

1 **Air quality in Delhi during the Commonwealth Games**

2 Pallavi Marrapu<sup>a,b,e</sup>, YafangCheng<sup>b,c</sup>,GufranBeig<sup>d</sup>, S. Sahu<sup>d</sup>, R.Srinivas<sup>d</sup>and Gregory  
3 R.Carmichael<sup>a,b</sup>

4  
5 a) Department of Chemical and Biochemical Engineering, University of Iowa, Iowa city, USA  
6 52242.

7 b) Center for Global and Regional Environmental Research, University of Iowa, Iowa city,  
8 USA 52242.

9 c) Multiphase Chemistry Department, Max Planck Institute Chemistry, Hahn-Meitner-Weg1 ,  
10 Mainz, Germany 55128.

11 d) Indian Institute of Tropical Meteorology (Ministry of Earth Sciences, Govt. of India)  
12 Dr. HomiBhabha Road, Pashan, Pune, India 411008.

13 e) Molina Center for Strategic Studies in Energy and Environment, La Jolla, California, USA  
14 92037.

15 Supplemental Information

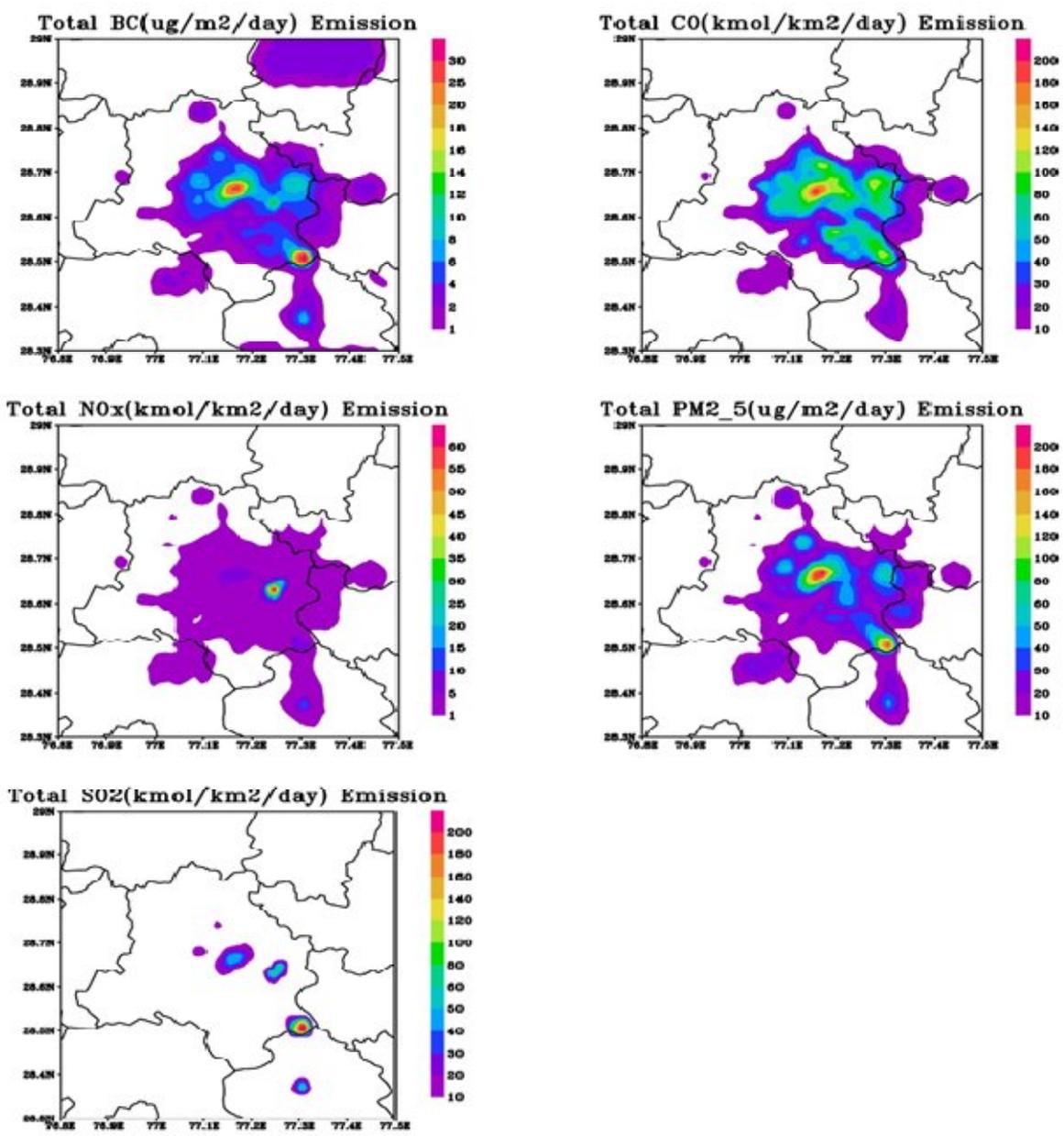
16  
17  
18  
19  
20  
21  
22  
23  
24  
25  
26  
27  
28  
29  
30  
31  
32  
33  
34  
35  
36  
37  
38  
39  
40  
41  
42  
43

