



*Supplement of*

**Widespread and persistent ozone pollution in eastern China during the non-winter season of 2015: observations and source attributions**

**Guohui Li et al.**

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## Supplementary Information Section

The supplementary information (SI) provides description about the NO<sub>2</sub> simulations.

### Tables

Table S1 Emission rates of the major O<sub>3</sub> precursors from different emission sources in May in the simulation domain (Unit: 10<sup>6</sup> mole month<sup>-1</sup>).

Species	Source Types		
	Industry	Transportation	Residential
ALK1	1199	57	237
ALK2	1530	125	376
ALK3	892	51	135
ALK4	1190	284	142
ALK5	1505	246	237
ETHENE	1289	468	455
OLE1	672	284	214
OLE2	594	243	126
ISOPRENE	4	1	5
TERPENES	8	3	29
ARO1	1989	132	136
ARO2	1014	191	131
HCHO	95	256	80
RCHO	0	73	23
NO <sub>x</sub>	21652	8539	3293

### Supplementary Figure Captions

Fig. S1 Defined four sections in Eastern China. 1) Northeast China (NEC): Heilongjiang, Jilin, Liaoning, and the east part of Inner Mongolia, 2) North China Plain and surrounding areas (NCPs): Beijing, Tianjin, Hebei, Shandong, Henan, Shanxi, and the north part of Jiangsu and Anhui, 3) YRD and surrounding areas (YRDs): the south part of Jiangsu and Anhui, Shanghai, Zhejiang, and Hubei, and 4) PRD and surrounding areas (PRDs): Fujian, Jiangxi, Hunan, Guangxi, and Guangdong.

Fig. S2 Average geopotential height wind field on 500 hPa from 22 to 27 May 2015.

Fig. S3 Pattern comparison of simulated vs. observed near-surface  $\text{NO}_2$  at 08:00 BJT from 22 to 27 May 2015. Colored circles:  $\text{NO}_2$  observations; color contour:  $\text{NO}_2$  simulations; black arrows: simulated surface winds.

Fig. S4 Comparison of measured (black dots) and predicted (blue line) diurnal profiles of near-surface  $\text{NO}_2$  averaged over all ambient monitoring stations in provinces of Eastern China from 22 to 28 May 2015.



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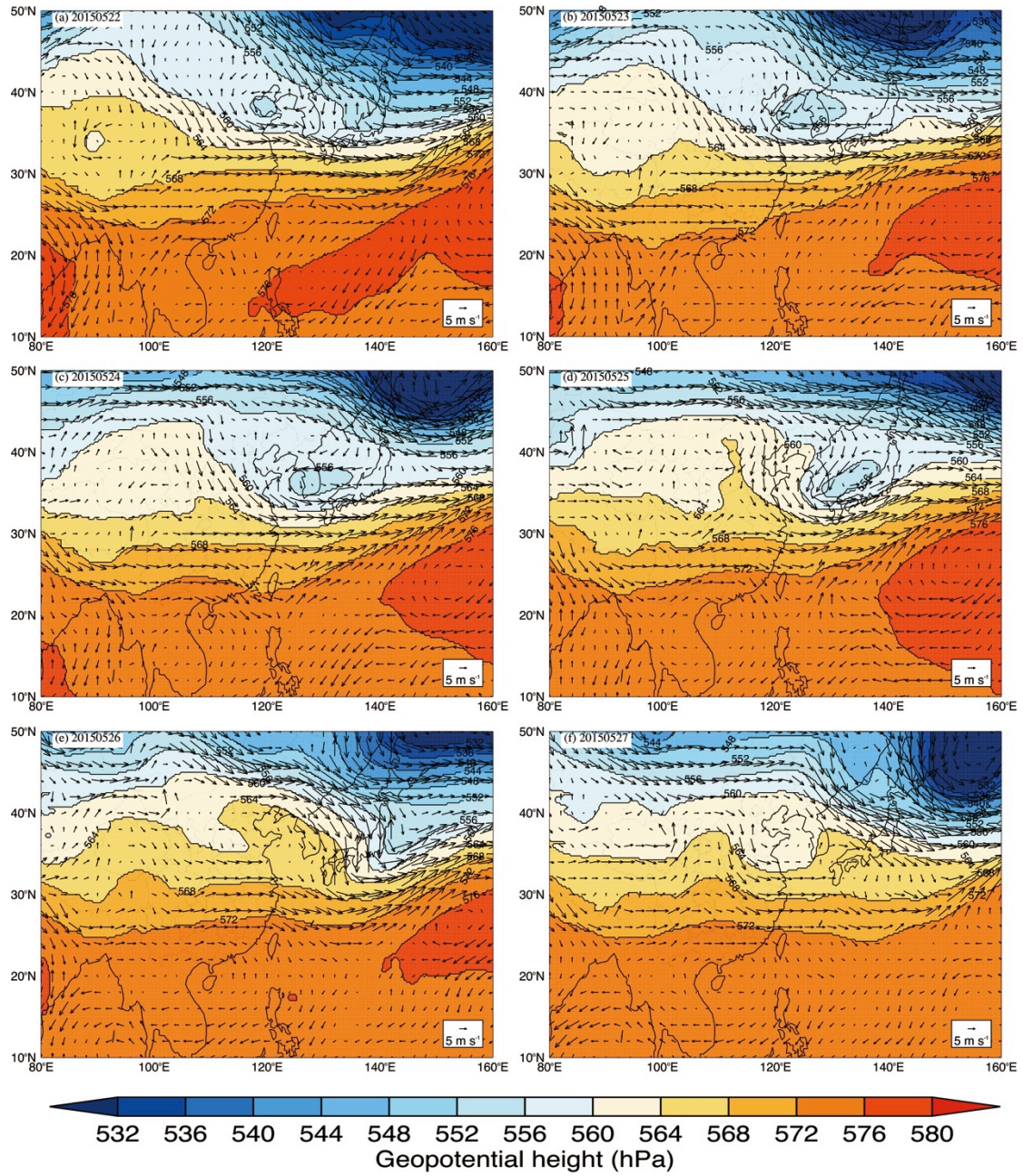


