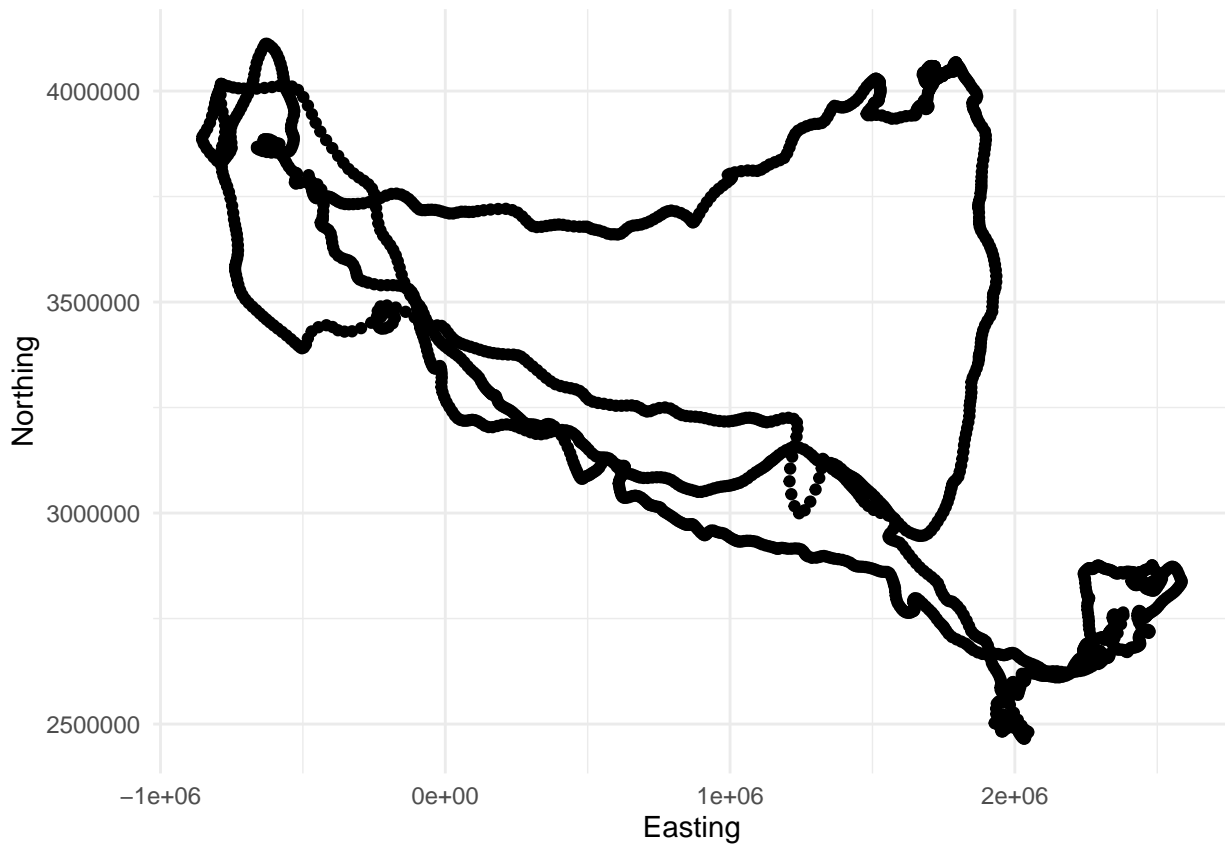


Movement Report for mq4-Alice-00

