Table 1. Observed concentrations of sulfate aerosol in China

Location	Period		Concentrations (μg m^{-3})	Reference
Beijing (116.4°E, 39.9°N)	Aug 2001 - Sep 2002	Summer	13.43	Duan et al. (2006)
		Autumn	9.61	
		Winter	9.88	
		Spring	6.71	
Nanjing (118.8°E, 32.0°N)	Sep 2001		11.5	Yang et al. (2005)
	Apr 2001		8.79	Wang et al. (2002)
	Feb 2001		10.04	
Shanghai (121.5°E, 31.2°N)	Dec 2006 – Jan 2007	Winter	9.52	Fu et al. (2008)
	Jul – Aug 2004	Summer	5.43	Wang et al. (2006)
	Mar – Apr 2004	Spring	11.73	
	Sep – Oct 2003	Antumn	8.7	
Fuzhou (119.3°E, 26.1°N)	Apr 2007 – Jan 2008	Spring	10.14±2.66	Xu et al. (2012)
		Summer	6.62±1.51	
		Autumn	11.59±4.28	
		Winter	14.78±6.44	
Hong Kong (114.2°E, 22.3°N)	Nov 2000 – Feb 2001		8.10	Ho et al. (2006)
Qingdao (121 °E, 36.5 °N)	25 Feb – 15 Mar 2002		11.9	Takami et al. (2006)
	17 Feb – 02 Mar 2001		19.1	
Dalian (121.5 °E, 39 °N)	2006 to 2007	Spring	11.68	Zhang et al. (2012)[a]
		Summer	15.15	
		Autumn	13.58	
		Winter	15.65	
Gaolanshan (105.9°E,36.0°N)	2006 to 2007	Spring	7.41	
		Summer	7.08	
		Autumn	11.91	
		Winter	12.91	
Jinsha (114.2°E, 29.6°N)	2006 to 2007	Spring	13.35	
		Summer	11.56	
		Autumn	22.03	
		Winter	17.93	
Lhasa (91.1°E, 29.7°N)	2006 to 2007	Spring	1.74	
		Summer	1.85	
		Autumn	1.63	
		Winter	2.21	
Lin'an (121.2°E, 31.1°N)	2006 to 2007	Spring	13.16	
		Summer	12.09	
		Autumn	12.95	

		Winter	14.32	
Longfengshan (127.6°E, 44.7°N)	2006 to 2007	Spring	4.69	
		Summer	7.32	
		Autumn	4.73	
		Winter	8.15	
Nanning (108.3°E, 22.8°N)	2006 to 2007	Spring	9.22	
		Summer	8.25	
		Autumn	17.42	
		Winter	14.84	
Panyu (113.35°E, 23.0°N)	2006 to 2007	Spring	16.09	
		Summer	10.25	
		Autumn	17.84	
		Winter	16.28	
Taiyangshan (111.7°E, 29.2°N)	2006 to 2007	Spring	11.92	
		Summer	15.71	
		Autumn	20.91	
		Winter	16.59	

[a]Observations in Zhang et al. (2012) are TSP (total suspended particles), which have been multiplied by 0.6 as suggested by Zhang et al. (2002) to convert $PM_{2.5}$ values in this table.

