



Figure 9: Lag-conditional response probability (lag-CRP) fits of baseline CRU (**Top**); best performing CRU variant with free pre-experimental context-to-feature memory ( $\alpha$ ,  $\delta$ ) and CMR-specific primacy gradient ( $\phi_s$ ,  $\phi_d$ ) parameters (**Middle**); and CMR with its default position-based recall termination mechanism and CRU’s item identification confusability mechanism (**Bottom**) to Logan (2021) serial recall data. Lines compare observed lag-CRP with predicted lag-CRP for the applicable model variant.

**Alt Text.** Lag-conditional response probability (lag-CRP) curves for serial-recall lists of length 5, 6, and 7 (columns). Within each column, three rows show: (1) baseline CRU; (2) the hybrid CRU that adds primacy and pre-experimental support; (3) CMR with position-based stopping. Observed data (orange circles  $\pm$  SE) and model predictions (blue lines) are plotted for lags  $-4$  to  $+5$ . All variants fit the dominant  $+1$  forward transition, but only the hybrid CRU (row 2) closely tracks the small yet reliable  $-1$  “fill-in” backward transition, while baseline CRU underestimates and CMR overestimates backward-lag probabilities beyond  $-1$ .