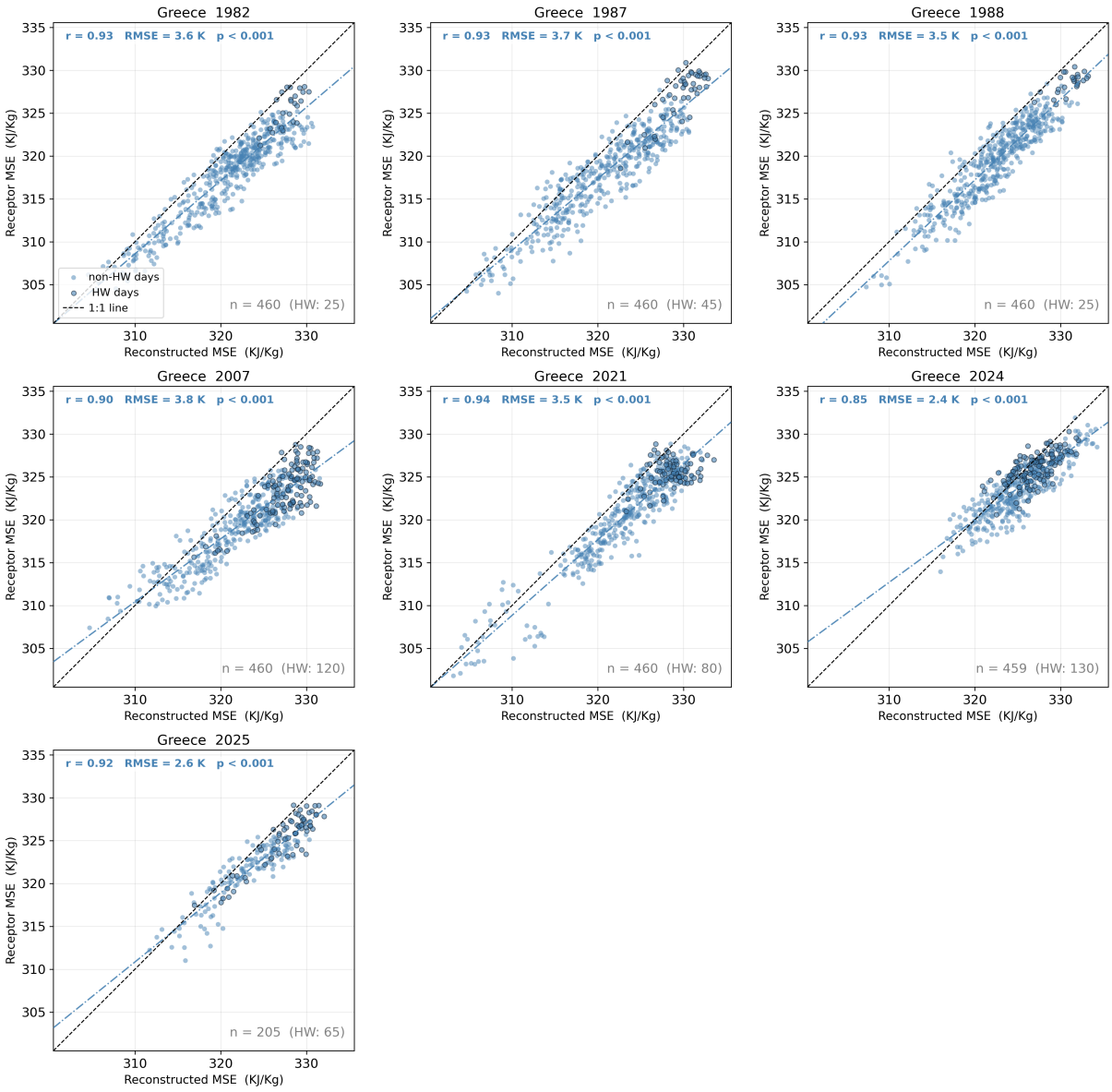


FIGURE S1. Scatter plot of reconstructed versus computed receptor MSE. Light points indicate trajectories initiated from all warm-period, while dark points indicate airmass initiated during the detected heatwave days. The dashed line shows the 1:1 relationship, and the blue dash-dotted line shows the linear fit

