

Supplementary Materials: Examining the Impacts of Land Use on Air Quality from a Spatio-Temporal Perspective in Wuhan, China. *Atmosphere* 2016, 7, doi:10.3390/atmos7050062

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Table S1. Detailed description of nine ambient air quality monitoring sites in Wuhan.

No.	Site Name	Location	District	Functional Zone
1	Hankou jiangtan	Inside the 1st ring road	Jiang' an district (64 km ² , urban area)	Scenery zone, Transportation zone
2	Hankou huaqiao	Near the 2nd ring road	Jiang' an district (64 km ² , urban area)	Residential zone, Transportation zone
3	Hanyang yuehu	Near the 1st ring road	Hanyang district (108 km ² , urban area)	Scenery zone, Transportation zone
4	Wuchang ziyang	Near the 1st ring road	Wuchang district (82 km ² , urban area)	Residential zone, Transportation zone
5	Donghu liyuan	Near the 2nd ring road	Wuchang district (82 km ² , urban area)	Scenery zone
6	Qingshan ganghua	Outside the 2nd ring road	Qingshan district (61 km ² , urban area)	Industrial zone, Transportation zone
7	Wujiashan	Outside the 3rd ring road	Dongxihu district (495 km ² , suburban area)	Industrial zone, Residential zone
8	Zhuankou xinqu	Outside the 3rd ring road	Caidian district (1100 km ² , suburban area)	Industrial zone, Residential zone
9	Donghu gaoxin	Near the 3rd ring road	Jiangxia district (2014 km ² , suburban area)	Industrial zone, Transportation zone

Table S2. Detailed information on satellite images used for land use information acquisition.

Date	Landsat No.	Imagery Type	Spatial Resolution (m)	Cloud Cover (%)
2007				
10 April	Landsat-5	TM	30	0.10
31 July	Landsat-5	TM	30	0.47
2008				
28 April	Landsat-5	TM	30	0.17
17 July	Landsat-5	TM	30	18.75
2009				
20 July	Landsat-5	TM	30	12.57
06 September	Landsat-5	TM	30	0.06
2010				
17 September	Landsat-7	ETM	30	0.00
03 October	Landsat-7	ETM	30	2.00
2011				
04 March	Landsat-5	TM	30	0.00
08 June	Landsat-5	TM	30	0.00
2012				
17 May	Landsat-7	ETM	30	0.03
2013				
31 July	Landsat-8	OLI	30	1.22
07 September	Landsat-8	OLI	30	0.12
2014				
06 October	Landsat-8	OLI	30	3.83
22 October	Landsat-8	OLI	30	12.04

