Acid Deposition Monitoring Network
in East Asia (EANET)

Data Report 2013

November 2014

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 2013, which contains the monitoring data from the participating countries at the Fourteenth Session of Scientific Advisory Committee (SAC14), held in September 2014. The draft Data Report was considered at SAC14 by the experts from the participating countries. Following the comments and guidance at the SAC14, the NC has elaborated and finalized the report.

The Data Report 2013 contains the data obtained from monitoring activities carried out in 2013.

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 2013

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 2013. The data on wet deposition monitoring were submitted from a total of 53 monitoring sites, including 20 remote, 13 rural and 20 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 2013

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
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	177
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	205

* The latitude, longitude and altitude information correspond 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 correspond 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
China	Jinyunshan (Chongqing)	Jinyunshan	Jinyunshan Lake
	Jiwozi (Xi'an)	Dabagou	Jiwozi River
	Xiaoping (Xiamen)	Xiaoping	Xiaoping Dam
	Zhuxiandong (Zhuhai)	Zhuxiandong	Zhuxiandong Stream
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
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.

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.

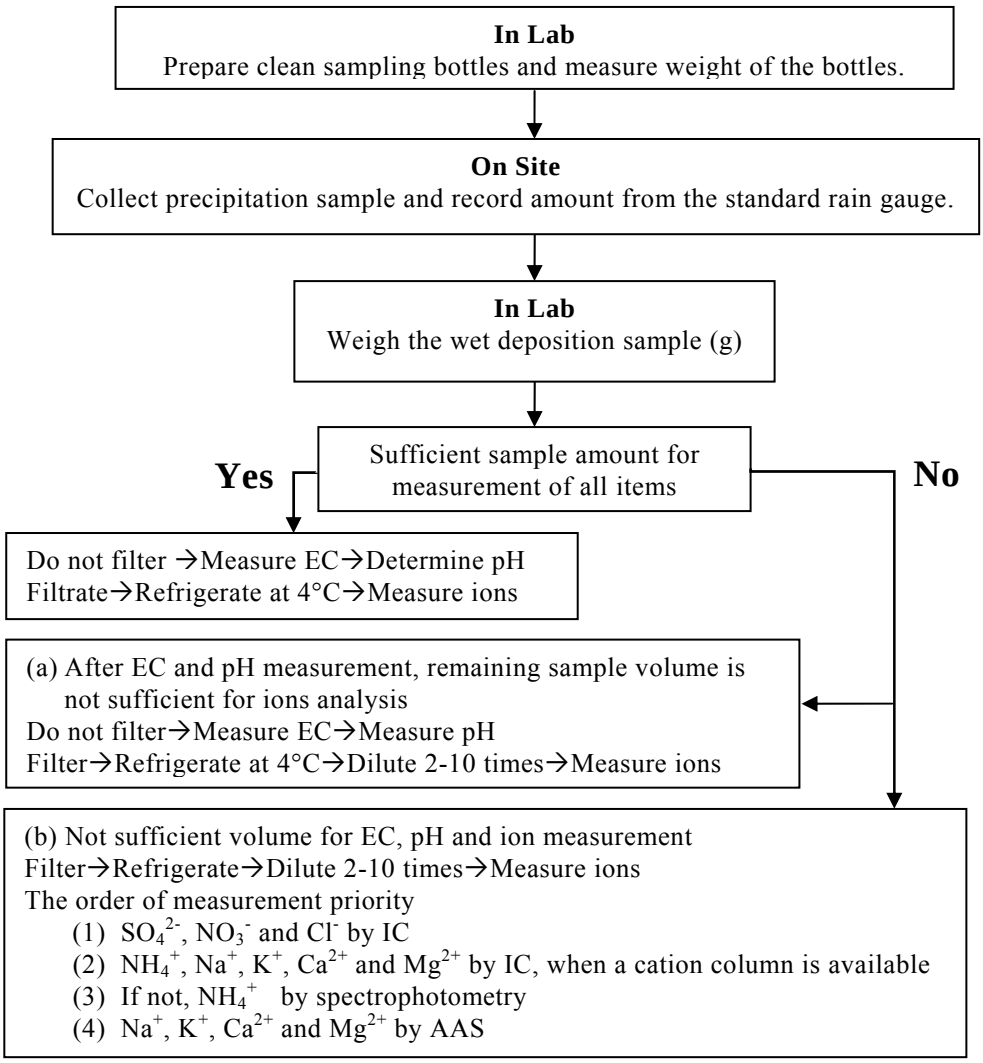


Figure 3.1 Flow chart of sampling and chemical analysis of Wet Deposition

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.
The recommended minimum detectable amounts (MDA) of each species by Ion chromatography according to the Technical Documents for Wet Deposition Monitoring in East Asia -2010 are shown in Table 3.2.

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.

Table 3.2 Recommended Minimum Detectable Amount

Species	MDA (μmol L^{-1})
SO_4^{2-}	1
NO_3^-	1
Cl^-	1
Na^+	1
NH_4^+	1
K^+	0.3
Ca^{2+}	0.2
Mg^{2+}	0.4

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.

$$[\text{nss-}SO_4^{2-}] = [SO_4^{2-}] - 0.06028\,[Na^+]$$
$$[\text{nss-}Ca^{2+}] = [Ca^{2+}] - 0.02161\,[Na^+]$$

(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 3.3.

Table 3.3 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 3.4.

Table 3.4 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 are given in Table 3.5.

Table 3.5 Terms and abbreviations

	Terms and abbreviations	Meaning
For all data	Data in hatched cell ( )	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 cell ( )	Monitoring was not carried out.
For precipitation amount weighted average concentrations	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). nss-SO_4^{2-} and nss-Ca^{2+} refer to MDA of SO_4^{2-} and Ca^{2+} respectively.
For deposition	[0.00]	Deposition amount was zero. (Precipitation was 0 mm.)
	[<0.01]	Calculated deposition amount was lower than 0.01mmol m^{-2}.
For 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 35 out of 53 sites, while weekly collection are performed at 18 sites, as presented in Table 3.6. The analytical methods used in the laboratories for measuring the precipitation samples are presented in Table 3.7.

Table 3.6 Sampling Frequencies for Wet Deposition Monitoring in 2013

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
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*1	Urban	Daily	October '03
Malaysia	Petaling Jaya	Urban	Weekly	April '98
	Tanah Rata	Remote	Weekly	January '99
	Danum Valley	Remote	Weekly	January '05
	Kuching	Urban	Weekly	January '08
Mongolia	Ulaanbaatar	Urban	Daily	August '98
	Terelj	Remote	Daily	September '98
Myanmar	Yangon	Urban	Weekly	January '07
Philippines	Metro Manila	Urban	Weekly	April '99
	Los Baños	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 3.6 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	Weekly	January '09
	Da Nang	Urban	Weekly	January '09

*1: The monitoring data in 2013 could not be submitted because of malfunction of the instrument in the laboratory.

Table 3.7 Analytical methods used for Wet Deposition Monitoring in 2013

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
Indonesia	Jakarta	Urban	IC	IC	IC
	Serpong	Rural	IC	IC	IC
	Kototabang	Remote	IC	IC	IC
	Bandung	Urban	IC	IC	IC
	Maros	Rural	IC	IC	IC
Japan	Rishiri	Remote	IC	IC	IC
	Ochiishi	Remote	IC	IC	IC
	Tappi	Remote	IC	IC	IC
	Sado-seki	Remote	IC	IC	IC
	Happo	Remote	IC	IC	IC
	Ijira	Rural	IC	IC	IC
	Oki	Remote	IC	IC	IC
	Banryu	Urban	IC	IC	IC
	Yusuhara	Remote	IC	IC	IC
	Hedo	Remote	IC	IC	IC
	Ogasawara	Remote	IC	IC	IC
	Tokyo	Urban	IC	IC	IC

Table 3.7 Analytical methods used for Wet Deposition Monitoring in 2013 (continued)

Country	Name of sites	Characteristics of sites	Anion Analysis	Cation Analysis	
				NH_4^+	Other Cations
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 2013 are shown in Table 3.8 through Table 3.59. The annual summaries of wet deposition monitoring in 2013 are shown in Table 3.60 through Table 3.62. 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 3.63. The summaries of annual data from 2000 to 2013 are shown in Table 3.64 through Table 3.88. Figure3.2 to Figure 3.53 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): F^-, Br^-, NO_2^- and PO_4^{3-}
- Yusuhara (Japan): F^-, NO_2^- and PO_4^{3-}
- Ogasawara and Tokyo (Japan): F^- and NO_2^-
- Petaling Jaya, Tanah Rata, Danum Valley and Kuching (Malaysia): formic acid, acetic acid and oxalic acid
- Metro Manila and Los Baños (Philippines): PO_4^{3-}
- Mt. Sto. Tomas (Philippines): NO_2^-
- Listvyanka and Irkutsk (Russia): HCO_3^-, F^-, Br^- and NO_2^-
- Mondy and Primorskaya (Russia): HCO_3^-, Br^- and NO_2^-
- 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^- and F^-

Results of the additional items are shown in Table 3.89 through Table 3.96. Note that the data in 2000 is obtained during the preparatory-phase activities of EANET.
The monitoring data in 2012 at Metro Manila and Los Baños in Philippines are shown in Appendix III at the end of this report.

Table 3.8 Monthly results **Site: Phnom Penh** **Country: Cambodia**

Precipitation amount-weighted average concentration/ Precipitation amount

2013	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	13.8	13.3	20.7	12.3	30.6	7.72	2.36	14.5	14.3	1.81	0.712	6.15	1.19	77.8
May	14.3	13.9	15.4	8.83	23.9	6.79	2.40	15.6	15.4	1.89	0.741	6.13	1.05	41.8
June	10.6	10.4	9.83	11.0	19.0	4.48	1.69	9.92	9.82	1.50	0.749	6.13	0.828	334
July	9.40	9.23	7.86	7.45	9.64	2.87	1.34	9.72	9.66	1.48	0.513	6.29	0.732	66.7
Aug	7.02	6.90	5.74	6.25	13.0	1.95	0.631	11.9	11.8	1.57	0.401	6.40	0.706	186
Sept	8.70	8.54	6.87	7.78	9.61	2.62	0.885	9.42	9.36	0.983	0.614	6.21	0.595	265
Oct	3.63	3.53	4.46	4.51	9.50	1.62	0.326	6.23	6.20	0.400	0.854	6.07	0.408	251
Nov	2.99	2.93	1.75	2.27	3.28	1.01	0.416	7.04	7.02	<0.4	0.553	6.26	0.334	122
Dec	--	--	--	--	--	--	--	--	--	--	--	--	--	0
Annual	7.99	7.80	7.65	7.53	13.5	3.10	1.06	9.57	9.50	1.12	0.662	6.18	0.665	1345
Max.	15.4	15.0	22.0	16.4	35.3	8.66	2.55	15.6	15.4	1.89	1.41	6.59	1.25	
Min.	1.62	1.47	1.24	1.97	2.94	<1	<0.3	3.34	3.34	<0.4	0.257	5.85	0.317	

Wet deposition amount

2013	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	1.07	1.04	1.61	0.954	2.38	0.601	0.184	1.13	1.12	0.141	0.0554
May	0.599	0.582	0.643	0.369	1.00	0.284	0.100	0.651	0.645	0.0791	0.0310
June	3.56	3.47	3.29	3.68	6.37	1.50	0.565	3.32	3.28	0.503	0.250
July	0.627	0.616	0.525	0.498	0.643	0.192	0.0895	0.649	0.645	0.0986	0.0342
Aug	1.31	1.29	1.07	1.17	2.43	0.363	0.118	2.21	2.20	0.293	0.0748
Sept	2.30	2.26	1.82	2.06	2.54	0.694	0.234	2.49	2.48	0.260	0.163
Oct	0.910	0.885	1.12	1.13	2.38	0.407	0.0818	1.56	1.55	0.100	0.214
Nov	0.366	0.359	0.214	0.278	0.401	0.124	0.0509	0.861	0.859	0.0275	0.0677
Dec	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	10.7	10.5	10.3	10.1	18.1	4.16	1.42	12.9	12.8	1.50	0.890

Data completeness

2013	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 cell for averages and deposition: Rejected monthly (annual) value by the criteria of EANET (%PCL<80% or %TP<80%)

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

Precipitation amount-weighted average concentration/ Precipitation amount

2013	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	420	419	475	69.3	490	19.9	30.7	314	313	28.4	80.0	4.10	20.9	8.70
Feb	377	375	257	61.1	624	31.9	88.6	451	450	51.7	29.9	4.52	19.2	18.5
Mar	1404	1396	868	183	1292	135	132	949	946	117	1.33	5.88	51.8	2.00
Apr	96.7	96.1	57.8	7.12	105	9.69	7.85	69.2	69.0	10.6	16.5	4.78	4.18	145
May	118	118	62.3	11.5	152	4.47	9.35	64.6	64.5	7.05	20.6	4.69	4.99	160
June	50.1	49.9	30.4	4.46	100	3.25	4.81	24.0	23.9	3.04	21.0	4.68	2.86	224
July	42.7	42.5	44.6	8.90	92.2	3.37	8.36	41.4	41.3	4.37	0.837	6.08	2.55	38.1
Aug	105	104	76.5	22.6	67.7	10.6	36.3	129	129	13.5	8.50	5.07	5.22	83.2
Sept	64.1	63.7	48.7	8.03	64.0	5.26	4.61	30.5	30.3	4.20	40.5	4.39	3.55	185
Oct	142	142	103	14.8	194	6.40	7.76	66.8	66.7	6.88	83.7	4.08	8.15	91.8
Nov	186	185	145	24.3	313	14.1	36.8	93.0	92.7	11.1	34.3	4.46	9.06	50.0
Dec	347	346	325	42.0	540	17.3	24.8	200	199	21.4	79.4	4.10	16.6	20.1
Annual	106	106	73.9	12.7	142	7.29	12.8	69.5	69.3	8.23	30.1	4.52	5.26	1026
Max.	1622	1611	1139	217	1644	183	219	1268	1266	152	324	7.04	57.5	
Min.	21.4	21.4	11.1	2.54	3.88	<1	0.512	2.74	2.74	0.822	0.0912	3.49	0.856	

Wet deposition amount

2013	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	3.66	3.64	4.13	0.603	4.26	0.173	0.267	2.73	2.73	0.247	0.696
Feb	6.98	6.94	4.75	1.13	11.5	0.591	1.64	8.34	8.33	0.957	0.553
Mar	2.81	2.79	1.74	0.367	2.58	0.269	0.264	1.90	1.89	0.234	<0.01
Apr	14.0	13.9	8.35	1.03	15.2	1.40	1.14	10.0	9.97	1.53	2.38
May	18.9	18.8	9.98	1.84	24.3	0.716	1.50	10.3	10.3	1.13	3.31
June	11.2	11.2	6.79	0.998	22.4	0.727	1.08	5.36	5.35	0.680	4.69
July	1.63	1.62	1.70	0.339	3.51	0.128	0.318	1.58	1.57	0.166	0.0319
Aug	8.74	8.69	6.37	1.88	5.63	0.878	3.02	10.8	10.7	1.12	0.707
Sept	11.8	11.8	9.00	1.48	11.8	0.972	0.853	5.63	5.61	0.777	7.48
Oct	13.1	13.0	9.44	1.36	17.8	0.588	0.712	6.14	6.12	0.631	7.69
Nov	9.31	9.27	7.25	1.21	15.6	0.704	1.84	4.65	4.63	0.553	1.72
Dec	6.98	6.96	6.52	0.845	10.9	0.347	0.499	4.01	4.01	0.430	1.60
Annual	109	108	75.8	13.1	145	7.48	13.1	71.2	71.1	8.44	30.8

Data completeness

2013	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	97.7	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
Feb	98.4	98.4	98.4	98.4	98.4	98.4	98.4	98.4	98.4	98.4	98.4	98.4	98.4	100
Mar	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	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
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 cell for averages and deposition: Rejected monthly (annual) value by the criteria of EANET (%PCL<80% or %TP<80%)

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

Precipitation amount-weighted average concentration/ Precipitation amount

2013	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	301	300	404	44.8	506	15.4	28.0	114	114	13.2	347	3.46	23.1	9.10
Feb	142	142	107	13.8	189	4.97	13.5	45.1	45.0	7.11	128	3.89	9.41	19.5
Mar	477	476	341	39.7	575	20.5	23.4	201	201	29.6	185	3.73	20.4	8.50
Apr	88.6	88.5	50.5	6.36	92.4	3.15	17.7	37.9	37.8	5.86	31.1	4.51	4.13	80.7
May	82.3	82.1	45.4	6.61	95.9	3.48	4.56	20.4	20.3	5.65	76.9	4.11	4.95	227
June	44.4	44.3	24.7	3.07	59.6	1.19	1.37	17.9	17.8	1.53	20.1	4.70	2.21	248
July	65.0	64.7	35.5	6.00	61.3	6.06	5.54	65.7	65.6	4.69	1.72	5.76	2.85	111
Aug	78.1	77.8	46.8	8.53	75.1	4.79	3.48	38.3	38.2	4.20	34.9	4.46	3.89	84.2
Sept	66.3	66.1	40.0	5.66	52.6	3.63	3.42	15.7	15.6	3.22	74.3	4.13	4.29	162
Oct	98.7	98.4	63.0	7.92	93.8	4.33	5.05	29.1	29.0	4.52	131	3.88	7.73	85.8
Nov	99.6	99.2	83.1	11.6	103	6.06	6.15	32.0	31.8	4.98	111	3.96	6.98	71.1
Dec	247	247	235	24.9	343	9.29	16.1	73.5	73.3	9.70	230	3.64	16.6	21.5
Annual	81.4	81.2	53.1	7.21	90.1	3.92	5.49	31.2	31.1	4.42	63.3	4.20	4.81	1127
Max.	673	671	493	61.8	727	36.1	43.0	371	370	56.7	676	6.22	35.4	
Min.	29.3	29.2	19.2	<1	11.6	<1	0.767	1.75	1.71	0.822	0.603	3.17	1.64	

Wet deposition amount

2013	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	2.74	2.73	3.68	0.407	4.60	0.140	0.255	1.04	1.03	0.120	3.16
Feb	2.77	2.76	2.10	0.269	3.69	0.0970	0.264	0.880	0.878	0.139	2.49
Mar	4.06	4.05	2.90	0.338	4.89	0.174	0.199	1.71	1.71	0.251	1.57
Apr	7.15	7.14	4.08	0.513	7.46	0.254	1.42	3.06	3.05	0.473	2.51
May	18.7	18.6	10.3	1.50	21.8	0.789	1.04	4.63	4.62	1.28	17.5
June	11.0	11.0	6.12	0.760	14.8	0.295	0.339	4.42	4.42	0.378	4.97
July	7.21	7.17	3.93	0.665	6.80	0.672	0.614	7.28	7.26	0.520	0.191
Aug	6.57	6.55	3.94	0.718	6.32	0.403	0.293	3.22	3.21	0.354	2.94
Sept	10.7	10.7	6.46	0.914	8.49	0.586	0.553	2.53	2.52	0.519	12.0
Oct	8.47	8.45	5.41	0.680	8.05	0.372	0.433	2.49	2.49	0.388	11.2
Nov	7.08	7.06	5.91	0.828	7.30	0.431	0.438	2.27	2.26	0.354	7.87
Dec	5.32	5.30	5.06	0.536	7.38	0.200	0.346	1.58	1.58	0.208	4.95
Annual	91.7	91.5	59.9	8.13	102	4.41	6.19	35.1	35.0	4.99	71.4

Data completeness

2013	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 cell for averages and deposition: Rejected monthly (annual) value by the criteria of EANET (%PCL<80% or %TP<80%)

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

Precipitation amount-weighted average concentration/ Precipitation amount

2013	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	558	529	309	324	1025	473	367	3930	3920	823	0.0601	7.22	29.1	12.7
Mar	--	--	--	--	--	--	--	--	--	--	--	--	--	0
Apr	675	634	333	474	1407	684	462	4486	4471	974	0.0276	7.56	33.3	7.90
May	88.0	81.5	13.5	21.2	166	108	7.78	82.0	79.7	10.5	0.0638	7.20	4.25	139
June	83.8	77.2	16.1	33.7	244	109	12.2	66.8	64.4	6.62	0.264	6.58	5.76	54.0
July	79.1	71.0	13.6	32.9	160	133	7.06	137	134	12.7	0.0713	7.15	5.33	137
Aug	28.0	21.9	4.52	12.1	60.9	100	16.4	19.3	17.1	8.76	0.0977	7.01	1.84	10.6
Sept	155	148	31.1	31.3	235	112	10.8	204	202	21.6	0.125	6.90	8.91	22.1
Oct	583	578	125	155	313	83.3	17.7	441	439	29.9	0.0305	7.52	16.1	16.6
Nov	213	205	41.7	45.5	282	133	16.5	300	298	30.2	0.328	6.48	7.96	40.0
Dec	--	--	--	--	--	--	--	--	--	--	--	--	--	0
Annual	141	132	35.6	50.8	238	138	28.1	325	322	54.5	0.117	6.93	6.97	441
Max.	1035	1034	524	731	2000	1009	726	6490	6468	1497	0.407	7.86	43.4	
Min.	26.4	19.4	3.55	12.1	55.4	21.3	3.35	19.3	17.1	5.72	0.0138	6.39	1.80	

Wet deposition amount

2013	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	7.08	6.72	3.93	4.11	13.0	6.01	4.66	49.9	49.8	10.5	<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	5.33	5.01	2.63	3.74	11.1	5.41	3.65	35.4	35.3	7.70	<0.01
May	12.3	11.4	1.89	2.96	23.2	15.1	1.08	11.4	11.1	1.46	<0.01
June	4.52	4.17	0.872	1.82	13.2	5.90	0.659	3.61	3.48	0.357	0.0143
July	10.9	9.75	1.87	4.52	22.0	18.2	0.969	18.8	18.4	1.75	<0.01
Aug	0.297	0.233	0.0479	0.128	0.645	1.06	0.174	0.204	0.181	0.0929	<0.01
Sept	3.43	3.28	0.688	0.691	5.20	2.47	0.238	4.51	4.46	0.478	<0.01
Oct	9.67	9.59	2.08	2.57	5.20	1.38	0.294	7.31	7.28	0.496	<0.01
Nov	8.54	8.22	1.67	1.82	11.3	5.33	0.661	12.0	11.9	1.21	0.0131
Dec	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	62.0	58.3	15.7	22.4	105	60.9	12.4	143	142	24.0	0.0514

Data completeness

2013	SO_4^{2-}	nss-SO_4^{2-}	NO_3^-	Cl^-	NH_4^+	Na^+	K^+	Ca^{2+}	nss-Ca^{2+}	Mg^{2+}	H^+	pH	EC	Precip.
	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%PCL
Jan	--	--	--	--	--	--	--	--	--	--	--	--	--	100
Feb	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Mar	--	--	--	--	--	--	--	--	--	--	--	--	--	100
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 cell for averages and deposition: Rejected monthly (annual) value by the criteria of EANET (%PCL<80% or %TP<80%)

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

Precipitation amount-weighted average concentration/ Precipitation amount

2013	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	138	128	52.0	72.1	164	151	25.6	317	314	50.9	0.0528	7.28	9.36	10.8
Apr	101	93.7	32.4	32.0	37.7	113	7.41	107	105	18.2	0.114	6.94	4.61	52.4
May	30.4	23.5	5.52	37.9	47.0	115	6.57	215	213	20.0	0.0572	7.24	4.04	235
June	56.2	50.7	7.90	21.4	43.8	91.5	9.66	69.2	67.2	22.6	0.0875	7.06	3.09	64.7
July	50.0	43.5	4.67	35.5	59.5	108	13.4	71.6	69.3	25.2	0.746	6.13	2.75	151
Aug	19.6	12.9	2.64	19.7	46.8	110	5.19	21.6	19.2	12.1	0.363	6.44	1.11	52.6
Sept	116	108	10.4	51.0	131	127	17.2	131	128	35.9	0.385	6.41	5.05	42.0
Oct	73.9	67.0	7.97	16.9	35.4	114	18.8	94.9	92.4	16.7	7.09	5.15	3.75	33.4
Nov	91.1	81.5	10.9	23.1	41.5	160	22.4	212	209	46.1	0.242	6.62	6.03	7.40
Dec	--	--	--	--	--	--	--	--	--	--	--	--	--	0
Annual	52.6	45.8	8.77	33.9	55.5	112	10.2	133	130	22.3	0.635	6.20	3.61	649
Max.	160	152	56.9	85.2	192	207	30.8	373	370	82.2	22.4	7.72	9.86	
Min.	14.9	6.99	1.73	10.5	<1	11.0	2.86	3.52	0.892	6.30	0.0191	4.65	0.690	

Wet deposition amount

2013	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	1.49	1.39	0.562	0.779	1.77	1.63	0.276	3.43	3.39	0.550	<0.01
Apr	5.27	4.91	1.70	1.68	1.97	5.91	0.388	5.62	5.49	0.953	<0.01
May	7.12	5.50	1.30	8.89	11.0	26.9	1.54	50.5	49.9	4.69	0.0134
June	3.64	3.28	0.511	1.38	2.83	5.92	0.625	4.48	4.35	1.46	<0.01
July	7.55	6.57	0.706	5.36	8.99	16.4	2.02	10.8	10.5	3.80	0.113
Aug	1.03	0.680	0.139	1.03	2.46	5.81	0.273	1.13	1.01	0.636	0.0191
Sept	4.87	4.55	0.436	2.14	5.49	5.32	0.724	5.51	5.39	1.51	0.0162
Oct	2.47	2.24	0.266	0.565	1.18	3.80	0.627	3.17	3.09	0.558	0.237
Nov	0.674	0.603	0.0806	0.171	0.307	1.19	0.166	1.57	1.54	0.341	<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	34.1	29.7	5.69	22.0	36.0	72.8	6.64	86.2	84.6	14.5	0.412

Data completeness

2013	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 cell for averages and deposition: Rejected monthly (annual) value by the criteria of EANET (%PCL<80% or %TP<80%)

Table 3.13 Monthly results **Site: Hongwen** **Country: China**

Precipitation amount-weighted average concentration/ Precipitation amount

2013	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	25.3	23.8	26.9	33.4	45.1	24.7	5.18	14.3	13.8	6.55	19.2	4.72	2.62	20.6
Mar	44.2	43.5	51.2	30.2	50.2	11.1	4.42	16.0	15.7	3.38	51.7	4.29	3.57	75.3
Apr	32.3	31.8	34.6	14.4	45.3	8.70	2.77	24.4	24.2	1.43	22.6	4.65	2.34	192
May	23.9	23.5	17.2	7.29	13.3	5.69	2.53	27.4	27.3	2.17	6.39	5.19	1.14	324
June	30.5	29.7	25.0	23.0	34.2	13.2	0.372	37.1	36.8	4.43	3.44	5.46	1.64	105
July	9.29	8.29	9.89	17.0	<1	16.5	1.24	13.2	12.9	3.44	9.31	5.03	1.11	402
Aug	16.1	15.1	15.0	23.7	13.9	16.7	0.980	17.7	17.4	4.34	5.21	5.28	1.25	175
Sept	35.8	30.2	42.1	113	16.6	93.4	2.84	18.0	16.0	12.1	57.0	4.24	4.46	34.5
Oct	--	--	--	--	--	--	--	--	--	--	--	--	--	0
Nov	31.1	29.8	24.0	28.0	41.8	21.4	1.15	22.8	22.3	5.48	16.1	4.79	2.55	28.1
Dec	22.4	21.7	27.9	20.1	3.64	10.8	0.842	46.5	46.3	3.63	7.97	5.10	1.70	45.4
Annual	21.9	21.0	20.9	19.3	18.3	14.3	1.90	21.9	21.6	3.36	13.2	4.88	1.63	1403
Max.	120	117	174	136	211	102	16.2	82.1	80.5	18.2	245	6.67	12.3	
Min.	2.36	1.42	3.48	<1	<1	1.83	<0.3	<0.2	<0.2	<0.4	0.214	3.61	0.273	

Wet deposition amount

2013	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	0.521	0.491	0.556	0.690	0.931	0.509	0.107	0.296	0.285	0.135	0.396
Mar	3.33	3.28	3.85	2.27	3.78	0.836	0.332	1.20	1.18	0.255	3.89
Apr	6.21	6.11	6.66	2.78	8.72	1.67	0.534	4.69	4.65	0.275	4.35
May	7.74	7.63	5.57	2.36	4.31	1.84	0.819	8.89	8.85	0.705	2.07
June	3.20	3.12	2.63	2.41	3.59	1.38	0.0390	3.89	3.86	0.465	0.361
July	3.74	3.34	3.98	6.85	<0.01	6.62	0.500	5.33	5.18	1.38	3.74
Aug	2.82	2.64	2.63	4.15	2.43	2.92	0.172	3.11	3.05	0.760	0.914
Sept	1.23	1.04	1.45	3.90	0.572	3.22	0.0978	0.621	0.552	0.419	1.96
Oct	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Nov	0.873	0.837	0.674	0.786	1.17	0.602	0.0323	0.640	0.627	0.154	0.454
Dec	1.02	0.986	1.27	0.913	0.165	0.490	0.0382	2.11	2.10	0.165	0.362
Annual	30.7	29.5	29.3	27.1	25.7	20.1	2.67	30.8	30.3	4.71	18.5

Data completeness

2013	SO_4^{2-}	nss-SO_4^{2-}	NO_3^-	Cl^-	NH_4^+	Na^+	K^+	Ca^{2+}	nss-Ca^{2+}	Mg^{2+}	H^+	pH	EC	Precip.
	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%PCL
Jan	--	--	--	--	--	--	--	--	--	--	--	--	--	100
Feb	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Mar	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Apr	100	100	100	100	100	100	100	100	100	100	100	100	100	100
May	100	100	100	100	100	100	100	100	100	100	100	100	100	100
June	100	100	100	100	100	100	100	100	100	100	100	100	100	100
July	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Aug	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Sept	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Oct	--	--	--	--	--	--	--	--	--	--	--	--	--	100
Nov	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Dec	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Annual	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**

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

[0.00] for deposition: The deposition was 0 mmol/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 cell for averages and deposition: Rejected monthly (annual) value by the criteria of EANET (%PCL<80% or %TP<80%)

Table 3.14 Monthly results **Site: Xiaoping** **Country: China**

Precipitation amount-weighted average concentration/ Precipitation amount

2013	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	34.8	34.3	54.0	16.3	91.6	8.22	<0.3	10.5	10.4	1.69	24.0	4.62	2.35	36.7
Mar	--	--	--	--	--	--	--	--	--	--	--	--	--	0
Apr	30.1	29.5	36.5	10.3	46.8	11.0	4.48	9.70	9.47	0.604	31.9	4.50	2.60	170
May	30.2	29.7	30.6	9.05	30.9	8.14	1.18	33.5	33.3	2.14	4.20	5.38	1.61	279
June	36.6	36.0	25.4	13.9	40.9	10.3	1.18	31.4	31.2	4.80	0.952	6.02	1.65	380
July	7.26	6.80	6.35	5.03	1.85	7.63	0.864	13.8	13.7	2.06	1.94	5.71	0.600	360
Aug	18.7	17.5	17.5	20.4	20.8	18.4	1.56	23.0	22.6	6.86	6.98	5.16	1.49	618
Sept	14.1	13.5	11.3	10.2	9.27	9.38	0.787	13.7	13.5	1.44	120	3.92	1.29	52.5
Oct	--	--	--	--	--	--	--	--	--	--	--	--	--	0
Nov	30.8	28.6	10.5	16.3	25.5	36.9	8.04	6.30	5.50	6.54	13.1	4.88	2.39	21.3
Dec	10.9	10.7	10.0	4.76	<1	3.47	4.28	25.0	25.0	2.96	4.06	5.39	0.441	62.3
Annual	22.7	22.0	20.7	13.0	25.3	12.1	1.66	22.7	22.4	4.03	9.92	5.00	1.46	1979
Max.	129	127	171	108	241	76.5	21.3	73.8	73.6	13.8	174	6.74	8.81	
Min.	3.82	3.53	2.65	<1	<1	<1	<0.3	<0.2	<0.2	<0.4	0.182	3.76	0.217	

Wet deposition amount

2013	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	1.28	1.26	1.98	0.597	3.36	0.302	<0.01	0.387	0.380	0.0620	0.879
Mar	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Apr	5.11	5.00	6.20	1.74	7.94	1.86	0.760	1.65	1.61	0.103	5.41
May	8.41	8.28	8.54	2.52	8.62	2.27	0.329	9.32	9.27	0.596	1.17
June	13.9	13.7	9.67	5.29	15.6	3.91	0.450	11.9	11.8	1.82	0.362
July	2.62	2.45	2.29	1.81	0.666	2.75	0.312	4.99	4.93	0.743	0.700
Aug	11.5	10.8	10.8	12.6	12.8	11.4	0.964	14.2	14.0	4.24	4.31
Sept	0.739	0.710	0.595	0.534	0.486	0.493	0.0413	0.722	0.711	0.0758	6.28
Oct	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Nov	0.658	0.610	0.223	0.347	0.544	0.787	0.171	0.134	0.117	0.139	0.278
Dec	0.681	0.668	0.625	0.296	<0.01	0.216	0.266	1.56	1.55	0.184	0.252
Annual	44.9	43.5	40.9	25.7	50.0	23.9	3.29	44.9	44.4	7.97	19.6

Data completeness

2013	SO_4^{2-}	nss-SO_4^{2-}	NO_3^-	Cl^-	NH_4^+	Na^+	K^+	Ca^{2+}	nss-Ca^{2+}	Mg^{2+}	H^+	pH	EC	Precip.
	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%PCL
Jan	--	--	--	--	--	--	--	--	--	--	--	--	--	100
Feb	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Mar	--	--	--	--	--	--	--	--	--	--	--	--	--	100
Apr	100	100	100	100	100	100	100	100	100	100	100	100	100	100
May	100	100	100	100	100	100	100	100	100	100	100	100	100	100
June	100	100	100	100	100	100	100	100	100	100	100	100	100	100
July	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Aug	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Sept	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Oct	--	--	--	--	--	--	--	--	--	--	--	--	--	100
Nov	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Dec	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Annual	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**

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

[0.00] for deposition: The deposition was 0 mmol/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 cell for averages and deposition: Rejected monthly (annual) value by the criteria of EANET (%PCL<80% or %TP<80%)

Table 3.15 Monthly results **Site: Xiang Zhou** **Country: China**

Precipitation amount-weighted average concentration/ Precipitation amount

2013	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	232	221	20.3	156	435	188	36.1	225	221	45.7	69.2	4.16	15.5	1.50
Feb	--	--	--	--	--	--	--	--	--	--	--	--	--	0
Mar	29.4	27.1	38.9	34.9	43.4	38.4	4.52	9.34	8.62	5.43	15.2	4.82	2.20	158
Apr	19.2	18.0	32.5	12.8	53.9	18.8	7.02	16.2	15.8	3.78	8.13	5.09	1.85	217
May	4.16	3.52	5.89	10.5	9.56	10.7	4.76	1.81	1.58	2.25	1.84	5.73	0.507	670
June	6.42	5.21	6.37	22.1	7.64	20.1	2.14	2.67	2.24	3.82	3.65	5.44	0.629	449
July	85.4	71.9	72.0	180	5.16	225	35.1	310	305	81.7	3.06	5.51	0.617	294
Aug	14.2	8.58	14.1	98.4	11.1	93.0	6.86	9.72	7.71	11.5	2.96	5.53	1.79	246
Sept	1.67	<1	2.16	2.72	13.6	13.4	2.89	7.33	7.04	1.93	5.02	5.30	1.00	256
Oct	129	102	289	308	241	452	17.6	77.6	67.8	55.9	29.5	4.53	15.5	5.00
Nov	27.8	16.4	35.7	128	65.8	190	7.46	14.4	10.3	22.0	56.5	4.25	6.55	50.5
Dec	5.06	4.71	10.9	7.94	21.9	5.84	4.08	10.6	10.4	2.02	14.1	4.85	1.38	75.0
Annual	19.1	15.9	20.4	46.1	17.7	54.2	8.24	43.4	42.2	14.0	5.83	5.23	1.15	2421
Max.	247	230	289	347	435	452	63.7	769	761	173	95.5	7.07	15.5	
Min.	<1	<1	<1	<1	1.70	<1	0.400	0.500	<0.2	0.800	0.0851	4.02	0.238	

Wet deposition amount

2013	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	0.348	0.331	0.0305	0.234	0.652	0.282	0.0542	0.338	0.331	0.0686	0.104
Feb	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Mar	4.65	4.28	6.14	5.51	6.86	6.07	0.714	1.48	1.36	0.858	2.41
Apr	4.16	3.91	7.04	2.78	11.7	4.09	1.52	3.51	3.43	0.820	1.76
May	2.79	2.36	3.94	7.01	6.41	7.15	3.19	1.22	1.06	1.51	1.24
June	2.88	2.34	2.86	9.90	3.42	9.02	0.961	1.20	1.00	1.71	1.64
July	25.1	21.1	21.2	52.8	1.52	66.1	10.3	91.1	89.7	24.0	0.899
Aug	3.49	2.11	3.48	24.2	2.72	22.9	1.69	2.39	1.90	2.83	0.728
Sept	0.428	0.238	0.553	0.696	3.49	3.43	0.739	1.87	1.80	0.493	1.28
Oct	0.646	0.509	1.44	1.54	1.20	2.26	0.0880	0.388	0.339	0.280	0.148
Nov	1.40	0.826	1.80	6.47	3.32	9.60	0.377	0.729	0.521	1.11	2.85
Dec	0.379	0.353	0.816	0.595	1.64	0.438	0.306	0.792	0.783	0.152	1.06
Annual	46.3	38.4	49.3	112	42.9	131	20.0	105	102	33.9	14.1

Data completeness

2013	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
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 cell for averages and deposition: Rejected monthly (annual) value by the criteria of EANET (%PCL<80% or %TP<80%)

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

Precipitation amount-weighted average concentration/ Precipitation amount

2013	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	9.48	8.86	1.40	15.3	13.3	10.2	3.68	5.91	5.69	2.40	10.6	4.97	0.994	635
Feb	42.8	42.0	46.5	33.0	4.81	12.6	1.42	23.4	23.1	3.71	13.7	4.86	1.08	203
Mar	16.7	16.3	13.9	9.79	18.8	5.76	1.48	10.3	10.2	1.51	18.3	4.74	2.00	256
Apr	18.4	18.2	9.56	12.7	8.35	4.11	2.44	13.7	13.6	0.961	14.4	4.84	1.15	197
May	35.6	35.0	38.9	32.2	26.6	10.3	3.01	16.5	16.3	2.18	6.49	5.19	1.17	165
June	23.0	22.5	27.8	17.1	47.2	8.34	2.64	35.0	34.9	4.25	12.8	4.89	1.89	80.5
July	24.6	23.8	30.4	20.0	20.9	13.9	1.26	14.8	14.5	2.23	25.4	4.59	2.18	311
Aug	31.7	30.5	36.5	26.8	23.7	18.5	7.49	25.6	25.2	3.24	40.3	4.39	2.70	61.7
Sept	41.6	36.4	55.9	41.2	76.6	85.7	10.5	38.3	36.5	13.6	25.2	4.60	3.66	44.0
Oct	53.9	51.7	17.5	43.6	21.5	36.3	7.45	52.2	51.5	7.63	17.0	4.77	5.22	36.5
Nov	18.0	12.1	19.5	15.6	24.8	105	1.80	10.2	7.90	1.88	12.8	4.89	1.30	97.0
Dec	22.8	22.0	39.6	17.2	5.67	13.4	2.65	11.5	11.3	2.45	27.8	4.56	1.87	244
Annual	21.9	20.9	21.8	19.3	17.2	16.2	2.83	14.1	13.8	2.62	16.9	4.77	1.59	2331
Max.	146	139	149	99.9	185	743	27.7	155	152	16.3	42.7	6.22	7.46	
Min.	5.04	<1	<1	5.96	<1	1.18	<0.3	2.70	1.63	<0.4	0.603	4.37	0.500	

Wet deposition amount

2013	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	6.02	5.63	0.887	9.69	8.44	6.49	2.34	3.75	3.61	1.52	6.76
Feb	8.68	8.52	9.43	6.70	0.976	2.55	0.289	4.75	4.69	0.754	2.77
Mar	4.27	4.18	3.57	2.51	4.81	1.47	0.380	2.63	2.60	0.388	4.69
Apr	3.62	3.57	1.88	2.50	1.64	0.809	0.479	2.70	2.68	0.189	2.82
May	5.89	5.79	6.43	5.32	4.40	1.70	0.498	2.73	2.69	0.361	1.07
June	1.85	1.81	2.23	1.38	3.80	0.672	0.213	2.82	2.81	0.342	1.03
July	7.66	7.40	9.46	6.22	6.52	4.31	0.393	4.62	4.53	0.694	7.91
Aug	1.95	1.88	2.25	1.65	1.46	1.14	0.462	1.58	1.56	0.200	2.49
Sept	1.83	1.60	2.46	1.81	3.37	3.77	0.464	1.69	1.61	0.600	1.11
Oct	1.97	1.89	0.637	1.59	0.783	1.32	0.272	1.91	1.88	0.279	0.619
Nov	1.74	1.17	1.89	1.51	2.40	10.2	0.174	0.986	0.766	0.182	1.24
Dec	5.55	5.35	9.65	4.19	1.38	3.27	0.646	2.81	2.74	0.595	6.76
Annual	51.0	48.8	50.8	45.1	40.0	37.7	6.61	33.0	32.2	6.11	39.3

Data completeness

2013	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 cell for averages and deposition: Rejected monthly (annual) value by the criteria of EANET (%PCL<80% or %TP<80%)

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

Precipitation amount-weighted average concentration/ Precipitation amount

2013	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	14.1	13.6	10.6	18.2	36.6	8.43	1.92	3.87	3.69	2.26	7.93	5.10	1.18	169
Feb	17.7	17.2	19.9	16.0	43.9	7.56	2.69	6.02	5.85	2.18	6.78	5.17	1.33	157
Mar	21.1	20.7	21.2	17.4	60.8	6.97	3.11	13.0	12.8	4.05	0.806	6.09	1.49	82.0
Apr	19.6	19.5	26.1	11.5	47.8	2.55	1.95	8.79	8.73	3.38	7.87	5.10	1.38	271
May	24.6	24.2	36.4	19.3	76.5	6.82	4.54	15.3	15.2	4.74	2.92	5.53	1.80	255
June	30.5	27.6	39.9	48.0	98.1	47.8	10.6	28.2	27.1	5.74	0.399	6.40	2.88	38.1
July	34.4	33.6	48.6	35.8	86.5	13.1	4.75	16.6	16.3	4.23	17.8	4.75	2.68	262
Aug	37.6	36.2	41.0	46.2	99.6	23.6	6.75	15.5	15.0	4.21	1.08	5.97	2.12	107
Sept	45.2	42.7	51.9	45.2	133	41.8	10.2	36.7	35.8	8.13	15.9	4.80	4.20	90.6
Oct	48.5	46.7	108	27.2	209	30.2	10.2	26.1	25.5	6.18	12.6	4.90	4.46	340
Nov	23.6	22.8	35.6	26.0	48.6	13.2	6.43	9.56	9.28	1.90	22.4	4.65	2.36	181
Dec	10.8	10.4	6.02	9.54	35.6	7.13	2.10	6.93	6.78	2.25	0.402	6.40	0.785	371
Annual	26.5	25.6	39.5	22.7	83.0	14.0	4.91	14.0	13.7	3.86	8.63	5.06	2.16	2324
Max.	90.0	88.3	344	196	386	253	56.3	96.7	94.9	16.9	57.5	7.86	8.60	
Min.	2.66	2.52	<1	5.28	5.70	<1	<0.3	1.20	1.17	0.600	0.0138	4.24	0.298	

Wet deposition amount

2013	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	2.39	2.31	1.79	3.08	6.21	1.43	0.326	0.655	0.624	0.383	1.34
Feb	2.78	2.71	3.13	2.52	6.91	1.19	0.423	0.947	0.921	0.344	1.07
Mar	1.73	1.70	1.74	1.43	4.99	0.571	0.255	1.06	1.05	0.332	0.0661
Apr	5.33	5.28	7.10	3.12	13.0	0.691	0.529	2.39	2.37	0.918	2.14
May	6.27	6.17	9.28	4.92	19.5	1.74	1.16	3.90	3.87	1.21	0.744
June	1.16	1.05	1.52	1.83	3.74	1.82	0.403	1.07	1.03	0.219	0.0152
July	9.00	8.80	12.7	9.36	22.6	3.43	1.24	4.33	4.26	1.11	4.65
Aug	4.04	3.89	4.41	4.96	10.7	2.53	0.724	1.66	1.61	0.453	0.116
Sept	4.10	3.87	4.70	4.09	12.0	3.79	0.929	3.33	3.25	0.736	1.44
Oct	16.5	15.9	36.9	9.25	71.2	10.3	3.47	8.88	8.66	2.10	4.28
Nov	4.26	4.12	6.43	4.70	8.79	2.39	1.16	1.73	1.68	0.344	4.05
Dec	4.00	3.84	2.23	3.54	13.2	2.64	0.780	2.57	2.51	0.832	0.149
Annual	61.6	59.6	91.9	52.8	193	32.5	11.4	32.5	31.8	8.97	20.1

Data completeness

2013	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 cell for averages and deposition: Rejected monthly (annual) value by the criteria of EANET (%PCL<80% or %TP<80%)

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

Precipitation amount-weighted average concentration/ Precipitation amount

2013	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	5.21	4.75	5.10	40.8	2.68	7.57	3.12	19.9	19.8	1.40	9.66	5.02	0.800	83.4
Feb	3.75	3.56	<1	6.84	1.57	3.03	0.621	6.55	6.49	0.563	6.37	5.20	0.516	178
Mar	7.12	6.89	2.61	15.1	11.2	3.83	2.57	8.12	8.04	0.788	8.54	5.07	0.700	328
Apr	10.1	8.45	5.30	43.6	10.3	27.8	78.4	11.0	10.4	4.45	5.77	5.24	1.91	172
May	3.76	3.19	2.89	8.57	7.14	9.50	5.79	9.23	9.03	0.955	3.50	5.46	0.441	159
June	9.35	7.77	5.53	166	22.6	26.2	135	20.8	20.2	3.13	3.56	5.45	2.91	91.7
July	11.9	10.0	2.53	19.2	27.5	30.7	10.4	18.0	17.3	1.99	7.74	5.11	1.06	82.1
Aug	8.66	8.24	4.41	15.9	8.44	6.96	2.36	25.7	25.6	4.75	4.47	5.35	0.905	203
Sept	3.85	3.62	2.94	6.34	<1	3.70	1.17	8.05	7.97	2.34	24.7	4.61	0.447	119
Oct	5.27	5.01	1.95	8.41	3.94	4.39	2.85	4.93	4.84	2.05	21.2	4.67	0.929	193
Nov	4.66	4.48	1.86	42.8	1.25	3.04	31.6	1.08	1.01	4.50	12.3	4.91	0.982	340
Dec	4.48	4.24	1.92	14.7	2.23	3.96	1.13	3.00	2.91	0.498	18.4	4.74	0.439	171
Annual	6.22	5.71	2.86	27.3	6.93	8.51	19.3	9.55	9.37	2.40	10.6	4.97	0.927	2120
Max.	43.2	31.8	32.1	804	119	266	836	86.7	82.6	36.9	46.8	7.24	15.1	
Min.	2.50	2.09	<1	2.01	<1	1.13	<0.3	0.710	0.611	<0.4	0.0575	4.33	0.229	

Wet deposition amount

2013	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	0.434	0.396	0.425	3.40	0.223	0.631	0.260	1.66	1.65	0.117	0.805
Feb	0.666	0.634	0.113	1.22	0.280	0.540	0.110	1.17	1.15	0.100	1.13
Mar	2.34	2.26	0.856	4.95	3.66	1.26	0.842	2.67	2.64	0.259	2.80
Apr	1.74	1.45	0.909	7.48	1.77	4.76	13.4	1.89	1.79	0.763	0.990
May	0.600	0.508	0.460	1.37	1.14	1.51	0.922	1.47	1.44	0.152	0.558
June	0.858	0.713	0.507	15.2	2.08	2.40	12.3	1.91	1.85	0.287	0.327
July	0.975	0.823	0.208	1.57	2.26	2.52	0.855	1.48	1.42	0.164	0.636
Aug	1.76	1.67	0.896	3.22	1.71	1.41	0.479	5.22	5.19	0.964	0.908
Sept	0.457	0.431	0.349	0.753	<0.01	0.440	0.138	0.956	0.947	0.278	2.93
Oct	1.02	0.966	0.377	1.62	0.759	0.847	0.551	0.951	0.933	0.396	4.09
Nov	1.58	1.52	0.634	14.5	0.424	1.03	10.7	0.367	0.344	1.53	4.19
Dec	0.766	0.725	0.328	2.52	0.381	0.677	0.193	0.512	0.497	0.0850	3.14
Annual	13.2	12.1	6.06	57.8	14.7	18.0	40.9	20.2	19.9	5.09	22.5

Data completeness

2013	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 cell for averages and deposition: Rejected monthly (annual) value by the criteria of EANET (%PCL<80% or %TP<80%)

Table 3.19 Monthly results **Site: Bandung** **Country: Indonesia**

Precipitation amount-weighted average concentration/ Precipitation amount

2013	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	21.5	20.8	7.12	28.6	29.8	11.4	21.6	24.6	24.4	6.07	0.303	6.52	1.55	190
Feb	35.9	35.3	20.3	15.4	47.2	9.07	7.52	16.5	16.3	4.52	10.6	4.98	2.11	245
Mar	28.9	28.0	20.8	23.0	48.2	15.0	13.5	15.0	14.7	4.00	9.05	5.04	1.94	281
Apr	35.1	34.7	21.0	10.6	48.7	8.16	5.84	16.4	16.3	4.78	7.67	5.12	1.87	323
May	28.4	28.0	25.2	7.78	50.9	7.00	2.60	15.9	15.7	2.59	3.81	5.42	1.68	99.2
June	27.3	26.0	21.6	19.4	48.3	22.1	5.37	12.9	12.5	3.28	3.35	5.47	1.61	134
July	27.2	26.2	15.5	10.6	37.7	16.8	5.97	19.0	18.6	7.08	0.441	6.36	1.47	105
Aug	51.7	49.6	42.3	25.2	122	34.3	10.1	27.4	26.7	9.58	3.17	5.50	3.34	55.5
Sept	35.3	34.3	28.3	16.5	87.4	17.0	6.45	23.3	22.9	6.70	0.187	6.73	2.30	138
Oct	46.8	44.6	40.5	28.5	71.8	35.7	11.1	31.6	30.8	17.4	0.291	6.54	2.87	136
Nov	33.0	32.0	38.6	13.8	44.1	17.1	6.29	27.5	27.2	8.82	1.71	5.77	2.04	200
Dec	22.0	21.7	14.1	5.84	26.7	6.01	2.82	17.8	17.6	6.56	0.655	6.18	1.27	437
Annual	30.7	29.9	22.0	15.6	47.4	13.6	7.97	19.6	19.3	6.33	4.01	5.40	1.86	2346
Max.	223	217	238	120	239	150	53.0	169	167	62.1	83.2	7.35	11.9	
Min.	5.04	4.76	<1	2.21	4.73	1.11	1.02	5.50	5.45	1.05	0.0447	4.08	0.690	

Wet deposition amount

2013	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	4.09	3.96	1.35	5.44	5.67	2.17	4.11	4.68	4.63	1.15	0.0576
Feb	8.78	8.65	4.96	3.77	11.6	2.22	1.84	4.04	3.99	1.11	2.58
Mar	8.12	7.87	5.84	6.47	13.6	4.23	3.80	4.23	4.14	1.13	2.55
Apr	11.4	11.2	6.81	3.43	15.8	2.64	1.89	5.32	5.26	1.55	2.48
May	2.82	2.78	2.50	0.772	5.05	0.695	0.258	1.58	1.56	0.257	0.378
June	3.68	3.50	2.90	2.61	6.49	2.97	0.722	1.74	1.68	0.441	0.451
July	2.86	2.76	1.64	1.12	3.97	1.77	0.629	2.00	1.96	0.745	0.0464
Aug	2.87	2.75	2.35	1.40	6.78	1.91	0.563	1.52	1.48	0.531	0.176
Sept	4.89	4.75	3.91	2.28	12.1	2.35	0.892	3.22	3.17	0.927	0.0259
Oct	6.36	6.07	5.51	3.88	9.77	4.86	1.50	4.30	4.19	2.37	0.0397
Nov	6.61	6.40	7.74	2.77	8.84	3.43	1.26	5.52	5.44	1.77	0.343
Dec	9.63	9.47	6.16	2.55	11.7	2.63	1.23	7.76	7.71	2.87	0.286
Annual	72.1	70.2	51.7	36.5	111	31.9	18.7	45.9	45.2	14.8	9.42

Data completeness

2013	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 cell for averages and deposition: Rejected monthly (annual) value by the criteria of EANET (%PCL<80% or %TP<80%)

Table 3.20 Monthly results **Site: Maros** **Country: Indonesia**

Precipitation amount-weighted average concentration/ Precipitation amount

2013	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	5.81	4.16	1.55	30.7	3.90	27.4	1.94	6.26	5.67	3.76	4.49	5.35	0.711	1289
Feb	4.83	3.60	2.98	22.6	4.65	20.5	1.14	11.2	10.8	2.73	1.06	5.98	0.605	518
Mar	6.42	5.65	5.01	25.5	6.92	12.8	0.913	8.87	8.59	2.38	3.10	5.51	0.761	280
Apr	3.62	3.29	1.77	12.3	3.03	5.47	1.13	17.0	16.9	0.756	6.39	5.19	0.780	425
May	8.96	8.35	5.33	13.4	21.6	10.1	2.95	17.5	17.3	1.86	1.24	5.91	1.01	80.8
June	5.42	5.05	5.75	8.08	29.7	6.17	2.00	16.8	16.6	1.51	1.57	5.80	0.667	140
July	5.19	4.85	4.86	8.37	3.36	5.59	0.870	14.1	14.0	2.47	5.59	5.25	0.670	208
Aug	--	--	--	--	--	--	--	--	--	--	--	--	--	0
Sept	21.8	19.0	91.9	66.6	15.4	46.4	14.6	76.8	75.8	11.1	3.50	5.46	1.22	4.60
Oct	15.2	13.6	32.4	29.1	38.3	25.8	4.22	30.7	30.2	4.73	1.23	5.91	1.78	58.1
Nov	8.95	8.34	11.1	15.0	14.2	10.2	2.30	14.5	14.3	1.80	2.28	5.64	0.685	208
Dec	8.79	7.38	2.62	89.4	5.75	23.3	2.54	7.91	7.41	3.06	2.17	5.66	1.91	823
Annual	6.44	5.28	3.65	36.3	6.75	19.3	1.84	10.4	9.98	2.81	3.41	5.47	0.970	4033
Max.	54.8	49.7	233	306	48.3	84.8	24.8	157	155	46.2	13.8	6.49	4.30	
Min.	2.53	<1	<1	3.86	<1	3.38	<0.3	3.77	3.29	0.600	0.324	4.86	0.300	

Wet deposition amount

2013	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	7.49	5.36	2.00	39.6	5.02	35.3	2.50	8.07	7.30	4.84	5.78
Feb	2.50	1.87	1.54	11.7	2.41	10.6	0.593	5.82	5.59	1.41	0.548
Mar	1.80	1.58	1.40	7.14	1.93	3.57	0.255	2.48	2.40	0.665	0.867
Apr	1.54	1.40	0.754	5.20	1.29	2.32	0.481	7.21	7.16	0.321	2.71
May	0.724	0.675	0.430	1.08	1.75	0.816	0.238	1.41	1.40	0.150	0.101
June	0.758	0.706	0.805	1.13	4.16	0.863	0.280	2.35	2.33	0.211	0.220
July	1.08	1.01	1.01	1.74	0.696	1.16	0.181	2.92	2.90	0.513	1.16
Aug	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Sept	0.100	0.0875	0.423	0.306	0.0709	0.214	0.0673	0.353	0.349	0.0511	0.0161
Oct	0.883	0.793	1.88	1.69	2.22	1.50	0.245	1.79	1.75	0.275	0.0716
Nov	1.86	1.74	2.30	3.12	2.95	2.11	0.478	3.01	2.97	0.375	0.475
Dec	7.23	6.07	2.15	73.5	4.73	19.2	2.09	6.51	6.10	2.52	1.79
Annual	26.0	21.3	14.7	146	27.2	77.7	7.41	41.9	40.3	11.3	13.7

Data completeness

2013	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 cell for averages and deposition: Rejected monthly (annual) value by the criteria of EANET (%PCL<80% or %TP<80%)

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

Precipitation amount-weighted average concentration/ Precipitation amount

2013	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	25.9	12.8	19.8	233	8.44	217	4.80	5.85	1.25	25.1	30.8	4.51	4.99	84.7
Feb	44.9	26.3	21.5	334	19.9	308	6.79	10.3	3.69	36.3	40.6	4.39	6.86	43.4
Mar	66.7	38.0	40.9	525	39.1	477	11.0	24.2	14.0	54.5	32.7	4.49	9.95	51.4
Apr	24.7	15.4	25.4	175	22.7	154	3.51	14.8	11.4	18.5	20.8	4.68	3.72	103
May	17.3	13.0	13.2	79.2	13.3	71.2	1.62	6.98	5.44	8.70	17.6	4.76	2.22	56.6
June	11.5	10.9	9.80	12.0	18.9	10.6	0.736	1.98	1.75	1.73	14.4	4.84	1.11	54.1
July	21.3	20.4	20.9	18.4	34.3	15.9	0.847	3.22	2.87	2.31	29.7	4.53	2.06	28.5
Aug	17.0	13.8	13.3	55.8	21.2	52.4	1.48	2.37	1.24	6.04	23.8	4.62	2.13	157
Sept	12.7	8.23	8.36	84.1	7.14	76.2	1.76	2.60	0.986	8.57	20.6	4.69	2.10	85.9
Oct	13.4	2.29	4.85	221	2.17	196	4.20	4.39	0.504	21.4	12.0	4.92	3.61	120
Nov	26.2	6.55	9.28	367	5.68	326	7.81	8.91	1.86	35.8	18.5	4.73	5.92	227
Dec	22.1	5.71	6.36	312	5.90	282	6.01	7.13	1.04	30.9	18.0	4.75	5.23	159
Annual	23.2	11.3	13.4	222	12.9	200	4.61	7.33	3.06	22.5	21.2	4.67	4.25	1170
Max.	363	202	244	4436	217	3887	83.0	181	127	427	174	6.48	62.4	
Min.	2.01	<1	<1	2.16	<1	2.14	<0.3	<0.2	<0.2	<0.4	0.331	3.76	0.509	

Wet deposition amount

2013	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	2.19	1.08	1.68	19.7	0.715	18.4	0.407	0.495	0.106	2.12	2.61
Feb	1.95	1.14	0.934	14.5	0.861	13.3	0.295	0.449	0.160	1.58	1.76
Mar	3.43	1.95	2.10	27.0	2.01	24.5	0.565	1.24	0.720	2.80	1.68
Apr	2.55	1.59	2.63	18.0	2.34	15.9	0.362	1.52	1.18	1.91	2.15
May	0.979	0.736	0.750	4.49	0.751	4.03	0.0919	0.396	0.308	0.493	0.994
June	0.624	0.589	0.530	0.651	1.02	0.576	0.0398	0.107	0.0948	0.0935	0.776
July	0.608	0.580	0.594	0.523	0.976	0.454	0.0241	0.0917	0.0819	0.0658	0.845
Aug	2.66	2.16	2.09	8.74	3.32	8.20	0.232	0.371	0.194	0.946	3.72
Sept	1.09	0.707	0.718	7.22	0.614	6.54	0.151	0.224	0.0848	0.736	1.77
Oct	1.60	0.274	0.580	26.4	0.260	23.5	0.502	0.526	0.0603	2.56	1.44
Nov	5.95	1.49	2.11	83.4	1.29	74.1	1.77	2.02	0.422	8.12	4.20
Dec	3.52	0.910	1.01	49.7	0.939	45.0	0.958	1.13	0.166	4.92	2.86
Annual	27.1	13.2	15.7	260	15.1	234	5.40	8.58	3.58	26.3	24.8

Data completeness

2013	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	99.1	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
Feb	96.8	96.8	96.8	96.8	96.8	96.8	96.8	96.8	96.8	96.8	96.8	96.8	96.8	100
Mar	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
Apr	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
May	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
June	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	100
July	97.9	97.9	97.9	97.9	97.9	97.9	97.9	97.9	97.9	97.9	97.9	97.9	97.9	100
Aug	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6	100
Sept	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
Oct	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
Nov	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
Dec	95.5	95.5	95.5	95.5	95.5	95.5	95.5	95.5	95.5	95.5	95.5	95.5	95.5	100
Annual	**98.8**	**98.8**	**98.8**	**98.8**	**98.8**	**98.8**	**98.8**	**98.8**	**98.8**	**98.8**	**98.8**	**98.8**	**98.8**	**100**

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

[0.00] for deposition: The deposition was 0 mmol/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 cell for averages and deposition: Rejected monthly (annual) value by the criteria of EANET (%PCL<80% or %TP<80%)

Table 3.22 Monthly results **Site: Ochiishi** **Country: Japan**

Precipitation amount-weighted average concentration/ Precipitation amount

2013	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	123	6.66	10.6	2229	8.79	1926	41.0	48.5	6.87	217	10.5	4.98	30.4	6.17
Feb	61.0	17.3	28.7	857	17.8	724	17.0	22.6	6.91	81.1	26.9	4.57	15.2	6.37
Mar	65.5	38.5	43.8	513	42.2	448	10.5	26.2	16.5	52.7	16.2	4.79	9.02	19.4
Apr	114	7.98	11.3	2020	20.4	1754	38.5	45.4	7.51	203	5.96	5.23	27.2	117
May	23.7	18.6	18.3	98.0	19.2	84.3	2.35	6.39	4.57	10.2	22.8	4.64	2.80	96.8
June	13.5	12.4	14.0	25.0	14.8	19.1	0.821	2.03	1.62	2.35	18.1	4.74	1.37	27.1
July	7.88	5.88	5.78	38.5	4.62	33.2	0.802	1.38	0.658	3.23	8.63	5.06	0.988	62.9
Aug	16.0	12.4	11.6	70.7	13.1	59.2	1.60	2.18	0.900	6.56	14.4	4.84	1.91	84.1
Sept	8.91	3.68	5.68	101	4.89	86.8	2.15	2.46	0.585	9.77	7.40	5.13	1.83	252
Oct	29.0	2.21	3.46	514	3.67	448	9.62	11.0	1.27	50.5	4.36	5.36	7.07	293
Nov	30.6	8.66	14.1	426	9.50	364	8.89	10.4	2.54	45.7	13.8	4.86	7.14	56.5
Dec	58.0	10.2	16.9	928	14.8	794	17.4	19.8	2.66	90.1	17.2	4.76	13.1	39.0
Annual	32.5	7.18	8.83	486	9.68	421	9.35	11.5	2.42	48.2	9.38	5.03	7.10	1059
Max.	256	118	156	4881	156	4217	92.0	99.9	64.1	490	79.8	6.02	65.2	
Min.	3.25	<1	1.01	7.93	<1	5.02	<0.3	0.571	<0.2	<0.4	0.953	4.10	0.667	

Wet deposition amount

2013	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	0.757	0.0411	0.0657	13.8	0.0542	11.9	0.253	0.299	0.0424	1.34	0.0648
Feb	0.388	0.110	0.183	5.46	0.113	4.61	0.108	0.144	0.0440	0.516	0.172
Mar	1.27	0.744	0.847	9.94	0.817	8.68	0.203	0.508	0.320	1.02	0.313
Apr	13.3	0.931	1.32	236	2.37	205	4.49	5.30	0.876	23.6	0.695
May	2.29	1.80	1.77	9.48	1.86	8.16	0.227	0.619	0.442	0.990	2.21
June	0.367	0.336	0.379	0.677	0.402	0.519	0.0223	0.0552	0.0439	0.0637	0.491
July	0.496	0.370	0.364	2.42	0.290	2.09	0.0504	0.0865	0.0414	0.203	0.543
Aug	1.35	1.05	0.979	5.94	1.11	4.97	0.135	0.183	0.0757	0.552	1.21
Sept	2.24	0.925	1.43	25.5	1.23	21.8	0.541	0.619	0.147	2.46	1.86
Oct	8.50	0.648	1.01	150	1.07	131	2.82	3.21	0.372	14.8	1.28
Nov	1.73	0.489	0.797	24.1	0.537	20.6	0.502	0.588	0.144	2.58	0.779
Dec	2.26	0.397	0.658	36.2	0.576	30.9	0.676	0.772	0.104	3.51	0.672
Annual	34.4	7.60	9.36	514	10.3	446	9.91	12.2	2.57	51.0	9.94

Data completeness

2013	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	61.9	61.9	61.9	61.9	61.9	61.9	61.9	61.9	61.9	61.9	61.9	61.9	61.9	100
Feb	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
Mar	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
Apr	97.3	97.3	97.3	97.3	97.3	97.3	97.3	97.3	97.3	97.3	97.3	97.3	97.3	100
May	99.0	99.0	99.0	99.0	99.0	99.0	99.0	99.0	99.0	99.0	97.7	97.7	97.7	100
June	88.5	88.5	88.5	88.5	88.5	88.5	88.5	88.5	88.5	88.5	84.8	84.8	84.8	100
July	95.4	95.4	95.4	95.4	95.4	95.4	95.4	95.4	95.4	95.4	90.7	90.7	90.7	100
Aug	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	97.5	97.5	97.5	100
Sept	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.5	99.5	99.5	100
Oct	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	98.9	98.9	98.9	100
Nov	28.3	28.3	28.3	28.3	28.3	28.3	28.3	28.3	28.3	28.3	27.4	27.4	27.4	100
Dec	94.9	94.9	94.9	94.9	94.9	94.9	94.9	94.9	94.9	94.9	92.3	92.3	92.3	100
Annual	**93.7**	**93.7**	**93.7**	**93.7**	**93.7**	**93.7**	**93.7**	**93.7**	**93.7**	**93.7**	**92.8**	**92.8**	**92.8**	**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 cell for averages and deposition: Rejected monthly (annual) value by the criteria of EANET (%PCL<80% or %TP<80%)

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

Precipitation amount-weighted average concentration/ Precipitation amount

2013	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	142	44.9	65.5	1870	26.5	1613	36.5	45.8	11.0	188	40.2	4.40	27.2	18.5
Feb	156	44.8	60.3	2075	30.8	1837	41.3	54.6	15.0	215	25.5	4.59	26.7	26.5
Mar	53.2	33.5	53.2	351	34.7	327	9.12	35.9	28.8	39.8	9.44	5.03	6.61	77.0
Apr	74.3	56.2	78.4	331	68.3	300	8.85	51.9	45.4	37.7	24.0	4.62	7.97	79.1
May	40.2	32.3	57.1	147	47.2	130	4.37	13.8	11.0	17.2	34.2	4.47	4.12	48.2
June	43.3	41.5	58.3	32.3	68.5	29.1	1.85	9.84	9.21	5.79	39.1	4.41	3.35	9.12
July	19.6	16.2	24.7	59.6	23.5	55.6	1.66	2.63	1.42	6.48	25.1	4.60	2.24	118
Aug	5.40	3.35	4.63	37.9	1.95	34.0	0.820	1.14	0.403	3.63	6.38	5.19	0.809	229
Sept	11.5	5.87	6.14	105	4.75	93.1	1.95	2.38	0.439	10.3	10.2	4.99	2.06	160
Oct	14.2	5.32	6.66	166	5.71	147	3.47	4.24	1.08	16.8	9.37	5.03	2.86	198
Nov	41.4	15.5	20.4	485	14.5	430	9.47	11.1	1.78	50.9	27.3	4.56	7.79	78.7
Dec	64.3	20.9	28.8	836	16.5	725	15.7	22.6	7.34	73.3	31.0	4.51	6.19	28.6
Annual	33.1	17.6	25.2	289	19.1	257	6.21	14.1	8.53	30.0	16.0	4.80	4.76	1070
Max.	1308	649	2026	18870	1071	16555	372	786	550	1923	129	7.02	79.0	
Min.	1.70	<1	<1	2.90	<1	1.90	<0.3	0.300	<0.2	<0.4	0.0962	3.89	0.320	

Wet deposition amount

2013	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	2.63	0.830	1.21	34.6	0.491	29.8	0.675	0.848	0.203	3.49	0.743
Feb	4.12	1.19	1.60	55.0	0.815	48.7	1.09	1.45	0.396	5.70	0.675
Mar	4.10	2.58	4.09	27.0	2.67	25.2	0.702	2.76	2.22	3.06	0.727
Apr	5.88	4.45	6.20	26.2	5.40	23.7	0.700	4.10	3.59	2.98	1.90
May	1.94	1.56	2.76	7.10	2.28	6.25	0.211	0.664	0.529	0.828	1.65
June	0.395	0.379	0.532	0.294	0.625	0.266	0.0169	0.0898	0.0841	0.0528	0.357
July	2.30	1.91	2.90	7.01	2.77	6.54	0.195	0.309	0.167	0.762	2.95
Aug	1.24	0.768	1.06	8.68	0.447	7.78	0.188	0.261	0.0924	0.833	1.46
Sept	1.83	0.937	0.980	16.8	0.759	14.9	0.312	0.380	0.0702	1.64	1.63
Oct	2.81	1.06	1.32	32.9	1.13	29.1	0.689	0.841	0.214	3.33	1.86
Nov	3.26	1.22	1.60	38.1	1.14	33.8	0.745	0.870	0.140	4.00	2.15
Dec	1.84	0.598	0.824	23.9	0.471	20.8	0.448	0.647	0.210	2.10	0.886
Annual	35.4	18.9	27.0	309	20.4	275	6.65	15.0	9.14	32.1	17.1

Data completeness

2013	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	78.4	78.4	78.4	78.4	78.4	78.4	78.4	78.4	78.4	78.4	78.4	78.4	78.4	100
Feb	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	86.8	86.8	86.8	100
Mar	100	100	100	100	100	100	100	100	100	100	99.4	99.4	99.4	100
Apr	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.3	99.3	99.3	100
May	99.0	99.0	99.0	99.0	99.0	99.0	99.0	99.0	99.0	99.0	91.2	91.2	91.2	100
June	100	100	100	100	100	100	100	100	100	100	87.7	87.7	87.7	100
July	50.6	50.6	50.6	50.6	50.6	50.6	50.6	50.6	50.6	50.6	49.8	49.8	49.8	100
Aug	55.9	55.9	55.9	55.9	55.9	55.9	55.9	55.9	55.9	55.9	55.6	55.6	55.6	100
Sept	100	100	100	100	100	100	100	100	100	100	99.2	99.2	99.2	100
Oct	100	100	100	100	100	100	100	100	100	100	99.1	99.1	99.1	100
Nov	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	96.3	96.3	96.3	100
Dec	100	100	100	100	100	100	100	100	100	100	90.8	90.8	90.8	100
Annual	**84.6**	**84.6**	**84.6**	**84.6**	**84.6**	**84.6**	**84.6**	**84.6**	**84.6**	**84.6**	**82.9**	**82.9**	**82.9**	**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 cell for averages and deposition: Rejected monthly (annual) value by the criteria of EANET (%PCL<80% or %TP<80%)

Table 3.24 Monthly results **Site: Sado-seki** **Country: Japan**

Precipitation amount-weighted average concentration/ Precipitation amount

2013	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	173	65.5	51.8	1994	39.7	1795	44.0	41.9	3.61	204	55.1	4.26	28.7	34.8
Feb	71.9	30.7	35.3	764	26.5	684	18.0	29.9	15.8	75.8	27.6	4.56	12.4	36.8
Mar	53.1	36.0	38.6	308	37.7	282	9.10	25.3	19.2	35.5	22.3	4.65	6.51	93.1
Apr	58.2	30.1	34.5	499	62.4	486	11.4	26.1	15.6	52.2	19.8	4.70	7.44	103
May	17.5	12.2	22.0	98.4	17.1	87.2	5.19	8.05	6.17	9.82	12.6	4.90	1.72	46.1
June	5.01	3.93	7.45	20.7	11.3	17.8	1.95	1.81	1.43	3.05	2.60	5.59	0.679	35.5
July	13.1	10.8	18.5	46.0	15.6	38.4	1.44	1.67	0.859	4.10	16.6	4.78	1.74	300
Aug	10.4	7.66	11.2	47.9	5.28	45.0	0.992	1.12	0.503	4.04	15.0	4.82	1.59	138
Sept	10.7	2.99	5.35	144	2.08	136	2.69	2.31	<0.2	13.1	7.05	5.15	2.30	280
Oct	20.1	6.23	7.53	245	8.02	237	5.22	4.37	0.629	28.6	10.4	4.98	4.25	211
Nov	65.6	15.5	21.9	909	22.9	833	16.9	19.6	2.65	94.6	30.3	4.52	14.5	170
Dec	66.1	18.3	40.8	861	27.7	795	18.0	21.7	5.02	90.2	37.6	4.42	14.5	129
Annual	33.5	13.9	19.4	355	18.1	328	7.69	10.4	3.83	36.9	18.2	4.74	5.98	1576
Max.	856	238	318	11197	997	13124	224	485	227	1398	164	5.89	148	
Min.	1.88	<1	<1	6.72	<1	5.38	<0.3	<0.2	<0.2	<0.4	1.29	3.79	0.340	

Wet deposition amount

2013	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	6.02	2.28	1.80	69.3	1.38	62.4	1.53	1.46	0.125	7.10	1.92
Feb	2.64	1.13	1.30	28.1	0.974	25.1	0.663	1.10	0.582	2.78	1.01
Mar	4.94	3.36	3.60	28.7	3.51	26.3	0.848	2.36	1.79	3.30	2.08
Apr	6.00	3.10	3.56	51.4	6.43	50.0	1.17	2.68	1.60	5.38	2.04
May	0.805	0.563	1.01	4.53	0.787	4.02	0.239	0.371	0.284	0.452	0.580
June	0.178	0.140	0.264	0.734	0.401	0.632	0.0692	0.0643	0.0506	0.108	0.0922
July	3.92	3.22	5.54	13.8	4.67	11.5	0.432	0.501	0.257	1.23	4.97
Aug	1.43	1.05	1.54	6.59	0.725	6.18	0.136	0.154	0.0692	0.555	2.06
Sept	2.99	0.836	1.50	40.4	0.583	38.0	0.752	0.646	0.0461	3.67	1.97
Oct	4.25	1.32	1.59	51.8	1.70	50.1	1.10	0.924	0.133	6.04	2.20
Nov	11.1	2.63	3.71	154	3.87	141	2.87	3.33	0.449	16.0	5.14
Dec	8.52	2.36	5.25	111	3.56	102	2.32	2.80	0.647	11.6	4.85
Annual	52.7	22.0	30.6	559	28.6	517	12.1	16.4	6.04	58.2	28.7

Data completeness

2013	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	98.4	98.4	98.4	98.4	98.4	98.4	98.4	98.4	98.4	98.4	91.9	91.9	91.9	100
Feb	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	94.7	94.7	94.7	100
Mar	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	98.8	98.8	98.8	100
Apr	100	100	100	100	100	100	100	100	100	100	98.1	98.1	98.1	100
May	98.9	98.9	98.9	98.9	98.9	98.9	98.9	98.9	98.9	98.9	95.7	95.7	95.7	100
June	100	100	100	100	100	100	100	100	100	100	98.6	98.6	98.6	100
July	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
Aug	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Sept	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
Oct	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
Nov	100	100	100	100	100	100	100	100	100	100	98.5	98.5	98.5	100
Dec	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5	97.8	97.8	97.8	100
Annual	**99.8**	**99.8**	**99.8**	**99.8**	**99.8**	**99.8**	**99.8**	**99.8**	**99.8**	**99.8**	**98.8**	**98.8**	**98.8**	**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 cell for averages and deposition: Rejected monthly (annual) value by the criteria of EANET (%PCL<80% or %TP<80%)

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

Precipitation amount-weighted average concentration/ Precipitation amount

2013	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	15.4	15.0	12.7	7.92	14.2	5.41	0.903	4.43	4.31	1.82	17.7	4.75	1.26	100
Feb	12.9	12.4	9.27	9.11	9.24	7.61	0.920	4.71	4.54	2.32	14.8	4.83	1.04	147
Mar	14.8	14.5	10.9	5.07	12.9	4.36	0.996	11.7	11.6	3.10	4.79	5.32	0.835	118
Apr	25.5	25.1	21.6	8.49	28.8	6.68	1.18	12.9	12.8	3.26	16.8	4.77	1.69	169
May	6.27	6.15	8.86	2.44	6.91	1.88	0.433	3.39	3.35	1.46	5.81	5.24	0.523	108
June	6.72	6.65	6.57	1.46	10.1	1.25	0.468	1.28	1.26	0.888	7.96	5.10	0.569	279
July	7.90	7.74	8.29	3.39	9.66	2.65	0.446	1.18	1.12	0.873	10.8	4.97	0.753	479
Aug	5.14	5.04	5.90	1.94	4.06	1.68	0.354	0.962	0.926	0.799	7.62	5.12	0.513	358
Sept	3.40	3.29	4.31	1.75	3.24	1.83	0.408	0.833	0.793	0.747	5.11	5.29	0.359	235
Oct	4.53	4.22	5.65	5.40	4.35	5.05	0.486	1.25	1.14	1.19	6.53	5.19	0.502	235
Nov	9.80	9.35	6.76	8.58	6.93	7.42	0.651	1.57	1.41	1.44	13.6	4.87	0.942	240
Dec	9.55	9.03	8.90	11.3	6.54	8.76	0.650	1.24	1.05	1.54	14.6	4.84	1.00	191
Annual	8.88	8.63	8.32	4.89	8.94	4.07	0.581	2.77	2.69	1.37	10.0	5.00	0.764	2658
Max.	69.6	68.9	144	104	145	78.0	6.93	59.0	58.5	15.4	66.1	6.06	4.96	
Min.	<1	<1	1.70	<1	<1	<1	<0.3	0.500	0.437	0.600	0.871	4.18	0.140	

Wet deposition amount

2013	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	1.54	1.51	1.27	0.793	1.42	0.542	0.0905	0.444	0.432	0.182	1.77
Feb	1.89	1.82	1.36	1.33	1.35	1.12	0.135	0.690	0.666	0.340	2.16
Mar	1.75	1.72	1.29	0.598	1.52	0.514	0.117	1.38	1.37	0.366	0.566
Apr	4.31	4.24	3.64	1.43	4.86	1.13	0.200	2.18	2.16	0.551	2.85
May	0.675	0.663	0.954	0.263	0.744	0.203	0.0467	0.365	0.361	0.157	0.626
June	1.88	1.86	1.83	0.409	2.82	0.348	0.130	0.358	0.351	0.248	2.22
July	3.78	3.71	3.97	1.62	4.63	1.27	0.214	0.564	0.537	0.418	5.18
Aug	1.84	1.80	2.11	0.693	1.45	0.599	0.127	0.344	0.331	0.286	2.72
Sept	0.801	0.775	1.01	0.411	0.762	0.431	0.0960	0.196	0.187	0.176	1.20
Oct	1.06	0.991	1.33	1.27	1.02	1.18	0.114	0.293	0.267	0.279	1.53
Nov	2.35	2.25	1.62	2.06	1.66	1.78	0.156	0.377	0.338	0.347	3.28
Dec	1.83	1.72	1.70	2.16	1.25	1.67	0.124	0.237	0.201	0.294	2.79
Annual	23.6	22.9	22.1	13.0	23.8	10.8	1.54	7.37	7.14	3.63	26.7

Data completeness

2013	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	45.9	45.9	45.9	45.9	45.9	45.9	45.9	45.9	45.9	45.9	45.4	45.4	45.4	100
Feb	96.2	96.2	96.2	96.2	96.2	96.2	96.2	96.2	96.2	96.2	93.5	93.5	93.5	100
Mar	74.6	74.6	74.6	74.6	74.6	74.6	74.6	74.6	74.6	74.6	74.6	74.6	74.6	100
Apr	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	96.4	96.4	96.4	100
May	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
June	93.6	93.6	93.6	93.6	93.6	93.6	93.6	93.6	93.6	93.6	91.3	91.3	91.3	100
July	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
Aug	67.3	67.3	67.3	67.3	67.3	67.3	67.3	67.3	67.3	67.3	66.2	66.2	66.2	87.1
Sept	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.0	99.0	99.0	100
Oct	98.9	98.9	98.9	98.9	98.9	98.9	98.9	98.9	98.9	98.9	98.0	98.0	98.0	100
Nov	91.0	91.0	91.0	91.0	91.0	91.0	91.0	91.0	91.0	91.0	91.0	91.0	91.0	100
Dec	84.6	84.6	84.6	84.6	84.6	84.6	84.6	84.6	84.6	84.6	84.0	84.0	84.0	100
Annual	**89.4**	**89.4**	**89.4**	**89.4**	**89.4**	**89.4**	**89.4**	**89.4**	**89.4**	**89.4**	**88.4**	**88.4**	**88.4**	**98.9**

[--] 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 cell for averages and deposition: Rejected monthly (annual) value by the criteria of EANET (%PCL<80% or %TP<80%)

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

Precipitation amount-weighted average concentration/ Precipitation amount

2013	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	10.8	16.2	39.0	10.1	30.6	0.857	2.06	1.40	3.70	23.4	4.63	1.82	171
Feb	22.3	20.3	28.4	43.2	21.0	33.3	1.67	6.53	5.81	4.70	33.4	4.48	2.62	149
Mar	58.4	53.7	44.5	85.9	53.8	77.9	4.45	43.9	42.2	16.8	10.2	4.99	3.83	81.0
Apr	10.4	9.72	10.5	13.5	13.0	10.7	0.848	2.05	1.82	1.69	12.0	4.92	1.06	237
May	9.11	8.47	12.3	13.3	8.86	10.7	0.447	1.69	1.46	1.30	15.8	4.80	1.13	204
June	14.7	14.5	18.1	6.25	22.4	2.71	0.362	1.46	1.40	<0.4	21.4	4.67	1.50	194
July	15.6	15.2	19.4	9.28	19.6	6.25	<0.3	0.689	0.555	<0.4	27.4	4.56	1.77	364
Aug	9.11	9.01	11.9	3.90	11.2	1.61	<0.3	0.380	0.345	<0.4	16.2	4.79	1.08	378
Sept	4.06	3.70	6.04	8.57	5.33	5.90	<0.3	<0.2	<0.2	0.681	7.50	5.12	0.603	379
Oct	5.44	4.55	7.34	18.4	6.26	14.8	<0.3	0.794	0.481	1.70	9.49	5.02	0.803	322
Nov	19.4	18.1	27.1	28.1	18.2	22.7	0.892	2.85	2.36	2.16	37.0	4.43	2.46	105
Dec	12.4	9.32	14.7	63.8	6.49	50.9	1.39	3.45	2.35	7.32	21.0	4.68	2.00	143
Annual	12.3	11.4	14.8	19.5	13.4	15.1	0.589	2.74	2.43	2.09	17.9	4.75	1.42	2724
Max.	138	134	233	114	192	93.5	29.1	87.1	85.8	25.0	87.1	6.36	8.27	
Min.	<1	<1	<1	1.20	<1	<1	<0.3	<0.2	<0.2	<0.4	0.437	4.06	0.190	

Wet deposition amount

2013	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	2.17	1.85	2.77	6.67	1.73	5.24	0.147	0.353	0.240	0.633	4.00
Feb	3.31	3.01	4.22	6.41	3.12	4.95	0.248	0.970	0.863	0.697	4.96
Mar	4.73	4.35	3.60	6.96	4.36	6.31	0.361	3.55	3.42	1.36	0.827
Apr	2.46	2.30	2.48	3.20	3.08	2.53	0.201	0.485	0.430	0.401	2.85
May	1.85	1.72	2.50	2.71	1.80	2.17	0.0910	0.345	0.298	0.264	3.21
June	2.84	2.81	3.50	1.21	4.33	0.525	0.0700	0.283	0.271	0.0490	4.13
July	5.68	5.54	7.06	3.37	7.11	2.27	0.0983	0.250	0.202	0.145	9.96
Aug	3.44	3.41	4.49	1.47	4.22	0.609	0.0144	0.144	0.130	0.0794	6.13
Sept	1.54	1.40	2.29	3.25	2.02	2.24	<0.01	0.0256	0.0234	0.258	2.84
Oct	1.75	1.46	2.36	5.92	2.02	4.77	0.0770	0.255	0.155	0.548	3.05
Nov	2.04	1.90	2.84	2.95	1.91	2.39	0.0937	0.299	0.248	0.227	3.89
Dec	1.77	1.33	2.10	9.10	0.924	7.26	0.198	0.491	0.334	1.04	2.99
Annual	33.6	31.1	40.2	53.2	36.6	41.3	1.60	7.45	6.61	5.70	48.8

Data completeness

2013	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	98.8	98.8	98.8	100
Apr	100	100	100	100	100	100	100	100	100	100	100	100	100	100
May	100	100	100	100	100	100	100	100	100	100	100	100	100	100
June	100	100	100	100	100	100	100	100	100	100	100	100	100	100
July	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Aug	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Sept	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Oct	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Nov	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	99.6	99.6	99.6	100
Annual	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**99.9**	**99.9**	**99.9**	**100**

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

[0.00] for deposition: The deposition was 0 mmol/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 cell for averages and deposition: Rejected monthly (annual) value by the criteria of EANET (%PCL<80% or %TP<80%)

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

Precipitation amount-weighted average concentration/ Precipitation amount

2013	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	48.1	14.7	16.4	637	9.96	555	12.5	15.0	3.02	63.0	26.1	4.58	9.79	69.7
Feb	48.3	28.5	35.4	366	32.5	327	9.34	17.5	10.5	38.3	33.0	4.48	7.54	55.0
Mar	60.9	31.8	29.8	551	31.4	483	13.7	24.3	13.9	55.2	30.3	4.52	9.57	56.2
Apr	52.3	21.8	25.0	582	25.5	506	13.0	19.0	8.09	60.5	23.7	4.63	9.49	101
May	12.6	10.3	15.9	49.1	9.33	39.3	1.79	3.63	2.78	5.53	18.7	4.73	1.79	47.7
June	26.9	23.4	25.8	75.0	38.2	59.0	4.50	2.93	1.65	7.12	34.5	4.46	3.25	120
July	18.2	11.8	17.5	125	17.0	106	4.19	4.43	2.14	12.7	18.2	4.74	2.87	120
Aug	14.6	7.11	11.1	144	5.53	125	3.96	3.79	1.09	14.3	14.7	4.83	2.93	127
Sept	4.77	3.03	7.29	34.9	3.08	28.8	1.06	1.14	0.522	3.38	10.1	4.99	1.04	233
Oct	45.7	7.12	13.7	726	7.94	639	16.6	17.7	3.85	68.9	13.9	4.86	10.3	194
Nov	94.6	27.5	36.9	1267	21.2	1114	25.9	31.3	7.21	127	45.7	4.34	20.3	156
Dec	158	37.1	73.5	2310	33.3	2010	45.9	72.0	28.6	213	44.6	4.35	34.4	115
Annual	47.0	16.5	24.2	579	17.5	505	12.8	17.0	6.12	56.1	24.6	4.61	9.41	1395
Max.	1130	372	384	19653	285	16894	347	438	362	1862	191	6.51	244	
Min.	1.50	<1	1.12	3.02	<1	<1	0.424	0.417	<0.2	0.563	0.309	3.72	0.426	

Wet deposition amount

2013	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	3.36	1.02	1.14	44.4	0.695	38.7	0.869	1.05	0.211	4.40	1.82
Feb	2.65	1.57	1.95	20.1	1.79	18.0	0.514	0.965	0.576	2.11	1.81
Mar	3.42	1.79	1.67	31.0	1.77	27.2	0.773	1.37	0.782	3.11	1.71
Apr	5.27	2.19	2.52	58.7	2.58	51.1	1.31	1.92	0.815	6.10	2.39
May	0.603	0.490	0.760	2.34	0.445	1.88	0.0852	0.173	0.133	0.264	0.891
June	3.23	2.80	3.10	9.00	4.59	7.08	0.540	0.351	0.198	0.854	4.14
July	2.19	1.42	2.11	15.0	2.05	12.8	0.505	0.534	0.258	1.54	2.19
Aug	1.85	0.899	1.40	18.2	0.700	15.8	0.501	0.480	0.138	1.81	1.86
Sept	1.11	0.707	1.70	8.13	0.717	6.71	0.248	0.267	0.122	0.787	2.36
Oct	8.86	1.38	2.66	141	1.54	124	3.22	3.43	0.747	13.4	2.69
Nov	14.8	4.28	5.75	198	3.31	174	4.04	4.88	1.13	19.9	7.13
Dec	18.2	4.28	8.47	266	3.84	232	5.29	8.30	3.29	24.6	5.14
Annual	65.6	23.1	33.7	807	24.4	705	17.8	23.8	8.53	78.3	34.3

Data completeness

2013	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	52.1	52.1	52.1	52.1	52.1	52.1	52.1	52.1	52.1	52.1	52.1	52.1	50.5	100
Feb	81.8	81.8	81.8	81.8	81.8	81.8	81.8	81.8	81.8	81.8	81.8	81.8	81.8	89.3
Mar	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	97.8	100
Apr	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.2	99.2	98.8	100
May	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6	100
June	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6	100
July	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.0	93.5
Aug	96.8	96.8	96.8	96.8	96.8	96.8	96.8	96.8	96.8	96.8	96.8	96.8	96.8	100
Sept	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
Oct	84.5	84.5	84.5	84.5	84.5	84.5	84.5	84.5	84.5	84.5	84.5	84.5	84.5	93.5
Nov	98.4	98.4	98.4	98.4	98.4	98.4	98.4	98.4	98.4	98.4	98.4	98.4	98.4	100
Dec	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
Annual	**93.8**	**93.8**	**93.8**	**93.8**	**93.8**	**93.8**	**93.8**	**93.8**	**93.8**	**93.8**	**93.8**	**93.8**	**93.7**	**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 cell for averages and deposition: Rejected monthly (annual) value by the criteria of EANET (%PCL<80% or %TP<80%)

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

Precipitation amount-weighted average concentration/ Precipitation amount

2013	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	31.7	22.7	29.6	170	19.3	149	4.49	8.75	5.53	18.0	41.1	4.39	4.75	90.5
Feb	29.9	26.8	25.5	59.8	22.7	50.3	2.47	6.06	4.97	6.75	45.4	4.34	3.35	109
Mar	32.1	27.2	31.4	91.5	32.2	81.1	3.74	16.2	14.5	11.0	20.2	4.69	3.10	43.5
Apr	47.4	40.1	47.9	142	44.0	122	4.37	11.2	8.53	15.7	59.0	4.23	5.74	120
May	13.5	13.0	13.6	12.8	10.3	8.41	0.956	2.37	2.19	1.78	22.9	4.64	1.50	67.2
June	5.12	4.93	5.69	5.41	6.37	3.09	0.445	0.522	0.455	0.768	8.44	5.07	0.583	330
July	7.72	7.25	9.84	9.80	12.3	7.80	1.08	0.977	0.809	1.23	13.4	4.87	0.970	247
Aug	6.02	5.63	6.15	9.32	5.77	6.59	0.480	0.844	0.702	1.10	10.5	4.98	0.740	461
Sept	9.07	8.51	7.25	13.8	1.79	9.25	0.604	0.625	0.425	1.51	20.1	4.70	1.20	151
Oct	15.1	5.83	5.98	176	5.84	154	4.76	4.39	1.07	17.9	12.3	4.91	3.11	208
Nov	40.3	26.8	32.7	261	25.8	224	5.68	9.40	4.57	26.8	47.6	4.32	6.37	98.0
Dec	60.7	35.9	67.0	474	45.1	412	10.1	15.5	6.58	47.7	69.3	4.16	10.8	99.0
Annual	17.3	13.1	16.2	80.8	13.8	69.1	2.33	3.92	2.42	8.50	22.8	4.64	2.48	2024
Max.	289	235	446	1626	417	1465	44.8	204	185	167	208	5.40	26.5	
Min.	1.08	<1	1.40	3.06	<1	<1	<0.3	0.417	0.227	0.623	3.95	3.68	0.268	

Wet deposition amount

2013	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	2.87	2.06	2.68	15.4	1.75	13.5	0.406	0.792	0.500	1.63	3.72
Feb	3.26	2.93	2.78	6.51	2.47	5.48	0.270	0.660	0.542	0.736	4.95
Mar	1.39	1.18	1.37	3.98	1.40	3.53	0.163	0.706	0.629	0.479	0.880
Apr	5.69	4.81	5.75	17.0	5.29	14.7	0.524	1.34	1.02	1.88	7.07
May	0.908	0.874	0.916	0.862	0.693	0.565	0.0642	0.159	0.147	0.119	1.54
June	1.69	1.63	1.88	1.79	2.10	1.02	0.147	0.172	0.150	0.253	2.79
July	1.91	1.79	2.43	2.42	3.04	1.93	0.268	0.241	0.200	0.303	3.30
Aug	2.77	2.59	2.83	4.29	2.66	3.04	0.221	0.389	0.323	0.504	4.84
Sept	1.37	1.29	1.10	2.08	0.270	1.40	0.0912	0.0944	0.0642	0.229	3.04
Oct	3.14	1.21	1.24	36.6	1.21	31.9	0.990	0.912	0.222	3.72	2.55
Nov	3.95	2.63	3.21	25.6	2.53	21.9	0.557	0.921	0.448	2.63	4.66
Dec	6.01	3.55	6.64	46.9	4.47	40.8	1.00	1.53	0.652	4.72	6.86
Annual	35.0	26.5	32.8	164	27.9	140	4.71	7.92	4.90	17.2	46.2

Data completeness

2013	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	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	100
June	100	100	100	100	100	100	100	100	100	100	100	100	100	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	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	**99.9**	**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 cell for averages and deposition: Rejected monthly (annual) value by the criteria of EANET (%PCL<80% or %TP<80%)

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

Precipitation amount-weighted average concentration/ Precipitation amount

2013	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	15.3	14.2	19.7	22.3	15.5	18.2	0.610	3.16	2.76	3.48	20.5	4.69	1.76	92.0
Feb	12.0	11.7	5.85	4.98	7.13	3.51	0.604	1.39	1.31	2.38	21.2	4.67	1.21	203
Mar	23.2	21.3	14.9	37.1	17.4	32.4	1.37	12.8	12.1	5.92	19.5	4.71	1.88	118
Apr	14.8	14.1	11.2	19.6	19.5	10.7	0.574	3.66	3.43	2.59	22.2	4.65	1.42	191
May	7.11	6.62	5.39	12.4	2.85	8.17	<0.3	0.999	0.823	2.04	19.0	4.72	0.894	116
June	8.75	8.69	6.21	3.46	5.03	1.06	<0.3	0.725	0.703	1.20	20.2	4.69	1.01	301
July	10.4	10.1	7.64	6.87	6.86	3.78	<0.3	0.741	0.659	1.33	27.9	4.55	1.19	100
Aug	8.80	8.59	5.43	5.10	7.92	3.48	<0.3	1.08	1.00	1.39	18.5	4.73	1.02	183
Sept	5.09	4.73	2.91	7.40	3.11	5.86	0.362	0.981	0.854	1.69	11.2	4.95	0.672	310
Oct	1.30	<1	1.56	7.30	1.20	5.73	<0.3	0.984	0.860	1.85	4.77	5.32	0.345	611
Nov	19.7	18.4	14.2	26.8	12.4	20.1	0.748	4.01	3.57	3.86	31.5	4.50	2.11	115
Dec	16.6	13.9	19.5	56.8	14.2	44.3	0.986	4.20	3.24	6.15	29.6	4.53	2.38	145
Annual	9.07	8.47	7.03	13.4	7.16	9.90	0.387	2.16	1.95	2.40	16.7	4.78	1.06	2485
Max.	193	190	404	413	311	402	17.2	158	150	57.1	263	6.19	17.2	
Min.	<1	<1	<1	<1	<1	<1	<0.3	0.400	0.400	0.950	0.646	3.58	0.164	

Wet deposition amount

2013	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	1.41	1.31	1.81	2.05	1.43	1.68	0.0561	0.291	0.254	0.320	1.89
Feb	2.43	2.39	1.19	1.01	1.45	0.713	0.123	0.282	0.267	0.484	4.30
Mar	2.75	2.52	1.76	4.39	2.06	3.83	0.162	1.52	1.43	0.701	2.31
Apr	2.82	2.70	2.14	3.75	3.72	2.05	0.110	0.700	0.655	0.494	4.23
May	0.825	0.768	0.626	1.44	0.330	0.947	<0.01	0.116	0.0954	0.236	2.20
June	2.63	2.61	1.87	1.04	1.51	0.319	<0.01	0.218	0.211	0.360	6.08
July	1.04	1.02	0.768	0.691	0.689	0.380	<0.01	0.0744	0.0662	0.133	2.80
Aug	1.61	1.57	0.993	0.932	1.45	0.636	0.0434	0.197	0.184	0.255	3.38
Sept	1.57	1.46	0.901	2.29	0.962	1.81	0.112	0.304	0.264	0.524	3.45
Oct	0.795	0.585	0.955	4.46	0.734	3.50	0.115	0.601	0.526	1.13	2.91
Nov	2.26	2.12	1.63	3.08	1.43	2.31	0.0861	0.461	0.411	0.445	3.62
Dec	2.41	2.02	2.83	8.24	2.05	6.43	0.143	0.609	0.470	0.893	4.30
Annual	22.5	21.1	17.5	33.4	17.8	24.6	0.962	5.37	4.84	5.98	41.4

Data completeness

2013	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	99.3	99.3	99.3	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	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	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	100	100	100	100	100	100	100	100	100	100	99.9	99.9	99.9	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	100	100	100	100
Nov	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.3	98.3	98.3	100
Dec	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Annual	**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**

[--] 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 cell for averages and deposition: Rejected monthly (annual) value by the criteria of EANET (%PCL<80% or %TP<80%)

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

Precipitation amount-weighted average concentration/ Precipitation amount

2013	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	19.7	9.87	7.66	190	7.54	163	3.74	4.65	1.13	18.4	15.4	4.81	3.47	147
Feb	30.7	22.9	13.4	151	16.3	130	3.65	4.52	1.72	14.9	36.6	4.44	4.07	99.7
Mar	11.3	7.98	11.2	61.2	17.5	55.3	2.68	2.07	0.870	6.38	11.3	4.95	1.69	203
Apr	15.5	12.2	13.6	63.1	20.6	54.7	2.78	5.17	3.99	6.80	11.1	4.95	1.83	193
May	5.02	3.65	6.20	26.9	8.86	22.9	0.831	2.07	1.58	2.84	4.07	5.39	0.725	214
June	4.61	2.59	5.81	41.8	3.01	33.5	0.706	1.58	0.854	3.76	4.08	5.39	0.867	89.3
July	7.93	5.01	9.41	58.3	6.12	48.5	1.08	5.21	4.16	5.95	2.63	5.58	1.24	12.7
Aug	6.04	1.89	2.96	82.2	2.16	69.0	1.71	2.76	1.27	8.22	2.04	5.69	1.30	57.0
Sept	14.1	5.58	6.88	165	2.78	142	3.26	4.01	0.942	16.5	7.56	5.12	2.74	67.5
Oct	86.5	7.76	7.08	1513	9.55	1317	29.1	31.8	3.40	147	5.61	5.25	20.5	263
Nov	17.9	7.66	5.83	204	4.67	170	3.80	4.91	1.26	20.0	11.8	4.93	3.27	163
Dec	28.5	12.2	14.1	319	5.47	270	5.73	9.11	3.28	30.4	15.2	4.82	5.32	103
Annual	22.2	8.58	8.58	263	9.94	227	5.48	6.89	1.99	25.7	10.9	4.96	4.24	1612
Max.	595	144	156	10587	142	12200	188	247	66.5	1007	240	6.55	95.8	
Min.	1.55	<1	<1	5.33	<1	2.35	<0.3	0.474	<0.2	0.617	0.283	3.62	0.236	

Wet deposition amount

2013	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	2.89	1.45	1.12	27.9	1.11	23.9	0.548	0.682	0.166	2.70	2.26
Feb	3.06	2.29	1.33	15.0	1.62	12.9	0.364	0.451	0.172	1.48	3.64
Mar	2.29	1.62	2.27	12.4	3.54	11.2	0.544	0.418	0.176	1.29	2.29
Apr	3.01	2.37	2.63	12.2	3.98	10.6	0.538	1.00	0.772	1.31	2.15
May	1.07	0.779	1.32	5.75	1.89	4.88	0.178	0.442	0.337	0.606	0.870
June	0.412	0.231	0.519	3.73	0.269	3.00	0.0630	0.141	0.0763	0.336	0.364
July	0.101	0.0636	0.119	0.740	0.0776	0.616	0.0138	0.0661	0.0528	0.0755	0.0333
Aug	0.344	0.107	0.169	4.68	0.123	3.93	0.0973	0.157	0.0722	0.469	0.116
Sept	0.954	0.377	0.464	11.1	0.188	9.58	0.220	0.271	0.0636	1.12	0.510
Oct	22.8	2.04	1.86	398	2.51	346	7.65	8.36	0.895	38.7	1.48
Nov	2.92	1.25	0.950	33.2	0.761	27.7	0.620	0.800	0.205	3.26	1.92
Dec	2.94	1.26	1.45	32.9	0.565	27.9	0.591	0.940	0.338	3.13	1.57
Annual	35.8	13.8	13.8	424	16.0	366	8.82	11.1	3.21	41.5	17.6

Data completeness

2013	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	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.5	99.5	99.5	100
Feb	100	100	100	100	100	100	100	100	100	100	99.8	99.8	99.8	100
Mar	43.2	43.2	43.2	43.2	43.2	43.2	43.2	43.2	43.2	43.2	43.2	43.2	43.2	100
Apr	98.2	98.2	98.2	98.2	98.2	98.2	98.2	98.2	98.2	98.2	98.0	98.0	98.0	100
May	98.6	98.6	98.6	98.6	98.6	98.6	98.6	98.6	98.6	98.6	98.4	98.4	98.4	100
June	100	100	100	100	100	100	100	100	100	100	100	100	100	100
July	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Aug	99.1	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
Sept	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	98.6	98.6	98.6	100
Oct	52.7	52.7	52.7	52.7	52.7	52.7	52.7	52.7	52.7	52.7	52.5	52.5	52.5	90.0
Nov	100	100	100	100	100	100	100	100	100	100	98.8	98.8	98.8	100
Dec	52.0	52.0	52.0	52.0	52.0	52.0	52.0	52.0	52.0	52.0	51.5	51.5	51.5	54.8
Annual	**81.6**	**81.6**	**81.6**	**81.6**	**81.6**	**81.6**	**81.6**	**81.6**	**81.6**	**81.6**	**81.3**	**81.3**	**81.3**	**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 cell for averages and deposition: Rejected monthly (annual) value by the criteria of EANET (%PCL<80% or %TP<80%)

Table 3.31 Monthly results **Site: Ogasawara** **Country: Japan**

Precipitation amount-weighted average concentration/ Precipitation amount

2013	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	11.3	7.40	235	6.98	200	4.92	5.44	1.13	23.3	14.2	4.85	4.21	49.1
Feb	16.8	10.9	9.48	112	10.1	97.6	2.30	3.15	1.04	11.7	12.6	4.90	2.47	13.2
Mar	19.5	13.7	8.88	110	15.6	95.5	2.79	5.08	3.01	11.3	7.57	5.12	2.28	11.2
Apr	10.8	7.22	6.87	72.2	11.1	60.0	2.01	2.40	1.11	6.86	6.15	5.21	1.64	215
May	8.12	5.59	3.45	49.1	7.66	42.0	1.32	1.97	1.06	4.76	5.01	5.30	1.18	256
June	4.54	3.54	2.87	19.5	3.66	16.5	0.701	1.10	0.739	2.03	5.89	5.23	0.717	136
July	6.04	4.10	3.84	37.0	2.55	32.2	0.748	1.53	0.836	3.96	8.28	5.08	1.05	15.8
Aug	12.1	9.77	8.09	45.9	6.93	38.7	0.917	1.72	0.882	4.46	16.8	4.78	1.67	40.4
Sept	33.8	1.37	<1	633	1.54	538	13.0	15.4	3.77	65.6	1.27	5.90	9.30	214
Oct	6.20	1.34	1.26	93.2	2.70	80.7	2.39	3.00	1.25	9.91	1.56	5.81	1.57	99.2
Nov	5.58	3.30	3.41	44.5	5.83	37.8	0.966	1.64	0.822	4.71	4.84	5.31	1.03	137
Dec	14.8	8.48	4.98	126	5.34	104	2.33	4.22	1.96	12.4	11.9	4.92	2.47	78.9
Annual	13.5	4.99	3.82	166	6.04	141	3.64	4.60	1.56	17.0	5.65	5.25	2.86	1265
Max.	114	75.4	104	2198	57.3	1869	62.0	47.6	15.1	230	95.5	6.30	31.3	
Min.	1.00	<1	<1	4.80	<1	4.30	<0.3	0.500	<0.2	0.600	0.501	4.02	0.330	

Wet deposition amount

2013	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	1.15	0.554	0.364	11.5	0.343	9.80	0.242	0.267	0.0553	1.14	0.697
Feb	0.221	0.144	0.125	1.47	0.133	1.29	0.0302	0.0415	0.0137	0.154	0.165
Mar	0.218	0.153	0.0992	1.23	0.174	1.07	0.0311	0.0567	0.0336	0.126	0.0846
Apr	2.33	1.55	1.48	15.5	2.40	12.9	0.432	0.517	0.239	1.48	1.32
May	2.08	1.43	0.883	12.6	1.96	10.7	0.338	0.504	0.272	1.22	1.28
June	0.616	0.481	0.389	2.65	0.496	2.24	0.0950	0.149	0.100	0.275	0.799
July	0.0952	0.0646	0.0605	0.584	0.0402	0.508	0.0118	0.0242	0.0132	0.0625	0.131
Aug	0.489	0.394	0.326	1.85	0.280	1.56	0.0370	0.0694	0.0356	0.180	0.678
Sept	7.23	0.292	0.118	135	0.330	115	2.79	3.29	0.806	14.0	0.272
Oct	0.615	0.133	0.125	9.24	0.268	8.00	0.237	0.297	0.124	0.982	0.155
Nov	0.765	0.452	0.468	6.10	0.799	5.18	0.132	0.225	0.113	0.646	0.664
Dec	1.17	0.669	0.393	9.95	0.421	8.24	0.184	0.333	0.155	0.981	0.938
Annual	17.1	6.31	4.83	210	7.64	178	4.60	5.82	1.97	21.5	7.15

Data completeness

2013	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	99.3	99.3	99.3	100
Feb	96.2	96.2	96.2	96.2	96.2	96.2	96.2	96.2	96.2	96.2	93.0	93.0	93.0	100
Mar	80.2	80.2	80.2	80.2	80.2	80.2	80.2	80.2	80.2	80.2	71.8	71.8	71.8	100
Apr	100	100	100	100	100	100	100	100	100	100	100	100	100	100
May	98.4	98.4	98.4	98.4	98.4	98.4	98.4	98.4	98.4	98.4	98.4	98.4	98.4	100
June	91.8	91.8	91.8	91.8	91.8	91.8	91.8	91.8	91.8	91.8	91.5	91.5	91.5	100
July	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
Aug	98.8	98.8	98.8	98.8	98.8	98.8	98.8	98.8	98.8	98.8	97.8	97.8	97.8	100
Sept	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
Oct	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
Nov	100	100	100	100	100	100	100	100	100	100	99.6	99.6	99.6	100
Dec	98.8	98.8	98.8	98.8	98.8	98.8	98.8	98.8	98.8	98.8	97.6	97.6	97.6	100
Annual	**98.4**	**98.4**	**98.4**	**98.4**	**98.4**	**98.4**	**98.4**	**98.4**	**98.4**	**98.4**	**98.0**	**98.0**	**98.0**	**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 cell for averages and deposition: Rejected monthly (annual) value by the criteria of EANET (%PCL<80% or %TP<80%)

Table 3.32 Monthly results **Site: Tokyo** **Country: Japan**

Precipitation amount-weighted average concentration/ Precipitation amount

2013	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	12.2	12.0	12.1	6.16	24.3	4.26	0.460	1.78	1.69	0.655	10.2	4.99	1.06	65.1
Feb	14.1	13.0	28.2	19.7	29.5	18.0	0.730	9.57	9.18	2.14	8.31	5.08	1.47	27.8
Mar	31.3	27.8	36.9	65.3	44.9	58.4	2.70	13.8	12.6	8.25	15.3	4.82	2.81	45.9
Apr	8.28	6.88	7.06	27.7	12.5	23.2	0.648	2.35	1.85	2.84	5.22	5.28	0.967	289
May	36.4	34.1	57.7	48.2	75.2	38.1	1.59	21.0	20.2	6.02	14.7	4.83	3.18	55.7
June	12.0	11.8	20.7	6.13	34.6	4.14	<0.3	3.91	3.82	0.912	8.19	5.09	1.15	158
July	32.3	31.8	54.2	13.4	63.3	8.65	0.625	9.98	9.80	2.08	32.8	4.48	2.99	120
Aug	20.6	20.1	31.2	9.53	31.2	7.70	0.583	5.19	5.02	1.50	25.9	4.59	2.09	98.5
Sept	11.2	7.71	6.93	68.9	14.6	57.6	1.30	2.82	1.58	6.79	5.32	5.27	1.56	226
Oct	3.09	2.52	4.83	11.6	8.51	9.52	<0.3	1.41	1.21	1.35	2.64	5.58	0.505	431
Nov	19.4	11.3	13.6	161	19.2	134	2.77	11.8	8.85	16.1	3.61	5.44	3.01	33.5
Dec	7.70	6.94	10.3	15.7	19.9	12.7	0.351	4.50	4.23	1.91	1.53	5.81	0.806	59.0
Annual	12.2	10.8	16.1	27.7	22.9	22.8	0.711	4.35	3.86	3.04	8.83	5.05	1.33	1609
Max.	163	142	256	1535	193	1277	27.4	96.7	95.1	145	182	6.57	21.6	
Min.	<1	<1	<1	<1	1.00	<1	<0.3	0.500	0.496	<0.4	0.269	3.74	0.180	

Wet deposition amount

2013	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	0.797	0.780	0.791	0.401	1.58	0.277	0.0300	0.116	0.110	0.0426	0.664
Feb	0.391	0.361	0.784	0.547	0.818	0.500	0.0203	0.266	0.255	0.0593	0.231
Mar	1.44	1.28	1.69	3.00	2.06	2.68	0.124	0.636	0.578	0.379	0.702
Apr	2.39	1.99	2.04	8.02	3.61	6.72	0.187	0.680	0.535	0.820	1.51
May	2.03	1.90	3.21	2.69	4.19	2.12	0.0887	1.17	1.13	0.335	0.817
June	1.90	1.86	3.27	0.967	5.45	0.653	0.0446	0.616	0.602	0.144	1.29
July	3.89	3.82	6.52	1.61	7.61	1.04	0.0750	1.20	1.18	0.250	3.94
Aug	2.02	1.98	3.07	0.938	3.07	0.758	0.0574	0.511	0.495	0.148	2.55
Sept	2.52	1.74	1.56	15.5	3.30	13.0	0.293	0.636	0.356	1.53	1.20
Oct	1.33	1.09	2.08	5.00	3.67	4.11	0.121	0.609	0.520	0.581	1.14
Nov	0.651	0.380	0.455	5.38	0.641	4.49	0.0929	0.394	0.296	0.538	0.121
Dec	0.454	0.409	0.609	0.926	1.18	0.747	0.0207	0.265	0.249	0.113	0.0905
Annual	19.7	17.4	25.9	44.5	36.9	36.7	1.14	7.00	6.21	4.89	14.2

