Supplementary material for manuscript « Analysis of daytime ozone vertical profile in the Paris city center during the ACROSS campaign »

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S1) **IAGOS Aircraft Trajectories during ACROSS - Campaign**
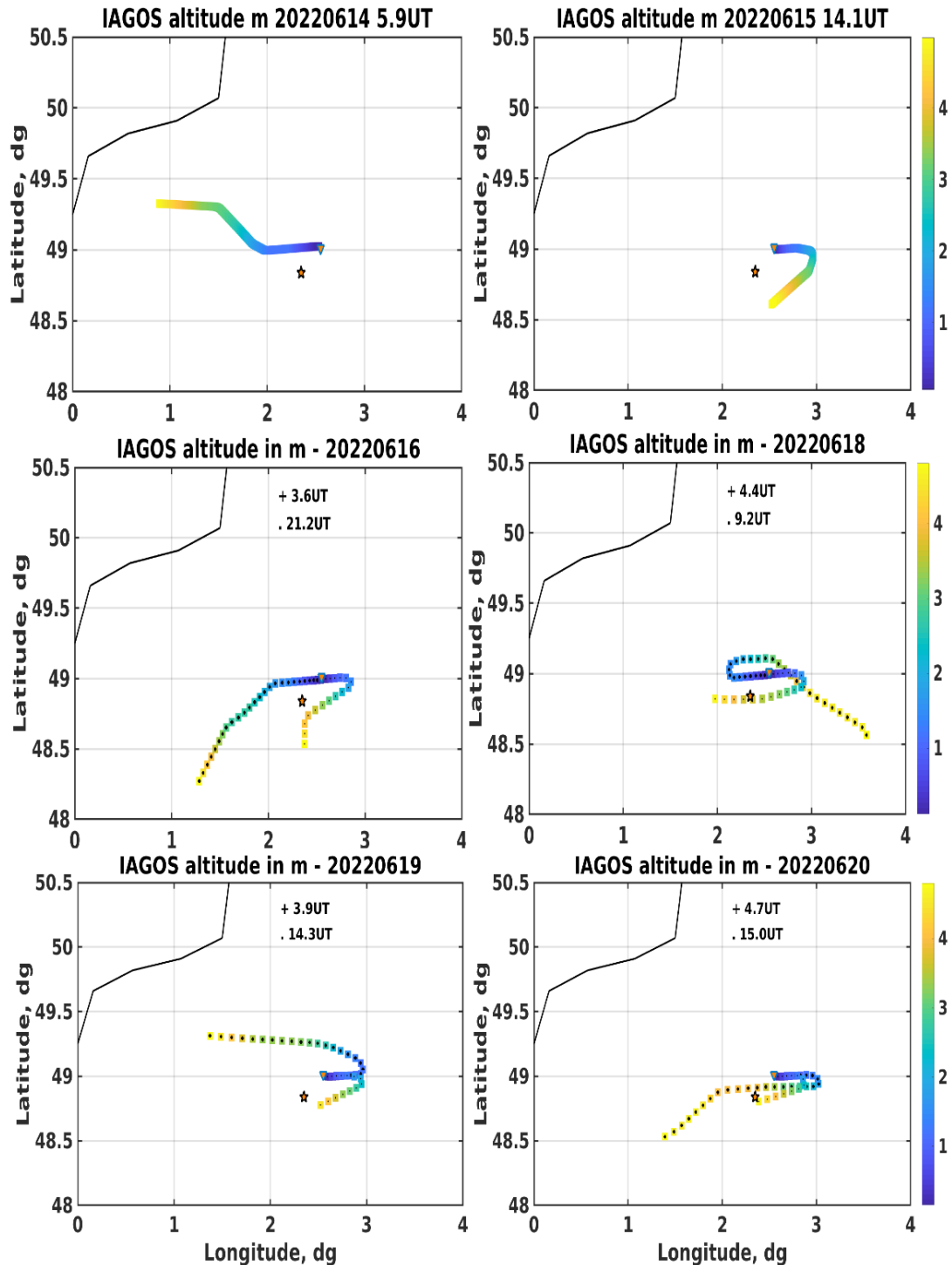
Fig. S1 : IAGOS aircraft positions at altitude < 5 km from June 14 to June 20 for landing (+) and takeoff (.) in Paris-CDG. Color scale is aircraft altitude in km. Star is Paris, triangle CDG airport.
