JOHANNES GUTENBERG UNIVERSITÄT MAINZ

Analysis of automated turbulence reports in a tropopause-relative framework

EGU General Assembly 2022

AS3.7 – Dynamics and chemistry of the upper troposphere and lower stratosphere

Kaluza, T., Hoor, P., and Kunkel, D
Johannes Gutenberg University Mainz

Kaluza et al. (2021): ***[…] A 10-year ERA5 northern hemispheric study***

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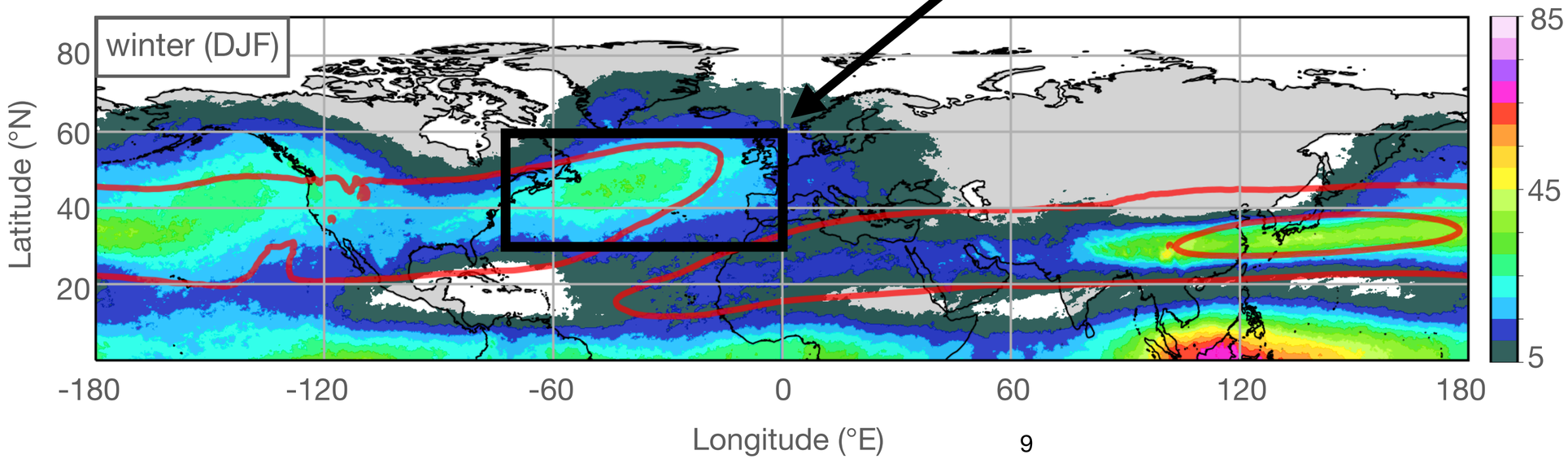
- Occurrence and seasonality is set by tropospheric dynamics



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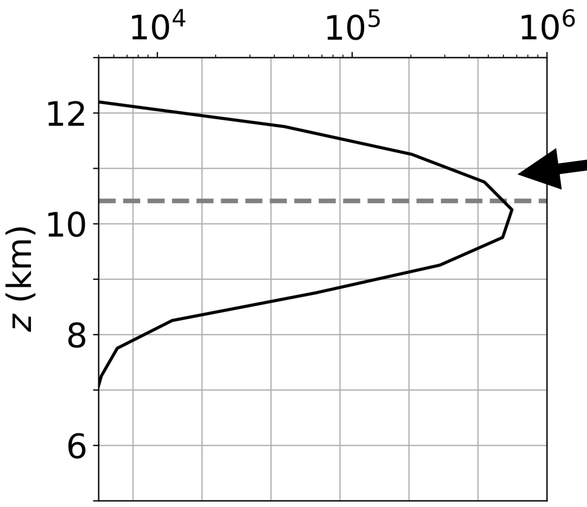

