**Identify and reject ocular artefacts only**

This is a time-consuming step that relies on visual inspection, ideally done once only.

***Step 1 – Set up environment***

Enter the following code in the Matlab command window:

clear; close all; clc;

addpath /Users/uqcbrad2/Documents/MATLAB/eeglab13\_6\_5b;

% Define paths for working directory

path\_general = '/Users/uqcbrad2/Desktop/EEGTest';

path\_raw = '/Users/uqcbrad2/Desktop/EEGTest/raw\_preproc';

path\_ica = '/Users/uqcbrad2/Desktop/EEGTest/interpolated\_ica';

cd(path\_ica) % go to where the raw files are

fileList = dir('\*denf\_i\_2-35\_ICA.set'); % select all the files

***Step 2 – Display ICA***

Enter the following code in the Matlab command window:

[ALLEEG EEG CURRENTSET ALLCOM] = eeglab; % open EEGLAB

EEG = pop\_loadset('filename',fileList(1).name,'filepath',path\_ica); % change the fileList(number) for each iteration

[ALLEEG, EEG, CURRENTSET] = eeg\_store( ALLEEG, EEG, 0 );

EEG = eeg\_checkset( EEG );

eeglab redraw % enabling the interface again

% pop\_selectcomps(EEG, [1:11]); % size(EEG.icawinv,2) to have an adjusted number of components, or XX to have the first XX components

%

SASICA % using algorithm FASTER, EOG correlation to AF3

***Step 3 – Select eye movement-related ICAs***

* Within the first 10 ICA topographies, select the ones that correspond to vertical and horizontal eye movements. They should be highlighted by SASICA through correlation with one of the remaining frontal electrodes (you should choose this electrode from the ones not interpolated or removed). I would recommend 3 ICAs max.
* Unselect any other topographies that might be highlighted.

***Step 4 – Save***

Enter the following code in the Matlab command window:

% % ATTENTION! Have to save and rewrite for changes to be effective

[ALLEEG EEG] = eeg\_store(ALLEEG, EEG, CURRENTSET);

EEG = eeg\_checkset( EEG );

EEG = pop\_saveset( EEG, 'savemode','resave');