Resource Summary Report

Generated by T1D on Aug 1, 2026

Simulated DW-MRI Brain Data Sets for Quantitative Evaluation of Estimated Fiber Orientations

RRID:SCR_014168
Type: Tool

Proper Citation

Simulated DW-MRI Brain Data Sets for Quantitative Evaluation of Estimated Fiber Orientations (RRID:SCR_014168)

Resource Information

URL: http://www.nitrc.org/projects/sim_dwi_brain/

Proper Citation: Simulated DW-MRI Brain Data Sets for Quantitative Evaluation of Estimated Fiber Orientations (RRID:SCR_014168)

Description: This resource provides simulated DW-MRI brain images and quantitative tools for evaluating the performance of diffusion analysis methods in terms of fiber orientation estimation and false-positive/-negative fiber rates, which are of fundamental importance to tractography based studies. DW data was generated using a multi-tensor model at SNRs of 9, 18 and 36, for sets of 20, 30, 40, 60, 90 and 120 gradient directions. For each combination of SNR and gradient direction set, 10 realizations of data are provided. All data is simulated with a diffusion-weighting of b=1000, as is common for clinical acquisitions.

Resource Type: image collection, data or information resource

Keywords: brain image, dw mri, diffusion analysis

Resource Name: Simulated DW-MRI Brain Data Sets for Quantitative Evaluation of Estimated Fiber Orientations

Resource ID: SCR_014168

License: Data License

Record Creation Time: 20220129T080319+0000

Record Last Update: 20260801T042725+0000

Ratings and Alerts

No rating or validation information has been found for Simulated DW-MRI Brain Data Sets for Quantitative Evaluation of Estimated Fiber Orientations.

No alerts have been found for Simulated DW-MRI Brain Data Sets for Quantitative Evaluation of Estimated Fiber Orientations.

Data and Source Information

Source: SciCrunch Registry

Usage and Citation Metrics

We found 1 mentions in open access literature.

Listed below are recent publications. The full list is available at T1D .

Wilkins B, et al. (2015) Fiber estimation and tractography in diffusion MRI: development of simulated brain images and comparison of multi-fiber analysis methods at clinical b-values. NeuroImage, 109, 341.