44  
45  
46  
47

Table S1 Comparison of 20-day mean observed and predicted concentrations of various species at all monitoring sites with Original Emissions

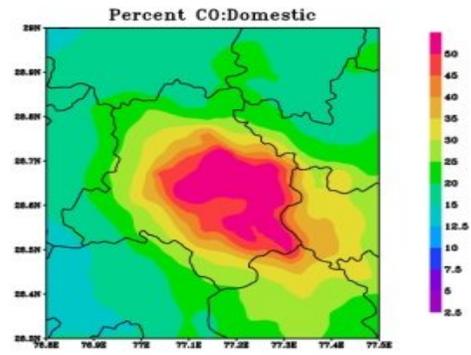
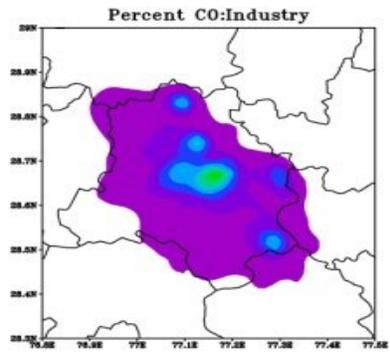
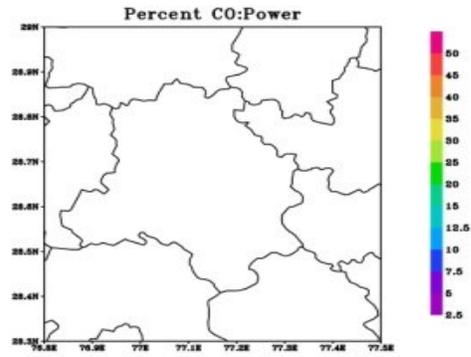
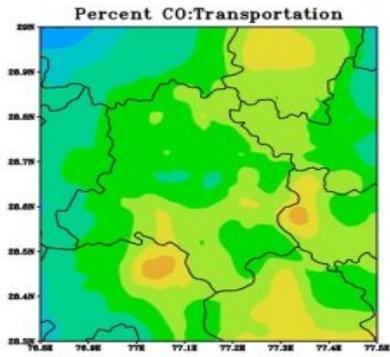
<b>NO<sub>x</sub>- Full</b>	<b>BC (µg/m<sup>3</sup>)</b>	<b>CO (ppmv)</b>	<b>NO<sub>x</sub> (ppbv)</b>	<b>O<sub>3</sub> (ppbv)</b>	<b>O<sub>3</sub>- DayTime(ppbv)</b>	<b>PM<sub>2.5</sub> (µg/m<sup>3</sup>)</b>	<b>PM<sub>10</sub> (µg/m<sup>3</sup>)</b>
<b>Mean- obs</b>	<b>9.5</b>	<b>1.7</b>	<b>67.8</b>	<b>30.1</b>	<b>54.5</b>	<b>110.8</b>	<b>237.6</b>
<b>Mean- model</b>	<b>13.8</b>	<b>1.0</b>	<b>150.3</b>	<b>26.3</b>	<b>60.4</b>	<b>181.5</b>	<b>294.3</b>
<b>Bias</b>	<b>10.1</b>	<b>-0.5</b>	<b>91.3</b>	<b>0.3</b>	<b>12.5</b>	<b>83.6</b>	<b>83.5</b>
<b>RMSE</b>	<b>15.7</b>	<b>1.4</b>	<b>170.3</b>	<b>29.2</b>	<b>40.6</b>	<b>162.8</b>	<b>259.5</b>
<b>R</b>	<b>0.6</b>	<b>0.4</b>	<b>0.4</b>	<b>0.7</b>	<b>0.4</b>	<b>0.4</b>	<b>0.4</b>