Data completeness

2013	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	95.2	95.2	95.2	95.2	95.2	95.2	95.2	95.2	95.2	95.2	95.2	95.2	95.2	100
Feb	97.3	97.3	97.3	97.3	97.3	97.3	97.3	97.3	97.3	97.3	97.3	97.3	97.3	100
Mar	95.6	95.6	95.6	95.6	95.6	95.6	95.6	95.6	95.6	95.6	94.7	94.7	94.7	96.8
Apr	98.6	98.6	98.6	98.6	98.6	98.6	98.6	98.6	98.6	98.6	98.4	98.4	98.4	100
May	93.7	93.7	93.7	93.7	93.7	93.7	93.7	93.7	93.7	93.7	93.7	93.7	93.7	100
June	98.6	98.6	98.6	98.6	98.6	98.6	98.6	98.6	98.6	98.6	97.9	97.9	97.9	100
July	96.4	96.4	96.4	96.4	96.4	96.4	96.4	96.4	96.4	96.4	95.7	95.7	95.7	100
Aug	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Sept	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
Oct	98.9	98.9	98.9	98.9	98.9	98.9	98.9	98.9	98.9	98.9	98.8	98.8	98.8	100
Nov	87.6	87.6	87.6	87.6	87.6	87.6	87.6	87.6	87.6	87.6	86.6	86.6	86.6	100
Dec	93.2	93.2	93.2	93.2	93.2	93.2	93.2	93.2	93.2	93.2	93.2	93.2	93.2	100
Annual	**97.8**	**97.8**	**97.8**	**97.8**	**97.8**	**97.8**	**97.8**	**97.8**	**97.8**	**97.8**	**97.6**	**97.6**	**97.6**	**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 cell for averages and deposition: Rejected monthly (annual) value by the criteria of EANET (%PCL<80% or %TP<80%)

Table 3.33 Monthly results **Site: Petaling Jaya** **Country: Malaysia**

Precipitation amount-weighted average concentration/ Precipitation amount

2013	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	12.3	12.0	36.1	9.31	1.49	5.02	1.42	6.67	6.56	0.795	39.5	4.40	2.51	371
Feb	11.5	10.8	38.2	10.9	8.95	11.3	1.86	7.16	6.91	1.08	35.0	4.46	2.37	274
Mar	32.7	32.4	60.4	9.71	32.8	5.35	1.63	6.90	6.81	0.652	64.4	4.19	4.10	366
Apr	25.6	25.4	31.2	5.34	23.6	2.59	0.987	7.46	7.41	<0.4	43.7	4.36	2.67	445
May	17.1	16.9	23.6	5.61	9.48	3.11	0.661	4.30	4.25	<0.4	40.4	4.39	2.40	345
June	19.4	18.4	47.0	23.2	24.7	15.9	2.21	15.9	15.6	2.51	15.1	4.82	2.02	25.2
July	13.3	13.1	11.8	8.72	10.8	3.87	1.12	5.27	5.18	0.692	20.6	4.69	1.43	145
Aug	12.7	12.5	16.8	7.38	15.4	3.54	0.634	3.30	3.23	0.631	22.0	4.66	1.54	280
Sept	13.4	13.1	19.2	6.99	10.2	4.46	1.11	5.88	5.79	1.04	29.7	4.53	1.90	159
Oct	17.4	17.2	28.9	8.42	15.8	4.20	1.49	6.62	6.53	1.38	31.8	4.50	2.06	204
Nov	19.6	19.4	36.6	7.22	17.8	2.41	0.893	6.23	6.18	0.610	42.7	4.37	2.68	456
Dec	12.0	11.8	36.7	6.25	19.3	3.32	0.988	5.95	5.88	0.726	27.9	4.56	1.89	498
Annual	17.8	17.5	33.5	7.66	16.2	4.29	1.14	6.13	6.04	0.686	38.0	4.42	2.43	3570
Max.	39.0	38.7	103	29.4	88.4	49.9	6.81	24.7	24.4	3.96	91.2	5.13	5.87	
Min.	5.00	4.80	<1	2.08	<1	1.21	<0.3	<0.2	<0.2	<0.4	7.41	4.04	0.570	

Wet deposition amount

2013	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	4.57	4.46	13.4	3.46	0.553	1.86	0.528	2.48	2.44	0.295	14.7
Feb	3.15	2.96	10.5	3.00	2.45	3.10	0.511	1.96	1.90	0.296	9.61
Mar	12.0	11.9	22.1	3.56	12.0	1.96	0.597	2.53	2.50	0.239	23.6
Apr	11.4	11.3	13.9	2.37	10.5	1.15	0.439	3.32	3.29	0.143	19.4
May	5.89	5.83	8.15	1.94	3.27	1.07	0.228	1.48	1.47	0.0625	13.9
June	0.488	0.463	1.18	0.585	0.623	0.401	0.0557	0.401	0.393	0.0633	0.381
July	1.93	1.89	1.71	1.26	1.56	0.561	0.162	0.764	0.751	0.100	2.98
Aug	3.57	3.51	4.71	2.07	4.31	0.994	0.178	0.925	0.906	0.177	6.16
Sept	2.13	2.09	3.05	1.11	1.62	0.708	0.177	0.934	0.919	0.165	4.71
Oct	3.55	3.50	5.89	1.72	3.22	0.857	0.304	1.35	1.33	0.281	6.48
Nov	8.93	8.87	16.7	3.30	8.11	1.10	0.407	2.84	2.82	0.278	19.5
Dec	6.00	5.90	18.3	3.12	9.61	1.66	0.492	2.96	2.93	0.362	13.9
Annual	63.6	62.6	119	27.3	57.8	15.3	4.07	21.9	21.6	2.45	136

Data completeness

2013	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	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
June	64.3	64.3	64.3	64.3	64.3	64.3	64.3	64.3	64.3	64.3	64.3	64.3	64.3	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 cell for averages and deposition: Rejected monthly (annual) value by the criteria of EANET (%PCL<80% or %TP<80%)

Table 3.34 Monthly results **Site: Tanah Rata** **Country: Malaysia**

Precipitation amount-weighted average concentration/ Precipitation amount

2013	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	3.48	3.37	4.85	2.64	<1	1.71	0.633	1.73	1.70	<0.4	9.36	5.03	0.599	242
Feb	1.49	1.28	2.07	4.20	<1	3.50	1.85	2.83	2.76	<0.4	6.03	5.22	0.409	63.0
Mar	10.1	9.86	10.9	3.93	2.45	4.68	2.69	7.11	7.01	0.463	18.5	4.73	1.31	127
Apr	5.83	5.64	2.16	2.51	6.20	3.12	5.63	3.61	3.54	0.680	10.5	4.98	0.816	450
May	2.58	2.43	3.36	2.64	1.61	2.37	1.04	2.39	2.37	<0.4	8.03	5.10	0.537	207
June	6.02	5.89	3.74	7.74	9.36	2.24	1.12	4.53	4.49	0.470	8.46	5.07	0.743	121
July	9.26	9.04	14.4	4.36	8.57	3.57	1.63	8.47	8.39	0.818	10.9	4.96	1.01	148
Aug	7.01	6.75	7.53	6.30	2.59	4.29	2.02	4.91	4.82	0.783	17.7	4.75	1.17	181
Sept	1.95	1.93	2.52	<1	<1	<1	0.398	2.33	2.32	<0.4	6.28	5.20	0.348	214
Oct	4.31	4.23	2.09	2.66	<1	1.26	0.806	2.09	2.06	<0.4	13.5	4.87	0.757	386
Nov	3.43	3.39	<1	1.69	<1	<1	0.422	1.02	1.01	<0.4	9.99	5.00	0.534	404
Dec	4.16	4.03	1.93	2.18	<1	2.06	0.689	<0.2	<0.2	<0.4	14.0	4.85	0.783	229
Annual	4.77	4.64	3.78	2.96	2.42	2.17	1.75	2.91	2.87	<0.4	11.2	4.95	0.734	2771
Max.	25.3	25.1	23.7	23.5	40.0	14.4	32.4	12.8	12.7	1.39	37.2	5.42	2.57	
Min.	<1	<1	<1	<1	<1	<1	<0.3	<0.2	<0.2	<0.4	3.80	4.43	0.236	

Wet deposition amount

2013	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	0.841	0.816	1.17	0.638	<0.01	0.414	0.153	0.419	0.410	<0.01	2.27
Feb	0.0939	0.0806	0.130	0.265	0.0267	0.221	0.117	0.178	0.174	0.0138	0.380
Mar	1.28	1.25	1.39	0.499	0.311	0.594	0.342	0.903	0.890	0.0588	2.36
Apr	2.62	2.54	0.970	1.13	2.79	1.40	2.53	1.62	1.59	0.306	4.71
May	0.532	0.503	0.695	0.546	0.332	0.491	0.215	0.494	0.489	0.0593	1.66
June	0.726	0.710	0.451	0.933	1.13	0.270	0.136	0.547	0.541	0.0566	1.02
July	1.37	1.34	2.13	0.645	1.27	0.528	0.241	1.25	1.24	0.121	1.61
Aug	1.27	1.22	1.36	1.14	0.468	0.775	0.365	0.887	0.871	0.141	3.20
Sept	0.419	0.413	0.541	0.185	0.159	0.0987	0.0854	0.499	0.497	<0.01	1.35
Oct	1.66	1.63	0.808	1.03	0.124	0.488	0.311	0.806	0.795	0.0264	5.22
Nov	1.39	1.37	0.392	0.682	<0.01	0.259	0.170	0.414	0.410	<0.01	4.03
Dec	0.951	0.923	0.442	0.499	0.0207	0.471	0.158	<0.01	<0.01	0.0440	3.21
Annual	13.2	12.8	10.5	8.19	6.69	6.02	4.85	8.06	7.95	0.835	31.1

Data completeness

2013	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	91.6	91.6	91.6	91.6	91.6	91.6	91.6	91.6	91.6	91.6	91.6	91.6	91.6	100
Feb	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
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	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
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**	**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 cell for averages and deposition: Rejected monthly (annual) value by the criteria of EANET (%PCL<80% or %TP<80%)

Table 3.35 Monthly results **Site: Danum Valley** **Country: Malaysia**

Precipitation amount-weighted average concentration/ Precipitation amount

2013	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	3.10	1.76	<1	24.8	<1	22.2	1.01	1.35	0.866	1.32	3.36	5.47	0.612	281
Feb	1.09	<1	<1	11.4	1.42	11.4	0.963	0.523	0.317	0.663	7.85	5.10	0.458	312
Mar	*	*	*	*	*	*	*	*	*	*	*	*	*	114
Apr	1.42	1.31	<1	2.52	<1	1.87	0.985	3.25	3.21	<0.4	4.78	5.32	0.385	269
May	10.2	9.99	9.92	16.6	<1	2.72	0.781	2.98	2.95	<0.4	3.64	5.44	0.287	300
June	2.41	2.29	1.79	3.90	4.09	1.88	1.09	0.818	0.784	<0.4	4.01	5.40	0.393	256
July	3.14	2.98	1.38	2.28	<1	2.69	1.32	3.03	2.98	0.430	3.18	5.50	0.295	395
Aug	1.90	1.84	<1	2.40	<1	<1	0.368	0.514	0.494	<0.4	8.23	5.08	0.470	310
Sept	2.20	2.07	2.42	5.39	5.00	2.19	2.33	2.20	2.15	0.501	5.48	5.26	0.437	109
Oct	3.54	3.37	2.97	4.30	1.59	2.90	1.13	1.38	1.32	0.505	6.71	5.17	0.469	185
Nov	2.40	2.26	1.28	3.99	<1	2.43	0.498	0.569	0.528	<0.4	6.79	5.17	0.357	299
Dec	2.78	2.50	1.90	5.98	<1	4.52	1.43	<0.2	<0.2	0.457	5.72	5.24	0.419	373
Annual	3.17	2.86	1.97	7.52	<1	5.14	1.01	1.44	1.34	0.430	5.33	5.27	0.410	3202
Max.	29.6	29.4	32.0	44.4	36.7	36.3	5.42	5.89	5.80	2.45	10.7	6.35	1.09	
Min.	<1	<1	<1	1.13	<1	<1	<0.3	<0.2	<0.2	<0.4	0.447	4.97	0.150	

Wet deposition amount

2013	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	0.868	0.493	0.0619	6.95	<0.01	6.22	0.284	0.377	0.243	0.369	0.943
Feb	0.339	0.124	0.188	3.54	0.442	3.56	0.300	0.163	0.0989	0.207	2.45
Mar	*	*	*	*	*	*	*	*	*	*	*
Apr	0.382	0.351	<0.01	0.678	<0.01	0.503	0.265	0.874	0.863	0.0393	1.29
May	3.05	3.00	2.97	4.96	0.0331	0.814	0.234	0.894	0.883	0.0515	1.09
June	0.616	0.587	0.458	0.997	1.05	0.481	0.278	0.209	0.201	0.0460	1.03
July	1.24	1.18	0.543	0.900	0.127	1.06	0.522	1.20	1.17	0.169	1.26
Aug	0.588	0.572	0.0610	0.746	0.0168	0.280	0.114	0.160	0.153	0.107	2.55
Sept	0.240	0.226	0.264	0.588	0.545	0.239	0.255	0.240	0.235	0.0547	0.598
Oct	0.654	0.622	0.548	0.794	0.294	0.535	0.209	0.255	0.243	0.0932	1.24
Nov	0.718	0.674	0.382	1.19	0.0420	0.725	0.149	0.170	0.158	0.0210	2.03
Dec	1.04	0.935	0.710	2.23	<0.01	1.69	0.533	<0.01	<0.01	0.170	2.13
Annual	10.1	9.15	6.32	24.1	2.48	16.5	3.22	4.59	4.30	1.38	17.1

Data completeness

2013	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	68.9	68.9	68.9	68.9	68.9	68.9	68.9	68.9	68.9	68.9	68.9	68.9	68.9	100
Mar	0	0	0	0	0	0	0	0	0	0	0	0	0	100
Apr	80.5	80.5	80.5	80.5	80.5	80.5	80.5	80.5	80.5	80.5	80.5	80.5	80.5	100
May	86.5	86.5	86.5	86.5	86.5	86.5	86.5	86.5	86.5	86.5	86.5	86.5	86.5	100
June	100	100	100	100	100	100	100	100	100	100	100	100	100	100
July	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
Aug	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Sept	64.2	64.2	64.2	64.2	64.2	64.2	64.2	64.2	64.2	64.2	64.2	64.2	64.2	100
Oct	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Nov	98.4	98.4	98.4	98.4	98.4	98.4	98.4	98.4	98.4	98.4	98.4	98.4	98.4	100
Dec	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Annual	**88.9**	**88.9**	**88.9**	**88.9**	**88.9**	**88.9**	**88.9**	**88.9**	**88.9**	**88.9**	**88.9**	**88.9**	**88.9**	**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 cell for averages and deposition: Rejected monthly (annual) value by the criteria of EANET (%PCL<80% or %TP<80%)

Table 3.36 Monthly results **Site: Kuching** **Country: Malaysia**

Precipitation amount-weighted average concentration/ Precipitation amount

2013	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	4.63	3.28	1.15	24.0	<1	22.4	0.327	2.93	2.47	1.70	4.86	5.31	0.635	265
Feb	3.37	2.66	1.47	13.3	2.66	11.6	0.840	4.02	3.77	0.652	3.04	5.52	0.456	403
Mar	3.24	2.90	1.80	7.59	1.41	5.54	0.891	6.51	6.39	<0.4	4.41	5.36	0.445	431
Apr	3.55	3.45	4.25	<1	2.53	1.74	0.393	2.68	2.64	<0.4	6.76	5.17	0.454	346
May	5.66	5.46	10.1	4.28	7.88	3.30	0.924	7.44	7.37	<0.4	2.48	5.61	0.510	285
June	3.62	3.49	6.03	3.33	4.45	2.08	0.485	6.34	6.29	<0.4	3.64	5.44	0.468	214
July	5.36	5.23	4.72	2.95	1.08	2.27	0.843	9.11	9.06	<0.4	4.24	5.37	0.451	160
Aug	6.38	6.13	5.86	5.19	2.91	4.07	0.596	4.84	4.75	0.557	6.14	5.21	0.603	346
Sept	7.04	6.63	7.72	7.12	7.01	6.74	0.741	2.25	2.13	0.526	6.57	5.18	0.672	208
Oct	5.59	5.36	5.90	4.71	4.45	3.73	0.821	2.78	2.69	<0.4	8.72	5.06	0.615	374
Nov	6.34	6.03	5.58	6.47	1.74	5.09	0.440	4.70	4.59	<0.4	6.21	5.21	0.597	391
Dec	5.68	4.86	3.63	16.2	1.34	13.7	0.826	1.69	1.39	1.39	4.57	5.34	0.620	686
Annual	5.01	4.56	4.52	8.82	2.87	7.54	0.695	4.20	4.04	0.588	5.17	5.29	0.549	4110
Max.	15.0	14.1	29.3	44.6	27.6	44.1	3.40	35.9	35.8	3.36	17.8	6.00	1.55	
Min.	1.44	1.33	<1	<1	<1	<1	<0.3	<0.2	<0.2	<0.4	1.00	4.75	0.197	

Wet deposition amount

2013	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	1.23	0.870	0.304	6.35	0.125	5.92	0.0866	0.776	0.654	0.451	1.29
Feb	1.36	1.07	0.595	5.36	1.07	4.70	0.339	1.62	1.52	0.263	1.23
Mar	1.39	1.25	0.778	3.27	0.606	2.39	0.384	2.80	2.75	0.151	1.90
Apr	1.23	1.19	1.47	0.175	0.874	0.602	0.136	0.925	0.912	<0.01	2.34
May	1.61	1.56	2.87	1.22	2.24	0.940	0.263	2.12	2.10	0.0288	0.706
June	0.776	0.749	1.29	0.713	0.955	0.446	0.104	1.36	1.35	<0.01	0.779
July	0.857	0.835	0.754	0.472	0.172	0.363	0.135	1.46	1.45	0.0586	0.678
Aug	2.21	2.12	2.03	1.79	1.01	1.41	0.206	1.68	1.65	0.193	2.12
Sept	1.47	1.38	1.61	1.48	1.46	1.40	0.154	0.470	0.443	0.110	1.37
Oct	2.09	2.01	2.20	1.76	1.67	1.40	0.307	1.04	1.01	0.0724	3.26
Nov	2.48	2.36	2.18	2.53	0.680	1.99	0.172	1.84	1.80	0.135	2.43
Dec	3.90	3.33	2.49	11.1	0.918	9.40	0.567	1.16	0.955	0.956	3.13
Annual	20.6	18.7	18.6	36.2	11.8	31.0	2.85	17.2	16.6	2.42	21.2

Data completeness

2013	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	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	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 cell for averages and deposition: Rejected monthly (annual) value by the criteria of EANET (%PCL<80% or %TP<80%)

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

Precipitation amount-weighted average concentration/ Precipitation amount

2013	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	13.5	13.2	15.8	2.82	<1	6.05	2.79	352	352	3.82	0.482	6.32	2.05	22.1
June	26.3	24.6	79.5	5.75	8.03	8.70	4.31	169	169	5.42	2.61	5.58	2.27	27.7
July	52.9	48.7	23.2	3.54	88.0	85.0	4.97	29.6	27.8	3.40	1.14	5.94	2.55	38.4
Aug	86.0	77.8	15.1	3.60	88.2	137	3.24	23.6	20.7	2.66	0.537	6.27	2.74	55.4
Sept	76.1	72.1	44.6	6.60	94.3	66.8	4.31	32.1	30.6	6.31	0.406	6.39	3.24	10.5
Oct	--	--	--	--	--	--	--	--	--	--	--	--	--	0
Nov	--	--	--	--	--	--	--	--	--	--	--	--	--	0
Dec	--	--	--	--	--	--	--	--	--	--	--	--	--	0
Annual	56.6	52.0	30.9	4.08	62.2	78.8	3.88	95.3	93.6	3.74	1.04	5.98	2.54	154
Max.	971	897	190	16.9	231	1228	8.46	1256	1255	12.8	4.47	7.86	16.8	
Min.	4.00	<1	5.30	1.10	<1	1.74	1.28	7.50	4.70	0.820	0.0138	5.35	0.570	

Wet deposition amount

2013	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	0.299	0.291	0.348	0.0623	<0.01	0.134	0.0618	7.77	7.77	0.0843	0.0107
June	0.726	0.681	2.20	0.159	0.222	0.241	0.119	4.68	4.68	0.150	0.0722
July	2.03	1.87	0.891	0.136	3.38	3.27	0.191	1.14	1.07	0.130	0.0439
Aug	4.76	4.31	0.837	0.199	4.88	7.59	0.179	1.31	1.14	0.147	0.0297
Sept	0.797	0.755	0.467	0.0691	0.988	0.699	0.0451	0.336	0.321	0.0660	<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	8.71	8.00	4.76	0.628	9.58	12.1	0.598	14.7	14.4	0.576	0.161

Data completeness

2013	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	91.4	91.4	91.4	91.4	91.4	91.4	91.4	91.4	91.4	91.4	100	100	100	100
June	98.9	96.4	98.9	98.9	96.4	96.4	96.4	96.4	96.4	96.4	100	100	100	100
July	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Aug	100	100	100	100	95.5	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	**98.6**	**98.1**	**98.6**	**98.6**	**96.5**	**98.1**	**98.1**	**98.1**	**98.1**	**98.1**	**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 cell for averages and deposition: Rejected monthly (annual) value by the criteria of EANET (%PCL<80% or %TP<80%)

Table 3.38 Monthly results **Site: Terelj** **Country: Mongolia**

Precipitation amount-weighted average concentration/ Precipitation amount

2013	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	8.85	8.07	27.8	8.75	30.9	12.8	7.43	75.4	75.2	7.31	1.24	5.91	1.50	15.7
June	14.7	13.2	38.1	5.89	<1	25.0	8.91	43.0	42.4	6.00	21.6	4.66	1.51	38.9
July	163	163	36.5	6.74	<1	<1	7.34	56.9	56.9	2.99	9.60	5.02	3.56	21.4
Aug	5.73	5.73	8.20	8.30	<1	8.21	7.30	144	144	2.62	3.29	5.48	1.04	13.9
Sept	*	*	*	*	<1	259	3.22	221	216	2.48	1.37	5.86	3.29	0.980
Oct	--	--	--	--	--	--	--	--	--	--	--	--	--	0
Nov	--	--	--	--	--	--	--	--	--	--	--	--	--	0
Dec	--	--	--	--	--	--	--	--	--	--	--	--	--	0
Annual	48.5	47.7	31.8	6.94	5.37	17.0	7.98	69.1	68.8	4.97	12.3	4.91	1.94	90.8
Max.	430	430	153	57.0	211	310	57.9	512	512	25.5	85.1	6.65	8.11	
Min.	<1	<1	<1	<1	<1	<1	0.800	3.50	3.45	0.400	0.224	4.07	0.270	

Wet deposition amount

2013	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	0.139	0.127	0.436	0.137	0.484	0.201	0.116	1.18	1.18	0.115	0.0195
June	0.571	0.512	1.48	0.229	<0.01	0.973	0.347	1.67	1.65	0.234	0.842
July	3.49	3.49	0.780	0.144	<0.01	<0.01	0.157	1.22	1.22	0.0638	0.205
Aug	0.0798	0.0798	0.114	0.115	<0.01	0.114	0.102	2.01	2.01	0.0364	0.0457
Sept	*	*	*	*	<0.01	0.254	<0.01	0.217	0.211	<0.01	<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	4.40	4.33	2.89	0.630	0.487	1.54	0.725	6.28	6.25	0.451	1.11

Data completeness

2013	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	100	100	100	100	100	100	100	100	100	100	100	100	100
Aug	86.7	86.7	86.7	86.7	98.6	98.6	98.6	98.6	98.6	98.6	100	100	100	100
Sept	0	0	0	0	100	100	100	100	100	100	100	100	100	100
Oct	--	--	--	--	--	--	--	--	--	--	--	--	--	100
Nov	--	--	--	--	--	--	--	--	--	--	--	--	--	100
Dec	--	--	--	--	--	--	--	--	--	--	--	--	--	100
Annual	**96.9**	**96.9**	**96.9**	**96.9**	**99.8**	**99.8**	**99.8**	**99.8**	**99.8**	**99.8**	**100**	**100**	**100**	**100**

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

[0.00] for deposition: The deposition was 0 mmol/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 cell for averages and deposition: Rejected monthly (annual) value by the criteria of EANET (%PCL<80% or %TP<80%)

Table 3.39 Monthly results **Site: Yangon** **Country: Myanmar**

Precipitation amount-weighted average concentration/ Precipitation amount

2013	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	66.5	45.1	115	255	44.1	354	30.9	5.86	<0.2	41.8	0.224	6.65	7.60	1.01
Feb	--	--	--	--	--	--	--	--	--	--	--	--	--	0
Mar	--	--	--	--	--	--	--	--	--	--	--	--	--	0
Apr	--	--	--	--	--	--	--	--	--	--	--	--	--	0
May	43.7	41.6	33.5	109	32.4	34.5	6.52	0.455	<0.2	31.2	0.451	6.35	2.05	149
June	16.1	15.1	6.81	54.3	11.8	17.4	2.18	<0.2	<0.2	12.2	0.554	6.26	0.960	515
July	3.36	2.71	2.80	17.0	11.5	17.9	3.11	1.28	0.896	7.18	0.238	6.62	0.564	480
Aug	<1	<1	3.95	21.7	13.3	21.8	1.46	1.41	0.960	7.40	0.351	6.45	0.743	596
Sept	2.25	1.84	4.29	7.67	15.1	6.69	1.80	0.457	0.312	4.45	0.354	6.45	0.517	563
Oct	7.40	6.95	3.95	6.12	33.9	7.35	3.80	2.27	2.11	12.5	0.186	6.73	0.790	370
Nov	20.4	20.2	42.5	24.5	34.3	3.26	9.54	4.79	4.72	276	0.148	6.83	3.62	12.1
Dec	73.4	72.6	300	83.2	<1	13.0	31.7	19.6	19.3	824	0.316	6.50	8.30	4.60
Annual	7.96	7.33	6.72	27.1	17.0	15.8	2.66	1.07	0.792	12.3	0.352	6.45	0.813	2692
Max.	73.4	72.6	300	255	107	354	31.7	25.1	25.1	824	0.871	6.99	8.30	
Min.	<1	<1	<1	3.98	<1	<1	<0.3	<0.2	<0.2	0.411	0.102	6.06	0.420	

Wet deposition amount

2013	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	0.0671	0.0456	0.116	0.257	0.0445	0.358	0.0313	<0.01	<0.01	0.0422	<0.01
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	6.50	6.19	4.99	16.3	4.82	5.14	0.971	0.0677	0.0206	4.65	0.0671
June	8.32	7.78	3.51	28.0	6.09	8.97	1.12	0.0965	<0.01	6.30	0.286
July	1.61	1.30	1.34	8.15	5.54	8.57	1.49	0.615	0.430	3.45	0.114
Aug	0.322	0.224	2.36	13.0	7.90	13.0	0.870	0.841	0.572	4.41	0.209
Sept	1.26	1.04	2.42	4.32	8.49	3.77	1.02	0.257	0.176	2.51	0.200
Oct	2.74	2.57	1.46	2.27	12.5	2.72	1.41	0.841	0.782	4.63	0.0687
Nov	0.247	0.245	0.516	0.298	0.416	0.0396	0.116	0.0582	0.0573	3.36	<0.01
Dec	0.337	0.334	1.38	0.383	<0.01	0.0596	0.146	0.0899	0.0886	3.79	<0.01
Annual	21.4	19.7	18.1	72.9	45.8	42.6	7.17	2.87	2.13	33.1	0.948

Data completeness

2013	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
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	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 cell for averages and deposition: Rejected monthly (annual) value by the criteria of EANET (%PCL<80% or %TP<80%)

Table 3.40 Monthly results **Site: Metro Manila** **Country: Philippines**

Precipitation amount-weighted average concentration/ Precipitation amount

2013	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	27.4	26.1	16.7	24.9	85.2	22.1	2.75	19.3	18.8	4.66	0.377	6.42	1.62	40.1
Feb	12.7	12.2	17.2	13.4	27.9	7.70	6.38	5.00	4.83	1.18	0.703	6.15	0.915	89.0
Mar	20.3	19.5	15.9	14.6	63.1	13.2	26.4	17.9	17.6	4.01	1.10	5.96	4.19	132
Apr	*	*	*	*	*	*	*	*	*	*	*	*	*	8.10
May	33.0	32.1	45.9	17.6	91.5	14.9	5.74	33.7	33.4	3.35	0.249	6.60	2.43	157
June	14.5	13.8	14.9	11.1	19.9	11.9	2.51	9.68	9.42	1.85	3.31	5.48	0.997	635
July	19.5	18.9	19.4	26.2	37.0	9.35	5.88	13.4	13.2	2.63	0.955	6.02	2.53	88.8
Aug	12.6	9.90	10.7	45.2	23.7	44.7	3.97	10.0	9.04	6.50	1.11	5.96	1.22	1197
Sept	8.13	7.27	8.32	15.1	22.7	14.1	1.84	6.56	6.25	2.02	9.53	5.02	0.884	576
Oct	24.7	23.2	17.1	22.4	98.2	24.2	9.11	12.8	12.3	4.86	1.07	5.97	2.43	387
Nov	13.2	12.0	15.6	23.7	95.5	21.0	44.0	19.4	19.0	7.08	0.217	6.66	2.78	90.0
Dec	7.44	4.95	7.01	42.3	22.2	41.3	6.09	8.26	7.37	5.96	2.95	5.53	0.716	116
Annual	15.1	13.4	13.9	28.7	41.2	28.0	6.45	11.5	10.9	4.54	2.85	5.55	1.53	3516
Max.	61.1	59.2	69.8	68.3	236	64.4	105	57.4	57.0	12.6	14.8	8.05	13.8	
Min.	6.43	4.95	4.74	4.85	<1	6.22	<0.3	3.74	3.61	<0.4	0.00891	4.83	0.519	

Wet deposition amount

2013	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	1.10	1.04	0.669	0.997	3.42	0.887	0.110	0.773	0.754	0.187	0.0151
Feb	1.13	1.09	1.53	1.20	2.48	0.685	0.568	0.445	0.430	0.105	0.0626
Mar	2.68	2.57	2.10	1.93	8.33	1.75	3.49	2.37	2.33	0.529	0.145
Apr	*	*	*	*	*	*	*	*	*	*	*
May	5.18	5.04	7.21	2.77	14.4	2.34	0.902	5.30	5.24	0.526	0.0392
June	9.19	8.74	9.49	7.03	12.6	7.53	1.59	6.15	5.98	1.18	2.10
July	1.73	1.68	1.72	2.33	3.28	0.830	0.522	1.19	1.17	0.234	0.0848
Aug	15.1	11.8	12.8	54.0	28.3	53.5	4.75	12.0	10.8	7.78	1.33
Sept	4.68	4.19	4.80	8.69	13.1	8.15	1.06	3.78	3.60	1.16	5.50
Oct	9.55	8.99	6.61	8.68	38.0	9.37	3.52	4.96	4.76	1.88	0.414
Nov	1.19	1.08	1.41	2.13	8.60	1.89	3.96	1.75	1.71	0.638	0.0196
Dec	0.863	0.574	0.814	4.91	2.57	4.79	0.706	0.958	0.854	0.692	0.342
Annual	52.9	47.0	49.0	101	145	98.3	22.7	40.5	38.4	16.0	10.0

Data completeness

2013	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	96.1	96.1	96.1	96.1	96.1	96.1	96.1	96.1	96.1	96.1	96.1	96.1	96.1	100
Apr	0	0	0	0	0	0	0	0	0	0	0	0	0	100
May	100	100	100	100	100	100	100	100	100	100	100	100	100	100
June	41.1	41.1	41.1	41.1	41.1	41.1	41.1	41.1	41.1	41.1	41.1	41.1	41.1	100
July	27.1	27.1	27.1	27.1	27.1	27.1	27.1	27.1	27.1	27.1	27.1	27.1	27.1	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	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
Nov	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Dec	38.7	38.7	38.7	38.7	38.7	38.7	38.7	38.7	38.7	38.7	38.7	38.7	38.7	100
Annual	**85.1**	**85.1**	**85.1**	**85.1**	**85.1**	**85.1**	**85.1**	**85.1**	**85.1**	**85.1**	**85.1**	**85.1**	**85.1**	**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 cell for averages and deposition: Rejected monthly (annual) value by the criteria of EANET (%PCL<80% or %TP<80%)

Table 3.41 Monthly results **Site: Los Baños** **Country: Philippines**

Precipitation amount-weighted average concentration/ Precipitation amount

2013	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	3.86	2.93	5.38	19.2	3.04	15.4	<0.3	2.32	1.99	2.20	1.72	5.76	0.570	83.4
Feb	3.22	1.84	5.51	16.7	11.9	23.0	1.66	0.838	0.694	0.903	2.91	5.54	0.619	150
Mar	12.8	9.36	10.5	165	6.17	56.4	102	14.4	13.2	10.4	1.39	5.86	2.19	56.3
Apr	--	--	--	--	--	--	--	--	--	--	--	--	--	0
May	7.93	7.22	11.9	13.4	23.3	11.8	2.09	5.64	5.38	1.33	0.629	6.20	0.944	107
June	4.86	3.85	6.76	19.4	22.0	16.8	5.70	9.53	9.17	3.54	0.646	6.19	1.03	327
July	5.64	5.00	5.81	10.3	22.3	10.7	2.33	8.53	8.30	3.04	0.617	6.21	0.763	329
Aug	7.42	5.77	11.0	26.0	27.5	27.3	3.41	6.27	5.68	3.44	0.747	6.13	1.21	407
Sept	6.67	6.01	7.50	11.2	9.74	11.0	1.73	5.71	5.47	2.04	2.31	5.64	0.681	347
Oct	5.34	3.85	7.37	22.7	13.3	24.7	5.18	10.8	10.3	4.19	0.670	6.17	0.829	188
Nov	6.20	4.16	4.33	35.1	45.4	33.9	6.61	6.04	5.31	4.45	1.61	5.79	1.33	333
Dec	21.1	20.0	19.2	32.7	26.4	19.3	1.71	8.43	8.02	4.24	0.871	6.06	2.51	68.1
Annual	6.60	5.22	7.80	25.8	22.3	22.8	6.37	6.40	5.94	3.25	1.41	5.85	1.02	2394
Max.	22.1	20.0	22.4	330	273	170	219	24.8	21.1	23.2	4.79	7.05	6.09	
Min.	2.26	1.21	3.05	7.76	<1	6.48	<0.3	<0.2	<0.2	<0.4	0.0891	5.32	0.338	

Wet deposition amount

2013	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	0.322	0.244	0.449	1.60	0.253	1.29	0.0242	0.194	0.166	0.183	0.143
Feb	0.482	0.275	0.824	2.50	1.78	3.43	0.248	0.125	0.104	0.135	0.435
Mar	0.719	0.527	0.589	9.31	0.348	3.17	5.73	0.810	0.741	0.587	0.0782
Apr	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
May	0.849	0.772	1.27	1.43	2.50	1.27	0.224	0.603	0.576	0.142	0.0673
June	1.59	1.26	2.21	6.34	7.17	5.50	1.86	3.11	2.99	1.16	0.211
July	1.86	1.65	1.91	3.38	7.35	3.52	0.766	2.81	2.73	1.00	0.203
Aug	3.02	2.35	4.45	10.6	11.2	11.1	1.39	2.55	2.31	1.40	0.304
Sept	2.31	2.08	2.60	3.90	3.38	3.81	0.598	1.98	1.90	0.708	0.800
Oct	1.01	0.725	1.39	4.28	2.51	4.65	0.976	2.04	1.94	0.789	0.126
Nov	2.06	1.38	1.44	11.7	15.1	11.3	2.20	2.01	1.77	1.48	0.535
Dec	1.44	1.36	1.31	2.23	1.80	1.31	0.117	0.574	0.546	0.289	0.0593
Annual	15.8	12.5	18.7	61.7	53.3	54.5	15.3	15.3	14.2	7.77	3.37

Data completeness

2013	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	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Mar	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
Apr	--	--	--	--	--	--	--	--	--	--	--	--	--	100
May	100	100	100	100	100	100	100	100	100	100	100	100	100	100
June	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	100
July	45.8	45.8	45.8	45.8	45.8	45.8	45.8	45.8	45.8	45.8	45.8	45.8	45.8	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	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
Nov	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Dec	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
Annual	**77.4**	**77.4**	**77.4**	**77.4**	**77.4**	**77.4**	**77.4**	**77.4**	**77.4**	**77.4**	**77.4**	**77.4**	**77.4**	**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 cell for averages and deposition: Rejected monthly (annual) value by the criteria of EANET (%PCL<80% or %TP<80%)

Table 3.42 Monthly results **Site: Mt. Sto. Tomas** **Country: Philippines**

Precipitation amount-weighted average concentration/ Precipitation amount

2013	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	1.93	1.58	2.39	5.19	5.09	5.78	<0.3	8.41	8.28	1.16	0.977	6.01	0.302	12.4
Feb	9.72	9.23	7.04	9.72	15.6	8.26	1.91	6.73	6.55	1.44	1.95	5.71	0.491	64.0
Mar	7.51	6.93	15.8	8.99	30.6	9.65	2.36	11.6	11.4	1.95	0.335	6.48	0.879	61.4
Apr	8.28	7.93	14.9	11.5	27.6	5.88	1.84	5.52	5.39	1.11	7.09	5.15	0.926	136
May	7.59	7.14	9.67	5.08	11.1	7.55	0.697	5.74	5.58	1.03	7.24	5.14	0.735	528
June	7.11	6.76	6.32	5.59	16.7	5.81	3.32	8.95	8.83	2.00	0.585	6.23	0.489	228
July	11.2	11.1	13.4	5.60	2.45	2.49	<0.3	8.01	7.95	0.946	19.3	4.71	0.966	544
Aug	7.99	7.54	8.46	7.04	<1	7.38	0.854	9.07	8.91	1.81	2.14	5.67	0.436	1638
Sept	4.99	4.60	4.52	8.02	<1	6.90	<0.3	9.94	9.79	2.09	2.79	5.55	0.365	878
Oct	10.2	9.51	8.40	11.6	16.2	11.5	<0.3	7.67	7.43	2.67	5.89	5.23	0.713	116
Nov	3.45	3.04	2.38	8.52	<1	6.80	<0.3	7.00	6.86	1.88	1.95	5.71	0.279	140
Dec	15.9	15.4	16.3	6.63	20.4	7.21	2.86	17.1	17.0	3.02	5.33	5.27	1.14	45.8
Annual	7.71	7.31	8.47	7.11	4.71	6.70	0.752	8.58	8.43	1.69	5.18	5.29	0.558	4392
Max.	20.8	20.3	31.8	19.5	64.1	22.4	8.68	40.4	40.0	5.76	39.8	7.02	1.49	
Min.	<1	<1	<1	4.44	<1	<1	<0.3	3.94	3.87	<0.4	0.0955	4.40	0.175	

Wet deposition amount

2013	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	0.0239	0.0196	0.0296	0.0644	0.0632	0.0716	<0.01	0.104	0.103	0.0144	0.0121
Feb	0.622	0.590	0.451	0.622	0.996	0.529	0.122	0.431	0.419	0.0919	0.125
Mar	0.461	0.425	0.972	0.552	1.88	0.593	0.145	0.712	0.700	0.119	0.0206
Apr	1.13	1.08	2.03	1.56	3.76	0.802	0.250	0.752	0.735	0.152	0.967
May	4.01	3.77	5.11	2.68	5.84	3.99	0.369	3.04	2.95	0.545	3.83
June	1.62	1.54	1.44	1.28	3.82	1.33	0.757	2.04	2.01	0.456	0.134
July	6.11	6.03	7.29	3.05	1.33	1.35	0.0828	4.36	4.33	0.515	10.5
Aug	13.1	12.4	13.9	11.5	<0.01	12.1	1.40	14.9	14.6	2.97	3.50
Sept	4.38	4.04	3.97	7.04	0.0996	6.06	<0.01	8.73	8.59	1.84	2.45
Oct	1.19	1.11	0.978	1.35	1.89	1.34	0.0311	0.893	0.864	0.311	0.686
Nov	0.482	0.425	0.332	1.19	0.0957	0.949	0.0141	0.978	0.957	0.263	0.273
Dec	0.726	0.706	0.747	0.304	0.933	0.330	0.131	0.784	0.777	0.138	0.244
Annual	33.8	32.1	37.2	31.2	20.7	29.4	3.30	37.7	37.0	7.41	22.7

Data completeness

2013	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 cell for averages and deposition: Rejected monthly (annual) value by the criteria of EANET (%PCL<80% or %TP<80%)

Table 3.43 Monthly results **Site: Kanghwa** **Country: Republic of Korea**

Precipitation amount-weighted average concentration/ Precipitation amount

2013	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	28.7	27.3	68.4	30.1	69.8	23.2	2.97	8.34	7.84	2.31	37.9	4.42	3.14	14.0
Feb	37.4	36.3	43.1	18.1	54.5	18.5	3.62	8.90	8.60	4.24	25.1	4.60	2.43	55.5
Mar	111	107	80.8	78.0	194	69.2	7.09	36.4	34.9	6.23	17.7	4.75	4.86	20.0
Apr	84.3	79.5	92.6	96.0	118	78.6	5.80	39.3	37.6	16.0	22.0	4.66	5.40	36.0
May	23.3	22.8	20.7	16.6	53.5	8.43	2.13	3.36	3.18	2.05	14.1	4.85	1.37	155
June	30.4	29.9	51.8	16.4	96.1	7.32	0.816	3.39	3.24	0.473	35.2	4.45	2.42	25.5
July	30.6	28.6	37.1	40.0	79.3	33.1	2.19	5.91	5.19	2.28	24.7	4.61	2.41	427
Aug	64.4	62.5	74.5	32.3	149	32.7	3.35	14.3	13.6	3.37	22.3	4.65	4.11	49.0
Sept	21.9	21.0	26.9	18.5	38.5	14.3	5.32	2.55	2.24	0.718	29.4	4.53	2.04	59.0
Oct	18.4	16.4	65.1	31.9	72.5	32.4	19.6	5.62	4.92	5.15	0.955	6.02	2.00	7.50
Nov	47.8	44.6	75.2	62.1	63.0	53.0	8.64	21.3	20.2	8.72	62.1	4.21	4.71	34.5
Dec	66.8	63.1	122	69.6	100	60.4	9.09	21.6	20.3	9.36	128	3.89	7.58	15.0
Annual	36.1	34.3	43.2	36.3	78.5	29.6	3.27	8.72	8.09	3.30	26.3	4.58	2.66	898
Max.	233	227	428	408	403	337	20.6	103	100	44.3	135	6.47	15.0	
Min.	11.7	10.5	10.9	12.3	20.5	3.91	0.816	<0.2	<0.2	<0.4	0.336	3.87	0.770	

Wet deposition amount

2013	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	0.401	0.382	0.958	0.422	0.977	0.324	0.0416	0.117	0.110	0.0324	0.530
Feb	2.08	2.02	2.39	1.00	3.02	1.03	0.201	0.494	0.477	0.235	1.39
Mar	2.22	2.14	1.62	1.56	3.88	1.38	0.142	0.727	0.697	0.125	0.354
Apr	3.03	2.86	3.33	3.45	4.24	2.83	0.209	1.41	1.35	0.576	0.794
May	3.61	3.54	3.20	2.57	8.29	1.31	0.330	0.521	0.493	0.317	2.18
June	0.774	0.763	1.32	0.418	2.45	0.187	0.0208	0.0865	0.0825	0.0121	0.896
July	13.1	12.2	15.8	17.1	33.8	14.1	0.933	2.52	2.21	0.973	10.5
Aug	3.16	3.06	3.65	1.58	7.29	1.60	0.164	0.699	0.664	0.165	1.09
Sept	1.29	1.24	1.58	1.09	2.27	0.844	0.314	0.150	0.132	0.0423	1.73
Oct	0.138	0.123	0.488	0.239	0.543	0.243	0.147	0.0421	0.0369	0.0386	<0.01
Nov	1.65	1.54	2.59	2.14	2.17	1.83	0.298	0.736	0.697	0.301	2.14
Dec	1.00	0.947	1.83	1.04	1.50	0.907	0.136	0.323	0.304	0.140	1.93
Annual	32.4	30.8	38.8	32.6	70.5	26.6	2.94	7.83	7.26	2.96	23.6

Data completeness

2013	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 cell for averages and deposition: Rejected monthly (annual) value by the criteria of EANET (%PCL<80% or %TP<80%)

Table 3.44 Monthly results **Site: Cheju** **Country: Republic of Korea**

Precipitation amount-weighted average concentration/ Precipitation amount

2013	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	34.8	21.5	26.0	235	46.1	220	6.04	8.86	4.10	15.4	28.8	4.54	4.53	19.5
Feb	35.4	25.8	29.2	161	51.4	161	7.86	8.67	5.20	10.1	10.2	4.99	3.64	71.6
Mar	47.6	30.3	35.4	314	49.4	287	9.24	14.8	8.65	24.5	7.05	5.15	6.11	54.5
Apr	54.8	38.6	35.3	305	43.9	269	12.4	14.4	8.62	26.9	8.34	5.08	5.85	58.5
May	28.4	18.2	24.0	177	31.7	169	5.90	7.07	3.42	12.4	1.89	5.72	3.39	69.0
June	16.3	14.1	25.3	31.0	44.5	35.6	8.43	2.16	1.39	1.38	1.72	5.76	1.39	114
July	19.9	16.6	23.0	36.4	36.0	54.9	3.13	1.97	0.781	1.68	0.360	6.44	1.55	5.00
Aug	17.3	9.84	19.8	123	24.5	124	4.63	4.57	1.93	5.99	0.715	6.15	2.50	75.7
Sept	11.0	5.98	16.6	69.7	14.6	83.1	10.9	3.38	1.58	1.91	1.20	5.92	1.68	79.3
Oct	30.0	<1	12.0	567	15.4	491	12.3	11.5	0.907	34.8	0.478	6.32	8.10	10.7
Nov	116	49.8	51.6	1439	30.6	1096	36.1	52.7	29.0	110	0.187	6.73	18.8	67.2
Dec	227	91.8	140	2950	31.0	2241	50.7	100	51.8	250	0.140	6.85	37.3	11.7
Annual	40.6	23.2	30.3	344	35.9	290	12.0	13.6	7.33	25.6	4.18	5.38	5.55	636
Max.	1094	311	334	17963	152	12978	394	380	99.3	1415	56.2	7.30	201	
Min.	4.74	<1	5.66	13.6	4.19	18.6	1.59	0.786	<0.2	<0.4	0.0504	4.25	0.729	

Wet deposition amount

2013	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	0.678	0.419	0.506	4.58	0.900	4.29	0.118	0.173	0.0800	0.300	0.562
Feb	2.54	1.84	2.09	11.5	3.68	11.5	0.562	0.620	0.373	0.725	0.730
Mar	2.60	1.65	1.93	17.1	2.69	15.6	0.503	0.809	0.471	1.33	0.384
Apr	3.21	2.26	2.07	17.9	2.57	15.8	0.727	0.845	0.504	1.57	0.488
May	1.96	1.26	1.66	12.2	2.19	11.7	0.407	0.488	0.236	0.853	0.130
June	1.84	1.60	2.87	3.52	5.05	4.04	0.957	0.245	0.158	0.157	0.195
July	0.0995	0.0830	0.115	0.182	0.180	0.274	0.0156	<0.01	<0.01	<0.01	<0.01
Aug	1.31	0.745	1.50	9.27	1.86	9.41	0.350	0.346	0.146	0.454	0.0541
Sept	0.871	0.474	1.32	5.53	1.16	6.59	0.862	0.268	0.126	0.152	0.0953
Oct	0.321	<0.01	0.129	6.06	0.164	5.25	0.132	0.123	<0.01	0.373	<0.01
Nov	7.78	3.34	3.46	96.7	2.06	73.6	2.42	3.54	1.95	7.41	0.0125
Dec	2.65	1.07	1.63	34.5	0.363	26.2	0.593	1.17	0.606	2.92	<0.01
Annual	25.9	14.8	19.3	219	22.9	184	7.65	8.64	4.66	16.3	2.66

Data completeness

2013	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 cell for averages and deposition: Rejected monthly (annual) value by the criteria of EANET (%PCL<80% or %TP<80%)

Table 3.45 Monthly results **Site: Imsil** **Country: Republic of Korea**

Precipitation amount-weighted average concentration/ Precipitation amount

2013	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	40.5	36.4	75.5	55.6	66.9	67.3	6.77	17.3	15.9	5.85	36.0	4.44	4.03	12.7
Feb	22.1	20.1	25.3	15.6	44.4	33.0	2.26	2.85	2.14	0.504	13.2	4.88	1.63	34.0
Mar	23.3	21.2	22.1	14.3	35.2	35.0	3.55	4.65	3.89	1.62	5.50	5.26	1.38	75.5
Apr	32.6	30.2	45.1	27.2	68.6	40.2	8.15	1.76	0.915	12.6	10.1	4.99	2.24	65.0
May	9.59	8.11	17.4	13.3	10.5	24.6	2.53	2.11	1.58	0.518	2.77	5.56	0.773	97.0
June	56.2	54.1	88.9	46.2	181	36.0	32.8	4.32	3.54	1.52	8.48	5.07	4.29	71.5
July	14.6	13.3	18.4	13.1	27.9	21.7	3.98	2.01	1.55	0.694	7.82	5.11	1.14	445
Aug	6.23	5.33	10.7	13.1	17.8	14.9	2.50	1.25	0.926	<0.4	1.46	5.84	0.536	256
Sept	9.64	8.03	18.7	15.3	20.4	26.7	3.37	1.91	1.33	0.579	0.640	6.19	0.884	69.0
Oct	31.6	27.7	49.2	47.9	89.9	65.1	18.9	2.11	0.778	1.00	0.455	6.34	2.78	19.5
Nov	37.9	31.2	51.5	112	71.7	111	16.3	12.2	9.83	9.62	4.20	5.38	3.64	69.0
Dec	86.2	81.6	129	43.5	149	76.7	5.61	10.8	9.10	7.51	47.1	4.33	7.27	6.00
Annual	18.5	16.7	26.2	22.8	40.5	30.3	6.33	2.95	2.29	1.87	6.01	5.22	1.47	1220
Max.	249	240	297	825	356	180	796	128	125	132	141	6.88	14.0	
Min.	3.02	2.15	6.19	7.27	1.11	9.13	0.995	0.512	<0.2	<0.4	0.133	3.85	0.267	

Wet deposition amount

2013	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	0.514	0.463	0.959	0.706	0.849	0.855	0.0860	0.220	0.202	0.0743	0.457
Feb	0.752	0.684	0.861	0.531	1.51	1.12	0.0770	0.0969	0.0727	0.0171	0.450
Mar	1.76	1.60	1.67	1.08	2.66	2.64	0.268	0.351	0.294	0.123	0.415
Apr	2.12	1.96	2.93	1.77	4.46	2.61	0.530	0.114	0.0595	0.819	0.658
May	0.930	0.786	1.69	1.29	1.02	2.39	0.245	0.205	0.154	0.0503	0.268
June	4.02	3.87	6.36	3.31	13.0	2.57	2.35	0.309	0.253	0.108	0.606
July	6.49	5.91	8.18	5.83	12.4	9.66	1.77	0.896	0.688	0.309	3.48
Aug	1.59	1.36	2.74	3.34	4.54	3.81	0.638	0.319	0.237	0.0157	0.372
Sept	0.665	0.554	1.29	1.06	1.41	1.84	0.232	0.132	0.0918	0.0399	0.0442
Oct	0.617	0.540	0.959	0.934	1.75	1.27	0.369	0.0412	0.0152	0.0195	<0.01
Nov	2.62	2.15	3.55	7.73	4.95	7.69	1.12	0.844	0.678	0.664	0.290
Dec	0.517	0.489	0.776	0.261	0.895	0.460	0.0337	0.0645	0.0546	0.0451	0.283
Annual	22.6	20.4	32.0	27.8	49.4	36.9	7.72	3.59	2.80	2.28	7.33

Data completeness

2013	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 cell for averages and deposition: Rejected monthly (annual) value by the criteria of EANET (%PCL<80% or %TP<80%)

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

Precipitation amount-weighted average concentration/ Precipitation amount

2013	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	8.93	8.67	6.90	<1	4.40	4.35	5.37	12.5	12.4	2.05	1.20	5.92	0.600	23.5
Apr	--	--	--	--	--	--	--	--	--	--	--	--	--	0
May	--	--	--	--	--	--	--	--	--	--	--	--	--	0
June	4.26	4.15	7.03	2.75	3.93	1.88	1.90	5.47	5.43	0.909	3.36	5.47	0.431	78.4
July	2.92	2.89	4.96	2.47	2.87	<1	3.44	4.54	4.53	0.902	5.65	5.25	0.430	91.8
Aug	2.82	2.78	4.36	2.44	2.52	<1	1.26	1.72	1.70	0.420	6.03	5.22	0.379	76.8
Sept	2.65	2.55	2.83	10.2	<1	1.63	1.22	4.55	4.52	0.970	5.35	5.27	0.383	55.0
Oct	1.35	1.27	<1	3.67	<1	1.30	1.02	0.250	0.222	0.410	5.62	5.25	0.270	4.90
Nov	--	--	--	--	--	--	--	--	--	--	--	--	--	0
Dec	--	--	--	--	--	--	--	--	--	--	--	--	--	0
Annual	3.58	3.49	5.03	3.69	2.71	1.36	2.30	4.61	4.58	0.877	4.83	5.32	0.420	330
Max.	8.93	8.67	9.37	48.5	5.90	4.35	8.70	20.2	20.2	3.28	15.5	5.92	0.672	
Min.	1.35	1.27	<1	<1	<1	<1	0.512	0.250	0.222	0.410	1.20	4.81	0.257	

Wet deposition amount

2013	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	0.210	0.204	0.162	0.0141	0.103	0.102	0.126	0.293	0.291	0.0482	0.0283
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	0.334	0.325	0.552	0.216	0.308	0.147	0.149	0.429	0.425	0.0713	0.264
July	0.268	0.265	0.455	0.227	0.263	0.0511	0.316	0.417	0.416	0.0828	0.519
Aug	0.217	0.214	0.335	0.187	0.193	0.0528	0.0968	0.132	0.131	0.0323	0.463
Sept	0.146	0.140	0.156	0.559	0.0233	0.0895	0.0669	0.250	0.249	0.0534	0.294
Oct	<0.01	<0.01	<0.01	0.0180	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.0276
Nov	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Dec	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	1.18	1.15	1.66	1.22	0.894	0.449	0.759	1.52	1.51	0.290	1.60

Data completeness

2013	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	--	--	--	--	--	--	--	--	--	--	--	--	--	96.8
Feb	--	--	--	--	--	--	--	--	--	--	--	--	--	100
Mar	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Apr	--	--	--	--	--	--	--	--	--	--	--	--	--	100
May	--	--	--	--	--	--	--	--	--	--	--	--	--	100
June	100	100	100	100	100	100	100	100	100	100	100	100	100	100
July	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Aug	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Sept	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Oct	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Nov	--	--	--	--	--	--	--	--	--	--	--	--	--	100
Dec	--	--	--	--	--	--	--	--	--	--	--	--	--	100
Annual	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**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 cell for averages and deposition: Rejected monthly (annual) value by the criteria of EANET (%PCL<80% or %TP<80%)

Table 3.47 Monthly results **Site: Listvyanka** **Country: Russia**

Precipitation amount-weighted average concentration/ Precipitation amount

2013	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	58.2	57.0	96.9	5.81	11.4	19.3	6.24	59.3	58.9	15.1	7.39	5.13	3.14	5.77
Feb	45.3	44.2	101	8.64	12.8	17.9	7.08	54.9	54.5	15.8	3.68	5.43	2.90	7.43
Mar	20.4	19.7	26.4	7.09	2.68	12.0	2.89	19.6	19.3	4.63	5.07	5.30	1.29	9.56
Apr	60.9	58.8	41.6	16.3	72.3	34.4	9.81	43.1	42.4	10.9	3.72	5.43	2.83	9.23
May	26.9	26.6	15.8	8.33	12.6	5.02	3.85	17.0	16.9	4.37	15.8	4.80	1.58	17.9
June	14.6	14.4	8.22	3.10	8.62	2.39	4.00	8.29	8.24	2.29	9.07	5.04	0.901	33.4
July	8.84	8.66	5.37	4.35	4.08	2.87	2.94	2.49	2.43	0.961	18.0	4.74	0.815	66.9
Aug	14.9	14.3	6.24	4.63	5.78	9.94	8.00	7.20	6.99	1.41	21.6	4.67	1.27	44.6
Sept	15.0	14.8	8.92	4.81	6.14	3.26	1.62	7.18	7.11	1.03	23.5	4.63	1.15	52.4
Oct	47.7	47.2	21.2	12.7	37.6	8.01	12.7	25.6	25.4	6.58	14.4	4.84	2.32	4.74
Nov	24.0	23.4	34.3	13.9	23.8	10.1	4.99	20.8	20.6	5.64	4.87	5.31	1.50	10.1
Dec	10.0	9.80	21.3	7.39	6.16	4.08	3.29	11.5	11.4	2.29	8.78	5.06	0.888	15.9
Annual	18.1	17.7	15.7	5.85	9.85	6.68	4.36	11.9	11.7	2.92	15.9	4.80	1.25	278
Max.	95.8	93.6	177	39.5	82.2	55.2	51.2	95.8	95.0	27.9	42.7	6.45	5.21	
Min.	4.06	4.01	3.25	1.64	<1	<1	0.510	0.749	0.730	0.410	0.355	4.37	0.590	

Wet deposition amount

2013	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	0.336	0.329	0.559	0.0335	0.0658	0.111	0.0360	0.342	0.340	0.0873	0.0427
Feb	0.337	0.329	0.751	0.0642	0.0949	0.133	0.0526	0.408	0.405	0.117	0.0274
Mar	0.195	0.188	0.252	0.0678	0.0256	0.115	0.0276	0.187	0.185	0.0443	0.0485
Apr	0.562	0.542	0.384	0.151	0.667	0.318	0.0906	0.398	0.391	0.101	0.0343
May	0.481	0.476	0.282	0.149	0.226	0.0899	0.0689	0.304	0.302	0.0782	0.283
June	0.485	0.481	0.274	0.103	0.287	0.0796	0.133	0.276	0.275	0.0764	0.303
July	0.591	0.580	0.359	0.291	0.273	0.192	0.197	0.167	0.162	0.0643	1.21
Aug	0.664	0.638	0.278	0.207	0.258	0.444	0.357	0.321	0.312	0.0631	0.963
Sept	0.785	0.775	0.467	0.252	0.322	0.171	0.0851	0.376	0.373	0.0541	1.23
Oct	0.226	0.224	0.100	0.0600	0.178	0.0379	0.0601	0.121	0.120	0.0312	0.0683
Nov	0.243	0.237	0.346	0.140	0.241	0.102	0.0505	0.210	0.208	0.0570	0.0492
Dec	0.160	0.156	0.340	0.118	0.0982	0.0650	0.0524	0.184	0.182	0.0365	0.140
Annual	5.02	4.91	4.37	1.62	2.74	1.86	1.21	3.30	3.26	0.810	4.41

Data completeness

2013	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	96.8
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	87.8	87.8	87.8	87.8	100	100	100	100	100	100	87.8	87.8	87.8	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	**99.6**	**99.6**	**99.6**	**99.6**	**100**	**100**	**100**	**100**	**100**	**100**	**99.6**	**99.6**	**99.6**	**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 cell for averages and deposition: Rejected monthly (annual) value by the criteria of EANET (%PCL<80% or %TP<80%)

Table 3.48 Monthly results **Site: Irkutsk** **Country: Russia**

Precipitation amount-weighted average concentration/ Precipitation amount

2013	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	116	114	63.4	27.1	43.8	24.2	10.2	169	169	25.6	0.129	6.89	6.30	6.18
Feb	93.0	90.4	58.7	53.1	63.7	42.9	7.93	153	152	19.7	0.107	6.97	6.02	3.83
Mar	63.2	56.0	30.8	148	25.8	119	9.93	96.3	93.7	15.0	0.152	6.82	5.27	5.12
Apr	65.2	63.0	22.0	40.6	39.1	36.9	8.46	47.6	46.8	10.6	12.3	4.91	3.20	12.3
May	37.6	36.8	17.0	15.2	31.5	12.5	8.53	33.3	33.1	8.67	3.58	5.45	1.93	40.3
June	42.8	42.5	14.5	16.5	28.6	5.29	5.29	27.3	27.1	6.61	19.0	4.72	2.29	47.5
July	24.2	23.9	11.4	9.14	20.1	5.47	3.39	21.8	21.7	4.45	13.1	4.88	1.68	42.1
Aug	23.2	23.1	14.7	9.27	27.8	1.93	1.67	10.9	10.8	2.60	21.5	4.67	1.76	23.7
Sept	12.1	11.9	7.04	6.14	15.2	2.41	1.49	7.64	7.59	1.22	9.12	5.04	0.806	44.6
Oct	21.0	20.9	11.1	5.95	40.9	3.56	4.09	11.6	11.5	2.47	2.43	5.61	1.10	16.5
Nov	81.9	79.7	38.3	47.3	49.7	37.1	11.2	83.3	82.5	13.8	0.829	6.08	3.96	8.38
Dec	45.1	43.6	16.2	32.1	41.6	23.8	6.80	50.2	49.7	7.49	0.861	6.07	2.38	26.1
Annual	36.6	35.8	16.3	19.2	29.5	12.8	5.19	33.0	32.7	6.38	9.81	5.01	2.08	277
Max.	396	360	192	736	300	609	77.5	449	436	78.0	42.7	8.08	23.6	
Min.	6.25	6.09	1.94	1.15	<1	1.30	1.02	4.24	4.18	0.410	0.00832	4.37	0.406	

Wet deposition amount

2013	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	0.716	0.707	0.392	0.168	0.270	0.150	0.0630	1.05	1.04	0.158	<0.01
Feb	0.356	0.346	0.225	0.203	0.244	0.164	0.0304	0.587	0.584	0.0754	<0.01
Mar	0.324	0.287	0.158	0.759	0.132	0.612	0.0508	0.493	0.480	0.0768	<0.01
Apr	0.804	0.776	0.271	0.501	0.482	0.454	0.104	0.586	0.576	0.131	0.151
May	1.51	1.48	0.684	0.612	1.27	0.504	0.344	1.34	1.33	0.349	0.144
June	2.03	2.02	0.687	0.784	1.36	0.251	0.251	1.29	1.29	0.314	0.904
July	1.02	1.00	0.481	0.385	0.845	0.230	0.143	0.920	0.915	0.187	0.553
Aug	0.551	0.548	0.349	0.220	0.660	0.0458	0.0396	0.258	0.257	0.0616	0.509
Sept	0.538	0.531	0.314	0.273	0.676	0.107	0.0662	0.340	0.338	0.0542	0.406
Oct	0.346	0.343	0.183	0.0979	0.673	0.0585	0.0674	0.191	0.189	0.0406	0.0401
Nov	0.686	0.668	0.321	0.396	0.417	0.311	0.0939	0.698	0.691	0.116	<0.01
Dec	1.18	1.14	0.424	0.839	1.09	0.621	0.178	1.31	1.30	0.196	0.0225
Annual	10.1	9.90	4.52	5.30	8.15	3.55	1.44	9.12	9.04	1.77	2.71

Data completeness

2013	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	99.0	99.0	99.0	99.0	99.0	99.0	99.0	99.0	99.0	99.0	100	100	99.0	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	94.3	94.3	94.3	94.3	94.3	94.3	94.3	94.3	94.3	94.3	94.3	94.3	94.3	100
July	92.2	92.2	92.2	92.2	92.2	92.2	92.2	92.2	92.2	92.2	100	100	100	100
Aug	98.7	98.7	98.7	98.7	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	90.0	90.0	90.0	90.0	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	**97.1**	**97.1**	**97.1**	**97.1**	**97.8**	**97.8**	**97.8**	**97.8**	**97.8**	**97.8**	**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 cell for averages and deposition: Rejected monthly (annual) value by the criteria of EANET (%PCL<80% or %TP<80%)

Table 3.49 Monthly results **Site: Primorskaya** **Country: Russia**

Precipitation amount-weighted average concentration/ Precipitation amount

2013	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	76.2	63.5	132	153	89.9	210	22.3	49.7	45.2	22.2	4.03	5.39	6.14	7.80
Feb	40.9	38.7	41.3	32.4	42.9	35.6	8.38	23.9	23.2	8.56	7.86	5.10	2.28	40.4
Mar	71.3	68.1	72.1	63.9	60.9	52.5	13.6	64.2	63.0	23.3	2.25	5.65	3.98	31.5
Apr	52.6	49.5	71.8	49.9	47.5	51.9	9.10	58.0	56.9	13.8	2.22	5.65	3.26	29.1
May	31.5	30.3	32.4	46.8	41.2	19.6	10.7	29.9	29.5	6.51	5.66	5.25	2.11	69.0
June	33.1	32.6	3.83	51.2	70.3	7.32	3.63	13.7	13.5	2.72	11.0	4.96	2.00	82.2
July	10.2	9.86	1.73	29.2	20.5	5.61	2.88	5.60	5.48	1.01	10.4	4.98	0.977	203
Aug	24.0	22.8	7.15	50.1	46.9	20.3	4.35	11.1	10.6	2.48	10.5	4.98	1.78	94.8
Sept	29.5	27.0	13.7	33.1	25.5	41.4	3.98	10.6	9.72	3.28	4.57	5.34	1.49	38.3
Oct	48.2	45.8	19.0	28.5	48.2	40.0	4.20	16.7	15.8	5.26	10.6	4.97	2.26	57.7
Nov	30.1	27.0	18.4	56.2	29.1	50.9	5.18	17.5	16.4	4.87	11.3	4.95	2.12	57.7
Dec	22.6	19.4	9.05	61.3	21.1	52.6	7.15	16.3	15.2	6.01	2.63	5.58	1.71	10.9
Annual	29.2	27.6	18.5	42.7	39.6	25.5	5.55	18.0	17.4	4.89	8.80	5.06	1.89	723
Max.	380	336	248	486	543	722	56.3	532	517	125	69.2	7.15	24.6	
Min.	2.60	2.34	<1	15.5	<1	4.30	<0.3	1.50	1.41	<0.4	0.0708	4.16	0.470	

Wet deposition amount

2013	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	0.594	0.495	1.03	1.19	0.701	1.64	0.174	0.388	0.352	0.173	0.0315
Feb	1.65	1.56	1.67	1.31	1.73	1.44	0.339	0.967	0.936	0.346	0.318
Mar	2.25	2.15	2.27	2.01	1.92	1.65	0.428	2.02	1.99	0.735	0.0708
Apr	1.53	1.44	2.09	1.45	1.38	1.51	0.265	1.69	1.65	0.402	0.0646
May	2.17	2.09	2.24	3.23	2.84	1.36	0.740	2.06	2.03	0.449	0.391
June	2.72	2.68	0.315	4.21	5.77	0.602	0.298	1.13	1.11	0.224	0.906
July	2.07	2.00	0.351	5.93	4.16	1.14	0.586	1.14	1.11	0.205	2.11
Aug	2.28	2.16	0.677	4.75	4.45	1.93	0.413	1.05	1.01	0.235	0.996
Sept	1.13	1.03	0.523	1.27	0.976	1.59	0.153	0.407	0.372	0.126	0.175
Oct	2.78	2.64	1.10	1.64	2.78	2.31	0.242	0.962	0.912	0.304	0.614
Nov	1.74	1.56	1.06	3.24	1.68	2.94	0.299	1.01	0.944	0.281	0.651
Dec	0.246	0.212	0.0986	0.668	0.230	0.574	0.0780	0.178	0.165	0.0656	0.0287
Annual	21.1	20.0	13.4	30.9	28.6	18.4	4.01	13.0	12.6	3.53	6.36

Data completeness

2013	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	94.9	94.9	94.9	94.9	94.9	94.9	94.9	94.9	94.9	94.9	100	100	94.9	100
Feb	99.0	99.0	99.0	99.0	99.0	99.0	99.0	99.0	99.0	99.0	100	100	99.0	100
Mar	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Apr	99.0	99.0	99.0	99.0	99.0	99.0	99.0	99.0	99.0	99.0	100	100	99.0	100
May	99.0	99.0	99.0	99.0	99.0	99.0	99.0	99.0	99.0	99.0	100	100	99.0	100
June	100	100	100	100	100	100	100	100	100	100	100	100	100	100
July	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Aug	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	100	100	98.0	100
Sept	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Oct	92.4	92.4	92.4	92.4	92.4	92.4	92.4	92.4	92.4	92.4	100	100	92.4	100
Nov	97.1	97.1	97.1	97.1	97.1	97.1	97.1	97.1	97.1	97.1	100	100	97.1	100
Dec	84.4	84.4	84.4	84.4	84.4	84.4	84.4	84.4	84.4	84.4	100	100	84.4	100
Annual	**98.4**	**98.4**	**98.4**	**98.4**	**98.4**	**98.4**	**98.4**	**98.4**	**98.4**	**98.4**	**100**	**100**	**98.4**	**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 cell for averages and deposition: Rejected monthly (annual) value by the criteria of EANET (%PCL<80% or %TP<80%)

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

Precipitation amount-weighted average concentration/ Precipitation amount

2013	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	29.1	26.8	75.7	38.0	91.5	38.6	4.86	59.3	58.5	5.76	0.338	6.47	3.55	75.0
May	6.11	3.25	20.2	10.8	55.5	47.4	5.67	89.2	88.2	9.27	0.150	6.82	3.39	57.4
June	10.8	9.62	14.5	19.3	57.1	19.6	2.69	46.6	46.2	4.81	1.06	5.97	2.24	190
July	9.47	8.66	17.2	5.54	53.5	13.5	2.21	28.5	28.2	3.09	0.478	6.32	1.46	95.9
Aug	4.28	3.69	3.07	3.06	42.2	9.81	1.43	16.1	15.9	2.33	0.616	6.21	0.965	279
Sept	6.08	5.80	11.6	1.62	36.5	4.71	1.05	16.7	16.6	1.55	2.78	5.56	0.925	278
Oct	2.78	2.58	4.66	1.47	35.5	3.26	1.15	6.60	6.53	0.536	6.82	5.17	0.651	308
Nov	4.10	3.65	9.90	4.37	59.4	7.42	1.79	26.8	26.7	1.62	0.388	6.41	1.03	46.6
Dec	--	--	--	--	--	--	--	--	--	--	--	--	--	0
Annual	7.09	6.36	12.9	7.24	46.3	12.0	1.91	25.2	25.0	2.63	2.52	5.60	1.35	1330
Max.	103	95.1	190	242	155	129	16.4	402	399	33.7	16.2	7.13	11.3	
Min.	<1	<1	<1	<1	13.9	<1	<0.3	2.25	2.22	0.411	0.0741	4.79	0.290	

Wet deposition amount

2013	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	2.18	2.01	5.68	2.85	6.86	2.89	0.364	4.45	4.38	0.432	0.0254
May	0.351	0.187	1.16	0.620	3.18	2.72	0.326	5.12	5.06	0.532	<0.01
June	2.05	1.82	2.74	3.67	10.8	3.71	0.509	8.83	8.75	0.912	0.202
July	0.908	0.830	1.65	0.532	5.13	1.29	0.212	2.73	2.70	0.296	0.0458
Aug	1.19	1.03	0.859	0.855	11.8	2.74	0.400	4.49	4.43	0.651	0.172
Sept	1.69	1.61	3.22	0.451	10.1	1.31	0.292	4.63	4.60	0.431	0.774
Oct	0.856	0.795	1.43	0.452	10.9	1.00	0.353	2.03	2.01	0.165	2.10
Nov	0.191	0.170	0.461	0.204	2.77	0.346	0.0834	1.25	1.24	0.0755	0.0181
Dec	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	9.42	8.46	17.2	9.63	61.6	16.0	2.54	33.5	33.2	3.50	3.35

Data completeness

2013	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 cell for averages and deposition: Rejected monthly (annual) value by the criteria of EANET (%PCL<80% or %TP<80%)

Table 3.51 Monthly results **Site: Samutprakarn** **Country: Thailand**

Precipitation amount-weighted average concentration/ Precipitation amount

2013	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	4.51	1.38	5.34	14.5	35.2	67.0	4.88	29.7	28.2	10.7	0.236	6.63	1.52	88.2
June	16.6	13.3	7.43	27.3	60.0	54.1	8.15	32.1	31.0	9.85	0.497	6.30	2.14	127
July	10.3	8.80	6.99	11.2	39.7	24.6	7.44	19.7	19.1	4.20	0.821	6.09	1.32	199
Aug	5.24	3.79	2.20	6.30	35.5	24.1	6.10	18.9	18.4	4.26	0.503	6.30	1.13	241
Sept	6.77	5.87	5.94	5.18	33.1	14.9	4.15	16.2	15.9	2.45	1.99	5.70	1.01	258
Oct	4.91	4.64	3.86	1.95	31.7	4.38	1.70	13.9	13.8	1.38	1.46	5.84	0.690	202
Nov	--	--	--	--	--	--	--	--	--	--	--	--	--	0
Dec	--	--	--	--	--	--	--	--	--	--	--	--	--	0
Annual	7.67	6.22	5.07	9.16	37.7	25.3	5.23	19.9	19.3	4.46	1.06	5.98	1.20	1115
Max.	99.8	86.3	32.1	163	109	225	80.6	155	150	40.3	7.24	7.13	8.08	
Min.	<1	<1	<1	<1	8.31	2.17	0.767	3.99	3.78	0.823	0.0741	5.14	0.360	

Wet deposition amount

2013	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	0.398	0.122	0.471	1.27	3.10	5.91	0.431	2.62	2.49	0.945	0.0208
June	2.11	1.69	0.943	3.47	7.61	6.87	1.03	4.08	3.93	1.25	0.0631
July	2.05	1.75	1.39	2.22	7.91	4.90	1.48	3.92	3.82	0.837	0.164
Aug	1.26	0.912	0.529	1.52	8.53	5.80	1.47	4.56	4.43	1.02	0.121
Sept	1.75	1.52	1.53	1.34	8.54	3.84	1.07	4.18	4.09	0.633	0.514
Oct	0.991	0.938	0.779	0.395	6.40	0.885	0.343	2.81	2.79	0.279	0.295
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	8.55	6.94	5.65	10.2	42.1	28.2	5.83	22.2	21.6	4.97	1.18

Data completeness

2013	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	96.3	96.3	96.3	100
June	100	100	100	100	100	100	100	100	100	100	100	100	100	100
July	100	100	100	100	100	100	100	100	100	100	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**	**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 cell for averages and deposition: Rejected monthly (annual) value by the criteria of EANET (%PCL<80% or %TP<80%)

Table 3.52 Monthly results **Site: Pathumthani** **Country: Thailand**

Precipitation amount-weighted average concentration/ Precipitation amount

2013	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	35.8	33.7	123	66.7	127	38.8	10.0	31.4	30.6	8.02	36.6	4.44	5.07	5.27
Feb	--	--	--	--	--	--	--	--	--	--	--	--	--	0
Mar	20.7	20.0	59.2	29.3	129	11.5	6.81	34.7	34.4	4.49	1.51	5.82	2.59	2.72
Apr	25.4	23.8	62.9	19.2	213	25.6	10.8	102	101	9.66	17.1	4.77	2.91	94.2
May	14.3	13.7	39.6	11.7	58.1	9.37	1.98	37.0	36.8	3.36	2.09	5.68	1.61	79.2
June	8.26	7.66	18.0	10.9	37.0	9.90	2.10	25.4	25.1	3.98	4.26	5.37	1.23	92.0
July	15.2	14.7	35.5	11.9	60.7	8.64	2.72	50.8	50.6	4.30	4.49	5.35	1.98	56.6
Aug	6.18	5.87	11.9	6.93	34.8	5.08	1.11	26.6	26.5	2.56	0.474	6.32	0.871	234
Sept	4.93	4.82	8.60	2.61	19.1	1.79	1.14	14.9	14.9	1.17	2.58	5.59	0.573	349
Oct	10.2	10.1	10.4	2.62	21.7	1.53	0.957	8.85	8.81	0.757	3.92	5.41	0.819	246
Nov	2.94	2.72	5.51	3.00	18.9	3.50	1.21	19.0	19.0	1.27	0.274	6.56	0.533	22.7
Dec	--	--	--	--	--	--	--	--	--	--	--	--	--	0
Annual	9.41	9.04	18.6	6.85	44.9	5.96	2.13	27.1	27.0	2.59	3.90	5.41	1.08	1181
Max.	243	240	199	78.6	712	127	88.9	542	540	47.6	43.7	6.65	10.4	
Min.	2.09	1.91	1.43	<1	7.65	<1	0.330	2.60	2.48	0.478	0.224	4.36	0.284	

Wet deposition amount

2013	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	0.189	0.178	0.647	0.352	0.667	0.205	0.0527	0.166	0.161	0.0422	0.193
Feb	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Mar	0.0564	0.0545	0.161	0.0796	0.352	0.0314	0.0185	0.0944	0.0937	0.0122	<0.01
Apr	2.39	2.24	5.93	1.81	20.1	2.41	1.02	9.62	9.56	0.910	1.61
May	1.13	1.09	3.14	0.924	4.61	0.743	0.157	2.93	2.92	0.266	0.165
June	0.760	0.705	1.65	1.00	3.41	0.911	0.193	2.33	2.31	0.366	0.392
July	0.859	0.830	2.01	0.676	3.44	0.489	0.154	2.88	2.87	0.243	0.254
Aug	1.44	1.37	2.78	1.62	8.12	1.19	0.258	6.22	6.19	0.598	0.111
Sept	1.72	1.68	3.00	0.911	6.67	0.624	0.398	5.20	5.19	0.407	0.901
Oct	2.50	2.47	2.55	0.644	5.33	0.375	0.235	2.17	2.16	0.186	0.962
Nov	0.0666	0.0618	0.125	0.0680	0.430	0.0794	0.0274	0.432	0.430	0.0287	<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	11.1	10.7	22.0	8.08	53.1	7.04	2.51	32.0	31.9	3.06	4.60

Data completeness

2013	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	89.2	100	100	89.2	89.2	89.2	89.2	89.2	89.2	100	100	100	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	99.4	99.4	99.4	100
Aug	100	100	100	100	100	100	100	100	100	100	99.9	99.9	99.9	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 cell for averages and deposition: Rejected monthly (annual) value by the criteria of EANET (%PCL<80% or %TP<80%)

Table 3.53 Monthly results **Site: Khanchanaburi** **Country: Thailand**

Precipitation amount-weighted average concentration/ Precipitation amount

2013	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	20.2	19.8	42.6	12.6	93.3	5.98	8.92	11.0	10.8	2.83	0.244	6.61	2.01	21.9
Apr	13.0	12.1	26.3	13.0	72.1	15.2	6.65	14.7	14.4	4.11	0.288	6.54	1.81	7.80
May	2.20	1.93	3.32	1.67	27.6	4.49	2.74	6.66	6.56	2.04	0.531	6.27	0.550	16.4
June	1.49	<1	1.55	8.99	4.72	13.0	0.995	7.82	7.54	2.08	2.19	5.66	0.456	304
July	<1	<1	<1	1.09	3.26	3.70	1.11	2.43	2.35	0.721	4.98	5.30	0.195	448
Aug	<1	<1	1.07	1.49	4.90	4.94	0.476	1.57	1.46	0.658	4.73	5.33	0.329	214
Sept	<1	<1	<1	<1	3.44	2.65	0.394	0.750	0.693	0.667	3.49	5.46	0.216	315
Oct	2.38	2.25	3.06	1.12	11.9	2.17	0.640	2.21	2.16	0.659	12.4	4.91	0.337	166
Nov	2.29	2.11	4.84	2.54	17.7	3.04	1.28	3.74	3.68	0.823	1.26	5.90	0.220	8.50
Dec	--	--	--	--	--	--	--	--	--	--	--	--	--	0
Annual	1.23	<1	1.93	2.89	6.80	5.46	0.955	3.26	3.14	1.03	4.72	5.33	0.326	1501
Max.	20.6	20.3	46.8	20.6	93.7	27.0	10.7	89.8	89.3	5.76	63.1	6.77	2.66	
Min.	<1	<1	<1	<1	<1	<1	<0.3	0.250	0.221	0.411	0.170	4.20	0.0500	

Wet deposition amount

2013	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	0.442	0.434	0.933	0.275	2.04	0.131	0.195	0.240	0.237	0.0619	<0.01
Apr	0.101	0.0943	0.205	0.101	0.562	0.119	0.0519	0.115	0.112	0.0321	<0.01
May	0.0360	0.0316	0.0544	0.0274	0.452	0.0737	0.0449	0.109	0.108	0.0334	<0.01
June	0.454	0.217	0.472	2.73	1.43	3.94	0.302	2.38	2.29	0.632	0.666
July	0.163	0.0972	0.209	0.489	1.46	1.66	0.496	1.09	1.05	0.323	2.23
Aug	0.146	0.0993	0.229	0.318	1.05	1.06	0.102	0.336	0.313	0.141	1.01
Sept	0.0863	0.0375	0.248	0.189	1.08	0.834	0.124	0.236	0.218	0.210	1.10
Oct	0.394	0.372	0.506	0.185	1.97	0.359	0.106	0.366	0.358	0.109	2.05
Nov	0.0195	0.0179	0.0411	0.0216	0.151	0.0259	0.0109	0.0318	0.0313	<0.01	0.0107
Dec	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	1.84	1.40	2.90	4.34	10.2	8.19	1.43	4.90	4.72	1.55	7.08

Data completeness

2013	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 cell for averages and deposition: Rejected monthly (annual) value by the criteria of EANET (%PCL<80% or %TP<80%)

Table 3.54 Monthly results **Site: Chiang Mai** **Country: Thailand**

Precipitation amount-weighted average concentration/ Precipitation amount

2013	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	16.0	15.5	29.5	9.45	54.6	7.94	9.84	8.11	7.94	1.85	13.8	4.86	2.07	13.0
Feb	7.76	7.39	20.1	4.32	28.2	6.14	6.13	5.66	5.52	0.912	10.5	4.98	1.29	27.7
Mar	--	--	--	--	--	--	--	--	--	--	--	--	--	0
Apr	27.8	25.5	73.9	37.0	90.5	37.3	4.97	57.1	56.3	5.71	0.359	6.44	3.48	78.8
May	5.76	5.19	35.3	13.0	60.6	9.47	5.96	25.2	25.0	5.02	1.54	5.81	1.83	64.6
June	5.77	5.58	9.00	4.53	20.4	3.11	0.645	9.20	9.14	2.22	0.369	6.43	0.477	97.9
July	<1	<1	5.57	3.74	13.9	2.38	1.03	12.7	12.6	1.38	0.304	6.52	0.499	215
Aug	1.49	1.31	4.26	2.90	12.7	3.22	0.745	4.37	4.30	0.583	0.516	6.29	0.336	337
Sept	3.27	3.21	1.95	6.00	9.56	2.57	0.789	6.11	6.05	0.972	0.889	6.05	0.399	311
Oct	4.25	3.84	5.07	2.01	13.7	6.84	0.902	7.65	7.50	1.23	0.524	6.28	0.409	153
Nov	1.45	1.23	1.75	<1	6.01	3.74	0.969	4.23	4.15	0.909	0.538	6.27	0.504	135
Dec	--	--	--	--	--	--	--	--	--	--	--	--	--	0
Annual	4.13	3.83	9.89	5.94	19.3	5.63	1.48	10.6	10.4	1.50	0.909	6.04	0.682	1433
Max.	35.9	35.4	78.1	41.2	170	40.5	13.2	73.4	73.1	10.7	16.6	6.87	4.13	
Min.	<1	<1	<1	<1	3.09	<1	<0.3	0.621	0.591	<0.4	0.135	4.78	0.150	

Wet deposition amount

2013	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	0.208	0.202	0.383	0.123	0.710	0.103	0.128	0.105	0.103	0.0240	0.180
Feb	0.215	0.205	0.556	0.120	0.781	0.170	0.170	0.157	0.153	0.0253	0.290
Mar	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Apr	2.19	2.01	5.82	2.92	7.13	2.94	0.391	4.50	4.43	0.450	0.0283
May	0.372	0.335	2.28	0.841	3.91	0.612	0.385	1.63	1.61	0.324	0.0993
June	0.565	0.547	0.882	0.443	1.99	0.305	0.0632	0.901	0.894	0.217	0.0361
July	<0.01	<0.01	1.20	0.805	2.98	0.514	0.221	2.73	2.72	0.298	0.0656
Aug	0.501	0.440	1.43	0.976	4.26	1.08	0.251	1.47	1.45	0.196	0.174
Sept	1.02	0.999	0.605	1.87	2.97	0.801	0.245	1.90	1.88	0.302	0.276
Oct	0.649	0.586	0.774	0.307	2.09	1.04	0.138	1.17	1.15	0.187	0.0800
Nov	0.197	0.166	0.237	0.113	0.813	0.505	0.131	0.572	0.562	0.123	0.0728
Dec	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	5.92	5.49	14.2	8.51	27.7	8.07	2.12	15.1	15.0	2.15	1.30

Data completeness

2013	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	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	100	100	100	100
Oct	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Nov	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Dec	--	--	--	--	--	--	--	--	--	--	--	--	--	100
Annual	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**99.9**	**99.9**	**99.9**	**100**

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

[0.00] for deposition: The deposition was 0 mmol/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 cell for averages and deposition: Rejected monthly (annual) value by the criteria of EANET (%PCL<80% or %TP<80%)

Table 3.55 Monthly results **Site: Nakhon Ratchasima** **Country: Thailand**

Precipitation amount-weighted average concentration/ Precipitation amount

2013	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	13.3	12.8	29.8	15.2	68.2	8.73	5.61	0.499	0.310	0.752	36.3	4.44	2.55	39.8
Feb	29.6	28.6	84.8	28.5	161	16.5	12.0	11.2	10.9	3.70	89.1	4.05	6.16	12.2
Mar	--	--	--	--	--	--	--	--	--	--	--	--	--	0
Apr	16.7	15.9	51.6	20.0	119	13.0	6.65	11.0	10.7	2.88	29.5	4.53	3.46	2.20
May	8.50	8.36	24.7	6.92	33.7	2.32	0.867	1.42	1.39	<0.4	9.30	5.03	1.07	106
June	4.28	4.11	9.79	6.74	14.5	2.78	0.619	2.05	1.99	<0.4	5.08	5.29	0.619	221
July	4.65	4.39	7.32	6.85	14.1	4.33	0.709	3.75	3.67	<0.4	1.08	5.97	0.449	107
Aug	5.56	5.29	12.3	7.63	31.3	4.43	1.32	8.37	8.28	0.582	0.696	6.16	0.680	121
Sept	4.09	3.94	7.47	5.27	13.3	2.42	0.399	0.749	0.711	<0.4	1.20	5.92	0.482	351
Oct	11.7	11.6	6.00	4.20	25.5	1.57	<0.3	0.508	0.479	<0.4	6.78	5.17	0.867	421
Nov	7.80	7.49	7.43	10.6	32.5	5.18	1.13	2.46	2.34	<0.4	0.170	6.77	0.602	61.2
Dec	--	--	--	--	--	--	--	--	--	--	--	--	--	0
Annual	7.49	7.31	10.4	6.34	23.8	2.96	0.813	1.96	1.90	<0.4	5.70	5.24	0.789	1443
Max.	62.9	62.1	84.8	113	161	114	21.0	78.6	78.1	10.7	89.1	7.47	6.16	
Min.	1.25	1.20	<1	2.54	<1	<1	<0.3	<0.2	<0.2	<0.4	0.0339	4.05	0.220	

Wet deposition amount

2013	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	0.531	0.510	1.19	0.604	2.71	0.347	0.223	0.0199	0.0124	0.0299	1.45
Feb	0.361	0.349	1.03	0.348	1.96	0.202	0.147	0.137	0.133	0.0452	1.09
Mar	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Apr	0.0366	0.0349	0.114	0.0441	0.261	0.0287	0.0146	0.0242	0.0235	<0.01	0.0649
May	0.905	0.890	2.62	0.737	3.58	0.247	0.0922	0.151	0.148	<0.01	0.990
June	0.946	0.909	2.16	1.49	3.20	0.615	0.137	0.453	0.440	0.0644	1.12
July	0.496	0.468	0.781	0.730	1.50	0.462	0.0756	0.399	0.391	0.0281	0.115
Aug	0.675	0.643	1.49	0.926	3.80	0.538	0.160	1.02	1.00	0.0707	0.0845
Sept	1.43	1.38	2.62	1.85	4.65	0.850	0.140	0.263	0.250	0.0104	0.421
Oct	4.94	4.90	2.53	1.77	10.7	0.661	0.114	0.214	0.202	0.0183	2.86
Nov	0.478	0.458	0.455	0.650	1.99	0.317	0.0690	0.150	0.144	0.0122	0.0104
Dec	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	10.8	10.5	15.0	9.14	34.4	4.27	1.17	2.83	2.75	0.289	8.23

Data completeness

2013	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	99.6	99.6	99.6	100
July	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6	97.0	97.0	97.0	100
Aug	100	100	100	100	100	100	100	100	100	100	99.2	99.2	99.2	100
Sept	100	100	100	100	100	100	100	100	100	100	99.6	99.6	99.6	100
Oct	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Nov	100	100	100	100	100	100	100	100	100	100	98.4	98.4	98.4	100
Dec	--	--	--	--	--	--	--	--	--	--	--	--	--	100
Annual	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**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 cell for averages and deposition: Rejected monthly (annual) value by the criteria of EANET (%PCL<80% or %TP<80%)

Table 3.56 Monthly results **Site: Hanoi** **Country: Vietnam**

Precipitation amount-weighted average concentration/ Precipitation amount

2013	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	264	258	252	113	353	100	21.7	210	208	33.2	10.9	4.96	13.7	18.1
Feb	199	195	163	85.9	449	64.2	14.5	59.7	58.3	16.3	1.01	5.99	9.96	17.7
Mar	60.9	60.4	49.0	17.3	132	9.11	6.77	18.5	18.3	5.57	5.65	5.25	3.17	52.9
Apr	82.3	80.7	86.9	30.4	180	26.4	12.0	36.2	35.6	8.97	2.39	5.62	4.48	24.0
May	29.0	28.6	23.7	9.99	48.9	7.61	3.08	21.4	21.2	3.36	1.86	5.73	1.61	259
June	21.9	21.7	12.3	3.81	40.2	2.36	2.16	12.8	12.7	1.80	0.755	6.12	1.10	244
July	18.9	18.4	12.6	8.81	44.3	7.42	1.79	15.0	14.8	2.10	0.427	6.37	1.20	271
Aug	12.8	12.4	28.5	7.17	30.0	7.05	1.84	13.3	13.2	2.27	0.833	6.08	0.984	573
Sept	16.7	16.5	16.3	4.49	38.8	3.03	1.60	6.24	6.18	1.01	4.33	5.36	1.01	330
Oct	72.4	71.4	60.2	36.3	157	17.6	5.54	23.9	23.6	6.17	13.8	4.86	4.03	63.5
Nov	7.25	7.19	5.38	1.75	27.0	1.01	0.512	7.17	7.15	0.954	0.323	6.49	0.660	69.2
Dec	44.0	43.7	31.4	7.51	84.8	4.90	2.57	19.1	19.0	2.29	5.88	5.23	2.11	21.8
Annual	25.9	25.4	26.3	9.93	53.4	7.69	2.64	16.2	16.1	2.79	2.21	5.66	1.52	1945
Max.	548	543	434	191	725	167	68.3	415	414	63.4	24.6	7.31	25.6	
Min.	5.59	5.56	4.22	1.43	16.9	<1	0.434	4.53	4.46	0.620	0.0485	4.61	0.595	

Wet deposition amount

2013	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	4.78	4.67	4.56	2.05	6.40	1.81	0.392	3.81	3.77	0.600	0.198
Feb	3.52	3.45	2.89	1.52	7.94	1.13	0.257	1.05	1.03	0.288	0.0179
Mar	3.22	3.19	2.59	0.917	7.00	0.482	0.358	0.977	0.967	0.294	0.299
Apr	1.97	1.93	2.08	0.729	4.31	0.633	0.286	0.868	0.854	0.215	0.0574
May	7.52	7.40	6.14	2.59	12.7	1.97	0.799	5.54	5.50	0.871	0.481
June	5.33	5.30	2.99	0.928	9.81	0.575	0.527	3.11	3.10	0.440	0.184
July	5.12	5.00	3.42	2.39	12.0	2.01	0.485	4.07	4.02	0.571	0.116
Aug	7.34	7.10	16.3	4.11	17.2	4.04	1.05	7.65	7.56	1.30	0.478
Sept	5.50	5.44	5.38	1.48	12.8	1.00	0.530	2.06	2.04	0.334	1.43
Oct	4.60	4.53	3.82	2.31	9.96	1.12	0.352	1.52	1.50	0.392	0.877
Nov	0.502	0.497	0.372	0.121	1.87	0.0697	0.0354	0.496	0.495	0.0660	0.0224
Dec	0.958	0.952	0.684	0.163	1.85	0.107	0.0560	0.417	0.414	0.0499	0.128
Annual	50.4	49.5	51.2	19.3	104	15.0	5.13	31.6	31.2	5.42	4.29

Data completeness

2013	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	75.0
Annual	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**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 cell for averages and deposition: Rejected monthly (annual) value by the criteria of EANET (%PCL<80% or %TP<80%)

Table 3.57 Monthly results **Site: Hoa Binh** **Country: Vietnam**

Precipitation amount-weighted average concentration/ Precipitation amount

2013	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	177	174	115	69.3	91.4	47.9	85.3	170	169	28.2	0.473	6.33	8.54	29.7
Feb	83.5	80.7	101	32.8	107	47.1	36.8	65.6	64.6	11.1	0.251	6.60	4.65	2.80
Mar	92.0	91.6	73.7	15.8	121	7.82	32.1	60.6	60.5	9.70	0.610	6.22	4.30	14.6
Apr	69.9	69.5	68.1	11.9	104	7.18	22.9	45.6	45.5	9.72	0.408	6.39	3.49	52.6
May	21.1	20.7	19.9	6.81	29.1	5.51	8.24	15.6	15.4	3.34	0.788	6.10	1.19	322
June	9.48	9.38	7.77	2.23	14.3	1.60	3.76	9.24	9.21	1.18	0.746	6.13	0.588	252
July	8.68	8.55	13.4	2.55	14.9	2.13	5.00	9.70	9.65	1.17	0.710	6.15	0.631	410
Aug	8.97	8.75	11.9	4.75	12.5	3.69	4.91	8.63	8.55	1.33	1.12	5.95	0.619	497
Sept	14.5	14.3	15.3	5.01	18.9	2.83	4.31	11.7	11.7	1.73	1.39	5.86	0.812	258
Oct	47.6	47.4	32.9	11.6	62.6	3.26	4.83	39.9	39.8	4.66	0.827	6.08	2.36	125
Nov	52.3	51.9	35.3	13.4	52.6	7.73	5.31	45.3	45.2	7.83	0.888	6.05	2.39	28.6
Dec	81.6	81.0	58.3	19.9	88.3	9.38	12.1	71.8	71.6	12.9	0.252	6.60	3.86	14.2
Annual	19.7	19.5	18.8	6.18	25.3	4.13	7.10	16.9	16.9	2.69	0.911	6.04	1.10	2008
Max.	560	553	336	204	298	127	104	607	604	91.9	3.16	7.15	25.9	
Min.	4.37	4.22	4.07	<1	5.48	<1	1.01	4.89	4.84	0.709	0.0708	5.50	0.390	

Wet deposition amount

2013	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	5.25	5.16	3.40	2.06	2.71	1.42	2.53	5.05	5.02	0.839	0.0140
Feb	0.234	0.226	0.283	0.0919	0.299	0.132	0.103	0.184	0.181	0.0310	<0.01
Mar	1.34	1.34	1.08	0.231	1.76	0.114	0.469	0.885	0.883	0.142	<0.01
Apr	3.68	3.66	3.58	0.624	5.44	0.378	1.20	2.40	2.39	0.511	0.0215
May	6.78	6.68	6.41	2.19	9.38	1.77	2.65	5.01	4.97	1.08	0.254
June	2.39	2.37	1.96	0.563	3.61	0.404	0.950	2.33	2.32	0.298	0.188
July	3.56	3.51	5.49	1.05	6.12	0.874	2.05	3.98	3.96	0.480	0.291
Aug	4.46	4.35	5.92	2.36	6.22	1.83	2.44	4.29	4.25	0.661	0.556
Sept	3.74	3.70	3.94	1.29	4.88	0.731	1.11	3.03	3.02	0.448	0.359
Oct	5.95	5.93	4.11	1.45	7.83	0.408	0.604	4.99	4.98	0.584	0.104
Nov	1.50	1.48	1.01	0.382	1.50	0.221	0.152	1.30	1.29	0.224	0.0254
Dec	1.16	1.15	0.829	0.282	1.25	0.133	0.171	1.02	1.02	0.184	<0.01
Annual	39.6	39.1	37.7	12.4	50.7	8.29	14.3	34.0	33.8	5.40	1.83

Data completeness

2013	SO_4^{2-}	nss-SO_4^{2-}	NO_3^-	Cl^-	NH_4^+	Na^+	K^+	Ca^{2+}	nss-Ca^{2+}	Mg^{2+}	H^+	pH	EC	Precip.
	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%PCL
Jan	92.6	92.6	92.6	92.6	92.6	92.6	92.6	92.6	92.6	92.6	92.6	92.6	92.6	100
Feb	78.6	78.6	78.6	78.6	78.6	78.6	78.6	78.6	78.6	78.6	78.6	78.6	78.6	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	91.6	91.6	91.6	91.6	91.6	91.6	91.6	91.6	91.6	91.6	91.6	91.6	91.6	100
Dec	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
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 cell for averages and deposition: Rejected monthly (annual) value by the criteria of EANET (%PCL<80% or %TP<80%)

Table 3.58 Monthly results **Site: Cuc Phuong** **Country: Vietnam**

Precipitation amount-weighted average concentration/ Precipitation amount

2013	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	135	130	173	104	168	79.4	15.4	189	188	80.4	0.107	6.97	9.74	18.4
Feb	106	100	116	104	179	98.5	17.1	142	140	66.5	0.357	6.45	8.45	39.3
Mar	99.8	94.6	123	119	138	86.0	27.8	126	124	78.7	0.688	6.16	8.66	25.6
Apr	44.4	42.8	42.7	74.8	20.3	27.0	9.24	72.3	71.8	35.3	0.102	6.99	3.26	80.6
May	21.9	20.8	21.6	22.8	18.9	17.6	8.24	31.0	30.6	11.3	1.41	5.85	1.53	239
June	11.2	10.1	8.85	16.1	20.7	18.6	9.39	20.8	20.6	16.4	0.583	6.23	1.34	198
July	6.93	5.82	6.12	16.4	19.5	18.4	6.20	12.8	12.4	2.70	0.583	6.23	0.925	309
Aug	25.3	23.5	<1	19.8	13.2	30.4	5.06	10.9	10.2	10.3	2.45	5.61	1.21	433
Sept	14.4	13.3	8.42	15.9	6.15	18.8	10.8	2.92	2.69	3.34	9.53	5.02	1.04	326
Oct	64.6	62.9	21.6	23.5	55.8	29.0	9.35	30.9	30.3	4.09	10.4	4.98	2.85	171
Nov	32.9	28.8	38.0	30.0	17.7	68.0	18.4	33.3	31.8	26.7	5.08	5.29	2.75	45.3
Dec	53.2	51.8	41.2	15.2	54.3	22.6	1.43	37.2	36.7	6.95	23.4	4.63	3.28	12.7
Annual	26.9	25.3	16.7	25.2	25.5	26.7	8.57	24.4	23.8	12.2	3.77	5.42	1.80	1898
Max.	212	203	251	345	377	178	42.4	394	391	128	23.4	7.62	17.4	
Min.	2.80	1.69	<1	4.88	<1	4.52	1.43	<0.2	<0.2	0.905	0.0240	4.63	0.610	

Wet deposition amount

2013	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	2.48	2.39	3.18	1.91	3.09	1.46	0.284	3.49	3.45	1.48	<0.01
Feb	4.18	3.94	4.56	4.07	7.04	3.87	0.671	5.60	5.51	2.61	0.0140
Mar	2.56	2.42	3.16	3.05	3.52	2.20	0.713	3.23	3.18	2.01	0.0176
Apr	3.58	3.45	3.44	6.03	1.64	2.17	0.745	5.83	5.78	2.85	<0.01
May	5.23	4.98	5.15	5.46	4.51	4.21	1.97	7.41	7.32	2.70	0.336
June	2.21	1.99	1.75	3.19	4.10	3.68	1.86	4.12	4.08	3.24	0.115
July	2.14	1.80	1.89	5.05	6.04	5.70	1.92	3.94	3.82	0.833	0.180
Aug	11.0	10.2	0.149	8.60	5.72	13.2	2.19	4.72	4.44	4.47	1.06
Sept	4.69	4.32	2.74	5.18	2.00	6.11	3.51	0.951	0.875	1.09	3.10
Oct	11.1	10.8	3.70	4.03	9.55	4.96	1.60	5.29	5.18	0.700	1.78
Nov	1.49	1.31	1.72	1.36	0.801	3.08	0.835	1.51	1.44	1.21	0.230
Dec	0.675	0.658	0.523	0.193	0.690	0.287	0.0182	0.472	0.466	0.0883	0.298
Annual	51.1	48.0	31.6	47.9	48.5	50.7	16.3	46.2	45.2	23.1	7.16

Data completeness

2013	SO_4^{2-}	nss-SO_4^{2-}	NO_3^-	Cl^-	NH_4^+	Na^+	K^+	Ca^{2+}	nss-Ca^{2+}	Mg^{2+}	H^+	pH	EC	Precip.
	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%TP	%PCL
Jan	92.9	92.9	92.9	92.9	92.9	92.9	92.9	92.9	92.9	92.9	92.9	92.9	92.9	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	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
May	100	100	100	100	100	100	100	100	100	100	100	100	100	100
June	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
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	92.9	92.9	92.9	92.9	92.9	92.9	92.9	92.9	92.9	92.9	92.9	92.9	92.9	100
Dec	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Annual	**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**

[--] 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 cell for averages and deposition: Rejected monthly (annual) value by the criteria of EANET (%PCL<80% or %TP<80%)

Table 3.59 Monthly results **Site: Da Nang** **Country: Vietnam**

Precipitation amount-weighted average concentration/ Precipitation amount

2013	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	79.4	59.3	<1	379	79.3	333	54.2	47.2	40.0	47.3	0.741	6.13	7.37	17.5
Feb	25.9	21.2	4.97	111	95.4	78.2	43.5	15.4	13.7	18.2	0.675	6.17	3.68	76.3
Mar	157	148	15.9	253	1555	156	268	109	105	66.7	0.0861	7.07	29.3	12.5
Apr	66.7	59.3	44.6	194	180	123	52.2	104	101	27.8	0.301	6.52	7.13	13.1
May	27.9	24.5	2.02	75.2	54.7	55.5	40.7	57.8	56.6	12.2	0.464	6.33	3.73	43.8
June	33.8	28.9	13.4	105	97.9	81.7	33.8	48.9	47.2	19.1	0.366	6.44	4.72	25.6
July	27.9	24.0	2.53	88.4	28.1	65.8	28.3	33.2	31.8	10.3	0.813	6.09	2.65	131
Aug	17.1	12.0	4.69	99.3	<1	84.4	19.5	23.2	21.4	11.4	1.19	5.92	2.31	119
Sept	7.19	5.75	1.85	33.8	6.76	24.0	11.0	10.9	10.4	4.41	1.12	5.95	0.925	701
Oct	63.8	27.9	4.81	703	10.4	596	24.3	45.3	32.4	69.0	8.09	5.09	11.0	382
Nov	15.1	11.3	7.55	75.3	9.00	62.5	6.68	11.5	10.2	8.73	2.29	5.64	1.71	763
Dec	55.0	48.8	39.6	135	110	103	92.8	22.4	20.1	11.9	1.82	5.74	5.34	29.8
Annual	24.2	15.6	5.41	174	24.6	144	17.9	21.5	18.4	18.8	2.62	5.58	3.46	2315
Max.	215	205	79.7	906	2293	777	390	134	132	87.5	69.2	7.95	41.0	
Min.	3.04	2.08	<1	21.2	<1	15.9	3.84	7.31	6.46	3.33	0.0112	4.16	0.620	

Wet deposition amount

2013	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	1.39	1.04	<0.01	6.63	1.39	5.83	0.949	0.826	0.700	0.828	0.0130
Feb	1.98	1.62	0.379	8.45	7.28	5.97	3.32	1.18	1.05	1.39	0.0515
Mar	1.97	1.85	0.198	3.16	19.4	1.95	3.35	1.36	1.32	0.834	<0.01
Apr	0.874	0.777	0.584	2.54	2.36	1.61	0.684	1.36	1.32	0.364	<0.01
May	1.22	1.07	0.0883	3.29	2.40	2.43	1.78	2.53	2.48	0.533	0.0203
June	0.866	0.739	0.342	2.69	2.51	2.09	0.865	1.25	1.21	0.488	<0.01
July	3.65	3.13	0.331	11.6	3.67	8.60	3.70	4.34	4.15	1.35	0.106
Aug	2.04	1.43	0.560	11.9	0.0938	10.1	2.33	2.77	2.55	1.36	0.142
Sept	5.04	4.03	1.30	23.7	4.74	16.8	7.73	7.66	7.29	3.10	0.788
Oct	24.4	10.6	1.84	269	3.95	227	9.29	17.3	12.4	26.4	3.09
Nov	11.5	8.62	5.76	57.5	6.87	47.7	5.10	8.81	7.78	6.66	1.75
Dec	1.64	1.45	1.18	4.01	3.29	3.07	2.77	0.666	0.600	0.355	0.0543
Annual	56.1	36.0	12.5	403	57.0	333	41.5	49.7	42.5	43.4	6.07

Data completeness

2013	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	66.3	66.3	66.3	66.3	66.3	66.3	66.3	66.3	66.3	66.3	37.7	37.7	37.7	100
Feb	94.5	94.5	94.5	94.5	94.5	94.5	94.5	94.5	94.5	94.5	94.5	94.5	94.5	100
Mar	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Apr	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
May	100	100	100	100	100	100	100	100	100	100	100	100	100	100
June	94.5	94.5	94.5	94.5	94.5	94.5	94.5	94.5	94.5	94.5	94.5	94.5	94.5	100
July	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Aug	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
Sept	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Oct	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Nov	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Dec	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	100
Annual	**99.4**	**99.4**	**99.4**	**99.4**	**99.4**	**99.4**	**99.4**	**99.4**	**99.4**	**99.4**	**99.2**	**99.2**	**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 cell for averages and deposition: Rejected monthly (annual) value by the criteria of EANET (%PCL<80% or %TP<80%)

Table 3.60 Annual precipitation amount and precipitation amount-weighted average concentration in 2013

Country	Name of sites	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	1345	7.99	7.80	7.65	7.53	13.5	3.10	1.06	9.57	9.50	1.12	0.662	6.18	0.665
China	Haifu	1026	106	106	73.9	12.7	142	7.29	12.8	69.5	69.3	8.23	30.1	4.52	5.26
	Jinyunshan	1127	81.4	81.2	53.1	7.21	90.1	3.92	5.49	31.2	31.1	4.42	63.3	4.20	4.81
	Shizhan	441	141	132	35.6	50.8	238	138	28.1	325	322	54.5	0.117	6.93	6.97
	Jiwozi	649	52.6	45.8	8.77	33.9	55.5	112	10.2	133	130	22.3	0.635	6.20	3.61
	Hongwen	1403	21.9	21.0	20.9	19.3	18.3	14.3	1.90	21.9	21.6	3.36	13.2	4.88	1.63
	Xiaoping	1979	22.7	22.0	20.7	13.0	25.3	12.1	1.66	22.7	22.4	4.03	9.92	5.00	1.46
	Xiang Zhou	2421	19.1	15.9	20.4	46.1	17.7	54.2	8.24	43.4	42.2	14.0	5.83	5.23	1.15
Indonesia	Jakarta	2331	21.9	20.9	21.8	19.3	17.2	16.2	2.83	14.1	13.8	2.62	16.9	4.77	1.59
	Serpong	2324	26.5	25.6	39.5	22.7	83.0	14.0	4.91	14.0	13.7	3.86	8.63	5.06	2.16
	Kototabang	2120	6.22	5.71	2.86	27.3	6.93	8.51	19.3	9.55	9.37	2.40	10.6	4.97	0.927
	Bandung	2346	30.7	29.9	22.0	15.6	47.4	13.6	7.97	19.6	19.3	6.33	4.01	5.40	1.86
	Maros	4033	6.44	5.28	3.65	36.3	6.75	19.3	1.84	10.4	9.98	2.81	3.41	5.47	0.970
Japan	Rishiri	1170	23.2	11.3	13.4	222	12.9	200	4.61	7.33	3.06	22.5	21.2	4.67	4.25
	Ochiishi	1059	32.5	7.18	8.83	486	9.68	421	9.35	11.5	2.42	48.2	9.38	5.03	7.10
	Tappi	1070	33.1	17.6	25.2	289	19.1	257	6.21	14.1	8.53	30.0	16.0	4.80	4.76
	Sado-seki	1576	33.5	13.9	19.4	355	18.1	328	7.69	10.4	3.83	36.9	18.2	4.74	5.98
	Happo	2658	8.88	8.63	8.32	4.89	8.94	4.07	0.581	2.77	2.69	1.37	10.0	5.00	0.764
	Ijira	2724	12.3	11.4	14.8	19.5	13.4	15.1	0.589	2.74	2.43	2.09	17.9	4.75	1.42
	Oki	1395	47.0	16.5	24.2	579	17.5	505	12.8	17.0	6.12	56.1	24.6	4.61	9.41
	Banryu	2024	17.3	13.1	16.2	80.8	13.8	69.1	2.33	3.92	2.42	8.50	22.8	4.64	2.48
	Yusuhara	2485	9.07	8.47	7.03	13.4	7.16	9.90	0.387	2.16	1.95	2.40	16.7	4.78	1.06
	Hedo	1612	22.2	8.58	8.58	263	9.94	227	5.48	6.89	1.99	25.7	10.9	4.96	4.24
	Ogasawara	1265	13.5	4.99	3.82	166	6.04	141	3.64	4.60	1.56	17.0	5.65	5.25	2.86
	Tokyo	1609	12.2	10.8	16.1	27.7	22.9	22.8	0.711	4.35	3.86	3.04	8.83	5.05	1.33
Malaysia	Petaling Jaya	3570	17.8	17.5	33.5	7.66	16.2	4.29	1.14	6.13	6.04	0.686	38.0	4.42	2.43
	Tanah Rata	2771	4.77	4.64	3.78	2.96	2.42	2.17	1.75	2.91	2.87	<0.4	11.2	4.95	0.734
	Danum Valley	3202	3.17	2.86	1.97	7.52	<1	5.14	1.01	1.44	1.34	0.430	5.33	5.27	0.410
	Kuching	4110	5.01	4.56	4.52	8.82	2.87	7.54	0.695	4.20	4.04	0.588	5.17	5.29	0.549
Mongolia	Ulaanbaatar	154	56.6	52.0	30.9	4.08	62.2	78.8	3.88	95.3	93.6	3.74	1.04	5.98	2.54
	Terelj	90.8	48.5	47.7	31.8	6.94	5.37	17.0	7.98	69.1	68.8	4.97	12.3	4.91	1.94
Myanmar	Yangon	2692	7.96	7.33	6.72	27.1	17.0	15.8	2.66	1.07	0.792	12.3	0.352	6.45	0.813
Philippines	Metro Manila	3516	15.1	13.4	13.9	28.7	41.2	28.0	6.45	11.5	10.9	4.54	2.85	5.55	1.53
	Los Baños	2394	6.60	5.22	7.80	25.8	22.3	22.8	6.37	6.40	5.94	3.25	1.41	5.85	1.02
	Mt. Sto. Tomas	4392	7.71	7.31	8.47	7.11	4.71	6.70	0.752	8.58	8.43	1.69	5.18	5.29	0.558
Republic of Korea	Kanghwa	898	36.1	34.3	43.2	36.3	78.5	29.6	3.27	8.72	8.09	3.30	26.3	4.58	2.66
	Cheju	636	40.6	23.2	30.3	344	35.9	290	12.0	13.6	7.33	25.6	4.18	5.38	5.55
	Imsil	1220	18.5	16.7	26.2	22.8	40.5	30.3	6.33	2.95	2.29	1.87	6.01	5.22	1.47
Russia	Mondy	330	3.58	3.49	5.03	3.69	2.71	1.36	2.30	4.61	4.58	0.877	4.83	5.32	0.420
	Listvyanka	278	18.1	17.7	15.7	5.85	9.85	6.68	4.36	11.9	11.7	2.92	15.9	4.80	1.25
	Irkutsk	277	36.6	35.8	16.3	19.2	29.5	12.8	5.19	33.0	32.7	6.38	9.81	5.01	2.08
	Primorskaya	723	29.2	27.6	18.5	42.7	39.6	25.5	5.55	18.0	17.4	4.89	8.80	5.06	1.89
Thailand	Bangkok	1330	7.09	6.36	12.9	7.24	46.3	12.0	1.91	25.2	25.0	2.63	2.52	5.60	1.35
	Samutprakarn	1115	7.67	6.22	5.07	9.16	37.7	25.3	5.23	19.9	19.3	4.46	1.06	5.98	1.20
	Pathumthani	1181	9.41	9.04	18.6	6.85	44.9	5.96	2.13	27.1	27.0	2.59	3.90	5.41	1.08
	Khanchanaburi	1501	1.23	<1	1.93	2.89	6.80	5.46	0.955	3.26	3.14	1.03	4.72	5.33	0.326
	Chiang Mai	1433	4.13	3.83	9.89	5.94	19.3	5.63	1.48	10.6	10.4	1.50	0.909	6.04	0.682
	Nakhon Ratchasima	1443	7.49	7.31	10.4	6.34	23.8	2.96	0.813	1.96	1.90	<0.4	5.70	5.24	0.789
Vietnam	Hanoi	1945	25.9	25.4	26.3	9.93	53.4	7.69	2.64	16.2	16.1	2.79	2.21	5.66	1.52
	Hoa Binh	2008	19.7	19.5	18.8	6.18	25.3	4.13	7.10	16.9	16.9	2.69	0.911	6.04	1.10
	Cuc Phuong	1898	26.9	25.3	16.7	25.2	25.5	26.7	8.57	24.4	23.8	12.2	3.77	5.42	1.80
	Da Nang	2315	24.2	15.6	5.41	174	24.6	144	17.9	21.5	18.4	18.8	2.62	5.58	3.46

