Resource Summary Report

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CBS High-Res Brain Processing Tools

RRID:SCR_009452
Type: Tool

Proper Citation

CBS High-Res Brain Processing Tools (RRID:SCR_009452)

Resource Information

URL: http://www.nitrc.org/projects/cbs-tools/

Proper Citation: CBS High-Res Brain Processing Tools (RRID:SCR_009452)

Description: A fully automated processing pipeline for cortical analysis of structural MR images at a resolution of up to 400??????m, including skull stripping, whole brain segmentation, cortical extraction, surface inflation and mapping, as well as dedicated tools for profile estimation across the cortical thickness. The tools are released as a set of plug-ins for the MIPAV software package and the JIST pipeline environment. They are therefore cross-platform and compatible with a wide variety of file formats.

Abbreviations: CBS High-Res Brain Processing Tools

Resource Type: software resource

Keywords: magnetic resonance

Funding:

Availability: Free

Resource Name: CBS High-Res Brain Processing Tools

Resource ID: SCR_009452

Alternate IDs: nlx_155596

Record Creation Time: 20220129T080253+0000

Record Last Update: 20250420T014453+0000

Ratings and Alerts

No rating or validation information has been found for CBS High-Res Brain Processing Tools.

No alerts have been found for CBS High-Res Brain Processing Tools.

Data and Source Information

Source: SciCrunch Registry

Usage and Citation Metrics

We found 20 mentions in open access literature.

Listed below are recent publications. The full list is available at NIF.

Huber LR, et al. (2021) LayNii: A software suite for layer-fMRI. NeuroImage, 237, 118091.

van Dijk JA, et al. (2021) Validating Linear Systems Analysis for Laminar fMRI: Temporal Additivity for Stimulus Duration Manipulations. Brain topography, 34(1), 88.

van Dijk JA, et al. (2020) Linear systems analysis for laminar fMRI: Evaluating BOLD amplitude scaling for luminance contrast manipulations. Scientific reports, 10(1), 5462.

Gau R, et al. (2020) Resolving multisensory and attentional influences across cortical depth in sensory cortices. eLife, 9.

Zikidi K, et al. (2020) Grey-matter abnormalities in clinical high-risk participants for psychosis. Schizophrenia research, 226, 120.

Kirilina E, et al. (2020) Superficial white matter imaging: Contrast mechanisms and whole-brain in vivo mapping. Science advances, 6(41).

Fracasso A, et al. (2018) Laminar imaging of positive and negative BOLD in human visual cortex at 7T. NeuroImage, 164, 100.

Rowley CD, et al. (2018) Altered Intracortical T1-Weighted/T2-Weighted Ratio Signal in Huntington's Disease. Frontiers in neuroscience, 12, 805.

Kuehn E, et al. (2017) Body Topography Parcellates Human Sensory and Motor Cortex. Cerebral cortex (New York, N.Y. : 1991), 27(7), 3790.

Rowley CD, et al. (2017) Age-related mapping of intracortical myelin from late adolescence to middle adulthood using T1 -weighted MRI. Human brain mapping, 38(7), 3691.

Keuken MC, et al. (2017) Effects of aging on T?, T?*, and QSM MRI values in the subcortex.

Brain structure & function, 222(6), 2487.

Waehnert MD, et al. (2016) A subject-specific framework for in vivo myeloarchitectonic analysis using high resolution quantitative MRI. NeuroImage, 125, 94.

Tardif CL, et al. (2016) Open Science CBS Neuroimaging Repository: Sharing ultra-high-field MR images of the brain. NeuroImage, 124(Pt B), 1143.

Dinse J, et al. (2015) A cytoarchitecture-driven myelin model reveals area-specific signatures in human primary and secondary areas using ultra-high resolution in-vivo brain MRI. NeuroImage, 114, 71.

Rowley CD, et al. (2015) Assessing intracortical myelin in the living human brain using myelinated cortical thickness. Frontiers in neuroscience, 9, 396.

Gorgolewski KJ, et al. (2015) A high resolution 7-Tesla resting-state fMRI test-retest dataset with cognitive and physiological measures. Scientific data, 2, 140054.

Tardif CL, et al. (2015) Multi-contrast multi-scale surface registration for improved alignment of cortical areas. NeuroImage, 111, 107.

Waehnert MD, et al. (2014) Anatomically motivated modeling of cortical laminae. NeuroImage, 93 Pt 2, 210.

Mestres-Missé A, et al. (2014) Dorsomedial striatum involvement in regulating conflict between current and presumed outcomes. NeuroImage, 98, 159.

Bazin PL, et al. (2014) A computational framework for ultra-high resolution cortical segmentation at 7Tesla. NeuroImage, 93 Pt 2, 201.