

Figure S1. Wind back trajectories (120-hours long) caclulated by NOAA's HYSPLIT model for the ground station station located at Vigla on the island of Lemnos at an altitude of 420 m asl. Different colors corespond to back trajectories arriving at the station on different dates during the field campaign.

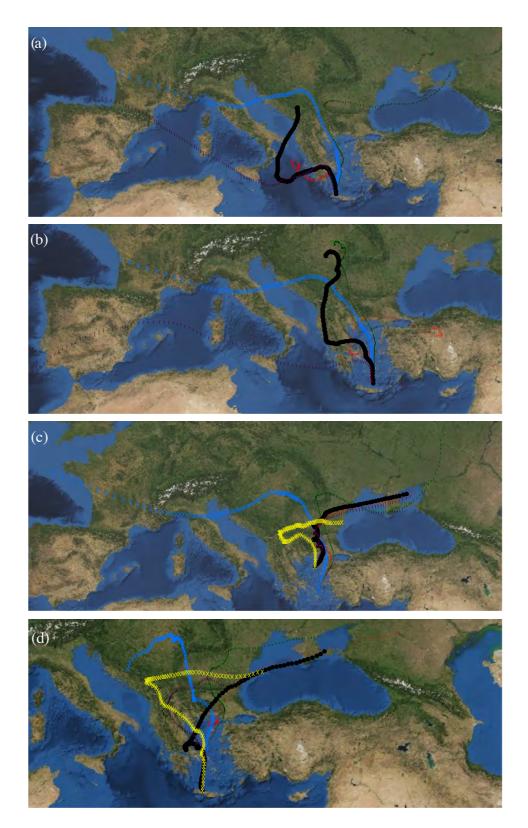


Figure S2. Wind back trajectories (120-hours long) caclulated by NOAA's HYSPLIT model for the different positions of the aircraft during the flight on the 1st of September 2011. The calculations have been performed when the aircraft was over Chania at 09:00 UTC (a), over north of Crete at 10:00 UTC (b), over the central Aegean Sea and Lemnos at 11:00 and 12:00 UTC, respectively (c), and over the central Aegean Sea and Chania on the way back at 13:00 and 14:00 UTC, respectively (d). Different colors of the trajectories correspond to different flight altitudes: 500 m (red), 1500 m (green), 2500 m (blue), 3500 m (black), and 4500 m (magenta).

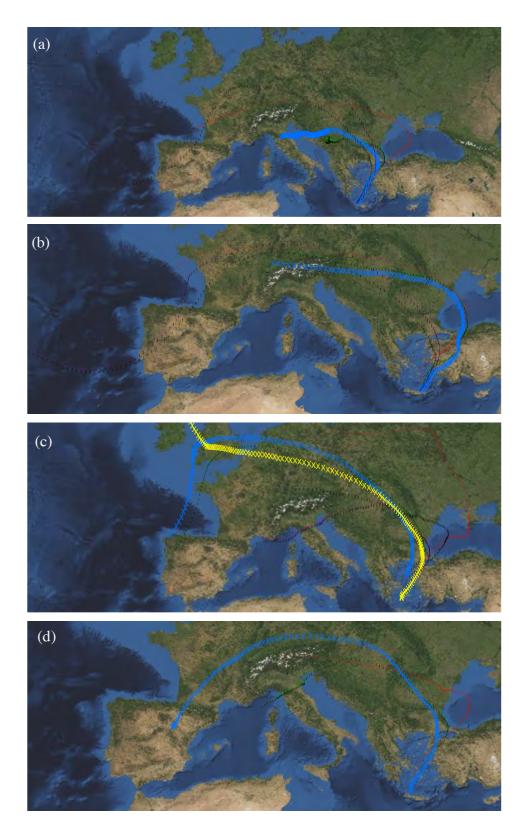


Figure S3. Wind back trajectories (120-hours long) caclulated by NOAA's HYSPLIT model for the different positions of the aircraft during the flight on the 4th of September 2011. The calculations have been performed when the aircraft was over Chania at 11:00 UTC (a), over eastern Crete at 12:00 UTC (b), over the Lemnos and northwestern of Crete at 13:00 and 14:00 UTC, respectively (c), and over Chania on the way back at 15:00 UTC, respectively (d). Different colors of the trajectories correspond to different flight altitudes: 500 m (red), 1500 m (green), 2500 m (blue), 3500 m (black), and 4500 m (magenta).