# Recording Session Log (27/08/2025)

## General Information

Participant : Alessandro Ascani Orsini

Date: \_27 August 2025\_\_\_\_

Session #: \_\_\_01\_\_

Researcher: \_\_Liu Chang and Beichen Shen\_\_

## Setup Details

Electrode Placement:  
 - Auricular: \_Right ear\_\_  
 - Scalp: \_\_\_Right temple\_\_\_\_  
 - Arm: \_\_\_Right arm\_\_\_\_

Reference Placement: Contralateral mastoid

Ground Placemente: Ipsilateral neck

IMU Placement:  
 - Participant: \_\_\_Right pocket\_\_

Additional Notes: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

## Recording Conditions

Condition (check all that apply):  
[x] Parked – Engine On  
[x] City Drive (30 mph)  
[ ] Highway Drive (70 mph)  
[ ] Rough Road (30 mph)

Duration: \_\_\_\_\_\_\_

## Observations During Recording

Signal Quality (auricular): \_\_Seem more stable in accordance to hypothesis\_\_

Signal Quality (scalp): \_\_Wiggles more\_\_

Signal Quality (arm): \_\_\_\_More stable for ECG than the ear. Likely due to the fact that the channel is grounded, so it is effectively a 2 electrodes setup compared to a 3 electrodes setup\_\_

Motion Artifacts Observed: \_\_some, only signal processing will be able to tell\_\_

Electrode used: \_\_Regular medical tape (no microfoam or gauze). Gel was used.\_\_\_

Other Observations: \_\_\_Reference electrode was more unstable than usual, likely breaking\_\_

## Data Summary

Recording #1: Car driving

**IMU**

File Saved (names and locations): Inertial Measurements/Rec\_1.csv

IMU End time: 3:29:14 PM

**Ephys**

File Saved (names and locations): Ephys/Rec\_1.bin (parameter file has same name

Recordings Start time: 3:15:23 PM

**Notes**

I think here only the ECG was working and the EEG quickly degraded

Recording #2: Car driving

**IMU**

File Saved (names and locations): Inertial Measurements/Rec\_2.csv

IMU End time: 3:58:15 PM

**Ephys**

File Saved (names and locations): Ephys/Rec\_2.bin (parameter file has same name

Recordings Start time: 3:49:21 PM

**Notes**

I think here only the EEG was working and the ECG was flat.

Recording #3: Car driving

**IMU**

File Saved (names and locations): Inertial Measurements/Rec\_3+4.csv

IMU End time: 4:23:20 PM

**Ephys**

File Saved (names and locations): Ephys/Rec\_3.bin (parameter file has same name

Recordings Start time: 4:01:02 PM

**Notes**

I believe here everything was working properly. The IMU data is merged with recording 4, so deduce the start time from Ephys (we were too excited to risk stopping and starting again).

Recording #4: Car parked, engine ON

**IMU**

File Saved (names and locations): Inertial Measurements/Rec\_3+4.csv

IMU End time: 4:23:20 PM

**Ephys**

File Saved (names and locations): Ephys/Rec\_4.bin (parameter file has same name

Recordings Start time: 4:12:38 PM

**Notes**

The IMU data is merged with recording 3, so deduce the start time from Ephys