

Forecast for O3 column. Last analysis time: 20181101 00

O3\_column, DobsonUnit, 12:0001NOV2018

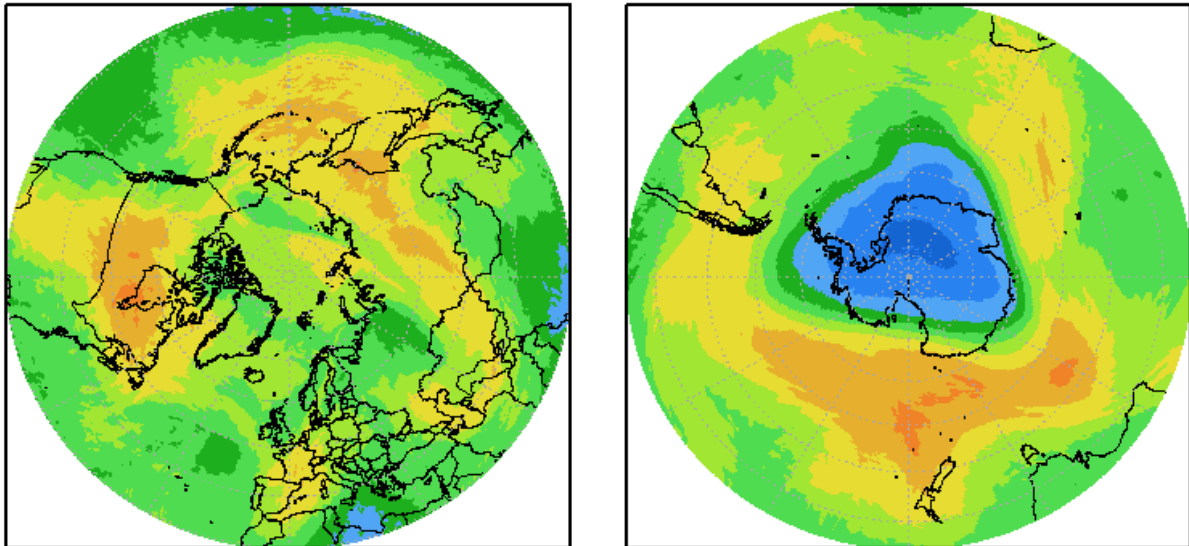
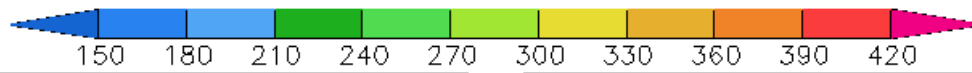
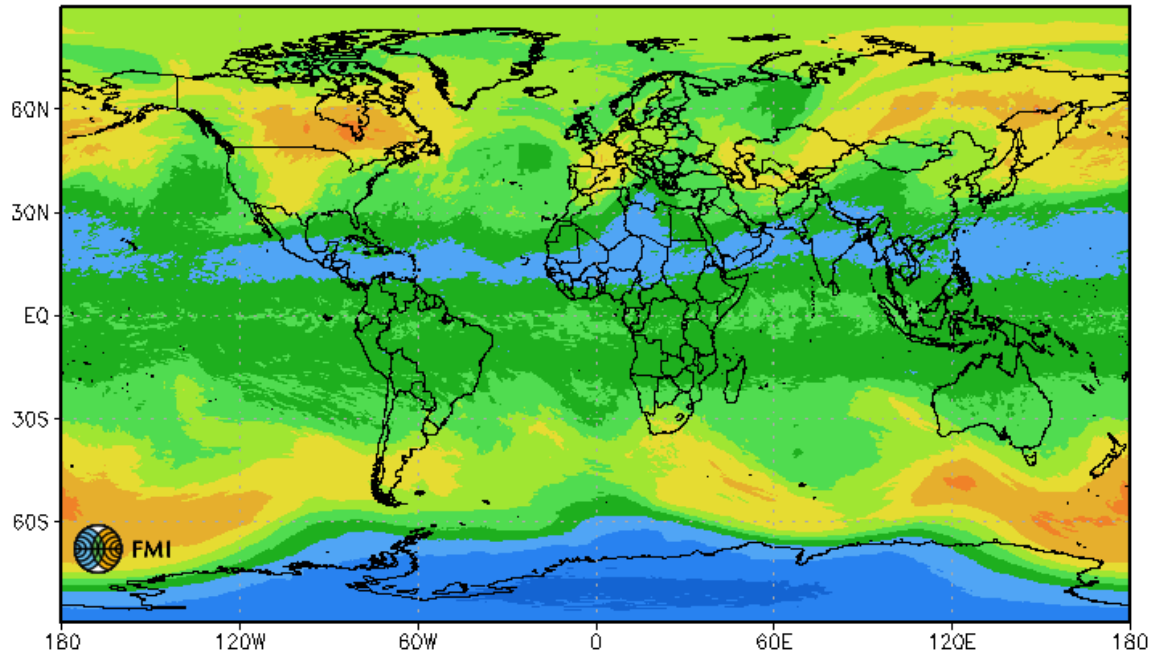
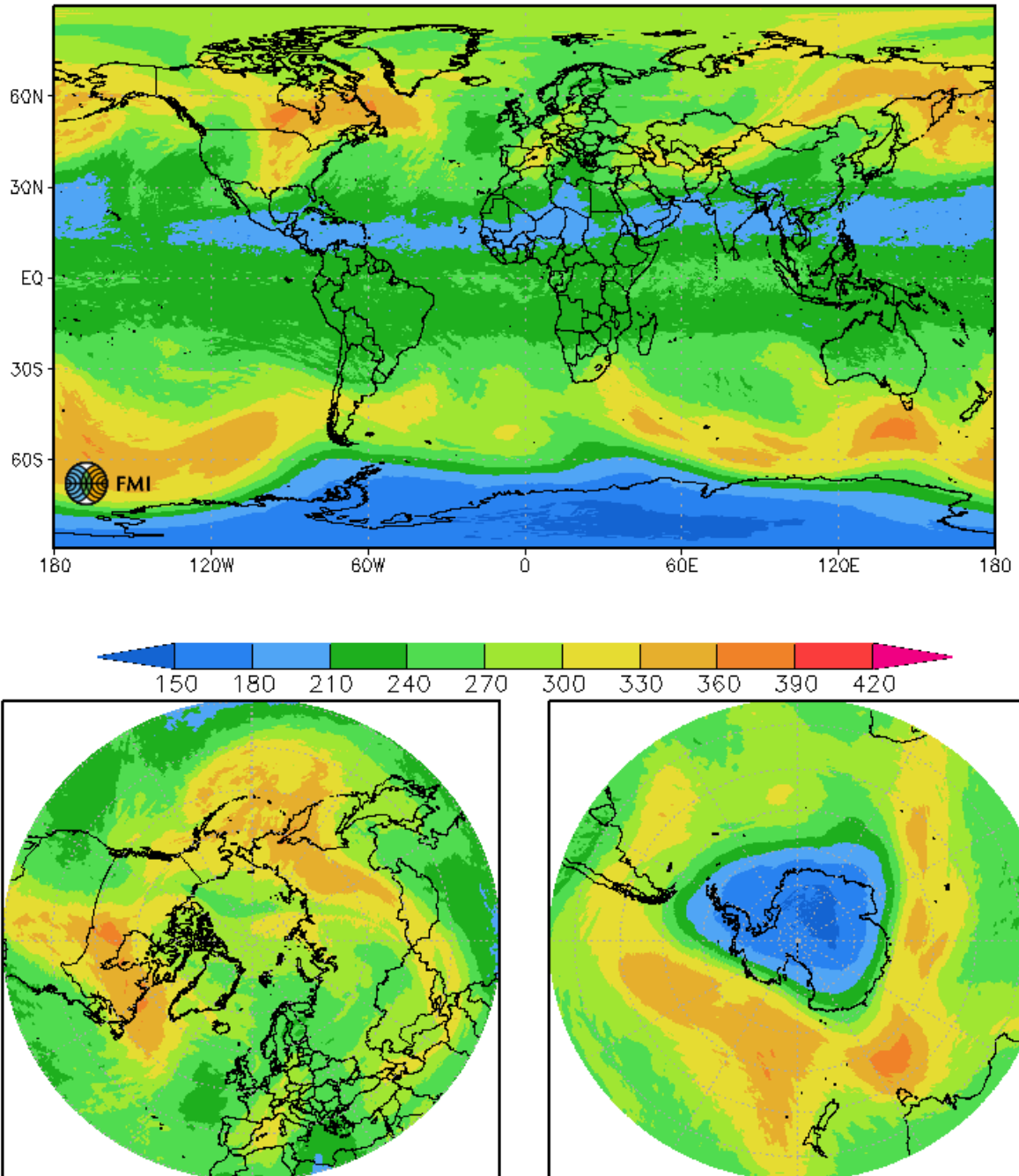


