EEGLAB
RRID:SCR_007292
Type: Tool

Proper Citation

EEGLAB (RRID:SCR_007292)

Resource Information

URL: http://sccn.ucsd.edu/eeglab/index.html
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Description: Interactive Matlab toolbox for processing continuous and event-related EEG, MEG and other electrophysiological data incorporating independent component analysis (ICA), time/frequency analysis, artifact rejection, event-related statistics, and several useful modes of visualization of the averaged and single-trial data. First developed on Matlab 5.3 under Linux, EEGLAB runs on Matlab v5 and higher under Linux, Unix, Windows, and Mac OS X (Matlab 7+ recommended). EEGLAB provides an interactive graphic user interface (GUI) allowing users to flexibly and interactively process their high-density EEG and other dynamic brain data using independent component analysis (ICA) and/or time/frequency analysis (TFA), as well as standard averaging methods. EEGLAB also incorporates extensive tutorial and help windows, plus a command history function that eases users' transition from GUI-based data exploration to building and running batch or custom data analysis scripts. EEGLAB offers a wealth of methods for visualizing and modeling event-related brain dynamics, both at the level of individual EEGLAB "datasets" and/or across a collection of datasets brought together in an EEGLAB "studyset." For experienced Matlab users, EEGLAB offers a structured programming environment for storing, accessing, measuring, manipulating and visualizing event-related EEG data. For creative research programmers and methods developers, EEGLAB offers an extensible, open-source platform through which they can share new methods with the world research community by publishing EEGLAB "plug-in" functions that appear automatically in the EEGLAB menu of users who download them. For example, novel EEGLAB plug-ins might be built and released to "pick peaks" in ERP or time/frequency results, or to perform specialized import/export, data visualization, or inverse source modeling of EEG, MEG, and/or ECOG data. EEGLAB Features * Graphic user interface * Multiformat data importing * High-density data scrolling * Defined EEG data structure * Open source plug-in facility * Interactive plotting functions * Semi-automated artifact removal * ICA & time/frequency transforms * Many advanced plug-in
toolboxes * Event & channel location handling * Forward/inverse head/source modeling

Abbreviations: EEGLAB

Resource Type: software toolkit, software resource, data processing software, software application

Defining Citation: PMID:15102499

Keywords: visualization, eeg modeling, independent component analysis, meg modeling, eeg, erp, spectral decomposition, single-trial, matlab, meg, electrophysiology, format conversion, source separation analysis, fourier time-domain analysis, spectral analysis, temporal wavelet analysis, anova, event related potential, three dimensional display, two dimensional display

Funding Agency: NINDS

Availability: GNU General Public License

Resource Name: EEGLAB

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Alternate URLs: http://www.nitrc.org/projects/eeglab/

Old URLs: http://www.nitrc.org/projects/incf_eeglab/

Ratings and Alerts

- 5 / 5 (1 votes) Rated at NITRC http://www.nitrc.org/projects/eeglab/

No alerts have been found for EEGLAB.

Data and Source Information

Source: SciCrunch Registry

Usage and Citation Metrics

We found 3890 mentions in open access literature.

Listed below are recent publications. The full list is available at FDI Lab - SciCrunch.org.


Di Gregorio F, et al. (2022) Tuning alpha rhythms to shape conscious visual perception.

Deng X, et al. (2022) Intermittent theta burst stimulation over the parietal cortex has a significant neural effect on working memory. Human brain mapping, 43(3), 1076-1086.


Colás-Blanco I, et al. (2022) The role of temporal distance of the events on the spatiotemporal dynamics of mental time travel to one’s personal past and future. Scientific reports, 12(1), 2378.


