

Supplement of

Hemispheric differences in ozone across the stratosphere-troposphere exchange region

Rodrigo J. Seguel et al.

Correspondence to: Rodrigo J. Seguel (rodrigoseguel@uchile.cl)

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Figure S1: Routes position frequency obtained from aircraft GPSs. All panels show only SouthTRAC and IAGOS data within the same latitudinal band 45°-60° in the SH and NH. The upper panel shows the number of GPS observations by grid cell (5° x 5°) between 300 and 700 hPa. The lower panels show the same information between 700 and 300 hPa.

Figure S2: Ozone box plot (nmol mol^{-1}) and associated observation numbers by pressure bins. The plots include ozone data with RH lower than 30%. In the upper panel, the left, middle and right plots show the entire period, late winter-early spring and mid-spring for the northern and southern hemispheres and high-depleted and low-depleted years. Box plots indicate the median, the 25th and 75th percentiles. The whiskers extend to the 5th and 95th percentiles. In the lower panels, the X-axis shows the observation numbers. The rest of the plot information is the same as described in the upper panel. High-depletion years in SH are based on ozonesondes launched from Ushuaia.

Figure S3: Ozone box plot (nmol mol^{-1}) and associated observation numbers by pressure bins. The plots include ozone data with RH lower than 10%. In the upper panel, the left, middle and right plots show the entire period, late winter-early spring and mid-spring for the northern and southern hemispheres and high-depleted and low-depleted years. Box plots indicate the median, the 25th and 75th percentiles. The whiskers extend to the 5th and 95th percentiles. In the lower panels, the X-axis shows the observation numbers. The rest of the plot information is the same as described in the upper panel. High-depletion years in SH are based on ozonesondes launched from Ushuaia.

