



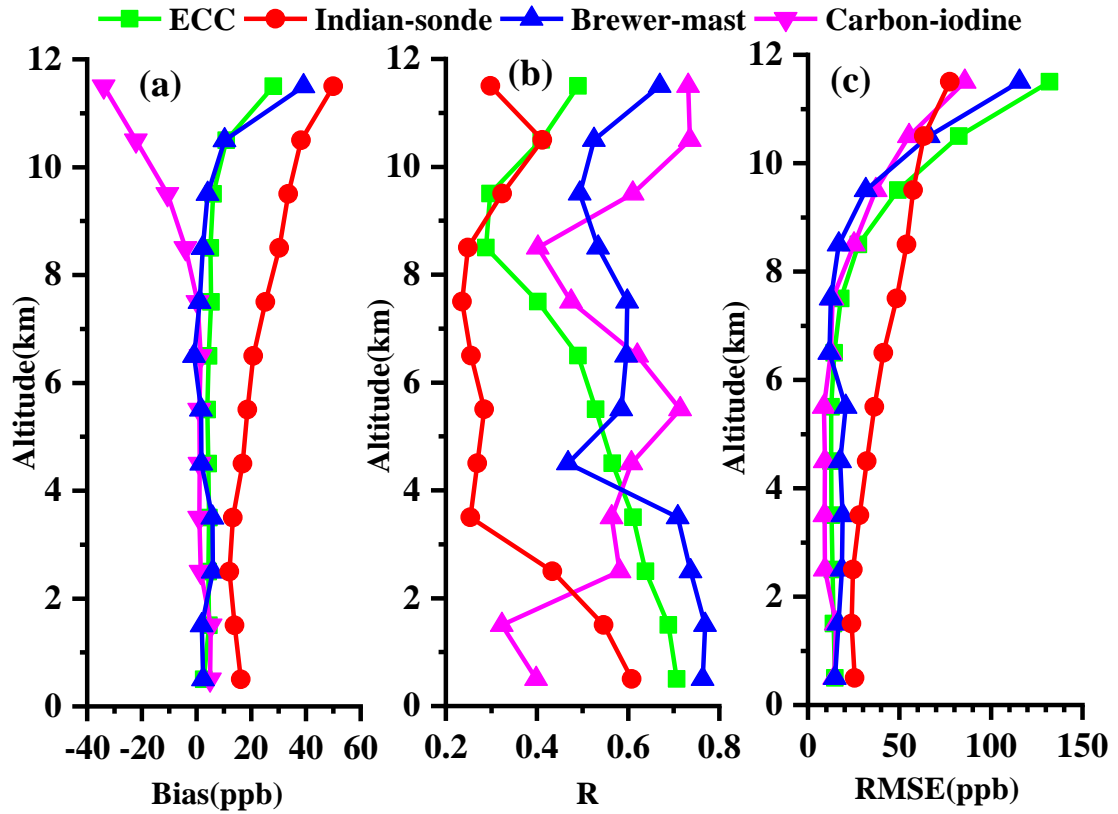
Supplement of

Consistency evaluation of tropospheric ozone from ozonesonde and IAGOS (In-service Aircraft for a Global Observing System) observations: vertical distribution, ozonesonde types, and station–airport distance

Honglei Wang et al.

