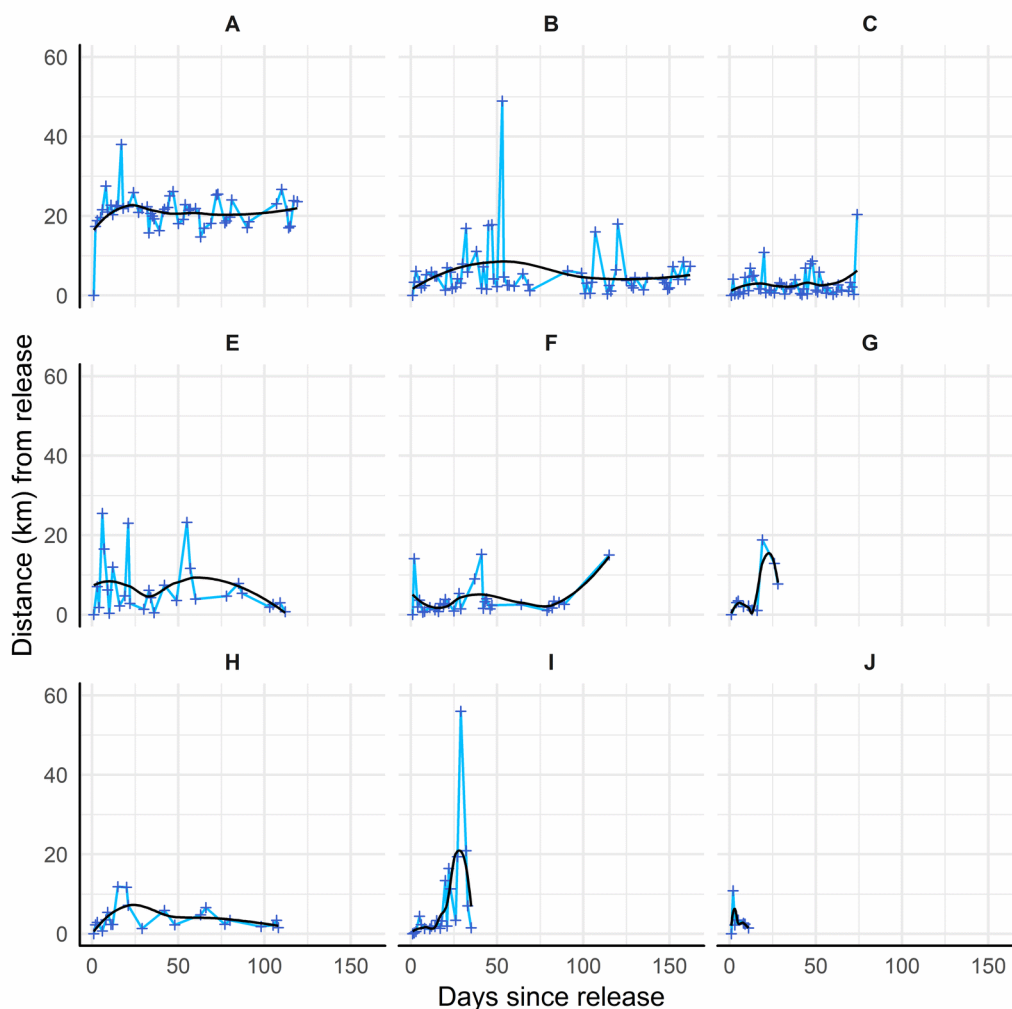
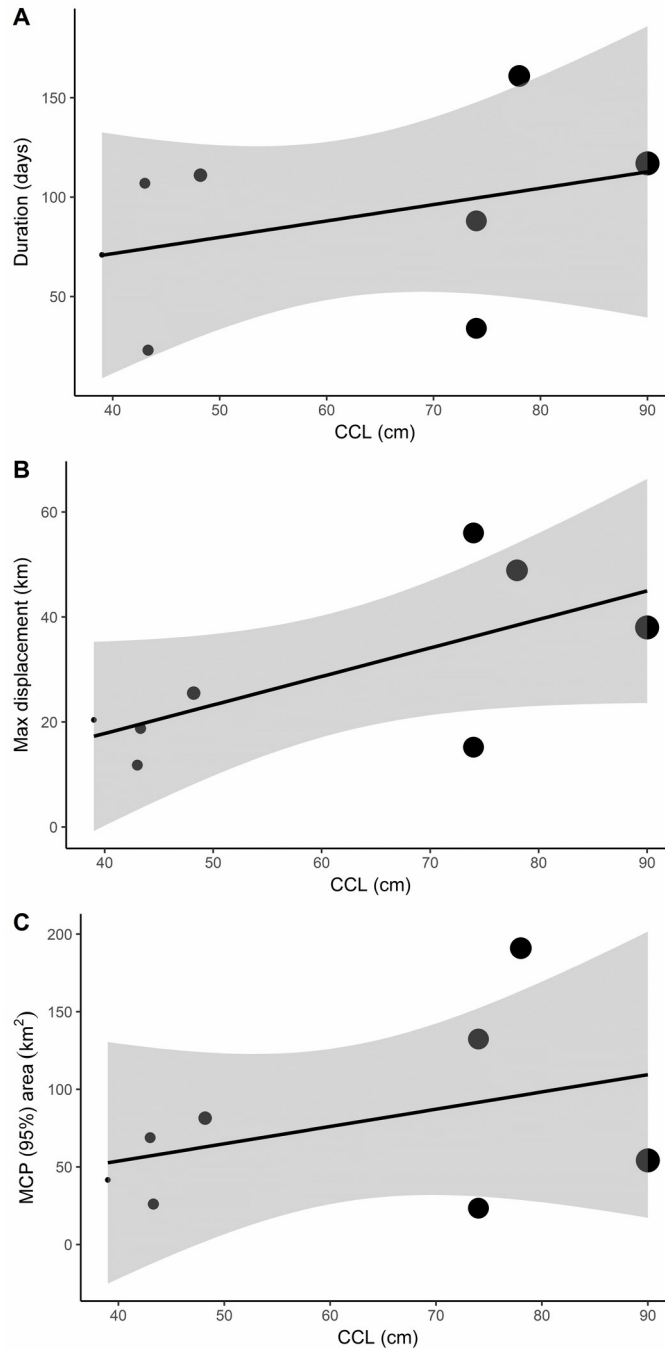


# Tracking foraging green turtles in the Republic of Congo: insights into spatial ecology from a data poor region

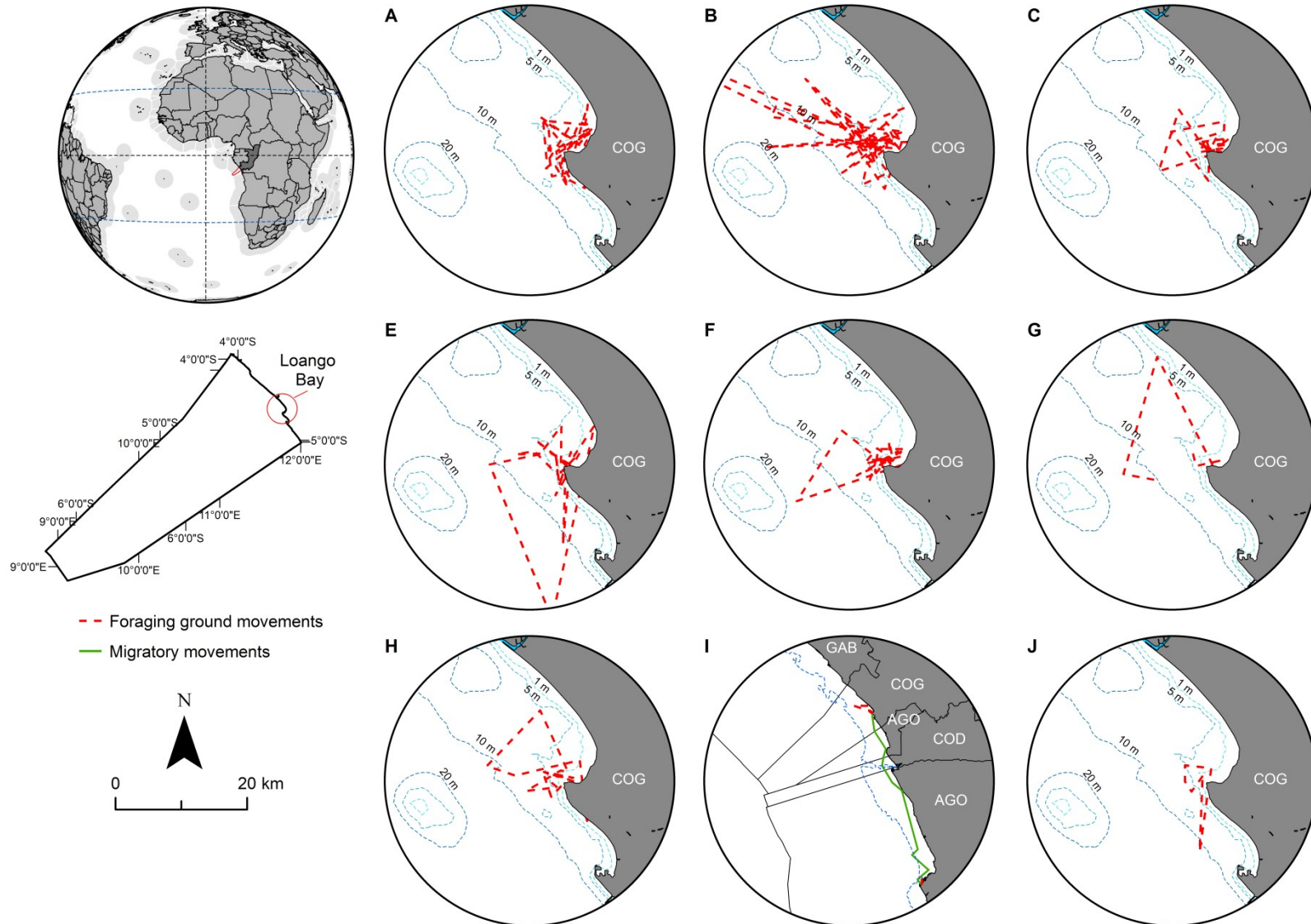
KRISTIAN METCALFE, NATHALIE BRÉHERET, GAELLE BAL, EVA