Figure S1. Global ozone column predicted by SILAM on 1.11.2018 for 1.11.2018. [Dobson units]

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**Figure S2.** Global ozone column predicted by SILAM on 1.11.2018 for 1.11.2018. [Dubson units]

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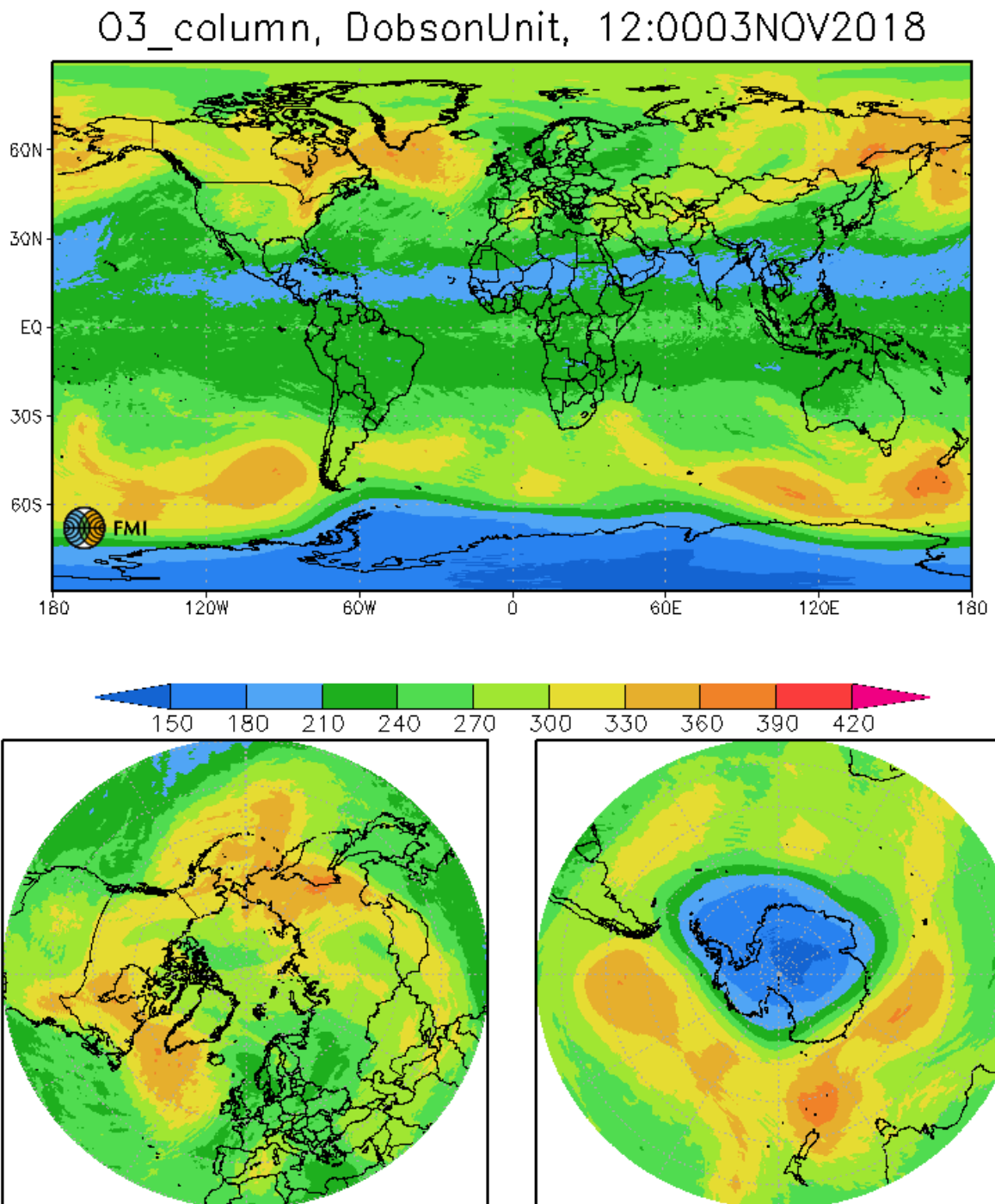


Figure S3. Global ozone column predicted by SILAM on 1.11.2018 for 1.11.2018. [Dubson units]

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O3\_column, DobsonUnit, 12:0004NOV2018