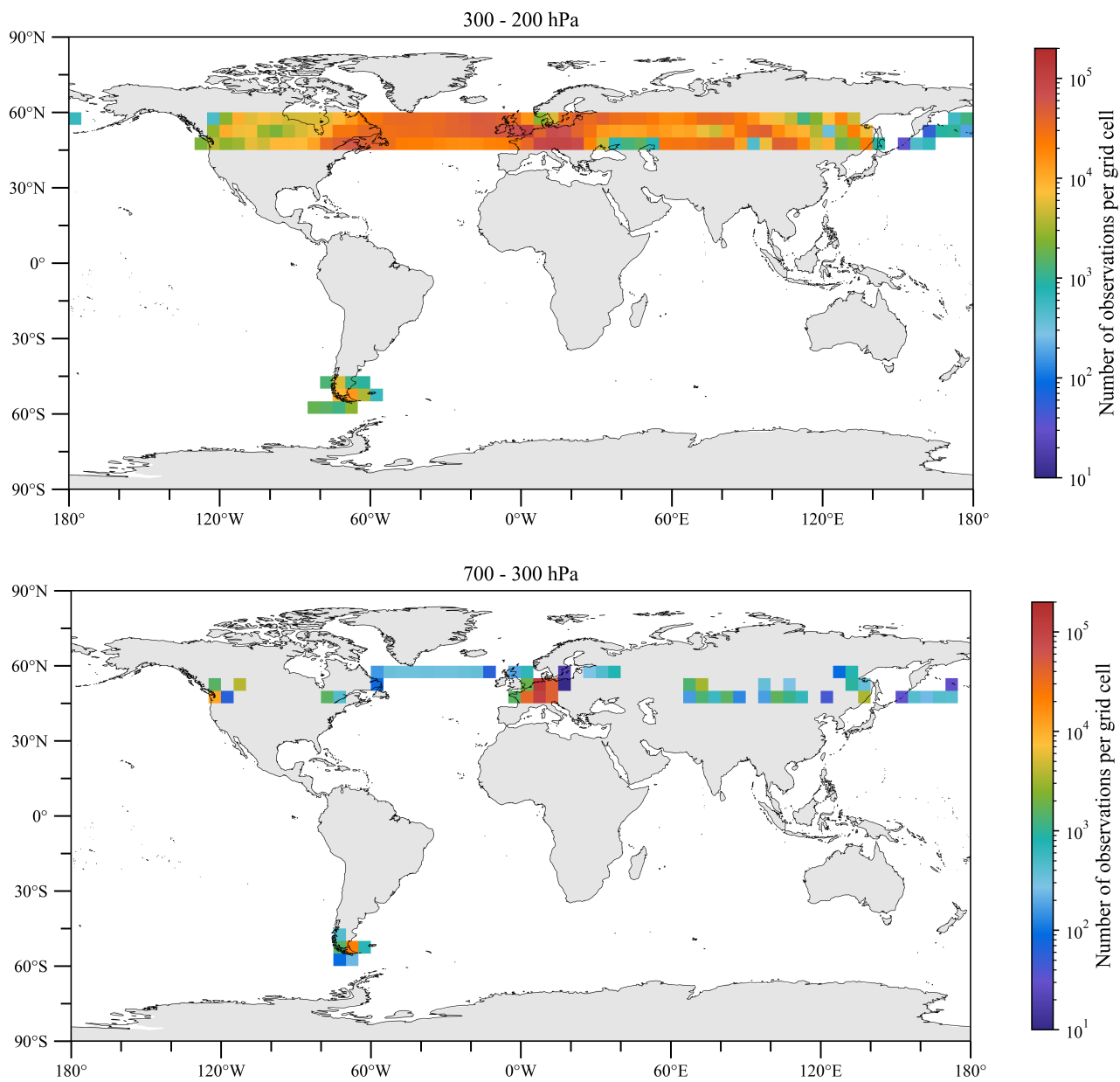


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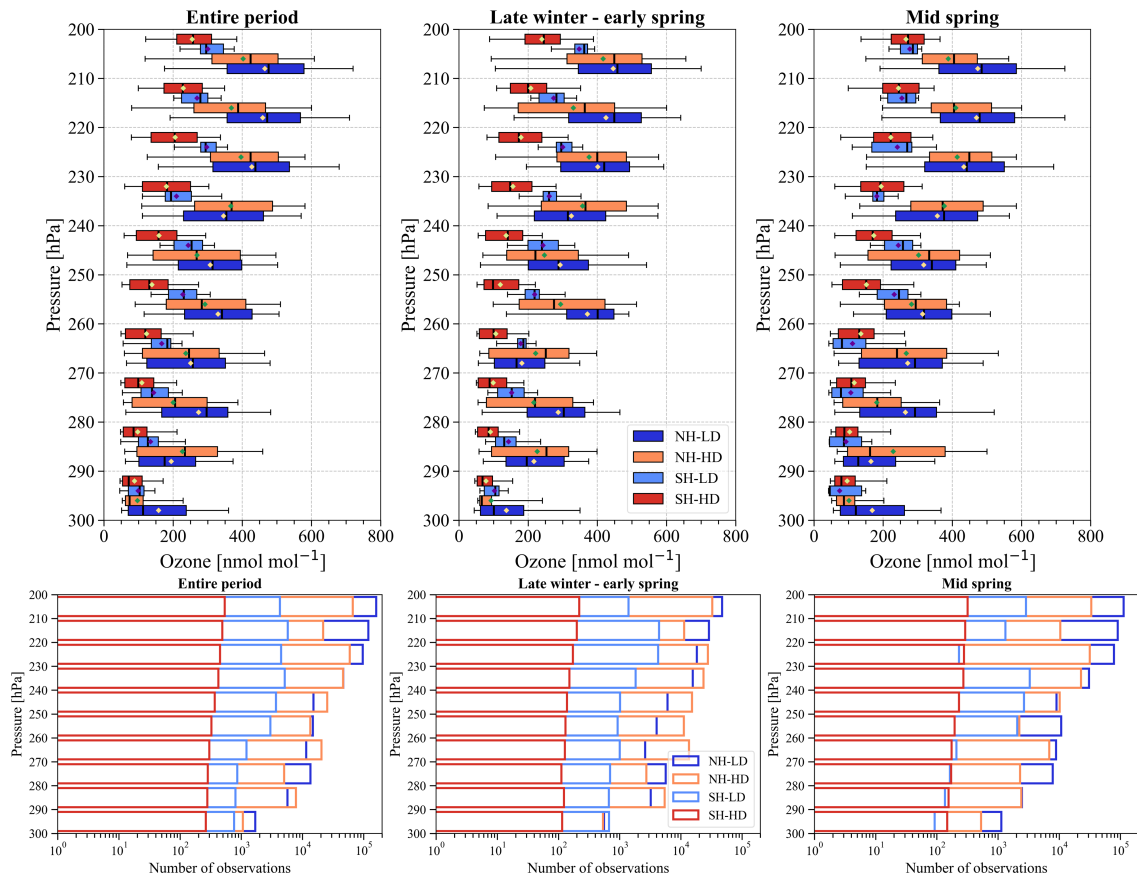


