Supplementary materials

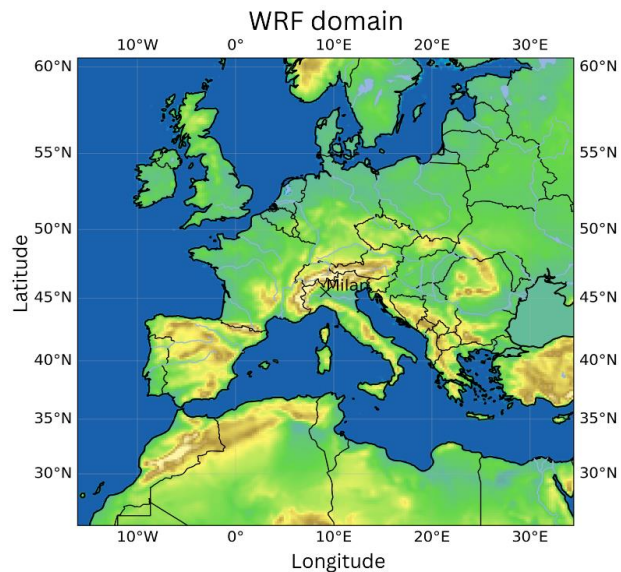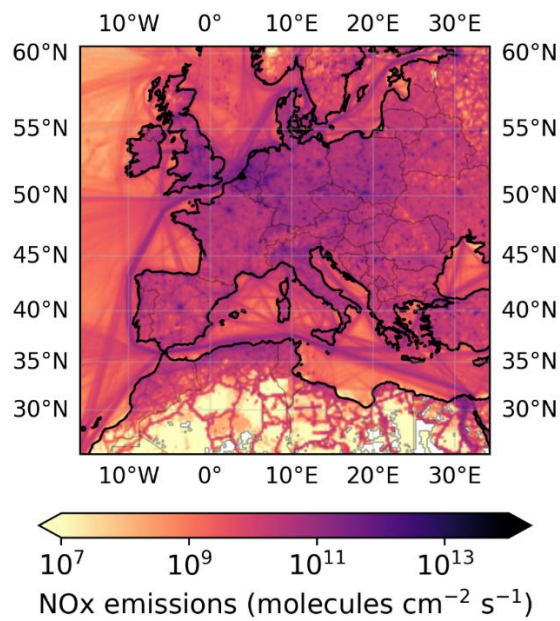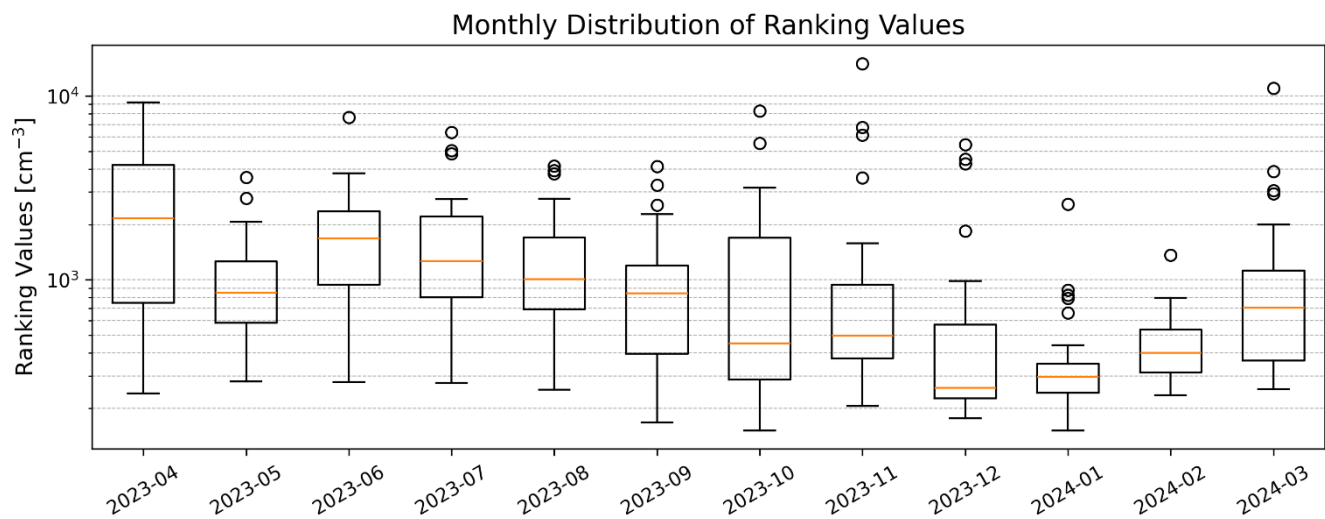**Figure S1: Domain for the WRF and FLEXPART simulations (special resolution of 18 × 18 km²).**

