



Fig. S1. Identification of time-frequency window corresponding to the alpha event-related desynchronization (ERD) in the novelty oddball task. **A.** Nose referenced log-ERSPs for correctly detected targets averaged across parietal and centroparietal sites (CP3/4, CP1/2, CPz, P5/6, P3/4, P1/2, Pz). Synchronization related to ERPs is indicated by deep red areas, and desynchronization by deep blue areas. The 8-12 Hz alpha ERD is well-captured by the 350-650 ms window. **B.** Time-frequency PCA (scaled CSD, NR, AR; all conditions, sites and subjects) yielded a single high-variance factor that unambiguously represented the alpha-ERD (loadings peak at 10Hz, 500ms post-stimulus, 17.2% variance; cf. Kaye et al., 2014 for methods).