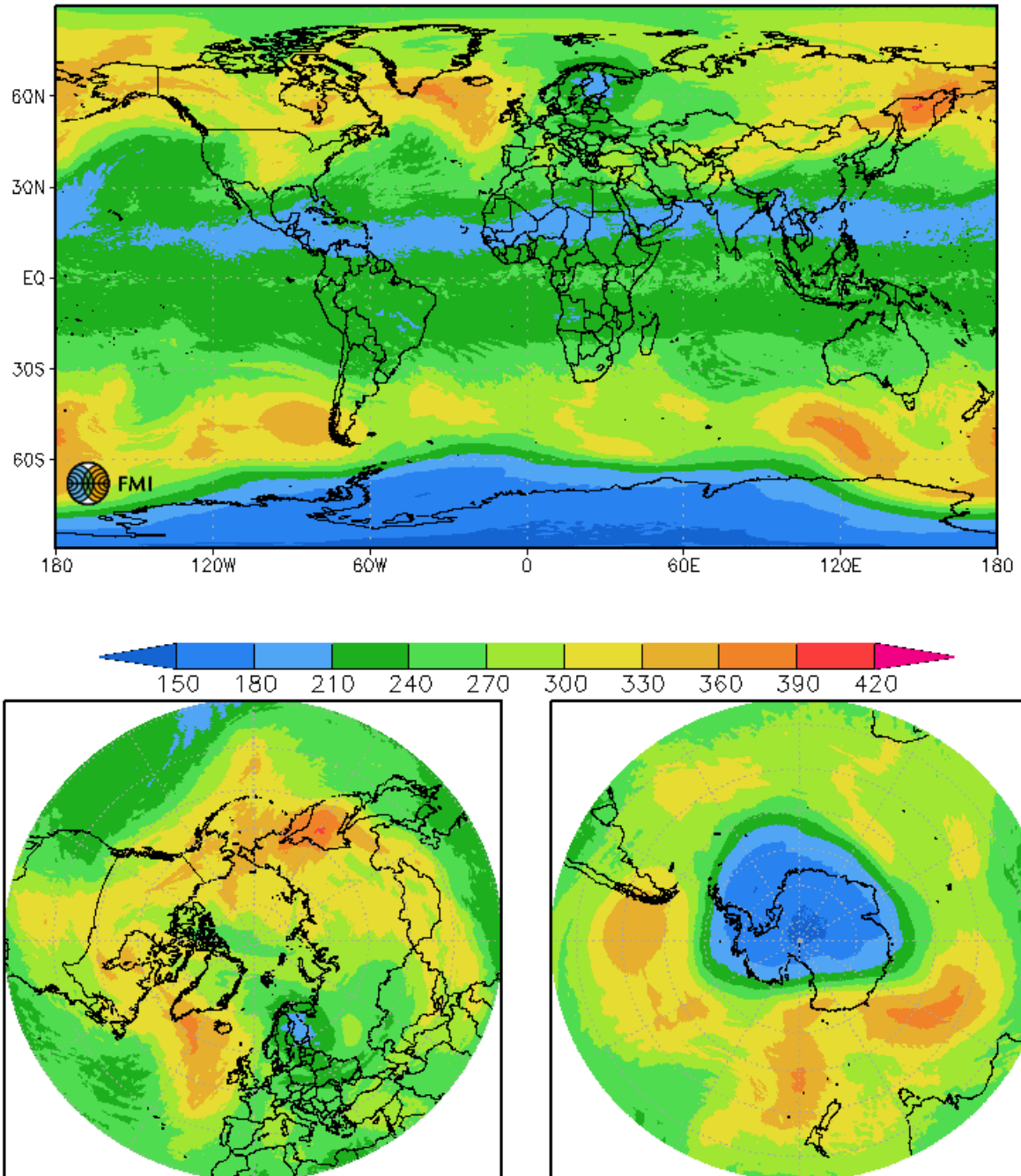


Figure S4. Global ozone column predicted by SILAM on 1.11.2018 for 1.11.2018. [Dubson units]



Forecast for O3 column. Last analysis time: 20181101 00

O3\_column, DobsonUnit, 12:0005NOV2018

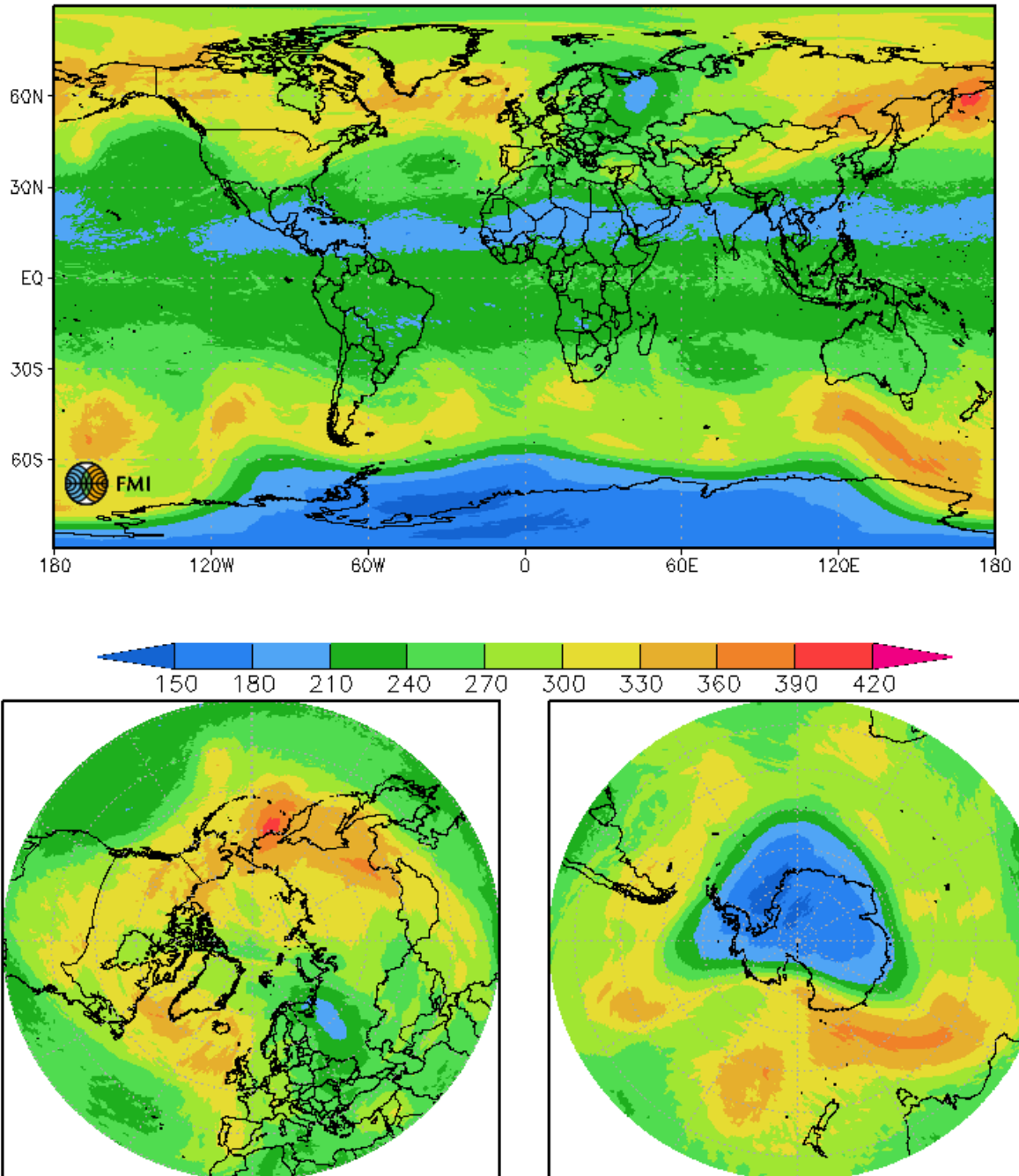


Figure S5. Global ozone column predicted by SILAM on 1.11.2018 for 1.11.2018. [Dubson units]