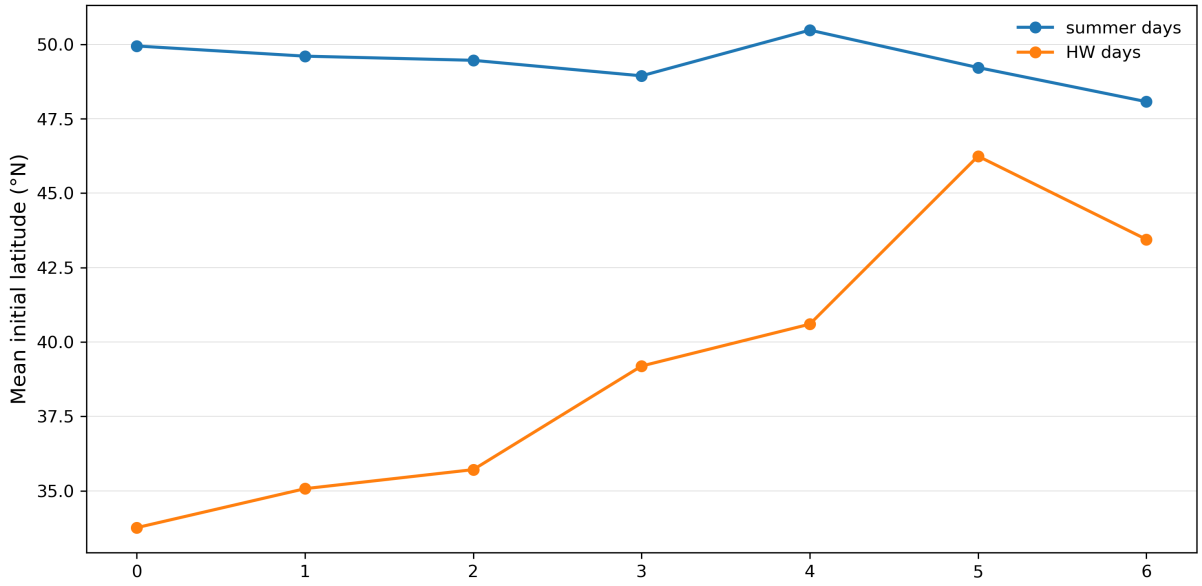


FIGURE S2. Mean latitude of airmass at the origin (-10 days before the heatwave and ordinary summer days). Sensitivity-weighted mean initial latitude of airmass contributing to the initial-condition moist static energy (MSE). For each event, the mean initial latitude is shown for the full warm period and for the heatwave days only.

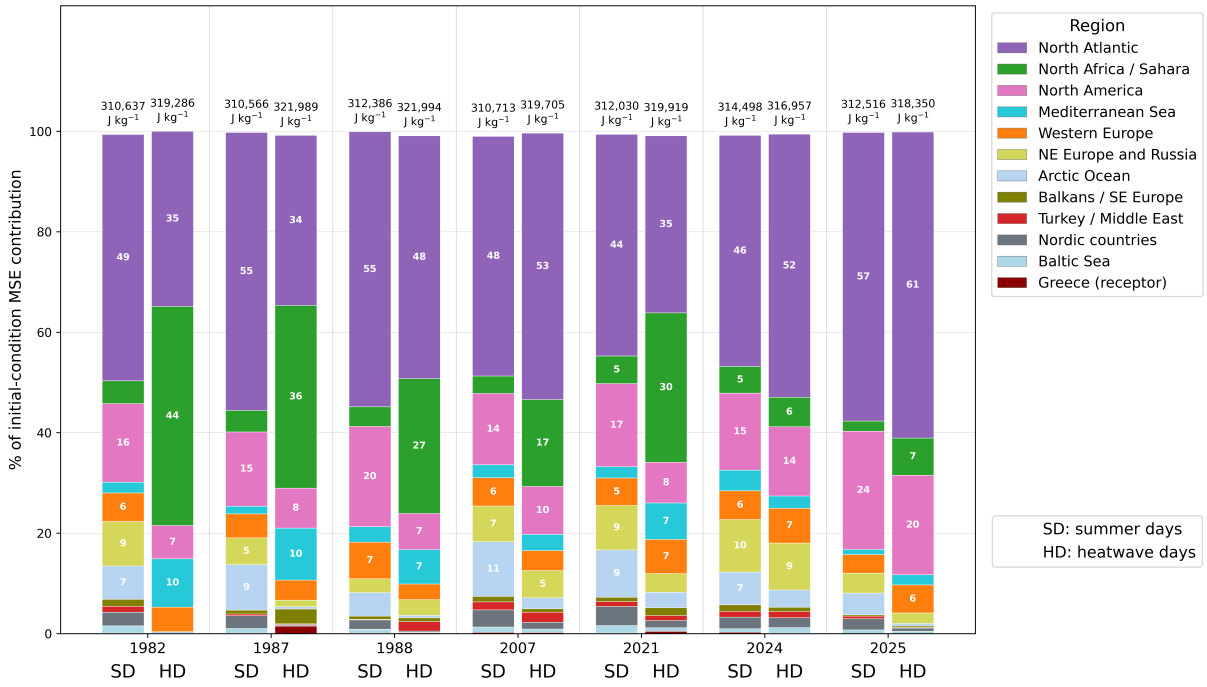


FIGURE S3. Sensitivity-weighted mean initial latitude of air parcels for the summer days (SD) and heatwave days (HD) across the analysed heatwave events. Values are weighted by the FLEXPART sensitivity field and indicate the average source latitude of air masses reaching the receptor region.