Quantifying imperfect camera-trap detection probabilities: implications for density modelling

T. McIntyre[A,B,E]*, T. L. Majelantle*[B]*, D. J. Slip*[C,D]* and R. G. Harcourt*[D]

[A]Department of Life and Consumer Sciences, College of Agriculture and Environmental Sciences, University of South Africa, Private Bag X6, Florida, 1710, South Africa.

[B]Mammal Research Institute, Department of Zoology and Entomology, University of Pretoria, Private Bag X20, Hatfield, 0028, South Africa.

[C]Taronga Conservation Society Australia, Bradley's Head Road, Mosman, NSW 2088, Australia.

[D]Marine Predator Research Group, Department of Biological Sciences, Macquarie University, North Ryde, NSW 2113, Australia.
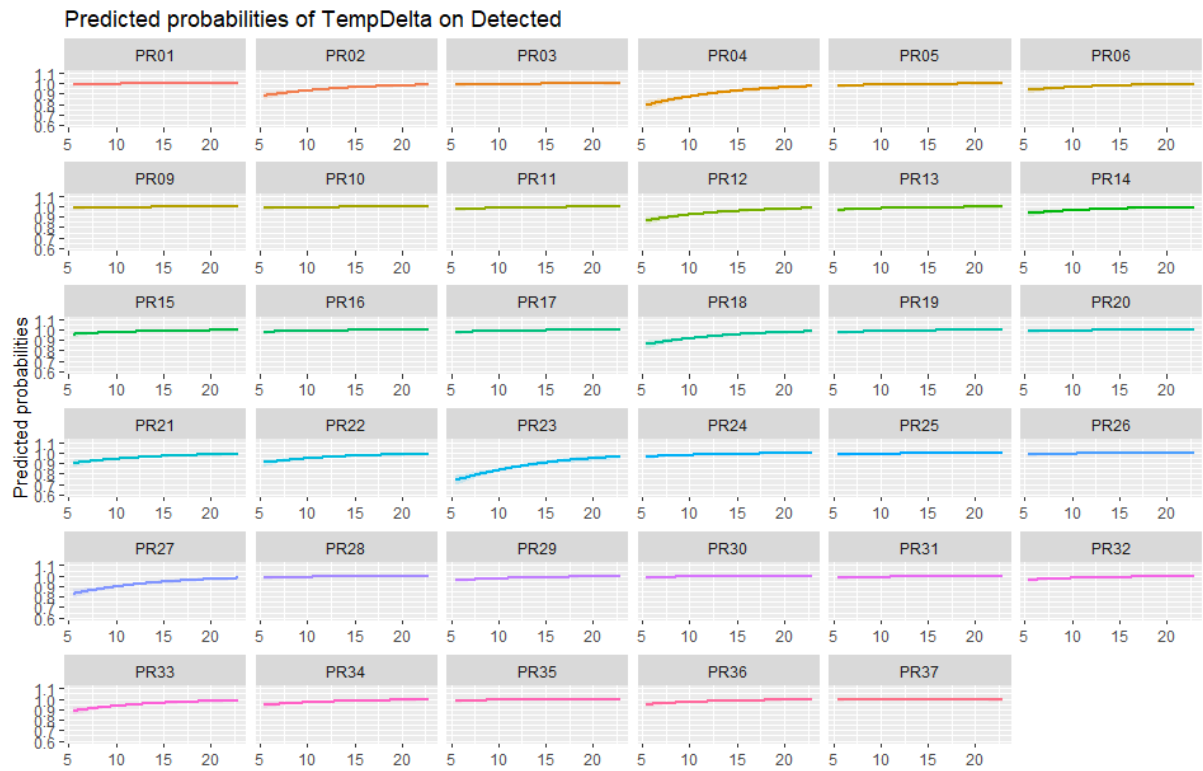
[E]Corresponding author. Email: trevmcnt@gmail.com
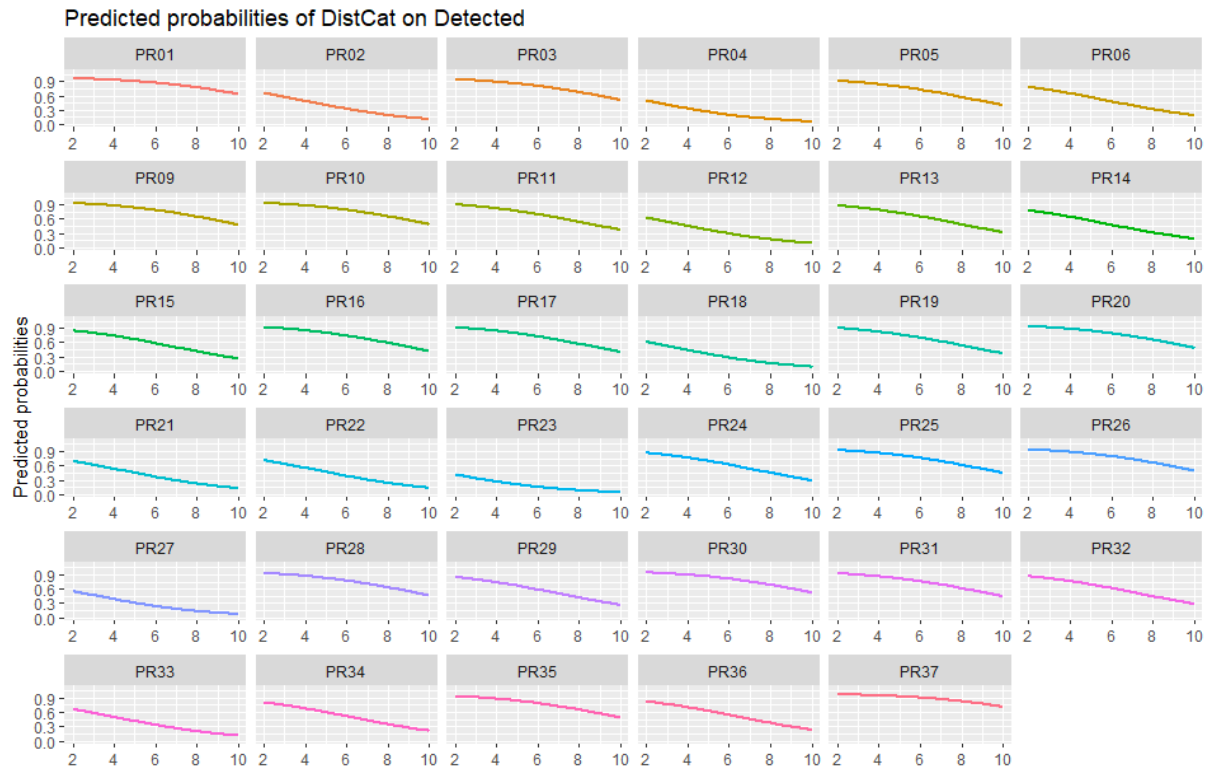
Figure S1: Predicted detection probabilities (model 1) in relation to distance from camera trap for individual camera traps.
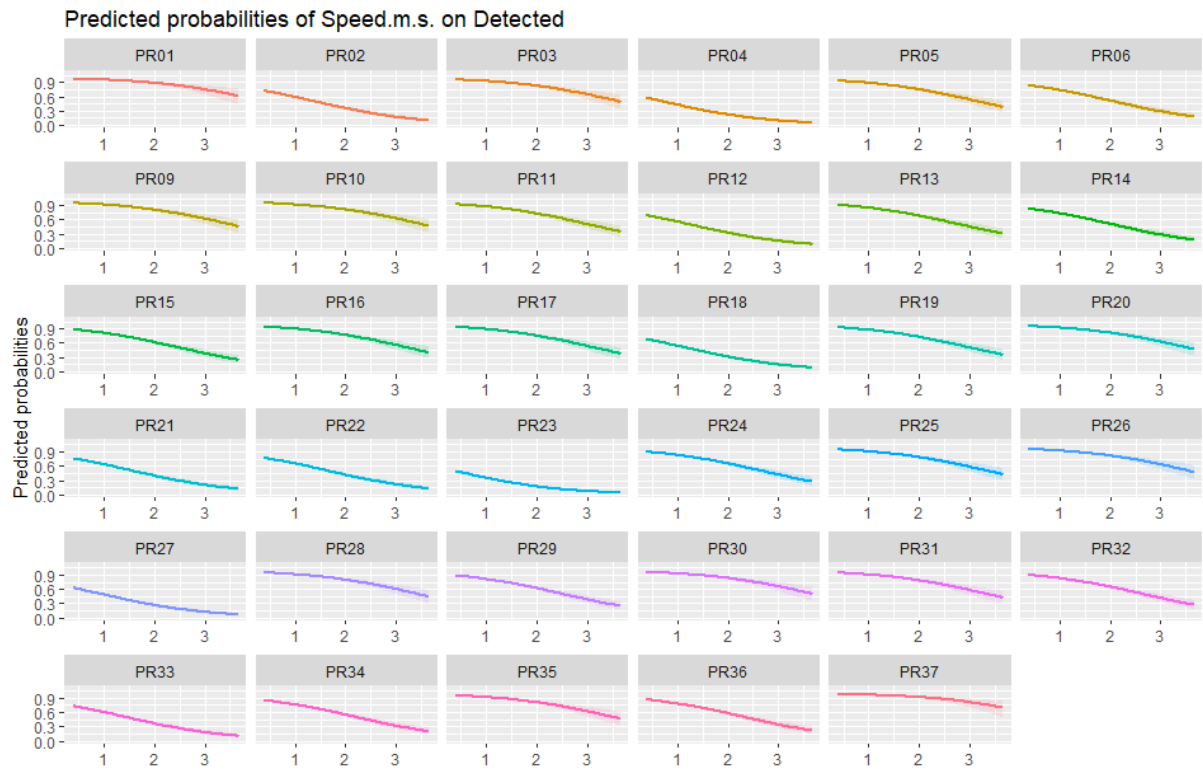
Figure S2: Predicted detection probabilities (model 1) in relation to animal model movement speed for individual camera traps.

