Resource Summary Report

Generated by FDI Lab - SciCrunch.org on Apr 15, 2025

Pythagorean Displacement and Motion Regressors

RRID:SCR_002525
Type: Tool

Proper Citation

Pythagorean Displacement and Motion Regressors (RRID:SCR_002525)

Resource Information

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

Proper Citation: Pythagorean Displacement and Motion Regressors (RRID:SCR_002525)

Description: Matlab script that uses the Pythagorean Theorem to calculate head motion and position, while preserving degrees of freedom. The motion parameters output by SPM (rp*.txt) estimate head position relative to the first volume in 3D translation and 3D rotation, which are often entered as a nuisance regressor during individual-level statistics. Regressing the total displacement and relative position can potentially explain more variance in voxel-level BOLD signals that is related to head movement during an fMRI experiment.

Abbreviations: Pythagorean Displacement and Motion Regressors

Resource Type: software resource

Keywords: algorithm, magnetic resonance, matlab, pythagorean theorem, head, motion, position, fmri

Funding:

Availability: GNU General Public License

Resource Name: Pythagorean Displacement and Motion Regressors

Resource ID: SCR_002525

Alternate IDs: nlx_155931

Record Creation Time: 20220129T080213+0000

Record Last Update: 20250410T064914+0000

Ratings and Alerts

No rating or validation information has been found for Pythagorean Displacement and Motion Regressors.

No alerts have been found for Pythagorean Displacement and Motion Regressors.

Data and Source Information

Source: SciCrunch Registry

Usage and Citation Metrics

We found 5 mentions in open access literature.

Listed below are recent publications. The full list is available at FDI Lab - SciCrunch.org.

Vaden KI, et al. (2022) Evidence for cortical adjustments to perceptual decision criteria during word recognition in noise. NeuroImage, 253, 119042.

Paul TK, et al. (2021) Multi-attribute decision making method using advanced Pythagorean fuzzy weighted geometric operator and their applications for real estate company selection. Heliyon, 7(6), e07340.

Benboujja F, et al. (2021) Quantitative evaluation of the human vocal fold extracellular matrix using multiphoton microscopy and optical coherence tomography. Scientific reports, 11(1), 2440.

Christodoulou C, et al. (2020) Live-animal imaging of native haematopoietic stem and progenitor cells. Nature, 578(7794), 278.

Vaden KI, et al. (2017) Cingulo-opercular activity affects incidental memory encoding for speech in noise. NeuroImage, 157, 381.