Forecast for O3 column. Last analysis time: 20181101 00

### O3\_column, DobsonUnit, 12:0006NOV2018

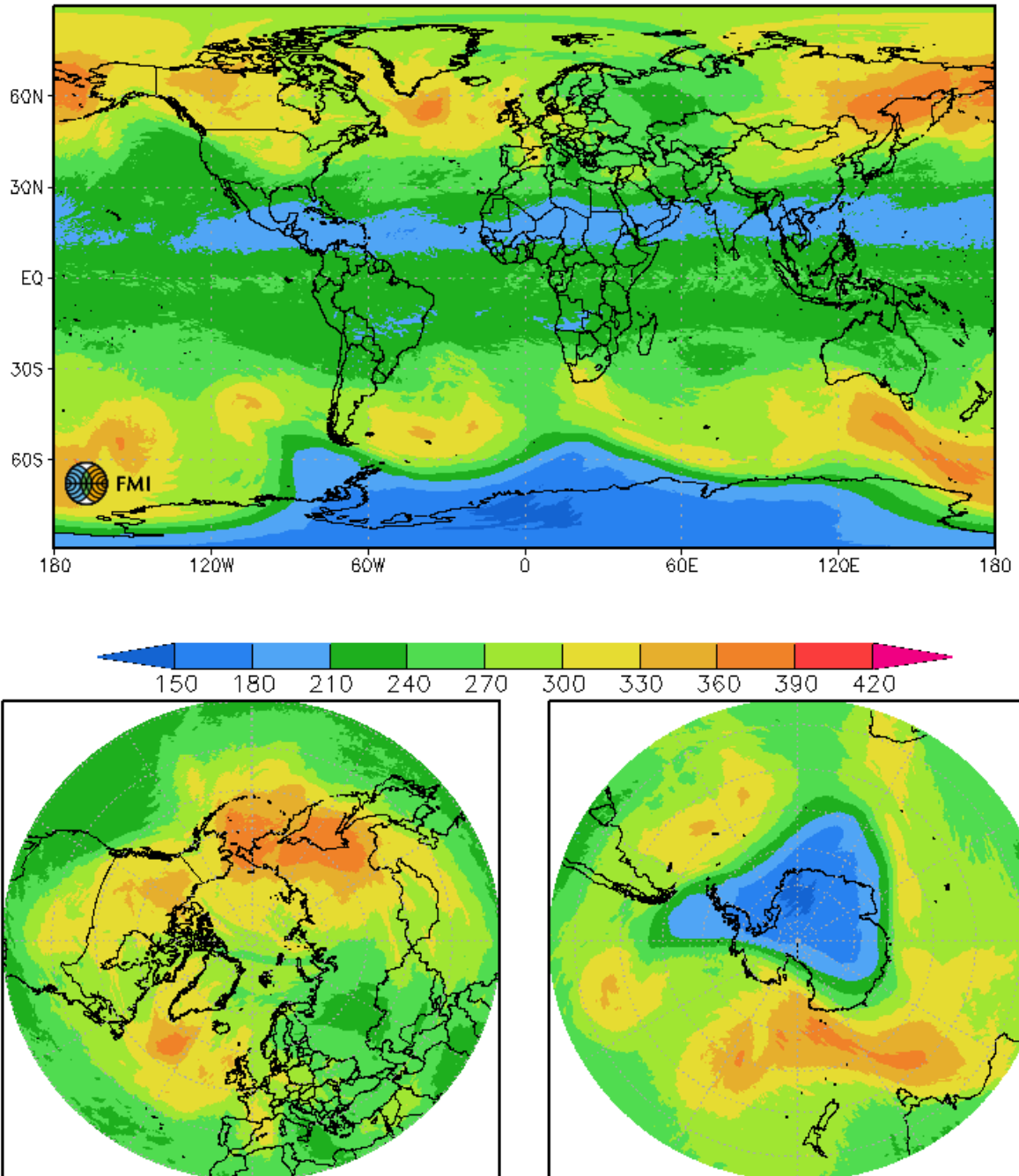


Figure S6. Global ozone column predicted by SILAM on 1.11.2018 for 1.11.2018. [Dubson units]

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O3\_column, DobsonUnit, 12:0007NOV2018

