

# Resource Summary Report

Generated by [nidm-terms](#) on Sep 21, 2026

## kCSD-Matlab

RRID:SCR\_016424

Type: Tool

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### Proper Citation

kCSD-Matlab (RRID:SCR\_016424)

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### Resource Information

**URL:** <https://github.molgen.mpg.de/MPIBR-coattia/MatlabMain/tree/master/behaviorAnalysis/code/NSKtoolbox/externalToolboxes/kCSDv1>

**Proper Citation:** kCSD-Matlab (RRID:SCR\_016424)

**Description:** Software tool for analyzing recordings from multielectrodes. Source code for the Matlab implementation of the Kernel Current Source Density method. The method operates in one-, two-, and three-dimensional space to perform nonparametric estimation of transmembrane current sources from local field potentials recorded from arbitrarily distributed electrodes.

**Abbreviations:** kCSD

**Synonyms:** kernel Current Source Density

**Resource Type:** data analysis software, data processing software, software application, software resource

**Keywords:** analyzing, recording, data, multielectrode, transmembrane, current, source, estimate, kernel, source, density, method

**Availability:** Free, Available for download, Freely available

**Resource Name:** kCSD-Matlab

**Resource ID:** SCR\_016424

**License:** GNU General Public License

**Record Creation Time:** 20220129T080330+0000

**Record Last Update:** 20260919T195323+0000

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### Ratings and Alerts

No rating or validation information has been found for kCSD-Matlab.

No alerts have been found for kCSD-Matlab.

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## Data and Source Information

**Source:** [SciCrunch Registry](#)

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## Usage and Citation Metrics

We found 3 mentions in open access literature.

**Listed below are recent publications.** The full list is available at [nidm-terms](#) .

Vafaei A, et al. (2026) Laminar-specific control of response gain and orientation-tuning by parvalbumin-expressing inhibitory interneurons in primate visual cortex. Research square.

Romano V, et al. (2025) Stage-dependent cerebrocerebellar communication during sensorimotor processing. Nature communications, 16(1), 8812.

Bijanzadeh M, et al. (2018) Distinct Laminar Processing of Local and Global Context in Primate Primary Visual Cortex. Neuron, 100(1), 259.