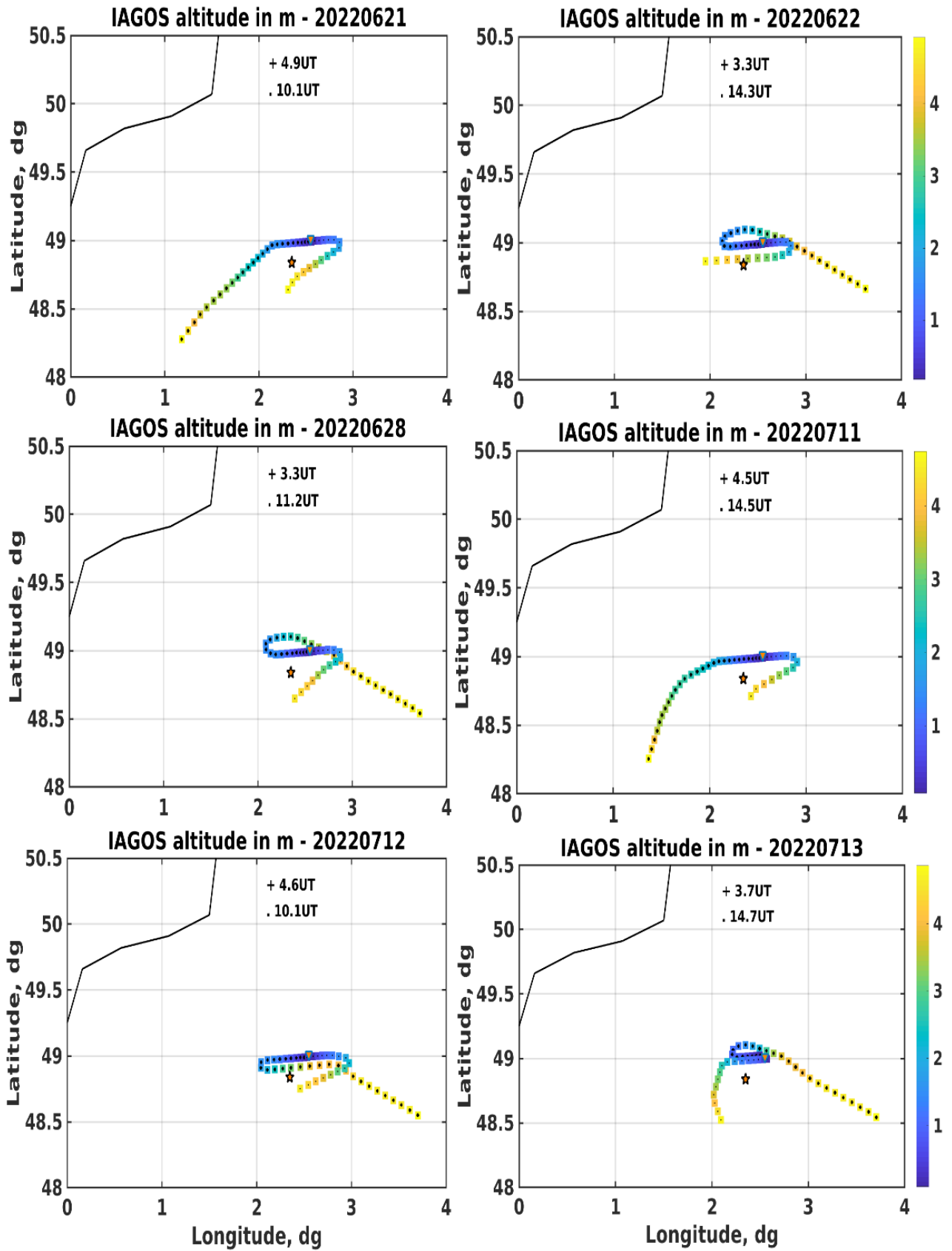
Fig.S2 : As Fig. S1 for IAGOS flights on June 21, 22, 28 and July 11 to 13.