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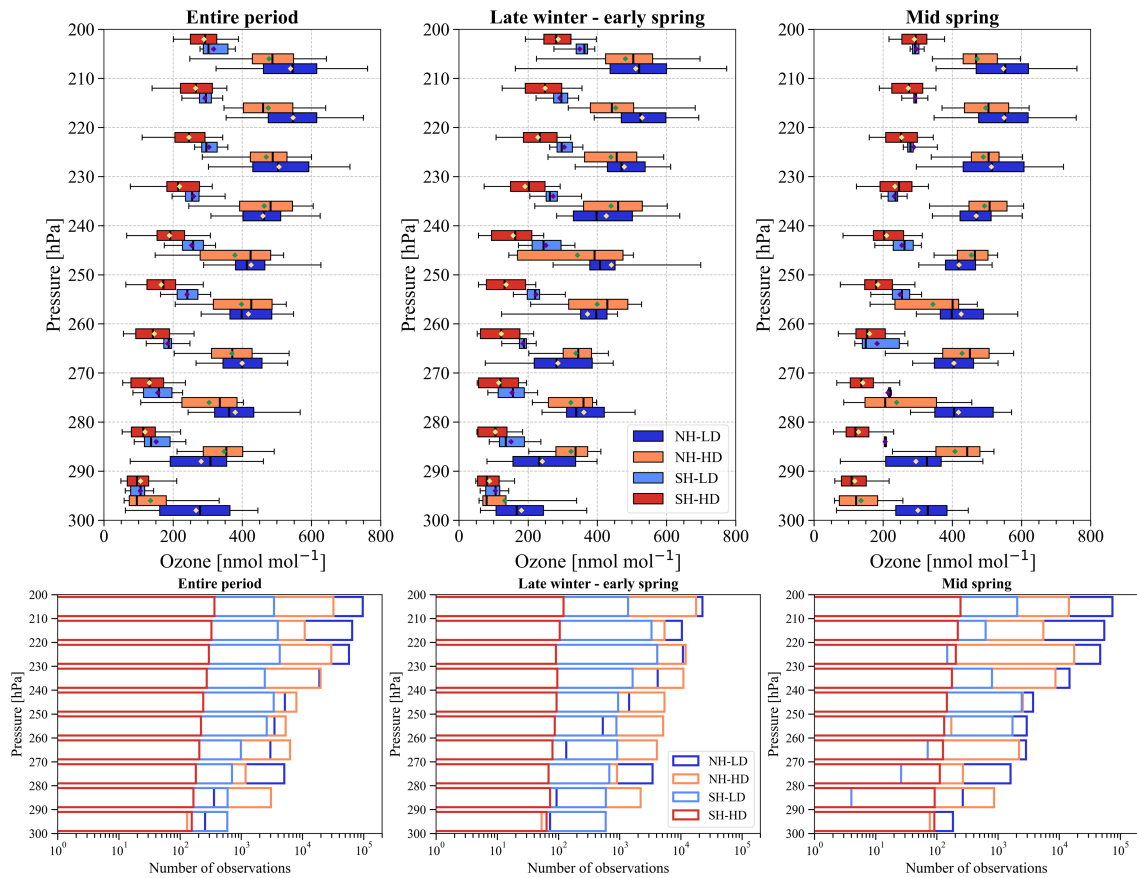


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