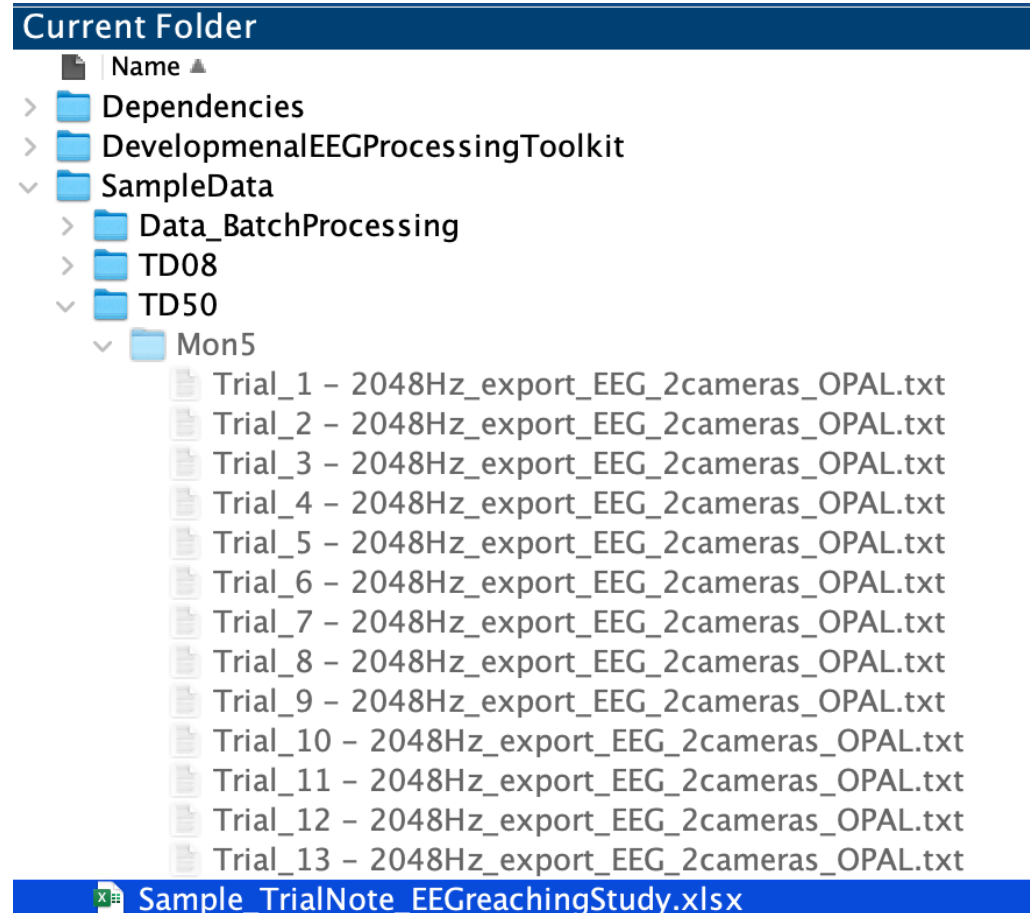


EEGWISE

As of 3/21/2025

Prerequisite: Mon@ folder inside TD@@ folder



DataPreparation_Biosemi.m

While **Mon@** folder is no longer asked for, the intended folder structure is still to **KEEP Mon@** folder inside a **TD@@** folder.

```
% Initialize directories
addpath(genpath('./Dependencies/'));

% Modify to the data directory on your computer
DataDir = '/Users/joh/Documents/Personal/Mentoring/NR/EEGWISE/SampleData';
% Modify to the directory for the trial information on your computer
trialInfo = readtable('/Users/joh/Documents/Personal/Mentoring/NR/EEGWISE/Sampl

% modify the participant and visit session for analysis
Pat = 'TD08'; TD50
```

```
% List all files and folders in the d
PatDir = dir(fullfile(DataDir, Pat));
% Remove "." and ".." entries and keep
PatDir = PatDir([PatDir.isdir]); % Ke
```

dir List folder.
dir NAME lists the files in a folder.

```
>> fullfile(DataDir, Pat)
```

ans = *fullfile()* makes the absolute, concatenating *DataDir* and *Pat*
'/Users/joh/Documents/Personal/Mentoring/NR/EEGWISE/SampleData/TD50'

```
>> dir('/Users/joh/Documents/Personal/Mentoring/NR/EEGWISE/SampleData/TD50')
.      ..      Mon5
```

dir() lists files and folders **INSIDE** the given path

DataPreparation_Biosemi.m

While **Mon@** folder is no longer asked for, the intended folder structure is still to **KEEP Mon@** folder inside a **TD@@** folder.

```
% Initialize directories
```

```
addpath(genpath('./Dependencies/'));
```

```
% Modify to the data directory on your computer
```

```
DataDir = '/Users/joh/Documents/Personal/Mentoring/NR/EEGWISE/SampleData';
```

```
% Modify to the directory for the trial information on your computer
```

```
trialInfo = readtable('/Users/joh/Documents/Personal/Mentoring/NR/EEGWISE/Sampl
```

