

# Supplementary material

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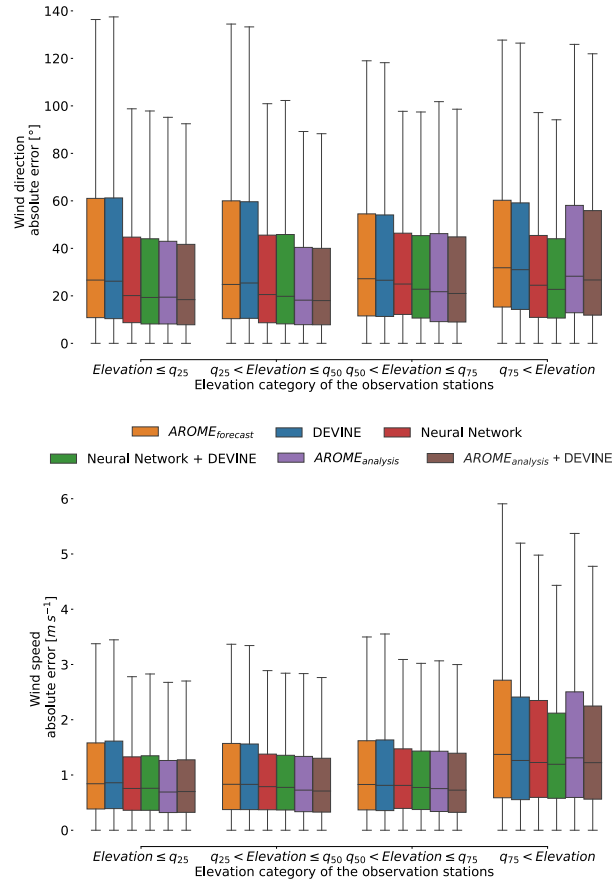
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**Figure S1.** Wind direction absolute error (a) and wind speed absolute error (b) categorized by the elevation of the observation station where the measurements were held. In details, the four categories correspond to the four quartiles of the elevation distribution among observation stations: elevation increases from left to right. Each boxplot color indicates a different model. This figure is similar to Fig. 6 in the main manuscript but also includes AROME<sub>analysis</sub> + DEVINE model. This model corresponds to outputs of DEVINE forced by AROME<sub>analysis</sub>. This figure only uses data from the test set.