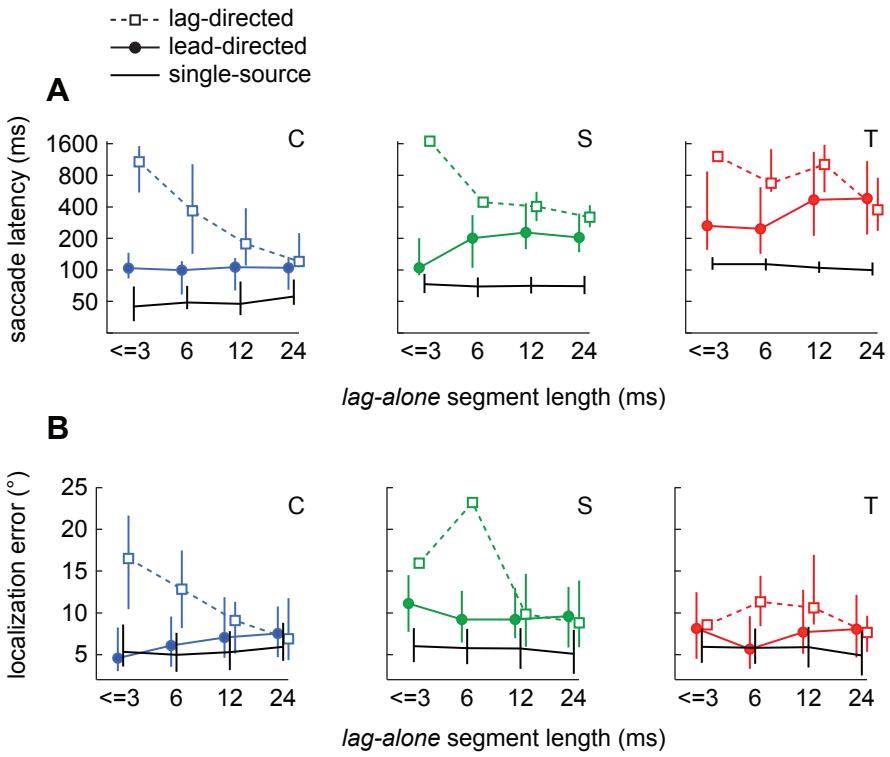

Supplementary Figure S2 Saccade latency (**A**) and localization error (**B**) measured separately for each bird (C, S, and T). Plotted are the median values for lead-directed (filled symbols) and lag-directed saccades (open symbols) and for saccades directed towards single sound sources (black line). For paired stimuli (colored lines), the abscissa shows only the length of each stimulus' lag-alone segment. The stimuli were thus grouped without respect to the length of the lead-alone segment and responses to stimuli with lag-alone segments <= 3 ms were combined. Values for single sound sources (black lines) were measured when these sounds had durations equal to those of the paired stimuli (i.e., 3=30, 6=36, 12=42, 24=54 ms). Error bars show the first and third quartiles. Values without error bars are the averages of 2 data points and should be viewed with caution. (**A**) Saccade latency. Latencies were consistently greater when saccades were directed towards paired stimuli (colored lines), in comparison with when saccades were directed towards single sound sources (black lines; P<110-6; df=11; Kruskal-Wallis; Dunn-Holland-Wolfe multiple comparisons). Latency increased further when saccades were lag-directed and when the length of the lag-alone segment was short (< 12 ms). These trends should be viewed with caution, however, since saccades were rarely lag-directed when the lag-alone segment was short (Fig. 6). Latency did not differ significantly when stimuli were lead-directed, even when the length of the lag-alone segment was decreased to <= 3 ms (including latencies for subject S). (**B**) Localization error. Error, ε, was measured, in Cartesian coordinates, as the angular distance from where each saccade ended to the nearest speaker ($\varepsilon = [\varepsilon_{azimuth}^2 + \varepsilon_{elevation}^2]^{1/2}$). Saccades were nearly as accurate and precise as those to single sound sources, except for when the saccades were lag-directed and when the lag-alone segment was short (< 12 ms). These trends should be viewed with caution, however, since saccades were rarely lag-directed when the lag-alone segment was short (Fig. 6).