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

[***] *Not measured*

Table 3.61 Annual wet depositions in 2013

Country	Name of sites	SO_4^{2-}	nss-SO_4^{2-}	NO_3^-	Cl^-	NH_4^+	Na^+	K^+	Ca^{2+}	nss-Ca^{2+}	Mg^{2+}	H^+
		mmol $m^{-2}y^{-1}$	mmol $m^{-2}y^{-1}$	mmol $m^{-2}y^{-1}$	mmol $m^{-2}y^{-1}$	mmol $m^{-2}y^{-1}$	mmol $m^{-2}y^{-1}$	mmol $m^{-2}y^{-1}$	mmol $m^{-2}y^{-1}$	mmol $m^{-2}y^{-1}$	mmol $m^{-2}y^{-1}$	mmol $m^{-2}y^{-1}$
Cambodia	Phnom Penh	10.7	10.5	10.3	10.1	18.1	4.16	1.42	12.9	12.8	1.50	0.890
China	Haifu	109	108	75.8	13.1	145	7.48	13.1	71.2	71.1	8.44	30.8
	Jinyunshan	91.7	91.5	59.9	8.13	102	4.41	6.19	35.1	35.0	4.99	71.4
	Shizhan	62.0	58.3	15.7	22.4	105	60.9	12.4	143	142	24.0	0.0514
	Jiwozi	34.1	29.7	5.69	22.0	36.0	72.8	6.64	86.2	84.6	14.5	0.412
	Hongwen	30.7	29.5	29.3	27.1	25.7	20.1	2.67	30.8	30.3	4.71	18.5
	Xiaoping	44.9	43.5	40.9	25.7	50.0	23.9	3.29	44.9	44.4	7.97	19.6
	Xiang Zhou	46.3	38.4	49.3	112	42.9	131	20.0	105	102	33.9	14.1
Indonesia	Jakarta	51.0	48.8	50.8	45.1	40.0	37.7	6.61	33.0	32.2	6.11	39.3
	Serpong	61.6	59.6	91.9	52.8	193	32.5	11.4	32.5	31.8	8.97	20.1
	Kototabang	13.2	12.1	6.06	57.8	14.7	18.0	40.9	20.2	19.9	5.09	22.5
	Bandung	72.1	70.2	51.7	36.5	111	31.9	18.7	45.9	45.2	14.8	9.42
	Maros	26.0	21.3	14.7	146	27.2	77.7	7.41	41.9	40.3	11.3	13.7
Japan	Rishiri	27.1	13.2	15.7	260	15.1	234	5.40	8.58	3.58	26.3	24.8
	Ochiishi	34.4	7.60	9.36	514	10.3	446	9.91	12.2	2.57	51.0	9.94
	Tappi	35.4	18.9	27.0	309	20.4	275	6.65	15.0	9.14	32.1	17.1
	Sado-seki	52.7	22.0	30.6	559	28.6	517	12.1	16.4	6.04	58.2	28.7
	Happo	23.6	22.9	22.1	13.0	23.8	10.8	1.54	7.37	7.14	3.63	26.7
	Ijira	33.6	31.1	40.2	53.2	36.6	41.3	1.60	7.45	6.61	5.70	48.8
	Oki	65.6	23.1	33.7	807	24.4	705	17.8	23.8	8.53	78.3	34.3
	Banryu	35.0	26.5	32.8	164	27.9	140	4.71	7.92	4.90	17.2	46.2
	Yusuhara	22.5	21.1	17.5	33.4	17.8	24.6	0.962	5.37	4.84	5.98	41.4
	Hedo	35.8	13.8	13.8	424	16.0	366	8.82	11.1	3.21	41.5	17.6
	Ogasawara	17.1	6.31	4.83	210	7.64	178	4.60	5.82	1.97	21.5	7.15
	Tokyo	19.7	17.4	25.9	44.5	36.9	36.7	1.14	7.00	6.21	4.89	14.2
Malaysia	Petaling Jaya	63.6	62.6	119	27.3	57.8	15.3	4.07	21.9	21.6	2.45	136
	Tanah Rata	13.2	12.8	10.5	8.19	6.69	6.02	4.85	8.06	7.95	0.835	31.1
	Danum Valley	10.1	9.15	6.32	24.1	2.48	16.5	3.22	4.59	4.30	1.38	17.1
	Kuching	20.6	18.7	18.6	36.2	11.8	31.0	2.85	17.2	16.6	2.42	21.2
Mongolia	Ulaanbaatar	8.71	8.00	4.76	0.628	9.58	12.1	0.598	14.7	14.4	0.576	0.161
	Terelj	4.40	4.33	2.89	0.630	0.487	1.54	0.725	6.28	6.25	0.451	1.11
Myanmar	Yangon	21.4	19.7	18.1	72.9	45.8	42.6	7.17	2.87	2.13	33.1	0.948
Philippines	Metro Manila	52.9	47.0	49.0	101	145	98.3	22.7	40.5	38.4	16.0	10.0
	Los Baños	15.8	12.5	18.7	61.7	53.3	54.5	15.3	15.3	14.2	7.77	3.37
	Mt. Sto. Tomas	33.8	32.1	37.2	31.2	20.7	29.4	3.30	37.7	37.0	7.41	22.7
Republic of Korea	Kanghwa	32.4	30.8	38.8	32.6	70.5	26.6	2.94	7.83	7.26	2.96	23.6
	Cheju	25.9	14.8	19.3	219	22.9	184	7.65	8.64	4.66	16.3	2.66
	Imsil	22.6	20.4	32.0	27.8	49.4	36.9	7.72	3.59	2.80	2.28	7.33
Russia	Mondy	1.18	1.15	1.66	1.22	0.894	0.449	0.759	1.52	1.51	0.290	1.60
	Listvyanka	5.02	4.91	4.37	1.62	2.74	1.86	1.21	3.30	3.26	0.810	4.41
	Irkutsk	10.1	9.90	4.52	5.30	8.15	3.55	1.44	9.12	9.04	1.77	2.71
	Primorskaya	21.1	20.0	13.4	30.9	28.6	18.4	4.01	13.0	12.6	3.53	6.36
Thailand	Bangkok	9.42	8.46	17.2	9.63	61.6	16.0	2.54	33.5	33.2	3.50	3.35
	Samutprakarn	8.55	6.94	5.65	10.2	42.1	28.2	5.83	22.2	21.6	4.97	1.18
	Pathumthani	11.1	10.7	22.0	8.08	53.1	7.04	2.51	32.0	31.9	3.06	4.60
	Khanchanaburi	1.84	1.40	2.90	4.34	10.2	8.19	1.43	4.90	4.72	1.55	7.08
	Chiang Mai	5.92	5.49	14.2	8.51	27.7	8.07	2.12	15.1	15.0	2.15	1.30
	Nakhon Ratchasima	10.8	10.5	15.0	9.14	34.4	4.27	1.17	2.83	2.75	0.289	8.23
Vietnam	Hanoi	50.4	49.5	51.2	19.3	104	15.0	5.13	31.6	31.2	5.42	4.29
	Hoa Binh	39.6	39.1	37.7	12.4	50.7	8.29	14.3	34.0	33.8	5.40	1.83
	Cuc Phuong	51.1	48.0	31.6	47.9	48.5	50.7	16.3	46.2	45.2	23.1	7.16
	Da Nang	56.1	36.0	12.5	403	57.0	333	41.5	49.7	42.5	43.4	6.07

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

[***] *Not measured*

Table 3.62 Data completeness for annual summaries in 2013 (%PCL, %TP)

Country	Name of sites	Precip. %PCL	SO_4^{2-} %TP	nss-SO_4^{2-} %TP	NO_3^- %TP	Cl^- %TP	NH_4^+ %TP	Na^+ %TP	K^+ %TP	Ca^{2+} %TP	nss-Ca^{2+} %TP	Mg^{2+} %TP	H^+ %TP	pH %TP	EC %TP
Cambodia	Phnom Penh	100	100	100	100	100	100	100	100	100	100	100	100	100	100
China	Haifu	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
	Jinyunshan	100	100	100	100	100	100	100	100	100	100	100	100	100	100
	Shizhan	100	100	100	100	100	100	100	100	100	100	100	100	100	100
	Jiwozi	100	100	100	100	100	100	100	100	100	100	100	100	100	100
	Hongwen	100	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	100	100
	Xiang Zhou	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Indonesia	Jakarta	100	100	100	100	100	100	100	100	100	100	100	100	100	100
	Serpong	100	100	100	100	100	100	100	100	100	100	100	100	100	100
	Kototabang	100	100	100	100	100	100	100	100	100	100	100	100	100	100
	Bandung	100	100	100	100	100	100	100	100	100	100	100	100	100	100
	Maros	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Japan	Rishiri	100	98.8	98.8	98.8	98.8	98.8	98.8	98.8	98.8	98.8	98.8	98.8	98.8	98.8
	Ochiishi	100	93.7	93.7	93.7	93.7	93.7	93.7	93.7	93.7	93.7	93.7	92.8	92.8	92.8
	Tappi	100	84.6	84.6	84.6	84.6	84.6	84.6	84.6	84.6	84.6	84.6	82.9	82.9	82.9
	Sado-seki	100	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	98.8	98.8	98.8
	Happo	98.9	89.4	89.4	89.4	89.4	89.4	89.4	89.4	89.4	89.4	89.4	88.4	88.4	88.4
	Ijira	100	100	100	100	100	100	100	100	100	100	100	99.9	99.9	99.9
	Oki	98.1	93.8	93.8	93.8	93.8	93.8	93.8	93.8	93.8	93.8	93.8	93.8	93.8	93.7
	Banryu	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
	Yusuhara	100	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
	Hedo	95.3	81.6	81.6	81.6	81.6	81.6	81.6	81.6	81.6	81.6	81.6	81.3	81.3	81.3
	Ogasawara	100	98.4	98.4	98.4	98.4	98.4	98.4	98.4	98.4	98.4	98.4	98.0	98.0	98.0
	Tokyo	99.7	97.8	97.8	97.8	97.8	97.8	97.8	97.8	97.8	97.8	97.8	97.6	97.6	97.6
Malaysia	Petaling Jaya	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
	Tanah Rata	100	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
	Danum Valley	100	88.9	88.9	88.9	88.9	88.9	88.9	88.9	88.9	88.9	88.9	88.9	88.9	88.9
	Kuching	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Mongolia	Ulaanbaatar	100	98.6	98.1	98.6	98.6	96.5	98.1	98.1	98.1	98.1	98.1	100	100	100
	Terelj	100	96.9	96.9	96.9	96.9	99.8	99.8	99.8	99.8	99.8	99.8	100	100	100
Myanmar	Yangon	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Philippines	Metro Manila	100	85.1	85.1	85.1	85.1	85.1	85.1	85.1	85.1	85.1	85.1	85.1	85.1	85.1
	Los Baños	100	77.4	77.4	77.4	77.4	77.4	77.4	77.4	77.4	77.4	77.4	77.4	77.4	77.4
	Mt. Sto. Tomas	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Republic of Korea	Kanghwa	100	100	100	100	100	100	100	100	100	100	100	100	100	100
	Cheju	100	100	100	100	100	100	100	100	100	100	100	100	100	100
	Imsil	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Russia	Mondy	99.7	100	100	100	100	100	100	100	100	100	100	100	100	100
	Listvyanka	99.7	99.6	99.6	99.6	99.6	100	100	100	100	100	100	99.6	99.6	99.6
	Irkutsk	100	97.1	97.1	97.1	97.1	97.8	97.8	97.8	97.8	97.8	97.8	99.0	99.0	99.0
	Primorskaya	100	98.4	98.4	98.4	98.4	98.4	98.4	98.4	98.4	98.4	98.4	100	100	98.4
Thailand	Bangkok	100	100	100	100	100	100	100	100	100	100	100	100	100	100
	Samutprakarn	100	100	100	100	100	100	100	100	100	100	100	99.7	99.7	99.7
	Pathumthani	100	100	100	100	100	100	100	100	100	100	100	100	100	100
	Khanchanaburi	100	100	100	100	100	100	100	100	100	100	100	100	100	100
	Chiang Mai	100	100	100	100	100	100	100	100	100	100	100	99.9	99.9	99.9
	Nakhon Ratchasima	100	100	100	100	100	100	100	100	100	100	100	99.5	99.5	99.5
Vietnam	Hanoi	98.1	100	100	100	100	100	100	100	100	100	100	100	100	100
	Hoa Binh	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
	Cuc Phuong	100	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
	Da Nang	100	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.2	99.2	99.2

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

[***] *Not measured*

Table 3.63 Results of ion balance and conductivity agreement check in 2013

Country	Name of sites	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	23	23	15	65.2	23	14	60.9	23	9	39.1
China	Haifu *	115	115	95	82.6	115	113	98.3	115	95	82.6
	Jinyunshan *	96	96	91	94.8	96	94	97.9	96	89	92.7
	Shizhan	32	32	1	3.1	32	21	65.6	32	0	0
	Jiwozi	58	58	1	1.7	58	42	72.4	58	0	0
	Hongwen *	55	55	35	63.6	55	50	90.9	55	34	61.8
	Xiaoping *	66	66	36	54.5	66	56	84.8	66	33	50.0
	Xiang Zhou *	76	76	46	60.5	76	65	85.5	76	43	56.6
Indonesia	Jakarta	45	45	17	37.8	45	25	55.6	45	10	22.2
	Serpong	90	90	42	46.7	90	80	88.9	90	42	46.7
	Kototabang	54	54	10	18.5	54	34	63.0	54	7	13.0
	Bandung	123	123	45	36.6	123	115	93.5	123	44	35.8
	Maros	40	40	5	12.5	40	30	75.0	40	2	5.0
Japan	Rishiri	223	172	169	98.3	172	172	100	172	169	98.3
	Ochiishi *	160	93	93	100	93	92	98.9	93	92	98.9
	Tappi	167	99	99	100	99	99	100	99	99	100
	Sado-seki	186	148	148	100	148	147	99.3	148	147	99.3
	Happo	185	146	143	97.9	146	145	99.3	146	142	97.3
	Ijira	47	45	44	97.8	45	45	100	45	44	97.8
	Oki	147	131	131	100	126	126	100	126	126	100
	Banryu	47	45	45	100	45	45	100	45	45	100
	Yusuhara *	153	147	134	91.2	147	146	99.3	147	134	91.2
	Hedo	139	127	123	96.9	127	124	97.6	127	121	95.3
	Ogasawara *	170	129	129	100	129	128	99.2	129	128	99.2
	Tokyo *	126	106	99	93.4	106	103	97.2	106	98	92.5
Malaysia	Petaling Jaya	49	46	42	91.3	46	44	95.7	46	40	87.0
	Tanah Rata	50	47	36	76.6	47	38	80.9	47	30	63.8
	Danum Valley	44	40	30	75.0	40	35	87.5	40	29	72.5
	Kuching	51	51	44	86.3	51	50	98.0	51	43	84.3
Mongolia	Ulaanbaatar	33	27	4	14.8	27	18	66.7	27	3	11.1
	Terelj	39	33	0	0	33	16	48.5	33	0	0
Myanmar	Yangon	29	29	3	10.3	29	22	75.9	29	3	10.3
Philippines	Metro Manila *	28	28	6	21.4	28	20	71.4	28	5	17.9
	Los Baños *	29	29	11	37.9	29	19	65.5	29	9	31.0
	Mt. Sto. Tomas *	36	36	19	52.8	36	34	94.4	36	19	52.8
Republic of Korea	Kanghwa	35	35	29	82.9	35	34	97.1	35	28	80.0
	Cheju	51	51	46	90.2	51	49	96.1	51	46	90.2
	Imsil	72	72	61	84.7	72	68	94.4	72	58	80.6
Russia	Mondy *	18	18	18	100	18	18	100	18	18	100
	Listvyanka *	57	56	54	96.4	56	56	100	56	54	96.4
	Irkutsk *	88	84	83	98.8	84	84	100	84	83	98.8
	Primorskaya *	113	100	100	100	100	100	100	100	100	100
Thailand	Bangkok *	57	57	0	0	57	34	59.6	57	0	0
	Samutprakarn *	73	71	0	0	71	38	53.5	71	0	0
	Pathumthani *	86	83	11	13.3	83	78	94.0	83	10	12.0
	Khanchanaburi *	84	84	0	0	84	57	67.9	84	0	0
	Chiang Mai *	102	99	16	16.2	99	75	75.8	99	15	15.2
	Nakhon Ratchasima *	106	95	56	58.9	95	75	78.9	95	46	48.4
Vietnam	Hanoi *	44	44	30	68.2	44	43	97.7	44	30	68.2
	Hoa Binh *	36	36	29	80.6	36	36	100	36	29	80.6
	Cuc Phuong *	46	39	37	94.9	39	39	100	39	37	94.9
	Da Nang *	45	36	33	91.7	36	35	97.2	36	33	91.7

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 * : R1 and R2, calculated including concentrations of additional measured constituents*
[***] *Not measured*

Table 3.64 Annual precipitation from 2000 to 2013

unit: mm y^{-1}

Country	Name of sites	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Cambodia	Phnom Penh					419	1308	949	1374	1834	1326	1851	1277	1617	1345
China	Guanyinqiao	1081	752	1445	987	1387	1077	842	1299						
	Nanshan	1259													
	Haifu									1010	1066	977	810	1010	1026
	Jinyunshan		710	1607	1233	1518	1461	1196	1645	1213	1098	979	848	1005	1127
	Shizhan	559	364	349	1273	601	509	483	527	385	592	459	659	393	441
	Weishuiyuan	447	69.3	232	1302	466	439	316							
	Jiwozi	829	209	142	611	1020	362	234	100	438	628	1155	971	390	649
	Hongwen	1517	296	1568	1301	1065	1702	2134	1347	945	737	1530	843	924	1403
	Xiaoping	1566	2682	2171	1768	1958	2921	2352	1044	2000	1134	1518	1531	1291	1979
	Xiang Zhou	2031	1990	1731	1726	1340	1179	1529	1442	2815	2010	1857	1259	1518	2421
	Zhuxiandong	1779	2571	1581	1755	1277	1062	887	***	2311	1580	1853	1146		
Indonesia	Jakarta	1577	1237	1572	1617	1469	2125	1481	2171	1717	1557	2120	990	2722	2331
	Serpong	***	1607	2505	2143	1462	824	1603	2015	2370	1344	1426	830	894	2324
	Kototabang	2340	1209	1798	3127	2111	2194	1248	2772	2481	2656	2370	2193	2639	2120
	Bandung	893	2605	2541	1606	894	1749	1311	1969	2334	2683	2606	1530	2084	2346
	Maros									3037	3237	2663	3632	2451	4033
Japan	Rishiri	770	615	957	709	945	961	1294	883	828	1054	1072	1232	1172	1170
	Ochiishi				782	648	822	997	866	730	1580	1085	818	871	1059
	Tappi	1049	1082	1329	1150	1473	1240	964	1055	824	1337	1555	1144	1178	1070
	Sado-seki	1068	971	1433	1126	1539	1143	1264	1163	1021	1037	1368	1387	1296	1576
	Happo	2188	2345	2607	2461	3088	2997	2755	2329	1645	2352	2621	3076	2002	2658
	Ijira	2685	2237	2648	2967	3424	2569	2829	2263	2250	2876	3847	3068	2862	2724
	Oki	1209	1246	1571	1597	1409	1313	1396	1160	1110	1123	1452	1534	1296	1395
	Banryu	1565	1788	1303	1752	1738	1290	1960	1273	1268	1735	1471	1432	1208	2024
	Yusuhara	2801	2080	2346	2839	3970	2321	3160	2373	2189	2068	2476	3401	3048	2485
	Hedo	2907	2126	2032	1393	1778	1780	1863	2701	1961	1975	2643	1766	2837	1612
	Ogasawara	1985	1806	1331	1398	1171	2050	1585	1567	1674	1675	1856	1297	1572	1265
	Tokyo								1080	1860	1727	1656	1388	1635	1609
Lao PDR	Vientiane				88.6	442	665	709	1399	1668	181	***	***	1322	***
Malaysia	Petaling Jaya	3417	3085	2660	3041	2996	2848	4009	3021	3747	2968	3517	3607	3412	3570
	Tanah Rata	3127	2626	2783	3010	2415	2886	2785	2968	3925	3077	2451	3293	2846	2771
	Danum Valley						1256	3005	2988	2999	3391	2370	3787	2958	3202
	Kuching									4286	4671	4645	4632	3796	4110
Mongolia	Ulaanbaatar	197	166	179	297	83.4	150	188	126	155	228	153	163	170	154
	Terelj	208	88.6	246	312	207	246	215	185	206	111	130	144	117	90.8
Myanmar	Yangon								3981	6375	3010	2280	3151	2570	2692
Philippines	Metro Manila	4036	2291	2975	2205	2164	2377	2696	3505	2381	3782	2676	3657	4461	3516
	Los Baños	2635	1817	1702	1608	1743	1643	2222	3097	1894	2900	2068	2384	2102	2394
	Mt. Sto. Tomas							431	3379	5078	4727	3610	4608	5730	4392
Republic of Korea	Kanghwa	1118	1139	824	1573	878	811	1092	883	1546	1266	1570	1476	748	898
	Cheju	1058	1114	1017	1291	1124	699	1127	1244	843	1039	1003	1076	1199	636
	Imsil		1299	993	1876	1207	1248	709	1344	854	1069	1642	1493	1400	1220
Russia	Mondy	305	319	204	409	360	286	410	351	206	119	90.2	73.5	105	330
	Listvyanka	442	494	360	540	551	452	311	408	391	312	327	478	343	278
	Irkutsk	534	468	303	457	553	442	357	478	527	430	375	329	443	277
	Primorskaya			835	323	692	737	623	989	553	864	673	621	922	723
Thailand	Bangkok	1148	1174	1300	1385	1211	2006	1589	1579	1776	2072	2023	2171	1799	1330
	Samutprakarn	978				1260	1625	1420	1871	1734	1989	1880	2103	953	1115
	Pathumthani	956	1349	948	1658	976	1268	1608	1381	1670	1314	1763	1562	1563	1181
	Khanchanaburi	881	1516	2200	1627	1392	2043	2518	1704	1962	1998	1626	1941	2390	1501
	Chiang Mai		1084	1473	808	1151	1430	1420	937	1286	1052	1167	1614	1111	1433
	Nakhon Ratchasima							1190	1386	1722	1259	1627	1509	1126	1443
Vietnam	Hanoi	1256	2255	1416	1586	1575	1761	1231	1659	2267	1609	1236	1817	1798	1945
	Hoa Binh	1894	2223	1626	1691	1831	2279	1546	1949	1978	1357	1370	1760	1915	2008
	Cuc Phuong										2266	1654	1853	2018	1898
	Da Nang										2966	1690	3639	1682	2315

[***]: No data or not measured

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

Black cell: Monitoring was not carried out

Table 3.65 Precipitation amount-weighted annual average concentrations of SO_4^{2-} from 2000 to 2013

unit: μmol L^{-1}

Country	Name of sites	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Cambodia	Phnom Penh					***	5.68	5.31	22.5	11.6	11.6	7.37	9.04	10.5	7.99
China	Guanyinqiao	152	205	114	110	165	186	177	130						
	Nanshan	130													
	Haifu									144	99.3	139	142	102	106
	Jinyunshan		124	78.3	83.2	109	102	141	90.4	120	114	151	141	124	81.4
	Shizhan	356	470	850	203	173	126	274	183	191	136	100.0	110	109	141
	Weishuiyuan	538	1510	1010	143	202	107	330							
	Jiwozi	141	326	305	90.6	55.2	118	128	182	145	93.5	31.8	62.6	94.5	52.6
	Hongwen	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	21.9
	Xiaoping	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	22.7
	Xiang Zhou	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	19.1
	Zhuxiandong	48.0	19.3	32.0	18.5	26.9	29.5	19.3	***	21.5	21.0	17.1	20.4		
Indonesia	Jakarta	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	21.9
	Serpong	***	38.2	25.7	23.1	28.1	33.3	28.2	30.5	27.8	23.1	24.4	33.6	29.0	26.5
	Kototabang	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	6.22
	Bandung	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	30.7
	Maros									5.38	6.96	10.8	8.26	8.77	6.44
Japan	Rishiri	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	23.2
	Ochiishi				19.1	34.5	22.6	27.7	21.3	18.7	16.7	23.0	15.2	25.3	32.5
	Tappi	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	33.1
	Sado-seki	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	33.5
	Happo	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	8.88
	Ijira	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	12.3
	Oki	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	47.0
	Banryu	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	17.3
	Yusuhara	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	9.07
	Hedo	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	22.2
	Ogasawara	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	13.5
	Tokyo								17.1	19.6	16.0	10.9	15.9	15.6	12.2
Lao PDR	Vientiane				***	***	***	3.46	4.67	5.06	4.05	***	***	2.41	***
Malaysia	Petaling Jaya	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	17.8
	Tanah Rata	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	4.77
	Danum Valley						4.40	3.41	2.29	2.49	2.82	5.08	1.96	2.28	3.17
	Kuching									4.14	3.78	3.57	4.07	4.67	5.01
Mongolia	Ulaanbaatar	24.3	25.2	24.7	19.5	22.1	26.7	25.4	37.1	27.9	19.9	22.2	28.1	***	56.6
	Terelj	16.4	9.72	15.1	8.26	13.3	17.5	23.8	25.0	16.5	16.5	30.5	23.6	***	48.5
Myanmar	Yangon								***	***	8.01	4.52	6.63	7.48	7.96
Philippines	Metro Manila	23.4	37.3	26.3	17.1	20.4	24.0	17.6	22.3	24.9	13.6	20.3	18.7	24.1	15.1
	Los Baños	10.5	15.6	16.1	7.08	8.42	9.86	10.8	8.38	18.0	8.82	7.39	8.57	12.6	6.60
	Mt. Sto. Tomas							1.37	5.74	3.47	5.04	4.94	4.69	7.26	7.71
Republic of Korea	Kanghwa	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	36.1
	Cheju	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	40.6
	Imsil		16.4	22.9	16.3	16.5	22.8	26.8	28.8	21.0	19.6	19.5	20.7	19.4	18.5
Russia	Mondy	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	3.58
	Listvyanka	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	18.1
	Irkutsk	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	36.6
	Primorskaya			29.0	43.1	37.2	38.2	46.0	30.8	40.6	22.6	31.9	14.0	20.8	29.2
Thailand	Bangkok	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	7.09
	Samutprakarn	25.5				16.5	19.1	20.7	14.8	15.7	15.1	15.6	7.67	10.2	7.67
	Pathumthani	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	9.41
	Khanchanaburi	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	1.23
	Chiang Mai		2.79	4.46	4.13	6.90	5.90	4.54	6.00	4.96	4.30	3.32	3.24	4.76	4.13
	Nakhon Ratchasima							8.24	6.44	7.36	6.44	7.04	5.30	6.64	7.49
Vietnam	Hanoi	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	25.9
	Hoa Binh	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	19.7
	Cuc Phuong										18.5	20.3	37.6	24.3	26.9
	Da Nang										18.8	16.4	21.1	19.6	24.2

[***]: No data or not measured

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

Black cell: Monitoring was not carried out

Table 3.66 Precipitation amount-weighted annual average concentrations of nss-SO_4^{2-} from 2000 to 2013

unit: μmol L^{-1}

Country	Name of sites	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Cambodia	Phnom Penh					***	***	5.08	22.0	8.67	11.2	7.18	8.83	10.3	7.80
China	Guanyinqiao	151	205	114	109	165	185	177	130						
	Nanshan	130													
	Haifu									144	99.0	138	142	101	106
	Jinyunshan		123	78.0	82.9	109	101	140	90.0	120	113	151	140	124	81.2
	Shizhan	353	460	835	199	171	125	271	182	190	135	99.5	109	109	132
	Weishuiyuan	534	1500	994	136	201	106	326							
	Jiwozi	140	316	295	84.5	53.7	115	124	177	140	92.0	31.4	62.1	91.8	45.8
	Hongwen	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	21.0
	Xiaoping	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	22.0
	Xiang Zhou	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	15.9
	Zhuxiandong	46.3	18.0	29.3	16.4	23.8	26.1	18.0	***	19.0	18.3	15.9	17.7		
Indonesia	Jakarta	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	20.9
	Serpong	***	36.8	24.2	22.4	26.9	32.3	27.7	29.8	27.2	22.5	23.9	33.0	28.4	25.6
	Kototabang	***	4.41	7.09	8.59	4.58	5.16	7.28	6.47	2.61	4.38	6.04	7.38	5.47	5.71
	Bandung	***	32.5	27.2	20.0	27.0	34.6	25.7	26.0	27.5	28.5	26.4	30.1	25.8	29.9
	Maros									4.43	6.18	10.0	7.36	7.65	5.28
Japan	Rishiri	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	11.3
	Ochiishi				7.47	12.9	10.1	11.3	10.1	8.41	5.88	9.65	6.73	8.81	7.18
	Tappi	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	17.6
	Sado-seki	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	13.9
	Happo	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	8.63
	Ijira	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	11.4
	Oki	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	16.5
	Banryu	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	13.1
	Yusuhara	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	8.47
	Hedo	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	8.58
	Ogasawara	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	4.99
	Tokyo								15.0	18.4	14.5	9.86	13.6	13.8	10.8
Lao PDR	Vientiane				***	***	***	3.03	4.53	4.88	3.50	***	***	***	***
Malaysia	Petaling Jaya	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	17.5
	Tanah Rata	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	4.64
	Danum Valley						4.13	3.07	2.04	2.30	2.47	4.32	1.72	2.11	2.86
	Kuching									3.82	3.33	3.17	3.53	4.35	4.56
Mongolia	Ulaanbaatar	23.9	24.6	24.3	19.3	21.8	26.3	24.9	36.8	27.3	19.6	22.0	27.7	***	52.0
	Terelj	16.0	8.77	14.3	7.99	12.9	16.8	23.0	24.5	15.8	16.0	29.8	23.2	***	47.7
Myanmar	Yangon								***	***	6.90	3.90	5.72	6.15	7.33
Philippines	Metro Manila	21.6	22.7	25.4	16.0	19.4	23.0	16.5	21.1	23.4	12.6	18.9	17.4	23.1	13.4
	Los Baños	8.50	13.2	14.8	6.25	7.70	8.83	9.44	7.32	16.9	7.77	6.02	7.40	11.3	5.22
	Mt. Sto. Tomas							1.20	5.40	3.17	4.54	4.56	4.43	6.64	7.31
Republic of Korea	Kanghwa	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	34.3
	Cheju	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	23.2
	Imsil		15.5	20.5	14.9	15.4	21.5	24.9	27.9	19.0	16.6	16.6	18.4	16.3	16.7
Russia	Mondy	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	3.49
	Listvyanka	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	17.7
	Irkutsk	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	35.8
	Primorskaya			27.6	41.1	35.8	36.9	45.0	29.6	39.3	21.8	30.4	13.2	19.4	27.6
Thailand	Bangkok	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	6.36
	Samutprakarn	24.9				15.5	17.9	19.7	14.1	14.8	14.5	14.5	7.33	9.74	6.22
	Pathumthani	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	9.04
	Khanchanaburi	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	<1
	Chiang Mai		2.56	3.92	3.97	6.72	5.84	4.34	5.82	4.81	4.14	3.16	3.05	4.53	3.83
	Nakhon Ratchasima							7.97	6.18	7.11	6.27	6.85	5.05	6.42	7.31
Vietnam	Hanoi	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	25.4
	Hoa Binh	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	19.5
	Cuc Phuong										17.8	19.6	36.8	23.1	25.3
	Da Nang										13.1	13.9	16.8	16.1	15.6

[***]: No data or not measured

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

Black cell: Monitoring was not carried out

Table 3.67 Precipitation amount-weighted annual average concentrations of NO_3^- from 2000 to 2013

unit: μmol L^{-1}

Country	Name of sites	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Cambodia	Phnom Penh					7.68	***	9.05	8.26	9.40	10.3	8.37	8.85	10.7	7.65
China	Guanyinqiao	42.1	52.8	34.4	38.9	43.9	41.3	60.7	48.8						
	Nanshan	41.6													
	Haifu									65.0	53.2	77.6	83.1	73.9	73.9
	Jinyunshan		40.3	29.4	34.4	36.8	34.4	46.1	31.5	46.5	54.4	75.0	77.5	70.4	53.1
	Shizhan	87.0	153	150	68.0	61.7	12.1	81.7	75.9	40.2	57.7	41.0	17.5	49.4	35.6
	Weishuiyuan	95.8	210	168	54.1	69.6	11.4	104							
	Jiwozi	29.1	140	89.8	42.8	26.4	9.31	50.7	66.8	103	27.4	12.2	8.24	47.4	8.77
	Hongwen	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	20.9
	Xiaoping	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	20.7
	Xiang Zhou	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	20.4
	Zhuxiandong	33.5	22.2	20.8	11.5	25.0	21.5	13.2	***	14.7	19.8	19.7	18.8		
Indonesia	Jakarta	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	21.8
	Serpong	***	50.7	32.6	30.8	39.7	39.4	28.3	30.4	30.3	25.4	29.8	35.5	31.5	39.5
	Kototabang	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	2.86
	Bandung	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	22.0
	Maros									3.51	5.36	6.35	7.51	9.05	3.65
Japan	Rishiri	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	13.4
	Ochiishi				7.95	13.5	9.31	11.4	9.57	8.44	5.42	9.47	9.58	9.80	8.83
	Tappi	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	25.2
	Sado-seki	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	19.4
	Happo	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	8.32
	Ijira	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	14.8
	Oki	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	24.2
	Banryu	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	16.2
	Yusuhara	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	7.03
	Hedo	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	8.58
	Ogasawara	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	3.82
	Tokyo								19.5	24.4	18.1	15.3	21.7	18.8	16.1
Lao PDR	Vientiane				***	***	***	6.94	6.90	5.96	9.73	***	***	5.55	***
Malaysia	Petaling Jaya	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	33.5
	Tanah Rata	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	3.78
	Danum Valley						2.50	1.41	<1.0	1.37	1.65	1.42	1.05	<1	1.97
	Kuching									4.98	4.55	4.91	5.00	3.82	4.52
Mongolia	Ulaanbaatar	19.9	20.7	23.7	15.5	15.8	18.8	18.6	26.0	20.1	19.1	21.4	16.8	***	30.9
	Terelj	17.6	9.20	18.1	12.4	16.1	11.8	15.5	18.3	18.3	21.0	27.6	18.0	***	31.8
Myanmar	Yangon								***	***	7.23	4.96	6.30	8.31	6.72
Philippines	Metro Manila	12.1	18.5	17.6	13.1	15.4	21.5	12.3	14.1	21.1	8.68	50.5	14.4	18.2	13.9
	Los Baños	5.44	13.9	8.21	4.87	6.10	9.83	8.13	6.25	7.97	8.01	31.4	8.35	11.9	7.80
	Mt. Sto. Tomas							1.87	5.47	3.92	3.94	4.29	2.56	6.10	8.47
Republic of Korea	Kanghwa	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	43.2
	Cheju	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	30.3
	Imsil		15.6	32.0	16.9	20.5	26.4	27.7	18.1	22.6	22.3	29.0	27.7	26.2	26.2
Russia	Mondy	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	5.03
	Listvyanka	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	15.7
	Irkutsk	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	16.3
	Primorskaya			10.2	15.4	21.4	21.6	29.2	19.1	33.1	18.6	21.9	37.8	23.4	18.5
Thailand	Bangkok	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	12.9
	Samutprakarn	15.4				9.79	17.9	14.1	16.6	17.4	20.0	15.4	9.81	12.5	5.07
	Pathumthani	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	18.6
	Khanchanaburi	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	1.93
	Chiang Mai		4.13	6.64	6.53	6.12	8.36	7.87	7.97	9.11	8.44	7.30	7.26	7.91	9.89
	Nakhon Ratchasima							11.3	11.4	11.5	12.7	14.6	9.97	11.2	10.4
Vietnam	Hanoi	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	26.3
	Hoa Binh	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	18.8
	Cuc Phuong										10.9	23.2	27.8	20.1	16.7
	Da Nang										11.4	7.02	15.8	4.79	5.41

[***]: No data or not measured

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

Black cell: Monitoring was not carried out

Table 3.68 Precipitation amount-weighted annual average concentrations of Cl⁻ from 2000 to 2013

unit: μmol L^{-1}

Country	Name of sites	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Cambodia	Phnom Penh					***	6.21	6.20	12.6	8.68	10.3	4.93	5.89	6.67	7.53
China	Guanyinqiao	24.0	29.8	15.6	16.2	14.7	18.3	19.3	13.8						
	Nanshan	15.6													
	Haifu									13.8	11.0	16.2	14.3	11.4	12.7
	Jinyunshan		56.8	12.9	10.3	12.8	15.5	13.6	8.70	15.4	16.1	16.1	11.9	11.6	7.21
	Shizhan	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	50.8
	Weishuiyuan	91.6	278	285	99.4	39.4	36.5	51.1							
	Jiwozi	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	33.9
	Hongwen	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	19.3
	Xiaoping	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	13.0
	Xiang Zhou	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	46.1
	Zhuxiandong	39.4	27.7	59.5	40.2	58.8	52.6	29.3	***	45.6	51.4	21.7	18.8		
Indonesia	Jakarta	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	19.3
	Serpong	***	32.3	23.0	27.2	23.8	19.8	10.9	14.3	17.0	17.6	22.4	15.1	24.1	22.7
	Kototabang	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	27.3
	Bandung	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	15.6
	Maros									20.1	15.3	21.1	16.1	20.0	36.3
Japan	Rishiri	372	235	217	201	256	233	126	161	268	193	184	156	332	222
	Ochiishi				227	410	232	317	219	194	205	266	180	307	486
	Tappi	178	156	191	154	231	250	326	262	226	217	124	167	162	289
	Sado-seki	274	378	307	107	154	337	256	257	236	364	351	182	293	355
	Happo	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	4.89
	Ijira	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	19.5
	Oki	449	359	419	201	321	696	253	312	371	436	471	552	411	579
	Banryu	31.0	86.5	88.9	92.5	133	110	76.0	89.2	82.5	114	107	125	103	80.8
	Yusuhara	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	13.4
	Hedo	515	175	593	451	982	488	217	146	138	141	284	232	496	263
	Ogasawara	164	123	278	286	139	115	119	154	98.8	227	211	241	134	166
	Tokyo								41.1	23.7	27.8	19.4	45.9	35.8	27.7
Lao PDR	Vientiane				***	***	***	4.77	7.42	7.41	6.19	***	***	4.46	***
Malaysia	Petaling Jaya	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	7.66
	Tanah Rata	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	2.96
	Danum Valley						6.00	7.15	4.90	6.10	6.79	17.1	5.70	4.16	7.52
	Kuching									6.35	8.41	8.04	11.5	6.78	8.82
Mongolia	Ulaanbaatar	8.96	9.65	7.69	7.64	8.03	7.75	7.77	9.38	10.1	9.63	8.49	7.46	***	4.08
	Terelj	8.96	8.66	11.4	6.59	8.96	9.92	9.28	10.3	9.22	9.95	10.6	9.81	***	6.94
Myanmar	Yangon								***	***	25.0	13.2	15.8	26.6	27.1
Philippines	Metro Manila	25.6	115	18.8	24.3	24.0	14.2	23.1	27.9	28.7	24.6	20.6	29.8	20.2	28.7
	Los Baños	33.0	34.5	24.6	16.2	14.3	18.1	21.0	24.4	18.8	25.0	25.3	26.2	21.6	25.8
	Mt. Sto. Tomas							1.57	7.38	5.24	8.31	5.07	4.41	6.50	7.11
Republic of Korea	Kanghwa	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	36.3
	Cheju	210	112	83.8	68.5	79.1	105	102	104	136	63.7	114	147	455	344
	Imsil		28.7	36.9	38.1	26.7	44.0	77.5	22.4	36.6	51.9	44.4	25.3	88.8	22.8
Russia	Mondy	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	3.69
	Listvyanka	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	5.85
	Irkutsk	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	19.2
	Primorskaya			33.9	35.6	21.3	21.7	18.0	18.6	25.6	14.7	29.4	67.4	29.9	42.7
Thailand	Bangkok	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	7.24
	Samutprakarn	12.9				12.8	19.0	12.5	11.2	12.8	8.45	16.2	7.61	9.92	9.16
	Pathumthani	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	6.85
	Khanchanaburi	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	2.89
	Chiang Mai		4.53	10.1	4.71	3.82	4.21	3.73	5.85	4.59	4.91	3.58	2.88	4.14	5.94
	Nakhon Ratchasima							5.52	5.11	5.93	4.62	4.81	4.80	6.36	6.34
Vietnam	Hanoi	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	9.93
	Hoa Binh	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	6.18
	Cuc Phuong										44.2	24.3	15.5	20.3	25.2
	Da Nang										110	50.4	93.5	83.1	174

[***]: No data or not measured

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

Black cell: Monitoring was not carried out

Table 3.69 Precipitation amount-weighted annual average concentrations of NH_4^+ from 2000 to 2013

unit: μmol L^{-1}

Country	Name of sites	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Cambodia	Phnom Penh					10.8	16.3	17.9	19.7	11.8	13.1	22.6	21.9	21.6	13.5
China	Guanyinqiao	161	211	120	132	137	157	179	140						
	Nanshan	105													
	Haifu									148	105	141	145	116	142
	Jinyunshan		111	83.5	85.6	105	105	121	75.2	98.8	110	124	117	124	90.1
	Shizhan	421	255	203	144	146	77.2	167	206	164	169	187	60.8	109	238
	Weishuiyuan	426	354	319	144	151	64.4	239							
	Jiwozi	199	171	71.2	82.7	37.1	37.8	48.6	11.2	31.6	52.0	17.3	23.1	26.6	55.5
	Hongwen	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	18.3
	Xiaoping	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	25.3
	Xiang Zhou	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	17.7
	Zhuxiandong	51.0	30.3	48.4	29.9	59.5	26.1	27.4	***	18.6	25.6	22.7	24.8		
Indonesia	Jakarta	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	17.2
	Serpong	***	67.6	46.0	45.0	42.3	44.6	40.3	44.3	47.2	43.0	52.3	62.2	71.1	83.0
	Kototabang	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	6.93
	Bandung	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	47.4
	Maros									8.85	12.7	10.1	9.30	14.1	6.75
Japan	Rishiri	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	12.9
	Ochiishi				7.65	11.8	7.51	15.6	7.84	6.45	8.40	10.7	11.0	12.3	9.68
	Tappi	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	19.1
	Sado-seki	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	18.1
	Happo	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	8.94
	Ijira	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	13.4
	Oki	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	17.5
	Banryu	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	13.8
	Yusuhara	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	7.16
	Hedo	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	9.94
	Ogasawara	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	6.04
	Tokyo								27.7	29.9	26.2	19.2	25.4	24.3	22.9
Lao PDR	Vientiane				***	***	***	7.72	10.9	8.39	17.3	***	***	***	***
Malaysia	Petaling Jaya	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	16.2
	Tanah Rata	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	2.42
	Danum Valley						2.03	2.05	1.32	9.76	3.44	4.89	1.90	<1	<1
	Kuching									4.61	4.94	1.94	5.03	6.16	2.87
Mongolia	Ulaanbaatar	52.0	49.9	72.8	47.5	46.2	54.4	53.7	87.1	53.3	46.7	54.7	45.9	***	62.2
	Terelj	44.3	30.5	65.7	31.6	35.6	36.1	54.6	38.8	51.1	41.0	35.0	39.4	***	5.37
Myanmar	Yangon								***	***	16.2	14.6	14.9	17.7	17.0
Philippines	Metro Manila	35.6	77.1	46.2	23.7	35.4	29.9	40.5	33.6	62.2	21.1	53.1	183	273	41.2
	Los Baños	13.6	22.4	34.5	14.5	13.9	15.0	16.3	16.8	19.6	11.7	38.2	29.4	67.8	22.3
	Mt. Sto. Tomas							<1.0	8.69	10.5	14.1	4.65	<1	3.42	4.71
Republic of Korea	Kanghwa	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	78.5
	Cheju	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	35.9
	Imsil		42.3	42.2	32.5	28.2	32.4	50.2	40.0	29.9	35.2	31.2	37.7	39.5	40.5
Russia	Mondy	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	2.71
	Listvyanka	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	9.85
	Irkutsk	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	29.5
	Primorskaya			35.9	39.1	30.4	41.6	49.8	29.6	50.6	28.8	42.7	54.1	27.0	39.6
Thailand	Bangkok	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	46.3
	Samutprakarn	31.8				34.5	37.4	49.9	47.1	56.4	41.0	28.1	27.8	34.1	37.7
	Pathumthani	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	44.9
	Khanchanaburi	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	6.80
	Chiang Mai		15.8	18.5	15.8	15.7	21.0	15.2	18.8	19.9	20.2	19.3	13.5	19.6	19.3
	Nakhon Ratchasima							23.1	18.3	21.1	22.9	24.6	24.3	25.7	23.8
Vietnam	Hanoi	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	53.4
	Hoa Binh	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	25.3
	Cuc Phuong										6.30	9.90	19.2	23.9	25.5
	Da Nang										13.5	8.67	21.5	21.3	24.6

[***]: No data or not measured

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

Black cell: Monitoring was not carried out

Table 3.70 Precipitation amount-weighted annual average concentrations of Na^+ from 2000 to 2013

unit: μmol L^{-1}

Country	Name of sites	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Cambodia	Phnom Penh					***	***	1.85	8.25	10.3	6.95	3.10	3.55	3.65	3.10
China	Guanyinqiao	11.8	10.8	5.54	4.91	7.28	8.35	7.92	5.92						
	Nanshan	7.73													
	Haifu									6.99	4.20	7.56	9.87	6.04	7.29
	Jinyunshan		10.2	5.90	4.99	12.3	15.3	6.65	6.20	10.3	7.70	8.17	6.12	6.28	3.92
	Shizhan	44.1	164	246	69.2	19.1	16.1	45.2	15.6	24.4	13.4	7.30	17.7	5.59	138
	Weishuiyuan	68.9	219	207	113	23.3	20.5	66.9							
	Jiwozi	23.8	158	171	102	25.1	59.6	65.6	85.8	81.1	25.2	6.47	7.86	44.5	112
	Hongwen	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	14.3
	Xiaoping	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	12.1
	Xiang Zhou	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	54.2
	Zhuxiandong	31.2	27.5	45.2	36.0	94.4	60.9	22.6	***	40.7	45.3	19.9	45.0		
Indonesia	Jakarta	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	16.2
	Serpong	***	23.8	25.2	11.3	19.6	16.0	7.46	11.7	10.5	10.2	8.32	10.1	10.9	14.0
	Kototabang	***	4.52	6.29	9.65	10.9	5.69	6.21	8.65	5.33	6.12	5.25	6.54	9.63	8.51
	Bandung	***	20.2	8.64	7.10	10.8	11.9	18.3	6.65	8.62	11.8	9.74	12.2	10.8	13.6
	Maros									15.7	13.3	13.2	14.9	19.9	19.3
Japan	Rishiri	325	212	197	176	229	203	110	143	247	176	162	139	292	200
	Ochiishi				198	360	208	278	186	171	182	232	155	274	421
	Tappi	149	134	165	141	199	218	289	234	197	199	114	150	141	257
	Sado-seki	258	355	268	93.8	135	290	224	227	215	321	320	153	246	328
	Happo	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	4.07
	Ijira	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	15.1
	Oki	396	316	363	185	295	602	225	275	324	376	409	480	357	505
	Banryu	28.9	78.2	79.4	80.9	113	92.1	66.4	78.6	72.2	98.8	94.2	108	92.2	69.1
	Yusuhara	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	9.90
	Hedo	454	160	515	430	873	449	189	129	124	127	254	204	418	227
	Ogasawara	139	104	236	251	125	97.3	103	133	86.2	188	208	202	114	141
	Tokyo								34.5	19.5	23.5	17.3	37.7	29.5	22.8
Lao PDR	Vientiane				***	***	***	7.10	2.38	2.91	9.14	***	***	***	***
Malaysia	Petaling Jaya	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	4.29
	Tanah Rata	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	2.17
	Danum Valley						4.45	5.64	4.15	3.22	5.83	13.8	5.52	2.87	5.14
	Kuching									5.39	7.35	6.67	9.08	5.21	7.54
Mongolia	Ulaanbaatar	7.88	9.09	6.29	3.84	5.79	7.16	8.43	5.25	3.59	4.88	3.50	5.65	***	78.8
	Terelj	6.47	15.9	16.9	4.50	6.32	11.5	12.5	9.42	5.47	7.60	11.1	6.07	***	17.0
Myanmar	Yangon								***	***	18.5	12.9	15.0	22.1	15.8
Philippines	Metro Manila	30.6	205	14.6	18.4	16.3	15.9	17.2	20.2	24.6	20.2	22.3	21.4	16.7	28.0
	Los Baños	34.8	37.2	21.1	15.3	12.0	17.2	22.7	17.6	19.1	17.4	22.7	19.4	22.2	22.8
	Mt. Sto. Tomas							2.81	5.68	5.11	8.26	6.30	4.31	10.3	6.70
Republic of Korea	Kanghwa	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	29.6
	Cheju	152	74.7	58.3	46.7	57.8	84.8	85.0	101	133	53.6	103	152	375	290
	Imsil		15.4	38.6	22.8	17.9	21.7	31.1	15.0	32.0	50.3	48.2	37.4	51.8	30.3
Russia	Mondy	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	1.36
	Listvyanka	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	6.68
	Irkutsk	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	12.8
	Primorskaya			23.1	33.7	22.5	21.7	16.8	19.8	22.9	12.8	23.9	13.7	23.1	25.5
Thailand	Bangkok	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	12.0
	Samutprakarn	10.1				16.5	19.8	14.6	12.2	15.4	10.0	18.6	5.70	7.89	25.3
	Pathumthani	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	5.96
	Khanchanaburi	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	5.46
	Chiang Mai		3.94	9.66	3.21	3.05	<1.0	3.53	2.93	2.61	2.69	2.72	3.21	3.80	5.63
	Nakhon Ratchasima							4.45	4.45	4.20	2.73	3.21	4.04	3.71	2.96
Vietnam	Hanoi	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	7.69
	Hoa Binh	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	4.13
	Cuc Phuong										11.2	12.0	13.6	20.0	26.7
	Da Nang										94.6	41.3	70.2	63.2	144

[***]: No data or not measured

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

Black cell: Monitoring was not carried out

Table 3.71 Precipitation amount-weighted annual average concentrations of K^+ from 2000 to 2013

unit: μmol L^{-1}

Country	Name of sites	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Cambodia	Phnom Penh					1.63	***	1.48	3.64	10.3	1.50	0.861	1.15	0.761	1.06
China	Guanyinqiao	14.2	18.7	10.6	11.0	10.9	12.4	12.6	8.81						
	Nanshan	16.3													
	Haifu									11.5	7.72	10.0	9.38	6.57	12.8
	Jinyunshan		44.4	10.3	8.60	11.7	11.4	11.4	6.78	9.54	8.71	10.4	10.4	7.64	5.49
	Shizhan	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	28.1
	Weishuiyuan	34.7	74.9	76.6	20.3	11.3	12.6	33.6							
	Jiwozi	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	10.2
	Hongwen	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	1.90
	Xiaoping	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	1.66
	Xiang Zhou	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	8.24
	Zhuxiandong	6.18	5.86	13.2	6.62	22.7	5.60	2.62	***	4.50	2.56	3.29	5.92		
Indonesia	Jakarta	***	24.3	11.3	9.28	10.3	5.73	8.01	11.2	3.51	2.22	2.23	2.28	2.86	2.83
	Serpong	***	7.04	3.95	7.96	5.65	6.18	4.46	2.76	2.21	1.75	3.20	3.15	4.33	4.91
	Kototabang	***	1.32	5.10	20.0	6.27	4.36	4.56	8.40	3.40	9.35	4.43	3.96	5.52	19.3
	Bandung	***	12.6	2.04	4.13	3.29	4.66	4.81	2.03	2.31	4.08	4.22	4.77	3.36	7.97
	Maros									5.76	3.89	2.52	1.86	3.50	1.84
Japan	Rishiri	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	4.61
	Ochiishi				4.63	8.08	5.28	7.66	4.58	3.81	4.09	6.16	3.70	6.76	9.35
	Tappi	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	6.21
	Sado-seki	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	7.69
	Happo	<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	0.581
	Ijira	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	0.589
	Oki	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	12.8
	Banryu	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	2.33
	Yusuhara	<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	0.387
	Hedo	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	5.48
	Ogasawara	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	3.64
	Tokyo								1.40	1.14	1.10	0.989	1.29	0.888	0.711
Lao PDR	Vientiane				***	***	***	3.51	1.69	1.69	<1.0	***	***	***	***
Malaysia	Petaling Jaya	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	1.14
	Tanah Rata	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	1.75
	Danum Valley						1.17	1.01	1.08	2.53	1.59	3.24	1.73	1.21	1.01
	Kuching									<1.0	<1.0	0.650	0.854	0.924	0.695
Mongolia	Ulaanbaatar	3.92	4.64	3.81	3.39	2.84	4.33	5.15	1.28	2.81	2.53	2.72	3.98	***	3.88
	Terelj	4.50	3.81	10.2	4.11	4.68	6.48	8.98	3.80	6.46	4.10	5.43	5.00	***	7.98
Myanmar	Yangon								***	***	6.46	2.07	1.66	6.78	2.66
Philippines	Metro Manila	15.5	23.2	9.87	2.52	3.93	3.90	12.6	5.38	15.6	3.99	17.0	23.5	26.3	6.45
	Los Baños	1.74	9.51	6.38	1.83	2.14	2.20	2.49	4.92	2.91	9.08	7.43	6.82	8.14	6.37
	Mt. Sto. Tomas							1.32	2.29	<1.0	1.95	1.41	0.821	0.885	0.752
Republic of Korea	Kanghwa	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	3.27
	Cheju	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	12.0
	Imsil		14.8	6.55	11.2	5.72	48.6	42.1	14.3	5.61	10.9	10.3	3.89	47.5	6.33
Russia	Mondy	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	2.30
	Listvyanka	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	4.36
	Irkutsk	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	5.19
	Primorskaya			5.35	10.1	7.24	7.07	5.47	6.18	8.99	4.40	5.84	6.75	5.09	5.55
Thailand	Bangkok	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	1.91
	Samutprakarn	5.29				4.88	4.92	4.31	2.88	6.12	2.77	17.0	1.11	1.52	5.23
	Pathumthani	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	2.13
	Khanchanaburi	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	0.955
	Chiang Mai		2.94	4.41	3.95	1.41	<1.0	1.70	2.87	2.63	1.47	1.21	1.45	1.26	1.48
	Nakhon Ratchasima							<1.0	1.38	1.24	1.31	0.940	1.20	1.26	0.813
Vietnam	Hanoi	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	2.64
	Hoa Binh	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	7.10
	Cuc Phuong										14.0	5.61	3.31	6.06	8.57
	Da Nang										6.27	3.41	14.0	11.5	17.9

[***]: No data or not measured

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

Black cell: Monitoring was not carried out

Table 3.72 Precipitation amount-weighted annual average concentrations of Ca^{2+} from 2000 to 2013

unit: μmol L^{-1}

Country	Name of sites	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Cambodia	Phnom Penh					<0.2	***	9.11	19.2	32.6	20.4	8.33	9.30	10.7	9.57
China	Guanyinqiao	63.0	137	65.4	65.4	110	156	143	75.2						
	Nanshan	55.2													
	Haifu									65.3	43.2	69.2	68.5	57.9	69.5
	Jinyunshan		44.9	29.7	30.7	70.5	57.7	98.3	55.1	68.3	66.7	68.7	65.1	59.2	31.2
	Shizhan	229	675	479	258	147	107	301	116	150	138	105	91.2	128	325
	Weishuiyuan	305	1160	617	241	190	91.0	330							
	Jiwozi	124	429	276	230	88.0	129	221	347	266	93.7	40.7	91.6	203	133
	Hongwen	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	21.9
	Xiaoping	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	22.7
	Xiang Zhou	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	43.4
	Zhuxiandong	25.0	14.3	20.7	20.2	24.7	17.0	17.1	***	13.6	7.40	16.4	19.1		
Indonesia	Jakarta	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	14.1
	Serpong	***	13.6	9.93	6.60	10.5	12.0	7.19	7.37	7.97	5.17	9.25	10.9	9.29	14.0
	Kototabang	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	9.55
	Bandung	***	24.2	17.1	10.9	18.3	15.9	14.8	9.50	11.3	15.3	13.5	20.9	13.3	19.6
	Maros									8.39	8.11	9.58	6.49	16.1	10.4
Japan	Rishiri	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	7.33
	Ochiishi				5.74	12.2	8.96	10.2	6.96	5.29	5.20	8.25	5.42	7.35	11.5
	Tappi	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	14.1
	Sado-seki	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	10.4
	Happo	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	2.77
	Ijira	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	2.74
	Oki	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	17.0
	Banryu	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	3.92
	Yusuhara	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	2.16
	Hedo	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	6.89
	Ogasawara	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	4.60
	Tokyo								4.99	4.09	3.42	3.98	4.84	4.21	4.35
Lao PDR	Vientiane				***	***	***	8.75	3.04	5.77	5.50	***	***	***	***
Malaysia	Petaling Jaya	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	6.13
	Tanah Rata	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	2.91
	Danum Valley						1.35	1.26	0.513	0.353	1.01	3.82	0.887	0.800	1.44
	Kuching									1.91	1.79	2.60	3.15	3.42	4.20
Mongolia	Ulaanbaatar	37.7	47.4	49.9	26.5	43.2	49.8	45.9	41.2	42.9	42.2	34.3	33.9	***	95.3
	Terelj	15.2	15.0	27.3	10.7	16.2	13.6	24.8	13.6	17.9	35.8	42.3	20.4	***	69.1
Myanmar	Yangon								***	***	9.66	6.37	6.89	7.79	1.07
Philippines	Metro Manila	14.5	71.6	8.71	8.76	11.1	10.6	13.7	10.4	13.7	6.41	12.8	12.9	13.9	11.5
	Los Baños	6.95	65.3	7.23	7.75	5.40	3.54	6.92	5.19	3.75	5.08	20.1	6.38	9.40	6.40
	Mt. Sto. Tomas							5.64	23.4	3.09	5.87	22.7	7.84	14.0	8.58
Republic of Korea	Kanghwa	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	8.72
	Cheju	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	13.6
	Imsil		5.85	9.84	5.39	6.76	5.00	14.7	13.7	6.92	3.88	5.74	6.81	4.31	2.95
Russia	Mondy	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	4.61
	Listvyanka	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	11.9
	Irkutsk	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	33.0
	Primorskaya			18.1	25.3	21.5	21.1	25.0	14.0	19.4	11.7	16.9	13.7	12.2	18.0
Thailand	Bangkok	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	25.2
	Samutprakarn	11.1				7.84	9.68	14.8	11.0	13.8	13.2	7.78	5.95	8.39	19.9
	Pathumthani	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	27.1
	Khanchanaburi	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	3.26
	Chiang Mai		6.95	18.0	5.72	4.77	3.75	4.74	8.03	6.68	5.69	4.40	2.60	7.77	10.6
	Nakhon Ratchasima							9.54	3.75	3.35	2.53	2.21	1.88	3.74	1.96
Vietnam	Hanoi	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	16.2
	Hoa Binh	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	16.9
	Cuc Phuong										24.8	38.3	32.2	30.6	24.4
	Da Nang										6.35	8.87	10.0	16.9	21.5

[***]: No data or not measured

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

Black cell: Monitoring was not carried out

Table 3.73 Precipitation amount-weighted annual average concentrations of nss-Ca^{2+} from 2000 to 2013

unit: μmol L^{-1}

Country	Name of sites	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Cambodia	Phnom Penh					***	***	9.07	19.1	32.5	20.3	8.26	9.23	10.7	9.50
China	Guanyinqiao	62.8	137	65.3	65.3	110	156	143	75.1						
	Nanshan	55.0													
	Haifu									65.2	43.2	69.0	68.2	57.7	69.3
	Jinyunshan		44.7	29.6	30.6	70.2	57.4	98.2	55.0	68.1	66.5	68.6	64.9	59.0	31.1
	Shizhan	228	672	474	257	147	107	300	116	149	138	105	90.8	128	322
	Weishuiyuan	303	1150	612	238	189	90.6	328							
	Jiwozi	123	425	273	227	87.4	128	220	345	264	93.2	40.6	91.4	202	130
	Hongwen	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	21.6
	Xiaoping	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	22.4
	Xiang Zhou	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	42.2
	Zhuxiandong	24.3	13.7	19.7	19.4	22.7	15.7	16.7	***	12.7	6.44	15.9	18.1		
Indonesia	Jakarta	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	13.8
	Serpong	***	13.1	9.40	6.38	10.1	11.7	7.03	7.19	7.75	5.03	9.07	10.7	9.05	13.7
	Kototabang	***	1.36	4.78	5.32	6.75	3.26	5.06	4.51	4.76	5.34	4.65	5.76	7.64	9.37
	Bandung	***	23.7	16.9	10.7	18.0	15.4	14.4	9.36	11.1	15.1	13.3	20.6	13.1	19.3
	Maros									8.05	7.83	9.30	6.17	15.7	9.98
Japan	Rishiri	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	3.06
	Ochiishi				1.60	4.48	4.44	4.30	2.96	1.66	1.38	3.25	2.11	1.50	2.42
	Tappi	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	8.53
	Sado-seki	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	3.83
	Happo	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	2.69
	Ijira	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	2.43
	Oki	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	6.12
	Banryu	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	2.42
	Yusuhara	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	1.95
	Hedo	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	1.99
	Ogasawara	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	1.56
	Tokyo								4.24	3.67	2.91	3.60	4.03	3.57	3.86
Lao PDR	Vientiane				***	***	***	8.59	2.99	5.70	5.30	***	***	***	***
Malaysia	Petaling Jaya	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	6.04
	Tanah Rata	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	2.87
	Danum Valley						1.26	1.16	0.453	0.315	0.919	3.59	0.794	0.750	1.34
	Kuching									1.81	1.66	2.45	2.95	3.32	4.04
Mongolia	Ulaanbaatar	37.6	47.2	49.8	26.4	43.0	49.6	45.7	41.1	42.9	42.1	34.2	33.8	***	93.6
	Terelj	15.1	14.6	26.3	10.6	16.1	13.3	24.5	13.4	17.7	35.6	42.1	20.2	***	68.8
Myanmar	Yangon								***	***	9.26	6.09	6.57	7.32	0.792
Philippines	Metro Manila	13.9	67.2	8.40	8.40	10.8	10.3	13.3	9.96	13.2	5.98	12.3	12.4	13.5	10.9
	Los Baños	6.20	64.5	6.77	7.46	5.14	3.18	6.43	4.82	3.34	4.71	19.7	5.96	8.92	5.94
	Mt. Sto. Tomas							5.58	23.3	2.98	5.69	22.5	7.75	13.8	8.43
Republic of Korea	Kanghwa	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	8.09
	Cheju	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	7.33
	Imsil		5.51	9.00	4.89	6.37	4.53	14.0	13.3	6.23	2.83	4.79	6.02	3.40	2.29
Russia	Mondy	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	4.58
	Listvyanka	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	11.7
	Irkutsk	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	32.7
	Primorskaya			17.6	24.6	21.0	20.7	24.7	13.5	18.9	11.4	16.3	13.4	11.7	17.4
Thailand	Bangkok	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	25.0
	Samutprakarn	10.8				7.48	9.25	14.5	10.7	13.5	13.0	7.38	5.83	8.22	19.3
	Pathumthani	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	27.0
	Khanchanaburi	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	3.14
	Chiang Mai		6.86	17.8	5.65	4.71	3.73	4.68	7.97	6.63	5.63	4.36	2.54	7.69	10.4
	Nakhon Ratchasima							9.45	3.66	3.26	2.48	2.15	1.81	3.66	1.90
Vietnam	Hanoi	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	16.1
	Hoa Binh	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	16.9
	Cuc Phuong										24.6	38.0	32.0	30.2	23.8
	Da Nang										4.31	7.98	8.50	15.5	18.4

[***]: No data or not measured

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

Black cell: Monitoring was not carried out

Table 3.74 Precipitation amount-weighted annual average concentrations of Mg^{2+} from 2000 to 2013

unit: μmol L^{-1}

Country	Name of sites	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Cambodia	Phnom Penh					<0.4	***	0.661	3.27	3.45	2.00	0.717	1.22	1.22	1.12
China	Guanyinqiao	8.54	11.6	6.00	4.46	9.12	12.7	12.6	8.04						
	Nanshan	7.05													
	Haifu									7.08	5.45	8.95	8.61	6.87	8.23
	Jinyunshan		5.76	3.37	2.89	3.55	3.17	4.00	2.81	4.64	5.56	5.76	6.13	5.82	4.42
	Shizhan	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	54.5
	Weishuiyuan	31.7	88.4	91.1	40.0	19.3	10.9	42.0							
	Jiwozi	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	22.3
	Hongwen	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	3.36
	Xiaoping	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	4.03
	Xiang Zhou	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	14.0
	Zhuxiandong	7.91	3.33	7.08	7.37	8.49	9.08	4.99	***	5.70	6.15	2.86	6.75		
Indonesia	Jakarta	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	2.62
	Serpong	***	3.53	4.52	2.69	3.99	3.74	1.73	2.65	4.12	1.36	3.09	3.12	2.01	3.86
	Kototabang	***	1.04	2.58	6.76	1.78	0.939	2.26	3.81	1.000	1.10	1.55	0.950	1.40	2.40
	Bandung	***	4.07	1.64	1.70	3.28	2.45	3.26	1.68	4.40	4.13	4.43	5.78	3.17	6.33
	Maros									2.56	1.86	2.17	2.50	7.03	2.81
Japan	Rishiri	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	22.5
	Ochiishi				22.1	42.2	22.2	31.2	21.5	19.8	19.9	28.6	18.5	30.6	48.2
	Tappi	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	30.0
	Sado-seki	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	36.9
	Happo	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	1.37
	Ijira	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	2.09
	Oki	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	56.1
	Banryu	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	8.50
	Yusuhara	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	2.40
	Hedo	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	25.7
	Ogasawara	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	17.0
	Tokyo								4.22	2.78	2.97	2.40	4.79	3.78	3.04
Lao PDR	Vientiane				***	***	***	3.49	0.698	1.31	0.722	***	***	***	***
Malaysia	Petaling Jaya	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	0.686
	Tanah Rata	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	<0.4
	Danum Valley						<0.4	0.481	0.402	0.528	0.549	1.48	0.541	<0.4	0.430
	Kuching									<0.4	<0.4	0.457	0.745	<0.4	0.588
Mongolia	Ulaanbaatar	4.14	5.41	3.56	3.69	5.86	5.21	4.39	4.75	3.67	5.32	2.98	9.23	***	3.74
	Terelj	3.16	2.53	4.09	2.26	5.15	3.67	4.85	2.07	3.00	5.45	5.54	7.35	***	4.97
Myanmar	Yangon								***	***	2.84	1.80	3.02	6.56	12.3
Philippines	Metro Manila	6.32	15.0	3.27	2.99	4.38	2.46	5.46	4.13	4.64	2.56	9.12	7.13	6.53	4.54
	Los Baños	3.71	11.1	2.94	2.60	3.59	2.34	3.44	3.46	4.65	3.73	8.20	4.76	4.26	3.25
	Mt. Sto. Tomas							0.971	2.08	<0.4	1.53	3.34	1.61	2.90	1.69
Republic of Korea	Kanghwa	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	3.30
	Cheju	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	25.6
	Imsil		1.92	3.31	1.60	2.39	1.82	3.99	3.57	1.99	3.88	4.68	2.02	3.05	1.87
Russia	Mondy	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	0.877
	Listvyanka	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	2.92
	Irkutsk	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	6.38
	Primorskaya			5.66	11.2	7.05	5.67	5.50	4.30	6.26	3.11	4.27	4.29	4.43	4.89
Thailand	Bangkok	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	2.63
	Samutprakarn	2.39				1.87	3.43	4.63	2.69	3.99	2.80	2.20	1.20	1.53	4.46
	Pathumthani	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	2.59
	Khanchanaburi	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	1.03
	Chiang Mai		1.10	3.54	2.08	1.82	1.00	2.42	1.24	1.78	2.73	0.451	<0.4	0.842	1.50
	Nakhon Ratchasima							1.98	1.78	1.22	1.27	0.703	<0.4	0.423	<0.4
Vietnam	Hanoi	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	2.79
	Hoa Binh	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	2.69
	Cuc Phuong										4.37	4.41	4.78	7.07	12.2
	Da Nang										10.2	8.52	9.42	9.19	18.8

[***]: No data or not measured

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

Black cell: Monitoring was not carried out

Table 3.75 Precipitation amount-weighted annual average concentrations of H^+ from 2000 to 2013

unit: μmol L^{-1}

Country	Name of sites	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Cambodia	Phnom Penh					4.79	0.478	0.191	0.203	1.45	0.649	1.07	1.10	0.694	0.662
China	Guanyinqiao	46.7	16.1	25.2	32.2	25.9	11.2	13.7	22.6						
	Nanshan	60.5													
	Haifu									63.5	60.3	71.0	65.9	57.5	30.1
	Jinyunshan		65.4	43.6	50.3	25.9	23.7	20.4	30.0	44.0	47.1	115	90.9	81.5	63.3
	Shizhan	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	0.117
	Weishuiyuan	0.381	0.484	0.931	0.784	1.05	7.04	1.46							
	Jiwozi	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	0.635
	Hongwen	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	13.2
	Xiaoping	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	9.92
	Xiang Zhou	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	5.83
	Zhuxiandong	23.0	16.7	12.8	7.88	23.2	24.4	15.0	***	13.1	17.7	11.3	16.7		
Indonesia	Jakarta	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	16.9
	Serpong	***	23.7	22.6	24.1	20.8	25.6	25.0	25.8	23.9	19.3	17.5	19.7	12.4	8.63
	Kototabang	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	10.6
	Bandung	***	10.1	34.9	10.0	9.30	9.33	7.00	11.8	6.81	4.99	7.99	4.00	3.48	4.01
	Maros									2.35	4.64	6.16	4.43	2.41	3.41
Japan	Rishiri	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	21.2
	Ochiishi				12.2	20.7	14.6	13.8	16.7	13.5	9.64	14.8	13.1	15.2	9.38
	Tappi	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	16.0
	Sado-seki	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	18.2
	Happo	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	10.0
	Ijira	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	17.9
	Oki	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	24.6
	Banryu	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	22.8
	Yusuhara	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	16.7
	Hedo	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	10.9
	Ogasawara	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	5.65
	Tokyo								16.3	24.8	17.7	11.2	14.9	14.4	8.83
Lao PDR	Vientiane				0.313	2.26	0.481	0.325	2.16	0.987	3.31	***	***	0.351	***
Malaysia	Petaling Jaya	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	38.0
	Tanah Rata	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	11.2
	Danum Valley						10.5	8.93	8.03	6.02	6.00	5.99	6.20	6.58	5.33
	Kuching									5.55	5.47	5.25	3.73	4.84	5.17
Mongolia	Ulaanbaatar	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	1.04
	Terelj	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	12.3
Myanmar	Yangon								2.66	0.392	0.346	0.384	0.347	0.323	0.352
Philippines	Metro Manila	3.28	3.87	8.11	36.2	6.64	11.3	5.01	5.33	2.84	5.87	2.25	2.27	6.03	2.85
	Los Baños	3.64	2.98	1.81	32.5	5.47	7.27	2.44	2.91	11.2	2.64	1.32	2.70	2.19	1.41
	Mt. Sto. Tomas							0.475	2.97	3.22	1.47	0.201	4.46	1.12	5.18
Republic of Korea	Kanghwa	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	26.3
	Cheju	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	4.18
	Imsil		8.05	2.02	8.34	11.8	0.997	6.45	1.85	13.1	8.06	13.5	5.42	7.82	6.01
Russia	Mondy	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	4.83
	Listvyanka	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	15.9
	Irkutsk	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	9.81
	Primorskaya			6.30	13.2	14.5	8.67	15.0	14.5	16.3	10.5	10.7	23.4	8.55	8.80
Thailand	Bangkok	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	2.52
	Samutprakarn	14.8				3.41	3.42	1.36	2.46	5.08	7.40	4.82	1.27	0.679	1.06
	Pathumthani	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	3.90
	Khanchanaburi	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	4.72
	Chiang Mai		1.94	1.89	2.47	2.54	5.94	2.00	1.12	1.04	1.20	0.676	5.14	0.789	0.909
	Nakhon Ratchasima							7.61	8.30	9.31	13.6	17.8	9.95	8.58	5.70
Vietnam	Hanoi	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	2.21
	Hoa Binh	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	0.911
	Cuc Phuong										10.3	5.88	9.09	3.68	3.77
	Da Nang										16.8	7.71	10.4	3.66	2.62

[***]: No data or not measured

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

Black cell: Monitoring was not carried out

Table 3.76 Precipitation amount-weighted annual average pH from 2000 to 2013

Country	Name of sites	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Cambodia	Phnom Penh					5.32	6.32	6.72	6.69	5.84	6.19	5.97	5.96	6.16	6.18
China	Guanyinqiao	4.33	4.79	4.60	4.49	4.59	4.95	4.86	4.65						
	Nanshan	4.22													
	Haifu									4.20	4.22	4.15	4.18	4.24	4.52
	Jinyunshan		4.18	4.36	4.30	4.59	4.62	4.69	4.52	4.36	4.33	3.94	4.04	4.09	4.20
	Shizhan	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	6.93
	Weishuiyuan	6.42	6.32	6.03	6.11	5.98	5.15	5.84							
	Jiwozi	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	6.20
	Hongwen	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	4.88
	Xiaoping	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	5.00
	Xiang Zhou	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	5.23
	Zhuxiandong	4.64	4.78	4.89	5.10	4.63	4.61	4.82	***	4.88	4.75	4.95	4.78		
Indonesia	Jakarta	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	4.77
	Serpong	***	4.63	4.65	4.62	4.68	4.59	4.60	4.59	4.62	4.71	4.76	4.70	4.91	5.06
	Kototabang	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	4.97
	Bandung	***	4.99	4.46	5.00	5.03	5.03	5.15	4.93	5.17	5.30	5.10	5.40	5.46	5.40
	Maros									5.63	5.33	5.21	5.35	5.62	5.47
Japan	Rishiri	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	4.67
	Ochiishi				4.91	4.68	4.84	4.86	4.78	4.87	5.02	4.83	4.88	4.82	5.03
	Tappi	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	4.80
	Sado-seki	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	4.74
	Happo	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	5.00
	Ijira	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	4.75
	Oki	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	4.61
	Banryu	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	4.64
	Yusuhara	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	4.78
	Hedo	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	4.96
	Ogasawara	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	5.25
	Tokyo								4.79	4.60	4.75	4.95	4.83	4.84	5.05
Lao PDR	Vientiane				6.51	5.65	6.32	6.49	5.67	6.01	5.48	***	***	6.46	***
Malaysia	Petaling Jaya	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	4.42
	Tanah Rata	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	4.95
	Danum Valley						4.98	5.05	5.10	5.22	5.22	5.22	5.21	5.18	5.27
	Kuching									5.26	5.26	5.28	5.43	5.32	5.29
Mongolia	Ulaanbaatar	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	5.98
	Terelj	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	4.91
Myanmar	Yangon								5.57	6.41	6.46	6.42	6.46	6.49	6.45
Philippines	Metro Manila	5.48	5.41	5.09	4.44	5.18	4.95	5.30	5.27	5.55	5.23	5.65	5.64	5.22	5.55
	Los Baños	5.44	5.53	5.74	4.49	5.26	5.14	5.61	5.54	4.95	5.58	5.88	5.57	5.66	5.85
	Mt. Sto. Tomas							6.32	5.53	5.49	5.83	6.70	5.35	5.95	5.29
Republic of Korea	Kanghwa	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	4.58
	Cheju	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	5.38
	Imsil		5.09	5.69	5.08	4.93	6.00	5.19	5.73	4.88	5.09	4.87	5.27	5.11	5.22
Russia	Mondy	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	5.32
	Listvyanka	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	4.80
	Irkutsk	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	5.01
	Primorskaya			5.20	4.88	4.84	5.06	4.83	4.84	4.79	4.98	4.97	4.63	5.07	5.06
Thailand	Bangkok	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	5.60
	Samutprakarn	4.83				5.47	5.47	5.87	5.61	5.29	5.13	5.32	5.90	6.17	5.98
	Pathumthani	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	5.41
	Khanchanaburi	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	5.33
	Chiang Mai		5.71	5.72	5.61	5.59	5.23	5.70	5.95	5.98	5.92	6.17	5.29	6.10	6.04
	Nakhon Ratchasima							5.12	5.08	5.03	4.87	4.75	5.00	5.07	5.24
Vietnam	Hanoi	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	5.66
	Hoa Binh	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	6.04
	Cuc Phuong										4.99	5.23	5.04	5.43	5.42
	Da Nang										4.77	5.11	4.98	5.44	5.58

[***]: No data or not measured

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

Black cell: Monitoring was not carried out

Table 3.77 Precipitation amount-weighted annual average EC from 2000 to 2013

unit: mS m^{-1}

Country	Name of sites	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Cambodia	Phnom Penh					1.17	0.807	1.17	1.37	1.53	0.880	0.747	0.820	0.704	0.665
China	Guanyinqiao	5.61	7.00	4.36	4.89	5.82	6.70	6.70	5.01						
	Nanshan	5.20													
	Haifu									6.46	5.14	6.71	6.55	5.33	5.26
	Jinyunshan		6.23	3.69	4.19	4.35	4.23	5.45	3.76	5.13	5.27	8.07	7.09	6.56	4.81
	Shizhan	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	6.97
	Weishuiyuan	15.1	27.7	21.7	7.80	8.55	4.61	13.4							
	Jiwozi	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	3.61
	Hongwen	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	1.63
	Xiaoping	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	1.46
	Xiang Zhou	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	1.15
	Zhuxiandong	3.04	2.08	3.63	2.42	3.15	2.49	2.67	***	1.94	2.15	1.37	1.99		
Indonesia	Jakarta	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	1.59
	Serpong	***	2.94	1.87	2.26	2.25	2.63	2.10	2.14	2.10	1.66	1.95	2.31	2.05	2.16
	Kototabang	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	0.927
	Bandung	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	1.86
	Maros									0.623	1.06	0.718	0.576	0.885	0.970
Japan	Rishiri	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	4.25
	Ochiishi				3.45	6.72	4.01	5.00	3.69	3.33	3.31	4.65	3.28	4.96	7.10
	Tappi	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	4.76
	Sado-seki	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	5.98
	Happo	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	0.764
	Ijira	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	1.42
	Oki	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	9.41
	Banryu	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	2.48
	Yusuhara	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	1.06
	Hedo	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	4.24
	Ogasawara	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	2.86
	Tokyo								1.80	1.96	1.66	1.18	1.88	1.75	1.33
Lao PDR	Vientiane				2.07	2.65	1.01	0.764	0.396	0.644	0.534	***	***	0.411	***
Malaysia	Petaling Jaya	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	2.43
	Tanah Rata	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	0.734
	Danum Valley						0.562	0.465	0.347	0.461	0.445	0.552	0.440	0.416	0.410
	Kuching									0.443	0.521	0.500	0.547	0.489	0.549
Mongolia	Ulaanbaatar	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	2.54
	Terelj	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	1.94
Myanmar	Yangon								0.595	0.949	1.54	1.34	0.682	1.30	0.813
Philippines	Metro Manila	2.20	6.49	1.85	1.36	1.48	1.66	1.66	1.40	2.88	1.24	1.89	3.76	4.81	1.53
	Los Baños	1.13	2.08	1.22	1.99	0.801	1.01	1.08	0.859	1.76	0.802	1.22	1.18	1.74	1.02
	Mt. Sto. Tomas							0.221	1.03	0.347	0.495	0.533	0.355	0.500	0.558
Republic of Korea	Kanghwa	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	2.66
	Cheju	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	5.55
	Imsil		1.31	1.80	1.42	1.42	1.72	2.51	1.58	1.75	1.98	1.89	1.58	2.58	1.47
Russia	Mondy	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	0.420
	Listvyanka	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	1.25
	Irkutsk	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	2.08
	Primorskaya			1.77	2.66	2.20	2.03	2.47	1.90	2.58	1.48	1.96	2.64	1.56	1.89
Thailand	Bangkok	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	1.35
	Samutprakarn	1.52				1.01	1.30	1.56	1.34	1.66	1.48	1.13	0.667	0.902	1.20
	Pathumthani	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	1.08
	Khanchanaburi	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	0.326
	Chiang Mai		0.885	0.476	0.458	0.486	0.812	0.593	0.630	0.622	0.608	0.519	0.442	0.512	0.682
	Nakhon Ratchasima							0.918	0.775	0.833	0.981	0.992	0.796	0.756	0.789
Vietnam	Hanoi	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	1.52
	Hoa Binh	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	1.10
	Cuc Phuong										1.74	1.71	1.98	1.73	1.80
	Da Nang										2.53	1.46	2.37	2.10	3.46

[***]: No data or not measured

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

Black cell: Monitoring was not carried out

Table 3.78 Annual SO_4^{2-} deposition amount from 2000 to 2013

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

Country	Name of sites	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Cambodia	Phnom Penh					***	7.43	5.04	30.9	21.3	15.4	13.6	11.5	17.0	10.7
China	Guanyinqiao	164	154	165	108	229	200	149	169						
	Nanshan	164													
	Haifu									145	106	136	115	103	109
	Jinyunshan		87.7	126	103	166	149	169	149	146	125	148	119	125	91.7
	Shizhan	199	171	297	258	104	63.9	132	96.7	73.6	80.5	45.8	72.5	42.9	62.0
	Weishuiyuan	241	105	234	186	94.2	47.1	104							
	Jiwozi	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	34.1
	Hongwen	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	30.7
	Xiaoping	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	44.9
	Xiang Zhou	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	46.3
	Zhuxiandong	85.4	49.5	50.6	32.4	34.3	31.3	17.1	***	49.6	33.2	31.6	23.4		
Indonesia	Jakarta	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	51.0
	Serpong	***	61.4	64.3	49.5	41.0	27.5	45.2	61.5	65.9	31.0	34.8	27.9	26.0	61.6
	Kototabang	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	13.2
	Bandung	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	72.1
	Maros									16.3	22.5	28.9	30.0	21.5	26.0
Japan	Rishiri	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	27.1
	Ochiishi				14.9	22.3	18.6	27.6	18.4	13.7	26.3	24.9	12.4	22.0	34.4
	Tappi	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	35.4
	Sado-seki	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	52.7
	Happo	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	23.6
	Ijira	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	33.6
	Oki	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	65.6
	Banryu	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	35.0
	Yusuhara	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	22.5
	Hedo	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	35.8
	Ogasawara	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	17.1
	Tokyo								18.4	36.5	27.6	18.1	22.0	25.5	19.7
Lao PDR	Vientiane				***	***	***	2.45	6.54	8.43	0.733	***	***	3.19	***
Malaysia	Petaling Jaya	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	63.6
	Tanah Rata	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	13.2
	Danum Valley						5.53	10.2	6.85	7.46	9.56	12.0	7.42	6.75	10.1
	Kuching									17.8	17.6	16.6	18.9	17.7	20.6
Mongolia	Ulaanbaatar	4.78	4.17	4.41	5.80	1.84	4.01	4.78	4.67	4.33	4.53	3.39	4.59	***	8.71
	Terelj	3.41	0.861	3.72	2.57	2.75	4.29	5.10	4.63	3.40	1.83	3.96	3.40	***	4.40
Myanmar	Yangon								***	***	24.1	10.3	20.9	19.2	21.4
Philippines	Metro Manila	94.4	85.5	78.2	37.6	44.0	57.1	47.4	78.1	59.2	51.3	54.2	68.3	108	52.9
	Los Baños	27.7	28.4	27.3	11.4	14.7	16.2	23.9	26.0	34.2	25.6	15.3	20.4	26.5	15.8
	Mt. Sto. Tomas							0.592	19.4	17.6	23.8	17.8	21.6	41.6	33.8
Republic of Korea	Kanghwa	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	32.4
	Cheju	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	25.9
	Imsil		21.3	22.7	30.6	19.9	28.4	19.0	38.8	17.9	21.0	32.0	30.9	27.2	22.6
Russia	Mondy	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	1.18
	Listvyanka	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	5.02
	Irkutsk	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	10.1
	Primorskaya			24.2	13.9	25.7	28.2	28.6	30.4	22.5	19.5	21.5	8.70	19.1	21.1
Thailand	Bangkok	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	9.42
	Samutprakarn	25.0				20.7	31.1	29.4	27.7	27.2	30.0	29.3	16.1	9.73	8.55
	Pathumthani	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	11.1
	Khanchanaburi	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	1.84
	Chiang Mai		3.02	6.57	3.34	7.95	8.43	6.44	5.62	6.38	4.52	3.88	5.23	5.28	5.92
	Nakhon Ratchasima							9.80	8.93	12.7	8.11	11.5	7.99	7.48	10.8
Vietnam	Hanoi	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	50.4
	Hoa Binh	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	39.6
	Cuc Phuong										41.9	33.7	69.7	49.0	51.1
	Da Nang										55.6	27.6	76.7	32.9	56.1

[***]: No data or not measured

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

Black cell: Monitoring was not carried out

Table 3.79 Annual nss-SO_4^{2-} deposition amount from 2000 to 2013

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

Country	Name of sites	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Cambodia	Phnom Penh					***	***	4.82	30.2	15.9	14.9	13.3	11.3	16.6	10.5
China	Guanyinqiao	163	154	164	108	228	200	149	169						
	Nanshan	164													
	Haifu									145	106	135	115	102	108
	Jinyunshan		87.3	125	102	165	148	168	148	145	124	148	119	125	91.5
	Shizhan	198	167	291	253	103	63.4	131	96.2	73.0	80.1	45.6	71.8	42.8	58.3
	Weishuiyuan	239	104	231	177	93.5	46.6	103							
	Jiwozi	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	29.7
	Hongwen	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	29.5
	Xiaoping	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	43.5
	Xiang Zhou	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	38.4
	Zhuxiandong	82.4	46.2	46.3	28.8	30.4	27.7	15.9	***	44.0	28.9	29.4	20.3		
Indonesia	Jakarta	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	48.8
	Serpong	***	59.1	60.5	48.0	39.3	26.7	44.4	60.1	64.5	30.2	34.1	27.4	25.4	59.6
	Kototabang	***	5.33	12.7	26.9	9.66	11.3	9.08	17.9	6.47	11.6	14.3	16.2	14.4	12.1
	Bandung	***	84.6	69.1	32.1	24.2	60.5	33.7	51.2	64.2	76.4	68.8	46.0	53.8	70.2
	Maros									13.5	20.0	26.7	26.7	18.7	21.3
Japan	Rishiri	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	13.2
	Ochiishi				5.84	8.33	8.28	11.3	8.73	6.14	9.29	10.5	5.51	7.68	7.60
	Tappi	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	18.9
	Sado-seki	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	22.0
	Happo	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	22.9
	Ijira	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	31.1
	Oki	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	23.1
	Banryu	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	26.5
	Yusuhara	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	21.1
	Hedo	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	13.8
	Ogasawara	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	6.31
	Tokyo								16.2	34.3	25.1	16.3	18.9	22.6	17.4
Lao PDR	Vientiane				***	***	***	2.15	6.34	8.14	0.633	***	***	***	***
Malaysia	Petaling Jaya	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	62.6
	Tanah Rata	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	12.8
	Danum Valley						5.19	9.23	6.11	6.89	8.36	10.2	6.51	6.24	9.15
	Kuching									16.4	15.6	14.7	16.3	16.5	18.7
Mongolia	Ulaanbaatar	4.69	4.08	4.34	5.73	1.81	3.95	4.68	4.63	4.22	4.47	3.36	4.53	***	8.00
	Terelj	3.33	0.776	3.51	2.49	2.67	4.12	4.93	4.53	3.26	1.78	3.86	3.34	***	4.33
Myanmar	Yangon								***	***	20.8	8.88	18.0	15.8	19.7
Philippines	Metro Manila	87.0	52.0	75.6	35.2	41.9	54.8	44.6	73.9	55.7	47.7	50.6	63.6	103	47.0
	Los Baños	22.4	23.9	25.1	10.0	13.4	14.5	21.0	22.7	32.0	22.5	12.5	17.6	23.7	12.5
	Mt. Sto. Tomas							0.519	18.2	16.1	21.5	16.5	20.4	38.1	32.1
Republic of Korea	Kanghwa	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	30.8
	Cheju	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	14.8
	Imsil		20.1	20.4	28.0	18.6	26.8	17.6	37.5	16.3	17.7	27.2	27.5	22.8	20.4
Russia	Mondy	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	1.15
	Listvyanka	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	4.91
	Irkutsk	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	9.90
	Primorskaya			23.0	13.3	24.8	27.2	28.0	29.2	21.7	18.8	20.5	8.19	17.9	20.0
Thailand	Bangkok	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	8.46
	Samutprakarn	24.4				19.5	29.1	28.0	26.3	25.6	28.8	27.2	15.4	9.28	6.94
	Pathumthani	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	10.7
	Khanchanaburi	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	1.40
	Chiang Mai		2.78	5.78	3.21	7.74	8.36	6.16	5.46	6.18	4.36	3.69	4.93	5.04	5.49
	Nakhon Ratchasima							9.48	8.56	12.2	7.90	11.1	7.63	7.23	10.5
Vietnam	Hanoi	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	49.5
	Hoa Binh	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	39.1
	Cuc Phuong										40.4	32.5	68.2	46.5	48.0
	Da Nang										38.7	23.4	61.3	27.1	36.0

[***]: No data or not measured

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

Black cell: Monitoring was not carried out

Table 3.80 Annual NO_3^- deposition amount from 2000 to 2013

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

Country	Name of sites	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Cambodia	Phnom Penh					3.22	***	8.59	11.3	17.2	13.7	15.5	11.3	17.4	10.3
China	Guanyinqiao	45.5	39.7	49.7	38.4	60.9	44.5	51.1	63.3						
	Nanshan	52.4													
	Haifu									65.6	56.7	75.9	67.4	74.6	75.8
	Jinyunshan		28.6	47.3	42.5	55.9	50.2	55.2	51.8	56.4	59.7	73.4	65.8	70.8	59.9
	Shizhan	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	15.7
	Weishuiyuan	42.9	14.5	39.0	70.5	32.4	5.01	32.8							
	Jiwozi	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	5.69
	Hongwen	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	29.3
	Xiaoping	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	40.9
	Xiang Zhou	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	49.3
	Zhuxiandong	59.6	57.1	32.9	20.2	31.9	22.8	11.7	***	33.9	31.3	36.6	21.5		
Indonesia	Jakarta	27.8	66.4	44.3	94.5	114	115	30.4	67.4	24.1	23.8	36.2	29.5	44.2	50.8
	Serpong	***	81.4	81.6	66.1	58.0	32.5	45.4	61.3	71.8	34.2	42.4	29.5	28.2	91.9
	Kototabang	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	6.06
	Bandung	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	51.7
	Maros									10.7	17.4	16.9	27.3	22.2	14.7
Japan	Rishiri	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	15.7
	Ochiishi				6.22	8.78	7.65	11.3	8.29	6.16	8.57	10.3	7.83	8.54	9.36
	Tappi	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	27.0
	Sado-seki	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	30.6
	Happo	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	22.1
	Ijira	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	40.2
	Oki	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	33.7
	Banryu	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	32.8
	Yusuhara	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	17.5
	Hedo	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	13.8
	Ogasawara	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	4.83
	Tokyo								21.0	45.5	31.3	25.4	30.1	30.7	25.9
Lao PDR	Vientiane				***	***	***	4.92	9.65	9.95	1.76	***	***	7.34	***
Malaysia	Petaling Jaya	92.9	73.2	97.9	100	89.4	102	120	80.5	135	138	174	190	150	119
	Tanah Rata	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	10.5
	Danum Valley						3.14	4.24	2.02	4.11	5.61	3.36	3.99	2.83	6.32
	Kuching									21.3	21.2	22.8	23.1	14.5	18.6
Mongolia	Ulaanbaatar	3.91	3.43	4.23	4.62	1.32	2.83	3.50	3.27	3.12	4.35	3.26	2.75	***	4.76
	Terelj	3.65	0.815	4.45	3.87	3.34	2.89	3.32	3.39	3.77	2.33	3.58	2.59	***	2.89
Myanmar	Yangon								***	***	21.8	11.3	19.8	21.4	18.1
Philippines	Metro Manila	48.9	42.5	52.3	28.8	33.4	51.1	33.1	49.4	50.2	32.8	135	52.7	81.4	49.0
	Los Baños	14.3	25.3	14.0	7.84	10.6	16.2	18.1	19.4	15.1	23.2	64.9	19.9	25.0	18.7
	Mt. Sto. Tomas							0.804	18.5	19.9	18.6	15.5	11.8	34.9	37.2
Republic of Korea	Kanghwa	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	38.8
	Cheju	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	19.3
	Imsil		20.2	31.8	31.7	24.8	32.9	19.6	24.4	19.3	23.9	47.6	41.3	36.7	32.0
Russia	Mondy	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	1.66
	Listvyanka	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	4.37
	Irkutsk	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	4.52
	Primorskaya			8.51	4.97	14.8	15.9	18.2	18.9	18.3	16.1	14.7	23.5	21.6	13.4
Thailand	Bangkok	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	17.2
	Samutprakarn	15.1				12.3	29.1	20.0	31.0	30.2	39.7	28.9	20.6	11.9	5.65
	Pathumthani	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	22.0
	Khanchanaburi	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	2.90
	Chiang Mai		4.47	9.78	5.27	7.04	12.0	11.2	7.47	11.7	8.88	8.52	11.7	8.78	14.2
	Nakhon Ratchasima							13.5	15.7	19.8	16.0	23.7	15.0	12.6	15.0
Vietnam	Hanoi	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	51.2
	Hoa Binh	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	37.7
	Cuc Phuong										24.6	38.4	51.5	40.5	31.6
	Da Nang										33.7	11.9	57.5	8.06	12.5

[***]: No data or not measured

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

Black cell: Monitoring was not carried out

Table 3.81 Annual Cl^- deposition amount from 2000 to 2013

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

Country	Name of sites	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Cambodia	Phnom Penh					***	8.12	5.88	17.4	15.9	13.6	9.12	7.52	10.8	10.1
China	Guanyinqiao	25.9	22.4	22.5	16.0	20.3	19.7	16.2	17.9						
	Nanshan	19.7													
	Haifu									13.9	11.7	15.8	11.6	11.5	13.1
	Jinyunshan		40.3	20.8	12.6	19.5	22.6	16.2	14.3	18.6	17.7	15.7	10.1	11.7	8.13
	Shizhan	27.4	29.6	122	106	21.7	17.5	17.3	21.0	12.9	15.5	10.5	7.07	6.28	22.4
	Weishuiyuan	41.0	19.3	66.0	129	18.3	16.0	16.1							
	Jiwozi	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	22.0
	Hongwen	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	27.1
	Xiaoping	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	25.7
	Xiang Zhou	101	75.2	119	81.8	48.8	77.6	68.1	44.5	98.1	90.2	41.6	37.5	65.8	112
	Zhuxiandong	70.2	71.2	94.1	70.5	75.1	55.9	25.9	***	105	81.2	40.2	21.5		
Indonesia	Jakarta	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	45.1
	Serpong	***	51.8	57.6	58.2	34.8	16.3	17.4	28.8	40.3	23.6	31.9	12.5	21.6	52.8
	Kototabang	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	57.8
	Bandung	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	36.5
	Maros									60.9	49.7	56.2	58.4	48.9	146
Japan	Rishiri	286	145	207	142	242	224	163	142	222	203	197	192	389	260
	Ochiishi				178	266	191	316	189	142	323	288	147	267	514
	Tappi	187	169	253	178	341	310	314	276	186	290	192	191	191	309
	Sado-seki	292	367	439	121	236	385	324	298	241	377	481	252	380	559
	Happo	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	13.0
	Ijira	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	53.2
	Oki	543	448	658	321	453	914	353	362	412	489	684	847	532	807
	Banryu	48.5	155	116	162	232	142	149	114	105	197	157	179	125	164
	Yusuhara	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	33.4
	Hedo	1500	373	1200	628	1750	869	404	394	270	278	751	410	1407	424
	Ogasawara	325	222	370	400	162	235	188	241	165	379	391	313	210	210
	Tokyo								44.4	44.0	48.0	32.1	63.8	58.5	44.5
Lao PDR	Vientiane				***	***	***	3.38	10.4	12.4	1.12	***	***	5.89	***
Malaysia	Petaling Jaya	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	27.3
	Tanah Rata	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	8.19
	Danum Valley						7.54	21.5	14.6	18.3	23.0	40.5	21.6	12.3	24.1
	Kuching									27.2	39.3	37.3	53.2	25.7	36.2
Mongolia	Ulaanbaatar	1.76	1.60	1.37	2.27	0.670	1.17	1.46	1.18	1.56	2.20	1.30	1.22	***	0.628
	Terelj	1.86	0.767	2.80	2.06	1.85	2.44	1.99	1.91	1.90	1.10	1.37	1.41	***	0.630
Myanmar	Yangon								***	***	75.3	30.0	49.6	68.3	72.9
Philippines	Metro Manila	103	264	55.9	53.5	52.0	33.7	62.3	97.8	68.4	92.9	55.2	109	90.1	101
	Los Baños	87.1	62.7	41.9	26.1	24.9	29.7	46.7	75.5	35.5	72.6	52.3	62.5	45.4	61.7
	Mt. Sto. Tomas							0.677	24.9	26.6	39.3	18.3	20.3	37.2	31.2
Republic of Korea	Kanghwa	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	32.6
	Cheju	222	125	85.3	88.4	88.9	73.1	116	130	114	66.1	114	158	545	219
	Imsil		37.3	36.7	71.5	32.2	54.9	54.9	30.1	31.2	55.5	72.9	37.9	124	27.8
Russia	Mondy	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	1.22
	Listvyanka	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	1.62
	Irkutsk	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	5.30
	Primorskaya			28.3	11.5	14.7	16.0	11.2	18.3	14.2	12.7	19.8	41.9	27.5	30.9
Thailand	Bangkok	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	9.63
	Samutprakarn	12.6				16.2	30.9	17.7	21.0	22.1	16.8	30.4	16.0	9.45	10.2
	Pathumthani	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	8.08
	Khanchanaburi	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	4.34
	Chiang Mai		4.91	14.8	3.81	4.40	6.01	5.29	5.48	5.90	5.16	4.17	4.65	4.59	8.51
	Nakhon Ratchasima							6.56	7.08	10.2	5.81	7.82	7.24	7.17	9.14
Vietnam	Hanoi	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	19.3
	Hoa Binh	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	12.4
	Cuc Phuong										100	40.2	28.7	41.0	47.9
	Da Nang										325	85.2	340	140	403

[***]: No data or not measured

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

Black cell: Monitoring was not carried out

Table 3.82 Annual NH_4^+ deposition amount from 2000 to 2013

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

Country	Name of sites	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Cambodia	Phnom Penh					4.51	21.3	17.0	27.0	21.6	17.3	41.9	28.0	34.9	18.1
China	Guanyinqiao	174	158	173	131	189	169	151	181						
	Nanshan	132													
	Haifu									149	112	137	117	118	145
	Jinyunshan		79.1	134	106	160	154	145	124	120	121	121	98.8	125	102
	Shizhan	235	92.8	70.7	183	87.5	39.3	80.7	109	63.3	99.7	85.6	40.0	42.7	105
	Weishuiyuan	190	24.5	74.1	188	70.5	28.2	75.4							
	Jiwozi	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	36.0
	Hongwen	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	25.7
	Xiaoping	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	50.0
	Xiang Zhou	41.7	49.8	166	58.7	67.9	121	86.6	28.0	55.0	44.4	45.4	26.1	44.2	42.9
	Zhuxiandong	90.7	77.8	76.5	52.5	75.9	27.8	24.3	***	42.9	40.5	42.1	28.4		
Indonesia	Jakarta	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	40.0
	Serpong	***	109	115	96.4	61.9	36.8	64.6	89.2	112	57.7	74.6	51.6	63.6	193
	Kototabang	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	14.7
	Bandung	29.3	98.8	75.9	52.6	32.9	62.6	61.0	94.3	104	130	83.7	93.0	112	111
	Maros									26.9	41.2	27.0	33.8	34.5	27.2
Japan	Rishiri	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	15.1
	Ochiishi				5.98	7.64	6.17	15.6	6.79	4.71	13.3	11.6	8.98	10.7	10.3
	Tappi	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	20.4
	Sado-seki	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	28.6
	Happo	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	23.8
	Ijira	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	36.6
	Oki	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	24.4
	Banryu	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	27.9
	Yusuhara	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	17.8
	Hedo	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	16.0
	Ogasawara	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	7.64
	Tokyo								29.9	55.6	45.3	31.8	35.3	39.8	36.9
Lao PDR	Vientiane				***	***	***	5.47	15.3	14.0	3.13	***	***	***	***
Malaysia	Petaling Jaya	149	179	43.0	37.1	39.4	57.3	93.3	57.7	77.9	22.5	16.2	17.5	4.40	57.8
	Tanah Rata	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	6.69
	Danum Valley						2.55	6.15	3.95	29.3	11.7	11.6	7.19	1.90	2.48
	Kuching									19.7	23.1	9.03	23.3	23.4	11.8
Mongolia	Ulaanbaatar	10.2	8.28	13.0	14.1	3.86	8.18	10.1	11.0	8.26	10.6	8.35	7.50	***	9.58
	Terelj	9.20	2.70	16.2	9.86	7.37	8.87	11.7	7.19	10.5	4.54	4.53	5.66	***	0.487
Myanmar	Yangon								***	***	48.9	33.3	46.9	45.6	45.8
Philippines	Metro Manila	143	177	137	52.2	76.6	71.0	109	118	148	79.7	142	667	1218	145
	Los Baños	35.9	40.7	58.8	23.3	24.3	24.7	36.2	52.1	37.1	33.9	79.1	70.1	142	53.3
	Mt. Sto. Tomas							0.293	29.4	53.3	66.7	16.8	3.79	19.6	20.7
Republic of Korea	Kanghwa	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	70.5
	Cheju	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	22.9
	Imsil		54.9	41.9	61.0	34.0	40.5	35.5	53.7	25.5	37.6	51.2	56.3	55.4	49.4
Russia	Mondy	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	0.894
	Listvyanka	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	2.74
	Irkutsk	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	8.15
	Primorskaya			30.0	12.6	21.0	30.7	31.0	29.2	28.0	24.9	28.8	33.6	24.9	28.6
Thailand	Bangkok	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	61.6
	Samutprakarn	31.1				43.5	60.8	70.8	88.1	97.8	81.5	52.9	58.5	32.5	42.1
	Pathumthani	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	53.1
	Khanchanaburi	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	10.2
	Chiang Mai		17.1	27.3	12.8	18.1	30.1	21.6	17.7	25.6	21.2	22.5	21.9	21.8	27.7
	Nakhon Ratchasima							27.5	25.4	36.4	28.8	40.0	36.7	29.0	34.4
Vietnam	Hanoi	34.5	45.7	78.6	87.4	83.0	174	56.2	80.1	69.4	81.4	64.8	95.9	108	104
	Hoa Binh	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	50.7
	Cuc Phuong										14.3	16.4	35.5	48.3	48.5
	Da Nang										40.0	14.6	78.3	35.8	57.0

[***]: No data or not measured

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

Black cell: Monitoring was not carried out

Table 3.83 Annual Na^+ deposition amount from 2000 to 2013

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

Country	Name of sites	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Cambodia	Phnom Penh					***	***	1.75	11.3	18.8	9.22	5.74	4.54	5.90	4.16
China	Guanyinqiao	12.8	8.11	8.01	4.85	10.1	8.99	6.66	7.69						
	Nanshan	9.73													
	Haifu									7.06	4.48	7.38	7.99	6.10	7.48
	Jinyunshan		7.25	9.48	6.15	18.7	22.3	7.95	10.2	12.5	8.45	8.00	5.19	6.32	4.41
	Shizhan	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	60.9
	Weishuiyuan	30.8	15.1	48.0	147	10.9	9.01	21.1							
	Jiwozi	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	72.8
	Hongwen	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	20.1
	Xiaoping	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	23.9
	Xiang Zhou	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	131
	Zhuxiandong	55.5	70.7	71.4	63.2	120	64.7	20.0	***	94.1	71.5	37.0	51.5		
Indonesia	Jakarta	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	37.7
	Serpong	***	38.2	63.2	24.2	28.7	13.2	12.0	23.7	24.8	13.7	11.9	8.36	9.71	32.5
	Kototabang	***	5.46	11.3	30.2	23.0	12.5	7.75	24.0	13.2	16.3	12.4	14.3	25.4	18.0
	Bandung	***	52.7	22.0	11.4	9.66	20.9	24.0	13.1	20.1	31.6	25.4	18.7	22.5	31.9
	Maros									47.5	43.0	35.3	54.1	48.8	77.7
Japan	Rishiri	250	130	188	125	217	195	142	126	204	185	173	171	343	234
	Ochiishi				155	233	171	277	161	125	287	252	126	239	446
	Tappi	156	145	219	162	292	270	278	247	162	266	177	171	166	275
	Sado-seki	275	345	384	106	208	332	283	264	219	333	437	213	319	517
	Happo	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	10.8
	Ijira	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	41.3
	Oki	479	394	570	296	416	791	315	319	360	422	594	737	462	705
	Banryu	45.2	140	104	142	197	119	130	100	91.6	171	139	155	111	140
	Yusuhara	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	24.6
	Hedo	1320	341	1050	599	1550	800	351	349	243	250	670	360	1186	366
	Ogasawara	277	189	314	351	146	199	163	209	144	315	386	262	179	178
	Tokyo								37.3	36.2	40.7	28.7	52.3	48.2	36.7
Lao PDR	Vientiane				***	***	***	5.04	3.32	4.86	1.66	***	***	***	***
Malaysia	Petaling Jaya	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	15.3
	Tanah Rata	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	6.02
	Danum Valley						5.59	16.9	12.4	9.65	19.8	32.7	20.9	8.49	16.5
	Kuching									23.1	34.3	31.0	42.1	19.8	31.0
Mongolia	Ulaanbaatar	1.55	1.51	1.12	1.14	0.483	1.08	1.58	0.660	0.556	1.11	0.535	0.924	***	12.1
	Terelj	1.34	1.41	4.15	1.40	1.31	2.83	2.68	1.74	1.13	0.843	1.44	0.873	***	1.54
Myanmar	Yangon								***	***	55.7	29.3	47.2	56.7	42.6
Philippines	Metro Manila	123	470	43.3	40.5	35.3	37.9	46.3	70.8	58.7	76.5	59.7	78.2	74.6	98.3
	Los Baños	91.7	67.6	35.9	24.6	20.9	28.3	50.5	54.4	36.2	50.5	46.9	46.3	46.7	54.5
	Mt. Sto. Tomas							1.21	19.2	25.9	39.1	22.7	19.9	58.9	29.4
Republic of Korea	Kanghwa	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	26.6
	Cheju	161	83.2	59.3	60.3	64.9	59.3	95.8	126	112	55.7	103	163	449	184
	Imsil		20.0	38.3	42.7	21.6	27.0	22.0	20.2	27.3	53.7	79.2	55.9	72.6	36.9
Russia	Mondy	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	0.449
	Listvyanka	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	1.86
	Irkutsk	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	3.55
	Primorskaya			19.3	10.9	15.6	16.0	10.5	19.6	12.7	11.0	16.1	8.48	21.3	18.4
Thailand	Bangkok	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	16.0
	Samutprakarn	9.91				20.8	32.2	20.8	22.8	26.8	19.9	35.0	12.0	7.51	28.2
	Pathumthani	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	7.04
	Khanchanaburi	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	8.19
	Chiang Mai		4.27	14.2	2.60	3.52	1.31	5.02	2.75	3.35	2.83	3.17	5.17	4.22	8.07
	Nakhon Ratchasima							5.30	6.17	7.24	3.44	5.22	6.10	4.18	4.27
Vietnam	Hanoi	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	15.0
	Hoa Binh	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	8.29
	Cuc Phuong										25.5	19.8	25.2	40.4	50.7
	Da Nang										281	69.9	255	106	333

