

# Activity recognition

## Columns

- **timestamp:** time when the activity recognition started
- **participant:** participant's ID
- **label:** detected activity
- **confidence:** confidence of the activity recognition [0, 100]
- **end\_time:** time when the activity recognition ended
- **upload\_time:** time when the data was uploaded to the server

## Description

- **Number of data points:** 12.851.846
- **Number of participants with activity recognition:** 105
- **Number of missing data:** 0
- **Average number of data points per participant:** 122.348
- **Max number of data points per participant:** 851.540

## Exploration

Unique activities recognized:

- **STILL:** the participant is not moving (sitting, lying...)
- **TILTING:** the smartphone is slightly moving
- **ON\_FOOT:** the participant is moving at a normal speed (walking, running very slow...)
- **IN\_VEHICLE:** the participant is moving at a high speed (in a vehicle)
- **ON\_BICYCLE:** the participant is moving at a medium speed (on bicycle, skate...)

# WiFi

## Columns

- **timestamp:** time when the WiFi scan started
- **participant:** participant's ID
- **ssid:** name of the WiFi network detected
- **bssid:** MAC address of the access point detected
- **end\_time:** time when the WiFi scan ended
- **upload\_time:** time when the data was uploaded to the server

## Description

- **Number of data points:** 1.432.755
- **Number of participants with WiFi records:** 107
- **Number of missing data:** 1.169.056
- **Average number of data points per participant:** 13.390
- **Max number of data points per participant:** 104.534

# Connectivity

## Columns

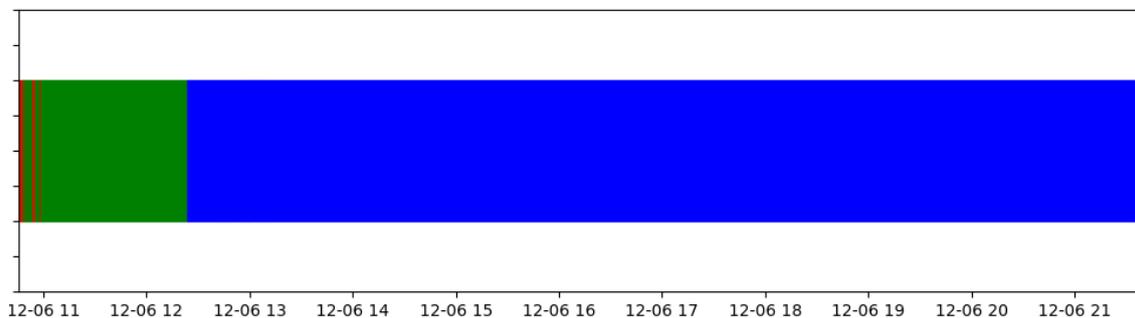
- **timestamp:** time of the network detection
- **participant:** participant's ID
- **connectivity\_status:** type of device connectivity (wifi, mobile, none)
- **upload\_time:** time when the data was uploaded to the server

## Description

- **Number of data points:** 451.266
- **Number of participants with WiFi records:** 107
- **Number of missing data:** 0
- **Average number of data points per participant:** 4.217
- **Max number of data points per participant:** 30.230

## Exploration

Example of different network connections during one day of a study participant (red: no connection, green: mobile network, blue: wifi network). The subject was connected to a wifi network from 12:30 to 21:30, so it is supposed to be indoors.



# Ambient light

## Columns

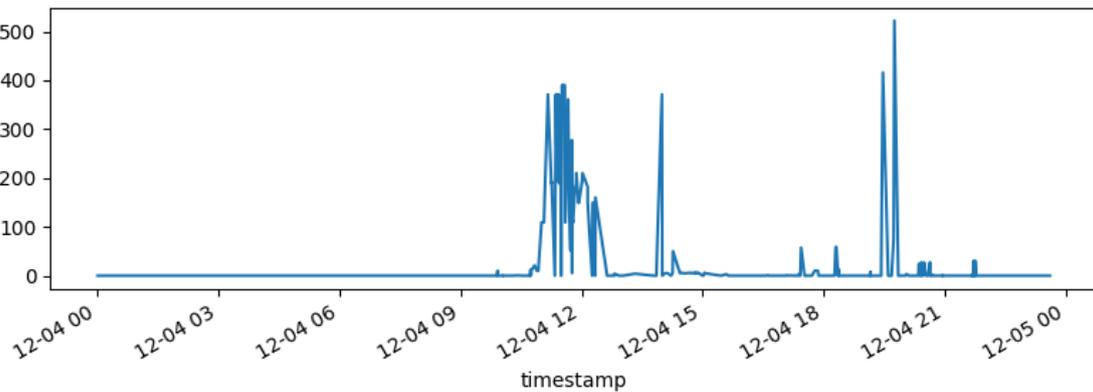
- **timestamp:** time when the sampling started
- **participant:** participant's ID
- **max\_lux:** maximum light value detected during the sampling
- **min\_lux:** minimum light value detected during the sampling
- **std\_lux:** standard deviation of the light values detected during the sampling
- **mean\_lux:** mean of the light values detected during the sampling
- **end\_time:** time when the sampling ended
- **upload\_time:** time when the data was uploaded to the server

## Description

- **Number of data points:** 1.831.747
- **Number of participants with light records:** 107
- **Number of missing data:** 0
- **Average number of data points per participant:** 17.119
- **Max number of data points per participant:** 81.180

## Exploration

Example of average ambient light values measured during one day of a study participant. It can be seen that the ambient light values during night are close to 0, being able to estimate the sleep time.