CHAUVET, PHILIP D. DOHERTY, ANGELA FORMIA, ALEXANDRE GIRARD, JEAN-GABRIEL MAVOUNGOU, RICHARD J. PARNELL, STEPHEN K. PIKESLEY and BRENDAN J. GODLEY



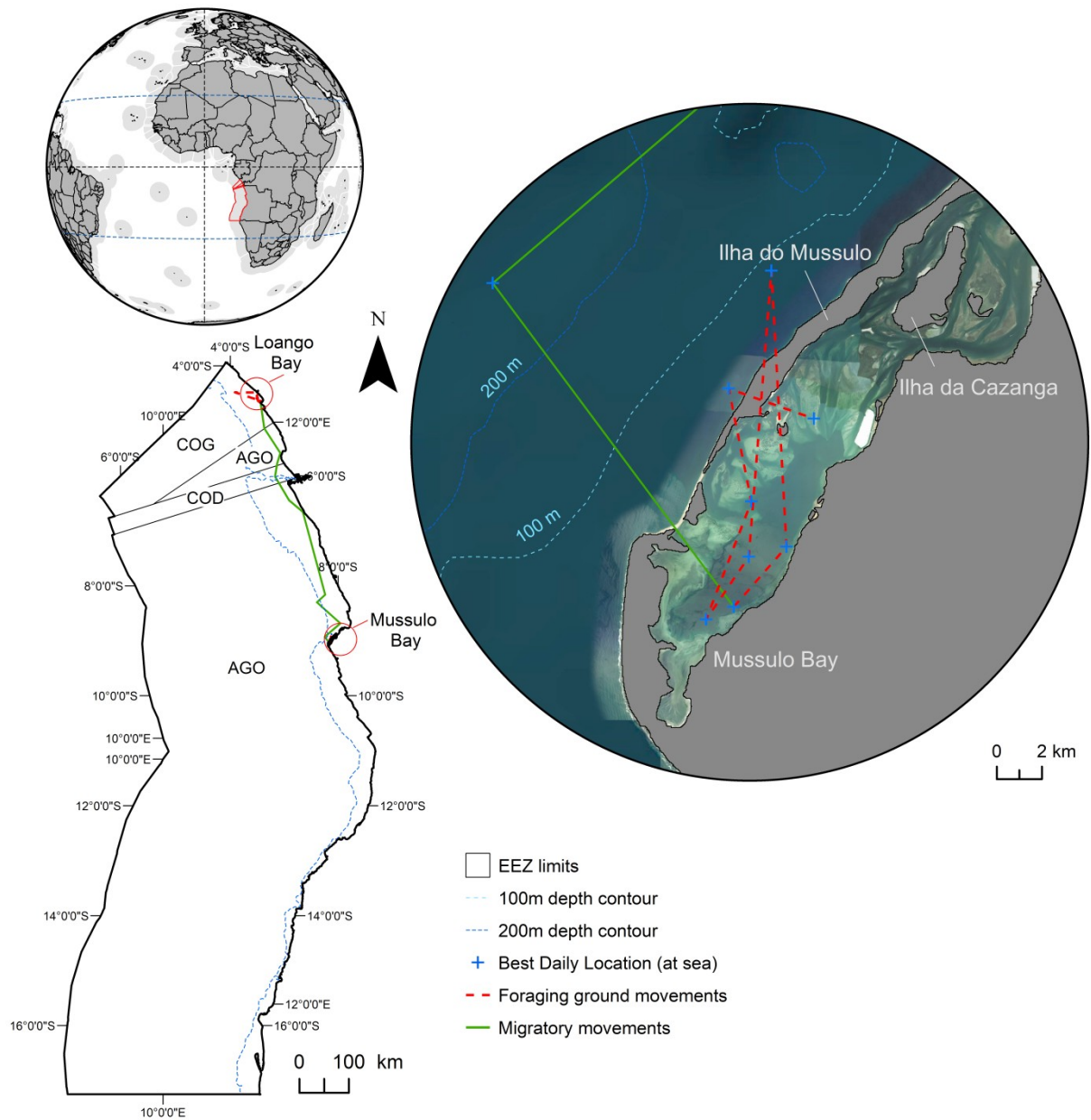
SUPPLEMENTARY FIG. 1 Daily displacement distance (km) from release (day zero) for each tagged individual (A, B, C, E, F, G, H, I, J;  $n = 9$ ) based on best daily location data. Solid black line represents LOESS smoother (locally weighted regression).



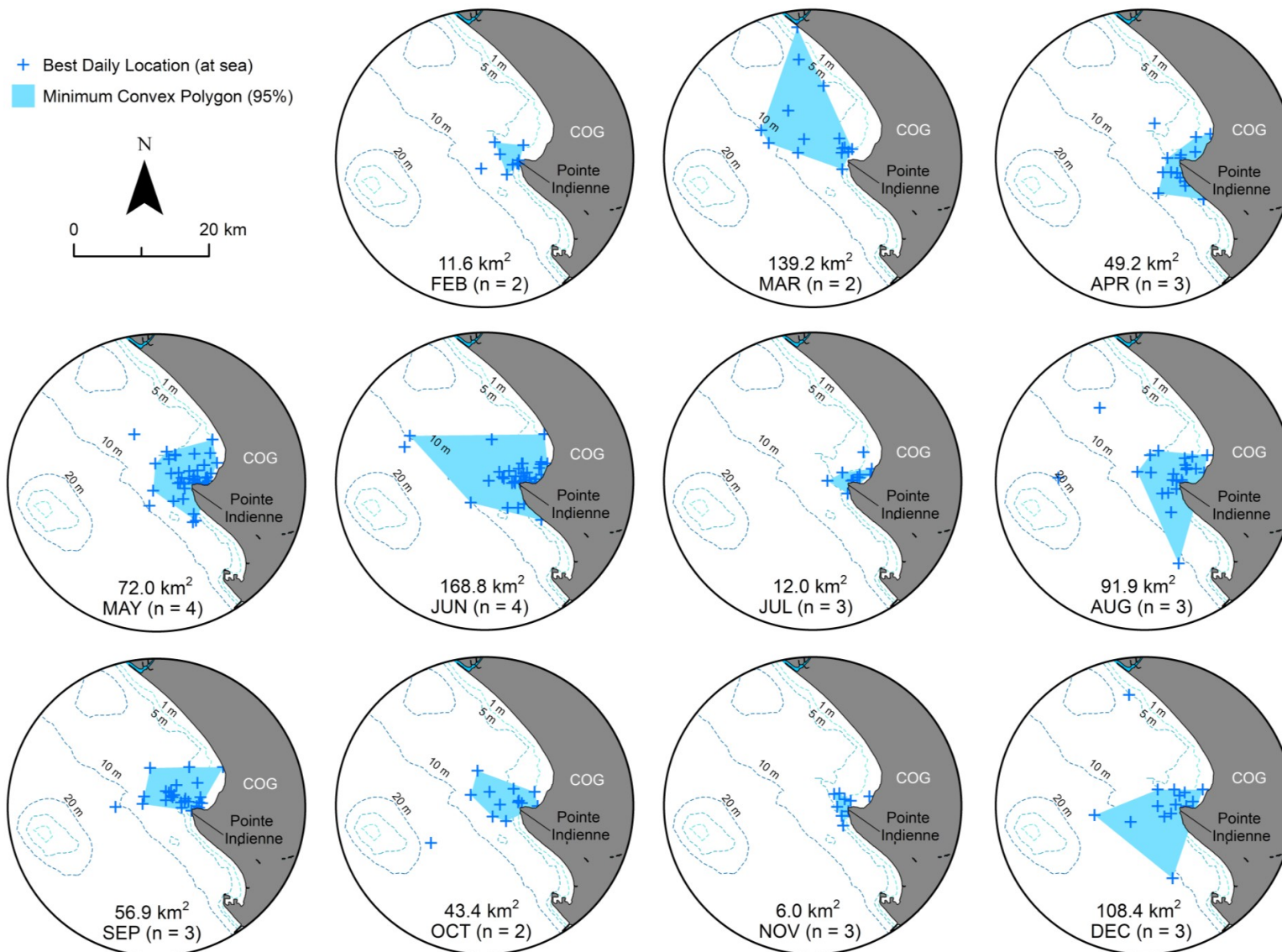
SUPPLEMENTARY FIG. 2 Relationship between size (curved carapace length, CCL) of satellite tagged green turtles and: (A) tracking duration (days), ( $F_{1,6} = 4.549$ ,  $r^2 = 0.4312$ ,  $p > 0.05$ ); (B) maximum displacement distance (km), ( $F_{1,6} = 1.027$ ,  $r^2 = 0.1461$ ,  $p > 0.05$ ); and (C) 95% minimum convex polygon (MCP) area (km<sup>2</sup>), ( $F_{1,6} = 0.8876$ ,  $r^2 = 0.1289$ ,  $p > 0.05$ ) for individuals with available size data ( $n = 8$  individuals). Solid black line indicates regression from linear modelling, and grey polygon 95% confidence intervals. Solid black circles represent data for each individual scaled according to their body size (CCL).



