Acid Deposition Monitoring Network
in East Asia (EANET)

Data Report 2012

November 2013

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 Vietnam. 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 five environmental items – wet deposition, dry deposition (air concentration), soil and vegetation, inland aquatic environment, and catchment-scale monitoring. 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, inland aquatic environment and catchment-scale 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 for 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 2012, which contains the monitoring data from the participating countries at the Thirteenth Session of Scientific Advisory Committee (SAC13), held in September 2013. The draft Data Report was considered at SAC13 by the experts from the participating countries. Following the comments and guidance at the SAC13, the NC has elaborated and finalized the report.

The Data Report 2012 contains the data obtained from monitoring activities carried out in 2012.

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 for the collection of 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 specific 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 (less 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 2012

Thirteen EANET countries, namely, Cambodia, China, Indonesia, Japan, Lao PDR, Malaysia, Mongolia, Myanmar, Philippines, Republic of Korea, Russia, Thailand and Vietnam participated in monitoring of acid deposition in 2012. The data on wet deposition monitoring 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 with the classification information is provided in Figure 2.1. The details on the location of the monitoring sites are presented in Table 2.2 and Table 2.3.

Figure 2.1 Locations of EANET deposition monitoring sites in 2012

Table 2.2 Locations of EANET deposition monitoring sites

Country	Name of sites		Classification	Latitude*	Longitude*	Altitude*/ m
Cambodia	Phnom Penh		Urban	11°33'N	104°50'E	10
China	Chongqing	-Haifu	Urban	29°37'N	106°30'E	317
		-Jinyunshan	Rural	29°49'N	106°22'E	800
	Xi'an	- Shizhan	Urban	34°14'N	108°57'E	400
		- Jiwozi	Remote	33°50'N	108°48'E	1,800
	Xiamen	- Hongwen	Urban	24°28'N	118°08'E	50
		- Xiaoping	Remote	24°51'N	118°02'E	686
	Zhuhai	- Xiang Zhou	Urban	22°16'N	113°34'E	40
		- Zhuxiandong	Urban	22°12'N	113°31'E	45
Indonesia	Jakarta		Urban	6°11' S	106°50' E	7
	Serpong		Rural	6°15' S	106°34' E	46
	Kototabang		Remote	0°02' S	100°19' E	864
	Bandung		Urban	6°54' S	107°35' E	743
	Maros		Rural	4°55' S	119°34' E	11
Japan	Rishiri		Remote	45°07'11" N	141°12'33" E	40
	Ochiishi		Remote	43°09'43" N	145°29'50" E	49
	Tappi		Remote	41°15'06" N	140°20'59" E	106
	Sado-seki		Remote	38°14'59" N	138°24'00" E	136
	Happo		Remote	36°41'48" N	137°47'53" E	1,850
	Ijira		Rural	35°34'20" N	136°41'38" E	140
	Oki		Remote	36°17'19" N	133°11'06" E	90
	Banryu		Urban	34°40'54" N	131°47'59" E	53
	Yusuhara		Remote	33°22'45" N	132°56'05" E	790
	Hedo		Remote	26°51'58" N	128°14'55" E	60
	Ogasawara		Remote	27°05'30" N	142°12'58" E	230
	Tokyo		Urban	35°41'18" N	139°45'22" E	26
Lao PDR	Vientiane		Urban	17° N	102° E	
Malaysia	Petaling Jaya		Urban	03°06' N	101°39' E	46
	Tanah Rata		Remote	04°47' N	101°37' E	1,545
	Danum Valley		Remote	04°58'53" N	117°50'37" E	427
	Kuching		Urban	01°29'28" N	110°20'57" E	20
Mongolia	Ulaanbaatar		Urban	47°55'13" N	106°54'43" E	1,305
	Terelj		Remote	47°59'00" N	107°27'04" E	1,556
Myanmar	Yangon		Urban	16°30' N	96°07' E	22
Philippines	Metro Manila		Urban	14°38' N	121°04' E	54
	Los Baños		Rural	14°11' N	121°15' E	35
	Mt. Sto. Tomas		Remote	16°25' N	120°36' E	1,500
Republic of Korea	Kanghwa		Rural	37°42' N	126°17' E	150
	Cheju (Kosan)		Remote	33°18' N	126°10' E	72
	Imsil		Rural	35°36' N	127°11' E	

* The latitude, longitude and altitude information corresponded to the wet deposition monitoring sites

Table 2.2 Locations of EANET deposition monitoring sites (continued)

Country	Name of sites	Classification	Latitude*	Longitude*	Altitude*/ m
Russia	Mondy	Remote	51° 40' N	101°00' E	2,005
	Listvyanka	Rural	51° 51' N	104°54' E	700
	Irkutsk	Urban	52° 14' N	104°15' E	500
	Primorskaya	Rural	43° 42' N	132°07' E	84
Thailand	Bangkok	Urban	13° 47' N	100°32' E	75
	Samutprakarn	Urban	13° 44' N	100°34' E	2
	Pathumthani	Rural	14° 02' N	100°46' E	2
	Khanchanaburi (Vachiralongkorn Dam)	Remote	14° 46' N	98°35' E	170
	Chiang Mai (Mae Hia)	Rural	18° 46' N	98°56' E	350
	Nakhon Ratchasima	Rural	14°28'04" N	101°54'05" E	418
Vietnam	Hanoi	Urban	21° 01' N	105°51' E	5
	Hoa Binh	Rural	20° 49' N	105°20' E	23
	Cuc Phuong	Remote	20°15' N	105°43' E	155
	Da Nang	Urban	16°02'34" N	108°12'23" E	60

* The latitude, longitude and altitude information corresponded to the wet deposition monitoring sites

The filter pack method is used at 36 sites for measurements of air concentrations of pollutants for determining of dry deposition. Automatic or manual gas monitors is also used for the monitoring of ozone concentration. Concentrations of particulate matter as PM_{10} are measured by automatic or manual instruments at 23 sites.

The current situation on basic survey sites for ecological monitoring and the nearest deposition monitoring sites was shown in Table 2.3. Soil and vegetation monitoring and monitoring on inland aquatic environment are conducted at 28 plots in 10 countries and 18 lakes/rivers in 10 countries, respectively, although the former is conducted in Republic of Korea and the latter is conducted in Lao PDR instead. Most of the ecological monitoring sites are corresponded to the deposition monitoring sites. Moreover, both soil and vegetation monitoring and monitoring on inland aquatic environment are conducted in the vicinity of 4 deposition monitoring sites in China, 2 sites in Japan, 1 site in Malaysia, 2 sites in Philippines, 2 sites in Russia, 1 site in Thailand, and 1 site in Vietnam. It is expected that the deposition data collected in the nearest monitoring sites will be used for interpretation of the data on ecological monitoring in these sites.

Table 2.3 Basic survey sites for ecological monitoring and the nearest deposition sites

Country	Site for deposition monitoring	Plot for soil and vegetation monitoring	Site for monitoring on inland aquatic environment
Cambodia	-	-	Sras Srang Lake
China	Jinyunshan (Chongqing)	Jinyunshan	Jinyunshan Lake
	Jiwozi (Xi'an)	Dabagou	Jiwozi River
	Xiaoping (Xiamen)	Xiaoping	Xiaoping Dam
	Zhuxiandong (Zhuhai)	Zhuxiandong	Zhuxiandong Stream[*3]
Indonesia	Serpong	Bogor Research Forest (Dramaga Experimental Forest)	-
	Bandung	-	Patengang Lake
	-	-	Gunung Lake
Japan	Ijira	Ijira	Ijira Lake
		Yamato	
	Banryu	Banryu-2[*1]	Banryu Lake
		Iwami "rinku" Factory Park[*1]	
Lao PDR	Vientiane	-	Nam Hum Lake
Malaysia	-	Pasoh Reserve Forest	-
	Petaling Jaya	Sungai Lalang Reserve Forest	Semenyih Dam
	Danum Valley	-	Tembaling River
	-	UPMKB (University of Putra Malaysia Bintulu Campus)	-
Mongolia	Ulaanbaatar	Bogdkhan Mountain	-
	Terelj	-	Terelj River
Philippines	Los Banos	Mt. Makiling	Pandin Lake
		UP Quezon, Land Grant	
	Metro Manila	La Mesa Watershed	-
	Mt. Sto Tomas	Boneco Long Term Ecological Research Site	Ambulalakao Lake
Republic of Korea	Imsil	Mt. Naejang	-
Russia	Irkutsk	Irkutsk	-
	Listvyanka	Bolshie Koty	Pereemnaya River
		Pereemnaya river catchment	
	Mondy	Ilchir Lake	-
		Okinskoe Lake	
		Solar Observatory	
	Primorskaya	Primorskaya	Komarovka River
Thailand	Khanchanaburi (Vachiralongkorn Dam)	Vachiralongkorn Dam[*2]	Vachiralongkorn Dam
		Vachiralongkorn Puye	
Vietnam	Hoa Binh	Cave of Heaven	Hoa Binh Reservoir
		Thang Ranh	

*1. The sites around Banryu deposition site were relocated in 2001; *2. Kao Lam Dam was renamed to Vachiralongkorn Dam; *3. The monitoring was conducted at Zhuxiandong reservoir from 2001 to 2003.

The implementation of the catchment scale monitoring at one site in Japan was shown in Table 2.4. This table contained the site information which is under preparation at this moment.

Table 2.4 Site for catchment-scale monitoring

Country	Name of site	Note
Japan	Lake Ijira catchment	
Philippines	La Mesa Watershed	Under preparation

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 Manual for Wet Deposition Monitoring in East Asia -2010*, which was issued by Network Center for EANET in November 2010 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.

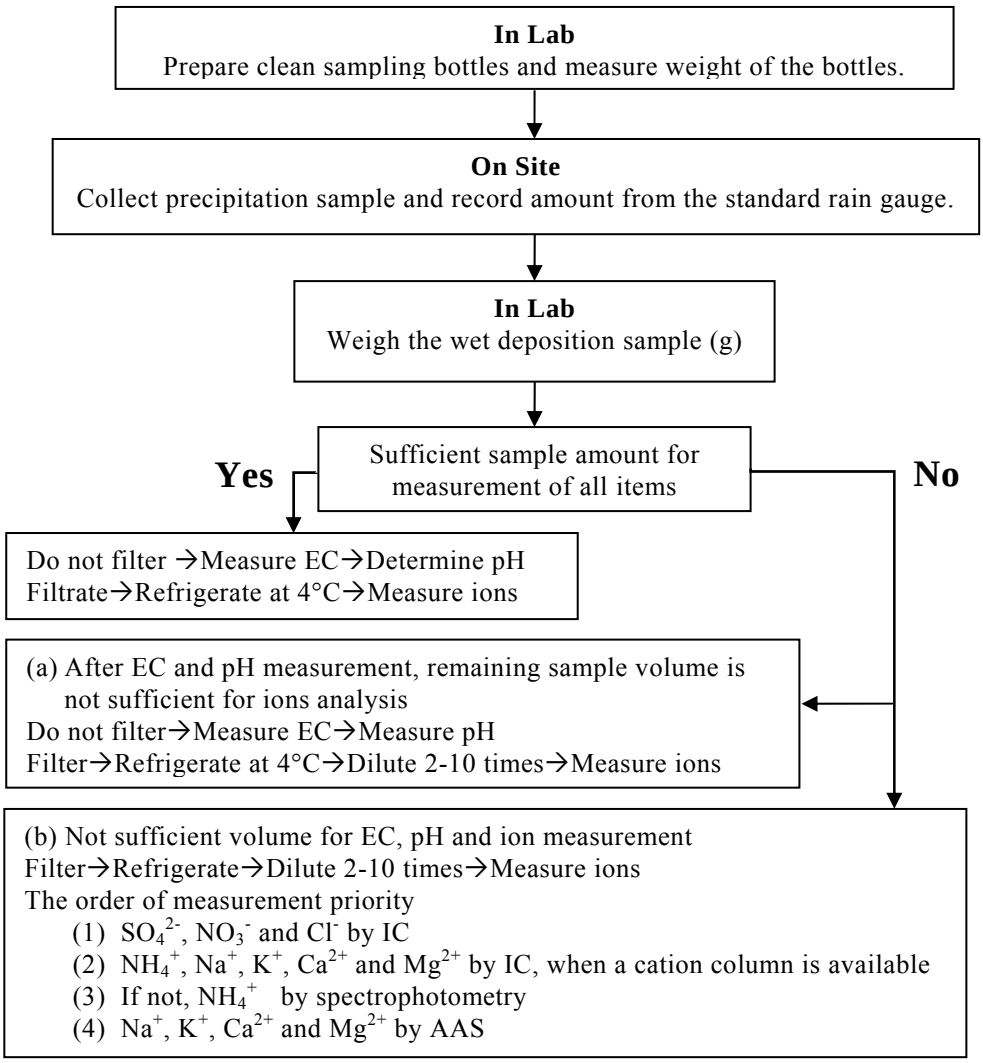


Figure 3.1 Flow chart of sampling and chemical analysis of Wet Deposition

3.1.1 Field Operation

The wet-only sampler is recommended for the collection of the precipitation samples. This instrument is designed to collect precipitation samples during the period of rainfall which is detected by an equipped rain sensor that opens the lid on the collecting bucket or funnel. The lid of this instrument closes to avoid any collection into the collecting bucket or funnel, when no rainfall is 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 by 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 Manual for Wet Deposition Monitoring in East Asia -2010 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/emission spectrometry for Na^+, K^+, Ca^{2+}, and Mg^{2+}, and spectrophotometry for NH_4^+ are the secondary methods 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

Each laboratory has to submit the analyzed data of the precipitation samples to the National

Center. Each National Center is expected to submit the compiled data in the required format to the Network Center for EANET (NC) by the end of June in the following year. All the data have to be checked by 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 QA/QC part of the EANET document on "*Technical Manual for Wet Deposition Monitoring in East Asia -2010.*"

3.1.4 Meteorological Measurements

It is recommended that monitoring sites incorporate collocated meteorological measurements including wind direction/speed, temperature, humidity, precipitation amount and solar radiation. Meteorological data can also be acquired from the nearest standard meteorological station (meeting the requirements of the national weather service). Local meteorological data is very useful when dealing with the interpretation of unusual precipitation events.

Meteorological statistics at the monitoring sites were shown in Appendix II at the end of report.

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
Cl^-, NO_3^-, SO_4^{2-}, NO_2^-, F^-, PO_4^{3-}	Ion chromatography, Spectrophotometry
NH_4^+	Ion chromatography, Spectrophotometry (Indophenol Blue)*
Na^+, K^+, Ca^{2+}, Mg^{2+}	Ion chromatography Atomic absorption/emission spectrometry
HCO_3^-	Ion chromatography, Alkalinity method, HPLC
Organic acids	Ion chromatography

* An alternate analysis method should be used if thymol has been used as a biocide during 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 (μmol L^{-1}) over the summary period.

Calculated as:

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

where $\hat{C}$: precipitation amount weighted average concentration (μmol L^{-1})

C_i : measured valid concentration for sample i (μmol L^{-1})

P_i : precipitation amount for the same sample i with valid concentration (mm)

Deposition amount: the wet deposition amount (mmol m^{-2}) for the summary period.

Calculated as:

Deposition amount = $\hat{C} \times$ (total precipitation amount for the summary period)/1000

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 (μmol L^{-1}): 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 and the component ratio of sea water.

$$[nss\text{-}SO_4^{2-}] = [SO_4^{2-}] - 0.06028\,[Na^+]$$

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

(Na^+ : 468.3 mmol L^{-1}, SO_4^{2-} : 28.23 mmol L^{-1}, Ca^{2+} : 10.12 mmol L^{-1}; 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 = [(Number of days in the summary period)−(Number of days with missing or unknown precipitation)] / (Number of days in the summary period) × 100

(ii) Percent total precipitation (%TP): Percentage of total precipitation amount

over the summary period represented by valid component measurements. Calculated as:

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

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

%PCL ≥ 80%, and %TP ≥ 80%

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

Ion balance (R_1):

Calculated as:

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

where C: total cation equivalent concentration (μeq L^{-1})

A: total anion equivalent concentration (μeq L^{-1})

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

where C_{Ci}: the concentration of i-th cation (μmol L^{-1})

V_i: the valence of the given ion

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

where C_{Ai} : the concentration of i-th anion (μmol L^{-1})

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) (μeq L^{-1})	R_1 (%)
<50	±30
50 – 100	±15
>100	±8

Conductivity agreement (R_2) :

Calculated as:

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

where Λ_{calc} : the calculated conductivity (mS m^{-1})

Λ_{meas} : the measured conductivity (mS m^{-1})

$$\Lambda_{calc} = \Sigma(C_i\ \Lambda_i^0) \times 10^{-4}$$

where C_i : the ionic concentration of i-th ion (μmol L^{-1})

Λ_i^0 : the molar conductivity at infinite dilution and 25°C ($Scm^2\ mol^{-1}$)

$$\Lambda_{calc} = \{349.7 \times 10^{(6-pH)} + 80.0 \times 2c(SO_4^{2-}) + 71.4c(NO_3^-) + 76.3c(Cl^-) + 73.5c(NH_4^+) + 50.1c(Na^+) + 73.5c(K^+) + 59.5 \times 2c(Ca^{2+}) + 53.0 \times 2c(Mg^{2+})\}/10000$$

where c( ) : the ionic concentrations (μmol L^{-1})

Required criteria for R_2 :

The required conductivity comparison criteria are given in Table 3.3.

Table 3.3 Required criteria for R_2

Λ_{meas} (mS m^{-1})	R_2 (%)
<0.5	±20
0.5 – 3	±13
>3	±9

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.

Precipitation amount weighted average concentrations / Precipitation

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

For concentration of ions except for H^+,

- [<0.2], [<0.3], [<0.4], [<1] : The values were 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^+ : <1 μmol L^{-1}
  - K^+ : <0.3 μmol L^{-1} - Mg^{2+} : <0.4 μmol L^{-1}
  - Ca^{2+}, nss-Ca^{2+} : <0.2 μmol L^{-1}

For deposition,

- [0.00] : Deposition amount was zero. (Precipitation was 0 mm.)
- [<0.01] : Calculated deposition amount was lower than 0.01mmol 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 36 out of 54 sites, while weekly and 10days collection are performed at 18 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 for Wet Deposition Monitoring in 2012

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
	Zhuxiandong (Zhuhai) *1	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 *2	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 *3	Urban	Daily	August '98
	Terelj *3	Remote	Daily	September '98
Myanmar	Yangon	Urban	Weekly	January '07
Philippines	Metro Manila *4	Urban	Weekly	April '99
	Los Baños *4	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 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
	Pathumthani	Rural	Daily	March '99
	Khanchanaburi	Remote	Daily	April '99
	Chiang Mai (Mae Hia)	Rural	Daily	January '01
	Nakhon Ratchasima	Rural	Daily	January '06
Vietnam	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

*1 The monitoring data in 2012 could not be submitted because of irregular condition around the site (construction nearby the site).
*2: The monitoring data of cations in 2012 could not be submitted because of malfunction of the instrument in the laboratory.
*3: The monitoring data of anions and cations in 2012 could not be submitted because of malfunction of the instrument in the laboratory.
*4 The monitoring data in 2012 were not submitted.

Table 3.5 Analytical methods used for Wet Deposition Monitoring in 2012

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	IC	IC
	Xiaoping (Xiamen)	Remote	IC	IC	IC
	Xiang Zhou (Zhuhai)	Urban	IC	IC	IC
	Zhuxiandong (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

Table 3.5 Analytical methods used for Wet Deposition Monitoring in 2012 (continued)

Country	Name of sites	Characteristics of sites	Anion Analysis	Cation Analysis	
				NH_4^+	Other Cations
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
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	IC	IC
	Los Baños	Rural	IC	IC	IC
	Mt. Sto. Tomas	Remote	IC	IC	IC
Republic of Korea	Kanghwa	Rural	IC	IC	IC
	Cheju (Kosan)	Remote	IC	IC	IC
	Imsil	Rural	IC	IC	IC
Russia	Mondy	Remote	IC	SP	AES
	Listvyanka	Rural	IC	SP	AES
	Irkutsk	Urban	IC	SP	AES
	Primorskaya	Rural	SP, TI	SP	AAS, AES
Thailand	Bangkok	Urban	IC	IC	IC
	Samutprakarn	Urban	IC	IC	IC
	Pathumthani	Rural	IC	IC	IC
	Khanchanaburi	Remote	IC	IC	IC
	Chiang Mai (Mae Hia)	Rural	IC	IC	IC
	Nakhon Ratchasima	Rural	IC	IC	IC
Vietnam	Hanoi	Urban	IC	IC	IC
	Hoa Binh	Rural	IC	IC	IC
	Cuc Phuong	Remote	IC	IC	IC
	Da Nang	Urban	IC	IC	IC

AAS: Atomic absorption spectrometry, AES: Atomic emission spectrometry,
IC: Ion chromatography, SP: Spectrophotometry, TI: Titration

3.2 Results of Monitoring

The monthly summaries of each monitoring site in 2012 are shown in Table 3.6 through Table 3.56. The annual summaries of wet deposition monitoring in 2012 are shown in Table 3.57 through Table 3.59. The summaries contain the precipitation amount weighted average, data completeness (%PCL, %TP) and the wet deposition amount.

Results of ion balance (R_1) and the conductivity agreement (R_2) of each monitoring site are shown in Table 3.60. Figure3.2 to Figure 3.49 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 additional items:
- Haifu, Jinyushan, Hongwen, Xiaoping and Xiang Zhou(China), Hanoi and Hoa Binh (Vietnam): F^-
- Ochiishi (Japan): PO_4^{3-}
- Tokyo (Japan), Mt. Sto. Tomas (Philippines): NO_2^-
- Petaling Jaya, Tanah Rata, Danum Valley and Kuching (Malaysia): formic acid, acetic acid and oxalic acid
- Mondy, Listvyanka and Irkutsk (Russia): HCO_3^-, F^-, NO_2^- and Br^-
- Primorskaya (Russia): HCO_3^-, NO_2^-, Br^-
- Bangkok, Samutprakarn, Pathumthani, Khanchanaburi, Chiang Mai and Nakhon Ratchasima (Thailand): PO_4^{3-}, formic acid and acetic acid
- Cuc Phuong and Da Nang (Vietnam): HCO_3^-

The summaries of annual data from 2000 to 2012 are shown in Table 3.61 through Table 3.85. The site identification codes are given in Table 3.86. Results of the additional items are shown in Table 3.87 through Table 3.94. Note that the data in 2000 is obtained during the preparatory-phase activities of EANET.

The monitoring data in 2011 at Kanghwa, Cheju and Imsil in Republic of Korea are shown in Appendix III at the end of this report.

Table 3.6 Monthly results **Site: Phnom Penh** **Country: Cambodia**

Precipitation amount-weighted average concentration/ Precipitation amount

2012	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^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}		mS m^{-1}	mm $month^{-1}$ or mm $year^{-1}$
Jan	10.1	9.80	18.5	9.29	40.5	5.40	1.32	7.50	7.38	1.44	0.732	6.14	0.957	36.8
Feb	16.9	16.5	21.4	14.1	36.2	7.31	2.56	10.8	10.6	1.89	2.24	5.65	1.25	39.1
Mar	20.5	20.2	28.9	18.5	61.1	6.12	4.09	18.5	18.4	2.66	1.34	5.87	1.56	24.6
Apr	15.6	15.2	27.5	13.7	41.1	6.26	2.86	21.3	21.2	2.22	0.692	6.16	1.30	18.4
May	15.6	15.3	15.2	7.99	24.1	4.07	0.646	12.8	12.7	1.34	0.689	6.16	0.814	285
June	13.3	12.5	10.5	18.8	18.2	13.9	1.07	26.7	26.4	3.09	0.557	6.25	1.05	91.0
July	8.53	8.35	6.39	6.07	22.9	3.03	<0.3	11.7	11.6	1.06	0.516	6.29	0.594	230
Aug	12.6	12.2	12.9	9.65	24.5	6.74	1.16	18.6	18.5	1.77	0.566	6.25	0.944	75.5
Sept	5.98	5.94	6.99	3.57	14.5	<1	<0.3	5.26	5.24	0.692	0.684	6.16	0.485	417
Oct	15.4	15.2	11.7	3.11	24.2	3.12	1.53	10.4	10.4	1.12	0.767	6.11	0.788	200
Nov	3.35	3.26	5.38	2.40	9.97	1.41	0.524	5.47	5.44	0.636	0.627	6.20	0.293	131
Dec	8.09	7.70	13.4	9.34	27.7	6.44	0.997	9.76	9.62	1.60	0.468	6.33	0.837	69.3
Annual	10.5	10.3	10.7	6.67	21.6	3.65	0.761	10.7	10.7	1.22	0.694	6.16	0.704	1617
Max.	27.2	26.5	40.0	28.6	78.1	20.5	4.19	29.8	29.5	3.83	2.24	6.68	2.33	
Min.	2.73	2.59	2.98	1.52	3.10	<1	<0.3	3.34	3.34	<0.4	0.209	5.65	0.255	

Wet deposition amount

2012	SO_4^{2-}	nss-SO_4^{2-}	NO_3^-	Cl^-	NH_4^+	Na^+	K^+	Ca^{2+}	nss-Ca^{2+}	Mg^{2+}	H^+
	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}
Jan	0.372	0.360	0.682	0.341	1.49	0.198	0.0484	0.276	0.271	0.0530	0.0269
Feb	0.661	0.644	0.836	0.553	1.42	0.286	0.100	0.422	0.415	0.0740	0.0876
Mar	0.505	0.496	0.711	0.455	1.50	0.151	0.100	0.456	0.453	0.0654	0.0329
Apr	0.287	0.280	0.505	0.251	0.757	0.115	0.0527	0.392	0.390	0.0409	0.0127
May	4.43	4.36	4.33	2.28	6.86	1.16	0.184	3.65	3.62	0.380	0.196
June	1.21	1.13	0.958	1.71	1.66	1.26	0.0976	2.43	2.40	0.281	0.0507
July	1.96	1.92	1.47	1.40	5.28	0.697	0.0505	2.69	2.67	0.243	0.119
Aug	0.949	0.919	0.975	0.729	1.85	0.509	0.0877	1.41	1.40	0.134	0.0428
Sept	2.49	2.47	2.91	1.49	6.02	0.267	0.0655	2.19	2.18	0.288	0.285
Oct	3.08	3.05	2.34	0.622	4.84	0.624	0.307	2.09	2.07	0.224	0.153
Nov	0.440	0.429	0.707	0.316	1.31	0.186	0.0688	0.718	0.714	0.0836	0.0824
Dec	0.560	0.533	0.926	0.647	1.92	0.446	0.0691	0.676	0.666	0.111	0.0324
Annual	17.0	16.6	17.4	10.8	34.9	5.90	1.23	17.4	17.3	1.98	1.12

Data completeness

2012	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 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%)

Table 3.7 Monthly results **Site: Haifu** **Country: China**

Precipitation amount-weighted average concentration/ Precipitation amount

2012	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^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}		mS m^{-1}	mm $month^{-1}$ or mm $year^{-1}$
Jan	287	287	241	33.2	369	6.50	20.7	113	113	10.6	183	3.74	15.2	26.8
Feb	464	463	329	37.3	654	14.7	31.2	229	229	25.1	169	3.77	21.1	11.1
Mar	248	248	193	28.2	293	11.5	15.8	156	156	18.1	114	3.94	12.4	25.9
Apr	146	146	91.0	13.6	160	7.07	7.95	112	111	12.8	61.7	4.21	7.12	54.8
May	77.9	77.6	46.6	7.38	95.8	4.78	5.79	36.8	36.6	4.55	51.7	4.29	4.14	212
June	75.0	74.7	54.4	8.83	102	3.89	4.12	37.5	37.4	5.41	35.0	4.46	3.75	139
July	70.5	70.2	54.0	8.77	93.9	4.21	3.96	57.0	57.0	5.24	7.87	5.10	3.13	68.7
Aug	66.2	65.5	50.3	10.6	47.7	12.1	7.46	64.3	64.1	7.93	16.7	4.78	3.25	103
Sept	62.1	61.9	46.1	6.72	55.8	3.09	2.56	30.2	30.1	3.98	62.8	4.20	3.91	252
Oct	127	127	81.3	13.6	121	5.06	6.73	43.9	43.8	5.43	115	3.94	7.49	75.7
Nov	235	233	224	33.7	293	20.4	18.7	173	172	20.9	57.2	4.24	11.5	30.7
Dec	429	428	363	48.5	619	19.7	32.6	294	294	26.2	70.9	4.15	19.0	10.6
Annual	102	101	73.9	11.4	116	6.04	6.57	57.9	57.7	6.87	57.5	4.24	5.33	1010
Max.	1711	1708	1350	198	2425	91.3	129	1205	1204	117	1622	7.11	89.4	
Min.	22.8	22.6	16.0	2.54	5.54	<1	0.512	7.73	7.67	0.411	0.0776	2.79	1.29	

Wet deposition amount

2012	SO_4^{2-}	nss-SO_4^{2-}	NO_3^-	Cl^-	NH_4^+	Na^+	K^+	Ca^{2+}	nss-Ca^{2+}	Mg^{2+}	H^+
	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}
Jan	7.70	7.69	6.46	0.891	9.90	0.174	0.554	3.03	3.03	0.285	4.89
Feb	5.15	5.14	3.65	0.414	7.26	0.163	0.347	2.55	2.54	0.279	1.88
Mar	6.43	6.41	5.01	0.729	7.58	0.297	0.408	4.05	4.04	0.469	2.95
Apr	8.02	8.00	4.99	0.746	8.75	0.388	0.435	6.11	6.10	0.701	3.38
May	16.5	16.5	9.89	1.57	20.3	1.01	1.23	7.80	7.78	0.965	11.0
June	10.4	10.4	7.53	1.22	14.1	0.538	0.570	5.19	5.18	0.749	4.85
July	4.84	4.83	3.71	0.602	6.45	0.289	0.272	3.92	3.91	0.360	0.541
Aug	6.83	6.76	5.19	1.10	4.92	1.24	0.769	6.64	6.61	0.818	1.72
Sept	15.7	15.6	11.6	1.69	14.1	0.780	0.645	7.61	7.59	1.00	15.8
Oct	9.62	9.60	6.15	1.03	9.16	0.383	0.509	3.32	3.31	0.411	8.68
Nov	7.20	7.16	6.88	1.03	9.00	0.627	0.576	5.31	5.29	0.641	1.75
Dec	4.55	4.54	3.85	0.514	6.56	0.209	0.345	3.12	3.11	0.277	0.751
Annual	103	102	74.6	11.5	118	6.10	6.64	58.5	58.3	6.94	58.1

Data completeness

2012	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	97.0	97.0	97.0	97.0	97.0	97.0	97.0	97.0	97.0	97.0	97.0	97.0	97.0	100
Feb	96.4	96.4	96.4	96.4	96.4	96.4	96.4	96.4	96.4	96.4	96.4	96.4	96.4	100
Mar	100	100	100	100	100	100	100	100	100	100	98.8	98.8	98.8	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	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	99.6	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
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	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
Nov	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Dec	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	100
Annual	**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**

[--] 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%)

Table 3.8 Monthly results **Site: Jinyunshan** **Country: China**

Precipitation amount-weighted average concentration/ Precipitation amount

2012	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^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}		mS m^{-1}	mm $month^{-1}$ or mm $year^{-1}$
Jan	335	334	204	25.0	357	13.0	31.1	126	125	14.6	282	3.55	19.6	35.6
Feb	396	395	250	35.9	468	13.7	27.7	171	171	19.8	347	3.46	25.4	23.6
Mar	235	234	139	19.8	288	7.47	13.2	97.4	97.2	14.1	209	3.68	14.7	31.9
Apr	184	183	87.4	14.0	169	13.5	9.74	95.5	95.2	13.9	95.3	4.02	8.98	55.4
May	107	107	59.2	7.44	117	4.46	7.90	42.3	42.2	3.68	61.5	4.21	4.96	235
June	97.8	97.5	50.0	12.4	59.6	5.53	5.79	81.5	81.4	4.66	32.6	4.49	4.22	124
July	85.9	85.6	45.5	14.1	68.2	6.08	3.43	66.2	66.1	3.11	26.6	4.58	3.93	116
Aug	103	102	35.3	10.5	89.8	7.29	4.65	48.9	48.8	5.57	39.4	4.40	4.41	133
Sept	64.0	63.7	36.9	6.71	66.2	5.29	4.67	27.6	27.5	3.69	49.9	4.30	3.56	128
Oct	112	112	67.6	7.96	113	1.63	4.83	29.6	29.6	2.90	134	3.87	7.79	80.6
Nov	163	163	173	17.8	177	8.17	7.69	70.2	70.0	9.46	142	3.85	9.88	30.5
Dec	213	213	210	21.4	287	5.95	12.0	89.9	89.8	7.03	200	3.70	14.6	11.6
Annual	124	124	70.4	11.6	124	6.28	7.64	59.2	59.0	5.82	81.5	4.09	6.56	1005
Max.	1205	1202	808	92.0	1347	107	149	512	512	89.4	933	6.79	66.1	
Min.	20.3	20.2	13.2	<1	<1	<1	2.05	8.48	8.47	1.23	0.162	3.03	1.01	

Wet deposition amount

2012	SO_4^{2-}	nss-SO_4^{2-}	NO_3^-	Cl^-	NH_4^+	Na^+	K^+	Ca^{2+}	nss-Ca^{2+}	Mg^{2+}	H^+
	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}
Jan	11.9	11.9	7.26	0.889	12.7	0.461	1.11	4.47	4.46	0.519	10.0
Feb	9.34	9.32	5.91	0.848	11.0	0.323	0.654	4.04	4.03	0.468	8.19
Mar	7.49	7.48	4.45	0.632	9.20	0.238	0.421	3.11	3.10	0.451	6.68
Apr	10.2	10.1	4.84	0.777	9.37	0.745	0.539	5.29	5.27	0.771	5.28
May	25.1	25.1	13.9	1.75	27.4	1.05	1.86	9.95	9.92	0.865	14.4
June	12.1	12.1	6.20	1.53	7.39	0.685	0.717	10.1	10.1	0.578	4.04
July	10.0	9.96	5.30	1.64	7.94	0.708	0.399	7.71	7.69	0.362	3.09
Aug	13.7	13.6	4.71	1.40	12.0	0.972	0.619	6.52	6.50	0.743	5.25
Sept	8.18	8.14	4.71	0.858	8.47	0.677	0.598	3.53	3.52	0.472	6.38
Oct	9.02	9.02	5.45	0.641	9.12	0.131	0.389	2.39	2.38	0.234	10.8
Nov	4.99	4.97	5.28	0.545	5.41	0.249	0.235	2.14	2.14	0.289	4.34
Dec	2.47	2.47	2.44	0.249	3.33	0.0690	0.139	1.04	1.04	0.0815	2.33
Annual	125	125	70.8	11.7	125	6.32	7.69	59.5	59.4	5.85	82.0

Data completeness

2012	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	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
Feb	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
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	99.1	99.1	99.1	100
May	100	100	100	100	100	100	100	100	100	100	100	100	100	100
June	76.6	76.6	76.6	76.6	76.6	76.6	76.6	76.6	76.6	76.6	76.0	76.0	76.0	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	**96.9**	**96.9**	**96.9**	**96.9**	**96.9**	**96.9**	**96.9**	**96.9**	**96.9**	**96.9**	**96.8**	**96.8**	**96.8**	**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%)

Table 3.9 Monthly results **Site: Shizhan** **Country: China**

Precipitation amount-weighted average concentration/ Precipitation amount

2012	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^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}		mS m^{-1}	mm $month^{-1}$ or mm $year^{-1}$
Jan	--	--	--	--	--	--	--	--	--	--	--	--	--	0
Feb	--	--	--	--	--	--	--	--	--	--	--	--	--	0
Mar	1032	1023	136	93.0	321	158	57.0	871	868	13.8	0.0835	7.08	33.7	5.00
Apr	148	147	76.2	8.83	15.5	3.60	4.05	219	219	0.703	0.0278	7.56	17.6	28.1
May	151	151	83.0	11.1	7.54	1.57	2.72	151	151	0.978	0.142	6.85	4.93	59.4
June	118	118	17.4	11.8	27.9	1.45	0.374	72.7	72.7	<0.4	0.0943	7.03	6.63	28.8
July	47.9	47.6	39.3	10.9	45.2	4.57	10.0	213	213	6.03	0.212	6.67	5.00	80.2
Aug	33.5	33.4	22.1	6.96	128	1.44	2.58	26.8	26.8	1.49	0.163	6.79	2.05	105
Sept	109	109	43.6	18.1	299	6.59	5.96	15.2	15.1	2.40	3.09	5.51	5.55	54.3
Oct	220	220	131	37.8	203	4.96	6.33	267	266	15.5	0.0505	7.30	16.1	14.3
Nov	273	272	81.0	82.0	183	12.9	9.81	229	228	12.4	0.0970	7.01	14.8	17.6
Dec	--	--	--	--	--	--	--	--	--	--	--	--	--	0
Annual	109	109	49.4	16.0	109	5.59	5.69	128	128	3.47	0.552	6.26	6.51	393
Max.	1064	1054	280	104	348	168	57.2	874	870	22.6	9.33	8.01	37.9	
Min.	25.4	25.4	4.03	5.36	<1	<1	<0.3	4.97	4.87	<0.4	0	5.03	1.61	

Wet deposition amount

2012	SO_4^{2-}	nss-SO_4^{2-}	NO_3^-	Cl^-	NH_4^+	Na^+	K^+	Ca^{2+}	nss-Ca^{2+}	Mg^{2+}	H^+
	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}
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	5.16	5.11	0.681	0.465	1.61	0.788	0.285	4.36	4.34	0.0688	<0.01
Apr	4.15	4.14	2.14	0.248	0.436	0.101	0.114	6.15	6.15	0.0198	<0.01
May	8.95	8.94	4.93	0.660	0.448	0.0934	0.161	8.95	8.95	0.0581	<0.01
June	3.40	3.40	0.500	0.340	0.804	0.0416	0.0108	2.09	2.09	<0.01	<0.01
July	3.84	3.82	3.15	0.877	3.63	0.366	0.806	17.1	17.1	0.484	0.0170
Aug	3.51	3.50	2.31	0.729	13.4	0.150	0.271	2.81	2.80	0.156	0.0171
Sept	5.93	5.91	2.37	0.981	16.3	0.358	0.323	0.827	0.819	0.131	0.168
Oct	3.15	3.14	1.87	0.540	2.91	0.0709	0.0905	3.81	3.81	0.222	<0.01
Nov	4.80	4.79	1.43	1.44	3.21	0.227	0.173	4.02	4.02	0.219	<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	42.9	42.8	19.4	6.28	42.7	2.20	2.23	50.1	50.1	1.36	0.217

Data completeness

2012	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	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 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%)

Table 3.10 Monthly results **Site: Jiwozi** **Country: China**

Precipitation amount-weighted average concentration/ Precipitation amount

2012	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^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}		mS m^{-1}	mm $month^{-1}$ or mm $year^{-1}$
Jan	--	--	--	--	--	--	--	--	--	--	--	--	--	0
Feb	--	--	--	--	--	--	--	--	--	--	--	--	--	0
Mar	--	--	--	--	--	--	--	--	--	--	--	--	--	0
Apr	138	135	53.8	24.8	7.98	48.6	11.7	247	246	65.5	0.0251	7.60	8.89	21.2
May	151	149	50.9	28.1	7.64	46.3	11.4	204	203	48.5	0.0466	7.33	4.58	82.7
June	106	105	28.2	26.0	8.20	23.1	7.12	125	125	34.5	0.0891	7.05	2.35	2.40
July	91.9	90.3	40.3	25.3	8.21	26.0	4.54	164	163	38.0	0.0962	7.02	4.56	47.1
Aug	156	152	68.0	46.0	66.5	55.2	13.0	262	260	60.4	0.0369	7.43	8.08	64.3
Sept	26.0	22.9	41.4	28.9	29.7	51.9	10.1	197	196	41.9	0.116	6.94	4.66	126
Oct	77.0	75.6	34.2	33.0	25.0	23.8	5.85	161	161	18.9	0.0730	7.14	4.48	46.1
Nov	--	--	--	--	--	--	--	--	--	--	--	--	--	0
Dec	--	--	--	--	--	--	--	--	--	--	--	--	--	0
Annual	94.5	91.8	47.4	31.3	26.6	44.5	9.74	203	202	44.4	0.0756	7.12	5.39	390
Max.	175	171	80.2	70.9	106	98.6	21.2	457	456	118	0.204	7.62	15.3	
Min.	1.35	<1	15.8	10.2	4.32	4.07	1.84	51.7	51.4	4.69	0.0240	6.69	1.15	

Wet deposition amount

2012	SO_4^{2-}	nss-SO_4^{2-}	NO_3^-	Cl^-	NH_4^+	Na^+	K^+	Ca^{2+}	nss-Ca^{2+}	Mg^{2+}	H^+
	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}
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	2.92	2.86	1.14	0.525	0.169	1.03	0.249	5.24	5.22	1.39	<0.01
May	12.5	12.3	4.21	2.32	0.632	3.83	0.939	16.9	16.8	4.01	<0.01
June	0.255	0.252	0.0677	0.0625	0.0197	0.0555	0.0171	0.301	0.300	0.0829	<0.01
July	4.33	4.25	1.90	1.19	0.387	1.23	0.214	7.72	7.69	1.79	<0.01
Aug	10.0	9.80	4.37	2.96	4.27	3.55	0.835	16.8	16.7	3.88	<0.01
Sept	3.29	2.89	5.23	3.65	3.76	6.56	1.28	24.9	24.8	5.29	0.0146
Oct	3.55	3.48	1.58	1.52	1.15	1.09	0.270	7.44	7.42	0.869	<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	36.9	35.8	18.5	12.2	10.4	17.3	3.80	79.3	78.9	17.3	0.0295

Data completeness

2012	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	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 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%)

Table 3.11 Monthly results **Site: Hongwen** **Country: China**

Precipitation amount-weighted average concentration/ Precipitation amount

2012	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^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}		mS m^{-1}	mm $month^{-1}$ or mm $year^{-1}$
Jan	42.1	41.5	38.4	23.0	72.7	9.22	3.17	14.9	14.7	2.80	21.7	4.66	2.63	54.2
Feb	26.9	26.3	27.5	14.3	60.8	9.24	2.38	8.30	8.10	2.09	31.3	4.50	2.70	95.5
Mar	94.7	92.7	88.5	51.3	124	33.2	7.92	28.4	27.7	7.86	101	4.00	7.69	28.0
Apr	35.4	34.6	41.6	20.2	58.5	13.1	3.07	11.9	11.6	2.94	28.7	4.54	2.68	131
May	27.1	26.3	25.4	14.3	16.4	13.5	0.351	11.0	10.7	3.91	26.3	4.58	2.10	114
June	21.3	19.7	23.7	39.2	44.2	26.7	3.31	9.17	8.59	6.54	20.8	4.68	1.82	95.8
July	18.3	17.2	24.7	31.0	6.52	18.0	7.83	27.6	27.3	9.20	4.69	5.33	1.46	53.1
Aug	35.0	33.8	35.8	29.3	40.5	20.7	1.64	21.7	21.2	6.33	42.4	4.37	2.96	115
Sept	45.2	44.3	77.9	21.5	58.4	15.3	2.14	15.7	15.3	3.07	66.4	4.18	4.84	52.7
Oct	56.3	54.5	57.6	44.6	95.0	29.8	3.65	32.7	32.0	8.96	33.9	4.47	3.54	11.3
Nov	23.2	22.5	23.5	17.6	20.0	12.8	2.88	27.3	27.0	4.67	19.4	4.71	1.98	161
Dec	53.4	51.6	56.9	38.9	41.6	29.7	3.20	39.9	39.3	6.29	55.3	4.26	4.38	13.1
Annual	32.2	31.2	35.2	23.9	43.2	16.3	2.86	17.5	17.1	4.69	30.9	4.51	2.67	924
Max.	103	101	110	176	162	136	18.4	78.5	78.0	28.9	129	6.36	8.87	
Min.	10.6	10.0	9.69	3.79	<1	<1	<0.3	1.34	1.07	0.833	0.437	3.89	0.910	

Wet deposition amount

2012	SO_4^{2-}	nss-SO_4^{2-}	NO_3^-	Cl^-	NH_4^+	Na^+	K^+	Ca^{2+}	nss-Ca^{2+}	Mg^{2+}	H^+
	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}
Jan	2.28	2.25	2.08	1.25	3.94	0.500	0.172	0.808	0.797	0.152	1.18
Feb	2.57	2.51	2.62	1.36	5.80	0.882	0.227	0.792	0.773	0.199	2.99
Mar	2.65	2.60	2.48	1.44	3.47	0.930	0.222	0.796	0.776	0.220	2.83
Apr	4.64	4.54	5.46	2.65	7.67	1.72	0.403	1.56	1.52	0.386	3.77
May	3.08	2.99	2.89	1.63	1.86	1.54	0.0399	1.25	1.21	0.445	2.99
June	2.04	1.89	2.27	3.76	4.24	2.56	0.317	0.878	0.823	0.626	2.00
July	0.972	0.914	1.31	1.65	0.347	0.957	0.416	1.47	1.45	0.489	0.249
Aug	4.02	3.88	4.10	3.36	4.65	2.38	0.188	2.49	2.44	0.726	4.87
Sept	2.38	2.33	4.11	1.13	3.08	0.808	0.113	0.826	0.809	0.162	3.50
Oct	0.634	0.613	0.648	0.502	1.07	0.335	0.0410	0.368	0.360	0.101	0.381
Nov	3.73	3.61	3.77	2.83	3.21	2.06	0.462	4.38	4.33	0.749	3.12
Dec	0.697	0.673	0.743	0.507	0.543	0.388	0.0418	0.521	0.513	0.0821	0.721
Annual	29.7	28.8	32.5	22.1	39.9	15.0	2.64	16.1	15.8	4.34	28.6

Data completeness

2012	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 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%)

Table 3.12 Monthly results **Site: Xiaoping** **Country: China**

Precipitation amount-weighted average concentration/ Precipitation amount

2012	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^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}		mS m^{-1}	mm $month^{-1}$ or mm $year^{-1}$
Jan	50.5	50.2	39.7	16.8	54.2	5.36	5.01	7.27	7.16	1.64	70.8	4.15	3.97	35.7
Feb	16.7	16.2	26.6	13.4	47.7	8.09	2.42	2.01	1.83	1.09	29.3	4.53	2.27	126
Mar	--	--	--	--	--	--	--	--	--	--	--	--	--	0
Apr	34.2	33.9	47.7	11.6	53.8	4.32	2.31	6.78	6.69	1.26	58.6	4.23	3.06	52.4
May	24.9	24.6	25.7	7.33	31.8	4.43	<0.3	38.0	37.9	2.93	8.36	5.08	1.71	303
June	20.8	19.7	21.6	24.9	22.6	18.5	4.02	14.2	13.8	6.66	10.5	4.98	1.24	313
July	13.5	13.4	18.5	<1	10.9	<1	4.38	26.3	26.3	0.574	1.21	5.92	1.04	73.5
Aug	26.0	25.5	34.9	13.2	33.1	7.94	2.68	20.0	19.9	3.32	18.6	4.73	1.48	115
Sept	42.2	41.8	44.6	28.1	48.1	6.63	11.8	22.3	22.2	3.22	9.96	5.00	2.29	125
Oct	21.7	21.3	26.1	12.9	40.8	5.87	3.86	5.44	5.31	3.97	16.6	4.78	1.70	26.4
Nov	5.16	4.94	7.16	3.90	<1	3.56	3.63	16.9	16.8	2.63	8.81	5.05	0.637	101
Dec	5.62	5.51	12.6	4.37	<1	1.93	0.499	7.75	7.71	1.28	17.8	4.75	1.01	19.8
Annual	23.4	22.9	26.7	14.5	30.4	8.45	3.47	20.0	19.9	3.45	15.7	4.80	1.67	1291
Max.	76.5	75.4	129	69.9	158	40.1	74.7	53.0	52.9	22.4	120	6.54	5.82	
Min.	1.79	1.72	4.02	<1	<1	<1	<0.3	0.875	0.862	<0.4	0.288	3.92	0.340	

Wet deposition amount

2012	SO_4^{2-}	nss-SO_4^{2-}	NO_3^-	Cl^-	NH_4^+	Na^+	K^+	Ca^{2+}	nss-Ca^{2+}	Mg^{2+}	H^+
	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}
Jan	1.80	1.79	1.42	0.600	1.93	0.191	0.179	0.259	0.255	0.0585	2.53
Feb	2.10	2.04	3.35	1.69	6.01	1.02	0.305	0.253	0.231	0.137	3.69
Mar	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Apr	1.79	1.78	2.50	0.609	2.82	0.227	0.121	0.355	0.350	0.0659	3.07
May	7.53	7.45	7.77	2.22	9.62	1.34	0.0269	11.5	11.5	0.887	2.53
June	6.51	6.16	6.75	7.80	7.07	5.80	1.26	4.45	4.33	2.08	3.29
July	0.989	0.988	1.36	<0.01	0.799	0.0312	0.322	1.94	1.94	0.0422	0.0887
Aug	3.00	2.94	4.03	1.52	3.82	0.917	0.310	2.31	2.29	0.383	2.15
Sept	5.27	5.22	5.56	3.51	6.01	0.828	1.48	2.79	2.77	0.402	1.24
Oct	0.571	0.562	0.688	0.341	1.08	0.155	0.102	0.143	0.140	0.104	0.437
Nov	0.521	0.499	0.723	0.394	0.0698	0.359	0.366	1.71	1.70	0.266	0.890
Dec	0.111	0.109	0.250	0.0866	<0.01	0.0382	<0.01	0.154	0.153	0.0253	0.352
Annual	30.2	29.5	34.4	18.8	39.2	10.9	4.48	25.9	25.6	4.46	20.3

Data completeness

2012	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
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 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%)

Table 3.13 Monthly results **Site: Xiang Zhou** **Country: China**

Precipitation amount-weighted average concentration/ Precipitation amount

2012	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^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}		mS m^{-1}	mm $month^{-1}$ or mm $year^{-1}$
Jan	17.6	17.3	14.4	15.7	29.7	5.62	10.5	10.2	10.0	4.74	14.1	4.85	1.81	44.0
Feb	31.3	29.7	16.1	22.9	60.3	26.0	5.28	10.2	9.63	5.22	30.2	4.52	2.93	23.0
Mar	60.6	56.7	36.8	49.9	126	63.3	10.4	13.6	12.2	8.76	52.9	4.28	6.84	16.0
Apr	15.6	13.1	13.1	38.9	40.0	40.8	10.9	7.36	6.48	7.69	4.71	5.33	2.09	388
May	10.1	8.80	17.2	14.8	13.5	21.4	2.29	7.51	7.05	3.69	10.4	4.98	1.32	105
June	8.44	6.84	13.6	23.4	7.58	26.6	4.02	12.1	11.5	3.72	1.73	5.76	0.939	257
July	9.76	4.72	7.94	84.8	6.23	83.6	5.22	9.05	7.25	7.94	2.35	5.63	1.50	347
Aug	12.5	11.4	13.4	14.5	35.9	17.2	5.24	10.8	10.4	3.28	14.3	4.84	1.20	121
Sept	25.2	21.8	36.9	51.2	61.1	55.2	33.9	27.1	25.9	17.0	16.7	4.78	3.24	45.0
Oct	17.3	12.8	19.8	36.5	72.2	74.8	41.2	13.7	12.1	13.2	7.85	5.10	1.52	66.0
Nov	37.9	35.2	42.6	55.1	59.3	45.9	7.85	18.0	17.0	7.39	21.6	4.67	2.99	66.5
Dec	29.3	27.2	24.0	41.9	65.5	35.7	13.0	22.2	21.4	9.82	23.7	4.63	2.70	40.5
Annual	14.9	12.1	15.2	43.4	29.1	45.9	9.20	10.8	9.76	6.90	7.73	5.11	1.76	1518
Max.	145	130	139	288	260	378	106	124	116	48.5	93.3	6.85	11.5	
Min.	4.40	<1	<1	2.50	1.70	2.60	1.50	3.70	3.37	2.10	0.141	4.03	0.394	

Wet deposition amount

2012	SO_4^{2-}	nss-SO_4^{2-}	NO_3^-	Cl^-	NH_4^+	Na^+	K^+	Ca^{2+}	nss-Ca^{2+}	Mg^{2+}	H^+
	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}
Jan	0.775	0.760	0.635	0.689	1.31	0.247	0.462	0.447	0.441	0.209	0.622
Feb	0.720	0.684	0.370	0.527	1.39	0.598	0.121	0.234	0.221	0.120	0.696
Mar	0.969	0.908	0.588	0.799	2.02	1.01	0.167	0.217	0.195	0.140	0.846
Apr	6.04	5.08	5.07	15.1	15.5	15.8	4.21	2.85	2.51	2.98	1.83
May	1.05	0.920	1.79	1.54	1.41	2.24	0.239	0.785	0.737	0.386	1.08
June	2.17	1.76	3.50	6.00	1.95	6.83	1.03	3.11	2.97	0.957	0.445
July	3.38	1.64	2.75	29.4	2.16	29.0	1.81	3.14	2.51	2.75	0.813
Aug	1.51	1.39	1.62	1.76	4.34	2.09	0.634	1.31	1.26	0.396	1.73
Sept	1.13	0.982	1.66	2.30	2.75	2.48	1.52	1.22	1.17	0.765	0.753
Oct	1.14	0.847	1.31	2.41	4.76	4.93	2.72	0.906	0.800	0.871	0.518
Nov	2.52	2.34	2.83	3.66	3.94	3.05	0.522	1.20	1.13	0.492	1.44
Dec	1.19	1.10	0.974	1.70	2.65	1.45	0.526	0.898	0.867	0.398	0.958
Annual	22.6	18.4	23.1	65.8	44.2	69.7	14.0	16.3	14.8	10.5	11.7

Data completeness

2012	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 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%)

Table 3.14 Monthly results **Site: Jakarta** **Country: Indonesia**

Precipitation amount-weighted average concentration/ Precipitation amount

2012	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^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}		mS m^{-1}	mm $month^{-1}$ or mm $year^{-1}$
Jan	18.1	17.4	10.3	15.8	14.1	10.9	1.51	9.16	8.92	2.01	19.1	4.72	1.28	477
Feb	29.7	28.9	17.3	14.4	19.7	13.8	1.38	11.7	11.4	2.51	42.3	4.37	2.30	115
Mar	20.8	20.1	9.03	12.0	9.54	12.0	0.793	6.32	6.06	2.19	30.3	4.52	1.69	485
Apr	21.0	20.2	16.8	11.7	26.1	13.4	1.12	5.92	5.63	5.13	11.8	4.93	1.23	411
May	25.0	24.1	24.3	11.3	7.54	14.2	1.44	9.36	9.06	1.99	16.6	4.78	0.934	201
June	20.1	19.7	15.5	11.4	22.0	6.08	1.40	14.4	14.3	1.80	7.94	5.10	1.30	116
July	46.4	44.7	72.3	28.4	58.8	28.7	7.07	61.9	61.3	7.16	5.01	5.30	2.80	42.0
Aug	--	--	--	--	--	--	--	--	--	--	--	--	--	0
Sept	--	--	--	--	--	--	--	--	--	--	--	--	--	0
Oct	64.0	61.9	114	46.4	106	34.7	8.90	56.7	56.0	8.90	3.98	5.40	4.30	38.3
Nov	18.4	17.1	23.3	14.5	60.1	21.4	5.89	25.1	24.6	4.60	9.50	5.02	1.28	464
Dec	13.2	13.1	2.96	5.97	<1	<1	6.02	3.90	3.88	0.703	12.9	4.89	0.977	373
Annual	20.6	19.8	16.2	13.0	23.1	12.7	2.86	12.0	11.7	2.96	17.4	4.76	1.39	2722
Max.	106	101	195	142	106	77.4	14.4	297	295	28.7	63.1	6.60	7.10	
Min.	9.09	8.15	<1	4.40	<1	<1	0.300	1.76	1.52	<0.4	0.251	4.20	0.500	

Wet deposition amount

2012	SO_4^{2-}	nss-SO_4^{2-}	NO_3^-	Cl^-	NH_4^+	Na^+	K^+	Ca^{2+}	nss-Ca^{2+}	Mg^{2+}	H^+
	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}
Jan	8.61	8.30	4.93	7.52	6.73	5.18	0.722	4.37	4.25	0.957	9.13
Feb	3.43	3.34	2.00	1.66	2.27	1.60	0.160	1.34	1.31	0.289	4.88
Mar	10.1	9.75	4.38	5.82	4.63	5.83	0.385	3.06	2.94	1.06	14.7
Apr	8.65	8.31	6.91	4.80	10.8	5.52	0.460	2.43	2.31	2.11	4.85
May	5.01	4.84	4.87	2.28	1.51	2.84	0.288	1.88	1.82	0.399	3.32
June	2.33	2.29	1.79	1.32	2.55	0.705	0.162	1.67	1.66	0.209	0.921
July	1.95	1.88	3.04	1.19	2.47	1.21	0.297	2.60	2.57	0.301	0.210
Aug	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Sept	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Oct	2.45	2.37	4.36	1.78	4.07	1.33	0.341	2.17	2.14	0.341	0.152
Nov	8.52	7.92	10.8	6.74	27.8	9.93	2.73	11.6	11.4	2.13	4.41
Dec	4.91	4.89	1.10	2.23	0.0331	0.328	2.24	1.45	1.45	0.262	4.80
Annual	56.0	53.9	44.2	35.3	62.9	34.5	7.79	32.6	31.9	8.06	47.4

Data completeness

2012	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
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 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%)

Table 3.15 Monthly results **Site: Serpong** **Country: Indonesia**

Precipitation amount-weighted average concentration/ Precipitation amount

2012	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^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}		mS m^{-1}	mm $month^{-1}$ or mm $year^{-1}$
Jan	18.6	18.1	11.4	12.2	29.4	7.93	1.57	6.74	6.57	1.37	8.04	5.09	1.17	124
Feb	33.9	33.7	40.5	10.8	44.4	3.90	2.28	10.8	10.7	1.41	34.5	4.46	2.73	34.0
Mar	21.5	20.6	13.9	23.1	62.3	14.7	3.23	6.42	6.10	2.16	5.82	5.24	1.55	57.8
Apr	23.7	23.1	23.3	20.2	78.0	10.7	7.30	6.48	6.25	2.39	2.74	5.56	1.70	237
May	34.7	34.2	36.6	32.5	113	8.95	4.97	7.98	7.78	1.76	1.86	5.73	1.98	53.6
June	40.6	39.8	47.4	27.1	93.5	13.9	5.48	13.3	13.0	2.78	9.22	5.04	2.26	32.2
July	74.6	73.6	105	43.8	161	16.9	7.80	33.2	32.8	4.31	12.6	4.90	4.88	22.6
Aug	72.4	70.7	75.8	79.0	173	29.0	7.90	19.3	18.7	3.90	3.02	5.52	4.43	3.80
Sept	47.8	45.8	58.9	49.9	79.9	33.8	4.96	18.7	18.0	4.67	32.2	4.49	3.81	21.6
Oct	42.0	40.8	58.1	42.8	113	20.8	6.19	16.0	15.6	2.68	20.8	4.68	3.12	47.4
Nov	34.2	33.6	41.7	29.7	67.2	10.4	2.89	9.95	9.73	1.58	31.1	4.51	2.74	159
Dec	20.1	19.8	21.9	18.4	52.0	4.13	1.72	7.60	7.51	1.16	5.79	5.24	1.33	102
Annual	29.0	28.4	31.5	24.1	71.1	10.9	4.33	9.29	9.05	2.01	12.4	4.91	2.05	894
Max.	167	166	113	129	382	93.3	25.5	33.3	32.8	11.2	288	7.64	12.6	
Min.	3.11	2.97	1.75	2.90	6.51	<1	<0.3	1.62	1.62	<0.4	0.0229	3.54	0.334	

Wet deposition amount

2012	SO_4^{2-}	nss-SO_4^{2-}	NO_3^-	Cl^-	NH_4^+	Na^+	K^+	Ca^{2+}	nss-Ca^{2+}	Mg^{2+}	H^+
	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}
Jan	2.30	2.24	1.41	1.50	3.64	0.980	0.194	0.833	0.812	0.169	0.994
Feb	1.15	1.15	1.38	0.366	1.51	0.132	0.0777	0.368	0.365	0.0478	1.17
Mar	1.24	1.19	0.804	1.34	3.60	0.848	0.187	0.371	0.353	0.125	0.336
Apr	5.62	5.47	5.52	4.78	18.5	2.54	1.73	1.53	1.48	0.565	0.650
May	1.86	1.83	1.96	1.74	6.04	0.480	0.266	0.427	0.417	0.0943	0.0996
June	1.31	1.28	1.53	0.872	3.01	0.449	0.177	0.428	0.418	0.0896	0.297
July	1.69	1.66	2.37	0.990	3.64	0.382	0.176	0.750	0.742	0.0974	0.285
Aug	0.275	0.268	0.288	0.300	0.657	0.110	0.0300	0.0733	0.0710	0.0148	0.0115
Sept	1.03	0.989	1.27	1.08	1.73	0.730	0.107	0.404	0.389	0.101	0.695
Oct	1.99	1.93	2.75	2.03	5.34	0.986	0.294	0.759	0.738	0.127	0.985
Nov	5.45	5.35	6.65	4.73	10.7	1.65	0.461	1.59	1.55	0.252	4.97
Dec	2.04	2.02	2.23	1.87	5.28	0.420	0.174	0.772	0.763	0.118	0.588
Annual	26.0	25.4	28.2	21.6	63.6	9.71	3.87	8.31	8.10	1.80	11.1

Data completeness

2012	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 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%)

Table 3.16 Monthly results **Site: Kototabang** **Country: Indonesia**

Precipitation amount-weighted average concentration/ Precipitation amount

2012	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^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}		mS m^{-1}	mm $month^{-1}$ or mm $year^{-1}$
Jan	7.73	6.25	9.46	22.8	20.9	24.5	11.5	24.8	24.3	3.85	2.81	5.55	1.32	118
Feb	7.11	5.98	5.87	4.59	4.56	18.8	1.87	12.2	11.8	1.42	5.14	5.29	0.534	325
Mar	2.61	2.07	1.64	4.19	5.28	8.86	2.75	11.0	10.8	0.841	5.97	5.22	0.621	152
Apr	3.71	3.07	3.31	6.82	5.11	12.3	4.86	12.4	12.1	1.65	12.6	4.90	0.876	232
May	3.06	2.70	6.26	8.13	12.4	5.94	3.94	4.72	4.59	0.786	3.29	5.48	0.438	81.5
June	8.09	7.54	7.29	9.06	13.7	9.00	4.54	4.93	4.74	1.39	12.1	4.92	0.909	181
July	7.71	7.37	3.99	7.12	7.93	5.70	3.49	4.01	3.89	0.799	16.8	4.78	1.07	145
Aug	6.70	6.43	3.71	6.38	10.7	4.42	12.3	3.59	3.50	0.598	8.37	5.08	0.781	289
Sept	9.73	9.07	9.80	10.7	12.9	10.9	5.01	6.22	5.98	2.08	11.2	4.95	1.03	63.0
Oct	8.74	8.29	5.86	7.76	16.7	7.39	3.02	4.12	3.96	1.39	15.5	4.81	0.955	425
Nov	3.72	3.23	4.30	17.5	1.83	8.09	6.71	7.26	7.09	2.00	10.1	5.00	0.591	384
Dec	3.90	3.64	<1	13.9	<1	4.26	6.95	5.87	5.78	0.684	6.04	5.22	0.743	245
Annual	6.04	5.47	4.65	9.72	8.47	9.63	5.52	7.85	7.64	1.40	9.75	5.01	0.791	2639
Max.	35.9	33.9	45.6	85.8	60.9	56.4	38.5	59.7	59.5	6.17	44.7	7.11	4.30	
Min.	1.00	<1	<1	2.30	<1	<1	0.574	1.10	1.04	<0.4	0.0776	4.35	0.300	

Wet deposition amount

2012	SO_4^{2-}	nss-SO_4^{2-}	NO_3^-	Cl^-	NH_4^+	Na^+	K^+	Ca^{2+}	nss-Ca^{2+}	Mg^{2+}	H^+
	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}
Jan	0.915	0.740	1.12	2.70	2.48	2.90	1.36	2.94	2.87	0.455	0.332
Feb	2.31	1.94	1.91	1.49	1.48	6.13	0.608	3.98	3.85	0.463	1.67
Mar	0.396	0.315	0.249	0.636	0.801	1.34	0.418	1.67	1.64	0.128	0.906
Apr	0.860	0.710	0.766	1.58	1.18	2.84	1.13	2.86	2.80	0.383	2.91
May	0.249	0.220	0.510	0.663	1.01	0.484	0.321	0.385	0.374	0.0641	0.268
June	1.46	1.36	1.32	1.64	2.47	1.63	0.820	0.891	0.856	0.251	2.18
July	1.12	1.07	0.579	1.03	1.15	0.827	0.506	0.582	0.564	0.116	2.43
Aug	1.93	1.86	1.07	1.84	3.10	1.28	3.54	1.04	1.01	0.173	2.41
Sept	0.613	0.571	0.617	0.673	0.813	0.687	0.316	0.392	0.377	0.131	0.705
Oct	3.71	3.52	2.49	3.30	7.09	3.14	1.28	1.75	1.68	0.590	6.57
Nov	1.43	1.24	1.65	6.71	0.701	3.10	2.57	2.79	2.72	0.768	3.86
Dec	0.955	0.893	<0.01	3.40	0.0844	1.04	1.70	1.44	1.42	0.168	1.48
Annual	16.0	14.4	12.3	25.7	22.4	25.4	14.6	20.7	20.2	3.69	25.7

Data completeness

2012	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 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%)

Table 3.17 Monthly results **Site: Bandung** **Country: Indonesia**

Precipitation amount-weighted average concentration/ Precipitation amount

2012	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^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}		mS m^{-1}	mm $month^{-1}$ or mm $year^{-1}$
Jan	9.36	7.82	5.41	11.9	26.0	25.4	3.08	9.65	9.10	1.43	0.204	6.69	0.928	63.2
Feb	26.8	26.6	21.0	6.20	47.3	3.89	1.34	11.5	11.5	1.30	11.0	4.96	1.67	259
Mar	19.8	19.6	14.7	5.73	42.2	3.68	1.04	12.4	12.3	1.54	2.53	5.60	1.25	142
Apr	22.2	21.8	17.5	6.90	48.5	6.41	2.60	8.46	8.33	2.10	1.57	5.80	1.31	256
May	29.7	29.0	21.5	11.2	68.7	12.1	3.32	12.5	12.2	3.72	0.617	6.21	1.70	213
June	66.7	57.2	25.1	86.7	85.4	158	3.00	8.01	7.87	2.86	2.16	5.66	3.71	31.8
July	57.8	57.0	38.8	22.0	128	13.7	10.8	29.8	29.5	5.77	0.401	6.40	2.90	41.8
Aug	--	--	--	--	--	--	--	--	--	--	--	--	--	0
Sept	35.8	34.8	40.0	21.4	112	17.2	9.32	24.5	24.1	4.94	0.234	6.63	2.74	51.5
Oct	36.3	35.3	36.8	20.6	96.4	16.5	6.76	21.8	21.5	5.58	0.395	6.40	2.40	208
Nov	24.4	23.9	21.9	8.50	43.4	8.00	3.72	12.8	12.6	3.42	4.32	5.36	1.42	411
Dec	21.9	21.6	17.1	5.52	33.0	4.82	2.43	12.4	12.3	3.63	3.81	5.42	1.24	408
Annual	26.5	25.8	21.6	10.6	53.8	10.8	3.36	13.3	13.1	3.17	3.48	5.46	1.60	2084
Max.	199	149	124	432	227	835	25.8	87.9	86.9	34.8	72.4	7.10	12.0	
Min.	4.66	3.45	1.93	2.40	8.84	1.67	<0.3	<0.2	<0.2	<0.4	0.0794	4.14	0.485	

Wet deposition amount

2012	SO_4^{2-}	nss-SO_4^{2-}	NO_3^-	Cl^-	NH_4^+	Na^+	K^+	Ca^{2+}	nss-Ca^{2+}	Mg^{2+}	H^+
	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}
Jan	0.591	0.494	0.342	0.749	1.64	1.61	0.195	0.609	0.574	0.0904	0.0129
Feb	6.93	6.87	5.42	1.60	12.2	1.01	0.347	2.98	2.96	0.335	2.84
Mar	2.83	2.79	2.09	0.816	6.01	0.525	0.148	1.77	1.75	0.219	0.360
Apr	5.67	5.57	4.49	1.76	12.4	1.64	0.666	2.16	2.13	0.538	0.401
May	6.32	6.17	4.58	2.37	14.6	2.58	0.705	2.65	2.60	0.792	0.131
June	2.12	1.82	0.798	2.75	2.71	5.01	0.0952	0.254	0.250	0.0909	0.0687
July	2.41	2.38	1.62	0.920	5.32	0.574	0.452	1.24	1.23	0.241	0.0167
Aug	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Sept	1.84	1.79	2.06	1.10	5.77	0.886	0.480	1.26	1.24	0.255	0.0121
Oct	7.53	7.32	7.63	4.27	20.0	3.42	1.40	4.53	4.45	1.16	0.0819
Nov	10.0	9.83	9.00	3.49	17.9	3.29	1.53	5.25	5.18	1.41	1.78
Dec	8.93	8.81	6.99	2.25	13.5	1.97	0.992	5.08	5.04	1.48	1.56
Annual	55.2	53.8	45.0	22.1	112	22.5	7.01	27.8	27.4	6.61	7.25

Data completeness

2012	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 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%)

Table 3.18 Monthly results **Site: Maros** **Country: Indonesia**

Precipitation amount-weighted average concentration/ Precipitation amount

2012	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^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}		mS m^{-1}	mm $month^{-1}$ or mm $year^{-1}$
Jan	3.75	2.22	5.38	21.1	14.0	31.1	2.58	5.82	5.15	5.58	1.32	5.88	0.551	534
Feb	7.11	6.30	16.9	15.0	7.14	13.4	3.73	17.5	17.2	2.49	1.76	5.75	0.798	303
Mar	7.44	6.07	4.60	27.0	8.35	22.7	3.57	7.84	7.35	1.94	3.66	5.44	0.715	563
Apr	16.6	15.7	13.0	16.2	16.1	14.6	2.73	36.4	36.1	2.73	2.54	5.60	1.15	217
May	10.5	9.23	11.7	25.1	36.3	20.4	5.15	29.5	29.1	2.73	0.696	6.16	1.29	124
June	15.6	14.4	5.79	26.5	30.8	20.2	6.91	47.0	46.6	4.18	3.60	5.44	1.35	68.7
July	5.44	4.27	<1	9.75	119	19.4	13.3	63.0	62.6	10.4	1.05	5.98	0.500	20.6
Aug	--	--	--	--	--	--	--	--	--	--	--	--	--	0
Sept	--	--	--	--	--	--	--	--	--	--	--	--	--	0
Oct	43.5	40.2	<1	58.7	<1	55.6	14.2	12.3	11.1	280	0.741	6.13	6.50	31.6
Nov	16.9	15.8	22.3	21.8	15.9	19.4	4.98	30.4	30.0	7.06	3.95	5.40	1.48	198
Dec	6.04	5.67	6.45	7.98	11.4	6.01	1.63	10.6	10.4	1.84	2.29	5.64	0.561	392
Annual	8.77	7.65	9.05	20.0	14.1	19.9	3.50	16.1	15.7	7.03	2.41	5.62	0.885	2451
Max.	91.6	85.1	161	118	119	149	14.2	218	216	280	10.2	6.57	7.50	
Min.	1.94	<1	<1	5.44	<1	3.55	<0.3	2.13	1.92	<0.4	0.269	4.99	0.300	

Wet deposition amount

2012	SO_4^{2-}	nss-SO_4^{2-}	NO_3^-	Cl^-	NH_4^+	Na^+	K^+	Ca^{2+}	nss-Ca^{2+}	Mg^{2+}	H^+
	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}
Jan	2.00	1.19	2.87	11.3	7.46	16.6	1.38	3.11	2.75	2.98	0.703
Feb	2.15	1.91	5.11	4.54	2.16	4.06	1.13	5.29	5.20	0.754	0.534
Mar	4.19	3.42	2.59	15.2	4.70	12.8	2.01	4.41	4.13	1.09	2.06
Apr	3.59	3.40	2.82	3.52	3.49	3.16	0.592	7.89	7.83	0.591	0.550
May	1.29	1.14	1.44	3.10	4.49	2.51	0.636	3.64	3.59	0.337	0.0860
June	1.07	0.988	0.398	1.82	2.12	1.39	0.475	3.23	3.20	0.287	0.248
July	0.112	0.0879	0.0165	0.201	2.46	0.400	0.274	1.30	1.29	0.215	0.0216
Aug	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Sept	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Oct	1.38	1.27	<0.01	1.86	<0.01	1.76	0.449	0.388	0.350	8.85	0.0234
Nov	3.35	3.12	4.41	4.31	3.14	3.84	0.984	6.01	5.92	1.39	0.781
Dec	2.37	2.22	2.53	3.13	4.48	2.35	0.640	4.14	4.09	0.720	0.896
Annual	21.5	18.7	22.2	48.9	34.5	48.8	8.57	39.4	38.4	17.2	5.90

Data completeness

2012	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
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 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%)

Table 3.19 Monthly results **Site: Rishiri** **Country: Japan**

Precipitation amount-weighted average concentration/ Precipitation amount

2012	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^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}		mS m^{-1}	mm $month^{-1}$ or mm $year^{-1}$
Jan	23.3	14.2	8.16	164	8.78	152	3.91	4.48	1.20	16.7	25.9	4.59	3.88	68.1
Feb	72.5	37.7	92.3	666	54.7	577	14.9	24.3	12.0	66.5	73.6	4.13	13.8	32.9
Mar	47.9	24.7	28.6	413	31.9	384	8.00	17.1	8.85	43.6	31.5	4.50	8.27	25.0
Apr	27.5	19.0	17.0	157	20.1	140	3.57	10.1	7.05	16.8	21.5	4.67	3.75	45.9
May	12.1	11.2	17.7	17.2	17.8	15.4	0.904	5.62	5.29	2.51	12.6	4.90	1.33	63.1
June	30.6	30.3	37.1	11.7	45.0	6.26	2.44	4.81	4.67	1.60	40.9	4.39	2.93	10.7
July	10.1	9.51	16.0	10.9	20.1	9.60	0.417	1.30	1.09	1.19	18.5	4.73	1.40	112
Aug	7.62	6.48	7.72	22.2	3.70	18.9	0.433	0.776	0.369	2.06	16.3	4.79	1.14	105
Sept	6.94	5.30	7.74	30.3	3.64	27.2	0.400	1.21	0.622	2.91	14.7	4.83	1.15	128
Oct	24.6	8.78	9.97	293	10.3	269	5.83	7.37	1.68	29.4	16.9	4.77	4.91	155
Nov	19.8	5.40	6.53	266	4.63	243	4.86	6.13	1.10	26.5	13.9	4.86	4.37	275
Dec	86.1	15.0	14.5	1389	11.2	1195	25.9	28.3	2.48	131	28.7	4.54	19.1	152
Annual	27.8	10.5	13.4	332	11.4	292	6.41	8.44	2.20	32.3	20.2	4.70	5.54	1172
Max.	475	167	333	9374	245	8054	170	221	209	865	302	6.70	117	
Min.	<1	<1	<1	1.50	<1	<1	<0.3	0.258	<0.2	<0.4	0.200	3.52	0.216	

Wet deposition amount

2012	SO_4^{2-}	nss-SO_4^{2-}	NO_3^-	Cl^-	NH_4^+	Na^+	K^+	Ca^{2+}	nss-Ca^{2+}	Mg^{2+}	H^+
	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}
Jan	1.59	0.964	0.555	11.2	0.598	10.3	0.266	0.305	0.0815	1.14	1.77
Feb	2.39	1.24	3.04	21.9	1.80	19.0	0.489	0.800	0.396	2.19	2.42
Mar	1.20	0.619	0.714	10.3	0.796	9.59	0.200	0.428	0.221	1.09	0.789
Apr	1.26	0.873	0.780	7.20	0.920	6.43	0.164	0.463	0.324	0.773	0.989
May	0.765	0.706	1.12	1.08	1.12	0.972	0.0570	0.355	0.334	0.158	0.792
June	0.327	0.323	0.396	0.125	0.481	0.0668	0.0261	0.0513	0.0499	0.0171	0.436
July	1.13	1.06	1.78	1.22	2.25	1.07	0.0466	0.145	0.122	0.132	2.06
Aug	0.801	0.681	0.811	2.34	0.389	1.98	0.0455	0.0816	0.0387	0.216	1.71
Sept	0.891	0.681	0.993	3.88	0.467	3.49	0.0513	0.155	0.0799	0.374	1.88
Oct	3.82	1.36	1.55	45.6	1.60	41.7	0.906	1.14	0.261	4.57	2.63
Nov	5.44	1.48	1.79	73.2	1.27	66.8	1.33	1.68	0.302	7.27	3.81
Dec	13.1	2.28	2.20	211	1.70	182	3.94	4.30	0.377	19.9	4.37
Annual	32.6	12.3	15.7	389	13.3	343	7.51	9.89	2.58	37.8	23.6

Data completeness

2012	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	99.3	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
Feb	98.5	98.5	98.5	98.5	98.5	98.5	98.5	98.5	98.5	98.5	98.5	98.5	98.5	100
Mar	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	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	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	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
July	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
Aug	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
Sept	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Oct	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
Nov	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
Dec	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
Annual	**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**

[--] 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%)

Table 3.20 Monthly results **Site: Ochiishi** **Country: Japan**

Precipitation amount-weighted average concentration/ Precipitation amount

2012	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^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}		mS m^{-1}	mm $month^{-1}$ or mm $year^{-1}$
Jan	67.0	5.79	5.33	957	19.7	1040	25.3	28.1	5.66	116	12.5	4.90	16.3	9.31
Feb	25.2	1.91	33.0	416	14.1	387	9.22	13.1	4.83	48.8	24.0	4.62	8.66	15.3
Mar	26.1	15.6	19.2	202	18.1	174	4.02	8.41	4.65	21.3	23.8	4.62	4.23	32.9
Apr	22.4	11.8	10.5	203	15.8	176	4.62	7.76	3.96	22.6	10.8	4.96	3.14	66.5
May	19.3	9.61	9.45	187	14.8	161	4.01	4.75	1.26	18.6	18.9	4.72	3.42	102
June	10.7	7.43	7.65	62.6	6.53	54.7	1.77	1.44	0.292	5.75	12.3	4.91	1.58	63.6
July	6.56	5.99	6.67	12.4	5.78	9.45	0.438	0.392	0.241	1.18	15.0	4.82	0.827	102
Aug	14.1	12.2	11.6	39.8	25.7	32.6	5.07	1.04	0.509	3.05	15.3	4.82	1.77	51.2
Sept	11.1	5.89	7.61	101	6.77	85.8	2.24	2.08	0.253	9.66	12.2	4.91	2.02	82.5
Oct	20.5	4.91	7.97	296	8.73	258	6.44	6.34	0.895	28.7	10.5	4.98	4.43	62.4
Nov	29.7	8.76	9.52	390	7.04	348	7.69	8.99	1.47	38.2	19.5	4.71	6.32	191
Dec	82.7	12.3	11.8	1309	19.3	1175	26.3	27.8	2.61	127	16.0	4.79	18.1	93.4
Annual	25.3	8.81	9.80	307	12.3	274	6.76	7.35	1.50	30.6	15.2	4.82	4.96	871
Max.	232	85.7	104	3118	416	3566	128	92.1	23.3	386	92.0	7.05	56.2	
Min.	2.43	<1	<1	6.34	<1	4.82	<0.3	<0.2	<0.2	<0.4	0.0899	4.04	0.424	

Wet deposition amount

2012	SO_4^{2-}	nss-SO_4^{2-}	NO_3^-	Cl^-	NH_4^+	Na^+	K^+	Ca^{2+}	nss-Ca^{2+}	Mg^{2+}	H^+
	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}
Jan	0.624	0.0539	0.0496	8.91	0.184	9.68	0.236	0.261	0.0527	1.08	0.116
Feb	0.384	0.0291	0.504	6.35	0.216	5.90	0.141	0.200	0.0737	0.745	0.366
Mar	0.861	0.515	0.633	6.64	0.595	5.73	0.132	0.277	0.153	0.703	0.786
Apr	1.49	0.785	0.701	13.5	1.05	11.7	0.307	0.516	0.263	1.50	0.721
May	1.96	0.976	0.959	19.0	1.50	16.4	0.407	0.482	0.128	1.89	1.92
June	0.682	0.472	0.486	3.98	0.415	3.48	0.113	0.0916	0.0186	0.366	0.784
July	0.668	0.610	0.679	1.26	0.589	0.962	0.0445	0.0399	0.0245	0.120	1.53
Aug	0.725	0.624	0.593	2.04	1.32	1.67	0.260	0.0534	0.0261	0.156	0.783
Sept	0.912	0.486	0.628	8.34	0.558	7.08	0.185	0.171	0.0209	0.797	1.01
Oct	1.28	0.306	0.497	18.5	0.545	16.1	0.402	0.395	0.0558	1.79	0.656
Nov	5.68	1.67	1.82	74.6	1.35	66.5	1.47	1.72	0.280	7.30	3.72
Dec	7.72	1.15	1.10	122	1.81	110	2.45	2.59	0.244	11.9	1.50
Annual	22.0	7.68	8.54	267	10.7	239	5.89	6.41	1.31	26.6	13.3

Data completeness

2012	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	91.0	91.0	91.0	91.0	91.0	91.0	91.0	91.0	91.0	91.0	82.2	82.2	82.2	100
Feb	69.8	69.8	69.8	69.8	69.8	69.8	69.8	69.8	69.8	69.8	57.3	57.3	57.3	100
Mar	83.5	83.5	83.5	83.5	83.5	83.5	83.5	83.5	83.5	83.5	83.5	83.5	83.5	100
Apr	96.2	96.2	96.2	96.2	96.2	96.2	96.2	96.2	96.2	96.2	89.5	89.5	89.5	100
May	93.9	93.9	93.9	93.9	93.9	93.9	93.9	93.9	93.9	93.9	90.9	90.9	90.9	100
June	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
July	96.3	96.3	96.3	96.3	96.3	96.3	96.3	96.3	96.3	96.3	96.3	96.3	96.3	100
Aug	97.6	97.6	97.6	97.6	97.6	97.6	97.6	97.6	97.6	97.6	97.6	97.6	97.6	100
Sept	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
Oct	88.2	88.2	88.2	88.2	88.2	88.2	88.2	88.2	88.2	88.2	87.4	87.4	87.4	100
Nov	34.3	34.3	34.3	34.3	34.3	34.3	34.3	34.3	34.3	34.3	34.3	34.3	34.3	76.7
Dec	89.4	89.4	89.4	89.4	89.4	89.4	89.4	89.4	89.4	89.4	89.8	89.8	89.8	100
Annual	**80.6**	**80.6**	**80.6**	**80.6**	**80.6**	**80.6**	**80.6**	**80.6**	**80.6**	**80.6**	**79.4**	**79.4**	**79.4**	**98.1**

[--] 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%)

Table 3.21 Monthly results **Site: Tappi** **Country: Japan**

Precipitation amount-weighted average concentration/ Precipitation amount

2012	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^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}		mS m^{-1}	mm $month^{-1}$ or mm $year^{-1}$
Jan	28.0	11.8	9.19	312	2.49	269	6.56	5.98	0.664	31.8	21.6	4.67	5.55	14.5
Feb	*	*	*	*	*	*	*	*	*	*	*	*	*	28.0
Mar	58.2	45.8	61.0	235	63.2	206	14.1	32.7	20.2	38.1	36.3	4.44	7.51	82.5
Apr	28.9	24.3	38.3	87.6	30.7	76.4	2.91	15.6	14.0	10.9	21.7	4.66	2.66	63.0
May	22.2	15.1	16.1	136	19.1	118	3.11	4.81	2.27	13.8	20.1	4.70	3.24	111
June	20.9	12.6	19.9	161	10.5	138	3.17	4.90	1.98	16.4	25.6	4.59	3.36	56.0
July	11.6	9.17	13.5	44.6	12.4	40.5	1.16	1.83	0.960	4.80	17.6	4.76	1.70	100
Aug	12.9	10.8	10.2	42.3	9.21	36.1	1.12	1.37	0.592	4.13	16.5	4.78	1.55	115
Sept	9.16	5.75	8.53	65.1	4.98	56.6	1.12	1.94	0.715	6.96	13.5	4.87	1.63	236
Oct	27.8	15.9	17.7	226	13.1	198	4.95	11.9	7.66	13.8	27.8	4.56	4.49	118
Nov	26.7	13.5	14.9	255	6.77	220	5.19	10.6	5.81	20.0	22.0	4.66	4.51	178
Dec	78.6	12.7	14.7	1279	4.89	1094	24.2	26.6	2.92	126	18.8	4.73	17.1	75.5
Annual	22.3	13.8	17.4	162	13.8	141	3.96	8.02	4.44	15.4	20.5	4.69	3.45	1178
Max.	672	616	1667	10897	1306	9294	202	904	883	1064	115	5.51	136	
Min.	1.79	<1	1.03	5.53	<1	3.52	<0.3	0.599	<0.2	0.782	3.08	3.94	0.555	

Wet deposition amount

2012	SO_4^{2-}	nss-SO_4^{2-}	NO_3^-	Cl^-	NH_4^+	Na^+	K^+	Ca^{2+}	nss-Ca^{2+}	Mg^{2+}	H^+
	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}
Jan	0.407	0.172	0.133	4.53	0.0362	3.90	0.0952	0.0867	<0.01	0.461	0.313
Feb	*	*	*	*	*	*	*	*	*	*	*
Mar	4.81	3.78	5.03	19.4	5.22	17.0	1.16	2.70	1.67	3.15	3.00
Apr	1.82	1.53	2.41	5.52	1.94	4.81	0.184	0.983	0.879	0.685	1.37
May	2.46	1.67	1.79	15.1	2.11	13.1	0.345	0.534	0.252	1.53	2.23
June	1.17	0.704	1.12	9.00	0.590	7.73	0.178	0.275	0.111	0.920	1.43
July	1.17	0.920	1.36	4.47	1.24	4.06	0.116	0.184	0.0963	0.482	1.76
Aug	1.49	1.24	1.18	4.87	1.06	4.16	0.129	0.158	0.0681	0.475	1.89
Sept	2.16	1.36	2.01	15.4	1.17	13.4	0.265	0.457	0.169	1.64	3.19
Oct	3.29	1.88	2.10	26.8	1.55	23.4	0.586	1.41	0.907	1.63	3.29
Nov	4.75	2.40	2.65	45.3	1.20	39.0	0.920	1.87	1.03	3.55	3.91
Dec	5.94	0.957	1.11	96.6	0.369	82.6	1.82	2.01	0.221	9.50	1.42
Annual	26.2	16.3	20.4	191	16.3	166	4.66	9.45	5.23	18.2	24.1

Data completeness

2012	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	82.8	82.8	82.8	82.8	82.8	82.8	82.8	82.8	82.8	82.8	82.8	82.8	82.8	100
Feb	0	0	0	0	0	0	0	0	0	0	0	0	0	100
Mar	70.3	70.3	70.3	70.3	74.0	70.3	76.4	76.4	70.3	74.0	72.7	72.7	72.7	100
Apr	98.4	98.4	98.4	98.4	98.4	98.4	98.4	98.4	98.4	98.4	96.8	96.8	96.8	100
May	100	100	100	100	100	100	100	100	100	100	99.5	99.5	99.5	100
June	100	100	100	100	100	100	100	100	100	100	98.2	98.2	98.2	100
July	100	100	100	100	100	100	100	100	100	100	99.5	99.5	99.5	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	99.8	99.8	99.8	100
Oct	100	100	100	100	100	100	100	100	100	100	98.7	98.7	98.7	100
Nov	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	98.6	98.6	98.6	100
Dec	31.1	31.1	31.1	31.1	31.1	31.1	31.1	31.1	31.1	31.1	31.1	31.1	31.1	100
Annual	**90.8**	**90.8**	**90.8**	**90.8**	**91.0**	**90.8**	**91.2**	**91.2**	**90.8**	**91.0**	**90.4**	**90.4**	**90.4**	**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%)

Table 3.22 Monthly results **Site: Sado-seki** **Country: Japan**

Precipitation amount-weighted average concentration/ Precipitation amount

2012	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^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}		mS m^{-1}	mm $month^{-1}$ or mm $year^{-1}$
Jan	68.8	30.6	37.3	743	21.9	634	16.0	16.4	3.09	69.6	56.2	4.25	11.5	50.0
Feb	56.7	21.1	24.8	845	16.8	650	20.6	30.8	16.7	75.0	32.7	4.49	12.0	51.8
Mar	42.9	27.3	37.8	291	29.9	270	6.77	15.4	9.91	31.0	24.8	4.61	5.51	110
Apr	21.5	5.71	12.1	392	3.68	318	8.25	13.7	6.83	36.7	5.05	5.30	5.31	68.9
May	58.0	49.6	59.4	148	60.1	138	5.36	22.6	19.6	19.2	35.6	4.45	5.15	76.8
June	8.19	5.59	13.6	48.2	7.46	43.2	2.20	7.79	6.86	9.28	3.93	5.41	1.16	31.1
July	9.94	8.88	12.6	19.1	12.1	17.6	0.812	2.22	1.84	3.06	14.5	4.84	1.20	136
Aug	7.84	4.76	7.46	58.7	4.19	51.1	1.44	2.70	1.60	6.93	9.84	5.01	1.44	40.6
Sept	6.61	4.45	7.71	41.2	4.79	36.0	1.03	2.15	1.37	5.26	9.98	5.00	1.23	284
Oct	19.6	13.7	16.0	112	11.1	97.2	2.68	3.93	2.03	12.2	22.8	4.64	2.80	156
Nov	44.5	16.9	20.6	545	16.8	458	13.1	20.8	11.0	54.0	16.6	4.78	8.23	243
Dec	99.0	22.4	24.4	1572	18.1	1271	25.1	33.9	6.42	150	22.7	4.64	20.8	47.7
Annual	29.8	15.3	20.0	293	15.5	246	6.62	11.4	6.19	29.4	18.6	4.73	4.88	1296
Max.	416	250	226	7472	342	5293	191	297	200	590	102	6.14	73.8	
Min.	1.76	<1	1.93	3.00	<1	3.61	<0.3	0.686	<0.2	1.23	0.721	3.99	0.388	

Wet deposition amount

2012	SO_4^{2-}	nss-SO_4^{2-}	NO_3^-	Cl^-	NH_4^+	Na^+	K^+	Ca^{2+}	nss-Ca^{2+}	Mg^{2+}	H^+
	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}
Jan	3.44	1.53	1.87	37.1	1.09	31.7	0.801	0.820	0.155	3.48	2.81
Feb	2.94	1.09	1.28	43.8	0.870	33.7	1.07	1.60	0.867	3.89	1.69
Mar	4.72	3.00	4.16	32.0	3.29	29.7	0.745	1.69	1.09	3.42	2.72
Apr	1.48	0.394	0.834	27.0	0.254	21.9	0.568	0.944	0.471	2.53	0.348
May	4.45	3.81	4.57	11.4	4.62	10.6	0.412	1.73	1.51	1.47	2.74
June	0.255	0.174	0.424	1.50	0.232	1.34	0.0684	0.242	0.213	0.289	0.122
July	1.35	1.21	1.71	2.59	1.65	2.39	0.111	0.302	0.250	0.417	1.97
Aug	0.319	0.193	0.303	2.38	0.170	2.08	0.0583	0.110	0.0649	0.282	0.400
Sept	1.88	1.26	2.19	11.7	1.36	10.2	0.292	0.610	0.389	1.49	2.83
Oct	3.06	2.15	2.51	17.6	1.73	15.2	0.420	0.615	0.317	1.91	3.56
Nov	10.8	4.11	5.02	132	4.09	111	3.20	5.05	2.66	13.1	4.04
Dec	4.72	1.07	1.16	74.9	0.861	60.6	1.20	1.62	0.306	7.17	1.08
Annual	38.6	19.9	26.0	380	20.1	319	8.58	14.8	8.03	38.1	24.1

Data completeness

2012	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	98.8	98.8	98.8	98.8	98.8	98.8	98.8	98.8	98.8	98.8	86.0	86.0	86.0	100
Feb	95.0	95.0	95.0	95.0	95.0	95.0	95.0	95.0	95.0	95.0	93.1	93.1	93.1	100
Mar	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5	95.9	95.9	95.9	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	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	98.7	98.7	98.7	100
June	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	96.5	96.5	96.5	100
July	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.2	99.2	99.2	100
Aug	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
Sept	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Oct	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.3	99.3	99.3	100
Nov	79.8	79.8	79.8	79.8	79.8	79.8	79.8	79.8	79.8	79.8	79.6	79.6	79.6	46.7
Dec	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6	94.8	94.8	94.8	100
Annual	**95.7**	**95.7**	**95.7**	**95.7**	**95.7**	**95.7**	**95.7**	**95.7**	**95.7**	**95.7**	**94.4**	**94.4**	**94.4**	**95.6**

[--] 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%)

Table 3.23 Monthly results **Site: Happo** **Country: Japan**

Precipitation amount-weighted average concentration/ Precipitation amount

2012	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^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}		mS m^{-1}	mm $month^{-1}$ or mm $year^{-1}$
Jan	11.9	11.6	12.8	8.53	7.95	5.72	0.756	3.35	3.22	1.89	20.6	4.69	1.28	110
Feb	10.3	9.95	8.01	7.74	6.60	6.21	0.825	4.19	4.06	2.13	14.2	4.85	0.937	127
Mar	4.80	4.68	6.72	2.49	3.95	2.01	0.662	3.60	3.55	1.58	6.43	5.19	0.493	239
Apr	18.7	15.9	20.6	54.2	21.6	46.2	2.03	9.21	8.21	6.93	11.3	4.95	1.93	165
May	33.2	32.9	35.2	6.64	41.8	4.12	1.40	12.8	12.7	3.13	29.4	4.53	2.55	151
June	6.42	6.33	7.17	1.84	6.48	1.50	0.541	1.74	1.71	1.15	6.86	5.16	0.515	185
July	6.04	5.95	7.98	1.66	6.89	1.39	0.494	1.55	1.52	1.15	8.55	5.07	0.588	250
Aug	7.40	7.29	10.5	2.79	8.40	1.89	0.460	2.32	2.27	1.27	10.9	4.96	0.728	101
Sept	7.28	7.18	8.26	2.56	7.73	1.65	0.491	1.88	1.84	1.12	9.72	5.01	0.675	170
Oct	4.71	4.56	4.83	2.68	3.40	2.37	0.580	2.02	1.97	1.34	6.51	5.19	0.435	151
Nov	10.7	9.89	8.45	16.6	5.56	13.7	0.870	3.40	3.11	2.42	13.6	4.87	1.04	171
Dec	16.4	15.1	9.79	24.9	7.02	21.4	1.16	4.41	3.95	3.11	23.3	4.63	1.62	183
Annual	11.6	11.0	11.6	11.6	10.7	9.57	0.865	4.14	3.93	2.30	13.3	4.88	1.07	2002
Max.	287	285	398	276	446	238	13.5	212	211	35.3	115	5.89	16.4	
Min.	1.67	1.60	1.93	<1	<1	<1	<0.3	0.623	0.598	0.849	1.29	3.94	0.170	

Wet deposition amount

2012	SO_4^{2-}	nss-SO_4^{2-}	NO_3^-	Cl^-	NH_4^+	Na^+	K^+	Ca^{2+}	nss-Ca^{2+}	Mg^{2+}	H^+
	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}
Jan	1.31	1.27	1.41	0.940	0.876	0.630	0.0833	0.369	0.355	0.208	2.27
Feb	1.31	1.27	1.02	0.986	0.841	0.790	0.105	0.533	0.516	0.271	1.81
Mar	1.15	1.12	1.60	0.594	0.944	0.480	0.158	0.858	0.848	0.378	1.53
Apr	3.09	2.63	3.39	8.93	3.56	7.61	0.335	1.52	1.35	1.14	1.87
May	5.02	4.98	5.33	1.01	6.34	0.624	0.211	1.94	1.92	0.474	4.46
June	1.18	1.17	1.32	0.339	1.20	0.276	0.0999	0.322	0.316	0.213	1.27
July	1.51	1.49	1.99	0.415	1.72	0.348	0.124	0.388	0.381	0.286	2.14
Aug	0.747	0.735	1.06	0.281	0.848	0.191	0.0465	0.234	0.229	0.128	1.10
Sept	1.24	1.22	1.41	0.435	1.32	0.281	0.0837	0.320	0.314	0.190	1.65
Oct	0.710	0.688	0.727	0.403	0.513	0.358	0.0874	0.305	0.297	0.202	0.981
Nov	1.83	1.69	1.44	2.84	0.947	2.33	0.148	0.580	0.530	0.412	2.33
Dec	3.00	2.76	1.79	4.55	1.28	3.92	0.211	0.806	0.722	0.569	4.25
Annual	23.2	22.0	23.3	23.3	21.5	19.2	1.73	8.29	7.87	4.60	26.6

Data completeness

2012	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	93.2	93.2	93.2	93.2	93.2	93.2	93.2	93.2	93.2	93.2	92.5	92.5	92.5	100
Feb	81.1	81.1	81.1	81.1	81.1	81.1	81.1	81.1	81.1	81.1	76.2	76.2	76.2	100
Mar	40.4	40.4	40.4	40.4	40.4	40.4	40.4	40.4	40.4	40.4	40.4	40.4	40.4	100
Apr	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.8	99.8	99.8	100
May	100	100	100	100	100	100	100	100	100	100	99.4	99.4	99.4	100
June	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
July	100	100	100	100	100	100	100	100	100	100	99.6	99.6	99.6	100
Aug	81.6	81.6	81.6	81.6	81.6	81.6	81.6	81.6	81.6	81.6	77.6	77.6	77.6	96.8
Sept	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.0	99.0	99.0	100
Oct	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.4	99.4	99.4	100
Nov	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.4	99.4	99.4	100
Dec	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	98.8	98.8	98.8	100
Annual	**90.3**	**90.3**	**90.3**	**90.3**	**90.3**	**90.3**	**90.3**	**90.3**	**90.3**	**90.3**	**89.2**	**89.2**	**89.2**	**99.7**

[--] 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%)

Table 3.24 Monthly results **Site: Ijira** **Country: Japan**

Precipitation amount-weighted average concentration/ Precipitation amount

2012	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^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}		mS m^{-1}	mm $month^{-1}$ or mm $year^{-1}$
Jan	9.58	8.45	16.6	26.7	8.56	18.8	0.729	0.849	0.443	2.27	23.7	4.63	1.63	67.5
Feb	13.7	12.3	16.6	31.5	8.27	23.5	0.601	2.99	2.48	3.18	25.7	4.59	1.89	136
Mar	15.3	13.8	18.4	30.2	13.9	24.3	0.800	2.96	2.43	3.19	25.5	4.59	1.94	353
Apr	27.2	24.6	20.0	53.6	32.1	43.2	1.82	6.88	5.94	6.17	20.9	4.68	2.50	294
May	30.9	30.6	44.4	8.70	37.8	5.42	1.44	13.3	13.1	2.55	37.0	4.43	2.82	83.5
June	6.81	6.70	9.95	3.35	7.37	1.82	<0.3	0.270	0.254	<0.4	14.2	4.85	0.888	397
July	14.3	13.8	21.1	11.3	22.4	8.88	<0.3	1.09	0.895	0.985	23.7	4.63	1.67	428
Aug	11.6	11.4	18.1	6.49	14.2	4.37	<0.3	1.14	1.05	0.472	20.7	4.68	1.43	299
Sept	9.16	7.95	12.4	24.9	10.3	20.0	<0.3	0.973	0.551	2.52	14.9	4.83	1.30	335
Oct	7.48	6.46	9.07	20.9	5.86	16.8	0.913	1.37	1.06	2.08	12.9	4.89	1.03	98.0
Nov	9.89	8.29	13.0	32.5	5.14	26.6	1.25	3.05	2.47	3.44	16.8	4.78	1.43	150
Dec	12.6	9.66	13.3	61.3	6.38	48.9	1.18	3.11	2.08	6.20	20.9	4.68	2.01	223
Annual	13.6	12.4	16.7	24.5	14.7	19.3	0.609	2.50	2.09	2.54	20.5	4.69	1.65	2862
Max.	94.0	93.3	115	157	131	128	6.90	29.1	28.9	17.0	102	5.42	7.67	
Min.	1.30	1.17	2.60	1.10	<1	<1	<0.3	<0.2	<0.2	<0.4	3.80	3.99	0.290	

Wet deposition amount

2012	SO_4^{2-}	nss-SO_4^{2-}	NO_3^-	Cl^-	NH_4^+	Na^+	K^+	Ca^{2+}	nss-Ca^{2+}	Mg^{2+}	H^+
	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}
Jan	0.647	0.570	1.12	1.80	0.578	1.27	0.0492	0.0573	0.0299	0.153	1.60
Feb	1.87	1.67	2.25	4.29	1.12	3.20	0.0818	0.407	0.337	0.432	3.50
Mar	5.40	4.88	6.49	10.7	4.91	8.57	0.282	1.04	0.859	1.13	9.00
Apr	7.97	7.21	5.87	15.7	9.41	12.7	0.533	2.02	1.74	1.81	6.13
May	2.58	2.55	3.71	0.726	3.16	0.453	0.121	1.11	1.10	0.213	3.09
June	2.70	2.66	3.95	1.33	2.92	0.721	0.0194	0.107	0.101	0.0316	5.64
July	6.12	5.89	9.01	4.81	9.59	3.79	0.0155	0.464	0.383	0.421	10.1
Aug	3.47	3.40	5.40	1.94	4.25	1.31	<0.01	0.341	0.313	0.141	6.20
Sept	3.06	2.66	4.14	8.31	3.46	6.68	0.0906	0.326	0.184	0.844	4.99
Oct	0.733	0.634	0.889	2.05	0.575	1.64	0.0895	0.134	0.104	0.204	1.27
Nov	1.48	1.24	1.95	4.88	0.771	4.00	0.188	0.457	0.371	0.515	2.51
Dec	2.81	2.16	2.97	13.7	1.42	10.9	0.264	0.693	0.465	1.38	4.67
Annual	38.9	35.5	47.7	70.2	42.2	55.2	1.74	7.16	5.99	7.27	58.7

Data completeness

2012	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	99.7	99.7	99.7	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 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%)

Table 3.25 Monthly results **Site: Oki** **Country: Japan**

Precipitation amount-weighted average concentration/ Precipitation amount

2012	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^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}		mS m^{-1}	mm $month^{-1}$ or mm $year^{-1}$
Jan	77.7	27.9	40.3	941	29.3	827	19.4	21.2	3.38	94.7	53.9	4.27	16.0	127
Feb	111	35.3	42.7	1432	33.7	1249	29.8	38.8	11.8	148	40.8	4.39	21.7	52.7
Mar	42.2	25.4	28.2	324	29.6	280	7.17	13.9	7.88	32.8	29.7	4.53	5.82	151
Apr	119	15.7	27.6	2004	32.7	1719	40.4	53.1	15.9	193	8.87	5.05	21.9	59.7
May	32.1	29.2	35.6	59.1	43.2	49.2	2.78	6.23	5.16	6.52	39.3	4.41	3.45	57.9
June	2.89	2.20	3.67	15.3	2.28	11.4	0.811	0.452	0.207	1.44	6.83	5.17	0.572	177
July	7.74	6.19	9.25	31.7	7.40	25.7	1.21	1.01	0.452	2.98	12.0	4.92	1.18	160
Aug	14.2	7.41	20.9	126	7.17	113	4.30	3.71	1.27	13.9	19.5	4.71	2.88	50.9
Sept	14.8	10.7	9.79	82.2	4.10	67.9	2.69	2.16	0.693	8.00	23.9	4.62	2.31	134
Oct	29.0	20.4	25.3	168	17.6	143	5.17	6.18	3.08	17.3	42.4	4.37	4.33	87.9
Nov	55.7	20.7	28.4	659	14.0	581	14.7	21.9	9.36	66.6	31.3	4.50	10.7	134
Dec	*	*	*	*	*	*	*	*	*	*	*	*	*	104
Annual	37.9	16.4	21.6	411	17.0	357	9.16	12.1	4.40	41.2	26.4	4.58	6.72	1296
Max.	1485	239	689	24416	602	20672	485	698	252	2326	324	6.55	168	
Min.	1.41	<1	1.21	5.72	<1	3.52	0.551	<0.2	<0.2	0.571	0.282	3.49	0.281	

Wet deposition amount

2012	SO_4^{2-}	nss-SO_4^{2-}	NO_3^-	Cl^-	NH_4^+	Na^+	K^+	Ca^{2+}	nss-Ca^{2+}	Mg^{2+}	H^+
	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}
Jan	9.87	3.54	5.12	120	3.72	105	2.46	2.70	0.429	12.0	6.85
Feb	5.82	1.86	2.25	75.4	1.77	65.8	1.57	2.04	0.622	7.81	2.15
Mar	6.38	3.83	4.25	48.9	4.47	42.3	1.08	2.10	1.19	4.96	4.48
Apr	7.12	0.935	1.65	120	1.95	103	2.41	3.17	0.952	11.5	0.529
May	1.86	1.69	2.06	3.42	2.50	2.85	0.161	0.361	0.299	0.378	2.27
June	0.511	0.390	0.650	2.71	0.404	2.01	0.144	0.0801	0.0366	0.254	1.21
July	1.24	0.990	1.48	5.07	1.18	4.11	0.193	0.161	0.0724	0.477	1.93
Aug	0.725	0.377	1.07	6.39	0.365	5.77	0.219	0.189	0.0644	0.705	0.994
Sept	1.98	1.43	1.32	11.0	0.551	9.12	0.361	0.290	0.0931	1.08	3.20
Oct	2.55	1.79	2.22	14.7	1.55	12.6	0.455	0.543	0.270	1.52	3.72
Nov	7.44	2.77	3.78	88.0	1.87	77.5	1.97	2.93	1.25	8.89	4.18
Dec	*	*	*	*	*	*	*	*	*	*	*
Annual	49.1	21.2	28.0	532	22.0	462	11.9	15.7	5.71	53.4	34.2

Data completeness

2012	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	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
Feb	92.1	92.1	92.1	92.1	92.1	92.1	92.1	92.1	92.1	92.1	92.1	92.1	91.1	100
Mar	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6	98.7	100
Apr	98.8	98.8	98.8	98.8	98.8	98.8	98.8	98.8	98.8	98.8	98.8	98.8	97.2	100
May	100	100	100	100	100	100	100	100	100	100	100	100	98.4	100
June	100	100	100	100	100	100	100	100	100	100	100	100	100	100
July	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
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	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
Oct	98.9	98.9	98.9	98.9	98.9	98.9	98.9	98.9	98.9	98.9	98.9	98.9	98.5	100
Nov	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6	98.9	100
Dec	0	0	0	0	0	0	0	0	0	0	0	0	0	100
Annual	**91.1**	**91.1**	**91.1**	**91.1**	**91.1**	**91.1**	**91.1**	**91.1**	**91.1**	**91.1**	**91.1**	**91.1**	**90.7**	**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%)

Table 3.26 Monthly results **Site: Banryu** **Country: Japan**

Precipitation amount-weighted average concentration/ Precipitation amount

2012	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^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}		mS m^{-1}	mm $month^{-1}$ or mm $year^{-1}$
Jan	53.5	38.1	74.4	286	46.2	254	9.05	12.7	7.26	30.0	68.2	4.17	7.88	57.0
Feb	63.8	47.8	61.2	286	52.4	265	8.43	14.8	9.07	31.4	74.5	4.13	8.61	84.5
Mar	24.5	20.4	18.6	79.4	17.8	68.2	2.21	4.32	2.85	8.28	28.7	4.54	2.90	128
Apr	32.6	26.9	29.5	113	27.5	94.9	3.52	12.1	10.1	12.5	26.3	4.58	3.65	60.0
May	22.6	20.9	25.3	32.7	31.6	27.2	1.67	6.81	6.22	4.22	21.4	4.67	2.14	69.5
June	9.48	9.11	9.74	9.87	8.65	6.15	0.686	0.646	0.513	1.00	18.3	4.74	1.13	149
July	12.0	11.7	13.8	6.66	18.5	4.22	0.740	0.786	0.695	0.788	16.4	4.79	1.19	257
Aug	19.0	16.2	15.8	56.8	10.8	45.9	2.03	1.67	0.674	5.59	35.6	4.45	2.58	52.0
Sept	28.8	24.8	28.4	79.5	12.1	66.8	2.20	3.11	1.67	8.06	56.8	4.25	4.08	46.0
Oct	17.9	16.2	14.4	33.0	9.23	27.2	1.37	2.64	2.05	3.94	33.1	4.48	2.03	66.5
Nov	29.1	21.4	38.6	142	20.2	127	4.77	10.6	7.86	15.4	41.7	4.38	4.28	112
Dec	38.9	22.4	46.2	294	21.7	272	7.64	19.3	13.4	31.8	40.9	4.39	6.58	128
Annual	25.9	20.3	27.8	103	21.5	92.2	3.26	6.65	4.66	11.2	33.5	4.48	3.44	1208
Max.	399	338	739	1263	558	1187	55.4	101	75.7	138	355	5.30	30.1	
Min.	4.99	4.80	3.54	3.21	1.71	1.64	0.583	0.484	0.383	0.532	5.04	3.45	0.774	

Wet deposition amount

2012	SO_4^{2-}	nss-SO_4^{2-}	NO_3^-	Cl^-	NH_4^+	Na^+	K^+	Ca^{2+}	nss-Ca^{2+}	Mg^{2+}	H^+
	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}
Jan	3.05	2.17	4.24	16.3	2.63	14.5	0.516	0.727	0.414	1.71	3.88
Feb	5.39	4.04	5.17	24.2	4.43	22.4	0.713	1.25	0.766	2.65	6.30
Mar	3.14	2.61	2.38	10.2	2.28	8.73	0.283	0.553	0.365	1.06	3.68
Apr	1.95	1.61	1.77	6.76	1.65	5.69	0.211	0.726	0.603	0.749	1.58
May	1.57	1.45	1.76	2.27	2.20	1.89	0.116	0.473	0.432	0.293	1.49
June	1.41	1.35	1.45	1.47	1.28	0.913	0.102	0.0959	0.0761	0.149	2.72
July	3.07	3.01	3.54	1.71	4.75	1.08	0.190	0.202	0.178	0.202	4.20
Aug	0.989	0.845	0.821	2.96	0.559	2.39	0.106	0.0866	0.0350	0.291	1.85
Sept	1.33	1.14	1.31	3.66	0.557	3.07	0.101	0.143	0.0767	0.371	2.61
Oct	1.19	1.08	0.960	2.19	0.614	1.81	0.0909	0.176	0.136	0.262	2.20
Nov	3.26	2.40	4.32	15.9	2.27	14.2	0.534	1.19	0.880	1.72	4.67
Dec	4.95	2.86	5.89	37.4	2.76	34.7	0.973	2.46	1.71	4.05	5.22
Annual	31.2	24.5	33.6	125	25.9	111	3.93	8.03	5.62	13.5	40.5

Data completeness

2012	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	99.1	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	85.0	85.0	85.0	85.0	85.0	85.0	85.0	85.0	85.0	85.0	85.0	85.0	85.0	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	**99.3**	**99.3**	**99.3**	**99.3**	**99.3**	**99.3**	**99.3**	**99.3**	**99.3**	**99.3**	**99.3**	**99.3**	**99.2**	**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%)

Table 3.27 Monthly results **Site: Yusuhara** **Country: Japan**

Precipitation amount-weighted average concentration/ Precipitation amount

2012	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^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}		mS m^{-1}	mm $month^{-1}$ or mm $year^{-1}$
Jan	23.6	21.2	27.6	49.1	14.6	40.3	1.84	3.74	2.87	5.73	39.1	4.41	2.90	58.1
Feb	20.5	19.7	12.2	16.5	11.1	13.4	1.29	2.98	2.69	2.85	33.2	4.48	2.03	176
Mar	22.5	21.4	16.3	21.2	18.4	17.5	1.34	5.73	5.35	2.92	28.7	4.54	2.00	216
Apr	11.3	10.5	8.63	16.0	9.25	13.6	0.981	3.16	2.86	2.46	14.1	4.85	1.11	230
May	13.6	13.4	9.98	5.56	11.1	3.82	1.04	2.07	1.99	1.57	23.2	4.63	1.25	113
June	5.94	5.68	6.28	6.39	5.66	4.22	0.947	0.907	0.816	1.17	10.2	4.99	0.733	692
July	10.9	10.5	7.29	8.34	9.28	5.98	0.637	0.507	0.380	1.08	18.6	4.73	1.12	404
Aug	4.09	2.76	2.97	26.1	1.84	22.1	0.975	0.912	0.434	2.97	8.03	5.10	0.753	436
Sept	4.82	3.35	2.50	28.7	1.76	24.4	1.10	1.11	0.586	3.32	8.71	5.06	0.824	408
Oct	5.29	4.81	5.14	9.66	4.12	8.01	0.687	0.812	0.639	1.49	13.1	4.88	0.696	63.5
Nov	15.1	13.2	17.8	37.9	11.0	32.6	0.809	4.76	4.06	4.83	25.4	4.60	1.86	101
Dec	16.4	13.7	18.8	55.0	10.5	45.5	1.87	8.49	7.51	6.95	21.3	4.67	2.16	151
Annual	10.7	9.66	8.57	21.8	7.55	18.1	1.07	2.39	2.00	2.84	16.8	4.77	1.24	3048
Max.	184	164	220	1483	215	1224	48.2	155	149	147	269	5.81	29.5	
Min.	<1	<1	<1	<1	<1	<1	<0.3	<0.2	<0.2	<0.4	1.55	3.57	0.179	

Wet deposition amount

2012	SO_4^{2-}	nss-SO_4^{2-}	NO_3^-	Cl^-	NH_4^+	Na^+	K^+	Ca^{2+}	nss-Ca^{2+}	Mg^{2+}	H^+
	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}
Jan	1.37	1.23	1.61	2.85	0.851	2.34	0.107	0.217	0.167	0.333	2.27
Feb	3.61	3.47	2.15	2.91	1.95	2.36	0.227	0.525	0.473	0.502	5.84
Mar	4.85	4.62	3.53	4.57	3.97	3.78	0.290	1.24	1.16	0.631	6.21
Apr	2.60	2.41	1.98	3.69	2.13	3.12	0.226	0.726	0.659	0.565	3.25
May	1.54	1.52	1.13	0.629	1.25	0.433	0.118	0.235	0.225	0.177	2.63
June	4.11	3.93	4.34	4.42	3.92	2.92	0.655	0.627	0.564	0.808	7.03
July	4.38	4.24	2.94	3.37	3.75	2.41	0.257	0.205	0.154	0.434	7.53
Aug	1.78	1.20	1.29	11.4	0.802	9.64	0.425	0.397	0.189	1.29	3.50
Sept	1.97	1.37	1.02	11.7	0.719	9.95	0.448	0.454	0.239	1.36	3.56
Oct	0.336	0.305	0.327	0.614	0.261	0.509	0.0436	0.0516	0.0406	0.0949	0.833
Nov	1.52	1.33	1.79	3.82	1.11	3.29	0.0816	0.480	0.409	0.487	2.56
Dec	2.49	2.07	2.84	8.32	1.59	6.88	0.282	1.28	1.14	1.05	3.22
Annual	32.8	29.4	26.1	66.5	23.0	55.1	3.25	7.28	6.09	8.65	51.3

Data completeness

2012	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	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Mar	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
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	33.1	33.1	33.1	33.1	33.1	33.1	33.1	33.1	33.1	33.1	33.1	33.1	33.1	100
July	79.2	79.2	79.2	79.2	79.2	79.2	79.2	79.2	79.2	79.2	79.1	79.1	79.1	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	99.5	99.5	99.5	100
Annual	**82.0**	**82.0**	**82.0**	**82.0**	**82.0**	**82.0**	**82.0**	**82.0**	**82.0**	**82.0**	**82.0**	**82.0**	**82.0**	**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%)

Table 3.28 Monthly results **Site: Hedo** **Country: Japan**

Precipitation amount-weighted average concentration/ Precipitation amount

2012	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^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}		mS m^{-1}	mm $month^{-1}$ or mm $year^{-1}$
Jan	42.9	25.6	14.9	309	17.2	288	6.86	8.53	2.32	33.3	40.4	4.39	6.55	82.5
Feb	12.4	6.74	7.26	103	8.83	93.3	2.41	3.84	1.82	10.9	9.09	5.04	2.03	133
Mar	22.5	13.4	19.1	166	21.8	151	4.68	8.27	5.00	17.9	16.1	4.79	3.76	81.5
Apr	9.53	6.67	9.60	53.4	10.5	47.5	1.66	3.48	2.46	5.61	7.20	5.14	1.41	293
May	11.6	6.61	6.07	93.9	8.77	83.5	2.04	2.86	1.05	9.52	7.87	5.10	1.99	295
June	9.40	3.81	5.34	106	5.56	92.7	2.19	3.03	1.03	10.6	3.61	5.44	1.92	289
July	8.93	1.94	3.67	137	5.03	116	2.69	3.17	0.679	13.0	3.06	5.51	2.24	173
Aug	23.5	2.25	2.91	410	2.29	353	8.34	10.2	2.54	40.0	2.73	5.56	6.04	705
Sept	192	5.30	2.23	3852	130	3165	79.9	76.1	7.64	362	1.60	5.80	50.8	431
Oct	62.1	6.38	15.5	1029	25.8	924	26.7	24.3	4.35	105	6.58	5.18	15.1	86.2
Nov	10.1	4.76	6.99	108	5.38	89.0	2.14	3.72	1.80	10.6	5.58	5.25	1.91	154
Dec	20.8	8.37	8.59	241	7.61	207	4.76	7.04	2.57	24.1	11.9	4.92	4.15	112
Annual	31.2	6.30	7.17	496	18.8	418	10.6	11.5	2.44	47.9	7.49	5.13	7.27	2837
Max.	607	343	455	9938	299	9126	234	274	87.2	1064	409	7.03	141	
Min.	1.01	<1	<1	9.79	<1	8.57	0.454	0.722	<0.2	0.839	0.0944	3.39	0.226	

Wet deposition amount

2012	SO_4^{2-}	nss-SO_4^{2-}	NO_3^-	Cl^-	NH_4^+	Na^+	K^+	Ca^{2+}	nss-Ca^{2+}	Mg^{2+}	H^+
	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}
Jan	3.54	2.11	1.23	25.5	1.42	23.7	0.566	0.704	0.191	2.75	3.33
Feb	1.65	0.898	0.967	13.7	1.18	12.4	0.321	0.511	0.242	1.46	1.21
Mar	1.84	1.10	1.56	13.5	1.78	12.3	0.381	0.674	0.408	1.46	1.32
Apr	2.79	1.95	2.81	15.7	3.06	13.9	0.486	1.02	0.720	1.64	2.11
May	3.44	1.95	1.79	27.7	2.59	24.7	0.602	0.844	0.311	2.81	2.33
June	2.72	1.10	1.54	30.7	1.61	26.8	0.634	0.877	0.298	3.08	1.04
July	1.55	0.336	0.635	23.7	0.871	20.1	0.465	0.550	0.118	2.25	0.530
Aug	16.6	1.59	2.05	289	1.61	249	5.88	7.16	1.79	28.2	1.92
Sept	83.0	2.29	0.963	1661	56.1	1365	34.4	32.8	3.30	156	0.688
Oct	5.35	0.550	1.33	88.7	2.22	79.6	2.30	2.10	0.375	9.02	0.567
Nov	1.56	0.733	1.08	16.6	0.828	13.7	0.330	0.573	0.277	1.64	0.860
Dec	2.34	0.940	0.966	27.1	0.856	23.3	0.535	0.792	0.289	2.71	1.34
Annual	88.5	17.9	20.3	1407	53.5	1186	30.2	32.6	6.93	136	21.3

Data completeness

2012	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	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.9	98.9	98.9	100
Feb	100	100	100	100	100	100	100	100	100	100	99.6	99.6	99.6	100
Mar	98.8	98.8	98.8	98.8	98.8	98.8	98.8	98.8	98.8	98.8	99.4	99.4	99.4	100
Apr	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.8	99.8	99.8	100
May	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
June	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5	100	100	100	100
July	97.7	97.7	97.7	97.7	97.7	97.7	97.7	97.7	97.7	97.7	97.6	97.6	97.6	100
Aug	30.7	30.7	30.7	30.7	30.7	30.7	30.7	30.7	30.7	30.7	30.7	30.7	30.7	93.5
Sept	38.1	38.1	38.1	38.1	38.1	38.1	38.1	38.1	38.1	38.1	38.1	38.1	38.1	80.0
Oct	100	100	100	100	100	100	100	100	100	100	100	100	99.4	96.8
Nov	59.1	59.1	59.1	59.1	59.1	59.1	59.1	59.1	59.1	59.1	59.1	59.1	59.1	80.0
Dec	100	100	100	100	100	100	100	100	100	100	100	100	99.6	100
Annual	**70.8**	**70.8**	**70.8**	**70.8**	**70.8**	**70.8**	**70.8**	**70.8**	**70.8**	**70.8**	**70.9**	**70.9**	**70.9**	**95.9**

[--] 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%)

Table 3.29 Monthly results **Site: Ogasawara** **Country: Japan**

Precipitation amount-weighted average concentration/ Precipitation amount

2012	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^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}		mS m^{-1}	mm $month^{-1}$ or mm $year^{-1}$
Jan	14.6	7.99	4.72	129	7.83	110	2.58	3.37	1.01	12.4	9.71	5.01	2.48	85.4
Feb	12.2	7.77	5.68	84.7	7.11	73.2	1.90	2.71	1.12	8.45	9.23	5.03	1.87	63.6
Mar	23.6	18.3	12.8	102	19.8	87.9	2.70	4.87	2.97	9.97	15.9	4.80	2.70	42.0
Apr	6.47	3.70	4.62	52.5	6.66	45.8	1.76	1.98	0.993	5.17	4.99	5.30	1.20	186
May	10.2	7.50	5.81	52.1	9.73	44.0	1.27	2.34	1.39	5.12	7.24	5.14	1.26	196
June	3.17	1.84	1.84	24.4	4.56	22.0	0.601	0.989	0.514	2.63	3.61	5.44	0.627	89.1
July	9.02	<1	<1	170	1.69	143	3.11	3.69	0.586	18.1	1.67	5.78	2.55	58.9
Aug	8.74	<1	<1	159	3.31	138	3.26	4.09	1.12	17.1	1.99	5.70	2.44	193
Sept	14.2	<1	<1	270	1.86	228	5.12	5.76	0.840	27.5	2.21	5.65	4.01	190
Oct	10.8	<1	<1	197	3.27	167	3.71	4.24	0.639	19.9	2.73	5.56	3.00	300
Nov	7.11	2.40	3.29	90.6	3.48	78.2	1.63	2.73	1.04	8.67	4.08	5.39	1.63	74.6
Dec	9.41	4.38	3.82	98.2	3.67	83.5	1.68	3.08	1.27	9.54	5.93	5.23	1.85	93.9
Annual	10.2	3.35	2.88	134	5.18	114	2.71	3.46	1.01	13.6	4.63	5.33	2.26	1572
Max.	147	110	79.7	2460	91.7	2082	44.7	49.1	28.0	239	97.7	6.16	19.1	
Min.	<1	<1	<1	4.44	<1	3.76	<0.3	0.321	<0.2	0.612	0.692	4.01	0.248	

Wet deposition amount

2012	SO_4^{2-}	nss-SO_4^{2-}	NO_3^-	Cl^-	NH_4^+	Na^+	K^+	Ca^{2+}	nss-Ca^{2+}	Mg^{2+}	H^+
	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}
Jan	1.25	0.683	0.403	11.0	0.669	9.43	0.221	0.288	0.0862	1.06	0.830
Feb	0.775	0.494	0.361	5.39	0.452	4.65	0.121	0.172	0.0715	0.538	0.587
Mar	0.992	0.769	0.538	4.27	0.835	3.69	0.113	0.205	0.125	0.419	0.669
Apr	1.20	0.687	0.857	9.74	1.24	8.50	0.326	0.368	0.184	0.959	0.925
May	1.99	1.47	1.14	10.2	1.91	8.64	0.249	0.460	0.274	1.00	1.42
June	0.282	0.164	0.164	2.18	0.406	1.96	0.0536	0.0882	0.0459	0.234	0.321
July	0.531	0.0220	0.0356	10.0	0.0992	8.44	0.183	0.217	0.0345	1.07	0.0981
Aug	1.68	0.0899	0.111	30.6	0.637	26.5	0.629	0.788	0.215	3.29	0.384
Sept	2.71	0.0948	0.120	51.4	0.355	43.3	0.975	1.10	0.160	5.23	0.421
Oct	3.23	0.257	0.226	58.9	0.979	50.0	1.11	1.27	0.191	5.95	0.819
Nov	0.530	0.179	0.245	6.76	0.259	5.83	0.121	0.203	0.0775	0.646	0.304
Dec	0.884	0.411	0.358	9.22	0.345	7.84	0.158	0.289	0.119	0.896	0.556
Annual	16.0	5.27	4.53	210	8.14	179	4.26	5.44	1.58	21.3	7.28

Data completeness

2012	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	97.5	97.5	97.5	97.5	97.5	97.5	97.5	97.5	97.5	97.5	96.0	96.0	96.0	100
Feb	95.9	95.9	95.9	95.9	95.9	95.9	95.9	95.9	95.9	95.9	95.2	95.2	95.2	100
Mar	95.1	95.1	95.1	95.1	95.1	95.1	95.1	95.1	95.1	95.1	94.2	94.2	94.2	100
Apr	100	100	100	100	100	100	100	100	100	100	100	100	100	100
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	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.3	99.3	99.3	100
July	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
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	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.5	99.5	99.5	100
Oct	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.7	99.7	99.7	100
Nov	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Dec	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
Annual	**99.4**	**99.4**	**99.4**	**99.4**	**99.4**	**99.4**	**99.4**	**99.4**	**99.4**	**99.4**	**99.0**	**99.0**	**99.0**	**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%)

Table 3.30 Monthly results **Site: Tokyo** **Country: Japan**

Precipitation amount-weighted average concentration/ Precipitation amount

2012	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^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}		mS m^{-1}	mm $month^{-1}$ or mm $year^{-1}$
Jan	17.4	16.5	38.3	22.4	43.7	15.5	0.919	6.69	6.35	2.81	20.4	4.69	2.06	51.6
Feb	26.2	24.3	28.8	37.4	38.3	31.6	1.32	4.43	3.75	3.58	26.6	4.58	2.60	92.5
Mar	16.6	15.5	21.0	22.9	30.9	18.2	0.753	3.79	3.40	2.20	14.9	4.83	1.70	141
Apr	29.6	24.1	32.2	110	35.6	92.2	2.76	8.85	6.86	11.3	22.6	4.65	3.48	122
May	13.4	12.7	13.2	14.7	19.4	11.3	0.534	3.87	3.62	1.77	11.2	4.95	1.23	252
June	12.1	9.43	9.41	53.8	18.3	44.8	1.02	3.75	2.78	5.46	7.54	5.12	1.54	200
July	16.8	16.2	21.3	13.9	27.0	10.0	<0.3	2.92	2.70	1.49	20.5	4.69	1.71	140
Aug	16.2	15.8	26.5	9.72	23.9	5.97	0.347	7.44	7.31	1.49	19.5	4.71	1.70	32.2
Sept	14.3	12.3	18.0	39.1	20.8	32.9	0.913	4.30	3.59	4.23	13.4	4.87	1.72	224
Oct	14.6	12.8	22.4	36.1	22.6	30.3	0.838	3.60	2.94	4.04	17.5	4.76	1.92	160
Nov	8.23	6.68	10.4	30.5	16.3	25.7	0.678	2.69	2.14	3.28	7.05	5.15	1.14	153
Dec	11.0	10.1	13.2	17.9	21.0	14.5	0.354	2.74	2.43	1.79	7.70	5.11	1.10	66.8
Annual	15.6	13.8	18.8	35.8	24.3	29.5	0.888	4.21	3.57	3.78	14.4	4.84	1.75	1635
Max.	124	123	248	662	220	562	15.0	73.9	70.9	70.5	141	6.19	11.3	
Min.	3.62	2.99	<1	1.12	6.41	<1	<0.3	0.555	0.344	<0.4	0.646	3.85	0.410	

Wet deposition amount

2012	SO_4^{2-}	nss-SO_4^{2-}	NO_3^-	Cl^-	NH_4^+	Na^+	K^+	Ca^{2+}	nss-Ca^{2+}	Mg^{2+}	H^+
	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}
Jan	0.900	0.852	1.98	1.16	2.26	0.802	0.0474	0.345	0.328	0.145	1.05
Feb	2.42	2.25	2.66	3.45	3.54	2.92	0.122	0.409	0.346	0.331	2.46
Mar	2.34	2.19	2.97	3.23	4.36	2.57	0.106	0.535	0.479	0.310	2.10
Apr	3.63	2.94	3.94	13.5	4.35	11.3	0.337	1.08	0.839	1.38	2.76
May	3.37	3.20	3.33	3.69	4.89	2.85	0.135	0.975	0.914	0.447	2.81
June	2.43	1.89	1.88	10.8	3.66	8.97	0.204	0.751	0.557	1.09	1.51
July	2.34	2.26	2.98	1.94	3.77	1.40	0.0193	0.407	0.377	0.208	2.86
Aug	0.520	0.508	0.853	0.313	0.769	0.192	0.0112	0.240	0.235	0.0478	0.628
Sept	3.20	2.76	4.04	8.77	4.67	7.37	0.205	0.965	0.806	0.947	3.00
Oct	2.33	2.04	3.59	5.76	3.61	4.84	0.134	0.574	0.470	0.645	2.80
Nov	1.26	1.02	1.59	4.66	2.48	3.93	0.103	0.411	0.326	0.500	1.08
Dec	0.731	0.673	0.880	1.20	1.40	0.971	0.0236	0.183	0.162	0.119	0.514
Annual	25.5	22.6	30.7	58.5	39.8	48.2	1.45	6.88	5.84	6.18	23.5

Data completeness

2012	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	87.4	87.4	87.4	100
Feb	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
Mar	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
Apr	98.8	98.8	98.8	98.8	98.8	98.8	98.8	98.8	98.8	98.8	98.5	98.5	98.5	100
May	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
June	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	100
July	96.4	96.4	96.4	96.4	96.4	96.4	96.4	96.4	96.4	96.4	96.4	96.4	96.4	100
Aug	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0	88.5	88.5	88.5	100
Sept	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
Oct	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	100
Nov	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
Dec	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
Annual	**98.4**	**98.4**	**98.4**	**98.4**	**98.4**	**98.4**	**98.4**	**98.4**	**98.4**	**98.4**	**97.9**	**97.9**	**97.9**	**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%)

Table 3.31 Monthly results **Site: Vientiane** **Country: Lao PDR**

Precipitation amount-weighted average concentration/ Precipitation amount

2012	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^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}		mS m^{-1}	mm $month^{-1}$ or mm $year^{-1}$
Jan	**	**	**	**	**	**	**	**	**	**	**	**	**	**
Feb	**	**	**	**	**	**	**	**	**	**	**	**	**	**
Mar	6.30	*	12.2	9.51	*	*	*	*	*	*	0.0631	7.20	0.400	19.1
Apr	1.69	*	8.67	6.31	*	*	*	*	*	*	0.132	6.88	1.26	19.1
May	3.34	*	5.52	4.68	*	*	*	*	*	*	0.0896	7.05	0.605	194
June	1.73	*	3.56	5.42	*	*	*	*	*	*	0.176	6.75	0.401	284
July	2.56	*	6.22	3.08	*	*	*	*	*	*	0.520	6.28	0.358	271
Aug	1.77	*	6.72	4.07	*	*	*	*	*	*	0.326	6.49	0.296	346
Sept	3.13	*	4.49	4.78	*	*	*	*	*	*	0.733	6.13	0.431	189
Oct	**	**	**	**	**	**	**	**	**	**	**	**	**	**
Nov	**	**	**	**	**	**	**	**	**	**	**	**	**	**
Dec	**	**	**	**	**	**	**	**	**	**	**	**	**	**
Annual	2.41	*	5.55	4.46	*	*	*	*	*	*	0.351	6.46	0.411	1322
Max.	8.67	*	15.1	9.51	*	*	*	*	*	*	3.02	7.65	1.26	
Min.	<1	*	<1	<1	*	*	*	*	*	*	0.0224	5.52	0.160	

Wet deposition amount

2012	SO_4^{2-}	nss-SO_4^{2-}	NO_3^-	Cl^-	NH_4^+	Na^+	K^+	Ca^{2+}	nss-Ca^{2+}	Mg^{2+}	H^+
	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}
Jan	**	**	**	**	**	**	**	**	**	**	**
Feb	**	**	**	**	**	**	**	**	**	**	**
Mar	0.120	*	0.233	0.182	*	*	*	*	*	*	<0.01
Apr	0.0323	*	0.166	0.121	*	*	*	*	*	*	<0.01
May	0.650	*	1.07	0.909	*	*	*	*	*	*	0.0174
June	0.490	*	1.01	1.54	*	*	*	*	*	*	0.0501
July	0.693	*	1.68	0.833	*	*	*	*	*	*	0.141
Aug	0.610	*	2.32	1.41	*	*	*	*	*	*	0.113
Sept	0.592	*	0.850	0.904	*	*	*	*	*	*	0.139
Oct	**	**	**	**	**	**	**	**	**	**	**
Nov	**	**	**	**	**	**	**	**	**	**	**
Dec	**	**	**	**	**	**	**	**	**	**	**
Annual	3.19	*	7.34	5.89	*	*	*	*	*	*	0.463

Data completeness

2012	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	100	0	100	100	0	0	0	0	0	0	100	100	100	100
Apr	100	0	100	100	0	0	0	0	0	0	100	100	100	100
May	100	0	100	100	0	0	0	0	0	0	100	100	100	100
June	100	0	100	100	0	0	0	0	0	0	100	100	100	100
July	100	0	100	100	0	0	0	0	0	0	100	100	100	100
Aug	100	0	100	100	0	0	0	0	0	0	100	100	100	100
Sept	100	0	100	100	0	0	0	0	0	0	100	100	100	100
Oct	**	**	**	**	**	**	**	**	**	**	**	**	**	0
Nov	**	**	**	**	**	**	**	**	**	**	**	**	**	0
Dec	**	**	**	**	**	**	**	**	**	**	**	**	**	0
Annual	**100**	**0**	**100**	**100**	**0**	**0**	**0**	**0**	**0**	**0**	**100**	**100**	**100**	**57.1**

[--] 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%)

Table 3.32 Monthly results **Site: Petaling Jaya** **Country: Malaysia**

Precipitation amount-weighted average concentration/ Precipitation amount

2012	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^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}		mS m^{-1}	mm $month^{-1}$ or mm $year^{-1}$
Jan	12.7	12.6	39.6	6.91	<1	3.01	0.917	3.36	3.30	<0.4	53.4	4.27	2.53	228
Feb	19.7	19.5	53.3	9.13	2.03	4.02	1.11	3.40	3.32	0.428	80.3	4.10	3.79	319
Mar	9.92	9.67	27.9	6.66	<1	4.06	1.07	2.43	2.35	<0.4	38.9	4.41	1.88	313
Apr	32.9	32.7	103	9.64	3.98	3.52	1.61	8.14	8.07	0.845	113	3.95	5.28	220
May	17.0	16.8	51.0	10.7	2.92	3.76	1.12	2.68	2.60	<0.4	51.3	4.29	2.88	269
June	25.1	24.7	40.6	10.2	7.13	5.71	1.10	6.40	6.27	1.25	59.1	4.23	3.51	67.8
July	20.9	20.5	47.7	10.5	1.95	5.86	1.56	6.94	6.82	1.21	65.7	4.18	3.21	162
Aug	23.7	23.2	72.6	13.8	<1	9.47	1.98	5.44	5.24	1.65	92.9	4.03	4.78	93.0
Sept	24.2	23.8	41.7	11.7	<1	6.83	2.02	4.60	4.45	1.10	72.3	4.14	3.49	141
Oct	20.6	20.3	32.1	6.18	1.12	5.10	1.33	4.65	4.54	0.708	64.8	4.19	3.54	354
Nov	12.8	12.7	35.2	4.63	<1	1.48	1.54	2.53	2.50	<0.4	49.4	4.31	2.47	841
Dec	12.7	12.4	35.2	10.5	<1	4.67	1.03	4.66	4.56	0.431	57.4	4.24	3.09	403
Annual	17.0	16.8	43.8	7.98	1.29	3.85	1.33	3.96	3.88	0.497	61.4	4.21	3.10	3412
Max.	89.1	88.3	557	34.4	101	17.0	8.30	27.6	27.3	6.01	275	4.76	15.0	
Min.	<1	<1	<1	<1	<1	<1	0.430	<0.2	<0.2	<0.4	17.4	3.56	1.14	

Wet deposition amount

2012	SO_4^{2-}	nss-SO_4^{2-}	NO_3^-	Cl^-	NH_4^+	Na^+	K^+	Ca^{2+}	nss-Ca^{2+}	Mg^{2+}	H^+
	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}
Jan	2.91	2.87	9.04	1.58	<0.01	0.688	0.209	0.768	0.754	0.0356	12.2
Feb	6.30	6.22	17.0	2.91	0.648	1.28	0.353	1.09	1.06	0.137	25.6
Mar	3.10	3.02	8.73	2.08	0.238	1.27	0.335	0.761	0.734	0.0845	12.2
Apr	7.24	7.19	22.7	2.12	0.876	0.774	0.354	1.79	1.77	0.186	24.8
May	4.59	4.53	13.7	2.87	0.786	1.01	0.301	0.721	0.699	0.102	13.8
June	1.70	1.68	2.75	0.694	0.483	0.387	0.0747	0.434	0.425	0.0850	4.01
July	3.38	3.33	7.72	1.70	0.316	0.949	0.253	1.12	1.10	0.195	10.7
Aug	2.21	2.16	6.76	1.28	<0.01	0.881	0.184	0.506	0.487	0.154	8.64
Sept	3.42	3.36	5.88	1.65	0.0466	0.963	0.284	0.648	0.627	0.155	10.2
Oct	7.31	7.20	11.4	2.19	0.397	1.80	0.472	1.65	1.61	0.251	22.9
Nov	10.7	10.6	29.6	3.89	0.454	1.25	1.30	2.13	2.11	0.137	41.5
Dec	5.13	5.01	14.2	4.25	0.138	1.89	0.414	1.88	1.84	0.174	23.1
Annual	58.0	57.3	150	27.2	4.40	13.1	4.53	13.5	13.2	1.69	210

Data completeness

2012	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	97.0	97.0	97.0	97.0	97.0	97.0	97.0	97.0	97.0	97.0	97.0	97.0	97.0	100
Feb	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Mar	97.7	97.7	97.7	97.7	97.7	97.7	97.7	97.7	97.7	97.7	97.7	97.7	97.7	100
Apr	100	100	100	100	100	100	100	100	100	100	97.6	97.6	97.6	100
May	100	100	100	100	100	100	100	100	100	100	98.1	98.1	98.1	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	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
Aug	96.6	96.6	96.6	96.6	96.6	96.6	96.6	96.6	96.6	96.6	96.6	96.6	96.6	100
Sept	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Oct	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
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	**99.4**	**99.4**	**99.4**	**99.4**	**99.4**	**99.4**	**99.4**	**99.4**	**99.4**	**99.4**	**99.1**	**99.1**	**99.1**	**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%)

Table 3.33 Monthly results **Site: Tanah Rata** **Country: Malaysia**

Precipitation amount-weighted average concentration/ Precipitation amount

2012	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^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}		mS m^{-1}	mm $month^{-1}$ or mm $year^{-1}$
Jan	1.59	1.57	<1	2.11	<1	<1	0.604	0.784	0.778	0.430	12.7	4.89	0.536	189
Feb	3.46	3.36	5.31	2.10	<1	1.70	0.639	3.43	3.40	<0.4	11.8	4.93	0.600	116
Mar	3.03	2.95	2.96	2.40	1.53	1.29	0.523	2.18	2.15	<0.4	9.06	5.04	0.419	418
Apr	3.41	3.34	3.70	2.12	<1	1.14	0.584	1.20	1.17	<0.4	9.47	5.02	0.570	289
May	6.57	6.47	6.63	3.20	2.51	1.73	0.718	3.39	3.36	<0.4	13.6	4.87	0.845	188
June	7.63	7.50	8.68	3.26	8.88	2.04	1.22	3.05	3.01	<0.4	10.3	4.99	0.804	142
July	6.35	6.21	1.77	5.58	42.4	2.30	10.6	1.84	1.79	<0.4	14.6	4.84	1.15	220
Aug	13.4	13.4	11.3	7.34	13.1	<1	2.69	5.15	5.13	0.575	12.1	4.92	2.16	273
Sept	4.78	4.61	4.25	5.02	1.87	2.77	1.25	4.26	4.20	0.486	10.5	4.98	0.671	166
Oct	2.51	2.44	<1	1.08	1.42	1.09	0.741	1.96	1.93	<0.4	7.84	5.11	0.522	218
Nov	2.01	1.93	1.51	1.53	<1	1.35	0.622	1.48	1.45	<0.4	12.0	4.92	0.614	453
Dec	2.48	2.31	1.46	4.16	<1	2.90	0.882	1.32	1.26	<0.4	7.47	5.13	0.490	175
Annual	4.59	4.50	3.78	3.19	5.67	1.51	1.68	2.37	2.33	<0.4	10.9	4.96	0.780	2846
Max.	28.9	28.9	24.9	18.4	98.2	5.76	23.7	15.3	15.2	1.36	30.2	6.97	5.87	
Min.	<1	<1	<1	<1	<1	<1	<0.3	<0.2	<0.2	<0.4	0.107	4.52	0.179	

Wet deposition amount

2012	SO_4^{2-}	nss-SO_4^{2-}	NO_3^-	Cl^-	NH_4^+	Na^+	K^+	Ca^{2+}	nss-Ca^{2+}	Mg^{2+}	H^+
	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}
Jan	0.301	0.298	<0.01	0.398	<0.01	0.0547	0.114	0.148	0.147	0.0814	2.41
Feb	0.400	0.388	0.614	0.242	<0.01	0.197	0.0738	0.397	0.393	<0.01	1.36
Mar	1.27	1.24	1.24	1.00	0.638	0.538	0.219	0.911	0.899	0.0194	3.79
Apr	0.987	0.967	1.07	0.613	<0.01	0.329	0.169	0.347	0.340	<0.01	2.74
May	1.23	1.21	1.24	0.601	0.472	0.324	0.135	0.637	0.630	0.0590	2.55
June	1.09	1.07	1.24	0.464	1.26	0.290	0.174	0.435	0.428	0.0418	1.47
July	1.40	1.36	0.389	1.22	9.30	0.505	2.33	0.405	0.394	0.0321	3.20
Aug	3.67	3.65	3.09	2.00	3.58	0.224	0.733	1.40	1.40	0.157	3.31
Sept	0.791	0.764	0.704	0.832	0.309	0.458	0.207	0.706	0.696	0.0805	1.74
Oct	0.548	0.534	0.180	0.236	0.310	0.238	0.162	0.427	0.422	0.0159	1.71
Nov	0.909	0.872	0.686	0.694	<0.01	0.612	0.282	0.669	0.656	0.0446	5.42
Dec	0.434	0.403	0.254	0.727	0.138	0.507	0.154	0.230	0.219	<0.01	1.30
Annual	13.1	12.8	10.8	9.07	16.1	4.29	4.78	6.73	6.64	0.528	31.0

Data completeness

2012	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	90.7	90.7	90.7	90.7	90.7	90.7	90.7	90.7	90.7	90.7	90.7	90.7	90.7	100
Feb	93.8	93.8	93.8	93.8	93.8	93.8	93.8	93.8	93.8	93.8	93.8	93.8	93.8	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	100	100	100	100	100	100	100	100	100	100	100	100	100	100
June	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	88.1	88.1	88.1	100
July	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
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	**99.0**	**99.0**	**99.0**	**99.0**	**99.0**	**99.0**	**99.0**	**99.0**	**99.0**	**99.0**	**98.5**	**98.5**	**98.5**	**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%)

Table 3.34 Monthly results **Site: Danum Valley** **Country: Malaysia**

Precipitation amount-weighted average concentration/ Precipitation amount

2012	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^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}		mS m^{-1}	mm $month^{-1}$ or mm $year^{-1}$
Jan	1.50	1.37	<1	5.98	<1	2.14	0.610	<0.2	<0.2	<0.4	7.88	5.10	0.439	123
Feb	<1	<1	<1	3.76	<1	2.85	0.470	<0.2	<0.2	<0.4	3.51	5.45	0.317	199
Mar	1.97	1.73	<1	6.35	2.43	3.98	0.664	0.855	0.778	<0.4	4.73	5.33	0.319	458
Apr	1.37	1.28	<1	2.77	<1	1.52	1.55	0.248	0.238	<0.4	2.99	5.52	0.263	376
May	2.17	2.09	<1	2.77	<1	1.37	1.27	1.11	1.08	0.516	8.26	5.08	0.459	184
June	3.14	3.06	3.35	3.12	<1	1.22	1.33	1.23	1.21	<0.4	4.81	5.32	0.369	185
July	1.78	1.68	<1	2.50	<1	1.67	1.22	1.05	1.01	<0.4	6.68	5.17	0.400	212
Aug	2.31	2.04	<1	7.56	<1	4.52	2.69	1.48	1.39	0.665	13.3	4.88	0.590	201
Sept	3.51	3.37	<1	2.83	2.10	2.41	1.43	0.851	0.799	<0.4	6.86	5.16	0.466	266
Oct	4.22	4.09	4.12	<1	<1	2.12	1.41	0.590	0.565	<0.4	13.9	4.86	0.750	241
Nov	2.33	2.21	<1	5.00	<1	2.04	0.913	0.766	0.722	<0.4	5.93	5.23	0.338	232
Dec	2.10	1.62	1.27	8.27	<1	8.06	1.08	1.54	1.37	0.698	5.02	5.30	0.443	281
Annual	2.28	2.11	<1	4.16	<1	2.87	1.21	0.800	0.750	<0.4	6.58	5.18	0.416	2958
Max.	9.96	9.78	5.84	23.7	12.6	12.9	13.3	5.04	4.85	2.22	20.4	5.75	1.07	
Min.	<1	<1	<1	<1	<1	<1	<0.3	<0.2	<0.2	<0.4	1.78	4.69	0.160	

Wet deposition amount

2012	SO_4^{2-}	nss-SO_4^{2-}	NO_3^-	Cl^-	NH_4^+	Na^+	K^+	Ca^{2+}	nss-Ca^{2+}	Mg^{2+}	H^+
	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}
Jan	0.184	0.168	<0.01	0.734	<0.01	0.262	0.0749	<0.01	<0.01	<0.01	0.967
Feb	0.179	0.145	<0.01	0.747	<0.01	0.566	0.0933	<0.01	<0.01	0.0356	0.697
Mar	0.901	0.791	0.241	2.91	1.11	1.82	0.304	0.392	0.356	0.0791	2.17
Apr	0.515	0.480	<0.01	1.04	<0.01	0.573	0.584	0.0935	0.0897	0.0647	1.13
May	0.401	0.385	0.133	0.510	<0.01	0.253	0.234	0.205	0.200	0.0951	1.52
June	0.581	0.567	0.621	0.577	0.0831	0.225	0.246	0.228	0.223	0.0589	0.891
July	0.377	0.356	<0.01	0.530	<0.01	0.355	0.258	0.223	0.215	0.0365	1.42
Aug	0.464	0.409	0.0899	1.52	<0.01	0.909	0.540	0.298	0.279	0.134	2.68
Sept	0.936	0.897	0.261	0.754	0.560	0.641	0.379	0.227	0.213	0.0881	1.83
Oct	1.02	0.986	0.992	<0.01	<0.01	0.512	0.341	0.142	0.136	0.0562	3.35
Nov	0.540	0.512	0.0285	1.16	<0.01	0.472	0.212	0.177	0.167	<0.01	1.37
Dec	0.591	0.454	0.356	2.32	0.210	2.26	0.304	0.432	0.383	0.196	1.41
Annual	6.75	6.24	2.83	12.3	1.90	8.49	3.59	2.37	2.22	0.830	19.5

Data completeness

2012	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	94.2	94.2	94.2	94.2	94.2	94.2	94.2	94.2	94.2	94.2	94.2	94.2	94.2	100
Feb	92.0	92.0	92.0	92.0	92.0	92.0	92.0	92.0	92.0	92.0	92.0	92.0	92.0	100
Mar	84.3	84.3	84.3	84.3	84.3	84.3	84.3	84.3	84.3	84.3	84.3	84.3	84.3	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	92.2	92.2	92.2	92.2	92.2	92.2	92.2	92.2	92.2	92.2	92.2	92.2	92.2	100
Aug	82.7	82.7	82.7	82.7	82.7	82.7	82.7	82.7	82.7	82.7	82.7	82.7	82.7	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	85.4	85.4	85.4	85.4	85.4	85.4	85.4	85.4	85.4	85.4	85.4	85.4	85.4	100
Dec	80.7	80.7	80.7	80.7	80.7	80.7	80.7	80.7	80.7	80.7	80.7	80.7	80.7	100
Annual	**92.1**	**92.1**	**92.1**	**92.1**	**92.1**	**92.1**	**92.1**	**92.1**	**92.1**	**92.1**	**92.1**	**92.1**	**92.1**	**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%)

