X" judging, there are some possible reason, but it's difficult to specify the main reason.

Acalc	R2	Judge ^{*3}
13.9	6.1	O
12.7	5.9	O
11.4	4.9	O
11.5	3.0	O
6.4	-7.3	O
6.9	-8.8	O
6.9	-4.7	O
6.3	-3.7	O
9.0	5.7	O
8.7	-0.8	O
9.0	5.7	O
7.3	-6.0	O
7.4	-8.7	O
7.9	2.0	O
7.2	-2.1	O
8.3	7.6	O

Table 6.4(2) Result of Inland Aquatic Environment Monitoring

Duration: 2009.2.-2009.12.

Country: Indonesia

Lake Name: See below

Site	Sampling Date	Temp. (°C)	pH	EC (mS/m)	Alkalinity (meq/L)	SO ₄ ²⁻ (mg/L)	NO ₃ ⁻ (mg/L)	Cl ⁻ (mg/L)	NH ₄ ⁺ (mg/L)	Na ⁺ (mg/L)	K ⁺ (mg/L)	Ca ²⁺ (mg/L)	Mg ²⁺ (mg/L)	PO ₄ ³⁻ (mg/L)	NO ₂ ⁻ (mg/L)	DOC (mg/L)	Water Colour (PtCo unit)	Transparency (m)
Pattenggang Lake	16-Feb-09	19.0	6.70	6.00	0.368	5.60	1.83	2.50	0.42	5.10	1.24	6.90	0.52	0.009	0.001	7.4	10.4	0.8
	15-Apr-09	21.0	7.20	6.70	0.432	5.40	0.69	2.90	0.01	3.00	1.00	6.00	2.50	0.009	0.008	5.9	8.1	1.4
	16-Jun-09	20.6	6.90	8.70	0.560	5.60	0.34	2.80	0.12	3.42	3.66	6.40	1.10	0.009	0.001	11.0	5.6	1.2
	31-Oct-09	21.8	7.40	6.90	0.540	2.90	*2	2.00	0.25	4.30	2.79	5.80	1.20	0.019	0.015	8.8	24.0	1.1
	7-Dec-09	21.2	7.10	6.50	0.550	6.30	0.05	1.00	0.17	2.60	2.95	8.20	0.15	0.009	0.010	10.0	21.2	1.1
Gunung Lake	mean*1	-	6.99	6.96	0.490	5.16	0.58	2.24	0.19	3.68	2.33	6.66	1.09	0.011	0.007	8.6	13.9	1.1
	17-Feb-09	25.0	7.40	6.40	0.430	5.10	0.14	0.80	*2	4.30	1.38	4.30	2.09	0.009	0.001	10.8	15.3	1.0
	16-Apr-09	24.9	7.00	5.00	0.540	2.30	0.01	0.80	0.12	3.00	0.30	5.00	1.70	0.009	0.002	9.8	23.0	1.2
	29-Jun-09	24.2	6.90	5.80	0.560	3.30	0.03	1.00	0.03	2.20	0.28	5.80	3.22	0.01	0.003	7.6	12.0	1.3
	31-Aug-09	26.2	6.60	6.40	0.550	1.50	0.10	2.90	*2	3.60	1.67	6.20	2.80	0.031	0.002	15.0	25.4	1.0
note	25-Nov-09	23.5	6.30	4.10	0.220	5.20	0.01	1.00	0.64	2.60	1.48	1.80	1.20	0.01	0.017	-	9.0	0.5
	mean*1	-	6.69	5.54	0.460	3.48	0.06	1.30	0.16	3.14	1.02	4.62	2.20	0.014	0.005	10.8	16.9	1.0

-: Items were not analyzed

*1 : Mean of pH takes an average of hydrogen ion

*2: Items were not detected.

Annual precipitation is 2357mm/year in 2007 (Meteorological Statistics : BMG Jakarta)

Annual precipitation is 2686mm/year in 2007 (Meteorological Statistics : EMC (Serpong))

		Anion	Cation	RI	Judge		Acate	R2	Judge*3
Pattenggang Lake	16-Feb-09	584.9	664.1	6.3	O		7.1	8.6	O
	15-Apr-09	637.8	661.5	1.8	O		7.3	4.0	O
	16-Jun-09	761.4	659.2	-7.2	O		7.9	-4.5	O
	31-Oct-09	657.7	660.2	0.2	O		7.1	1.7	O
	7-Dec-09	710.7	619.3	-6.9	O		7.4	6.6	O
Gunung Lake	17-Feb-09	561.3	608.8	4.1	O		6.4	-0.4	O
	16-Apr-09	611.0	534.4	-6.7	O		6.0	8.8	O
	29-Jun-09	657.7	658.9	0.1	O		7.0	9.0	X
	31-Aug-09	665.7	739.2	5.2	O		7.5	8.1	O
	25-Nov-09	357.4	375.1	2.4	O		4.3	1.8	O

*3: Concerning "X" judging, it was not able to specify the main reasons

Table 6.4(3) Result of Inland Aquatic Environment Monitoring

Duration: 2009 4.-2010 1.

Country: Japan

Lake Name Ijira Lake

Site	Sampling Date	Temp. (degreeC)	pH	EC (mS/m)	Alkalinity (meq/L)	SO ₄ ²⁻ (mg/L)	NO ₃ ⁻ (mg/L)	Cl ⁻ (mg/L)	NH ₄ ⁺ (mg/L)	Na ⁺ (mg/L)	K ⁺ (mg/L)	Ca ²⁺ (mg/L)	Mg ²⁺ (mg/L)
Center (Surface)	24-Apr-09	15.6	7.10	4.24	0.169	5.43	1.56	2.18	<0.01*1	2.06	0.26	2.98	1.38
	15-Jul-09	24.3	6.91	3.84	0.158	4.65	1.65	1.98	0.01	1.98	0.25	2.65	1.31
	22-Oct-09	18.8	7.09	4.37	0.197	4.78	1.21	2.09	0.04	2.12	0.30	3.09	1.33
	18-Jan-10	5.2	7.10	4.59	0.181	5.86	1.46	2.26	<0.01*1	2.14	0.24	3.39	1.38
	mean	-	7.04	4.26	0.176	5.18	1.47	2.13	0.01	2.08	0.26	3.03	1.35
Center (near bottom)	24-Apr-09	11.6	7.02	4.20	0.166	5.37	1.53	2.21	0.05	2.02	0.26	2.89	1.37
	15-Jul-09	18.4	6.81	3.95	0.156	4.76	1.95	2.04	0.02	2.00	0.26	2.72	1.33
	22-Oct-09	18.2	7.10	4.37	0.198	4.78	1.21	2.10	0.04	2.13	0.31	3.09	1.34
	18-Jan-10	4.8	7.07	4.58	0.182	5.84	1.44	2.26	<0.01*1	2.14	0.25	3.38	1.38
	mean	-	6.99	4.27	0.176	5.19	1.53	2.15	0.03	2.07	0.27	3.02	1.35
Ijira River (Input)	24-Apr-09	13.1	7.09	4.43	0.154	6.34	2.28	2.14	<0.01*1	2.09	0.25	3.00	1.51
	15-Jul-09	19.0	7.10	4.12	0.160	5.32	1.88	2.12	<0.01*1	2.04	0.25	2.88	1.43
	22-Oct-09	17.2	6.98	4.86	0.167	6.94	2.41	2.14	<0.01*1	2.30	0.31	3.28	1.58
	18-Jan-10	5.7	6.99	4.52	0.141	7.00	1.98	2.20	<0.01*1	2.07	0.21	2.96	1.50
	mean*2	-	7.04	4.48	0.155	6.40	2.14	2.15	<0.01*1	2.13	0.25	3.03	1.50
Kobora River (Input)	24-Apr-09	11.9	6.95	3.79	0.143	4.68	1.65	2.26	<0.01*1	2.28	0.21	1.96	1.39
	15-Jul-09	18.1	6.82	3.60	0.145	4.16	1.27	2.25	<0.01*1	2.27	0.24	1.95	1.33
	22-Oct-09	15.4	6.89	3.97	0.144	4.83	2.01	2.20	<0.01*1	2.43	0.24	1.99	1.43
	18-Jan-10	5.0	6.71	3.76	0.123	5.07	1.49	2.34	<0.01*1	2.25	0.18	1.86	1.35
	mean	-	6.84	3.78	0.139	4.68	1.61	2.26	<0.01*1	2.31	0.22	1.94	1.38
Ijira River (Output)	24-Apr-09	15.5	7.10	4.26	0.172	5.46	1.55	2.19	0.01	2.06	0.27	3.03	1.37
	15-Jul-09	21.4	7.08	3.89	0.163	4.70	1.65	1.99	0.03	1.98	0.26	2.77	1.32
	22-Oct-09	19.1	7.18	4.77	0.246	4.72	0.70	2.13	<0.01*1	2.13	0.31	4.09	1.26
	18-Jan-10	4.3	7.11	4.56	0.185	5.84	1.42	2.27	<0.01*1	2.13	0.24	3.40	1.37
	mean	-	7.25	4.53	0.201	5.34	1.22	2.20	<0.01*1	2.11	0.28	3.51	1.33
Discharge	24-Apr-09	11.6	7.08	4.16	0.163	5.34	1.54	2.20	0.04	2.01	0.26	2.88	1.36
	15-Jul-09	17.4	6.93	4.02	0.160	4.78	1.96	2.03	0.08	1.96	0.26	2.80	1.35
	22-Oct-09	18.1	6.98	4.39	0.205	4.82	1.24	2.10	0.13	2.14	0.33	3.14	1.37
	18-Jan-10	4.3	7.11	4.58	0.187	5.86	1.45	2.26	<0.01*1	2.14	0.24	3.41	1.38
	mean	-	7.02	4.29	0.178	5.20	1.55	2.15	0.06	2.06	0.27	3.06	1.36

note

-:Items were not analyzed

*1:less than determination limits

pick up 2 samples on site and measure three times/sample.

Mean of pH takes an average of hydrogen ion.

When the value is under detection limits, it considers "0". When it is over detection limits and under determination limits,

it considers half determination limits. And using it, it was calculated the average and R I R2".

Annual precipitation is 1942.0mm/year in 2009 (Gifu pref. Meteorological observatory)

Site	Sampling Date	Mandatory Parameters : Once/year					
		PO ₄ ³⁻ (mg/L)	NO ₃ ⁻ (mg/L)	DOC (mg/L)	Transparency (m)	Water color	Chl-a (µg/L)
Center (Surface)	24-Apr-09	<0.1*1	0.01	0.7	2.9	clear	1.0
	15-Jul-09	-	<0.01*	-	-	clear	0.8
	22-Oct-09	-	<0.01*1	-	2.2	clear	6.2
	18-Jan-10	-	<0.01*1	-	3.1	clear	6.8
	mean	<0.1*1	<0.01*1	0.7*2	2.7	-	3.7
Center (near bottom)	24-Apr-09	<0.1*1	0.01	0.6	-	clear	3.3
	40009 00	-	0.01	-	-	clear	2.8
	22-Oct-09	-	<0.01*1	-	-	clear	8.0
	18-Jan-10	-	<0.01*1	-	-	clear	12.1
	mean	<0.1*1	<0.01*1	0.6*2	-	-	6.5
Ijira River (Input)	24-Apr-09	<0.1*1	<0.01*1	0.4	-	clear	-
	15-Jul-09	-	<0.01*1	-	-	clear	-
	22-Oct-09	-	<0.01*1	-	-	clear	-
	18-Jan-10	-	<0.01*1	-	-	clear	-
	mean	<0.1*1	<0.01*1	0.4*2	-	-	-
Kobora River (Input)	24-Apr-09	<0.1*1	<0.01*1	0.4	-	clear	-
	15-Jul-09	-	<0.01*1	-	-	clear	-
	22-Oct-09	-	<0.01*1	-	-	clear	-
	18-Jan-10	-	<0.01*1	-	-	clear	-
	mean*2	<0.1*1	<0.01*1	0.4*2	-	-	-
Ijira River (Output)	24-Apr-09	<0.1*1	0.01	0.8	-	clear	-
	15-Jul-09	-	0.01	-	-	clear	-
	22-Oct-09	-	<0.01*1	-	-	clear	-
	18-Jan-10	-	<0.01*1	-	-	clear	-
	mean*1	<0.1*1	<0.01*1	0.8*2	-	-	-
Discharge	24-Apr-09	<0.1*1	0.01	0.6	-	clear	-
	15-Jul-09	-	0.01	-	-	clear	-
	22-Oct-09	-	<0.01*1	-	-	clear	-
	18-Jan-10	-	<0.01*1	-	-	clear	-
	mean	<0.1*1	<0.01*1	0.6*2	-	-	-

		Anion	Cation	R 1	Judge
Center (Surface)	24-Apr-09	368.5	358.7	-1.4	O
	15-Jul-09	337.8	333.0	-0.7	O
	22-Oct-09	375.0	366.2	-1.2	O
	18-Jan-10	390.6	382.3	-1.1	O
Center (near bottom)	24-Apr-09	365.2	354.0	-1.5	O
	15-Jul-09	344.6	339.3	-0.8	O
	22-Oct-09	375.8	367.2	-1.2	O
	18-Jan-10	390.9	381.9	-1.2	O
Ijira River (Input)	24-Apr-09	382.8	371.1	-1.6	O
	15-Jul-09	361.0	356.3	-0.7	O
	22-Oct-09	410.7	401.8	-1.1	O
	18-Jan-10	381.0	366.8	-1.9	O
Kobora River (Input)	24-Apr-09	330.7	317.6	-2.0	O
	15-Jul-09	315.8	312.0	-0.6	O
	22-Oct-09	338.6	328.4	-1.5	O
	18-Jan-10	318.4	306.5	-1.9	O
Ijira River (Output)	39472				
	24-Apr-09	372.2	361.1	-1.5	O
	15-Jul-09	343.3	340.8	-0.4	O
	22-Oct-09	415.3	408.8	-0.8	O
Discharge	18-Jan-10	393.5	381.4	-1.6	O
	24-Apr-09	361.0	351.6	-1.3	O
	15-Jul-09	348.3	346.6	-0.2	O
	22-Oct-09	384.4	378.2	-0.8	O
	18-Jan-10	395.9	382.7	-1.7	O

