



Supplement of

Surface ozone over the Tibetan Plateau controlled by stratospheric intrusion

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Table S1. Locations of the sites over the Tibetan Plateau in this study

	City	Latitude(N°)	Longitude (E°)	Altitude (m)	Pressure (hPa)
1	Haixizhou	37.3753	97.3731	2992	709
2	Haibeizhou	36.9639	100.9048	3115	690
3	Xining	36.63855	101.7828	2238	759
4	Haidongzhou	36.5067	102.0306	2140	787
5	Hainanzhou	36.2866	100.6188	2865	722
6	Huangnanzhou	35.5102	102.0199	2480	754
7	Guoluozhou	34.4714	100.2561	3755	647
8	Nagqu	31.48215	92.05815	4505	587
9	Changdu	31.1266	97.18065	3244	681
10	Lhasa	29.652	91.097	3650	650
11	Nyingchi	29.6504	94.36485	2993	711
12	Shigatse	29.25415	88.89035	3840	638
13	Shannan	29.24615	91.7657	3559	663

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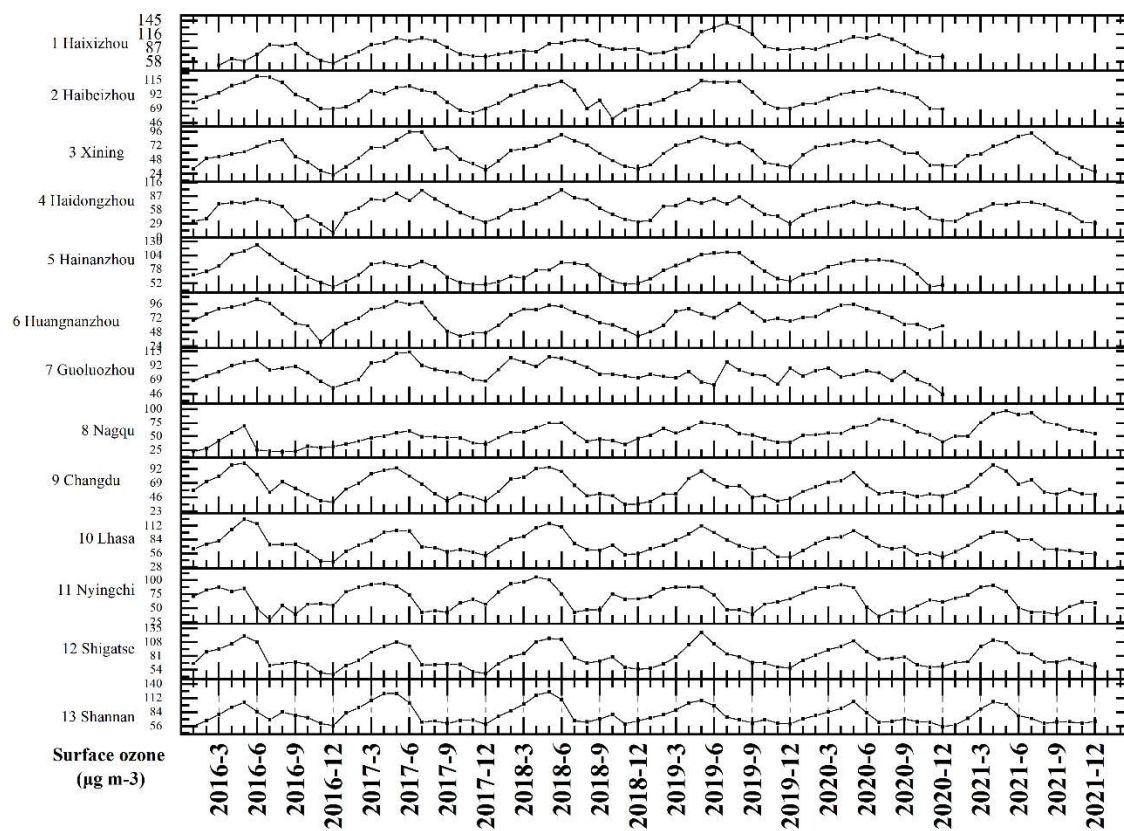
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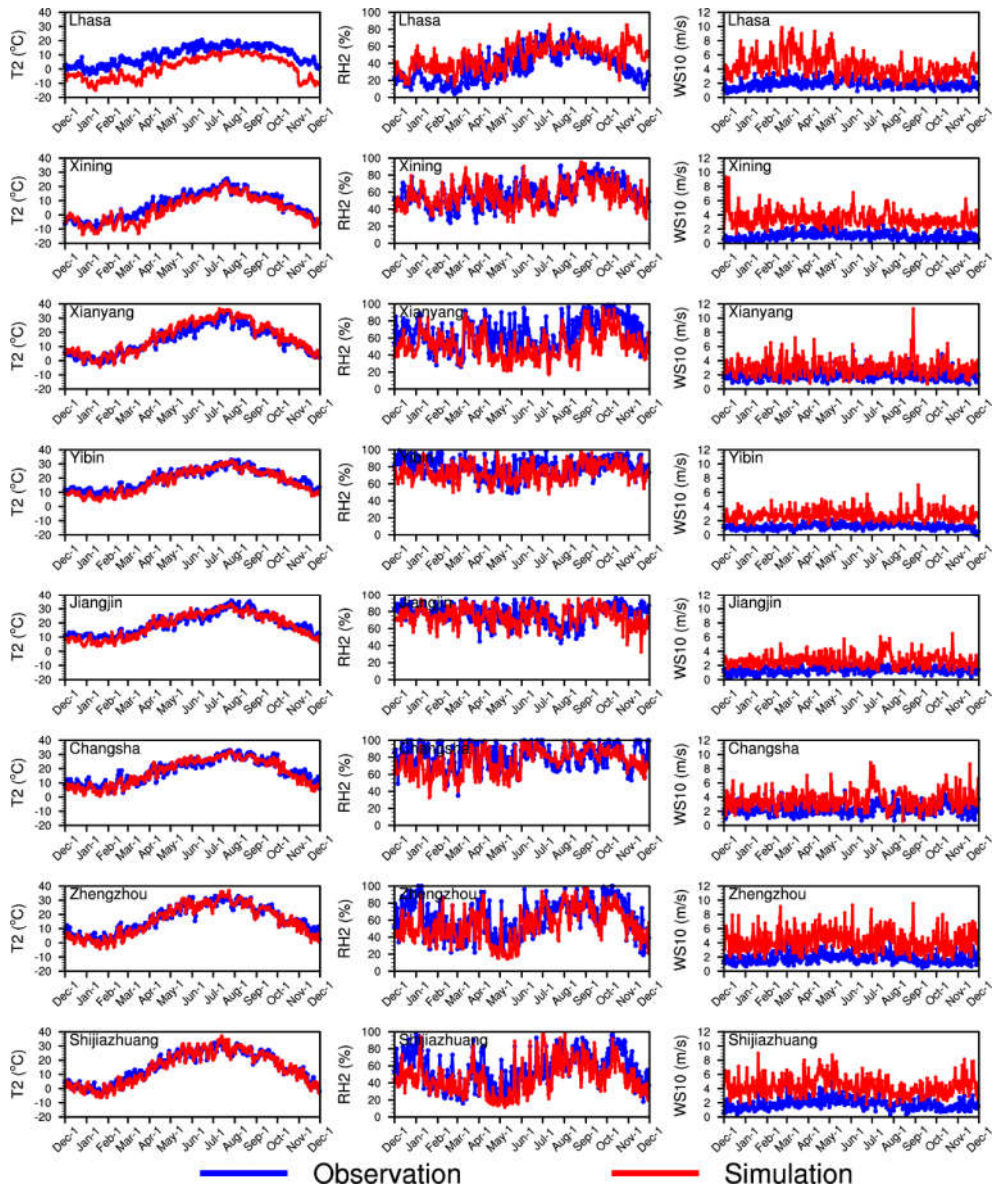
Fig. S1 Month to month variation of surface ozone at 13 sites over the Tibetan Plateau during 2016 to 2021

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Fig. S2 Comparisons of T2, RH2, and WS10 between WRF-chem simulation and observation

