Supporting Information

The impact of peripheral circulation characteristics of typhoon on sustained

ozone episodes over the Pearl River Delta region, China

Ying Li^{1,2*}, Xiangjun Zhao^{1,2,3}, Xuejiao Deng^{4*}, Jinhui Gao^{1,2,5}

¹ Department of Ocean Sciences and Engineering, Southern University of Science and Technology, Shenzhen, China

- ² Southern University of Science and Technology, Shenzhen, China
- ³ School of Mathematics and Finance, Chuzhou University, Anhui 239000, China
- ⁴ Institute of Tropical and Marine Meteorology/Guangdong Provincial Key Laboratory of Regional Numerical Weather Prediction, China Meteorological Administration, Guangzhou, China
- ⁵ Plateau Atmosphere and Environment Key Laboratory of Sichuan Province, School of Atmospheric Sciences, Chengdu University of Information Technology, Chengdu, China.
 - * Corresponding author e-mail address: (iamzxj841025@163.com) and (dxj@gd121.cn)

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Figure S1. The 1000 hPa horizontal wind vector and the 500 hPa Geopotential height (unit: m/s) of NCEP-FNL data at 14:00 on 5 July (a), 6 July (b),7 July (c) and 8 July(d); the red typhoon signs represent the moving typhoon center and the strings WPSH represent the location of WPSH.



Figure S2. Map of the two nested model domains.



Figure S3. The profile evolution of horizontal wind speed of 59285 wind profile radar station in PRD from 3 July to 13 July; the black solid line denotes the surface ozone concentration.



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Figure S7. The evolution of VMIX on the ground from 08:00 on 5 July to 20:00 on 10July.



Figure S8. The evolution of daily average ADV contributions of each layer within 0.2-1 km.



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