Mixing layer height on the North China Plain and meteorological evidence of serious air pollution in Southern Hebei

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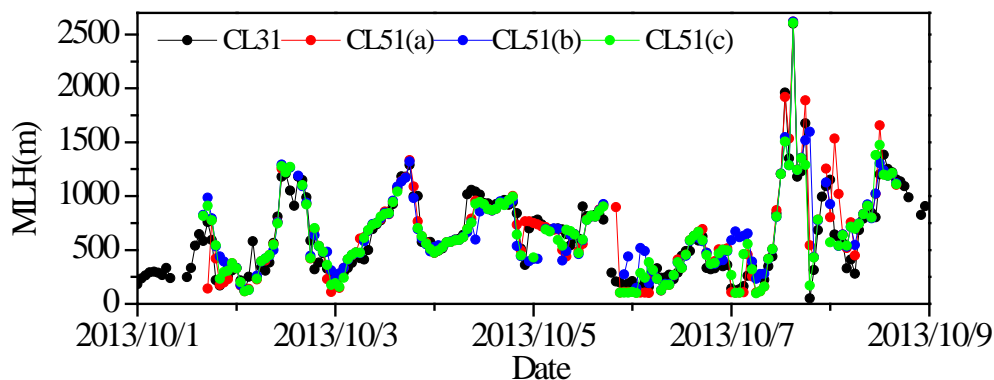
Fig. S1 Comparison between MLH measured by CL31 and by CL51 (a), CL51 (b) and CL51(c).

Table S1. Seasonal averages of MLH at the BJ, SJZ, TJ and QHD stations in NCP from December 2013 to November 2014.

Station	Spring(m)	Summer(m)	Autumn(m)	Winter(m)
BJ	655±166	722±169	531±169	493±131
SJZ	489±142	623±161	404±147	347±153
TJ	627±189	655±165	493±169	436±178
QHD	498±217	447±153	451±146	467±180

Table S2 Annual means of T, RH, MLH and V_c for the BJ, SJZ, TJ and QHD stations in NCP from December 2013 to November 2014.