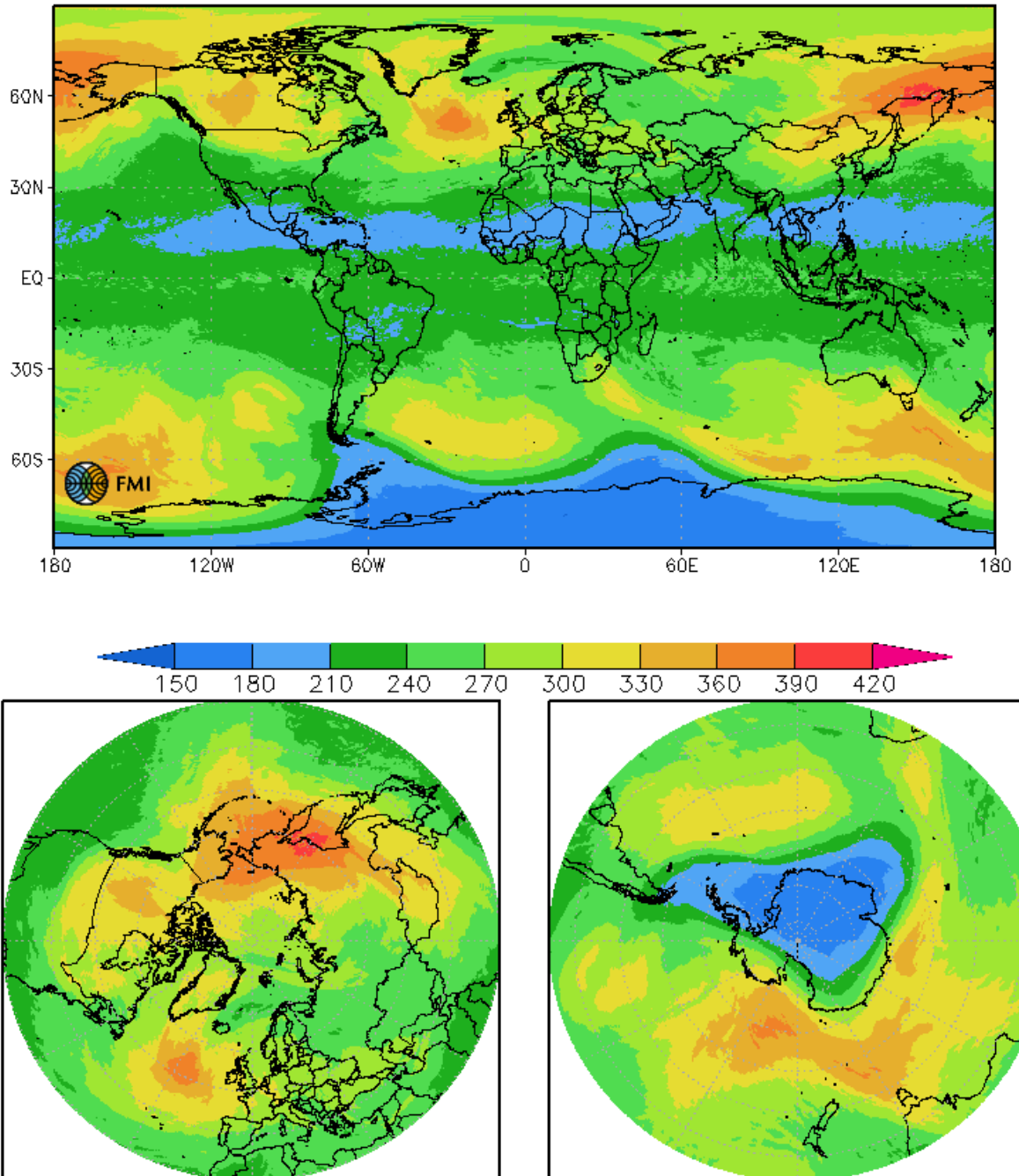
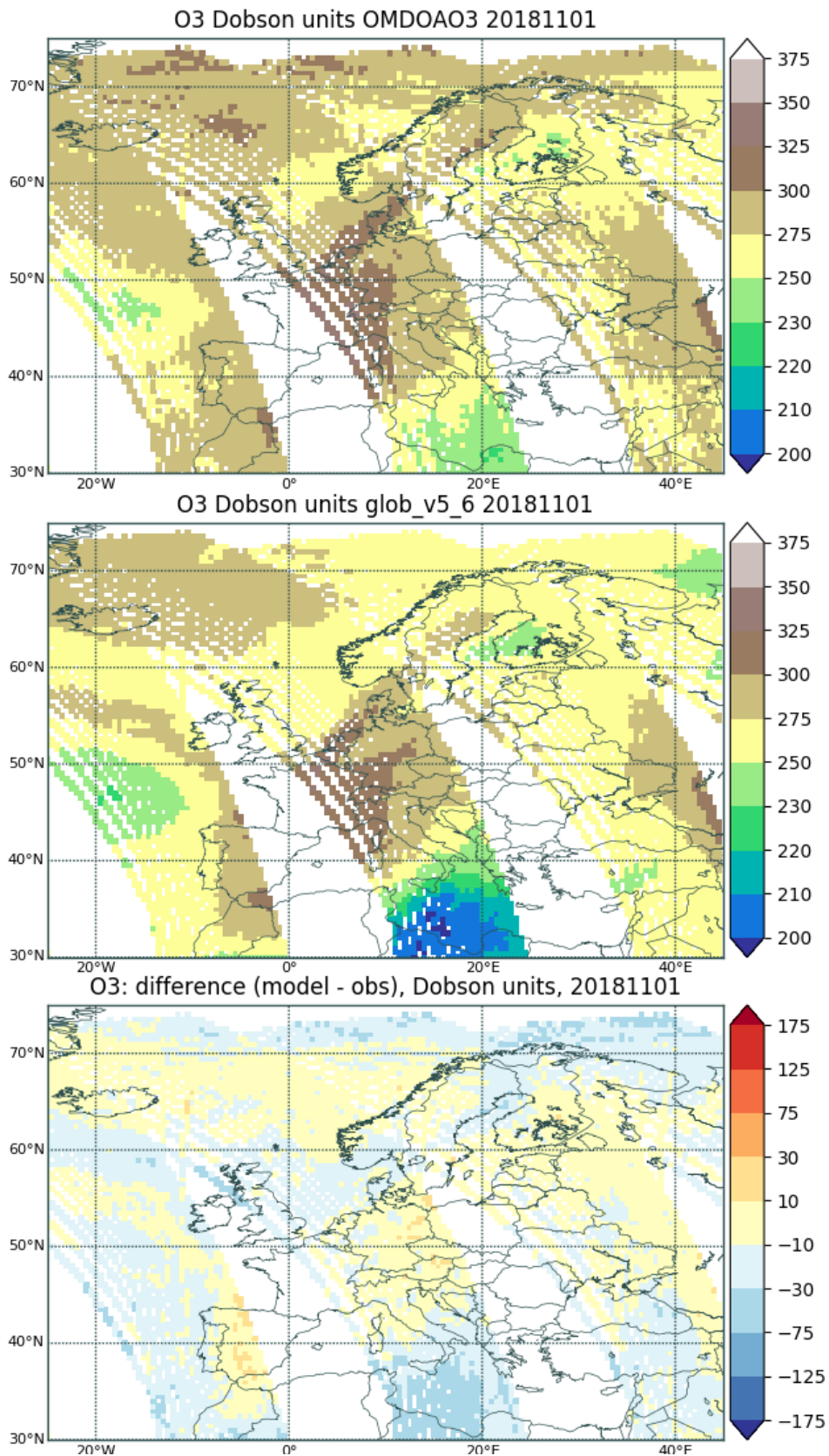
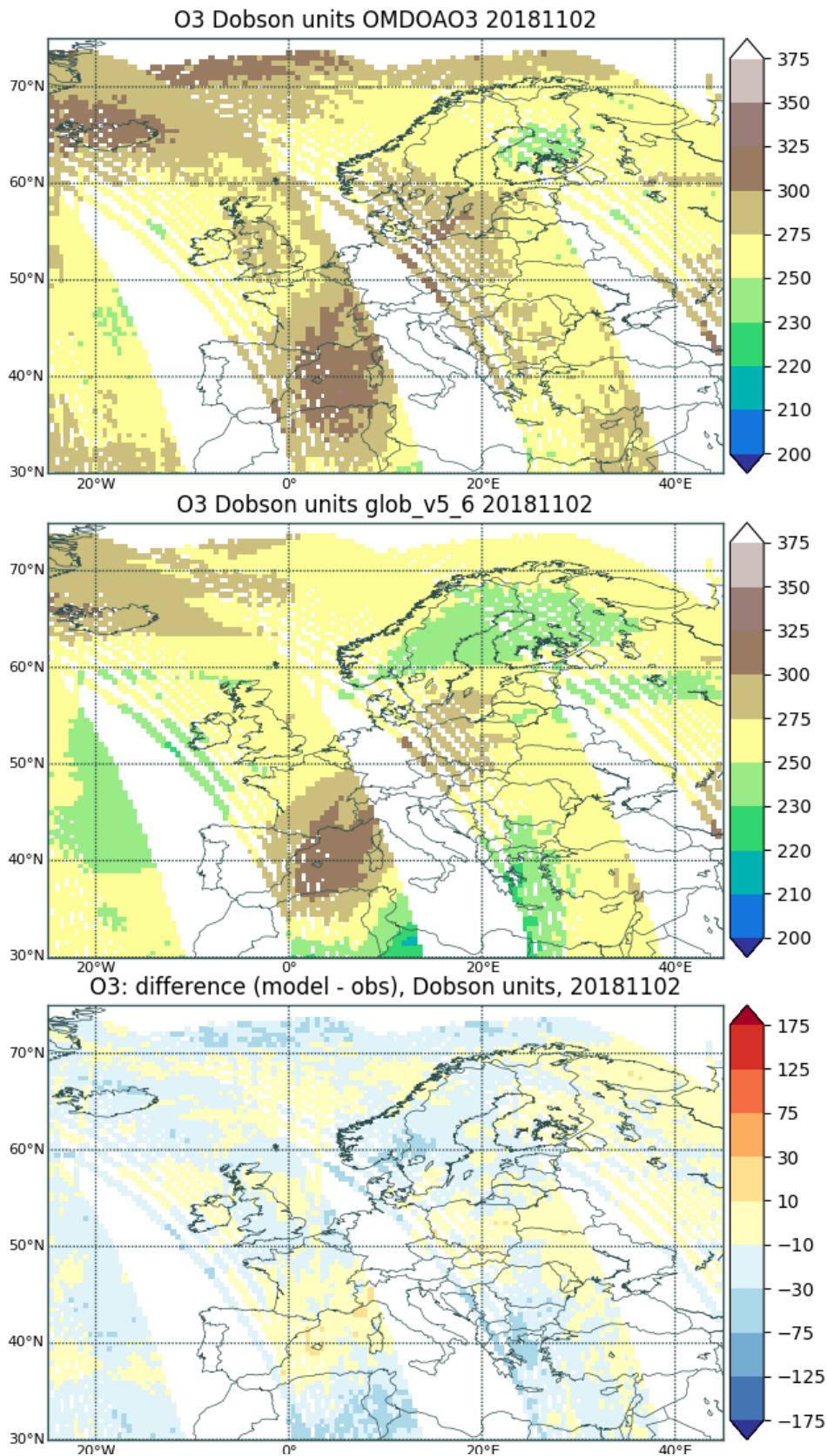


