

Supplementary material for: Influence of modelled soil biogenicNO emissions on related trace gases and the atmospheric oxidizing efficiency

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Abstract

In this document you can find figures with absolute differences in the LT column mixing ratio/concentration of relevant tracers and some additional plots, which were not included in the article.

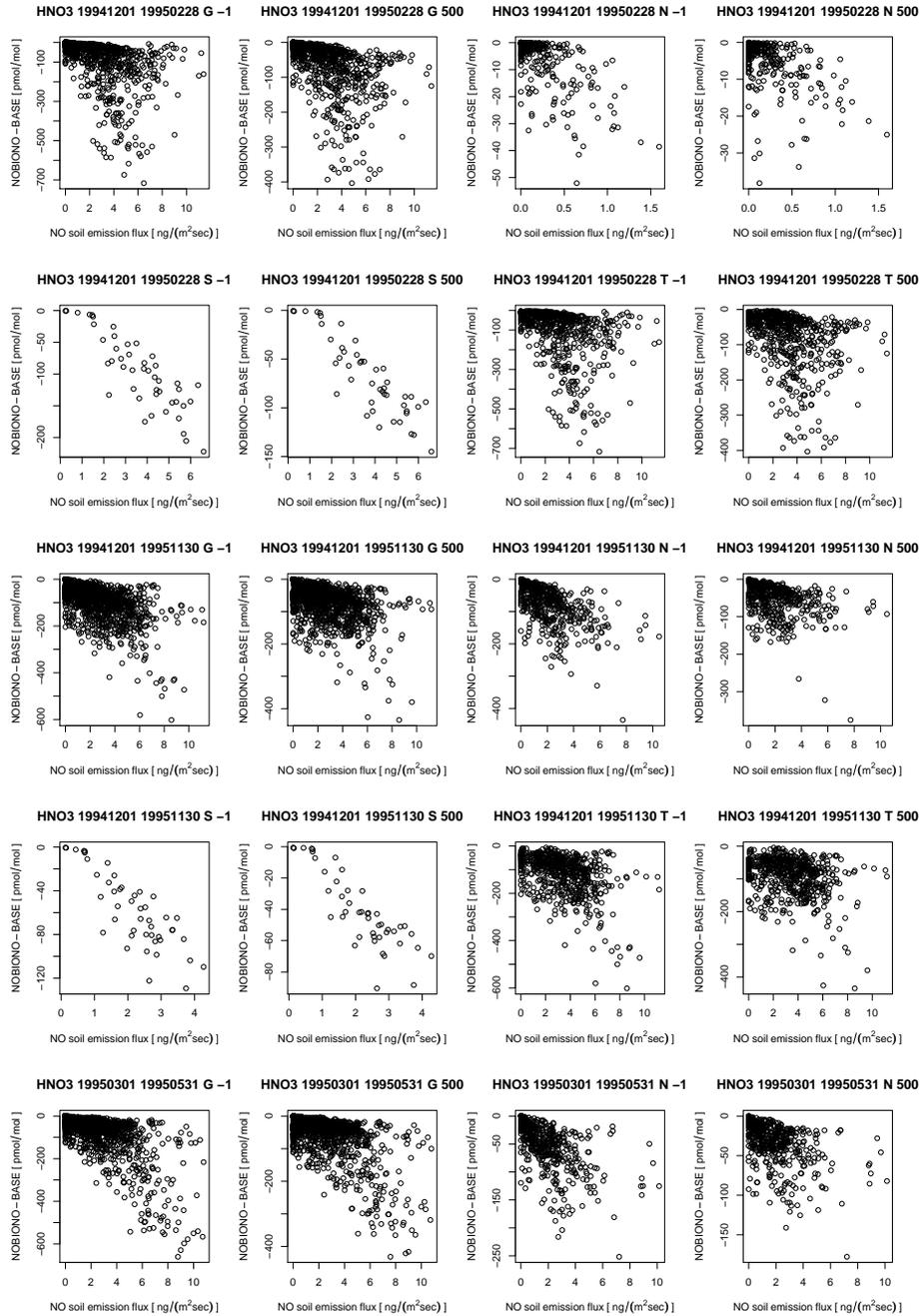


Figure 1: Scatterplot of difference in the tracer mixing ratio/concentration (NOBIONO - BASE) versus soil NO emission. Naming of each plot: “tracer” “start date” “end date” “column height” (-1 for surface layer; 500 up to 500hPa) “domain” (G: global, N: 30–60degnorth, S: 30–60degsouth, T: 30degsouthth–30degnorth)

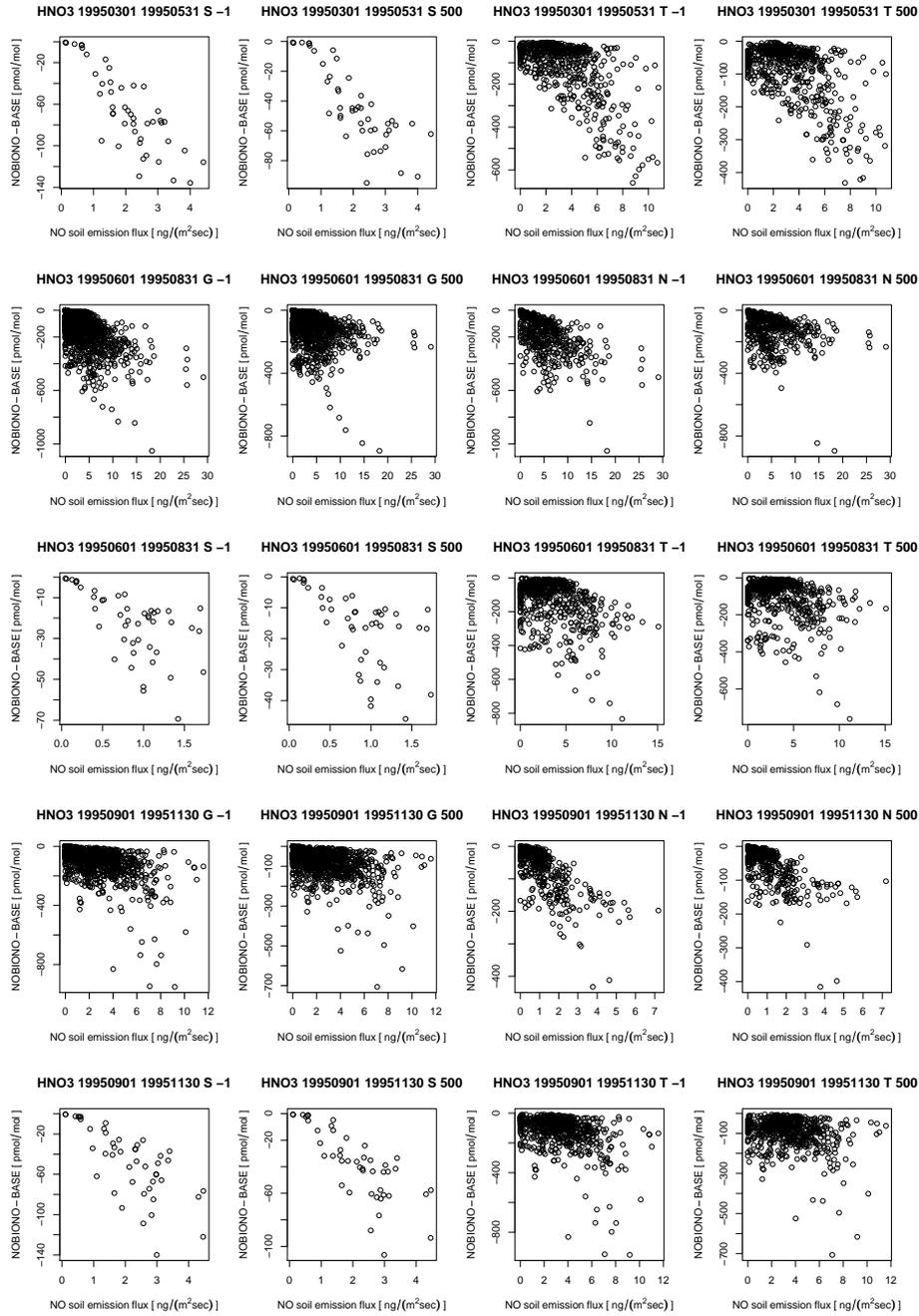


Figure 1: Continued. Naming of each plot: “tracer” “start date” “end date” “column height” (-1 for surface layer; 500 up to 500hPa) “domain” (G: global, N: 30–60degnorth, S: 30–60degsouth, T: 30degsouthth–30degnorth)

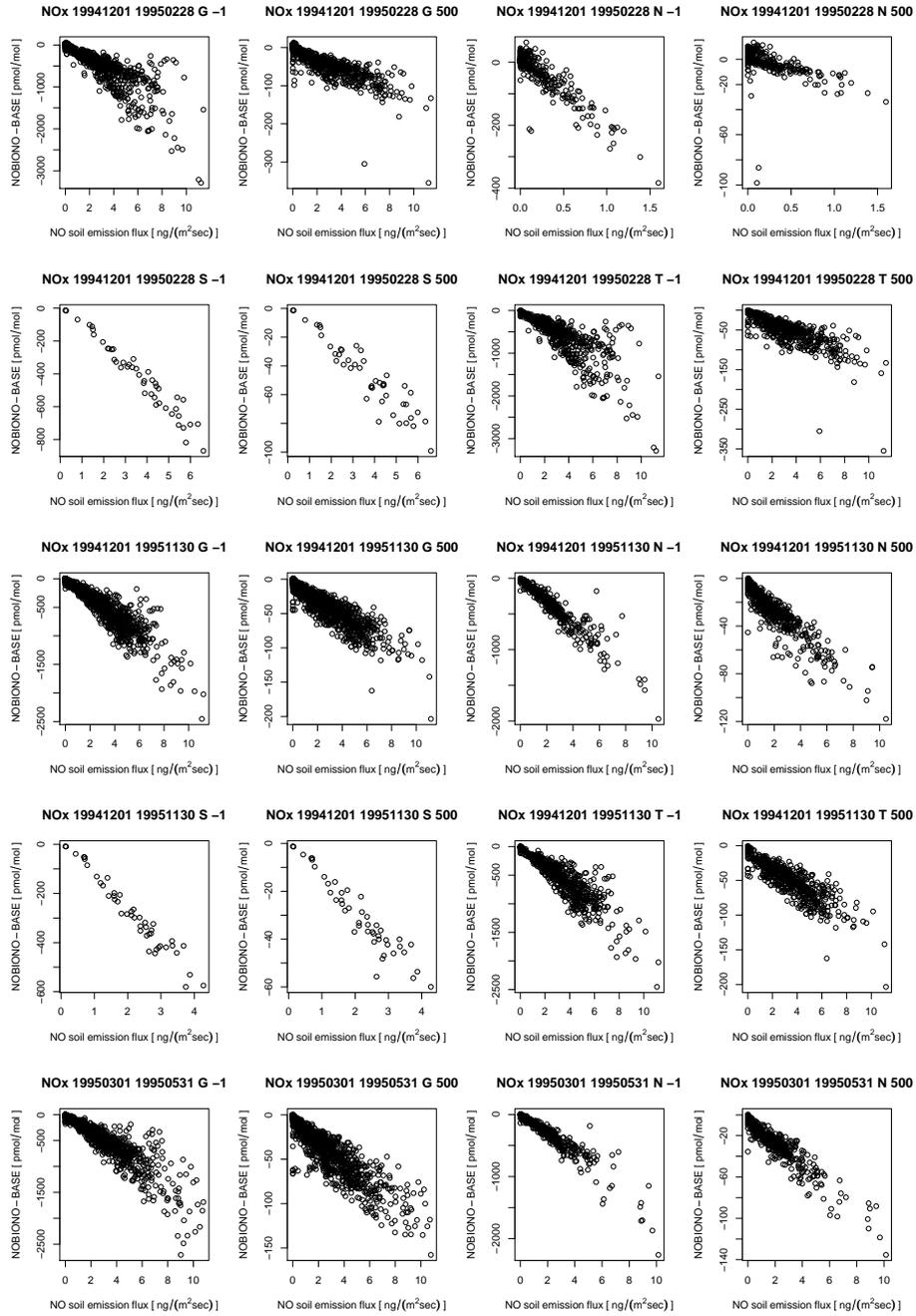


Figure 1: Continued. Naming of each plot: “tracer” “start date” “end date” “column height” (-1 for surface layer; 500 up to 500hPa) “domain” (G: global, N: 30–60degnorth, S: 30–60degsouth, T: 30degsouthth–30degnorth)

