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Supplementary Materials: Modeling Ground Ozone Concentration Changes after Variations in Precursor Emissions and Assessing Their Benefits in the Kanto Region of Japan

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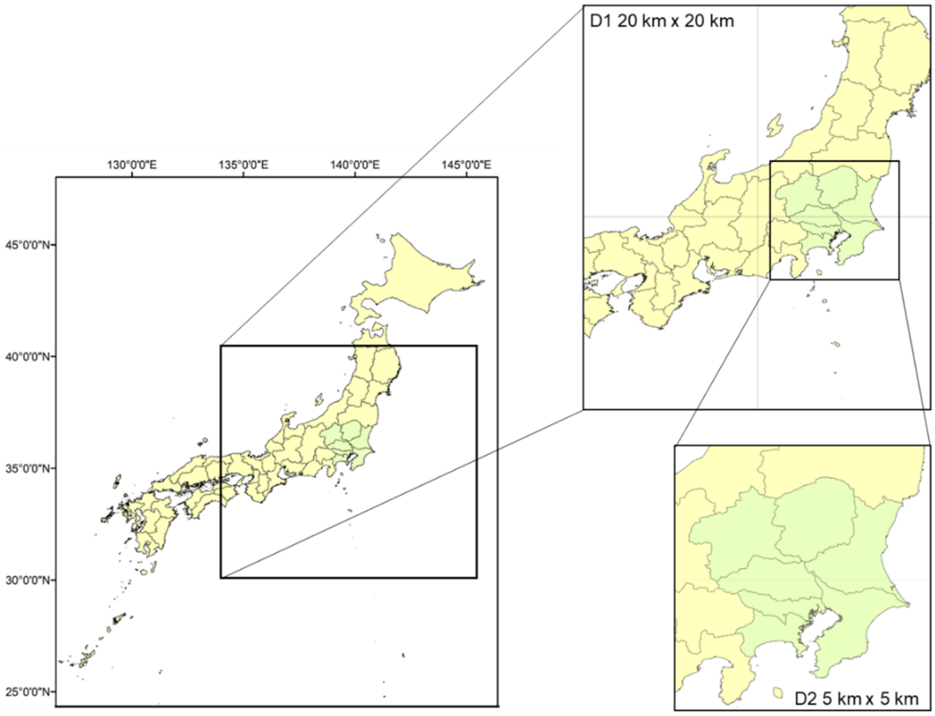

Figure S1. Simulation domains.

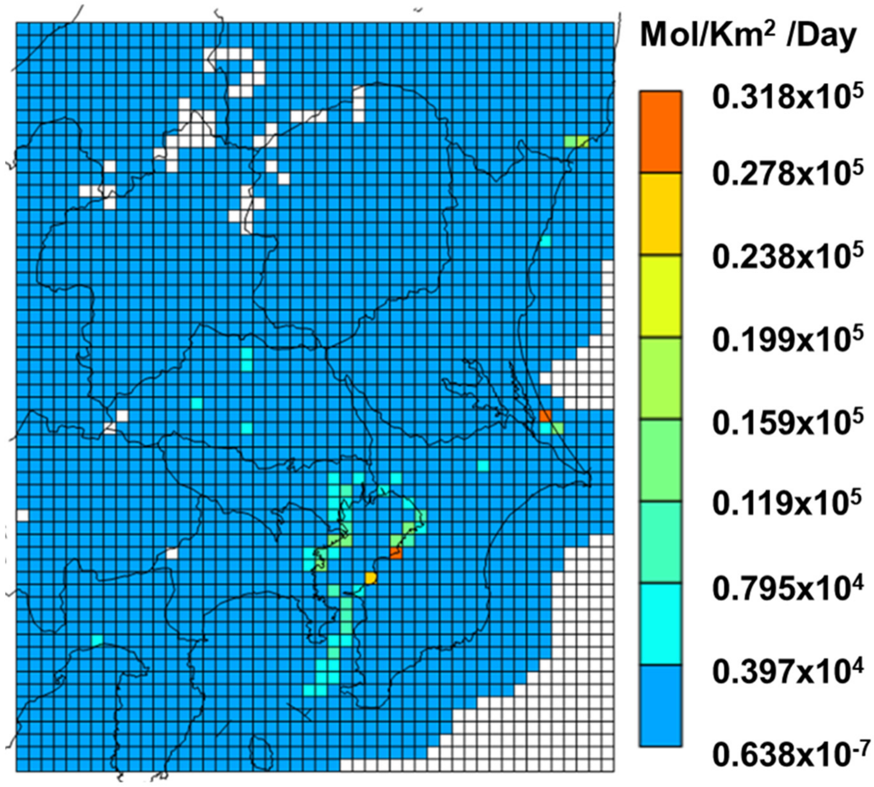

Figure S2. NO_x emission distribution in the Kanto region during the 2016 ozone season.