Table 3.35 Monthly results **Site: Kuching** **Country: Malaysia**

Precipitation amount-weighted average concentration/ Precipitation amount

2012	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^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}		mS m^{-1}	mm $month^{-1}$ or mm $year^{-1}$
Jan	1.95	1.49	<1	11.3	<1	7.66	<0.3	1.07	0.950	0.411	3.01	5.52	0.340	776
Feb	4.48	3.96	5.15	9.85	4.21	8.64	1.22	4.13	3.94	<0.4	3.04	5.52	0.529	300
Mar	3.26	2.93	1.61	7.14	2.73	5.53	0.322	1.76	1.64	<0.4	4.95	5.31	0.371	446
Apr	5.59	5.44	6.40	4.88	12.6	2.54	1.71	3.87	3.81	<0.4	3.89	5.41	0.540	214
May	7.00	6.80	<1	5.13	3.16	3.40	1.46	5.36	5.28	<0.4	5.71	5.24	0.498	237
June	6.75	6.49	1.33	5.35	3.50	4.35	0.928	8.60	8.51	0.429	4.23	5.37	0.495	101
July	4.48	4.22	1.01	3.93	1.22	4.23	0.869	5.57	5.48	<0.4	5.79	5.24	0.405	218
Aug	7.51	7.24	11.1	4.21	18.1	4.44	1.69	4.58	4.48	0.427	7.71	5.11	0.794	319
Sept	7.69	7.47	7.93	3.79	19.1	3.68	1.61	4.59	4.51	<0.4	4.80	5.32	0.644	240
Oct	9.26	8.85	6.58	7.26	12.3	6.81	1.58	5.72	5.57	0.752	7.02	5.15	0.794	320
Nov	2.40	2.23	4.68	5.29	6.52	2.82	0.865	3.34	3.28	<0.4	4.89	5.31	0.408	311
Dec	3.03	2.89	3.16	3.09	1.51	2.26	0.599	1.83	1.78	<0.4	5.26	5.28	0.340	312
Annual	4.67	4.35	3.82	6.78	6.16	5.21	0.924	3.42	3.32	<0.4	4.84	5.32	0.489	3796
Max.	23.9	23.3	18.3	15.9	46.8	15.4	12.0	17.2	17.0	2.33	14.1	6.33	1.31	
Min.	<1	<1	<1	1.40	<1	<1	<0.3	<0.2	<0.2	<0.4	0.468	4.85	0.177	

Wet deposition amount

2012	SO_4^{2-}	nss-SO_4^{2-}	NO_3^-	Cl^-	NH_4^+	Na^+	K^+	Ca^{2+}	nss-Ca^{2+}	Mg^{2+}	H^+
	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}
Jan	1.52	1.16	0.479	8.74	<0.01	5.94	0.111	0.830	0.737	0.319	2.34
Feb	1.35	1.19	1.55	2.96	1.26	2.60	0.367	1.24	1.18	0.0745	0.913
Mar	1.45	1.31	0.717	3.19	1.22	2.47	0.144	0.784	0.731	0.0663	2.21
Apr	1.20	1.17	1.37	1.05	2.70	0.544	0.367	0.829	0.817	<0.01	0.834
May	1.66	1.61	<0.01	1.22	0.749	0.805	0.347	1.27	1.25	0.0615	1.35
June	0.679	0.653	0.134	0.539	0.353	0.437	0.0934	0.865	0.856	0.0432	0.425
July	0.977	0.922	0.221	0.858	0.265	0.924	0.190	1.21	1.19	0.0524	1.26
Aug	2.39	2.31	3.54	1.34	5.78	1.42	0.538	1.46	1.43	0.136	2.46
Sept	1.85	1.80	1.91	0.911	4.59	0.885	0.387	1.10	1.08	0.0284	1.15
Oct	2.96	2.83	2.11	2.32	3.93	2.18	0.505	1.83	1.78	0.241	2.25
Nov	0.747	0.694	1.46	1.65	2.03	0.877	0.269	1.04	1.02	0.0213	1.52
Dec	0.946	0.904	0.988	0.965	0.473	0.707	0.187	0.571	0.556	<0.01	1.64
Annual	17.7	16.5	14.5	25.7	23.4	19.8	3.51	13.0	12.6	1.04	18.4

Data completeness

2012	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	90.5	90.5	90.5	90.5	90.5	90.5	90.5	90.5	90.5	90.5	90.5	90.5	90.5	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	**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**

[--] 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%)

Table 3.36 Monthly results **Site: Ulaanbaatar** **Country: Mongolia**

Precipitation amount-weighted average concentration/ Precipitation amount

2012	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^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}		mS m^{-1}	mm $month^{-1}$ or mm $year^{-1}$
Jan	--	--	--	--	--	--	--	--	--	--	--	--	--	0
Feb	--	--	--	--	--	--	--	--	--	--	--	--	--	0
Mar	--	--	--	--	--	--	--	--	--	--	--	--	--	0
Apr	--	--	--	--	--	--	--	--	--	--	--	--	--	0
May	--	--	--	--	--	--	--	--	--	--	--	--	--	0
June	*	*	*	*	*	*	*	*	*	*	0.461	6.34	1.60	30.8
July	*	*	*	*	*	*	*	*	*	*	0.461	6.34	1.86	78.6
Aug	*	*	*	*	*	*	*	*	*	*	3.15	5.50	1.40	43.0
Sept	*	*	*	*	*	*	*	*	*	*	2.11	5.68	1.95	17.9
Oct	--	--	--	--	--	--	--	--	--	--	--	--	--	0
Nov	--	--	--	--	--	--	--	--	--	--	--	--	--	0
Dec	--	--	--	--	--	--	--	--	--	--	--	--	--	0
Annual	*	*	*	*	*	*	*	*	*	*	1.31	5.88	1.71	170
Max.	*	*	*	*	*	*	*	*	*	*	20.4	7.22	9.19	
Min.	*	*	*	*	*	*	*	*	*	*	0.0603	4.69	0.415	

Wet deposition amount

2012	SO_4^{2-}	nss-SO_4^{2-}	NO_3^-	Cl^-	NH_4^+	Na^+	K^+	Ca^{2+}	nss-Ca^{2+}	Mg^{2+}	H^+
	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}
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	0.00	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	*	*	*	*	*	*	*	*	*	*	0.0142
July	*	*	*	*	*	*	*	*	*	*	0.0363
Aug	*	*	*	*	*	*	*	*	*	*	0.136
Sept	*	*	*	*	*	*	*	*	*	*	0.0377
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	*	*	*	*	*	*	*	*	*	*	0.224

Data completeness

2012	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
May	--	--	--	--	--	--	--	--	--	--	--	--	--	100
June	0	0	0	0	0	0	0	0	0	0	100	100	100	100
July	0	0	0	0	0	0	0	0	0	0	100	100	100	100
Aug	0	0	0	0	0	0	0	0	0	0	100	100	100	100
Sept	0	0	0	0	0	0	0	0	0	0	100	100	100	100
Oct	--	--	--	--	--	--	--	--	--	--	--	--	--	100
Nov	--	--	--	--	--	--	--	--	--	--	--	--	--	100
Dec	--	--	--	--	--	--	--	--	--	--	--	--	--	100
Annual	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**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%)

Table 3.37 Monthly results **Site: Terelj** **Country: Mongolia**

Precipitation amount-weighted average concentration/ Precipitation amount

2012	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^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}		mS m^{-1}	mm $month^{-1}$ or mm $year^{-1}$
Jan	--	--	--	--	--	--	--	--	--	--	--	--	--	0
Feb	--	--	--	--	--	--	--	--	--	--	--	--	--	0
Mar	--	--	--	--	--	--	--	--	--	--	--	--	--	0
Apr	--	--	--	--	--	--	--	--	--	--	--	--	--	0
May	*	*	*	*	*	*	*	*	*	*	3.74	5.43	4.85	6.18
June	*	*	*	*	*	*	*	*	*	*	1.76	5.75	0.744	20.9
July	*	*	*	*	*	*	*	*	*	*	1.31	5.88	1.25	56.9
Aug	*	*	*	*	*	*	*	*	*	*	2.79	5.55	1.15	25.1
Sept	*	*	*	*	*	*	*	*	*	*	0.904	6.04	1.24	7.88
Oct	--	--	--	--	--	--	--	--	--	--	--	--	--	0
Nov	--	--	--	--	--	--	--	--	--	--	--	--	--	0
Dec	--	--	--	--	--	--	--	--	--	--	--	--	--	0
Annual	*	*	*	*	*	*	*	*	*	*	1.81	5.74	1.33	117
Max.	*	*	*	*	*	*	*	*	*	*	26.9	6.68	5.95	
Min.	*	*	*	*	*	*	*	*	*	*	0.209	4.57	0.271	

Wet deposition amount

2012	SO_4^{2-}	nss-SO_4^{2-}	NO_3^-	Cl^-	NH_4^+	Na^+	K^+	Ca^{2+}	nss-Ca^{2+}	Mg^{2+}	H^+
	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}
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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
May	*	*	*	*	*	*	*	*	*	*	0.0231
June	*	*	*	*	*	*	*	*	*	*	0.0367
July	*	*	*	*	*	*	*	*	*	*	0.0745
Aug	*	*	*	*	*	*	*	*	*	*	0.0700
Sept	*	*	*	*	*	*	*	*	*	*	<0.01
Oct	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Nov	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Dec	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	*	*	*	*	*	*	*	*	*	*	0.211

Data completeness

2012	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
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	0	0	0	0	0	0	0	0	0	0	100	100	100	100
Aug	0	0	0	0	0	0	0	0	0	0	100	100	100	100
Sept	0	0	0	0	0	0	0	0	0	0	100	100	100	100
Oct	--	--	--	--	--	--	--	--	--	--	--	--	--	100
Nov	--	--	--	--	--	--	--	--	--	--	--	--	--	100
Dec	--	--	--	--	--	--	--	--	--	--	--	--	--	100
Annual	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**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%)

Table 3.38 Monthly results **Site: Yangon** **Country: Myanmar**

Precipitation amount-weighted average concentration/ Precipitation amount

2012	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^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}		mS m^{-1}	mm $month^{-1}$ or mm $year^{-1}$
Jan	--	--	--	--	--	--	--	--	--	--	--	--	--	0
Feb	--	--	--	--	--	--	--	--	--	--	--	--	--	0
Mar	--	--	--	--	--	--	--	--	--	--	--	--	--	0
Apr	39.5	36.0	73.7	57.0	76.3	57.4	20.3	49.9	48.7	10.00	0.926	6.03	3.26	12.5
May	15.3	13.7	19.7	39.5	45.8	26.6	20.8	21.9	21.3	5.13	0.165	6.78	1.68	193
June	10.7	8.18	11.0	45.2	18.4	41.1	2.61	18.1	17.2	5.99	0.248	6.61	1.34	411
July	6.55	5.11	6.03	27.5	12.6	23.9	2.95	5.33	4.81	4.98	0.424	6.37	1.87	842
Aug	4.98	4.07	5.31	23.7	13.2	15.1	12.6	1.42	1.09	10.5	0.288	6.54	0.801	608
Sept	3.71	3.23	3.96	6.53	13.4	8.01	3.32	0.524	0.387	6.84	0.329	6.48	0.514	343
Oct	11.0	10.2	13.2	10.2	35.7	13.4	4.64	14.7	14.4	2.09	0.239	6.62	1.18	74.8
Nov	8.79	8.18	17.3	9.87	26.5	10.2	5.28	12.9	12.7	2.18	0.262	6.58	1.16	85.8
Dec	--	--	--	--	--	--	--	--	--	--	--	--	--	0
Annual	7.48	6.15	8.31	26.6	17.7	22.1	6.78	7.79	7.32	6.56	0.323	6.49	1.30	2570
Max.	43.7	38.0	76.4	95.1	117	95.7	30.1	57.9	57.2	21.0	1.48	7.10	4.50	
Min.	1.88	1.54	2.19	2.45	7.76	5.79	0.997	<0.2	<0.2	<0.4	0.0794	5.83	0.368	

Wet deposition amount

2012	SO_4^{2-}	nss-SO_4^{2-}	NO_3^-	Cl^-	NH_4^+	Na^+	K^+	Ca^{2+}	nss-Ca^{2+}	Mg^{2+}	H^+
	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}
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	0.493	0.450	0.921	0.711	0.953	0.717	0.254	0.623	0.608	0.125	0.0116
May	2.94	2.63	3.79	7.60	8.83	5.11	4.01	4.22	4.10	0.988	0.0317
June	4.39	3.37	4.52	18.6	7.59	16.9	1.07	7.45	7.09	2.47	0.102
July	5.52	4.30	5.07	23.1	10.6	20.2	2.48	4.49	4.05	4.19	0.357
Aug	3.03	2.47	3.23	14.4	8.05	9.20	7.68	0.862	0.663	6.40	0.175
Sept	1.27	1.11	1.36	2.24	4.61	2.75	1.14	0.179	0.133	2.34	0.113
Oct	0.827	0.766	0.989	0.764	2.68	1.000	0.347	1.10	1.08	0.156	0.0179
Nov	0.754	0.702	1.48	0.847	2.28	0.872	0.453	1.11	1.09	0.187	0.0224
Dec	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	19.2	15.8	21.4	68.3	45.6	56.7	17.4	20.0	18.8	16.9	0.831

Data completeness

2012	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	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 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%)

Table 3.39 Monthly results **Site: Mt. Sto. Tomas** **Country: Philippines**

Precipitation amount-weighted average concentration/ Precipitation amount

2012	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^{-1}	µmol L^{-1}	µmol L^{-1}	µmol L^{-1}	µmol L^{-1}	µmol L^{-1}	µmol L^{-1}	µmol L^{-1}	µmol L^{-1}	µmol L^{-1}	µmol L^{-1}		mS m^{-1}	mm $month^{-1}$ or mm $year^{-1}$
Jan	4.00	2.81	<1	10.8	<1	19.8	0.312	15.4	15.0	2.15	0.182	6.74	0.760	36.4
Feb	2.86	1.61	2.95	2.30	<1	20.8	0.896	20.2	19.8	2.92	0.123	6.91	0.591	277
Mar	4.85	3.89	6.28	3.22	5.64	15.9	1.04	16.3	16.0	2.59	0.274	6.56	0.490	198
Apr	5.12	4.64	10.8	2.63	23.3	7.94	1.38	16.7	16.6	3.97	0.165	6.78	0.702	97.8
May	10.2	9.62	14.8	6.24	12.9	9.49	3.08	16.0	15.8	3.24	1.79	5.75	0.740	257
June	10.0	9.35	3.84	7.23	2.78	10.9	1.07	13.7	13.4	2.88	0.836	6.08	0.459	994
July	7.18	6.72	4.90	4.84	1.93	7.53	0.473	21.1	21.0	3.46	0.907	6.04	0.550	871
Aug	6.84	6.23	6.90	8.12	2.26	10.1	0.743	10.8	10.6	2.80	1.49	5.83	0.469	2625
Sept	5.84	5.48	5.66	4.08	4.45	5.96	0.428	9.76	9.64	2.02	1.15	5.94	0.388	300
Oct	4.72	4.26	3.71	5.11	3.41	7.55	0.644	8.85	8.69	1.54	0.831	6.08	0.311	45.6
Nov	*	*	*	*	*	*	*	*	*	*	*	*	*	12.0
Dec	9.03	8.68	<1	6.61	18.4	5.71	0.946	7.94	7.82	1.31	0.741	6.13	0.572	15.8
Annual	7.26	6.64	6.10	6.50	3.42	10.3	0.885	14.0	13.8	2.90	1.12	5.95	0.500	5730
Max.	11.2	10.4	16.3	13.2	32.3	24.1	3.14	32.8	32.6	5.02	5.01	6.99	0.798	
Min.	2.33	<1	<1	<1	<1	3.95	<0.3	5.34	5.23	0.790	0.102	5.30	0.206	

Wet deposition amount

2012	SO_4^{2-}	nss-SO_4^{2-}	NO_3^-	Cl^-	NH_4^+	Na^+	K^+	Ca^{2+}	nss-Ca^{2+}	Mg^{2+}	H^+
	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}
Jan	0.146	0.102	0.0343	0.395	<0.01	0.722	0.0114	0.560	0.544	0.0782	<0.01
Feb	0.793	0.445	0.818	0.638	0.211	5.78	0.249	5.62	5.49	0.809	0.0342
Mar	0.961	0.771	1.25	0.638	1.12	3.15	0.205	3.24	3.17	0.513	0.0542
Apr	0.501	0.454	1.05	0.257	2.28	0.776	0.135	1.64	1.62	0.388	0.0162
May	2.62	2.48	3.81	1.61	3.31	2.44	0.793	4.13	4.07	0.832	0.459
June	9.95	9.29	3.82	7.19	2.76	10.8	1.07	13.6	13.4	2.87	0.831
July	6.25	5.85	4.27	4.21	1.68	6.55	0.412	18.4	18.3	3.01	0.790
Aug	18.0	16.4	18.1	21.3	5.94	26.5	1.95	28.4	27.9	7.34	3.92
Sept	1.75	1.65	1.70	1.23	1.34	1.79	0.129	2.93	2.89	0.605	0.345
Oct	0.215	0.194	0.169	0.233	0.156	0.344	0.0294	0.404	0.396	0.0703	0.0379
Nov	*	*	*	*	*	*	*	*	*	*	*
Dec	0.143	0.137	0.0101	0.104	0.291	0.0902	0.0150	0.125	0.123	0.0207	0.0117
Annual	41.6	38.1	34.9	37.2	19.6	58.9	5.07	80.4	79.1	16.6	6.41

Data completeness

2012	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	47.8	47.8	47.8	47.8	47.8	47.8	47.8	47.8	47.8	47.8	47.8	47.8	47.8	100
Feb	97.6	97.6	97.6	97.6	97.6	97.6	97.6	97.6	97.6	97.6	97.6	97.6	97.6	100
Mar	97.6	97.6	97.6	97.6	97.6	97.6	97.6	97.6	97.6	97.6	97.6	97.6	97.6	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	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
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	86.1	86.1	86.1	86.1	86.1	86.1	86.1	86.1	86.1	86.1	86.1	86.1	86.1	100
Annual	**92.7**	**92.7**	**92.7**	**92.7**	**92.7**	**92.7**	**92.7**	**92.7**	**92.7**	**92.7**	**92.7**	**92.7**	**92.7**	**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%)

Table 3.40 Monthly results **Site: Kanghwa** **Country: Republic of Korea**

Precipitation amount-weighted average concentration/ Precipitation amount

2012	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^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}		mS m^{-1}	mm $month^{-1}$ or mm $year^{-1}$
Jan	--	--	--	--	--	--	--	--	--	--	--	--	--	0
Feb	--	--	--	--	--	--	--	--	--	--	--	--	--	0
Mar	82.6	77.5	106	136	93.4	85.7	42.9	56.7	54.9	15.9	1.45	5.84	5.71	7.50
Apr	42.3	40.1	66.3	51.3	73.3	36.8	6.65	21.7	20.9	6.68	19.5	4.71	3.34	97.0
May	98.3	96.6	135	45.4	193	27.8	6.24	35.4	34.8	10.3	60.3	4.22	7.06	2.00
June	18.8	16.1	14.9	59.4	40.4	45.0	1.07	1.74	0.769	2.00	3.98	5.40	1.64	64.5
July	21.9	21.3	21.7	24.3	54.9	11.0	4.00	1.63	1.39	1.34	14.5	4.84	1.78	234
Aug	8.88	6.03	18.0	88.5	15.0	69.7	8.96	5.85	4.34	7.56	13.5	4.87	2.26	152
Sept	14.0	12.7	30.6	28.3	28.0	20.7	3.16	3.60	3.15	2.42	36.2	4.44	2.05	19.5
Oct	33.7	30.6	32.6	62.5	46.6	52.3	3.30	4.47	3.34	3.80	67.6	4.17	3.15	70.5
Nov	47.4	38.8	73.5	172	60.2	144	10.3	16.6	13.5	14.6	63.1	4.20	5.86	72.5
Dec	56.5	50.1	94.9	139	96.6	106	13.6	30.6	28.3	12.6	17.0	4.77	4.62	29.0
Annual	27.2	24.4	36.4	67.5	49.4	50.7	6.39	8.64	7.54	5.50	24.4	4.61	2.76	748
Max.	116	111	252	373	208	289	42.9	83.6	81.8	32.2	158	6.75	9.78	
Min.	7.45	<1	10.5	12.1	10.5	7.12	1.07	0.369	<0.2	0.872	0.178	3.80	1.02	

Wet deposition amount

2012	SO_4^{2-}	nss-SO_4^{2-}	NO_3^-	Cl^-	NH_4^+	Na^+	K^+	Ca^{2+}	nss-Ca^{2+}	Mg^{2+}	H^+
	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}
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	0.620	0.581	0.794	1.02	0.701	0.643	0.322	0.425	0.412	0.119	0.0108
Apr	4.10	3.89	6.43	4.97	7.11	3.57	0.645	2.11	2.03	0.648	1.89
May	0.197	0.193	0.271	0.0907	0.386	0.0557	0.0125	0.0709	0.0697	0.0206	0.121
June	1.21	1.04	0.961	3.83	2.61	2.90	0.0691	0.112	0.0496	0.129	0.257
July	5.12	4.97	5.06	5.68	12.8	2.58	0.933	0.380	0.325	0.312	3.39
Aug	1.35	0.916	2.74	13.5	2.29	10.6	1.36	0.889	0.660	1.15	2.06
Sept	0.272	0.248	0.596	0.552	0.545	0.404	0.0615	0.0701	0.0614	0.0472	0.706
Oct	2.38	2.15	2.29	4.40	3.28	3.69	0.232	0.315	0.236	0.268	4.77
Nov	3.44	2.81	5.33	12.5	4.37	10.4	0.747	1.20	0.978	1.06	4.57
Dec	1.64	1.45	2.75	4.02	2.80	3.08	0.393	0.886	0.820	0.364	0.493
Annual	20.3	18.3	27.2	50.5	36.9	37.9	4.78	6.46	5.64	4.11	18.3

Data completeness

2012	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	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 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%)

Table 3.41 Monthly results **Site: Cheju** **Country: Republic of Korea**

Precipitation amount-weighted average concentration/ Precipitation amount

2012	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^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}		mS m^{-1}	mm $month^{-1}$ or mm $year^{-1}$
Jan	355	195	266	3179	140	2655	184	99.3	42.0	299	75.9	4.12	51.9	2.50
Feb	49.4	34.0	40.8	281	58.2	255	14.0	18.8	13.3	21.9	10.8	4.97	5.77	68.2
Mar	31.4	24.1	34.2	119	40.0	121	5.48	7.37	4.84	7.13	7.59	5.12	3.10	116
Apr	19.0	10.5	14.9	163	29.3	141	13.4	5.46	2.50	9.96	2.72	5.57	2.87	214
May	8.98	7.29	13.9	27.7	24.5	28.1	13.0	0.610	<0.2	0.831	1.51	5.82	0.940	50.0
June	9.35	7.46	20.5	37.6	28.8	31.4	14.5	1.46	0.779	0.496	0.930	6.03	1.07	24.0
July	18.4	15.4	26.0	48.4	48.4	50.0	9.41	2.43	1.52	2.23	5.88	5.23	1.99	193
Aug	21.7	2.66	8.06	354	14.7	319	8.47	8.45	1.58	27.5	0.821	6.09	5.31	280
Sept	176	22.9	2.95	3369	67.2	2548	80.7	57.8	2.77	264	0.575	6.24	45.5	92.5
Oct	67.3	47.1	56.2	323	52.9	335	10.7	15.5	8.27	30.3	16.3	4.79	7.02	10.5
Nov	18.6	9.18	13.6	163	9.56	157	4.73	4.10	0.844	9.12	10.4	4.98	3.00	87.5
Dec	48.8	22.2	32.4	476	30.3	441	11.2	17.5	7.97	41.0	15.4	4.81	7.65	61.9
Annual	36.7	14.1	19.3	455	33.4	375	15.7	11.2	3.15	34.5	4.95	5.31	7.05	1199
Max.	393	195	266	5330	169	4635	184	155	64.2	511	75.9	7.08	74.2	
Min.	1.93	<1	2.95	10.7	4.66	16.1	0.982	0.399	<0.2	<0.4	0.0832	4.12	0.377	

Wet deposition amount

2012	SO_4^{2-}	nss-SO_4^{2-}	NO_3^-	Cl^-	NH_4^+	Na^+	K^+	Ca^{2+}	nss-Ca^{2+}	Mg^{2+}	H^+
	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}
Jan	0.887	0.487	0.664	7.95	0.350	6.64	0.460	0.248	0.105	0.748	0.190
Feb	3.37	2.32	2.78	19.1	3.97	17.4	0.951	1.28	0.909	1.50	0.735
Mar	3.65	2.80	3.97	13.8	4.65	14.1	0.635	0.855	0.562	0.827	0.881
Apr	4.05	2.23	3.19	34.9	6.27	30.2	2.87	1.17	0.534	2.13	0.581
May	0.449	0.364	0.694	1.38	1.22	1.40	0.650	0.0305	<0.01	0.0415	0.0756
June	0.224	0.179	0.491	0.902	0.692	0.754	0.348	0.0350	0.0187	0.0119	0.0223
July	3.54	2.96	5.00	9.32	9.32	9.62	1.81	0.469	0.292	0.429	1.13
Aug	6.08	0.744	2.25	98.9	4.10	89.2	2.37	2.36	0.441	7.67	0.230
Sept	16.3	2.12	0.273	312	6.21	236	7.46	5.35	0.256	24.4	0.0532
Oct	0.707	0.495	0.590	3.39	0.556	3.52	0.112	0.163	0.0869	0.318	0.171
Nov	1.63	0.803	1.19	14.2	0.836	13.7	0.414	0.358	0.0738	0.798	0.911
Dec	3.02	1.37	2.00	29.4	1.88	27.3	0.691	1.08	0.493	2.54	0.951
Annual	43.9	16.9	23.1	545	40.1	449	18.8	13.4	3.78	41.4	5.93

Data completeness

2012	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 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%)

Table 3.42 Monthly results **Site: Imsil** **Country: Republic of Korea**

Precipitation amount-weighted average concentration/ Precipitation amount

2012	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^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}		mS m^{-1}	mm $month^{-1}$ or mm $year^{-1}$
Jan	53.8	43.3	95.1	221	111	175	60.5	11.3	7.86	15.0	21.9	4.66	6.39	7.50
Feb	23.2	21.0	32.0	43.5	48.7	35.8	26.6	3.57	2.79	0.790	3.63	5.44	1.48	3.00
Mar	61.7	58.1	75.1	47.6	79.2	60.9	6.87	20.2	18.9	7.10	40.5	4.39	4.33	78.2
Apr	24.4	21.1	26.9	45.2	32.9	55.5	9.08	6.19	4.99	2.39	6.17	5.21	1.93	78.9
May	63.1	58.2	96.5	46.4	113	83.2	16.9	25.0	23.4	5.35	8.80	5.06	4.08	34.0
June	17.9	15.7	29.2	55.1	47.1	37.0	32.0	4.84	4.04	1.56	0.921	6.04	1.87	75.0
July	13.3	12.0	13.7	36.7	32.6	21.7	20.9	0.811	0.347	1.87	5.78	5.24	1.31	335
Aug	6.47	5.35	12.2	25.6	18.5	18.6	11.7	0.823	0.466	1.68	1.51	5.82	0.876	358
Sept	16.5	11.5	24.9	270	58.6	82.2	197	1.16	0.429	0.640	0.659	6.18	5.75	252
Oct	29.1	25.7	29.6	50.5	33.5	55.8	3.94	3.20	1.99	5.34	32.9	4.48	2.65	56.1
Nov	34.8	26.0	44.7	140	38.4	146	4.95	11.4	8.25	11.3	30.6	4.51	3.75	52.5
Dec	29.2	19.9	44.7	138	28.6	155	6.02	14.3	11.0	11.8	9.35	5.03	3.36	71.2
Annual	19.4	16.3	26.2	88.8	39.5	51.8	47.5	4.31	3.40	3.05	7.82	5.11	2.58	1400
Max.	196	186	340	939	338	849	662	81.3	72.2	88.4	204	6.76	19.3	
Min.	1.81	<1	3.67	6.70	1.40	4.14	0.501	<0.2	<0.2	<0.4	0.174	3.69	0.365	

Wet deposition amount

2012	SO_4^{2-}	nss-SO_4^{2-}	NO_3^-	Cl^-	NH_4^+	Na^+	K^+	Ca^{2+}	nss-Ca^{2+}	Mg^{2+}	H^+
	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}
Jan	0.404	0.325	0.713	1.66	0.834	1.31	0.454	0.0848	0.0589	0.112	0.165
Feb	0.0695	0.0630	0.0960	0.130	0.146	0.107	0.0797	0.0107	<0.01	<0.01	0.0109
Mar	4.83	4.54	5.87	3.72	6.19	4.76	0.537	1.58	1.48	0.555	3.16
Apr	1.93	1.66	2.12	3.56	2.59	4.38	0.716	0.488	0.394	0.189	0.487
May	2.15	1.98	3.28	1.58	3.83	2.83	0.574	0.851	0.796	0.182	0.299
June	1.34	1.18	2.19	4.13	3.53	2.78	2.40	0.363	0.303	0.117	0.0690
July	4.44	4.00	4.59	12.3	10.9	7.27	6.98	0.271	0.116	0.626	1.93
Aug	2.31	1.91	4.36	9.14	6.61	6.64	4.17	0.294	0.167	0.600	0.538
Sept	4.15	2.91	6.28	68.1	14.8	20.7	49.6	0.292	0.108	0.161	0.166
Oct	1.63	1.44	1.66	2.83	1.88	3.13	0.221	0.179	0.112	0.299	1.85
Nov	1.82	1.36	2.35	7.34	2.02	7.67	0.260	0.598	0.433	0.592	1.60
Dec	2.08	1.42	3.18	9.84	2.04	11.0	0.429	1.02	0.781	0.837	0.665
Annual	27.2	22.8	36.7	124	55.4	72.6	66.5	6.03	4.76	4.27	10.9

Data completeness

2012	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 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%)

Table 3.43 Monthly results **Site: Mondy** **Country: Russia**

Precipitation amount-weighted average concentration/ Precipitation amount

2012	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^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}		mS m^{-1}	mm $month^{-1}$ or mm $year^{-1}$
Jan	--	--	--	--	--	--	--	--	--	--	--	--	--	0
Feb	--	--	--	--	--	--	--	--	--	--	--	--	--	0
Mar	--	--	--	--	--	--	--	--	--	--	--	--	--	0
Apr	--	--	--	--	--	--	--	--	--	--	--	--	--	0
May	12.0	11.6	13.4	5.01	48.4	6.55	6.90	20.2	20.0	6.45	1.58	5.80	1.41	22.3
June	4.13	4.00	4.64	1.41	9.11	2.28	3.01	7.23	7.18	1.89	3.25	5.49	0.476	29.9
July	--	--	--	--	--	--	--	--	--	--	--	--	--	0
Aug	5.73	5.67	7.90	1.40	14.4	<1	1.30	2.00	1.98	0.800	6.17	5.21	0.500	10.1
Sept	10.5	9.89	13.1	23.0	27.8	10.4	37.0	19.0	18.8	9.90	0.813	6.09	1.70	18.1
Oct	--	--	--	--	--	--	--	--	--	--	--	--	--	0
Nov	--	--	--	--	--	--	--	--	--	--	--	--	--	0
Dec	4.58	4.48	3.50	1.70	<1	1.74	1.00	10.0	9.96	1.60	1.62	5.79	0.380	24.8
Annual	7.16	6.90	7.99	5.95	19.0	4.32	9.05	12.1	12.1	4.06	2.37	5.62	0.864	105
Max.	17.8	17.4	19.0	23.0	75.0	10.4	37.0	25.0	24.8	9.90	6.17	6.09	1.93	
Min.	3.75	3.64	1.94	1.40	<1	<1	1.00	2.00	1.98	0.800	0.813	5.21	0.380	

Wet deposition amount

2012	SO_4^{2-}	nss-SO_4^{2-}	NO_3^-	Cl^-	NH_4^+	Na^+	K^+	Ca^{2+}	nss-Ca^{2+}	Mg^{2+}	H^+
	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}
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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
May	0.268	0.259	0.299	0.112	1.08	0.146	0.154	0.450	0.446	0.144	0.0353
June	0.124	0.119	0.139	0.0420	0.273	0.0681	0.0901	0.216	0.215	0.0566	0.0971
July	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Aug	0.0578	0.0573	0.0798	0.0141	0.145	<0.01	0.0131	0.0202	0.0200	<0.01	0.0623
Sept	0.190	0.179	0.237	0.416	0.503	0.189	0.670	0.344	0.340	0.179	0.0147
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	0.114	0.111	0.0868	0.0422	<0.01	0.0431	0.0248	0.248	0.247	0.0397	0.0402
Annual	0.753	0.726	0.841	0.626	2.00	0.455	0.952	1.28	1.27	0.427	0.250

Data completeness

2012	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
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
Aug	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Sept	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Oct	--	--	--	--	--	--	--	--	--	--	--	--	--	100
Nov	--	--	--	--	--	--	--	--	--	--	--	--	--	100
Dec	100	100	100	100	100	100	100	100	100	100	100	100	100	100
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 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%)

Table 3.44 Monthly results **Site: Listvyanka** **Country: Russia**

Precipitation amount-weighted average concentration/ Precipitation amount

2012	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^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}		mS m^{-1}	mm $month^{-1}$ or mm $year^{-1}$
Jan	22.4	22.1	54.4	3.37	24.0	4.86	2.42	23.1	23.0	4.29	8.54	5.07	1.60	13.2
Feb	18.4	18.0	52.6	4.07	7.34	7.01	1.53	26.6	26.4	4.85	5.60	5.25	1.45	17.8
Mar	71.9	70.9	128	5.38	41.0	16.9	5.91	74.3	73.9	13.2	16.5	4.78	4.34	4.30
Apr	27.5	27.2	14.5	4.07	25.1	5.84	2.02	8.56	8.43	2.56	21.2	4.67	1.49	35.3
May	41.2	40.9	28.0	5.06	114	5.71	4.38	21.1	21.0	5.06	13.2	4.88	2.74	38.8
June	23.0	22.7	16.2	2.92	22.8	4.47	1.26	8.20	8.10	1.77	27.2	4.57	1.81	67.9
July	12.5	12.4	6.49	2.01	9.82	2.09	0.953	3.02	2.97	0.680	19.4	4.71	1.06	88.8
Aug	10.2	10.1	8.37	2.52	10.7	1.79	1.33	5.52	5.48	1.80	8.99	5.05	0.757	45.2
Sept	14.4	14.3	8.39	1.06	14.5	1.27	1.31	6.86	6.84	0.851	12.6	4.90	0.954	10.9
Oct	13.6	13.0	12.5	8.08	10.0	10.3	6.83	16.6	16.4	4.05	2.98	5.53	1.01	3.27
Nov	14.4	14.0	20.1	4.62	5.82	6.83	5.29	15.9	15.7	3.13	4.98	5.30	0.940	10.7
Dec	45.8	45.3	59.0	9.50	10.8	8.56	5.10	60.0	59.9	8.63	2.70	5.57	2.54	7.37
Annual	21.4	21.1	19.3	3.28	26.7	4.20	2.00	11.7	11.7	2.53	16.7	4.78	1.51	343
Max.	172	169	306	31.2	139	38.3	14.6	162	161	29.2	56.2	6.44	10.1	
Min.	5.62	5.54	1.77	<1	1.40	<1	<0.3	0.749	0.720	<0.4	0.363	4.25	0.390	

Wet deposition amount

2012	SO_4^{2-}	nss-SO_4^{2-}	NO_3^-	Cl^-	NH_4^+	Na^+	K^+	Ca^{2+}	nss-Ca^{2+}	Mg^{2+}	H^+
	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}
Jan	0.296	0.292	0.720	0.0445	0.318	0.0643	0.0320	0.305	0.304	0.0567	0.113
Feb	0.328	0.321	0.937	0.0724	0.131	0.125	0.0272	0.473	0.470	0.0863	0.0997
Mar	0.309	0.305	0.549	0.0231	0.176	0.0727	0.0254	0.319	0.318	0.0567	0.0711
Apr	0.971	0.958	0.513	0.143	0.884	0.206	0.0712	0.302	0.297	0.0901	0.747
May	1.60	1.59	1.08	0.196	4.43	0.221	0.170	0.820	0.815	0.196	0.511
June	1.56	1.54	1.10	0.199	1.55	0.304	0.0853	0.557	0.550	0.120	1.84
July	1.11	1.10	0.577	0.178	0.872	0.186	0.0847	0.268	0.264	0.0603	1.72
Aug	0.463	0.458	0.379	0.114	0.482	0.0808	0.0601	0.250	0.248	0.0814	0.406
Sept	0.156	0.156	0.0910	0.0115	0.158	0.0138	0.0142	0.0745	0.0742	<0.01	0.137
Oct	0.0444	0.0424	0.0410	0.0264	0.0328	0.0335	0.0223	0.0544	0.0537	0.0132	<0.01
Nov	0.154	0.149	0.215	0.0493	0.0621	0.0729	0.0564	0.170	0.168	0.0334	0.0531
Dec	0.338	0.334	0.435	0.0700	0.0796	0.0631	0.0376	0.443	0.441	0.0636	0.0199
Annual	7.33	7.25	6.64	1.13	9.17	1.44	0.686	4.03	4.00	0.867	5.73

Data completeness

2012	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 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%)

Table 3.45 Monthly results **Site: Irkutsk** **Country: Russia**

Precipitation amount-weighted average concentration/ Precipitation amount

2012	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^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}		mS m^{-1}	mm $month^{-1}$ or mm $year^{-1}$
Jan	34.9	34.1	34.3	15.8	23.8	12.6	2.34	44.4	44.1	8.55	1.55	5.81	2.04	20.9
Feb	43.3	42.2	31.9	21.2	24.0	18.4	4.21	53.7	53.3	8.66	0.626	6.20	2.37	16.0
Mar	98.9	93.2	50.9	88.6	35.7	95.0	11.9	108	106	24.2	0.712	6.15	5.50	5.02
Apr	44.6	43.7	23.6	34.1	40.8	15.5	5.24	43.8	43.5	6.96	4.16	5.38	2.36	60.9
May	44.3	44.0	13.1	8.88	46.1	5.03	4.21	24.5	24.4	7.20	16.1	4.79	2.26	50.3
June	51.3	50.9	26.4	10.4	50.0	6.69	5.00	37.9	37.7	10.8	17.9	4.75	2.98	37.7
July	23.9	23.8	8.15	2.27	24.9	1.93	1.45	11.7	11.6	2.26	21.1	4.68	1.62	131
Aug	31.3	31.1	17.0	6.83	36.0	4.32	5.01	26.7	26.6	5.95	8.36	5.08	1.78	44.6
Sept	50.3	49.9	16.6	6.88	35.0	5.87	19.9	38.6	38.5	8.39	6.17	5.21	2.20	26.9
Oct	37.6	36.1	12.7	33.4	24.0	26.0	7.64	47.3	46.7	8.13	0.788	6.10	2.35	15.3
Nov	40.3	38.2	24.4	51.8	36.8	35.3	8.70	43.1	42.3	9.33	0.607	6.22	2.64	16.9
Dec	47.7	46.5	36.4	28.9	31.9	19.5	5.98	57.7	57.2	9.96	1.94	5.71	2.74	17.5
Annual	37.9	37.3	18.3	15.1	34.1	9.96	4.99	31.3	31.1	6.49	11.6	4.93	2.16	443
Max.	691	643	287	643	209	804	197	574	563	140	40.7	7.78	34.7	
Min.	3.85	3.59	1.94	<1	<1	<1	<0.3	1.50	1.49	0.411	0.0166	4.39	0.420	

Wet deposition amount

2012	SO_4^{2-}	nss-SO_4^{2-}	NO_3^-	Cl^-	NH_4^+	Na^+	K^+	Ca^{2+}	nss-Ca^{2+}	Mg^{2+}	H^+
	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}
Jan	0.727	0.711	0.715	0.331	0.497	0.262	0.0487	0.926	0.921	0.178	0.0323
Feb	0.694	0.676	0.511	0.340	0.385	0.295	0.0674	0.860	0.854	0.139	0.0100
Mar	0.496	0.468	0.256	0.445	0.179	0.477	0.0598	0.544	0.534	0.122	<0.01
Apr	2.72	2.66	1.44	2.07	2.48	0.946	0.319	2.67	2.65	0.424	0.253
May	2.23	2.21	0.659	0.447	2.32	0.253	0.212	1.23	1.23	0.362	0.809
June	1.94	1.92	0.994	0.392	1.89	0.252	0.189	1.43	1.42	0.409	0.674
July	3.13	3.12	1.07	0.297	3.26	0.253	0.191	1.53	1.52	0.297	2.76
Aug	1.40	1.39	0.756	0.304	1.60	0.193	0.224	1.19	1.19	0.265	0.373
Sept	1.35	1.34	0.446	0.185	0.943	0.158	0.535	1.04	1.04	0.226	0.166
Oct	0.574	0.550	0.194	0.509	0.366	0.397	0.117	0.722	0.713	0.124	0.0120
Nov	0.681	0.645	0.412	0.875	0.622	0.597	0.147	0.728	0.715	0.158	0.0103
Dec	0.836	0.816	0.637	0.506	0.558	0.341	0.105	1.01	1.00	0.175	0.0340
Annual	16.8	16.5	8.09	6.69	15.1	4.41	2.21	13.9	13.8	2.88	5.15

Data completeness

2012	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	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
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	**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 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%)

Table 3.46 Monthly results **Site: Primorskaya** **Country: Russia**

Precipitation amount-weighted average concentration/ Precipitation amount

2012	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^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}		mS m^{-1}	mm $month^{-1}$ or mm $year^{-1}$
Jan	*	*	*	*	*	*	*	*	*	*	11.7	4.93	16.8	0.200
Feb	67.8	63.4	200	70.2	90.1	72.6	21.3	57.3	55.7	34.5	3.75	5.43	5.14	9.60
Mar	64.5	55.8	126	135	84.0	144	18.4	28.4	25.3	27.6	11.9	4.92	5.69	19.9
Apr	35.0	33.8	38.4	50.4	53.9	20.5	6.96	32.8	32.4	9.22	5.86	5.23	2.42	88.1
May	46.6	45.2	69.2	50.6	123	22.7	13.5	37.3	36.8	11.1	2.13	5.67	3.47	37.5
June	14.7	14.3	24.7	22.5	32.0	6.05	5.77	6.31	6.18	1.49	9.99	5.00	1.46	47.5
July	11.3	10.5	15.9	21.7	23.2	12.4	4.32	5.50	5.23	1.01	9.74	5.01	1.08	76.3
Aug	9.13	8.15	7.49	25.0	13.1	16.2	2.30	5.36	5.02	1.61	6.42	5.19	0.877	194
Sept	11.5	10.8	11.1	10.2	9.95	12.5	1.24	2.45	2.25	0.909	11.7	4.93	0.930	187
Oct	25.8	24.1	13.3	26.2	18.9	27.9	5.03	7.47	6.87	3.73	12.1	4.92	1.51	157
Nov	19.2	18.2	24.6	22.7	18.2	17.1	4.95	19.2	18.9	5.25	3.74	5.43	1.34	71.5
Dec	44.7	39.8	44.6	78.1	36.1	80.0	17.4	31.7	29.9	11.7	5.44	5.26	3.08	34.4
Annual	20.8	19.4	23.4	29.9	27.0	23.1	5.09	12.2	11.7	4.43	8.55	5.07	1.56	922
Max.	197	188	406	294	256	326	63.9	291	288	109	112	6.79	24.2	
Min.	2.50	2.29	<1	5.64	1.66	3.26	<0.3	<0.2	<0.2	<0.4	0.162	3.95	0.260	

Wet deposition amount

2012	SO_4^{2-}	nss-SO_4^{2-}	NO_3^-	Cl^-	NH_4^+	Na^+	K^+	Ca^{2+}	nss-Ca^{2+}	Mg^{2+}	H^+
	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}
Jan	*	*	*	*	*	*	*	*	*	*	<0.01
Feb	0.651	0.609	1.92	0.674	0.865	0.697	0.204	0.550	0.535	0.331	0.0360
Mar	1.28	1.11	2.52	2.68	1.67	2.88	0.366	0.565	0.503	0.550	0.237
Apr	3.09	2.98	3.39	4.44	4.75	1.81	0.613	2.89	2.85	0.812	0.516
May	1.75	1.69	2.60	1.90	4.59	0.853	0.508	1.40	1.38	0.416	0.0799
June	0.696	0.679	1.17	1.07	1.52	0.287	0.274	0.300	0.293	0.0707	0.475
July	0.862	0.805	1.21	1.65	1.77	0.944	0.330	0.419	0.399	0.0774	0.743
Aug	1.77	1.58	1.45	4.85	2.54	3.14	0.445	1.04	0.972	0.311	1.24
Sept	2.16	2.02	2.08	1.90	1.86	2.33	0.233	0.457	0.420	0.170	2.19
Oct	4.05	3.78	2.09	4.11	2.97	4.38	0.790	1.17	1.08	0.585	1.90
Nov	1.38	1.30	1.76	1.62	1.30	1.23	0.354	1.38	1.35	0.375	0.268
Dec	1.54	1.37	1.53	2.69	1.24	2.75	0.598	1.09	1.03	0.401	0.187
Annual	19.1	17.9	21.6	27.5	24.9	21.3	4.69	11.2	10.8	4.08	7.88

Data completeness

2012	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	100	100	100	100
Feb	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Mar	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	100	100	100	100
Apr	100	100	100	100	100	100	100	100	100	100	100	100	100	100
May	93.6	93.6	93.6	93.6	93.6	93.6	93.6	93.6	93.6	93.6	100	100	100	100
June	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	100	100	100	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	100	100	100	100
Sept	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5	100	100	100	100
Oct	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	100	100	100	100
Nov	98.9	98.9	98.9	98.9	98.9	98.9	98.9	98.9	98.9	98.9	100	100	100	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**	**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%)

Table 3.47 Monthly results **Site: Bangkok** **Country: Thailand**

Precipitation amount-weighted average concentration/ Precipitation amount

2012	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^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}		mS m^{-1}	mm $month^{-1}$ or mm $year^{-1}$
Jan	32.7	32.2	113	19.3	120	8.61	4.55	30.3	30.1	2.52	10.2	4.99	3.43	103
Feb	34.2	32.7	131	35.6	146	24.1	5.81	49.0	48.5	5.50	6.53	5.18	3.79	24.8
Mar	59.7	57.4	194	49.9	208	36.5	12.5	127	126	13.2	0.407	6.39	7.23	3.00
Apr	20.9	20.4	63.7	15.3	93.0	9.10	3.90	26.1	25.9	2.42	4.66	5.33	2.41	73.8
May	13.5	12.8	27.6	14.7	46.2	11.6	2.17	14.9	14.6	2.24	0.750	6.12	1.34	143
June	10.0	9.10	16.9	17.1	36.7	15.7	1.85	23.7	23.3	3.18	0.281	6.55	1.40	106
July	5.18	4.76	8.20	8.83	25.2	6.90	0.758	7.74	7.59	1.02	0.204	6.69	0.670	200
Aug	5.71	5.34	7.27	8.23	28.8	6.09	1.22	9.85	9.72	1.23	0.121	6.92	0.750	235
Sept	6.42	6.32	17.4	2.46	32.2	1.67	0.737	8.24	8.21	0.632	0.743	6.13	0.798	615
Oct	12.4	12.2	29.1	4.87	42.5	3.97	1.02	10.8	10.7	0.698	6.14	5.21	1.57	232
Nov	23.2	22.4	61.1	12.5	76.5	13.2	3.59	31.9	31.6	2.51	0.445	6.35	2.25	63.0
Dec	--	--	--	--	--	--	--	--	--	--	--	--	--	0
Annual	10.7	10.3	27.6	8.33	44.1	6.07	1.52	13.5	13.3	1.35	2.08	5.68	1.26	1799
Max.	85.2	83.5	298	59.5	348	50.0	14.1	144	143	13.2	39.8	7.56	8.15	
Min.	2.19	2.03	2.42	1.13	9.42	<1	<0.3	1.25	1.21	0.411	0.0275	4.40	0.260	

Wet deposition amount

2012	SO_4^{2-}	nss-SO_4^{2-}	NO_3^-	Cl^-	NH_4^+	Na^+	K^+	Ca^{2+}	nss-Ca^{2+}	Mg^{2+}	H^+
	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}
Jan	3.37	3.32	11.6	1.99	12.3	0.887	0.469	3.12	3.10	0.259	1.06
Feb	0.847	0.811	3.25	0.883	3.61	0.599	0.144	1.22	1.20	0.136	0.162
Mar	0.179	0.172	0.581	0.150	0.625	0.110	0.0376	0.380	0.378	0.0395	<0.01
Apr	1.54	1.50	4.70	1.13	6.86	0.672	0.288	1.93	1.91	0.178	0.344
May	1.94	1.84	3.95	2.10	6.60	1.66	0.311	2.13	2.09	0.320	0.107
June	1.07	0.968	1.80	1.82	3.91	1.68	0.197	2.52	2.48	0.339	0.0299
July	1.04	0.952	1.64	1.77	5.05	1.38	0.152	1.55	1.52	0.205	0.0408
Aug	1.34	1.26	1.71	1.94	6.77	1.43	0.286	2.32	2.29	0.290	0.0284
Sept	3.95	3.89	10.7	1.51	19.8	1.03	0.453	5.07	5.05	0.389	0.457
Oct	2.88	2.83	6.77	1.13	9.88	0.921	0.236	2.50	2.48	0.162	1.43
Nov	1.46	1.41	3.85	0.789	4.82	0.833	0.226	2.01	1.99	0.158	0.0280
Dec	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	19.3	18.6	49.7	15.0	79.4	10.9	2.74	24.2	24.0	2.43	3.74

Data completeness

2012	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	88.5	88.5	88.5	88.5	88.5	88.5	88.5	88.5	88.5	88.5	88.5	88.5	88.5	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	60.3	60.3	60.3	60.3	60.3	60.3	60.3	60.3	60.3	60.3	60.3	60.3	60.3	100
Dec	--	--	--	--	--	--	--	--	--	--	--	--	--	100
Annual	**97.7**	**97.7**	**97.7**	**97.7**	**97.7**	**97.7**	**97.7**	**97.7**	**97.7**	**97.7**	**97.7**	**97.7**	**97.7**	**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%)

Table 3.48 Monthly results **Site: Samutprakarn** **Country: Thailand**

Precipitation amount-weighted average concentration/ Precipitation amount

2012	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^{-1}	µmol L^{-1}	µmol L^{-1}	µmol L^{-1}	µmol L^{-1}	µmol L^{-1}	µmol L^{-1}	µmol L^{-1}	µmol L^{-1}	µmol L^{-1}	µmol L^{-1}		mS m^{-1}	mm $month^{-1}$ or mm $year^{-1}$
Jan	57.6	55.9	114	40.6	211	27.8	24.0	57.6	57.0	5.76	0.174	6.76	4.86	15.0
Feb	*	*	*	*	*	*	*	*	*	*	*	*	*	13.6
Mar	*	*	*	*	*	*	*	*	*	*	*	*	*	14.9
Apr	--	--	--	--	--	--	--	--	--	--	--	--	--	0
May	9.74	8.97	9.12	15.2	23.8	12.8	1.35	7.24	6.96	1.88	0.401	6.40	0.743	121
June	7.69	6.51	6.60	21.3	23.1	19.6	1.99	10.4	10.0	2.62	0.271	6.57	0.850	86.3
July	13.0	12.2	7.57	16.9	41.1	13.9	1.71	10.5	10.2	2.24	0.137	6.86	0.982	162
Aug	5.79	5.38	4.17	9.28	25.6	6.85	1.17	6.88	6.73	1.57	0.124	6.91	0.631	144
Sept	10.3	10.2	17.1	3.66	34.2	2.37	1.02	6.74	6.69	0.871	1.23	5.91	0.914	397
Oct	--	--	--	--	--	--	--	--	--	--	--	--	--	0
Nov	--	--	--	--	--	--	--	--	--	--	--	--	--	0
Dec	--	--	--	--	--	--	--	--	--	--	--	--	--	0
Annual	10.2	9.74	12.5	9.92	34.1	7.89	1.52	8.39	8.22	1.53	0.679	6.17	0.902	953
Max.	57.6	55.9	114	79.8	211	75.3	24.0	57.6	57.0	8.64	3.47	7.73	4.86	
Min.	1.98	1.87	1.94	1.41	12.2	<1	<0.3	2.50	2.47	0.411	0.0186	5.46	0.410	

Wet deposition amount

2012	SO_4^{2-}	nss-SO_4^{2-}	NO_3^-	Cl^-	NH_4^+	Na^+	K^+	Ca^{2+}	nss-Ca^{2+}	Mg^{2+}	H^+
	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}
Jan	0.864	0.838	1.70	0.609	3.16	0.418	0.361	0.865	0.855	0.0864	<0.01
Feb	*	*	*	*	*	*	*	*	*	*	*
Mar	*	*	*	*	*	*	*	*	*	*	*
Apr	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
May	1.18	1.08	1.10	1.83	2.87	1.54	0.163	0.873	0.840	0.227	0.0484
June	0.664	0.562	0.570	1.84	1.99	1.69	0.172	0.900	0.863	0.226	0.0234
July	2.11	1.97	1.23	2.74	6.67	2.26	0.278	1.70	1.65	0.364	0.0223
Aug	0.832	0.773	0.598	1.33	3.68	0.983	0.168	0.988	0.967	0.225	0.0179
Sept	4.08	4.02	6.77	1.45	13.6	0.941	0.406	2.67	2.65	0.345	0.487
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	9.73	9.28	11.9	9.45	32.5	7.51	1.45	7.99	7.83	1.46	0.647

Data completeness

2012	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	54.0	54.0	54.0	54.0	54.0	54.0	54.0	54.0	54.0	54.0	54.0	54.0	54.0	100
Feb	0	0	0	0	0	0	0	0	0	0	0	0	0	100
Mar	0	0	0	0	0	0	0	0	0	0	0	0	0	100
Apr	--	--	--	--	--	--	--	--	--	--	--	--	--	100
May	32.1	32.1	32.1	32.1	32.1	32.1	32.1	32.1	32.1	32.1	32.1	32.1	32.1	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	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Oct	--	--	--	--	--	--	--	--	--	--	--	--	--	100
Nov	--	--	--	--	--	--	--	--	--	--	--	--	--	100
Dec	--	--	--	--	--	--	--	--	--	--	--	--	--	100
Annual	**87.7**	**87.7**	**87.7**	**87.7**	**87.7**	**87.7**	**87.7**	**87.7**	**87.7**	**87.7**	**87.7**	**87.7**	**87.7**	**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%)

Table 3.49 Monthly results **Site: Pathumthani** **Country: Thailand**

Precipitation amount-weighted average concentration/ Precipitation amount

2012	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^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}		mS m^{-1}	mm $month^{-1}$ or mm $year^{-1}$
Jan	--	--	--	--	--	--	--	--	--	--	--	--	--	0
Feb	--	--	--	--	--	--	--	--	--	--	--	--	--	0
Mar	--	--	--	--	--	--	--	--	--	--	--	--	--	0
Apr	39.9	37.6	28.2	38.0	148	37.8	5.59	30.6	29.7	6.17	1.74	5.76	2.76	2.26
May	10.7	10.2	25.9	12.1	68.6	9.10	2.49	25.9	25.7	2.58	3.44	5.46	1.47	228
June	3.74	3.16	15.2	13.7	41.4	12.5	1.52	29.0	28.7	3.71	0.947	6.02	1.11	116
July	5.64	5.24	13.0	7.07	33.7	6.77	1.02	18.6	18.5	2.17	2.34	5.63	0.797	332
Aug	11.7	8.44	21.9	58.6	35.4	54.6	3.01	34.0	32.9	9.32	0.717	6.14	1.83	278
Sept	6.43	6.36	17.0	2.30	25.2	1.11	0.702	10.2	10.2	0.765	6.87	5.16	0.909	487
Oct	7.60	7.40	15.0	5.19	36.3	3.27	2.47	20.0	19.9	1.57	2.45	5.61	1.03	71.2
Nov	11.2	11.0	33.4	5.85	48.7	3.98	2.34	17.0	17.0	1.53	3.82	5.42	1.42	46.2
Dec	39.6	39.2	107	11.2	151	7.09	5.12	30.8	30.7	3.00	22.9	4.64	4.45	2.32
Annual	7.93	7.10	18.8	15.9	37.9	14.1	1.64	20.6	20.3	3.14	3.60	5.44	1.17	1563
Max.	41.4	40.8	183	125	226	117	17.2	115	114	18.1	302	6.68	7.12	
Min.	<1	<1	2.42	<1	4.66	<1	<0.3	2.30	2.30	<0.4	0.209	3.52	0.305	

Wet deposition amount

2012	SO_4^{2-}	nss-SO_4^{2-}	NO_3^-	Cl^-	NH_4^+	Na^+	K^+	Ca^{2+}	nss-Ca^{2+}	Mg^{2+}	H^+
	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}
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	0.0900	0.0848	0.0636	0.0857	0.333	0.0854	0.0126	0.0690	0.0671	0.0139	<0.01
May	2.45	2.33	5.91	2.77	15.6	2.07	0.569	5.90	5.86	0.589	0.783
June	0.434	0.366	1.77	1.59	4.80	1.45	0.176	3.36	3.33	0.430	0.110
July	1.87	1.74	4.32	2.34	11.2	2.25	0.337	6.18	6.13	0.718	0.775
Aug	3.26	2.35	6.09	16.3	9.84	15.2	0.838	9.47	9.14	2.59	0.199
Sept	3.13	3.10	8.29	1.12	12.3	0.540	0.342	4.96	4.95	0.373	3.35
Oct	0.541	0.527	1.07	0.369	2.59	0.233	0.176	1.43	1.42	0.112	0.175
Nov	0.519	0.508	1.54	0.270	2.25	0.184	0.108	0.787	0.783	0.0706	0.177
Dec	0.0920	0.0910	0.247	0.0260	0.351	0.0165	0.0119	0.0715	0.0712	<0.01	0.0532
Annual	12.4	11.1	29.3	24.9	59.2	22.0	2.57	32.2	31.8	4.91	5.62

Data completeness

2012	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	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 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%)

Table 3.50 Monthly results **Site: Khanchanaburi** **Country: Thailand**

Precipitation amount-weighted average concentration/ Precipitation amount

2012	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^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}		mS m^{-1}	mm $month^{-1}$ or mm $year^{-1}$
Jan	8.12	7.99	26.8	5.80	31.9	2.17	3.44	4.44	4.39	1.23	1.28	5.89	0.871	31.4
Feb	10.7	10.6	31.1	7.62	39.9	2.17	5.63	3.99	3.95	1.23	5.01	5.30	1.11	40.1
Mar	21.9	21.6	36.7	10.3	76.7	6.01	7.53	14.6	14.5	3.19	1.21	5.92	2.01	56.9
Apr	11.6	11.4	24.6	6.85	36.4	3.42	4.42	5.28	5.21	1.18	6.42	5.19	1.12	74.7
May	4.04	3.67	7.05	6.37	8.74	6.00	1.31	5.33	5.20	1.59	2.47	5.61	0.514	158
June	4.04	2.75	10.0	24.6	7.21	21.4	2.96	68.1	67.7	8.98	0.588	6.23	1.96	508
July	2.54	1.84	2.76	14.4	3.21	11.6	0.647	3.68	3.43	1.26	0.505	6.30	0.520	518
Aug	1.88	1.38	2.18	9.92	3.35	8.30	0.563	2.59	2.41	0.989	0.724	6.14	0.436	361
Sept	1.37	1.27	2.64	1.83	3.74	1.69	0.545	0.969	0.933	0.411	0.436	6.36	0.196	475
Oct	6.95	6.81	6.49	2.15	16.5	2.31	1.04	2.00	1.95	0.619	2.02	5.69	0.504	137
Nov	4.66	4.29	13.7	5.02	27.8	6.19	3.30	7.97	7.84	1.44	0.466	6.33	0.581	30.6
Dec	--	--	--	--	--	--	--	--	--	--	--	--	--	0
Annual	3.72	3.14	6.86	11.6	8.95	9.71	1.57	17.5	17.3	2.76	0.964	6.02	0.817	2390
Max.	23.4	22.1	37.1	70.5	79.8	60.9	10.2	317	316	39.9	15.8	7.03	7.66	
Min.	<1	<1	<1	<1	<1	<1	<0.3	0.250	0.212	0.411	0.0933	4.80	0.110	

Wet deposition amount

2012	SO_4^{2-}	nss-SO_4^{2-}	NO_3^-	Cl^-	NH_4^+	Na^+	K^+	Ca^{2+}	nss-Ca^{2+}	Mg^{2+}	H^+
	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}
Jan	0.255	0.251	0.841	0.182	1.00	0.0683	0.108	0.139	0.138	0.0387	0.0401
Feb	0.430	0.425	1.25	0.305	1.60	0.0872	0.226	0.160	0.158	0.0495	0.201
Mar	1.25	1.23	2.09	0.585	4.36	0.342	0.428	0.831	0.824	0.181	0.0691
Apr	0.870	0.854	1.84	0.512	2.72	0.256	0.330	0.394	0.389	0.0883	0.479
May	0.636	0.579	1.11	1.00	1.38	0.946	0.207	0.840	0.820	0.252	0.389
June	2.05	1.40	5.10	12.5	3.66	10.9	1.50	34.6	34.4	4.56	0.299
July	1.32	0.954	1.43	7.45	1.66	6.01	0.335	1.91	1.78	0.651	0.262
Aug	0.680	0.499	0.786	3.58	1.21	3.00	0.203	0.936	0.872	0.357	0.262
Sept	0.653	0.604	1.25	0.867	1.77	0.802	0.259	0.460	0.443	0.195	0.207
Oct	0.953	0.934	0.890	0.294	2.27	0.317	0.142	0.274	0.267	0.0849	0.277
Nov	0.143	0.131	0.420	0.154	0.851	0.189	0.101	0.244	0.240	0.0441	0.0143
Dec	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	8.89	7.49	16.4	27.8	21.4	23.2	3.75	41.7	41.2	6.59	2.30

Data completeness

2012	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	66.8	66.8	66.8	66.8	66.8	66.8	66.8	66.8	66.8	66.8	66.8	66.8	66.8	100
Mar	87.5	87.5	87.5	87.5	87.5	87.5	87.5	87.5	87.5	87.5	87.5	87.5	87.5	100
Apr	86.2	86.2	86.2	86.2	86.2	86.2	86.2	86.2	86.2	86.2	86.2	86.2	86.2	100
May	65.7	65.7	65.7	65.7	65.7	65.7	65.7	65.7	65.7	65.7	65.7	65.7	65.7	100
June	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
July	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
Aug	95.1	95.1	95.1	95.1	95.1	95.1	95.1	95.1	95.1	95.1	95.1	95.1	95.1	100
Sept	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Oct	84.7	84.7	84.7	84.7	84.7	84.7	84.7	84.7	84.7	84.7	84.7	84.7	84.7	100
Nov	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Dec	--	--	--	--	--	--	--	--	--	--	--	--	--	100
Annual	**93.3**	**93.3**	**93.3**	**93.3**	**93.3**	**93.3**	**93.3**	**93.3**	**93.3**	**93.3**	**93.3**	**93.3**	**93.3**	**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%)

Table 3.51 Monthly results **Site: Chiang Mai** **Country: Thailand**

Precipitation amount-weighted average concentration/ Precipitation amount

2012	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^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}		mS m^{-1}	mm $month^{-1}$ or mm $year^{-1}$
Jan	17.8	17.6	40.5	10.2	71.7	2.89	8.04	11.3	11.3	1.45	16.9	4.77	2.60	6.10
Feb	39.4	36.9	134	39.9	225	41.1	25.4	35.0	34.1	5.30	*	*	*	0.200
Mar	--	--	--	--	--	--	--	--	--	--	--	--	--	0
Apr	33.7	33.5	28.5	7.98	55.0	2.24	4.47	13.4	13.4	2.48	0.794	6.10	1.45	38.1
May	3.97	3.71	7.01	4.14	15.4	4.33	0.957	4.15	4.06	0.674	0.729	6.14	0.449	307
June	8.15	7.44	13.1	17.0	34.7	13.6	2.28	16.4	16.1	2.48	0.478	6.32	0.775	53.0
July	1.88	1.62	4.25	4.26	17.3	4.31	1.70	5.55	5.46	0.749	0.415	6.38	0.402	146
Aug	1.86	1.74	5.88	2.39	18.5	2.04	1.07	7.73	7.69	0.737	0.485	6.31	0.384	183
Sept	3.36	3.24	5.64	2.68	13.1	2.06	<0.3	7.39	7.35	<0.4	0.979	6.01	0.395	248
Oct	6.25	6.01	11.2	3.04	24.7	3.98	1.85	15.9	15.8	1.25	0.527	6.28	0.657	89.0
Nov	6.10	5.87	13.5	3.82	31.2	3.71	2.45	10.4	10.3	0.903	1.56	5.81	0.837	36.0
Dec	3.16	2.51	9.70	6.76	35.7	10.7	2.10	12.9	12.6	1.71	0.392	6.41	0.749	5.40
Annual	4.76	4.53	7.91	4.14	19.6	3.80	1.26	7.77	7.69	0.842	0.789	6.10	0.512	1111
Max.	85.9	85.5	134	91.3	225	81.9	25.4	72.1	70.4	15.6	17.8	6.95	3.28	
Min.	<1	<1	1.00	<1	3.00	<1	<0.3	1.40	1.33	<0.4	0.112	4.75	0.180	

Wet deposition amount

2012	SO_4^{2-}	nss-SO_4^{2-}	NO_3^-	Cl^-	NH_4^+	Na^+	K^+	Ca^{2+}	nss-Ca^{2+}	Mg^{2+}	H^+
	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}
Jan	0.109	0.108	0.247	0.0621	0.437	0.0176	0.0491	0.0692	0.0688	<0.01	0.103
Feb	<0.01	<0.01	0.0267	<0.01	0.0451	<0.01	<0.01	<0.01	<0.01	<0.01	*
Mar	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Apr	1.28	1.28	1.09	0.304	2.09	0.0855	0.170	0.511	0.509	0.0943	0.0302
May	1.22	1.14	2.15	1.27	4.73	1.33	0.294	1.27	1.25	0.207	0.224
June	0.432	0.394	0.696	0.902	1.84	0.722	0.121	0.868	0.852	0.131	0.0253
July	0.273	0.235	0.618	0.620	2.51	0.627	0.247	0.808	0.794	0.109	0.0604
Aug	0.341	0.318	1.08	0.437	3.39	0.373	0.197	1.41	1.41	0.135	0.0888
Sept	0.832	0.801	1.40	0.664	3.23	0.509	0.0586	1.83	1.82	0.0961	0.242
Oct	0.556	0.535	0.996	0.270	2.20	0.354	0.164	1.41	1.40	0.111	0.0469
Nov	0.220	0.211	0.487	0.138	1.12	0.133	0.0881	0.373	0.370	0.0325	0.0560
Dec	0.0170	0.0136	0.0524	0.0365	0.193	0.0576	0.0113	0.0694	0.0682	<0.01	<0.01
Annual	5.28	5.04	8.78	4.59	21.8	4.22	1.40	8.64	8.54	0.936	0.876

Data completeness

2012	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	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
Feb	100	100	100	100	100	100	100	100	100	100	0	0	0	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	83.0	83.0	100	100	100	100	100	100	97.7	97.7	97.7	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	99.4	99.4	99.4	100
Dec	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Annual	**100**	**100**	**99.2**	**99.2**	**100**	**100**	**100**	**100**	**100**	**100**	**99.8**	**99.8**	**99.8**	**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%)

Table 3.52 Monthly results **Site: Nakhon Ratchasima** **Country: Thailand**

Precipitation amount-weighted average concentration/ Precipitation amount

2012	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^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}		mS m^{-1}	mm $month^{-1}$ or mm $year^{-1}$
Jan	14.9	14.6	36.8	12.5	84.4	5.34	5.88	8.03	7.91	1.05	28.4	4.55	2.18	35.0
Feb	--	--	--	--	--	--	--	--	--	--	--	--	--	0
Mar	--	--	--	--	--	--	--	--	--	--	--	--	--	0
Apr	9.24	9.16	18.4	6.56	32.9	1.21	2.32	2.92	2.89	<0.4	15.8	4.80	1.26	64.8
May	8.60	8.32	14.2	7.64	27.4	4.57	1.33	4.61	4.51	<0.4	11.1	4.95	0.826	257
June	9.98	9.31	12.6	15.0	28.1	11.2	1.57	7.88	7.64	1.07	3.84	5.42	0.887	80.5
July	4.56	4.32	9.23	5.70	12.9	3.94	0.497	5.85	5.77	<0.4	9.21	5.04	0.515	140
Aug	3.48	3.24	6.91	5.71	19.7	4.03	1.34	3.90	3.82	<0.4	6.17	5.21	0.541	90.8
Sept	4.86	4.71	7.42	3.83	24.3	2.54	1.10	2.10	2.05	0.800	4.59	5.34	0.617	264
Oct	6.39	6.30	7.24	4.20	21.7	1.53	0.550	0.600	0.571	<0.4	8.90	5.05	0.674	131
Nov	4.57	4.48	10.3	4.85	27.8	1.57	0.740	2.23	2.20	<0.4	3.43	5.47	0.620	62.6
Dec	--	--	--	--	--	--	--	--	--	--	--	--	--	0
Annual	6.64	6.42	11.2	6.36	25.7	3.71	1.26	3.74	3.66	0.423	8.58	5.07	0.756	1126
Max.	133	131	142	134	264	127	33.8	41.4	40.5	15.2	87.1	6.95	6.97	
Min.	1.67	1.61	1.61	1.69	2.22	<1	<0.3	<0.2	<0.2	<0.4	0.112	4.06	0.220	

Wet deposition amount

2012	SO_4^{2-}	nss-SO_4^{2-}	NO_3^-	Cl^-	NH_4^+	Na^+	K^+	Ca^{2+}	nss-Ca^{2+}	Mg^{2+}	H^+
	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}
Jan	0.522	0.511	1.29	0.439	2.95	0.187	0.206	0.281	0.277	0.0369	0.996
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	0.598	0.594	1.19	0.425	2.13	0.0784	0.150	0.189	0.187	<0.01	1.03
May	2.21	2.14	3.65	1.97	7.06	1.18	0.343	1.19	1.16	0.0705	2.86
June	0.804	0.749	1.01	1.21	2.27	0.899	0.126	0.634	0.615	0.0865	0.309
July	0.640	0.607	1.30	0.800	1.82	0.553	0.0698	0.822	0.810	0.0335	1.29
Aug	0.316	0.294	0.627	0.518	1.79	0.366	0.122	0.354	0.347	0.0177	0.560
Sept	1.29	1.24	1.96	1.01	6.42	0.671	0.291	0.555	0.541	0.212	1.21
Oct	0.835	0.823	0.945	0.549	2.84	0.200	0.0719	0.0784	0.0745	0.0123	1.16
Nov	0.286	0.280	0.642	0.304	1.74	0.0981	0.0463	0.140	0.138	<0.01	0.214
Dec	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	7.48	7.23	12.6	7.17	29.0	4.18	1.42	4.21	4.13	0.477	9.66

Data completeness

2012	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	98.3	98.3	98.3	100
Feb	--	--	--	--	--	--	--	--	--	--	--	--	--	100
Mar	--	--	--	--	--	--	--	--	--	--	--	--	--	100
Apr	100	100	100	100	100	100	100	100	100	100	99.1	99.1	99.1	100
May	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.0	99.0	99.0	100
June	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
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	97.8	97.8	97.8	100
Sept	100	100	100	100	100	100	100	100	100	100	99.8	99.8	99.8	100
Oct	100	100	100	100	100	100	100	100	100	100	99.7	99.7	99.7	100
Nov	100	100	100	100	100	100	100	100	100	100	99.0	99.0	99.0	100
Dec	--	--	--	--	--	--	--	--	--	--	--	--	--	100
Annual	**99.4**	**99.4**	**99.4**	**99.4**	**99.4**	**99.4**	**99.4**	**99.4**	**99.4**	**99.4**	**98.6**	**98.6**	**98.6**	**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%)

Table 3.53 Monthly results **Site: Hanoi** **Country: Vietnam**

Precipitation amount-weighted average concentration/ Precipitation amount

2012	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^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}		mS m^{-1}	mm $month^{-1}$ or mm $year^{-1}$
Jan	88.9	88.4	72.7	17.1	202	6.75	13.4	31.9	31.7	7.64	0.622	6.21	4.39	13.2
Feb	269	267	315	74.1	725	38.7	23.5	91.7	90.8	14.8	0.615	6.21	14.3	19.6
Mar	250	249	237	48.9	614	23.9	16.8	92.6	92.0	13.3	0.453	6.34	12.2	23.8
Apr	71.1	69.9	70.7	26.0	122	20.3	2.91	40.9	40.5	7.58	1.55	5.81	3.61	36.3
May	18.3	18.2	17.7	2.71	29.9	2.54	2.37	7.23	7.17	1.36	6.64	5.18	1.06	527
June	22.0	21.9	15.9	5.12	42.4	2.01	1.95	10.6	10.6	1.50	1.18	5.93	1.08	296
July	21.4	21.2	18.4	3.88	49.2	2.00	3.34	13.2	13.1	1.14	0.448	6.35	1.22	284
Aug	15.4	15.4	10.1	2.45	39.5	1.03	0.746	10.4	10.3	1.07	0.386	6.41	0.924	409
Sept	35.8	35.4	32.2	9.82	79.4	7.42	2.73	25.7	25.5	4.56	0.199	6.70	2.05	52.9
Oct	30.7	29.8	23.8	16.3	47.1	13.8	6.21	24.7	24.4	3.92	0.454	6.34	1.70	78.4
Nov	60.1	59.2	45.2	19.6	92.7	14.6	10.5	43.4	43.0	6.61	0.419	6.38	3.05	45.9
Dec	108	106	79.8	26.5	146	28.0	4.81	80.4	79.8	10.1	0.378	6.42	4.95	12.0
Annual	28.8	28.6	25.2	6.58	60.2	4.19	3.00	15.0	15.0	2.15	2.39	5.62	1.56	1798
Max.	506	497	510	260	1204	154	56.1	290	287	40.4	12.6	7.20	27.2	
Min.	7.34	7.30	5.57	1.09	20.1	<1	<0.3	4.76	4.74	0.699	0.0631	4.90	0.596	

Wet deposition amount

2012	SO_4^{2-}	nss-SO_4^{2-}	NO_3^-	Cl^-	NH_4^+	Na^+	K^+	Ca^{2+}	nss-Ca^{2+}	Mg^{2+}	H^+
	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}
Jan	1.18	1.17	0.962	0.227	2.68	0.0893	0.177	0.422	0.420	0.101	<0.01
Feb	5.28	5.23	6.18	1.45	14.2	0.759	0.461	1.80	1.78	0.291	0.0121
Mar	5.96	5.92	5.64	1.16	14.6	0.569	0.401	2.20	2.19	0.316	0.0108
Apr	2.58	2.54	2.57	0.943	4.44	0.737	0.106	1.48	1.47	0.275	0.0564
May	9.65	9.57	9.34	1.43	15.8	1.34	1.25	3.81	3.78	0.718	3.50
June	6.52	6.48	4.69	1.52	12.6	0.594	0.579	3.15	3.14	0.443	0.349
July	6.07	6.04	5.22	1.10	14.0	0.569	0.949	3.75	3.73	0.325	0.127
Aug	6.31	6.28	4.12	1.00	16.1	0.419	0.305	4.24	4.23	0.436	0.158
Sept	1.89	1.87	1.70	0.519	4.20	0.392	0.144	1.36	1.35	0.241	0.0105
Oct	2.40	2.34	1.86	1.28	3.69	1.09	0.487	1.94	1.91	0.307	0.0356
Nov	2.76	2.72	2.08	0.899	4.26	0.671	0.482	1.99	1.98	0.303	0.0192
Dec	1.29	1.27	0.958	0.318	1.76	0.336	0.0577	0.966	0.958	0.121	<0.01
Annual	51.8	51.4	45.3	11.8	108	7.54	5.39	27.0	26.9	3.87	4.29

Data completeness

2012	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	93.3	93.3	93.3	93.3	93.3	93.3	93.3	93.3	93.3	93.3	93.3	93.3	93.3	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 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%)

Table 3.54 Monthly results **Site: Hoa Binh** **Country: Vietnam**

Precipitation amount-weighted average concentration/ Precipitation amount

2012	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^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}		mS m^{-1}	mm $month^{-1}$ or mm $year^{-1}$
Jan	*	*	*	*	*	*	*	*	*	*	*	*	*	1.50
Feb	*	*	*	*	*	*	*	*	*	*	*	*	*	0.800
Mar	212	209	294	71.3	239	42.5	22.6	246	245	33.9	0.210	6.68	11.9	8.30
Apr	24.6	24.5	31.4	6.58	52.8	1.10	2.59	17.1	17.0	1.86	3.11	5.51	1.47	75.1
May	15.9	15.8	16.0	3.57	33.2	2.22	0.979	9.62	9.57	1.57	2.42	5.62	0.891	502
June	10.3	10.2	9.29	3.37	19.7	1.17	0.479	7.49	7.46	0.770	1.88	5.73	0.585	328
July	13.2	13.0	10.2	2.37	18.4	4.03	0.893	10.6	10.5	1.44	0.794	6.10	0.704	149
Aug	11.1	11.0	8.85	2.17	19.2	1.39	1.10	6.27	6.24	1.77	2.20	5.66	0.627	479
Sept	17.9	17.7	13.7	5.91	22.9	3.57	2.27	11.8	11.7	3.93	2.85	5.54	0.909	197
Oct	43.8	43.0	31.7	15.6	76.1	12.9	5.13	22.5	22.2	4.96	4.57	5.34	2.34	133
Nov	26.9	26.6	24.2	7.46	42.1	4.89	1.42	16.9	16.8	4.64	1.99	5.70	1.40	40.4
Dec	*	*	*	*	*	*	*	*	*	*	*	*	*	1.50
Annual	17.1	16.9	15.4	4.65	30.0	3.03	1.50	11.1	11.0	2.17	2.35	5.63	0.940	1915
Max.	256	250	303	97.1	583	102	23.8	288	288	36.0	7.59	7.25	14.2	
Min.	9.44	9.33	6.39	<1	10.5	<1	<0.3	3.57	3.54	0.411	0.0562	5.12	0.513	

Wet deposition amount

2012	SO_4^{2-}	nss-SO_4^{2-}	NO_3^-	Cl^-	NH_4^+	Na^+	K^+	Ca^{2+}	nss-Ca^{2+}	Mg^{2+}	H^+
	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}
Jan	*	*	*	*	*	*	*	*	*	*	*
Feb	*	*	*	*	*	*	*	*	*	*	*
Mar	1.76	1.74	2.44	0.592	1.98	0.353	0.188	2.04	2.04	0.281	<0.01
Apr	1.85	1.84	2.36	0.494	3.97	0.0829	0.195	1.28	1.28	0.139	0.234
May	7.99	7.93	8.02	1.79	16.6	1.11	0.491	4.83	4.80	0.790	1.21
June	3.37	3.35	3.05	1.11	6.46	0.385	0.157	2.46	2.45	0.253	0.618
July	1.96	1.92	1.51	0.352	2.73	0.599	0.133	1.57	1.56	0.213	0.118
Aug	5.31	5.27	4.24	1.04	9.19	0.666	0.527	3.00	2.99	0.847	1.06
Sept	3.53	3.48	2.70	1.17	4.52	0.705	0.447	2.32	2.31	0.775	0.563
Oct	5.82	5.72	4.20	2.07	10.1	1.71	0.681	2.98	2.95	0.659	0.607
Nov	1.09	1.07	0.977	0.301	1.70	0.197	0.0574	0.683	0.679	0.188	0.0804
Dec	*	*	*	*	*	*	*	*	*	*	*
Annual	32.7	32.4	29.5	8.91	57.4	5.81	2.88	21.2	21.0	4.15	4.50

Data completeness

2012	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	97.6	97.6	97.6	97.6	97.6	97.6	97.6	97.6	97.6	97.6	97.6	97.6	97.6	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	0	0	0	0	0	0	0	0	0	0	0	0	0	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 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%)

Table 3.55 Monthly results **Site: Cuc Phuong** **Country: Vietnam**

Precipitation amount-weighted average concentration/ Precipitation amount

2012	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^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}		mS m^{-1}	mm $month^{-1}$ or mm $year^{-1}$
Jan	108	106	100	44.4	470	21.7	57.3	157	156	14.7	16.0	4.80	12.6	32.2
Feb	152	149	270	53.6	488	39.5	79.5	155	154	34.9	2.84	5.55	13.1	27.1
Mar	86.7	84.1	170	55.4	167	42.3	26.0	86.7	85.7	22.7	1.52	5.82	6.36	23.0
Apr	36.8	35.4	24.2	17.9	6.71	23.0	10.5	81.0	80.5	10.2	0.854	6.07	2.90	25.7
May	14.0	12.7	14.4	9.97	2.08	20.6	4.06	9.47	9.02	1.66	5.32	5.27	0.920	339
June	20.5	19.2	12.9	8.13	<1	21.1	1.75	12.0	11.6	5.18	6.55	5.18	1.13	172
July	11.9	10.5	3.68	11.6	12.8	23.1	5.43	9.01	8.51	1.30	1.55	5.81	0.812	255
Aug	14.5	13.8	9.11	20.4	8.21	11.4	3.37	33.9	33.7	3.93	2.21	5.65	1.20	359
Sept	24.6	23.6	12.6	21.9	6.43	16.1	4.37	23.9	23.5	5.56	4.42	5.35	1.24	515
Oct	29.7	28.4	19.2	26.1	8.99	21.6	0.521	41.1	40.7	12.6	1.74	5.76	1.61	190
Nov	45.5	42.6	50.3	63.4	43.0	49.5	10.9	117	116	47.9	0.237	6.63	5.51	57.4
Dec	63.2	59.4	78.7	82.5	85.6	63.4	7.72	109	108	47.5	0.166	6.78	6.10	23.3
Annual	24.3	23.1	20.1	20.3	23.9	20.0	6.06	30.6	30.2	7.07	3.68	5.43	1.73	2018
Max.	172	170	332	113	1530	93.2	189	421	420	79.2	29.5	7.24	28.4	
Min.	8.07	7.65	<1	1.72	<1	6.39	<0.3	5.21	4.72	<0.4	0.0575	4.53	0.640	

Wet deposition amount

2012	SO_4^{2-}	nss-SO_4^{2-}	NO_3^-	Cl^-	NH_4^+	Na^+	K^+	Ca^{2+}	nss-Ca^{2+}	Mg^{2+}	H^+
	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}
Jan	3.47	3.42	3.23	1.43	15.1	0.699	1.85	5.05	5.03	0.474	0.516
Feb	4.11	4.04	7.31	1.45	13.2	1.07	2.15	4.19	4.17	0.947	0.0769
Mar	1.99	1.93	3.90	1.27	3.83	0.974	0.598	1.99	1.97	0.522	0.0349
Apr	0.945	0.910	0.623	0.459	0.172	0.592	0.269	2.08	2.07	0.261	0.0219
May	4.73	4.31	4.86	3.38	0.704	6.97	1.37	3.20	3.05	0.564	1.80
June	3.52	3.30	2.22	1.40	0.144	3.62	0.301	2.07	1.99	0.891	1.13
July	3.03	2.68	0.940	2.95	3.28	5.91	1.39	2.30	2.17	0.331	0.396
Aug	5.18	4.94	3.27	7.32	2.94	4.10	1.21	12.2	12.1	1.41	0.794
Sept	12.7	12.2	6.49	11.3	3.31	8.31	2.25	12.3	12.1	2.87	2.28
Oct	5.64	5.39	3.65	4.95	1.71	4.10	0.0989	7.81	7.72	2.39	0.330
Nov	2.61	2.44	2.89	3.64	2.47	2.84	0.626	6.70	6.64	2.75	0.0136
Dec	1.47	1.38	1.83	1.92	1.99	1.48	0.180	2.54	2.51	1.11	<0.01
Annual	49.0	46.5	40.5	41.0	48.3	40.4	12.2	61.8	60.9	14.3	7.42

Data completeness

2012	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	87.4	87.4	87.4	87.4	87.4	87.4	87.4	87.4	87.4	87.4	87.4	87.4	87.4	100
Apr	94.2	94.2	94.2	94.2	94.2	94.2	94.2	94.2	94.2	94.2	94.2	94.2	94.2	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	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	81.1	81.1	81.1	81.1	81.1	81.1	81.1	81.1	81.1	81.1	81.1	81.1	81.1	100
Annual	**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**

[--] 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%)

Table 3.56 Monthly results **Site: Da Nang** **Country: Vietnam**

Precipitation amount-weighted average concentration/ Precipitation amount

2012	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^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}		mS m^{-1}	mm $month^{-1}$ or mm $year^{-1}$
Jan	55.4	46.2	58.2	200	46.8	152	25.4	25.7	22.4	26.0	35.3	4.45	6.14	53.0
Feb	42.4	35.7	19.5	145	38.6	112	23.5	30.5	28.0	15.1	3.09	5.51	3.86	37.1
Mar	271	210	3.16	1789	560	1003	134	231	209	251	0.257	6.59	34.9	8.30
Apr	36.1	30.6	21.3	179	106	91.6	80.1	37.4	35.4	15.0	0.395	6.40	5.18	11.8
May	64.7	58.9	10.0	184	41.1	95.7	63.6	92.0	90.0	17.5	0.759	6.12	5.23	9.70
June	15.2	13.7	<1	43.6	4.57	24.8	6.29	49.0	48.5	9.19	0.824	6.08	1.91	46.3
July	26.7	<1	3.63	793	123	761	24.5	59.6	43.2	12.5	0.235	6.63	12.7	30.7
Aug	13.7	11.8	5.64	48.4	8.09	31.4	6.75	20.4	19.8	8.48	1.30	5.89	1.40	179
Sept	19.1	17.7	<1	30.1	5.73	23.5	8.34	9.52	9.01	4.44	5.76	5.24	1.19	594
Oct	11.6	8.26	<1	78.8	8.41	54.8	7.14	10.6	9.46	8.29	1.08	5.97	1.44	367
Nov	10.5	8.55	4.18	35.2	9.92	32.9	3.83	10.6	9.85	5.97	0.169	6.77	1.04	286
Dec	43.0	32.7	16.7	224	185	172	59.3	39.3	35.6	23.2	0.210	6.68	6.95	59.5
Annual	19.6	16.1	4.79	83.1	21.3	63.2	11.5	16.9	15.5	9.19	3.66	5.44	2.10	1682
Max.	271	210	65.9	1789	560	1807	134	231	209	251	38.9	7.06	34.9	
Min.	2.95	<1	<1	11.3	<1	7.13	0.972	5.21	4.61	1.93	0.0871	4.41	0.410	

Wet deposition amount

2012	SO_4^{2-}	nss-SO_4^{2-}	NO_3^-	Cl^-	NH_4^+	Na^+	K^+	Ca^{2+}	nss-Ca^{2+}	Mg^{2+}	H^+
	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}
Jan	2.93	2.45	3.08	10.6	2.48	8.07	1.35	1.36	1.19	1.38	1.87
Feb	1.57	1.32	0.725	5.36	1.43	4.14	0.871	1.13	1.04	0.562	0.115
Mar	2.25	1.75	0.0262	14.9	4.65	8.33	1.11	1.92	1.74	2.09	<0.01
Apr	0.426	0.361	0.252	2.11	1.25	1.08	0.945	0.441	0.418	0.177	<0.01
May	0.628	0.572	0.0973	1.79	0.399	0.928	0.617	0.893	0.873	0.170	<0.01
June	0.704	0.634	<0.01	2.02	0.211	1.15	0.291	2.27	2.25	0.425	0.0381
July	0.819	<0.01	0.112	24.3	3.77	23.4	0.753	1.83	1.33	0.384	<0.01
Aug	2.45	2.11	1.01	8.68	1.45	5.62	1.21	3.66	3.54	1.52	0.233
Sept	11.3	10.5	0.568	17.9	3.40	14.0	4.95	5.65	5.35	2.64	3.42
Oct	4.24	3.03	<0.01	28.9	3.08	20.1	2.62	3.90	3.47	3.04	0.397
Nov	3.01	2.44	1.20	10.1	2.83	9.40	1.10	3.02	2.81	1.71	0.0482
Dec	2.56	1.94	0.996	13.3	11.0	10.2	3.53	2.34	2.12	1.38	0.0125
Annual	32.9	27.1	8.06	140	35.8	106	19.3	28.4	26.1	15.4	6.16

Data completeness

2012	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	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	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Dec	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	100
Annual	**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**

[--] 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%)

Table 3.57 Annual precipitation amount and precipitation amount-weighted average concentration in 2012

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^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}		mS m^{-1}
Cambodia	Phnom Penh	*KH 11052*	1617	10.5	10.3	10.7	6.67	21.6	3.65	0.761	10.7	10.7	1.22	0.694	6.16	0.704
China	Haifu	*CN 11058*	1010	102	101	73.9	11.4	116	6.04	6.57	57.9	57.7	6.87	57.5	4.24	5.33
	Jinyunshan	*CN 11003*	1005	124	124	70.4	11.6	124	6.28	7.64	59.2	59.0	5.82	81.5	4.09	6.56
	Shizhan	*CN 11004*	393	109	109	49.4	16.0	109	5.59	5.69	128	128	3.47	0.552	6.26	6.51
	Jiwozi	*CN 11007*	390	94.5	91.8	47.4	31.3	26.6	44.5	9.74	203	202	44.4	0.08	7.12	5.39
	Hongwen	*CN 11008*	924	32.2	31.2	35.2	23.9	43.2	16.3	2.86	17.5	17.1	4.69	30.9	4.51	2.67
	Xiaoping	*CN 11009*	1291	23.4	22.9	26.7	14.5	30.4	8.45	3.47	20.0	19.9	3.45	15.7	4.80	1.67
	Xiang Zhou	*CN 11010*	1518	14.9	12.1	15.2	43.4	29.1	45.9	9.20	10.8	9.76	6.90	7.73	5.11	1.76
Indonesia	Jakarta	*ID 11012*	2722	20.6	19.8	16.2	13.0	23.1	12.7	2.86	12.0	11.7	2.96	17.4	4.76	1.39
	Serpong	*ID 11013*	894	29.0	28.4	31.5	24.1	71.1	10.9	4.33	9.29	9.05	2.01	12.4	4.91	2.05
	Kototabang	*ID 11014*	2639	6.04	5.47	4.65	9.72	8.47	9.63	5.52	7.85	7.64	1.40	9.75	5.01	0.791
	Bandung	*ID 11015*	2084	26.5	25.8	21.6	10.6	53.8	10.8	3.36	13.3	13.1	3.17	3.48	5.46	1.60
	Maros	*ID 11059*	2451	8.77	7.65	9.05	20.0	14.1	19.9	3.50	16.1	15.7	7.03	2.41	5.62	0.885
Japan	Rishiri	*JP 11016*	1172	27.8	10.5	13.4	332	11.4	292	6.41	8.44	2.20	32.3	20.2	4.70	5.54
	Ochiishi	*JP 11050*	871	25.3	8.81	9.80	307	12.3	274	6.76	7.35	1.50	30.6	15.2	4.82	4.96
	Tappi	*JP 11017*	1178	22.3	13.8	17.4	162	13.8	141	3.96	8.02	4.44	15.4	20.5	4.69	3.45
	Sado-seki	*JP 11019*	1296	29.8	15.3	20.0	293	15.5	246	6.62	11.4	6.19	29.4	18.6	4.73	4.88
	Happo	*JP 11021*	2002	11.6	11.0	11.6	11.6	10.7	9.57	0.865	4.14	3.93	2.30	13.3	4.88	1.07
	Ijira	*JP 11022*	2862	13.6	12.4	16.7	24.5	14.7	19.3	0.609	2.50	2.09	2.54	20.5	4.69	1.65
	Oki	*JP 11023*	1296	37.9	16.4	21.6	411	17.0	357	9.16	12.1	4.40	41.2	26.4	4.58	6.72
	Banryu	*JP 11024*	1208	25.9	20.3	27.8	103	21.5	92.2	3.26	6.65	4.66	11.2	33.5	4.48	3.44
	Yusuhara	*JP 11025*	3048	10.7	9.66	8.57	21.8	7.55	18.1	1.07	2.39	2.00	2.84	16.8	4.77	1.24
	Hedo	*JP 11027*	2837	31.2	6.30	7.17	496	18.8	418	10.6	11.5	2.44	47.9	7.49	5.13	7.27
	Ogasawara	*JP 11018*	1572	10.2	3.35	2.88	134	5.18	114	2.71	3.46	1.01	13.6	4.63	5.33	2.26
	Tokyo	*JP 11057*	1635	15.6	13.8	18.8	35.8	24.3	29.5	0.888	4.21	3.57	3.78	14.4	4.84	1.75
Lao PDR	Vientiane	*LA 11051*	1322	2.41	***	5.55	4.46	***	***	***	***	***	***	0.351	6.46	0.411
Malaysia	Petaling Jaya	*MY 11029*	3412	17.0	16.8	43.8	7.98	1.29	3.85	1.33	3.96	3.88	0.497	61.4	4.21	3.10
	Tanah Rata	*MY 11030*	2846	4.59	4.50	3.78	3.19	5.67	1.51	1.68	2.37	2.33	<0.4	10.9	4.96	0.780
	Danum Valley	*MY 11053*	2958	2.28	2.11	<1	4.16	<1	2.87	1.21	0.800	0.750	<0.4	6.58	5.18	0.416
	Kuching	*MY 11060*	3796	4.67	4.35	3.82	6.78	6.16	5.21	0.924	3.42	3.32	<0.4	4.84	5.32	0.489
Mongolia	Ulaanbaatar	*MN 11031*	170	***	***	***	***	***	***	***	***	***	***	1.31	5.88	1.71
	Terelj	*MN 11032*	117	***	***	***	***	***	***	***	***	***	***	1.81	5.74	1.33
Myanmar	Yangon	*MM 11056*	2570	7.48	6.15	8.31	26.6	17.7	22.1	6.78	7.79	7.32	6.56	0.323	6.49	1.30
Philippines	Mt. Sto. Tomas	*PH 11055*	5730	7.26	6.64	6.10	6.50	3.42	10.3	0.885	14.0	13.8	2.90	1.12	5.95	0.500
Republic	Kanghwa	*KR 11035*	748	27.2	24.4	36.4	67.5	49.4	50.7	6.39	8.64	7.54	5.50	24.4	4.61	2.76
of Korea	Cheju	*KR 11036*	1199	36.7	14.1	19.3	455	33.4	375	15.7	11.2	3.15	34.5	4.95	5.31	7.05
	Imsil	*KR 11037*	1400	19.4	16.3	26.2	88.8	39.5	51.8	47.5	4.31	3.40	3.05	7.82	5.11	2.58
Russia	Mondy	*RU 11038*	105	7.16	6.90	7.99	5.95	19.0	4.32	9.05	12.1	12.1	4.06	2.37	5.62	0.864
	Listvyanka	*RU 11039*	343	21.4	21.1	19.3	3.28	26.7	4.20	2.00	11.7	11.7	2.53	16.7	4.78	1.51
	Irkutsk	*RU 11040*	443	37.9	37.3	18.3	15.1	34.1	9.96	4.99	31.3	31.1	6.49	11.6	4.93	2.16
	Primorskaya	*RU 11041*	922	20.8	19.4	23.4	29.9	27.0	23.1	5.09	12.2	11.7	4.43	8.55	5.07	1.56
Thailand	Bangkok	*TH 11042*	1799	10.7	10.3	27.6	8.33	44.1	6.07	1.52	13.5	13.3	1.35	2.08	5.68	1.26
	Samutprakarn	*TH 11043*	953	10.2	9.74	12.5	9.92	34.1	7.89	1.52	8.39	8.22	1.53	0.679	6.17	0.902
	Pathumthani	*TH 11044*	1563	7.93	7.10	18.8	15.9	37.9	14.1	1.64	20.6	20.3	3.14	3.60	5.44	1.17
	Khanchanaburi	*TH 11045*	2390	3.72	3.14	6.86	11.6	8.95	9.71	1.57	17.5	17.3	2.76	0.964	6.02	0.817
	Chiang Mai	*TH 11046*	1111	4.76	4.53	7.91	4.14	19.6	3.80	1.26	7.77	7.69	0.842	0.789	6.10	0.512
	Nakhon Ratchasima	*TH 11054*	1126	6.64	6.42	11.2	6.36	25.7	3.71	1.26	3.74	3.66	0.423	8.58	5.07	0.756
Vietnam	Hanoi	*VN 11047*	1798	28.8	28.6	25.2	6.58	60.2	4.19	3.00	15.0	15.0	2.15	2.39	5.62	1.56
	Hoa Binh	*VN 11048*	1915	17.1	16.9	15.4	4.65	30.0	3.03	1.50	11.1	11.0	2.17	2.35	5.63	0.940
	Cuc Phuong	*VN 11061*	2018	24.3	23.1	20.1	20.3	23.9	20.0	6.06	30.6	30.2	7.07	3.68	5.43	1.73
	Da Nang	*VN 11062*	1682	19.6	16.1	4.79	83.1	21.3	63.2	11.5	16.9	15.5	9.19	3.66	5.44	2.10

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

[***] *Not measured*

Table 3.58 Annual wet depositions in 2012

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*	17.0	16.6	17.4	10.8	34.9	5.90	1.23	17.4	17.3	1.98	1.12
China	Haifu	*CN*	*11058*	103	102	74.6	11.5	118	6.10	6.64	58.5	58.3	6.94	58.1
	Jinyunshan	*CN*	*11003*	125	125	70.8	11.7	125	6.32	7.69	59.5	59.4	5.85	82.0
	Shizhan	*CN*	*11004*	42.9	42.8	19.4	6.28	42.7	2.20	2.23	50.1	50.1	1.36	0.217
	Jiwozi	*CN*	*11007*	36.9	35.8	18.5	12.2	10.4	17.3	3.80	79.3	78.9	17.3	0.03
	Hongwen	*CN*	*11008*	29.7	28.8	32.5	22.1	39.9	15.0	2.64	16.1	15.8	4.34	28.6
	Xiaoping	*CN*	*11009*	30.2	29.5	34.4	18.8	39.2	10.9	4.48	25.9	25.6	4.46	20.3
	Xiang Zhou	*CN*	*11010*	22.6	18.4	23.1	65.8	44.2	69.7	14.0	16.3	14.8	10.5	11.7
Indonesia	Jakarta	*ID*	*11012*	56.0	53.9	44.2	35.3	62.9	34.5	7.79	32.6	31.9	8.06	47.4
	Serpong	*ID*	*11013*	26.0	25.4	28.2	21.6	63.6	9.71	3.87	8.31	8.10	1.80	11.1
	Kototabang	*ID*	*11014*	16.0	14.4	12.3	25.7	22.4	25.4	14.6	20.7	20.2	3.69	25.7
	Bandung	*ID*	*11015*	55.2	53.8	45.0	22.1	112	22.5	7.01	27.8	27.4	6.61	7.25
	Maros	*ID*	*11059*	21.5	18.7	22.2	48.9	34.5	48.8	8.57	39.4	38.4	17.2	5.90
Japan	Rishiri	*JP*	*11016*	32.6	12.3	15.7	389	13.3	343	7.51	9.89	2.58	37.8	23.6
	Ochiishi	*JP*	*11050*	22.0	7.68	8.54	267	10.7	239	5.89	6.41	1.31	26.6	13.3
	Tappi	*JP*	*11017*	26.2	16.3	20.4	191	16.3	166	4.66	9.45	5.23	18.2	24.1
	Sado-seki	*JP*	*11019*	38.6	19.9	26.0	380	20.1	319	8.58	14.8	8.03	38.1	24.1
	Happo	*JP*	*11021*	23.2	22.0	23.3	23.3	21.5	19.2	1.73	8.29	7.87	4.60	26.6
	Ijira	*JP*	*11022*	38.9	35.5	47.7	70.2	42.2	55.2	1.74	7.16	5.99	7.27	58.7
	Oki	*JP*	*11023*	49.1	21.2	28.0	532	22.0	462	11.9	15.7	5.71	53.4	34.2
	Banryu	*JP*	*11024*	31.2	24.5	33.6	125	25.9	111	3.93	8.03	5.62	13.5	40.5
	Yusuhara	*JP*	*11025*	32.8	29.4	26.1	66.5	23.0	55.1	3.25	7.28	6.09	8.65	51.3
	Hedo	*JP*	*11027*	88.5	17.9	20.3	1407	53.5	1186	30.2	32.6	6.93	136	21.3
	Ogasawara	*JP*	*11018*	16.0	5.27	4.53	210	8.14	179	4.26	5.44	1.58	21.3	7.28
	Tokyo	*JP*	*11057*	25.5	22.6	30.7	58.5	39.8	48.2	1.45	6.88	5.84	6.18	23.5
Lao PDR	Vientiane	*LA*	*11051*	3.19	***	7.34	5.89	***	***	***	***	***	***	0.463
Malaysia	Petaling Jaya	*MY*	*11029*	58.0	57.3	150	27.2	4.40	13.1	4.53	13.5	13.2	1.69	210
	Tanah Rata	*MY*	*11030*	13.1	12.8	10.8	9.07	16.1	4.29	4.78	6.73	6.64	0.528	31.0
	Danum Valley	*MY*	*11053*	6.75	6.24	2.83	12.3	1.90	8.49	3.59	2.37	2.22	0.830	19.5
	Kuching	*MY*	*11060*	17.7	16.5	14.5	25.7	23.4	19.8	3.51	13.0	12.6	1.04	18.4
Mongolia	Ulaanbaatar	*MN*	*11031*	***	***	***	***	***	***	***	***	***	***	0.224
	Terelj	*MN*	*11032*	***	***	***	***	***	***	***	***	***	***	0.211
Myanmar	Yangon	*MM*	*11056*	19.2	15.8	21.4	68.3	45.6	56.7	17.4	20.0	18.8	16.9	0.831
Philippines	Mt. Sto. Tomas	*PH*	*11055*	41.6	38.1	34.9	37.2	19.6	58.9	5.07	80.4	79.1	16.6	6.41
Republic	Kanghwa	*KR*	*11035*	20.3	18.3	27.2	50.5	36.9	37.9	4.78	6.46	5.64	4.11	18.3
of Korea	Cheju	*KR*	*11036*	43.9	16.9	23.1	545	40.1	449	18.8	13.4	3.78	41.4	5.93
	Imsil	*KR*	*11037*	27.2	22.8	36.7	124	55.4	72.6	66.5	6.03	4.76	4.27	10.9
Russia	Mondy	*RU*	*11038*	0.753	0.726	0.841	0.626	2.00	0.455	0.952	1.28	1.27	0.427	0.250
	Listvyanka	*RU*	*11039*	7.33	7.25	6.64	1.13	9.17	1.44	0.686	4.03	4.00	0.867	5.73
	Irkutsk	*RU*	*11040*	16.8	16.5	8.09	6.69	15.1	4.41	2.21	13.9	13.8	2.88	5.15
	Primorskaya	*RU*	*11041*	19.1	17.9	21.6	27.5	24.9	21.3	4.69	11.2	10.8	4.08	7.88
Thailand	Bangkok	*TH*	*11042*	19.3	18.6	49.7	15.0	79.4	10.9	2.74	24.2	24.0	2.43	3.74
	Samutprakarn	*TH*	*11043*	9.73	9.28	11.9	9.45	32.5	7.51	1.45	7.99	7.83	1.46	0.647
	Pathumthani	*TH*	*11044*	12.4	11.1	29.3	24.9	59.2	22.0	2.57	32.2	31.8	4.91	5.62
	Khanchanaburi	*TH*	*11045*	8.89	7.49	16.4	27.8	21.4	23.2	3.75	41.7	41.2	6.59	2.30
	Chiang Mai	*TH*	*11046*	5.28	5.04	8.78	4.59	21.8	4.22	1.40	8.64	8.54	0.936	0.876
	Nakhon Ratchasima	*TH*	*11054*	7.48	7.23	12.6	7.17	29.0	4.18	1.42	4.21	4.13	0.477	9.66
Vietnam	Hanoi	*VN*	*11047*	51.8	51.4	45.3	11.8	108	7.54	5.39	27.0	26.9	3.87	4.29
	Hoa Binh	*VN*	*11048*	32.7	32.4	29.5	8.91	57.4	5.81	2.88	21.2	21.0	4.15	4.50
	Cuc Phuong	*VN*	*11061*	49.0	46.5	40.5	41.0	48.3	40.4	12.2	61.8	60.9	14.3	7.42
	Da Nang	*VN*	*11062*	32.9	27.1	8.06	140	35.8	106	19.3	28.4	26.1	15.4	6.16

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

[***] *Not measured*

Table 3.59 Data completeness for annual summaries in 2012 (%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*	100	100	100	100	100	100	100	100	100	100	100	100	100	100
China	Haifu	*CN 11058*	100	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
	Jinyunshan	*CN 11003*	100	96.9	96.9	96.9	96.9	96.9	96.9	96.9	96.9	96.9	96.9	96.8	96.8	96.8
	Shizhan	*CN 11004*	100	100	100	100	100	100	100	100	100	100	100	100	100	100
	Jiwozi	*CN 11007*	100	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
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	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
	Ochiishi	*JP 11050*	98.1	80.6	80.6	80.6	80.6	80.6	80.6	80.6	80.6	80.6	80.6	79.4	79.4	79.4
	Tappi	*JP 11017*	100	90.8	90.8	90.8	90.8	91.0	90.8	91.2	91.2	90.8	91.0	90.4	90.4	90.4
	Sado-seki	*JP 11019*	95.6	95.7	95.7	95.7	95.7	95.7	95.7	95.7	95.7	95.7	95.7	94.4	94.4	94.4
	Happo	*JP 11021*	99.7	90.3	90.3	90.3	90.3	90.3	90.3	90.3	90.3	90.3	90.3	89.2	89.2	89.2
	Ijira	*JP 11022*	100	100	100	100	100	100	100	100	100	100	100	100	100	100
	Oki	*JP 11023*	100	91.1	91.1	91.1	91.1	91.1	91.1	91.1	91.1	91.1	91.1	91.1	91.1	90.7
	Banryu	*JP 11024*	100	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.2
	Yusuhara	*JP 11025*	100	82.0	82.0	82.0	82.0	82.0	82.0	82.0	82.0	82.0	82.0	82.0	82.0	82.0
	Hedo	*JP 11027*	95.9	70.8	70.8	70.8	70.8	70.8	70.8	70.8	70.8	70.8	70.8	70.9	70.9	70.9
	Ogasawara	*JP 11018*	100	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.0	99.0	99.0
	Tokyo	*JP 11057*	100	98.4	98.4	98.4	98.4	98.4	98.4	98.4	98.4	98.4	98.4	97.9	97.9	97.9
Lao PDR	Vientiane	*LA 11051*	57.1	100	0.0	100	100	0.0	0.0	0.0	0.0	0.0	0.0	100	100	100
Malaysia	Petaling Jaya	*MY 11029*	100	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.1	99.1	99.1
	Tanah Rata	*MY 11030*	100	99.0	99.0	99.0	99.0	99.0	99.0	99.0	99.0	99.0	99.0	98.5	98.5	98.5
	Danum Valley	*MY 11053*	100	92.1	92.1	92.1	92.1	92.1	92.1	92.1	92.1	92.1	92.1	92.1	92.1	92.1
	Kuching	*MY 11060*	100	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
Mongolia	Ulaanbaatar	*MN 11031*	100	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100	100	100
	Terelj	*MN 11032*	100	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100	100	100
Myanmar	Yangon	*MM 11056*	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Philippines	Mt. Sto. Tomas	*PH 11055*	100	92.7	92.7	92.7	92.7	92.7	92.7	92.7	92.7	92.7	92.7	92.7	92.7	92.7
Republic	Kanghwa	*KR 11035*	100	100	100	100	100	100	100	100	100	100	100	100	100	100
of Korea	Cheju	*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	100	100	100
	Irkutsk	*RU 11040*	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
	Primorskaya	*RU 11041*	100	99.2	99.2	99.2	99.2	99.2	99.2	99.2	99.2	99.2	99.2	100	100	100
Thailand	Bangkok	*TH 11042*	100	97.7	97.7	97.7	97.7	97.7	97.7	97.7	97.7	97.7	97.7	97.7	97.7	97.7
	Samutprakarn	*TH 11043*	100	87.7	87.7	87.7	87.7	87.7	87.7	87.7	87.7	87.7	87.7	87.7	87.7	87.7
	Pathumthani	*TH 11044*	100	100	100	100	100	100	100	100	100	100	100	100	100	100
	Khanchanaburi	*TH 11045*	100	93.3	93.3	93.3	93.3	93.3	93.3	93.3	93.3	93.3	93.3	93.3	93.3	93.3
	Chiang Mai	*TH 11046*	100	100	100	99.2	99.2	100	100	100	100	100	100	99.8	99.8	99.8
	Nakhon Ratchasima	*TH 11054*	100	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	98.6	98.6	98.6
Vietnam	Hanoi	*VN 11047*	100	100	100	100	100	100	100	100	100	100	100	100	100	100
	Hoa Binh	*VN 11048*	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
	Cuc Phuong	*VN 11061*	100	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
	Da Nang	*VN 11062*	100	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

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

[***] *Not measured*

Table 3.60 Results of ion balance and conductivity agreement check in 2012

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*	29	29	13	44.8	29	25	86.2	29	11	37.9
China	Haifu *	*CN 11058*	124	123	111	90.2	123	118	95.9	123	106	86.2
	Jinyunshan *	*CN 11003*	111	107	102	95.3	107	101	94.4	107	96	89.7
	Shizhan	*CN 11004*	35	35	7	20.0	35	18	51.4	35	5	14.3
	Jiwozi	*CN 11007*	51	51	4	7.8	51	36	70.6	51	2	3.9
	Hongwen *	*CN 11008*	61	61	46	75.4	61	55	90.2	61	42	68.9
	Xiaoping *	*CN 11009*	53	53	28	52.8	53	44	83.0	53	24	45.3
	Xiang Zhou *	*CN 11010*	67	67	33	49.3	67	49	73.1	67	31	46.3
Indonesia	Jakarta	*ID 11012*	32	32	16	50.0	32	24	75.0	32	15	46.9
	Serpong	*ID 11013*	64	64	54	84.4	64	62	96.9	64	54	84.4
	Kototabang	*ID 11014*	54	54	11	20.4	54	44	81.5	54	9	16.7
	Bandung	*ID 11015*	96	96	32	33.3	96	87	90.6	96	31	32.3
	Maros	*ID 11059*	36	36	2	5.6	36	30	83.3	36	2	5.6
Japan	Rishiri	*JP 11016*	235	172	170	98.8	172	172	100	172	170	98.8
	Ochiishi *	*JP 11050*	139	92	83	90.2	92	89	96.7	92	82	89.1
	Tappi	*JP 11017*	123	105	105	100	105	105	100	105	105	100
	Sado-seki	*JP 11019*	159	113	111	98.2	113	112	99.1	113	110	97.3
	Happo	*JP 11021*	201	157	156	99.4	157	157	100	157	156	99.4
	Ijira	*JP 11022*	50	49	49	100	49	49	100	49	49	100
	Oki	*JP 11023*	166	139	139	100	129	129	100	129	129	100
	Banryu	*JP 11024*	46	46	46	100	45	45	100	45	45	100
	Yusuhara	*JP 11025*	178	174	171	98.3	174	174	100	174	171	98.3
	Hedo	*JP 11027*	191	172	166	96.5	170	169	99.4	170	164	96.5
	Ogasawara	*JP 11018*	215	146	143	97.9	146	145	99.3	146	142	97.3
	Tokyo *	*JP 11057*	155	123	119	96.7	123	122	99.2	123	119	96.7
Lao PDR	Vientiane	*LA 11051*	31	0	***	***	0	***	***	0	***	***
Malaysia	Petaling Jaya	*MY 11029*	52	42	32	76.2	42	41	97.6	42	31	73.8
	Tanah Rata	*MY 11030*	51	44	29	65.9	44	37	84.1	44	24	54.5
	Danum Valley	*MY 11053*	47	45	41	91.1	45	36	80.0	45	34	75.6
	Kuching	*MY 11060*	50	50	41	82.0	50	47	94.0	50	39	78.0
Mongolia	Ulaanbaatar	*MN 11031*	28	0	***	***	0	***	***	0	***	***
	Terelj	*MN 11032*	34	0	***	***	0	***	***	0	***	***
Myanmar	Yangon	*MM 11056*	33	33	6	18.2	33	25	75.8	33	4	12.1
Philippines	Mt. Sto. Tomas	*PH 11055*	32	29	7	24.1	29	27	93.1	29	6	20.7
Republic	Kanghwa	*KR 11035*	27	27	27	100	27	23	85.2	27	23	85.2
of Korea	Cheju	*KR 11036*	61	61	61	100	61	56	91.8	61	56	91.8
	Imsil	*KR 11037*	76	76	75	98.7	76	65	85.5	76	64	84.2
Russia	Mondy *	*RU 11038*	7	7	7	100	7	7	100	7	7	100
	Listvyanka *	*RU 11039*	47	47	47	100	47	47	100	47	47	100
	Irkutsk *	*RU 11040*	107	106	93	87.7	106	104	98.1	106	92	86.8
	Primorskaya *	*RU 11041*	80	66	66	100	66	66	100	66	66	100
Thailand	Bangkok *	*TH 11042*	72	70	23	32.9	70	63	90.0	70	19	27.1
	Samutprakarn *	*TH 11043*	64	57	11	19.3	57	44	77.2	57	5	8.8
	Pathumthani *	*TH 11044*	99	98	7	7.1	98	92	93.9	98	5	5.1
	Khanchanaburi *	*TH 11045*	149	123	94	76.4	123	65	52.8	123	46	37.4
	Chiang Mai *	*TH 11046*	110	104	15	14.4	104	93	89.4	104	13	12.5
	Nakhon Ratchasima *	*TH 11054*	102	86	65	75.6	86	75	87.2	86	58	67.4
Vietnam	Hanoi *	*VN 11047*	42	42	31	73.8	42	42	100	42	31	73.8
	Hoa Binh *	*VN 11048*	33	33	27	81.8	33	33	100	33	27	81.8
	Cuc Phuong *	*VN 11061*	36	31	31	100	31	31	100	31	31	100
	Da Nang *	*VN 11062*	30	28	27	96.4	28	28	100	28	27	96.4

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 caluculated 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 for both R_1 and R_2*
*Sites marked with **
: *R_1 and R_2, calculated including concentrations of additional measured constituents*
[***] *Not measured*

Table 3.61 **Annual precipitation from 2000 to 2012**

unit: mm y^{-1}

Country	Name of sites	Code		2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Cambodia	Phnom Penh	*KH*	*11052*					419	1308	949	1374	1834	1326	1851	1277	1617
China	Guanyinqiac	*CN*	*11001*	1081	752	1445	987	1387	1077	842	1299					
	Nanshan	*CN*	*11002*	1259												
	Haifu	*CN*	*11058*									1010	1066	977	810	1010
	Jinyunshar	*CN*	*11003*		710	1607	1233	1518	1461	1196	1645	1213	1098	979	848	1005
	Shizhan	*CN*	*11004*	559	364	349	1273	601	509	483	527	385	592	459	659	393
	Weishuiyuar	*CN*	*11005*	447	69.3	232	1302	466	439	316						
	Jiwozi	*CN*	*11007*	829	209	142	611	1020	362	234	100	438	628	1155	971	390
	Hongwen	*CN*	*11008*	1517	296	1568	1301	1065	1702	2134	1347	945	737	1530	843	924
	Xiaoping	*CN*	*11009*	1566	2682	2171	1768	1958	2921	2352	1044	2000	1134	1518	1531	1291
	Xiang Zhou	*CN*	*11010*	2031	1990	1731	1726	1340	1179	1529	1442	2815	2010	1857	1259	1518
	Zhuxiandong	*CN*	*11011*	1779	2571	1581	1755	1277	1062	887	***	2311	1580	1853	1146	***
Indonesia	Jakarta	*ID*	*11012*	1577	1237	1572	1617	1469	2125	1481	2171	1717	1557	2120	990	2722
	Serpong	*ID*	*11014*	***	1607	2505	2143	1462	824	1603	2015	2370	1344	1426	830	894
	Kototabang	*ID*	*11013*	2340	1209	1798	3127	2111	2194	1248	2772	2481	2656	2370	2193	2639
	Bandung	*ID*	*11015*	893	2605	2541	1606	894	1749	1311	1969	2334	2683	2606	1530	2084
	Maros	*ID*	*11059*									3037	3237	2663	3632	2451
Japan	Rishiri	*JP*	*11016*	770	615	957	709	945	961	1294	883	828	1054	1072	1232	1172
	Ochiishi	*JP*	*11050*				782	648	822	997	866	730	1580	1085	818	871
	Tappi	*JP*	*11017*	1049	1082	1329	1150	1473	1240	964	1055	824	1337	1555	1144	1178
	Sado-seki	*JP*	*11019*	1068	971	1433	1126	1539	1143	1264	1163	1021	1037	1368	1387	1296
	Happo	*JP*	*11021*	2188	2345	2607	2461	3088	2997	2755	2329	1645	2352	2621	3076	2002
	Ijira	*JP*	*11022*	2685	2237	2648	2967	3424	2569	2829	2263	2250	2876	3847	3068	2862
	Oki	*JP*	*11023*	1209	1246	1571	1597	1409	1313	1396	1160	1110	1123	1452	1534	1296
	Banryu	*JP*	*11024*	1565	1788	1303	1752	1738	1290	1960	1273	1268	1735	1471	1432	1208
	Yusuhara	*JP*	*11025*	2801	2080	2346	2839	3970	2321	3160	2373	2189	2068	2476	3401	3048
	Hedo	*JP*	*11027*	2907	2126	2032	1393	1778	1780	1863	2701	1961	1975	2643	1766	2837
	Ogasawara	*JP*	*11018*	1985	1806	1331	1398	1171	2050	1585	1567	1674	1675	1856	1297	1572
	Tokyo	*JP*	*11057*								1080	1860	1727	1656	1388	1635
Lao PDR	Vientiane	*LA*	*11051*				88.6	442	665	709	1399	1668	181	***	***	1322
Malaysia	Petaling Jaya	*MY*	*11029*	3417	3085	2660	3041	2996	2848	4009	3021	3747	2968	3517	3607	3412
	Tanah Rata	*MY*	*11030*	3127	2626	2783	3010	2415	2886	2785	2968	3925	3077	2451	3293	2846
	Danum Valley	*MY*	*11053*						1256	3005	2988	2999	3391	2370	3787	2958
	Kuching	*MY*	*11060*									4286	4671	4645	4632	3796
Mongolia	Ulaanbaatar	*MN*	*11031*	197	166	179	297	83.4	150	188	126	155	228	153	163	170
	Terelj	*MN*	*11032*	208	88.6	246	312	207	246	215	185	206	111	130	144	117
Myanmar	Yangon	*MM*	*11056*								3981	6375	3010	2280	3151	2570
Philippines	Metro Manila	*PH*	*11033*	4036	2291	2975	2205	2164	2377	2696	3505	2381	3782	2676	3657	***
	Los Baños	*PH*	*11034*	2635	1817	1702	1608	1743	1643	2222	3097	1894	2900	2068	2384	***
	Mt. Sto. Tomas	*PH*	*11055*							431	3379	5078	4727	3610	4608	5730
Republic of Korea	Kanghwa	*KR*	*11035*	1118	1139	824	1573	878	811	1092	883	1546	1266	1570	1476	748
	Cheju	*KR*	*11036*	1058	1114	1017	1291	1124	699	1127	1244	843	1039	1003	1076	1199
	Imsil	*KR*	*11037*		1299	993	1876	1207	1248	709	1344	854	1069	1642	1493	1400
Russia	Mondy	*RU*	*11038*	305	319	204	409	360	286	410	351	206	119	90.2	73.5	105
	Listvyanka	*RU*	*11039*	442	494	360	540	551	452	311	408	391	312	327	478	343
	Irkutsk	*RU*	*11040*	534	468	303	457	553	442	357	478	527	430	375	329	443
	Primorskaya	*RU*	*11041*			835	323	692	737	623	989	553	864	673	621	922
Thailand	Bangkok	*TH*	*11042*	1148	1174	1300	1385	1211	2006	1589	1579	1776	2072	2023	2171	1799
	Samutprakarn	*TH*	*11043*	978				1260	1625	1420	1871	1734	1989	1880	2103	953
	Pathumthani	*TH*	*11044*	956	1349	948	1658	976	1268	1608	1381	1670	1314	1763	1562	1563
	Khanchanabur	*TH*	*11045*	881	1516	2200	1627	1392	2043	2518	1704	1962	1998	1626	1941	2390
	Chiang Mai	*TH*	*11046*		1084	1473	808	1151	1430	1420	937	1286	1052	1167	1614	1111
	Nakhon Ratchasima	*TH*	*11054*							1190	1386	1722	1259	1627	1509	1126
Vietnam	Hanoi	*VN*	*11047*	1256	2255	1416	1586	1575	1761	1231	1659	2267	1609	1236	1817	1798
	Hoa Binh	*VN*	*11048*	1894	2223	1626	1691	1831	2279	1546	1949	1978	1357	1370	1760	1915
	Cuc Phuong	*VN*	*11061*										2266	1654	1853	2018
	Da Nang	*VN*	*11062*										2966	1690	3639	1682

[***]: No data or not measured

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

Black column: Monitoring was not carried out

Table 3.62 Precipitation amount-weighted annual average concentrations of SO_4^{2-} from 2000 to 2012

unit: μmol L^{-1}

Country	Name of sites	Code		2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Cambodia	Phnom Penh	*KH*	*11052*					***	5.68	5.31	22.5	11.6	11.6	7.37	9.04	10.5
China	Guanyinqiac	*CN*	*11001*	152	205	114	110	165	186	177	130					
	Nanshan	*CN*	*11002*	130												
	Haifu	*CN*	*11058*									144	99.3	139	142	102
	Jinyunshar	*CN*	*11003*		124	78.3	83.2	109	102	141	90.4	120	114	151	141	124
	Shizhan	*CN*	*11004*	356	470	850	203	173	126	274	183	191	136	100.0	110	109
	Weishuiyuar	*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	31.8	62.6	94.5
	Hongwen	*CN*	*11008*	20.2	56.5	42.8	36.9	69.1	47.2	28.6	75.5	31.7	26.1	26.7	31.3	32.2
	Xiaoping	*CN*	*11009*	14.6	18.3	16.7	23.6	27.2	20.2	16.9	28.0	29.2	28.2	27.3	24.9	23.4
	Xiang Zhou	*CN*	*11010*	22.4	15.7	27.9	20.5	18.7	23.8	29.2	21.7	16.5	18.2	19.8	15.5	14.9
	Zhuxiandong	*CN*	*11011*	48.0	19.3	32.0	18.5	26.9	29.5	19.3	***	21.5	21.0	17.1	20.4	***
Indonesia	Jakarta	*ID*	*11012*	58.7	62.7	38.5	66.7	48.6	40.3	26.2	27.9	22.7	19.4	21.9	28.7	20.6
	Serpong	*ID*	*11014*	***	38.2	25.7	23.1	28.1	33.3	28.2	30.5	27.8	23.1	24.4	33.6	29.0
	Kototabang	*ID*	*11013*	3.69	4.68	7.47	9.18	5.23	5.50	7.65	6.99	2.91	4.72	6.33	7.77	6.04
	Bandung	*ID*	*11015*	67.4	33.7	27.7	20.4	27.7	35.3	26.8	26.4	28.0	29.2	27.0	30.8	26.5
	Maros	*ID*	*11059*									5.38	6.96	10.8	8.26	8.77
Japan	Rishiri	*JP*	*11016*	39.0	31.0	27.3	23.5	28.6	27.9	22.9	28.3	29.4	25.9	23.4	21.2	27.8
	Ochiishi	*JP*	*11050*				19.1	34.5	22.6	27.7	21.3	18.7	16.7	23.0	15.2	25.3
	Tappi	*JP*	*11017*	21.9	22.9	22.7	21.8	26.2	29.6	35.8	29.6	28.3	23.1	21.3	27.5	22.3
	Sado-seki	*JP*	*11019*	34.4	41.0	28.2	16.5	17.7	34.2	28.3	34.9	31.0	33.0	32.3	24.5	29.8
	Happo	*JP*	*11021*	13.3	11.7	7.59	7.53	9.13	12.0	10.3	12.2	10.9	10.1	6.11	7.00	11.6
	Ijira	*JP*	*11022*	19.9	22.0	19.7	19.1	14.0	18.9	20.6	19.0	18.2	15.4	11.1	13.0	13.6
	Oki	*JP*	*11023*	40.5	33.8	35.3	21.5	29.3	55.7	29.5	36.3	35.6	37.8	40.8	45.6	37.9
	Banryu	*JP*	*11024*	15.6	19.0	19.0	17.4	19.8	26.9	22.0	27.9	25.8	20.9	21.0	21.1	25.9
	Yusuhara	*JP*	*11025*	11.1	9.16	11.2	9.33	6.72	12.1	10.1	9.50	10.2	11.7	9.64	7.02	10.7
	Hedo	*JP*	*11027*	32.2	15.9	36.9	35.2	77.0	36.0	19.2	14.4	14.2	13.1	20.9	20.5	31.2
	Ogasawara	*JP*	*11018*	11.4	11.4	18.1	18.0	10.7	13.1	10.2	12.7	8.97	16.5	15.0	15.7	10.2
	Tokyo	*JP*	*11057*								17.1	19.6	16.0	10.9	15.9	15.6
Lao PDR	Vientiane	*LA*	*11051*				***	***	***	3.46	4.67	5.06	4.05	***	***	2.41
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	17.1	22.5	17.0
	Tanah Rata	*MY*	*11030*	4.12	3.73	4.62	3.79	4.03	5.58	4.43	3.52	3.28	3.27	3.25	5.05	4.59
	Danum Valley	*MY*	*11053*						4.40	3.41	2.29	2.49	2.82	5.08	1.96	2.28
	Kuching	*MY*	*11060*									4.14	3.78	3.57	4.07	4.67
Mongolia	Ulaanbaatar	*MN*	*11031*	24.3	25.2	24.7	19.5	22.1	26.7	25.4	37.1	27.9	19.9	22.2	28.1	***
	Terelj	*MN*	*11032*	16.4	9.72	15.1	8.26	13.3	17.5	23.8	25.0	16.5	16.5	30.5	23.6	***
Myanmar	Yangon	*MM*	*11056*								***	***	8.01	4.52	6.63	7.48
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	20.3	18.7	***
	Los Baños	*PH*	*11034*	10.5	15.6	16.1	7.08	8.42	9.86	10.8	8.38	18.0	8.82	7.39	8.57	***
	Mt. Sto. Tomas	*PH*	*11055*							1.37	5.74	3.47	5.04	4.94	4.69	7.26
Republic	Kanghwa	*KR*	*11035*	31.6	25.0	34.5	26.1	44.8	46.8	37.0	41.2	27.9	29.2	26.3	27.2	27.2
of Korea	Cheju	*KR*	*11036*	23.2	20.7	28.0	22.7	23.8	34.3	28.1	37.9	26.2	25.3	19.3	25.5	36.7
	Imsil	*KR*	*11037*		16.4	22.9	16.3	16.5	22.8	26.8	28.8	21.0	19.6	19.5	20.7	19.4
Russia	Mondy	*RU*	*11038*	7.18	11.0	10.8	8.51	6.85	5.37	4.70	9.31	7.13	7.82	6.80	4.53	7.16
	Listvyanka	*RU*	*11039*	15.4	13.4	18.2	19.1	19.2	17.3	19.0	17.1	21.3	19.3	20.7	22.1	21.4
	Irkutsk	*RU*	*11040*	30.1	29.6	34.2	26.3	26.6	27.8	26.0	33.6	38.5	31.2	33.5	34.4	37.9
	Primorskaya	*RU*	*11041*			29.0	43.1	37.2	38.2	46.0	30.8	40.6	22.6	31.9	14.0	20.8
Thailand	Bangkok	*TH*	*11042*	21.6	18.2	18.6	18.5	16.3	19.5	22.3	17.2	18.0	12.7	12.0	10.7	10.7
	Samutprakarn	*TH*	*11043*	25.5				16.5	19.1	20.7	14.8	15.7	15.1	15.6	7.67	10.2
	Pathumthani	*TH*	*11044*	19.6	17.2	15.0	12.4	17.5	13.2	13.4	12.0	10.6	8.89	8.01	9.45	7.93
	Khanchanabur	*TH*	*11045*	3.64	5.22	5.62	3.56	3.39	2.80	4.04	2.47	3.78	3.60	1.79	5.11	3.72
	Chiang Mai	*TH*	*11046*		2.79	4.46	4.13	6.90	5.90	4.54	6.00	4.96	4.30	3.32	3.24	4.76
	Nakhon Ratchasima	*TH*	*11054*							8.24	6.44	7.36	6.44	7.04	5.30	6.64
Vietnam	Hanoi	*VN*	*11047*	30.1	14.0	33.7	30.1	37.0	51.4	46.9	33.6	20.2	27.4	35.4	30.7	28.8
	Hoa Binh	*VN*	*11048*	16.3	14.7	18.8	22.5	29.4	17.8	24.9	17.0	13.6	16.1	26.3	18.0	17.1
	Cuc Phuong	*VN*	*11061*										18.5	20.3	37.6	24.3
	Da Nang	*VN*	*11062*										18.8	16.4	21.1	19.6

[***]: 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 3.63 Precipitation amount-weighted annual average concentrations of nss-SO_4^{2-} from 2000 to 2012

unit: μmol L^{-1}

Country	Name of sites	Code		2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Cambodia	Phnom Penh	*KH*	*11052*					***	***	5.08	22.0	8.67	11.2	7.18	8.83	10.3
China	Guanyinqiac	*CN*	*11001*	151	205	114	109	165	185	177	130					
	Nanshan	*CN*	*11002*	130												
	Haifu	*CN*	*11058*									144	99.0	138	142	101
	Jinyunshar	*CN*	*11003*		123	78.0	82.9	109	101	140	90.0	120	113	151	140	124
	Shizhan	*CN*	*11004*	353	460	835	199	171	125	271	182	190	135	99.5	109	109
	Weishuiyuar	*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	31.4	62.1	91.8
	Hongwen	*CN*	*11008*	18.8	55.9	39.4	34.8	66.0	44.1	27.0	74.0	30.3	24.6	25.5	30.2	31.2
	Xiaoping	*CN*	*11009*	14.1	17.6	15.7	22.1	26.4	19.6	16.1	27.2	27.8	27.3	26.2	24.2	22.9
	Xiang Zhou	*CN*	*11010*	19.9	14.6	25.4	18.3	16.7	21.5	27.0	20.5	14.4	15.8	18.6	13.5	12.1
	Zhuxiandong	*CN*	*11011*	46.3	18.0	29.3	16.4	23.8	26.1	18.0	***	19.0	18.3	15.9	17.7	***
Indonesia	Jakarta	*ID*	*11012*	55.6	60.3	36.4	65.1	46.4	38.9	25.4	27.0	22.1	18.8	21.4	28.0	19.8
	Serpong	*ID*	*11014*	***	36.8	24.2	22.4	26.9	32.3	27.7	29.8	27.2	22.5	23.9	33.0	28.4
	Kototabang	*ID*	*11013*	***	4.41	7.09	8.59	4.58	5.16	7.28	6.47	2.61	4.38	6.04	7.38	5.47
	Bandung	*ID*	*11015*	***	32.5	27.2	20.0	27.0	34.6	25.7	26.0	27.5	28.5	26.4	30.1	25.8
	Maros	*ID*	*11059*									4.43	6.18	10.0	7.36	7.65
Japan	Rishiri	*JP*	*11016*	19.4	18.2	15.6	12.9	14.7	15.7	16.3	19.7	14.5	15.3	13.6	12.9	10.5
	Ochiishi	*JP*	*11050*				7.47	12.9	10.1	11.3	10.1	8.41	5.88	9.65	6.73	8.81
	Tappi	*JP*	*11017*	12.9	14.8	12.9	13.4	14.2	16.6	18.4	15.7	16.4	11.5	14.5	18.5	13.8
	Sado-seki	*JP*	*11019*	18.9	19.5	13.1	10.9	9.53	16.8	14.8	21.3	18.3	13.7	13.4	15.3	15.3
	Happo	*JP*	*11021*	12.9	11.3	7.39	7.24	8.78	11.5	10.1	12.0	10.7	9.82	5.88	6.80	11.0
	Ijira	*JP*	*11022*	18.7	20.2	18.0	18.3	12.7	18.0	20.0	17.7	17.3	14.6	10.3	12.1	12.4
	Oki	*JP*	*11023*	16.9	14.8	13.5	10.3	11.9	19.3	15.8	19.7	16.4	15.2	16.2	16.7	16.4
	Banryu	*JP*	*11024*	13.9	14.3	14.2	12.5	13.0	21.3	18.0	23.1	21.4	15.0	15.3	14.6	20.3
	Yusuhara	*JP*	*11025*	10.1	8.45	9.44	8.46	5.27	10.6	9.39	8.69	9.69	10.9	9.11	6.28	9.66
	Hedo	*JP*	*11027*	5.89	6.49	7.44	11.3	24.4	13.0	7.86	6.58	6.73	5.55	5.79	8.26	6.30
	Ogasawara	*JP*	*11018*	3.13	5.11	3.94	4.08	3.44	7.32	4.15	4.85	3.81	5.21	3.02	3.56	3.35
	Tokyo	*JP*	*11057*								15.0	18.4	14.5	9.86	13.6	13.8
Lao PDR	Vientiane	*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	16.8	22.2	16.8
	Tanah Rata	*MY*	*11030*	4.01	3.61	4.52	3.68	3.92	5.18	4.34	3.43	3.21	3.19	3.17	4.93	4.50
	Danum Valley	*MY*	*11053*						4.13	3.07	2.04	2.30	2.47	4.32	1.72	2.11
	Kuching	*MY*	*11060*									3.82	3.33	3.17	3.53	4.35
Mongolia	Ulaanbaatar	*MN*	*11031*	23.9	24.6	24.3	19.3	21.8	26.3	24.9	36.8	27.3	19.6	22.0	27.7	***
	Terelj	*MN*	*11032*	16.0	8.77	14.3	7.99	12.9	16.8	23.0	24.5	15.8	16.0	29.8	23.2	***
Myanmar	Yangon	*MM*	*11056*								***	***	6.90	3.90	5.72	6.15
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	18.9	17.4	***
	Los Baños	*PH*	*11034*	8.50	13.2	14.8	6.25	7.70	8.83	9.44	7.32	16.9	7.77	6.02	7.40	***
	Mt. Sto. Tomas	*PH*	*11055*							1.20	5.40	3.17	4.54	4.56	4.43	6.64
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	24.7	25.0	24.4
	Cheju	*KR*	*11036*	14.0	16.2	24.5	19.9	20.3	29.2	22.9	31.8	18.2	22.1	13.1	16.4	14.1
	Imsil	*KR*	*11037*		15.5	20.5	14.9	15.4	21.5	24.9	27.9	19.0	16.6	16.6	18.4	16.3
Russia	Mondy	*RU*	*11038*	7.08	10.8	10.7	8.37	6.75	5.28	4.60	9.12	7.02	7.69	6.63	4.30	6.90
	Listvyanka	*RU*	*11039*	15.1	13.2	18.0	18.8	18.9	17.1	18.8	17.0	21.2	19.1	20.5	21.8	21.1
	Irkutsk	*RU*	*11040*	29.6	29.1	33.6	25.9	26.2	27.4	25.4	33.0	37.9	30.1	32.4	33.4	37.3
	Primorskaya	*RU*	*11041*			27.6	41.1	35.8	36.9	45.0	29.6	39.3	21.8	30.4	13.2	19.4
Thailand	Bangkok	*TH*	*11042*	21.2	17.7	17.6	18.0	15.7	18.7	21.8	16.8	17.4	12.1	11.5	10.3	10.3
	Samutprakarn	*TH*	*11043*	24.9				15.5	17.9	19.7	14.1	14.8	14.5	14.5	7.33	9.74
	Pathumthani	*TH*	*11044*	18.9	16.7	14.4	12.1	17.0	12.8	13.0	11.7	10.3	8.56	7.67	9.10	7.10
	Khanchanabur	*TH*	*11045*	3.09	4.54	5.11	2.96	2.84	2.40	3.67	2.04	3.22	3.03	1.60	4.66	3.14
	Chiang Mai	*TH*	*11046*		2.56	3.92	3.97	6.72	5.84	4.34	5.82	4.81	4.14	3.16	3.05	4.53
	Nakhon Ratchasima	*TH*	*11054*							7.97	6.18	7.11	6.27	6.85	5.05	6.42
Vietnam	Hanoi	*VN*	*11047*	29.0	13.3	33.4	29.6	36.5	50.4	46.1	33.1	19.6	26.8	35.0	30.3	28.6
	Hoa Binh	*VN*	*11048*	15.5	14.1	18.6	22.3	29.2	17.4	24.6	16.8	13.4	15.9	26.0	17.9	16.9
	Cuc Phuong	*VN*	*11061*										17.8	19.6	36.8	23.1
	Da Nang	*VN*	*11062*										13.1	13.9	16.8	16.1

[***]: 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 3.64 Precipitation amount-weighted annual average concentrations of NO_3^- from 2000 to 2012

unit: μmol L^{-1}

Country	Name of sites	Code		2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Cambodia	Phnom Penh	*KH*	*11052*					7.68	***	9.05	8.26	9.40	10.3	8.37	8.85	10.7
China	Guanyinqiac	*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	77.6	83.1	73.9
	Jinyunshar	*CN*	*11003*		40.3	29.4	34.4	36.8	34.4	46.1	31.5	46.5	54.4	75.0	77.5	70.4
	Shizhan	*CN*	*11004*	87.0	153	150	68.0	61.7	12.1	81.7	75.9	40.2	57.7	41.0	17.5	49.4
	Weishuiyuar	*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	12.2	8.24	47.4
	Hongwen	*CN*	*11008*	18.7	37.9	30.7	33.6	49.8	37.3	22.4	37.6	22.9	23.4	29.0	23.6	35.2
	Xiaoping	*CN*	*11009*	14.6	18.7	14.8	22.6	19.6	18.1	16.0	26.2	24.6	29.3	30.3	22.6	26.7
	Xiang Zhou	*CN*	*11010*	15.6	14.1	17.8	20.9	22.1	17.2	21.8	16.6	12.3	17.7	23.9	15.7	15.2
	Zhuxiandong	*CN*	*11011*	33.5	22.2	20.8	11.5	25.0	21.5	13.2	***	14.7	19.8	19.7	18.8	***
Indonesia	Jakarta	*ID*	*11012*	17.6	53.7	28.2	58.4	77.6	53.9	20.5	31.1	14.1	15.3	17.1	29.8	16.2
	Serpong	*ID*	*11014*	***	50.7	32.6	30.8	39.7	39.4	28.3	30.4	30.3	25.4	29.8	35.5	31.5
	Kototabang	*ID*	*11013*	6.16	2.74	5.64	49.3	4.71	1.58	1.40	3.57	2.79	<1.0	2.37	5.05	4.65
	Bandung	*ID*	*11015*	34.4	26.9	26.3	20.4	28.2	19.2	23.1	21.6	20.7	22.8	17.9	28.0	21.6
	Maros	*ID*	*11059*									3.51	5.36	6.35	7.51	9.05
Japan	Rishiri	*JP*	*11016*	18.1	18.0	13.5	12.2	11.6	12.6	14.0	15.6	14.7	17.3	14.3	14.1	13.4
	Ochiishi	*JP*	*11050*				7.95	13.5	9.31	11.4	9.57	8.44	5.42	9.47	9.58	9.80
	Tappi	*JP*	*11017*	12.9	15.3	16.9	16.9	16.3	18.2	22.5	21.6	22.4	13.4	17.5	19.8	17.4
	Sado-seki	*JP*	*11019*	18.3	22.2	15.0	13.9	11.2	18.6	18.9	25.8	23.9	16.6	18.1	19.7	20.0
	Happo	*JP*	*11021*	11.1	8.88	6.97	6.57	8.01	9.53	8.25	9.82	11.0	8.56	6.51	8.17	11.6
	Ijira	*JP*	*11022*	24.1	21.7	21.8	21.7	15.4	24.1	24.2	21.8	24.1	18.4	15.1	15.1	16.7
	Oki	*JP*	*11023*	18.6	15.7	15.1	12.9	17.0	21.8	18.2	23.8	19.3	20.2	24.2	21.2	21.6
	Banryu	*JP*	*11024*	13.9	17.4	19.1	15.9	15.6	25.5	19.5	29.2	24.6	20.0	22.6	19.5	27.8
	Yusuhara	*JP*	*11025*	7.02	6.85	8.45	6.95	5.27	9.41	7.56	7.19	8.98	7.83	7.70	5.75	8.57
	Hedo	*JP*	*11027*	5.73	6.57	9.49	9.48	13.4	11.0	8.09	6.41	6.90	6.43	6.38	7.69	7.17
	Ogasawara	*JP*	*11018*	2.38	3.69	2.71	4.69	3.67	3.21	4.78	4.88	3.75	3.39	3.07	2.93	2.88
	Tokyo	*JP*	*11057*								19.5	24.4	18.1	15.3	21.7	18.8
Lao PDR	Vientiane	*LA*	*11051*				***	***	***	6.94	6.90	5.96	9.73	***	***	5.55
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	49.5	52.8	43.8
	Tanah Rata	*MY*	*11030*	3.32	3.39	5.99	4.70	4.61	6.04	5.34	4.17	4.53	5.19	4.40	2.21	3.78
	Danum Valley	*MY*	*11053*						2.50	1.41	<1.0	1.37	1.65	1.42	1.05	<1
	Kuching	*MY*	*11060*									4.98	4.55	4.91	5.00	3.82
Mongolia	Ulaanbaatar	*MN*	*11031*	19.9	20.7	23.7	15.5	15.8	18.8	18.6	26.0	20.1	19.1	21.4	16.8	***
	Terelj	*MN*	*11032*	17.6	9.20	18.1	12.4	16.1	11.8	15.5	18.3	18.3	21.0	27.6	18.0	***
Myanmar	Yangon	*MM*	*11056*								***	***	7.23	4.96	6.30	8.31
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	50.5	14.4	***
	Los Baños	*PH*	*11034*	5.44	13.9	8.21	4.87	6.10	9.83	8.13	6.25	7.97	8.01	31.4	8.35	***
	Mt. Sto. Tomas	*PH*	*11055*							1.87	5.47	3.92	3.94	4.29	2.56	6.10
Republic	Kanghwa	*KR*	*11035*	42.4	28.6	32.7	27.3	41.1	45.0	33.0	39.0	31.0	18.9	31.8	27.7	36.4
of Korea	Cheju	*KR*	*11036*	15.3	18.4	24.0	23.0	24.8	27.5	25.5	15.1	26.5	18.6	22.7	27.9	19.3
	Imsil	*KR*	*11037*		15.6	32.0	16.9	20.5	26.4	27.7	18.1	22.6	22.3	29.0	27.7	26.2
Russia	Mondy	*RU*	*11038*	9.97	10.6	13.5	6.80	6.78	5.03	5.10	8.51	7.48	7.90	8.11	4.30	7.99
	Listvyanka	*RU*	*11039*	18.7	14.7	25.0	29.8	19.8	11.8	14.6	20.4	15.4	16.4	20.2	30.6	19.3
	Irkutsk	*RU*	*11040*	21.0	18.4	21.8	17.8	17.1	16.4	16.5	18.3	17.1	16.8	22.3	20.7	18.3
	Primorskaya	*RU*	*11041*			10.2	15.4	21.4	21.6	29.2	19.1	33.1	18.6	21.9	37.8	23.4
Thailand	Bangkok	*TH*	*11042*	21.6	17.9	24.6	23.1	15.9	23.2	33.0	28.0	31.2	28.1	26.8	20.6	27.6
	Samutprakarn	*TH*	*11043*	15.4				9.79	17.9	14.1	16.6	17.4	20.0	15.4	9.81	12.5
	Pathumthani	*TH*	*11044*	18.6	19.6	18.5	17.2	24.0	19.6	22.0	22.8	21.5	16.6	20.4	19.2	18.8
	Khanchanabur	*TH*	*11045*	5.74	6.75	6.06	4.89	4.78	2.50	6.15	2.94	5.02	4.55	3.76	7.27	6.86
	Chiang Mai	*TH*	*11046*		4.13	6.64	6.53	6.12	8.36	7.87	7.97	9.11	8.44	7.30	7.26	7.91
	Nakhon Ratchasima	*TH*	*11054*							11.3	11.4	11.5	12.7	14.6	9.97	11.2
Vietnam	Hanoi	*VN*	*11047*	16.1	5.06	15.1	24.8	25.2	30.8	24.9	15.6	9.76	16.6	20.8	21.7	25.2
	Hoa Binh	*VN*	*11048*	9.68	8.77	20.2	13.4	19.9	12.9	16.1	10.5	10.2	12.9	15.5	14.4	15.4
	Cuc Phuong	*VN*	*11061*										10.9	23.2	27.8	20.1
	Da Nang	*VN*	*11062*										11.4	7.02	15.8	4.79

[***]: 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 Precipitation amount-weighted annual average concentrations of Cl^- from 2000 to 2012

unit: μmol L^{-1}

Country	Name of sites	Code		2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Cambodia	Phnom Penh	*KH*	*11052*					***	6.21	6.20	12.6	8.68	10.3	4.93	5.89	6.67
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	16.2	14.3	11.4
	Jinyunshar	*CN*	*11003*		56.8	12.9	10.3	12.8	15.5	13.6	8.70	15.4	16.1	16.1	11.9	11.6
	Shizhan	*CN*	*11004*	49.0	81.3	349	83.3	36.1	34.4	35.8	39.9	33.6	26.2	22.9	10.7	16.0
	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	14.6	11.1	31.3
	Hongwen	*CN*	*11008*	32.0	35.8	42.9	51.3	60.2	66.0	45.9	39.0	31.2	32.3	15.0	25.4	23.9
	Xiaoping	*CN*	*11009*	20.7	28.8	9.15	23.5	16.6	11.9	22.3	14.6	18.6	20.1	13.9	17.1	14.5
	Xiang Zhou	*CN*	*11010*	49.8	37.8	68.9	47.4	36.4	65.8	44.6	30.9	34.8	44.9	22.4	29.8	43.4
	Zhuxiandong	*CN*	*11011*	39.4	27.7	59.5	40.2	58.8	52.6	29.3	***	45.6	51.4	21.7	18.8	***
Indonesia	Jakarta	*ID*	*11012*	21.5	38.9	28.1	52.2	39.1	41.6	15.6	18.7	11.4	12.0	15.4	19.4	13.0
	Serpong	*ID*	*11014*	***	32.3	23.0	27.2	23.8	19.8	10.9	14.3	17.0	17.6	22.4	15.1	24.1
	Kototabang	*ID*	*11013*	6.76	6.60	16.8	27.8	11.8	7.13	7.80	13.8	3.88	10.7	9.91	13.9	9.72
	Bandung	*ID*	*11015*	105	25.0	20.3	13.0	17.4	14.6	14.1	7.53	8.33	11.8	8.60	12.4	10.6
	Maros	*ID*	*11059*									20.1	15.3	21.1	16.1	20.0
Japan	Rishiri	*JP*	*11016*	372	235	217	201	256	233	126	161	268	193	184	156	332
	Ochiishi	*JP*	*11050*				227	410	232	317	219	194	205	266	180	307
	Tappi	*JP*	*11017*	178	156	191	154	231	250	326	262	226	217	124	167	162
	Sado-seki	*JP*	*11019*	274	378	307	107	154	337	256	257	236	364	351	182	293
	Happo	*JP*	*11021*	10.7	8.84	4.97	7.26	8.74	8.69	5.68	4.36	5.60	6.64	4.99	4.43	11.6
	Ijira	*JP*	*11022*	23.0	32.7	33.3	19.1	27.5	16.8	14.4	24.8	18.9	16.5	16.2	17.2	24.5
	Oki	*JP*	*11023*	449	359	419	201	321	696	253	312	371	436	471	552	411
	Banryu	*JP*	*11024*	31.0	86.5	88.9	92.5	133	110	76.0	89.2	82.5	114	107	125	103
	Yusuhara	*JP*	*11025*	18.7	12.3	31.8	16.0	28.1	29.9	14.0	16.2	10.0	13.9	11.0	14.7	21.8
	Hedo	*JP*	*11027*	515	175	593	451	982	488	217	146	138	141	284	232	496
	Ogasawara	*JP*	*11018*	164	123	278	286	139	115	119	154	98.8	227	211	241	134
	Tokyo	*JP*	*11057*								41.1	23.7	27.8	19.4	45.9	35.8
Lao PDR	Vientiane	*LA*	*11051*				***	***	***	4.77	7.42	7.41	6.19	***	***	4.46
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	9.26	8.36	7.98
	Tanah Rata	*MY*	*11030*	6.80	3.00	2.26	2.39	2.43	2.64	2.10	1.70	1.47	2.26	1.91	2.95	3.19
	Danum Valley	*MY*	*11053*						6.00	7.15	4.90	6.10	6.79	17.1	5.70	4.16
	Kuching	*MY*	*11060*									6.35	8.41	8.04	11.5	6.78
Mongolia	Ulaanbaatar	*MN*	*11031*	8.96	9.65	7.69	7.64	8.03	7.75	7.77	9.38	10.1	9.63	8.49	7.46	***
	Terelj	*MN*	*11032*	8.96	8.66	11.4	6.59	8.96	9.92	9.28	10.3	9.22	9.95	10.6	9.81	***
Myanmar	Yangon	*MM*	*11056*								***	***	25.0	13.2	15.8	26.6
Philippines	Metro Manila	*PH*	*11033*	25.6	115	18.8	24.3	24.0	14.2	23.1	27.9	28.7	24.6	20.6	29.8	***
	Los Baños	*PH*	*11034*	33.0	34.5	24.6	16.2	14.3	18.1	21.0	24.4	18.8	25.0	25.3	26.2	***
	Mt. Sto. Tomas	*PH*	*11055*							1.57	7.38	5.24	8.31	5.07	4.41	6.50
Republic	Kanghwa	*KR*	*11035*	54.9	42.6	43.0	61.3	55.8	56.1	36.0	57.7	45.6	60.2	43.9	48.5	67.5
of Korea	Cheju	*KR*	*11036*	210	112	83.8	68.5	79.1	105	102	104	136	63.7	114	147	455
	Imsil	*KR*	*11037*		28.7	36.9	38.1	26.7	44.0	77.5	22.4	36.6	51.9	44.4	25.3	88.8
Russia	Mondy	*RU*	*11038*	2.58	1.45	8.87	3.07	2.75	5.92	4.47	3.94	4.22	3.29	3.39	5.28	5.95
	Listvyanka	*RU*	*11039*	5.04	2.16	6.81	4.13	4.94	5.38	3.50	4.29	5.13	3.02	3.43	6.63	3.28
	Irkutsk	*RU*	*11040*	11.6	12.2	18.0	17.7	8.52	12.4	12.5	13.2	15.9	24.9	23.8	22.0	15.1
	Primorskaya	*RU*	*11041*			33.9	35.6	21.3	21.7	18.0	18.6	25.6	14.7	29.4	67.4	29.9
Thailand	Bangkok	*TH*	*11042*	12.6	9.41	13.9	8.67	11.3	12.3	10.8	8.23	11.3	7.65	9.33	7.98	8.33
	Samutprakarn	*TH*	*11043*	12.9				12.8	19.0	12.5	11.2	12.8	8.45	16.2	7.61	9.92
	Pathumthani	*TH*	*11044*	10.4	7.75	11.6	6.39	14.3	7.13	6.83	6.64	6.61	6.23	5.77	6.82	15.9
	Khanchanabur	*TH*	*11045*	17.6	9.96	14.1	8.80	9.96	7.79	6.30	6.62	10.3	8.84	3.30	8.86	11.6
	Chiang Mai	*TH*	*11046*		4.53	10.1	4.71	3.82	4.21	3.73	5.85	4.59	4.91	3.58	2.88	4.14
	Nakhon Ratchasima	*TH*	*11054*							5.52	5.11	5.93	4.62	4.81	4.80	6.36
Vietnam	Hanoi	*VN*	*11047*	24.3	27.1	9.53	21.3	14.7	27.2	15.6	11.8	8.74	9.65	10.9	8.56	6.58
	Hoa Binh	*VN*	*11048*	20.3	22.1	6.95	6.92	11.8	13.5	6.46	6.30	4.22	5.38	6.35	4.30	4.65
	Cuc Phuong	*VN*	*11061*										44.2	24.3	15.5	20.3
	Da Nang	*VN*	*11062*										110	50.4	93.5	83.1