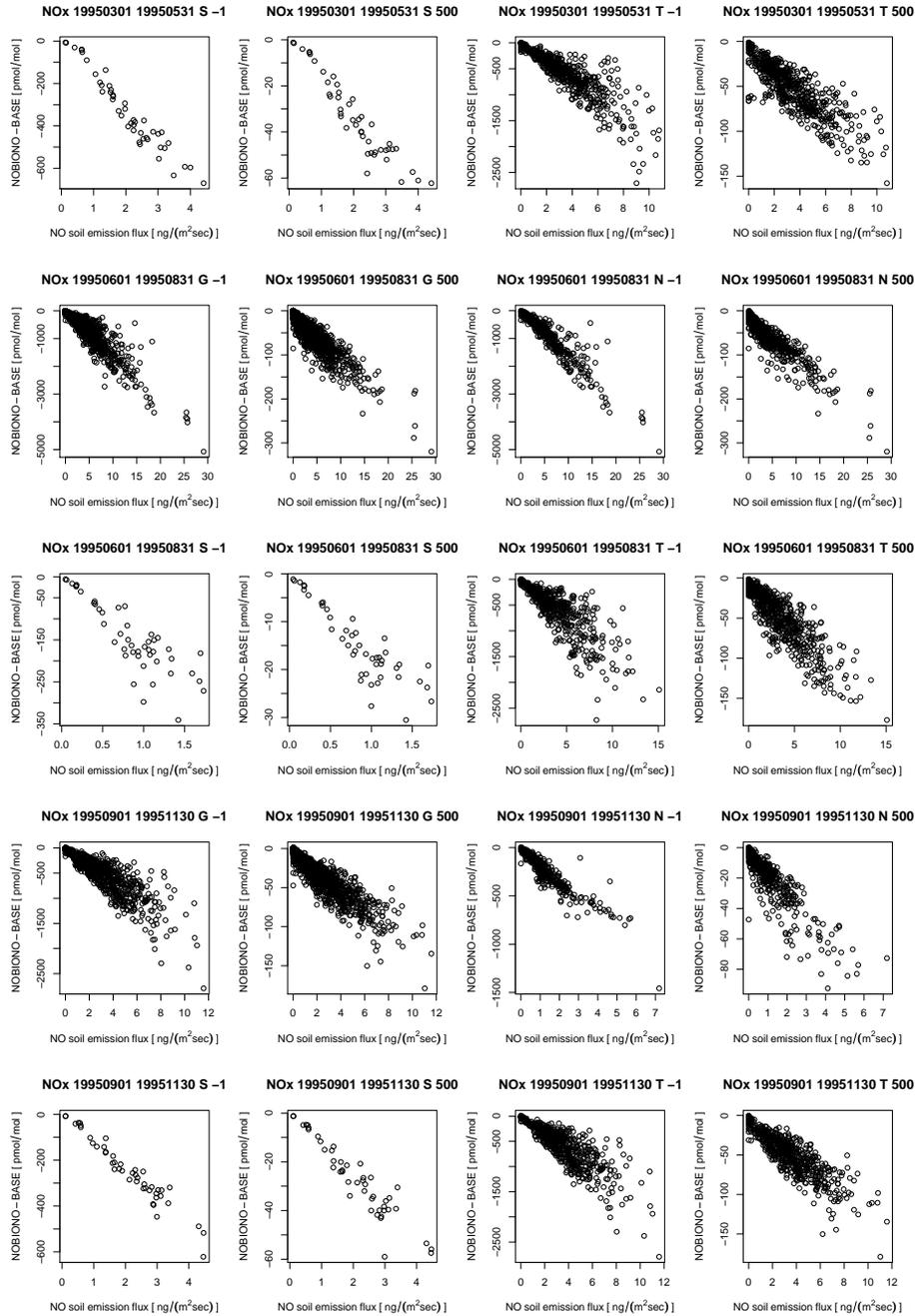


Figure 1: Continued. Naming of each plot: “tracer” “start date” “end date” “column height” (-1 for surface layer; 500 up to 500hPa) “domain” (G: global, N: 30–60degnorth, S: 30–60degsouth, T: 30degsouthth–30degnorth)

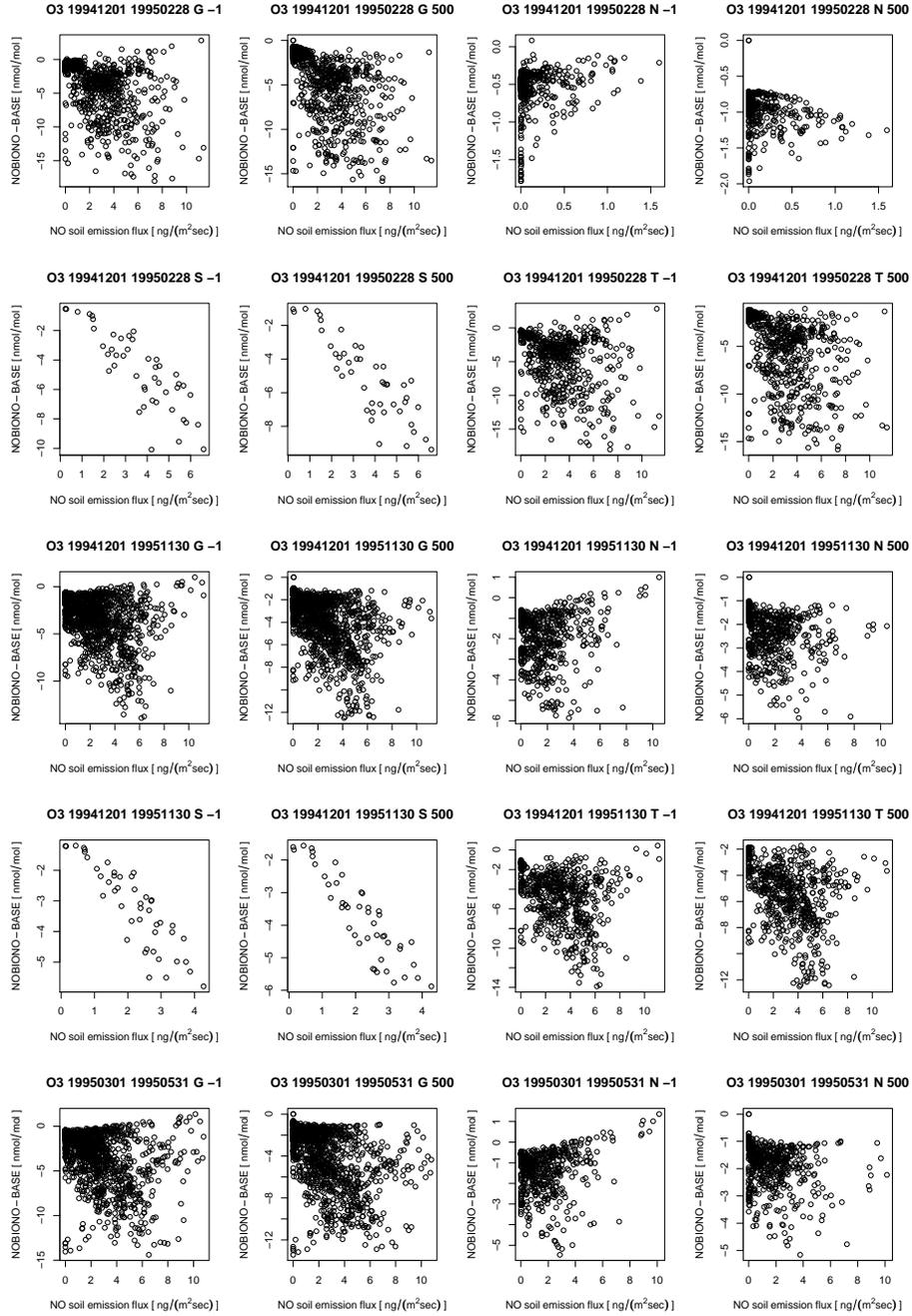


Figure 1: Continued. Naming of each plot: “tracer” “start date” “end date” “column height” (-1 for surface layer; 500 up to 500hPa) “domain” (G: global, N: 30–60degnorth, S: 30–60degsouth, T: 30degsouthth–30degnorth)

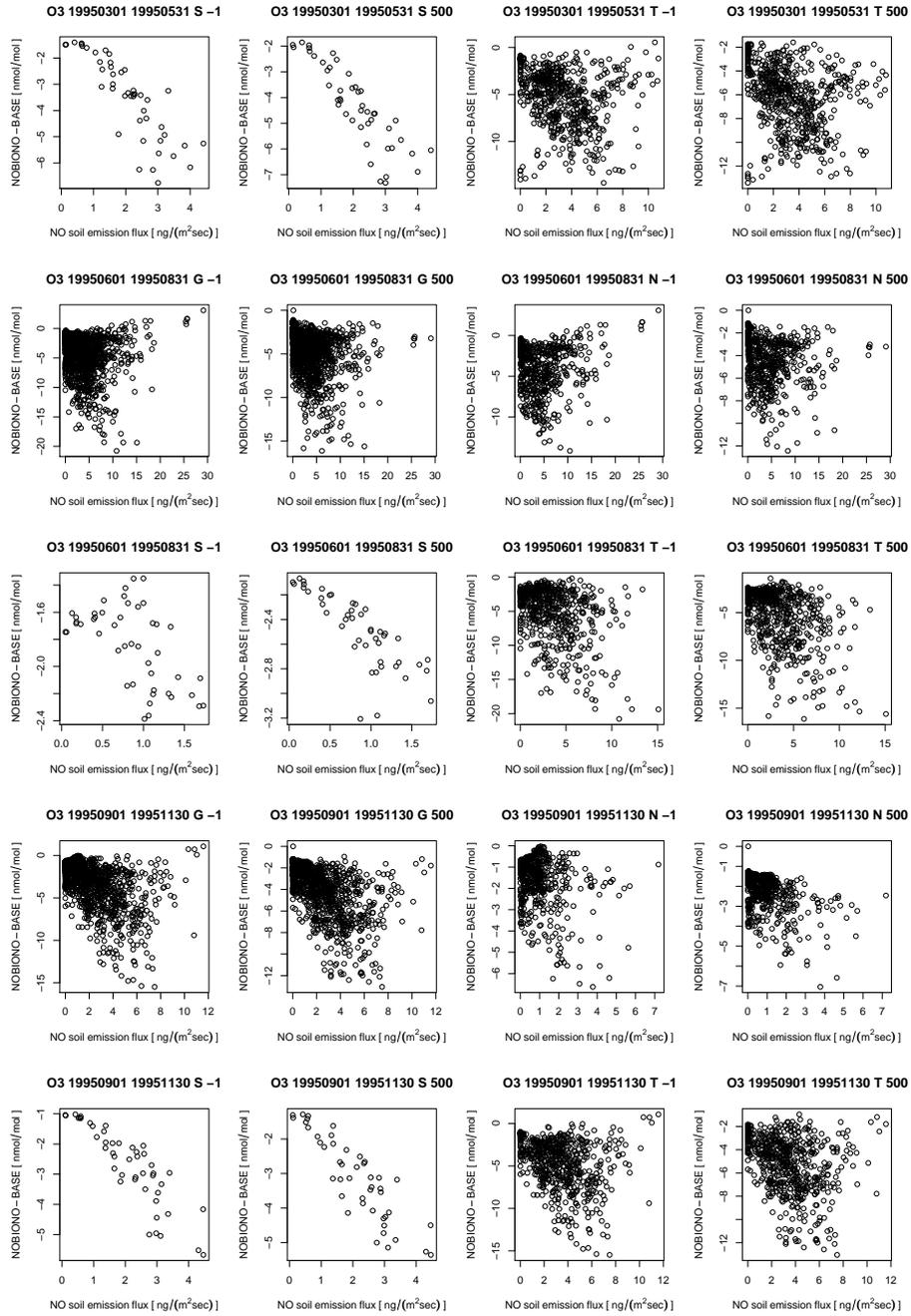


Figure 1: Continued. Naming of each plot: “tracer” “start date” “end date” “column height” (-1 for surface layer; 500 up to 500hPa) “domain” (G: global, N: 30–60degnorth, S: 30–60degsouth, T: 30degsouthth–30degnorth)

