Time-varying habitat selection analysis: A model and applications for studying diel, seasonal, and post-release changes

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Appendix S2: Applications of time-varying HSA on wildebeest examples

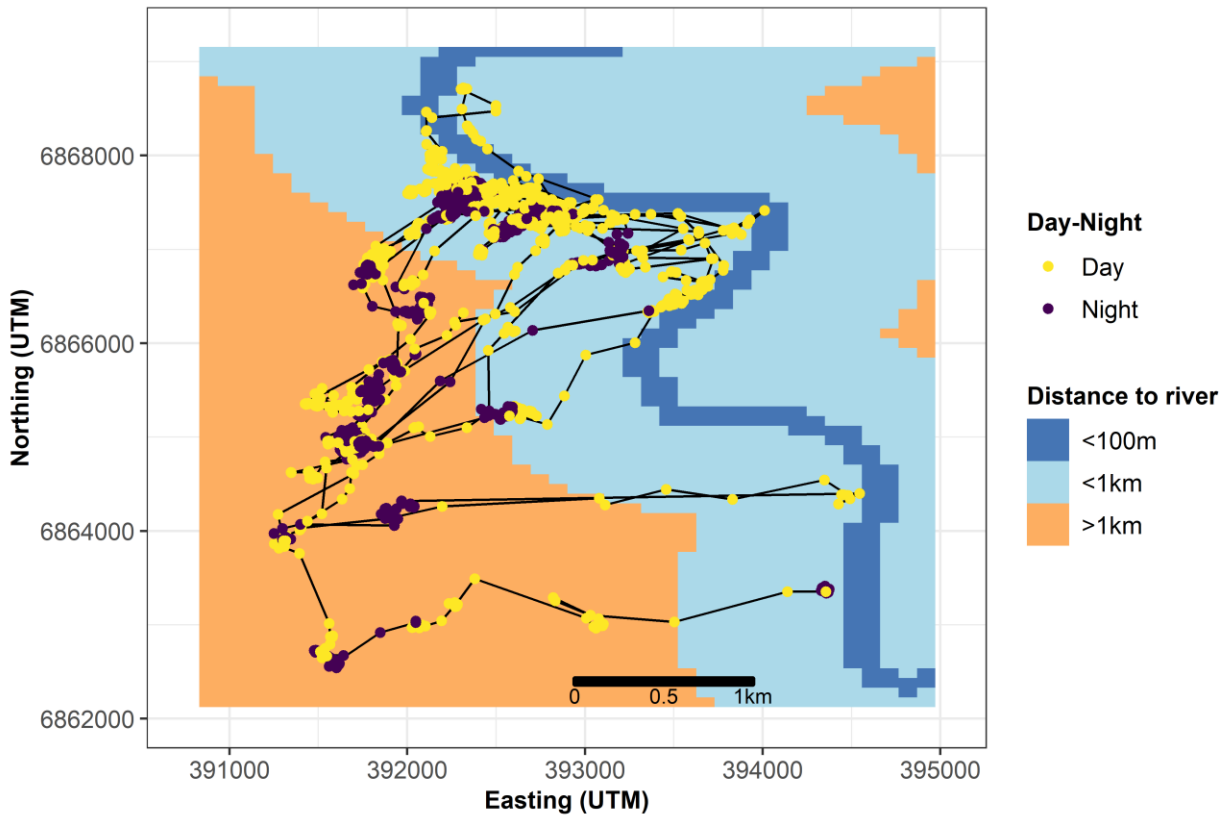

Figure S1. Illustration of the wildebeest's locations recorded during one month in the dry season, at a fix rate of one location every 15 minutes. Background shows the distance to the closest river. Locations collected during the night are colored in purple, whereas those collected during the day are in yellow.