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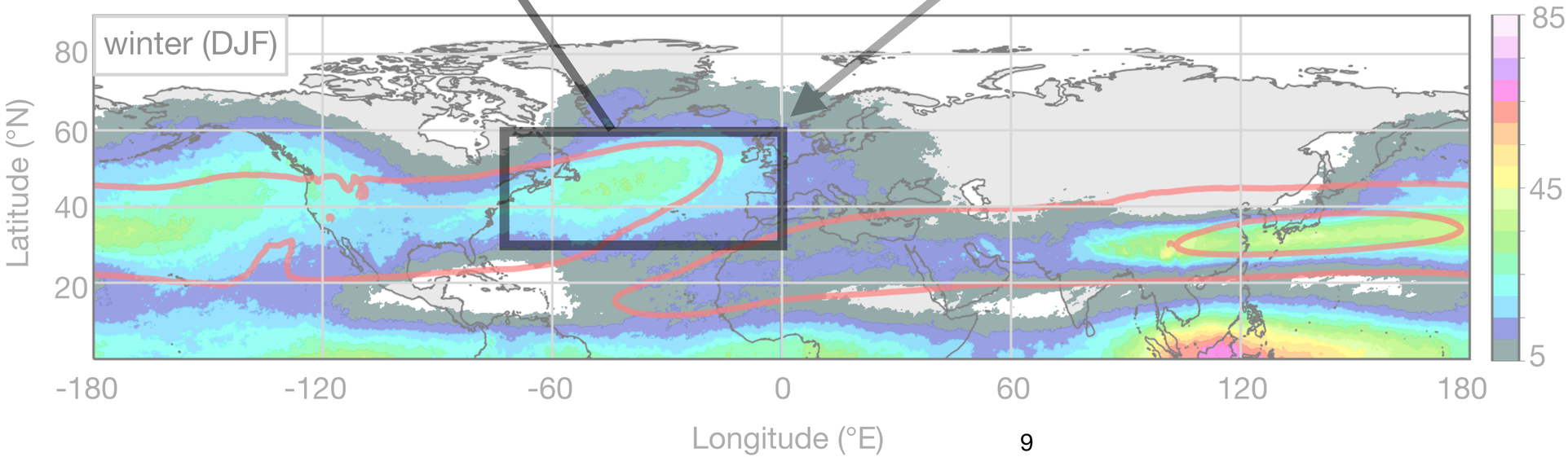

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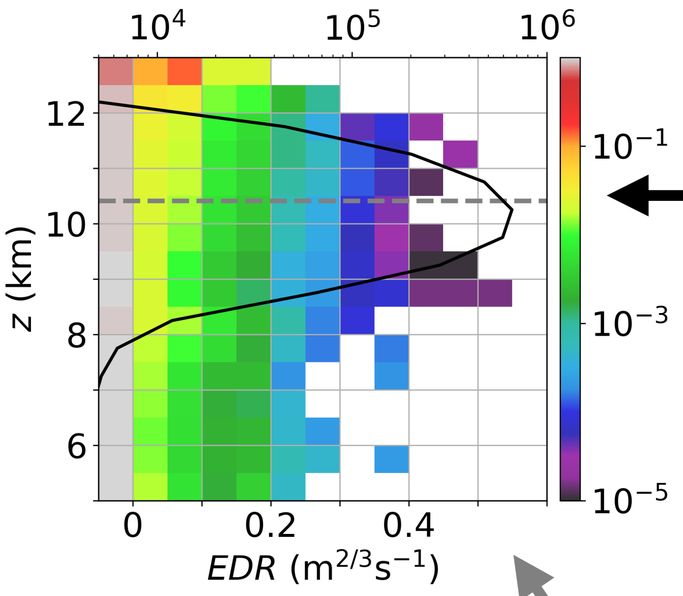

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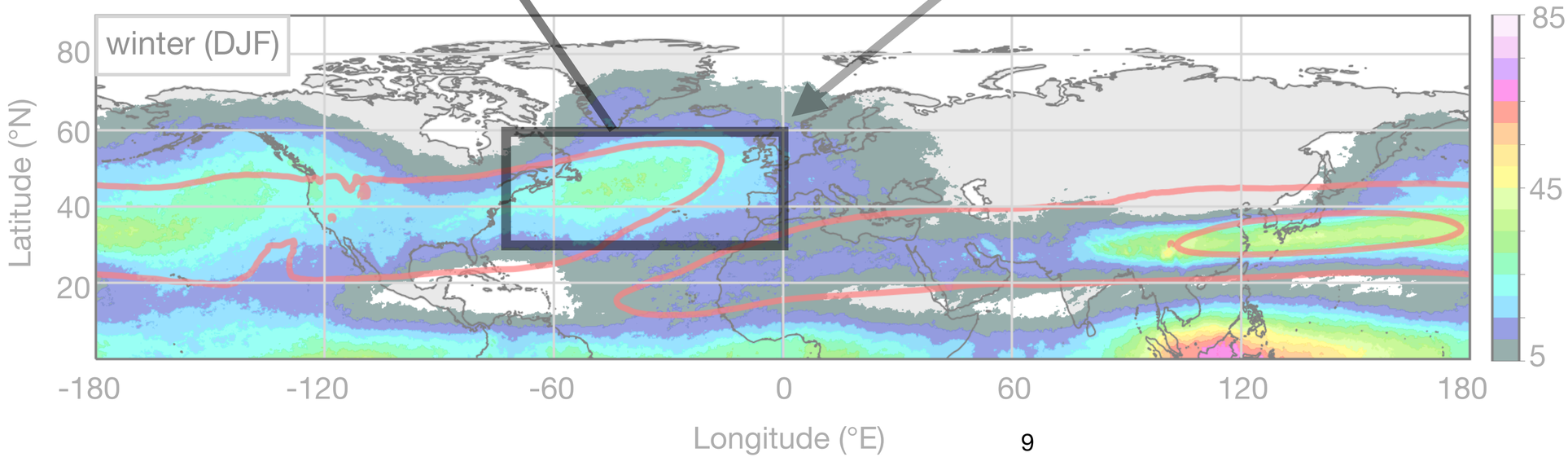

