Instructions to Run Lotek Code

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1. Download Program R and install on your computer.

   http://ftp.osuosl.org/pub/cran/

2. Download R Studio free version for desktop (This is an interface that makes it easier to use program r)

   https://www.rstudio.com/products/rstudio/download3/

3. Download the supplemental materials to your computer and save the "Lotek_Function.Rdata" to the folder where your Lotek GPS collar data you wish to process is located. If you are processing the example dataset, then save everything into one folder.

4. Open the file named "Lotek_3300_r_code.r" from the supplemental materials. If this is your first time opening a file in R Studio, you may need to specify which program to open it with by right clicking on the file and selecting "open with", then choosing R Studio.

5. Next we want to identify the folder where our Lotek data is located to be processed. Make sure your sensor and fix files are contained in the same folder as well as the "Lotek_Function.r" file.

   From the R Studio drop down menu Click

   Session -> Set Working Directory -> Choose Directory .

   Navigate to the folder you want to process and click open

6. Change the information in the lines 3 and 6 to match the file names you wish to process.

For example change:

```
#change the name to the fix file to process
Fix_file="Fix_example.txt"

#change the name to the sensor file to process
Sensor_file="Sensor_example.txt"
```

to

```
#change the name to the fix file to process
Fix_file="Steer_123.txt"

#change the name to the sensor file to process
Sensor_file="Steer_123.txt"
```

6. Similarily change the text in quotation after Animal_ID = in line 9 to match the unique animal name for the dataset being processed.

7. Change the text after graze = in line 12 to either "Yes" or "No" depending on the desired output.

8. Once the above information has been entered, click on the first line on code and hold "CTRL"+"Shift" and hit "Enter" on your keyboard to execute the code.

9. After it has processed a shapefile and a .csv file of the processed data will be saved in your folder. To process the next Lotek file, simply change the infromation from steps 5-7, and then execute step 8.