

Additional data for experiments on spatial release from masking in different room acoustic conditions

Related to publication:

Spatial release from masking under different reverberant conditions in young and elderly subjects: Effect of moving or stationary maskers at circular and radial conditions

Lukas Aspöck¹, Rhoddy Viveros Muñoz², Janina Fels²

¹Institute of Technical Acoustics, RWTH Aachen University,
Kopernikusstr. 5, D-52074, Aachen, Germany
las@akustik.rwth-aachen.de

²Medical Acoustics Group, Institute of Technical Acoustics, RWTH Aachen University,
Kopernikusstr. 5, D-52074, Aachen, Germany
rvm@akustik.rwth-aachen.de

May 8, 2019

Data download url:

<https://rwth-aachen.sciebo.de/s/0sLo3WHqNVASvK7>
(this data will be later published using a DOI)

This documents introduces the structure and the data included in this supplementary material. In total, it contains 70 files in 19 different folders. The total file size is 31 MB.

- The folder **RavenAnimationFiles** contains positions and orientations of virtual sound sources and receivers. While receiver and target sound source positions are always identical, the position and orientation of the distractor changes according to the experimental conditions defined in the paper.
- The folder **RavenDatabase** contains the the sound source directivity and the HRTF dataset for the receiver used in the experiments in the OpenDAFF file format (see <http://opendaff.org/>). It also includes the material files (*.mat, ASCII text format) for the three room conditions as used in the RAVEN simulation
- **RavenModels** contains the room models as used by the RAVEN simulation. Files are provided in the AC3D (*.ac) format (ASCII text format). Additionally it contains the empty *untreated* room model as a *SketchUp* file.
- **RavenProjectFiles** contains the project files (*.rpf, ASCII text format) including the configuration of the simulation. These files are only examples, covering the three room acoustic conditions, but not covering all experimental conditions w.r.t. the movement of the distractor.
- **RoomInfo** contains a figure of the simulated reverberation times RT60 evaluated in octave bands for two omnidirectional sound source positions and six receiver positions, that are documented in *RoomSketches*.
- **RoomSketches** contains the figures of the simulated room including sound source and receiver positions for the simulation of room acoustic parameters (ISO3382) and for the moving distractor conditions (circular and radial movement).
- **ExperimentResults** contains an extended version of Figure 6 and Figure 7 of the paper. It also includes indications of significant differences across all conditions.
- In the folder **wav** the binaural distractor signals used in all experimental conditions are stored. Only two (out of in total 336 different) binaural target speaker signals are included for each room acoustic conditions.



This data will most likely be published under the
Creative Commons Attribution-NonCommercial 3.0 Unported (CC BY-NC 3.0) license