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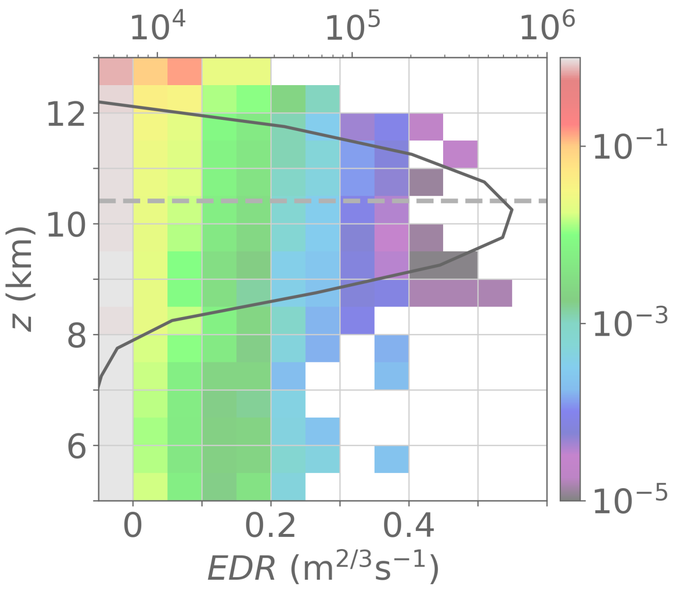

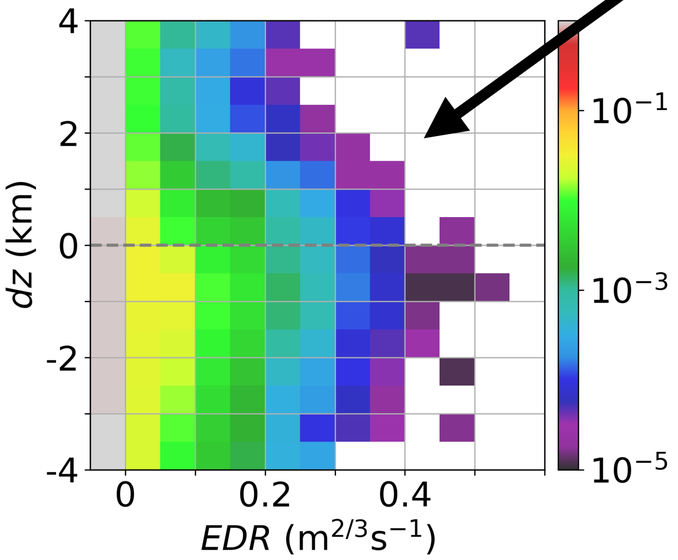

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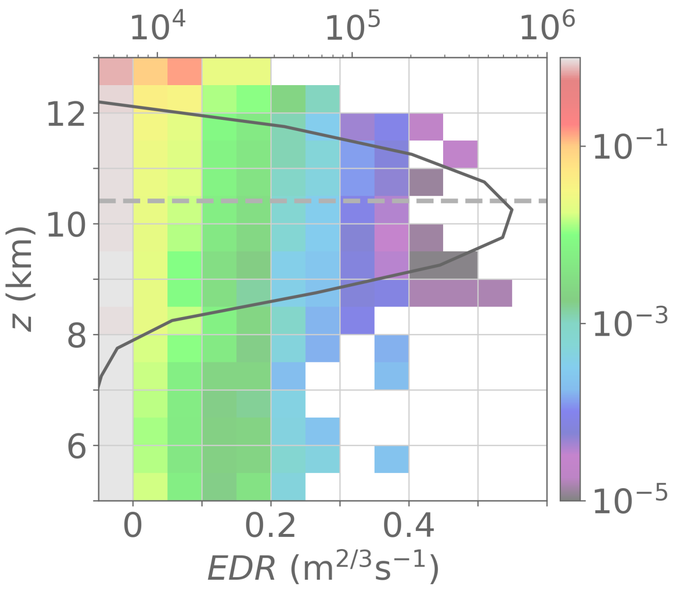