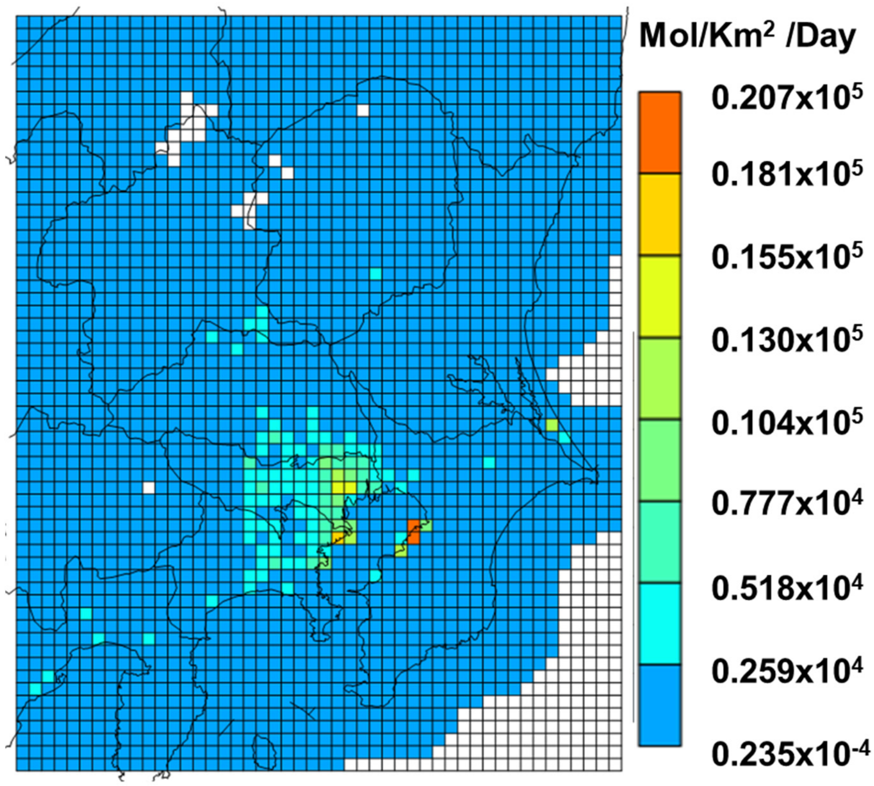

Figure S3. VOC emission distribution in the Kanto region during the 2016 ozone season.

