

Resource Summary Report

Generated by [FDI Lab - SciCrunch.org](https://FDILab.org) on Apr 18, 2025

Robust Biological Parametric Mapping

RRID:SCR_009642

Type: Tool

Proper Citation

Robust Biological Parametric Mapping (RRID:SCR_009642)

Resource Information

URL: <http://www.nitrc.org/projects/rbpm/>

Proper Citation: Robust Biological Parametric Mapping (RRID:SCR_009642)

Description: To enable widespread application of the Biological parametric mapping (BPM) approach, they introduce robust regression and non-parametric regression in the neuroimaging context of application of the general linear model. Biological parametric mapping (BPM) has extended the widely popular statistical parametric approach to enable application of the general linear model to multiple image modalities (both for regressors and regressands) along with scalar valued observations. This approach offers great promise for direct, voxelwise assessment of structural and functional relationships with multiple imaging modalities. However, as presented, the biological parametric mapping approach is not robust to outliers and may lead to invalid inferences (e.g., artifactual low p-values) due to slight mis-registration or variation in anatomy between subjects.

Abbreviations: Robust Biological Parametric Mapping

Resource Type: software resource

Keywords: magnetic resonance, neuroimaging

Funding:

Availability: GNU Lesser General Public License

Resource Name: Robust Biological Parametric Mapping

Resource ID: SCR_009642

Alternate IDs: nlx_155944

Record Creation Time: 20220129T080254+0000

Record Last Update: 20250410T065853+0000

Ratings and Alerts

No rating or validation information has been found for Robust Biological Parametric Mapping.

No alerts have been found for Robust Biological Parametric Mapping.

Data and Source Information

Source: [SciCrunch Registry](#)

Usage and Citation Metrics

We found 3 mentions in open access literature.

Listed below are recent publications. The full list is available at [FDI Lab - SciCrunch.org](#).

Araque Caballero MÁ, et al. (2015) Mapping 3-year changes in gray matter and metabolism in A β -positive nondemented subjects. *Neurobiology of aging*, 36(11), 2913.

Premi E, et al. (2014) Multimodal FMRI resting-state functional connectivity in granulin mutations: the case of fronto-parietal dementia. *PloS one*, 9(9), e106500.

Yang X, et al. (2012) Biological parametric mapping accounting for random regressors with regression calibration and model II regression. *NeuroImage*, 62(3), 1761.