	Acalc	R2	Judge
	4.3	0.8	O
	3.9	1.4	O
	4.3	-0.8	O
	4.6	-0.2	O
	4.3	0.7	O
	4.0	1.2	O
	4.3	-0.6	O
	4.6	-0.1	O
	4.5	1.1	O
	4.3	1.5	O
	4.9	0.1	O
	4.5	0.2	O
	3.8	0.5	O
	3.7	1.1	O
	3.9	-0.3	O
	3.7	-0.2	O
	4.3	0.9	O
	4.0	1.6	O
	4.7	-0.6	O
	4.6	0.2	O
	4.2	0.8	O
	4.1	1.1	O
	4.4	0.5	O
	4.6	0.2	O

Site	Sampling Date	Mandatory Parameters : Once/year						Optional Parameters						
		PO ₄ ³⁻ (mg/L)	NO ₂ ⁻ (mg/L)	DOC (mg/L)	Transparency (m)	Water color	D-AI (mg/L)	COD (mg/L)	Chl-a (µg/L)	Fe ³⁺ (mg/L)	Mn ²⁺ (mg/L)	TOC (mg/L)	TN (mg/L)	TP (mg/L)
NO.2 (center) surface	19-May-09	0.0	<0.003*1	1.9	3.7	green	0.01	4.4	2.6	0.03	<0.005*1	1.9	0.39	0.010
	28-Jul-09	<0.003*1	<0.003*1	4.1	2.0	brown green	0.05	7.9	9.3	0.06	0.007	4.3	0.29	0.013
	27-Oct-09	<0.003*1	<0.003*1	3.3	1.9	brown green	<0.01*1	5.8	8.7	0.14	0.036	3.5	0.33	0.017
	20-Jan-10	<0.003*1	0.006	2.5	3.0	brown green	0.01	4.6	3.6	0.05	0.006	2.7	0.37	0.011
	mean	<0.003*1	<0.003*1	2.9	2.7	-	0.02	5.7	6.1	0.07	0.012	3.1	0.35	0.013
NO.2 (center) near bottom	19-May-09	<0.003*1	0.003	2.2	-	-	<0.01*1	4.6	9.7	0.08	0.440	2.4	0.42	0.023
	28-Jul-09	0.012	0.013	3.4	-	-	0.015	8.2	24.7	6.53	1.318	4.2	0.46	0.026
	27-Oct-09	<0.003*1	0.004	3.2	-	-	<0.01*1	7.6	10.0	0.85	0.268	4.3	0.79	0.040
	20-Jan-10	<0.003*1	0.007	2.6	-	-	0.013	4.5	3.8	0.05	0.007	2.8	0.40	0.011
	mean	0.003	0.007	2.9	-	-	<0.01*1	6.2	12.0	1.88	0.508	3.4	0.52	0.025
NO.3 surface	19-May-09	0.0	0.0	1.9	3.5	green	<0.01*1	4.5	3.6	0.03	0.010	2.0	0.24	0.012
	28-Jul-09	<0.003*1	<0.003*1	2.8	1.7	brown green	0.070	7.1	7.8	0.07	0.015	2.9	0.30	0.021
	27-Oct-09	0.0	0.004	2.9	1.7	brown green	<0.01*1	5.8	11.5	0.19	0.011	3.0	0.41	0.022
	20-Jan-10	<0.003*1	0.005	2.5	3.8	brown green	0.010	4.8	3.2	0.07	0.008	2.8	0.36	0.012
	mean	<0.003*1	0.004	2.5	2.7	-	0.020	5.6	6.5	0.09	0.011	2.7	0.33	0.017

[illegible]

Table 6.4(7) Result of Inland Aquatic Environment Monitoring

Duration: 2009.1-2009.10
Country: Philippines
Lake Name: Pandin Lake & Ambulalakao Lake

Site	Sampling Date	Temp. (°C)	pH	EC (mS/m)	Alkalinity (meq/L)	SO ₄ ²⁻ (mg/L)	NO ₃ ⁻ (mg/L)	Cl ⁻ (mg/L)	NH ₄ ⁺ (mg/L)	Na ⁺ (mg/L)	K ⁺ (mg/L)	Ca ²⁺ (mg/L)	Mg ²⁺ (mg/L)	PO ₄ ³⁻ (mg/L)	Transparency (m)	NO ₂ ⁻ (mg/L)
Pandin Lake (Surface)	26-Jan-09	25.0	7.25	22.4	2.25	0.70	6.82	3.78	2.95	8.06	4.36	17.2	7.86	0.24	1.8	-
	22-Apr-09	29.4	7.97	19.4	1.93	0.68	4.28	4.07	*2	10.20	4.66	15.4	7.29	0.08	2.1	-
	22-Jul-09	28.5	7.81	17.1	1.59	0.54	7.91	3.43	*2	8.40	4.25	11.4	7.08	0.03	2.0	-
	21-Oct-09	29.9	9.0	15.9	1.48	0.71	3.87	3.83	*2	7.76	4.12	12.4	7.03	*2	1.2	-
	mean*1	-	7.68	18.7	1.81	0.66	5.72	3.78	1.02	8.61	4.35	14.10	7.32	0.09	1.78	-
Ambulalakao Lake (Surface)	*3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	*4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	16-Sep-09	18.0	5.42	0.17	0.29	0.21	0.08	0.13	0.17	0.27	0.06	0.17	0.07	-	-	-
	8-Dec-09*5	17.2	8.00	60.50	0.26	46.08	29.43	18.41	0.08	12.82	0.60	65.0	5.62	-	-	-
	mean*1	-	5.72	30.33	0.28	23.14	14.75	9.27	0.13	6.54	0.33	32.58	2.84	-	-	-

- : Items were not analyzed

*1 : Mean of pH takes an average of hydrogen ion

*2 : The item was not detected.

*3 : No monitoring data since the road was not accessible due to landslides caused by typhoons in 3rd.

*4 : No monitoring data since the road was not accessible due to landslides caused by typhoons in 4th.

*5 : There is rapid encroachment of slash and burn agricultural activities within the vicinity and there is an influx of visitors to the lake and its vicinity (EMB-CAR)

Pandin Lake (Surface)	Anion	Cation	RI	Judge			
	26-Jan-09	2488.7	2130.3	-7.8	O	Acetic	R2
	22-Apr-09	2130.6	1930.8	-4.9	O	24.1	3.7
	22-Jul-09	1826.4	1687.3	-4.0	O	21.0	3.9
	21-Oct-09	1665.2	1639.8	-0.8	O	18.4	3.8
Ambulalakao Lake (Surface)	*3	-	-	-	-	17.2	3.9
	*4	-	-	-	-	-	-
	16-Sep-09	298.0	40.4	-76.1	X	-	-
	8-Dec-09*5	2213.4	4283.3	31.9	X	1.7	82.0
						41.0	-19.3

*5 : Concerning "X" judging, it was not able to specify the main reasons

Table 6.4(9) Result of Inland Aquatic Environment Monitoring

Duration: 2009.3-2010.1
Country: Thailand
Lake Name: Vachiralongkorn Dam

Site	Sampling Date	Mandatory Parameters : 4 times/year										Mandatory Parameters : Once/year							
		Temp. (°C)	pH	EC (mS/m)	Alkalinity (meq/L)	SO ₄ ²⁻ (mg/L)	NO ₃ ⁻ (mg/L)	Cl ⁻ (mg/L)	NH ₄ ⁺ (mg/L)	Na ⁺ (mg/L)	K ⁺ (mg/L)	Ca ²⁺ (mg/L)	Mg ²⁺ (mg/L)	PO ₄ ³⁻ (mg/L)	NO ₂ ⁻ (mg/L)	COD (mg/L)	Transparency (m)	Water color	
Station1 (Ban Pong Chang)	31 Mar 09	27.8	7.96	10.7	1.07	1.10	0.06	0.71	-	1.17	0.96	16.9	3.34	0.01	0.01	-	4.6	blue	
	11 Jun 09	29.1	7.60	11.2	1.08	1.66	0.06	0.73	-	1.21	0.94	16.6	3.47	0.01	<0.01 ^{*1}	-	4.5	blue	
	23 Sep 09	31.0	7.90	10.3	1.04	1.44	0.06	0.69	-	1.07	0.98	15.4	3.28	0.01	0.01	-	4.0	blue	
	5 Jan 10	28.8	7.80	11.1	1.26	1.13	0.06	0.83	-	1.22	0.93	15.5	3.46	0.01	0.01	-	4.5	light blue	
	mean	-	7.79	10.8	1.11	1.33	0.06	0.74	-	1.16	0.95	16.1	3.39	0.01	<0.01 ^{*1}	-	4.4	-	
Station2 (Ban Pang Pueng)	31 Mar 09	27.5	8.05	10.8	1.10	1.30	0.06	0.69	-	1.16	0.92	17.5	2.95	0.01	0.01	-	4.6	blue	
	11 Jun 09	29.2	7.80	10.5	1.05	1.67	0.06	0.74	-	1.18	0.89	16.3	2.89	0.01	<0.01 ^{*1}	-	4.0	blue	
	23 Sep 09	30.2	8.20	9.15	0.91	1.23	0.06	0.65	-	1.05	0.92	14.0	2.58	0.01	0.01	-	3.7	blue	
	5 Jan 10	27.9	7.80	10.8	1.21	1.47	0.06	0.85	-	1.17	5.45	15.8	2.77	0.01	0.01	-	6.0	light blue	
	mean	-	7.93	10.3	1.07	1.42	0.06	0.73	-	1.14	2.04	15.9	2.79	0.01	<0.01 ^{*1}	-	4.6	-	

note

- : Items were not analyzed

*1 : less than determination limits

Mean of pH takes an average of hydrogen ion.

pick up 2 samples on site.

When the value is under detection limits, it considers "0". When it is over detection limits and under determination limits, it considers half determination limits. And using it, it was calculated the average and R1R2".

##Annual precipitation amount: 1961.9mm

Site	Date	Anion	Cation	R1	Acalc		R2	Judge
					Acalc	Judge		
Station1 (Ban Pong Chang)	31 Mar 09	1113.5	1193.2	3.5	12.05	5.9	O	
	11 Jun 09	1130.3	1190.0	2.6	12.14	4.0	O	
	23 Sep 09	1089.0	1107.0	0.8	11.45	5.3	O	
	5 Jan 10	1307.4	1134.6	-7.1	12.56	6.2	O	
Station2 (Ban Pang Pueng)	31 Mar 09	1141.9	1189.1	2.0	12.18	6.0	O	
	11 Jun 09	1100.7	1122.0	1.0	11.63	5.1	O	
	23 Sep 09	954.3	976.7	1.2	10.09	4.9	O	
	5 Jan 10	1265.0	1206.0	-2.4	13.03	9.6	X	

note
- : Items were not analyzed
*1 : less than determination limits

Mean of pH takes an average of hydrogen ion.

pick up 2 samples on site.

When the value is under detection limits, it considers "0". When it is over detection limits and under determination limits, it considers half determination limits. And using it, it was calculated the average and R1 R2".

#Annual precipitation amount: 1961.9mm

Station1 (Ban Pong Chang)	Date	Anion	Cation	R1	Judge				Acalc	R2	Judge
	31 Mar 09	1113.5	1193.2	3.5	O				12.05	5.9	O
	11 Jun 09	1130.3	1190.0	2.6	O				12.14	4.0	O
	23 Sep 09	1089.0	1107.0	0.8	O				11.45	5.3	O
	5 Jan 10	1307.4	1134.6	-7.1	O				12.56	6.2	O
	31 Mar 09	1141.9	1189.1	2.0	O				12.18	6.0	O
	11 Jun 09	1100.7	1122.0	1.0	O				11.63	5.1	O
	23 Sep 09	954.3	976.7	1.2	O				10.09	4.9	O
	5 Jan 10	1265.0	1206.0	-2.4	O				13.03	9.6	X

note: NH₄⁺ concentration at V.L.K reservoir is very low

Table 6.5(1) Annual mean values of each parameters from 2001 to 2009 at Jinyushan Lake (China)

	pH	EC mS/m	Alkalinity meq/L	Mandatory Parameters : 4 times/year							Mandatory Parameters : Once/year					
				SO ₄ ²⁻ mg/L	NO ₃ ⁻ mg/L	Cl ⁻ mg/L	NH ₄ ⁺ mg/L	Na ⁺ mg/L	K ⁺ mg/L	Ca ²⁺ mg/L	Mg ²⁺ mg/L	PO ₄ ³⁻ mg/L	NO ₂ ⁻ mg/L	DOC mg/L	COD mg/L	Transparency m
2001	7.50	9.05	-	26.05	7.68	2.58	0.65	1.78	1.58	6.63	2.63	-	-	-	-	-
2002	6.12	9.52	-	26.36	7.99	2.53	0.09	2.50	1.79	9.08	3.28	-	-	-	-	-
2003	6.55	9.79	0.210	23.21	5.16	2.68	0.21	2.60	1.72	9.03	3.30	-	-	-	-	0.9
2004	6.34	9.61	0.075	25.72	7.94	1.74	0.30	1.98	1.65	9.66	2.71	-	-	-	7.6	2.6
2005	6.04	10.21	0.073	28.12	8.16	2.63	0.04	2.70	1.82	9.36	3.22	*1	*1	2.9	3.7	3.7
2006	6.36	11.92	0.113	32.65	9.53	3.05	0.11	2.96	2.27	11.05	3.82	*1	*1	3.2	5.0	5.0
2007	6.24	12.35	0.086	37.19	10.21	3.12	0.12	2.81	2.18	11.24	3.81	*1	*1	4.4	3.0	3.0
2008	5.42	12.20	0.066	33.26	12.78	2.77	0.16	2.65	1.98	11.34	3.77	*1	*1	2.9	3.7	3.7
2009	5.84	11.18	0.048	29.27	8.29	2.95	0.23	2.59	1.96	10.15	3.63	*1	*1	<10*1	2.3	2.3

