Data Report 2020

Dry deposition (Air conc.) monitoring (Draft)

SAC21

26-28 October 2021

WebEx

Network Center for EANET

Contents of the data report for dry deposition (Air concentration) monitoring (SAC 21/5, pp.139-219)

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- Methods of automatic monitors — *Table 4.1.2*
- Terms and abbreviations — *Table 4.2*
- Monthly and annual data in 2020 — *Table 4.3.1 – 4.20.2*
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Location of sites for Dry dep. Monitoring (2020)

Location of Dry dep. (Air conc.) monitoring sites.

Dry dep. (Air conc.) monitoring

Filter Pack	41 sites
Automatic	34 sites
Passive sampler	6 sites

(See Table 4.1.1 and 4.2)

Site number for monitoring species in 2020 Gas

(See Table 4.1.1)

Parameter	Method	Sites (Countries)	Total sites (countries)
SO_2	Auto	24 (5)	65 (13)
	FP	38 (11)	
	PS	3 (1)	
HNO_3, NH_3, HCl	FP	41 (12)	41 (12)
NO, NOx/NOx*	Auto	20 (6)	20 (6)
NO_2	Auto	15 (6)	18 (7)
	PS	3 (1)	
O_3	Auto	26 (8)	28 (10)
	PS	2 (2)	

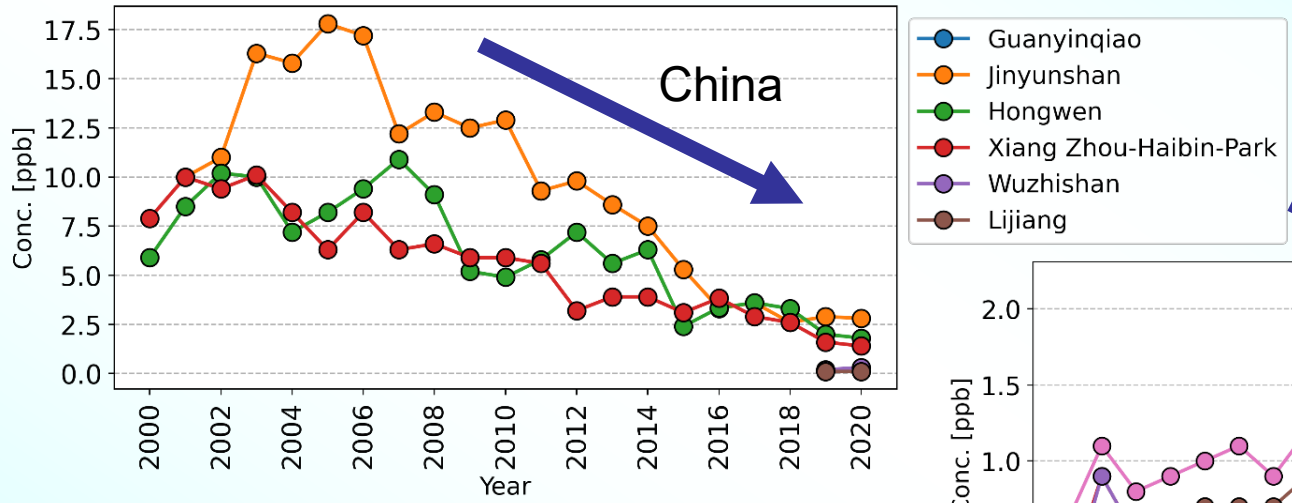
Site number for monitoring species in 2020 PM

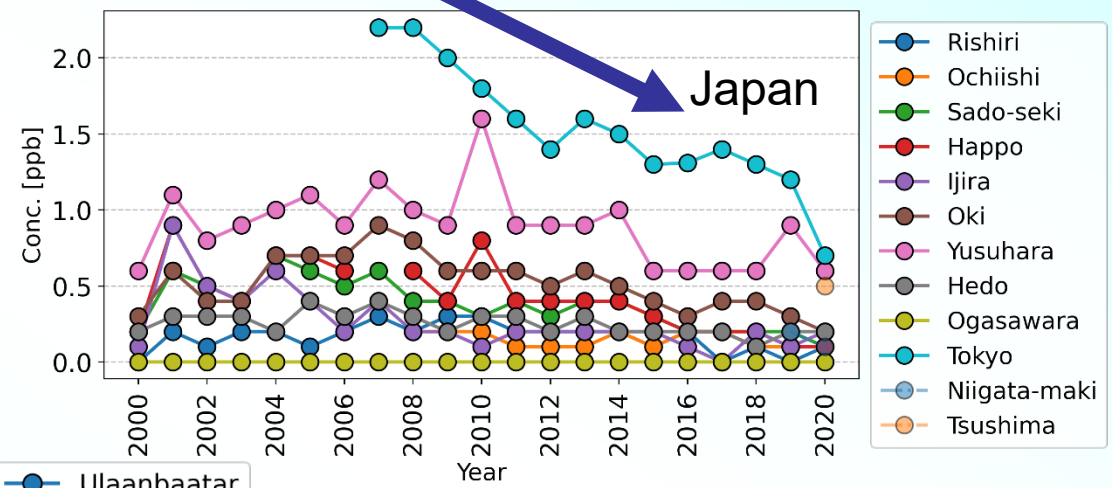
(See Table 4.1.1)

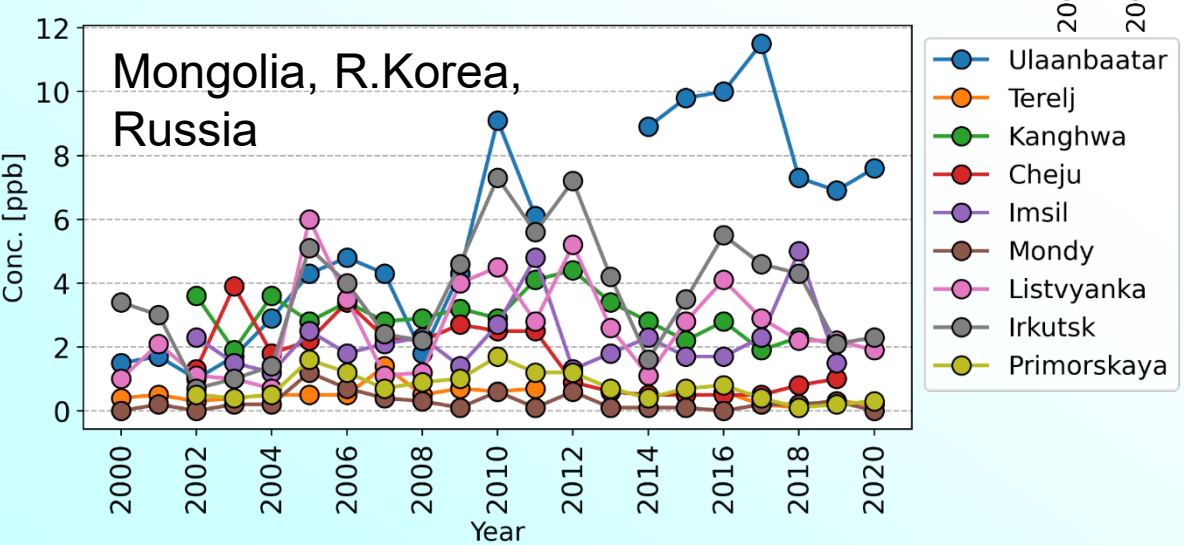
Parameter	Method	Sites (Countries)	Total sites (countries)
PM_{10}	Auto	28 (7)	28 (7)
$PM_{2.5}$	Auto	28 (10)	28 (10)
PM Components	FP	41 (12)	41 (12)

Annual trend during 2000-2020 (SO_2)

(See Table 4.21)

