Supplementary material to:

The global chemistry transport model TM5: description and evaluation of the tropospheric chemistry version 3.0

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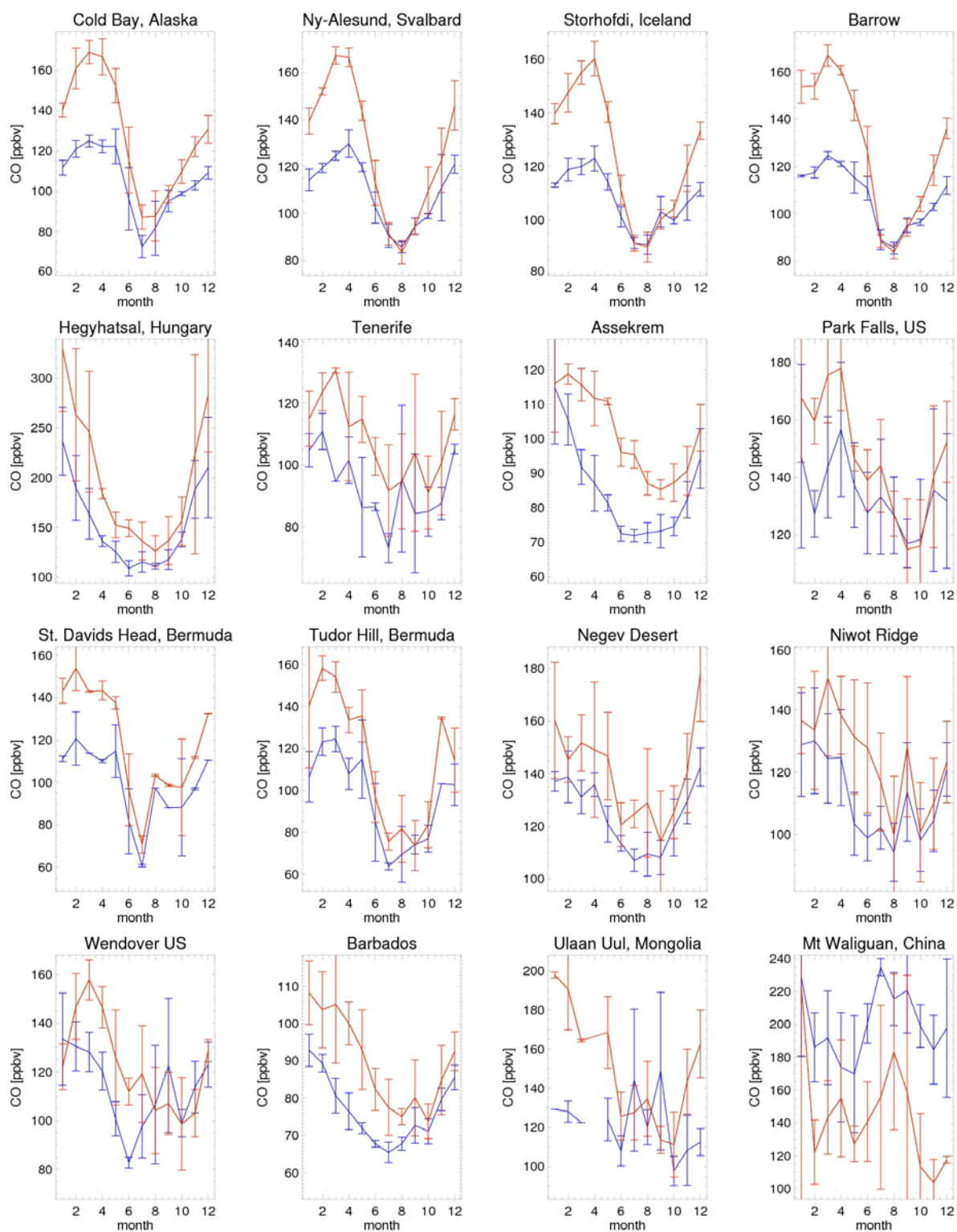Correspondence to: V. Huijnen (huijnen@knmi.nl)

