

The data are provided in MATLAB formatted files.
Files included:

- 1a. rest_eyes_closed_raw.mat
- 1b. rest_eyes_closed_SL.mat
- 2a. rest_eyes_closed_rep_raw.mat
- 2b. rest_eyes_closed_rep_SL.mat
- 3a. rest_eyes_open_dark_raw.mat
- 3b. rest_eyes_open_dark_SL.mat
- 4a. nature_video_early_raw.mat
- 4b. nature_video_early_SL.mat
- 5a. nature_video_late_raw.mat
- 5b. nature_video_late_SL.mat
6. chanlocs.mat
7. electrode_mapping.pdf

For example, **rest_eyes_closed_SL.mat** contains surface-Laplacian transformed (see the methods section of the paper) EEG data recorded with 64 scalp electrodes from 24 participants (recorded in μV prior to surface-Laplacian transform; **rest_eyes_closed_raw.mat**), while they engaged in spontaneous thoughts with their eyes closed for about 5 minutes. Within each cell (representing a participant), the first dimension indicates time points at 512 Hz resolution, the second dimension (equaling 1) indicates that there was only one trial, and the third dimension indicates 64 electrodes. Electrode locations are provided in **chanlocs.mat** and are schematically depicted in **electrode_mapping.pdf**.

The remaining data files are formatted in the same way. **rest_eyes_closed_rep_raw.mat** and **rest_eyes_closed_rep_SL.mat** contain raw and surface-Laplacian transformed EEG data recorded from additional 24 participants while they engaged in spontaneous thoughts with their eyes closed for about 5 minutes (a replication). **rest_eyes_open_dark_raw.mat** and **rest_eyes_open_dark_SL.mat** contain raw and surface-Laplacian transformed EEG data recorded from the same 24 participants while they engaged in spontaneous thoughts with their eyes open in a darkened room for about 5 minutes. **nature_video_early_raw.mat** and **nature_video_early_SL.mat** contain raw and surface-Laplacian transformed EEG data recorded from 21 participants (some overlapping with 1a and 1b; see the paper) while they viewed a silent nature video for about 5 minutes. **nature_video_late_raw.mat** and **nature_video_late_SL.mat** contain raw and surface-Laplacian transformed EEG data recorded from the same 21 participants while they viewed a different segment of the same nature video 20-30 minutes after the first viewing (for assessing the temporal stability of the data).

See the paper for additional details.