

Oslo Eyehub Workshop on Eyetracking Data Analysis

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Overview

Workshop schedule

Time	Activity
09:15-09:30	Introduction by workshop organizers
09:30-10:00	Lecture 1: eyetracking data pre-processing
10:00-10:45	Hands-on session 1
10:45-11:00	<i>BREAK</i>
11:00-11:30	Lecture 2: pre-processing (cont'd) and visualization
11:30-12:15	Hands-on session 2
12:15-13:15	<i>LUNCH</i> (provided)
13:15-13:45	Lecture 3: overview of statistical analysis
13:45-14:15	Hands-on session 3
14:15-14:30	<i>BREAK</i>
14:30-15:00	Lecture 4: cluster-based permutation analysis
15:00-15:45	Last hands-on session
15:45-16:00	Summary and discussion
19:00	<i>Dinner for Eyehub and workshop participants</i>

Getting prepared

We will be working through an existing dataset from a visual world eyetracking study, and writing code in R. You can also work with this dataset during the hands-on exercises, but feel free to try to apply these skills to your own data instead.

Some experience with R and the tidyverse will be helpful, but the workshop will give you an overview of data analysis that will be useful even if you are not an R user, and even if you don't want to participate in the hands-on exercises. All of the materials from the workshop (code, data, slides) will be available at this site for later review.

For the participants wishing to participate in the hands-on parts, you will need the following:

- a laptop
- R version 4.0 or higher ([download from r-project.org](https://www.r-project.org/))

- an Integrated Development Environment such as the [RStudio IDE](#) but feel free to use VS-Code or emacs if you prefer and know how to make R scripts or RMarkdown documents in those
- the [tidyverse add-on package](#) version 1.3 or higher
- add-on packages `lme4` and `remotes`

I won't be able to provide much tech support so it is a good idea to make sure everything is installed and working before Wednesday.

To find out what version of R you currently have, look at the message that appears when you start R, or type `R.version.string` in the R console. If you need help installing R and RStudio, please check [these resources kindly provided by the PsyTeachR team at the University of Glasgow](#).

To find out what version of tidyverse you have, type `packageVersion("tidyverse")`. If you need to update tidyverse (i.e., if you have a version before 1.3), type `tidyverse::update_packages()` in the console and follow the instructions. You can also find more information about updating packages [at the psyteachr site](#).

Textbook

We will be working from the online textbook, [Reproducibly Analyzing Visual-World Eyetracking Data](#).

You will need to download and extract [data-raw.zip](#), the raw data we will be working with, into your working directory.