

Supplemental Figure 1. Mean (SEM) horizontal or vertical eye velocity during **(A)** pitch (up/down) or yaw (right/left) rotation, and **(B)** up/down or right/left translation, respectively. The horizontal component of eye velocity was used for left/right yaw rotation and left/right translation; the vertical component of eye velocity was used for up/down pitch rotation and up/down translation. The data are expressed in terms of both eye velocity (left vertical axis) and gain (right vertical axis). For rotation, response gain was obtained as the ratio of eye velocity over either actual (vestibular condition) or simulated (visual condition) head velocity. For translation, this ratio reflected how close eye velocity was to that required for perfect stabilization of a space-fixed target, given screen distance and displacement amplitude. Expressed as gains ($\ll 0.1$) and velocities ($\ll 1^\circ/\text{s}$), these data show that monkeys suppressed VOR and OKN almost completely during experiments, although the largest residual eye velocities were seen during yaw and pitch VOR suppression. Asterisk (*) represents values that were significantly different from zero (paired t-test, $p = 0.05$).