MRTOOL

a SPM-based toolbox for structural MR imaging analyses

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OVERVIEW

In view of the increasing availability of MR imaging data for clinical investigations, we introduce MRTool, a comprehensive collection of analysis tools in the form of a SPM12 plugin toolbox.

At the current stage, it consists of four modules (Fig. 1).

'T1-w/T2-w image' for the generation of the multimodal ratio image (1). 'Optimized Bias Correction parameters' for the definition of the optimal set of input parameters (regularization and FWHM) required during the bias correction of MR images in SPM12 (2). 'Brain Extraction' for the generation of skull-stripped images (3). 'Optimized Normalization' for an enhanced spatial registration and segmentation of elderly subjects characterized by a marked ventricular enlargement and advanced atrophy (4).
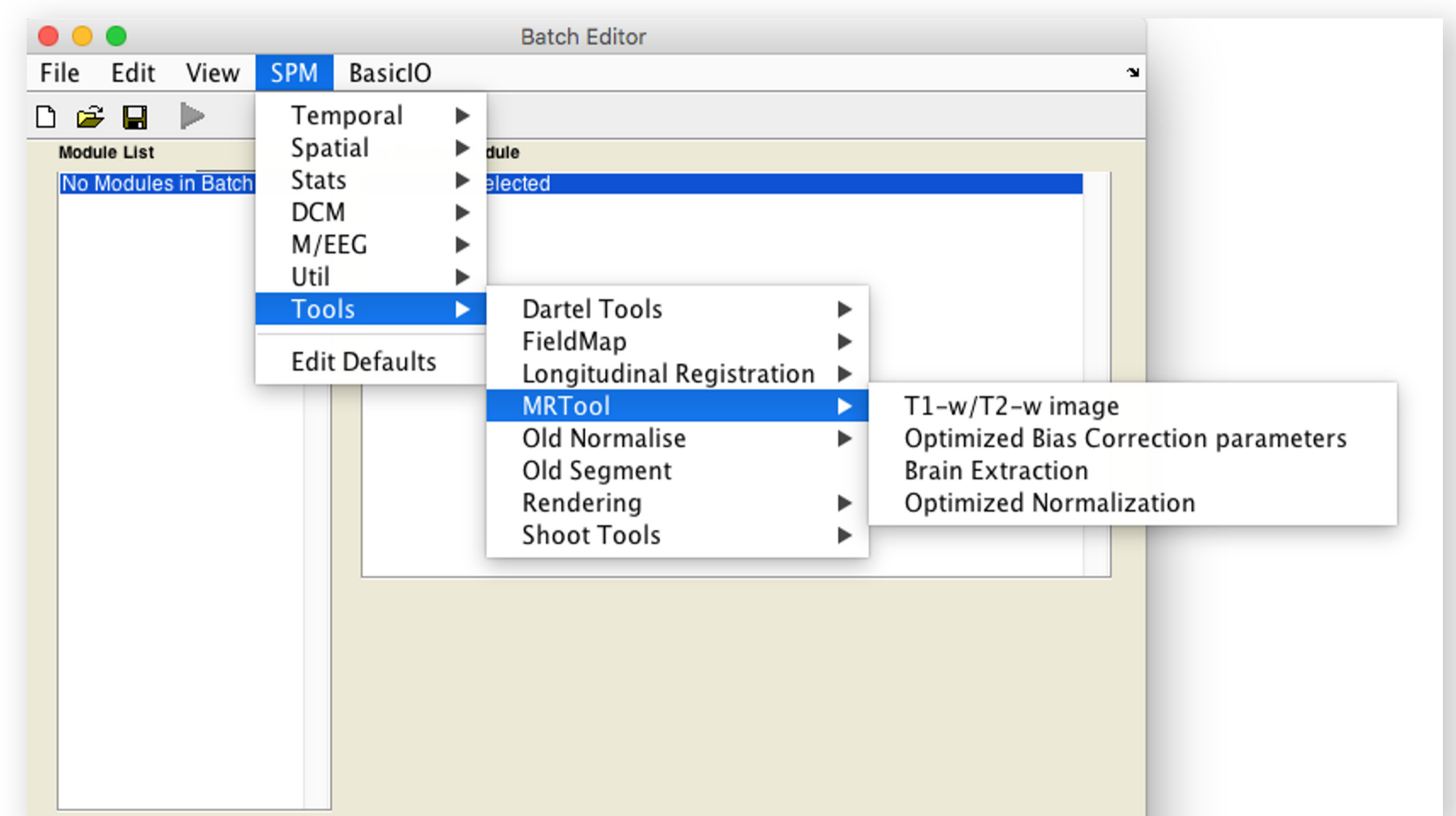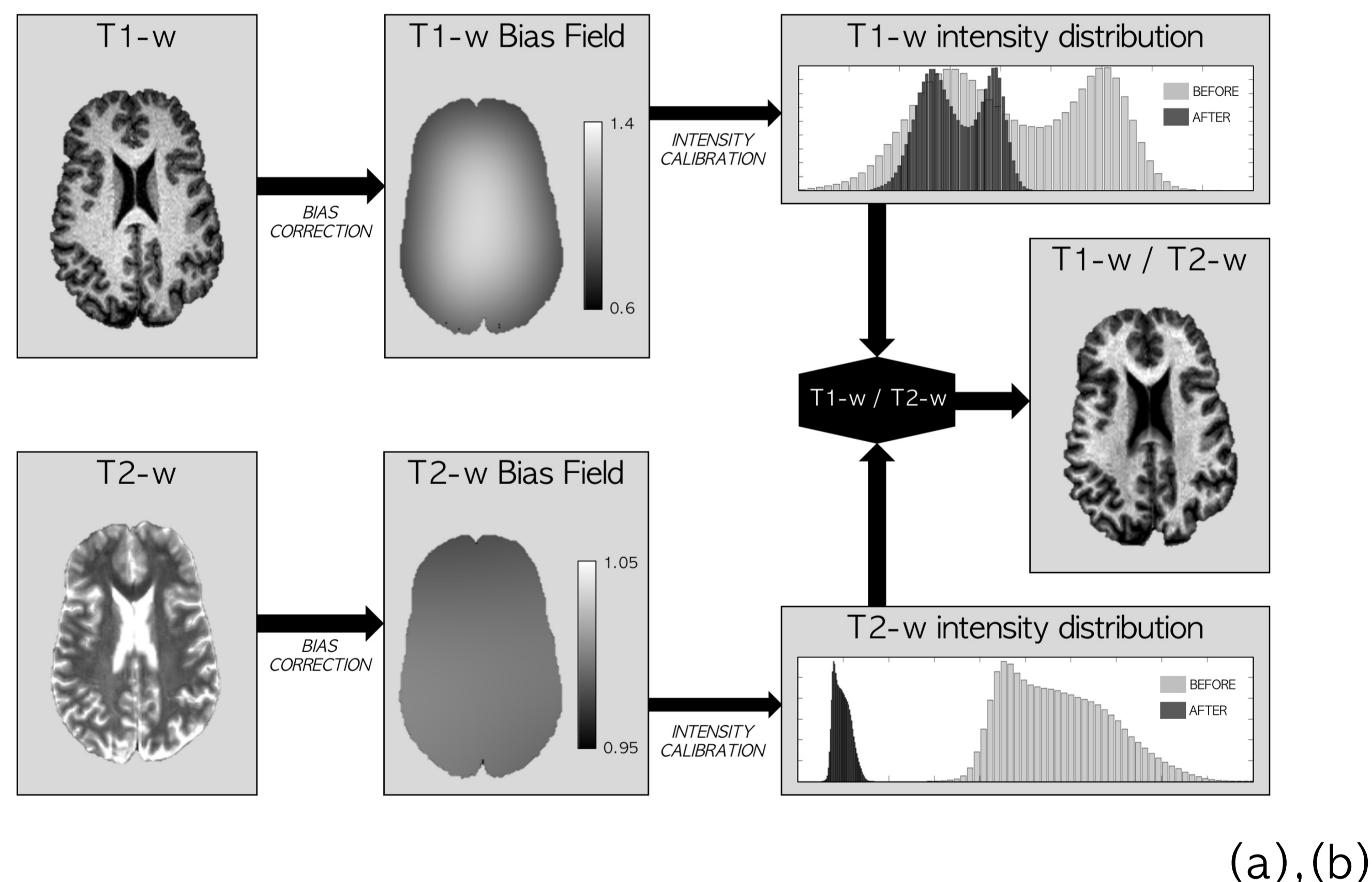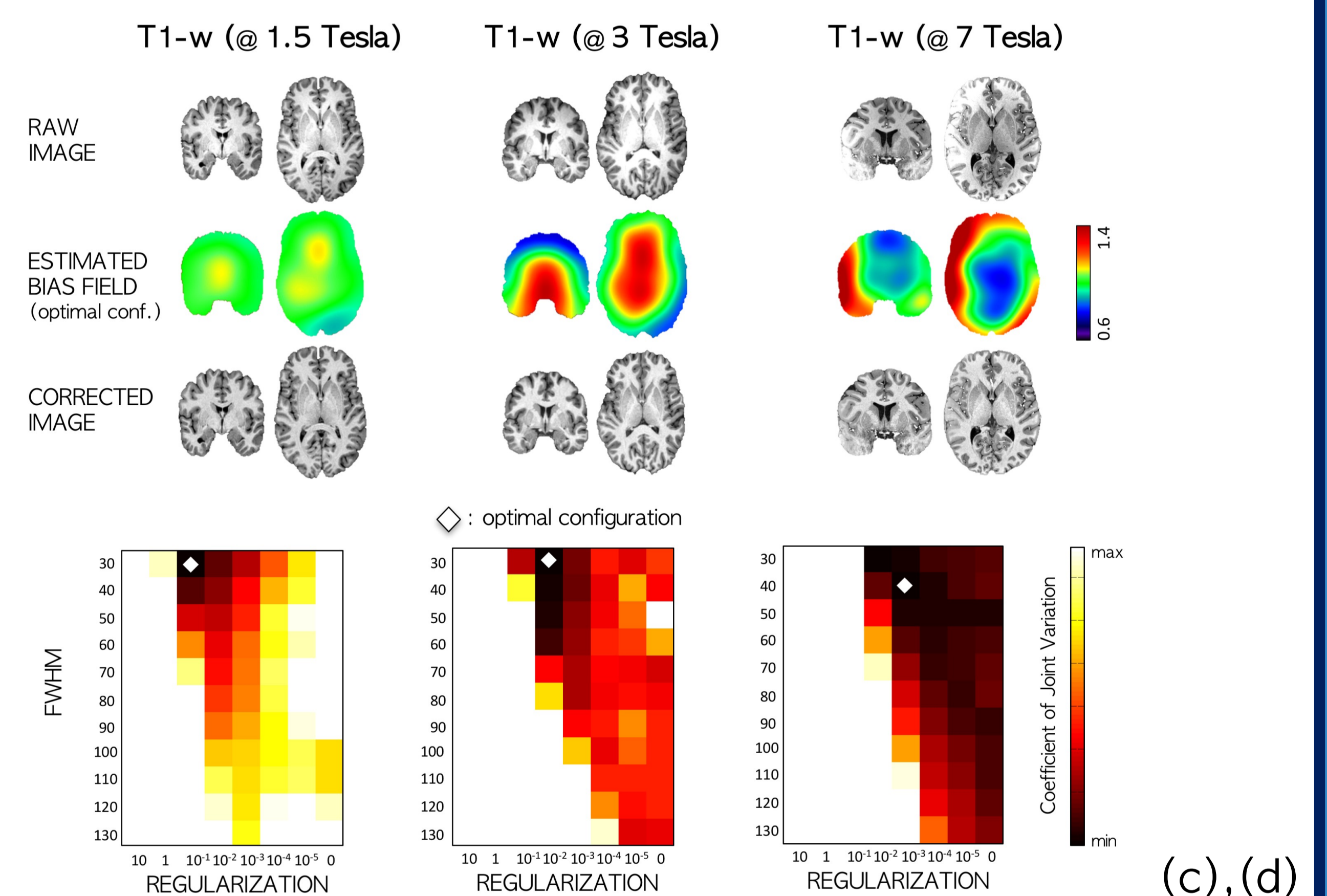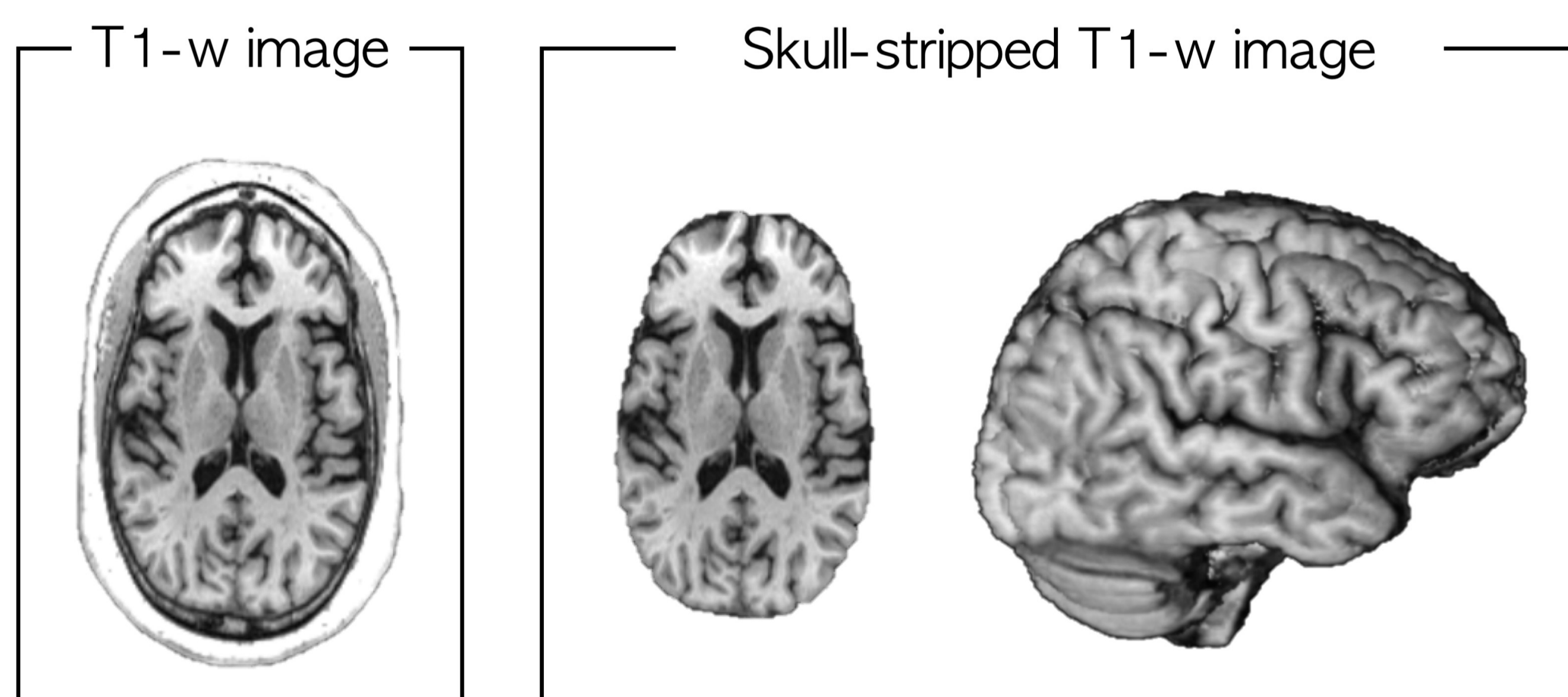