[***]: No data or not measured

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

Black cell: Monitoring was not carried out

Table 3.84 Annual K^+ deposition amount from 2000 to 2013

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

Country	Name of sites	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Cambodia	Phnom Penh					0.682	***	1.41	5.00	19.0	1.98	1.59	1.47	1.23	1.42
China	Guanyinqiao	15.3	14.0	15.3	10.9	15.1	13.4	10.6	11.4						
	Nanshan	20.5													
	Haifu									11.6	8.23	9.78	7.60	6.64	13.1
	Jinyunshan		31.6	16.5	10.6	17.8	16.6	13.6	11.1	11.6	9.56	10.2	8.80	7.69	6.19
	Shizhan	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	12.4
	Weishuiyuan	15.5	5.19	17.8	26.5	5.25	5.52	10.6							
	Jiwozi	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	6.64
	Hongwen	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	2.67
	Xiaoping	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	3.29
	Xiang Zhou	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	20.0
	Zhuxiandong	11.0	15.1	20.8	11.6	28.9	5.95	2.32	***	10.4	4.04	6.10	6.78		
Indonesia	Jakarta	***	30.1	17.8	15.0	15.2	12.2	11.9	24.3	6.03	3.46	4.72	2.26	7.79	6.61
	Serpong	***	11.3	9.89	17.0	8.26	5.09	7.14	5.56	5.24	2.36	4.57	2.61	3.87	11.4
	Kototabang	***	1.59	9.16	62.6	13.2	9.57	5.69	23.3	8.42	24.8	10.5	8.69	14.6	40.9
	Bandung	***	32.7	5.19	6.63	2.95	8.15	6.31	4.01	5.38	11.0	11.0	7.30	7.01	18.7
	Maros									17.5	12.6	6.71	6.74	8.57	7.41
Japan	Rishiri	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	5.40
	Ochiishi				3.62	5.23	4.34	7.64	3.97	2.78	6.47	6.68	3.02	5.89	9.91
	Tappi	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	6.65
	Sado-seki	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	12.1
	Happo	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	1.54
	Ijira	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	1.60
	Oki	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	17.8
	Banryu	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	4.71
	Yusuhara	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	0.962
	Hedo	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	8.82
	Ogasawara	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	4.60
	Tokyo								1.51	2.12	1.90	1.64	1.79	1.45	1.14
Lao PDR	Vientiane				***	***	***	2.49	2.37	2.82	0.168	***	***	***	***
Malaysia	Petaling Jaya	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	4.07
	Tanah Rata	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	4.85
	Danum Valley						1.47	3.05	3.22	7.58	5.39	7.67	6.56	3.59	3.22
	Kuching									2.77	3.24	3.02	3.95	3.51	2.85
Mongolia	Ulaanbaatar	0.771	0.770	0.679	1.01	0.237	0.651	0.968	0.161	0.435	0.577	0.416	0.650	***	0.598
	Terelj	0.935	0.337	2.50	1.28	0.970	1.59	1.93	0.703	1.33	0.455	0.703	0.719	***	0.725
Myanmar	Yangon								***	***	19.4	4.71	5.21	17.4	7.17
Philippines	Metro Manila	62.6	53.1	29.4	5.55	8.50	9.28	34.0	18.9	37.1	15.1	45.6	85.9	117	22.7
	Los Baños	4.58	17.3	10.9	2.94	3.74	3.62	5.53	15.2	5.51	26.3	15.4	16.3	17.1	15.3
	Mt. Sto. Tomas							0.569	7.73	3.57	9.24	5.09	3.78	5.07	3.30
Republic of Korea	Kanghwa	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	2.94
	Cheju	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	7.65
	Imsil		19.3	6.50	21.0	6.90	60.6	29.9	19.2	4.79	11.7	16.8	5.81	66.5	7.72
Russia	Mondy	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	0.759
	Listvyanka	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	1.21
	Irkutsk	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	1.44
	Primorskaya			4.47	3.25	5.01	5.21	3.41	6.11	4.97	3.81	3.93	4.19	4.69	4.01
Thailand	Bangkok	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	2.54
	Samutprakarn	5.17				6.15	7.99	6.12	5.38	10.6	5.51	31.9	2.33	1.45	5.83
	Pathumthani	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	2.51
	Khanchanaburi	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	1.43
	Chiang Mai		3.19	6.49	3.19	1.62	1.02	2.41	2.69	3.38	1.55	1.41	2.33	1.40	2.12
	Nakhon Ratchasima							0.791	1.91	2.13	1.65	1.53	1.81	1.42	1.17
Vietnam	Hanoi	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	5.13
	Hoa Binh	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	14.3
	Cuc Phuong										31.7	9.28	6.14	12.2	16.3
	Da Nang										18.6	5.76	50.9	19.3	41.5

[***]: No data or not measured

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

Black cell: Monitoring was not carried out

Table 3.85 Annual Ca^{2+} deposition amount from 2000 to 2013

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

Country	Name of sites	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Cambodia	Phnom Penh					0	***	8.64	26.4	59.9	27.1	15.4	11.9	17.4	12.9
China	Guanyinqiao	68.1	103	94.5	64.5	153	168	120	97.7						
	Nanshan	69.5													
	Haifu									66.0	46.1	67.6	55.5	58.5	71.2
	Jinyunshan		31.9	47.7	37.8	107	84.3	118	90.7	82.9	73.2	67.3	55.2	59.5	35.1
	Shizhan	128	246	167	329	88.5	54.4	145	61.3	57.6	81.7	48.1	60.1	50.1	143
	Weishuiyuan	136	80.0	143	313	88.3	39.9	104							
	Jiwozi	103	89.5	39.1	140	89.7	46.7	51.9	34.7	116	58.9	47.0	88.9	79.3	86.2
	Hongwen	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	30.8
	Xiaoping	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	44.9
	Xiang Zhou	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	105
	Zhuxiandong	44.4	36.8	32.7	35.5	31.5	18.1	15.2	***	31.4	11.7	30.3	21.8		
Indonesia	Jakarta	138	79.6	67.5	164	74.8	36.9	27.9	30.2	7.48	19.6	21.9	11.0	32.6	33.0
	Serpong	***	21.8	24.9	14.1	15.4	9.89	11.5	14.9	18.9	6.95	13.2	9.08	8.31	32.5
	Kototabang	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	20.2
	Bandung	***	63.0	43.4	17.5	16.3	27.7	19.4	18.7	26.4	41.1	35.1	32.0	27.8	45.9
	Maros									25.5	26.3	25.5	23.6	39.4	41.9
Japan	Rishiri	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	8.58
	Ochiishi				4.49	7.92	7.37	10.2	6.03	3.86	8.21	8.95	4.44	6.41	12.2
	Tappi	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	15.0
	Sado-seki	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	16.4
	Happo	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	7.37
	Ijira	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	7.45
	Oki	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	23.8
	Banryu	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	7.92
	Yusuhara	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	5.37
	Hedo	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	11.1
	Ogasawara	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	5.82
	Tokyo								5.38	7.61	5.91	6.59	6.72	6.88	7.00
Lao PDR	Vientiane				***	***	***	6.20	4.25	9.62	0.996	***	***	***	***
Malaysia	Petaling Jaya	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	21.9
	Tanah Rata	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	8.06
	Danum Valley						1.70	3.79	1.53	1.06	3.43	9.05	3.36	2.37	4.59
	Kuching									8.19	8.35	12.1	14.6	13.0	17.2
Mongolia	Ulaanbaatar	7.41	7.86	8.91	7.88	3.60	7.49	8.63	5.19	6.66	9.63	5.23	5.54	***	14.7
	Terelj	3.16	1.33	6.72	3.32	3.36	3.33	5.32	2.52	3.68	3.97	5.48	2.93	***	6.28
Myanmar	Yangon								***	***	29.1	14.5	21.7	20.0	2.87
Philippines	Metro Manila	58.6	164	25.9	19.3	24.1	25.2	36.8	36.4	32.7	24.2	34.2	47.0	61.8	40.5
	Los Baños	18.3	119	12.3	12.5	9.41	5.82	15.4	16.1	7.10	14.7	41.6	15.2	19.8	15.3
	Mt. Sto. Tomas							2.43	79.0	15.7	27.8	81.8	36.1	80.4	37.7
Republic of Korea	Kanghwa	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	7.83
	Cheju	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	8.64
	Imsil		7.60	9.76	10.1	8.16	6.24	10.4	18.4	5.91	4.14	9.42	10.2	6.03	3.59
Russia	Mondy	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	1.52
	Listvyanka	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	3.30
	Irkutsk	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	9.12
	Primorskaya			15.1	8.16	14.9	15.6	15.6	13.8	10.7	10.1	11.3	8.52	11.2	13.0
Thailand	Bangkok	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	33.5
	Samutprakarn	10.8				9.88	15.7	21.0	20.5	24.0	26.2	14.6	12.5	7.99	22.2
	Pathumthani	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	32.0
	Khanchanaburi	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	4.90
	Chiang Mai		7.53	26.5	4.62	5.50	5.36	6.72	7.53	8.60	5.98	5.14	4.20	8.64	15.1
	Nakhon Ratchasima							11.4	5.20	5.78	3.19	3.60	2.83	4.21	2.83
Vietnam	Hanoi	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	31.6
	Hoa Binh	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	34.0
	Cuc Phuong										56.2	63.3	59.8	61.8	46.2
	Da Nang										18.8	15.0	36.4	28.4	49.7

[***]: No data or not measured

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

Black cell: Monitoring was not carried out

Table 3.86 Annual nss-Ca^{2+} deposition amount from 2000 to 2013

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

Country	Name of sites	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Cambodia	Phnom Penh					***	***	8.61	26.2	59.5	26.9	15.3	11.8	17.3	12.8
China	Guanyinqiao	67.9	103	94.3	64.4	153	168	120	97.5						
	Nanshan	69.3													
	Haifu									65.8	46.0	67.5	55.3	58.3	71.1
	Jinyunshan		31.7	47.5	37.7	107	83.9	117	90.4	82.6	73.0	67.1	55.1	59.4	35.0
	Shizhan	128	244	165	327	88.3	54.3	145	61.2	57.4	81.5	48.0	59.8	50.1	142
	Weishuiyuan	136	79.7	142	310	88.1	39.8	104							
	Jiwozi	102	88.8	38.6	139	89.1	46.2	51.6	34.5	116	58.5	46.9	88.8	78.9	84.6
	Hongwen	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	30.3
	Xiaoping	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	44.4
	Xiang Zhou	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	102
	Zhuxiandong	43.2	35.3	31.1	34.1	28.9	16.7	14.8	***	29.3	10.2	29.5	20.7		
Indonesia	Jakarta	136	78.5	66.3	163	73.8	35.9	27.5	29.5	7.11	19.2	21.6	10.7	31.9	32.2
	Serpong	***	21.0	23.5	13.7	14.7	9.60	11.3	14.5	18.4	6.76	12.9	8.91	8.10	31.8
	Kototabang	***	1.65	8.60	16.6	14.2	7.15	6.31	12.5	11.8	14.2	11.0	12.6	20.2	19.9
	Bandung	***	61.8	42.9	17.2	16.1	26.9	18.9	18.4	25.9	40.4	34.6	31.6	27.4	45.2
	Maros									24.4	25.3	24.8	22.4	38.4	40.3
Japan	Rishiri	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	3.58
	Ochiishi				1.25	2.90	3.65	4.29	2.56	1.21	2.18	3.52	1.73	1.31	2.57
	Tappi	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	9.14
	Sado-seki	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	6.04
	Happo	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	7.14
	Ijira	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	6.61
	Oki	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	8.53
	Banryu	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	4.90
	Yusuhara	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	4.84
	Hedo	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	3.21
	Ogasawara	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	1.97
	Tokyo								4.58	6.83	5.03	5.97	5.59	5.84	6.21
Lao PDR	Vientiane				***	***	***	6.09	4.18	9.51	0.960	***	***	***	***
Malaysia	Petaling Jaya	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	21.6
	Tanah Rata	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	7.95
	Danum Valley						1.58	3.49	1.36	0.944	3.12	8.51	3.01	2.22	4.30
	Kuching									7.77	7.76	11.4	13.7	12.6	16.6
Mongolia	Ulaanbaatar	7.38	7.83	8.88	7.85	3.59	7.46	8.59	5.17	6.64	9.60	5.22	5.53	***	14.4
	Terelj	3.13	1.30	6.46	3.29	3.33	3.27	5.26	2.48	3.66	3.95	5.45	2.91	***	6.25
Myanmar	Yangon								***	***	27.9	13.9	20.7	18.8	2.13
Philippines	Metro Manila	56.0	154	25.0	18.5	23.4	24.4	35.8	34.9	31.4	22.6	32.9	45.4	60.2	38.4
	Los Baños	16.3	117	11.5	12.0	8.95	5.22	14.3	14.9	6.32	13.7	40.7	14.2	18.7	14.2
	Mt. Sto. Tomas							2.40	78.7	15.1	26.9	81.4	35.7	79.1	37.0
Republic of Korea	Kanghwa	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	7.26
	Cheju	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	4.66
	Imsil		7.16	8.93	9.18	7.70	5.65	9.93	17.9	5.32	3.02	7.87	8.99	4.76	2.80
Russia	Mondy	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	1.51
	Listvyanka	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	3.26
	Irkutsk	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	9.04
	Primorskaya			14.7	7.92	14.5	15.2	15.4	13.4	10.4	9.86	11.0	8.34	10.8	12.6
Thailand	Bangkok	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	33.2
	Samutprakarn	10.6				9.43	15.0	20.6	20.0	23.4	25.8	13.9	12.3	7.83	21.6
	Pathumthani	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	31.9
	Khanchanaburi	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	4.72
	Chiang Mai		7.44	26.2	4.57	5.42	5.33	6.64	7.47	8.52	5.92	5.09	4.10	8.54	15.0
	Nakhon Ratchasima							11.2	5.07	5.62	3.12	3.50	2.73	4.13	2.75
Vietnam	Hanoi	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	31.2
	Hoa Binh	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	33.8
	Cuc Phuong										55.7	62.9	59.2	60.9	45.2
	Da Nang										12.8	13.5	30.9	26.1	42.5

[***]: No data or not measured

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

Black cell: Monitoring was not carried out

Table 3.87 Annual Mg^{2+} deposition amount from 2000 to 2013

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

Country	Name of sites	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Cambodia	Phnom Penh					0.00	***	0.627	4.49	6.33	2.66	1.33	1.55	1.98	1.50
China	Guanyinqiao	9.23	8.73	8.67	4.40	12.7	13.7	10.6	10.4						
	Nanshan	8.87													
	Haifu									7.15	5.81	8.75	6.98	6.94	8.44
	Jinyunshan		4.09	5.41	3.56	5.39	4.63	4.78	4.61	5.62	6.10	5.64	5.20	5.85	4.99
	Shizhan	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	24.0
	Weishuiyuan	14.2	6.13	21.1	52.0	8.99	4.77	13.3							
	Jiwozi	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	14.5
	Hongwen	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	4.71
	Xiaoping	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	7.97
	Xiang Zhou	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	33.9
	Zhuxiandong	14.1	8.56	11.2	12.9	10.8	9.65	4.43	***	13.2	9.71	5.30	7.74		
Indonesia	Jakarta	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	6.11
	Serpong	***	5.67	11.3	5.76	5.84	3.09	2.78	5.33	9.76	1.83	4.40	2.59	1.80	8.97
	Kototabang	***	1.25	4.63	21.1	3.76	2.06	2.82	10.6	2.48	2.92	3.67	2.08	3.69	5.09
	Bandung	***	10.6	4.16	2.73	2.93	4.29	4.27	3.31	10.3	11.1	11.6	8.85	6.61	14.8
	Maros									7.77	6.02	5.79	9.07	17.2	11.3
Japan	Rishiri	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	26.3
	Ochiishi				17.3	27.3	18.2	31.1	18.6	14.5	31.4	31.0	15.1	26.6	51.0
	Tappi	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	32.1
	Sado-seki	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	58.2
	Happo	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	3.63
	Ijira	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	5.70
	Oki	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	78.3
	Banryu	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	17.2
	Yusuhara	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	5.98
	Hedo	145	35.8	120	68.7	162	84.3	40.7	40.0	27.9	28.6	77.2	40.9	136	41.5
	Ogasawara	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	21.5
	Tokyo								4.56	5.17	5.13	3.98	6.65	6.18	4.89
Lao PDR	Vientiane				***	***	***	2.47	0.977	2.18	0.131	***	***	***	***
Malaysia	Petaling Jaya	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	2.45
	Tanah Rata	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	0.835
	Danum Valley						0.406	1.45	1.20	1.58	1.86	3.51	2.05	0.830	1.38
	Kuching									1.24	1.84	2.12	3.45	1.04	2.42
Mongolia	Ulaanbaatar	0.814	0.897	0.636	1.10	0.488	0.783	0.825	0.597	0.568	1.21	0.455	1.51	***	0.576
	Terelj	0.656	0.224	1.01	0.706	1.07	0.901	1.04	0.384	0.619	0.604	0.718	1.06	***	0.451
Myanmar	Yangon								***	***	8.54	4.11	9.52	16.9	33.1
Philippines	Metro Manila	25.5	34.4	9.72	6.60	9.47	5.86	14.7	14.5	11.1	9.69	24.4	26.1	29.1	16.0
	Los Baños	9.78	20.1	5.00	4.18	6.25	3.84	7.65	10.7	8.80	10.8	17.0	11.3	8.96	7.77
	Mt. Sto. Tomas							0.418	7.03	1.76	7.23	12.1	7.41	16.6	7.41
Republic of Korea	Kanghwa	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	2.96
	Cheju	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	16.3
	Imsil		2.49	3.28	3.00	2.89	2.27	2.83	4.80	1.70	4.14	7.69	3.02	4.27	2.28
Russia	Mondy	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	0.290
	Listvyanka	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	0.810
	Irkutsk	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	1.77
	Primorskaya			4.73	3.60	4.87	4.18	3.43	4.25	3.46	2.68	2.88	2.66	4.08	3.53
Thailand	Bangkok	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	3.50
	Samutprakarn	2.33				2.36	5.57	6.57	5.03	6.91	5.57	4.14	2.52	1.46	4.97
	Pathumthani	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	3.06
	Khanchanaburi	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	1.55
	Chiang Mai		1.19	5.22	1.68	2.10	1.43	3.44	1.16	2.29	2.87	0.526	0.367	0.936	2.15
	Nakhon Ratchasima							2.36	2.47	2.11	1.60	1.14	0.410	0.477	0.289
Vietnam	Hanoi	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	5.42
	Hoa Binh	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	5.40
	Cuc Phuong										9.89	7.30	8.86	14.3	23.1
	Da Nang										30.1	14.4	34.3	15.4	43.4

[***]: No data or not measured

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

Black cell: Monitoring was not carried out

Table 3.88 Annual H^+ deposition amount from 2000 to 2013

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

Country	Name of sites	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Cambodia	Phnom Penh					2.01	0.625	0.181	0.279	2.65	0.861	1.98	1.41	1.12	0.890
China	Guanyinqiao	50.5	12.1	36.4	31.7	36.0	12.1	11.6	29.3						
	Nanshan	76.2													
	Haifu									64.1	64.3	69.3	53.4	58.1	30.8
	Jinyunshan		46.5	70.1	62.0	39.3	34.7	24.4	49.4	53.3	51.7	112	77.1	82.0	71.4
	Shizhan	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	0.0514
	Weishuiyuan	0.171	0.0335	0.216	1.02	0.489	3.09	0.460							
	Jiwozi	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	0.412
	Hongwen	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	18.5
	Xiaoping	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	19.6
	Xiang Zhou	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	14.1
	Zhuxiandong	40.8	43.0	20.3	13.8	29.6	25.9	13.3	***	30.2	28.0	21.0	19.1		
Indonesia	Jakarta	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	39.3
	Serpong	***	38.0	56.6	51.6	30.5	21.1	40.1	52.0	56.7	25.9	25.0	16.4	11.1	20.1
	Kototabang	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	22.5
	Bandung	***	26.4	88.7	16.1	8.31	16.3	9.18	23.2	15.9	13.4	20.8	6.12	7.25	9.42
	Maros									7.15	15.0	16.4	16.1	5.90	13.7
Japan	Rishiri	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	24.8
	Ochiishi				9.53	13.4	12.0	13.8	14.5	9.86	15.2	16.0	10.7	13.3	9.94
	Tappi	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	17.1
	Sado-seki	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	28.7
	Happo	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	26.7
	Ijira	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	48.8
	Oki	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	34.3
	Banryu	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	46.2
	Yusuhara	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	41.4
	Hedo	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	17.6
	Ogasawara	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	7.15
	Tokyo								17.6	46.2	30.6	18.6	20.7	23.5	14.2
Lao PDR	Vientiane				0.0277	0.999	0.320	0.231	3.02	1.65	0.600	***	***	0.463	***
Malaysia	Petaling Jaya	153	173	157	158	142	123	151	83.2	140	134	191	250	210	136
	Tanah Rata	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	31.1
	Danum Valley						13.1	26.8	24.0	18.1	20.4	14.2	23.5	19.5	17.1
	Kuching									23.8	25.5	24.4	17.3	18.4	21.2
Mongolia	Ulaanbaatar	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	0.161
	Terelj	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	1.11
Myanmar	Yangon								10.6	2.50	1.04	0.875	1.09	0.831	0.948
Philippines	Metro Manila	13.2	8.86	24.1	79.8	14.4	26.8	13.5	18.7	6.75	22.2	6.01	8.29	26.9	10.0
	Los Baños	9.58	5.41	3.07	52.2	9.54	11.9	5.42	9.01	21.2	7.64	2.73	6.43	4.61	3.37
	Mt. Sto. Tomas							0.204	10.0	16.3	6.96	0.726	20.6	6.41	22.7
Republic of Korea	Kanghwa	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	23.6
	Cheju	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	2.66
	Imsil		10.5	2.00	15.7	14.2	1.24	4.57	2.49	11.2	8.62	22.1	8.09	10.9	7.33
Russia	Mondy	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	1.60
	Listvyanka	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	4.41
	Irkutsk	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	2.71
	Primorskaya			5.26	4.27	10.0	6.39	9.32	14.4	9.02	9.11	7.23	14.6	7.88	6.36
Thailand	Bangkok	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	3.35
	Samutprakarn	14.5				4.29	5.55	1.93	4.60	8.81	14.7	9.06	2.66	0.647	1.18
	Pathumthani	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	4.60
	Khanchanaburi	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	7.08
	Chiang Mai		2.10	2.79	2.00	2.93	8.50	2.83	1.05	1.34	1.26	0.789	8.29	0.876	1.30
	Nakhon Ratchasima							9.06	11.5	16.0	17.1	29.0	15.0	9.66	8.23
Vietnam	Hanoi	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	4.29
	Hoa Binh	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	1.83
	Cuc Phuong										23.4	9.73	16.8	7.42	7.16
	Da Nang										49.9	13.0	38.0	6.16	6.07

[***]: No data or not measured

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

Black cell: Monitoring was not carried out

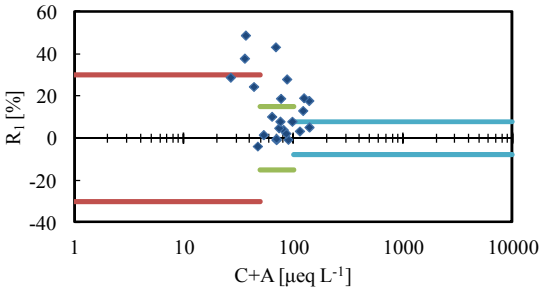


Fig. 3.2 a) Phnom Penh Ion Balance (R_1)

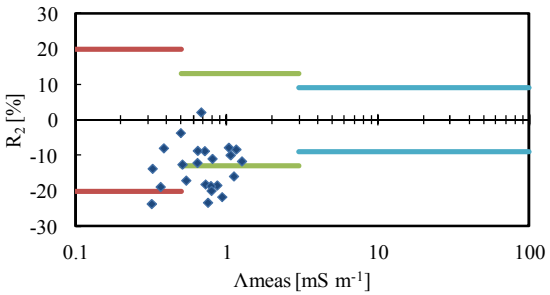


Fig. 3.2 b) Phnom Penh Conductivity Agreement (R_2)

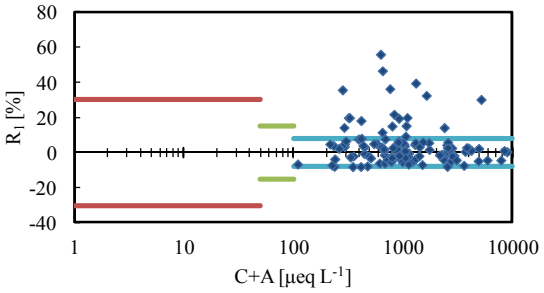


Fig. 3.3 a) Haifu Ion Balance (R_1)

Calculated including F^-

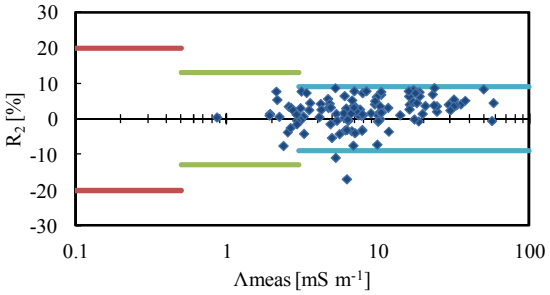


Fig. 3.3 b) Haifu Conductivity Agreement (R_2)

Calculated including F^-

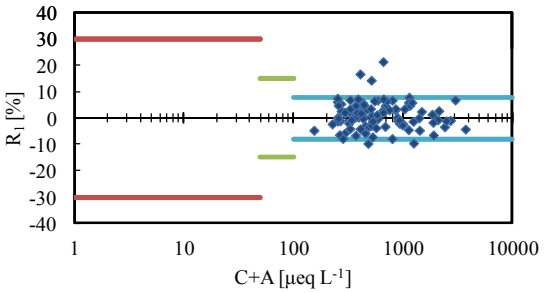


Fig. 3.4 a) Jinyushan Ion Balance (R_1)

Calculated including F^-

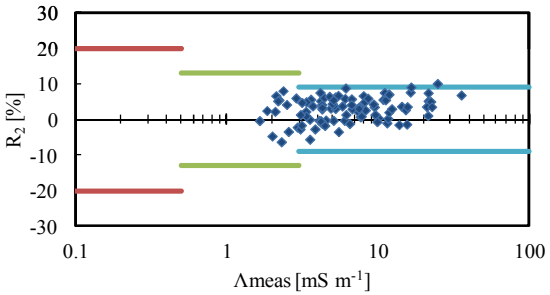


Fig. 3.4 b) Jinyushan Conductivity Agreement (R_2)

Calculated including F^-

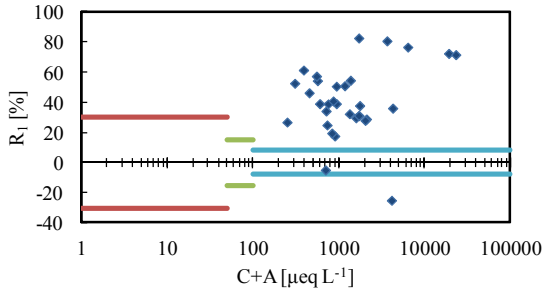


Fig. 3.5 a) Shizhan Ion Balance (R_1)

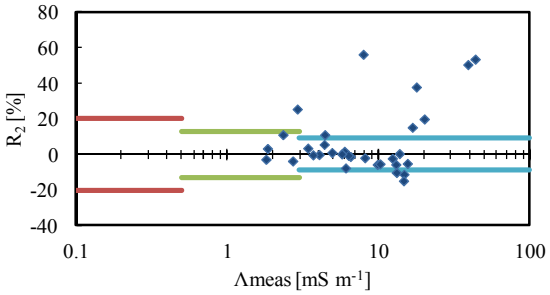


Fig. 3.5 b) Shizhan Conductivity Agreement (R_2)

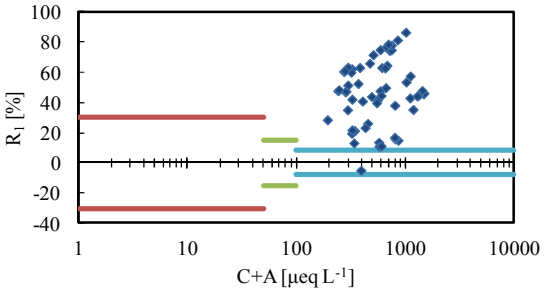


Fig. 3.6 a) Jiwozi Ion Balance (R_1)

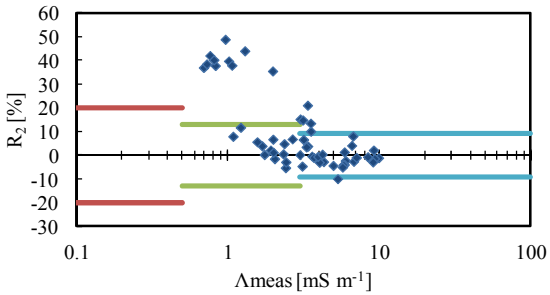


Fig. 3.6 b) Jiwozi Conductivity Agreement (R_2)

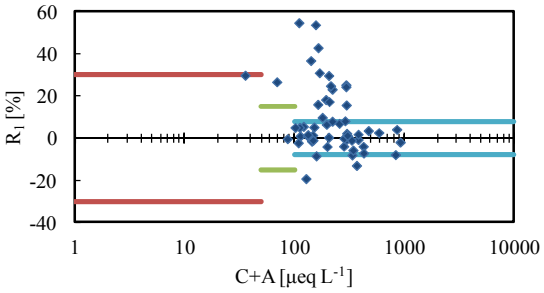


Fig. 3.7 a) Hongwen Ion Balance (R_1)

Calculated including F^-

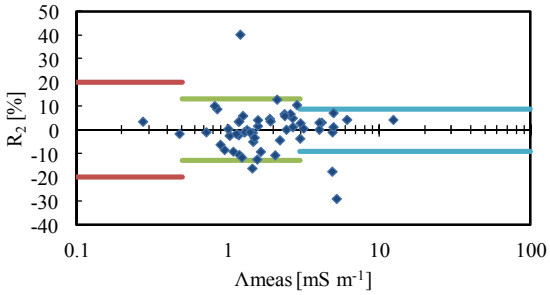


Fig. 3.7 b) Hongwen Conductivity Agreement (R_2)

Calculated including F^-

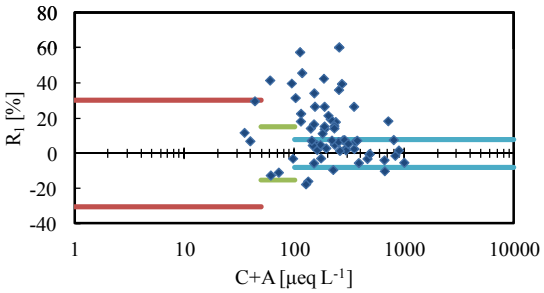


Fig. 3.8 a) Xiaoping Ion Balance (R_1)

Calculated including F^-

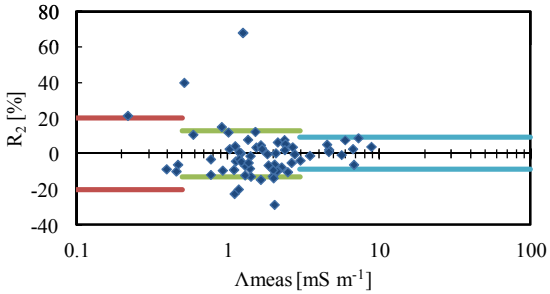


Fig. 3.8 b) Xiaoping Conductivity Agreement (R_2)

Calculated including F^-

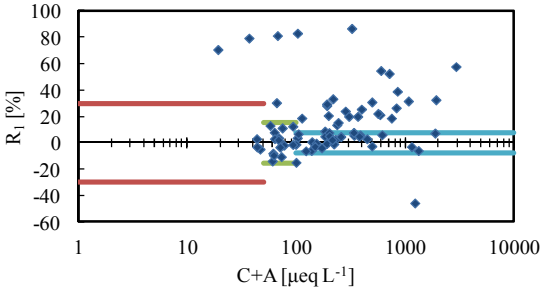


Fig. 3.9 a) Xiang Zhou Ion Balance (R_1)

Calculated including F^-

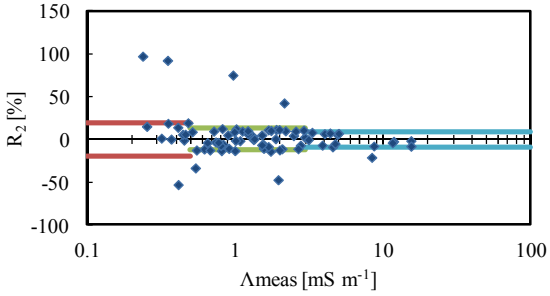


Fig. 3.9 b) Xiang Zhou Conductivity Agreement (R_2)

Calculated including F^-

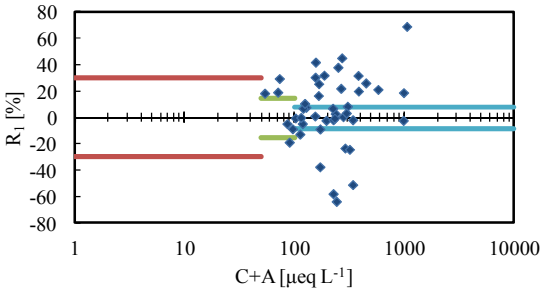


Fig. 3.10 a) Jakarta Ion Balance (R_1)

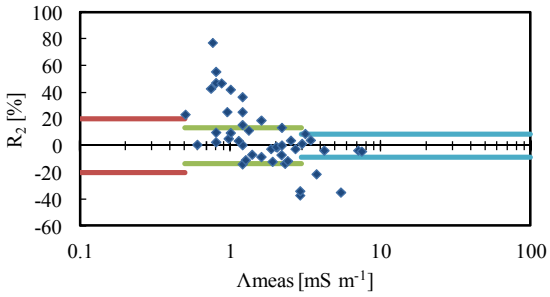


Fig. 3.10 b) Jakarta Conductivity Agreement (R_2)

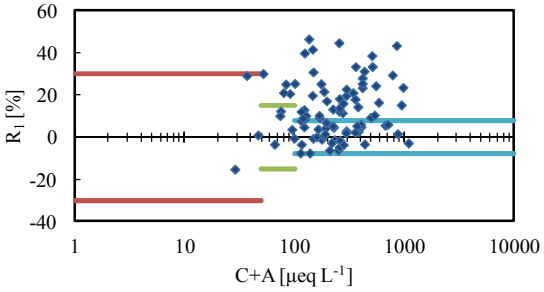


Fig. 3.11 a) Serpong Ion Balance (R_1)

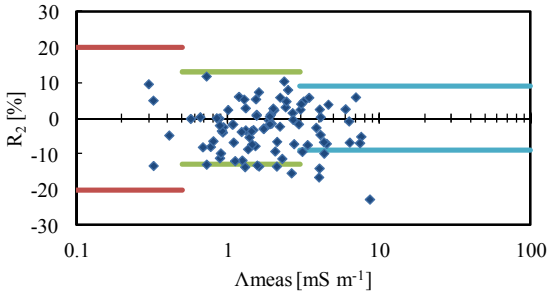


Fig. 3.11 b) Serpong Conductivity Agreement (R_2)

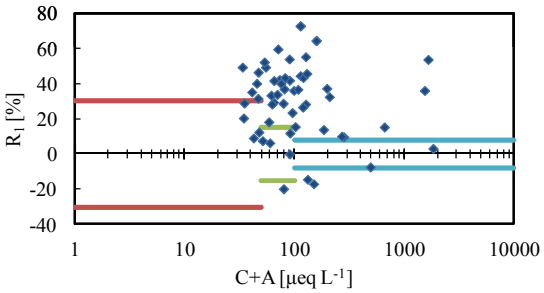


Fig. 3.12 a) Kototabang Ion Balance (R_1)

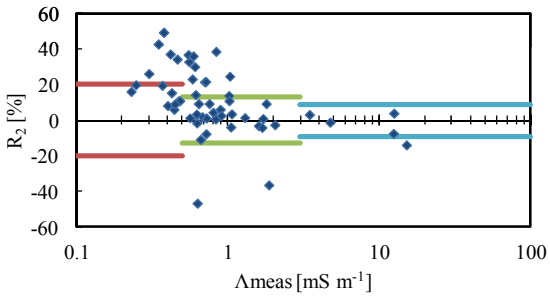


Fig. 3.12 b) Kototabang Conductivity Agreement (R_2)

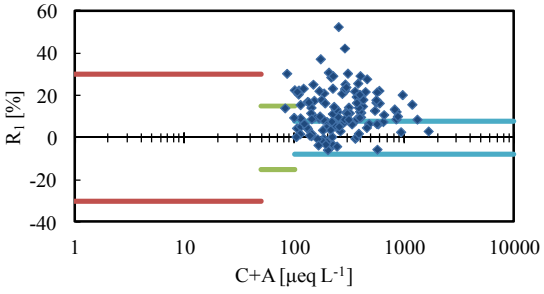


Fig. 3.13 a) Bandung Ion Balance (R_1)

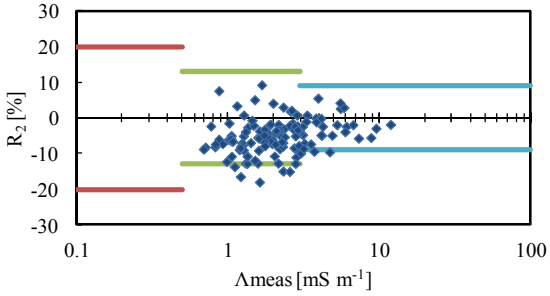


Fig. 3.13 b) Bandung Conductivity Agreement (R_2)

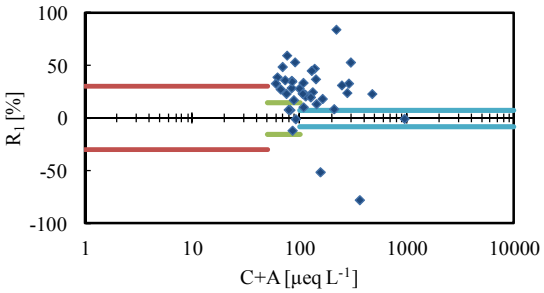


Fig. 3.14 a) Maros Ion Balance (R_1)

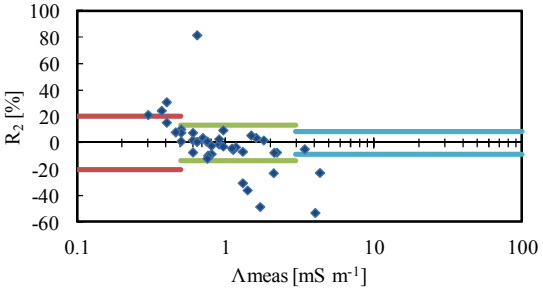


Fig. 3.14 b) Maros Conductivity Agreement (R_2)

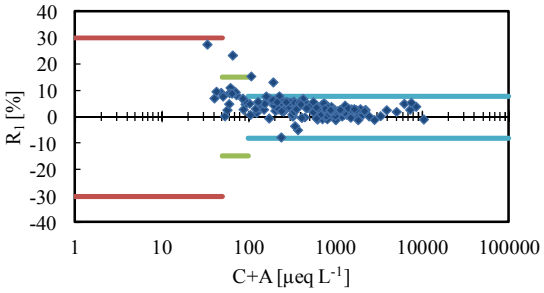


Fig. 3.15 a) Rishiri Ion Balance (R_1)

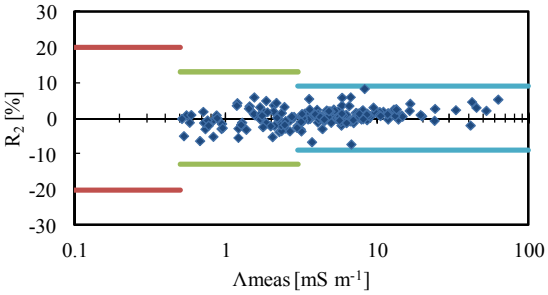


Fig. 3.15 b) Rishiri Conductivity Agreement (R_2)

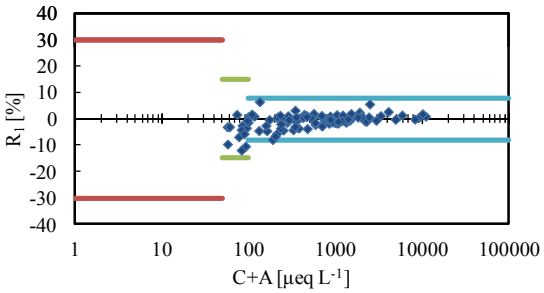


Fig. 3.16 a) Ochiishi Ion Balance (R_1)

Calculated including F^-, Br^-, NO_2^-, PO_4^{3-}

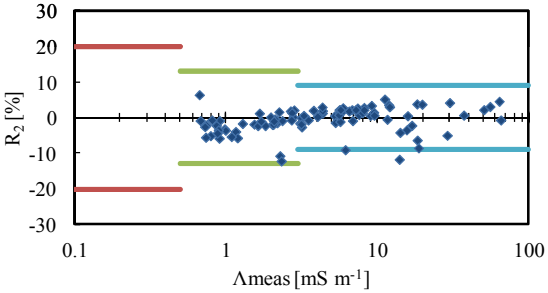


Fig. 3.16 b) Ochiishi Conductivity Agreement (R_2)

Calculated including F^-, Br^-, NO_2^-, PO_4^{3-}

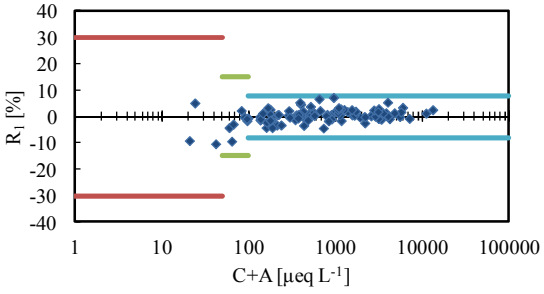


Fig. 3.17 a) Tappi Ion Balance (R_1)

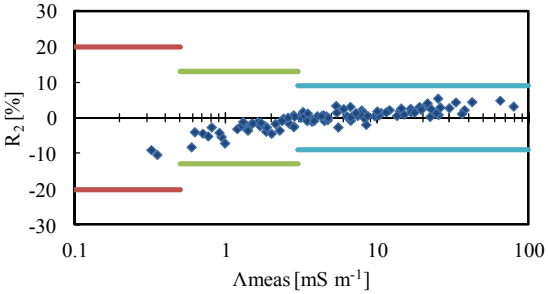


Fig. 3.17 b) Tappi Conductivity Agreement (R_2)

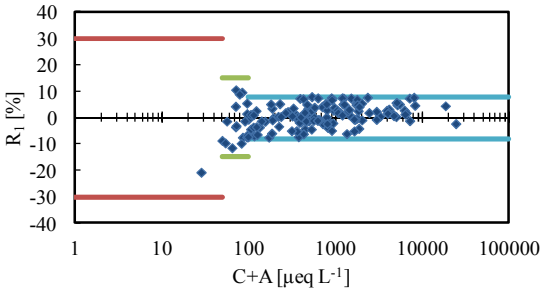


Fig. 3.18 a) Sado-seki Ion Balance (R_1)

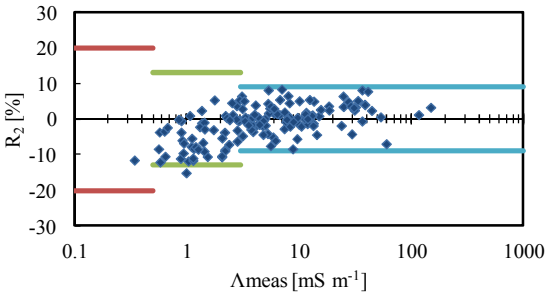


Fig. 3.18 b) Sado-seki Conductivity Agreement (R_2)

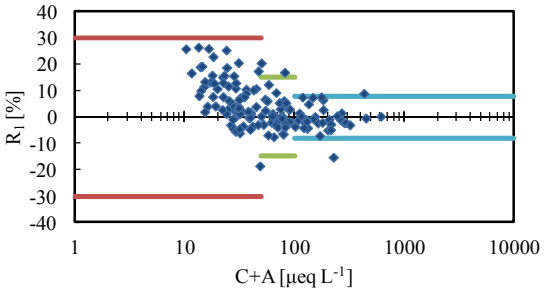


Fig. 3.19 a) Happo Ion Balance (R_1)

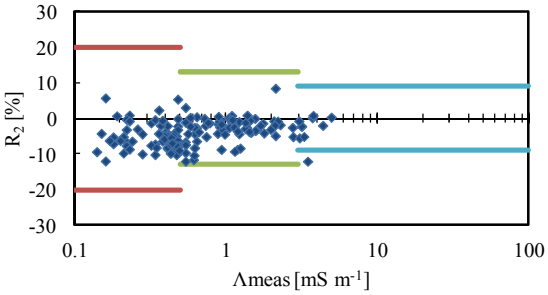


Fig. 3.19 b) Happo Conductivity Agreement (R_2)

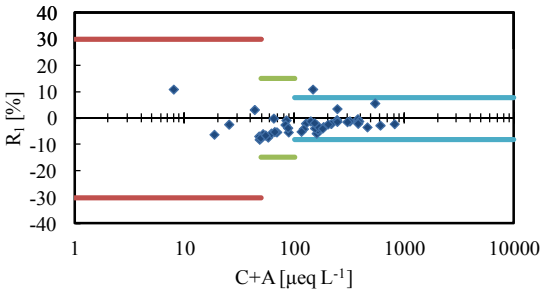


Fig. 3.20 a) Ijira Ion Balance (R_1)

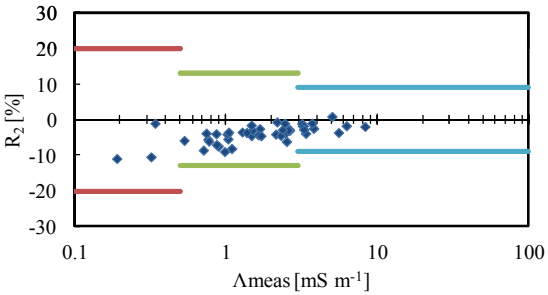


Fig. 3.20 b) Ijira Conductivity Agreement (R_2)

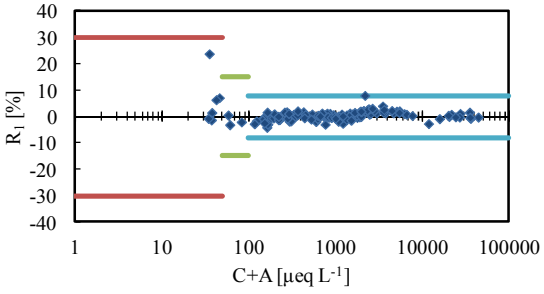


Fig. 3.21 a) Oki Ion Balance (R_1)

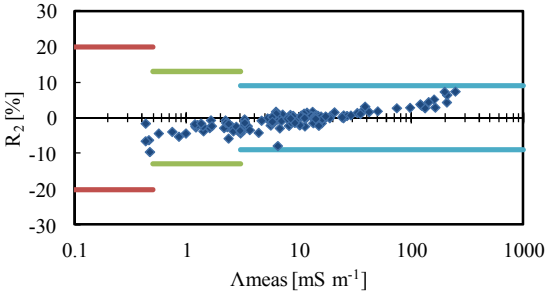


Fig. 3.21 b) Oki Conductivity Agreement (R_2)

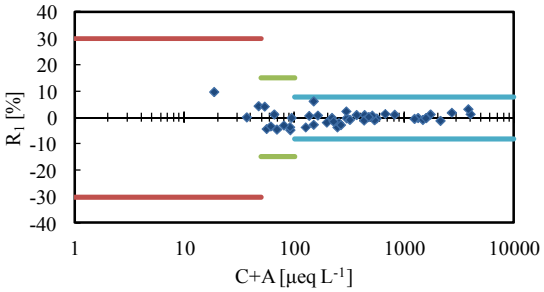


Fig. 3.22 a) Banryu Ion Balance (R_1)

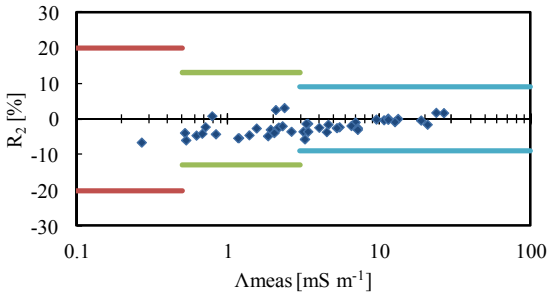


Fig. 3.22 b) Banryu Conductivity Agreement (R_2)

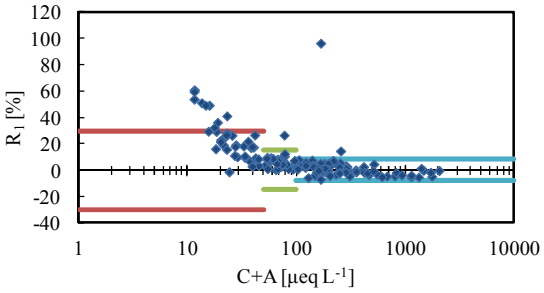


Fig. 3.23 a) Yusuhara Ion Balance (R_1)

Calculated including F^-, NO_2^-, PO_4^{3-}

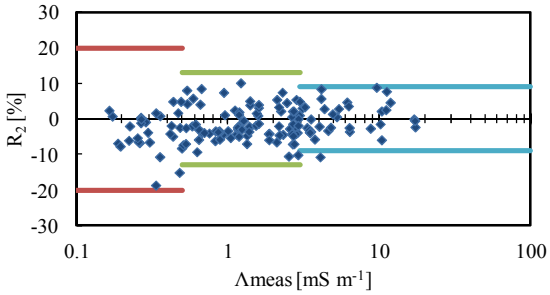


Fig. 3.23 b) Yusuhara Conductivity Agreement (R_2)

Calculated including F^-, NO_2^-, PO_4^{3-}

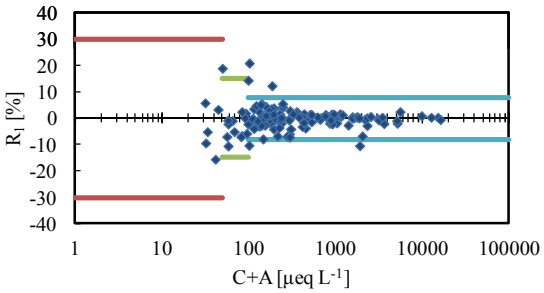


Fig. 3.24 a) Hedo Ion Balance (R_1)

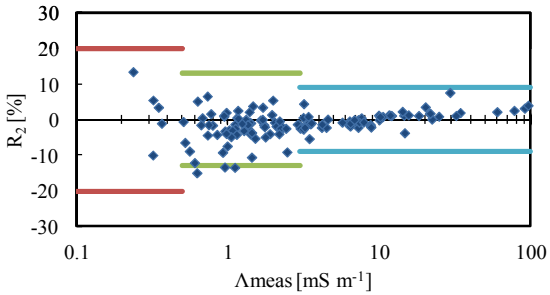


Fig. 3.24 b) Hedo Conductivity Agreement (R_2)

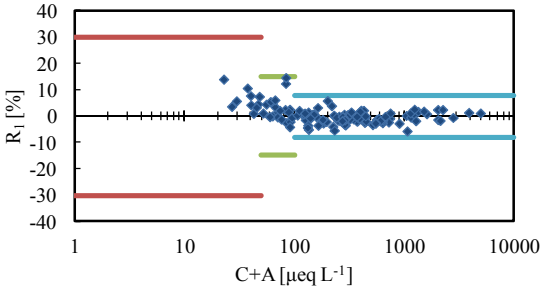


Fig. 3.25 a) Ogasawara Ion Balance (R_1)

Calculated including F^-, NO_2^-

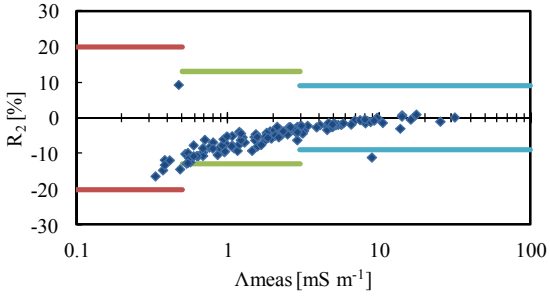


Fig. 3.25 b) Ogasawara Conductivity Agreement (R_2)

Calculated including F^-, NO_2^-

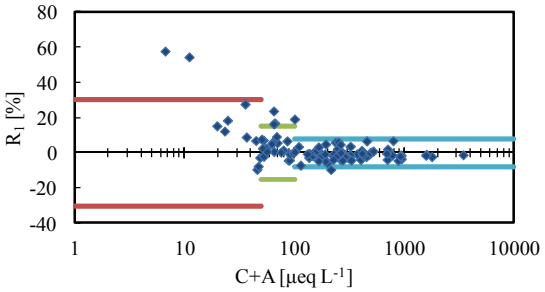


Fig. 3.26 a) Tokyo Ion Balance (R_1)

Calculated including F^-, NO_2^-

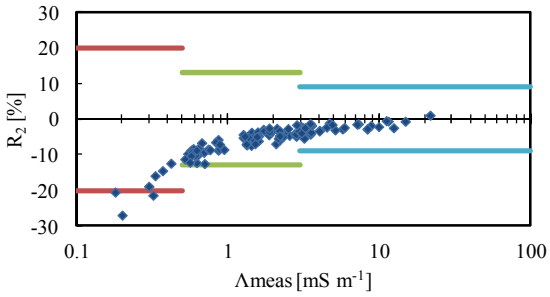


Fig. 3.26 b) Tokyo Conductivity Agreement (R_2)

Calculated including F^-, NO_2^-

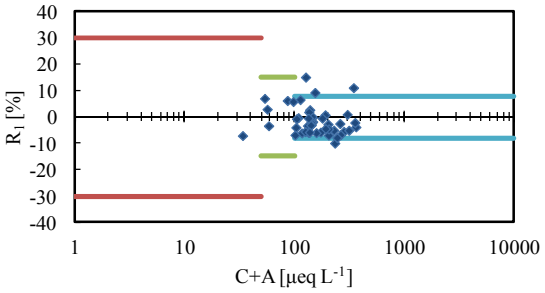


Fig. 3.27 a) Petaling Jaya Ion Balance (R_1)

Calculated including formic acid, acetic acid, oxalic acid

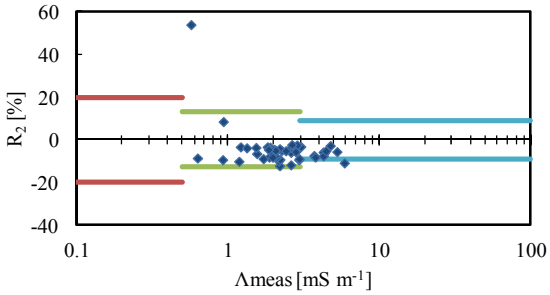


Fig. 3.27 b) Petaling Jaya Conductivity Agreement (R_2)

Calculated including formic acid, acetic acid, oxalic acid

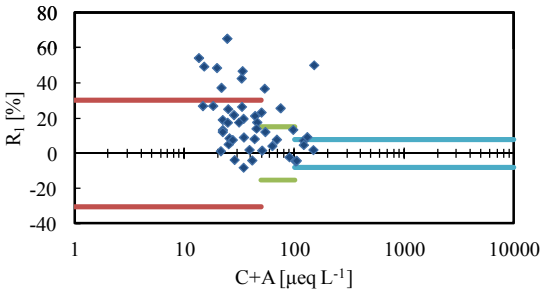


Fig. 3.28 a) Tanah Rata Ion Balance (R_1)

Calculated including formic acid, acetic acid, oxalic acid

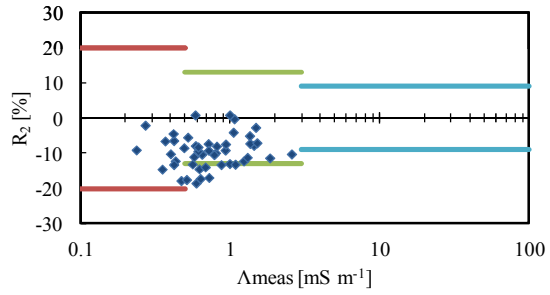


Fig. 3.28 b) Tanah Rata Conductivity Agreement (R_2)

Calculated including formic acid, acetic acid, oxalic acid

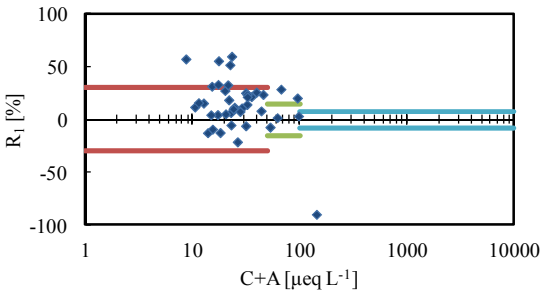


Fig. 3.29 a) Danum Valley Ion Balance (R_1)

Calculated including formic acid, acetic acid, oxalic acid

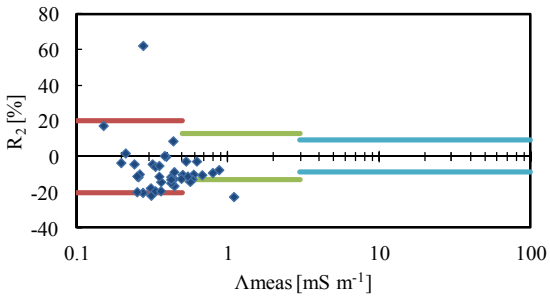


Fig. 3.29 b) Danum Valley Conductivity Agreement (R_2)

Calculated including formic acid, acetic acid, oxalic acid

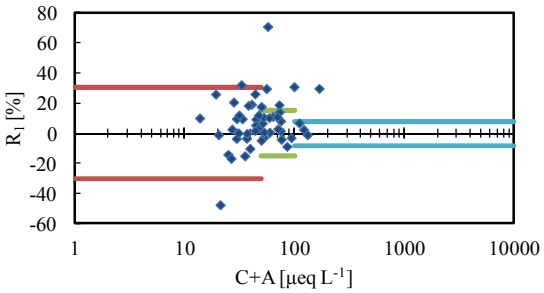


Fig. 3.30 a) Kuching Ion Balance (R_1)

Calculated including formic acid, acetic acid, oxalic acid

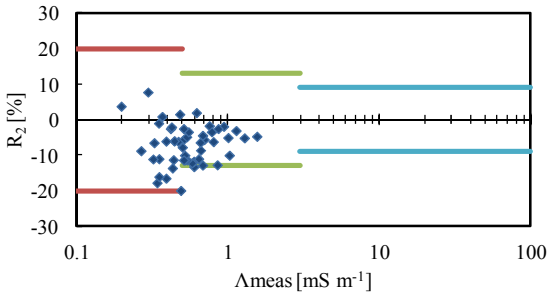


Fig. 3.30 b) Kuching Conductivity Agreement (R_2)

Calculated including formic acid, acetic acid, oxalic acid

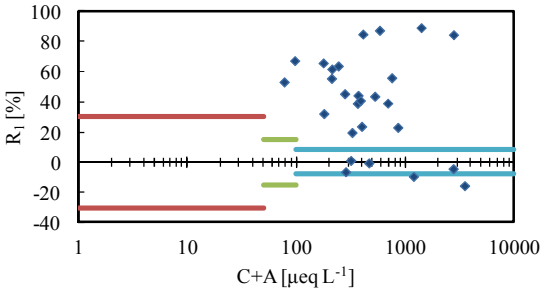


Fig. 3.31 a) Ulaanbaatar Ion Balance (R_1)

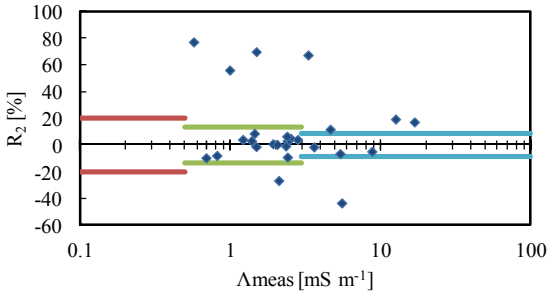


Fig. 3.31 b) Ulaanbaatar Conductivity Agreement (R_2)

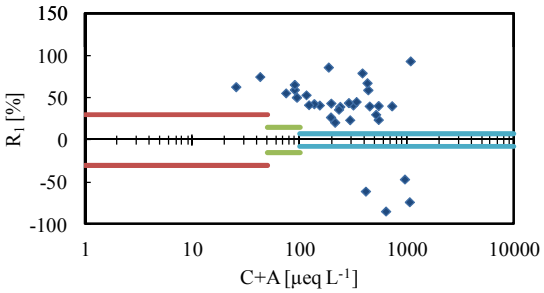


Fig. 3.32 a) Terelj Ion Balance (R_1)

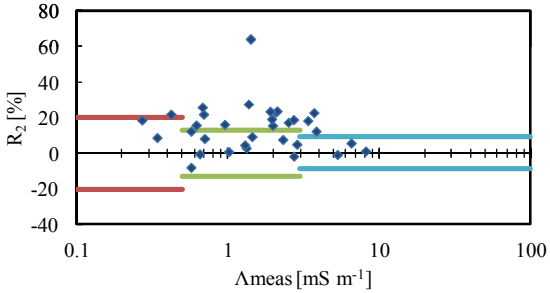


Fig. 3.32 b) Terelj Conductivity Agreement (R_2)

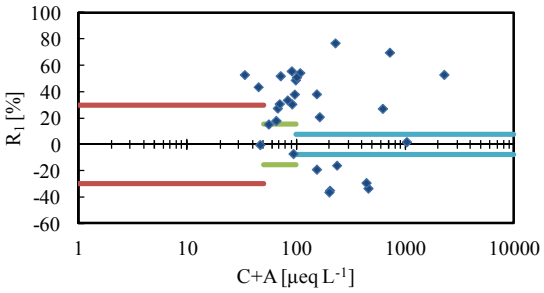


Fig. 3.33 a) Yangon Ion Balance (R_1)

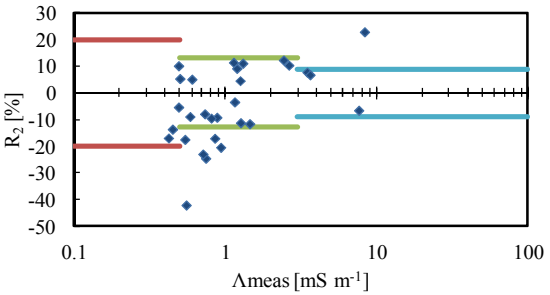


Fig. 3.33 b) Yangon Conductivity Agreement (R_2)

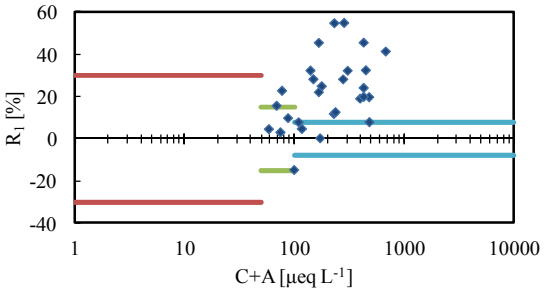


Fig. 3.34 a) Metro Manila Ion Balance (R_1)

Calculated including PO_4^{3-}

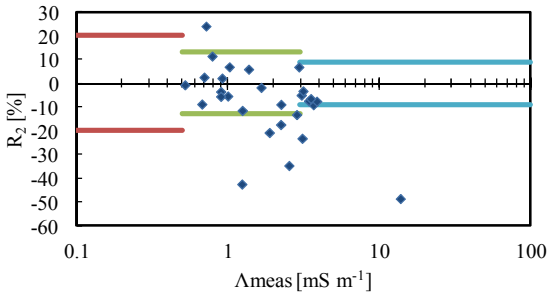


Fig. 3.34 b) Metro Manila Conductivity Agreement (R_2)

Calculated including PO_4^{3-}

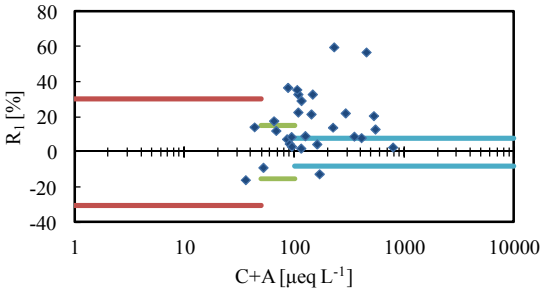


Fig. 3.35 a) Los Baños Ion Balance (R_1)

Calculated including PO_4^{3-}

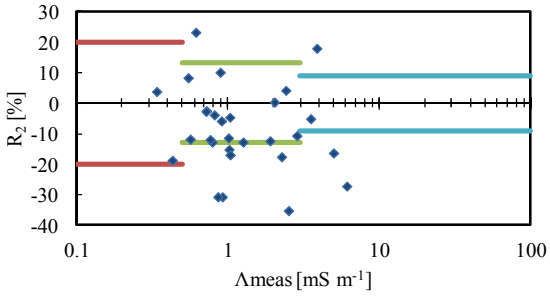


Fig. 3.35 b) Los Baños Conductivity Agreement (R_2)

Calculated including PO_4^{3-}

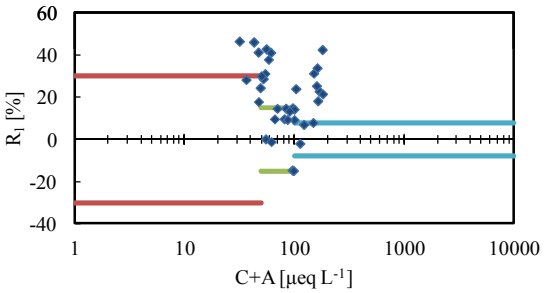


Fig. 3.36 a) Mt. Sto. Tomas Ion Balance (R_1)

Calculated including NO_2^-

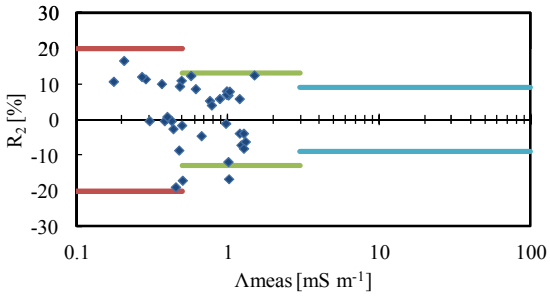


Fig. 3.36 b) Mt. Sto. Tomas Conductivity Agreement (R_2)

Calculated including NO_2^-

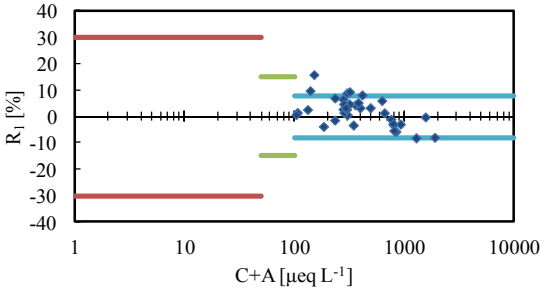


Fig. 3.37 a) Kanghwa Ion Balance (R_1)

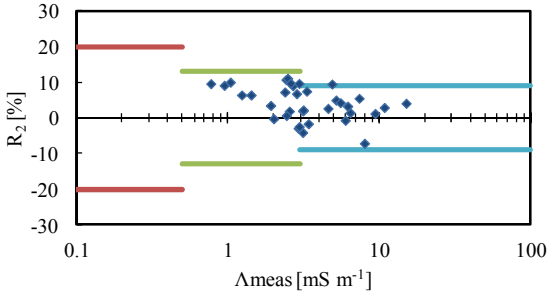


Fig. 3.37 b) Kanghwa Conductivity Agreement (R_2)

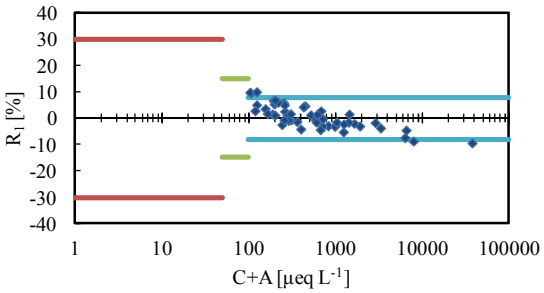


Fig. 3.38 a) Cheju Ion Balance (R_1)

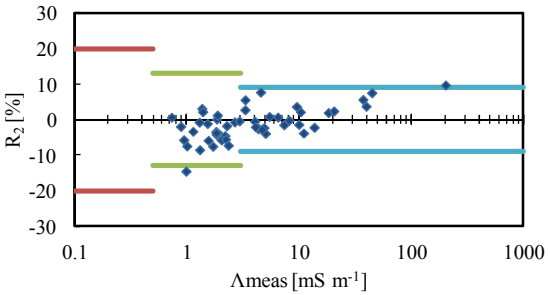


Fig. 3.38 b) Cheju Conductivity Agreement (R_2)

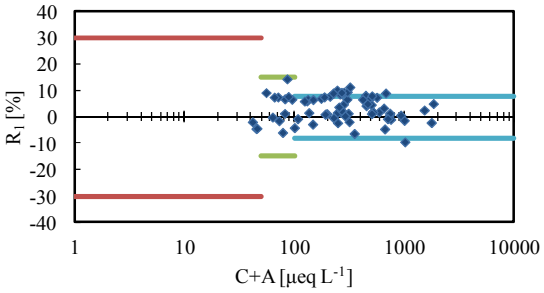


Fig. 3.39 a) Imsil Ion Balance (R_1)

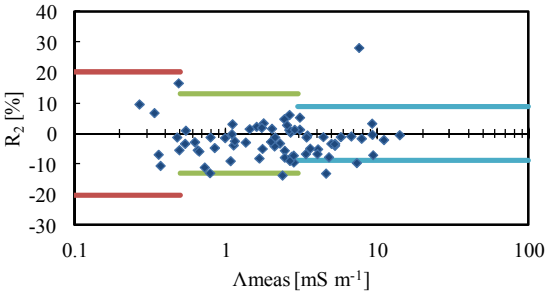


Fig. 3.39 b) Imsil Conductivity Agreement (R_2)

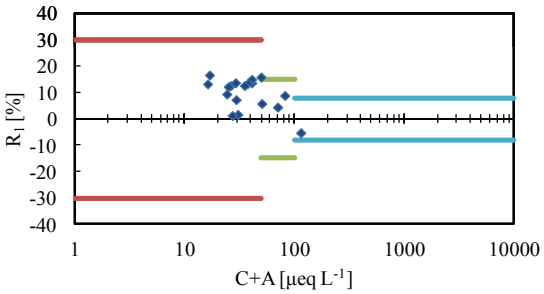


Fig. 3.40 a) Mondy Ion Balance (R_1)

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

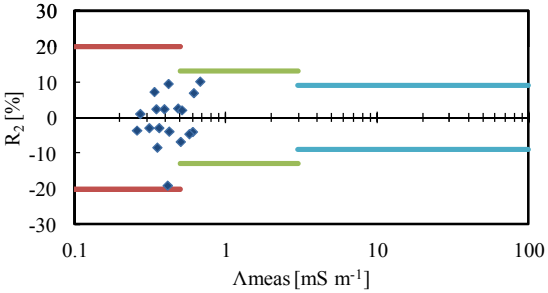


Fig. 3.40 b) Mondy Conductivity Agreement (R_2)

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

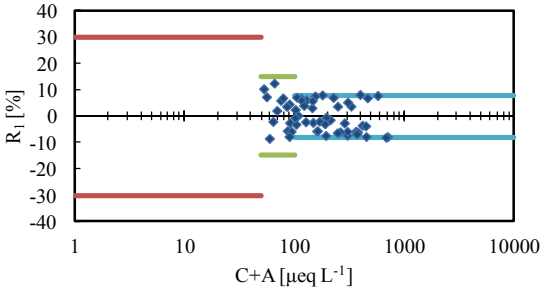


Fig. 3.41 a) Listvyanka Ion Balance (R_1)

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

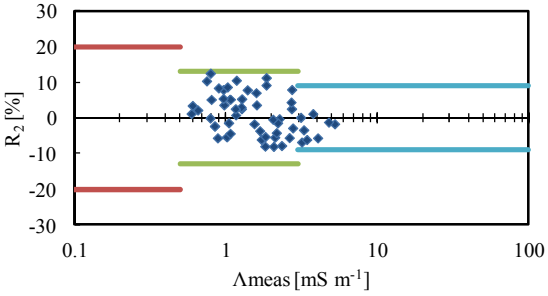


Fig. 3.41 b) Listvyanka Conductivity Agreement (R_2)

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

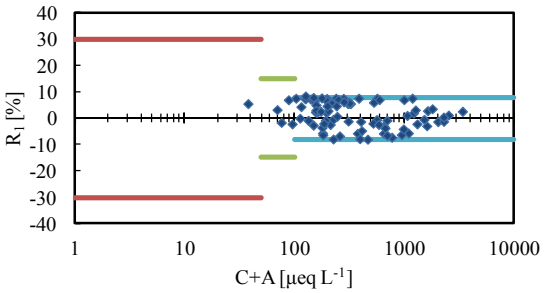


Fig. 3.42 a) Irkutsk Ion Balance (R_1)

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

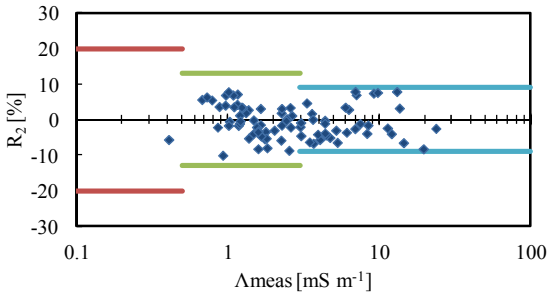


Fig. 3.42 b) Irkutsk Conductivity Agreement (R_2)

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

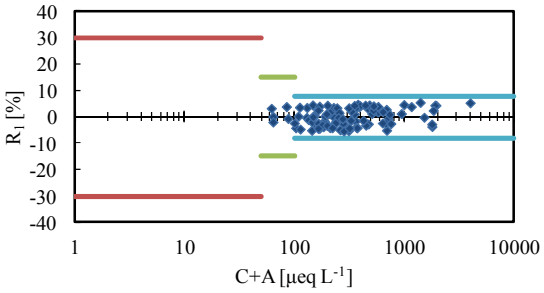


Fig. 3.43 a) Primorskaya Ion Balance (R_1)

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

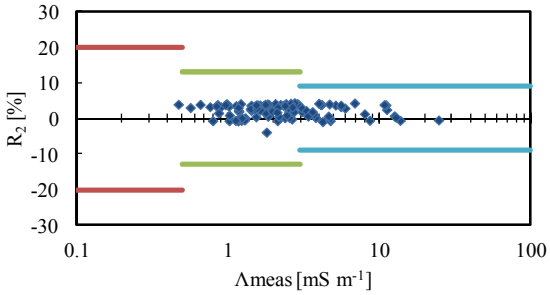


Fig. 3.43 b) Primorskaya Conductivity Agreement (R_2)

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

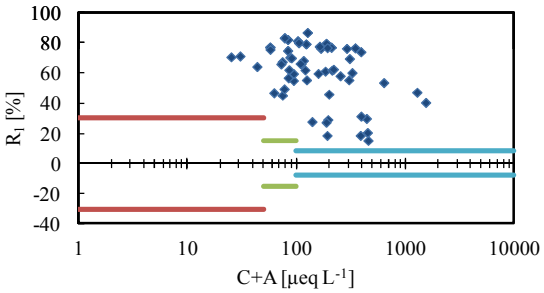


Fig. 3.44 a) Bangkok Ion Balance (R_1)

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

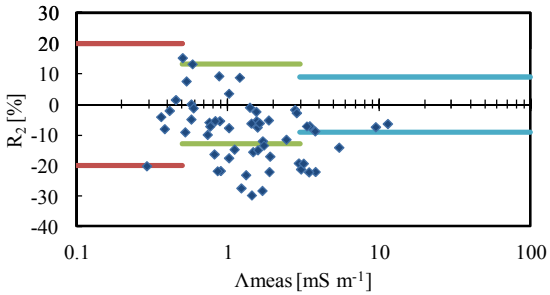


Fig. 3.44 b) Bangkok Conductivity Agreement (R_2)

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

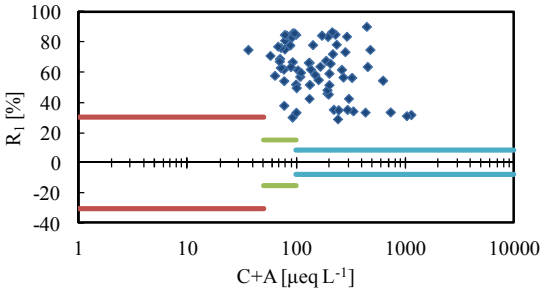


Fig. 3.45 a) Samutprakarn Ion Balance (R_1)

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

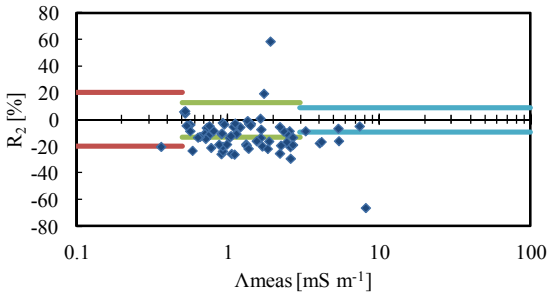


Fig. 3.45 b) Samutprakarn Conductivity Agreement (R_2)

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

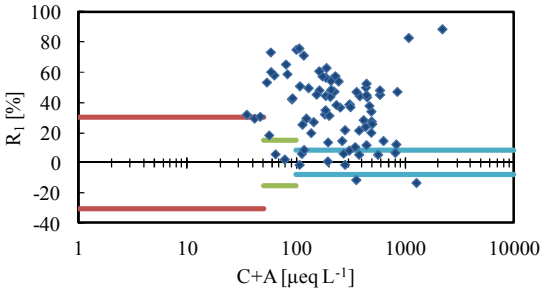


Fig. 3.46 a) Pathumthani Ion Balance (R_1)

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

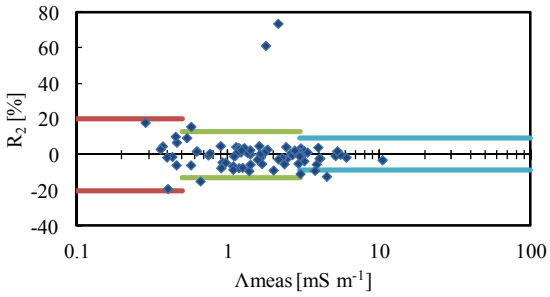


Fig. 3.46 b) Pathumthani Conductivity Agreement (R_2)

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

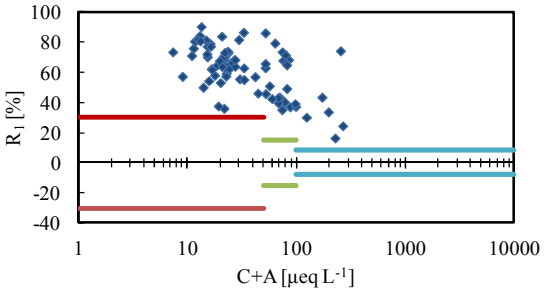


Fig. 3.47 a) Khanchanaburi Ion Balance (R_1)

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

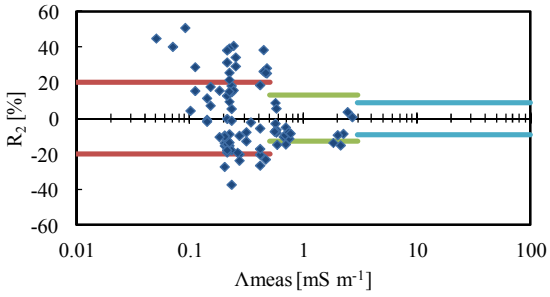


Fig. 3.47 b) Khanchanaburi Conductivity Agreement (R_2)

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

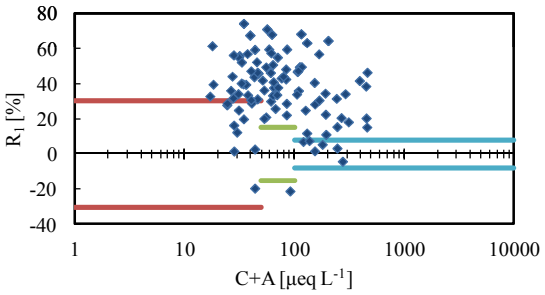


Fig. 3.48 a) Chang Mai Ion Balance (R_1)

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

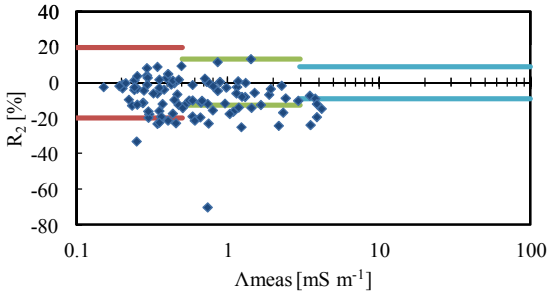


Fig. 3.48 b) Chang Mai Conductivity Agreement (R_2)

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

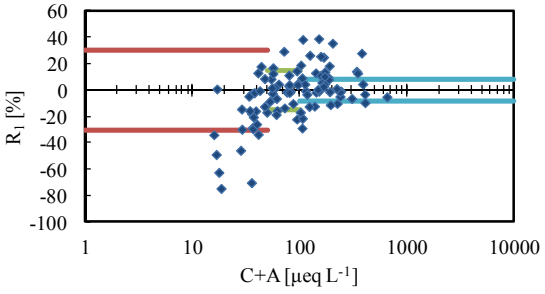


Fig. 3.49 a) Nakhon Ratchasima Ion Balance (R_1)

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

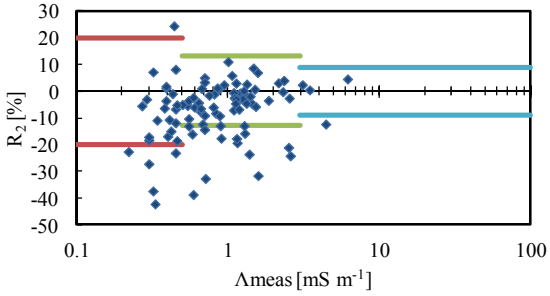


Fig. 3.49 b) Nakhon Ratchasima Conductivity Agreement (R_2)

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

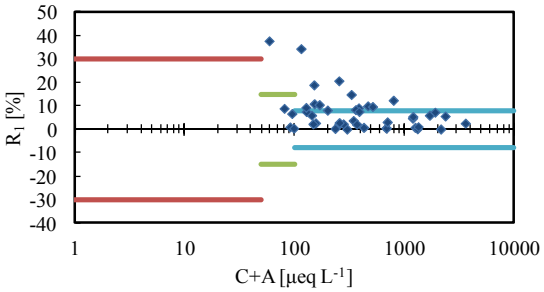


Fig. 3.50 a) Hanoi Ion Balance (R_1)

Calculated including F^-

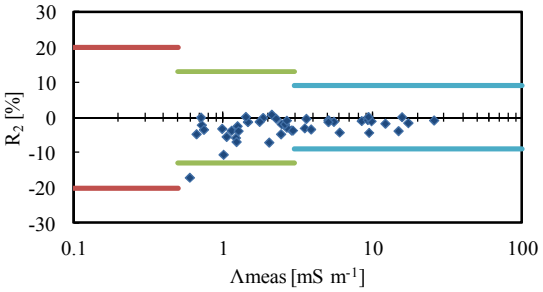


Fig. 3.50 b) Hanoi Conductivity Agreement (R_2)

Calculated including F^-

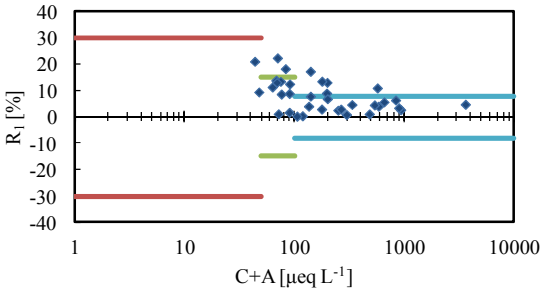


Fig. 3.51 a) Hoa Binh Ion Balance (R_1)

Calculated including F^-

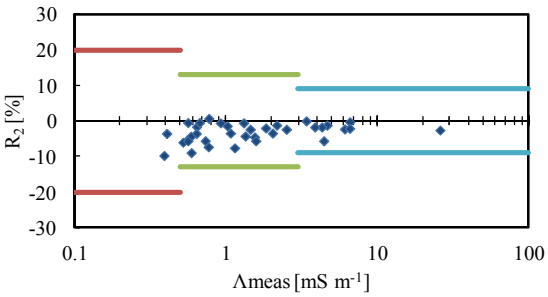


Fig. 3.51 b) Hoa Binh Conductivity Agreement (R_2)

Calculated including F^-

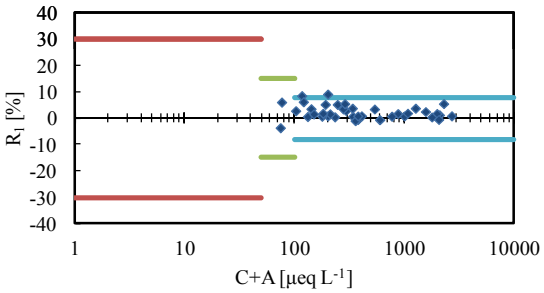


Fig. 3.52 a) Cuc Phuong Ion Balance (R_1)

Calculated including HCO_3^-, F^-

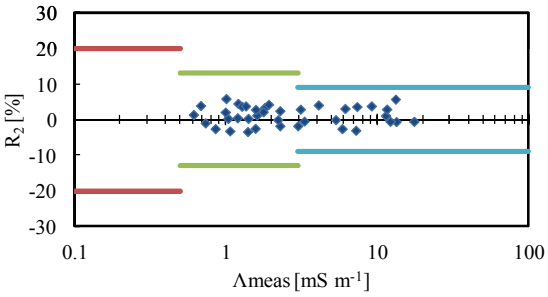


Fig. 3.52 b) Cuc Phuong Conductivity Agreement (R_2)

Calculated including HCO_3^-, F^-

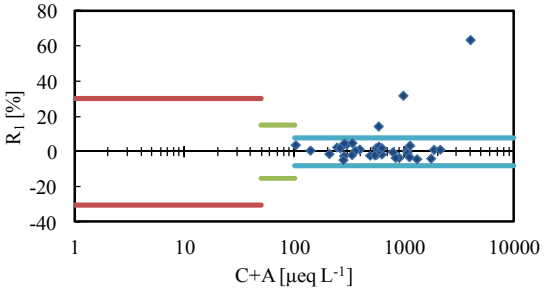


Fig. 3.53 a) Da Nang Ion Balance (R_1)

Calculated including HCO_3^-, F^-

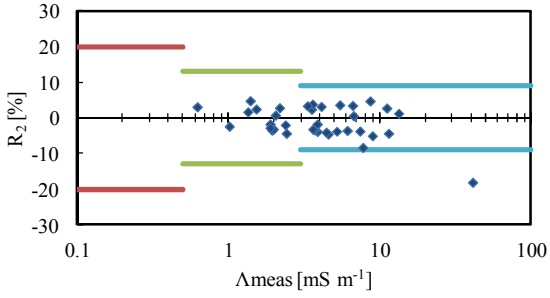


Fig. 3.53 b) Da Nang Conductivity Agreement (R_2)

Calculated including HCO_3^-, F^-

Table 3.89 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	--	--	11.8	--	--	<1	6.22	<1	<1	<1	--	--	2.57
	Listvyanka	5.10	6.31	<1	3.33	<1	<1	<1	<1	<1	7.66	<1	<1	<1
	Irkutsk	151	175	90.9	12.5	14.5	<1	18.4	2.90	1.48	6.10	48.7	52.4	20.6
	Primorskaya	44.0	4.23	24.9	25.1	3.50	1.82	<1	2.94	2.37	4.50	5.41	3.27	4.80
Vietnam	Cuc Phuong	195	248	190	57.5	28.2	63.2	36.6	20.6	<1	<1	73.6	<1	34.3
	Da Nang	110	118	*	295	150	173	61.9	22.8	20.3	14.2	10.0	90.9	27.7
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	0.277	0.00	0.00	<0.01	0.571	<0.01	<0.01	<0.01	0.00	0.00	0.848
	Listvyanka	0.0294	0.0469	<0.01	0.0308	<0.01	<0.01	<0.01	<0.01	<0.01	0.0363	<0.01	<0.01	0.149
	Irkutsk	0.933	0.668	0.465	0.154	0.584	0.0138	0.777	0.0687	0.0661	0.100	0.408	1.37	5.69
	Primorskaya	0.344	0.171	0.784	0.731	0.241	0.150	0.0872	0.279	0.0907	0.260	0.312	0.0357	3.47
Vietnam	Cuc Phuong	3.59	9.75	4.85	4.63	6.74	12.5	11.3	8.95	<0.01	<0.01	3.34	<0.01	65.2
	Da Nang	1.93	9.02	*	3.87	6.59	4.43	8.10	2.72	14.2	5.42	7.67	2.71	64.1
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	--	--	100
	Listvyanka	100	100	100	87.8	100	100	100	100	100	100	100	100	99.6
	Irkutsk	100	100	99.0	100	100	94.3	92.2	98.7	100	90.0	100	100	97.1
	Primorskaya	94.9	99.0	100	99.0	99.0	100	100	98.0	100	92.4	97.1	84.4	98.4
Vietnam	Cuc Phuong	92.9	100	97.7	98.9	100	99.0	100	100	100	100	92.9	100	99.6
	Da Nang	37.7	94.5	0.0	58.8	100	94.5	100	99.3	100	100	100	99.3	98.5

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

[0.00] for deposition: The deposition was 0 mmol m^{-2} because precipitation was 0 mm.

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

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

Data in hatched cell 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 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	27.5	26.6	48.9	4.38	5.69	2.34	3.22	8.62	3.73	8.89	15.5	26.3	6.37
	Jinyushan	23.8	5.65	22.8	4.03	4.77	2.50	3.81	5.02	2.66	4.82	7.88	15.4	4.55
	Hongwen	--	<1	15.7	5.36	<1	<1	<1	<1	<1	--	12.9	4.57	2.18
	Xiaoping	--	<1	--	5.28	1.95	<1	<1	<1	<1	--	7.57	<1	1.18
	Xiang Zhou	3.20	--	3.08	10.8	5.06	1.85	9.46	4.42	1.29	12.6	3.88	22.0	5.43
Japan	Ochiishi	*	*	*	*	*	*	*	*	*	*	*	3.50	3.50
	Yusuhara	*	*	*	*	*	*	*	*	1.18	1.51	*	1.31	1.31
	Ogasawara	*	*	*	*	<1	<1	<1	<1	<1	<1	<1	<1	<1
	Tokyo	*	*	*	*	1.04	<1	<1	<1	<1	<1	<1	<1	<1
Russia	Listvyanka	<1	<1	<1	6.58	<1	1.58	8.10	19.0	4.20	2.46	<1	1.69	6.34
	Irkutsk	<1	<1	<1	<1	2.56	6.45	3.69	<1	3.77	3.98	4.77	<1	3.06
Vietnam	Hanoi	36.3	12.8	3.68	6.14	4.72	2.21	1.28	1.35	2.54	7.41	1.82	7.33	2.93
	Hoa Binh	17.7	6.47	4.84	5.27	1.32	<1	<1	<1	1.63	5.67	5.11	13.7	1.74
	Cuc Phuong	13.7	5.91	8.96	1.12	<1	<1	<1	<1	1.51	1.85	19.9	24.3	1.57
	Da Nang	<1	3.00	<1	<1	3.95	5.04	<1	1.26	<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**
China	Haifu	0.240	0.492	0.0979	0.633	0.911	0.524	0.123	0.717	0.691	0.816	0.773	0.529	6.53
	Jinyushan	0.217	0.110	0.193	0.325	1.08	0.620	0.422	0.423	0.429	0.413	0.560	0.332	5.13
	Hongwen	0.00	<0.01	1.18	1.03	0.122	<0.01	0.158	<0.01	<0.01	0.00	0.362	0.208	3.06
	Xiaoping	0.00	<0.01	0.00	0.896	0.544	0.354	<0.01	0.379	<0.01	0.00	0.161	<0.01	2.33
	Xiang Zhou	<0.01	0.00	0.487	2.33	3.39	0.828	2.78	1.09	0.331	0.0630	0.196	1.65	13.2
Japan	Ochiishi	*	*	*	*	*	*	*	*	*	*	*	0.136	3.70
	Yusuhara	*	*	*	*	*	*	*	*	0.366	0.923	*	0.190	3.25
	Ogasawara	*	*	*	*	0.0112	<0.01	<0.01	0.0112	0.0223	<0.01	0.0102	0.0313	0.140
	Tokyo	*	*	*	*	0.0578	0.0469	0.118	0.0755	0.0637	0.0244	0.0178	<0.01	0.517
Russia	Listvyanka	<0.01	<0.01	<0.01	0.0607	<0.01	0.0527	0.542	0.849	0.220	0.0116	<0.01	0.0269	1.76
	Irkutsk	<0.01	<0.01	<0.01	<0.01	0.103	0.306	0.155	0.0230	0.168	0.0655	0.0400	<0.01	0.846
Vietnam	Hanoi	0.657	0.225	0.194	0.147	1.22	0.538	0.346	0.776	0.840	0.471	0.126	0.160	5.70
	Hoa Binh	0.525	0.0181	0.0707	0.277	0.425	0.162	0.313	0.283	0.420	0.709	0.146	0.195	3.50
	Cuc Phuong	0.252	0.232	0.229	0.0903	0.227	<0.01	<0.01	<0.01	0.492	0.316	0.902	0.308	2.97
	Da Nang	<0.01	0.229	<0.01	<0.01	0.173	0.129	0.0888	0.150	<0.01	<0.01	<0.01	<0.01	0.754
Data completeness											**%TP**			
Country	Name of sites	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	**Annual**
China	Haifu	97.7	98.4	100	100	100	100	100	100	100	100	100	98.5	99.9
	Jinyushan	100	100	100	100	100	100	100	100	100	100	100	100	100
	Hongwen	--	100	100	100	100	100	100	100	100	--	100	100	100
	Xiaoping	--	100	--	100	100	100	100	100	100	--	100	100	100
	Xiang Zhou	100	--	100	100	100	100	100	100	100	100	100	100	100
Japan	Ochiishi	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.2	0.0
	Yusuhara	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	34.4	10.6	0.0	18.9	8.0
	Ogasawara	0.0	0.0	0.0	0.0	57.9	91.8	98.3	98.8	99.6	99.8	100	98.8	67.6
	Tokyo	0.0	0.0	0.0	0.0	25.5	98.6	96.4	100	99.1	98.9	87.6	93.2	69.5
Russia	Listvyanka	100	100	100	87.8	100	100	100	100	100	100	100	100	99.6
	Irkutsk	100	100	99.0	100	100	94.3	92.2	98.7	91.0	90.0	100	100	95.7
Vietnam	Hanoi	100	100	100	100	100	100	100	100	100	100	100	100	100
	Hoa Binh	92.6	78.6	100	100	100	100	100	100	100	100	91.6	98.6	99.7
	Cuc Phuong	92.9	100	97.7	98.9	100	99.0	100	100	100	100	92.9	100	99.6
	Da Nang	66.3	94.5	100	88.5	100	94.5	100	99.3	100	100	100	99.3	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 cell 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 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**
Japan	Ochiishi	*	*	*	3.44	<1	*	*	<1	1.79	*	<1	1.31	2.57
Russia	Mondy	--	--	<1	--	--	<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	<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	*	*	*	0.401	0.0602	*	*	0.0752	0.451	*	0.0253	0.0510	2.73
Russia	Mondy	0.00	0.00	<0.01	0.00	0.00	<0.01	<0.01	<0.01	<0.01	<0.01	0.00	0.00	<0.01
	Listvyanka	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
	Irkutsk	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
	Primorskaya	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Data completeness											**%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	93.9	2.3	0.0	0.0	4.8	3.3	0.0	25.7	94.9	16.6
Russia	Mondy	--	--	100	--	--	100	100	100	100	100	--	--	100
	Listvyanka	100	100	100	87.8	100	100	100	100	100	100	100	100	99.6
	Irkutsk	100	100	99.0	100	100	94.3	92.2	98.7	91.0	90.0	100	100	95.7
	Primorskaya	94.9	99.0	100	99.0	99.0	100	100	98.0	100	92.4	97.1	84.4	98.4

[--] 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 cell 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 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	Ochiishi	*	*	*	3.61	*	*	2.61	1.49	*	*	*	<1	3.09
	Yusuhara	*	*	*	*	*	*	*	*	<1	<1	*	<1	<1
	Ogasawara	*	*	*	*	<1	<1	<1	<1	<1	<1	<1	<1	<1
	Tokyo	*	*	*	*	<1	1.73	1.43	1.02	<1	<1	1.32	3.28	1.19
Philippines	Mt. Sto. Tomas	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Russia	Mondy	--	--	<1	--	--	<1	<1	<1	<1	<1	--	--	<1
	Listvyanka	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
	Irkutsk	1.06	1.16	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
	Primorskaya	<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**
Japan	Ochiishi	*	*	*	0.420	*	*	0.164	0.125	*	*	*	<0.01	3.28
	Yusuhara	*	*	*	*	*	*	*	*	<0.01	<0.01	*	<0.01	<0.01
	Ogasawara	*	*	*	*	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
	Tokyo	*	*	*	*	0.0472	0.273	0.171	0.1000	0.214	0.359	0.0443	0.193	1.92
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	<0.01
Russia	Mondy	0.00	0.00	<0.01	0.00	0.00	<0.01	<0.01	<0.01	<0.01	<0.01	0.00	0.00	0.0176
	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	0.0159
	Irkutsk	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.0129	<0.01	0.0116	0.0106	<0.01	<0.01	0.0810
	Primorskaya	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Data completeness														**%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	48.5	0.0	0.0	3.2	5.9	0.0	0.0	0.0	18.0	6.7
	Yusuhara	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	34.4	10.6	0.0	18.9	8.0
	Ogasawara	0.0	0.0	0.0	0.0	57.9	91.8	98.3	98.8	99.6	99.8	100	98.8	67.6
	Tokyo	0.0	0.0	0.0	0.0	25.5	98.6	96.4	100	99.1	98.9	87.6	93.2	69.5
Philippines	Mt. Sto. Tomas	100	100	100	100	100	100	100	100	100	100	100	100	100
Russia	Mondy	--	--	100	--	--	100	100	100	100	100	--	--	100
	Listvyanka	100	100	100	87.8	100	100	100	100	100	100	100	100	99.6
	Irkutsk	100	100	99.0	100	100	94.3	92.2	98.7	100	90.0	100	100	97.1
	Primorskaya	94.9	99.0	100	99.0	99.0	100	100	98.0	100	92.4	97.1	84.4	98.4

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

[0.001 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 cell 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 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	*	*	*	3.29	*	*	5.77	*	*	*	*	*	4.28
	Yusuhara	*	*	*	*	*	*	*	*	<1	<1	*	<1	<1
Philippines	Metro Manila	*	*	*	*	*	*	*	*	*	5.61	7.09	*	5.69
	Los Baños	*	*	*	--	*	*	*	*	1.51	*	7.31	*	3.68
Thailand	Bangkok	--	--	--	<1	<1	<1	<1	<1	<1	<1	<1	--	<1
	Samutprakarn	--	--	--	--	<1	<1	<1	<1	<1	<1	--	--	<1
	Pathumthani	<1	--	<1	<1	<1	1.16	<1	<1	<1	<1	<1	--	<1
	Khanchanaburi	--	--	<1	<1	<1	<1	<1	<1	<1	<1	<1	--	<1
	Chiang Mai	<1	<1	--	<1	<1	<1	<1	<1	<1	<1	<1	--	<1
	Nakhon Ratchasima	<1	<1	--	1.79	<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	Ochiishi	*	*	*	0.383	*	*	0.363	*	*	*	*	*	4.53
	Yusuhara	*	*	*	*	*	*	*	*	<0.01	<0.01	*	<0.01	<0.01
Philippines	Metro Manila	*	*	*	*	*	*	*	*	*	2.17	0.638	*	20.0
	Los Baños	*	*	*	0.00	*	*	*	*	0.522	*	2.43	*	8.80
Thailand	Bangkok	0.00	0.00	0.00	<0.01	<0.01	<0.01	<0.01	0.0123	0.0149	0.0158	<0.01	0.00	0.0553
	Samutprakarn	0.00	0.00	0.00	0.00	0.0106	<0.01	0.0106	<0.01	0.0105	<0.01	0.00	0.00	0.0420
	Pathumthani	<0.01	0.00	<0.01	0.0185	<0.01	0.107	0.0105	0.0252	0.0121	<0.01	<0.01	0.00	0.176
	Khanchanaburi	0.00	0.00	<0.01	<0.01	<0.01	<0.01	0.0144	0.0134	0.0208	0.0289	<0.01	0.00	0.0845
	Chiang Mai	<0.01	<0.01	0.00	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.0335	0.0429	0.00	0.0763
	Nakhon Ratchasima	0.0301	<0.01	0.00	<0.01	<0.01	<0.01	<0.01	<0.01	0.0939	0.0523	<0.01	0.00	0.190
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	1.3	0.0	0.0	1.6	0.0	0.0	0.0	0.0	0.0	0.2
	Yusuhara	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	34.4	10.6	0.0	18.9	8.0
Philippines	Metro Manila	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	64.0	14.7	0.0	7.4
	Los Baños	0.0	0.0	0.0	--	0.0	0.0	0.0	0.0	26.9	0.0	16.8	0.0	6.2
Thailand	Bangkok	--	--	--	100	100	100	100	100	100	100	100	--	100
	Samutprakarn	--	--	--	--	100	100	100	100	100	100	--	--	100
	Pathumthani	100	--	100	100	100	100	100	100	100	100	100	--	100
	Khanchanaburi	--	--	100	100	100	100	100	100	100	100	100	--	100
	Chiang Mai	100	100	--	100	100	100	100	100	100	100	100	--	100
	Nakhon Ratchasima	100	100	--	100	100	100	99.6	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 cell 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 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
	Kuching	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Thailand	Bangkok	--	--	--	5.63	1.47	1.46	1.04	<1	<1	1.53	<1	--	1.25
	Samutprakarn	--	--	--	--	<1	<1	<1	<1	<1	<1	--	--	<1
	Pathumthani	<1	--	11.8	12.8	<1	<1	<1	<1	<1	<1	<1	--	1.43
	Khanchanaburi	--	--	<1	<1	<1	<1	<1	<1	<1	<1	<1	--	<1
	Chiang Mai	17.8	9.94	--	5.48	4.56	1.36	1.99	<1	1.91	<1	1.66	--	2.04
	Nakhon Ratchasima	36.7	90.2	--	57.3	9.43	2.06	3.63	1.29	2.79	1.63	1.05	--	4.45
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	0.0457	<0.01	<0.01	0.0935	0.0948	<0.01	0.0211	<0.01	<0.01	<0.01	0.0280	<0.01	0.296
	Tanah Rata	<0.01	<0.01	0.0118	0.0456	0.0188	0.0240	0.0191	0.0332	0.0352	0.0752	0.0336	0.0384	0.347
	Danum Valley	<0.01	<0.01	*	<0.01	<0.01	<0.01	<0.01	<0.01	0.0124	<0.01	<0.01	<0.01	0.0163
	Kuching	<0.01	<0.01	0.0244	0.0307	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.0550
Thailand	Bangkok	0.00	0.00	0.00	0.422	0.0845	0.276	0.0999	0.155	0.130	0.470	0.0244	0.00	1.66
	Samutprakarn	0.00	0.00	0.00	0.00	<0.01	<0.01	0.0394	0.0556	0.140	<0.01	0.00	0.00	0.251
	Pathumthani	<0.01	0.00	0.0321	1.21	<0.01	<0.01	0.0304	0.0685	0.342	<0.01	<0.01	0.00	1.69
	Khanchanaburi	0.00	0.00	<0.01	<0.01	<0.01	0.0440	0.0664	0.162	0.0137	0.0318	<0.01	0.00	0.318
	Chiang Mai	0.232	0.275	0.00	0.432	0.294	0.133	0.428	0.300	0.595	<0.01	0.224	0.00	2.92
	Nakhon Ratchasima	1.46	1.10	0.00	0.126	1.00	0.456	0.387	0.156	0.980	0.687	0.0644	0.00	6.42
Data completeness														**%TP**
Country	Name of sites	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	**Annual**
Malaysia	Petaling Jaya	100	100	100	100	99.1	64.3	100	100	100	100	100	100	99.7
	Tanah Rata	91.6	92.7	100	100	100	100	100	100	98.6	100	100	100	99.0
	Danum Valley	99.3	68.9	0.0	80.5	86.5	100	98.0	100	64.2	100	98.4	100	88.9
	Kuching	100	100	100	100	100	100	100	99.5	100	100	100	100	100
Thailand	Bangkok	--	--	--	100	100	100	100	100	100	100	100	--	100
	Samutprakarn	--	--	--	--	100	100	100	100	100	100	--	--	100
	Pathumthani	100	--	100	100	100	100	100	100	100	100	100	--	100
	Khanchanaburi	--	--	100	100	100	100	100	100	100	100	100	--	100
	Chiang Mai	100	100	--	100	100	100	100	100	100	100	100	--	100
	Nakhon Ratchasima	100	100	--	100	100	100	99.6	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 cell for averages and deposition: Rejected monthly (annual) value by the criteria of EANET (%PCL<80% or %TP<80%)

Table 3.95 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	<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
	Kuching	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Thailand	Bangkok	--	--	--	10.5	<1	<1	<1	<1	<1	<1	<1	--	<1
	Samutprakarn	--	--	--	--	<1	<1	<1	<1	<1	<1	--	--	<1
	Pathumthani	<1	--	3.48	9.77	<1	<1	1.11	1.43	2.79	8.69	<1	--	3.78
	Khanchanaburi	--	--	<1	<1	<1	<1	<1	<1	<1	<1	<1	--	<1
	Chiang Mai	8.68	5.70	--	10.1	1.88	<1	1.44	<1	1.02	<1	<1	--	1.57
	Nakhon Ratchasima	24.3	78.8	--	40.3	5.67	2.65	2.37	2.25	1.34	<1	<1	--	3.03
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	0.0433	0.0262	0.0812	0.0898	0.125	<0.01	0.0178	0.0290	0.0562	<0.01	<0.01	<0.01	0.470
	Tanah Rata	0.195	0.0102	0.0445	0.381	0.122	<0.01	0.0806	0.163	0.0307	0.328	0.198	0.0468	1.60
	Danum Valley	0.0278	0.0723	*	0.0558	0.0130	<0.01	0.0103	0.0611	0.0281	0.0127	<0.01	<0.01	0.289
	Kuching	0.0124	<0.01	0.0363	0.228	<0.01	0.0226	<0.01	0.0568	<0.01	0.0154	0.133	<0.01	0.512
Thailand	Bangkok	0.00	0.00	0.00	0.791	0.0385	0.137	0.0197	0.0743	0.0774	0.0932	0.0237	0.00	1.25
	Samutprakarn	0.00	0.00	0.00	0.00	<0.01	0.0130	0.0283	0.0545	0.112	<0.01	0.00	0.00	0.222
	Pathumthani	<0.01	0.00	<0.01	0.920	<0.01	0.0212	0.0626	0.333	0.974	2.13	<0.01	0.00	4.47
	Khanchanaburi	0.00	0.00	<0.01	<0.01	<0.01	0.0405	0.159	0.0839	0.0199	0.0363	<0.01	0.00	0.340
	Chiang Mai	0.113	0.158	0.00	0.798	0.121	0.0849	0.310	0.240	0.318	0.0551	0.0563	0.00	2.25
	Nakhon Ratchasima	0.966	0.962	0.00	0.0886	0.603	0.586	0.252	0.273	0.469	0.125	0.0522	0.00	4.38
Data completeness											**%TP**			
Country	Name of sites	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	**Annual**
Malaysia	Petaling Jaya	100	100	100	100	99.1	64.3	100	100	100	100	100	100	99.7
	Tanah Rata	91.6	92.7	100	100	100	100	100	100	98.6	100	100	100	99.0
	Danum Valley	99.3	68.9	0.0	80.5	86.5	100	98.0	100	64.2	100	98.4	100	88.9
	Kuching	100	100	100	100	100	100	100	99.5	100	100	100	100	100
Thailand	Bangkok	--	--	--	100	100	100	100	100	100	100	100	--	100
	Samutprakarn	--	--	--	--	100	100	100	100	100	100	--	--	100
	Pathumthani	100	--	100	100	100	100	100	100	100	100	100	--	100
	Khanchanaburi	--	--	100	100	100	100	100	100	100	100	100	--	100
	Chiang Mai	100	100	--	100	100	100	100	100	100	100	100	--	100
	Nakhon Ratchasima	100	100	--	100	100	100	99.6	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 cell for averages and deposition: Rejected monthly (annual) value by the criteria of EANET (%PCL<80% or %TP<80%)

Table 3.96 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
	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	0.0192	0.0289	<0.01	<0.01	0.0200	<0.01	<0.01	<0.01	<0.01	<0.01	0.0866
	Tanah Rata	0.0129	<0.01	0.0372	0.101	0.0330	<0.01	0.0213	0.0370	0.0232	0.0542	0.0323	0.0371	0.402
	Danum Valley	<0.01	<0.01	*	0.0346	0.0381	<0.01	<0.01	0.0366	0.0109	<0.01	<0.01	0.0201	0.148
	Kuching	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.0117	<0.01	0.0389
Data completeness											**%TP**			
Country	Name of sites	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	**Annual**
Malaysia	Petaling Jaya	100	100	100	100	99.1	64.3	100	100	100	100	100	100	99.7
	Tanah Rata	91.6	92.7	100	100	100	100	100	100	98.6	100	100	100	99.0
	Danum Valley	99.3	68.9	0.0	80.5	86.5	100	98.0	100	64.2	100	98.4	100	88.9
	Kuching	100	100	100	100	100	100	100	99.5	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 cell 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 2013. 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 2013 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 2013.

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

↓

Chemical analysis

By ion chromatography or other suitable analytical methods

Fig. 4.1 Specification of the four-stage filter pack method

Table 4.1 Sampling methods and parameters for dry deposition (air concentration) monitoring in 2013

Country	Site name	Characteristic	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}
	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 2013 (continued)

Country	Site name	Characteristic	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}
	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 2013 monitoring data of which were not submitted. Filter pack data at 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.

Table 4.2 Methods of automatic monitors in 2013

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 2013 are presented in Table 4.3 through Table 4.20.

The terms and abbreviations are as follows:

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 2013 are summarized in Table 4.21 through Table 4.38.

Monthly and annual dry deposition amounts of gaseous and particulate substances in 2013 were summarized in Table 4.39 through 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 through Table 4.38, ppb unit is used for gases and μg/m^3 unit for particulate

matter concentration. In the Table 4.39 through Table 4.49, 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 4.50.