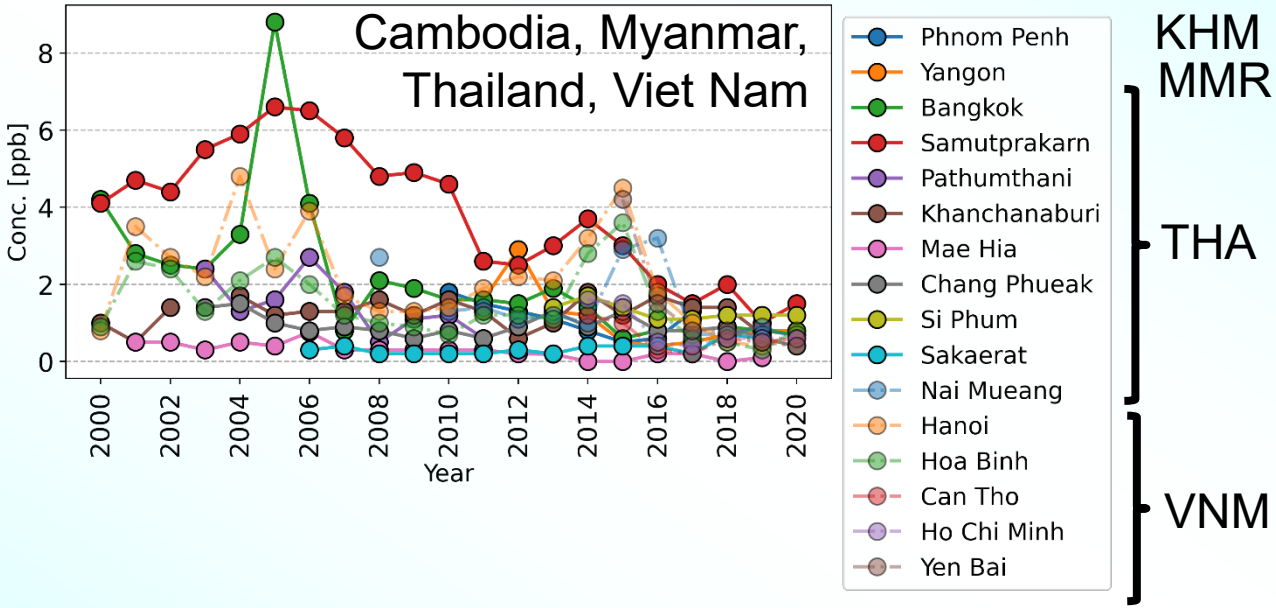


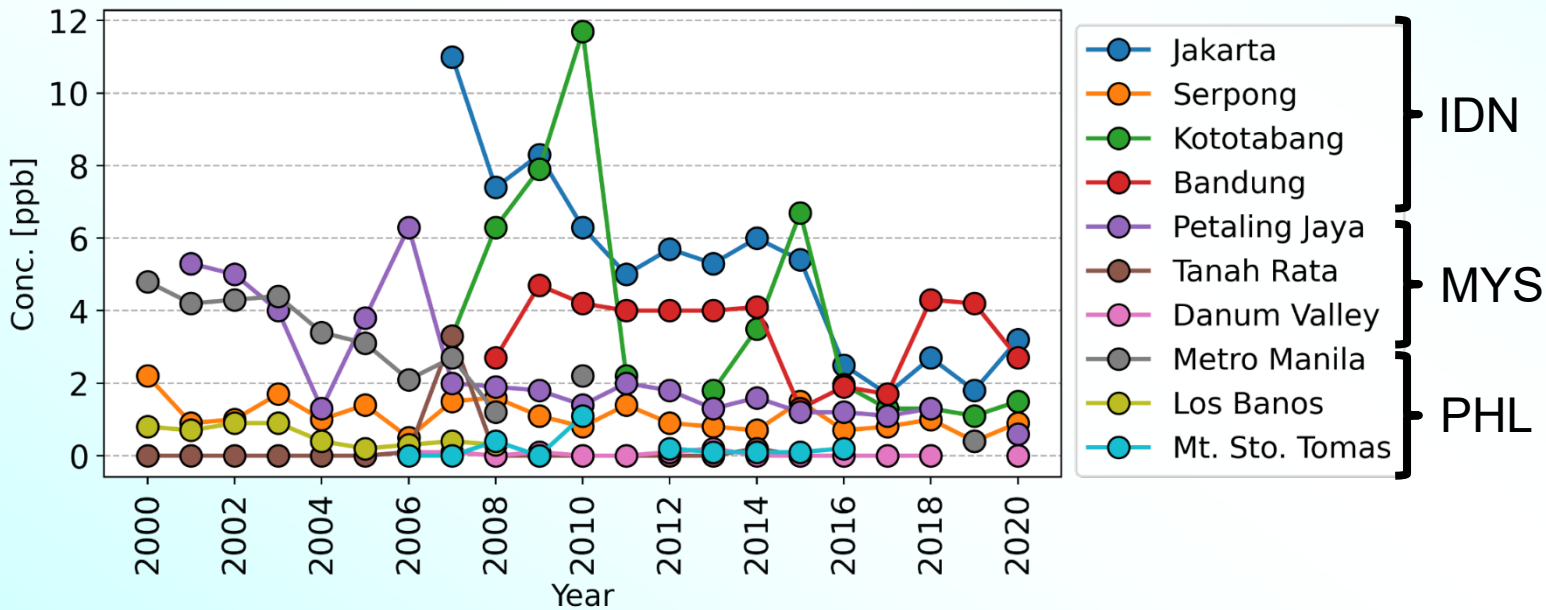




Annual trend during 2000-2020 (SO_2) cont.

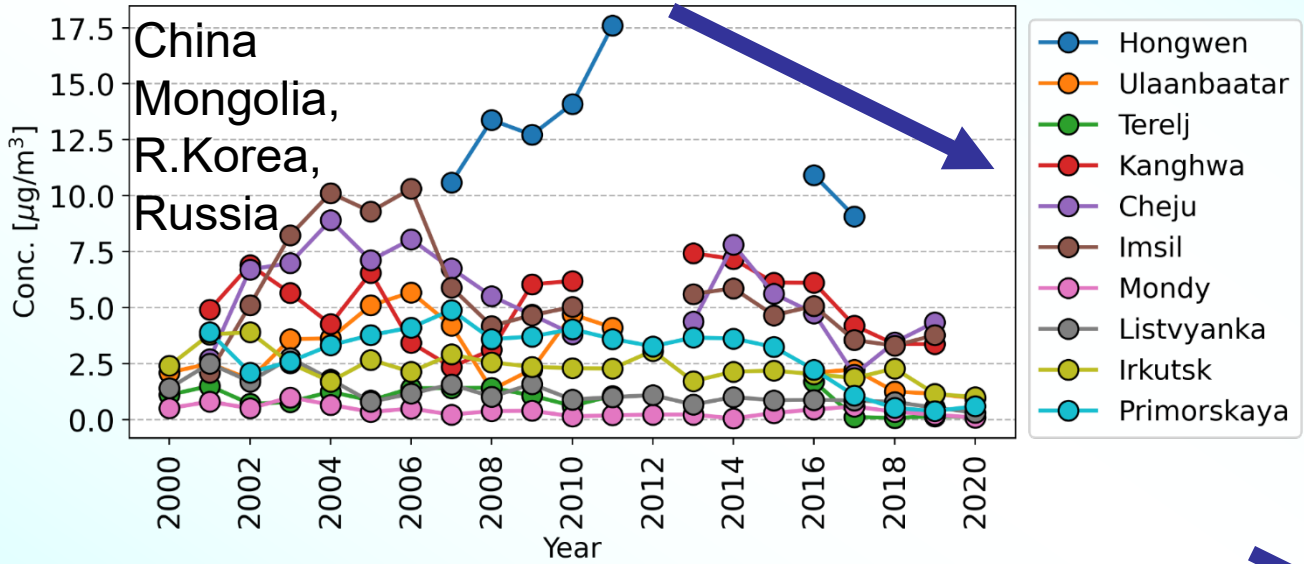
(See Table 4.21)

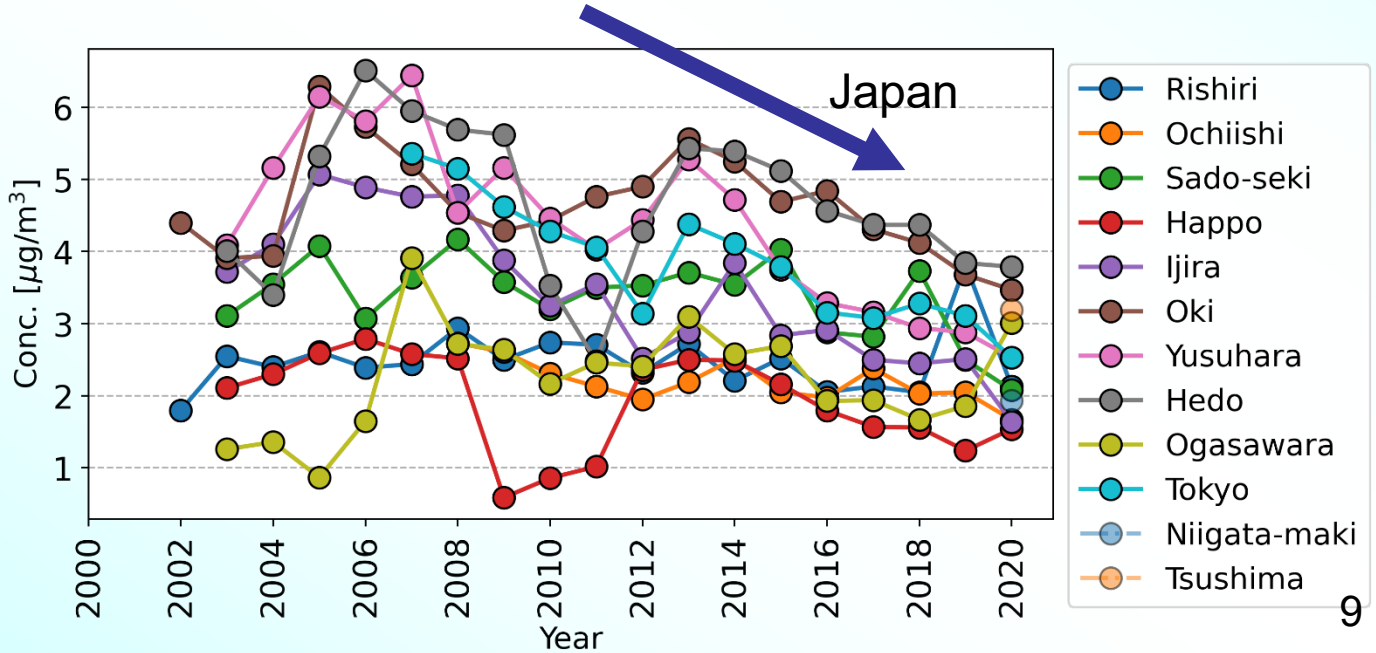




Annual trend during 2000-2020 (SO_4^{2-} in PM)