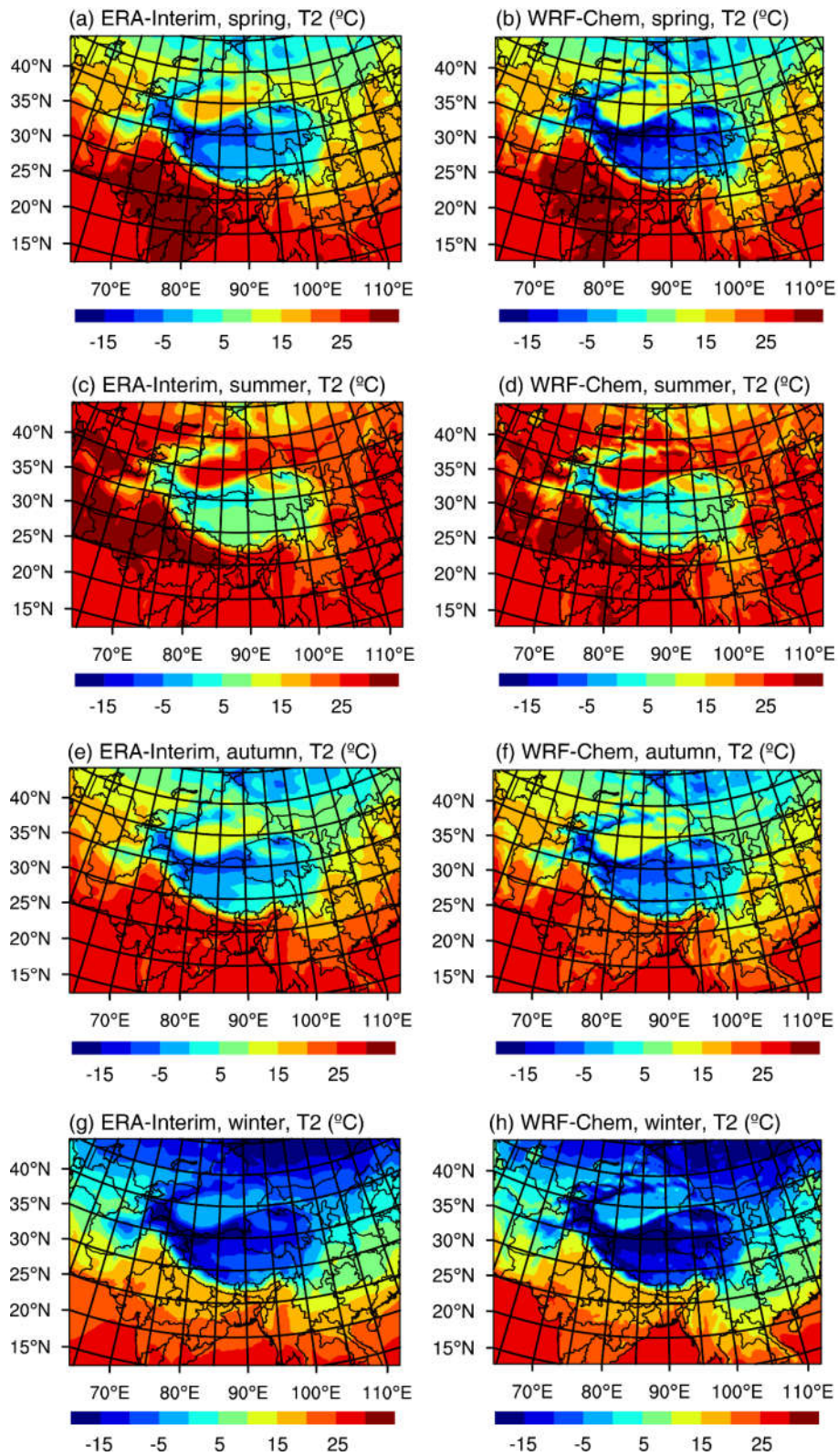


Fig. S3 Comparisons of seasonal mean T2 between WRF-chem simulation and observation