Table 6.5(2) Annual mean values of each parameters from 2001 to 2009 at Xiaoping Dam (China)

	pH	EC mS/m	Alkalinity meq/L	Mandatory Parameters : 4 times/year						Mandatory Parameters : Once/year					
				SO ₄ ²⁻ mg/L	NO ₃ ⁻ mg/L	Cl ⁻ mg/L	NH ₄ ⁺ mg/L	Na ⁺ mg/L	K ⁺ mg/L	Ca ²⁺ mg/L	Mg ²⁺ mg/L	PO ₄ ³⁻ mg/L	NO ₂ ⁻ mg/L	DOC mg/L	COD mg/L
2001	7.21	-	-	1.43	1.30	2.18	-	-	-	-	-	-	-	-	-
2002	7.39	7.00	-	4.67	6.66	2.82	0.20	7.29	2.14	2.29	0.82	-	-	-	-
2003	6.73	7.19	0.193	2.68	5.02	5.91	0.17	6.53	2.06	2.35	0.86	-	-	1.8	-
2004	7.34	5.57	0.242	2.68	7.83	4.35	0.18	6.70	2.18	2.92	0.64	0.020	0.008	2.1	-
2005	6.73	4.62	0.232	2.07	2.83	3.94	0.05	4.77	2.37	2.95	0.61	0.020	0.008	1.3	0.9
2006	6.81	5.27	0.190	2.46	2.52	5.13	0.19	6.02	2.33	3.19	0.66	0.020	0.008	0.7	0.9
2007	7.07	7.32	0.110	2.67	2.67	5.13	0.15	3.64	1.63	2.82	0.54	-	0.006	1.8	-
2008	6.73	5.66	0.124	4.49	2.67	12.95	0.14	4.97	2.46	3.90	0.56	0.010	0.007	1.9	-
2009	6.72	7.53	0.193	3.14	2.67	7.44	0.10	6.91	3.52	2.43	0.82	0.010	0.008	-	3.5

Table 6.5(3) Annual mean values of each parameters from 2001 to 2009 at Jiwozi River (China)

	Mandatory Parameters : 4 times/year										Mandatory Parameters : Once/year					
	pH	EC mS/m	Alkalinity meq/L	SO ₄ ²⁻ mg/L	NO ₃ ⁻ mg/L	Cl ⁻ mg/L	NH ₄ ⁺ mg/L	Na ⁺ mg/L	K ⁺ mg/L	Ca ²⁺ mg/L	Mg ²⁺ mg/L	PO ₄ ³⁻ mg/L	NO ₂ ⁻ mg/L	DOC mg/L	COD mg/L	Transparency m
2001	7.11	4.50	0.225	10.03	1.47	1.06	0.04	1.90	0.70	8.83	1.38	-	-	-	-	-
2002	7.60	8.47	0.110	12.16	1.70	1.80	*1	2.80	1.20	12.73	1.72	-	-	-	-	-
2003	7.54	7.83	0.140	11.44	2.01	1.63	*1	2.08	0.95	12.03	1.59	-	-	-	-	-
2004	7.20	6.63	0.243	11.68	2.30	1.06	*1	1.79	0.68	9.04	1.35	*1	*1	3.2	-	-
2005	6.99	7.99	0.208	15.31	0.81	1.74	0.06	1.77	0.72	7.44	1.35	-	0.090	1.6	-	-
2006	6.80	7.59	0.238	11.80	1.87	1.21	0.07	1.93	0.65	7.64	1.11	0.030	0.003	2.8	-	-
2007	7.32	8.86	0.250	16.68	3.46	1.31	0.13	2.09	0.96	11.00	0.96	*1	*1	2.2	-	-
2008	7.05	8.42	0.248	13.92	1.89	1.51	0.30	1.43	1.05	9.38	1.20	<0.01*1	<0.003*1	2.5	-	-
2009	6.98	8.28	0.278	15.51	2.07	1.34	0.14	1.88	1.04	9.85	1.38	<0.01*1	<0.003*1	-	2.5	-

Table 6.5(4) Annual mean values of each parameters from 2004 to 2009 at Zhuxiandong stream and from 2001 to 2003 at Zhuxiandong reservoir(China)

	pH	EC mS/m	Alkalinity meq/L	Mandatory Parameters : 4 times/year							Mandatory Parameters : Once/year				
				SO ₄ ²⁻ mg/L	NO ₃ ⁻ mg/L	Cl ⁻ mg/L	NH ₄ ⁺ mg/L	Na ⁺ mg/L	K ⁺ mg/L	Ca ²⁺ mg/L	Mg ²⁺ mg/L	PO ₄ ³⁻ mg/L	NO ₂ ⁻ mg/L	DOC mg/L	COD mg/L
2001	7.62	-	-	17.70	0.63	43.13	0.20	-	-	-	-	-	-	-	-
2002	7.93	6.70	0.963	19.89	0.83	23.80	0.23	7.27	1.57	17.00	2.50	-	-	-	-
2003	7.82	7.54	1.603	17.50	0.29	19.59	0.17	7.34	1.96	16.80	2.36	-	0.029	-	1.7
2004	7.12	8.49	0.645	5.47	1.90	6.03	*1	8.95	1.88	5.41	2.84	-	*1	-	1.1
2005	6.97	9.53	0.133	5.83	1.70	6.73	*1	8.90	1.60	4.63	2.65	*1	*1	-	0.9
2006	7.18	7.35	0.225	2.60	1.15	4.50	1.10	5.40	1.13	4.38	1.58	*1	*1	1.0	1.3
2007	7.28	7.80	0.240	3.61	1.77	5.09	0.10	6.01	1.22	3.65	1.38	*1	*1	1.1	1.3
2008	7.18	7.58	0.165	2.95	2.36	4.90	0.05	6.83	1.31	4.40	1.76	*1	*1	1.1	1.3
2009	7.16	7.74	0.367	2.97	4.20	6.30	0.06	7.86	1.57	2.77	1.96	*1	*1	1.3	1.1

- : Items were not analyzed.

*1 : Less than determination limits

Table 6.5(5) Annual mean values of each parameters from 2001 to 2009 at Patenggang Lake (Indonesia)

	Mandatory Parameters : 4 times/year										Mandatory Parameters : Once/year					
	pH	EC mS/m	Alkalinity meq/L	SO ₄ ²⁻ mg/L	NO ₃ ⁻ mg/L	Cl ⁻ mg/L	NH ₄ ⁺ mg/L	Na ⁺ mg/L	K ⁺ mg/L	Ca ²⁺ mg/L	Mg ²⁺ mg/L	PO ₄ ³⁻ mg/L	NO ₂ ⁻ mg/L	DOC mg/L	COD mg/L	Transparency m
2001	7.90	7.28	0.488	4.33	0.07	8.19	0.13	4.90	0.54	6.32	2.18	-	-	-	-	-
2002	8.46	5.83	0.255	7.33	0.06	6.30	0.17	4.60	0.71	4.03	1.93	-	-	-	-	-
2003	7.34	6.58	0.460	7.76	0.19	7.50	0.53	4.30	0.49	5.17	2.53	0.207	*1	12.4	-	0.6
2004	7.29	5.89	0.340	2.65	0.03	3.85	0.02	2.10	0.85	5.75	2.20	0.014	*1	7.3	-	0.6
2005	7.19	6.71	0.459	8.83	0.23	2.30	0.43	4.04	1.87	5.70	2.70	0.010	*1	10.9	-	0.1
2006	7.49	5.74	0.414	3.80	0.47	2.58	0.39	2.87	1.70	5.70	1.43	0.085	0.016	8.1	-	0.1
2007	7.17	6.75	0.420	7.45	0.32	2.59	0.41	3.40	1.53	5.75	1.47	0.038	0.012	3.8	-	0.1
2008	6.76	6.43	0.448	7.89	0.07	2.18	0.05	2.84	1.29	6.18	2.39	0.202	0.019	10.2	-	0.9
2009	6.99	6.96	0.490	5.16	0.58	2.24	0.19	3.68	2.33	6.66	1.09	0.011	0.007	8.6	-	1.1

Table 6.5(6) Annual mean values of each parameters from 2008 to 2009 at Gunung Lake (Indonesia)

	Mandatory Parameters : 4 times/year											Mandatory Parameters : Once/year				
	pH	EC mS/m	Alkalinity mg/L	SO ₄ ²⁻ mg/L	NO ₃ ⁻ mg/L	Cl ⁻ mg/L	NH ₄ ⁺ mg/L	Na ⁺ mg/L	K ⁺ mg/L	Ca ²⁺ mg/L	Mg ²⁺ mg/L	PO ₄ ³⁻ mg/L	NO ₂ ⁻ mg/L	DOC mg/L	COD mg/L	Transparency m
2008	6.73	5.90	0.438	5.59	0.03	2.01	0.57	2.24	0.71	5.09	1.87	0.040	0.007	6.7	-	1.1
2009	6.69	5.54	0.460	3.48	0.06	1.30	0.16	3.14	1.02	4.62	2.20	0.014	0.005	10.8	-	1.0

Table 6.5(7) Annual mean values of each parameters from 2001 to 2009 at Ijira Lake (Japan)

	Mandatory Parameters : 4 times/year										Mandatory Parameters : Once/year					
	pH	EC mS/m	Alkalinity meq/L	SO ₄ ²⁻ mg/L	NO ₃ ⁻ mg/L	Cl ⁻ mg/L	NH ₄ ⁺ mg/L	Na ⁺ mg/L	K ⁺ mg/L	Ca ²⁺ mg/L	Mg ²⁺ mg/L	PO ₄ ³⁻ mg/L	NO ₂ ⁻ mg/L	DOC mg/L	COD mg/L	Transparency m
2001	6.85	4.33	0.138	4.66	2.31	2.19	0.07	2.37	0.40	3.51	1.61	<0.01*1	-	-	-	-
2002	6.72	4.52	0.173	5.63	2.01	2.27	0.09	2.23	0.38	3.39	1.37	<0.066*1	<0.01*1	3.2	-	2.2
2003	6.75	4.10	0.146	5.14	2.07	2.40	0.08	1.86	0.30	2.94	1.36	<0.01*1	<0.03*1	1.4	-	3.0
2004	7.17	4.05	0.145	4.79	1.88	2.34	0.12	2.15	0.23	2.71	1.23	<0.03*1	<0.02*1	1.1	-	2.8
2005	6.94	4.47	0.153	5.73	2.37	2.32	0.08	2.29	0.39	3.27	1.42	<0.03*1	0.068	0.7	-	3.0
2006	6.81	3.94	0.164	4.53	2.11	2.09	0.03	2.00	0.33	2.80	1.23	<0.1*1	<0.02*1	0.6	-	2.4
2007	7.09	4.58	0.206	5.77	1.22	2.27	0.03	2.24	0.30	3.57	1.46	<0.1*1	<0.02*1	1.0	-	2.7
2008	7.19	4.36	0.183	5.37	1.78	2.16	0.04	2.10	0.28	3.24	1.45	<0.1*1	<0.01*1	0.8	-	2.7
2009	7.04	4.26	0.176	5.18	1.47	2.13	0.01	2.08	0.26	3.03	1.35	<0.1*1	<0.01*1	0.7*2	-	2.7

Table 6.5(8) Annual mean values of each parameters from 2001 to 2009 at Banryu Lake (Japan)

	Mandatory Parameters : 4 times/year										Mandatory Parameters : Once/year					
	pH	EC mS/m	Alkalinity meq/L	SO ₄ ²⁻ mg/L	NO ₃ ⁻ mg/L	Cl ⁻ mg/L	NH ₄ ⁺ mg/L	Na ⁺ mg/L	K ⁺ mg/L	Ca ²⁺ mg/L	Mg ²⁺ mg/L	PO ₄ ³⁻ mg/L	NO ₂ ⁻ mg/L	DOC mg/L	COD mg/L	Transparency m
2001	6.98	9.43	0.174	4.07	0.11	19.73	0.15	12.23	1.75	1.23	1.60	<0.003*1	-	-	5.3	-
2002	7.07	10.10	0.176	3.93	0.30	21.90	0.12	12.96	1.80	1.21	1.76	<0.003*1	<0.003*1	2.5	5.7	1.6
2003	6.98	10.85	0.170	3.96	0.14	22.31	0.19	13.44	1.78	1.09	1.69	<0.003*1	<0.003*1	2.6	5.6	1.5
2004	7.10	10.68	0.165	3.96	0.21	22.96	0.09	13.95	1.84	1.05	1.69	<0.003*1	<0.003*1	3.3	4.8	2.5
2005	7.09	10.68	0.156	4.31	0.14	23.05	0.04	14.18	1.91	1.47	1.82	0.003	<0.003*1	2.6	5.0	2.2
2006	7.01	10.28	0.162	4.44	0.13	21.61	0.11	13.76	1.83	1.49	1.77	<0.003*1	0.003	2.7	4.8	2.5
2007	7.02	10.76	0.176	4.49	0.10	22.49	0.02	14.28	1.94	1.52	1.62	<0.003*1	<0.003*1	2.6	5.0	2.5
2008	7.05	10.74	0.175	4.24	0.14	22.84	0.03	14.28	1.87	1.37	1.65	<0.003*1	<0.003*1	2.5	-	3.0
2009	7.02	10.09	0.171	4.14	0.10	21.98	0.03	13.75	1.79	1.52	1.81	<0.003*1	<0.003*1	2.9	-	2.7

- : Items were not analyzed.

