



Supplemental Material S5. Averaged pupil responses relative to baseline in the data subsets included across classification models. Upper rows: pupil data used to classify hearing status are depicted; Lower rows: pupil data used to classify SNR or task response within groups are shown. Subfigure titles refer to the classification model as shown in the main article, Tables 1 and 2. Data labels are color/line-coded and shown in the legend. Analysis 1: (1a) All – averaged pupil responses of all available trials per hearing status, (1b) Correct – averaged pupil responses of correct trials only per hearing status, (1c) ^cSNR-7, (1d) ^cSNR-5 and (1e) ^cSNR-3 – averaged pupil responses of correct trials only at 3 SNR per hearing status; Analysis 2: (2a) NH TR – average pupil response of correct and incorrect trials in the NH group, (2b) HI TR – average pupil response of correct and incorrect trials in the HI group, (2c) NH SNR – average pupil responses at SNR corresponding to either 50% or 84% correct in the NH group, (2d) HI SNR – average pupil responses of two SNR at SNR corresponding to either 50% or 84% correct in the HI group. Note that Supplemental Material S5 represents the average pupil responses over trials, which is not representative of the average of the pupil measures extracted at the trial level in the main article.