S2) FLEXPART Potential Emission Sensitivity for DIAL ozone observations during ACROSS campaign
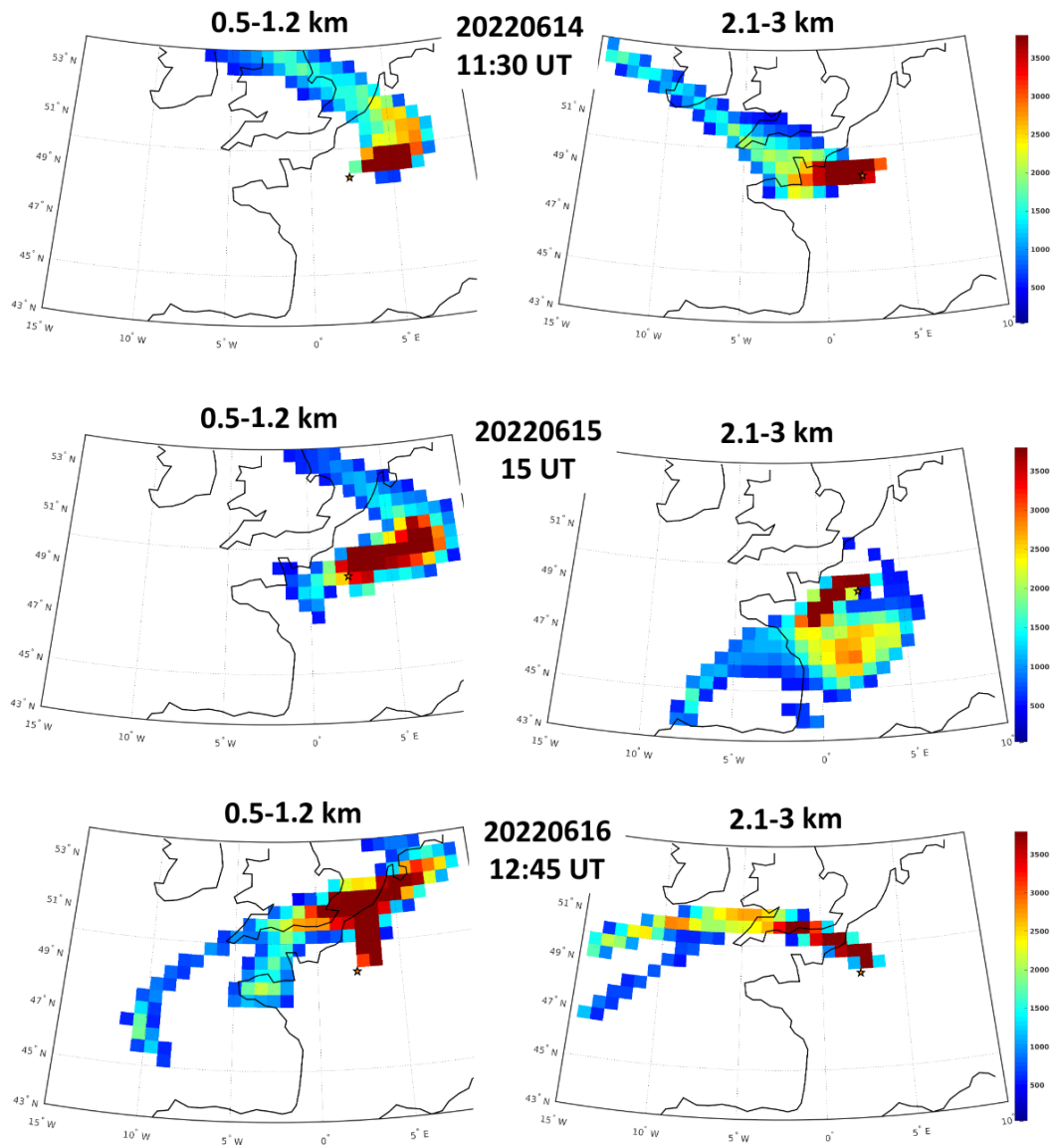
Fig. S3 : Maps of the vertically integrated FLEXPART backward potential emission sensitivity (PES) for particles release at midday in the 0.5-1.2 km altitude range (left column) and in the 2.1-3km altitude range (right column) above the DIAL in Paris city center on June 14 (top), 15 (middle) and 16 (bottom). The PES color scale is in s. Integration time is 3 days. The orange star is the DIAL position.
