

Elephant Figures

30/12/17

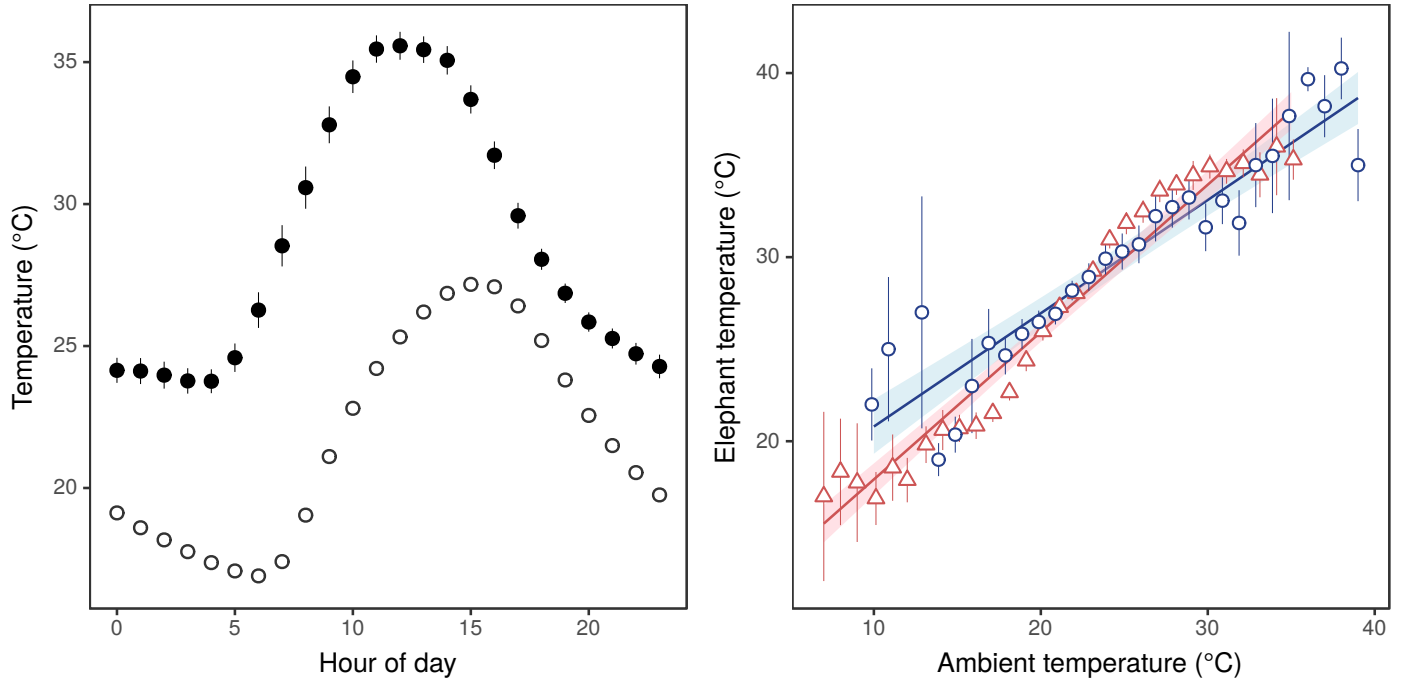


Figure 1: A: Mean thermochron temperature (filled circles) tracks mean ambient temperature (open circles) through the day. Vertical error bars represent 95% confidence intervals. B: Mean thermochron temperature (points) at measured ambient temperature, and GLM fits (lines) in each season (cool-dry: blue circles & lines, hot-wet: red triangles & lines). Vertical error bars and shaded areas (coloured by season) indicate 95% confidence intervals at each point.