5   **Figure S2: Map of NOx emissions.**

Monthly Distribution of Ranking Values

10 **Figure S3: Monthly distribution of the ranking values. For the explanation of the box plots, refer to Fig. 5b.**
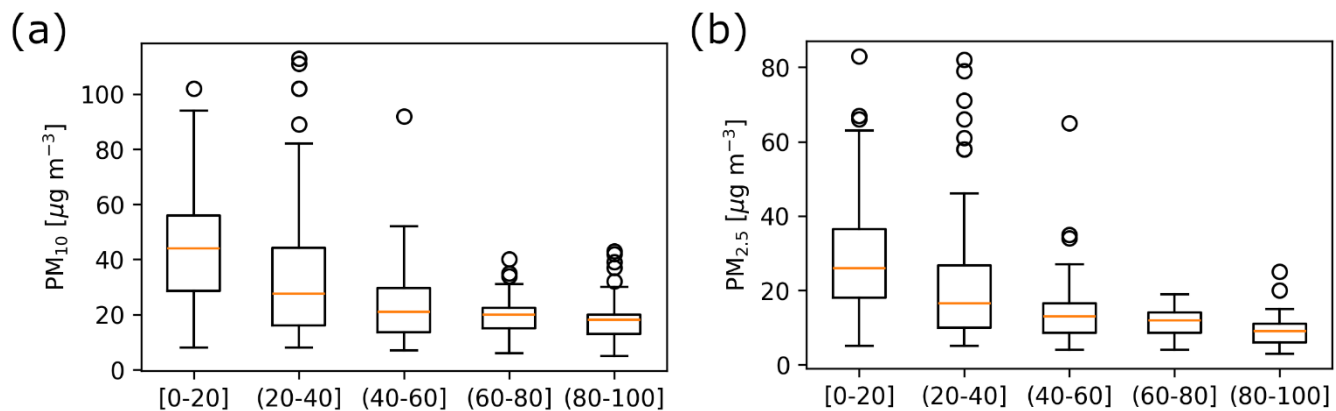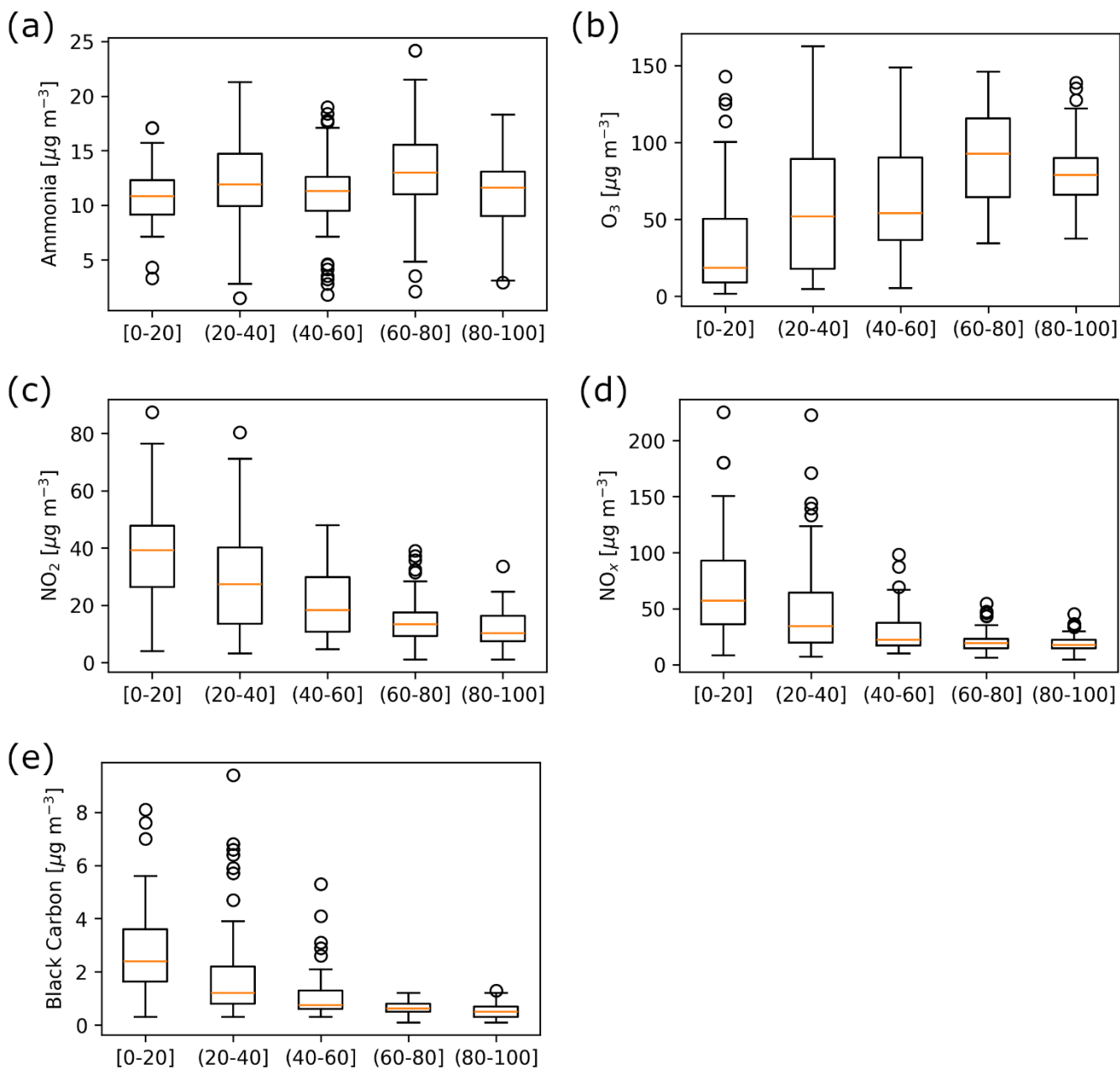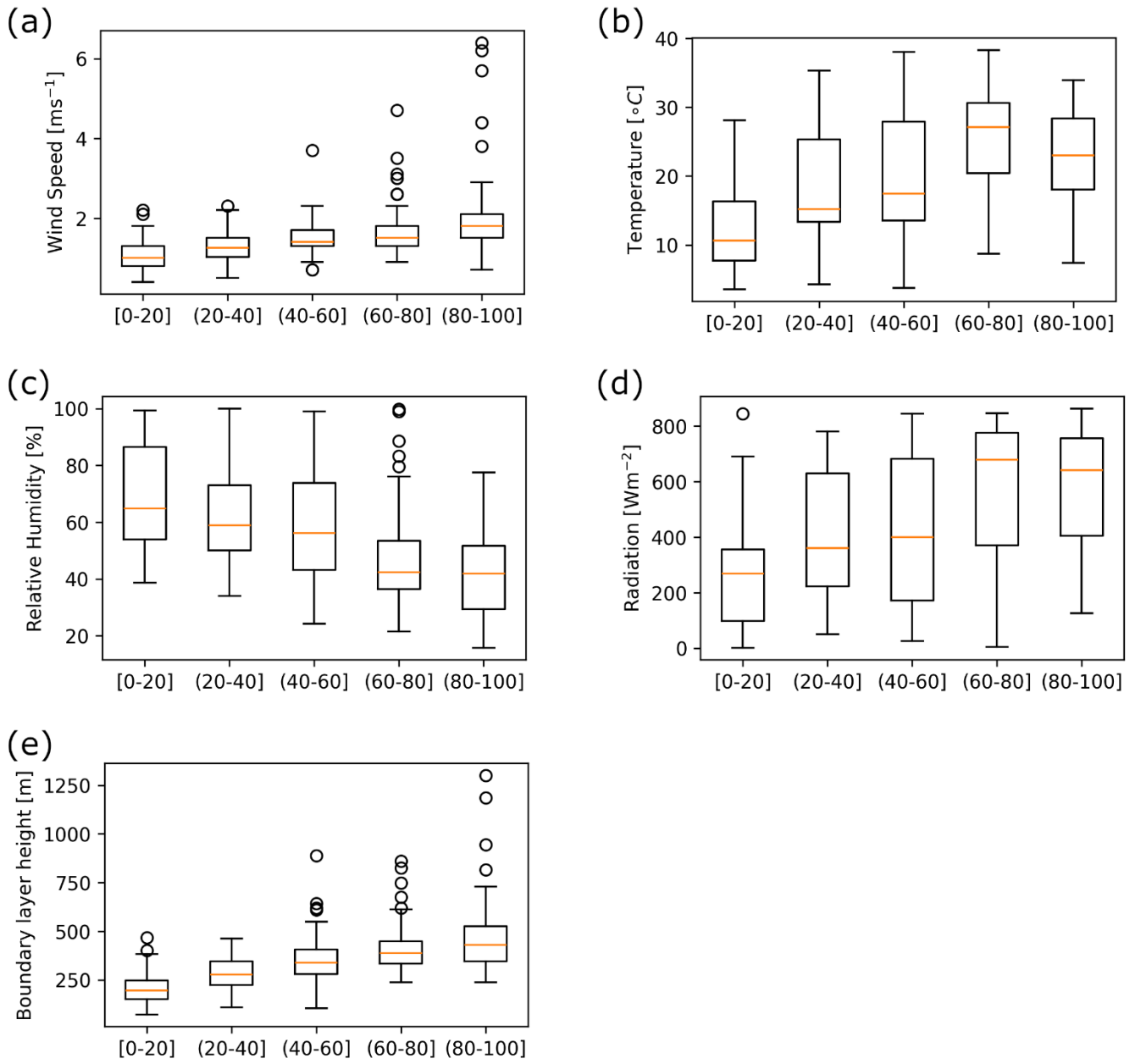

Figure S4: a) Daily PM$_{10}$ and b) PM$_{2.5}$ per rank class. For the description of the box plots, refer to Fig. 5b.

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Figure S5: Daily median of a) ammonia, b) O₃, c) NO₂, d) NOₓ, e) black carbon calculated over the active window per rank class. For the explanation of the box plots, refer to Fig. 5b.

20 **Figure S6: Daily median of a) wind speed, b) temperature, c) relative humidity, d) radiation, e) boundary layer height calculated over the active window per rank class. For the explanation of the box plots, refer to Fig. 5b.**