

## Supplementary Figures

Community detection for air traffic networks and its application to strategic flight planning

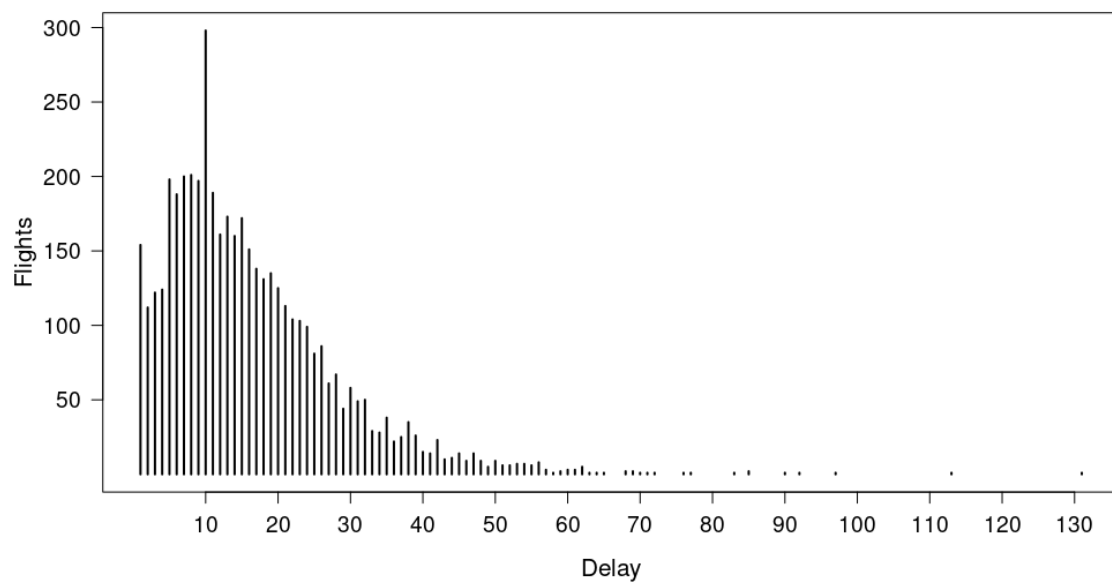


Figure S1: Histogram of the actual ATFM delay distribution, September 1<sup>st</sup> 2017.