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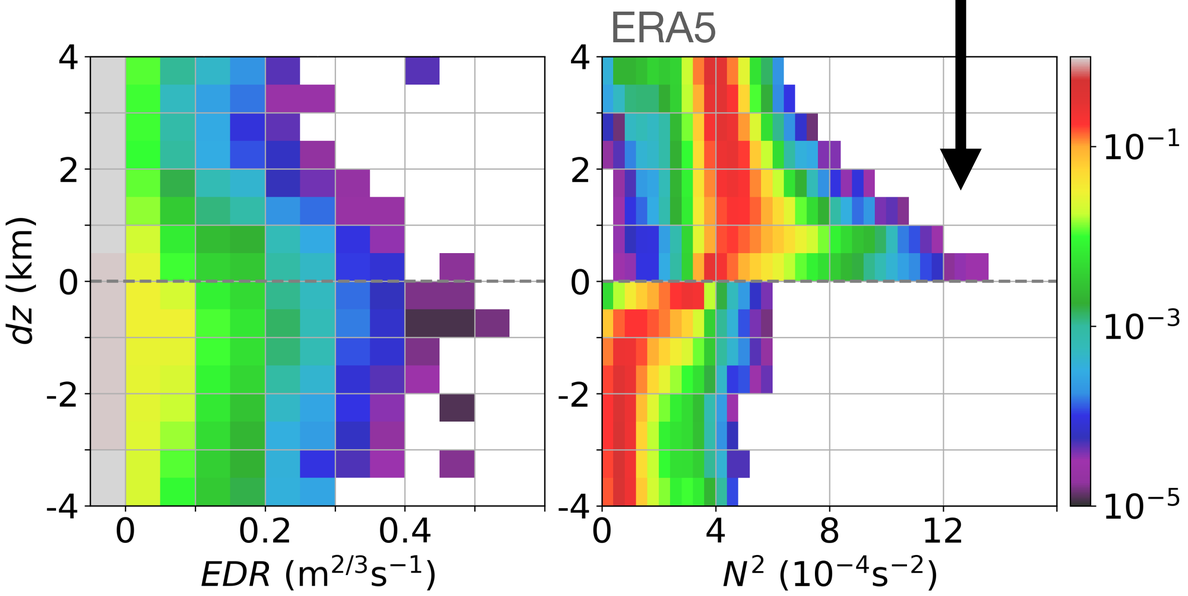

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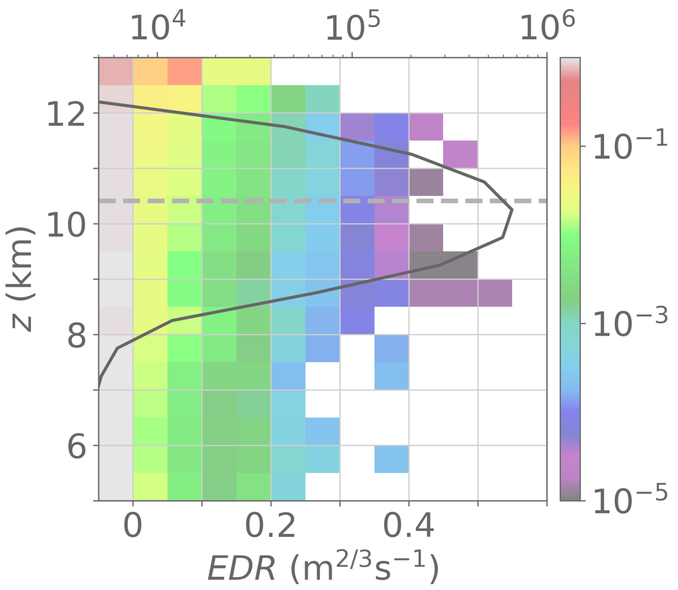