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 4.51 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			2013												Annual
Country	Site		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
Cambodia	Phnom Penh	Mean	1.4	1.2	1.5	1.5	1.5	1.0	0.5	0.9	0.9	0.6	1.0	0.9	1.1
		%	82	100	100	100	100	100	50	100	100	100	100	100	95
		Max-2w	1.5	1.3	1.6	1.7	1.8	1.0	0.5	1.1	1.2	0.6	1.1	1.0	1.8
		Min-2w	1.2	1.0	1.5	1.3	1.3	0.9	0.5	0.6	0.7	0.5	0.9	0.9	0.5
China	Jinyunshan	Mean	12.3	7.2	12.1	8.7	3.9	5.5	7.4	8.1	4.9	9.1	8.5	15.1	8.6
		%	100	97	100	100	97	93	100	100	100	100	100	100	99
		Max-d	34.1	21.0	36.0	13.5	10.1	12.8	13.1	15.4	10.1	15.8	34.5	30.0	36.0
		Min-d	5.3	1.5	3.4	3.4	0.8	0.8	1.9	1.5	1.5	2.6	3.4	6.0	0.8
	Hongwen	Mean	7.8	4.0	6.9	6.7	5.3	4.1	4.2	5.3	4.1	5.0	6.0	8.0	5.6
		%	100	86	100	100	100	100	100	100	100	100	100	100	99
		Max-d	13.5	10.1	14.6	11.3	8.6	8.3	9.4	13.1	8.3	8.6	13.1	15.4	15.4
		Min-d	3.4	1.5	2.6	1.9	1.9	1.9	1.1	1.9	1.9	2.3	1.9	1.9	1.1
	Xiang Zhou	Mean	4.7	2.1	2.2	3.1	2.0	1.6	1.6	2.1	3.6	7.1	5.6	11.1	3.9
		%	100	97	100	100	100	100	100	100	100	100	100	100	100
		Max-d	8.3	4.9	6.4	14.6	4.1	5.6	3.8	6.4	6.4	13.1	9.0	18.8	18.8
		Min-d	2.3	0.8	0.8	1.1	0.8	0.8	0.8	0.8	1.5	3.8	1.5	2.3	0.8
Indonesia	Jakarta	Mean	3.4	6.3	4.3	3.1	7.0	5.7	5.7	0.9	8.0	5.9	8.0	4.3	5.3
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-w	9.6	9.5	12.5	9.0	8.7	9.6	10.2	1.2	13.1	12.4	31.7	6.6	31.7
		Min-w	＜0.1	1.2	1.2	0.9	4.8	3.4	0.7	0.5	1.1	1.1	0.9	＜0.1	<0.1
	Serpong	Mean	0.7	0.8	1.0	0.6	0.7	0.7	0.7	0.5	1.0	1.1	0.8	0.6	0.8
		%	100	100	100	78	100	100	100	100	100	100	100	100	98
		Max-m	0.7	0.8	1.2	0.7	0.7	1.0	1.1	0.6	1.2	1.4	0.8	0.7	1.4
		Min-m	0.7	0.7	0.7	0.6	0.6	0.5	0.4	0.4	0.9	0.8	0.8	0.6	0.4
	Kototabang	Mean	-	0.9	0.3	1.5	1.2	3.2	2.7	3.1	0.8	1.1	1.0	-	1.8
		%	0	100	20	100	100	100	100	100	100	100	23	0	69
		Max-w	-	1.6	1.3	1.8	1.4	3.6	3.3	6.0	1.6	1.6	1.0	-	6.0
		Min-w	-	＜0.1	1.3	1.3	1.0	3.0	1.1	＜0.1	＜0.1	0.7	1.0	-	<0.1
	Bandung	Mean	2.5	3.2	4.8	4.7	3.8	5.9	3.3	2.2	4.3	3.8	-	5.4	4.0
		%	100	100	100	100	100	100	100	100	100	100	0	100	92
		Max-m	2.5	3.2	4.8	4.7	3.8	5.9	3.3	2.2	4.3	3.8	-	5.4	5.9
		Min-m	2.5	3.2	4.8	4.7	3.8	5.9	3.3	2.2	4.3	3.8	-	5.4	2.2
Japan	Rishiri	Mean	0.4	0.3	0.3	0.1	0.1	<0.1	<0.1	<0.1	<0.1	0.2	0.2	0.3	0.2
		%	98	98	97	98	98	98	98	98	85	99	96	95	97
		Max-d	3.8	1.0	1.0	0.6	0.7	0.4	0.2	0.1	0.2	0.7	1.2	1.1	3.8
		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
	Ochiishi	Mean	0.3	0.2	0.2	0.1	<0.1	<0.1	<0.1	<0.1	<0.1	0.1	0.2	0.1	0.1
		%	95	96	96	91	90	96	96	95	96	95	92	93	94
		Max-d	1.9	0.5	0.4	0.4	0.1	0.2	<0.1	0.1	0.2	0.4	0.4	0.6	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
	Tappi	Mean	0.6	0.7	0.5	0.3	0.4	0.6	0.5	0.3	0.3	0.3	0.6	0.3	0.5
		%	99	99	98	99	98	99	98	99	99	99	99	89	98
		Max-d	2.9	2.1	1.7	1.1	2.1	1.4	1.8	0.7	0.5	1.8	4.5	0.8	4.5
		Min-d	0.2	0.2	0.2	<0.1	<0.1	0.1	<0.1	<0.1	0.1	<0.1	0.1	<0.1	0.1
	Sado-seki	Mean	0.5	0.7	0.7	0.4	0.3	0.1	0.2	0.3	0.2	0.2	0.4	0.6	0.4
		%	82	97	91	91	96	97	88	88	98	98	97	93	93
		Max-d	2.1	2.5	4.6	2.1	1.1	0.5	0.5	1.5	0.9	0.9	1.9	3.2	4.6
		Min-d	<0.1	<0.1	0.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	0.2
	Happo	Mean	0.6	0.5	0.7	0.4	0.5	0.2	0.1	0.1	0.2	0.2	0.4	0.4	0.4
		%	98	98	98	99	98	98	98	98	99	85	98	95	97
		Max-d	1.7	1.7	4.1	2.3	1.9	0.7	0.4	0.5	0.7	0.8	1.8	2.0	4.1
		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	0.2	0.2	0.5	0.3	0.3	0.3	0.1	0.1	0.2	<0.1	0.1	0.1	0.2
		%	92	99	99	99	99	99	99	99	98	99	99	83	97
		Max-d	0.7	0.5	2.0	0.9	0.8	1.0	0.9	0.4	0.6	0.3	0.4	1.5	2.0
		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	0.9	1.0	0.6	0.6	0.1	0.2	0.1	0.2	0.3	0.8	1.1	0.6
		%	86	90	97	98	98	98	97	98	98	97	98	92	96
		Max-d	3.7	3.2	2.8	2.2	2.2	0.4	0.9	0.4	0.7	1.4	2.9	4.6	4.6
		Min-d	0.2	<0.1	0.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	0.2
	Banryu	Mean	0.9	0.9	0.9	0.4	0.4	0.2	0.2	0.2	0.2	0.2	0.4	0.7	0.5
		%	98	74	98	98	98	98	98	99	98	98	98	95	96
		Max-d	2.3	2.0	3.3	2.3	1.4	0.6	0.8	0.5	0.6	0.9	1.1	2.0	3.3
		Min-d	0.1	0.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	0.1	0.1
	Yusuhara	Mean	1.4	1.2	2.1	1.1	0.7	0.3	1.0	0.6	0.3	0.5	0.9	1.3	0.9
		%	98	98	97	98	98	98	98	98	86	98	98	94	97
		Max-d	4.1	3.5	9.1	5.0	3.8	1.0	3.4	2.6	1.0	2.7	3.8	6.4	9.1
		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
	Hedo	Mean	0.3	0.5	0.4	0.4	0.2	<0.1	<0.1	<0.1	0.1	0.3	0.6	0.7	0.3
		%	98	82	98	97	98	98	98	98	97	93	98	95	96
		Max-d	1.4	2.4	2.9	1.7	1.3	0.1	0.2	0.2	0.9	3.1	2.1	1.9	3.1
		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	0.2	<0.1
		%	98	95	97	98	98	98	98	97	98	98	98	96	98
		Max-d	0.4	0.9	0.3	0.4	0.6	0.2	<0.1	0.5	<0.1	<0.1	0.3	0.8	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	1.0	1.1	1.8	1.1	1.8	2.1	2.9	2.8	1.4	0.8	1.2	1.3	1.6
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-2w	1.0	1.2	1.9	1.1	1.9	2.4	3.0	3.4	2.0	0.9	1.2	1.8	3.4
		Min-2w	0.9	0.9	1.7	1.1	1.7	1.7	2.9	2.3	0.5	0.8	1.1	0.8	0.5
Malaysia	Petaling Jaya	Mean	1.1	1.2	2.1	1.6	0.8	0.9	1.9	1.4	1.5	1.2	1.4	1.1	1.3
		%	100	100	100	100	100	100	75	100	100	100	80	100	96
		Max-w	1.5	1.3	4.5	2.3	1.3	1.6	2.9	1.9	2.3	1.7	1.6	2.0	4.5
		Min-w	0.8	1.0	0.4	1.3	0.2	0.2	0.7	0.4	0.8	0.9	1.0	0.8	0.2
	Tanah Rata	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
		%	100	100	100	100	100	100	100	100	75	100	100	100	98
		Max-w	<0.1	<0.1	<0.1	0.4	0.1	0.4	0.3	0.3	0.2	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	0.2	0.5	-	<0.1	0.2	0.3	0.2	-	<0.1	<0.1	<0.1	-	0.2
		%	100	50	0	100	100	100	100	0	100	100	50	0	67
		Max-2w	0.2	0.5	-	0.1	0.2	0.5	0.3	-	<0.1	<0.1	<0.1	-	0.5
		Min-2w	0.2	0.5	-	<0.1	0.1	0.1	<0.1	-	<0.1	<0.1	<0.1	-	<0.1

Table 4.3 SO_2

Unit : ppb			2013												Annual
Country	Site		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
Myanmar	Yangon	Mean	2.6	0.9	2.6	3.4	0.5	0.3	0.3	0.2	0.2	-	-	-	1.3
		%	100	100	100	100	100	100	100	100	100	0	0	0	74
		Max-2w	2.9	1.4	3.7	3.5	0.7	0.4	0.6	0.5	0.2	-	-	-	3.7
		Min-2w	2.5	0.5	1.5	3.4	0.2	0.1	<0.1	<0.1	0.2	-	-	-	<0.1
Philippines	Mt. Sto. Tomas	Mean	0.1	0.1	<0.1	0.2	<0.1	0.2	<0.1	<0.1	<0.1	0.2	<0.1	<0.1	0.1
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-w	0.2	0.2	0.2	0.3	0.2	0.3	0.2	0.1	0.1	0.3	0.1	0.2	0.3
		Min-w	<0.1	<0.1	<0.1	0.2	<0.1	0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Republic of Korea	Kanghwa	Mean	6.7	4.3	3.5	4.4	4.5	3.0	2.1	1.6	1.8	1.7	3.1	4.5	3.4
		%	99	99	99	98	98	99	96	92	97	98	98	95	98
		Max-d	11.1	6.2	7.4	10.4	8.9	5.6	3.9	3.0	4.5	4.6	6.3	11.0	11.1
		Min-d	3.1	2.6	1.3	2.4	1.2	1.7	0.9	1.0	0.9	0.5	1.8	2.1	0.5
	Cheju (Kosan)	Mean	1.3	0.8	0.5	0.4	0.6	0.4	0.2	0.2	0.3	0.5	0.6	1.1	0.6
		%	99	99	99	96	35	5	87	89	99	97	55	95	80
		Max-d	4.1	3.1	3.6	1.3	0.9	0.4	0.3	0.3	0.5	0.9	2.1	3.4	4.1
		Min-d	0.2	0.1	<0.1	<0.1	0.2	0.4	0.1	0.1	0.2	0.3	0.3	0.3	0.1
	Imsil	Mean	0.6	1.9	1.5	3.1	2.7	1.9	1.4	1.5	1.6	2.0	1.4	1.8	1.8
		%	82	94	99	98	97	99	91	98	99	98	97	77	94
		Max-d	2.2	3.3	4.9	4.5	7.2	2.9	3.7	2.3	2.2	3.7	4.0	4.2	7.2
		Min-d	0.2	0.8	0.2	1.7	0.1	0.8	0.1	1.0	1.0	1.5	<0.1	0.1	0.1
Russia	Mondy	Mean	0.3	<0.1	<0.1	<0.1	0.1	<0.1	0.6	<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-m	0.3	<0.1	<0.1	<0.1	0.1	<0.1	0.6	<0.1	0.1	<0.1	<0.1	<0.1	0.6
		Min-m	0.3	<0.1	<0.1	<0.1	0.1	<0.1	0.6	<0.1	0.1	<0.1	<0.1	<0.1	<0.1
	Listvianka	Mean	7.4	8.1	2.0	1.8	1.3	0.7	0.4	0.6	0.3	0.4	4.4	4.6	2.6
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-w	11.0	16.8	3.1	3.2	3.3	1.5	0.7	0.9	0.4	0.8	7.1	8.0	16.8
		Min-w	3.8	2.1	1.3	0.7	0.3	0.3	0.2	0.2	0.2	0.1	0.6	1.4	0.1
	Irkutsk	Mean	14.4	10.4	4.1	4.0	1.6	2.0	0.6	1.2	0.5	2.0	3.5	8.2	4.2
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-w	26.0	24.2	5.8	6.2	2.1	3.9	1.3	2.5	1.0	3.7	5.2	11.9	26.0
		Min-w	7.3	0.4	0.3	1.5	1.1	0.6	0.2	0.5	0.2	0.4	1.6	4.2	0.2
	Primorskaya	Mean	2.5	2.0	0.4	0.7	1.0	0.6	0.3	0.3	0.3	0.3	0.1	0.1	0.7
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-2w	3.6	2.1	0.4	0.9	1.2	0.7	0.4	0.4	0.4	0.5	0.1	0.2	3.6
		Min-2w	1.5	2.0	0.4	0.5	0.7	0.6	0.2	0.1	0.3	0.1	0.1	<0.1	<0.1
Thailand	Bangkok	Mean	2.3	2.2	1.7	1.2	1.7	1.5	-	-	-	-	-	3.0	1.9
		%	82	80	90	88	94	61	0	0	0	0	0	39	44
		Max-d	4.7	5.0	3.8	3.1	2.4	2.4	-	-	-	-	-	3.8	5.0
		Min-d	1.1	0.8	0.7	<0.1	0.6	0.7	-	-	-	-	-	2.0	0.6
	Samutprakarn	Mean	3.4	3.2	1.7	1.4	2.4	3.0	3.6	3.5	2.9	3.6	3.7	3.2	3.0
		%	96	96	93	81	94	42	78	95	83	95	83	92	86
		Max-d	8.1	6.8	5.0	3.2	4.7	7.0	9.5	5.6	5.3	6.1	7.6	7.1	9.5
		Min-d	1.8	2.1	0.2	0.3	1.0	0.2	1.3	1.3	0.5	1.4	2.0	1.0	0.2
	Khanchanaburi (Vachiralongkorn Dam)	Mean	-	-	-	1.3	-	-	0.6	0.3	-	-	1.3	-	1.0
		%	0	0	0	57	0	0	6	38	0	0	50	0	13
		Max-d	-	-	-	4.2	-	-	3.0	1.0	-	-	3.0	-	4.2
		Min-d	-	-	-	<0.1	-	-	0.1	<0.1	-	-	<0.1	-	0.1
	Chiangmai (Mae Hia)	Mean	1.1	1.1	1.8	1.4	1.3	1.6	1.5	1.5	1.5	1.1	0.6	0.6	1.3
		%	95	79	93	95	94	92	95	95	95	88	93	93	93
		Max-d	1.7	3.0	3.1	2.9	2.6	4.2	3.0	2.7	4.4	4.3	1.9	1.6	4.4
		Min-d	<0.1	<0.1	0.3	0.2	<0.1	0.3	0.4	0.5	0.3	0.2	<0.1	<0.1	0.2
	Nakhon Ratchasima	Mean	-	-	-	0.2	0.3	0.2	0.3	<0.1	0.3	0.4	<0.1	-	0.2
		%	0	0	0	38	100	100	100	100	100	100	100	0	62
		Max-10d	-	-	-	0.2	0.3	0.2	0.4	<0.1	0.3	0.8	0.1	-	0.8
		Min-10d	-	-	-	0.2	0.3	0.1	0.1	<0.1	0.3	<0.1	<0.1	-	<0.1
Vietnam	Hanoi	Mean	2.9	2.4	2.1	2.1	1.4	1.3	0.9	1.3	1.9	3.0	2.9	3.4	2.1
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-w	4.9	2.9	3.3	2.7	1.9	1.9	1.1	1.8	2.3	3.5	3.4	4.2	4.9
		Min-w	1.9	2.0	1.3	1.3	0.9	1.0	0.7	0.6	1.3	2.6	2.6	3.0	0.6
	Hoa Binh	Mean	1.2	1.1	1.0	1.0	0.3	0.4	0.5	1.1	0.8	1.5	1.4	2.3	1.1
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-w	1.7	1.2	1.4	2.2	0.6	0.4	0.8	1.5	1.0	2.0	2.2	3.1	3.1
		Min-w	0.2	0.9	0.8	0.3	0.2	0.3	0.3	0.6	0.6	1.0	1.0	1.8	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			2013												Annual
Country	Site		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
Cambodia	Phnom Penh	Mean	0.5	0.5	0.6	0.8	0.8	0.4	0.4	0.2	0.3	0.2	0.4	0.4	0.5
		%	82	100	100	100	100	100	50	100	100	100	100	100	95
		Max-2w	0.6	0.5	0.7	1.0	1.0	0.5	0.4	0.3	0.4	0.2	0.5	0.5	1.0
		Min-2w	0.4	0.4	0.5	0.7	0.6	0.3	0.4	0.2	0.1	0.1	0.2	0.3	0.1
Indonesia	Serpong	Mean	0.5	0.3	0.4	0.9	1.0	0.5	0.7	0.6	0.5	0.9	0.8	0.5	0.6
		%	100	100	100	78	100	100	100	100	100	100	100	100	98
		Max-2w	0.7	0.4	0.5	1.4	1.3	0.7	0.9	1.1	1.0	1.1	0.8	0.8	1.4
		Min-2w	0.3	0.2	0.2	0.4	0.7	0.2	0.6	0.1	0.2	0.7	0.8	0.3	0.1
Japan	Rishiri	Mean	<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	0	0	0	0	66
		Max-2w	<0.1	<0.1	<0.1	<0.1	0.2	0.2	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
	Ochiishi	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	52	100	100	100	100	100	100	47	100	92
		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
	Tappi	Mean	<0.1	<0.1	<0.1	<0.1	0.3	0.3	0.3	0.4	<0.1	<0.1	<0.1	<0.1	0.1
		%	100	100	50	100	100	100	100	100	100	100	100	100	96
		Max-2w	<0.1	<0.1	<0.1	<0.1	0.4	0.4	0.5	0.4	0.2	<0.1	<0.1	<0.1	0.5
		Min-2w	<0.1	<0.1	<0.1	<0.1	0.1	0.3	0.2	0.3	<0.1	<0.1	<0.1	<0.1	<0.1
	Sado-seki	Mean	<0.1	<0.1	0.2	0.2	0.7	0.4	0.3	0.7	0.2	<0.1	0.1	<0.1	0.3
		%	45	100	100	100	100	100	100	100	100	100	100	100	95
		Max-2w	<0.1	0.1	0.2	0.2	0.9	0.5	0.3	0.8	0.3	0.1	0.2	<0.1	0.9
		Min-2w	<0.1	<0.1	0.1	0.1	0.5	0.3	0.2	0.7	<0.1	<0.1	<0.1	<0.1	<0.1
	Happo	Mean	<0.1	<0.1	0.2	0.2	0.6	0.5	0.3	0.6	0.2	0.1	0.2	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	0.2	0.7	0.6	0.4	0.7	0.3	0.2	0.2	0.1	0.7
		Min-2w	<0.1	<0.1	0.1	0.2	0.5	0.3	0.3	0.5	0.1	<0.1	0.2	<0.1	<0.1
	Ijira	Mean	<0.1	<0.1	0.2	0.3	0.4	0.4	0.4	0.3	0.1	<0.1	<0.1	<0.1	0.2
		%	100	100	100	100	100	100	100	100	33	52	100	56	85
		Max-2w	<0.1	<0.1	0.3	0.4	0.4	0.6	0.4	0.3	0.1	<0.1	<0.1	<0.1	0.6
		Min-2w	<0.1	<0.1	0.1	0.2	0.3	0.2	0.4	0.2	0.1	<0.1	<0.1	<0.1	<0.1
	Oki	Mean	0.1	0.1	0.2	0.2	0.6	0.3	0.2	0.5	0.2	<0.1	0.2	0.1	0.2
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-2w	0.2	0.2	0.2	0.2	0.6	0.4	0.3	0.5	0.3	<0.1	0.2	0.2	0.6
		Min-2w	0.1	<0.1	0.2	0.2	0.6	0.2	<0.1	0.4	<0.1	<0.1	0.2	<0.1	<0.1
	Banryu	Mean	0.1	0.2	0.3	0.3	0.9	0.5	0.4	0.8	0.3	0.1	0.1	0.2	0.3
		%	100	100	100	100	52	100	100	100	100	100	100	100	96
		Max-2w	0.1	0.3	0.4	0.5	0.9	0.7	0.5	0.9	0.4	0.1	0.1	0.3	0.9
		Min-2w	<0.1	0.2	0.2	0.3	0.9	0.3	0.3	0.6	0.2	<0.1	0.1	<0.1	<0.1
	Yusuhara	Mean	0.4	0.5	0.4	0.6	0.5	0.3	0.4	0.6	0.3	0.2	0.2	0.3	0.4
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-2w	0.6	0.5	0.5	0.6	0.6	0.4	0.5	1.0	0.4	0.3	0.4	0.5	1.0
		Min-2w	0.1	0.4	0.2	0.5	0.5	0.1	0.2	0.3	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	<0.1	0.3	0.3	0.1
		%	100	100	100	100	100	100	54	100	100	100	100	100	96
		Max-2w	0.2	<0.1	0.1	0.2	0.2	0.1	<0.1	<0.1	<0.1	<0.1	0.4	0.5	0.5
		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	66	100	100	96
		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	0.2	0.2	0.4	0.5	1.0	1.3	2.0	2.6	0.8	0.3	0.3	0.2	0.8
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-2w	0.2	0.2	0.5	0.6	1.2	1.6	2.0	3.5	1.0	0.3	0.3	0.2	3.5
		Min-2w	0.2	0.2	0.4	0.4	0.9	1.0	2.0	1.8	0.3	0.2	0.3	0.2	0.2
Malaysia	Petaling Jaya	Mean	0.6	0.5	2.5	0.5	0.3	0.6	0.7	0.5	0.7	0.6	0.6	0.6	0.7
		%	100	100	100	100	100	100	75	100	100	100	80	100	96
		Max-w	0.8	0.7	4.0	0.6	0.5	1.4	1.2	0.8	1.3	0.8	0.8	1.2	4.0
		Min-w	0.3	0.3	0.9	0.4	<0.1	<0.1	0.3	<0.1	0.3	0.3	0.4	0.2	<0.1
	Tanah Rata	Mean	<0.1	<0.1	0.5	<0.1	<0.1	<0.1	0.2	0.2	0.2	0.1	<0.1	<0.1	0.1
		%	100	100	100	100	100	100	100	100	75	100	100	100	98
		Max-w	<0.1	<0.1	0.7	0.1	0.1	0.2	0.4	0.3	0.3	0.2	<0.1	<0.1	0.7
		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	0.2	-	<0.1	<0.1	<0.1	1.3	-	<0.1	<0.1	<0.1	-	0.3
		%	100	50	0	100	100	100	100	0	100	100	50	0	67
		Max-2w	<0.1	0.2	-	<0.1	<0.1	0.1	3.5	-	0.1	<0.1	<0.1	-	3.5
		Min-2w	<0.1	0.2	-	<0.1	<0.1	<0.1	<0.1	-	<0.1	<0.1	<0.1	-	<0.1

Table 4.4 HNO_3

Unit : ppb			2013												Annual
Country	Site		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
Myanmar	Yangon	Mean	0.2	0.4	0.4	0.7	0.5	0.3	0.1	<0.1	<0.1	-	-	-	0.3
		%	100	100	100	100	100	100	100	100	100	0	0	0	74
		Max-2w	0.5	0.5	0.7	1.2	0.6	0.5	0.2	<0.1	<0.1	-	-	-	1.2
		Min-2w	<0.1	0.4	0.2	0.3	0.4	0.1	<0.1	<0.1	<0.1	-	-	-	<0.1
Philippines	Mt. Sto. Tomas	Mean	0.1	<0.1	<0.1	<0.1	<0.1	0.3	<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	0.3	<0.1	<0.1	0.2	0.1	0.7	<0.1	<0.1	<0.1	<0.1	0.2	0.1	0.7
		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
Republic of Korea	Kanghwa	Mean	0.2	0.2	0.1	0.4	0.5	0.9	0.3	0.3	0.3	0.3	0.3	0.3	0.4
		%	6	18	6	17	16	17	16	19	17	16	17	16	14
		Max-d	0.2	0.4	0.2	0.6	0.8	2.1	0.4	0.9	0.8	0.8	0.7	0.6	2.1
		Min-d	0.1	0.1	0.1	0.3	0.2	<0.1	0.2	<0.1	<0.1	0.1	0.1	0.2	0.1
	Cheju (Kosan)	Mean	0.3	0.3	0.5	0.5	0.6	0.7	0.2	0.7	0.3	0.2	0.3	0.7	0.4
		%	16	14	16	17	16	17	16	16	17	10	17	13	15
		Max-d	0.6	0.5	1.6	0.9	1.0	1.1	0.4	1.1	0.3	0.3	0.4	2.0	2.0
		Min-d	0.2	0.1	0.2	0.2	0.3	0.2	0.2	0.5	0.2	0.2	0.1	<0.1	<0.1
	Imsil	Mean	0.2	0.2	0.3	0.6	0.7	1.6	0.4	0.8	0.5	0.6	0.2	0.4	0.6
		%	16	18	16	17	16	17	16	6	17	13	17	13	13
		Max-d	0.3	0.4	0.8	0.8	1.5	3.3	1.4	1.0	1.3	1.1	0.8	0.7	3.3
		Min-d	<0.1	<0.1	<0.1	0.4	<0.1	0.3	<0.1	0.7	0.2	0.2	<0.1	<0.1	<0.1
Russia	Mondy	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-m	<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-m	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	0.1	<0.1	<0.01	<0.1	<0.01
	Listvianka	Mean	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	0.1	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	0.1	0.1	0.2	0.3	0.2	<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	<0.1	<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	0.5	<0.1	<0.1	<0.1	0.1	0.2	0.3	0.2	0.2	0.2	0.4	<0.1	0.5
		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	0.2	0.1	0.2	0.7	0.7	0.4	0.4	0.1	0.2	0.1	0.2	0.3
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-2w	0.4	0.2	0.2	0.2	0.9	0.7	0.6	0.5	0.3	0.2	0.2	0.2	0.9
		Min-2w	0.2	0.2	0.1	0.1	0.6	0.6	0.2	0.3	<0.1	0.1	0.1	0.1	<0.1
Thailand	Bangkok	Mean	<0.1	1.4	0.8	0.4	<0.1	<0.1	<0.1	<0.1	<0.1	0.3	0.5	1.4	0.4
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-10d	0.2	1.5	1.6	0.8	0.1	<0.1	<0.1	<0.1	0.1	0.5	0.8	1.5	1.6
		Min-10d	<0.1	1.1	0.4	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	0.1	0.4	1.2	<0.1
	Khanchanaburi (Vachiralongkorn Dam)	Mean	-	-	-	0.2	-	-	-	<0.1	-	-	0.1	-	0.1
		%	0	0	0	69	0	0	0	44	0	0	50	0	13
		Max-2w	-	-	-	0.2	-	-	-	<0.1	-	-	0.1	-	0.2
		Min-2w	-	-	-	0.2	-	-	-	<0.1	-	-	0.1	-	<0.1
	Chiangmai (Mae Hia)	Mean	0.2	0.5	-	0.2	0.3	0.1	<0.1	<0.1	<0.1	0.2	0.3	-	0.2
		%	94	36	0	30	97	97	97	97	97	97	100	0	70
		Max-10d	0.3	0.5	-	0.2	0.3	0.2	0.1	<0.1	0.2	0.3	0.3	-	0.5
		Min-10d	0.1	0.5	-	0.2	0.2	0.1	<0.1	<0.1	<0.1	<0.1	0.2	-	<0.1
	Nakhon Ratchasima	Mean	-	-	-	0.2	0.2	0.1	<0.1	<0.1	<0.1	0.2	<0.1	-	0.1
		%	0	0	0	38	100	100	100	100	100	100	100	0	62
		Max-10d	-	-	-	0.2	0.2	0.2	0.2	<0.1	<0.1	0.2	<0.1	-	0.2
		Min-10d	-	-	-	0.2	0.1	<0.1	<0.1	<0.1	<0.1	0.1	<0.1	-	<0.1
Vietnam	Hanoi	Mean	1.1	0.4	0.4	0.7	0.7	0.9	0.3	0.6	0.9	1.0	0.5	0.6	0.7
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-w	2.2	0.6	0.7	0.9	1.1	1.7	0.5	1.0	1.2	1.5	0.7	0.9	2.2
		Min-w	0.4	0.3	0.2	0.6	0.4	0.5	0.2	0.3	0.6	0.5	0.3	0.4	0.2
	Hoa Binh	Mean	0.3	0.2	0.2	0.2	0.2	0.1	0.1	0.3	0.1	0.3	0.3	0.8	0.3
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-w	0.5	0.4	0.4	0.2	0.2	0.1	0.2	0.5	0.2	0.5	0.6	1.6	1.6
		Min-w	0.1	0.1	0.1	0.2	<0.1	<0.1	<0.1	0.1	<0.1	0.2	0.1	0.2	<0.1

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			2013												Annual
Country	Site		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
Cambodia	Phnom Penh	Mean	1.2	1.1	1.6	1.4	1.5	1.7	0.9	1.5	1.8	0.7	1.3	0.7	1.3
		%	82	100	100	100	100	100	50	100	100	100	100	100	95
		Max-2w	1.5	1.3	1.6	1.5	1.6	2.1	0.9	2.0	2.6	0.8	2.1	0.7	2.6
		Min-2w	1.0	1.0	1.5	1.3	1.5	1.2	0.9	0.9	1.1	0.7	0.8	0.6	0.6
Indonesia	Serpong	Mean	0.5	0.6	0.6	0.7	0.8	1.1	0.4	0.5	1.1	0.9	0.7	0.5	0.7
		%	100	100	100	78	100	100	100	100	100	100	100	100	98
		Max-2w	0.5	0.6	0.6	0.9	0.8	1.8	0.4	0.7	1.8	1.1	0.7	0.8	1.8
		Min-2w	0.5	0.5	0.5	0.5	0.7	0.4	0.4	0.3	0.4	0.8	0.7	0.4	0.3
Japan	Rishiri	Mean	0.4	0.4	0.5	0.4	0.6	0.4	0.5	0.8	-	-	-	-	0.5
		%	100	100	100	100	100	100	100	100	0	0	0	0	66
		Max-2w	0.5	0.5	0.5	0.6	0.9	0.5	0.6	1.1	-	-	-	-	1.1
		Min-2w	0.3	0.4	0.5	0.2	0.3	0.4	0.3	0.4	-	-	-	-	0.2
	Ochiishi	Mean	0.3	0.3	0.3	0.4	0.3	0.8	0.6	0.6	0.7	0.2	1.9	0.1	0.5
		%	100	100	100	52	100	100	100	100	100	100	47	100	92
		Max-2w	0.5	0.4	0.3	0.4	0.5	1.3	0.8	0.7	0.8	0.3	1.9	0.2	1.9
		Min-2w	0.1	<0.1	0.3	0.4	0.1	0.4	0.4	0.6	0.6	0.2	1.9	<0.1	<0.1
	Tappi	Mean	0.4	0.5	0.4	0.6	0.8	0.7	0.6	1.1	0.4	0.5	0.6	0.5	0.6
		%	100	100	50	100	100	100	100	100	100	100	100	100	96
		Max-2w	0.6	0.6	0.4	0.7	0.9	0.7	0.8	1.5	0.7	0.7	0.8	0.5	1.5
		Min-2w	0.3	0.3	0.4	0.5	0.8	0.7	0.4	0.7	0.3	0.4	0.4	0.4	0.3
	Sado-seki	Mean	0.6	0.8	0.9	0.8	1.1	0.7	1.2	1.3	0.7	0.5	0.8	0.5	0.8
		%	45	100	100	100	100	100	100	100	100	100	100	100	95
		Max-2w	0.6	1.1	1.0	0.9	1.6	0.7	1.3	1.4	0.7	0.5	1.2	0.6	1.6
		Min-2w	0.6	0.6	0.7	0.7	0.7	0.7	1.2	1.3	0.5	0.5	0.5	0.4	0.4
	Happo	Mean	0.1	0.1	0.2	0.2	0.2	0.1	0.1	0.2	0.2	0.2	0.3	0.2	0.2
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-2w	0.1	0.1	0.3	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.3	0.2	0.3
		Min-2w	<0.1	0.1	0.2	0.1	0.1	<0.1	0.1	0.2	0.1	0.2	0.3	0.1	<0.1
	Ijira	Mean	<0.1	<0.1	0.2	0.2	0.2	0.1	0.2	0.1	<0.1	<0.1	<0.1	<0.1	0.1
		%	100	100	100	100	100	100	100	100	33	52	100	56	85
		Max-2w	0.1	<0.1	0.3	0.3	0.2	0.2	0.2	0.1	<0.1	<0.1	<0.1	<0.1	0.3
		Min-2w	<0.1	<0.1	0.2	0.1	0.2	<0.1	0.2	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
	Oki	Mean	1.1	1.0	1.2	1.0	1.3	0.7	1.3	1.5	0.8	0.8	0.9	0.8	1.0
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-2w	1.1	1.2	1.3	1.2	1.6	0.7	1.8	2.0	1.3	1.1	1.0	1.1	2.0
		Min-2w	1.1	0.8	1.1	0.8	1.0	0.7	0.9	1.0	0.3	0.5	0.7	0.4	0.3
	Banryu	Mean	0.8	0.9	1.1	1.0	0.7	0.6	0.7	0.8	0.9	0.7	1.0	0.7	0.8
		%	100	100	100	100	52	100	100	100	100	100	100	100	96
		Max-2w	0.9	0.9	1.2	1.1	0.7	0.6	0.8	1.0	1.3	1.0	1.2	0.9	1.3
		Min-2w	0.6	0.8	0.9	0.8	0.7	0.6	0.6	0.5	0.5	0.5	0.8	0.4	0.4
	Yusuhara	Mean	0.5	0.5	0.5	0.5	0.3	0.1	0.4	0.4	0.4	0.3	0.4	0.4	0.4
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-2w	0.7	0.5	0.5	0.6	0.3	0.1	0.6	0.4	0.6	0.3	0.4	0.5	0.7
		Min-2w	0.3	0.5	0.5	0.3	0.2	<0.1	0.3	0.3	0.3	0.3	0.4	0.3	<0.1
	Hedo	Mean	1.1	0.9	0.9	0.9	1.1	0.7	0.3	0.4	1.0	0.9	2.0	1.7	1.0
		%	100	100	100	100	100	100	54	100	100	100	100	100	96
		Max-2w	1.3	1.0	1.0	1.3	1.1	1.0	0.3	0.5	1.3	1.0	2.3	2.2	2.3
		Min-2w	0.9	0.8	0.9	0.7	1.0	0.3	0.3	0.3	0.8	0.9	1.7	1.2	0.3
	Ogasawara	Mean	0.9	0.6	0.9	0.8	0.6	0.4	0.5	0.6	0.2	0.3	0.6	1.0	0.6
		%	100	100	100	100	100	100	100	100	100	66	100	100	96
		Max-2w	1.1	0.7	1.2	1.0	0.6	0.4	0.7	1.0	0.3	0.3	0.7	1.3	1.3
		Min-2w	0.6	0.5	0.6	0.6	0.6	0.4	0.3	0.1	0.1	0.2	0.6	0.7	0.1
	Tokyo	Mean	0.3	0.3	0.8	0.9	1.0	0.9	1.3	1.1	1.0	0.8	0.6	0.4	0.8
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-2w	0.4	0.3	0.8	1.0	1.0	1.0	1.7	1.2	1.4	0.8	0.7	0.4	1.7
		Min-2w	0.3	0.3	0.7	0.7	0.9	0.7	0.9	1.0	0.8	0.8	0.5	0.3	0.3
Malaysia	Petaling Jaya	Mean	1.9	2.0	1.7	1.5	1.0	1.3	0.2	0.3	0.4	1.1	0.8	3.4	1.3
		%	100	100	100	100	100	100	75	100	100	100	80	100	96
		Max-w	2.3	2.3	2.8	3.1	1.4	1.8	0.2	0.6	1.1	2.2	0.9	9.5	9.5
		Min-w	1.8	1.9	0.4	0.8	0.4	0.9	<0.1	<0.1	<0.1	0.6	0.7	1.4	<0.1
	Tanah Rata	Mean	0.6	0.5	0.5	0.2	0.2	0.3	<0.1	<0.1	0.2	0.2	0.2	0.4	0.3
		%	100	100	100	100	100	100	100	100	75	100	100	100	98
		Max-w	0.7	0.6	0.6	0.5	0.3	0.4	0.1	0.2	0.4	0.2	0.2	0.5	0.7
		Min-w	0.5	0.5	0.4	<0.1	0.1	0.1	<0.1	<0.1	<0.1	0.2	0.2	0.3	<0.1
	Danum Valley	Mean	1.5	3.0	-	1.7	1.7	0.9	<0.1	-	<0.1	0.2	0.2	-	1.0
		%	100	50	0	100	100	100	100	0	100	100	50	0	67
		Max-2w	2.2	3.0	-	1.9	1.9	1.4	0.2	-	0.2	0.2	0.2	-	3.0
		Min-2w	0.7	3.0	-	1.6	1.6	0.5	<0.1	-	<0.1	0.1	0.2	-	<0.1

Table 4.5 HCl

Unit : ppb			2013												Annual
Country	Site		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
Myanmar	Yangon	Mean	0.9	0.5	0.7	1.0	0.4	0.6	0.1	0.6	<0.1	-	-	-	0.6
		%	100	100	100	100	100	100	100	100	100	0	0	0	74
		Max-2w	1.0	0.6	0.7	1.2	0.6	1.2	0.3	0.8	0.2	-	-	-	1.2
		Min-2w	0.8	0.5	0.7	0.9	0.3	<0.1	<0.1	0.4	<0.1	-	-	-	<0.1
Philippines	Mt. Sto. Tomas	Mean	0.3	0.2	0.1	0.3	0.3	0.3	0.3	0.3	0.2	0.3	0.2	0.2	0.2
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-w	0.4	0.2	0.2	0.3	0.4	0.4	0.3	0.3	0.3	0.3	0.4	0.3	0.4
		Min-w	0.1	0.1	0.1	0.2	0.2	0.3	0.3	0.2	0.2	0.2	0.1	0.1	0.1
Republic of Korea	Kanghwa	Mean	0.2	0.2	0.2	0.3	0.3	0.3	0.4	0.2	0.1	0.2	0.2	0.2	0.3
		%	6	18	6	17	16	17	16	19	17	16	17	16	14
		Max-d	0.2	0.5	0.2	0.5	0.4	0.5	0.6	0.3	0.2	0.3	0.3	0.4	0.6
		Min-d	0.1	0.1	0.1	0.2	0.2	<0.1	0.3	<0.1	<0.1	0.2	<0.1	0.2	<0.1
	Cheju (Kosan)	Mean	0.1	0.2	0.2	0.2	0.3	0.2	0.3	0.2	0.2	0.2	0.2	0.3	0.2
		%	16	14	16	17	16	17	16	16	17	10	17	13	15
		Max-d	0.2	0.2	0.3	0.4	0.3	0.3	0.3	0.3	0.2	0.3	0.3	0.4	0.4
		Min-d	<0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.1	0.1	0.2	0.2	0.2	<0.1
	Imsil	Mean	0.1	0.2	0.2	0.3	0.2	0.1	0.1	<0.1	0.1	0.2	0.1	0.3	0.2
		%	16	18	16	17	16	17	16	6	17	13	17	13	13
		Max-d	0.3	0.3	0.5	0.3	0.2	0.2	0.2	<0.1	0.2	0.3	0.2	0.7	0.7
		Min-d	<0.1	<0.1	<0.1	0.2	<0.1	0.1	<0.1	<0.1	<0.1	<0.1	<0.1	0.2	<0.1
Russia	Mondy	Mean	0.3	0.6	1.2	1.1	0.6	0.1	1.7	0.5	1.6	0.4	0.3	0.2	0.7
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-m	0.3	0.6	1.5	1.1	0.6	0.1	1.7	0.5	1.6	0.4	0.4	0.2	1.7
		Min-m	0.3	0.6	0.9	1.1	0.6	0.1	1.7	0.5	1.6	0.4	<0.01	0.2	<0.01
	Listvianka	Mean	7.5	3.9	0.4	0.7	2.9	4.2	2.0	1.0	0.5	0.3	0.5	0.5	2.1
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-w	13.2	7.3	0.6	1.1	5.6	5.2	3.2	1.8	1.2	0.5	0.6	0.7	13.2
		Min-w	3.6	0.2	0.3	0.4	0.7	2.5	1.3	0.4	0.2	<0.1	0.4	0.4	<0.1
	Irkutsk	Mean	7.8	2.7	2.0	3.3	2.3	0.3	<0.1	0.1	0.8	0.7	0.3	0.7	1.7
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-w	17.3	3.6	3.3	4.8	2.7	0.5	0.1	0.2	1.7	0.9	0.5	1.3	17.3
		Min-w	3.0	1.8	1.5	1.6	2.0	<0.1	<0.1	<0.1	<0.1	0.4	<0.1	0.4	<0.1
	Primorskaya	Mean	0.8	0.4	0.7	0.4	0.8	0.5	0.4	0.4	0.7	0.6	0.5	0.3	0.5
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-2w	1.3	0.4	1.1	0.4	0.9	0.5	0.5	0.4	0.8	0.8	0.6	0.4	1.3
		Min-2w	0.2	0.3	0.3	0.4	0.7	0.5	0.3	0.3	0.6	0.4	0.4	0.3	0.2
Thailand	Bangkok	Mean	1.1	1.0	1.2	0.8	0.4	0.7	0.1	0.4	0.3	0.3	0.5	0.6	0.6
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-10d	1.3	1.2	1.9	1.2	0.5	0.7	0.3	0.6	0.4	0.4	0.6	0.7	1.9
		Min-10d	1.0	0.8	0.8	0.3	0.4	0.6	<0.1	0.2	0.2	0.3	0.5	0.5	<0.1
	Khanchanaburi (Vachiralongkorn Dam)	Mean	-	-	-	0.2	-	-	-	<0.1	-	-	0.3	-	0.2
		%	0	0	0	69	0	0	0	44	0	0	50	0	13
		Max-2w	-	-	-	0.2	-	-	-	<0.1	-	-	0.3	-	0.3
		Min-2w	-	-	-	0.2	-	-	-	<0.1	-	-	0.3	-	<0.1
	Chiangmai (Mae Hia)	Mean	0.3	0.2	-	0.3	0.2	0.2	0.2	0.1	0.3	0.2	0.3	-	0.2
		%	94	36	0	30	97	97	97	97	97	97	100	0	70
		Max-10d	0.4	0.2	-	0.3	0.3	0.3	0.4	0.2	0.4	0.2	0.4	-	0.4
		Min-10d	0.3	0.2	-	0.3	0.2	0.2	0.1	0.1	0.2	0.2	0.2	-	0.1
	Nakhon Ratchasima	Mean	-	-	-	0.1	0.2	0.2	0.3	0.2	0.2	0.1	<0.1	-	0.2
		%	0	0	0	38	100	100	100	100	100	100	100	0	62
		Max-10d	-	-	-	0.1	0.2	0.2	0.5	0.2	0.2	0.1	0.1	-	0.5
		Min-10d	-	-	-	0.1	0.2	<0.1	0.3	<0.1	0.1	0.1	<0.1	-	<0.1
Vietnam	Hanoi	Mean	1.4	3.0	1.8	1.6	1.3	1.5	1.3	1.7	1.5	1.2	1.2	1.4	1.6
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-w	2.8	4.0	3.0	2.3	1.9	1.9	1.7	2.3	2.6	1.9	1.5	1.9	4.0
		Min-w	0.8	2.2	0.8	1.1	0.8	1.0	1.1	1.4	1.0	0.7	0.8	1.1	0.7
	Hoa Binh	Mean	2.0	1.6	1.7	1.7	0.8	1.3	1.6	2.5	1.6	0.9	1.7	1.9	1.6
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-w	2.4	2.4	2.2	2.9	1.1	1.4	2.2	3.5	2.4	1.3	2.0	2.7	3.5
		Min-w	1.2	1.0	1.1	0.6	0.6	1.3	1.0	1.8	0.6	0.6	1.4	1.6	0.6

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 4.6 NH_3

Unit : ppb			2013												Annual
Country	Site		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
Cambodia	Phnom Penh	Mean	10.2	9.0	10.6	11.8	11.3	10.2	7.4	8.3	7.3	7.8	8.9	8.1	9.4
		%	82	100	100	100	100	100	50	100	100	100	100	100	95
		Max-2w	11.9	10.2	11.2	12.8	13.3	11.2	7.4	10.0	11.8	8.3	9.4	8.7	13.3
		Min-2w	8.4	7.8	10.0	10.7	8.6	9.2	7.4	6.7	2.7	7.3	8.0	7.6	2.7
Indonesia	Serpong	Mean	9.2	9.1	6.1	10.9	14.4	13.5	14.8	12.3	16.8	12.5	12.2	7.9	11.7
		%	100	100	100	78	100	100	100	100	100	100	100	100	98
		Max-2w	11.2	9.3	10.7	13.3	15.5	18.4	18.0	13.1	21.1	14.5	12.2	14.8	21.1
		Min-2w	7.3	9.0	1.4	8.6	13.3	8.5	11.7	11.5	10.5	10.5	12.2	1.2	1.2
Japan	Rishiri	Mean	<0.1	<0.1	0.2	0.3	0.6	0.4	0.8	0.9	-	-	-	-	0.4
		%	100	100	100	100	100	100	100	100	0	0	0	0	66
		Max-2w	<0.1	<0.1	0.3	0.4	0.9	0.5	0.8	1.1	-	-	-	-	1.1
		Min-2w	<0.1	<0.1	0.2	0.3	0.4	0.3	0.8	0.7	-	-	-	-	<0.1
	Ochiishi	Mean	<0.1	0.2	0.1	0.4	0.2	0.3	0.4	0.5	0.4	0.6	0.4	0.2	0.3
		%	100	100	100	52	100	100	100	100	100	100	47	100	92
		Max-2w	0.1	0.2	0.1	0.4	0.3	0.4	0.4	0.6	0.5	0.7	0.4	0.3	0.7
		Min-2w	<0.1	0.1	0.1	0.4	0.1	0.2	0.3	0.4	0.4	0.5	0.4	0.1	<0.1
	Tappi	Mean	<0.1	0.1	0.2	0.4	0.3	0.4	0.5	1.0	0.6	0.5	0.2	0.2	0.4
		%	100	100	50	100	100	100	100	100	100	100	100	100	96
		Max-2w	0.1	0.1	0.2	0.5	0.4	0.5	0.7	1.2	0.6	0.6	0.3	0.2	1.2
		Min-2w	<0.1	0.1	0.2	0.3	0.2	0.3	0.4	0.7	0.6	0.4	0.2	0.2	<0.1
	Sado-seki	Mean	<0.1	0.1	0.6	0.6	1.3	1.0	0.9	0.9	0.6	0.4	0.4	0.1	0.6
		%	45	100	100	100	100	100	100	100	100	100	100	100	95
		Max-2w	<0.1	0.1	0.6	0.7	1.3	1.0	1.0	1.1	0.7	0.6	0.5	0.2	1.3
		Min-2w	<0.1	0.1	0.5	0.5	1.3	0.9	0.9	0.8	0.5	0.3	0.2	0.1	<0.1
	Happo	Mean	0.2	0.2	0.4	0.4	0.7	0.5	0.4	0.6	0.4	0.3	<0.1	0.1	0.4
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-2w	0.2	0.2	0.5	0.6	0.9	0.6	0.4	0.7	0.5	0.3	<0.1	0.1	0.9
		Min-2w	0.2	0.1	0.4	0.2	0.6	0.4	0.4	0.5	0.3	0.3	<0.1	<0.1	<0.1
	Ijira	Mean	0.3	0.5	0.7	1.6	1.5	2.0	2.1	2.9	1.8	0.9	0.4	0.2	1.3
		%	100	100	100	100	100	100	100	100	33	52	100	56	85
		Max-2w	0.4	0.5	0.8	2.5	1.6	2.8	2.3	3.8	1.8	0.9	0.5	0.2	3.8
		Min-2w	0.3	0.4	0.5	0.5	1.4	1.2	1.9	2.0	1.8	0.9	0.4	0.2	0.2
	Oki	Mean	<0.1	0.1	0.6	0.8	1.1	0.7	0.6	1.1	0.5	0.4	0.4	0.2	0.6
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-2w	0.2	0.1	0.6	1.2	1.2	0.7	1.0	1.4	0.6	0.6	0.5	0.3	1.4
		Min-2w	<0.1	0.1	0.6	0.5	1.1	0.6	0.2	0.9	0.5	0.2	0.2	<0.1	<0.1
	Banryu	Mean	0.3	0.4	0.9	0.8	1.0	0.8	0.8	1.0	0.9	0.6	0.3	0.3	0.7
		%	100	100	100	100	52	100	100	100	100	100	100	100	96
		Max-2w	0.3	0.4	1.2	1.1	1.0	0.8	0.8	1.4	1.1	0.8	0.5	0.4	1.4
		Min-2w	0.3	0.4	0.7	0.4	1.0	0.7	0.7	0.5	0.7	0.5	0.2	0.2	0.2
	Yusuhara	Mean	0.2	0.2	0.8	0.9	0.9	0.7	1.0	1.1	0.5	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	0.3	0.9	1.3	1.0	0.8	1.5	1.1	0.6	0.4	0.4	0.2	1.5
		Min-2w	0.1	0.2	0.8	0.5	0.8	0.7	0.5	1.0	0.4	0.3	0.2	0.2	0.1
	Hedo	Mean	0.5	0.5	1.1	1.1	1.6	1.3	1.5	1.7	1.0	0.8	1.0	0.8	1.1
		%	100	100	100	100	100	100	54	100	100	100	100	100	96
		Max-2w	0.5	0.6	1.2	1.6	1.7	1.3	1.5	2.1	1.1	0.8	1.2	1.1	2.1
		Min-2w	0.5	0.4	1.0	0.8	1.6	1.2	1.5	1.3	0.8	0.8	0.9	0.5	0.4
	Ogasawara	Mean	0.3	0.3	0.8	0.9	0.8	0.7	0.6	0.7	0.5	0.5	0.4	0.5	0.6
		%	100	100	100	100	100	100	100	100	100	66	100	100	96
		Max-2w	0.4	0.3	0.9	1.1	0.8	0.7	0.7	1.0	0.5	0.6	0.5	0.6	1.1
		Min-2w	0.2	0.3	0.7	0.7	0.7	0.6	0.5	0.4	0.4	0.4	0.3	0.4	0.2
	Tokyo	Mean	3.3	3.3	3.9	3.1	5.0	5.6	6.7	6.7	5.1	3.8	4.6	4.6	4.6
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-2w	3.4	3.3	4.0	3.3	5.0	5.7	7.1	7.8	5.3	3.9	4.9	4.9	7.8
		Min-2w	3.3	3.2	3.8	2.9	4.9	5.5	6.3	5.7	4.8	3.8	4.3	4.4	2.9
Malaysia	Petaling Jaya	Mean	0.7	6.8	8.8	9.2	4.7	18.2	10.0	10.5	8.1	8.2	7.9	11.3	8.6
		%	100	100	100	100	100	100	75	100	100	100	80	100	96
		Max-w	0.8	7.0	10.6	10.8	8.5	40.1	11.7	12.1	10.0	9.7	8.9	18.9	40.1
		Min-w	0.5	6.3	7.9	8.1	<0.1	5.4	9.1	9.0	6.5	7.1	6.7	6.0	<0.1
	Tanah Rata	Mean	1.5	0.8	1.2	0.9	1.4	1.6	1.7	1.5	1.1	0.7	0.7	1.6	1.2
		%	100	100	100	100	100	100	100	100	75	100	100	100	98
		Max-w	2.2	1.0	1.5	1.4	1.7	2.6	2.1	3.1	1.5	0.9	0.8	2.9	3.1
		Min-w	0.9	0.8	0.8	0.6	1.1	0.8	1.2	0.9	0.6	0.5	0.4	0.7	0.4
	Danum Valley	Mean	3.5	3.7	-	2.5	3.5	3.4	10.1	-	1.1	1.3	1.1	-	3.8
		%	100	50	0	100	100	100	100	0	100	100	50	0	67
		Max-2w	4.9	3.7	-	2.7	3.8	4.6	13.9	-	1.2	1.5	1.1	-	13.9
		Min-2w	1.6	3.7	-	2.3	3.2	2.2	4.9	-	1.0	1.1	1.1	-	1.0

Table 4.6 NH_3

Unit : ppb			2013												Annual
Country	Site		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
Myanmar	Yangon	Mean	0.3	5.4	5.9	12.5	10.1	8.0	6.1	7.6	3.1	-	-	-	6.2
		%	100	100	100	100	100	100	100	100	100	0	0	0	74
		Max-2w	0.8	10.3	11.7	13.9	11.0	10.6	6.7	9.7	6.1	-	-	-	13.9
		Min-2w	<0.1	0.6	<0.1	11.1	9.2	5.4	5.7	5.5	<0.1	-	-	-	<0.1
Philippines	Mt. Sto. Tomas	Mean	0.8	1.4	1.3	2.0	1.2	1.3	0.8	0.4	0.7	1.6	0.7	0.6	1.1
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-w	1.2	1.8	1.6	2.6	2.1	1.8	1.2	0.7	1.3	2.6	0.8	0.6	2.6
		Min-w	0.6	1.0	0.9	1.5	0.6	0.7	0.6	0.2	<0.1	1.0	0.5	0.5	<0.1
Republic of Korea	Kanghwa	Mean	4.4	2.2	3.3	5.9	8.8	5.1	10.2	12.1	8.3	7.5	6.4	3.2	7.4
		%	6	18	6	17	16	17	16	19	17	16	17	16	14
		Max-d	4.5	2.8	3.6	7.5	11.4	8.0	15.2	16.9	14.7	12.4	8.0	4.3	16.9
		Min-d	4.2	1.7	3.1	4.7	7.9	<0.1	7.0	<0.1	<0.1	4.5	4.0	2.5	1.7
	Cheju (Kosan)	Mean	0.2	0.9	0.4	0.7	8.2	4.8	3.5	0.2	8.4	7.9	3.1	0.8	3.2
		%	16	14	16	17	16	17	16	16	17	10	17	13	15
		Max-d	0.3	1.1	0.8	0.9	11.4	6.5	6.0	0.2	10.4	11.5	4.1	1.6	11.5
		Min-d	0.1	0.8	0.3	0.4	6.0	2.9	0.7	<0.1	4.9	5.5	2.0	0.3	<0.1
	Imsil	Mean	<0.1	0.6	0.4	0.4	7.8	2.4	2.3	1.2	6.4	5.2	1.6	2.1	3.0
		%	16	18	16	17	16	17	16	6	17	13	17	13	13
		Max-d	0.1	1.1	0.9	0.6	11.9	4.1	3.3	1.3	8.0	7.7	2.7	2.6	11.9
		Min-d	<0.1	<0.1	<0.1	0.3	<0.1	1.3	<0.1	1.2	4.6	4.0	<0.1	1.1	<0.1
Russia	Mondy	Mean	0.2	<0.1	0.1	0.8	0.5	<0.1	<0.1	0.6	4.4	0.5	0.5	<0.1	0.6
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-m	0.2	<0.1	0.2	0.8	0.5	<0.1	<0.1	0.6	4.4	0.5	0.6	<0.1	4.4
		Min-m	0.2	<0.1	<0.1	0.8	0.5	<0.1	<0.1	0.6	4.4	0.5	<0.01	<0.1	<0.01
	Listvianka	Mean	1.4	1.0	2.6	1.8	1.6	2.1	0.3	1.3	0.6	1.0	1.0	0.4	1.3
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-w	1.9	1.3	4.1	2.2	2.7	3.2	1.3	2.9	1.0	1.2	1.8	0.8	4.1
		Min-w	0.9	0.6	2.1	1.5	0.6	0.2	<0.1	0.7	0.3	0.7	0.1	<0.1	<0.1
	Irkutsk	Mean	1.3	0.3	0.8	1.0	2.0	2.2	0.5	2.2	1.1	2.9	1.9	1.1	1.5
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-w	2.0	0.5	1.8	1.5	2.3	3.1	0.6	4.0	4.2	3.7	2.6	1.4	4.2
		Min-w	0.6	<0.1	<0.1	0.7	1.7	0.5	0.5	1.3	<0.1	2.1	1.1	0.7	<0.1
	Primorskaya	Mean	0.9	<0.1	1.4	2.1	1.3	1.2	1.2	1.4	0.9	1.4	1.0	<0.1	1.1
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-2w	1.1	0.1	1.9	2.3	1.4	1.4	1.5	1.4	1.0	1.7	1.8	<0.1	2.3
		Min-2w	0.7	<0.1	0.9	1.8	1.2	1.0	1.0	1.4	0.8	1.1	0.1	<0.1	<0.1
Thailand	Bangkok	Mean	8.6	10.7	8.0	8.4	8.2	8.8	9.1	8.0	5.2	10.2	9.6	9.9	8.7
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-10d	9.3	11.4	10.0	9.2	9.0	9.4	10.2	8.2	7.9	11.4	9.8	15.9	15.9
		Min-10d	7.7	9.3	6.0	7.2	7.0	8.2	7.9	7.9	0.2	8.7	9.2	2.0	0.2
	Khanchanaburi (Vachiralongkorn Dam)	Mean	-	-	-	4.1	-	-	-	3.1	-	-	2.9	-	3.4
		%	0	0	0	69	0	0	0	44	0	0	50	0	13
		Max-2w	-	-	-	4.1	-	-	-	3.1	-	-	2.9	-	4.1
		Min-2w	-	-	-	4.1	-	-	-	3.1	-	-	2.9	-	2.9
	Chiangmai (Mae Hia)	Mean	4.6	4.6	-	8.4	5.0	3.8	2.6	0.3	2.8	3.5	3.2	-	3.5
		%	94	36	0	30	97	97	97	97	97	97	100	0	70
		Max-10d	5.1	4.6	-	8.4	7.1	4.1	3.4	0.4	3.3	4.5	4.3	-	8.4
		Min-10d	4.3	4.6	-	8.4	3.6	3.6	1.9	0.3	2.2	2.7	2.6	-	0.3
	Nakhon Ratchasima	Mean	-	-	-	3.1	2.9	3.4	3.9	3.0	3.2	3.0	0.7	-	2.9
		%	0	0	0	38	100	100	100	100	100	100	100	0	62
		Max-10d	-	-	-	3.1	3.3	4.1	4.3	3.2	3.6	3.1	0.8	-	4.3
		Min-10d	-	-	-	3.1	2.6	2.7	3.3	2.8	3.1	2.9	0.4	-	0.4
Vietnam	Hanoi	Mean	1.4	1.4	1.3	1.2	1.0	1.1	1.3	1.6	1.9	1.7	1.9	1.5	1.4
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-w	1.5	1.6	1.5	1.3	1.2	1.2	1.5	1.8	2.1	1.8	2.3	1.6	2.3
		Min-w	1.3	1.3	1.1	1.0	0.8	0.9	1.1	1.2	1.7	1.6	1.7	1.5	0.8
	Hoa Binh	Mean	2.0	1.9	1.9	1.8	1.7	1.7	1.6	1.5	1.4	1.3	1.4	1.7	1.7
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-w	2.1	2.0	1.9	1.9	1.8	1.8	1.7	1.5	1.5	1.5	1.5	2.0	2.1
		Min-w	1.9	1.9	1.8	1.7	1.7	1.6	1.5	1.4	1.4	1.2	1.3	1.5	1.2

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 4.7 NO

Unit : ppb			2013												Annual
Country	Site		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
China	Jinyunshan	Mean	-	-	1.6	1.5	1.3	0.7	2.3	1.3	1.8	1.7	1.4	2.3	1.6
		%	0	0	23	100	97	90	100	100	100	97	100	100	76
		Max-d	-	-	1.6	1.6	1.6	1.6	15.2	2.4	3.2	4.0	2.4	10.4	15.2
		Min-d	-	-	1.6	0.8	＜0.1	＜0.1	0.8	0.8	1.6	0.8	0.8	0.8	＜0.1
Japan	Rishiri	Mean	<0.1	<0.1	<0.1	<0.1	0.1	0.1	0.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
		%	98	98	94	98	98	98	98	98	49	98	95	94	93
		Max-d	0.1	<0.1	<0.1	<0.1	0.3	0.3	0.6	0.3	0.1	<0.1	<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	0.1	0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
		%	95	96	96	91	90	96	96	95	91	95	92	93	94
		Max-d	<0.1	0.2	0.1	0.2	0.2	0.3	0.3	0.2	0.3	0.2	<0.1	<0.1	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
	Tappi	Mean	<0.1	<0.1	<0.1	0.1	0.2	0.3	0.2	<0.1	<0.1	<0.1	<0.1	<0.1	0.1
		%	99	1	87	99	97	98	98	98	98	98	98	88	89
		Max-d	0.1	<0.1	0.2	0.2	0.8	1.0	1.1	0.3	0.2	0.2	0.2	0.2	1.1
		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	0.9	<0.1	<0.1	<0.1	<0.1	<0.1	0.1
		%	81	96	97	98	97	96	89	87	97	97	97	92	94
		Max-d	0.1	0.1	<0.1	0.1	0.2	0.2	4.1	0.3	0.1	<0.1	<0.1	0.2	4.1
		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	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
		%	98	98	97	98	98	98	97	98	98	85	98	95	97
		Max-d	0.2	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.4	0.4
		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
	Ijira	Mean	<0.1	0.1	<0.1	<0.1	0.1	-	-	-	-	0.4	0.3	<0.1	0.2
		%	99	99	99	99	60	0	0	0	0	91	99	83	61
		Max-d	0.4	0.5	0.2	0.2	0.2	-	-	-	-	1.0	0.9	0.3	1.0
		Min-d	<0.1	<0.1	<0.1	<0.1	<0.1	-	-	-	-	0.2	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	<0.1	<0.1	<0.1
		%	86	90	97	98	98	98	97	98	98	97	98	93	96
		Max-d	0.2	0.1	<0.1	<0.1	0.3	0.2	0.2	0.2	0.1	0.2	<0.1	<0.1	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
	Banryu	Mean	0.1	<0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.2	0.2
		%	92	87	98	98	98	98	98	98	98	98	98	95	97
		Max-d	0.4	0.3	0.4	0.2	0.3	0.4	0.5	0.4	0.3	0.4	0.2	0.4	0.5
		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
	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
		%	98	98	96	98	98	97	98	97	85	98	98	94	96
		Max-d	0.2	0.2	0.2	0.2	0.1	0.2	0.3	0.2	0.3	0.1	0.2	0.1	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	0.2	0.1	<0.1	<0.1	0.3	0.2	0.2	<0.1	<0.1	<0.1	0.2	0.1
		%	98	81	97	95	73	97	97	98	97	91	98	94	93
		Max-d	1.0	0.4	0.5	0.3	0.3	0.4	0.9	1.4	0.4	0.4	0.3	0.4	1.4
		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
	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
		%	95	94	97	97	97	97	74	51	0	62	98	96	80
		Max-d	0.2	0.2	0.2	0.2	0.3	0.8	0.6	0.1	-	0.1	0.2	0.6	0.8
		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
Thailand	Bangkok	Mean	12.8	3.7	2.6	3.7	3.9	8.5	9.9	12.0	13.0	8.8	12.8	10.3	8.5
		%	91	91	90	88	94	94	90	92	96	93	93	83	92
		Max-d	46.4	14.5	9.9	12.4	9.7	38.3	26.0	38.7	47.2	35.9	54.6	33.0	54.6
		Min-d	0.7	0.9	0.5	0.3	0.7	1.9	2.2	3.0	2.9	0.7	0.9	1.3	0.3
	Samutprakarn	Mean	14.9	6.9	2.7	4.7	6.4	16.1	24.1	16.6	15.3	12.3	20.5	13.9	12.6
		%	96	96	95	95	94	87	81	96	95	95	83	64	90
		Max-d	43.3	33.1	10.8	18.5	21.6	33.3	122.6	31.9	34.4	42.0	103.6	26.3	122.6
		Min-d	1.0	1.7	<0.1	<0.1	1.0	3.1	10.1	5.7	2.2	0.3	2.7	2.7	0.3
	Khanchanaburi	Mean	-	-	-	1.3	-	-	5.6	7.3	-	-	0.3	-	3.3
	(Vachiralongkorn Dam)	%	0	0	0	12	0	0	6	38	0	0	50	0	9
		Max-d	-	-	-	5.6	-	-	7.6	7.6	-	-	0.7	-	7.6
		Min-d	-	-	-	<0.1	-	-	<0.1	6.9	-	-	<0.1	-	6.9
	Chiangmai	Mean	4.5	2.0	1.3	0.7	0.4	0.8	1.3	2.6	1.8	2.0	2.6	3.3	1.9
	(Mae Hia)	%	96	95	94	95	94	95	95	89	95	85	95	93	94
		Max-d	8.8	5.8	3.7	2.3	1.5	3.6	3.5	5.1	3.4	4.2	14.6	6.4	14.6
		Min-d	0.6	0.3	0.1	<0.1	<0.1	<0.1	<0.1	0.4	0.5	0.5	0.1	0.2	0.1

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			2013												Annual
Country	Site		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
China	Hongwen	Mean	26.3	19.0	24.6	24.3	16.9	13.3	14.4	18.5	14.0	15.4	21.4	25.9	19.5
		%	100	93	100	100	100	100	100	100	100	100	100	100	100
		Max-d	54.6	51.5	48.4	40.6	23.9	35.4	23.4	32.2	27.0	25.0	41.1	48.4	54.6
		Min-d	13.0	7.3	10.9	8.8	9.9	5.7	6.8	6.8	6.2	9.9	11.4	17.2	5.7
	Xiang Zhou	Mean	17.8	15.5	16.7	22.9	16.2	11.0	9.0	11.4	14.6	16.3	25.3	34.1	17.6
		%	100	97	100	100	100	100	100	100	100	100	100	100	100
		Max-d	28.6	27.6	28.1	48.9	31.7	21.3	13.5	30.2	32.8	27.0	38.0	55.1	55.1
		Min-d	8.3	10.4	10.4	14.0	9.4	6.2	4.7	4.2	6.8	9.4	12.0	12.5	4.2
Indonesia	Jakarta	Mean	22.0	25.3	30.3	26.5	20.8	21.1	26.0	12.9	30.7	44.8	29.6	25.7	26.5
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-w	27.5	30.7	35.7	31.7	28.0	35.6	44.4	22.6	55.7	63.2	50.0	34.9	63.2
		Min-w	15.2	22.4	25.6	21.7	＜0.1	＜0.1	＜0.1	2.9	12.7	14.8	＜0.1	＜0.1	<0.1
	Kototabang	Mean	5.4	1.4	4.0	1.8	0.6	1.9	2.1	1.5	0.9	1.2	＜0.1	6.1	2.5
		%	77	100	100	100	100	100	100	100	100	100	23	100	92
		Max-w	10.4	1.9	7.0	2.5	2.4	2.2	2.3	2.2	2.3	3.0	＜0.1	10.1	10.4
		Min-w	0.2	0.9	2.5	0.2	＜0.1	1.5	1.7	0.1	＜0.1	0.2	＜0.1	2.7	<0.1
	Bandung	Mean	36.8	47.0	44.7	39.5	40.2	46.5	36.3	34.4	36.7	44.6	40.0	45.1	41.0
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-m	36.8	47.0	44.7	39.5	40.2	46.5	36.3	34.4	36.7	44.6	40.0	45.1	47.0
		Min-m	36.8	47.0	44.7	39.5	40.2	46.5	36.3	34.4	36.7	44.6	40.0	45.1	34.4
Japan	Banryu	Mean	2.3	2.3	2.2	1.9	1.5	1.2	1.5	1.3	1.4	1.4	1.5	2.3	1.7
		%	92	87	98	98	98	98	98	98	98	98	98	95	97
		Max-d	4.3	3.7	4.1	2.9	2.7	2.5	2.7	2.6	2.6	2.5	2.3	4.0	4.3
		Min-d	1.1	1.4	0.9	0.5	0.4	0.3	0.6	0.7	0.7	0.5	0.8	1.0	0.3
Republic of Korea	Kanghwa	Mean	10.5	5.5	3.9	5.2	4.9	3.5	3.1	3.1	6.2	6.9	8.0	7.7	5.7
		%	99	99	99	98	98	99	98	92	97	97	98	95	98
		Max-d	37.2	17.0	11.9	12.9	8.6	7.5	5.9	5.8	17.8	19.5	25.4	26.3	37.2
		Min-d	1.7	2.3	1.4	2.0	2.2	2.0	1.7	1.9	2.0	3.4	2.4	2.4	1.4
	Cheju (Kosan)	Mean	3.2	2.8	4.0	3.4	4.2	4.5	1.4	2.1	4.7	2.9	3.4	4.1	3.4
		%	99	98	99	97	87	99	97	99	99	97	95	96	97
		Max-d	7.9	6.2	9.8	6.2	9.3	8.2	2.3	3.5	6.8	6.3	5.6	8.5	9.8
		Min-d	1.3	1.3	1.4	2.1	1.9	1.5	0.7	0.6	2.3	0.4	1.1	1.2	0.4
	Imsil	Mean	8.7	7.9	5.1	2.9	3.1	3.2	3.7	5.1	4.8	4.9	6.7	5.4	5.1
		%	96	92	99	96	97	95	95	98	99	98	98	88	96
		Max-d	16.3	14.4	8.4	5.4	7.0	6.3	7.7	7.7	10.1	10.2	11.1	16.6	16.6
		Min-d	2.4	3.4	2.5	<0.1	0.9	2.1	1.1	3.6	2.7	2.7	3.7	0.6	<0.1
Thailand	Bangkok	Mean	34.8	28.5	20.4	20.2	19.1	19.7	19.7	18.7	21.2	29.5	31.5	41.2	25.3
		%	91	91	90	88	94	94	90	92	96	93	93	84	92
		Max-d	56.7	46.1	43.7	30.8	29.1	31.1	27.8	24.4	31.5	60.2	45.7	61.6	61.6
		Min-d	18.9	16.8	13.0	13.1	10.8	12.6	15.5	14.6	15.7	16.5	20.9	28.0	10.8
	Samutprakarn	Mean	26.2	18.7	9.7	11.4	9.1	13.7	10.9	8.8	12.5	18.7	19.0	25.7	15.1
		%	96	96	95	95	94	87	81	96	95	95	83	64	90
		Max-d	52.7	45.2	33.5	25.5	24.6	24.3	37.4	12.9	25.3	40.1	30.6	38.3	52.7
		Min-d	8.5	4.6	1.6	2.3	1.8	5.8	4.8	3.7	3.8	8.8	10.8	11.5	1.6

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			2013												Annual
Country	Site		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
China	Jinyunshan	Mean	-	-	9.4	6.9	6.7	5.7	8.2	8.8	9.8	13.2	8.0	13.7	9.1
	(NOx*)	%	0	0	23	100	97	90	100	100	100	97	100	100	76
		Max-d	-	-	13.0	12.5	13.3	15.1	20.4	16.7	16.4	19.0	11.5	29.6	29.6
		Min-d	-	-	7.3	3.4	2.6	1.6	3.7	1.8	5.2	6.5	3.4	7.6	1.6
Japan	Rishiri	Mean	0.6	0.6	0.8	0.7	0.7	0.5	0.8	0.3	0.4	0.5	0.6	0.5	0.6
	(NOx*)	%	98	98	94	98	98	98	98	98	49	98	95	94	93
		Max-d	2.4	1.6	2.3	1.8	1.9	1.4	1.8	0.9	0.5	1.3	1.6	1.2	2.4
		Min-d	<0.1	0.2	0.1	<0.1	0.2	<0.1	0.2	0.1	<0.1	<0.1	0.2	0.2	0.1
	Ochiishi	Mean	0.7	0.9	1.1	1.2	0.7	0.9	0.8	0.8	0.8	0.8	0.8	0.6	0.8
	(NOx*)	%	95	96	96	91	90	96	96	95	91	95	92	93	94
		Max-d	1.3	1.5	2.1	2.1	1.9	2.3	1.5	1.6	1.8	2.5	1.9	1.4	2.5
		Min-d	0.3	0.4	0.4	0.2	0.2	0.3	0.3	0.2	0.3	0.3	0.4	0.2	0.2
	Tappi	Mean	0.8	1.2	1.4	1.5	2.0	2.4	1.7	0.8	1.1	1.1	1.1	0.9	1.4
	(NOx*)	%	99	1	87	99	97	98	98	98	98	98	98	88	89
		Max-d	1.8	1.2	2.6	3.8	9.3	5.5	7.2	1.6	1.9	2.3	2.7	2.0	9.3
		Min-d	0.4	1.2	0.3	0.2	0.6	0.5	0.5	0.4	0.4	0.5	0.5	0.3	0.2
	Sado-seki	Mean	0.5	0.7	1.0	1.0	0.8	0.5	2.2	0.4	0.6	0.6	0.8	0.8	0.8
	(NOx*)	%	81	96	97	98	97	96	89	87	97	97	97	92	94
		Max-d	1.2	1.4	3.4	1.9	1.8	1.4	6.2	1.9	1.3	1.1	1.9	2.6	6.2
		Min-d	0.1	0.3	<0.1	0.1	<0.1	<0.1	0.3	<0.1	<0.1	<0.1	0.3	0.3	0.1
	Happo	Mean	0.9	1.0	1.0	1.0	1.4	1.0	0.7	0.7	0.7	0.6	1.0	0.9	0.9
	(NOx*)	%	98	98	97	98	98	98	97	98	98	85	98	95	97
		Max-d	2.0	1.6	3.2	1.5	2.8	2.0	1.4	1.3	1.6	1.3	1.4	1.9	3.2
		Min-d	0.4	0.5	<0.1	0.4	0.4	0.4	0.3	0.3	0.3	<0.1	0.7	0.4	0.3
	Ijira	Mean	1.5	1.5	1.9	1.8	2.3	-	-	-	-	2.2	1.5	1.3	1.7
	(NOx*)	%	99	99	99	99	60	0	0	0	0	91	99	83	61
		Max-d	6.3	9.2	5.5	6.1	6.2	-	-	-	-	9.6	3.7	2.7	9.6
		Min-d	<0.1	0.4	0.4	0.3	0.3	-	-	-	-	<0.1	0.5	0.2	0.2
	Oki	Mean	1.3	1.3	1.6	1.4	1.1	0.8	0.9	0.6	0.6	1.0	1.3	1.4	1.1
	(NOx*)	%	86	90	97	98	98	98	97	98	98	97	98	93	96
		Max-d	3.1	2.7	3.5	2.4	2.1	2.3	1.8	1.3	1.9	2.1	3.0	4.3	4.3
		Min-d	0.5	0.7	0.5	0.3	0.5	0.3	<0.1	<0.1	0.1	0.2	0.2	0.2	0.1
	Banryu	Mean	2.4	2.4	2.4	2.1	1.7	1.4	1.7	1.4	1.6	1.6	1.6	2.5	1.9
		%	92	87	98	98	98	98	98	98	98	98	98	95	97
		Max-d	4.7	3.9	4.4	3.1	2.9	2.8	3.0	2.7	2.7	2.9	2.5	4.3	4.7
		Min-d	1.2	1.4	1.0	0.6	0.6	0.5	0.7	1.0	0.9	0.5	1.0	1.2	0.5
	Yusuhara	Mean	2.2	2.0	1.7	1.8	1.2	0.8	1.0	1.1	1.0	0.8	1.5	2.2	1.4
	(NOx*)	%	98	98	96	98	98	97	98	97	85	98	98	94	96
		Max-d	3.9	4.3	6.0	4.1	2.4	1.5	1.6	1.9	2.0	2.0	2.7	5.2	6.0
		Min-d	0.9	0.8	<0.1	0.6	0.3	0.2	0.1	0.5	0.4	<0.1	0.7	0.5	0.1
	Hedo	Mean	1.1	1.0	0.9	1.0	0.6	0.7	0.7	0.8	0.5	0.6	0.9	1.3	0.9
	(NOx*)	%	98	81	97	97	76	97	97	98	97	92	98	94	94
		Max-d	2.2	1.6	2.6	2.3	1.9	1.1	1.2	2.8	0.8	2.6	2.0	2.1	2.8
		Min-d	0.3	0.4	0.3	0.1	<0.1	0.3	0.3	0.2	0.3	<0.1	0.2	0.5	0.1
	Ogasawara	Mean	0.6	0.4	0.5	0.4	0.3	0.3	0.1	0.2	-	0.2	0.5	0.9	0.4
	(NOx*)	%	95	94	97	97	97	97	74	51	0	62	98	96	80
		Max-d	2.0	1.5	2.2	1.5	2.1	1.9	1.4	0.3	-	0.9	3.0	2.9	3.0
		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
Thailand	Bangkok	Mean	47.9	32.4	23.2	24.1	23.2	28.4	29.8	30.9	34.4	38.3	44.3	51.9	34.0
		%	91	91	90	88	94	94	90	92	96	93	93	84	92
		Max-d	97.0	60.3	52.1	42.8	34.7	64.8	48.4	61.9	75.4	96.1	91.9	91.5	97.0
		Min-d	20.0	18.4	13.6	14.3	11.6	16.8	17.9	18.8	20.6	20.2	23.2	30.0	11.6
	Samutprakarn	Mean	41.0	25.6	12.4	16.1	15.4	29.8	35.1	25.4	27.8	31.0	39.5	39.5	27.7
		%	96	96	95	95	94	87	81	96	95	95	83	64	90
		Max-d	94.9	77.8	44.3	44.0	38.4	52.1	160.1	44.2	52.7	76.9	134.1	62.7	160.1
		Min-d	10.4	7.2	3.4	3.5	2.8	12.0	17.9	10.4	6.0	10.9	14.4	17.3	2.8
	Khanchanaburi	Mean	-	-	-	3.2	-	-	5.8	7.5	-	-	2.7	-	4.7
	(Vachiralongkorn Dam)	%	0	0	0	12	0	0	6	38	0	0	50	0	9
	(NOx*)	Max-d	-	-	-	8.0	-	-	7.7	7.8	-	-	3.7	-	8.0
		Min-d	-	-	-	<0.1	-	-	2.0	7.2	-	-	2.0	-	2.0
	Chiangmai	Mean	21.7	17.9	21.1	16.6	10.5	9.5	9.5	12.6	10.0	11.4	13.1	16.1	14.2
	(Mae Hia)	%	96	95	94	95	94	95	95	89	95	85	95	93	94
	(NOx*)	Max-d	28.3	27.9	34.0	25.6	15.6	15.5	14.0	20.0	12.8	16.0	31.0	25.4	34.0
		Min-d	11.1	11.9	10.1	11.2	6.5	5.7	6.7	5.5	6.4	6.3	7.6	9.6	5.5

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			2013												Annual
Country	Site		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
Japan	Rishiri	Mean	42	45	49	48	39	30	24	26	29	36	35	36	37
		%	99	99	99	100	99	99	99	99	89	100	97	96	98
		Max-d	47	52	60	64	59	46	39	43	41	47	46	42	64
		Min-d	38	41	41	36	21	17	11	15	19	24	28	30	11
	Ochiishi	Mean	39	40	50	53	41	29	31	32	36	41	38	38	39
		%	99	97	100	98	96	100	100	99	100	99	96	97	99
		Max-d	42	48	63	68	53	42	62	48	46	50	52	44	68
		Min-d	33	32	44	40	37	21	15	19	21	32	30	32	15
	Tappi	Mean	42	46	51	53	45	31	27	36	36	38	38	37	40
		%	99	99	98	99	98	99	99	99	99	99	99	92	98
		Max-d	45	54	65	66	63	49	44	46	45	53	50	42	66
		Min-d	39	42	45	42	31	20	13	19	26	28	31	31	13
	Sado-seki	Mean	44	48	52	56	55	44	35	42	45	43	42	40	46
		%	82	97	98	95	95	92	91	58	97	97	98	94	91
		Max-d	49	56	73	68	74	59	59	59	69	60	56	47	74
		Min-d	40	44	46	44	41	31	22	20	37	33	31	32	20
	Happo	Mean	45	48	58	61	64	53	40	45	44	41	43	42	49
		%	99	99	99	100	99	99	99	99	100	85	99	96	98
		Max-d	51	57	72	74	83	71	60	59	66	57	53	49	83
		Min-d	40	33	46	52	37	27	23	28	21	29	33	35	21
	Ijira	Mean	28	31	38	41	39	27	17	16	22	20	17	18	26
		%	97	100	99	99	99	100	99	99	98	99	99	80	98
		Max-d	38	40	51	57	58	41	32	32	38	36	29	28	58
		Min-d	19	19	18	27	14	7	6	5	4	9	10	7	4
	Oki	Mean	42	47	56	60	63	46	40	52	46	44	41	39	48
		%	90	93	99	100	100	100	100	100	99	99	100	95	98
		Max-d	48	58	78	74	95	61	82	81	65	57	56	46	95
		Min-d	36	39	47	48	45	24	21	31	37	35	29	32	21
	Banryu	Mean	35	39	44	48	48	32	24	25	27	25	28	28	33
		%	100	88	99	100	100	100	100	99	99	100	96	97	98
		Max-d	44	51	67	68	71	45	48	44	45	40	38	36	71
		Min-d	25	28	28	33	32	19	12	13	11	10	20	22	10
	Yusuhara	Mean	39	40	48	51	48	34	23	30	35	38	38	40	39
		%	54	99	99	96	99	99	99	99	90	99	99	96	94
		Max-d	49	49	77	64	71	45	55	55	62	56	56	52	77
		Min-d	33	31	39	38	25	13	9	10	12	17	27	33	9
	Hedo	Mean	34	43	53	58	43	24	13	16	35	49	48	51	38
		%	99	83	99	98	99	99	99	99	75	36	99	96	90
		Max-d	43	64	67	75	67	56	25	25	64	65	65	71	75
		Min-d	25	20	30	34	13	10	7	9	13	23	14	37	7
	Ogasawara	Mean	41	42	39	48	46	31	26	28	34	31	37	39	37
		%	99	97	98	99	99	99	99	99	31	67	99	96	90
		Max-d	48	55	57	72	67	51	39	41	40	51	49	49	72
		Min-d	30	29	16	24	29	20	13	16	24	19	28	28	13
Republic of Korea	Kanghwa	Mean	38	41	49	54	64	60	45	46	47	44	31	29	46
		%	98	98	99	98	98	99	97	92	97	98	98	94	98
		Max-d	51	51	65	72	103	107	85	96	62	60	53	47	107
		Min-d	16	27	39	39	37	31	20	22	29	27	14	9	9
	Cheju (Kosan)	Mean	47	44	57	63	51	33	20	23	44	40	35	38	41
		%	99	98	99	97	88	99	92	99	99	97	95	96	97
		Max-d	59	63	82	84	90	48	48	47	64	54	52	50	90
		Min-d	39	33	45	37	25	12	5	9	22	21	20	27	5
	Imsil	Mean	26	32	41	52	46	39	19	21	26	23	24	23	31
		%	96	94	99	96	97	99	95	98	99	98	98	93	97
		Max-d	39	59	58	66	69	58	38	38	37	38	36	32	69
		Min-d	18	16	30	29	26	22	6	6	16	10	15	8	6
Russia	Mondy	Mean	39	-	-	58	49	43	35	36	32	34	34	35	38
		%	71	0	0	20	100	100	100	100	100	100	100	100	75
		Max-d	43	-	-	64	58	53	48	48	41	40	38	40	64
		Min-d	36	-	-	52	39	27	27	29	22	24	26	30	22
Thailand	Bangkok	Mean	29	34	28	25	22	12	10	10	10	21	19	29	21
		%	90	91	88	88	93	78	86	93	93	93	93	83	89
		Max-d	47	54	72	49	38	22	25	19	22	43	37	40	72
		Min-d	13	19	10	11	11	<1	4	5	<1	3	3	4	3
	Samutprakarn	Mean	26	31	26	22	19	14	12	10	10	22	22	29	20
		%	95	96	95	79	94	95	87	95	83	95	83	92	91
		Max-d	55	52	52	57	33	25	23	17	24	42	36	46	57
		Min-d	15	17	8	5	7	5	7	6	4	8	9	20	4
	Khanchanaburi (Vachiralongkorn Dam)	Mean	-	-	-	18	-	-	7	5	-	-	13	-	13
		%	0	0	0	64	0	0	6	38	0	0	50	0	13
		Max-d	-	-	-	34	-	-	8	9	-	-	19	-	34
		Min-d	-	-	-	3	-	-	3	2	-	-	3	-	2
	Chiangmai (Mae Hia)	Mean	22	30	32	37	26	19	12	8	12	17	17	20	21
		%	95	94	95	95	94	95	95	56	95	95	94	93	92
		Max-d	35	45	43	52	40	33	20	11	23	33	29	32	52
		Min-d	16	18	13	24	14	9	7	3	6	8	10	11	3

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 : μg/m³			2013												Annual
Country	Site		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
China	Jinyunshan	Mean	100	72	101	55	36	41	43	51	49	77	52	88	64
		%	100	97	100	100	90	93	100	100	100	100	100	100	99
		Max-d	166	143	237	112	79	75	83	84	121	138	129	159	237
		Min-d	40	9	21	16	21	12	20	19	8	15	7	23	7
	Hongwen	Mean	74	52	74	73	43	35	31	44	53	69	71	76	58
		%	94	97	100	100	100	100	87	100	100	100	100	100	98
		Max-d	119	116	126	114	83	67	74	117	79	120	134	136	136
		Min-d	33	23	37	25	11	9	13	17	37	23	21	<1	<1
	Xiang Zhou	Mean	85	48	56	52	30	26	22	33	47	88	67	97	54
		%	100	97	100	100	100	100	100	100	100	100	100	100	100
		Max-d	117	78	121	148	56	56	49	115	88	121	118	174	174
		Min-d	57	27	27	21	13	10	9	17	12	48	23	15	9
Japan	Rishiri	Mean	8	11	20	19	11	10	-	-	-	-	-	7	12
		%	88	88	71	86	88	85	0	0	0	0	0	68	48
		Max-d	28	38	52	82	54	19	-	-	-	-	-	18	82
		Min-d	3	3	4	3	3	3	-	-	-	-	-	3	3
	Ochiishi	Mean	10	14	21	27	10	8	7	15	21	24	21	17	16
		%	99	100	99	99	98	99	100	99	100	100	100	89	99
		Max-d	25	54	51	72	21	17	19	30	41	44	60	45	72
		Min-d	5	6	9	4	5	2	<1	3	5	9	9	9	2
	Tappi	Mean	13	18	26	26	18	12	11	19	15	18	21	14	18
		%	100	100	98	100	97	100	100	100	100	99	100	96	99
		Max-d	25	37	62	94	56	34	19	43	32	42	52	22	94
		Min-d	9	9	15	3	5	4	5	7	6	6	6	6	3
	Sado-seki	Mean	14	20	36	24	21	14	15	24	17	17	20	18	20
		%	76	98	97	99	100	89	55	100	100	100	100	92	92
		Max-d	23	45	109	55	52	21	39	54	36	39	37	35	109
		Min-d	4	7	12	8	6	6	8	10	6	4	8	2	2
	Happo	Mean	4	5	15	20	17	13	10	15	10	8	8	6	11
		%	86	41	12	90	100	100	100	90	100	100	99	28	79
		Max-d	12	8	20	48	37	26	22	35	23	19	19	9	48
		Min-d	<1	3	9	5	2	3	4	2	<1	<1	2	4	2
	Ijira	Mean	10	11	26	20	20	19	23	24	15	14	13	10	18
		%	21	100	100	100	100	100	99	100	99	100	100	31	88
		Max-d	20	19	69	48	35	29	39	48	39	29	28	18	69
		Min-d	5	5	9	<1	6	7	7	8	5	4	5	5	4
	Oki	Mean	29	27	39	32	33	16	26	23	19	22	28	33	27
		%	99	92	99	99	99	99	99	99	100	98	99	96	99
		Max-d	63	40	114	61	88	26	71	43	37	45	54	58	114
		Min-d	10	9	16	10	12	8	13	12	8	5	13	14	5
	Banryu	Mean	23	24	39	30	32	18	23	23	21	22	23	20	25
		%	99	100	99	100	100	100	100	99	100	99	99	96	99
		Max-d	57	48	124	55	68	27	53	47	39	44	49	41	124
		Min-d	7	11	12	11	10	8	11	5	7	3	12	7	3
	Yusuhara	Mean	14	14	33	22	22	11	20	21	12	11	15	12	17
		%	88	88	88	88	88	88	88	87	85	85	88	84	87
		Max-d	43	31	120	50	71	27	37	42	31	30	42	50	120
		Min-d	3	2	7	3	3	2	3	<1	2	1	4	2	1
	Hedo	Mean	29	28	41	34	23	19	12	11	21	29	35	32	26
		%	100	99	100	97	100	100	100	100	99	94	95	96	98
		Max-d	69	57	101	70	51	41	40	29	38	54	87	60	101
		Min-d	13	9	17	11	7	9	5	5	6	<1	8	13	5
	Ogasawara	Mean	12	13	15	17	12	7	6	7	12	13	12	12	12
		%	100	96	100	100	100	100	99	99	100	100	100	96	99
		Max-d	22	25	31	26	30	13	12	16	28	27	20	23	31
		Min-d	6	4	2	3	3	3	3	3	3	4	4	5	2
Republic of Korea	Kanghwa	Mean	67	61	63	71	58	37	34	31	35	26	43	51	48
		%	98	98	99	97	98	96	95	92	98	98	98	95	97
		Max-d	138	106	171	184	132	69	109	61	86	75	102	111	184
		Min-d	24	39	35	38	13	11	8	13	11	7	14	16	7
	Cheju (Kosan)	Mean	42	36	56	47	56	40	49	41	36	38	50	45	45
		%	93	98	96	97	98	98	92	96	92	93	98	90	95
		Max-d	119	74	149	83	111	61	72	67	54	77	110	113	149
		Min-d	13	11	24	23	21	19	30	24	21	23	26	16	11
	Imsil	Mean	49	38	57	48	52	41	29	27	28	28	34	39	39
		%	89	92	92	98	97	98	93	91	98	98	98	92	95
		Max-d	102	73	125	83	103	64	76	60	65	50	70	84	125
		Min-d	4	20	27	26	15	15	7	4	15	10	14	16	4
Thailand	Bangkok	Mean	66	66	40	35	28	30	25	23	24	47	38	78	41
		%	90	90	89	84	91	93	90	93	94	93	93	84	91
		Max-d	127	149	92	72	44	39	48	33	36	84	60	100	149
		Min-d	30	25	19	15	18	20	14	15	13	14	20	39	13
	Samutprakarn	Mean	60	56	40	34	24	29	30	28	29	55	54	136	44
		%	91	93	60	100	95	94	78	91	69	92	60	45	81
		Max-d	130	119	90	74	38	40	48	54	44	96	101	173	173
		Min-d	29	23	16	13	13	12	15	7	18	19	14	47	7
	Khanchanaburi (Vachiralongkorn Dam)	Mean	-	-	-	38	-	-	-	-	-	-	15	-	28
		%	0	0	0	67	0	0	0	0	0	0	52	0	10
		Max-d	-	-	-	143	-	-	-	-	-	-	24	-	143
		Min-d	-	-	-	3	-	-	-	-	-	-	10	-	3
	Chiangmai (Mae Hia)	Mean	53	60	98	76	29	20	18	19	18	31	23	45	41
		%	100	94	99	98	99	100	100	100	99	100	100	97	99
		Max-d	68	107	207	138	66	39	32	31	34	53	35	78	207
		Min-d	24	25	21	31	19	10	10	8	10	5	10	16	5

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/m³			2013												Annual
Country	Site		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
Japan	Rishiri	Mean	6	7	10	9	7	7	7	8	5	10	8	4	7
		%	100	99	87	100	100	100	100	100	100	100	100	97	99
		Max-d	16	19	17	21	23	13	11	20	13	27	27	15	27
		Min-d	2	3	4	2	3	3	4	2	2	2	3	1	1
	Ochiishi	Mean	5	7	11	12	5	5	4	7	7	9	8	6	7
		%	99	100	99	99	98	99	100	99	100	100	100	89	99
		Max-d	14	21	29	23	14	13	15	23	15	25	19	14	29
		Min-d	3	3	4	1	2	<1	<1	<1	2	3	2	2	1
	Oki	Mean	17	15	19	17	20	11	15	16	10	11	14	13	15
		%	61	60	99	100	100	100	99	99	100	99	99	96	93
		Max-d	35	22	52	30	57	18	60	38	31	27	27	24	60
		Min-d	5	4	8	7	6	6	7	5	4	3	6	4	3

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			2013												Annual
Country	Site		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
Cambodia	Phnom Penh	Mean	3.32	3.20	4.35	3.43	3.31	1.38	2.55	2.82	2.20	2.90	2.64	2.56	2.91
		%	82	100	100	100	100	100	50	100	100	100	100	100	95
		Max-2w	3.45	3.27	4.54	3.94	4.12	1.93	2.55	3.17	2.26	3.04	2.80	2.60	4.54
		Min-2w	3.18	3.14	4.16	2.91	2.52	0.83	2.55	2.47	2.14	2.76	2.50	2.53	0.83
Indonesia	Serpong	Mean	2.97	3.11	1.84	3.61	4.55	3.06	3.64	4.78	3.05	6.09	3.98	2.69	3.54
		%	100	100	100	78	100	100	100	100	100	100	100	100	98
		Max-2w	3.05	4.09	3.42	5.30	5.36	4.95	4.08	5.67	7.19	7.03	3.98	3.31	7.19
		Min-2w	2.90	2.12	0.27	1.92	3.74	1.17	3.19	3.90	0.74	5.15	3.98	2.26	0.27
Japan	Rishiri	Mean	1.64	2.55	3.42	3.02	2.72	2.63	2.12	3.49	-	-	-	-	2.72
		%	100	100	100	100	100	100	100	100	0	0	0	0	66
		Max-2w	2.18	2.61	4.42	3.70	3.87	2.87	2.38	4.00	-	-	-	-	4.42
		Min-2w	1.11	2.49	2.41	1.92	1.57	2.40	1.86	2.98	-	-	-	-	1.11
	Ochiishi	Mean	4.09	2.22	3.34	1.29	1.75	0.79	2.06	2.43	2.59	1.45	3.41	1.44	2.19
		%	100	100	100	52	100	100	100	100	100	100	47	100	92
		Max-2w	6.47	2.71	3.90	1.29	2.19	1.24	2.71	2.80	2.74	2.56	3.41	2.45	6.47
		Min-2w	1.72	1.73	2.78	1.29	1.30	0.34	1.40	2.07	2.44	0.34	3.41	0.25	0.25
	Tappi	Mean	2.90	5.49	4.72	3.91	4.10	3.68	3.33	6.80	2.54	3.31	3.59	2.63	3.83
		%	100	100	50	100	100	100	100	100	100	100	100	100	96
		Max-2w	3.39	7.95	4.72	4.69	4.81	4.11	4.53	7.53	4.43	3.51	3.70	3.69	7.95
		Min-2w	2.41	3.04	4.72	2.90	3.40	3.25	2.13	6.07	1.28	3.11	3.47	1.58	1.28
	Sado-seki	Mean	2.38	3.00	4.98	3.15	6.25	4.11	2.19	9.70	2.02	2.01	3.67	1.58	3.71
		%	45	100	100	100	100	100	100	100	100	100	100	100	95
		Max-2w	2.38	3.91	5.13	4.89	7.20	4.25	3.91	9.85	2.37	3.23	3.90	2.32	9.85
		Min-2w	2.38	2.09	4.82	0.70	5.30	3.97	0.47	9.54	1.58	0.79	3.43	0.84	0.47
	Happo	Mean	1.03	1.73	3.89	2.02	3.99	3.13	2.70	6.88	1.45	1.80	0.30	0.70	2.50
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-2w	1.18	1.84	5.17	3.57	4.57	4.12	3.02	6.89	2.00	2.61	0.30	0.72	6.89
		Min-2w	0.87	1.62	2.61	0.39	3.42	2.14	2.38	6.86	1.13	0.99	0.30	0.68	0.30
	Ijira	Mean	1.86	0.18	5.12	1.66	4.87	3.25	5.36	4.71	1.89	0.34	1.65	2.23	2.88
		%	100	100	100	100	100	100	100	100	33	52	100	56	85
		Max-2w	2.32	0.21	5.39	4.20	5.21	3.28	5.81	8.15	1.89	0.34	3.13	2.23	8.15
		Min-2w	1.39	0.16	4.85	0.33	4.52	3.22	4.92	1.27	1.89	0.34	0.17	2.23	0.16
	Oki	Mean	6.41	5.87	8.03	5.86	8.10	3.48	4.66	7.55	3.81	4.33	5.15	3.97	5.56
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-2w	6.84	6.60	8.88	6.22	10.14	3.87	7.86	9.20	5.47	6.80	5.46	5.14	10.14
		Min-2w	5.99	5.15	7.18	5.40	6.05	3.09	1.46	5.90	2.14	1.92	4.84	2.81	1.46
	Banryu	Mean	4.22	5.87	8.36	6.24	9.52	4.13	5.41	8.84	4.84	3.42	4.68	3.92	5.56
		%	100	100	100	100	52	100	100	100	100	100	100	100	96
		Max-2w	5.03	6.38	9.01	6.70	9.52	4.82	8.28	10.74	6.74	5.73	5.70	4.85	10.74
		Min-2w	3.40	5.37	7.72	5.80	9.52	3.44	2.55	6.95	2.93	2.25	3.66	2.98	2.25
	Yusuhara	Mean	4.64	5.23	7.13	6.20	6.70	2.92	5.93	8.30	4.15	4.04	4.62	3.63	5.28
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-2w	6.30	6.08	7.41	6.89	9.14	4.43	6.11	10.96	6.16	5.91	6.33	5.02	10.96
		Min-2w	2.98	4.37	6.86	5.79	4.27	1.42	5.74	5.64	2.55	2.17	2.91	2.24	1.42
	Hedo	Mean	7.21	5.80	6.05	5.88	5.06	3.15	1.96	2.11	3.29	7.41	8.59	7.74	5.43
		%	100	100	100	100	100	100	54	100	100	100	100	100	96
		Max-2w	9.20	6.51	6.21	6.48	5.89	3.58	1.96	2.65	5.04	9.35	9.20	9.08	9.35
		Min-2w	5.22	5.09	5.89	5.33	4.23	2.73	1.96	1.56	0.28	5.47	7.97	6.41	0.28
	Ogasawara	Mean	3.39	3.16	4.69	4.31	3.22	1.70	2.12	2.89	1.43	2.13	3.44	4.10	3.10
		%	100	100	100	100	100	100	100	100	100	66	100	100	96
		Max-2w	3.88	3.72	5.44	5.00	3.26	1.75	3.15	5.27	1.56	2.38	3.56	5.17	5.44
		Min-2w	2.91	2.61	3.94	3.30	3.18	1.65	1.10	0.50	1.29	1.88	3.32	3.04	0.50
	Tokyo	Mean	2.14	2.64	5.28	4.31	4.78	5.13	7.67	10.18	3.24	2.99	2.84	1.97	4.38
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-2w	2.23	2.77	5.33	4.78	4.94	5.81	8.03	11.69	3.75	4.11	3.41	2.61	11.69
		Min-2w	2.05	2.52	5.23	3.92	4.61	4.46	7.31	8.66	2.22	1.86	2.28	1.33	1.33
Malaysia	Petaling Jaya	Mean	3.01	3.06	5.06	4.19	1.97	2.79	4.32	3.49	2.92	2.46	2.34	2.41	3.17
		%	100	100	100	100	100	100	75	100	100	100	80	100	96
		Max-w	3.89	3.68	8.80	5.90	3.36	4.85	5.62	5.41	4.20	3.48	2.92	3.51	8.80
		Min-w	1.90	2.26	1.34	3.34	0.02	0.03	3.27	1.25	1.12	1.16	1.62	1.54	0.02
	Tanah Rata	Mean	1.05	1.07	2.38	2.10	1.17	1.50	0.95	2.84	1.84	0.61	0.83	1.15	1.48
		%	100	100	100	100	100	100	100	100	75	100	100	100	98
		Max-w	1.56	1.58	4.07	2.61	1.97	2.52	2.45	3.39	2.93	0.99	1.38	2.22	4.07
		Min-w	0.41	0.72	0.77	1.61	0.48	<0.01	<0.01	1.71	0.05	0.22	0.46	0.10	<0.01
	Danum Valley	Mean	0.52	0.73	-	0.25	0.42	0.21	1.38	-	1.30	1.10	1.00	-	0.78
		%	100	50	0	100	100	100	100	0	100	100	50	0	67
		Max-2w	0.83	0.73	-	0.40	0.48	0.32	2.16	-	1.79	1.40	1.00	-	2.16
		Min-2w	0.30	0.73	-	0.09	0.35	0.10	0.40	-	0.80	0.80	1.00	-	0.09

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

Unit : μg/m³			2013												Annual
Country	Site		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
Myanmar	Yangon	Mean	1.63	3.25	4.64	0.31	1.67	0.27	0.24	0.65	0.40	-	-	-	1.40
		%	100	100	100	100	100	100	100	100	100	0	0	0	74
		Max-2w	4.12	3.94	8.66	0.36	3.08	0.37	0.57	1.28	0.71	-	-	-	8.66
		Min-2w	0.28	2.56	0.62	0.27	0.26	0.18	<0.01	0.02	0.09	-	-	-	<0.01
Philippines	Mt. Sto. Tomas	Mean	0.56	0.44	0.53	0.30	0.11	0.30	0.24	0.21	0.15	0.24	0.20	0.08	0.29
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-w	0.83	0.55	0.61	0.66	0.17	0.45	0.39	0.52	0.27	0.42	0.61	0.14	0.83
		Min-w	0.45	0.29	0.43	0.02	0.07	0.14	0.11	0.05	0.04	0.11	<0.01	0.02	<0.01
Republic of Korea	Kanghwa	Mean	6.13	7.44	3.96	9.57	10.94	7.36	10.02	7.15	4.51	3.01	3.91	6.37	7.43
		%	6	18	6	17	16	17	16	19	17	16	17	16	14
		Max-d	9.66	16.92	5.19	16.85	13.88	12.49	35.29	14.90	10.45	3.93	12.75	12.00	35.29
		Min-d	2.61	2.58	2.74	3.88	8.01	<0.01	1.30	<0.01	<0.01	1.83	1.38	4.45	1.30
	Cheju (Kosan)	Mean	3.44	3.49	3.33	3.76	5.75	5.34	2.87	3.82	4.46	1.99	7.08	6.03	4.37
		%	16	14	16	17	16	17	16	16	17	10	17	16	16
		Max-d	5.11	5.26	5.85	5.48	12.31	8.62	4.93	6.49	6.12	2.63	10.30	15.65	15.65
		Min-d	2.00	1.22	1.40	2.97	0.71	3.52	0.98	1.63	1.69	1.45	3.33	1.87	0.71
	Imsil	Mean	5.24	3.38	3.11	6.32	5.38	8.30	4.51	10.47	4.04	3.40	3.20	4.35	5.61
		%	16	18	16	17	16	17	16	6	17	13	17	13	13
		Max-d	14.83	8.40	7.20	9.31	8.94	10.28	15.25	14.09	7.65	5.78	11.46	10.35	15.25
		Min-d	<0.01	<0.01	<0.01	4.08	<0.01	7.40	<0.01	6.85	0.99	1.37	<0.01	1.63	0.99
Russia	Mondy	Mean	0.11	0.01	0.06	0.12	0.06	0.07	0.66	0.29	0.24	0.19	0.44	0.38	0.22
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-m	0.11	0.01	0.09	0.12	0.06	0.07	0.66	0.29	0.24	0.19	0.59	0.38	0.66
		Min-m	0.11	0.01	0.02	0.12	0.06	0.07	0.66	0.29	0.24	0.19	<0.01	0.38	<0.01
	Listvianka	Mean	1.18	1.04	0.58	0.51	0.63	0.34	0.13	0.28	0.33	0.83	0.88	1.32	0.67
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-w	1.50	1.53	0.67	0.69	1.45	0.46	0.25	0.38	0.44	2.09	1.09	1.83	2.09
		Min-w	0.76	0.39	0.47	0.23	0.28	0.15	0.03	0.20	0.23	0.32	0.76	0.88	0.03
	Irkutsk	Mean	2.77	2.28	1.43	1.26	0.47	0.88	0.67	1.44	1.55	1.42	2.09	5.40	1.71
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-w	4.27	3.98	1.63	1.70	1.12	1.51	1.36	3.58	5.10	2.92	2.56	7.70	7.70
		Min-w	1.58	0.27	0.91	0.56	0.15	0.27	0.07	0.19	0.28	0.27	1.74	3.94	0.07
	Primorskaya	Mean	5.25	5.01	4.97	4.41	4.96	3.53	2.28	2.86	1.98	3.30	3.28	2.07	3.66
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-2w	5.46	5.41	5.23	4.94	6.24	3.77	3.15	3.72	2.28	3.67	3.83	2.56	6.24
		Min-2w	5.04	4.62	4.71	3.87	3.69	3.29	1.42	2.01	1.67	2.93	2.73	1.58	1.42
Thailand	Bangkok	Mean	0.17	4.82	1.94	4.97	1.25	0.40	0.86	1.33	0.90	1.96	2.55	12.41	2.80
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-10d	0.39	6.13	5.38	7.98	1.51	1.15	1.74	1.91	1.01	2.47	2.88	14.37	14.37
		Min-10d	0.02	3.42	0.19	2.97	0.75	0.02	0.21	0.81	0.73	1.47	2.12	9.87	0.02
	Khanchanaburi (Vachiralongkorn Dam)	Mean	-	-	-	3.78	-	-	-	0.43	-	-	<0.01	-	1.40
		%	0	0	0	69	0	0	0	44	0	0	50	0	13
		Max-2w	-	-	-	3.78	-	-	-	0.43	-	-	<0.01	-	3.78
		Min-2w	-	-	-	3.78	-	-	-	0.43	-	-	<0.01	-	<0.01
	Chiangmai (Mae Hia)	Mean	0.53	1.64	-	0.10	0.20	0.32	0.18	0.25	0.10	1.04	0.15	-	0.39
		%	94	36	0	30	97	97	97	97	97	97	100	0	70
		Max-10d	1.01	1.64	-	0.10	0.32	0.42	0.21	0.30	0.13	1.19	0.20	-	1.64
		Min-10d	0.20	1.64	-	0.10	0.09	0.24	0.14	0.22	0.09	0.90	0.11	-	0.09
	Nakhon Ratchasima	Mean	-	-	-	3.04	2.29	2.15	1.47	1.59	0.84	8.47	3.37	-	2.89
		%	0	0	0	38	100	100	100	100	100	100	100	0	62
		Max-10d	-	-	-	3.04	2.56	3.42	1.76	1.90	1.57	11.32	4.05	-	11.32
		Min-10d	-	-	-	3.04	2.03	0.96	1.25	1.41	0.19	4.95	2.84	-	0.19
Vietnam	Hanoi	Mean	12.83	14.04	11.22	8.93	5.64	5.84	1.48	5.13	11.57	27.00	15.07	18.59	11.54
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-w	22.81	21.35	14.85	13.91	8.23	12.95	3.44	7.15	17.59	29.53	25.20	24.55	29.53
		Min-w	6.47	8.96	8.87	2.87	1.58	2.37	0.69	0.85	4.43	23.77	6.73	13.86	0.69
	Hoa Binh	Mean	3.60	2.89	3.10	2.67	1.15	0.71	0.40	1.35	0.94	4.16	5.30	4.71	2.58
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-w	5.65	4.33	5.37	5.56	3.12	1.51	0.64	2.59	1.45	11.91	9.95	6.72	11.91
		Min-w	1.35	1.06	1.22	0.25	0.28	0.27	0.19	0.34	0.40	1.56	2.71	3.39	0.19

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			2013												Annual
Country	Site		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
Cambodia	Phnom Penh	Mean	1.42	1.13	1.20	0.99	1.16	1.31	1.37	1.05	1.09	1.17	1.28	1.05	1.18
		%	82	100	100	100	100	100	50	100	100	100	100	100	95
		Max-2w	1.54	1.20	1.21	1.08	1.33	1.59	1.37	1.07	1.16	1.23	1.50	1.20	1.59
		Min-2w	1.31	1.06	1.18	0.89	0.93	1.02	1.37	1.03	1.02	1.11	1.00	0.89	0.89
Indonesia	Serpong	Mean	0.36	0.62	0.16	0.56	0.71	0.68	1.04	0.32	0.15	1.14	0.41	0.42	0.53
		%	100	100	100	78	100	100	100	100	100	100	100	100	98
		Max-2w	0.59	0.67	0.26	0.74	0.77	0.86	1.19	0.64	0.34	1.25	0.41	0.51	1.25
		Min-2w	0.14	0.57	0.06	0.39	0.66	0.50	0.88	<0.01	0.04	1.04	0.41	0.33	<0.01
Japan	Rishiri	Mean	0.40	0.34	0.81	0.91	0.87	0.41	0.33	0.58	-	-	-	-	0.60
		%	100	100	100	100	100	100	100	100	0	0	0	0	66
		Max-2w	0.66	0.41	1.13	1.22	1.39	0.56	0.39	0.86	-	-	-	-	1.39
		Min-2w	0.13	0.27	0.50	0.60	0.35	0.26	0.28	0.31	-	-	-	-	0.13
	Ochiishi	Mean	0.58	0.63	1.04	0.41	0.30	0.19	0.37	0.36	0.26	0.47	0.05	0.23	0.42
		%	100	100	100	52	100	100	100	100	100	100	47	100	92
		Max-2w	0.77	0.73	1.30	0.41	0.37	0.31	0.43	0.50	0.39	0.91	0.05	0.37	1.30
		Min-2w	0.39	0.54	0.78	0.41	0.23	0.08	0.30	0.22	0.13	0.03	0.05	0.02	0.02
	Tappi	Mean	1.02	0.68	1.80	1.72	1.64	0.40	0.50	1.03	0.97	1.17	1.12	0.55	1.04
		%	100	100	50	100	100	100	100	100	100	100	100	100	96
		Max-2w	1.52	0.75	1.80	2.15	1.78	0.47	0.60	1.29	1.15	1.37	1.26	0.59	2.15
		Min-2w	0.52	0.62	1.80	0.87	1.51	0.33	0.41	0.77	0.62	0.97	0.98	0.52	0.33
	Sado-seki	Mean	0.37	0.58	2.07	1.21	1.02	0.75	0.69	0.96	1.00	0.68	0.79	0.43	0.92
		%	45	100	100	100	100	100	100	100	100	100	100	100	95
		Max-2w	0.37	0.83	2.19	1.99	1.38	1.03	1.24	1.61	1.23	1.12	0.92	0.75	2.19
		Min-2w	0.37	0.34	1.95	0.09	0.67	0.47	0.13	0.31	0.54	0.24	0.65	0.11	0.09
	Happo	Mean	0.08	0.04	1.72	0.55	0.58	0.27	0.14	0.16	0.22	0.22	0.08	0.12	0.36
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-2w	0.13	0.06	2.56	1.03	0.68	0.33	0.19	0.17	0.32	0.29	0.08	0.13	2.56
		Min-2w	0.03	0.02	0.89	0.16	0.48	0.21	0.10	0.16	0.14	0.14	0.08	0.12	0.02
	Ijira	Mean	0.24	0.02	1.26	0.27	0.68	0.16	0.08	0.05	0.07	0.03	0.18	0.32	0.30
		%	100	100	100	100	100	100	100	100	33	52	100	56	85
		Max-2w	0.31	0.03	1.38	0.68	0.88	0.21	0.11	0.07	0.07	0.03	0.33	0.32	1.38
		Min-2w	0.18	0.01	1.13	0.06	0.48	0.11	0.04	0.04	0.07	0.03	0.03	0.32	0.01
	Oki	Mean	2.42	1.73	4.19	2.69	1.29	0.59	1.33	1.01	0.84	1.35	2.58	1.59	1.82
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-2w	2.47	1.83	4.74	3.18	1.56	0.87	1.85	1.55	1.00	1.80	3.11	2.37	4.74
		Min-2w	2.37	1.63	3.64	2.40	1.01	0.30	0.82	0.48	0.69	0.98	2.05	0.81	0.30
	Banryu	Mean	2.02	2.33	4.50	2.33	0.87	0.39	1.19	0.48	0.80	0.91	1.97	1.64	1.65
		%	100	100	100	100	52	100	100	100	100	100	100	100	96
		Max-2w	2.04	2.88	4.65	3.13	0.87	0.65	1.68	0.77	1.03	1.28	2.09	2.26	4.65
		Min-2w	2.00	1.78	4.34	1.67	0.87	0.14	0.71	0.19	0.57	0.55	1.86	1.02	0.14
	Yusuhara	Mean	0.88	0.73	2.53	0.76	0.29	0.07	0.15	0.08	0.24	0.28	1.09	0.90	0.66
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-2w	0.91	1.08	2.95	1.34	0.38	0.08	0.18	0.13	0.53	0.45	1.26	1.54	2.95
		Min-2w	0.86	0.38	2.12	0.45	0.21	0.07	0.12	0.04	0.05	0.10	0.92	0.26	0.04
	Hedo	Mean	1.84	1.58	2.52	2.02	1.35	1.01	0.51	0.65	0.75	1.43	3.16	2.34	1.62
		%	100	100	100	100	100	100	54	100	100	100	100	100	96
		Max-2w	2.34	2.07	2.80	2.23	1.54	1.07	0.51	0.92	1.23	1.62	3.72	3.17	3.72
		Min-2w	1.35	1.09	2.23	1.63	1.15	0.96	0.51	0.39	<0.01	1.23	2.61	1.52	<0.01
	Ogasawara	Mean	0.68	0.85	0.94	1.08	0.55	0.19	0.21	0.18	0.28	0.33	0.87	0.84	0.60
		%	100	100	100	100	100	100	100	100	100	66	100	100	96
		Max-2w	0.83	1.10	0.95	1.55	0.71	0.22	0.24	0.27	0.46	0.34	0.95	1.01	1.55
		Min-2w	0.52	0.59	0.93	0.71	0.40	0.15	0.19	0.09	0.11	0.32	0.79	0.66	0.09
	Tokyo	Mean	3.40	3.27	4.69	3.36	3.06	2.12	2.96	1.98	2.89	3.42	3.21	3.20	3.13
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-2w	3.74	3.57	4.81	4.17	3.37	2.12	3.23	2.02	3.36	4.64	3.76	4.12	4.81
		Min-2w	3.06	2.97	4.57	2.72	2.75	2.11	2.70	1.94	2.59	2.20	2.67	2.29	1.94
Malaysia	Petaling Jaya	Mean	1.37	1.89	4.35	1.27	0.94	2.02	1.85	1.31	1.17	1.13	0.98	1.21	1.65
		%	100	100	100	100	100	100	75	100	100	100	80	100	96
		Max-w	1.62	2.74	10.12	1.73	2.36	5.76	2.08	2.00	1.61	1.84	1.32	1.66	10.12
		Min-w	1.01	1.02	1.04	0.90	<0.01	0.07	1.44	0.56	0.50	0.64	0.57	0.99	<0.01
	Tanah Rata	Mean	0.26	0.28	0.68	0.10	0.12	1.11	0.64	0.30	0.25	0.05	0.07	0.20	0.34
		%	100	100	100	100	100	100	100	100	75	100	100	100	98
		Max-w	0.66	0.42	1.67	0.18	0.31	2.60	0.82	0.47	0.62	0.09	0.20	0.38	2.60
		Min-w	0.09	0.17	0.19	0.04	<0.01	<0.01	0.52	0.11	<0.01	<0.01	0.02	0.02	<0.01
	Danum Valley	Mean	0.15	0.06	-	0.06	0.03	0.06	0.28	-	<0.01	0.02	0.01	-	0.09
		%	100	50	0	100	100	100	100	0	100	100	50	0	67
		Max-2w	0.21	0.06	-	0.09	0.05	0.10	0.38	-	<0.01	0.03	0.01	-	0.38
		Min-2w	0.07	0.06	-	0.02	0.01	0.01	0.20	-	<0.01	<0.01	0.01	-	<0.01