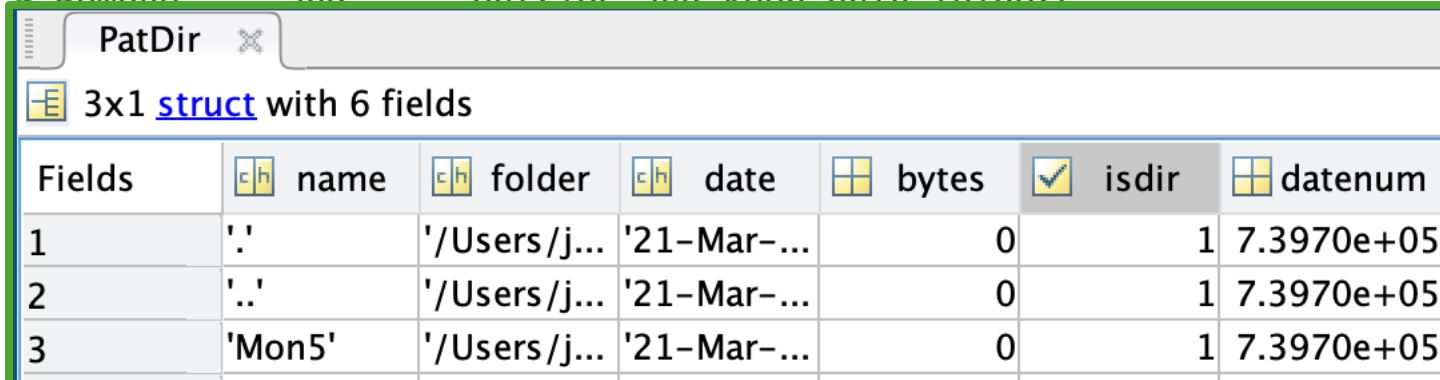
```
% modify the participant and visit session for analysis
```

```
Pat = 'TD08';
```

```
% List all files and folders in the directory
```

```
PatDir = dir(fullfile(DataDir, Pat)); % Using fullfile for safer path handling
```

```
% Remove "." and ".." entries and keep only folders
```



The image shows a MATLAB variable viewer window titled 'PatDir'. It displays a 3x1 struct with 6 fields. The fields are: name, folder, date, bytes, isdir, and datenum. The first three rows of the struct are visible, corresponding to the current directory, the parent directory, and a folder named 'Mon5'.

| Fields | name | folder | date | bytes | isdir | datenum |
|--------|--------|--------------|-------------|-------|-------|------------|
| 1 | .' | '/Users/j... | '21-Mar-... | 0 | 1 | 7.3970e+05 |
| 2 | '..' | '/Users/j... | '21-Mar-... | 0 | 1 | 7.3970e+05 |
| 3 | 'Mon5' | '/Users/j... | '21-Mar-... | 0 | 1 | 7.3970e+05 |

PatDir is a *struct*, a MATLAB data type. A struct will have different *fields*. These fields contain information about the files/folders inside the *path* provided. In our example, **this**:

```
>> dir('/Users/joh/Documents/Personal/Mentoring/NR/EEGWISE/SampleData/TD50')
```

DataPreparation_Biosemi.m

While **Mon@** folder is no longer asked for, the intended folder structure is still to **KEEP Mon@** folder inside a **TD@@** folder.

```
% Initialize directories
```

```
addpath(genpath('./Dependencies/')):
```

PatDir

3x1 struct with 6 fields

| Fields | name | folder | date | bytes | isdir |
|--------|--------|--------------|-------------|-------|-------|
| 1 | '.' | '/Users/j... | '21-Mar-... | 0 | 1 |
| 2 | '..' | '/Users/j... | '21-Mar-... | 0 | 1 |
| 3 | 'Mon5' | '/Users/j... | '21-Mar-... | 0 | 1 |

```
% List all files and folders in the directory
```

```
PatDir = dir(fullfile(DataDir, Pat)); % Using fullfile
```

```
% Remove "." and ".." entries and keep only folders
```

```
PatDir = PatDir([PatDir.isdir]); % Keep only directories
```

```
PatDir = PatDir(strcmp(PatDir.name, {'.', '..'}), {'.', '..'})
```

This is one example of logical indexing; if you don't understand, just think that this code makes PatDir to contain only entries about directories.

```
>> PatDir.isdir
```

```
ans =
```

```
logical
```

```
1
```

```
ans =
```

```
logical
```

```
1
```

```
ans =
```

```
logical
```

```
1
```

You saw from the previous slide that PatDir, a struct, has three fields. **PatDir.isdir** is a command checking if each field is an entry about a **directory**. If a field is an entry about a directory, it returns **1 (true)**. Here you see that three **ans(wers)** are all 1's, meaning that all three fields of PatDir are about directories.