Table 2. Observed concentrations of nitrate aerosol in China

Location	Period		Concentrations (μg m^{-3})	Reference
Beijing (116.4°E, 39.9°N)	Jul 1999 - Sep 2000	Summer	4.59	He et al. (2001)
		Spring	7.26	
	2001-2003	Autumn	9.14	Wang et al. (2005)
		Winter	12.29	
Nanjing (118.8°E, 32.0°N)	Sep 2001		3.24	Yang et al. (2005)
	Apr 2001		4.53	Wang et al. (2002)
	Feb 2001		5.67	
Shanghai (121.5°E, 31.2°N)	20 Mar 1999 -27 Mar 2000	Spring	5.4	Ye et al. (2003)
	Jul-Aug 2004	Summer	2.59	Wang et al. (2006)
	Sep-Oct 2003	Antumn	3.70	
	Dec 2006 - Jan 2007	Winter	6.76	Fu et al. (2008)
Hangzhou (120.1°E, 30.2°N)	Sep 2001- Aug 2002	Summer	4.68	Cao et al. (2009)
		Spring	7.20	
		Autumn	7.07	
		Winter	11.19	
Tianjin (117.12°E, 39.4°N)	Jan 2008		16.6	Gu et al. (2011)
Hong Kong (114.2°E, 22.3°N)	Nov 2000 - Feb 2001		1.20	Ho et al. (2006)
Fuzhou (119.3°E, 26.1°N)	Apr 2007 – Jan 2008	Autumn	3.13±2.13	Xu et al. (2012)
		Winter	8.77±3.17	
		Spring	4.60±1.09	
		Summer	1.10±0.35	
Qingdao (121 °E, 36.5 °N)	25 Feb–15 Mar 2002		10.3	Takami et al. (2006)
	17 Feb–02 Mar 2001		12.5	
Fenghuanshan (124 °E, 40.5 °N)	17 Feb–01 Mar, 2001		7.3	
Dalian (121.5 °E, 39 °N)	2006 to 2007	Spring	8.32	
		Summer	7.09	
		Autumn	6.92	
		Winter	9.45	
Dunhuang (94.7°E, 40.2°N)	2006 to 2007	Spring	1.17	
		Summer	1.34	
		Autumn	1.37	
		Winter	1.82	
Gucheng (115.8°E, 39.1°N)	2006 to 2007	Spring	10.21	
		Summer	9.75	

		Autumn	12.06	Zhang et al. (2012)[a]
		Winter	16.30	
Jinsha (114.2°E, 29.6°N)	2006 to 2007	Spring	3.00	
		Summer	1.62	
		Autumn	7.10	
		Winter	5.79	
Lhasa (91.1°E, 29.7°N)	2006 to 2007	Spring	1.38	
		Summer	1.25	
		Autumn	1.33	
		Winter	1.39	
Lin'an (121.2°E, 31.1°N)	2006 to 2007	Spring	5.59	
		Summer	3.37	
		Autumn	5.06	
		Winter	6.99	
Longfengshan (127.6°E, 44.7°N)	2006 to 2007	Spring	2.43	
		Summer	1.44	
		Autumn	2.50	
		Winter	5.42	
Nanning (108.3°E, 22.8°N)	2006 to 2007	Spring	2.92	
		Summer	1.84	
		Autumn	3.00	
		Winter	4.39	
Panyu (113.35°E, 23.0°N)	2006 to 2007	Spring	7.68	
		Summer	3.60	
		Autumn	5.95	
		Winter	8.83	
Taiyangshan (111.7°E, 19.2°N)	2006 to 2007	Spring	3.01	
		Summer	2.51	
		Autumn	7.57	
		Winter	5.73	

[a]Observations in Zhang et al. (2012) are TSP (total suspended particles), which have been multiplied by 0.6 as suggested by Zhang et al. (2002) to convert $PM_{2.5}$ values in this table.