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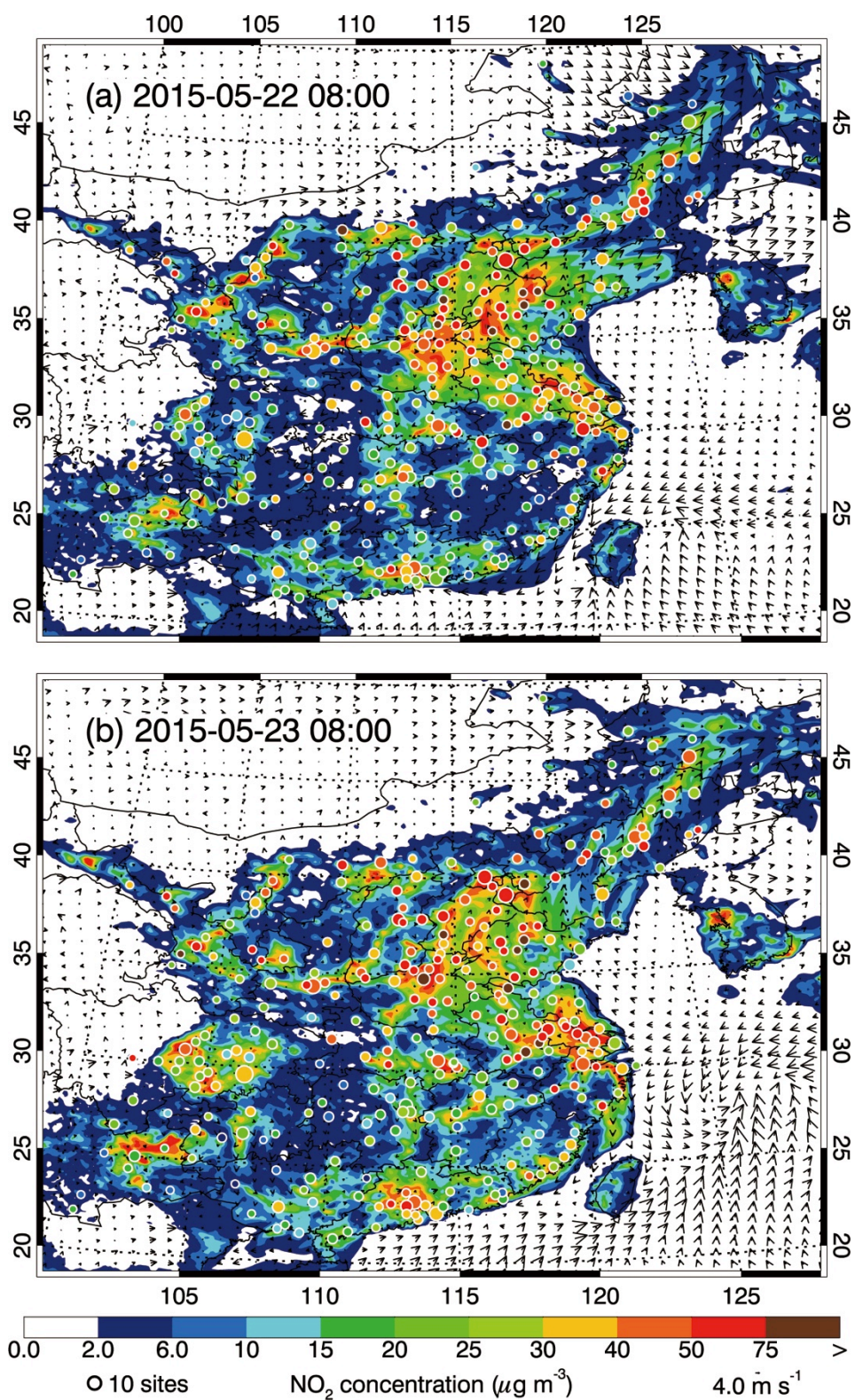


