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Borrmann, R. M., Phillips, R. A., Clay, T. A. and Garthe, S. 2019. High foraging site fidelity and spatial segregation among individual great black-backed gulls. – J. Avian Biol. 2019: e02156

Supplementary material

Appendix 1.

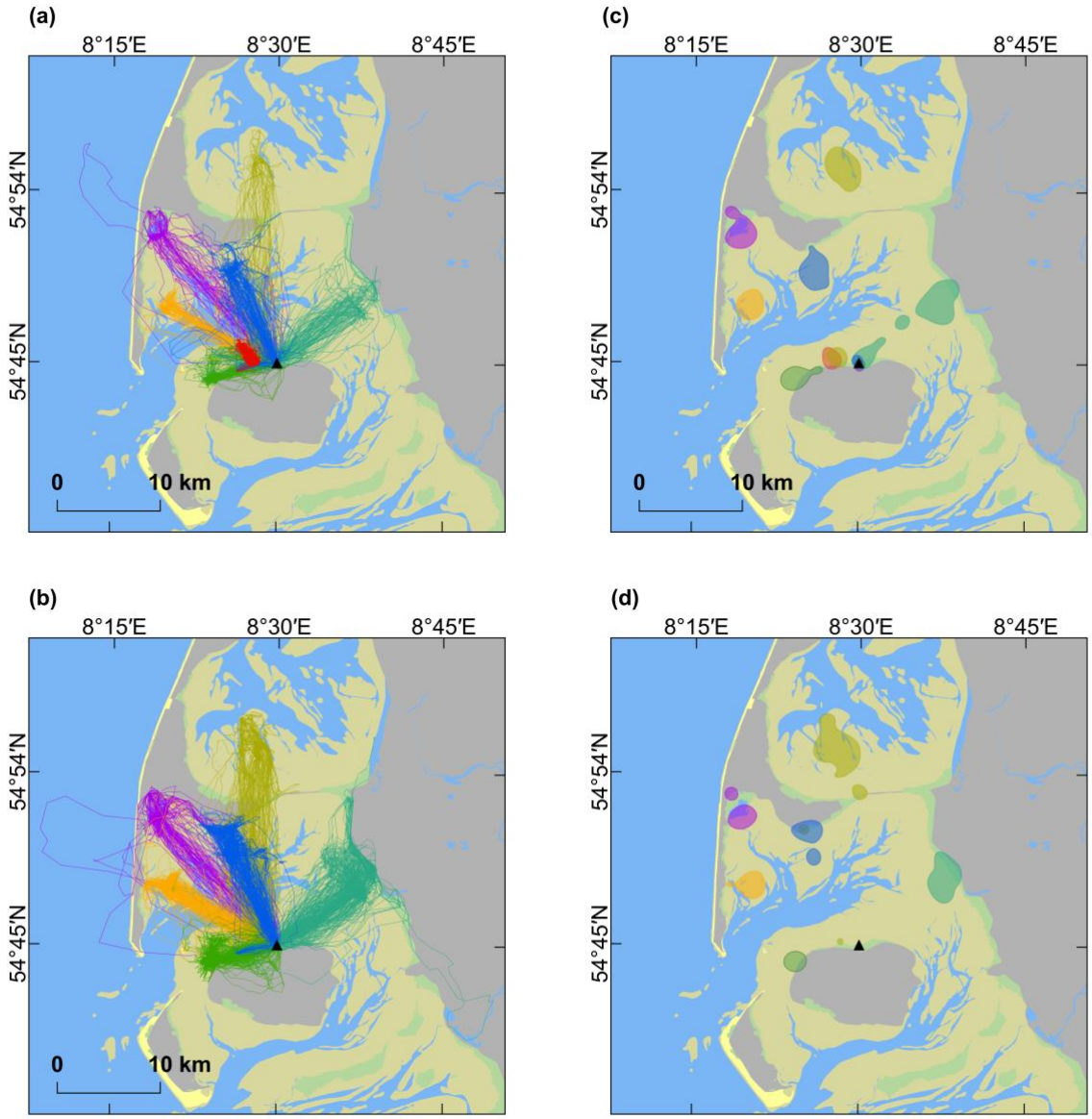

Figure A1. (a-b) Movement patterns of seven great black-backed gulls *Larus marinus* tracked using GPS loggers during **(a)** incubation and **(b)** chick-rearing in 2016. The colony is marked as a black triangle. **(c-d)** 50% utilisation distributions (UDs) of seven great black-backed gulls tracked using GPS loggers during **(c)** incubation and **(d)** chick-rearing in 2016 (maps produced with QGIS 3.4.9-Madeira software, https://qgis.org).

