Readme for Data Analysis and Plotting Instructions using txt CSVs from VideoAnnotate written for a beginner:

1. Download and Install R. https://posit.co/download/rstudio-desktop/
2. Download and Install RStudio (a user-friendly application that runs R). <https://posit.co/download/rstudio-desktop/>
3. Download the Exemplar R Analysis folder from github:
4. Open the Rmd file in RStudio from the Exemplar R Analysis folder, “PiE\_HomeCage\_Behavior\_Box\_Exemplar\_Data\_Analysis.Rmd”
5. Run each section of code one at a time, while reading the comments denoted with “#” above and within each section to understand the purpose of the code.
6. This code uses several packages that must be installed the first time the code is run (see first section of code in the Rmd file) and must be loaded every time you launch the RStudio application (second section of code).
7. Once you’ve run the exemplar code and read all the #comments within the Rmd file, you’ll be ready to analyze your own txt CSV files generated from VideoAnnotate. If you’re a beginner, duplicate the exemplar code and rename the duplicate, keeping the first and second sections of code the same to ensure you install and load all the packages. Then adapt the exemplar code to your purposes as you go.
8. We recommend naming each file something similar to COHORTID\_ANIMALID\_CONDITION\_ASSAYNUMBER\_DATE so the exemplar code will be easily adaptable and you won’t lose identifying data while merging multiple txt files into one data frame in R. Alternatively, if you have relatively few txt files, you can read them each in individually using the “Import” function within RStudio.