1   Supporting Information for

2   **Impacts of tropical cyclone-heatwave compound events on surface ozone in eastern China:**

3   **Comparison between the Yangtze River and Pearl River Deltas**

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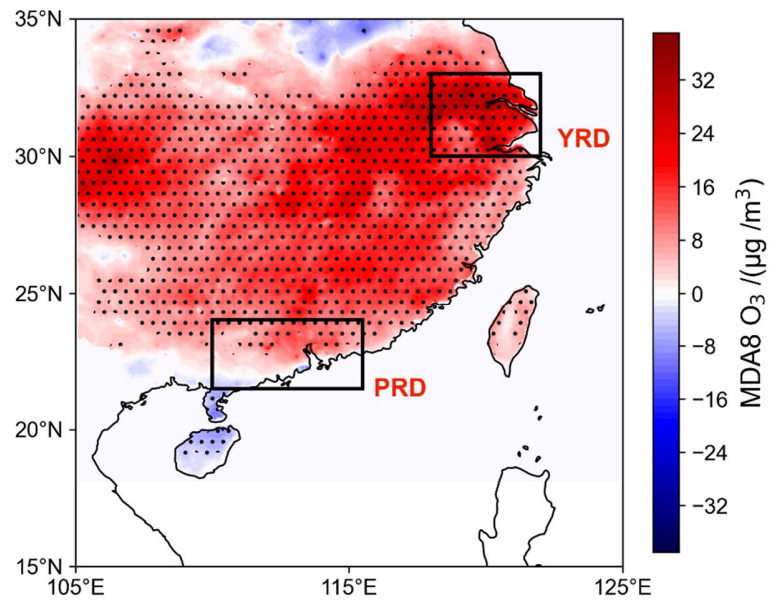
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28   **Figure S1.** Spatial distributions of ground-level MDA8 ozone concentration anomalies averaged

29   for TC-HDs compared to those during the periods of TC occurring alone. YRD and PRD regions

30   are outlined in black boxes in panel.

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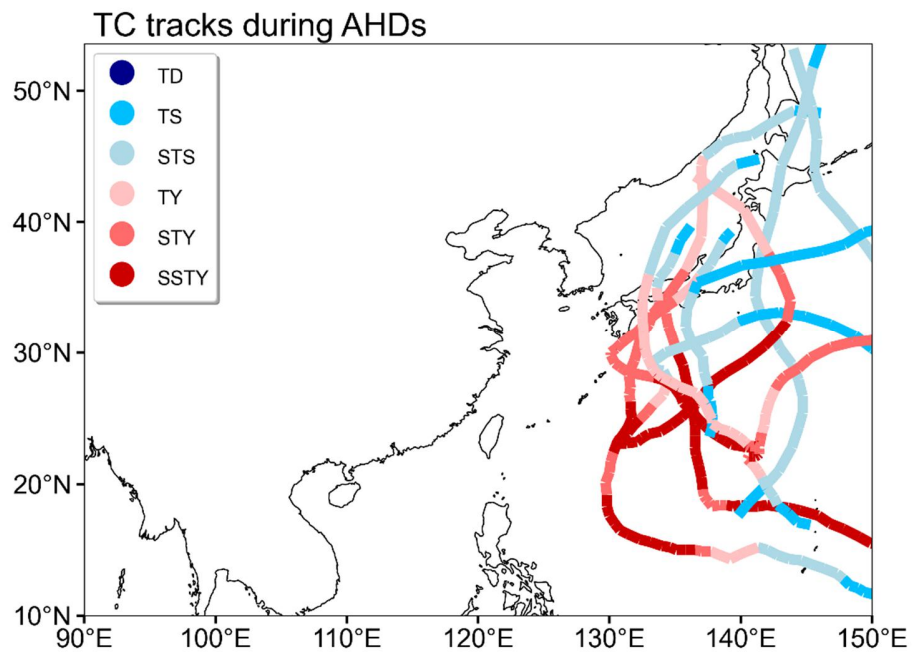
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33 **Figure S2.** The tracks and intensity of tropical cyclones observed during the AHDs period.