Figure S7. Global ozone column predicted by SILAM on 1.11.2018 for 1.11.2018. [Dubson units]



**Figure S8.** Observed by OMI DOAS (upper panel), predicted by SILAM (middle panel) daily-composite ozone column for 1.11.2018. The lower panel shows the model bias. Only grid cells corresponding to valid OMI observations were retained in the SILAM forecast. Dobson units





**Figure S9.** Observed by OMI DOAS (upper panel), predicted by SILAM (middle panel) daily-composite ozone column for 2.11.2018. The lower panel shows the model bias. Only grid cells corresponding to valid OMI observations were retained in the SILAM forecast. Dobson units

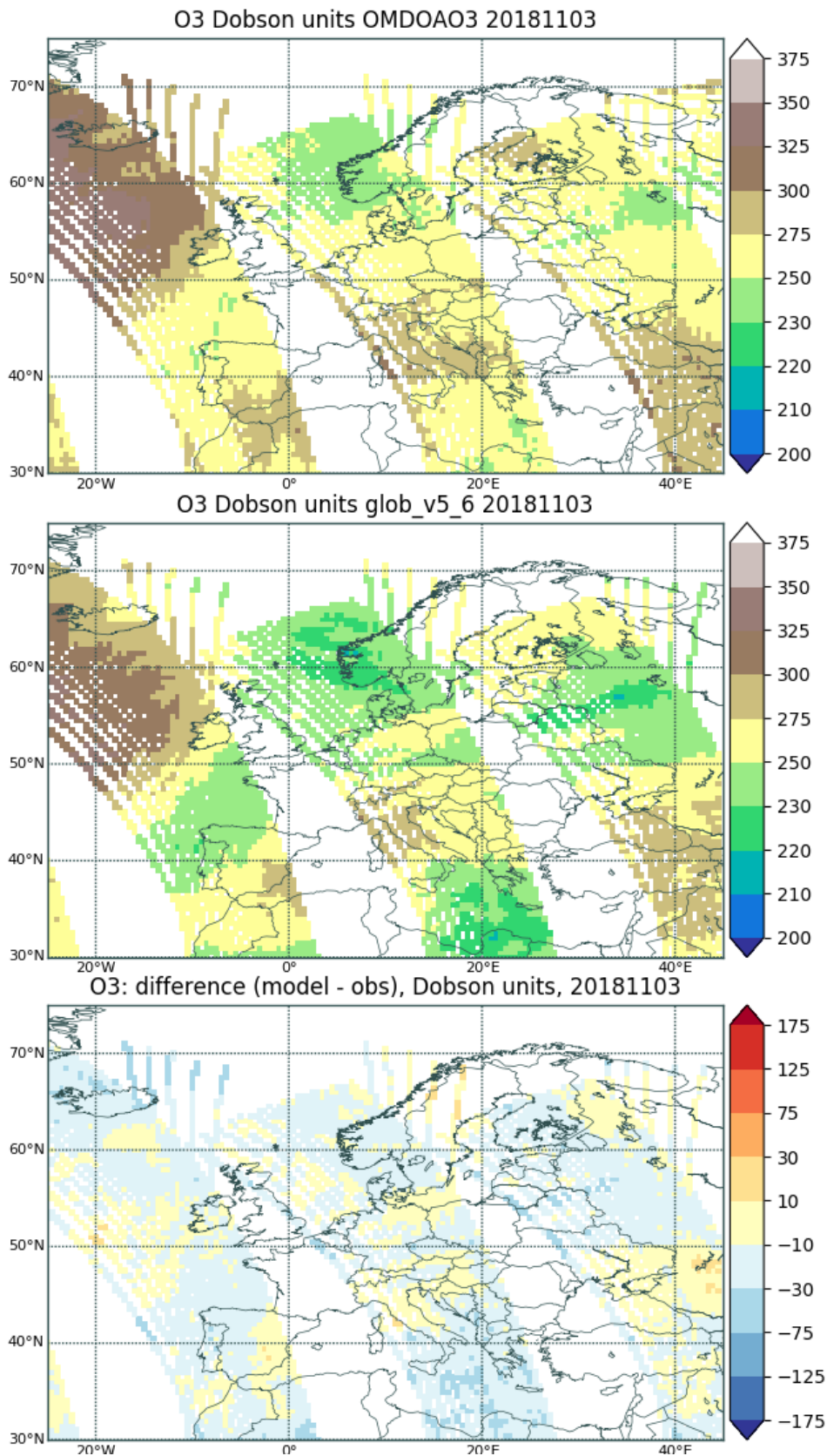


Figure S10. Observed by OMI DOAS (upper panel), predicted by SILAM (middle panel) daily-composite ozone column for 3.11.2018. The lower panel shows the model bias. Only grid cells corresponding to valid OMI observations were retained in the SILAM forecast. Dobson units