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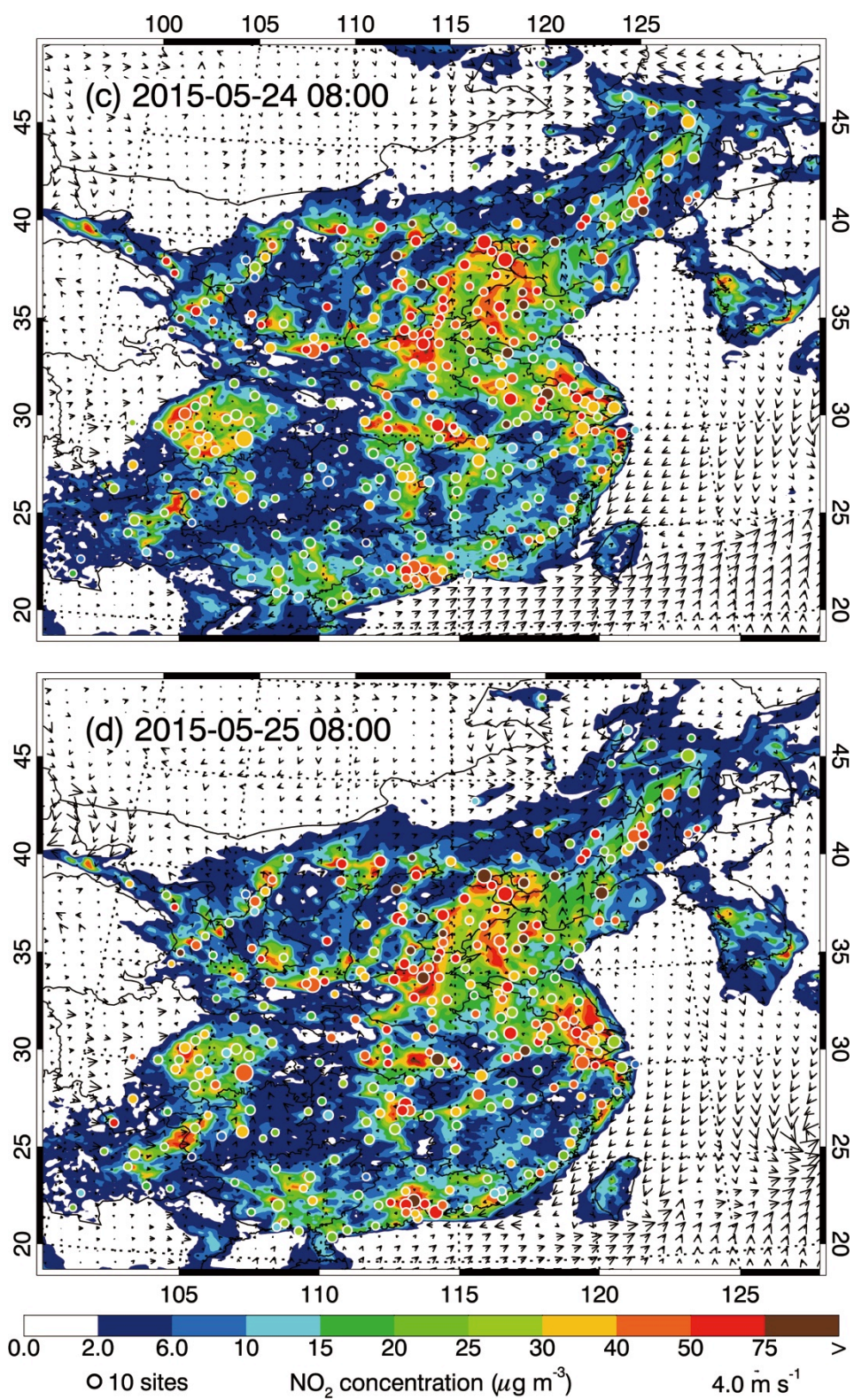