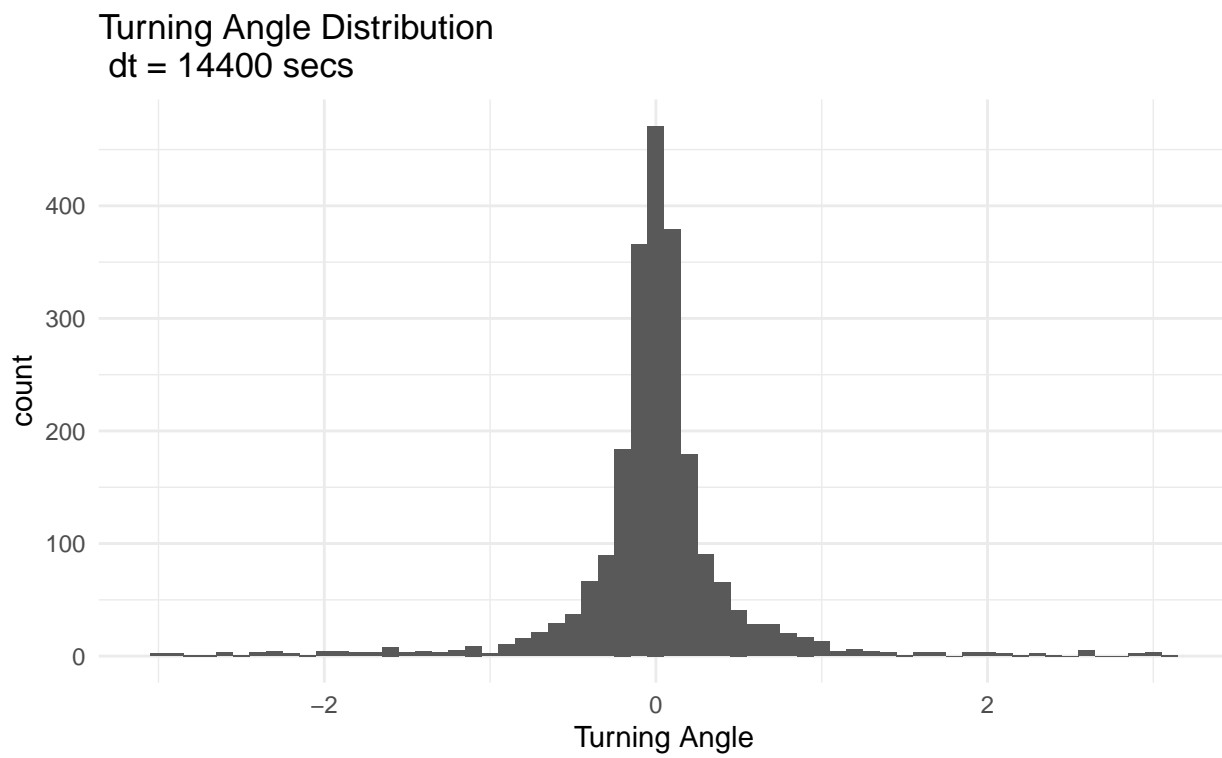
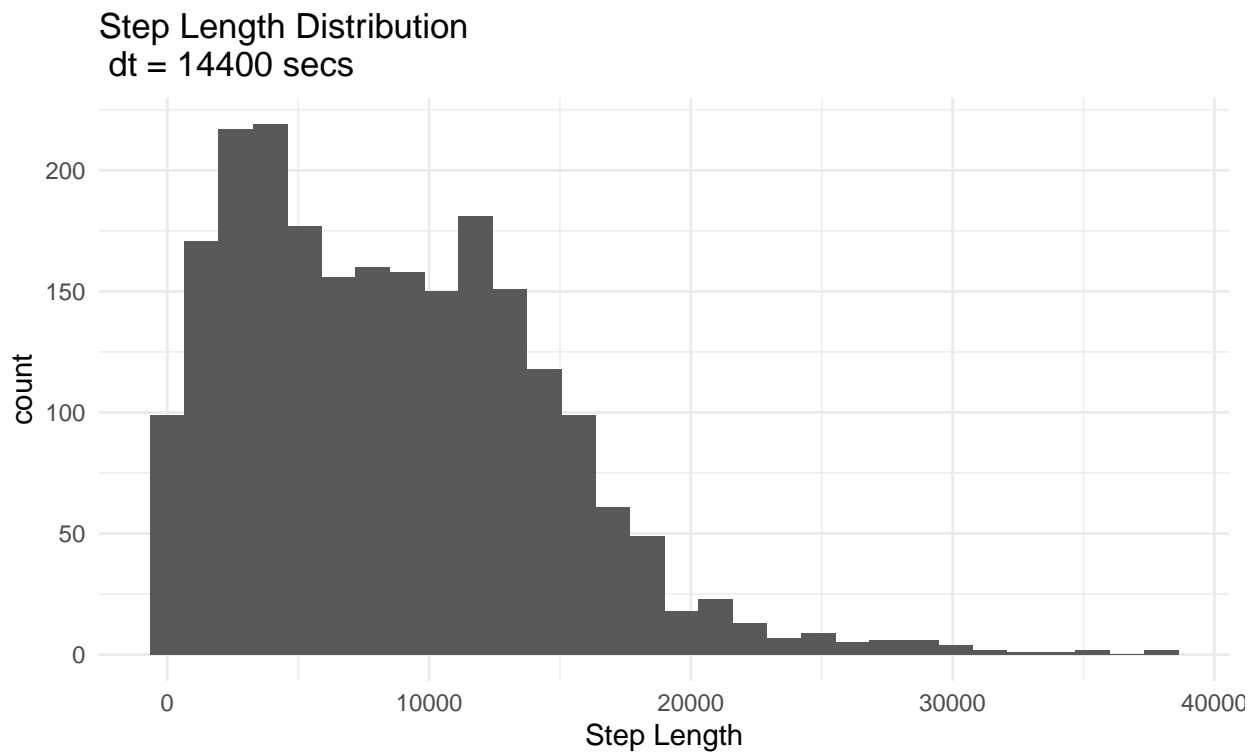
created with pkg stmove