DataPreparation_Biosemi.m

While **Mon@** folder is no longer asked for, the intended folder structure is still to **KEEP Mon@** folder inside a **TD@@** folder.

```
% Initialize directories
addpath(genpath('./Dependencies/'));

% Modify to the data directory on your computer
DataDir = '/Users/joh/Documents/Personal/Mentoring/NR/EEG';
% Modify to the directory for the trial information on your computer
trialInfo = readtable('/Users/joh/Documents/Personal/Mentoring/NR/EEG/TrialInfo.csv');

% modify the participant and visit session for analysis
Pat = 'TD08';

% List all files and folders in the directory
PatDir = dir(fullfile(DataDir, Pat)); % Using fullfile to get the full path
% Remove "." and ".." entries and keep only folders
PatDir = PatDir([PatDir.isdir]); % Keep only directories
PatDir = PatDir(~ismember({PatDir.name}, {'.', '..'}));
```

```
>> PatDir.name
ans =
    '.'
    '..'

ans =
    'Mon5'
```

So this is iteratively checking if each element of PatDir.name is in {'.', '..'}. The first ('.') and the second ('..') are in {'.', '..'} -> returns **1 (true)**. The third ('Mon5') is **not** contained in {'.', '..'} -> returns **0 (false)**.

ismember True for set member.

LIA = **ismember**(A,B) for arrays A and B returns an array of the same size as A containing true where the elements of A are in B and false otherwise.

DataPreparation_Biosemi.m

While **Mon@** folder is no longer asked for, the intended folder structure is still to **KEEP Mon@** folder inside a **TD@@** folder.

```
% Initialize directories
```

```
addpath(genpath('./Dependencies/'));
```

```
% Modify to the data directory on your computer
```

```
DataDir = '/Users/joh/Documents/Personal/Ment
```

```
% Modify to the directory for the trial information
```

```
trialInfo = readtable('/Users/joh/Documents/
```

```
% modify the participant and visit session folder
```

```
Pat = 'TD08';
```

```
% List all files and folders in the directory
```

```
PatDir = dir(fullfile(DataDir, Pat)); % Using
```

```
% Remove "." and ".." entries and keep only files
```

```
PatDir = PatDir([PatDir.isdir]); % Keep only files
```

```
PatDir = PatDir(~ismember({PatDir.name}, {'.', '..'})); % Remove "." and ".."
```

```
>> PatDir.name
```

```
ans =
```

```
 '.'
```

```
ans =
```

```
 '..'
```

```
ans =
```

```
 'Mon5'
```

```
>> ismember({PatDir.name}, {'.', '..'})
```

```
ans =
```

```
 true
```

```
 logical array
```

```
 1
```

```
 1
```

```
 0
```

```
 false
```

```
 true
```

```
 Is '.' a member of {'.', '..'}?
```

```
 Is 'Mon5' a member of {'.', '..'}?
```

~ means **not**.

not true (~ 1) is false (0)

not false (~ 0) is true (1)

So $\sim[1 \ 1 \ 0] = [0 \ 0 \ 1] = [\text{false} \ \text{false} \ \text{true}]$

DataPreparation_Biosemi.m

While **Mon@** folder is no longer asked for, the intended folder structure is still to **KEEP Mon@** folder inside a **TD@@** folder.

```
%% Initialize directories
```

```
addpath(genpath('./Dependencies/'));
```

```
% Modify to the data directory on your computer
```

```
DataDir = '/Users/joh/Documents/Personal/M'
```

```
% Modify to the directory for the trial in
```

```
trialInfo = readtable('/Users/joh/Document
```

```
% modify the participant and visit session
```

```
Pat = 'TD08';
```

saved

```
% List all files and folders in the directory
```

```
PatDir = dir(fullfile(DataDir, Pat)); % Using fullfile for safer path handling
```

```
% Remove "." and ".." entries and keep only folders
```

```
PatDir = PatDir([PatDir.isdir]); % Keep only directories
```

```
PatDir = PatDir(~ismember({PatDir.name}, {'.', '..'}));
```

| PatDir | | | | | | |
|--------------------------|--------|--------------|-------------|-------|-------|------------|
| 3x1 struct with 6 fields | | | | | | |
| Fields | name | folder | date | bytes | isdir | datenum |
| 1 | .' | '/Users/j... | '21-Mar-... | 0 | 1 | 7.3970e+05 |
| 2 | '..' | '/Users/j... | '21-Mar-... | 0 | 1 | 7.3970e+05 |
| 3 | 'Mon5' | '/Users/j... | '21-Mar-... | 0 | 1 | 7.3970e+05 |

This is PatDir([false false true])

This is equal to selecting the **THIRD** element of PatDir.