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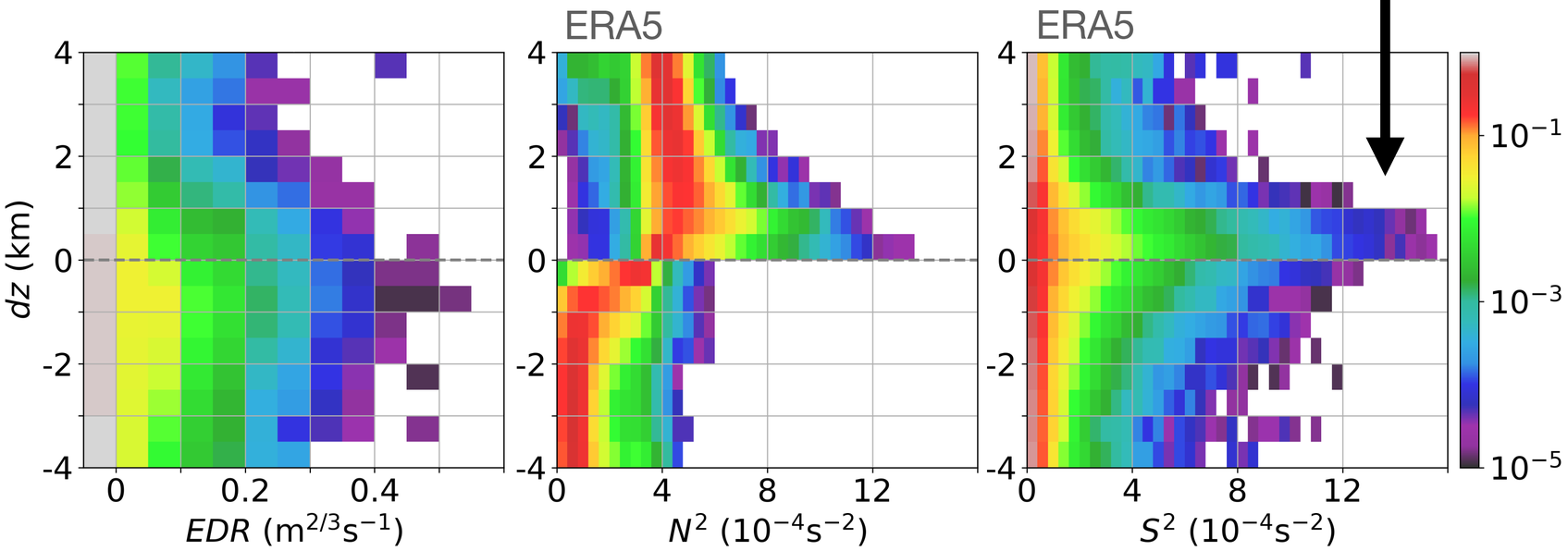

$$Ri = \frac{N^2}{S^2} \qquad Ri_c = 1/4$$

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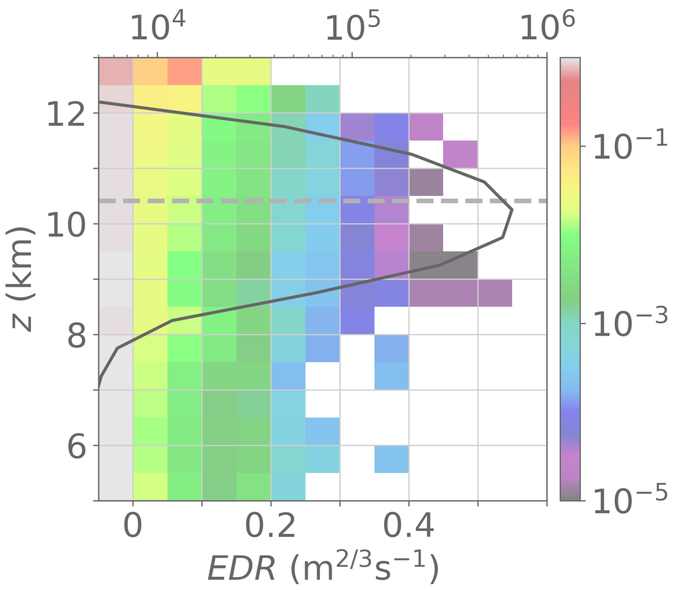