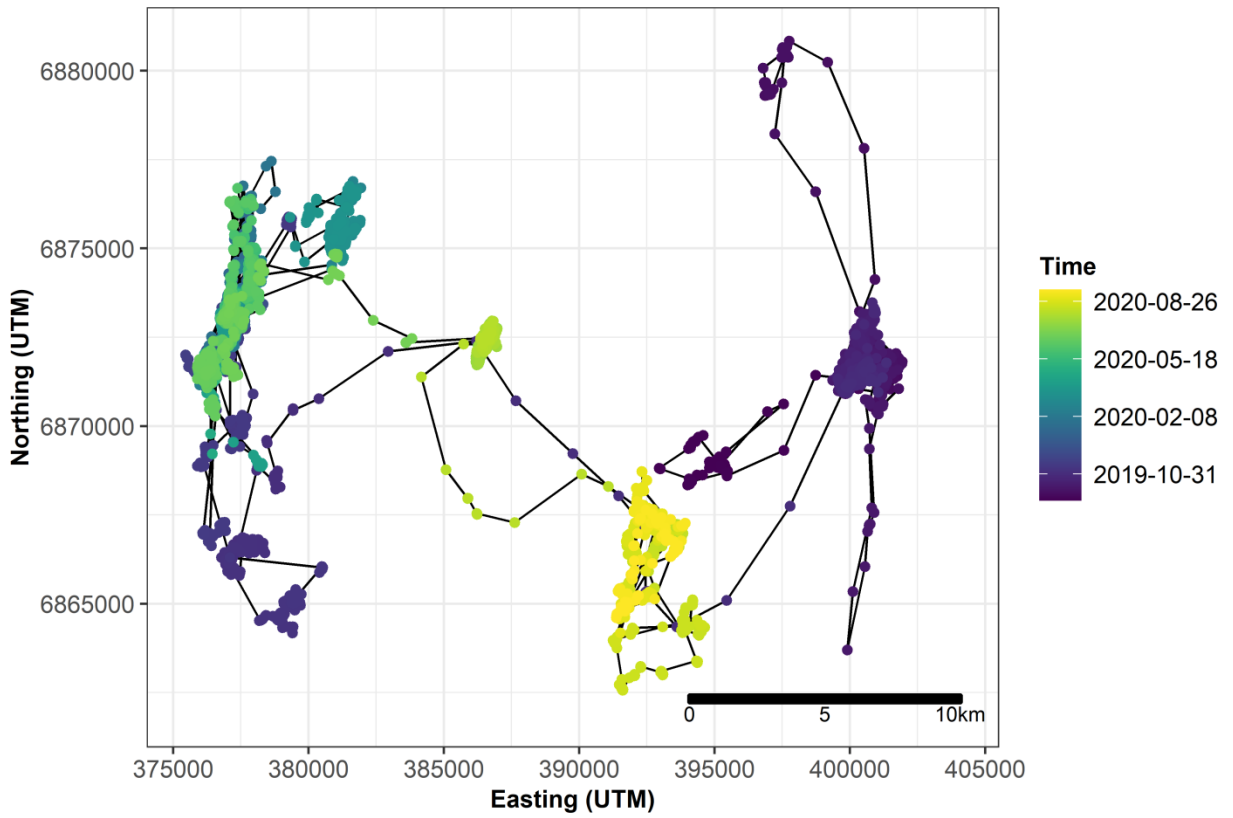

Figure S2. Illustration of the wildebeest's locations recorded during one year, at a fix rate of one location every 15 minutes and subsampled to one location per hour. Locations are colored based on their collection time.

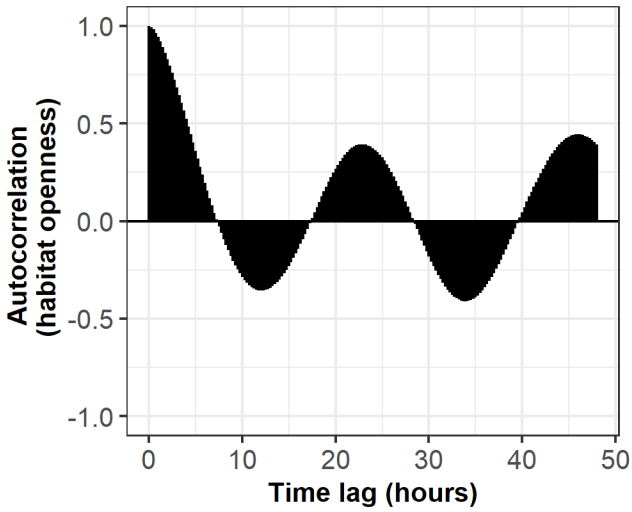

Figure S3. Temporal autocorrelation of the selection coefficient for open habitat $\beta(t)\beta(t + lag)$. Values close to 1 (resp. -1) indicate high auto-correlation, with similar selection strength (resp. opposite selection strengths), while values close to 0 indicate low auto-correlation.