*1 : Less than determination limits

Table 6.5(9) Annual mean values of each parameters from 2009 at Nam Hum Lake (Lao PDR)

Year	Annual mean values of water parameters from 2006 to 2009 at Kumbhari Lake (2002-2009)															
	Mandatory Parameters : 4 times/year												Mandatory Parameters : Once/year			
	pH	EC	Alkalinity	SO ₄ ²⁻	NO ₃ ⁻	Cl ⁻	NH ₄ ⁺	Na ⁺	K ⁺	Ca ²⁺	Mg ²⁺	PO ₄ ³⁻	NO ₂ ⁻	DOC	COD	Transparency
		mS/m	meq/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	m
2009	7.55	3.90	0.411	1.83	0.65	1.45	0.15	0.94	1.75	4.43	0.86	0.001	-	-	10.2	-

Table 6.5(9) Annual mean values of each parameters from 2005 to 2009 at Semenyih Dam (Malaysia)

	Mandatory Parameters : 4 times/year										Mandatory Parameters : Once/year					
	pH	EC mS/m	Alkalinity meq/L	SO ₄ ²⁻ mg/L	NO ₃ ⁻ mg/L	Cl ⁻ mg/L	NH ₄ ⁺ mg/L	Na ⁺ mg/L	K ⁺ mg/L	Ca ²⁺ mg/L	Mg ²⁺ mg/L	PO ₄ ³⁻ mg/L	NO ₂ ⁻ mg/L	DOC mg/L	COD mg/L	Transparency m
2005	7.08	2.27	0.226	0.75	1.07	1.41	0.11	2.34	2.01	4.93	1.40	-	-	-	-	-
2006	7.24	3.03	0.688	5.04	0.87	7.03	0.29	14.55	16.83	14.39	2.70	-	-	-	-	-
2007	7.02	2.67	0.266	1.22	0.10	0.75	0.04	2.35	2.05	2.30	0.69	-	-	-	-	-
2008	6.94	1.53	0.265	1.73	0.18	0.83	0.06	2.46	2.08	2.54	0.66	-	-	-	-	-
2009	6.91	3.30	0.229	1.80	0.22	0.83	0.02	2.13	1.90	1.83	0.55	-	-	-	-	-

Table 6.5(10) Annual mean values of each parameters from 2007 to 2009 at Tembeling River (Malaysia)

Year	Annual mean value of water parameters from 2007 to 2009 at a drinking water (municipal)															
	Mandatory Parameters : 4 times/year											Mandatory Parameters : Once/year				
	pH	EC mS/m	Alkalinity meq/L	SO ₄ ²⁻ mg/L	NO ₃ ⁻ mg/L	Cl ⁻ mg/L	NH ₄ ⁺ mg/L	Na ⁺ mg/L	K ⁺ mg/L	Ca ²⁺ mg/L	Mg ²⁺ mg/L	PO ₄ ³⁻ mg/L	NO ₂ ⁻ mg/L	DOC mg/L	COD mg/L	Transparency m
2007	6.80	13.90	1.640	7.03	0.63	2.20	0.05	3.01	3.37	16.50	8.68	-	-	-	-	-
2008	7.07	18.62	1.850	8.10	0.75	1.20	0.01	5.83	0.40	22.00	10.40	-	-	-	-	-
2009	7.97	20.28	1.975	9.38	0.72	1.33	0.01	6.25	0.53	20.50	10.23	-	-	-	-	-

Table 6.5(11) Annual mean values of each parameters from 2002 to 2009 at Terelj river (Mongolia)

Year	Mandatory Parameters : 4 times/year													Mandatory Parameters : Once/year				
	pH	EC mS/m	Alkalinity meq/L	SO ₄ ²⁻ mg/L	NO ₃ ⁻ mg/L	Cl ⁻ mg/L	NH ₄ ⁺ mg/L	Na ⁺ mg/L	K ⁺ mg/L	Ca ²⁺ mg/L	Mg ²⁺ mg/L	PO ₄ ³⁻ mg/L	NO ₂ ⁻ mg/L	DOC mg/L	COD mg/L	Transparency m		
2002	7.23	4.84	0.098	3.47	1.11	0.43	0.04	1.87	0.52	7.17	0.87	-	-	-	-	-		
2003	6.75	4.60	0.266	3.16	0.74	0.36	0.04	1.65	0.48	5.88	0.83	-	-	-	-	-		
2004	6.80	4.44	0.296	2.76	0.70	0.54	0.06	1.60	0.72	5.93	0.89	-	-	-	-	-		
2005	6.90	4.84	0.367	3.18	0.82	0.56	0.05	1.95	0.68	8.90	1.04	-	0.003	-	-	-		
2006	6.99	5.07	0.327	3.60	0.79	0.46	0.11	2.07	0.62	9.04	1.07	-	0.003	-	-	-		
2007	6.89	5.06	0.339	3.18	0.79	0.57	0.07	2.22	0.55	8.63	1.03	<0.005*1	0.003	-	-	-		
2008	6.36	6.59	0.282	3.82	1.33	0.73	<0.01*1	1.93	0.60	13.70	1.00	0.007	<0.005*1	-	-	-		
2009	7.13	4.70	0.331	3.47	0.49	0.41	<0.01*1	1.66	0.58	5.41	0.76	-	<0.005*1	-	-	-		

- : Items were not analyzed.

*1 : Less than determination limits

Table 6.5(12) Annual mean values of each parameters from 2004 to 2009 at Pandin Lake (Philippines)

	Mandatory Parameters : 4 times/year										Mandatory Parameters : Once/year					
	pH	EC mS/m	Alkalinity meq/L	SO ₄ ²⁻ mg/L	NO ₃ ⁻ mg/L	Cl ⁻ mg/L	NH ₄ ⁺ mg/L	Na ⁺ mg/L	K ⁺ mg/L	Ca ²⁺ mg/L	Mg ²⁺ mg/L	PO ₄ ³⁻ mg/L	NO ₂ ⁻ mg/L	DOC mg/L	COD mg/L	Transparency m
2004	8.08	18.23	1.808	0.33	0.08	3.16	0.02	8.91	5.81	12.05	6.91	0.014	0.072	-	-	-
2005	7.96	18.14	1.723	1.11	0.58	3.76	0.69	8.18	4.89	14.33	7.84	0.005	0.295	-	-	-
2006	7.72	17.34	1.758	0.43	0.19	2.40	0.22	8.08	5.08	15.13	7.30	0.004	0.012	-	-	2.2
2007	7.76	17.57	1.708	0.52	0.10	3.37	0.26	7.28	6.29	12.10	9.03	0.002	0.013	-	-	-
2008	7.48	17.95	1.627	0.76	5.23	3.70	0.02	7.33	4.92	12.65	7.97	0.013	-	-	-	-
2009	7.68	18.70	1.813	0.66	5.72	3.78	1.02	8.61	4.35	14.10	7.32	0.087	-	-	-	1.8

Table 6.5(13) Annual mean values of each parameters from 2005 to 2009 at Ambulakao Lake (Philippines)

Year	Annual mean values of water parameters from 2005 to 2009 at Kumbhariam Lake (Mumbai)															
	Mandatory Parameters : 4 times/year											Mandatory Parameters : Once/year				
	pH	EC mS/m	Alkalinity meq/L	SO ₄ ²⁻ mg/L	NO ₃ ⁻ mg/L	Cl ⁻ mg/L	NH ₄ ⁺ mg/L	Na ⁺ mg/L	K ⁺ mg/L	Ca ²⁺ mg/L	Mg ²⁺ mg/L	PO ₄ ³⁻ mg/L	NO ₂ ⁻ mg/L	DOC mg/L	COD mg/L	Transparency m
2005	5.82	0.44	0.020	0.15	0.11	0.06	-	0.22	0.15	0.15	0.04	-	0.100	-	-	-
2006	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2007	5.49	0.53	0.031	0.46	0.12	0.25	0.02	0.37	0.13	0.40	0.10	*1	*1	-	-	-
2008	5.74	0.38	0.081	0.27	0.12	0.17	0.10	0.19	0.07	0.26	0.15	0.001	-	-	-	-
2009	5.72	30.33	0.275	23.14	14.75	9.27	0.13	6.54	0.33	32.58	2.84	-	-	-	-	-

Table 6.5(14) Annual mean values of each parameters from 2004 to 2009 at Pereemnaya River (Russia)

	Mandatory Parameters : 4 times/year											Mandatory Parameters : Once/year				
	pH	EC mS/m	Alkalinity meq/L	SO ₄ ²⁻ mg/L	NO ₃ ⁻ mg/L	Cl ⁻ mg/L	NH ₄ ⁺ mg/L	Na ⁺ mg/L	K ⁺ mg/L	Ca ²⁺ mg/L	Mg ²⁺ mg/L	PO ₄ ³⁻ mg/L	NO ₂ ⁻ mg/L	DOC mg/L	COD mg/L	Transparency m
2004	6.55	3.93	0.135	7.18	0.76	0.23	0.03	1.10	0.77	3.23	0.94	0.008	0.002	-	-	2.0
2005	6.80	4.03	0.135	7.84	0.66	0.20	0.03	0.96	0.71	3.29	1.04	0.002	0.005	-	0.8	-
2006	6.74	3.95	0.140	7.49	0.81	0.20	0.04	1.07	0.75	3.36	1.02	0.004	0.002	1.5	1.1	-
2007	6.59	4.21	0.135	8.98	0.91	0.18	0.11	1.06	0.76	3.92	0.85	0.004	0.003	1.6	1.0	-
2008	6.68	4.87	0.155	9.77	1.03	0.13	0.03	0.93	0.60	4.78	1.05	0.007	0.002	1.0	0.8	-
2009	6.66	4.87	0.128	11.69	0.85	0.14	0.02	1.00	0.60	4.94	0.97	0.005	0.002	-	0.6	-

Table 6.5(15) Annual mean values of each parameters from 2005 to 2009 at Komarovka River (Russia)

	Mandatory Parameters : 4 times/year										Mandatory Parameters : Once/year					
	pH	EC mS/m	Alkalinity meq/L	SO ₄ ²⁻ mg/L	NO ₃ ⁻ mg/L	Cl ⁻ mg/L	NH ₄ ⁺ mg/L	Na ⁺ mg/L	K ⁺ mg/L	Ca ²⁺ mg/L	Mg ²⁺ mg/L	PO ₄ ³⁻ mg/L	NO ₂ ⁻ mg/L	DOC mg/L	COD mg/L	Transparency m
2005	7.24	8.75	0.495	11.18	0.33	3.09	0.15	3.34	0.60	9.07	2.25	*1	*1	-	-	-
2006	7.08	8.37	0.428	9.02	0.26	3.12	0.08	3.10	0.57	8.51	2.27	0.014	0.003	-	-	-
2007	7.15	8.68	0.395	10.51	0.26	4.03	0.09	3.39	0.65	8.04	2.34	0.010	0.025	-	4.3	-
2008	7.22	8.68	0.391	12.08	0.52	3.06	0.09	3.80	0.62	8.14	2.08	0.030	0.053	-	3.6	-
2009	7.02	8.64	0.351	12.59	1.11	3.69	0.22	3.57	0.60	8.21	2.07	0.041	0.067	-	4.4	-

- : Items were not analyzed.

*1 : Less than determination limits

Table 6.5(16) Annual mean values of each parameters from 2002 to 2009 at Vachiralongkorn Dam(Ban Pong Chang) (Thailand)

	Mandatory Parameters : 4 times/year											Mandatory Parameters : Once/year					
	pH	EC mS/m	Alkalinity meq/L	SO ₄ ²⁻ mg/L	NO ₃ ⁻ mg/L	Cl ⁻ mg/L	NH ₄ ⁺ mg/L	Na ⁺ mg/L	K ⁺ mg/L	Ca ²⁺ mg/L	Mg ²⁺ mg/L	PO ₄ ³⁻ mg/L	NO ₂ ⁻ mg/L	DOC mg/L	COD mg/L	Transparency m	
2002	7.52	12.13	0.625	1.15	0.04	0.89	*1	1.14	1.01	13.27	2.98	0.024	*1	-	4.0	5.3	
2003	7.45	10.75	0.625	1.29	0.01	0.84	*1	1.14	0.97	16.24	3.52	*1	*1	-	5.8	5.0	
2004	7.77	11.53	1.050	1.27	0.08	0.98	0.05	1.18	0.97	15.68	3.26	0.023	0.010	-	7.5	5.6	
2005	7.33	11.18	1.276	1.47	0.11	1.05	0.01	1.26	1.02	15.83	3.12	0.010	0.010	-	<4.0*1	3.6	
2006	7.21	10.41	1.125	1.31	0.20	0.85	0.06	1.14	1.03	16.24	3.17	<0.01*1	<0.01*1	-	10.0	4.6	
2007	7.80	10.41	1.090	1.17	0.20	0.75	0.01	1.21	0.96	16.50	3.26	0.010	0.010	-	5.2	5.1	
2008	7.71	10.55	1.178	1.11	0.05	0.75	<0.01*1	1.16	0.97	16.25	3.23	<0.01*1	0.010	-	6.8	4.4	
2009	7.79	10.83	1.111	1.33	0.06	0.74	-	1.16	0.95	16.09	3.39	0.010	<0.01*1	-	-	4.4	

Table 6.5(17) Annual mean values of each parameters from 2002 to 2009 at Vachiralongkorn Dam(Ban Pang Pueng) (Thailand)

Year	Mandatory Parameters : 4 times/year												Mandatory Parameters : Once/year				
	pH	EC mS/m	Alkalinity meq/L	SO ₄ ²⁻ mg/L	NO ₃ ⁻ mg/L	Cl ⁻ mg/L	NH ₄ ⁺ mg/L	Na ⁺ mg/L	K ⁺ mg/L	Ca ²⁺ mg/L	Mg ²⁺ mg/L	PO ₄ ³⁻ mg/L	NO ₂ ⁻ mg/L	DOC mg/L	COD mg/L	Transparency m	
2002	7.31	11.98	0.633	1.24	0.06	0.90	*1	1.19	0.99	13.28	2.90	0.034	*1	-	3.0	5.5	
2003	7.87	10.50	0.590	1.41	0.01	0.84	*1	1.17	0.98	16.24	2.94	*1	*1	-	7.3	5.8	
2004	7.24	11.12	1.005	1.54	0.20	0.95	0.05	1.21	1.03	16.01	2.83	0.020	0.010	-	5.0	8.1	
2005	6.98	11.20	1.015	1.29	0.11	1.15	0.03	1.52	1.02	16.16	2.98	0.135	0.010	-	*1	4.4	
2006	7.12	10.03	1.046	1.44	0.20	0.83	0.03	1.14	1.04	16.19	2.64	<0.01*1	<0.01*1	-	11.0	5.0	
2007	7.84	10.21	1.050	1.25	0.20	0.70	0.01	1.13	0.98	16.75	2.98	0.010	0.010	-	4.0	5.3	
2008	7.78	9.88	1.104	1.49	<0.06*1	0.75	<0.01*1	1.17	1.00	15.65	2.49	<0.01*1	0.010	-	4.7	4.4	
2009	7.93	10.30	1.065	1.42	0.06	0.73	-	1.14	2.04	15.88	2.79	0.010	<0.01*1	-	-	4.6	

Table 6.5(18) Annual mean values of each parameters from 2001 to 2009 at Hoa Binh Reservoir (Viet Nam)