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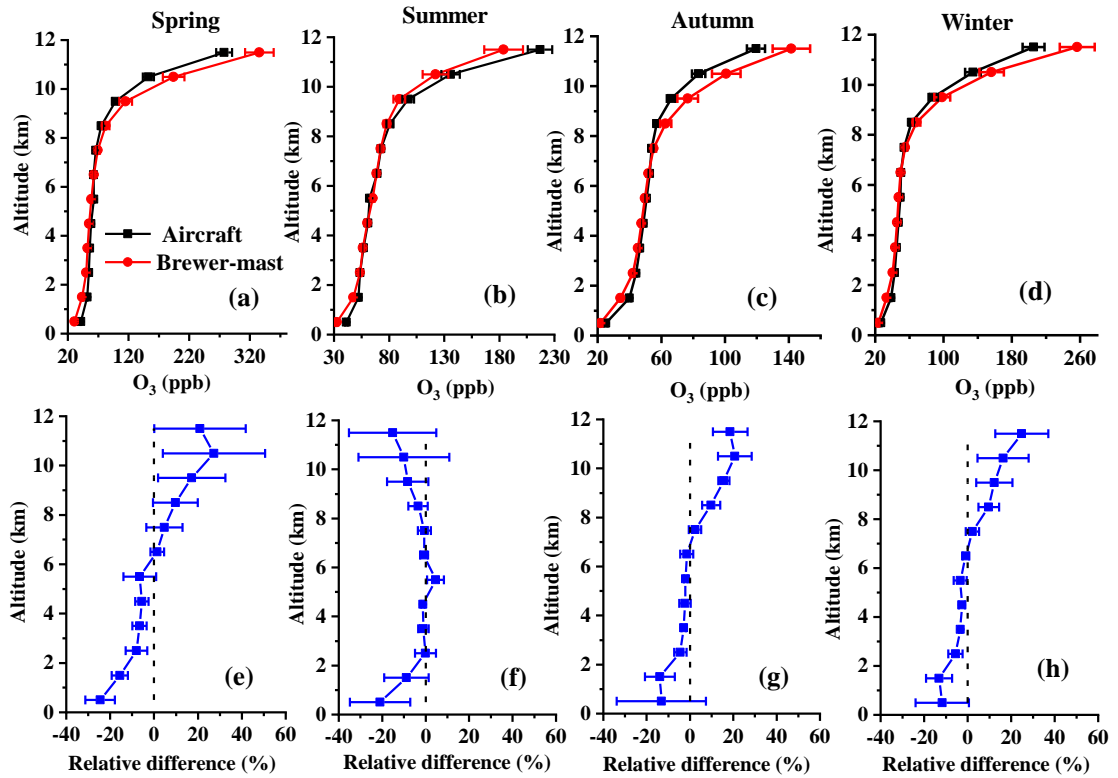
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19 **Figure S1.** Bias, correlation coefficient (R), and RMSE for four types of ozonesonde and aircraft

20 observations in different altitudes.