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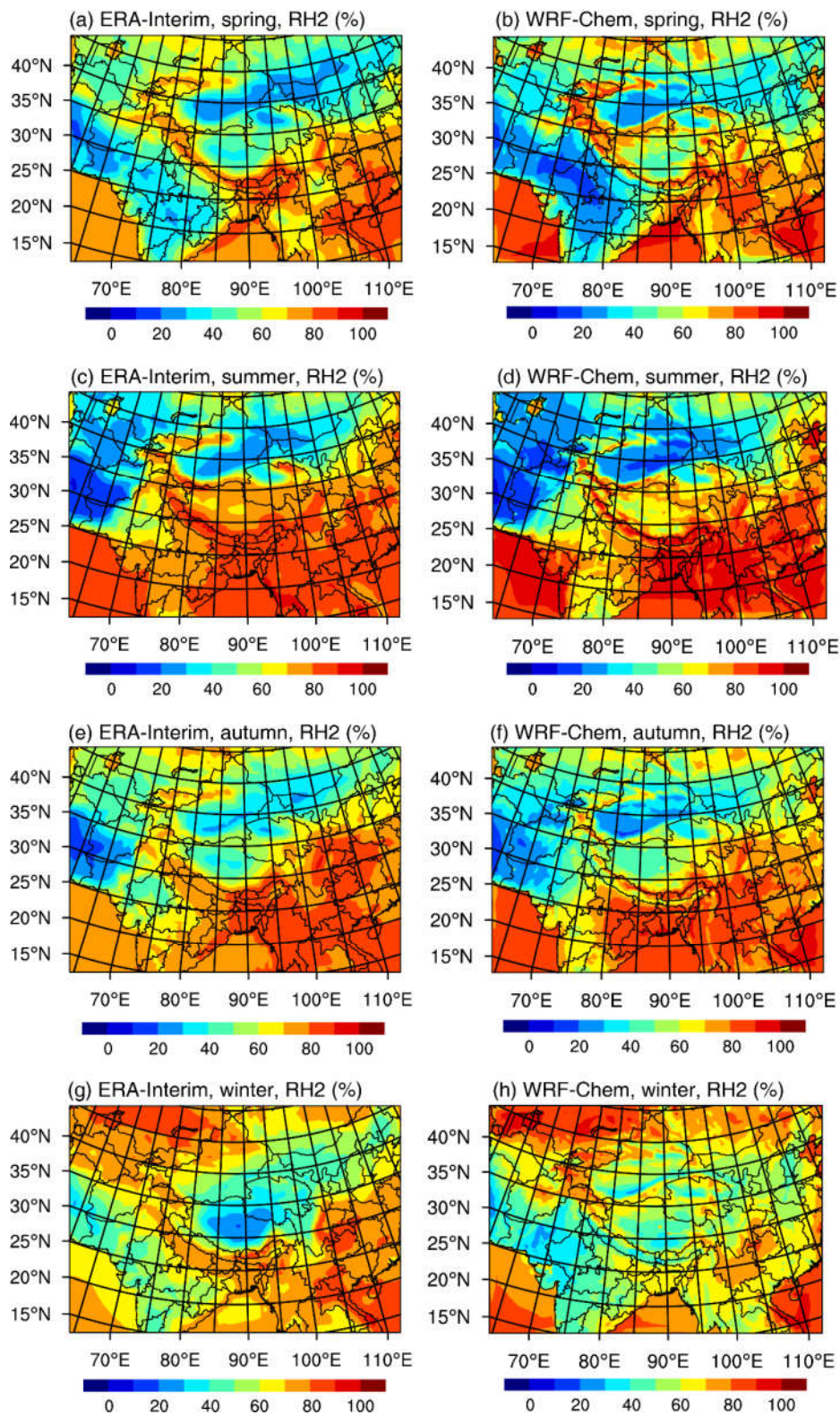
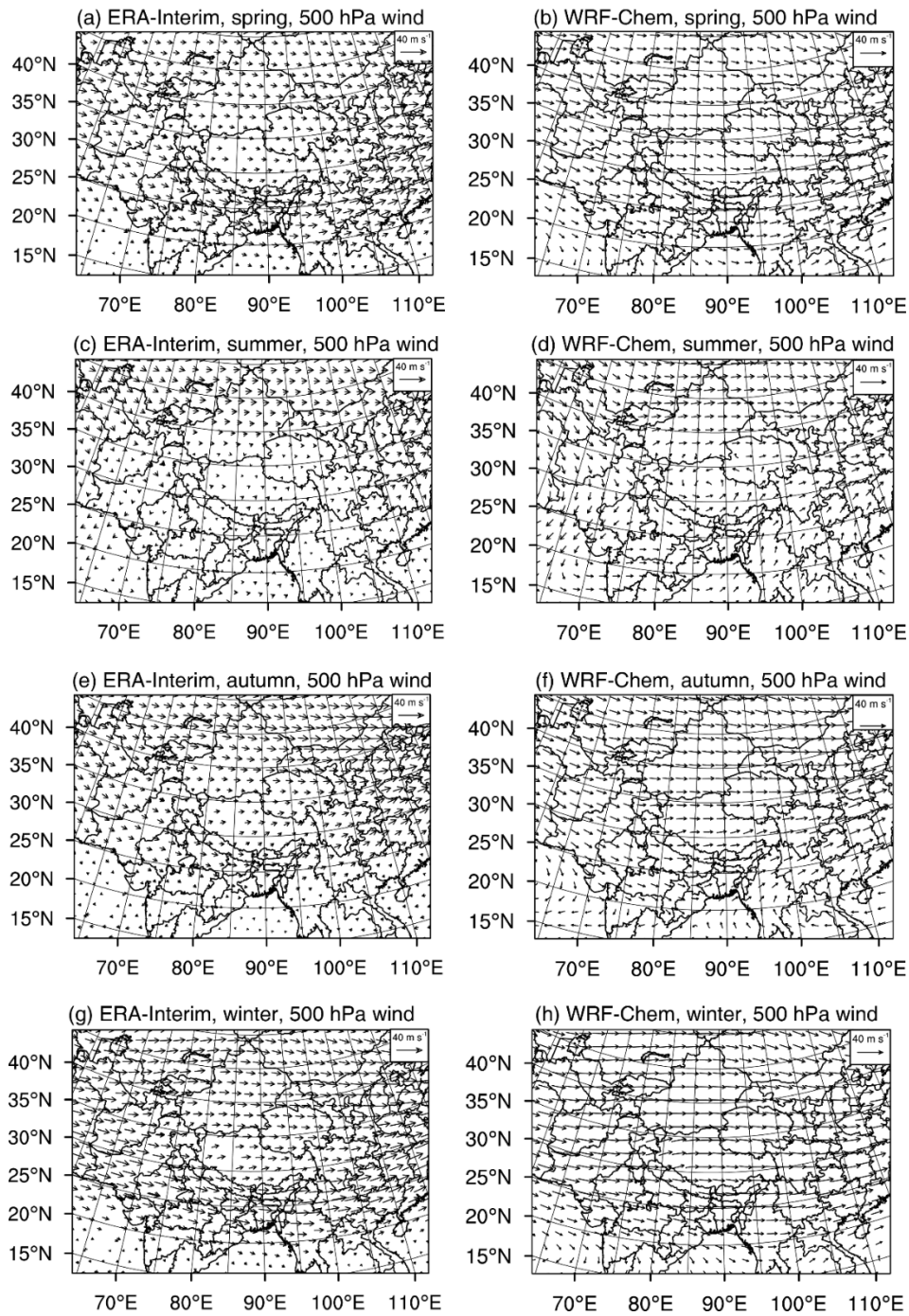


