

MortalMove R package

Survival modeling using movement data

Jiangyue Wang

E-mail: jyuewang@uw.edu

Personal website: www.jiangyue-wang.com

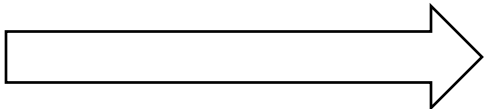
Source Code Example Usage



Input data:

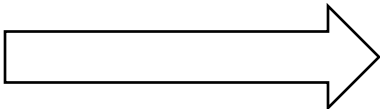
AnimalID	x	y	Timestamp	Age, Sex...	Habitat Covariates...	
A	108260.6	345680	2025-7-20 00:00:00			
A	108267.2	345578	2025-7-20 04:00:00			
...						

prepare_stan_data()



Fit with cmdstan or rstan

diagnostic_fit()



Coefficient
summaries,
convergence check,
LOO for further
comparison, posterior
predictive checks

References: Poulton, A. J., Villegas-Ríos, D., Freitas, C., Moland, E., Olsen, E. M., Sethi, S. A., & Ellner, S. P. (2024). Bayesian estimation of spatially varying mortality risk using tagged animal data. *Methods in Ecology and Evolution*, 15(11), 2101–2117.

Biard, L., Bergeron, A., Lévy, V., & Chevret, S. (2021). Bayesian survival analysis for early detection of treatment effects in phase 3 clinical trials. *Contemporary Clinical Trials Communications*, 21, 100709.