In the Pupil Labs\_raw folder there are two folders: export\_info and info.player, each with 21 files. These have been copied by me from some export files.

In the export\_info folder, in each of the files (per participant/build) there is an Absolute Time Range which specifies the start and end timestamps of the export in seconds. [I am not sure if you actually need this for anything, except for checking)

Each fixations\_Px\_Bx.csv file will have a column called start\_timestamp.

These timestamps are [Pupil Timestamps](https://docs.pupil-labs.com/core/terminology/#pupil-time).

To convert them to [UNIX timestamps](https://docs.pupil-labs.com/core/terminology/#system-time) you could calculate the difference between start\_time\_system\_s and start\_time\_synced\_s from info.player folder files. You need to apply that different to the timestamps in fixations.csv.

Example:

start\_time\_synced\_s = 108854.618865 # pupil timestamp

start\_time\_system\_s = 1581605232.6661968 # unix timestamp

fixation\_0\_start\_timestamp = 108855.2 # pupil timestamp

def pupil\_to\_unix\_timestamp(synced\_timestamp):

return synced\_timestamp - start\_time\_synced\_s + start\_time\_system\_s

# fixation\_0\_start\_timestamp as unix timestamp

pupil\_to\_unix\_timestamp(fixation\_0\_start\_timestamp)

Output: 1581605233.2473319