

Figure 1. Sampling maps of H5N1 clades in the Mekong region. Crosses and dots refer to sampling locations of H5N1 sequences assigned to an admin-1 or admin-2 polygon, respectively.

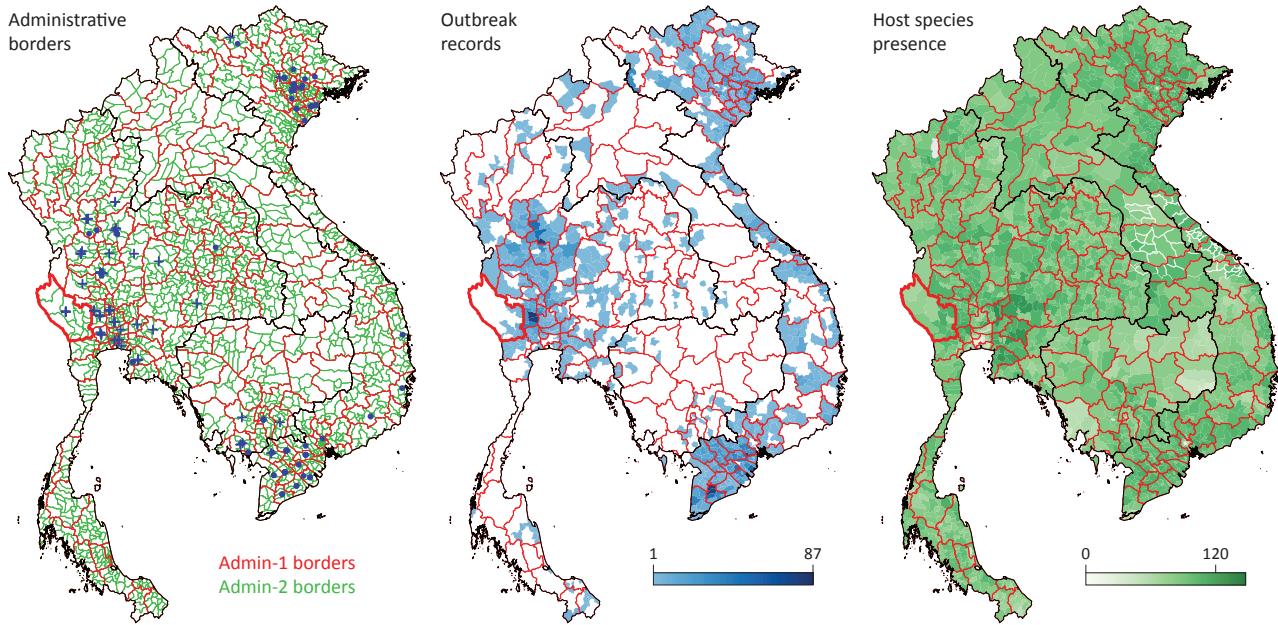


Figure 2. External data used to assign sampling probabilities to admin-2 polygons. The map of outbreak gathers data cumulated from 2004 to 2012 for admin-2 polygons (see also Figure S1 for annual maps), and the host species presence map displays log-transformed occurrences for both host species (poultry, ducks) per admin-2 polygon. For illustrative purpose, the admin-1 area highlighted by the red contour is displayed in a bigger size in Figure 3. The first map also displays the sampling locations of H5N1 clade 1 sequences considered in this study. As in Figure 1, crosses and dots refer to sampling locations of H5N1 sequences assigned to an admin-1 or admin-2 polygon, respectively.

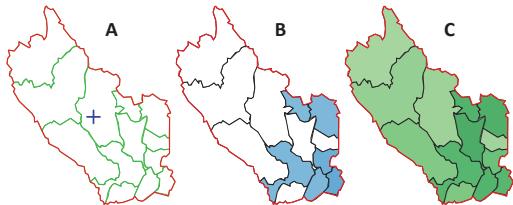


Figure 3. Zoom on a given admin-1 polygon for which a sampled sequence is assigned. Admin-2 polygons are delimited by green borders (A) and further coloured by outbreak records (B) and log-transformed host species occurrences (C). In this example, only 6 out of 13 admin-2 polygons are associated with a non-null number of outbreak records. If none of these admin-2 were associated with outbreak records, the host occurrence data would have been used to assign a sampling probability to each admin-2 polygon.