Figure S1. A *comparison of the annual cycle in surface CO concentrations from TM5 (blue) to GMD station measurements (red). Model data has been sampled at the time of the observations and the bars indicate the standard deviations of the monthly mean.*
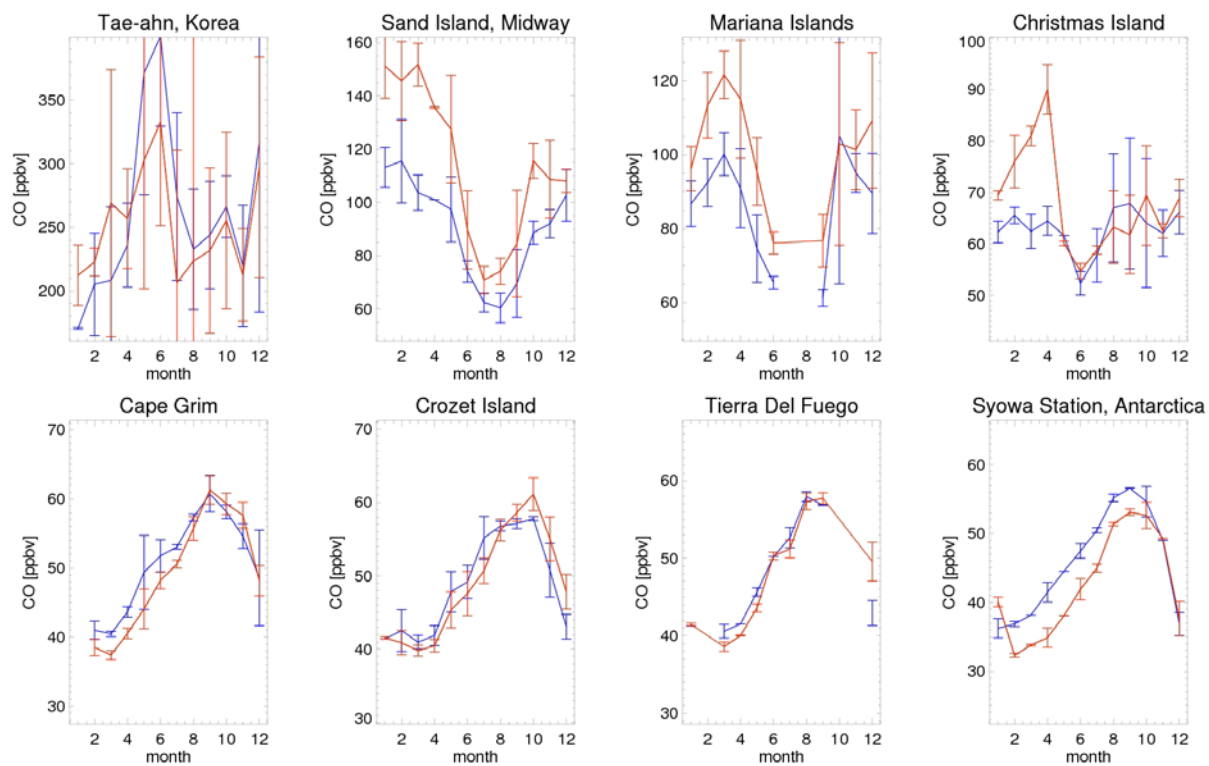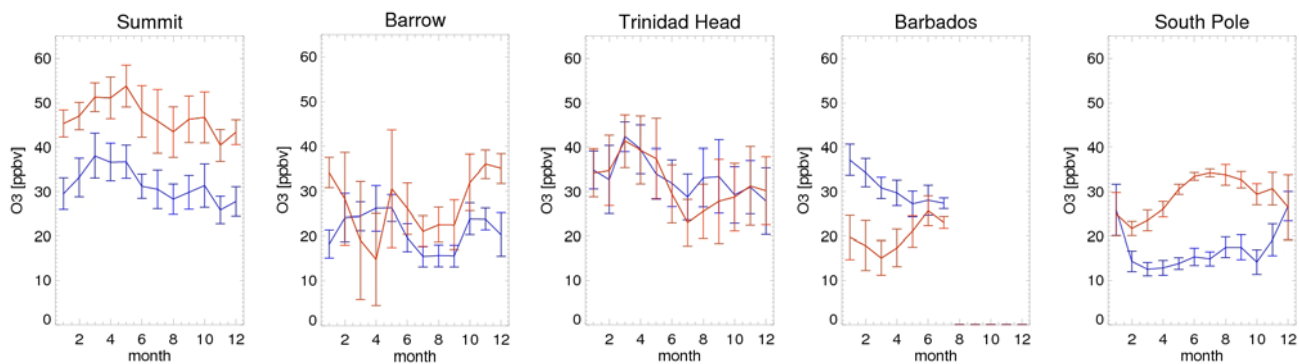
Figure S1. Continued.