Fig. S4 Comparisons of seasonal mean RH2 between WRF-chem simulation and observation

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Fig. S5 Comparisons of seasonal mean wind at 500hPa between WRF-chem simulation and observation

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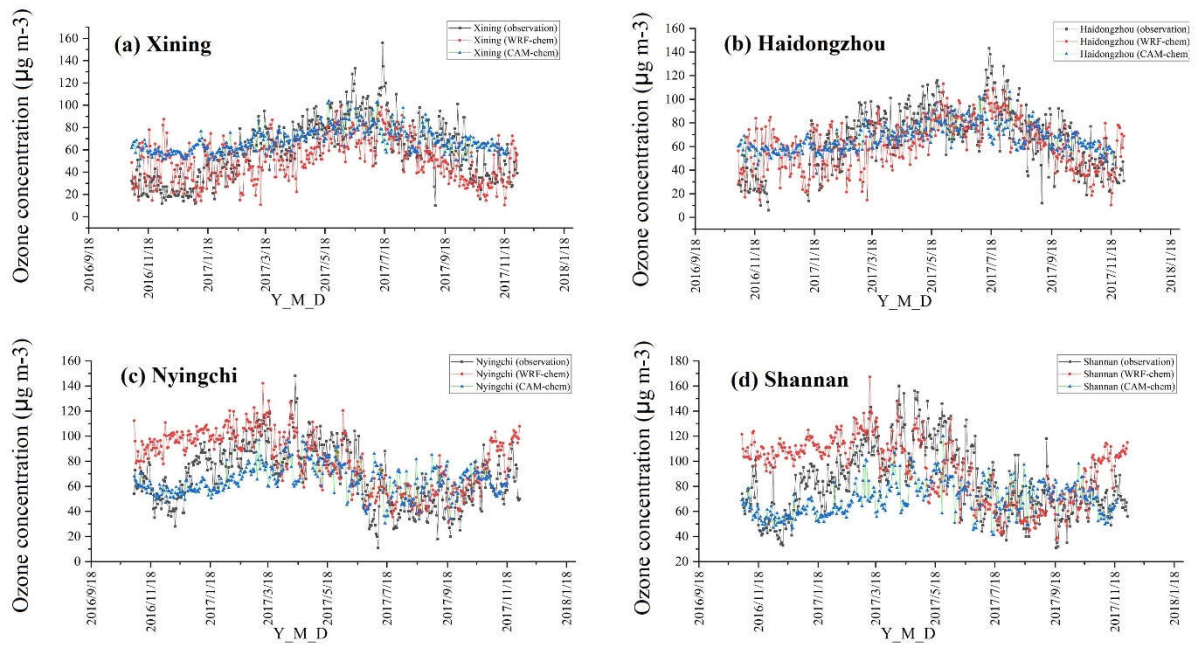
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Fig. S6 Comparisons of surface ozone concentrations between WRF-chem simulation, CAM-chem simulation and observation