Image processing and analysis overview

The ABCD Data Analysis and Informatics Resource Center (DAIRC) performs centralized processing and analysis of MRI data from each modality (sMRI, dMRI, rs-fMRI, and task-fMRI). We use a collection of processing steps contained within the Multi-Modal Processing Stream (MMPS), a software package developed and maintained in-house at the Center for Multimodal Imaging and Genetics (CMIG) at the University of California, San Diego (UCSD) that provides large-scale, standardized processing and analysis of multimodality neuroimaging data on Linux workstations and compute clusters.

For more information:

ABCD image processing and analysis methods paper:
https://pubmed.ncbi.nlm.nih.gov/31415884/

ABCD Wiki: https://abcd-internal.ucsd.edu/confluence/pages/viewpage.action?pageId=33565877

Supporting files and software:

NDA ABCD Collection Supporting information: https://nda.nih.gov/edit_collection.html?id=2573

Miscellaneous ABCD tools: https://github.com/ABCD-STUDY

E-prime extraction functions: https://github.com/ABCD-STUDY/abcd_extract_eprime

AtlasTrack fiber tract atlas files: https://www.nitrc.org/projects/atlastrack

ABCD 2.0 processing pipeline Docker: https://www.nitrc.org/projects/mmps_docker/