[***]: 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 3.66 Precipitation amount-weighted annual average concentrations of NH_4^+ from 2000 to 2012

unit: μmol L^{-1}

Country	Name of sites	Code		2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Cambodia	Phnom Penh	*KH*	*11052*					10.8	16.3	17.9	19.7	11.8	13.1	22.6	21.9	21.6
China	Guanyinqiac	*CN*	*11001*	161	211	120	132	137	157	179	140					
	Nanshan	*CN*	*11002*	105												
	Haifu	*CN*	*11058*									148	105	141	145	116
	Jinyunshar	*CN*	*11003*		111	83.5	85.6	105	105	121	75.2	98.8	110	124	117	124
	Shizhan	*CN*	*11004*	421	255	203	144	146	77.2	167	206	164	169	187	60.8	109
	Weishuiyuar	*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	17.3	23.1	26.6
	Hongwen	*CN*	*11008*	31.6	64.9	44.2	29.4	45.8	35.4	29.1	38.5	34.7	46.6	39.8	42.3	43.2
	Xiaoping	*CN*	*11009*	19.8	33.2	31.1	38.2	38.0	32.2	21.5	52.7	33.0	45.8	42.9	38.9	30.4
	Xiang Zhou	*CN*	*11010*	20.5	25.0	95.8	34.0	50.7	103	56.7	19.4	19.5	22.1	24.4	20.7	29.1
	Zhuxiandong	*CN*	*11011*	51.0	30.3	48.4	29.9	59.5	26.1	27.4	***	18.6	25.6	22.7	24.8	***
Indonesia	Jakarta	*ID*	*11012*	77.3	66.2	31.7	20.8	22.4	12.4	17.4	24.2	25.4	17.7	23.0	33.7	23.1
	Serpong	*ID*	*11014*	***	67.6	46.0	45.0	42.3	44.6	40.3	44.3	47.2	43.0	52.3	62.2	71.1
	Kototabang	*ID*	*11013*	1.14	2.38	5.12	1.85	12.3	9.46	9.88	18.2	7.55	2.69	2.83	10.0	8.47
	Bandung	*ID*	*11015*	32.8	37.9	29.9	32.7	36.8	35.8	46.5	47.9	44.8	48.3	32.1	60.8	53.8
	Maros	*ID*	*11059*									8.85	12.7	10.1	9.30	14.1
Japan	Rishiri	*JP*	*11016*	34.0	26.0	20.1	18.3	17.1	18.9	17.5	25.9	23.6	17.7	15.7	14.0	11.4
	Ochiishi	*JP*	*11050*				7.65	11.8	7.51	15.6	7.84	6.45	8.40	10.7	11.0	12.3
	Tappi	*JP*	*11017*	9.65	12.7	14.7	16.2	15.6	15.8	18.9	17.7	18.2	10.5	15.0	16.9	13.8
	Sado-seki	*JP*	*11019*	16.9	19.7	14.5	15.6	10.1	18.3	16.6	25.2	21.7	12.5	11.9	14.6	15.5
	Happo	*JP*	*11021*	14.2	10.8	7.74	6.37	8.30	10.8	8.96	11.1	10.1	9.73	5.88	6.06	10.7
	Ijira	*JP*	*11022*	23.8	17.6	22.8	18.1	14.7	20.3	22.8	20.7	18.0	18.2	12.2	14.1	14.7
	Oki	*JP*	*11023*	19.4	14.7	12.4	8.82	10.9	15.8	12.8	15.7	15.7	17.0	17.8	18.6	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	21.6	15.7	21.5
	Yusuhara	*JP*	*11025*	5.06	5.17	7.57	6.02	4.78	8.88	7.52	7.45	7.52	8.25	6.60	4.83	7.55
	Hedo	*JP*	*11027*	7.22	4.48	18.5	10.9	17.2	13.3	8.55	7.49	6.11	6.43	9.31	9.13	18.8
	Ogasawara	*JP*	*11018*	2.33	4.82	5.40	3.63	5.09	3.46	4.59	7.70	3.43	4.82	5.29	4.54	5.18
	Tokyo	*JP*	*11057*								27.7	29.9	26.2	19.2	25.4	24.3
Lao PDR	Vientiane	*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	4.60	4.86	1.29
	Tanah Rata	*MY*	*11030*	41.1	35.4	4.02	2.30	2.39	2.82	3.53	3.91	3.10	5.41	4.05	14.3	5.67
	Danum Valley	*MY*	*11053*						2.03	2.05	1.32	9.76	3.44	4.89	1.90	<1
	Kuching	*MY*	*11060*									4.61	4.94	1.94	5.03	6.16
Mongolia	Ulaanbaatar	*MN*	*11031*	52.0	49.9	72.8	47.5	46.2	54.4	53.7	87.1	53.3	46.7	54.7	45.9	***
	Terelj	*MN*	*11032*	44.3	30.5	65.7	31.6	35.6	36.1	54.6	38.8	51.1	41.0	35.0	39.4	***
Myanmar	Yangon	*MM*	*11056*								***	***	16.2	14.6	14.9	17.7
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	53.1	183	***
	Los Baños	*PH*	*11034*	13.6	22.4	34.5	14.5	13.9	15.0	16.3	16.8	19.6	11.7	38.2	29.4	***
	Mt. Sto. Tomas	*PH*	*11055*							<1.0	8.69	10.5	14.1	4.65	<1	3.42
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	26.5	43.3	49.4
	Cheju	*KR*	*11036*	20.2	32.3	43.3	41.9	36.0	30.9	26.1	28.8	26.2	45.2	26.8	28.0	33.4
	Imsil	*KR*	*11037*		42.3	42.2	32.5	28.2	32.4	50.2	40.0	29.9	35.2	31.2	37.7	39.5
Russia	Mondy	*RU*	*11038*	11.4	22.2	33.8	14.7	11.2	9.76	3.70	30.1	9.86	20.2	17.5	9.14	19.0
	Listvyanka	*RU*	*11039*	16.5	10.8	26.8	20.8	12.2	16.6	15.5	15.6	18.9	13.4	18.3	17.2	26.7
	Irkutsk	*RU*	*11040*	32.1	25.1	43.0	42.1	27.2	35.3	24.9	33.9	34.4	36.4	34.5	32.7	34.1
	Primorskaya	*RU*	*11041*			35.9	39.1	30.4	41.6	49.8	29.6	50.6	28.8	42.7	54.1	27.0
Thailand	Bangkok	*TH*	*11042*	41.3	36.2	46.8	37.5	37.8	43.4	56.1	57.8	53.8	64.9	37.8	40.2	44.1
	Samutprakarn	*TH*	*11043*	31.8				34.5	37.4	49.9	47.1	56.4	41.0	28.1	27.8	34.1
	Pathumthani	*TH*	*11044*	38.3	35.5	34.2	29.1	34.0	31.2	33.5	34.4	29.7	33.0	28.0	38.1	37.9
	Khanchanabur	*TH*	*11045*	6.84	11.0	10.9	12.5	8.40	4.96	17.5	13.9	10.1	26.1	8.90	13.0	8.95
	Chiang Mai	*TH*	*11046*		15.8	18.5	15.8	15.7	21.0	15.2	18.8	19.9	20.2	19.3	13.5	19.6
	Nakhon Ratchasima	*TH*	*11054*							23.1	18.3	21.1	22.9	24.6	24.3	25.7
Vietnam	Hanoi	*VN*	*11047*	27.5	20.3	55.5	55.1	52.7	98.8	45.7	48.3	30.6	50.6	52.4	52.8	60.2
	Hoa Binh	*VN*	*11048*	8.01	12.5	28.2	28.7	41.0	30.1	27.6	21.3	17.1	31.4	28.3	27.8	30.0
	Cuc Phuong	*VN*	*11061*										6.30	9.90	19.2	23.9
	Da Nang	*VN*	*11062*										13.5	8.67	21.5	21.3

[***]: 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 Precipitation amount-weighted annual average concentrations of Na^+ from 2000 to 2012

unit: μmol L^{-1}

Country	Name of sites	Code		2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Cambodia	Phnom Penh	*KH*	*11052*					***	***	1.85	8.25	10.3	6.95	3.10	3.55	3.65
China	Guanyinqiac	*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	7.56	9.87	6.04
	Jinyunshar	*CN*	*11003*		10.2	5.90	4.99	12.3	15.3	6.65	6.20	10.3	7.70	8.17	6.12	6.28
	Shizhan	*CN*	*11004*	44.1	164	246	69.2	19.1	16.1	45.2	15.6	24.4	13.4	7.30	17.7	5.59
	Weishuiyuar	*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	6.47	7.86	44.5
	Hongwen	*CN*	*11008*	23.8	10.8	55.6	34.8	50.4	51.4	30.8	24.1	22.9	24.5	19.4	18.1	16.3
	Xiaoping	*CN*	*11009*	8.66	11.8	16.4	24.7	13.0	9.67	23.2	12.4	22.5	16.4	18.8	10.9	8.45
	Xiang Zhou	*CN*	*11010*	42.1	24.6	41.5	39.1	72.1	44.1	35.5	19.4	34.6	40.2	19.8	32.3	45.9
	Zhuxiandong	*CN*	*11011*	31.2	27.5	45.2	36.0	94.4	60.9	22.6	***	40.7	45.3	19.9	45.0	***
Indonesia	Jakarta	*ID*	*11012*	52.4	39.4	35.3	27.1	37.2	23.2	13.1	15.8	9.95	9.31	7.92	11.7	12.7
	Serpong	*ID*	*11014*	***	23.8	25.2	11.3	19.6	16.0	7.46	11.7	10.5	10.2	8.32	10.1	10.9
	Kototabang	*ID*	*11013*	***	4.52	6.29	9.65	10.9	5.69	6.21	8.65	5.33	6.12	5.25	6.54	9.63
	Bandung	*ID*	*11015*	***	20.2	8.64	7.10	10.8	11.9	18.3	6.65	8.62	11.8	9.74	12.2	10.8
	Maros	*ID*	*11059*									15.7	13.3	13.2	14.9	19.9
Japan	Rishiri	*JP*	*11016*	325	212	197	176	229	203	110	143	247	176	162	139	292
	Ochiishi	*JP*	*11050*				198	360	208	278	186	171	182	232	155	274
	Tappi	*JP*	*11017*	149	134	165	141	199	218	289	234	197	199	114	150	141
	Sado-seki	*JP*	*11019*	258	355	268	93.8	135	290	224	227	215	321	320	153	246
	Happo	*JP*	*11021*	7.85	6.22	3.39	4.78	5.94	7.04	4.13	3.13	4.12	5.14	3.76	3.34	9.57
	Ijira	*JP*	*11022*	19.9	29.7	28.5	13.3	21.6	13.6	10.8	20.8	15.4	13.5	13.0	13.8	19.3
	Oki	*JP*	*11023*	396	316	363	185	295	602	225	275	324	376	409	480	357
	Banryu	*JP*	*11024*	28.9	78.2	79.4	80.9	113	92.1	66.4	78.6	72.2	98.8	94.2	108	92.2
	Yusuhara	*JP*	*11025*	15.2	11.8	28.9	14.4	24.1	25.2	11.9	13.5	8.61	12.0	8.82	12.3	18.1
	Hedo	*JP*	*11027*	454	160	515	430	873	449	189	129	124	127	254	204	418
	Ogasawara	*JP*	*11018*	139	104	236	251	125	97.3	103	133	86.2	188	208	202	114
	Tokyo	*JP*	*11057*								34.5	19.5	23.5	17.3	37.7	29.5
Lao PDR	Vientiane	*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	4.99	4.56	3.85
	Tanah Rata	*MY*	*11030*	1.90	1.92	1.64	1.89	1.83	6.64	1.41	1.54	1.20	1.58	1.29	1.99	1.51
	Danum Valley	*MY*	*11053*						4.45	5.64	4.15	3.22	5.83	13.8	5.52	2.87
	Kuching	*MY*	*11060*									5.39	7.35	6.67	9.08	5.21
Mongolia	Ulaanbaatar	*MN*	*11031*	7.88	9.09	6.29	3.84	5.79	7.16	8.43	5.25	3.59	4.88	3.50	5.65	***
	Terelj	*MN*	*11032*	6.47	15.9	16.9	4.50	6.32	11.5	12.5	9.42	5.47	7.60	11.1	6.07	***
Myanmar	Yangon	*MM*	*11056*								***	***	18.5	12.9	15.0	22.1
Philippines	Metro Manila	*PH*	*11033*	30.6	205	14.6	18.4	16.3	15.9	17.2	20.2	24.6	20.2	22.3	21.4	***
	Los Baños	*PH*	*11034*	34.8	37.2	21.1	15.3	12.0	17.2	22.7	17.6	19.1	17.4	22.7	19.4	***
	Mt. Sto. Tomas	*PH*	*11055*							2.81	5.68	5.11	8.26	6.30	4.31	10.3
Republic	Kanghwa	*KR*	*11035*	56.3	41.7	49.2	25.4	32.5	33.7	28.8	44.3	39.3	45.1	27.0	35.8	50.7
of Korea	Cheju	*KR*	*11036*	152	74.7	58.3	46.7	57.8	84.8	85.0	101	133	53.6	103	152	375
	Imsil	*KR*	*11037*		15.4	38.6	22.8	17.9	21.7	31.1	15.0	32.0	50.3	48.2	37.4	51.8
Russia	Mondy	*RU*	*11038*	1.84	2.27	1.93	2.27	1.93	1.52	1.57	3.13	1.84	2.28	2.81	3.86	4.32
	Listvyanka	*RU*	*11039*	4.57	3.38	3.80	5.10	4.66	3.01	2.80	2.57	2.49	3.82	3.60	5.42	4.20
	Irkutsk	*RU*	*11040*	8.85	8.27	9.19	6.59	6.65	6.89	10.0	9.94	10.0	18.7	18.4	16.8	9.96
	Primorskaya	*RU*	*11041*			23.1	33.7	22.5	21.7	16.8	19.8	22.9	12.8	23.9	13.7	23.1
Thailand	Bangkok	*TH*	*11042*	6.93	8.33	16.1	7.65	10.2	12.8	8.72	7.08	9.77	9.79	8.79	6.46	6.07
	Samutprakarn	*TH*	*11043*	10.1				16.5	19.8	14.6	12.2	15.4	10.0	18.6	5.70	7.89
	Pathumthani	*TH*	*11044*	10.9	8.06	9.65	4.73	8.94	6.56	7.49	5.77	5.96	5.58	7.46	5.87	14.1
	Khanchanabur	*TH*	*11045*	9.71	11.3	8.34	10.3	8.99	6.70	6.86	7.05	9.23	9.49	3.11	7.45	9.71
	Chiang Mai	*TH*	*11046*		3.94	9.66	3.21	3.05	***	3.53	2.93	2.61	2.69	2.72	3.21	3.80
	Nakhon Ratchasima	*TH*	*11054*							4.45	4.45	4.20	2.73	3.21	4.04	3.71
Vietnam	Hanoi	*VN*	*11047*	18.1	11.5	5.94	8.96	8.05	17.7	13.5	8.20	9.59	9.17	7.28	6.17	4.19
	Hoa Binh	*VN*	*11048*	12.7	9.80	2.06	2.36	3.91	7.47	4.49	3.20	3.07	3.39	4.86	2.46	3.03
	Cuc Phuong	*VN*	*11061*										11.2	12.0	13.6	20.0
	Da Nang	*VN*	*11062*										94.6	41.3	70.2	63.2

[***]: 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 3.68 Precipitation amount-weighted annual average concentrations of K^+ from 2000 to 2012

unit: μmol L^{-1}

Country	Name of sites	Code		2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Cambodia	Phnom Penh	*KH*	*11052*					1.63	***	1.48	3.64	10.3	1.50	0.861	1.15	0.761
China	Guanyinqiac	*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	10.0	9.38	6.57
	Jinyunshar	*CN*	*11003*		44.4	10.3	8.60	11.7	11.4	11.4	6.78	9.54	8.71	10.4	10.4	7.64
	Shizhan	*CN*	*11004*	26.5	42.2	40.5	18.7	9.57	15.4	18.0	19.3	13.3	10.2	32.4	13.4	5.69
	Weishuiyuar	*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	4.89	7.28	9.74
	Hongwen	*CN*	*11008*	4.99	10.4	4.30	4.33	7.23	5.08	3.35	3.73	2.12	2.26	2.24	1.99	2.86
	Xiaoping	*CN*	*11009*	2.81	4.20	3.76	4.75	5.09	2.76	13.5	7.31	10.2	2.33	1.94	2.80	3.47
	Xiang Zhou	*CN*	*11010*	6.59	4.02	17.6	5.74	7.65	2.66	8.16	8.27	1.65	2.10	2.21	3.74	9.20
	Zhuxiandong	*CN*	*11011*	6.18	5.86	13.2	6.62	22.7	5.60	2.62	***	4.50	2.56	3.29	5.92	***
Indonesia	Jakarta	*ID*	*11012*	***	24.3	11.3	9.28	10.3	5.73	8.01	11.2	3.51	2.22	2.23	2.28	2.86
	Serpong	*ID*	*11014*	***	7.04	3.95	7.96	5.65	6.18	4.46	2.76	2.21	1.75	3.20	3.15	4.33
	Kototabang	*ID*	*11013*	***	1.32	5.10	20.0	6.27	4.36	4.56	8.40	3.40	9.35	4.43	3.96	5.52
	Bandung	*ID*	*11015*	***	12.6	2.04	4.13	3.29	4.66	4.81	2.03	2.31	4.08	4.22	4.77	3.36
	Maros	*ID*	*11059*									5.76	3.89	2.52	1.86	3.50
Japan	Rishiri	*JP*	*11016*	9.95	6.04	5.08	4.90	6.01	5.09	3.75	4.13	6.58	4.31	4.28	3.44	6.41
	Ochiishi	*JP*	*11050*				4.63	8.08	5.28	7.66	4.58	3.81	4.09	6.16	3.70	6.76
	Tappi	*JP*	*11017*	3.64	3.28	4.07	3.45	4.95	4.99	7.12	5.66	5.36	4.95	3.50	4.34	3.96
	Sado-seki	*JP*	*11019*	6.37	8.19	6.49	2.46	3.56	6.65	5.69	5.88	7.16	7.96	8.08	4.45	6.62
	Happo	*JP*	*11021*	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	0.356	0.447	0.865
	Ijira	*JP*	*11022*	2.95	4.06	2.10	1.24	1.10	<1.0	<1.0	1.15	<1.0	<1.0	0.426	0.535	0.609
	Oki	*JP*	*11023*	10.5	8.77	9.53	5.45	9.62	15.5	6.56	9.12	11.9	10.1	10.1	12.7	9.16
	Banryu	*JP*	*11024*	1.35	2.73	2.89	2.49	3.02	3.69	2.23	3.06	2.54	3.00	5.43	3.39	3.26
	Yusuhara	*JP*	*11025*	<1.0	<1.0	1.01	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	0.613	0.465	1.07
	Hedo	*JP*	*11027*	9.06	3.56	12.0	10.1	24.6	11.3	4.71	3.31	3.18	3.29	6.19	4.94	10.6
	Ogasawara	*JP*	*11018*	3.58	4.08	6.17	5.60	3.07	2.28	2.53	3.17	2.61	4.55	5.02	4.95	2.71
	Tokyo	*JP*	*11057*								1.40	1.14	1.10	0.989	1.29	0.888
Lao PDR	Vientiane	*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	1.50	1.31	1.33
	Tanah Rata	*MY*	*11030*	1.09	<1.0	<1.0	<1.0	1.52	<1.0	<1.0	<1.0	<1.0	<1.0	1.06	2.03	1.68
	Danum Valley	*MY*	*11053*						1.17	1.01	1.08	2.53	1.59	3.24	1.73	1.21
	Kuching	*MY*	*11060*									<1.0	<1.0	0.650	0.854	0.924
Mongolia	Ulaanbaatar	*MN*	*11031*	3.92	4.64	3.81	3.39	2.84	4.33	5.15	1.28	2.81	2.53	2.72	3.98	***
	Terelj	*MN*	*11032*	4.50	3.81	10.2	4.11	4.68	6.48	8.98	3.80	6.46	4.10	5.43	5.00	***
Myanmar	Yangon	*MM*	*11056*								***	***	6.46	2.07	1.66	6.78
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	17.0	23.5	***
	Los Baños	*PH*	*11034*	1.74	9.51	6.38	1.83	2.14	2.20	2.49	4.92	2.91	9.08	7.43	6.82	***
	Mt. Sto. Tomas	*PH*	*11055*							1.32	2.29	<1.0	1.95	1.41	0.821	0.885
Republic	Kanghwa	*KR*	*11035*	5.61	4.74	8.83	9.39	11.4	6.49	4.86	10.8	5.40	8.97	7.78	3.62	6.39
of Korea	Cheju	*KR*	*11036*	6.32	9.38	6.45	8.16	8.11	8.61	6.04	7.18	10.4	9.75	7.96	6.54	15.7
	Imsil	*KR*	*11037*		14.8	6.55	11.2	5.72	48.6	42.1	14.3	5.61	10.9	10.3	3.89	47.5
Russia	Mondy	*RU*	*11038*	1.19	2.07	2.32	1.61	2.68	1.05	1.11	2.47	2.02	3.29	2.62	4.98	9.05
	Listvyanka	*RU*	*11039*	4.67	1.73	2.22	2.64	2.36	1.15	1.54	1.28	3.38	2.07	1.66	2.42	2.00
	Irkutsk	*RU*	*11040*	4.38	7.37	2.32	2.63	2.72	3.39	7.64	7.77	8.99	26.6	5.52	4.59	4.99
	Primorskaya	*RU*	*11041*			5.35	10.1	7.24	7.07	5.47	6.18	8.99	4.40	5.84	6.75	5.09
Thailand	Bangkok	*TH*	*11042*	3.22	4.11	3.35	2.62	1.62	2.17	2.83	1.57	2.03	1.98	2.58	1.82	1.52
	Samutprakarn	*TH*	*11043*	5.29				4.88	4.92	4.31	2.88	6.12	2.77	17.0	1.11	1.52
	Pathumthani	*TH*	*11044*	2.26	1.68	1.49	1.17	1.19	1.20	1.66	1.61	1.50	1.61	1.85	1.96	1.64
	Khanchanabur	*TH*	*11045*	8.88	4.98	2.38	2.02	1.09	<1.0	2.44	<1.0	1.15	1.21	0.710	2.21	1.57
	Chiang Mai	*TH*	*11046*		2.94	4.41	3.95	1.41	<1.0	1.70	2.87	2.63	1.47	1.21	1.45	1.26
	Nakhon Ratchasima	*TH*	*11054*							<1.0	1.38	1.24	1.31	0.940	1.20	1.26
Vietnam	Hanoi	*VN*	*11047*	4.09	3.81	2.07	2.57	2.95	5.22	3.78	2.70	2.77	1.57	2.78	2.27	3.00
	Hoa Binh	*VN*	*11048*	3.56	2.33	1.48	1.48	1.67	3.64	2.43	2.24	3.24	2.72	2.88	2.40	1.50
	Cuc Phuong	*VN*	*11061*										14.0	5.61	3.31	6.06
	Da Nang	*VN*	*11062*										6.27	3.41	14.0	11.5

[***]: 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 3.69 Precipitation amount-weighted annual average concentrations of Ca^{2+} from 2000 to 2012

unit: μmol L^{-1}

Country	Name of sites	Code		2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Cambodia	Phnom Penh	*KH*	*11052*					<0.2	***	9.11	19.2	32.6	20.4	8.33	9.30	10.7
China	Guanyinqiac	*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	69.2	68.5	57.9
	Jinyunshar	*CN*	*11003*		44.9	29.7	30.7	70.5	57.7	98.3	55.1	68.3	66.7	68.7	65.1	59.2
	Shizhan	*CN*	*11004*	229	675	479	258	147	107	301	116	150	138	105	91.2	128
	Weishuiyuar	*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	40.7	91.6	203
	Hongwen	*CN*	*11008*	6.75	36.3	49.1	30.7	83.7	37.4	25.5	54.9	14.1	13.2	9.11	14.1	17.5
	Xiaoping	*CN*	*11009*	0.773	5.10	10.6	17.3	6.41	10.6	10.5	16.7	15.6	9.04	8.37	11.7	20.0
	Xiang Zhou	*CN*	*11010*	21.2	7.96	15.5	22.8	18.0	7.31	14.1	4.71	5.43	4.91	7.40	17.5	10.8
	Zhuxiandong	*CN*	*11011*	25.0	14.3	20.7	20.2	24.7	17.0	17.1	***	13.6	7.40	16.4	19.1	***
Indonesia	Jakarta	*ID*	*11012*	87.6	64.4	42.9	101	50.9	17.4	18.8	13.9	4.36	12.6	10.3	11.1	12.0
	Serpong	*ID*	*11014*	***	13.6	9.93	6.60	10.5	12.0	7.19	7.37	7.97	5.17	9.25	10.9	9.29
	Kototabang	*ID*	*11013*	3.97	1.43	4.92	5.53	6.98	3.38	5.19	4.70	4.86	5.47	4.77	5.90	7.85
	Bandung	*ID*	*11015*	***	24.2	17.1	10.9	18.3	15.9	14.8	9.50	11.3	15.3	13.5	20.9	13.3
	Maros	*ID*	*11059*									8.39	8.11	9.58	6.49	16.1
Japan	Rishiri	*JP*	*11016*	13.7	10.1	10.2	7.74	8.60	7.62	5.33	5.83	8.72	10.1	6.89	5.63	8.44
	Ochiishi	*JP*	*11050*				5.74	12.2	8.96	10.2	6.96	5.29	5.20	8.25	5.42	7.35
	Tappi	*JP*	*11017*	6.37	5.78	9.01	6.98	7.76	10.7	12.7	11.0	10.3	6.41	8.54	8.01	8.02
	Sado-seki	*JP*	*11019*	11.7	15.8	9.08	5.08	4.70	10.2	12.1	11.8	10.3	11.1	12.7	8.28	11.4
	Happo	*JP*	*11021*	3.88	4.31	2.00	1.92	2.36	4.15	6.28	2.91	2.70	4.66	2.40	2.57	4.14
	Ijira	*JP*	*11022*	6.77	5.62	4.18	2.88	2.31	2.82	2.89	3.63	2.20	2.74	2.48	1.97	2.50
	Oki	*JP*	*11023*	16.0	12.9	11.5	6.91	11.9	18.6	11.4	13.6	10.9	14.6	16.1	17.1	12.1
	Banryu	*JP*	*11024*	4.24	5.97	5.37	3.39	5.29	5.87	9.51	7.36	7.41	5.45	8.02	5.85	6.65
	Yusuhara	*JP*	*11025*	2.69	3.41	1.78	1.42	1.84	2.39	2.61	1.96	1.69	1.97	1.79	2.27	2.39
	Hedo	*JP*	*11027*	10.1	4.88	14.0	10.9	22.7	14.1	9.21	4.92	4.18	4.47	7.98	6.04	11.5
	Ogasawara	*JP*	*11018*	5.11	5.43	8.61	8.00	3.36	2.56	3.58	4.36	2.55	5.20	5.82	5.56	3.46
	Tokyo	*JP*	*11057*								4.99	4.09	3.42	3.98	4.84	4.21
Lao PDR	Vientiane	*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	5.40	3.97	3.96
	Tanah Rata	*MY*	*11030*	2.26	3.10	3.08	3.35	2.32	1.83	1.15	1.05	0.772	1.03	1.22	2.08	2.37
	Danum Valley	*MY*	*11053*						1.35	1.26	0.513	0.353	1.01	3.82	0.887	0.800
	Kuching	*MY*	*11060*									1.91	1.79	2.60	3.15	3.42
Mongolia	Ulaanbaatar	*MN*	*11031*	37.7	47.4	49.9	26.5	43.2	49.8	45.9	41.2	42.9	42.2	34.3	33.9	***
	Terelj	*MN*	*11032*	15.2	15.0	27.3	10.7	16.2	13.6	24.8	13.6	17.9	35.8	42.3	20.4	***
Myanmar	Yangon	*MM*	*11056*								***	***	9.66	6.37	6.89	7.79
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	12.8	12.9	***
	Los Baños	*PH*	*11034*	6.95	65.3	7.23	7.75	5.40	3.54	6.92	5.19	3.75	5.08	20.1	6.38	***
	Mt. Sto. Tomas	*PH*	*11055*							5.64	23.4	3.09	5.87	22.7	7.84	14.0
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	7.02	4.39	8.64
	Cheju	*KR*	*11036*	13.8	5.89	9.37	8.10	7.70	11.3	9.05	10.6	10.5	4.08	6.72	6.60	11.2
	Imsil	*KR*	*11037*		5.85	9.84	5.39	6.76	5.00	14.7	13.7	6.92	3.88	5.74	6.81	4.31
Russia	Mondy	*RU*	*11038*	5.79	7.00	8.54	3.80	5.33	4.17	5.46	6.91	7.97	5.19	9.20	9.02	12.1
	Listvyanka	*RU*	*11039*	12.8	7.25	11.4	14.3	14.1	8.23	8.81	9.02	8.18	12.6	12.6	16.1	11.7
	Irkutsk	*RU*	*11040*	28.0	34.8	31.5	23.9	21.9	21.6	29.9	26.5	29.5	29.2	32.2	34.7	31.3
	Primorskaya	*RU*	*11041*			18.1	25.3	21.5	21.1	25.0	14.0	19.4	11.7	16.9	13.7	12.2
Thailand	Bangkok	*TH*	*11042*	11.4	12.0	15.7	11.9	11.0	18.6	18.4	13.6	16.1	10.0	11.2	10.5	13.5
	Samutprakarn	*TH*	*11043*	11.1				7.84	9.68	14.8	11.0	13.8	13.2	7.78	5.95	8.39
	Pathumthani	*TH*	*11044*	13.2	13.0	17.4	6.30	11.4	8.48	12.8	8.50	11.6	9.19	9.17	12.1	20.6
	Khanchanabur	*TH*	*11045*	4.76	9.05	4.92	8.45	4.78	2.45	2.71	3.03	4.59	4.93	1.80	4.04	17.5
	Chiang Mai	*TH*	*11046*		6.95	18.0	5.72	4.77	3.75	4.74	8.03	6.68	5.69	4.40	2.60	7.77
	Nakhon Ratchasima	*TH*	*11054*							9.54	3.75	3.35	2.53	2.21	1.88	3.74
Vietnam	Hanoi	*VN*	*11047*	20.9	10.7	16.8	17.8	25.0	26.1	35.2	18.1	11.8	12.0	23.7	14.6	15.0
	Hoa Binh	*VN*	*11048*	13.1	10.4	12.6	12.0	19.9	14.3	17.8	9.33	14.5	9.44	21.1	12.5	11.1
	Cuc Phuong	*VN*	*11061*										24.8	38.3	32.2	30.6
	Da Nang	*VN*	*11062*										6.35	8.87	10.0	16.9

[***]: 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 3.70 Precipitation amount-weighted annual average concentrations of nss-Ca^{2+} from 2000 to 2012

unit: μmol L^{-1}

Country	Name of sites	Code		2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Cambodia	Phnom Penh	*KH*	*11052*					***	***	9.07	19.1	32.5	20.3	8.26	9.23	10.7
China	Guanyinqiac	*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	69.0	68.2	57.7
	Jinyunshar	*CN*	*11003*		44.7	29.6	30.6	70.2	57.4	98.2	55.0	68.1	66.5	68.6	64.9	59.0
	Shizhan	*CN*	*11004*	228	672	474	257	147	107	300	116	149	138	105	90.8	128
	Weishuiyuar	*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	40.6	91.4	202
	Hongwen	*CN*	*11008*	6.32	36.1	47.9	30.0	82.6	36.3	24.8	54.4	13.6	12.7	8.70	13.7	17.1
	Xiaoping	*CN*	*11009*	0.599	4.90	10.3	16.8	6.13	10.4	9.99	16.4	15.1	8.69	7.96	11.5	19.9
	Xiang Zhou	*CN*	*11010*	20.3	7.43	14.6	21.9	16.4	6.46	13.3	4.33	4.68	4.04	6.97	16.8	9.76
	Zhuxiandong	*CN*	*11011*	24.3	13.7	19.7	19.4	22.7	15.7	16.7	***	12.7	6.44	15.9	18.1	***
Indonesia	Jakarta	*ID*	*11012*	86.4	63.5	42.2	101	50.2	16.9	18.5	13.6	4.14	12.4	10.2	10.8	11.7
	Serpong	*ID*	*11014*	***	13.1	9.40	6.38	10.1	11.7	7.03	7.19	7.75	5.03	9.07	10.7	9.05
	Kototabang	*ID*	*11013*	***	1.36	4.78	5.32	6.75	3.26	5.06	4.51	4.76	5.34	4.65	5.76	7.64
	Bandung	*ID*	*11015*	***	23.7	16.9	10.7	18.0	15.4	14.4	9.36	11.1	15.1	13.3	20.6	13.1
	Maros	*ID*	*11059*									8.05	7.83	9.30	6.17	15.7
Japan	Rishiri	*JP*	*11016*	6.68	5.53	5.91	3.98	3.66	3.27	2.99	2.76	3.40	6.39	3.44	2.63	2.20
	Ochiishi	*JP*	*11050*				1.60	4.48	4.44	4.30	2.96	1.66	1.38	3.25	2.11	1.50
	Tappi	*JP*	*11017*	3.20	3.01	5.49	3.94	3.52	6.15	6.50	6.01	6.09	2.26	6.16	4.87	4.44
	Sado-seki	*JP*	*11019*	6.18	8.32	3.39	3.06	1.88	3.90	7.28	6.87	5.67	4.20	5.94	4.99	6.19
	Happo	*JP*	*11021*	3.71	4.18	1.92	1.81	2.24	4.00	6.19	2.85	2.61	4.55	2.32	2.49	3.93
	Ijira	*JP*	*11022*	6.34	4.97	3.57	2.60	1.87	2.53	2.65	3.18	1.87	2.46	2.21	1.70	2.09
	Oki	*JP*	*11023*	7.50	6.10	3.91	2.85	5.51	5.51	6.85	7.68	3.94	6.44	7.24	6.73	4.40
	Banryu	*JP*	*11024*	3.67	4.29	3.66	1.65	2.86	3.89	8.08	5.66	5.85	3.32	5.99	3.52	4.66
	Yusuhara	*JP*	*11025*	2.43	3.21	1.24	1.14	1.32	1.85	2.35	1.67	1.51	1.71	1.65	2.04	2.00
	Hedo	*JP*	*11027*	0.807	1.71	2.89	3.48	4.30	4.39	5.15	2.13	1.50	1.75	2.50	1.63	2.44
	Ogasawara	*JP*	*11018*	2.14	3.19	3.58	2.63	1.04	0.575	1.37	1.50	0.862	1.16	1.35	1.20	1.01
	Tokyo	*JP*	*11057*								4.24	3.67	2.91	3.60	4.03	3.57
Lao PDR	Vientiane	*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	5.29	3.87	3.88
	Tanah Rata	*MY*	*11030*	2.21	3.06	3.04	3.31	2.28	1.70	1.12	1.02	0.753	1.01	1.19	2.04	2.33
	Danum Valley	*MY*	*11053*						1.26	1.16	0.453	0.315	0.919	3.59	0.794	0.750
	Kuching	*MY*	*11060*									1.81	1.66	2.45	2.95	3.32
Mongolia	Ulaanbaatar	*MN*	*11031*	37.6	47.2	49.8	26.4	43.0	49.6	45.7	41.1	42.9	42.1	34.2	33.8	***
	Terelj	*MN*	*11032*	15.1	14.6	26.3	10.6	16.1	13.3	24.5	13.4	17.7	35.6	42.1	20.2	***
Myanmar	Yangon	*MM*	*11056*								***	***	9.26	6.09	6.57	7.32
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	12.3	12.4	***
	Los Baños	*PH*	*11034*	6.20	64.5	6.77	7.46	5.14	3.18	6.43	4.82	3.34	4.71	19.7	5.96	***
	Mt. Sto. Tomas	*PH*	*11055*							5.58	23.3	2.98	5.69	22.5	7.75	13.8
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	6.44	3.66	7.54
	Cheju	*KR*	*11036*	10.5	4.30	8.15	7.09	6.45	9.45	7.21	8.43	7.63	3.03	4.70	3.72	3.15
	Imsil	*KR*	*11037*		5.51	9.00	4.89	6.37	4.53	14.0	13.3	6.23	2.83	4.79	6.02	3.40
Russia	Mondy	*RU*	*11038*	5.75	6.95	8.50	3.75	5.29	4.14	5.43	6.84	7.93	5.14	9.14	8.94	12.1
	Listvyanka	*RU*	*11039*	12.7	7.18	11.3	14.1	14.0	8.16	8.76	8.96	8.12	12.5	12.5	16.0	11.7
	Irkutsk	*RU*	*11040*	27.8	34.6	31.3	23.7	21.7	21.4	29.7	26.3	29.2	28.8	31.8	34.4	31.1
	Primorskaya	*RU*	*11041*			17.6	24.6	21.0	20.7	24.7	13.5	18.9	11.4	16.3	13.4	11.7
Thailand	Bangkok	*TH*	*11042*	11.2	11.8	15.4	11.7	10.7	18.4	18.2	13.5	15.9	9.81	11.1	10.4	13.3
	Samutprakarn	*TH*	*11043*	10.8				7.48	9.25	14.5	10.7	13.5	13.0	7.38	5.83	8.22
	Pathumthani	*TH*	*11044*	12.9	12.8	17.2	6.20	11.2	8.34	12.7	8.38	11.5	9.07	9.03	12.0	20.3
	Khanchanabur	*TH*	*11045*	4.56	8.81	4.74	8.22	4.59	2.31	2.56	2.88	4.39	4.72	1.73	3.88	17.3
	Chiang Mai	*TH*	*11046*		6.86	17.8	5.65	4.71	3.73	4.68	7.97	6.63	5.63	4.36	2.54	7.69
	Nakhon Ratchasima	*TH*	*11054*							9.45	3.66	3.26	2.48	2.15	1.81	3.66
Vietnam	Hanoi	*VN*	*11047*	20.5	10.4	16.7	17.6	24.8	25.7	35.0	17.9	11.6	11.8	23.5	14.5	15.0
	Hoa Binh	*VN*	*11048*	12.8	10.2	12.6	11.9	19.8	14.1	17.7	9.26	14.4	9.37	21.0	12.5	11.0
	Cuc Phuong	*VN*	*11061*										24.6	38.0	32.0	30.2
	Da Nang	*VN*	*11062*										4.31	7.98	8.50	15.5

[***]: 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 3.71 Precipitation amount-weighted annual average concentrations of Mg^{2+} from 2000 to 2012

unit: μmol L^{-1}

Country	Name of sites	Code		2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Cambodia	Phnom Penh	*KH*	*11052*					<0.4	***	0.661	3.27	3.45	2.00	0.717	1.22	1.22
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	8.95	8.61	6.87
	Jinyunshar	*CN*	*11003*		5.76	3.37	2.89	3.55	3.17	4.00	2.81	4.64	5.56	5.76	6.13	5.82
	Shizhan	*CN*	*11004*	23.6	48.5	67.9	33.5	15.3	13.2	28.3	21.4	45.4	12.4	11.0	9.94	3.47
	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	7.17	9.65	44.4
	Hongwen	*CN*	*11008*	4.22	6.30	9.64	5.96	11.4	9.04	5.44	6.18	4.92	4.08	2.00	4.22	4.69
	Xiaoping	*CN*	*11009*	1.32	2.50	1.61	4.04	1.44	1.15	2.77	2.06	3.39	3.24	1.89	2.21	3.45
	Xiang Zhou	*CN*	*11010*	6.95	2.93	5.52	7.15	6.35	6.87	12.0	2.38	3.97	4.52	2.57	4.39	6.90
	Zhuxiandong	*CN*	*11011*	7.91	3.33	7.08	7.37	8.49	9.08	4.99	***	5.70	6.15	2.86	6.75	***
Indonesia	Jakarta	*ID*	*11012*	219	69.0	13.1	12.7	6.30	3.63	8.59	2.21	1.67	1.97	2.23	3.45	2.96
	Serpong	*ID*	*11014*	***	3.53	4.52	2.69	3.99	3.74	1.73	2.65	4.12	1.36	3.09	3.12	2.01
	Kototabang	*ID*	*11013*	***	1.04	2.58	6.76	1.78	0.939	2.26	3.81	1.000	1.10	1.55	0.950	1.40
	Bandung	*ID*	*11015*	***	4.07	1.64	1.70	3.28	2.45	3.26	1.68	4.40	4.13	4.43	5.78	3.17
	Maros	*ID*	*11059*									2.56	1.86	2.17	2.50	7.03
Japan	Rishiri	*JP*	*11016*	36.3	24.8	22.3	20.3	26.4	23.3	12.6	17.0	30.0	19.9	18.6	15.4	32.3
	Ochiishi	*JP*	*11050*				22.1	42.2	22.2	31.2	21.5	19.8	19.9	28.6	18.5	30.6
	Tappi	*JP*	*11017*	17.5	15.5	19.6	16.8	23.4	24.2	33.3	26.4	23.1	21.1	12.9	17.4	15.4
	Sado-seki	*JP*	*11019*	29.0	40.5	30.7	11.3	15.6	33.0	25.9	26.1	23.5	36.2	37.7	19.0	29.4
	Happo	*JP*	*11021*	1.67	1.59	0.926	1.25	1.26	1.20	0.958	0.676	0.697	1.16	0.810	0.896	2.30
	Ijira	*JP*	*11022*	2.89	3.99	3.53	2.16	2.75	1.75	1.64	2.75	1.74	1.67	1.62	1.69	2.54
	Oki	*JP*	*11023*	45.0	36.6	40.6	21.2	34.4	69.9	26.9	31.7	36.7	43.1	48.1	55.5	41.2
	Banryu	*JP*	*11024*	3.33	9.11	9.30	9.29	13.2	10.8	8.34	9.85	8.91	11.8	12.1	12.8	11.2
	Yusuhara	*JP*	*11025*	2.18	1.83	3.55	1.83	2.86	3.04	1.66	1.80	1.11	1.61	1.56	2.56	2.84
	Hedo	*JP*	*11027*	50.0	16.9	59.0	49.3	91.0	47.3	21.8	14.8	14.2	14.5	29.2	23.2	47.9
	Ogasawara	*JP*	*11018*	19.2	13.3	32.4	31.1	13.0	10.7	11.4	15.0	10.6	21.9	24.5	23.6	13.6
	Tokyo	*JP*	*11057*								4.22	2.78	2.97	2.40	4.79	3.78
Lao PDR	Vientiane	*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	0.698	0.579	0.497
	Tanah Rata	*MY*	*11030*	0.415	0.406	0.422	0.451	<0.4	0.492	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4
	Danum Valley	*MY*	*11053*						<0.4	0.481	0.402	0.528	0.549	1.48	0.541	<0.4
	Kuching	*MY*	*11060*									<0.4	<0.4	0.457	0.745	<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	2.98	9.23	***
	Terelj	*MN*	*11032*	3.16	2.53	4.09	2.26	5.15	3.67	4.85	2.07	3.00	5.45	5.54	7.35	***
Myanmar	Yangon	*MM*	*11056*								***	***	2.84	1.80	3.02	6.56
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	9.12	7.13	***
	Los Baños	*PH*	*11034*	3.71	11.1	2.94	2.60	3.59	2.34	3.44	3.46	4.65	3.73	8.20	4.76	***
	Mt. Sto. Tomas	*PH*	*11055*							0.971	2.08	<0.4	1.53	3.34	1.61	2.90
Republic	Kanghwa	*KR*	*11035*	9.31	5.26	6.34	2.86	5.49	6.20	5.10	6.74	2.75	5.27	3.64	3.18	5.50
of Korea	Cheju	*KR*	*11036*	18.6	9.96	7.48	5.86	7.27	15.0	9.59	7.30	9.68	6.02	6.90	10.5	34.5
	Imsil	*KR*	*11037*		1.92	3.31	1.60	2.39	1.82	3.99	3.57	1.99	3.88	4.68	2.02	3.05
Russia	Mondy	*RU*	*11038*	1.09	1.46	2.20	0.775	1.27	0.961	0.986	1.78	1.98	1.17	1.81	2.60	4.06
	Listvyanka	*RU*	*11039*	2.94	1.78	3.04	3.65	3.20	1.58	1.71	1.85	1.76	2.84	2.97	3.12	2.53
	Irkutsk	*RU*	*11040*	4.99	5.55	5.66	4.32	4.77	5.08	5.76	6.27	6.44	7.55	6.75	7.29	6.49
	Primorskaya	*RU*	*11041*			5.66	11.2	7.05	5.67	5.50	4.30	6.26	3.11	4.27	4.29	4.43
Thailand	Bangkok	*TH*	*11042*	2.01	3.16	3.54	2.33	2.13	3.78	2.34	1.68	2.34	1.49	1.52	1.25	1.35
	Samutprakarn	*TH*	*11043*	2.39				1.87	3.43	4.63	2.69	3.99	2.80	2.20	1.20	1.53
	Pathumthani	*TH*	*11044*	2.41	2.17	2.77	1.06	1.58	1.31	1.76	1.28	1.70	1.24	1.38	1.57	3.14
	Khanchanabur	*TH*	*11045*	1.67	2.52	1.75	2.23	1.64	1.13	0.983	0.997	1.61	1.44	0.575	1.27	2.76
	Chiang Mai	*TH*	*11046*		1.10	3.54	2.08	1.82	1.00	2.42	1.24	1.78	2.73	0.451	<0.4	0.842
	Nakhon Ratchasima	*TH*	*11054*							1.98	1.78	1.22	1.27	0.703	<0.4	0.423
Vietnam	Hanoi	*VN*	*11047*	4.99	3.97	2.95	3.64	3.80	8.64	8.55	4.17	3.65	4.78	5.68	4.08	2.15
	Hoa Binh	*VN*	*11048*	4.67	3.71	1.42	2.14	2.52	4.21	5.28	2.76	1.60	1.85	5.56	2.39	2.17
	Cuc Phuong	*VN*	*11061*										4.37	4.41	4.78	7.07
	Da Nang	*VN*	*11062*										10.2	8.52	9.42	9.19

[***]: 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 Precipitation amount-weighted annual average concentrations of H^+ from 2000 to 2012

unit: μmol L^{-1}

Country	Name of sites	Code		2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Cambodia	Phnom Penh	*KH*	*11052*					4.79	0.478	0.191	0.203	1.45	0.649	1.07	1.10	0.694
China	Guanyinqiac	*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	71.0	65.9	57.5
	Jinyunshar	*CN*	*11003*		65.4	43.6	50.3	25.9	23.7	20.4	30.0	44.0	47.1	115	90.9	81.5
	Shizhan	*CN*	*11004*	2.09	0.420	0.576	1.00	0.505	3.86	2.75	3.03	0.402	0.297	0.211	0.535	0.552
	Weishuiyuar	*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	2.91	1.13	0.076
	Hongwen	*CN*	*11008*	19.1	29.6	16.2	34.4	19.4	19.9	14.7	16.2	25.7	30.2	26.6	22.5	30.9
	Xiaoping	*CN*	*11009*	12.2	12.6	33.6	41.4	24.6	16.5	16.5	25.4	27.9	34.1	26.5	15.3	15.7
	Xiang Zhou	*CN*	*11010*	7.00	11.4	7.83	7.87	16.5	27.3	13.4	23.3	11.7	13.4	14.1	8.81	7.73
	Zhuxiandong	*CN*	*11011*	23.0	16.7	12.8	7.88	23.2	24.4	15.0	***	13.1	17.7	11.3	16.7	***
Indonesia	Jakarta	*ID*	*11012*	6.57	3.79	16.9	6.96	20.4	49.1	41.5	27.5	22.5	23.5	18.6	28.2	17.4
	Serpong	*ID*	*11014*	***	23.7	22.6	24.1	20.8	25.6	25.0	25.8	23.9	19.3	17.5	19.7	12.4
	Kototabang	*ID*	*11013*	31.2	8.53	4.89	5.00	18.5	20.9	29.4	5.31	6.00	22.6	16.0	9.22	9.75
	Bandung	*ID*	*11015*	***	10.1	34.9	10.0	9.30	9.33	7.00	11.8	6.81	4.99	7.99	4.00	3.48
	Maros	*ID*	*11059*									2.35	4.64	6.16	4.43	2.41
Japan	Rishiri	*JP*	*11016*	15.7	16.8	15.0	13.3	14.4	18.4	21.5	26.3	12.3	18.3	18.7	20.1	20.2
	Ochiishi	*JP*	*11050*				12.2	20.7	14.6	13.8	16.7	13.5	9.64	14.8	13.1	15.2
	Tappi	*JP*	*11017*	19.0	23.0	20.9	27.0	25.4	24.9	26.5	23.8	26.0	18.2	20.4	24.6	20.5
	Sado-seki	*JP*	*11019*	26.9	23.2	22.7	21.5	19.7	27.6	19.7	31.4	27.9	17.7	19.8	20.8	18.6
	Happo	*JP*	*11021*	18.6	14.6	11.8	12.4	13.9	15.9	10.7	16.2	14.7	10.7	8.00	9.15	13.3
	Ijira	*JP*	*11022*	30.1	37.1	30.4	38.7	22.1	30.9	31.0	29.3	35.7	23.0	17.3	18.0	20.5
	Oki	*JP*	*11023*	22.8	17.0	18.6	17.5	15.9	27.4	18.7	23.1	25.0	19.4	21.8	18.8	26.4
	Banryu	*JP*	*11024*	22.9	21.9	20.4	23.3	19.9	32.7	20.5	32.3	29.3	22.1	19.8	21.8	33.5
	Yusuhara	*JP*	*11025*	19.5	14.9	17.4	18.4	10.6	22.8	14.4	15.3	21.6	17.2	16.2	11.7	16.8
	Hedo	*JP*	*11027*	7.38	10.9	11.3	12.5	16.5	14.7	10.1	10.2	10.0	7.81	6.34	12.5	7.49
	Ogasawara	*JP*	*11018*	5.91	8.07	8.21	9.10	7.48	15.4	10.1	9.38	10.0	6.79	5.68	4.98	4.63
	Tokyo	*JP*	*11057*								16.3	24.8	17.7	11.2	14.9	14.4
Lao PDR	Vientiane	*LA*	*11051*				0.313	2.26	0.481	0.325	2.16	0.987	3.31	***	***	0.351
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	54.4	69.4	61.4
	Tanah Rata	*MY*	*11030*	16.1	12.7	10.8	12.7	13.7	14.3	11.3	11.1	8.01	8.31	8.64	9.76	10.9
	Danum Valley	*MY*	*11053*						10.5	8.93	8.03	6.02	6.00	5.99	6.20	6.58
	Kuching	*MY*	*11060*									5.55	5.47	5.25	3.73	4.84
Mongolia	Ulaanbaatar	*MN*	*11031*	0.550	0.643	0.419	1.90	0.347	1.02	0.354	0.550	0.521	0.777	1.33	3.64	1.31
	Terelj	*MN*	*11032*	3.02	0.913	1.77	3.96	1.64	5.44	6.89	6.04	3.72	0.608	2.44	5.47	1.81
Myanmar	Yangon	*MM*	*11056*								2.66	0.392	0.346	0.384	0.347	0.323
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	2.25	2.27	***
	Los Baños	*PH*	*11034*	3.64	2.98	1.81	32.5	5.47	7.27	2.44	2.91	11.2	2.64	1.32	2.70	***
	Mt. Sto. Tomas	*PH*	*11055*							0.475	2.97	3.22	1.47	0.201	4.46	1.12
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	39.0	23.0	24.4
	Cheju	*KR*	*11036*	14.1	12.9	24.3	15.0	18.2	28.5	45.9	30.7	21.5	7.79	9.19	6.80	4.95
	Imsil	*KR*	*11037*		8.05	2.02	8.34	11.8	0.997	6.45	1.85	13.1	8.06	13.5	5.42	7.82
Russia	Mondy	*RU*	*11038*	5.50	3.15	4.06	4.47	4.57	4.34	4.08	3.03	6.72	3.33	2.80	2.90	2.37
	Listvyanka	*RU*	*11039*	8.57	11.0	13.2	9.71	12.1	14.7	22.8	21.6	23.2	14.4	17.6	18.8	16.7
	Irkutsk	*RU*	*11040*	7.76	5.31	9.44	4.24	12.2	7.61	7.04	11.7	17.1	3.89	7.41	9.51	11.6
	Primorskaya	*RU*	*11041*			6.30	13.2	14.5	8.67	15.0	14.5	16.3	10.5	10.7	23.4	8.55
Thailand	Bangkok	*TH*	*11042*	11.1	10.7	7.90	29.5	6.49	12.7	6.91	8.96	5.29	8.07	8.48	8.97	2.08
	Samutprakarn	*TH*	*11043*	14.8				3.41	3.42	1.36	2.46	5.08	7.40	4.82	1.27	0.679
	Pathumthani	*TH*	*11044*	5.66	7.42	4.64	13.7	13.6	12.9	13.0	15.6	9.24	7.05	5.82	9.99	3.60
	Khanchanabur	*TH*	*11045*	2.73	5.47	2.30	3.47	0.847	2.87	1.78	1.66	2.19	2.18	2.03	3.21	0.964
	Chiang Mai	*TH*	*11046*		1.94	1.89	2.47	2.54	5.94	2.00	1.12	1.04	1.20	0.676	5.14	0.789
	Nakhon Ratchasima	*TH*	*11054*							7.61	8.30	9.31	13.6	17.8	9.95	8.58
Vietnam	Hanoi	*VN*	*11047*	3.57	1.47	2.79	1.55	2.26	0.710	1.85	2.61	1.43	2.15	1.16	5.03	2.39
	Hoa Binh	*VN*	*11048*	7.79	9.09	6.50	4.15	2.52	2.03	2.57	8.71	3.25	5.13	4.26	3.65	2.35
	Cuc Phuong	*VN*	*11061*										10.3	5.88	9.09	3.68
	Da Nang	*VN*	*11062*										16.8	7.71	10.4	3.66

[***]: 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 Precipitation amount-weighted annual average pH from 2000 to 2012

Country	Name of sites	Code		2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Cambodia	Phnom Penh	*KH*	*11052*					5.32	6.32	6.72	6.69	5.84	6.19	5.97	5.96	6.16
China	Guanyinqiac	*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	4.15	4.18	4.24
	Jinyunshar	*CN*	*11003*		4.18	4.36	4.30	4.59	4.62	4.69	4.52	4.36	4.33	3.94	4.04	4.09
	Shizhan	*CN*	*11004*	5.68	6.38	6.24	6.00	6.30	5.41	5.56	5.52	6.40	6.53	6.68	6.27	6.26
	Weishuiyuar	*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	5.54	5.95	7.12
	Hongwen	*CN*	*11008*	4.72	4.53	4.79	4.46	4.71	4.70	4.83	4.79	4.59	4.52	4.57	4.65	4.51
	Xiaoping	*CN*	*11009*	4.91	4.90	4.47	4.38	4.61	4.78	4.78	4.60	4.55	4.47	4.58	4.82	4.80
	Xiang Zhou	*CN*	*11010*	5.15	4.94	5.11	5.10	4.78	4.56	4.87	4.63	4.93	4.87	4.85	5.05	5.11
	Zhuxiandong	*CN*	*11011*	4.64	4.78	4.89	5.10	4.63	4.61	4.82	***	4.88	4.75	4.95	4.78	***
Indonesia	Jakarta	*ID*	*11012*	5.18	5.42	4.77	5.16	4.69	4.31	4.38	4.56	4.65	4.63	4.73	4.55	4.76
	Serpong	*ID*	*11014*	***	4.63	4.65	4.62	4.68	4.59	4.60	4.59	4.62	4.71	4.76	4.70	4.91
	Kototabang	*ID*	*11013*	4.51	5.07	5.31	5.30	4.73	4.68	4.53	5.27	5.22	4.65	4.80	5.04	5.01
	Bandung	*ID*	*11015*	***	4.99	4.46	5.00	5.03	5.03	5.15	4.93	5.17	5.30	5.10	5.40	5.46
	Maros	*ID*	*11059*									5.63	5.33	5.21	5.35	5.62
Japan	Rishiri	*JP*	*11016*	4.80	4.77	4.82	4.88	4.84	4.74	4.67	4.58	4.91	4.74	4.73	4.70	4.70
	Ochiishi	*JP*	*11050*				4.91	4.68	4.84	4.86	4.78	4.87	5.02	4.83	4.88	4.82
	Tappi	*JP*	*11017*	4.72	4.64	4.68	4.57	4.59	4.60	4.58	4.62	4.59	4.74	4.69	4.61	4.69
	Sado-seki	*JP*	*11019*	4.57	4.63	4.64	4.67	4.70	4.56	4.70	4.50	4.55	4.75	4.70	4.68	4.73
	Happo	*JP*	*11021*	4.73	4.84	4.93	4.91	4.86	4.80	4.97	4.79	4.83	4.97	5.10	5.04	4.88
	Ijira	*JP*	*11022*	4.52	4.43	4.52	4.41	4.65	4.51	4.51	4.53	4.45	4.64	4.76	4.75	4.69
	Oki	*JP*	*11023*	4.64	4.77	4.73	4.76	4.80	4.56	4.73	4.64	4.60	4.71	4.66	4.73	4.58
	Banryu	*JP*	*11024*	4.64	4.66	4.69	4.63	4.70	4.49	4.69	4.49	4.53	4.66	4.70	4.66	4.48
	Yusuhara	*JP*	*11025*	4.71	4.83	4.76	4.73	4.97	4.64	4.84	4.81	4.67	4.77	4.79	4.93	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	5.20	4.90	5.13
	Ogasawara	*JP*	*11018*	5.23	5.09	5.09	5.04	5.13	4.81	4.99	5.03	5.00	5.17	5.25	5.30	5.33
	Tokyo	*JP*	*11057*								4.79	4.60	4.75	4.95	4.83	4.84
Lao PDR	Vientiane	*LA*	*11051*				6.51	5.65	6.32	6.49	5.67	6.01	5.48	***	***	6.46
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	4.26	4.16	4.21
	Tanah Rata	*MY*	*11030*	4.79	4.90	4.97	4.90	4.86	4.84	4.95	4.95	5.10	5.08	5.06	5.01	4.96
	Danum Valley	*MY*	*11053*						4.98	5.05	5.10	5.22	5.22	5.22	5.21	5.18
	Kuching	*MY*	*11060*									5.26	5.26	5.28	5.43	5.32
Mongolia	Ulaanbaatar	*MN*	*11031*	6.26	6.19	6.38	5.72	6.46	5.99	6.45	6.26	6.28	6.11	5.88	5.44	5.88
	Terelj	*MN*	*11032*	5.52	6.04	5.75	5.40	5.78	5.26	5.16	5.22	5.43	6.22	5.61	5.26	5.74
Myanmar	Yangon	*MM*	*11056*								5.57	6.41	6.46	6.42	6.46	6.49
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	5.65	5.64	***
	Los Baños	*PH*	*11034*	5.44	5.53	5.74	4.49	5.26	5.14	5.61	5.54	4.95	5.58	5.88	5.57	***
	Mt. Sto. Tomas	*PH*	*11055*							6.32	5.53	5.49	5.83	6.70	5.35	5.95
Republic	Kanghwa	*KR*	*11035*	5.00	4.99	4.65	4.67	4.57	4.25	4.68	4.62	4.55	4.59	4.41	4.64	4.61
of Korea	Cheju	*KR*	*11036*	4.85	4.89	4.61	4.83	4.74	4.55	4.34	4.51	4.67	5.11	5.04	5.17	5.31
	Imsil	*KR*	*11037*		5.09	5.69	5.08	4.93	6.00	5.19	5.73	4.88	5.09	4.87	5.27	5.11
Russia	Mondy	*RU*	*11038*	5.26	5.50	5.39	5.35	5.34	5.36	5.39	5.52	5.17	5.48	5.55	5.54	5.62
	Listvyanka	*RU*	*11039*	5.07	4.96	4.88	5.01	4.92	4.83	4.64	4.67	4.63	4.84	4.76	4.73	4.78
	Irkutsk	*RU*	*11040*	5.11	5.28	5.02	5.37	4.91	5.12	5.15	4.93	4.77	5.41	5.13	5.02	4.93
	Primorskaya	*RU*	*11041*			5.20	4.88	4.84	5.06	4.83	4.84	4.79	4.98	4.97	4.63	5.07
Thailand	Bangkok	*TH*	*11042*	4.95	4.97	5.10	4.53	5.19	4.89	5.16	5.05	5.28	5.09	5.07	5.05	5.68
	Samutprakarn	*TH*	*11043*	4.83				5.47	5.47	5.87	5.61	5.29	5.13	5.32	5.90	6.17
	Pathumthani	*TH*	*11044*	5.25	5.13	5.33	4.86	4.87	4.89	4.89	4.81	5.03	5.15	5.24	5.00	5.44
	Khanchanabur	*TH*	*11045*	5.56	5.26	5.64	5.46	6.07	5.54	5.75	5.78	5.66	5.66	5.69	5.49	6.02
	Chiang Mai	*TH*	*11046*		5.71	5.72	5.61	5.59	5.23	5.70	5.95	5.98	5.92	6.17	5.29	6.10
	Nakhon Ratchasima	*TH*	*11054*							5.12	5.08	5.03	4.87	4.75	5.00	5.07
Vietnam	Hanoi	*VN*	*11047*	5.45	5.83	5.55	5.81	5.65	6.15	5.73	5.58	5.84	5.67	5.93	5.30	5.62
	Hoa Binh	*VN*	*11048*	5.11	5.04	5.19	5.38	5.60	5.69	5.59	5.06	5.49	5.29	5.37	5.44	5.63
	Cuc Phuong	*VN*	*11061*										4.99	5.23	5.04	5.43
	Da Nang	*VN*	*11062*										4.77	5.11	4.98	5.44

[***]: 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 Precipitation amount-weighted annual average EC from 2000 to 2012

unit: mS m^{-1}

Country	Name of sites	Code		2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Cambodia	Phnom Penh	*KH*	*11052*					1.17	0.807	1.17	1.37	1.53	0.880	0.747	0.820	0.704
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	6.71	6.55	5.33
	Jinyunshan	*CN*	*11003*		6.23	3.69	4.19	4.35	4.23	5.45	3.76	5.13	5.27	8.07	7.09	6.56
	Shizhan	*CN*	*11004*	11.4	19.5	16.1	7.50	6.47	5.18	9.81	7.21	7.96	5.80	5.63	4.31	6.51
	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	1.67	3.04	5.39
	Hongwen	*CN*	*11008*	1.66	3.87	2.64	2.88	3.41	2.63	2.31	2.68	2.15	2.25	2.05	2.18	2.67
	Xiaoping	*CN*	*11009*	0.879	1.44	1.60	2.15	1.97	1.91	2.19	2.01	2.09	2.26	2.06	1.82	1.67
	Xiang Zhou	*CN*	*11010*	2.05	1.95	3.20	2.19	2.37	2.41	2.20	1.99	1.84	1.99	1.74	1.84	1.76
	Zhuxiandong	*CN*	*11011*	3.04	2.08	3.63	2.42	3.15	2.49	2.67	***	1.94	2.15	1.37	1.99	***
Indonesia	Jakarta	*ID*	*11012*	5.06	26.4	2.97	4.78	3.69	3.37	1.92	2.23	1.78	1.66	1.90	2.17	1.39
	Serpong	*ID*	*11014*	***	2.94	1.87	2.26	2.25	2.63	2.10	2.14	2.10	1.66	1.95	2.31	2.05
	Kototabang	*ID*	*11013*	0.997	0.427	4.94	1.96	1.11	0.843	0.881	0.816	0.556	0.766	0.903	0.742	0.791
	Bandung	*ID*	*11015*	3.37	2.08	1.68	1.50	1.80	1.75	1.69	1.64	1.58	1.62	1.43	1.90	1.60
	Maros	*ID*	*11059*									0.623	1.06	0.718	0.576	0.885
Japan	Rishiri	*JP*	*11016*	6.37	4.51	4.23	3.80	4.72	4.46	3.04	3.72	4.86	4.10	3.77	3.50	5.54
	Ochiishi	*JP*	*11050*				3.45	6.72	4.01	5.00	3.69	3.33	3.31	4.65	3.28	4.96
	Tappi	*JP*	*11017*	3.69	3.52	3.89	3.74	4.57	4.18	5.98	4.92	4.32	3.78	2.80	3.64	3.45
	Sado-seki	*JP*	*11019*	4.76	5.64	4.99	2.65	3.10	5.05	3.81	4.92	4.28	5.65	5.08	3.57	4.88
	Happo	*JP*	*11021*	1.22	0.965	0.667	0.692	0.915	1.10	0.840	1.08	1.03	0.860	0.597	0.666	1.07
	Ijira	*JP*	*11022*	2.11	2.44	2.18	2.12	1.62	2.11	2.15	2.05	2.18	1.65	1.33	1.46	1.65
	Oki	*JP*	*11023*	7.28	5.90	6.59	3.82	5.86	11.3	4.77	5.91	6.60	7.16	7.56	8.76	6.72
	Banryu	*JP*	*11024*	1.82	2.52	2.56	2.56	3.02	3.50	2.54	3.36	3.10	3.02	2.88	3.13	3.44
	Yusuhara	*JP*	*11025*	1.17	0.981	1.42	1.16	1.03	1.59	1.08	1.06	1.14	1.15	1.06	0.870	1.24
	Hedo	*JP*	*11027*	7.21	2.95	8.85	7.10	14.2	7.10	3.58	2.54	2.61	2.44	4.59	3.87	7.27
	Ogasawara	*JP*	*11018*	2.59	2.20	3.95	4.31	2.29	2.33	2.14	2.59	1.86	3.27	3.58	3.70	2.26
	Tokyo	*JP*	*11057*								1.80	1.96	1.66	1.18	1.88	1.75
Lao PDR	Vientiane	*LA*	*11051*				2.07	2.65	1.01	0.764	0.396	0.644	0.534	***	***	0.411
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	2.90	3.43	3.10
	Tanah Rata	*MY*	*11030*	0.725	0.543	0.594	0.613	0.763	0.684	0.510	0.506	0.471	0.544	0.550	0.822	0.780
	Danum Valley	*MY*	*11053*						0.562	0.465	0.347	0.461	0.445	0.552	0.440	0.416
	Kuching	*MY*	*11060*									0.443	0.521	0.500	0.547	0.489
Mongolia	Ulaanbaatar	*MN*	*11031*	1.79	1.91	2.20	1.56	1.68	1.87	1.92	2.18	1.92	1.76	1.53	1.74	1.71
	Terelj	*MN*	*11032*	1.28	0.933	1.93	1.05	1.12	1.18	1.95	2.02	1.34	2.06	1.88	1.54	1.33
Myanmar	Yangon	*MM*	*11056*								0.595	0.949	1.54	1.34	0.682	1.30
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	1.89	3.76	***
	Los Baños	*PH*	*11034*	1.13	2.08	1.22	1.99	0.801	1.01	1.08	0.859	1.76	0.802	1.22	1.18	***
	Mt. Sto. Tomas	*PH*	*11055*							0.221	1.03	0.347	0.495	0.533	0.355	0.500
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	2.46	2.34	2.76
	Cheju	*KR*	*11036*	3.37	2.56	3.03	2.22	2.45	3.43	3.64	3.43	3.47	2.20	2.32	3.07	7.05
	Imsil	*KR*	*11037*		1.31	1.80	1.42	1.42	1.72	2.51	1.58	1.75	1.98	1.89	1.58	2.58
Russia	Mondy	*RU*	*11038*	0.578	0.680	0.964	0.586	0.536	0.485	0.428	0.799	0.727	0.621	0.653	0.566	0.864
	Listvyanka	*RU*	*11039*	1.04	0.945	1.39	1.36	1.30	1.19	1.51	1.38	1.58	1.31	1.41	1.63	1.51
	Irkutsk	*RU*	*11040*	1.71	1.79	2.10	1.67	1.80	1.66	1.76	2.02	2.48	2.18	2.05	2.16	2.16
	Primorskaya	*RU*	*11041*			1.77	2.66	2.20	2.03	2.47	1.90	2.58	1.48	1.96	2.64	1.56
Thailand	Bangkok	*TH*	*11042*	1.64	1.50	1.32	1.67	1.25	1.66	1.94	1.41	1.54	1.38	1.31	1.24	1.26
	Samutprakarn	*TH*	*11043*	1.52				1.01	1.30	1.56	1.34	1.66	1.48	1.13	0.667	0.902
	Pathumthani	*TH*	*11044*	1.48	1.80	1.07	1.24	1.47	1.31	1.42	1.50	1.19	1.07	0.975	1.27	1.17
	Khanchanaburi	*TH*	*11045*	0.519	0.559	0.508	0.352	0.406	0.315	0.462	0.292	0.496	0.511	0.249	0.585	0.817
	Chiang Mai	*TH*	*11046*		0.885	0.476	0.458	0.486	0.812	0.593	0.630	0.622	0.608	0.519	0.442	0.512
	Nakhon Ratchasima	*TH*	*11054*							0.918	0.775	0.833	0.981	0.992	0.796	0.756
Vietnam	Hanoi	*VN*	*11047*	1.55	0.917	1.52	1.70	1.85	2.75	2.18	1.57	1.11	1.41	1.72	1.60	1.56
	Hoa Binh	*VN*	*11048*	1.15	1.04	1.06	1.12	1.48	1.15	1.22	1.08	0.918	1.10	1.39	1.02	0.940
	Cuc Phuong	*VN*	*11061*										1.74	1.71	1.98	1.73
	Da Nang	*VN*	*11062*										2.53	1.46	2.37	2.10

[***]: No data or not measured

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

Black column: Monitoring was not carried out

Table 3.75 Annual SO_4^{2-} deposition amount from 2000 to 2012

unit: mmol $m^{-2}y^{-1}$

Country	Name of sites	Code		2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Cambodia	Phnom Penh	*KH*	*11052*					***	7.43	5.04	30.9	21.3	15.4	13.6	11.5	17.0
China	Guanyinqiao	*CN*	*11001*	164	154	165	108	229	200	149	169					
	Nanshan	*CN*	*11002*	164												
	Haifu	*CN*	*11058*									145	106	136	115	103
	Jinyunshan	*CN*	*11003*		87.7	126	103	166	149	169	149	146	125	148	119	125
	Shizhan	*CN*	*11004*	199	171	297	258	104	63.9	132	96.7	73.6	80.5	45.8	72.5	42.9
	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	36.8	60.7	36.9
	Hongwen	*CN*	*11008*	30.7	16.7	67.0	48.0	73.6	80.4	61.1	102	29.9	19.2	40.8	26.4	29.7
	Xiaoping	*CN*	*11009*	22.8	49.1	36.3	41.7	53.3	59.0	39.7	29.2	58.3	32.0	41.4	38.1	30.2
	Xiang Zhou	*CN*	*11010*	45.5	31.2	48.3	35.3	25.0	28.0	44.6	31.2	46.5	36.6	36.7	19.5	22.6
	Zhuxiandong	*CN*	*11011*	85.4	49.5	50.6	32.4	34.3	31.3	17.1	***	49.6	33.2	31.6	23.4	***
Indonesia	Jakarta	*ID*	*11012*	92.7	77.5	60.5	108	71.4	85.6	38.7	60.6	38.9	30.2	46.4	28.4	56.0
	Serpong	*ID*	*11014*	***	61.4	64.3	49.5	41.0	27.5	45.2	61.5	65.9	31.0	34.8	27.9	26.0
	Kototabang	*ID*	*11013*	8.65	5.66	13.4	28.7	11.0	12.1	9.55	19.4	7.21	12.5	15.0	17.1	16.0
	Bandung	*ID*	*11015*	60.2	87.8	70.4	32.8	24.8	61.7	35.1	52.0	65.4	78.3	70.3	47.1	55.2
	Maros	*ID*	*11059*									16.3	22.5	28.9	30.0	21.5
Japan	Rishiri	*JP*	*11016*	30.0	19.1	26.1	16.6	27.0	26.8	29.6	24.9	24.3	27.4	25.1	26.1	32.6
	Ochiishi	*JP*	*11050*				14.9	22.3	18.6	27.6	18.4	13.7	26.3	24.9	12.4	22.0
	Tappi	*JP*	*11017*	22.9	24.7	30.2	25.1	38.6	36.8	34.5	31.2	23.3	30.9	33.1	31.5	26.2
	Sado-seki	*JP*	*11019*	36.8	39.8	40.4	18.6	27.2	39.1	35.7	40.6	31.6	34.2	44.2	34.0	38.6
	Happo	*JP*	*11021*	29.2	27.4	19.8	18.5	28.2	35.8	28.4	28.4	18.0	23.8	16.0	21.5	23.2
	Ijira	*JP*	*11022*	53.3	49.1	52.2	56.7	48.0	48.5	58.3	43.0	41.0	44.2	42.6	39.8	38.9
	Oki	*JP*	*11023*	49.0	42.1	55.4	34.3	41.3	73.2	41.1	42.1	39.5	42.4	59.3	70.0	49.1
	Banryu	*JP*	*11024*	24.4	33.9	24.8	30.5	34.4	34.6	43.1	35.5	32.7	36.3	30.8	30.1	31.2
	Yusuhara	*JP*	*11025*	31.0	19.0	26.2	26.5	26.7	28.0	31.9	22.5	22.4	24.1	23.9	23.9	32.8
	Hedo	*JP*	*11027*	93.6	33.9	75.0	49.0	137	64.1	35.8	38.8	27.8	25.9	55.3	36.3	88.5
	Ogasawara	*JP*	*11018*	22.6	20.7	24.1	25.2	12.5	26.9	16.2	19.9	15.0	27.7	27.9	20.4	16.0
	Tokyo	*JP*	*11057*								18.4	36.5	27.6	18.1	22.0	25.5
Lao PDR	Vientiane	*LA*	*11051*				***	***	***	2.45	6.54	8.43	0.733	***	***	3.19
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	60.3	81.2	58.0
	Tanah Rata	*MY*	*11030*	12.9	9.79	12.8	11.4	9.74	16.1	12.3	10.4	12.9	10.0	7.96	16.6	13.1
	Danum Valley	*MY*	*11053*						5.53	10.2	6.85	7.46	9.56	12.0	7.42	6.75
	Kuching	*MY*	*11060*									17.8	17.6	16.6	18.9	17.7
Mongolia	Ulaanbaatar	*MN*	*11031*	4.78	4.17	4.41	5.80	1.84	4.01	4.78	4.67	4.33	4.53	3.39	4.59	***
	Terelj	*MN*	*11032*	3.41	0.861	3.72	2.57	2.75	4.29	5.10	4.63	3.40	1.83	3.96	3.40	***
Myanmar	Yangon	*MM*	*11056*								***	***	24.1	10.3	20.9	19.2
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	54.2	68.3	***
	Los Baños	*PH*	*11034*	27.7	28.4	27.3	11.4	14.7	16.2	23.9	26.0	34.2	25.6	15.3	20.4	***
	Mt. Sto. Tomas	*PH*	*11055*							0.592	19.4	17.6	23.8	17.8	21.6	41.6
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	41.3	40.1	20.3
	Cheju	*KR*	*11036*	24.5	23.0	28.5	29.3	26.8	24.0	31.6	47.1	22.1	26.3	19.4	27.4	43.9
	Imsil	*KR*	*11037*		21.3	22.7	30.6	19.9	28.4	19.0	38.8	17.9	21.0	32.0	30.9	27.2
Russia	Mondy	*RU*	*11038*	2.19	3.51	2.20	3.48	2.46	1.54	1.93	3.26	1.47	0.929	0.613	0.333	0.753
	Listvyanka	*RU*	*11039*	6.79	6.60	6.56	10.3	10.6	7.80	5.90	6.99	8.33	6.02	6.76	10.6	7.33
	Irkutsk	*RU*	*11040*	16.1	13.9	10.3	12.0	14.7	12.3	9.28	16.0	20.3	13.4	12.6	11.3	16.8
	Primorskaya	*RU*	*11041*			24.2	13.9	25.7	28.2	28.6	30.4	22.5	19.5	21.5	8.70	19.1
Thailand	Bangkok	*TH*	*11042*	24.8	21.3	24.2	25.6	19.8	39.1	35.5	27.2	32.0	26.3	24.3	23.2	19.3
	Samutprakarn	*TH*	*11043*	25.0				20.7	31.1	29.4	27.7	27.2	30.0	29.3	16.1	9.73
	Pathumthani	*TH*	*11044*	18.7	23.2	14.2	20.5	17.1	16.7	21.6	16.6	17.8	11.7	14.1	14.8	12.4
	Khanchanaburi	*TH*	*11045*	3.21	7.91	12.4	5.78	4.71	5.72	10.2	4.20	7.41	7.19	2.91	9.93	8.89
	Chiang Mai	*TH*	*11046*		3.02	6.57	3.34	7.95	8.43	6.44	5.62	6.38	4.52	3.88	5.23	5.28
	Nakhon Ratchasima	*TH*	*11054*							9.80	8.93	12.7	8.11	11.5	7.99	7.48
Vietnam	Hanoi	*VN*	*11047*	37.9	31.5	47.8	47.7	58.3	90.6	57.7	55.8	45.8	44.1	43.8	55.7	51.8
	Hoa Binh	*VN*	*11048*	30.8	32.6	30.5	38.0	53.9	40.6	38.5	33.1	26.9	21.8	36.1	31.7	32.7
	Cuc Phuong	*VN*	*11061*										41.9	33.7	69.7	49.0
	Da Nang	*VN*	*11062*										55.6	27.6	76.7	32.9

[***]: 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 3.76 Annual nss-SO_4^{2-} deposition amount from 2000 to 2012

unit: mmol $m^{-2}y^{-1}$

Country	Name of sites	Code		2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Cambodia	Phnom Penh	*KH*	*11052*					***	***	4.82	30.2	15.9	14.9	13.3	11.3	16.6
China	Guanyinqiao	*CN*	*11001*	163	154	164	108	228	200	149	169					
	Nanshan	*CN*	*11002*	164												
	Haifu	*CN*	*11058*									145	106	135	115	102
	Jinyunshan	*CN*	*11003*		87.3	125	102	165	148	168	148	145	124	148	119	125
	Shizhan	*CN*	*11004*	198	167	291	253	103	63.4	131	96.2	73.0	80.1	45.6	71.8	42.8
	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	36.3	60.3	35.8
	Hongwen	*CN*	*11008*	28.5	16.5	61.8	45.3	70.3	75.1	57.7	99.7	28.6	18.1	39.0	25.5	28.8
	Xiaoping	*CN*	*11009*	22.0	47.2	34.1	39.0	51.8	57.3	37.9	28.4	55.6	30.9	39.7	37.1	29.5
	Xiang Zhou	*CN*	*11010*	40.3	29.1	44.0	31.6	22.4	25.3	41.3	29.5	40.6	31.7	34.5	17.0	18.4
	Zhuxiandong	*CN*	*11011*	82.4	46.2	46.3	28.8	30.4	27.7	15.9	***	44.0	28.9	29.4	20.3	***
Indonesia	Jakarta	*ID*	*11012*	87.7	74.6	57.3	105	68.2	82.7	37.6	58.5	37.9	29.3	45.4	27.7	53.9
	Serpong	*ID*	*11014*	***	59.1	60.5	48.0	39.3	26.7	44.4	60.1	64.5	30.2	34.1	27.4	25.4
	Kototabang	*ID*	*11013*	***	5.33	12.7	26.9	9.66	11.3	9.08	17.9	6.47	11.6	14.3	16.2	14.4
	Bandung	*ID*	*11015*	***	84.6	69.1	32.1	24.2	60.5	33.7	51.2	64.2	76.4	68.8	46.0	53.8
	Maros	*ID*	*11059*									13.5	20.0	26.7	26.7	18.7
Japan	Rishiri	*JP*	*11016*	14.9	11.2	14.9	9.12	13.9	15.0	21.0	17.4	12.0	16.2	14.6	15.8	12.3
	Ochiishi	*JP*	*11050*				5.84	8.33	8.28	11.3	8.73	6.14	9.29	10.5	5.51	7.68
	Tappi	*JP*	*11017*	13.5	16.0	17.1	15.4	21.0	20.6	17.8	16.6	13.5	15.4	22.5	21.2	16.3
	Sado-seki	*JP*	*11019*	20.2	18.9	18.8	12.3	14.7	19.2	18.7	24.7	18.7	14.2	18.3	21.2	19.9
	Happo	*JP*	*11021*	28.1	26.6	19.3	17.8	27.1	34.5	27.8	28.0	17.6	23.1	15.4	20.9	22.0
	Ijira	*JP*	*11022*	50.1	45.1	47.6	54.3	43.6	46.3	56.5	40.1	39.0	41.9	39.6	37.2	35.5
	Oki	*JP*	*11023*	20.4	18.4	21.2	16.4	16.8	25.3	22.0	22.8	18.2	17.0	23.6	25.6	21.2
	Banryu	*JP*	*11024*	21.7	25.5	18.6	22.0	22.5	27.5	35.3	29.5	27.2	25.9	22.5	20.8	24.5
	Yusuhara	*JP*	*11025*	28.4	17.6	22.1	24.0	20.9	24.5	29.7	20.6	21.2	22.6	22.6	21.3	29.4
	Hedo	*JP*	*11027*	17.1	13.8	15.1	15.7	43.4	23.1	14.7	17.8	13.2	11.0	15.3	14.6	17.9
	Ogasawara	*JP*	*11018*	6.22	9.23	5.25	5.71	4.02	15.0	6.58	7.61	6.38	8.72	5.60	4.62	5.27
	Tokyo	*JP*	*11057*								16.2	34.3	25.1	16.3	18.9	22.6
Lao PDR	Vientiane	*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	59.3	80.2	57.3
	Tanah Rata	*MY*	*11030*	12.5	9.49	12.6	11.1	9.48	14.9	12.1	10.2	12.6	9.80	7.78	16.2	12.8
	Danum Valley	*MY*	*11053*						5.19	9.23	6.11	6.89	8.36	10.2	6.51	6.24
	Kuching	*MY*	*11060*									16.4	15.6	14.7	16.3	16.5
Mongolia	Ulaanbaatar	*MN*	*11031*	4.69	4.08	4.34	5.73	1.81	3.95	4.68	4.63	4.22	4.47	3.36	4.53	***
	Terelj	*MN*	*11032*	3.33	0.776	3.51	2.49	2.67	4.12	4.93	4.53	3.26	1.78	3.86	3.34	***
Myanmar	Yangon	*MM*	*11056*								***	***	20.8	8.88	18.0	15.8
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	50.6	63.6	***
	Los Baños	*PH*	*11034*	22.4	23.9	25.1	10.0	13.4	14.5	21.0	22.7	32.0	22.5	12.5	17.6	***
	Mt. Sto. Tomas	*PH*	*11055*							0.519	18.2	16.1	21.5	16.5	20.4	38.1
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	38.8	36.9	18.3
	Cheju	*KR*	*11036*	14.8	18.0	24.9	25.6	22.9	20.4	25.9	39.5	15.3	23.0	13.1	17.6	16.9
	Imsil	*KR*	*11037*		20.1	20.4	28.0	18.6	26.8	17.6	37.5	16.3	17.7	27.2	27.5	22.8
Russia	Mondy	*RU*	*11038*	2.16	3.46	2.17	3.42	2.43	1.51	1.89	3.20	1.45	0.912	0.598	0.316	0.726
	Listvyanka	*RU*	*11039*	6.67	6.50	6.47	10.1	10.4	7.72	5.85	6.93	8.27	5.94	6.69	10.4	7.25
	Irkutsk	*RU*	*11040*	15.8	13.6	10.2	11.8	14.5	12.1	9.07	15.8	20.0	12.9	12.2	11.0	16.5
	Primorskaya	*RU*	*11041*			23.0	13.3	24.8	27.2	28.0	29.2	21.7	18.8	20.5	8.19	17.9
Thailand	Bangkok	*TH*	*11042*	24.4	20.7	22.9	24.9	19.1	37.6	34.6	26.5	31.0	25.1	23.3	22.4	18.6
	Samutprakarn	*TH*	*11043*	24.4				19.5	29.1	28.0	26.3	25.6	28.8	27.2	15.4	9.28
	Pathumthani	*TH*	*11044*	18.1	22.5	13.7	20.1	16.6	16.2	20.8	16.1	17.2	11.2	13.5	14.2	11.1
	Khanchanaburi	*TH*	*11045*	2.72	6.89	11.2	4.81	3.96	4.89	9.24	3.48	6.33	6.05	2.61	9.06	7.49
	Chiang Mai	*TH*	*11046*		2.78	5.78	3.21	7.74	8.36	6.16	5.46	6.18	4.36	3.69	4.93	5.04
	Nakhon Ratchasima	*TH*	*11054*							9.48	8.56	12.2	7.90	11.1	7.63	7.23
Vietnam	Hanoi	*VN*	*11047*	36.5	30.0	47.3	46.9	57.5	88.7	56.7	55.0	44.5	43.2	43.3	55.0	51.4
	Hoa Binh	*VN*	*11048*	29.4	31.3	30.3	37.8	53.5	39.6	38.1	32.7	26.5	21.5	35.7	31.5	32.4
	Cuc Phuong	*VN*	*11061*										40.4	32.5	68.2	46.5
	Da Nang	*VN*	*11062*										38.7	23.4	61.3	27.1

[***]: 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 3.77 Annual NO_3^- deposition amount from 2000 to 2012

unit: mmol $m^{-2}y^{-1}$

Country	Name of sites	Code		2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Cambodia	Phnom Penh	*KH*	*11052*					3.22	***	8.59	11.3	17.2	13.7	15.5	11.3	17.4
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	75.9	67.4	74.6
	Jinyunshan	*CN*	*11003*		28.6	47.3	42.5	55.9	50.2	55.2	51.8	56.4	59.7	73.4	65.8	70.8
	Shizhan	*CN*	*11004*	48.6	55.8	52.2	86.6	37.1	6.16	39.4	40.0	15.5	34.1	18.8	11.5	19.4
	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	14.1	8.01	18.5
	Hongwen	*CN*	*11008*	28.4	11.2	48.2	43.7	53.1	63.4	47.7	50.6	21.6	17.2	44.3	19.9	32.5
	Xiaoping	*CN*	*11009*	22.8	50.1	32.0	39.9	38.5	52.9	37.7	27.3	49.2	33.2	46.0	34.6	34.4
	Xiang Zhou	*CN*	*11010*	31.8	28.0	30.9	36.0	29.6	20.3	33.3	23.9	34.7	35.5	44.3	19.8	23.1
	Zhuxiandong	*CN*	*11011*	59.6	57.1	32.9	20.2	31.9	22.8	11.7	***	33.9	31.3	36.6	21.5	***
Indonesia	Jakarta	*ID*	*11012*	27.8	66.4	44.3	94.5	114	115	30.4	67.4	24.1	23.8	36.2	29.5	44.2
	Serpong	*ID*	*11014*	***	81.4	81.6	66.1	58.0	32.5	45.4	61.3	71.8	34.2	42.4	29.5	28.2
	Kototabang	*ID*	*11013*	14.4	3.32	10.1	154	9.94	3.46	1.74	9.88	6.93	0.679	5.61	11.1	12.3
	Bandung	*ID*	*11015*	30.7	70.0	66.7	32.7	25.2	33.5	30.3	42.4	48.4	61.3	46.8	42.8	45.0
	Maros	*ID*	*11059*									10.7	17.4	16.9	27.3	22.2
Japan	Rishiri	*JP*	*11016*	13.9	11.1	12.9	8.65	11.0	12.1	18.2	13.8	12.1	18.3	15.4	17.4	15.7
	Ochiishi	*JP*	*11050*				6.22	8.78	7.65	11.3	8.29	6.16	8.57	10.3	7.83	8.54
	Tappi	*JP*	*11017*	13.5	16.5	22.5	19.4	24.0	22.5	21.7	22.8	18.5	18.0	27.2	22.7	20.4
	Sado-seki	*JP*	*11019*	19.5	21.6	21.4	15.7	17.3	21.3	23.9	30.0	24.4	17.2	24.8	27.3	26.0
	Happo	*JP*	*11021*	24.3	20.8	18.2	16.2	24.7	28.6	22.7	22.9	18.2	20.1	17.1	25.1	23.3
	Ijira	*JP*	*11022*	64.8	48.5	57.8	64.5	52.6	61.9	68.5	49.4	54.3	52.9	57.9	46.4	47.7
	Oki	*JP*	*11023*	22.4	19.5	23.7	20.7	24.0	28.7	25.4	27.6	21.5	22.7	35.2	32.6	28.0
	Banryu	*JP*	*11024*	21.7	31.1	25.0	27.9	27.0	32.8	38.3	37.1	31.2	34.8	33.2	27.9	33.6
	Yusuhara	*JP*	*11025*	19.7	14.2	19.8	19.7	20.9	21.8	23.9	17.1	19.7	16.2	19.1	19.6	26.1
	Hedo	*JP*	*11027*	16.7	14.0	19.3	13.2	23.8	19.6	15.1	17.3	13.5	12.7	16.9	13.6	20.3
	Ogasawara	*JP*	*11018*	4.73	6.67	3.61	6.55	4.30	6.58	7.57	7.64	6.27	5.67	5.70	3.80	4.53
	Tokyo	*JP*	*11057*								21.0	45.5	31.3	25.4	30.1	30.7
Lao PDR	Vientiane	*LA*	*11051*				***	***	***	4.92	9.65	9.95	1.76	***	***	7.34
Malaysia	Petaling Jaya	*MY*	*11029*	92.9	73.2	97.9	100	89.4	102	120	80.5	135	138	174	190	150
	Tanah Rata	*MY*	*11030*	10.4	8.90	16.7	14.1	11.1	17.4	14.9	12.4	17.8	16.0	10.8	7.29	10.8
	Danum Valley	*MY*	*11053*						3.14	4.24	2.02	4.11	5.61	3.36	3.99	2.83
	Kuching	*MY*	*11060*									21.3	21.2	22.8	23.1	14.5
Mongolia	Ulaanbaatar	*MN*	*11031*	3.91	3.43	4.23	4.62	1.32	2.83	3.50	3.27	3.12	4.35	3.26	2.75	***
	Terelj	*MN*	*11032*	3.65	0.815	4.45	3.87	3.34	2.89	3.32	3.39	3.77	2.33	3.58	2.59	***
Myanmar	Yangon	*MM*	*11056*								***	***	21.8	11.3	19.8	21.4
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	135	52.7	***
	Los Baños	*PH*	*11034*	14.3	25.3	14.0	7.84	10.6	16.2	18.1	19.4	15.1	23.2	64.9	19.9	***
	Mt. Sto. Tomas	*PH*	*11055*							0.804	18.5	19.9	18.6	15.5	11.8	34.9
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	49.8	40.9	27.2
	Cheju	*KR*	*11036*	16.2	20.5	24.4	29.7	27.9	19.2	28.8	18.7	22.3	19.3	22.7	30.0	23.1
	Imsil	*KR*	*11037*		20.2	31.8	31.7	24.8	32.9	19.6	24.4	19.3	23.9	47.6	41.3	36.7
Russia	Mondy	*RU*	*11038*	3.04	3.38	2.75	2.78	2.44	1.44	2.09	2.99	1.54	0.938	0.732	0.316	0.841
	Listvyanka	*RU*	*11039*	8.25	7.26	8.99	16.1	10.9	5.34	4.54	8.33	6.02	5.10	6.59	14.6	6.64
	Irkutsk	*RU*	*11040*	11.2	8.61	6.59	8.15	9.48	7.25	5.89	8.76	9.02	7.23	8.36	6.81	8.09
	Primorskaya	*RU*	*11041*			8.51	4.97	14.8	15.9	18.2	18.9	18.3	16.1	14.7	23.5	21.6
Thailand	Bangkok	*TH*	*11042*	24.8	21.0	32.0	31.9	19.3	46.6	52.4	44.1	55.4	58.2	54.1	44.7	49.7
	Samutprakarn	*TH*	*11043*	15.1				12.3	29.1	20.0	31.0	30.2	39.7	28.9	20.6	11.9
	Pathumthani	*TH*	*11044*	17.8	26.5	17.6	28.4	23.4	24.8	35.4	31.4	35.9	21.8	36.0	30.0	29.3
	Khanchanaburi	*TH*	*11045*	5.06	10.2	13.3	7.96	6.65	5.11	15.5	5.01	9.85	9.10	6.11	14.1	16.4
	Chiang Mai	*TH*	*11046*		4.47	9.78	5.27	7.04	12.0	11.2	7.47	11.7	8.88	8.52	11.7	8.78
	Nakhon Ratchasima	*TH*	*11054*							13.5	15.7	19.8	16.0	23.7	15.0	12.6
Vietnam	Hanoi	*VN*	*11047*	20.2	11.4	21.4	39.4	39.7	54.3	30.6	25.8	22.1	26.7	25.7	39.5	45.3
	Hoa Binh	*VN*	*11048*	18.3	19.5	32.8	22.6	36.4	29.5	25.0	20.4	20.2	17.5	21.3	25.4	29.5
	Cuc Phuong	*VN*	*11061*										24.6	38.4	51.5	40.5
	Da Nang	*VN*	*11062*										33.7	11.9	57.5	8.06

[***]: No data or not measured

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

Black column: Monitoring was not carried out

Table 3.78 Annual Cl^- deposition amount from 2000 to 2012

unit: mmol $m^{-2}y^{-1}$

Country	Name of sites	Code		2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Cambodia	Phnom Penh	*KH*	*11052*					***	8.12	5.88	17.4	15.9	13.6	9.12	7.52	10.8
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	15.8	11.6	11.5
	Jinyunshan	*CN*	*11003*		40.3	20.8	12.6	19.5	22.6	16.2	14.3	18.6	17.7	15.7	10.1	11.7
	Shizhan	*CN*	*11004*	27.4	29.6	122	106	21.7	17.5	17.3	21.0	12.9	15.5	10.5	7.07	6.28
	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	16.9	10.8	12.2
	Hongwen	*CN*	*11008*	48.6	10.6	67.3	66.7	64.1	112	98.0	52.6	29.5	23.8	23.0	21.5	22.1
	Xiaoping	*CN*	*11009*	32.4	77.3	19.9	41.6	32.5	34.9	52.4	15.2	37.1	22.8	21.1	26.1	18.8
	Xiang Zhou	*CN*	*11010*	101	75.2	119	81.8	48.8	77.6	68.1	44.5	98.1	90.2	41.6	37.5	65.8
	Zhuxiandong	*CN*	*11011*	70.2	71.2	94.1	70.5	75.1	55.9	25.9	***	105	81.2	40.2	21.5	***
Indonesia	Jakarta	*ID*	*11012*	33.9	48.2	44.2	84.4	57.4	88.4	23.0	40.7	19.6	18.7	32.7	19.2	35.3
	Serpong	*ID*	*11014*	***	51.8	57.6	58.2	34.8	16.3	17.4	28.8	40.3	23.6	31.9	12.5	21.6
	Kototabang	*ID*	*11013*	15.8	7.97	30.1	87.0	24.8	15.6	9.74	38.2	9.62	28.4	23.5	30.5	25.7
	Bandung	*ID*	*11015*	93.7	65.1	51.5	20.9	15.6	25.5	18.6	14.8	19.4	31.6	22.4	18.9	22.1
	Maros	*ID*	*11059*									60.9	49.7	56.2	58.4	48.9
Japan	Rishiri	*JP*	*11016*	286	145	207	142	242	224	163	142	222	203	197	192	389
	Ochiishi	*JP*	*11050*				178	266	191	316	189	142	323	288	147	267
	Tappi	*JP*	*11017*	187	169	253	178	341	310	314	276	186	290	192	191	191
	Sado-seki	*JP*	*11019*	292	367	439	121	236	385	324	298	241	377	481	252	380
	Happo	*JP*	*11021*	23.4	20.7	13.0	17.9	27.0	26.1	15.6	10.1	9.21	15.6	13.1	13.6	23.3
	Ijira	*JP*	*11022*	61.8	73.0	88.2	56.6	94.2	43.3	40.8	56.1	42.5	47.4	62.4	52.8	70.2
	Oki	*JP*	*11023*	543	448	658	321	453	914	353	362	412	489	684	847	532
	Banryu	*JP*	*11024*	48.5	155	116	162	232	142	149	114	105	197	157	179	125
	Yusuhara	*JP*	*11025*	52.4	25.6	74.6	45.4	112	69.4	44.4	38.5	22.0	28.8	27.3	49.8	66.5
	Hedo	*JP*	*11027*	1500	373	1200	628	1750	869	404	394	270	278	751	410	1407
	Ogasawara	*JP*	*11018*	325	222	370	400	162	235	188	241	165	379	391	313	210
	Tokyo	*JP*	*11057*								44.4	44.0	48.0	32.1	63.8	58.5
Lao PDR	Vientiane	*LA*	*11051*				***	***	***	3.38	10.4	12.4	1.12	***	***	5.89
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	32.6	30.2	27.2
	Tanah Rata	*MY*	*11030*	21.3	7.87	6.29	7.19	5.86	7.61	5.85	5.05	5.78	6.96	4.67	9.70	9.07
	Danum Valley	*MY*	*11053*						7.54	21.5	14.6	18.3	23.0	40.5	21.6	12.3
	Kuching	*MY*	*11060*									27.2	39.3	37.3	53.2	25.7
Mongolia	Ulaanbaatar	*MN*	*11031*	1.76	1.60	1.37	2.27	0.670	1.17	1.46	1.18	1.56	2.20	1.30	1.22	***
	Terelj	*MN*	*11032*	1.86	0.767	2.80	2.06	1.85	2.44	1.99	1.91	1.90	1.10	1.37	1.41	***
Myanmar	Yangon	*MM*	*11056*								***	***	75.3	30.0	49.6	68.3
Philippines	Metro Manila	*PH*	*11033*	103	264	55.9	53.5	52.0	33.7	62.3	97.8	68.4	92.9	55.2	109	***
	Los Baños	*PH*	*11034*	87.1	62.7	41.9	26.1	24.9	29.7	46.7	75.5	35.5	72.6	52.3	62.5	***
	Mt. Sto. Tomas	*PH*	*11055*							0.677	24.9	26.6	39.3	18.3	20.3	37.2
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	68.9	71.6	50.5
	Cheju	*KR*	*11036*	222	125	85.3	88.4	88.9	73.1	116	130	114	66.1	114	158	545
	Imsil	*KR*	*11037*		37.3	36.7	71.5	32.2	54.9	54.9	30.1	31.2	55.5	72.9	37.9	124
Russia	Mondy	*RU*	*11038*	0.785	0.463	1.81	1.25	0.991	1.69	1.83	1.38	0.869	0.391	0.306	0.388	0.626
	Listvyanka	*RU*	*11039*	2.22	1.07	2.45	2.23	2.72	2.43	1.09	1.75	2.00	0.942	1.12	3.17	1.13
	Irkutsk	*RU*	*11040*	6.19	5.72	5.45	8.07	4.71	5.47	4.48	6.30	8.39	10.7	8.95	7.23	6.69
	Primorskaya	*RU*	*11041*			28.3	11.5	14.7	16.0	11.2	18.3	14.2	12.7	19.8	41.9	27.5
Thailand	Bangkok	*TH*	*11042*	14.4	11.1	18.0	12.0	13.7	24.7	17.1	13.0	20.1	15.9	18.9	17.3	15.0
	Samutprakarn	*TH*	*11043*	12.6				16.2	30.9	17.7	21.0	22.1	16.8	30.4	16.0	9.45
	Pathumthani	*TH*	*11044*	9.96	10.5	11.0	10.6	13.9	9.04	11.0	9.17	11.0	8.18	10.2	10.6	24.9
	Khanchanaburi	*TH*	*11045*	15.5	15.1	30.9	14.3	13.9	15.9	15.9	11.3	20.1	17.6	5.37	17.2	27.8
	Chiang Mai	*TH*	*11046*		4.91	14.8	3.81	4.40	6.01	5.29	5.48	5.90	5.16	4.17	4.65	4.59
	Nakhon Ratchasima	*TH*	*11054*							6.56	7.08	10.2	5.81	7.82	7.24	7.17
Vietnam	Hanoi	*VN*	*11047*	30.5	61.2	13.5	33.7	23.2	47.9	19.2	19.5	19.8	15.5	13.4	15.6	11.8
	Hoa Binh	*VN*	*11048*	38.4	49.2	11.3	11.7	21.6	30.9	9.99	12.3	8.35	7.30	8.70	7.58	8.91
	Cuc Phuong	*VN*	*11061*										100	40.2	28.7	41.0
	Da Nang	*VN*	*11062*										325	85.2	340	140

[***]: 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 NH_4^+ deposition amount from 2000 to 2012

unit: mmol $m^{-2}y^{-1}$

Country	Name of sites	Code		2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Cambodia	Phnom Penh	*KH*	*11052*					4.51	21.3	17.0	27.0	21.6	17.3	41.9	28.0	34.9
China	Guanyinqiao	*CN*	*11001*	174	158	173	131	189	169	151	181					
	Nanshan	*CN*	*11002*	132												
	Haifu	*CN*	*11058*									149	112	137	117	118
	Jinyunshan	*CN*	*11003*		79.1	134	106	160	154	145	124	120	121	121	98.8	125
	Shizhan	*CN*	*11004*	235	92.8	70.7	183	87.5	39.3	80.7	109	63.3	99.7	85.6	40.0	42.7
	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	20.0	22.5	10.4
	Hongwen	*CN*	*11008*	47.9	19.2	69.3	38.3	48.8	60.2	62.0	51.8	32.8	34.4	60.9	35.7	39.9
	Xiaoping	*CN*	*11009*	31.0	88.9	67.5	67.5	74.4	94.0	50.5	55.0	65.9	52.0	65.1	59.6	39.2
	Xiang Zhou	*CN*	*11010*	41.7	49.8	166	58.7	67.9	121	86.6	28.0	55.0	44.4	45.4	26.1	44.2
	Zhuxiandong	*CN*	*11011*	90.7	77.8	76.5	52.5	75.9	27.8	24.3	***	42.9	40.5	42.1	28.4	***
Indonesia	Jakarta	*ID*	*11012*	122	81.9	49.8	33.6	32.8	26.4	25.7	52.6	43.6	27.6	48.8	33.4	62.9
	Serpong	*ID*	*11014*	***	109	115	96.4	61.9	36.8	64.6	89.2	112	57.7	74.6	51.6	63.6
	Kototabang	*ID*	*11013*	2.66	2.88	9.21	5.78	25.9	20.7	12.3	50.5	18.7	7.15	6.72	21.9	22.4
	Bandung	*ID*	*11015*	29.3	98.8	75.9	52.6	32.9	62.6	61.0	94.3	104	130	83.7	93.0	112
	Maros	*ID*	*11059*									26.9	41.2	27.0	33.8	34.5
Japan	Rishiri	*JP*	*11016*	26.2	16.0	19.2	12.9	16.2	18.1	22.6	22.9	19.5	18.7	16.8	17.3	13.3
	Ochiishi	*JP*	*11050*				5.98	7.64	6.17	15.6	6.79	4.71	13.3	11.6	8.98	10.7
	Tappi	*JP*	*11017*	10.1	13.8	19.6	18.6	22.9	19.6	18.2	18.7	15.0	14.0	23.3	19.4	16.3
	Sado-seki	*JP*	*11019*	18.1	19.2	20.7	17.6	15.5	20.9	21.0	29.3	22.2	12.9	16.2	20.2	20.1
	Happo	*JP*	*11021*	31.0	25.3	20.2	15.7	25.6	32.3	24.7	25.8	16.6	22.9	15.4	18.6	21.5
	Ijira	*JP*	*11022*	63.8	39.4	60.4	53.6	50.2	52.1	64.5	46.8	40.6	52.4	46.9	43.4	42.2
	Oki	*JP*	*11023*	23.5	18.4	19.5	14.1	15.3	20.8	17.8	18.3	17.4	19.1	25.8	28.6	22.0
	Banryu	*JP*	*11024*	18.2	24.6	23.4	21.9	19.5	28.1	29.1	28.4	24.3	28.3	31.8	22.5	25.9
	Yusuhara	*JP*	*11025*	14.2	10.7	17.8	17.1	19.0	20.6	23.8	17.7	16.5	17.1	16.3	16.4	23.0
	Hedo	*JP*	*11027*	21.0	9.52	37.6	15.2	30.6	23.6	15.9	20.2	12.0	12.7	24.6	16.1	53.5
	Ogasawara	*JP*	*11018*	4.62	8.70	7.18	5.07	5.96	7.10	7.27	12.1	5.74	8.07	9.82	5.88	8.14
	Tokyo	*JP*	*11057*								29.9	55.6	45.3	31.8	35.3	39.8
Lao PDR	Vientiane	*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	16.2	17.5	4.40
	Tanah Rata	*MY*	*11030*	129	93.0	11.2	6.92	5.77	8.13	9.84	11.6	12.2	16.7	9.92	47.2	16.1
	Danum Valley	*MY*	*11053*						2.55	6.15	3.95	29.3	11.7	11.6	7.19	1.90
	Kuching	*MY*	*11060*									19.7	23.1	9.03	23.3	23.4
Mongolia	Ulaanbaatar	*MN*	*11031*	10.2	8.28	13.0	14.1	3.86	8.18	10.1	11.0	8.26	10.6	8.35	7.50	***
	Terelj	*MN*	*11032*	9.20	2.70	16.2	9.86	7.37	8.87	11.7	7.19	10.5	4.54	4.53	5.66	***
Myanmar	Yangon	*MM*	*11056*								***	***	48.9	33.3	46.9	45.6
Philippines	Metro Manila	*PH*	*11033*	143	177	137	52.2	76.6	71.0	109	118	148	79.7	142	667	***
	Los Baños	*PH*	*11034*	35.9	40.7	58.8	23.3	24.3	24.7	36.2	52.1	37.1	33.9	79.1	70.1	***
	Mt. Sto. Tomas	*PH*	*11055*							0.293	29.4	53.3	66.7	16.8	3.79	19.6
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	41.6	63.8	36.9
	Cheju	*KR*	*11036*	21.3	36.0	44.0	54.1	40.4	21.6	29.5	35.9	22.1	47.0	26.8	30.2	40.1
	Imsil	*KR*	*11037*		54.9	41.9	61.0	34.0	40.5	35.5	53.7	25.5	37.6	51.2	56.3	55.4
Russia	Mondy	*RU*	*11038*	3.47	7.08	6.89	6.00	4.03	2.79	1.52	10.6	2.03	2.40	1.58	0.672	2.00
	Listvyanka	*RU*	*11039*	7.29	5.34	9.66	11.3	6.74	7.50	4.82	6.35	7.40	4.18	5.99	8.22	9.17
	Irkutsk	*RU*	*11040*	17.2	11.7	13.0	19.2	15.1	15.6	8.89	16.2	18.1	15.7	12.9	10.8	15.1
	Primorskaya	*RU*	*11041*			30.0	12.6	21.0	30.7	31.0	29.2	28.0	24.9	28.8	33.6	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	76.5	87.3	79.4
	Samutprakarn	*TH*	*11043*	31.1				43.5	60.8	70.8	88.1	97.8	81.5	52.9	58.5	32.5
	Pathumthani	*TH*	*11044*	36.6	47.9	32.4	48.2	33.2	39.6	53.9	47.5	49.6	43.3	49.4	59.5	59.2
	Khanchanaburi	*TH*	*11045*	6.03	16.7	24.0	20.3	11.7	10.1	44.1	23.7	19.8	52.1	14.5	25.2	21.4
	Chiang Mai	*TH*	*11046*		17.1	27.3	12.8	18.1	30.1	21.6	17.7	25.6	21.2	22.5	21.9	21.8
	Nakhon Ratchasima	*TH*	*11054*							27.5	25.4	36.4	28.8	40.0	36.7	29.0
Vietnam	Hanoi	*VN*	*11047*	34.5	45.7	78.6	87.4	83.0	174	56.2	80.1	69.4	81.4	64.8	95.9	108
	Hoa Binh	*VN*	*11048*	15.2	27.8	45.9	48.5	75.0	68.5	42.7	41.4	33.8	42.6	38.8	48.9	57.4
	Cuc Phuong	*VN*	*11061*										14.3	16.4	35.5	48.3
	Da Nang	*VN*	*11062*										40.0	14.6	78.3	35.8

[***]: 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 3.80 Annual Na^+ deposition amount from 2000 to 2012

unit: mmol $m^{-2}y^{-1}$

Country	Name of sites	Code		2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Cambodia	Phnom Penh	*KH*	*11052*					***	***	1.75	11.3	18.8	9.22	5.74	4.54	5.90
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	7.38	7.99	6.10
	Jinyunshan	*CN*	*11003*		7.25	9.48	6.15	18.7	22.3	7.95	10.2	12.5	8.45	8.00	5.19	6.32
	Shizhan	*CN*	*11004*	24.7	59.8	85.7	88.1	11.5	8.18	21.8	8.22	9.41	7.91	3.35	11.7	2.20
	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	7.47	7.63	17.3
	Hongwen	*CN*	*11008*	36.1	3.20	87.2	45.2	53.7	87.4	65.6	32.4	21.7	18.1	29.6	15.2	15.0
	Xiaoping	*CN*	*11009*	13.6	31.7	35.6	43.6	25.5	28.3	54.5	13.0	44.9	18.5	28.6	16.6	10.9
	Xiang Zhou	*CN*	*11010*	85.4	49.0	71.9	67.5	96.6	52.0	54.3	27.9	97.5	80.7	36.8	40.7	69.7
	Zhuxiandong	*CN*	*11011*	55.5	70.7	71.4	63.2	120	64.7	20.0	***	94.1	71.5	37.0	51.5	***
Indonesia	Jakarta	*ID*	*11012*	82.6	48.8	55.6	43.8	54.6	49.4	19.3	34.4	17.1	14.5	16.8	11.6	34.5
	Serpong	*ID*	*11014*	***	38.2	63.2	24.2	28.7	13.2	12.0	23.7	24.8	13.7	11.9	8.36	9.71
	Kototabang	*ID*	*11013*	***	5.46	11.3	30.2	23.0	12.5	7.75	24.0	13.2	16.3	12.4	14.3	25.4
	Bandung	*ID*	*11015*	***	52.7	22.0	11.4	9.66	20.9	24.0	13.1	20.1	31.6	25.4	18.7	22.5
	Maros	*ID*	*11059*									47.5	43.0	35.3	54.1	48.8
Japan	Rishiri	*JP*	*11016*	250	130	188	125	217	195	142	126	204	185	173	171	343
	Ochiishi	*JP*	*11050*				155	233	171	277	161	125	287	252	126	239
	Tappi	*JP*	*11017*	156	145	219	162	292	270	278	247	162	266	177	171	166
	Sado-seki	*JP*	*11019*	275	345	384	106	208	332	283	264	219	333	437	213	319
	Happo	*JP*	*11021*	17.2	14.6	8.85	11.8	18.4	21.1	11.4	7.29	6.77	12.1	9.86	10.3	19.2
	Ijira	*JP*	*11022*	53.5	66.4	75.6	39.4	74.0	34.9	30.7	47.1	34.5	39.0	50.0	42.3	55.2
	Oki	*JP*	*11023*	479	394	570	296	416	791	315	319	360	422	594	737	462
	Banryu	*JP*	*11024*	45.2	140	104	142	197	119	130	100	91.6	171	139	155	111
	Yusuhara	*JP*	*11025*	42.6	24.5	67.8	40.7	95.8	58.5	37.5	32.1	18.8	24.9	21.8	41.8	55.1
	Hedo	*JP*	*11027*	1320	341	1050	599	1550	800	351	349	243	250	670	360	1186
	Ogasawara	*JP*	*11018*	277	189	314	351	146	199	163	209	144	315	386	262	179
	Tokyo	*JP*	*11057*								37.3	36.2	40.7	28.7	52.3	48.2
Lao PDR	Vientiane	*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	17.6	16.5	13.1
	Tanah Rata	*MY*	*11030*	5.94	5.05	4.56	5.70	4.42	19.2	3.93	4.57	4.73	4.87	3.15	6.56	4.29
	Danum Valley	*MY*	*11053*						5.59	16.9	12.4	9.65	19.8	32.7	20.9	8.49
	Kuching	*MY*	*11060*									23.1	34.3	31.0	42.1	19.8
Mongolia	Ulaanbaatar	*MN*	*11031*	1.55	1.51	1.12	1.14	0.483	1.08	1.58	0.660	0.556	1.11	0.535	0.924	***
	Terelj	*MN*	*11032*	1.34	1.41	4.15	1.40	1.31	2.83	2.68	1.74	1.13	0.843	1.44	0.873	***
Myanmar	Yangon	*MM*	*11056*								***	***	55.7	29.3	47.2	56.7
Philippines	Metro Manila	*PH*	*11033*	123	470	43.3	40.5	35.3	37.9	46.3	70.8	58.7	76.5	59.7	78.2	***
	Los Baños	*PH*	*11034*	91.7	67.6	35.9	24.6	20.9	28.3	50.5	54.4	36.2	50.5	46.9	46.3	***
	Mt. Sto. Tomas	*PH*	*11055*							1.21	19.2	25.9	39.1	22.7	19.9	58.9
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	42.4	52.8	37.9
	Cheju	*KR*	*11036*	161	83.2	59.3	60.3	64.9	59.3	95.8	126	112	55.7	103	163	449
	Imsil	*KR*	*11037*		20.0	38.3	42.7	21.6	27.0	22.0	20.2	27.3	53.7	79.2	55.9	72.6
Russia	Mondy	*RU*	*11038*	0.560	0.726	0.392	0.927	0.693	0.436	0.643	1.10	0.379	0.270	0.253	0.283	0.455
	Listvyanka	*RU*	*11039*	2.02	1.67	1.37	2.76	2.57	1.36	0.870	1.05	0.972	1.19	1.18	2.59	1.44
	Irkutsk	*RU*	*11040*	4.73	3.88	2.78	3.01	3.68	3.04	3.58	4.75	5.29	8.06	6.91	5.52	4.41
	Primorskaya	*RU*	*11041*			19.3	10.9	15.6	16.0	10.5	19.6	12.7	11.0	16.1	8.48	21.3
Thailand	Bangkok	*TH*	*11042*	7.95	9.78	20.9	10.6	12.3	25.6	13.8	11.2	17.3	20.3	17.8	14.0	10.9
	Samutprakarn	*TH*	*11043*	9.91				20.8	32.2	20.8	22.8	26.8	19.9	35.0	12.0	7.51
	Pathumthani	*TH*	*11044*	10.4	10.9	9.15	7.84	8.72	8.32	12.0	7.97	9.95	7.34	13.1	9.16	22.0
	Khanchanaburi	*TH*	*11045*	8.55	17.1	18.3	16.7	12.5	13.7	17.3	12.0	18.1	19.0	5.05	14.5	23.2
	Chiang Mai	*TH*	*11046*		4.27	14.2	2.60	3.52	1.31	5.02	2.75	3.35	2.83	3.17	5.17	4.22
	Nakhon Ratchasima	*TH*	*11054*							5.30	6.17	7.24	3.44	5.22	6.10	4.18
Vietnam	Hanoi	*VN*	*11047*	22.8	25.9	8.41	14.2	12.7	31.2	16.6	13.6	21.7	14.8	9.00	11.2	7.54
	Hoa Binh	*VN*	*11048*	24.1	21.8	3.34	3.98	7.16	17.0	6.94	6.23	6.08	4.60	6.65	4.32	5.81
	Cuc Phuong	*VN*	*11061*										25.5	19.8	25.2	40.4
	Da Nang	*VN*	*11062*										281	69.9	255	106

[***]: 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 K^+ deposition amount from 2000 to 2012

unit: mmol $m^{-2}y^{-1}$

Country	Name of sites	Code		2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Cambodia	Phnom Penh	*KH*	*11052*					0.682	***	1.41	5.00	19.0	1.98	1.59	1.47	1.23
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	9.78	7.60	6.64
	Jinyunshan	*CN*	*11003*		31.6	16.5	10.6	17.8	16.6	13.6	11.1	11.6	9.56	10.2	8.80	7.69
	Shizhan	*CN*	*11004*	14.8	15.3	14.1	23.9	5.75	7.85	8.67	10.2	5.11	6.03	14.9	8.83	2.23
	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	5.64	7.07	3.80
	Hongwen	*CN*	*11008*	7.56	3.06	6.73	5.63	7.70	8.65	7.14	5.03	2.00	1.66	3.42	1.68	2.64
	Xiaoping	*CN*	*11009*	4.40	11.3	8.17	8.39	9.96	8.06	31.7	7.63	20.3	2.64	2.94	4.29	4.48
	Xiang Zhou	*CN*	*11010*	13.4	8.00	30.4	9.91	10.3	3.13	12.5	11.9	4.65	4.23	4.10	4.71	14.0
	Zhuxiandong	*CN*	*11011*	11.0	15.1	20.8	11.6	28.9	5.95	2.32	***	10.4	4.04	6.10	6.78	***
Indonesia	Jakarta	*ID*	*11012*	***	30.1	17.8	15.0	15.2	12.2	11.9	24.3	6.03	3.46	4.72	2.26	7.79
	Serpong	*ID*	*11014*	***	11.3	9.89	17.0	8.26	5.09	7.14	5.56	5.24	2.36	4.57	2.61	3.87
	Kototabang	*ID*	*11013*	***	1.59	9.16	62.6	13.2	9.57	5.69	23.3	8.42	24.8	10.5	8.69	14.6
	Bandung	*ID*	*11015*	***	32.7	5.19	6.63	2.95	8.15	6.31	4.01	5.38	11.0	11.0	7.30	7.01
	Maros	*ID*	*11059*									17.5	12.6	6.71	6.74	8.57
Japan	Rishiri	*JP*	*11016*	7.66	3.71	4.86	3.47	5.68	4.89	4.85	3.65	5.44	4.54	4.59	4.24	7.51
	Ochiishi	*JP*	*11050*				3.62	5.23	4.34	7.64	3.97	2.78	6.47	6.68	3.02	5.89
	Tappi	*JP*	*11017*	3.82	3.55	5.41	3.97	7.28	6.19	6.86	5.97	4.42	6.62	5.45	4.96	4.66
	Sado-seki	*JP*	*11019*	6.80	7.95	9.30	2.78	5.48	7.60	7.20	6.84	7.31	8.26	11.1	6.18	8.58
	Happo	*JP*	*11021*	1.76	1.50	1.03	0.942	1.55	2.14	1.42	1.41	0.962	1.58	0.934	1.38	1.73
	Ijira	*JP*	*11022*	7.91	9.09	5.57	3.69	3.75	2.39	2.77	2.60	1.43	1.95	1.64	1.64	1.74
	Oki	*JP*	*11023*	12.7	10.9	15.0	8.70	13.6	20.4	9.16	10.6	13.2	11.3	14.7	19.5	11.9
	Banryu	*JP*	*11024*	2.12	4.89	3.76	4.36	5.25	4.76	4.37	3.89	3.22	5.20	7.98	4.85	3.93
	Yusuhara	*JP*	*11025*	2.15	1.05	2.37	1.30	3.72	2.27	2.15	1.51	0.928	1.59	1.52	1.58	3.25
	Hedo	*JP*	*11027*	26.3	7.57	24.3	14.0	43.7	20.2	8.77	8.95	6.23	6.49	16.4	8.73	30.2
	Ogasawara	*JP*	*11018*	7.10	7.37	8.21	7.82	3.59	4.68	4.01	4.97	4.36	7.61	9.32	6.42	4.26
	Tokyo	*JP*	*11057*								1.51	2.12	1.90	1.64	1.79	1.45
Lao PDR	Vientiane	*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	5.26	4.71	4.53
	Tanah Rata	*MY*	*11030*	3.41	2.40	2.21	2.15	3.68	2.57	1.74	1.92	1.70	3.05	2.60	6.70	4.78
	Danum Valley	*MY*	*11053*						1.47	3.05	3.22	7.58	5.39	7.67	6.56	3.59
	Kuching	*MY*	*11060*									2.77	3.24	3.02	3.95	3.51
Mongolia	Ulaanbaatar	*MN*	*11031*	0.771	0.770	0.679	1.01	0.237	0.651	0.968	0.161	0.435	0.577	0.416	0.650	***
	Terelj	*MN*	*11032*	0.935	0.337	2.50	1.28	0.970	1.59	1.93	0.703	1.33	0.455	0.703	0.719	***
Myanmar	Yangon	*MM*	*11056*								***	***	19.4	4.71	5.21	17.4
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	45.6	85.9	***
	Los Baños	*PH*	*11034*	4.58	17.3	10.9	2.94	3.74	3.62	5.53	15.2	5.51	26.3	15.4	16.3	***
	Mt. Sto. Tomas	*PH*	*11055*							0.569	7.73	3.57	9.24	5.09	3.78	5.07
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	12.2	5.34	4.78
	Cheju	*KR*	*11036*	6.69	10.4	6.55	10.5	9.11	6.02	6.80	8.94	8.78	10.1	7.98	7.04	18.8
	Imsil	*KR*	*11037*		19.3	6.50	21.0	6.90	60.6	29.9	19.2	4.79	11.7	16.8	5.81	66.5
Russia	Mondy	*RU*	*11038*	0.361	0.661	0.473	0.659	0.965	0.300	0.455	0.867	0.416	0.390	0.237	0.366	0.952
	Listvyanka	*RU*	*11039*	2.06	0.855	0.800	1.42	1.30	0.520	0.479	0.521	1.32	0.646	0.543	1.16	0.686
	Irkutsk	*RU*	*11040*	2.34	3.45	0.703	1.20	1.50	1.50	2.73	3.72	4.74	11.4	2.07	1.51	2.21
	Primorskaya	*RU*	*11041*			4.47	3.25	5.01	5.21	3.41	6.11	4.97	3.81	3.93	4.19	4.69
Thailand	Bangkok	*TH*	*11042*	3.70	4.83	4.36	3.63	1.96	4.34	4.50	2.48	3.61	4.10	5.22	3.95	2.74
	Samutprakarn	*TH*	*11043*	5.17				6.15	7.99	6.12	5.38	10.6	5.51	31.9	2.33	1.45
	Pathumthani	*TH*	*11044*	2.16	2.27	1.41	1.93	1.16	1.52	2.67	2.23	2.51	2.12	3.26	3.06	2.57
	Khanchanaburi	*TH*	*11045*	7.82	7.54	5.23	3.29	1.52	1.40	6.16	1.21	2.26	2.41	1.15	4.30	3.75
	Chiang Mai	*TH*	*11046*		3.19	6.49	3.19	1.62	1.02	2.41	2.69	3.38	1.55	1.41	2.33	1.40
	Nakhon Ratchasima	*TH*	*11054*							0.791	1.91	2.13	1.65	1.53	1.81	1.42
Vietnam	Hanoi	*VN*	*11047*	5.14	8.59	2.93	4.08	4.65	9.19	4.65	4.48	6.28	2.53	3.43	4.12	5.39
	Hoa Binh	*VN*	*11048*	6.74	5.19	2.40	2.50	3.06	8.29	3.76	4.36	6.40	3.69	3.94	4.23	2.88
	Cuc Phuong	*VN*	*11061*										31.7	9.28	6.14	12.2
	Da Nang	*VN*	*11062*										18.6	5.76	50.9	19.3

[***]: 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 Ca^{2+} deposition amount from 2000 to 2012

unit: mmol $m^{-2}y^{-1}$

Country	Name of sites	Code		2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Cambodia	Phnom Penh	*KH*	*11052*					0	***	8.64	26.4	59.9	27.1	15.4	11.9	17.4
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	67.6	55.5	58.5
	Jinyunshan	*CN*	*11003*		31.9	47.7	37.8	107	84.3	118	90.7	82.9	73.2	67.3	55.2	59.5
	Shizhan	*CN*	*11004*	128	246	167	329	88.5	54.4	145	61.3	57.6	81.7	48.1	60.1	50.1
	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	47.0	88.9	79.3
	Hongwen	*CN*	*11008*	10.2	10.7	77.0	40.0	89.1	63.7	54.4	74.0	13.3	9.71	13.9	11.9	16.1
	Xiaoping	*CN*	*11009*	1.21	13.8	23.0	30.6	12.5	30.9	24.7	17.4	31.2	10.2	12.7	17.9	25.9
	Xiang Zhou	*CN*	*11010*	43.1	15.8	26.9	39.3	24.1	8.62	21.6	6.78	15.3	9.87	13.7	22.1	16.3
	Zhuxiandong	*CN*	*11011*	44.4	36.8	32.7	35.5	31.5	18.1	15.2	***	31.4	11.7	30.3	21.8	***
Indonesia	Jakarta	*ID*	*11012*	138	79.6	67.5	164	74.8	36.9	27.9	30.2	7.48	19.6	21.9	11.0	32.6
	Serpong	*ID*	*11014*	***	21.8	24.9	14.1	15.4	9.89	11.5	14.9	18.9	6.95	13.2	9.08	8.31
	Kototabang	*ID*	*11013*	9.28	1.73	8.84	17.3	14.7	7.42	6.48	13.0	12.1	14.5	11.3	12.9	20.7
	Bandung	*ID*	*11015*	***	63.0	43.4	17.5	16.3	27.7	19.4	18.7	26.4	41.1	35.1	32.0	27.8
	Maros	*ID*	*11059*									25.5	26.3	25.5	23.6	39.4
Japan	Rishiri	*JP*	*11016*	10.6	6.21	9.73	5.49	8.13	7.32	6.90	5.15	7.22	10.6	7.39	6.93	9.89
	Ochiishi	*JP*	*11050*				4.49	7.92	7.37	10.2	6.03	3.86	8.21	8.95	4.44	6.41
	Tappi	*JP*	*11017*	6.68	6.25	12.0	8.02	11.4	13.3	12.3	11.7	8.52	8.58	13.3	9.17	9.45
	Sado-seki	*JP*	*11019*	12.5	15.4	13.0	5.72	7.23	11.6	15.3	13.7	10.5	11.5	17.4	11.5	14.8
	Happo	*JP*	*11021*	8.49	10.1	5.21	4.72	7.29	12.4	17.3	6.77	4.44	11.0	6.30	7.89	8.29
	Ijira	*JP*	*11022*	18.2	12.6	11.1	8.55	7.92	7.25	8.17	8.23	4.94	7.89	9.55	6.05	7.16
	Oki	*JP*	*11023*	19.4	16.1	18.1	11.0	16.7	24.4	15.9	15.8	12.1	16.3	23.3	26.2	15.7
	Banryu	*JP*	*11024*	6.64	10.7	6.99	5.95	9.20	7.57	18.6	9.37	9.40	9.46	11.8	8.38	8.03
	Yusuhara	*JP*	*11025*	7.55	7.09	4.17	4.04	7.32	5.55	8.25	4.66	3.71	4.07	4.44	7.71	7.28
	Hedo	*JP*	*11027*	29.3	10.4	28.5	15.1	40.3	25.1	17.2	13.3	8.19	8.83	21.1	10.7	32.6
	Ogasawara	*JP*	*11018*	10.1	9.81	11.5	11.2	3.93	5.25	5.68	6.83	4.27	8.71	10.8	7.21	5.44
	Tokyo	*JP*	*11057*								5.38	7.61	5.91	6.59	6.72	6.88
Lao PDR	Vientiane	*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	19.0	14.3	13.5
	Tanah Rata	*MY*	*11030*	7.06	8.13	8.56	10.1	5.60	5.28	3.20	3.11	3.03	3.17	2.99	6.84	6.73
	Danum Valley	*MY*	*11053*						1.70	3.79	1.53	1.06	3.43	9.05	3.36	2.37
	Kuching	*MY*	*11060*									8.19	8.35	12.1	14.6	13.0
Mongolia	Ulaanbaatar	*MN*	*11031*	7.41	7.86	8.91	7.88	3.60	7.49	8.63	5.19	6.66	9.63	5.23	5.54	***
	Terelj	*MN*	*11032*	3.16	1.33	6.72	3.32	3.36	3.33	5.32	2.52	3.68	3.97	5.48	2.93	***
Myanmar	Yangon	*MM*	*11056*								***	***	29.1	14.5	21.7	20.0
Philippines	Metro Manila	*PH*	*11033*	58.6	164	25.9	19.3	24.1	25.2	36.8	36.4	32.7	24.2	34.2	47.0	***
	Los Baños	*PH*	*11034*	18.3	119	12.3	12.5	9.41	5.82	15.4	16.1	7.10	14.7	41.6	15.2	***
	Mt. Sto. Tomas	*PH*	*11055*							2.43	79.0	15.7	27.8	81.8	36.1	80.4
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	11.0	6.48	6.46
	Cheju	*KR*	*11036*	14.6	6.56	9.53	10.5	8.66	7.89	10.2	13.2	8.86	4.23	6.74	7.10	13.4
	Imsil	*KR*	*11037*		7.60	9.76	10.1	8.16	6.24	10.4	18.4	5.91	4.14	9.42	10.2	6.03
Russia	Mondy	*RU*	*11038*	1.76	2.24	1.74	1.55	1.92	1.19	2.24	2.42	1.64	0.616	0.830	0.663	1.28
	Listvyanka	*RU*	*11039*	5.66	3.58	4.11	7.70	7.80	3.72	2.74	3.68	3.19	3.92	4.12	7.72	4.03
	Irkutsk	*RU*	*11040*	14.9	16.3	9.53	10.9	12.1	9.53	10.7	12.7	15.5	12.6	12.1	11.4	13.9
	Primorskaya	*RU*	*11041*			15.1	8.16	14.9	15.6	15.6	13.8	10.7	10.1	11.3	8.52	11.2
Thailand	Bangkok	*TH*	*11042*	13.0	14.1	20.5	16.5	13.3	37.4	29.2	21.5	28.7	20.8	22.8	22.9	24.2
	Samutprakarn	*TH*	*11043*	10.8				9.88	15.7	21.0	20.5	24.0	26.2	14.6	12.5	7.99
	Pathumthani	*TH*	*11044*	12.6	17.5	16.5	10.5	11.1	10.8	20.6	11.7	19.4	12.1	16.2	18.9	32.2
	Khanchanaburi	*TH*	*11045*	4.19	13.7	10.8	13.7	6.65	5.01	6.82	5.16	9.00	9.85	2.93	7.84	41.7
	Chiang Mai	*TH*	*11046*		7.53	26.5	4.62	5.50	5.36	6.72	7.53	8.60	5.98	5.14	4.20	8.64
	Nakhon Ratchasima	*TH*	*11054*							11.4	5.20	5.78	3.19	3.60	2.83	4.21
Vietnam	Hanoi	*VN*	*11047*	26.2	24.1	23.8	28.2	39.3	45.9	43.4	30.0	26.7	19.3	29.2	26.6	27.0
	Hoa Binh	*VN*	*11048*	24.8	23.1	20.5	20.2	36.4	32.6	27.5	18.2	28.7	12.8	28.9	22.1	21.2
	Cuc Phuong	*VN*	*11061*										56.2	63.3	59.8	61.8
	Da Nang	*VN*	*11062*										18.8	15.0	36.4	28.4

[***]: 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 3.83 Annual nss-Ca^{2+} deposition amount from 2000 to 2012

unit: mmol $m^{-2}y^{-1}$

Country	Name of sites	Code		2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Cambodia	Phnom Penh	*KH*	*11052*					***	***	8.61	26.2	59.5	26.9	15.3	11.8	17.3
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	67.5	55.3	58.3
	Jinyunshan	*CN*	*11003*		31.7	47.5	37.7	107	83.9	117	90.4	82.6	73.0	67.1	55.1	59.4
	Shizhan	*CN*	*11004*	128	244	165	327	88.3	54.3	145	61.2	57.4	81.5	48.0	59.8	50.1
	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	46.9	88.8	78.9
	Hongwen	*CN*	*11008*	9.59	10.7	75.1	39.0	88.0	61.8	53.0	73.3	12.8	9.32	13.3	11.5	15.8
	Xiaoping	*CN*	*11009*	0.938	13.1	22.3	29.6	12.0	30.3	23.5	17.1	30.2	9.85	12.1	17.6	25.6
	Xiang Zhou	*CN*	*11010*	41.3	14.8	25.3	37.9	22.0	7.62	20.4	6.25	13.2	8.13	13.0	21.2	14.8
	Zhuxiandong	*CN*	*11011*	43.2	35.3	31.1	34.1	28.9	16.7	14.8	***	29.3	10.2	29.5	20.7	***
Indonesia	Jakarta	*ID*	*11012*	136	78.5	66.3	163	73.8	35.9	27.5	29.5	7.11	19.2	21.6	10.7	31.9
	Serpong	*ID*	*11014*	***	21.0	23.5	13.7	14.7	9.60	11.3	14.5	18.4	6.76	12.9	8.91	8.10
	Kototabang	*ID*	*11013*	***	1.65	8.60	16.6	14.2	7.15	6.31	12.5	11.8	14.2	11.0	12.6	20.2
	Bandung	*ID*	*11015*	***	61.8	42.9	17.2	16.1	26.9	18.9	18.4	25.9	40.4	34.6	31.6	27.4
	Maros	*ID*	*11059*									24.4	25.3	24.8	22.4	38.4
Japan	Rishiri	*JP*	*11016*	5.14	3.40	5.66	2.82	3.46	3.15	3.87	2.44	2.81	6.74	3.69	3.24	2.58
	Ochiishi	*JP*	*11050*				1.25	2.90	3.65	4.29	2.56	1.21	2.18	3.52	1.73	1.31
	Tappi	*JP*	*11017*	3.36	3.25	7.30	4.53	5.19	7.62	6.26	6.34	5.02	3.02	9.58	5.57	5.23
	Sado-seki	*JP*	*11019*	6.60	8.08	4.86	3.44	2.90	4.46	9.20	7.99	5.79	4.36	8.12	6.92	8.03
	Happo	*JP*	*11021*	8.12	9.80	5.02	4.46	6.91	12.0	17.0	6.63	4.30	10.7	6.09	7.67	7.87
	Ijira	*JP*	*11022*	17.0	11.1	9.45	7.71	6.39	6.49	7.51	7.21	4.21	7.06	8.49	5.23	5.99
	Oki	*JP*	*11023*	9.07	7.60	6.14	4.55	7.76	7.24	9.57	8.91	4.37	7.23	10.5	10.3	5.71
	Banryu	*JP*	*11024*	5.74	7.68	4.76	2.89	4.97	5.02	15.8	7.21	7.42	5.76	8.80	5.04	5.62
	Yusuhara	*JP*	*11025*	6.80	6.68	2.91	3.23	5.25	4.28	7.44	3.97	3.30	3.53	4.07	6.94	6.09
	Hedo	*JP*	*11027*	2.35	3.64	5.87	4.84	7.64	7.81	9.59	5.75	2.95	3.46	6.61	2.88	6.93
	Ogasawara	*JP*	*11018*	4.24	5.77	4.77	3.68	1.22	1.18	2.17	2.34	1.44	1.95	2.51	1.56	1.58
	Tokyo	*JP*	*11057*								4.58	6.83	5.03	5.97	5.59	5.84
Lao PDR	Vientiane	*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	18.6	14.0	13.2
	Tanah Rata	*MY*	*11030*	6.93	8.02	8.46	9.95	5.51	4.92	3.13	3.02	2.95	3.10	2.93	6.71	6.64
	Danum Valley	*MY*	*11053*						1.58	3.49	1.36	0.944	3.12	8.51	3.01	2.22
	Kuching	*MY*	*11060*									7.77	7.76	11.4	13.7	12.6
Mongolia	Ulaanbaatar	*MN*	*11031*	7.38	7.83	8.88	7.85	3.59	7.46	8.59	5.17	6.64	9.60	5.22	5.53	***
	Terelj	*MN*	*11032*	3.13	1.30	6.46	3.29	3.33	3.27	5.26	2.48	3.66	3.95	5.45	2.91	***
Myanmar	Yangon	*MM*	*11056*								***	***	27.9	13.9	20.7	18.8
Philippines	Metro Manila	*PH*	*11033*	56.0	154	25.0	18.5	23.4	24.4	35.8	34.9	31.4	22.6	32.9	45.4	***
	Los Baños	*PH*	*11034*	16.3	117	11.5	12.0	8.95	5.22	14.3	14.9	6.32	13.7	40.7	14.2	***
	Mt. Sto. Tomas	*PH*	*11055*							2.40	78.7	15.1	26.9	81.4	35.7	79.1
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	10.1	5.40	5.64
	Cheju	*KR*	*11036*	11.1	4.79	8.28	9.16	7.25	6.61	8.13	10.5	6.43	3.15	4.72	4.00	3.78
	Imsil	*KR*	*11037*		7.16	8.93	9.18	7.70	5.65	9.93	17.9	5.32	3.02	7.87	8.99	4.76
Russia	Mondy	*RU*	*11038*	1.75	2.22	1.73	1.53	1.90	1.18	2.23	2.40	1.63	0.610	0.824	0.657	1.27
	Listvyanka	*RU*	*11039*	5.61	3.54	4.08	7.64	7.74	3.69	2.72	3.66	3.17	3.89	4.09	7.67	4.00
	Irkutsk	*RU*	*11040*	14.8	16.2	9.47	10.8	12.0	9.46	10.6	12.6	15.4	12.4	11.9	11.3	13.8
	Primorskaya	*RU*	*11041*			14.7	7.92	14.5	15.2	15.4	13.4	10.4	9.86	11.0	8.34	10.8
Thailand	Bangkok	*TH*	*11042*	12.9	13.9	20.0	16.2	13.0	36.8	28.9	21.3	28.3	20.3	22.4	22.6	24.0
	Samutprakarn	*TH*	*11043*	10.6				9.43	15.0	20.6	20.0	23.4	25.8	13.9	12.3	7.83
	Pathumthani	*TH*	*11044*	12.3	17.3	16.3	10.3	11.0	10.6	20.4	11.6	19.2	11.9	15.9	18.7	31.8
	Khanchanaburi	*TH*	*11045*	4.02	13.4	10.4	13.4	6.38	4.72	6.44	4.90	8.61	9.44	2.82	7.53	41.2
	Chiang Mai	*TH*	*11046*		7.44	26.2	4.57	5.42	5.33	6.64	7.47	8.52	5.92	5.09	4.10	8.54
	Nakhon Ratchasima	*TH*	*11054*							11.2	5.07	5.62	3.12	3.50	2.73	4.13
Vietnam	Hanoi	*VN*	*11047*	25.7	23.5	23.6	27.8	39.1	45.2	43.0	29.7	26.2	19.0	29.0	26.3	26.9
	Hoa Binh	*VN*	*11048*	24.2	22.6	20.4	20.1	36.2	32.2	27.4	18.0	28.5	12.7	28.7	22.0	21.0
	Cuc Phuong	*VN*	*11061*										55.7	62.9	59.2	60.9
	Da Nang	*VN*	*11062*										12.8	13.5	30.9	26.1

[***]: 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 3.84 Annual Mg^{2+} deposition amount from 2000 to 2012

unit: mmol $m^{-2}y^{-1}$

Country	Name of sites	Code		2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Cambodia	Phnom Penh	*KH*	*11052*					0.00	***	0.627	4.49	6.33	2.66	1.33	1.55	1.98
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	8.75	6.98	6.94
	Jinyunshan	*CN*	*11003*		4.09	5.41	3.56	5.39	4.63	4.78	4.61	5.62	6.10	5.64	5.20	5.85
	Shizhan	*CN*	*11004*	13.2	17.6	23.7	42.7	9.18	6.69	13.6	11.3	17.5	7.34	5.04	6.55	1.36
	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	8.28	9.37	17.3
	Hongwen	*CN*	*11008*	6.40	1.86	15.1	7.76	12.2	15.4	11.6	8.32	4.65	3.01	3.06	3.56	4.34
	Xiaoping	*CN*	*11009*	2.07	6.77	3.50	7.15	2.81	3.35	6.52	2.16	6.78	3.67	2.88	3.39	4.46
	Xiang Zhou	*CN*	*11010*	14.1	5.83	9.56	12.3	8.51	8.10	18.3	3.43	11.2	9.08	4.77	5.53	10.5
	Zhuxiandong	*CN*	*11011*	14.1	8.56	11.2	12.9	10.8	9.65	4.43	***	13.2	9.71	5.30	7.74	***
Indonesia	Jakarta	*ID*	*11012*	346	85.3	20.7	20.6	9.25	7.72	12.7	4.79	2.87	3.06	4.72	3.42	8.06
	Serpong	*ID*	*11014*	***	5.67	11.3	5.76	5.84	3.09	2.78	5.33	9.76	1.83	4.40	2.59	1.80
	Kototabang	*ID*	*11013*	***	1.25	4.63	21.1	3.76	2.06	2.82	10.6	2.48	2.92	3.67	2.08	3.69
	Bandung	*ID*	*11015*	***	10.6	4.16	2.73	2.93	4.29	4.27	3.31	10.3	11.1	11.6	8.85	6.61
	Maros	*ID*	*11059*									7.77	6.02	5.79	9.07	17.2
Japan	Rishiri	*JP*	*11016*	28.0	15.2	21.4	14.4	25.0	22.4	16.3	15.0	24.8	21.0	20.0	18.9	37.8
	Ochiishi	*JP*	*11050*				17.3	27.3	18.2	31.1	18.6	14.5	31.4	31.0	15.1	26.6
	Tappi	*JP*	*11017*	18.3	16.7	26.1	19.3	34.5	30.0	32.1	27.9	19.1	28.2	20.1	19.9	18.2
	Sado-seki	*JP*	*11019*	30.9	39.3	44.0	12.7	24.1	37.7	32.7	30.3	24.0	37.6	51.6	26.4	38.1
	Happo	*JP*	*11021*	3.66	3.73	2.42	3.06	3.90	3.59	2.64	1.57	1.15	2.73	2.12	2.76	4.60
	Ijira	*JP*	*11022*	7.75	8.93	9.34	6.42	9.43	4.51	4.63	6.23	3.92	4.80	6.22	5.19	7.27
	Oki	*JP*	*11023*	54.4	45.6	63.8	33.9	48.4	91.8	37.6	36.8	40.8	48.3	69.9	85.2	53.4
	Banryu	*JP*	*11024*	5.22	16.3	12.1	16.3	23.0	13.9	16.3	12.5	11.3	20.4	17.7	18.3	13.5
	Yusuhara	*JP*	*11025*	6.09	3.80	8.34	5.21	11.4	7.07	5.25	4.27	2.42	3.33	3.86	8.71	8.65
	Hedo	*JP*	*11027*	145	35.8	120	68.7	162	84.3	40.7	40.0	27.9	28.6	77.2	40.9	136
	Ogasawara	*JP*	*11018*	38.2	23.9	43.1	43.5	15.3	21.8	18.1	23.4	17.7	36.6	45.4	30.5	21.3
	Tokyo	*JP*	*11057*								4.56	5.17	5.13	3.98	6.65	6.18
Lao PDR	Vientiane	*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	2.46	2.09	1.69
	Tanah Rata	*MY*	*11030*	1.30	1.07	1.17	1.36	0.749	1.42	0.452	0.329	0.192	0.0927	0.210	0.869	0.528
	Danum Valley	*MY*	*11053*						0.406	1.45	1.20	1.58	1.86	3.51	2.05	0.830
	Kuching	*MY*	*11060*									1.24	1.84	2.12	3.45	1.04
Mongolia	Ulaanbaatar	*MN*	*11031*	0.814	0.897	0.636	1.10	0.488	0.783	0.825	0.597	0.568	1.21	0.455	1.51	***
	Terelj	*MN*	*11032*	0.656	0.224	1.01	0.706	1.07	0.901	1.04	0.384	0.619	0.604	0.718	1.06	***
Myanmar	Yangon	*MM*	*11056*								***	***	8.54	4.11	9.52	16.9
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	24.4	26.1	***
	Los Baños	*PH*	*11034*	9.78	20.1	5.00	4.18	6.25	3.84	7.65	10.7	8.80	10.8	17.0	11.3	***
	Mt. Sto. Tomas	*PH*	*11055*							0.418	7.03	1.76	7.23	12.1	7.41	16.6
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	5.71	4.70	4.11
	Cheju	*KR*	*11036*	19.7	11.1	7.60	7.57	8.17	10.5	10.8	9.09	8.16	6.25	6.91	11.3	41.4
	Imsil	*KR*	*11037*		2.49	3.28	3.00	2.89	2.27	2.83	4.80	1.70	4.14	7.69	3.02	4.27
Russia	Mondy	*RU*	*11038*	0.333	0.467	0.447	0.316	0.456	0.275	0.405	0.623	0.408	0.138	0.163	0.191	0.427
	Listvyanka	*RU*	*11039*	1.30	0.881	1.10	1.97	1.76	0.715	0.532	0.755	0.687	0.884	0.970	1.49	0.867
	Irkutsk	*RU*	*11040*	2.66	2.60	1.71	1.97	2.64	2.24	2.06	3.00	3.40	3.25	2.53	2.40	2.88
	Primorskaya	*RU*	*11041*			4.73	3.60	4.87	4.18	3.43	4.25	3.46	2.68	2.88	2.66	4.08
Thailand	Bangkok	*TH*	*11042*	2.30	3.71	4.61	3.22	2.59	7.58	3.72	2.65	4.15	3.09	3.07	2.72	2.43
	Samutprakarn	*TH*	*11043*	2.33				2.36	5.57	6.57	5.03	6.91	5.57	4.14	2.52	1.46
	Pathumthani	*TH*	*11044*	2.30	2.93	2.63	1.76	1.55	1.66	2.82	1.77	2.84	1.62	2.43	2.46	4.91
	Khanchanaburi	*TH*	*11045*	1.47	3.82	3.85	3.63	2.29	2.30	2.47	1.70	3.16	2.87	0.935	2.47	6.59
	Chiang Mai	*TH*	*11046*		1.19	5.22	1.68	2.10	1.43	3.44	1.16	2.29	2.87	0.526	0.367	0.936
	Nakhon Ratchasima	*TH*	*11054*							2.36	2.47	2.11	1.60	1.14	0.410	0.477
Vietnam	Hanoi	*VN*	*11047*	6.27	8.94	4.18	5.77	5.98	15.2	10.5	6.91	8.27	7.70	7.02	7.41	3.87
	Hoa Binh	*VN*	*11048*	8.84	8.25	2.31	3.62	4.62	9.59	8.17	5.38	3.17	2.51	7.61	4.21	4.15
	Cuc Phuong	*VN*	*11061*										9.89	7.30	8.86	14.3
	Da Nang	*VN*	*11062*										30.1	14.4	34.3	15.4