FIG. 1 – Batch editor of SPM12

T1-w/T2-w image (1)

(a),(b)

Optimized Bias Correction parameters (2)
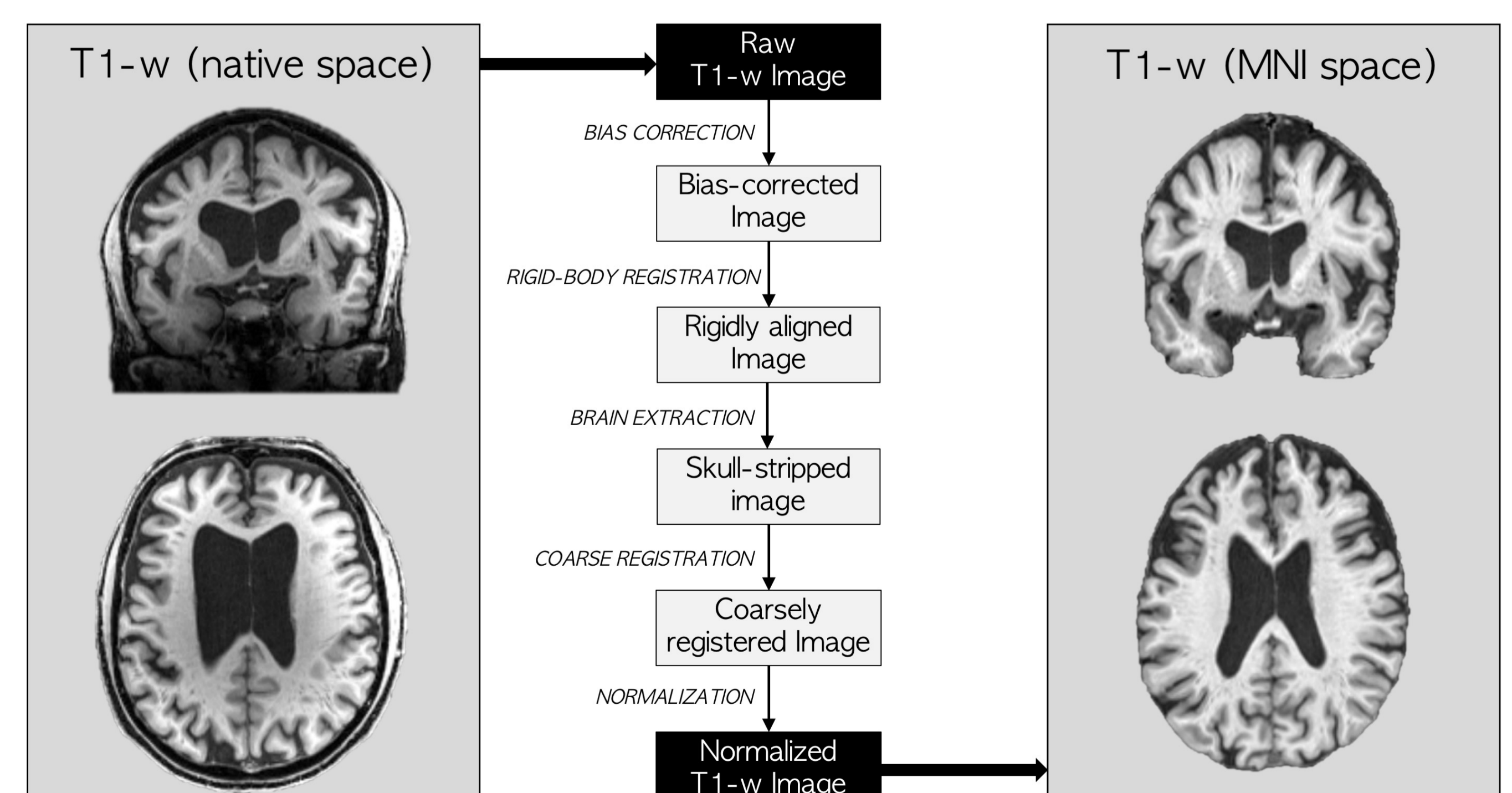

(c),(d)

Brain Extraction (3)

Optimized Normalization (4)

NEW RELEASE

.... for more information, please see **poster 3782**

(a) Ganzetti et al. 2014 – Frontiers in Human Neuroscience
(b) Ganzetti et al. 2015 - Neuroradiology
(c) Ganzetti et al. 2016 – Frontiers in Neuroinformatics
(d) Ganzetti et al. 2016 - Neuroinformatics

MRTool 1.4.1: **www.nitrc.org/projects/mrtool**
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