

Resource Summary Report

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Brain Observatory Storage Service

RRID:SCR_017273

Type: Tool

Proper Citation

Brain Observatory Storage Service (RRID:SCR_017273)

Resource Information

URL: <https://bosssdb.org/>

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Description: Volumetric database for 3D and 4D neuroscience data. Database and Software Service for storing and sharing electron microscopy and x-ray microtomography data. Cloud based data storage service with public data available directly from cloud storage or through our API in a number of formats. This Data archive was established under the IARPA MICrONS Program, and is supported by the BRAIN Initiative Informatics Program.

Abbreviations: BossDB, bossDB, BOSS DB

Synonyms: Brain Observatory Storage Service, bossDB, Block and Object Storage Service, BOSSDB, Block and Object Storage Service Database, Brain Observatory Storage Service and Database, BossDB

Resource Type: image, service resource, data repository, storage service resource, 3d spatial image, data or information resource, database

Defining Citation: [DOI:10.1101/217745](https://doi.org/10.1101/217745)

Keywords: database, electron microscopy, xray, data, storage, archive, BRAIN Initiative, EM, XRM, XNH, ecosystem

Funding: BRAIN Initiative ;
NIMH R24 MH114785

Availability: Open

Resource Name: Brain Observatory Storage Service

Resource ID: SCR_017273

Alternate URLs: <https://github.com/jhuapl-boss/boss/>

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Record Creation Time: 20220129T080334+0000

Record Last Update: 20250401T061436+0000

Ratings and Alerts

No rating or validation information has been found for Brain Observatory Storage Service.

No alerts have been found for Brain Observatory Storage Service.

Data and Source Information

Source: [SciCrunch Registry](#)

Usage and Citation Metrics

We found 24 mentions in open access literature.

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

Iyer S, et al. (2024) The BRAIN Initiative data-sharing ecosystem: Characteristics, challenges, benefits, and opportunities. *eLife*, 13.

Guittari NK, et al. (2024) Nanoscale Connectomics Annotation Standards Framework. *ArXiv*.

Son R, et al. (2024) Morphomics via next-generation electron microscopy. *Journal of molecular cell biology*, 15(12).

Wildenberg G, et al. (2023) The Development of Synapses in Mouse and Macaque Primary Sensory Cortices. *bioRxiv : the preprint server for biology*.

Lackey EP, et al. (2023) Cerebellar circuits for disinhibition and synchronous inhibition. *bioRxiv : the preprint server for biology*.

Hawrylycz M, et al. (2023) A guide to the BRAIN Initiative Cell Census Network data ecosystem. *PLoS biology*, 21(6), e3002133.

Spirou GA, et al. (2023) High-resolution volumetric imaging constrains compartmental

models to explore synaptic integration and temporal processing by cochlear nucleus globular bushy cells. *eLife*, 12.

Jwa AS, et al. (2022) The spectrum of data sharing policies in neuroimaging data repositories. *Human brain mapping*, 43(8), 2707.

Osorno T, et al. (2022) Candelabrum cells are ubiquitous cerebellar cortex interneurons with specialized circuit properties. *Nature neuroscience*, 25(6), 702.

Hider R, et al. (2022) The Brain Observatory Storage Service and Database (BossDB): A Cloud-Native Approach for Petascale Neuroscience Discovery. *Frontiers in neuroinformatics*, 16, 828787.

Ishibashi M, et al. (2022) Analysis of rod/cone gap junctions from the reconstruction of mouse photoreceptor terminals. *eLife*, 11.

Sanchez M, et al. (2022) Connectomics Annotation Metadata Standardization for Increased Accessibility and Queryability. *Frontiers in neuroinformatics*, 16, 828458.

Bishop C, et al. (2021) CONFIRMS: A Toolkit for Scalable, Black Box Connectome Assessment and Investigation. Annual International Conference of the IEEE Engineering in Medicine and Biology Society. IEEE Engineering in Medicine and Biology Society. Annual International Conference, 2021, 2444.

Wildenberg G, et al. (2021) Partial connectomes of labeled dopaminergic circuits reveal non-synaptic communication and axonal remodeling after exposure to cocaine. *eLife*, 10.

Matelsky JK, et al. (2021) DotMotif: an open-source tool for connectome subgraph isomorphism search and graph queries. *Scientific reports*, 11(1), 13045.

Matelsky JK, et al. (2021) An Integrated Toolkit for Extensible and Reproducible Neuroscience. Annual International Conference of the IEEE Engineering in Medicine and Biology Society. IEEE Engineering in Medicine and Biology Society. Annual International Conference, 2021, 2413.

Witvliet D, et al. (2021) Connectomes across development reveal principles of brain maturation. *Nature*, 596(7871), 257.

Phelps JS, et al. (2021) Reconstruction of motor control circuits in adult *Drosophila* using automated transmission electron microscopy. *Cell*, 184(3), 759.

Matelsky JK, et al. (2020) A substrate for modular, extensible data-visualization. *Big data analytics*, 5.

Prasad JA, et al. (2020) A three-dimensional thalamocortical dataset for characterizing brain heterogeneity. *Scientific data*, 7(1), 358.