[***]: 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 3.85 Annual H^+ deposition amount from 2000 to 2012

unit: mmol $m^{-2}y^{-1}$

Country	Name of sites	Code		2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Cambodia	Phnom Penh	*KH*	*11052*					2.01	0.625	0.181	0.279	2.65	0.861	1.98	1.41	1.12
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	69.3	53.4	58.1
	Jinyunshan	*CN*	*11003*		46.5	70.1	62.0	39.3	34.7	24.4	49.4	53.3	51.7	112	77.1	82.0
	Shizhan	*CN*	*11004*	1.17	0.153	0.201	1.27	0.304	1.96	1.33	1.60	0.155	0.176	0.0965	0.352	0.217
	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	3.36	1.10	0.0295
	Hongwen	*CN*	*11008*	29.0	8.75	25.4	44.8	20.6	33.8	31.4	21.8	24.3	22.2	40.7	19.0	28.6
	Xiaoping	*CN*	*11009*	19.1	33.8	72.9	73.2	48.3	48.1	38.9	26.5	55.8	38.7	40.2	23.4	20.3
	Xiang Zhou	*CN*	*11010*	14.2	22.7	13.5	13.6	22.1	32.2	20.4	33.7	33.0	26.9	26.2	11.1	11.7
	Zhuxiandong	*CN*	*11011*	40.8	43.0	20.3	13.8	29.6	25.9	13.3	***	30.2	28.0	21.0	19.1	***
Indonesia	Jakarta	*ID*	*11012*	10.4	4.68	26.5	11.3	30.0	104	61.4	59.7	38.6	36.6	39.5	27.9	47.4
	Serpong	*ID*	*11014*	***	38.0	56.6	51.6	30.5	21.1	40.1	52.0	56.7	25.9	25.0	16.4	11.1
	Kototabang	*ID*	*11013*	73.0	10.3	8.78	15.6	39.0	46.0	36.6	14.7	14.9	59.9	37.9	20.2	25.7
	Bandung	*ID*	*11015*	***	26.4	88.7	16.1	8.31	16.3	9.18	23.2	15.9	13.4	20.8	6.12	7.25
	Maros	*ID*	*11059*									7.15	15.0	16.4	16.1	5.90
Japan	Rishiri	*JP*	*11016*	12.1	10.3	14.4	9.43	13.6	17.7	27.8	23.3	10.2	19.3	20.1	24.8	23.6
	Ochiishi	*JP*	*11050*				9.53	13.4	12.0	13.8	14.5	9.86	15.2	16.0	10.7	13.3
	Tappi	*JP*	*11017*	19.9	24.9	27.8	31.0	37.5	30.9	25.5	25.1	21.4	24.4	31.7	28.2	24.1
	Sado-seki	*JP*	*11019*	28.7	22.5	32.5	24.2	30.4	31.5	24.9	36.5	28.5	18.4	27.0	28.8	24.1
	Happo	*JP*	*11021*	40.6	34.1	30.7	30.5	43.0	47.6	29.4	37.8	24.2	25.2	21.0	28.2	26.6
	Ijira	*JP*	*11022*	80.7	82.9	80.5	115	75.8	79.4	87.6	66.3	80.2	66.0	66.6	55.2	58.7
	Oki	*JP*	*11023*	27.6	21.1	29.2	27.9	22.4	36.0	26.1	26.8	27.7	21.8	31.7	28.8	34.2
	Banryu	*JP*	*11024*	35.9	39.1	26.5	40.7	34.7	42.2	40.1	41.1	37.2	38.3	29.2	31.3	40.5
	Yusuhara	*JP*	*11025*	54.7	31.1	40.8	52.3	42.1	52.9	45.4	36.4	47.3	35.5	40.1	39.7	51.3
	Hedo	*JP*	*11027*	21.5	23.1	22.9	17.4	29.4	26.2	18.9	27.7	19.6	15.4	16.8	22.1	21.3
	Ogasawara	*JP*	*11018*	11.7	14.6	10.9	12.7	8.75	31.5	16.1	14.7	16.8	11.4	10.5	6.46	7.28
	Tokyo	*JP*	*11057*								17.6	46.2	30.6	18.6	20.7	23.5
Lao PDR	Vientiane	*LA*	*11051*				0.0277	0.999	0.320	0.231	3.02	1.65	0.600	***	***	0.463
Malaysia	Petaling Jaya	*MY*	*11029*	153	173	157	158	142	123	151	83.2	140	134	191	250	210
	Tanah Rata	*MY*	*11030*	50.4	33.4	30.1	38.3	33.1	41.4	31.3	33.0	31.4	25.6	21.2	32.1	31.0
	Danum Valley	*MY*	*11053*						13.1	26.8	24.0	18.1	20.4	14.2	23.5	19.5
	Kuching	*MY*	*11060*									23.8	25.5	24.4	17.3	18.4
Mongolia	Ulaanbaatar	*MN*	*11031*	0.108	0.107	0.0749	0.564	0.0289	0.153	0.0666	0.0692	0.0807	0.177	0.202	0.595	0.224
	Terelj	*MN*	*11032*	0.626	0.0809	0.436	1.24	0.340	1.34	1.48	1.12	0.768	0.0675	0.316	0.786	0.211
Myanmar	Yangon	*MM*	*11056*								10.6	2.50	1.04	0.875	1.09	0.831
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	6.01	8.29	***
	Los Baños	*PH*	*11034*	9.58	5.41	3.07	52.2	9.54	11.9	5.42	9.01	21.2	7.64	2.73	6.43	***
	Mt. Sto. Tomas	*PH*	*11055*							0.204	10.0	16.3	6.96	0.726	20.6	6.41
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	61.2	33.9	18.3
	Cheju	*KR*	*11036*	15.0	14.4	24.8	19.3	20.5	19.9	51.8	38.2	18.1	8.09	9.21	7.32	5.93
	Imsil	*KR*	*11037*		10.5	2.00	15.7	14.2	1.24	4.57	2.49	11.2	8.62	22.1	8.09	10.9
Russia	Mondy	*RU*	*11038*	1.68	1.00	0.828	1.83	1.64	1.24	1.67	1.06	1.38	0.395	0.253	0.213	0.250
	Listvyanka	*RU*	*11039*	3.78	5.42	4.74	5.24	6.67	6.62	7.10	8.82	9.06	4.49	5.74	9.00	5.73
	Irkutsk	*RU*	*11040*	4.15	2.49	2.86	1.94	6.74	3.36	2.52	5.59	9.01	1.67	2.78	3.13	5.15
	Primorskaya	*RU*	*11041*			5.26	4.27	10.0	6.39	9.32	14.4	9.02	9.11	7.23	14.6	7.88
Thailand	Bangkok	*TH*	*11042*	12.8	12.6	10.3	40.8	7.86	25.6	11.0	14.1	9.39	16.7	17.2	19.5	3.74
	Samutprakarn	*TH*	*11043*	14.5				4.29	5.55	1.93	4.60	8.81	14.7	9.06	2.66	0.647
	Pathumthani	*TH*	*11044*	5.41	10.0	4.39	22.7	13.3	16.4	20.9	21.5	15.4	9.26	10.3	15.6	5.62
	Khanchanaburi	*TH*	*11045*	2.41	8.29	5.05	5.65	1.18	5.86	4.48	2.83	4.30	4.35	3.30	6.24	2.30
	Chiang Mai	*TH*	*11046*		2.10	2.79	2.00	2.93	8.50	2.83	1.05	1.34	1.26	0.789	8.29	0.876
	Nakhon Ratchasima	*TH*	*11054*							9.06	11.5	16.0	17.1	29.0	15.0	9.66
Vietnam	Hanoi	*VN*	*11047*	4.48	3.31	3.95	2.45	3.56	1.25	2.28	4.32	3.24	3.46	1.44	9.13	4.29
	Hoa Binh	*VN*	*11048*	14.7	20.2	10.6	7.02	4.61	4.63	3.98	17.0	6.42	6.96	5.84	6.42	4.50
	Cuc Phuong	*VN*	*11061*										23.4	9.73	16.8	7.42
	Da Nang	*VN*	*11062*										49.9	13.0	38.0	6.16

[***]: No data or not measured

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

Black column: Monitoring was not carried out

Table 3.86 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
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
	Pathumthani	TH 11044
	Khanchanaburi	TH 11045
	Chiang Mai (Mae Hia)	TH 11046
	Nakhon Ratchasima	TH 11054
Vietnam	Hanoi	VN 11047
	Hoa Binh	VN 11048
	Cuc Phuong	VN 11061
	Da Nang	VN 11062

Including the sites working only for preparatory-phase activities

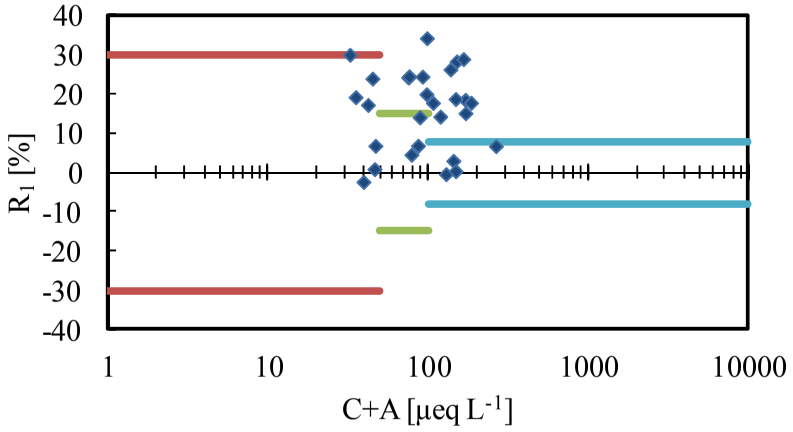


Fig. 3.2 a) Phnom Penh Ion Balance (R_1)

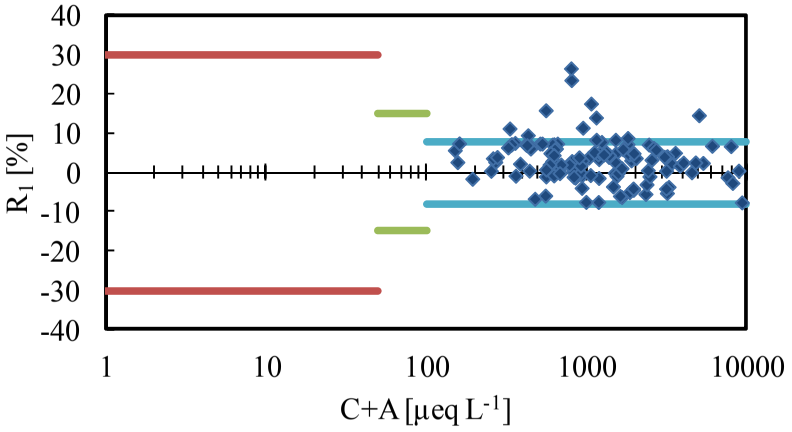


Fig. 3.3 a) Haifu Ion Balance (R_1)

Calculated including F^-

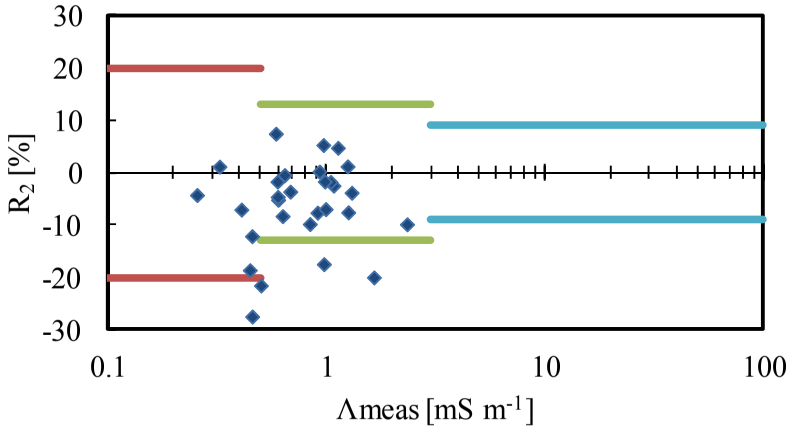


Fig. 3.2 b) Phnom Penh Conductivity Agreement (R_2)

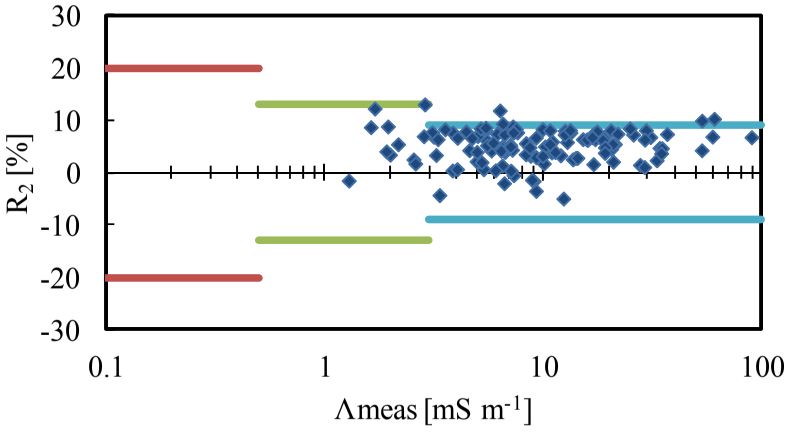


Fig. 3.3 b) Haifu Conductivity Agreement (R_2)

Calculated including F^-

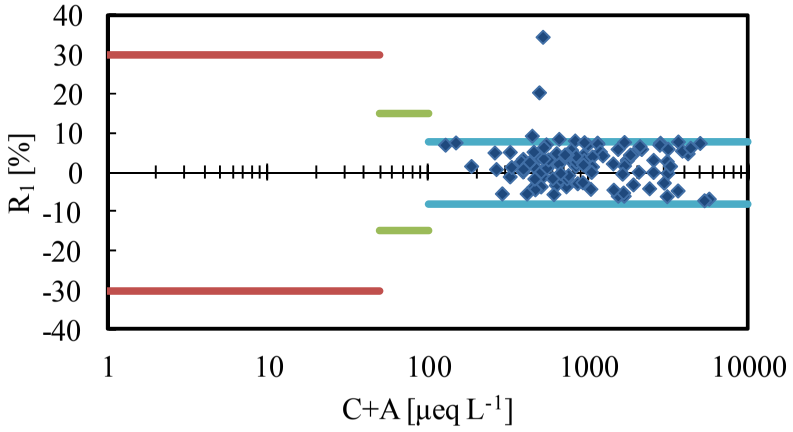


Fig. 3.4 a) Jinyushan Ion Balance (R_1)

Calculated including F^-

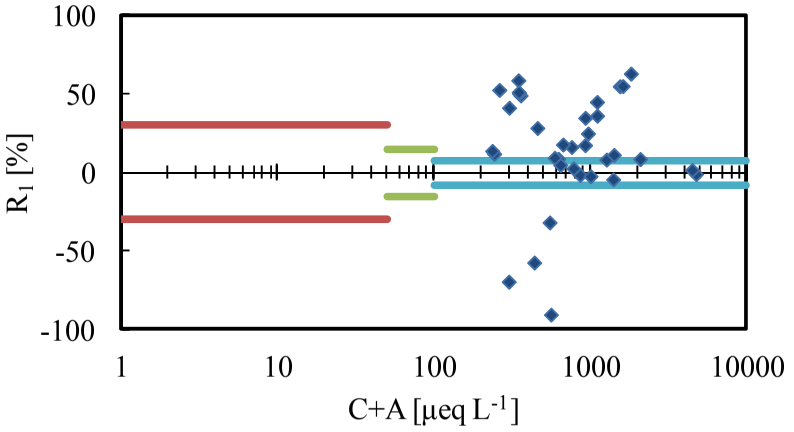


Fig. 3.5 a) Shizhan Ion Balance (R_1)

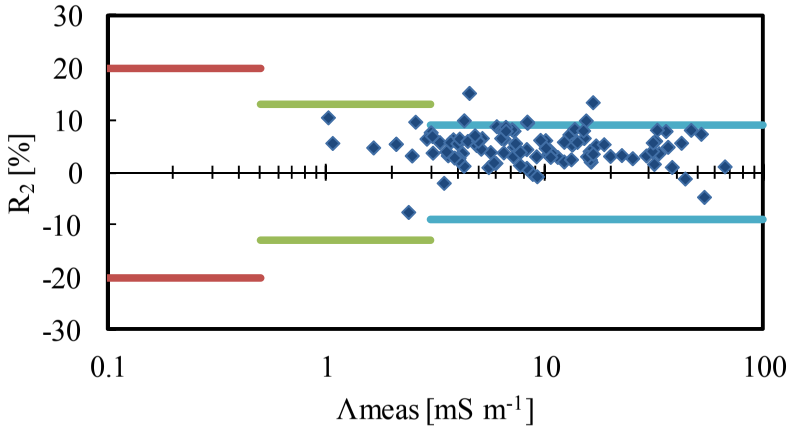


Fig. 3.4 b) Jinyushan Conductivity Agreement (R_2)

Calculated including F^-

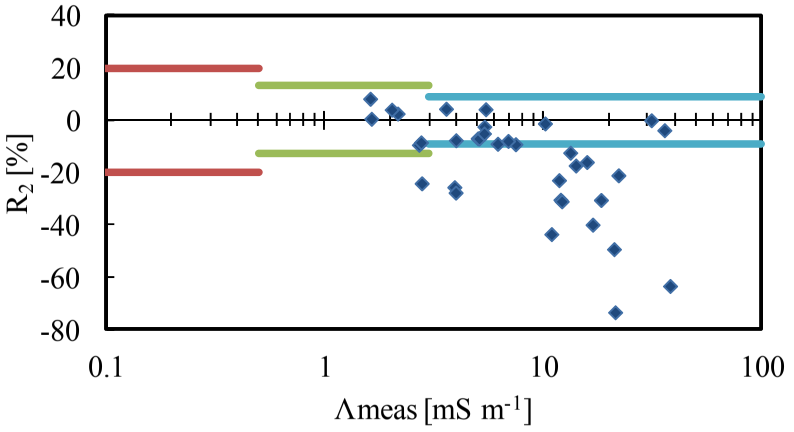


Fig. 3.5 b) Shizhan Conductivity Agreement (R_2)

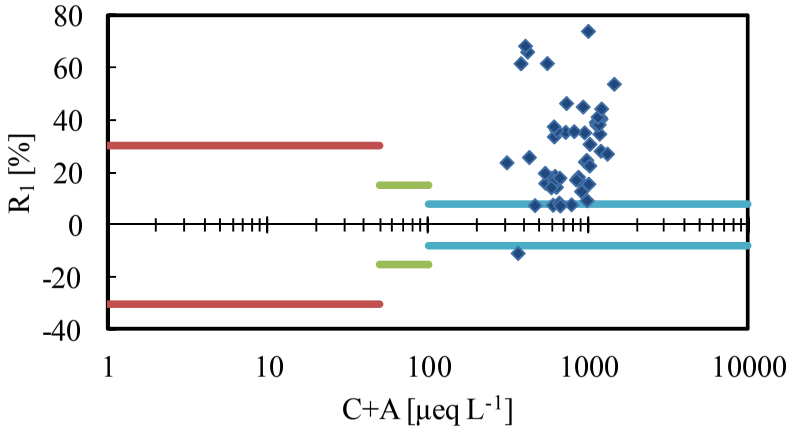


Fig. 3.6 a) Jiwozi Ion Balance (R_1)

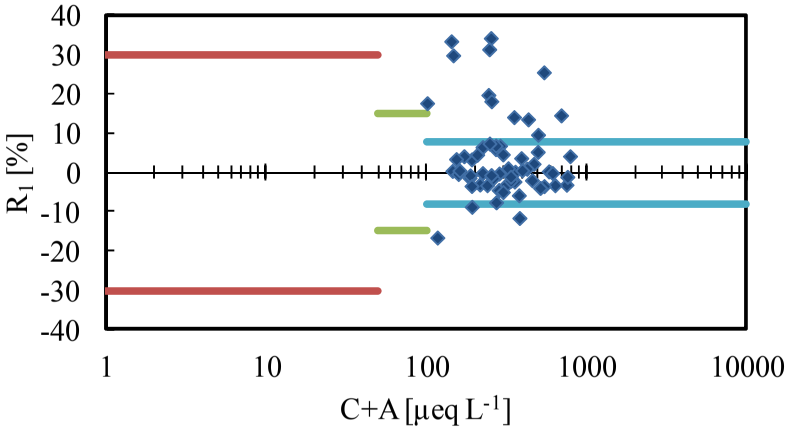


Fig. 3.7 a) Hongwen Ion Balance (R_1)

Calculated including F^-

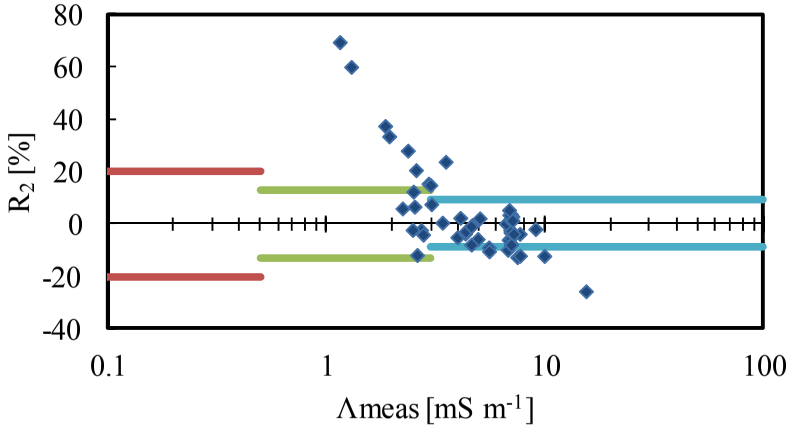


Fig. 3.6 b) Jiwozi Conductivity Agreement (R_2)

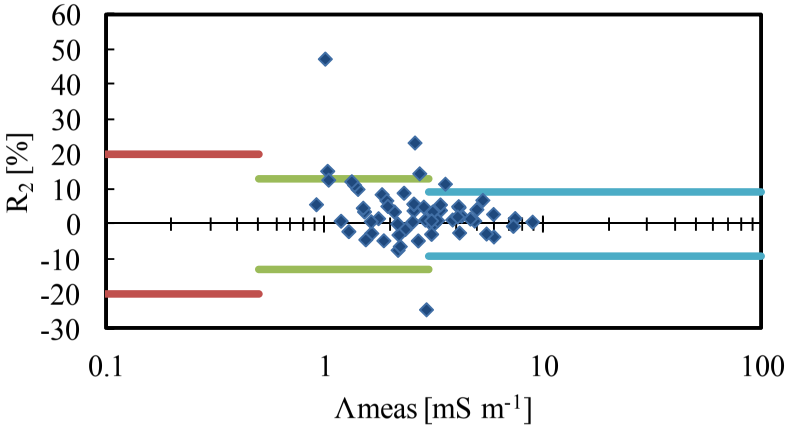


Fig. 3.7 b) Hongwen Conductivity Agreement (R_2)

Calculated including F^-

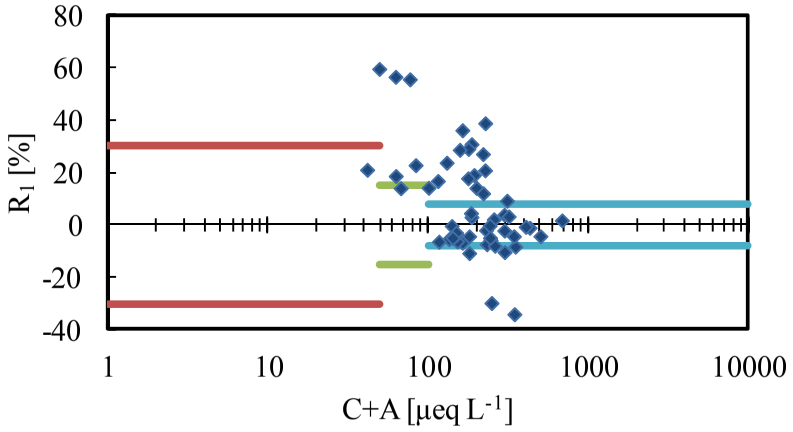


Fig. 3.8 a) Xiaoping Ion Balance (R_1)

Calculated including F^-

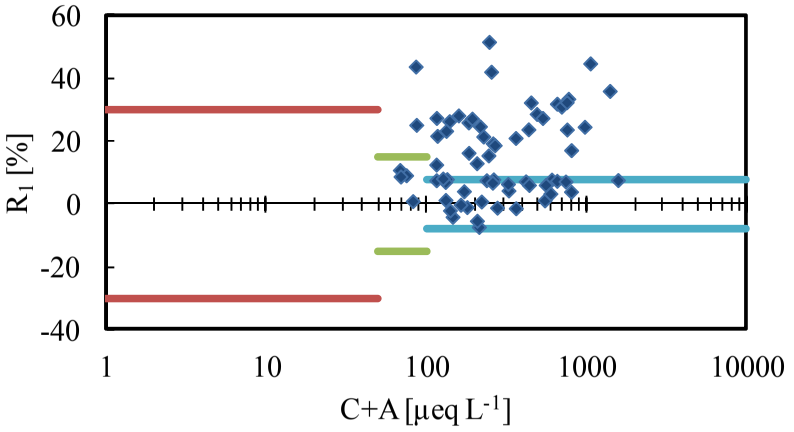


Fig. 3.9 a) Xiang Zhou Ion Balance (R_1)

Calculated including F^-

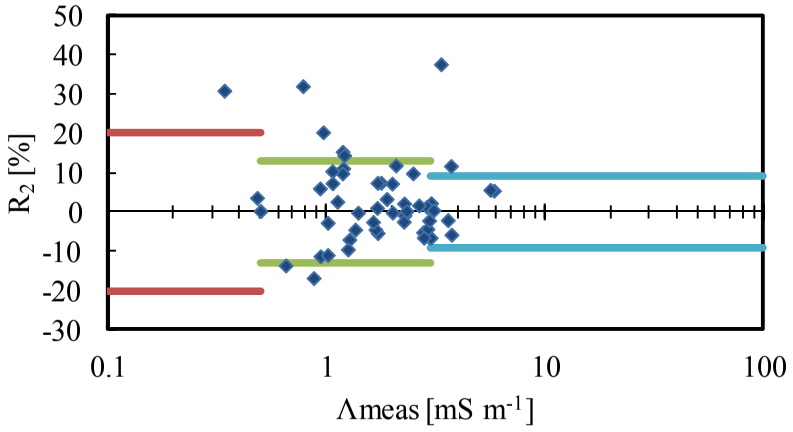


Fig. 3.8 b) Xiaoping Conductivity Agreement (R_2)

Calculated including F^-

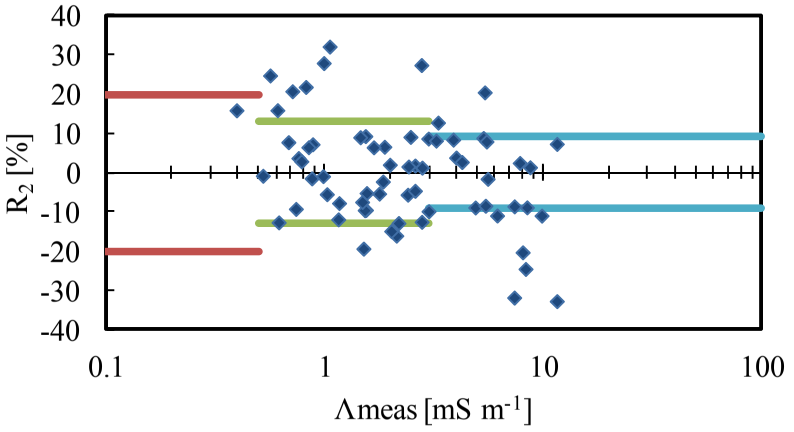


Fig. 3.9 b) Xiang Zhou Conductivity Agreement (R_2)

Calculated including F^-

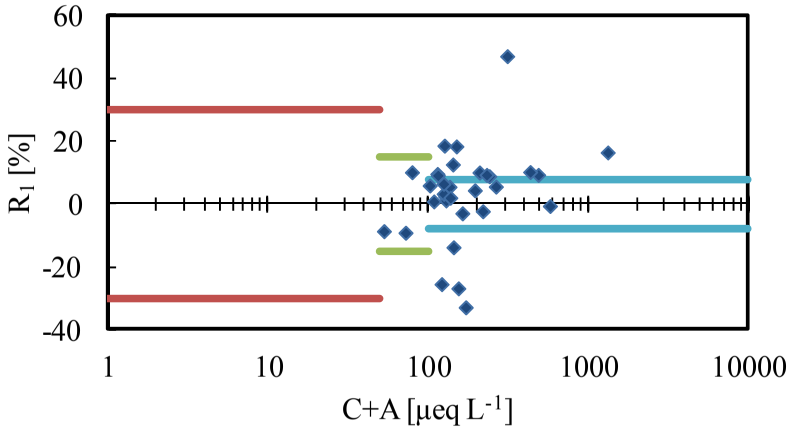


Fig. 3.10 a) Jakarta Ion Balance (R_1)

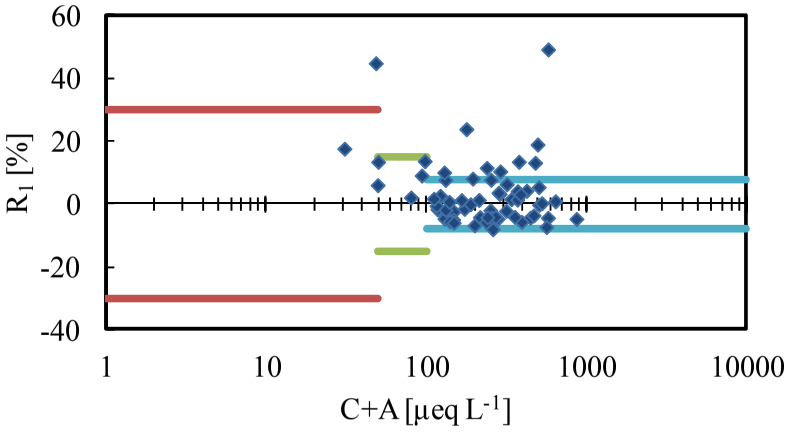


Fig. 3.11 a) Serpong Ion Balance (R_1)

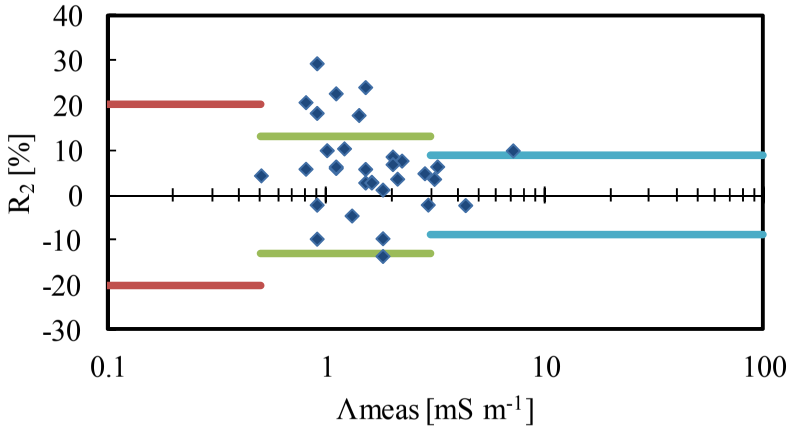


Fig. 3.10 b) Jakarta Conductivity Agreement (R_2)

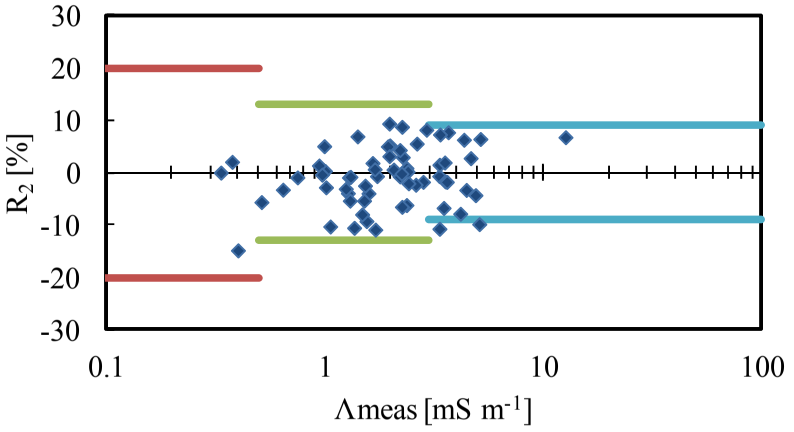


Fig. 3.11 b) Serpong Conductivity Agreement (R_2)

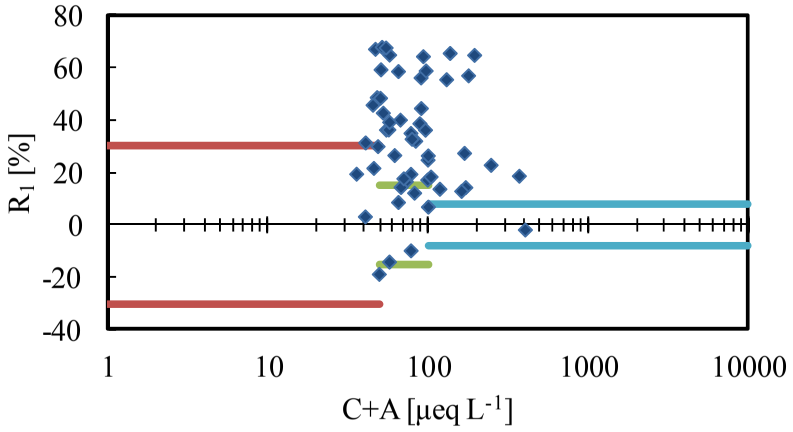


Fig. 3.12 a) Kototabang Ion Balance (R_1)

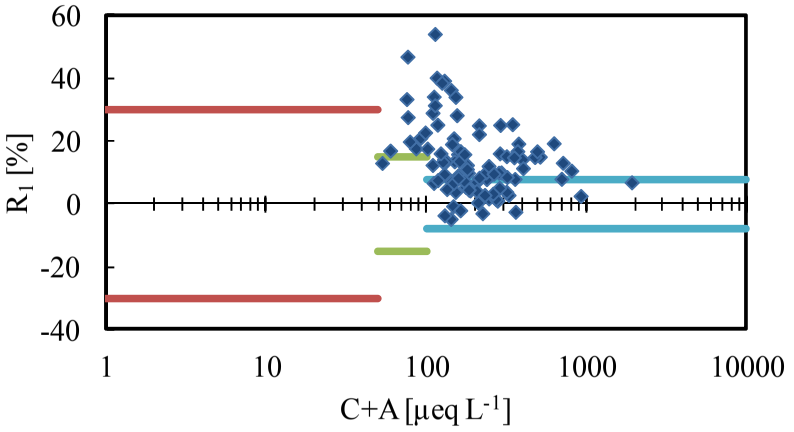


Fig. 3.13 a) Bandung Ion Balance (R_1)

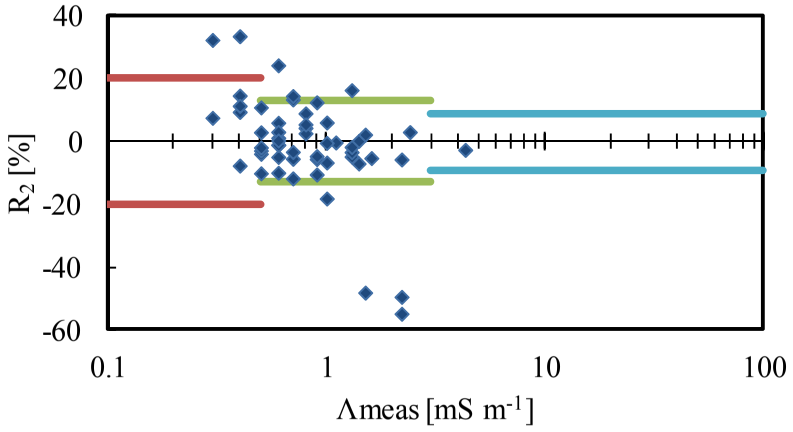


Fig. 3.12 b) Kototabang Conductivity Agreement (R_2)

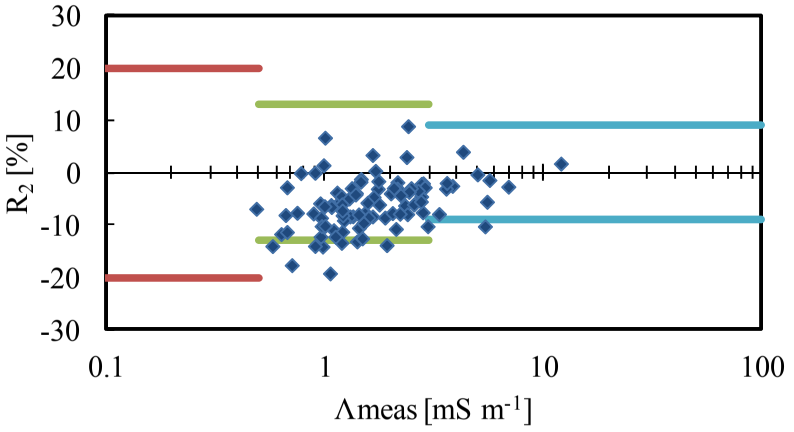


Fig. 3.13 b) Bandung Conductivity Agreement (R_2)

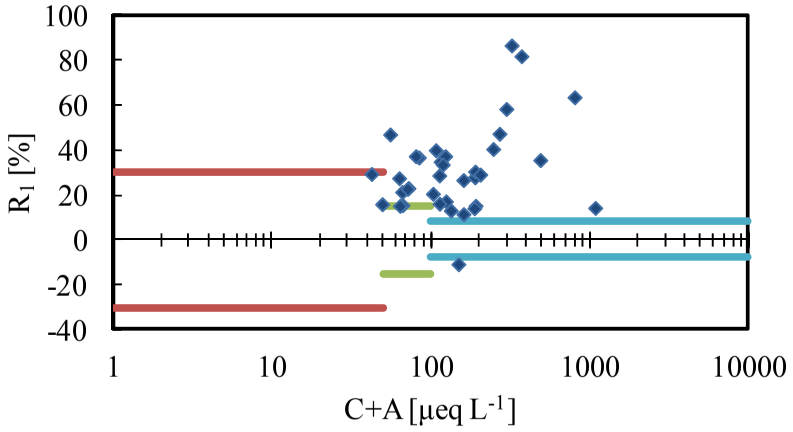


Fig. 3.14 a) Maros Ion Balance (R_1)

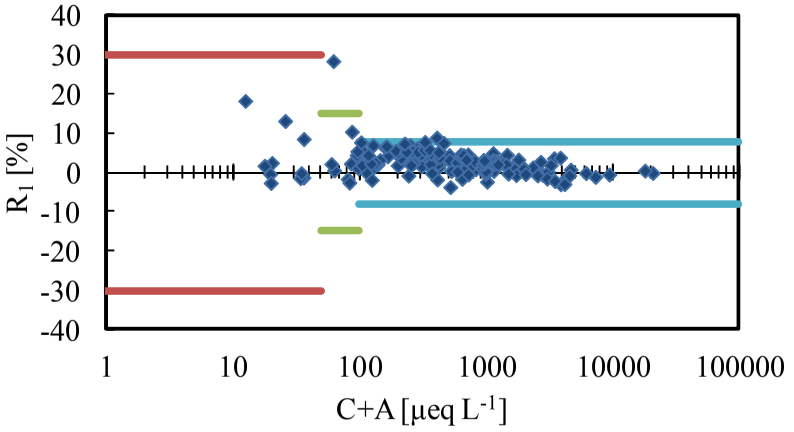


Fig. 3.15 a) Rishiri Ion Balance (R_1)

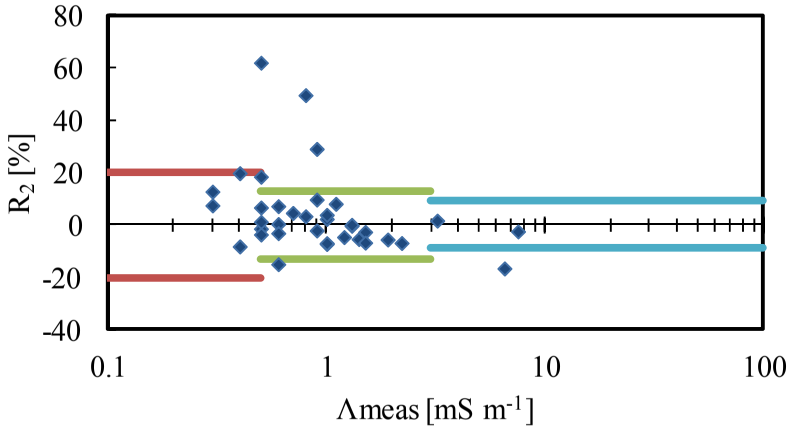


Fig. 3.14 b) Maros Conductivity Agreement (R_2)

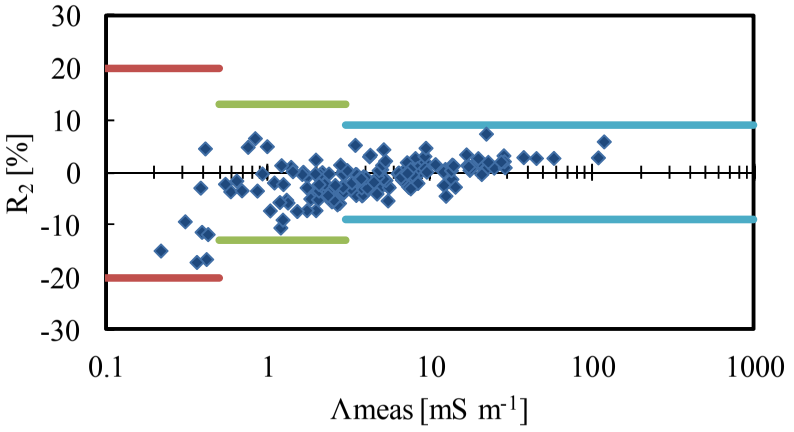


Fig. 3.15 b) Rishiri Conductivity Agreement (R_2)

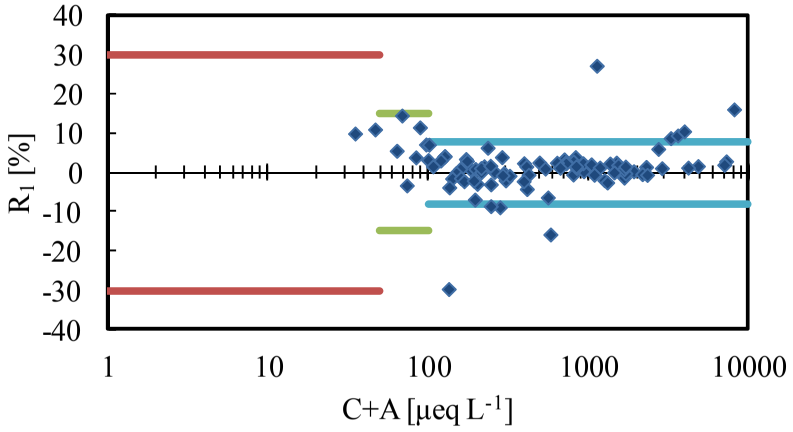


Fig. 3.16 a) Ochiishi Ion Balance (R_1)

Calculated including PO_4^{3-}

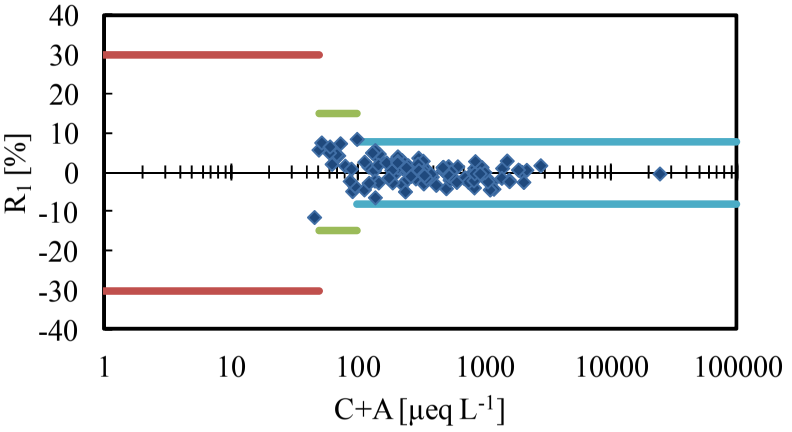


Fig. 3.17 a) Tappi Ion Balance (R_1)

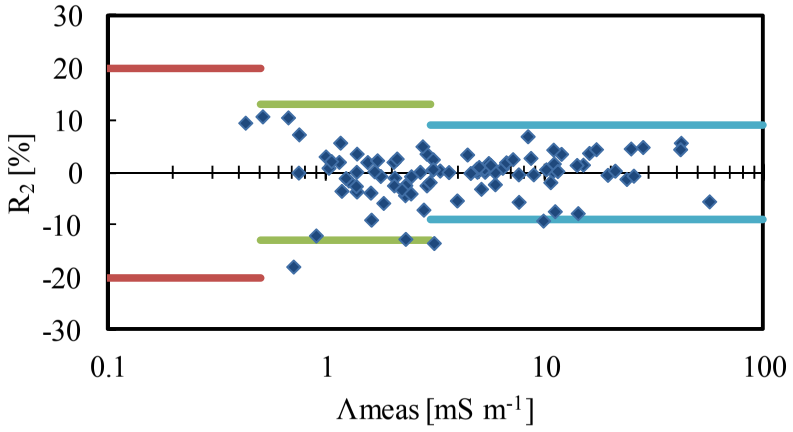


Fig. 3.16 b) Ochiishi Conductivity Agreement (R_2)

Calculated including PO_4^{3-}

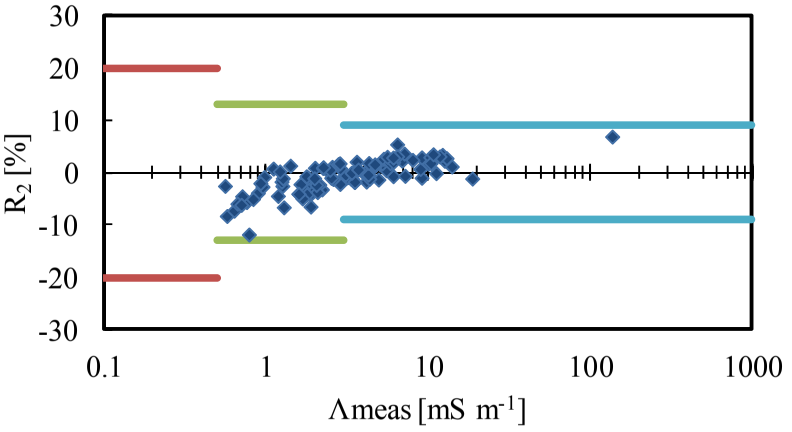


Fig. 3.17 b) Tappi Conductivity Agreement (R_2)

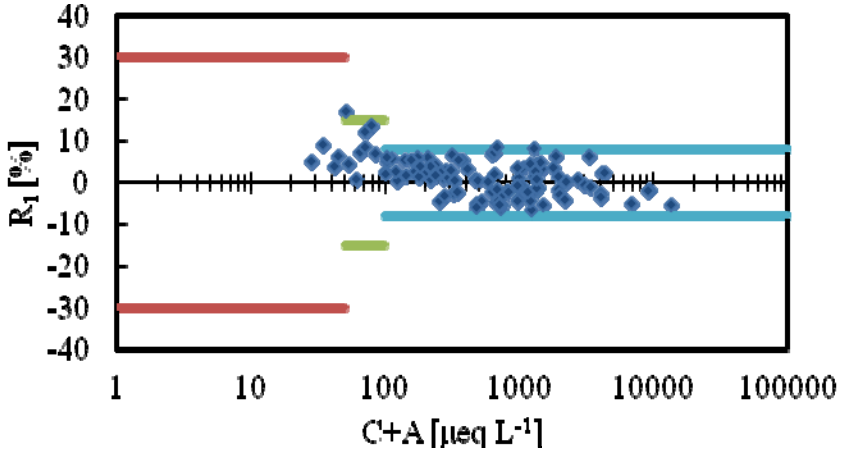


Fig. 3.18 a) Sado-seki Ion Balance (R_1)

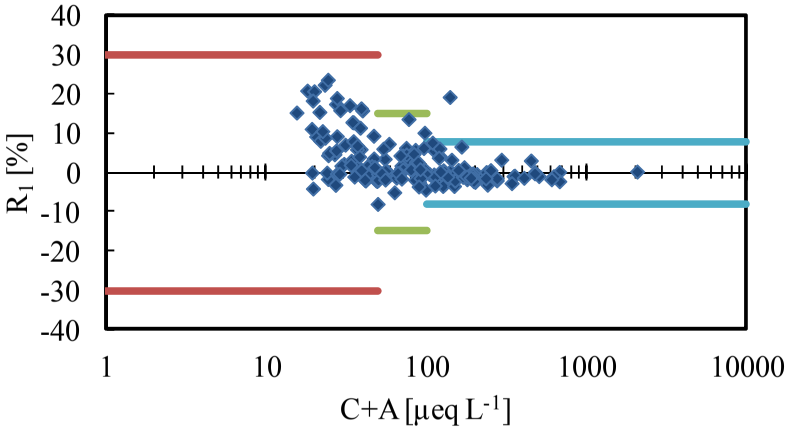


Fig. 3.19 a) Happo Ion Balance (R_1)

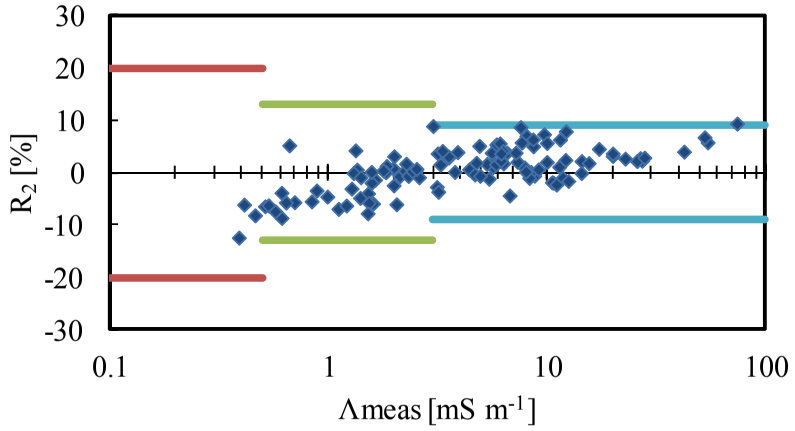


Fig. 3.18 b) Sado-seki Conductivity Agreement (R_2)

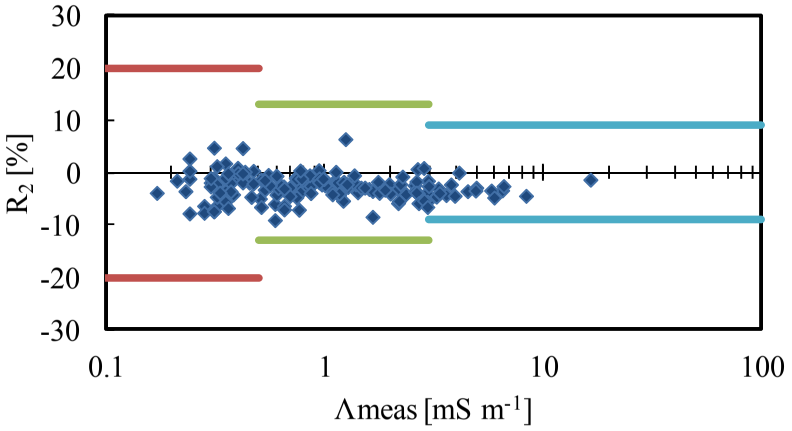


Fig. 3.19 b) Happo Conductivity Agreement (R_2)

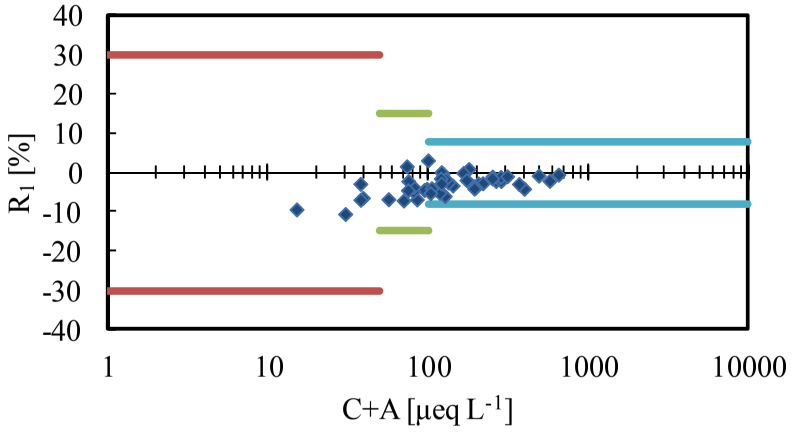


Fig. 3.20 a) Ijira Ion Balance (R_1)

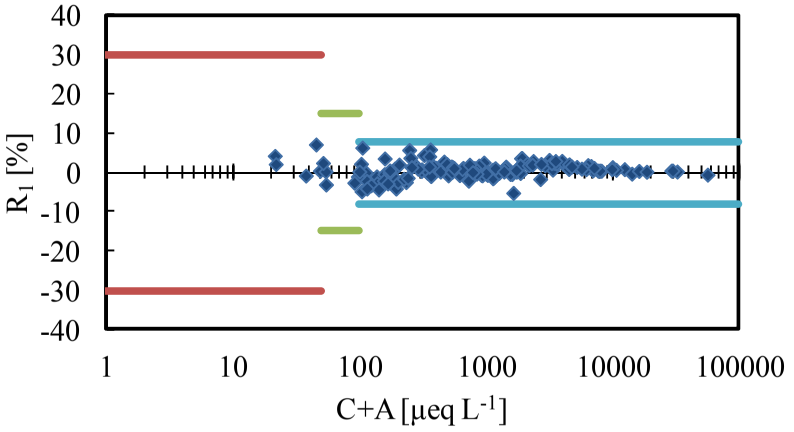


Fig. 3.21 a) Oki Ion Balance (R_1)

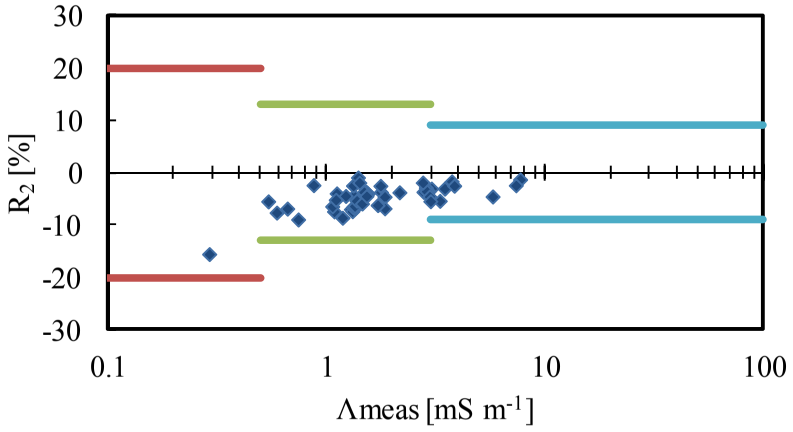


Fig. 3.20 b) Ijira Conductivity Agreement (R_2)

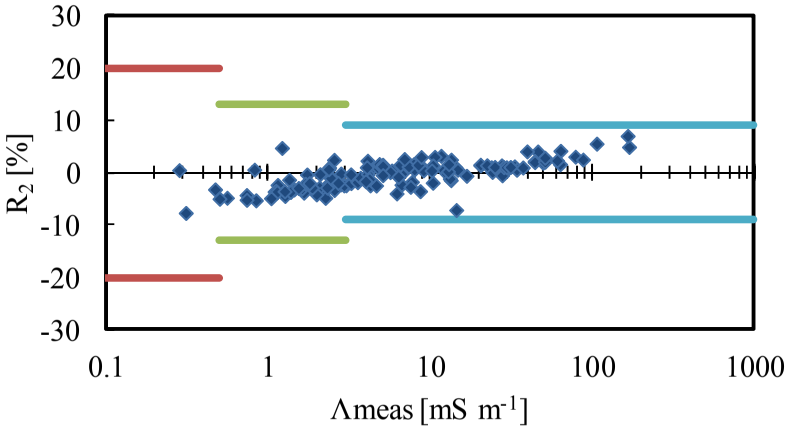


Fig. 3.21 b) Oki Conductivity Agreement (R_2)

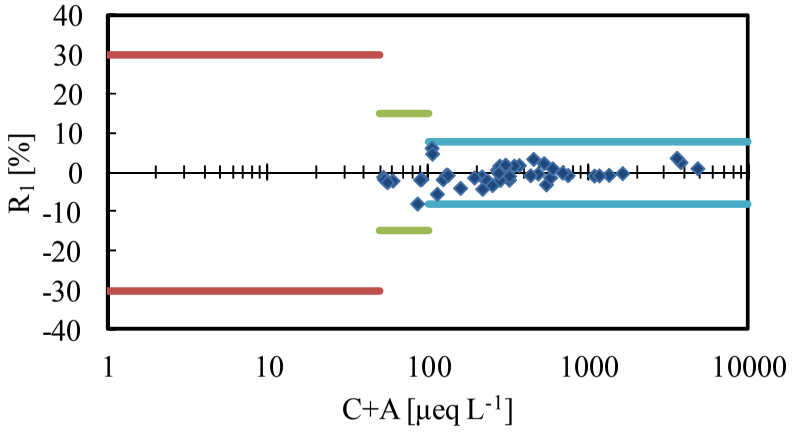


Fig. 3.22 a) Banryu Ion Balance (R_1)

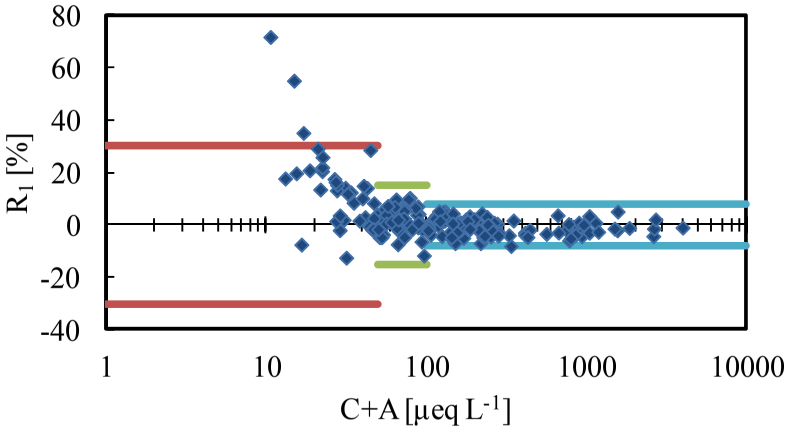


Fig. 3.23 a) Yusuhara Ion Balance (R_1)

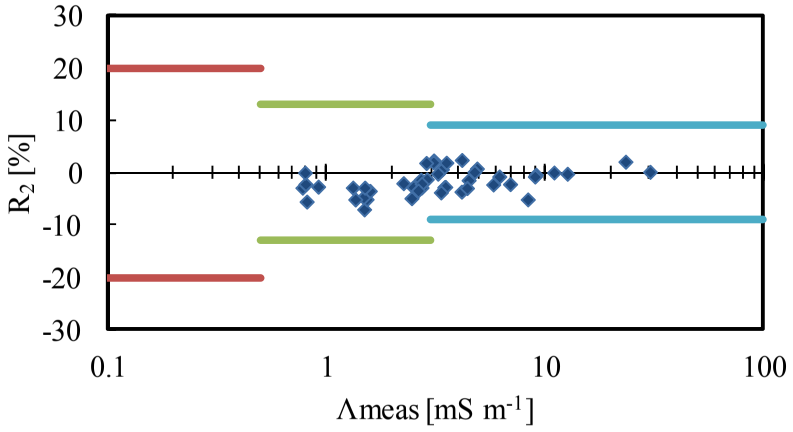


Fig. 3.22 b) Banryu Conductivity Agreement (R_2)

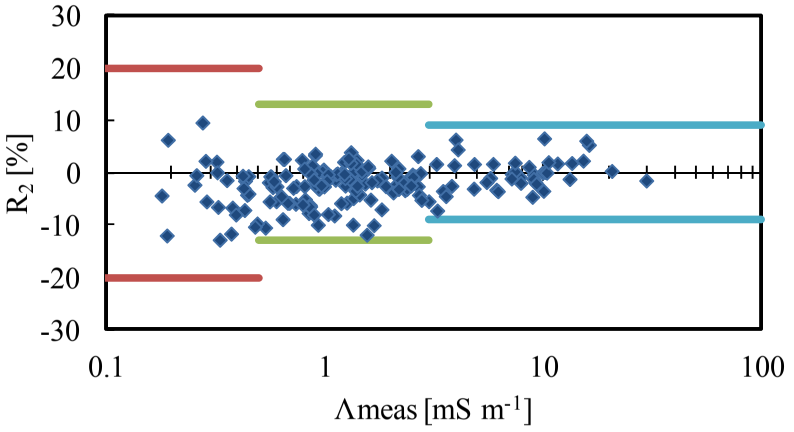


Fig. 3.23 b) Yusuhara Conductivity Agreement (R_2)

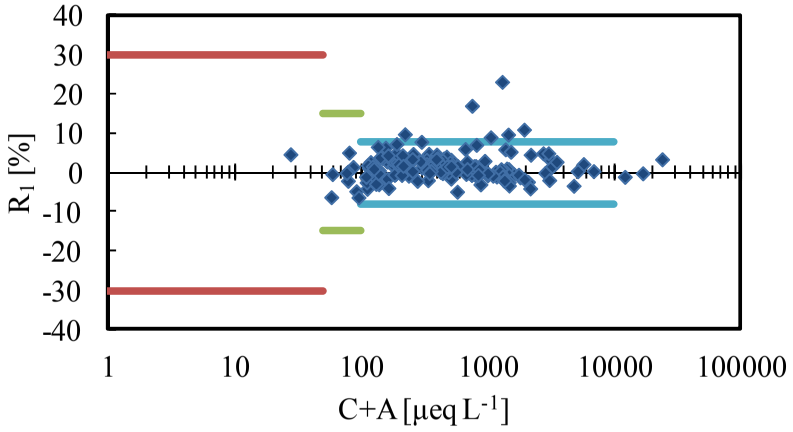


Fig. 3.24 a) Hedo Ion Balance (R_1)

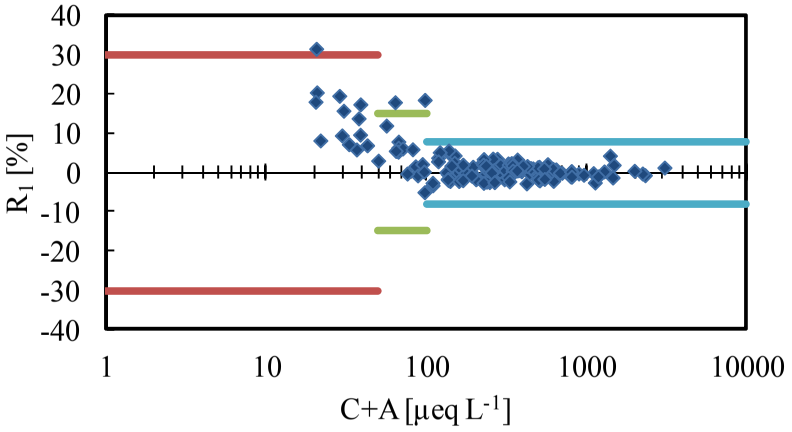


Fig. 3.25 a) Ogasawara Ion Balance (R_1)

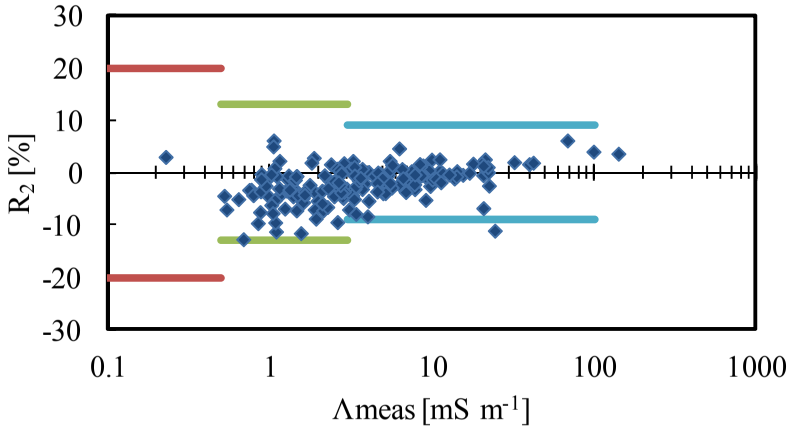


Fig. 3.24 b) Hedo Conductivity Agreement (R_2)

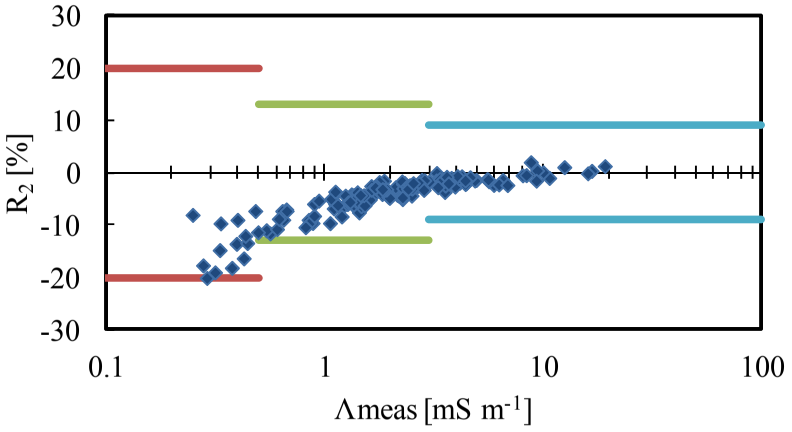


Fig. 3.25 b) Ogasawara Conductivity Agreement (R_2)

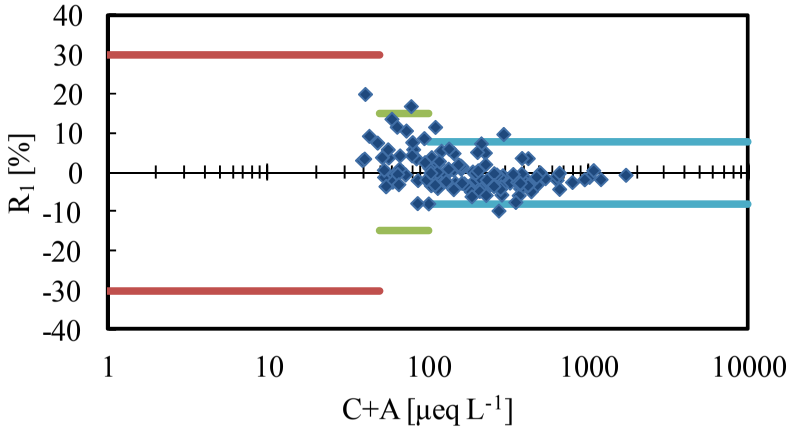


Fig. 3.26 a) Tokyo Ion Balance (R_1)

Calculated including NO_2^-

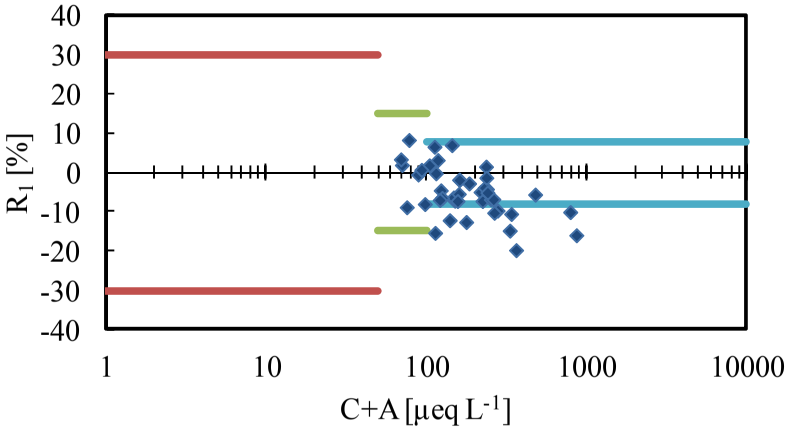


Fig. 3.27 a) Petaling Jaya Ion Balance (R_1)

Calculated including formic acid, acetic acid, oxalic acid

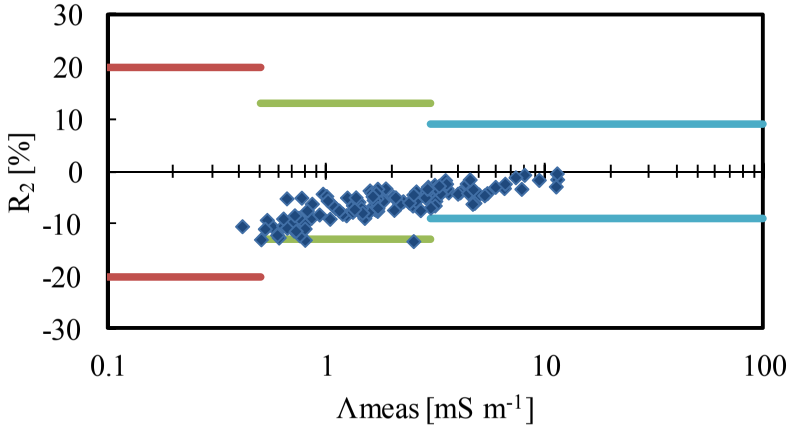


Fig. 3.26 b) Tokyo Conductivity Agreement (R_2)

Calculated including NO_2^-

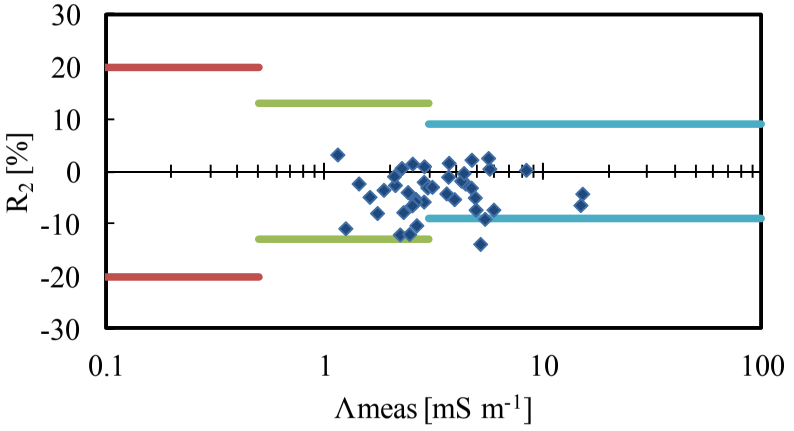


Fig. 3.27 b) Petaling Jaya Conductivity Agreement (R_2)

Calculated including formic acid, acetic acid, oxalic acid

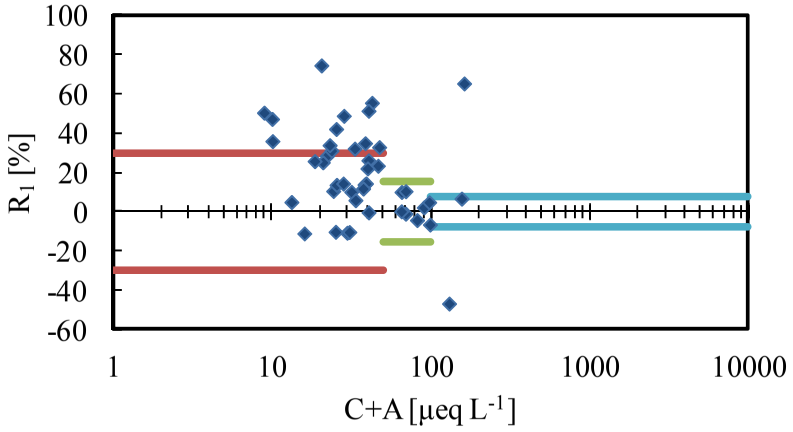


Fig. 3.28 a) Tanah Rata Ion Balance (R_1)

Calculated including formic acid, acetic acid, oxalic acid

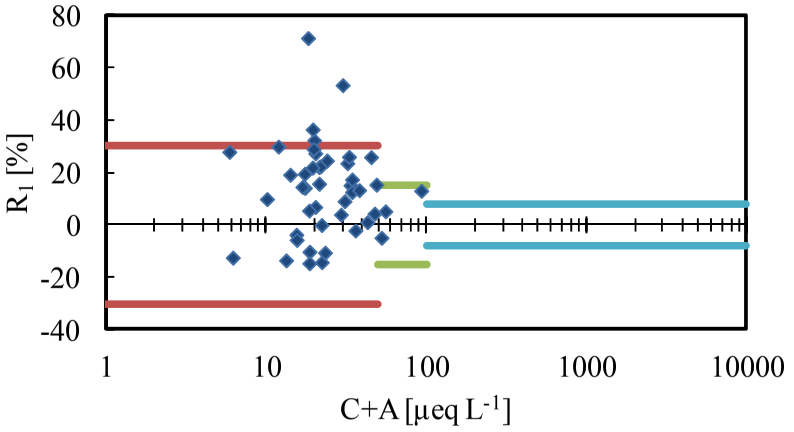


Fig. 3.29 a) Danum Valley Ion Balance (R_1)

Calculated including formic acid, acetic acid, oxalic acid

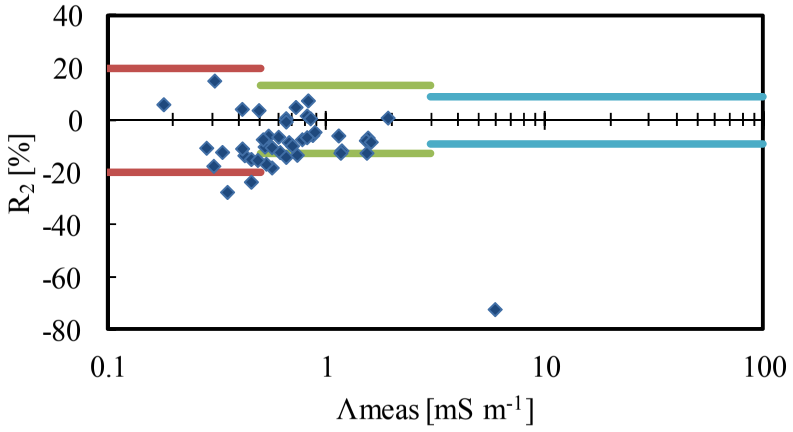


Fig. 3.28 b) Tanah Rata Conductivity Agreement (R_2)

Calculated including formic acid, acetic acid, oxalic acid

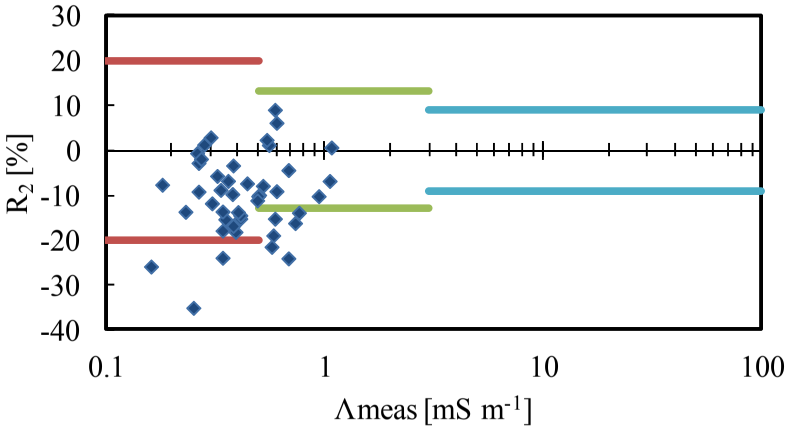


Fig. 3.29 b) Danum Valley Conductivity Agreement (R_2)

Calculated including formic acid, acetic acid, oxalic acid

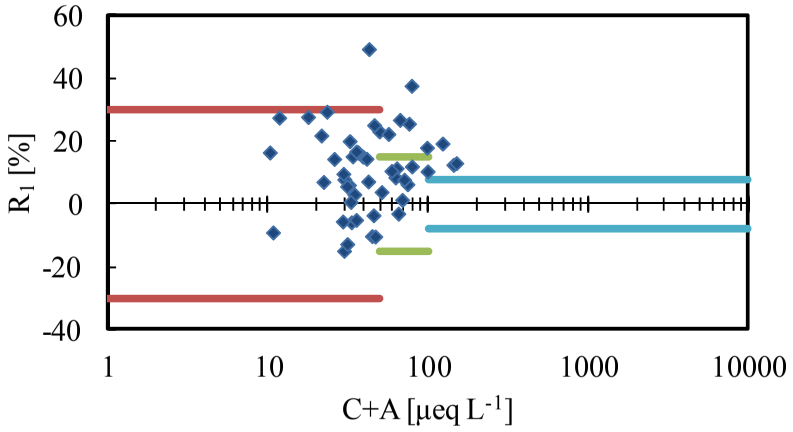


Fig. 3.30 a) Kuching Ion Balance (R_1)

Calculated including formic acid, acetic acid, oxalic acid

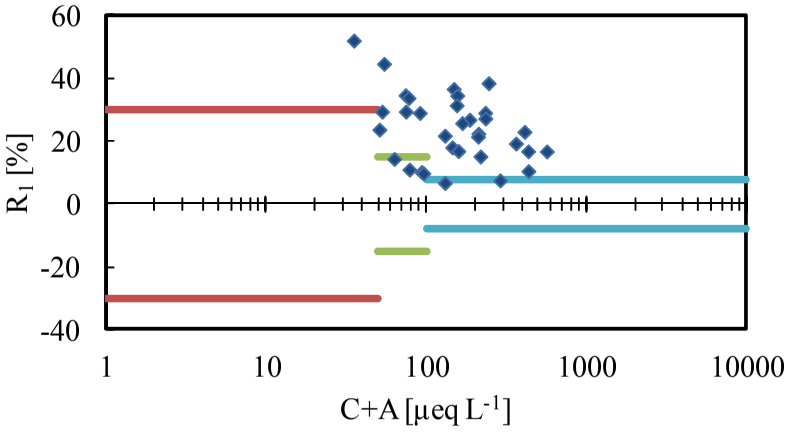


Fig. 3.31 a) Yangon Ion Balance (R_1)

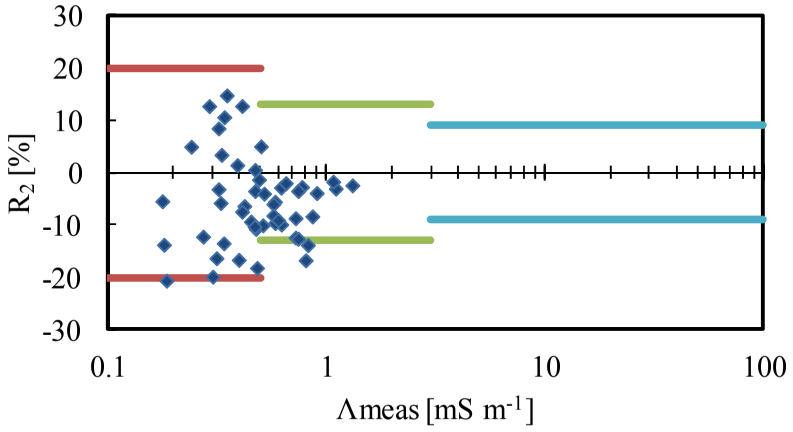


Fig. 3.30 b) Kuching Conductivity Agreement (R_2)

Calculated including formic acid, acetic acid, oxalic acid

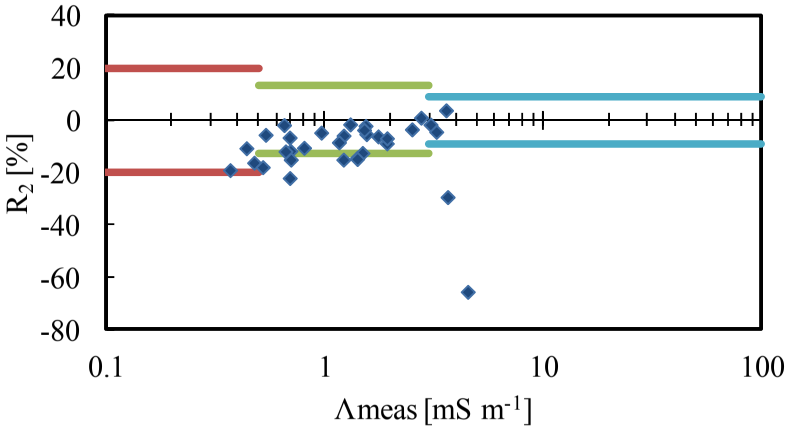


Fig. 3.31 b) Yangon Conductivity Agreement (R_2)

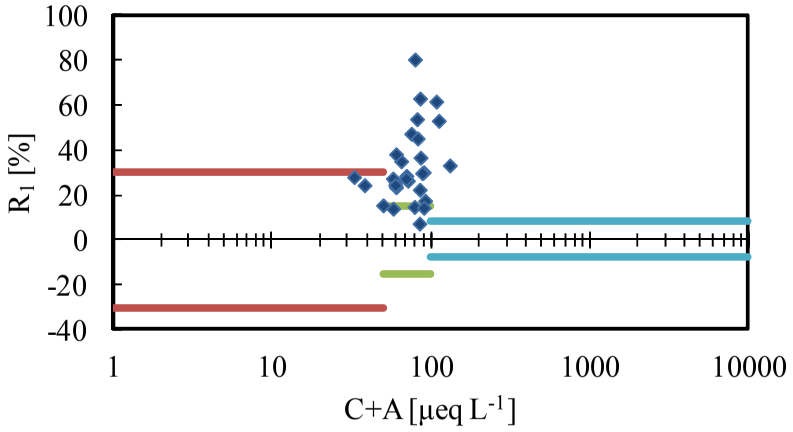


Fig. 3.32 a) Mt. Sto. Tomas Ion Balance (R_1)

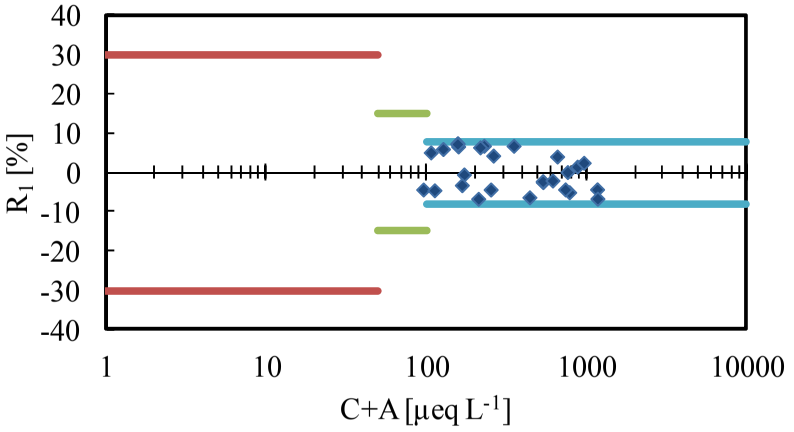


Fig. 3.33 a) Kanghwa Ion Balance (R_1)

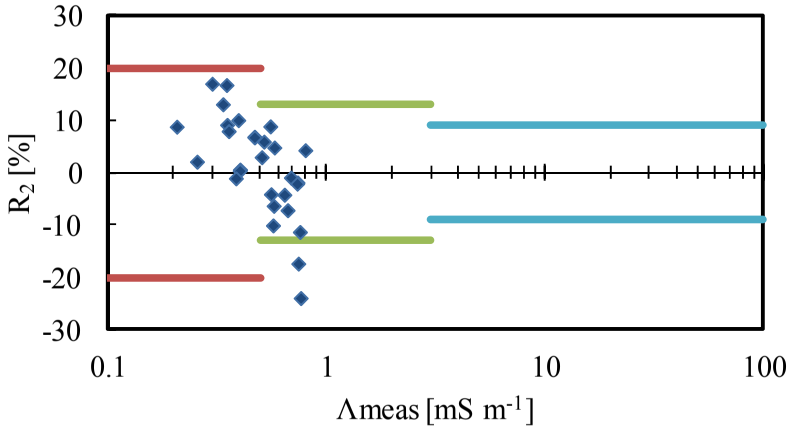


Fig. 3.32 b) Mt. Sto. Tomas Conductivity Agreement (R_2)

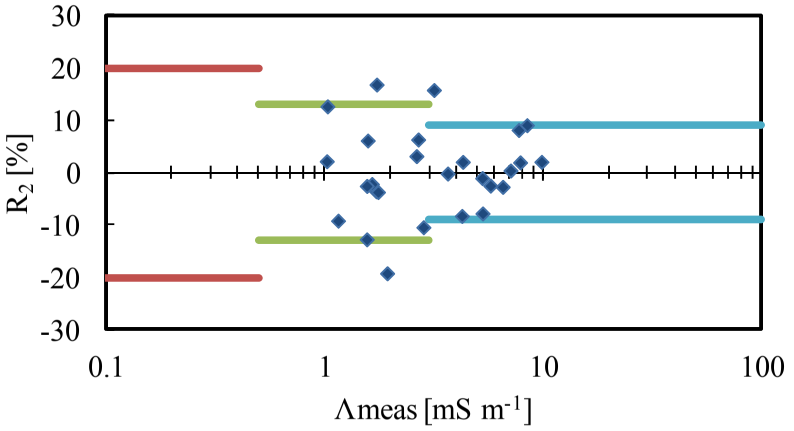


Fig. 3.33 b) Kanghwa Conductivity Agreement (R_2)

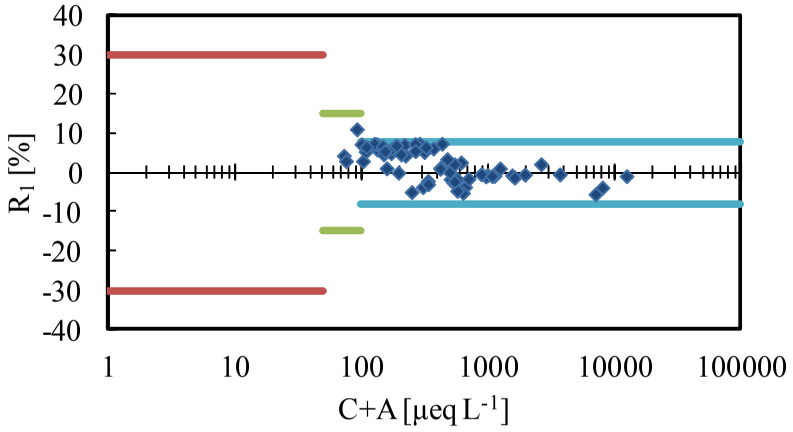


Fig. 3.34 a) Cheju Ion Balance (R_1)

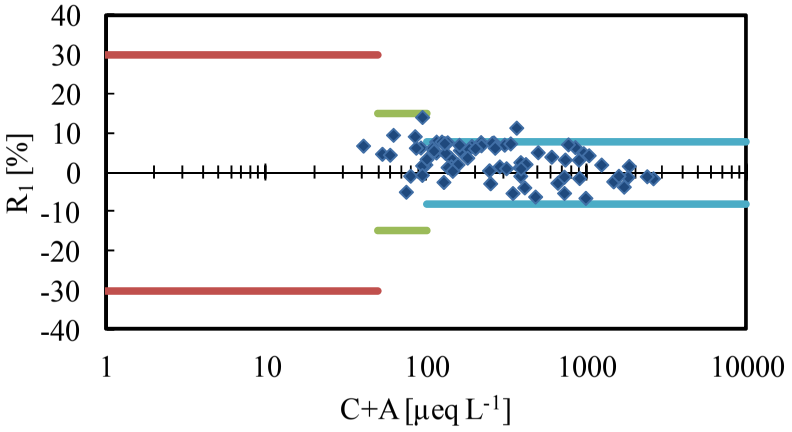


Fig. 3.35 a) Imsil Ion Balance (R_1)

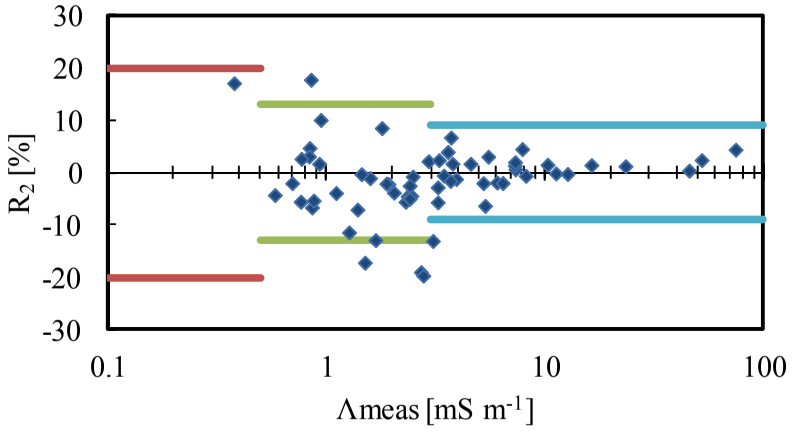


Fig. 3.34 b) Cheju Conductivity Agreement (R_2)

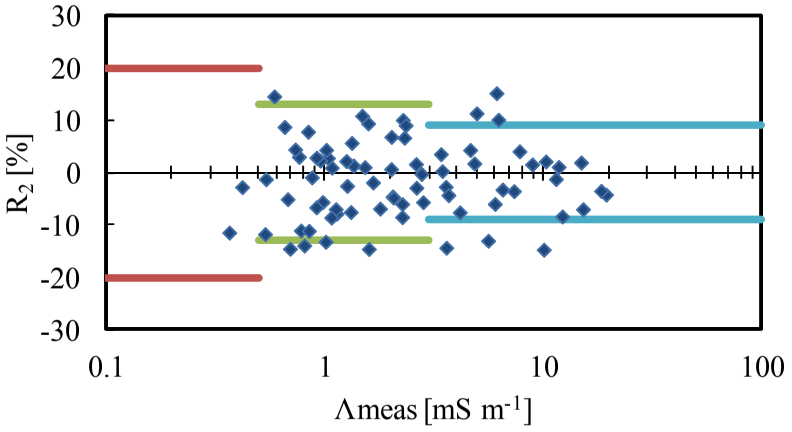


Fig. 3.35 b) Imsil Conductivity Agreement (R_2)

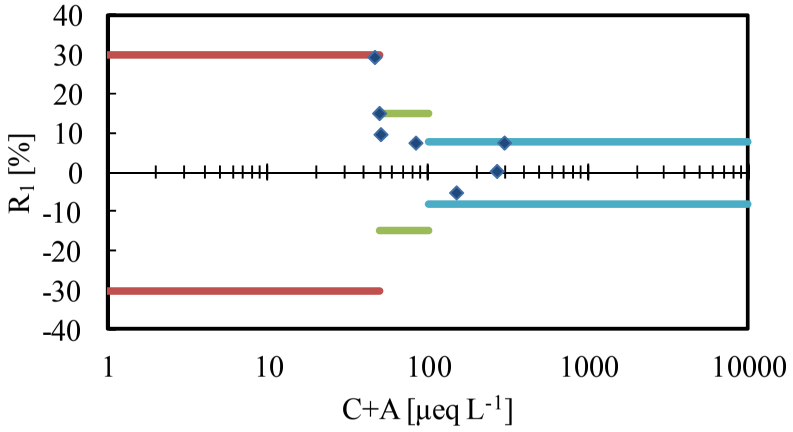


Fig. 3.36 a) Mondy Ion Balance (R_1)

Calculated including HCO_3^-, F^-, Br^-, NO_2^-

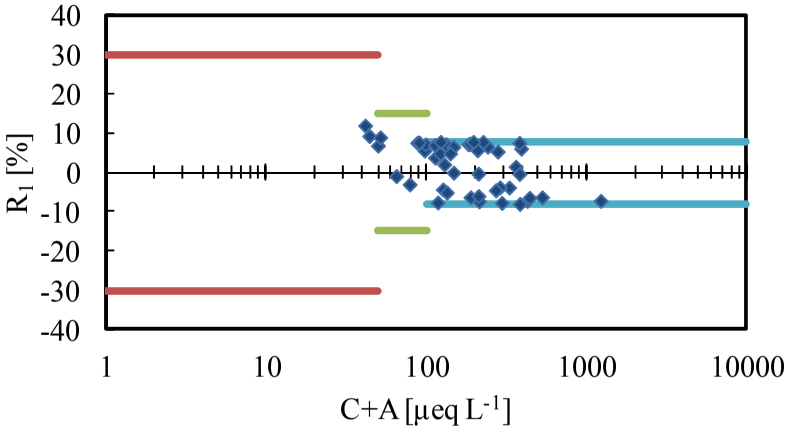


Fig. 3.37 a) Listvyanka Ion Balance (R_1)

Calculated including HCO_3^-, F^-, Br^- , NO_2^-

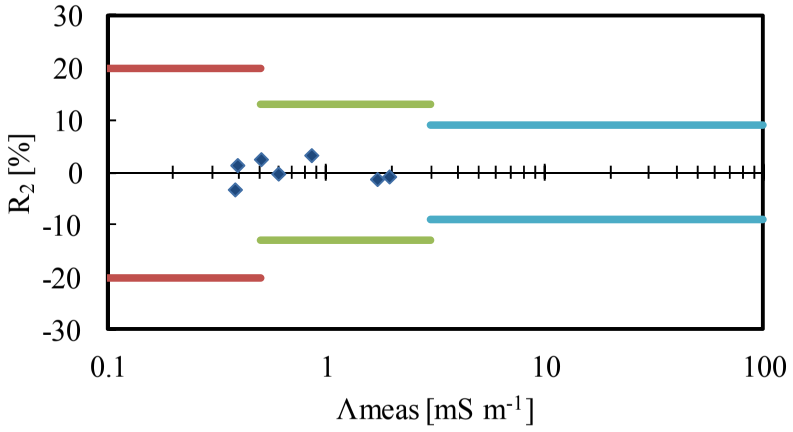


Fig. 3.36 b) Mondy Conductivity Agreement (R_2)

Calculated including HCO_3^-, F^-, Br^-, NO_2^-

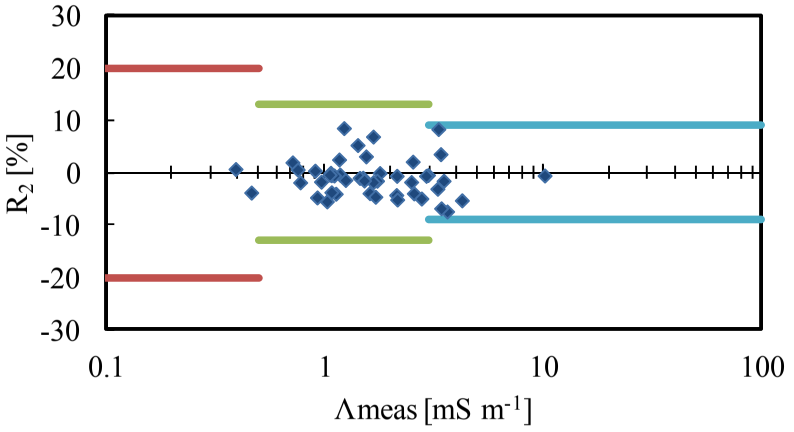


Fig. 3.37 b) Listvyanka Conductivity Agreement (R_2)

Calculated including HCO_3^-, F^-, Br^- , NO_2^-

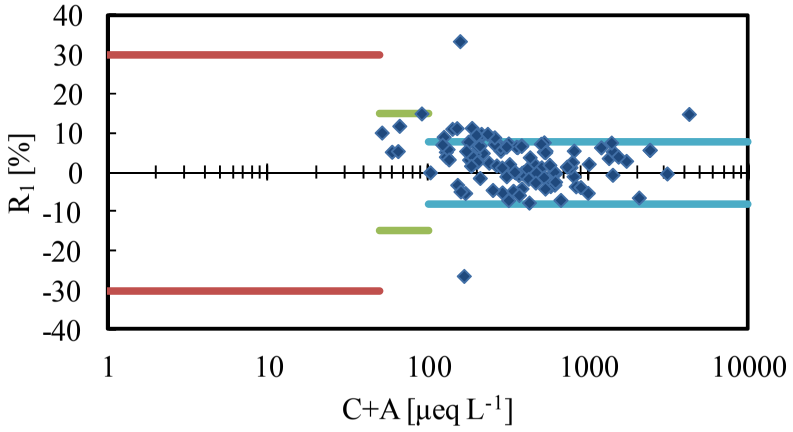


Fig. 3.38 a) Irkutsk Ion Balance (R_1)

Calculated including HCO_3^-, F^-, Br^- , NO_2^-

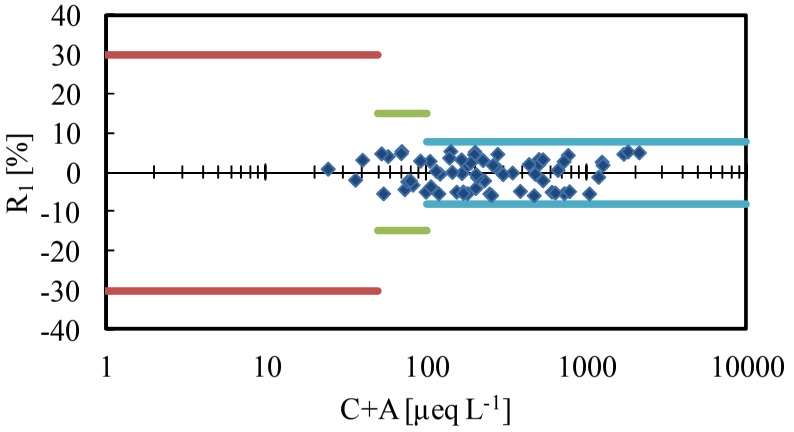


Fig. 3.39 a) Primorskaya Ion Balance (R_1)

Calculated including HCO_3^-, Br^- , NO_2^-

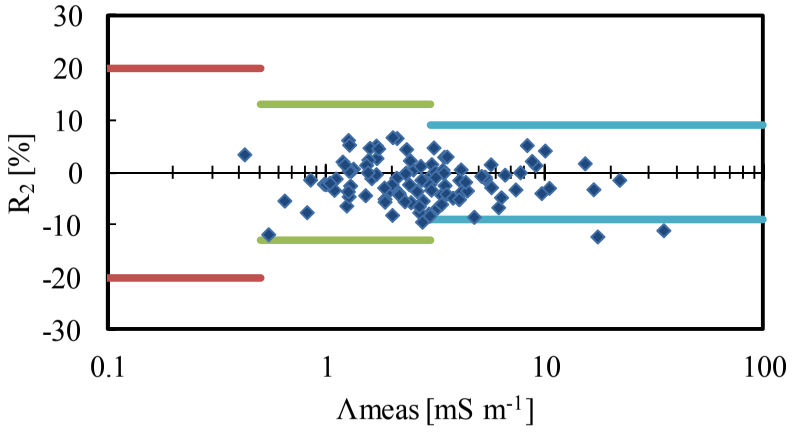


Fig. 3.38 b) Irkutsk Conductivity Agreement (R_2)

Calculated including HCO_3^-, F^-, Br^- , NO_2^-

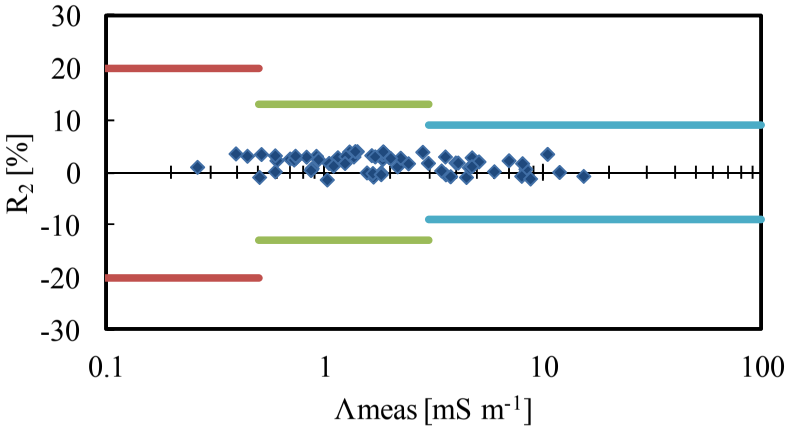


Fig. 3.39 b) Primorskaya Conductivity Agreement (R_2)

Calculated including HCO_3^-, Br^- , NO_2^-

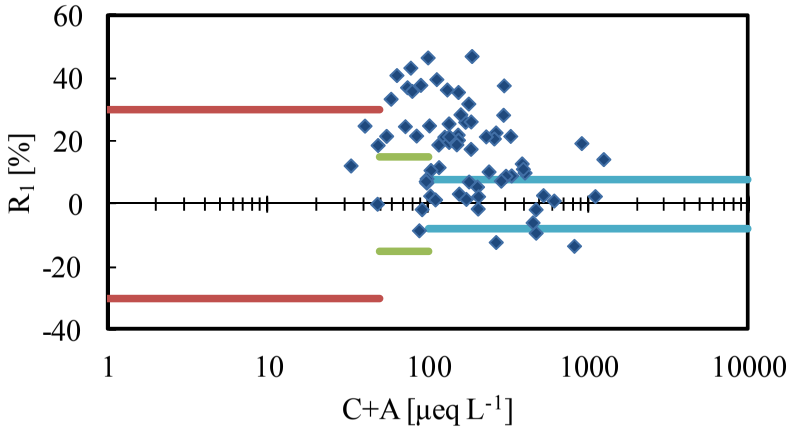


Fig. 3.40 a) Bankok Ion Balance (R_1)

Calculated including PO_4^{3-}, formic acid, acetic acid

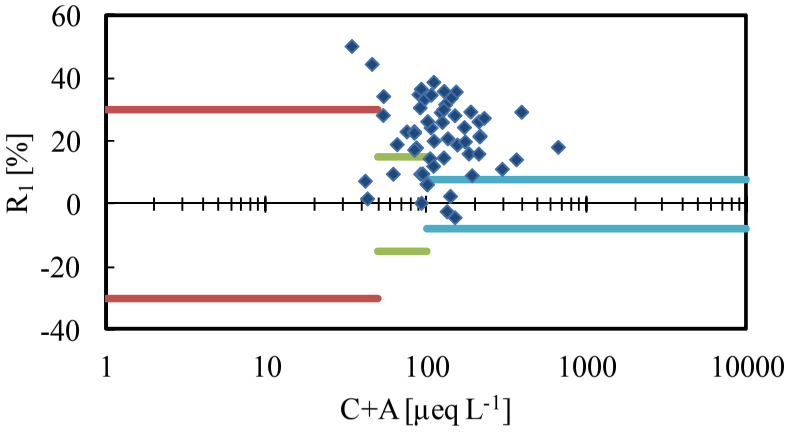


Fig. 3.41 a) Samutprakarn Ion Balance (R_1)

Calculated including PO_4^{3-}, formic acid, acetic acid

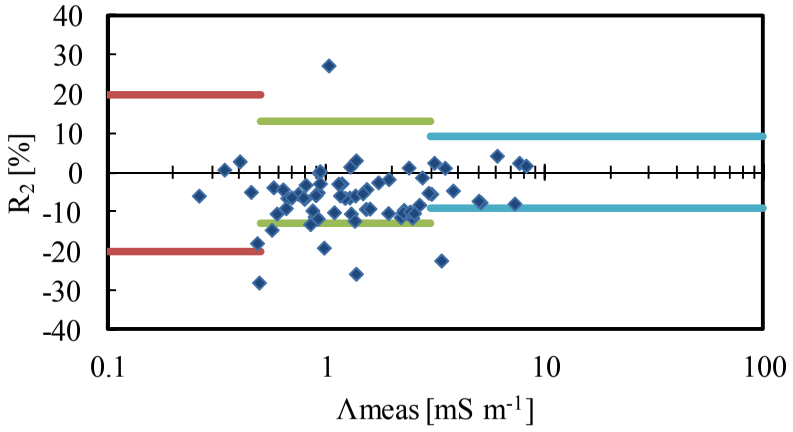


Fig. 3.40 b) Bankok Conductivity Agreement (R_2)

Calculated including PO_4^{3-}, formic acid, acetic acid

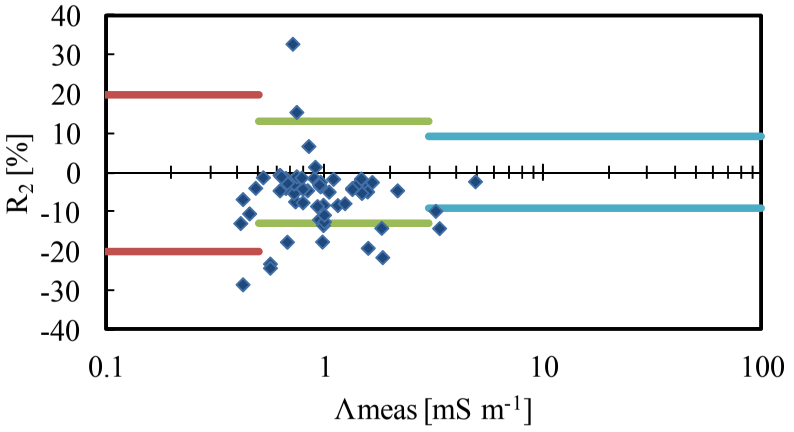


Fig. 3.41 b) Samutprakarn Conductivity Agreement (R_2)

Calculated including PO_4^{3-}, formic acid, acetic acid

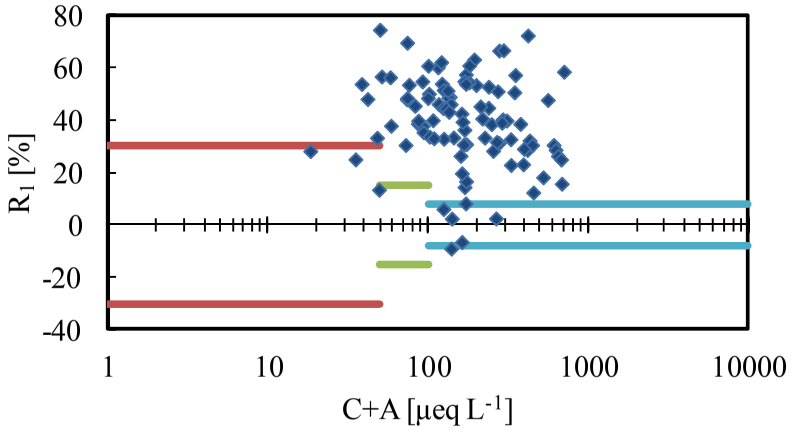


Fig. 3.42 a) Pathumthani Ion Balance (R_1)

Calculated including PO_4^{3-}, formic acid, acetic acid

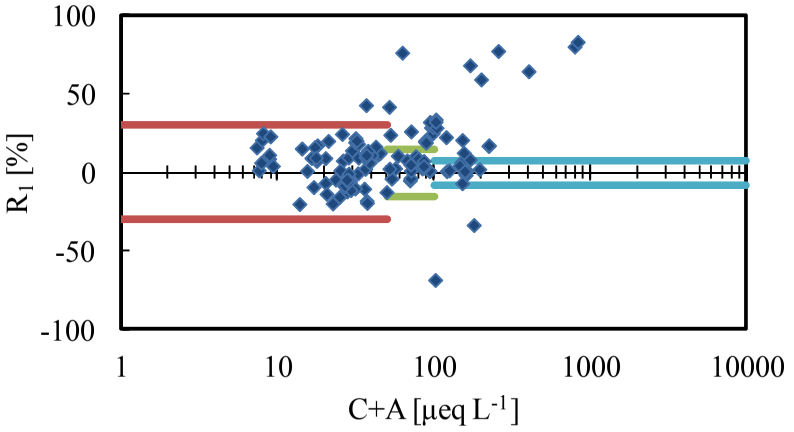


Fig. 3.43 a) Khanchanaburi Ion Balance (R_1)

Calculated including PO_4^{3-}, formic acid, acetic acid

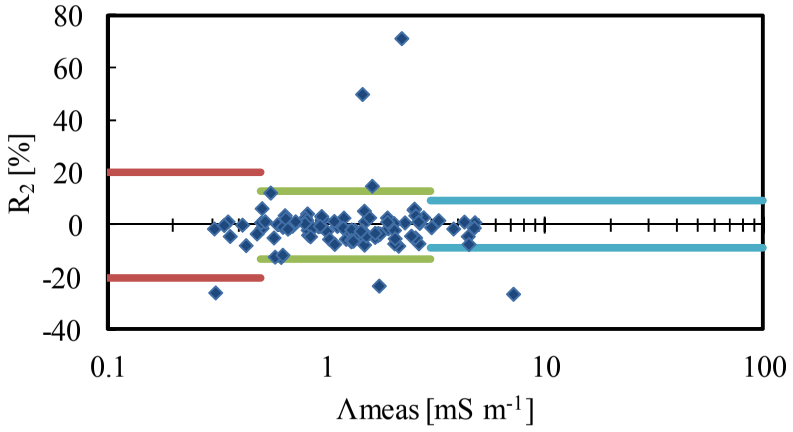


Fig. 3.42 b) Pathumthani Conductivity Agreement (R_2)

Calculated including PO_4^{3-}, formic acid, acetic acid

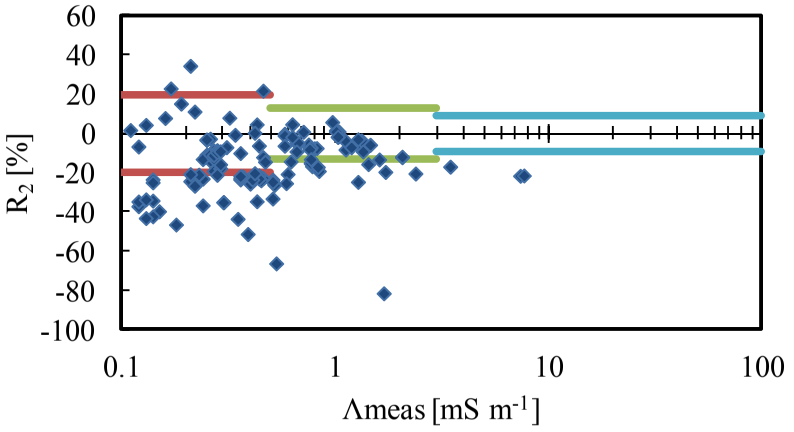


Fig. 3.43 b) Khanchanaburi Conductivity Agreement (R_2)

Calculated including PO_4^{3-}, formic acid, acetic acid

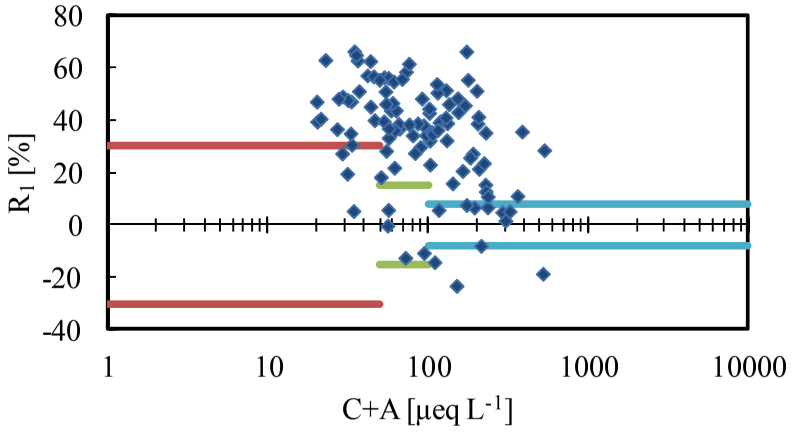


Fig. 3.44 a) Chang Mai Ion Balance (R_1)

Calculated including PO_4^{3-}, formic acid, acetic acid

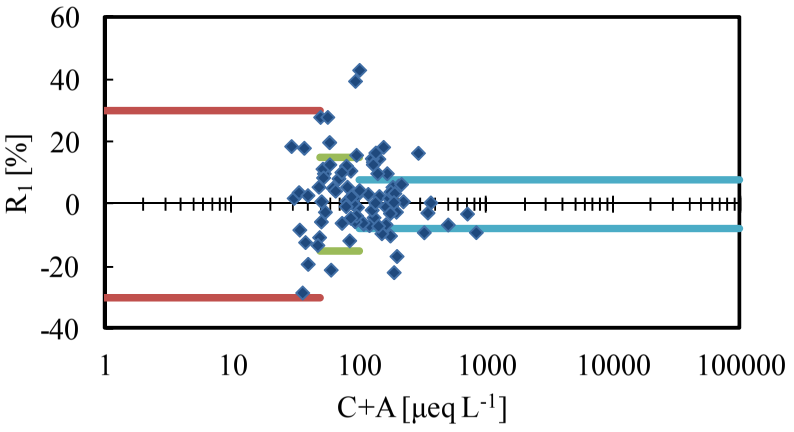


Fig. 3.45 a) Nakhon Ratchasima Ion Balance (R_1)

Calculated including PO_4^{3-}, formic acid, acetic acid

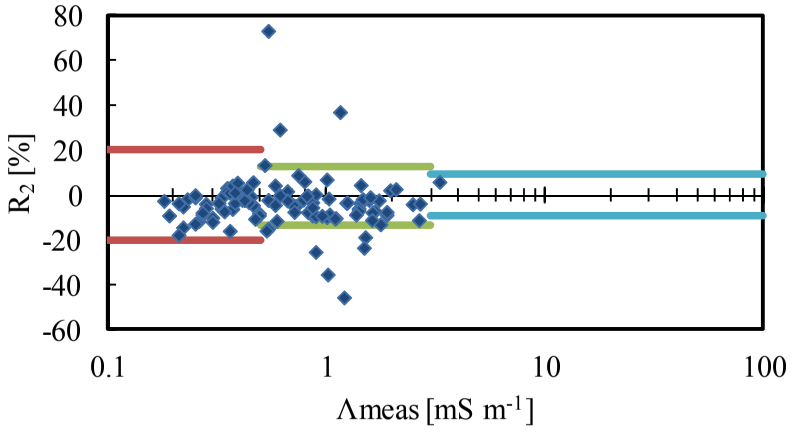


Fig. 3.44 b) Chang Mai Conductivity Agreement (R_2)

Calculated including PO_4^{3-}, formic acid, acetic acid

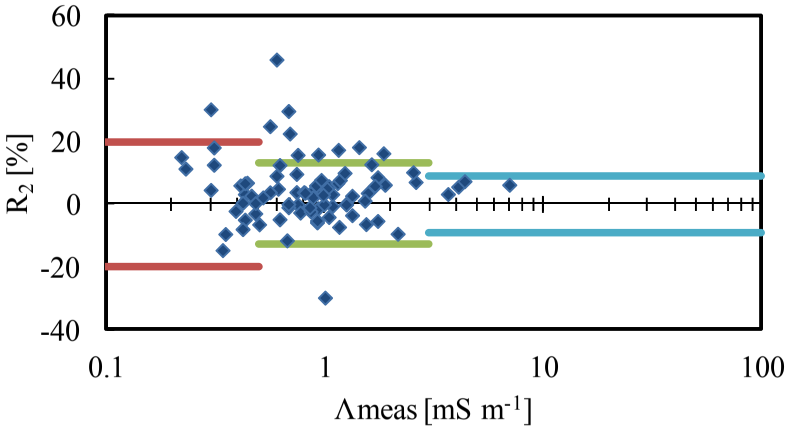


Fig. 3.45 b) Nakhon Ratchasima Conductivity Agreement (R_2)

Calculated including PO_4^{3-}, formic acid, acetic acid

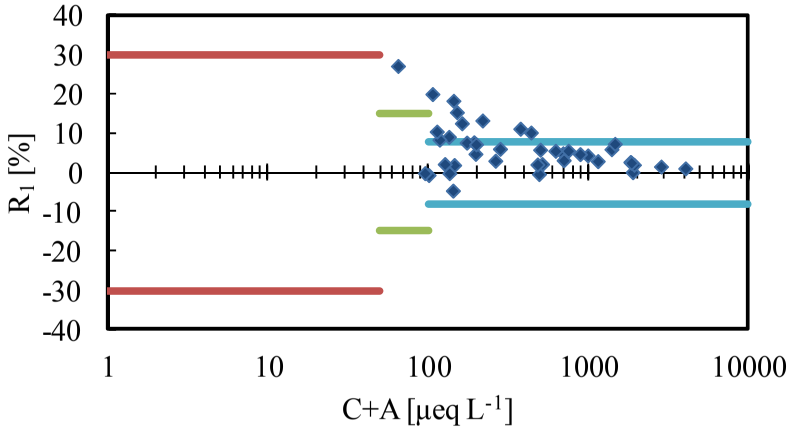


Fig. 3.46 a) Hanoi Ion Balance (R_1)

Calculated including F^-

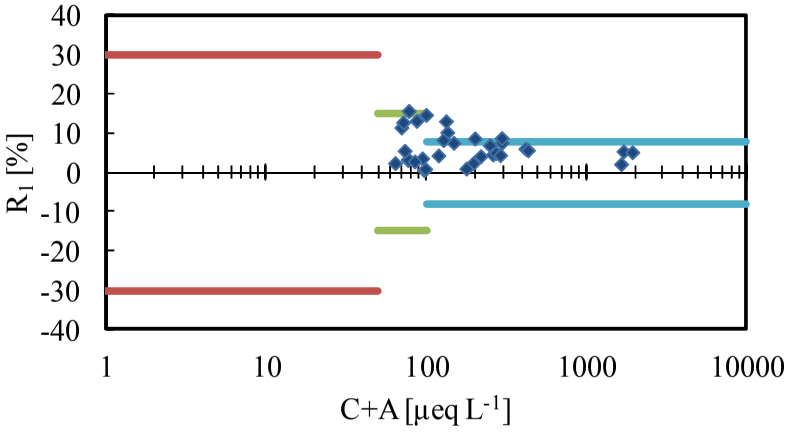


Fig. 3.47 a) Hoa Binh Ion Balance (R_1)

Calculated including F^-

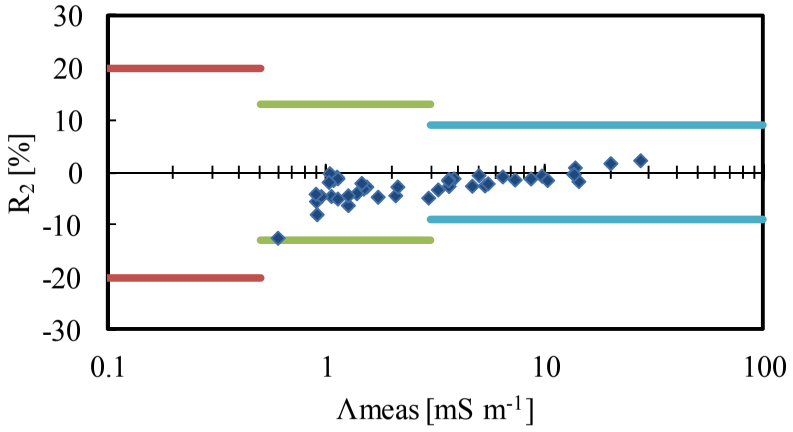


Fig. 3.46 b) Hanoi Conductivity Agreement (R_2)

Calculated including F^-

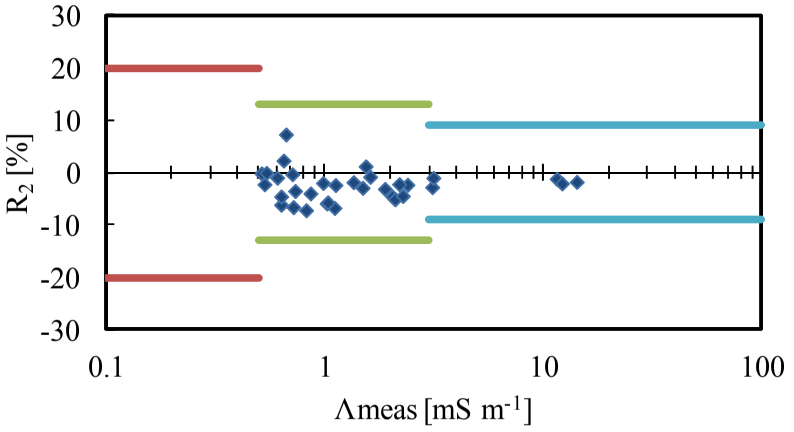


Fig. 3.47 b) Hoa Binh Conductivity Agreement (R_2)

Calculated including F^-

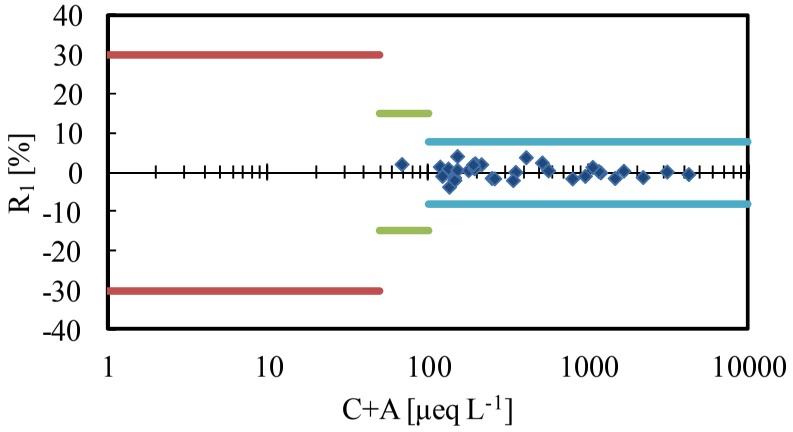


Fig. 3.48 a) Cuc Phuong Ion Balance (R_1)

Calculated including HCO_3^-

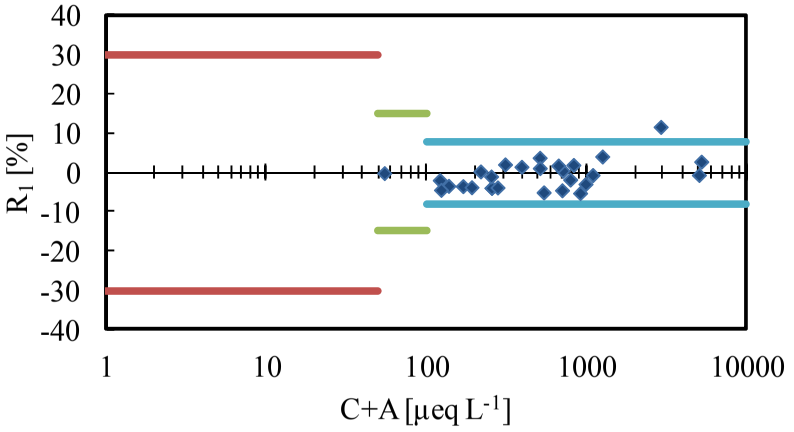


Fig. 3.49 a) Da Nang Ion Balance (R_1)

Calculated including HCO_3^-

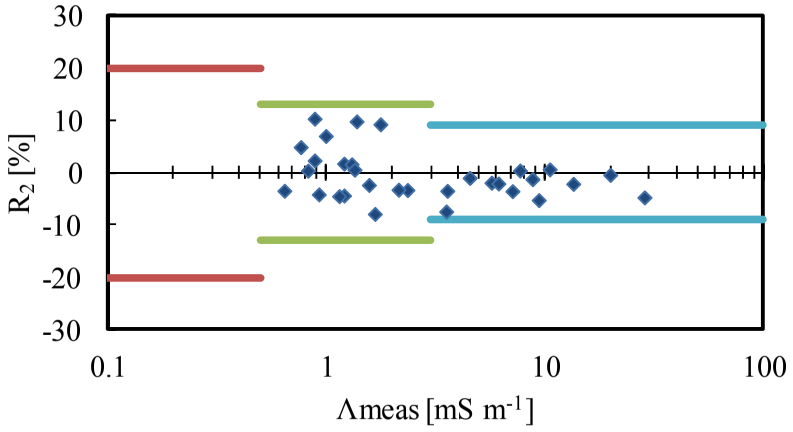


Fig. 3.48 b) Cuc Phuong Conductivity Agreement (R_2)

Calculated including HCO_3^-

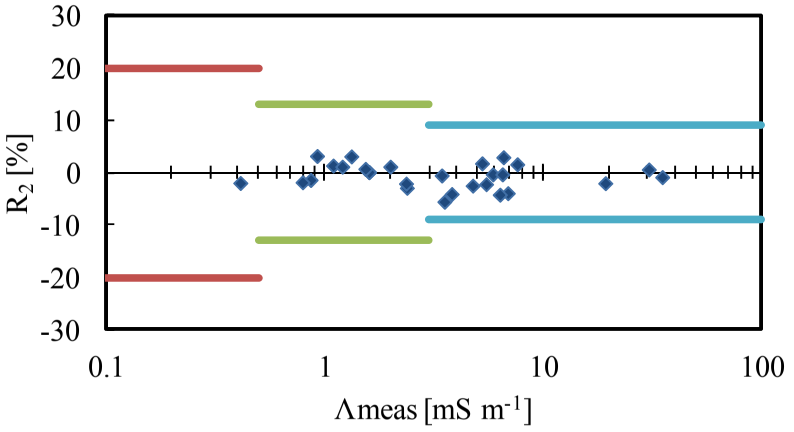


Fig. 3.49 b) Da Nang Conductivity Agreement (R_2)

Calculated including HCO_3^-

Table 3.87 Concentration, deposition and data completeness of F^-

Precipitation amount-weighted average concentration/ Precipitation amount														**unit : µmol L^{-1}**
Country	Name of sites	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	**Annual**
China	Haifu	15.6	23.6	21.9	8.92	3.89	2.52	5.58	6.93	3.46	5.93	16.2	24.4	6.00
	Jinyushan	12.1	19.7	21.1	9.26	10.1	6.29	10.2	7.10	4.79	3.60	9.30	14.6	8.73
	Hongwen	8.51	1.73	27.1	2.16	6.02	3.21	<1	9.89	6.31	50.4	1.14	8.02	5.40
	Xiaoping	5.01	<1	--	3.98	2.74	1.67	2.41	5.36	5.71	11.2	<1	<1	2.79
	Xiang Zhou	1.48	5.38	12.1	5.36	9.20	4.09	9.18	4.43	3.46	8.39	9.24	14.6	6.63
Russia	Mondy	--	--	--	--	<1	3.12	--	<1	<1	--	--	<1	<1
	Listvyanka	<1	<1	<1	<1	3.93	1.19	<1	<1	<1	<1	<1	<1	<1
	Irkutsk	<1	<1	*	<1	5.07	8.53	12.9	7.58	<1	<1	<1	<1	7.85
Vietnam	Hanoi	13.8	47.1	37.1	4.19	<1	1.43	1.79	1.67	5.16	4.16	8.81	16.2	2.95
	Hoa Binh	*	*	24.5	<1	5.60	1.17	<1	2.29	2.35	1.87	4.73	*	2.92
Wet deposition amount														**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**
China	Haifu	0.418	0.262	0.566	0.489	0.825	0.349	0.383	0.715	0.871	0.449	0.496	0.259	6.06
	Jinyushan	0.431	0.465	0.672	0.512	2.37	0.779	1.18	0.946	0.612	0.290	0.284	0.169	8.78
	Hongwen	0.461	0.165	0.758	0.284	0.685	0.307	<0.01	1.14	0.332	0.567	0.182	0.105	4.99
	Xiaoping	0.179	0.0483	0.00	0.209	0.829	0.524	0.177	0.619	0.714	0.294	<0.01	0.0109	3.60
	Xiang Zhou	0.0653	0.124	0.194	2.08	0.961	1.05	3.18	0.536	0.156	0.554	0.615	0.590	10.1
Russia	Mondy	0.00	0.00	0.00	0.00	<0.01	0.0933	0.00	<0.01	<0.01	0.00	0.00	<0.01	0.0933
	Listvyanka	<0.01	<0.01	<0.01	<0.01	0.153	0.0805	0.0877	<0.01	<0.01	<0.01	<0.01	<0.01	0.324
	Irkutsk	<0.01	<0.01	*	<0.01	0.255	0.322	1.69	0.338	<0.01	<0.01	<0.01	<0.01	3.48
Vietnam	Hanoi	0.182	0.924	0.883	0.152	0.360	0.424	0.508	0.684	0.273	0.326	0.404	0.194	5.30
	Hoa Binh	*	*	0.203	0.0743	2.81	0.383	0.119	1.10	0.463	0.249	0.191	*	5.60
Data completeness														**%TP**
Country	Name of sites	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	**Annual**
China	Haifu	97.0	96.4	100	99.1	100	99.9	99.6	100	100	99.6	100	98.1	99.7
	Jinyushan	95.8	99.2	100	100	100	76.6	100	100	100	100	100	100	96.9
	Hongwen	100	100	100	100	100	100	100	100	100	100	100	100	100
	Xiaoping	100	100	--	100	100	100	100	100	100	100	100	100	100
	Xiang Zhou	100	100	62.5	100	93.8	100	100	100	100	100	100	100	99.2
Russia	Mondy	--	--	--	--	100	100	--	100	100	--	--	100	100
	Listvyanka	100	100	100	100	100	100	100	100	100	100	100	60.2	99.1
	Irkutsk	98.1	51.3	0.0	14.3	74.5	38.0	79.7	35.5	8.2	69.9	0.7	25.1	51.2
Vietnam	Hanoi	100	100	100	100	100	100	100	100	100	100	100	93.3	100.0
	Hoa Binh	0.0	0.0	97.6	100	100	100	100	100	100	100	100	0.0	99.8

[--] 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%)

Table 3.88 Concentration, deposition and data completeness of Br^-

Precipitation amount-weighted average concentration/ Precipitation amount														**unit : µmol L^{-1}**
Country	Name of sites	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	**Annual**
Russia	Mondy	--	--	--	--	<1	<1	--	<1	<1	--	--	<1	<1
	Listvyanka	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
	Irkutsk	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
	Primorskaya	*	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Wet deposition amount														**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**
Russia	Mondy	0.00	0.00	0.00	0.00	<0.01	<0.01	0.00	<0.01	<0.01	0.00	0.00	<0.01	<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
Data completeness														**%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
	Listvyanka	100	100	100	100	100	100	100	100	100	100	100	100	100
	Irkutsk	100	100	100	100	100	100	98.6	100	100	95.4	100	100	99.4
	Primorskaya	0.0	100	98.0	100	93.6	98.1	100	99.8	99.5	99.4	98.9	100	99.2

[--] 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%)

Table 3.89 Concentration, deposition and data completeness of NO_2^-

Precipitation amount-weighted average concentration/ Precipitation amount												unit : µmol L^{-1}		
Country	Name of sites	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	**Annual**
Japan	Tokyo	*	*	2.20	*	*	*	*	*	*	*	*	*	2.20
Philippines	Mt. Sto. Tomas	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	*	<1	<1
Russia	Mondy	--	--	--	--	<1	<1	--	<1	<1	--	--	<1	<1
	Listvyanka	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
	Irkutsk	<1	<1	<1	<1	<1	<1	<1	<1	<1	3.42	<1	<1	<1
	Primorskaya	*	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Wet deposition amount												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**
Japan	Tokyo	*	*	0.310	*	*	*	*	*	*	*	*	*	3.60
Philippines	Mt. Sto. Tomas	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	*	<0.01	<0.01
Russia	Mondy	0.00	0.00	0.00	0.00	<0.01	<0.01	0.00	<0.01	<0.01	0.00	0.00	<0.01	0.0124
	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	0.0334
	Irkutsk	0.0105	<0.01	<0.01	0.0124	0.0270	<0.01	<0.01	0.0368	<0.01	0.0522	<0.01	<0.01	0.173
	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
Data completeness												%TP		
Country	Name of sites	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	**Annual**
Japan	Tokyo	0.0	0.0	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
Philippines	Mt. Sto. Tomas	47.8	97.6	97.6	100	100	100	100	85.7	100	100	0.0	100	92.7
Russia	Mondy	--	--	--	--	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	95.4	100	100	99.8
	Primorskaya	0.0	100	98.0	100	93.6	98.1	100	99.8	99.5	99.4	98.9	100	99.2

[--] 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%)

Table 3.90 Concentration, deposition and data completeness of HCO_3^-

Precipitation amount-weighted average concentration/ Precipitation amount											**unit : µmol L^{-1}**			
Country	Name of sites	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	**Annual**
Russia	Mondy	--	--	--	--	65.9	7.77	--	<1	75.4	--	--	8.20	31.1
	Listvyanka	<1	<1	3.62	<1	48.5	<1	<1	1.12	<1	16.0	2.30	15.4	6.23
	Irkutsk	21.7	25.7	70.0	11.2	3.57	22.1	<1	15.7	12.8	40.4	42.8	35.7	13.3
	Primorskaya	*	<1	4.80	17.2	48.5	<1	<1	<1	<1	<1	3.05	<1	3.89
Vietnam	Cuc Phuong	548	357	62.3	106	<1	5.87	24.7	40.5	<1	38.2	238	190	38.6
	Da Nang	<1	<1	180	137	80.0	82.3	197	27.2	6.43	5.10	24.8	211	25.7
Wet deposition amount											**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**
Russia	Mondy	0.00	0.00	0.00	0.00	1.47	0.232	0.00	<0.01	1.36	0.00	0.00	0.203	3.27
	Listvyanka	<0.01	<0.01	0.0156	<0.01	1.88	<0.01	<0.01	0.0508	<0.01	0.0524	0.0245	0.114	2.14
	Irkutsk	0.453	0.412	0.351	0.683	0.179	0.833	0.00	0.699	0.344	0.616	0.724	0.625	5.90
	Primorskaya	*	<0.01	0.0956	1.52	1.82	<0.01	0.0301	<0.01	<0.01	<0.01	0.218	<0.01	3.58
Vietnam	Cuc Phuong	17.7	9.67	1.43	2.72	<0.01	1.01	6.32	14.5	<0.01	7.25	13.7	4.43	77.8
	Da Nang	<0.01	<0.01	1.49	1.62	0.776	3.81	6.06	4.88	3.81	1.87	7.09	12.6	43.2
Data completeness											**%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
	Listvyanka	100	100	100	100	100	100	100	100	100	100	100	100	100
	Irkutsk	100	100	100	100	100	100	100	100	100	95.4	100	100	99.8
	Primorskaya	0.0	100	98.0	100	93.6	98.1	100	99.8	99.5	99.4	98.9	100	99.2
Vietnam	Cuc Phuong	100	100	87.4	94.2	100	100	100	100	100	99.3	100	81.1	99.5
	Da Nang	100	100	100	100	100	100	88.3	100	100	99.7	100	98.0	99.7

[--] 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%)

Table 3.91 Concentration, deposition and data completeness of Formic Acid

Precipitation amount-weighted average concentration/ Precipitation amount												unit : µmol L^{-1}		
Country	Name of sites	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	**Annual**
Malaysia	Petaling Jaya	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
	Tanah Rata	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
	Danum Valley	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
	Kuching	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Thailand	Bangkok	18.8	<1	<1	<1	3.95	13.2	5.18	2.19	2.96	9.43	3.81	--	5.44
	Samutprakarn	<1	*	*	--	<1	<1	<1	<1	<1	--	--	--	<1
	Pathumthani	--	--	--	<1	<1	<1	<1	<1	<1	<1	1.22	<1	<1
	Khanchanaburi	<1	<1	<1	1.93	<1	<1	1.67	<1	<1	<1	2.46	--	<1
	Chiang Mai	5.56	5.70	--	8.01	<1	<1	<1	<1	<1	<1	2.43	<1	<1
	Nakhon Ratchasima	38.6	--	--	5.88	1.93	3.08	2.35	4.43	4.50	4.95	5.73	--	4.81
Wet deposition amount												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**
Malaysia	Petaling Jaya	<0.01	<0.01	<0.01	0.0319	0.0775	<0.01	<0.01	<0.01	0.0402	<0.01	<0.01	0.0688	0.230
	Tanah Rata	<0.01	<0.01	0.0331	0.0644	0.0304	0.0131	<0.01	0.0419	0.0155	<0.01	0.305	<0.01	0.512
	Danum Valley	<0.01	<0.01	0.0160	<0.01	0.0270	<0.01	<0.01	0.0180	<0.01	<0.01	0.0222	<0.01	0.0898
	Kuching	<0.01	<0.01	<0.01	0.0122	0.0177	<0.01	<0.01	0.0169	<0.01	0.0172	<0.01	<0.01	0.0712
Thailand	Bangkok	1.93	<0.01	<0.01	0.0149	0.565	1.40	1.04	0.515	1.82	2.19	0.240	0.00	9.79
	Samutprakarn	<0.01	*	*	0.00	0.0650	0.0521	0.104	0.0453	0.309	0.00	0.00	0.00	0.606
	Pathumthani	0.00	0.00	0.00	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.0564	<0.01	0.0576
	Khanchanaburi	<0.01	<0.01	<0.01	0.144	0.141	0.193	0.864	0.0263	0.225	0.120	0.0753	0.00	1.79
	Chiang Mai	0.0339	<0.01	0.00	0.305	0.171	0.0194	0.0232	0.0405	0.0586	0.0123	0.0874	<0.01	0.757
	Nakhon Ratchasima	1.35	0.00	0.00	0.381	0.495	0.248	0.330	0.402	1.19	0.646	0.359	0.00	5.41
Data completeness												**%TP**		
Country	Name of sites	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	**Annual**
Malaysia	Petaling Jaya	97.0	100	97.7	100	100	99.4	99.6	96.6	100	99.6	100	100	99.4
	Tanah Rata	90.7	93.8	100	100	100	98.0	99.8	100	100	100	100	100	99.0
	Danum Valley	94.2	92.0	84.3	100	100	100	92.2	82.7	100	100	85.4	80.7	92.1
	Kuching	100	100	100	100	100	90.5	100	100	100	100	100	100	99.7
Thailand	Bangkok	100	100	100	100	88.5	100	100	100	100	100	60.3	--	97.7
	Samutprakarn	54.0	0.0	0.0	--	32.1	100	100	100	100	--	--	--	87.7
	Pathumthani	--	--	--	100	100	100	100	100	100	100	100	100	100
	Khanchanaburi	100	66.8	87.5	86.2	65.7	96.5	96.5	95.1	100	84.7	100	--	93.3
	Chiang Mai	96.7	100	--	100	100	83.0	100	100	100	100	100	100	99.2
	Nakhon Ratchasima	100	--	--	100	99.9	92.5	100	100	100	100	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%)

Table 3.92 Concentration, deposition and data completeness of Acetic Acid

Precipitation amount-weighted average concentration/ Precipitation amount														**unit : µmol L^{-1}**
Country	Name of sites	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	**Annual**
Malaysia	Petaling Jaya	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
	Tanah Rata	2.29	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
	Danum Valley	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
	Kuching	<1	2.91	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Thailand	Bangkok	17.7	13.3	<1	1.01	4.69	6.81	2.36	<1	1.67	4.29	4.09	--	3.62
	Samutprakarn	<1	*	*	--	<1	<1	<1	<1	<1	--	--	--	<1
	Pathumthani	--	--	--	1.12	1.31	2.61	1.34	5.98	4.07	1.62	<1	<1	3.09
	Khanchanaburi	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	--	<1
	Chiang Mai	16.4	3.00	--	3.95	<1	2.09	<1	<1	1.45	1.41	3.41	<1	<1
	Nakhon Ratchasima	30.8	--	--	4.39	2.37	7.95	2.53	3.01	5.07	7.14	4.54	--	5.13
Wet deposition amount														**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**
Malaysia	Petaling Jaya	<0.01	<0.01	<0.01	0.127	0.0389	<0.01	<0.01	<0.01	0.0118	<0.01	<0.01	0.0662	0.258
	Tanah Rata	0.434	<0.01	0.371	0.214	0.0951	0.0242	0.102	0.114	0.165	0.147	0.0854	0.0813	1.81
	Danum Valley	0.0195	<0.01	0.101	0.251	0.174	0.0662	0.105	0.125	0.0695	0.0562	0.0620	0.0123	1.07
	Kuching	0.0998	0.873	0.0327	0.0471	<0.01	<0.01	0.0141	<0.01	<0.01	0.0467	<0.01	0.0168	1.15
Thailand	Bangkok	1.82	0.330	<0.01	0.0748	0.671	0.724	0.473	0.162	1.03	0.998	0.258	0.00	6.51
	Samutprakarn	<0.01	*	*	0.00	<0.01	0.0304	0.0581	0.0299	0.201	0.00	0.00	0.00	0.364
	Pathumthani	0.00	0.00	0.00	<0.01	0.300	0.302	0.444	1.66	1.98	0.115	0.0155	<0.01	4.82
	Khanchanaburi	<0.01	0.0339	<0.01	0.0438	0.130	<0.01	0.0684	0.0205	0.261	0.0903	0.0117	0.00	0.642
	Chiang Mai	0.0999	<0.01	0.00	0.151	0.0362	0.111	<0.01	0.0904	0.360	0.125	0.123	<0.01	1.09
	Nakhon Ratchasima	1.08	0.00	0.00	0.285	0.610	0.640	0.355	0.273	1.34	0.932	0.284	0.00	5.78
Data completeness										**%TP**				
Country	Name of sites	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	**Annual**
Malaysia	Petaling Jaya	97.0	100	97.7	100	100	99.4	99.6	96.6	100	99.6	100	100	99.4
	Tanah Rata	90.7	93.8	100	100	100	98.0	99.8	100	100	100	100	100	99.0
	Danum Valley	94.2	92.0	84.3	100	100	100	92.2	82.7	100	100	85.4	80.7	92.1
	Kuching	100	100	100	100	100	90.5	100	100	100	100	100	100	99.7
Thailand	Bangkok	100	100	100	100	88.5	100	100	100	100	100	60.3	--	97.7
	Samutprakarn	54.0	0.0	0.0	--	32.1	100	100	100	100	--	--	--	87.7
	Pathumthani	--	--	--	100	100	100	100	100	100	100	100	100	100
	Khanchanaburi	100	66.8	87.5	86.2	65.7	96.5	96.5	95.1	100	84.7	100	--	93.3
	Chiang Mai	96.7	100	--	100	100	83.0	100	100	100	100	100	100	99.2
	Nakhon Ratchasima	100	--	--	100	99.9	92.5	100	100	100	100	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%)

Table 3.93 Concentration, deposition and data completeness of Oxalic Acid

Precipitation amount-weighted average concentration/ Precipitation amount											**unit : μmol L $^{-1}$**			
Country	Name of sites	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	**Annual**
Malaysia	Petaling Jaya	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
	Tanah Rata	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
	Danum Valley	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
	Kuching	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Wet deposition amount											**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**
Malaysia	Petaling Jaya	<0.01	<0.01	<0.01	0.0124	<0.01	<0.01	<0.01	<0.01	0.0162	<0.01	<0.01	0.0337	0.0632
	Tanah Rata	0.0170	<0.01	0.0567	<0.01	<0.01	0.0120	0.0276	0.0131	0.0343	<0.01	0.0134	0.0444	0.236
	Danum Valley	<0.01	<0.01	0.0188	<0.01	<0.01	<0.01	<0.01	0.0275	<0.01	<0.01	<0.01	0.0807	0.166
	Kuching	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.0152
Data completeness											**%TP**			
Country	Name of sites	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	**Annual**
Malaysia	Petaling Jaya	97.0	100	97.7	100	100	99.4	99.6	96.6	100	99.6	100	100	99.4
	Tanah Rata	90.7	93.8	100	100	100	98.0	99.8	100	100	100	100	100	99.0
	Danum Valley	94.2	92.0	84.3	100	100	100	92.2	82.7	100	100	85.4	80.7	92.1
	Kuching	100	100	100	100	100	90.5	100	100	100	100	100	100	99.7

[--] 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%)

Table 3.94 Concentration, deposition and data completeness of PO_4^{3-}

Precipitation amount-weighted average concentration/ Precipitation amount												unit : µmol L^{-1}		
Country	Name of sites	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	**Annual**
Japan	Ochiishi	*	*	*	*	*	*	*	26.8	*	*	*	*	26.8
Thailand	Bangkok	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	2.58	--	<1
	Samutprakarn	<1	*	*	--	<1	<1	<1	<1	<1	--	--	--	<1
	Pathumthani	--	--	--	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
	Khanchanaburi	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	--	<1
	Chiang Mai	<1	1.60	--	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
	Nakhon Ratchasima	<1	--	--	<1	<1	1.16	<1	<1	1.02	<1	<1	--	<1
Wet deposition amount												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**
Japan	Ochiishi	*	*	*	*	*	*	*	1.37	*	*	*	*	23.3
Thailand	Bangkok	<0.01	<0.01	<0.01	0.0254	0.0572	0.0126	<0.01	<0.01	0.112	0.147	0.163	0.00	0.462
	Samutprakarn	<0.01	*	*	0.00	0.0219	<0.01	<0.01	<0.01	0.0123	0.00	0.00	0.00	0.0318
	Pathumthani	0.00	0.00	0.00	<0.01	<0.01	<0.01	<0.01	0.0285	<0.01	<0.01	0.0133	<0.01	0.0577
	Khanchanaburi	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.00	<0.01
	Chiang Mai	<0.01	<0.01	0.00	<0.01	0.219	0.0384	<0.01	<0.01	0.0434	<0.01	<0.01	<0.01	0.314
	Nakhon Ratchasima	0.0268	0.00	0.00	0.0542	0.215	0.0933	0.129	0.0774	0.270	0.0414	0.0221	0.00	0.927
Data completeness												%TP		
Country	Name of sites	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	**Annual**
Japan	Ochiishi	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.9	0.0	0.0	0.0	0.0	0.2
Thailand	Bangkok	100	100	100	100	88.5	100	100	100	100	100	60.3	--	97.7
	Samutprakarn	54.0	0.0	0.0	--	32.1	100	100	100	100	--	--	--	87.7
	Pathumthani	--	--	--	100	100	100	100	100	100	100	100	100	100
	Khanchanaburi	100	66.8	87.5	86.2	65.7	96.5	96.5	95.1	100	84.7	100	--	93.3
	Chiang Mai	96.7	100	--	100	100	83.0	100	100	100	100	100	100	99.2
	Nakhon Ratchasima	100	--	--	100	99.9	92.5	100	100	100	100	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%)

CHAPTER 4

Dry Deposition Monitoring

(Air Concentration)

4. Dry Deposition (Air Concentration) Monitoring

4.1 Method

Automatic monitoring, filter pack sampling and passive sampling methods were used to implement the dry deposition (air concentration) monitoring in 2012. The monitoring items were selected, taking into account the priority chemical species defined in the "Strategy Paper for Future Direction of Dry Deposition Monitoring of EANET (Second Edition, 2005; 2011-2015 Edition, 2010)".

4.1.1 Automatic Monitoring Method

In the "Strategy Paper for Future Direction of Dry Deposition Monitoring of EANET (Second Edition and 2011-2015 Edition)", it was mentioned that the first priority chemical species of SO_2, NO, NO_2 (at urban sites), O_3, and PM_{10} and the second priority chemical species of NO_2 (at rural and remote sites) and $PM_{2.5}$ were monitored by automatic monitoring methods. The quality assurance/quality control (QA/QC) for automatic monitoring methods 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 was used to determine gaseous substances (SO_2, HNO_3, HCl, NH_3) and particulate matter components (SO_4^{2-}, NO_3^-, Cl^-, NH_4^+, Na^+, K^+, Mg^{2+}, Ca^{2+}), which are identified as the first priority chemical species in EANET.

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 specifications of the four-stage filter pack method are shown in Fig. 4.1.

4.1.3 Monitoring Sites

The measurement methods and parameters at each monitoring site for dry deposition (air concentration) monitoring in 2012 are shown in Table 4.1. Automatic monitors were used in 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 in Cambodia, Indonesia, Japan, Lao PDR, Malaysia, Mongolia, Myanmar, Philippines, Republic of Korea, Russia, Thailand and Vietnam in 2012.

Preparation of filter pack

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

↓

Sampling on site

Air flow rate: approximately 1 or 2 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^+,
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 the four-stage filter pack method

Table 4.1 Sampling methods and parameters for dry deposition (air concentration) monitoring in 2012

Country	Name of sites	Characteristics of sites	Method	Parameter
Cambodia	Phnom Penh	Urban	FP	SO_2, HNO_3, HCl, NH_3, PMC
China	Chongqing			
	- Jinyunshan	Rural	AT	SO_2, NO, NO_x*, PM_{10}
	Xiamen			
	- Hongwen†	Urban	AT	SO_2, NO_2, PM_{10}
			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
Lao PDR	Vientiane†	Urban	FP	SO_2, HNO_3, HCl, NH_3, PMC
Malaysia	Petaling Jaya	Urban	FP	SO_2, HNO_3, HCl, NH_3, PMC
	Tanah Rata	Remote	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
Myanmar	Yangon	Urban	FP	SO_2, HNO_3, HCl, NH_3, PMC

Table 4.1 Sampling methods and parameters for dry deposition (air concentration) monitoring in 2012 (continued)

Country	Name of sites	Characteristics of sites	Method	Parameter
Philippines	Metro Manila†	Urban	FP	SO_2, HNO_3, HCl, NH_3, PMC
	Los Banos†	Rural	FP	SO_2, HNO_3, HCl, NH_3, PMC
	Mt. Sto. Tomas	Remote	FP	SO_2, HNO_3, HCl, NH_3, PMC
Republic of Korea	Kanghwa†	Rural	AT	SO_2, NO_2, O_3, PM_{10}
			FP	HNO_3, HCl, NH_3, PMC in $PM_{2.5}$
	Cheju† (Kosan)	Remote	AT	SO_2, NO_2, O_3, PM_{10}
			FP	HNO_3, HCl, NH_3, PMC in $PM_{2.5}$
	Imsil†	Rural	AT	SO_2, NO_2, O_3, PM_{10}
			FP	HNO_3, HCl, NH_3, PMC in $PM_{2.5}$
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}
	Pathumthani†	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}
			FP	HNO_3, HCl, NH_3, PMC
	Nakhon Ratchasima	Rural	FP	SO_2, 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) NOx*: NOx measured by CLD in remote or rural sites.

(Note 3) Intensive monitoring was implemented for 2 weeks and 3 times per year at Khanchanaburi (Vachiralongkorn Dam) due to availability of monitoring in remote area.

(Note 4) AT: Automatic monitor, PS: Passive sampler, FP: Filter pack, PMC: particulate matter components.

(Note 5) † denote the sites 2012 monitoring data of which were not submitted. Filter pack data at Hongwen, Vientiane, Ulaanbaatar, Terelj, Metro Manila and Los Banos and passive sampler data at Kototabang were not submitted because of failure of monitoring or analytical equipment. Filter pack data at Kanghwa, Cheju and Imsil were not submitted because of internal data validation procedure. Filter pack data at Pathumthani could not be submitted because of termination of monitoring contract.

Table 4.2 Methods of automatic monitors in 2012

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 on monthly basis. Summarized data in 2012 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 2012 are summarized in Table 4.21 through Table 4.38.