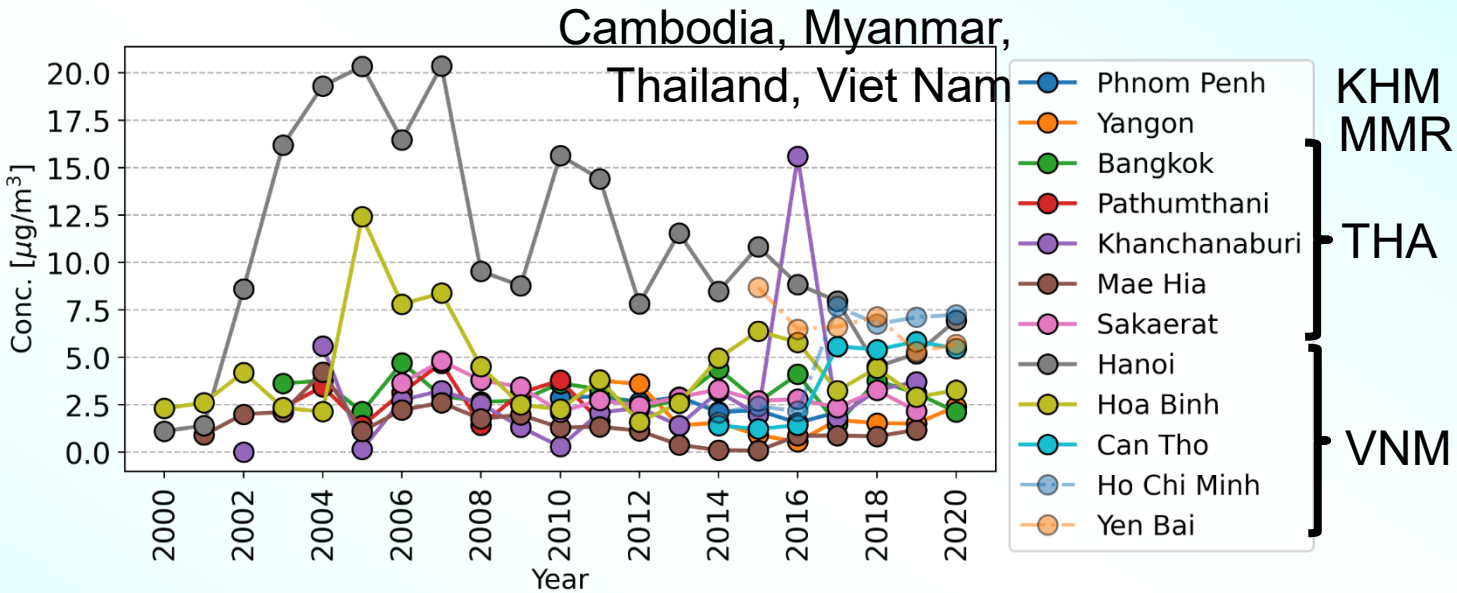
(See Table 4.31)

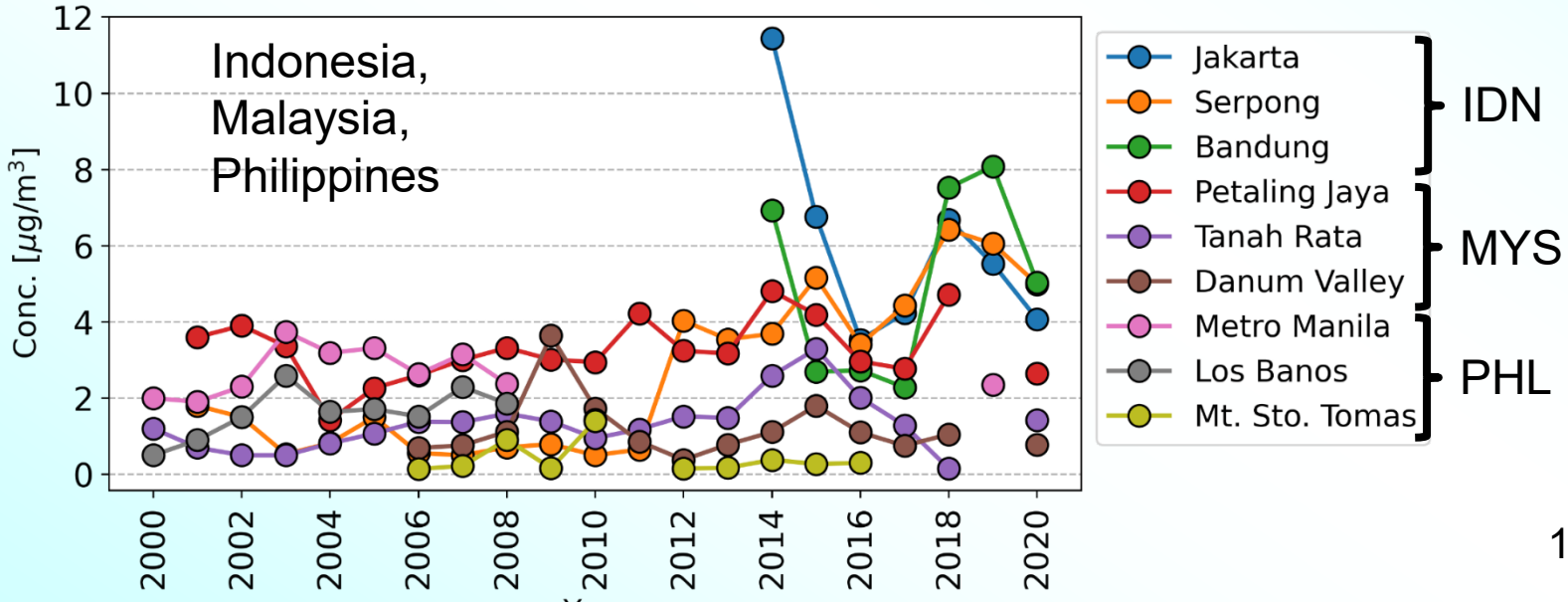




Annual trend during 2000-2020 (SO_4^{2-} in PM)

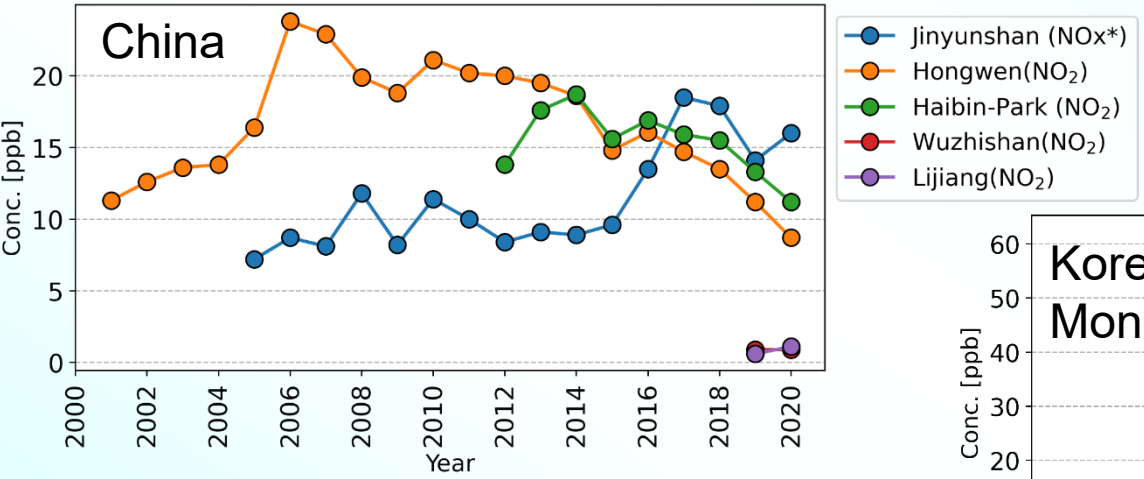
(See Table 4.31)