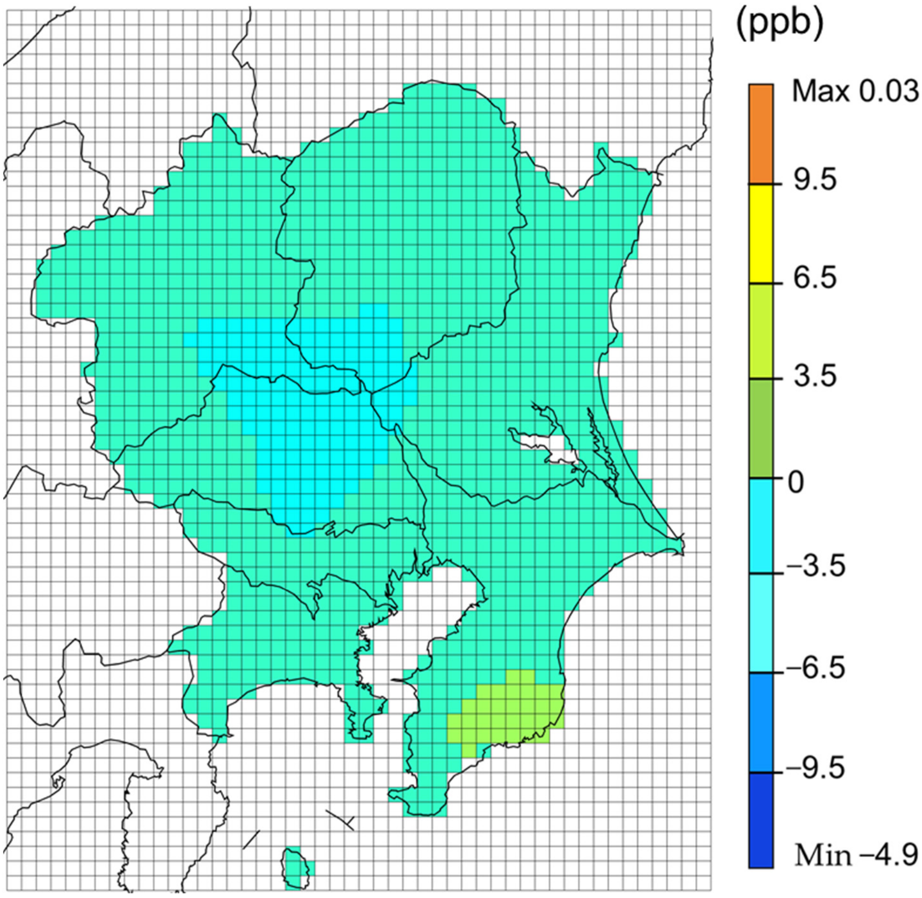

Figure S4. Ozone level differences between the N100V050 and BASE scenarios.

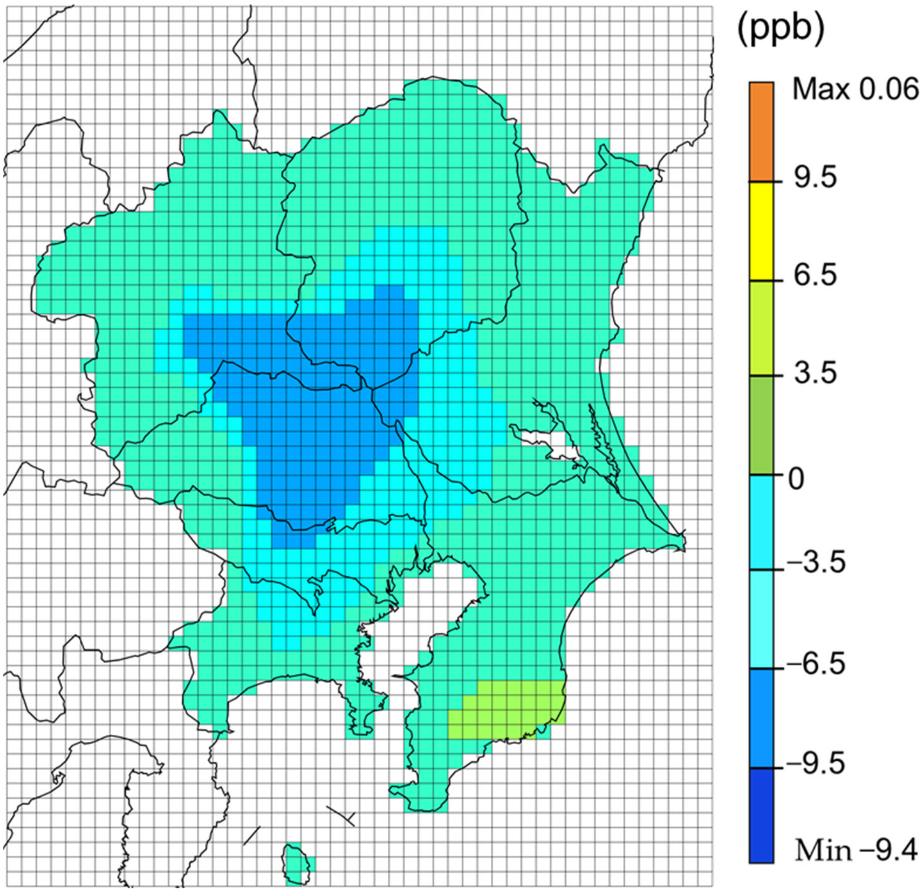

Figure S5. Ozone level differences between the N100V000 and BASE scenarios.