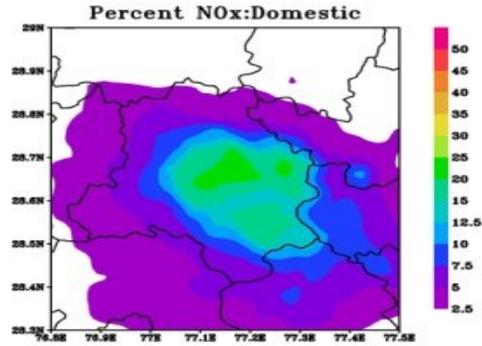
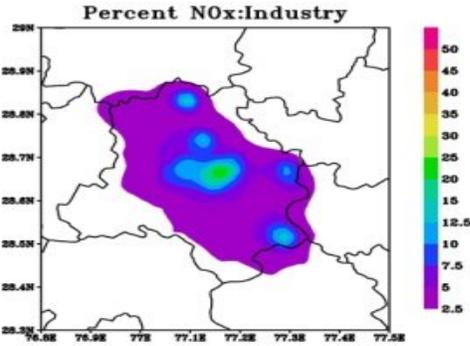
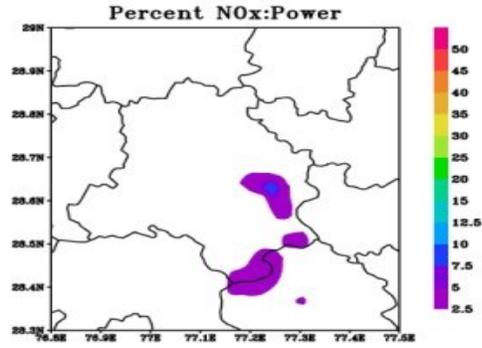
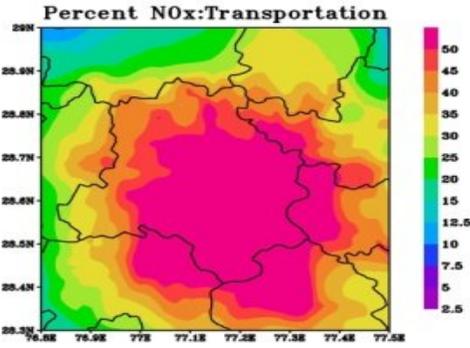
48



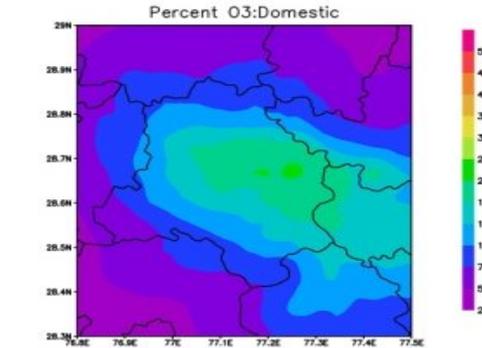
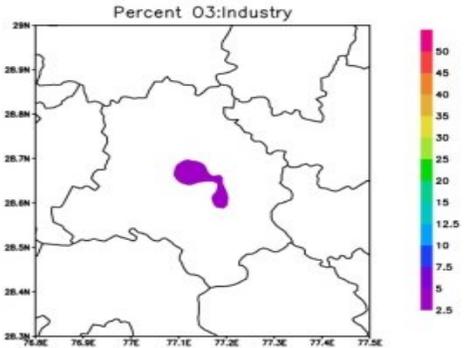
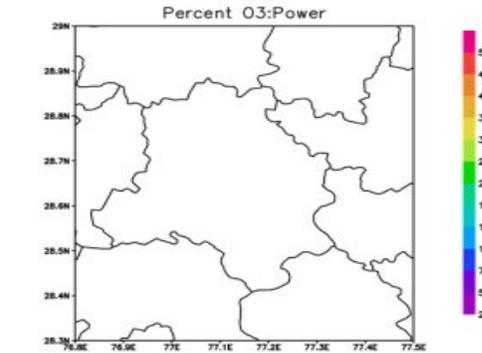
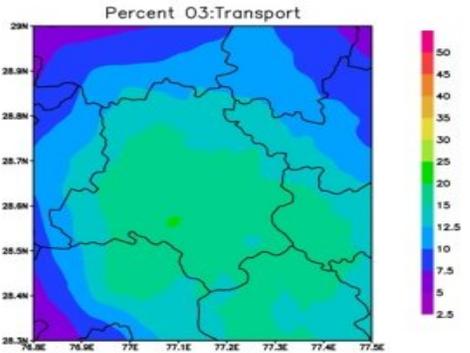
49  
50

Fig S1 .Emission distributions of BC, CO, NO<sub>x</sub>, PM<sub>2.5</sub> and SO<sub>2</sub> units over Delhi.