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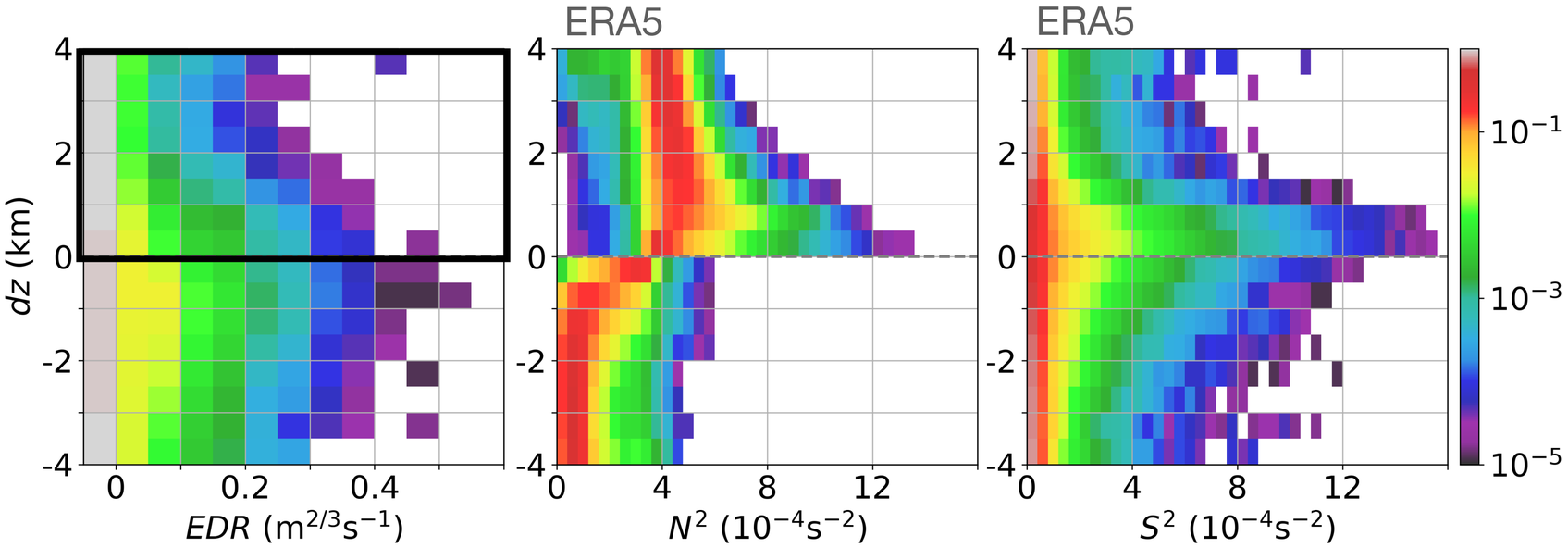

