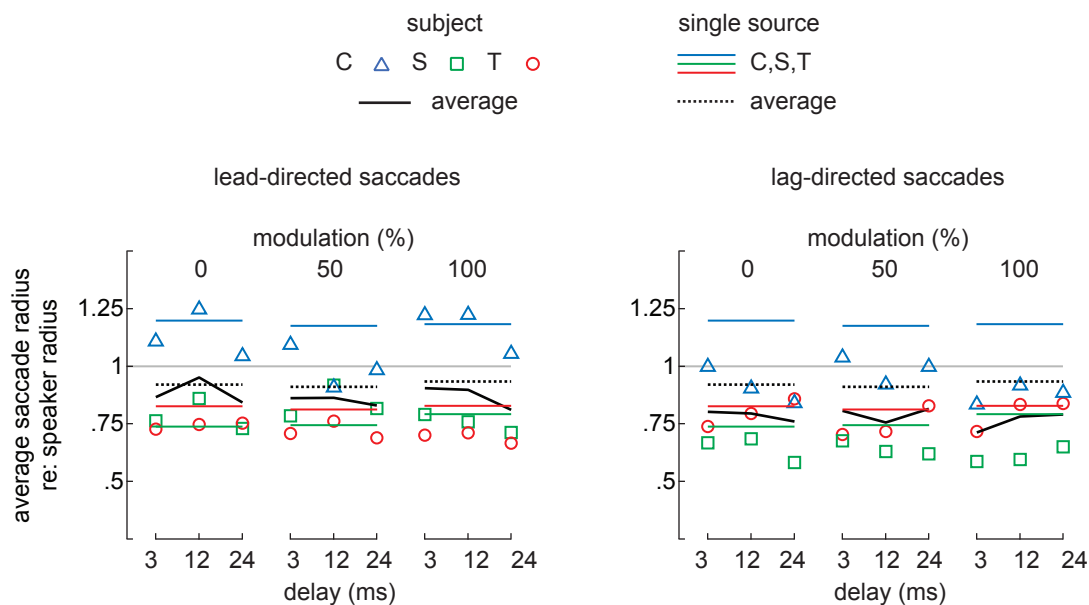


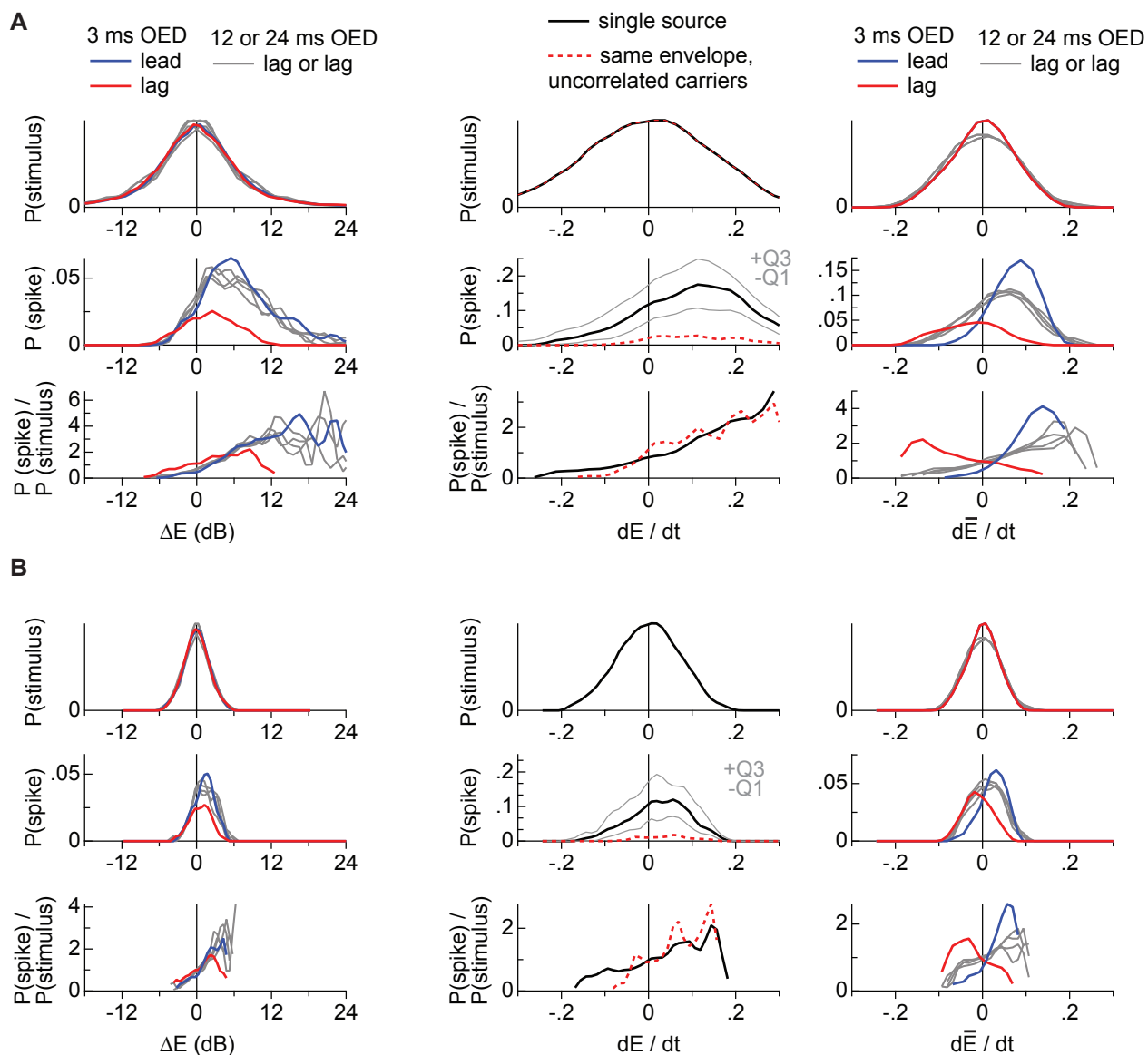
Inventory of Supplemental Information

Figure S1. This supplemental figure is related to Figure 3, which summarizes the angular component of saccade error measurements. Shown in Figure S1 is the radial component, which was found to be highly variable (see text) and thus is not shown in Figure 3.

Figure S2. This supplemental figure is related to Figure 5, which summarizes the preferences of space map neurons for positive amplitude differences and derivatives when the modulation depth was 100% and the OED was long (12 or 24 ms). Shown in Figure S2 are additional distributions when the modulation depth was 50% and when the OED was short (3 ms).



Supplementary Figure S1 Average saccade radii for each bird (C, S, and T). Each measurement assumed a linear trajectory and was normalized to the radius of the speaker to which the saccade was directed. In contrast to the polar angles shown in Figures 3B and C, the radii did not vary significantly with stimulus delay or modulation depth. The radii were slightly shorter for lag-directed saccades (see subjects C and S) but the variance was high (s.d. = 0.3 to 0.6; not shown) and this trend must therefore be viewed with caution.



Supplementary Figure S2 Measurements of ΔE and $d\bar{E}/dt$. (A) 100% amplitude modulation. (B) 50% amplitude modulation.