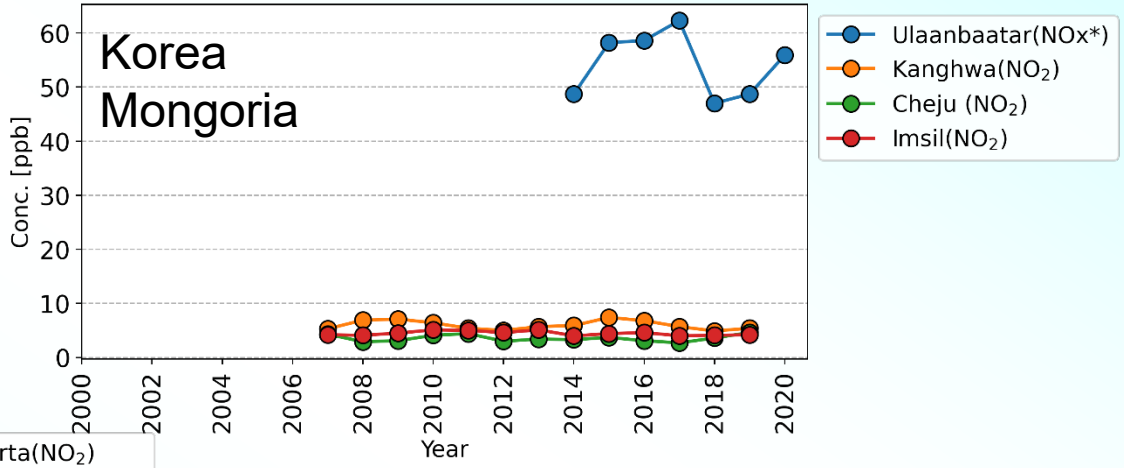


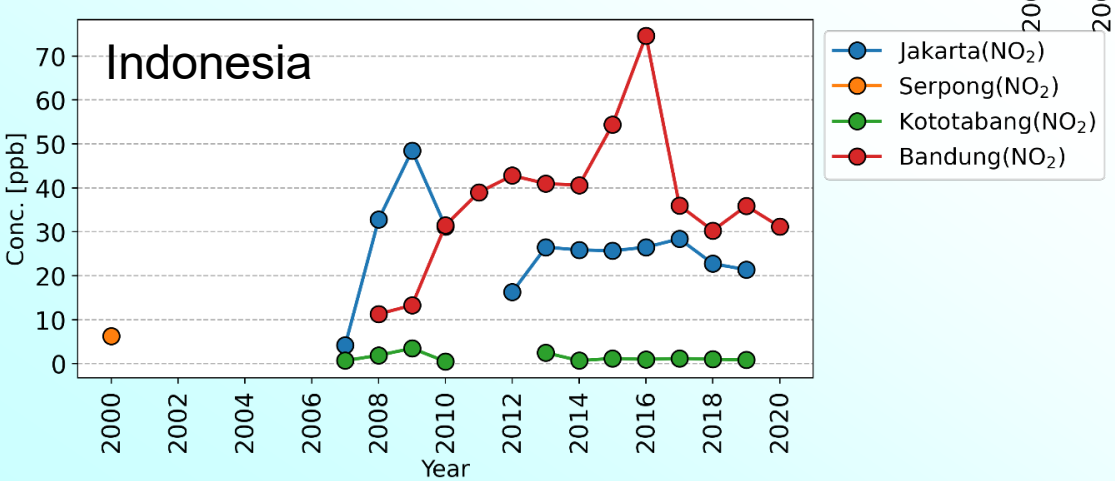


Annual trend during 2000-2020 (NO_2, NOx)

(See Table 4.26,4.27)

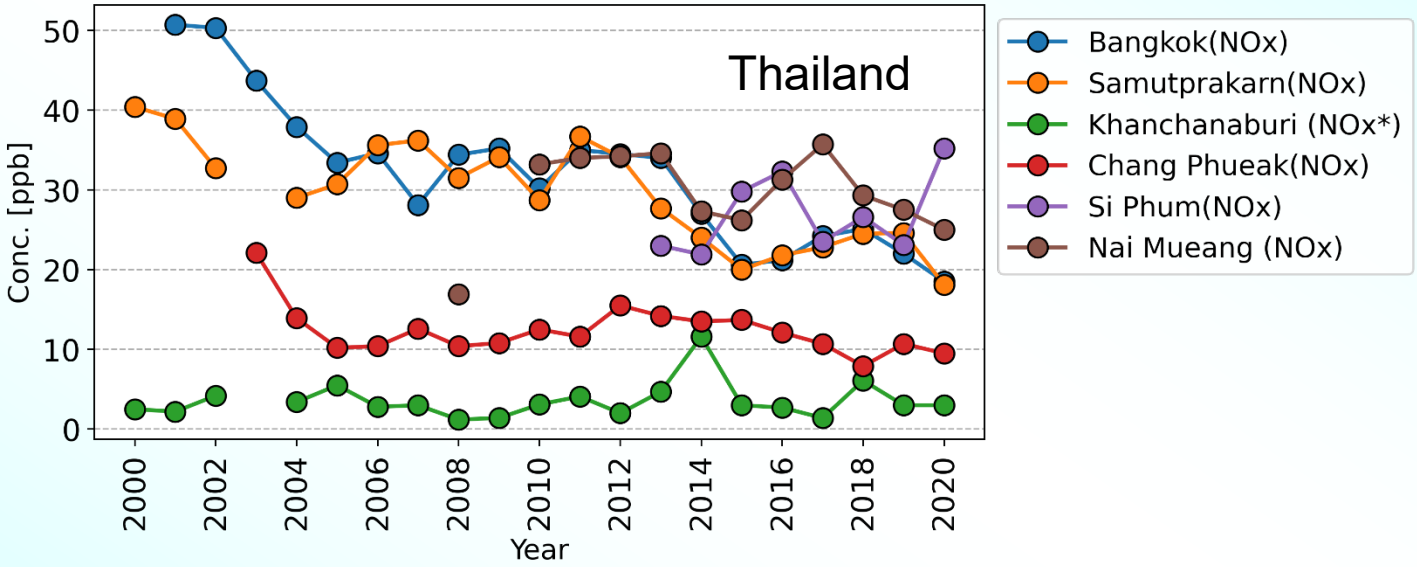


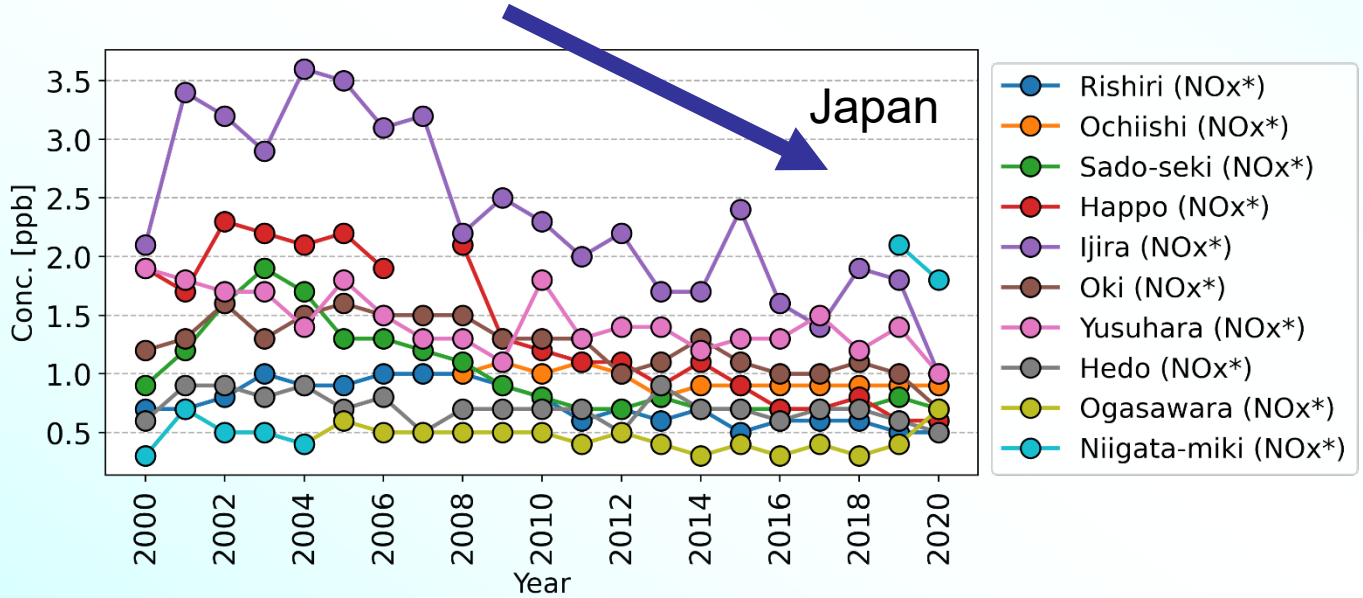




Annual trend during 2000-2020 (NO_2, NOx)

(See Table 4.26,4.27)

