Music 451A Supplementary Handout: Sharing Data

Tricks for Sharing individual averages and difference waveforms (version 2: 2014/03/11)

1. Make your average and difference waveform data
2. Export your data that you want to share to MATLAB, make clear and appropriate name (better to discuss that with your group to be consistent in style)

ex. kb10, kb15, kbdiff1, kb20, kb25, kbdiff2, etc.

3. Now save these variables in MATLAB .mat file

For example,

```
>> save('kb_s2_data', 'kb10', 'kb15', 'kbdiff1', 'kb20', 'kb25',
'kbdiff2');
>> save('js_s2_data', 'js10', 'js15', 'jsdiff1', 'js20', 'js25',
'jsdiff2');
>> save('hs_s2_data', 'hs10', 'hs15', 'hsdiff1', 'hs20', 'hs25',
'hsdiff2');
....
```

4. Read all the .mat files into somebody's MATLAB

```
>> load ('kb_s2_data');
>> load ('js_s2_data');
>> load ('hs_s2_data');
....
```

5. Average them on MATLAB

```
>> all10 = (kb10.F+js10.F+hs10.F+...)/(Number of datasets);
>> all15 = (kb15.F+js15.F+hs15.F+...)/(Number of datasets);
....
```

6. In Brainstorm, duplicate one of the subject data to get dummy place holder (Go to 'KB' for example, right click, select 'File' – 'Duplicate Subject' then rename 'KB_Copy' as 'GAVG'

7. You can delete single trial and raw files from this place holder dummy subject but leave Avg; type of files for each condition average and subtracted waveforms

8. Now, export each of them to MATLAB

(e.g., Avg; stim10 to a variable called gavg10, and so on)

9. In MATLAB, replace these with the average you made in MATLAB

```
>> gavg10.F = all10;
>> gavg15.F = all15;
....
```

10. Import the grand averaged data to Avg: file places be able to display in the Brainstorm (File -> Import from MATLAB, then select 'gavg10' and so on)