Table 4.14 Particulate matter component: NO_3^-

Unit : μg/m³			2013												Annual
Country	Site		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
Myanmar	Yangon	Mean	0.40	1.09	0.76	0.18	0.52	0.75	0.58	0.28	0.31	-	-	-	0.54
		%	100	100	100	100	100	100	100	100	100	0	0	0	74
		Max-2w	0.91	1.43	1.35	0.22	1.03	0.94	0.80	0.55	0.59	-	-	-	1.43
		Min-2w	0.13	0.76	0.17	0.15	<0.01	0.57	0.14	0.01	0.03	-	-	-	<0.01
Philippines	Mt. Sto. Tomas	Mean	0.56	0.44	0.53	0.30	0.11	0.30	0.24	0.21	0.15	0.24	0.20	0.08	0.29
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-w	0.83	0.55	0.61	0.66	0.17	0.45	0.39	0.52	0.27	0.42	0.61	0.14	0.83
		Min-w	0.45	0.29	0.43	0.02	0.07	0.14	0.11	0.05	0.04	0.11	<0.01	0.02	<0.01
Republic of Korea	Kanghwa	Mean	6.68	6.49	6.02	9.10	3.09	1.64	1.33	0.59	0.34	1.12	1.87	5.02	3.51
		%	6	18	6	17	16	17	16	19	17	16	17	16	14
		Max-d	9.94	14.14	6.10	15.84	6.72	3.45	2.98	1.22	0.61	2.62	4.80	10.36	15.84
		Min-d	3.42	1.33	5.95	3.18	0.68	<0.01	0.83	<0.01	<0.01	0.51	0.65	1.57	0.51
	Cheju (Kosan)	Mean	0.49	0.13	1.53	0.61	0.43	0.98	0.51	0.70	0.34	0.93	0.73	1.47	0.74
		%	16	14	16	17	16	17	16	16	17	10	17	16	16
		Max-d	0.92	0.24	5.47	1.53	1.23	2.39	0.75	1.03	0.59	1.23	1.22	4.08	5.47
		Min-d	0.30	<0.01	0.30	0.20	0.17	0.28	0.33	0.51	0.16	0.55	0.27	0.55	<0.01
	Imsil	Mean	6.36	5.56	3.95	3.48	0.36	0.88	0.48	0.51	0.33	2.00	0.99	5.19	2.95
		%	16	18	16	17	16	17	16	6	17	13	17	13	13
		Max-d	20.92	12.44	8.01	10.93	0.56	1.88	0.75	0.53	0.43	5.81	2.62	14.26	20.92
		Min-d	<0.01	<0.01	<0.01	0.50	<0.01	0.47	<0.01	0.48	0.29	0.49	<0.01	1.13	0.29
Russia	Mondy	Mean	<0.01	0.02	<0.01	<0.01	<0.01	0.06	<0.01	<0.01	<0.01	<0.01	0.08	0.02	0.02
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-m	<0.01	0.02	<0.01	<0.01	<0.01	0.06	<0.01	<0.01	<0.01	<0.01	0.12	0.02	0.12
		Min-m	<0.01	0.02	<0.01	<0.01	<0.01	0.06	<0.01	<0.01	<0.01	<0.01	<0.01	0.02	<0.01
	Listvianka	Mean	0.10	0.13	0.10	0.06	0.05	0.04	<0.01	0.03	0.05	0.19	0.18	0.11	0.09
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-w	0.18	0.20	0.18	0.12	0.08	0.06	0.02	0.04	0.06	0.53	0.29	0.20	0.53
		Min-w	0.05	0.06	0.06	0.02	0.02	0.02	<0.01	0.02	0.03	0.05	0.09	<0.01	<0.01
	Irkutsk	Mean	0.83	0.79	0.39	0.26	0.12	0.18	0.13	0.32	0.40	0.52	0.64	1.72	0.49
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-w	1.36	1.49	0.52	0.33	0.34	0.35	0.31	0.71	1.13	1.15	1.05	2.11	2.11
		Min-w	0.29	0.06	0.27	0.09	0.04	0.03	<0.01	0.02	0.08	0.10	0.24	1.47	<0.01
	Primorskaya	Mean	2.36	2.06	2.66	2.04	0.86	0.30	0.27	0.28	0.32	1.11	0.81	1.01	1.17
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-2w	2.62	2.39	2.80	2.26	1.04	0.35	0.34	0.28	0.55	1.39	1.09	1.02	2.80
		Min-2w	2.09	1.72	2.51	1.81	0.68	0.24	0.19	0.27	0.08	0.83	0.53	1.00	0.08
Thailand	Bangkok	Mean	0.17	4.56	0.96	2.40	0.50	0.35	0.44	0.98	0.55	0.69	1.67	3.68	1.41
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-10d	0.43	5.34	2.56	3.45	0.62	0.99	1.00	1.11	0.80	0.78	1.89	4.67	5.34
		Min-10d	0.03	3.12	0.03	1.68	0.33	0.02	0.15	0.91	0.29	0.54	1.52	2.69	0.02
	Khanchanaburi (Vachiralongkorn Dam)	Mean	-	-	-	0.16	-	-	-	0.13	-	-	0.05	-	0.11
		%	0	0	0	69	0	0	0	44	0	0	50	0	13
		Max-2w	-	-	-	0.16	-	-	-	0.13	-	-	0.05	-	0.16
		Min-2w	-	-	-	0.16	-	-	-	0.13	-	-	0.05	-	0.05
	Chiangmai (Mae Hia)	Mean	0.18	0.42	-	0.31	0.50	0.23	0.24	0.35	0.35	0.22	0.28	-	0.30
		%	94	36	0	30	97	97	97	97	97	97	100	0	70
		Max-10d	0.30	0.42	-	0.31	0.60	0.32	0.27	0.63	0.45	0.26	0.62	-	0.63
		Min-10d	0.06	0.42	-	0.31	0.33	0.17	0.21	0.15	0.29	0.15	0.11	-	0.06
	Nakhon Ratchasima	Mean	-	-	-	0.09	0.30	0.51	0.62	0.38	0.12	0.14	0.92	-	0.41
		%	0	0	0	38	100	100	100	100	100	100	100	0	62
		Max-10d	-	-	-	0.09	0.42	0.97	0.80	0.50	0.16	0.21	1.00	-	1.00
		Min-10d	-	-	-	0.09	0.13	0.18	0.38	0.27	0.08	0.08	0.85	-	0.08
Vietnam	Hanoi	Mean	9.05	8.66	7.57	5.77	3.77	3.34	1.53	4.86	5.48	7.82	9.43	13.90	6.73
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-w	18.54	12.66	10.87	8.09	5.28	5.73	2.99	7.36	7.90	14.62	13.20	17.77	18.54
		Min-w	3.95	6.16	5.43	2.77	1.24	1.83	0.87	1.32	2.79	1.44	6.03	8.61	0.87
	Hoa Binh	Mean	1.20	0.81	1.27	1.56	0.52	0.55	0.36	0.99	0.56	1.27	1.85	2.50	1.11
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-w	3.59	1.15	1.72	4.27	0.65	0.88	0.67	2.06	0.79	2.97	2.39	3.05	4.27
		Min-w	0.40	0.19	0.57	0.28	0.30	0.35	0.07	0.48	0.36	0.19	1.34	1.87	0.07

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			2013												Annual
Country	Site		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
Cambodia	Phnom Penh	Mean	0.77	0.31	0.26	0.18	0.22	0.52	0.54	0.53	0.42	0.21	0.63	0.21	0.40
		%	82	100	100	100	100	100	50	100	100	100	100	100	95
		Max-2w	0.98	0.36	0.28	0.21	0.26	0.70	0.54	0.81	0.58	0.22	0.79	0.23	0.98
		Min-2w	0.55	0.27	0.23	0.16	0.16	0.34	0.54	0.25	0.26	0.19	0.53	0.19	0.16
Indonesia	Serpong	Mean	0.15	0.31	0.14	0.14	0.10	0.25	0.45	0.05	0.30	0.12	0.12	0.19	0.20
		%	100	100	100	78	100	100	100	100	100	100	100	100	98
		Max-2w	0.25	0.52	0.25	0.17	0.11	0.33	0.78	0.08	0.72	0.16	0.12	0.36	0.78
		Min-2w	0.05	0.09	0.02	0.12	0.10	0.18	0.12	0.03	0.08	0.08	0.12	0.10	0.02
Japan	Rishiri	Mean	1.09	1.97	5.76	3.70	0.56	0.23	0.26	1.59	-	-	-	-	2.00
		%	100	100	100	100	100	100	100	100	0	0	0	0	66
		Max-2w	1.16	3.26	7.84	6.32	0.91	0.39	0.38	3.08	-	-	-	-	7.84
		Min-2w	1.01	0.68	3.68	1.34	0.22	0.06	0.14	0.10	-	-	-	-	0.06
	Ochiishi	Mean	10.13	4.07	7.25	4.77	2.30	0.45	0.36	0.66	0.71	4.93	21.86	5.67	4.58
		%	100	100	100	52	100	100	100	100	100	100	47	100	92
		Max-2w	15.21	4.51	8.79	4.77	3.96	0.70	0.61	0.73	0.78	7.94	21.86	11.54	21.86
		Min-2w	5.04	3.64	5.71	4.77	0.63	0.19	0.10	0.58	0.64	1.91	21.86	1.30	0.10
	Tappi	Mean	5.02	22.26	8.80	7.16	0.64	0.03	0.14	0.86	2.54	6.51	9.87	9.62	5.91
		%	100	100	50	100	100	100	100	100	100	100	100	100	96
		Max-2w	5.51	39.69	8.80	8.69	0.93	0.03	0.19	1.51	2.60	10.26	12.03	16.34	39.69
		Min-2w	4.53	4.84	8.80	5.94	0.34	0.02	0.10	0.20	2.50	2.75	7.72	2.91	0.02
	Sado-seki	Mean	5.67	4.25	6.11	4.21	0.12	0.12	0.90	0.27	2.12	3.02	11.38	4.40	3.43
		%	45	100	100	100	100	100	100	100	100	100	100	100	95
		Max-2w	5.67	5.34	6.24	5.37	0.14	0.23	1.72	0.28	2.68	3.49	16.44	5.89	16.44
		Min-2w	5.67	3.15	5.97	2.81	0.11	<0.01	0.08	0.26	1.81	2.55	6.31	2.92	<0.01
	Happo	Mean	<0.01	<0.01	0.11	0.04	<0.01	<0.01	<0.01	<0.01	<0.01	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	0.01	0.19	0.08	<0.01	<0.01	0.01	<0.01	0.02	0.07	<0.01	<0.01	0.19
		Min-2w	<0.01	<0.01	0.03	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
	Ijira	Mean	0.04	0.01	0.09	0.04	0.03	<0.01	<0.01	<0.01	<0.01	<0.01	0.02	0.12	0.03
		%	100	100	100	100	100	100	100	100	33	52	100	56	85
		Max-2w	0.04	0.02	0.14	0.10	0.03	<0.01	<0.01	<0.01	<0.01	<0.01	0.03	0.12	0.14
		Min-2w	0.03	<0.01	0.04	<0.01	0.02	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.12	<0.01
	Oki	Mean	8.02	6.36	6.74	4.52	0.21	0.68	1.48	0.33	2.29	6.92	10.18	11.33	4.98
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-2w	9.72	6.73	9.41	7.21	0.30	1.02	1.69	0.43	2.66	15.45	10.90	13.68	15.45
		Min-2w	6.32	5.99	4.07	2.64	0.12	0.34	1.27	0.24	1.92	2.24	9.46	8.99	0.12
	Banryu	Mean	1.93	1.84	2.08	1.32	0.06	0.06	0.20	0.03	1.26	3.55	1.44	2.81	1.52
		%	100	100	100	100	52	100	100	100	100	100	100	100	96
		Max-2w	2.25	2.31	2.46	1.95	0.06	0.10	0.22	0.06	1.92	7.16	1.50	3.31	7.16
		Min-2w	1.61	1.37	1.70	0.46	0.06	0.02	0.18	<0.01	0.60	1.47	1.38	2.32	<0.01
	Yusuhara	Mean	0.08	0.04	0.14	0.07	<0.01	<0.01	<0.01	0.01	0.06	0.09	0.15	0.12	0.06
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-2w	0.09	0.07	0.15	0.08	<0.01	<0.01	<0.01	0.02	0.16	0.17	0.15	0.17	0.17
		Min-2w	0.06	<0.01	0.12	0.06	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.14	0.07	<0.01
	Hedo	Mean	7.97	5.23	4.64	4.51	2.30	5.25	6.31	3.63	6.77	27.45	7.08	7.20	7.27
		%	100	100	100	100	100	100	54	100	100	100	100	100	96
		Max-2w	8.77	6.22	4.79	7.63	2.92	8.55	6.31	4.93	11.67	37.77	8.11	9.36	37.77
		Min-2w	7.16	4.24	4.49	2.38	1.67	1.95	6.31	2.33	1.45	17.13	6.05	5.04	1.45
	Ogasawara	Mean	3.46	4.20	3.49	2.90	2.56	1.87	1.27	0.95	5.69	8.96	3.29	3.83	3.51
		%	100	100	100	100	100	100	100	100	100	66	100	100	96
		Max-2w	5.20	5.32	5.15	4.58	3.88	2.50	2.05	1.74	8.58	9.25	4.47	5.00	9.25
		Min-2w	1.71	3.09	1.82	1.98	1.24	1.24	0.49	0.15	2.79	8.66	2.12	2.65	0.15
	Tokyo	Mean	0.67	0.64	1.27	0.43	0.57	0.11	0.08	0.04	1.00	0.84	0.62	0.71	0.59
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-2w	0.73	0.64	1.88	0.57	0.80	0.15	0.10	0.04	1.54	0.97	0.64	0.71	1.88
		Min-2w	0.61	0.64	0.67	0.33	0.35	0.08	0.05	0.04	0.71	0.71	0.59	0.71	0.04
Malaysia	Petaling Jaya	Mean	0.14	0.26	0.07	0.13	0.11	0.19	0.26	0.15	0.15	0.11	0.21	0.27	0.16
		%	100	100	100	100	100	100	75	100	100	100	80	100	96
		Max-w	0.22	0.57	0.09	0.18	0.36	0.46	0.40	0.26	0.22	0.18	0.30	0.44	0.57
		Min-w	0.07	0.06	0.06	0.05	<0.01	0.02	0.12	0.06	0.11	0.03	0.15	0.12	<0.01
	Tanah Rata	Mean	0.09	0.19	0.03	0.03	0.03	0.24	0.04	0.06	0.03	0.02	0.03	0.10	0.07
		%	100	100	100	100	100	100	100	100	75	100	100	100	98
		Max-w	0.14	0.32	0.07	0.10	0.08	0.49	0.07	0.14	0.05	0.03	0.08	0.21	0.49
		Min-w	0.04	0.02	<0.01	<0.01	<0.01	<0.01	0.02	0.02	<0.01	<0.01	<0.01	0.01	<0.01
	Danum Valley	Mean	0.33	0.09	-	<0.01	0.01	0.04	0.27	-	<0.01	<0.01	0.01	-	0.11
		%	100	50	0	100	100	100	100	0	100	100	50	0	67
		Max-2w	0.51	0.09	-	<0.01	0.02	0.07	0.39	-	<0.01	<0.01	0.01	-	0.51
		Min-2w	0.17	0.09	-	<0.01	<0.01	<0.01	0.15	-	<0.01	<0.01	0.01	-	<0.01

Table 4.15 Particulate matter component: Cl⁻

Unit : μg/m³			2013												Annual
Country	Site		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
Myanmar	Yangon	Mean	0.08	0.04	0.02	0.03	0.27	0.19	0.63	0.32	0.16	-	-	-	0.21
		%	100	100	100	100	100	100	100	100	100	0	0	0	74
		Max-2w	0.15	0.05	0.03	0.05	0.34	0.24	1.57	0.63	0.29	-	-	-	1.57
		Min-2w	0.04	0.03	0.02	0.02	0.20	0.14	0.01	<0.01	0.03	-	-	-	<0.01
Philippines	Mt. Sto. Tomas	Mean	0.56	0.44	0.53	0.30	0.11	0.30	0.24	0.21	0.15	0.24	0.20	0.08	0.29
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-w	0.83	0.55	0.61	0.66	0.17	0.45	0.39	0.52	0.27	0.42	0.61	0.14	0.83
		Min-w	0.45	0.29	0.43	0.02	0.07	0.14	0.11	0.05	0.04	0.11	<0.01	0.02	<0.01
Republic of Korea	Kanghwa	Mean	0.45	0.61	0.45	0.60	0.49	0.45	0.52	0.31	0.18	0.25	0.46	0.51	0.47
		%	6	18	6	17	16	17	16	19	17	16	17	16	14
		Max-d	0.53	1.16	0.49	0.83	0.67	0.72	0.57	0.39	0.33	0.33	0.79	0.80	1.16
		Min-d	0.36	0.42	0.41	0.38	0.40	<0.01	0.46	<0.01	<0.01	0.20	0.36	0.39	0.20
	Cheju (Kosan)	Mean	0.53	0.56	0.87	0.50	0.82	1.86	0.66	1.84	1.36	1.97	1.53	1.19	1.12
		%	16	14	16	17	16	17	16	16	17	10	17	16	16
		Max-d	0.68	1.01	1.53	0.61	2.15	4.30	1.12	3.39	1.87	2.86	2.74	2.21	4.30
		Min-d	0.46	0.37	0.43	0.41	0.32	0.37	0.28	0.91	0.75	1.43	0.65	0.56	0.28
	Imsil	Mean	0.48	0.38	0.31	0.43	0.27	0.40	0.27	0.40	0.40	0.59	0.52	0.59	0.48
		%	16	18	16	17	16	17	16	6	17	13	17	13	13
		Max-d	0.84	0.56	0.71	0.47	0.38	0.41	0.45	0.40	0.42	0.62	0.67	0.61	0.84
		Min-d	<0.01	<0.01	<0.01	0.41	<0.01	0.38	<0.01	0.40	0.38	0.57	<0.01	0.58	0.29
Russia	Mondy	Mean	0.23	<0.01	0.03	0.09	0.08	0.09	0.74	0.02	0.01	0.03	0.21	0.20	0.14
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-m	0.23	<0.01	0.04	0.09	0.08	0.09	0.74	0.02	0.01	0.03	0.29	0.20	0.74
		Min-m	0.23	<0.01	0.01	0.09	0.08	0.09	0.74	0.02	0.01	0.03	<0.01	0.20	<0.01
	Listvianka	Mean	0.09	0.05	0.08	0.06	0.03	0.11	0.14	0.04	0.04	0.03	0.03	0.03	0.06
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-w	0.12	0.08	0.16	0.17	0.04	0.36	0.46	0.10	0.10	0.05	0.04	0.05	0.46
		Min-w	0.06	<0.01	0.02	<0.01	0.03	0.02	<0.01	0.02	<0.01	0.01	0.02	0.01	<0.01
	Irkutsk	Mean	0.35	0.12	0.41	0.21	0.09	0.08	0.06	0.07	0.08	0.17	0.51	0.81	0.24
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-w	1.28	0.25	0.65	0.38	0.16	0.10	0.10	0.15	0.26	0.47	0.78	1.20	1.28
		Min-w	0.02	0.05	0.28	0.05	0.04	0.03	0.02	<0.01	<0.01	0.01	0.34	0.40	<0.01
	Primorskaya	Mean	0.99	0.10	0.96	0.19	0.18	0.08	0.05	0.05	0.32	0.16	0.14	0.10	0.28
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-2w	1.92	0.11	1.11	0.25	0.27	0.14	0.07	0.07	0.57	0.19	0.23	0.14	1.92
		Min-2w	0.06	0.10	0.82	0.13	0.08	0.02	0.02	0.03	0.07	0.12	0.06	0.06	0.02
Thailand	Bangkok	Mean	0.08	0.37	0.11	0.13	0.10	0.15	0.09	0.47	0.12	0.07	0.12	0.11	0.16
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-10d	0.21	0.48	0.29	0.16	0.10	0.43	0.16	0.75	0.19	0.09	0.12	0.14	0.75
		Min-10d	0.01	0.26	<0.01	0.10	0.08	<0.01	0.03	0.26	0.03	0.04	0.12	0.06	<0.01
	Khanchanaburi (Vachiralongkorn Dam)	Mean	-	-	-	<0.01	-	-	-	0.13	-	-	<0.01	-	0.05
		%	0	0	0	69	0	0	0	44	0	0	50	0	13
		Max-2w	-	-	-	<0.01	-	-	-	0.13	-	-	<0.01	-	0.13
		Min-2w	-	-	-	<0.01	-	-	-	0.13	-	-	<0.01	-	<0.01
	Chiangmai (Mae Hia)	Mean	0.16	0.08	-	0.06	0.08	0.13	0.16	0.18	0.05	0.10	0.16	-	0.12
		%	94	36	0	30	97	97	97	97	97	97	100	0	70
		Max-10d	0.21	0.08	-	0.06	0.13	0.16	0.24	0.20	0.07	0.11	0.20	-	0.24
		Min-10d	0.11	0.08	-	0.06	0.04	0.11	0.12	0.13	0.05	0.09	0.11	-	0.04
	Nakhon Ratchasima	Mean	-	-	-	<0.01	0.05	0.09	0.18	0.11	0.04	0.03	0.39	-	0.12
		%	0	0	0	38	100	100	100	100	100	100	100	0	62
		Max-10d	-	-	-	<0.01	0.06	0.15	0.37	0.27	0.11	0.07	0.75	-	0.75
		Min-10d	-	-	-	<0.01	0.04	0.04	0.05	0.04	<0.01	<0.01	<0.01	-	<0.01
Vietnam	Hanoi	Mean	2.19	1.81	2.21	1.13	0.77	0.67	1.25	2.31	2.67	1.94	1.79	2.21	1.75
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-w	4.25	2.69	3.68	1.76	1.28	1.09	2.99	2.93	4.94	4.03	2.72	2.96	4.94
		Min-w	0.56	1.34	1.15	0.50	0.17	0.33	0.22	1.33	0.86	1.09	1.12	1.86	0.17
	Hoa Binh	Mean	0.46	0.57	0.41	0.56	0.12	0.12	0.28	1.01	0.79	1.89	0.30	0.29	0.59
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-w	0.59	1.37	0.52	1.16	0.18	0.14	0.55	1.95	1.14	7.48	0.47	0.41	7.48
		Min-w	0.31	0.18	0.29	0.13	0.08	0.09	0.12	0.46	0.44	0.18	0.21	0.20	0.08

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			2013												Annual
Country	Site		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
Cambodia	Phnom Penh	Mean	0.92	0.37	0.78	0.97	0.83	0.28	0.48	0.40	0.33	0.39	0.38	0.59	0.57
		%	82	100	100	100	100	100	50	100	100	100	100	100	95
		Max-2w	1.13	0.43	1.00	1.00	1.06	0.34	0.48	0.57	0.34	0.41	0.59	0.83	1.13
		Min-2w	0.71	0.32	0.56	0.94	0.37	0.22	0.48	0.23	0.32	0.37	0.27	0.35	0.22
Indonesia	Serpong	Mean	0.38	0.25	0.05	0.54	0.66	0.21	0.55	0.52	0.45	0.71	0.18	0.10	0.38
		%	100	100	100	78	100	100	100	100	100	100	100	100	98
		Max-2w	0.48	0.47	0.06	0.82	0.76	0.21	0.56	0.76	0.91	1.07	0.18	0.13	1.07
		Min-2w	0.28	0.03	0.05	0.26	0.57	0.20	0.54	0.29	0.13	0.35	0.18	0.08	0.03
Japan	Rishiri	Mean	0.25	0.32	0.54	0.50	0.48	0.56	0.45	0.48	-	-	-	-	0.45
		%	100	100	100	100	100	100	100	100	0	0	0	0	66
		Max-2w	0.38	0.35	0.73	0.63	0.59	0.68	0.49	0.68	-	-	-	-	0.73
		Min-2w	0.13	0.30	0.36	0.30	0.37	0.43	0.40	0.29	-	-	-	-	0.13
	Ochiishi	Mean	0.42	0.42	0.62	0.21	0.21	0.10	0.28	0.33	0.24	0.19	0.08	0.18	0.28
		%	100	100	100	52	100	100	100	100	100	100	47	100	92
		Max-2w	0.51	0.55	0.73	0.21	0.26	0.16	0.34	0.43	0.28	0.34	0.08	0.28	0.73
		Min-2w	0.34	0.30	0.51	0.21	0.17	0.05	0.23	0.23	0.20	0.03	0.08	0.04	0.03
	Tappi	Mean	0.37	0.38	0.69	0.65	0.77	0.64	0.72	1.22	0.45	0.51	0.46	0.23	0.58
		%	100	100	50	100	100	100	100	100	100	100	100	100	96
		Max-2w	0.47	0.42	0.69	0.84	0.96	0.77	0.96	1.38	0.84	0.76	0.61	0.24	1.38
		Min-2w	0.26	0.34	0.69	0.39	0.58	0.52	0.49	1.06	0.15	0.27	0.32	0.22	0.15
	Sado-seki	Mean	0.19	0.40	0.83	0.55	1.21	0.89	0.26	2.09	0.29	0.31	0.27	0.16	0.62
		%	45	100	100	100	100	100	100	100	100	100	100	100	95
		Max-2w	0.19	0.56	0.84	0.93	1.35	0.90	0.43	2.21	0.39	0.55	0.32	0.26	2.21
		Min-2w	0.19	0.25	0.82	0.09	1.07	0.88	0.09	1.96	0.15	0.07	0.22	0.06	0.06
	Happo	Mean	0.18	0.31	0.73	0.47	1.05	0.94	0.79	2.01	0.42	0.43	0.06	0.13	0.63
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-2w	0.23	0.34	1.05	0.80	1.07	1.20	0.94	2.03	0.63	0.62	0.06	0.14	2.03
		Min-2w	0.13	0.29	0.41	0.05	1.02	0.67	0.64	2.00	0.27	0.24	0.06	0.13	0.05
	Ijira	Mean	0.54	0.06	1.49	0.50	1.37	0.89	1.35	1.30	0.51	0.09	0.50	0.68	0.81
		%	100	100	100	100	100	100	100	100	33	52	100	56	85
		Max-2w	0.68	0.07	1.69	1.23	1.40	0.91	1.60	2.27	0.51	0.09	0.95	0.68	2.27
		Min-2w	0.40	0.05	1.28	0.11	1.33	0.88	1.10	0.32	0.51	0.09	0.05	0.68	0.05
	Oki	Mean	1.17	1.21	1.88	1.26	1.87	0.71	1.09	1.40	0.67	0.70	0.89	0.49	1.10
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-2w	1.27	1.26	2.08	1.40	2.42	0.76	2.01	1.52	1.05	1.50	0.97	0.73	2.42
		Min-2w	1.07	1.16	1.69	1.07	1.33	0.66	0.16	1.27	0.29	0.27	0.82	0.24	0.16
	Banryu	Mean	1.12	1.79	2.33	1.58	2.74	0.97	1.48	2.02	0.77	0.65	1.23	1.04	1.40
		%	100	100	100	100	52	100	100	100	100	100	100	100	96
		Max-2w	1.25	1.92	2.39	1.68	2.74	1.17	2.46	2.29	0.99	1.25	1.43	1.35	2.74
		Min-2w	0.99	1.67	2.27	1.44	2.74	0.77	0.50	1.74	0.54	0.28	1.04	0.74	0.28
	Yusuhara	Mean	1.17	1.33	1.60	1.47	1.54	0.72	1.32	2.00	0.83	0.97	1.11	1.01	1.25
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-2w	1.56	1.37	1.95	1.54	2.05	1.06	1.62	2.37	1.21	1.55	1.53	1.47	2.37
		Min-2w	0.79	1.29	1.26	1.38	1.03	0.38	1.03	1.63	0.54	0.39	0.69	0.55	0.38
	Hedo	Mean	1.18	0.96	1.06	0.89	0.63	0.25	0.11	0.22	0.19	0.40	1.05	1.14	0.69
		%	100	100	100	100	100	100	54	100	100	100	100	100	96
		Max-2w	1.54	1.26	1.37	1.03	0.95	0.34	0.11	0.28	0.35	0.48	1.07	1.45	1.54
		Min-2w	0.83	0.65	0.74	0.82	0.32	0.16	0.11	0.16	0.02	0.32	1.03	0.83	0.02
	Ogasawara	Mean	0.37	0.36	0.41	0.41	0.33	0.13	0.23	0.36	0.06	0.08	0.34	0.55	0.31
		%	100	100	100	100	100	100	100	100	100	66	100	100	96
		Max-2w	0.43	0.42	0.52	0.61	0.40	0.18	0.37	0.70	0.08	0.11	0.39	0.67	0.70
		Min-2w	0.30	0.29	0.31	0.21	0.26	0.08	0.09	0.03	0.03	0.05	0.30	0.42	0.03
	Tokyo	Mean	1.44	1.49	1.77	1.34	1.23	1.40	1.92	2.83	0.75	1.12	1.17	1.21	1.44
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-2w	1.50	1.58	2.04	1.49	1.34	1.60	2.11	3.24	0.83	1.91	1.46	1.60	3.24
		Min-2w	1.39	1.40	1.49	1.14	1.12	1.19	1.73	2.42	0.64	0.32	0.87	0.81	0.32
Malaysia	Petaling Jaya	Mean	1.11	0.43	1.44	1.70	0.54	0.44	1.18	0.95	1.05	0.81	0.83	0.90	0.94
		%	100	100	100	100	100	100	75	100	100	100	80	100	96
		Max-w	1.44	0.69	2.41	2.24	1.09	0.76	1.49	1.39	1.55	0.99	1.07	1.39	2.41
		Min-w	0.92	0.15	0.45	1.12	<0.01	0.06	1.00	0.49	0.41	0.50	0.71	0.57	<0.01
	Tanah Rata	Mean	0.33	0.14	0.45	0.69	0.32	0.14	0.47	0.76	0.49	0.22	0.34	0.24	0.39
		%	100	100	100	100	100	100	100	100	75	100	100	100	98
		Max-w	0.46	0.20	0.68	1.27	0.53	0.20	0.99	1.03	0.81	0.31	0.49	0.48	1.27
		Min-w	0.19	0.08	0.20	0.25	0.15	0.09	<0.01	0.27	0.07	0.14	0.16	0.07	<0.01
	Danum Valley	Mean	0.09	<0.01	-	0.16	0.05	0.18	0.12	-	0.19	0.20	0.17	-	0.13
		%	100	50	0	100	100	100	100	0	100	100	50	0	67
		Max-2w	0.15	<0.01	-	0.25	0.06	0.20	0.18	-	0.24	0.24	0.17	-	0.25
		Min-2w	<0.01	<0.01	-	0.07	0.04	0.17	0.08	-	0.13	0.15	0.17	-	<0.01

Table 4.16 Particulate matter component: NH_4^+

Unit : μg/m³			2013												Annual
Country	Site		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
Myanmar	Yangon	Mean	0.27	0.55	0.94	0.13	0.26	0.16	0.18	0.12	0.18	-	-	-	0.30
		%	100	100	100	100	100	100	100	100	100	0	0	0	74
		Max-2w	0.61	0.65	1.63	0.15	0.30	0.30	0.48	0.22	0.32	-	-	-	1.63
		Min-2w	0.04	0.46	0.25	0.12	0.22	0.02	0.02	<0.01	0.04	-	-	-	<0.01
Philippines	Mt. Sto. Tomas	Mean	0.56	0.44	0.53	0.30	0.11	0.30	0.24	0.21	0.15	0.24	0.20	0.08	0.29
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-w	0.83	0.55	0.61	0.66	0.17	0.45	0.39	0.52	0.27	0.42	0.61	0.14	0.83
		Min-w	0.45	0.29	0.43	0.02	0.07	0.14	0.11	0.05	0.04	0.11	<0.01	0.02	<0.01
Republic of Korea	Kanghwa	Mean	4.28	4.70	3.25	5.55	5.11	3.31	3.87	2.65	1.65	1.09	1.40	3.28	3.54
		%	6	18	6	17	16	17	16	19	17	16	17	16	14
		Max-d	6.86	9.63	3.68	9.54	6.41	5.80	12.15	5.54	4.35	1.78	4.82	5.60	12.15
		Min-d	1.69	1.34	2.82	2.75	3.90	<0.01	0.73	<0.01	<0.01	0.34	0.33	1.73	0.33
	Cheju (Kosan)	Mean	1.61	1.15	1.53	1.63	2.12	2.33	0.88	1.82	1.76	0.91	2.83	2.51	1.80
		%	16	14	16	17	16	17	16	16	17	10	17	16	16
		Max-d	2.18	1.70	3.24	2.37	4.04	3.64	1.42	2.75	2.38	1.00	3.84	6.35	6.35
		Min-d	1.10	0.41	0.64	1.26	0.29	1.15	0.27	0.83	0.56	0.82	1.81	0.99	0.27
	Imsil	Mean	4.20	2.60	2.18	3.02	1.86	2.88	1.70	4.00	1.67	1.86	1.36	3.17	2.82
		%	16	18	16	17	16	17	16	6	17	13	17	13	13
		Max-d	12.25	6.04	4.65	4.40	3.08	3.81	5.80	5.22	2.77	3.85	4.69	8.49	12.25
		Min-d	<0.01	<0.01	<0.01	1.80	<0.01	2.53	<0.01	2.78	0.67	0.70	<0.01	1.06	0.44
Russia	Mondy	Mean	0.02	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.04	0.02	<0.01	<0.01	<0.01	<0.01
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-m	0.02	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.04	0.02	<0.01	<0.01	<0.01	0.04
		Min-m	0.02	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.04	0.02	<0.01	<0.01	<0.01	<0.01
	Listvianka	Mean	0.08	0.08	0.09	0.11	0.09	0.06	0.02	0.03	0.05	0.20	0.20	0.19	0.10
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-w	0.10	0.08	0.13	0.14	0.20	0.11	0.05	0.08	0.09	0.57	0.31	0.30	0.57
		Min-w	0.04	0.07	<0.01	0.09	0.02	0.01	<0.01	0.01	0.03	0.02	0.13	0.11	<0.01
	Irkutsk	Mean	0.83	0.66	0.48	0.33	0.21	0.20	0.07	0.23	0.21	0.28	0.36	1.19	0.40
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-w	1.39	1.21	0.59	0.63	0.53	0.49	0.14	0.38	0.63	0.85	0.61	1.57	1.57
		Min-w	0.43	0.07	0.14	0.12	0.05	<0.01	<0.01	0.05	0.03	0.04	0.05	0.90	<0.01
	Primorskaya	Mean	1.83	1.88	1.74	1.26	0.86	0.62	0.61	0.79	0.47	0.88	0.82	0.92	1.06
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-2w	1.88	1.97	1.78	1.38	1.05	0.67	0.79	1.26	0.66	1.19	0.91	1.08	1.97
		Min-2w	1.78	1.79	1.70	1.14	0.67	0.57	0.43	0.31	0.29	0.57	0.72	0.76	0.29
Thailand	Bangkok	Mean	0.31	0.83	0.43	1.08	0.50	0.02	0.18	0.13	0.40	1.73	0.90	3.02	0.79
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-10d	0.49	0.94	1.08	1.75	0.56	0.05	0.25	0.16	0.58	3.14	0.94	4.03	4.03
		Min-10d	0.03	0.73	0.09	0.71	0.40	<0.01	0.13	0.11	0.27	0.81	0.85	1.81	<0.01
	Khanchanaburi (Vachiralongkorn Dam)	Mean	-	-	-	0.78	-	-	-	0.11	-	-	<0.01	-	0.30
		%	0	0	0	69	0	0	0	44	0	0	50	0	13
		Max-2w	-	-	-	0.78	-	-	-	0.11	-	-	<0.01	-	0.78
		Min-2w	-	-	-	0.78	-	-	-	0.11	-	-	<0.01	-	<0.01
	Chiangmai (Mae Hia)	Mean	0.10	0.29	-	0.18	0.23	0.01	0.01	0.05	0.02	0.15	<0.01	-	0.09
		%	94	36	0	30	97	97	97	97	97	97	100	0	70
		Max-10d	0.20	0.29	-	0.18	0.31	0.02	0.01	0.07	0.02	0.17	0.01	-	0.31
		Min-10d	0.04	0.29	-	0.18	0.15	<0.01	<0.01	0.02	0.01	0.14	<0.01	-	<0.01
	Nakhon Ratchasima	Mean	-	-	-	0.99	0.74	0.62	0.49	0.68	0.39	3.14	0.23	-	0.90
		%	0	0	0	38	100	100	100	100	100	100	100	0	62
		Max-10d	-	-	-	0.99	0.76	0.87	0.52	1.01	0.81	4.02	0.57	-	4.02
		Min-10d	-	-	-	0.99	0.70	0.39	0.43	0.47	0.04	2.04	<0.01	-	<0.01
Vietnam	Hanoi	Mean	4.62	4.91	2.82	2.21	1.05	1.14	0.26	0.99	2.51	5.26	4.45	9.93	3.32
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-w	10.30	7.02	4.35	4.53	1.80	3.13	0.40	1.83	3.36	6.37	7.91	13.19	13.19
		Min-w	2.28	3.04	1.90	0.60	0.42	0.18	0.13	0.24	1.24	4.33	2.84	5.99	0.13
	Hoa Binh	Mean	0.59	0.47	0.28	0.50	1.13	0.21	0.13	0.45	0.32	2.71	2.08	1.62	0.90
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-w	0.98	1.00	0.46	1.31	3.71	0.39	0.18	0.96	0.51	4.93	3.53	2.36	4.93
		Min-w	0.32	0.23	0.10	0.11	0.11	0.13	0.10	0.09	0.19	0.44	1.19	0.92	0.09

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			2013												Annual
Country	Site		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
Cambodia	Phnom Penh	Mean	1.07	1.02	0.67	0.79	0.67	0.38	0.37	0.85	0.62	0.33	0.60	0.54	0.67
		%	82	100	100	100	100	100	50	100	100	100	100	100	95
		Max-2w	1.20	1.07	0.70	1.01	1.05	0.54	0.37	1.21	0.65	0.36	0.76	0.72	1.21
		Min-2w	0.94	0.97	0.64	0.57	0.31	0.23	0.37	0.49	0.59	0.30	0.47	0.37	0.23
Indonesia	Serpong	Mean	0.24	0.55	0.28	0.28	0.25	0.53	0.45	0.40	0.32	0.59	0.44	0.21	0.37
		%	100	100	100	78	100	100	100	100	100	100	100	100	98
		Max-2w	0.37	0.91	0.55	0.39	0.36	0.75	0.54	0.53	0.89	0.63	0.44	0.31	0.91
		Min-2w	0.10	0.19	<0.01	0.18	0.15	0.31	0.37	0.26	<0.01	0.54	0.44	0.11	<0.01
Japan	Rishiri	Mean	0.99	1.60	3.80	2.51	0.94	0.55	0.60	1.69	-	-	-	-	1.64
		%	100	100	100	100	100	100	100	100	0	0	0	0	66
		Max-2w	1.19	2.47	5.08	3.82	1.45	0.77	0.83	2.93	-	-	-	-	5.08
		Min-2w	0.80	0.72	2.51	1.19	0.44	0.33	0.37	0.45	-	-	-	-	0.33
	Ochiishi	Mean	6.45	2.83	4.72	2.83	1.72	0.48	0.77	1.02	1.04	2.95	12.29	3.30	3.00
		%	100	100	100	52	100	100	100	100	100	100	47	100	92
		Max-2w	9.71	3.02	5.74	2.83	2.48	0.77	0.87	1.12	1.17	4.83	12.29	6.65	12.29
		Min-2w	3.18	2.65	3.70	2.83	0.97	0.18	0.67	0.92	0.92	1.08	12.29	0.73	0.18
	Tappi	Mean	3.37	13.27	5.78	4.73	1.27	0.72	0.64	1.87	2.03	4.44	6.14	5.90	4.05
		%	100	100	50	100	100	100	100	100	100	100	100	100	96
		Max-2w	3.47	23.17	5.78	5.18	1.38	0.75	0.81	2.73	2.27	6.66	7.51	9.82	23.17
		Min-2w	3.27	3.38	5.78	4.34	1.16	0.69	0.46	1.00	1.85	2.22	4.76	1.97	0.46
	Sado-seki	Mean	3.56	2.84	4.07	2.87	1.06	0.70	1.15	1.53	1.76	2.05	7.16	2.72	2.56
		%	45	100	100	100	100	100	100	100	100	100	100	100	95
		Max-2w	3.56	3.58	4.09	3.72	1.45	0.80	2.19	1.71	2.25	2.53	9.80	3.71	9.80
		Min-2w	3.56	2.10	4.05	1.62	0.66	0.61	0.12	1.35	1.51	1.56	4.52	1.74	0.12
	Happo	Mean	0.03	0.08	0.29	0.08	0.10	0.04	0.07	0.07	0.09	0.17	0.02	0.05	0.09
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-2w	0.05	0.10	0.42	0.14	0.12	0.08	0.07	0.08	0.15	0.18	0.02	0.06	0.42
		Min-2w	0.02	0.06	0.16	0.04	0.08	0.01	0.06	0.06	0.03	0.16	0.02	0.04	0.01
	Ijira	Mean	0.12	<0.01	0.46	0.13	0.32	0.12	0.25	0.09	0.06	<0.01	0.08	0.16	0.16
		%	100	100	100	100	100	100	100	100	33	52	100	56	85
		Max-2w	0.15	<0.01	0.51	0.35	0.41	0.14	0.27	0.16	0.06	<0.01	0.15	0.16	0.51
		Min-2w	0.08	<0.01	0.41	0.01	0.22	0.11	0.22	0.02	0.06	<0.01	<0.01	0.16	<0.01
	Oki	Mean	5.85	4.66	5.20	3.67	1.14	0.94	1.65	1.57	2.00	4.72	6.71	7.07	3.80
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-2w	6.83	5.10	6.82	5.03	1.45	1.35	1.90	2.20	2.02	9.39	7.06	8.54	9.39
		Min-2w	4.87	4.22	3.57	2.75	0.82	0.53	1.39	0.93	1.97	1.76	6.35	5.60	0.53
	Banryu	Mean	1.83	1.78	2.35	1.66	0.55	0.44	0.77	0.89	1.72	2.65	1.54	2.22	1.62
		%	100	100	100	100	52	100	100	100	100	100	100	100	96
		Max-2w	2.27	2.09	2.50	2.02	0.55	0.51	0.97	1.29	2.60	4.43	1.60	2.31	4.43
		Min-2w	1.39	1.47	2.20	1.10	0.55	0.37	0.58	0.49	0.84	1.35	1.49	2.13	0.37
	Yusuhara	Mean	0.44	0.38	0.73	0.48	0.40	0.15	0.46	0.41	0.52	0.47	0.53	0.39	0.45
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-2w	0.57	0.41	0.81	0.62	0.45	0.22	0.60	0.54	0.66	0.54	0.56	0.48	0.81
		Min-2w	0.32	0.36	0.64	0.30	0.34	0.09	0.32	0.29	0.34	0.40	0.50	0.30	0.09
	Hedo	Mean	6.10	4.10	3.87	3.76	2.51	3.81	3.98	2.44	4.59	16.66	6.06	5.85	5.27
		%	100	100	100	100	100	100	54	100	100	100	100	100	96
		Max-2w	6.12	4.82	4.03	5.45	2.80	5.44	3.98	3.37	7.83	22.86	6.76	6.65	22.86
		Min-2w	6.08	3.39	3.72	2.46	2.23	2.18	3.98	1.50	0.79	10.46	5.35	5.05	0.79
	Ogasawara	Mean	2.68	3.03	2.96	2.71	2.18	1.41	1.19	1.10	3.51	5.37	2.67	3.03	2.65
		%	100	100	100	100	100	100	100	100	100	66	100	100	96
		Max-2w	3.62	3.77	3.54	3.31	2.88	1.78	1.37	1.16	5.11	5.42	3.36	3.30	5.42
		Min-2w	1.74	2.30	2.38	2.26	1.47	1.05	1.00	1.03	1.91	5.31	1.98	2.76	1.00
	Tokyo	Mean	0.31	0.37	1.27	0.97	1.12	0.70	1.11	0.74	1.47	1.09	0.63	0.32	0.87
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-2w	0.32	0.41	1.76	1.06	1.32	0.83	1.49	0.77	1.98	1.32	0.67	0.38	1.98
		Min-2w	0.30	0.34	0.78	0.87	0.91	0.57	0.74	0.72	1.16	0.85	0.58	0.26	0.26
Malaysia	Petaling Jaya	Mean	0.47	0.60	0.30	0.42	0.36	0.90	0.36	0.51	0.38	0.31	0.20	0.26	0.42
		%	100	100	100	100	100	100	75	100	100	100	80	100	96
		Max-w	0.80	0.99	0.81	0.73	0.99	0.97	0.62	0.82	0.60	0.54	0.24	0.42	0.99
		Min-w	0.20	0.30	0.06	0.20	<0.01	0.84	0.22	0.18	0.13	0.20	0.15	0.11	<0.01
	Tanah Rata	Mean	0.19	0.39	0.15	0.10	0.08	0.26	0.12	0.18	0.17	0.10	0.11	0.13	0.16
		%	100	100	100	100	100	100	100	100	75	100	100	100	98
		Max-w	0.30	0.59	0.37	0.13	0.15	0.36	0.17	0.27	0.27	0.16	0.19	0.23	0.59
		Min-w	0.09	0.20	0.06	0.07	0.02	0.17	<0.01	0.10	0.01	0.02	0.06	0.03	<0.01
	Danum Valley	Mean	0.49	0.08	-	0.05	0.04	0.13	0.07	-	0.12	0.13	0.23	-	0.16
		%	100	50	0	100	100	100	100	0	100	100	50	0	67
		Max-2w	0.51	0.08	-	0.08	0.06	0.19	0.13	-	0.16	0.13	0.23	-	0.51
		Min-2w	0.46	0.08	-	0.02	0.02	0.06	0.03	-	0.08	0.13	0.23	-	0.02

Table 4.17 Particulate matter component: Na^+

Unit : μg/m³			2013												Annual
Country	Site		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
Myanmar	Yangon	Mean	0.09	0.14	0.24	<0.01	0.18	<0.01	0.43	0.36	0.40	-	-	-	0.21
		%	100	100	100	100	100	100	100	100	100	0	0	0	74
		Max-2w	0.23	0.15	0.46	<0.01	0.36	0.01	1.26	0.66	0.50	-	-	-	1.26
		Min-2w	<0.01	0.13	0.01	<0.01	<0.01	<0.01	<0.01	0.05	0.30	-	-	-	<0.01
Philippines	Mt. Sto. Tomas	Mean	0.56	0.44	0.53	0.30	0.11	0.30	0.24	0.21	0.15	0.24	0.20	0.08	0.29
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-w	0.83	0.55	0.61	0.66	0.17	0.45	0.39	0.52	0.27	0.42	0.61	0.14	0.83
		Min-w	0.45	0.29	0.43	0.02	0.07	0.14	0.11	0.05	0.04	0.11	<0.01	0.02	<0.01
Republic of Korea	Kanghwa	Mean	0.21	0.44	0.11	0.66	0.75	0.36	0.56	0.43	0.23	0.38	0.53	0.68	0.51
		%	6	18	6	17	16	17	16	19	17	16	17	16	14
		Max-d	0.22	0.58	0.14	0.70	2.04	0.48	0.73	0.99	0.46	0.48	0.78	1.32	2.04
		Min-d	0.20	0.35	0.08	0.61	0.32	<0.01	0.42	<0.01	<0.01	0.31	0.33	0.37	0.08
	Cheju (Kosan)	Mean	0.32	0.42	0.62	0.32	0.41	0.92	0.66	0.88	0.51	0.90	0.95	0.80	0.64
		%	16	14	16	17	16	17	16	16	17	10	17	16	16
		Max-d	0.43	0.62	0.77	0.41	1.06	2.39	0.74	1.31	0.83	1.18	1.53	1.43	2.39
		Min-d	0.26	0.28	0.33	0.25	0.18	0.16	0.51	0.49	0.23	0.69	0.30	0.20	0.16
	Imsil	Mean	0.22	0.27	0.21	0.29	0.16	0.25	0.24	0.24	0.05	0.13	0.21	0.28	0.24
		%	16	18	16	17	16	17	16	6	17	13	17	13	13
		Max-d	0.37	0.48	0.48	0.38	0.27	0.28	0.48	0.31	0.07	0.21	0.30	0.38	0.48
		Min-d	<0.01	<0.01	<0.01	0.25	<0.01	0.23	<0.01	0.18	<0.01	0.10	<0.01	0.17	<0.01
Russia	Mondy	Mean	0.12	<0.01	0.03	0.11	0.03	<0.01	0.41	0.03	0.02	0.02	0.02	0.06	0.06
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-m	0.12	<0.01	0.05	0.11	0.03	<0.01	0.41	0.03	0.02	0.02	0.03	0.06	0.41
		Min-m	0.12	<0.01	<0.01	0.11	0.03	<0.01	0.41	0.03	0.02	0.02	<0.01	0.06	<0.01
	Listvianka	Mean	0.11	0.07	0.07	0.04	0.03	0.04	0.02	0.02	0.03	0.04	0.04	0.04	0.05
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-w	0.15	0.11	0.13	0.07	0.03	0.05	0.04	0.04	0.04	0.06	0.06	0.06	0.15
		Min-w	0.09	0.02	0.04	0.03	0.02	0.02	<0.01	<0.01	0.02	0.02	0.03	0.03	<0.01
	Irkutsk	Mean	0.15	0.13	0.31	0.12	0.04	0.07	0.08	0.10	0.11	0.14	0.22	0.20	0.14
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-w	0.26	0.23	0.54	0.18	0.11	0.12	0.15	0.21	0.34	0.25	0.40	0.31	0.54
		Min-w	0.10	0.04	0.13	0.06	<0.01	0.02	0.02	0.01	0.02	0.02	0.07	0.06	<0.01
	Primorskaya	Mean	0.20	0.18	0.79	0.29	0.39	0.22	0.14	0.11	0.25	0.31	0.30	0.10	0.27
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-2w	0.29	0.20	0.86	0.32	0.43	0.31	0.19	0.15	0.40	0.37	0.37	0.11	0.86
		Min-2w	0.11	0.16	0.73	0.26	0.36	0.13	0.09	0.07	0.10	0.25	0.23	0.09	0.07
Thailand	Bangkok	Mean	0.56	1.12	0.32	0.63	0.63	0.05	0.27	0.64	0.27	0.36	0.38	0.46	0.47
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-10d	1.07	1.43	0.95	0.88	0.67	0.15	0.49	0.80	0.41	0.51	0.44	0.47	1.43
		Min-10d	0.04	0.94	<0.01	0.39	0.59	<0.01	0.11	0.55	0.18	0.22	0.34	0.44	<0.01
	Khanchanaburi (Vachiralongkorn Dam)	Mean	-	-	-	0.27	-	-	-	0.12	-	-	0.02	-	0.13
		%	0	0	0	69	0	0	0	44	0	0	50	0	13
		Max-2w	-	-	-	0.27	-	-	-	0.12	-	-	0.02	-	0.27
		Min-2w	-	-	-	0.27	-	-	-	0.12	-	-	0.02	-	0.02
	Chiangmai (Mae Hia)	Mean	0.12	0.15	-	0.05	0.14	0.08	0.12	0.15	0.06	0.11	0.11	-	0.11
		%	94	36	0	30	97	97	97	97	97	97	100	0	70
		Max-10d	0.16	0.15	-	0.05	0.21	0.12	0.18	0.23	0.08	0.16	0.13	-	0.23
		Min-10d	0.09	0.15	-	0.05	0.04	0.04	0.09	0.08	0.03	0.08	0.09	-	0.03
	Nakhon Ratchasima	Mean	-	-	-	0.07	0.18	0.10	0.17	0.26	0.01	0.06	0.13	-	0.13
		%	0	0	0	38	100	100	100	100	100	100	100	0	62
		Max-10d	-	-	-	0.07	0.26	0.26	0.40	0.38	0.02	0.10	0.22	-	0.40
		Min-10d	-	-	-	0.07	0.05	0.02	0.05	0.18	<0.01	<0.01	<0.01	-	<0.01
Vietnam	Hanoi	Mean	0.87	0.88	1.23	0.86	0.59	0.47	0.88	0.89	1.05	0.43	0.42	0.53	0.75
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-w	1.84	1.09	2.29	1.63	1.08	0.80	1.56	1.09	2.08	1.06	0.65	0.69	2.29
		Min-w	0.22	0.68	0.60	0.46	0.25	0.25	0.28	0.39	0.23	0.21	0.17	0.43	0.17
	Hoa Binh	Mean	0.42	0.67	0.41	0.42	0.22	0.13	0.43	0.76	0.80	0.37	0.34	0.33	0.44
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-w	0.52	1.33	0.60	0.49	0.34	0.21	0.82	1.29	1.70	0.47	0.39	0.38	1.70
		Min-w	0.31	0.40	0.31	0.33	0.13	0.09	0.18	0.46	0.41	0.32	0.31	0.30	0.09

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			2013												Annual
Country	Site		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
Cambodia	Phnom Penh	Mean	0.80	0.85	0.88	1.06	1.02	0.64	0.38	0.59	0.53	0.46	0.72	0.54	0.73
		%	82	100	100	100	100	100	50	100	100	100	100	100	95
		Max-2w	0.91	0.95	0.95	1.16	1.21	0.72	0.38	0.60	0.80	0.49	1.02	0.63	1.21
		Min-2w	0.70	0.75	0.81	0.96	0.79	0.57	0.38	0.58	0.26	0.43	0.44	0.45	0.26
Indonesia	Serpong	Mean	0.29	0.32	0.24	0.36	0.25	0.50	0.56	0.36	0.28	0.55	0.44	0.34	0.37
		%	100	100	100	78	100	100	100	100	100	100	100	100	98
		Max-2w	0.32	0.39	0.44	0.46	0.43	0.65	0.63	0.49	0.70	0.55	0.44	0.43	0.70
		Min-2w	0.27	0.24	0.03	0.26	0.07	0.35	0.49	0.23	0.06	0.55	0.44	0.27	0.03
Japan	Rishiri	Mean	0.07	0.10	0.19	0.14	0.07	0.06	0.07	0.11	-	-	-	-	0.10
		%	100	100	100	100	100	100	100	100	0	0	0	0	66
		Max-2w	0.10	0.11	0.25	0.21	0.12	0.07	0.07	0.16	-	-	-	-	0.25
		Min-2w	0.04	0.09	0.12	0.08	0.03	0.05	0.06	0.07	-	-	-	-	0.03
	Ochiishi	Mean	0.25	0.13	0.20	0.13	0.06	0.02	0.03	0.05	0.04	0.13	0.44	0.12	0.12
		%	100	100	100	52	100	100	100	100	100	100	47	100	92
		Max-2w	0.38	0.14	0.24	0.13	0.09	0.03	0.04	0.06	0.04	0.21	0.44	0.24	0.44
		Min-2w	0.12	0.12	0.15	0.13	0.04	<0.01	0.02	0.04	0.04	0.04	0.44	0.02	<0.01
	Tappi	Mean	0.18	0.49	0.27	0.22	0.09	0.06	0.05	0.12	0.11	0.26	0.27	0.23	0.19
		%	100	100	50	100	100	100	100	100	100	100	100	100	96
		Max-2w	0.19	0.80	0.27	0.24	0.11	0.08	0.07	0.16	0.14	0.34	0.30	0.37	0.80
		Min-2w	0.17	0.18	0.27	0.21	0.07	0.04	0.04	0.09	0.08	0.18	0.23	0.08	0.04
	Sado-seki	Mean	0.16	0.17	0.24	0.17	0.13	0.09	0.07	0.16	0.09	0.11	0.27	0.11	0.15
		%	45	100	100	100	100	100	100	100	100	100	100	100	95
		Max-2w	0.16	0.22	0.25	0.24	0.14	0.11	0.12	0.16	0.12	0.15	0.32	0.15	0.32
		Min-2w	0.16	0.13	0.23	0.06	0.12	0.08	0.01	0.16	0.07	0.07	0.23	0.06	0.01
	Happo	Mean	0.01	0.03	0.09	0.03	0.08	0.04	0.02	0.08	0.02	0.04	<0.01	0.01	0.04
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-2w	0.02	0.03	0.13	0.05	0.10	0.07	0.03	0.08	0.03	0.05	<0.01	0.02	0.13
		Min-2w	<0.01	0.03	0.04	<0.01	0.07	0.02	0.02	0.08	0.01	0.03	<0.01	<0.01	<0.01
	Ijira	Mean	0.04	<0.01	0.14	0.03	0.11	0.09	0.11	0.07	0.08	0.02	0.04	0.05	0.07
		%	100	100	100	100	100	100	100	100	33	52	100	56	85
		Max-2w	0.06	<0.01	0.17	0.08	0.13	0.11	0.13	0.13	0.08	0.02	0.08	0.05	0.17
		Min-2w	0.02	<0.01	0.11	<0.01	0.09	0.08	0.10	0.01	0.08	0.02	<0.01	0.05	<0.01
	Oki	Mean	0.32	0.27	0.45	0.23	0.15	0.08	0.12	0.18	0.16	0.25	0.33	0.31	0.24
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-2w	0.36	0.29	0.61	0.30	0.18	0.11	0.17	0.24	0.20	0.38	0.33	0.42	0.61
		Min-2w	0.28	0.26	0.28	0.19	0.12	0.05	0.07	0.13	0.11	0.10	0.33	0.21	0.05
	Banryu	Mean	0.15	0.21	0.38	0.18	0.18	0.11	0.12	0.19	0.18	0.17	0.17	0.17	0.18
		%	100	100	100	100	52	100	100	100	100	100	100	100	96
		Max-2w	0.19	0.23	0.43	0.22	0.18	0.12	0.16	0.24	0.24	0.20	0.19	0.22	0.43
		Min-2w	0.12	0.19	0.34	0.16	0.18	0.10	0.07	0.14	0.11	0.13	0.15	0.13	0.07
	Yusuhara	Mean	0.11	0.14	0.20	0.14	0.13	0.07	0.06	0.12	0.07	0.11	0.14	0.10	0.12
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-2w	0.14	0.16	0.26	0.18	0.19	0.09	0.07	0.16	0.08	0.14	0.20	0.15	0.26
		Min-2w	0.08	0.11	0.15	0.10	0.07	0.04	0.06	0.07	0.07	0.08	0.08	0.05	0.04
	Hedo	Mean	0.31	0.23	0.25	0.24	0.19	0.20	0.17	0.11	0.19	0.57	0.36	0.36	0.26
		%	100	100	100	100	100	100	54	100	100	100	100	100	96
		Max-2w	0.33	0.29	0.25	0.28	0.19	0.25	0.17	0.15	0.31	0.73	0.43	0.40	0.73
		Min-2w	0.28	0.17	0.25	0.21	0.18	0.14	0.17	0.06	0.03	0.42	0.29	0.32	0.03
	Ogasawara	Mean	0.16	0.13	0.17	0.15	0.12	0.08	0.06	0.08	0.13	0.21	0.12	0.13	0.13
		%	100	100	100	100	100	100	100	100	100	66	100	100	96
		Max-2w	0.24	0.17	0.18	0.17	0.14	0.09	0.07	0.09	0.19	0.21	0.14	0.14	0.24
		Min-2w	0.08	0.10	0.15	0.14	0.09	0.08	0.05	0.06	0.08	0.20	0.10	0.12	0.05
	Tokyo	Mean	0.11	0.11	0.29	0.14	0.13	0.13	0.16	0.27	0.14	0.15	0.14	0.11	0.16
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-2w	0.12	0.12	0.41	0.15	0.14	0.14	0.17	0.37	0.16	0.16	0.15	0.15	0.41
		Min-2w	0.11	0.11	0.18	0.12	0.12	0.12	0.15	0.17	0.13	0.14	0.13	0.08	0.08
Malaysia	Petaling Jaya	Mean	0.45	0.52	0.19	0.44	0.20	0.42	0.48	0.51	0.41	0.30	0.29	0.28	0.37
		%	100	100	100	100	100	100	75	100	100	100	80	100	96
		Max-w	0.66	1.11	0.29	0.66	0.44	0.44	0.58	0.70	0.57	0.42	0.34	0.34	1.11
		Min-w	0.26	0.02	0.07	0.35	0.04	0.38	0.42	0.15	0.19	0.18	0.19	0.11	0.02
	Tanah Rata	Mean	0.13	0.09	0.14	0.17	0.06	0.14	0.19	0.22	0.18	0.06	0.09	0.10	0.13
		%	100	100	100	100	100	100	100	100	75	100	100	100	98
		Max-w	0.18	0.11	0.24	0.20	0.08	0.23	0.30	0.31	0.34	0.07	0.12	0.15	0.34
		Min-w	0.07	0.07	0.07	0.10	0.05	0.08	<0.01	0.07	0.03	0.05	0.05	0.02	<0.01
	Danum Valley	Mean	0.13	<0.01	-	0.09	0.05	0.24	0.12	-	0.24	0.19	0.20	-	0.14
		%	100	50	0	100	100	100	100	0	100	100	50	0	67
		Max-2w	0.13	<0.01	-	0.12	0.06	0.31	0.24	-	0.32	0.26	0.20	-	0.32
		Min-2w	0.12	<0.01	-	0.06	0.04	0.17	0.03	-	0.16	0.12	0.20	-	<0.01

Table 4.18 Particulate matter component: K^+

Unit : μg/m³			2013												Annual
Country	Site		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
Myanmar	Yangon	Mean	0.25	0.70	0.38	0.02	0.31	0.14	0.03	0.12	0.27	-	-	-	0.24
		%	100	100	100	100	100	100	100	100	100	0	0	0	74
		Max-2w	0.63	0.90	0.70	0.02	0.61	0.28	0.04	0.24	0.30	-	-	-	0.90
		Min-2w	0.02	0.51	0.07	0.01	0.01	0.01	<0.01	0.01	0.25	-	-	-	<0.01
Philippines	Mt. Sto. Tomas	Mean	0.56	0.44	0.53	0.30	0.11	0.30	0.24	0.21	0.15	0.24	0.20	0.08	0.29
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-w	0.83	0.55	0.61	0.66	0.17	0.45	0.39	0.52	0.27	0.42	0.61	0.14	0.83
		Min-w	0.45	0.29	0.43	0.02	0.07	0.14	0.11	0.05	0.04	0.11	<0.01	0.02	<0.01
Republic of Korea	Kanghwa	Mean	0.27	0.41	0.11	0.30	0.32	0.11	0.14	0.11	0.13	0.19	0.32	0.76	0.29
		%	6	18	6	17	16	17	16	19	17	16	17	16	14
		Max-d	0.36	1.01	0.14	0.58	0.94	0.28	0.39	0.19	0.30	0.26	0.52	1.52	1.52
		Min-d	0.18	0.17	0.09	0.15	0.08	<0.01	0.03	<0.01	<0.01	0.06	0.10	0.18	0.02
	Cheju (Kosan)	Mean	0.12	0.19	0.18	0.16	0.10	0.17	0.07	0.05	0.15	0.12	0.20	0.24	0.15
		%	16	14	16	17	16	17	16	16	17	10	17	16	16
		Max-d	0.16	0.25	0.46	0.26	0.17	0.36	0.10	0.08	0.49	0.16	0.29	0.78	0.78
		Min-d	0.08	0.16	0.07	0.08	0.03	0.06	0.04	0.02	0.02	0.07	0.13	0.04	0.02
	Imsil	Mean	0.25	0.14	0.09	0.20	0.08	0.16	0.07	0.08	0.05	0.17	0.11	0.23	0.16
		%	16	18	16	17	16	17	16	6	17	13	17	13	13
		Max-d	0.59	0.37	0.19	0.29	0.15	0.27	0.22	0.12	0.11	0.37	0.40	0.64	0.64
		Min-d	<0.01	<0.01	<0.01	0.13	<0.01	0.11	<0.01	0.05	0.02	0.05	<0.01	0.08	0.02
Russia	Mondy	Mean	0.02	<0.01	0.02	0.24	0.26	0.01	0.37	0.03	<0.01	0.01	0.03	0.01	0.08
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-m	0.02	<0.01	0.03	0.24	0.26	0.01	0.37	0.03	<0.01	0.01	0.05	0.01	0.37
		Min-m	0.02	<0.01	0.02	0.24	0.26	0.01	0.37	0.03	<0.01	0.01	<0.01	0.01	<0.01
	Listvianka	Mean	0.08	0.04	0.06	0.04	0.08	0.11	0.11	0.04	0.06	0.03	0.03	0.06	0.06
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-w	0.16	0.05	0.12	0.11	0.20	0.35	0.36	0.07	0.11	0.07	0.04	0.10	0.36
		Min-w	0.02	0.01	0.03	0.02	0.04	0.02	0.02	<0.01	0.02	<0.01	0.02	0.03	<0.01
	Irkutsk	Mean	0.12	0.12	0.06	0.16	0.03	0.19	0.43	0.19	0.14	0.09	0.09	0.25	0.15
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-w	0.20	0.17	0.09	0.26	0.08	0.60	0.51	0.34	0.50	0.19	0.15	0.37	0.60
		Min-w	0.07	0.06	0.03	0.03	<0.01	0.04	0.33	0.03	<0.01	0.02	0.02	0.16	<0.01
	Primorskaya	Mean	0.86	0.57	0.37	0.32	0.28	0.15	0.14	0.16	0.18	0.40	1.09	0.31	0.40
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-2w	1.11	0.65	0.39	0.32	0.30	0.17	0.16	0.17	0.19	0.51	1.43	0.35	1.43
		Min-2w	0.61	0.48	0.35	0.32	0.26	0.13	0.13	0.14	0.17	0.29	0.74	0.27	0.13
Thailand	Bangkok	Mean	0.32	1.03	0.17	0.47	0.33	<0.01	0.29	0.30	0.31	0.59	0.59	1.21	0.47
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-10d	0.47	1.15	0.49	0.80	0.37	<0.01	0.46	0.36	0.37	0.83	0.77	1.38	1.38
		Min-10d	0.07	0.94	<0.01	0.29	0.31	<0.01	0.11	0.26	0.22	0.28	0.43	1.11	<0.01
	Khanchanaburi (Vachiralongkorn Dam)	Mean	-	-	-	0.51	-	-	-	0.05	-	-	<0.01	-	0.19
		%	0	0	0	69	0	0	0	44	0	0	50	0	13
		Max-2w	-	-	-	0.51	-	-	-	0.05	-	-	<0.01	-	0.51
		Min-2w	-	-	-	0.51	-	-	-	0.05	-	-	<0.01	-	<0.01
	Chiangmai (Mae Hia)	Mean	0.40	0.75	-	0.03	0.10	0.02	0.03	0.21	0.12	0.26	0.08	-	0.17
		%	94	36	0	30	97	97	97	97	97	97	100	0	70
		Max-10d	0.55	0.75	-	0.03	0.14	0.03	0.05	0.40	0.17	0.35	0.10	-	0.75
		Min-10d	0.30	0.75	-	0.03	0.01	0.01	0.01	0.09	0.08	0.18	0.05	-	0.01
	Nakhon Ratchasima	Mean	-	-	-	0.26	0.18	0.15	0.12	0.11	0.05	0.29	0.20	-	0.16
		%	0	0	0	38	100	100	100	100	100	100	100	0	62
		Max-10d	-	-	-	0.26	0.20	0.19	0.19	0.13	0.10	0.41	0.25	-	0.41
		Min-10d	-	-	-	0.26	0.17	0.09	0.05	0.09	<0.01	0.17	0.14	-	<0.01
Vietnam	Hanoi	Mean	2.60	2.77	2.10	1.92	1.32	3.02	2.12	4.15	3.71	1.24	0.95	2.20	2.34
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-w	4.72	4.30	3.85	2.88	2.05	4.79	5.49	5.10	6.59	2.02	1.29	2.73	6.59
		Min-w	0.68	1.85	0.92	0.67	0.33	1.12	0.59	2.79	0.71	0.90	0.63	1.49	0.33
	Hoa Binh	Mean	1.34	1.53	2.15	0.76	0.51	0.56	2.68	2.63	1.77	0.57	0.53	0.63	1.30
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-w	2.77	2.54	4.15	1.60	1.01	0.66	3.38	3.00	3.02	0.78	0.74	0.90	4.15
		Min-w	0.34	0.90	1.22	0.35	0.28	0.38	1.67	2.13	0.34	0.30	0.41	0.38	0.28

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			2013												Annual
Country	Site		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
Cambodia	Phnom Penh	Mean	0.24	0.20	0.18	0.16	0.13	0.10	0.05	0.16	0.10	0.07	0.14	0.11	0.14
		%	82	100	100	100	100	100	50	100	100	100	100	100	95
		Max-2w	0.32	0.23	0.19	0.16	0.18	0.11	0.05	0.24	0.12	0.07	0.20	0.13	0.32
		Min-2w	0.17	0.17	0.17	0.15	0.06	0.08	0.05	0.08	0.08	0.07	0.07	0.10	0.05
Indonesia	Serpong	Mean	0.05	0.09	0.04	0.04	0.07	0.09	0.09	0.10	0.08	0.13	0.08	0.05	0.08
		%	100	100	100	78	100	100	100	100	100	100	100	100	98
		Max-2w	0.08	0.11	0.06	0.07	0.07	0.17	0.10	0.13	0.19	0.14	0.08	0.06	0.19
		Min-2w	0.02	0.06	0.02	0.02	0.07	0.02	0.09	0.07	0.02	0.12	0.08	0.03	0.02
Japan	Rishiri	Mean	0.11	0.18	0.43	0.30	0.12	0.07	0.07	0.20	-	-	-	-	0.19
		%	100	100	100	100	100	100	100	100	0	0	0	0	66
		Max-2w	0.14	0.26	0.58	0.48	0.20	0.09	0.09	0.35	-	-	-	-	0.58
		Min-2w	0.09	0.09	0.27	0.14	0.05	0.05	0.05	0.06	-	-	-	-	0.05
	Ochiishi	Mean	0.73	0.32	0.55	0.35	0.20	0.04	0.06	0.10	0.12	0.36	1.52	0.38	0.35
		%	100	100	100	52	100	100	100	100	100	100	47	100	92
		Max-2w	1.10	0.34	0.67	0.35	0.29	0.08	0.08	0.11	0.14	0.58	1.52	0.77	1.52
		Min-2w	0.36	0.30	0.44	0.35	0.11	<0.01	0.05	0.09	0.11	0.13	1.52	0.08	<0.01
	Tappi	Mean	0.40	1.49	0.71	0.58	0.17	0.09	0.07	0.23	0.25	0.55	0.77	0.73	0.49
		%	100	100	50	100	100	100	100	100	100	100	100	100	96
		Max-2w	0.42	2.57	0.71	0.62	0.17	0.09	0.10	0.34	0.29	0.81	0.93	1.22	2.57
		Min-2w	0.37	0.41	0.71	0.53	0.17	0.08	0.05	0.12	0.22	0.29	0.61	0.23	0.05
	Sado-seki	Mean	0.43	0.36	0.53	0.37	0.16	0.09	0.14	0.20	0.21	0.24	0.78	0.32	0.31
		%	45	100	100	100	100	100	100	100	100	100	100	100	95
		Max-2w	0.43	0.45	0.54	0.49	0.20	0.10	0.27	0.21	0.27	0.30	1.02	0.44	1.02
		Min-2w	0.43	0.26	0.52	0.19	0.12	0.09	0.01	0.18	0.18	0.18	0.55	0.20	0.01
	Happo	Mean	<0.01	0.01	0.09	0.03	0.04	0.02	0.01	0.04	0.02	0.03	<0.01	<0.01	0.03
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-2w	<0.01	0.02	0.13	0.05	0.06	0.03	0.02	0.04	0.02	0.03	<0.01	0.01	0.13
		Min-2w	<0.01	<0.01	0.05	0.01	0.03	<0.01	0.01	0.03	<0.01	0.03	<0.01	<0.01	<0.01
	Ijira	Mean	0.01	<0.01	0.09	0.02	0.05	0.01	0.03	0.01	<0.01	<0.01	<0.01	0.02	0.02
		%	100	100	100	100	100	100	100	100	33	52	100	56	85
		Max-2w	0.02	<0.01	0.10	0.05	0.07	0.01	0.04	0.03	<0.01	<0.01	0.02	0.02	0.10
		Min-2w	<0.01	<0.01	0.09	<0.01	0.03	<0.01	0.02	<0.01	<0.01	<0.01	<0.01	0.02	<0.01
	Oki	Mean	0.71	0.57	0.70	0.48	0.19	0.12	0.20	0.18	0.23	0.56	0.80	0.78	0.46
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-2w	0.82	0.62	0.91	0.67	0.23	0.17	0.25	0.24	0.24	1.07	0.84	0.94	1.07
		Min-2w	0.60	0.53	0.49	0.36	0.14	0.07	0.16	0.12	0.21	0.20	0.77	0.62	0.07
	Banryu	Mean	0.25	0.25	0.38	0.24	0.12	0.07	0.11	0.13	0.21	0.31	0.21	0.25	0.22
		%	100	100	100	100	52	100	100	100	100	100	100	100	96
		Max-2w	0.29	0.29	0.38	0.31	0.12	0.08	0.14	0.19	0.31	0.50	0.24	0.27	0.50
		Min-2w	0.21	0.21	0.37	0.17	0.12	0.07	0.07	0.08	0.10	0.15	0.19	0.23	0.07
	Yusuhara	Mean	0.07	0.06	0.20	0.10	0.10	0.03	0.06	0.06	0.07	0.07	0.09	0.05	0.08
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-2w	0.08	0.06	0.22	0.14	0.14	0.04	0.07	0.08	0.08	0.07	0.11	0.07	0.22
		Min-2w	0.06	0.06	0.18	0.08	0.06	0.01	0.04	0.05	0.05	0.07	0.07	0.04	0.01
	Hedo	Mean	0.76	0.51	0.52	0.50	0.32	0.46	0.48	0.30	0.56	1.68	0.77	0.72	0.63
		%	100	100	100	100	100	100	54	100	100	100	100	100	96
		Max-2w	0.76	0.61	0.54	0.69	0.35	0.65	0.48	0.41	0.94	2.11	0.87	0.80	2.11
		Min-2w	0.75	0.41	0.50	0.36	0.30	0.26	0.48	0.18	0.11	1.24	0.67	0.64	0.11
	Ogasawara	Mean	0.33	0.37	0.39	0.35	0.28	0.18	0.15	0.14	0.42	0.66	0.33	0.36	0.33
		%	100	100	100	100	100	100	100	100	100	66	100	100	96
		Max-2w	0.44	0.47	0.47	0.42	0.37	0.22	0.18	0.15	0.61	0.67	0.41	0.39	0.67
		Min-2w	0.21	0.26	0.30	0.31	0.19	0.14	0.12	0.12	0.24	0.64	0.26	0.34	0.12
	Tokyo	Mean	0.06	0.07	0.21	0.15	0.18	0.12	0.17	0.14	0.20	0.15	0.10	0.06	0.14
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-2w	0.06	0.07	0.29	0.17	0.21	0.13	0.22	0.15	0.27	0.17	0.10	0.07	0.29
		Min-2w	0.06	0.07	0.14	0.13	0.15	0.11	0.12	0.13	0.16	0.13	0.10	0.05	0.05
Malaysia	Petaling Jaya	Mean	0.06	0.10	0.04	0.04	0.04	0.06	0.08	0.11	0.07	0.06	0.06	0.14	0.07
		%	100	100	100	100	100	100	75	100	100	100	80	100	96
		Max-w	0.09	0.13	0.08	0.07	0.13	0.13	0.10	0.20	0.10	0.11	0.10	0.35	0.35
		Min-w	0.03	<0.01	<0.01	0.02	<0.01	<0.01	0.06	0.02	0.04	0.03	0.04	0.05	<0.01
	Tanah Rata	Mean	0.02	0.04	0.02	0.01	0.01	0.09	0.05	0.04	0.03	0.01	0.01	0.03	0.03
		%	100	100	100	100	100	100	100	100	75	100	100	100	98
		Max-w	0.03	0.07	0.04	0.02	0.02	0.17	0.10	0.06	0.05	0.02	0.02	0.07	0.17
		Min-w	<0.01	0.02	<0.01	<0.01	<0.01	0.03	<0.01	0.02	<0.01	<0.01	<0.01	<0.01	<0.01
	Danum Valley	Mean	0.02	<0.01	-	<0.01	<0.01	<0.01	0.01	-	0.03	0.02	0.03	-	0.01
		%	100	50	0	100	100	100	100	0	100	100	50	0	67
		Max-2w	0.02	<0.01	-	<0.01	<0.01	<0.01	0.02	-	0.04	0.03	0.03	-	0.04
		Min-2w	<0.01	<0.01	-	<0.01	<0.01	<0.01	0.01	-	0.02	0.02	0.03	-	<0.01

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

Unit : μg/m³			2013												Annual
Country	Site		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
Myanmar	Yangon	Mean	0.03	0.07	0.09	0.02	0.05	<0.01	<0.01	0.07	0.04	-	-	-	0.04
		%	100	100	100	100	100	100	100	100	100	0	0	0	74
		Max-2w	0.06	0.09	0.17	0.02	0.09	0.01	0.01	0.11	0.05	-	-	-	0.17
		Min-2w	0.01	0.04	<0.01	0.01	0.02	<0.01	<0.01	0.04	0.04	-	-	-	<0.01
Philippines	Mt. Sto. Tomas	Mean	0.56	0.44	0.53	0.30	0.11	0.30	0.24	0.21	0.15	0.24	0.20	0.08	0.29
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-w	0.83	0.55	0.61	0.66	0.17	0.45	0.39	0.52	0.27	0.42	0.61	0.14	0.83
		Min-w	0.45	0.29	0.43	0.02	0.07	0.14	0.11	0.05	0.04	0.11	<0.01	0.02	<0.01
Republic of Korea	Kanghwa	Mean	-	0.21	-	0.12	0.19	<0.01	0.01	0.01	0.04	0.18	0.02	<0.01	0.08
		%	0	4	0	17	10	3	10	16	3	10	3	6	7
		Max-d	-	0.21	-	0.13	0.19	<0.01	0.02	0.03	0.04	0.19	0.02	0.01	0.21
		Min-d	-	0.21	-	0.12	0.19	<0.01	<0.01	<0.01	0.04	0.17	0.02	<0.01	<0.01
	Cheju (Kosan)	Mean	0.04	0.02	0.03	0.05	0.04	0.04	0.05	0.02	<0.01	0.06	0.08	0.05	0.04
		%	16	14	16	17	16	17	16	16	17	10	17	16	16
		Max-d	0.05	0.02	0.05	0.06	0.06	0.10	0.05	0.04	0.01	0.07	0.10	0.11	0.11
		Min-d	0.03	0.02	0.03	<0.01	<0.01	<0.01	0.05	<0.01	<0.01	0.05	0.06	0.03	<0.01
	Imsil	Mean	0.03	0.02	0.02	0.05	0.03	0.05	0.03	0.02	<0.01	0.03	0.03	0.04	0.03
		%	16	18	16	17	16	17	16	6	17	13	17	13	13
		Max-d	0.06	0.03	0.03	0.07	0.05	0.05	0.05	0.04	0.01	0.06	0.07	0.04	0.07
		Min-d	<0.01	<0.01	<0.01	<0.01	<0.01	0.05	<0.01	<0.01	<0.01	<0.01	<0.01	0.03	<0.01
Russia	Mondy	Mean	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.08	<0.01	<0.01	<0.01	0.01	<0.01	<0.01
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-m	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.08	<0.01	<0.01	<0.01	0.01	<0.01	0.08
		Min-m	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.08	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
	Listvianka	Mean	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
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-w	0.02	0.01	<0.01	<0.01	<0.01	0.01	<0.01	<0.01	<0.01	0.02	0.02	0.02	0.02
		Min-w	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
	Irkutsk	Mean	0.04	0.04	0.02	0.03	<0.01	0.04	0.03	0.07	0.07	0.05	0.06	0.08	0.04
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-w	0.07	0.06	0.04	0.04	0.02	0.09	0.07	0.17	0.23	0.11	0.15	0.11	0.23
		Min-w	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.01	0.06	<0.01
	Primorskaya	Mean	0.05	0.04	0.14	0.11	0.14	0.07	0.04	0.05	0.07	0.08	0.10	0.06	0.08
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-2w	0.07	0.05	0.15	0.14	0.14	0.08	0.06	0.07	0.09	0.10	0.11	0.06	0.15
		Min-2w	0.03	0.04	0.13	0.08	0.14	0.07	0.03	0.03	0.04	0.05	0.09	0.05	0.03
Thailand	Bangkok	Mean	0.10	0.19	0.04	0.09	0.15	0.22	0.06	0.08	0.05	0.08	0.10	0.15	0.11
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-10d	0.18	0.22	0.11	0.13	0.19	0.24	0.09	0.09	0.08	0.12	0.13	0.16	0.24
		Min-10d	0.01	0.17	<0.01	0.06	0.12	0.19	0.03	0.08	0.04	0.04	0.08	0.14	<0.01
	Khanchanaburi (Vachiralongkorn Dam)	Mean	-	-	-	0.07	-	-	-	0.01	-	-	<0.01	-	0.03
		%	0	0	0	69	0	0	0	44	0	0	50	0	13
		Max-2w	-	-	-	0.07	-	-	-	0.01	-	-	<0.01	-	0.07
		Min-2w	-	-	-	0.07	-	-	-	0.01	-	-	<0.01	-	<0.01
	Chiangmai (Mae Hia)	Mean	0.03	0.06	-	0.05	0.06	0.02	0.01	0.03	0.03	0.03	0.02	-	0.03
		%	94	36	0	30	97	97	97	97	97	97	100	0	70
		Max-10d	0.05	0.06	-	0.05	0.08	0.02	0.02	0.05	0.03	0.06	0.06	-	0.08
		Min-10d	0.03	0.06	-	0.05	0.04	0.01	<0.01	0.02	0.02	<0.01	<0.01	-	<0.01
	Nakhon Ratchasima	Mean	-	-	-	0.01	0.01	0.01	<0.01	0.02	<0.01	<0.01	<0.01	-	<0.01
		%	0	0	0	38	100	100	100	100	100	100	100	0	62
		Max-10d	-	-	-	0.01	0.02	0.04	<0.01	0.04	<0.01	<0.01	<0.01	-	0.04
		Min-10d	-	-	-	0.01	<0.01	<0.01	<0.01	0.02	<0.01	<0.01	<0.01	-	<0.01
Vietnam	Hanoi	Mean	0.44	0.65	0.75	0.48	0.38	0.47	0.23	0.39	0.35	0.50	0.41	0.48	0.46
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-w	0.67	1.12	1.14	0.70	0.63	0.58	0.60	0.57	0.46	0.64	0.46	0.59	1.14
		Min-w	0.23	0.28	0.46	0.30	0.03	0.22	0.08	0.15	0.25	0.32	0.31	0.36	0.03
	Hoa Binh	Mean	0.24	0.28	0.50	0.48	0.17	0.23	0.19	0.22	0.17	0.24	0.26	0.45	0.28
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-w	0.37	0.51	0.65	0.63	0.25	0.30	0.28	0.31	0.23	0.36	0.40	0.54	0.65
		Min-w	0.17	0.14	0.34	0.26	0.12	0.15	0.10	0.17	0.12	0.11	0.15	0.41	0.10

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			2013												Annual
Country	Site		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
Cambodia	Phnom Penh	Mean	0.71	0.53	0.94	0.96	0.85	0.80	0.90	0.96	1.09	0.82	0.97	0.84	0.87
		%	82	100	100	100	100	100	50	100	100	100	100	100	95
		Max-2w	0.75	0.64	1.26	1.14	1.19	0.85	0.90	1.23	1.30	0.87	1.14	0.96	1.30
		Min-2w	0.68	0.43	0.63	0.78	0.49	0.75	0.90	0.70	0.87	0.77	0.69	0.71	0.43
Indonesia	Serpong	Mean	0.33	0.39	0.25	0.38	0.67	0.71	0.59	0.43	0.53	0.83	0.53	0.48	0.51
		%	100	100	100	78	100	100	100	100	100	100	100	100	98
		Max-2w	0.35	0.51	0.46	0.58	0.70	1.11	0.70	0.64	1.22	0.85	0.53	0.69	1.22
		Min-2w	0.31	0.27	0.04	0.19	0.64	0.30	0.48	0.23	0.14	0.82	0.53	0.36	0.04
Japan	Rishiri	Mean	0.06	0.09	0.20	0.31	0.19	0.07	0.05	0.10	-	-	-	-	0.14
		%	100	100	100	100	100	100	100	100	0	0	0	0	66
		Max-2w	0.07	0.12	0.28	0.63	0.31	0.09	0.05	0.14	-	-	-	-	0.63
		Min-2w	0.06	0.06	0.12	0.12	0.07	0.05	0.05	0.06	-	-	-	-	0.05
	Ochiishi	Mean	0.62	0.12	0.24	0.12	0.07	0.02	0.03	0.04	0.05	0.14	0.63	0.15	0.17
		%	100	100	100	52	100	100	100	100	100	100	47	100	92
		Max-2w	1.11	0.12	0.30	0.12	0.10	0.03	0.04	0.05	0.05	0.23	0.63	0.28	1.11
		Min-2w	0.13	0.12	0.18	0.12	0.05	<0.01	0.03	0.04	0.04	0.05	0.63	0.04	<0.01
	Tappi	Mean	0.16	0.60	0.41	0.47	0.19	0.06	0.04	0.14	0.14	0.27	0.37	0.25	0.26
		%	100	100	50	100	100	100	100	100	100	100	100	100	96
		Max-2w	0.17	0.98	0.41	0.82	0.27	0.07	0.05	0.20	0.22	0.36	0.37	0.41	0.98
		Min-2w	0.16	0.22	0.41	0.28	0.10	0.06	0.03	0.09	0.08	0.19	0.37	0.08	0.03
	Sado-seki	Mean	0.17	0.21	0.71	0.35	0.34	0.11	0.07	0.22	0.12	0.12	0.38	0.11	0.25
		%	45	100	100	100	100	100	100	100	100	100	100	100	95
		Max-2w	0.17	0.31	0.91	0.61	0.40	0.16	0.12	0.23	0.16	0.17	0.47	0.16	0.91
		Min-2w	0.17	0.11	0.51	0.07	0.29	0.06	0.02	0.21	0.07	0.08	0.28	0.06	0.02
	Happo	Mean	0.03	0.06	0.97	0.33	0.42	0.11	0.04	0.13	0.03	0.06	0.01	0.02	0.19
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-2w	0.04	0.11	1.36	0.55	0.57	0.19	0.04	0.14	0.04	0.06	0.01	0.02	1.36
		Min-2w	0.02	<0.01	0.59	0.17	0.27	0.03	0.03	0.12	0.02	0.06	0.01	0.01	<0.01
	Ijira	Mean	0.03	<0.01	0.35	0.07	0.22	0.11	0.06	0.03	0.02	<0.01	0.04	0.05	0.09
		%	100	100	100	100	100	100	100	100	33	52	100	56	85
		Max-2w	0.04	0.01	0.36	0.19	0.25	0.12	0.08	0.05	0.02	<0.01	0.07	0.05	0.36
		Min-2w	0.01	<0.01	0.34	<0.01	0.18	0.11	0.04	0.01	0.02	<0.01	<0.01	0.05	<0.01
	Oki	Mean	0.34	0.29	0.77	0.48	0.32	0.07	0.08	0.14	0.12	0.25	0.43	0.31	0.30
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-2w	0.38	0.29	0.95	0.74	0.34	0.08	0.12	0.18	0.15	0.43	0.47	0.42	0.95
		Min-2w	0.29	0.28	0.60	0.31	0.29	0.07	0.05	0.10	0.08	0.09	0.40	0.19	0.05
	Banryu	Mean	0.22	0.22	0.86	0.38	0.35	0.07	0.09	0.15	0.13	0.16	0.24	0.13	0.25
		%	100	100	100	100	52	100	100	100	100	100	100	100	96
		Max-2w	0.23	0.25	1.02	0.66	0.35	0.09	0.14	0.21	0.19	0.20	0.29	0.18	1.02
		Min-2w	0.21	0.19	0.71	0.22	0.35	0.05	0.05	0.09	0.06	0.08	0.19	0.09	0.05
	Yusuhara	Mean	0.17	0.15	1.12	0.43	0.41	0.06	0.08	0.14	0.08	0.12	0.23	0.09	0.26
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-2w	0.19	0.15	1.13	0.71	0.64	0.09	0.09	0.20	0.09	0.14	0.34	0.15	1.13
		Min-2w	0.15	0.15	1.10	0.26	0.19	0.02	0.06	0.07	0.06	0.09	0.11	0.04	0.02
	Hedo	Mean	0.42	0.33	0.66	0.54	0.23	0.23	0.20	0.16	0.22	0.80	0.76	0.43	0.42
		%	100	100	100	100	100	100	54	100	100	100	100	100	96
		Max-2w	0.47	0.44	0.68	0.81	0.25	0.37	0.20	0.18	0.37	1.12	0.97	0.53	1.12
		Min-2w	0.38	0.21	0.63	0.38	0.21	0.10	0.20	0.13	0.06	0.48	0.55	0.34	0.06
	Ogasawara	Mean	0.13	0.20	0.32	0.25	0.15	0.05	0.05	0.06	0.15	0.22	0.16	0.12	0.16
		%	100	100	100	100	100	100	100	100	100	66	100	100	96
		Max-2w	0.19	0.28	0.41	0.28	0.17	0.06	0.05	0.06	0.22	0.23	0.19	0.12	0.41
		Min-2w	0.08	0.13	0.23	0.21	0.13	0.05	0.05	0.05	0.09	0.20	0.13	0.11	0.05
	Tokyo	Mean	0.40	0.58	1.00	0.53	0.59	0.46	0.54	0.55	0.38	0.34	0.48	0.47	0.52
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-2w	0.48	0.63	1.04	0.70	0.63	0.48	0.59	0.61	0.44	0.34	0.49	0.56	1.04
		Min-2w	0.32	0.54	0.96	0.34	0.56	0.43	0.49	0.49	0.30	0.33	0.47	0.37	0.30
Malaysia	Petaling Jaya	Mean	0.48	0.38	0.17	0.49	0.33	0.60	0.80	0.62	0.65	0.47	0.40	0.37	0.47
		%	100	100	100	100	100	100	75	100	100	100	80	100	96
		Max-w	0.81	0.77	0.43	0.96	0.64	0.64	0.96	1.04	0.90	0.66	0.46	0.58	1.04
		Min-w	0.26	0.03	<0.01	0.28	<0.01	0.59	0.62	0.20	0.29	0.24	0.35	<0.01	<0.01
	Tanah Rata	Mean	0.08	0.03	0.03	0.09	0.08	1.14	0.43	0.18	0.17	0.06	0.05	1.16	0.28
		%	100	100	100	100	100	100	100	100	75	100	100	100	98
		Max-w	0.17	0.08	0.04	0.17	0.17	2.33	0.98	0.32	0.33	0.08	0.07	4.14	4.14
		Min-w	0.01	<0.01	<0.01	0.04	<0.01	0.15	0.01	0.08	0.04	0.03	0.01	<0.01	<0.01
	Danum Valley	Mean	<0.01	<0.01	-	0.03	<0.01	0.13	0.05	-	0.05	0.03	0.04	-	0.04
		%	100	50	0	100	100	100	100	0	100	100	50	0	67
		Max-2w	<0.01	<0.01	-	0.05	0.01	0.26	0.08	-	0.06	0.04	0.04	-	0.26
		Min-2w	<0.01	<0.01	-	<0.01	<0.01	<0.01	0.03	-	0.04	0.03	0.04	-	<0.01

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

Unit : μg/m³			2013												Annual
Country	Site		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
Myanmar	Yangon	Mean	0.31	0.75	0.46	0.05	0.38	0.01	0.17	0.14	0.38	-	-	-	0.29
		%	100	100	100	100	100	100	100	100	100	0	0	0	74
		Max-2w	0.72	0.99	0.71	0.06	0.70	0.01	0.51	0.28	0.45	-	-	-	0.99
		Min-2w	0.09	0.51	0.20	0.03	0.05	0.01	<0.01	<0.01	0.31	-	-	-	<0.01
Philippines	Mt. Sto. Tomas	Mean	0.56	0.44	0.53	0.30	0.11	0.30	0.24	0.21	0.15	0.24	0.20	0.08	0.29
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-w	0.83	0.55	0.61	0.66	0.17	0.45	0.39	0.52	0.27	0.42	0.61	0.14	0.83
		Min-w	0.45	0.29	0.43	0.02	0.07	0.14	0.11	0.05	0.04	0.11	<0.01	0.02	<0.01
Republic of Korea	Kanghwa	Mean	-	0.28	-	0.07	0.08	0.12	0.17	0.14	0.23	0.14	0.29	0.07	0.14
		%	0	4	0	17	10	3	10	16	3	10	3	6	13
		Max-d	-	0.28	-	0.11	0.08	0.12	0.20	0.18	0.23	0.21	0.29	0.12	0.32
		Min-d	-	0.28	-	0.04	0.08	0.12	0.13	0.09	0.23	0.08	0.29	<0.01	<0.01
	Cheju (Kosan)	Mean	0.09	0.03	0.07	0.03	0.10	0.08	0.08	0.05	0.09	0.07	0.11	0.22	0.09
		%	16	14	16	17	16	17	16	16	17	10	17	16	16
		Max-d	0.17	0.06	0.18	0.05	0.16	0.17	0.09	0.06	0.16	0.10	0.19	0.66	0.66
		Min-d	0.04	<0.01	0.04	0.01	0.07	0.01	0.06	0.04	0.03	0.06	0.07	0.02	<0.01
	Imsil	Mean	0.09	0.07	0.03	0.04	0.08	0.13	0.08	0.08	0.09	0.05	0.07	0.08	0.08
		%	16	18	16	17	16	17	16	6	17	13	17	13	13
		Max-d	0.27	0.16	0.06	0.07	0.12	0.32	0.13	0.11	0.15	0.07	0.12	0.15	0.32
		Min-d	<0.01	<0.01	<0.01	0.02	<0.01	0.06	<0.01	0.05	0.06	0.04	<0.01	0.02	0.02
Russia	Mondy	Mean	<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
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-m	<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
		Min-m	<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
	Listvianka	Mean	0.16	0.10	0.02	<0.01	0.03	0.03	0.03	0.04	0.03	0.07	0.10	0.13	0.06
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-w	0.20	0.16	0.04	0.01	0.05	0.04	0.04	0.05	0.04	0.14	0.15	0.16	0.20
		Min-w	0.08	<0.01	<0.01	<0.01	<0.01	0.03	0.02	0.03	0.03	0.03	0.05	0.10	<0.01
	Irkutsk	Mean	0.25	0.25	0.17	0.28	0.05	0.28	0.31	0.63	0.64	0.45	0.44	0.68	0.36
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-w	0.36	0.39	0.27	0.40	0.13	0.52	0.79	1.47	2.29	0.79	1.16	0.84	2.29
		Min-w	0.11	0.01	0.01	0.09	0.01	0.04	0.03	0.06	0.05	0.11	0.12	0.59	0.01
	Primorskaya	Mean	0.41	0.31	0.48	0.81	0.53	0.28	0.17	0.23	0.26	0.28	0.23	0.17	0.35
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-2w	0.45	0.34	0.50	1.07	0.60	0.34	0.25	0.28	0.32	0.43	0.30	0.19	1.07
		Min-2w	0.37	0.29	0.46	0.55	0.46	0.23	0.09	0.19	0.20	0.14	0.15	0.16	0.09
Thailand	Bangkok	Mean	0.72	1.98	0.34	0.82	1.03	1.51	0.75	0.85	0.99	1.46	2.27	2.73	1.29
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-10d	1.24	2.15	0.89	1.17	1.35	1.61	1.21	0.99	1.32	1.97	2.71	3.17	3.17
		Min-10d	0.07	1.88	0.02	0.63	0.83	1.39	0.27	0.74	0.73	0.65	1.90	2.34	0.02
	Khanchanaburi (Vachiralongkorn Dam)	Mean	-	-	-	0.24	-	-	-	0.09	-	-	0.03	-	0.12
		%	0	0	0	69	0	0	0	44	0	0	50	0	13
		Max-2w	-	-	-	0.24	-	-	-	0.09	-	-	0.03	-	0.24
		Min-2w	-	-	-	0.24	-	-	-	0.09	-	-	0.03	-	0.03
	Chiangmai (Mae Hia)	Mean	0.54	0.82	-	0.45	0.82	0.40	0.21	0.27	0.16	0.55	0.63	-	0.46
		%	94	36	0	30	97	97	97	97	97	97	100	0	70
		Max-10d	0.71	0.82	-	0.45	1.01	0.50	0.24	0.42	0.29	0.66	0.76	-	1.01
		Min-10d	0.31	0.82	-	0.45	0.48	0.26	0.18	0.18	0.03	0.41	0.56	-	0.03
	Nakhon Ratchasima	Mean	-	-	-	0.01	0.06	0.15	0.12	0.22	0.01	0.03	0.17	-	0.11
		%	0	0	0	38	100	100	100	100	100	100	100	0	62
		Max-10d	-	-	-	0.01	0.13	0.24	0.23	0.26	0.02	0.10	0.41	-	0.41
		Min-10d	-	-	-	0.01	0.02	<0.01	<0.01	0.18	<0.01	<0.01	<0.01	-	<0.01
Vietnam	Hanoi	Mean	6.13	9.07	9.00	6.48	5.68	7.58	3.13	6.30	3.51	6.24	5.07	6.75	6.23
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-w	9.24	15.11	11.86	8.79	8.59	10.02	7.87	9.38	8.18	7.91	6.33	10.25	15.11
		Min-w	2.63	3.96	6.86	3.90	0.47	3.47	1.26	1.75	0.58	4.45	4.22	4.69	0.47
	Hoa Binh	Mean	3.43	3.20	3.80	3.96	1.48	1.80	1.77	2.49	2.10	4.75	3.91	4.79	3.12
		%	100	100	100	100	100	100	100	100	100	100	100	100	100
		Max-w	4.41	4.50	4.48	6.13	2.14	2.61	2.88	3.42	3.21	6.32	5.30	5.69	6.32
		Min-w	2.26	2.18	2.87	1.71	1.06	1.07	0.79	1.80	1.39	1.32	2.39	3.70	0.79

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	2013
Cambodia	Phnom Penh											1.8	1.5	1.3	1.1
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	8.6
	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	5.6
	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	3.9
Indonesia	Jakarta								11.0	7.4	8.3	6.3	5.0	5.7	5.3
	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	0.8
	Kototabang								3.3	6.3	7.9	11.7	2.2	***	1.8
	Bandung									2.7	4.7	4.2	4.0	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	0.2
	Ochiishi									0.2	0.2	0.2	0.1	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	0.5
	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	0.4
	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	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	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	0.6
	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	0.5
	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	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	0.3
	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	<0.1
	Tokyo								2.2	2.2	2.0	1.8	1.6	1.4	1.6
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	1.3
	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	<0.1
	Danum Valley							0.1	0.1	<0.1	0.1	<0.1	<0.1	0.1	0.2
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	1.3
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	0.1
Republic of Korea	Kanghwa			3.6	1.9	3.6	2.8	3.4	2.8	2.9	3.2	2.9	4.1	4.4	3.4
	Cheju (Kosan)			1.3	3.9	1.8	2.2	3.4	2.3	2.2	2.7	2.5	2.5	0.9	0.6
	Imsil			2.3	1.5	1.2	2.5	1.8	2.1	2.3	1.4	2.7	4.8	1.3	1.8
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	0.1
	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	2.6
	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	4.2
	Primorskaya			0.5	0.4	0.5	1.6	1.2	0.7	0.9	1.0	1.7	1.2	1.2	0.7
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	1.9
	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	3.0
	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	1.0
	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	1.3
	Nakhon Ratchasima							0.3	0.4	0.2	0.2	0.2	0.2	0.3	0.2
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	2.1
	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	1.1

( ) : Reference data

[***]: No data or not measured

Data in hatched cell: Annual data completeness was not satisfied with EANET criteria. (<70%)

Black cell: 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	2013
Cambodia	Phnom Penh											0.3	0.3	0.3	0.5
China	Hongwen								0.9	1.7	1.1	1.0	2.1	***	***
Indonesia	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	0.6
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
	Ochiishi									<0.1	<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	0.1
	Sado-seki				0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.3	0.3
	Happo				0.4	0.3	0.2	0.3	0.4	0.4	<0.1	<0.1	<0.1	0.3	0.3
	Ijira				0.3	0.4	0.4	0.4	0.3	0.3	0.3	0.2	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	0.2
	Banryu				0.2	0.3	0.4	0.3	0.4	0.3	0.3	0.2	0.2	0.3	0.3
	Yusuhara				0.3	0.4	0.5	0.5	0.5	0.3	0.3	0.3	0.3	0.3	0.4
	Hedo				<0.1	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	<0.1
	Tokyo								1.1	1.0	0.8	0.8	0.6	0.6	0.8
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	0.7
	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	0.1
	Danum Valley							<0.1	<0.1	<0.1	0.2	<0.1	<0.1	<0.1	0.3
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	0.3
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	<0.1
Republic of Korea	Kanghwa				0.2	0.3	***	0.4	0.7	0.5	0.5	0.4	***	***	0.4
	Cheju (Kosan)				0.2	0.9	***	0.5	***	0.7	0.6	0.5	***	***	0.4
	Imsil		0.5	***	1.7	0.4	***	0.6	0.4	0.4	0.5	0.3	***	***	0.6
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	<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	<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	<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	0.3
Thailand	Bangkok				0.7	0.9	0.5	1.0	0.5	0.5	0.5	0.6	0.5	0.6	0.4
	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	0.1
	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	0.2
	Nakhon Ratchasima							0.3	0.3	0.2	0.2	0.2	<0.1	0.2	<0.1
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	0.7
	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	0.3

[***]: No data or not measured

Data in hatched cell: Annual data completeness was not satisfied with EANET criteria. (<70%)

Black cell: 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	2013
Cambodia	Phnom Penh											0.5	0.4	0.7	1.3
China	Hongwen								1.5	1.2	1.5	14.5	13.3	***	***
Indonesia	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	0.7
Japan	Rishiri			0.3	0.4	0.5	0.4	0.4	0.4	0.5	0.5	0.5	0.5	0.4	0.5
	Ochiishi									0.4	0.4	0.4	0.6	0.6	0.5
	Tappi				0.7	0.6	0.5	0.5	0.6	0.6	0.5	1.5	0.7	0.6	0.6
	Sado-seki				0.9	1.0	1.1	0.9	0.9	0.8	0.9	0.7	0.8	0.9	0.8
	Happo				0.2	0.2	0.2	0.2	0.2	0.2	<0.1	<0.1	<0.1	0.2	0.2
	Ijira				0.2	0.3	0.2	0.2	0.3	0.2	0.2	0.2	0.2	0.1	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	1.0
	Banryu				0.2	0.6	0.9	0.8	0.9	0.7	0.8	0.7	0.8	0.7	0.8
	Yusuhara				0.3	0.3	0.4	0.4	0.4	0.3	0.3	0.3	0.4	0.3	0.4
	Hedo				0.9	1.0	0.9	0.9	1.0	0.9	0.9	0.5	0.4	0.6	1.0
	Ogasawara				0.3	0.5	0.5	0.4	0.7	0.6	0.5	0.4	0.4	0.4	0.6
	Tokyo								1.0	0.8	0.8	0.7	0.8	0.7	0.8
Malaysia	Petaling Jaya		1.4	***	***	0.7	0.9	1.6	0.7	1.1	0.7	0.5	0.8	1.2	1.3
	Tanah Rata	0.1	<0.1	***	***	0.3	0.1	<0.1	0.1	0.4	0.1	<0.1	0.2	0.4	0.3
	Danum Valley							0.2	0.2	0.3	0.5	0.3	0.2	0.5	1.0
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	0.6
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	0.2
Republic of Korea	Kanghwa				0.3	0.1	***	0.2	0.2	<0.1	0.1	0.2	***	***	0.3
	Cheju (Kosan)				0.1	0.9	***	0.2	***	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	***	***	0.2
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	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	2.1
	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	1.7
	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	0.5
Thailand	Bangkok				0.7	0.9	1.5	1.5	0.7	0.8	0.9	0.7	0.7	0.7	0.6
	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	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	0.2
	Nakhon Ratchasima							0.4	0.3	0.2	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	1.6
	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	1.6

[***]: No data or not measured

Data in hatched cell: Annual data completeness was not satisfied with EANET criteria. (<70%)

Black cell: 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	2013
Cambodia	Phnom Penh											14.3	11.5	9.9	9.4
China	Hongwen								7.9	8.1	11.2	12.2	9.5	***	***
Indonesia	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	11.7
Japan	Rishiri			0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.3	0.4
	Ochiishi									0.6	1.0	0.4	0.4	0.4	0.3
	Tappi				0.6	0.5	0.3	0.3	0.4	0.5	0.5	0.5	0.4	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	0.6
	Happo				0.5	0.3	0.6	0.4	0.3	0.4	0.2	0.3	0.2	0.4	0.4
	Ijira				1.2	1.2	1.1	1.3	1.2	1.1	1.0	1.1	1.0	1.0	1.3
	Oki			1.1	0.6	0.8	0.8	0.7	0.8	1.0	1.0	0.8	0.7	0.5	0.6
	Banryu				1.1	1.3	1.2	1.1	1.0	1.0	1.0	1.0	0.9	0.8	0.7
	Yusuhara				0.7	0.5	0.4	0.4	0.5	0.5	0.5	0.5	0.5	0.5	0.6
	Hedo				0.8	0.9	0.8	0.9	1.0	1.2	1.2	1.2	0.9	1.3	1.1
	Ogasawara				0.2	0.5	0.9	0.5	0.5	0.5	0.5	0.5	0.7	0.5	0.6
	Tokyo								6.1	5.2	5.0	4.9	4.4	3.9	4.6
Malaysia	Petaling Jaya		10.1	***	***	3.5	10.4	16.9	7.5	6.1	7.3	6.7	6.7	6.5	8.6
	Tanah Rata	0.5	0.2	***	0.3	0.7	1.3	1.2	0.9	1.0	0.8	0.9	1.2	0.9	1.2
	Danum Valley							1.2	0.9	0.9	1.9	1.5	0.9	0.7	3.8
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	6.2
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	1.1
Republic of Korea	Kanghwa				14.1	13.7	***	4.8	9.7	3.4	3.2	4.6	***	***	7.4
	Cheju (Kosan)				1.4	1.1	***	***	***	3.7	4.9	7.0	***	***	3.2
	Imsil		4.9	***	4.6	6.0	***	5.9	5.0	5.0	6.0	6.5	***	***	3.0
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	0.6
	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	1.3
	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	1.5
	Primorskaya			12.0	10.8	7.8	1.2	2.7	3.6	2.9	1.8	2.2	4.2	1.3	1.1
Thailand	Bangkok				5.8	11.1	7.8	10.1	10.2	8.2	8.7	7.9	8.8	8.3	8.7
	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	3.4
	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	3.5
	Nakhon Ratchasima							2.8	2.4	2.6	2.3	2.0	1.8	3.3	2.9
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	1.4
	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	1.7

[***]: No data or not measured

Data in hatched cell: Annual data completeness was not satisfied with EANET criteria. (<70%)

Black cell: 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	2013
China	Jinyunshan						1.0	2.6	1.5	6.7	3.3	2.0	1.6	2.1	1.6
	Weishuiyuan						5.1	9.8							
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	<0.1
	Ochiishi									<0.1	<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	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	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	<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	0.2
	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	<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	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	<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	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	<0.1
Malaysia	Tanah Rata								10.1	***	***	***	***	***	***
Thailand	Bangkok		25.0	21.6	***	15.3	11.2	11.1	11.5	13.6	11.6	8.8	10.3	9.5	8.5
	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	12.6
	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	3.3
	Chiang Mai (Mae Hia)				7.1	3.0	2.9	2.5	3.1	2.0	2.1	3.0	2.0	4.3	1.9
	Nakhon Ratchasima									5.9	***	***	***	***	***

( ) : Reference data
[***]: No data or not measured
Data in hatched cell: Annual data completeness was not satisfied with EANET criteria. (<70%)
Black cell: 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	2013
China	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	19.5
	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	17.6
Indonesia	Jakarta								4.2	32.8	48.5	31.2	***	16.3	26.5
	Serpong	6.3													
	Kototabang								0.7	1.9	3.5	0.5	***	***	2.5
	Bandung									11.3	13.3	31.5	39.0	42.8	41.0
Japan	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	1.7
Malaysia	Petaling Jaya		26.6	29.4	30.9										
Republic	Kanghwa								5.3	6.9	7.1	6.4	5.4	5.0	5.7
of Korea	Cheju (Kosan)								4.3	2.9	3.1	4.1	4.4	3.0	3.4
	Imsil								4.2	4.1	4.5	5.1	5.0	4.6	5.1
Thailand	Bangkok	***	25.3	28.5	***	23.8	21.5	23.6	16.4	20.5	23.6	21.2	24.5	24.7	25.3
	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	15.1

[***]: No data or not measured

Data in hatched cell: Annual data completeness was not satisfied with EANET criteria. (<70%)

Black cell: 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	2013
China	Jinyunshan (NOx*)						7.2	8.7	8.1	11.8	8.2	11.4	10.0	8.4	9.1
	Weishuiyuan (NOx*)						14.7	26.8							
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	0.6
	Ochiishi (NOx*)									1.0	1.1	1.0	1.1	1.0	0.8
	Tappi (NOx*)	0.9	1.2	1.3	1.4	1.5	1.4	1.2	1.3	1.6	***	***	1.1	1.2	1.4
	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	0.8
	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	0.9
	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	1.7
	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	1.1
	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	1.9
	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	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	0.9
	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	0.4
Malaysia	Tanah Rata (NOx*)								12.2	***	***	***	***	***	***
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	34.0
	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	27.7
	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	4.7
	Chiang Mai (Mae Hia) (NOx*)					14.0	8.8	10.4	12.6	10.4	10.8	12.5	11.6	15.5	14.2
	Nakhon Ratchasima (NOx*)									16.9	***	***	***	***	***

( ) : Reference data

[***]: No data or not measured

Data in hatched cell: Annual data completeness was not satisfied with EANET criteria. (<70%)

Black cell: 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	2013
Japan	Rishiri	39	39	41	43	43	42	43	46	42	42	40	37	34	37
	Ochiishi									38	37	38	35	39	39
	Tappi	47	46	46	45	47	51	51	54	60	***	***	38	41	40
	Sado-seki	44	41	43	49	49	48	48	48	47	49	53	49	46	46
	Happo	53	54	55	56	56	58	59	(63)	50	52	48	53	49	49
	Ijira	30	30	24	30	27	23	17	35	20	21	19	20	24	26
	Oki	45	44	40	39	45	45	44	45	45	46	45	46	46	48
	Banryu	36	36	37	36	37	37	34	34	35	36	35	33	33	33
	Yusuhara	39	29	29	33	39	43	42	40	40	41	36	33	34	39
	Hedo	41	41	42	39	32	35	40	38	39	39	38	33	35	38
	Ogasawara	22	27	29	30	30	33	31	32	28	30	38	29	32	37
Malaysia	Tanah Rata								15	***	***	***	***	***	***
Republic of Korea	Kanghwa			42	43	40	41	27	43	41	43	43	39	44	46
	Cheju (Kosan)			41	28	38	40	35	38	42	44	42	35	39	41
	Imsil			31	22	24	30	30	30	20	33	30	30	33	31
Russia	Mondy			44	42	45	42	45	39	35	45	44	40	38	38
Thailand	Bangkok									10	17	17	19	17	21
	Samutprakarn		4	12	17	13	14	14	14	18	18	15	17	19	20
	Khanchanaburi	20	10	14	***	15	17	10	7	16	14	23	12	16	13
	Chiang Mai (Mae Hia)				13	22	20	19	23	22	26	24	25	21	21
	Nakhon Ratchasima									22	***	***	***	***	***

( ) : Reference data

[***]: No data or not measured

Data in hatched cell: Annual data completeness was not satisfied with EANET criteria. (<70%)

Black cell: 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: μg/m^3

Country	Name of sites	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
China	Jinyunshan		96	73	70	64	60	78	65	50	40	51	45	43	64
	Weishuiyuan		123	138	112	128	118	121							
	Hongwen		61	62	68	64	66	97	71	59	60	63	61	59	58
	Xiang Zhou		51	48	56	48	40	47	50	51	48	48	49	44	54
Japan	Rishiri	16	18	18	16	17	14	15	14	16	16	18	15	13	12
	Ochiishi									30	24	22	23	20	16
	Tappi	64	19	26	16	20	19	18	17	22	16	28	18	17	18
	Sado-seki	24	25	27	22	28	24	24	22	23	22	21	21	19	20
	Happo	13	14	12	10	15	15	13	12	14	12	12	12	11	11
	Ijira	24	22	24	20	21	21	22	22	20	18	18	19	16	18
	Oki	26	29	31	23	27	28	30	29	26	26	29	25	23	27
	Banryu	29	31	35	25	29	29	31	31	27	26	28	24	22	25
	Yusuhara	15	22	22	18	20	20	20	19	18	18	18	16	15	17
	Hedo		46	48	26	34	35	37	29	27	28	31	28	27	26
	Ogasawara	11	12	13	11	13	12	13	13	10	12	12	10	11	12
Malaysia	Petaling Jaya	37	***	39	41										
Republic	Kanghwa			53	56	54	58	46	52	48	51	51	44	45	48
of Korea	Cheju (Kosan)			43	41	36	39	51	54	50	43	47	42	37	45
	Imsil			57	42	44	54	57	43	59	34	40	38	36	39
Thailand	Bangkok	56	49	***	***	51	42	44	45	43	39	38	38	37	41
	Samutprakarn									45	43	38	54	39	44
	Khanchanaburi	38	21	79	***	41	60	37	31	37	28	46	23	10	28
	Chiang Mai (Mae Hia)				48	59	52	41	52	38	42	45	33	42	41
	Nakhon Ratchasima									47	***	***	***	***	***

[***]: No data or not measured

Data in hatched cell: Annual data completeness was not satisfied with EANET criteria. (<70%)

Black cell: Monitoring was not carried out.

