**Supplementary file 1**

**Supplementary Table S1: Table representing the pipeline used in EEGLAB (v. 14.1.1) interfaced in Matlab R2017b**

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| --- | --- | --- |
| Process | Function | Settings/options |
| Import data | pop\_biosig |  |
| Filter from 0.5 to 48Hz with FIR filter | pop\_eegfiltnew | Automatic filter order by EEGLAB |
| Add channel locations | pop\_chanedit |  |
| Visual inspection of noisy channels | pop\_eegplot |  |
| Remove noisy channels | pop\_select |  |
| Periods with high-amplitude deflections removed | pop\_select |  |
| Average reference | pop\_reref |  |
| Downsample from 2048Hz to 256Hz | pop\_resample |  |
| ICA decomposition | pop\_runica | *runica* algorithm |
| Plot and remove components representing eye-blinks and saccades | pop\_plot; pop\_subcomp | Identified based on (Chaumon et al., 2015) |
| Interpolate removed channels (if any). | pop\_interp | *spherical* algorithm |
|  |  |  |  |  |  |  |