I wanted to keep my entry relatively simple and focused on a single story. This figure shows the movements of an adult female King Cobra (*Ophiophagus hannah*). King Cobras, like many snakes, live secretive lives and often defy easy study by their cryptic nature and lifestyles. Tagging and tracking snakes can be exceptionally useful when studying their ecology; however, GPS tracking of snakes remains infeasible. Instead, we used radio telemetry, locating King Cobras four times a day (trying to make up with work-hours what we lose from not having GPS). During the two years of tracking this individual, we were able to document consistent annual movements to-and-from the protected forest. She made use of a main irrigation canal that connected her usual agricultural home range, to forested nesting sites. The movements to the nesting site are some of the largest exhibited at any time and highlights the importance of movement corridors for this individual. I have highlighted the temporal patterns of movement in a lower plot that displays dynamic Brownian Bridge Movement Model (dBBMM) derived motion variance, essentially an indicator of movement activity.

The plot was made entirely in R. I relied heavily on dplyr and lubridate for initial data manipulation, then the move package to generate dBBMMs to describe the movement patterns over time. I used ggplot2 to create the plot, with ggspatial, spatialEco packages to ensure spatial data plotted correctly. I used a suite of packages to add details to the map: ggtext for text colouring, ggforce for circle plotting, magick for inserting images, and scico for the colour scheme. Finally, I combined two plots with ggpubr, and used ragg to help transparent elements export correctly.

Code, data, and images for reproducing this plot can be found: https://github.com/BenMMarshall/BES\_MoveMap

Data was originally used in Marshall, B.M., Crane, M., Silva, I. et al. (2020) No room to roam: King Cobras reduce movement in agriculture. Movement Ecology 8, 33. https://doi.org/10.1186/s40462-020-00219-5