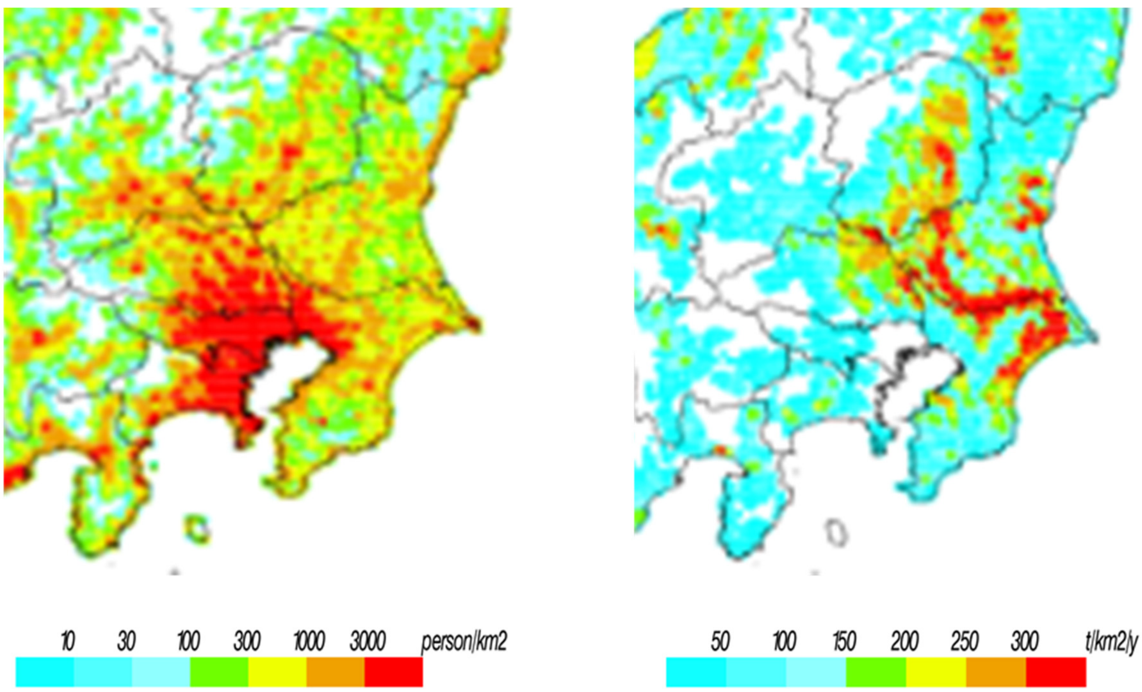

Figure S6. Population density and rice yield distribution in the Kanto region. Source: Ministry of Agriculture, Forestry and Fisheries of Japan [1].

Table S1. Pattern analysis classification results of ADMER-pro, with a 24% of occurrence frequency for the ozone season in 2016. The second column shows the days considered in this study.

Calculation period	**2016/01-2016/09**		
Occurrence frequency (%)	24		
Starting date	**Ending date**	**Pattern Classification**	**Occurrence frequency**
8/23/2016	8/26/2016	BSWm	4.57
6/5/2016	6/8/2016	CSWm	4.57
7/10/2016	7/13/2016	DSWm	4.57
8/7/2016	8/10/2016	BNEm	4
7/19/2016	7/22/2016	DSSm	4
5/6/2016	5/9/2016	DSWs	4

Table S2. Parameters used for the benefit assessment with BESystem [2–4].

Parameter	**Definition**	**Value used**
β	Rate of increase in early deaths due to ozone exposure	0.00125/ppb
VSL	Statistical Value of Life	4×10^8 JPY/person
γO_3	Rate of decrease in rice production	0.0034/ppb
VW	Price of 1 kg of rice	240 JPY/kg

References

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3. Turner, M.C.; Jerrett, M.; Pope, C.A.; Krewski, D.; Gapstur, S.M.; Diver, W.R.; Beckerman, B.S.; Marshall, J.D.; Su, J.; Crouse, D.L.; et al. Long-Term Ozone Exposure and Mortality in a Large Prospective Study. *Am. J. Respir. Crit. Care Med.* **2016**, *193*, 1134–1142. DOI:10.1164/RCCM.201508-1633OC.
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