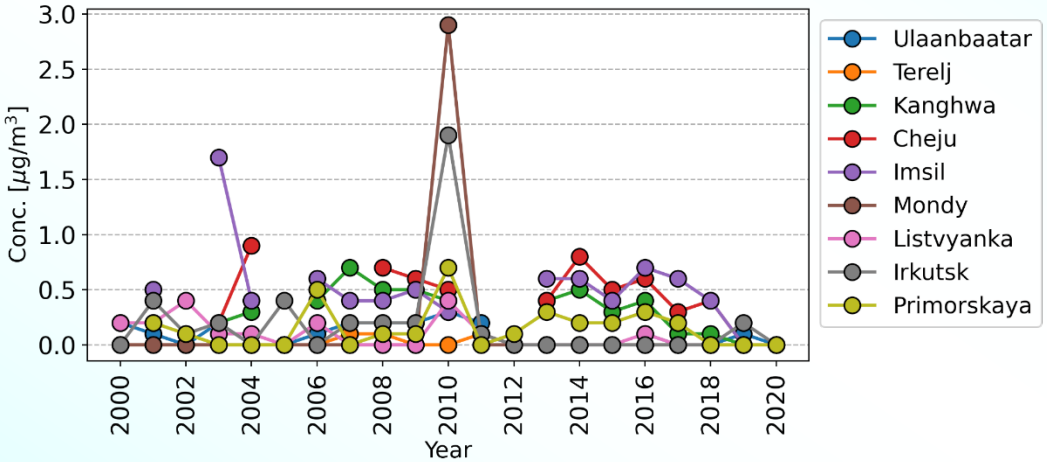




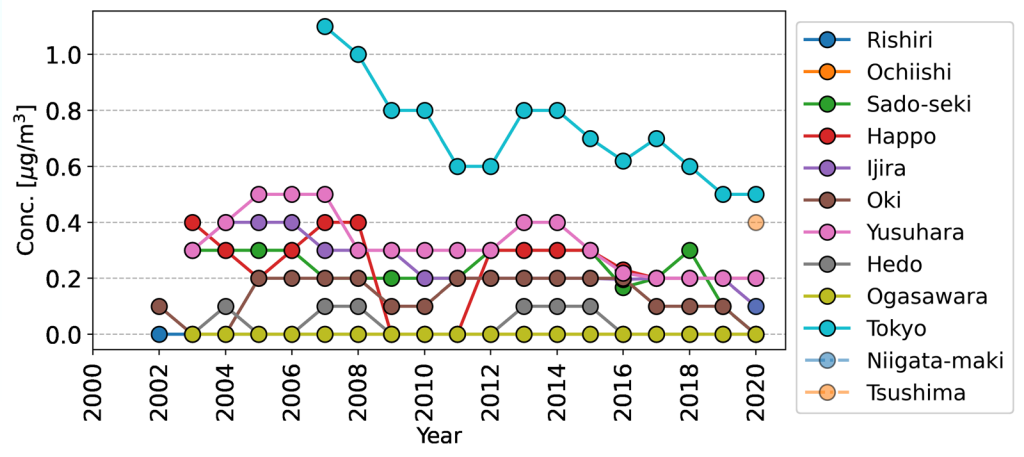
Annual trend during 2000-2020 (HNO_3)

(See Table 4.22)

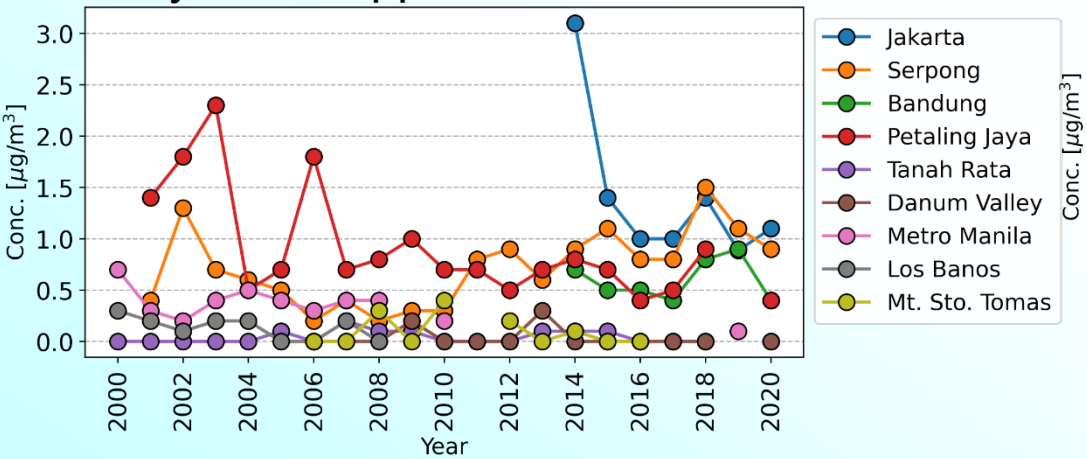
Mongolia, R.Korea, Russia



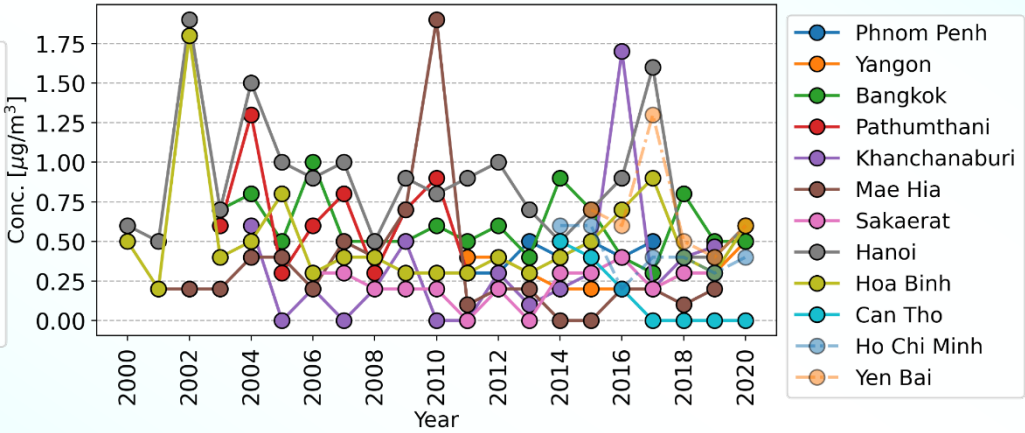
Japan



Indonesia, Malaysia, Philippines



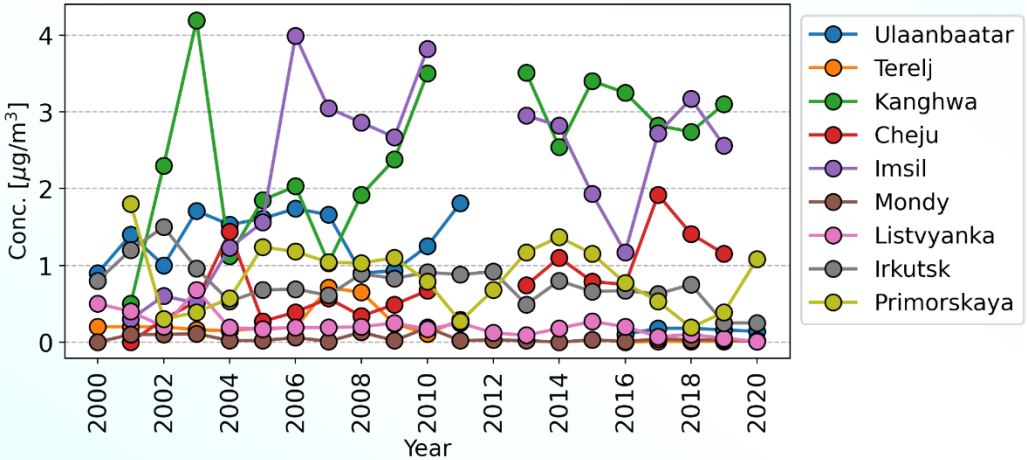
Cambodia, Myanmar,Thailand, Viet Nam



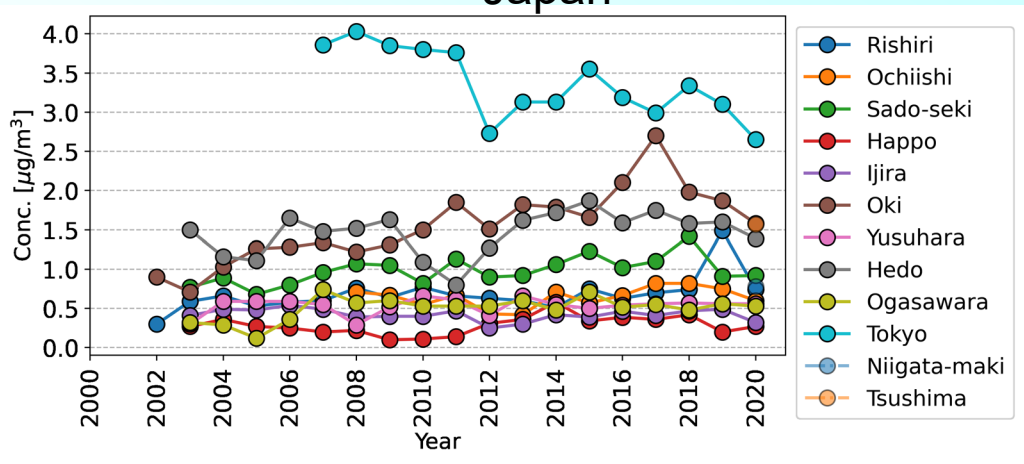
Annual trend during 2000-2020 (NO_3^- in PM)

(See Table 4.32)