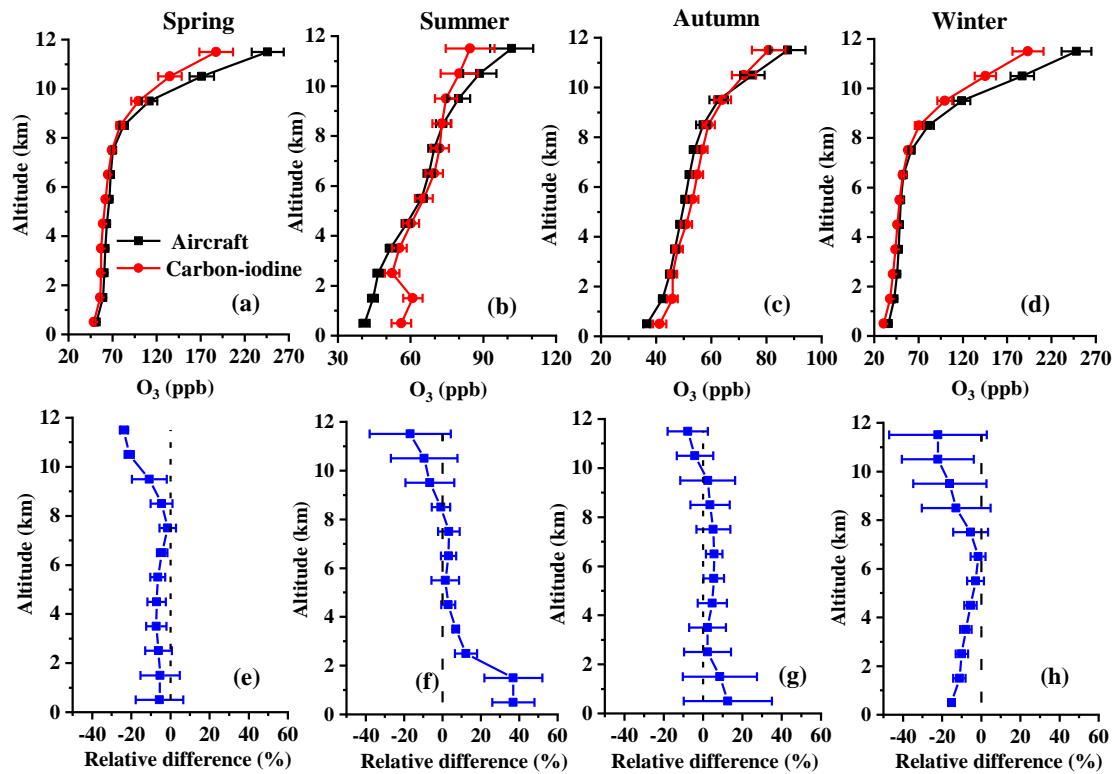


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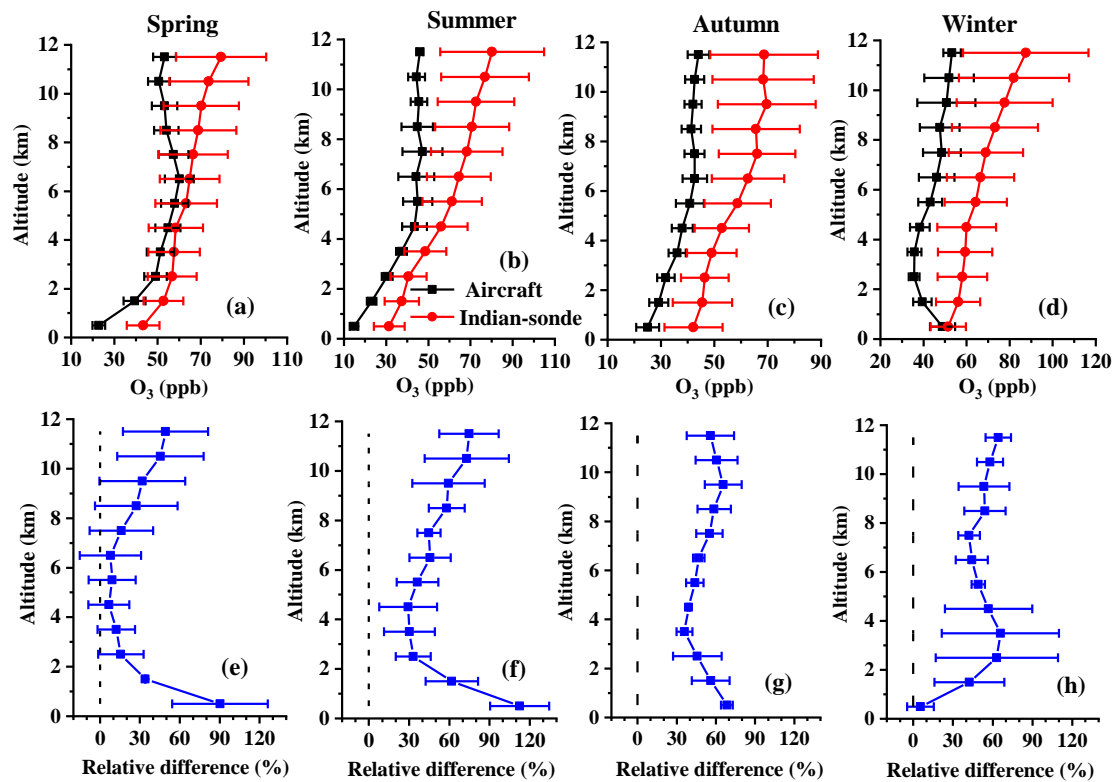
22 **Figure S2.** Comparison of vertical profiles of tropospheric O₃ (a-d) and the mean relative difference

23 (e-h) between Brewer-mast ozonesonde and aircraft observations in four seasons. The black dashed