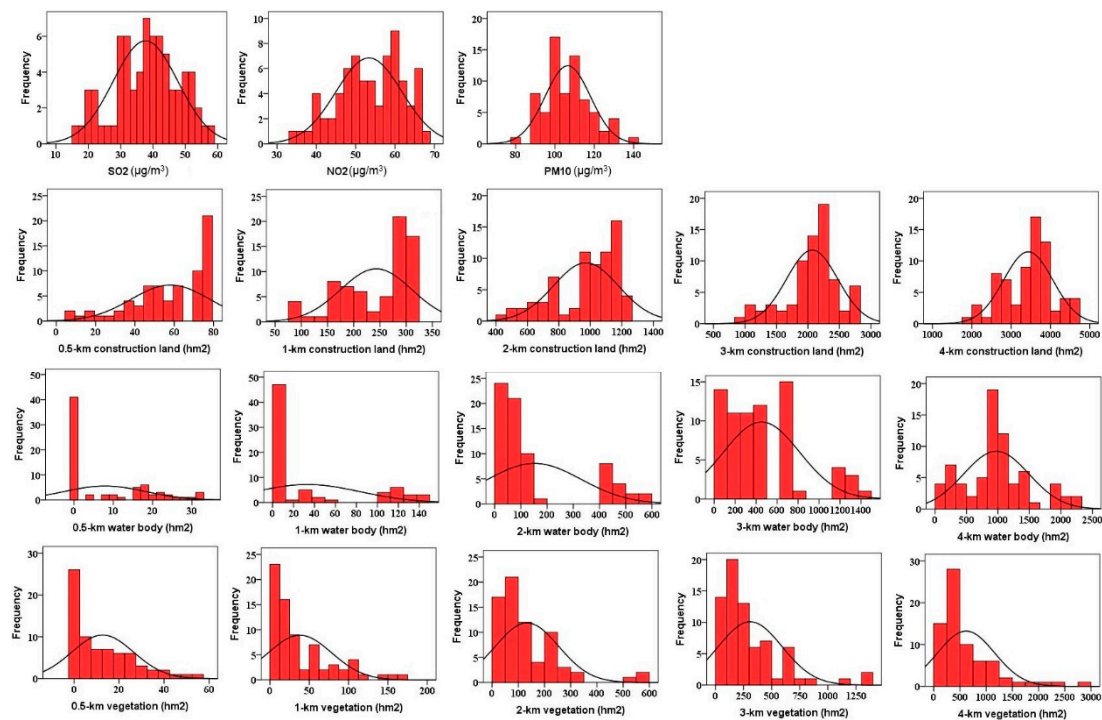


Figure S1. Frequency distribution histograms of air pollutants and land use variables.

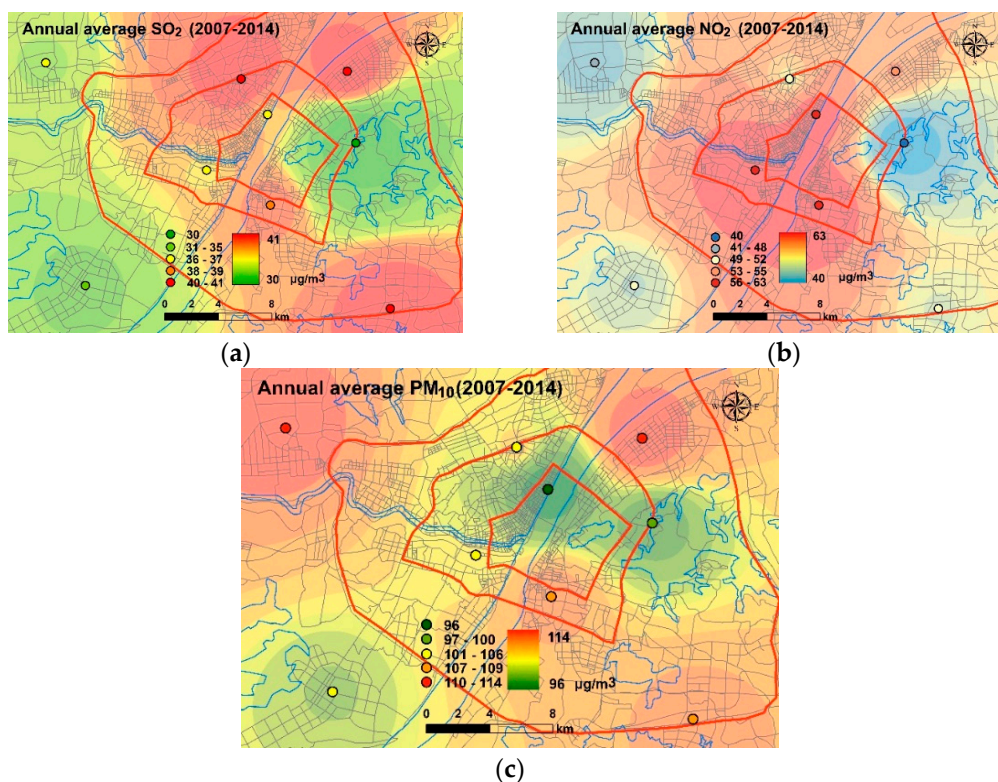


Figure S2. Spatial distribution of eight-year (2007–2014) average concentrations of three air pollutants in Wuhan based on IDW interpolation in ArcGIS10.1 with default parameters: (a) SO₂ concentration; (b) NO₂ concentration; (c) PM₁₀ concentration.

