Supplementary information for

Visuomotor Adaptation in Early Stage Modulates Brain Network and Activity in Frontal regions

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To determine the appropriate time window (TW) for brain activity analysis, we obtained the variation in brain activity at each candidate TW with a time width of 40 s, between the pre-test and the post-test, then compared the *p* value using the Wilcoxon signed-rank test. Fig. S1.B represents the transition of the *p* value in each candidate TW. In TW: 30-70 s, the most number of channels (L7, R3, and R5) that showed significant changes between pre-test and post-test were confirmed. We also examined the time-series of the total average measured oxy-Hb (Fig. S1.A). In principle, the HRF model indicates that brain activity is the plateau in TW: 20-60 s, which is the middle of the short task period. However, the observed plateau was later than the HRF model. Based on the evidence, we used 30-70 s TW for the analysis.

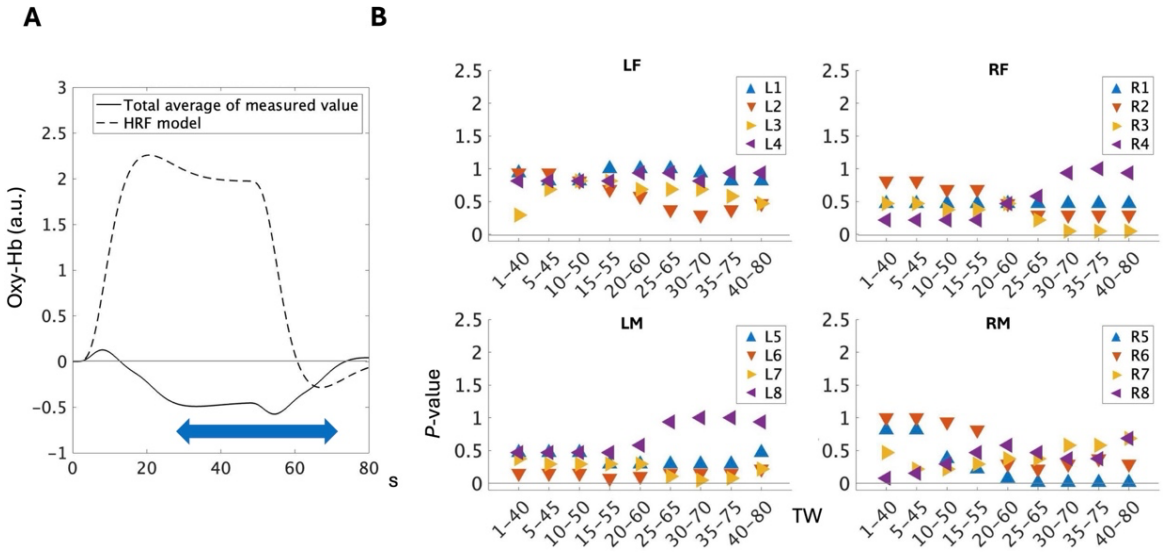

Figure S1. Pre-analyses for determining the appropriate TW used to calculate brain activity amount. A: Time-series graphs of measured oxy-Hb and HRF model. B: Transition of *p* value using the Wilcoxon signed-rank test in each TW. Each Colored triangle represents channels of NIRS measurement.