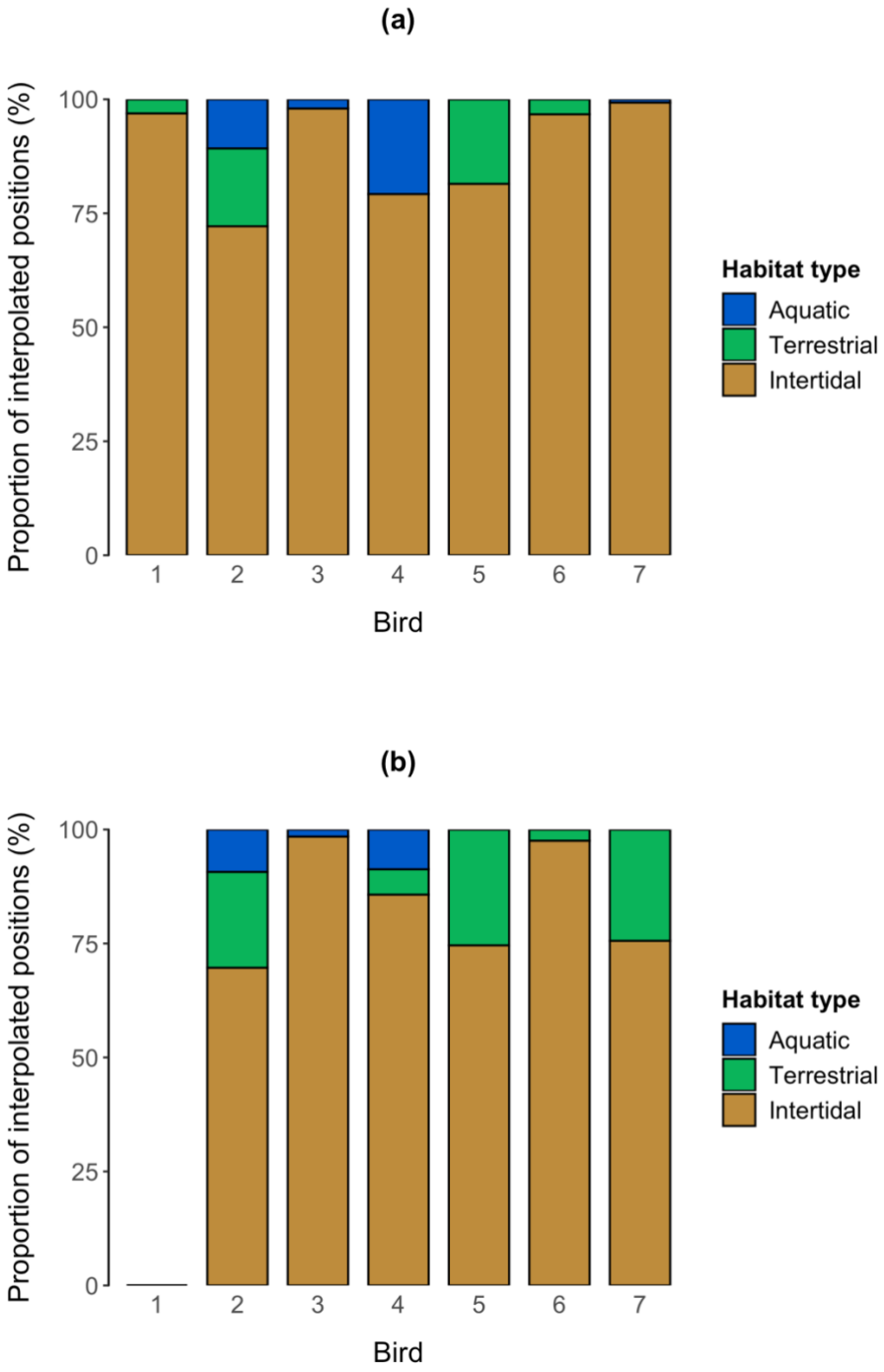

Figure A2. Proportion of interpolated foraging positions (%) of seven great black-backed gulls *Larus marinus* tracked using GPS loggers during **(a)** incubation and **(b)** chick-rearing in 2016. Use of habitats in core areas (50% utilisation distributions): intertidal (mud flats, salt marshes), terrestrial and aquatic (freshwater, marine).