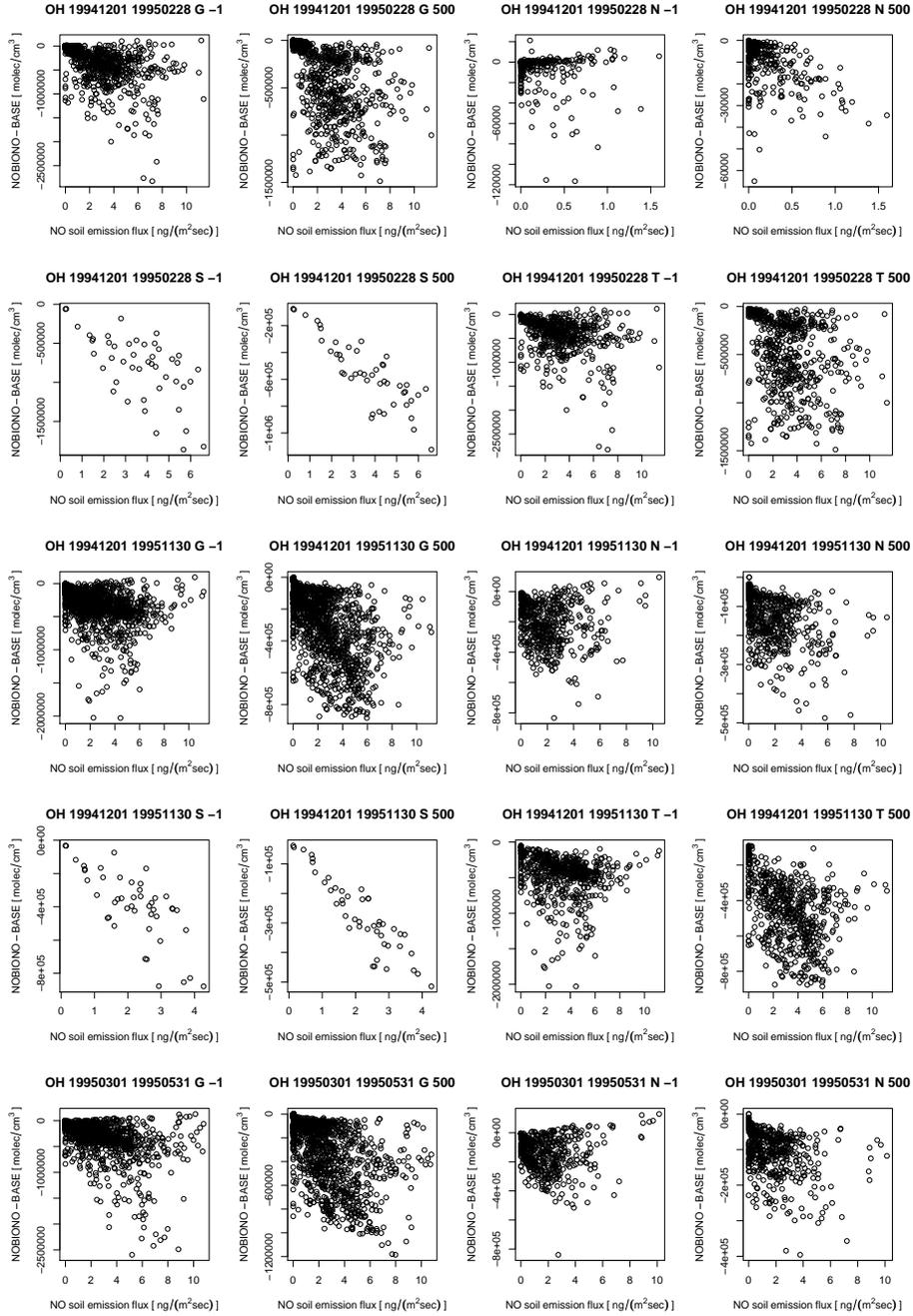


Figure 1: Continued. Naming of each plot: “tracer” “start date” “end date” “column height” (-1 for surface layer; 500 up to 500hPa) “domain” (G: global, N: 30–60deg north, S: 30–60deg south, T: 30deg south to 30deg north)

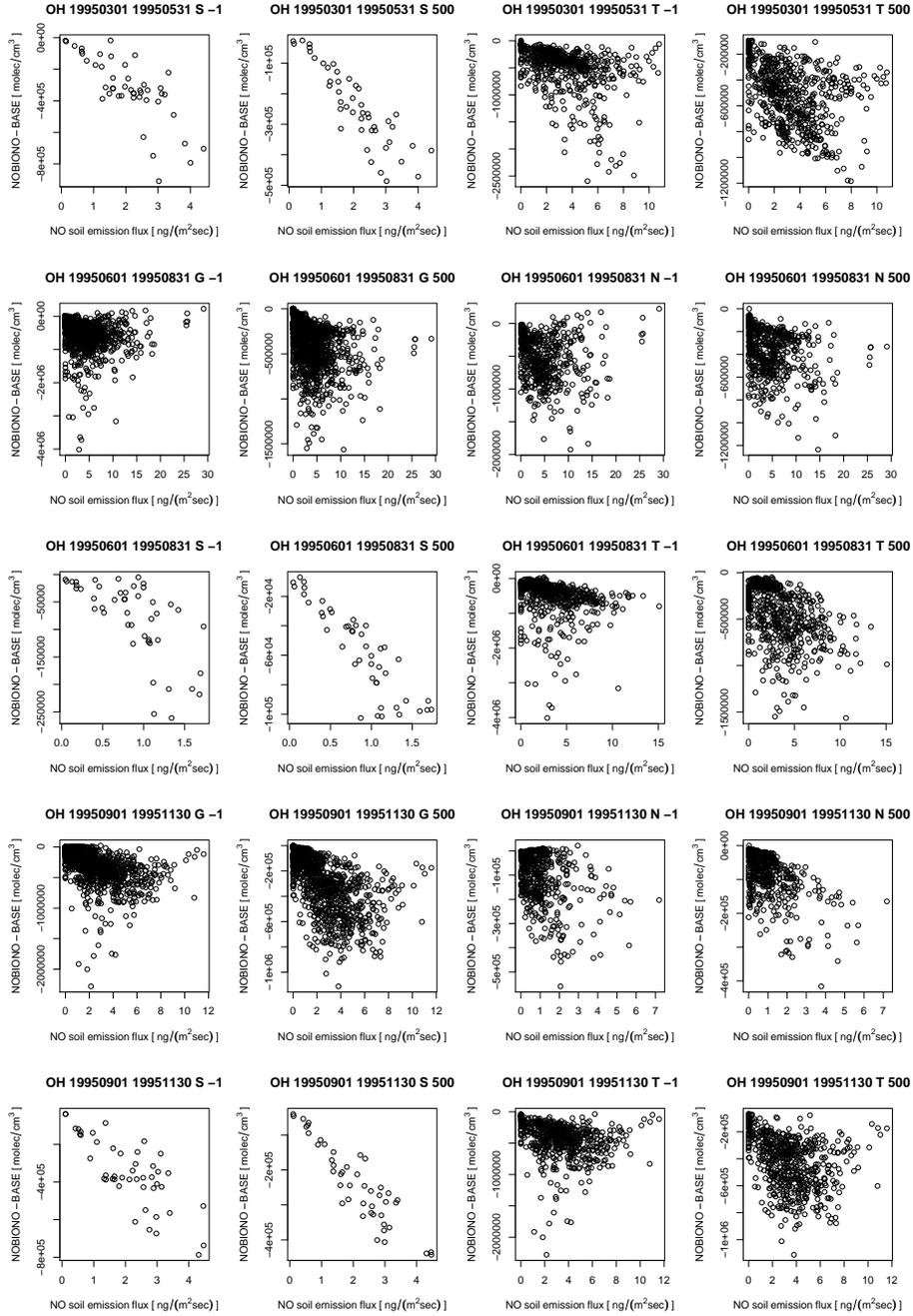


Figure 1: Continued. Naming of each plot: “tracer” “start date” “end date” “column height” (-1 for surface layer; 500 up to 500hPa) “domain” (G: global, N: 30–60degnorth, S: 30–60degsouth, T: 30degsouthth–30degnorth)

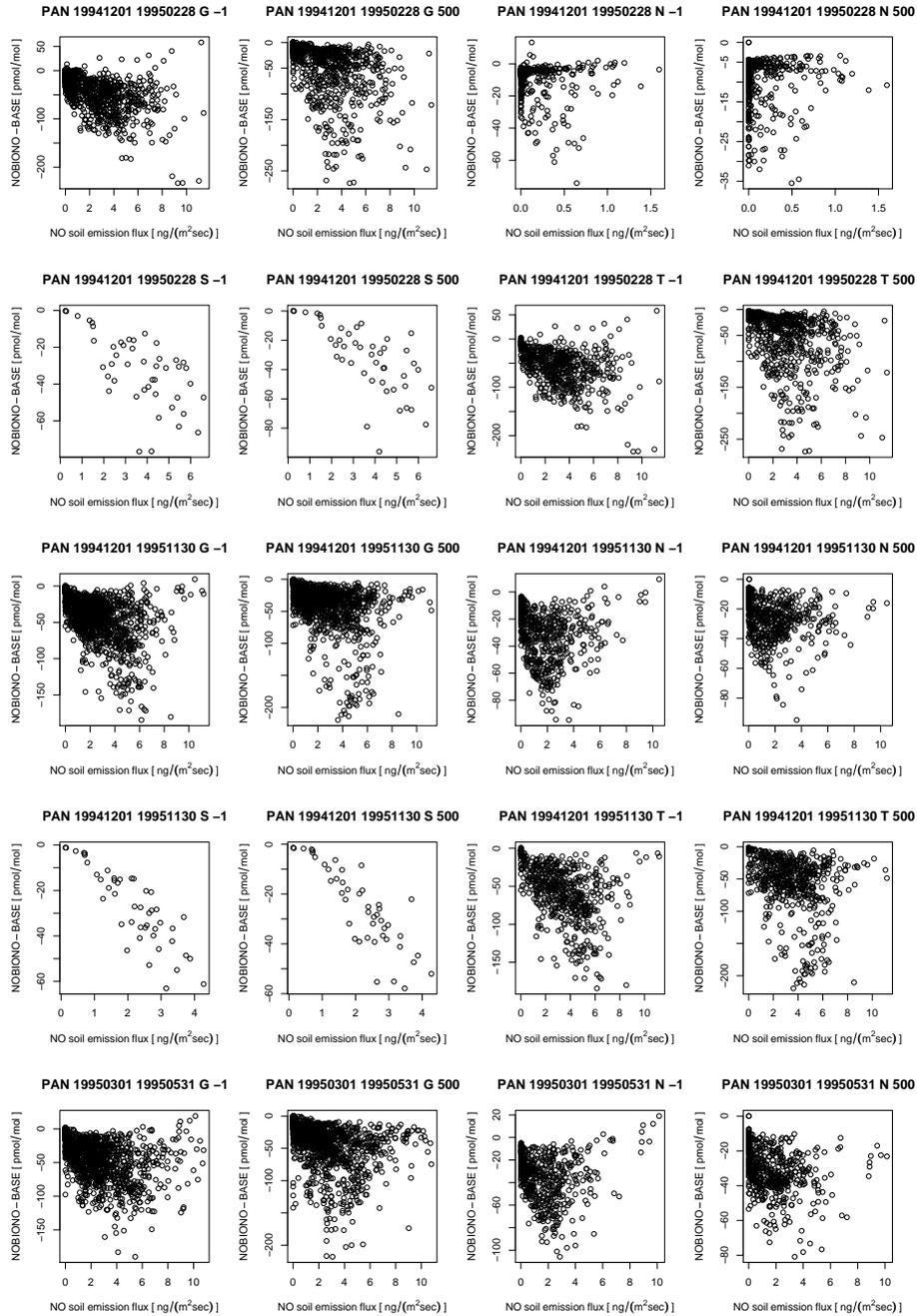


Figure 1: Continued. Naming of each plot: “tracer” “start date” “end date” “column height” (-1 for surface layer; 500 up to 500hPa) “domain” (G: global, N: 30–60degnorth, S: 30–60degsouth, T: 30degstouthth–30degnorth)

