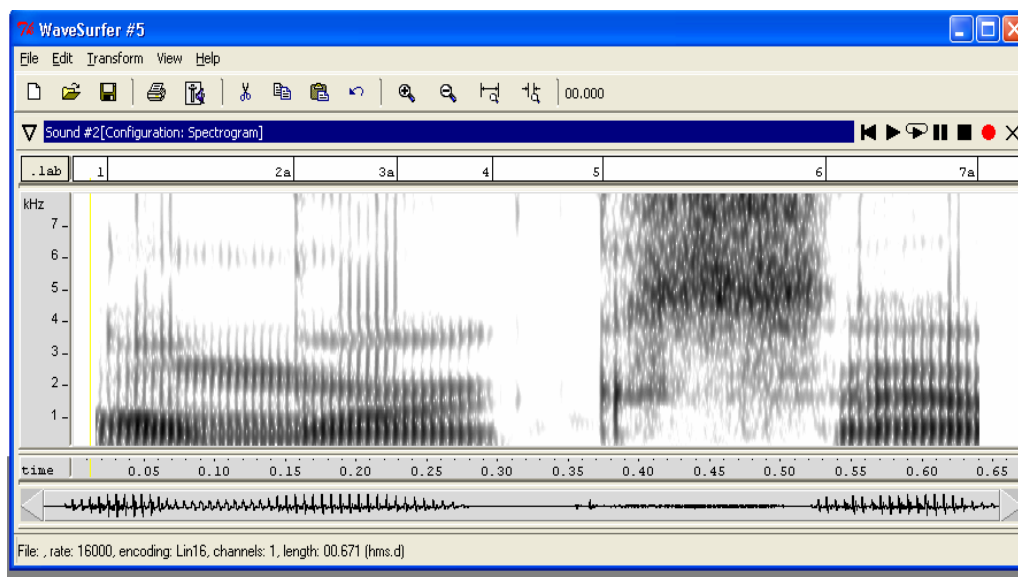


## How to measure vowel durations and export the information from WaveSurfer to MS Excel

It seems that there is no way to measure vowel durations automatically in WaveSurfer. Therefore, you have to find the boundary for onsets & offsets of vowels manually.

1. Open the soundfile in WaveSurfer.
2. Create Spectrogram Pane (Create Pane → Spectrogram).
3. Create Transcription Pane (Right click → Create Pane → Transcription).
4. Fine the onsets & offsets of vowels in spectrogram and label them in Transcription Pane. When you do this, find your own way to mark the offsets of the vowels. For example, you may include “a” in the label for vowel offsets.



5. Save your transcriptions (Right click when the cursor is on Transcription Pane → Save All Transcriptions). It seems that nothing happened. However, something happened.
6. Right click when the cursor is on Transcription Pane → Save Transcription As ... → Save the information (the file name has the “.lab” at the end).
7. Do the same things for exporting information from WaveSufer to Ms Excel.
8. Open the saved file in MS Excel (File → Open. Note that you have to change the files of type to “All Files”).
9. You will see “Text Import Wizard – Step 1 of 3” window. Check “Delimited” and click “Next”.
10. In “Delimiters” box, check “Tab” and “Space” and click “Next”.
11. In “Column data formant” box, “General” should be checked. Click “Next”.
12. Columns A & B correspond to the time of the previous label ends and that of the

current label starts. Column C corresponds to the label (i.e., Column B shows where the time starts for this label).

	A	B	C	D	E	F	G
1	0	0,024524		1			
2	0,024524	0,156061	2a				
3	0,156061	0,22889	3a				
4	0,22889	0,296516		4			
5	0,296516	0,374547		5			
6	0,374547	0,532094		6			
7	0,532094	0,639107	7a				
8							
9							
10							
11							
12							
13							
14							
15							
16							

13. Insert a column between B and C. In the cell C1, write down “= B1–A1”. Then, drag this cell down to the cell displaying times. You can fine the vowel durations (e.g., the rows having the labeling “a” in it) in this column.