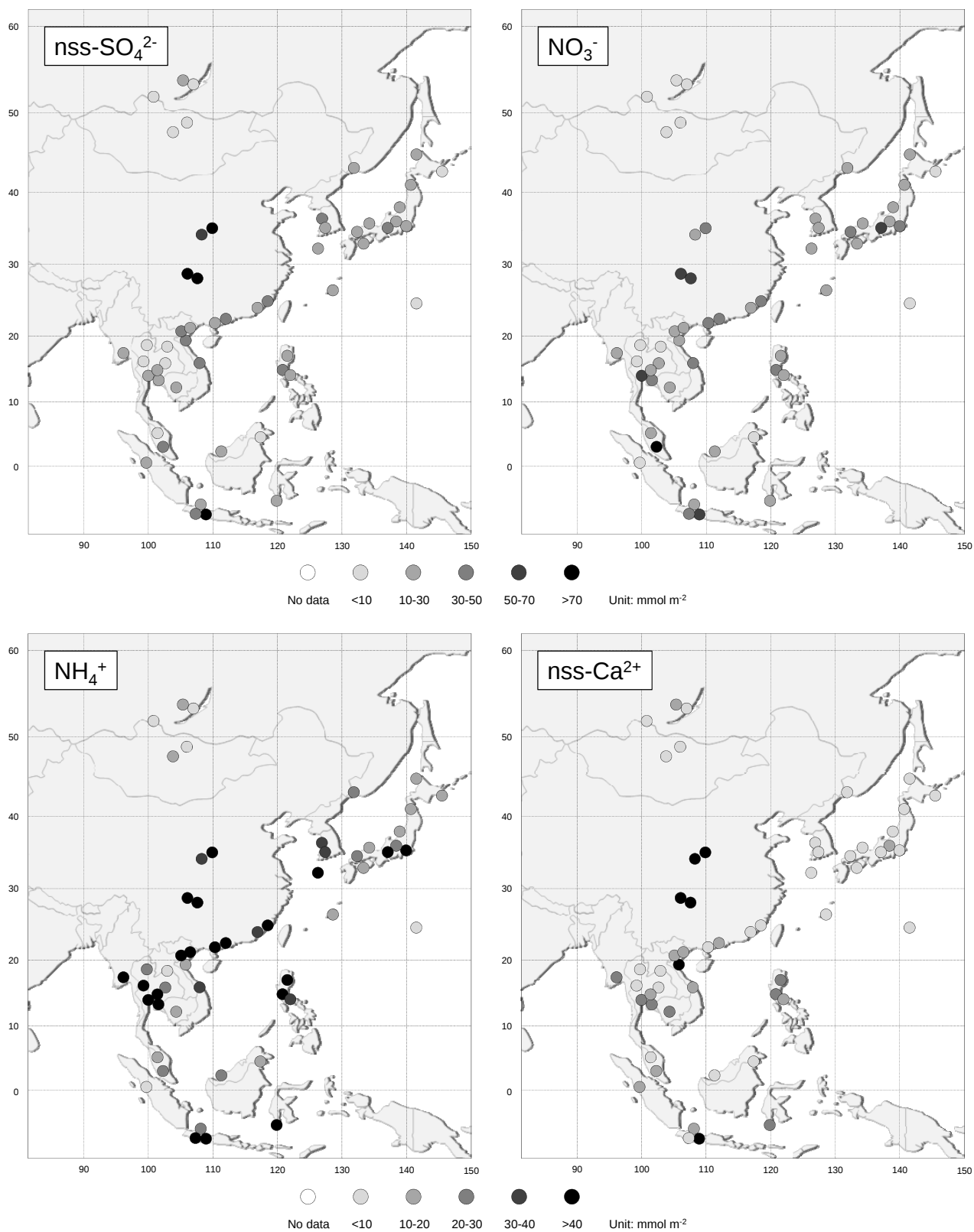
	Mandatory Parameters : 4 times/year											Mandatory Parameters : Once/year					
	pH	EC mS/m	Alkalinity meq/L	SO ₄ ²⁻ mg/L	NO ₃ ⁻ mg/L	Cl ⁻ mg/L	NH ₄ ⁺ mg/L	Na ⁺ mg/L	K ⁺ mg/L	Ca ²⁺ mg/L	Mg ²⁺ mg/L	PO ₄ ³⁻ mg/L	NO ₂ ⁻ mg/L	DOC mg/L	COD mg/L	Transparency m	
2001	7.59	17.40	1.575	5.44	0.59	1.16	0.15	1.97	1.22	21.85	6.12	-	-	-	-	-	
2002	7.88	17.14	1.613	3.90	0.46	1.35	0.21	1.70	1.16	22.53	5.49	-	-	-	-	-	
2003	7.29	18.41	1.595	6.13	0.63	1.33	0.08	2.14	1.36	24.50	4.78	-	-	-	-	-	
2004	6.55	19.27	1.675	4.51	1.16	1.38	0.17	2.45	1.11	27.22	4.11	-	-	-	-	-	
2005	7.58	19.01	1.605	5.62	1.04	1.62	0.16	4.40	1.31	23.12	4.77	-	-	-	-	-	
2006	7.22	19.08	1.605	7.71	0.87	1.41	0.12	3.62	1.46	25.22	4.87	0.005	0.006	-	2.2	0.7	
2007	7.62	19.09	1.613	8.14	1.44	1.54	0.11	3.53	1.48	24.90	4.64	0.015	0.016	-	1.9	0.9	
2008	7.73	18.26	1.533	7.36	1.04	1.65	0.04	2.33	0.91	22.90	5.01	0.021	0.025	-	2.2	1.5	
2009	7.98	16.65	1.390	6.55	0.67	2.05	0.02	3.10	0.84	20.82	4.49	0.019	0.010	-	1.4	1.10	

- : Items were not analyzed.

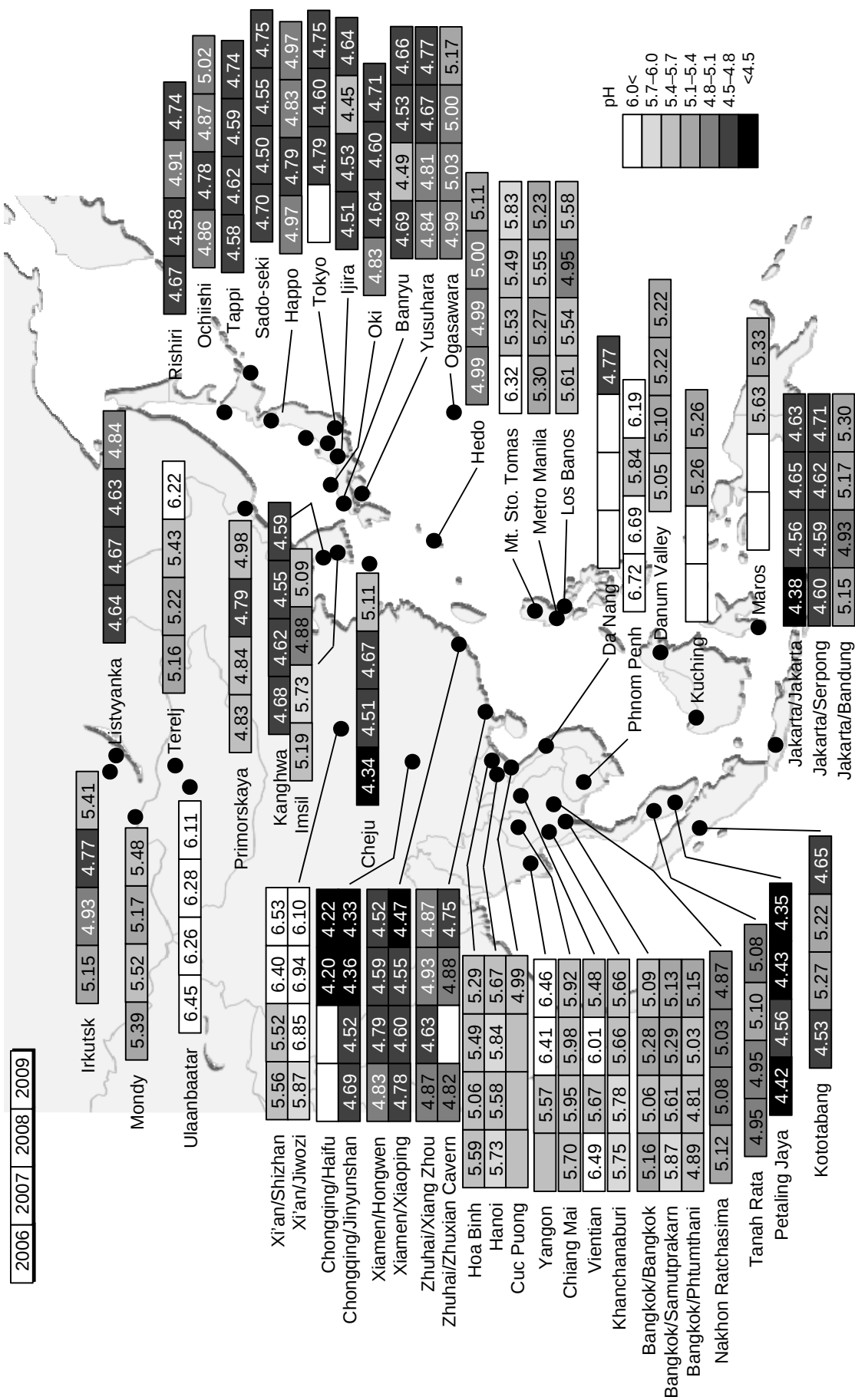
*1 : Less than determination limits

Appendix I

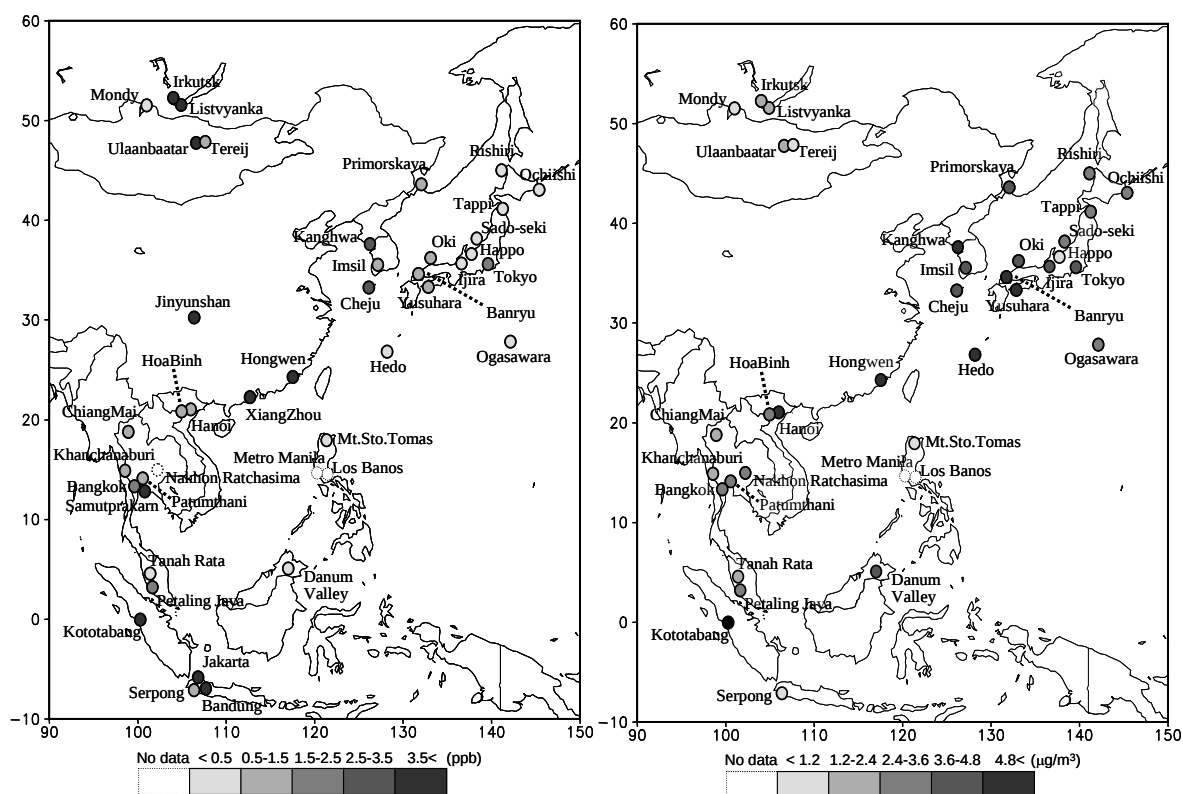
Overview of Data Report 2009



Appendix Fig. 1-1 Annual deposition levels of nss-SO_4^{2-} , NO_3^- , NH_4^+ and nss-Ca^{2+}