Monthly and annual dry deposition amounts of gaseous and particulate substances in 2012 were summarized in Table 4.39 though Table 4.48. The Inferential Method is adopted to estimate the dry depositions of EANET priority chemical species. Dry deposition amounts of gaseous and particulate substances are estimated by the product of an atmospheric concentration and a deposition velocity expressed as, $F_{dry} = V_d \times C$, where F_{dry}, V_d, and C denote the dry deposition flux, calculated deposition velocity, and the measured atmospheric concentrations, respectively for each species and type of surface. The V_d was calculated by meteorological parameters at the site and parameterization described in the Technical Manual on Dry Deposition Flux Estimation in East Asia (Network Center for EANET, 2010). Since V_d of gases and particulate matter are different in different types of land surfaces, the V_d at each site was first calculated for forest and grass surfaces, and the weighted-average of V_d was then estimated according to the land-use ratio of forest and grass within 1 km square from the site. The estimation of dry deposition flux was made only for the sites in which hourly meteorological data and land use data are available.

In the Table 4.3 though Table 4.38, ppb unit is used for gases and μg/m^3 unit for particulate

matter concentration. In the Table 4.39 though Table 4.48, mmol m^{-2}/month or mmol m^{-2}/year units are used for dry deposition amounts. For comparing the other networks' data, conversion ratios from ppb to $\mu g/m^3$, which are based on 20 ^oC, 1 atm, are provided in Table 4.49.

Reporting limits for individual species depend on specification of instrument or procedures of sampling and analysis. The NC set up the reporting limits as shown in Table 4.50 taking into account methods adopted by each country. The data that air concentrations were less than the reporting limit are specified in the summarized tables. Regarding the particulate matter components measured by filter pack method, the detection limits for particulate matter components were determined as 0.01 $\mu g/m^3$ 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 SO_2

Unit : ppb			2012												Annual
Country	Site		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
Cambodia	Phnom Penh	Mean	1.7	1.7	1.3	1.2	1.5	1.2	1.0	1.4	1.5	1.1	1.2	1.1	1.3
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-2w	2.0	1.7	1.8	1.6	1.6	1.4	1.3	1.8	1.7	1.2	1.7	1.2	2.0
		Min-2w	1.4	1.6	0.9	0.9	1.3	1.0	0.7	1.0	1.4	1.0	0.8	1.1	0.7
China	Jinyunshan	Mean	14.5	11.9	8.6	11.8	10.5	10.7	6.7	5.7	6.4	9.1	11.3	10.7	9.8
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-d	30.8	34.1	22.5	28.5	25.1	23.6	23.3	25.9	15.8	28.1	25.9	35.3	35.3
		Min-d	3.0	3.4	1.5	4.5	2.6	1.5	0.8	0.4	0.4	1.9	2.3	0.8	0.4
	Hongwen	Mean	6.9	8.2	9.3	8.4	7.4	5.0	4.8	6.8	7.2	7.0	8.0	7.6	7.2
		%	100	100	100	100	100	97	90	97	100	100	100	100	99
		Max-d	13.9	15.8	16.9	16.1	14.6	16.5	10.5	11.3	15.4	14.3	13.5	11.3	16.9
		Min-d	3.4	3.4	5.3	2.6	2.3	1.9	1.9	3.4	2.6	4.5	4.1	4.1	1.9
	Xiang Zhou	Mean	4.9	4.1	3.3	3.0	2.3	1.7	1.5	3.3	3.9	3.7	3.7	3.5	3.2
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-d	12.4	9.0	7.1	8.6	4.1	3.0	4.5	9.4	12.4	6.8	9.4	6.4	12.4
		Min-d	1.1	1.5	1.1	0.8	0.8	0.8	0.8	0.8	1.1	1.5	1.5	1.5	0.8
Indonesia	Jakarta	Mean	4.0	4.0	5.0	5.0	4.0	6.0	7.0	6.0	6.0	8.0	7.0	6.0	5.7
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-m	4.0	4.0	5.0	5.0	4.0	6.0	7.0	6.0	6.0	8.0	7.0	6.0	8.0
		Min-m	4.0	4.0	5.0	5.0	4.0	6.0	7.0	6.0	6.0	8.0	7.0	6.0	4.0
	Serpong	Mean	0.5	0.3	0.1	0.9	2.4	1.6	1.7	0.8	0.9	0.9	0.8	0.6	0.9
		%	97	100	100	100	100	100	100	100	100	100	100	91	99
		Max-2w	0.8	0.3	0.2	1.3	3.0	1.9	1.7	1.2	1.0	1.0	1.2	0.7	3.0
		Min-2w	0.3	0.3	<0.1	0.5	1.8	1.3	1.6	0.5	0.9	0.7	0.3	0.6	<0.1
	Bandung	Mean	2.5	4.0	2.7	3.7	1.3	5.6	4.8	2.3	3.6	6.6	5.4	5.3	4.0
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-m	2.5	4.0	2.7	3.7	1.3	5.6	4.8	2.3	3.6	6.6	5.4	5.3	6.6
		Min-m	2.5	4.0	2.7	3.7	1.3	5.6	4.8	2.3	3.6	6.6	5.4	5.3	1.3
Japan	Rishiri	Mean	0.2	1.0	0.2	0.1	0.1	<0.1	<0.1	<0.1	<0.1	<0.1	0.2	0.8	0.2
		%	99	98	91	98	98	99	98	98	85	98	99	98	97
		Max-d	0.5	6.7	2.4	0.4	0.6	0.3	1.6	0.2	0.1	0.2	1.0	6.5	6.7
		Min-d	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	0.1	0.1
	Ochiishi	Mean	0.2	0.3	0.2	<0.1	<0.1	0.1	<0.1	<0.1	<0.1	0.1	0.1	0.4	0.1
		%	81	92	97	98	96	89	96	96	96	96	91	95	94
		Max-d	0.5	0.9	0.6	0.3	0.3	1.9	0.2	0.3	0.3	0.2	0.3	2.4	2.4
		Min-d	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
	Tappi	Mean	0.3	0.8	0.4	0.3	0.4	0.5	0.1	0.3	0.2	0.2	0.3	0.9	0.4
		%	98	98	88	99	99	99	99	99	98	89	97	99	97
		Max-d	0.9	4.3	2.0	1.5	1.5	2.0	0.4	0.5	0.6	0.7	1.2	3.2	4.3
		Min-d	<0.1	0.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	0.3	0.2
	Sado-seki	Mean	0.4	0.8	0.4	0.4	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.5	0.3
		%	99	98	98	96	97	98	98	88	97	98	98	81	95
		Max-d	1.8	3.5	1.4	1.9	1.8	0.6	0.9	0.3	0.4	1.5	1.1	1.5	3.5
		Min-d	<0.1	0.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	0.2
	Happo	Mean	0.6	0.7	0.5	0.7	0.3	0.3	<0.1	0.2	0.1	0.3	0.3	0.5	0.4
		%	100	100	100	98	99	98	98	97	83	98	99	98	97
		Max-d	1.7	2.6	2.0	2.6	0.9	1.0	0.3	1.0	0.6	1.3	1.2	1.6	2.6
		Min-d	<0.1	0.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	0.2
	Ijira	Mean	0.1	0.2	0.2	0.3	0.4	0.3	0.2	0.4	<0.1	0.1	0.1	<0.1	0.2
		%	99	99	98	99	99	98	99	99	99	99	87	86	97
		Max-d	0.5	1.2	0.8	1.0	1.2	1.9	0.7	1.5	0.2	0.7	0.7	0.5	1.9
		Min-d	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
	Oki	Mean	1.2	1.2	0.5	0.7	0.4	0.2	0.2	0.2	0.2	0.3	0.7	0.6	0.5
		%	97	98	97	98	98	97	97	98	96	98	98	97	97
		Max-d	6.2	4.5	2.9	2.9	1.8	1.2	1.2	0.5	0.7	1.2	2.5	1.9	6.2
		Min-d	<0.1	0.1	<0.1	0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	0.1
	Banryu	Mean	1.3	0.9	0.8	0.7	0.4	0.3	0.2	0.3	0.2	0.3	0.6	0.6	0.6
		%	98	98	98	99	98	98	98	98	99	98	98	98	98
		Max-d	5.4	3.1	3.5	2.4	1.7	1.1	1.2	0.9	0.5	1.0	2.0	1.9	5.4
		Min-d	0.2	0.2	0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	0.1	<0.1	0.1
	Yusuhara	Mean	1.9	1.5	1.1	1.3	1.2	0.2	0.4	0.3	0.5	0.8	1.0	0.8	0.9
		%	98	98	98	98	98	92	92	81	98	97	90	98	95
		Max-d	7.4	12.3	4.1	11.3	8.8	1.8	1.8	1.9	3.0	4.8	2.8	2.2	12.3
		Min-d	<0.1	0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	0.2	0.1
	Hedo	Mean	0.4	0.3	0.5	0.3	0.2	0.1	<0.1	<0.1	<0.1	<0.1	0.3	0.3	0.2
		%	98	82	98	98	98	98	98	92	67	71	80	98	90
		Max-d	2.1	1.7	2.6	2.0	1.0	0.4	0.4	0.1	0.1	0.2	1.7	1.5	2.6
		Min-d	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
	Ogasawara	Mean	<0.1	<0.1	0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
		%	97	95	98	97	98	98	98	98	97	98	98	98	97
		Max-d	0.4	0.2	0.7	0.7	0.1	0.9	<0.1	<0.1	<0.1	<0.1	0.2	0.1	0.9
		Min-d	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
	Tokyo	Mean	1.2	1.5	0.1	1.0	1.9	1.9	2.6	2.0	2.7	0.8	0.8	1.0	1.4
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-2w	1.4	1.5	0.2	1.5	2.2	1.9	3.1	2.6	2.7	0.9	0.8	1.0	3.1
		Min-2w	1.0	1.5	<0.1	0.2	1.6	1.8	2.1	1.5	2.6	0.7	0.8	0.9	<0.1

Table 4.3 SO_2

Unit : ppb			2012												Annual
Country	Site		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
Malaysia	Petaling Jaya	Mean	1.4	1.5	1.8	2.5	1.8	-	-	-	-	-	-	-	1.8
		%	100	100	100	100	100	0	0	0	0	0	0	0	40
		Max-w	1.4	2.0	2.8	3.0	2.2	-	-	-	-	-	-	-	3.0
		Min-w	1.2	1.1	1.4	1.3	1.4	-	-	-	-	-	-	-	1.1
	Tanah Rata	Mean	<0.1	<0.1	<0.1	<0.1	<0.1	0.2	0.1	<0.1	<0.1	0.5	<0.1	<0.1	<0.1
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-w	<0.1	<0.1	<0.1	<0.1	0.2	0.3	0.3	0.2	<0.1	1.9	<0.1	<0.1	1.9
		Min-w	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
	Danum Valley	Mean	<0.1	<0.1	<0.1	-	<0.1	<0.1	<0.1	<0.1	0.4	0.9	<0.1	0.2	0.1
		%	67	100	50	0	50	100	100	100	100	50	50	50	69
		Max-2w	<0.1	<0.1	<0.1	-	<0.1	<0.1	<0.1	<0.1	0.8	0.9	<0.1	0.2	0.9
		Min-2w	<0.1	<0.1	<0.1	-	<0.1	<0.1	<0.1	<0.1	<0.1	0.9	<0.1	0.2	<0.1
Myanmar	Yangon	Mean	1.9	2.7	2.8	2.9	2.8	-	1.5	2.1	2.1	3.8	10.2	<0.1	2.9
		%	100	100	82	100	100	0	100	100	100	100	100	100	91
		Max-2w	2.1	3.8	4.3	3.2	3.6	-	3.0	2.1	3.5	4.1	11.7	<0.1	11.7
		Min-2w	1.6	1.7	1.4	2.5	2.0	-	0.6	2.0	0.7	3.4	8.7	<0.1	<0.1
Philippines	Mt. Sto. Tomas	Mean	-	-	-	-	-	<0.1	0.2	0.3	0.2	0.1	<0.1	0.2	0.2
		%	0	0	0	0	0	15	100	100	100	100	100	100	52
		Max-w	-	-	-	-	-	<0.1	0.5	0.9	0.3	0.2	<0.1	0.3	0.9
		Min-w	-	-	-	-	-	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Republic of Korea	Kanghwa	Mean	9.4	5.8	6.0	4.4	3.9	4.0	2.4	2.0	1.6	2.7	4.9	5.5	4.4
		%	98	100	100	100	98	93	97	78	96	98	98	97	96
		Max-d	16.0	8.5	7.4	6.5	5.3	6.4	3.1	2.3	1.9	3.3	7.9	7.1	16.0
		Min-d	5.8	4.4	4.7	0.9	1.9	2.4	1.7	1.4	1.3	2.1	2.1	4.2	0.9
	Cheju (Kosan)	Mean	4.5	0.6	0.7	0.8	0.8	0.3	0.5	0.4	0.3	0.3	0.7	0.5	0.9
		%	100	89	100	95	93	100	99	100	94	100	100	95	97
		Max-d	14.5	1.0	1.6	2.0	2.3	0.5	1.0	0.6	0.5	0.4	1.7	0.8	14.5
		Min-d	0.4	0.3	0.2	0.2	0.1	0.1	0.2	0.2	0.3	0.3	0.2	0.3	0.1
	Imsil	Mean	3.8	2.9	2.3	1.5	1.4	1.0	0.5	0.5	0.4	0.4	0.6	0.2	1.3
		%	98	98	96	100	97	93	66	76	98	80	100	92	91
		Max-d	9.3	4.7	3.5	2.5	2.0	2.0	0.8	0.7	0.8	0.6	0.7	0.6	9.3
		Min-d	1.2	1.4	0.8	0.8	0.7	0.6	0.1	0.3	0.2	0.3	0.3	0.1	0.1
Russia	Mondy	Mean	0.4	<0.1	<0.1	<0.1	0.5	0.2	1.9	0.2	<0.1	0.5	0.2	2.8	0.6
		%	13	100	38	100	100	100	100	100	100	100	100	100	86
		Max-2w	0.4	<0.1	<0.1	<0.1	0.9	0.2	1.9	0.2	<0.1	0.5	0.2	2.8	2.8
		Min-2w	0.4	<0.1	<0.1	<0.1	<0.1	0.2	1.9	0.2	<0.1	0.5	0.2	2.8	<0.1
	Listvianka	Mean	10.7	9.4	5.8	2.8	5.0	0.6	0.5	3.7	2.6	2.0	5.4	14.8	5.2
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-w	15.1	16.5	9.1	6.9	16.9	0.8	0.7	7.8	3.9	3.9	8.6	21.5	21.5
		Min-w	6.1	5.7	3.1	1.1	0.8	0.5	0.3	1.4	1.5	0.7	1.0	8.2	0.3
	Irkutsk	Mean	16.4	14.5	10.8	3.6	2.7	1.8	1.7	1.7	2.9	3.3	9.2	17.2	7.2
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-w	23.8	30.5	15.2	6.4	5.7	2.4	2.6	4.2	5.4	4.3	10.2	28.6	30.5
		Min-w	9.2	9.1	3.9	1.8	0.4	1.3	0.5	0.2	1.0	2.2	8.1	10.0	0.2
	Primorskaya	Mean	1.7	1.8	1.1	1.1	0.8	0.7	0.4	0.6	0.2	2.8	0.9	1.7	1.2
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-2w	2.0	2.2	1.2	1.3	0.9	0.9	0.4	0.9	0.2	5.4	1.0	2.0	5.4
		Min-2w	1.3	1.5	1.1	0.9	0.8	0.5	0.4	0.3	0.1	0.2	0.8	1.4	0.1
Thailand	Bangkok	Mean	2.9	1.6	1.4	0.9	0.8	1.1	1.1	1.4	1.0	1.7	2.0	2.6	1.5
		%	14	95	96	97	90	81	94	95	95	96	95	93	87
		Max-d	3.9	2.9	2.1	2.2	2.0	2.1	2.2	3.2	2.1	4.3	4.9	4.4	4.9
		Min-d	1.6	1.0	0.4	<0.1	<0.1	<0.1	0.4	0.4	<0.1	<0.1	1.0	0.9	0.4
	Samutprakarn	Mean	-	-	1.9	1.1	3.2	2.8	1.8	2.2	1.9	2.8	3.3	3.0	2.5
		%	0	0	8	88	92	95	88	95	95	94	95	96	71
		Max-d	-	-	2.7	2.9	6.7	6.2	4.7	4.1	4.3	7.0	8.0	6.4	8.0
		Min-d	-	-	1.3	<0.1	1.2	1.0	0.2	0.7	0.5	1.3	1.2	1.5	0.2
	Khanchanaburi (Vachiralongkorn Dam)	Mean	-	-	1.4	-	-	-	<0.1	-	-	-	0.2	-	0.6
		%	0	0	49	0	0	0	45	0	0	0	49	0	12
		Max-d	-	-	2.0	-	-	-	2.1	-	-	-	2.1	-	2.1
		Min-d	-	-	<0.1	-	-	-	<0.1	-	-	-	<0.1	-	<0.1
	Chiangmai (Mae Hia)	Mean	0.8	0.8	1.1	1.6	1.1	0.6	1.7	1.2	0.5	0.2	0.3	1.1	0.9
		%	95	89	85	58	88	82	89	95	92	84	92	78	86
		Max-d	2.0	3.1	3.1	5.4	4.7	1.8	4.1	3.3	2.0	1.1	1.5	1.9	5.4
		Min-d	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	0.2	<0.1	<0.1	<0.1	<0.1	<0.1	0.2
	Nakhon Ratchasima	Mean	-	-	-	1.1	0.3	<0.1	0.2	0.1	0.4	<0.1	<0.1	0.2	0.3
		%	0	0	0	100	100	100	100	100	100	100	100	100	74
		Max-10d	-	-	-	2.3	0.4	0.1	0.3	0.2	0.8	0.2	<0.1	0.3	2.3
		Min-10d	-	-	-	0.3	0.1	<0.1	0.1	<0.1	0.1	<0.1	<0.1	0.1	<0.1

Table 4.3 SO_2

Unit : ppb			2012												Annual
Country	Site		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
Vietnam	Hanoi	Mean	2.1	2.3	2.9	1.8	1.5	3.3	2.8	2.7	1.9	2.2	2.4	0.8	2.2
		%	75	100	100	100	100	75	75	100	100	100	100	100	94
		Max-w	3.3	3.0	6.4	2.1	2.2	5.9	4.6	5.0	3.2	5.3	3.7	1.1	6.4
		Min-w	1.2	1.8	1.7	1.4	1.0	0.9	1.8	1.2	1.0	1.0	1.6	0.6	0.6
	Hoa Binh	Mean	1.5	1.5	1.7	1.8	1.5	1.4	1.0	0.8	0.5	0.4	0.7	0.9	1.2
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-w	1.9	1.6	2.1	2.1	2.0	1.7	1.6	1.0	1.0	0.7	1.0	1.9	2.1
		Min-w	1.0	1.4	1.5	1.4	0.9	0.9	0.5	0.7	0.3	0.3	0.2	0.5	0.2

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 HNO_3

Unit : ppb			2012												Annual
Country	Site		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
Cambodia	Phnom Penh	Mean	0.4	0.7	0.4	0.4	0.4	<0.1	<0.1	0.2	0.2	0.6	0.3	0.2	0.3
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-2w	0.5	0.7	0.6	0.5	0.5	<0.1	<0.1	0.2	0.2	0.6	0.4	0.3	0.7
		Min-2w	0.3	0.6	0.2	0.2	0.2	<0.1	<0.1	0.1	0.1	0.5	0.2	0.2	<0.1
Indonesia	Serpong	Mean	0.4	0.3	0.2	0.5	1.8	1.8	1.9	1.7	0.1	1.1	0.7	0.4	0.9
		%	97	100	100	100	100	100	100	100	100	100	100	91	99
		Max-2w	0.5	0.4	0.4	0.9	2.4	2.3	2.5	2.5	0.2	1.2	0.9	0.7	2.5
		Min-2w	0.4	0.2	<0.1	0.1	1.3	1.2	1.2	1.3	<0.1	0.9	0.5	<0.1	<0.1
Japan	Rishiri	Mean	<0.1	<0.1	<0.1	<0.1	<0.1	0.1	0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-2w	<0.1	<0.1	<0.1	<0.1	0.2	0.2	0.1	<0.1	<0.1	<0.1	<0.1	<0.1	0.2
		Min-2w	<0.1	<0.1	<0.1	<0.1	<0.1	0.1	0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
	Ochiishi	Mean	<0.1	0.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
		%	100	100	100	100	100	100	100	100	100	53	100	100	96
		Max-2w	<0.1	0.3	<0.1	<0.1	<0.1	<0.1	0.1	0.1	0.2	<0.1	<0.1	<0.1	0.3
		Min-2w	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
	Tappi	Mean	<0.1	<0.1	<0.1	<0.1	0.2	0.3	0.5	0.4	0.3	<0.1	<0.1	<0.1	0.2
		%	100	100	100	100	67	100	100	100	100	100	100	100	96
		Max-2w	<0.1	<0.1	<0.1	<0.1	0.2	0.4	0.6	0.5	0.3	<0.1	<0.1	<0.1	0.6
		Min-2w	<0.1	<0.1	<0.1	<0.1	0.2	0.2	0.4	0.3	0.2	<0.1	<0.1	<0.1	<0.1
	Sado-seki	Mean	<0.1	<0.1	<0.1	0.4	0.5	0.4	0.8	0.4	0.3	0.1	<0.1	<0.1	0.3
		%	100	50	100	67	100	100	100	100	100	100	100	100	92
		Max-2w	<0.1	<0.1	<0.1	0.6	0.7	0.7	1.0	0.6	0.3	0.2	<0.1	0.1	1.0
		Min-2w	<0.1	<0.1	<0.1	0.2	0.4	0.2	0.5	0.2	0.2	<0.1	<0.1	<0.1	<0.1
	Happo	Mean	<0.1	0.1	0.1	0.3	0.7	0.4	-	0.5	0.3	0.2	<0.1	<0.1	0.3
		%	100	100	100	100	100	100	0	100	100	100	100	100	92
		Max-2w	<0.1	0.1	0.2	0.4	0.8	0.4	-	0.5	0.4	0.3	<0.1	<0.1	0.8
		Min-2w	<0.1	<0.1	0.1	0.1	0.6	0.3	-	0.4	0.2	<0.1	<0.1	<0.1	<0.1
	Ijira	Mean	<0.1	0.1	0.1	0.2	0.6	0.4	0.2	0.3	0.2	0.1	<0.1	<0.1	0.2
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-2w	<0.1	0.2	0.2	0.3	0.7	0.4	0.2	0.7	0.3	0.2	<0.1	<0.1	0.7
		Min-2w	<0.1	<0.1	<0.1	0.2	0.5	0.4	0.1	<0.1	0.1	<0.1	<0.1	<0.1	<0.1
	Oki	Mean	<0.1	<0.1	0.1	0.1	0.3	0.2	0.4	0.2	0.1	-	-	<0.1	0.2
		%	100	100	100	100	100	100	100	100	50	0	0	100	77
		Max-2w	0.1	<0.1	0.1	0.2	0.3	0.3	0.6	0.2	0.1	-	-	<0.1	0.6
		Min-2w	<0.1	<0.1	0.1	0.1	0.2	0.2	0.3	0.1	0.1	-	-	<0.1	<0.1
	Banryu	Mean	0.2	0.1	0.2	0.4	0.6	0.3	0.7	<0.1	0.2	0.2	0.2	0.1	0.3
		%	46	100	100	100	100	100	100	100	100	62	100	100	92
		Max-2w	0.2	0.1	0.2	0.4	0.6	0.5	1.0	0.2	0.2	0.2	0.2	0.1	1.0
		Min-2w	0.2	0.1	0.1	0.3	0.5	0.1	0.4	<0.1	0.2	0.2	0.2	<0.1	<0.1
	Yusuhara	Mean	0.4	0.1	0.4	0.3	0.7	0.2	0.2	0.1	0.2	0.3	0.3	0.2	0.3
		%	100	100	100	33	100	100	100	100	100	100	100	100	92
		Max-2w	0.6	0.2	0.5	0.3	0.9	0.3	0.2	0.2	0.3	0.3	0.3	0.3	0.9
		Min-2w	0.2	<0.1	0.3	0.3	0.6	<0.1	0.2	<0.1	<0.1	0.1	0.2	0.2	<0.1
	Hedo	Mean	<0.1	<0.1	<0.1	0.1	0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-2w	<0.1	0.1	<0.1	0.1	0.3	<0.1	<0.1	<0.1	<0.1	<0.1	0.1	<0.1	0.3
		Min-2w	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
	Ogasawara	Mean	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-2w	<0.1	<0.1	<0.1	0.1	<0.1	<0.1	<0.1	<0.1	0.1	<0.1	<0.1	<0.1	0.1
		Min-2w	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
	Tokyo	Mean	0.1	0.2	<0.1	0.5	1.6	0.5	2.2	0.4	1.0	0.3	0.3	0.2	0.6
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-2w	0.2	0.2	<0.1	0.9	1.6	0.6	2.9	0.5	1.1	0.3	0.4	0.2	2.9
		Min-2w	0.1	0.2	<0.1	<0.1	1.5	0.5	1.5	0.4	0.8	0.3	0.2	0.1	<0.1
Malaysia	Petaling Jaya	Mean	0.3	0.5	0.4	0.9	0.7	-	-	-	-	-	-	-	0.5
		%	100	100	100	100	100	0	0	0	0	0	0	0	40
		Max-w	0.4	0.7	0.6	1.2	1.0	-	-	-	-	-	-	-	1.2
		Min-w	<0.1	0.3	0.1	0.4	0.4	-	-	-	-	-	-	-	<0.1
	Tanah Rata	Mean	<0.1	<0.1	<0.1	<0.1	<0.1	0.2	<0.1	0.2	0.2	<0.1	<0.1	<0.1	<0.1
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-w	<0.1	0.1	0.1	<0.1	0.1	0.4	0.2	0.3	0.3	<0.1	<0.1	<0.1	0.4
		Min-w	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	0.1	<0.1	<0.1	<0.1	<0.1
	Danum Valley	Mean	<0.1	<0.1	<0.1	-	<0.1	<0.1	<0.1	<0.1	0.2	<0.1	<0.1	0.1	<0.1
		%	67	100	50	0	50	100	100	100	100	50	50	50	69
		Max-2w	<0.1	<0.1	<0.1	-	<0.1	<0.1	<0.1	<0.1	0.4	<0.1	<0.1	0.1	0.4
		Min-2w	<0.1	<0.1	<0.1	-	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	0.1	<0.1

Table 4.4 HNO_3

Unit : ppb			2012												Annual
Country	Site		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
Myanmar	Yangon	Mean	0.9	1.1	0.9	0.6	0.2	-	<0.1	<0.1	0.1	0.1	0.6	<0.1	0.4
		%	100	100	82	100	100	0	100	100	100	100	100	100	91
		Max-2w	1.1	2.0	1.6	0.7	0.5	-	<0.1	<0.1	0.2	0.2	0.8	<0.1	2.0
		Min-2w	0.7	0.1	0.2	0.5	<0.1	-	<0.1	<0.1	<0.1	<0.1	0.5	<0.1	<0.1
Philippines	Mt. Sto. Tomas	Mean	-	-	-	-	-	0.3	0.3	<0.1	0.4	0.3	0.2	0.1	0.2
		%	0	0	0	0	0	15	100	100	100	100	100	100	52
		Max-w	-	-	-	-	-	0.3	0.8	0.2	0.7	0.5	0.5	0.2	0.8
		Min-w	-	-	-	-	-	0.3	<0.1	<0.1	0.1	0.2	<0.1	<0.1	<0.1
Russia	Mondy	Mean	0.1	<0.1	<0.1	<0.1	<0.1	<0.1	0.9	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
		%	13	100	38	100	100	100	100	100	100	100	100	100	86
		Max-2w	0.1	<0.1	<0.1	<0.1	<0.1	<0.1	0.9	<0.1	<0.1	<0.1	<0.1	<0.1	0.9
		Min-2w	0.1	<0.1	<0.1	<0.1	<0.1	<0.1	0.9	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
	Listvianka	Mean	0.1	0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-w	0.1	0.2	0.3	<0.1	<0.1	<0.1	<0.1	0.1	<0.1	<0.1	0.1	<0.1	0.3
		Min-w	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
	Irkutsk	Mean	<0.1	0.1	0.4	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	0.1	0.2	<0.1	<0.1
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-w	<0.1	0.4	1.0	<0.1	0.1	0.1	0.3	<0.1	<0.1	0.2	0.7	<0.1	1.0
		Min-w	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
	Primorskaya	Mean	0.3	<0.1	0.1	<0.1	0.2	0.2	0.1	0.3	0.1	<0.1	0.1	0.2	0.1
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-2w	0.6	<0.1	0.2	<0.1	0.2	0.2	0.2	0.4	0.2	0.1	0.1	0.2	0.6
		Min-2w	<0.1	<0.1	<0.1	<0.1	0.1	0.1	<0.1	0.1	0.1	<0.1	0.1	0.1	<0.1
Thailand	Bangkok	Mean	0.7	1.3	1.0	0.9	0.4	0.2	0.1	<0.1	0.1	0.3	1.2	1.1	0.6
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-10d	0.8	1.9	2.0	1.5	0.8	0.5	0.1	<0.1	0.3	0.3	1.7	1.2	2.0
		Min-10d	0.6	0.8	0.3	0.4	0.2	<0.1	<0.1	<0.1	<0.1	0.2	0.8	0.9	<0.1
	Khanchanaburi	Mean	-	-	1.0	-	-	-	<0.1	-	-	-	<0.1	-	0.3
	(Vachiralongkorn Dam)	%	0	0	53	0	0	0	42	0	0	0	50	0	12
		Max-2w	-	-	1.0	-	-	-	<0.1	-	-	-	<0.1	-	1.0
		Min-2w	-	-	1.0	-	-	-	<0.1	-	-	-	<0.1	-	<0.1
	Chiangmai	Mean	-	-	-	0.3	0.3	0.1	<0.1	0.3	<0.1	0.2	0.2	0.2	0.2
	(Mae Hia)	%	0	0	0	100	97	100	97	97	97	97	97	100	73
		Max-10d	-	-	-	0.5	0.4	0.2	<0.1	0.5	0.1	0.2	0.3	0.4	0.5
		Min-10d	-	-	-	0.2	0.2	<0.1	<0.1	<0.1	<0.1	<0.1	0.1	0.1	<0.1
	Nakhon Ratchasima	Mean	-	-	-	0.6	0.3	<0.1	<0.1	<0.1	<0.1	0.1	<0.1	0.2	0.2
		%	0	0	0	100	100	100	100	100	100	100	100	100	74
		Max-10d	-	-	-	0.6	0.5	0.1	0.2	<0.1	<0.1	0.2	0.1	0.2	0.6
		Min-10d	-	-	-	0.5	0.1	<0.1	<0.1	<0.1	<0.1	0.1	<0.1	<0.1	<0.1
Vietnam	Hanoi	Mean	0.4	0.5	1.0	1.0	1.0	1.3	0.9	1.0	1.0	1.3	1.3	0.5	1.0
		%	75	100	100	100	100	75	75	100	100	100	100	100	94
		Max-w	0.7	0.8	3.0	1.5	1.4	1.5	1.1	1.8	1.8	1.9	2.4	0.6	3.0
		Min-w	0.2	0.4	0.4	0.6	0.7	1.1	0.5	0.7	0.7	0.9	0.4	0.3	0.2
	Hoa Binh	Mean	0.4	0.4	0.5	0.5	0.5	0.4	0.4	0.5	0.3	0.3	0.4	0.4	0.4
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-w	0.6	0.5	0.7	0.8	0.6	0.5	0.5	0.5	0.5	0.4	0.6	0.5	0.8
		Min-w	0.3	0.3	0.4	0.4	0.3	0.2	0.3	0.4	0.2	0.3	0.3	0.2	0.2

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
% : monthly or annual percentages of period of available data

Table 4.5 HCl

Unit : ppb			2012												Annual
Country	Site		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
Cambodia	Phnom Penh	Mean	1.1	1.5	0.7	0.5	0.7	0.3	0.3	0.7	0.8	0.7	0.5	0.6	0.7
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-2w	1.2	1.6	1.2	0.6	0.7	0.4	0.4	0.8	1.0	0.7	0.7	0.6	1.6
		Min-2w	1.0	1.3	0.4	0.4	0.6	0.2	0.3	0.6	0.7	0.6	0.4	0.6	0.2
Indonesia	Serpong	Mean	0.5	0.6	0.5	0.4	0.9	1.1	1.3	1.2	0.9	0.6	0.5	0.4	0.8
		%	97	100	100	100	100	100	100	100	100	100	100	91	99
		Max-2w	0.7	0.7	0.8	0.5	1.3	1.4	1.4	1.4	1.4	0.6	0.6	0.4	1.4
		Min-2w	0.4	0.4	0.4	0.3	0.6	0.8	1.3	1.2	0.4	0.5	0.5	0.3	0.3
Japan	Rishiri	Mean	0.2	0.5	0.6	0.5	0.5	0.5	0.4	0.6	0.3	0.3	0.3	0.6	0.4
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-2w	0.2	0.5	0.6	0.5	0.6	0.6	0.6	0.7	0.5	0.3	0.4	0.8	0.8
		Min-2w	0.1	0.5	0.5	0.4	0.5	0.4	0.2	0.4	0.1	0.2	0.2	0.3	0.1
	Ochiishi	Mean	0.1	0.4	0.4	3.3	0.3	0.3	0.4	0.5	0.6	0.4	<0.1	0.3	0.6
		%	100	100	100	100	100	100	100	100	100	53	100	100	96
		Max-2w	0.1	0.4	0.5	5.9	0.3	0.4	0.7	0.5	0.9	0.4	<0.1	0.3	5.9
		Min-2w	0.1	0.3	0.4	0.6	0.2	0.2	0.2	0.5	0.3	0.4	<0.1	0.2	<0.1
	Tappi	Mean	0.3	0.4	0.4	0.5	0.8	0.6	0.7	0.9	0.8	0.5	0.5	0.7	0.6
		%	100	100	100	100	67	100	100	50	100	100	100	100	92
		Max-2w	0.4	0.4	0.5	0.5	0.9	0.6	0.7	0.9	0.9	0.7	0.6	0.9	0.9
		Min-2w	0.2	0.3	0.2	0.4	0.7	0.5	0.6	0.9	0.8	0.3	0.4	0.4	0.2
	Sado-seki	Mean	0.6	0.7	0.6	0.8	1.3	0.8	1.1	1.0	0.9	0.9	0.8	1.2	0.9
		%	100	50	100	67	100	100	100	100	100	100	100	100	92
		Max-2w	0.6	0.7	0.7	0.9	1.6	0.9	1.4	1.0	1.0	1.0	0.8	1.6	1.6
		Min-2w	0.5	0.7	0.6	0.8	1.0	0.7	0.8	1.0	0.8	0.5	0.7	0.8	0.5
	Happo	Mean	<0.1	<0.1	0.1	0.2	0.2	0.2	-	0.2	0.2	0.3	0.2	<0.1	0.2
		%	100	100	100	100	100	100	0	100	100	100	100	100	92
		Max-2w	<0.1	0.1	0.1	0.2	0.2	0.2	-	0.3	0.2	0.3	0.2	<0.1	0.3
		Min-2w	<0.1	<0.1	<0.1	0.2	0.2	0.1	-	0.2	0.1	0.2	0.2	<0.1	<0.1
	Ijira	Mean	<0.1	0.1	0.1	0.1	0.2	0.2	0.1	0.2	0.2	0.2	<0.1	<0.1	0.1
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-2w	<0.1	0.1	0.1	0.2	0.2	0.2	0.1	0.4	0.2	0.2	<0.1	<0.1	0.4
		Min-2w	<0.1	<0.1	0.1	<0.1	0.2	0.2	<0.1	<0.1	0.1	0.1	<0.1	<0.1	<0.1
	Oki	Mean	1.1	0.9	0.9	0.8	0.9	1.1	1.1	0.6	0.7	-	-	0.6	0.9
		%	100	100	100	100	100	100	100	100	50	0	0	100	77
		Max-2w	1.3	1.0	1.1	0.9	1.4	1.5	1.2	0.7	0.7	-	-	0.6	1.5
		Min-2w	0.9	0.9	0.8	0.7	0.5	0.8	0.9	0.5	0.7	-	-	0.5	0.5
	Banryu	Mean	1.1	0.6	0.8	0.9	0.9	0.8	0.8	0.3	0.7	0.7	0.8	0.6	0.7
		%	46	100	100	100	100	100	100	100	100	62	100	100	92
		Max-2w	1.1	0.7	0.9	1.1	1.2	0.9	0.9	0.6	0.7	0.7	0.9	0.6	1.2
		Min-2w	1.1	0.6	0.7	0.8	0.6	0.7	0.7	0.1	0.6	0.7	0.8	0.5	0.1
	Yusuhara	Mean	0.6	0.3	0.2	0.3	<0.1	<0.1	0.3	0.4	0.3	0.4	0.5	0.2	0.3
		%	100	100	100	33	100	100	100	100	100	100	100	100	92
		Max-2w	0.8	0.4	0.3	0.3	<0.1	0.1	0.3	0.4	0.3	0.5	0.6	0.3	0.8
		Min-2w	0.4	0.2	0.1	0.3	<0.1	<0.1	0.3	0.3	0.2	0.3	0.3	0.2	<0.1
	Hedo	Mean	0.9	1.0	0.5	1.0	0.7	0.2	0.1	0.2	0.2	0.5	0.7	0.6	0.6
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-2w	1.0	1.1	0.8	1.1	1.1	0.3	0.2	0.3	0.3	0.7	1.1	0.6	1.1
		Min-2w	0.8	1.0	0.2	0.8	0.2	0.2	<0.1	<0.1	<0.1	0.3	0.3	0.5	<0.1
	Ogasawara	Mean	0.7	0.6	0.7	0.7	0.2	0.3	0.2	0.1	0.2	0.2	0.7	0.5	0.4
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-2w	0.7	0.6	1.1	0.7	0.4	0.4	0.2	0.1	0.2	0.4	0.7	0.5	1.1
		Min-2w	0.6	0.6	0.4	0.6	<0.1	0.2	0.2	0.1	0.2	0.1	0.6	0.5	<0.1
	Tokyo	Mean	0.2	0.4	<0.1	0.7	1.0	1.1	1.1	1.0	1.0	0.9	0.5	0.3	0.7
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-2w	0.2	0.4	<0.1	1.1	1.0	1.1	1.4	1.2	1.0	1.0	0.6	0.4	1.4
		Min-2w	0.2	0.3	<0.1	<0.1	0.9	1.0	0.9	0.8	0.9	0.9	0.4	0.2	<0.1
Malaysia	Petaling Jaya	Mean	0.9	0.5	0.7	1.1	2.6	-	-	-	-	-	-	-	1.2
		%	100	100	100	100	100	0	0	0	0	0	0	0	40
		Max-w	1.0	0.8	1.0	1.6	2.8	-	-	-	-	-	-	-	2.8
		Min-w	0.7	0.3	0.6	0.8	2.4	-	-	-	-	-	-	-	0.3
	Tanah Rata	Mean	0.3	<0.1	0.2	0.2	0.4	0.2	0.3	0.5	0.6	0.5	0.6	0.5	0.4
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-w	0.6	0.1	0.3	0.2	0.4	0.2	0.5	0.7	1.1	0.6	0.7	0.5	1.1
		Min-w	0.2	<0.1	<0.1	0.2	0.3	0.1	<0.1	0.4	0.4	0.4	0.5	0.4	<0.1
	Danum Valley	Mean	<0.1	<0.1	<0.1	-	0.3	0.1	0.2	0.3	0.6	2.2	0.6	2.3	0.5
		%	67	100	50	0	50	100	100	100	100	50	50	50	69
		Max-2w	0.1	<0.1	<0.1	-	0.3	0.1	0.3	0.3	1.0	2.2	0.6	2.3	2.3
		Min-2w	<0.1	<0.1	<0.1	-	0.3	0.1	<0.1	0.3	0.3	2.2	0.6	2.3	<0.1

Table 4.5 HCl

Unit : ppb			2012												Annual
Country	Site		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
Myanmar	Yangon	Mean	2.0	1.8	2.3	3.1	2.1	-	0.2	0.6	0.9	2.1	1.8	0.4	1.5
		%	100	100	82	100	100	0	100	100	100	100	100	100	91
		Max-2w	2.6	2.1	3.0	4.6	2.4	-	0.5	1.1	1.0	2.7	2.1	0.7	4.6
		Min-2w	1.3	1.6	1.6	1.7	1.8	-	<0.1	0.2	0.9	1.6	1.5	0.2	<0.1
Philippines	Mt. Sto. Tomas	Mean	-	-	-	-	-	0.4	0.5	0.2	0.3	0.2	<0.1	0.2	0.2
		%	0	0	0	0	0	15	100	100	100	100	100	100	52
		Max-w	-	-	-	-	-	0.4	1.5	0.4	0.5	0.3	<0.1	0.2	1.5
		Min-w	-	-	-	-	-	0.4	<0.1	<0.1	0.2	<0.1	<0.1	<0.1	<0.1
Russia	Mondy	Mean	0.6	1.0	0.3	0.2	0.8	0.6	2.0	0.4	0.2	0.4	1.0	0.6	0.7
		%	13	100	38	100	100	100	100	100	100	100	100	100	86
		Max-2w	0.6	1.0	0.3	0.2	1.2	0.6	2.0	0.4	0.2	0.4	1.0	0.6	2.0
		Min-2w	0.6	1.0	0.3	0.2	0.3	0.6	2.0	0.4	0.2	0.4	1.0	0.6	0.2
	Listvianka	Mean	0.7	15.9	8.2	12.4	14.2	11.2	2.1	0.6	4.3	21.3	13.7	8.3	9.8
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-w	1.1	29.5	17.5	17.3	16.9	13.9	3.6	1.4	15.4	32.1	15.0	14.4	32.1
		Min-w	0.5	1.3	0.3	7.5	9.9	9.0	0.3	<0.1	0.5	11.1	12.0	4.6	<0.1
	Irkutsk	Mean	1.3	8.7	2.0	0.4	0.6	1.0	0.5	0.4	0.8	2.2	2.4	9.9	2.6
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-w	2.5	14.5	3.7	0.5	0.8	1.6	1.1	0.6	2.5	3.4	2.7	17.5	17.5
		Min-w	0.6	5.4	0.5	0.2	0.4	0.4	0.1	0.1	0.3	1.1	1.6	2.7	0.1
	Primorskaya	Mean	0.5	0.6	0.9	1.1	0.7	0.3	0.7	2.8	0.5	0.3	1.2	2.7	1.0
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-2w	0.5	0.7	1.7	1.6	0.7	0.5	1.3	4.0	0.8	0.4	2.1	2.8	4.0
		Min-2w	0.5	0.5	0.2	0.6	0.7	0.2	0.2	1.6	0.3	0.2	0.4	2.6	0.2
Thailand	Bangkok	Mean	0.5	0.7	1.1	0.6	0.6	0.6	0.8	1.2	1.5	0.4	0.4	0.6	0.7
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-10d	0.5	0.7	1.2	0.8	0.8	1.0	1.3	1.5	1.7	0.4	0.5	0.6	1.7
		Min-10d	0.4	0.6	0.9	0.4	0.5	0.3	0.3	0.7	1.0	0.3	0.3	0.5	0.3
	Khanchanaburi	Mean	-	-	0.5	-	-	-	<0.1	-	-	-	0.1	-	0.2
	(Vachiralongkorn Dam)	%	0	0	53	0	0	0	42	0	0	0	50	0	12
		Max-2w	-	-	0.5	-	-	-	<0.1	-	-	-	0.1	-	0.5
		Min-2w	-	-	0.5	-	-	-	<0.1	-	-	-	0.1	-	<0.1
	Chiangmai	Mean	-	-	-	0.2	0.2	0.5	0.2	0.3	0.2	0.3	0.3	0.2	0.3
	(Mae Hia)	%	0	0	0	100	97	100	97	97	97	97	97	100	73
		Max-10d	-	-	-	0.4	0.3	0.5	0.3	0.3	0.2	0.4	0.3	0.3	0.5
		Min-10d	-	-	-	<0.1	0.2	0.4	0.2	0.2	0.2	0.2	0.2	0.1	<0.1
	Nakhon Ratchasima	Mean	-	-	-	0.5	0.5	0.2	0.1	0.2	0.2	0.2	0.1	0.1	0.2
		%	0	0	0	100	100	100	100	100	100	100	100	100	74
		Max-10d	-	-	-	0.7	0.7	0.2	0.2	0.3	0.4	0.4	0.2	0.1	0.7
		Min-10d	-	-	-	0.3	0.4	0.2	<0.1	0.1	<0.1	<0.1	0.1	0.1	<0.1
Vietnam	Hanoi	Mean	1.1	1.2	1.5	1.7	2.3	2.3	3.3	2.1	3.6	2.9	2.0	1.4	2.1
		%	75	100	100	100	100	75	75	100	100	100	100	100	94
		Max-w	1.9	1.5	2.0	2.0	3.3	4.1	5.3	3.5	7.6	6.4	2.7	1.6	7.6
		Min-w	0.7	0.9	1.3	1.4	1.8	1.3	2.1	1.6	2.0	1.6	1.6	1.1	0.7
	Hoa Binh	Mean	1.0	1.3	1.5	1.5	1.6	1.7	1.8	1.9	1.9	1.6	1.9	2.9	1.7
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-w	1.1	1.5	2.3	1.8	2.4	2.2	2.2	2.1	2.1	1.8	3.5	5.1	5.1
		Min-w	0.9	1.0	1.1	0.8	0.9	1.5	1.4	1.7	1.7	1.1	1.3	1.8	0.8

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
% : monthly or annual percentages of period of available data

Table 4.6 NH_3

Unit : ppb			2012												Annual
Country	Site		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
Cambodia	Phnom Penh	Mean	13.1	17.1	9.1	7.0	8.4	6.6	7.9	12.9	10.8	7.8	8.5	7.7	9.9
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-2w	17.2	18.3	15.8	9.2	9.1	7.9	8.8	13.8	15.0	8.2	10.8	8.5	18.3
		Min-2w	9.0	15.9	4.8	4.8	7.7	5.2	7.0	11.9	6.7	7.4	6.2	6.9	4.8
Indonesia	Serpong	Mean	8.7	9.8	9.0	12.7	24.0	22.0	23.9	22.5	21.9	19.5	10.1	8.9	16.1
		%	97	100	100	100	100	100	100	100	100	100	100	91	99
		Max-2w	10.0	10.6	12.0	15.9	33.5	25.0	27.9	24.8	27.4	20.5	10.9	10.2	33.5
		Min-2w	7.3	9.0	5.7	9.5	14.5	19.0	19.9	19.6	16.4	18.4	9.2	7.7	5.7
Japan	Rishiri	Mean	<0.1	<0.1	0.1	0.4	0.5	0.6	0.5	0.6	0.5	0.3	0.1	0.1	0.3
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-2w	<0.1	<0.1	0.2	0.6	0.8	0.6	0.5	0.8	0.7	0.4	0.1	0.1	0.8
		Min-2w	<0.1	<0.1	0.1	0.2	0.3	0.5	0.4	0.5	0.4	0.3	0.1	<0.1	<0.1
	Ochiishi	Mean	0.1	0.2	<0.1	0.2	0.3	0.3	0.3	0.5	1.0	0.9	0.4	0.2	0.4
		%	100	100	100	100	100	100	100	100	100	53	100	100	96
		Max-2w	0.1	0.2	0.1	0.3	0.4	0.4	0.4	0.5	1.5	0.9	0.4	0.3	1.5
		Min-2w	<0.1	0.2	<0.1	0.1	0.2	0.3	0.3	0.5	0.6	0.9	0.4	0.1	<0.1
	Tappi	Mean	0.1	<0.1	0.2	0.5	0.5	0.5	0.6	0.9	0.9	0.5	0.2	0.1	0.4
		%	100	100	100	100	67	100	100	100	100	100	100	100	96
		Max-2w	0.2	<0.1	0.3	0.5	0.6	0.6	0.7	0.9	1.0	0.6	0.3	0.1	1.0
		Min-2w	<0.1	<0.1	0.1	0.4	0.5	0.5	0.6	0.8	0.8	0.3	0.2	0.1	<0.1
	Sado-seki	Mean	<0.1	0.1	0.2	1.0	1.2	0.8	1.1	0.8	0.5	0.6	0.2	0.2	0.6
		%	100	50	100	67	100	100	100	100	100	100	100	100	92
		Max-2w	0.1	0.1	0.3	1.2	1.5	0.9	1.5	0.8	0.6	0.7	0.3	0.2	1.5
		Min-2w	<0.1	0.1	0.2	0.8	0.8	0.8	0.7	0.7	0.4	0.5	0.1	0.1	<0.1
	Happo	Mean	<0.1	<0.1	0.2	0.5	0.8	0.5	-	1.0	0.5	0.4	0.2	0.2	0.4
		%	100	100	100	100	100	100	0	100	100	100	100	100	92
		Max-2w	0.1	<0.1	0.2	0.7	0.8	0.5	-	1.3	0.5	0.5	0.2	0.2	1.3
		Min-2w	<0.1	<0.1	0.1	0.3	0.7	0.4	-	0.6	0.5	0.2	0.2	0.2	<0.1
	Ijira	Mean	0.2	0.2	0.4	1.3	1.4	1.3	2.0	1.9	1.2	1.0	0.4	0.3	1.0
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-2w	0.3	0.3	0.5	2.1	1.4	1.6	2.4	2.0	1.3	1.5	0.6	0.4	2.4
		Min-2w	<0.1	0.2	0.3	0.5	1.4	1.1	1.5	1.8	1.0	0.6	0.2	0.2	<0.1
	Oki	Mean	0.2	0.2	0.3	0.4	1.2	1.1	0.4	0.5	0.9	-	-	0.1	0.5
		%	100	100	100	100	100	100	100	100	50	0	0	100	77
		Max-2w	0.2	0.2	0.4	0.4	1.3	1.4	0.8	1.1	0.9	-	-	0.2	1.4
		Min-2w	0.2	0.2	0.2	0.4	1.1	0.8	<0.1	<0.1	0.9	-	-	<0.1	<0.1
	Banryu	Mean	0.3	0.5	0.5	1.3	1.2	1.1	1.1	1.0	0.9	0.6	0.4	0.3	0.8
		%	46	100	100	100	100	100	100	100	100	62	100	100	92
		Max-2w	0.3	0.5	0.7	1.6	1.5	1.2	1.2	1.0	1.1	0.8	0.5	0.3	1.6
		Min-2w	0.3	0.4	0.4	1.0	0.9	1.1	1.0	0.9	0.7	0.5	0.4	0.2	0.2
	Yusuhara	Mean	0.3	0.2	0.3	1.0	0.9	0.5	0.7	0.4	0.4	0.5	0.2	0.2	0.5
		%	100	100	100	33	100	100	100	100	100	100	100	100	92
		Max-2w	0.3	0.2	0.3	1.0	1.1	0.6	0.8	0.4	0.4	0.7	0.5	0.3	1.1
		Min-2w	0.3	0.2	0.2	1.0	0.8	0.5	0.6	0.4	0.4	0.4	<0.1	0.2	<0.1
	Hedo	Mean	0.5	1.0	0.7	2.1	1.6	1.5	1.8	1.7	2.1	1.0	0.9	0.5	1.3
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-2w	0.5	1.5	0.9	2.4	2.2	1.5	2.2	1.8	2.2	1.2	1.0	0.6	2.4
		Min-2w	0.5	0.5	0.6	1.6	1.0	1.5	1.5	1.7	2.0	0.9	0.8	0.5	0.5
	Ogasawara	Mean	0.2	0.3	0.7	0.7	0.5	0.7	0.6	0.6	0.6	0.4	0.4	0.4	0.5
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-2w	0.3	0.3	0.8	0.9	0.7	0.7	0.6	0.8	0.7	0.6	0.5	0.4	0.9
		Min-2w	0.2	0.3	0.6	0.6	0.4	0.6	0.5	0.4	0.4	0.3	0.3	0.3	0.2
	Tokyo	Mean	3.4	2.8	0.6	2.8	4.0	4.5	6.0	4.7	5.4	4.3	4.3	4.4	3.9
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-2w	3.6	2.9	0.6	4.7	4.1	4.7	7.0	5.2	5.8	4.4	4.4	4.6	7.0
		Min-2w	3.2	2.7	0.5	0.4	4.0	4.4	5.1	4.2	5.1	4.3	4.2	4.2	0.4
Malaysia	Petaling Jaya	Mean	6.3	6.5	6.9	6.0	6.6	-	-	-	-	-	-	-	6.5
		%	100	100	100	100	100	0	0	0	0	0	0	0	40
		Max-w	7.1	6.9	8.1	6.5	7.1	-	-	-	-	-	-	-	8.1
		Min-w	5.6	6.2	5.2	5.0	6.1	-	-	-	-	-	-	-	5.0
	Tanah Rata	Mean	1.0	0.8	0.7	0.6	1.2	1.4	1.0	1.5	0.8	0.8	0.7	0.7	0.9
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-w	1.6	1.2	1.1	1.0	1.6	2.7	1.7	2.6	1.3	1.4	0.8	1.2	2.7
		Min-w	0.6	0.6	0.4	0.4	0.5	0.6	0.6	0.7	<0.1	0.3	0.6	0.2	<0.1
	Danum Valley	Mean	0.2	0.7	0.2	-	0.4	0.4	0.5	0.2	0.3	2.9	0.6	2.9	0.7
		%	67	100	50	0	50	100	100	100	100	50	50	50	69
		Max-2w	0.2	0.8	0.2	-	0.4	0.5	0.9	0.2	0.3	2.9	0.6	2.9	2.9
		Min-2w	0.2	0.6	0.2	-	0.4	0.3	0.2	0.2	0.3	2.9	0.6	2.9	0.2

Table 4.6 NH_3

Unit : ppb			2012												Annual
Country	Site		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
Myanmar	Yangon	Mean	19.7	20.9	22.2	17.8	6.8	-	1.9	5.4	12.0	0.3	5.1	<0.1	10.2
		%	100	100	82	100	100	0	100	100	100	100	100	100	91
		Max-2w	22.5	21.0	25.1	22.0	12.5	-	3.2	6.9	12.7	0.5	8.9	0.2	25.1
		Min-2w	15.8	20.9	19.3	13.6	1.0	-	0.5	3.9	11.4	<0.1	1.2	<0.1	<0.1
Philippines	Mt. Sto. Tomas	Mean	-	-	-	-	-	0.9	1.6	<0.1	1.2	0.9	1.3	1.0	1.0
		%	0	0	0	0	0	15	100	100	100	100	100	100	52
		Max-w	-	-	-	-	-	0.9	4.6	0.1	1.5	1.6	1.5	1.1	4.6
		Min-w	-	-	-	-	-	0.9	<0.1	<0.1	1.0	0.1	1.0	0.8	<0.1
Russia	Mondy	Mean	0.4	0.5	1.0	0.5	0.5	0.5	<0.1	0.2	0.4	0.5	0.7	2.7	0.7
		%	13	100	38	100	100	100	100	100	100	100	100	100	86
		Max-2w	0.4	0.5	1.0	0.5	0.5	0.5	<0.1	0.2	0.4	0.5	0.7	2.7	2.7
		Min-2w	0.4	0.5	1.0	0.5	0.5	0.5	<0.1	0.2	0.4	0.5	0.7	2.7	<0.1
	Listvianka	Mean	0.9	<0.1	0.1	<0.1	<0.1	<0.1	<0.1	1.4	1.1	0.9	0.5	2.1	0.6
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-w	2.0	0.2	0.6	<0.1	<0.1	0.1	0.1	2.2	1.3	1.7	0.5	2.5	2.5
		Min-w	0.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	0.3	0.9	0.3	0.4	1.3	<0.1
	Irkutsk	Mean	1.8	1.8	1.2	1.4	1.3	1.7	0.3	1.6	2.4	1.6	1.1	0.7	1.4
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-w	3.5	3.1	2.3	2.2	1.5	2.4	0.9	2.8	3.7	2.1	1.3	1.2	3.7
		Min-w	0.7	0.6	0.8	1.0	1.1	1.2	0.1	0.2	1.9	1.0	0.8	0.2	0.1
	Primorskaya	Mean	2.2	0.2	1.3	2.6	1.0	0.8	1.5	3.2	0.8	0.7	0.9	0.4	1.3
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-2w	3.7	0.4	2.2	3.4	1.0	1.0	2.0	4.6	1.4	1.3	1.1	0.4	4.6
		Min-2w	0.7	<0.1	0.4	1.8	0.9	0.7	1.0	1.8	0.2	0.1	0.8	0.4	<0.1
Thailand	Bangkok	Mean	11.0	8.9	9.3	6.4	7.6	6.9	8.7	8.9	7.9	10.3	2.8	11.1	8.3
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-10d	12.3	10.4	13.3	9.2	7.9	7.5	9.4	9.3	9.8	11.7	4.5	13.3	13.3
		Min-10d	8.8	6.2	4.6	3.1	7.0	6.2	8.3	8.5	5.5	8.0	1.0	9.9	1.0
	Khanchanaburi	Mean	-	-	5.9	-	-	-	0.5	-	-	-	0.7	-	2.4
	(Vachiralongkorn Dam)	%	0	0	53	0	0	0	42	0	0	0	50	0	12
		Max-2w	-	-	5.9	-	-	-	0.5	-	-	-	0.7	-	5.9
		Min-2w	-	-	5.9	-	-	-	0.5	-	-	-	0.7	-	0.5
	Chiangmai	Mean	-	-	-	13.3	5.0	3.4	3.0	3.2	2.4	3.0	3.3	3.4	4.4
	(Mae Hia)	%	0	0	0	100	97	100	97	97	97	97	97	100	73
		Max-10d	-	-	-	15.1	5.5	3.6	3.3	3.6	3.3	3.6	3.5	4.0	15.1
		Min-10d	-	-	-	10.7	4.7	3.2	2.5	3.0	1.5	2.6	3.1	2.9	1.5
	Nakhon Ratchasima	Mean	-	-	-	4.7	3.0	2.2	2.0	2.4	3.1	3.2	5.7	3.9	3.3
		%	0	0	0	100	100	100	100	100	100	100	100	100	74
		Max-10d	-	-	-	9.6	7.5	2.9	2.8	2.6	3.3	3.8	7.3	4.3	9.6
		Min-10d	-	-	-	<0.1	<0.1	1.1	0.9	2.3	2.9	2.4	4.3	3.6	<0.1
Vietnam	Hanoi	Mean	7.8	6.1	6.3	6.3	5.9	7.7	3.4	3.1	4.8	3.8	2.2	1.2	4.8
		%	75	100	100	100	100	75	75	100	100	100	100	100	94
		Max-w	13.6	6.2	6.6	6.5	7.4	13.6	5.3	4.2	9.1	9.4	3.2	1.3	13.6
		Min-w	4.3	5.9	6.2	6.2	4.8	4.8	2.4	2.7	2.1	1.7	1.6	1.0	1.0
	Hoa Binh	Mean	3.0	3.0	3.0	3.0	2.6	2.8	2.8	2.9	2.1	2.3	2.0	2.0	2.6
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-w	3.1	3.1	3.1	3.1	2.9	2.8	2.8	2.9	2.2	2.5	2.1	2.0	3.1
		Min-w	3.0	2.7	3.0	2.8	1.6	2.7	2.8	2.9	2.0	2.2	1.9	1.9	1.6

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
% : monthly or annual percentages of period of available data

Table 4.7 NO

Unit : ppb			2012												Annual
Country	Site		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
China	Jinyunshan	Mean	3.2	2.7	1.1	1.6	1.5	1.2	1.5	1.4	2.7	2.3	2.2	3.4	2.1
		%	97	100	87	97	94	97	100	97	100	100	100	100	98
		Max-d	6.4	6.4	2.4	3.2	4.8	4.0	6.4	4.0	4.8	4.8	7.2	15.2	15.2
		Min-d	1.6	0.8	0.8	0.8	0.8	0.8	0.8	0.8	2.4	0.8	0.8	0.8	0.8
Japan	Rishiri	Mean	<0.1	<0.1	<0.1	<0.1	<0.1	0.2	0.2	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
		%	98	98	90	98	98	98	98	98	84	98	98	97	96
		Max-d	0.2	0.2	0.2	0.3	0.2	0.6	0.4	0.4	0.1	0.2	0.1	0.1	0.6
		Min-d	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
	Ochiishi	Mean	<0.1	<0.1	<0.1	<0.1	<0.1	0.2	0.2	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
		%	81	92	97	98	96	89	96	96	96	96	91	95	93
		Max-d	<0.1	0.1	0.1	0.2	0.8	1.8	1.1	0.4	0.4	0.2	<0.1	0.1	1.8
		Min-d	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
	Tappi	Mean	<0.1	0.1	0.1	0.2	0.2	0.3	0.2	0.2	0.2	<0.1	0.1	<0.1	0.1
		%	98	98	98	99	99	99	99	99	98	89	97	99	98
		Max-d	0.1	0.2	0.3	0.8	0.6	1.3	0.5	0.3	0.5	0.2	0.3	<0.1	1.3
		Min-d	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
	Sado-seki	Mean	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	0.1	<0.1	<0.1
		%	98	97	98	95	96	97	97	88	95	95	90	80	94
		Max-d	0.2	0.2	0.2	0.1	0.1	0.2	0.1	0.1	0.1	0.1	0.2	0.2	0.2
		Min-d	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
	Happo	Mean	<0.1	0.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
		%	100	72	100	98	98	98	98	97	83	97	98	98	95
		Max-d	0.6	0.3	0.3	<0.1	0.2	0.2	0.2	0.2	0.1	0.2	0.2	0.2	0.6
		Min-d	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
	Ijira	Mean	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	0.2	0.7	0.1	<0.1	<0.1	<0.1	0.1
		%	36	99	98	99	99	98	99	99	99	99	87	85	91
		Max-d	0.1	0.3	0.2	<0.1	0.1	0.4	0.8	1.9	0.5	0.2	0.1	0.3	1.9
		Min-d	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
	Oki	Mean	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	0.1	-	<0.1	<0.1	0.2	<0.1
		%	97	98	97	71	98	97	97	63	0	61	98	97	81
		Max-d	0.1	<0.1	<0.1	<0.1	0.2	<0.1	0.2	0.3	-	0.2	0.2	0.2	0.3
		Min-d	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	-	<0.1	<0.1	0.1	0.1
	Banryu	Mean	0.3	0.1	<0.1	<0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	<0.1	0.2
		%	98	98	98	99	98	98	98	98	99	98	98	98	98
		Max-d	0.5	0.3	0.2	0.2	0.3	0.4	0.5	0.5	0.5	0.3	0.3	0.3	0.5
		Min-d	0.2	<0.1	<0.1	<0.1	<0.1	0.1	<0.1	<0.1	0.1	<0.1	<0.1	<0.1	0.1
	Yusuhara	Mean	0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
		%	97	98	97	97	98	91	92	80	98	96	89	97	94
		Max-d	0.2	0.2	0.3	0.2	0.1	0.2	0.2	0.2	0.2	0.1	0.2	0.2	0.3
		Min-d	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
	Hedo	Mean	<0.1	<0.1	<0.1	<0.1	0.1	0.1	<0.1	<0.1	<0.1	0.2	0.1	<0.1	<0.1
		%	98	82	98	97	98	59	88	86	53	93	60	33	79
		Max-d	0.2	0.3	0.2	0.2	0.9	0.8	0.2	0.3	0.2	0.4	0.2	<0.1	0.9
		Min-d	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
	Ogasawara	Mean	<0.1	<0.1	<0.1	<0.1	<0.1	0.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
		%	97	94	97	97	96	97	97	97	95	96	96	96	96
		Max-d	0.2	0.1	0.2	0.2	0.1	1.6	0.7	0.4	0.3	<0.1	0.2	0.1	1.6
		Min-d	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Thailand	Bangkok	Mean	9.0	5.4	3.3	4.0	5.3	6.5	10.3	12.6	13.6	17.2	15.9	10.8	9.5
		%	95	94	95	80	95	94	94	95	93	89	95	93	93
		Max-d	50.7	21.1	8.1	27.1	29.7	25.8	23.3	41.4	56.9	68.2	36.8	32.7	68.2
		Min-d	1.1	1.2	0.7	0.6	0.3	0.5	1.3	2.3	3.0	2.8	3.6	0.4	0.3
	Samutprakarn	Mean	-	-	11.8	12.8	9.5	12.7	17.1	23.2	21.6	21.5	22.6	12.7	17.1
		%	0	0	8	88	91	95	88	95	93	95	96	96	71
		Max-d	-	-	21.8	24.3	20.3	33.1	39.6	45.7	73.3	58.6	55.1	48.1	73.3
		Min-d	-	-	3.3	7.4	0.7	1.2	4.5	7.3	4.9	3.0	3.4	0.5	0.5
	Khanchanaburi	Mean	-	-	0.8	-	-	-	0.2	-	-	-	0.4	-	0.5
	(Vachiralongkorn Dam)	%	0	0	49	0	0	0	45	0	0	0	49	0	12
		Max-d	-	-	1.7	-	-	-	3.3	-	-	-	1.9	-	3.3
		Min-d	-	-	0.3	-	-	-	<0.1	-	-	-	<0.1	-	0.3
	Chiangmai	Mean	4.6	4.0	2.2	1.4	1.9	1.2	4.7	5.4	5.1	5.4	7.6	6.1	4.3
	(Mae Hia)	%	95	96	91	42	92	94	95	95	95	84	95	95	89
		Max-d	9.2	8.0	4.7	2.8	4.9	2.7	7.1	7.8	7.7	12.3	13.3	9.6	13.3
		Min-d	1.2	0.8	0.3	0.5	0.2	0.3	2.5	3.4	3.8	2.6	4.7	2.3	0.2

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 NO_2

Unit : ppb			2012												Annual
Country	Site		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
China	Hongwen	Mean	20.1	25.7	26.7	25.4	17.2	11.4	17.2	16.3	16.1	16.3	23.2	24.5	20.0
		%	100	100	100	100	100	97	90	97	100	100	100	100	99
		Max-d	36.9	48.4	46.8	57.2	49.4	23.9	41.1	31.2	30.2	27.6	46.3	42.6	57.2
		Min-d	8.3	11.4	9.4	2.6	3.6	4.2	6.2	4.7	10.4	10.4	13.5	15.6	2.6
	Xiang Zhou	Mean	18.4	19.2	17.7	13.8	17.9	7.5	5.7	11.9	10.6	9.7	16.5	17.4	13.8
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-d	34.3	31.2	38.0	27.0	27.6	28.6	15.6	26.5	24.4	20.3	28.6	30.7	38.0
		Min-d	8.3	10.4	10.9	5.2	6.8	3.1	1.6	3.1	2.1	5.2	7.3	7.8	1.6
Indonesia	Jakarta	Mean	9.0	9.0	9.0	15.0	16.0	15.0	19.0	29.0	24.0	13.0	24.0	13.0	16.3
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-m	9.0	9.0	9.0	15.0	16.0	15.0	19.0	29.0	24.0	13.0	24.0	13.0	29.0
		Min-m	9.0	9.0	9.0	15.0	16.0	15.0	19.0	29.0	24.0	13.0	24.0	13.0	9.0
	Bandung	Mean	29.5	40.9	30.7	44.4	42.7	41.4	40.8	31.0	49.2	51.7	56.9	54.8	42.8
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-m	29.5	40.9	30.7	44.4	42.7	41.4	40.8	31.0	49.2	51.7	56.9	54.8	56.9
		Min-m	29.5	40.9	30.7	44.4	42.7	41.4	40.8	31.0	49.2	51.7	56.9	54.8	29.5
Japan	Banryu	Mean	2.8	2.6	2.6	1.8	1.4	1.5	1.4	1.4	1.3	1.6	2.2	2.1	1.9
		%	98	98	98	99	98	98	98	98	99	98	98	98	98
		Max-d	5.1	4.4	4.9	3.6	3.0	2.9	2.0	2.6	2.1	2.4	3.6	4.7	5.1
		Min-d	1.2	1.3	1.0	0.6	<0.1	0.6	0.5	0.7	0.6	0.9	1.1	0.7	0.5
Republic of Korea	Kanghwa	Mean	7.5	4.4	5.6	6.0	7.2	3.7	2.7	4.0	3.7	3.4	8.3	2.9	5.0
		%	98	100	100	100	98	95	95	78	96	98	98	97	96
		Max-d	12.7	9.1	11.5	9.6	14.1	5.7	3.6	6.2	4.5	4.2	13.7	3.6	14.1
		Min-d	3.3	2.5	3.0	2.3	3.0	2.0	1.8	2.3	2.3	2.5	3.7	2.5	1.8
	Cheju (Kosan)	Mean	3.9	2.0	3.6	3.4	3.6	3.4	2.6	2.0	2.6	2.3	3.9	2.9	3.0
		%	100	98	100	100	93	100	99	100	94	100	100	100	99
		Max-d	5.8	4.5	5.4	4.7	4.2	4.6	3.3	3.8	3.3	3.6	9.0	5.6	9.0
		Min-d	2.0	0.3	2.6	2.0	3.0	2.2	2.2	1.2	1.4	1.4	2.3	1.7	0.3
	Imsil	Mean	7.3	7.4	6.2	4.9	4.1	3.4	1.6	0.9	2.2	3.0	3.0	11.5	4.6
		%	98	98	97	100	97	93	99	96	98	93	100	92	97
		Max-d	15.3	13.2	8.4	8.9	4.9	6.2	2.4	1.8	3.4	3.8	6.8	26.7	26.7
		Min-d	3.8	2.6	4.1	2.8	3.4	1.7	0.7	0.2	1.2	2.0	1.2	4.8	0.2
Thailand	Bangkok	Mean	30.7	28.4	23.4	25.2	21.2	17.1	16.3	15.9	20.3	30.7	33.4	34.7	24.7
		%	96	94	96	80	95	94	94	95	93	89	95	93	93
		Max-d	51.6	48.9	36.5	52.9	58.1	24.0	22.0	18.2	32.3	72.0	49.9	48.9	72.0
		Min-d	17.6	14.3	17.0	14.3	9.3	9.8	11.7	12.6	14.8	19.7	19.7	18.2	9.3
	Samutprakarn	Mean	-	-	19.1	7.7	13.3	13.5	12.7	13.2	16.2	23.5	26.4	26.3	17.1
		%	0	0	8	88	91	95	88	95	93	95	96	96	71
		Max-d	-	-	20.5	25.4	25.3	21.0	19.9	18.6	28.2	42.0	47.9	46.7	47.9
		Min-d	-	-	18.0	1.9	4.8	4.0	6.5	8.5	5.5	14.0	10.2	6.4	1.9

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
Max-m : maximum values of monthly data
Min-m : minimum values of monthly data
% : monthly or annual percentages of period of available data

Table 4.9 NOx

Unit : ppb			2012												Annual
Country	Site		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
China	Jinyunshan	Mean	10.4	9.5	8.3	10.4	6.6	5.6	5.0	5.4	8.1	8.9	7.0	15.1	8.4
	(NOx*)	%	97	100	87	97	94	97	100	97	100	100	100	100	98
		Max-d	19.1	21.7	13.0	23.5	11.8	10.2	14.7	9.4	12.3	15.2	11.8	30.9	30.9
		Min-d	3.7	3.4	3.9	5.5	2.4	2.9	1.8	2.4	5.0	4.4	2.9	3.4	1.8
Japan	Rishiri	Mean	0.7	1.1	1.1	0.9	0.5	0.7	0.6	0.5	0.5	0.6	0.5	0.8	0.7
	(NOx*)	%	98	98	90	98	98	98	98	98	84	98	98	97	96
		Max-d	1.4	3.8	2.4	2.1	1.4	1.8	2.0	1.4	0.8	1.2	1.4	3.4	3.8
		Min-d	0.3	0.4	0.4	0.2	<0.1	<0.1	<0.1	<0.1	0.2	<0.1	<0.1	0.2	0.2
	Ochiishi	Mean	0.7	0.9	1.1	1.3	1.1	1.2	1.3	1.1	1.0	0.9	0.6	0.9	1.0
	(NOx*)	%	81	92	97	98	96	89	96	96	96	96	91	95	93
		Max-d	1.4	1.6	2.2	2.2	2.4	3.6	3.2	2.7	2.6	2.1	1.1	1.9	3.6
		Min-d	0.2	0.4	0.5	0.5	0.3	0.3	0.3	0.4	0.3	0.4	0.2	0.2	0.2
	Tappi	Mean	0.6	0.6	1.1	1.8	2.1	2.3	1.2	0.9	0.7	0.7	1.1	1.0	1.2
	(NOx*)	%	98	98	98	99	99	99	99	99	98	89	97	99	98
		Max-d	1.2	2.1	2.1	6.1	6.5	7.6	2.6	2.0	1.8	1.8	2.2	2.0	7.6
		Min-d	0.1	<0.1	0.2	0.8	0.5	<0.1	0.2	0.1	0.2	0.3	0.5	0.3	0.1
	Sado-seki	Mean	0.5	0.8	1.0	1.1	0.7	0.8	0.7	0.6	0.5	0.5	0.7	0.7	0.7
	(NOx*)	%	98	97	98	95	96	97	97	88	95	95	90	80	94
		Max-d	1.7	2.3	2.0	1.9	1.5	1.5	1.1	1.3	1.1	1.1	1.4	1.4	2.3
		Min-d	<0.1	0.3	0.4	0.6	0.1	0.3	0.2	0.2	<0.1	0.1	0.2	0.1	0.1
	Happo	Mean	1.0	1.2	1.3	1.6	1.3	1.5	1.0	1.3	0.6	0.9	0.9	0.9	1.1
	(NOx*)	%	100	72	100	98	98	98	98	97	83	97	98	98	95
		Max-d	2.8	2.3	2.5	3.2	3.2	3.0	1.9	2.9	1.4	1.6	1.3	1.8	3.2
		Min-d	0.2	0.4	0.6	0.5	0.4	0.7	0.1	0.4	<0.1	0.4	0.5	0.2	0.1
	Ijira	Mean	1.6	1.4	1.6	2.3	2.7	3.3	2.9	4.1	1.7	1.7	1.3	1.2	2.2
	(NOx*)	%	36	99	98	99	99	98	99	99	99	99	87	85	91
		Max-d	4.0	5.6	5.6	5.0	6.3	6.7	8.7	7.4	3.1	5.9	4.7	3.4	8.7
		Min-d	0.3	0.1	0.2	<0.1	<0.1	0.2	0.2	1.3	0.4	0.3	0.3	0.3	0.1
	Oki	Mean	1.2	1.5	1.4	0.9	0.5	0.6	0.7	0.7	-	1.3	1.2	1.3	1.0
	(NOx*)	%	97	98	97	71	98	97	97	63	0	61	98	97	81
		Max-d	3.5	3.7	3.2	1.6	1.9	1.9	1.6	1.5	-	2.0	2.4	2.8	3.7
		Min-d	0.3	0.4	0.3	0.5	<0.1	<0.1	0.2	<0.1	-	0.8	0.4	0.6	0.2
	Banryu	Mean	3.1	2.7	2.7	1.8	1.5	1.7	1.6	1.6	1.5	1.8	2.4	2.2	2.0
		%	98	98	98	99	98	98	98	98	99	98	98	98	98
		Max-d	5.5	4.5	5.1	3.9	3.2	3.1	2.4	3.1	2.4	2.5	3.9	4.9	5.5
		Min-d	1.4	1.4	1.0	0.6	0.2	0.7	0.6	0.9	0.8	1.1	1.4	0.7	0.2
	Yusuhara	Mean	2.2	1.9	2.1	1.2	1.3	0.9	0.6	0.6	0.7	1.2	1.8	2.0	1.4
	(NOx*)	%	97	98	97	97	98	91	92	80	98	96	89	97	94
		Max-d	4.4	4.3	3.6	3.0	2.5	1.7	1.4	1.4	2.0	2.6	3.4	3.2	4.4
		Min-d	0.7	0.7	0.7	0.2	0.4	0.3	0.2	<0.1	0.1	0.6	0.6	0.7	0.1
	Hedo	Mean	0.3	0.6	0.9	0.7	0.8	0.3	0.1	0.1	<0.1	0.3	0.4	1.0	0.5
	(NOx*)	%	98	82	98	97	98	60	91	88	53	93	60	33	79
		Max-d	0.6	1.4	2.1	1.7	1.5	0.9	0.4	0.4	0.4	0.5	0.7	1.5	2.1
		Min-d	0.2	<0.1	0.2	0.1	0.1	<0.1	<0.1	<0.1	<0.1	<0.1	0.2	0.5	0.1
	Ogasawara	Mean	0.7	0.6	0.9	0.4	0.2	0.5	0.7	0.6	0.1	<0.1	0.5	0.5	0.5
	(NOx*)	%	97	94	97	97	96	97	97	97	95	96	96	96	96
		Max-d	1.8	2.1	2.8	1.6	1.6	3.2	1.7	2.1	1.5	0.6	1.6	1.6	3.2
		Min-d	<0.1	<0.1	0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	0.1
Thailand	Bangkok	Mean	40.0	33.8	26.7	29.2	26.6	23.8	26.8	28.7	34.1	48.2	49.7	46.0	34.5
		%	96	94	96	80	95	94	94	95	93	89	95	93	93
		Max-d	93.2	68.3	40.1	61.1	65.1	45.3	38.6	57.2	89.1	104.5	74.3	81.9	104.5
		Min-d	19.7	16.5	19.7	15.8	10.1	10.4	13.1	15.8	20.0	25.0	24.0	18.8	10.1
	Samutprakarn	Mean	-	-	30.8	20.5	21.9	26.2	29.8	36.4	37.7	45.0	49.1	39.0	34.1
		%	0	0	8	88	91	95	88	95	93	95	96	96	71
		Max-d	-	-	42.2	45.2	44.7	46.3	55.9	61.1	101.5	96.1	92.0	94.3	101.5
		Min-d	-	-	21.9	10.3	7.8	5.3	11.0	20.3	12.5	17.8	13.8	6.9	5.3
	Khanchanaburi	Mean	-	-	2.4	-	-	-	0.4	-	-	-	3.2	-	2.0
	(Vachiralongkorn Dam)	%	0	0	49	0	0	0	45	0	0	0	49	0	12
	(NOx*)	Max-d	-	-	4.2	-	-	-	3.3	-	-	-	4.8	-	4.8
		Min-d	-	-	0.7	-	-	-	0.1	-	-	-	2.2	-	0.1
	Chiangmai	Mean	18.7	24.2	24.1	12.5	10.4	8.3	12.1	12.9	11.9	13.8	16.6	18.3	15.5
	(Mae Hia)	%	95	96	91	42	92	94	95	95	95	84	95	95	89
	(NOx*)	Max-d	26.2	41.2	41.0	20.2	15.7	13.1	17.4	18.4	14.5	20.3	25.2	24.0	41.2
		Min-d	12.3	13.4	11.4	3.8	5.9	5.6	7.6	7.7	8.5	8.0	11.5	13.3	3.8

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 O_3

Unit : ppb			2012												Annual
Country	Site		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
Japan	Rishiri	Mean	30	34	42	42	41	30	23	26	27	35	35	39	34
		%	100	99	92	99	99	100	99	99	86	99	100	99	98
		Max-d	32	48	56	53	62	42	35	38	42	44	42	43	62
		Min-d	27	30	36	29	29	19	14	16	18	27	31	31	14
	Ochiishi	Mean	36	40	49	52	46	34	28	31	31	39	38	39	39
		%	100	100	100	100	95	90	100	100	100	100	97	99	98
		Max-d	39	47	62	61	58	43	47	44	42	47	44	42	62
		Min-d	33	36	43	40	37	25	21	15	16	34	33	33	15
	Tappi	Mean	36	40	48	50	49	38	32	38	40	41	38	39	41
		%	98	96	96	98	99	99	99	99	99	89	96	99	97
		Max-d	39	48	59	64	63	56	53	51	51	50	48	43	64
		Min-d	32	35	43	39	34	27	21	25	27	35	34	36	21
	Sado-seki	Mean	40	45	55	59	62	51	43	39	40	42	38	41	46
		%	99	99	99	97	98	98	97	89	98	96	98	78	95
		Max-d	44	53	68	79	83	67	58	54	54	54	46	46	83
		Min-d	31	38	48	51	46	35	27	23	29	33	33	34	23
	Happo	Mean	41	48	55	63	67	57	41	42	39	45	45	43	49
		%	95	81	100	99	100	99	99	98	85	99	100	99	96
		Max-d	47	59	74	77	87	71	60	61	59	58	52	50	87
		Min-d	36	40	49	48	48	39	17	18	26	36	37	36	17
	Ijira	Mean	21	26	32	37	33	20	18	18	19	28	20	23	24
		%	100	99	97	99	99	99	99	100	99	99	99	86	98
		Max-d	27	37	45	53	53	32	33	41	31	39	30	31	53
		Min-d	13	16	16	22	13	7	7	4	6	16	12	8	4
	Oki	Mean	38	42	53	59	61	48	42	41	46	47	41	38	46
		%	100	100	99	99	100	100	100	100	100	100	100	99	100
		Max-d	43	48	70	76	84	60	56	56	62	60	51	43	84
		Min-d	33	37	45	49	45	36	21	24	24	38	33	33	21
	Banryu	Mean	29	33	42	48	48	33	25	20	28	32	31	30	33
		%	100	100	100	100	90	100	100	100	100	100	100	99	99
		Max-d	36	44	63	64	69	48	46	37	46	47	43	38	69
		Min-d	17	20	24	33	24	16	11	8	7	23	21	14	7
	Yusuhara	Mean	32	35	43	49	50	33	21	12	25	37	34	32	34
		%	99	99	99	98	99	93	94	81	99	99	90	62	93
		Max-d	37	46	57	65	73	58	36	26	50	45	43	35	73
		Min-d	22	31	30	39	32	12	6	5	9	27	28	27	5
	Hedo	Mean	42	43	48	47	46	20	11	14	24	43	44	42	35
		%	99	83	99	99	99	99	99	96	87	96	80	99	95
		Max-d	47	52	67	69	72	41	17	23	53	53	57	47	72
		Min-d	38	37	18	18	17	6	7	7	10	25	30	34	6
	Ogasawara	Mean	41	42	48	48	34	13	12	15	22	27	39	39	32
		%	99	99	98	98	99	99	99	99	98	98	99	99	99
		Max-d	46	48	63	60	66	45	22	25	37	45	48	45	66
		Min-d	33	29	27	17	12	6	5	8	9	10	30	26	5
Republic of Korea	Kanghwa	Mean	30	37	47	53	61	57	44	34	47	45	33	37	44
		%	98	100	100	99	98	91	97	78	96	98	98	97	96
		Max-d	35	40	54	66	95	73	63	49	52	55	41	40	95
		Min-d	25	34	43	42	33	42	25	23	41	38	23	34	23
	Cheju (Kosan)	Mean	27	30	-	-	-	54	42	30	55	45	33	38	39
		%	100	98	0	0	0	60	99	100	94	100	100	100	71
		Max-d	34	34	-	-	-	55	61	61	65	56	40	44	65
		Min-d	23	27	-	-	-	53	20	16	48	35	26	32	16
	Imsil	Mean	21	26	38	45	46	47	29	25	30	28	33	24	33
		%	98	98	98	100	97	93	99	96	98	93	100	92	97
		Max-d	29	29	47	55	55	64	46	45	43	30	45	31	64
		Min-d	9	21	32	35	32	37	17	13	14	25	25	7	7
Russia	Mondy	Mean	35	39	47	49	45	39	34	34	35	34	33	35	38
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-d	39	45	51	56	56	47	45	47	42	40	37	39	56
		Min-d	30	34	43	43	32	28	25	23	24	24	23	30	23
Thailand	Bangkok	Mean	16	26	28	23	16	12	11	8	12	13	12	23	17
		%	51	95	96	97	94	94	94	92	77	85	88	87	87
		Max-d	28	55	57	58	25	22	22	15	33	23	26	47	58
		Min-d	8	12	6	10	3	6	2	1	1	4	<1	6	1
	Samutprakarn	Mean	13	27	31	25	17	13	12	13	12	19	19	25	19
		%	17	36	89	89	92	95	88	95	86	92	95	96	81
		Max-d	24	46	54	55	23	22	22	25	29	33	36	41	55
		Min-d	8	6	14	14	9	6	5	5	2	4	4	12	2
	Khanchanaburi (Vachiralongkorn Dam)	Mean	-	-	29	-	-	-	7	-	-	-	11	-	16
		%	0	0	49	0	0	0	45	0	0	0	49	0	12
		Max-d	-	-	37	-	-	-	12	-	-	-	16	-	37
		Min-d	-	-	17	-	-	-	<1	-	-	-	<1	-	17
	Chiangmai (Mae Hia)	Mean	26	36	41	38	35	15	11	11	11	12	11	16	21
		%	94	96	91	67	94	93	94	95	95	86	95	95	91
		Max-d	38	50	55	57	50	19	14	16	17	24	19	25	57
		Min-d	19	21	26	17	19	10	7	7	5	5	6	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 4.11 PM_{10}

Unit : $\mu g/m^3$			2012												Annual
Country	Site		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
China	Jinyunshan	Mean	47	67	54	47	26	39	20	34	38	41	48	58	43
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-d	107	131	108	92	71	91	44	91	86	116	91	137	137
		Min-d	5	12	14	15	3	5	2	6	4	7	12	17	2
	Hongwen	Mean	48	50	84	77	53	35	40	54	56	71	72	60	59
		%	100	100	100	100	100	93	97	94	100	100	100	100	99
		Max-d	100	108	149	159	116	83	123	89	119	114	121	119	159
		Min-d	14	14	31	18	12	14	16	18	24	39	23	21	12
	Xiang Zhou	Mean	49	45	49	37	32	36	26	50	42	64	47	53	44
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-d	80	97	135	82	46	75	65	126	84	124	91	103	135
		Min-d	9	10	20	16	19	22	15	14	15	28	15	19	9
Japan	Rishiri	Mean	7	14	17	22	13	11	12	15	11	13	10	12	13
		%	88	88	88	88	88	88	87	86	79	80	88	88	86
		Max-d	15	62	68	101	42	25	42	43	28	29	46	56	101
		Min-d	3	3	4	5	3	2	1	2	5	4	3	4	1
	Ochiishi	Mean	14	20	26	28	21	20	17	18	13	21	18	16	20
		%	100	100	100	100	99	97	99	100	23	32	99	100	87
		Max-d	26	75	48	65	47	71	49	29	34	31	41	39	75
		Min-d	8	7	12	11	11	7	8	12	3	2	5	6	2
	Tappi	Mean	15	17	22	25	18	14	15	16	13	18	19	18	17
		%	100	100	100	100	100	100	98	99	98	100	98	100	99
		Max-d	29	30	66	73	33	34	38	37	22	32	47	35	73
		Min-d	4	6	4	8	3	5	4	7	7	9	8	8	3
	Sado-seki	Mean	15	19	21	30	22	14	18	14	13	20	21	16	19
		%	100	99	100	97	99	100	100	100	100	99	42	59	91
		Max-d	27	41	65	113	53	24	34	22	30	46	37	29	113
		Min-d	7	9	4	9	4	6	5	8	6	10	9	6	4
	Happo	Mean	7	11	10	20	19	12	12	13	9	9	6	4	11
		%	93	42	63	98	100	100	100	98	100	99	99	99	91
		Max-d	42	26	35	43	53	22	34	22	17	23	14	7	53
		Min-d	1	4	2	5	2	2	3	4	3	2	3	<1	1
	Ijira	Mean	7	11	14	26	25	18	22	16	18	15	13	7	16
		%	96	100	97	100	100	100	100	100	100	100	100	65	96
		Max-d	12	34	32	81	60	31	45	30	33	33	25	11	81
		Min-d	2	4	3	12	4	6	8	8	10	2	5	4	2
	Oki	Mean	22	24	27	32	29	18	21	16	19	23	30	20	23
		%	100	100	99	78	100	99	99	99	100	99	100	96	97
		Max-d	47	47	57	70	69	31	56	26	35	43	80	37	80
		Min-d	8	7	4	14	11	6	12	11	12	10	15	6	4
	Banryu	Mean	22	21	27	32	32	20	20	15	20	20	24	16	22
		%	96	100	99	100	100	100	99	99	100	87	37	100	93
		Max-d	45	47	57	69	81	31	50	23	35	33	55	32	81
		Min-d	7	5	6	7	10	7	11	8	10	10	11	5	5
	Yusuhara	Mean	14	11	18	23	25	11	14	9	12	14	15	9	15
		%	100	100	88	87	100	93	83	77	87	87	81	88	89
		Max-d	32	32	40	72	71	44	52	27	30	25	29	21	72
		Min-d	3	3	4	1	2	2	4	3	3	2	7	2	1
	Hedo	Mean	24	23	35	37	28	18	13	20	17	32	34	31	27
		%	100	99	100	100	100	95	40	95	86	94	78	100	91
		Max-d	49	39	112	168	87	40	30	61	41	54	71	79	168
		Min-d	8	9	15	14	9	5	8	7	4	16	4	14	4
	Ogasawara	Mean	12	11	15	16	10	6	7	8	9	11	13	11	11
		%	100	99	100	100	100	100	100	100	99	100	100	100	100
		Max-d	19	19	29	43	24	15	18	18	18	17	25	21	43
		Min-d	7	5	3	3	<1	2	3	3	5	6	8	5	2
Republic of Korea	Kanghwa	Mean	75	49	46	48	58	39	33	33	28	26	43	58	45
		%	96	99	100	100	95	96	99	78	98	98	80	97	95
		Max-d	103	72	55	76	80	50	51	39	47	39	132	101	132
		Min-d	52	34	36	21	25	33	23	25	17	13	23	27	13
	Cheju (Kosan)	Mean	42	32	44	53	45	31	29	29	34	28	43	29	37
		%	100	98	100	99	94	98	94	93	96	98	80	100	96
		Max-d	71	36	63	79	86	39	44	37	51	39	116	45	116
		Min-d	31	26	31	32	14	21	14	19	20	22	18	14	14
	Imsil	Mean	59	41	46	38	46	41	23	16	23	28	37	39	36
		%	98	98	98	100	98	93	96	96	97	93	80	92	95
		Max-d	113	64	60	56	81	52	27	22	45	48	118	57	118
		Min-d	39	22	24	24	23	20	16	11	8	15	22	22	8
Thailand	Bangkok	Mean	43	43	48	37	27	33	26	23	24	41	45	60	37
		%	58	95	93	88	92	94	94	96	95	97	96	93	91
		Max-d	64	83	87	93	40	68	41	34	61	86	81	88	93
		Min-d	14	17	17	14	14	15	17	15	16	20	19	33	14
	Samutprakarn	Mean	-	71	26	-	50	32	30	31	28	45	42	55	39
		%	0	36	27	0	9	84	94	100	100	96	98	99	62
		Max-d	-	144	53	-	55	64	42	47	59	92	87	75	144
		Min-d	-	15	13	-	38	18	18	20	13	20	17	31	13
	Khanchanaburi (Vachiralongkorn Dam)	Mean	-	-	18	-	-	-	4	-	-	-	8	-	10
		%	0	0	51	0	0	0	43	0	0	0	51	0	12
		Max-d	-	-	33	-	-	-	7	-	-	-	11	-	33
		Min-d	-	-	8	-	-	-	3	-	-	-	5	-	3
	Chiangmai (Mae Hia)	Mean	43	82	120	56	32	26	22	22	21	32	27	37	42
		%	99	83	92	86	99	99	100	100	100	90	100	99	96
		Max-d	71	196	201	103	50	43	40	33	36	45	42	52	201
		Min-d	26	37	26	19	8	15	15	15	11	18	21	20	8

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			2012												Annual
Country	Site		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
Japan	Rishiri	Mean	4	9	10	9	8	10	8	7	5	6	6	8	8
		%	99	100	100	100	100	100	100	100	100	100	100	100	100
		Max-d	9	30	26	20	20	16	18	14	9	15	16	41	41
		Min-d	2	3	3	4	1	5	2	2	3	3	3	3	1
	Ochiishi	Mean	5	9	12	11	11	9	9	9	6	9	7	8	9
		%	99	99	98	99	99	98	99	100	23	32	98	100	87
		Max-d	10	56	21	25	33	37	31	16	17	21	17	26	56
		Min-d	3	<1	5	4	4	3	4	5	2	2	2	3	2
	Oki	Mean	11	13	15	16	17	11	15	11	10	11	13	10	13
		%	98	100	100	97	100	99	99	67	97	100	99	78	94
		Max-d	33	26	40	39	42	19	39	22	27	25	24	23	42
		Min-d	5	7	2	5	4	3	3	5	4	4	5	4	2

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: SO_4^{2-}

Unit : μg/m³			2012												Annual
Country	Site		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
Cambodia	Phnom Penh	Mean	2.65	4.39	2.84	2.54	2.69	2.48	1.82	1.80	1.36	5.31	1.67	2.31	2.63
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-2w	3.28	4.62	3.37	2.92	2.91	2.97	2.16	2.00	1.64	5.56	1.72	2.35	5.56
		Min-2w	2.02	4.17	2.15	2.15	2.48	1.98	1.48	1.51	1.08	5.05	1.62	2.26	1.08
Indonesia	Serpong	Mean	0.60	1.37	2.91	3.01	3.03	4.67	8.40	7.26	4.07	7.99	2.52	1.42	4.03
		%	97	100	100	100	100	100	100	100	100	100	100	91	99
		Max-2w	0.90	2.28	4.14	4.99	5.23	5.08	10.29	8.67	5.91	8.73	4.50	2.64	10.29
		Min-2w	0.30	0.45	2.21	1.04	0.83	4.25	6.50	5.99	2.24	7.26	0.55	0.21	0.21
Japan	Rishiri	Mean	1.35	2.36	3.19	2.68	3.05	2.63	2.50	1.95	1.79	1.72	1.83	2.69	2.32
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-2w	1.49	2.42	3.22	2.89	3.28	3.47	3.57	1.98	2.52	2.38	2.45	3.94	3.94
		Min-2w	1.21	2.30	3.15	2.47	2.79	1.78	1.43	1.91	1.05	1.38	1.21	1.44	1.05
	Ochiishi	Mean	1.54	2.91	3.20	1.69	1.22	2.18	2.10	1.69	2.49	1.59	0.38	1.55	1.95
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-2w	1.70	3.67	3.40	2.73	2.05	2.59	3.13	1.91	3.48	2.45	0.38	2.58	3.67
		Min-2w	1.38	2.15	2.99	0.64	0.40	1.77	1.54	1.46	1.49	0.74	0.38	0.53	0.38
	Tappi	Mean	2.30	3.68	3.76	3.66	3.34	3.08	5.32	3.73	3.13	2.33	4.64	6.89	3.76
		%	100	100	100	100	67	100	100	100	100	100	100	100	96
		Max-2w	2.43	3.86	4.43	3.76	4.53	4.00	7.03	3.79	3.69	3.81	6.70	9.78	9.78
		Min-2w	2.16	3.50	3.10	3.56	2.15	2.16	3.61	3.66	2.57	1.33	2.58	4.00	1.33
	Sado-seki	Mean	2.43	3.99	3.14	2.75	5.79	3.22	5.84	4.28	3.57	2.70	2.51	2.85	3.53
		%	100	50	100	67	100	100	100	100	100	100	100	100	92
		Max-2w	2.95	3.99	3.82	3.07	5.86	4.04	7.52	5.25	3.80	3.98	3.14	3.17	7.52
		Min-2w	1.92	3.99	2.47	2.42	5.72	2.40	4.16	3.30	3.34	1.96	1.87	2.53	1.87
	Happo	Mean	1.19	1.52	1.85	2.72	6.63	2.43	-	3.22	1.72	2.26	0.82	0.67	2.36
		%	100	100	100	100	100	100	0	100	100	100	100	100	92
		Max-2w	1.22	1.58	2.24	3.54	6.90	2.84	-	4.13	1.79	3.48	0.82	0.88	6.90
		Min-2w	1.16	1.46	1.45	1.10	6.36	2.02	-	2.32	1.65	1.35	0.82	0.45	0.45
	Ijira	Mean	1.86	2.76	2.63	2.64	6.82	3.49	1.52	2.00	3.12	2.19	0.50	0.81	2.52
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-2w	2.08	3.60	3.44	3.62	7.56	3.64	2.27	3.85	3.21	3.91	0.88	1.55	7.56
		Min-2w	1.63	1.93	1.81	0.77	6.07	3.35	0.77	0.14	3.04	0.52	0.12	0.07	0.07
	Oki	Mean	3.85	5.39	5.87	6.58	4.98	4.30	5.89	3.49	3.07	-	-	4.66	4.90
		%	100	100	100	100	100	100	100	100	50	0	0	100	77
		Max-2w	4.83	5.46	6.51	8.31	8.25	5.20	6.82	3.59	3.07	-	-	5.09	8.31
		Min-2w	2.87	5.33	5.23	4.85	2.84	3.40	4.96	3.39	3.07	-	-	4.22	2.84
	Banryu	Mean	5.78	5.05	5.70	6.29	7.61	4.94	6.09	2.85	3.95	4.58	4.67	2.85	5.05
		%	46	100	100	100	100	100	100	100	100	62	100	100	92
		Max-2w	5.78	5.15	6.25	6.73	9.45	6.22	8.54	3.41	4.40	4.89	5.18	3.36	9.45
		Min-2w	5.78	4.95	5.16	5.47	5.77	3.67	3.64	2.29	3.50	4.28	4.16	2.33	2.29
	Yusuhara	Mean	4.52	2.78	5.06	4.79	10.15	3.62	5.03	2.59	3.78	4.15	4.36	2.83	4.44
		%	100	100	100	33	100	100	100	100	100	100	100	100	92
		Max-2w	5.68	3.84	5.38	4.79	12.08	4.70	5.76	3.57	5.60	5.03	5.06	3.53	12.08
		Min-2w	3.35	1.72	4.73	4.79	8.22	2.53	4.31	1.61	1.97	3.04	3.65	2.12	1.61
	Hedo	Mean	5.63	3.36	3.63	6.73	5.69	2.28	1.45	1.56	2.24	4.71	5.22	5.29	4.28
		%	100	100	100	100	100	100	100	100	100	64	100	100	96
		Max-2w	5.92	5.94	6.71	6.89	8.96	2.44	1.62	2.54	3.40	8.57	6.57	5.43	8.96
		Min-2w	5.35	0.79	0.54	6.43	2.42	2.12	1.27	0.58	1.08	5.55	3.87	5.16	0.54
	Ogasawara	Mean	3.84	3.23	3.93	4.13	0.89	1.12	0.83	0.96	1.18	1.69	3.56	3.03	2.41
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-2w	4.45	3.53	5.47	4.92	1.71	1.34	0.91	1.02	1.27	2.58	4.06	3.60	5.47
		Min-2w	3.23	2.93	2.39	2.70	0.06	0.90	0.76	0.91	1.10	1.24	3.07	2.46	0.06
	Tokyo	Mean	2.00	3.20	0.40	3.26	6.40	3.26	5.87	3.03	3.54	2.82	2.18	1.76	3.14
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-2w	2.38	3.79	0.42	4.66	6.58	3.32	6.96	3.35	3.69	3.34	2.22	1.97	6.96
		Min-2w	1.63	2.61	0.37	0.58	6.22	3.20	4.78	2.71	3.40	2.52	2.13	1.56	0.37
Malaysia	Petaling Jaya	Mean	1.74	1.48	3.73	4.97	4.16	-	-	-	-	-	-	-	3.24
		%	100	100	100	100	100	0	0	0	0	0	0	0	40
		Max-w	2.58	3.17	8.05	7.45	5.05	-	-	-	-	-	-	-	8.05
		Min-w	0.04	0.07	0.87	1.98	2.68	-	-	-	-	-	-	-	0.04
	Tanah Rata	Mean	0.56	0.67	1.18	0.88	1.66	4.09	1.82	3.43	1.53	0.84	0.31	0.53	1.52
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-w	0.96	0.93	2.20	1.94	2.69	6.03	3.31	4.90	3.09	1.77	0.54	0.98	6.03
		Min-w	0.21	0.22	0.12	0.16	0.82	1.55	0.98	0.73	0.34	<0.01	0.14	0.19	<0.01
	Danum Valley	Mean	<0.01	<0.01	<0.01	-	0.02	0.06	0.25	0.62	1.31	1.30	0.30	0.48	0.38
		%	67	100	50	0	50	100	100	100	100	50	50	50	69
		Max-2w	<0.01	<0.01	<0.01	-	0.02	0.11	0.64	0.62	2.60	1.30	0.30	0.48	2.60
		Min-2w	<0.01	<0.01	<0.01	-	0.02	<0.01	<0.01	0.62	0.02	1.30	0.30	0.48	<0.01

Table 4.13 Particulate matter component: SO_4^{2-}

Unit : μg/m³			2012												Annual
Country	Site		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
Myanmar	Yangon	Mean	6.0	5.7	6.8	3.7	5.9	-	1.6	1.8	2.8	2.7	2.36	<0.01	3.59
		%	100	100	82	100	100	0	100	100	100	100	100	100	91
		Max-2w	6.3	10.5	11.4	6.5	6.4	-	2.5	2.0	3.7	4.9	4.56	<0.01	11.40
		Min-2w	5.5	1.0	2.2	0.9	5.4	-	0.7	1.6	2.0	0.5	0.15	<0.01	<0.01
Philippines	Mt. Sto. Tomas	Mean	-	-	-	-	-	0.13	0.16	0.07	0.24	0.28	0.12	0.04	0.15
		%	0	0	0	0	0	15	100	100	100	100	100	100	52
		Max-w	-	-	-	-	-	0.13	0.50	0.12	0.34	0.52	0.30	0.04	0.52
		Min-w	-	-	-	-	-	0.13	0.01	0.02	0.13	0.12	0.01	0.02	0.01
Russia	Mondy	Mean	0.08	0.11	0.07	0.03	0.11	1.03	0.18	0.26	0.06	0.17	0.23	0.40	0.22
		%	13	100	38	100	100	100	100	100	100	100	100	100	86
		Max-2w	0.08	0.11	0.07	0.03	0.20	1.03	0.18	0.26	0.06	0.17	0.23	0.40	1.03
		Min-2w	0.08	0.11	0.07	0.03	0.01	1.03	0.18	0.26	0.06	0.17	0.23	0.40	0.01
	Listvianka	Mean	1.61	1.02	1.60	1.03	1.04	1.08	0.40	0.72	1.21	0.94	0.98	1.24	1.09
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-w	2.11	1.44	2.55	1.41	1.33	1.33	0.98	1.26	1.64	1.47	1.43	1.88	2.55
		Min-w	1.00	0.26	0.86	0.66	0.73	0.78	0.11	0.09	0.72	0.32	0.79	0.96	0.09
	Irkutsk	Mean	6.24	4.39	2.89	1.40	2.37	1.60	3.01	1.45	1.43	2.24	3.64	6.32	3.07
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-w	9.55	7.67	4.21	2.10	3.11	2.40	7.47	2.66	2.81	4.26	5.19	10.73	10.73
		Min-w	2.84	2.78	1.41	0.82	1.78	0.99	0.91	0.66	0.53	0.81	1.64	2.18	0.53
	Primorskaya	Mean	4.29	3.23	4.38	3.60	3.60	3.23	2.16	3.13	2.17	1.73	3.59	4.18	3.27
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-2w	4.81	3.26	5.84	3.72	3.68	3.80	2.28	3.77	2.69	2.51	3.74	4.41	5.84
		Min-2w	3.77	3.20	2.93	3.48	3.52	2.66	2.03	2.49	1.64	0.96	3.44	3.95	0.96
Thailand	Bangkok	Mean	3.10	4.19	5.00	3.43	0.07	1.26	1.27	0.93	0.19	1.73	1.62	4.30	2.26
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-10d	3.63	5.10	7.24	5.93	0.11	1.86	1.52	1.60	0.42	3.05	4.17	5.07	7.24
		Min-10d	2.77	3.07	2.74	0.17	<0.01	0.10	0.96	0.13	0.02	0.73	0.01	3.66	<0.01
	Khanchanaburi	Mean	-	-	6.58	-	-	-	<0.01	-	-	-	0.44	-	2.34
	(Vachiralongkorn Dam)	%	0	0	53	0	0	0	42	0	0	0	50	0	12
		Max-2w	-	-	6.58	-	-	-	<0.01	-	-	-	0.44	-	6.58
		Min-2w	-	-	6.58	-	-	-	<0.01	-	-	-	0.44	-	<0.01
	Chiangmai	Mean	-	-	-	2.17	1.53	1.12	0.79	0.25	0.15	2.64	0.83	0.63	1.12
	(Mae Hia)	%	0	0	0	100	97	100	97	97	97	97	97	100	73
		Max-10d	-	-	-	3.62	2.23	2.39	1.21	0.63	0.20	4.11	1.23	1.19	4.11
		Min-10d	-	-	-	0.71	0.28	0.12	0.53	0.06	0.13	0.26	0.59	0.32	0.06
	Nakhon Ratchasima	Mean	-	-	-	2.93	2.91	1.57	0.53	1.22	2.21	5.81	2.31	2.49	2.44
		%	0	0	0	100	100	100	100	100	100	100	100	100	74
		Max-10d	-	-	-	5.29	5.78	2.97	1.45	1.28	5.02	8.34	3.72	3.98	8.34
		Min-10d	-	-	-	1.30	0.48	<0.01	0.03	1.16	0.21	2.26	1.38	1.67	<0.01
Vietnam	Hanoi	Mean	11.39	13.63	11.35	9.95	6.47	6.47	1.14	3.06	2.13	14.82	4.22	9.61	7.82
		%	75	100	100	100	100	75	75	100	100	100	100	100	94
		Max-w	17.11	17.48	18.09	14.00	10.59	11.68	1.38	6.78	5.52	24.95	12.10	24.19	24.95
		Min-w	5.61	10.44	0.57	7.92	2.96	3.67	0.69	0.71	0.79	3.53	0.32	1.23	0.32
	Hoa Binh	Mean	2.87	1.63	2.92	0.93	1.41	1.39	0.36	0.62	0.94	1.36	2.32	2.11	1.59
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-w	4.78	4.52	4.56	1.47	2.41	1.80	0.61	0.99	2.78	1.90	7.15	3.76	7.15
		Min-w	1.84	0.36	1.16	0.60	0.39	0.85	<0.01	0.27	0.12	0.49	0.40	0.41	<0.01

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
% : monthly or annual percentages of period of available data

Table 4.14 Particulate matter component: NO_3^-

Unit : μg/m³			2012												Annual
Country	Site		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
Cambodia	Phnom Penh	Mean	1.77	2.82	1.76	0.82	0.81	1.15	0.85	1.10	0.70	0.62	0.88	0.91	1.20
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-2w	2.00	3.30	2.98	0.96	0.96	1.38	1.00	1.50	0.87	0.65	0.96	1.10	3.30
		Min-2w	1.54	2.35	0.96	0.67	0.67	0.92	0.69	0.75	0.54	0.59	0.80	0.72	0.54
Indonesia	Serpong	Mean	0.28	0.30	0.59	2.74	0.93	1.10	2.07	1.97	0.72	1.62	0.45	0.12	1.09
		%	97	100	100	100	100	100	100	100	100	100	100	91	99
		Max-2w	0.44	0.48	0.92	5.13	1.14	1.28	2.65	2.25	1.09	2.35	0.83	0.13	5.13
		Min-2w	0.12	0.12	0.08	0.34	0.73	0.93	1.49	1.82	0.34	0.90	0.07	0.11	0.07
Japan	Rishiri	Mean	0.17	0.94	0.79	0.92	1.01	0.45	0.34	0.65	0.63	0.48	0.42	0.67	0.63
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-2w	0.18	1.21	0.86	1.11	1.64	0.54	0.57	0.87	0.84	0.72	0.62	1.07	1.64
		Min-2w	0.17	0.68	0.72	0.72	0.60	0.36	0.11	0.44	0.41	0.28	0.23	0.27	0.11
	Ochiishi	Mean	0.35	0.52	0.75	0.52	0.38	0.42	0.26	0.41	0.59	0.44	0.08	0.32	0.43
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-2w	0.37	0.70	0.93	0.90	0.73	0.44	0.39	0.54	0.85	0.76	0.08	0.54	0.93
		Min-2w	0.33	0.34	0.58	0.15	0.04	0.40	0.15	0.28	0.32	0.13	0.08	0.10	0.04
	Tappi	Mean	0.46	1.53	1.14	1.68	1.35	0.51	0.27	0.86	1.28	0.79	0.86	1.17	0.98
		%	100	100	100	100	67	100	100	100	100	100	100	100	96
		Max-2w	0.46	1.54	1.45	2.13	1.60	0.51	0.36	1.37	1.36	1.38	1.11	1.52	2.13
		Min-2w	0.46	1.52	0.83	1.23	1.11	0.51	0.19	0.35	1.20	0.18	0.60	0.83	0.18
	Sado-seki	Mean	0.57	0.76	0.91	0.95	1.41	0.83	0.39	1.27	1.21	1.06	0.59	0.74	0.90
		%	100	50	100	67	100	100	100	100	100	100	100	100	92
		Max-2w	0.67	0.76	1.35	1.27	1.61	1.01	0.57	1.64	1.24	1.69	0.72	1.00	1.69
		Min-2w	0.47	0.76	0.47	0.63	1.21	0.65	0.21	0.90	1.18	0.63	0.46	0.48	0.21
	Happo	Mean	0.06	0.05	0.11	1.00	0.58	0.14	-	0.26	0.11	0.40	0.06	0.08	0.31
		%	100	100	100	100	100	100	0	100	100	100	100	100	92
		Max-2w	0.06	0.07	0.13	1.97	1.03	0.20	-	0.30	0.13	0.51	0.06	0.11	1.97
		Min-2w	0.06	0.03	0.10	0.32	0.12	0.09	-	0.22	0.10	0.17	0.06	0.04	0.03
	Ijira	Mean	0.21	0.20	0.37	0.48	0.27	0.22	0.07	0.29	0.21	0.37	0.07	0.07	0.25
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-2w	0.21	0.21	0.39	0.73	0.34	0.24	0.11	0.54	0.28	0.64	0.14	0.14	0.73
		Min-2w	0.21	0.19	0.35	0.05	0.20	0.20	0.03	0.03	0.14	0.10	<0.01	<0.01	<0.01
	Oki	Mean	1.46	2.25	2.02	2.65	1.36	1.27	0.39	1.21	0.90	-	-	1.41	1.51
		%	100	100	100	100	100	100	100	100	50	0	0	100	77
		Max-2w	1.95	2.33	2.48	3.22	2.69	1.80	0.54	1.43	0.90	-	-	1.67	3.22
		Min-2w	0.97	2.16	1.55	2.08	0.52	0.74	0.25	0.99	0.90	-	-	1.15	0.25
	Banryu	Mean	3.43	2.36	2.19	2.22	0.87	0.84	0.17	0.92	0.93	1.56	2.11	1.18	1.51
		%	46	100	100	100	100	100	100	100	100	62	100	100	92
		Max-2w	3.43	2.42	2.20	3.60	1.16	1.06	0.28	0.93	1.11	1.69	2.15	1.35	3.60
		Min-2w	3.43	2.30	2.17	1.27	0.59	0.62	0.06	0.90	0.75	1.43	2.06	1.01	0.06
	Yusuhara	Mean	0.94	0.41	0.69	0.92	0.26	0.05	<0.01	<0.01	0.05	0.46	1.01	0.34	0.41
		%	100	100	100	33	100	100	100	100	100	100	100	100	92
		Max-2w	1.38	0.64	1.08	0.92	0.46	0.05	<0.01	0.02	0.09	0.72	1.28	0.42	1.38
		Min-2w	0.50	0.17	0.31	0.92	0.07	0.04	<0.01	<0.01	0.01	0.33	0.73	0.26	<0.01
	Hedo	Mean	1.35	0.72	1.31	2.40	1.13	0.71	0.45	0.40	0.67	1.07	2.16	1.77	1.27
		%	100	100	100	100	100	100	100	100	100	64	100	100	96
		Max-2w	1.47	1.19	2.42	3.29	1.59	0.73	0.59	0.77	0.77	1.94	2.97	2.06	3.29
		Min-2w	1.23	0.26	0.21	1.66	0.67	0.70	0.31	0.04	0.57	1.27	1.34	1.48	0.04
	Ogasawara	Mean	0.74	0.63	1.03	0.94	0.06	0.17	0.14	0.11	0.27	0.42	0.97	0.73	0.53
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-2w	0.89	0.65	1.40	1.47	0.11	0.19	0.14	0.13	0.30	0.82	1.12	0.93	1.47
		Min-2w	0.59	0.60	0.66	0.57	<0.01	0.14	0.13	0.09	0.24	0.08	0.83	0.54	<0.01
	Tokyo	Mean	3.05	4.40	0.24	3.06	2.98	2.92	1.80	3.01	2.49	2.94	3.08	2.49	2.73
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-2w	3.42	5.28	0.34	5.64	3.36	3.03	2.47	3.39	2.53	3.39	3.83	2.67	5.64
		Min-2w	2.68	3.52	0.15	0.35	2.61	2.80	1.14	2.64	2.46	2.62	2.33	2.31	0.15
Malaysia	Petaling Jaya	Mean	1.04	0.74	1.63	1.21	1.43	-	-	-	-	-	-	-	1.23
		%	100	100	100	100	100	0	0	0	0	0	0	0	40
		Max-w	1.81	1.90	2.52	1.39	1.88	-	-	-	-	-	-	-	2.52
		Min-w	<0.01	0.09	0.44	1.05	1.13	-	-	-	-	-	-	-	<0.01
	Tanah Rata	Mean	0.12	0.08	0.12	0.02	0.04	0.62	0.20	0.37	0.26	0.02	0.02	0.12	0.18
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-w	0.24	0.22	0.32	0.03	0.08	1.74	0.25	1.11	0.36	0.07	0.04	0.17	1.74
		Min-w	0.02	0.01	0.01	0.01	0.02	0.09	0.11	0.04	0.16	<0.01	0.02	0.08	<0.01
	Danum Valley	Mean	<0.01	<0.01	<0.01	-	<0.01	0.07	0.03	<0.01	0.46	<0.01	0.03	0.19	0.08
		%	67	100	50	0	50	100	100	100	100	50	50	50	69
		Max-2w	<0.01	<0.01	<0.01	-	<0.01	0.14	0.08	<0.01	0.71	<0.01	0.03	0.19	0.71
		Min-2w	<0.01	<0.01	<0.01	-	<0.01	<0.01	<0.01	<0.01	0.21	<0.01	0.03	0.19	<0.01

Table 4.14 Particulate matter component: NO_3^-

Unit : μg/m³			2012												Annual
Country	Site		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
Myanmar	Yangon	Mean	1.7	1.1	2.2	0.2	0.5	-	0.2	0.4	1.0	0.6	1.15	0.94	0.92
		%	100	100	82	100	100	0	100	100	100	100	100	100	91
		Max-2w	2.8	2.0	3.5	0.4	1.0	-	0.6	0.7	1.0	1.1	2.17	1.74	3.47
		Min-2w	0.0	0.2	1.0	<0.01	0.0	-	<0.01	0.2	0.9	0.1	0.13	0.13	<0.01
Philippines	Mt. Sto. Tomas	Mean	-	-	-	-	-	0.20	0.25	0.21	0.31	0.17	0.13	0.08	0.19
		%	0	0	0	0	0	15	100	100	100	100	100	100	52
		Max-w	-	-	-	-	-	0.20	0.68	0.52	0.45	0.34	0.36	0.13	0.68
		Min-w	-	-	-	-	-	0.20	0.02	0.05	0.13	0.04	0.02	0.04	0.02
Russia	Mondy	Mean	0.03	0.03	<0.01	<0.01	<0.01	0.02	<0.01	0.13	<0.01	<0.01	0.01	0.20	0.03
		%	13	100	38	100	100	100	100	100	100	100	100	100	86
		Max-2w	0.03	0.03	<0.01	<0.01	<0.01	0.02	<0.01	0.13	<0.01	<0.01	0.01	0.20	0.20
		Min-2w	0.03	0.03	<0.01	<0.01	<0.01	0.02	<0.01	0.13	<0.01	<0.01	0.01	0.20	<0.01
	Listvianka	Mean	0.21	0.19	0.19	0.08	0.05	0.05	0.04	0.22	0.07	0.05	0.07	0.27	0.12
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-w	0.29	0.44	0.27	0.15	0.06	0.08	0.08	0.65	0.11	0.10	0.11	0.52	0.65
		Min-w	0.11	0.03	0.11	0.03	0.04	0.04	0.01	<0.01	0.04	0.03	<0.01	0.17	<0.01
	Irkutsk	Mean	2.14	2.08	1.64	0.17	0.32	0.29	0.41	0.25	0.35	0.51	1.35	1.76	0.92
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-w	3.15	4.52	3.20	0.35	0.53	0.63	0.76	0.50	0.98	0.77	2.22	2.48	4.52
		Min-w	1.19	0.86	0.35	0.08	0.04	0.10	<0.01	0.07	0.02	0.27	0.61	0.63	<0.01
	Primorskaya	Mean	0.87	0.50	0.21	0.77	0.08	0.08	0.02	0.11	0.17	1.02	1.69	2.66	0.68
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-2w	1.42	0.95	0.21	0.99	0.11	0.13	0.03	0.15	0.29	1.65	2.10	2.72	2.72
		Min-2w	0.31	0.05	0.21	0.54	0.06	0.03	0.01	0.07	0.05	0.38	1.28	2.60	0.01
Thailand	Bangkok	Mean	3.06	3.07	2.70	1.51	1.16	1.02	0.80	0.78	0.19	5.32	0.24	3.06	1.91
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-10d	3.62	4.44	3.12	2.39	1.77	1.53	1.23	1.30	0.46	8.97	0.38	3.35	8.97
		Min-10d	2.47	2.05	2.07	0.09	0.12	0.07	0.16	0.02	0.04	3.21	0.08	2.86	0.02
	Khanchanaburi	Mean	-	-	0.08	-	-	-	0.01	-	-	-	0.20	-	0.10
	(Vachiralongkorn Dam)	%	0	0	53	0	0	0	42	0	0	0	50	0	12
		Max-2w	-	-	0.08	-	-	-	0.01	-	-	-	0.20	-	0.20
		Min-2w	-	-	0.08	-	-	-	0.01	-	-	-	0.20	-	0.01
	Chiangmai	Mean	-	-	-	0.35	0.48	0.52	0.39	0.22	0.22	0.27	0.28	0.06	0.31
	(Mae Hia)	%	0	0	0	100	97	100	97	97	97	97	97	100	73
		Max-10d	-	-	-	0.59	0.79	0.86	0.73	0.48	0.47	0.44	0.40	0.10	0.86
		Min-10d	-	-	-	0.22	0.17	0.13	0.10	0.08	0.08	0.08	0.15	<0.01	<0.01
	Nakhon Ratchasima	Mean	-	-	-	0.35	0.57	0.57	0.24	0.44	0.03	0.07	0.12	0.08	0.28
		%	0	0	0	100	100	100	100	100	100	100	100	100	74
		Max-10d	-	-	-	0.51	1.17	1.09	0.68	0.64	0.06	0.09	0.14	0.15	1.17
		Min-10d	-	-	-	0.12	<0.01	<0.01	<0.01	0.13	<0.01	0.05	0.10	0.04	<0.01
Vietnam	Hanoi	Mean	10.28	12.30	9.96	8.01	3.67	2.19	1.09	1.47	1.09	7.22	3.18	6.64	5.57
		%	75	100	100	100	100	75	75	100	100	100	100	100	94
		Max-w	18.59	14.85	16.71	10.14	4.91	3.02	1.51	2.63	2.06	8.35	8.54	16.75	18.59
		Min-w	5.36	10.53	0.49	6.61	1.96	1.61	0.87	0.41	0.41	4.60	0.35	0.75	0.35
	Hoa Binh	Mean	2.17	1.45	1.47	0.77	0.49	0.55	0.22	0.28	0.47	0.80	1.37	1.02	0.92
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-w	4.41	3.34	1.93	0.94	0.82	0.65	0.31	0.36	0.68	1.10	3.43	2.15	4.41
		Min-w	0.69	0.50	0.77	0.60	0.13	0.48	0.16	0.21	0.35	0.43	0.35	0.26	0.13

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
% : monthly or annual percentages of period of available data

Table 4.15 Particulate matter component: Cl^-

Unit : μg/m³			2012												Annual
Country	Site		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
Cambodia	Phnom Penh	Mean	0.17	0.33	0.32	0.16	0.14	0.42	0.34	0.30	0.12	0.18	0.17	0.15	0.24
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-2w	0.24	0.39	0.59	0.16	0.15	0.52	0.41	0.38	0.13	0.18	0.17	0.21	0.59
		Min-2w	0.10	0.28	0.16	0.16	0.13	0.33	0.27	0.24	0.12	0.18	0.17	0.09	0.1
Indonesia	Serpong	Mean	0.24	0.19	0.10	0.37	0.08	0.12	0.19	0.20	0.23	0.12	0.08	0.06	0.16
		%	97	100	100	100	100	100	100	100	100	100	100	91	99
		Max-2w	0.40	0.33	0.15	0.71	0.12	0.17	0.29	0.23	0.28	0.13	0.11	0.07	0.71
		Min-2w	0.07	0.04	0.07	0.04	0.05	0.08	0.10	0.17	0.19	0.10	0.04	0.05	0.04
Japan	Rishiri	Mean	0.76	1.95	2.47	2.86	1.37	0.15	0.33	0.93	2.44	4.03	2.52	2.75	1.94
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-2w	0.96	1.97	3.62	3.20	2.98	0.22	0.57	1.43	3.38	7.40	3.03	4.66	7.40
		Min-2w	0.55	1.92	1.33	2.52	0.53	0.07	0.08	0.42	1.50	2.16	2.01	0.83	0.07
	Ochiishi	Mean	4.48	3.76	5.27	2.31	1.86	1.47	0.64	0.51	3.69	6.27	1.41	5.39	3.06
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-2w	5.00	7.49	5.62	2.53	1.98	1.66	0.91	0.69	5.05	8.56	1.41	8.21	8.56
		Min-2w	3.97	0.03	4.93	2.09	1.73	1.27	0.16	0.33	2.34	3.98	1.41	2.56	0.03
	Tappi	Mean	6.19	8.14	6.34	9.43	1.16	0.22	0.59	0.28	1.08	7.31	19.22	38.19	8.15
		%	100	100	100	100	67	100	100	100	100	100	100	100	96
		Max-2w	7.71	9.03	8.96	16.89	1.40	0.27	1.10	0.35	1.12	12.93	32.87	59.00	59.00
		Min-2w	4.67	7.25	3.73	1.97	0.91	0.18	0.09	0.21	1.05	2.02	5.56	17.37	0.09
	Sado-seki	Mean	3.88	8.69	5.38	0.95	0.62	0.92	0.25	0.50	0.77	4.22	5.99	6.29	3.02
		%	100	50	100	67	100	100	100	100	100	100	100	100	92
		Max-2w	3.90	8.69	6.20	1.04	1.04	1.68	0.48	0.69	1.01	5.55	8.55	7.10	8.69
		Min-2w	3.86	8.69	4.55	0.86	0.21	0.16	0.01	0.31	0.54	1.97	3.42	5.48	0.01
	Happo	Mean	<0.01	<0.01	<0.01	0.06	0.01	<0.01	-	0.04	0.02	0.04	<0.01	<0.01	0.02
		%	100	100	100	100	100	100	0	100	100	100	100	100	92
		Max-2w	0.01	<0.01	<0.01	0.14	0.01	0.01	-	0.07	0.03	0.07	<0.01	<0.01	0.14
		Min-2w	<0.01	<0.01	<0.01	0.01	<0.01	<0.01	-	0.02	<0.01	0.01	<0.01	<0.01	<0.01
	Ijira	Mean	0.02	0.01	0.07	0.03	0.01	<0.01	<0.01	<0.01	0.02	0.04	0.02	0.01	0.02
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-2w	0.04	0.02	0.09	0.06	0.02	<0.01	0.02	0.01	0.03	0.05	0.04	0.02	0.09
		Min-2w	<0.01	<0.01	0.04	<0.01	<0.01	<0.01	<0.01	<0.01	0.01	0.04	<0.01	<0.01	<0.01
	Oki	Mean	4.64	5.89	4.72	10.65	0.49	1.32	0.14	0.95	1.15	-	-	12.42	4.20
		%	100	100	100	100	100	100	100	100	50	0	0	100	77
		Max-2w	4.93	6.76	5.36	19.61	1.06	2.17	0.23	1.20	1.15	-	-	15.88	19.61
		Min-2w	4.35	5.01	4.08	1.70	0.08	0.47	0.04	0.71	1.15	-	-	8.96	0.04
	Banryu	Mean	1.03	2.14	1.62	1.08	0.15	0.36	0.03	0.27	0.18	1.46	1.62	1.93	0.99
		%	46	100	100	100	100	100	100	100	100	62	100	100	92
		Max-2w	1.03	2.40	1.64	2.44	0.20	0.60	0.03	0.32	0.18	1.69	1.96	2.45	2.45
		Min-2w	1.03	1.88	1.59	0.13	0.09	0.13	0.02	0.22	0.17	1.23	1.29	1.42	0.02
	Yusuhara	Mean	0.05	1.49	0.08	0.03	0.01	<0.01	<0.01	0.06	0.02	0.06	0.17	0.06	0.17
		%	100	100	100	33	100	100	100	100	100	100	100	100	92
		Max-2w	0.06	2.98	0.15	0.03	0.02	<0.01	0.01	0.09	0.04	0.13	0.25	0.06	2.98
		Min-2w	0.03	<0.01	0.02	0.03	<0.01	<0.01	<0.01	0.04	<0.01	0.02	0.10	0.06	<0.01
	Hedo	Mean	6.47	3.40	3.01	4.97	3.99	5.13	4.05	5.40	3.23	13.96	5.17	7.06	6.02
		%	100	100	100	100	100	100	100	100	100	64	100	100	96
		Max-2w	7.74	5.46	5.63	9.45	6.34	5.59	4.75	7.49	4.07	37.26	5.89	7.29	37.26
		Min-2w	5.20	1.35	0.38	2.73	1.64	4.67	3.35	3.31	2.38	4.62	4.44	6.84	0.38
	Ogasawara	Mean	3.77	3.01	3.94	3.59	0.87	1.52	3.13	4.91	4.57	5.09	3.75	3.62	3.55
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-2w	4.59	3.45	4.26	5.33	1.74	2.16	3.84	5.49	4.63	6.39	4.08	4.21	6.39
		Min-2w	2.94	2.56	3.62	1.17	0.01	0.87	2.41	4.32	4.50	3.59	3.43	3.02	0.01
	Tokyo	Mean	0.82	0.72	0.02	0.55	0.08	0.27	0.19	0.38	0.40	0.83	0.77	0.68	0.49
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-2w	0.90	0.74	0.02	1.09	0.08	0.31	0.31	0.44	0.70	1.06	1.22	0.80	1.22
		Min-2w	0.74	0.70	0.02	0.16	0.08	0.23	0.08	0.31	0.11	0.68	0.33	0.55	0.02
Malaysia	Petaling Jaya	Mean	0.11	0.04	0.09	0.14	0.27	-	-	-	-	-	-	-	0.13
		%	100	100	100	100	100	0	0	0	0	0	0	0	40
		Max-w	0.20	0.12	0.24	0.17	0.29	-	-	-	-	-	-	-	0.29
		Min-w	<0.01	<0.01	0.02	0.10	0.23	-	-	-	-	-	-	-	<0.01
	Tanah Rata	Mean	0.06	0.04	0.03	0.01	0.04	0.06	0.02	0.03	<0.01	0.02	<0.01	0.10	0.03
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-w	0.14	0.10	0.06	0.01	0.04	0.15	0.03	0.07	0.02	0.03	0.02	0.12	0.15
		Min-w	<0.01	<0.01	<0.01	0.01	0.03	0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.07	<0.01
	Danum Valley	Mean	<0.01	0.02	<0.01	-	<0.01	0.03	<0.01	<0.01	0.04	<0.01	<0.01	0.19	0.02
		%	67	100	50	0	50	100	100	100	100	50	50	50	69
		Max-2w	<0.01	0.02	<0.01	-	<0.01	0.05	<0.01	<0.01	0.07	<0.01	<0.01	0.19	0.19
		Min-2w	<0.01	0.02	<0.01	-	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.19	<0.01

Table 4.15 Particulate matter component: Cl^-

Unit : μg/m³			2012												Annual
Country	Site		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
Myanmar	Yangon	Mean	0.8	0.7	0.6	0.5	0.6	-	1.1	0.5	0.3	0.3	0.22	0.18	0.56
		%	100	100	82	100	100	0	100	100	100	100	100	100	91
		Max-2w	0.9	1.1	0.7	0.9	1.1	-	1.5	0.6	0.5	0.4	0.41	0.32	1.48
		Min-2w	0.5	0.2	0.5	0.2	0.1	-	0.7	0.3	0.1	0.1	0.02	0.04	0.02
Philippines	Mt. Sto. Tomas	Mean	-	-	-	-	-	0.01	0.07	0.04	0.03	0.06	0.06	0.03	0.05
		%	0	0	0	0	0	15	100	100	100	100	100	100	52
		Max-w	-	-	-	-	-	0.01	0.16	0.06	0.06	0.11	0.10	0.04	0.16
		Min-w	-	-	-	-	-	0.01	0.02	0.03	<0.01	<0.01	<0.01	<0.01	<0.01
Russia	Mondy	Mean	0.04	0.04	0.57	0.36	0.29	0.05	0.05	0.36	0.11	0.11	0.01	0.84	0.24
		%	13	100	38	100	100	100	100	100	100	100	100	100	86
		Max-2w	0.04	0.04	0.57	0.36	0.30	0.05	0.05	0.36	0.11	0.11	0.01	0.84	0.84
		Min-2w	0.04	0.04	0.57	0.36	0.28	0.05	0.05	0.36	0.11	0.11	0.01	0.84	0.01
	Listvianka	Mean	0.02	0.06	0.91	0.70	0.06	0.61	0.06	0.27	0.02	0.02	0.07	0.10	0.26
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-w	0.02	0.12	2.51	1.98	0.08	0.85	0.13	0.54	0.06	0.04	0.20	0.18	2.51
		Min-w	0.01	0.02	0.08	0.06	0.03	0.22	0.02	0.02	<0.01	0.01	0.03	0.04	<0.01
	Irkutsk	Mean	0.72	0.35	0.81	0.39	0.70	0.39	0.25	0.08	0.16	0.28	0.52	0.84	0.46
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-w	2.08	0.67	1.20	0.62	1.07	0.92	0.39	0.18	0.45	0.44	0.59	1.70	2.08
		Min-w	0.19	0.19	0.39	0.19	0.21	0.08	0.04	0.04	0.02	0.17	0.38	0.09	0.02
	Primorskaya	Mean	0.05	0.04	0.17	0.34	0.07	0.04	0.11	0.21	0.07	0.08	1.11	1.19	0.29
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-2w	0.06	0.04	0.32	0.46	0.10	0.05	0.20	0.22	0.10	0.09	1.70	1.50	1.70
		Min-2w	0.04	0.04	0.03	0.23	0.05	0.02	0.02	0.19	0.05	0.07	0.53	0.87	0.02
Thailand	Bangkok	Mean	0.17	0.25	0.18	0.11	0.28	0.84	0.55	0.34	0.09	0.07	0.10	0.12	0.26
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-10d	0.25	0.48	0.24	0.24	0.58	1.51	0.90	0.78	0.23	0.10	0.24	0.17	1.51
		Min-10d	0.08	0.06	0.05	0.03	0.01	0.07	0.37	<0.01	0.02	0.01	<0.01	0.09	<0.01
	Khanchanaburi	Mean	-	-	<0.01	-	-	-	<0.01	-	-	-	<0.01	-	<0.01
	(Vachiralongkorn Dam)	%	0	0	53	0	0	0	42	0	0	0	50	0	12
		Max-2w	-	-	<0.01	-	-	-	<0.01	-	-	-	<0.01	-	<0.01
		Min-2w	-	-	<0.01	-	-	-	<0.01	-	-	-	<0.01	-	<0.01
	Chiangmai	Mean	-	-	-	0.11	0.17	0.34	0.17	0.05	0.06	<0.01	0.10	0.13	0.13
	(Mae Hia)	%	0	0	0	100	97	100	97	97	97	97	97	100	73
		Max-10d	-	-	-	0.18	0.30	0.62	0.24	0.06	0.12	0.01	0.12	0.20	0.62
		Min-10d	-	-	-	0.06	0.07	0.16	0.10	0.04	<0.01	<0.01	0.07	0.08	<0.01
	Nakhon Ratchasima	Mean	-	-	-	0.11	0.03	0.32	0.13	0.14	<0.01	0.09	0.03	<0.01	0.10
		%	0	0	0	100	100	100	100	100	100	100	100	100	74
		Max-10d	-	-	-	0.14	0.07	0.65	0.35	0.28	0.01	0.11	0.03	0.01	0.65
		Min-10d	-	-	-	0.08	<0.01	<0.01	<0.01	0.04	<0.01	0.06	0.03	<0.01	<0.01
Vietnam	Hanoi	Mean	1.11	1.19	1.94	1.35	0.67	0.61	0.72	0.37	1.26	1.85	1.06	1.08	1.11
		%	75	100	100	100	100	75	75	100	100	100	100	100	94
		Max-w	2.11	1.67	4.01	1.71	1.05	0.75	1.65	0.60	2.25	2.52	1.67	2.37	4.01
		Min-w	0.22	0.74	0.05	0.89	0.23	0.44	0.17	0.11	0.25	1.21	0.44	0.14	0.05
	Hoa Binh	Mean	0.06	0.05	0.08	0.12	0.27	0.42	0.28	0.23	1.74	0.67	0.69	0.68	0.43
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-w	0.17	0.18	0.18	0.29	0.50	0.77	0.45	0.45	4.87	0.76	1.33	1.01	4.87
		Min-w	0.02	<0.01	<0.01	<0.01	0.05	0.09	0.18	0.06	0.44	0.52	0.44	0.38	<0.01

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
% : monthly or annual percentages of period of available data

Table 4.16 Particulate matter component: NH_4^+

Unit : μg/m³			2012												Annual
Country	Site		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
Cambodia	Phnom Penh	Mean	0.37	0.71	0.37	0.31	0.30	0.31	0.23	0.15	0.20	0.69	0.27	0.29	0.34
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-2w	0.42	0.76	0.44	0.35	0.34	0.35	0.25	0.21	0.21	0.73	0.28	0.36	0.76
		Min-2w	0.32	0.66	0.27	0.27	0.25	0.26	0.20	0.09	0.19	0.66	0.25	0.22	0.09
Indonesia	Serpong	Mean	0.27	0.26	1.52	1.48	0.54	0.61	1.33	0.54	0.50	1.79	0.02	0.23	0.78
		%	97	100	100	100	100	100	100	100	100	100	100	91	99
		Max-2w	0.48	0.42	4.08	2.45	0.79	0.70	1.74	0.71	0.62	2.65	0.03	0.44	4.08
		Min-2w	0.07	0.10	0.19	0.51	0.28	0.52	0.93	0.43	0.38	0.94	0.01	0.01	0.01
Japan	Rishiri	Mean	0.18	0.51	0.59	0.48	0.56	0.58	0.52	0.29	0.24	0.24	0.28	0.45	0.41
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-2w	0.22	0.55	0.67	0.49	0.63	0.75	0.73	0.42	0.32	0.31	0.40	0.73	0.75
		Min-2w	0.14	0.46	0.51	0.48	0.47	0.41	0.32	0.17	0.16	0.17	0.17	0.17	0.14
	Ochiishi	Mean	0.30	0.73	0.46	0.31	0.17	0.21	0.38	0.24	0.34	0.20	0.07	0.24	0.32
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-2w	0.36	0.97	0.47	0.47	0.31	0.31	0.64	0.29	0.46	0.34	0.07	0.41	0.97
		Min-2w	0.25	0.49	0.44	0.16	0.03	0.11	0.22	0.20	0.22	0.07	0.07	0.06	0.03
	Tappi	Mean	0.22	0.49	0.62	0.64	0.66	0.59	1.09	0.75	0.50	0.23	0.35	0.38	0.53
		%	100	100	100	100	67	100	100	100	100	100	100	100	96
		Max-2w	0.23	0.56	0.72	0.78	0.85	0.79	1.50	0.84	0.53	0.38	0.37	0.48	1.50
		Min-2w	0.21	0.41	0.51	0.51	0.48	0.39	0.67	0.66	0.48	0.10	0.33	0.29	0.10
	Sado-seki	Mean	0.29	0.45	0.49	0.42	1.02	0.60	0.95	0.85	0.67	0.35	0.19	0.30	0.54
		%	100	50	100	67	100	100	100	100	100	100	100	100	92
		Max-2w	0.35	0.45	0.65	0.58	1.34	0.95	1.45	1.06	0.68	0.60	0.20	0.38	1.45
		Min-2w	0.22	0.45	0.33	0.27	0.70	0.25	0.44	0.64	0.67	0.15	0.18	0.22	0.15
	Happo	Mean	0.17	0.25	0.41	0.83	1.90	0.76	-	1.09	0.52	0.57	0.13	0.09	0.64
		%	100	100	100	100	100	100	0	100	100	100	100	100	92
		Max-2w	0.21	0.29	0.49	1.12	2.07	0.88	-	1.39	0.56	0.91	0.13	0.13	2.07
		Min-2w	0.13	0.22	0.33	0.28	1.73	0.64	-	0.80	0.49	0.30	0.13	0.06	0.06
	Ijira	Mean	0.52	0.83	0.75	0.81	1.96	0.96	0.40	0.40	0.75	0.57	0.14	0.23	0.69
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-2w	0.55	1.06	0.97	1.17	2.24	1.02	0.59	0.79	0.76	1.05	0.25	0.45	2.24
		Min-2w	0.49	0.60	0.54	0.24	1.68	0.91	0.22	<0.01	0.74	0.16	0.03	0.01	<0.01
	Oki	Mean	0.70	1.17	1.34	1.32	1.14	0.75	1.04	0.55	0.47	-	-	0.55	0.94
		%	100	100	100	100	100	100	100	100	50	0	0	100	77
		Max-2w	0.89	1.17	1.43	1.54	1.77	0.78	1.12	0.62	0.47	-	-	0.57	1.77
		Min-2w	0.50	1.17	1.25	1.11	0.67	0.73	0.96	0.48	0.47	-	-	0.52	0.47
	Banryu	Mean	1.91	1.55	1.61	1.45	1.87	1.06	1.36	0.58	0.89	1.12	0.92	0.75	1.24
		%	46	100	100	100	100	100	100	100	100	62	100	100	92
		Max-2w	1.91	1.61	1.92	1.63	2.20	1.46	1.93	0.65	1.03	1.14	0.97	0.81	2.20
		Min-2w	1.91	1.48	1.31	1.11	1.54	0.66	0.80	0.50	0.76	1.09	0.88	0.68	0.50
	Yusuhara	Mean	1.42	0.71	1.58	0.85	2.44	0.91	0.97	0.24	0.77	0.96	1.23	0.64	1.06
		%	100	100	100	33	100	100	100	100	100	100	100	100	92
		Max-2w	1.97	1.04	1.79	0.85	3.11	1.34	1.10	0.35	1.13	1.62	1.56	0.80	3.11
		Min-2w	0.88	0.38	1.38	0.85	1.77	0.47	0.83	0.12	0.40	0.35	0.91	0.47	0.12
	Hedo	Mean	0.90	0.55	0.74	1.03	0.91	0.18	0.16	0.10	1.00	0.63	0.95	0.85	0.71
		%	100	100	100	100	100	100	100	100	100	64	100	100	96
		Max-2w	1.09	0.93	1.33	1.11	1.63	0.19	0.22	0.19	1.54	1.29	1.15	0.92	1.63
		Min-2w	0.72	0.17	0.14	0.98	0.19	0.17	0.10	0.02	0.45	0.61	0.74	0.77	0.02
	Ogasawara	Mean	0.41	0.30	0.37	0.40	0.07	0.08	0.05	0.05	0.08	0.12	0.30	0.30	0.22
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-2w	0.52	0.31	0.54	0.61	0.10	0.08	0.07	0.06	0.08	0.27	0.40	0.38	0.61
		Min-2w	0.31	0.30	0.20	0.13	0.05	0.07	0.02	0.05	0.07	0.03	0.20	0.22	0.02
	Tokyo	Mean	1.48	2.14	0.16	1.02	1.98	0.87	1.19	0.59	0.88	0.77	1.16	1.13	1.10
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-2w	1.63	2.58	0.20	1.75	1.99	0.90	1.53	0.63	0.89	0.98	1.52	1.23	2.58
		Min-2w	1.33	1.71	0.13	0.19	1.98	0.85	0.85	0.56	0.86	0.55	0.81	1.04	0.13
Malaysia	Petaling Jaya	Mean	0.31	0.45	0.97	0.95	1.02	-	-	-	-	-	-	-	0.75
		%	100	100	100	100	100	0	0	0	0	0	0	0	40
		Max-w	0.53	0.79	1.82	1.14	1.25	-	-	-	-	-	-	-	1.82
		Min-w	<0.01	<0.01	0.29	0.70	0.68	-	-	-	-	-	-	-	<0.01
	Tanah Rata	Mean	0.17	0.30	0.41	0.33	0.36	0.88	0.41	1.07	0.70	0.31	0.23	0.22	0.46
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-w	0.23	0.45	0.75	0.49	0.61	1.65	0.89	1.84	1.06	0.48	0.50	0.53	1.84
		Min-w	0.11	0.09	0.14	0.23	0.15	0.21	0.17	0.42	0.26	0.15	0.11	0.05	0.05
	Danum Valley	Mean	0.02	0.02	<0.01	-	<0.01	0.03	<0.01	0.02	0.30	0.50	0.04	0.08	0.08
		%	67	100	50	0	50	100	100	100	100	50	50	50	69
		Max-2w	0.03	0.03	<0.01	-	<0.01	0.06	0.01	0.02	0.60	0.50	0.04	0.08	0.60
		Min-2w	<0.01	<0.01	<0.01	-	<0.01	<0.01	<0.01	0.01	<0.01	0.50	0.04	0.08	<0.01

Table 4.16 Particulate matter component: NH_4^+

Unit : μg/m³			2012												Annual
Country	Site		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
Myanmar	Yangon	Mean	0.9	0.9	1.0	0.1	0.4	-	<0.01	0.1	0.2	0.2	0.23	0.10	0.38
		%	100	100	82	100	100	0	100	100	100	100	100	100	91
		Max-2w	1.4	1.2	1.3	0.2	0.5	-	<0.01	0.1	0.3	0.4	0.34	0.19	1.36
		Min-2w	0.0	0.6	0.6	<0.01	0.2	-	<0.01	<0.01	0.2	0.1	0.11	<0.01	<0.01
Philippines	Mt. Sto. Tomas	Mean	-	-	-	-	-	<0.01	<0.01	<0.01	<0.01	0.04	<0.01	<0.01	<0.01
		%	0	0	0	0	0	15	100	100	100	100	100	100	52
		Max-w	-	-	-	-	-	<0.01	<0.01	<0.01	0.01	0.07	0.03	0.01	0.07
		Min-w	-	-	-	-	-	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Russia	Mondy	Mean	0.03	0.04	0.10	0.05	0.07	<0.01	<0.01	<0.01	0.01	<0.01	0.04	0.13	0.04
		%	13	100	38	100	100	100	100	100	100	100	100	100	86
		Max-2w	0.03	0.04	0.10	0.05	0.12	<0.01	<0.01	<0.01	0.01	<0.01	0.04	0.13	0.13
		Min-2w	0.03	0.04	0.10	0.05	0.03	<0.01	<0.01	<0.01	0.01	<0.01	0.04	0.13	<0.01
	Listvianka	Mean	0.40	0.29	0.35	0.17	0.21	0.19	0.14	0.09	0.19	0.24	0.27	0.07	0.22
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-w	0.56	0.51	0.62	0.27	0.28	0.25	0.25	0.15	0.22	0.40	0.35	0.09	0.62
		Min-w	0.29	0.14	0.19	0.08	0.15	0.15	0.08	<0.01	0.15	0.10	0.19	0.05	<0.01
	Irkutsk	Mean	2.08	1.77	0.85	0.21	0.49	0.31	0.28	0.21	0.39	0.21	1.17	1.63	0.80
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-w	2.94	3.19	1.39	0.41	0.83	0.41	0.51	0.44	0.75	0.29	1.67	2.39	3.19
		Min-w	1.34	0.55	0.30	0.04	0.28	0.14	<0.01	0.02	0.08	0.06	0.68	0.45	<0.01
	Primorskaya	Mean	1.42	0.40	0.54	0.15	0.32	0.47	0.34	0.55	0.50	0.54	1.56	1.62	0.70
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-2w	1.81	0.56	0.96	0.21	0.34	0.55	0.45	0.70	0.51	0.69	1.75	1.83	1.83
		Min-2w	1.02	0.24	0.13	0.10	0.30	0.40	0.23	0.41	0.50	0.40	1.36	1.41	0.10
Thailand	Bangkok	Mean	0.72	1.15	0.01	0.92	0.26	0.13	0.18	0.13	0.16	0.68	0.92	1.12	0.53
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-10d	0.78	1.51	0.02	1.76	0.40	0.19	0.25	0.19	0.33	1.47	2.60	1.36	2.60
		Min-10d	0.64	0.89	<0.01	0.17	0.03	0.03	0.12	0.04	0.04	0.13	0.01	0.84	<0.01
	Khanchanaburi	Mean	-	-	<0.01	-	-	-	<0.01	-	-	-	0.21	-	0.07
	(Vachiralongkorn Dam)	%	0	0	53	0	0	0	42	0	0	0	50	0	12
		Max-2w	-	-	<0.01	-	-	-	<0.01	-	-	-	0.21	-	0.21
		Min-2w	-	-	<0.01	-	-	-	<0.01	-	-	-	0.21	-	<0.01
	Chiangmai	Mean	-	-	-	0.50	0.29	0.15	0.11	0.04	0.04	0.69	0.19	0.07	0.23
	(Mae Hia)	%	0	0	0	100	97	100	97	97	97	97	97	100	73
		Max-10d	-	-	-	0.88	0.44	0.36	0.16	0.11	0.05	1.03	0.31	0.11	1.03
		Min-10d	-	-	-	0.15	0.05	0.02	0.07	<0.01	0.03	0.05	0.13	0.02	<0.01
	Nakhon Ratchasima	Mean	-	-	-	1.05	0.77	0.35	0.13	0.40	0.88	1.99	1.00	0.99	0.84
		%	0	0	0	100	100	100	100	100	100	100	100	100	74
		Max-10d	-	-	-	2.00	1.77	0.75	0.40	0.45	1.92	2.94	1.63	1.41	2.94
		Min-10d	-	-	-	0.23	<0.01	<0.01	<0.01	0.36	0.03	0.71	0.59	0.43	<0.01
Vietnam	Hanoi	Mean	5.75	7.04	4.20	2.75	1.44	2.26	0.36	0.80	0.64	4.75	1.54	3.19	2.83
		%	75	100	100	100	100	75	75	100	100	100	100	100	94
		Max-w	8.92	8.07	9.29	4.63	2.22	3.00	0.49	1.43	1.63	8.92	5.08	9.04	9.29
		Min-w	3.41	6.02	0.12	1.71	0.69	0.81	0.30	0.13	0.15	0.57	0.11	0.29	0.11
	Hoa Binh	Mean	1.62	1.05	0.71	0.30	0.82	0.45	0.18	0.35	0.19	0.58	1.01	0.57	0.66
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-w	3.16	3.04	1.91	0.62	2.02	0.81	0.57	0.83	0.39	0.90	3.46	1.73	3.46
		Min-w	0.50	0.07	0.19	0.15	0.12	0.17	<0.01	0.09	0.03	0.19	0.15	0.10	<0.01

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
% : monthly or annual percentages of period of available data