Table 3. Observed concentrations of BC aerosol in China

Location	Period		Concentrations (μg m^{-3})	Reference
Beijing (116.4°E, 39.9°N)	Jul 1999 - Sep 2000	Spring	6.67	He et al. (2001)
	Jan-Jul 2003	Summer	4.6±3.0	Cao et al. (2007)
		Winter	7.1±3.5	
Nanjing (118.8°E , 32.0°N)	Feb 2001 – Sep 2001	Feb	2.88	Yang et al. (2005)
		Sep	4.01	
Shanghai (121.5°E, 31.2°N)	Apr 2006 –Jan 2007	Summer	1.1	Hou et al. (2011)
		Autumn	2.1	
	Oct 2005-Jul 2006	Spring	3.1±1.5	Feng et al. (2009)
		Winter	2.3±1.0	
Hangzhou (120.1°E, 30.2°N)	Sep 2001 – Aug 2002	Winter	4.43	Cao et al. (2009)
		Summer	2.82	
		Spring	2.96	
		Autumn	4.38	
Changchun (125.3°E, 43.9°N)	Jan - Jul 2003	Summer	2.9±1.4	Cao et al. (2007)
Qingdao (120.3°E, 36.0°N)	Jan - Jul 2003	Winter	6.3±2.4	
		Summer	1.4±0.5	
HongKong (114.1°E, 22.2°N)	Jan - Jul 2003	Winter	5.8±2.6	
Wuhan (114.2°E, 30.5°N)	Jan - Jul 2003	Summer	3.0±0.07	
Xiamen (118.1°E, 24.4°N)	Jan - Jul 2003	Winter	5.0±1.4	
		Summer	1.4±1.3	
Sheshan (131.2°E, 31.1°N)	Oct – Nov 1999		3.2±1.9	Xu et al. (2002)
Changshu (120.8°E, 31.7°N)	Oct – Nov 1999		3.6±1.7	
Akdala (87.97°E, 47.1°N)	Jan-Mar 2005		0.33	Fu et al. (2012)
Muztagh (75.01°E, 38.3°N)	2005		0.051	
Zhuzhang (99.72°E, 28°N)	Jan-Feb 2005		0.35	
Dalian (121.5 °E, 39 °N)	2006 to 2007	Spring	2.74	
		Summer	2.12	
		Autumn	3.27	
		Winter	4.53	
Gaolanshan (105.9°E,36.0°N)	2006 to 2007	Summer	1.73	
		Autumn	2.44	

Gucheng (115.8°E, 39.1°N)	2006 to 2007	Spring	4.18	Zhang et al. (2012)[a]
		Summer	4.24	
		Autumn	6.96	
Jinsha (114.2°E, 29.6°N)	2006 to 2007	Spring	1.35	
		Summer	1.14	
		Autumn	2.58	
		Winter	2.07	
Lhasa (91.1°E, 29.7°N)	2006 to 2007	Spring	1.82	
		Summer	2.09	
		Autumn	2.10	
		Winter	3.27	
Lin'an (121.2°E, 31.1°N)	2006 to 2007	Spring	2.51	
		Summer	2.25	
		Autumn	2.49	
		Winter	2.91	
Longfengshan (127.6°E, 44.7°N)	2006 to 2007	Spring	0.92	
		Summer	0.67	
		Autumn	1.51	
		Winter	2.30	
Nanning (108.3°E, 22.8°N)	2006 to 2007	Spring	1.58	
		Summer	1.64	
		Autumn	3.00	
		Winter	2.99	
Panyu (113.35°E, 23.0°N)	2006 to 2007	Spring	4.90	
		Summer	2.92	
		Autumn	4.48	
		Winter	5.80	
Taiyangshan (111.7°E, 19.2°N)	2006 to 2007	Spring	1.23	
		Summer	1.26	
		Autumn	2.20	
		Winter	1.57	
Xi'an (108.9°E, 34.3°N)	2006 to 2007	Spring	6.90	
		Summer	4.56	
		Autumn	6.49	
		Winter	11.16	
Zhengzhou (113.7°E, 34.8°N)	2006 to 2007	Spring	4.84	
		Summer	4.18	
		Autumn	5.96	
		Winter	7.65	

[a]Observations in Zhang et al. (2012) are TSP (total suspended particles), which have been

multiplied by 0.6 as suggested by Zhang et al. (2002) to convert $PM_{2.5}$ values in this table.