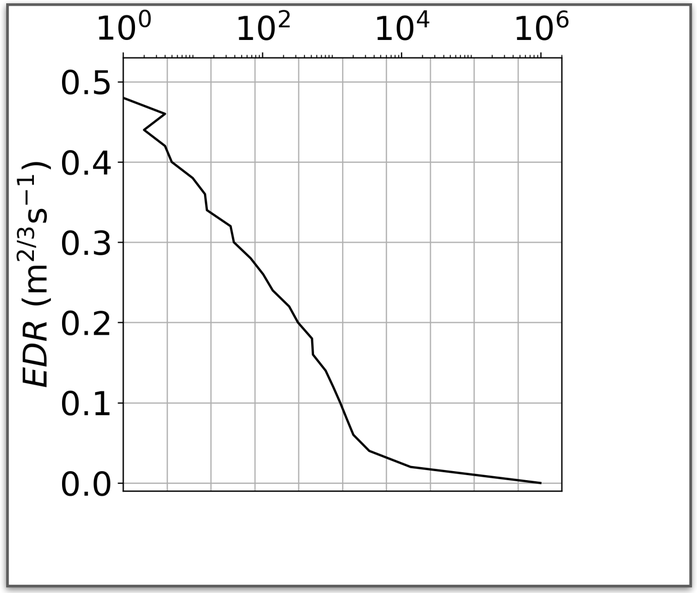

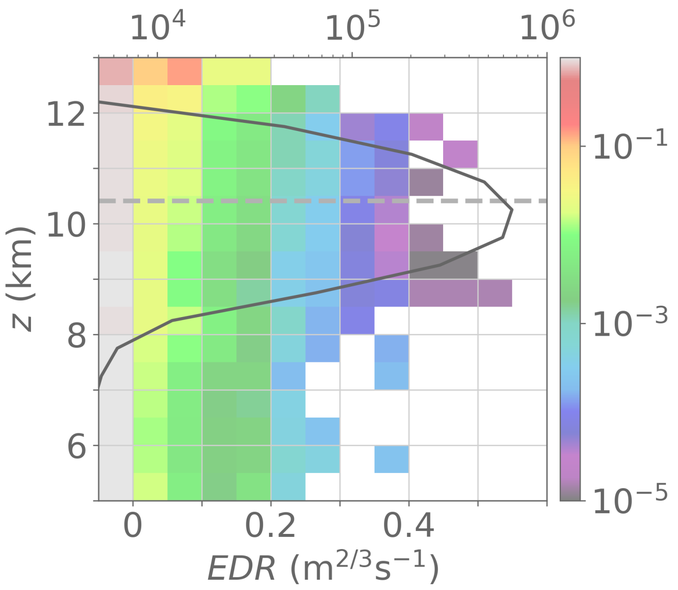

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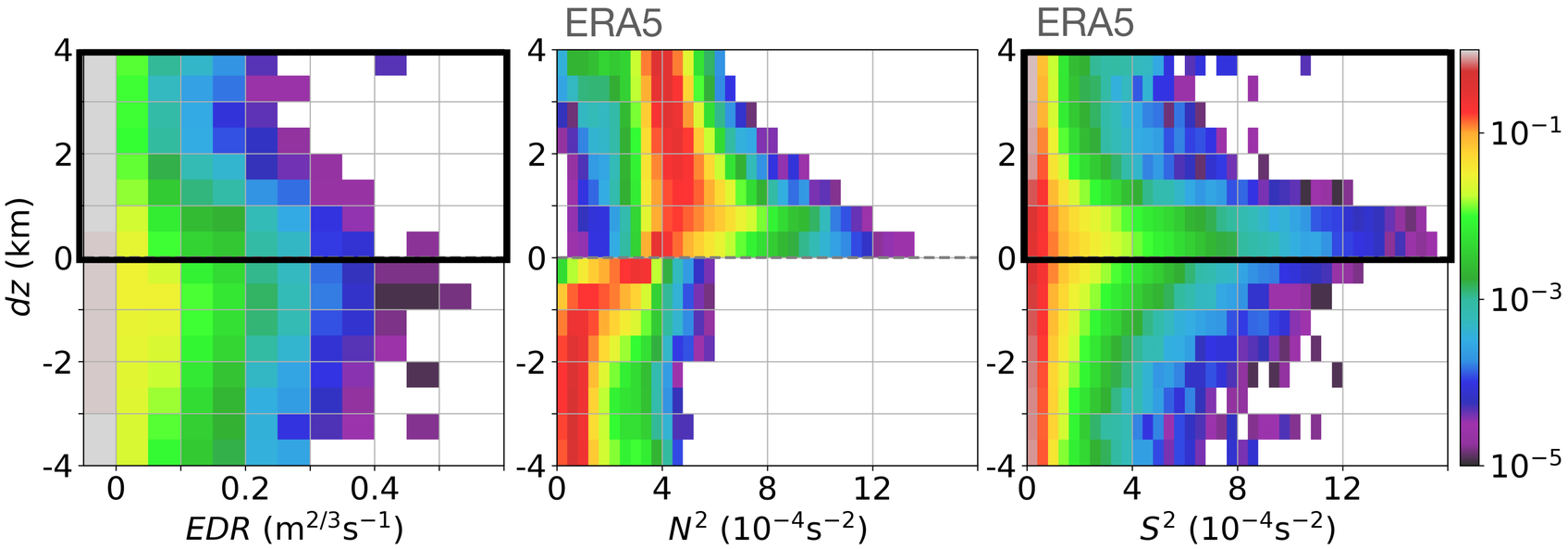