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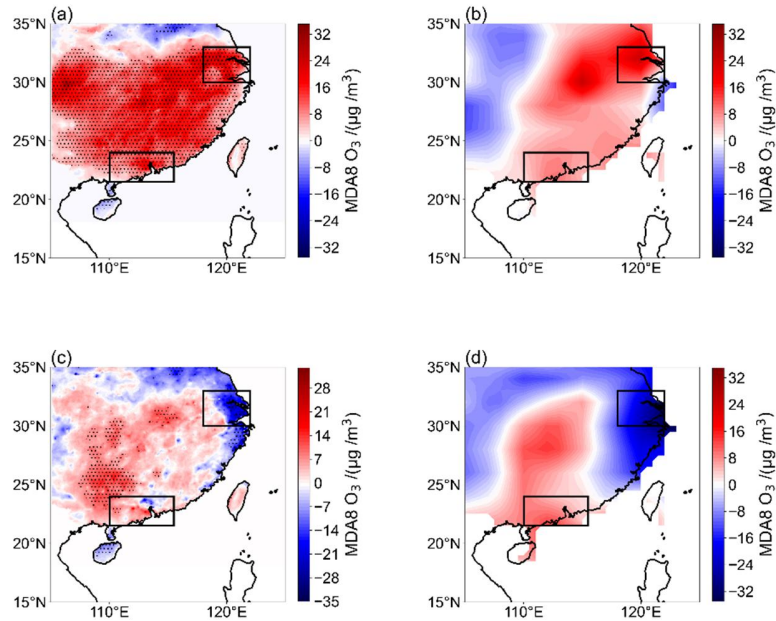
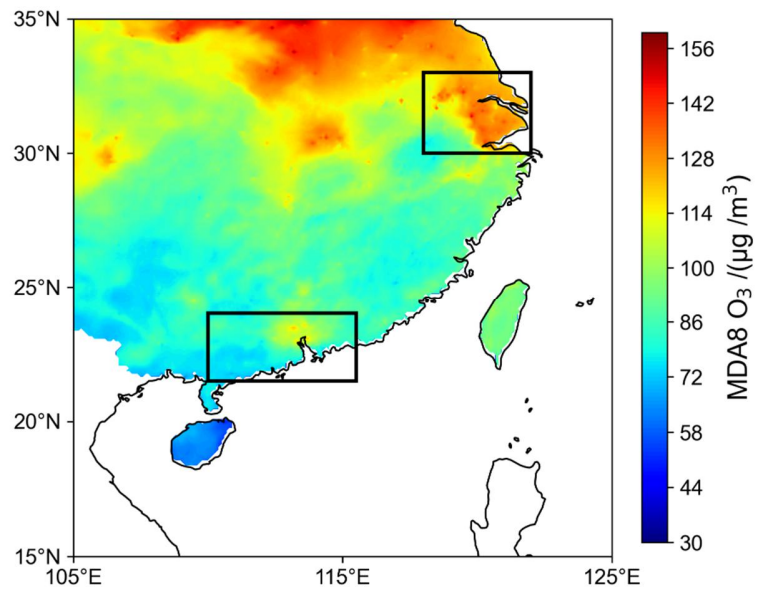


Figure S3. (a) Spatial distributions of observed ground-level MDA8 ozone concentration anomalies during TC-HDs relative to the summer climatology. (b) Spatial distribution of simulated ground-level MDA8 ozone concentration anomalies during the TC-HDs relative to the summer climatology. (c) Spatial distributions of observed ground-level MDA8 ozone concentration anomalies during TC-HDs relative to AHDs. (d) Spatial distribution of simulated ground-level MDA8 ozone concentration anomalies during the TC-HDs relative to the AHDs. YRD and PRD regions are outlined in black boxes in each panel.

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46 **Figure S4.** Spatial distributions of ground-level MDA8 ozone concentration averaged for summer

47 climatological period. YRD and PRD regions are outlined in black boxes in panel.

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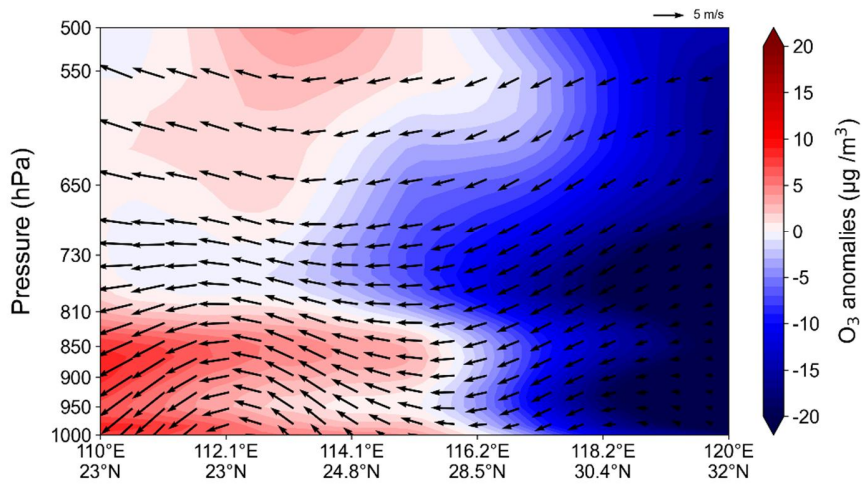
Figure S5. The cross-section of the wind fields and ozone concentration anomalies during the TC-

HDs compared to AHDs.

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