DataPreparation_Biosemi.m

While **Mon@** folder is no longer asked for, the intended folder structure is still to **KEEP Mon@** folder inside a **TD@@** folder.

```
% Initialize directories
```

```
addpath(genpath('./Dependencies/'));
```

```
% Modify to the data directory on your computer
```

```
DataDir = '/Users/joh/Documents/Personal/Mentoring/NR/EEGWISE/SampleData/';
```

```
% Modify to the directory for the trial information
```

```
trialInfo = readtable('/Users/joh/Documents/TrialInfo/'); % Read trial info
```

```
% modify the participant and visit session
```

```
Pat = 'TD08';
```

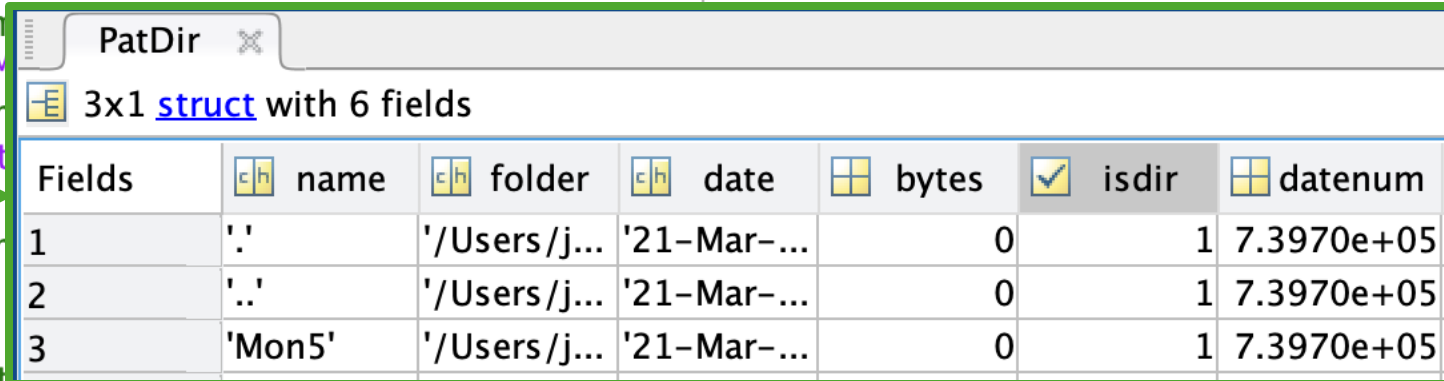
```
% List all files and folders in the directory
```

```
PatDir = dir(fullfile(DataDir, Pat)); % Using fullfile for safer path handling
```

```
% Remove "." and ".." entries and keep only folders
```

```
PatDir = PatDir([PatDir.isdir]); % Keep only directories
```

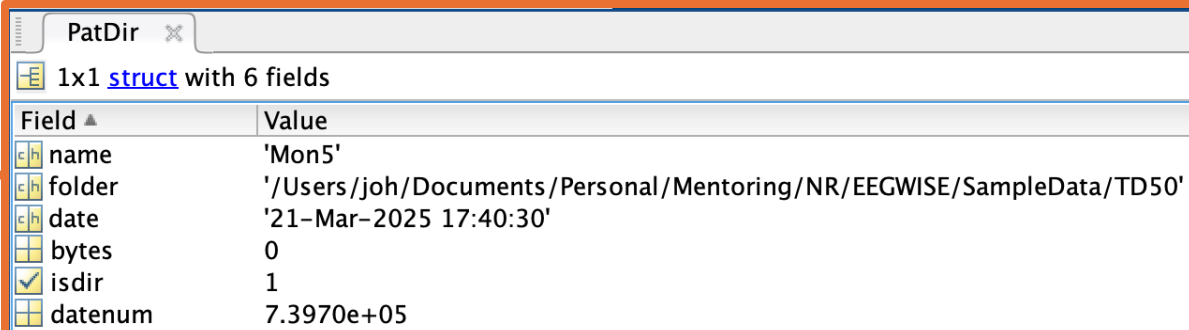
```
PatDir = PatDir(~ismember({PatDir.name}, {'.', '..'})); % Remove "." and ".."
```



PatDir

3x1 struct with 6 fields

| Fields | name | folder | date | bytes | isdir | datenum |
|--------|--------|--------------|-------------|-------|-------|------------|
| 1 | '.' | '/Users/j... | '21-Mar-... | 0 | 1 | 7.3970e+05 |
| 2 | '..' | '/Users/j... | '21-Mar-... | 0 | 1 | 7.3970e+05 |
| 3 | 'Mon5' | '/Users/j... | '21-Mar-... | 0 | 1 | 7.3970e+05 |



PatDir

1x1 struct with 6 fields

| Field | Value |
|---------|--|
| name | 'Mon5' |
| folder | '/Users/joh/Documents/Personal/Mentoring/NR/EEGWISE/SampleData/TD50' |
| date | '21-Mar-2025 17:40:30' |
| bytes | 0 |
| isdir | 1 |
| datenum | 7.3970e+05 |