Table 4.17 Particulate matter component: Na^+

Unit : μg/m³			2012												Annual
Country	Site		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
Cambodia	Phnom Penh	Mean	0.68	1.30	0.75	0.33	0.35	0.73	0.54	0.52	0.17	0.69	0.31	0.38	0.57
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-2w	0.83	1.59	1.44	0.34	0.38	0.88	0.64	0.90	0.20	0.72	0.33	0.46	1.59
		Min-2w	0.53	1.01	0.34	0.33	0.32	0.58	0.44	0.27	0.14	0.65	0.29	0.31	0.14
Indonesia	Serpong	Mean	0.40	0.26	0.66	0.19	0.31	0.42	0.34	0.93	0.69	0.48	0.28	0.06	0.45
		%	97	100	100	100	100	100	100	100	100	100	100	91	99
		Max-2w	0.75	0.45	1.50	0.32	0.52	0.56	0.66	1.17	1.20	0.71	0.33	0.09	1.50
		Min-2w	0.04	0.07	0.16	0.06	0.10	0.27	0.01	0.68	0.18	0.26	0.23	0.03	0.01
Japan	Rishiri	Mean	0.67	1.57	1.95	2.04	1.40	0.55	0.56	1.16	1.90	2.69	1.82	2.23	1.58
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-2w	0.78	1.62	2.54	2.19	2.35	0.65	0.89	1.64	2.65	4.62	2.26	3.73	4.62
		Min-2w	0.56	1.51	1.36	1.89	0.89	0.45	0.23	0.67	1.15	1.61	1.37	0.73	0.23
	Ochiishi	Mean	2.68	2.41	3.54	1.68	1.38	1.53	0.82	0.84	2.82	3.91	0.86	3.30	2.15
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-2w	3.04	4.52	3.73	2.15	1.73	1.56	1.18	0.94	3.09	5.44	0.86	5.10	5.44
		Min-2w	2.33	0.30	3.34	1.20	1.04	1.50	0.45	0.74	2.55	2.37	0.86	1.51	0.30
	Tappi	Mean	3.58	5.25	4.15	5.77	1.34	0.70	1.05	0.93	1.48	4.54	11.10	21.83	5.12
		%	100	100	100	100	67	100	100	100	100	100	100	100	96
		Max-2w	4.40	5.85	5.61	9.73	1.53	0.84	1.33	1.10	1.65	7.82	18.43	32.98	32.98
		Min-2w	2.76	4.65	2.68	1.81	1.15	0.55	0.78	0.77	1.30	1.68	3.77	10.68	0.55
	Sado-seki	Mean	2.63	5.45	3.52	1.08	1.53	1.19	1.04	1.21	1.29	2.99	3.80	4.01	2.38
		%	100	50	100	67	100	100	100	100	100	100	100	100	92
		Max-2w	2.74	5.45	4.08	1.20	2.09	1.67	1.43	1.35	1.33	3.97	5.34	4.47	5.45
		Min-2w	2.53	5.45	2.95	0.95	0.98	0.72	0.65	1.08	1.24	1.61	2.25	3.56	0.65
	Happo	Mean	0.03	0.05	0.07	0.10	0.09	0.03	-	0.09	0.06	0.24	0.11	0.02	0.09
		%	100	100	100	100	100	100	0	100	100	100	100	100	92
		Max-2w	0.04	0.05	0.09	0.17	0.11	0.04	-	0.11	0.07	0.29	0.11	0.02	0.29
		Min-2w	0.03	0.05	0.05	0.01	0.07	0.03	-	0.07	0.05	0.16	0.11	0.01	0.01
	Ijira	Mean	0.09	0.14	0.20	0.18	0.23	0.22	0.06	0.27	0.21	0.24	0.03	0.04	0.16
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-2w	0.13	0.17	0.20	0.32	0.23	0.25	0.10	0.55	0.27	0.38	0.06	0.09	0.55
		Min-2w	0.04	0.10	0.20	0.01	0.23	0.20	0.01	<0.01	0.15	0.06	<0.01	<0.01	<0.01
	Oki	Mean	3.46	4.37	3.67	6.93	1.09	1.67	0.93	1.45	1.34	-	-	7.72	3.25
		%	100	100	100	100	100	100	100	100	50	0	0	100	77
		Max-2w	3.92	4.88	3.89	11.93	2.10	2.53	1.42	1.48	1.34	-	-	9.66	11.93
		Min-2w	2.99	3.86	3.46	1.92	0.49	0.80	0.45	1.42	1.34	-	-	5.79	0.45
	Banryu	Mean	1.50	1.84	1.73	1.58	0.95	0.97	0.40	0.77	0.74	1.59	1.84	1.59	1.29
		%	46	100	100	100	100	100	100	100	100	62	100	100	92
		Max-2w	1.50	2.08	1.82	2.55	1.27	1.14	0.45	0.92	0.79	1.79	2.20	2.03	2.55
		Min-2w	1.50	1.59	1.65	0.87	0.63	0.79	0.35	0.62	0.68	1.39	1.48	1.14	0.35
	Yusuhara	Mean	0.29	1.11	0.34	0.27	0.32	0.11	0.24	0.32	0.24	0.43	0.62	0.29	0.39
		%	100	100	100	33	100	100	100	100	100	100	100	100	92
		Max-2w	0.36	1.98	0.43	0.27	0.33	0.17	0.27	0.33	0.32	0.60	0.79	0.31	1.98
		Min-2w	0.22	0.24	0.25	0.27	0.32	0.06	0.20	0.32	0.17	0.21	0.45	0.28	0.06
	Hedo	Mean	5.10	2.68	2.33	4.36	3.37	3.48	2.57	3.29	3.30	8.27	4.01	5.22	4.34
		%	100	100	100	100	100	100	100	100	100	64	100	100	96
		Max-2w	5.70	4.51	4.35	6.50	4.08	3.81	2.88	4.63	3.55	21.06	4.81	5.65	21.06
		Min-2w	4.51	0.86	0.30	3.17	2.65	3.16	2.25	1.94	3.05	3.74	3.21	4.80	0.30
	Ogasawara	Mean	2.74	2.33	3.00	2.83	0.70	1.14	1.90	2.84	2.70	3.14	2.98	2.62	2.45
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-2w	3.16	2.57	3.49	3.86	1.39	1.41	2.27	3.21	2.71	3.67	3.22	2.94	3.86
		Min-2w	2.31	2.08	2.51	1.51	<0.01	0.88	1.52	2.48	2.70	2.63	2.74	2.30	<0.01
	Tokyo	Mean	0.27	0.33	0.04	0.90	0.70	1.03	1.00	1.16	0.89	1.21	0.47	0.23	0.71
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-2w	0.29	0.41	0.04	1.33	0.80	1.05	1.07	1.31	1.11	1.43	0.50	0.28	1.43
		Min-2w	0.25	0.25	0.03	0.16	0.60	1.00	0.94	1.02	0.67	1.06	0.45	0.19	0.03
Malaysia	Petaling Jaya	Mean	0.27	0.26	0.31	0.19	0.33	-	-	-	-	-	-	-	0.27
		%	100	100	100	100	100	0	0	0	0	0	0	0	40
		Max-w	0.70	0.67	0.51	0.32	0.50	-	-	-	-	-	-	-	0.70
		Min-w	0.03	0.03	0.05	0.10	0.20	-	-	-	-	-	-	-	0.03
	Tanah Rata	Mean	0.16	0.19	0.17	0.03	0.07	0.17	0.13	0.16	0.12	0.10	0.07	0.09	0.12
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-w	0.28	0.29	0.42	0.07	0.11	0.20	0.18	0.26	0.15	0.18	0.13	0.17	0.42
		Min-w	0.05	0.09	0.07	0.01	0.04	0.09	0.08	0.09	0.10	0.03	0.01	0.01	0.01
	Danum Valley	Mean	<0.01	<0.01	<0.01	-	<0.01	<0.01	0.02	<0.01	0.26	0.04	0.11	0.05	0.05
		%	67	100	50	0	50	100	100	100	100	50	50	50	69
		Max-2w	<0.01	<0.01	<0.01	-	<0.01	<0.01	0.06	<0.01	0.47	0.04	0.11	0.05	0.47
		Min-2w	<0.01	<0.01	<0.01	-	<0.01	<0.01	<0.01	<0.01	0.06	0.04	0.11	0.05	<0.01

Table 4.17 Particulate matter component: Na^+

Unit : μg/m³			2012												Annual
Country	Site		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
Myanmar	Yangon	Mean	0.7	1.1	1.2	0.9	1.0	-	1.0	0.6	0.7	0.5	0.28	0.14	0.74
		%	100	100	82	100	100	0	100	100	100	100	100	100	91
		Max-2w	1.0	1.8	1.8	1.0	1.1	-	1.5	0.8	0.7	0.6	0.54	0.27	1.83
		Min-2w	0.4	0.3	0.6	0.8	0.9	-	0.6	0.5	0.6	0.3	0.01	<0.01	<0.01
Philippines	Mt. Sto. Tomas	Mean	-	-	-	-	-	0.03	0.08	0.05	0.06	0.10	0.07	0.06	0.07
		%	0	0	0	0	0	15	100	100	100	100	100	100	52
		Max-w	-	-	-	-	-	0.03	0.23	0.09	0.10	0.19	0.11	0.10	0.23
		Min-w	-	-	-	-	-	0.03	<0.01	0.01	<0.01	0.04	0.04	<0.01	<0.01
Russia	Mondy	Mean	<0.01	<0.01	0.20	0.18	0.04	0.04	0.05	0.10	0.03	0.03	<0.01	0.36	0.08
		%	13	100	38	100	100	100	100	100	100	100	100	100	86
		Max-2w	<0.01	<0.01	0.20	0.18	0.04	0.04	0.05	0.10	0.03	0.03	<0.01	0.36	0.36
		Min-2w	<0.01	<0.01	0.20	0.18	0.03	0.04	0.05	0.10	0.03	0.03	<0.01	0.36	<0.01
	Listvianka	Mean	0.03	0.05	0.87	0.56	0.11	0.54	0.08	0.12	0.04	0.02	0.02	0.19	0.24
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-w	0.04	0.10	2.41	1.57	0.19	0.79	0.09	0.17	0.06	0.03	0.03	0.28	2.41
		Min-w	0.02	0.02	0.06	0.06	0.05	0.23	0.07	0.05	0.02	<0.01	0.02	0.10	<0.01
	Irkutsk	Mean	0.89	0.18	0.47	0.32	0.41	0.26	0.16	0.13	0.06	0.07	0.07	0.35	0.28
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-w	2.83	0.34	0.74	0.55	0.64	0.33	0.30	0.21	0.14	0.10	0.12	0.60	2.83
		Min-w	0.12	0.07	0.34	0.18	0.18	0.15	0.08	0.04	0.02	0.05	0.05	0.19	0.02
	Primorskaya	Mean	0.06	0.18	0.38	0.71	0.35	0.20	0.06	0.19	0.09	0.03	0.27	0.16	0.22
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-2w	0.07	0.24	0.45	0.75	0.49	0.24	0.12	0.28	0.13	0.04	0.51	0.16	0.75
		Min-2w	0.05	0.13	0.31	0.66	0.22	0.15	<0.01	0.09	0.04	0.02	0.03	0.15	<0.01
Thailand	Bangkok	Mean	0.38	1.00	0.32	0.49	0.46	0.64	0.72	0.36	0.09	0.32	0.07	0.34	0.43
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-10d	0.49	1.04	0.48	0.82	0.80	1.00	1.05	0.77	0.22	0.45	0.19	0.44	1.05
		Min-10d	0.21	0.95	0.23	0.09	0.04	0.05	0.32	0.02	0.02	0.19	<0.01	0.29	<0.01
	Khanchanaburi	Mean	-	-	0.16	-	-	-	<0.01	-	-	-	0.06	-	0.07
	(Vachiralongkorn Dam)	%	0	0	53	0	0	0	42	0	0	0	50	0	12
		Max-2w	-	-	0.16	-	-	-	<0.01	-	-	-	0.06	-	0.16
		Min-2w	-	-	0.16	-	-	-	<0.01	-	-	-	0.06	-	<0.01
	Chiangmai	Mean	-	-	-	0.18	0.19	0.19	0.17	0.05	0.24	0.20	0.13	0.11	0.16
	(Mae Hia)	%	0	0	0	100	97	100	97	97	97	97	97	100	73
		Max-10d	-	-	-	0.38	0.34	0.27	0.22	0.08	0.59	0.32	0.15	0.16	0.59
		Min-10d	-	-	-	0.06	0.04	0.06	0.15	0.03	<0.01	0.04	0.13	0.06	<0.01
	Nakhon Ratchasima	Mean	-	-	-	0.11	0.30	0.36	0.18	0.26	0.03	0.14	0.06	0.14	0.18
		%	0	0	0	100	100	100	100	100	100	100	100	100	74
		Max-10d	-	-	-	0.32	0.54	0.59	0.55	0.42	0.06	0.21	0.09	0.19	0.59
		Min-10d	-	-	-	<0.01	<0.01	<0.01	<0.01	0.13	0.01	0.09	0.03	0.10	<0.01
Vietnam	Hanoi	Mean	0.17	0.32	1.30	1.20	0.59	0.47	0.59	0.16	0.67	1.28	0.98	0.44	0.70
		%	75	100	100	100	100	75	75	100	100	100	100	100	94
		Max-w	0.26	0.49	3.40	1.56	1.14	1.06	0.89	0.20	0.96	1.98	2.72	0.80	3.40
		Min-w	0.11	0.09	0.04	0.74	0.07	0.15	0.13	0.05	0.24	0.96	0.15	0.12	0.04
	Hoa Binh	Mean	0.12	0.02	0.17	0.20	0.14	0.28	0.12	0.21	1.05	0.49	0.40	0.60	0.31
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-w	0.21	0.02	0.40	0.36	0.29	0.39	0.20	0.37	2.41	0.60	0.67	1.01	2.41
		Min-w	0.02	0.01	0.01	0.08	0.03	0.22	0.04	0.08	0.37	0.33	0.22	0.26	0.01

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
% : monthly or annual percentages of period of available data

Table 4.18 Particulate matter component: K^+

Unit : μg/m³			2012												Annual
Country	Site		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
Cambodia	Phnom Penh	Mean	0.46	0.80	0.57	0.47	0.47	0.36	0.38	0.43	0.31	0.56	0.27	0.36	0.46
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-2w	0.59	0.87	0.82	0.57	0.56	0.43	0.45	0.55	0.40	0.59	0.28	0.39	0.87
		Min-2w	0.33	0.73	0.38	0.38	0.38	0.29	0.31	0.22	0.22	0.53	0.25	0.33	0.22
Indonesia	Serpong	Mean	0.39	0.18	0.27	0.36	0.30	0.45	0.99	0.81	0.39	0.77	0.30	0.15	0.45
		%	97	100	100	100	100	100	100	100	100	100	100	91	99
		Max-2w	0.75	0.32	0.33	0.62	0.51	0.46	1.23	0.96	0.53	0.83	0.43	0.24	1.23
		Min-2w	0.03	0.05	0.16	0.10	0.10	0.44	0.76	0.69	0.26	0.70	0.17	0.06	0.03
Japan	Rishiri	Mean	0.05	0.13	0.14	0.15	0.09	0.06	0.05	0.09	0.11	0.13	0.10	0.15	0.10
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-2w	0.05	0.15	0.15	0.17	0.15	0.06	0.07	0.10	0.14	0.22	0.13	0.24	0.24
		Min-2w	0.05	0.11	0.13	0.13	0.06	0.06	0.03	0.07	0.08	0.08	0.07	0.06	0.03
	Ochiishi	Mean	0.12	0.16	0.17	0.08	0.06	0.07	0.04	0.04	0.11	0.16	0.03	0.13	0.10
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-2w	0.15	0.21	0.17	0.10	0.08	0.08	0.06	0.04	0.12	0.23	0.03	0.22	0.23
		Min-2w	0.10	0.11	0.17	0.06	0.04	0.06	0.03	0.03	0.11	0.09	0.03	0.05	0.03
	Tappi	Mean	0.17	0.26	0.22	0.31	0.13	0.09	0.06	0.06	0.07	0.20	0.48	0.80	0.24
		%	100	100	100	100	67	100	100	100	100	100	100	100	96
		Max-2w	0.19	0.28	0.29	0.44	0.14	0.10	0.06	0.08	0.08	0.34	0.81	1.22	1.22
		Min-2w	0.14	0.25	0.15	0.19	0.11	0.08	0.06	0.05	0.07	0.09	0.15	0.39	0.05
	Sado-seki	Mean	0.16	0.21	0.19	0.10	0.15	0.10	0.09	0.09	0.09	0.16	0.17	0.18	0.14
		%	100	50	100	67	100	100	100	100	100	100	100	100	92
		Max-2w	0.21	0.21	0.23	0.12	0.18	0.10	0.11	0.09	0.10	0.25	0.22	0.20	0.25
		Min-2w	0.11	0.21	0.14	0.08	0.12	0.10	0.08	0.09	0.09	0.09	0.11	0.15	0.08
	Happo	Mean	0.01	0.02	0.02	0.06	0.11	0.08	-	0.04	0.03	0.05	0.01	<0.01	0.04
		%	100	100	100	100	100	100	0	100	100	100	100	100	92
		Max-2w	0.02	0.03	0.02	0.10	0.13	0.11	-	0.04	0.03	0.09	0.01	<0.01	0.13
		Min-2w	<0.01	0.01	0.02	<0.01	0.08	0.05	-	0.03	0.03	0.02	0.01	<0.01	<0.01
	Ijira	Mean	0.03	0.05	0.05	0.06	0.13	0.09	0.04	0.04	0.11	0.06	0.02	0.01	0.06
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-2w	0.04	0.06	0.06	0.12	0.13	0.11	0.06	0.07	0.12	0.10	0.02	0.02	0.13
		Min-2w	0.02	0.03	0.03	<0.01	0.12	0.06	0.01	0.01	0.11	0.01	0.01	<0.01	<0.01
	Oki	Mean	0.22	0.29	0.32	0.39	0.12	0.13	0.12	0.10	0.10	-	-	0.41	0.22
		%	100	100	100	100	100	100	100	100	50	0	0	100	77
		Max-2w	0.25	0.32	0.35	0.60	0.21	0.17	0.18	0.10	0.10	-	-	0.57	0.60
		Min-2w	0.18	0.25	0.29	0.17	0.07	0.10	0.06	0.10	0.10	-	-	0.26	0.06
	Banryu	Mean	0.26	0.21	0.23	0.21	0.18	0.17	0.09	0.09	0.10	0.17	0.19	0.10	0.16
		%	46	100	100	100	100	100	100	100	100	62	100	100	92
		Max-2w	0.26	0.22	0.25	0.31	0.23	0.19	0.10	0.10	0.12	0.20	0.21	0.12	0.31
		Min-2w	0.26	0.20	0.21	0.15	0.13	0.15	0.08	0.07	0.08	0.15	0.16	0.08	0.07
	Yusuhara	Mean	0.17	0.09	0.09	0.11	0.16	0.10	<0.01	0.02	0.06	0.10	0.13	0.06	0.09
		%	100	100	100	33	100	100	100	100	100	100	100	100	92
		Max-2w	0.20	0.09	0.11	0.11	0.20	0.14	<0.01	0.04	0.09	0.13	0.15	0.07	0.20
		Min-2w	0.15	0.09	0.07	0.11	0.13	0.06	<0.01	<0.01	0.03	0.06	0.10	0.06	<0.01
	Hedo	Mean	0.24	0.14	0.14	0.28	0.23	0.22	0.14	0.16	0.46	0.34	0.25	0.25	0.25
		%	100	100	100	100	100	100	100	100	100	64	100	100	96
		Max-2w	0.26	0.23	0.26	0.39	0.25	0.24	0.14	0.24	0.77	0.76	0.33	0.25	0.77
		Min-2w	0.23	0.04	0.02	0.22	0.21	0.20	0.13	0.08	0.15	0.25	0.17	0.24	0.02
	Ogasawara	Mean	0.13	0.12	0.16	0.15	0.04	0.08	0.08	0.12	0.10	0.14	0.14	0.11	0.12
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-2w	0.14	0.13	0.18	0.21	0.08	0.08	0.09	0.15	0.11	0.16	0.16	0.13	0.21
		Min-2w	0.12	0.11	0.13	0.10	<0.01	0.08	0.07	0.10	0.10	0.11	0.13	0.10	<0.01
	Tokyo	Mean	0.10	0.13	0.01	0.12	0.13	0.12	0.16	0.14	0.13	0.16	0.14	0.11	0.12
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-2w	0.11	0.14	0.02	0.18	0.14	0.12	0.21	0.16	0.13	0.19	0.15	0.12	0.21
		Min-2w	0.09	0.12	<0.01	0.02	0.12	0.11	0.12	0.11	0.12	0.13	0.13	0.11	<0.01
Malaysia	Petaling Jaya	Mean	0.24	0.20	0.35	0.26	0.30	-	-	-	-	-	-	-	0.27
		%	100	100	100	100	100	0	0	0	0	0	0	0	40
		Max-w	0.35	0.36	0.54	0.33	0.40	-	-	-	-	-	-	-	0.54
		Min-w	0.02	0.03	0.08	0.17	0.22	-	-	-	-	-	-	-	0.02
	Tanah Rata	Mean	0.06	0.10	0.14	0.07	0.06	0.18	0.11	0.23	0.16	0.06	0.11	0.04	0.11
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-w	0.08	0.15	0.28	0.09	0.09	0.34	0.25	0.38	0.22	0.10	0.28	0.08	0.38
		Min-w	0.04	0.05	0.05	0.06	0.03	0.06	0.06	0.10	0.08	0.01	0.04	<0.01	<0.01
	Danum Valley	Mean	0.02	0.01	<0.01	-	<0.01	<0.01	0.02	<0.01	0.29	0.16	0.08	0.03	0.06
		%	67	100	50	0	50	100	100	100	100	50	50	50	69
		Max-2w	0.03	0.01	<0.01	-	<0.01	<0.01	0.06	<0.01	0.55	0.16	0.08	0.03	0.55
		Min-2w	<0.01	<0.01	<0.01	-	<0.01	<0.01	<0.01	<0.01	0.03	0.16	0.08	0.03	<0.01

Table 4.18 Particulate matter component: K^+

Unit : μg/m³			2012												Annual
Country	Site		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
Myanmar	Yangon	Mean	2.0	1.3	1.1	1.0	0.4	-	0.2	0.3	0.4	0.3	0.72	0.38	0.76
		%	100	100	82	100	100	0	100	100	100	100	100	100	91
		Max-2w	2.6	2.1	1.7	1.1	0.5	-	0.4	0.4	0.4	0.5	1.39	0.74	2.55
		Min-2w	1.3	0.4	0.5	0.8	0.2	-	0.1	0.3	0.3	0.1	0.06	0.01	0.01
Philippines	Mt. Sto. Tomas	Mean	-	-	-	-	-	0.04	0.01	0.02	0.01	0.01	<0.01	<0.01	0.01
		%	0	0	0	0	0	15	100	100	100	100	100	100	52
		Max-w	-	-	-	-	-	0.04	0.02	0.05	0.02	0.03	0.02	<0.01	0.05
		Min-w	-	-	-	-	-	0.04	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Russia	Mondy	Mean	<0.01	0.01	0.05	0.03	0.07	0.06	0.14	0.08	0.13	0.17	0.02	0.18	0.08
		%	13	100	38	100	100	100	100	100	100	100	100	100	86
		Max-2w	<0.01	0.01	0.05	0.03	0.08	0.06	0.14	0.08	0.13	0.17	0.02	0.18	0.18
		Min-2w	<0.01	0.01	0.05	0.03	0.05	0.06	0.14	0.08	0.13	0.17	0.02	0.18	<0.01
	Listvianka	Mean	0.02	0.03	0.91	0.63	0.13	0.63	0.11	0.29	0.04	0.02	0.06	0.21	0.28
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-w	0.03	0.07	2.26	1.79	0.24	0.91	0.14	0.48	0.08	0.03	0.08	0.34	2.26
		Min-w	0.01	0.01	0.04	0.07	0.05	0.27	0.09	0.10	0.02	0.02	0.05	0.09	0.01
	Irkutsk	Mean	0.32	0.12	0.35	0.34	0.60	0.50	0.39	0.19	0.13	0.31	0.21	0.38	0.32
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-w	0.85	0.24	0.83	0.70	0.78	1.23	0.68	0.34	0.31	0.54	0.36	0.56	1.23
		Min-w	0.06	0.05	0.04	0.15	0.30	0.25	0.10	0.08	0.04	0.14	0.11	0.17	0.04
	Primorskaya	Mean	0.21	0.32	0.57	0.56	0.21	0.13	0.17	0.20	0.14	0.18	0.45	0.48	0.30
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-2w	0.22	0.46	0.73	0.60	0.24	0.14	0.22	0.30	0.18	0.24	0.45	0.59	0.73
		Min-2w	0.20	0.18	0.41	0.52	0.18	0.12	0.12	0.09	0.10	0.11	0.44	0.38	0.09
Thailand	Bangkok	Mean	0.55	0.58	<0.01	0.48	0.28	0.31	0.47	0.24	0.07	0.42	0.25	0.83	0.37
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-10d	0.67	0.77	<0.01	0.71	0.40	0.43	0.83	0.34	0.14	0.60	0.71	1.03	1.03
		Min-10d	0.44	0.39	<0.01	0.10	0.05	0.18	0.26	0.04	0.01	0.32	<0.01	0.58	<0.01
	Khanchanaburi	Mean	-	-	<0.01	-	-	-	<0.01	-	-	-	0.19	-	0.06
	(Vachiralongkorn Dam)	%	0	0	53	0	0	0	42	0	0	0	50	0	12
		Max-2w	-	-	<0.01	-	-	-	<0.01	-	-	-	0.19	-	0.19
		Min-2w	-	-	<0.01	-	-	-	<0.01	-	-	-	0.19	-	<0.01
	Chiangmai	Mean	-	-	-	0.54	0.13	0.15	0.30	0.15	0.04	0.24	0.26	0.11	0.21
	(Mae Hia)	%	0	0	0	100	97	100	97	97	97	97	97	100	73
		Max-10d	-	-	-	0.77	0.28	0.38	0.49	0.32	0.09	0.33	0.37	0.24	0.77
		Min-10d	-	-	-	0.18	<0.01	<0.01	0.14	0.06	<0.01	0.06	0.14	0.03	<0.01
	Nakhon Ratchasima	Mean	-	-	-	1.18	2.26	0.10	0.04	0.10	0.11	0.24	0.15	0.45	0.51
		%	0	0	0	100	100	100	100	100	100	100	100	100	74
		Max-10d	-	-	-	3.13	4.36	0.19	0.12	0.10	0.18	0.30	0.16	0.52	4.36
		Min-10d	-	-	-	0.08	0.33	<0.01	<0.01	0.09	0.03	0.15	0.14	0.41	<0.01
Vietnam	Hanoi	Mean	1.40	1.06	1.33	1.70	1.82	1.03	0.42	0.70	3.28	1.88	0.61	0.97	1.36
		%	75	100	100	100	100	75	75	100	100	100	100	100	94
		Max-w	2.73	2.75	2.29	2.49	6.50	1.86	0.53	1.58	8.98	4.78	1.44	2.14	8.98
		Min-w	0.72	0.19	0.14	1.15	0.24	0.51	0.25	0.17	1.21	0.18	0.07	0.15	0.07
	Hoa Binh	Mean	0.27	0.15	0.60	0.94	0.39	0.94	0.65	0.25	1.00	0.81	0.54	0.27	0.56
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-w	0.45	0.22	1.00	2.31	0.76	1.12	1.10	0.42	1.43	1.84	0.87	0.45	2.31
		Min-w	0.14	0.06	0.26	0.39	0.09	0.58	0.26	0.02	0.48	0.13	0.19	0.03	0.02

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
% : monthly or annual percentages of period of available data

Table 4.19 Particulate matter component: Mg^{2+}

Unit : μg/m³			2012												Annual
Country	Site		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
Cambodia	Phnom Penh	Mean	0.14	0.22	0.12	0.08	0.09	0.15	0.13	0.11	0.04	0.13	0.07	0.09	0.11
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-2w	0.16	0.24	0.19	0.09	0.09	0.18	0.15	0.16	0.05	0.13	0.08	0.09	0.24
		Min-2w	0.12	0.20	0.07	0.07	0.09	0.12	0.10	0.07	0.03	0.12	0.06	0.09	0.03
Indonesia	Serpong	Mean	0.03	0.04	0.14	0.09	0.06	0.09	0.16	0.18	0.06	0.09	0.03	0.01	0.09
		%	97	100	100	100	100	100	100	100	100	100	100	91	99
		Max-2w	0.05	0.07	0.20	0.10	0.10	0.11	0.17	0.22	0.08	0.10	0.03	0.02	0.22
		Min-2w	<0.01	<0.01	0.03	0.07	0.02	0.07	0.15	0.15	0.03	0.08	0.02	<0.01	<0.01
Japan	Rishiri	Mean	0.08	0.19	0.23	0.25	0.18	0.07	0.07	0.13	0.22	0.31	0.21	0.25	0.19
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-2w	0.09	0.20	0.30	0.26	0.31	0.08	0.11	0.19	0.31	0.56	0.25	0.43	0.56
		Min-2w	0.06	0.18	0.17	0.24	0.11	0.06	0.03	0.07	0.14	0.18	0.16	0.07	0.03
	Ochiishi	Mean	0.31	0.30	0.43	0.21	0.16	0.17	0.09	0.09	0.32	0.47	0.10	0.39	0.25
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-2w	0.35	0.55	0.46	0.26	0.20	0.17	0.13	0.10	0.37	0.67	0.10	0.61	0.67
		Min-2w	0.28	0.05	0.39	0.17	0.11	0.17	0.04	0.07	0.28	0.27	0.10	0.17	0.04
	Tappi	Mean	0.40	0.67	0.50	0.67	0.21	0.11	0.12	0.11	0.17	0.53	1.30	2.42	0.60
		%	100	100	100	100	67	100	100	100	100	100	100	100	96
		Max-2w	0.51	0.76	0.67	1.09	0.23	0.13	0.15	0.13	0.20	0.93	2.16	3.66	3.66
		Min-2w	0.30	0.58	0.32	0.26	0.18	0.09	0.09	0.09	0.15	0.19	0.43	1.19	0.09
	Sado-seki	Mean	0.32	0.65	0.43	0.14	0.21	0.15	0.12	0.14	0.16	0.35	0.46	0.49	0.29
		%	100	50	100	67	100	100	100	100	100	100	100	100	92
		Max-2w	0.34	0.65	0.50	0.16	0.28	0.21	0.17	0.16	0.17	0.50	0.65	0.56	0.65
		Min-2w	0.30	0.65	0.36	0.13	0.13	0.08	0.07	0.13	0.15	0.19	0.28	0.42	0.07
	Happo	Mean	<0.01	<0.01	0.01	0.03	0.04	<0.01	-	0.01	<0.01	0.04	0.01	<0.01	0.02
		%	100	100	100	100	100	100	0	100	100	100	100	100	92
		Max-2w	<0.01	0.01	0.02	0.05	0.06	<0.01	-	0.01	<0.01	0.06	0.01	<0.01	0.06
		Min-2w	<0.01	<0.01	<0.01	<0.01	0.03	<0.01	-	0.01	<0.01	0.02	0.01	<0.01	<0.01
	Ijira	Mean	<0.01	0.02	0.03	0.03	0.05	0.03	<0.01	0.04	0.04	0.03	<0.01	<0.01	0.02
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-2w	<0.01	0.02	0.03	0.06	0.07	0.03	0.01	0.07	0.05	0.06	<0.01	<0.01	0.07
		Min-2w	<0.01	<0.01	0.03	<0.01	0.04	0.02	<0.01	<0.01	0.02	<0.01	<0.01	<0.01	<0.01
	Oki	Mean	0.41	0.53	0.44	0.65	0.25	0.19	0.11	0.17	0.16	-	-	0.93	0.39
		%	100	100	100	100	100	100	100	100	50	0	0	100	77
		Max-2w	0.47	0.59	0.48	1.04	0.55	0.30	0.17	0.18	0.16	-	-	1.16	1.16
		Min-2w	0.36	0.47	0.41	0.25	0.08	0.09	0.05	0.17	0.16	-	-	0.70	0.05
	Banryu	Mean	0.21	0.23	0.21	0.25	0.15	0.11	0.05	0.09	0.09	0.22	0.27	0.19	0.17
		%	46	100	100	100	100	100	100	100	100	62	100	100	92
		Max-2w	0.21	0.26	0.22	0.39	0.20	0.13	0.06	0.11	0.10	0.24	0.31	0.25	0.39
		Min-2w	0.21	0.21	0.20	0.15	0.09	0.09	0.04	0.08	0.07	0.19	0.23	0.14	0.04
	Yusuhara	Mean	0.04	0.14	0.05	0.12	0.09	0.02	0.03	0.04	0.04	0.06	0.11	0.04	0.06
		%	100	100	100	33	100	100	100	100	100	100	100	100	92
		Max-2w	0.05	0.24	0.06	0.12	0.11	0.03	0.03	0.04	0.05	0.08	0.13	0.05	0.24
		Min-2w	0.04	0.04	0.03	0.12	0.07	<0.01	0.03	0.04	0.02	0.03	0.08	0.04	<0.01
	Hedo	Mean	0.64	0.34	0.32	0.54	0.43	0.43	0.30	0.40	0.31	0.98	0.52	0.68	0.53
		%	100	100	100	100	100	100	100	100	100	64	100	100	96
		Max-2w	0.71	0.57	0.60	0.78	0.50	0.47	0.34	0.56	0.40	2.47	0.63	0.73	2.47
		Min-2w	0.57	0.11	0.04	0.41	0.36	0.38	0.27	0.23	0.23	0.48	0.41	0.63	0.04
	Ogasawara	Mean	0.34	0.27	0.43	0.37	0.09	0.15	0.24	0.36	0.34	0.38	0.37	0.33	0.31
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-2w	0.40	0.28	0.52	0.49	0.18	0.19	0.28	0.40	0.35	0.46	0.40	0.37	0.52
		Min-2w	0.27	0.25	0.34	0.24	<0.01	0.11	0.20	0.32	0.34	0.33	0.34	0.29	<0.01
	Tokyo	Mean	0.05	0.05	<0.01	0.13	0.11	0.14	0.15	0.17	0.14	0.18	0.08	0.05	0.11
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-2w	0.05	0.05	<0.01	0.20	0.11	0.15	0.16	0.19	0.16	0.20	0.09	0.06	0.20
		Min-2w	0.04	0.05	<0.01	0.02	0.10	0.13	0.14	0.15	0.11	0.16	0.08	0.04	<0.01
Malaysia	Petaling Jaya	Mean	0.01	0.02	0.05	0.03	0.05	-	-	-	-	-	-	-	0.03
		%	100	100	100	100	100	0	0	0	0	0	0	0	40
		Max-w	0.04	0.08	0.09	0.04	0.06	-	-	-	-	-	-	-	0.09
		Min-w	<0.01	<0.01	<0.01	0.01	0.04	-	-	-	-	-	-	-	<0.01
	Tanah Rata	Mean	<0.01	<0.01	0.02	<0.01	0.01	0.05	0.02	0.03	0.02	0.01	0.01	<0.01	0.02
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-w	<0.01	<0.01	0.04	<0.01	0.02	0.14	0.03	0.03	0.03	0.02	0.03	0.01	0.14
		Min-w	<0.01	<0.01	<0.01	<0.01	<0.01	0.02	0.02	0.02	0.01	<0.01	<0.01	<0.01	<0.01
	Danum Valley	Mean	<0.01	<0.01	<0.01	-	<0.01	<0.01	<0.01	<0.01	0.04	<0.01	<0.01	<0.01	<0.01
		%	67	100	50	0	50	100	100	100	100	50	50	50	69
		Max-2w	<0.01	<0.01	<0.01	-	<0.01	<0.01	<0.01	<0.01	0.08	<0.01	<0.01	<0.01	0.08
		Min-2w	<0.01	<0.01	<0.01	-	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01

Table 4.19 Particulate matter component: Mg^{2+}

Unit : μg/m³			2012												Annual
Country	Site		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
Myanmar	Yangon	Mean	0.2	0.2	0.2	0.1	0.2	-	0.1	0.1	0.1	0.1	0.11	0.05	0.13
		%	100	100	82	100	100	0	100	100	100	100	100	100	91
		Max-2w	0.3	0.3	0.3	0.2	0.2	-	0.1	0.1	0.2	0.2	0.22	0.08	0.32
		Min-2w	0.1	<0.01	0.1	0.0	0.2	-	0.1	0.1	0.1	<0.01	<0.01	0.02	<0.01
Philippines	Mt. Sto. Tomas	Mean	-	-	-	-	-	0.01	0.05	0.03	0.01	0.03	0.03	0.03	0.03
		%	0	0	0	0	0	15	100	100	100	100	100	100	52
		Max-w	-	-	-	-	-	0.01	0.15	0.05	0.03	0.04	0.04	0.05	0.15
		Min-w	-	-	-	-	-	0.01	<0.01	0.02	<0.01	0.02	0.02	0.01	<0.01
Russia	Mondy	Mean	<0.01	<0.01	<0.01	<0.01	0.01	0.14	<0.01	0.07	<0.01	<0.01	<0.01	<0.01	0.02
		%	13	100	38	100	100	100	100	100	100	100	100	100	86
		Max-2w	<0.01	<0.01	<0.01	<0.01	0.02	0.14	<0.01	0.07	<0.01	<0.01	<0.01	<0.01	0.14
		Min-2w	<0.01	<0.01	<0.01	<0.01	<0.01	0.14	<0.01	0.07	<0.01	<0.01	<0.01	<0.01	<0.01
	Listvianka	Mean	<0.01	0.01	0.02	0.01	<0.01	0.01	<0.01	0.03	0.01	<0.01	<0.01	0.02	0.01
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-w	0.01	0.03	0.04	0.03	0.01	0.02	<0.01	0.10	0.02	<0.01	<0.01	0.03	0.10
		Min-w	<0.01	<0.01	0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.02	<0.01
	Irkutsk	Mean	0.08	0.07	0.08	0.04	0.07	0.06	0.08	0.04	0.05	0.03	0.03	0.08	0.06
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-w	0.16	0.13	0.11	0.07	0.11	0.12	0.16	0.08	0.06	0.06	0.04	0.12	0.16
		Min-w	0.02	0.04	0.03	0.02	<0.01	0.02	<0.01	0.01	0.01	0.01	0.03	0.03	<0.01
	Primorskaya	Mean	0.04	0.11	0.07	0.16	0.08	0.04	0.02	0.04	0.03	0.03	0.05	0.07	0.06
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-2w	0.05	0.15	0.08	0.17	0.09	0.06	0.02	0.05	0.04	0.05	0.08	0.08	0.17
		Min-2w	0.03	0.07	0.05	0.16	0.07	0.03	0.01	0.02	0.03	0.01	0.02	0.06	0.01
Thailand	Bangkok	Mean	0.15	0.12	<0.01	0.07	0.08	0.10	0.09	0.05	0.02	0.08	0.03	0.02	0.07
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-10d	0.32	0.14	<0.01	0.13	0.14	0.13	0.12	0.10	0.03	0.09	0.08	0.03	0.32
		Min-10d	0.07	0.09	<0.01	<0.01	0.01	0.02	0.05	0.01	0.01	0.06	<0.01	0.02	<0.01
	Khanchanaburi	Mean	-	-	<0.01	-	-	-	<0.01	-	-	-	0.08	-	0.03
	(Vachiralongkorn Dam)	%	0	0	53	0	0	0	42	0	0	0	50	0	12
		Max-2w	-	-	<0.01	-	-	-	<0.01	-	-	-	0.08	-	0.08
		Min-2w	-	-	<0.01	-	-	-	<0.01	-	-	-	0.08	-	<0.01
	Chiangmai	Mean	-	-	-	0.05	0.03	0.05	0.05	0.02	0.03	0.03	0.03	<0.01	0.03
	(Mae Hia)	%	0	0	0	100	97	100	97	97	97	97	97	100	73
		Max-10d	-	-	-	0.07	0.05	0.08	0.06	0.04	0.07	0.05	0.03	0.02	0.08
		Min-10d	-	-	-	0.02	<0.01	<0.01	0.04	0.01	<0.01	<0.01	0.02	<0.01	<0.01
	Nakhon Ratchasima	Mean	-	-	-	<0.01	0.02	0.06	0.02	<0.01	<0.01	<0.01	<0.01	<0.01	0.01
		%	0	0	0	100	100	100	100	100	100	100	100	100	74
		Max-10d	-	-	-	<0.01	0.04	0.12	0.07	0.03	<0.01	<0.01	<0.01	<0.01	0.12
		Min-10d	-	-	-	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Vietnam	Hanoi	Mean	0.28	0.36	0.45	0.44	0.23	0.43	0.09	0.18	1.30	0.81	0.13	0.29	0.41
		%	75	100	100	100	100	75	75	100	100	100	100	100	94
		Max-w	0.47	0.48	0.92	0.45	0.38	1.09	0.12	0.57	3.12	2.09	0.30	0.47	3.12
		Min-w	0.18	0.22	0.03	0.41	0.05	0.09	0.06	0.05	0.29	0.04	0.02	0.15	0.02
	Hoa Binh	Mean	0.12	0.12	0.09	0.09	0.07	0.09	0.05	0.05	0.37	0.26	0.24	0.15	0.14
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-w	0.16	0.30	0.13	0.14	0.11	0.11	0.08	0.07	0.70	0.36	0.45	0.25	0.70
		Min-w	0.08	0.05	0.06	0.07	0.02	0.07	0.03	0.02	0.14	0.12	0.09	0.10	0.02

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
% : monthly or annual percentages of period of available data

Table 4.20 Particulate matter component: Ca^{2+}

Unit : μg/m³			2012												Annual
Country	Site		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
Cambodia	Phnom Penh	Mean	0.61	1.05	0.58	0.51	0.73	1.37	1.10	0.88	0.26	0.80	0.56	0.70	0.76
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-2w	0.81	1.07	0.82	0.63	0.83	1.66	1.32	1.14	0.37	0.84	0.66	0.74	1.66
		Min-2w	0.40	1.04	0.38	0.38	0.63	1.09	0.89	0.51	0.15	0.76	0.47	0.66	0.15
Indonesia	Serpong	Mean	0.12	0.17	0.39	0.40	0.49	0.83	1.33	1.32	0.50	0.82	0.24	0.18	0.59
		%	97	100	100	100	100	100	100	100	100	100	100	91	99
		Max-2w	0.15	0.28	0.51	0.67	0.74	0.93	1.40	1.64	0.75	0.89	0.34	0.32	1.64
		Min-2w	0.09	0.07	0.19	0.13	0.23	0.72	1.26	1.15	0.26	0.75	0.14	0.04	0.04
Japan	Rishiri	Mean	0.04	0.14	0.17	0.27	0.23	0.05	0.06	0.06	0.11	0.14	0.13	0.12	0.13
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-2w	0.04	0.15	0.19	0.38	0.52	0.05	0.08	0.09	0.14	0.25	0.18	0.21	0.52
		Min-2w	0.03	0.13	0.14	0.16	0.09	0.04	0.03	0.04	0.08	0.08	0.08	0.04	0.03
	Ochiishi	Mean	0.10	0.11	0.17	0.13	0.07	0.07	0.05	0.04	0.11	0.16	0.04	0.14	0.10
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-2w	0.12	0.12	0.19	0.15	0.09	0.07	0.06	0.04	0.12	0.24	0.04	0.22	0.24
		Min-2w	0.08	0.10	0.14	0.11	0.05	0.07	0.04	0.04	0.10	0.07	0.04	0.06	0.04
	Tappi	Mean	0.17	0.36	0.32	0.44	0.21	0.11	0.07	0.06	0.10	0.25	0.52	0.66	0.27
		%	100	100	100	100	67	100	100	100	100	100	100	100	96
		Max-2w	0.19	0.41	0.51	0.60	0.23	0.11	0.07	0.07	0.11	0.46	0.86	0.92	0.92
		Min-2w	0.15	0.30	0.13	0.29	0.19	0.10	0.07	0.05	0.09	0.08	0.19	0.40	0.05
	Sado-seki	Mean	0.14	0.30	0.28	0.33	0.30	0.09	0.08	0.08	0.10	0.21	0.25	0.20	0.19
		%	100	50	100	67	100	100	100	100	100	100	100	100	92
		Max-2w	0.15	0.30	0.39	0.40	0.40	0.10	0.09	0.09	0.12	0.32	0.34	0.22	0.40
		Min-2w	0.14	0.30	0.16	0.25	0.20	0.07	0.07	0.08	0.09	0.09	0.16	0.17	0.07
	Happo	Mean	0.03	0.06	0.06	0.29	0.38	0.03	-	0.03	0.03	0.11	0.05	0.03	0.11
		%	100	100	100	100	100	100	0	100	100	100	100	100	92
		Max-2w	0.05	0.08	0.07	0.56	0.60	0.04	-	0.04	0.03	0.22	0.05	0.03	0.60
		Min-2w	0.01	0.04	0.06	0.10	0.16	0.03	-	0.03	0.02	0.03	0.05	0.02	0.01
	Ijira	Mean	0.03	0.05	0.11	0.13	0.28	0.07	0.01	0.08	0.06	0.07	0.04	0.03	0.08
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-2w	0.03	0.06	0.11	0.21	0.35	0.07	0.02	0.13	0.07	0.14	0.07	0.03	0.35
		Min-2w	0.03	0.05	0.10	0.04	0.21	0.07	0.01	0.02	0.05	<0.01	<0.01	0.03	<0.01
	Oki	Mean	0.17	0.28	0.30	0.84	0.16	0.07	0.06	0.08	0.07	-	-	0.45	0.25
		%	100	100	100	100	100	100	100	100	50	0	0	100	77
		Max-2w	0.20	0.31	0.36	1.43	0.33	0.11	0.07	0.08	0.07	-	-	0.47	1.43
		Min-2w	0.14	0.24	0.23	0.25	0.07	0.04	0.04	0.08	0.07	-	-	0.43	0.04
	Banryu	Mean	0.19	0.18	0.21	0.52	0.26	0.06	0.05	0.05	0.07	0.19	0.37	0.13	0.20
		%	46	100	100	100	100	100	100	100	100	62	100	100	92
		Max-2w	0.19	0.19	0.26	0.78	0.40	0.07	0.07	0.06	0.10	0.23	0.38	0.16	0.78
		Min-2w	0.19	0.16	0.16	0.30	0.13	0.06	0.03	0.04	0.05	0.14	0.35	0.09	0.03
	Yusuhara	Mean	0.11	0.08	0.17	0.76	0.41	0.04	0.04	0.03	0.07	0.12	0.23	0.09	0.15
		%	100	100	100	33	100	100	100	100	100	100	100	100	92
		Max-2w	0.14	0.09	0.24	0.76	0.65	0.06	0.04	0.03	0.12	0.18	0.26	0.09	0.76
		Min-2w	0.08	0.08	0.11	0.76	0.17	0.02	0.04	0.03	0.02	0.07	0.19	0.08	0.02
	Hedo	Mean	0.28	0.21	0.06	0.29	0.31	0.24	0.12	0.16	0.23	0.54	0.49	0.63	0.32
		%	100	100	100	100	100	100	100	100	100	64	100	100	96
		Max-2w	0.32	0.31	0.09	0.43	0.42	0.28	0.12	0.23	0.28	1.31	0.71	0.63	1.31
		Min-2w	0.24	0.12	0.03	0.16	0.20	0.21	0.12	0.10	0.18	0.31	0.28	0.63	0.03
	Ogasawara	Mean	0.14	0.11	0.31	0.33	0.04	0.03	0.05	0.11	0.11	0.13	0.18	0.13	0.15
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-2w	0.17	0.13	0.46	0.41	0.09	0.06	0.07	0.11	0.11	0.15	0.22	0.17	0.46
		Min-2w	0.10	0.08	0.16	0.17	<0.01	0.01	0.03	0.11	0.10	0.11	0.14	0.10	<0.01
	Tokyo	Mean	0.41	0.36	0.02	0.35	0.47	0.31	0.49	0.45	0.43	0.35	0.37	0.37	0.36
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-2w	0.47	0.37	0.03	0.63	0.55	0.35	0.60	0.51	0.43	0.42	0.41	0.43	0.63
		Min-2w	0.34	0.34	0.02	0.05	0.39	0.27	0.38	0.40	0.42	0.29	0.33	0.31	0.02
Malaysia	Petaling Jaya	Mean	0.25	0.13	0.66	0.31	0.49	-	-	-	-	-	-	-	0.38
		%	100	100	100	100	100	0	0	0	0	0	0	0	40
		Max-w	0.53	0.34	1.04	0.45	0.59	-	-	-	-	-	-	-	1.04
		Min-w	<0.01	<0.01	0.02	0.17	0.38	-	-	-	-	-	-	-	<0.01
	Tanah Rata	Mean	0.02	<0.01	0.05	0.02	0.06	0.35	0.16	0.11	0.09	0.06	0.04	0.02	0.09
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-w	0.06	<0.01	0.12	0.04	0.10	1.27	0.22	0.19	0.12	0.10	0.12	0.05	1.27
		Min-w	<0.01	<0.01	<0.01	0.01	0.02	0.03	0.13	0.08	0.06	0.02	<0.01	<0.01	<0.01
	Danum Valley	Mean	<0.01	<0.01	<0.01	-	<0.01	<0.01	0.01	<0.01	0.08	<0.01	<0.01	<0.01	0.02
		%	67	100	50	0	50	100	100	100	100	50	50	50	69
		Max-2w	<0.01	<0.01	<0.01	-	<0.01	0.01	0.01	<0.01	0.16	<0.01	<0.01	<0.01	0.16
		Min-2w	<0.01	<0.01	<0.01	-	<0.01	<0.01	0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01

Table 4.20 Particulate matter component: Ca^{2+}

Unit : μg/m³			2012												Annual
Country	Site		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
Myanmar	Yangon	Mean	1.8	1.4	1.8	0.8	1.1	-	0.4	0.6	1.0	0.6	1.12	0.66	1.03
		%	100	100	82	100	100	0	100	100	100	100	100	100	91
		Max-2w	2.0	2.7	3.2	1.5	1.2	-	0.5	0.6	1.1	1.0	2.17	1.12	3.22
		Min-2w	1.6	0.1	0.4	0.1	0.9	-	0.2	0.6	0.9	0.1	0.07	0.21	0.07
Philippines	Mt. Sto. Tomas	Mean	-	-	-	-	-	0.31	0.61	0.30	0.36	0.34	0.29	0.21	0.35
		%	0	0	0	0	0	15	100	100	100	100	100	100	52
		Max-w	-	-	-	-	-	0.31	1.68	0.39	0.48	0.62	0.40	0.27	1.68
		Min-w	-	-	-	-	-	0.31	0.13	0.24	0.24	0.23	0.18	0.14	0.13
Russia	Mondy	Mean	0.01	<0.01	0.06	0.04	0.09	0.08	<0.01	0.07	0.04	<0.01	0.01	0.14	0.05
		%	13	100	38	100	100	100	100	100	100	100	100	100	86
		Max-2w	0.01	<0.01	0.06	0.04	0.16	0.08	<0.01	0.07	0.04	<0.01	0.01	0.14	0.16
		Min-2w	0.01	<0.01	0.06	0.04	0.02	0.08	<0.01	0.07	0.04	<0.01	0.01	0.14	<0.01
	Listvianka	Mean	0.10	0.10	0.21	0.17	0.11	0.15	0.06	0.16	0.16	0.10	0.16	0.19	0.14
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-w	0.13	0.19	0.43	0.36	0.14	0.20	0.07	0.36	0.37	0.26	0.32	0.28	0.43
		Min-w	0.08	0.03	0.10	0.06	0.07	0.10	0.05	0.06	0.06	0.03	0.07	0.14	0.03
	Irkutsk	Mean	0.55	0.63	0.42	0.34	0.61	0.58	0.35	0.43	0.41	0.24	0.48	0.73	0.49
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-w	1.00	1.11	0.53	0.55	0.94	1.04	0.70	0.73	0.86	0.37	0.70	1.94	1.94
		Min-w	0.22	0.32	0.30	0.22	0.11	0.22	0.08	0.21	0.13	0.14	0.33	0.25	0.08
	Primorskaya	Mean	0.30	0.54	0.43	1.22	0.46	0.23	0.18	0.33	0.18	0.24	0.44	0.37	0.41
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-2w	0.34	0.59	0.47	1.30	0.49	0.27	0.23	0.46	0.20	0.37	0.55	0.38	1.30
		Min-2w	0.26	0.49	0.38	1.15	0.42	0.19	0.13	0.19	0.16	0.12	0.33	0.35	0.12
Thailand	Bangkok	Mean	1.60	0.99	<0.01	0.71	0.60	0.80	0.95	0.48	0.14	1.29	0.13	1.13	0.74
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-10d	2.92	1.18	<0.01	1.07	0.97	1.33	1.24	0.75	0.36	1.59	0.35	1.58	2.92
		Min-10d	0.87	0.69	<0.01	0.06	0.05	0.07	0.70	0.06	0.02	0.87	<0.01	0.61	<0.01
	Khanchanaburi	Mean	-	-	<0.01	-	-	-	<0.01	-	-	-	0.82	-	0.28
	(Vachiralongkorn Dam)	%	0	0	53	0	0	0	42	0	0	0	50	0	12
		Max-2w	-	-	<0.01	-	-	-	<0.01	-	-	-	0.82	-	0.82
		Min-2w	-	-	<0.01	-	-	-	<0.01	-	-	-	0.82	-	<0.01
	Chiangmai	Mean	-	-	-	0.41	0.39	0.44	0.44	0.28	0.19	0.69	0.92	0.48	0.47
	(Mae Hia)	%	0	0	0	100	97	100	97	97	97	97	97	100	73
		Max-10d	-	-	-	0.65	0.70	0.72	0.57	0.70	0.29	0.94	1.14	0.87	1.14
		Min-10d	-	-	-	0.16	0.11	<0.01	0.28	0.07	0.11	0.28	0.73	0.22	<0.01
	Nakhon Ratchasima	Mean	-	-	-	0.09	0.15	0.41	0.15	0.15	0.04	0.02	0.13	0.07	0.14
		%	0	0	0	100	100	100	100	100	100	100	100	100	74
		Max-10d	-	-	-	0.18	0.33	0.88	0.45	0.19	0.12	0.06	0.37	0.08	0.88
		Min-10d	-	-	-	0.03	<0.01	<0.01	<0.01	0.07	<0.01	<0.01	<0.01	0.06	<0.01
Vietnam	Hanoi	Mean	2.83	4.23	6.61	9.46	2.75	1.42	0.44	1.39	8.47	5.44	1.27	3.71	4.07
		%	75	100	100	100	100	75	75	100	100	100	100	100	94
		Max-w	4.15	8.14	10.50	10.19	6.57	2.94	0.65	5.05	26.90	13.53	2.99	5.64	26.90
		Min-w	1.68	2.23	0.62	8.16	0.08	0.64	0.28	0.12	0.94	0.35	0.18	1.49	0.08
	Hoa Binh	Mean	0.50	0.51	1.55	1.44	0.74	1.06	0.54	0.48	3.10	2.77	2.54	2.99	1.50
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-w	0.74	0.64	2.12	1.80	1.09	1.26	0.97	0.71	5.13	3.96	4.77	5.11	5.13
		Min-w	0.34	0.38	0.90	1.18	0.55	0.82	0.34	0.29	1.39	1.01	0.48	1.49	0.29

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
% : monthly or annual percentages of period of available data

Table 4.21 Annual SO_2 concentration

unit: ppb

Country	Name of sites	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Cambodia	Phnom Penh											1.8	1.5	1.3
China	Jinyunshan		10.0	11.0	16.3	15.8	17.8	17.2	12.2	13.3	12.5	12.9	9.3	9.8
	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	4.9	5.8	7.2
	Xiang Zhou	7.9	10.0	9.4	10.1	8.2	6.3	8.2	6.3	6.6	5.9	5.9	5.6	3.2
Indonesia	Jakarta								11.0	7.4	8.3	6.3	5.0	5.7
	Serpong	2.2	0.9	1.0	1.7	1.0	1.4	0.5	1.5	1.6	1.1	0.8	1.4	0.9
	Kototabang								3.3	6.3	7.9	11.7	2.2	***
	Bandung									2.7	4.7	4.2	4.0	4.0
Japan	Rishiri	<0.1	0.2	0.1	0.2	0.2	0.1	0.2	0.3	0.2	0.3	0.3	0.2	0.2
	Ochiishi									0.2	0.2	0.2	0.1	0.1
	Tappi	0.3	0.5	0.3	0.5	0.5	0.5	0.5	0.5	0.6	***	***	0.4	0.4
	Sado-seki	0.2	0.6	0.5	0.4	0.7	0.6	0.5	0.6	0.4	0.4	0.3	0.4	0.3
	Happo	0.2	0.9	0.5	0.4	0.7	0.7	0.6	(0.8)	0.6	0.4	0.8	0.4	0.4
	Ijira	0.1	0.9	0.5	0.4	0.6	0.4	0.2	0.4	0.2	0.2	0.1	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	0.6	0.6	0.5
	Banryu	0.5	1.0	0.9	1.0	0.9	1.0	0.6	1.1	1.0	0.6	0.6	0.5	0.6
	Yusuhara	0.6	1.1	0.8	0.9	1.0	1.1	0.9	1.2	1.0	0.9	1.6	0.9	0.9
	Hedo	0.2	0.3	0.3	0.3	0.2	0.4	0.3	0.4	0.3	0.2	0.3	0.3	0.2
	Ogasawara	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
	Tokyo								2.2	2.2	2.0	1.8	1.6	1.4
Malaysia	Petaling Jaya		5.3	5.0	4.0	1.3	3.8	6.3	2.0	1.9	1.8	1.4	2.0	1.8
	Tanah Rata	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	0.1	3.3	<0.1	<0.1	<0.1	<0.1	<0.1
	Danum Valley							0.1	0.1	<0.1	0.1	<0.1	<0.1	0.1
Mongolia	Ulaanbaatar	1.5	1.7	1.0	1.7	2.9	4.3	4.8	4.3	1.8	4.3	9.1	6.1	***
	Terelj	0.4	0.5	0.3	0.4	0.5	0.5	0.5	1.4	0.5	0.7	0.6	0.7	***
Myanmar	Yangon												1.6	2.9
Philippines	Metro Manila	4.8	4.2	4.3	4.4	3.4	3.1	2.1	2.7	1.2	***	2.2	***	***
	Los Banos	0.8	0.7	0.9	0.9	0.4	0.2	0.3	0.4	0.3	***	***	***	***
	Mt. Sto. Tomas							<0.1	<0.1	0.4	<0.1	1.1	***	0.2
Republic	Kanghwa			3.6	1.9	3.6	2.8	3.4	2.8	2.9	3.2	2.9	4.1	4.4
of Korea	Cheju (Kosan)			1.3	3.9	1.8	2.2	3.4	2.3	2.2	2.7	2.5	2.5	0.9
	Imsil			2.3	1.5	1.2	2.5	1.8	2.1	2.3	1.4	2.7	4.8	1.3
Russia	Mondy	<0.1	0.2	<0.1	0.2	0.2	1.2	0.7	0.4	0.3	0.1	0.6	0.1	0.6
	Listvyanka	1.0	2.1	1.1	1.0	0.7	6.0	3.5	1.1	1.2	4.0	4.5	2.8	5.2
	Irkutsk	3.4	3.0	0.7	1.0	1.4	5.1	4.0	2.4	2.2	4.6	7.3	5.6	7.2
	Primorskaya			0.5	0.4	0.5	1.6	1.2	0.7	0.9	1.0	1.7	1.2	1.2
Thailand	Bangkok	4.2	2.8	2.5	2.4	3.3	7.3	4.1	0.8	2.1	1.9	1.6	1.6	1.5
	Samutprakarn	4.1	4.7	4.4	5.5	5.9	6.6	6.5	5.8	4.8	4.9	4.6	2.6	2.5
	Pathumthani				2.4	1.3	1.6	2.7	1.8	0.5	1.1	1.2	0.6	***
	Khanchanaburi	1.0	0.5	1.4	***	1.7	1.2	1.3	1.3	1.6	1.2	1.6	1.3	0.6
	Chiang Mai (Mae Hia)		0.5	0.5	1.4	1.5	1.0	0.8	0.9	0.8	0.6	0.8	0.6	0.9
	Nakhon Ratchasima							0.3	0.4	0.2	0.2	0.2	0.2	0.3
Vietnam	Hanoi	0.8	3.5	2.7	2.2	4.8	2.4	3.9	1.7	1.3	1.3	1.4	1.9	2.2
	Hoa Binh	0.9	2.6	2.4	1.3	2.1	2.7	2.0	1.2	1.0	0.9	0.7	1.2	1.2

( ) : Reference data

[***]: No data or not measured

Black column: Monitoring was not carried out

A part of 2008-2010 Data at Tappi and 2010 Data at Happo, Yusuhara were revised from reference data to invalid data because of sample inlet failure.

Table 4.22 Annual HNO_3 concentration

unit: ppb

Country	Name of sites	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Cambodia	Phnom Penh											0.3	0.3	0.3
China	Jinyunshan													
	Weishuiyuan													
	Hongwen								0.9	1.7	1.1	1.0	2.1	***
	Xiang Zhou													
Indonesia	Jakarta													
	Serpong		0.4	1.3	0.7	0.6	0.5	0.2	0.4	0.2	0.3	0.3	0.8	0.9
	Kototabang													
	Bandung													
Japan	Rishiri			<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
	Ochiishi									<0.1	<0.1	<0.1	<0.1	<0.1
	Tappi				0.2	0.2	0.1	0.1	0.2	0.2	<0.1	0.2	0.2	0.2
	Sado-seki				0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.3
	Happo				0.4	0.3	0.2	0.3	0.4	0.4	<0.1	<0.1	<0.1	0.3
	Ijira				0.3	0.4	0.4	0.4	0.3	0.3	0.3	0.2	0.2	0.2
	Oki			0.1	<0.1	<0.1	0.2	0.2	0.2	0.2	0.1	0.1	0.2	0.2
	Banryu				0.2	0.3	0.4	0.3	0.4	0.3	0.3	0.2	0.2	0.3
	Yusuhara				0.3	0.4	0.5	0.5	0.5	0.3	0.3	0.3	0.3	0.3
	Hedo				<0.1	0.1	<0.1	<0.1	0.1	0.1	<0.1	<0.1	<0.1	<0.1
	Ogasawara				<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
	Tokyo								1.1	1.0	0.8	0.8	0.6	0.6
Malaysia	Petaling Jaya		1.4	1.8	2.3	0.5	0.7	1.8	0.7	0.8	1.0	0.7	0.7	0.5
	Tanah Rata	<0.1	<0.1	<0.1	<0.1	<0.1	0.1	<0.1	0.2	0.1	0.1	<0.1	<0.1	<0.1
	Danum Valley							<0.1	<0.1	<0.1	0.2	<0.1	<0.1	<0.1
Mongolia	Ulaanbaatar	0.2	0.1	<0.1	0.2	<0.1	<0.1	0.1	0.2	0.2	0.2	0.3	0.2	***
	Terelj	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	0.1	0.1	<0.1	<0.1	0.1	***
Myanmar	Yangon												0.4	0.4
Philippines	Metro Manila	0.7	0.3	0.2	0.4	0.5	0.4	0.3	0.4	0.4	***	0.2	***	***
	Los Banos	0.3	0.2	0.1	0.2	0.2	<0.1	<0.1	0.2	<0.1	***	***	***	***
	Mt. Sto. Tomas							<0.1	<0.1	0.3	<0.1	0.4	***	0.2
Republic	Kanghwa				0.2	0.3	***	0.4	0.7	0.5	0.5	0.4	***	***
of Korea	Cheju (Kosan)				0.2	0.9	***	0.5	***	0.7	0.6	0.5	***	***
	Imsil		0.5	***	1.7	0.4	***	0.6	0.4	0.4	0.5	0.3	***	***
Russia	Mondy	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	2.9	<0.1	<0.1
	Listvyanka	0.2	0.2	0.4	0.1	0.1	<0.1	0.2	<0.1	<0.1	<0.1	0.4	0.1	<0.1
	Irkutsk	<0.1	0.4	0.1	0.2	<0.1	0.4	<0.1	0.2	0.2	0.2	1.9	0.1	<0.1
	Primorskaya		0.2	0.1	<0.1	<0.1	<0.1	0.5	<0.1	0.1	0.1	0.7	<0.1	0.1
Thailand	Bangkok				0.7	0.9	0.5	1.0	0.5	0.5	0.5	0.6	0.5	0.6
	Samutprakarn													
	Pathumthani				0.6	1.3	0.3	0.6	0.8	0.3	0.7	0.9	0.3	***
	Khanchanaburi			0.2	***	0.6	<0.1	0.2	<0.1	0.2	0.5	<0.1	<0.1	0.3
	Chiang Mai (Mae Hia)		0.2	0.2	0.1	0.4	0.4	0.2	0.5	0.4	0.7	1.9	0.1	0.2
	Nakhon Ratchasima							0.3	0.3	0.2	0.2	0.2	<0.1	0.2
Vietnam	Hanoi	0.6	0.5	1.9	0.7	1.5	1.0	0.9	1.0	0.5	0.9	0.8	0.9	1.0
	Hoa Binh	0.5	0.2	1.8	0.4	0.5	0.8	0.3	0.4	0.4	0.3	0.3	0.3	0.4

[***]: 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	2010	2011	2012
Cambodia	Phnom Penh											0.5	0.4	0.7
China	Jinyunshan													
	Weishuiyuan													
	Hongwen								1.5	1.2	1.5	14.5	13.3	***
	Xiang Zhou													
Indonesia	Jakarta													
	Serpong		0.4	2.6	1.8	1.5	1.1	0.5	1.7	0.5	0.4	0.8	0.7	0.8
	Kototabang													
	Bandung													
Japan	Rishiri			0.3	0.4	0.5	0.4	0.4	0.4	0.5	0.5	0.5	0.5	0.4
	Ochiishi									0.4	0.4	0.4	0.6	0.6
	Tappi				0.7	0.6	0.5	0.5	0.6	0.6	0.5	1.5	0.7	0.6
	Sado-seki				0.9	1.0	1.1	0.9	0.9	0.8	0.9	0.7	0.8	0.9
	Happo				0.2	0.2	0.2	0.2	0.2	0.2	<0.1	<0.1	<0.1	0.2
	Ijira				0.2	0.3	0.2	0.2	0.3	0.2	0.2	0.2	0.2	0.1
	Oki			0.2	0.3	0.5	0.9	0.9	1.1	0.9	0.8	0.8	1.0	0.9
	Banryu				0.2	0.6	0.9	0.8	0.9	0.7	0.8	0.7	0.8	0.7
	Yusuhara				0.3	0.3	0.4	0.4	0.4	0.3	0.3	0.3	0.4	0.3
	Hedo				0.9	1.0	0.9	0.9	1.0	0.9	0.9	0.5	0.4	0.6
	Ogasawara				0.3	0.5	0.5	0.4	0.7	0.6	0.5	0.4	0.4	0.4
	Tokyo								1.0	0.8	0.8	0.7	0.8	0.7
Malaysia	Petaling Jaya		1.4	***	***	0.7	0.9	1.6	0.7	1.1	0.7	0.5	0.8	1.2
	Tanah Rata	0.1	<0.1	***	***	0.3	0.1	<0.1	0.1	0.4	0.1	<0.1	0.2	0.4
	Danum Valley							0.2	0.2	0.3	0.5	0.3	0.2	0.5
Mongolia	Ulaanbaatar	0.3	0.1	0.4	1.0	0.9	0.7	1.0	0.9	0.7	0.7	1.7	1.1	***
	Terelj	0.1	<0.1	0.3	0.7	0.6	0.4	0.4	0.5	0.4	0.3	0.5	0.5	***
Myanmar	Yangon												1.5	1.5
Philippines	Metro Manila	5.4	0.3	0.9	1.2	1.0	0.9	0.5	0.7	0.7	***	0.8	***	***
	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	<0.1	0.6	0.2	1.2	***	0.2
Republic	Kanghwa				0.3	0.1	***	0.2	0.2	<0.1	0.1	0.2	***	***
of Korea	Cheju (Kosan)				0.1	0.9	***	0.2	***	0.2	0.2	0.2	***	***
	Imsil		0.5	***	0.2	2.0	***	0.3	0.2	0.1	0.2	0.1	***	***
Russia	Mondy	<0.1	<0.1	<0.1	0.1	0.1	<0.1	<0.1	<0.1	<0.1	<0.1	0.5	0.4	0.7
	Listvyanka	0.3	0.2	0.4	0.3	0.2	<0.1	0.2	<0.1	0.1	0.2	0.6	1.8	9.8
	Irkutsk	0.3	0.4	0.3	0.4	0.1	0.2	0.1	0.2	0.2	0.2	0.5	1.4	2.6
	Primorskaya		0.2	0.5	0.5	0.3	0.1	0.2	0.2	0.2	0.2	0.7	1.1	1.0
Thailand	Bangkok				0.7	0.9	1.5	1.5	0.7	0.8	0.9	0.7	0.7	0.7
	Samutprakarn													
	Pathumthani				0.5	0.8	0.6	1.1	1.2	0.4	0.9	0.7	0.5	***
	Khanchanaburi			0.7	***	0.5	0.1	0.3	0.2	0.3	0.2	<0.1	0.2	0.2
	Chiang Mai (Mae Hia)		0.2	0.3	0.2	0.4	0.4	0.5	0.2	0.2	0.3	0.4	0.3	0.3
	Nakhon Ratchasima							0.4	0.3	0.2	0.2	0.2	0.2	0.2
Vietnam	Hanoi	0.8	0.5	4.1	2.2	2.2	2.9	2.5	2.5	1.8	1.5	2.0	2.0	2.1
	Hoa Binh	0.1	0.2	4.4	3.3	1.5	2.3	1.5	2.1	1.8	1.2	1.5	1.6	1.7

[***]: No data or not measured

Black column: Monitoring was not carried out

Table 4.24 Annual NH_3 concentration

unit: ppb

Country	Name of sites	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Cambodia	Phnom Penh											14.3	11.5	9.9
China	Jinyunshan													
	Weishuiyuan													
	Hongwen								7.9	8.1	11.2	12.2	9.5	***
	Xiang Zhou													
Indonesia	Jakarta													
	Serpong		4.6	5.1	12.9	10.2	11.2	6.2	8.5	6.3	5.9	5.4	11.0	16.1
	Kototabang													
	Bandung													
Japan	Rishiri			0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.3
	Ochiishi									0.6	1.0	0.4	0.4	0.4
	Tappi				0.6	0.5	0.3	0.3	0.4	0.5	0.5	0.5	0.4	0.4
	Sado-seki				0.6	0.7	0.6	0.6	0.6	0.7	0.6	0.6	0.6	0.6
	Happo				0.5	0.3	0.6	0.4	0.3	0.4	0.2	0.3	0.2	0.4
	Ijira				1.2	1.2	1.1	1.3	1.2	1.1	1.0	1.1	1.0	1.0
	Oki			1.1	0.6	0.8	0.8	0.7	0.8	1.0	1.0	0.8	0.7	0.5
	Banryu				1.1	1.3	1.2	1.1	1.0	1.0	1.0	1.0	0.9	0.8
	Yusuhara				0.7	0.5	0.4	0.4	0.5	0.5	0.5	0.5	0.5	0.5
	Hedo				0.8	0.9	0.8	0.9	1.0	1.2	1.2	1.2	0.9	1.3
	Ogasawara				0.2	0.5	0.9	0.5	0.5	0.5	0.5	0.5	0.7	0.5
	Tokyo								6.1	5.2	5.0	4.9	4.4	3.9
Malaysia	Petaling Jaya		10.1	***	***	3.5	10.4	16.9	7.5	6.1	7.3	6.7	6.7	6.5
	Tanah Rata	0.5	0.2	0.6	0.3	0.7	1.3	1.2	0.9	1.0	0.8	0.9	1.2	0.9
	Danum Valley							1.2	0.9	0.9	1.9	1.5	0.9	0.7
Mongolia	Ulaanbaatar	8.4	7.3	9.8	11.3	9.2	9.2	10.3	10.4	10.7	7.4	14.8	8.7	***
	Terelj	1.0	0.7	1.5	1.7	1.3	1.4	1.6	1.3	1.2	1.9	1.4	1.5	***
Myanmar	Yangon												15.5	10.2
Philippines	Metro Manila	<0.1	7.1	10.0	9.3	9.1	12.5	3.8	6.6	9.2	***	7.5	***	***
	Los Banos	<0.1	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	2.5	***	1.0
Republic	Kanghwa				14.1	13.7	***	4.8	9.7	3.4	3.2	4.6	***	***
of Korea	Cheju (Kosan)				1.4	1.1	***	***	***	3.7	4.9	7.0	***	***
	Imsil		4.9	***	4.6	6.0	***	5.9	5.0	5.0	6.0	6.5	***	***
Russia	Mondy	0.6	0.2	0.7	0.7	0.5	0.8	1.9	0.8	0.7	0.4	0.4	0.4	0.7
	Listvyanka	1.1	0.2	0.8	1.7	1.6	0.8	4.4	2.5	2.7	2.4	2.8	0.8	0.6
	Irkutsk	1.8	0.5	1.3	2.2	4.4	1.8	3.7	3.8	3.3	2.9	2.2	1.7	1.4
	Primorskaya			12.0	10.8	7.8	1.2	2.7	3.6	2.9	1.8	2.2	4.2	1.3
Thailand	Bangkok				5.8	11.1	7.8	10.1	10.2	8.2	8.7	7.9	8.8	8.3
	Samutprakarn													
	Pathumthani				6.5	8.5	6.3	7.0	9.2	3.1	8.1	7.8	5.2	***
	Khanchanaburi			6.5	***	6.2	1.9	2.1	3.2	2.3	2.6	1.6	1.5	2.4
	Chiang Mai (Mae Hia)		6.5	3.9	6.9	5.5	3.0	3.2	4.7	3.8	5.8	9.0	5.3	4.4
	Nakhon Ratchasima							2.8	2.4	2.6	2.3	2.0	1.8	3.3
Vietnam	Hanoi	9.6	5.8	4.1	5.4	13.9	4.0	2.8	4.1	5.0	4.8	5.7	6.4	4.8
	Hoa Binh	6.8	2.7	2.8	7.5	8.9	3.8	2.7	2.3	4.0	3.9	2.1	2.4	2.6

[***]: 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	2010	2011	2012
Cambodia	Phnom Penh													
China	Jinyunshan						1.0	2.6	1.5	6.7	3.3	2.0	1.6	2.1
	Weishuiyuan						5.1	9.8						
	Hongwen													
	Xiang Zhou													
Indonesia	Jakarta													
	Serpong													
	Kototabang													
	Bandung													
Japan	Rishiri	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	0.1	<0.1	<0.1	<0.1
	Ochiishi									<0.1	<0.1	<0.1	<0.1	<0.1
	Tappi	0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	***	***	0.2	0.1
	Sado-seki	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
	Happo	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	(<0.1)	<0.1	<0.1	0.1	<0.1	<0.1
	Ijira	0.1	0.3	0.5	0.4	0.4	0.3	0.3	0.3	0.2	0.2	0.3	0.2	0.1
	Oki	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	0.1	<0.1	<0.1
	Banryu	0.1	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	<0.1	0.2
	Yusuhara	0.2	0.1	<0.1	0.1	0.2	0.3	0.1	<0.1	0.1	<0.1	<0.1	<0.1	<0.1
	Hedo	<0.1	0.1	0.2	<0.1	<0.1	0.2	<0.1	<0.1	0.1	<0.1	<0.1	0.2	<0.1
	Ogasawara	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
	Tokyo													
Malaysia	Petaling Jaya													
	Tanah Rata								10.1	***	***	***	***	***
	Danum Valley													
Mongolia	Ulaanbaatar													
	Terelj													
Myanmar	Yangon													
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	8.8	10.3	9.5
	Samutprakarn	23.0	18.9	18.0	14.5	15.5	14.4	16.4	16.7	15.3	15.2	13.3	15.1	17.1
	Pathumthani													
	Khanchanaburi	<0.1	1.2	0.3	***	1.0	1.0	0.6	1.8	0.7	0.2	0.3	1.1	0.5
	Chiang Mai (Mae Hia)				7.1	3.0	2.9	2.5	3.1	2.0	2.1	3.0	2.0	4.3
	Nakhon Ratchasima									5.9	***	***	***	***
Vietnam	Hanoi													
	Hoa Binh													

( ) : Reference data
[***]: No data or not measured
Black column: Monitoring was not carried out
A part of 2008-2010 Data at Tappi and 2010 Data at Happo, Yusuhara were revised from reference data to invalid data because of sample inlet failure.

Table 4.26 Annual NO_2 concentration

unit: ppb

Country	Name of sites	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Cambodia	Phnom Penh													
China	Jinyunshan													
	Weishuiyuan													
	Hongwen		11.3	12.6	13.6	13.8	16.4	23.8	22.9	19.9	18.8	21.1	20.2	20.0
	Xiang Zhou		18.6	24.2	22.1	21.0	18.8	20.7	19.5	21.1	15.4	17.0	18.6	13.8
Indonesia	Jakarta								4.2	32.8	48.5	31.2	***	16.3
	Serpong	6.3												
	Kototabang								0.7	1.9	3.5	0.5	***	***
	Bandung									11.3	13.3	31.5	39.0	42.8
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	2.8	2.6	2.5	1.9
	Yusuhara													
	Hedo													
	Ogasawara													
	Tokyo													
Malaysia	Petaling Jaya		26.6	29.4	30.9									
	Tanah Rata													
	Danum Valley													
Mongolia	Ulaanbaatar													
	Terelj													
Myanmar	Yangon													
Philippines	Metro Manila													
	Los Banos													
	Mt. Sto. Tomas													
Republic	Kanghwa								5.3	6.9	7.1	6.4	5.4	5.0
of Korea	Cheju (Kosan)								4.3	2.9	3.1	4.1	4.4	3.0
	Imsil								4.2	4.1	4.5	5.1	5.0	4.6
Russia	Mondy													
	Listvyanka													
	Irkutsk													
	Primorskaya													
Thailand	Bangkok	***	25.3	28.5	***	23.8	21.5	23.6	16.4	20.5	23.6	21.2	24.5	24.7
	Samutprakarn	18.4	21.0	15.2	17.6	13.8	16.9	19.3	19.5	16.4	19.0	15.5	21.5	17.1
	Pathumthani													
	Khanchanaburi													
	Chiang Mai (Mae Hia)													
	Nakhon Ratchasima													
Vietnam	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	2010	2011	2012
Cambodia	Phnom Penh													
China	Jinyunshan (NOx*)						7.2	8.7	8.1	11.8	8.2	11.4	10.0	8.4
	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	0.8	0.6	0.7
	Ochiishi (NOx*)									1.0	1.1	1.0	1.1	1.0
	Tappi (NOx*)	0.9	1.2	1.3	1.4	1.5	1.4	1.2	1.3	1.6	***	***	1.1	1.2
	Sado-seki (NOx*)	0.9	1.2	1.6	1.9	1.7	1.3	1.3	1.2	1.1	0.9	0.8	0.7	0.7
	Happo (NOx*)	1.9	1.7	2.3	2.2	2.1	2.2	1.9	(2.3)	2.1	1.3	1.2	1.1	1.1
	Ijira (NOx*)	2.1	3.4	3.2	2.9	3.6	3.5	3.1	3.2	2.2	2.5	2.3	2.0	2.2
	Oki (NOx*)	1.2	1.3	1.6	1.3	1.5	1.6	1.5	1.5	1.5	1.3	1.3	1.3	1.0
	Banryu	3.9	4.3	4.0	4.3	3.7	4.0	2.8	3.5	3.6	3.0	2.8	2.5	2.0
	Yusuhara (NOx*)	1.9	1.8	1.7	1.7	1.4	1.8	1.5	1.3	1.3	1.1	1.8	1.3	1.4
	Hedo (NOx*)	0.6	0.9	0.9	0.8	0.9	0.7	0.8	0.5	0.7	0.7	0.7	0.7	0.5
	Ogasawara (NOx*)	0.3	0.7	0.5	0.5	0.4	0.6	0.5	0.5	0.5	0.5	0.5	0.4	0.5
	Tokyo													
Malaysia	Petaling Jaya													
	Tanah Rata (NOx*)								12.2	***	***	***	***	***
	Danum Valley													
Mongolia	Ulaanbaatar													
	Terelj													
Myanmar	Yangon													
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	30.2	35.0	34.5
	Samutprakarn	40.4	38.9	32.7	***	29.0	30.7	35.6	36.2	31.5	34.1	28.7	36.7	34.1
	Pathumthani													
	Khanchanaburi (NOx*)	2.5	2.2	4.2	***	3.4	5.5	2.8	3.0	1.2	1.4	3.1	4.1	2.0
	Chiang Mai (Mae Hia)					14.0	8.8	10.4	12.6	10.4	10.8	12.5	11.6	15.5
	(NOx*)													
	Nakhon Ratchasima									16.9	***	***	***	***
	(NOx*)													
Vietnam	Hanoi													
	Hoa Binh													

( ) : Reference data
[***]: No data or not measured
Black column: Monitoring was not carried out
A part of 2008-2010 Data at Tappi and 2010 Data at Happo, Yusuhara were revised from reference data to invalid data because of sample inlet failure.

Table 4.28 Annual O_3 concentration

unit: ppb

Country	Name of sites	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Cambodia	Phnom Penh													
China	Jinyunshan													
	Weishuiyuan													
	Hongwen													
	Xiang Zhou													
Indonesia	Jakarta													
	Serpong													
	Kototabang													
	Bandung													
Japan	Rishiri	39	39	41	43	43	42	43	46	42	42	40	37	34
	Ochiishi									38	37	38	35	39
	Tappi	47	46	46	45	47	51	51	54	60	***	***	38	41
	Sado-seki	44	41	43	49	49	48	48	48	47	49	53	49	46
	Happo	53	54	55	56	56	58	59	(63)	50	52	48	53	49
	Ijira	30	30	24	30	27	23	17	35	20	21	19	20	24
	Oki	45	44	40	39	45	45	44	45	45	46	45	46	46
	Banryu	36	36	37	36	37	37	34	34	35	36	35	33	33
	Yusuhara	39	29	29	33	39	43	42	40	40	41	36	33	34
	Hedo	41	41	42	39	32	35	40	38	39	39	38	33	35
	Ogasawara	22	27	29	30	30	33	31	32	28	30	38	29	32
	Tokyo													
Malaysia	Petaling Jaya													
	Tanah Rata								15	***	***	***	***	***
	Danum Valley													
Mongolia	Ulaanbaatar													
	Terelj													
Myanmar	Yangon													
Philippines	Metro Manila													
	Los Banos													
	Mt. Sto. Tomas													
Republic	Kanghwa			42	43	40	41	27	43	41	43	43	39	44
of Korea	Cheju (Kosan)			41	28	38	40	35	38	42	44	42	35	39
	Imsil			31	22	24	30	30	30	20	33	30	30	33
Russia	Mondy			44	42	45	42	45	39	35	45	44	40	38
	Listvyanka													
	Irkutsk													
	Primorskaya													
Thailand	Bangkok									10	17	17	19	17
	Samutprakarn		4	12	17	13	14	14	14	18	18	15	17	19
	Pathumthani													
	Khanchanaburi	20	10	14	***	15	17	10	7	16	14	23	12	16
	Chiang Mai (Mae Hia)				13	22	20	19	23	22	26	24	25	21
	Nakhon Ratchasima									22	***	***	***	***
Vietnam	Hanoi													
	Hoa Binh													

( ) : Reference data
[***]: No data or not measured
Black column: Monitoring was not carried out
A part of 2008-2010 Data at Tappi and 2010 Data at Happo, Yusuhara were revised from reference data to invalid data because of sample inlet failure.

Table 4.29 Annual PM_{10} concentration

unit: $\mu g/m^3$

Country	Name of sites	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Cambodia	Phnom Penh													
China	Jinyunshan		96	73	70	64	60	78	65	50	40	51	45	43
	Weishuiyuan		123	138	112	128	118	121						
	Hongwen		61	62	68	64	66	97	71	59	60	63	61	59
	Xiang Zhou		51	48	56	48	40	47	50	51	48	48	49	44
Indonesia	Jakarta													
	Serpong													
	Kototabang													
	Bandung													
Japan	Rishiri	16	18	18	16	17	14	15	14	16	16	18	15	13
	Ochiishi									30	24	22	23	20
	Tappi	64	19	26	16	20	19	18	17	22	16	28	18	17
	Sado-seki	24	25	27	22	28	24	24	22	23	22	21	21	19
	Happo	13	14	12	10	15	15	13	12	14	12	12	12	11
	Ijira	24	22	24	20	21	21	22	22	20	18	18	19	16
	Oki	26	29	31	23	27	28	30	29	26	26	29	25	23
	Banryu	29	31	35	25	29	29	31	31	27	26	28	24	22
	Yusuhara	15	22	22	18	20	20	20	19	18	18	18	16	15
	Hedo		46	48	26	34	35	37	29	27	28	31	28	27
	Ogasawara	11	12	13	11	13	12	13	13	10	12	12	10	11
	Tokyo													
Malaysia	Petaling Jaya	37	***	39	41									
	Tanah Rata													
	Danum Valley													
Mongolia	Ulaanbaatar													
	Terelj													
Myanmar	Yangon													
Philippines	Metro Manila													
	Los Banos													
	Mt. Sto. Tomas													
Republic	Kanghwa			53	56	54	58	46	52	48	51	51	44	45
of Korea	Cheju (Kosan)			43	41	36	39	51	54	50	43	47	42	37
	Imsil			57	42	44	54	57	43	59	34	40	38	36
Russia	Mondy													
	Listvyanka													
	Irkutsk													
	Primorskaya													
Thailand	Bangkok	56	49	***	***	51	42	44	45	43	39	38	38	37
	Samutprakarn									45	43	38	54	39
	Pathumthani													
	Khanchanaburi	38	21	79	***	41	60	37	31	37	28	46	23	10
	Chiang Mai (Mae Hia)				48	59	52	41	52	38	42	45	33	42
	Nakhon Ratchasima									47	***	***	***	***
Vietnam	Hanoi													
	Hoa Binh													

[***]: No data or not measured

Black column: Monitoring was not carried out

Table 4.30 Annual $PM_{2.5}$ concentration

unit: $\mu g/m^3$

Country	Name of sites	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Cambodia	Phnom Penh													
China	Jinyunshan													
	Weishuiyuan													
	Hongwen													
	Xiang Zhou													
Indonesia	Jakarta													
	Serpong													
	Kototabang													
	Bandung													
Japan	Rishiri		9	8	10	8	8	8	8	9	8	9	8	8
	Ochiishi									16	12	12	10	9
	Tappi													
	Sado-seki													
	Happo													
	Ijira													
	Oki		12	14	12	13	15	15	15	14	12	12	14	13
	Banryu													
	Yusuhara													
	Hedo													
	Ogasawara													
	Tokyo													
Malaysia	Petaling Jaya													
	Tanah Rata													
	Danum Valley													
Mongolia	Ulaanbaatar													
	Terelj													
Myanmar	Yangon													
Philippines	Metro Manila													
	Los Banos													
	Mt. Sto. Tomas													
Republic of Korea	Kanghwa													
	Cheju (Kosan)													
	Imsil													
Russia	Mondy													
	Listvyanka													
	Irkutsk													
	Primorskaya													
Thailand	Bangkok													
	Samutprakarn													
	Pathumthani													
	Khanchanaburi													
	Chiang Mai (Mae Hia)													
	Nakhon Ratchasima													
Vietnam	Hanoi													
	Hoa Binh													

[***]: No data or not measured

Black column: Monitoring was not carried out

Table 4.31 Annual SO_4^{2-} in PM concentration

unit: μg/m^3

Country	Name of sites	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Cambodia	Phnom Penh											2.85	2.95	2.63
China	Jinyunshan													
	Weishuiyuan													
	Hongwen								10.58	13.38	12.72	14.10	17.60	***
	Xiang Zhou													
Indonesia	Jakarta													
	Serpong		1.8	1.5	0.53	0.82	1.50	0.56	0.50	0.71	0.79	0.50	0.65	4.03
	Kototabang													
	Bandung													
Japan	Rishiri			1.8	2.55	2.40	2.61	2.39	2.44	2.94	2.50	2.74	2.71	2.32
	Ochiishi									2.73	2.61	2.31	2.13	1.95
	Tappi				3.32	3.89	3.92	4.10	4.02	4.67	4.29	4.12	3.99	3.76
	Sado-seki				3.11	3.55	4.08	3.07	3.64	4.17	3.58	3.20	3.50	3.53
	Happo				2.11	2.30	2.59	2.79	2.58	2.52	0.59	0.86	1.02	2.36
	Ijira				3.72	4.10	5.07	4.89	4.76	4.78	3.88	3.25	3.55	2.52
	Oki			4.4	3.91	3.94	6.29	5.73	5.21	4.54	4.29	4.43	4.76	4.90
	Banryu				3.82	4.43	6.33	6.55	6.41	5.11	5.44	4.37	4.55	5.05
	Yusuhara				4.09	5.16	6.15	5.81	6.44	4.54	5.16	4.46	4.03	4.44
	Hedo				4.01	3.40	5.32	6.51	5.95	5.69	5.62	3.53	2.48	4.28
	Ogasawara				1.26	1.36	0.87	1.65	3.91	2.72	2.64	2.17	2.46	2.41
	Tokyo								5.36	5.15	4.62	4.28	4.06	3.14
Malaysia	Petaling Jaya		3.6	3.9	3.36	1.42	2.26	2.60	3.00	3.32	3.01	2.94	4.22	3.24
	Tanah Rata	1.23	0.7	0.5	0.50	0.81	1.07	1.38	1.37	1.59	1.39	0.95	1.18	1.52
	Danum Valley							0.69	0.76	1.12	3.64	1.73	0.86	0.38
Mongolia	Ulaanbaatar	2.1	2.5	1.8	3.59	3.63	5.10	5.68	4.20	1.33	2.24	4.70	4.11	***
	Terelj	1.1	1.5	0.7	0.78	1.24	0.85	1.40	1.41	1.42	1.07	0.61	1.06	***
Myanmar	Yangon												3.77	3.59
Philippines	Metro Manila	2.0	1.9	2.3	3.74	3.19	3.31	2.63	3.15	2.37	***	1.43	***	***
	Los Banos	0.5	0.9	1.5	2.59	1.64	1.71	1.52	2.29	1.86	***	***	***	***
	Mt. Sto. Tomas							0.14	0.22	0.91	0.16	1.40	***	0.15
Republic	Kanghwa		4.9	6.9	5.65	4.26	6.56	3.43	2.35	3.11	6.04	6.19	***	***
of Korea	Cheju (Kosan)		2.7	6.7	6.99	8.90	7.11	8.05	6.75	5.51	4.68	3.82	***	***
	Imsil		2.1	5.1	8.23	10.12	9.29	10.31	5.90	4.18	4.66	5.03	***	***
Russia	Mondy	0.5	0.8	0.5	0.99	0.66	0.34	0.49	0.22	0.38	0.39	0.14	0.19	0.22
	Listvyanka	1.4	2.5	1.7	2.75	1.79	0.79	1.16	1.57	1.02	1.58	0.89	1.00	1.09
	Irkutsk	2.4	3.8	3.9	2.51	1.70	2.67	2.13	2.91	2.55	2.36	2.29	2.28	3.07
	Primorskaya		3.9	2.1	2.59	3.32	3.77	4.11	4.89	3.59	3.71	4.04	3.60	3.27
Thailand	Bangkok				3.63	4.02	2.13	4.71	2.97	2.65	2.71	3.63	3.31	2.26
	Samutprakarn													
	Pathumthani				2.34	3.46	1.39	3.14	4.69	1.41	3.12	3.78	1.64	***
	Khanchanaburi			<0.1	***	5.59	0.15	2.74	3.24	2.54	1.32	0.29	2.08	2.34
	Chiang Mai (Mae Hia)		0.9	2.0	2.11	3.93	1.11	2.22	2.60	1.75	1.97	1.29	1.34	1.12
	Nakhon Ratchasima							3.64	4.80	3.78	3.44	2.12	2.74	2.44
Vietnam	Hanoi	1.1	1.4	8.6	16.19	19.30	20.33	16.46	20.35	9.53	8.77	15.63	14.40	7.82
	Hoa Binh	2.3	2.6	4.2	2.34	2.13	12.41	7.80	8.38	4.51	2.49	2.26	3.81	1.59

[***]: No data or not measured

Black column: Monitoring was not carried out

The reporting limits for the components in the particulate matters for the descriptive purposes defined by the Network Center were changed from 0.1 μg/m^3 to 0.01 μg/m^3 in 2003.

Table 4.32 Annual NO_3^- in PM concentration

unit: μg/m^3

Country	Name of sites	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Cambodia	Phnom Penh											1.32	1.27	1.20
China	Jinyunshan													
	Weishuiyuan													
	Hongwen								5.81	8.10	7.98	11.66	11.66	***
	Xiang Zhou													
Indonesia	Jakarta													
	Serpong		0.7	1.4	0.61	0.81	1.55	0.37	0.17	0.18	0.13	0.21	0.57	1.09
	Kototabang													
	Bandung													
Japan	Rishiri			0.3	0.59	0.66	0.53	0.58	0.60	0.76	0.64	0.77	0.66	0.63
	Ochiishi									0.71	0.67	0.55	0.67	0.43
	Tappi				1.24	1.13	0.92	1.17	1.18	1.23	1.29	1.24	1.27	0.98
	Sado-seki				0.77	0.89	0.68	0.80	0.96	1.07	1.05	0.82	1.13	0.90
	Happo				0.27	0.36	0.27	0.25	0.20	0.22	0.10	0.11	0.14	0.31
	Ijira				0.41	0.49	0.48	0.54	0.49	0.39	0.40	0.40	0.47	0.25
	Oki			0.9	0.71	1.03	1.26	1.28	1.34	1.22	1.31	1.50	1.85	1.51
	Banryu				0.69	1.09	1.43	1.54	1.57	1.35	1.43	1.53	1.68	1.51
	Yusuhara				0.30	0.59	0.59	0.59	0.55	0.29	0.52	0.66	0.61	0.41
	Hedo				1.50	1.16	1.11	1.65	1.48	1.52	1.63	1.09	0.80	1.27
	Ogasawara				0.32	0.29	0.12	0.36	0.74	0.57	0.60	0.53	0.53	0.53
	Tokyo								3.86	4.03	3.85	3.80	3.76	2.73
Malaysia	Petaling Jaya		0.6	0.2	0.10	0.56	0.97	0.81	1.18	1.17	1.22	1.25	1.14	1.23
	Tanah Rata	0.19	<0.1	0.1	0.11	0.18	0.18	0.18	0.13	0.16	0.15	0.12	0.13	0.18
	Danum Valley							0.05	0.04	0.06	0.21	0.36	0.04	0.08
Mongolia	Ulaanbaatar	0.9	1.4	1.0	1.71	1.53	1.61	1.74	1.66	0.90	0.93	1.25	1.81	***
	Terelj	0.2	0.2	0.2	0.16	0.15	0.18	0.19	0.71	0.65	0.24	0.11	0.29	***
Myanmar	Yangon												0.31	0.92
Philippines	Metro Manila	0.7	1.1	0.9	2.26	1.77	1.11	1.03	1.27	0.99	***	0.85	***	***
	Los Banos	0.2	0.8	0.5	1.18	0.64	0.42	0.29	0.39	0.27	***	***	***	***
	Mt. Sto. Tomas							0.02	0.07	1.15	0.12	0.78	***	0.19
Republic	Kanghwa		0.5	2.3	4.19	1.12	1.85	2.03	1.03	1.92	2.38	3.50	***	***
of Korea	Cheju (Kosan)		<0.1	0.3	0.53	1.44	0.27	0.39	0.57	0.34	0.49	0.67	***	***
	Imsil		0.3	0.6	0.51	1.23	1.56	3.99	3.05	2.86	2.67	3.82	***	***
Russia	Mondy	<0.1	0.1	0.1	0.11	0.02	0.02	0.06	0.01	0.13	0.02	0.19	0.02	0.03
	Listvyanka	0.5	0.4	0.2	0.68	0.19	0.17	0.19	0.19	0.20	0.25	0.17	0.25	0.12
	Irkutsk	0.8	1.2	1.5	0.96	0.53	0.68	0.69	0.61	0.89	0.83	0.91	0.88	0.92
	Primorskaya		1.8	0.3	0.39	0.57	1.24	1.18	1.04	1.03	1.10	0.79	0.27	0.68
Thailand	Bangkok				1.51	2.07	2.83	1.60	1.51	1.44	1.62	1.86	2.00	1.91
	Samutprakarn													
	Pathumthani				0.63	1.11	1.13	0.81	2.02	0.77	1.73	1.93	0.92	***
	Khanchanaburi			<0.1	***	0.58	0.06	0.09	0.10	0.15	3.55	0.06	0.04	0.10
	Chiang Mai (Mae Hia)		0.6	0.2	0.28	0.64	0.33	0.67	0.62	0.36	0.66	10.25	0.24	0.31
	Nakhon Ratchasima							0.52	0.48	0.41	0.34	0.18	0.31	0.28
Vietnam	Hanoi	0.3	0.3	1.9	5.33	8.74	10.52	5.34	6.21	2.89	3.52	7.81	6.82	5.57
	Hoa Binh	0.5	0.4	0.9	0.54	0.69	1.71	1.09	1.46	1.24	0.49	0.61	1.14	0.92

[***]: No data or not measured

Black column: Monitoring was not carried out

The reporting limits for the components in the particulate matters for the descriptive purposes defined by the Network Center were changed from 0.1 μg/m^3 to 0.01 μg/m^3 in 2003.

Table 4.33 Annual Cl^- in PM concentration

unit: μg/m^3

Country	Name of sites	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Cambodia	Phnom Penh											0.20	0.24	0.24
China	Jinyunshan													
	Weishuiyuan													
	Hongwen								2.07	1.85	1.73	2.28	1.51	***
	Xiang Zhou													
Indonesia	Jakarta													
	Serpong		0.1	1.5	1.24	0.79	1.07	0.21	0.46	0.10	0.09	0.25	0.10	0.16
	Kototabang													
	Bandung													
Japan	Rishiri			2.4	2.04	2.73	2.35	2.03	2.25	2.20	2.42	2.79	2.31	1.94
	Ochiishi									4.44	6.88	4.34	3.28	3.06
	Tappi				3.38	7.64	6.02	8.08	6.51	8.26	8.97	6.01	5.93	8.15
	Sado-seki				3.08	3.88	3.08	3.56	3.30	4.61	3.38	3.78	3.06	3.02
	Happo				0.02	0.03	0.02	0.03	0.02	0.01	0.02	0.03	0.02	0.02
	Ijira				0.05	0.05	0.04	0.05	0.05	0.04	0.06	0.05	0.04	0.02
	Oki			1.4	1.30	2.12	2.55	2.42	2.36	2.71	3.69	4.54	4.29	4.20
	Banryu				0.41	1.31	1.43	1.47	0.97	1.13	1.59	1.38	1.53	0.99
	Yusuhara				0.03	0.07	0.07	0.08	0.04	0.03	0.21	0.10	0.08	0.17
	Hedo				6.12	4.60	7.29	6.35	5.79	4.40	6.02	4.62	3.09	6.02
	Ogasawara				2.86	1.66	0.94	2.69	3.82	3.04	3.93	3.44	3.79	3.55
	Tokyo								0.62	0.63	0.68	0.66	0.70	0.49
Malaysia	Petaling Jaya		<0.1	<0.1	0.02	0.10	0.18	0.10	0.13	0.09	0.11	0.19	0.11	0.13
	Tanah Rata	<0.1	<0.1	<0.1	0.08	0.03	0.03	0.04	0.03	0.02	0.03	0.05	0.03	0.03
	Danum Valley							0.04	0.02	0.04	0.15	0.33	0.04	0.02
Mongolia	Ulaanbaatar	0.5	0.7	0.4	0.82	1.02	1.06	1.25	0.87	0.47	1.84	1.06	1.18	***
	Terelj	<0.1	0.2	<0.1	0.20	0.18	0.30	0.19	0.36	0.24	0.22	0.18	0.23	***
Myanmar	Yangon												0.59	0.56
Philippines	Metro Manila	2.6	0.5	0.5	0.86	0.77	0.39	0.62	0.62	0.59	***	0.66	***	***
	Los Banos	1.1	0.9	0.9	1.09	0.65	0.58	0.67	1.15	0.82	***	***	***	***
	Mt. Sto. Tomas							0.03	0.07	0.35	0.05	0.32	***	0.05
Republic	Kanghwa		0.3	0.3	0.24	0.16	0.18	0.15	0.19	0.19	0.64	0.44	***	***
of Korea	Cheju (Kosan)		0.3	0.3	0.41	0.53	0.14	0.13	0.30	0.32	0.29	0.46	***	***
	Imsil		0.3	0.3	0.31	0.14	0.12	0.29	0.38	0.50	0.45	0.61	***	***
Russia	Mondy	<0.1	<0.1	<0.1	0.12	0.02	<0.01	0.03	0.01	<0.01	<0.01	0.33	0.04	0.24
	Listvyanka	0.4	0.8	0.3	0.13	0.26	0.03	0.08	0.12	0.11	0.11	0.11	0.04	0.26
	Irkutsk	0.1	0.4	0.4	0.24	0.15	0.12	0.19	0.30	0.32	0.40	0.31	0.43	0.46
	Primorskaya		0.5	0.2	0.25	0.18	0.21	0.12	0.19	0.17	0.14	0.20	0.09	0.29
Thailand	Bangkok				0.22	1.06	0.59	0.19	0.29	0.18	0.26	0.28	0.32	0.26
	Samutprakarn													
	Pathumthani				0.07	0.11	0.31	0.09	0.39	0.07	0.20	0.14	0.15	***
	Khanchanaburi			<0.1	***	0.06	0.02	0.08	0.02	0.06	0.04	0.10	0.05	<0.01
	Chiang Mai (Mae Hia)		<0.1	0.1	0.03	0.30	0.08	0.29	0.11	0.05	0.09	0.16	0.12	0.13
	Nakhon Ratchasima							0.09	0.06	0.06	0.07	0.02	0.06	0.10
Vietnam	Hanoi	0.4	1.5	1.8	1.22	1.67	3.10	2.90	2.81	0.79	0.58	1.66	1.33	1.11
	Hoa Binh	0.3	0.1	1.7	1.17	0.94	1.41	0.65	0.58	0.64	0.11	0.35	0.27	0.43

[***]: No data or not measured

Black column: Monitoring was not carried out

The reporting limits for the components in the particulate matters for the descriptive purposes defined by the Network Center were changed from 0.1 μg/m^3 to 0.01 μg/m^3 in 2003.

Table 4.34 Annual NH_4^+ in PM concentration

unit: μg/m^3

Country	Name of sites	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Cambodia	Phnom Penh											0.61	0.50	0.34
China	Jinyunshan													
	Weishuiyuan													
	Hongwen								3.66	5.55	5.48	6.72	5.85	***
	Xiang Zhou													
Indonesia	Jakarta													
	Serpong		0.4	0.6	0.09	0.18	0.25	0.08	0.24	0.08	0.11	0.14	0.32	0.78
	Kototabang													
	Bandung													
Japan	Rishiri			0.3	0.48	0.35	0.44	0.41	0.39	0.53	0.45	0.47	0.47	0.41
	Ochiishi									0.40	0.40	0.29	0.37	0.32
	Tappi				0.60	0.67	0.57	0.63	0.64	0.77	0.66	0.68	0.64	0.53
	Sado-seki				0.45	0.49	0.83	0.48	0.54	0.68	0.53	0.50	0.56	0.54
	Happo				0.58	0.57	0.69	0.64	0.65	0.66	0.15	0.22	0.26	0.64
	Ijira				1.24	1.17	1.45	1.39	1.32	1.36	1.06	0.87	0.95	0.69
	Oki			0.8	0.60	0.68	1.27	1.19	1.07	0.97	0.86	0.92	0.93	0.94
	Banryu				0.62	0.97	1.43	1.51	1.60	1.32	1.30	1.02	1.06	1.24
	Yusuhara				0.88	1.15	1.40	1.41	1.53	1.12	1.25	1.00	0.96	1.06
	Hedo				0.56	0.46	0.67	0.80	0.88	0.98	0.86	0.42	0.43	0.71
	Ogasawara				0.10	0.15	0.08	0.17	0.46	0.24	0.21	0.17	0.22	0.22
	Tokyo								1.82	1.96	1.83	1.71	1.57	1.10
Malaysia	Petaling Jaya		0.9	1.3	1.01	0.30	0.59	0.76	0.76	0.82	0.73	0.80	1.12	0.75
	Tanah Rata	0.3	0.3	0.3	0.13	0.23	0.23	0.40	0.32	0.35	0.29	0.25	0.49	0.46
	Danum Valley							0.10	0.08	0.12	0.39	0.12	0.13	0.08
Mongolia	Ulaanbaatar	0.4	0.4	0.5	0.67	0.92	1.60	1.95	1.96	0.23	0.95	1.69	1.80	***
	Terelj	0.3	0.4	0.3	0.29	0.33	0.28	0.43	0.40	0.37	0.28	0.12	0.43	***
Myanmar	Yangon												0.34	0.38
Philippines	Metro Manila	<0.1	0.3	0.9	1.09	0.48	0.73	0.25	0.43	0.42	***	0.14	***	***
	Los Banos	<0.1	0.4	0.3	0.70	0.21	0.67	0.23	0.28	0.34	***	***	***	***
	Mt. Sto. Tomas							0.03	0.09	0.33	0.03	0.10	***	<0.01
Republic	Kanghwa		2.0	2.6	2.69	1.59	2.23	1.38	0.85	1.34	2.51	2.93	***	***
of Korea	Cheju (Kosan)		0.7	2.0	2.44	2.98	2.05	2.39	2.15	1.61	1.54	1.32	***	***
	Imsil		0.5	1.4	2.59	2.85	2.66	3.67	2.37	1.82	2.34	2.54	***	***
Russia	Mondy	0.1	0.2	0.2	0.36	0.17	0.12	0.09	0.02	0.09	0.07	0.01	0.02	0.04
	Listvyanka	0.8	1.2	0.8	0.92	0.63	0.37	0.27	0.33	0.21	0.24	0.15	0.22	0.22
	Irkutsk	1.0	1.6	1.5	0.76	0.59	0.69	0.46	0.93	0.80	0.66	0.49	0.62	0.80
	Primorskaya		1.2	1.1	0.78	0.74	1.10	1.32	1.43	0.94	0.99	0.75	0.77	0.70
Thailand	Bangkok				1.08	0.71	0.42	1.30	1.29	1.15	0.70	0.69	0.60	0.53
	Samutprakarn													
	Pathumthani				0.46	0.73	0.38	0.86	1.37	0.71	1.50	0.84	0.26	***
	Khanchanaburi			<0.1	***	1.41	0.04	0.65	0.91	1.10	0.83	0.18	0.46	0.07
	Chiang Mai (Mae Hia)		0.6	0.3	1.23	0.72	0.59	0.67	0.74	0.49	0.58	3.70	0.31	0.23
	Nakhon Ratchasima							1.13	1.37	1.13	0.87	0.73	0.96	0.84
Vietnam	Hanoi	1.0	1.5	2.1	3.86	4.97	7.30	3.18	3.99	2.20	1.68	3.28	4.50	2.83
	Hoa Binh	0.8	0.8	2.1	6.25	1.46	4.27	2.29	2.24	0.84	0.90	0.64	1.55	0.66

[***]: No data or not measured

Black column: Monitoring was not carried out

The reporting limits for the components in the particulate matters for the descriptive purposes defined by the Network Center were changed from 0.1 μg/m^3 to 0.01 μg/m^3 in 2003.

Table 4.35 Annual Na^+ in PM concentration

unit: μg/m^3

Country	Name of sites	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Cambodia	Phnom Penh											0.53	0.63	0.57
China	Jinyunshan													
	Weishuiyuan													
	Hongwen								1.39	1.40	1.55	1.76	1.62	***
	Xiang Zhou													
Indonesia	Jakarta													
	Serpong		0.4	1.0	0.47	0.63	0.22	0.32	0.11	0.06	0.10	0.09	0.16	0.45
	Kototabang													
	Bandung													
Japan	Rishiri			1.7	1.65	2.02	1.76	1.62	1.78	1.82	1.91	2.14	1.84	1.58
	Ochiishi									3.09	4.37	2.87	2.45	2.15
	Tappi				2.99	4.99	4.18	5.23	4.30	5.31	6.01	4.24	3.97	5.12
	Sado-seki				2.39	2.92	2.22	2.52	2.53	3.32	2.56	2.67	2.43	2.38
	Happo				0.09	0.14	0.08	0.08	0.08	0.10	0.03	0.03	0.05	0.09
	Ijira				0.26	0.27	0.27	0.26	0.29	0.25	0.25	0.22	0.25	0.16
	Oki			2.3	2.00	1.59	2.38	2.26	2.21	2.26	2.75	3.35	3.28	3.25
	Banryu				1.18	1.42	1.61	1.68	1.33	1.32	1.64	1.41	1.59	1.29
	Yusuhara				0.34	0.44	0.43	0.45	0.43	0.26	0.54	0.41	0.42	0.39
	Hedo				4.85	3.18	5.22	4.85	4.54	3.77	4.63	3.38	2.28	4.34
	Ogasawara				1.86	1.24	0.68	1.78	2.95	2.38	2.80	2.38	2.61	2.45
	Tokyo								0.99	0.80	0.94	0.91	0.89	0.71
Malaysia	Petaling Jaya		0.3	0.2	0.17	0.24	0.18	0.21	0.32	0.34	0.24	0.26	0.32	0.27
	Tanah Rata	0.1	0.1	0.1	0.09	0.08	0.09	0.13	0.14	0.13	0.10	0.10	0.12	0.12
	Danum Valley							0.13	0.13	0.16	0.59	0.72	0.17	0.05
Mongolia	Ulaanbaatar	0.3	0.3	0.2	0.60	0.49	0.47	0.38	0.32	0.09	0.08	0.21	0.20	***
	Terelj	<0.1	0.1	<0.1	0.09	0.17	0.14	0.11	0.12	0.08	0.11	0.02	0.09	***
Myanmar	Yangon												0.59	0.74
Philippines	Metro Manila	1.3	1.1	0.3	0.92	0.89	0.62	0.61	0.79	0.97	***	0.54	***	***
	Los Banos	0.6	1.4	0.8	0.72	0.64	0.65	0.70	0.98	0.67	***	***	***	***
	Mt. Sto. Tomas							0.05	0.05	0.38	0.16	0.52	***	0.07
Republic	Kanghwa		0.3	0.6	0.33	0.19	0.33	0.25	0.26	0.34	0.52	0.40	***	***
of Korea	Cheju (Kosan)		<0.1	0.4	0.52	0.72	0.35	0.40	0.39	0.41	0.51	0.45	***	***
	Imsil		0.3	0.4	0.52	0.52	0.44	0.39	0.42	0.46	0.54	0.40	***	***
Russia	Mondy	<0.1	<0.1	<0.1	0.04	0.04	0.02	0.04	<0.01	0.02	0.03	0.36	<0.01	0.08
	Listvyanka	<0.1	0.2	<0.1	0.18	0.20	0.05	0.06	0.07	0.12	0.16	0.08	0.04	0.24
	Irkutsk	0.1	<0.1	0.1	0.19	0.13	0.21	0.17	0.12	0.23	0.50	0.26	0.28	0.28
	Primorskaya		0.3	0.2	0.21	0.26	0.22	0.22	0.25	0.26	0.25	0.26	0.11	0.22
Thailand	Bangkok				0.46	1.53	0.48	0.68	0.38	0.33	0.57	0.54	0.54	0.43
	Samutprakarn													
	Pathumthani				0.23	0.54	0.27	0.34	0.40	0.27	0.38	0.30	0.22	***
	Khanchanaburi			<0.1	***	0.38	0.01	0.17	0.12	0.17	0.09	0.06	0.09	0.07
	Chiang Mai (Mae Hia)		0.1	0.1	0.12	0.33	0.08	0.21	0.23	0.15	0.48	0.17	0.10	0.16
	Nakhon Ratchasima							0.17	0.28	0.24	0.21	0.16	0.17	0.18
Vietnam	Hanoi	0.6	0.5	0.5	0.57	1.21	1.95	1.99	1.64	0.56	0.58	1.03	0.67	0.70
	Hoa Binh	0.3	0.2	0.5	0.12	0.61	0.92	0.52	0.25	0.24	0.13	0.28	0.23	0.31

[***]: No data or not measured

Black column: Monitoring was not carried out

The reporting limits for the components in the particulate matters for the descriptive purposes defined by the Network Center were changed from 0.1 μg/m^3 to 0.01 μg/m^3 in 2003.

Table 4.36 Annual K^+ in PM concentration

unit: μg/m^3

Country	Name of sites	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Cambodia	Phnom Penh											0.63	0.59	0.46
China	Jinyunshan													
	Weishuiyuan													
	Hongwen								0.57	0.62	0.68	3.46	0.72	***
	Xiang Zhou													
Indonesia	Jakarta													
	Serpong		0.4	0.5	0.28	0.15	0.25	0.11	0.05	0.07	0.08	0.14	0.37	0.45
	Kototabang													
	Bandung													
Japan	Rishiri			<0.1	0.13	0.14	0.13	0.15	0.13	0.16	0.14	0.15	0.14	0.10
	Ochiishi									0.16	0.18	0.13	0.12	0.10
	Tappi				0.19	0.27	0.21	0.28	0.25	0.26	0.31	0.28	0.23	0.24
	Sado-seki				0.11	0.17	0.14	0.15	0.16	0.19	0.18	0.17	0.17	0.14
	Happo				0.05	0.06	0.06	0.06	0.05	0.05	0.02	0.01	0.02	0.04
	Ijira				0.16	0.14	0.18	0.17	0.15	0.14	0.13	0.09	0.11	0.06
	Oki			0.2	0.19	0.22	0.26	0.23	0.21	0.18	0.20	0.22	0.24	0.22
	Banryu				0.18	0.19	0.21	0.25	0.21	0.19	0.21	0.16	0.19	0.16
	Yusuhara				0.11	0.18	0.21	0.21	0.18	0.11	0.16	0.12	0.15	0.09
	Hedo				0.23	0.19	0.29	0.32	0.31	0.27	0.29	0.21	0.12	0.25
	Ogasawara				0.10	0.07	0.03	0.08	0.16	0.16	0.16	0.13	0.13	0.12
	Tokyo								0.20	0.19	0.21	0.18	0.17	0.12
Malaysia	Petaling Jaya		0.3	0.4	0.25	0.24	0.23	0.19	0.25	0.23	0.23	0.27	0.34	0.27
	Tanah Rata	0.1	0.1	0.3	0.07	0.09	0.21	0.10	0.08	0.09	0.08	0.08	0.12	0.11
	Danum Valley							0.09	0.09	0.12	0.43	0.29	0.16	0.06
Mongolia	Ulaanbaatar	0.2	0.3	0.2	0.53	0.42	0.61	0.60	0.25	0.12	0.16	0.22	0.29	***
	Terelj	<0.1	0.2	0.2	0.24	0.24	0.20	0.13	0.14	0.09	0.16	0.04	0.08	***
Myanmar	Yangon												1.24	0.76
Philippines	Metro Manila	14.3	1.0	0.3	0.74	0.33	0.26	0.46	0.41	0.43	***	0.22	***	***
	Los Banos	0.4	1.0	0.2	0.26	0.17	0.22	0.22	0.28	0.17	***	***	***	***
	Mt. Sto. Tomas							0.03	0.06	0.39	0.14	0.15	***	0.01
Republic	Kanghwa		0.5	0.5	0.61	0.27	0.48	0.33	0.30	0.25	0.49	0.20	***	***
of Korea	Cheju (Kosan)		0.2	0.4	1.29	0.72	0.45	0.46	0.40	0.33	0.21	0.12	***	***
	Imsil		0.3	0.5	1.17	0.84	0.55	0.50	0.32	0.37	0.35	0.25	***	***
Russia	Mondy	0.1	<0.1	<0.1	0.08	0.05	0.02	0.04	0.01	0.02	0.02	0.04	0.02	0.08
	Listvyanka	0.3	0.2	<0.1	0.23	0.15	0.09	0.05	0.06	0.09	0.11	0.07	0.06	0.28
	Irkutsk	0.5	0.2	0.1	0.21	0.09	0.18	0.10	0.11	0.21	0.16	0.13	0.25	0.32
	Primorskaya		0.5	0.2	0.38	0.35	0.28	0.37	0.44	0.37	0.37	0.44	0.27	0.30
Thailand	Bangkok				0.59	0.98	0.28	0.65	0.43	0.36	0.43	0.39	0.41	0.37
	Samutprakarn													
	Pathumthani				0.49	0.61	0.47	0.48	1.82	0.26	0.54	0.47	0.24	***
	Khanchanaburi			<0.1	***	0.88	0.99	0.34	0.16	0.19	0.27	0.06	0.13	0.06
	Chiang Mai (Mae Hia)		0.5	0.5	0.4	0.54	0.29	0.86	0.58	0.37	0.47	0.42	0.27	0.21
	Nakhon Ratchasima							0.25	0.37	0.34	0.31	0.18	0.64	0.51
Vietnam	Hanoi	0.1	0.2	0.8	0.8	1.90	2.61	1.70	2.04	1.00	0.79	1.15	0.85	1.36
	Hoa Binh	0.3	0.4	1.2	0.4	0.61	2.37	1.19	1.41	0.94	0.70	0.65	0.32	0.56

[***]: No data or not measured

Black column: Monitoring was not carried out

The reporting limits for the components in the particulate matters for the descriptive purposes defined by the Network Center were changed from 0.1 μg/m^3 to 0.01 μg/m^3 in 2003.

Table 4.37 Annual Mg^{2+} in PM concentration

unit: μg/m^3

Country	Name of sites	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Cambodia	Phnom Penh											0.12	0.14	0.11
China	Jinyunshan													
	Weishuiyuan													
	Hongwen								0.28	0.31	0.33	0.48	0.31	***
	Xiang Zhou													
Indonesia	Jakarta													
	Serpong		0.2	<0.1	0.04	0.12	0.08	0.04	0.05	0.03	0.02	0.02	0.05	0.09
	Kototabang													
	Bandung													
Japan	Rishiri			0.2	0.20	0.24	0.21	0.20	0.22	0.24	0.24	0.26	0.22	0.19
	Ochiishi									0.44	0.56	0.34	0.30	0.25
	Tappi				0.39	0.61	0.49	0.63	0.52	0.56	0.68	0.48	0.46	0.60
	Sado-seki				0.30	0.36	0.31	0.28	0.31	0.39	0.31	0.32	0.30	0.29
	Happo				0.02	0.03	0.02	0.02	0.03	0.03	<0.01	<0.01	0.01	0.02
	Ijira				0.05	0.04	0.04	0.04	0.05	0.04	0.04	0.04	0.04	0.02
	Oki			0.2	0.23	0.27	0.31	0.30	0.29	0.28	0.34	0.44	0.36	0.39
	Banryu				0.15	0.19	0.23	0.26	0.22	0.17	0.20	0.20	0.21	0.17
	Yusuhara				0.07	0.08	0.08	0.09	0.09	0.05	0.08	0.08	0.07	0.06
	Hedo				0.61	0.38	0.67	0.60	0.58	0.47	0.58	0.44	0.29	0.53
	Ogasawara				0.25	0.14	0.08	0.22	0.37	0.33	0.36	0.30	0.32	0.31
	Tokyo								0.15	0.12	0.13	0.12	0.13	0.11
Malaysia	Petaling Jaya		<0.1	<0.1	0.02	0.03	0.03	0.03	0.09	0.05	0.03	0.05	0.04	0.03
	Tanah Rata	<0.1	<0.1	<0.1	0.01	0.01	0.01	0.02	0.04	0.02	0.01	0.02	0.02	0.02
	Danum Valley							0.01	0.04	0.05	0.07	0.10	0.02	<0.01
Mongolia	Ulaanbaatar	0.1	0.3	0.1	0.40	0.33	0.35	0.26	0.19	0.11	0.04	0.18	0.38	***
	Terelj	<0.1	<0.1	<0.1	0.04	0.06	0.06	0.06	0.02	0.02	0.04	0.04	0.05	***
Myanmar	Yangon												0.18	0.13
Philippines	Metro Manila	2.7	<0.1	<0.1	0.15	0.10	0.11	0.24	0.14	0.17	***	0.10	***	***
	Los Banos	0.1	<0.1	0.1	0.10	0.07	0.06	0.09	0.14	0.11	***	***	***	***
	Mt. Sto. Tomas							0.01	<0.01	0.07	<0.01	0.06	***	0.03
Republic	Kanghwa		<0.1	<0.1	0.07	0.01	0.01	0.01	<0.01	0.01	0.03	0.04	***	***
of Korea	Cheju (Kosan)		<0.1	<0.1	0.05	0.04	0.01	0.02	0.09	0.02	<0.01	0.04	***	***
	Imsil		<0.1	<0.1	0.06	0.05	0.03	0.04	0.03	0.01	0.02	0.05	***	***
Russia	Mondy	<0.1	<0.1	<0.1	<0.01	0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.02
	Listvyanka	<0.1	<0.1	<0.1	0.04	0.04	0.02	0.02	0.03	0.02	0.03	0.02	0.02	0.01
	Irkutsk	0.1	<0.1	<0.1	0.08	0.06	0.07	0.08	0.09	0.13	0.08	0.08	0.09	0.06
	Primorskaya		<0.1	<0.1	0.03	0.19	0.08	0.07	0.07	0.08	0.07	0.08	0.07	0.06
Thailand	Bangkok				0.12	0.43	0.10	0.13	0.09	0.08	0.09	0.14	0.09	0.07
	Samutprakarn													
	Pathumthani				0.05	0.80	0.05	0.05	0.08	0.06	0.07	0.05	0.04	***
	Khanchanaburi			<0.1	***	0.14	<0.01	0.04	0.04	0.10	0.03	<0.01	0.03	0.03
	Chiang Mai (Mae Hia)		<0.1	<0.1	0.32	0.03	0.02	0.22	0.07	0.04	0.04	0.04	0.02	0.03
	Nakhon Ratchasima							0.05	0.06	0.05	0.04	0.02	0.01	0.01
Vietnam	Hanoi	0.1	0.2	0.4	0.16	0.51	0.67	0.52	0.44	0.18	0.32	0.48	0.35	0.41
	Hoa Binh	0.1	<0.1	0.2	0.04	0.66	0.49	0.13	0.15	0.09	0.11	0.11	0.08	0.14

[***]: No data or not measured

Black column: Monitoring was not carried out

The reporting limits for the components in the particulate matters for the descriptive purposes defined by the Network Center were changed from 0.1 μg/m^3 to 0.01 μg/m^3 in 2003.

Table 4.38 Annual Ca^{2+} in PM concentration

unit: μg/m^3

Country	Name of sites	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Cambodia	Phnom Penh											0.87	0.82	0.76
China	Jinyunshan													
	Weishuiyuan													
	Hongwen								2.84	2.79	2.73	9.44	1.59	***
	Xiang Zhou													
Indonesia	Jakarta													
	Serpong		0.4	0.3	0.22	0.61	0.28	0.36	0.26	0.13	0.07	0.09	0.18	0.59
	Kototabang													
	Bandung													
Japan	Rishiri			<0.1	0.13	0.16	0.14	0.13	0.14	0.17	0.16	0.18	0.13	0.13
	Ochiishi									0.15	0.24	0.14	0.14	0.10
	Tappi				0.22	0.38	0.27	0.35	0.30	0.30	0.39	0.36	0.29	0.27
	Sado-seki				0.16	0.31	0.22	0.23	0.25	0.29	0.25	0.24	0.25	0.19
	Happo				0.06	0.16	0.15	0.17	0.14	0.12	0.07	0.05	0.04	0.11
	Ijira				0.12	0.16	0.16	0.18	0.17	0.13	0.14	0.15	0.17	0.08
	Oki			0.2	0.19	0.28	0.33	0.29	0.28	0.22	0.30	0.47	0.38	0.25
	Banryu				0.17	0.22	0.27	0.31	0.30	0.22	0.29	0.44	0.26	0.20
	Yusuhara				0.16	0.27	0.25	0.27	0.28	0.14	0.36	0.33	0.21	0.15
	Hedo				0.32	0.36	0.37	0.48	0.43	0.34	0.43	0.48	0.18	0.32
	Ogasawara				0.11	0.10	0.04	0.13	0.22	0.16	0.20	0.23	0.17	0.15
	Tokyo								0.56	0.52	0.51	0.59	0.49	0.36
Malaysia	Petaling Jaya		0.5	0.2	0.07	0.76	0.20	0.39	0.68	0.47	0.34	0.46	0.37	0.38
	Tanah Rata	<0.1	0.2	<0.1	0.02	0.18	0.06	0.07	0.10	0.08	0.07	0.07	0.07	0.09
	Danum Valley							0.02	0.03	0.02	0.04	0.07	0.02	0.02
Mongolia	Ulaanbaatar	3.6	4.4	3.6	6.76	4.76	4.86	4.64	3.69	3.38	1.43	1.45	3.35	***
	Terelj	0.3	0.4	0.3	0.26	0.30	0.27	0.30	0.43	0.42	0.32	0.16	0.32	***
Myanmar	Yangon												1.82	1.03
Philippines	Metro Manila	0.4	0.8	0.6	1.37	1.00	0.75	1.09	1.18	0.87	***	0.66	***	***
	Los Banos	1.0	0.6	1.8	0.69	0.38	0.14	0.13	0.23	0.27	***	***	***	***
	Mt. Sto. Tomas							0.02	0.07	0.77	0.22	0.50	***	0.35
Republic	Kanghwa		0.2	0.2	0.34	0.09	0.10	0.04	0.05	0.07	0.17	0.07	***	***
of Korea	Cheju (Kosan)		<0.1	0.2	0.25	0.20	0.08	0.05	0.09	0.11	0.08	0.07	***	***
	Imsil		<0.1	0.3	0.42	0.13	0.11	0.12	0.28	0.11	0.08	0.09	***	***
Russia	Mondy	0.1	<0.1	<0.1	0.08	0.08	0.03	0.07	0.03	0.05	0.05	0.04	0.04	0.05
	Listvyanka	0.5	0.3	0.1	0.26	0.19	0.07	0.13	0.22	0.15	0.19	0.12	0.10	0.14
	Irkutsk	0.6	0.5	0.5	0.45	0.29	0.46	0.47	0.62	0.82	0.49	0.59	0.35	0.49
	Primorskaya		0.6	0.2	0.23	0.25	0.36	0.38	0.40	0.45	0.37	0.41	0.28	0.41
Thailand	Bangkok				1.17	1.03	1.20	1.39	1.07	0.80	0.88	0.94	1.03	0.74
	Samutprakarn													
	Pathumthani				0.77	0.80	0.47	0.65	0.93	0.36	0.90	0.98	0.50	***
	Khanchanaburi			0.1	***	0.65	0.06	0.18	0.12	0.22	0.12	0.04	0.12	0.28
	Chiang Mai (Mae Hia)		0.5	0.4	1.17	0.42	0.29	0.61	0.57	0.44	0.72	0.53	0.22	0.47
	Nakhon Ratchasima							0.17	0.23	0.28	0.22	0.09	0.16	0.14
Vietnam	Hanoi	2.0	2.3	3.2	4.43	7.58	8.47	8.97	7.59	2.83	2.87	7.75	8.67	4.07
	Hoa Binh	1.2	0.8	1.5	0.95	3.25	4.51	2.39	2.19	1.27	1.27	1.24	1.62	1.50

[***]: No data or not measured

Black column: Monitoring was not carried out

The reporting limits for the components in the particulate matters for the descriptive purposes defined by the Network Center were changed from 0.1 μg/m^3 to 0.01 μg/m^3 in 2003.

Table 4.39 Monthly and annual dry deposition amounts of gaseous and particulate substances

Site: Rishiri **Country: Japan**

	Gases				Particulate matter components							
	SO_2	HNO_3	NH_3	NO_2	nss-SO_4^{2-}	NO_3^-	Cl^-	NH_4^+	Na^+	K^+	Mg^{2+}	Ca^{2+}
2012	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}
Jan	0.12	0.04	0.02	0.01	0.15	0.05	2.32	0.13	3.16	0.14	0.34	0.11
Feb	0.95	0.36	0.03	0.02	0.37	0.34	7.04	0.53	8.78	0.42	1.00	0.45
Mar	0.32	0.28	0.11	0.06	0.50	0.30	9.14	0.61	11.37	0.49	1.29	0.56
Apr	0.14	0.15	0.51	0.11	0.29	0.27	9.89	0.35	10.81	0.42	1.24	0.74
May	0.09	0.25	0.50	0.06	0.33	0.28	5.70	0.38	7.82	0.30	0.97	0.86
June	0.07	0.39	0.46	0.12	0.21	0.08	0.31	0.29	1.36	0.09	0.16	0.07
July	0.07	0.27	0.47	0.09	0.20	0.06	0.48	0.26	1.44	0.09	0.16	0.10
Aug	0.05	0.15	0.70	0.08	0.12	0.11	1.77	0.13	3.00	0.12	0.33	0.09
Sept	0.03	0.07	0.50	0.08	0.13	0.13	5.25	0.14	6.22	0.20	0.69	0.20
Oct	0.08	0.09	0.29	0.04	0.20	0.19	21.89	0.25	21.90	0.63	2.43	0.65
Nov	0.39	0.07	0.22	0.03	0.30	0.17	17.62	0.30	19.20	0.59	2.09	0.70
Dec	0.86	0.16	0.06	0.03	0.57	0.37	23.30	0.63	29.06	1.12	3.12	0.95
Annual	3.16	2.29	3.86	0.71	3.38	2.36	104.71	3.99	124.13	4.63	13.81	5.49

Table 4.40 Monthly and annual dry deposition amounts of gaseous and particulate substances

Site: Tappi **Country: Japan**

	Gases				Particulate matter components							
	SO_2	HNO_3	NH_3	NO_2	nss-SO_4^{2-}	NO_3^-	Cl^-	NH_4^+	Na^+	K^+	Mg^{2+}	Ca^{2+}
2012	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}
Jan	0.25	0.39	0.07	0.01	0.64	0.43	50.00	0.55	44.06	1.20	4.83	1.12
Feb	1.55	0.64	0.02	0.01	1.09	1.25	60.13	1.16	58.88	1.78	6.91	2.18
Mar	0.52	0.27	0.21	0.09	1.02	0.94	69.91	1.29	67.18	2.00	7.47	2.87
Apr	0.25	0.58	0.43	0.22	0.60	0.91	58.11	0.97	54.21	1.69	5.97	2.33
May	0.75	1.34	1.14	0.27	0.66	0.61	6.01	0.83	9.87	0.57	1.44	0.92
June	0.93	1.85	0.98	0.51	0.68	0.26	1.11	0.80	5.33	0.41	0.77	0.50
July	0.34	2.71	0.74	0.22	1.02	0.14	2.85	1.30	6.88	0.23	0.76	0.26
Aug	0.37	1.80	0.65	0.21	0.57	0.31	1.20	0.68	4.97	0.19	0.54	0.19
Sept	0.16	1.00	0.47	0.13	0.42	0.39	4.29	0.39	7.81	0.24	0.87	0.28
Oct	0.46	0.38	0.12	0.04	0.46	0.63	72.63	0.48	68.18	1.72	7.62	2.20
Nov	1.05	0.39	0.12	0.04	0.62	0.58	158.90	0.62	141.81	3.58	15.62	3.83
Dec	1.38	0.55	0.09	0.04	0.68	1.20	405.97	1.06	356.06	7.76	37.44	6.20
Annual	8.00	11.90	5.05	1.78	8.48	7.66	891.12	10.13	825.24	21.37	90.25	22.88

Table 4.41 Monthly and annual dry deposition amounts of gaseous and particulate substances

Site: Sado-seki **Country: Japan**

	Gases				Particulate matter components							
	SO_2	HNO_3	NH_3	NO_2	nss-SO_4^{2-}	NO_3^-	Cl^-	NH_4^+	Na^+	K^+	Mg^{2+}	Ca^{2+}
2012	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}
Jan	0.72	0.46	0.09	0.01	0.61	0.39	32.66	0.53	33.47	1.07	3.83	1.01
Feb	2.09	0.20	0.06	0.01	0.56	0.33	46.21	0.52	44.73	1.02	5.07	1.40
Mar	1.48	0.54	0.28	0.09	0.75	0.61	44.77	0.85	45.20	1.43	5.26	2.07
Apr	0.27	1.10	0.41	0.13	0.30	0.26	2.69	0.24	4.72	0.26	0.59	0.85
May	0.34	3.20	1.04	0.09	1.06	0.55	4.64	1.08	11.48	0.60	1.49	1.46
June	0.13	1.85	0.65	0.14	0.72	0.55	5.17	0.70	9.32	0.40	1.11	0.39
July	0.26	2.73	0.97	0.15	0.75	0.17	1.91	0.65	7.79	0.36	0.89	0.29
Aug	0.15	1.25	0.40	0.14	0.44	0.30	1.12	0.51	4.00	0.17	0.45	0.16
Sept	0.17	0.96	0.25	0.09	0.48	0.37	4.01	0.52	7.68	0.30	0.89	0.32
Oct	0.39	0.78	0.21	0.03	0.51	0.53	26.39	0.46	28.05	0.84	3.10	1.15
Nov	0.48	0.45	0.09	0.01	0.40	0.32	53.55	0.20	52.09	1.29	5.86	1.91
Dec	0.32	0.10	0.02	0.00	0.09	0.05	6.36	0.06	6.20	0.16	0.71	0.17
Annual	6.81	13.61	4.48	0.91	6.66	4.43	229.48	6.31	254.72	7.91	29.26	11.18

Table 4.42 Monthly and annual dry deposition amounts of gaseous and particulate substances

Site: Happo **Country: Japan**

	Gases				Particulate matter components							
	SO_2	HNO_3	NH_3	NO_2	nss-SO_4^{2-}	NO_3^-	Cl^-	NH_4^+	Na^+	K^+	Mg^{2+}	Ca^{2+}
2012	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}
Jan	0.24	0.38	0.02	0.01	0.34	0.03	0.04	0.24	0.41	0.08	0.06	0.18
Feb	0.43	0.69	0.03	0.01	0.49	0.03	0.04	0.43	0.72	0.16	0.12	0.43
Mar	0.26	0.81	0.12	0.06	0.69	0.37	0.30	0.94	1.24	0.33	0.28	1.39
Apr	1.72	1.63	0.57	0.18	0.97	0.73	0.63	1.54	1.77	0.61	0.45	2.77
May	0.48	2.23	0.95	0.18	0.81	0.23	0.11	1.18	0.48	0.31	0.25	1.46
June	0.44	1.18	0.70	0.34	0.32	0.03	0.02	0.55	0.17	0.20	0.04	0.11
July	0.23	0.12	0.14	0.21	0.03	0.01	0.01	0.06	0.02	0.01	0.00	0.01
Aug	0.66	1.18	1.22	0.30	0.25	0.05	0.06	0.55	0.21	0.06	0.03	0.05
Sept	0.33	0.76	0.82	0.09	0.18	0.03	0.05	0.33	0.32	0.06	0.04	0.06
Oct	0.44	0.58	0.49	0.05	0.26	0.10	0.13	0.39	1.06	0.11	0.14	0.25
Nov	0.38	0.46	0.16	0.04	0.22	0.03	0.04	0.17	1.33	0.10	0.16	0.38
Dec	0.26	0.40	0.06	0.04	0.24	0.05	0.06	0.17	0.33	0.06	0.07	0.28
Annual	5.87	10.42	5.31	1.51	4.79	1.70	1.48	6.56	8.06	2.09	1.63	7.35

Table 4.43 Monthly and annual dry deposition amounts of gaseous and particulate substances

Site: Ijira **Country: Japan**

	Gases				Particulate matter components							
	SO_2	HNO_3	NH_3	NO_2	nss-SO_4^{2-}	NO_3^-	Cl^-	NH_4^+	Na^+	K^+	Mg^{2+}	Ca^{2+}
2012	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}
Jan	0.06	0.04	0.05	0.01	0.03	0.01	0.01	0.05	0.04	0.01	0.00	0.01
Feb	0.09	0.08	0.06	0.02	0.05	0.01	0.00	0.08	0.07	0.01	0.01	0.02
Mar	0.10	0.11	0.15	0.13	0.07	0.02	0.03	0.11	0.16	0.03	0.02	0.05
Apr	0.11	0.18	0.42	0.22	0.08	0.03	0.02	0.13	0.16	0.03	0.03	0.06
May	0.12	0.46	0.42	0.28	0.13	0.01	0.00	0.21	0.11	0.03	0.02	0.08
June	0.10	0.21	0.32	0.28	0.05	0.01	0.00	0.08	0.08	0.02	0.01	0.02
July	0.09	0.09	0.49	0.21	0.02	0.00	0.00	0.03	0.04	0.01	0.00	0.01
Aug	0.16	0.21	0.48	0.29	0.04	0.01	0.00	0.04	0.11	0.01	0.01	0.02
Sept	0.03	0.08	0.38	0.16	0.04	0.01	0.01	0.05	0.10	0.02	0.02	0.01
Oct	0.06	0.10	0.25	0.08	0.05	0.01	0.01	0.07	0.12	0.02	0.02	0.02
Nov	0.05	0.01	0.14	0.05	0.01	0.00	0.01	0.01	0.01	0.00	0.00	0.01
Dec	0.04	0.03	0.11	0.03	0.02	0.00	0.01	0.03	0.04	0.01	0.00	0.01
Annual	1.03	1.59	3.26	1.76	0.58	0.12	0.10	0.88	1.04	0.20	0.15	0.32

Table 4.44 Monthly and annual dry deposition amounts of gaseous and particulate substances

Site: Oki **Country: Japan**

	Gases				Particulate matter components							
	SO_2	HNO_3	NH_3	NO_2	nss-SO_4^{2-}	NO_3^-	Cl^-	NH_4^+	Na^+	K^+	Mg^{2+}	Ca^{2+}
2012	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}
Jan	4.03	0.69	0.32	0.02	1.29	1.21	74.51	1.45	80.45	2.70	9.13	2.24
Feb	2.55	0.48	0.27	0.03	1.29	1.22	40.39	1.70	46.34	1.79	5.33	1.68
Mar	0.99	1.01	0.46	0.16	1.93	1.57	57.85	2.57	64.55	2.93	6.89	3.38
Apr	1.41	1.34	0.53	0.10	1.91	1.74	71.52	2.46	74.38	2.53	7.23	5.27
May	0.94	1.39	1.56	0.07	1.22	0.71	3.04	1.46	9.77	0.58	2.21	0.85
June	0.34	1.09	1.57	0.13	0.81	0.48	5.38	0.83	10.43	0.48	1.16	0.28
July	0.39	1.42	0.96	0.10	1.30	0.31	3.06	1.14	12.36	0.78	1.38	0.35
Aug	0.06	0.12	0.09	0.00	0.13	0.09	0.97	0.12	1.75	0.07	0.20	0.05
Sept	0.38	0.19	0.47	0.00	0.24	0.15	2.16	0.21	3.87	0.16	0.43	0.11
Oct	0.59	0.00	0.00	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Nov	2.22	0.00	0.00	0.06	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Dec	2.39	0.29	0.14	0.06	1.07	0.99	130.45	1.05	124.66	3.98	14.20	4.06
Annual	16.28	8.03	6.38	0.79	11.20	8.46	389.33	12.99	428.56	16.02	48.15	18.28

Table 4.45 Monthly and annual dry deposition amounts of gaseous and particulate substances

Site: Banryu **Country: Japan**

	Gases				Particulate matter components							
	SO_2	HNO_3	NH_3	NO_2	nss-SO_4^{2-}	NO_3^-	Cl^-	NH_4^+	Na^+	K^+	Mg^{2+}	Ca^{2+}
2012	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}
Jan	1.74	1.27	1.14	0.05	0.36	0.44	3.30	0.67	5.09	0.36	0.65	0.28
Feb	1.34	0.42	0.51	0.05	0.63	0.65	6.22	1.18	8.28	0.57	0.99	0.47
Mar	0.87	0.83	0.80	0.27	0.71	0.65	5.21	1.18	8.54	0.66	1.02	0.77
Apr	0.64	1.36	1.02	0.23	0.75	0.56	2.79	1.05	6.05	0.49	0.90	1.13
May	0.49	1.80	1.37	0.20	0.82	0.31	0.92	1.18	4.27	0.38	0.66	0.81
June	0.42	0.85	1.25	0.26	0.39	0.15	0.53	0.57	2.29	0.24	0.25	0.10
July	0.34	1.72	1.12	0.30	0.51	0.05	0.17	0.70	1.39	0.16	0.15	0.07
Aug	0.35	0.29	0.88	0.29	0.23	0.16	0.36	0.31	1.65	0.11	0.19	0.06
Sept	0.30	0.42	0.70	0.21	0.26	0.14	0.22	0.38	1.46	0.12	0.17	0.09
Oct	0.42	0.40	0.43	0.11	0.35	0.28	2.14	0.55	3.59	0.23	0.47	0.25
Nov	0.82	0.61	0.41	0.13	0.51	0.49	4.49	0.64	7.83	0.46	1.07	0.81
Dec	1.13	0.49	0.37	0.11	0.45	0.47	7.73	0.71	10.10	0.41	1.22	0.60
Annual	8.85	10.45	10.00	2.21	5.98	4.36	34.08	9.12	60.55	4.18	7.74	5.44

Table 4.46 Monthly and annual dry deposition amounts of gaseous and particulate substances

Site: Yusuhara **Country: Japan**

	Gases				Particulate matter components							
	SO_2	HNO_3	NH_3	NO_2	nss-SO_4^{2-}	NO_3^-	Cl^-	NH_4^+	Na^+	K^+	Mg^{2+}	Ca^{2+}
2012	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}
Jan	1.23	1.02	0.14	0.03	0.37	0.13	0.22	0.57	0.92	0.21	0.13	0.15
Feb	1.21	0.36	0.16	0.03	0.26	0.08	2.72	0.40	3.21	0.17	0.38	0.16
Mar	0.97	0.97	0.21	0.21	0.45	0.14	0.21	0.78	1.14	0.18	0.15	0.35
Apr	0.60	0.22	0.15	0.16	0.10	0.04	0.01	0.10	0.18	0.04	0.07	0.28
May	0.62	1.58	0.55	0.17	0.64	0.08	0.03	0.84	0.62	0.19	0.20	0.68
June	0.17	0.39	0.48	0.10	0.22	0.01	0.00	0.29	0.28	0.13	0.04	0.06
July	0.44	0.37	0.51	0.07	0.24	0.00	0.01	0.27	0.43	0.00	0.05	0.04
Aug	0.20	0.14	0.29	0.07	0.09	0.00	0.06	0.06	0.42	0.02	0.05	0.02
Sept	0.41	0.42	0.34	0.07	0.25	0.02	0.02	0.26	0.61	0.10	0.09	0.12
Oct	0.44	0.62	0.23	0.07	0.29	0.06	0.08	0.39	0.86	0.12	0.12	0.14
Nov	0.85	0.72	0.20	0.09	0.39	0.19	0.35	0.65	1.85	0.22	0.29	0.36
Dec	0.97	0.70	0.19	0.09	0.31	0.10	0.18	0.40	1.22	0.16	0.18	0.26
Annual	8.11	7.51	3.45	1.17	3.60	0.84	3.88	5.00	11.74	1.54	1.76	2.61

Table 4.47 Monthly and annual dry deposition amounts of gaseous and particulate substances

Site: Hedo **Country: Japan**

	Gases				Particulate matter components							
	SO_2	HNO_3	NH_3	NO_2	nss-SO_4^{2-}	NO_3^-	Cl^-	NH_4^+	Na^+	K^+	Mg^{2+}	Ca^{2+}
2012	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}
Jan	0.87	0.27	0.20	0.00	1.17	0.71	41.17	1.26	50.20	1.42	5.93	1.60
Feb	0.23	0.45	0.43	0.01	0.51	0.27	12.70	0.56	15.33	0.46	1.82	0.71
Mar	0.38	0.38	0.39	0.10	0.84	0.77	18.53	1.02	21.26	0.75	2.64	0.30
Apr	0.33	0.64	1.31	0.09	1.25	1.01	23.85	1.22	34.13	1.30	4.03	1.40
May	0.30	0.75	1.22	0.10	1.19	0.58	15.15	1.17	23.40	1.03	2.86	1.55
June	0.44	0.00	1.32	0.02	0.35	0.35	38.88	0.23	40.24	1.41	4.64	1.51
July	0.11	0.01	1.29	0.03	0.15	0.17	15.29	0.15	14.83	0.46	1.66	0.40
Aug	0.09	0.00	1.38	0.02	0.18	0.21	45.84	0.25	43.66	1.35	4.88	1.27
Sept	0.05	0.03	1.05	0.01	0.17	0.15	5.38	0.50	7.66	0.51	0.76	0.30
Oct	0.03	0.20	0.26	0.01	0.84	0.67	162.45	0.97	143.35	3.15	15.98	5.19
Nov	0.17	0.45	0.17	0.01	0.71	0.69	16.76	0.85	20.34	0.75	2.50	1.40
Dec	0.31	0.30	0.14	0.02	1.09	0.91	42.66	1.21	49.81	1.40	6.03	2.91
Annual	3.31	3.50	9.15	0.42	8.44	6.49	438.67	9.40	464.21	14.00	53.74	18.54

Table 4.48 Monthly and annual dry deposition amounts of gaseous and particulate substances

Site: Ogasawara **Country: Japan**

	Gases				Particulate matter components							
	SO_2	HNO_3	NH_3	NO_2	nss-SO_4^{2-}	NO_3^-	Cl^-	NH_4^+	Na^+	K^+	Mg^{2+}	Ca^{2+}
2012	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}
Jan	0.04	0.05	0.11	0.02	0.18	0.08	4.78	0.12	5.30	0.14	0.62	0.15
Feb	0.02	0.07	0.17	0.01	0.16	0.08	3.89	0.10	4.60	0.14	0.52	0.12
Mar	0.08	0.11	0.38	0.09	0.23	0.14	4.62	0.15	5.39	0.17	0.71	0.33
Apr	0.05	0.07	0.30	0.04	0.17	0.12	5.23	0.10	5.89	0.17	0.70	0.24
May	0.01	0.07	0.62	0.02	0.15	0.03	2.27	0.08	3.31	0.12	0.44	0.28
June	0.05	0.02	0.54	0.06	0.07	0.02	2.40	0.03	2.70	0.10	0.34	0.06
July	0.00	0.02	0.50	0.12	0.03	0.02	5.53	0.02	5.10	0.13	0.61	0.09
Aug	0.00	0.01	0.63	0.08	0.02	0.02	9.30	0.03	8.33	0.21	0.99	0.18
Sept	0.04	0.12	0.57	0.02	0.04	0.05	8.97	0.03	8.08	0.19	0.97	0.19
Oct	0.00	0.01	0.43	0.01	0.06	0.06	13.30	0.04	12.12	0.31	1.40	0.27
Nov	0.01	0.07	0.24	0.03	0.16	0.10	3.89	0.09	4.73	0.13	0.56	0.17
Dec	0.02	0.06	0.25	0.03	0.14	0.08	3.62	0.08	4.29	0.11	0.51	0.12
Annual	0.33	0.68	4.74	0.52	1.41	0.81	67.81	0.88	69.83	1.93	8.34	2.20

Table 4.49 Conversion ratios from ppb to μg/m^3 (20^{o}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 4.50 Reporting limits for summarizing air concentration data

Species	Reporting 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 μg/m^3
Particulate matter components	0.01 μg/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(H_2O), 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.

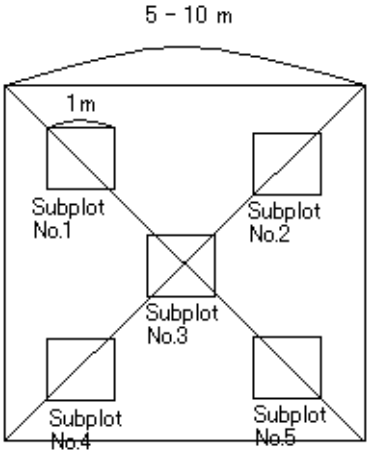


Figure 5.1 Plot for soil sampling

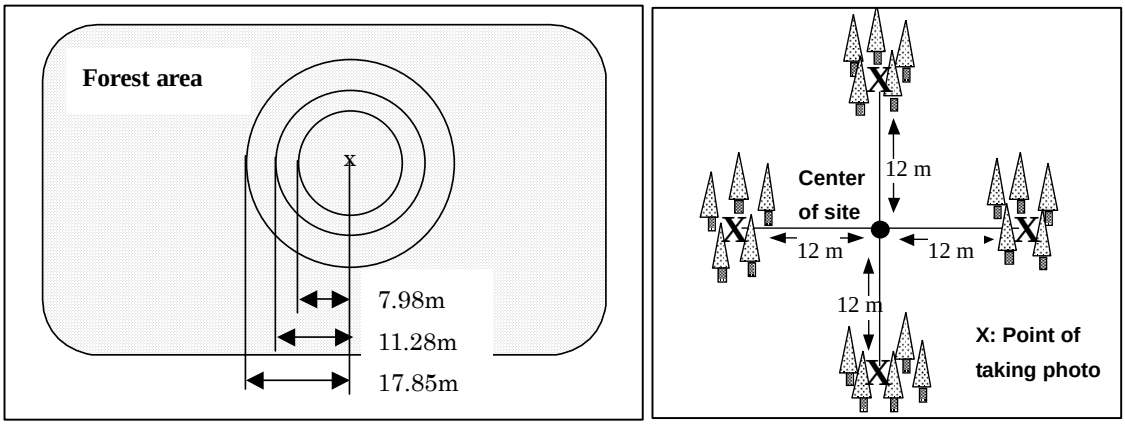


Figure 5.2 Plots for description of trees (Left) and selection of observation trees (Right)

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
Chemical Properties of Soil	
a) Moisture Content	Drying oven, Balance
b) pH (H_2O) and pH (KCl)	Glass electrode
c) Exchangeable Base Cations (Ca, Mg, K and Na)	AAS, ICP-AES or ICP-MS (CH_3COONH_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)	
g) Carbonate Content (for calcareous soil)	Volumetric calcimeter
h) Total Carbon Content	Titration (Walkley-Black method) or CN-analyzer
i)Total Nitrogen Content	Titration (Kjeldahl method) or CN-analyzer
j) Available Phosphate	Spectrophotometry (Bray-1 test)
k) Sulfate	Turbidimetry, IC, ICP-AES or ICP-MS

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

5.1.3 Monitoring Sites

Soil and vegetation monitoring data of 7 areas of 3 countries were submitted this year. The list of monitoring site and reported items in 2012 were shown in Table 5.4. Observation of the tree decline was conducted in 12 plots. The second or third survey on soil and forest vegetation monitoring were carried out in 4 sites in China.

Table 5.4 Outline of the Monitoring Sites in 2012

Country	Nearest deposition monitoring site	Site: Name of forests	Soil type	Items[*1]
China	**Jinyunshan (Chongqing)**	**Jinyunshan**	**Acidi-Udic Argosols**	**S (2)** **F (2)**
	Xiaoping (Xiamen)	**Xiaoping**	**Red soil**	**S (1)** **F (1)**
	Jiwozi (Xi'an)	**Dabagou**	**Brown soil**	**S (2)** **F (1)**
	Zhuxiandong (Zhuhai)	**Zhuxiandong**	**Ferrosols**	**S (3)** **F (3)**
Indonesia	**Serpong**	**Bogor**	**Typic Dystrudepts**	**F (1)[*2]**
Japan	**Banryu**	**Banryu-2**	**Cambisols**	**F (1)[*2]**
		Iwami "rinku" Factory Park	**Acrisols**	**F (1)[*2]**
	Ijira	**Ijira**	**Dystric Cambisols**	**F (1)[*2]**
		Yamato	**Andosols**	**F (1)[*2]**

*1. S, Soil monitoring; F, Forest monitoring; Figure in parentheses shows the number of the monitoring plots. *2. The monitoring was only conducted for the observation of tree decline.

