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## Supplement of

## Seasonal stratospheric ozone trends over 2000–2018 derived from several merged data sets

Monika E. Szelag et al.

Correspondence to: Monika E. Szeląg (monika.szelag@fmi.fi)

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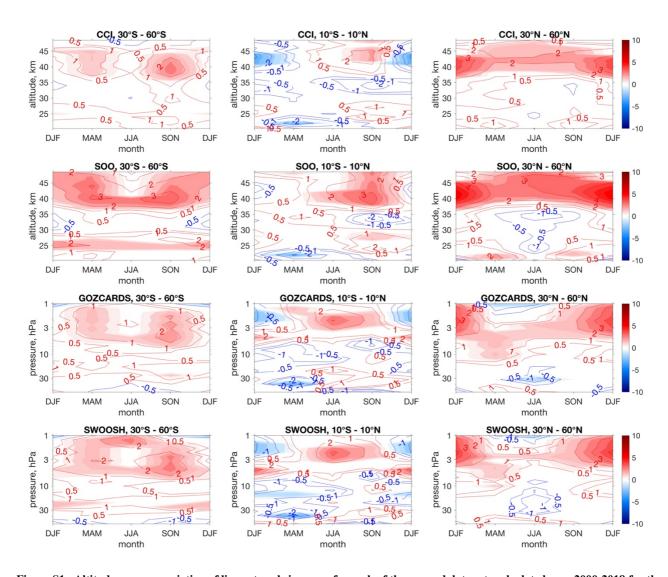


Figure S1. Altitude-seasons variation of linear trends in ozone for each of the merged data sets calculated over 2000-2018 for three selected latitudinal bands using method #2 (see description in the Manuscript). Data are presented on their natural vertical coordinate: altitude grid for CCI and SOO and pressure grid for GOZCARDS and SWOOSH. The shading denotes trends that are significant at the 95% level.

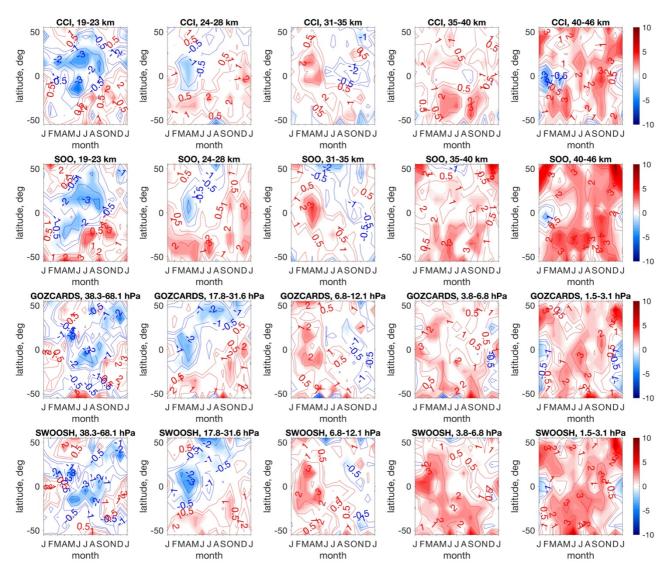


Figure S2. Latitude-months variation of linear trends in ozone for each of the merged data sets calculated over 2000-2018 for five selected altitude/pressure bands. The shading denotes trends that are significant at the 95% level.

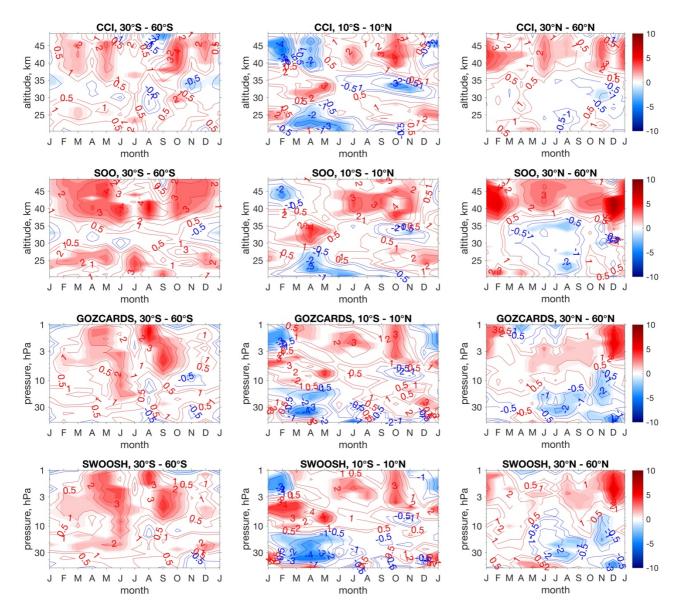


Figure S3. Altitude-months variation of linear trends in ozone for each of the merged data sets calculated over 2000-2016 for three selected latitudinal bands. Data are presented on their natural vertical coordinate: altitude grid for CCI and SOO and pressure grid for GOZCARDS and SWOOSH. The shading denotes trends that are significant at the 95% level.

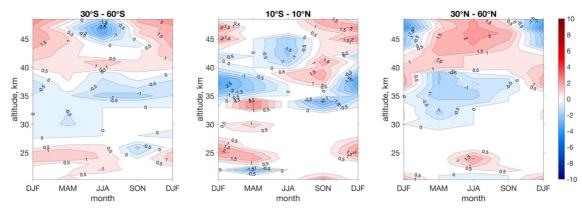


Figure S4. Altitude-seasons variation of the difference of the seasonal trends (mean[CCI, SOO] minus mean[GOZCARDS, SWOOSH]), calculated over 2000-2018 for three selected latitudinal bands.

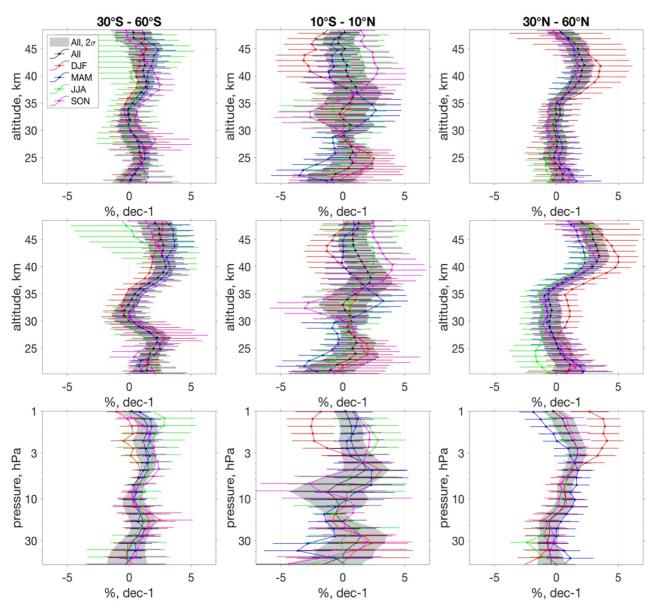


Figure S5. Vertical profiles of seasonal (red, blue, green, magenta) and yearly (black) ozone trends in 2000-2018 from CCI (top panels), SOO (middle panels) and GOZCARDS (bottom panels). The results are shown for three selected latitude bands. Error bars and shaded area (gray) are 2-sigma uncertainties.

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