

Prepping Long-term Data

Laura LaBarge

21.09.21

Important items:

- Standardized method of cleaning + storing long-term data (meeting with Brendan at 15:00 on 22.9.21)

- **Everything** must be well-documented and stored on server per MPG rules (e.g. code for converting/cleaning and prepping the data so it is reproducible by someone else)

-The output of this code is a csv that can be manually merged with the Tuanan access database

- GPS points stored as GPX needed to be converted to csv to join with the rest of the long-term dataset (see code below)

```
library(plotKML)
# loading all the GPX files and then making a dataframe for export
myfiles <- list.files(path = "C:/Users/lrlab/OneDrive/Desktop/GPS201718/ptsraw/AllGPX", full.names = TRUE)
myfiles <- myfiles[grep(".gpx", myfiles)]

allwaypoints <- list()
for (i in 1:length(myfiles)) {
  allwaypoints[[i]] <- readGPX(myfiles[i], tracks=FALSE, routes=FALSE)$waypoints[, c('name', 'lon', 'lat')]
}
allwaypoints <- do.call('rbind', allwaypoints)
write.csv(allwaypoints, file = "C:/Users/lrlab/OneDrive/Desktop/GPS201718/CSVs/GPXPTS.csv")

# I already converted the GDB points (raw data) into GPX within Garmin Basecamp, from there just convert
d16 <- readGPX("C:/Users/lrlab/OneDrive/Desktop/GPS201718/ptsraw/GDBTOGPX.gpx", metadata = TRUE, bounds = TRUE,
              waypoints = TRUE, tracks = TRUE, routes = TRUE)
D16 <- as.data.frame(d16[["waypoints"]])
head(D16)
write.csv(D16, file = "C:/Users/lrlab/OneDrive/Desktop/GPS201718/CSVs/D16.csv")
```