Figure S2. A comparison of the monthly mean concentrations in surface O_3 concentrations from TM5 (blue) to GMD station measurements (red). Model data has been sampled at the time of the observations and the bars indicate the standard deviations of the monthly mean.
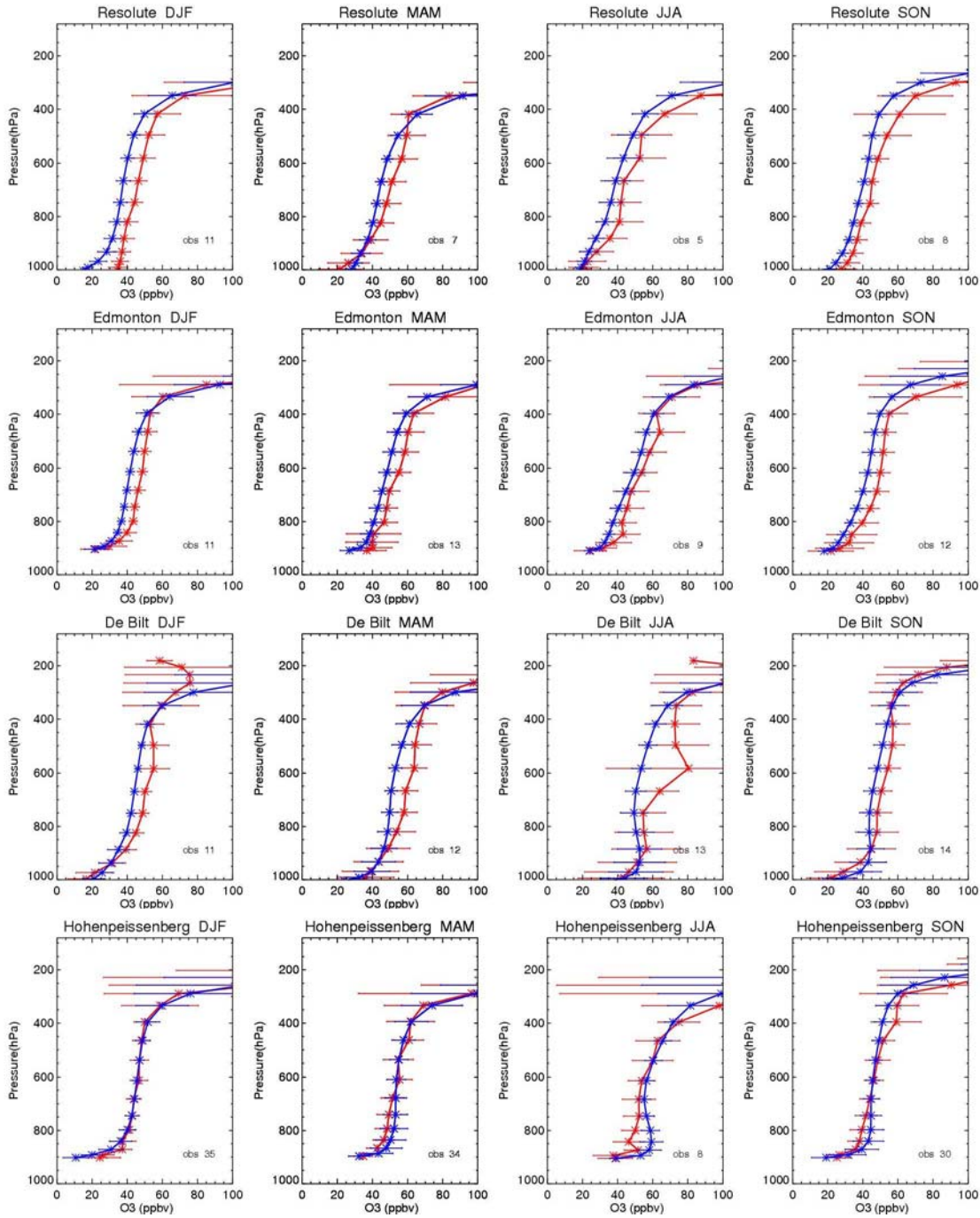
Figure S3. Comparison of seasonally averaged modeled ozone profiles (blue) to WOUDC sonde observations (red). The bars indicate the standard deviations of the monthly mean. Stations are: Resolute (74°N, 95°W), Edmonton (53°N, 114°W), De Bilt (52°N,5°E), Hohenpeissenberg (47°N, 11 ^{o}E), Naha (26°N, 127°E), Cotonou (6°N, 2°E), Paramaribo (5 ^{o}N, 55°W), San Christobal (0°S, 89°W), Sepang Airport (2°N, 101°E), Nairobi (1°S, 36°E), Natal (5°S, 35°W), Samoa (14°S, 170°W), La Reunion (21°S, 55°E), Neumayer (70°S, 8°W).
