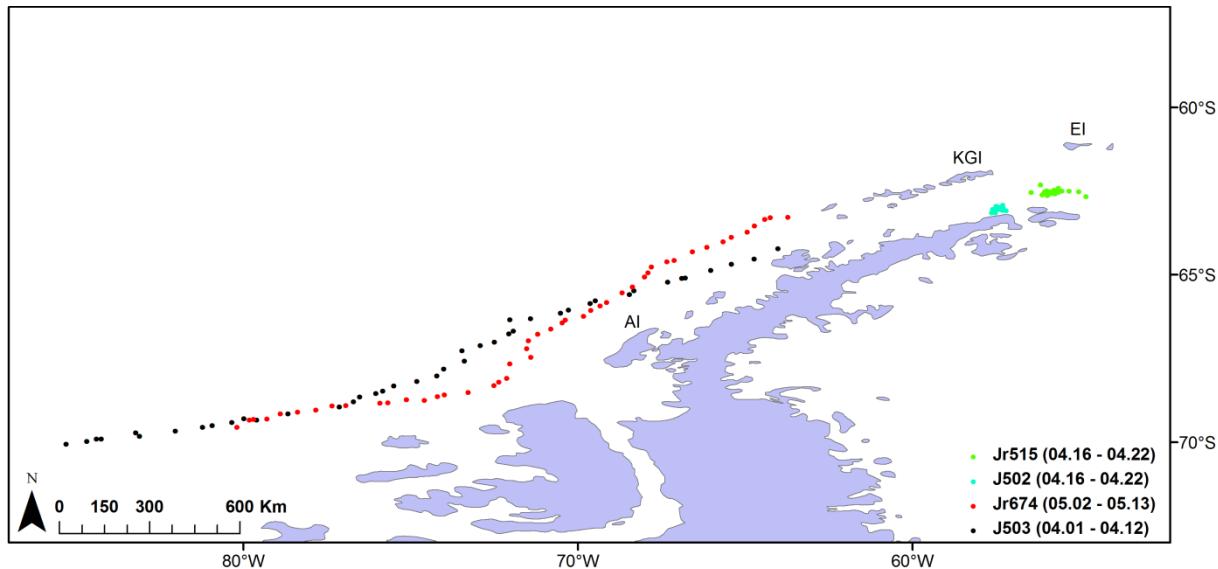
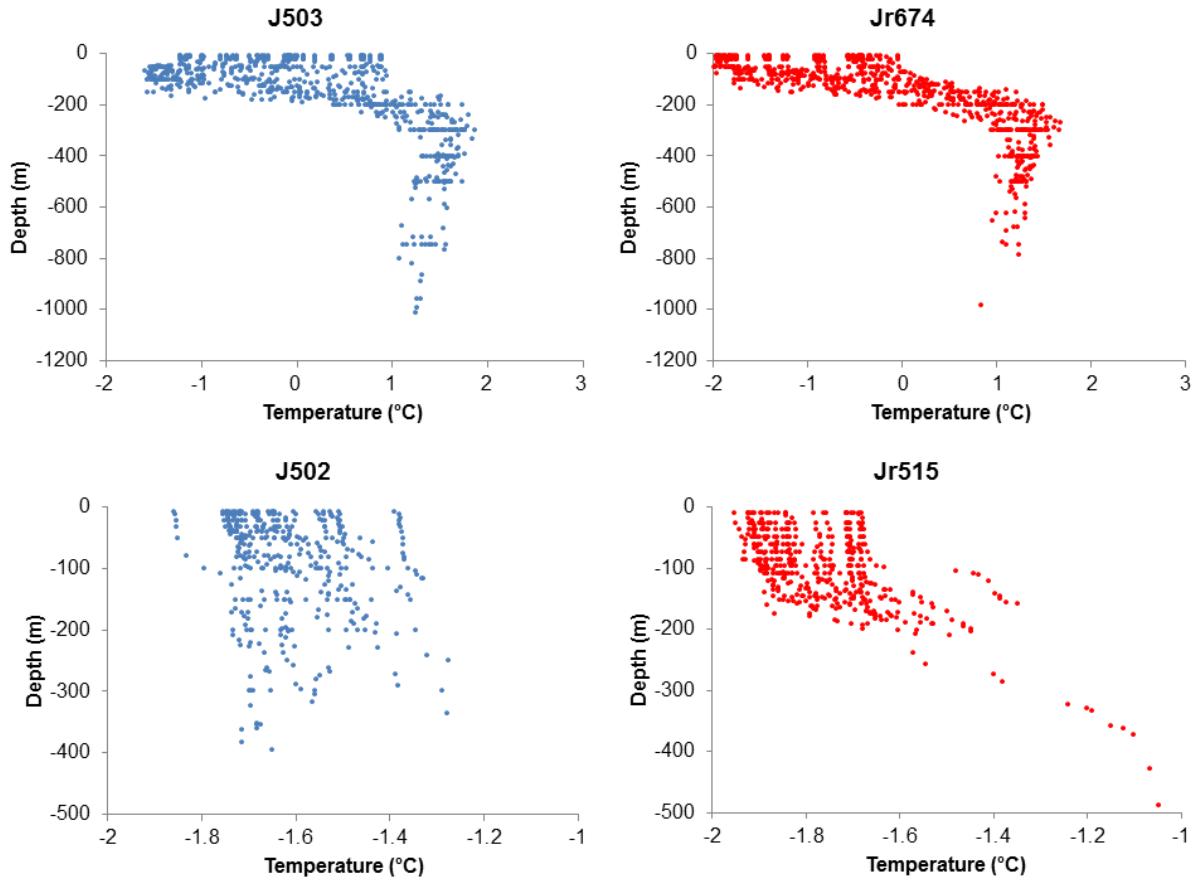


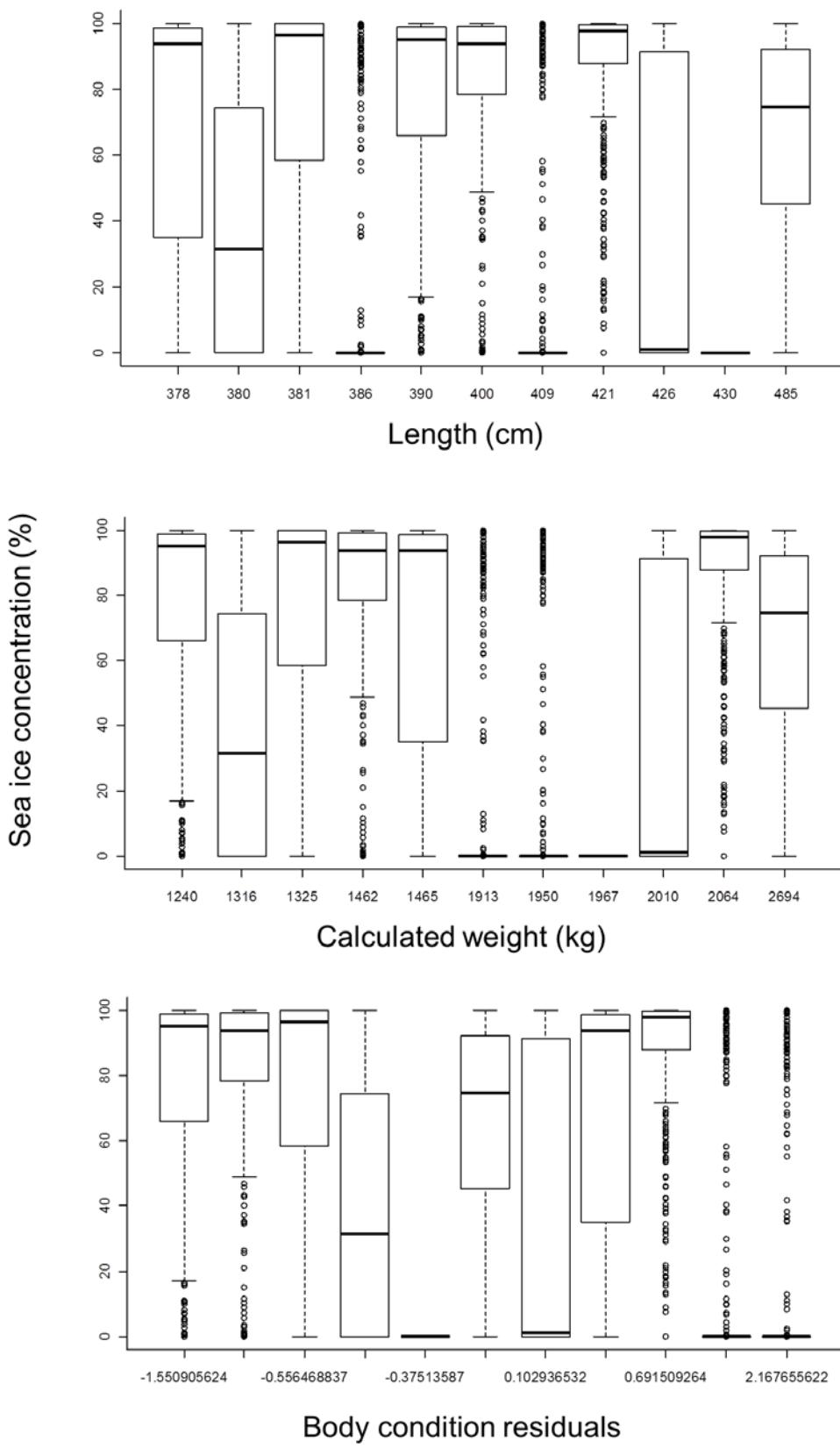
Supplementary file for: McIntyre T., Bornemann H., Nico de Bruyn P.J., Reisinger R.R., Steinhage D., Márquez M.E.I., Bester M.N. & Plötz J. 2014. Environmental influences on the at-sea behaviour of a major consumer, *Mirounga leonina*, in a rapidly changing environment *Polar Research* 33. Correspondence: Trevor McIntyre, Mammal Research Institute, Department of Zoology and Entomology, University of Pretoria, Private Bag X20, Hatfield, 0028, South Africa. E-mail: tmcintyre@zoology.up.ac.za.