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

Figure 5.3: Photographic record of tree decline

Table 5.5 a) Soil chemical analysis: Jinyunshan (China)

Soil sampling: 2012.9.11

Name of analysis laboratory: Chongqing Institute of Environmental Science

Analyst: Meng xiaoxing, Zhang guanli

Location	Soil type	Plot No.	Subplot No.	Layer analyzed (cm)	Repeat analysis	Water contents (%)	pH		Exchangeable base cations (B)				Ex-acidity (A)	Ex-acid cations		ECEC (A) + (B)	Base saturation
									Ca	Mg	K	Na		Al	H		
							H_2O	KCl	($cmol_c\ kg^{-1}$)								(%)
Jinyunshan-1	Acidi-Udic Argosols	No.1	1	0-10	1	4.63	4.2	3.6	0.20	0.04	0.08	0.02	8.2	6.5	1.70	8.5	4.0
			2			4.13	4.1	3.5	0.12	0.05	0.08	0.01	7.2	5.9	1.25	7.4	3.5
			3			3.85	4.2	3.5	0.22	0.05	0.09	0.00	7.3	6.2	1.1	7.6	4.7
			4			4.21	4.0	3.4	0.17	0.07	0.05	0.01	7.0	6.1	0.9	7.3	4.1
			5			3.55	4.1	3.6	0.14	0.03	0.07	0.00	5.0	4.2	0.8	5.3	4.6
			1	10-20	1	4.51	4.2	3.6	0.10	0.03	0.08	0.02	7.1	5.6	1.5	7.4	3.1
			2			3.62	4.1	3.5	0.12	0.03	0.08	0.02	7.0	5.9	1.1	7.2	3.5
			3			3.45	4.0	3.6	0.20	0.03	0.05	0.01	6.5	5.6	0.9	6.8	4.2
			4			3.52	4.0	3.3	0.11	0.04	0.05	0.02	4.2	4.2	0.1	4.5	4.9
			5			3.78	4.1	3.5	0.10	0.02	0.05	0.02	5.8	4.6	1.20	6.0	3.2
Jinyunshan-2	Acidi-Udic Argosols	No.1	1	0-10	1	3.63	4.2	3.4	0.11	0.03	0.07	0.02	6.6	5.3	1.24	6.8	3.4
			2			2.85	4.2	3.7	0.12	0.04	0.08	0.01	4.9	3.3	1.62	5.1	4.9
			3			3.77	4.2	3.6	0.16	0.03	0.08	0.00	6.0	5.1	0.9	6.3	4.3
			4			3.26	4.3	3.4	0.20	0.03	0.05	0.01	5.1	4.3	0.9	5.4	5.3
			5			3.03	4.1	3.6	0.06	0.03	0.11	0.02	5.1	3.8	1.3	5.3	4.1
			1	10-20	1	4.02	4.2	3.5	0.06	0.02	0.05	0.02	5.6	5.0	0.7	5.8	2.6
			2			3.61	4.9	4.0	0.18	0.15	0.12	0.02	3.1	1.0	2.1	3.6	13.1
			3			3.22	4.3	3.7	0.22	0.16	0.11	0.01	5.0	4.7	0.4	5.5	9.1
			4			3.90	4.3	3.5	0.24	0.05	0.05	0.02	5.5	4.8	0.7	5.8	6.2
			5			3.32	4.8	3.9	0.21	0.13	0.12	0.01	3.0	1.9	1.14	3.5	13.5

Table 5.5 b) Soil chemical analysis: Xiaoping (China)

Soil sampling: 2012.10.22

Name of analysis laboratory: Xiamen environmental monitoring central station

Analyst: Zhang Yashuang

Location	Soil type	Plot No.	Subplot No.	Layer analyzed (cm)	Repeat analysis	Water contents (%)	pH		Exchangeable base cations (B)				Ex-acidity (A)	Ex-acid cations		ECEC (A) + (B)	Base saturation	T-C	T-N
									Ca	Mg	K	Na		Al	H				
							H_2O	KCl	($cmol_c\ kg^{-1}$)								(%)	($g\ kg^{-1}$)	
Xiaoping	Dystric Cambisol	XPT-01	1	0-10	1	2.79	4.5	4.0	0.05	0.09	0.05	0.21	4.6	3.7	0.89	5.0	8.0	16	1.1
			2			2.35	4.6	3.9	0.07	0.07	0.05	0.22	4.1	3.4	0.73	4.5	9.0	15	1.1
			3			2.67	4.5	3.9	0.07	0.07	0.05	0.18	4.0	3.5	0.5	4.4	8.2	14	1.1
			4			2.32	4.5	4.0	0.03	0.08	0.06	0.09	4.0	3.4	0.6	4.2	5.9	16	1.2
			5			2.86	4.6	3.9	0.02	0.03	0.05	0.06	3.7	3.1	0.6	3.8	4.0	17	1.7
			1	10-20	1	2.76	4.6	3.9	0.06	0.08	0.04	0.16	4.2	3.4	0.8	4.5	7.4	5.7	0.7
			2			2.32	4.7	4.0	0.05	0.06	0.05	0.21	3.4	2.9	0.5	3.7	9.7	5.7	1.0
			3			2.22	4.5	3.9	0.03	0.05	0.06	0.08	3.4	2.8	0.6	3.6	6.1	7.7	1.0
			4			2.83	4.5	3.9	0.02	0.07	0.04	0.08	3.9	2.9	1.0	4.1	5.0	9.9	0.8
			5			2.92	4.7	3.9	0.04	0.06	0.06	0.06	3.2	2.7	0.48	3.4	6.3	4.6	0.8

Table 5.5 c) Soil chemical analysis: Dabagou (China)

Soil sampling: 2012.11.9

Name of analysis laboratory: Xi'an environmental monitoring station

Analyst: ZhuJian

Location	Soil type	Plot No.	Subplot No.	Layer analyzed (cm)	Repeat analysis	Water contents (%)	pH		Exchangeable base cations (B)				Ex-acidity (A)	Ex-acid cations		ECEC (A) + (B)	Base saturation
									Ca	Mg	K	Na		Al	H		
							H_2O	KCl	($cmol_c\ kg^{-1}$)								(%)
Dabagou	Dystric Cambisol	No.1	1	0-10	1	3.04	6.0	4.6	2.54	0.31	0.38	0.75	2.1	0.3	1.76	6.1	65.4
			2			3.58	5.8	4.8	3.14	0.32	0.30	0.04	2.5	0.5	2.00	6.3	60.5
			3			11.4	5.9	5.0	3.32	0.54	0.57	0.04	0.5	0.1	0.4	4.9	90.3
			4			12.19	6.2	5.0	3.39	0.37	0.29	0.05	0.7	0.1	0.6	4.8	85.1
			5			4.99	6.0	4.9	5.08	1.00	0.83	0.10	2.4	0.7	1.6	9.4	74.7
			1	10-20	1	17.9	6.0	5.0	3.85	0.57	0.49	0.04	1.3	0.4	0.9	6.2	79.9
			2			7.14	6.3	5.1	2.33	0.70	0.34	0.05	1.8	0.5	1.3	5.2	65.5
			3			3.18	6.3	5.0	2.41	0.68	0.18	0.13	1.1	0.1	1.1	4.5	75.2
			4			8.94	6.1	5.0	3.27	0.38	0.17	0.07	0.9	0.3	0.6	4.8	81.4
			5			8.61	6.1	5.1	2.82	0.33	0.15	0.08	1.4	0.1	1.28	4.8	70.4
	Dystric Cambisol	No.2	1	0-10	1	11.15	6.0	5.1	2.63	0.33	0.31	0.10	1.4	0.1	1.32	4.8	70.3
			2			4.89	5.7	4.8	6.19	0.55	0.14	2.48	2.0	0.7	1.36	11.4	82.2
			3			18.17	5.9	5.2	5.45	0.54	0.54	0.26	1.4	0.4	1.0	8.2	83.0
			4			17.13	5.9	5.0	5.68	0.59	0.94	0.07	1.7	0.2	1.5	9.0	80.9
			5			7.01	5.8	5.0	9.73	1.35	1.41	0.13	1.4	0.5	0.9	14.0	89.9
			1	10-20	1	4.62	5.3	4.3	5.46	0.93	0.78	0.09	2.9	0.5	2.5	10.2	71.2
			2			15.29	5.7	4.8	3.66	0.64	1.02	0.19	0.8	0.6	0.2	6.3	86.9
			3			8.5	6.1	5.0	4.04	0.64	0.99	0.12	1.4	0.3	1.1	7.2	80.6
			4			16.42	6.1	5.1	2.43	0.81	0.41	0.08	1.0	0.4	0.7	4.8	78.2
			5			8.35	6.2	5.1	3.14	0.97	0.19	0.12	0.8	0.3	0.46	5.2	85.0

Table 5.5 d) Soil chemical analysis: Zhuxiandong (China)

Soil sampling: 2012.12.28-29

Name of analysis laboratory: College of Natural Resources and Environment, South China Agric. Univ.

Analyst: DAI Jun, ZHAO Xiaorong, Dai Jinjun, HUANG Yuting

Location	Soil type	Plot No.	Subplot No.	Layer analyzed (cm)	Repeat analysis	Water contents (%)	pH		Exchangeable base cations (B)				Ex-acidity (A)	Ex-acid cations		ECEC (A) + (B)	Base saturation	T-C	T-N
									Ca	Mg	K	Na		Al	H				
							H_2O	KCl	($cmol_c\ kg^{-1}$)								(%)	(g kg^{-1})	
Zhuxiandong	Latosolic red soil	No.1	1	0-10	1	3.47	4.5	3.8	1.51	0.53	0.13	0.05	3.5	0.7	2.85	5.7	38.8	18.8	1.3
			2			2.29	4.7	4.0	1.36	0.49	0.16	0.03	2.6	0.5	2.06	4.6	44.2	20.6	1.5
			3			2.95	4.6	4.0	1.35	0.45	0.12	0.03	3.5	1.1	2.5	5.5	35.5	18.4	0.9
			4			4.02	4.4	3.7	1.01	0.37	0.16	0.03	4.5	1.5	3.0	6.1	25.8	21.6	1.4
			5			3.45	4.6	3.9	0.90	0.32	0.10	0.02	4.1	1.5	2.6	5.4	24.6	15.9	1.2
			1	10-20	1	2.81	4.6	4.1	0.57	0.25	0.12	0.04	3.7	1.1	2.5	4.7	21.0	7.6	0.5
			2			3.04	4.7	4.1	0.76	0.33	0.14	0.05	2.9	0.8	2.0	4.1	30.7	10.3	0.7
			3			3.67	4.6	4.0	1.16	0.38	0.11	0.02	4.3	1.3	3.0	6.0	28.0	11.0	0.6
			4			4.19	4.6	4.0	0.70	0.26	0.12	0.03	4.2	1.5	2.7	5.3	20.7	11.3	0.7
			5			3.53	4.6	4.1	0.45	0.22	0.13	0.02	3.6	1.1	2.6	4.5	18.5	8.0	0.6
		No.2	1	0-10	1	1.73	4.2	3.8	0.71	0.21	0.12	0.02	3.2	1.0	2.2	4.2	25.2	13.2	1.0
			2			2.41	4.4	4.0	0.83	0.31	0.19	0.02	3.1	0.7	2.4	4.4	30.4	10.5	0.9
			3			1.70	4.6	4.0	1.38	0.41	0.15	0.01	2.6	0.4	2.2	4.6	42.6	13.1	1.2
			4			1.82	4.6	3.9	0.78	0.27	0.11	0.02	3.6	1.0	2.6	4.7	24.7	13.4	0.9
			5			1.55	4.4	3.8	1.11	0.35	0.15	0.02	4.1	1.1	3.0	5.8	28.4	18.0	1.3
			1	10-20	1	1.67	4.4	3.9	0.63	0.19	0.12	0.01	3.0	1.0	2.0	3.9	24.2	11.1	0.7
			2			1.91	4.6	4.1	0.68	0.21	0.12	0.02	3.2	0.5	2.6	4.2	24.7	8.5	0.7
			3			2.37	4.8	4.1	1.26	0.44	0.21	0.03	3.5	0.9	2.6	5.4	35.9	6.5	0.6
			4			2.05	4.8	4.1	0.70	0.32	0.16	0.02	3.4	0.7	2.8	4.6	25.8	9.5	0.6
			5			1.91	4.5	3.9	1.04	0.39	0.19	0.02	5.7	1.8	3.9	7.3	22.2	10.7	0.8
		No.3	1	0-10	1	2.68	4.7	4.0	1.13	0.45	0.14	0.04	5.5	1.9	3.6	7.2	24.3	13.8	0.9
			2			2.83	4.6	3.9	0.62	0.24	0.10	0.03	5.1	1.7	3.4	6.1	16.3	13.4	1.1
			3			2.68	4.6	3.9	1.18	0.29	0.11	0.02	4.6	1.3	3.3	6.2	25.7	14.4	0.8
			4			1.94	4.4	3.9	1.28	0.54	0.15	0.03	6.6	1.6	5.0	8.6	23.2	12.7	0.8
			5			2.88	4.5	3.8	0.84	0.38	0.14	0.07	7.2	2.7	4.5	8.6	16.5	10.4	1.0
			1	10-20	1	3.10	4.5	4.0	0.47	0.20	0.12	0.02	6.9	2.4	4.5	7.7	10.6	6.4	0.5
			2			3.17	4.5	4.0	0.26	0.14	0.10	0.03	5.5	1.8	3.7	6.0	8.6	10.1	0.5
			3			2.33	4.5	4.0	0.83	0.20	0.09	0.02	5.2	1.6	3.6	6.3	18.0	9.5	0.6
			4			1.67	4.5	3.9	1.15	0.42	0.13	0.03	8.0	2.8	5.3	9.8	17.8	10.6	0.6
			5			4.74	4.4	3.8	0.33	0.25	0.12	0.02	9.2	3.1	6.1	10.0	7.3	12.8	0.7

Table 5.6 a) Observation of tree decline: Jinyunshan 1 (China)

Date: 11 September 2012

Individual No.	1 (3)	2 (2)	3 (58)	4 (101)	5 (105)	6 (70)	7 (102)	8 (72)	9 (103)	10 (104)
Direction (E, W, S, or N)	E	E	E	S	S	W	S	W	N	N
Plant Name	*Cunninghamia lanceolata*	*Symplocos setchuenensis*	*Symplocos setchuenensis*	*Symplocos setchuenensis*	*Symplocos setchuenensis*	*Symplocos setchuenensis*	*Symplocos setchuenensis*	*Symplocos setchuenensis*	*Symplocos setchuenensis*	*Symplocos setchuenensis*
Relative height										
Tree height (m)	17.7	9.2	6.3	12.5	12.3	7.6	8.1	9.6	11.4	11.5
DBH (cm)	18.9	12.6	10.7	12.1	13.2	8.0	10.3	11.6	11.2	10.3
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										
Damage class										

Estimated cause of decline: unknown

Table 5.6 b) Observation of tree decline: Jinyunshan 2 (China)

Date: 11 September 2012

Individual No.	1 (67)	2 (68)	3 (74)	4 (76)	6 (41)	8 (71)	9 (70)	10 (69)
Direction (E, W, S, or N)	E	E	S	S	W	N	N	N
Plant Name	*Symplocos setchuenensis*	*Symplocos setchuenensis*	*Adinandra bockiana*	*Symplocos setchuenensis*	*Adinandra bockiana*	*Symplocos lancifolia*	*Elaeocarpus japonecus*	*Michilus pingii*
Relative height								
Tree height (m)	10.2	9.2	15.2	16.1	19.2	13.9	17.2	15.2
DBH (cm)	10.2	13.8	15.5	24.9	20.9	16.0	38.5	21.1
Vitality of tree								
Form of tree				1				
Branch growth								
Dieback of stem								
Defoliation of crown								
Deformation of leaves	1		1					
Size of leaves								
Discoloration of leaves								
Injury of leaves						1		
Damage class								

Estimated cause of decline: unknown

Table 5.6 c) Observation of tree decline: Xiaoping (China)

Date: 22 October 2012

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	*Michelia.Macclurei Dandy*	*Michelia.Macclurei Dandy*	*Michelia.Macclurei Dandy*	*Michelia.Macclurei Dandy*	*Michelia.Macclurei Dandy*	*Michelia.Macclurei Dandy*	*Michelia.Macclurei Dandy*	*Michelia.Macclurei Dandy*	*Michelia.Macclurei Dandy*	*Michelia.Macclurei Dandy*	*Michelia.Macclurei Dandy*	*Michelia.Macclurei Dandy*	*Michelia.Macclurei Dandy*	*Michelia.Macclurei Dandy*	*Michelia.Macclurei Dandy*	*Michelia.Macclurei Dandy*	*Michelia.Macclurei Dandy*	*Michelia.Macclurei Dandy*
Relative height																		
Tree height (m)	16.5	17.3	18.0	16.8	16.2	17.3	17.9	17.8	17.7	18.2	17.9	17.7	18.9	16.5	16.8	17.0	16.9	19.2
DBH (cm)	17.3	20.8	19.5	19.9	21.6	24.7	21.2	20.3	18.2	22.8	20.3	20.4	18.8	21.5	20.5	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								

Estimated cause of decline: unknown

Table 5.6 d) Observation of tree decline: Dabagou (China)

Data: 9 November 2012

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	*Pinus armandi Fanch*	*Pinus armandi Fanch*	*Pinus armandi Fanch*	*Pinus armandi Fanch*	*Pinus armandi Fanch*	*Pinus armandi Fanch*	*Pinus armandi Fanch*	*Pinus armandi Fanch*	*Pinus armandi Fanch*	*Pinus armandi Fanch*	*Pinus armandi Fanch*	*Pinus armandi Fanch*	*Pinus armandi Fanch*	*Pinus armandi Fanch*	*Pinus armandi Fanch*	*Pinus armandi Fanch*	*Pinus armandi Fanch*	*Pinus armandi Fanch*	*Pinus armandi Fanch*	*Pinus armandi Fanch*
Relative height																				
Tree height (m)	16.8	14.2	11.9	14.8	11.9	11.9	9.8	8.6	10.8	14.7	14.5	12.3	10.8	15.2	11.1	13.2	11.9	13.7	11.2	8.7
DBH (cm)	24.7	24.5	16.1	21.5	24.8	16.6	12.4	18.4	15.6	19.2	27.7	22.6	14.8	22.6	16.2	24.1	16.3	24.3	15.5	9.2
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

Estimated cause of decline: Trees are too much

Table 5.6 e) Observation of tree decline: Zhuxiandong 1 (China)

Data: 29 December 2012

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)	W	W	W	W	W	S	S	S	S	S	E	E	E	E	E	N	N	N	N	N
Plant Name	*Pinus elliottii*	*Pinus elliottii*	*Pinus elliottii*	*Pinus elliottii*	*Pinus elliottii*	*Cratoxylum cochinchinense*	*Cratoxylum cochinchinense*	*Pinus elliottii*	*Micrococs paniculata*	*Wendlandia uvarifolia*	*Pinus elliottii*	*Pinus elliottii*	*Pinus elliottii*	*Archidendron lucidum*	*Archidendron lucidum*	*Pinus elliottii*	*Pinus elliottii*	*Pinus elliottii*	*Pinus elliottii*	*Pinus elliottii*
Relative height																				
Tree height (m)	11.0	11.0	9.0	9.0	10.0	6.0	5.0	11.5	7.0	7.0	10.0	11.0	12.0	12.0	9.5	8.0	8.0	8.0	8.5	8.5
DBH (cm)	35.4	14.5	16.9	13.6	20.0	6.1	5.8	29.8	8.5	11.4	13.5	18.9	20.4	20.4	16.3	26.0	8.6	16.7	17.4	15.1
Vitality of tree	1	2	2	1	1			1			3	1	1			3	3	2	3	2
Form of tree	1	2	2	1	1			1			2	2	1			3	3	2	3	2
Branch growth	1	2	2	2	2	1	1	1			2	2	1			3	3	3	3	2
Dieback of stem	2	2	2	2	2			1			2	2	1			2	2	2	3	2
Defoliation of crown	1	2	2	2	1	1	1	1			2	2	1			2	2	2	2	2
Deformation of leaves	1	2	2	2	1			1			3	1	1			2	2	2	2	2
Size of leaves	1	1	1	1	1			1			2		1			2	2	2	2	2
Discoloration of leaves						1	1	1			1					2	2	2	2	2
Injury of leaves	1	2	2	1	1	1	1	1			2	1				2	2	2	2	2
Damage class	1	2	2	2	2			1			3	2	2			3	3	2	3	2

Estimated cause of decline:_____

Table 5.6 f) Observation of tree decline: Zhuxiandong 2 (China)

Data: 28 December 2012

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)	N	N	N	N	N	E	E	E	E	E	W	W	W	W	W	S	S	S	S	S
Plant Name	*Acacia confusa*	*Litsea rotundifolia var. oblongifolia*	*Litsea rotundifolia var. oblongifolia*	*Machilus velutina*	*Acacia confusa*	*Acacia confusa*	*Litsea rotundifolia var. oblongifolia*	*Acacia confusa*	*Syzygium rehderianum*	*Acacia confusa*	*Archidendron lucidum*	*Acacia confusa*	*Litsea rotundifolia var. oblongifolia*	*Syzygium odoratum*	*Archidendron lucidum*	*Acacia confusa*	*Bridelia tomentosa*	*Acacia confusa*	*Acacia confusa*	*Acacia confusa*
Relative height																				
Tree height (m)	10.0	6.5	6.0	6.0	8.0	8.0	5.0	9.5	8.0	10.0	5.0	11.0	4.0	7.0	7.0	7.5	7.5	10.0	6.0	12.0
DBH (cm)	14.5 +18.7 +25.6	5.5 +5.5	5.6 +5.2 +5.1 +4.9 +4.6 +2.5 +2.1	7.4	12.3	17.4	3.3 +2.7 +4.5	22.1	10.5	11.0	4.2	27.8	3.6	12.2	9.8	7.0	6.9	20.5 +6.45	5.6	16.3
Vitality of tree		1	1	1	2	1	2	2		3		1				1	1	1		
Form of tree		1	1	1	2	1	2	2		3		1				1		1		
Branch growth		1	1	1	2	1	1	2		2		1				1		1		
Dieback of stem		1	1	1	2	1	2	2		3		2			1	1	1	1		
Defoliation of crown		1	1	1	2	1	2	2		3		2			1	1	1	1		
Deformation of leaves					2	0	1	2		1		1				1		1		
Size of leaves		1	1	1	1	1		1		1		1				1		1		
Discoloration of leaves								1		1		1						1		
Injury of leaves					2		2	1		3		1				1		1		
Damage class		1	1	1	2	1	2	2		3		1				1	1	1		

Estimated cause of decline: No. 1 and 19, Dead; No.5, Winding with climbers.

Trees which have some DBHs show that they have some stems.

Table 5.6 g) Observation of tree decline: Zhuxiandong 3 (China)

Data: 29 December 2012

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)	W	W	W	W	W	S	S	S	S	S	E	E	E	E	E	S	S	S	S	S
Plant Name	*Machilus velutina*	*Schefflera heptaphylla*	*Sapium discolor*	*Litsea glutinosa*	*Machilus velutina*	*Acacia confusa*	*Toxicodendron succedaneum*	*Acacia confusa*	*Aporusa dioica*	*Acacia confusa*	*Machilus velutina*	*Sapium discolor*	*Acacia confusa*	*Acacia confusa*	*Machilus velutina*	*Acacia confusa*	*Eurya nitida*	*Machilus velutina*	*Eurya nitida*	*Eurya nitida*
Relative height																				
Tree height (m)	4.0	3.6	4.0	5.0	6.0	6.5	2.1	8.0	7.0	5.0	5.5	5.5	6.0	6.0	4.5	6.0	2.5	4.5	3.0	3.0
DBH (cm)	10.2 +6.2	5.8	18.2	4.5	14.5	10.2	3.5 +2.3	25.4	9.5 +8.8	6.8	6.6	13.5	8.9	7+6.6	5.2	21.5	4.1	8.4	8.3 +6.2	5.1 +4.5 +2.9
Vitality of tree		1	2	1		1		1		1				1						
Form of tree		1	2	1		1		1		1	1			1						
Branch growth		1	2	1		1		1		1		1		1						
Dieback of stem		1	2	1		1		1		1	1	1		1						
Defoliation of crown		1	2	1		1				1		1		1						
Deformation of leaves		1	2	1		1				1				1						
Size of leaves			1			1				1				1						
Discoloration of leaves			1											1						
Injury of leaves		1	1			1				1										
Damage class			2	1		1		1		1				1						

Estimated cause of decline: No. 2, Leaves were damaged by herbivorous insects; No.10, Winding with climbers; No.16, Parasited by parasitic plants.

Trees which have some DBHs show that they have some stems.

Table 5.6 h) Observation of tree decline: Bogor (Indonesia)

Date: 18 and 19 May 2012

Individual No.	1 (71)	4 (27)	5 (279) (279)	6 (280)	8 (282)	12 (269)	16 (113)	21 (83)	23 (146)	27 (175)	28 (232)	31 (264)	33 (266)	34 (267)	39 (275)	42 (278)	44 (287)	46 (289)	49 (292)	51 (294)
Direction (E, W, S, or N)																				
Plant Name	*Hopea mengarawan*	*Hopea mengarawan*	*Hopea mengarawan*	*Hopea mengarawan*	*Hopea mengarawan*	*Hopea mengarawan*	*Hopea mengarawan*	*Hopea mengarawan*	*Hopea mengarawan*	*Hopea mengarawan*	*Hopea mengarawan*	*Hopea mengarawan*	*Melia excelsa*	*Maesopsis emenii*	*Hopea mengarawan*	*Hopea odorata*	*Khaya grandifolia*	*Hopea mengarawan*	*Hopea mengarawan*	*Hopea mengarawan*
Relative height																				
Tree height (m)	28	33	40	43	45		24	47	31	7.5	42	10	6.5	5.81	43	30	45	42	35	40
DBH (cm)																				
Vitality of tree													2	1						
Form of tree		1		1			1	1	1	1	1	1	3	3	1	1	1	1	1	1
Branch growth	2	1		1	1		2	2	1		2		2	3	1	2	1	1		1
Dieback of stem														3						
Defoliation of crown	1						1	1	1				1	1	1	1				1
Density of foliage	1						1	1	2				2	2	1	1				1
Deformation of leaves																				
Size of leaves																				
Discoloration of leaves	1									1						1				
Color of leaves	1									1						1				
Injury of leaves		1	1		1		1	1	1	1	1	1	1	1	1	1		1		
Damage class																				

Estimated cause of decline: Pest and very dense. No. 12 (269) was felt due to hard rain and strong wind.

Table 5.6 i) Observation of tree decline: Banryu-2 (Japan)

Date: 1 October 2012

Individual No.	72	82	76	63	64	65	54	83	34	35	37	8	9	80
Direction (E, W, S, or N)	N	N	N	E	E	E	S	S	W	W	W	W	W	W
Plant Name	*Castanopsis cuspidata*	*Machilus thunbergii*	*Symplocos lucida*	*Machilus thunbergii*	*Styrax japonica*	*Machilus thunbergii*	*Clethra barbinervis*	*Quercus serrata*	*Machilus thunbergii*	*Machilus thunbergii*	*Acanthopanax sciadophylloides*	*Symplocos lucida*	*Symplocos lucida*	*Ilex integra*
Relative height	+	+	+	+	+	+		+	+	+		+	+	+
Tree height (m)	13.5	14.5	13.5	12.5	11.0	14.5		13.0	16.0	14.5		14.5	16.5	14.0
DBH (cm)	25.3	26.7	11.9	26.5	16.0	21.9		21.3	25.1	21.3		16.2	20.9	33.2
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														

Estimated cause of decline: No. 83, by specific disease for Fagaceae tree species (infection of *Raffaelea quercivora* through the beetle, *Platypus quercivorus*), broken tip of the trunk; No. 37 and 54, dead recorded in 2011.

Remarks: No. 8, 9 and 80 were added in 2011.

Table 5.6 j) Observation of tree decline: Iwami "rinku" Factory Park (Japan)

Date: 1 October 2012

Individual No.	92	93	122	100	104	108	127	128	63	137	138	140	112	113	114	142	141	138
Direction	N	N	N	E	E	E	E	E	S	S	S	S	W	W	W	W	W	W
Plant Name	*Machilus thunbergii*	*Machilus thunbergii*	*Ilex micrococca*	*Quercus serrata*	*Castanopsis cuspidata*	*Castanopsis cuspidata*	*Castanopsis cuspidata*	*Castanopsis cuspidata*	*Castanopsis cuspidata*	*Quercus serrata*	*Machilus thunbergii*	*Quercus serrata*	*Machilus thunbergii*	*Machilus thunbergii*	*Machilus thunbergii*	*Castanea crenata*	*Machilus thunbergii*	*Machilus thunbergii*
Relative height			+		+						−						−	
Tree height (m)	15.5	16.2	18.2	18.0	17.4	17.0	18.0	18.0	18.0		12.6		18.6	19.6	15.1	12.5	14.5	12.6
DBH (cm)	24.2	28.1	29.0	29.7	29.0	26.0	30.0	35.6	32.9		24.5		21.8	22.3	28.5	35.4	25.1	24.5
Vitality of tree																3		
Form of tree					1	1			1							3		
Branch growth					1	1			1							3		
Dieback of stem					1	1			1							3		
Defoliation of crown																2		
Deformation of leaves																		
Size of leaves																		
Discoloration of leaves																2		
Injury of leaves																2		
Damage class																3		

Estimated cause of decline: No. 100, 137, 140 and 142, by specific disease for Fagaceae tree species (infection of *Raffaelea quercivora* through the beetle, *Platypus quercivorus*); No. 63, natural pruning; No. 127 and 128, perforations by the beetle, *Platypus quercivorus* , but no symptom of desease; No. 137, dead recorded in 2006; No.140, dead recorded in 2008.

Remarks: No. 138 was added in 2011.

Table 5.6 k) Observation of tree decline: Ijira (Japan)

Date: 30 November 2012

Individual No.	1	2	3-2	4	5-2	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Direction	N	N	N	N	N	E	E	E	E	E	S	S	S	S	S	W	W	W	W	W
Plant Name	*Chamaecyparis obtusa*	*Chamaecyparis obtusa*	*Chamaecyparis obtusa*	*Chamaecyparis obtusa*	*Chamaecyparis obtusa*	*Chamaecyparis obtusa*	*Cryptomeria japonica*	*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)	13.9	13.2	14.9	12.0	14.8	15.4	16.3	15.6	15.3	14.0	15.0	13.3	13.7	16.0	15.4	12.9	13.8	12.0	12.7	12.4
DBH (cm)	19.3	15.6	17.6	14.2	16.7	23.4	26.0	21.8	17.3	19.0	14.4	16.1	15.7	20.1	18.1	21.7	16.9	11.4	11.7	17.9
Vitality of tree												1	1					2	1	
Form of tree	2			2						1	1	2	2	1	1		1	2	1	1
Branch growth																				
Dieback of stem	1			1						1		1	1							
Defoliation of crown																				
Deformation of leaves																				
Size of leaves																				
Discoloration of leaves																				
Injury of leaves																				
Damage class																				

Estimated cause of decline: No.1, 4 and 12, broken tree tip; No. 10, broken tree tip and bent stem; No. 13, broken tree tip and forked; No. 18, 19 and 20, suppression by other surrounding trees.

Remarks: No. 3-3 and 5-2 were added in 2010.

Table 5.6 l) Observation of tree decline: Yamato (Japan)

Date: 29 November 2012

Individual No.	1	2	3	4	5	6	7	8	9	10	11-2	12-2	13-2	14-2	15	16	17	18	19	20
Direction	N	N	N	N	N	E	E	E	E	E	S	S	S	S	S	W	W	W	W	W
Plant Name	*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)	30.0	28.6	31.0	28.6	28.7	31.8	29.0	30.8	30.2	28.5	25.7	30.0	30.4	29.0	28.7	28.6	27.0	29.6	30.0	24.3
DBH (cm)	38.0	38.6	42.0	43.0	41.2	44.2	38.1	36.5	41.2	38.9	34.0	43.2	44.3	34.8	41.4	31.9	34.3	43.9	39.2	34.3
Vitality of tree																				1
Form of tree																1				1
Branch growth																				
Dieback of stem							1													
Defoliation of crown																				
Deformation of leaves																				
Size of leaves																				
Discoloration of leaves																				
Injury of leaves																				
Damage class																				

Estimated cause of decline: No. 7, broken tree tip; No. 16 and 20, bent stem by heavy snow.

Remarks: No. 11-2 and 12-2 were added in 2011; No. 13-2 and 14-2 were added in 2010.

Table 5.7 a) Description of trees: Jinyunshan 1 (China)
Date: 11 September 2012
Surveyor: Li Xianyuan

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

Tree No.	Scientific name	DBH (cm)	Tree Height (m)	Remarks
1	*Michilus pingii*	17.1	17.2	
2	*Symplocos setchuenensis*	12.6	9.2	
3	*Cunninghamia lanceolata*	18.9	17.7	
5	*Michilus pingii*	18.2	15.6	
6	*Symplocos setchuenensis*	13.1	8.7	
7	*Pinus massoniana*	41.9	23.2	
8	*Randia cochinchinensis*	3.9	3.9	
11	*Symplocos setchuenensis*	2.5	3.7	
12	*Randia cochinchinensis*	3.2	4.8	
13	*Randia cochinchinensis*	3.0	4.0	
15	*Symplocos setchuenensis*	10.7	10.4	
17	*Symplocos setchuenensis*	12.0	10.6	
18	*Symplocos setchuenensis*	6.6	10.4	
20	*Elaeocarpus japonecus*	6.9	10.5	
22	*Symplocos setchuenensis*	9.3	9.8	
24	*Symplocos setchuenensis*	7.9	11.3	
25	*Symplocos setchuenensis*	8.3	11.5	
26	*Pinus massoniana*	27.0	20.2	
27	*Castanopsis carlesii var. spinulosa*	4.3	6.9	
28	*Diospyros morrisiana*	2.3	3.6	
31	*Elaeocarpus japonecus*	25.5	16.2	
32	*Symplocos setchuenensis*	3.9	5.9	
33	*Castanopsis carlesii var. spinulosa*	40.7	22.5	
34	*Symplocos setchuenensis*	11.4	13.2	
35	*Symplocos setchuenensis*	9.9	11.2	
36	*Symplocos lancifolia*	11.3	8.9	
39	*Randia cochinchinensis*	2.5	3.4	
40	*Symplocos setchuenensis*	8.7	9.7	
41	*Symplocos setchuenensis*	2.8	4.6	
43	*Castanopsis carlesii var. spinulosa*	3.0	5.1	
44	*Eurya nitida*	4.0	5.9	
45	*Castanopsis carlesii var. spinulosa*	2.8	3.5	
46	*Castanopsis carlesii var. spinulosa*	25.6	21.3	
48	*Symplocos setchuenensis*	16.6	14.6	
49	*Castanopsis carlesii var. spinulosa*	2.9	5.1	
51	*Castanopsis carlesii var. spinulosa*	2.8	3.4	
52	*Castanopsis carlesii var. spinulosa*	2.5	3.2	
53	*Castanopsis carlesii var. spinulosa*	4.9	5.3	
54	*Randia cochinchinensis*	2.1	3.4	
57	*Michilus pingii*	20.5	19.4	

Table 5.7 b) Description of trees: Jinyunshan 1 (China)
Date: 11 September 2012
Surveyor: Li Xianyuan

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

Tree No.	Scientific name	DBH (cm)	Tree Height (m)	Remarks
58	*Symplocos setchuenensis*	10.7	6.3	
59	*Pinus massoniana*	46.9	25.8	
60	*Randia cochinchinensis*	6.9	6.5	
61	*Pinus massoniana*	30.3	21.1	
62	*Symplocos setchuenensis*	7.6	5.1	
63	*Adinandra bockiana*	7.3	6.5	
64	*Castanopsis carlesii var. spinulosa*	39.7	18.1	
65	*Symplocos setchuenensis*	11.0	9.1	
66	*Cunninghamia lanceolata*	20.5	17.6	
67	*Michilus pingii*	28.6	23.2	
68	*Michilus pingii*	25.4	19.2	
70	*Symplocos setchuenensis*	8.0	7.6	
71	*Symplocos setchuenensis*			dead
72	*Symplocos setchuenensis*	11.6	9.6	
73	*Symplocos setchuenensis*	7.0	7.4	
74	*Symplocos setchuenensis*	13.3	12.4	
75	*Michilus pingii*	13.8	14.7	
76	*Symplocos setchuenensis*	14.5	13.5	
77	*Symplocos setchuenensis*	8.1	9.9	
78	*Symplocos setchuenensis*	20.7	14.5	
79	*Symplocos lancifolia*	6.6	8.5	
80	*Michilus pingii*	26.4	20.7	
81	*Michilus pingii*	20.9	20.8	
82	*Castanopsis carlesii var. spinulosa*	19.9	17.8	
83	*Cunninghamia lanceolata*	18.1	15.2	
84	*Symplocos setchuenensis*	7.1	6.6	
85	*Symplocos setchuenensis*	11.6	8.6	

Table 5.7 c) Description of trees: Jinyunshan 1 (China)
Date: 11 September 2012
Surveyor: Li Xianyuan

Survey area 3: radius 17.85 m
(DBH > 18 cm)

Tree No.	Scientific name	DBH (cm)	Tree Height (m)	Remarks
87	*Castanopsis carlesii var. spinulosa*	39.4	24.2	
88	*Castanopsis carlesii var. spinulosa*	31.8	21.5	
90	*Castanopsis fargesii*	41.5	25.4	
91	*Michilus pingii*	23.4	23.8	
92	*Michilus pingii*	23.5	21.4	
93	*Pinus massoniana*	57.0	28.4	
94	*Cunninghamia lanceolata*	25.4	23.4	
95	*Castanopsis carlesii var. spinulosa*	32.2	19.5	
96	*Castanopsis carlesii var. spinulosa*	26.2	17.3	
99	*Castanopsis carlesii var. spinulosa*	40.3	23.4	
100	*Cunninghamia lanceolata*	27.2	16.5	
101	*Symplocos setchuenensis*	12.3	13.2	
102	*Symplocos setchuenensis*	8.1	10.3	
103	*Symplocos setchuenensis*	11.2	11.4	
104	*Symplocos setchuenensis*	10.3	11.5	
105	*Symplocos setchuenensis*	13.1	11.8	

Table 5.7 d) Description of trees: Jinyunshan 2 (China)
Date: 11 September 2012
Surveyor: Li Xianyuan

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

Tree No.	Scientific name	DBH (cm)	Tree Height (m)	Remarks
2	*Eurya loquaniana*	3.7	4.0	
3	*Eurya loquaniana*	4.6	3.3	
6	*Michilus pingii*	35.3	25.8	
7	*Michilus pingii*	27.7	27.6	
8	*Michilus pingii*			cut
12	*Michilus pingii*	33.8	24.1	
13	*Michilus pingii*	40.7	27.7	
15	*Symplocos botryantha*			dead
18	*Symplocos setchuenensis*	6.4	5.4	
20	*Symplocos lancifolia*	4.9	8.1	
21	*Symplocos setchuenensis*	4.8	6.3	
23	*Symplocos lancifolia*	4.9	6.1	
24	*Quercus fabri*			cut
25	*Elaeocarpus japonecus*	31.8	22.2	
26	*Symplocos setchuenensis*	3.5	4.0	
27	*Stranvaesia tomentosa*	1.9	3.7	
28	*Symplocos setchuenensis*	5.5	7.1	
32	*Eurya loquaniana*	3.6	5.1	
33	*Symplocos setchuenensis*	6.7	5.4	
35	*Symplocos setchuenensis*	6.7	7.1	
37	*Eurya loquaniana*	4.2	5.5	

Table 5.7 e) Description of trees: Jinyunshan 2 (China)
Date: 11 September 2012
Surveyor: Li Xianyuan

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

Tree No.	Scientific name	DBH (cm)	Tree Height (m)	Remarks
39	*Michilus pingii*	14.2	17.2	
40	*Michilus pingii*	31.9	26.1	
41	*Adinandra bockiana*	20.9	19.2	
42	*Symplocos lancifolia*	16.3	15.5	
43	*Symplocos setchuenensis*	9.5	15.2	
44	*Symplocos setchuenensis*	22.3	21.5	
45	*Elaeocarpus japonecus*	44.1	18.2	
46	*Symplocos setchuenensis*	8.1	14.2	
48	*Castanopsis carlesii var. spinulosa*	6.9	10.8	
49	*Viburnum sambucinum var. tomentosum*	9.9	11.1	

Table 5.7 f) Description of trees: Jinyunshan 2 (China)
Date: 11 September 2012
Surveyor: Li Xianyuan

Survey area 3: radius 17.85 m
(DBH > 18 cm)

Tree No.	Scientific name	DBH (cm)	Tree Height (m)	Remarks
50	*Elaeocarpus japonecus*	45.0	20.2	
51	*Castanopsis carlesii var. spinulosa*	36.8	25.1	
52	*Michilus pingii*	29.7	24.5	
53	*Michilus pingii*	30.8	28	
54	*Michilus pingii*	29.5	28.1	
55	*Michilus pingii*	33.1	29.6	
56	*Michilus pingii*	27.5	25.6	
57	*Michilus pingii*	29.7	26.1	
58	*Elaeocarpus japonecus*	40.4	19.2	
59	*Castanopsis fargesii*	53.8	26.5	
61	*Symplocos setchuenensis*	23.9	15.6	
62	*Michilus pingii*	36.3	29.7	
63	*Michilus pingii*	40.5	29.6	
65	*Michilus pingii*			cut
66	*Michilus pingii*			cut
67	*Symplocos setchuenensis*	10.2	10.2	
68	*Symplocos setchuenensis*	13.8	9.2	
69	*Michilus pingii*	21.3	15.2	
70	*Elaeocarpus japonecus*	38.7	17.2	
71	*Symplocos lancifolia*	16.0	13.9	
74	*Adinandra bockiana*	15.5	15.2	
76	*Symplocos setchuenensis*	24.9	16.1	
77	*Symplocos lancifolia*	15.4	13.6	

Table 5.7 g) Description of trees: Xiaoping (China)
Date: 22 October 2012
Surveyor: Chen Weidong, Hong Zhiyuan and Wang Bingzhi

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

Tree No.	Scientific name	DBH (cm)	Tree Height (m)	Remarks
101	*Michelia.Macclurei Dandy*	19.4	15.6	
102	*Michelia.Macclurei Dandy*	13.2	6.8	
103	*Michelia.Macclurei Dandy*	20.7	16.8	
104	*Michelia.Macclurei Dandy*	23.2	16.1	
105				dead
106	*Michelia.Macclurei Dandy*	19.9	15.2	
107	*Michelia.Macclurei Dandy*	13.3	10.5	
108	*Michelia.Macclurei Dandy*	14.6	9.2	
109	*Michelia.Macclurei Dandy*	18.6	16.5	
110	*Michelia.Macclurei Dandy*	5.5	8.9	
111				dead
112	*Michelia.Macclurei Dandy*	14.2	9.7	
113	*Michelia.Macclurei Dandy*	18.6	15.6	
114	*Michelia.Macclurei Dandy*	14.6	10.5	
115	*Michelia.Macclurei Dandy*	14.6	8.9	
116	*Michelia.Macclurei Dandy*	19.9	17.2	
117	*Michelia.Macclurei Dandy*	18.7	17.0	
118	*Michelia.Macclurei Dandy*	13.0	8.0	
119	*Michelia.Macclurei Dandy*	16.3	11.0	
120	*Michelia.Macclurei Dandy*	17.3	16.5	

Table 5.7 h) Description of trees: Xiaoping (China)
Date: 22 October 2012
Surveyor: Chen Weidong, Hong Zhiyuan and Wang Bingzhi

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

Tree No.	Scientific name	DBH (cm)	Tree Height (m)	Remarks
201	*Michelia.Macclurei Dandy*	21.7	15.2	
202	*Michelia.Macclurei Dandy*	14.9	9.0	
203	*Michelia.Macclurei Dandy*	21.6	16.2	
204	*Michelia.Macclurei Dandy*	5.9	7.0	
205	*Michelia.Macclurei Dandy*	16.7	11.0	
206	*Michelia.Macclurei Dandy*	13.0	11.2	
207	*Michelia.Macclurei Dandy*	21.7	18.0	
208	*Michelia.Macclurei Dandy*	15.5	10.1	
209	*Michelia.Macclurei Dandy*	13.5	11.6	
210	*Michelia.Macclurei Dandy*	20.8	17.3	
211	*Michelia.Macclurei Dandy*	19.5	18.0	
212	*Michelia.Macclurei Dandy*	15.8	10.9	
213	*Michelia.Macclurei Dandy*	23.7	17.0	
214	*Michelia.Macclurei Dandy*	22.4	17.5	
215	*Sapiumsebiferum*	11.8	10.0	
216	*Michelia.Macclurei Dandy*	22.7	18.0	
217	*Michelia.Macclurei Dandy*	20.0	18.2	
218	*Schima Su-perba Gardn.et Champ*	11.2	13.1	
219	*Michelia.Macclurei Dandy*	17.2	17.8	
220	*Michelia.Macclurei Dandy*	18.2	17.7	
221	*Michelia.Macclurei Dandy*	22.8	18.2	
222				dead
223	*Michelia.Macclurei Dandy*	18.9	16.5	
224	*Michelia.Macclurei Dandy*	14.5	8.8	
225	*Michelia.Macclurei Dandy*	24.7	17.3	
226	*Alnus rubra*	3.5	5.0	
227	*Michelia.Macclurei Dandy*	21.2	18.3	

Table 5.7 i) Description of trees: Xiaoping (China)
Date: 22 October 2012
Surveyor: Chen Weidong, Hong Zhiyuan and Wang Bingzhi

Survey area 3: radius 17.85 m
(DBH > 18 cm)

Tree No.	Scientific name	DBH (cm)	Tree Height (m)	Remarks
301	*Michelia.Macclurei Dandy*	20.3	17.8	
302	*Michelia.Macclurei Dandy*	15.8	6.0	
303	*Michelia.Macclurei Dandy*	23.5	16.0	
304				dead
305	*Michelia.Macclurei Dandy*	23.8	19.0	
306	*Michelia.Macclurei Dandy*	21.2	16.8	
307	*Michelia.Macclurei Dandy*	21.0	16.5	
308	*Michelia.Macclurei Dandy*	30.1	19.2	
309	*Michelia.Macclurei Dandy*	21.4	16.9	
310	*Michelia.Macclurei Dandy*	20.3	17.0	
311	*Michelia.Macclurei Dandy*	13.3	8.5	
312	*Michelia.Macclurei Dandy*	14.5	11.8	
313	*Michelia.Macclurei Dandy*	21.5	16.5	
314	*Michelia.Macclurei Dandy*	20.5	16.8	
315	*Michelia.Macclurei Dandy*	15.7	10.0	
316	*Michelia.Macclurei Dandy*	22.3	17.1	
317				dead
318	*Schima Su-perba Gardn.et Champ*	10.2	11.7	
319	*Michelia.Macclurei Dandy*	15.0	11.5	
320	*Michelia.Macclurei Dandy*	15.5	12.8	
321	*Michelia.Macclurei Dandy*	15.5	12.0	
322	*Michelia.Macclurei Dandy*	18.2	16.3	
323	*Pinus Massoniana*	8.6	11.5	
324	*Michelia.Macclurei Dandy*	9.4	11.0	
325	*Michelia.Macclurei Dandy*	21.8	16.8	
326	*Michelia.Macclurei Dandy*	21.0	17.0	
327				dead
328	*Michelia.Macclurei Dandy*	17.3	16.0	
329	*Michelia.Macclurei Dandy*	21.5	17.5	
330	*Michelia.Macclurei Dandy*	15.0	8.0	
331	*Michelia.Macclurei Dandy*	22.8	17.0	
332	*Michelia.Macclurei Dandy*	14.3	11.2	
333	*Michelia.Macclurei Dandy*	18.8	18.9	
334	*Michelia.Macclurei Dandy*	20.4	17.7	
335	*Michelia.Macclurei Dandy*	13.9	12.0	
336	*Michelia.Macclurei Dandy*	4.2	4.5	
337	*Michelia.Macclurei Dandy*	20.3	17.9	
338	*Michelia.Macclurei Dandy*	20.4	16.3	
339	*Michelia.Macclurei Dandy*	14.7	12.0	
340	*Michelia.Macclurei Dandy*	20.3	15.9	

Table 5.7 j) Description of trees: Dabagou (China)
Date: 9 November 2012
Surveyor: Zhu Jian, Song Xuejuan and Fu Gejuan

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

Tree No.	Scientific name	DBH (cm)	Tree Height (m)	Remarks
0	*Pinus armandi Fanch*	22.0	12.0	
1	*Pinus armandi Fanch*	18.2	14.8	
2	*Larix gmelini Rupr.*	10.2	13.2	
3	*Larix gmelini Rupr.*	17.8	14.6	
4	*Crataegus hupehensis*	3.0	3.8	
5	*Viburnum kansuense*	2.5	2.9	
6	*Viburnum betulifolium*	2.1	4.7	
7	*Rosa omeiensis*	2.2	3.0	
8	*Quercus aliena var.acuteserrata*	5.6	5.9	
9	*Pinus armandi Fanch*	26.4	16.0	
10	*Carpinus cordata*	2.6	3.9	
11	*Quercus aliena var.acuteserrata*	4.7	6.8	
12	*Lespedeza formosa*	2.7	3.7	
13	*Pinus armandi Fanch*	26.4	10.3	
14	*Pinus armandi Fanch*	24.1	13.5	
15	*Pinus armandi Fanch*	22.6	10.1	
16	*Pinus armandi Fanch*	15.1	18.2	
17	*Quercus aliena var.acuteserrata*	4.7	6.4	
18	*Elaeagnus henryi*	5.7	7.9	
19	*Pinus armandi Fanch*	14.7	11.7	
20	*Larix gmelini Rupr.*	10.2	8.7	
21	*Acer grosseri*	6.8	7.3	
22	*Carpinus cordata*	4.5	5.3	
23	*Larix gmelini Rupr.*	22.1	13.2	
24	*Larix gmelini Rupr.*	24.7	14.9	
25	*Larix gmelini Rupr.*	15.9	13.0	
26	*Quercus aliena var.acuteserrata*	5.4	8.1	
27	*Quercus aliena var.acuteserrata*	6.4	6.9	
28	*Larix gmelini Rupr.*	17.8	14.0	
29	*Berberis*	2.1	3.8	
30	*Larix gmelini Rupr.*	10.2	10.3	
31	*Acer grosseri*	3.7	7.1	
32	*Prunus venosa*	3.5	7.2	
33	*Celastrus orbiculatus Thunb*			dead
34	*Quercus aliena var.acuteserrata*	5.5	6.5	
35	*Pinus armandi Fanch*	27.7	14.6	

Table 5.7 k) Description of trees: Dabagou (China)
Date: 9 November 2012
Surveyor: Zhu Jian, Song Xuejuan and Fu Gejuan

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

Tree No.	Scientific name	DBH (cm)	Tree Height (m)	Remarks
36	*Pinus armandi Fanch*	10.4	7.1	
37	*Pinus armandi Fanch*	9.7	9.3	
38	*Larix gmelini Rupr.*	9.1	7.8	
39	*Larix gmelini Rupr.*	9.2	9.7	
40	*Larix gmelini Rupr.*	12.1	9.8	
41	*Quercus aliena var.acuteserrata*	9.4	11.3	
42	*Larix gmelini Rupr.*	12.1	8.0	
43	*Larix gmelini Rupr.*	11.1	10.7	
44	*Larix gmelini Rupr.*	10.1	12.1	
45	*Larix gmelini Rupr.*	6.8	9.6	
46	*Larix gmelini Rupr.*	10.2	9.7	
47	*Larix gmelini Rupr.*	15.3	13.1	
48	*Larix gmelini Rupr.*	10.5	10.2	
49	*Larix gmelini Rupr.*	16.9	14.2	
50	*Larix gmelini Rupr.*	7.1	9.7	
51	*Pinus armandi Fanch*	15.6	9.3	
52	*Larix gmelini Rupr.*	6.5	7.9	
53	*Larix gmelini Rupr.*	6.7	9.4	
54	*Larix gmelini Rupr.*	6.1	8.1	
55	*Larix gmelini Rupr.*	6.4	7.7	
56	*Pinus armandi Fanch*	27.7	19.0	
57	*Larix gmelini Rupr.*	8.9	8.7	
58	*Larix gmelini Rupr.*	22.0	16.8	
59	*Pinus armandi Fanch*	25.8	15.9	

Table 5.7 l) Description of trees: Dabagou (China)
Date: 9 November 2012
Surveyor: Zhu Jian, Song Xuejuan and Fu Gejuan

Survey area 3: radius 17.85 m
(DBH > 18 cm)

Tree No.	Scientific name	DBH (cm)	Tree Height (m)	Remarks
60	*Pinus armandi Fanch*	26.1	16.0	
61	*Pinus armandi Fanch*	25.2	15.9	
62	*Larix gmelini Rupr.*	27.7	16.0	
63	*Pinus armandi Fanch*	30.3	17.2	
64	*Pinus armandi Fanch*	27.4	14.5	
65	*Pinus armandi Fanch*	25.5	19.5	
66	*Pinus armandi Fanch*	23.2	14.8	

Table 5.7 m) Description of trees: Zhuxiandong 1 (China)
Date: 29 December 2012
Surveyor: Zhuang Xueying, Huang Jiuxiang, Zheng Mingxuan, Mo Huizhi, Xu Ruijing, Yan Xiang, Hong Wenjun, Yang Jiehao

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

Tree No.	Scientific name	DBH (cm)	Tree Height (m)	Remarks
1	*Mallotus paniculatus*	3.4	3.0	
2	*Litsea rotundifolia var. oblongifolia*	3.7+3.4+4.4	2.1	
3	*Litsea rotundifolia var. oblongifolia*	2.2	1.8	
4	*Litsea rotundifolia var. oblongifolia*	2.4+2.6+2.2	3.0	
5	*Litsea rotundifolia var. oblongifolia*	2.8	2.3	
6	*Litsea rotundifolia var. oblongifolia*	2.3+1.6+2.4	2.3	
7	*Litsea rotundifolia var. oblongifolia*	2.2+2.4+1.8 +2.3	2.4	
8	*Litsea rotundifolia var. oblongifolia*	2.4+2.2+2.1	2.4	
9	*Litsea rotundifolia var. oblongifolia*	2.4	2.5	
10	*Litsea rotundifolia var. oblongifolia*	3.0+2.2+2.4 +2.8+2.7	2.2	
11	*Litsea rotundifolia var. oblongifolia*	1.1+1.3	1.6	
12	*Litsea rotundifolia var. oblongifolia*	1.8	2.0	
13	*Litsea rotundifolia var. oblongifolia*	2.8+3.8	3.7	
14	*Litsea rotundifolia var. oblongifolia*	3.1+3.6+3.3 +2.9+3.5+3.3 +2.4+2.1	3.4	
15	*Litsea rotundifolia var. oblongifolia*	2.0	2.6	
16	*Litsea rotundifolia var. oblongifolia*	3.2	4.3	
17	*Litsea rotundifolia var. oblongifolia*	4.0+4.1	4.2	
18	*Litsea rotundifolia var. oblongifolia*	4.8+3.9+2.9 +3.6+3.3+4.4	3.8	
19	*Litsea rotundifolia var. oblongifolia*	1.1+2.3	2.5	
20	*Litsea rotundifolia var. oblongifolia*	2.4+2.4	2.6	
21	*Litsea rotundifolia var. oblongifolia*	5.8	2.2	
22	*Litsea glutinosa*	7.8	5.3	
23	*Litsea glutinosa*	3.8	2.3	
24	*Litsea glutinosa*	1.7	2.2	
25	*Raphiolepis indica var. indica*	1.8	1.8	
26	*Melastoma candidum*	1.4	1.5	
27	*Cratoxylum cochinchinense*	6.1	4.5	
28	*Cratoxylum cochinchinense*	3.3	3.5	
29	*Cratoxylum cochinchinense*	5.3	4.8	
30	*Cratoxylum cochinchinense*	6.1	6.0	
31	*Cratoxylum cochinchinense*	5.8	5.0	
32	*Psychotria rubra*	2.3	2.1	
33	*Psychotria rubra*	2.4	2.4	
34	*Psychotria rubra*	2.8	3.9	
35	*Psychotria rubra*	2.0+1.8	2.0	
36	*Psychotria rubra*	2.3+2.8	1.6	
37	*Zanthoxylum avicennae*	2.6	2.4	
38	*Ilex asprella*	1.8+2.2	2.4	
39	*Ilex asprella*	2.9	2.5	
40	*Ilex asprella*	3.8+3.5+3.5 +3.2	2.6	
41	*Ilex asprella*	2.1+1.7	2.3	
42	*Ilex asprella*	2.4+2.8	2.3	
43	*Ilex asprella*	1.0	1.8	
44	*Ilex asprella*	2.9	2.5	
45	*Ilex asprella*	3.8+3.5+3.5 +3.2	2.6	
46	*Ilex asprella*	2.1+1.7	2.3	
47	*Ilex asprella*	2.4+2.8	2.3	
48	*Ilex asprella*	1.0	1.8	
49	*Fagerlindia scandens*	1.3	1.9	
50	*Fagerlindia scandens*	1.8+1.9+3.1 +2.7+1.5+1.8	1.9	
51	*Pinus elliottii*	21.4	9.5	
52	*Pinus elliottii*	29.8	9.0	
53	*Pinus elliottii*	15.3	10.2	
54	*Pinus elliottii*	39.5	9.5	
55	*Pinus elliottii*	14.9	9.0	
56	*Pinus elliottii*	14.8	8.0	
57	*Pinus elliottii*	13.6	7.5	
58	*Pinus elliottii*	9.5	8.5	
59	*Pinus elliottii*	17.1	9.5	
60	*Pinus elliottii*	16.9	10.0	
61	*Pinus elliottii*	13.9	10.0	
62	*Pinus elliottii*	11.2	5.6	
63	*Pinus elliottii*	29.8	9.0	
64	*Eurya nitida*	2.4+3.1+3.3	2.3	
65	*Eurya nitida*	3.3+3.1	2.2	
66	*Schefflera heptaphylla*	3.8	2.3	
67	*Strophanthus divaricatus*	5.8	6.0	
68	*Strophanthus divaricatus*	2.3+1.4+2.6 +2.8+1.5	1.7	
69	*Phyllanthus emblica*	2.2	1.8	

Table 5.7 n) Description of trees: Zhuxiandong 1 (China)

Date: 29 December 2012

Surveyor: Zhuang Xueying, Huang Jiuxiang, Zheng Mingxuan, Mo Huizhi, Xu Ruijing, Yan Xiang, Hong Wenjun, Yang Jiehao

Survey area 2: radius 11.28 m

(DBH > 4 cm)

Tree No.	Scientific name	DBH (cm)	Tree Height (m)	Remarks
1	*Microcos paniculata*	4.3	5.0	
2	*Litsea rotundifolia var. oblongifolia*	4.5	5.5	
3	*Litsea rotundifolia var. oblongifolia*	6.5+6.1	6.0	
4	*Litsea rotundifolia var. oblongifolia*	6.7+5.2+5.9	6.0	
5	*Litsea rotundifolia var. oblongifolia*	3.7+3.4+4.4	2.1	
6	*Litsea rotundifolia var. oblongifolia*	4.0+4.1	4.2	
7	*Litsea rotundifolia var. oblongifolia*	4.8+3.9+2.9 +3.6+3.3+4.4	3.8	
8	*Litsea rotundifolia var. oblongifolia*	5.8	2.2	
9	*Litsea rotundifolia var. oblongifolia*	5.5	7.0	
10	*Litsea glutinosa*	7.5	6.0	
11	*Litsea glutinosa*	7.8	5.3	
12	*Litsea glutinosa*	6.1	5.5	
13	*Cratoxylum cochinchinense*	6.7	6.0	
14	*Cratoxylum cochinchinense*	6.1	4.5	
15	*Cratoxylum cochinchinense*	5.3	4.8	
16	*Cratoxylum cochinchinense*	6.1	6.0	
17	*Cratoxylum cochinchinense*	5.8	5.0	
18	*Cratoxylum cochinchinense*	9.8	5.5	
19	*Sapium discolor*	7.3+5.6	6.5	
20	*Pinus elliottii*	17.5	12.0	
21	*Pinus elliottii*	26.0	13.0	
22	*Pinus elliottii*	17.5	11.0	
23	*Pinus elliottii*	17.9	12.0	
24	*Pinus elliottii*	13.6	9.0	
25	*Pinus elliottii*	21.2	11.0	
26	*Pinus elliottii*	16.9	9.0	
27	*Pinus elliottii*	20.5	11.0	
28	*Pinus elliottii*	16.6	10.0	
29	*Pinus elliottii*	15.6	10.0	
30	*Pinus elliottii*	18.9	12.0	
31	*Pinus elliottii*	20.7	13.0	
32	*Pinus elliottii*	21.4	9.5	
33	*Pinus elliottii*	29.8	9.0	
34	*Pinus elliottii*	15.3	10.2	
35	*Pinus elliottii*	39.5	9.5	
36	*Pinus elliottii*	14.9	9.0	
37	*Pinus elliottii*	14.8	8.0	
38	*Pinus elliottii*	13.6	7.5	
39	*Pinus elliottii*	9.5	8.5	
40	*Pinus elliottii*	17.1	9.5	
41	*Pinus elliottii*	16.9	10.0	
42	*Pinus elliottii*	13.9	10.0	
43	*Pinus elliottii*	11.2	5.6	
44	*Pinus elliottii*	29.8	9.0	
45	*Wendlandia uvariifolia*	6.5	7.0	
46	*Acacia confusa*	13.8	9.0	
47	*Acacia confusa*	6.3	4.5	
48	*Acacia confusa*	21.5	11.0	
49	*Eurya nitida*	6.0	5.5	
50	*Schefflera heptaphylla*	4.9	4.5	
51	*Schefflera heptaphylla*	5.5	3.5	
52	*Schefflera heptaphylla*	5.2	3.0	
53	*Strophanthus divaricatus*	5.8	6.0	

Table 5.7 o) Description of trees: Zhuxiandong 1 (China)

Date: 29 December 2012

Surveyor: Zhuang Xueying, Huang Jiuxiang, Zheng Mingxuan, Mo Huizhi, Xu Ruijing, Yan Xiang, Hong Wenjun, Yang Jiehao

Survey area 3: radius 17.85 m

(DBH > 18 cm)

Tree No.	Scientific name	DBH (cm)	Tree Height (m)	Remarks
1	*Pinus elliottii*	39.5	9.5	
2	*Pinus elliottii*	30.4	12.5	
3	*Pinus elliottii*	29.8	9.0	
4	*Pinus elliottii*	25.0	9.5	
5	*Pinus elliottii*	24.1	10.0	
6	*Pinus elliottii*	23.0	9.0	
7	*Pinus elliottii*	21.4	9.5	
8	*Pinus elliottii*	21.2	8.5	
9	*Pinus elliottii*	21.0	10.5	
10	*Pinus elliottii*	20.9	9.0	
11	*Pinus elliottii*	20.4	9.0	
12	*Pinus elliottii*	20.2	9.0	
13	*Pinus elliottii*	19.9	7.5	
14	*Pinus elliottii*	19.5	10.0	
15	*Pinus elliottii*	19.4	10.0	
16	*Pinus elliottii*	19.2	9.0	
17	*Pinus elliottii*	19.2	8.5	
18	*Pinus elliottii*	19.1	10.0	
19	*Pinus elliottii*	19.0	9.0	
20	*Pinus elliottii*	18.8	10.0	
21	*Pinus elliottii*	18.5	9.0	
22	*Pinus elliottii*	18.0	9.0	
23	*Acacia confusa*	41.5	12.5	
24	*Acacia confusa*	22.9	12.0	
25	*Acacia confusa*	21.5	11.0	
26	*Acacia confusa*	21.1	8.0	
27	*Pinus elliottii*	19.1		Dead
28	*Acacia confusa*	22.5		Dead

Table 5.7 p) Description of trees: Zhuxiandong 2 (China)

Date: 28 December 2012

Surveyor: Zhuang Xueying, Huang Jiuxiang, Zheng Mingxuan, Mo Huizhi, Xu Ruijing, Yan Xiang, Hong Wenjun, Yang Jiehao

Survey area 1: radius 7.98 m

(Height > 1.3 m)

Tree No.	Scientific name	DBH (cm)	Tree Height (m)	Remarks
1	*Mallotus paniculatus*	8.8	5.5	
2	*Mallotus paniculatus*	10.7	6.5	
3	*Litsea rotundifolia var. oblongifolia*	1.6	1.7	
4	*Litsea rotundifolia var. oblongifolia*	2.8	1.9	
5	*Litsea rotundifolia var. oblongifolia*	2.8	2.3	
6	*Litsea rotundifolia var. oblongifolia*	3.0	2.6	
7	*Litsea rotundifolia var. oblongifolia*	2.3+1.2	2.3	
8	*Litsea rotundifolia var. oblongifolia*	2.3+2.8	2.0	
9	*Litsea rotundifolia var. oblongifolia*	3.5+3.3	1.8	
10	*Litsea rotundifolia var. oblongifolia*	4.2+3.1	3.2	
11	*Litsea rotundifolia var. oblongifolia*	2.4+3.4+1.8	2.6	
12	*Litsea rotundifolia var. oblongifolia*	4.5+3.8	2.8	
13	*Litsea rotundifolia var. oblongifolia*	2.6+2.8+3.2	2.8	
14	*Litsea rotundifolia var. oblongifolia*	2.8+2.5+1.9 +2.6	2.8	
15	*Litsea rotundifolia var. oblongifolia*	2.8+3.6+3.4	4.2	
16	*Litsea rotundifolia var. oblongifolia*	2.3+2.4+2.8 +2.4	2.3	
17	*Litsea rotundifolia var. oblongifolia*	2.8+2.6+4.1 +2.1	2.3	
18	*Litsea rotundifolia var. oblongifolia*	3.0+4.0+3.1 +2.0+3.8+3.7	3.1	
19	*Litsea rotundifolia var. oblongifolia*	2.2+3.3+2.6 +2.5+2.2+2.8 +2.9+3.2	2.5	
20	*Cratoxylum cochinchinense*	1.9	1.9	
21	*Cratoxylum cochinchinense*	3.4	3.0	
22	*Desmos chinensis*	4.7	4.1	
23	*Fagerlindia scandens*	1.3	1.6	
24	*Fagerlindia scandens*	2.2+1.8	3.0	
25	*Microcos paniculata*	5.3	3.8	
26	*Microcos paniculata*	3.9+3.3	3.5	
27	*Microcos paniculata*	7.8	5.0	
28	*Microcos paniculata*	4.8+4.0	4.5	
29	*Microcos paniculata*	9.1	5.0	
30	*Acacia confusa*	7.0	5.0	
31	*Acacia confusa*	7.0	5.8	
32	*Acacia confusa*	7.2	5.0	
33	*Acacia confusa*	8.3	4.0	
34	*Acacia confusa*	8.6	6.0	
35	*Acacia confusa*	9.2	6.5	
36	*Acacia confusa*	12.8	6.5	
37	*Acacia confusa*	15.8	5.5	
38	*Acacia confusa*	16.0	6.5	
39	*Acacia confusa*	16.5	5.2	
40	*Acacia confusa*	16.7	6.2	
41	*Acacia confusa*	15.3+12.9	6.0	
42	*Syzygium odoratum*	7.8	5.8	
43	*Syzygium odoratum*	12.2	7.0	
44	*Aporusa dioica*	1.6	1.7	
45	*Acacia confusa*	9.3		Dead

Table 5.7 q) Description of trees: Zhuxiandong 2 (China)
Date: 28 December 2012
Surveyor: Zhuang Xueying, Huang Jiuxiang, Zheng Mingxuan, Mo Huizhi, Xu Ruijing, Yan Xiang, Hong Wenjun, Yang Jiehao

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

Tree No.	Scientific name	DBH (cm)	Tree Height (m)	Remarks
1	*Mallotus paniculatus*	8.8	5.5	
2	*Mallotus paniculatus*	9.9	6.0	
3	*Mallotus paniculatus*	10.7	6.5	
4	*Microcos paniculata*	4.3	4.0	
5	*Microcos paniculata*	4.2+3.1	3.2	
6	*Microcos paniculata*	4.5+3.8	2.8	
7	*Microcos paniculata*	4.1+4.3	5.2	
8	*Microcos paniculata*	4.9+4.3	5.0	
9	*Microcos paniculata*	2.8+2.6+4.1 +2.1	2.3	
10	*Litsea rotundifolia var. oblongifolia*	5.5+4.8+4.0	4.0	
11	*Litsea rotundifolia var. oblongifolia*	3.0+4.0+3.1 +2.0+3.8+3.7	3.1	
12	*Litsea rotundifolia var. oblongifolia*	6.0+4.9+5.2 +5.6+5.1	6.0	
13	*Litsea rotundifolia var. oblongifolia*	4.0	3.8	
14	*Litsea rotundifolia var. oblongifolia*	4.8	3.8	
15	*Litsea rotundifolia var. oblongifolia*	4.3	4.2	
16	*Litsea rotundifolia var. oblongifolia*	4.7	4.1	
17	*Litsea rotundifolia var. oblongifolia*	10.8	7.2	
18	*Litsea rotundifolia var. oblongifolia*	5.3	3.8	
19	*Litsea glutinosa*	7.8	5.0	
20	*Scolopia saeva*	4.8+4.0	4.5	
21	*Sterculia lanceolata*	9.1	5.0	
22	*Desmos chinensis*	4.3	5.0	
23	*Archidendron lucidum*	4.4	4.8	
24	*Microcos paniculata*	6.3	5.3	
25	*Microcos paniculata*	7.9	6.0	
26	*Microcos paniculata*	4.3+4.1	5.0	
27	*Microcos paniculata*	6.2+7.8	5.8	
28	*Machilus velutina*	4.3	5.0	
29	*Machilus velutina*	5.5	3.2	
30	*Machilus velutina*	5.7	4.3	
31	*Machilus velutina*	7.2	5.0	
32	*Acacia confusa*	4.3	5.2	
33	*Acacia confusa*	4.9	4.2	
34	*Acacia confusa*	5.1	3.2	
35	*Acacia confusa*	5.8	5.5	
36	*Acacia confusa*	7.0	6.5	
37	*Acacia confusa*	7.0	5.0	
38	*Acacia confusa*	7.0	5.8	
39	*Acacia confusa*	7.2	5.0	
40	*Acacia confusa*	7.4	5.0	
41	*Acacia confusa*	7.6	5.0	
42	*Acacia confusa*	8.3	4.0	
43	*Acacia confusa*	8.5	5.8	
44	*Acacia confusa*	8.6	6.0	
45	*Acacia confusa*	9.0	6.8	
46	*Acacia confusa*	9.2	6.5	
47	*Acacia confusa*	10.5	7.2	
48	*Acacia confusa*	11.7	7.0	
49	*Acacia confusa*	11.8	7.5	
50	*Acacia confusa*	12.2	6.0	
51	*Acacia confusa*	12.8	6.5	
52	*Acacia confusa*	15.4	7.0	
53	*Acacia confusa*	15.8	5.5	
54	*Acacia confusa*	16.0	6.5	
55	*Acacia confusa*	16.5	10.5	
56	*Acacia confusa*	16.5	5.2	
57	*Acacia confusa*	16.7	6.2	
58	*Acacia confusa*	18.2	11.0	
59	*Acacia confusa*	20.0	11.5	
60	*Acacia confusa*	10.3+8.3+7.8	6.8	
61	*Acacia confusa*	18.9+8.0	9.0	
62	*Acacia confusa*	20.8+6.5	12.2	
63	*Acacia confusa*	15.3+12.9	6.0	
64	*Acacia confusa*	13.5+17.0	9.2	
65	*Bridelia tomentosa*	6.9	6.2	
66	*Syzygium odoratum*	7.8	5.8	
67	*Syzygium odoratum*	12.2	7.0	
68	*Litsea rotundifolia var. oblongifolia*	5.9		Dead
69	*Acacia confusa*	9.3		Dead
70	*Acacia confusa*	6.1		Dead
71	*Acacia confusa*	5.4		Dead
72	*Acacia confusa*	4.5		Dead
73	*Acacia confusa*	4.4		Dead
74	*Acacia confusa*	7.0		Dead
75	*Acacia confusa*	9.3		Dead

Table 5.7 r) Description of trees: Zhuxiandong 2 (China)
Date: 28 December 2012
Surveyor: Zhuang Xueying, Huang Jiuxiang, Zheng Mingxuan, Mo Huizhi, Xu Ruijing, Yan Xiang, Hong Wenjun, Yang Jiehao

Survey area 3: radius 17.85 m
(DBH > 18 cm)

Tree No.	Scientific name	DBH (cm)	Tree Height (m)	Remarks
1	*Acacia confusa*	27.8	11.5	
2	*Acacia confusa*	23.1	11.0	
3	*Acacia confusa*	23.0	10.0	
4	*Acacia confusa*	22.5+21.9	9.0	
5	*Acacia confusa*	21.2	10.5	
6	*Acacia confusa*	20.8	12.0	
7	*Acacia confusa*	20.6	9.0	
8	*Acacia confusa*	20.0	10.0	
9	*Acacia confusa*	19.8	10.0	
10	*Acacia confusa*	18.9	12.0	
11	*Acacia confusa*	25.6 Dead +18.7 Dead +14	13.0	

Table 5.7 s) Description of trees: Zhuxiandong 3 (China)
Date: 29 December 2012
Surveyor: Zhuang Xueying, Huang Jiuxiang, Zheng Mingxuan, Mo Huizhi, Xu Ruijing, Yan Xiang, Hong Wenjun, Yang Jiehao

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

Tree No.	Scientific name	DBH (cm)	Tree Height (m)	Remarks
1	*Litsea rotundifolia var. oblongifolia*	2.9+4.3+2.2 +3.8	2.8	
2	*Litsea rotundifolia var. oblongifolia*	1.1+1.2+1.5 +1.4+1.3+1.2	2.3	
3	*Litsea rotundifolia var. oblongifolia*	1.5	1.6	
4	*Litsea rotundifolia var. oblongifolia*	3.0	2.2	
5	*Litsea rotundifolia var. oblongifolia*	2.4	2.3	
6	*Litsea rotundifolia var. oblongifolia*	4.1+3.0+4.6 +4.6+3.8+4.0 +2.5+2.6	3.2	
7	*Litsea rotundifolia var. oblongifolia*	2.3+2.6+2.0 +2.2+2.8+2.6 +2.5+2.3	3.2	
8	*Litsea rotundifolia var. oblongifolia*	1.5+1.3	1.7	
9	*Litsea rotundifolia var. oblongifolia*	1.5+1.4+1.6 +1.2+1.8	2.1	
10	*Litsea rotundifolia var. oblongifolia*	1.6+1.6+2.1	2.4	
11	*Glochidion lanceolarium*	4.4+1.9	2.1	
12	*Melastoma candidum*	4.8	3.1	
13	*Archidendron lucidum*	0.9	2.4	
14	*Archidendron lucidum*	1.8	2.0	
15	*Archidendron lucidum*	2.7	3.0	
16	*Cratoxylum cochinchinense*	2.7	3.3	
17	*Psychotria rubra*	2.1+1.2	1.6	
18	*Machilus velutina*	5.3	5.6	
19	*Machilus velutina*	4.1	3.2	
20	*Machilus velutina*	3.6	2.5	
21	*Machilus velutina*	5.7+5.3+5.4 +4.1	4.0	
22	*Machilus velutina*	6.2+10.2	3.8	
23	*Machilus velutina*	14.5	5.3	
24	*Sapium discolor*	8.1	3.3	
25	*Sapium discolor*	8.3	3.5	
26	*Sapium discolor*	13.5	3.4	
27	*Sapium discolor*	13.3	3.8	
28	*Acacia confusa*	8.8	3.5	
29	*Acacia confusa*	6.5	2.6	
30	*Acacia confusa*	7.9	3.8	
31	*Eurya nitida*	3.6+2.2	2.5	
32	*Eurya nitida*	2.2+4.8	2.3	
33	*Eurya nitida*	2.8+3.0+4.9 +1.5+2.5	3.2	
34	*Eurya nitida*	3.4+3.7+2.2	2.9	
35	*Eurya nitida*	3.6+3.6	2.8	
36	*Eurya nitida*	3.1+2.7+2.2 +1.8	3.0	
37	*Eurya nitida*	4.3+2.8+1.8	2.5	
38	*Eurya nitida*	2.2+3.8	3.0	
39	*Eurya nitida*	2.7+2.9+3.1 +2.5	2.3	
40	*Eurya nitida*	4.7	2.7	
41	*Eurya nitida*	1.2+1.3+1.5 +1.6	2.4	
42	*Eurya nitida*	1.1	1.7	
43	*Schefflera heptaphylla*	2.5	3.0	
44	*Mallotus paniculatus*	2.3		Dead

Table 5.7 t) Description of trees: Zhuxiandong 3 (China)
Date: 29 December 2012
Surveyor: Zhuang Xueying, Huang Jiuxiang, Zheng Mingxuan, Mo Huizhi, Xu Ruijing, Yan Xiang, Hong Wenjun, Yang Jiehao

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

Tree No.	Scientific name	DBH (cm)	Tree Height (m)	Remarks
1	*Mallotus paniculatus*	5.5+4.7	4.0	
2	*Mallotus paniculatus*	4.7	5.5	
3	*Litsea rotundifolia var. oblongifolia*	4.9+4.1	3.5	
4	*Litsea rotundifolia var. oblongifolia*	2.9+4.3+2.2 +3.8	2.8	
5	*Litsea rotundifolia var. oblongifolia*	4.1+3.0+4.6 +4.6+3.8+4.0 +2.5+2.6	3.2	
6	*Litsea glutinosa*	4.3	3.0	
7	*Glochidion lanceolarium*	4.4+1.9	2.1	
8	*Melastoma candidum*	4.8	3.1	
9	*Archidendron lucidum*	8.9	5.5	
10	*Archidendron lucidum*	11.8	6.0	
11	*Archidendron lucidum*	17.8	6.5	
12	*Archidendron lucidum*	4.5	4.5	
13	*Machilus velutina*	7.5	4.5	
14	*Machilus velutina*	6.6	5.5	
15	*Machilus velutina*	4.3	4.0	
16	*Machilus velutina*	4.1	4.5	
17	*Machilus velutina*	5.6+4.9	5.0	
18	*Machilus velutina*	4.2	4.5	
19	*Machilus velutina*	4.6	5.0	
20	*Machilus velutina*	4.8	5.0	
21	*Machilus velutina*	5.2	4.5	
22	*Machilus velutina*	4.6	4.5	
23	*Machilus velutina*	4.4+4.7+5.4	4.0	
24	*Machilus velutina*	14.5	6.5	
25	*Machilus velutina*	5.3	5.6	
26	*Machilus velutina*	4.1	3.2	
27	*Machilus velutina*	5.7+5.3+5.4 +4.1	4.0	
28	*Machilus velutina*	6.2+10.2	3.8	
29	*Machilus velutina*	14.5	5.3	
30	*Sapium discolor*	17.5	6.0	
31	*Sapium discolor*	11.9+6.2	4.5	
32	*Sapium discolor*	13.1	4.8	
33	*Sapium discolor*	12.7	5.0	
34	*Sapium discolor*	10.0	6.5	
35	*Sapium discolor*	8.1	3.3	
36	*Sapium discolor*	8.3	3.5	
37	*Sapium discolor*	13.5	3.4	
38	*Sapium discolor*	13.3	3.8	
39	*Acacia confusa*	5.9+5.8	5.5	
40	*Acacia confusa*	4.6	4.0	
41	*Acacia confusa*	8.9+9.1	6.5	
42	*Acacia confusa*	12.0	7.0	
43	*Acacia confusa*	10.7	6.5	
44	*Acacia confusa*	8.8	3.5	
45	*Acacia confusa*	6.5	2.6	
46	*Acacia confusa*	7.9	3.8	
47	*Eurya nitida*	2.2+4.8	2.3	
48	*Eurya nitida*	2.8+3.0+4.9 +1.5+2.5	3.2	
49	*Eurya nitida*	4.3+2.8+1.8	2.5	
50	*Eurya nitida*	4.7	2.7	
51	*Syzygium odoratum*	5.2	4.5	
52	*Aporusa dioica*	6.1+6.3+4.2	4.0	
53	*Aporusa dioica*	9.5+8.8	6.5	

Table 5.7 u) Description of trees: Zhuxiandong 3 (China)
Date: 29 December 2012
Surveyor: Zhuang Xueying, Huang Jiuxiang, Zheng Mingxuan, Mo Huizhi, Xu Ruijing, Yan Xiang, Hong Wenjun, Yang Jiehao

Survey area 3: radius 17.85 m
(DBH > 18 cm)

Tree No.	Scientific name	DBH (cm)	Tree Height (m)	Remarks
1	*Sapium discolor*	18.2	5.8	
2	*Acacia confusa*	25.8	8.0	
3	*Acacia confusa*	21.5	5.0	

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

Date: 11 September 2012

Surveyor: Li Xianyuan

Number of Species: 41

Scientific name	Abundance
Simplocos setchuenensis	1
Lophatherum gracile	2
Castanopsis carlesii var. spinulosa	1
Elaeocarpus duclowxii	+
Vaccinium sprengelii	+
Sarcandra glabra	1
Castanopsis fargesii	+
Measa japonica	+
Diplopterygium chinensis	3
Elaeocarpus japonecus	+
Eurya loquaniana	+
Ardisia crispa var. dielsii	+
Camellia tsofuii	+
Lindera kwantungensis	+
Symplocos lancifolia	+
Cunninghamia lanceolata	+
Randia cochinchinensis	+
Stranvaesia tomentosa	2
Dryopteris erythrosora	+
Embelia rudis	+
Antidesma decicatalum	+
Arachniodes chinensis	+
Ardisia crenata	+
Lysimachia paridiformis	+
Michilus pingii	1
Alpinia japonica	+
Smilax china	+
Neolitea aurata var. glauca	+
Ficus heteromorpha	+
Gordonia acuminata	+
Balanophora henryi	+
Fordiophyton faberi Stapf	+
Laurocerasus spinulosa (Sieb. et zucc.) Schneid.	+

Table 5.8 b) Understory vegetation survey: Jinyunshan 2 (China)

Date: 11 September 2012

Surveyor: Li Xianyuan

Number of Species: 48

Scientific name	Abundance
Diplopterygium chinensis	3
Michilus pingii	4
Castanopsis carlesii var. spinulosa	2
Symplocos lancifolia	+
Symplocos setchuenensis	3
Camellia sinensis	+
Rubus assamensis	+
Measa japonica	+
Embelia rudis	+
Sarcandra glabra	2
Lophatherum gracile	+
Woodiwardia japonica	+
Stranvaesia tomentosa	+
Caesalpinia crista	3
Arachniodea omaena	+
Castanopsis fargesii	+
Elaeocarpus japonecus	+
Lysimachia paridifermis	+
Adinandra bockiana	+
Ilex viridis var. brevipedicelata	+
Symplocos botryantha	+
Trachycarpa fortunei	+
Liriope sp.	+
Ardisia crispa var. dielsii	+
Elaeocarpus duclouxii	+
Woodwardia unigemmata	+
Dichroa febrifuga	+
Daphniphyllum oldhami	+
Mahonia eurybracteata	+
Cinnamomum appelianum	+
Eurya loquaniana	+
Smilax china	1
Schefflera delavayi	+
Symplocos laurina	+
Sapium discolor	+
Litsea mollifolia	+
Neolitsea aurata var.glauca	+
Disporum cantoniense	+
Toxicodendron succedaneum	+
Rubus buergeri	+
Balanophora henryi	+
Ardisia sp.	+
Vaccinium sprengelii	+
hotinia glabra (Thunb.) Maxim.	+
Aidia cochinchinensis Lour.	+
Aleurites fordii Hemsl.	+
Rubus corchorifolius	+
Dendranthema indicum	+

Table 5.8 c) Understory vegetation survey: Xiaoping (China)

Date: 23 Octomber 2012

Surveyor: Chen Weidong, Hong Zhiyuan, Ye Jindui and Li Jinxing

Number of Species: 11

Scientific name	Abundance
Ilex purpurea Hassk	3
Dicranopteris linearis	2
Mussaenda pubescens Ait f	2
Buxus harlandii Hance	2
Litsea cubeba	2
Common Melastoma Herb	2
Adina pilulifera (Lam) Franch ex Drake	1
Cyclobalanopsis gilva (Blume) Oerst	1
Sapiumsebiferum	1
Schima Su-perba Gardn.et Champ	1
Schefflera octophylla（Lour.）Harms	1

Table 5.8 d) Understory vegetation survey: Dabagou (China)

Date: 9 November 2012

Surveyor: Zhu Jian

Number of Species: 13

Scientific name	Abundance
Equisetum hiemale	1
fargesia spathacea	+
chimaphila japonica	+
Aquilegia ecalcarata	+
Sanguisorba offiinalis	+
euonymus alatus	+
Reineckea carnea	+
Cardamina leucantha	+
Glechoma lonituba	+
Celastrus orbiculatus Thunb	+
Rubia ovatifolia	+
Agrimonia pilosa	+
rubus masogaeus	+

Table 5.8 e) Understory vegetation survey: Zhuxiandong 1 (China)

Date: 29 December 2012

Surveyor: Zhuang Xueying, Huang Jiuxiang, Zheng Mingxuan, Mo Huizhi, Xu Ruijing, Yan Xiang, Hong Wenjun, Yang Jiehao

Number of Species: 30

Scientific name	Abundance
Litsea rotundifolia var. oblongifolia	2
Sinobambusa tootsik	2
Strophanthus divaricatus	2
Embelia laeta	1
Psychotria rubra	1
Adiantum capillus-veneris	+
Breynia fruticosa	+
Clerodendrum canescens	+
Dicranopteris dichotoma	+
Eurya nitida	+
Fagerlindia scandens	+
Ficus variolosa	+
Gardenia jasminoides	+
Heterosmilax japonica	+
Ilex memecylifolia	+
Litsea glutinosa	+
Mallotus paniculatus	+
Melastoma candidum	+
Melastoma sanguineum	+
Miscanthus sinensis	+
Mussaenda pubescens	+
Psychotria serpens	+
Raphiolepis indica	+
Rhodomyrtus tomentosa	+
Schefflera heptaphylla	+
Taxillus chinensis	+
Tetracera asiatica	+
Toxicodendron succedaneum	+
Zanthoxylum avicennae	+
Zanthoxylum nitidum	+

Table 5.8 f) Understory vegetation survey: Zhuxiandong 2 (China)

Date: 28 December 2012

Surveyor: Zhuang Xueying, Huang Jiuxiang, Zheng Mingxuan, Mo Huizhi, Xu Ruijing, Yan Xiang, Hong Wenjun, Yang Jiehao

Number of Species: 39

Scientific name	Abundance
Adiantum flabellulatum	2
Ichnanthus vicinus	2
Sinobambusa tootsik	2
Lophatherum gracile	1
Microcos paniculata	1
Psychotria rubra	1
Alocasia macrorrhiza	+
Alpinia katsumadai	+
Archidendron lucidum	+
Ardisia crenata	+
Breynia fruticosa	+
Celastrus hindsii	+
Centotheca lappacea	+
Cyrtococcum patens	+
Dicranopteris dichotoma	+
Embelia laeta	+
Eurya nitida	+
Fagerlindia scandens	+
Ficus hirta	+
Glochidion eriocarpum	+
Gnetum parvifolium	+
Heterosmilax japonica	+
Ilex asprella	+
Lindsaea heterophylla	+
Lindsaea orbiculata	+
Litsea glutinosa	+
Lygodium japonicum	+
Machilus velutina	+
Melastoma sanguineum	+
Panicum brevifolium	+
Pteris semipinnata	+
Raphiolepis indica	+
Rubus howii	+
Sterculia lanceolata	+
Syzygium odoratum	+
Syzygium rehderianum	+
Tylophora ovata	+
Uvaria microcarpa	+
Zanthoxylum nitidum	+

Table 5.8 g) Understory vegetation survey: Zhuxiandong 3 (China)

Date: 29 December 2012

Surveyor: Zhuang Xueying, Huang Jiuxiang, Zheng Mingxuan, Mo Huizhi, Xu Ruijing, Yan Xiang, Hong Wenjun, Yang Jiehao

Number of Species: 16

Scientific name	Abundance
Dicranopteris dichotoma	5
Miscanthus sinensis	2
Litsea rotundifolia var. oblongifolia	2
Machilus velutina	1
Zanthoxylum nitidum	+
Rubus howii	+
Psychotria serpens	+
Glochidion lanceolarium	+
Stephania longa	+
Lygodium flexuosum	+
Gahnia tristis	+
Embelia laeta	+
Rhodomyrtus tomentosa	+
Cassytha filiformis	+
Gnetum parvifolium	+
Hypserpa nitida	+

Figure 5.3 a) Photographic record of tree decline: Ijira (Japan)

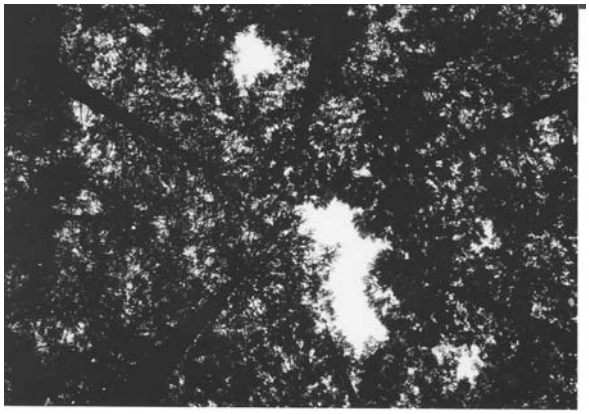
North

South

West

East

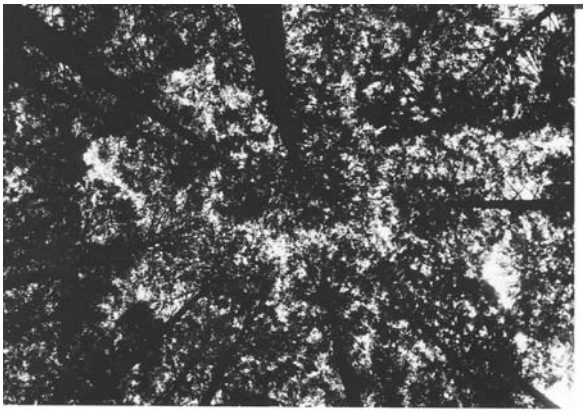
Figure 5.3 b) Photographic record of tree decline: Yamato (Japan)



North

South

West



East

Figure 5.3 c) Photographic record of tree decline: Banryu-2 (Japan)

North

South

West

East

Figure 5.3 d) Photographic record of tree decline: Iwami “rinku” Factory Park (Japan)

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 carried out the monitoring basically according to the Technical Manual for Monitoring on Inland Aquatic Environment (2000), although the latest version of the manual 2010 came to be available in 2012.

Items specified in the technical manual (2000) include 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 optional items are specified to be monitored. In near future, it is expected that some additional items (*i.e.* Chlorophyll a, T-P, T-N, DO) will be adopted as mandatory parameters according to the new manual (2010) at each laboratory.

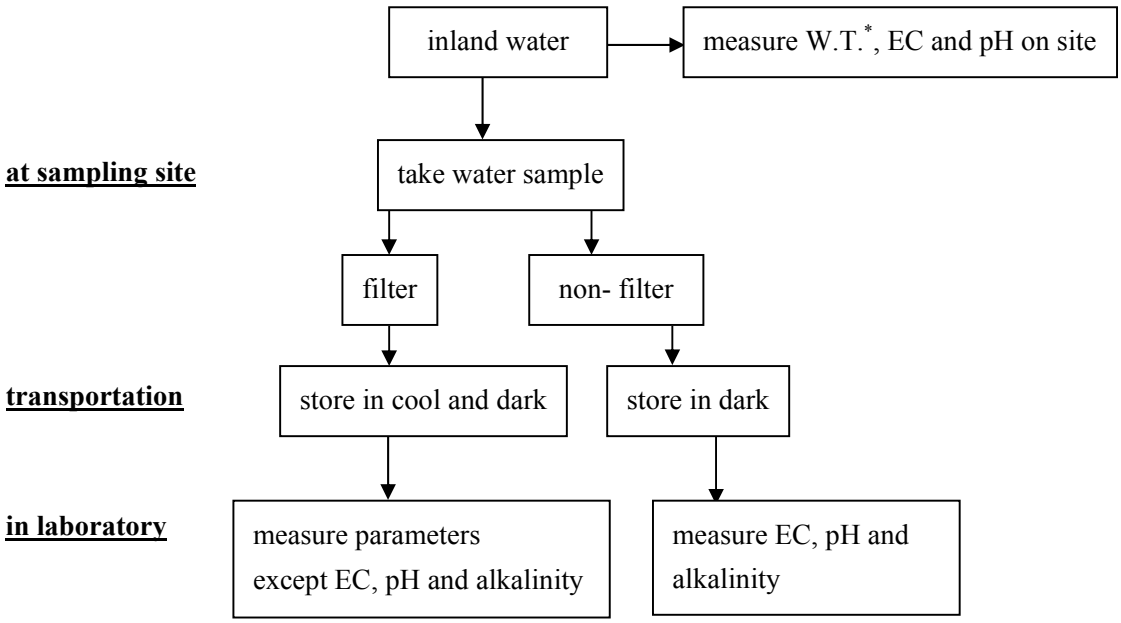
6.1.1 Selection of Sampling Sites

According to the technical manual (2000), 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 human activities such as deforestation, and cultivation should be few and far between in the upstream area.

6.1.2 Field Operation

Surface water is sampled at one location at the center of the lake or river. In principle, measurements of pH and electric conductivity (EC) are conducted at the site before a more

precise measurement is taken in the laboratory. Water samples for further analyses 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 pH, EC and 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. In addition, with regard to alkalinity, the Gran's plot titration method is adopted newly and recommended as a measurement parallel to the end-point pH 4.8 method in the latest version of the manual 2010.

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, 11 countries (Cambodia, China, Indonesia, Japan, Lao PDR, Malaysia, Mongolia, Philippines, Russia, Thailand, and Vietnam) carried out inland aquatic environment monitoring. The monitoring sites were established in 13 lakes/reservoirs and 6 streams. For 2012, the data of Nam Hum Lake, Pandin Lake and Ambulalakao Lake have not been submitted yet. Furthermore, including Semenyih Dam, some monitoring sites were not surveyed absolutely or partially, due to various reasons. Properties of all the monitoring sites are shown on Table 6.3. However, more information should be appended to these tables in the future.

Table 6.2 Outline of Inland Aquatic Environment Monitoring of 2012

Country	Name of site	Distance from the site	Nearest deposition monitoring site	Start year	Interval
Cambodia	Sras Srang Lake (Kampong Speu province)	-	Remote	2012	2 times/yr.
China	Jinyunshan Lake (Chongqing)	-	Rural	2001	4 times/yr.
	Xiaoping Dam (Xiamen)	-	Remote	2001	4 times/yr.
	Jiwozi River (Xi'an)	-	Remote	2001	4 times/yr.
	Zhuxiandong Stream (Zhuhai)	-	Urban	2004	4 times/yr.
Indonesia	Patengang Lake (Bandung)	47 km	Urban	2001	5 times/yr.
	Gunung Lake (Sukabumi)	-	-	2008	5 times/yr.

Japan	Ijira Lake (Gifu Pref.)	1.1 km	Rural/Ecolog. (Ijira)	2001	4 times/yr.
	Banryu Lake (Shimane Pref.)	0.5 km	Urban/Ecolog. (Banryu)	2001	4 times/yr.
Lao PDR	Nam Hum Lake (Vientiane province)	-	Vientiane	2009	
Malaysia	Semenyih Dam	26 km	Urban (Petaling Jaya)	2005	-
	Tembaling River (Sabah)	-	Remote (Danum Valley)	2007	5 times/yr.
Mongolia	Terelj River	-	Remote (Terelj)	2002	4 times/yr.
Philippines	Pandin Lake (San Pablo)	30 km	Rural (Los Banos)	2004	
	Ambulalakao Lake	-	Remote (Mt. Sto. Tomas)	2005	
Russia	Pereemnaya River (Listvyanka)	48 km	Rural (Listvyanka)	2004	2 times/yr.
	Komarovka River (Primorskaya)	0.5 km	Rural (Primorskaya)	2005	5 times/yr.
Thailand	Vachiralongkorn Dam (Kanchanaburi Province)	-	Remote	2002	4 times/yr.
Vietnam	Hoa Binh Reservoir	-	Rural	2001	4 times/yr.

6.2 Results of Monitoring

The results of monitoring of each parameter are shown in Table 6.4(1) to (12). Data within or exceeded the criteria of R_1 and R_2 are judged and marked as "O" or "×" in these tables respectively according to the QA/QC Program for Monitoring on Inland Aquatic Environment in East Asia. The annual mean values of each monitoring sites are summarized in Table 6.4 (13).

There were four sites (Sras Srang Lake in Cambodia, Gunung Lake in Indonesia, Tembaling river in Malaysia, and Vachiralongkorn Dam in Thailand) which have results exceeding allowable range of R_1 and/or R_2. However, that main reasons could not be identified.

The annual mean values of each parameter from 2000 to 2012 are shown in Table 6.5(1) to (20).

Table 6.3(1) Properties of lakes or streams

Lake/Stream: Sras Srang Lake

Country	Cambodia
Location	KIRIRUM national Park, Kampong Speu province
Latitude and longitude	11° 19’ 69.29” N, 104° 2’ 22.97” E
Altitude	800 m
Origin	-
Area and shape	10,403 m^2
Shore line length	-
Lake hydrologic type	-
Lake trophic type	-
Water depth	-
Water volume	-
Annual water level fluctuation	-
Annual air temperature	-
Precipitation	-
Sunshine duration	-
Solar radiation	-
Wind speed	-
Wind direction	-
Residence time of water	-
Lake utilization	-
Watershed area	-
River (inflow)	-

- : no information

Table 6.3(2) Properties of lakes or streams

Lake/Stream: Jinyunshan Lake

Country	China
Location	Chongqing Prefecture
Altitude	-
Origin	Artificial lake
Area and shape	0.999 ha
Shore line length	About 2 km
Lake hydrologic type	Reservoir
Lake trophic type	Oligotrophic to Mesotrophic
Water depth	6-13 m
Water volume	60,000 m^3
Annual water level fluctuation	2-4 m
Annual air temperature	18.3°C (mean) *1
Precipitation	1,149.5 mm/year *1
Sunshine duration	-
Solar radiation	-
Wind speed	Mean 0.48 m/s *2
Wind direction	S (dominant) *1
Residence time of water	-
Lake utilization	For drink, Irrigation water
Watershed area	-
River (inflow)	-

- : no information

*1 Chongqing, 2012

*2 Chongqing, 2011

Table 6.3(3) Properties of lakes or streams

Lake/Stream: Xiaoping Dam

Country	China
Location	Xiaoping, Xiamen
Altitude	595 m
Origin	Artificial lake
Area and shape	26.4 ha
Shore line length	100 m
Lake hydrologic type	Natural
Lake trophic type	Normal
Water depth	57.5 m
Water volume	4,080,000 m^3
Annual water level fluctuation	-
Annual air temperature	21.4°C (mean) *1
Precipitation	1,671.9 mm/year *1
Sunshine duration	162.8 hrs/month (mean) *1
Solar radiation	-
Wind speed	Mean 2.5 m/s *1
Wind direction	E (dominant) *1
Residence time of water	15 days
Lake utilization	Water power
Watershed area	18.1 km^2
River (flows into)	Dingxi lake

- : no information

*1 Xiamen, 2012

Table 6.3(4) Properties of lakes or streams

Lake/Stream: Jiwozi River

Country	China
Location	Xi'an
Origin	Natural stream
River length	-
Drainage area	-
The mean height of the river basin	-
Annual air temperature	14.6°C (mean) *1
Precipitation	426.7 mm/year *1
Sunshine duration	128.6 hrs/month (mean) *1
Solar radiation	-
Wind speed	Mean 1.2 m/s *1
Wind direction	W (dominant) *1
Lake (flows into)	-

- : no information

*1 Xi'an, 2012

Table 6.3(5) Properties of lakes or streams

Lake/Stream: Zhuxiandong Stream

Country	China
Location	Zhuhai
Origin	Natural stream
River length	-
Drainage area	-
The mean height of the river basin	-
Annual air temperature	22.9°C (mean) *1
Precipitation	1,759.7 mm *1
Sunshine duration	142.6 hrs/month (mean) *1
Solar radiation	-
Wind speed	Mean 2.7 m/s *1
Wind direction	ESE (dominant) *1
Lake (flows into)	-

- : no information

*1 Zhuhai, 2012

The monitoring had conducted between 2001 and 2003 at Zhuxiandong reservoir, after that, Zhuxiandong Stream was selected as a new site for inland water monitoring in 2004. This site is located in the upper stream of Zhuxiandong Reservoir. Therefore continuous monitoring has been conducted from 2004 at Zhuxiandong Stream.

Table 6.3(6) Properties of lakes or streams

Lake/Stream: Patengang Lake

Country	Indonesia
Location	Bandung
Altitude(including watershed)	1600-1700 m
Origin	Natural lake
Area and shape	65 km^2
Shore line length	-
Lake hydrologic type	-
Lake trophic type	-
Water depth	7 m (max)
Water volume	4.98 x 10^6 m^3
Annual water level fluctuation	1.42 m-4.20 m
Annual air temperature	24.5°C (mean) *1
Precipitation	2,198.0 mm *1
Sunshine duration	-
Solar radiation	411 MJ/m^2/month (mean) *1
Wind speed	Mean 1.1 m/s *1
Wind direction	WNW (dominant) *2
Residence time of water	-
Lake utilization	Sightseeing
River (inflow)	-

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

- : no information

*1 Bandung, 2012

*2 Bandung, 2011

Table 6.3(7) Properties of lakes or streams

Lake/Stream: Gunung Lake

Country	Indonesia
Location	Sukabumi, West Java
Altitude (including watershed)	950-1036 m
Origin	Natural lake
Area and shape	9.5 ha
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	-
Sunshine duration	-
Solar radiation	-
Wind speed	-
Wind direction	-
Residence time of water	-
Lake utilization	Irrigation
River (inflow)	1

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

- : no information

Table 6.3(8) Properties of lakes or streams

Lake/Stream: Ijira Lake

Country	Japan
Location	Gifu prefecture
Altitude	110 m
Origin	Artificial (dam-made lake)
Area and shape	0.1 km^2
Shore line length	1.8 km
Lake hydrologic type	Reservoir
Lake trophic type	Oligotrophic or mesotrophic
Water depth	Ave. 5.4 m (Max 10.9 m)
Water volume	0.00054 km^3
Annual water level fluctuation	0-0.74 m (Ave. 0.22 m)
Annual air temperature	15.9°C (mean) *1
Precipitation	1,721.5 mm/year *1
Sunshine duration	184.4 hrs/month (mean) *1
Solar radiation	-
Wind speed	Mean 2.7 m/s *1
Wind direction	NW(dominant) *1
Residence time of water	23 days
Lake utilization	Irrigation and fishing
River (inflow)	Kamagatani River, Kobora River

Watershed area	5.4 km^2
Surface geology	Chert
Vegetation (dominant plants)	*Pinus densiflora, Chamaecyparis obtuse, Cryptomeria japonica*

*1 Gifu Local Meteorological Observatory, JFY2012

Table 6.3(9) Properties of lakes or streams

Lake/Stream: Banryu Lake

Country	Japan
Location	Shimane prefecture
Altitude	25 m
Origin	Natural damming lake
Area and shape	0.13 km^2
Shore line length	5.7 km
Lake hydrologic type	Reservoir
Lake trophic type	Mesotrophic
Water depth	Ave. 8-8.5 m
Water volume	Unknown (Max 500,000 m^3)
Annual water level fluctuation	0-1.1 m
Annual air temperature	15.9°C (mean) *1
Precipitation	1,184.0 mm/year *2
Sunshine duration	147.2 hrs/month (mean) *1
Solar radiation	-
Wind speed	Mean 1.9 m/s *1
Wind direction	SSE (dominant) *1
Residence time of water	222 days (2004)
Lake utilization	Irrigation and sightseeing
River (inflow)	None

- : no information

*1 Masuda AMeDAS of Japan Meteorological Agency, JFY2012

*2 Lake Banryu national acid rain monitoring station, JFY2012

Watershed area	0.73 km^2
Surface geology	Grave, sand, clay
Vegetation (dominant plants)	*Pinus thunbergii, Pinus densiflora*

Table 6.3(10) Properties of lakes or streams

Lake/Stream: Nam Hum Lake

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

- : no information

Table 6.3(11) Properties of lakes or streams

Lake/Stream: Semenyih Dam

Country	Malaysia
Location	
Altitude	30 m
Origin	Dam
Area and shape	3.6 km^2
Shore line length	800 m
Lake hydrologic type	Reservoir
Lake trophic type	-
Water depth	Mean: 110 m
Water volume	-
Annual water level fluctuation	-
Annual air temperature	-
Precipitation	-
Sunshine duration	-
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(12) Properties of lakes or streams

Lake/Stream: 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	6056.0 mm *1
Sunshine duration	-
Solar radiation	-
Wind speed	-
Wind direction	-
River (meet in 10m from sampling point)	Segama river

- : no information

*1 Danum Valley, 2012

Table 6.3(13) Properties of lakes or streams

Lake/Stream: Terelj River

Country	Mongolia
Location	Terelj
Origin	Natural stream
River length	65 km
Drainage area	1220 km^2
The mean height of the river basin	-
Annual air temperature	-5.1°C (mean) *1
Precipitation	351.6 mm *1
Sunshine duration	-
Solar radiation	-
Wind speed	Mean 1.8 m/s *1
Wind direction	WWS (dominant) *1
Lake (flows into)	-

- : no information

*1 Terelj, 2012

Table 6.3(14) Properties of lakes or streams

Lake/Stream: Pandin Lake

Country	Philippines
Location	San Pablo City
Altitude	200m
Origin	Natural lake
Area and shape	0.24 km^2
Shore line length	-
Lake hydrologic type	-
Lake trophic type	Oligotrophic
Water depth	61.75 m (mean), 63 m (max)
Water volume	6600 m^3
Annual water level fluctuation	-
Annual air temperature	-
Precipitation	-
Sunshine duration	-
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(15) Properties of lakes or streams

Lake/Stream: Ambulalakao Lake

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

- : no information

Table 6.3(16) Properties of lakes or streams

Lake/Stream: Pereemnaya River

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

Watershed area	About 360 km^2
Surface geology	Archaean rocks, presented mainly by gneisses, crystal schists, andpegmatites
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(17) Properties of lakes or streams

Lake/Stream: Komarovka River

Country	Russia
Location	Primorskli Kray, Ussuriyskii district, near Kamenushka settlement
Latitude	43°42' N
Altitude	386 m
Origin	Natural stream
Water depth	Mean 0.8 m Maximum 1.5 m
Water discharge	0.14 m^3/sec
River length	66 km
Drainage area	-
Annual air temperature	-
Precipitation	737 mm/year (2005)
Sunshine duration	-
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 1490 km^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(18) Properties of lakes or streams

Lake/Stream: Vachiralongkorn Dam

Country	Thailand
Location	Kanchanaburi Province
Latitude	14°46' N
Altitude	170 m
Origin	Artificial (Dam made lake)
Area and shape	3,720 km^2
Shore line length	-
Lake hydrologic type	Reservoir
Lake trophic type	-
Water depth	136.9-151.8 m (mean: 143.7 m) (2011)
Water volume	4.599-6.985 km^3 (mean: 5.345 km^3) (2011)
Annual water level fluctuation	Depth: 4.2 m (2010)
Annual air temperature	-
Precipitation	1941.4 mm/year *1
Sunshine duration	-
Solar radiation	-
Wind speed	0.02-0.26 (Ave. 0.07) m/s *1
Wind direction	NNW, NW and SE *2
Residence time of water	165 days
Lake utilization	Irrigation, Electric power, Fishery, Flooding protection and Sight seeing
Watershed area	3,720 km^2
River (inflow)	-

- : no information

*1 Thongpaphum Meteorological station, 2011

*2 Thongpaphum Meteorological station, 2010

Table 6.3(19) Properties of lakes or streams

Lake/Stream: Hoa Binh Reservoir

Country	Vietnam
Location	Hoa Binh Province
Altitude	23 m
Origin	Artificial (dam-made lake)
Area and shape	208 km^2 -25 km^2 *1
Shore line length	208 km-16.7 km *1
Lake hydrologic type	Reservoir
Lake trophic type	Mesotrophic
Water depth	60 m (max: 120 m)
Water volume	9.45 km^3-2.5 km^3 *1
Annual water level fluctuation	80 m-120 m (Ave.100 m)
Annual air temperature	24.1°C (mean) *2
Precipitation	1,915.4 mm *2
Sunshine duration	121.1 hrs/month (mean) *2
Solar radiation	-
Wind speed	Mean 1.0 m/s *2
Wind direction	SE (dominant) *2
Residence time of water	365 days
Lake utilization	Electric power and flood control
Watershed area	51,700 km^2-13,700 km^2 *1
River (inflow)	Da River

- : no information

*1 The second value is in affected area of reservoir.

*2 Hoa Binh, 2012

Table 6.4(1) Result of Inland Aquatic Environment Monitoring

Duration: 2012.1.-2012.6.
Country: Cambodia
Lake/Stream: Sras Srang Lake

		Mandatory Parameters: 4 times/year												Mandatory Parameters: Once/year				Optional Parameters
Site	Sampling Date	Temp. (^{o}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)	Transparency (m)	PO_4^{3-} (mg/L)	NO_2^{-} (mg/L)	COD (mg/L)	DO (mg/L)
Sras Srang Lake	4-Jan-12	26.1	6.34	0.92	0.034	0.08	0.03	1.61	0.02	0.88	0.12	0.25	0.16	0.8	-	-	-	7.2
	27-Jun-12	28.8	6.63	0.85	0.040	0.09	0.10	1.69	0.05	1.00	0.15	0.29	0.16	0.7	-	-	-	6.9
	mean*1	-	6.46	0.88	0.037	0.08	0.06	1.65	0.04	0.94	0.13	0.27	0.16	0.7	-	-	-	7.0

note
- : Items were not analyzed.
*1: Mean of pH takes an average of hydrogen ion.
Pick up two samples on site and measure three times per sample.
Mean of pH takes an average of hydrogen ion.

		Anion	Cation	R1	Judge	Δcalc	R2	Judge
Sras Srang Lake	4-Jan-12	80.8	69.0	-7.9	×	0.9	-1.0	O
	27-Jun-12	90.4	78.1	-7.3	O	1.0	8.0	O

note
Concerning "×" judging, it was not able to specify the main reasons.

Table 6.4(2) Result of Inland Aquatic Environment Monitoring

Duration: 2012.2.-2012.12.
Country: China
Lake/Stream: (See below)

		Mandatory Parameters : 4 times/year												Mandatory Parameters : Once /year				
Site	Sampling Date	Temp. (^{o}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)	Transparency (m)	Water Color	PO_4^{3-} (mg/l)	NO_2^- (mg/l)	COD (mg/l)
Chongqing -Jinyunshan Lake	24-Mar-12	13.0	6.16	15.1	0.092	44.6	11.5	4.30	0.001	3.48	2.29	14.1	4.80	2.1	-	-	-	-
	23-Jun-12	23.0	5.06	13.9	0.025	39.8	10.7	3.26	0.10	3.34	2.62	13.2	3.80	3.1	-	-	-	-
	15-Sep-12	23.0	5.45	12.6	0.030	37.5	9.90	3.30	0.40	2.50	2.30	12.1	3.70	4.5	-	-	-	-
	27-Dec-12	11.0	6.18	12.7	0.060	41.2	7.40	3.99	0.04	3.00	2.32	11.8	3.60	2.8	-	*1	*1	<10*1
	mean*2	-	5.47	13.5	0.052	40.8	9.9	3.71	0.14	3.08	2.38	12.8	3.98	3.1	-	*1	*1	<10*1
Xiamen -Xiaoping Dam	02-Mar-12	18.8	6.85	4.89	0.151	2.72	3.59	2.89	0.07	4.13	2.06	2.36	0.64	1.5	-	-	0.024	3.10
	03-May-12	23.5	7.05	4.69	0.151	3.09	2.82	3.36	0.05	3.97	2.04	2.51	0.69	0.5	-	-	0.024	2.79
	02-Jul-12	25.4	6.82	4.04	0.079	2.42	3.59	2.69	0.07	1.85	2.82	1.96	0.56	1.5	-	-	0.050	1.56
	01-Nov-12	21.0	7.10	6.69	0.238	3.43	3.82	3.47	0.04	5.17	3.07	3.19	0.84	1.2	-	0.03	0.025	2.61
	mean*2	-	6.94	5.08	0.155	2.92	3.46	3.10	0.06	3.78	2.50	2.51	0.68	1.2	-	0.03	0.031	2.52
Xi'an -Jiwozi River	01-Apr-12	4.6	7.09	7.80	0.220	15.1	1.47	0.60	*1	0.69	0.94	8.40	2.02	-	-	-	-	-
	25-Jun-12	16.2	7.26	6.39	0.300	11.3	1.01	0.63	*1	0.73	0.90	8.02	2.26	-	-	-	-	-
	17-Sep-12	13.4	6.49	6.62	0.280	13.0	0.82	0.59	*1	0.72	0.72	7.04	1.85	-	-	-	-	-
	09-Nov-12	5.8	6.89	6.98	0.300	12.4	0.54	0.46	*1	0.65	0.75	7.75	1.93	-	-	<0.01*1	<0.003*1	4.00
	mean*2	-	6.83	6.95	0.275	13.0	0.96	0.57	*1	0.70	0.83	7.80	2.01	-	-	<0.01*1	<0.003*1	4.00
Zhuhai -Zhuxiandong stream	01-Feb-12	14.0	7.15	7.52	0.587	2.43	1.37	5.24	0.15	7.58	2.28	4.37	1.75	1.2	-	*1	*1	1.10
	05-Apr-12	23.0	7.24	7.66	0.501	4.03	2.38	5.30	0.06	8.01	1.52	5.15	1.87	1.2	-	*1	*1	1.20
	01-Aug-12	27.5	7.24	7.45	0.438	1.98	1.13	4.84	0.07	6.98	1.05	3.79	1.54	1.0	-	*1	*1	1.20
	01-Nov-12	19.0	7.44	7.84	0.471	3.49	3.11	6.12	0.08	7.44	1.91	5.94	2.36	1.2	-	*1	*1	1.10
	mean*2	-	7.26	7.62	0.499	2.98	2.00	5.38	0.09	7.50	1.69	4.81	1.88	1.1	-	*1	*1	1.15

note
- : Items were not analyzed.
*1: Less than determination limit.
*2: Mean of pH takes an average of hydrogen ion.

		Anion	Cation	R1	Judge	Acalc	R2	Judge
Chongqing -Jinyunshan Lake	24-Mar-12	1327.7	1309.0	-0.7	O	17.6	7.8	O
	23-Jun-12	1119.0	1197.7	3.4	O	15.9	6.6	O
	15-Sep-12	1063.5	1101.4	1.7	O	14.7	7.9	O
	27-Dec-12	1149.7	1076.1	-3.3	O	15.1	8.7	O
Xiamen -Xiaoping	02-Mar-12	347.6	406.8	7.9	O	4.5	-4.5	O
	03-May-12	356.1	409.9	7.0	O	4.6	-1.4	O
	02-Jul-12	264.2	300.4	6.4	O	3.6	-6.4	O
	01-Nov-12	470.4	534.0	6.3	O	5.9	-6.5	O
Xi'an -Jiwozi	01-Apr-12	575.6	639.3	5.2	O	7.5	-1.8	O
	25-Jun-12	569.8	640.3	5.8	O	7.2	5.8	O
	17-Sep-12	581.0	553.5	-2.4	O	6.9	1.7	O
	09-Nov-12	579.8	592.9	1.1	O	7.0	0.2	O
Zhuhai -Zhuxiandong stream	01-Feb-12	807.5	758.4	-3.1	O	8.5	6.2	O
	05-Apr-12	772.8	801.4	1.8	O	8.7	6.5	O
	01-Aug-12	634.0	650.2	1.3	O	7.0	-3.1	O
	01-Nov-12	766.5	867.4	6.2	O	9.2	7.8	O

Table 6.4(3) Result of Inland Aquatic Environment Monitoring

Duration: 2012.2.-2012.10.
Country: Indonesia
Lake/Stream: (See below)

		Mandatory Parameters: 4 times/year												Mandatory Parameters: Once/year				
Site	Sampling Date	Temp. (^{o}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)	Transparency (m)	Water Color (PtCo unit)	PO_4^{3-} (mg/L)	NO_2^- (mg/L)	DOC (mg/L)
Patengang Lake	21-Feb-12	23.4	7.53	5.21	0.428	3.10	*1	1.00	*1	3.30	1.41	3.38	3.02	-	9.4	0.060	*1	8.1
	24-Apr-12	22.4	7.50	6.01	0.360	9.20	*1	2.00	0.18	2.80	1.24	4.80	2.60	1.2	9.2	0.023	*1	*1
	20-Jun-12	23.2	7.70	6.01	0.400	7.10	*1	2.00	*1	3.30	1.68	6.10	1.41	-	9.2	0.307	*1	2.4
	5-Sep-12	21.7	8.00	6.90	0.424	8.50	*1	2.00	*1	3.90	1.39	6.10	2.30	-	5.4	0.252	*1	12.0
	24-Oct-12	22.9	8.30	6.32	0.402	9.10	*1	2.00	0.68	4.20	1.62	5.90	0.98	0.4	15.0	0.025	*1	7.8
	mean*2	-	7.72	6.09	0.403	7.40	*1	1.80	0.43	3.50	1.47	5.26	2.06	0.8	9.6	0.133	*1	7.6
Gunung Lake	14-Feb-12	22.8	6.30	7.12	0.600	3.20	*1	1.50	*1	1.60	0.67	7.38	3.50	0.5	14.0	0.064	*1	11.0
	20-Apr-12	23.5	6.20	6.40	0.568	4.80	*1	1.00	*1	1.60	1.06	7.10	2.86	0.6	8.0	2.45	*1	9.0
	17-Jun-12	23.5	6.80	6.80	0.480	2.50	*1	1.00	*1	1.20	1.08	4.75	2.41	0.6	-	0.223	*1	3.3
	4-Sep-12	27.5	7.20	4.83	0.364	4.30	*1	1.00	*1	2.30	0.81	4.30	2.00	-	5.7	0.102	*1	13.0
	22-Oct-12	27.7	7.90	4.17	0.240	5.40	*1	1.00	*1	2.00	0.78	2.95	1.91	0.4	24.0	*1	*1	11.0
	mean*2	-	6.56	5.86	0.450	4.04	*1	1.10	*1	1.74	0.88	5.30	2.54	0.5	12.9	0.710	*1	9.5

note
- : Items were not analyzed.
*1: Less than detection limit.
*2: Mean of pH takes an average of hydrogen ion.

		Anion	Cation	R1	Judge	Acalc	R2	Judge
Patengang Lake	21-Feb-12	522.6	596.6	6.6	O	6.0	6.8	O
	24-Apr-12	608.7	616.7	0.7	O	7.1	8.0	O
	20-Jun-12	613.9	606.9	-0.6	O	6.9	7.1	O
	5-Sep-12	665.3	698.7	2.4	O	7.7	5.7	O
	24-Oct-12	648.7	636.6	-0.9	O	7.4	8.0	O
Gunung Lake	14-Feb-12	711.0	743.3	2.2	O	7.8	4.4	O
	20-Apr-12	773.5	686.8	-5.9	O	8.0	11.2	×
	17-Jun-12	567.3	515.2	-4.8	O	5.8	-8.3	O
	4-Sep-12	485.0	499.9	1.5	O	5.4	5.5	O
	22-Oct-12	380.6	411.2	3.9	O	4.5	3.6	O

note
Concerning "×" judging, it was not able to specify the main reasons.

Table 6.4(4) Result of Inland Aquatic Environment Monitoring

Duration: 2012.4.-2013.1.
Country: Japan
Lake/Stream: Ijira Lake

		Mandatory Parameters : 4times/year													Mandatory Parameters : Once/year							Optional Parameters
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)	Site	Sampling Date	Transparency (m)	Water Color (Forel-Ule Scale)	Water Color (sample)	PO_4^{3-} (mg/L)	NO_2^- (mg/L)	DOC (mg/L)	Chl-a (μg/L)
Center (Surface)	16-Apr-12	13.4	7.12	3.62	0.136	4.69	1.32	1.95	<0.01*1	1.81	0.20	2.66	1.23	Center (Surface)	16-Apr-12	2.0	15	clear, colorless	<0.1*1	<0.01*1	0.5	3.7
	23-Jul-12	23.1	7.05	3.40	0.135	4.17	1.25	1.74	<0.01*1	1.72	0.24	2.39	1.10		23-Jul-12	2.3	15	clear, colorless	-	<0.01*1	-	3.2
	04-Oct-12	21.9	7.10	3.93	0.178	4.45	1.48	1.79	<0.01*1	1.91	0.27	2.70	1.27		04-Oct-12	2.5	15	clear, colorless	-	<0.01*1	-	6.7
	11-Jan-13	5.4	7.18	4.09	0.165	5.31	1.21	2.07	<0.01*1	1.94	0.21	3.39	1.35		11-Jan-13	2.5	18	clear, colorless	-	<0.01*1	-	13.5
	mean*2	-	7.11	3.76	0.154	4.66	1.31	1.89	<0.01*1	1.85	0.23	2.78	1.23		mean	2.3	-	-	<0.1*1	<0.01*1	0.5	6.8
Center (near bottom)	16-Apr-12	11.5	6.86	3.77	0.134	5.05	1.46	1.98	0.01	1.85	0.20	2.71	1.27	Center (near bottom)	16-Apr-12	-	-	clear, colorless	<0.1*1	<0.01*1	0.5	13.5
	23-Jul-12	18.5	6.61	3.57	0.147	3.98	1.58	1.65	0.05	1.63	0.27	2.50	1.18		23-Jul-12	-	-	clear, colorless	-	<0.01*1	-	4.4
	04-Oct-12	20.7	6.70	3.90	0.169	4.46	1.63	1.81	0.05	1.95	0.27	2.57	1.27		04-Oct-12	-	-	clear, colorless	-	<0.01*1	-	8.5
	11-Jan-13	5.7	7.17	4.13	0.167	5.31	1.21	2.12	0.02	1.95	0.33	3.38	1.34		11-Jan-13	-	-	clear, colorless	-	<0.01*1	-	14.3
	mean*2	-	6.79	3.84	0.154	4.70	1.47	1.89	0.03	1.84	0.26	2.79	1.27		mean	-	-	-	<0.1*1	<0.01*1	0.5	10.2
Kamagatani River (Input)	16-Apr-12	11.2	6.98	3.87	0.136	5.36	1.65	1.93	<0.01*1	1.89	0.22	2.71	1.35	Kamagatani River (Input)	16-Apr-12	-	-	clear, colorless	<0.1*1	<0.01*1	0.3	-
	23-Jul-12	18.2	6.82	3.79	0.138	4.87	1.81	1.79	<0.01*1	1.83	0.25	2.64	1.24		23-Jul-12	-	-	clear, colorless	-	<0.01*1	-	-
	04-Oct-12	20.8	6.98	4.23	0.167	5.38	2.20	1.85	<0.01*1	2.01	0.29	3.01	1.43		04-Oct-12	-	-	clear, colorless	-	<0.01*1	-	-
	11-Jan-13	5.6	7.01	4.14	0.132	6.35	1.75	2.02	0.02	1.97	0.22	3.01	1.46		11-Jan-13	-	-	clear, colorless	-	0.01	-	-
	mean*2	-	6.94	4.00	0.143	5.49	1.85	1.90	<0.01*1	1.92	0.24	2.84	1.37		mean	-	-	-	<0.1*1	<0.01*1	0.3	-
Kobora River (Input)	16-Apr-12	10.7	6.96	3.41	0.128	4.35	0.89	2.03	<0.01*1	2.10	0.19	1.92	1.29	Kobora River (Input)	16-Apr-12	-	-	clear, colorless	<0.1*1	<0.01*1	0.3	-
	23-Jul-12	18.6	6.83	3.24	0.121	3.93	1.19	1.86	<0.01*1	2.02	0.22	1.77	1.13		23-Jul-12	-	-	clear, colorless	-	<0.01*1	-	-
	04-Oct-12	18.8	7.07	3.62	0.143	4.41	1.65	1.97	<0.01*1	2.23	0.24	1.92	1.38		04-Oct-12	-	-	clear, colorless	-	<0.01*1	-	-
	11-Jan-13	5.0	6.95	3.62	0.124	5.16	1.19	2.09	<0.01*1	2.17	0.17	2.10	1.42		11-Jan-13	-	-	clear, colorless	-	<0.01*1	-	-
	mean*2	-	6.94	3.47	0.129	4.46	1.23	1.99	<0.01*1	2.13	0.20	1.92	1.30		mean	-	-	-	<0.1*1	<0.01*1	0.3	-
Ijira River (Output)	16-Apr-12	12.7	7.02	3.62	0.134	4.67	1.31	1.95	<0.01*1	1.81	0.20	2.65	1.21	Ijira River (Output)	16-Apr-12	-	-	clear, colorless	<0.1*1	<0.01*1	0.5	-
	23-Jul-12	20.6	7.10	3.47	0.136	4.29	1.34	1.71	<0.01*1	1.72	0.25	2.44	1.10		23-Jul-12	-	-	clear, colorless	-	<0.01*1	-	-
	04-Oct-12	22.4	7.19	4.03	0.186	4.46	1.47	1.81	<0.01*1	1.93	0.27	2.98	1.32		04-Oct-12	-	-	clear, colorless	-	<0.01*1	-	-
	11-Jan-13	6.5	7.10	4.10	0.164	5.30	1.18	2.09	<0.01*1	1.94	0.23	3.38	1.33		11-Jan-13	-	-	clear, colorless	-	<0.01*1	-	-
	mean*2	-	7.10	3.81	0.155	4.68	1.32	1.89	<0.01*1	1.85	0.24	2.86	1.24		mean	-	-	-	<0.1*1	<0.01*1	0.5	-
Discharge	16-Apr-12	8.9	6.85	3.75	0.130	5.05	1.50	1.98	0.01	1.85	0.20	2.71	1.27	Discharge	16-Apr-12	-	-	clear, colorless	<0.1*1	<0.01*1	0.4	-
	23-Jul-12	17.8	6.77	3.57	0.143	4.04	1.64	1.68	0.07	1.66	0.27	2.49	1.15		23-Jul-12	-	-	clear, colorless	-	<0.01*1	-	-
	04-Oct-12	20.3	6.89	4.07	0.182	4.55	1.79	1.78	0.07	2.01	0.29	2.90	1.39		04-Oct-12	-	-	clear, colorless	-	<0.01*1	-	-
	11-Jan-13	6.1	7.10	4.09	0.163	5.32	1.23	2.08	<0.01*1	1.94	0.22	3.35	1.32		11-Jan-13	-	-	clear, colorless	-	<0.01*1	-	-
	mean*2	-	6.89	3.87	0.154	4.74	1.54	1.88	0.04	1.86	0.24	2.86	1.28		mean	-	-	-	<0.1*1	<0.01*1	0.4	-

note
- : Items were not analyzed.
*1: Less than detection limit.
*2: Mean of pH takes an average of hydrogen ion.
Pick up two samples on site and measure three times per sample for almost all parameters
When the value is under detection limit, it considers "0". Then the average and R1R2 were calculated by using
Annual precipitation is 1721.5 mm/year in JFY2012 (Gifu pref. Meteorological observatory).

Table 6.4(4) Result of Inland Aquatic Environment Monitoring - continued

		Anion	Cation	R1	Judge	Acalc	R2	Judge
Center (Surface)	16-Apr-12	309.9	317.3	1.2	O	3.7	1.5	O
	23-Jul-12	290.8	290.1	-0.1	O	3.4	0.4	O
	04-Oct-12	345.0	328.9	-2.4	O	3.9	-0.1	O
	11-Jan-13	353.5	369.6	2.2	O	4.3	2.1	O
Center (near bottom)	16-Apr-12	318.4	325.4	1.1	O	3.8	0.9	O
	23-Jul-12	301.1	302.2	0.2	O	3.5	-0.3	O
	04-Oct-12	339.0	327.2	-1.8	O	3.9	-0.1	O
	11-Jan-13	356.1	373.2	2.3	O	4.3	2.2	O
Kamagatani River (Input)	16-Apr-12	328.0	334.2	0.9	O	4.0	1.2	O
	23-Jul-12	318.8	319.1	0.0	O	3.8	0.1	O
	04-Oct-12	366.7	362.7	-0.5	O	4.3	1.0	O
	11-Jan-13	349.1	362.5	1.9	O	4.3	2.0	O
Kobora River (Input)	16-Apr-12	289.6	297.6	1.4	O	3.5	0.8	O
	23-Jul-12	274.0	274.6	0.1	O	3.2	0.0	O
	04-Oct-12	316.2	311.9	-0.7	O	3.7	0.9	O
	11-Jan-13	308.9	319.5	1.7	O	3.7	1.7	O
Ijira River (Output)	16-Apr-12	307.4	315.5	1.3	O	3.7	1.1	O
	23-Jul-12	294.6	293.4	-0.2	O	3.5	0.0	O
	04-Oct-12	353.4	347.7	-0.8	O	4.1	0.5	O
	11-Jan-13	351.8	367.6	2.2	O	4.3	1.8	O
Discharge	16-Apr-12	315.2	325.5	1.6	O	3.8	1.1	O
	23-Jul-12	300.6	301.6	0.2	O	3.5	-0.2	O
	04-Oct-12	355.2	357.4	0.3	O	4.2	1.0	O
	11-Jan-13	351.6	365.6	1.9	O	4.2	1.9	O

Table 6.4(5) Result of Inland Aquatic Environment Monitoring

Duration: 2012.4.-2013.1.
Country: Japan
Lake/Stream: Banryu Lake

		Mandatory Parameters : 4 times/year											
Site	Sampling Date	Temp. (^{o}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)
NO.2 (center) surface	26-Apr-12	17.7	7.13	10.8	0.148	4.54	0.011	24.6	<0.02*1	14.9	1.88	1.78	1.93
	08-Aug-12	31.5	7.15	10.4	0.157	3.98	<0.005*1	23.4	<0.02*1	14.3	1.85	1.71	1.86
	24-Oct-12	18.0	6.89	11.5	0.231	3.39	0.019	24.9	0.06	15.1	2.04	2.10	2.27
	16-Jan-13	5.1	6.88	11.4	0.176	4.18	0.575	24.4	0.10	14.7	1.93	1.94	2.08
	mean*2	-	7.00	11.0	0.178	4.02	0.151	24.3	0.04	14.7	1.92	1.88	2.04
NO.2 (center) near bottom	26-Apr-12	9.5	6.51	11.2	0.182	4.86	0.236	24.4	0.11	15.1	2.01	2.11	2.16
	08-Aug-12	12.1	6.48	14.7	0.600	1.79	<0.005*1	24.8	0.06	15.6	2.19	4.37	3.64
	24-Oct-12	17.2	6.69	12.4	0.316	3.07	0.011	25.0	0.25	15.2	2.14	2.63	2.59
	16-Jan-13	5.0	6.87	11.3	0.169	4.19	0.562	24.7	0.10	14.8	1.91	1.94	2.08
	mean*2	-	6.61	12.4	0.317	3.48	0.202	24.7	0.13	15.2	2.06	2.76	2.62
NO.3 surface	26-Apr-12	17.6	7.10	10.7	0.152	4.70	0.028	24.2	0.03	14.9	1.94	1.95	2.00
	08-Aug-12	31.3	7.06	10.3	0.155	4.08	<0.005*1	23.0	<0.02*1	14.1	1.84	1.79	1.86
	24-Oct-12	17.9	6.84	11.5	0.240	3.45	0.018	24.5	0.06	14.9	2.07	2.20	2.27
	16-Jan-13	4.7	6.90	11.3	0.182	4.30	0.620	24.1	0.09	14.5	1.93	2.07	2.10
	mean*2	-	6.96	11.0	0.182	4.13	0.167	23.9	0.05	14.6	1.95	2.00	2.06

note
- : Items were not analyzed.
*1: Less than determination limit.
*2: Mean of pH takes an average of hydrogen ion.
Pick up two samples on site and measure three times per sample for almost all parameters.
When the value is under detection limit, it considers "0". Then the average and R1R2 were calculated by using it.
Annual precipitation is 1184.0 mm/year in JFY2012 (Lake Banryu national acid rain monitoring station).

Table 6.4(5) Result of Inland Aquatic Environment Monitoring - continued

		Mandatory Parameters : Once/year						Optional Parameters						
Site	Sampling Date	Transparency (m)	Water Color (Forel-Ule Scale)	PO_4^{3-} (mg/L)	NO_2^- (mg/L)	DOC (mg/L)	COD (mg/L)	D-Al (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	26-Apr-12	3.1	13	<0.003*1	0.01	2.2	4.7	<0.01*1	4.2	0.04	0.009	2.4	0.21	0.01
	08-Aug-12	3.6	14	<0.003*1	<0.003*1	2.5	5.3	<0.01*1	2.8	0.04	<0.005*1	2.7	0.19	0.02
	24-Oct-12	1.5	14	0.008	0.00	2.1	4.6	<0.01*1	5.1	0.22	0.106	2.4	0.29	0.02
	16-Jan-13	2.5	13	<0.003*1	0.007	2.0	4.2	<0.01*1	4.3	0.04	<0.005*1	2.3	0.41	0.02
	mean	2.7	-	<0.003*1	0.004	2.2	4.7	<0.01*1	4.1	0.08	0.029	2.4	0.27	0.02
NO.2 (center) near bottom	26-Apr-12	-	-	<0.003*1	0.005	2.0	4.2	<0.01*1	2.3	0.17	0.197	2.1	0.35	0.01
	08-Aug-12	-	-	0.008	0.012	2.6	10.4	<0.01*1	54.4	6.33	1.617	4.7	0.70	0.08
	24-Oct-12	-	-	0.015	<0.003*1	2.2	6.3	<0.01*1	8.3	0.99	0.390	3.0	0.60	0.05
	16-Jan-13	-	-	<0.003*1	0.007	2.1	4.1	<0.01*1	4.2	0.04	<0.005*1	2.3	0.41	0.02
	mean	-	-	0.006	0.006	2.2	6.2	<0.01*1	17.3	1.88	0.551	3.0	0.51	0.04
NO.3 surface	26-Apr-12	2.7	13	0.004	0.004	2.1	4.9	<0.01*1	4.7	0.04	0.009	2.3	0.26	0.01
	08-Aug-12	3.3	14	<0.003*1	<0.003*1	2.4	5.0	<0.01*1	2.9	0.03	<0.005*1	2.7	0.18	0.02
	24-Oct-12	1.6	14	0.007	0.005	2.0	4.4	<0.01*1	7.6	0.24	0.059	2.4	0.34	0.02
	16-Jan-13	2.4	13	<0.003*1	0.006	2.0	4.0	<0.01*1	4.5	0.07	<0.005*1	2.1	0.41	0.01
	mean	2.5	-	<0.003*1	0.004	2.1	4.6	<0.01*1	4.9	0.10	0.017	2.4	0.30	0.02

Table 6.4(5) Result of Inland Aquatic Environment Monitoring - continued

		Anion	Cation	R1	Judge	Acalc	R2	Judge
NO.2 (center) surface	26-Apr-12	935.2	942.6	0.4	O	11.7	3.9	O
	08-Aug-12	900.7	907.7	0.4	O	11.2	3.7	O
	24-Oct-12	1002.7	1001.1	-0.1	O	12.3	3.2	O
	16-Jan-13	959.2	962.5	0.2	O	11.9	2.3	O
NO.2 (center) near bottom	26-Apr-12	975.1	996.8	1.1	O	12.2	4.2	O
	08-Aug-12	1337.8	1257.2	-3.1	O	15.1	1.4	O
	24-Oct-12	1084.7	1074.5	-0.5	O	13.0	2.7	O
	16-Jan-13	962.9	966.5	0.2	O	12.0	2.8	O
NO.3 surface	26-Apr-12	934.3	959.9	1.4	O	11.8	4.7	O
	08-Aug-12	888.7	902.7	0.8	O	11.1	3.7	O
	24-Oct-12	1003.0	999.7	-0.2	O	12.2	3.1	O
	16-Jan-13	960.1	961.2	0.1	O	11.9	2.5	O

Table 6.4(6) Result of Inland Aquatic Environment Monitoring

Duration: 2012.*.-2012.*.
Country: Lao PDR
Lake/Stream: Nam Hum Lake

		Mandatory Parameters: 4 times/year												Mandatory Parameters: Once/year			
Site	Sampling Date	Temp. (^{o}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)	Transparency (m)	PO_4^{3-} (mg/L)	NO_2^{-} (mg/L)	COD (mg/L)
Nam Hum Lake																	
	mean*1	-															

note
- : Items were not analyzed.
*1: Mean of pH takes an average of hydrogen ion.
The monitoring at Nam Hum Lake was started from Sep 2009.

		Anion	Cation	R1	Judge		Acalc	R2	Judge
Nam Hum Lake									

Table 6.4(7) Result of Inland Aquatic Environment Monitoring

Duration: 2012.1.-2012.12.
Country: Malaysia
Lake/Stream: (See below)

		Mandatory Parameters: 4 times/year												Mandatory Parameters: Once/year	
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)	COD (mg/L)
Semenyih Dam	*1	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	*1	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	*1	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	*1	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	mean*3	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Tembaling river	19-Jan-12	-	8.38	20.9	2.103	8.73	0.62	1.72	<0.002*2	5.10	0.17	21.68	10.84	<0.10*2	7.07
	5-Apr-12	-	8.20	18.1	1.993	8.32	0.28	1.60	<0.050*2	4.97	0.17	20.41	9.41	<0.10*2	4.83
	19-Jun-12	-	8.37	24.2	2.438	7.75	0.23	1.05	<0.002*2	6.79	0.31	26.70	13.41	<0.10*2	4.47
	18-Sep-12	-	8.22	15.3	1.514	4.00	0.21	0.88	0.020	4.53	0.53	15.02	8.37	<0.10*2	2.85
	25-Dec-12	-	7.63	10.6	0.932	1.77	0.13	0.65	0.005	2.15	0.09	13.06	3.96	<0.10*2	3.07
	mean*3	-	8.06	17.8	1.796	6.11	0.29	1.18	0.012	4.71	0.25	19.37	9.20	<0.10*2	4.46

note
- : Items were not analyzed.
*1: No monitoring data since the survey was not conducted due to changing of the staff.
*2: Less than determination limit.
*3: Mean of pH takes an average of hydrogen ion.

		Anion	Cation	R1	Judge	Acalc	R2	Judge
Semenyih Dam	*1	-	-	-	-	-	-	-
	*1	-	-	-	-	-	-	-
	*1	-	-	-	-	-	-	-
	*1	-	-	-	-	-	-	-
Tembaling rriver	19-Jan-12	2342.9	2199.2	-3.2	O	23.6	6.2	O
	5-Apr-12	2215.9	2012.4	-4.8	O	22.0	9.6	×
	19-Jun-12	2633.1	2738.0	2.0	O	27.8	6.8	O
	18-Sep-12	1625.1	1649.4	0.7	O	16.9	4.7	O
	25-Dec-12	988.8	1073.6	4.1	O	10.7	0.6	O

note
Concerning "×" judging, it was not able to specify the main reasons.

Table 6.4(8) Result of Inland Aquatic Environment Monitoring

Duration: 2012.5.-2012.9.
Country: Mongolia
Lake/Stream: Terelj river

		Mandatory Parameters: 4 times/year												Mandatory Parameters : Once/year	
Site	Sampling Date	Temp. (^{o}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)
Terelj river	2-May-12	10.0	6.95	4.34	0.287	-	-	-	-	-	-	-	-	0.006	<0.005*1
	4-Jul-12	16.7	7.10	4.67	0.328	-	-	-	-	-	-	-	-	0.004	0.006
	22-Aug-12	10.2	7.77	4.35	0.307	-	-	-	-	-	-	-	-	0.010	0.005
	19-Sep-12	6.4	7.64	4.84	0.348	-	-	-	-	-	-	-	-	0.012	<0.005*1
	mean*2	-	7.24	4.55	0.318	-	-	-	-	-	-	-	-	0.008	0.006

note
- : Items were not analyzed.
*1: Less than determination limit.
*2: Mean of pH takes an average of hydrogen ion.
Major ions were not analyzed due to be in the process of switching new Ion Chromatography.

		Anion	Cation	R1	Judge	Δcalc	R2	Judge
Terelj river	2-May-12	-	-	-	-	-	-	-
	4-Jul-12	-	-	-	-	-	-	-
	22-Aug-12	-	-	-	-	-	-	-
	19-Sep-12	-	-	-	-	-	-	-

Table 6.4(9) Result of Inland Aquatic Environment Monitoring

Duration: 2012.*.-2012.*.
Country: Philippines
Lake/Stream: (See below)

		Mandatory Parameters: 4 times/year												Mandatory Parameters: Once/year		
Site	Sampling Date	Temp. (^{o}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)	Transparency (m)	PO_4^{3-} (mg/L)	NO_2^- (mg/L)
Pandin Lake																
	mean*2	-												-		
Ambulalakao Lake																
	mean*2	-												-		

note
- : Items were not analyzed.
*1: The item was not detected.
*2: Mean of pH takes an average of hydrogen ion.

		Anion	Cation	R1	Judge		Acalc	R2	Judge
Pandin Lake									
Ambulalakao Lake									

Table 6.4(10) Result of Inland Aquatic Environment Monitoring

Duration: 2012.2.-2012.11.
Country: Russian Federation
Lake/Stream: (See below)

		Mandatory Parameters: 4 times/year												Mandatory Parameters: Once/year					Optional Parameters			
Site	Sampling Date	Temp. (^{o}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)	Transparency (m)	Water color	PO_4^{3-} (mg/L)	NO_2^{-} (mg/L)	COD (mg/L)	Fe (mg/L)	TP (mg/L)	O_2 (mg/L)	Si (mg/L)
Pereemnaya River	29-Jun-12	10.7	6.56	3.82	0.122	8.52	0.31	0.07	0.05	0.85	0.51	3.99	0.50	-	colorless	0.007	0.002	0.92	-	0.021	10.3	2.27
	1-Oct-12	5.9	6.68	4.61	0.155	10.5	0.45	0.26	0.12	1.06	0.76	4.85	0.83	-	colorless	0.004	0.003	1.44	-	0.075	10.9	2.96
	mean*1	-	6.61	4.21	0.139	9.49	0.38	0.17	0.09	0.95	0.63	4.42	0.67	-	-	0.005	0.002	1.18	-	0.048	10.6	2.62
Komarovka River	15-Feb-12	0.1	7.00	11.08	0.508	10.4	2.53	5.00	0.24	5.28	1.08	8.90	3.30	-	colorless	0.012	0.026	2.85	0.20	-	13.7	3.78
	17-Apr-12	0.1	6.95	8.12	0.290	10.7	0.87	3.85	0.49	2.70	0.70	7.40	2.38	-	colorless	0.022	0.058	7.50	0.41	-	14.4	3.45
	19-Jun-12	13.0	7.10	8.42	0.411	11.5	1.59	3.23	0.09	3.43	0.58	8.67	2.20	-	colorless	0.005	0.036	4.03	0.21	-	10.60	5.67
	18-Sep-12	14.5	7.20	7.21	0.371	5.58	0.27	4.13	1.04	3.02	1.10	6.40	1.78	-	colorless	0.019	0.025	7.28	0.41	-	10.3	6.73
	20-Nov-12	0.1	6.80	7.85	0.341	9.87	1.41	3.18	0.39	3.20	0.50	8.05	2.18	-	colorless	0.019	0.043	3.85	0.23	-	10.1	5.62
	mean*1	-	6.99	8.54	0.384	9.61	1.33	3.88	0.45	3.53	0.79	7.88	2.37	-	-	0.015	0.038	5.10	0.29	-	11.8	5.05

note
- : Items were not analyzed.
*1: Mean of pH takes an average of hydrogen ion.
Pick up two samples on site and measure three times per sample
Mean of pH takes an average of hydrogen ion.
As for Pereemnaya River, some surveys were not conducted due to a fund problem.

		Anion	Cation	R1	Judge	Acalc	R2	Judge
Pereemnaya River	29-Jun-12	306.7	293.3	-2.2	O	3.7	-1.1	O
	1-Oct-12	387.6	382.4	-0.7	O	4.8	1.9	O
Komarovka River	15-Feb-12	906.2	986.5	4.2	O	10.9	-0.7	O
	17-Apr-12	637.4	727.7	6.6	O	8.2	0.4	O
	19-Jun-12	768.5	782.6	0.9	O	9.1	3.8	O
	18-Sep-12	609.2	683.0	5.7	O	7.5	1.9	O
	20-Nov-12	659.9	754.8	6.7	O	8.3	3.0	O

Table 6.4(11) Result of Inland Aquatic Environment Monitoring

Duration: 2012.2.-2012.11.
Country: Thailand
Lake/Stream: Vachiralongkorn Dam

		Mandatory Parameters : 4 times/year												Mandatory Parameters : Once/year				
Site	Sampling Date	Temp. (^{o}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)	Transparency (m)	Water color	PO_4^{3-} (mg/L)	NO_2^- (mg/L)	COD (mg/L)
Station1 (Ban Pong Chang)	13-Feb-12	23.5	7.10	17.8	1.200	0.88	<0.1*1	0.93	0.04	1.30	1.16	17.3	3.60	2.5	-	<0.01*1	-	8.45
	17-May-12	28.7	7.60	10.3	1.265	1.28	<0.1*1	1.17	<0.01*1	1.38	1.15	19.0	3.86	4.5	-	0.01	-	-
	21-Aug-12	28.0	8.20	7.40	1.020	1.59	0.27	0.86	0.02	1.08	1.06	15.3	3.18	2.5	-	<0.01*1	-	-
	27-Nov-12	31.0	7.10	11.8	1.115	1.13	0.11	0.81	0.03	1.10	1.12	15.6	3.48	-	-	-	-	-
	mean*2	-	7.32	11.8	1.150	1.22	0.19	0.94	0.03	1.21	1.12	16.8	3.53	3.2	-	0.01	-	8.45
Station2 (Ban Pang Pueng)	13-Feb-12	24.4	7.10	11.0	1.135	1.24	<0.1*1	0.80	0.02	1.22	1.10	17.3	2.93	3.5	-	<0.01*1	-	6.90
	17-May-12	28.5	7.70	9.90	1.140	1.28	0.10	0.95	<0.01*1	1.22	1.13	18.1	3.02	4.5	-	0.01	-	-
	21-Aug-12	28.7	8.80	7.06	0.970	3.26	0.07	0.88	0.03	1.15	1.02	15.0	2.53	3.5	-	<0.01*1	-	-
	27-Nov-12	32.2	7.00	9.69	0.945	1.65	<0.1*1	0.80	0.04	1.11	1.09	14.7	2.71	-	-	-	-	-
	mean*2	-	7.30	9.41	1.048	1.85	0.08	0.86	0.03	1.17	1.08	16.3	2.80	3.8	-	0.01	-	6.90

note
- : Items were not analyzed.
*1: Less than determination limit.
*2: Mean of pH takes an average of hydrogen ion.
Pick up two samples on site.
NH_4^+ concentration at VLK reservior is very low

	Date	Anion	Cation	R1	Judge	Acalc	R2	Judge
Station1 (Ban Pong Chang)	13-Feb-12	1244.3	1245.2	0.0	O	12.93	-15.7	×
	17-May-12	1324.9	1354.5	1.1	O	13.97	15.1	×
	21-Aug-12	1081.5	1099.6	0.8	O	11.42	21.4	×
	27-Nov-12	1163.0	1142.0	-0.9	O	11.98	0.9	O
Station2 (Ban Pang Pueng)	13-Feb-12	1183.4	1183.9	0.0	O	12.34	5.8	O
	17-May-12	1195.3	1233.5	1.6	O	12.71	12.4	×
	21-Aug-12	1063.6	1034.1	-1.4	O	11.09	22.2	×
	27-Nov-12	1001.8	1031.6	1.5	O	10.67	4.8	O

note
Concerning "×" judging, it was not able to specify the main reasons.

Table 6.4(12) Result of Inland Aquatic Environment Monitoring

Duration: 2012.3.-2012.12.
Country: Vietnam
Lake/Stream: Hoa Binh Reservoir

		Mandatory Parameters: 4 times/year												Mandatory Parameters: Once/year				
Site	Sampling Date	Temp. (^oC)	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)	Transparency (m)	Water Color (PtCo unit)	PO_4^{3-} (mg/L)	NO_2^- (mg/L)	COD (mg/L)
Hoa Binh Reservoir	15-Mar-12	18.7	7.45	18.1	1.520	6.67	1.85	1.92	0.10	3.55	1.18	22.2	4.75	1.2	-	-	0.015	4.50
	15-Jun-12	28.5	7.46	19.8	1.700	3.41	0.70	2.88	0.16	4.23	1.71	28.0	3.46	0.9	-	-	0.019	4.10
	15-Sep-12	26.5	6.64	15.5	1.350	3.05	1.35	2.24	0.11	3.39	1.58	19.9	4.55	0.9	-	-	0.011	4.30
	15-Dec-12	24.5	7.70	17.4	1.500	5.54	2.17	1.46	0.12	3.17	1.10	22.3	4.22	1.2	2	0.010	0.018	4.40
	mean*1	-	7.10	17.7	1.518	4.67	1.52	2.13	0.12	3.59	1.39	23.1	4.25	1.0	2	0.010	0.016	4.33

note
- : Items were not analyzed.
*1 : Mean of pH takes an average of hydrogen ion.