	T(℃)	RH (%)	MLH (m)	V_c (m^2 s^{-1})
BJ	13.7	51.2	594	3054.5
SJZ	13.5	65.7	464	2045.4
TJ	14.1	57.0	546	
QHD	10.9	68.6	465	3021.0
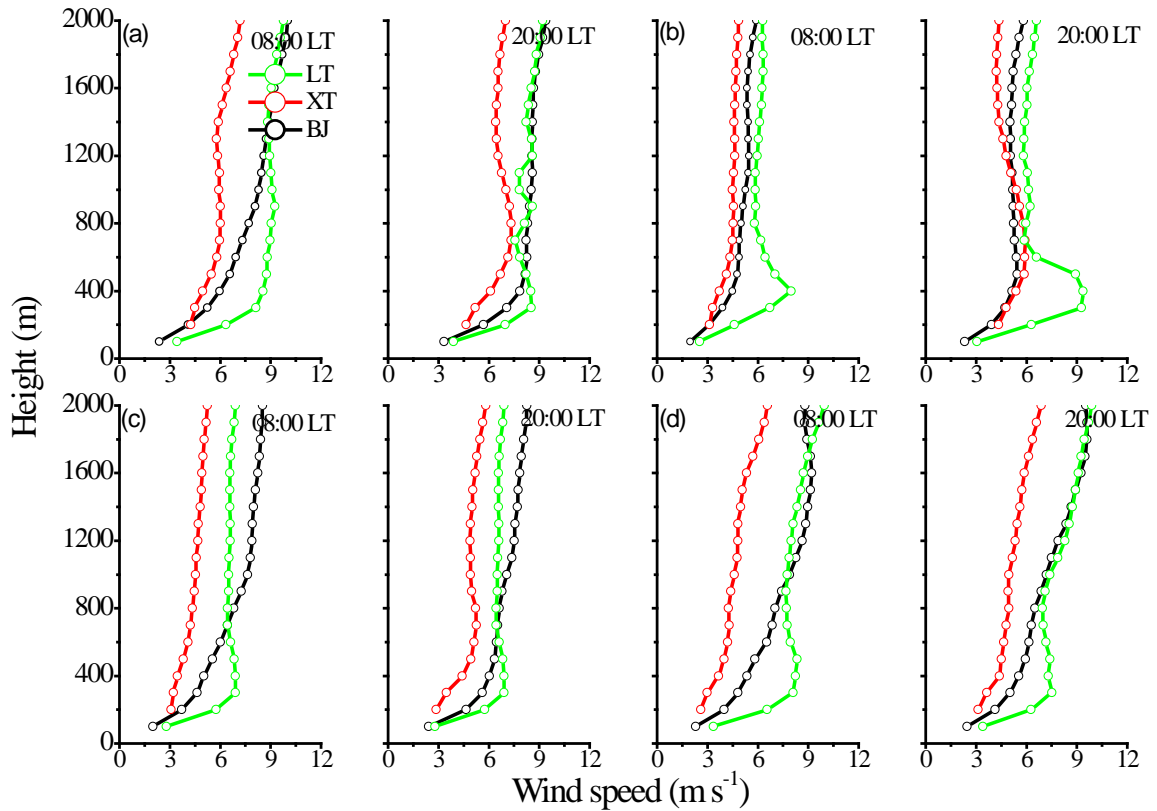
Fig.S2 Vertical profiles of horizontal wind speed at the BJ, XT and LT stations in (a) spring, (b) summer, (c) autumn and (d) winter.
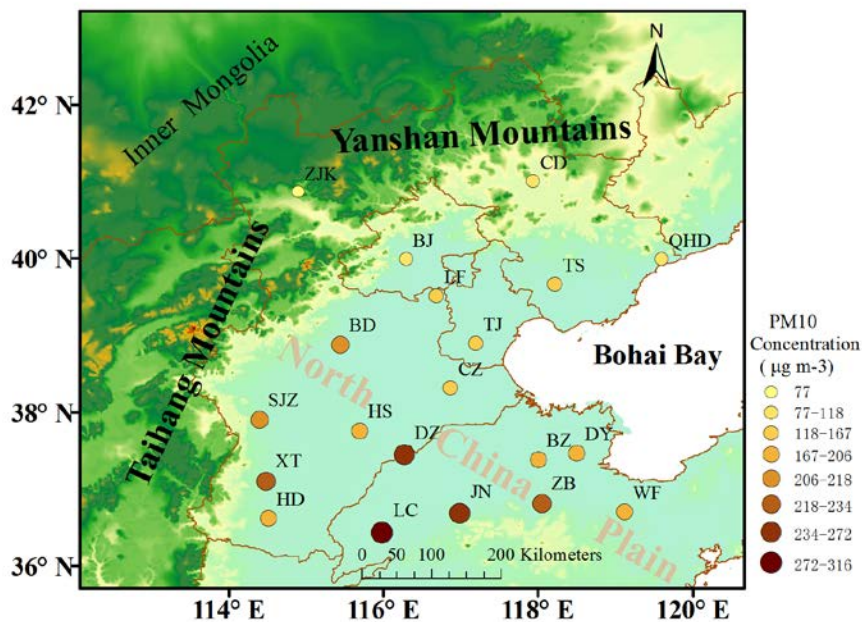
Fig. S3 Distributions of PM$_{10}$ concentrations at the NCP. The PM$_{10}$ observation sites (ZJK, CD, BJ, QHD, TJ, LF, TS, CZ, BD, SJZ, HS, XT, HD, DZ, LC, JN, BZ, DY, ZB and WF) were marked in the map with black abbreviations. The sizes and colors of the circular marks are representatives of the annual means of near-ground PM$_{10}$ concentrations, the bigger and darker the circle, the larger the concentrations.