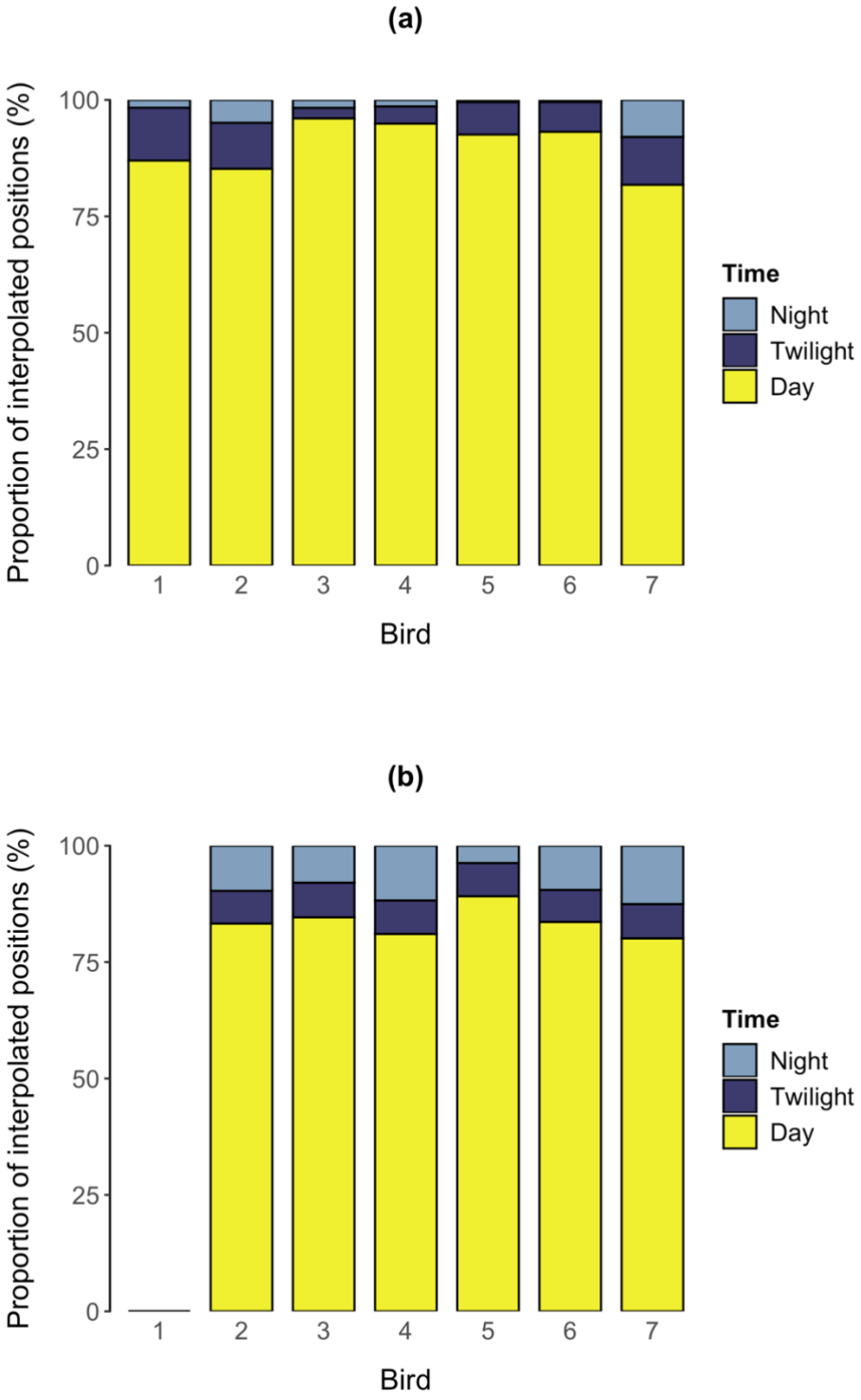

Figure A3. Proportion of interpolated foraging positions (%) of seven great black-backed gulls *Larus marinus* tracked using GPS loggers during **(a)** incubation and **(b)** chick-rearing in 2016. Different periods day, night and twilight are distinguished based on estimated times for sunrise and sunset.