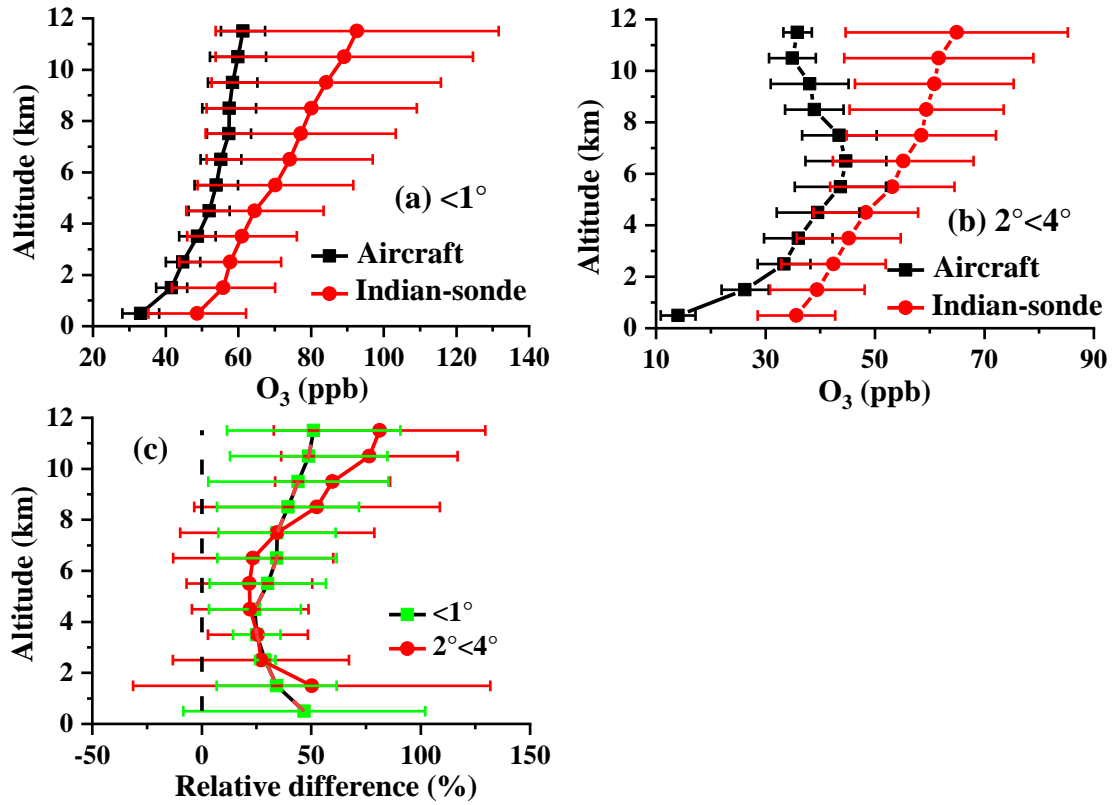
24 line is the zero line in (e-h). Note that the horizontal scales of the plots among (a)-(d) and among (e)
 25 -(h) are not the same.



26
 27 **Figure S3.** The same as Figure S1, but between Carbon-iodine ozonesonde and aircraft observations.

