

# Resource Summary Report

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## Wavelet Analysis of Image Registration

RRID:SCR\_000172

Type: Tool

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### Proper Citation

Wavelet Analysis of Image Registration (RRID:SCR\_000172)

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### Resource Information

**URL:** <https://www.loni.usc.edu/research/software?name=WAIR>

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**Description:** A software tool for the quantitative analysis of various n-dimensional (n-D) image registration techniques. The series of 'C' subroutines which comprise the WAIR library can be easily incorporated into the user's site specific programs and adapted to their particular needs. Wavelet-space triangle analysis is applicable for studying a family of warps on single or multiple n-D data sets. For each data set the WAIR routine assigns a positive real number to every warp alignment in the family, and the best warp for the given data will be the one with the smallest value. It uses the original data prior to warping and the target of the warp in determining warp ranking in reduced wavelet space. Cluster group classification (CGC) is applicable for analyzing the overall performance of a family of warps of a group of data sets. A single number is assigned to each registration alignment, based on its group-clustering characteristics. Spread group classification (SGC) gives preference to registration techniques that spread apart baseline versus activation functional signal for group data.

**Abbreviations:** WAIR

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

**Keywords:** image analysis, cluster group classification, spread group classification, Java, warp, wavelet space triangle analysis

**Funding:** NIBIB 9P41EB015922-15

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

**Resource Name:** Wavelet Analysis of Image Registration

**Resource ID:** SCR\_000172

**Alternate IDs:** nif-0000-00357

**Old URLs:** <http://www.loni.usc.edu/Software/WAIR>

**License:** <http://loni.usc.edu/Software/license.php>

**License URLs:** <http://loni.usc.edu/Software/license.php>

**Record Creation Time:** 20220129T080200+0000

**Record Last Update:** 20260803T040249+0000

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## Ratings and Alerts

No rating or validation information has been found for Wavelet Analysis of Image Registration.

No alerts have been found for Wavelet Analysis of Image Registration.

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## Data and Source Information

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

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## Usage and Citation Metrics

We found 1 mentions in open access literature.

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

Boehringer R, et al. (2017) Chronic Loss of CA2 Transmission Leads to Hippocampal Hyperexcitability. Neuron, 94(3), 642.