

READ ME

subjects_info.xlsx

The current XLSX file contains all relevant information about the participants who took part in the experiment.

Column	Description
Subject_ID	s_00x is the unique code assigned to each participant to ensure anonymity.
Age	The participant's age (in years) at the time of data collection.
Gender	The participant's self-reported gender.
Glasses	The column indicates whether the participant uses glasses or other vision corrections, either permanently or only occasionally, in everyday life.
Contact Lens	The column indicates whether the participant wore contact lenses during the experiment, as the Emotiv X headset does not allow glasses to be worn.

s00x_rec_task_L_eeg.txt

The current text file contains the EEG recordings (the L correspond to the level of the task).

Each line corresponds to a single sample, and it consists of 15 items: 14 raw EEG values for the 14 channels of the Emotiv Epoc X, and the corresponding acquisition local timestamp (expressed in samples).

Item #	Channel Name	Item #	Channel Name	Item #	Local Timestamp
1	AF3	8	O2	15	The time at which sample occurred (in seconds)
2	F7	9	P8		
3	F3	10	T8		
4	FC5	11	FC6		
5	T7	12	F4		
6	P7	13	F8		
7	O1	14	AF4		

EEG values are raw, unfiltered microvolt (μV) data, directly from the acquisition system, and no highpass filtering (or any preprocessing) has been applied yet.

s00x_rec_task_L_trigger.txt

The current text file contains the custom triggers (the `L` correspond to the level of the task).

Each line corresponds to single record of a task-related event, and it consists of 4 items.

At the start and end of the run session, you find the line:

```
[N, 'task_L_T', T, t]
```

Item	Description
N	start at the beginning of the run session; stop at the end of the run session.
'task_L_T'	Trigger information: <ul style="list-style-type: none">□ <code>L</code> is the level of the task: 0, 1, 2, 3.□ <code>T</code> represent the moment within the run session: start at the beginning of the run session; end at the end of run session.
T	Type of relevant-event: <ul style="list-style-type: none">□ Start of the run session (start)□ End of the run session (end)
t	The time at which the event occurred (expressed in seconds and synchronized with the local timestamps of the EEG data).

Within the run session, you find the line:

```
[N, 'task_L_A/X/B/C', T, t]
```

Item	Description
N	Number of each registered event. It can be start or stop
'task_L_A/X/B/C'	Trigger information: <ul style="list-style-type: none">□ <code>L</code> is the level of the task: 0, 1, 2, 3.□ <code>X</code> is the trial type: 0 for standard trials, 1 for error trials.□ <code>A</code> is the command corresponding to the key actually pressed by the participant. This can be used to compute participant errors ($A \neq B$ indicates an incorrect response. In the baseline task, $A = B$ for all trials.□ <code>C</code> is the actual execution. In standard trials ($X = 0$), $C = B$ (the required command was executed). In error trials ($X = 1$), $C \neq A$ and $C \neq B$ (the executed command differs from both the participant's command and the required one).
T	Type of relevant-event: command.

t

The time at which the event occurred (expressed in seconds and synchronized with the local timestamps of the EEG data).

Please note the presence of a subject-specific file named `s003_rec_task_3_triggers_rep_README.pdf` in the `s003_rec` folder, which contains important additional information specific to this participant.