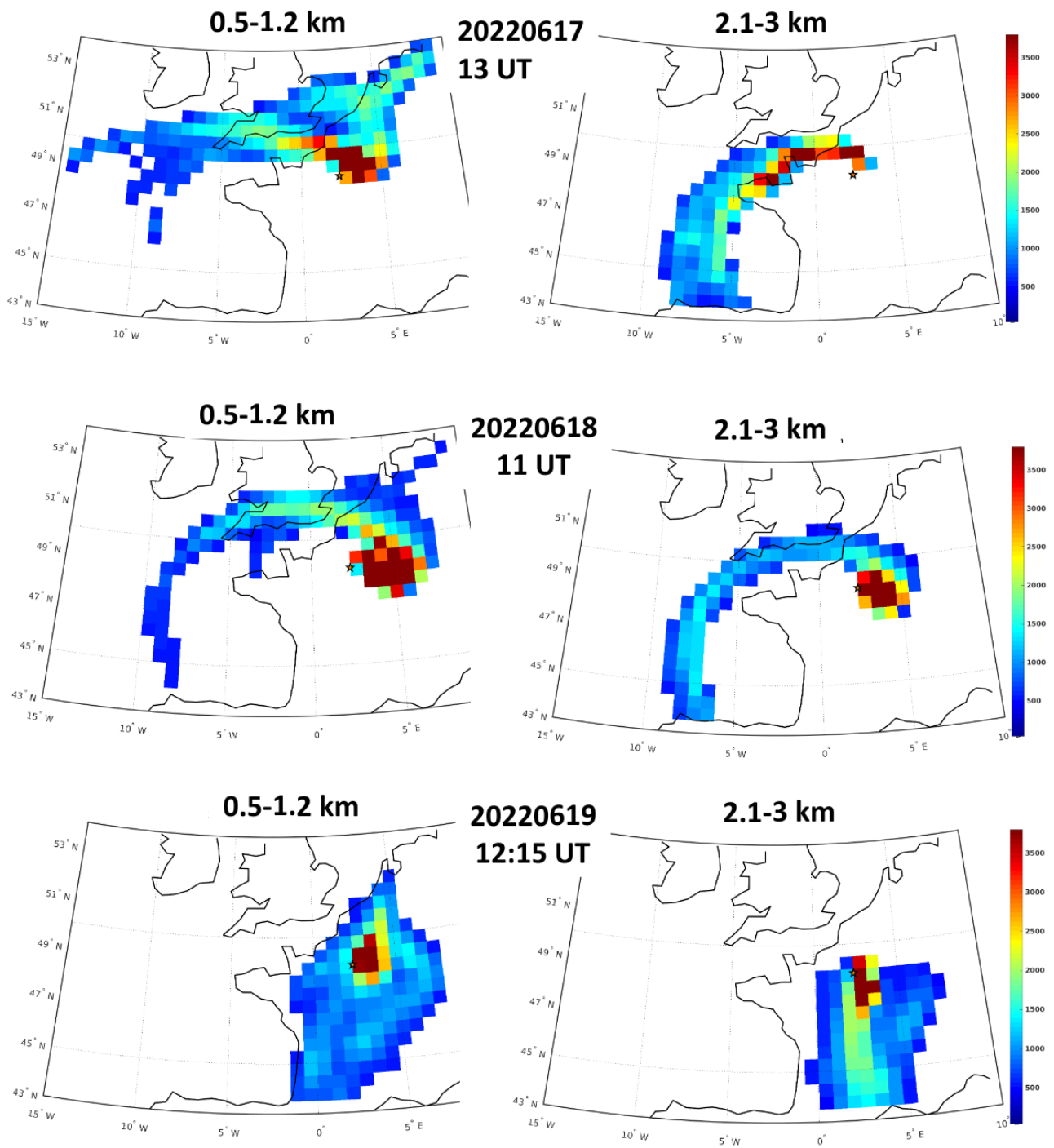
Fig. S4 : As Fig.S3 for June 17 (top), 18 (middle) and 19 (bottom) 2022
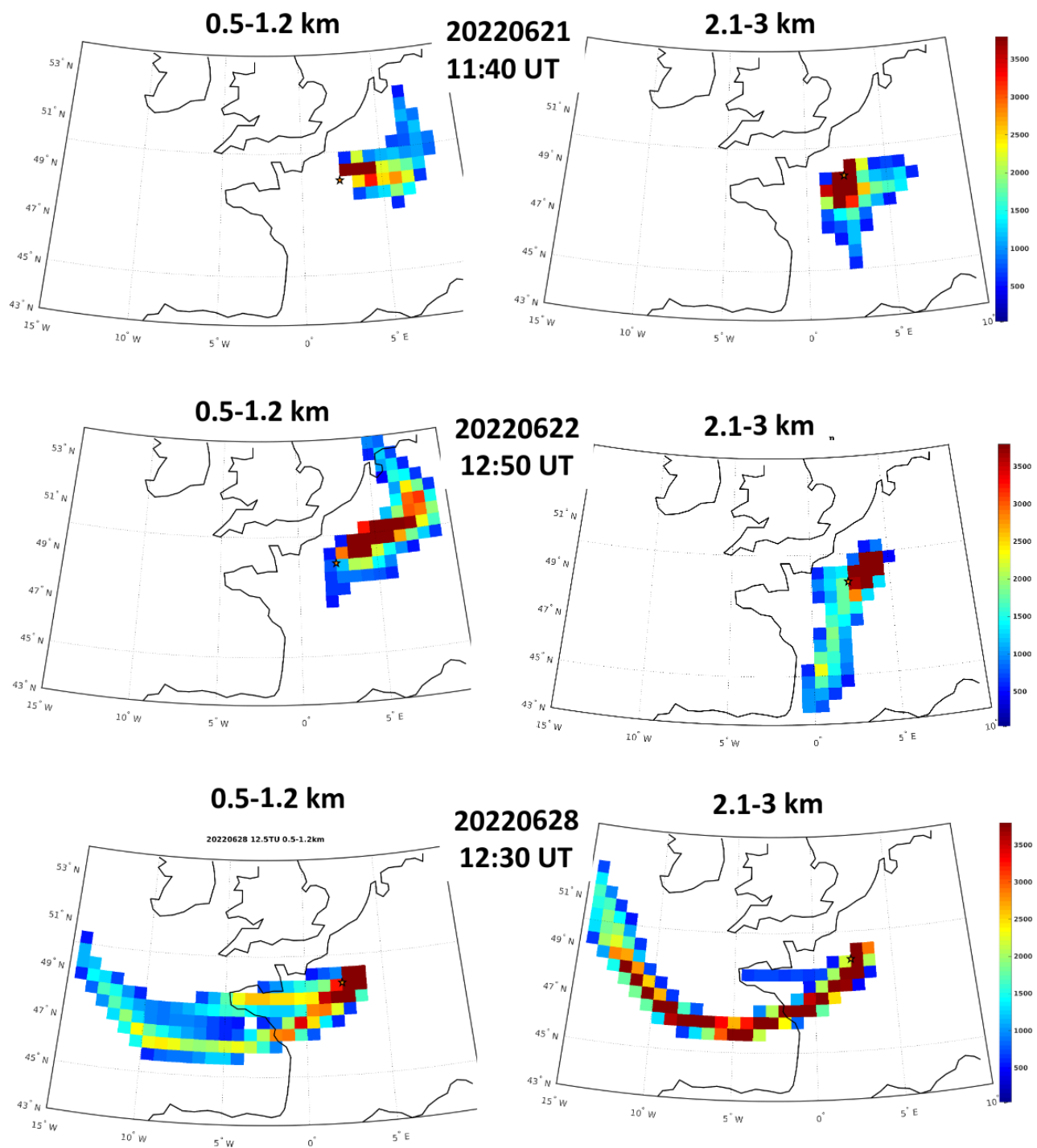
Fig. S5 : As Fig.S3 for June 21 (top), 22 (middle) and 28 (bottom) 2022

Fig. S6 : As Fig.S3 for June 21 (top), 22 (middle) and 28 (bottom) 2022