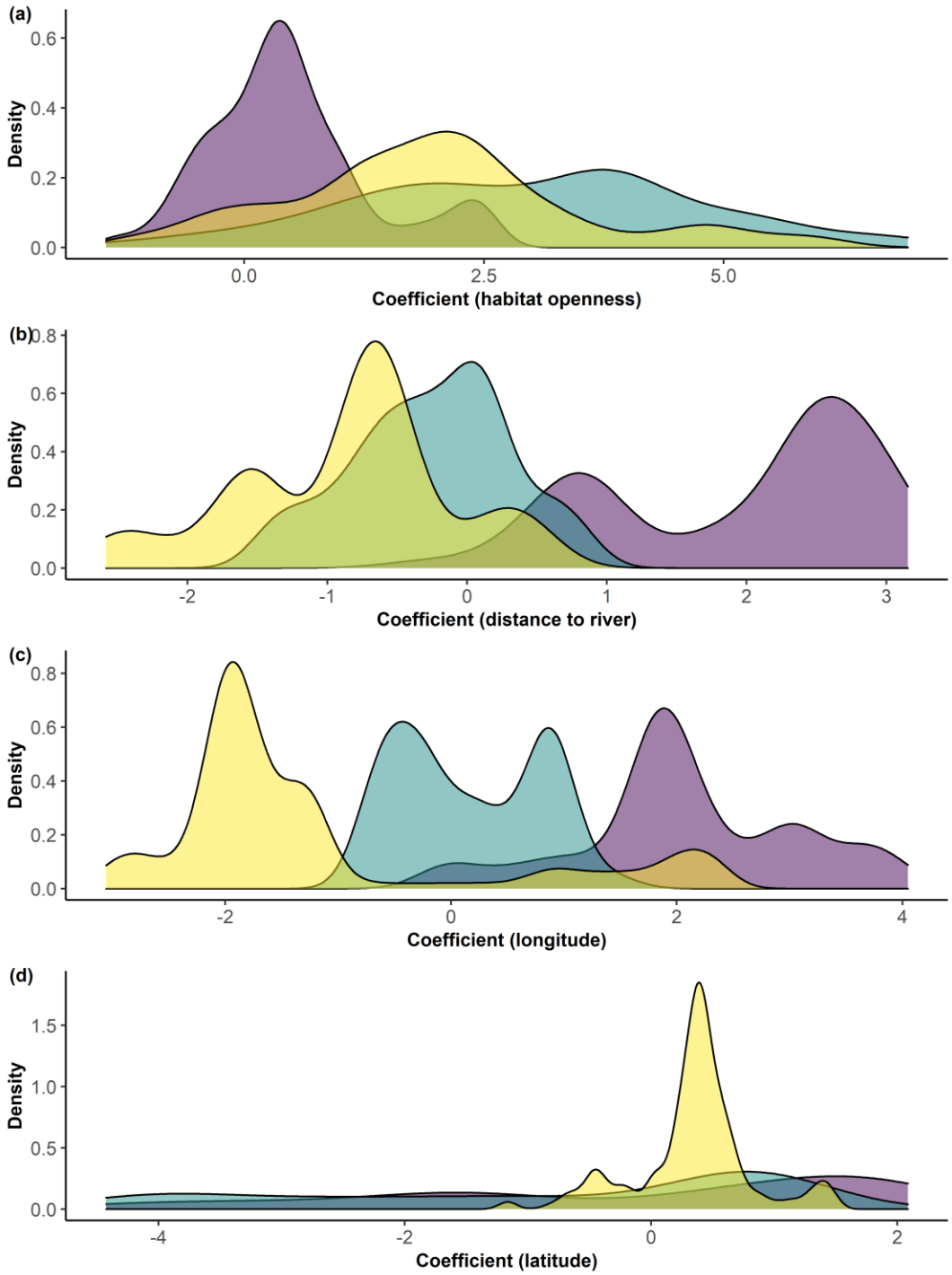

Figure S4. Distribution of the habitat selection coefficients for (a) habitat openness, (b) distance to the closest river, (c) longitude and (d) latitude. Each color shows the distribution of the selection coefficients for one individual.