Reviewer Report

Title: CAT â€“ A Computational Anatomy Toolbox for the Analysis of Structural MRI Data

Version: Original Submission **Date:** 3/21/2024

Reviewer name: Chris Armit

Reviewer Comments to Author:

This Technical Note describes the Computational Anatomy Toolbox (CAT) software tool, which includes a Graphical User Interface that can be used for morphometric analysis of Structural MRI data. The CAT software tool is impressive, and enables voxel-based and surface-based morphometric analysis to be accomplished on Structural MRI data, and also voxel-based tissue segmentation and surface mesh generation to be applied to these 3D imaging datasets. The authors helpfully illustrate the utility of the Computational Anatomy Toolbox (CAT) using T1-weighted structural brain images from the Alzheimer's Disease Neuroimaging Initiative (ADNI) database.This is an excellent, freely available tool for the Neuroimaging community and the authors are to be commended for developing this impressive software tool.Minor commentsI first attempted to launch the CAT software tool on macOS 14.0 (Sonoma) with Apple M1 chip, and on the command line I received the following message: "spm12" is damaged and can't be opened. You should move it to the Bin.I additionally tested the CAT software tool on macOS 12.6 (Monterey) with Intel chip, and I was able to run the CAT software tool on this platform.A minor criticism is that the installation instructions in the supporting Readme file for archive [CAT12.9_R2023b_MCR_Mac_arm64.zip], which runs on macOS with Intel chip, only details how to install the SPM (Statistical Parametric Mapping) software tool. The CAT software tool needs to be downloaded separately and then moved into the directory of the SPM toolbox, and these installation instructions are included in the supporting CAT software documentation (https://neuro-jena.github.io/cat12-help/#get_started)With the issues I encountered in installation, I invite the authors to list the System Requirements - specifically the Operating Systems that are needed to run the CAT software tool - in the GigaScience manuscript and also in the supporting CAT software documentation.In addition, it would be particularly helpful if the instructions on how to install CAT in the context of SPM were included in the supporting Readme files for the Computational Anatomy Toolbox (CAT) zip archives.

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