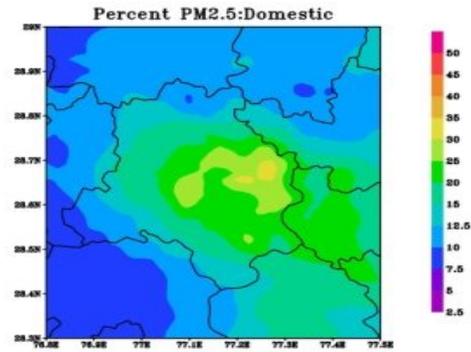
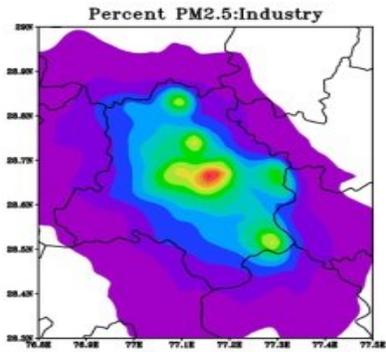
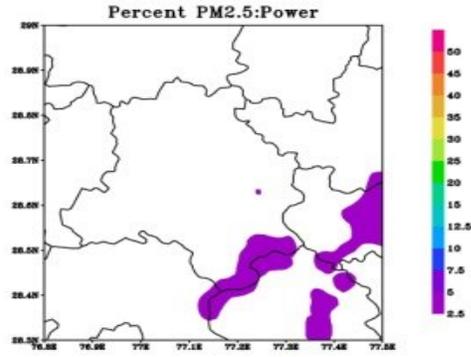
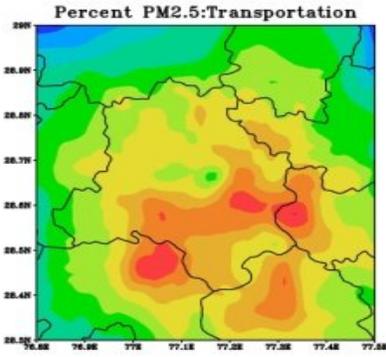




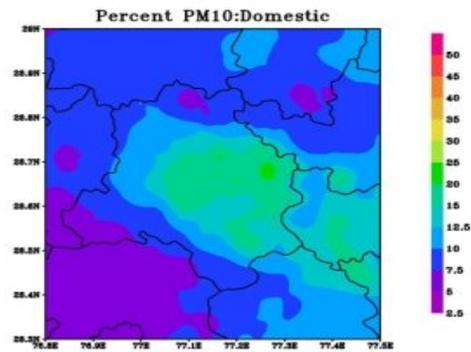
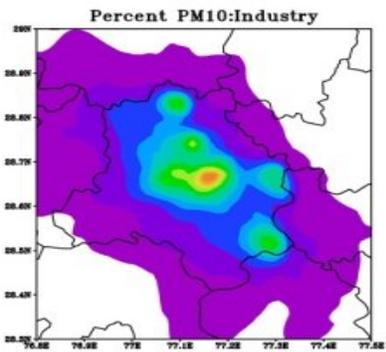
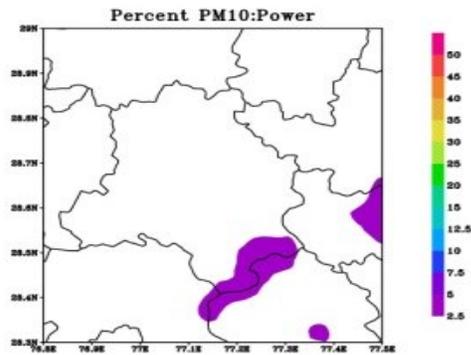
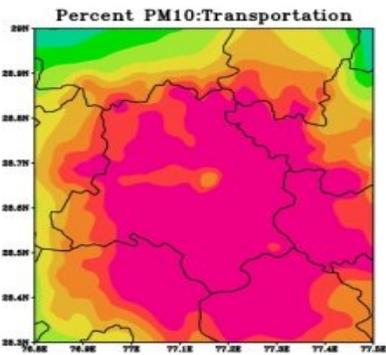
52