Fig. S3 Continued.



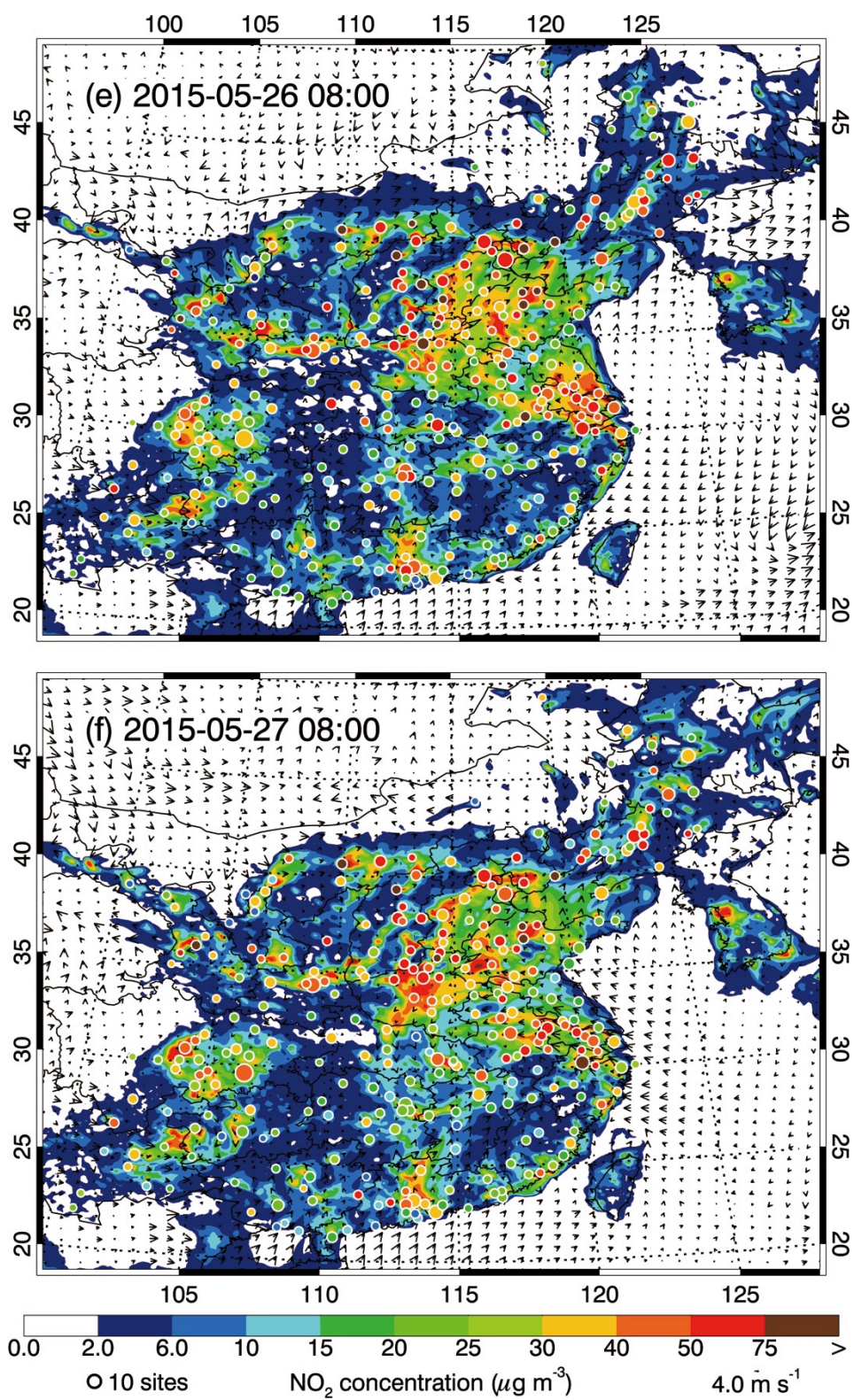


Fig. S3 Continued.



