

Figure 6-figure supplement 3

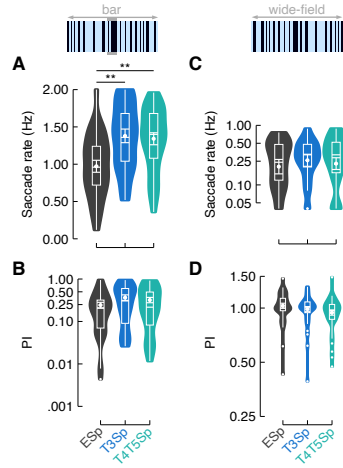


Figure 6-figure supplement 3. Saccade rate and performance index in bar tracking and wide-field stabilization in flies expressing CsChrimson. (A) Violin-box plots of the frequency of bar tracking saccades per trial in the three genotypes (black: $n = 19$ EmptySp>CsChrimson; blue: $n = 18$ T3Sp>CsChrimson; green: $n = 19$ T4T5Sp>CsChrimson). Big white dot represents the mean, thin horizontal bars indicate s.e.m. and thick horizontal bar indicates the median. Small white dots on the violin tails represent outliers. A linear mixed model was used to fit the data and pairwise post-hoc comparisons using t -tests adjusted with Bonferroni method were used to compare the predictions (EmptySp vs T3Sp, $p = .005$, Cohen's $d = -1.07$; EmptySp vs T4/T5Sp, $p = .007$, Cohen's $d = -.97$; T3Sp vs T4/T5Sp, $p = 1$, Cohen's $d = .10$). (B) Violin-box plots of the PI (y-axis is on a log scale) in trials with positive values (greater than 0). PI mean for CW and CCW revolving bars was computed and a generalized linear model (with gamma distribution and log link function) was fitted to the data (EmptySp vs T3Sp, $p = .18$, Cohen's $d = -.56$; EmptySp vs T4/T5Sp, $p = .60$, Cohen's $d = -.38$; T3Sp vs T4/T5Sp $p = 1$, Cohen's $d = .19$). Graph features are as in (A). (C) Violin-box plots of the frequency of optomotor saccades per trial in the three genotypes (y-axis is on a log scale). A generalized linear mixed model (with gamma distribution and log link function) was used to fit the data (EmptySp vs T3Sp, $p = 1$, Cohen's $d = -.46$; EmptySp vs T4/T5Sp, $p = 1$, Cohen's $d = -.22$; T3Sp vs T4/T5Sp, $p = 1$, Cohen's $d = .24$). Graph features are as in (A). (D) Violin-box plots of the PI in trials with positive values (y-axis is on a log scale). PI mean for CW and CCW rotating wide-field pattern was computed and a generalized linear model (with gaussian distribution and log link function) was used to fit the data (EmptySp vs T3Sp, $p = 1$, Cohen's $d = .32$; EmptySp vs T4/T5Sp, $p = .18$, Cohen's $d = .64$; T3Sp vs T4/T5Sp $p = 1$, Cohen's $d = .32$). Graph features are as in (A).