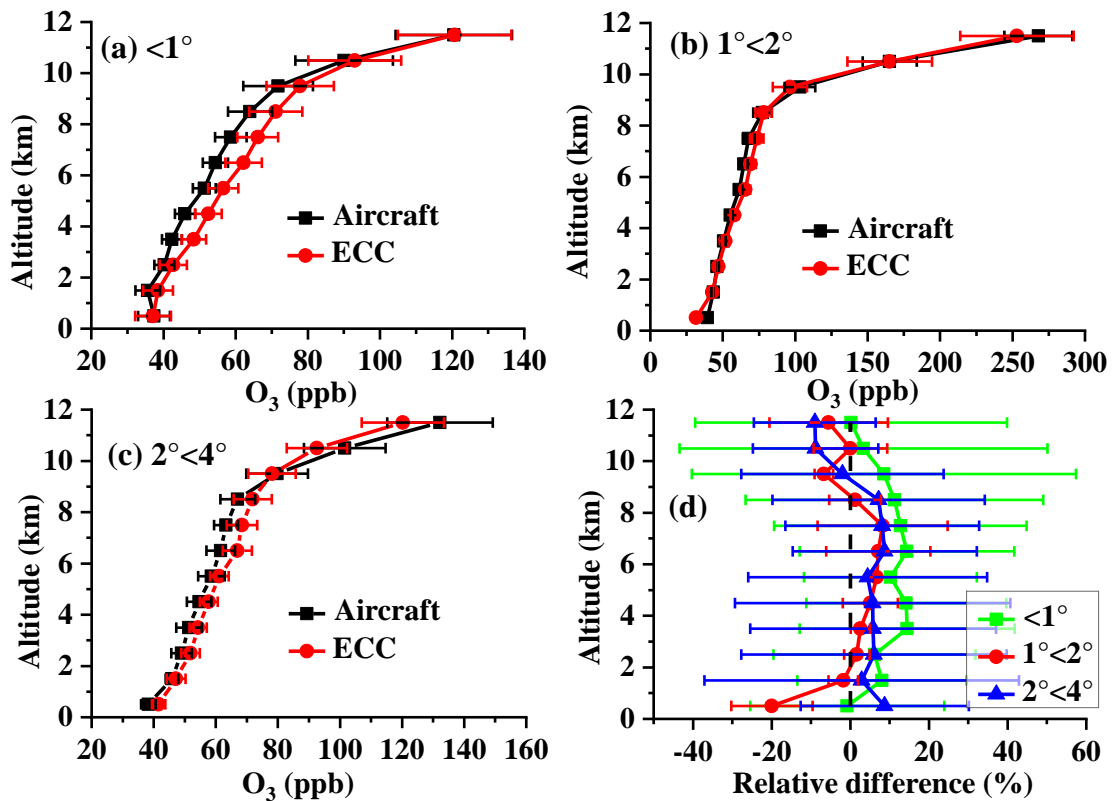


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 29 **Figure S4.** The same as Figure S1, but between Indian-sonde and aircraft observations.



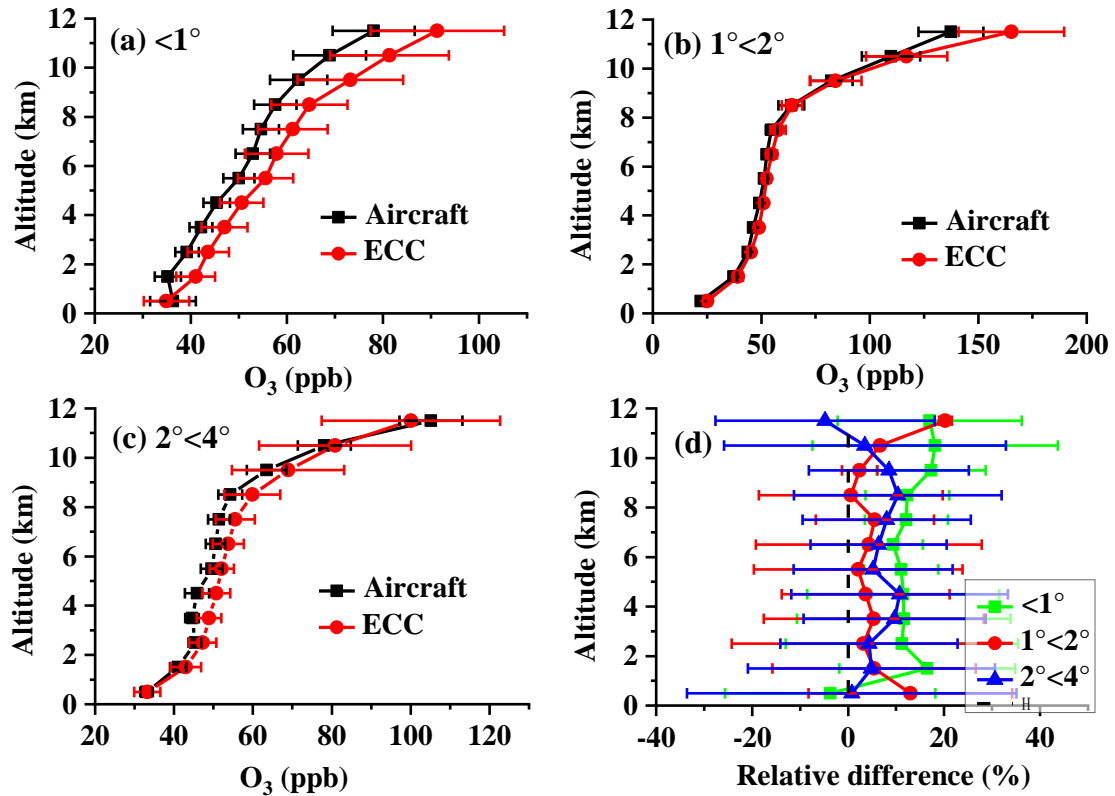
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31 **Figure S5.** Vertical profiles of tropospheric O₃ (a and b) and the mean relative difference between
 32 Indian-sonde and aircraft observations at different station-pair distances (c) and the black dashed
 33 line is the zero line in (c).