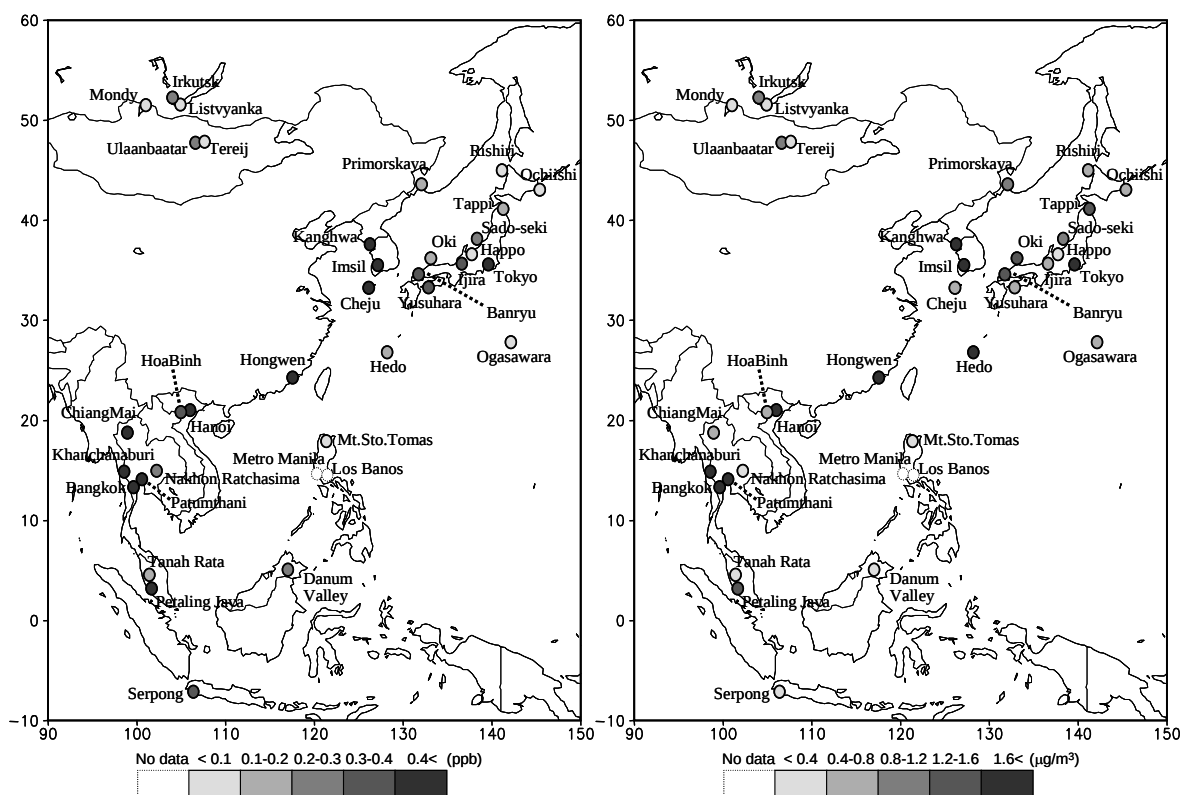


Appendix Fig. 1-2 Trends of pH in each EANET site from 2006 to 2009



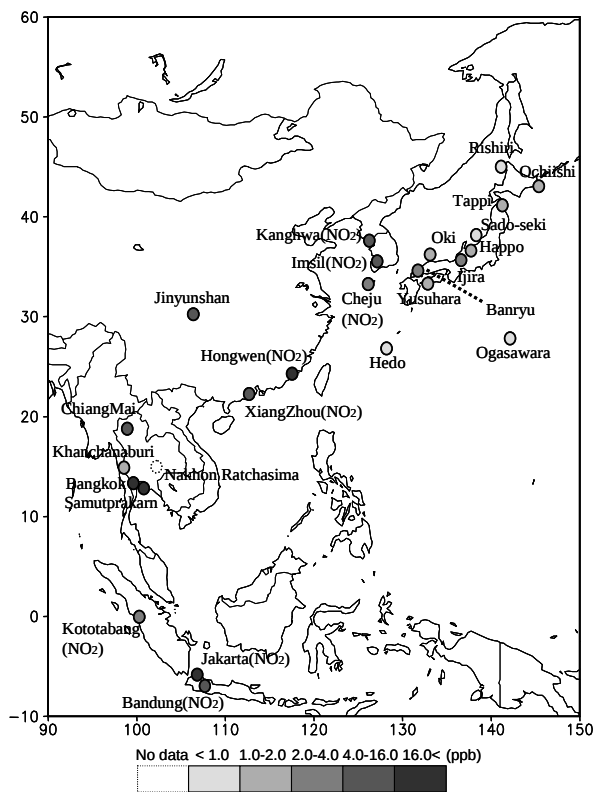
Appendix Fig. 2-1 Levels of annual SO_2 concentration in at EANET monitoring sites in 2009.

Appendix Fig. 2-2 Levels of annual particulate SO_4^{2-} concentration in at EANET monitoring sites in 2009.

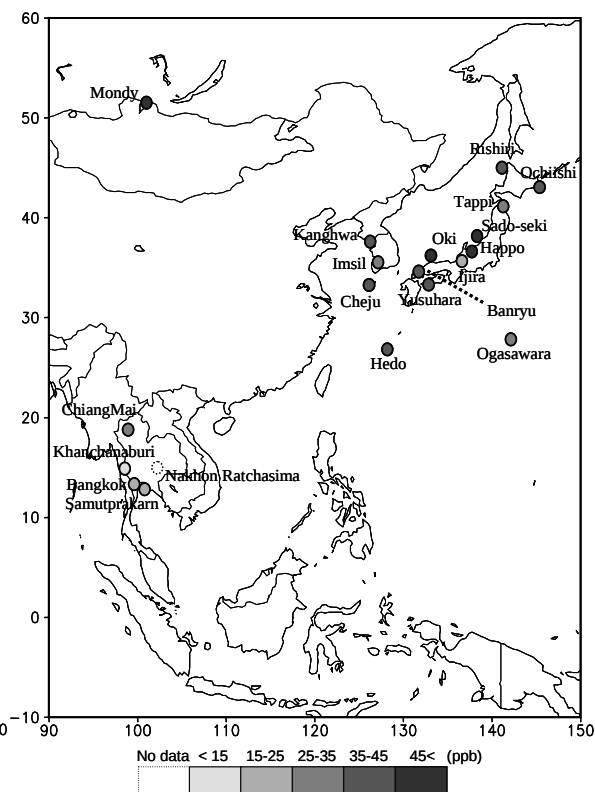


Appendix Fig. 2-3 Levels of annual HNO_3 concentration in at EANET monitoring sites in 2009.

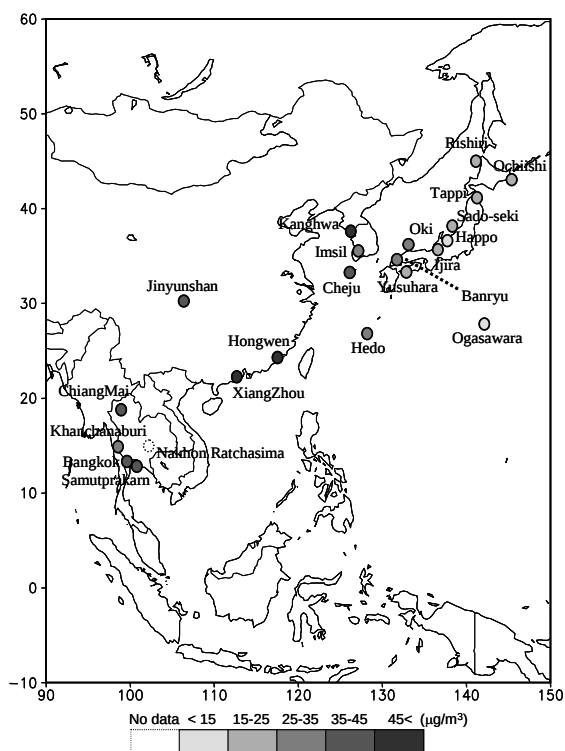
Appendix Fig. 2-4 Levels of annual particulate NO_3^- concentration in at EANET monitoring sites in 2009.



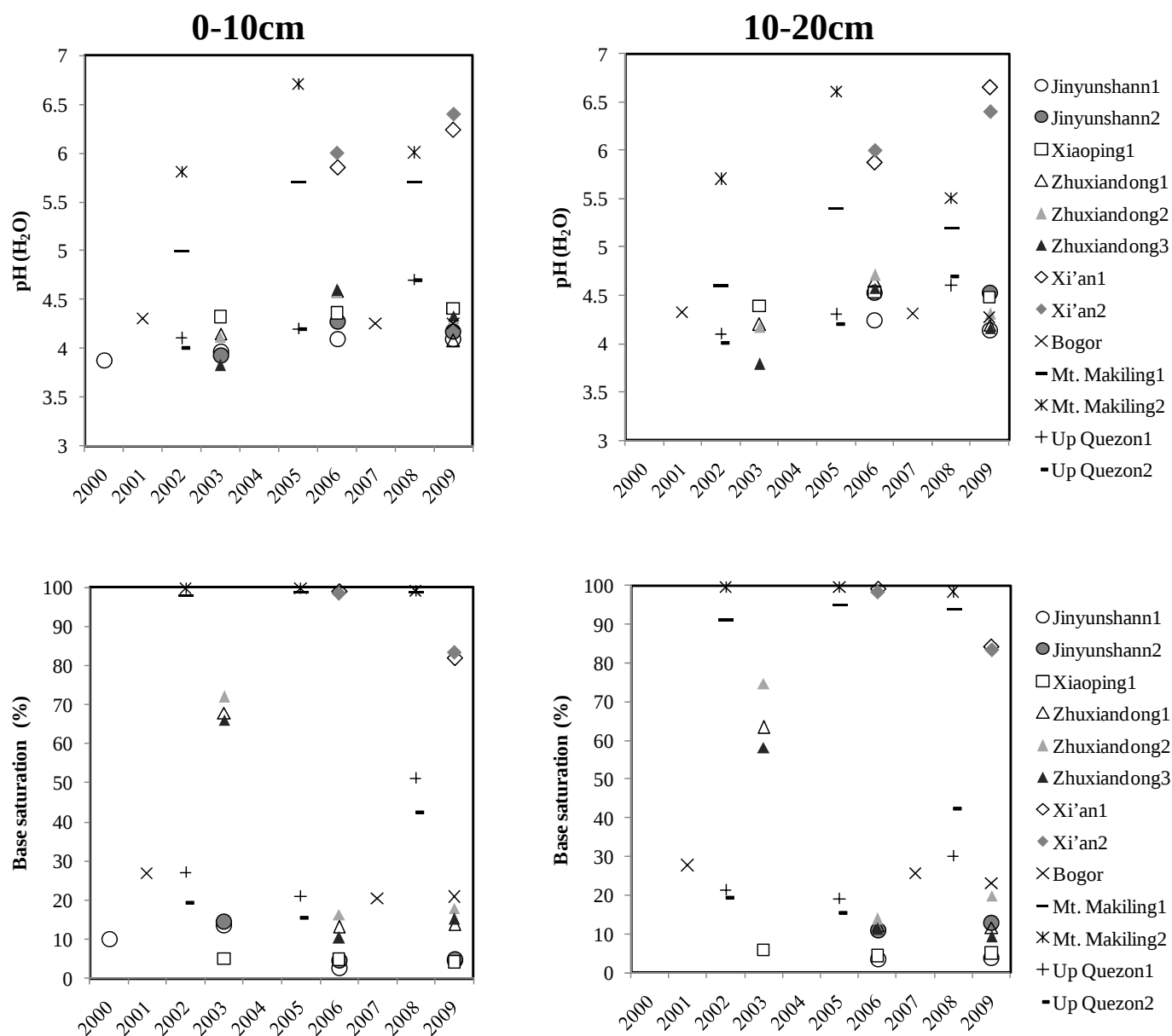
Appendix Fig. 2-5 Levels of annual NO_x or NO₂ concentration at EANET monitoring sites in 2009.



Appendix Fig. 2-6 Levels of annual O₃ concentration at EANET monitoring sites in 2009.

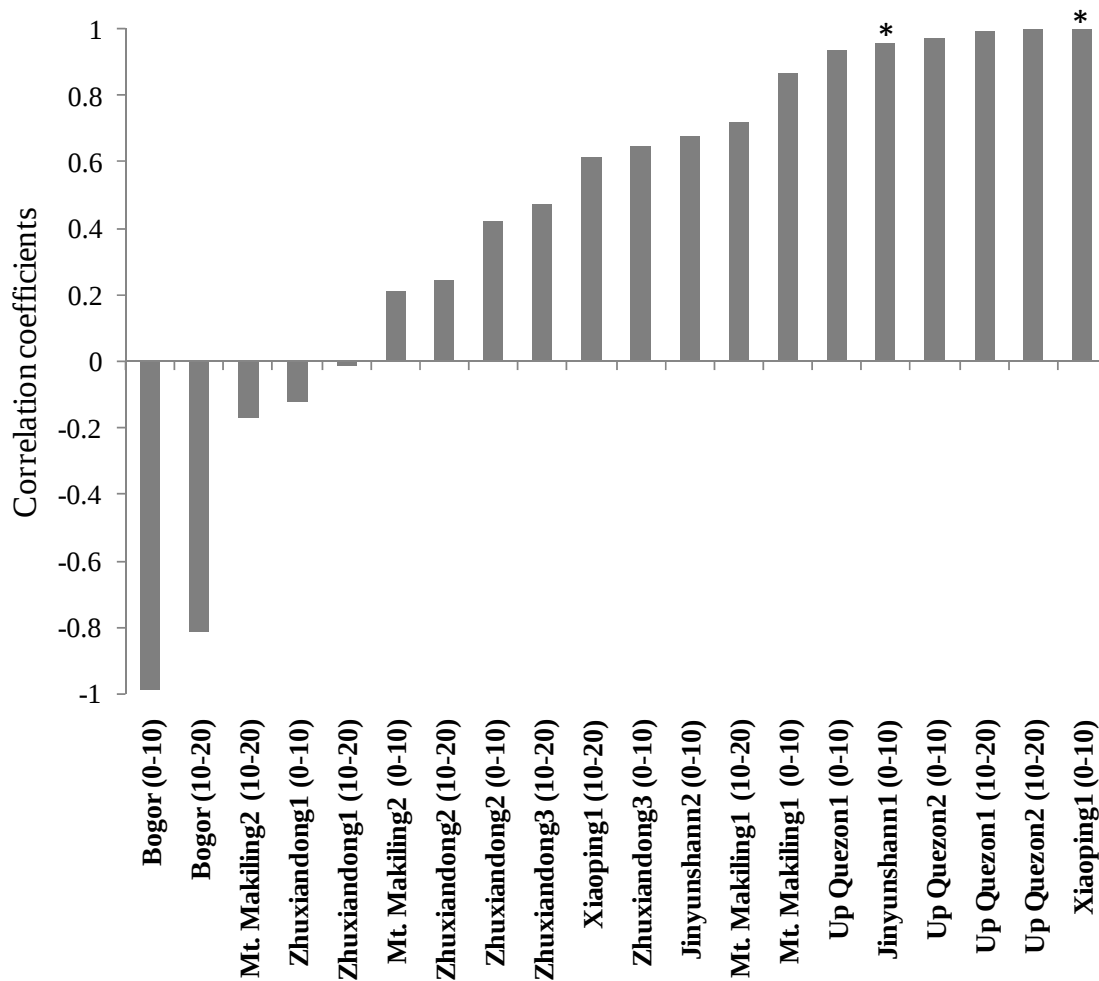


Appendix Fig. 2-7 Levels of annual PM₁₀ concentration at EANET monitoring sites in 2009.



Appendix Fig. 3 Changes in pH (H₂O) and bases saturation ((Ca+Mg+K)/ECEC) of surface soil (0-10 cm) and sub soil (10-20 cm) from 2000 to 2009

Soil was basically monitored every three years. The numbers beside the site name, 1 and 2, indicate the plot number. Each point indicates the mean value of five sub-plots.



Appendix Fig. 4 Correlation coefficients between pH (H₂O) and time (2000 - 2009)

Coefficients were calculated in the monitoring plot where soil surveys were conducted more than 3 times from 2000 to 2009 (n=3 or 4). Asterisk besides each bar indicates the significant correlation with time. Positive and negative values indicate an increase and decrease trend of pH, respectively.

