



Figure 4 – Figure Supplement 1. ACC r_{sc} conditioned on simultaneously measured LC spiking using shuffled trials. (A) Shuffled ACC r_{sc} data conditioned on LC spiking, separated into terciles (panels, as labeled) of LC-independent values, plotted as in Figure 4A–C. Bootstrapped 95% confidence intervals are plotted as vertical lines (same ordinate scaling as Figure 4; bars and lines too small for visibility in most cases). (B) Probability of obtaining a statistically reliable difference in ACC r_{sc} on LC_{zero} vs. LC_{non-zero} trials (sign-rank test, $p < 0.05$) in the given number of adjacent time bins tested. The time bins are 200, 400, 600, 800, and 1000 ms, as in A, tested separately for each of the three terciles. Bars are for shuffled data, markers above bars are for the real (i.e., unshuffled) data, calculated separately for each monkey (shading). Thus, the probability of 0.4 for monkey Ci (dark symbol), bin size = 1, corresponds to the 6/15 single bins from Figure 4D–F for which we rejected the null hypothesis that the mean difference=0. Note that the probability of finding effects in up to three adjacent time bins from the real data was substantially higher than would be expected by chance (i.e., as predicted from the shuffled data).