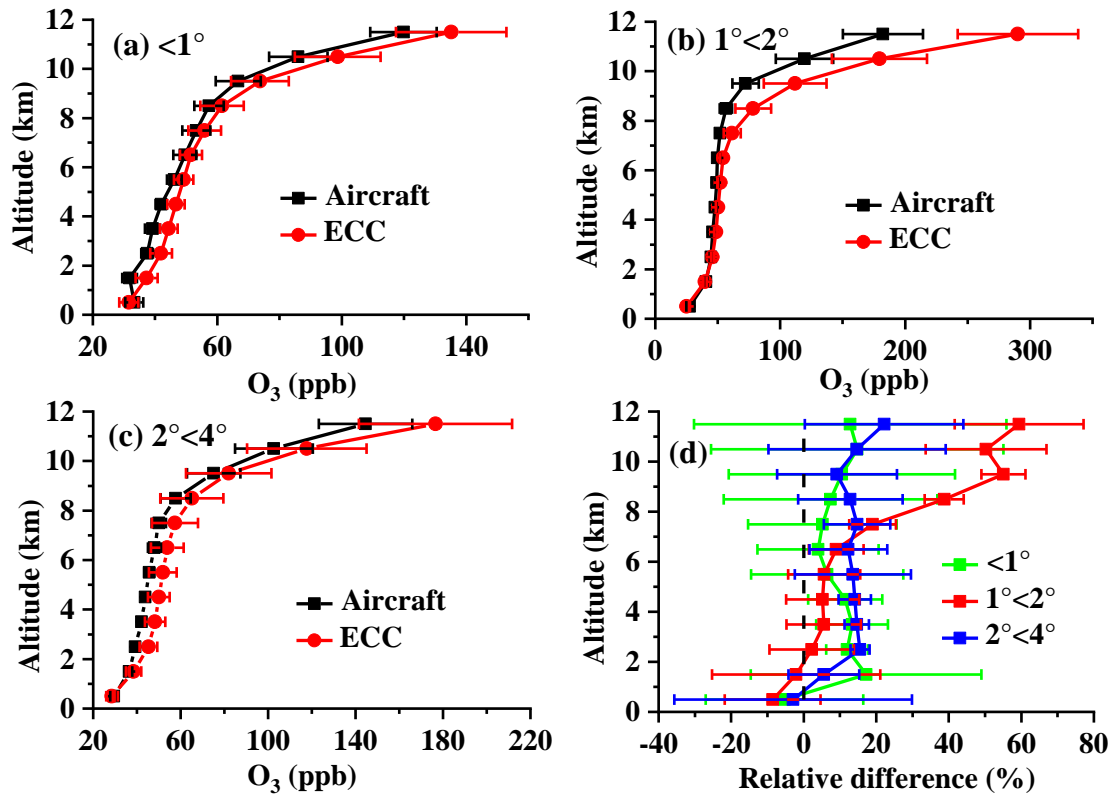


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35 **Figure S6.** Vertical profiles of tropospheric O₃ (a-c) and the mean relative difference between ECC
36 ozonesonde and aircraft observations at different station-pair distances in summer (d) and the black
37 dashed line is the zero line in (d).