Appendix II

Meteorological Statistics at the Monitoring Sites

Meteorological Statistics : Chongqing

[illegible]

2009

[illegible]

Meteorological Statistics : Jakarta

[illegible]

2009

[illegible]

Meteorological Statistics : Kototabang

Month		1	2	3	4	5	6	7	8	9	10	11	12
Items													
Temperature (°C)	monthly mean	21.6	21.7	22.4	22.5	22.7	22.4	22.0	21.9	22.0	21.9	21.8	21.4
	max.daily mean	26.4	27.3	28.0	28.1	27.7	28.3	27.5	27.2	27.1	27.4	26.9	26.2
	min.daily mean	18.7	18.0	18.8	19.2	17.9	18.7	17.6	18.6	18.9	18.9	19.1	18.6
Relative humidity (%)	monthly mean	90	89	96	91	87	90	89	90	87	87	87	93
	max.daily mean	99	100	100	73	96	100	100	99	97	94	97	100
	min.daily mean	70	66	68	50	62	67	66	68	65	61	64	75
Mean wind speed (m/s)		0.7	0.5	0.4	0.3	0.5	0.4	0.4	0.5	0.9	0.9	1.0	1.0
Most frequent wind direction (bearings)		SE	NE	NE	N	N	N	SE	SE	N	SE	NE	SE
Precipitation amount (mm/month)		151	232	123	145	97	217	54	343	269	402	452	352
Sunshine duration (hours/month)		108	87	143	109	183	127	135	129	99	110	72	68
Solar radiation (MJ/m ² /month)		160	163	182	177	203	176	175	175	186	189	179	163

2009

[illegible]

Appendix Table II-5 Meteorological statistics at the monitoring sites

Meteorological Statistics : Rishiri

2009

Month		1	2	3	4	5	6	7	8	9	10	11	12
Items													
Temperature (°C)	monthly mean	-2.8	-4.4	-0.3	4.0	10.0	13.8	16.2	18.8	15.8	10.8	2.6	-2.8
	max.daily mean	2.8	-0.6	4.4	9.3	14.1	18.9	17.4	21.0	18.8	16.7	14.0	2.9
	min.daily mean	-8.2	-8.0	-6.1	-1.3	4.9	9.3	14.4	16.2	11.9	2.2	-3.5	-7.3
Relative humidity (%)	monthly mean	75	74	72	72	78	88	92	87	79	72	73	74
	max.daily mean	86	91	93	94	95	96	99	97	92	88	92	90
	min.daily mean	57	51	55	50	63	79	89	61	63	52	53	54
Mean wind speed (m/s)		4.4	4.4	4.7	3.5	2.4	2.2	1.4	2.4	2.6	3.7	4.2	4.3
Most frequent wind direction (bearings)		NW	NNW	W	ENE	W	E	WNW	WSW	N NNE	WNW	WNW	NW
Precipitation amount (mm/month)		66	90	50	29	55	143	2.5	111	79	107	156	83
Sunshine duration (hours/month)		-	-	-	-	-	-	-	-	-	-	-	-
Solar radiation (MJ/m ² /month)		121	193	339	529	569	391	129	504	471	300	130	105

Meteorological Statistics : Ochiishi

2009

Month		1	2	3	4	5	6	7	8	9	10	11	12
Items													
Temperature (°C)	monthly mean	-2.6	-4.9	-1.5	1.1	5.3	7.5	10.7	13.6	13.4	9.9	3.9	-2.0
	max.daily mean	0.9	-0.9	1.3	3.7	8.9	13.5	13.5	16.2	14.8	14.0	9.6	4.5
	min.daily mean	-6.0	-7.4	-5.8	-1.5	2.8	4.4	7.3	9.8	11.2	3.5	-1.2	-6.1
Relative humidity (%)	monthly mean	76	73	83	82	88	96	96	96	88	76	74	66
	max.daily mean	97	96	100	99	100	100	100	100	100	96	95	87
	min.daily mean	53	44	57	64	68	81	84	78	62	56	43	41
Mean wind speed (m/s)		8.7	8.7	9.0	8.3	8.6	6.7	6.6	6.1	6.9	9.1	8.2	8.4
Most frequent wind direction (bearings)		NW	NNW	WSW	N	WSW	SE	NE	WSW	SSE	WSW	NNW	NNW
Precipitation amount (mm/month)		22	24	87	68	119	122	295	156	139	210	70	61
Sunshine duration (hours/month)		-	-	-	-	-	-	-	-	-	-	-	-
Solar radiation (MJ/m ² /month)		198	271	365	515	551	462	434	428	413	317	187	187

Appendix Table II-6 Meteorological statistics at the monitoring sites

Meteorological Statistics : Tappi

2009

Month		1	2	3	4	5	6	7	8	9	10	11	12
Items													
Temperature (°C)	monthly mean	0.8	0.5	2.4	7.4	12.0	15.4	18.8	20.4	18.4	14.1	8.0	1.9
	max.daily mean	5.4	5.0	9.7	11.8	15.6	20.9	21.1	23.6	20.9	17.9	16.3	7.7
	min.daily mean	-4.3	-4.4	-2.8	2.5	8.3	11.9	16.4	17.8	15.5	8.4	2.2	-2.4
Relative humidity (%)	monthly mean	68	67	68	70	80	84	90	83	73	66	69	68
	max.daily mean	86	89	91	94	96	96	96	96	84	85	88	88
	min.daily mean	58	51	49	51	59	68	82	59	60	52	49	56
Mean wind speed (m/s)		7.6	8.6	8.3	6.2	5.7	4.7	4.7	4.8	4.9	6.4	6.9	9.7
Most frequent wind direction (bearings)		WSW	WSW	WSW	WSW	SW	ENE	WSW	ENE	WSW	WSW	WSW	WSW
Precipitation amount (mm/month)		46	81	34	55	97	73	396	196	83	94	54	58
Sunshine duration (hours/month)		-	-	-	-	-	-	-	-	-	-	-	-
Solar radiation (MJ/m ² /month)		108	164	278	475	544	491	337	434	451	311	128	74

Meteorological Statistics : Sado-Seki

2009

Month		1	2	3	4	5	6	7	8	9	10	11	12
Items													
Temperature (°C)	monthly mean	3.5	3.6	5.6	10.7	15.8	19.4	21.7	22.8	20.2	16.4	11.1	5.3
	max.daily mean	8.4	13.4	16.5	17.2	20.1	24.7	25.3	26.5	23.3	20.1	19.0	10.8
	min.daily mean	-1.7	-1.8	1.1	5.2	9.1	14.3	18.2	19.5	17.3	12.8	5.2	-0.8
Relative humidity (%)	monthly mean	69	66	62	66	68	71	85	82	75	66	71	71
	max.daily mean	93	86	81	93	93	90	95	95	88	90	87	94
	min.daily mean	46	41	40	31	32	41	67	60	63	49	48	54
Mean wind speed (m/s)		8.1	6.4	6.7	5.5	4.6	3.6	4.1	3.1	3.5	5.4	6.5	7.7
Most frequent wind direction (bearings)		W	W	W	WSW	SW	WSW	SW	NE	ENE	WSW	W	W
Precipitation amount (mm/month)		67	44	74	31	43	81	232	58	24	188	129	88
Sunshine duration (hours/month)		-	-	-	-	-	-	-	-	-	-	-	-
Solar radiation (MJ/m ² /month)		154	199	348	482	553	574	380	441	428	342	157	102

Appendix Table II-7 Meteorological statistics at the monitoring sites

Meteorological Statistics : Happo

2009

Month		1	2	3	4	5	6	7	8	9	10	11	12
Items													
Temperature (°C)	monthly mean	-8.0	-5.6	-4.6	3.1	8.4	11.3	14.6	15.2	10.8	5.7	0.8	-5.5
	max.daily mean	0.7	3.4	5.8	9.5	14.9	17.1	17.2	17.7	14.0	10.9	7.7	0.2
	min.daily mean	-14.1	-14.2	-11.3	-6.9	1.1	6.1	10.9	9.6	7.4	2.6	-6.5	-12.3
Relative humidity (%)	monthly mean	75	64	66	54	64	74	90	87	88	77	75	81
	max.daily mean	95	92	92	95	95	97	99	99	99	99	99	97
	min.daily mean	20	32	22	17	17	44	70	48	63	44	30	37
Mean wind speed (m/s)		4.4	5.1	5.8	4.0	2.9	2.2	2.6	1.8	1.9	2.2	2.3	3.9
Most frequent wind direction (bearings)		S	NW	NW	S	S	SSE	SSE	SSE	SSE	SSE	SSE	SSE
Precipitation amount (mm/month)		94	230	129	91	157	168	635	168	113	180	124	129
Sunshine duration (hours/month)		-	-	-	-	-	-	-	-	-	-	-	-
Solar radiation (MJ/m ² /month)		42	-	-	69	223	512	285	401	347	364	264	221

Meteorological Statistics : Ijira

2009

Month		1	2	3	4	5	6	7	8	9	10	11	12
Items													
Temperature (°C)	monthly mean	2.2	4.4	6.2	12.0	16.4	19.8	22.8	23.5	20.4	14.7	9.7	4.0
	max.daily mean	9.5	10.5	13.1	16.7	19.8	22.5	24.7	25.7	23.8	19.3	16.1	10.3
	min.daily mean	-1.4	-0.2	2.0	6.5	13.0	16.3	20.8	20.7	17.4	12.4	5.5	-1.0
Relative humidity (%)	monthly mean	87	78	74	71	79	83	94	87	84	85	87	90
	max.daily mean	98	98	96	98	98	97	97	97	97	97	97	97
	min.daily mean	71	59	47	46	53	63	83	67	65	69	70	68
Mean wind speed (m/s)		0.4	0.6	0.7	0.7	0.5	0.4	0.2	0.3	0.4	0.4	0.4	0.4
Most frequent wind direction (bearings)		Calm	Calm	Calm	W	Calm	Calm	Calm	Calm	Calm	Calm	Calm	Calm
Precipitation amount (mm/month)		135	162	274	232	202	350	606	283	77	162	188	164
Sunshine duration (hours/month)		-	-	-	-	-	-	-	-	-	-	-	-
Solar radiation (MJ/m ² /month)		225	267	398	495	497	474	272	391	360	319	218	198

Appendix Table II-8 Meteorological statistics at the monitoring sites

Meteorological Statistics : Oki

2009

Month		1	2	3	4	5	6	7	8	9	10	11	12
Items													
Temperature (°C)	monthly mean	5.2	6.6	7.8	13.1	16.3	20.1	22.4	23.5	20.9	17.7	12.2	7.5
	max.daily mean	9.7	14.8	17.2	17.8	19.7	24.8	26.2	26.6	22.3	21.4	19.7	13.8
	min.daily mean	0.5	1.4	3.3	6.8	13.4	15.6	18.7	20.5	18.9	14.6	7.6	1.0
Relative humidity (%)	monthly mean	67	65	63	62	69	71	81	79	69	62	65	64
	max.daily mean	87	80	77	85	87	86	90	90	80	85	87	86
	min.daily mean	51	48	49	34	49	51	69	64	53	49	48	55
Mean wind speed (m/s)		6.1	5.0	5.4	4.7	4.8	4.0	5.0	4.3	3.8	5.2	6.1	5.8
Most frequent wind direction (bearings)		WSW	N	NNE	S	S	S	S	NNE	NNE	NNE	NNE	W
Precipitation amount (mm/month)		107	67	75	59	44	118	261	104	16	71	145	74
Sunshine duration (hours/month)		-	-	-	-	-	-	-	-	-	-	-	-
Solar radiation (MJ/m ² /month)		158	214	381	537	521	541	373	482	456	366	179	147

Meteorological Statistics : Banryu

2009

Month		1	2	3	4	5	6	7	8	9	10	11	12
Items													
Temperature (°C)	monthly mean	4.5	7.6	8.9	12.9	17.1	20.9	24.0	24.6	21.2	16.6	11.5	7.1
	max.daily mean	9.7	16.4	19.2	17.4	21.2	24.2	28.2	28.0	23.7	23.0	19.3	13.8
	min.daily mean	-0.1	2.5	5.1	7.2	14.0	17.6	20.9	21.1	18.4	14.0	6.8	1.5
Relative humidity (%)	monthly mean	77	74	68	71	73	79	84	84	83	76	77	71
	max.daily mean	96	91	91	92	91	94	95	94	94	95	95	91
	min.daily mean	55	53	51	48	44	49	69	67	72	60	61	55
Mean wind speed (m/s)		3.4	3.1	3.3	3.1	2.9	2.2	2.1	2.3	2.5	2.9	2.9	3.3
Most frequent wind direction (bearings)		S	S	S	S	S	S	S	S	S	S	S	S
Precipitation amount (mm/month)		124	95	67	109	27	237	549	80	75	75	207	81
Sunshine duration (hours/month)		-	-	-	-	-	-	-	-	-	-	-	-
Solar radiation (MJ/m ² /month)		145	269	427	539	557	522	367	546	483	376	212	166

Appendix Table II-9 Meteorological statistics at the monitoring sites

Meteorological Statistics : Yusuhara

2009

Month		1	2	3	4	5	6	7	8	9	10	11	12
Items													
Temperature (°C)	monthly mean	1.2	5.1	5.8	10.8	15.3	18.3	21.4	-	-	-	-	3.1
	max.daily mean	8.7	12.6	12.0	17.2	20.0	21.9	24.6	-	-	-	-	10.2
	min.daily mean	-6.2	-2.3	-0.3	2.9	11.6	13.3	17.0	-	-	-	-	-4.8
Relative humidity (%)	monthly mean	80	75	70	63	67	80	87	-	-	-	-	77
	max.daily mean	99	99	98	95	94	98	97	-	-	-	-	95
	min.daily mean	43	45	44	30	26	37	73	-	-	-	-	60
Mean wind speed (m/s)		2.7	2.5	2.2	2.2	1.9	1.4	1.2	-	-	-	-	2.6
Most frequent wind direction (bearings)		N	N	N	NNW	N	NNW	SSE	-	-	-	-	NNW
Precipitation amount (mm/month)		128	192	165	91	73	307	269	-	-	-	-	101
Sunshine duration (hours/month)		-	-	-	-	-	-	-	-	-	-	-	-
Solar radiation (MJ/m ² /month)		241	317	442	603	604	531	442	-	-	-	-	249