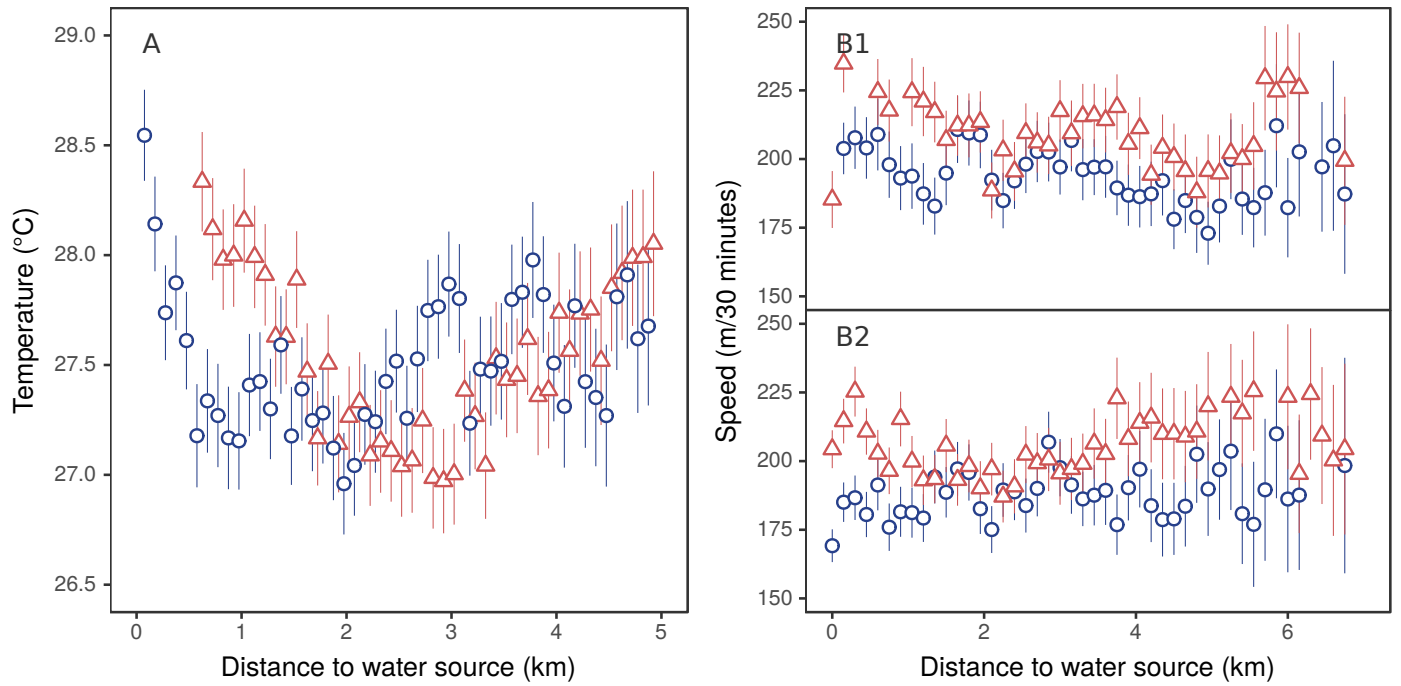


Figure 2: Elephant speed at the landscape level is mediated by temperature. A: Mean elephant temperature (points) at 100m distance intervals from the nearest water source in each season (cool-dry: blue circles, hot-wet: red triangles). Vertical lineranges (coloured by season) represent 95% confidence intervals. B: Mean speed (distance covered in 30 minutes) at 100m distance intervals from the nearest water source in each season (points & lineranges, as prev.), split into panels by movement relative to water (B1: Inbound, B2: Outbound).

