

PManalyzer 2.0

Quick Start Guide

New to PManalyzer? Use this guide to learn the basics.

Section bar

Go from left to right to specify your different preferences and settings for Input, Computation, Plot, Video and Output

On/Off button for sections

For each section, you can turn the settings panel on and off. For "Input" and "Computation" this requires to load .mat data of a previous analysis

Select settings

Save or load your current settings, so that you can go back to any state you want

Help

Help

Get individual help for each section

Start Computation!

Start your computation

If all sections are set correctly the button will turn green and you can start the PCA

Settings panel

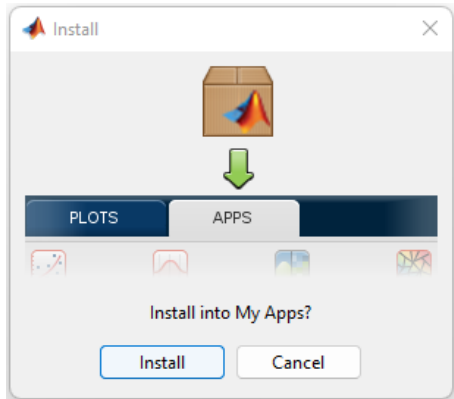
Specify different settings for the different sections

The screenshot shows the PManalyzer 2.0 software interface. At the top is a 'Section bar' with tabs for 'Input', 'Computation', 'Plots', 'Videos', and 'Output'. Below this is a toggle switch for 'Process input data' (currently 'On'). The main area is divided into two panels. The left panel, titled 'Input information', contains a 'Path' field, a file type dropdown set to '.CSV', a large file selection area with a folder icon and the text 'Drop files here or select from path', and a 'Sample-frequency [Hz]' input field. The right panel, titled 'Special data treatment', contains several checkboxes and dropdown menus: 'Delete columns (marker coordinates):' with a dropdown set to '[1:2]', 'Delete rows (time steps):' with a dropdown set to '[1:240, 500:1000]', 'Use gap filling:' with a dropdown set to 'All together', 'Pre-processing options:' with a dropdown set to '1. Pre-Processing: Center data towards center of mass!', 'Coordinate transformation:' with a dropdown set to '1. Coordinate transformation: Cartesian -> Spherical (3D)', and 'Data filter after read in:' with input fields for '3' (Order) and '10' (Cut-off) and a dropdown set to 'Butterworth'. On the far left, there is a 'Save/Load settings' panel with a 'Change to selected' button, 'SAVE' and 'Load' buttons, a 'NoSpaceNames' checkbox, and a 'Delete!' button. On the far right, there is a 'Help' button and a large 'Start Computation!' button. Below the 'Start Computation!' button is an 'Enable Extras' button.

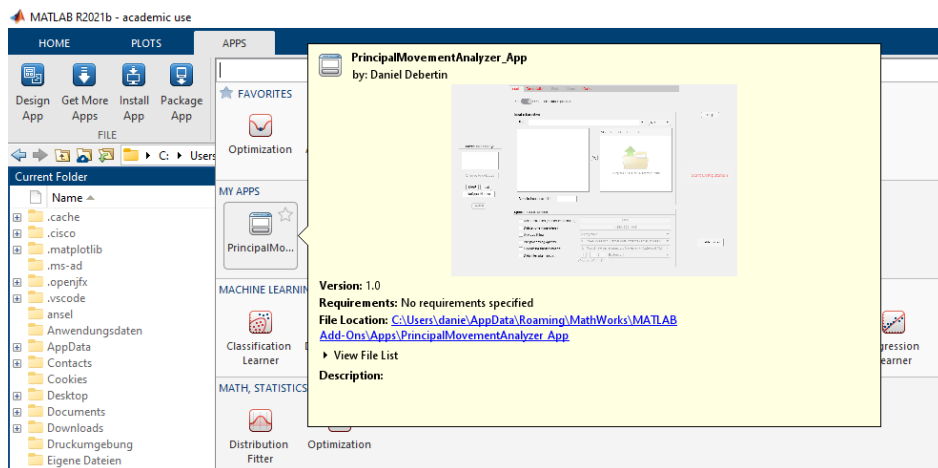
PManalyzer 2.0

Installation

Download and double click on  **PrincipalMovementAnalyzer_App.mlappinstall**



Find it under APPS > MY APPS in MATLAB



Requirements

You will need to have a Windows OS and an active **MATLAB** (The MathWorks, Natick, Massachusetts, United States) license and version **R2022b** or higher.