Meteorological Statistics : Hedo

2009

Month		1	2	3	4	5	6	7	8	9	10	11	12
Items													
Temperature (°C)	monthly mean	15.7	-	18.3	19.4	22.4	24.9	28.0	28.5	27.6	24.1	21.4	17.4
	max.daily mean	19.5	-	22.3	22.0	25.6	28.5	29.5	29.5	29.3	27.8	23.8	21.2
	min.daily mean	11.5	-	13.6	15.3	19.8	22.2	24.3	27.4	26.6	21.7	17.8	13.7
Relative humidity (%)	monthly mean	66	-	76	70	75	83	79	78	73	75	73	67
	max.daily mean	89	-	91	86	91	92	87	89	91	91	91	88
	min.daily mean	54	-	56	46	49	63	73	67	61	54	54	55
Mean wind speed (m/s)		5.3	-	4.8	5.0	3.8	3.3	3.2	3.7	4.7	5.4	5.6	4.9
Most frequent wind direction (bearings)		NNW	-	N	E	NNW	SSW	SE	E	E	ENE	E	N
Precipitation amount (mm/month)		95	-	163	69	110	402	102	77	38	552	187	52
Sunshine duration (hours/month)		-	-	-	-	-	-	-	-	-	-	-	-
Solar radiation (MJ/m ² /month)		269	-	362	482	639	531	710	710	564	322	272	256

Meteorological Statistics : Ogasawara

Month		1	2	3	4	5	6	7	8	9	10	11	12
Items													
Temperature (°C)	monthly mean	15.6	16.9	17.3	18.5	20.5	24.0	26.1	26.3	25.4	24.3	22.3	18.0
	max.daily mean	18.9	20.9	20.8	21.9	23.0	26.5	27.2	27.2	27.5	25.9	24.7	23.7
	min.daily mean	12.3	12.6	14.2	15.2	16.9	21.1	24.8	24.5	22.7	21.2	19.2	12.0
Relative humidity (%)	monthly mean	77	77	79	86	87	91	88	88	89	88	84	79
	max.daily mean	96	94	95	96	96	96	94	94	96	95	96	96
	min.daily mean	61	58	60	64	65	85	84	83	83	77	71	60
Mean wind speed (m/s)		1.4	1.6	1.8	1.7	1.8	1.4	1.0	1.5	2.0	1.4	1.7	1.3
Most frequent wind direction (bearings)		SW	SW	SSW	SW	SSW	SSW	SSW	NNE	SSW	SSW	ENE	SW
Precipitation amount (mm/month)		155	49	87	286	41	97	83	126	239	158	54	168
Sunshine duration (hours/month)		-	-	-	-	-	-	-	-	-	-	-	-
Solar radiation (MJ/m ² /month)		278	402	446	359	256	540	666	556	459	440	323	305

2009

[illegible]

Meteorological Statistics : Tanah Rata

[illegible]

2009

[illegible]

Meteorological Statistics : Kuching

[illegible]

2009

[illegible]

Appendix Table II-13 Meteorological statistics at the monitoring sites

Meteorological Statistics : Terelj

2009

Month		1	2	3	4	5	6	7	8	9	10	11	12
Items													
Temperature (°C)	monthly mean	-23.6	-21.0	-11.5	2.9	8.0	12.0	14.8	12.0	6.0	-2.5	-18.0	-25.3
	max.daily mean	-14.4	-10.7	-2.3	12.3	17.3	20.8	22.7	20.8	16.0	56.0	-8.3	-16.6
	min.daily mean	-29.8	-29.5	-20.7	-6.1	-2.5	2.8	7.3	3.8	-3.4	-10.7	-24.9	-31.7
Relative humidity (%)	monthly mean	69	63	59	49	48	58	71	72	58	65	73	72
	max.daily mean	82	83	85	84	85	92	97	98	91	92	89	85
	min.daily mean	54	32	34	22	24	29	44	42	29	38	55	61
Mean wind speed (m/s)		1.4	1.9	2.3	2.5	3.3	2.8	1.9	2.0	2.7	2.1	1.6	1.2
Most frequent wind direction (bearings)		WSW	WSW	WSW	WSW	WSW	SW	WSW	WSW	WSW	WSW	WSW	SW
Precipitation amount (mm/month)		1	5	5	8	29	67	53	54	6	9	3	3
Sunshine duration (hours/month)		-	-	-	-	-	-	-	-	-	-	-	-
Solar radiation (MJ/m ² /month)		-	-	-	-	-	-	-	-	-	-	-	-

Meteorological Statistics : Mondy

2009

Month		1	2	3	4	5	6	7	8	9	10	11	12
Items													
Temperature (°C)	monthly mean	-18.3	-18.5	-8.7	2.6	8.5	11.3	14.5	12.0	5.4	-2.2	-11.6	-21.1
	max.daily mean	-9.2	-9.6	0.4	12.0	17.9	19.9	21.4	20.1	13.5	6.0	-3.4	-11.9
	min.daily mean	-24.9	-26.3	-17.8	-5.8	0.0	3.3	8.8	5.5	-0.9	-8.6	-18.4	-27.1
Relative humidity (%)	monthly mean	75	73	61	61	52	66	79	77	73	70	73	83
	max.daily mean	91	91	87	91	81	96	97	97	95	94	91	95
	min.daily mean	50	52	38	34	25	39	54	49	44	42	50	65
Mean wind speed (m/s)		1.6	1.5	1.7	1.5	2.3	1.4	1.1	1.1	1.8	1.5	1.8	0.6
Most frequent wind direction (bearings)		NNW	E	NNW	E	E	W	E	E	E	E	W	NW
Precipitation amount (mm/month)		0	2	0	3	11	63	103	76	43	5	1	3
Sunshine duration (hours/month)		-	-	-	-	-	-	-	-	-	-	-	-
Solar radiation (MJ/m ² /month)		113	185	348	406	513	511	459	449	349	248	147	91

Appendix Table II-14 Meteorological statistics at the monitoring sites

Meteorological Statistics : Listvyanka

2009

Month		1	2	3	4	5	6	7	8	9	10	11	12
Items													
Temperature (°C)	monthly mean	-13.6	-16.5	-8.3	2.0	6.6	9.5	14.7	14.4	7.4	1.7	-8.0	-15.2
	max.daily mean	-9.3	-11.3	-3.2	6.9	13.9	14.5	19.7	19.1	12.7	6.3	-4.0	-10.6
	min.daily mean	-16.7	-21.0	-13.0	-1.5	2.0	5.7	10.3	10.6	3.7	-2.0	-11.6	-18.5
Relative humidity (%)	monthly mean	81	74	74	69	68	79	81	83	80	73	78	84
	max.daily mean	-	-	-	-	-	-	-	-	-	-	-	-
	min.daily mean	66	58	56	48	44	63	65	66	61	55	64	77
Mean wind speed (m/s)		3.9	3.6	3.6	3.2	3.6	2.6	2.1	3.0	3.9	3.6	4.7	5.1
Most frequent wind direction (bearings)		N	N	N	N	N	N	N	N	N	N	N	N
Precipitation amount (mm/month)		10	7	4	14	41	84	50	94	62	14	16	13
Sunshine duration (hours/month)		-	-	-	-	-	-	-	-	-	-	-	-
Solar radiation (MJ/m ² /month)		-	-	-	-	-	-	-	-	-	-	-	-

Note: Sunshine duration and solar radiation values are the same as the values for the Irkutsk site.
(There is only station in the area of Listvyanka and Irkutsk.)

Meteorological Statistics : Irkutsk

2009

Month		1	2	3	4	5	6	7	8	9	10	11	12
Items													
Temperature (°C)	monthly mean	-16.1	-17.1	-6.8	5.5	10.3	15.0	19.0	15.9	8.0	1.7	-10.2	-19.1
	max.daily mean	-11.4	-10.8	0.3	12.6	19.1	22.4	25.6	22.6	14.4	7.7	-5.6	-14.2
	min.daily mean	-20.1	-22.1	-12.7	-0.1	3.4	9.0	13.3	10.5	3.4	-2.8	-14.4	-22.9
Relative humidity (%)	monthly mean	84	73	61	54	56	68	71	77	77	70	81	85
	max.daily mean	-	-	-	-	-	-	-	-	-	-	-	-
	min.daily mean	76	57	39	34	31	47	49	51	53	48	68	80
Mean wind speed (m/s)		1.6	2.0	2.0	2.4	2.4	2.2	1.4	1.6	2.0	1.9	1.8	1.7
Most frequent wind direction (bearings)		ESE	WN	NW	NW	WN	WN	NW	NW	WN	NW	NW	ENE
Precipitation amount (mm/month)		12	9	8	15	49	91	99	62	87	29	22	13
Sunshine duration (hours/month)		-	-	-	-	-	-	-	-	-	-	-	-
Solar radiation (MJ/m ² /month)		110	198	368	443	518	532	539	449	292	220	115	75

Appendix Table II-15 Meteorological statistics at the monitoring sites

Meteorological Statistics : Primorskaya

2009

Month		1	2	3	4	5	6	7	8	9	10	11	12
Items													
Temperature (°C)	monthly mean	-14.8	-11.0	-3.2	6.4	13.5	15.0	18.7	20.0	14.3	7.3	-6.6	-17.4
	max.daily mean	-2.9	-0.9	2.0	13.4	18.4	20.4	22.2	23.4	18.5	22.3	16.4	3.3
	min.daily mean	-22.8	-20.2	-12.2	0.8	7.7	10.2	14.9	13.2	9.0	-4.9	-24.5	-34.3
Relative humidity (%)	monthly mean	76	68	65	63	68	88	89	84	82	74	76	80
	max.daily mean	86	92	85	95	89	96	98	96	93	99	99	99
	min.daily mean	63	57	38	48	47	77	80	70	74	45	35	57
Mean wind speed (m/s)		1.7	1.8	2.2	2.0	2.0	1.5	1.3	1.5	1.5	1.7	1.7	1.5
Most frequent wind direction (bearings)		ENE	ENE	WNW	E	E ENE	SSE	calm	E	ENE	ENE	calm	E
Precipitation amount (mm/month)		35	28	32	44	14	155	129	144	94	91	25	74
Sunshine duration (hours/month)		-	-	-	-	-	-	-	-	-	-	-	-
Solar radiation (MJ/m ² /month)		-	-	-	-	-	-	-	-	-	-	-	-

Meteorological Statistics : Bangkok

2009

Month		1	2	3	4	5	6	7	8	9	10	11	12
Items													
Temperature (°C)	monthly mean	26.1	25.5	26.5	30.7	29.4	29.7	29.1	29.7	29.0	28.2	27.8	27.9
	max.daily mean	27.0	26.5	31.9	33.4	32.9	31.1	31.6	32.0	30.6	30.0	30.8	29.9
	min.daily mean	25.3	23.8	22.8	27.3	26.0	26.9	26.7	27.3	26.9	24.9	23.1	26.3
Relative humidity (%)	monthly mean	69	68	70	68	74	71	68	76	78	82	70	71
	max.daily mean	76	76	81	85	90	85	82	87	90	93	85	95
	min.daily mean	64	47	61	55	56	65	54	65	71	66	62	61
Mean wind speed (m/s)		0.8	1.2	1.2	0.9	0.7	1.4	1.3	0.9	0.9	0.4	0.5	0.4
Most frequent wind direction (bearings)		W	SE	SE	SW	SW	SW	SW	SW	SW	SW	NE	NE
Precipitation amount (mm/month)		0	0	35	374	368	101	180	363	355	216	61	19
Sunshine duration (hours/month)		-	-	-	-	-	-	-	-	-	-	-	-
Solar radiation (MJ/m ² /month)		159	148	153	169	134	125	117	128	128	109	129	127

Meteorological Statistics : Samutprakarn

[illegible]

2009

[illegible]

Appendix Table II-17 Meteorological statistics at the monitoring sites

Meteorological Statistics : Khanchanaburi

2009

Month		1	2	3	4	5	6	7	8	9	10	11	12
Items													
Temperature (°C)	monthly mean	22.4	27.4	28.4	28.7	27.9	26.7	26.3	27.2	27.1	27.3	25.8	24.6
	max.daily mean	26.6	30.0	30.2	30.2	30.3	28.2	27.8	29.1	28.8	28.6	29.4	27.0
	min.daily mean	18.1	24.0	25.7	27.0	26.2	25.0	24.9	24.7	25.6	25.7	22.5	22.3
Relative humidity (%)	monthly mean	72	67	70	76	82	88	88	86	86	85	77	77
	max.daily mean	78	76	85	85	90	95	95	95	93	93	85	80
	min.daily mean	65	57	57	67	72	80	80	79	79	80	65	72
Mean wind speed (m/s)		0.3	0.3	0.2	0.2	0.1	0.0	0.1	0.1	0.1	0.0	0.2	0.1
Most frequent wind direction (bearings)		Calm SE	Calm N	Calm NW	Calm NW	Calm W	Calm NW	Calm NW	Calm N	Calm NW	Calm NW	Calm SE	Calm SE
Precipitation amount (mm/month)		0	31	143	160	187	286	344	449	210	170	4	0
Sunshine duration (hours/month)		-	-	-	-	-	-	-	-	-	-	-	-
Solar radiation (MJ/m ² /month)		-	-	-	-	-	-	-	-	-	-	-	-

Meteorological Statistics : Chiang Mai

2009

Month		1	2	3	4	5	6	7	8	9	10	11	12
Items													
Temperature (°C)	monthly mean	21.4	25.4	27.1	29.6	28.5	27.7	27.8	28.0	28.0	27.4	25.1	22.5
	max.daily mean	24.0	29.5	29.1	32.9	30.6	29.4	30.0	29.7	29.2	29.5	28.0	24.9
	min.daily mean	17.7	23.3	24.1	25.9	25.5	25.4	24.0	26.0	26.0	25.8	21.6	21.0
Relative humidity (%)	monthly mean	69	59	57	61	73	77	76	77	77	78	69	71
	max.daily mean	74	69	81	84	88	91	95	86	88	88	74	79
	min.daily mean	62	49	45	48	62	67	64	67	65	70	49	63
Mean wind speed (m/s)		0.7	0.9	1.5	2.2	2.1	2.1	1.7	1.7	1.4	1.1	1.6	0.7
Most frequent wind direction (bearings)		NW	NW	NW	S	N S	S SE	S	NW	NW	NW	NW	N
Precipitation amount (mm/month)		0	0	17	98	138	143	124	127	192	223	0	8
Sunshine duration (hours/month)		-	-	-	-	-	-	-	-	-	-	-	-
Solar radiation (MJ/m ² /month)		149	149	159	175	163	140	126	131	153	148	153	145

Meteorological Statistics : Nakhon Ratchasima

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Meteorological Statistics : Hanoi

[illegible]

Meteorological Statistics : Hoa Binh

[illegible]

2009

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Meteorological Statistics : Da Nang

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