07 April, 2021

Visualize the trajectory



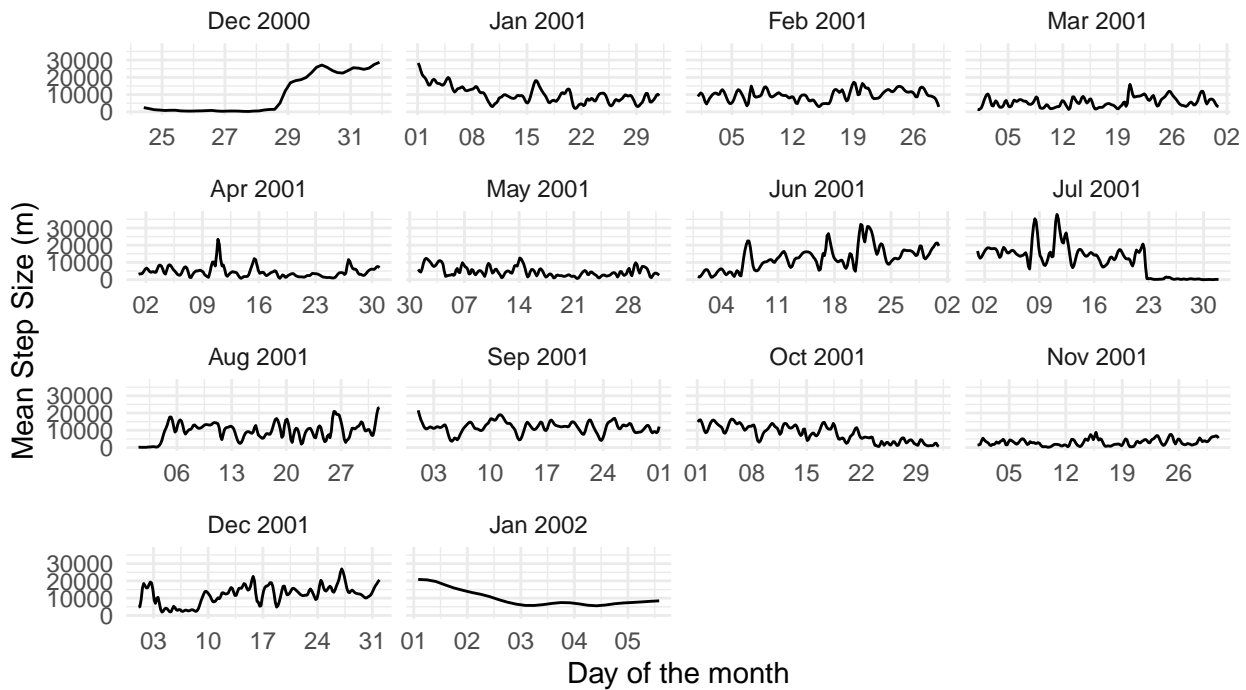
Step Length & Turning Angle Distributions:



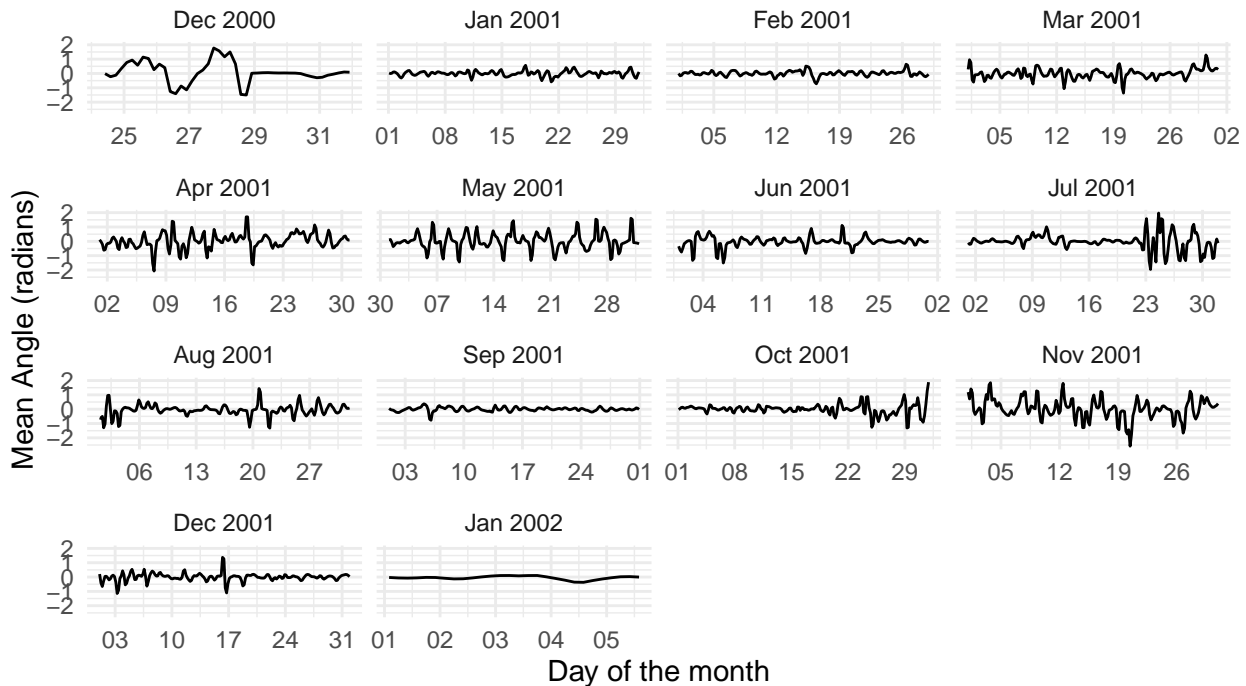
Basic Statistical Summary

Fine Scale Sliding Window

Mean Step Size on a Rolling interval

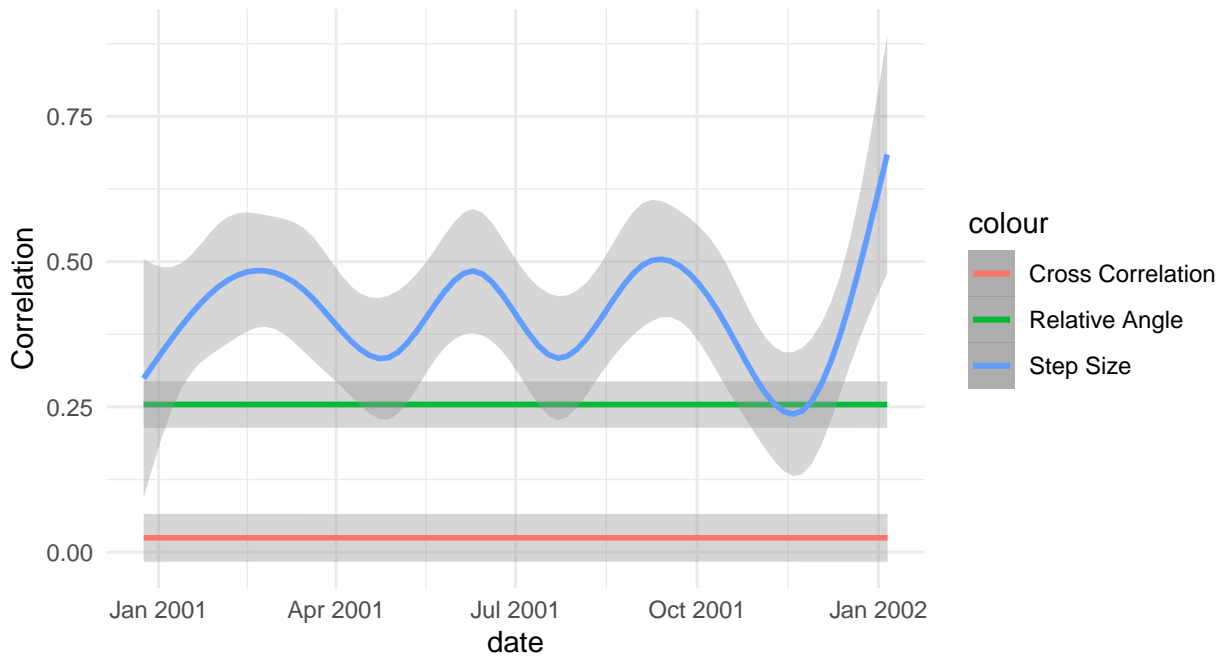