Table 4.30 Annual $PM_{2.5}$ concentration

unit: μg/m^3

Country	Name of sites	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Japan	Rishiri		9	8	10	8	8	8	8	9	8	9	8	8	7
	Ochiishi									16	12	12	10	9	7
	Oki		12	14	12	13	15	15	15	14	12	12	14	13	15

[***]: No data or not measured

Data in hatched cell: Annual data completeness was not satisfied with EANET criteria. (<70%)

Black cell: 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	2013
Cambodia	Phnom Penh											2.85	2.95	2.63	2.91
China	Hongwen								10.58	13.38	12.72	14.10	17.60	***	***
Indonesia	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	3.54
Japan	Rishiri			1.8	2.55	2.40	2.61	2.39	2.44	2.94	2.50	2.74	2.71	2.32	2.72
	Ochiishi									2.73	2.61	2.31	2.13	1.95	2.19
	Tappi				3.32	3.89	3.92	4.10	4.02	4.67	4.29	4.12	3.99	3.76	3.83
	Sado-seki				3.11	3.55	4.08	3.07	3.64	4.17	3.58	3.20	3.50	3.53	3.71
	Happo				2.11	2.30	2.59	2.79	2.58	2.52	0.59	0.86	1.02	2.36	2.50
	Ijira				3.72	4.10	5.07	4.89	4.76	4.78	3.88	3.25	3.55	2.52	2.88
	Oki			4.4	3.91	3.94	6.29	5.73	5.21	4.54	4.29	4.43	4.76	4.90	5.56
	Banryu				3.82	4.43	6.33	6.55	6.41	5.11	5.44	4.37	4.55	5.05	5.56
	Yusuhara				4.09	5.16	6.15	5.81	6.44	4.54	5.16	4.46	4.03	4.44	5.28
	Hedo				4.01	3.40	5.32	6.51	5.95	5.69	5.62	3.53	2.48	4.28	5.43
	Ogasawara				1.26	1.36	0.87	1.65	3.91	2.72	2.64	2.17	2.46	2.41	3.10
	Tokyo								5.36	5.15	4.62	4.28	4.06	3.14	4.38
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	3.17
	Tanah Rata	1.20	0.7	0.5	0.50	0.81	1.07	1.38	1.37	1.59	1.39	0.95	1.18	1.52	1.48
	Danum Valley							0.69	0.76	1.12	3.64	1.73	0.86	0.38	0.78
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	1.40
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	0.17
Republic	Kanghwa		4.9	6.9	5.65	4.26	6.56	3.43	2.35	3.11	6.04	6.19	***	***	7.43
of Korea	Cheju (Kosan)		2.7	6.7	6.99	8.90	7.11	8.05	6.75	5.51	4.68	3.82	***	***	4.37
	Imsil		2.1	5.1	8.23	10.12	9.29	10.31	5.90	4.18	4.66	5.03	***	***	5.61
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	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	0.67
	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	1.71
	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	3.66
Thailand	Bangkok				3.63	4.02	2.13	4.71	2.97	2.65	2.71	3.63	3.31	2.26	2.80
	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	1.40
	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	0.39
	Nakhon Ratchasima							3.64	4.80	3.78	3.44	2.12	2.74	2.44	2.89
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	11.54
	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	2.58

[***]: No data or not measured

Data in hatched cell: Annual data completeness was not satisfied with EANET criteria. (<70%)

Black cell: 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	2013
Cambodia	Phnom Penh											1.32	1.27	1.20	1.18
China	Hongwen								5.81	8.10	7.98	11.66	11.66	***	***
Indonesia	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	0.53
Japan	Rishiri			0.3	0.59	0.66	0.53	0.58	0.60	0.76	0.64	0.77	0.66	0.63	0.60
	Ochiishi									0.71	0.67	0.55	0.67	0.43	0.42
	Tappi				1.24	1.13	0.92	1.17	1.18	1.23	1.29	1.24	1.27	0.98	1.04
	Sado-seki				0.77	0.89	0.68	0.80	0.96	1.07	1.05	0.82	1.13	0.90	0.92
	Happo				0.27	0.36	0.27	0.25	0.20	0.22	0.10	0.11	0.14	0.31	0.36
	Ijira				0.41	0.49	0.48	0.54	0.49	0.39	0.40	0.40	0.47	0.25	0.30
	Oki			0.9	0.71	1.03	1.26	1.28	1.34	1.22	1.31	1.50	1.85	1.51	1.82
	Banryu				0.69	1.09	1.43	1.54	1.57	1.35	1.43	1.53	1.68	1.51	1.65
	Yusuhara				0.30	0.59	0.59	0.59	0.55	0.29	0.52	0.66	0.61	0.41	0.66
	Hedo				1.50	1.16	1.11	1.65	1.48	1.52	1.63	1.09	0.80	1.27	1.62
	Ogasawara				0.32	0.29	0.12	0.36	0.74	0.57	0.60	0.53	0.53	0.53	0.60
	Tokyo								3.86	4.03	3.85	3.80	3.76	2.73	3.13
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	1.65
	Tanah Rata	0.20	<0.1	0.1	0.11	0.18	0.18	0.18	0.13	0.16	0.15	0.12	0.13	0.18	0.34
	Danum Valley							0.05	0.04	0.06	0.21	0.36	0.04	0.08	0.09
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	0.54
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	0.14
Republic of Korea	Kanghwa		0.5	2.3	4.19	1.12	1.85	2.03	1.03	1.92	2.38	3.50	***	***	3.51
	Cheju (Kosan)		<0.1	0.3	0.53	1.44	0.27	0.39	0.57	0.34	0.49	0.67	***	***	0.74
	Imsil		0.3	0.6	0.51	1.23	1.56	3.99	3.05	2.86	2.67	3.82	***	***	2.95
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	0.02
	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	0.09
	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	0.49
	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	1.17
Thailand	Bangkok				1.51	2.07	2.83	1.60	1.51	1.44	1.62	1.86	2.00	1.91	1.41
	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	0.11
	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	0.30
	Nakhon Ratchasima							0.52	0.48	0.41	0.34	0.18	0.31	0.28	0.41
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	6.73
	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	1.11

[***]: No data or not measured

Data in hatched cell: Annual data completeness was not satisfied with EANET criteria. (<70%)

Black cell: 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	2013
Cambodia	Phnom Penh											0.20	0.24	0.24	0.40
China	Hongwen								2.07	1.85	1.73	2.28	1.51	***	***
Indonesia	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	0.20
Japan	Rishiri			2.4	2.04	2.73	2.35	2.03	2.25	2.20	2.42	2.79	2.31	1.94	2.00
	Ochiishi									4.44	6.88	4.34	3.28	3.06	4.58
	Tappi				3.38	7.64	6.02	8.08	6.51	8.26	8.97	6.01	5.93	8.15	5.91
	Sado-seki				3.08	3.88	3.08	3.56	3.30	4.61	3.38	3.78	3.06	3.02	3.43
	Happo				0.02	0.03	0.02	0.03	0.02	0.01	0.02	0.03	0.02	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	0.03
	Oki			1.4	1.30	2.12	2.55	2.42	2.36	2.71	3.69	4.54	4.29	4.20	4.98
	Banryu				0.41	1.31	1.43	1.47	0.97	1.13	1.59	1.38	1.53	0.99	1.52
	Yusuhara				0.03	0.07	0.07	0.08	0.04	0.03	0.21	0.10	0.08	0.17	0.06
	Hedo				6.12	4.60	7.29	6.35	5.79	4.40	6.02	4.62	3.09	6.02	7.27
	Ogasawara				2.86	1.66	0.94	2.69	3.82	3.04	3.93	3.44	3.79	3.55	3.51
	Tokyo								0.62	0.63	0.68	0.66	0.70	0.49	0.59
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	0.16
	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	0.07
	Danum Valley							0.04	0.02	0.04	0.15	0.33	0.04	0.02	0.11
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	0.21
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	0.04
Republic of Korea	Kanghwa		0.3	0.3	0.24	0.16	0.18	0.15	0.19	0.19	0.64	0.44	***	***	0.47
	Cheju (Kosan)		0.3	0.3	0.41	0.53	0.14	0.13	0.30	0.32	0.29	0.46	***	***	1.12
	Imsil		0.3	0.3	0.31	0.14	0.12	0.29	0.38	0.50	0.45	0.61	***	***	0.48
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	0.14
	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	0.06
	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	0.24
	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	0.28
Thailand	Bangkok				0.22	1.06	0.59	0.19	0.29	0.18	0.26	0.28	0.32	0.26	0.16
	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	0.05
	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	0.12
	Nakhon Ratchasima							0.09	0.06	0.06	0.07	0.02	0.06	0.10	0.12
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	1.75
	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	0.59

[***]: No data or not measured

Data in hatched cell: Annual data completeness was not satisfied with EANET criteria. (<70%)

Black cell: 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	2013
Cambodia	Phnom Penh											0.61	0.50	0.34	0.57
China	Hongwen								3.66	5.55	5.48	6.72	5.85	***	***
Indonesia	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	0.38
Japan	Rishiri			0.3	0.48	0.35	0.44	0.41	0.39	0.53	0.45	0.47	0.47	0.41	0.45
	Ochiishi									0.40	0.40	0.29	0.37	0.32	0.28
	Tappi				0.60	0.67	0.57	0.63	0.64	0.77	0.66	0.68	0.64	0.53	0.58
	Sado-seki				0.45	0.49	0.83	0.48	0.54	0.68	0.53	0.50	0.56	0.54	0.62
	Happo				0.58	0.57	0.69	0.64	0.65	0.66	0.15	0.22	0.26	0.64	0.63
	Ijira				1.24	1.17	1.45	1.39	1.32	1.36	1.06	0.87	0.95	0.69	0.81
	Oki			0.8	0.60	0.68	1.27	1.19	1.07	0.97	0.86	0.92	0.93	0.94	1.10
	Banryu				0.62	0.97	1.43	1.51	1.60	1.32	1.30	1.02	1.06	1.24	1.40
	Yusuhara				0.88	1.15	1.40	1.41	1.53	1.12	1.25	1.00	0.96	1.06	1.25
	Hedo				0.56	0.46	0.67	0.80	0.88	0.98	0.86	0.42	0.43	0.71	0.69
	Ogasawara				0.10	0.15	0.08	0.17	0.46	0.24	0.21	0.17	0.22	0.22	0.31
	Tokyo								1.82	1.96	1.83	1.71	1.57	1.10	1.44
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	0.94
	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	0.39
	Danum Valley							0.10	0.08	0.12	0.39	0.12	0.13	0.08	0.13
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	0.30
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	0.01
Republic of Korea	Kanghwa		2.0	2.6	2.69	1.59	2.23	1.38	0.85	1.34	2.51	2.93	***	***	3.54
	Cheju (Kosan)		0.7	2.0	2.44	2.98	2.05	2.39	2.15	1.61	1.54	1.32	***	***	1.80
	Imsil		0.5	1.4	2.59	2.85	2.66	3.67	2.37	1.82	2.34	2.54	***	***	2.82
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	<0.01
	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	0.10
	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	0.40
	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	1.06
Thailand	Bangkok				1.08	0.71	0.42	1.30	1.29	1.15	0.70	0.69	0.60	0.53	0.79
	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	0.30
	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	0.09
	Nakhon Ratchasima							1.13	1.37	1.13	0.87	0.73	0.96	0.84	0.90
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	3.32
	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	0.90

[***]: No data or not measured

Data in hatched cell: Annual data completeness was not satisfied with EANET criteria. (<70%)

Black cell: 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	2013
Cambodia	Phnom Penh											0.53	0.63	0.57	0.67
China	Hongwen								1.39	1.40	1.55	1.76	1.62	***	***
Indonesia	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	0.37
Japan	Rishiri			1.7	1.65	2.02	1.76	1.62	1.78	1.82	1.91	2.14	1.84	1.58	1.64
	Ochiishi									3.09	4.37	2.87	2.45	2.15	3.00
	Tappi				2.99	4.99	4.18	5.23	4.30	5.31	6.01	4.24	3.97	5.12	4.05
	Sado-seki				2.39	2.92	2.22	2.52	2.53	3.32	2.56	2.67	2.43	2.38	2.56
	Happo				0.09	0.14	0.08	0.08	0.08	0.10	0.03	0.03	0.05	0.09	0.09
	Ijira				0.26	0.27	0.27	0.26	0.29	0.25	0.25	0.22	0.25	0.16	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	3.80
	Banryu				1.18	1.42	1.61	1.68	1.33	1.32	1.64	1.41	1.59	1.29	1.62
	Yusuhara				0.34	0.44	0.43	0.45	0.43	0.26	0.54	0.41	0.42	0.39	0.45
	Hedo				4.85	3.18	5.22	4.85	4.54	3.77	4.63	3.38	2.28	4.34	5.27
	Ogasawara				1.86	1.24	0.68	1.78	2.95	2.38	2.80	2.38	2.61	2.45	2.65
	Tokyo								0.99	0.80	0.94	0.91	0.89	0.71	0.87
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	0.42
	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	0.16
	Danum Valley							0.13	0.13	0.16	0.59	0.72	0.17	0.05	0.16
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	0.21
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	0.10
Republic of Korea	Kanghwa		0.3	0.6	0.33	0.19	0.33	0.25	0.26	0.34	0.52	0.40	***	***	0.51
	Cheju (Kosan)		<0.1	0.4	0.52	0.72	0.35	0.40	0.39	0.41	0.51	0.45	***	***	0.64
	Imsil		0.3	0.4	0.52	0.52	0.44	0.39	0.42	0.46	0.54	0.40	***	***	0.24
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	0.06
	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	0.05
	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	0.14
	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	0.27
Thailand	Bangkok				0.46	1.53	0.48	0.68	0.38	0.33	0.57	0.54	0.54	0.43	0.47
	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	0.13
	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	0.11
	Nakhon Ratchasima							0.17	0.28	0.24	0.21	0.16	0.17	0.18	0.13
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	0.75
	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	0.44

[***]: No data or not measured

Data in hatched cell: Annual data completeness was not satisfied with EANET criteria. (<70%)

Black cell: 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	2013
Cambodia	Phnom Penh											0.63	0.59	0.46	0.73
China	Hongwen								0.57	0.62	0.68	3.46	0.72	***	***
Indonesia	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	0.37
Japan	Rishiri			<0.1	0.13	0.14	0.13	0.15	0.13	0.16	0.14	0.15	0.14	0.10	0.10
	Ochiishi									0.16	0.18	0.13	0.12	0.10	0.12
	Tappi				0.19	0.27	0.21	0.28	0.25	0.26	0.31	0.28	0.23	0.24	0.19
	Sado-seki				0.11	0.17	0.14	0.15	0.16	0.19	0.18	0.17	0.17	0.14	0.15
	Happo				0.05	0.06	0.06	0.06	0.05	0.05	0.02	0.01	0.02	0.04	0.04
	Ijira				0.16	0.14	0.18	0.17	0.15	0.14	0.13	0.09	0.11	0.06	0.07
	Oki			0.2	0.19	0.22	0.26	0.23	0.21	0.18	0.20	0.22	0.24	0.22	0.24
	Banryu				0.18	0.19	0.21	0.25	0.21	0.19	0.21	0.16	0.19	0.16	0.18
	Yusuhara				0.11	0.18	0.21	0.21	0.18	0.11	0.16	0.12	0.15	0.09	0.12
	Hedo				0.23	0.19	0.29	0.32	0.31	0.27	0.29	0.21	0.12	0.25	0.26
	Ogasawara				0.10	0.07	0.03	0.08	0.16	0.16	0.16	0.13	0.13	0.12	0.13
	Tokyo								0.20	0.19	0.21	0.18	0.17	0.12	0.16
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	0.37
	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	0.13
	Danum Valley							0.09	0.09	0.12	0.43	0.29	0.16	0.06	0.14
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	0.24
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	0.01
Republic	Kanghwa		0.5	0.5	0.61	0.27	0.48	0.33	0.30	0.25	0.49	0.20	***	***	0.29
of Korea	Cheju (Kosan)		0.2	0.4	1.29	0.72	0.45	0.46	0.40	0.33	0.21	0.12	***	***	0.15
	Imsil		0.3	0.5	1.17	0.84	0.55	0.50	0.32	0.37	0.35	0.25	***	***	0.16
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	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	0.06
	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	0.15
	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	0.40
Thailand	Bangkok				0.59	0.98	0.28	0.65	0.43	0.36	0.43	0.39	0.41	0.37	0.47
	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	0.19
	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	0.17
	Nakhon Ratchasima							0.25	0.37	0.34	0.31	0.18	0.64	0.51	0.16
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	2.34
	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	1.30

[***]: No data or not measured

Data in hatched cell: Annual data completeness was not satisfied with EANET criteria. (<70%)

Black cell: 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	2013
Cambodia	Phnom Penh											0.12	0.14	0.11	0.14
China	Hongwen								0.28	0.31	0.33	0.48	0.31	***	***
Indonesia	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	0.08
Japan	Rishiri			0.2	0.20	0.24	0.21	0.20	0.22	0.24	0.24	0.26	0.22	0.19	0.19
	Ochiishi									0.44	0.56	0.34	0.30	0.25	0.35
	Tappi				0.39	0.61	0.49	0.63	0.52	0.56	0.68	0.48	0.46	0.60	0.49
	Sado-seki				0.30	0.36	0.31	0.28	0.31	0.39	0.31	0.32	0.30	0.29	0.31
	Happo				0.02	0.03	0.02	0.02	0.03	0.03	<0.01	<0.01	0.01	0.02	0.03
	Ijira				0.05	0.04	0.04	0.04	0.05	0.04	0.04	0.04	0.04	0.02	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	0.46
	Banryu				0.15	0.19	0.23	0.26	0.22	0.17	0.20	0.20	0.21	0.17	0.22
	Yusuhara				0.07	0.08	0.08	0.09	0.09	0.05	0.08	0.08	0.07	0.06	0.08
	Hedo				0.61	0.38	0.67	0.60	0.58	0.47	0.58	0.44	0.29	0.53	0.63
	Ogasawara				0.25	0.14	0.08	0.22	0.37	0.33	0.36	0.30	0.32	0.31	0.33
	Tokyo								0.15	0.12	0.13	0.12	0.13	0.11	0.14
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	0.07
	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	0.03
	Danum Valley							0.01	0.04	0.05	0.07	0.10	0.02	<0.01	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	0.04
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	0.04
Republic of Korea	Kanghwa		<0.1	<0.1	0.07	0.01	0.01	0.01	<0.01	0.01	0.03	0.04	***	***	0.08
	Cheju (Kosan)		<0.1	<0.1	0.05	0.04	0.01	0.02	0.09	0.02	<0.01	0.04	***	***	0.04
	Imsil		<0.1	<0.1	0.06	0.05	0.03	0.04	0.03	0.01	0.02	0.05	***	***	0.03
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	<0.01
	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	<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	0.04
	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	0.08
Thailand	Bangkok				0.12	0.43	0.10	0.13	0.09	0.08	0.09	0.14	0.09	0.07	0.11
	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	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	0.03
	Nakhon Ratchasima							0.05	0.06	0.05	0.04	0.02	0.01	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	0.46
	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	0.28

[***]: No data or not measured

Data in hatched cell: Annual data completeness was not satisfied with EANET criteria. (<70%)

Black cell: 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	2013
Cambodia	Phnom Penh											0.87	0.82	0.76	0.87
China	Hongwen								2.84	2.79	2.73	9.44	1.59	***	***
Indonesia	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	0.51
Japan	Rishiri			<0.1	0.13	0.16	0.14	0.13	0.14	0.17	0.16	0.18	0.13	0.13	0.14
	Ochiishi									0.15	0.24	0.14	0.14	0.10	0.17
	Tappi				0.22	0.38	0.27	0.35	0.30	0.30	0.39	0.36	0.29	0.27	0.26
	Sado-seki				0.16	0.31	0.22	0.23	0.25	0.29	0.25	0.24	0.25	0.19	0.25
	Happo				0.06	0.16	0.15	0.17	0.14	0.12	0.07	0.05	0.04	0.11	0.19
	Ijira				0.12	0.16	0.16	0.18	0.17	0.13	0.14	0.15	0.17	0.08	0.09
	Oki			0.2	0.19	0.28	0.33	0.29	0.28	0.22	0.30	0.47	0.38	0.25	0.30
	Banryu				0.17	0.22	0.27	0.31	0.30	0.22	0.29	0.44	0.26	0.20	0.25
	Yusuhara				0.16	0.27	0.25	0.27	0.28	0.14	0.36	0.33	0.21	0.15	0.26
	Hedo				0.32	0.36	0.37	0.48	0.43	0.34	0.43	0.48	0.18	0.32	0.42
	Ogasawara				0.11	0.10	0.04	0.13	0.22	0.16	0.20	0.23	0.17	0.15	0.16
	Tokyo								0.56	0.52	0.51	0.59	0.49	0.36	0.52
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	0.47
	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	0.28
	Danum Valley							0.02	0.03	0.02	0.04	0.07	0.02	0.02	0.04
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	0.29
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	0.29
Republic of Korea	Kanghwa		0.2	0.2	0.34	0.09	0.10	0.04	0.05	0.07	0.17	0.07	***	***	0.14
	Cheju (Kosan)		<0.1	0.2	0.25	0.20	0.08	0.05	0.09	0.11	0.08	0.07	***	***	0.09
	Imsil		<0.1	0.3	0.42	0.13	0.11	0.12	0.28	0.11	0.08	0.09	***	***	0.08
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	<0.01
	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	0.06
	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	0.36
	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	0.35
Thailand	Bangkok				1.17	1.03	1.20	1.39	1.07	0.80	0.88	0.94	1.03	0.74	1.29
	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	0.12
	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	0.46
	Nakhon Ratchasima							0.17	0.23	0.28	0.22	0.09	0.16	0.14	0.11
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	6.23
	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	3.12

[***]: No data or not measured

Data in hatched cell: Annual data completeness was not satisfied with EANET criteria. (<70%)

Black cell: 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+}
2013	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	0.32	0.05	0.02	0.01	0.08	0.04	1.55	0.08	2.06	0.08	0.22	0.08
Feb	0.27	0.06	0.04	0.01	0.12	0.04	2.38	0.10	2.86	0.09	0.29	0.09
Mar	0.42	0.16	0.16	0.06	0.21	0.13	7.95	0.25	8.20	0.24	0.87	0.25
Apr	0.13	0.08	0.34	0.09	0.16	0.11	4.26	0.18	4.44	0.15	0.51	0.32
May	0.07	0.15	0.44	0.08	0.09	0.06	0.49	0.10	0.90	0.04	0.11	0.07
June	0.08	0.19	0.33	0.09	0.11	0.04	0.11	0.13	0.36	0.02	0.04	0.03
July	0.05	0.15	0.54	0.14	0.07	0.02	0.08	0.09	0.27	0.02	0.03	0.01
Aug	0.03	0.11	0.70	0.05	0.10	0.04	0.97	0.08	1.50	0.05	0.17	0.05
Sept	0.05	0.00	0.00	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Oct	0.12	0.00	0.00	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Nov	0.31	0.00	0.00	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Dec	0.22	0.00	0.00	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	2.07	0.96	2.56	0.67	0.95	0.49	17.80	1.02	20.59	0.69	2.24	0.90

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

Site: Ochiishi **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+}
2013	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	0.22	0.11	0.04	0.01	0.14	0.06	3.87	0.13	3.80	0.09	0.41	0.19
Feb	0.14	0.05	0.07	0.01	0.08	0.06	1.40	0.13	1.49	0.04	0.16	0.04
Mar	0.14	0.08	0.09	0.09	0.17	0.14	4.05	0.27	4.07	0.10	0.45	0.12
Apr	0.09	0.05	0.19	0.15	0.02	0.02	1.70	0.04	1.57	0.04	0.18	0.04
May	0.02	0.04	0.18	0.08	0.06	0.02	0.83	0.06	0.97	0.02	0.11	0.02
June	0.03	0.05	0.20	0.14	0.04	0.02	0.09	0.03	0.21	0.01	0.02	0.01
July	0.01	0.11	0.27	0.13	0.08	0.03	0.14	0.07	0.43	0.01	0.04	0.01
Aug	0.03	0.12	0.41	0.12	0.10	0.03	0.26	0.08	0.63	0.02	0.06	0.02
Sept	0.06	0.12	0.33	0.11	0.10	0.04	0.93	0.07	1.20	0.03	0.14	0.03
Oct	0.09	0.05	0.30	0.05	0.03	0.03	3.34	0.04	3.00	0.07	0.34	0.08
Nov	0.14	0.03	0.10	0.05	0.01	0.00	3.65	0.01	3.16	0.07	0.37	0.09
Dec	0.11	0.04	0.12	0.03	0.04	0.03	3.15	0.06	2.81	0.06	0.31	0.07
Annual	1.09	0.85	2.31	0.97	0.85	0.47	23.42	0.98	23.34	0.55	2.58	0.72

Table 4.41 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+}
2013	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	0.95	0.43	0.05	0.01	1.09	1.01	79.36	0.98	77.58	1.97	8.35	1.93
Feb	0.82	0.39	0.06	0.00	1.18	0.69	198.99	1.04	183.44	4.02	19.51	4.81
Mar	1.06	0.37	0.10	0.09	1.11	1.10	67.24	1.15	66.87	1.77	7.76	2.62
Apr	0.56	0.73	0.37	0.16	1.29	1.47	67.95	1.46	69.15	1.94	8.04	4.61
May	0.76	1.39	0.38	0.23	1.19	1.12	16.14	1.31	23.41	0.79	2.77	1.20
June	1.27	2.24	0.48	0.52	0.95	0.25	0.18	0.91	4.23	0.22	0.49	0.26
July	1.18	2.09	0.64	0.30	1.03	0.29	0.90	1.17	6.88	0.34	0.77	0.27
Aug	0.58	1.86	0.64	0.15	1.47	0.50	8.07	1.39	16.64	0.58	1.93	0.64
Sept	0.35	0.61	0.32	0.17	0.57	0.40	10.92	0.61	13.86	0.46	1.63	0.61
Oct	0.38	0.33	0.22	0.06	0.75	0.81	60.85	0.83	63.11	2.02	7.33	2.10
Nov	0.68	0.59	0.08	0.05	0.99	0.99	82.49	1.10	79.62	2.08	9.43	2.76
Dec	0.52	0.48	0.08	0.04	0.55	0.49	101.31	0.55	95.11	2.15	11.14	2.32
Annual	9.10	11.50	3.43	1.78	12.17	9.12	694.40	12.51	699.88	18.34	79.15	24.13

Table 4.42 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+}
2013	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	1.50	0.31	0.05	0.01	0.29	0.14	27.92	0.19	27.08	0.71	3.11	0.76
Feb	1.68	0.74	0.14	0.01	0.89	0.49	36.32	0.82	37.41	1.34	4.43	1.76
Mar	0.77	1.18	0.37	0.11	1.04	1.04	32.95	1.12	33.57	1.15	4.10	3.25
Apr	0.49	1.23	0.66	0.14	0.86	0.83	38.15	1.01	39.14	1.29	4.72	2.71
May	0.25	2.34	0.92	0.11	0.82	0.45	8.33	0.93	12.25	0.54	1.53	1.10
June	0.16	1.47	0.69	0.10	0.40	0.15	0.24	0.51	1.91	0.15	0.24	0.19
July	0.59	1.42	0.80	0.22	0.64	0.42	7.76	0.51	16.05	0.55	1.86	0.59
Aug	0.26	2.25	0.55	0.07	0.96	0.22	2.41	1.19	6.57	0.33	0.79	0.42
Sept	0.17	0.74	0.36	0.10	0.23	0.28	6.87	0.23	8.81	0.28	1.01	0.38
Oct	0.23	0.46	0.22	0.04	0.23	0.23	14.37	0.24	14.74	0.43	1.61	0.47
Nov	1.19	0.87	0.22	0.04	0.66	0.62	192.70	0.54	181.27	3.77	18.28	5.23
Dec	2.10	0.52	0.12	0.04	0.26	0.23	39.63	0.23	37.34	0.83	4.09	0.86
Annual	9.37	13.53	5.10	1.00	7.27	5.09	407.65	7.54	416.14	11.37	45.77	17.71

Table 4.43 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+}
2013	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	0.31	0.56	0.05	0.01	0.30	0.03	0.02	0.26	0.35	0.08	0.06	0.12
Feb	0.30	0.54	0.05	0.01	0.55	0.10	0.13	0.49	0.96	0.19	0.19	0.74
Mar	0.56	1.13	0.25	0.07	1.01	0.84	0.82	0.94	2.90	0.50	0.85	5.52
Apr	0.36	1.34	0.35	0.09	0.52	0.27	0.45	0.58	0.88	0.18	0.29	2.12
May	0.26	1.81	0.45	0.21	0.45	0.11	0.01	0.58	0.32	0.16	0.14	0.83
June	0.24	0.88	0.48	0.18	0.20	0.04	0.00	0.32	0.07	0.05	0.03	0.11
July	0.17	0.95	0.37	0.14	0.32	0.03	0.01	0.46	0.30	0.06	0.06	0.10
Aug	0.19	1.01	0.42	0.16	0.44	0.02	0.01	0.66	0.13	0.08	0.06	0.12
Sept	0.30	0.61	0.42	0.11	0.16	0.05	0.02	0.25	0.28	0.04	0.05	0.05
Oct	0.26	0.36	0.41	0.03	0.16	0.05	0.11	0.20	0.70	0.08	0.12	0.13
Nov	0.54	0.63	0.09	0.05	0.08	0.03	0.02	0.08	0.16	0.02	0.05	0.06
Dec	0.17	0.52	0.02	0.04	0.16	0.06	0.04	0.16	0.59	0.10	0.10	0.11
Annual	3.65	10.35	3.35	1.11	4.36	1.62	1.65	4.97	7.64	1.55	1.97	10.02

Table 4.44 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+}
2013	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	0.13	0.05	0.16	0.03	0.04	0.01	0.01	0.06	0.08	0.02	0.01	0.01
Feb	0.16	0.04	0.21	0.03	0.03	0.01	0.02	0.04	0.04	0.01	0.01	0.02
Mar	0.23	0.27	0.26	0.19	0.18	0.08	0.06	0.28	0.50	0.08	0.09	0.21
Apr	0.12	0.43	0.73	0.20	0.05	0.02	0.02	0.08	0.13	0.02	0.02	0.04
May	0.11	0.38	0.43	0.14	0.11	0.03	0.01	0.18	0.19	0.04	0.03	0.08
June	0.16	0.26	0.66	0.00	0.05	0.01	0.00	0.08	0.07	0.03	0.01	0.03
July	0.09	0.24	0.77	0.00	0.09	0.00	0.00	0.12	0.12	0.03	0.02	0.02
Aug	0.07	0.20	1.09	0.00	0.09	0.00	0.00	0.13	0.05	0.03	0.01	0.01
Sept	0.10	0.02	0.16	0.00	0.01	0.00	0.00	0.01	0.01	0.01	0.00	0.00
Oct	0.05	0.01	0.13	0.07	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Nov	0.07	0.04	0.23	0.06	0.03	0.01	0.01	0.04	0.03	0.01	0.00	0.01
Dec	0.09	0.03	0.12	0.05	0.02	0.01	0.03	0.04	0.06	0.01	0.01	0.01
Annual	1.37	1.98	4.96	0.76	0.68	0.17	0.17	1.06	1.29	0.28	0.19	0.44

Table 4.45 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+}
2013	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	3.05	1.00	0.16	0.02	2.30	2.03	98.04	2.59	106.70	3.27	12.20	3.63
Feb	1.96	0.77	0.18	0.02	1.75	1.22	54.47	2.19	61.43	2.15	7.14	2.26
Mar	2.02	1.73	0.85	0.21	3.42	3.85	71.48	4.70	83.88	4.24	10.64	6.92
Apr	1.31	1.59	1.09	0.21	2.25	2.32	46.44	2.83	57.16	2.09	7.07	4.38
May	1.09	3.67	1.48	0.16	2.53	1.04	4.09	3.05	13.74	0.90	1.99	1.82
June	0.38	1.98	1.17	0.20	0.91	0.28	2.95	1.03	6.95	0.38	0.86	0.46
July	1.25	1.97	1.17	0.20	2.14	1.23	14.73	2.63	25.87	1.10	2.99	0.76
Aug	0.56	3.17	1.81	0.13	2.51	0.74	7.26	2.48	18.99	1.10	2.02	0.79
Sept	0.38	1.02	0.64	0.16	0.98	0.54	16.05	1.00	20.43	0.86	2.15	0.63
Oct	0.79	0.65	0.44	0.07	1.40	1.22	153.46	1.37	149.04	3.91	16.31	4.13
Nov	3.36	1.94	0.35	0.08	2.37	2.79	169.30	2.79	173.16	5.04	19.64	6.49
Dec	3.45	1.52	0.20	0.08	1.25	1.75	160.74	1.40	155.32	4.10	16.30	3.99
Annual	19.61	21.00	9.54	1.55	23.82	18.99	799.01	28.06	872.67	29.13	99.29	36.27

Table 4.46 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+}
2013	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	1.00	0.58	0.43	0.04	0.67	0.58	6.54	0.98	10.01	0.49	1.24	0.59
Feb	1.02	0.79	0.48	0.04	0.73	0.63	5.03	1.20	7.59	0.56	1.03	0.70
Mar	0.85	1.13	0.81	0.29	1.15	1.18	6.29	1.76	10.50	0.93	1.54	1.96
Apr	0.43	1.26	0.87	0.25	0.90	0.72	4.75	1.20	8.62	0.53	1.19	1.13
May	0.34	1.31	0.53	0.21	0.54	0.15	0.23	0.79	1.25	0.17	0.22	0.29
June	0.26	1.26	0.87	0.24	0.40	0.08	0.11	0.53	1.19	0.18	0.19	0.12
July	0.28	1.20	0.72	0.37	0.54	0.21	0.34	0.75	2.10	0.19	0.27	0.14
Aug	0.29	1.81	0.84	0.27	0.75	0.09	0.32	0.92	2.22	0.25	0.29	0.19
Sept	0.26	0.97	1.01	0.26	0.66	0.23	3.41	0.58	6.96	0.41	0.78	0.29
Oct	0.34	0.42	0.71	0.09	0.52	0.31	22.30	0.62	23.71	0.78	2.62	0.74
Nov	0.58	0.43	0.33	0.09	0.62	0.50	4.90	0.86	8.07	0.50	1.04	0.67
Dec	1.41	0.68	0.32	0.12	0.48	0.45	9.93	0.73	12.10	0.56	1.28	0.42
Annual	7.07	11.85	7.92	2.28	7.97	5.12	64.16	10.91	94.32	5.56	11.69	7.24

Table 4.47 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+}
2013	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	0.95	1.77	0.12	0.04	0.78	0.23	0.19	0.99	2.29	0.33	0.32	0.41
Feb	0.82	1.49	0.21	0.04	0.61	0.20	0.11	0.80	1.48	0.32	0.23	0.46
Mar	1.13	1.17	0.57	0.22	0.75	0.46	0.29	0.88	2.52	0.38	0.64	2.04
Apr	0.68	1.90	0.71	0.23	0.80	0.21	0.20	0.97	2.06	0.34	0.41	1.04
May	0.29	1.40	0.51	0.18	0.51	0.05	0.02	0.64	0.89	0.19	0.21	0.53
June	0.25	0.52	0.65	0.12	0.21	0.01	0.00	0.26	0.42	0.11	0.09	0.17
July	0.91	1.05	0.64	0.19	0.48	0.02	0.00	0.58	0.97	0.09	0.12	0.10
Aug	0.56	1.43	0.60	0.19	0.60	0.01	0.02	0.75	0.88	0.14	0.12	0.16
Sept	0.14	0.48	0.27	0.07	0.28	0.04	0.10	0.29	1.14	0.10	0.14	0.10
Oct	0.27	0.74	0.27	0.05	0.52	0.06	0.22	0.61	2.25	0.29	0.32	0.31
Nov	0.89	0.78	0.22	0.08	0.52	0.21	0.31	0.65	1.89	0.28	0.31	0.42
Dec	1.67	1.09	0.16	0.11	0.48	0.23	0.40	0.68	1.99	0.30	0.27	0.28
Annual	8.57	13.83	4.93	1.52	6.54	1.73	1.88	8.10	18.78	2.87	3.19	6.01

Table 4.48 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+}
2013	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	0.32	0.53	0.17	0.02	1.01	0.60	28.86	1.06	34.77	1.01	4.07	1.35
Feb	0.32	0.30	0.21	0.01	0.72	0.49	16.29	0.79	19.79	0.65	2.35	0.97
Mar	0.27	0.37	0.43	0.10	0.55	0.49	8.80	0.62	10.87	0.39	1.36	0.90
Apr	0.31	0.57	0.58	0.11	0.66	0.51	11.84	0.62	15.10	0.57	1.90	1.37
May	0.26	0.52	0.95	0.07	0.52	0.35	4.92	0.43	8.47	0.38	1.04	0.50
June	0.06	0.19	0.54	0.04	0.21	0.20	7.58	0.13	8.56	0.26	0.97	0.30
July	0.06	0.03	0.24	0.06	0.06	0.06	4.45	0.04	4.34	0.11	0.50	0.13
Aug	0.02	0.12	0.91	0.13	0.22	0.15	9.56	0.15	10.13	0.27	1.16	0.32
Sept	0.20	0.24	0.54	0.09	0.40	0.26	26.36	0.16	27.37	0.65	3.13	0.75
Oct	0.29	0.24	0.23	0.03	0.63	0.52	135.99	0.42	126.77	2.46	11.66	3.57
Nov	0.54	1.06	0.27	0.05	0.93	0.77	42.91	0.71	46.03	1.20	4.70	2.21
Dec	0.66	1.22	0.21	0.07	0.85	0.61	21.16	0.82	25.00	0.81	2.88	0.94
Annual	3.33	5.39	5.28	0.80	6.74	5.02	318.73	5.95	337.20	8.76	35.74	13.30

Table 4.49 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+}
2013	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	0.06	0.14	0.01	0.17	0.08	5.03	0.12	5.60	0.21	0.65	0.17
Feb	0.04	0.04	0.23	0.01	0.16	0.09	3.55	0.12	4.14	0.11	0.48	0.17
Mar	0.03	0.09	0.69	0.05	0.25	0.12	4.87	0.14	5.67	0.18	0.70	0.33
Apr	0.06	0.15	0.81	0.05	0.28	0.15	5.83	0.16	7.71	0.24	0.95	0.38
May	0.07	0.14	0.84	0.02	0.22	0.10	3.54	0.15	4.96	0.16	0.60	0.21
June	0.03	0.04	0.84	0.03	0.11	0.03	2.57	0.06	3.00	0.10	0.36	0.07
July	0.01	0.07	0.55	0.03	0.07	0.02	0.87	0.05	1.20	0.04	0.14	0.03
Aug	0.04	0.08	0.61	0.02	0.11	0.02	1.15	0.08	1.68	0.06	0.20	0.05
Sept	0.00	0.02	0.61	0.00	0.04	0.04	16.75	0.03	15.56	0.34	1.76	0.38
Oct	0.00	0.01	0.48	0.01	0.07	0.05	13.41	0.04	12.30	0.28	1.43	0.29
Nov	0.06	0.04	0.26	0.02	0.13	0.08	2.98	0.08	3.66	0.09	0.43	0.13
Dec	0.19	0.08	0.25	0.04	0.19	0.09	6.04	0.16	6.78	0.16	0.77	0.15
Annual	0.62	0.81	6.31	0.30	1.81	0.90	66.61	1.19	72.25	1.98	8.46	2.35

Table 4.50 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 4.51 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.

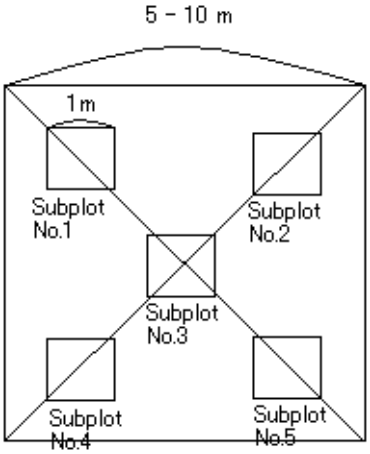


Figure 5.1 Plot for soil sampling

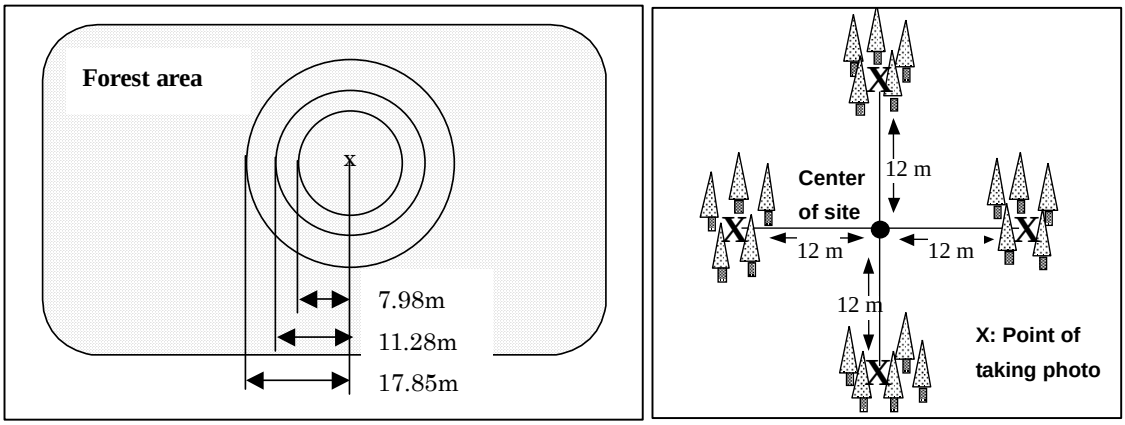


Figure 5.2 Plots for description of trees (Left) and selection of observation trees (Right)

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 11 areas of 5 countries were submitted this year. The list of monitoring site and reported items in 2013 were shown in Table 5.4.1 Observation of the tree decline was conducted in 10 plots. The second survey on soil and forest vegetation monitoring were carried out in 4 plots in Russia. Description of trees and understory vegetation survey in 2012 were reported from Thailand. The number of soil and vegetation plots in each monitoring site were shown in Table 5.4.2 with the number of survey until 2013.

Table 5.4.1 Outline of the Monitoring Sites in 2013

Country	Nearest deposition monitoring site	Site: Name of forests	Soil type	Items[*1]
China	**Chongquing**	**Jinyunshan-1**	**Acidi-Udic Argosols**	**F[*1]**
		Jinyunshan-2	**Acidi-Udic Argosols**	**F[*1]**
	Xiamen	**Xiaoping**	**Red soil**	**F[*1]**
	Xi'an	**Jiwozi**	**Brown soil**	**F[*1]**
	Zhunhai	**Zhuxiandong**	**Ferrosols**	**F[*1]**
Indonesia	**Serpong**	**Research Forest Station of Center and Development of Forestry Research**	**Typic Dystrudepts**	**F[*1]**
Japan	**Banryu**	**Banryu-2**	**Cambisols**	**F[*1]**
		Iwami Rinku Factory Park	**Acrisols**	**F[*1]**
	Ijira	**Lake Ijira**	**Dystric Cambisol**	**F[*1]**
		Yamato	**Andosols**	**F[*1]**
Russia	**Primorskaya**	**Primorskaya**	**Cambisols**	**S**
	Bolshie koty	**BK4**	**Mollic Leptosol**	**S**
		BK6	**Umbric Leptosol**	**S**
	Irkutsk	**Irkutsk**	**Eutric regosol**	**S**
Thailand	**Vachiralongkorn**	**Vachiralongkorn Dam**	**Ferric Acrisols**	**F[*2]**
		Vachiralongkorn Puye	**Luvisols**	**F[*2]**

*1. S, Soil monitoring; F[*1], Observation of tree decline; F[*2], Description of trees and understory vegetation survey

Table 5.4.2 Site information about the number of plots and surveys conducted until 2013

Country	Area (Name of nearest deposition monitoring site)	Name of individual monitoring site	The number of plots			Repeat of soil analysis	Start year	Latest year	The number of surveys until 2013		
			Forest Plot	Soil Main-plot	Soil Sub-plot				Tree decline	Tree survey (DBH, hight, Understory)	Soil survey (pH, Cations, Acidity)
***Standard Case (start in 2001)**			***1***	***2***	***5***	***2***	***2001***	***2013***	***9***	***3 - 5***	***3 - 5***
China	Jinyunshan (Chongqing)	Jinyunshan	2	2	5	1	2000	2013	8	4	5
	Jiwozi (Xi'an)	Dabagou	1	2	5	1	2001	2013	8	4	5
	Xiaoping (Xiamen)	Xiaoping	1	1	5	1	2000	2013	9	5	5
	Zhuxiandong (Zhuhai)	Zhuxiandong	3	3	5	1	2001	2012	7	1	4
Indonesia	EMC	Bogor Research Forest	1	1	5	1	2001	2013	5	1	3
Japan	Ijira	Ijira	1	2	5	2	2000	2013	11	3	3
		Yamato	1	2	5	2	2003	2013	11	2	2
	Banryu	Banryu-2[*2]	1	2	5	2	2000	2013	12	3	3
		Iwami "rinku" Factory Park[*2]	1	2	5	2	2001	2013	11	3	3
Malaysia	-	Pasoh Reserve Forest	0	2	5	1	2000	**	0	0	1
	Petaling Jaya	Sungai Lalang Reserve Forest	0	0	0	0	not started		0	0	0
Mongolia	Ulaanbaatar	Bogdkhan Mountain	1	0	0	0	2005	**	0	1	0
Phili-ppines	Los Banos	Mt. Makiling	1	2	5	2	2000	2008	3	3	3
		UP Quezon, Land Grant	1	2	5	2	2000	2008	3	3	4
	Metro Manila	La Mesa Watershed	1	2	5	2	2007	2010	2	2	2
	Mt. Sto Tomas	Boneco Long Term Ecological Research	1	2	5	2	2008	**	1	1	1
Republic of Korea	Imsil	Mt. Naejang	1	2	5	1	2001	2004	1	1	2
Russia	Irkutsk	Irkutsk	1	1	2	1	2001	2013	2	2	2
	Listvyanka	Bolshie Koty	1	2	1	2	2000	2013	1	1	2
		Pereemnaya river catchment	1	2	5	1	2005	**	1	1	1
	Mondy	Ilchir Lake	0	2	5	1	1999	**	0	0	1
		Okinskoe Lake	0	1	5	1	1999	**	0	0	1
		Solar Observatory	1	1	5	1	1999	2004	1	1	1
	Primorskaya	Primorskaya	1	1	2	3	2006	2013	1	1	2
Thailand	Vachiralongkorn Dam (old name: Kao Lam Dam) [*3]	Vachiralongkorn Dam	1	2	5	2	2000	2012	5	5	6
		Vachiralongkorn Puye	1	1	5	2	2002	2012	5	5	4
Viet Nam	Hoa Binh	Cave of Heaven	0	2	5	2	1999	**	0	0	1
		Thang Ranh	0	2	5	2	1999	**	0	0	1

**Soil and vegetation monitoring have been conducted only one time.

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

Table 5.5.1) Russia (Primorskaya)
Soil sampling date: 16 July 2013
Name of analysis laboratory: Laboratory of the hydrochemistry and chemistry of atmosphere, Limnological Institute, Russia
Analyst: Zhuchenko Natalia

1st analysis (Februaly 2014)

Location	Soil type	Plot No.	Subplot No.	Layer analyzed (cm)	Repeat analysis	Water contents (%)	pH		Exchangeable base cations (B)				Ex-acidity	Ex-acid cations		ECEC
									Ca	Mg	K	Na	(A)	Al	H	(A) + (B)
							H_2O	KCl	($cmol_c\ kg^{-1}$)							
Kaymonovka village, Primorsky Krai	Cambisols	1	1	0-5	1	4.3	5.9	5.1	25.3	4.6	0.69	0.20	0.21	0.00	0.21	31
			2			3.4	6.0	5.3	21.6	3.3	0.55	0.15	0.31	0.00	0.31	26
			1	5-10	1	3.0	5.5	4.4	10.5	2.7	0.42	0.13	0.46	0.21	0.25	14
			2			2.6	5.4	4.3	11.2	2.2	0.43	0.06	0.52	0.10	0.41	14
			1	10-20	1	2.4	5.0	3.8	5.2	1.9	0.32	0.10	2.37	1.95	0.42	9.9
			2			2.1	5.1	3.8	5.3	1.2	0.30	0.09	2.36	1.98	0.38	9.2

2nd analysis (March 2014)

Location	Soil type	Plot No.	Subplot No.	Layer analyzed (cm)	Repeat analysis	Water contents (%)	pH		Exchangeable base cations (B)				Ex-acidity	Ex-acid cations		ECEC
									Ca	Mg	K	Na	(A)	Al	H	(A) + (B)
							H_2O	KCl	($cmol_c\ kg^{-1}$)							
Kaymonovka village, Primorsky Krai	Cambisols	1	1	0-5	2	4.3	5.9	5.1	24.2	4.4	0.76	0.12	0.21	0.00	0.21	30
			2			3.4	6.0	5.3	21.7	3.3	0.55	0.15	0.31	0.00	0.31	26
			1	5-10	2	2.9	5.5	4.4	9.9	2.7	0.45	0.08	0.41	0.21	0.21	14
			2			2.6	5.4	4.3	11.2	2.2	0.43	0.06	0.51	0.31	0.21	14
			1	10-20	2	2.4	5.0	3.8	5.0	1.9	0.34	0.11	2.26	1.95	0.31	9.7
			2			2.1	5.1	3.8	5.3	1.2	0.30	0.09	2.36	1.94	0.42	9.2

3rd analysis (March 2014)

Location	Soil type	Plot No.	Subplot No.	Layer analyzed (cm)	Repeat analysis	Water contents (%)	pH		Exchangeable base cations (B)				Ex-acidity	Ex-acid cations		ECEC
									Ca	Mg	K	Na	(A)	Al	H	(A) + (B)
							H_2O	KCl	($cmol_c\ kg^{-1}$)							
Kaymonovka village, Primorsky Krai	Cambisols	1	1	0-5	3	4.3	5.9	5.1	26.5	4.8	0.62	0.27	0.21	0.00	0.21	32
			2			3.5	6.0	5.2	21.6	3.3	0.56	0.16	0.31	0.00	0.31	26
			1	5-10	3	2.9	5.5	4.4	11.1	2.8	0.39	0.17	0.52	0.21	0.31	15
			2			2.6	5.4	4.3	11.2	2.2	0.43	0.06	0.52	0.21	0.31	14
			1	10-20	3	2.5	5.0	3.8	5.3	1.9	0.30	0.09	2.31	1.95	0.36	10.0
			2			2.1	5.1	3.8	5.3	1.2	0.30	0.09	2.36	2.04	0.32	9.3

Table 5.5.2) Russia (Irkutsk)
Soil sampling date: July 2013
Name of analysis laboratory: Laboratory of the hydrochemistry and chemistry of atmosphere, Limnological Institute, Russia
Analyst: Zhuchenko Natalia

1st analysis

Location	Soil type	Plot No.	Subplot No.	Layer analyzed (cm)	Repeat analysis	Water contents (%)	pH		Exchangeable base cations (B)				Ex-acidity	Ex-acid cations		ECEC
									Ca	Mg	K	Na	(A)	Al	H	(A) + (B)
							H_2O	KCl	($cmol_c\ kg^{-1}$)							
Russia, Irkutsk, Academy town.	Eutric regosol	1	1	0-10	1	2.9	5.7	4.7	15	4.2	0.23	0.07	0.05	0.0	0.05	19
			2			2.8	5.7	4.7	14	4.3	0.25	0.072	0.049	0.0	0.05	19
			1	10-20		5.5	6.0	4.4	18	5.4	0.09	0.10	0.10	0.0	0.10	24
			2			5.5	6.0	4.3	18	5.5	0.09	0.10	0.10	0.0	0.10	24

Note: Soil chemical propesties have been reported from 0 to 140 cm depth.

Table 5.5.3) Russia (Bolshie Koty)
Soil sampling date：26 July 2013
Name of analysis laboratory: Laboratory of the hydrochemistry and chemistry of atmosphere, Limnological Institute, Russia
Analyst: Zhuchenko Natalia
1st analysis

Location	Soil type	Plot No.	Subplot No.	Layer analyzed (cm)	Repeat analysis	Water contents (%)	pH		Exchangeable base cations (B) Ca	Mg	K	Na	Ex-acidity (A)	Ex-acid cations Al	H	ECEC (A) + (B)
							H_2O	KCl	($cmol_c\ kg^{-1}$)							
Bolshie Koty station of LIN SB RAS	Mollic Leptosol	BK4	1	0–2	1	3.0	5.5	5.1	34	5.4	0.89	0.07	0.00	0.0	0.00	40
			1	2-15		3.6	5.6	4.4	18	3.3	0.18	0.09	0.10	0.0	0.10	22
			1	15–30		2.3	5.8	4.2	13	2.9	0.18	0.08	0.10	0.0	0.10	16

2nd analysis

Location	Soil type	Plot No.	Subplot No.	Layer analyzed (cm)	Repeat analysis	Water contents (%)	pH		Exchangeable base cations (B) Ca	Mg	K	Na	Ex-acidity (A)	Ex-acid cations Al	H	ECEC (A) + (B)
							H_2O	KCl	($cmol_c\ kg^{-1}$)							
Bolshie Koty station of LIN SB RAS	Mollic Leptosol	BK4	1	0–2	2	2.9	5.6	5.1	34	5.4	0.87	0.07	0.00	0.0	0.00	40
			1	2-15		3.6	5.6	4.5	18	3.3	0.12	0.09	0.10	0.0	0.10	22
			1	15–30		2.2	5.7	4.3	13	2.8	0.16	0.08	0.10	0.0	0.10	16

Note: Soil chemical propesties have been reported from 0 to 150 cm depth.

Table 5.5.4) Russia (Bolshie Koty)
Soil sampling date：27 July 2013
Name of analysis laboratory: Laboratory of the hydrochemistry and chemistry of atmosphere, Limnological Institute, Russia
Analyst: Zhuchenko Natalia
1st analysis

Location	Soil type	Plot No.	Subplot No.	Layer analyzed (cm)	Repeat analysis	Water contents (%)	pH		Exchangeable base cations (B) Ca	Mg	K	Na	Ex-acidity (A)	Ex-acid cations Al	H	ECEC (A) + (B)
							H_2O	KCl	($cmol_c\ kg^{-1}$)							
Bolshie Koty station of LIN SB RAS	Umbric Leptosol	BK6	1	0-10	1	25	4.9	3.5	11	3.9	0.60	0.07	3.0	2.2	0.74	19
			1	10-20		3.5	4.6	3.4	5.6	2.0	0.27	0.07	6.0	5.6	0.44	14

2nd analysis

Location	Soil type	Plot No.	Subplot No.	Layer analyzed (cm)	Repeat analysis	Water contents (%)	pH		Exchangeable base cations (B) Ca	Mg	K	Na	Ex-acidity (A)	Ex-acid cations Al	H	ECEC (A) + (B)
							H_2O	KCl	($cmol_c\ kg^{-1}$)							
Bolshie Koty station of LIN SB RAS	Umbric Leptosol	BK6	1	0-10	2	25	4.9	3.6	11	3.8	0.62	0.09	3.0	2.3	0.76	19
			1	10-20		3.5	4.6	3.4	5.5	2.0	0.29	0.07	6.1	5.6	0.50	14

Note: Soil chemical propesties have been reported from 0 to 80 cm depth.

Table 5.6.1) Observation of tree decline: jinyushan 1 (China)

Plot name: Jinyushan1, Chongqing

Date: 25 September 2013

Surveyor: Lixianyuan

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)	17.9	9.4	6.4	12.7	12.5	7.8	8.3	9.8	11.7	11.7
DBH (cm)	18.9	13.4	11.3	13.1	13.7	8.7	10.3	12.0	11.8	10.4
Vitality of tree										
Form of tree	1									
Branch growth										
Dieback of stem										
Defoliation of crown										
Deformation of leaves										
Size of leaves										
Discoloration of leaves										
Injury of leaves										
Damage class										

Estimated cause of decline: unknown

Table 5.6.2) Observation of tree decline: Jinyunshan 2 (China)

Plot name: Jinyushan2, Chongqing

Date: 25 September 2013

Surveyor: Lixianyuan

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)	10.4	9.4	15.5	16.3	19.5	14.1	17.5	15.5
DBH (cm)	10.7	14.1	15.6	25.2	21.0	16.2	39.0	21.9
Vitality of tree								
Form of tree				1				
Branch growth								
Dieback of stem								
Defoliation of crown								
Deformation of leaves								
Size of leaves								
Discoloration of leaves								
Injury of leaves								
Damage class								

Estimated cause of decline: unknown

Table 5.6.3) Observation of tree decline: Xiaoping (China)

Plot name: XPZ-01, Xiamen

Date: 15 October 2013

Surveyor: Zhang Yashuang

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																		
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																		

Table 5.6.4) Observation of tree decline: Jiwoji (China)

Plot name: DaBaGou, Xi'an

Date: 6 November 2013

Surveyor: Zhu Jian , Song XueJuan

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)	16.9	14.2	11.9	14.8	12.0	11.9	9.8	8.8	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)	24.8	24.6	16.1	21.6	24.8	16.6	12.4	18.5	15.6	19.2	27.7	22.7	14.8	22.7	16.2	24.1	16.3	24.3	15.6	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																				
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 5.6.5) Observation of tree decline: Bogor (Indonesia)

Plot name: Dramaga experimental forest, Block12, Serpong

Date: 30 April and 1 May 2013

Surveyor: Unknown

Individual No.	4 (27)	5 (279)	6 (280)	8 (282)	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*	*Melia excelsa*	*Maesopsis emenii*	*Hopea mengarawan*	*Hopea odorata*	*Khaya grandifolia*	*Hopea mengarawan*	*Hopea mengarawan*	*Hopea mengarawan*
Relative height																		
Tree height (m)	33	40	43	45	24	47	31	7.5	42	10	6.5	5.81	43	30	45	42	35	40
DBH (cm)			1															
Vitality of tree	1		2	1	1	3	1	1	1		3	3	1	2	2	1	1	2
Form of tree	1		1	1	2	3	1	1	2		2	3	1	2	1	1	1	1
Branch growth	1			1			1					3		1				
Dieback of stem	1		1	1	1	1	1	1			1	1	1	1	1	1		1
Defoliation of crown	1		1	1	1	2	1	2			2	2	1	1	1	1		1
Density of foliage			1										1	1				
Deformation of leaves			1										1	1		1		
Size of leaves			1				1		1	1	1		1	1		1		1
Discoloration of leaves			1				1			1								1
Color of leaves			1				1		1	1	1		1	1		1		
Injury of leaves			1				1				1		1	1		1		1
Damage class																		

Estimated cause of decline: Pest and very dense.

Table 5.6.6) Observation of tree decline: Lake Banryu-1 (Japan)

Plot name: Banryu-2, Banryu

Date: 27 September 2013

Surveyor: Ryoji Yanai

Individual No.	72	82	76	63	64	65	83	34	35	8	9	80
Direction (E, W, S, or N)	N	N	N	E	E	E	S	W	W	W	W	W
Plant Name	*Castanopsis cuspidata*	*Machilus Thunbergii*	*Symplocos lucida*	*Machilus Thunbergii*	*Syrax japonica*	*Machilus Thunbergii*	*Quercus serrata*	*Machilus Thunbergii*	*Machilus Thunbergii*	*Symplocos lucida*	*Symplocos lucida*	*Ilex integra*
Relative height	+	+	+	+	+	+	+	+	+	+	+	+
Tree height (m)	13.7	14.6	13.7	12.7	11.0	14.7	13.3	16.2	14.5	14.6	16.5	14.2
DBH (cm)	26.2	27.5	12.3	27.6	16.1	23.5	15.1	25.3	21.4	16.4	21.1	34.1
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												

Table 5.6.7) Observation of tree decline: Lake Banryu-2 (Japan)

Plot name: Iwamirinku-FP, Banryu

Date: 28 September 2013

Surveyor: Ryoji Yanai

Individual No.	92	93	122	100	104	108	127	128	63	138	112	113	114	142	141
Direction	N	N	N	E	E	E	E	E	S	S	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*	*Machilus Thunbergii*	*Machilus Thunbergii*	*Machilus Thunbergii*	*Machilus Thunbergii*	*Castanea crenata*	*Machilus Thunbergii*
Relative height			+		+					−					−
Tree height (m)	15.7	16.2	18.4	18.2	17.5	17.2	18.2	18.2	18.2	12.8	18.7	19.8	15.5	12.7	14.7
DBH (cm)	24.9	29.0	29.2	30.6	28.9	26.3	31.0	36.6	33.1	25.2	22.2	22.3	29.1	35.5	26.5
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: 142, by specific disease for Fagaceae tree species (infection of *Raffaelea quercivora* through the beetle, *Platypus quercivorus*); No. 63, natural pruning.

Table 5.6.8) Observation of tree decline: Lake Ijira (Japan)

Plot name: Ijira, Ijira

Date: 28 November 2013

Surveyor: Shinji Tanaka

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)	14.1	13.3	14.9	12.0	15.5	15.9	16.7	15.9	15.8	14.5	15.2	13.8	14.1	16.2	15.8	12.9	14.0	12.0	12.7	12.5
DBH (cm)	20.0	15.8	17.7	14.7	17.2	23.7	26.6	22.1	17.6	19.2	14.8	16.2	16.2	20.5	18.6	22.0	17.1	11.4	11.8	18.1
Vitality of tree												1	1					2	1	
Form of tree	2			2				1		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. 8, 11, 14 and 17, bent stem; No. 13, broken tree tip and forked; No. 18, 19 and 20, suppression by other surrounding trees.

Table 5.6.9) Observation of tree decline: Lake Ijira-2 (Japan)

Plot name: Yamato, Ijira

Date: 28 November 2013

Surveyor: Shinji Tanaka

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	28.7	31.0	28.7	28.9	31.8	29.0	30.8	30.3	28.5	26.0	30.4	30.4	29.0	28.7	29.3	27.5	29.6	30.7	24.3
DBH (cm)	38.4	39.0	42.5	43.2	41.5	44.4	38.2	36.6	41.5	39.5	34.1	43.8	44.6	34.8	41.7	32.3	34.4	44.1	39.6	34.6
Vitality of tree																				1
Form of tree						1										1				1
Branch growth																				
Dieback of stem				1			1													
Defoliation of crown																				
Deformation of leaves																				
Size of leaves																				
Discoloration of leaves																				
Injury of leaves																				
Damage class																				

Estimated cause of decline: No. 4, 6 and 7, broken tree tip; No. 16 and 20, bent stem by heavy snow.

Table 5.7.1) Description of trees: Vachiralongkorn Dam (Thailand)

Date: 21 September 2012

Survey area 1: radius 7.98 m

(Height > 1.3 m)

Tree No.	Scientific name (Local name)	DBH (cm)	Tree Height (m)	Remarks
no tree				

Survey area 2: radius 11.28 m

(DBH > 4 cm)

Tree No.	Scientific name (Local name)	DBH	Tree Height	Remarks
1	*Millettia branbisiana* (Kra pi jan)	14.4	10.6	
2	*Schleichera oleosa* (Tra kro)	16.1	12.6	
3	*Schleichera oleosa* (Tra kro)	16.1	12.6	
4	*Schleichera oleosa* (Tra kro)	5.2	5.0	
5	*Schleichera oleosa* (Tra kro)	7.1	6.0	
6	*Schleichera oleosa* (Tra kro)	7.2	6.0	
7	*Schleichera oleosa* (Tra kro)	7.3	6.5	
8	*Dalbergia cultrata* (Kra Pi Khao Kwai)	13.7	13.6	
9	*Millettia leucantha* (Kra Pi Khoa Kwai)	20.6	16.4	
10	Climber, Not identified	13.3	-	
11	Climber, Not identified	12.3	-	

Survey area 3: radius 17.85 m

(DBH > 18 cm)

Tree No.	Scientific name (Local name)	DBH	Tree Height	Remarks
1	*Mitragyna diversifolia* (Kra Tum Nam)	27.8	16.8	
2	*Millettia branbisiana* (Kra pi jan)	19.7	13.6	
3	*Vitex pinnata* (Tin Nok)	42.1	25.5	
4	*Sterculia guttata* (Por daeng)	27.0	18.4	
5	*Heteropanax fragrans* (Aoi chang)	19.9	17.5	
6	Not identified (Maew Lai)	25.8	5.5	
7	Not identified	18.0	18.0	

Table 5.7.2) Description of trees: Vachiralongkorn Puye (Thailand)
Date: 21 September 2012

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

Tree No.	Scientific name (Local name)	DBH (cm)	Tree Height (m)	Remarks
1	*Pterospermum acerifolium* (Po Hoo Chang)	1.9	2.1	
2	*Glochidion wallichianum* (Mun poo)	2.5	2.5	
3	*Glochidion wallichianum* (Mun poo)	2.0	3.0	
4	*Glochidion wallichianum* (Mun poo)	1.0	1.7	
5	*Pterospermum acerifolium* (Po Hoo Chang)	1.3	2.0	
6	*Glochidion wallichianum* (Mun poo)	0.8	2.0	
7	*Glochidion wallichianum* (Mun poo)	0.8	2.0	
8	*Helicia robusta* (Hang kra rok)	0.6	1.8	
9	*Glochidion wallichianum* (Mun poo)	1.1	2.3	
10	*Pterospermum acerifolium* (Po Hoo Chang)	0.7	1.6	
11	*Pterospermum acerifolium* (Po Hoo Chang)	1.0	1.7	
12	*Millettia brandisiana* (Kra pi jan)	1.3	2.5	
13	*Fraxinus chinensis* (Khae)	6.0	6.0	
14	*Glochidion wallichianum* (Mun poo)	1.4	2.0	
15	*Glochidion wallichianum* (Mun poo)	1.6	2.0	
16	*Glochidion wallichianum* (Mun poo)	0.7	2.1	
17	*Glochidion wallichianum* (Mun poo)	1.6	2.5	
18	*Glochidion wallichianum* (Mun poo)	1.1	2.3	
19	*Pterospermum acerifolium* (Po Hoo Chang)	1.5	2.4	
20	Not identified (Niang)	1.0	1.6	
21	Not identified (Niang)	1.0	2.3	
22	Not identified (Matard)	2.5	4.5	
23	Not identified (Ta baek)	1.5	3.2	
24	Not identified (Ta baek)	2.4	3.0	
25	Not identified	1.7	3.0	
26	Not identified	2.3	2.5	
27	Not identified	1.1	2.1	
28	Not identified	1.6	1.6	
29	Not identified	4.0	5.2	
30	Not identified	2.8	6.0	
31	Not identified	1.1	2.1	

Table 5.7.2) continued

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

Tree No.	Scientific name (Local name)	DBH (cm)	Tree Height (m)	Remarks
1	*Stereospermum cylindricum* (Khae sai)	8	7	
2	*Gluta usitata* (Rak)	8	8	
3	*Adenanthera pavonina* (Maklam)	13	9.6	
4	*Caryota bacsonensis* (Tao rang)	17.5	8.1	

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

Tree No.	Scientific name (Local name)	DBH	Tree Height	Remarks
1	*Helicia robusta* (Hang kra rok)	47.5	23.4	
2	*Strychnos nux-blanda* (Tumka khao)	80.6	25.5	
3	*Dipterocarpus turbinatus* (Yang dang)	78.4	26.5	
4	*Helicia robusta* (Hang kra rok)	53.0	18.0	
5	*Helicia robusta* (Hang kra rok)	30.0	10.0	
6	*Helicia robusta* (Hang kra rok)	20.0	12.0	
7	*Helicia robusta* (Hang kra rok)	62.0	20.0	
8	*Dipterocarpus turbinatus* (Yang dang)	63.1	33.0	
9	*Diospyros oblonga* (Nang dam)	20.0	18.8	
10	*Diospyros oblonga* (Nang dam)	60.0	20.4	
11	*Diospyros oblonga* (Nang dam)	46.5	20.4	
12	*Diospyros oblonga* (Nang dam)	28.4	20.4	
13	*Helicia robusta* (Hang kra rok)	30.0	24.5	
14	*Dipterocarpus turbinatus* (Yang dang)	47.6	24.4	
15	*Strychnos nux-blanda* (Tumka khao)	83.6	24.5	
16	*Dipterocarpus turbinatus* (Yang dang)	47.8	26.5	
17	Not indentified	20.0	12.0	

Table 5.8.1) Understory vegetation survey: Vachiralongkorn Dam (Thailand)
Date: 11 September 2012

Number of Species: 8

Scientific name (Local name)	Abundance
Smithatris supraneanae (Waan dok kao phan sa)	5
Amorphophallus aberrans (Buk)	+
Millettia branbisiana (Kra pi jan)	+
Anaxagorea javanica (Cham poon)	+
Holarrhena pubescens (Mok laung)	+
Dischidia nummularia (Kled mung kon)	+
Flickingeria sp. (Euang kha kai)	+
Dendrocalamus membranaceus (Pai sang nuan)	+

Table 5.8.2) Understory vegetation survey: Vachiralongkorn Dam Puye (Thailand)
Date: 21 Sep 2012

Number of Species: 0

Scientific name (Local name)	Abundance
no understory vegetation	

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 2013.

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.

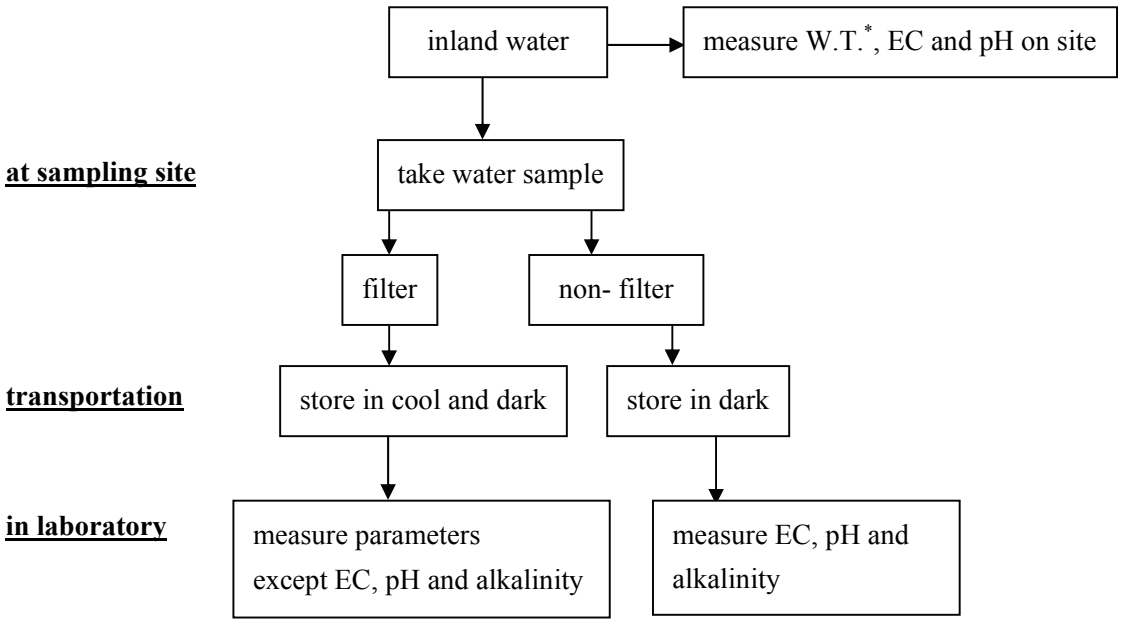
6.1.1 Selection of Sampling Sites

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, 10 countries (Cambodia, China, Indonesia, Japan, Malaysia, Mongolia, Philippines, Russia, Thailand, and Vietnam) carried out inland aquatic environment monitoring. The monitoring sites were established in 12 lakes/reservoirs and 6 streams. 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 2013

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	4 times/yr.
	Gunung Lake (Sukabumi)	-	-	2008	4 times/yr.
Japan	Ijira Lake (Gifu Pref.)	1.1 km	Rural/Ecolog. (Ijira)	2001	4 times/yr.

Japan	Banryu Lake (Shimane Pref.)	0.5 km	Urban/Ecolog. (Banryu)	2001	4 times/yr.
Malaysia	Semenyih Dam	26 km	Urban (Petaling Jaya)	2005	3 times/yr.
	Tembaling River (Sabah)	-	Remote (Danum Valley)	2007	4 times/yr.
Mongolia	Terelj River	-	Remote (Terelj)	2002	4 times/yr.
Philippines	Pandin Lake	30 km	Rural (Mt. Makiling)	2004	4 times/yr.
	Ambulalakaw Lake	-	Remote (Mt. Sto. Tomas)	2005	4 times/yr.
Russia	Pereemnaya River (Listvyanka)	48 km	Rural (Listvyanka)	2004	4 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 (11). 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 (12).

There were three sites (Terelj River in Mongolia, Ambulalakaw Lake in Philippines and Vachiralongkorn Dam in Thailand) which have results exceeding allowable range of R_1 and/or R_2. However, those main reasons could not be identified.

The annual mean values of each parameter from 2000 to 2013 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 Name: 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	19.8°C (mean) *1
Precipitation	1,026.9 mm/year *1
Sunshine duration	85.6 hrs/month (mean) *1
Solar radiation	-
Wind speed	Mean 1.4 m/s *1
Wind direction	S (dominant) *2
Residence time of water	-
Lake utilization	For drink, Irrigation water
Watershed area	-
River (inflow)	-

- : no information

*1 Chongqing, 2013

*2 Chongqing, 2012

Table 6.3(3) Properties of lakes or streams

Lake Name: 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	21.2°C (mean) *1
Precipitation	1,663.1 mm/year *1
Sunshine duration	152.4 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, 2013

Table 6.3(4) Properties of lakes or streams

Lake Name: Jiwozi River

Country	China
Location	Xi'an
Origin	Natural stream
River length	-
Drainage area	-
The mean height of the river basin	-
Annual air temperature	15.9°C (mean) *1
Precipitation	497.5 mm/year *1
Sunshine duration	166.7 hrs/month (mean) *1
Solar radiation	-
Wind speed	Mean 1.1 m/s *1
Wind direction	ENE and W(dominant) *1
Lake (flows into)	-

- : no information

*1 Xi'an, 2013

Table 6.3(5) Properties of lakes or streams

Lake Name: Zhuxiandong Stream

Country	China
Location	Zhuhai
Origin	Natural stream
River length	-
Drainage area	-
The mean height of the river basin	-
Annual air temperature	23.0°C (mean) *1
Precipitation	2,884.9 mm *1
Sunshine duration	159.2 hrs/month (mean) *1
Solar radiation	-
Wind speed	Mean 2.6 m/s *1
Wind direction	ESE (dominant) *1
Lake (flows into)	-

- : no information
*1 Zhuhai, 2013

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 Name: 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	24.0°C (mean) *1
Precipitation	2,504.0 mm *1
Sunshine duration	-
Solar radiation	389 MJ/m^2/month (mean) *1
Wind speed	Mean 1.3 m/s *1
Wind direction	S (dominant) *1
Residence time of water	-
Lake utilization	Sightseeing
River (inflow)	-

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

- : no information

*1 Bandung, 2013

Table 6.3(7) Properties of lakes or streams

Lake Name: 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 Name: 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	16.3°C (mean) *1
Precipitation	1,794.0 mm/year *1
Sunshine duration	195.4 hrs/month (mean) *1
Solar radiation	-
Wind speed	Mean 2.8 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, JFY2013

Table 6.3(9) Properties of lakes or streams

Lake Name: 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	16.1°C (mean) *1
Precipitation	2,078.5 mm/year *1
Sunshine duration	151.2 hrs/month (mean) *1
Solar radiation	-
Wind speed	Mean 1.9 m/s *1
Wind direction	S (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, JFY2013

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 Name: 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(11) Properties of lakes or streams

Lake Name: Tembaling River

Country	Malaysia
Location	Danum Valley, Sabah
Latitude and longitude	04° 57’ N, 117° 48’ E
Altitude	-
Origin	Natural stream
Water depth	-
Water Volume	-
Watershed area	-
River length	-
Drainage area	-
The mean height of the river basin	-
Annual air temperature	-
Precipitation	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(12) Properties of lakes or streams

Lake Name: 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(13) Properties of lakes or streams

Lake Name: Pandin Lake

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

- : no information

Table 6.3(14) Properties of lakes or streams

Lake Name: Ambulalakao Lake

Country	Philippines
Location	Kabayan, Benguet
Altitude	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(15) Properties of lakes or streams

Stream Name: 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(16) Properties of lakes or streams

Stream Name: 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(17) Properties of lakes or streams

Lake Name: 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 (2011)
Wind direction	NNW, NW and SE (2010)
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

Table 6.3(18) Properties of lakes or streams

Lake Name: 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	24.0°C (mean) *2
Precipitation	2,006.6 mm *2
Sunshine duration	131.2 hrs/month (mean) *2
Solar radiation	-
Wind speed	Mean 1.0 m/s *2
Wind direction	N (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, 2013

Table 6.4(1) Result of Inland Aquatic Environment Monitoring

Duration: 2013.1.-2013.6.
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	Jan-13	27.1	5.71	0.88	0.032	0.06	0.16	1.46	*1	0.96	0.09	0.35	0.12	0.8	-	-	-	7.1
	Jun-13	29.0	5.78	0.97	0.036	0.05	0.40	1.33	0.04	0.93	0.15	0.22	0.14	0.7	-	-	-	7.0
	mean*2	-	5.74	0.93	0.034	0.05	0.28	1.39	0.02	0.94	0.12	0.29	0.13	0.7	-	-	-	7.1

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.
Mean of pH takes an average of hydrogen ion.

		Anion	Cation	R1	Judge	Acalc	R2	Judge
Sras Srang Lake	Jan-13	76.6	73.4	-2.1	O	0.93	2.9	O
	Jun-13	80.4	70.8	-6.4	O	0.93	-2.0	O

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

Table 6.4(2) Result of Inland Aquatic Environment Monitoring

Duration: 2013.3.-2013.12.
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	29-Mar-13	17.0	6.58	7.24	0.114	22.28	2.57	0.63	0.32	0.74	0.76	8.55	0.97	2.5	-	-	-	-
	28-May-13	23.0	6.30	7.69	0.062	23.21	5.03	0.78	0.01	0.85	0.79	9.50	1.07	3.2	-	-	-	-
	27-Sep-13	22.0	5.82	6.69	0.060	18.59	4.37	0.72	0.06	0.72	0.80	8.23	0.94	4.4	-	-	-	-
	28-Dec-13	7.0	5.83	6.87	0.093	18.88	3.76	0.60	0.08	0.69	0.71	8.72	0.93	4.2	-	*1	*1	<10*1
	mean*2	-	6.03	7.12	0.082	20.74	3.93	0.68	0.12	0.75	0.77	8.75	0.98	3.5	-	*1	*1	<10*1
Xiamen -Xiaoping Dam	01-Mar-13	16.6	7.04	6.04	0.253	2.35	3.48	2.87	0.03	4.46	3.02	3.27	0.89	1.4	-	-	0.045	1.2
	02-May-13	19.3	6.72	4.26	0.213	3.35	3.12	2.13	0.04	3.53	2.51	3.03	0.87	0.2	-	-	0.038	2.3
	02-Jul-13	27.6	6.52	5.68	0.157	2.97	3.81	3.47	0.05	3.10	3.16	3.06	0.58	0.5	-	-	0.011	2.2
	01-Nov-13	22.3	7.35	6.11	0.255	2.17	3.25	2.61	0.06	4.12	2.62	3.43	0.71	1.6	-	0.02	0.021	0.9
	mean*2	-	6.80	5.52	0.220	2.71	3.42	2.77	0.05	3.80	2.83	3.20	0.76	0.9	-	0.02	0.029	1.7
Xi'an -Jiwozi River	29-Mar-13	4.0	7.28	9.40	0.350	15.19	2.64	4.98	*1	4.89	1.90	10.74	1.95	-	-	-	-	-
	28-Jun-13	13.0	7.59	9.72	0.320	16.96	2.42	4.70	*1	4.16	1.23	12.29	1.92	-	-	-	-	-
	24-Sep-13	18.0	6.56	8.23	0.350	13.44	2.68	1.58	*1	2.64	1.13	10.77	1.83	-	-	-	-	-
	05-Nov-13	10.0	6.71	8.32	0.310	14.44	1.82	1.37	*1	2.32	1.21	10.49	1.06	-	-	<0.01*1	<0.003*1	5.0
	mean*2	-	6.86	8.92	0.333	15.01	2.39	3.16	*1	3.50	1.37	11.07	1.69	-	-	<0.01*1	<0.003*1	5.0
Zhuhai -Zhuxiandong Stream	01-Mar-13	17.5	7.10	7.22	0.537	2.59	2.47	3.60	0.19	7.14	1.50	4.35	1.68	1.2	-	*1	*1	1.1
	06-May-13	22.5	7.19	8.93	0.502	7.10	5.91	4.41	0.02	6.39	2.27	5.43	1.94	1.2	-	*1	*1	1.2
	01-Aug-13	25.5	7.22	7.40	0.478	3.14	4.01	4.87	0.02	6.85	1.42	4.02	1.75	1.1	-	*1	*1	1.1
	02-Dec-13	15.5	7.34	7.92	0.481	2.42	4.05	5.76	0.04	7.40	1.90	5.85	2.26	1.2	-	*1	*1	1.1
	mean*2	-	7.20	7.87	0.500	3.81	4.11	4.66	0.07	6.95	1.77	4.91	1.91	1.2	-	*1	*1	1.1

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	29-Mar-13	637.1	576.0	-5.0	O	8.07	5.4	O
	28-May-13	648.4	620.3	-2.2	O	8.55	5.3	O
	27-Sep-13	537.8	544.6	0.6	O	7.27	4.2	O
	28-Dec-13	563.8	565.7	0.2	O	7.50	4.4	O
Xiamen -Xiaoping	01-Mar-13	440.0	509.4	7.3	O	5.46	-5.0	O
	02-May-13	394.0	442.9	5.8	O	4.88	6.8	O
	02-Jul-13	378.4	419.1	5.1	O	4.85	-7.9	O
	01-Nov-13	427.4	479.1	5.7	O	5.19	-8.1	O
Xi'an -Jiwozi	29-Mar-13	849.3	957.5	6.0	O	10.95	7.6	O
	28-Jun-13	844.9	983.3	7.6	O	11.19	7.0	O
	24-Sep-13	717.6	831.1	7.3	O	9.25	5.9	O
	05-Nov-13	678.6	742.5	4.5	O	8.62	1.8	O
Zhuhai -Zhuxiandong Stream	01-Mar-13	732.3	714.8	-1.2	O	7.83	4.1	O
	06-May-13	869.5	767.7	-6.2	O	9.35	2.3	O
	01-Aug-13	745.4	680.0	-4.6	O	7.90	3.3	O
	02-Dec-13	759.2	850.5	5.7	O	8.97	6.2	O

Table 6.4(3) Result of Inland Aquatic Environment Monitoring

Duration: 2013.2.-2012.11.
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	20-Feb-13	20.7	7.06	5.62	0.366	7.20	0.04	1.00	0.10	4.50	3.50	2.40	1.65	1.0	-	*1	0.004	6.7
	23-Apr-13	21.1	7.29	6.32	0.436	9.00	0.00	1.00	0.12	6.30	2.04	3.30	1.54	1.2	-	*1	0.011	13.0
	27-Jun-13	22.8	8.87	8.39	0.566	9.60	0.14	2.00	0.08	5.30	1.38	6.90	2.79	0.8	13.0	*1	0.016	19.0
	19-Nov-13	21.3	7.77	6.21	0.400	7.10	0.06	2.00	0.05	3.20	1.19	5.80	1.90	0.8	9.1	*1	0.006	9.8
	mean*2	-	7.41	6.64	0.442	8.23	0.06	1.50	0.09	4.83	2.03	4.60	1.97	0.9	11.1	*1	0.009	12.1
Gunung Lake	21-Feb-13	23.4	7.06	3.92	0.240	4.30	0.04	1.50	0.04	4.90	1.06	1.50	0.85	0.9	-	*1	*1	5.7
	30-Apr-13	26.5	7.81	4.50	0.380	3.00	0.04	1.00	0.04	2.10	0.78	3.40	1.80	1.4	-	*1	*1	*1
	26-Jun-13	27.3	7.33	4.41	0.340	4.60	0.04	0.25	0.04	2.40	0.56	4.70	0.95	1.2	8.9	*1	*1	10.0
	24-Oct-13	24.0	7.73	3.75	0.324	0.30	0.04	0.25	0.20	1.60	0.64	2.09	1.12	0.6	26.0	*1	0.009	5.4
	mean*2	-	7.38	4.15	0.321	3.05	0.04	0.75	0.08	2.75	0.76	2.92	1.18	1.0	17.5	*1	0.002	5.3

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	20-Feb-13	544.8	546.3	0.1	O	6.17	4.7	O
	23-Apr-13	651.9	624.3	-2.2	O	7.12	6.0	O
	27-Jun-13	824.9	843.7	1.1	O	9.29	5.1	O
	19-Nov-13	605.3	618.3	1.1	O	6.91	5.3	O
Gunung Lake	21-Feb-13	372.5	387.1	1.9	O	4.22	3.6	O
	30-Apr-13	471.3	431.0	-4.5	O	4.83	3.6	O
	26-Jun-13	443.5	433.8	-1.1	O	4.80	4.3	O
	24-Oct-13	338.1	293.4	-7.1	O	3.22	-7.7	O

Table 6.4(4) Result of Inland Aquatic Environment Monitoring

Duration: 2013.4.-2014.1.
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)	22-Apr-13	14.8	7.24	4.10	0.167	5.63	0.84	2.14	<0.01*1	2.09	0.22	2.91	1.27	Center (Surface)	22-Apr-13	2.8	15	clear, colorless	<0.1*1	<0.01*1	0.5	4.0
	12-Jul-13	27.6	7.27	3.70	0.156	4.60	1.22	1.86	0.02	1.84	0.27	2.43	1.20		12-Jul-13	3.0	17	clear, colorless	-	0.01	-	4.0
	31-Oct-13	17.0	7.10	3.89	0.169	4.51	1.27	1.83	<0.01*1	1.94	0.27	2.58	1.27		31-Oct-13	2.2	18	clear, colorless	-	<0.01*1	-	5.8
	07-Jan-14	6.6	7.12	4.09	0.169	5.35	0.92	2.03	<0.01*1	2.01	0.22	3.03	1.25		07-Jan-14	1.6	15	clear, colorless	-	<0.01*1	-	4.0
	mean*2	-	7.17	3.94	0.165	5.02	1.06	1.97	<0.01*1	1.97	0.24	2.73	1.25		mean	2.4	-	-	<0.1*1	<0.01*1	0.5	4.4
Center (near bottom)	22-Apr-13	12.3	7.29	4.10	0.163	5.65	0.90	2.14	<0.01*1	2.07	0.23	2.88	1.28	Center (near bottom)	22-Apr-13	−	−	clear, colorless	<0.1*1	<0.01*1	0.5	6.9
	12-Jul-13	17.9	6.65	3.97	0.179	4.38	1.35	1.87	0.13	1.82	0.32	2.50	1.37		12-Jul-13	−	−	clear, colorless	-	0.02	-	6.9
	31-Oct-13	16.3	6.84	3.88	0.167	4.54	1.15	1.85	0.03	1.96	0.26	2.60	1.27		31-Oct-13	−	−	clear, colorless	-	<0.01*1	-	3.5
	07-Jan-14	6.4	7.15	4.11	0.174	5.35	0.92	2.04	<0.01*1	2.02	0.22	3.03	1.25		07-Jan-14	−	−	clear, colorless	-	<0.01*1	-	6.9
	mean*2	-	6.91	4.01	0.171	4.98	1.08	1.97	0.04	1.97	0.26	2.75	1.29		mean	−	−	-	<0.1*1	<0.01*1	0.5	6.1
Kamagatani River (Input)	22-Apr-13	10.5	7.17	4.50	0.153	7.05	1.49	2.13	0.04	2.26	0.27	2.95	1.48	Kamagatani River (Input)	22-Apr-13	−	−	clear, colorless	<0.1*1	0.08	0.3	-
	12-Jul-13	21.0	7.19	4.01	0.156	5.38	1.53	1.91	<0.01*1	1.95	0.28	2.61	1.33		12-Jul-13	−	−	clear, colorless	-	<0.01*1	-	-
	31-Oct-13	15.2	7.17	3.99	0.141	5.63	1.56	1.92	<0.01*1	2.02	0.25	2.62	1.31		31-Oct-13	−	−	clear, colorless	-	<0.01*1	-	-
	07-Jan-14	6.1	6.95	4.19	0.135	6.86	1.40	2.00	<0.01*1	2.03	0.20	2.75	1.41		07-Jan-14	−	−	clear, colorless	-	<0.01*1	-	-
	mean*2	-	7.11	4.17	0.146	6.23	1.50	1.99	<0.01*1	2.06	0.25	2.73	1.38		mean	−	−	-	<0.1*1	0.02	0.3	-
Kobora River (Input)	22-Apr-13	9.5	6.91	4.08	0.156	5.53	1.24	2.23	<0.01*1	2.50	0.21	2.11	1.49	Kobora River (Input)	22-Apr-13	−	−	clear, colorless	<0.1*1	<0.01*1	0.3	-
	12-Jul-13	20.7	7.07	3.61	0.144	4.44	1.12	2.06	<0.01*1	2.23	0.27	1.81	1.26		12-Jul-13	−	−	clear, colorless	-	<0.01*1	-	-
	31-Oct-13	14.4	7.02	3.44	0.124	4.47	1.01	2.01	<0.01*1	2.22	0.21	1.77	1.19		31-Oct-13	−	−	clear, colorless	-	<0.01*1	-	-
	07-Jan-14*3	-	-	-	-	-	-	-	-	-	-	-	-		07-Jan-14	−	−	-	-	-	-	-
	mean*2	-	7.00	3.71	0.141	4.81	1.12	2.10	<0.01*1	2.31	0.23	1.89	1.31		mean	−	−	-	<0.1*1	<0.01*1	0.3	-
Ijira River (Output)	22-Apr-13	11.8	7.23	4.20	0.172	5.41	0.73	2.35	0.02	2.07	0.27	3.23	1.14	Ijira River (Output)	22-Apr-13	−	−	clear, colorless	<0.1*1	<0.01*1	0.6	-
	12-Jul-13	26.3	7.16	3.79	0.159	4.63	1.24	1.88	0.05	1.83	0.29	2.54	1.19		12-Jul-13	−	−	clear, colorless	-	0.01	-	-
	31-Oct-13	16.9	7.24	3.93	0.172	4.52	1.27	1.84	<0.01*1	1.94	0.27	2.67	1.26		31-Oct-13	−	−	clear, colorless	-	<0.01*1	-	-
	07-Jan-14	5.8	7.17	4.11	0.178	5.28	0.79	2.05	<0.01*1	2.00	0.23	3.14	1.23		07-Jan-14	−	−	clear, colorless	-	<0.01*1	-	-
	mean*2	-	7.20	4.01	0.170	4.96	1.01	2.03	0.02	1.96	0.26	2.89	1.20		mean	−	−	-	<0.1*1	<0.01*1	0.6	-
Discharge	22-Apr-13	11.6	7.09	4.12	0.162	5.71	0.92	2.14	<0.01*1	2.07	0.23	2.87	1.28	Discharge	22-Apr-13	−	−	clear, colorless	<0.1*1	<0.01*1	0.6	-
	12-Jul-13	20.5	6.85	3.78	0.152	4.45	1.68	1.85	0.05	1.79	0.30	2.41	1.22		12-Jul-13	−	−	clear, colorless	-	<0.01*1	-	-
	31-Oct-13	16.1	6.79	4.01	0.170	4.69	1.43	1.85	0.04	1.95	0.27	2.61	1.30		31-Oct-13	−	−	clear, colorless	-	<0.01*1	-	-
	07-Jan-14	6.4	7.11	4.10	0.172	5.36	0.93	2.04	<0.01*1	2.02	0.23	3.02	1.25		07-Jan-14	−	−	clear, colorless	-	<0.01*1	-	-
	mean*2	-	6.94	4.00	0.164	5.05	1.24	1.97	0.02	1.96	0.26	2.73	1.26		mean	−	−	-	<0.1*1	<0.01*1	0.6	-

note
- : Items were not analyzed.
*1: Less than detection limit.
*2: Mean of pH takes an average of hydrogen ion.
*3: Water shotage.
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 1875.5 mm/year in JFY2013 (Gifu pref. Meteorological observatory

Table 6.4(3) Result of Inland Aquatic Environment Monitoring - continued

		Anion	Cation	R1	Judge	Acalc	R2	Judge
Center (Surface)	22-Apr-13	357.5	346.0	-1.6	O	4.16	0.7	O
	12-Jul-13	323.5	307.4	-2.6	O	3.71	0.2	O
	31-Oct-13	334.4	324.3	-1.5	O	3.84	-0.6	O
	07-Jan-14	351.9	346.7	-0.7	O	4.11	0.3	O
Center (near bottom)	22-Apr-13	355.4	344.4	-1.6	O	4.14	0.5	O
	12-Jul-13	344.5	331.5	-1.9	O	3.94	-0.3	O
	31-Oct-13	332.3	327.0	-0.8	O	3.85	-0.4	O
	07-Jan-14	357.3	346.7	-1.5	O	4.14	0.4	O
Kamagatani River (Input)	22-Apr-13	385.4	375.9	-1.2	O	4.58	0.9	O
	12-Jul-13	346.1	331.4	-2.2	O	4.02	0.1	O
	31-Oct-13	337.0	332.2	-0.7	O	4.00	0.2	O
	07-Jan-14	356.8	345.8	-1.6	O	4.25	0.7	O
Kobora River (Input)	22-Apr-13	353.8	341.7	-1.7	O	4.11	0.3	O
	12-Jul-13	312.4	297.5	-2.4	O	3.58	-0.4	O
	31-Oct-13	289.4	287.4	-0.3	O	3.41	-0.3	O
	07-Jan-14*3	-	-	-	-	-	-	-
Ijira River (Output)	22-Apr-13	362.5	352.6	-1.4	O	4.23	0.3	O
	12-Jul-13	328.5	313.4	-2.4	O	3.78	-0.2	O
	31-Oct-13	337.9	327.5	-1.5	O	3.88	-0.6	O
	07-Jan-14	358.3	350.7	-1.1	O	4.16	0.6	O
Discharge	22-Apr-13	356.0	343.9	-1.7	O	4.15	0.4	O
	12-Jul-13	323.8	307.9	-2.5	O	3.73	-0.7	O
	31-Oct-13	342.1	331.3	-1.6	O	3.94	-0.8	O
	07-Jan-14	355.8	346.9	-1.3	O	4.14	0.5	O

Table 6.4(5) Result of Inland Aquatic Environment Monitoring

Duration: 2013.4.-2014.1.
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	23-Apr-13	14.4	7.18	11.00	0.153	4.49	0.089	24.55	<0.02	14.60	1.85	1.82	1.97
	01-Aug-13	29.6	7.28	9.40	0.144	4.12	<0.005	21.00	<0.02	12.90	1.72	1.61	1.73
	31-Oct-13	17.6	6.73	9.40	0.200	3.67	0.029	19.75	0.07	12.45	1.80	1.83	1.96
	15-Jan-14	4.7	7.05	9.75	0.165	4.32	0.409	20.85	0.06	12.95	1.75	1.77	1.92
	mean*2	-	7.01	9.89	0.165	4.15	0.132	21.54	0.03	13.23	1.78	1.76	1.89
NO.2 (center) near bottom	23-Apr-13	14.1	6.95	12.15	0.259	4.53	0.202	24.65	0.22	15.10	2.00	2.35	2.39
	01-Aug-13	11.9	6.62	15.05	0.681	0.79	<0.005	24.60	0.18	15.70	2.41	5.90	3.76
	31-Oct-13	17.1	6.64	9.95	0.248	3.44	0.024	20.10	0.19	12.75	1.85	2.12	2.10
	15-Jan-14	5.8	6.93	10.00	0.166	4.40	0.400	21.45	0.06	13.25	1.76	1.77	1.95
	mean*2	-	6.76	11.79	0.338	3.29	0.157	22.70	0.16	14.20	2.00	3.03	2.55
NO.3 surface	23-Apr-13	14.3	7.20	10.60	0.156	4.68	0.078	24.10	<0.02	14.40	1.84	1.93	1.67
	01-Aug-13	29.1	7.19	9.10	0.144	4.26	<0.005	20.60	<0.02	12.80	1.71	1.74	1.72
	31-Oct-13	17.1	6.65	8.90	0.202	3.95	0.026	18.90	0.06	12.00	1.80	2.02	1.90
	15-Jan-14	4.2	6.95	9.80	0.170	4.47	0.372	20.60	0.04	12.80	1.74	1.91	1.88
	mean*2	-	6.94	9.60	0.168	4.34	0.119	21.05	0.03	13.00	1.77	1.90	1.79

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 2029.5 mm/year in JFY2013 (Lake Banryu national acid rain monitoring station).

Table 6.4(4) 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	23-Apr-13	3.0	14	<0.003*1	0.004	2.3	4.8	<0.01*1	7.2	0.01	0.006	2.6	0.27	0.01
	01-Aug-13	2.3	15	<0.003*1	<0.003*1	3.1	5.7	<0.01*1	8.4	0.02	<0.005*1	3.6	0.21	0.01
	31-Oct-13	1.9	15	<0.003*1	<0.003*1	2.5	4.9	0.03	5.5	0.67	0.088	2.7	0.28	0.01
	15-Jan-14	2.9	13	<0.003*1	0.007	2.1	4.6	0.01	9.1	0.06	0.010	2.4	0.34	0.01
	mean	2.5	-	<0.003*1	<0.003*1	2.5	5.0	<0.01*1	7.5	0.19	0.026	2.8	0.27	0.01
NO.2 (center) near bottom	23-Apr-13	-	-	<0.003*1	0.009	2.1	4.8	<0.01*1	9.7	0.15	0.492	2.7	0.51	0.03
	01-Aug-13	-	-	0.023	0.023	3.2	9.9	<0.01*1	37.5	9.79	1.770	5.5	0.57	0.05
	31-Oct-13	-	-	0.007	0.010	2.4	5.8	0.09	6.3	2.17	0.215	3.0	0.49	0.02
	15-Jan-14	-	-	<0.003*1	0.010	2.1	4.3	0.04	10.0	0.11	0.010	2.4	0.37	0.02
	mean	-	-	0.008	0.013	2.4	6.2	0.03	15.9	3.05	0.622	3.4	0.48	0.03
NO.3 surface	23-Apr-13	2.9	14	<0.003*1	0.005	2.2	4.9	<0.01*1	8.6	0.02	<0.005*1	2.6	0.28	0.01
	01-Aug-13	2.2	15	<0.003*1	<0.003*1	2.9	5.8	<0.01*1	8.7	0.02	<0.005*1	3.6	0.22	0.02
	31-Oct-13	1.7	15	0.006	0.003	2.3	5.2	0.04	6.2	0.79	0.076	2.5	0.32	0.01
	15-Jan-14	2.8	13	<0.003*1	0.005	2.0	4.5	0.01	7.9	0.08	0.010	2.3	0.30	0.01
	mean	2.4	-	<0.003*1	0.003	2.4	5.1	0.01	7.9	0.23	0.022	2.8	0.28	0.01

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

		Anion	Cation	R1	Judge	Acalc	R2	Judge
NO.2 (center) surface	23-Apr-13	940.0	934.9	-0.3	O	11.66	2.9	O
	01-Aug-13	821.6	827.8	0.4	O	10.22	4.2	O
	31-Oct-13	833.4	844.0	0.6	O	10.24	4.3	O
	15-Jan-14	849.7	857.3	0.4	O	10.53	3.9	O
NO.2 (center) near bottom	23-Apr-13	1052.1	1033.4	-0.9	O	12.74	2.4	O
	01-Aug-13	1392.6	1357.6	-1.3	O	15.83	2.5	O
	31-Oct-13	886.9	890.4	0.2	O	10.77	3.9	O
	15-Jan-14	869.3	872.7	0.2	O	10.76	3.7	O
NO.3 surface	23-Apr-13	934.6	907.1	-1.5	O	11.46	3.9	O
	01-Aug-13	813.8	828.8	0.9	O	10.17	5.6	O
	31-Oct-13	818.1	828.6	0.6	O	10.05	6.1	O
	15-Jan-14	850.3	853.5	0.2	O	10.51	3.5	O

Table 6.4(6) Result of Inland Aquatic Environment Monitoring

Duration: 2013.1.-2013.12.
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	14-Jun-13	-	6.34	2.94	0.223	2.99	0.60	0.77	<0.003*1	2.19	1.90	2.47	0.56	<0.10*1	6.6
	20-Sep-13	-	6.95	2.98	0.231	3.02	0.12	0.79	0.072	2.08	1.97	2.59	0.64	<0.10*1	4.2
	16-Dec-13	20.0	6.87	2.98	0.234	2.93	0.03	0.75	0.053	2.08	1.95	2.59	0.63	<0.10*1	5.0
	mean*2	-	6.63	2.96	0.230	2.98	0.25	0.77	0.063	2.12	1.94	2.55	0.61	<0.10*1	5.3
Tembaling River	30-Apr-13	-	7.77	15.4	1.500	5.15	0.50	1.60	<0.001*1	4.54	0.17	15.52	8.29	<0.10*1	4.1
	2-Jul-13	-	8.30	19.5	1.954	5.40	0.12	1.10	0.053	5.79	0.30	20.87	11.06	0.04	5.6
	20-Aug-13	-	8.23	24.1	2.445	6.32	0.18	0.94	0.003	7.11	0.25	27.75	14.29	<0.10*1	4.9
	10-Dec-13	25.1	8.14	17.7	1.722	5.13	0.72	1.18	0.059	5.47	0.80	17.26	9.06	<0.10*1	3.7
	mean*2	-	8.05	19.2	1.905	5.50	0.38	1.20	0.038	5.73	0.38	20.35	10.67	<0.10*1	4.6

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
Semenyih Dam	14-Jun-13	317.2	313.5	-0.6	O	3.56	9.6	O
	20-Sep-13	317.7	327.1	1.5	O	3.62	9.8	O
	16-Dec-13	317.3	324.7	1.2	O	3.59	9.4	O
Tembaling River	30-Apr-13	1660.4	1658.0	-0.1	O	17.22	5.6	O
	2-Jul-13	2100.8	2213.4	2.6	O	22.27	6.6	O
	20-Aug-13	2606.3	2875.4	4.9	O	28.30	8.1	O
	10-Dec-13	1873.8	1867.6	-0.2	O	19.34	4.6	O

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

Table 6.4(7) Result of Inland Aquatic Environment Monitoring

Duration: 2013.5.-2013.9.
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	8-May-13	-	6.58	3.62	0.227	1.99	0.16	0.43	*1	1.10	1.25	4.73	0.68	-	-
	5-Jun-13	-	6.90	4.56	0.289	3.27	0.61	0.39	*1	1.58	0.91	6.60	0.88	-	-
	3-Jul-13	-	6.88	4.69	0.340	3.34	0.61	0.40	*1	1.62	1.16	6.95	0.92	-	-
	11-Sep-13	-	7.28	4.41	0.320	2.64	*1	0.25	*1	1.55	0.71	6.25	0.83	-	-
	mean*2	-	6.84	4.32	0.294	2.81	0.46	0.37	*1	1.46	1.01	6.13	0.83	-	-

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
Terelj River	8-May-13	283.1	372.0	13.6	×	3.65	0.4	O
	5-Jun-13	377.9	493.8	13.3	×	4.86	3.2	O
	3-Jul-13	430.7	522.7	9.7	×	5.28	5.9	O
	11-Sep-13	382.0	465.8	9.9	×	4.62	2.3	O

Table 6.4(8) Result of Inland Aquatic Environment Monitoring

Duration: 2013.2.-2013.12.
Country: Philippines
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)	PO_4^{3-} (mg/L)	NO_2^- (mg/L)	DO (mg/L)
Pandin Lake	20-Feb-13	25.4	6.83	18.49	1.87	0.480	0.126	2.99	0.075	8.59	4.32	14.4	6.67	-	*1	*1	5.1
	16-May-13	30.7	7.88	17.54	1.85	0.227	0.049	3.38	0.000	8.24	4.45	16.0	8.79	-	0.015	*1	5.0
	05-Sep-13	28.0	7.63	17.06	1.64	0.774	0.201	3.20	0.219	7.89	4.12	15.4	8.23	-	*1	*1	4.0
	06-Nov-13	27.8	7.67	17.73	1.54	0.778	0.271	3.20	0.099	7.95	4.05	16.4	7.87	-	*1	*1	3.8
	mean*2	-	7.29	17.71	1.73	0.565	0.162	3.19	0.098	8.17	4.24	15.6	7.89	-	0.004	*1	4.5
Ambulalakaw Lake	19-Feb-13	25.4	5.85	0.43	-	*1	*1	0.26	*1	0.47	0.10	0.7	0.14	-	-	-	-
	30-Apr-13	30.7	5.58	0.71	0.06	*1	*1	0.70	*1	0.78	0.24	0.7	0.16	-	-	-	-
	09-Jul-13	28.0	5.71	0.46	-	*1	*1	0.28	*1	0.46	0.09	0.5	0.13	-	-	-	-
	03-Dec-13	27.8	5.92	0.49	-	*1	*1	0.31	*1	0.52	0.10	*1	*1	-	-	-	-
	mean*2	-	5.75	0.52	0.06	*1	*1	0.39	*1	0.56	0.13	0.5	0.11	-	-	-	-

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	20-Feb-13	1966.4	1755.5	-5.7	O	19.00	1.4	O
	16-May-13	1951.3	1993.5	1.1	O	20.27	7.2	O
	05-Sep-13	1749.6	1906.0	4.3	O	18.93	5.2	O
	06-Nov-13	1650.8	1920.5	7.5	O	18.58	2.3	O
Ambulalakaw Lake	19-Feb-13	7.3	70.4	81.1	×	0.49	7.0	O
	30-Apr-13	79.7	93.1	7.8	O	1.02	17.8	×
	09-Jul-13	8.0	60.3	76.7	×	0.45	-0.6	O
	03-Dec-13	8.9	26.5	49.9	×	0.24	-33.7	×

Table 6.4(9) Result of Inland Aquatic Environment Monitoring

Duration: 2013.2.-2013.11.
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	19-Mar-13	0.2	6.63	5.47	0.164	12.76	0.73	0.14	0.01	1.26	0.69	6.20	0.94	1.5	colorless	0.010	0.002	0.4	-	0.01	12.77	2.63
	21-May-13	8.4	6.86	3.78	0.138	8.30	0.73	0.07	0.01	0.82	0.58	3.99	0.70	2.0	colorless	0.015	0.002	1.5	-	0.02	11.37	2.53
	6-Jul-13	9.1	6.94	4.50	0.111	11.46	0.33	0.13	0.04	0.92	0.66	4.56	0.90	2.0	colorless	0.004	0.002	0.7	-	0.02	9.11	2.33
	12-Oct-13	2.5	6.69	4.67	0.123	12.02	0.50	0.19	0.01	1.00	0.69	4.95	0.74	2.0	colorless	0.003	0.001	1.4	-	0.01	11.59	2.99
	mean*1	-	6.76	4.61	0.134	11.14	0.57	0.13	0.02	1.00	0.65	4.92	0.82	1.9	-	0.008	0.002	1.0	-	0.02	11.21	2.62
Komarovka River	19-Feb-13	0.1	7.10	8.50	0.310	15.00	1.39	3.47	0.21	3.03	0.50	8.17	2.60	-	colorless	0.008	0.062	2.8	0.18	-	14.47	4.40
	16-Apr-13	2.4	6.60	7.75	0.230	10.07	1.73	5.03	0.10	2.07	0.50	7.40	2.07	-	colorless	0.005	0.032	5.4	0.24	-	12.27	8.30
	18-Jun-13	18.0	7.25	8.60	0.410	9.83	2.28	3.53	0.30	4.70	0.90	6.80	2.83	-	colorless	0.005	0.005	5.6	0.15	-	9.41	6.90
	17-Sep-13	12.0	6.85	8.78	0.500	11.13	0.31	2.80	0.18	4.30	0.90	7.80	3.00	-	colorless	0.005	0.005	4.5	0.19	-	10.70	7.00
	19-Nov-13	1.7	6.70	8.60	0.410	13.30	0.66	3.20	0.02	3.10	0.40	8.37	2.80	-	colorless	0.005	0.032	2.4	0.14	-	13.57	5.97
	mean*1	-	6.84	8.45	0.372	11.87	1.27	3.61	0.16	3.44	0.64	7.71	2.66	-	-	0.006	0.027	4.1	0.18	-	12.08	6.51

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	19-Mar-13	446.0	459.9	1.5	O	5.65	1.6	O
	21-May-13	325.4	307.6	-2.8	O	3.89	1.4	O
	6-Jul-13	358.4	360.5	0.3	O	4.57	0.7	O
	12-Oct-13	387.2	369.8	-2.3	O	4.81	1.5	O
Komarovka River	19-Feb-13	744.1	778.0	2.2	O	9.22	4.0	O
	16-Apr-13	610.3	647.7	3.0	O	7.70	-0.3	O
	18-Jun-13	751.8	816.5	4.1	O	9.08	2.7	O
	17-Sep-13	816.4	856.1	2.4	O	9.55	4.2	O
	19-Nov-13	788.7	794.1	0.3	O	9.30	3.9	O

Table 6.4(10) Result of Inland Aquatic Environment Monitoring

Duration: 2013.2.-2013.11.
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)	6-Feb-13	29.4	7.40	11.77	1.155	0.99	0.10	0.92	0.01	1.25	1.07	16.4	3.75	3.5	-	0.01	-	-
	15-May-13	32.5	8.00	8.16	1.215	1.22	0.10	0.79	0.01	1.32	1.08	17.4	3.82	2.0	-	0.01	-	-
	17-Jul-13	29.9	7.60	10.21	1.270	1.12	0.10	1.01	0.02	1.19	0.96	18.0	4.08	2.5	-	0.01	-	-
	14-Nov-13	30.5	8.00	24.00	1.105	1.10	0.10	0.77	0.01	1.07	0.96	16.3	3.60	3.0	-	0.01	-	-
	mean*1	-	7.67	13.53	1.186	1.10	0.10	0.87	0.01	1.21	1.02	17.0	3.81	2.8	-	0.01	-	-
Station2 (Ban Pang Pueng)	6-Feb-13	28.8	7.90	9.69	1.070	1.18	0.10	0.90	0.01	1.17	1.04	15.9	2.81	4.5	-	0.01	-	-
	15-May-13	32.1	7.90	8.09	1.135	1.28	0.10	0.70	0.01	1.16	1.07	17.3	2.93	4.0	-	0.01	-	-
	17-Jul-13	29.5	7.90	9.72	1.110	1.17	0.10	0.98	0.01	1.17	0.99	17.3	2.87	3.5	-	0.01	-	-
	14-Nov-13	30.2	7.90	16.90	1.055	1.42	0.10	0.75	0.01	1.09	0.95	17.0	2.91	4.0	-	0.01	-	-
	mean*1	-	7.90	11.10	1.093	1.26	0.10	0.83	0.01	1.14	1.01	16.8	2.88	4.0	-	0.01	-	-

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

	Date	Anion	Cation	R1	Judge	Acalc	R2	Judge
Station1 (Ban Pong Chang)	6-Feb-13	1203.2	1206.0	0.1	O	12.51	3.1	O
	15-May-13	1264.5	1265.5	0.0	O	13.14	23.4	×
	17-Jul-13	1323.6	1308.1	-0.6	O	13.66	14.4	×
	14-Nov-13	1151.4	1180.7	1.3	O	12.14	-32.8	×
Station2 (Ban Pang Pueng)	6-Feb-13	1121.6	1100.1	-1.0	O	11.58	8.9	O
	15-May-13	1183.2	1179.8	-0.1	O	12.32	20.7	×
	17-Jul-13	1163.8	1175.4	0.5	O	12.22	11.4	×
	14-Nov-13	1107.4	1156.8	2.2	O	11.86	-17.5	×

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

Table 6.4(11) Result of Inland Aquatic Environment Monitoring

Duration: 2013.3.-2013.12.
Country: Vietnam
Lake/Stream: Hoa Binh Reservoir

		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)	COD (mg/L)
Hoa Binh Reservoir	15-Mar-13	23.6	7.25	17.11	1.42	7.03	1.11	1.88	0.26	4.32	1.19	21.02	5.26	1.2	-	-	0.006	3.8
	15-Jun-13	27.0	7.89	20.20	1.78	6.37	1.38	3.02	0.09	5.76	1.74	25.77	6.03	1.1	-	-	0.002	4.2
	15-Sep-13	27.5	7.52	15.24	1.20	8.65	0.16	2.86	0.18	5.80	2.54	13.33	5.76	1.1	-	-	0.008	3.5
	15-Dec-13	21.7	7.82	16.20	1.34	5.61	1.49	1.88	0.01	3.95	0.83	19.96	4.19	1.2	12	0.008	0.009	3.1
	mean*1	-	7.54	17.19	1.44	6.92	1.04	2.41	0.14	4.96	1.58	20.02	5.31	1.1	-	0.008	0.006	3.7

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

		Anion	Cation	R1	Judge
Hoa Binh Reservoir	15-Mar-13	1637.4	1714.3	2.3	O
	15-Jun-13	2020.1	2081.9	1.5	O
	15-Sep-13	1463.5	1466.1	0.1	O
	15-Dec-13	1534.3	1534.2	0.0	O

Acalc	R2	Judge
17.9	2.2	O
21.7	3.7	O
15.7	1.6	O
16.3	0.3	O

Table 6.4 (12) Summary of Inland Aquatic Environment Monitoring

			Mandatory Parameters : 4 times/year											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 *2	5.74	0.93	0.034	0.05	0.28	1.39	0.02	0.94	0.12	0.29	0.13	0.7	-	-	-	-
China	Chongqing	Jinyunshan Lake	6.03	7.12	0.082	20.74	3.93	0.68	0.12	0.75	0.77	8.75	0.98	3.5	*1	*1	-	<10*1
	Xiamen	Xiaoping Dam	6.80	5.52	0.220	2.71	3.42	2.77	0.05	3.80	2.83	3.20	0.76	0.9	0.02	0.029	-	1.7
	Xi'an	Jiwozi River	6.86	8.92	0.333	15.01	2.39	3.16	*1	3.50	1.37	11.07	1.69	-	<0.01*1	<0.003*1	-	5.0
	Zhuhai	Zhuxiandong Stream	7.20	7.87	0.500	3.81	4.11	4.66	0.07	6.95	1.77	4.91	1.91	1.2	*1	*1	-	1.1
Indonesia	Bandung	Patenggang Lake	7.41	6.64	0.442	8.23	0.06	1.50	0.09	4.83	2.03	4.60	1.97	0.9	*1	0.009	12.1	-
	Sukabumi, West Java	Gunung Lake	7.38	4.15	0.321	3.05	0.04	0.75	0.08	2.75	0.76	2.92	1.18	1.0	*1	0.002	5.3	-
Japan	Gifu pref.	Ijira Lake (Center, surface)	7.17	3.94	0.165	5.02	1.06	1.97	<0.01*1	1.97	0.24	2.73	1.25	2.4	<0.1*1	<0.01*1	0.5	-
	Shimane pref.	Banryu Lake (Center, surface)	7.01	9.89	0.165	4.15	0.132	21.54	0.03	13.23	1.78	1.76	1.89	2.5	<0.003*1	<0.003*1	2.5	5.0
Malaysia	Selangor	Semenyih Dam*3	6.63	2.96	0.230	2.98	0.25	0.77	0.063	2.12	1.94	2.55	0.61	-	<0.10*1	-	-	5.3
	Sabah	Tembaling river	8.05	19.16	1.905	5.50	0.38	1.20	0.038	5.73	0.38	20.35	10.67	-	<0.10*1	-	-	4.6
Mongolia	Terelj	Terelj River	6.84	4.32	0.294	2.81	0.46	0.37	*1	1.46	1.01	6.13	0.83	-	-	-	-	-
Philippines	San Pablo City	Pandin Lake	7.29	17.71	1.725	0.56	0.16	3.19	0.10	8.17	4.24	15.55	7.89	-	0.004	*1	-	-
	Benguet	Ambulalakaw Lake	5.75	0.52	0.060	*1	*1	0.39	*1	0.56	0.13	0.49	0.11	-	-	-	-	-
Russia	Southern Baikal	Pereemnaya River	6.76	4.61	0.134	11.14	0.57	0.13	0.02	1.00	0.65	4.92	0.82	1.9	0.008	0.002	-	1.0
	Primorskaya	Komarovka River*4	6.84	8.45	0.372	11.87	1.27	3.61	0.16	3.44	0.64	7.71	2.66	-	0.006	0.027	-	4.1
Thailand	Kanchanaburi Province	Vachiralongkorn Dam (Ban Pong Chang)	7.67	13.53	1.186	1.10	0.10	0.87	0.01	1.21	1.02	17.0	3.81	2.8	0.01	-	-	-
		Vachiralongkorn Dam (Ban Pang Pueng)	7.90	11.10	1.093	1.26	0.10	0.83	0.01	1.14	1.01	16.8	2.88	4.0	0.01	-	-	-
Vietnam	Hoa Binh Province	Hoa Binh Reservoir	7.54	17.19	1.435	6.92	1.04	2.41	0.14	4.96	1.58	20.0	5.31	1.1	0.008	0.006	-	3.7

note
- : Items were not analyzed.
*1: Less than determination/detection limit.
*2: Surveyed twice a year.
*3: Surveyed three times a year.
*4: Surveyed five 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	-	-	-	-
2013	5.74	0.93	0.034	0.05	0.28	1.39	0.02	0.94	0.12	0.29	0.13	0.7	-	-	-	-

Table 6.5(2) Annual mean values of each parameters from 2001 to 2013 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	9.88	3.71	0.14	3.08	2.38	12.8	3.98	3.1	*1	*1	-	<10*1
2013	6.03	7.12	0.082	20.7	3.93	0.68	0.12	0.75	0.77	8.75	0.98	3.5	*1	*1	-	<10*1

Table 6.5(3) Annual mean values of each parameters from 2001 to 2013 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
2013	6.80	5.52	0.220	2.71	3.42	2.77	0.05	3.80	2.83	3.20	0.76	0.9	0.02	0.029	-	1.7

- : Items were not analyzed.