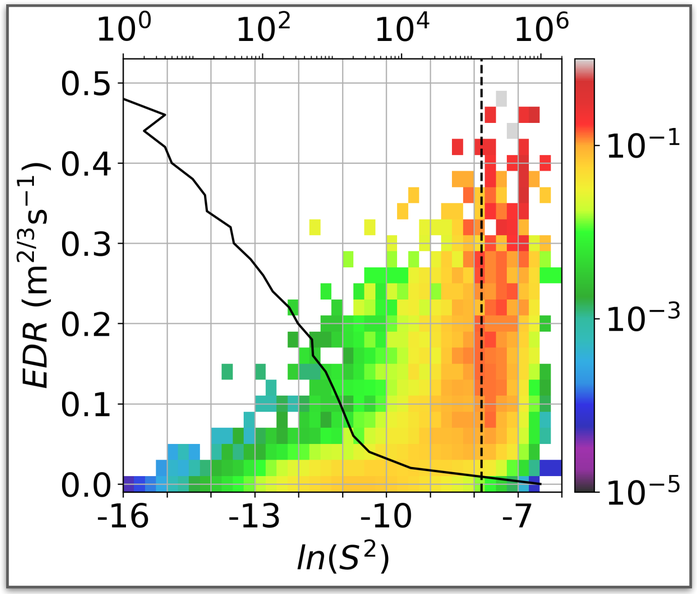

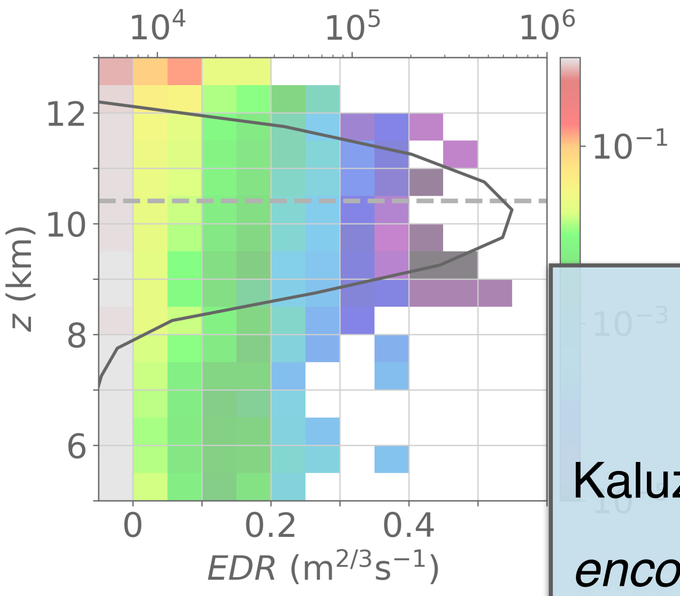

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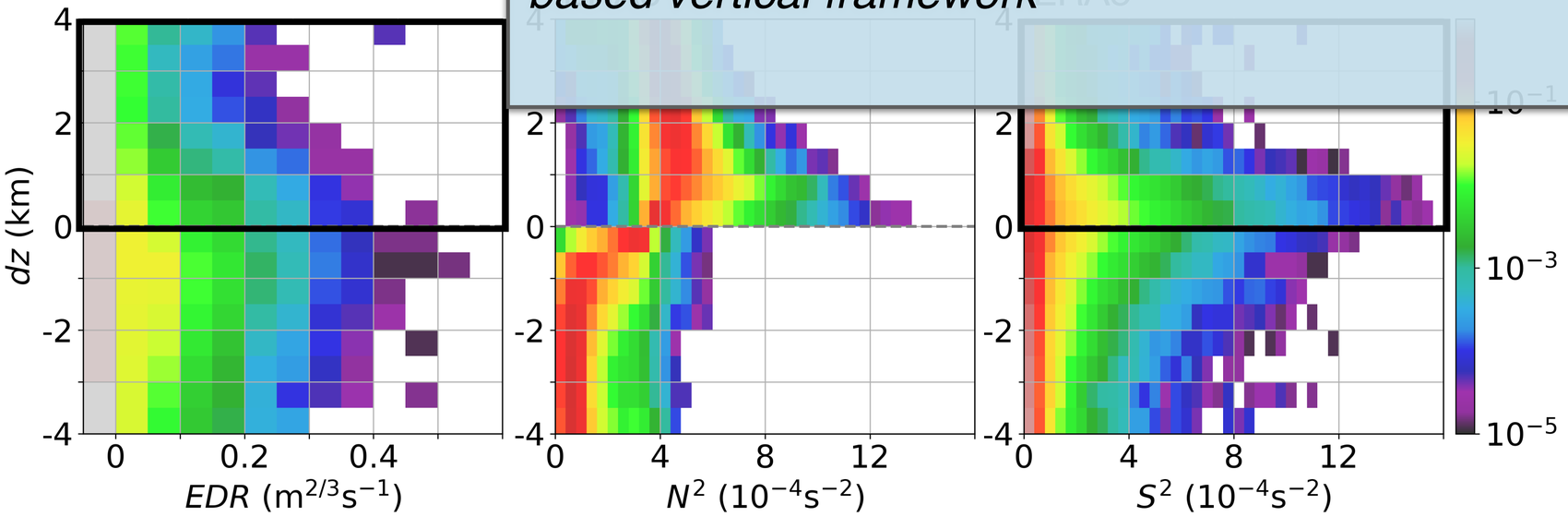
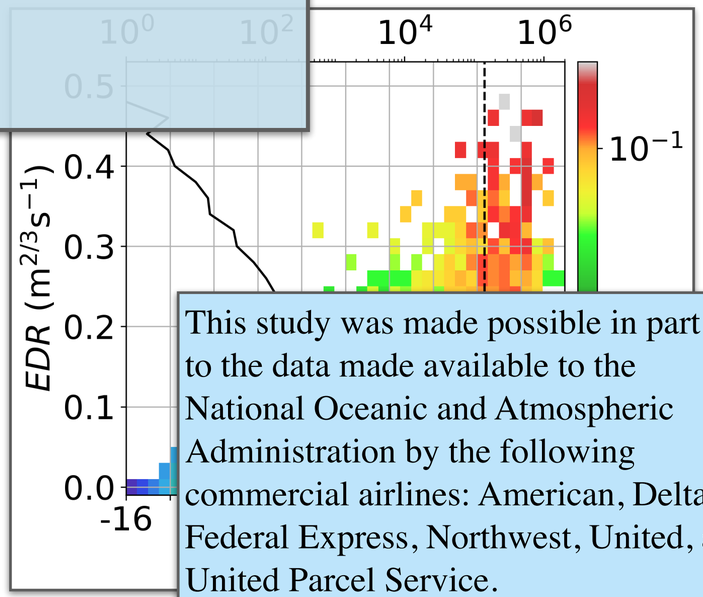
Publication prepared for submission:

Kaluza, T., Hoor, P., and Kunkel, D., *Analysis of turbulence encounters and ERA5 turbulence diagnostics in a tropopause based vertical framework*





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