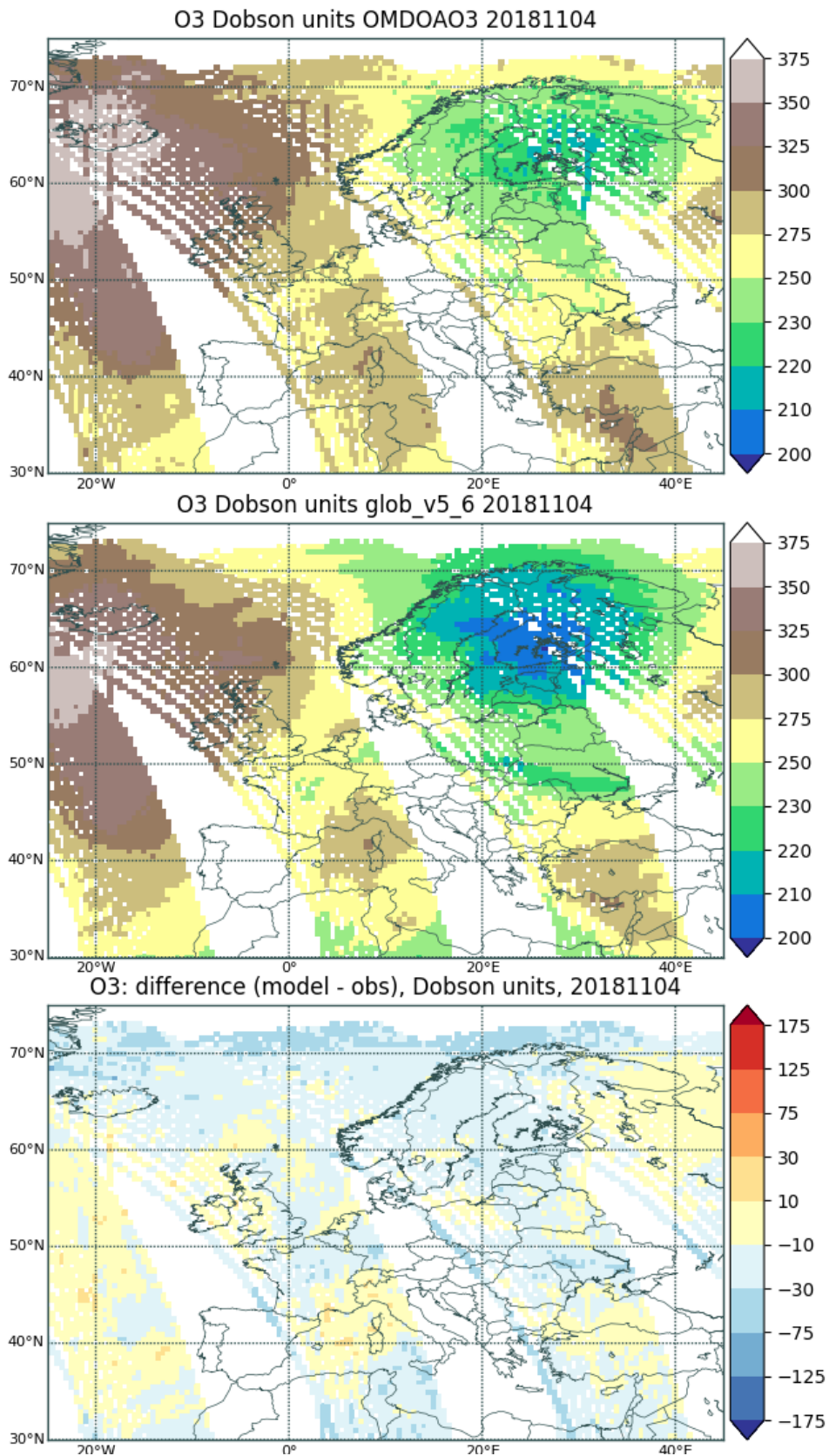


Figure S11. Observed by OMI DOAS (upper panel), predicted by SILAM (middle panel) daily-composite ozone column for 4.11.2018. The lower panel shows the model bias. Only grid cells corresponding to valid OMI observations were retained in the SILAM forecast. Dobson units



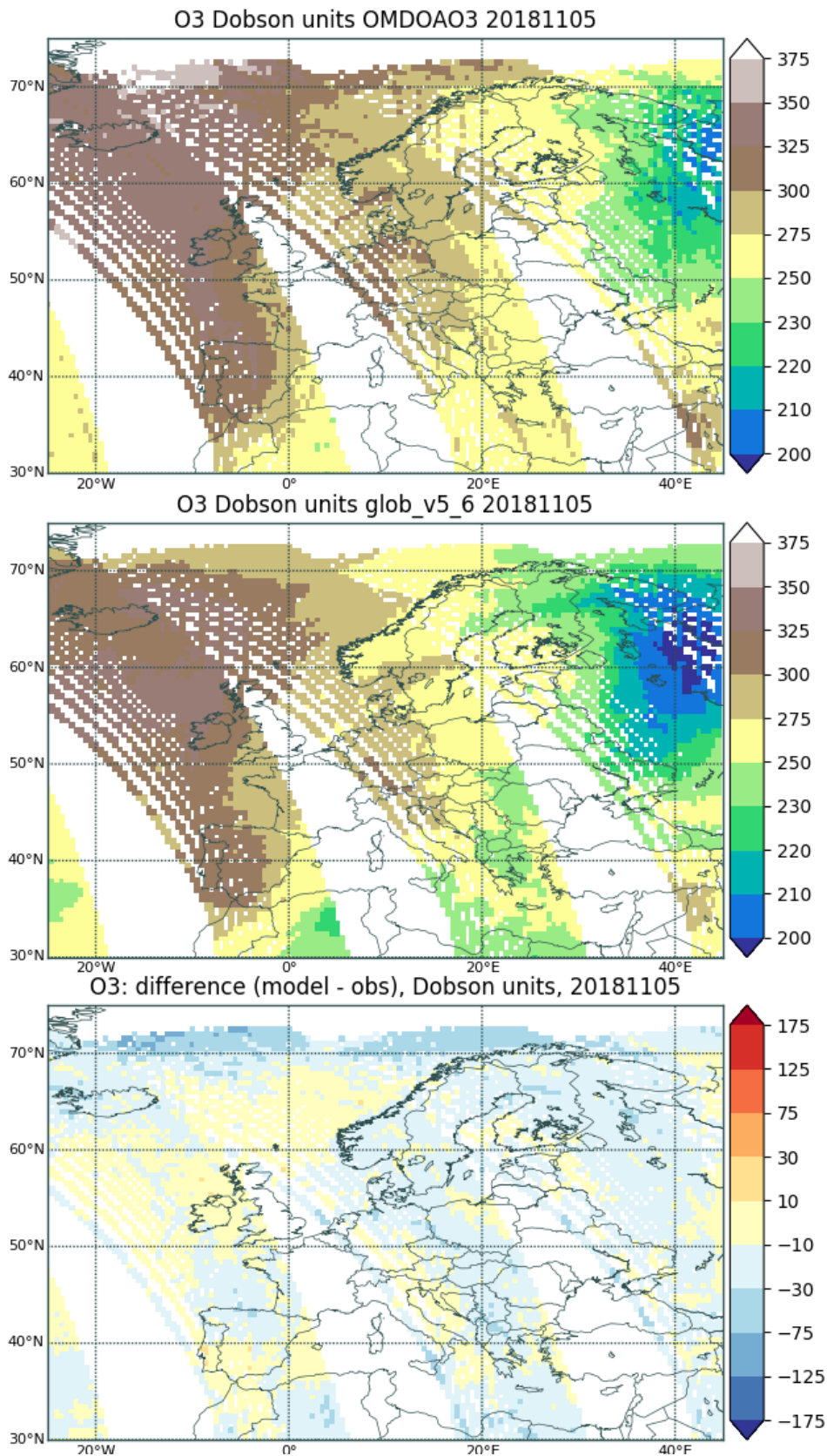


Figure S12. Observed by OMI DOAS (upper panel), predicted by SILAM (middle panel) daily-composite ozone column for 5.11.2018. The lower panel shows the model bias. Only grid cells corresponding to valid OMI observations were retained in the SILAM forecast. Dobson units