# Ambient noise

## Columns

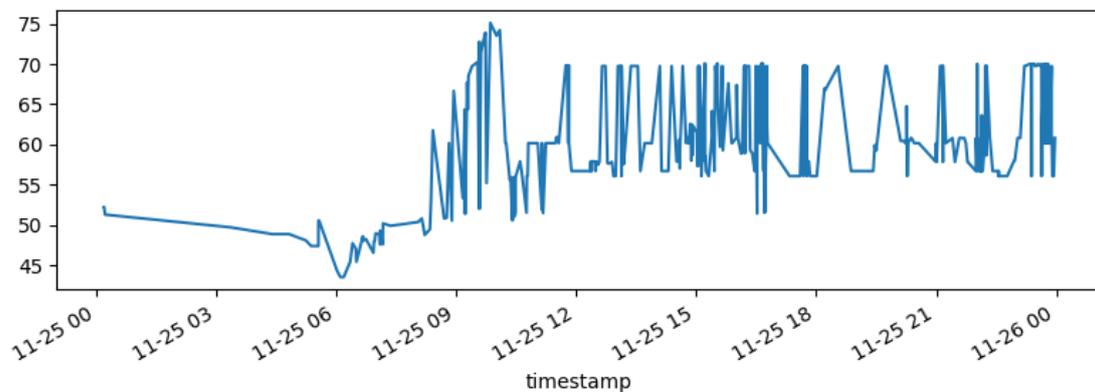
- **timestamp:** time when the sampling started
- **participant:** participant's ID
- **max\_decibel:** maximum noise value detected during the sampling
- **min\_decibel:** minimum noise value detected during the sampling
- **std\_decibel:** standard deviation of the noise values detected during the sampling
- **mean\_decibel:** mean of the noise values detected during the sampling
- **end\_time:** time when the sampling ended
- **upload\_time:** time when the data was uploaded to the server

## Description

- **Number of data points:** 398.236
- **Number of participants with light records:** 61
- **Number of missing data:** 0
- **Average number of data points per participant:** 6.528
- **Max number of data points per participant:** 69.760

## Exploration

Example of average ambient noise values measured during one day of a study participant.



# Screen

## Columns

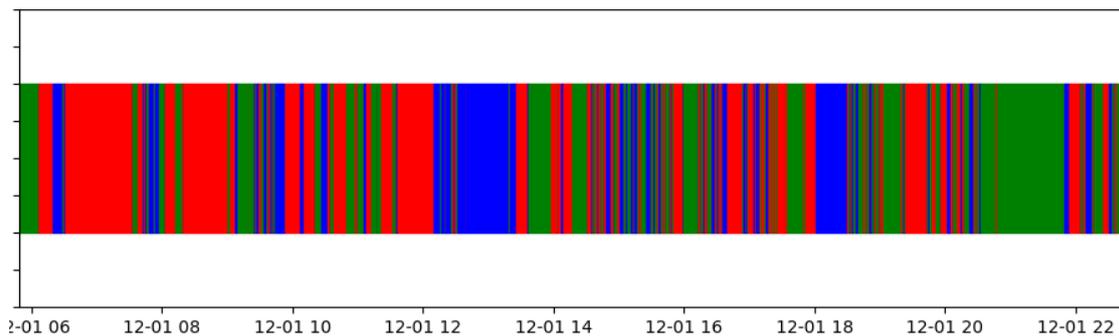
- **timestamp:** time of the event detection
- **participant:** participant's ID
- **screen\_event:** screen event (on, off, lock, unlock)
- **upload\_time:** time when the data was uploaded to the server

## Description

- **Number of data points:** 648.810
- **Number of participants with WiFi records:** 108
- **Number of missing data:** 0
- **Average number of data points per participant:** 6.007
- **Max number of data points per participant:** 18.758

## Exploration

Example of different screen events during one day of a study participant (red: screen off, green: screen on, blue: screen unlocked).



# Survey (one file per survey type: initial, daily, weekly)

## Columns

- **timestamp**: time when the data was uploaded to the server
- **participant**: participant's ID
- **[one column per survey question]**: question answer
- **start\_time**: time when the survey was opened
- **end\_time**: time when the survey was sent

## Description: initial survey

- **Number of data points**: 150
- **Number of columns**: 68
- **Number of participants with initial survey record**: 110
- **Number of missing data**: 7

## Description: daily survey

- **Number of data points**: 16.467
- **Number of columns**: 8
- **Number of participants with daily survey records**: 109
- **Number of missing data**: 0
- **Average number of surveys per participant**: 151

## Description: weekly survey

- **Number of data points**: 328
- **Number of columns**: 16
- **Number of participants with daily survey records**: 98
- **Number of missing data**: 0
- **Average number of surveys per participant**: 3