Mean Turning Angle on a Rolling interval



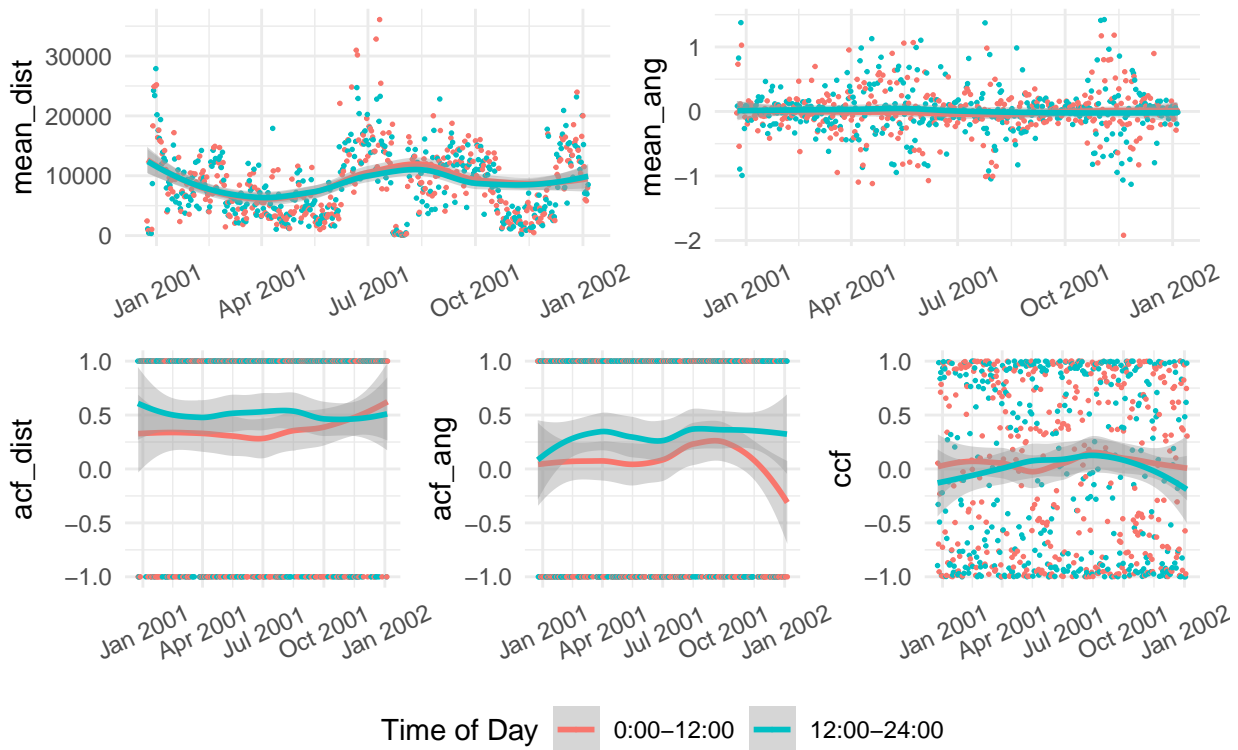
Lag 1 Auto and Cross Correlations in Turning Angle & Step Size