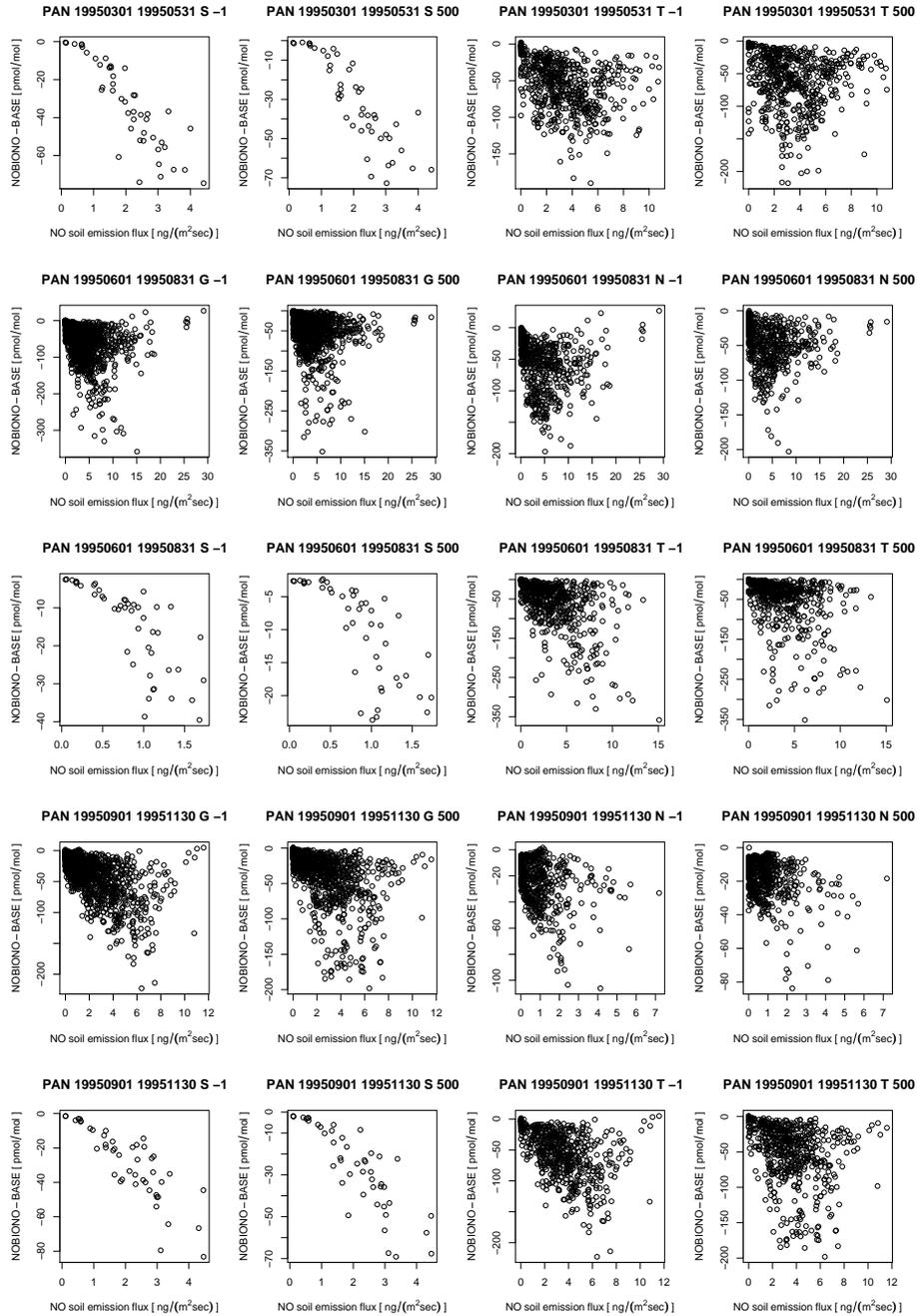


Figure 1: Continued. Naming of each plot: “tracer” “start date” “end date” “column height” (-1 for surface layer; 500 up to 500hPa) “domain” (G: global, N: 30–60degnorth, S: 30–60degsouth, T: 30degsouthth–30degnorth)

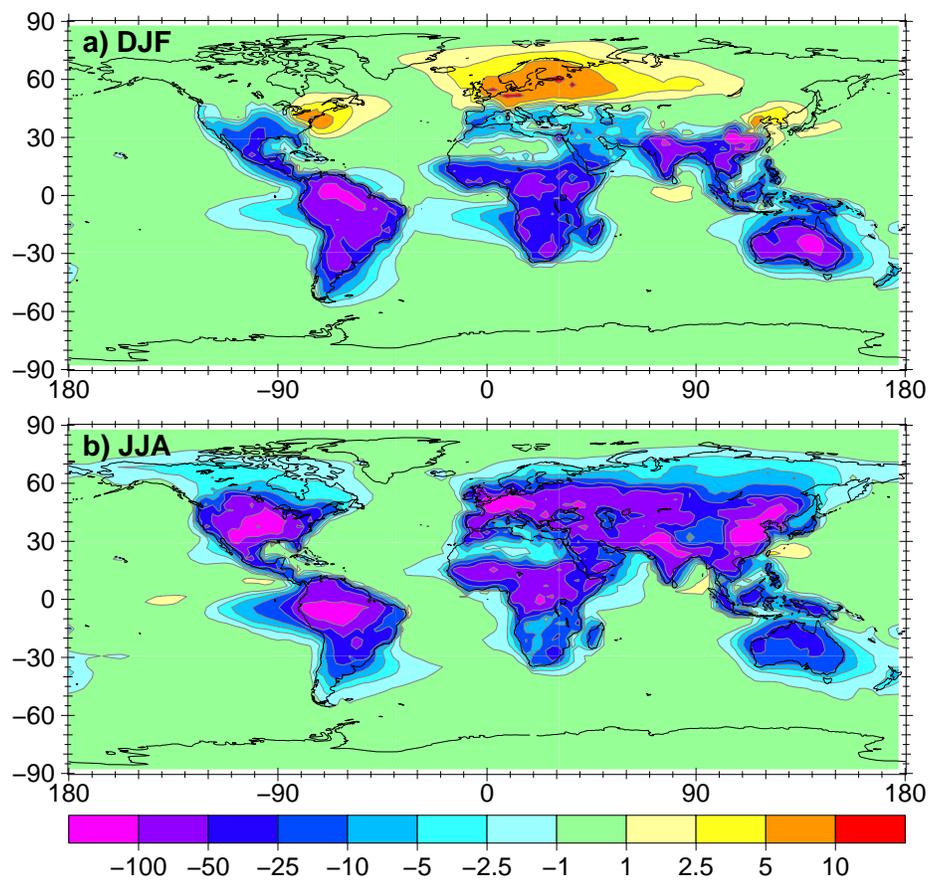


Figure 2: Absolute difference (NOBIONO – BASE) of the lower tropospheric column mixing ratio of NO_x in $\frac{\text{pmol}}{\text{mol}}$ averaged for a) December, January, February and b) June, July and August

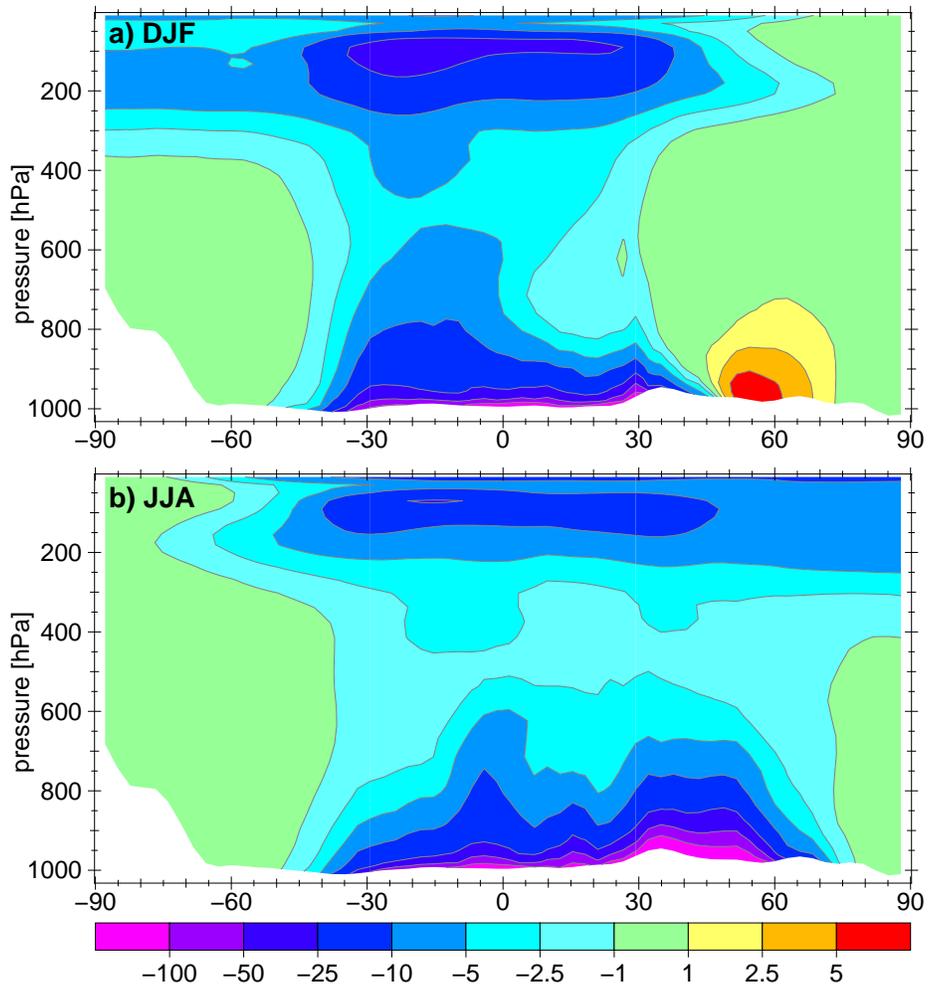


Figure 3: Absolute difference (NOBIONO – BASE) of zonal mean mixing ratio of NO_x in $\frac{\text{pmol}}{\text{mol}}$ averaged for a) December, January, February and b) June, July and August

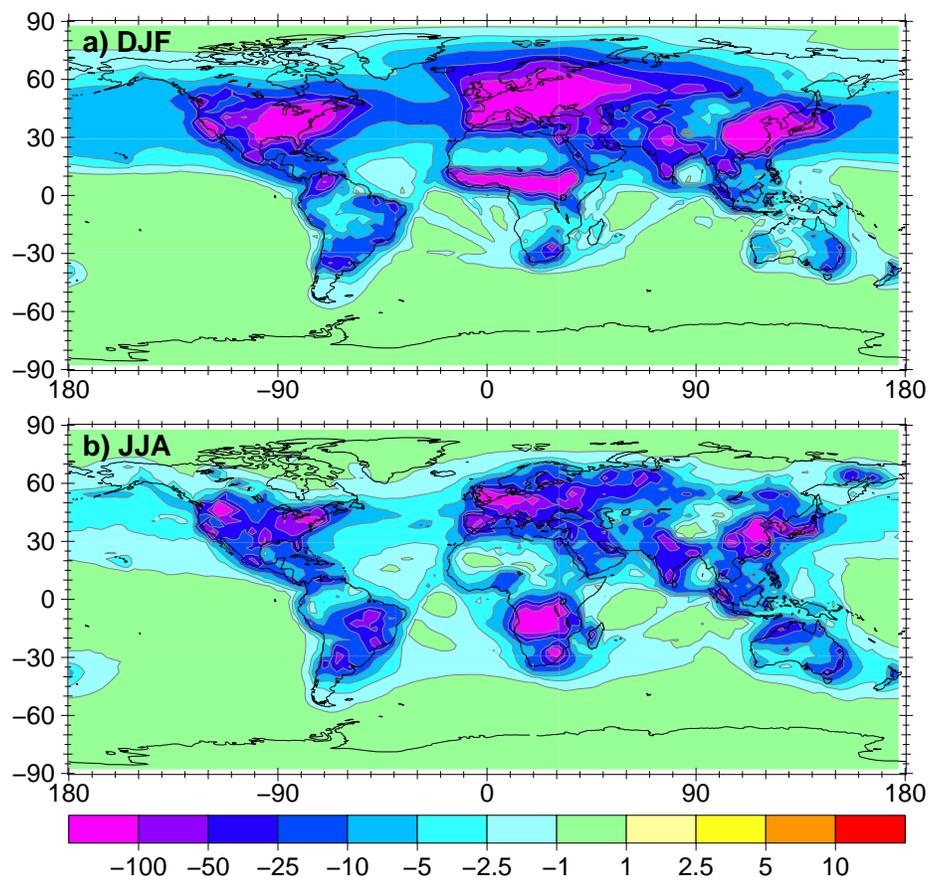


Figure 4: Absolute difference (REDOTHER – BASE) of the lower tropospheric column mixing ratio of NO_x in $\frac{\text{pmol}}{\text{mol}}$ averaged for a) December, January, February and b) June, July and August

