



**Figure 3 - figure supplement 2. Model parameters for fits of the optimal model and two alternative parameterizations.** Based on the maximum likelihood parameters of full model fits for each subject, the four top plots show how drift rate and normalized bounds are assumed to depend on visual motion coherence. The solid lines show fits for the model described in the main text. The dashed lines show fits for an alternative parameterization with one additional parameter (see Supplementary Text). The circles show the fits of a model that, instead of linking them by a parametric function, fits these drifts and bounds for each coherence separately. As can be seen, the parametric functions qualitatively match these independent fits. The bottom bar graphs show drift rate and bound for the vestibular modalities and fitted non-decision times for each subject, all for the model parameterization described in the text. All error bars show  $\pm 1$  SD of the parameter posterior. Each color corresponds to a separate subject, with color scheme given by the bottom left bar graph.