The data variables are described below.

data: a matrix with raw fMRI data 80 rows by 428 columns. Each row is the fMRI data for all voxels in one brain area (auditory cortex) from one participant corresponding to the brain response from a single experimental trial when the participant was listening to an animal sound (the roar of a lion or the howl of a wolf) for 5 seconds. There were 80 such trials altogether in the experiment, half of them lion roars and half wolf howls, in random order. Each column is the brain response from one voxel in the auditory cortex for every trial.

thresholdData: a matrix with 1 row and 428 columns. Each column is the squared correlation coefficient (R^2, coefficient of determination) for the corresponding voxel data. The correlation coeffificents in this matrix indicate for each voxel how strong the fMRI response to the auditory stimulus was – a zero means it did not respond at all, a 1 would indicate that the voxel responded perfectly and equally strongly to every stimulus shown.

groupLabels: a matrix with 80 rows and 1 column. Each row indicates for each trial whether the auditory stimulus presented was a lion roaring (1) or a wolf howling (2).