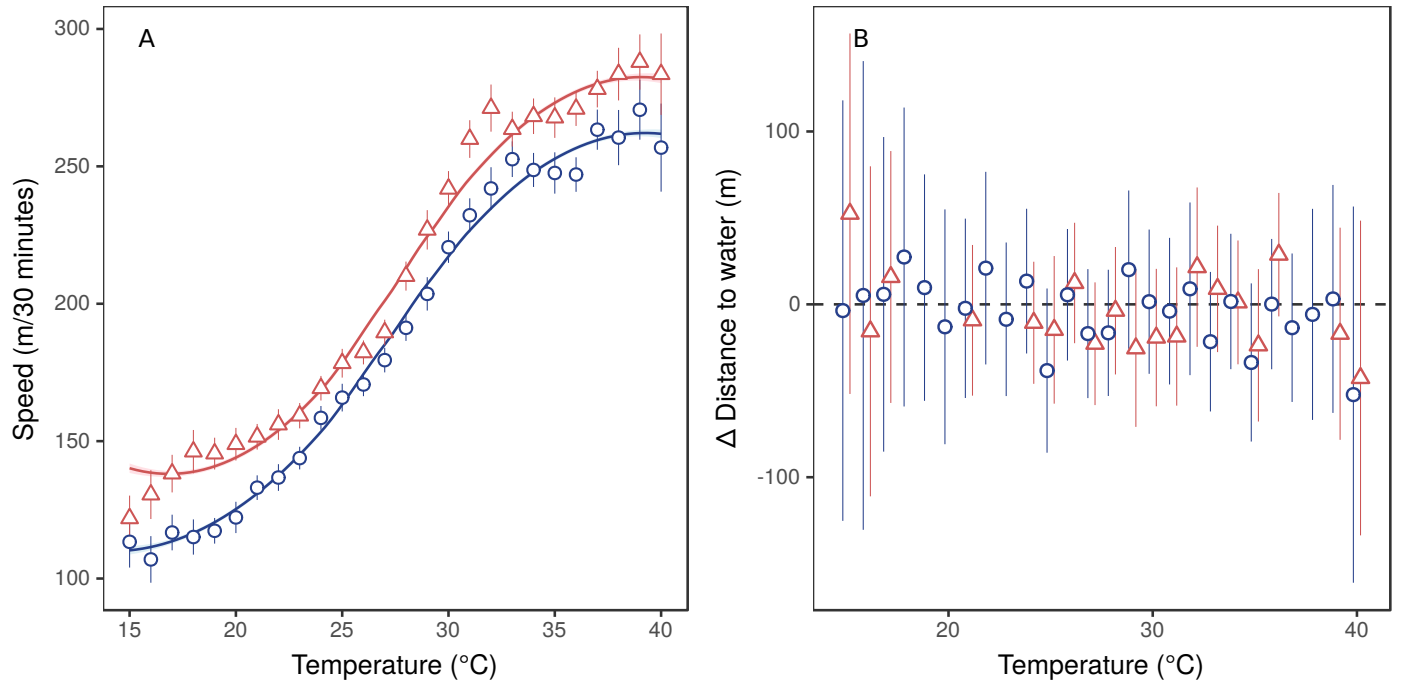


Figure 3: A. Mean steplength (points) at 1°C temperature intervals in each season (cool-dry: blue circles, hot-wet: red triangles). GAMM fit (lines), data error intervals (lineranges), and fit error intervals (shaded areas) are shown coloured by season. B. Change in distance to water sources (points) at degree temperature intervals in each season (cool-dry: blue circles, hot-wet: red triangles). Vertical lineranges (coloured by season) indicate 95% confidence intervals at each point.

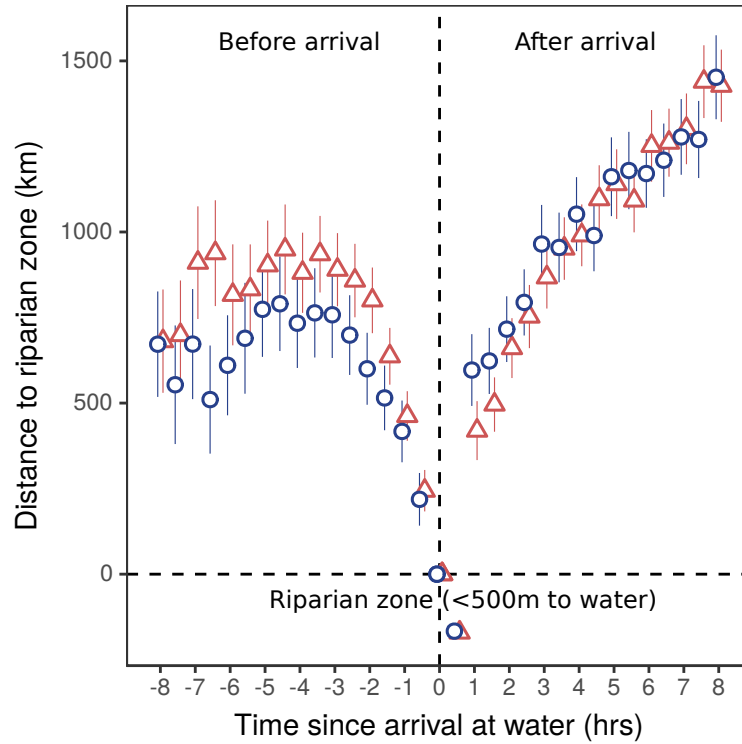


Figure 4: Mean distance to the point of arrival in the riparian zone (<500m from water) at each half hour interval over a sixteen hour period centred on the arrival event, separated by season (points; cool-dry: blue circles, hot-wet: red triangles). Vertical lineranges coloured by season show 95% confidence intervals at each point.

