

Energyscapes and prey fields shape a North Atlantic seabird wintering hotspot under climate change. Amélineau F., Fort J., Mathewson P.D., Speirs D.C., Courbin N., Perret S., Porter W.P., Wilson R.J., Grémillet D. **Royal Society Open Science.**

ESM file 2: Parameters used in Niche Mapper™

Morphological properties	Value	References
Body mass (g)	152	This study
Body plumage depth (dorsal-ventral) (mm)	7.4–12.8	Fort et al 2009
Head plumage depth (d-v) (mm)	5.2-9.4	This study
Plumage reflectivity (d-v) (%)	40.4–65.0	Fort et al 2009
Body feather length (d-v) (mm)	20.0–19.2	Fort et al 2009
Head (feather length (d-v) (mm)	11.6-10.7	This study
Feather diameter (d-v) (μm)	33.0–33.0	Fort et al 2009
Physiological properties	Value	References
Body core temperature ($^{\circ}\text{C}$)	40	Gabrielsen et al 1991 Cheng and Plewes 1992
Flesh thermal conductivity ($\text{W}\cdot\text{m}^{-1}\cdot^{\circ}\text{C}^{-1}$)	0.5-2.8	1992
Oxygen extraction efficiency (%)	35	Fort et al 2009
Bird density ($\text{kg}\cdot\text{m}^{-3}$)	932.9	Fort et al 2009
Resting metabolic rate (W)	2.02	Gabrielsen et al 1991
Flight metabolism (W)	10.57	Fort et al 2009
Behavioural properties	Value	References
Ventral area contacting substrate (%)	25	Fort et al 2009
Proportion of time spent flying per day (%)	9	Fort et al 2009, 2010
Proportion of time spent diving per day (%)	24	Fort et al 2010

Environmental data	source
Sea surface temperature (°C)	ICOADS (http://icoads.noaa.gov/)
Air temperature (°C)	ICOADS (http://icoads.noaa.gov/)
Cloud cover (%)	ICOADS (http://icoads.noaa.gov/)
Relative humidity (%)	ICOADS (http://icoads.noaa.gov/)
Wind speed (m.s ⁻¹)	ICOADS (http://icoads.noaa.gov/)