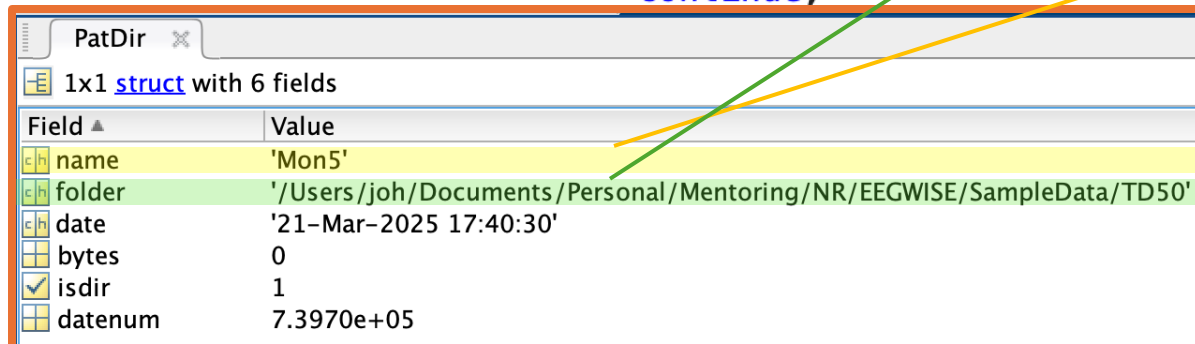
DataPreparation_Biosemi.m

While **Mon@** folder is no longer asked for, the intended folder structure is still to **KEEP Mon@** folder inside a **TD@@** folder.

i will increase from 1 to **size(PatDir, 1)**. In our example of TD50, **i** will increase from 1 to 1. **strcat** concatenates texts.

```
if isempty(PatDir)
    print('No monthly folders found for the patient. Please check the patient name')
else
    for i = 1:size(PatDir,1) % loop through each Monthly folder for the participant
        SessionDir = dir(strcat(PatDir(i).folder, '/', PatDir(i).name, '/*.txt')),

        if isempty(SessionDir)
            print('No files found. Please check the patient name and file directory')
            continue;
        end
    end
end
```



A screenshot of the MATLAB variable viewer showing the structure of the 'PatDir' variable. It is a 1x1 struct with 6 fields. The 'name' field is 'Mon5' and the 'folder' field is '/Users/joh/Documents/Personal/Mentoring/NR/EEGWISE/SampleData/TD50'. The 'date' field is '21-Mar-2025 17:40:30', 'bytes' is 0, 'isdir' is 1, and 'datenum' is 7.3970e+05.

| Field | Value |
|---------|--|
| name | 'Mon5' |
| folder | '/Users/joh/Documents/Personal/Mentoring/NR/EEGWISE/SampleData/TD50' |
| date | '21-Mar-2025 17:40:30' |
| bytes | 0 |
| isdir | 1 |
| datenum | 7.3970e+05 |

The output of this command is:

"/Users/joh/Documents/Personal/Mentoring/
NR/EEGWISE/SampleData/TD50/Mon5/*.txt"

DataPreparation_Biosemi.m

While **Mon@** folder is no longer asked for, the intended folder structure is still to **KEEP Mon@** folder inside a **TD@@** folder.

```
if isempty(PatDir)
    print('No monthly folders found for the patient. Please check the patient name')
else
    for i = 1:size(PatDir,1) % loop through each Monthly folder for the participant
        SessionDir = dir(strcat(PatDir(i).folder, '/', PatDir(i).name, '/*.txt'));
```

Current Folder

- Dependencies
- DevelopmentalEEGProcessingToolkit
- SampleData
 - Data_BatchProcessing
 - TD08
 - TD50
 - Mon5
 - Trial_1 - 2048Hz_export_EEG_2cameras_OPAL.txt
 - Trial_2 - 2048Hz_export_EEG_2cameras_OPAL.txt
 - Trial_3 - 2048Hz_export_EEG_2cameras_OPAL.txt
 - Trial_4 - 2048Hz_export_EEG_2cameras_OPAL.txt
 - Trial_5 - 2048Hz_export_EEG_2cameras_OPAL.txt
 - Trial_6 - 2048Hz_export_EEG_2cameras_OPAL.txt
 - Trial_7 - 2048Hz_export_EEG_2cameras_OPAL.txt
 - Trial_8 - 2048Hz_export_EEG_2cameras_OPAL.txt
 - Trial_9 - 2048Hz_export_EEG_2cameras_OPAL.txt
 - Trial_10 - 2048Hz_export_EEG_2cameras_OPAL.txt
 - Trial_11 - 2048Hz_export_EEG_2cameras_OPAL.txt
 - Trial_12 - 2048Hz_export_EEG_2cameras_OPAL.txt
 - Trial_13 - 2048Hz_export_EEG_2cameras_OPAL.txt

