

Figure 8. Electrical stimulation of the SNr alters saccade latency. Cumulative density (CDF) plots of saccade latencies in the different task conditions for all 61 stimulation sites. Cyan lines are for stimulated trials and black lines are for no stimulation trials. a. CDF of saccade latency of memory-guided saccades to a target located in the hemisphere contralateral to the site of SNr stimulation. Kruskal Wallis test showed that contralateral saccade latencies were significantly different in stimulation and no stimulation trials ($\rightarrow p < 0.001$). b. CDF of saccade latency in memory-guided saccades to a target located in the ipsilateral hemifield (Kruskal Wallis $\rightarrow p < 0.02$). c. The same as in a for visually-guided saccades. d. The same as in b for visually-guided saccades. e-f show the same results for the 75Hz and 125Hz stimulation conditions. Data are from 35 stimulation sites.

Figure 9. Memory-guided saccade frequency is reduced with electrical stimulation of the SNr. The frequency of saccades measured from 61 stimulation sites from monkey for the 8 target locations is plotted. Grey bars are data from the no stimulation trials and cyan bars are data from the stimulation trials. The data are normalized to the no stimulation condition so that black bars have length of 100. The vertical lines on the cyan bars are 1SD. a. Contralateral saccade frequency is plotted for memory trials (two left bars) and for visual trials (two right bars). b, Ipsilateral saccade frequency is plotted for memory trials (two left bars) and visual trials (two right bars). * $p = 0.02$; ** $p = 0.001$. Data are from 300Hz condition.