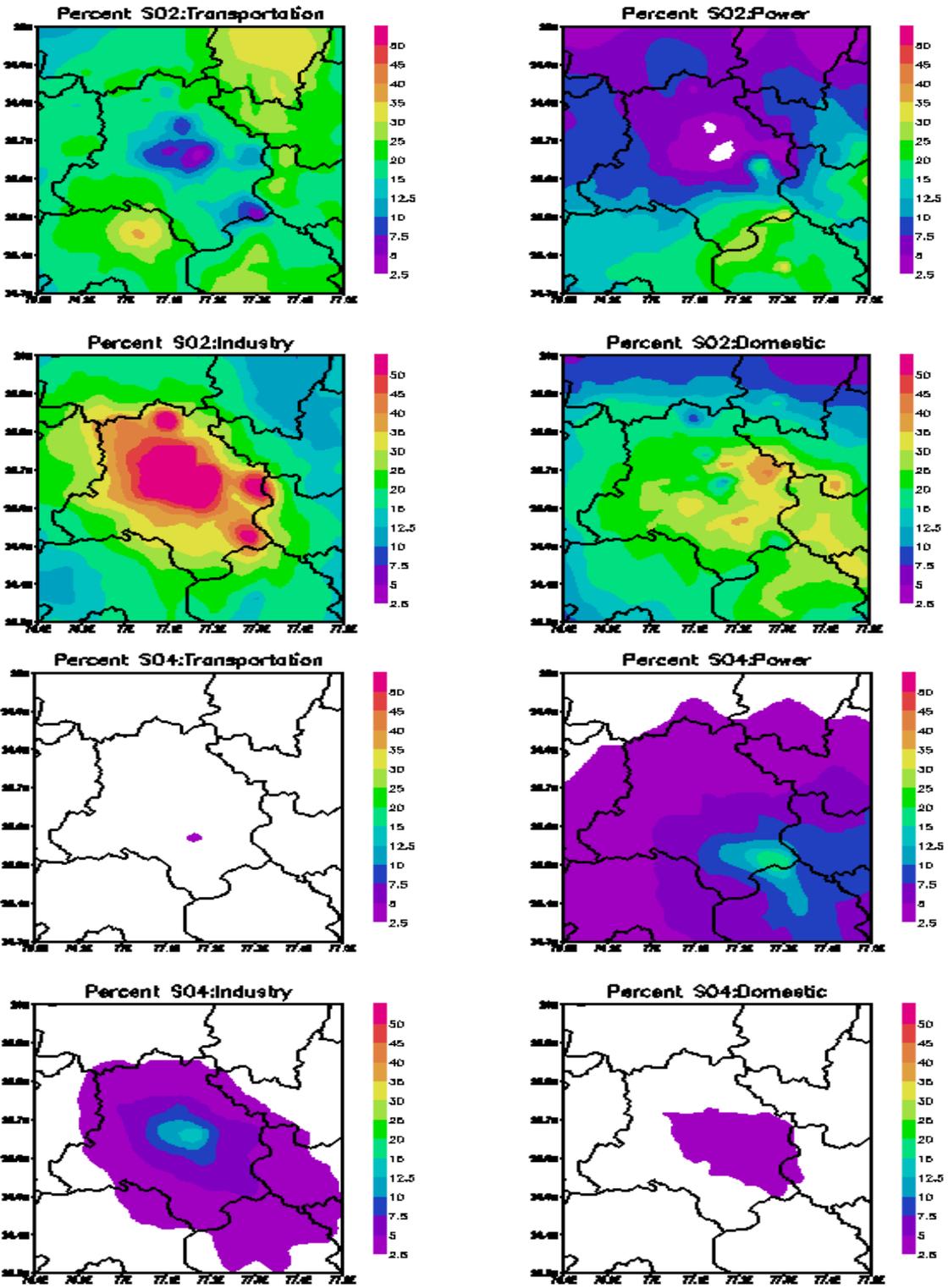
53



54



55  
56  
57  
58  
59



60

61

62 FigS2.Twenty day mean percent contribution of each pollutant from different sectors.

63