

Sound File Cutter Upper

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Release 2010-01-12 – First release, please report bugs

This software is provided as-is without any guarantee that it will work. I'm willing to give some end-user support, but please read this document thoroughly and follow all the instructions before contacting me.

This software is provided free-of-charge for academic not-for-profit research. Please include appropriate acknowledgments in published papers.

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Purpose

This software takes a “.wav” sound file (PCM), and cuts it up, saving the non-silent portions as a series of short “.wav” files. It was designed for use with recordings my colleagues and I are collecting for databases of voice recordings for use in forensic-voice-comparison research. For this research, first save each task as a separate recording (of approximately ten minutes duration each), then save the right and the left channel from each task as separate recordings. The software expects single channel recordings.

Requirements

Matlab code version:

- installed and licenced version of Matlab
- installed and licenced version of Matlab Signal Processing Toolbox
- Windows XP

The software has been tested on 32 and 64 bit versions of Matlab R2008b and R2009b running under 32 and 64 bit versions of Windows XP respectively. You may have to make changes if you want to run

it on a different version of Matlab or using a different operating system. I will not provide end-user support for other versions of Matlab or other operating systems.

Compiled version:

- Matlab Compiler Runtime version 7.9 (this can be downloaded from my ftp site; however, you will need to ask me for the username and password - the licencing agreement doesn't allow it to be posted to a generally accessible location on the internet).
- 32 bit Windows XP

Installing and Running

Matlab code version:

Unzip the files in the archive [cut_up_soundfiles.zip](#) into a folder which is a *sister* to the [Sound Files](#) folder.

- To start the software, run [cut_up_soundfiles_script.m](#) or [cut_up_soundfiles_function.m](#) in Matlab.

Compiled version:

1. Install Matlab Compiler Runtime version 7.9
 2. Place [cut_up_soundfiles_pkg.exe](#) into a folder which is a *sister* to the [Sound Files](#) folder, and double click on [cut_up_soundfiles_pkg.exe](#).
- To start the software, double click on [cut_up_soundfiles.exe](#).

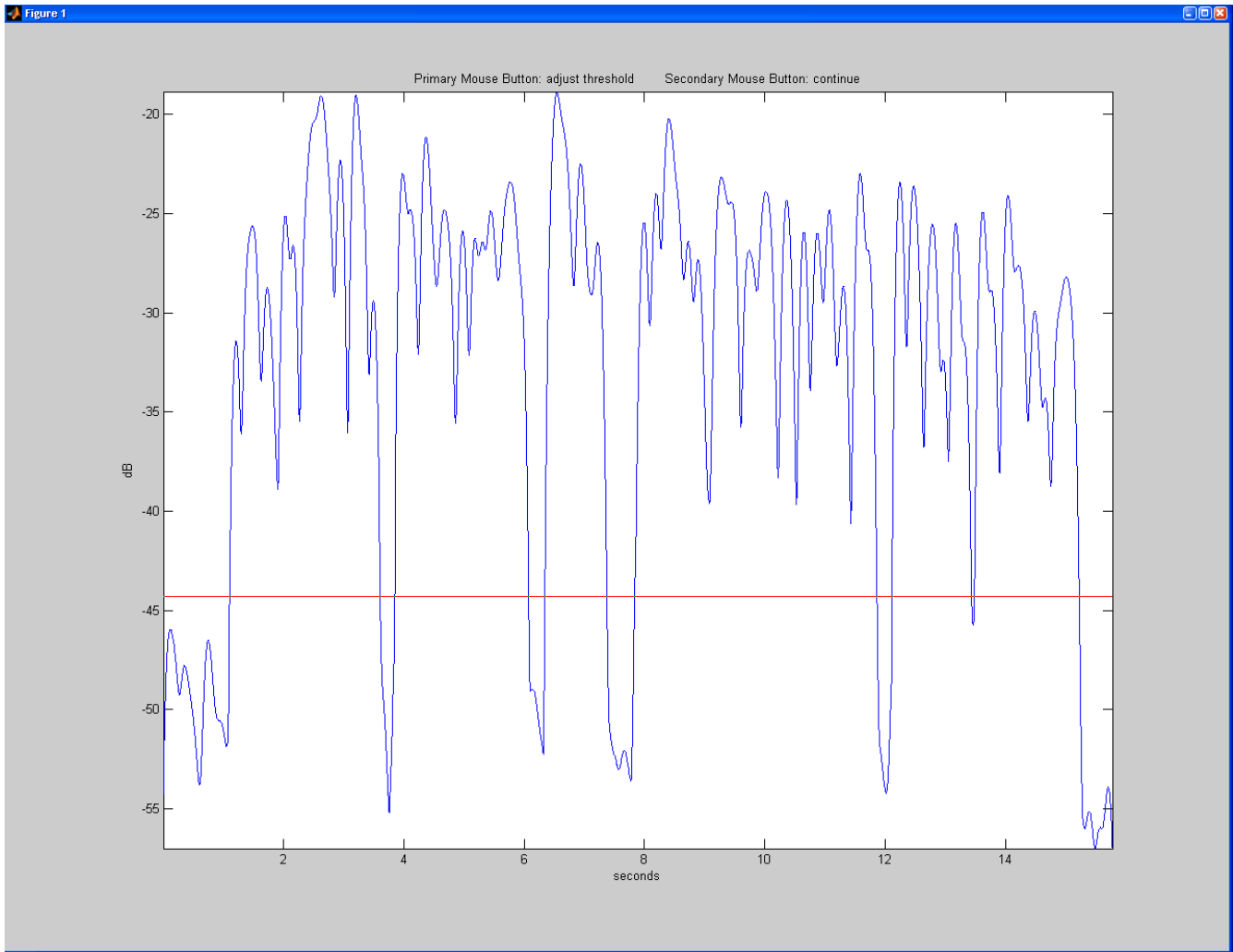
Operation

- Select the sound file to process.

- Wait while the sound file is read in and its running amplitude is calculated (this may take several minutes).

- You will see a display of the sound file's amplitude against time in blue, and a red horizontal line indicating the default cutoff value (see below). Portions of the sound file above the threshold (plus some padding before and after) will be saved as separate files. **Point and click with the primary mouse button to adjust the threshold value** (optional). **Click the secondary mouse button to proceed.**

– Wait while the portions of the original sound file are saved as separate files.



Output

– A folder with the same name as the original file will be created as a sister to the original file.

– The folder will contain a series of sound files with the following naming convention: **mm-ss-cc_mm-ss-cc.wav** where the **mm-ss-cc** indicate the time in minutes, seconds, and hundredths of seconds from the beginning of the original sound file. The first set indicate the start time and the second set the end time of the new file.