Wave setup software guide

1. Introduction

Wave is a Python library for the processing of waveform accelerometery data. Wave provides an efficient and user-friendly way of processing data without the requirements of dedicated computer clusters. The library currently accepts accelerometry data from binary AX3 or GENEActiv files to give intensity and/or orientation of monitor statistics at specified time resolution(s). This is designed to be a more user-friendly version of pampro.

2. Requirements

Ensure your operating system meets the requirements below

System Specifications

The minimum suggested requirements for using Wave are:

- 4GB RAM
- 2GB hard drive space

Additional

- Whilst the above mentioned system specifications will suit the majority of processing needs, the larger the file, the more available resources are needed.
- The specifications should be adequate for file sizes up to 7 days, recording at 100Hz.
- If processing multiple files of 14 days at 100Hz, Wave might need more memory to be made available.
- This might be possible by closing other programs, however if this does not work, please check out the link below outlining how to free up virtual memory:
 - <u>https://www.windowscentral.com/how-change-virtual-memory-size-windows-10?amp</u>

3. Downloading Wave

Download the latest executable file from <u>https://github.com/MRC-</u> Epid/Wave/releases/tag/v1.0.0-Beta suitable for your operating system.

From the download page, click "Assets". It is only necessary to download the Wave.exe file which is compatible with your operating system.

(Latest release) ♥ v1.0.0-Beta -Φ- b38ff39 Compare ▼	Version 1.0.0-Beta Cobine released this 3 minutes ago · 10 commits to main since this release Testing instructions with compiled 32-bit, 64-bit, and macOS app.		
	Assets 5 Windows x64 bit		
	𝔅 Wave_x86-32.exe ◀ Windows x32 bit		
	Wave_macOS.app.tar Mac OS		
	Source code (zip)		
	Source code (tar.gz)		

Save to your computer (Some computers may be not be able to run this from the download folder).

We suggest saving directly to the C drive top level in a designated folder E.g C:\WAVE (or a top level folder on your mac)

Windows (C:) → WAVE ~ ♂ Search WAVE				
^	Name	Date modified	Туре	Size
*	🎦 Wave.exe	22/09/2021 14:41	Application	141,740 KB

DOUBLE CLICK ON Wave.exe TO LAUNCH THE SOFTWARE

Wave		- 🗆 🗙
View Help		
Files		
Data Files:	Submit Browse	
Output Folder:	Submit Browse	
Output Settings		
Monitor Type	Output Resolution (mins) Output Variables	
Axivity	1 A ENMO	^
◯ GeneActiv	✓ Roll ✓ Temperature	~
Processing Data Status		
		Submit
Output Folder: Select all Clear selection		

NOTE: It may take a couple of minutes for the software to open

Mac users: If you receive a security alert, please follow instructions below to add Wave to your trusted apps.

Open an app by overriding security settings

You can open an app that isn't allowed to open by manually overriding the settings in Security & Privacy preferences.

- In the Finder S on your Mac, locate the app you want to open.
- Most apps can be found in the Applications folder.
- Control-click the app icon, then choose Open from the shortcut menu.
- Click Open.
 The app is saved as an exception to your security settings, and you can open it in the future by double-clicking it, just as you can any authorised app.

PLEASE NOW FOLLOW THE GUIDE TO RUN AN EXAMPLE FILE THROUGH TO CHECK FUNCTIONALITY PRIOR TO THE WORKSHOP

If you experience any problems running this software, please contact us prior to the workshop on wamaa@mrc-epid.cam.ac.uk