Figure S3: Predicted detection probabilities (model 1) in relation to differences between ambient temperature and model surface temperature (Δtemp) for individual camera traps.
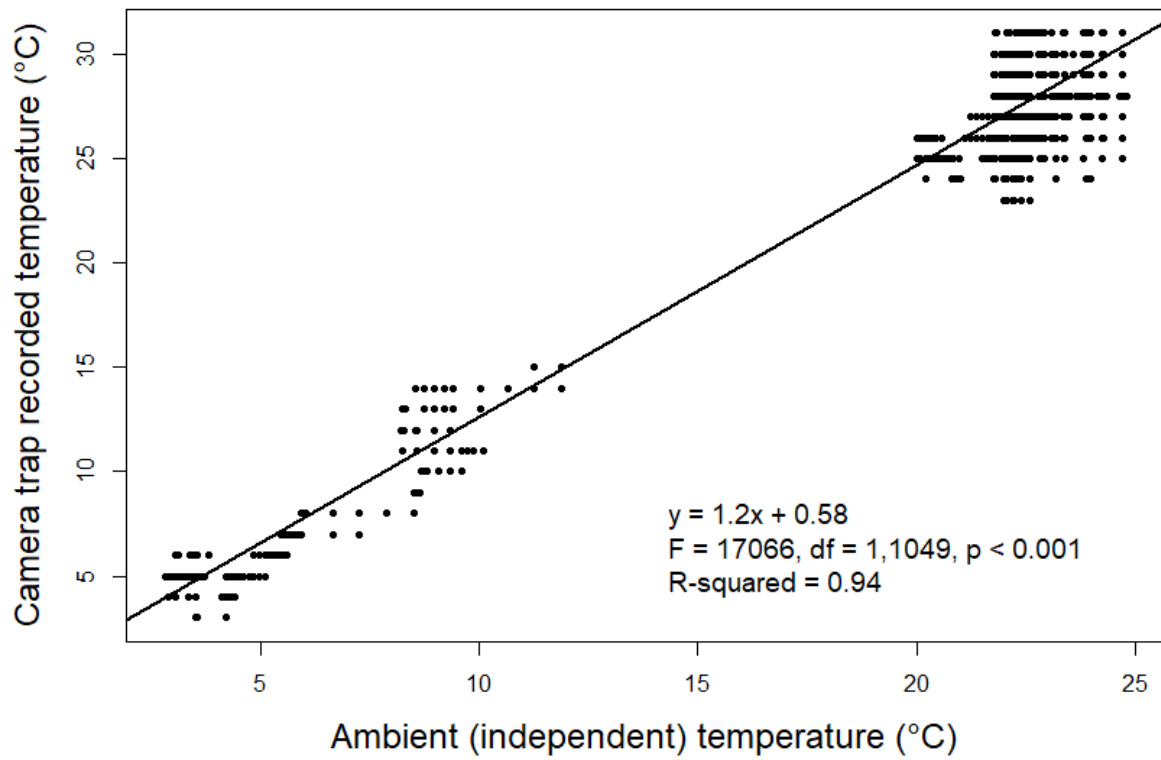
Figure S4: Relationship between temperatures recorded by camera traps and ambient temperature simultaneously (and independently) recorded using a Eutech EcoScan Temp 6 thermoprobe (Thermo Fisher Scientific Inc.).