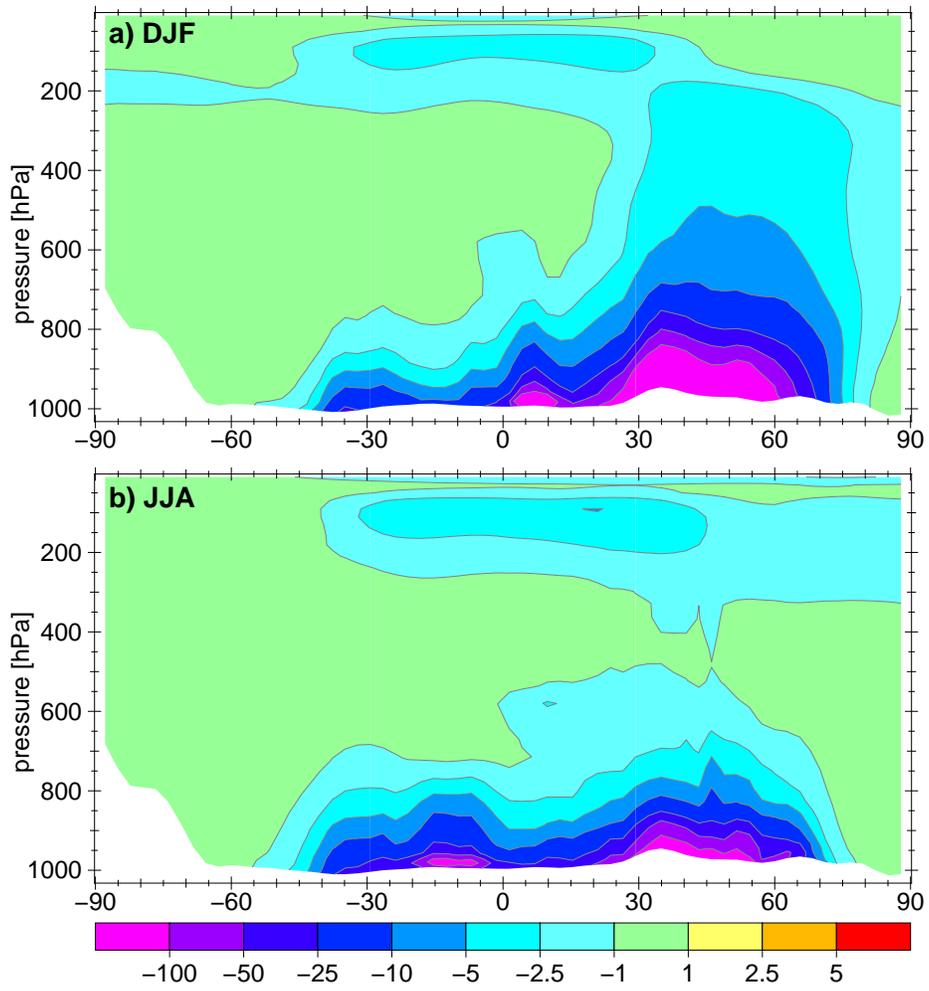


Figure 5: Absolute difference (REDOTHER – BASE) of zonal mean mixing ratio of NO_x in $\frac{\text{pmol}}{\text{mol}}$ averaged for a) December, January, February and b) June, July and August

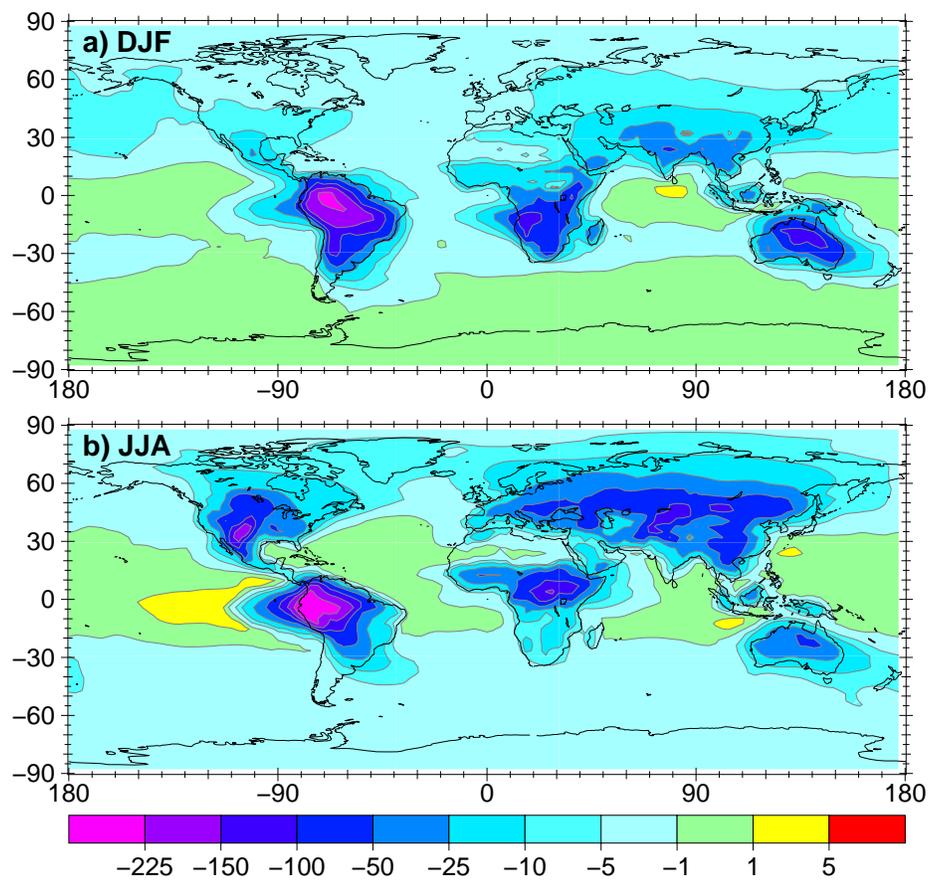


Figure 6: Absolute difference (NOBIONO – BASE) of the lower tropospheric column mixing ratio of PAN in $\frac{\text{pmol}}{\text{mol}}$ averaged for a) December, January, February and b) June, July and August

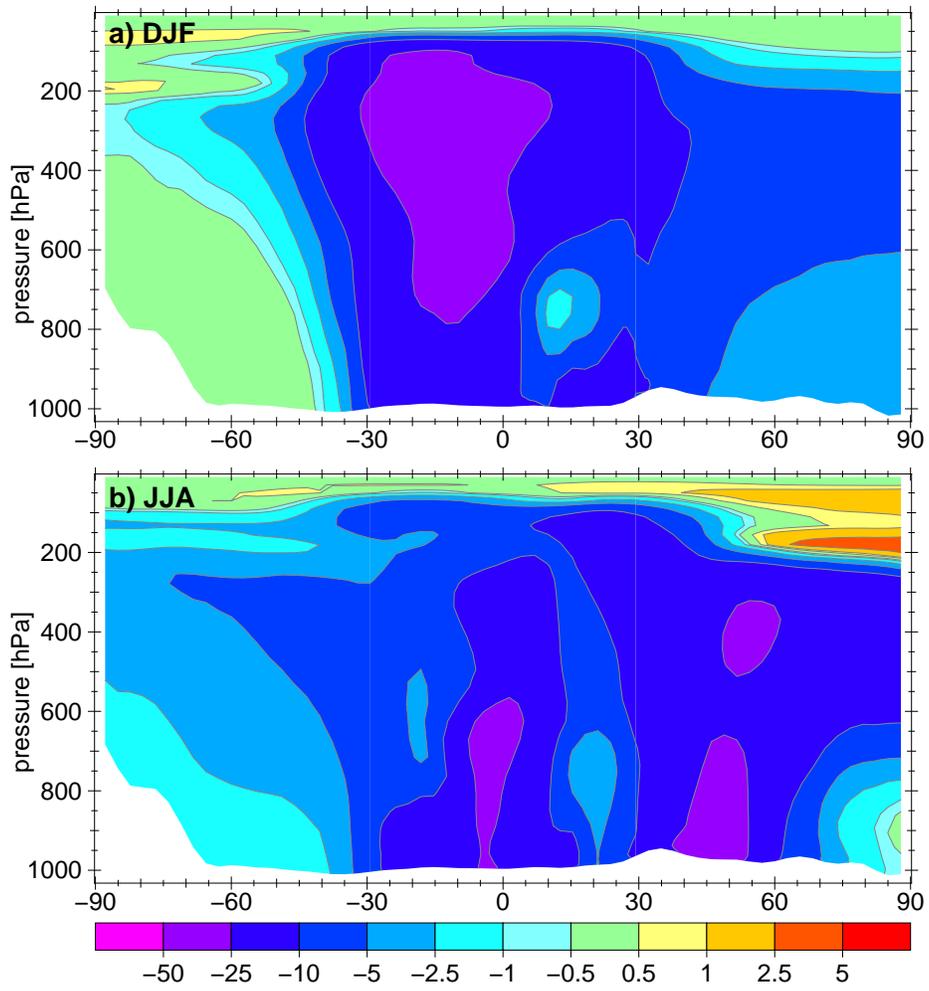


Figure 7: Absolute difference (NOBIONO – BASE) of zonal mean mixing ratio of PAN in $\frac{pmol}{mol}$ averaged for a) December, January, February and b) June, July and August

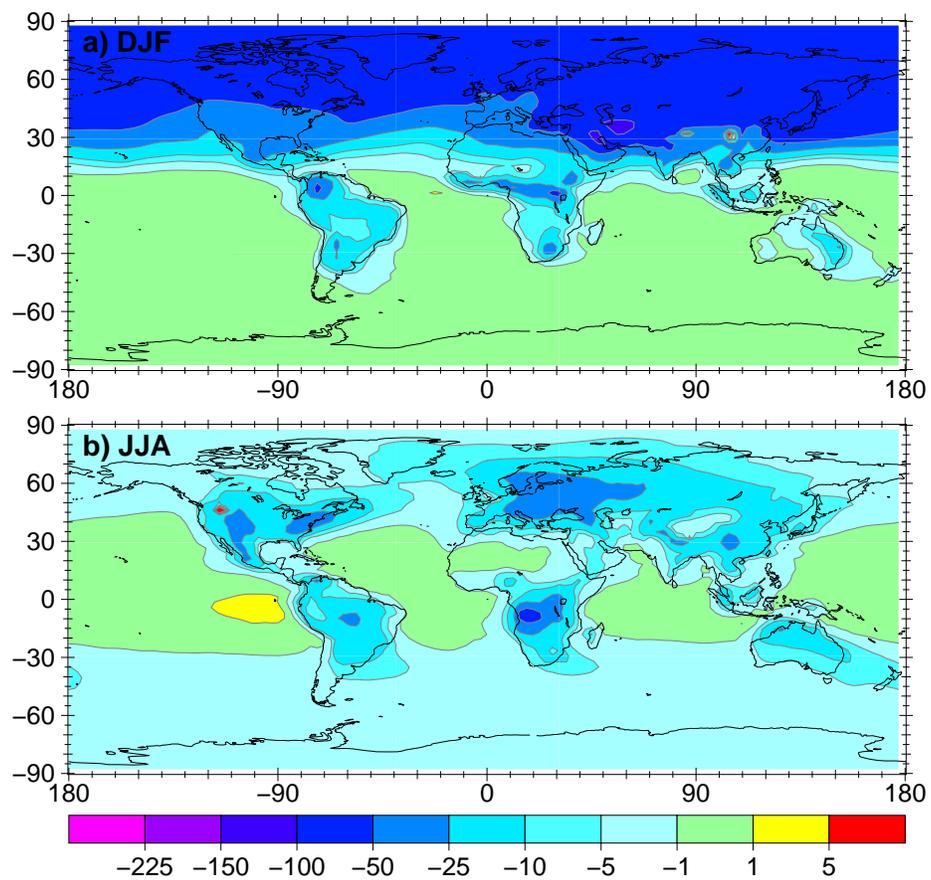


Figure 8: Absolute difference (REDOTHER – BASE) of the lower tropospheric column mixing ratio of PAN in $\frac{\text{pmol}}{\text{mol}}$ averaged for a) December, January, February and b) June, July and August