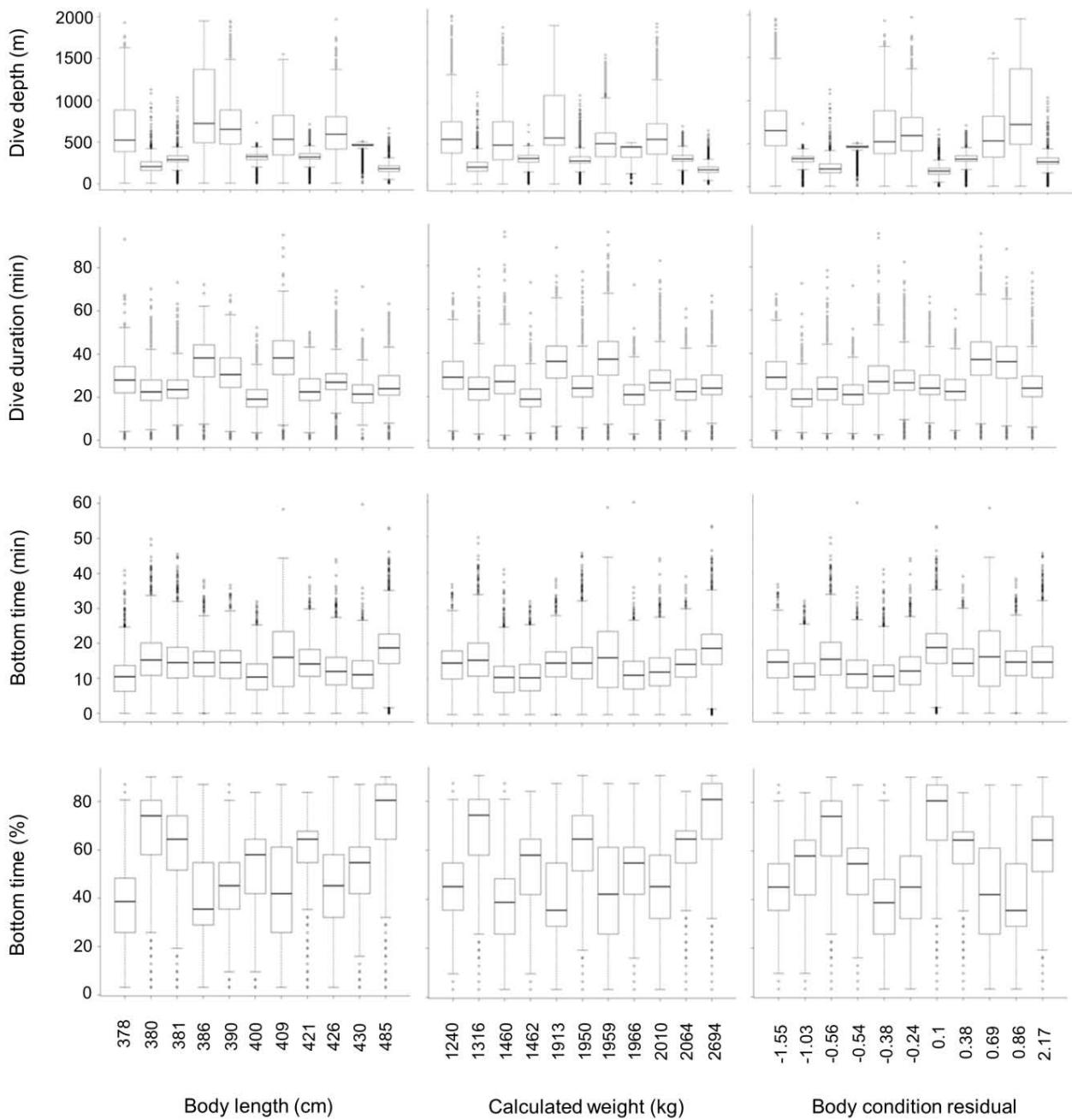
Supplementary Fig. S1. Spatial and temporal distribution of temperature profiles used for comparative purposes between refurbished conductivity–temperature–depth– satellite-relay data loggers (CTD–SRDLs) and new CTD–SRDLs. Note that the spatial locations of Jr515 (refurbished) do not overlap with J502 (new), but are in close proximity (within about 100 km) to one another, and were obtained over the same time period. The comparative profiles of Jr674 (refurbished) and J503 (new) were consistently within close proximity to each other (maximum of about 110 km, but mostly within about 60 km), and were obtained approximately one month apart.



Supplementary Fig. S2. Temperature extracted for comparative purposes. Jr674 and Jr515 were refurbished conductivity–temperature–depth–satellite-relay data loggers (CTD–SRDLs), while J503 and J502 were new CTD-SRDLs. Positions of profile locations and dates of measurement are displayed in Supplementary Fig. S1.



Supplementary Fig. S3. Box and whisker plots of sea ice concentration in areas utilized by seals in this study, divided by length (top plot), calculated weight (middle plot) and body condition residuals (bottom plot). The bold lines indicate medians, boxes indicate 25th and 75th percentiles, individual points are outliers and whiskers indicate 1.5 times the interquartile range, or the maximum values (when there are no outliers).



Supplementary Fig. S4. Box and whisker plots of dive parameters (depth, duration, bottom time and percentage bottom time) in relation to body length, calculated weight and body condition residuals of tracked seals. The bold lines indicate medians, boxes indicate 25th and 75th percentiles, individual points are outliers and whiskers indicate 1.5 times the interquartile range, or the maximum values (when there are no outliers).