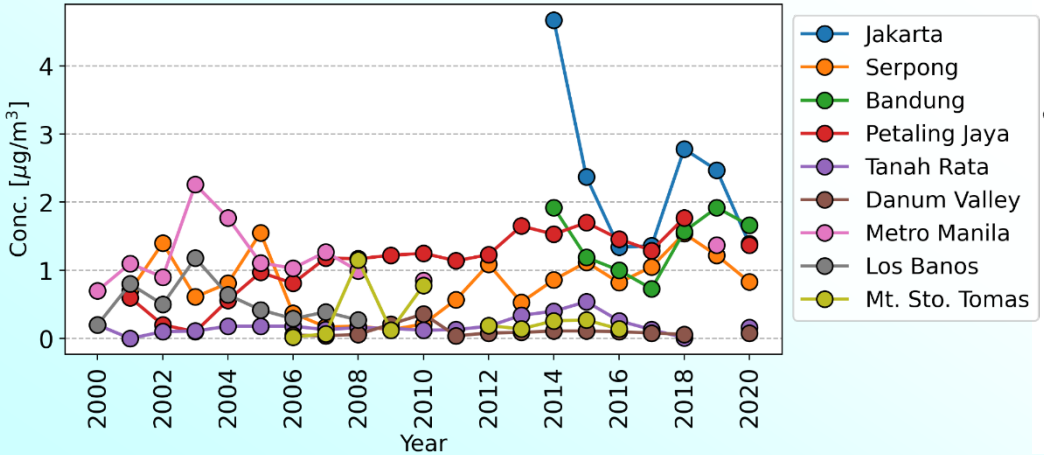
Mongolia, R.Korea, Russia



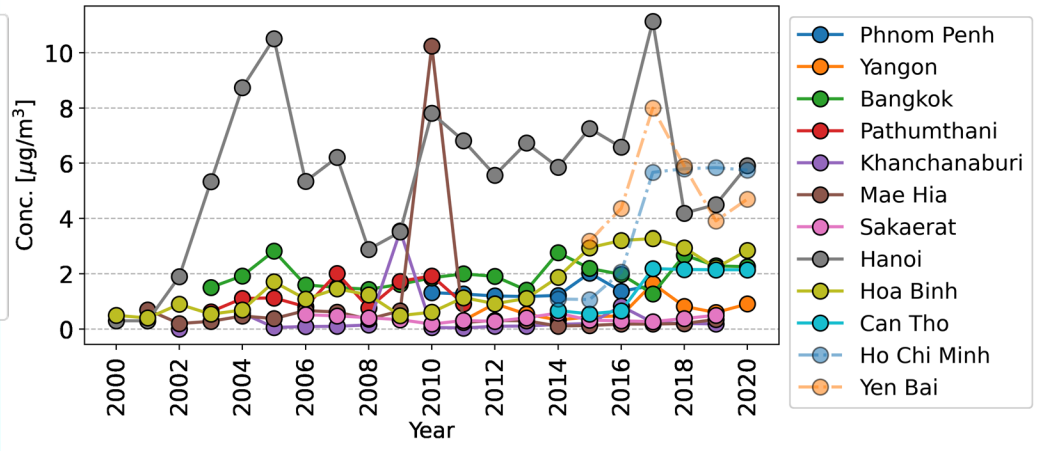
Japan



Indonesia, Malaysia, Philippines



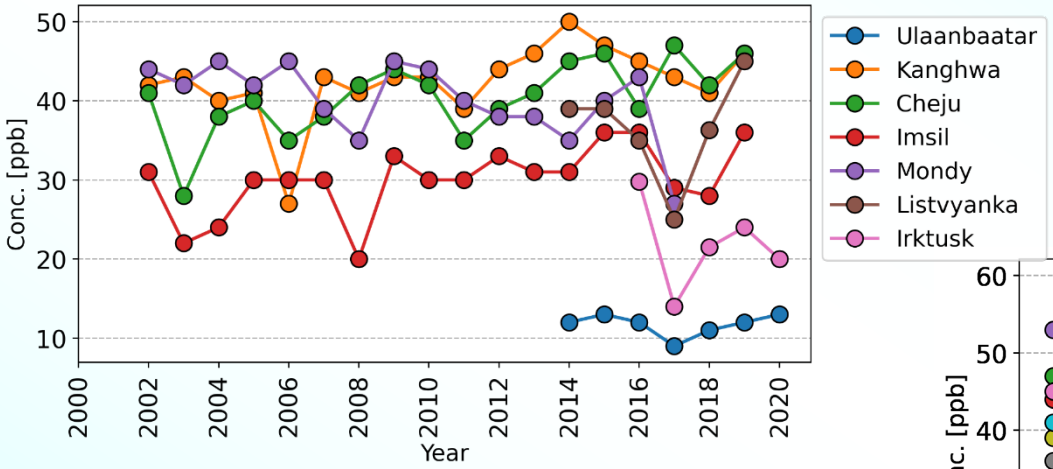
Cambodia, Myanmar, Thailand, Viet Nam



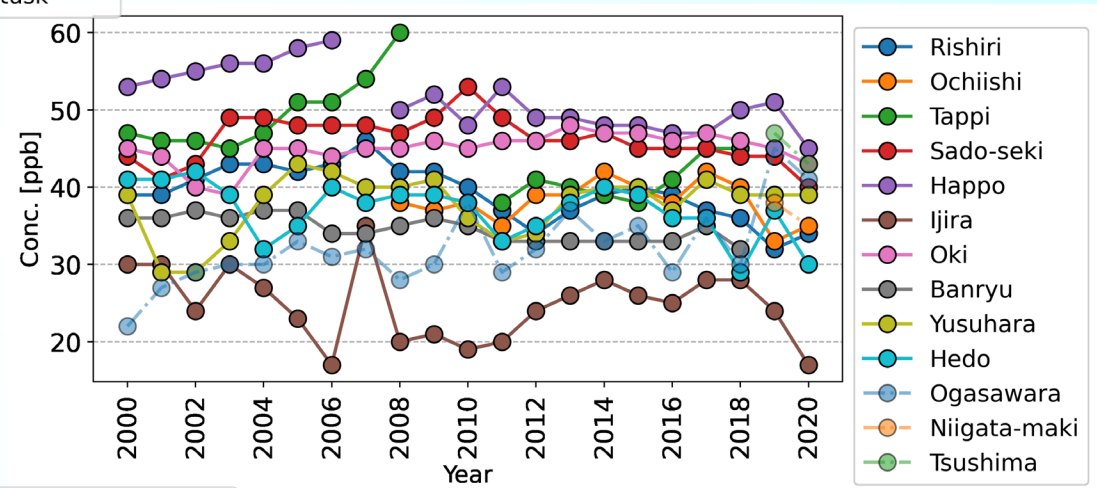
Annual trend during 2000-2020 (O_3)

(See Table 4.28)