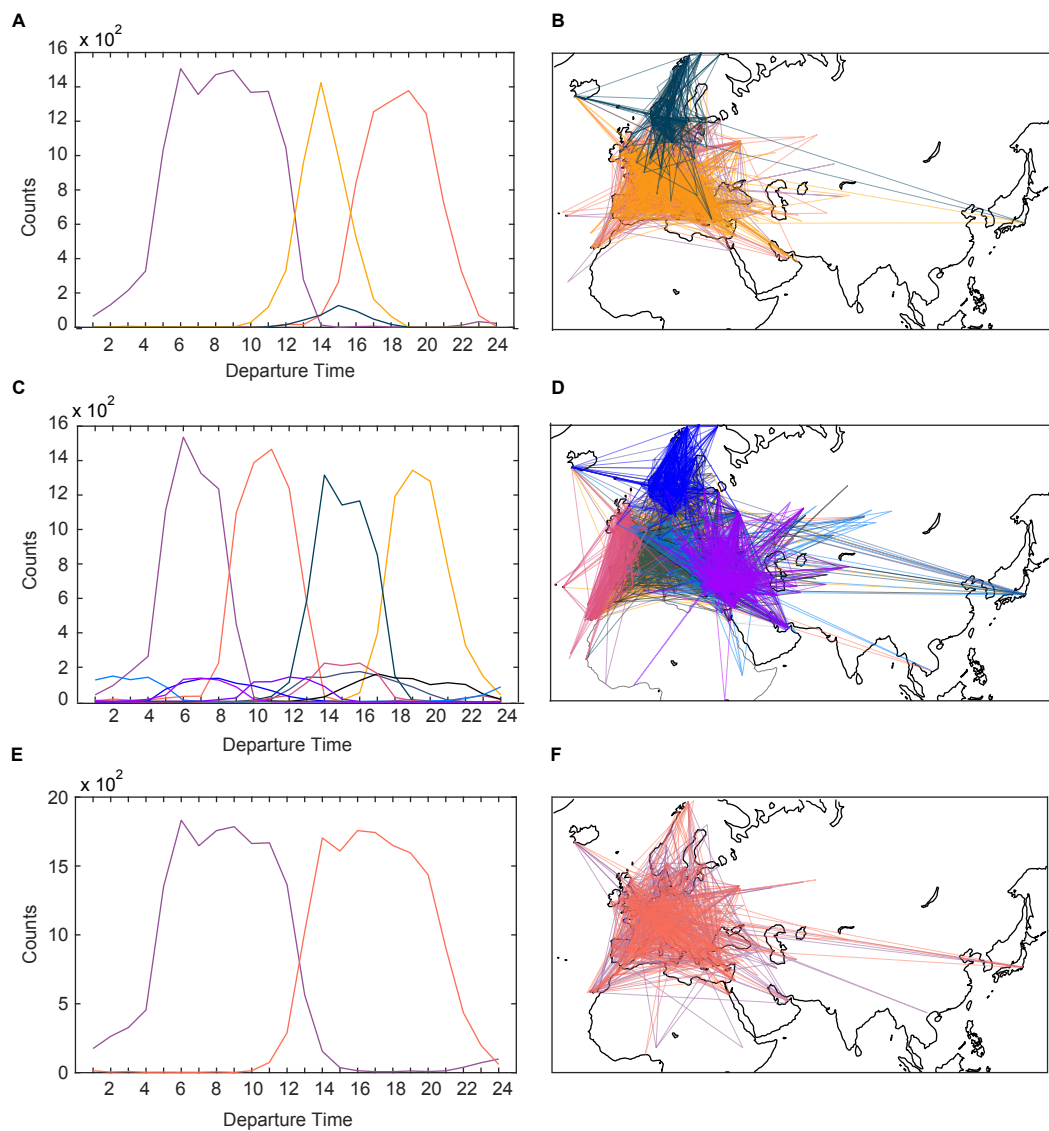


Figure S2: Temporal and spatial characterisation of clusters found with the Infomap algorithm on network 2 (panels A and B), network 3 (panels C and D) and network 4 (panels E and F). Panels A, C and D show the histograms of departure times. Panels B, D and F show the spatial distribution of clusters; each segment represents a flight, and for each cluster only 300 flights picked at random are represented, for clarity.

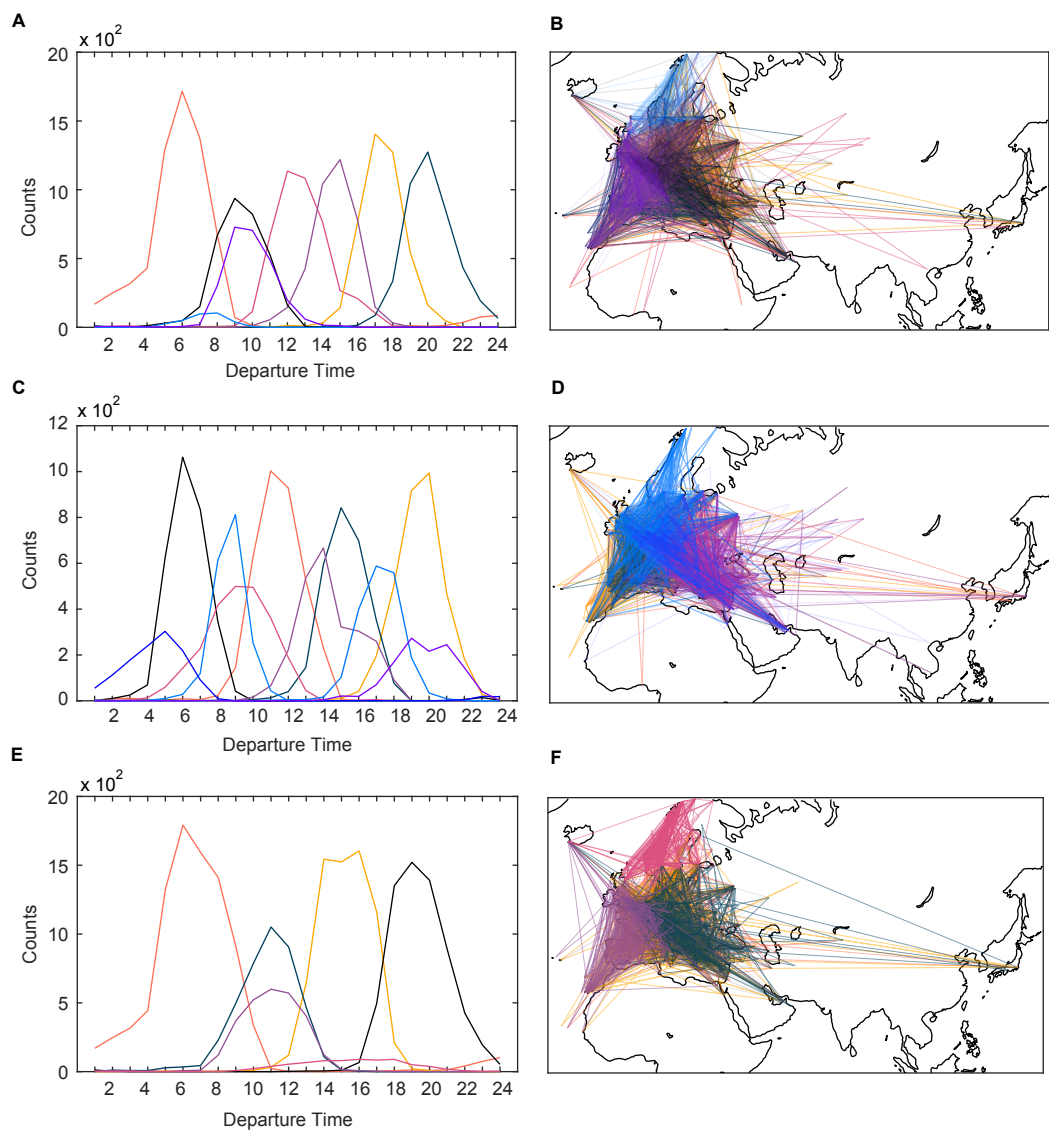


Figure S3: Temporal and spatial characterisation of clusters found with the Louvain algorithm on network 1 (panels A and B), network 2 (panels C and D) and network 4 (panels E and F). Panels A, C and D show the histograms of departure times. Panels B, D and F show the spatial distribution of clusters; each segment represents a flight, and for each cluster only 300 flights picked at random are represented, for clarity.