Workshop: EOG processing

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Overview

This workshop provides hands-on experience with electrooculography (EOG).

Students will go through computer code to process EOG data and extract relevant information about oculomotor behavior.

Learning outcomes

By the end of this workshop, students will be able to:

- Preprocess EOG data using MATLAB.
- Extract key oculomotor parameters from EOG signals.
- Interpret EOG data in the context of psychophysiological research.

Requirements

1. **MATLAB** The computer code is written in MATLAB (https://en.wikipedia.org/wiki/MAT-LAB), a programming language often used for numerical computations in psychophysiology. To run MATLAB code you will need to use MATLAB software.

2. **"Quiet Eye EOG" for MATLAB** This function will be used to extract an oculomotor parameter called "Quiet Eye" from EOG data. https://github.com/GermanoGallicchio/Quiet-Eye-EOG

3. **Scripts** Scripts from the "Learn Psychophysiology" repository: https://github.com/Germano Gallicchio/LearnPsychophysiology

4. **Data** *TO DO: provide data link*

Make sure you have installed all the required software and downloaded the scripts and data before starting the workshop.

Workshop structure

The workshop is designed to be interactive, with students following along with the provided MATLAB scripts and data.

For this session, we will use this script:

pp02_EOG.m

Let's switch to MATLAB and start working on the code.