Sample_TrialNote_EEGreachingStudy.xlsx

SessionDir

13x1 struct with 6 fields

| Fields | name | folder | date | bytes | isdir | datenum |
|--------|--|--------------|-------------|----------|-------|------------|
| 1 | 'Trial_1 - 2048Hz_export_EEG_2cameras_OPAL.txt' | '/Users/j... | '22-Mar-... | 46078496 | 0 | 7.3970e+05 |
| 2 | 'Trial_10 - 2048Hz_export_EEG_2cameras_OPAL.txt' | '/Users/j... | '22-Mar-... | 22883954 | 0 | 7.3970e+05 |
| 3 | 'Trial_11 - 2048Hz_export_EEG_2cameras_OPAL.txt' | '/Users/j... | '22-Mar-... | 30448482 | 0 | 7.3970e+05 |
| 4 | 'Trial_12 - 2048Hz_export_EEG_2cameras_OPAL.txt' | '/Users/j... | '22-Mar-... | 29058839 | 0 | 7.3970e+05 |
| 5 | 'Trial_13 - 2048Hz_export_EEG_2cameras_OPAL.txt' | '/Users/j... | '22-Mar-... | 24031938 | 0 | 7.3970e+05 |
| 6 | 'Trial_2 - 2048Hz_export_EEG_2cameras_OPAL.txt' | '/Users/j... | '22-Mar-... | 46090720 | 0 | 7.3970e+05 |
| 7 | 'Trial_3 - 2048Hz_export_EEG_2cameras_OPAL.txt' | '/Users/j... | '22-Mar-... | 46091484 | 0 | 7.3970e+05 |
| 8 | 'Trial_4 - 2048Hz_export_EEG_2cameras_OPAL.txt' | '/Users/j... | '22-Mar-... | 46080597 | 0 | 7.3970e+05 |
| 9 | 'Trial_5 - 2048Hz_export_EEG_2cameras_OPAL.txt' | '/Users/j... | '22-Mar-... | 46086327 | 0 | 7.3970e+05 |
| 10 | 'Trial_6 - 2048Hz_export_EEG_2cameras_OPAL.txt' | '/Users/j... | '22-Mar-... | 46086518 | 0 | 7.3970e+05 |
| 11 | 'Trial_7 - 2048Hz_export_EEG_2cameras_OPAL.txt' | '/Users/j... | '22-Mar-... | 46087664 | 0 | 7.3970e+05 |
| 12 | 'Trial_8 - 2048Hz_export_EEG_2cameras_OPAL.txt' | '/Users/j... | '22-Mar-... | 46083653 | 0 | 7.3970e+05 |
| 13 | 'Trial_9 - 2048Hz_export_EEG_2cameras_OPAL.txt' | '/Users/j... | '22-Mar-... | 16351679 | 0 | 7.3970e+05 |

DataPreparation_Biosemi.m

While **Mon@** folder is no longer asked for, the intended folder structure is still to **KEEP Mon@** folder inside a **TD@@** folder.

```
if isempty(PatDir)
    print('No monthly folders found for the patient. Please check the patient name')
else
    for i = 1:size(PatDir,1) % loop through each Monthly folder for the participant
        SessionDir = dir(strcat(PatDir(i).folder, '/', PatDir(i).name, '/*.txt'));

        if isempty(SessionDir)
            print('No files found. Please check the patient name and file directory')
            continue;
        else
            % get trial indices in SessionDir
            Sess_trialIdx = cellfun(@(x) str2double(regexp(x, '\d+', 'match', 'once
```

DataPreparation_Biosemi.m

While **Mon@** folder is no longer asked for, the intended folder structure is still to **KEEP Mon@** folder inside a **TD@@** folder.

If you don't have a **Mon@** folder...

% Modify to the data directory on your computer

```
DataDir = '/Users/joh/Documents/Personal/Mentoring/NR/EEGWISE/SampleData';
```

% Modify to the directory for the trial information on your computer

```
trialInfo = readtable('/Users/joh/Documents/Personal/Mentoring/NR/EEGWISE/Samp
```

