



**Figure S8.** H12 and H2/H1 measured in hard sweeps at varying distances from the selected site in additional evolutionary scenarios. Simulations were performed with the same parameters as in Figure 8 with some modifications. In (A) the sweeps were decayed for  $0.001 \cdot 4N_e$  generations and the frequency of the adaptive mutation was 0.5 at the time when selection ceased. In (B) sweeps are complete and were sampled when selection ceased without any time for decay. In all scenarios tested, the H12 value at the center of the sweep where the selected site is located is the highest and H2/H1 is the lowest.