38
39 **Figure S7.** Vertical profiles of tropospheric O₃ (a-c) and the mean relative difference between ECC
40 ozonesonde and aircraft observations at different station-pair distances in autumn (d) and the black
41 dashed line is the zero line in (d).

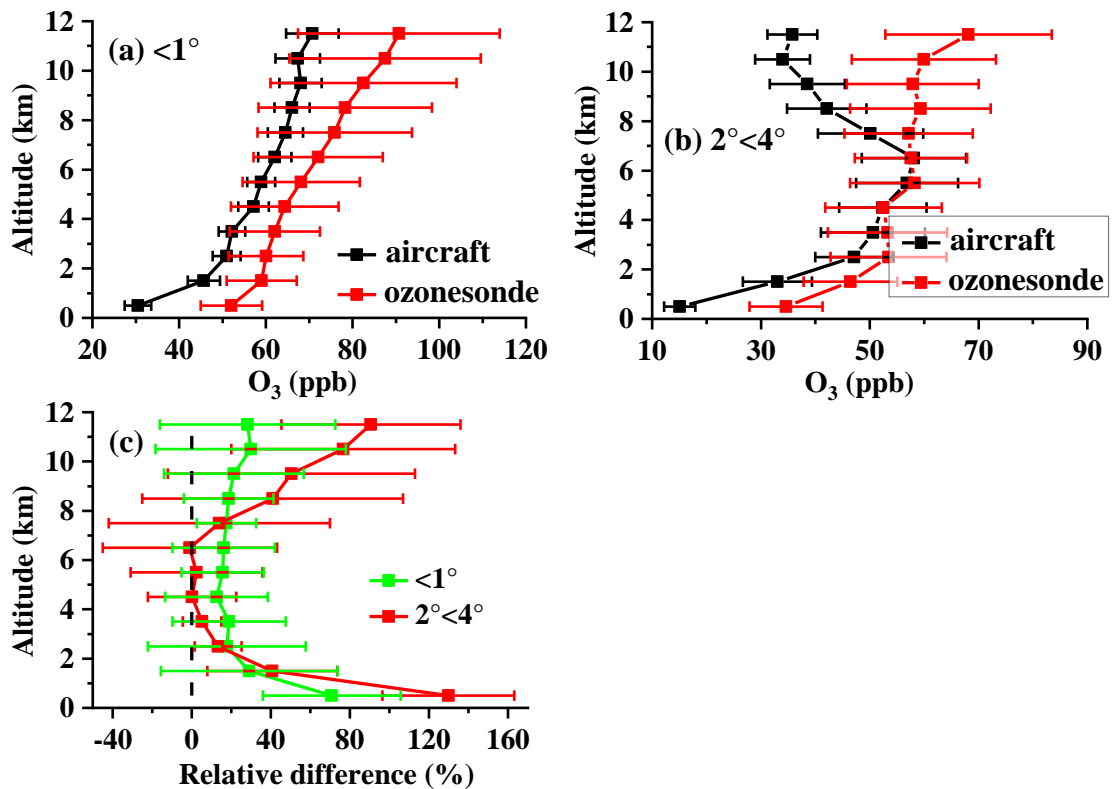


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43 **Figure S8.** Vertical profiles of tropospheric O₃ (a-c) and mean relative difference between ECC

44 ozonesonde and aircraft observations at different station-pair distances in winter (d) and the black

45 dashed line is the zero line in (d).



46

47 **Figure S9.** Vertical profiles of tropospheric O₃ (a and b) and mean relative difference between
48 Indian-sonde ozonesonde and aircraft observations at different station-pair distances in spring (c)
49 and the black dashed line is the zero line in (c).