% modify

Pat =

% list

PatDir

% Remove

PatDir

PatDir

| Fields | name | folder | date | bytes | isdir | datenum |
|--------|--|--------------|-------------|----------|-------|------------|
| 1 | '.' | '/Users/j... | '21-Mar-... | 0 | 1 | 7.3970e+05 |
| 2 | '..' | '/Users/j... | '21-Mar-... | 0 | 1 | 7.3970e+05 |
| 3 | '.DS_Store' | '/Users/j... | '21-Mar-... | 6148 | 0 | 7.3970e+05 |
| 4 | 'Trial_1 - 2048Hz_export_EEG_2cameras_OPAL.txt' | '/Users/j... | '22-Mar-... | 46078496 | 0 | 7.3970e+05 |
| 5 | 'Trial_10 - 2048Hz_export_EEG_2cameras_OPAL.txt' | '/Users/j... | '22-Mar-... | 22883954 | 0 | 7.3970e+05 |
| 6 | 'Trial_11 - 2048Hz_export_EEG_2cameras_OPAL.txt' | '/Users/j... | '22-Mar-... | 30448482 | 0 | 7.3970e+05 |
| 7 | 'Trial_12 - 2048Hz_export_EEG_2cameras_OPAL.txt' | '/Users/j... | '22-Mar-... | 29058839 | 0 | 7.3970e+05 |
| 8 | 'Trial_13 - 2048Hz_export_EEG_2cameras_OPAL.txt' | '/Users/j... | '22-Mar-... | 24031938 | 0 | 7.3970e+05 |
| 9 | 'Trial_2 - 2048Hz_export_EEG_2cameras_OPAL.txt' | '/Users/j... | '22-Mar-... | 46090720 | 0 | 7.3970e+05 |
| 10 | 'Trial_3 - 2048Hz_export_EEG_2cameras_OPAL.txt' | '/Users/j... | '22-Mar-... | 46091484 | 0 | 7.3970e+05 |
| 11 | 'Trial_4 - 2048Hz_export_EEG_2cameras_OPAL.txt' | '/Users/j... | '22-Mar-... | 46080597 | 0 | 7.3970e+05 |
| 12 | 'Trial_5 - 2048Hz_export_EEG_2cameras_OPAL.txt' | '/Users/j... | '22-Mar-... | 46086327 | 0 | 7.3970e+05 |
| 13 | 'Trial_6 - 2048Hz_export_EEG_2cameras_OPAL.txt' | '/Users/j... | '22-Mar-... | 46086518 | 0 | 7.3970e+05 |
| 14 | 'Trial_7 - 2048Hz_export_EEG_2cameras_OPAL.txt' | '/Users/j... | '22-Mar-... | 46087664 | 0 | 7.3970e+05 |
| 15 | 'Trial_8 - 2048Hz_export_EEG_2cameras_OPAL.txt' | '/Users/j... | '22-Mar-... | 46083653 | 0 | 7.3970e+05 |
| 16 | 'Trial_9 - 2048Hz_export_EEG_2cameras_OPAL.txt' | '/Users/j... | '22-Mar-... | 16351679 | 0 | 7.3970e+05 |

| Current Folder | |
|----------------|--|
| Name ▲ | |
| > | Dependencies |
| > | DevelopmentalEEGProcessingToolkit |
| > | SampleData |
| > | Data_BatchProcessing |
| > | TD08 |
| > | TD50 |
| | Trial_1 - 2048Hz_export_EEG_2cameras_OPAL.txt |
| | Trial_2 - 2048Hz_export_EEG_2cameras_OPAL.txt |
| | Trial_3 - 2048Hz_export_EEG_2cameras_OPAL.txt |
| | Trial_4 - 2048Hz_export_EEG_2cameras_OPAL.txt |
| | Trial_5 - 2048Hz_export_EEG_2cameras_OPAL.txt |
| | Trial_6 - 2048Hz_export_EEG_2cameras_OPAL.txt |
| | Trial_7 - 2048Hz_export_EEG_2cameras_OPAL.txt |
| | Trial_8 - 2048Hz_export_EEG_2cameras_OPAL.txt |
| | Trial_9 - 2048Hz_export_EEG_2cameras_OPAL.txt |
| | Trial_10 - 2048Hz_export_EEG_2cameras_OPAL.txt |
| | Trial_11 - 2048Hz_export_EEG_2cameras_OPAL.txt |
| | Trial_12 - 2048Hz_export_EEG_2cameras_OPAL.txt |
| | Trial_13 - 2048Hz_export_EEG_2cameras_OPAL.txt |

DataPreparation_Biosemi.m

While **Mon@** folder is no longer asked for, the intended folder structure is still to **KEEP Mon@** folder inside a **TD@@** folder.

If you don't have a **Mon@** folder...

```
% Modify to the data directory on your computer
DataDir = '/Users/joh/Documents/Personal/Mentoring/NR/EEGWISE/SampleData';
% Modify to the directory for the trial information on your computer
trialInfo = readtable('/Users/joh/Do

% modify the participant and visit s
Pat = 'TD08';

% list all files and folders in the
PatDir = dir(fullfile(DataDir, Pat))
% Remove "." and ".." entries and ke
PatDir = PatDir([PatDir.isdir]); % Keep only directories
```

```
>> logicalindex = [PatDir.isdir];
>> logicalindex
```

```
logicalindex =

1x16 logical array
```

```
1 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0
```

| PatDir | | | | | | | |
|---------------------------------|------|--------------|-------------|-------|-------|------------|--|
| 2x1 struct with 6 fields | | | | | | | |
| Fields | name | folder | date | bytes | isdir | datenum | |
| 1 | '.' | '/Users/j... | '21-Mar-... | 0 | 1 | 7.3970e+05 | |
| 2 | '..' | '/Users/j... | '21-Mar-... | 0 | 1 | 7.3970e+05 | |

DataPreparation_Biosemi.m

While **Mon@** folder is no longer asked for, the intended folder structure is still to **KEEP Mon@** folder inside a **TD@@** folder.

