

Resource Summary Report

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Lab Streaming Layer

RRID:SCR_017631

Type: Tool

Proper Citation

Lab Streaming Layer (RRID:SCR_017631)

Resource Information

URL: <https://github.com/sccn/labstreaminglayer>

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Description: System for unified collection of measurement time series in research experiments that handles networking, time synchronization, near real time access as well as optionally centralized collection, viewing and disk recording of data. System for synchronizing streaming data for live analysis or recording.

Abbreviations: LSL

Synonyms: Lab Streaming Layer

Resource Type: software resource, software application

Keywords: Synchronizing, streaming, data, live, analysis, recording, collection, time, series, EEG

Funding: Army Research Laboratory ;
NINDS R01 NS047293

Availability: Free, Freely available

Resource Name: Lab Streaming Layer

Resource ID: SCR_017631

Record Creation Time: 20220129T080336+0000

Record Last Update: 20260801T191110+0000

Ratings and Alerts

No rating or validation information has been found for Lab Streaming Layer.

No alerts have been found for Lab Streaming Layer.

Data and Source Information

Source: [SciCrunch Registry](#)

Usage and Citation Metrics

We found 67 mentions in open access literature.

Listed below are recent publications. The full list is available at [RRID](#) .

Nolte D, et al. (2025) Combining EEG and eye-tracking in virtual reality: Obtaining fixation-onset event-related potentials and event-related spectral perturbations. *Attention, perception & psychophysics*, 87(1), 207.

Khatri UU, et al. (2025) Personalized whole-brain activity patterns predict human corticospinal tract activation in real-time. *Brain stimulation*, 18(1), 64.

Shehabi S, et al. (2025) Individual Differences in Cognition and Perception Predict Neural Processing of Speech in Noise for Audiometrically Normal Listeners. *eNeuro*, 12(4).

Lor CS, et al. (2025) SpiderPhy dataset: A multimodal dataset of Physiological, Psychometric and Behavioral Responses to fear stimuli. *Scientific data*, 12(1), 599.

Cheng X, et al. (2025) Promoting Social Connectedness Through Interbrain Neurofeedback. *Annals of the New York Academy of Sciences*, 1554(1), 267.

Molina-Cantero AJ, et al. (2025) Evaluating the effectiveness of integrating biofeedback in the treatment of aggressive outbursts (BRET-IA2): A study protocol. *PloS one*, 20(7), e0327361.

Chen X, et al. (2025) Walking Modulates Active Auditory Sensing. *The Journal of neuroscience : the official journal of the Society for Neuroscience*, 45(45).

Kisker J, et al. (2025) Comparative analysis of early visual processes across presentation modalities: The event-related potential evoked by real-life, virtual reality, and planar objects. *Cognitive, affective & behavioral neuroscience*, 25(4), 1022.

Yasuhara M, et al. (2025) Error-related potentials during multitasking involving sensorimotor control: an ERP and offline decoding study for brain-computer interface. *Frontiers in human neuroscience*, 19, 1516721.

Kisker J, et al. (2025) Visual information processing of 2D, virtual 3D and real-world objects marked by theta band responses: Visuospatial processing and cognitive load as a function of modality. *The European journal of neuroscience*, 61(1), e16634.

Gowda HT, et al. (2025) A database of upper limb surface electromyogram signals from demographically diverse individuals. *Scientific data*, 12(1), 517.

Bhadra K, et al. (2025) Learning to operate an imagined speech Brain-Computer Interface involves the spatial and frequency tuning of neural activity. *Communications biology*, 8(1), 271.

Nicklas P, et al. (2025) A symphony of functioning: Assessing the interplay of cognition, movement, and visual processing in adolescents on the autism spectrum using mobile brain-body imaging (MoBI). *Research square*.

Liu H, et al. (2025) A Novel Real-time Phase Prediction Network in EEG Rhythm. *Neuroscience bulletin*, 41(3), 391.

Wachsmann FD, et al. (2025) Temporal modulation of tactile perception during balance control. *Scientific reports*, 15(1), 17380.

Raja V, et al. (2025) Ecological Resonance Is Reflected in Human Brain Activity. *Psychophysiology*, 62(9), e70136.

Ausili SA, et al. (2025) Sound Localization with Hearables in Transparency Mode. *Audiology research*, 15(3).

Poikonen H, et al. (2024) Math on cortex-enhanced delta phase synchrony in math experts during long and complex math demonstrations. *Cerebral cortex (New York, N.Y. : 1991)*, 34(2).

Wimmer M, et al. (2024) Multimodal decoding of error processing in a virtual reality flight simulation. *Scientific reports*, 14(1), 9221.

Cockx HM, et al. (2024) Freezing of gait in Parkinson's disease is related to imbalanced stopping-related cortical activity. *Brain communications*, 6(5), fcae259.