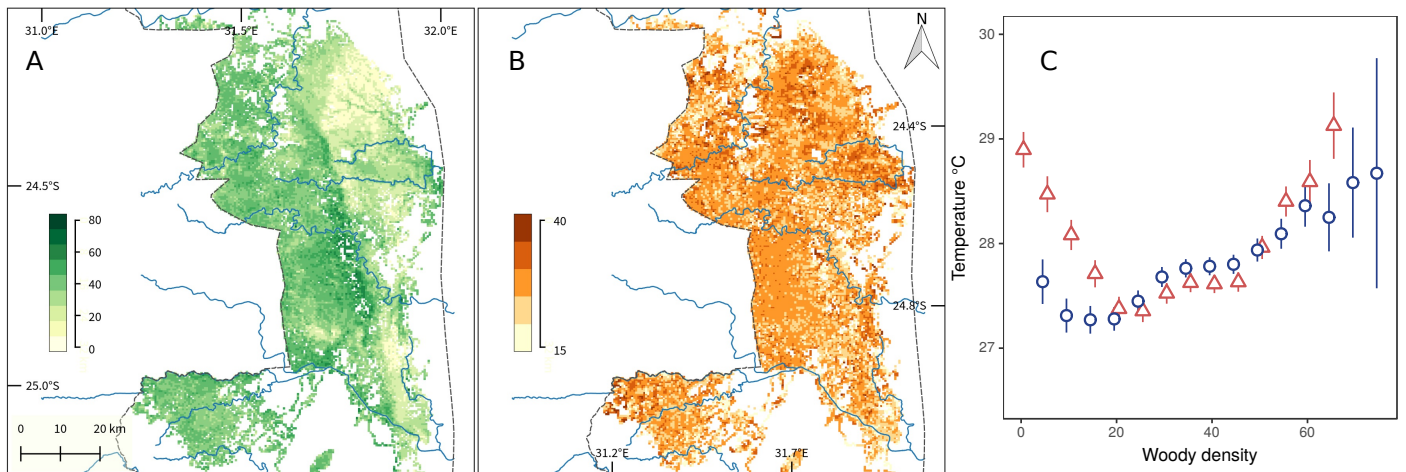


Figure 5: A. Woody density, and B. Elephant temperature at relocation sites. Values shown are 500m² pooled means. C. Mean elephant temperatures at woody densities in increments of 5, separated by season (cool dry: blue circles, hot wet: red triangles), showing 95% confidence intervals (lineranges coloured by season.). Rivers (light blue lines) and Kruger boundary (dashed black line) are shown.