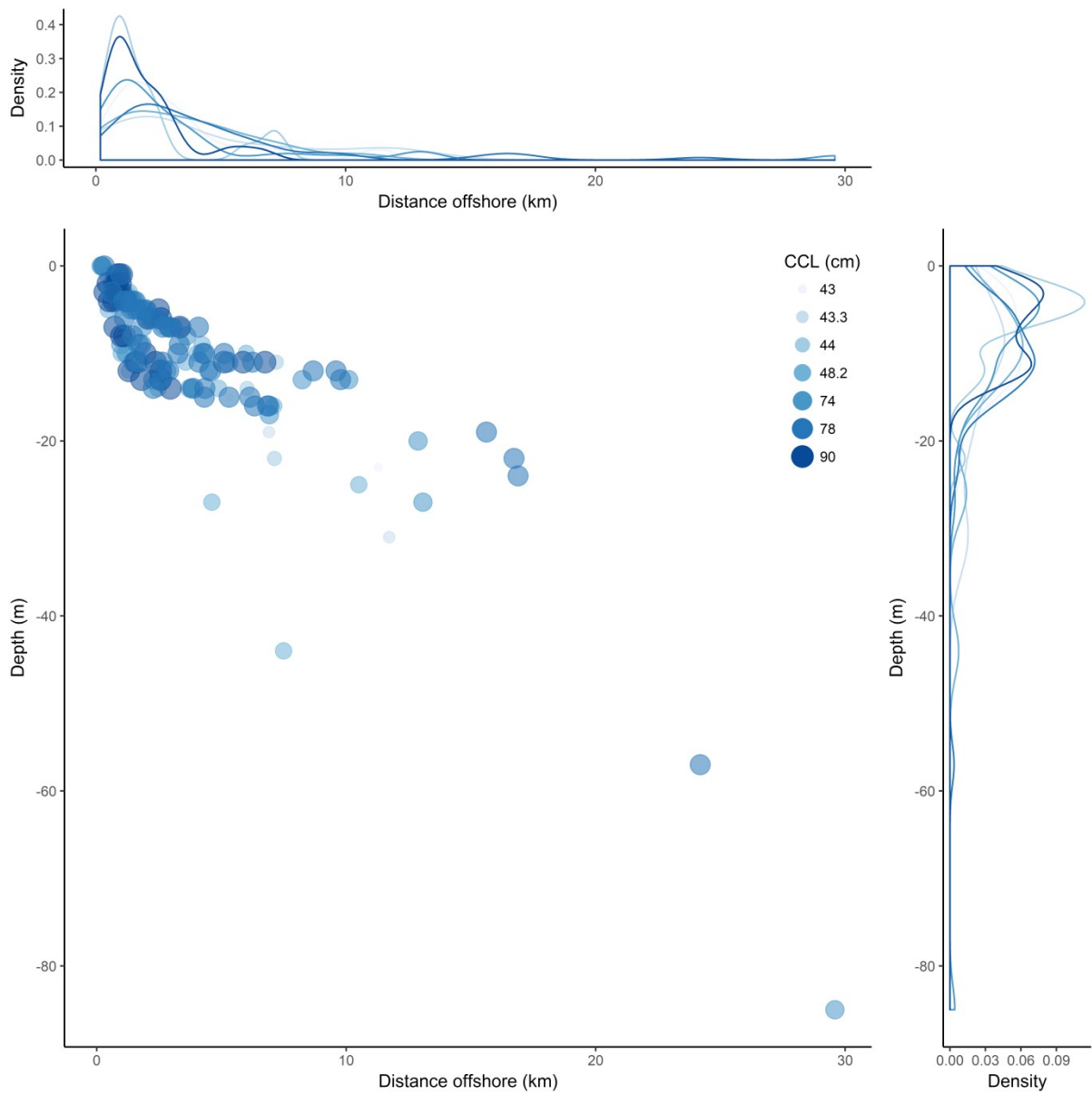
SUPPLEMENTARY FIG. 3 Green turtle satellite telemetry tracks for each individual (A, B, C, E, F, G, H, I, J; n = 9) based on best daily location data (at-sea). Please note: different scale plot for movements of individual I (see Figure S4 for fine-scale movements). Country labels: GAB – Gabon; COG – Republic of Congo; AGO – Angola; and COD – Democratic Republic of Congo.



SUPPLEMENTARY FIG. 4 Regional movements for green turtle individual I (PTT: 115080; Table 1) that migrated 505.9km from foraging grounds in Loango Bay, Republic of Congo to foraging grounds in Mussulo Bay, Angola. Exclusive economic zones (EEZ) are labelled as follows: COG – Republic of Congo; AGO – Angola; and COD – Democratic Republic of Congo.



SUPPLEMENTARY FIG. 5 Ninety-five percent minimum convex polygon (MCP) home ranges for each month (February – December; n = 11 months) derived from best daily location data (at-sea). Please note: number of individuals used to calculate MCPs for each month included in parentheses. Country labels: COG – Republic of Congo.



SUPPLEMENTARY FIG. 6 Green turtle habitat use in Loango Bay – the relationship between seabed depth (m) and distance offshore (km) based on best-daily locations at-sea for individuals of different size (curved carapace length, CCL) tagged during the study. Marginal density plots (smoothed histograms) describe core area of habitat use (depth and distance offshore) for each size class.