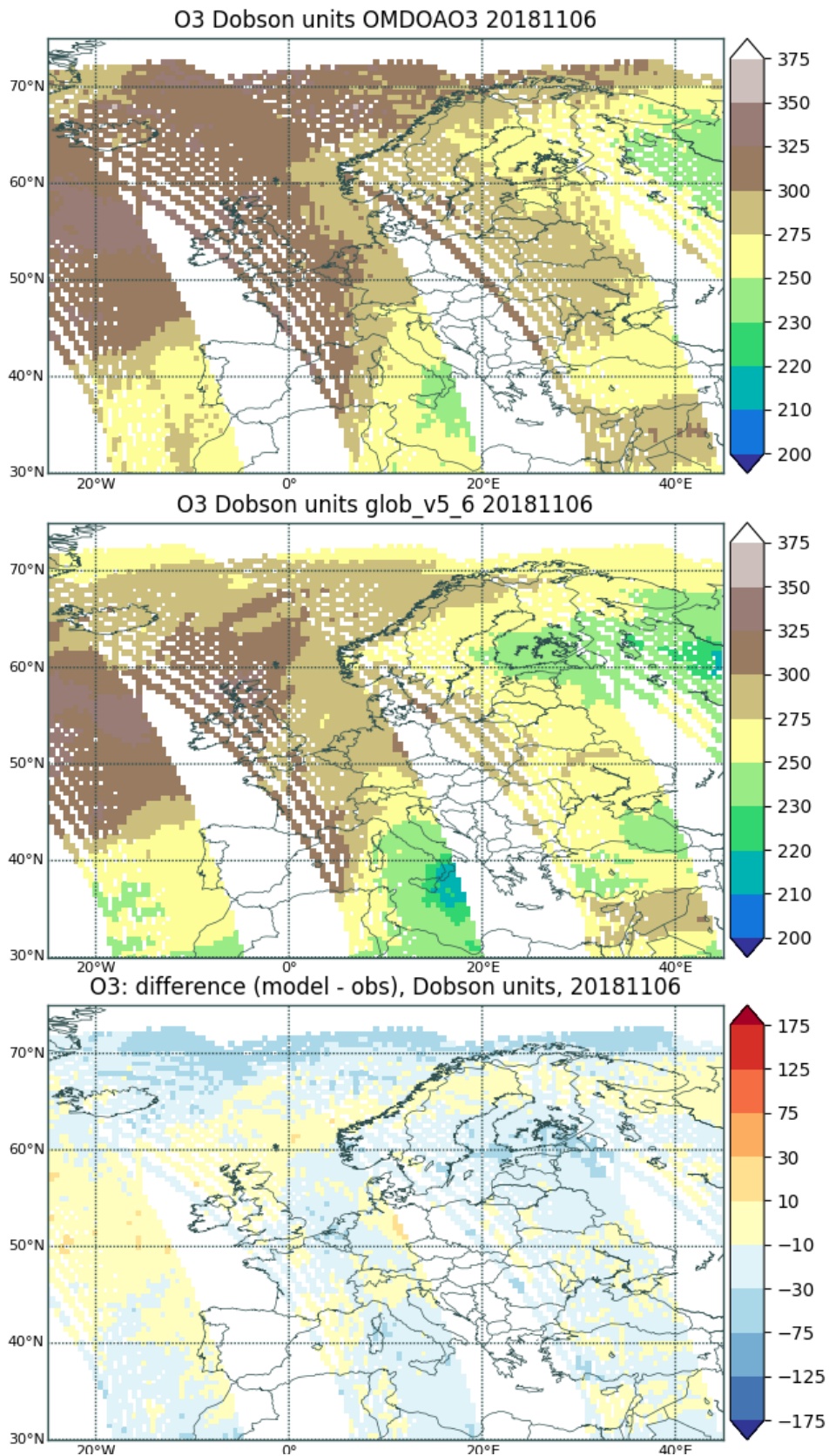
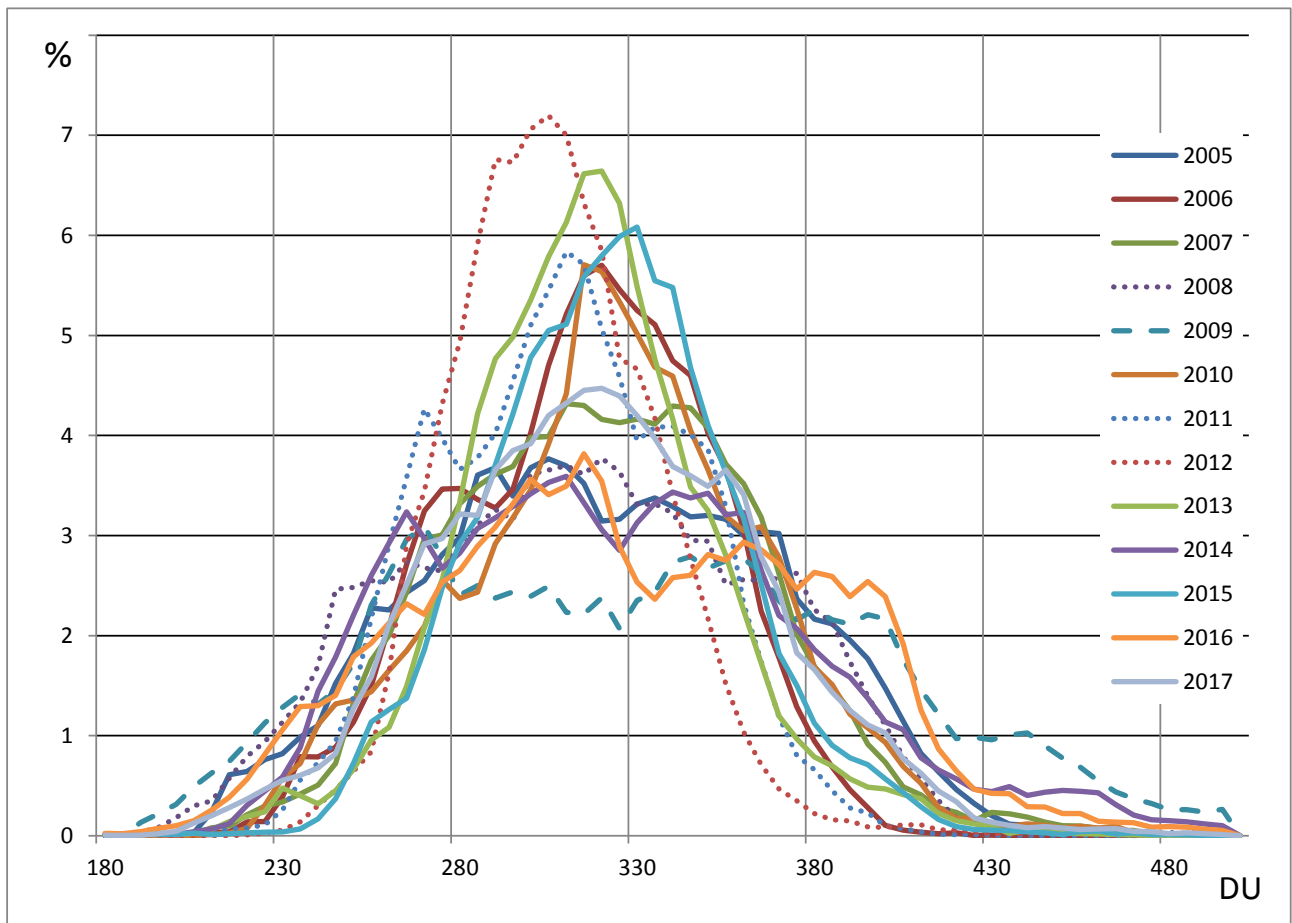


Figure S13. Observed by OMI DOAS (upper panel), predicted by SILAM (middle panel) daily-composite ozone column for 6.11.2018. The lower panel shows the model bias. Only grid cells corresponding to valid OMI observations were retained in the SILAM forecast. Dobson units



**Figure S14. Frequency distribution of ozone total column as observed by OMI for November 2005-2017, latitude belt 60N – 90N. Extreme years are additionally highlighted by the specific line shapes. Dobson units.**