If you don't have a **Mon@** folder...

```
% Modify to the data directory on your computer
DataDir = '/Users/joh/Documents/Personal/Monitoring/NB/EEG/TCF/CompData/';
% Modify to the directory for
trialInfo = readtable('/User
```

```
% modify the participant and
Pat = 'TD08';
```

```
% List all files and folders
```

```
PatDir = dir(fullfile(DataDir, Pat)); % Using fullfile for safer path handling
```

```
% Remove "." and ".." entries and keep only folders
```

```
PatDir = PatDir([PatDir.isdir]); % Keep only directories
```

```
PatDir = PatDir(~ismember({PatDir.name}, {'.', '..'})); % Remove "." and ".."
```

PatDir

2x1 struct with 6 fields

| Fields | name | folder | date | bytes | isdir | datenum |
|--------|------|--------------|-------------|-------|-------|------------|
| 1 | '.' | '/Users/j... | '21-Mar-... | 0 | 1 | 7.3970e+05 |
| 2 | '..' | '/Users/j... | '21-Mar-... | 0 | 1 | 7.3970e+05 |

```
>> ~ismember({PatDir.name}, {'.', '..'})
```

```
ans =
```

```
1x2 logical array
```

```
0 0
```

```
>> ismember({PatDir.name}, {'.', '..'})
```

```
ans =
```

```
1x2 logical array
```

```
1 1
```

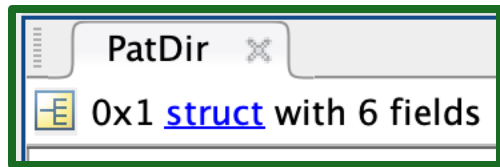
PatDir

0x1 struct with 6 fields

DataPreparation_Biosemi.m

While **Mon@** folder is no longer asked for, the intended folder structure is still to **KEEP Mon@** folder inside a **TD@@** folder.

If you don't have a **Mon@** folder...



```
>> isempty(PatDir)
ans =
    logical
     1 1 = true
```

```
if isempty(PatDir)
```

```
    print('No monthly
```

```
else
```

```
    for i = 1:size(PatDir,1) % loop through each Monthly folder for the participant
```

```
        Error using validateHandleToPrint
        No figure to print.
```

```
        Error in validate (line 17)
        pj = validateHandleToPrint(pj);
```

```
        Error in print (line 67)
        pj = validate( pj );
```

```
        Error in DataPreparation_Biosemi (line 25)
```

```
        print('No monthly folders found for the patient. Please check the patient name and file direc
```

the patient. Please check the patient name

Does not run!

If this condition is true, then anything below 'else' does not run which is NOT what you want.

EEGWISE runs smoothly as well

Where

* **_Baseline.set** and
* **_reach.set** are
stored

The screenshot displays the MATLAB App interface for EEGWISE, showing the workflow steps and the current folder structure. The workflow steps include:

- Step 3. Channel correction
- Step 4. Artifact reject by

The current folder structure is shown in the 'Current Folder' pane, with the following files and folders:

- Dependencies
- DevelopmentalEEGProcessingToolkit
- Results
- Sample Data
- Data_BatchProcessing
- TD08
- TD50
- Mon5
- TD50_Mon5_Baseline.fdt
- TD50_Mon5_Baseline.set
- TD50_Mon5_Baseline_ori_timing_info.mat
- TD50_Mon5_reach.fdt
- TD50_Mon5_reach.set
- TD50_Mon5_reach_ori_timing_...

The 'Data directory' is set to `/Users/joh/Documents/Personal/Mentoring/NR/EEGWISE` and the 'Result directory' is set to `./Results/`. The 'Generate report' option is set to 'Yes'.

The 'Current Folder' pane shows the following files and folders:

- Dependencies
- DevelopmentalEEGProcessingToolkit
- Results
- Analysis_Report.csv
- Analysis_Report.mat
- TD50_Mon5_Baseline.set_Step4...
- TD50_Mon5_Baseline.set_Step4...
- TD50_Mon5_Baseline_seg_rej_r...
- TD50_Mon5_Baseline_Step1.fdt
- TD50_Mon5_Baseline_Step1.jpg
- TD50_Mon5_Baseline_Step1.set
- TD50_Mon5_Baseline_Step2.fdt
- TD50_Mon5_Baseline_Step2.jpg
- TD50_Mon5_Baseline_Step2.set

The MATLAB Editor shows the following code in `DataPreparation_Biosemi.m`:

```
7 dataFolderDir = strsplit('...')
8 ResultDir = [app.ResultDir, 'TD50_Mon5_Baseline'];
9
10 if ~exist(ResultDir, 'dir')
11     mkdir(ResultDir);
12 end
13
14 % get all .set data files
15 MyFolderInfo = dir(fullfile(dataFolderDir, 'TD50_Mon5_Baseline', '*.set'));
16
17 % create an empty table
18 if strcmp(app.GenerateReport, 'Yes')
19     if exist(fullfile(ResultDir, 'Analysis_Report.csv'), 'file')
20         delete(fullfile(ResultDir, 'Analysis_Report.csv'));
```

The Command Window shows the message: "New to MATLAB? See resources for [Getting started](#)".