		Anion	Cation	R1	Judge	Acalc	R2	Judge
Hoa Binh Reservoir	15-Mar-12	1743.2	1687.6	-1.6	O	18.2	0.4	O
	15-Jun-12	1863.9	1916.4	1.4	O	20.0	0.5	O
	15-Sep-12	1498.7	1562.9	2.1	O	16.2	2.2	O
	15-Dec-12	1692.2	1630.5	-1.9	O	17.6	0.5	O

Table 6.4 (13) Summary of Inland Aquatic Environment Monitoring

			Mandatory Parameters : 4 times/year *2*3											Mandatory Parameters : Once/year				
Country	Location	Site	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)	Transparency (m)	PO_4^{3-} (mg/L)	NO_2^- (mg/L)	DOC (mg/L)	COD (mg/L)
Cambodia	Kampong Speu province	Sras Srang Lake *3	6.46	0.88	0.037	0.08	0.06	1.65	0.04	0.94	0.13	0.27	0.16	0.7	-	-	-	-
China	Chongqing	Jinyunshan Lake	5.47	13.5	0.052	40.8	9.9	3.71	0.14	3.08	2.38	12.8	3.98	3.1	*1	*1	-	<10*1
	Xiamen	Xiaoping Dam	6.94	5.08	0.155	2.92	3.46	3.10	0.06	3.78	2.50	2.51	0.68	1.2	0.03	0.031	-	2.52
	Xi'an	Jiwozi River	6.83	6.95	0.275	13.0	0.96	0.57	*1	0.70	0.83	7.80	2.01	-	<0.01*1	<0.003*1	-	4.00
	Zhuhai	Zhuxiandong Stream	7.26	7.62	0.499	2.98	2.00	5.38	0.09	7.50	1.69	4.81	1.88	1.1	*1	*1	-	1.15
Indonesia	Bandung	Patenggang Lake	7.72	6.09	0.403	7.40	*1	1.80	0.43	3.50	1.47	5.26	2.06	0.8	0.133	*1	7.58	-
	Sukabumi, West Java	Gunung Lake	6.56	5.86	0.450	4.04	*1	1.10	*1	1.74	0.88	5.30	2.54	0.5	0.710	*1	9.46	-
Japan	Gifu pref.	Ijira Lake (Center, surface)	7.11	3.76	0.154	4.66	1.31	1.89	<0.01*1	1.85	0.23	2.78	1.23	2.3	<0.1*1	<0.01*1	0.50	-
	Shimane pref.	Banryu Lake (Center, surface)	7.00	11.0	0.178	4.02	0.15	24.3	0.04	14.7	1.92	1.88	2.04	2.7	<0.003*1	0.004	2.20	4.68
Lao PDR	Vientiane province	Nam Hum Lake																
Malaysia		Semenyih Dam	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Sabah	Tembaling river	8.06	17.8	1.796	6.11	0.29	1.18	0.01	4.71	0.25	19.4	9.20	-	<0.10*2	-	-	4.46
Mongolia	Terelj	Terelj river	7.24	4.55	0.318	-	-	-	-	-	-	-	-	-	0.008	0.006	-	-
Philippines	Los Banos	Pandin Lake																
	Kabayan, Benguet	Ambulalakao Lake																
Russia	Southern Baikal	Pereemnaya River *3	6.61	4.21	0.139	9.5	0.38	0.17	0.09	0.95	0.63	4.42	0.67	-	0.005	0.002	-	1.18
	Primorskaya	Komarovka River	6.99	8.54	0.384	9.6	1.33	3.88	0.45	3.53	0.79	7.88	2.37	-	0.015	0.038	-	5.10
Thailand	Kanchanaburi Province	Vachiralongkorn Dam (Ban Pong Chang)	7.32	11.8	1.150	1.22	0.19	0.94	0.03	1.21	1.12	16.8	3.53	3.2	0.01	-	-	8.45
		Vachiralongkorn Dam (Ban Pang Pueng)	7.30	9.41	1.048	1.85	0.08	0.86	0.03	1.17	1.08	16.3	2.80	3.8	0.01	-	-	6.90
Vietnam	Hoa Binh Province	Hoa Binh Reservoir	7.10	17.7	1.518	4.67	1.52	2.13	0.12	3.59	1.39	23.1	4.25	1.0	0.010	0.016	-	4.33

note
- : Items were not analyzed.
*1: Less than determination/detection limit.
*2: Some monitering sites were surveyed more than four times a year.
*3: Sras Srang Lake and Pereemnaya River were surveyed two times a year.

Table 6.5(1) Annual mean values of each parameters of 2012 at Sras Srang Lake (Cambodia)

	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+}	Transparency	PO_4^{3-}	NO_2^-	DOC	COD
		mS/m	meq/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	m	mg/L	mg/L	mg/L	mg/L
2012	6.46	0.88	0.037	0.08	0.06	1.65	0.04	0.94	0.13	0.27	0.16	0.7	-	-	-	-

Table 6.5(2) Annual mean values of each parameters from 2001 to 2012 at Jinyushan Lake (China)

	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+}	Transparency	PO_4^{3-}	NO_2^-	DOC	COD
		mS/m	meq/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	m	mg/L	mg/L	mg/L	mg/L
2001	7.50	9.05	-	26.1	7.68	2.58	0.65	1.78	1.58	6.63	2.63	-	-	-	-	-
2002	6.12	9.52	-	26.4	7.99	2.53	0.09	2.50	1.79	9.08	3.28	-	-	-	-	-
2003	6.55	9.79	0.210	23.2	5.16	2.68	0.21	2.60	1.72	9.03	3.30	0.9	-	-	-	-
2004	6.34	9.61	0.075	25.7	7.94	1.74	0.30	1.98	1.65	9.66	2.71	2.6	-	-	-	7.6
2005	6.04	10.2	0.073	28.1	8.16	2.63	0.04	2.70	1.82	9.36	3.22	3.7	*1	*1	-	2.9
2006	6.36	11.9	0.113	32.7	9.53	3.05	0.11	2.96	2.27	11.1	3.82	5.0	*1	*1	-	3.2
2007	6.24	12.4	0.086	37.2	10.2	3.12	0.12	2.81	2.18	11.2	3.81	3.0	*1	*1	-	4.4
2008	5.42	12.2	0.066	33.3	12.8	2.77	0.16	2.65	1.98	11.3	3.77	3.7	*1	*1	-	2.9
2009	5.84	11.2	0.048	29.3	8.29	2.95	0.23	2.59	1.96	10.1	3.63	2.3	*1	*1	-	<10*1
2010	5.76	12.8	0.157	34.5	10.6	3.00	0.14	2.90	2.07	11.7	3.98	3.4	*1	*1	-	<10*1
2011	5.25	14.2	0.064	39.6	15.2	3.76	0.12	2.71	2.27	12.8	3.90	4.5	*1	*1	-	<10*1
2012	5.47	13.5	0.052	40.8	9.9	3.71	0.14	3.08	2.38	12.8	3.98	3.1	*1	*1	-	<10*1

Table 6.5(3) Annual mean values of each parameters from 2001 to 2012 at Xiaoping Dam (China)

	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+}	Transparency	PO_4^{3-}	NO_2^-	DOC	COD
		mS/m	meq/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	m	mg/L	mg/L	mg/L	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	-	0.02	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	0.9	0.02	0.008	-	1.3
2006	6.81	5.27	0.190	2.46	2.52	5.13	0.19	6.02	2.33	3.19	0.66	0.9	0.02	0.008	-	0.7
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	12.9	0.14	4.97	2.46	3.90	0.56	-	0.01	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	-	0.01	0.008	-	3.5
2010	6.63	6.19	0.190	2.70	3.70	5.54	0.11	5.80	2.53	2.51	0.69	1.1	0.02	0.015	-	1.9
2011	6.78	4.85	0.168	2.60	2.89	3.14	0.09	3.50	2.10	2.57	0.52	0.7	0.05	0.022	-	1.8
2012	6.94	5.08	0.155	2.92	3.46	3.10	0.06	3.78	2.50	2.51	0.68	1.2	0.03	0.031	-	2.5

- : Items were not analyzed.

*1: Less than determination/detection limit.

Table 6.5(4) Annual mean values of each parameters from 2001 to 2012 at Jiwozi River (China)

	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+}	Transparency	PO_4^{3-}	NO_2^-	DOC	COD
		mS/m	meq/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	m	mg/L	mg/L	mg/L	mg/L
2001	7.11	4.50	0.225	10.0	1.47	1.06	0.04	1.90	0.70	8.83	1.38	-	-	-	-	-
2002	7.60	8.47	0.110	12.2	1.70	1.80	*1	2.80	1.20	12.7	1.72	-	-	-	-	-
2003	7.54	7.83	0.140	11.4	2.01	1.63	*1	2.08	0.95	12.0	1.59	-	-	-	-	-
2004	7.20	6.63	0.243	11.7	2.30	1.06	*1	1.79	0.68	9.04	1.35	-	*1	*1	-	3.2
2005	6.99	7.99	0.208	15.3	0.81	1.74	0.06	1.77	0.72	7.44	1.35	-	*1	0.090	-	1.6
2006	6.80	7.59	0.238	11.8	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	16.7	3.46	1.31	0.13	2.09	0.96	11.0	0.96	-	*1	*1	-	2.2
2008	7.05	8.42	0.248	13.9	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	15.5	2.07	1.34	0.14	1.88	1.04	9.85	1.38	-	<0.01*1	<0.003*1	-	2.5
2010	7.33	8.11	0.280	13.9	2.83	1.27	*1	1.22	0.81	10.5	1.35	-	<0.01*1	<0.003*1	-	3.0
2011	6.85	6.83	0.275	12.9	0.87	0.51	*1	0.74	0.84	8.1	2.01	-	<0.01*1	<0.003*1	-	3.0
2012	6.83	6.95	0.275	13.0	0.96	0.57	*1	0.70	0.83	7.80	2.01	-	<0.01*1	<0.003*1	-	4.0

Table 6.5(5) Annual mean values of each parameters from 2004 to 2012 at Zhuxiandong stream and from 2001 to 2003 at Zhuxiandong resorvoir(China)

	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+}	Transparency	PO_4^{3-}	NO_2^-	DOC	COD
		mS/m	meq/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	m	mg/L	mg/L	mg/L	mg/L
2001	7.62	-	-	17.7	0.63	43.1	0.20	-	-	-	-	-	-	-	-	-
2002	7.93	6.70	0.963	19.9	0.83	23.8	0.23	7.27	1.57	17.0	2.50	-	-	-	-	-
2003	7.82	7.54	1.603	17.5	0.29	19.6	0.17	7.34	1.96	16.8	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	1.3	*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	1.3	*1	*1		1.0
2007	7.28	7.80	0.240	3.61	1.77	5.09	0.10	6.01	1.22	3.65	1.38	1.3	*1	*1	-	1.1
2008	7.18	7.58	0.165	2.95	2.36	4.90	0.05	6.83	1.31	4.40	1.76	1.3	*1	*1	-	1.1
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	*1	-	1.3
2010	7.22	6.86	0.393	2.49	2.50	5.15	0.08	6.98	1.23	4.30	1.72	1.1	*1	*1	-	1.4
2011	7.16	7.42	0.467	1.95	1.00	4.33	0.09	7.70	1.15	4.68	1.69	1.1	*1	*1	-	1.3
2012	7.26	7.62	0.499	2.98	2.00	5.38	0.09	7.50	1.69	4.81	1.88	1.1	*1	*1	-	1.2

Table 6.5(6) Annual mean values of each parameters from 2001 to 2012 at Patenggang Lake (Indonesia)

	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+}	Transparency	PO_4^{3-}	NO_2^-	DOC	COD
		mS/m	meq/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	m	mg/L	mg/L	mg/L	mg/L
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	0.6	0.207	*1	12.4	-
2004	7.29	5.89	0.340	2.65	0.03	3.85	0.02	2.10	0.85	5.75	2.20	0.6	0.014	*1	7.3	-
2005	7.19	6.71	0.459	8.83	0.23	2.30	0.43	4.04	1.87	5.70	2.70	0.1	0.010	*1	10.9	-
2006	7.49	5.74	0.414	3.80	0.47	2.58	0.39	2.87	1.70	5.70	1.43	0.1	0.085	0.016	8.1	-
2007	7.17	6.75	0.420	7.45	0.32	2.59	0.41	3.40	1.53	5.75	1.47	0.1	0.038	0.012	3.8	-
2008	6.76	6.43	0.448	7.89	0.07	2.18	0.05	2.84	1.29	6.18	2.39	0.9	0.202	0.019	10.2	-
2009	6.99	6.96	0.490	5.16	0.58	2.24	0.19	3.68	2.33	6.66	1.09	1.1	0.011	0.007	8.6	-
2010	6.66	6.75	0.512	4.93	0.01	2.33	0.17	3.43	1.52	6.87	2.12	1.1	0.031	0.006	7.5	-
2011	7.84	7.40	0.522	8.08	0.02	2.48	0.34	3.18	1.38	6.46	2.61	0.7	0.292	0.006	6.9	-
2012	7.72	6.09	0.403	7.40	*1	1.80	0.43	3.50	1.47	5.26	2.06	0.8	0.133	*1	7.6	-

- : Items were not analyzed.

*1: Less than determination/detection limit.

Table 6.5(7) Annual mean values of each parameters from 2008 to 2012 at Gunung Lake (Indonesia)

	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+}	Transparency	PO_4^{3-}	NO_2^-	DOC	COD
		mS/m	meq/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	m	mg/L	mg/L	mg/L	mg/L
2008	6.73	5.90	0.438	5.59	0.03	2.01	0.57	2.24	0.71	5.09	1.87	1.1	0.040	0.007	6.7	-
2009	6.69	5.54	0.460	3.48	0.06	1.30	0.16	3.14	1.02	4.62	2.20	1.0	0.014	0.005	10.8	-
2010	6.24	5.14	0.442	1.70	0.00	1.15	0.11	2.01	0.87	5.35	1.66	1.1	0.125	0.002	5.0	-
2011	7.38	5.15	0.414	4.04	0.07	1.00	0.12	2.36	0.84	5.04	2.02	0.7	0.037	0.004	10.2	-
2012	6.56	5.86	0.450	4.04	*1	1.10	*1	1.74	0.88	5.30	2.54	0.5	0.710	*1	9.5	-

Table 6.5(8) Annual mean values of each parameters from 2001 to 2012 at Ijira Lake (Japan)

	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+}	Transparency	PO_4^{3-}	NO_2^-	DOC	COD
		mS/m	meq/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	m	mg/L	mg/L	mg/L	mg/L
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	2.2	<0.066*1	<0.01*1	3.2	-
2003	6.75	4.10	0.146	5.14	2.07	2.40	0.08	1.86	0.30	2.94	1.36	3.0	<0.01*1	<0.03*1	1.4	-
2004	7.17	4.05	0.145	4.79	1.88	2.34	0.12	2.15	0.23	2.71	1.23	2.8	<0.03*1	<0.02*1	1.1	-
2005	6.94	4.47	0.153	5.73	2.37	2.32	0.08	2.29	0.39	3.27	1.42	3.0	<0.03*1	0.068	0.7	-
2006	6.81	3.94	0.164	4.53	2.11	2.09	0.03	2.00	0.33	2.80	1.23	2.4	<0.1*1	<0.02*1	0.6	-
2007	7.09	4.58	0.206	5.77	1.22	2.27	0.03	2.24	0.30	3.57	1.46	2.7	<0.1*1	<0.02*1	1.0	-
2008	7.19	4.36	0.183	5.37	1.78	2.16	0.04	2.10	0.28	3.24	1.45	2.7	<0.1*1	<0.01*1	0.8	-
2009	7.04	4.26	0.176	5.18	1.47	2.13	0.01	2.08	0.26	3.03	1.35	2.7	<0.1*1	<0.01*1	0.7*2	-
2010	7.01	3.74	0.158	4.58	1.10	1.96	<0.01*1	1.88	0.25	2.61	1.18	2.3	<0.1*1	<0.01*1	0.5	-
2011	7.11	3.85	0.159	4.77	1.34	1.86	<0.01*1	1.89	0.23	3.05	1.22	1.8	<0.1*1	<0.01*1	0.8	-
2012	7.11	3.76	0.154	4.66	1.31	1.89	<0.01*1	1.85	0.23	2.78	1.23	2.3	<0.1*1	<0.01*1	0.5	-

Table 6.5(9) Annual mean values of each parameters from 2001 to 2012 at Banryu Lake (Japan)

	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+}	Transparency	PO_4^{3-}	NO_2^-	DOC	COD
		mS/m	meq/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	m	mg/L	mg/L	mg/L	mg/L
2001	6.98	9.43	0.174	4.07	0.11	19.7	0.15	12.2	1.75	1.23	1.60	-	<0.003*1	-	-	5.3
2002	7.07	10.1	0.176	3.93	0.30	21.9	0.12	13.0	1.80	1.21	1.76	1.6	<0.003*1	<0.003*1	2.5	5.7
2003	6.98	10.9	0.170	3.96	0.14	22.3	0.19	13.4	1.78	1.09	1.69	1.5	<0.003*1	<0.003*1	2.6	5.6
2004	7.10	10.7	0.165	3.96	0.21	23.0	0.09	14.0	1.84	1.05	1.69	2.5	<0.003*1	<0.003*1	3.3	4.8
2005	7.09	10.7	0.156	4.31	0.14	23.1	0.04	14.2	1.91	1.47	1.82	2.2	0.003	<0.003*1	2.6	5.0
2006	7.01	10.3	0.162	4.44	0.13	21.6	0.11	13.8	1.83	1.49	1.77	2.5	<0.003*1	0.003	2.7	4.8
2007	7.02	10.8	0.176	4.49	0.10	22.5	0.02	14.3	1.94	1.52	1.62	2.5	<0.003*1	<0.003*1	2.6	5.0
2008	7.05	10.7	0.175	4.24	0.14	22.8	0.03	14.3	1.87	1.37	1.65	3.0	<0.003*1	<0.003*1	2.5	-
2009	7.02	10.1	0.171	4.14	0.10	22.0	0.03	13.7	1.79	1.52	1.81	2.7	<0.003*1	<0.003*1	2.9	-
2010	7.03	10.1	0.144	4.00	0.16	21.9	0.04	13.5	1.77	1.67	1.88	2.9	<0.003*1	<0.003*1	2.9	5.5
2011	6.97	10.9	0.168	4.08	0.21	23.6	0.04	14.3	1.90	1.85	2.07	3.2	<0.003*1	<0.003*1	2.4	5.0
2012	7.00	11.0	0.178	4.02	0.15	24.3	0.04	14.7	1.92	1.88	2.04	2.7	<0.003*1	0.004	2.2	4.7

- : Items were not analyzed.

*1: Less than determination/detection limit.

Table 6.5(10) Annual mean values of each parameters from 2009 to 2012 at Nam Hum Lake (Lao PDR)

	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+}	Transparency	PO_4^{3-}	NO_2^-	DOC	COD
		mS/m	meq/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	m	mg/L	mg/L	mg/L	mg/L
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
2010	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2011	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2012																

Table 6.5(11) Annual mean values of each parameters from 2005 to 2012 at Semenyih Dam (Malaysia)

	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+}	Transparency	PO_4^{3-}	NO_2^-	DOC	COD
		mS/m	meq/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	m	mg/L	mg/L	mg/L	mg/L
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	14.5	16.8	14.4	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	-	-	-	-	-
2010	6.92	2.77	0.225	2.40	0.05	0.81	0.02	2.18	2.00	2.43	0.65	-	<0.10*1	-	-	-
2011	6.99	2.69	0.270	2.85	0.54	0.96	0.05	2.15	2.01	2.53	0.60	-	-	-	-	-
2012	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Table 6.5(12) Annual mean values of each parameters from 2007 to 2012 at Tembaling River (Malaysia)

	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+}	Transparency	PO_4^{3-}	NO_2^-	DOC	COD
		mS/m	meq/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	m	mg/L	mg/L	mg/L	mg/L
2007	6.80	13.9	1.640	7.03	0.63	2.20	0.05	3.01	3.37	16.5	8.68	-	-	-	-	-
2008	7.07	18.6	1.850	8.10	0.75	1.20	0.01	5.83	0.40	22.0	10.4	-	-	-	-	-
2009	7.97	20.3	1.975	9.38	0.72	1.33	0.01	6.25	0.53	20.5	10.2	-	-	-	-	-
2010	8.11	21.8	2.070	9.94	0.59	1.55	0.03	6.99	0.81	18.4	16.0	-	<0.10*1	-	-	4.01
2011	8.18	17.4	1.626	7.23	1.19	1.35	0.01	4.99	0.40	16.3	7.5	-	<0.10*1	-	-	7.81
2012	8.06	17.8	1.796	6.11	0.29	1.18	0.01	4.71	0.25	19.4	9.20	-	<0.10*2	-	-	4.46

- : Items were not analyzed.

*1: Less than determination/detection limit.

Table 6.5(13) Annual mean values of each parameters from 2002 to 2012 at Terelj river (Mongolia)

	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+}	Transparency	PO_4^{3-}	NO_2^-	DOC	COD
		mS/m	meq/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	m	mg/L	mg/L	mg/L	mg/L
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	13.7	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	-	-
2010	6.67	5.57	0.380	4.47	0.86	0.78	0.13	2.17	1.19	7.52	1.15	-	0.011	<0.005*1	-	-
2011	6.28	5.33	0.327	3.73	0.76	0.79	0.06	1.57	0.68	5.80	0.87	-	0.008	0.002	-	-
2012	7.24	4.55	0.318	-	-	-	-	-	-	-	-	-	0.008	0.006	-	-

Table 6.5(14) Annual mean values of each parameters from 2004 to 2012 at Pandin Lake (Philippines)

	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+}	Transparency	PO_4^{3-}	NO_2^-	DOC	COD
		mS/m	meq/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	m	mg/L	mg/L	mg/L	mg/L
2004	8.08	18.2	1.808	0.33	0.08	3.16	0.02	8.91	5.81	12.1	6.91	-	0.014	0.072	-	-
2005	7.96	18.1	1.723	1.11	0.58	3.76	0.69	8.18	4.89	14.3	7.84	-	0.005	0.295	-	-
2006	7.72	17.3	1.758	0.43	0.19	2.40	0.22	8.08	5.08	15.1	7.30	2.2	0.004	0.012	-	-
2007	7.76	17.6	1.708	0.52	0.10	3.37	0.26	7.28	6.29	12.1	9.03	-	0.002	0.013	-	-
2008	7.48	18.0	1.627	0.76	5.23	3.70	0.02	7.33	4.92	12.6	7.97	-	0.013	-	-	-
2009	7.68	18.7	1.813	0.66	5.72	3.78	1.02	8.61	4.35	14.1	7.32	1.8	0.087	-	-	-
2010	8.25	18.4	1.837	0.34	3.36	3.28	*1	8.79	5.59	13.1	8.49	-	0.060	-	-	-
2011	7.67	20.5	1.738	0.49	2.08	3.29	0.17	7.99	4.14	14.9	7.58	-	0.086	-	-	-
2012																

Table 6.5(15) Annual mean values of each parameters from 2005 to 2012 at Ambulalakao Lake (Philippines)

	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+}	Transparency	PO_4^{3-}	NO_2^-	DOC	COD
		mS/m	meq/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	m	mg/L	mg/L	mg/L	mg/L
2005	5.82	0.44	0.020	0.15	0.11	0.06	-	0.22	0.15	0.15	0.04	-	-	0.100	-	-
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	30.3	0.275	23.1	14.8	9.27	0.13	6.54	0.33	32.6	2.84	-	-	-	-	-
2012																

- : Items were not analyzed.

*1: Less than determination/detection limit.

Table 6.5(16) Annual mean values of each parameters from 2004 to 2012 at Pereemnaya River (Russia)

	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+}	Transparency	PO_4^{3-}	NO_2^-	DOC	COD
		mS/m	meq/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	m	mg/L	mg/L	mg/L	mg/L
2004	6.55	3.93	0.135	7.18	0.76	0.23	0.03	1.10	0.77	3.23	0.94	2.0	0.008	0.002	-	-
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	11.7	0.85	0.14	0.02	1.00	0.60	4.94	0.97	-	0.005	0.002	-	0.6
2010	6.88	5.14	0.127	12.9	0.79	0.20	0.03	0.99	0.66	5.18	1.05	-	0.007	0.002	-	1.1
2011	6.85	4.79	0.138	11.4	0.67	0.16	0.02	1.02	0.68	4.97	0.83	-	0.004	0.003	-	0.9
2012	6.61	4.21	0.139	9.5	0.38	0.17	0.09	0.95	0.63	4.42	0.67	-	0.005	0.002	-	1.2

Table 6.5(17) Annual mean values of each parameters from 2005 to 2012 at Komarovka River (Russia)

	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+}	Transparency	PO_4^{3-}	NO_2^-	DOC	COD
		mS/m	meq/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	m	mg/L	mg/L	mg/L	mg/L
2005	7.24	8.75	0.495	11.2	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	10.5	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	12.1	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	12.6	1.11	3.69	0.22	3.57	0.60	8.21	2.07	-	0.041	0.067	-	4.4
2010	6.99	8.32	0.445	8.62	0.99	3.33	0.19	3.21	0.46	8.29	2.12	-	0.013	0.036	-	4.0
2011	7.09	8.86	0.405	12.67	1.63	3.11	0.27	3.88	0.74	8.58	2.22	-	0.010	0.018	-	4.4
2012	6.99	8.54	0.384	9.6	1.33	3.88	0.45	3.53	0.79	7.88	2.37	-	0.015	0.038	-	5.1

Table 6.5(18) Annual mean values of each parameters from 2002 to 2012 at Vachiralongkorn Dam (Ban Pong Chang) (Thailand)

	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+}	Transparency	PO_4^{3-}	NO_2^-	DOC	COD
		mS/m	meq/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	m	mg/L	mg/L	mg/L	mg/L
2002	7.52	12.1	0.625	1.15	0.04	0.89	*1	1.14	1.01	13.3	2.98	5.3	0.024	*1	-	4.0
2003	7.45	10.8	0.625	1.29	0.01	0.84	*1	1.14	0.97	16.2	3.52	5.0	*1	*1	-	5.8
2004	7.77	11.5	1.050	1.27	0.20	0.98	0.05	1.18	0.97	15.7	3.26	5.6	0.023	0.010	-	7.5
2005	7.33	11.2	1.276	1.47	0.11	1.05	0.01	1.26	1.02	15.8	3.12	3.6	0.010	0.010	-	<4.0*1
2006	7.21	10.4	1.125	1.31	0.20	0.85	0.06	1.14	1.03	16.2	3.17	4.6	<0.01*1	<0.01*1		10.0
2007	7.80	10.4	1.090	1.17	0.20	0.75	0.01	1.21	0.96	16.5	3.26	5.1	0.010	0.010	-	5.2
2008	7.71	10.6	1.178	1.11	0.05	0.75	<0.01*1	1.16	0.97	16.3	3.23	4.4	<0.01*1	0.010	-	6.8
2009	7.79	10.8	1.111	1.33	0.06	0.74	-	1.16	0.95	16.1	3.39	4.4	0.010	<0.01*1	-	-
2010	7.70	11.8	1.176	1.55	0.06	0.83	0.01	1.24	1.01	16.6	3.62	3.6	0.010	0.010	-	4.7
2011	7.38	12.8	1.178	1.43	0.07	0.82	0.01	1.22	1.04	17.9	3.70	3.0	0.012	<0.01*1	-	5.7
2012	7.32	11.8	1.150	1.22	0.19	0.94	0.03	1.21	1.12	16.8	3.53	3.2	0.010	-	-	8.5

- : Items were not analyzed.

*1: Less than determination/detection limit.

Table 6.5(19) Annual mean values of each parameters from 2002 to 2012 at Vachiralongkorn Dam (Ban Pang Pueng) (Thailand)

	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+}	Transparency	PO_4^{3-}	NO_2^-	DOC	COD
		mS/m	meq/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	m	mg/L	mg/L	mg/L	mg/L
2002	7.31	12.0	0.633	1.24	0.06	0.90	*1	1.19	0.99	13.3	2.90	5.5	0.034	*1	-	3.0
2003	7.87	10.5	0.590	1.41	0.01	0.84	*1	1.17	0.98	16.2	2.94	5.8	*1	*1	-	7.3
2004	7.24	11.1	1.005	1.54	0.20	0.95	0.05	1.21	1.03	16.0	2.83	8.1	0.020	0.010	-	5.0
2005	6.98	11.2	1.015	1.29	0.11	1.15	0.03	1.52	1.02	16.2	2.98	4.4	0.135	0.010	-	*1
2006	7.12	10.0	1.046	1.44	0.20	0.83	0.03	1.14	1.04	16.2	2.64	5.0	<0.01*1	<0.01*1		11.0
2007	7.84	10.2	1.050	1.25	0.20	0.70	0.01	1.13	0.98	16.8	2.98	5.3	0.010	0.010	-	4.0
2008	7.78	9.88	1.104	1.49	<0.06*1	0.75	<0.01*1	1.17	1.00	15.7	2.49	4.4	<0.01*1	0.010	-	4.7
2009	7.93	10.3	1.065	1.42	0.06	0.73	-	1.14	2.04	15.9	2.79	4.6	0.010	<0.01*1	-	-
2010	7.79	11.2	1.113	1.61	0.06	0.76	0.01	1.16	0.99	16.4	2.86	4.1	0.010	0.010	-	7.1
2011	7.41	11.8	1.098	1.51	0.07	0.79	0.02	1.18	0.98	16.9	2.92	3.5	0.010	<0.01*1	-	8.4
2012	7.30	9.41	1.048	1.85	0.08	0.86	0.03	1.17	1.08	16.3	2.80	3.8	0.010	-	-	6.9

Table 6.5(20) Annual mean values of each parameters from 2001 to 2012 at Hoa Binh Reservoir (Vietnam)

	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+}	Transparency	PO_4^{3-}	NO_2^-	DOC	COD
		mS/m	meq/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	m	mg/L	mg/L	mg/L	mg/L
2001	7.59	17.4	1.575	5.44	0.59	1.16	0.15	1.97	1.22	21.8	6.12	-	-	-	-	-
2002	7.88	17.1	1.613	3.90	0.46	1.35	0.21	1.70	1.16	22.5	5.49	-	-	-	-	-
2003	7.29	18.4	1.595	6.13	0.63	1.33	0.08	2.14	1.36	24.5	4.78	-	-	-	-	-
2004	6.55	19.3	1.675	4.51	1.16	1.38	0.17	2.45	1.11	27.2	4.11	-	-	-	-	-
2005	7.58	19.0	1.605	5.62	1.04	1.62	0.16	4.40	1.31	23.1	4.77	-	-	-	-	-
2006	7.22	19.1	1.605	7.71	0.87	1.41	0.12	3.62	1.46	25.2	4.87	0.7	0.005	0.006	-	2.2
2007	7.62	19.1	1.613	8.14	1.44	1.54	0.11	3.53	1.48	24.9	4.64	0.9	0.015	0.016	-	1.9
2008	7.73	18.3	1.533	7.36	1.04	1.65	0.04	2.33	0.91	22.9	5.01	1.5	0.021	0.025	-	2.2
2009	7.98	16.7	1.390	6.55	0.67	2.05	0.02	3.10	0.84	20.8	4.49	1.1	0.019	0.010	-	1.4
2010	7.80	17.7	1.420	7.26	1.66	2.07	0.11	4.20	1.56	23.3	2.94	1.0	0.013	0.014	-	0.9
2011	7.43	18.5	1.540	7.36	1.59	2.26	0.07	3.51	1.26	23.2	4.55	1.1	0.010	0.012	-	3.4
2012	7.10	17.7	1.518	4.67	1.52	2.13	0.12	3.59	1.39	23.1	4.25	1.0	0.010	0.016	-	4.3

- : Items were not analyzed.

*1: Less than determination/detection limit.

CHAPTER 7

Catchment-scale Monitoring

7. Catchment-scale Monitoring

7.1 Method

The Guideline for Catchment-scale Monitoring in East Asia (2010) recommended to measure input from atmosphere (total deposition), output from the catchment (discharge from the stream), and some biogeochemical processes in a selected small forest catchment to discuss relationship between seasonal or annual changes in stream water chemistry and those in atmospheric deposition. Material/elemental input-output budget in the catchment can be calculated based on the atmospheric deposition chemistry, stream water chemistry, and water balance. Based on the catchment-scale dataset, the simulation model on biogeochemical cycles is expected to be developed.

7.1.1 Field Operation

Recommended methods and proposed frequency of major monitoring items in the field are summarized in Table 7.1. The existing EANET technical documents can be referred in the field operation for the items. Moreover, the existing EAENET data on wet and dry deposition collected at the nearest the monitoring sites can be used to calculate total deposition. Similarly, the existing EANET data on soil and vegetation can be referred as the relevant information on biogeochemical processes.

Table 7.1 Methods and frequency of major monitoring items

Items to be monitored		Recommended methods	Proposed frequency
Input (total deposition)	Precipitation amount	Rain gauge	Continuously or daily
	Wet deposition[*1]	Wet-only sampling	Daily or weekly
		Bulk sampling (when electricity is not available)	Weekly or biweekly
	Dry deposition[*1]	Inferential method: based on Filter pack data and Meteorological data	Weekly (for filter pack method)
		Automatic monitors (alternative for air concentration)	Continuously
	Total deposition	Wet + Dry	Biweekly or monthly
		Throughfall–Stemflow method (when electricity is not available)	Biweekly

Output (discharge from the stream)	Water discharge	Weir	Continuously or biweekly
		H-Q curve method (when a weir is not available)	
	Stream water chemistry	Periodical collection of stream water	Weekly or biweekly
		Intensive sampling	During heavy-rain or snow-melting events
	Chemical discharge	Calculation based on the water flux and the chemical concentration	Biweekly, monthly or annual
Soil	Soil chemistry[*1]	Collection from the permanent plots	Once for several years
Vegetation	Plant growth[*1]	Measurement of tree size (diameter at breast height, height of tree and name of species)	Once for several years

Note. *1, The relevant EANET data can be referred.

7.1.2 Laboratory Operation

Table 7.2 Chemical parameters for the respective items

Items	Parameters to be measured
Rainwater samples	Mandatory: SO_4^{2-}, NO_3^-, Cl^-, NH_4^+, Ca^{2+}, Mg^{2+}, Na^+, K^+, Electric conductivity (EC), and pH Optional: Total organic nitrogen (TON), Total organic carbon (TOC)
Stream water samples	Mandatory: SO_4^{2-}, NO_3^-, Cl^-, NH_4^+, Ca^{2+}, Mg^{2+}, Na^+, K^+, Electric conductivity (EC), pH, and Alkalinity (Gran's ANC and/or pH 4.8 endpoint) Optional: SiO_2, TON, TOC, Total dissolved Al
Air concentrations (by filter pack method)	Cations: NH_4^+, Ca^{2+}, Mg^{2+}, Na^+, and K^+, Anions: SO_4^{2-}, NO_3^-, and Cl^-, Gasses: SO_2, HNO_3, HCl, and NH_3
Soil chemistry	pH (H_2O), pH (KCl), Exchangeable Base Cations (Ca, Mg, K and Na), Exchangeable Acidity, Al and H, Effective Cation Exchangeable Capacity

Chemical parameters to be measured for the respective monitoring items were shown in Table 7.2. Basically, the parameters are same as those for other EANET monitoring items. The existing EANET technical documents can also be referred in the laboratory

operation.

7.1.3 Data Management

Data quality was controlled and assured according to the EANET QA/QC program. In particular, for rainwater and stream water samples, ion balance (R_1) and conductivity check (R_2) can be applied to check the analytical results as same as monitoring on wet deposition and inland aquatic environment.

The data should be evaluated on a catchment scale. The input- output budget should be calculated based on the atmospheric deposition chemistry, stream water chemistry, and water balance to outline the material/elemental cycles in the catchment. The standard units should be used for the input and output. Recommended basic units for evaluation is as follows:

- Water flux (precipitation amount and stream water discharge): mm
- Chemical concentration: $mol_c\ L^{-1}$ (ex. $\mu mol_c\ L^{-1}$ or $mmol_c\ L^{-1}$)
- Ion flux (deposition, discharge or soil/vegetation flux): $mol_c\ ha^{-1}$ or $mol_c\ m^{-2}$
- Elemental flux for N and S: $kg\ ha^{-1}\ y^{-1}$ or $g\ m^{-2}\ y^{-1}$

Based on the compiled data with the standard units on a water-year basis, initial evaluations should be done for the following items:

- Water balance on a catchment-scale: input, output and possible evapotranspiration
- Material/elemental balance on a catchment-scale: input-output budget

Dataset should be submitted to Network Center after an initial evaluation is done by the national center. Since the catchment-scale data should be evaluated based on the water year, the dataset should be compiled on a water-year basis of the respective catchment sites.

7.1.4 Monitoring sites

Several EANET countries have the experience on catchment-scale analysis as research activities and/or the national monitoring. Many research projects were conducted by universities and institutes in China and Japan. The case studies have been conducted in Japan, Malaysia and Thailand as the EANET joint research projects. Moreover, the new site in the Philippines is under preparation. Some countries may have an intention to start the regular catchment-scale monitoring as a part of the EANET activities.

Japan submitted the data of the water year 2010-2011 based on the regular catchment-scale monitoring in the Lake Ijira Catchment, which was started in 2007. Site characteristics and the survey outline were shown in Table 7.3 and 7.4, respectively.

Table 7.3 Site for the catchment-scale monitoring

Country	Site name (and name of river/stream)	Catchment area (km^2)	Geology and soil type	Coverage of forest (%) and major species	Start year
Japan	Lake Ijira Catchment (Kamagatani River)	2.98	Chert Cambisols (brown forest soils)	99.6%, Japanese cedar (*Cryptomeria japonica),* Japanese cypress (*Chamaecyparis obtusa),* and Japanese red pine (*Pinus densiflora)*	November 2007 (the water year here: from November to the next October)

Table 7.4 Survey outline for the catchment-scale monitoring

Site	Items	Detailed items
Lake Ijira Catchment	Input (total deposition)	1. Precipitation amount (at 3 points)[*1] 2. Wet deposition[*1] 3. Dry deposition (Air concentration measurement for Inferential method)[*1] 4. Total deposition (calculated as wet+dry)
	Output (chemical discharge from the stream)	1. Water discharge (by H-Q curve method) 2. Stream water chemistry: biweekly 3. Chemical discharge
	Soil[*2]	Soil chemical properties
	Vegetation[*2]	1. Plant growth (field measurement) 2. Species composition (field measurement)

Note: [*1], The EANET data collected at the Ijira deposition monitoring site will be used; *2, The EANET data collected in the Lake Ijira soil and vegetation monitoring plots will be referred.

7.2 Results of Monitoring

The list of the dataset submitted to NC was shown in Table 7.5.

Table 7.5 List of the dataset submitted for Data Report 2011

Site	Items	Detailed items	Water year
Lake Ijira Catchment	Input (total deposition) [*1]	1. Precipitation amount (at 3 points) [*2] Calculation of total deposition is still under discussion for precise estimation.	2010-2011 [*3]
	Output (chemical discharge from the stream)	1. Water discharge 2. Stream water chemistry: biweekly 3. Chemical discharge	2010-2011 [*3]

Note. [*1], The data of wet deposition and dry deposition (air concentration) in the Ijira deposition monitoring site for the same period can be found in Data Reports 2010 and 2011; [*2], Precipitation data at 3 points (approx. 260, 140 and 110 m above sea level) including the Ijira deposition monitoring site were submitted; *3, The water year was defined as the period from November to October in the following year. Soil chemical properties, plant growth and understory-species composition are surveyed in 2011 as a part of soil and vegetation monitoring.

The submitted data above were summarized in the following tables.
Table 7.6: Water balance in the catchment
Table 7.7: Stream water chemistry
Table 7.8: Periodic chemical discharges from the stream
Table 7.9: Annual chemical discharges from the stream

Table 7.6 Water balance in the catchment: Lake Ijira Catchment

Fluxes[*1]	Points	Water year[*2]
		2010-2011
Input by precipitation, mm y^{-1}	Akatani (260 m)	3913
	Ijira monitoring site (140 m)	3157
	Youth house/Lakeside (110 m)[*3]	3583
	Mean	3551
Output by the stream, mm y^{-1}	Outlet of Kamagatani River	1703
Runoff rate, %		48.0

Note. [*1], Fluxes were calculated based on the catchment area, 2.98 km^{-2}, at the outlet of Kamagatani River; [*2], The water year: from November to the next October; [*2], the rain gauge at the Youth house was moved to the lakeside (approx. 300 m ESE) in April 2011.

Table 7.7 Stream water chemistry: Lake Ijira Catchment

Collection date	pH	EC	Gran's ANC*1	SO_4^{2-}	NO_3^-	Cl^-	Na^+	Ca^{2+}	Mg^{2+}	K^+	NH_4^+	TOC	SiO_2	Water level, m
		$mS\ m^{-1}$				$\mu mol_c\ L^{-1}$						$mg\text{-}C\ L^{-1}$	$mg\text{-}SiO_2\ L^{-1}$	
2010/11/15	6.93	4.36	110	151	22.7	55.9	90.1	138	118	5.01	0.57	0.22	8.1	0.20
2010/11/29	6.97	4.51	108	162	21	56.9	91.7	143	122	4.84	0.58	0.22	7.92	0.19
2010/12/13	6.93	4.43	112	156	27.9	59.6	92	143	121	5.86	4.98	0.25	7.86	0.19
2010/12/24	6.82	4.43	85	127	44.7	60.3	79.6	131	111	6.18	1.52	0.57	6.71	0.28
2011/1/11	6.87	4.3	100	146	27.5	56.6	85.2	138	120	5.44	1.24	0.21	7.73	0.23
2011/1/24	6.84	4.51	107	152	26.1	58.7	87.9	143	124	5.4	3.25	0.18	7.67	0.21
2011/2/7	6.95	4.44	114	148	30.3	57.2	85	142	123	5.24	0.86	0.27	7.53	0.27
2011/2/21	6.88	4.15	94	128	32.8	55.5	79.8	129	113	5.11	1.58	0.3	7.52	0.29
2011/3/7	6.81	3.97	105	130	30	56.5	82.7	119	107	5.12	1.96	0.3	8.47	0.23
2011/3/22	6.86	4.36	115	152	24	59.3	91.9	136	119	5.73	0.97	0.3	8.60	0.21
2011/4/5	6.77	4.52	124	177	27	63.5	100	147	129	5.32	1.98	0.25	8.60	0.21
2011/4/18	6.78	4.65	138	169	24.7	59.3	99.1	145	128	5.69	1.17	0.32	8.56	0.12
2011/5/2	6.86	3.93	113	125	31.4	53.5	80.3	120	107	5.41	1.69	0.25	8.64	0.24
2011/5/16	6.84	3.67	104	108	26.1	54.2	78.6	108	97.3	5.49	0	0.24	9.16	0.25
2011/5/30	6.75	3.13	78	94	31.9	48.4	65.3	86.9	83.2	6.07	1.68	0.34	7.64	0.35
2011/6/13	6.86	3.83	119	117	28.4	53.3	85.2	116	72.2	6.89	0	0.23	9.35	0.24
2011/6/27	6.81	3.73	105	114	39.9	46.9	77.9	113	74.4	7.04	0	0.74	8.28	0.31
2011/7/11	6.83	3.85	121	113	31.4	54.2	85.2	119	81.4	6.55	0.79	0.17	9.35	0.24
2011/7/25	6.88	3.91	120	116	38.2	52.3	83.8	120	85	6.64	0	0.33	9.63	0.23
2011/8/8	6.85	4.1	135	130	34.8	58.4	92.5	129	93.6	7.5	1.35	0.2	10.10	0.20
2011/8/22	6.81	4.14	118	93	64.6	40.5	84.3	132	97.8	7.87	1.35	0.3	9.13	0.24
2011/9/5	6.57	3.08	58	78	63.1	44.5	63.1	93.4	78	8	1.89	0.27	7.55	0.45
2011/9/20	6.81	3.67	93	104	54.7	49.9	76	119	102	7.27	1.85	0.38	8.75	0.29
2011/10/3	6.77	3.8	109	113	34.4	57.2	85.3	122	99.7	6.45	0	0.23	9.67	0.20
2011/10/17	6.83	3.79	106	112	51.1	52.5	80	126	101	6.81	2.84	0.17	9.13	0.22
2011/10/31	6.78	4.09	119	124	35.4	55.4	86	131	105	6.53	2.02	0.09	9.48	0.16

Note. The water year was difined as the period from November to October in the following year. The lines indicate the borde of the water years.*1, The data of the pH 4.8 endpoint alkalinity are also available.

Table 7.8 Periodic chemical discharges from the stream: Lake Ijira Catchment

Start date	End date	Gran's ANC	SO_4^{2-}	NO_3^-	Cl^-	Na^+	Ca^{2+}	Mg^{2+}	K^+	NH_4^+	H^+	TOC	SiO_2	Periodic discharge,
						$kmol_c\ ha^{-1}$						$kg\text{-}C\ ha^{-1}$	$kg\text{-}SiO_2\ ha^{-1}$	mm
2010/11/2	2010/11/15	0.04	0.06	0.01	0.02	0.03	0.05	0.05	0.00	0.00	0.00	0.10	3.17	39.4
2010/11/15	2010/11/29	0.04	0.06	0.01	0.02	0.03	0.05	0.05	0.00	0.00	0.00	0.08	3.07	38.4
2010/11/29	2010/12/13	0.05	0.07	0.01	0.03	0.04	0.06	0.05	0.00	0.00	0.00	0.10	3.47	44.0
2010/12/13	2010/12/24	0.04	0.06	0.01	0.02	0.03	0.06	0.05	0.00	0.00	0.00	0.17	2.97	40.8
2010/12/24	2011/1/11	0.04	0.06	0.02	0.03	0.04	0.06	0.05	0.00	0.00	0.00	0.18	3.26	45.2
2011/1/11	2011/1/24	0.04	0.06	0.01	0.02	0.03	0.06	0.05	0.00	0.00	0.00	0.08	3.11	40.4
2011/1/24	2011/2/7	0.06	0.08	0.02	0.03	0.05	0.08	0.07	0.00	0.00	0.00	0.13	4.24	55.8
2011/2/7	2011/2/21	0.09	0.12	0.03	0.05	0.07	0.12	0.11	0.00	0.00	0.00	0.26	6.74	89.5
2011/2/21	2011/3/7	0.08	0.10	0.03	0.05	0.07	0.10	0.09	0.00	0.00	0.00	0.24	6.44	80.6
2011/3/7	2011/3/22	0.04	0.05	0.01	0.02	0.03	0.05	0.04	0.00	0.00	0.00	0.11	3.20	37.5
2011/3/22	2011/4/5	0.03	0.05	0.01	0.02	0.03	0.04	0.04	0.00	0.00	0.00	0.08	2.43	28.3
2011/4/5	2011/4/18	0.02	0.02	0.00	0.01	0.01	0.02	0.02	0.00	0.00	0.00	0.04	1.06	12.4
2011/4/18	2011/5/2	0.05	0.05	0.01	0.02	0.03	0.05	0.04	0.00	0.00	0.00	0.10	3.1	36.1
2011/5/2	2011/5/16	0.11	0.12	0.03	0.06	0.08	0.12	0.11	0.01	0.00	0.00	0.26	9.36	105.2
2011/5/16	2011/5/30	0.06	0.07	0.02	0.03	0.05	0.07	0.06	0.00	0.00	0.00	0.20	5.7	67.9
2011/5/30	2011/6/13	0.15	0.16	0.04	0.08	0.11	0.15	0.12	0.01	0.00	0.00	0.42	12.61	148.5
2011/6/13	2011/6/27	0.09	0.09	0.03	0.04	0.07	0.09	0.06	0.01	0.00	0.00	0.39	7.1	80.3
2011/6/27	2011/7/11	0.09	0.09	0.03	0.04	0.07	0.10	0.06	0.01	0.00	0.00	0.37	7.2	82.2
2011/7/11	2011/7/25	0.18	0.17	0.05	0.08	0.13	0.18	0.13	0.01	0.00	0.00	0.38	14.3	151.1
2011/7/25	2011/8/8	0.09	0.09	0.03	0.04	0.07	0.09	0.07	0.01	0.00	0.00	0.20	7.31	74.1
2011/8/8	2011/8/22	0.03	0.03	0.01	0.01	0.02	0.03	0.02	0.00	0.00	0.00	0.06	2.3	23.8
2011/8/22	2011/9/5	0.10	0.09	0.07	0.05	0.08	0.12	0.10	0.01	0.00	0.00	0.31	9.12	109.3
2011/9/5	2011/9/20	0.08	0.09	0.06	0.05	0.07	0.11	0.09	0.01	0.00	0.00	0.33	8.3	101.9
2011/9/20	2011/10/3	0.10	0.11	0.05	0.05	0.08	0.12	0.10	0.01	0.00	0.00	0.31	9.31	101.1
2011/10/3	2011/10/17	0.04	0.04	0.02	0.02	0.03	0.05	0.04	0.00	0.00	0.00	0.08	3.57	38.0
2011/10/17	2011/10/31	0.03	0.04	0.01	0.02	0.03	0.04	0.03	0.00	0.00	0.00	0.04	2.88	30.9

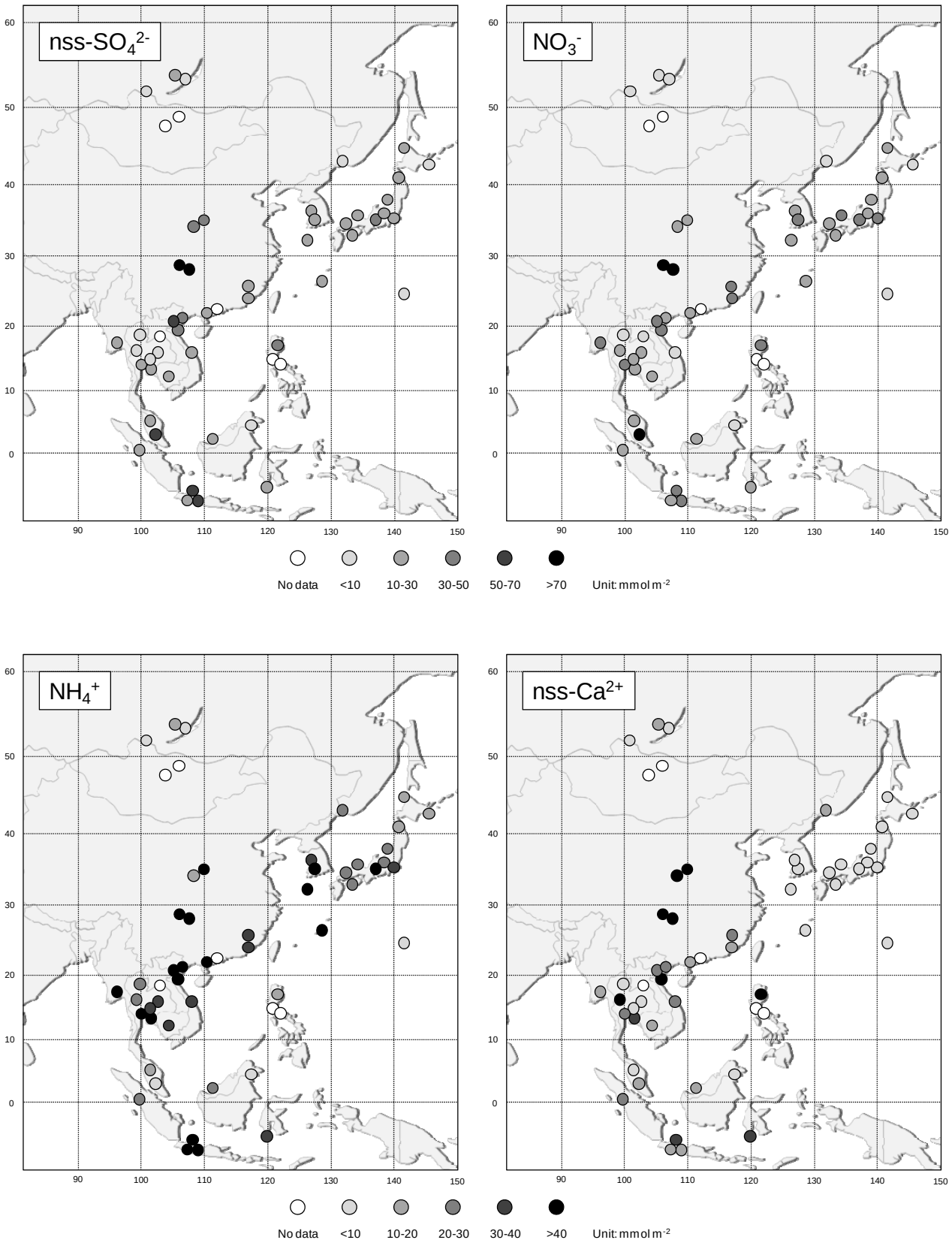
Note. Periodic chemical discharges were calculated based on the mean concentrations and the water discharge for the respective sampling intervals.

Table 7.9 Annual chemical discharges from the stream: Lake Ijira Catchment

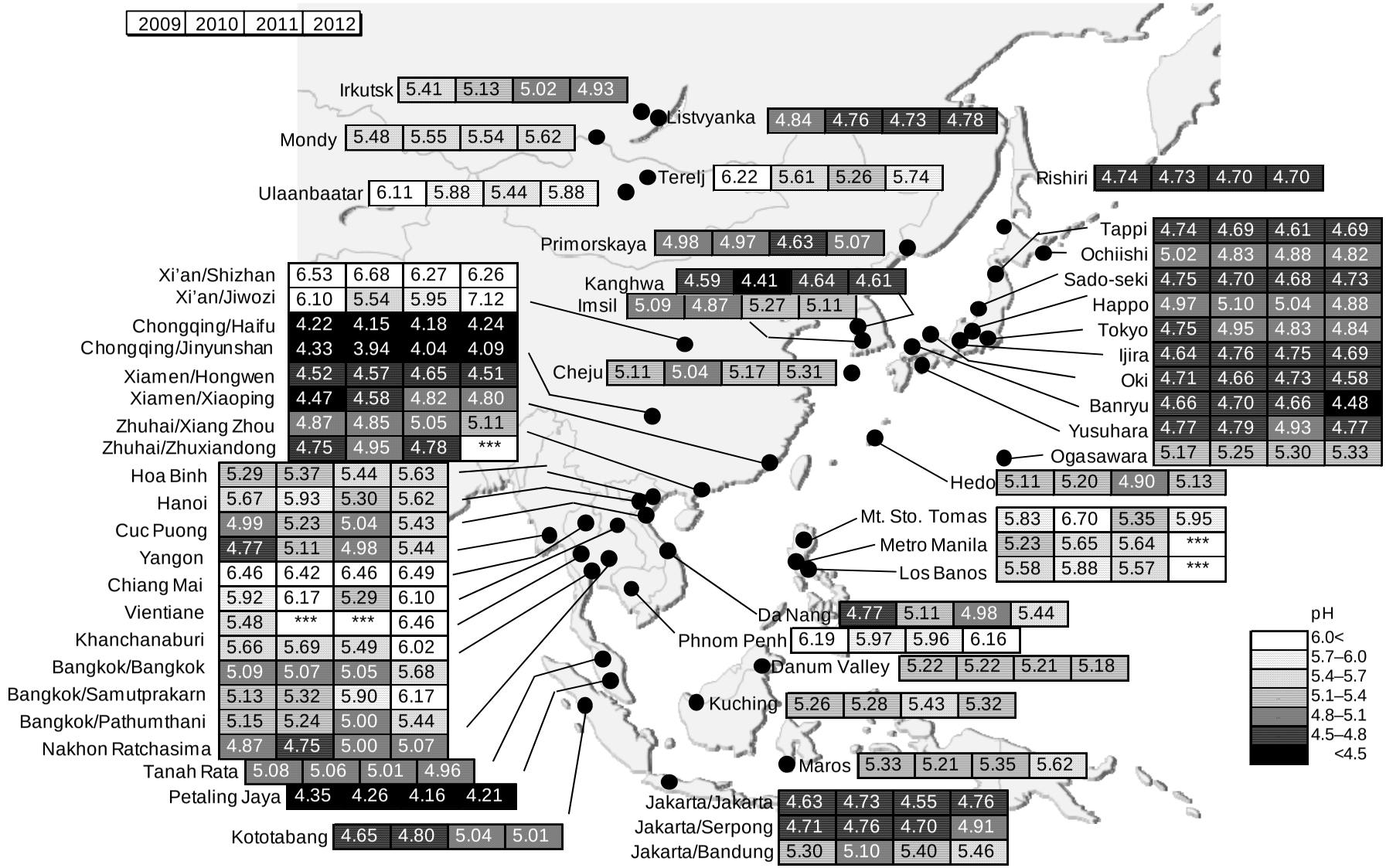
Water year	alkalinity Gran's ANC	SO_4^{2-}	NO_3^-	Cl^-	Na^+	Ca^{2+}	Mg^{2+}	K^+	NH_4^+	H^+	TOC	SiO_2
					$kmol_c\ ha^{-1}$						$kg\text{-}C\ ha^{-1}$	$kg\text{-}SiO_2\ ha^{-1}$
2010 - 2011	1.79	2.05	0.62	0.91	1.39	2.06	1.67	0.11	0.02	0.00	5.0	145

Appendix I

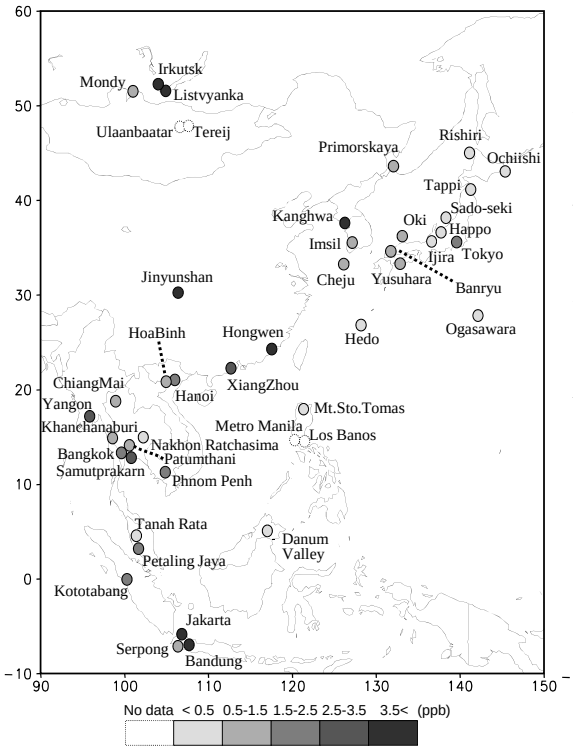
Overview of Data Report 2012



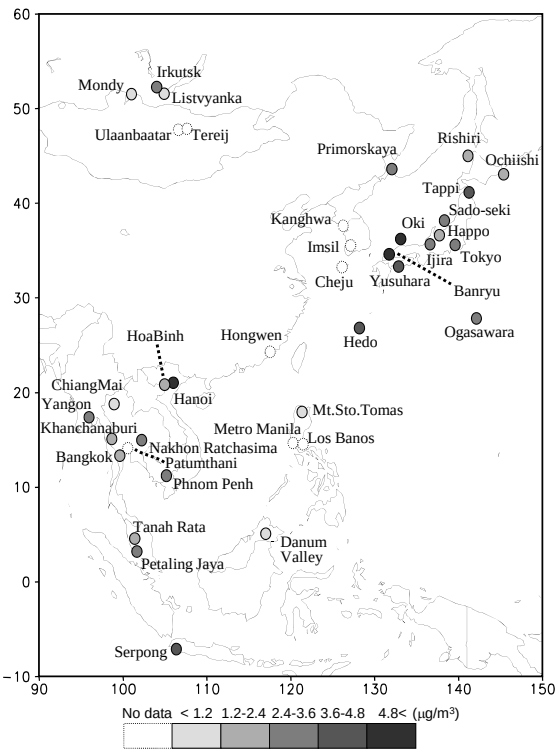
Appendix Fig. 1-1 Annual wet deposition levels of nss-SO_4^{2-}, NO_3^-, NH_4^+ and nss-Ca^{2+}



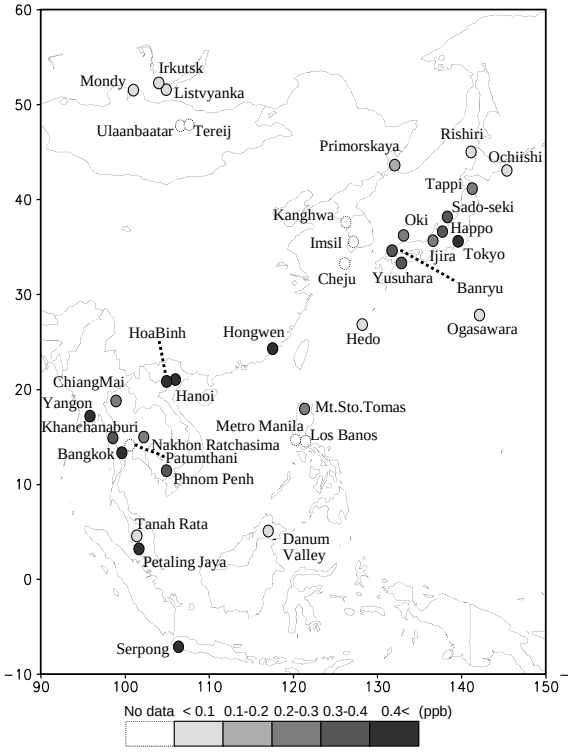
Appendix Fig. 1-2 Trends of pH in each EANET site from 2009 to 2012



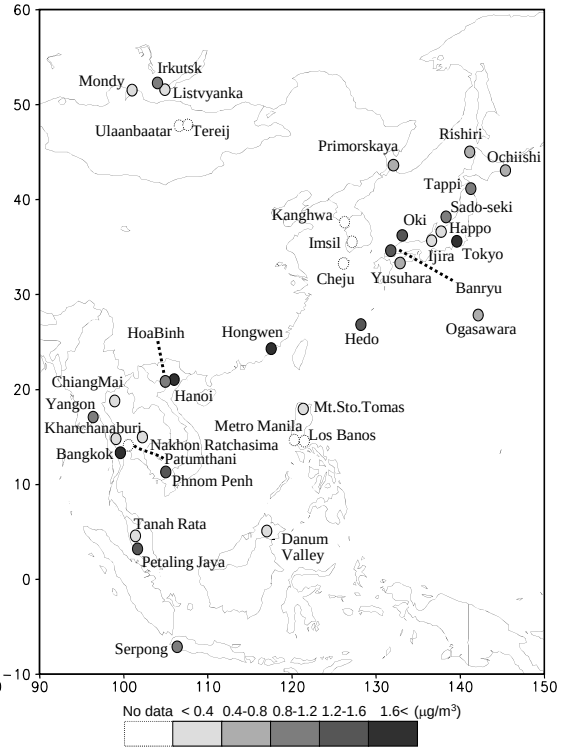
Appendix Fig. 1-3 Levels of annual SO_2 concentration in at EANET monitoring sites in 2012.



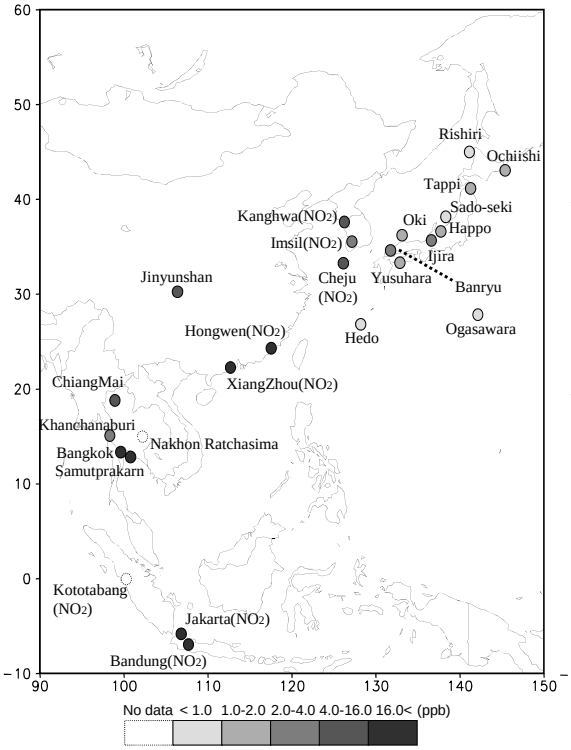
Appendix Fig. 1-4 Levels of annual particulate SO_4^{2-} concentration in at EANET monitoring sites in 2012.



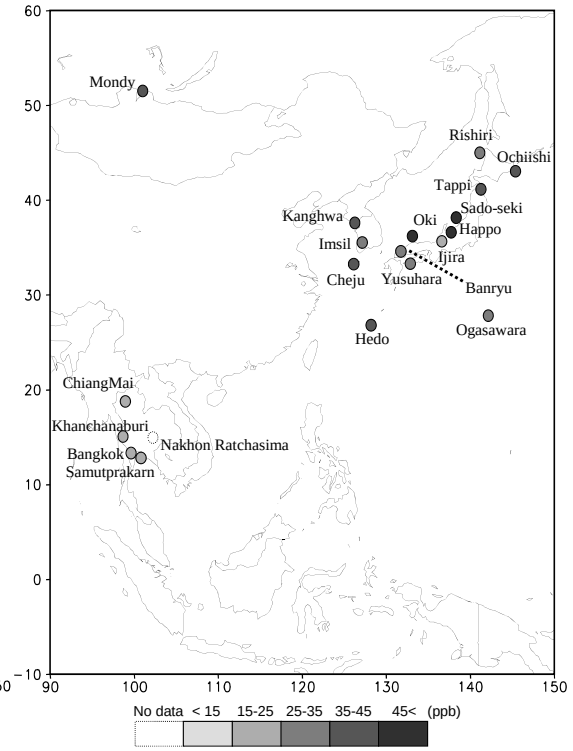
Appendix Fig. 1-5 Levels of annual HNO_3 concentration in at EANET monitoring sites in 2012.



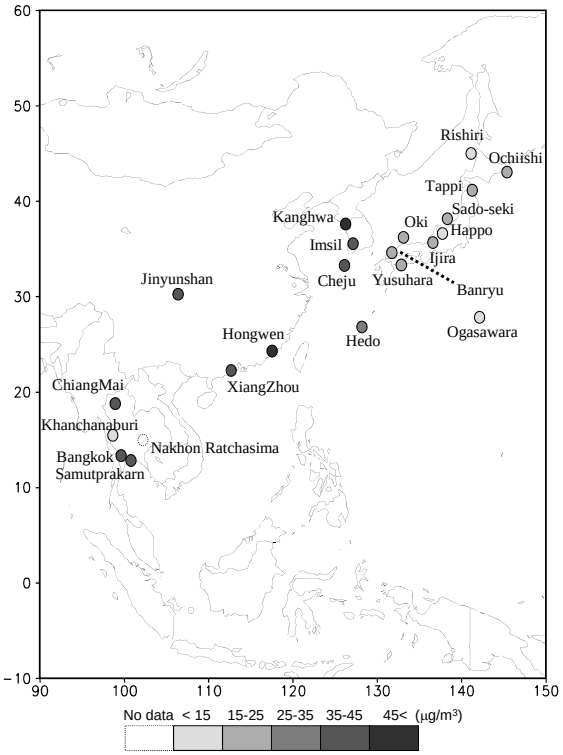
Appendix Fig. 1-6 Levels of annual particulate NO_3^- concentration in at EANET monitoring sites in 2012.



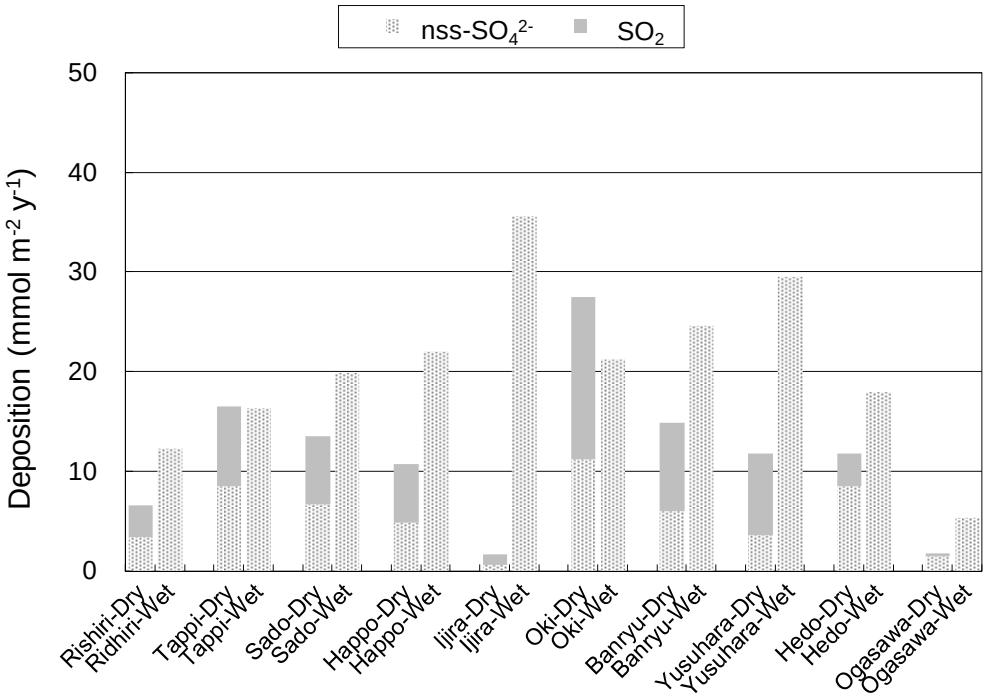
Appendix Fig. 1-7 Levels of annual NOx or NO_2 concentration at EANET monitoring sites in 2012.



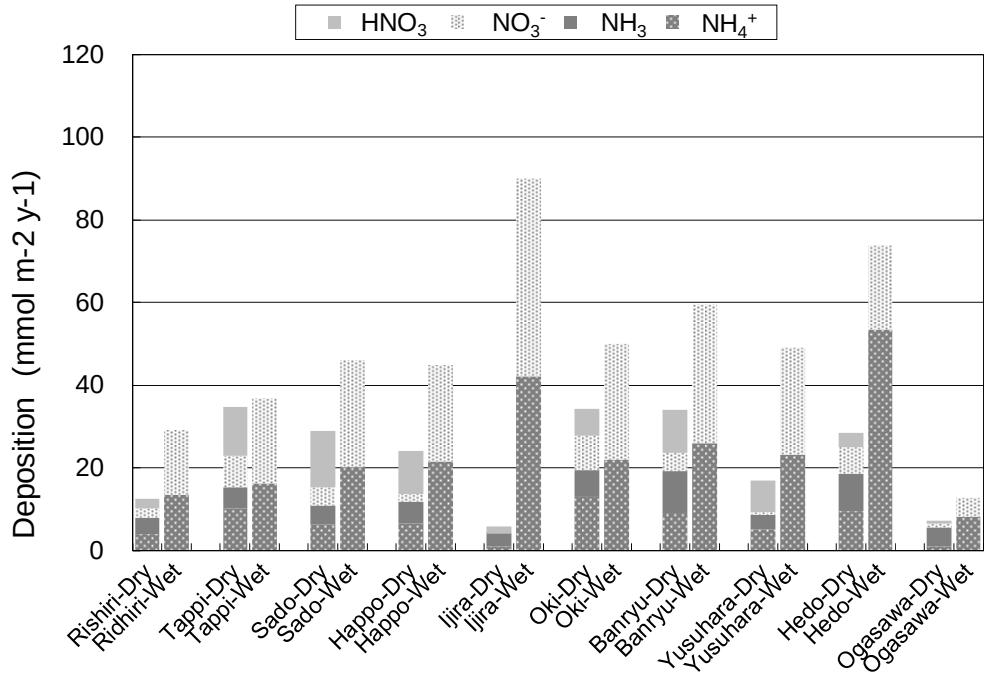
Appendix Fig. 1-8 Levels of annual O_3 concentration at EANET monitoring sites in 2012.



Appendix Fig. 1-9 Levels of annual PM_{10} concentration at EANET monitoring sites in 2012.



Appendix Fig. 1-10 Annual dry and wet deposition amount of sulfur compounds at EANET sites in 2012.



Appendix Fig. 1-11 Annual dry and wet deposition amount of nitrogen compounds at EANET sites in 2012.

Appendix II

Meteorological Statistics at the Monitoring Sites

Appendix Table 2-1 Meteorological statistics at the monitoring sites
Meteorological Statistics : Chongqing

2012

Month / Items		1	2	3	4	5	6	7	8	9	10	11	12
Tempera-ture (ºC)	monthly mean	7.2	8.7	13.7	19.7	22.4	24.4	28.3	29.9	23.3	18.5	13.6	9.6
	max.daily mean	8.8	11.3	20.9	25.9	27.8	28.0	32.1	33.9	29.9	22.1	19.6	12.1
	min.daily mean	5.1	6.0	7.6	14.9	18.2	20.0	24.4	23.3	20.0	15.2	8.8	5.5
Relative humidity (%)	monthly mean	69	68	70	67	77	80	71	61	73	79	76	73
	max.daily mean	91	89	94	86	93	92	89	90	91	91	91	89
	min.daily mean	51	49	51	34	55	65	53	43	49	58	57	32
Mean wind speed (m/s)		--	--	--	--	--	--	--	--	--	--	--	--
Most frequent wind direction (bearings)		SE	SSE, SSW	S	N	SSE	NE, ENE	S	S	S	S	SSW	NNW
Precipitation amount (mm/month)		34	14	31	52	287	162	85	76	272	95	30	11
Sunshine duration (hours/month)		--	--	--	--	--	--	--	--	--	--	--	--
Solar radiation (MJ/m^2/month)		--	--	--	--	--	--	--	--	--	--	--	--

Appendix Table 2-2 Meteorological statistics at the monitoring sites
Meteorological Statistics : Xi'an

2012

Month / Items		1	2	3	4	5	6	7	8	9	10	11	12
Tempera-ture (ºC)	monthly mean	-0.4	2.5	8.6	18.1	22.2	27.3	27.9	26.0	20.2	15.3	6.8	1.2
	max.daily mean	10.7	11.1	24.1	31.2	34.8	39.2	39.9	35.7	30.7	26.1	18.5	14.1
	min.daily mean	-9.3	-5.4	-0.6	6.3	13.3	18.7	20.1	18.2	10.3	5.3	-3.2	-7.9
Relative humidity (%)	monthly mean	71	52	62	51	62	49	67	70	74	70	59	56
	max.daily mean	--	--	--	--	--	--	--	--	--	--	--	--
	min.daily mean	22	14	11	13	11	12	26	31	24	16	16	13
Mean wind speed (m/s)		0.9	1.1	1.3	1.3	1.3	1.4	1.3	1.3	1.3	1.0	1.1	1.1
Most frequent wind direction (bearings)		W	E	E	E	ENE	ENE	W	E	W	W	W	NE
Precipitation amount (mm/month)		5	0	15	21	56	23	84	103	84	17	18	1
Sunshine duration (hours/month)		81	75	122	187	133	171	128	127	136	116	148	119
Solar radiation (MJ/m^2/month)		--	--	--	--	--	--	--	--	--	--	--	--

Appendix Table 2-3 Meteorological statistics at the monitoring sites
Meteorological Statistics : Xiamen

2012

Month / Items		1	2	3	4	5	6	7	8	9	10	11	12
Tempera-ture (ºC)	monthly mean	12.1	12.2	15.9	20.8	23.8	26.2	33.3	28.4	26.5	23.0	19.2	15.1
	max.daily mean	15.1	15.7	20.3	24.8	27.7	29.7	25.9	32.7	30.6	27.7	22.7	18.6
	min.daily mean	10.2	9.9	12.9	18.0	21.4	24.2	25.5	25.7	23.9	20.1	17.0	12.8
Relative humidity (%)	monthly mean	77	77	72	75	80	84	76	75	71	62	74	74
	max.daily mean	--	--	--	--	--	--	--	--	--	--	--	--
	min.daily mean	47	35	15	26	26	46	43	38	32	25	22	28
Mean wind speed (m/s)		2.3	2.2	2.5	2.2	2.3	2.8	2.6	2.5	2.6	2.7	2.5	2.7
Most frequent wind direction (bearings)		E	E	E	ESE	E	ESE	SW	SE	NE	NNE	NE	ENE
Precipitation amount (mm/month)		58	57	117	82	134	147	266	202	166	230	101	112
Sunshine duration (hours/month)		100	139	107	203	143	197	239	244	137	170	130	146
Solar radiation (MJ/m^2/month)		--	--	--	--	--	--	--	--	--	--	--	--

Appendix Table 2-4 Meteorological statistics at the monitoring sites
Meteorological Statistics : Zhuhai

2012

Month / Items		1	2	3	4	5	6	7	8	9	10	11	12
Tempera-ture (ºC)	monthly mean	13.4	15.0	18.5	23.4	27.3	28.0	28.6	29.0	27.9	25.4	21.3	16.7
	max.daily mean	16.2	17.9	21.7	26.2	30.3	30.9	31.6	32.5	30.9	28.6	24.0	19.5
	min.daily mean	11.6	13.1	16.5	21.5	25.7	25.9	26.2	26.6	25.6	23.2	19.3	14.5
Relative humidity (%)	monthly mean	77	81	82	86	82	82	80	78	69	69	79	75
	max.daily mean	--	--	--	--	--	--	--	--	--	--	--	--
	min.daily mean	43	40	26	49	44	50	43	38	26	32	40	27
Mean wind speed (m/s)		2.0	2.0	2.4	2.8	3.2	3.3	3.3	2.6	3.0	2.9	2.5	2.3
Most frequent wind direction (bearings)		ENE	NE	ENE	ESE	ESE	ESE	ESE	WSW	ESE	ESE	ENE	ENE
Precipitation amount (mm/month)		45	29	23	390	133	218	475	160	34	85	128	41
Sunshine duration (hours/month)		77	34	86	98	173	170	244	203	215	200	113	99
Solar radiation (MJ/m^2/month)		--	--	--	--	--	--	--	--	--	--	--	--

Appendix Table 2-5 Meteorological statistics at the monitoring sites
Meteorological Statistics : Serpong

2012

Month / Items		1	2	3	4	5	6	7	8	9	10	11	12
Tempera-ture (ºC)	monthly mean	27.2	27.7	28.1	27.7	28.2	28.4	27.9	28.2	28.4	28.3	27.3	27.9
	max.daily mean	36.8	37.5	37.0	37.5	37.4	37.9	36.7	37.9	37.9	38.2	37.0	36.8
	min.daily mean	23.0	22.8	22.6	23.4	22.5	22.2	21.1	21.5	20.3	21.6	23.5	23.1
Relative humidity (%)	monthly mean	89	89	90	89	67	73	66	76	81	86	84	92
	max.daily mean	99	99	99	99	99	99	99	99	99	99	99	99
	min.daily mean	45	40	47	33	38	34	31	32	30	40	41	41
Mean wind speed (m/s)		0.4	0.3	0.4	0.3	0.3	0.3	0.3	0.4	0.4	0.3	0.2	0.3
Most frequent wind direction (bearings)		WSW	N	WSW	N	N	N	N	N	N	N	N	N
Precipitation amount (mm/month)		124	34	320	1414	65	33	23	4	22	35	173	102
Sunshine duration (hours/month)		--	--	--	--	--	--	--	--	--	--	--	--
Solar radiation (MJ/m^2/month)		--	--	--	--	--	--	--	--	--	--	--	--

Appendix Table 2-6 Meteorological statistics at the monitoring sites
Meteorological Statistics : Kototabang

2012

Month / Items		1	2	3	4	5	6	7	8	9	10	11	12
Tempera-ture (ºC)	monthly mean	22.2	21.9	21.8	22.2	22.6	22.0	21.7	21.7	22.3	21.7	22.4	22.4
	max.daily mean	27.3	27.4	27.5	28.0	28.0	27.6	27.1	27.0	27.4	26.5	26.9	27.0
	min.daily mean	18.6	18.8	18.2	18.9	19.1	18.3	18.2	18.4	18.6	18.9	19.5	19.0
Relative humidity (%)	monthly mean	81	86	85	87	86	84	85	87	85	88	87	86
	max.daily mean	94	95	95	93	93	93	94	92	94	97	93	92
	min.daily mean	68	77	73	76	80	75	77	71	72	74	71	78
Mean wind speed (m/s)		1.2	1.1	1.1	0.9	1.1	1.2	1.1	1.1	1.0	0.9	0.8	0.9
Most frequent wind direction (bearings)		N	N	SE	SE	E	E	E	NE	SE	NE	SE	NE
Precipitation amount (mm/month)		93	375	182	259	134	80	190	268	83	553	284	212
Sunshine duration (hours/month)		4	3	4	5	5	4	5	4	4	3	3	3
Solar radiation (Watt/m2/month)		197	183	192	199	187	185	180	175	157	146	167	144

Appendix Table 2-7 Meteorological statistics at the monitoring sites
Meteorological Statistics : Bandung

2012

Month / Items		1	2	3	4	5	6	7	8	9	10	11	12
Tempera-ture (ºC)	monthly mean	23.5	23.7	23.9	23.8	27.1	27.2	23.7	24.0	24.6	24.7	23.9	23.5
	max.daily mean	30.3	31.6	30.2	32.4	33.0	33.5	32.8	33.8	32.6	33.9	32.6	30.9
	min.daily mean	20.3	19.6	19.3	19.0	22.6	20.8	16.9	17.3	18.4	18.9	19.8	19.7
Relative humidity (%)	monthly mean	85	86	82	88	84	79	77	74	76	80	88	90
	max.daily mean	97	99	98	100	96	95	97	93	94	99	100	100
	min.daily mean	60	54	56	38	59	42	32	34	36	33	45	60
Mean wind speed (m/s)		2.0	1.2	2.3	0.8	0.2	0.3	1.0	1.0	1.3	1.2	0.9	0.8
Most frequent wind direction (bearings)		NNW	NNW	NNW	NNW	NNE	NNE	NNW	NNW	NNW	NNW	NNW	NNW
Precipitation amount (mm/month)		56	246	145	348	189	42	51	2	46	199	362	512
Sunshine duration (hours/month)		--	--	--	--	--	--	--	--	--	--	--	--
Solar radiation (MJ/m^2/month)		357	425	500	378	344	513	409	370	455	451	351	379

Appendix Table 2-8 Meteorological statistics at the monitoring sites
Meteorological Statistics : Rishiri

2012

Month / Items		1	2	3	4	5	6	7	8	9	10	11	12
Tempera-ture (ºC)	monthly mean	-6.1	-6.7	-2.6	3.8	9.8	13.9	17.8	19.7	19.5	10.9	3.5	-3.4
	max.daily mean	-0.2	1.7	3.9	12.5	15.0	17.7	21.3	24.1	24.0	16.4	9.3	3.8
	min.daily mean	-11.5	-11.5	-7.3	-4.0	5.3	8.6	13.4	15.9	12.7	4.5	-2.9	-11.7
Relative humidity (%)	monthly mean	79	76	72	78	83	81	89	91	87	75	80	80
	max.daily mean	93	91	99	99	98	94	100	99	99	93	96	91
	min.daily mean	66	56	53	54	68	38	61	78	73	51	61	67
Mean wind speed (m/s)		3.2	4.4	4.0	2.7	2.5	2.0	1.9	1.8	2.5	3.7	4.3	4.3
Most frequent wind direction (bearings)		NNW	WNW	ENE	ENE	ENE	E	ENE	W	E	W	ENE	NW
Precipitation amount (mm/month)		65	28	27	49	62	10	111	105	127	154	272	151
Sunshine duration (hours/month)		--	--	--	--	--	--	--	--	--	--	--	--
Solar radiation (MJ/m^2/month)		141	225	381	488	497	582	451	467	362	277	119	86

Appendix Table 2-9 Meteorological statistics at the monitoring sites
Meteorological Statistics : Ochiishi

2012

Month / Items		1	2	3	4	5	6	7	8	9	10	11	12
Tempera-ture (ºC)	monthly mean	-5.8	-7.1	-3.5	0.6	4.4	7.2	11.5	14.5	16.2	10.8	4.5	-2.7
	max.daily mean	-0.2	-1.3	0.9	4.6	7.0	10.4	15.5	19.0	19.8	14.7	8.8	5.5
	min.daily mean	-9.5	-10.7	-8.5	-4.2	1.4	3.1	8.7	10.3	11.3	7.3	-2.2	-9.8
Relative humidity (%)	monthly mean	67	67	79	88	93	94	98	97	94	78	77	71
	max.daily mean	99	100	100	100	100	100	100	100	100	100	99	95
	min.daily mean	49	55	55	61	68	80	91	89	70	51	52	45
Mean wind speed (m/s)		8.2	8.2	7.5	7.5	7.1	6.5	5.1	5.3	6.4	8.2	9.2	9.8
Most frequent wind direction (bearings)		NW	NW	NNE	S	WSW	WSW	WSW	SW	E	SSE	NW	NW
Precipitation amount (mm/month)		10	4	25	37	61	63	98	27	21	118	141	83
Sunshine duration (hours/month)		--	--	--	--	--	--	--	--	--	--	--	--
Solar radiation (MJ/m^2/month)		219	311	401	432	503	522	435	388	355	296	191	167

Appendix Table 2-10 Meteorological statistics at the monitoring sites
Meteorological Statistics : Tappi

2012

Month / Items		1	2	3	4	5	6	7	8	9	10	11	12
Tempera-ture (ºC)	monthly mean	-2.4	-2.3	1.7	6.7	11.5	14.9	19.7	24.1	23.0	14.7	7.1	-0.3
	max.daily mean	2.9	3.8	9.3	13.5	15.1	20.5	26.7	27.6	28.7	20.3	13.3	6.0
	min.daily mean	-6.6	-5.9	-2.3	0.0	7.7	11.7	16.1	19.5	17.4	8.1	1.1	-8.4
Relative humidity (%)	monthly mean	72	69	70	71	83	83	86	80	75	65	71	69
	max.daily mean	84	87	96	97	96	96	97	93	92	78	86	82
	min.daily mean	59	56	50	53	66	49	70	72	58	51	58	54
Mean wind speed (m/s)		9.4	10.2	7.4	6.2	5.4	5.3	4.8	3.7	3.8	6.6	7.6	9.8
Most frequent wind direction (bearings)		WSW	WSW	WSW	WSW	ENE	ENE	ENE	ENE	ENE	WSW	WSW	WSW
Precipitation amount (mm/month)		15	28	82	63	111	56	20	115	209	143	178	76
Sunshine duration (hours/month)		--	--	--	--	--	--	--	--	--	--	--	--
Solar radiation (MJ/m^2/month)		96	159	290	447	483	536	502	532	418	289	94	75

Appendix Table 2-11 Meteorological statistics at the monitoring sites
Meteorological Statistics : Sado-seki

2012

Month / Items		1	2	3	4	5	6	7	8	9	10	11	12
Tempera-ture (ºC)	monthly mean	0.8	0.4	4.6	10.6	14.8	18.2	23.5	26.5	24.3	16.6	11.7	2.9
	max.daily mean	6.0	6.3	12.7	20.1	22.0	22.0	28.4	29.2	29.7	20.6	15.1	7.6
	min.daily mean	-2.2	-3.2	0.4	2.2	7.6	14.5	19.8	22.7	19.4	9.9	8.1	-3.7
Relative humidity (%)	monthly mean	72	74	72	62	72	79	81	75	71	69	74	79
	max.daily mean	94	95	97	92	97	91	95	84	92	92	85	90
	min.daily mean	56	49	47	31	42	67	60	60	50	52	64	68
Mean wind speed (m/s)		6.8	6.1	6.7	5.1	4.6	4.7	3.1	2.6	3.5	5.1	9.1	6.9
Most frequent wind direction (bearings)		WSW	WSW	WSW	SW	SSW	WSW	WSW	NNE	ENE	W	W	W
Precipitation amount (mm/month)		43	57	110	78	76	31	136	41	280	151	106	15
Sunshine duration (hours/month)		--	--	--	--	--	--	--	--	--	--	--	--
Solar radiation (MJ/m^2/month)		121	170	296	484	554	590	545	643	459	316	47	12

Appendix Table 2-12 Meteorological statistics at the monitoring sites
Meteorological Statistics : Happo

2012

Month / Items		1	2	3	4	5	6	7	8	9	10	11	12
Tempera-ture (ºC)	monthly mean	-10.0	-9.3	-4.9	1.0	5.8	10.7	15.4	16.5	13.1	5.6	-1.5	-7.1
	max.daily mean	-3.4	-0.3	3.2	11.5	9.6	14.5	18.6	18.8	15.6	10.8	4.4	2.0
	min.daily mean	-14.6	-16.4	-12.2	-11.0	-1.9	7.6	11.6	12.0	8.7	-0.4	-7.8	-14.4
Relative humidity (%)	monthly mean	87	83	77	75	80	90	95	95	97	85	75	79
	max.daily mean	98	96	98	99	99	99	99	99	99	99	96	95
	min.daily mean	49	62	27	23	51	75	87	72	82	52	46	31
Mean wind speed (m/s)		4.7	5.2	4.7	4.7	3.2	2.1	1.8	1.9	2.3	2.3	4.4	5.7
Most frequent wind direction (bearings)		NNW	NW	NW	S	S	SSE	SSE	SSE	SSE	SSE	NW	SSE
Precipitation amount (mm/month)		107	130	239	165	151	182	253	107	165	153	170	182
Sunshine duration (hours/month)		--	--	--	--	--	--	--	--	--	--	--	--
Solar radiation (MJ/m^2/month)		245	348	448	571	584	502	366	452	289	295	269	233

Appendix Table 2-13 Meteorological statistics at the monitoring sites
Meteorological Statistics : Ijira

2012

Month / Items		1	2	3	4	5	6	7	8	9	10	11	12
Tempera-ture (ºC)	monthly mean	1.1	1.2	5.2	11.0	15.7	19.2	23.4	24.9	21.5	15.1	7.7	1.9
	max.daily mean	5.3	6.9	10.8	17.9	18.5	21.1	27.1	27.0	24.2	20.3	13.4	6.8
	min.daily mean	-1.7	-3.5	-0.4	2.1	11.4	16.9	19.9	22.9	17.5	10.0	3.6	-1.2
Relative humidity (%)	monthly mean	89	86	83	82	77	86	92	88	93	87	93	95
	max.daily mean	100	100	100	100	100	100	100	98	98	98	99	99
	min.daily mean	68	56	58	58	58	69	81	73	84	68	75	81
Mean wind speed (m/s)		0.3	0.4	0.5	0.6	0.5	0.3	0.3	0.3	0.3	0.4	0.3	0.3
Most frequent wind direction (bearings)		Calm	Calm	Calm	Calm	Calm	Calm	Calm	Calm	Calm	Calm	Calm	Calm
Precipitation amount (mm/month)		77	144	339	294	82	328	498	244	390	98	149	226
Sunshine duration (hours/month)		--	--	--	--	--	--	--	--	--	--	--	--
Solar radiation (MJ/m^2/month)		209	233	345	408	503	382	392	468	356	342	205	186

Appendix Table 2-14 Meteorological statistics at the monitoring sites
Meteorological Statistics : Oki

2012

Month / Items		1	2	3	4	5	6	7	8	9	10	11	12
Tempera-ture (ºC)	monthly mean	4.1	3.1	7.0	12.7	15.9	19.7	24.5	27.3	23.0	17.4	11.3	5.3
	max.daily mean	7.6	8.3	15.2	18.9	20.4	23.0	28.1	29.1	27.7	20.1	15.8	12.1
	min.daily mean	-0.2	-1.8	2.5	5.2	10.0	16.3	20.2	24.3	18.8	11.9	6.2	0.6
Relative humidity (%)	monthly mean	83	82	80	77	85	90	93	85	87	79	78	82
	max.daily mean	98	94	98	95	98	98	98	96	97	92	88	92
	min.daily mean	67	70	59	53	65	78	83	73	76	67	68	69
Mean wind speed (m/s)		6.0	5.3	6.2	6.1	4.5	3.7	4.2	4.1	5.0	5.4	7.0	7.1
Most frequent wind direction (bearings)		N	W	NNE	S	S	NNE	S	S	NNE	NNE	N	N
Precipitation amount (mm/month)		125	54	147	67	58	143	197	13	133	87	132	110
Sunshine duration (hours/month)		--	--	--	--	--	--	--	--	--	--	--	--
Solar radiation (MJ/m^2/month)		153	197	313	513	560	552	554	656	423	396	168	132

Appendix Table 2-15 Meteorological statistics at the monitoring sites
Meteorological Statistics : Banryu

2012

Month / Items		1	2	3	4	5	6	7	8	9	10	11	12
Tempera-ture (ºC)	monthly mean	4.2	3.6	7.9	13.7	17.0	20.5	25.7	27.1	22.7	16.3	10.8	5.2
	max.daily mean	8.0	10.0	16.9	19.0	18.9	24.7	28.8	28.7	26.9	19.6	14.6	12.4
	min.daily mean	1.0	-1.5	2.2	5.6	12.6	18.1	21.4	23.0	19.0	12.3	6.0	0.5
Relative humidity (%)	monthly mean	81	84	83	79	86	93	90	87	90	86	82	84
	max.daily mean	98	98	98	96	98	98	98	98	98	97	95	98
	min.daily mean	64	66	58	54	62	86	77	72	82	69	67	60
Mean wind speed (m/s)		3.1	3.2	3.1	3.0	2.6	2.0	2.1	2.1	2.3	3.0	2.8	3.4
Most frequent wind direction (bearings)		S	S	S	S	S	N	S	S	S	S	S	S
Precipitation amount (mm/month)		63	87	118	70	60	142	264	51	47	71	106	130
Sunshine duration (hours/month)		--	--	--	--	--	--	--	--	--	--	--	--
Solar radiation (MJ/m^2/month)		158	217	346	525	570	490	625	619	445	399	228	158

Appendix Table 2-16 Meteorological statistics at the monitoring sites
Meteorological Statistics : Yusuhara

2012

Month / Items		1	2	3	4	5	6	7	8	9	10	11	12
Tempera-ture (ºC)	monthly mean	0.0	0.6	5.1	10.6	14.8	17.5	21.5	21.8	19.0	13.9	6.7	1.6
	max.daily mean	5.8	9.0	12.9	18.0	18.1	20.6	23.2	23.6	21.6	16.7	12.3	10.5
	min.daily mean	-5.1	-7.1	-3.2	2.5	10.7	15.0	19.4	20.1	15.4	9.8	1.2	-5.3
Relative humidity (%)	monthly mean	75	77	73	68	69	90	89	91	86	75	78	80
	max.daily mean	97	97	97	97	97	97	96	97	97	97	96	95
	min.daily mean	47	52	43	37	39	66	73	79	62	49	58	63
Mean wind speed (m/s)		2.4	2.5	2.3	2.0	1.8	1.3	1.2	1.0	1.4	1.9	2.4	2.6
Most frequent wind direction (bearings)		N	N	NNW	NNW	NNW	SSE	SSE	SSE	NNW	NNW	N	N
Precipitation amount (mm/month)		57	172	216	226	104	657	404	359	392	64	100	131
Sunshine duration (hours/month)		--	--	--	--	--	--	--	--	--	--	--	--
Solar radiation (MJ/m^2/month)		278	269	379	492	559	317	420	395	330	371	241	227

Appendix Table 2-17 Meteorological statistics at the monitoring sites
Meteorological Statistics : Hedo

2012

Month / Items		1	2	3	4	5	6	7	8	9	10	11	12
Tempera-ture (ºC)	monthly mean	16.0	16.3	18.3	20.2	22.7	25.7	27.8	27.2	26.1	23.8	20.5	17.6
	max.daily mean	19.7	20.3	22.8	24.1	25.6	27.8	29.2	28.5	27.4	25.7	22.7	22.1
	min.daily mean	12.9	12.3	13.9	15.3	20.6	22.7	25.3	25.3	22.9	20.2	19.2	13.4
Relative humidity (%)	monthly mean	72	75	71	79	82	84	83	84	76	69	67	69
	max.daily mean	89	87	91	91	93	94	90	92	92	89	89	88
	min.daily mean	53	56	50	50	70	76	75	80	67	58	51	52
Mean wind speed (m/s)		5.1	4.8	4.9	4.5	4.2	4.2	3.7	4.7	4.6	6.3	4.5	5.8
Most frequent wind direction (bearings)		NE	N	N	ESE	ENE	SSW	E	E	E	NE	N	NNW
Precipitation amount (mm/month)		82	133	82	318	270	290	172	460	70	84	119	112
Sunshine duration (hours/month)		--	--	--	--	--	--	--	--	--	--	--	--
Solar radiation (MJ/m^2/month)		169	214	388	404	540	489	673	540	471	380	239	247

Appendix Table 2-18 Meteorological statistics at the monitoring sites
Meteorological Statistics : Ogasawara

2012

Month / Items		1	2	3	4	5	6	7	8	9	10	11	12
Tempera-ture (ºC)	monthly mean	15.3	15.8	16.7	17.8	20.5	24.3	25.1	25.3	25.2	23.3	19.3	16.7
	max.daily mean	19.1	19.4	20.7	21.0	24.2	25.9	26.1	26.3	26.0	25.5	21.9	19.5
	min.daily mean	12.6	12.2	13.2	15.5	16.5	20.6	22.7	22.6	23.1	18.5	15.4	13.2
Relative humidity (%)	monthly mean	77	81	77	84	93	--	95	93	95	92	88	85
	max.daily mean	94	99	97	100	100	--	97	98	98	98	97	97
	min.daily mean	59	64	59	64	75	--	89	90	88	78	68	66
Mean wind speed (m/s)		1.4	1.4	1.5	1.6	1.7	1.6	1.5	1.6	1.5	1.7	1.3	1.3
Most frequent wind direction (bearings)		SSW,	SW	SSW	SW	SSW	SSW	ENE	NE	NE	SSW	SSW	SW
Precipitation amount (mm/month)		83	62	39	185	197	89	42	209	190	300	74	93
Sunshine duration (hours/month)		--	--	--	--	--	--	--	--	--	--	--	--
Solar radiation (MJ/m^2/month)		314	326	505	492	356	554	677	572	587	374	377	314

Appendix Table 2-19 Meteorological statistics at the monitoring sites
Meteorological Statistics : Petaling Jaya

2012

Month / Items		1	2	3	4	5	6	7	8	9	10	11	12
Tempera-ture (ºC)	monthly mean	28.4	28.2	28.2	28.8	29.0	29.5	28.3	28.3	28.4	27.7	27.2	27.1
	max.daily mean	30.2	29.5	30.1	30.6	30.6	31.0	30.0	30.3	29.7	29.7	29.5	28.0
	min.daily mean	26.7	26.7	26.3	27.1	26.5	26.9	26.0	25.7	25.8	25.0	25.4	25.9
Relative humidity (%)	monthly mean	76	79	79	79	77	69	73	74	75	80	84	84
	max.daily mean	86	88	86	87	91	81	88	89	86	94	90	88
	min.daily mean	63	65	72	67	69	59	61	59	68	69	73	75
Mean wind speed (m/s)		7.5	7.7	7.2	8.1	8.2	7.6	7.8	7.6	7.8	8.2	7.7	7.2
Most frequent wind direction (bearings)		WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW
Precipitation amount (mm/month)		232	364	263	225	313	23	164	92	141	459	684	455
Sunshine duration (hours/month)		--	--	--	--	--	--	--	--	--	--	--	--
Solar radiation (MJ/m^2/month)		--	--	--	--	--	--	--	--	--	--	--	--

Appendix Table 2-20 Meteorological statistics at the monitoring sites
Meteorological Statistics : Tanah Rata

2012

Month / Items		1	2	3	4	5	6	7	8	9	10	11	12
Tempera-ture (ºC)	monthly mean	17.4	18.1	17.8	18.3	18.7	18.5	18.0	18.2	17.8	18.0	18.5	18.1
	max.daily mean	18.6	19.0	18.9	19.0	19.6	19.2	19.6	19.0	19.1	19.4	19.3	18.9
	min.daily mean	16.3	17.2	16.6	17.3	17.5	17.2	16.8	17.3	16.4	17.1	17.9	17.1
Relative humidity (%)	monthly mean	89	87	89	91	93	90	91	92	93	92	92	91
	max.daily mean	96	93	95	94	97	95	97	95	98	96	96	96
	min.daily mean	79	73	80	84	89	85	82	89	86	86	84	87
Mean wind speed (m/s)		7.8	8.2	7.4	7.0	8.7	8.2	7.9	7.4	8.7	7.0	7.0	8.7
Most frequent wind direction (bearings)		ENE	E	E,W	W	WNW	W	WNW	W	W	E,W	W	E
Precipitation amount (mm/month)		214	169	321	324	242	30	278	273	166	224	411	211
Sunshine duration (hours/month)		--	--	--	--	--	--	--	--	--	--	--	--
Solar radiation (MJ/m^2/month)		431	234	--	212	453	505	452	464	387	422	395	367

Appendix Table 2-21 Meteorological statistics at the monitoring sites
Meteorological Statistics : Danum Valley

2012

Month / Items		1	2	3	4	5	6	7	8	9	10	11	12
Tempera-ture (ºC)	monthly mean	23.1	23.5	23.4	23.9	24.0	25.0	24.3	24.5	25.0	24.1	--	--
	max.daily mean	24.0	24.9	24.4	24.8	24.8	25.8	26.1	26.2	26.9	25.1	--	--
	min.daily mean	22.2	21.9	22.8	22.9	22.9	23.7	22.6	23.4	23.4	22.7	--	--
Relative humidity (%)	monthly mean	89	88	88	86	83	82	81	82	78	85	--	--
	max.daily mean	95	93	94	90	90	87	92	87	89	91	--	--
	min.daily mean	78	84	82	80	80	78	68	73	65	77	--	--
Mean wind speed (m/s)		6.8	7.0	10.2	8.8	9.0	7.8	6.9	7.2	6.5	8.8	--	--
Most frequent wind direction (bearings)		SSE,SSW	S,SW, WNW	E,ESE	E	ESE	SE	ESE	ESE	SE	SE	--	--
Precipitation amount (mm/month)		193	215	442	376	226	143	212	191	276	241	216	297
Sunshine duration (hours/month)		--	--	--	--	--	--	--	--	--	--	--	--
Solar radiation (MJ/m^2/month)		--	--	--	--	--	--	--	--	--	--	--	--

Appendix Table 2-21 Meteorological statistics at the monitoring sites
Meteorological Statistics : Kuching

2012

Month / Items		1	2	3	4	5	6	7	8	9	10	11	12
Tempera-ture (ºC)	monthly mean	26.0	25.9	26.4	26.8	27.6	27.6	26.8	27.0	27.4	26.5	26.4	26.5
	max.daily mean	27.3	27.0	27.8	28.7	29.3	29.5	28.5	29.1	29.3	27.3	27.9	27.9
	min.daily mean	24.0	24.5	24.6	25.2	25.5	25.5	25.1	24.0	25.5	24.9	25.2	25.1
Relative humidity (%)	monthly mean	87	87	86	85	83	80	84	83	81	86	85	85
	max.daily mean	96	94	94	90	92	89	91	96	91	93	92	91
	min.daily mean	76	81	77	78	77	71	77	75	71	79	77	79
Mean wind speed (m/s)		9.0	8.5	8.2	9.2	9.5	8.8	8.0	8.2	8.2	9.6	8.2	8.0
Most frequent wind direction (bearings)		NW	NNW	N	SSW	W	S	SSE,S	W	S	NNW	W	NW
Precipitation amount (mm/month)		822	299	412	244	237	100	219	319	193	374	276	342
Sunshine duration (hours/month)		--	--	--	--	--	--	--	--	--	--	--	--
Solar radiation (MJ/m^2/month)		423	409	468	512	552	521	513	499	527	463	443	453

Appendix Table 2-23 Meteorological statistics at the monitoring sites
Meteorological Statistics : Ulaanbaatar

2012

Month / Items		1	2	3	4	5	6	7	8	9	10	11	12
Tempera-ture (ºC)	monthly mean	-25.5	-20.2	-8.0	2.7	11.5	15.2	18.0	15.9	11.6	0.2	12.3	-22.4
	max.daily mean	-11.6	-6.4	14.0	21.7	29.5	32.7	29.4	30.9	27.4	17.8	8.1	-9.5
	min.daily mean	-37.0	-34.4	-23.9	-9.7	-2.0	4.0	7.3	0.0	-1.9	-14.1	-28.4	-32.9
Relative humidity (%)	monthly mean	76	73	57	39	33	50	60	58	45	53	61	64
	max.daily mean	85	83	89	87	83	82	83	83	80	86	81	77
	min.daily mean	68	44	27	12	29	13	24	17	13	18	14	45
Mean wind speed (m/s)		1.1	1.8	2.4	3.2	3.4	2.7	2.2	2.8	2.5	2.2	2.1	1.6
Most frequent wind direction (bearings)		W	W	W	W	WN	WN	E	EEN	E	WN	E	E
Precipitation amount (mm/month)		1	1	1	7	9	70	107	57	18	4	8	6
Sunshine duration (hours/month)		183	241	286	270	312	258	223	245	245	201	154	94
Solar radiation (MJ/m^2/month)		--	--	--	--	--	--	--	--	--	--	--	--

Appendix Table 2-24 Meteorological statistics at the monitoring sites
Meteorological Statistics : Terelj

2012

Month / Items		1	2	3	4	5	6	7	8	9	10	11	12
Tempera-ture (ºC)	monthly mean	-29.0	-23.1	-13.0	0.1	7.4	11.7	14.5	12.0	6.6	-3.3	-17.6	-27.6
	max.daily mean	-11.4	-6.9	10.6	19.8	27.6	28.6	26.0	27.5	23.2	16.2	5.3	-12.3
	min.daily mean	-44.0	-40.3	-34.0	-17.2	-10.2	-5.1	1.8	-3.2	-8.0	-20.3	-38.8	-43.2
Relative humidity (%)	monthly mean	69	65	63	63	47	56	78	77	68	66	72	70
	max.daily mean	85	89	83	99	87	99	97	97	98	95	96	87
	min.daily mean	42	38	27	18	24	20	32	29	18	21	19	42
Mean wind speed (m/s)		1.0	2.0	2.0	2.2	3.3	2.1	1.5	1.8	1.4	2.0	1.2	0.9
Most frequent wind direction (bearings)		WS	WWS	WWS	NWN	WWS	WWS	WWS	NWN	WS	WWS	WWS	WS
Precipitation amount (mm/month)		0	1	3	3	19	67	136	83	22	2	10	7
Sunshine duration (hours/month)		--	--	--	--	--	--	--	--	--	--	--	--
Solar radiation (MJ/m^2/month)		--	--	--	--	--	--	--	--	--	--	--	--

Appendix Table 2-25 Meteorological statistics at the monitoring sites
Meteorological Statistics : Mondy

2012

Month / Items		1	2	3	4	5	6	7	8	9	10	11	12
Tempera-ture (ºC)	monthly mean	-22.0	-17.9	-10.0	0.4	6.8	13.3	14.7	12.3	7.3	-2.7	-13.4	-23.5
	max.daily mean	-12.7	-8.0	0.6	8.5	16.1	21.2	22.1	20.9	17.9	5.9	-4.8	-15.4
	min.daily mean	-28.7	-25.7	-19.6	-6.5	-1.9	5.5	8.9	5.7	-1.9	-10.0	-20.2	-29.4
Relative humidity (%)	monthly mean	75	64	62	49	52	64	76	73	64	65	72	76
	max.daily mean	89	82	87	75	82	91	96	96	96	90	88	86
	min.daily mean	57	42	35	27	26	38	50	44	32	35	48	62
Mean wind speed (m/s)		1.7	2.6	2.2	3.7	3.0	2.0	1.5	1.7	1.5	1.7	1.5	1.3
Most frequent wind direction (bearings)		W	W	W	W	W	W, E	W, E	E	WSW, W	W	W	W
Precipitation amount (mm/month)		0	0	6	16	17	50	56	33	25	2	8	12
Sunshine duration (hours/month)		169	214	265	245	273	257	205	230	250	219	115	111
Solar radiation (MJ/m^2/month)		123	226	373	471	566	539	469	439	391	242	122	93

Appendix Table 2-26 Meteorological statistics at the monitoring sites
Meteorological Statistics : Listvyanka

2012

Month / Items		1	2	3	4	5	6	7	8	9	10	11	12
Tempera-ture (ºC)	monthly mean	-17.3	-15.1	-8.4	1.2	5.9	11.5	14.1	13.1	10.2	1.4	-7.1	-19,0
	max.daily mean	-13.7	-11.4	-3.6	5.2	11.0	16.6	18.1	16.9	15.5	5.4	-2.5	-15,1
	min.daily mean	-19.9	-18.4	-12.4	-2.0	2.2	7.2	10.6	10.1	6.0	-2.0	-10.7	-21,7
Relative humidity (%)	monthly mean	83	84	78	67	66	77	88	87	78	75	78	86
	max.daily mean	--	--	--	--	--	--	--	--	--	--	--	--
	min.daily mean	77	73	61	45	47	60	76	73	58	59	60	81
Mean wind speed (m/s)		5.1	4.0	3.4	4.1	4.0	2.5	2.1	2.2	2.9	4.0	4.6	6.3
Most frequent wind direction (bearings)		N	N	N	N	N	N	N	N	N	N	N	N
Precipitation amount (mm/month)		13	28	11	52	39	95	120	75	18	23	19	15
Sunshine duration (hours/month)		--	--	--	--	--	--	--	--	--	--	--	--
Solar radiation (MJ/m^2/month)		--	--	--	--	--	--	--	--	--	--	--	--

Appendix Table 2-27 Meteorological statistics at the monitoring sites
Meteorological Statistics : Irkutsk

2012

Month / Items		1	2	3	4	5	6	7	8	9	10	11	12
Tempera-ture (ºC)	monthly mean	-21.9	-13.4	-5.2	5.5	9.7	18.6	17.3	16.4	8.8	4.6	-8.2	-15.1
	max.daily mean	-17.5	-6.7	1.5	13.4	16.5	26.3	24.5	22.7	15.6	11.1	-2.9	-11.2
	min.daily mean	-25.2	-18.5	-10.7	-0.4	3.4	11.8	11.6	11.5	3.5	-0.1	-12.1	-18.5
Relative humidity (%)	monthly mean	84	75	63	50	53	61	72	76	68	71	78	86
	max.daily mean	--	--	--	--	--	--	--	--	--	--	--	--
	min.daily mean	79	54	41	28	32	37	52	56	44	48	65	80
Mean wind speed (m/s)		1.5	1.8	2.4	2.7	2.5	1.9	2.1	2.1	2.0	1.9	2.0	1.3
Most frequent wind direction (bearings)		ESE, SE	SE	SE	SE	WNW	SE	W	ESE	W	ESE	ESE, W	NE
Precipitation amount (mm/month)		17	7	13	59	18	41	113	66	20	36	7	25
Sunshine duration (hours/month)		117	163	228	263	310	308	278	226	204	183	114	73
Solar radiation (MJ/m^2/month)		108	191	354	454	557	592	565	443	353	233	132	75

Appendix Table 2-28 Meteorological statistics at the monitoring sites
Meteorological Statistics : Primorskaya

2012

Month / Items		1	2	3	4	5	6	7	8	9	10	11	12
Tempera-ture (ºC)	monthly mean	-20.5	-13.8	-3.4	5.1	12.7	16.3	20.7	20.5	16.3	6.8	-2.0	-18.0
	max.daily mean	-10.3	-2.6	7.0	17.0	23.4	25.2	31.0	26.7	23.9	17.6	6.9	-2.5
	min.daily mean	-20.9	-17.5	-7.9	-2.1	9.5	13.6	17.6	14.9	12.8	-1.7	-9.3	-22.9
Relative humidity (%)	monthly mean	69	64	61	61	72	80	82	85	86	73	74	71
	max.daily mean	70	75	85	95	92	96	97	97	96	95	97	83
	min.daily mean	47	32	25	19	29	0	44	55	11	36	35	50
Mean wind speed (m/s)		1.4	1.9	2.0	1.9	1.4	1.2	1.0	1.0	0.8	1.4	1.4	1.6
Most frequent wind direction (bearings)		E	E	ENE	E	E	Calm	Calm	Calm	Calm	E	Calm	E
Precipitation amount (mm/month)		0	10	20	88	38	48	76	194	187	157	72	34
Sunshine duration (hours/month)		--	--	--	--	--	--	--	--	--	--	--	--
Solar radiation (MJ/m^2/month)		265	318	444	495	625	506	509	452	350	320	171	209

Appendix Table 2-29 Meteorological statistics at the monitoring sites
Meteorological Statistics : Bangkok

2012

Month / Items		1	2	3	4	5	6	7	8	9	10	11	12
Tempera-ture (ºC)	monthly mean	27.9	29.2	30.8	31.3	30.6	29.6	28.8	28.6	27.6	28.6	28.5	28.8
	max.daily mean	31.4	30.7	32.7	33.6	33.2	30.6	30.7	30.4	29.3	30.5	29.8	30.3
	min.daily mean	25.9	26.7	29.6	27.1	26.4	27.8	26.7	26.7	25.5	25.6	26.1	26.1
Relative humidity (%)	monthly mean	--	--	--	--	69	71	74	74	81	77	78	67
	max.daily mean	--	--	--	--	91	82	82	84	93	90	88	82
	min.daily mean	--	--	--	--	54	64	66	66	71	63	67	57
Mean wind speed (m/s)		0.5	0.8	0.8	1.0	1.0	1.1	0.8	0.8	0.5	0.3	0.4	0.4
Most frequent wind direction (bearings)		SSW	SSW	S	SSW	SSW	SSW	SW	SW	SW	SW	SW	ESE
Precipitation amount (mm/month)		63	36	3	61	181	144	254	50	669	338	415	0
Sunshine duration (hours/month)		--	--	--	--	--	--	--	--	--	--	--	--
Solar radiation (MJ/m^2/month)		--	--	--	--	--	--	--	--	--	--	--	--

Appendix Table 2-30 Meteorological statistics at the monitoring sites
Meteorological Statistics : Samutprakarn

2012

Month / Items		1	2	3	4	5	6	7	8	9	10	11	12
Tempera-ture (ºC)	monthly mean	28.0	28.9	30.3	31.1	30.6	29.8	28.9	28.9	28.2	28.8	28.6	28.9
	max.daily mean	29.1	30.4	32.0	32.9	32.5	30.8	30.4	30.0	29.8	30.4	30.3	30.8
	min.daily mean	26.3	27.5	29.5	28.1	27.1	28.8	27.0	26.8	26.2	26.2	26.3	26.0
Relative humidity (%)	monthly mean	72	76	72	71	73	74	78	77	81	79	80	70
	max.daily mean	83	83	80	81	90	83	88	86	93	91	90	84
	min.daily mean	57	60	59	62	61	66	69	69	71	66	73	59
Mean wind speed (m/s)		0.8	1.2	1.4	1.5	1.5	1.5	1.2	1.2	0.8	0.7	0.7	0.9
Most frequent wind direction (bearings)		--	--	--	--	--	--	--	--	--	--	--	--
Precipitation amount (mm/month)		16	14	49	70	95	112	166	182	455	226	128	0
Sunshine duration (hours/month)		--	--	--	--	--	--	--	--	--	--	--	--
Solar radiation (MJ/m^2/month)		--	--	--	--	--	--	--	--	--	--	--	--

Appendix Table 2-31 Meteorological statistics at the monitoring sites
Meteorological Statistics : Pathumthani

2012

Month / Items		1	2	3	4	5	6	7	8	9	10	11	12
Tempera-ture (ºC)	monthly mean	27.5	28.7	29.7	30.5	29.9	28.8	28.2	28.2	27.6	28.6	28.4	28.2
	max.daily mean	28.7	30.3	31.4	34.4	32.6	31.0	30.0	30.7	29.0	30.2	30.1	29.6
	min.daily mean	24.9	26.7	27.9	27.3	27.4	27.6	26.3	26.3	25.8	25.9	25.8	25.3
Relative humidity (%)	monthly mean	67	70	67	65	67	71	73	72	78	71	73	65
	max.daily mean	76	77	74	75	79	84	80	80	84	82	84	76
	min.daily mean	58	58	58	48	55	62	62	60	74	61	66	58
Mean wind speed (m/s)		1.4	1.7	1.9	1.9	2.0	2.0	1.7	1.8	1.3	1.2	1.0	1.1
Most frequent wind direction (bearings)		S	SSW	S	S	S	WSW	W	W	WSW	ESE	SSE	ESE
Precipitation amount (mm/month)		0	28	28	14	96	97	333	105	317	117	45	3
Sunshine duration (hours/month)		--	--	--	--	--	--	--	--	--	--	--	--
Solar radiation (MJ/m^2/month)		--	--	--	--	--	--	--	--	--	--	--	--

Appendix Table 2-32 Meteorological statistics at the monitoring sites
Meteorological Statistics : Chiang Mai

2012

Month / Items		1	2	3	4	5	6	7	8	9	10	11	12
Tempera-ture (ºC)	monthly mean	25.7	28.1	30.6	32.2	31.6	31.2	30.4	30.4	30.4	30.2	29.9	26.9
	max.daily mean	29.1	30.3	34.9	35.5	33.9	32.5	33.0	32.0	31.9	32.9	31.4	29.3
	min.daily mean	21.9	26.1	28.2	27.6	26.8	30.2	27.2	28.5	28.5	27.5	28.4	24.4
Relative humidity (%)	monthly mean	62	52	49	60	72	72	77	78	79	74	77	73
	max.daily mean	85	77	67	70	90	83	92	89	90	87	87	87
	min.daily mean	44	39	38	51	56	63	68	68	71	61	68	66
Mean wind speed (m/s)		2.1	2.2	2.3	2.3	2.2	2.3	2.0	1.8	2.2	2.0	1.8	2.0
Most frequent wind direction (bearings)		NNW	NNW	NNW	NNW	NW	S	S	SE	NW	NW	NW	NW
Precipitation amount (mm/month)		11	0	22	57	317	61	154	176	262	54	72	5
Sunshine duration (hours/month)		--	--	--	--	--	--	--	--	--	--	--	--
Solar radiation (MJ/m^2/month)		--	--	--	--	--	--	--	--	--	--	--	--

Appendix Table 2-33 Meteorological statistics at the monitoring sites
Meteorological Statistics : Nakhon Rachasima

2012

Month / Items		1	2	3	4	5	6	7	8	9	10	11	12
Tempera-ture (ºC)	monthly mean	25.5	28.3	29.2	29.8	29.4	28.7	28.3	28.1	27.6	27.9	27.9	27.5
	max.daily mean	28.2	31.9	31.3	33.0	32.3	30.7	29.0	28.9	28.4	28.8	29.0	28.4
	min.daily mean	22.4	22.9	22.7	25.7	26.4	26.8	27.3	26.9	26.8	26.4	26.8	24.8
Relative humidity (%)	monthly mean	81	73	77	80	87	76	81	82	92	82	83	73
	max.daily mean	98	89	100	98	100	100	95	96	100	100	100	83
	min.daily mean	66	56	56	64	65	63	68	70	80	70	73	63
Mean wind speed (m/s)		1.2	1.1	1.0	1.1	1.2	1.6	1.7	1.7	0.6	0.2	--	0.3
Most frequent wind direction (bearings)		E	E	E	WSW	SW	W	W	W	E	E	E	E
Precipitation amount (mm/month)		30	1	79	99	160	20	89	114	168	106	51	0
Sunshine duration (hours/month)		--	--	--	--	--	--	--	--	--	--	--	--
Solar radiation (MJ/m^2/month)		--	--	--	--	--	--	--	--	--	--	--	--

Appendix Table 2-34 Meteorological statistics at the monitoring sites
Meteorological Statistics : Hanoi

2012

Month / Items		1	2	3	4	5	6	7	8	9	10	11	12
Tempera-ture (ºC)	monthly mean	14.6	16.2	20.2	26.2	28.9	30.3	29.6	29.3	28.0	26.8	23.4	18.7
	max.daily mean	16.6	19.0	22.7	30.5	33.3	34.5	33.8	33.7	31.6	30.8	26.9	31.6
	min.daily mean	13.2	14.4	18.5	23.5	26.1	27.1	26.9	26.5	25.6	24.4	21.2	16.9
Relative humidity (%)	monthly mean	82	83	82	80	77	74	78	78	76	75	79	79
	max.daily mean	92	95	92	92	90	90	91	91	90	90	91	90
	min.daily mean	72	71	71	63	60	56	61	60	60	56	64	65
Mean wind speed (m/s)		1	1	1	1	1	1	1	1	1	1	1	1
Most frequent wind direction (bearings)		NE	NE	ENE	SSE	SE	SW	SSE	SW	NE	NE	NE	NE
Precipitation amount (mm/month)		20	17	17	32	387	318	339	478	55	78	35	26
Sunshine duration (hours/month)		48	185	243	949	1461	1077	1454	1603	1122	999	997	442
Solar radiation (MJ/m^2/month)		--	--	--	--	--	--	--	--	--	--	--	--

Appendix Table 2-35 Meteorological statistics at the monitoring sites
Meteorological Statistics : Hoa Binh

2012

Month / Items		1	2	3	4	5	6	7	8	9	10	11	12
Tempera-ture (ºC)	monthly mean	15.3	16.3	21.0	26.2	28.3	29.6	29.0	28.7	26.9	25.8	23.0	19.4
	max.daily mean	17.8	19.6	24.6	31.8	33.9	33.3	33.8	29.2	27.4	26.4	23.5	19.7
	min.daily mean	13.8	14.7	18.7	22.9	25.0	26.4	26.3	28.2	26.2	25.4	22.6	19.1
Relative humidity (%)	monthly mean	87	86	83	82	84	82	85	75	73	74	75	76
	max.daily mean	93	93	92	94	94	90	93	87	88	84	84	88
	min.daily mean	76	76	68	65	66	65	67	30	65	64	64	63
Mean wind speed (m/s)		1	1	1	1	1	1	1	1	1	1	1	1
Most frequent wind direction (bearings)		N	N	W	SE	SE	SN	SE	SE	SW	SE	N	N
Precipitation amount (mm/month)		2	1	8	75	444	289	259	380	282	133	33	9
Sunshine duration (hours/month)		25	31	61	158	191	133	173	197	140	161	121	62
Solar radiation (MJ/m^2/month)		--	--	--	--	--	--	--	--	--	--	--	--

Appendix Table 2-36 Meteorological statistics at the monitoring sites
Meteorological Statistics : Cuc Phuong

2012

Month / Items		1	2	3	4	5	6	7	8	9	10	11	12
Tempera-ture (ºC)	monthly mean	13.8	15.1	19.2	24.9	27.4	28.5	27.8	27.1	25.5	24.2	22.0	18.2
	max.daily mean	16.0	18.1	22.4	30.0	32.3	33.0	32.4	31.9	29.7	29.1	26.3	21.8
	min.daily mean	12.5	13.5	17.3	21.9	24.5	25.6	25.1	24.6	23.2	21.8	19.6	16.3
Relative humidity (%)	monthly mean	92	92	87	82	82	80	85	86	86	85	88	87
	max.daily mean	98	98	96	94	93	93	96	96	96	97	98	97
	min.daily mean	84	81	74	63	64	63	66	68	69	65	72	72
Mean wind speed (m/s)		1	1	1	1	2	1	1	1	1	1	1	1
Most frequent wind direction (bearings)		NE	N	SE	ESE	SSW	SW	SW	NW	NW	NNW	NNW	NNE
Precipitation amount (mm/month)		32	26	24	26	310	183	273	359	516	190	57	23
Sunshine duration (hours/month)		13	292	292	1337	1792	1241	1558	1754	1296	1373	1197	639
Solar radiation (MJ/m^2/month)		--	--	--	--	--	--	--	--	--	--	--	--

Appendix Table 2-37 Meteorological statistics at the monitoring sites
Meteorological Statistics : DaNang

2012

Month / Items		1	2	3	4	5	6	7	8	9	10	11	12
Tempera-ture (ºC)	monthly mean	21.4	22.2	24.3	27.0	29.3	30.6	29.6	29.7	27.5	26.3	26.0	24.5
	max.daily mean	24.7	25.5	26.8	30.1	31.2	33.0	31.4	31.6	29.2	27.7	27.4	26.5
	min.daily mean	19.0	19.8	21.2	22.5	27.7	28.9	27.1	26.7	24.4	24.5	23.1	19.5
Relative humidity (%)	monthly mean	88	87	82	81	77	70	73	74	85	84	88	85
	max.daily mean	97	97	91	92	82	86	87	90	95	93	95	92
	min.daily mean	78	81	67	73	69	58	59	61	77	76	82	76
Mean wind speed (m/s)		1	1	1	2	2	2	2	1	2	1	1	1
Most frequent wind direction (bearings)		ENE	NNW	NW	NNW	SSW	NW	NNW	E	ESE	E	ESE	ENE
Precipitation amount (mm/month)		53	37	8	12	10	46	31	179	594	367	286	60
Sunshine duration (hours/month)		63	126	178	209	257	185	242	219	167	164	155	132
Solar radiation (MJ/m^2/month)													

Appendix III

Supplemental Data in 2011

Appendix Table 3.1 Monthly results of wet deposition monitoring in 2011

Site: Kanghwa **Country: Republic of Korea**

Precipitation amount-weighted average concentration/ Precipitation amount

2011	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^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}		mS m^{-1}	mm $month^{-1}$ or mm $year^{-1}$
Jan	55.0	51.9	128	78.8	109	50.4	9.75	52.3	51.2	16.0	0.120	6.92	4.99	11.0
Feb	15.2	14.3	24.2	20.4	46.7	15.4	2.70	2.83	2.50	0.959	7.76	5.11	1.29	22.0
Mar	--	--	--	--	--	--	--	--	--	--	--	--	--	0
Apr	44.0	42.6	61.3	25.6	80.1	22.8	1.78	11.5	11.0	3.63	19.5	4.71	3.23	9.50
May	67.7	65.0	75.2	53.7	87.8	44.6	4.24	29.3	28.4	7.96	33.6	4.47	4.62	85.0
June	19.4	17.3	19.2	48.7	37.7	34.9	3.13	1.71	1.12	1.85	14.8	4.83	1.83	336
July	24.1	23.4	22.0	20.7	37.5	12.1	3.11	1.07	0.806	1.21	23.7	4.62	1.81	745
Aug	26.2	18.7	18.1	154	37.9	124	6.02	4.93	2.25	9.39	22.9	4.64	3.48	178
Sept	13.1	12.4	25.0	16.4	39.8	11.0	0.737	2.40	2.16	1.16	5.13	5.29	1.17	30.5
Oct	44.3	41.9	68.4	53.5	57.4	39.3	4.83	13.1	12.2	5.52	63.1	4.20	4.23	14.0
Nov	64.5	58.8	94.0	110	90.4	94.4	6.02	16.7	14.6	10.8	66.6	4.18	6.20	44.5
Dec	--	--	--	--	--	--	--	--	--	--	--	--	--	0
Annual	27.2	25.0	27.7	48.5	43.3	35.8	3.62	4.39	3.66	3.18	23.0	4.64	2.34	1476
Max.	157	153	151	283	153	227	12.5	96.0	93.0	25.4	117	6.92	9.40	
Min.	3.34	2.90	3.94	10.4	6.11	4.35	0.489	0.212	<0.2	<0.4	0.120	3.93	0.429	

Wet deposition amount

2011	SO_4^{2-}	nss-SO_4^{2-}	NO_3^-	Cl^-	NH_4^+	Na^+	K^+	Ca^{2+}	nss-Ca^{2+}	Mg^{2+}	H^+
	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}
Jan	0.605	0.571	1.41	0.867	1.19	0.555	0.107	0.575	0.563	0.176	<0.01
Feb	0.335	0.315	0.533	0.450	1.03	0.339	0.0594	0.0622	0.0549	0.0211	0.171
Mar	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Apr	0.418	0.405	0.583	0.243	0.761	0.216	0.0169	0.109	0.104	0.0345	0.185
May	5.75	5.52	6.39	4.57	7.47	3.79	0.360	2.49	2.41	0.677	2.85
June	6.51	5.80	6.44	16.4	12.7	11.7	1.05	0.573	0.375	0.621	4.99
July	17.9	17.4	16.4	15.4	27.9	9.00	2.31	0.795	0.600	0.899	17.7
Aug	4.66	3.33	3.22	27.5	6.74	22.0	1.07	0.877	0.401	1.67	4.07
Sept	0.400	0.380	0.761	0.501	1.21	0.336	0.0225	0.0731	0.0659	0.0353	0.156
Oct	0.620	0.587	0.957	0.748	0.804	0.550	0.0677	0.183	0.171	0.0773	0.883
Nov	2.87	2.62	4.18	4.92	4.02	4.20	0.268	0.742	0.652	0.482	2.96
Dec	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	40.1	36.9	40.9	71.6	63.8	52.8	5.34	6.48	5.40	4.70	33.9

Data completeness

2011	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
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 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 3.2 Monthly results of wet deposition monitoring in 2011

Site: Cheju **Country: Republic of Korea**

Precipitation amount-weighted average concentration/ Precipitation amount

2011	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^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}		mS m^{-1}	mm $month^{-1}$ or mm $year^{-1}$
Jan	415	187	503	4115	134	3784	105	228	146	451	53.7	4.27	63.4	2.10
Feb	143	92.4	124	926	115	833	36.6	44.8	26.8	86.9	87.1	4.06	17.2	23.0
Mar	50.6	31.6	58.7	324	67.3	316	8.37	15.5	8.63	25.4	25.2	4.60	7.13	32.0
Apr	44.6	34.4	50.4	165	46.7	170	7.15	15.0	11.7	13.0	12.3	4.91	4.37	39.5
May	25.6	22.1	34.4	41.1	48.5	58.4	3.95	3.80	2.57	1.65	1.83	5.74	1.96	48.2
June	9.36	4.77	14.8	66.4	13.3	76.1	5.53	1.44	0.496	2.16	2.19	5.66	1.42	397
July	43.4	35.9	45.5	85.7	60.1	124	2.38	5.70	3.17	2.97	13.5	4.87	3.13	67.0
Aug	25.4	9.95	17.8	285	20.8	257	7.45	5.60	0.822	18.5	4.09	5.39	4.41	139
Sept	90.5	78.3	81.6	147	107	203	18.4	14.7	10.3	13.3	7.82	5.11	5.57	47.3
Oct	7.47	5.67	13.8	21.5	11.8	29.8	1.88	1.44	0.798	1.86	5.56	5.26	0.692	67.0
Nov	7.63	4.05	11.3	45.8	10.5	59.4	2.00	2.97	1.78	2.67	2.27	5.64	1.16	193
Dec	109	53.6	105	974	38.8	913	22.1	58.7	39.0	96.4	14.2	4.85	17.1	20.8
Annual	25.5	16.4	27.9	147	28.0	152	6.54	6.60	3.72	10.5	6.80	5.17	3.07	1076
Max.	415	187	503	4115	196	3784	105	228	146	451	174	6.51	63.4	
Min.	2.43	1.33	6.91	9.43	<1	18.4	<0.3	0.564	<0.2	<0.4	0.309	3.76	0.453	

Wet deposition amount

2011	SO_4^{2-}	nss-SO_4^{2-}	NO_3^-	Cl^-	NH_4^+	Na^+	K^+	Ca^{2+}	nss-Ca^{2+}	Mg^{2+}	H^+
	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}
Jan	0.872	0.393	1.06	8.64	0.281	7.95	0.221	0.478	0.307	0.948	0.113
Feb	3.28	2.13	2.85	21.3	2.65	19.2	0.842	1.03	0.617	2.00	2.00
Mar	1.62	1.01	1.88	10.4	2.15	10.1	0.268	0.495	0.276	0.812	0.807
Apr	1.76	1.36	1.99	6.51	1.85	6.71	0.283	0.593	0.463	0.513	0.486
May	1.24	1.07	1.66	1.98	2.34	2.81	0.190	0.183	0.124	0.0793	0.0880
June	3.72	1.89	5.88	26.4	5.27	30.2	2.20	0.570	0.197	0.856	0.870
July	2.91	2.41	3.05	5.74	4.03	8.34	0.159	0.382	0.212	0.199	0.905
Aug	3.54	1.38	2.47	39.6	2.89	35.7	1.04	0.778	0.114	2.58	0.569
Sept	4.28	3.70	3.86	6.95	5.08	9.59	0.871	0.694	0.487	0.629	0.370
Oct	0.501	0.380	0.926	1.44	0.792	2.00	0.126	0.0967	0.0534	0.125	0.372
Nov	1.47	0.781	2.17	8.83	2.04	11.5	0.386	0.574	0.343	0.515	0.439
Dec	2.26	1.12	2.19	20.3	0.807	19.0	0.459	1.22	0.811	2.01	0.295
Annual	27.4	17.6	30.0	158	30.2	163	7.04	7.10	4.00	11.3	7.32

Data completeness

2011	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 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 3.3 Monthly results of wet deposition monitoring in 2011

Site: Imsil **Country: Republic of Korea**

Precipitation amount-weighted average concentration/ Precipitation amount

2011	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^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}	μmol L^{-1}		mS m^{-1}	mm $month^{-1}$ or mm $year^{-1}$
Jan	122	92.3	344	530	152	490	29.5	129	118	71.4	70.7	4.15	14.3	2.40
Feb	32.8	28.9	48.3	38.0	55.3	65.0	9.83	9.36	7.95	2.72	2.66	5.58	2.60	55.5
Mar	51.3	44.0	85.0	107	86.3	122	30.2	39.1	36.5	12.0	0.490	6.31	4.92	16.5
Apr	64.3	60.8	68.8	37.5	81.8	58.2	7.55	44.5	43.3	8.86	0.394	6.40	4.08	132
May	11.6	9.71	22.0	17.6	23.3	31.8	7.20	4.85	4.16	1.28	0.604	6.22	1.08	85.0
June	15.7	12.8	26.2	26.7	30.6	46.8	6.54	1.68	0.785	0.765	1.29	5.89	1.31	124
July	14.0	12.2	19.1	14.9	27.1	29.4	2.38	2.54	1.93	<0.4	4.00	5.40	0.964	452
Aug	13.1	11.7	16.1	22.3	32.1	22.8	1.12	0.870	0.389	1.17	5.28	5.28	1.07	435
Sept	47.2	45.0	54.5	20.0	98.9	36.6	4.52	2.51	1.72	1.42	42.5	4.37	3.80	16.5
Oct	53.8	49.0	94.2	72.9	121	80.1	12.2	17.1	15.4	8.08	16.7	4.78	3.90	20.0
Nov	17.1	14.2	23.2	29.6	29.1	47.2	2.54	1.57	0.551	1.98	15.0	4.82	1.69	153
Dec	31.0	22.8	149	96.9	103	137	4.13	18.4	15.4	8.74	37.2	4.43	5.27	1.80
Annual	20.7	18.4	27.7	25.3	37.7	37.4	3.89	6.81	6.02	2.02	5.42	5.27	1.58	1493
Max.	181	171	495	839	258	813	66.1	244	240	111	112	7.12	21.0	
Min.	3.53	2.46	5.90	7.25	7.32	13.6	<0.3	<0.2	<0.2	<0.4	0.0759	3.95	0.430	

Wet deposition amount

2011	SO_4^{2-}	nss-SO_4^{2-}	NO_3^-	Cl^-	NH_4^+	Na^+	K^+	Ca^{2+}	nss-Ca^{2+}	Mg^{2+}	H^+
	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}	mmol m^{-2}
Jan	0.292	0.222	0.825	1.27	0.365	1.18	0.0707	0.309	0.284	0.171	0.170
Feb	1.82	1.60	2.68	2.11	3.07	3.61	0.546	0.519	0.441	0.151	0.147
Mar	0.847	0.725	1.40	1.77	1.42	2.02	0.499	0.645	0.602	0.199	<0.01
Apr	8.51	8.04	9.09	4.96	10.8	7.69	0.998	5.89	5.72	1.17	0.0521
May	0.988	0.825	1.87	1.50	1.98	2.70	0.612	0.412	0.354	0.109	0.0514
June	1.94	1.59	3.25	3.31	3.79	5.81	0.811	0.208	0.0973	0.0949	0.160
July	6.32	5.52	8.62	6.73	12.2	13.3	1.08	1.15	0.871	0.110	1.81
Aug	5.68	5.08	6.98	9.69	13.9	9.91	0.486	0.378	0.169	0.508	2.30
Sept	0.780	0.743	0.900	0.331	1.63	0.603	0.0745	0.0414	0.0283	0.0234	0.701
Oct	1.08	0.979	1.88	1.46	2.42	1.60	0.243	0.341	0.309	0.162	0.334
Nov	2.62	2.18	3.56	4.54	4.46	7.24	0.389	0.241	0.0844	0.304	2.30
Dec	0.0559	0.0410	0.269	0.174	0.186	0.246	<0.01	0.0330	0.0277	0.0157	0.0669
Annual	30.9	27.5	41.3	37.9	56.3	55.9	5.81	10.2	8.99	3.02	8.09

Data completeness

2011	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**

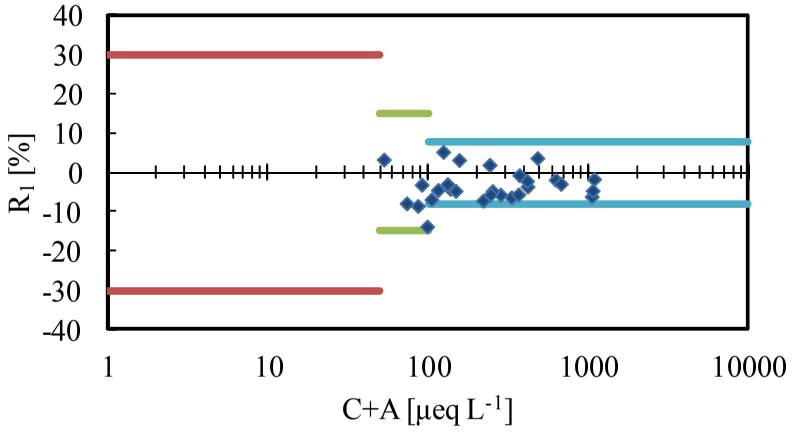
[--] for averages and completeness: Precipitation was 0mm.

[0.00] for deposition: The deposition was 0 mmol m^{-2} because precipitation was 0 mm.

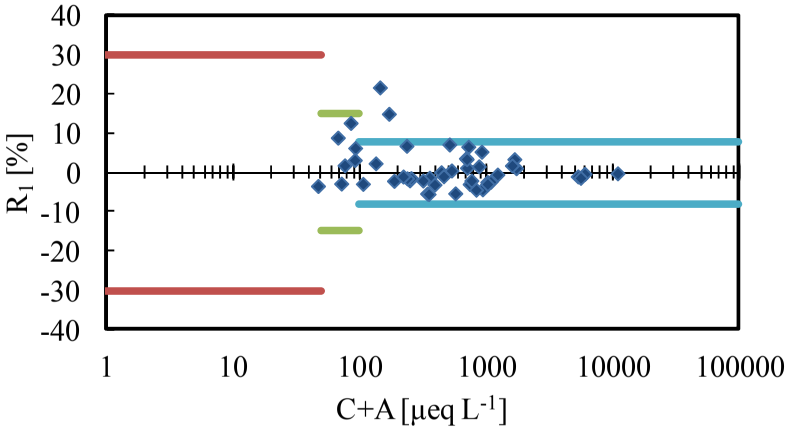
[*] for averages and deposition: The constituent was not measured although precipitation was not 0 mm. (%TP=0%)

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

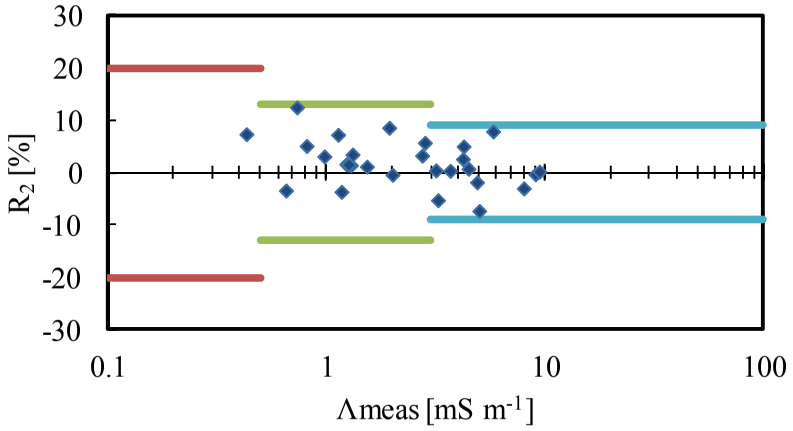
Data in hatched column for averages and deposition: Rejected monthly (annual) value by the criteria of EANET (%PCL<80% or %TP<80%)



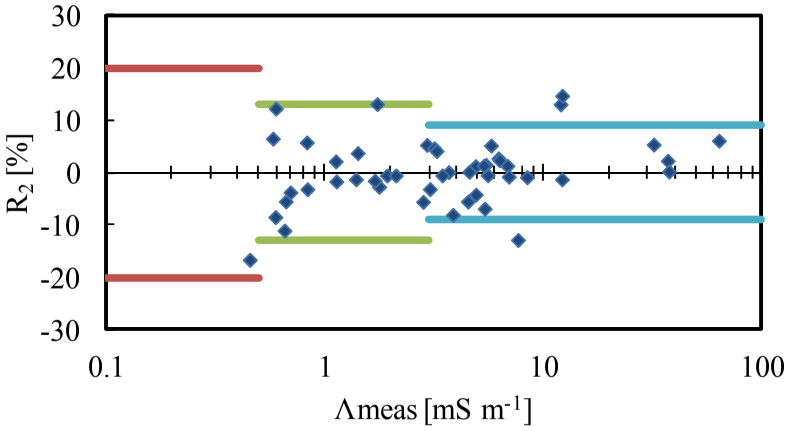
Appendix Fig. 3.1 a) Kanghwa Ion Balance (R_1) in 2011



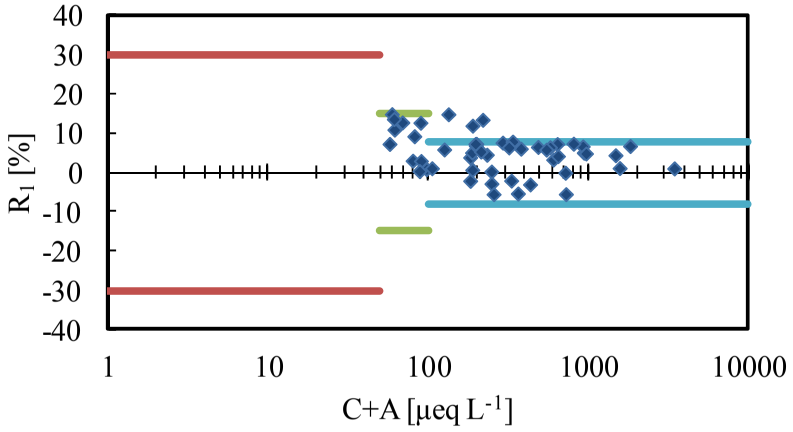
Appendix Fig. 3.2 a) Cheju Ion Balance (R_1) in 2011



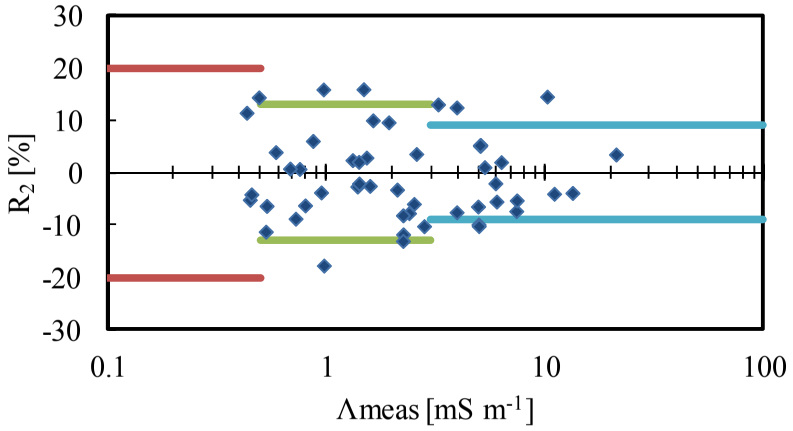
Appendix Fig. 3.1 b)
Kanghwa Conductivity Agreement (R_2) in 2011



Appendix Fig. 3.2 b)
Cheju Conductivity Agreement (R_2) in 2011



Appendix Fig. 3.3 a) Imsil Ion Balance (R_1) in 2011



Appendix Fig. 3.3 b)
Imsil Conductivity Agreement (R_2) in 2011

Appendix Table 3.4 Monthly results of SO_2 concentration in 2011

Unit : ppb			2011												Annual
Country	Site		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
Republic of Korea	Kanghwa	Mean	5.6	4.6	5.3	7.0	3.1	2.9	2.7	1.1	1.7	4.7	5.0	5.2	4.1
		%	97	100	100	74	100	99	100	100	98	98	100	97	97
		Max-d	8.5	6.1	6.0	10.0	4.0	4.0	3.0	1.2	4.0	7.3	9.2	7.6	10.0
		Min-d	3.3	3.3	4.5	2.2	2.0	2.3	2.5	0.9	0.6	2.7	2.7	4.0	0.6
	Cheju (Kosan)	Mean	4.0	4.6	3.6	2.1	1.8	1.5	1.0	1.2	1.8	2.3	2.4	3.8	2.5
		%	80	99	99	97	89	94	97	76	93	97	83	100	92
		Max-d	6.8	8.9	5.1	2.8	3.4	2.6	1.3	1.8	2.3	2.6	3.1	5.6	8.9
		Min-d	1.7	1.7	2.2	1.5	0.9	0.6	0.8	0.9	1.2	1.8	1.4	2.6	0.6
	Imsil	Mean	4.3	6.7	4.4	4.7	5.1	5.8	4.6	2.8	4.2	5.8	7.1	2.3	4.8
		%	100	89	99	99	93	98	97	95	99	95	100	90	96
		Max-d	5.2	9.3	5.0	5.1	5.5	6.3	6.1	3.1	5.1	6.3	8.6	6.8	9.3
		Min-d	3.3	3.8	4.1	4.2	4.8	5.3	2.9	2.5	3.0	5.4	5.6	0.4	0.4

Appendix Table 3.5 Monthly results of NO_2 concentration in 2011

Unit : ppb			2011												Annual
Country	Site		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
Republic of Korea	Kanghwa	Mean	7.0	6.9	2.3	6.6	6.5	3.4	5.1	3.8	2.0	3.8	9.9	7.7	5.4
		%	97	100	100	98	100	100	100	100	98	98	97	98	99
		Max-d	15.1	20.4	3.9	11.8	8.1	5.5	7.2	7.4	4.2	6.5	14.4	28.6	28.6
		Min-d	3.3	1.8	1.3	3.6	3.4	1.0	1.3	1.7	1.4	2.1	5.2	1.8	1.0
	Cheju (Kosan)	Mean	2.9	6.9	4.3	5.7	4.7	4.7	3.0	3.7	3.4	5.0	4.0	4.6	4.4
		%	80	99	99	97	89	93	97	74	93	77	83	78	88
		Max-d	4.6	11.1	6.0	7.9	7.2	7.0	4.2	9.0	5.2	6.2	5.6	8.9	11.1
		Min-d	1.3	1.6	2.4	3.4	3.0	0.2	2.1	2.3	2.2	4.2	2.7	0.2	0.2
	Imsil	Mean	8.5	10.9	3.2	7.1	2.4	3.0	2.0	1.9	1.8	4.7	7.7	6.8	5.0
		%	100	90	100	99	95	98	97	94	98	94	100	95	97
		Max-d	9.8	15.8	7.1	10.2	3.8	4.5	3.4	3.4	3.1	12.6	14.1	12.6	15.8
		Min-d	7.0	5.9	1.3	3.6	1.2	1.4	0.5	1.0	1.3	1.4	3.6	4.7	0.5

Appendix Table 3.6 Monthly results of O_3 concentration in 2011

Unit : ppb			2011												Annual
Country	Site		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
Republic of Korea	Kanghwa	Mean	34	39	46	53	52	55	30	21	40	50	25	28	39
		%	97	100	100	98	100	100	100	100	100	100	97	98	99
		Max-d	40	47	51	65	64	72	49	36	72	71	31	37	72
		Min-d	24	33	40	35	33	31	9	13	25	35	23	12	9
	Cheju (Kosan)	Mean	41	47	51	55	46	30	15	18	30	34	25	24	35
		%	80	99	98	97	89	94	97	76	93	97	83	100	92
		Max-d	43	56	61	64	77	42	27	26	42	43	28	26	77
		Min-d	36	40	47	50	27	10	8	11	22	24	22	22	8
	Imsil	Mean	21	24	40	45	39	41	24	20	28	27	25	20	30
		%	100	90	100	99	95	98	97	95	99	95	100	95	97
		Max-d	28	29	48	52	49	54	38	33	35	33	31	26	54
		Min-d	14	15	35	33	27	18	9	13	15	24	14	14	9

Appendix Table 3.7 Monthly results of PM_{10} concentration in 2011

Unit : $\mu g/m^3$			2011												Annual
Country	Site		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
Republic of Korea	Kanghwa	Mean	47	56	39	60	55	47	24	31	30	53	45	44	44
		%	99	100	80	99	80	100	100	100	84	98	97	99	95
		Max-d	61	73	50	81	87	71	47	38	60	66	69	71	87
		Min-d	32	30	28	44	19	17	9	23	16	40	34	32	9
	Cheju (Kosan)	Mean	54	68	55	56	49	46	32	45	22	27	24	27	42
		%	78	80	80	94	70	92	96	72	93	97	83	78	84
		Max-d	90	99	73	80	102	65	39	62	28	33	33	30	102
		Min-d	31	55	46	40	20	33	26	29	17	17	19	25	17
	Imsil	Mean	46	58	40	55	33	48	31	19	25	34	31	33	38
		%	100	89	80	92	75	98	97	90	99	95	90	93	92
		Max-d	61	78	53	94	57	71	74	26	33	66	59	69	94
		Min-d	31	23	21	43	15	11	8	14	21	16	19	21	8

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