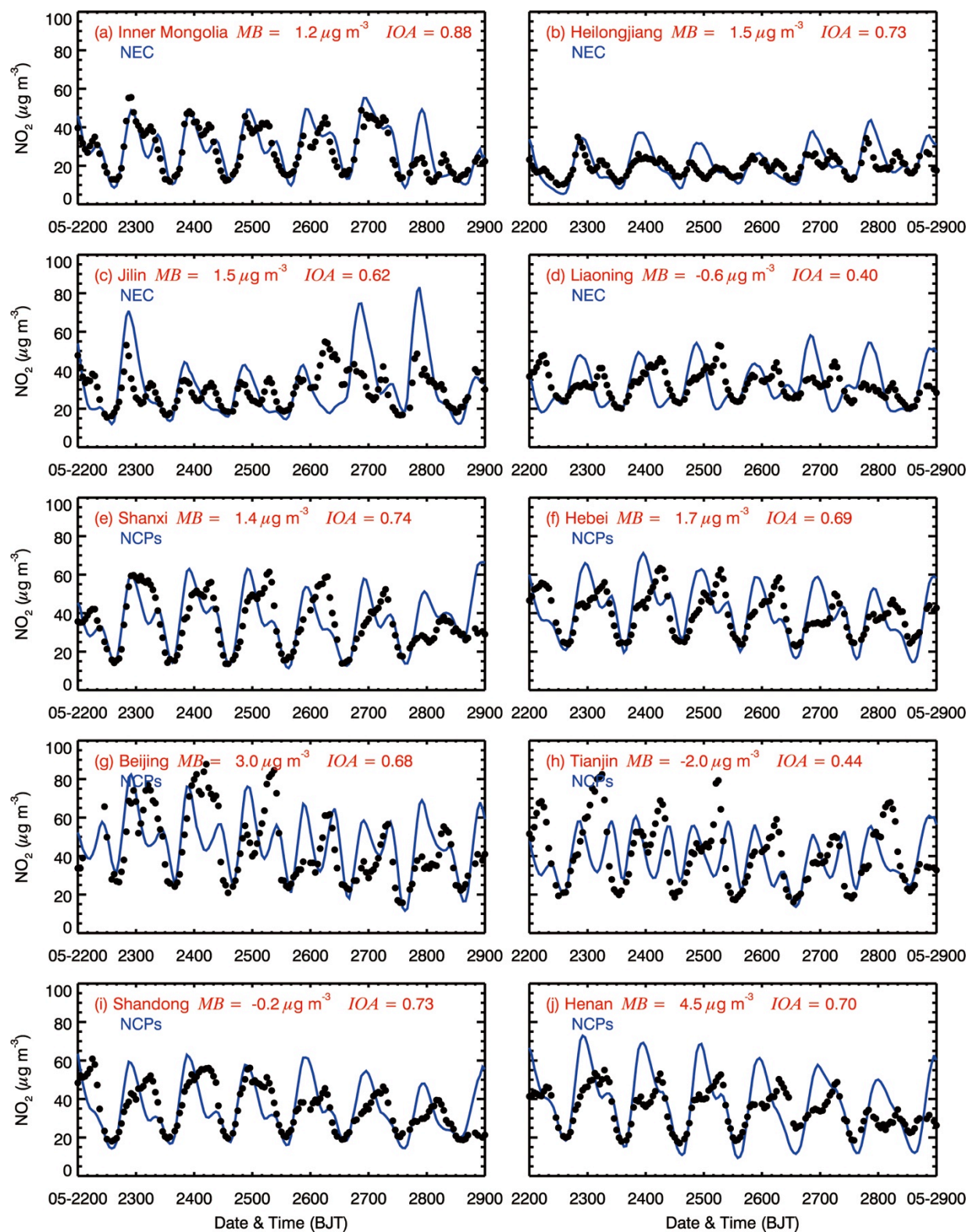


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