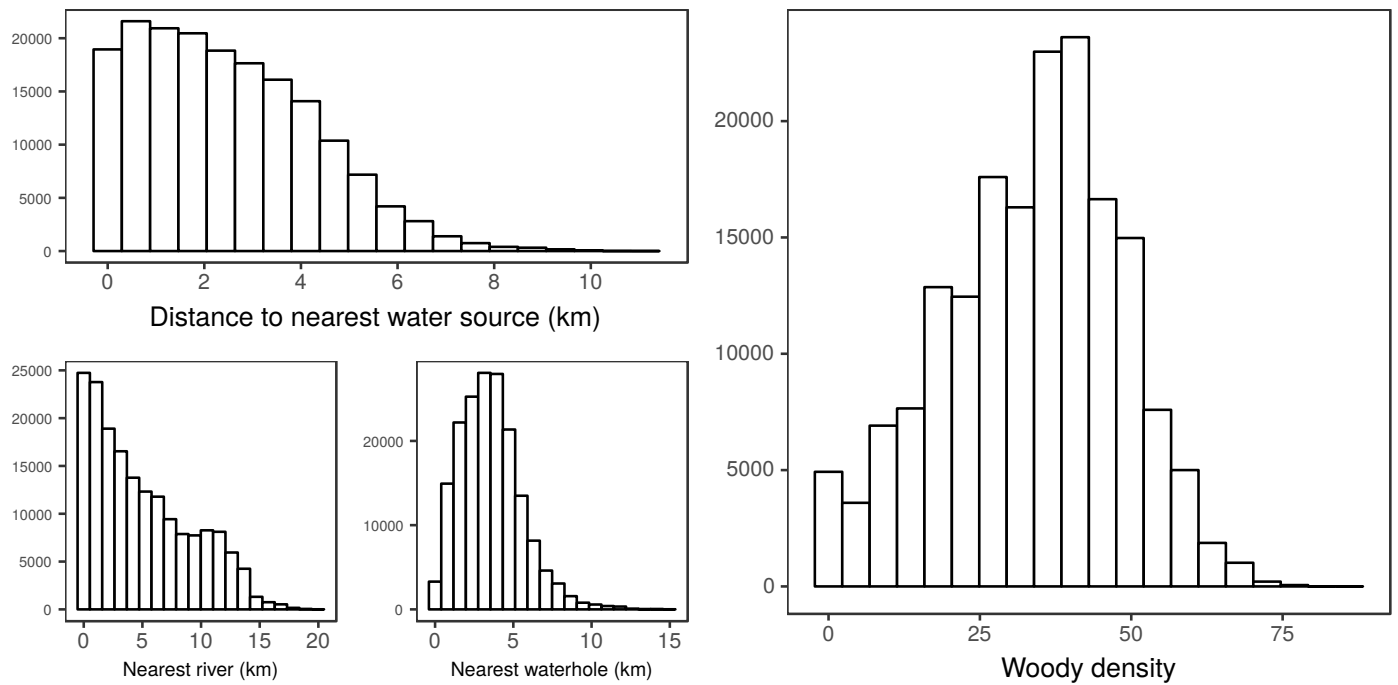


Figure 6: Supplementary material: A. Frequency distributions of distance to the nearest water source (water-hole or river, see separate histograms below), and B. Frequency distribution of the woody density encountered by elephants.

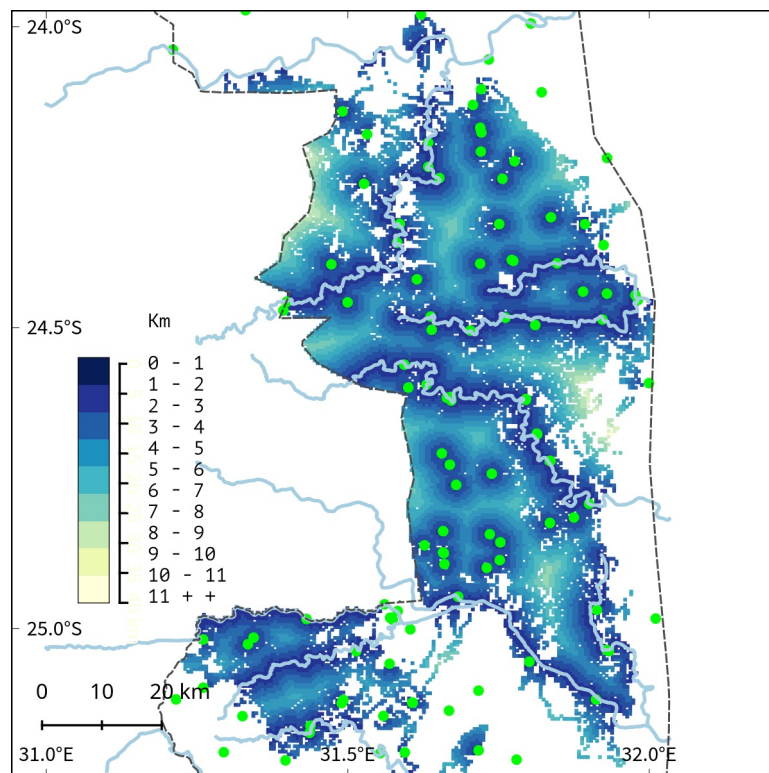


Figure 7: Supplement: Recalculated distances to water shown as 500m² pooled means. Active waterholes (green circles), rivers (light blue lines), and Kruger boundary (dashed black line) are shown.