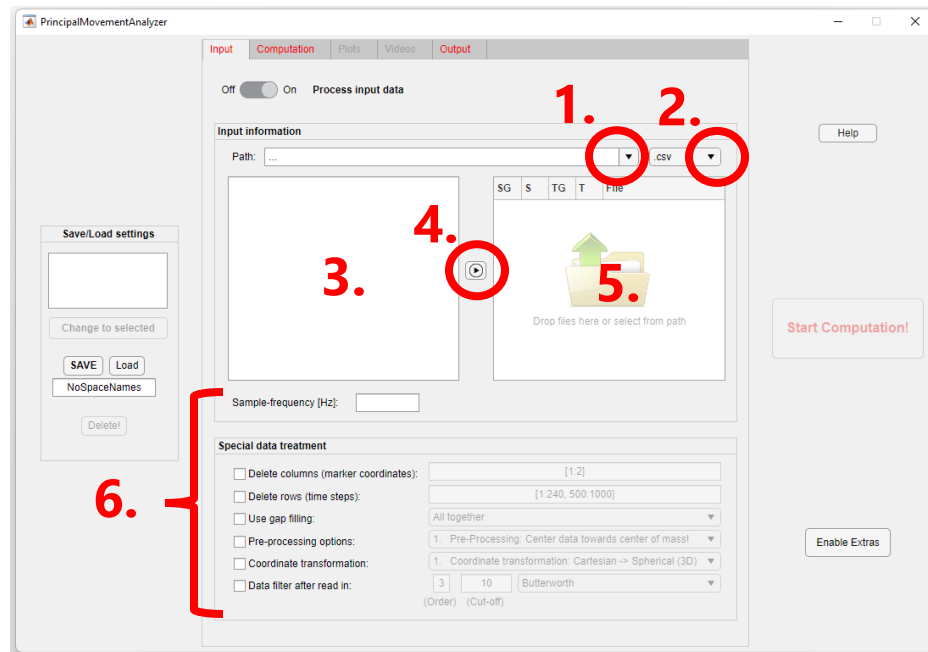
PManalyzer 2.0

Start your analysis

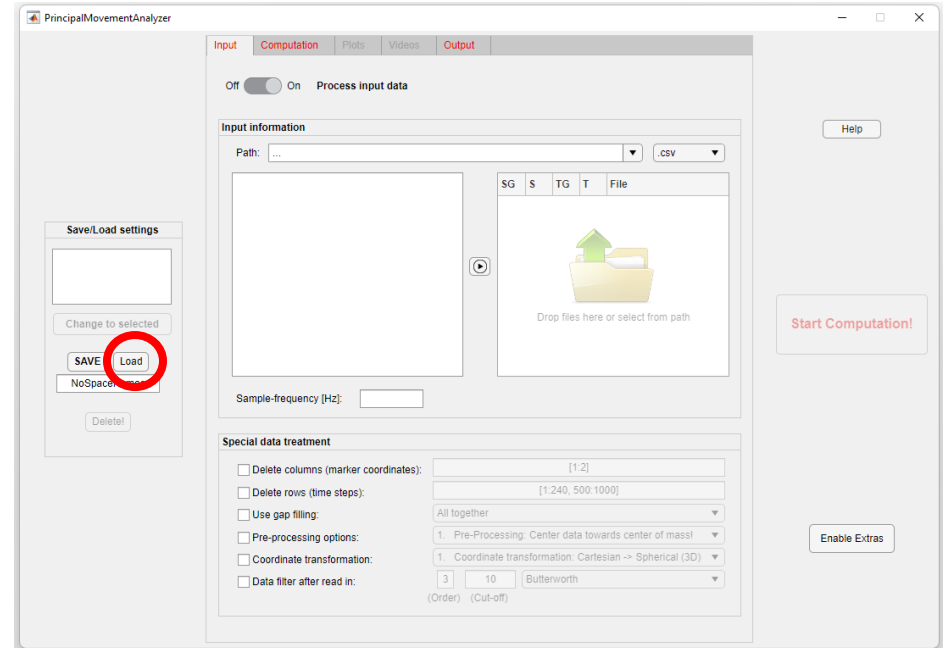
Option 1: Specify a path (1) and a file extension (2) for the files you would like to analyse. All files in this folder and its subfolders will be listed in (3). You can select them and proceed them for analysis by clicking on (4), so that they are displayed in (5).

Also set the sample frequency and possibly other data treatment functions (6).

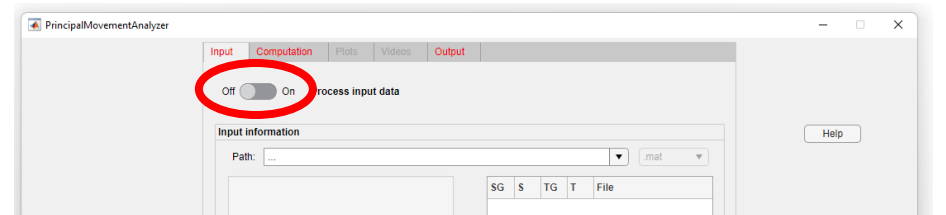
Option 2: Drag and drop your files directly into area (5).



Option 3: Use a formerly saved settings file to go back to a previous analysis, which also loads the input path and files. Click on "Load" under settings and select a valid settings file.



Option 4: Use a formerly saved input.mat data file of a previous analysis. Turn off the process switch and specify the path with the data file.



PManalyzer 2.0

Next steps with PManalyzer

- Select your preferences and settings for the tabs Computation, Plot, Videos and Output.
- Press “Start Computation” Button and follow printed text in the command Window of your MATLAB instance.
- Find your results in the specified output folder.

For detailed manual and example data visit:

https://www.uibk.ac.at/isw/forschung/research_teams/neurophysiology/pm_analyzer/software.html

Send us feedback

Something went better or worse than expected, you found a bug or have a suggestion for a new feature? Thanks a lot for contacting



Daniel Debertin, daniel.debertin@uibk.ac.at