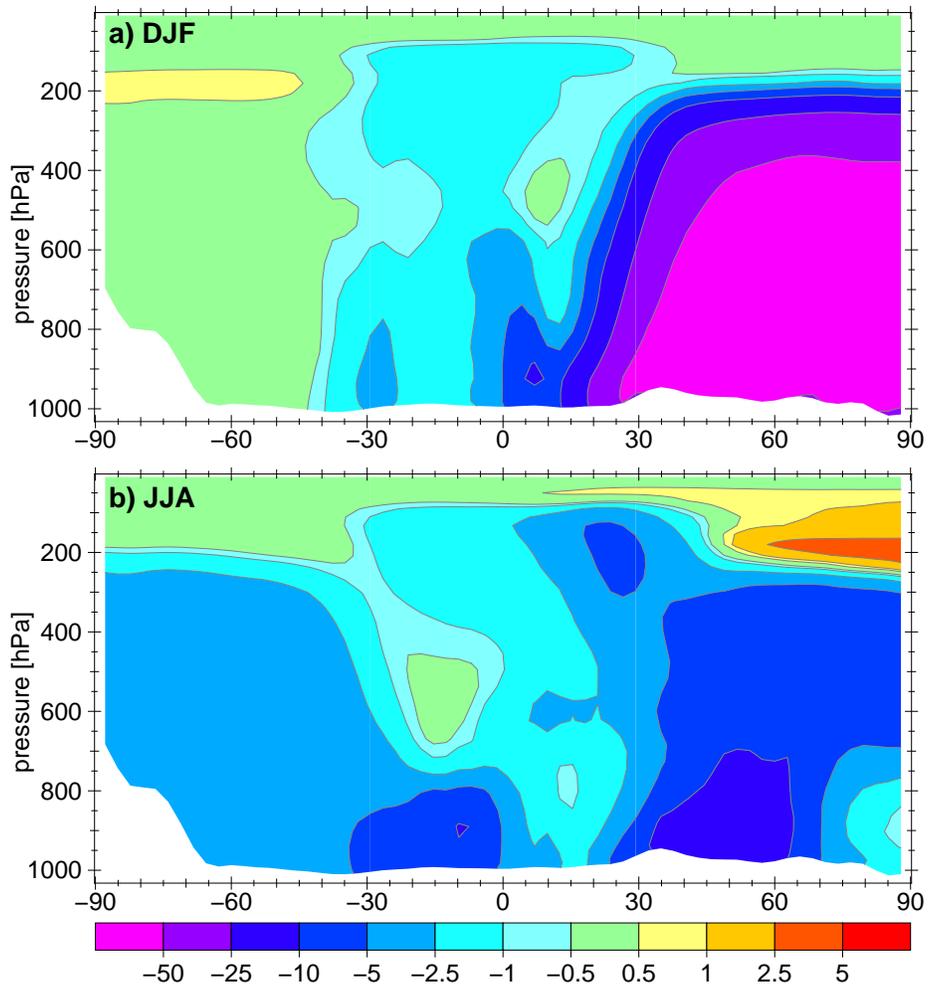


Figure 9: Absolute difference (REDOTHER – BASE) of zonal mean mixing ratio of PAN in $\frac{pmol}{mol}$ averaged for a) December, January, February and b) June, July and August

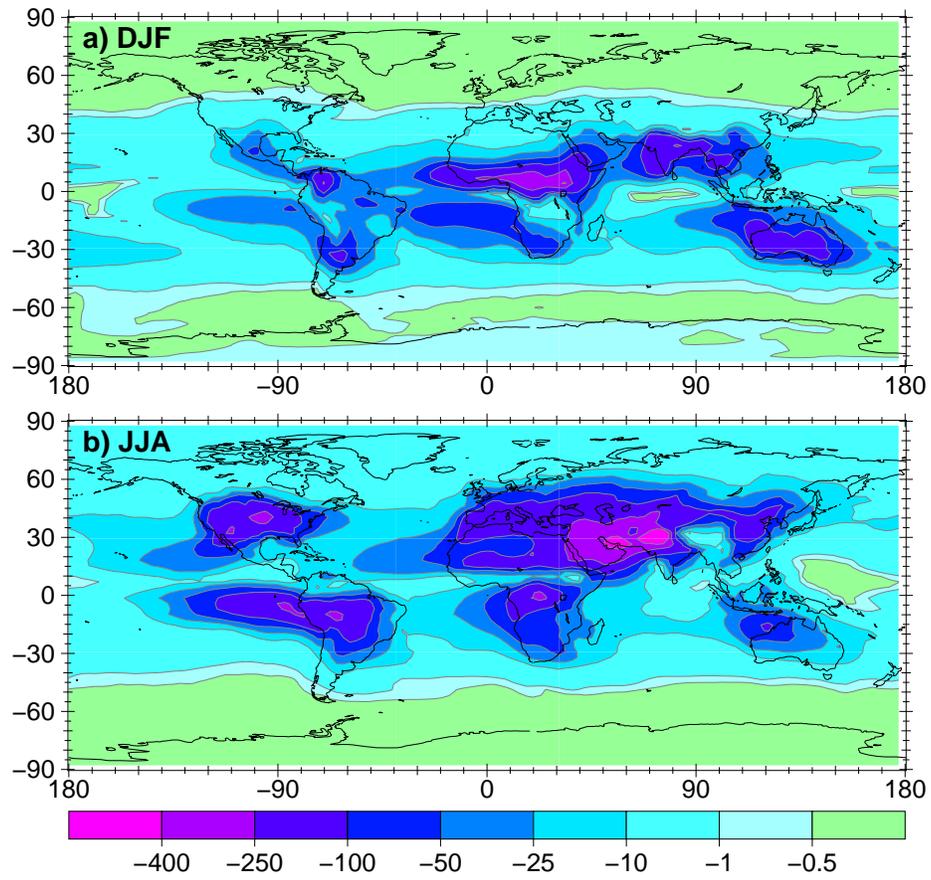


Figure 10: Absolute difference (NOBIONO – BASE) of the lower tropospheric column mixing ratio of HNO₃ in $\frac{\text{pmol}}{\text{mol}}$ averaged for a) December, January, February and b) June, July and August

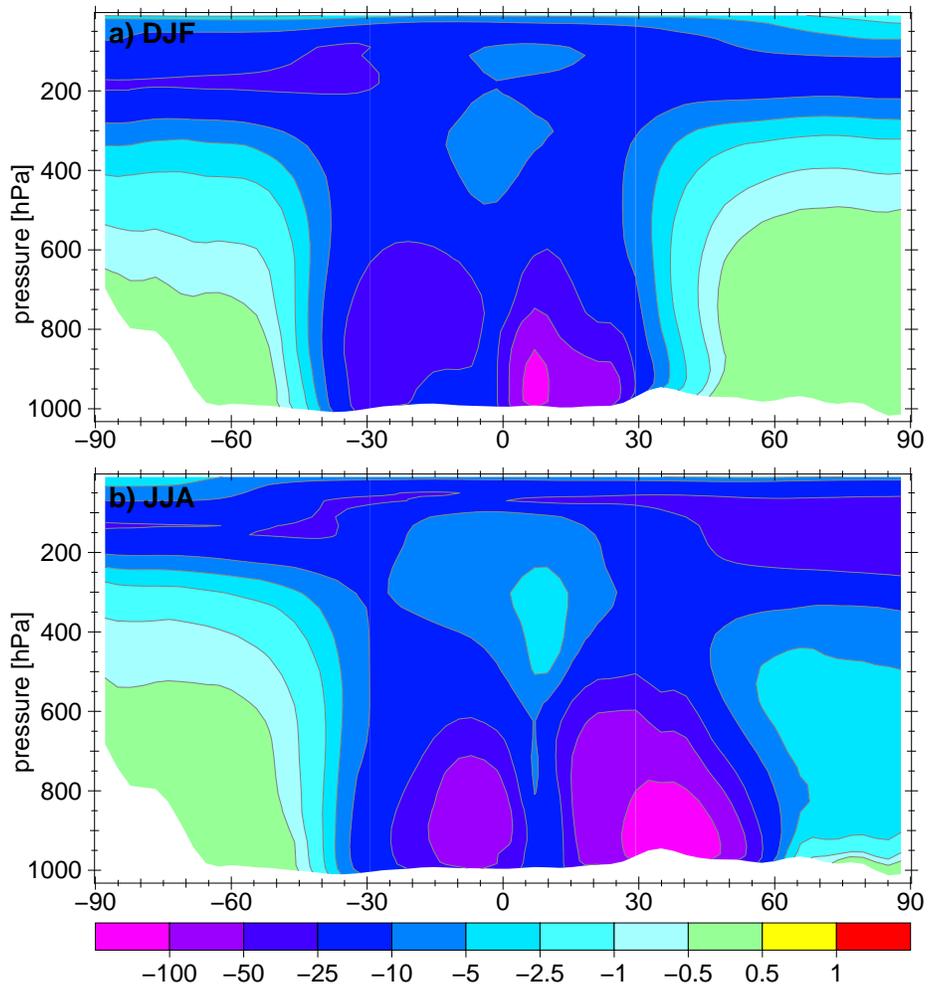


Figure 11: Absolute difference (NOBIONO – BASE) of zonal mean mixing ratio of HNO_3 in $\frac{\text{pmol}}{\text{mol}}$ averaged for a) December, January, February and b) June, July and August

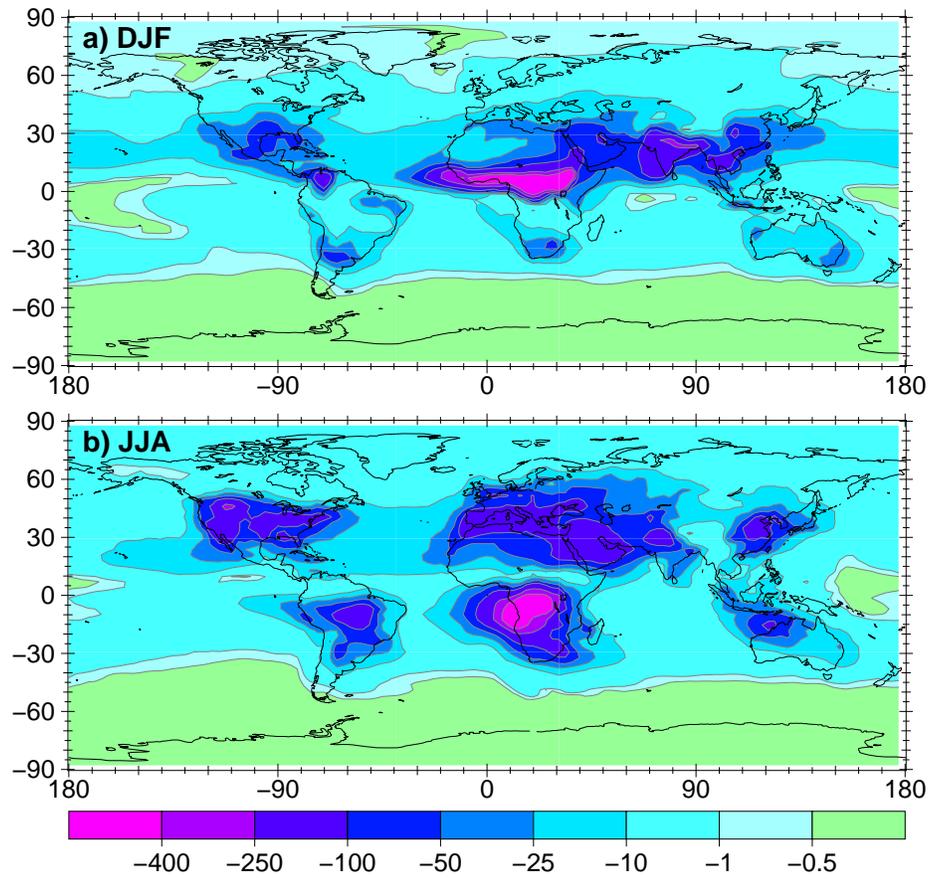


Figure 12: Absolute difference (REDOTHER – BASE) of the lower tropospheric column mixing ratio of HNO_3 in $\frac{\text{pmol}}{\text{mol}}$ averaged for a) December, January, February and b) June, July and August

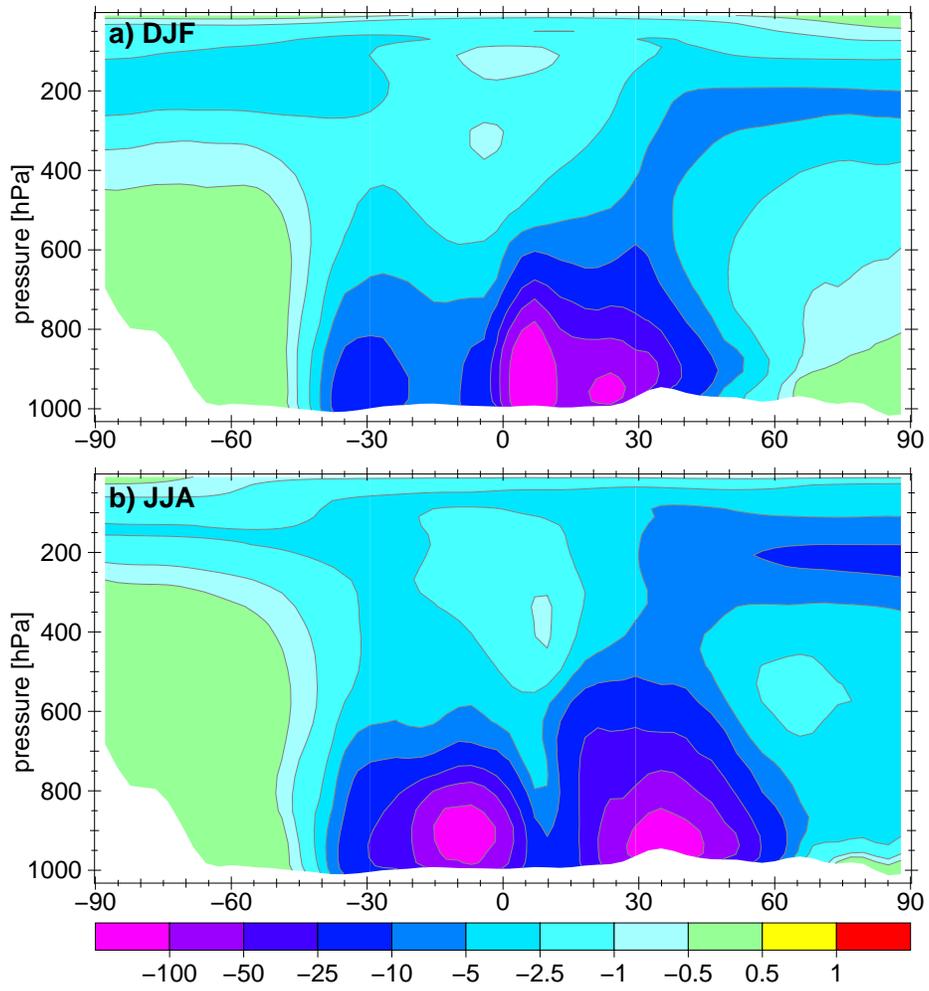


Figure 13: Absolute difference (REDOTHER – BASE) of zonal mean mixing ratio of HNO_3 in $\frac{pmol}{mol}$ averaged for a) December, January, February and b) June, July and August