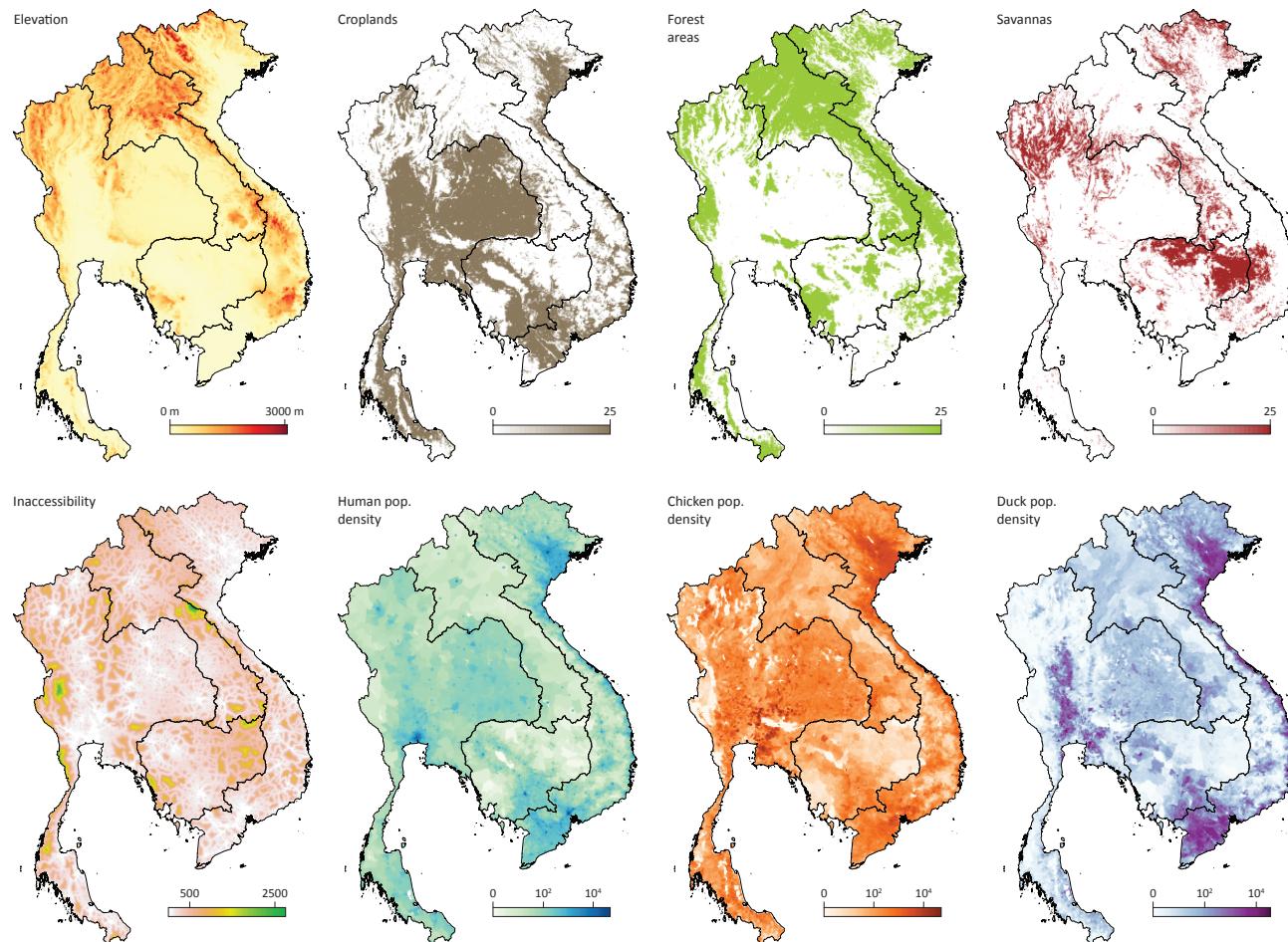


Figure 4. Environmental variables that were tested as factors that could have impacted lineage dispersal velocity.