Table 4. Observed concentrations of OC aerosol in China

Location	Period		Concentrations (μg m^{-3})	Reference
Beijing (116.4°E, 39.9°N)	Jul 1999 - Sep2000	Summer	13.42	He et al. (2001)
		Spring	18.21	
Nanjing (118.8°E, 32.0°N)	2001	Feb	18.34	Wang et al. (2002)
		Apr	20.14	
Shanghai (121.5°E, 31.2°N)	Apr 2006 –Jan 2007	Spring	8.4±2.2	Hou et al. (2011)
		Summer	3.8±1.6	
		Autumn	6.5±2.6	
		Winter	10.9±4.5	
Hangzhou (120.1°E, 30.2°N)	Sep 2001 – Aug 2002	Winter	23.81	Cao et al. (2009)
		summer	13.54	
		spring	14.03	
Changchun (125.3°E, 43.9°N)	Jan - Jul 2003	Summer	12.5±5.2	Cao et al. (2007)
Qingdao (120.3°E, 36.0°N)	Jan - Jul 2003	Summer	5.0±2.9	
Tianjin (117.2°E, 39.1°N)	Jan - Jul 2003	Summer	16.5±4.1	
HongKong (114.1°E, 22.2°N)	Jan - Jul 2003	Winter	11.2±4.8	
		Summer	7.3±1.9	
Wuhan (114.2°E, 30.5°N)	Jan - Jul 2003	Summer	14.2±3.7	
Xiamen (118.1°E, 24.4°N)	Jan - Jul 2003	Winter	16.5±5.4	
Muztagh (75.01°E, 38.3°N)	2005		0.51	Fu et al. (2012)
Zhuzhang (99.72°E, 28°N)	Jan-Feb 2005		3.1	
Chengdu (104.1°E, 30.6°N)	2006 to 2007	Spring	22.82	
		Summer	19.61	
		Autumn	22.78	
		Winter	22.12	
Dalian (121.5 °E, 39 °N)	2006 to 2007	Spring	14.10	
		Summer	9.03	
		Autumn	10.71	
		Winter	13.90	
Gaolanshan (105.9°E,36.0°N)	2006 to 2007	Spring	9.66	
		Summer	9.44	
		Autumn	11.87	
		Winter	14.65	

Gucheng (115.8°E, 39.1°N)	2006 to 2007	Spring	15.43	Zhang et al. (2012)[a]
		Spring	15.43	
		Summer	12.90	
		Autumn	23.56	
		Winter	36.80	
Jinsha (114.2°E, 29.6°N)	2006 to 2007	Spring	8.09	
		Summer	7.20	
		Autumn	12.19	
		Winter	10.17	
Lhasa (91.1°E, 29.7°N)	2006 to 2007	Spring	12.11	
		Summer	11.37	
		Autumn	11.48	
		Winter	17.89	
Lin'an (121.2°E, 31.1°N)	2006 to 2007	Spring	9.15	
		Summer	8.08	
		Autumn	8.77	
		Winter	10.57	
Longfengshan (127.6°E, 44.7°N)	2006 to 2007	Spring	7.71	
		Summer	5.79	
		Autumn	11.22	
		Winter	13.01	
Nanning (108.3°E, 22.8°N)	2006 to 2007	Spring	7.75	
		Summer	8.03	
		Autumn	12.67	
		Winter	13.22	
Panyu (113.35°E, 23.0°N)	2006 to 2007	Spring	12.33	
		Summer	8.67	
		Autumn	13.20	
		Winter	16.36	
Taiyangshan (111.7°E, 19.2°N)	2006 to 2007	Spring	6.89	
		Summer	6.84	
		Autumn	10.17	
		Winter	7.95	
Xi'an (108.9°E, 34.3°N)	2006 to 2007	Spring	25.81	
		Summer	16.86	
		Autumn	20.66	
		Winter	44.79	
Zhengzhou (113.7°E, 34.8°N)	2006 to 2007	Spring	15.96	
		Summer	12.03	
		Autumn	19.65	

		Winter	23.87	

[a]Observations in Zhang et al. (2012) are TSP (total suspended particles), which have been multiplied by 0.6 as suggested by Zhang et al. (2002) to convert $PM_{2.5}$ values in this table.

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