Rolling Window



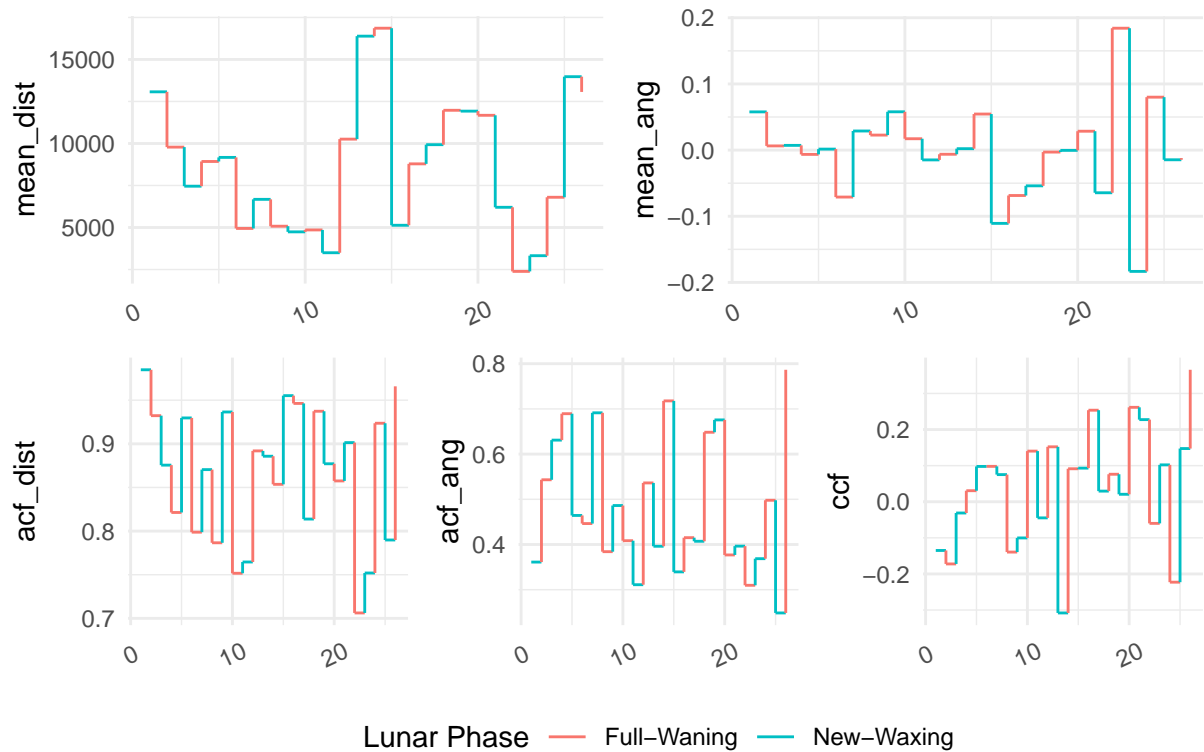
Diurnal Cycle

Diurnal Interval Statistics



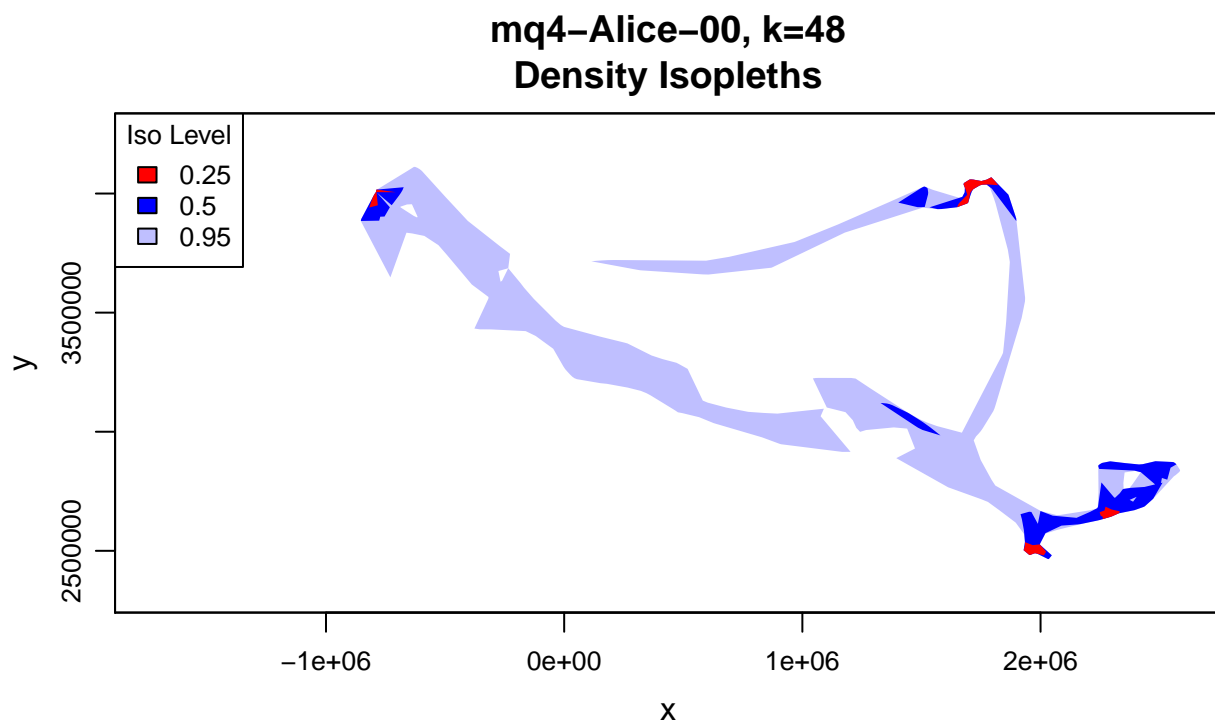
Lunar Cycle

Lunar Interval Statistics



Space Use Constructions

A k-LoCoh hull set



These isopleths were constructed from 2266 hulls sorted by area. Isoleth levels indicate the proportion of total points enclosed. Hulls created from 2266 locations of mq4–Alice–00 using the Fixed–k method ($k=48$, $s=0$, $kmin=0$).

Suggested Next Steps

This report provides a first-pass look at your trajectories and patterns you see here may be further investigated in any number of ways. Below we suggest some common next questions and steps and associated packages that could help you begin to address them. Also see suggestions from Seidel et al. 2019, Appendix C of Seidel et al. 2018, or tutorials from the 2018 Movement Ecology in R workshop hosted [here](#).

- Habitat Selection Analysis
 - the **sf** package offers tools for ready manipulation of spatial vector data.
 - the **raster** and **velox** packages offer tools for raster data manipulation.
 - the **lme4** package is useful for fitting generalized linear models with fixed or random effects
- Hidden Markov Models can be fit or Behavioral Change Point Analysis done with tools from:
 - **momentuHMM**
 - **moveHMM**
 - **bcpa**
- Dynamic Interaction between individuals may be explored use
 - **wildlifeDI**

Also consider the numerous analyses made available by the extensive “adehabitat” packages: **adehabitatLT**, **adehabitatHR**, **adehabitatMA**, **adehabitatHS** and their indepth vignettes.