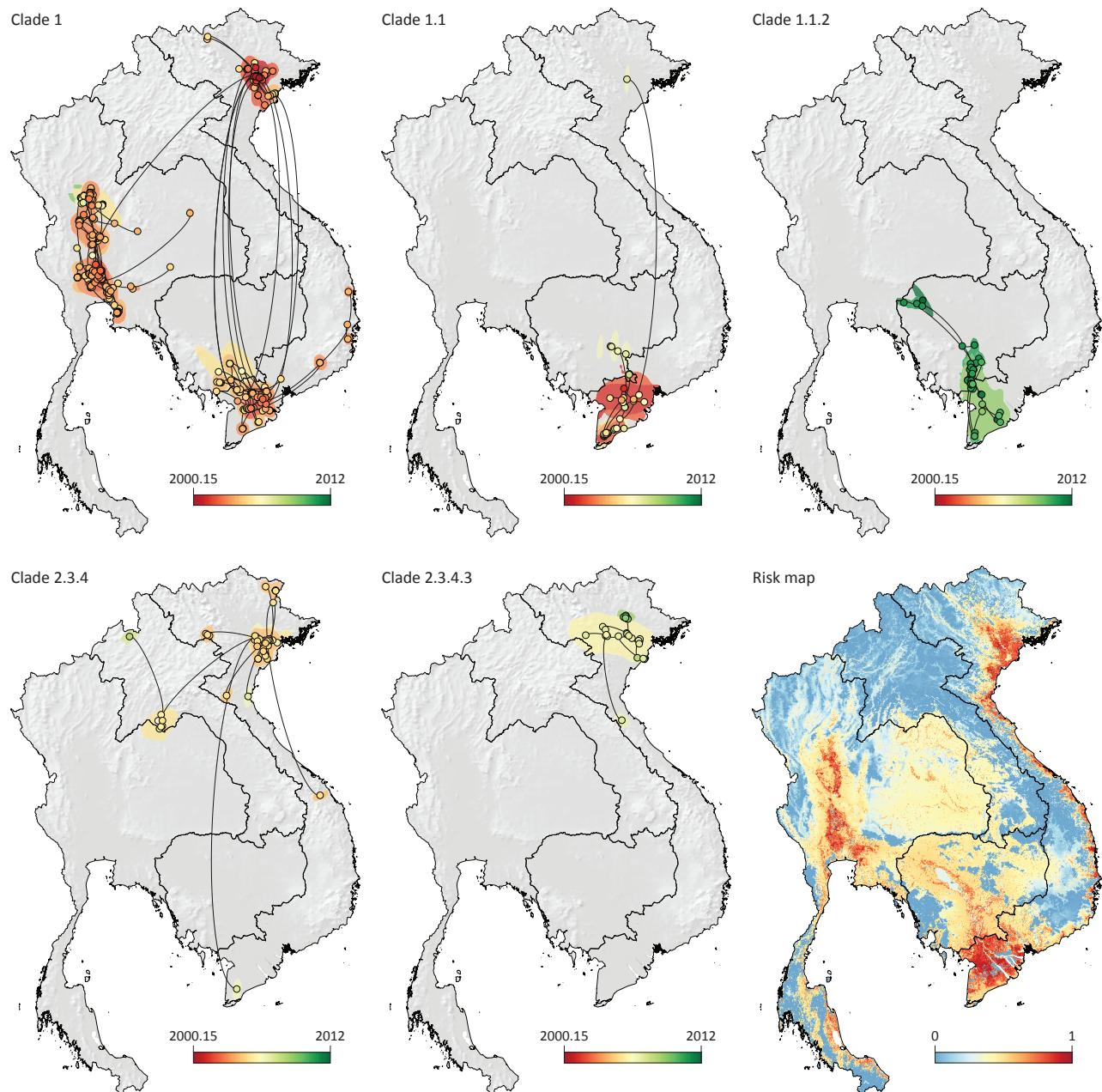


Figure 5. Risk map and reconstructed spatiotemporal diffusion for each H5N1 clade considered in the present study: mapped consensus trees and 95% HPD regions. Consensus trees and 95% HPD regions are based on 100 trees subsampled from each post burn-in posterior distribution. Nodes of consensus trees are coloured according to their time of occurrence. 95% HPD regions were computed for successive time layers and then superimposed using the same colour scale reflecting time.