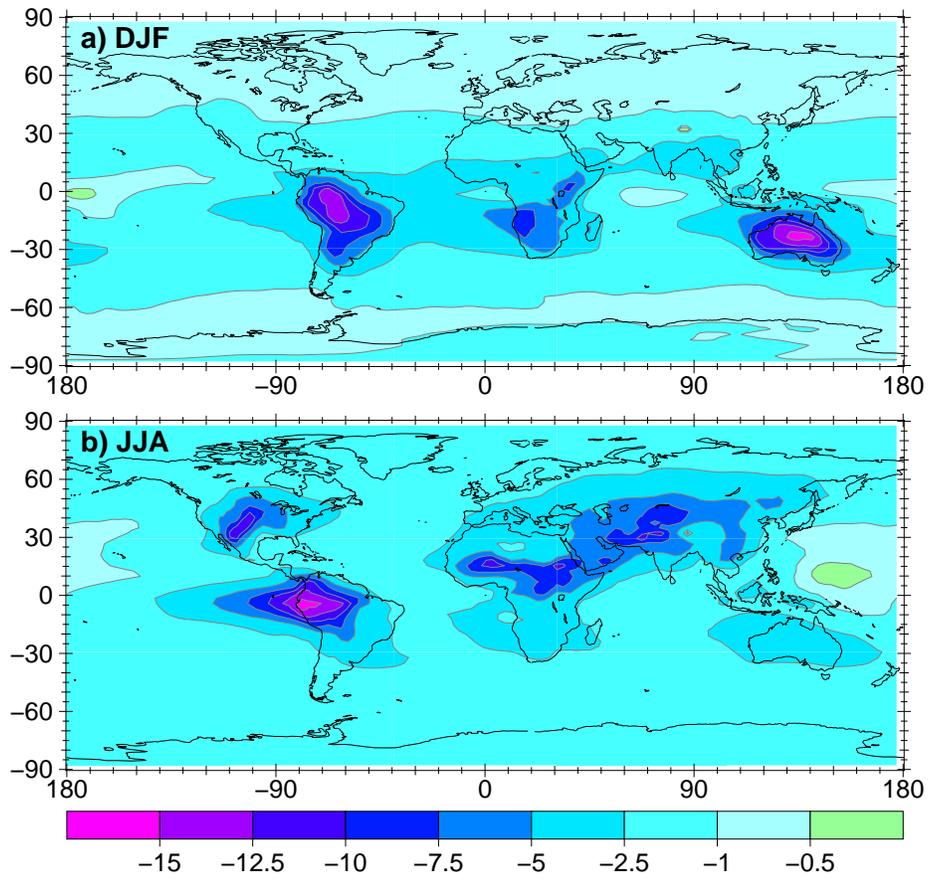


Figure 14: Absolute difference (NOBIONO – BASE) of the lower tropospheric column mixing ratio of O₃ in $\frac{nmol}{mol}$ averaged for a) December, January, February and b) June, July and August

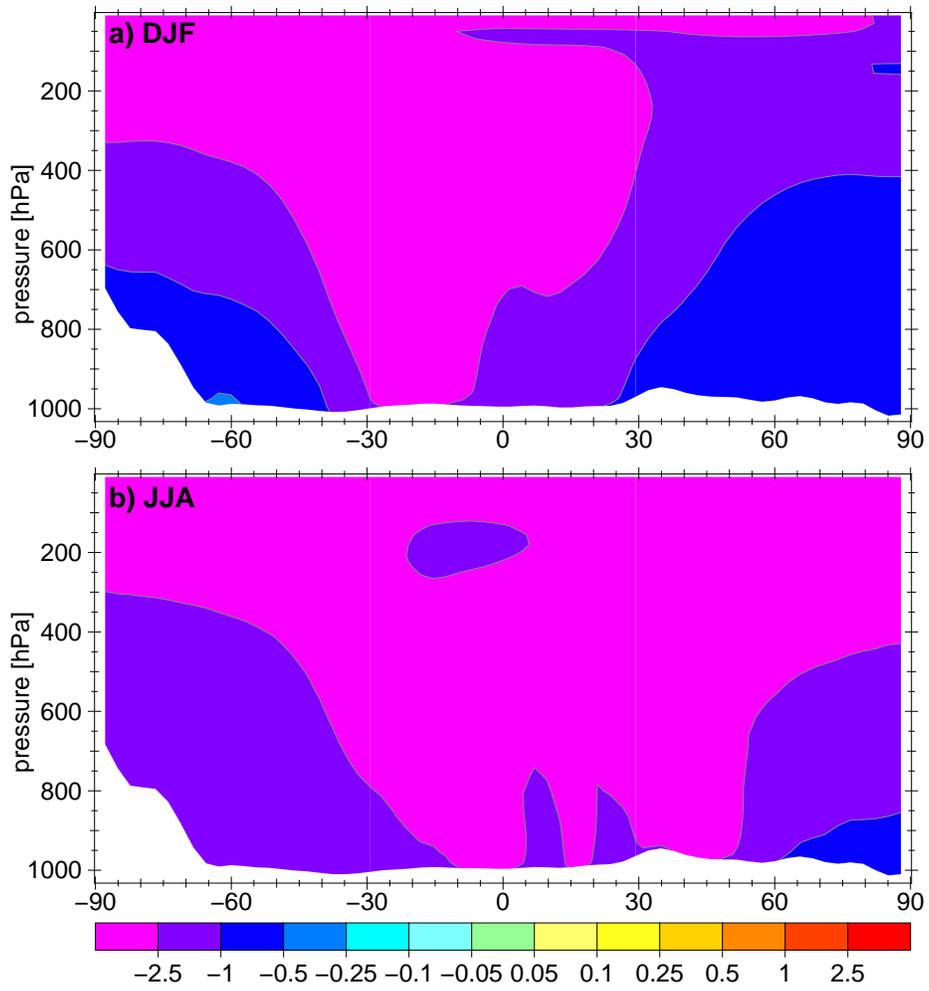


Figure 15: Absolute difference (NOBIONO – BASE) of zonal mean mixing ratio of O_3 in $\frac{nmol}{mol}$ averaged for a) December, January, February and b) June, July and August

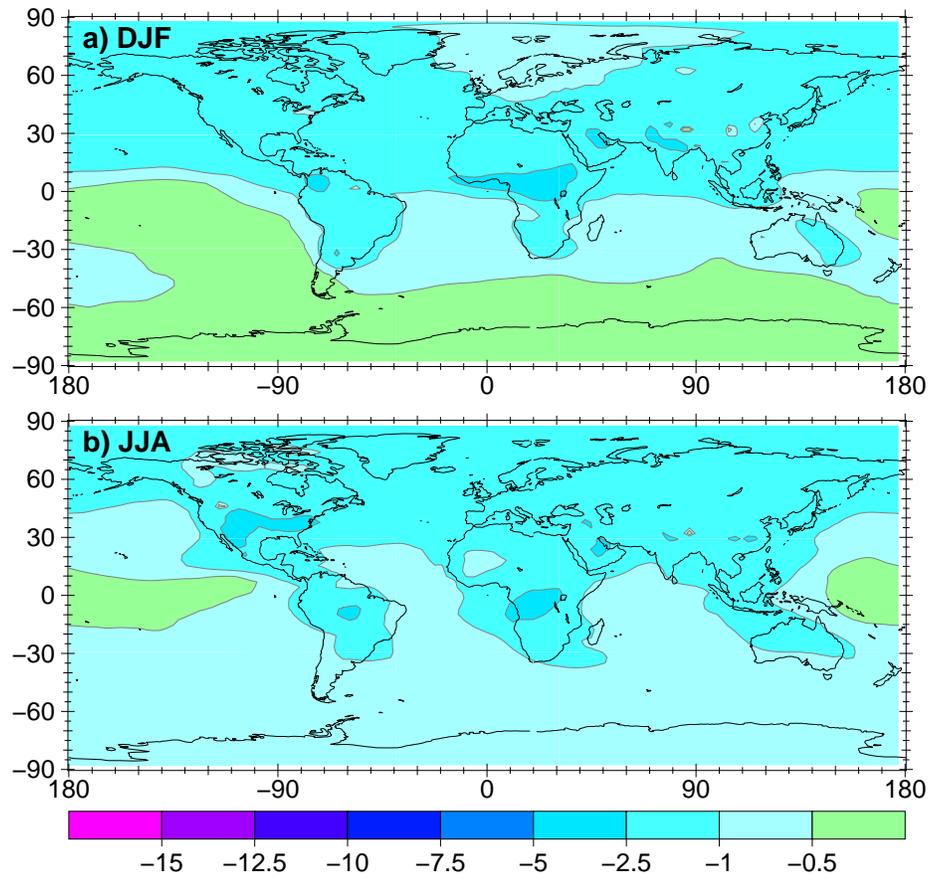


Figure 16: Absolute difference (REDOTHER – BASE) of the lower tropospheric column mixing ratio of O₃ in $\frac{\text{nmol}}{\text{mol}}$ averaged for a) December, January, February and b) June, July and August

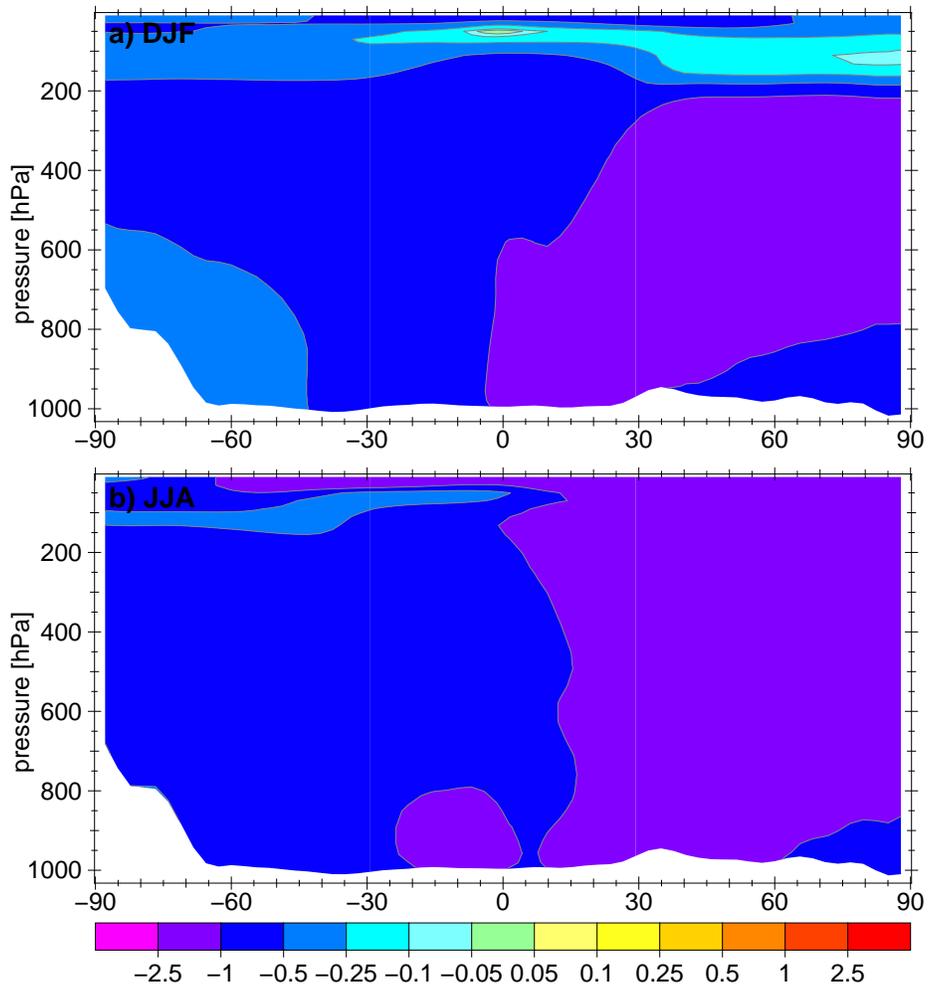


Figure 17: Absolute difference (REDOTHER – BASE) of zonal mean mixing ratio of O_3 in $\frac{nmol}{mol}$ averaged for a) December, January, February and b) June, July and August