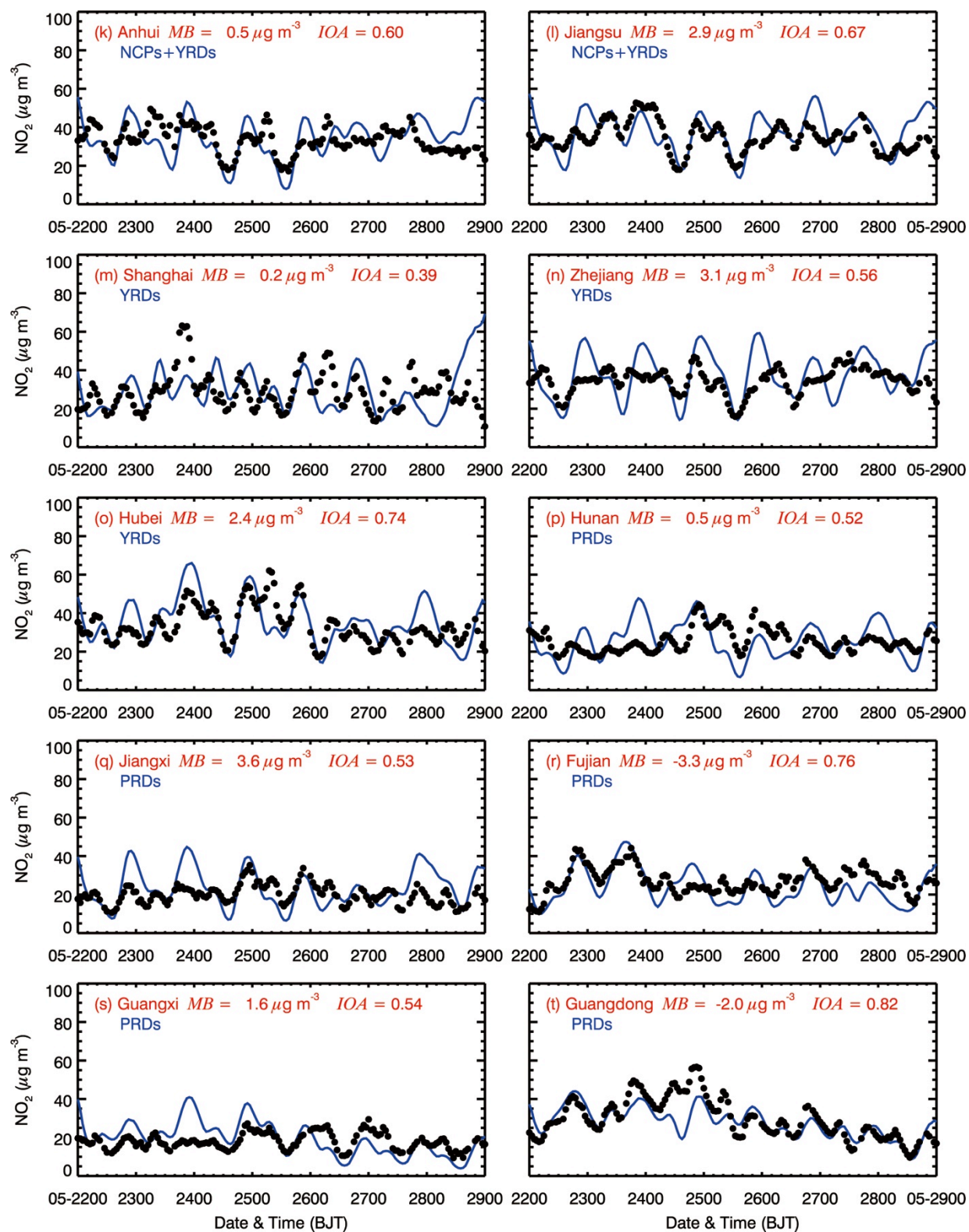


Fig. S4 Continued.