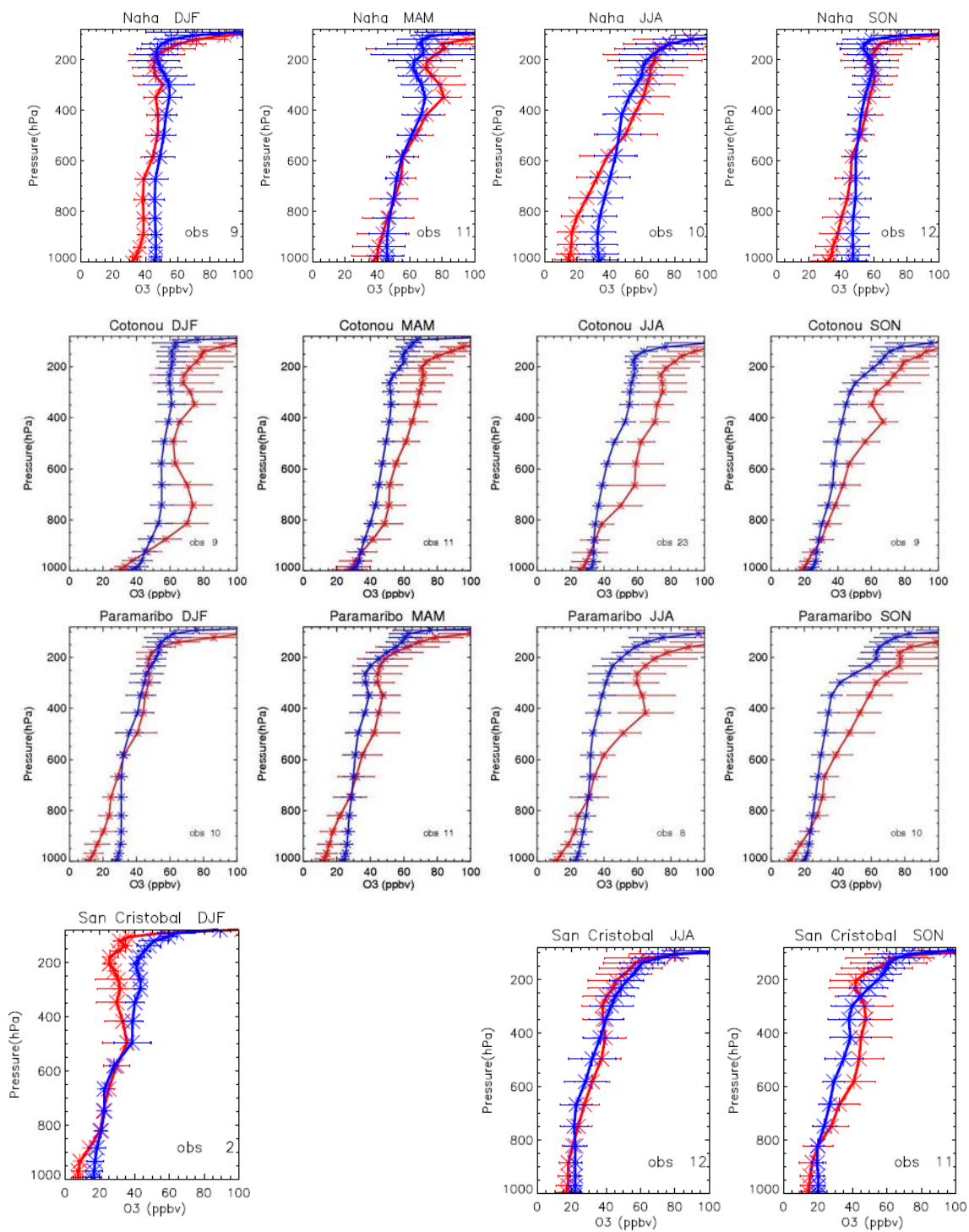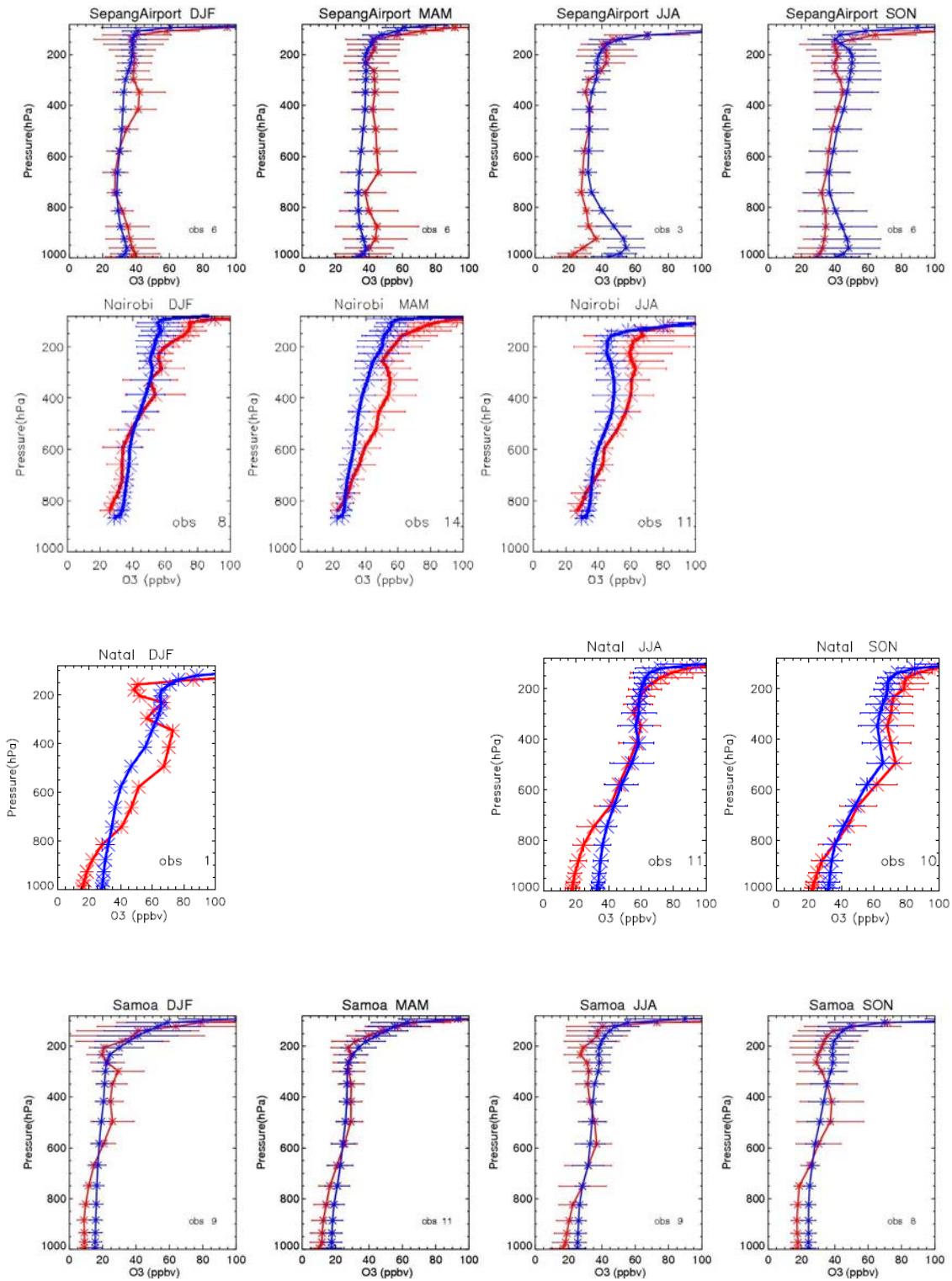
Figure S3. Continued.

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