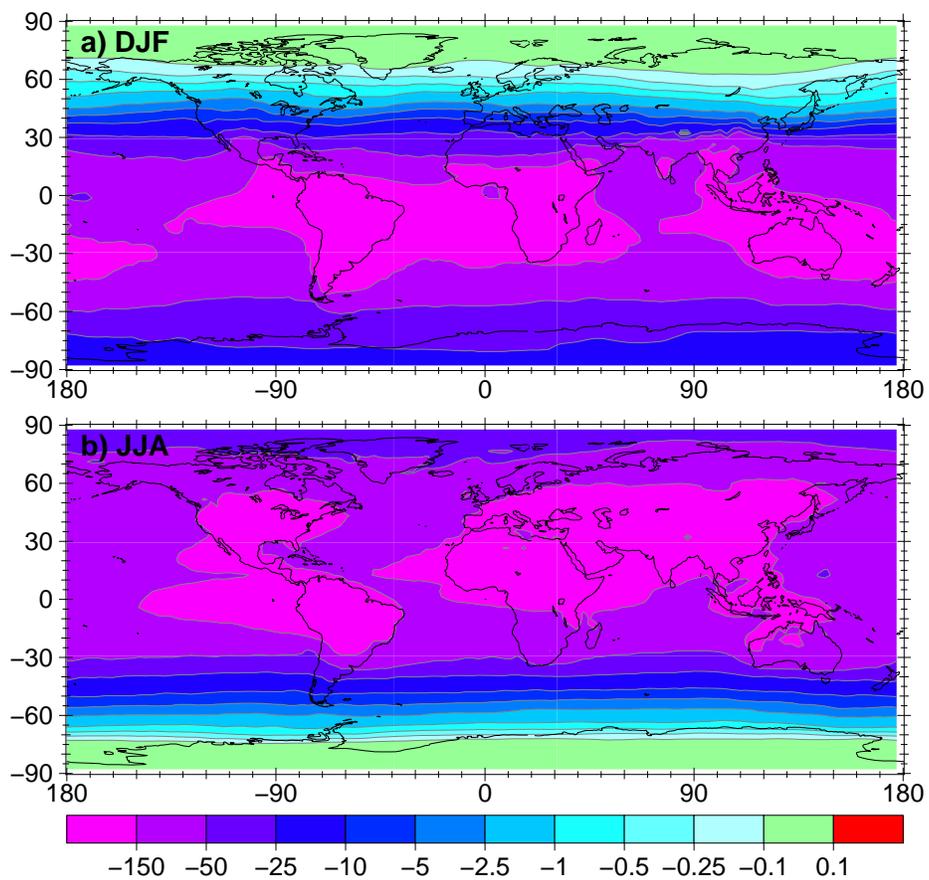


Figure 18: Absolute difference (NOBIONO – BASE) of the lower tropospheric column mixing ratio of OH in $10^3 \frac{\text{molec}}{\text{cm}^3}$ averaged for a) December, January, February and b) June, July and August

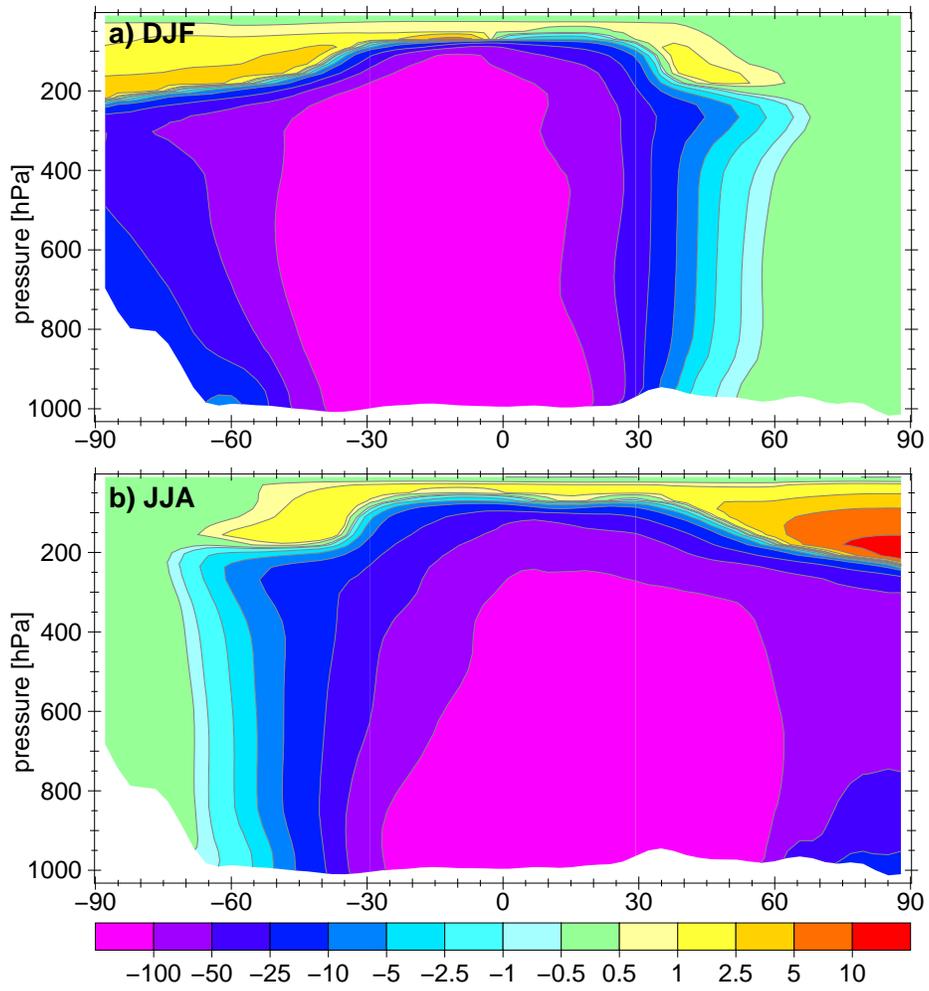


Figure 19: Absolute difference (NOBIONO – BASE) of zonal mean mixing ratio of OH in $10^3 \frac{\text{molec}}{\text{cm}^3}$ averaged for a) December, January, February and b) June, July and August

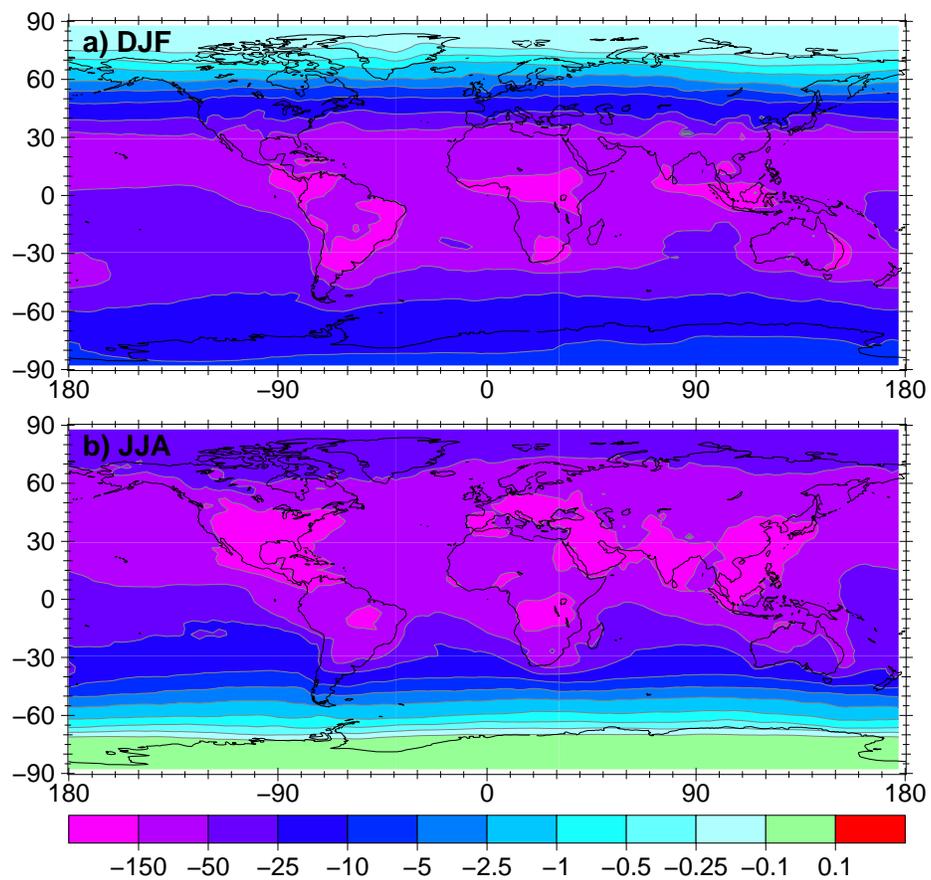


Figure 20: Absolute difference (REDOTHER – BASE) of the lower tropospheric column mixing ratio of OH in $10^3 \frac{\text{molec}}{\text{cm}^3}$ averaged for a) December, January, February and b) June, July and August

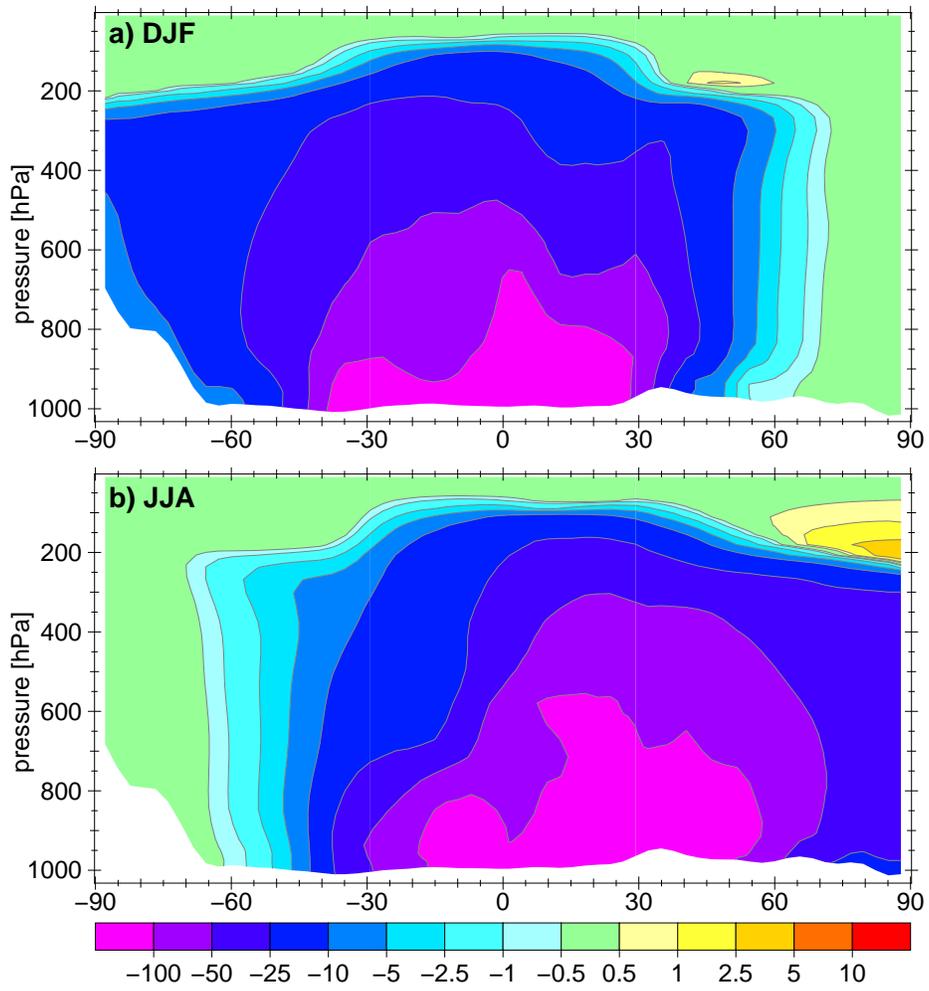


Figure 21: Absolute difference (REDOTHER – BASE) of zonal mean mixing ratio of OH in $10^3 \frac{\text{molec}}{\text{cm}^3}$ averaged for a) December, January, February and b) June, July and August