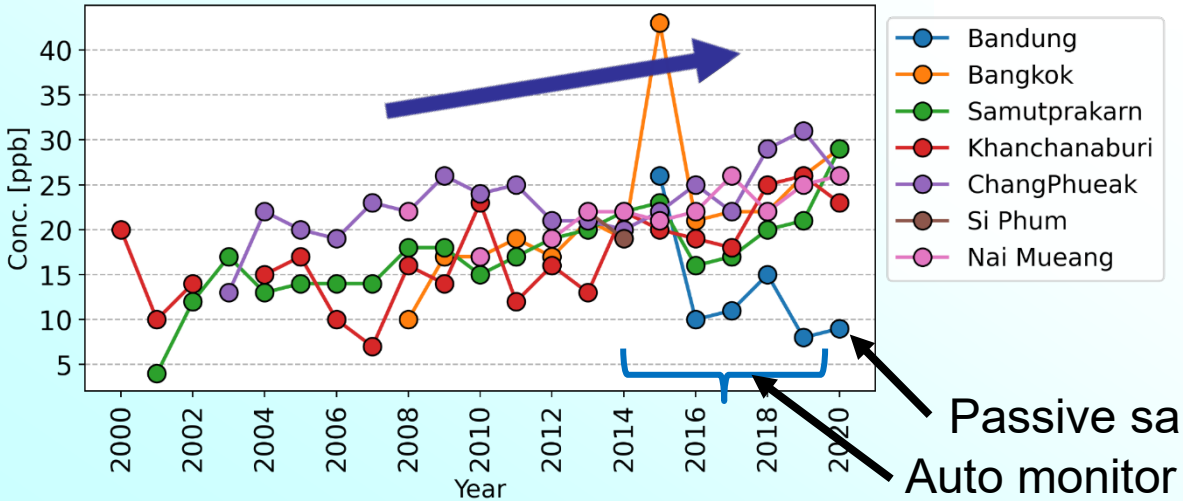
Mongolia, R.Korea, Russia



Japan

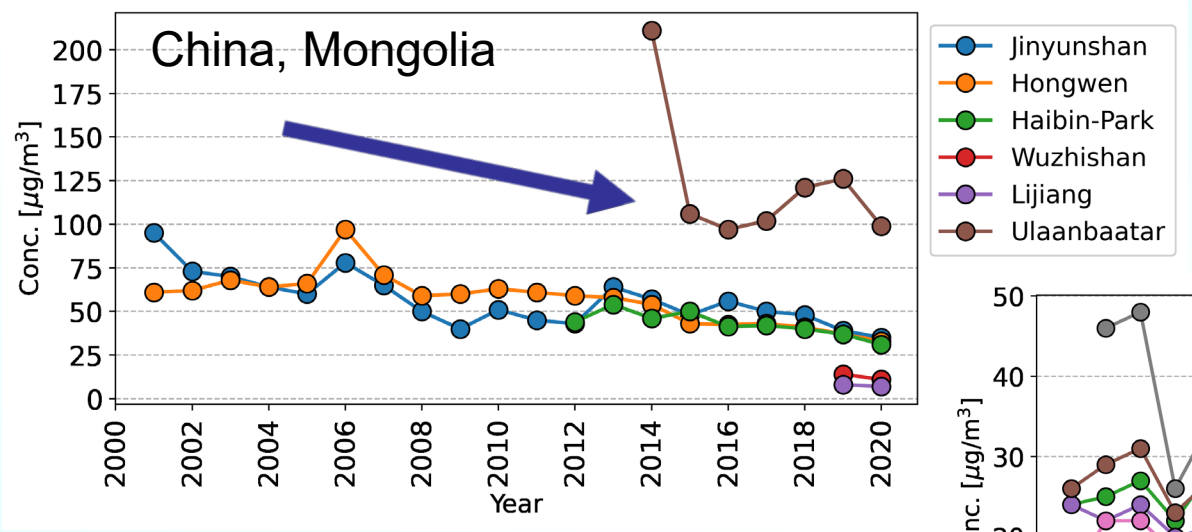


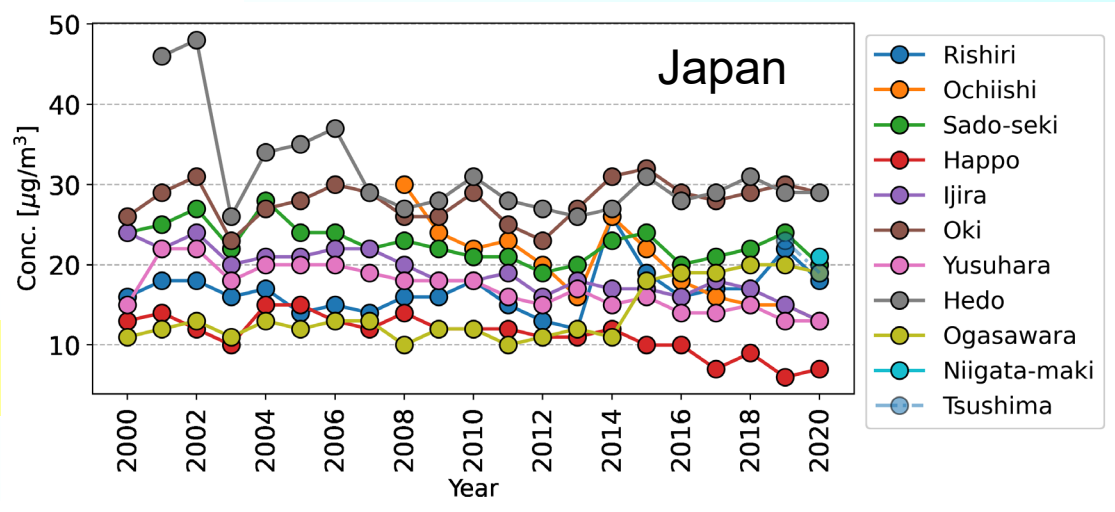
Indonesia, Thailand



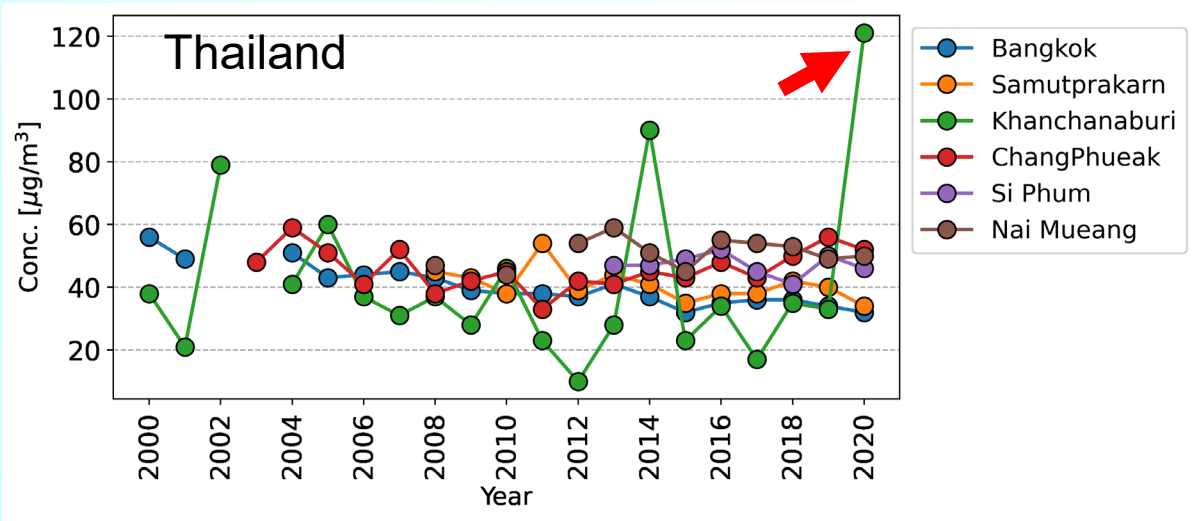
Annual trend during 2000-2020 (PM_{10})

(See Table 4.29)



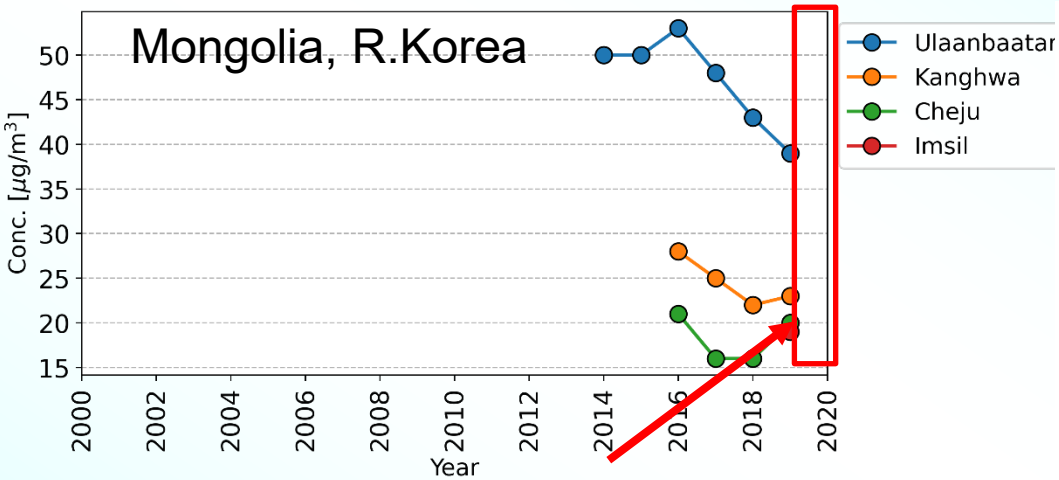


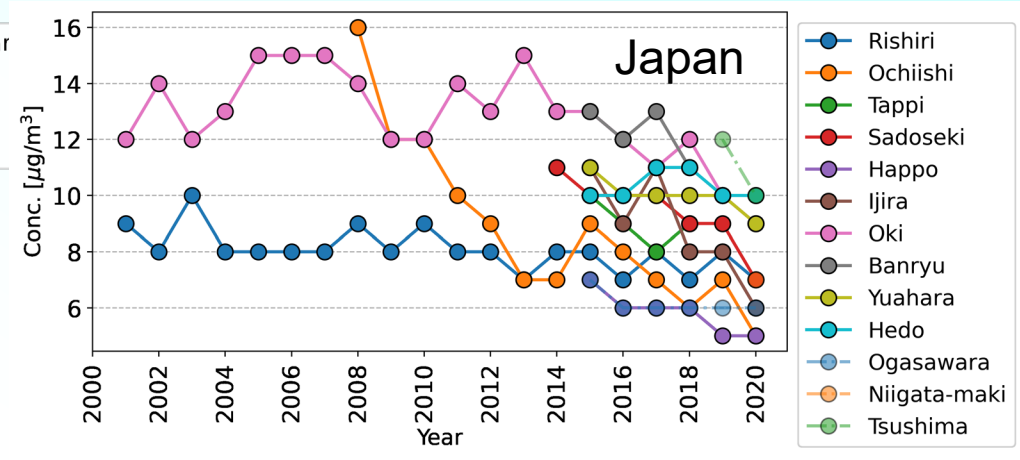
Decreasing



Annual trend during 2000-2020 ($PM_{2.5}$)