*1: Less than determination/detection limit.

Table 6.5(4) Annual mean values of each parameters from 2001 to 2013 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	10.03	1.47	1.06	0.04	1.90	0.70	8.83	1.38	-	-	-	-	-
2002	7.60	8.47	0.110	12.16	1.70	1.80	*1	2.80	1.20	12.73	1.72	-	-	-	-	-
2003	7.54	7.83	0.140	11.44	2.01	1.63	*1	2.08	0.95	12.03	1.59	-	-	-	-	-
2004	7.20	6.63	0.243	11.68	2.30	1.06	*1	1.79	0.68	9.04	1.35	-	*1	*1	-	3.2
2005	6.99	7.99	0.208	15.31	0.81	1.74	0.06	1.77	0.72	7.44	1.35	-	*1	0.090	-	1.6
2006	6.80	7.59	0.238	11.80	1.87	1.21	0.07	1.93	0.65	7.64	1.11	-	0.03	0.003	-	2.8
2007	7.32	8.86	0.250	16.68	3.46	1.31	0.13	2.09	0.96	11.00	0.96	-	*1	*1	-	2.2
2008	7.05	8.42	0.248	13.92	1.89	1.51	0.30	1.43	1.05	9.38	1.20	-	<0.01*1	<0.003*1	-	2.5
2009	6.98	8.28	0.278	15.51	2.07	1.34	0.14	1.88	1.04	9.85	1.38	-	<0.01*1	<0.003*1	-	2.5
2010	7.33	8.11	0.280	13.92	2.83	1.27	*1	1.22	0.81	10.49	1.35	-	<0.01*1	<0.003*1	-	3.0
2011	6.85	6.83	0.275	12.89	0.87	0.51	*1	0.74	0.84	8.09	2.01	-	<0.01*1	<0.003*1	-	3.0
2012	6.83	6.95	0.275	12.97	0.96	0.57	*1	0.70	0.83	7.80	2.01	-	<0.01*1	<0.003*1	-	4.0
2013	6.86	8.92	0.333	15.01	2.39	3.16	*1	3.50	1.37	11.07	1.69	-	<0.01*1	<0.003*1	-	5.0

Table 6.5(5) Annual mean values of each parameters from 2004 to 2013 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	-	-	17.70	0.63	43.1	0.20	-	-	-	-	-	-	-	-	-
2002	7.93	6.70	0.963	19.89	0.83	23.8	0.23	7.27	1.57	17.0	2.50	-	-	-	-	-
2003	7.82	7.54	1.603	17.50	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
2013	7.20	7.87	0.500	3.81	4.11	4.66	0.07	6.95	1.77	4.91	1.91	1.2	*1	*1	-	1.1

Table 6.5(6) Annual mean values of each parameters from 2001 to 2013 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	-
2013	7.41	6.64	0.442	8.23	0.06	1.50	0.09	4.83	2.03	4.60	1.97	0.9	*1	0.009	12.1	-

- : Items were not analyzed.

*1: Less than determination/detection limit.

Table 6.5(7) Annual mean values of each parameters from 2008 to 2013 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	-
2013	7.38	4.15	0.321	3.05	0.04	0.75	0.08	2.75	0.76	2.92	1.18	1.0	*1	0.002	5.3	-

Table 6.5(8) Annual mean values of each parameters from 2001 to 2013 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	0.07	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	-
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	-
2013	7.17	3.94	0.165	5.02	1.06	1.97	<0.01*1	1.97	0.24	2.73	1.25	2.4	<0.1*1	<0.01*1	0.5	-

Table 6.5(9) Annual mean values of each parameters from 2001 to 2013 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
2013	7.01	9.89	0.165	4.15	0.13	21.5	0.03	13.2	1.78	1.76	1.89	2.5	<0.003*1	<0.003*1	2.5	5.0

- : Items were not analyzed.

*1: Less than determination/detection limit.

Table 6.5(10) Annual mean values of each parameters of 2009 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

Table 6.5(11) Annual mean values of each parameters from 2005 to 2013 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	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2013	6.63	2.96	0.230	2.98	0.25	0.77	0.06	2.12	1.94	2.55	0.61	-	<0.10*1	-	-	5.3

Table 6.5(12) Annual mean values of each parameters from 2007 to 2013 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	-	-	4.0
2011	8.18	17.4	1.626	7.23	1.19	1.35	0.01	4.99	0.40	16.3	7.50	-	<0.10*1	-	-	7.8
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*1	-	-	4.5
2013	8.05	19.2	1.905	5.50	0.38	1.20	0.04	5.73	0.38	20.4	10.7	-	<0.10*1	-	-	4.6

- : 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	-	-
2013	6.84	4.32	0.294	2.81	0.46	0.37	*1	1.46	1.01	6.13	0.83	-	-	-	-	-

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	7.95	17.6	1.683	1.53	0.48	3.45	0.06	8.19	4.43	14.1	7.59	-	*1	-	-	-
2013	7.29	17.7	1.725	0.56	0.16	3.19	0.10	8.17	4.24	15.6	7.89	-	0.004	*1	-	-

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	-	-	-	-	-
2010	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2011	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2012	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2013	5.75	0.52	0.060	*1	*1	0.39	*1	0.56	0.13	0.49	0.11	-	-	-	-	-

- : Items were not analyzed.

*1: Less than determination/detection limit.

Table 6.5(16) Annual mean values of each parameters from 2004 to 2013 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	9.49	0.38	0.17	0.09	0.95	0.63	4.42	0.67	-	0.005	0.002	-	1.2
2013	6.76	4.61	0.134	11.1	0.57	0.13	0.02	1.00	0.65	4.92	0.82	1.9	0.008	0.002	-	1.0

Table 6.5(17) Annual mean values of each parameters from 2005 to 2013 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	11.18	0.33	3.09	0.15	3.34	0.60	9.07	2.25	-	*1	*1	-	-
2006	7.08	8.37	0.428	9.02	0.26	3.12	0.08	3.10	0.57	8.51	2.27	-	0.014	0.003	-	-
2007	7.15	8.68	0.395	10.51	0.26	4.03	0.09	3.39	0.65	8.04	2.34	-	0.010	0.025	-	4.3
2008	7.22	8.68	0.391	12.08	0.52	3.06	0.09	3.80	0.62	8.14	2.08	-	0.030	0.053	-	3.6
2009	7.02	8.64	0.351	12.59	1.11	3.69	0.22	3.57	0.60	8.21	2.07	-	0.041	0.067	-	4.4
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	9.61	1.33	3.88	0.45	3.53	0.79	7.88	2.37	-	0.015	0.038	-	5.1
2013	6.84	8.45	0.372	11.87	1.27	3.61	0.16	3.44	0.64	7.71	2.66	-	0.006	0.027	-	4.1

Table 6.5(18) Annual mean values of each parameters from 2002 to 2013 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
2013	7.67	13.5	1.186	1.10	0.10	0.87	0.01	1.21	1.02	17.0	3.81	2.8	0.010	-	-	-

- : Items were not analyzed.

*1: Less than determination/detection limit.

Table 6.5(19) Annual mean values of each parameters from 2002 to 2013 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
2013	7.90	11.1	1.093	1.26	0.10	0.83	0.01	1.14	1.01	16.8	2.88	4.0	0.010	-	-	-

Table 6.5(20) Annual mean values of each parameters from 2001 to 2013 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
2013	7.54	17.2	1.435	6.92	1.04	2.41	0.14	4.96	1.58	20.0	5.31	1.1	0.008	0.006	-	3.7

- : 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 two water years, 2011-2012 and 2012-2013, 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 2013

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.	2011-2012 2012-2013[*3]
	Output (chemical discharge from the stream)	1. Water discharge 2. Stream water chemistry: biweekly 3. Chemical discharge	2011-2012 2012-2013[*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 2011, 2012 and 2013; [*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]	
		2011-2012	2012-2013
Input by precipitation, mm y^{-1}	Akatani (260 m)	3267	3189
	Ijira monitoring site (140 m)	2732	2847
	Lakeside (110 m)	2981	2893
	Mean	2993	2976
Output by the stream, mm y^{-1}	Outlet of Kamagatani River	1496	1417
Runoff rate, %		50	48

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..

Table 7.7 Stream water chemistry: Lake Ijira Catchment (Water years, 2011-2012 and 2012-2013)

Collection date	pH	EC	Gran's ANC*1	SO_4^{2-}	NO_3^-	Cl^-	Na^+	Ca^{2+}	Mg^{2+}	K^+	NH_4^{+}*2,	TOC	SiO_2	Water level, m
		$mS\ m^{-1}$				$\mu mol_c\ L^{-1}$						$mg\text{-}C\ L^{-1}$	$mg\text{-}SiO_2\ L^{-1}$	
2011/11/14	6.83	4.31	125	146	35.2	58.4	94.2	144	116	6.8	3.84	0.4	9.3	0.17
2011/11/28	6.74	4.19	119	133	28.9	55.6	90.1	126	89	5.9	< 3.0	0.1	9.1	0.18
2011/12/12	6.78	4.35	125	147	22.7	56.5	94.4	133	97	5.7	< 3.0	0.1	8.2	0.18
2011/12/26	6.94	4.33	120	151	23.6	57.0	90.5	135	102	5.1	< 3.0	0.2	7.5	0.19
2012/1/10	6.96	4.51	120	162	28.1	56.4	95.8	139	112	5.2	< 3.0	0.1	8.0	0.19
2012/1/23	6.97	4.55	118	161	32.6	55.6	92.5	143	111	5.3	< 3.0	0.1	8.2	0.20
2012/2/6	6.88	4.53	123	161	27.3	56.6	94.0	145	115	5.2	< 3.0	0.2	9.3	0.19
2012/2/20	6.93	4.29	120	148	31.3	56.2	90.2	136	115	5.1	< 3.0	0.3	10.2	0.19
2012/3/5	6.70	3.54	76	113	56.3	45.8	65.6	109	101	6.2	< 3.0	0.4	5.8	0.31
2012/3/19	6.86	3.95	111	130	33.2	55.7	80.9	121	112	5.8	< 3.0	0.1	7.6	0.18
2012/4/3	6.86	3.65	96	120	32.1	59.0	77.1	113	103	7.1	< 3.0	0.4	6.5	0.31
2012/4/16	7.06	3.89	120	122	29.2	59.6	83.6	120	113	6.5	< 3.0	0.1	8.1	0.23
2012/5/1	7.05	4.00	119	126	28.8	58.5	86.1	126	117	7.1	< 3.0	0.1	8.5	0.23
2012/5/14	7.06	4.23	125	148	25.3	60.7	93.1	136	125	7.2	< 3.0	0.1	8.9	0.17
2012/5/28	6.88	4.52	149	145	23.5	60.3	95.0	144	130	7.3	< 3.0	0.1	9.6	0.18
2012/6/11	6.85	4.77	148	161	37.8	55.8	96.1	151	136	7.7	< 3.0	0.1	8.2	0.16
2012/6/25	6.91	3.76	119	111	24.0	53.6	80.8	116	107	7.3	< 3.0	0.5	8.1	0.25
2012/7/9	6.92	3.71	121	113	26.4	52.8	80.4	116	107	6.8	< 3.0	0.2	8.2	0.26
2012/7/30	6.97	3.82	128	118	23.5	56.9	85.0	120	110	7.4	< 3.0	0.1	8.8	0.18
2012/8/13	6.99	4.42	143	143	31.9	58.1	95.3	143	129	8.4	< 3.0	0.1	9.0	0.20
2012/8/27	7.04	4.10	139	128	28.2	55.5	89.9	132	121	7.8	< 3.0	0.1	8.9	0.18
2012/9/10	7.05	4.41	142	137	41.4	53.6	89.0	144	129	8.1	< 3.0	0.2	8.5	0.20
2012/9/24	6.91	3.79	119	112	30.8	54.2	80.8	120	110	6.8	< 3.0	0.3	8.4	0.22
2012/10/9	7.04	4.11	131	129	27.2	56.2	87.4	130	118	6.8	< 3.0	0.3	8.5	0.18
2012/10/22	6.95	4.32	131	146	31.7	57.5	92.2	138	125	6.9	4.07	0.1	8.5	0.15
2012/11/5	6.99	4.42	126	158	31.3	57.9	92.9	142	129	6.5	< 3.0	0.1	8.2	0.14
2012/11/19	6.95	4.41	113	144	45.0	56.9	91.1	142	127	6.2	< 3.0	0.1	7.8	0.17
2012/12/3	6.92	4.43	122	158	30.6	56.6	93.9	140	127	5.8	< 3.0	0.1	7.8	0.15
2012/12/17	6.88	4.00	90	126	46.2	59.2	85.5	126	115	5.9	< 3.0	0.1	7.3	0.23
2012/12/27	7.00	4.14	110	142	31.7	57.7	89.8	131	120	5.3	< 3.0	0.1	7.4	0.18
2013/1/15	6.97	4.16	114	147	29.3	58.1	95.3	138	127	5.8	< 3.0	0.1	7.4	0.17
2013/1/28	6.99	4.11	106	144	28.8	58.8	89.3	130	119	5.3	< 3.0	0.1	7.2	0.18
2013/2/12	6.96	3.96	102	134	28.5	57.6	87.5	124	115	5.2	< 3.0	0.2	7.6	0.18
2013/2/25	6.98	4.12	114	142	27.6	58.2	91.3	131	121	5.2	< 3.0	0.1	7.4	0.17
2013/3/11	7.02	4.12	116	140	24.4	57.0	88.2	129	120	5.3	< 3.0	0.2	7.9	0.17
2013/3/25	7.06	4.27	122	143	20.4	58.3	90.9	133	124	5.9	< 3.0	0.2	7.9	0.18
2013/4/9	7.02	4.45	131	153	21.8	57.6	92.8	141	132	6.1	< 3.0	0.5	7.9	0.16
2013/4/22	7.09	4.59	138	166	23.7	60.5	98.7	149	138	6.2	< 3.0	0.3	8.1	0.15
2013/5/7	7.04	4.26	138	143	13.6	56.6	93.9	135	125	6.2	< 3.0	0.5	8.1	0.17
2013/5/20	7.01	4.43	136	147	27.3	55.3	93.5	147	135	7.1	< 3.0	0.4	7.9	0.18
2013/6/3	6.81	4.19	140	137	21.6	57.0	92.0	135	124	6.8	< 3.0	0.3	8.1	0.18
2013/6/17	6.97	4.56	148	156	19.0	57.8	100.7	148	136	7.5	< 3.0	0.2	8.7	0.16
2013/7/1	6.91	4.24	135	133	3.0	56.6	92.1	141	129	7.0	< 3.0	0.3	8.6	0.18
2013/7/16	6.87	4.01	131	127	21.7	56.9	89.8	130	120	7.3	< 3.0	0.4	8.6	0.19
2013/7/29	6.44	3.35	77	99	58.4	35.9	64.4	112	99	9.5	< 3.0	3.3	6.0	0.38
2013/8/12	6.90	3.69	113	113	22.6	58.0	85.0	114	107	6.7	< 3.0	0.4	9.0	0.21
2013/8/26	6.83	4.22	135	135	30.1	57.7	96.3	138	127	7.6	< 3.0	0.4	9.1	0.16
2013/9/9	6.89	3.72	93	117	27.7	56.1	87.6	120	111	6.9	< 3.0	0.3	9.1	0.22
2013/9/24	6.96	3.86	123	122	21.2	58.3	91.0	125	117	7.0	< 3.0	0.4	8.9	0.25
2013/10/7	7.22	4.25	135	145	19.8	59.3	100.1	140	129	7.4	< 3.0	0.3	9.0	0.22
2013/10/21	7.02	3.91	112	127	33.0	55.9	89.3	129	119	6.8	< 3.0	0.4	8.4	0.29
2013/11/5	6.98	4.01	124	136	21.9	59.2	93.9	133	123	6.3	< 3.0	0.3	8.4	0.26

Note. The water year was difined as the period from November to October in the following year. The line indicates the border of the water years.*1, The data of the pH 4.8 endpoint alkalinity are also available. *2, The data was processed according to the determination limit decided by the data quality objectives (DQO) of EANET.

Table 7.8 Periodic chemical discharges from the stream: Lake Ijira Catchment (Water years, 2011-2012 and 2012-2013)

Start date	End date	pH4.8	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
2011/10/31	2011/11/14	0.04	0.04	0.04	0.01	0.02	0.03	0.04	0.03	0.00	0.00058	0.00	0.07	2.85	30.3
2011/11/14	2011/11/28	0.06	0.05	0.06	0.01	0.02	0.04	0.06	0.04	0.00	0.00083	0.00	0.11	4.00	43.4
2011/11/28	2011/12/12	0.05	0.04	0.05	0.01	0.02	0.03	0.05	0.03	0.00	ND	0.00	0.05	3.12	36.1
2011/12/12	2011/12/26	0.04	0.04	0.05	0.01	0.02	0.03	0.04	0.03	0.00	ND	0.00	0.05	2.55	32.5
2011/12/26	2012/1/10	0.06	0.05	0.07	0.01	0.02	0.04	0.06	0.05	0.00	ND	0.00	0.06	3.40	43.8
2012/1/10	2012/1/23	0.05	0.04	0.06	0.01	0.02	0.03	0.05	0.04	0.00	ND	0.00	0.03	2.88	35.6
2012/1/23	2012/2/6	0.04	0.04	0.05	0.01	0.02	0.03	0.05	0.04	0.00	ND	0.00	0.05	2.83	32.4
2012/2/6	2012/2/20	0.07	0.06	0.08	0.02	0.03	0.05	0.08	0.06	0.00	ND	0.00	0.14	5.21	53.5
2012/2/20	2012/3/5	0.05	0.04	0.06	0.02	0.02	0.04	0.06	0.05	0.00	ND	0.00	0.17	3.66	45.9
2012/3/5	2012/3/19	0.05	0.04	0.05	0.02	0.02	0.03	0.05	0.05	0.00	ND	0.00	0.11	2.94	43.8
2012/3/19	2012/4/3	0.09	0.08	0.10	0.03	0.04	0.06	0.09	0.08	0.01	ND	0.00	0.16	5.53	78.1
2012/4/3	2012/4/16	0.13	0.11	0.13	0.03	0.06	0.08	0.12	0.11	0.01	ND	0.00	0.23	7.65	104
2012/4/16	2012/5/1	0.10	0.09	0.10	0.02	0.05	0.07	0.10	0.09	0.01	ND	0.00	0.09	6.50	78.0
2012/5/1	2012/5/14	0.04	0.04	0.04	0.01	0.02	0.03	0.04	0.04	0.00	ND	0.00	0.03	2.82	32.4
2012/5/14	2012/5/28	0.06	0.06	0.06	0.01	0.03	0.04	0.06	0.05	0.00	ND	0.00	0.03	3.92	42.4
2012/5/28	2012/6/11	0.04	0.04	0.04	0.01	0.01	0.02	0.04	0.03	0.00	ND	0.00	0.02	2.18	24.6
2012/6/11	2012/6/25	0.17	0.16	0.16	0.04	0.07	0.11	0.16	0.14	0.01	ND	0.00	0.33	9.66	119
2012/6/25	2012/7/9	0.13	0.12	0.11	0.02	0.05	0.08	0.11	0.11	0.01	ND	0.00	0.30	8.07	99.0
2012/7/9	2012/7/30	0.24	0.22	0.20	0.04	0.10	0.14	0.21	0.19	0.01	ND	0.00	0.19	14.84	174
2012/7/30	2012/8/13	0.06	0.06	0.06	0.01	0.02	0.04	0.06	0.05	0.00	ND	0.00	0.04	3.79	42.5
2012/8/13	2012/8/27	0.14	0.13	0.13	0.03	0.05	0.09	0.13	0.12	0.01	ND	0.00	0.10	8.37	93.6
2012/8/27	2012/9/10	0.05	0.05	0.04	0.01	0.02	0.03	0.05	0.04	0.00	ND	0.00	0.05	2.96	34.0
2012/9/10	2012/9/24	0.13	0.11	0.10	0.03	0.05	0.07	0.11	0.10	0.01	ND	0.00	0.21	7.12	84.2
2012/9/24	2012/10/9	0.07	0.06	0.06	0.01	0.03	0.04	0.06	0.06	0.00	ND	0.00	0.14	4.09	48.5
2012/10/9	2012/10/22	0.03	0.03	0.03	0.01	0.01	0.02	0.03	0.03	0.00	0.00047	0.00	0.05	1.95	22.9
2012/10/22	2012/11/5	0.03	0.03	0.03	0.01	0.01	0.02	0.03	0.03	0.00	0.00043	0.00	0.02	1.77	21.1
2012/11/5	2012/11/19	0.03	0.03	0.04	0.01	0.01	0.02	0.03	0.03	0.00	ND	0.00	0.02	1.86	23.2
2012/11/19	2012/12/3	0.03	0.03	0.03	0.01	0.01	0.02	0.03	0.03	0.00	ND	0.00	0.01	1.79	23.0
2012/12/3	2012/12/17	0.04	0.04	0.05	0.01	0.02	0.03	0.05	0.04	0.00	ND	0.00	0.02	2.75	36.6
2012/12/17	2012/12/27	0.04	0.03	0.04	0.01	0.02	0.03	0.04	0.04	0.00	ND	0.00	0.02	2.26	30.8
2012/12/27	2013/1/15	0.06	0.05	0.07	0.01	0.03	0.04	0.06	0.06	0.00	ND	0.00	0.04	3.55	47.9
2013/1/15	2013/1/28	0.03	0.03	0.04	0.01	0.01	0.02	0.03	0.03	0.00	ND	0.00	0.03	1.83	25.1
2013/1/28	2013/2/12	0.06	0.05	0.07	0.01	0.03	0.04	0.06	0.06	0.00	ND	0.00	0.07	3.75	50.8
2013/2/12	2013/2/25	0.04	0.03	0.04	0.01	0.02	0.03	0.04	0.03	0.00	ND	0.00	0.03	2.21	29.6
2013/2/25	2013/3/11	0.04	0.04	0.05	0.01	0.02	0.03	0.04	0.04	0.00	ND	0.00	0.04	2.59	33.8
2013/3/11	2013/3/25	0.04	0.03	0.04	0.01	0.02	0.03	0.04	0.03	0.00	ND	0.00	0.05	2.26	28.6
2013/3/25	2013/4/9	0.03	0.03	0.04	0.01	0.01	0.02	0.04	0.03	0.00	ND	0.00	0.09	2.04	25.8
2013/4/9	2013/4/22	0.03	0.03	0.03	0.00	0.01	0.02	0.03	0.03	0.00	ND	0.00	0.07	1.52	18.9
2013/4/22	2013/5/7	0.09	0.09	0.10	0.01	0.04	0.06	0.09	0.08	0.00	ND	0.00	0.25	5.1	63.4
2013/5/7	2013/5/20	0.04	0.03	0.04	0.01	0.01	0.02	0.04	0.03	0.00	ND	0.00	0.12	2.00	25.0
2013/5/20	2013/6/3	0.05	0.05	0.05	0.01	0.02	0.03	0.05	0.05	0.00	ND	0.00	0.14	3.0	36.9
2013/6/3	2013/6/17	0.04	0.03	0.03	0.00	0.01	0.02	0.03	0.03	0.00	ND	0.00	0.07	1.93	22.9
2013/6/17	2013/7/1	0.08	0.08	0.08	0.01	0.03	0.05	0.08	0.07	0.00	ND	0.00	0.15	4.6	53.3
2013/7/1	2013/7/16	0.14	0.13	0.13	0.01	0.06	0.09	0.13	0.12	0.01	ND	0.00	0.36	8.5	98.7
2013/7/16	2013/7/29	0.04	0.04	0.04	0.01	0.02	0.03	0.04	0.04	0.00	ND	0.00	0.68	2.7	36.8
2013/7/29	2013/8/12	0.14	0.13	0.15	0.06	0.07	0.10	0.16	0.14	0.01	ND	0.00	2.60	10.51	140
2013/8/12	2013/8/26	0.04	0.04	0.04	0.01	0.02	0.03	0.04	0.04	0.00	ND	0.00	0.12	2.8	31.0
2013/8/26	2013/9/9	0.10	0.09	0.10	0.02	0.04	0.07	0.10	0.09	0.01	ND	0.00	0.24	7.07	77.3
2013/9/9	2013/9/24	0.15	0.13	0.14	0.03	0.07	0.11	0.15	0.14	0.01	ND	0.00	0.42	11.0	121
2013/9/24	2013/10/7	0.09	0.09	0.09	0.01	0.04	0.06	0.09	0.08	0.00	ND	0.00	0.25	6.05	67.5
2013/10/7	2013/10/21	0.15	0.15	0.16	0.03	0.07	0.11	0.16	0.15	0.01	ND	0.00	0.43	10.21	117
2013/10/21	2013/11/5	0.19	0.18	0.20	0.04	0.09	0.14	0.20	0.18	0.01	ND	0.00	0.58	12.72	151

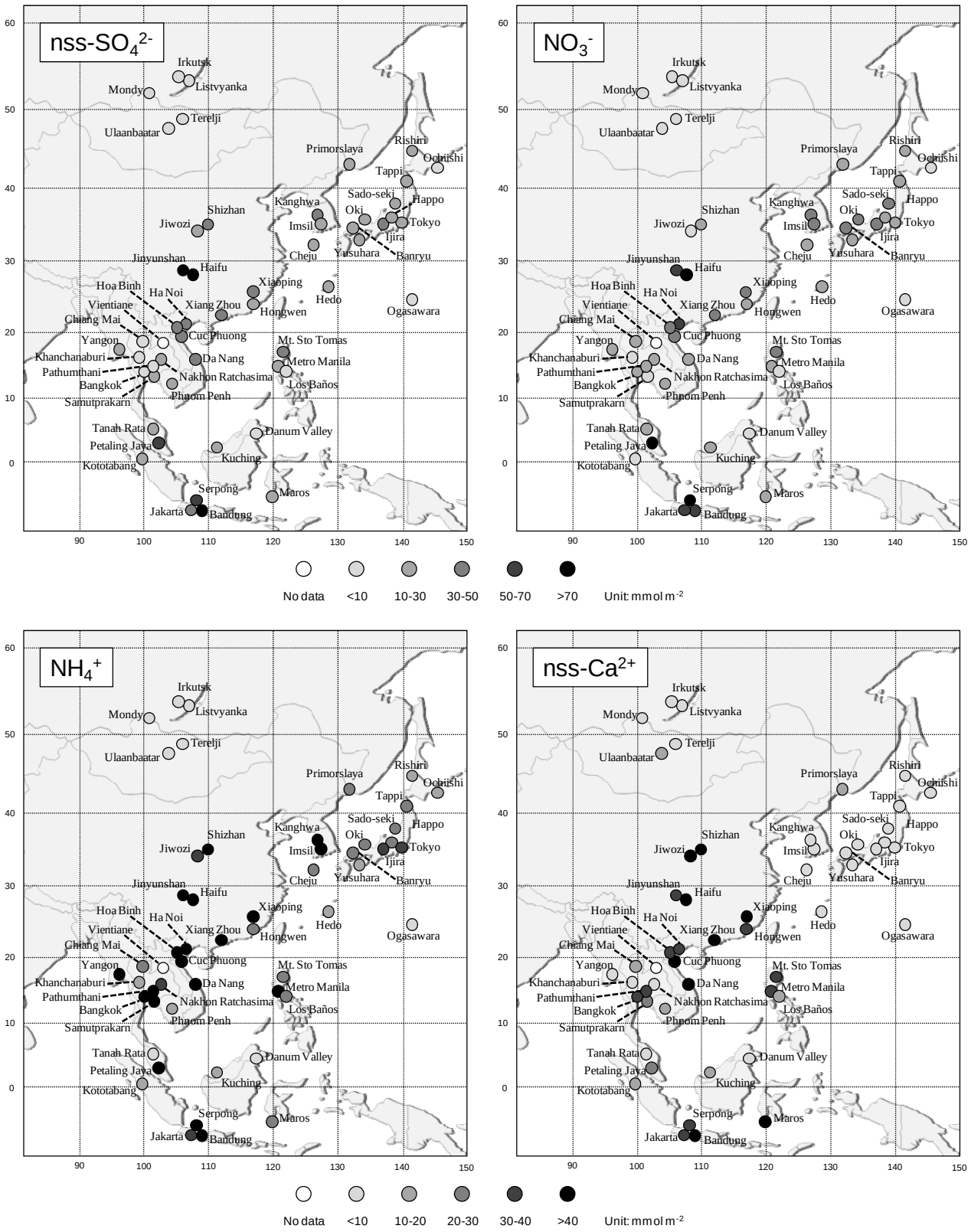
Note. Periodic chemical discharges were calculated based on the mean concentrations and the water discharge for the respective sampling intervals. In the case that the concentration was below determination limit, the chemical discharge was expressed as ND. The line indicates the border of the water years.

Table 7.9 Annual chemical discharges from the stream: Lake Ijira Catchment (Water years, 2011-2012 and 2012-2013)

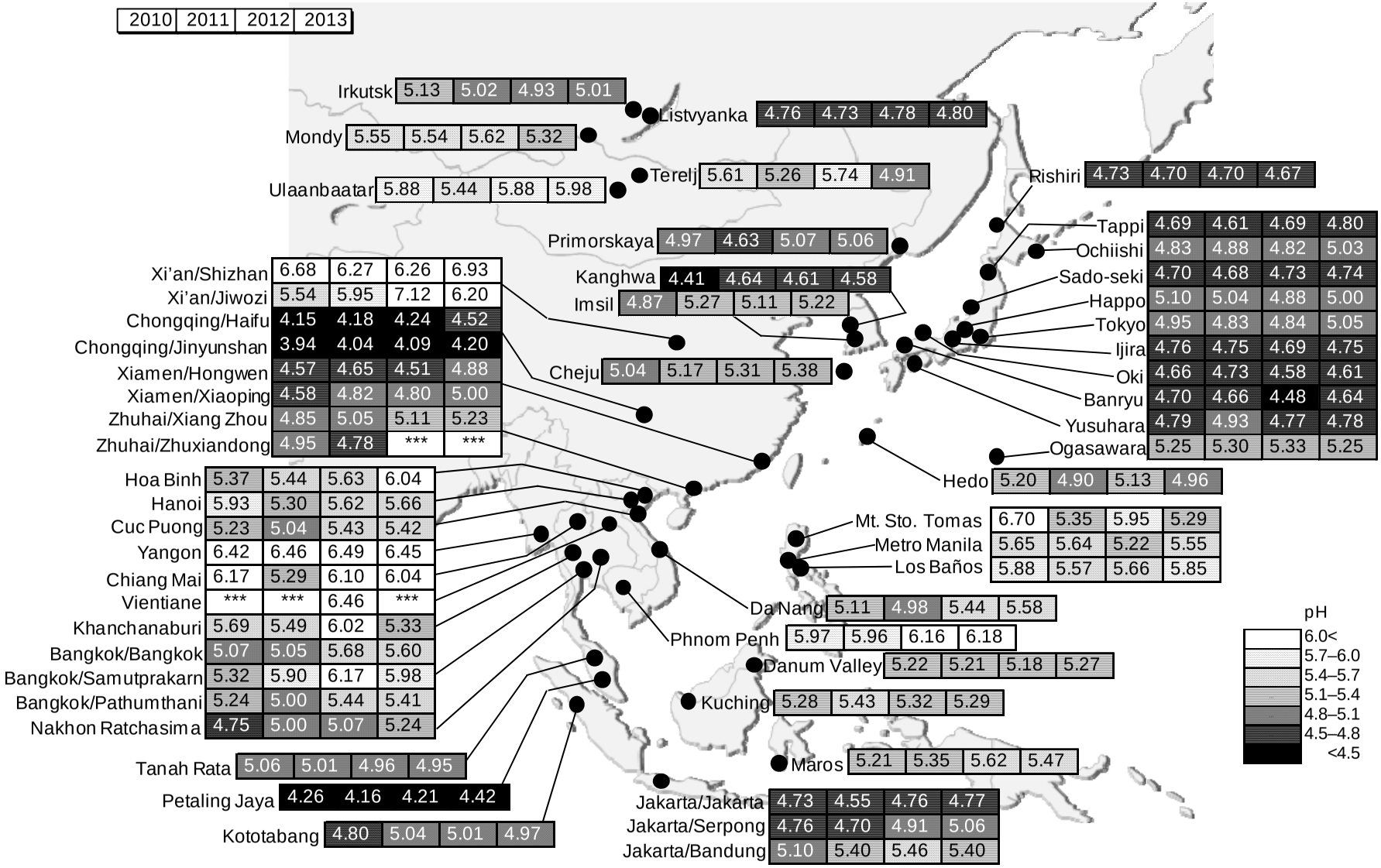
Water year	pH4.8	alkalinity Gran's ANC	SO_4^{2-}	NO_3^-	Cl^-	Na^+	Ca^{2+}	Mg^{2+}	K^+	NH_4^+	H^+	TOC	SiO_2
					$kmol_c\ ha^{-1}$							$kg\text{-}C\ ha^{-1}$	$kg\text{-}SiO_2\ ha^{-1}$
2011 - 2012	2.0	1.8	2.0	0.5	0.8	1.3	1.9	1.7	0.1	0.002	0.0	2.8	125
2012 - 2013	1.8	1.7	1.9	0.4	0.8	1.3	1.9	1.7	0.1	0.0	0.0	6.9	117

Appendix I

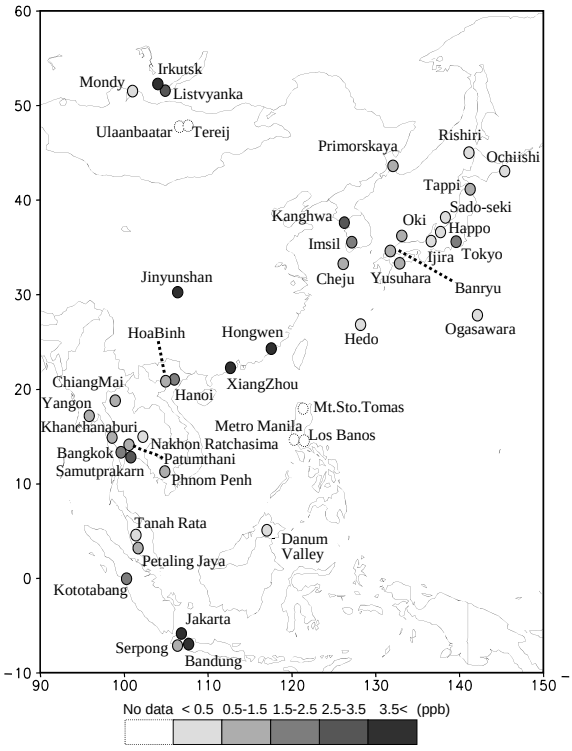
Overview of Data Report 2013



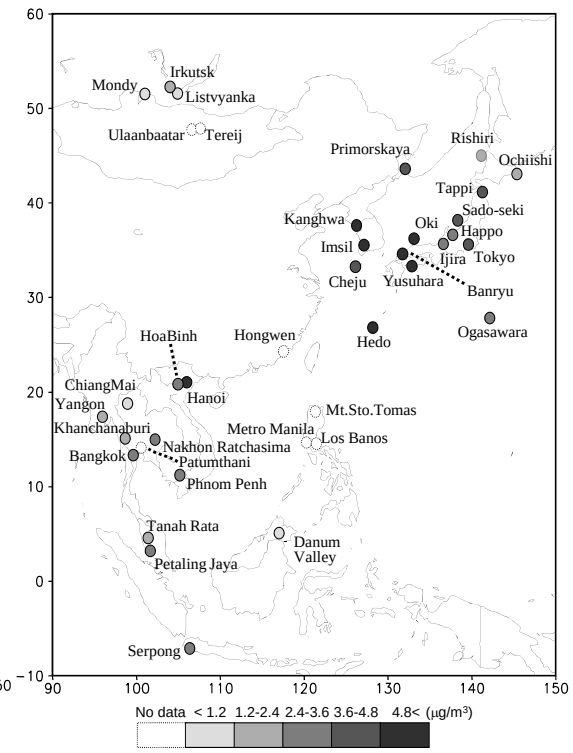
Appendix Fig. 1.1 Annual wet deposition levels of nss-SO_4^{2-}, NO_3^-, NH_4^+ and nss-Ca^{2+}



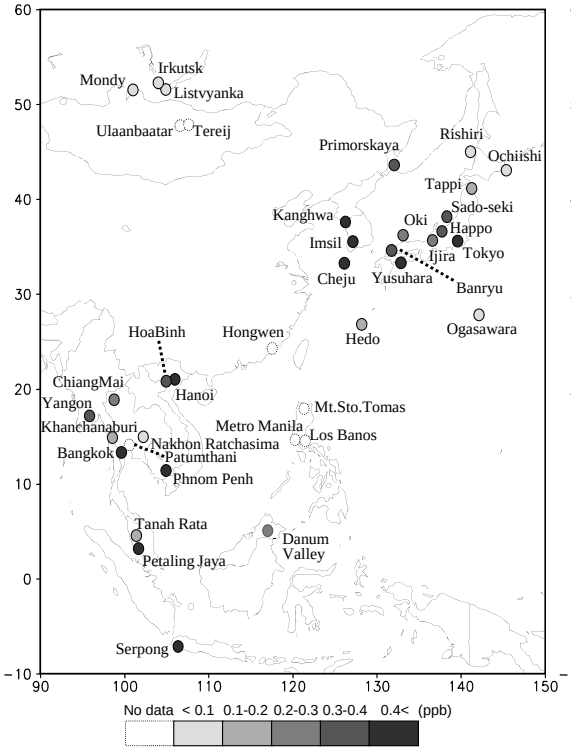
Appendix Fig. 1-2 Trends of pH in each EANET site from 2010 to 2013



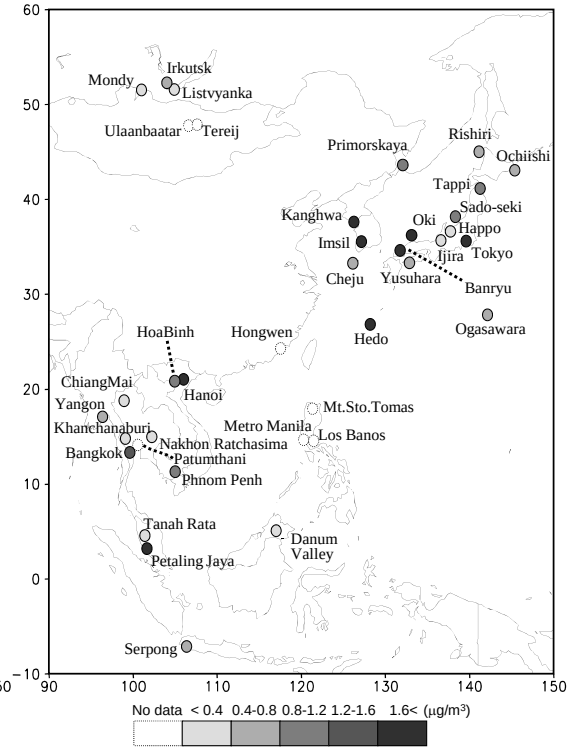
Appendix Fig. 1-3 Levels of annual SO_2 concentration in at EANET monitoring sites in 2013.



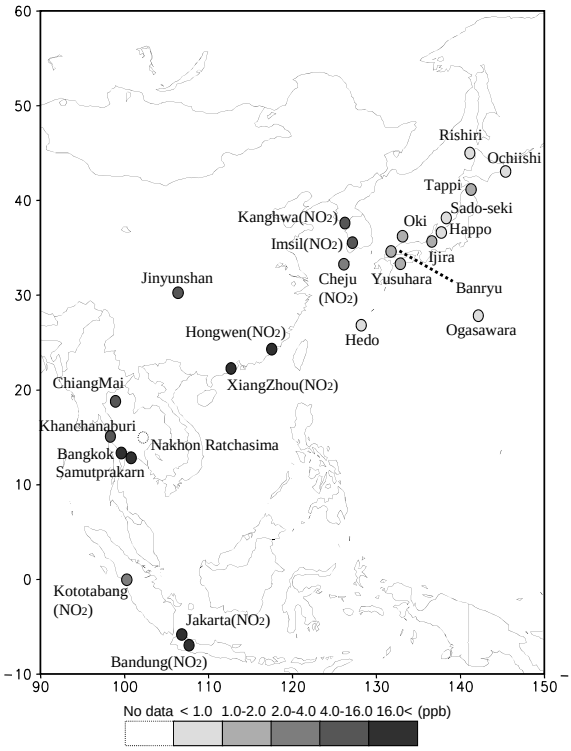
Appendix Fig. 1-4 Levels of annual particulate SO_4^{2-} concentration in at EANET monitoring sites in 2013.



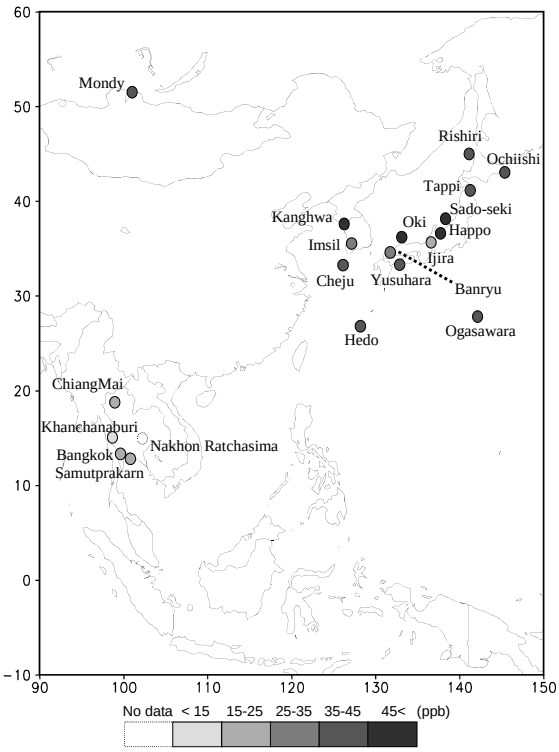
Appendix Fig. 1-5 Levels of annual HNO_3 concentration in at EANET monitoring sites in 2013.



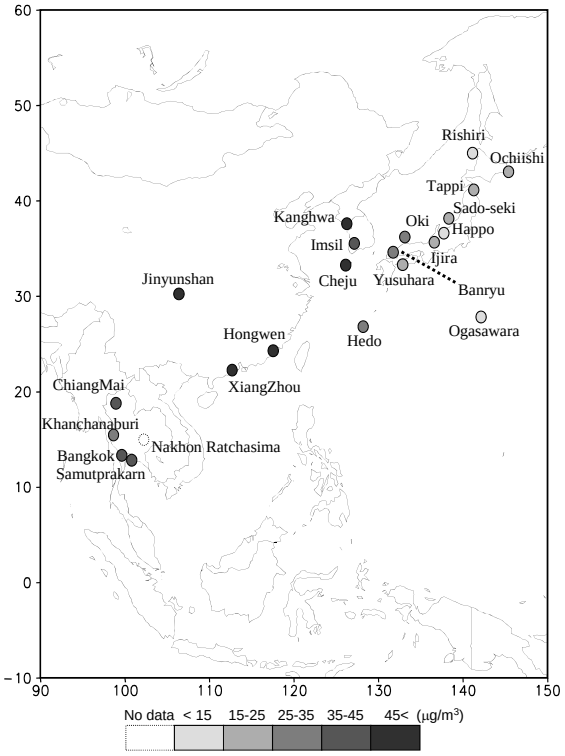
Appendix Fig. 1-6 Levels of annual particulate NO_3^- concentration in at EANET monitoring sites in 2013.



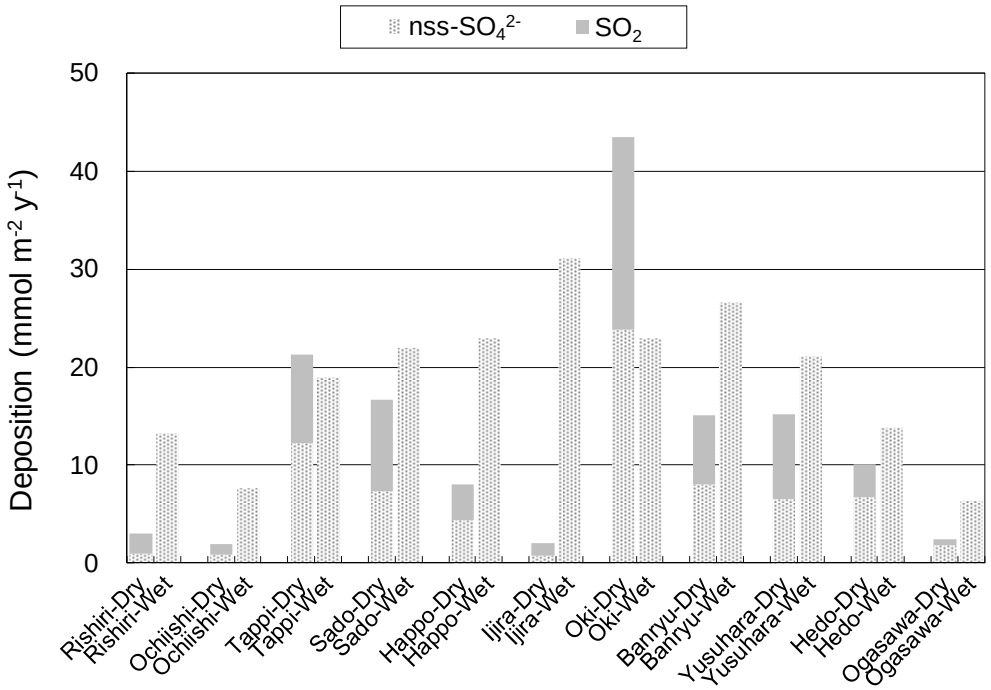
Appendix Fig. 1-7 Levels of annual NOx or NO_2 concentration at EANET monitoring sites in 2013.



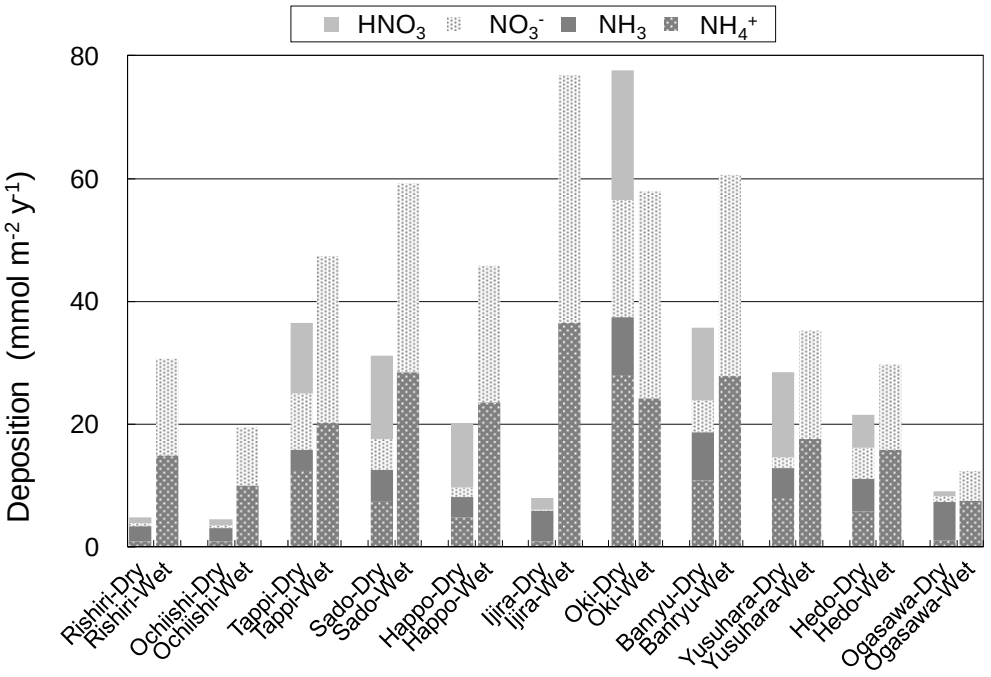
Appendix Fig. 1-8 Levels of annual O_3 concentration at EANET monitoring sites in 2013.



Appendix Fig. 1-9 Levels of annual PM_{10} concentration at EANET monitoring sites in 2013.



Appendix Fig. 1-10 Annual dry and wet deposition amount of sulfur compounds at EANET sites in 2013.



Appendix Fig. 1-11 Annual dry and wet deposition amount of nitrogen compounds at EANET sites in 2013.

Appendix II

Meteorological Statistics at the Monitoring Sites

Appendix Table 2-1 Meteorological statistics at the monitoring sites
Meteorological Statistics : Chongqing

2013

Month / Items		1	2	3	4	5	6	7	8	9	10	11	12
Tempera-ture (ºC)	monthly mean	8.3	11.9	17.9	20.3	22.5	27.9	31.5	30.5	23.4	19.7	14.7	9.3
	max.daily mean	11.5	15.4	23.3	25.9	27.6	33.1	36.7	36.3	27.4	23.6	17.0	11.9
	min.daily mean	6.0	9.7	14.2	16.5	19.4	23.8	27.4	26.5	21.0	17.1	13.4	7.6
Relative humidity (%)	monthly mean	72	73	59	61	73	66	59	59	80	81	87	84
	max.daily mean	--	--	--	--	--	--	--	--	--	--	--	--
	min.daily mean	31	33	17	19	14	23	27	26	39	30	38	40
Mean wind speed (m/s)		1.2	1.2	1.4	1.4	1.3	1.5	1.9	1.7	1.3	1.2	1.2	1.3
Most frequent wind direction (bearings)		--	--	--	--	--	--	--	--	--	--	--	--
Precipitation amount (mm/month)		9	29	3	115	127	242	81	63	195	91	57	16
Sunshine duration (hours/month)		35	46	102	136	115	187	213	209	--	--	8	8
Solar radiation (MJ/m^2/month)		--	--	--	--	--	--	--	--	--	--	--	--

Appendix Table 2-2 Meteorological statistics at the monitoring sites
Meteorological Statistics : Xi'an

2013

Month / Items		1	2	3	4	5	6	7	8	9	10	11	12
Tempera-ture (ºC)	monthly mean	1.2	5.0	13.3	16.6	21.9	27.4	27.8	28.6	22.6	16.4	8.0	2.1
	max.daily mean	7.6	9.9	20.8	23.7	28.0	33.7	32.8	34.1	28.6	23.0	13.4	8.1
	min.daily mean	-2.8	1.5	8.2	11.1	17.3	21.6	23.9	24.1	18.7	12.4	4.7	-2.0
Relative humidity (%)	monthly mean	50	72	42	50	62	54	72	63	67	67	74	61
	max.daily mean	--	--	--	--	--	--	--	--	--	--	--	--
	min.daily mean	14	12	11	8	8	13	33	17	23	16	10	10
Mean wind speed (m/s)		0.9	0.9	1.2	1.2	1.2	1.3	1.2	1.3	1.1	0.8	0.8	0.7
Most frequent wind direction (bearings)		Calm	Calm	Calm	S	ENE	ENE	W	NNE	W	Calm	Calm	Calm
Precipitation amount (mm/month)		1	18	1	16	148	36	131	48	46	19	33	0
Sunshine duration (hours/month)		146	64	187	213	159	241	156	220	155	176	140	144
Solar radiation (MJ/m^2/month)		--	--	--	--	--	--	--	--	--	--	--	--

Appendix Table 2-3 Meteorological statistics at the monitoring sites
Meteorological Statistics : Xiamen

2013

Month / Items		1	2	3	4	5	6	7	8	9	10	11	12
Tempera-ture (ºC)	monthly mean	13.4	15.2	17.2	19.0	23.9	26.8	27.6	28.0	26.8	23.5	19.3	13.8
	max.daily mean	17.9	19.5	22.9	23.3	27.7	30.5	31.4	32.0	30.3	27.9	23.3	17.8
	min.daily mean	10.7	12.5	13.9	16.3	21.6	24.4	25.0	25.4	24.4	20.5	16.7	11.0
Relative humidity (%)	monthly mean	68	76	72	77	82	82	79	80	71	60	66	63
	max.daily mean	--	--	--	--	--	--	--	--	--	--	--	--
	min.daily mean	29	39	17	31	19	49	46	45	43	25	18	28
Mean wind speed (m/s)		2.6	2.2	2.2	2.2	2.1	2.0	2.5	2.4	3.2	3.1	2.6	2.7
Most frequent wind direction (bearings)		E	E	E	E	SSE	S	SSW	SW	NNE	ENE	ENE	ENE
Precipitation amount (mm/month)		0	24	69	167	282	194	430	263	102	7	41	84
Sunshine duration (hours/month)		147	65	166	79	80	165	244	199	172	231	148	133
Solar radiation (MJ/m^2/month)		--	--	--	--	--	--	--	--	--	--	--	--

Appendix Table 2-4 Meteorological statistics at the monitoring sites
Meteorological Statistics : Zhuhai

2013

Month / Items		1	2	3	4	5	6	7	8	9	10	11	12
Tempera-ture (ºC)	monthly mean	15.5	18.4	20.1	21.3	25.8	28.3	28.2	28.6	27.6	25.6	21.4	15.1
	max.daily mean	19.0	21.7	23.2	24.0	28.8	31.3	31.2	31.4	30.3	28.6	24.3	18.3
	min.daily mean	13.1	16.5	18.0	19.5	23.8	25.9	25.9	26.3	25.6	23.1	19.2	12.5
Relative humidity (%)	monthly mean	68	78	82	87	88	84	84	84	80	64	70	58
	max.daily mean	--	--	--	--	--	--	--	--	--	--	--	--
	min.daily mean	27	44	24	40	55	49	54	54	40	23	25	21
Mean wind speed (m/s)		2.2	2.3	2.5	2.4	2.5	2.9	3.1	3.2	2.9	2.5	2.8	2.1
Most frequent wind direction (bearings)		ENE	ESE	ESE	ESE	ESE	WSW	ESE	ESE	ESE	ENE	ENE	NE
Precipitation amount (mm/month)		0	4	166	220	661	443	445	405	385	1	65	90
Sunshine duration (hours/month)		172	94	116	53	113	211	214	189	188	228	140	193
Solar radiation (MJ/m^2/month)		--	--	--	--	--	--	--	--	--	--	--	--

Appendix Table 2-5 Meteorological statistics at the monitoring sites
Meteorological Statistics : Serpong

2013

Month / Items		1	2	3	4	5	6	7	8	9	10	11	12
Tempera-ture (ºC)	monthly mean	26.9	27.7	26.9	27.9	27.5	27.8	27.7	27.7	28.0	27.3	27.5	26.5
	max.daily mean	36.6	37.5	37.9	37.4	35.7	36.9	35.8	34.9	37.8	36.2	37.0	36.8
	min.daily mean	23.1	22.6	20.7	20.2	21.0	21.0	20.7	20.2	20.3	20.5	21.5	23.0
Relative humidity (%)	monthly mean	97	97	96	94	99	88	93	85	85	86	88	89
	max.daily mean	99	99	99	99	99	99	99	99	99	99	99	99
	min.daily mean	66	55	54	46	49	44	40	42	32	37	35	40
Mean wind speed (m/s)		0.3	0.4	0.4	0.3	0.3	0.3	0.2	0.3	0.4	0.3	0.3	0.3
Most frequent wind direction (bearings)		WSW	N	WSW	N	N	SW	SW	SSW	SSW	WSW	WSW	WSW
Precipitation amount (mm/month)		170	158	518	1536	255	39	262	108	91	341	181	371
Sunshine duration (hours/month)		--	--	--	--	--	--	--	--	--	--	--	--
Solar radiation (MJ/m^2/month)		--	--	--	--	--	--	--	--	--	--	--	--

Appendix Table 2-6 Meteorological statistics at the monitoring sites
Meteorological Statistics : Bandung

2013

Month / Items		1	2	3	4	5	6	7	8	9	10	11	12
Tempera-ture (ºC)	monthly mean	23.4	23.6	24.1	24.3	24.1	24.3	23.5	24.1	24.4	24.4	24.2	23.3
	max.daily mean	29.5	30.5	32.4	32.4	32.3	31.3	30.9	32.1	32.5	32.4	32.2	30.6
	min.daily mean	20.1	19.1	19.3	19.6	19.6	19.9	18.6	16.7	18.7	19.1	18.4	19.1
Relative humidity (%)	monthly mean	89	88	87	89	89	86	85	79	79	81	83	89
	max.daily mean	100	100	100	100	100	100	100	99	100	100	100	100
	min.daily mean	62	62	59	53	58	53	54	38	41	40	46	46
Mean wind speed (m/s)		2.2	1.7	1.3	0.8	0.9	1.2	1.2	1.2	1.4	1.2	1.4	1.3
Most frequent wind direction (bearings)		NNW	NNW	NNW	NNW	NNW	NNW	NNW	NNW	NNW	NW	WNW	NNW
Precipitation amount (mm/month)		182	264	294	258	192	215	126	68	139	146	179	441
Sunshine duration (hours/month)		--	--	--	--	--	--	--	--	--	--	--	--
Solar radiation (MJ/m^2/month)		424	359	436	148	314	333	329	441	484	504	490	402

Appendix Table 2-7 Meteorological statistics at the monitoring sites
Meteorological Statistics : Rishiri

2013

Month / Items		1	2	3	4	5	6	7	8	9	10	11	12
Temperature (ºC)	monthly mean	-6.3	-5.6	-1.6	4.2	8.1	14.3	19.9	20.2	16.6	10.9	4.7	-0.8
	max.daily mean	-0.4	3.1	3.8	8.4	16.7	18.0	23.1	24.7	20.9	17.9	13.2	3.8
	min.daily mean	-10.4	-8.8	-7.3	1.1	2.5	9.8	17.3	15.0	10.5	5.5	-2.1	-5.4
Relative humidity (%)	monthly mean	80	77	73	78	85	87	90	91	84	78	75	76
	max.daily mean	95	93	99	97	100	100	100	99	98	97	96	97
	min.daily mean	70	56	52	55	61	55	71	73	57	57	53	52
Mean wind speed (m/s)		3.6	4.2	5.0	3.5	2.7	1.8	1.5	2.2	2.8	3.3	3.9	4.0
Most frequent wind direction (bearings)		NNW	NW	W	WSW	E	W	W	ENE	NE	E	W	NW
Precipitation amount (mm/month)		84	43	51	103	56	54	27	156	77	125	221	153
Sunshine duration (hours/month)		--	--	--	--	--	--	--	--	--	--	--	--
Solar radiation (MJ/m^2/month)		137	209	317	482	457	506	528	456	376	295	155	93

Appendix Table 2-8 Meteorological statistics at the monitoring sites
Meteorological Statistics : Ochiishi

2012

Month / Items		1	2	3	4	5	6	7	8	9	10	11	12
Temperature (ºC)	monthly mean	-6.7	-5.8	-2.9	0.9	3.3	8.6	13.4	15.3	14.8	10.8	5.2	0.2
	max.daily mean	-1.8	0.2	0.4	3.9	8.0	11.2	16.6	17.7	17.6	15.5	10.7	5.8
	min.daily mean	-10.5	-9.9	-7.6	-2.0	-0.6	3.7	10.2	11.7	11.1	5.9	0.1	-4.3
Relative humidity (%)	monthly mean	65	-6	79	87	93	97	99	96	87	78	71	69
	max.daily mean	94	0	97	100	100	100	100	100	100	100	96	96
	min.daily mean	43	-10	61	61	77	89	92	74	57	59	53	47
Mean wind speed (m/s)		7.9	7.4	9.4	8.8	7.2	5.2	6.0	5.9	6.9	8.5	9.2	9.7
Most frequent wind direction (bearings)		NNW	NW	WSW	WSW	N	NE	ESE	SE	SSW	WSW	WSW	NW
Precipitation amount (mm/month)		14	5	11	71	54	13	67	72	232	224	69	41
Sunshine duration (hours/month)		--	--	--	--	--	--	--	--	--	--	--	--
Solar radiation (MJ/m^2/month)		229	300	428	127	52	139	130	105	101	85	62	42

Appendix Table 2-9 Meteorological statistics at the monitoring sites
Meteorological Statistics : Tappi

2013

Month / Items		1	2	3	4	5	6	7	8	9	10	11	12
Tempera-ture (ºC)	monthly mean	-2.3	-1.7	1.9	6.4	10.5	15.7	20.2	23.5	20.1	14.6	7.7	2.7
	max.daily mean	1.9	5.1	7.8	9.6	16.8	19.8	22.8	26.8	24.5	21.3	14.1	9.0
	min.daily mean	-7.1	-5.9	-3.5	2.9	5.3	13.0	17.3	19.4	15.6	8.7	1.0	-2.5
Relative humidity (%)	monthly mean	70	72	67	70	81	83	86	78	71	72	64	66
	max.daily mean	84	88	86	92	95	94	97	92	91	91	80	77
	min.daily mean	54	58	48	48	61	75	69	60	49	57	52	53
Mean wind speed (m/s)		8.8	9.9	9.6	7.3	5.4	4.8	4.6	4.8	3.9	6.2	8.0	9.3
Most frequent wind direction (bearings)		WSW	WSW	WSW	WSW	ENE	ENE	ENE	WSW	WSW	WSW	WSW	WSW
Precipitation amount (mm/month)		19	27	77	79	48	9	114	207	184	199	73	27
Sunshine duration (hours/month)		--	--	--	--	--	--	--	--	--	--	--	--
Solar radiation (MJ/m^2/month)		109	137	237	390	451	593	433	501	377	217	124	94

Appendix Table 2-10 Meteorological statistics at the monitoring sites
Meteorological Statistics : Sado-seki

2013

Month / Items		1	2	3	4	5	6	7	8	9	10	11	12
Tempera-ture (ºC)	monthly mean	0.8	0.8	5.5	9.4	14.5	20.4	23.5	25.5	21.5	17.5	10.0	5.1
	max.daily mean	4.8	7.4	12.8	15.7	20.8	26.7	26.4	28.3	26.7	23.3	16.2	10.0
	min.daily mean	-2.8	-3.2	-0.7	4.3	5.2	16.2	20.7	22.5	16.6	11.8	3.3	0.6
Relative humidity (%)	monthly mean	75	71	63	68	71	76	85	79	77	74	71	73
	max.daily mean	94	89	88	95	93	96	96	92	93	91	89	87
	min.daily mean	56	49	40	34	29	37	66	58	58	59	52	49
Mean wind speed (m/s)		8.2	8.1	6.5	6.4	4.1	2.5	4.3	3.2	3.2	4.1	7.5	8.1
Most frequent wind direction (bearings)		W	W	W	WSW	WSW	NE	SW	WSW	ENE	W	W	W
Precipitation amount (mm/month)		34	40	93	100	44	36	296	129	280	211	170	124
Sunshine duration (hours/month)		--	--	--	--	--	--	--	--	--	--	--	--
Solar radiation (MJ/m^2/month)		100	166	341	462	581	687	343	532	425	290	152	93

Appendix Table 2-11 Meteorological statistics at the monitoring sites
Meteorological Statistics : Happo

2013

Month / Items		1	2	3	4	5	6	7	8	9	10	11	12
Tempera-ture (ºC)	monthly mean	-9.4	-9.2	-2.4	0.1	7.4	11.7	15.4	16.5	12.4	7.5	-1.4	-6.9
	max.daily mean	-3.7	-0.3	4.6	7.9	13.0	15.4	18.7	19.4	15.7	13.7	8.3	-1.5
	min.daily mean	-15.2	-15.6	-12.1	-7.6	-4.0	8.7	11.9	12.2	5.3	0.0	-8.2	-13.2
Relative humidity (%)	monthly mean	75	75	62	66	62	87	84	85	88	90	85	88
	max.daily mean	94	95	92	93	99	99	98	99	98	98	97	97
	min.daily mean	31	33	18	33	26	59	57	64	52	58	65	46
Mean wind speed (m/s)		5.4	5.9	5.7	5.6	2.7	1.7	2.5	1.9	2.1	2.3	3.5	5.1
Most frequent wind direction (bearings)		NW	NW	NW	S	S	SSE	SSE	SSE	SSE	SSE	SSE, S	S, NW
Precipitation amount (mm/month)		101	147	118	169	108	279	425	307	238	235	240	190
Sunshine duration (hours/month)		--	--	--	--	--	--	--	--	--	--	--	--
Solar radiation (MJ/m^2/month)		296	333	556	641	769	415	414	399	369	291	259	236

Appendix Table 2-12 Meteorological statistics at the monitoring sites
Meteorological Statistics : Ijira

2013

Month / Items		1	2	3	4	5	6	7	8	9	10	11	12
Tempera-ture (ºC)	monthly mean	0.9	1.1	6.9	10.5	16.0	20.4	23.5	24.7	20.9	16.6	7.9	3.0
	max.daily mean	4.0	4.3	12.3	16.5	19.8	23.8	26.2	27.5	24.5	21.9	13.9	6.0
	min.daily mean	-2.6	-2.2	1.4	4.3	9.1	18.1	18.6	20.5	16.8	11.0	2.1	-1.0
Relative humidity (%)	monthly mean	92	90	77	78	75	90	93	89	91	92	95	95
	max.daily mean	98	98	98	98	98	98	98	98	98	98	99	99
	min.daily mean	78	76	51	52	47	73	83	77	74	75	88	85
Mean wind speed (m/s)		0.4	0.5	0.6	0.7	0.5	0.3	0.3	0.4	0.4	0.3	0.4	0.4
Most frequent wind direction (bearings)		Calm	Calm	Calm	Calm	Calm	Calm	Calm	Calm	Calm	Calm	Calm	Calm
Precipitation amount (mm/month)		143	144	112	243	198	194	495	241	386	310	117	143
Sunshine duration (hours/month)		--	--	--	--	--	--	--	--	--	--	--	--
Solar radiation (MJ/m^2/month)		220	241	405	455	537	391	403	465	364	253	204	184

Appendix Table 2-13 Meteorological statistics at the monitoring sites
Meteorological Statistics : Oki

2013

Month / Items		1	2	3	4	5	6	7	8	9	10	11	12
Temperature (ºC)	monthly mean	3.9	4.1	8.3	11.3	16.6	20.9	25.0	26.6	22.1	18.4	11.8	7.0
	max.daily mean	7.8	10.2	13.8	17.4	21.8	24.5	26.6	28.8	26.6	23.5	17.3	12.5
	min.daily mean	-0.4	-1.5	2.0	6.0	9.1	18.4	22.6	23.4	17.5	14.1	4.9	1.8
Relative humidity (%)	monthly mean	79	80	79	79	81	92	94	92	87	83	77	79
	max.daily mean	92	95	94	98	97	100	99	98	97	97	93	95
	min.daily mean	68	66	66	60	60	79	82	81	63	65	64	64
Mean wind speed (m/s)		6.5	5.7	6.8	6.2	4.8	3.4	6.4	5.2	4.7	5.7	7.7	7.8
Most frequent wind direction (bearings)		N	N	S	S	S	NNE	S	SW	NNE	NNE	WSW	N
Precipitation amount (mm/month)		64	46	58	101	48	120	120	127	232	170	156	114
Sunshine duration (hours/month)		--	--	--	--	--	--	--	--	--	--	--	--
Solar radiation (MJ/m^2/month)		171	212	430	491	711	640	693	766	873	627	329	196

Appendix Table 2-14 Meteorological statistics at the monitoring sites
Meteorological Statistics : Banryu

2013

Month / Items		1	2	3	4	5	6	7	8	9	10	11	12
Temperature (ºC)	monthly mean	4.0	5.4	9.6	12.0	17.3	21.5	26.7	27.0	22.0	17.8	11.2	6.3
	max.daily mean	8.9	12.1	16.3	18.9	22.6	25.4	29.0	29.3	25.9	22.8	16.1	9.6
	min.daily mean	0.6	-0.6	4.2	5.5	10.4	17.7	23.5	23.1	17.9	12.9	4.3	2.5
Relative humidity (%)	monthly mean	82	82	81	80	82	93	88	90	91	89	83	84
	max.daily mean	95	98	95	95	93	98	97	98	98	98	98	97
	min.daily mean	57	61	57	61	65	86	79	81	72	72	68	64
Mean wind speed (m/s)		3.2	2.9	3.2	3.0	2.6	2.0	2.2	1.9	2.8	3.2	3.0	3.1
Most frequent wind direction (bearings)		S	S	S	S	S	S	S	S	S	S	S	S
Precipitation amount (mm/month)		77	103	64	133	34	351	253	416	193	199	106	99
Sunshine duration (hours/month)		--	--	--	--	--	--	--	--	--	--	--	--
Solar radiation (MJ/m^2/month)		202	257	419	484	655	488	609	582	481	347	240	145

Appendix Table 2-15 Meteorological statistics at the monitoring sites
Meteorological Statistics : Yusuhara

2013

Month / Items		1	2	3	4	5	6	7	8	9	10	11	12
Temperature (ºC)	monthly mean	0.1	2.3	7.7	9.2	15.6	18.0	23.1	23.8	19.1	15.1	7.2	1.7
	max.daily mean	6.1	8.7	14.1	15.6	19.8	22.6	25.3	27.3	25.7	21.0	14.6	6.1
	min.daily mean	-4.8	-5.0	0.0	1.8	8.3	12.7	17.3	19.5	14.9	8.9	-0.5	-4.0
Relative humidity (%)	monthly mean	71	71	67	67	64	88	80	77	80	79	80	80
	max.daily mean	92	96	96	96	97	97	96	95	97	97	96	96
	min.daily mean	51	36	39	35	25	68	60	60	41	50	60	57
Mean wind speed (m/s)		2.7	2.3	2.0	2.2	1.6	1.1	1.4	1.5	1.5	2.0	2.2	2.5
Most frequent wind direction (bearings)		N	N	NNW	NNW	NNW	ENE	NNW	NNW	NNW	NNW	N	N
Precipitation amount (mm/month)		77	171	118	191	116	301	100	159	250	611	113	239
Sunshine duration (hours/month)		--	--	--	--	--	--	--	--	--	--	--	--
Solar radiation (MJ/m^2/month)		316	333	497	559	668	350	638	470	196	318	275	239

Appendix Table 2-16 Meteorological statistics at the monitoring sites
Meteorological Statistics : Hedo

2013

Month / Items		1	2	3	4	5	6	7	8	9	10	11	12
Temperature (ºC)	monthly mean	16.0	17.3	19.2	19.3	22.4	26.5	28.4	29.0	27.7	24.4	20.3	16.5
	max.daily mean	19.7	21.4	22.5	23.2	26.4	28.7	29.4	29.9	29.3	26.6	24.9	21.0
	min.daily mean	12.9	13.1	15.3	14.4	19.1	22.9	26.9	26.7	26.1	20.7	15.2	13.2
Relative humidity (%)	monthly mean	65	72	64	--	--	--	--	--	--	--	--	68
	max.daily mean	89	86	100	--	--	--	--	--	--	--	--	91
	min.daily mean	48	52	2	--	--	--	--	--	--	--	--	55
Mean wind speed (m/s)		5.6	5.2	4.4	4.4	4.0	3.8	3.5	3.6	5.4	7.8	4.8	5.3
Most frequent wind direction (bearings)		N	NNE	NNW	ESE	ESE	SW	SSW	E	E	ENE	NNW	NNW
Precipitation amount (mm/month)		146	100	203	191	124	51	5	57	67	124	181	53
Sunshine duration (hours/month)		--	--	--	--	--	--	--	--	--	--	--	--
Solar radiation (MJ/m^2/month)		246	293	471	437	454	178	421	711	579	326	312	229

Appendix Table 2-17 Meteorological statistics at the monitoring sites
Meteorological Statistics : Ogasawara

2013

Month / Items		1	2	3	4	5	6	7	8	9	10	11	12
Tempera-ture (ºC)	monthly mean	15.0	15.4	18.1	18.4	19.6	24.1	24.5	25.8	25.3	24.0	20.1	16.2
	max.daily mean	19.0	18.4	22.1	22.2	22.7	25.8	26.4	27.0	26.3	25.3	23.1	20.4
	min.daily mean	12.3	12.5	13.1	14.8	15.3	21.5	22.8	24.1	23.0	21.8	15.8	13.4
Relative humidity (%)	monthly mean	81	85	90	91	94	98	97	96	97	98	93	87
	max.daily mean	97	98	98	98	98	98	99	98	99	99	98	99
	min.daily mean	65	67	72	77	75	95	92	92	92	89	80	74
Mean wind speed (m/s)		1.4	1.4	1.5	1.7	1.6	1.8	0.9	1.1	2.1	2.1	1.2	1.3
Most frequent wind direction (bearings)		WSW	SSW	SSW	SSW	NE	SSW	SW	SW	NE	NE	WSW	WSW
Precipitation amount (mm/month)		48	12	78	215	256	134	15	41	188	127	136	80
Sunshine duration (hours/month)		--	--	--	--	--	--	--	--	--	--	--	--
Solar radiation (MJ/m^2/month)		331	387	499	373	466	419	614	645	470	333	339	295

Appendix Table 2-18 Meteorological statistics at the monitoring sites
Meteorological Statistics : Listvyanka

2013

Month / Items		1	2	3	4	5	6	7	8	9	10	11	12
Tempera-ture (ºC)	monthly mean	-17.6	-17.1	-9.2	-0.4	5.2	10.1	13.6	14.5	7.6	1.7	-2.0	-7.9
	max.daily mean	-13.5	-12.3	-4.0	5.5	10.9	15.5	18.6	18.6	12.2	5.9	2.0	-3.5
	min.daily mean	-20.7	-20.8	-13.3	-4.6	0.8	5.2	8.5	9.6	3.6	-2.3	-5.7	-11.3
Relative humidity (%)	monthly mean	86	85	75	65	69	79	83	84	79	74	77	84
	max.daily mean	--	--	--	--	--	--	--	--	--	--	--	--
	min.daily mean	78	72	55	44	49	63	67	69	61	56	61	68
Mean wind speed (m/s)		3.5	3.5	3.9	3.2	3.1	2.2	2.0	2.3	3.4	3.2	3.3	3.9
Most frequent wind direction (bearings)		N	N	N	N	N	N	N	N	N	N	N	N
Precipitation amount (mm/month)		9	6	7	16	32	35	73	48	52	19	18	19
Sunshine duration (hours/month)		--	--	--	--	--	--	--	--	--	--	--	--
Solar radiation (MJ/m^2/month)		--	--	--	--	--	--	--	--	--	--	--	--

Appendix Table 2-19 Meteorological statistics at the monitoring sites
Meteorological Statistics : Irkutsk

2013

Month / Items		1	2	3	4	5	6	7	8	9	10	11	12
Tempera-ture (ºC)	monthly mean	-19.0	-16.9	-7.4	2.6	9.5	15.5	18.3	18.2	8.4	1.8	-2.8	-10.5
	max.daily mean	-14.1	-10.4	-0.7	8.9	17.8	22.6	25.2	24.7	15.1	7.4	1.9	-6.0
	min.daily mean	-22.6	-21.6	-12.2	-2.8	2.9	9.5	12.6	12.8	3.8	-2.3	-6.7	-14.1
Relative humidity (%)	monthly mean	82	73	59	50	55	67	71	71	75	73	76	85
	max.daily mean	--	--	--	--	--	--	--	--	--	--	--	--
	min.daily mean	74	56	43	28	30	44	48	48	51	52	59	74
Mean wind speed (m/s)		1.9	1.9	2.7	2.6	2.6	2.1	1.8	1.8	2.1	2.5	2.2	1.7
Most frequent wind direction (bearings)		SE	SE	SE	SE	SE	SE	WNW	W	WNW	SSE	SSE	ENE
Precipitation amount (mm/month)		10	4	7	12	46	57	60	30	45	18	12	29
Sunshine duration (hours/month)		129	167	229	293	278	296	305	248	148	158	92	87
Solar radiation (MJ/m^2/month)		141	253	408	549	606	656	632	452	317	241	133	91

Appendix Table 2-20 Meteorological statistics at the monitoring sites
Meteorological Statistics : Primorskaya

2013

Month / Items		1	2	3	4	5	6	7	8	9	10	11	12
Tempera-ture (ºC)	monthly mean	-19.4	-13.4	-4.0	3.6	11.8	17.3	21.4	21.3	14.9	7.3	-1.0	-12.6
	max.daily mean	-9.7	-5.6	2.6	10.7	19.9	24.3	26.6	27.3	21.7	15.1	5.7	-6.0
	min.daily mean	-26.9	-21	-10.4	-2.3	5.8	12.0	18.0	17.3	9.7	1.4	-5.6	18.2
Relative humidity (%)	monthly mean	68	65	59	62	73	75	84	84	80	75	74	73
	max.daily mean	82	84	83	86	92	92	98	97	97	92	85	91
	min.daily mean	43	39	33	33	48	54	66	62	49	45	46	54
Mean wind speed (m/s)		1.4	1.7	1.6	1.3	1.1	0.9	0.8	0.7	0.9	1.1	1.3	0.9
Most frequent wind direction (bearings)		E	WNW	WNW	W	SSE	S	SSE	E	SSE	E	E	E
Precipitation amount (mm/month)		8	38	35	41	67	81	205	87	46	58	56	11
Sunshine duration (hours/month)		--	--	--	--	--	--	--	--	--	--	--	--
Solar radiation (MJ/m^2/month)		257	321	447	463	560	610	482	501	444	319	196	194

Appendix Table 2-21 Meteorological statistics at the monitoring sites
Meteorological Statistics : Bangkok

2013

Month / Items		1	2	3	4	5	6	7	8	9	10	11	12
Temperature (ºC)	monthly mean	27.9	29.7	30.3	30.9	31.4	27.9	26.4	28.6	27.8	28.0	28.3	25.2
	max.daily mean	29.3	31.3	31.9	32.4	33.7	30.9	30.1	30.0	30.8	30.2	30.3	29.0
	min.daily mean	25.8	27.5	25.4	28.0	28.5	15.5	18.9	26.4	24.5	25.2	25.6	22.4
Relative humidity (%)	monthly mean	63	66	68	67	67	73	76	77	77	74	69	60
	max.daily mean	81	73	82	83	78	90	90	87	89	89	83	76
	min.daily mean	44	50	55	50	57	33	65	66	63	62	51	50
Mean wind speed (m/s)		0.4	0.5	0.9	0.8	0.7	0.6	0.7	0.7	0.6	0.3	0.3	0.2
Most frequent wind direction (bearings)		SSW	SSW	S	SSW	SSW	SW	SW	SW	SW	SW	ESE	WNW
Precipitation amount (mm/month)		0	0	0	0	184	269	344	343	452	484	55	1
Sunshine duration (hours/month)		--	--	--	--	--	--	--	--	--	--	--	--
Solar radiation (MJ/m^2/month)		--	--	--	--	--	--	--	--	--	--	--	--

Appendix Table 2-22 Meteorological statistics at the monitoring sites
Meteorological Statistics : Samutprakarn

2013

Month / Items		1	2	3	4	5	6	7	8	9	10	11	12
Temperature (ºC)	monthly mean	25.0	27.9	28.7	29.3	29.9	31.0	29.2	28.7	27.9	29.5	30.3	27.7
	max.daily mean	27.7	29.8	30.7	30.7	32.2	33.7	34.8	30.3	30.9	32.9	32.8	32.1
	min.daily mean	22.6	26.1	23.6	26.0	26.8	12.8	26.5	26.7	24.2	26.2	27.7	24.2
Relative humidity (%)	monthly mean	64	66	68	68	67	77	79	78	81	73	68	62
	max.daily mean	80	74	78	79	77	89	88	85	94	94	86	75
	min.daily mean	49	52	57	55	60	34	69	68	71	55	47	53
Mean wind speed (m/s)		1.7	1.8	2.1	2.0	2.0	1.9	2.0	2.0	1.7	1.6	1.8	1.7
Most frequent wind direction (bearings)		ENE	SSW	S	S	SSW	SW	W	SSW	W	E	ENE	ENE
Precipitation amount (mm/month)		77	1	23	99	109	152	165	223	287	251	35	1
Sunshine duration (hours/month)		--	--	--	--	--	--	--	--	--	--	--	--
Solar radiation (MJ/m^2/month)		--	--	--	--	--	--	--	--	--	--	--	--

Appendix Table 2-23 Meteorological statistics at the monitoring sites
Meteorological Statistics : Pathumthani

2013

Month / Items		1	2	3	4	5	6	7	8	9	10	11	12
Tempera-ture (ºC)	monthly mean	27.1	28.7	29.0	29.9	30.1	27.9	28.0	28.1	27.4	27.8	--	--
	max.daily mean	28.9	30.7	30.7	31.5	31.9	29.7	29.6	29.7	30.0	30.0	--	--
	min.daily mean	24.6	25.7	23.8	27.8	27.9	17.6	26.3	26.3	24.3	25.4	--	--
Relative humidity (%)	monthly mean	63	61	62	62	58	63	62	64	75	73	--	--
	max.daily mean	75	68	75	77	65	75	71	75	86	82	--	--
	min.daily mean	48	47	50	48	50	30	54	56	57	55	--	--
Mean wind speed (m/s)		3.3	3.5	4.6	4.5	4.0	3.9	4.6	4.4	3.6	3.4	3.0	3.8
Most frequent wind direction (bearings)		ESE	SSW	S	S	S	WSW	WSW	W	W	E	E	NNE
Precipitation amount (mm/month)		7	0	2	81	101	93	60	64	0	0	0	0
Sunshine duration (hours/month)		--	--	--	--	--	--	--	--	--	--	--	--
Solar radiation (MJ/m^2/month)		--	--	--	--	--	--	--	--	--	--	--	--

Appendix Table 2-24 Meteorological statistics at the monitoring sites
Meteorological Statistics : Chiang Mai

2013

Month / Items		1	2	3	4	5	6	7	8	9	10	11	12
Tempera-ture (ºC)	monthly mean	25.7	29.6	30.3	34.5	31.5	26.3	25.6	24.5	24.1	24.5	30.0	20.0
	max.daily mean	28.0	32.0	33.4	36.1	35.7	30.7	29.8	27.3	26.9	31.7	32.7	24.1
	min.daily mean	23.3	26.6	26.2	32.4	26.2	14.5	21.0	21.7	20.8	17.6	24.7	13.6
Relative humidity (%)	monthly mean	67	63	55	52	66	68	77	78	75	74	69	78
	max.daily mean	82	78	82	65	80	85	93	98	95	89	79	81
	min.daily mean	55	44	41	42	58	32	59	66	57	56	61	75
Mean wind speed (m/s)		1.9	2.0	2.1	2.4	2.5	2.4	2.0	1.8	2.1	2.1	2.1	1.8
Most frequent wind direction (bearings)		NNW	NNW	NNW	SSE	SSE	SSE	SE	SE	NW	WNW	WNW	NW
Precipitation amount (mm/month)		14	35	25	15	74	45	200	184	310	131	39	14
Sunshine duration (hours/month)		--	--	--	--	--	--	--	--	--	--	--	--
Solar radiation (MJ/m^2/month)		--	--	--	--	--	--	--	--	--	--	--	--

Appendix Table 2-25 Meteorological statistics at the monitoring sites
Meteorological Statistics : Nakhon Rachasima

2013

Month / Items		1	2	3	4	5	6	7	8	9	10	11	12
Tempera-ture (ºC)	monthly mean	26.7	28.1	28.8	29.8	28.6	28.5	28.4	28.0	27.4	27.1	27.3	25.4
	max.daily mean	27.9	29.6	30.3	30.4	29.7	29.5	29.2	29.0	28.6	27.9	28.4	27.1
	min.daily mean	25.3	26.7	25.5	28.3	27.7	27.7	27.6	26.8	26.2	26.1	25.8	22.9
Relative humidity (%)	monthly mean	73	67	73	68	88	86	77	78	90	80	74	64
	max.daily mean	100	95	100	88	100	100	95	100	100	100	100	100
	min.daily mean	54	56	55	48	72	56	57	60	71	65	55	44
Mean wind speed (m/s)		-	-	0.1	-	0.1	0.4	0.5	0.3	0.4	1.2	1.3	1.3
Most frequent wind direction (bearings)		E	E	WSW	WSW	SW	WSW	W	W	WNW	E	E	E
Precipitation amount (mm/month)		6	0	51	0	30	43	15	86	189	51	19	0
Sunshine duration (hours/month)		--	--	--	--	--	--	--	--	--	--	--	--
Solar radiation (MJ/m^2/month)		--	--	--	--	--	--	--	--	--	--	--	--

Appendix Table 2-26 Meteorological statistics at the monitoring sites
Meteorological Statistics : Hanoi

2013

Month / Items		1	2	3	4	5	6	7	8	9	10	11	12
Tempera-ture (ºC)	monthly mean	15.4	19.9	24.0	25.0	29.0	30.1	28.9	29.2	27.1	25.7	22.9	16.3
	max.daily mean	21.5	25.0	27.4	18.6	34.4	33.8	31.3	31.5	30.6	29.3	26.0	20.5
	min.daily mean	9.7	14.3	17.8	29.2	24.7	26.1	25.8	24.6	22.3	20.0	18.2	13.6
Relative humidity (%)	monthly mean	82	86	80	81	77	74	82	80	82	73	73	67
	max.daily mean	95	95	88	90	86	93	95	94	96	92	91	84
	min.daily mean	55	69	56	56	64	51	75	69	57	58	47	49
Mean wind speed (m/s)		1	1	1	1	0	1	1	0	0	1	1	1
Most frequent wind direction (bearings)		NE	SE, NE	SE, S	NE, SE	NE, SE	SE	SE, NE	NW	NE	NE	NE	NE
Precipitation amount (mm/month)		14	18	46	67	200	217	307	546	376	62	70	22
Sunshine duration (hours/month)		12	39	75	69	158	162	120	141	89	135	69	159
Solar radiation (MJ/m^2/month)		--	--	--	--	--	--	--	--	--	--	--	--

Appendix Table 2-27 Meteorological statistics at the monitoring sites
Meteorological Statistics : Hoa Binh

2013

Month / Items		1	2	3	4	5	6	7	8	9	10	11	12
Tempera-ture (ºC)	monthly mean	15.6	20.3	24.5	25.3	28.6	29.1	28.3	28.6	26.1	24.3	22.0	15.3
	max.daily mean	15.8	20.6	24.9	25.8	29.3	29.6	28.8	29.1	26.5	24.9	22.4	15.8
	min.daily mean	15.4	19.9	24.1	24.9	28.1	28.5	27.8	28.1	25.7	23.9	21.7	14.7
Relative humidity (%)	monthly mean	76	77	71	71	71	71	77	76	80	74	74	71
	max.daily mean	84	86	84	85	85	86	88	88	88	86	85	86
	min.daily mean	65	62	53	56	51	52	60	58	65	53	58	46
Mean wind speed (m/s)		1	1	1	1	1	1	1	1	1	1	1	1
Most frequent wind direction (bearings)		N	N	N	N	N	N	SE	SW	SW	SE	E	N
Precipitation amount (mm/month)		11	21	15	60	257	309	416	489	261	125	29	14
Sunshine duration (hours/month)		18	74	136	127	203	184	136	186	105	168	67	171
Solar radiation (MJ/m^2/month)		--	--	--	--	--	--	--	--	--	--	--	--

Appendix Table 2-28 Meteorological statistics at the monitoring sites
Meteorological Statistics : Cuc Phuong

2013

Month / Items		1	2	3	4	5	6	7	8	9	10	11	12
Tempera-ture (ºC)	monthly mean	14.5	19.2	22.3	23.8	27.5	27.7	27.0	27.5	25.5	23.3	20.7	13.7
	max.daily mean	20.7	23.9	26.0	28.2	32.3	31.2	29.3	30.7	27.8	26.3	24.5	19.3
	min.daily mean	9.8	14.0	15.2	16.8	23.6	24.5	24.8	24.9	20.9	18.9	15.8	10.5
Relative humidity (%)	monthly mean	90	91	89	87	83	81	89	86	88	81	85	77
	max.daily mean	98	99	98	97	91	89	97	96	96	97	97	96
	min.daily mean	67	70	76	71	63	71	82	70	69	63	67	52
Mean wind speed (m/s)		1	1	1	1	1	1	1	1	1	1	1	1
Most frequent wind direction (bearings)		NNE	SE, ENE	SE, ESE	SE	ESE	SW	SE	NW	NWN	NWE	NE, NNW	NNW
Precipitation amount (mm/month)		18	29	35	82	240	166	361	414	333	170	46	13
Sunshine duration (hours/month)		14	48	68	99	173	175	122	152	102	149	57	162
Solar radiation (MJ/m^2/month)		--	--	--	--	--	--	--	--	--	--	--	--

Appendix Table 2-29 Meteorological statistics at the monitoring sites
Meteorological Statistics : DaNang

2013

Month / Items		1	2	3	4	5	6	7	8	9	10	11	12
Tempera-ture (ºC)	monthly mean	21.9	24.4	25.3	27.1	29.2	29.6	28.6	29.3	27.1	26.0	25.2	20.8
	max.daily mean	23.8	26.1	27.7	30.5	32.4	32.0	29.9	31.8	29.1	27.9	27.3	24.0
	min.daily mean	19.5	21.5	20.2	24.6	25.4	26.8	26.0	27.2	24.9	22.9	20.7	17.8
Relative humidity (%)	monthly mean	84	84	86	83	77	72	79	77	85	83	86	80
	max.daily mean	93	97	93	89	85	83	93	89	97	93	97	89
	min.daily mean	75	73	79	74	67	59	69	62	74	71	75	69
Mean wind speed (m/s)		1	2	2	2	2	2	1	1	1	2	2	1
Most frequent wind direction (bearings)		NNW	E	E	ESE	E	NNW	SSW	NNW	NNW	N	ENE	NNW
Precipitation amount (mm/month)		18	45	45	14	43	25	132	80	751	369	760	34
Sunshine duration (hours/month)		126	154	172	172	284	237	216	166	146	135	110	51
Solar radiation (MJ/m^2/month)		--	--	--	--	--	--	--	--	--	--	--	--

Appendix III

Supplemental Data in 2012

Appendix Table 3.1 Monthly results of wet deposition monitoring in 2012

Site: Metro Manila **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	*	*	*	*	*	*	*	*	*	*	*	*	*	71.6
Feb	19.5	18.9	13.5	19.3	336	9.44	29.7	13.0	12.8	5.72	0.0537	7.27	4.42	128
Mar	67.2	63.6	21.0	60.4	1086	60.6	105	48.5	47.1	24.5	0.0724	7.14	19.5	118
Apr	33.6	32.4	22.1	35.0	268	19.5	43.2	18.3	17.8	7.73	0.0759	7.12	6.06	110
May	*	*	*	*	*	*	*	*	*	*	*	*	*	298
June	*	*	*	*	*	*	*	*	*	*	*	*	*	299
July	31.9	30.8	30.8	26.8	652	17.8	57.7	23.3	22.9	15.0	0.129	6.89	9.92	968
Aug	17.0	16.1	16.3	30.1	42.9	14.9	3.91	11.9	11.6	4.18	2.23	5.65	1.14	1320
Sept	17.8	17.0	12.5	11.4	17.3	13.7	3.44	6.00	5.71	0.886	12.8	4.89	1.13	880
Oct	8.65	8.27	8.86	10.7	11.2	6.23	1.86	4.07	3.94	<0.4	2.89	5.54	0.561	195
Nov	11.2	10.6	12.9	13.4	30.9	11.0	3.38	8.58	8.35	<0.4	0.407	6.39	0.673	26.7
Dec	17.4	17.0	21.9	17.2	104	7.09	4.40	6.89	6.73	3.62	0.347	6.46	1.72	48.0
Annual	24.1	23.1	18.2	20.2	273	16.7	26.3	13.9	13.5	6.53	6.03	5.22	4.81	4461
Max.	83.7	77.6	69.3	78.1	1253	102	159	71.9	69.7	31.1	37.2	8.23	23.3	
Min.	7.45	6.75	5.85	9.45	<1	5.79	1.41	3.39	3.26	<0.4	0.00589	4.43	0.372	

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	2.48	2.41	1.72	2.46	42.9	1.20	3.79	1.67	1.64	0.730	<0.01
Mar	7.90	7.47	2.47	7.10	128	7.12	12.4	5.69	5.54	2.88	<0.01
Apr	3.68	3.55	2.42	3.83	29.3	2.14	4.73	2.00	1.95	0.847	<0.01
May	*	*	*	*	*	*	*	*	*	*	*
June	*	*	*	*	*	*	*	*	*	*	*
July	30.9	29.8	29.8	25.9	631	17.2	55.9	22.5	22.2	14.5	0.125
Aug	22.4	21.2	21.5	39.7	56.6	19.7	5.15	15.7	15.3	5.51	2.94
Sept	15.7	14.9	11.0	10.1	15.2	12.1	3.03	5.29	5.03	0.780	11.3
Oct	1.69	1.61	1.73	2.09	2.18	1.21	0.362	0.794	0.768	<0.01	0.563
Nov	0.300	0.282	0.344	0.357	0.824	0.294	0.0901	0.229	0.223	<0.01	0.0109
Dec	0.834	0.814	1.05	0.825	4.98	0.340	0.211	0.331	0.323	0.174	0.0166
Annual	108	103	81.4	90.1	1218	74.6	117	61.8	60.2	29.1	26.9

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	0	0	0	0	0	0	0	0	0	0	0	0	0	100
Feb	66.1	66.1	66.1	66.1	66.1	66.1	66.1	66.1	66.1	66.1	66.1	66.1	66.1	100
Mar	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
Apr	72.7	72.7	72.7	72.7	72.7	72.7	72.7	72.7	72.7	72.7	72.7	72.7	72.7	100
May	0	0	0	0	0	0	0	0	0	0	0	0	0	100
June	0	0	0	0	0	0	0	0	0	0	0	0	0	100
July	54.6	54.6	54.6	54.6	54.6	54.6	54.6	54.6	54.6	54.6	54.6	54.6	54.6	100
Aug	4.08	4.08	4.08	4.08	4.08	4.08	4.08	4.08	4.08	4.08	4.08	4.08	4.08	100
Sept	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Oct	96.8	96.8	96.8	96.8	96.8	96.8	96.8	96.8	96.8	96.8	96.8	96.8	96.8	100
Nov	80.9	80.9	80.9	80.9	80.9	80.9	80.9	80.9	80.9	80.9	80.9	80.9	80.9	100
Dec	94.4	94.4	94.4	94.4	94.4	94.4	94.4	94.4	94.4	94.4	94.4	94.4	94.4	100
Annual	**44.8**	**44.8**	**44.8**	**44.8**	**44.8**	**44.8**	**44.8**	**44.8**	**44.8**	**44.8**	**44.8**	**44.8**	**44.8**	**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%)

Appendix Table 3.2 Monthly results of wet deposition monitoring in 2012

Site: Los Baños **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	*	*	*	*	*	*	*	*	*	*	*	*	*	87.3
Feb	8.73	8.23	14.4	12.6	83.1	8.39	11.3	14.6	14.4	3.25	0.537	6.27	1.98	86.5
Mar	14.3	12.9	16.2	38.3	86.0	24.3	16.3	13.7	13.1	8.26	1.03	5.99	2.47	125
Apr	*	*	*	*	*	*	*	*	*	*	*	*	*	39.1
May	*	*	*	*	*	*	*	*	*	*	*	*	*	170
June	14.8	13.5	13.0	22.0	68.6	21.9	11.9	13.2	12.7	6.57	0.540	6.27	1.93	163
July	22.8	21.6	15.8	25.3	234	19.6	16.3	20.3	19.9	8.37	0.123	6.91	4.25	388
Aug	5.69	4.67	4.63	8.32	<1	17.1	1.36	3.02	2.65	<0.4	2.88	5.54	0.536	459
Sept	9.47	8.62	10.9	12.1	14.9	14.2	4.67	5.32	5.01	1.42	6.37	5.20	0.762	202
Oct	7.33	5.93	6.96	11.2	1.88	23.1	1.26	1.92	1.42	<0.4	2.42	5.62	0.550	284
Nov	9.07	7.05	7.13	25.5	3.36	33.6	1.95	3.31	2.59	2.55	5.23	5.28	0.792	28.8
Dec	13.8	10.3	17.8	65.2	16.6	58.1	2.70	5.13	3.88	8.25	0.822	6.09	1.18	68.1
Annual	12.6	11.3	11.9	21.6	67.8	22.2	8.14	9.40	8.92	4.26	2.19	5.66	1.74	2102
Max.	68.0	66.7	43.7	96.8	859	108	77.0	35.2	34.7	19.4	26.9	7.91	13.5	
Min.	5.40	4.14	<1	8.32	<1	7.18	1.05	1.35	0.844	<0.4	0.0123	4.57	0.451	

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	0.756	0.712	1.25	1.09	7.19	0.726	0.980	1.26	1.24	0.281	0.0465
Mar	1.78	1.60	2.02	4.77	10.7	3.03	2.03	1.70	1.64	1.03	0.128
Apr	*	*	*	*	*	*	*	*	*	*	*
May	*	*	*	*	*	*	*	*	*	*	*
June	2.41	2.20	2.11	3.57	11.1	3.55	1.94	2.14	2.06	1.07	0.0877
July	8.86	8.40	6.14	9.84	90.7	7.60	6.34	7.90	7.73	3.25	0.0480
Aug	2.62	2.14	2.13	3.82	<0.01	7.83	0.623	1.39	1.22	<0.01	1.32
Sept	1.91	1.74	2.21	2.45	3.02	2.87	0.944	1.07	1.01	0.287	1.29
Oct	2.08	1.69	1.98	3.19	0.534	6.57	0.357	0.545	0.403	0.0880	0.688
Nov	0.261	0.203	0.205	0.735	0.0968	0.967	0.0562	0.0954	0.0745	0.0734	0.151
Dec	0.939	0.701	1.21	4.44	1.13	3.95	0.184	0.349	0.264	0.562	0.0560
Annual	26.5	23.7	25.0	45.4	142	46.7	17.1	19.8	18.7	8.96	4.61

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	64.2	64.2	64.2	64.2	64.2	64.2	64.2	64.2	64.2	64.2	64.2	64.2	64.2	100
Mar	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
Apr	0	0	0	0	0	0	0	0	0	0	0	0	0	100
May	0	0	0	0	0	0	0	0	0	0	0	0	0	100
June	100	100	100	100	100	100	100	100	100	100	100	100	100	100
July	53.2	53.2	53.2	53.2	53.2	53.2	53.2	53.2	53.2	53.2	53.2	53.2	53.2	100
Aug	9.16	9.16	9.16	9.16	9.16	9.16	9.16	9.16	9.16	9.16	9.16	9.16	9.16	100
Sept	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Oct	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Nov	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Dec	98.2	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
Annual	**55.8**	**55.8**	**55.8**	**55.8**	**55.8**	**55.8**	**55.8**	**55.8**	**55.8**	**55.8**	**55.8**	**55.8**	**55.8**	**100**

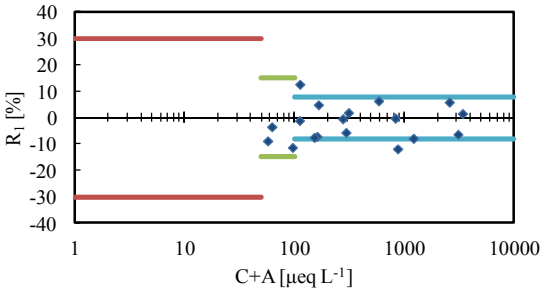
[--] for averages and completeness: Precipitation was 0mm.

[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%)

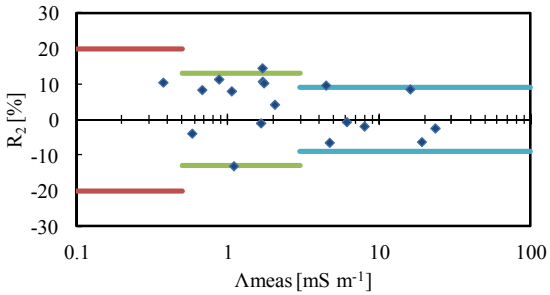
[**] for all: Precipitation was not measured. (%PCL=0%)

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



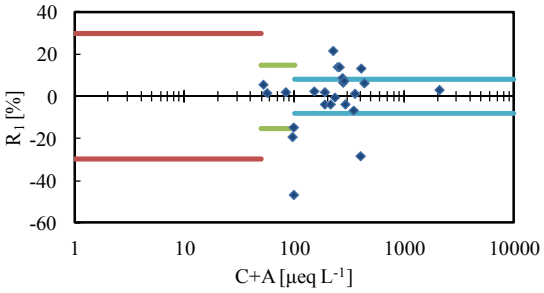
Appendix Fig. 3.1 a) Metro Manila Ion Balance (R_1)

Calculated including HCO_3^-, PO_4^{3-}



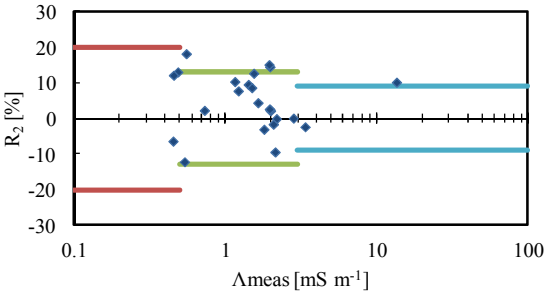
Appendix Fig. 3.1 b) Metro Manila Conductivity Agreement (R_2)

Calculated including HCO_3^-, PO_4^{3-}



Appendix Fig. 3.2 a) Los Baños Ion Balance (R_1)

Calculated including HCO_3^-, PO_4^{3-}



Appendix Fig. 3.2 b) Los Baños Conductivity Agreement (R_2)

Calculated including HCO_3^-, PO_4^{3-}

Appendix Table 3.3 Result of Inland Aquatic Environment Monitoring

Duration: 2012.2.-2012.10.
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	23-Feb-12	28.3	8.34	17.77	1.850	1.51	0.00	3.37	0.00	8.16	4.36	14.46	7.60	-	*1	-
	07-Jun-12	29.9	7.97	17.18	1.590	1.59	1.07	3.71	0.23	8.54	4.76	14.10	7.49	-	*1	-
	18-Jul-12	30.8	8.10	17.57	1.660	1.53	0.86	3.27	0.00	7.96	4.28	13.73	7.67	-	*1	-
	17-Oct-12	30.2	7.67	17.73	1.630	1.50	0.00	3.44	0.00	8.10	4.31	14.30	7.58	-	*1	-
	mean*2	-	7.95	17.56	1.683	1.53	0.48	3.45	0.06	8.19	4.43	14.15	7.59	-	*1	-

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	23-Feb-12	1976.5	1813.0	-4.3	O	19.45	4.5	O
	07-Jun-12	1745.0	1825.5	2.3	O	18.60	4.0	O
	18-Jul-12	1798.0	1771.6	-0.7	O	18.44	2.4	O
	17-Oct-12	1758.3	1799.5	1.2	O	18.41	1.9	O

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