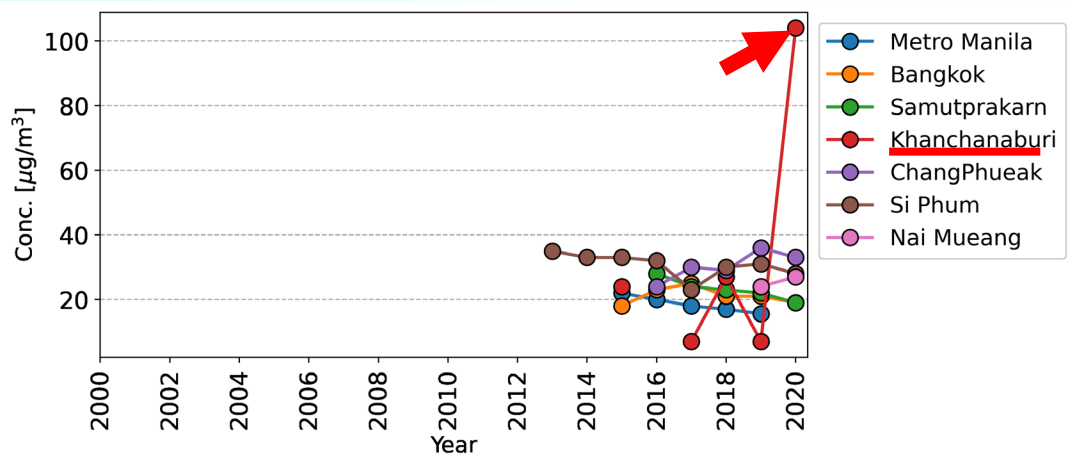
(See Table 4.30)



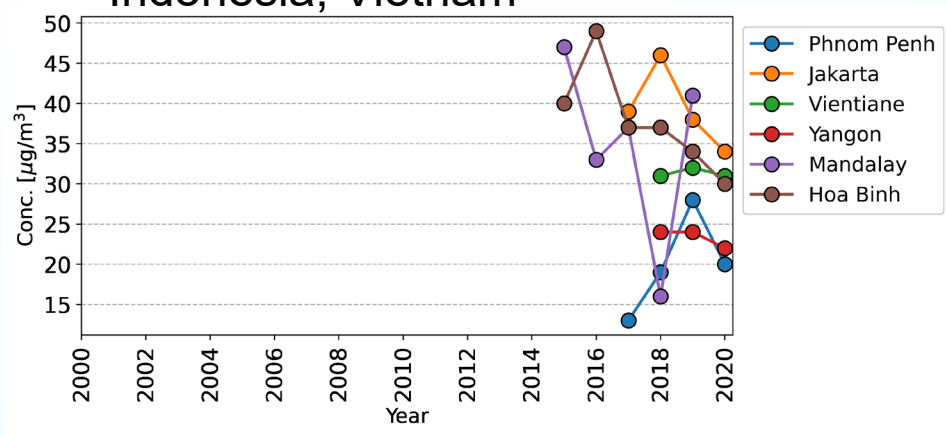


PM2.5 data of Mongolia were turned down and the data of Korea have not been submitted yet.

Philippines, Thailand

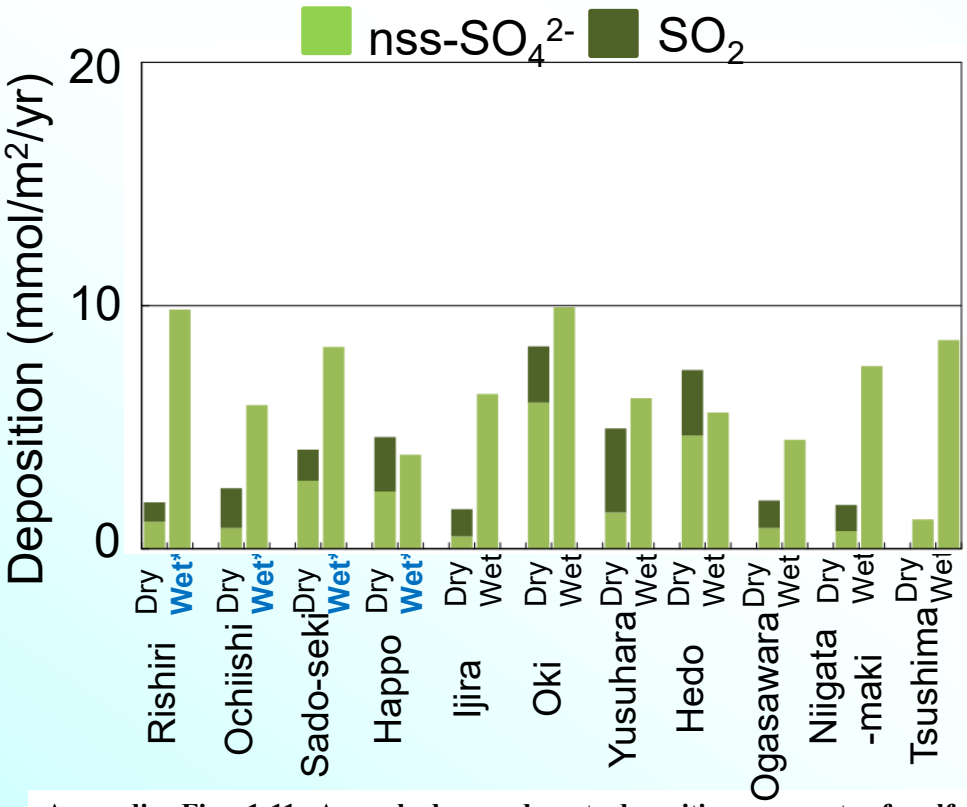


Cambodia, Lao PDR, Myanmar, Indonesia, Vietnam

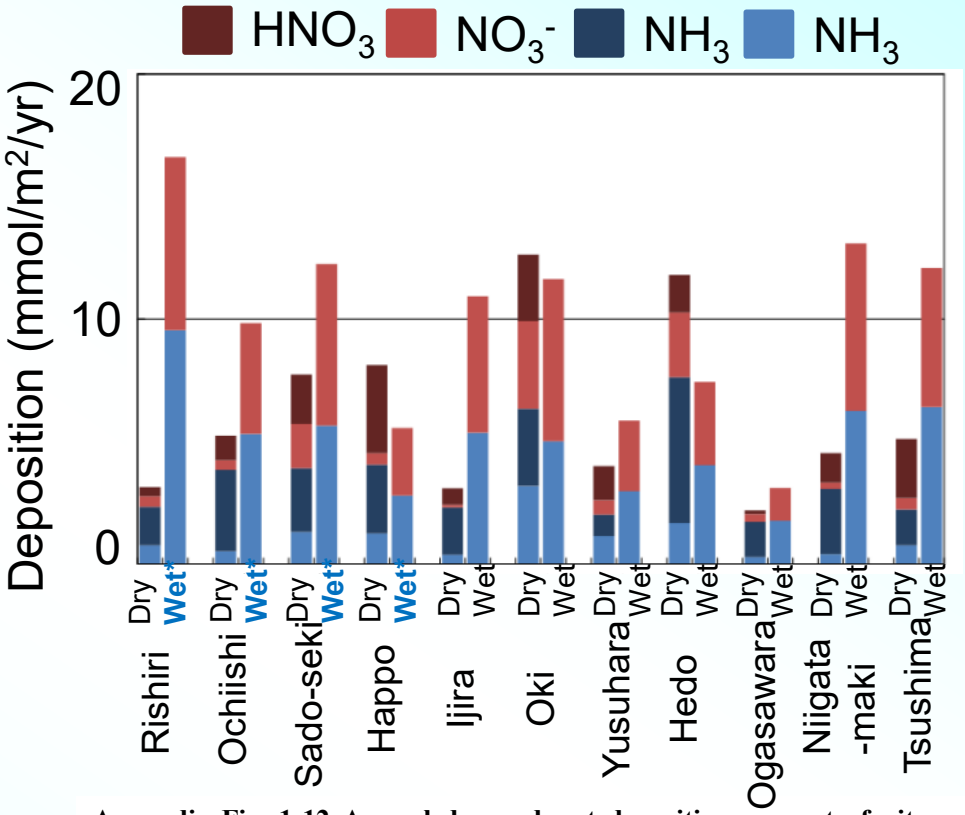


Annual amount of Dry and Wet deposition on EANET sites located in Japan

(See Appendix Figs. 1-11 and 1-12)



Appendix Fig. 1-11 Annual dry and wet deposition amount of sulfur compounds at EANET sites in 2020.



Appendix Fig. 1-12 Annual dry and wet deposition amount of nitrogen compounds at EANET sites in 2020.

*The data completeness of wet deposition monitoring was less than 80% (EANET criteria).

To calculate dry deposition, meteorological data are needed. The above sites in Japan have no data for cloud coverage. Therefore, cloud coverage ratio was obtained from the results of simulations by using Meso Scale Model of Japan Meteorological Agency.

Thank you for your attention.

ACAP
Asia Center for Air Pollution Research
Japan Environmental Sanitation Center