

Correction

Correction: Reimer and Hatsopoulos, Periodicity and Evoked Responses in Motor Cortex

In the article “Periodicity and Evoked Responses in Motor Cortex” by Jacob Reimer and Nicholas G. Hatsopoulos, which appeared on pages 11506–11515 of the August 25, 2010 issue, there was an error in data collection. This error affects many of the analyses, but does not affect the overall conclusions of the paper.

The commercial software package that was used (TEMPO, Reflective Computing, St. Louis, MO) did not accurately timestamp stimulus onsets. New measurements show that all stimulus onsets had a variable delay (mean 49 ms, SD 7 ms) relative to the timestamps used in the analyses. Owing to this delay, the event-related changes in activity described in the article occurred sooner after the target appearance than reported.

For example, the changes in event-related spiking (Fig. 3) and mutual information (Fig. 5) described as occurring around 100 ms after the target onset actually happen around 50 ms after target onset. Additionally, the LFP phase-locking described in Figure 2 as increasing around the target event actually begins ~50 ms beforehand (as the monkey is about to acquire the current target), and the peak in this phase-locking occurs closer to 50 ms after the next target appearance, rather than at a latency of ~100 ms. Overall, ~50 ms² of the variance in the timing of event-locked responses can be attributed to the imprecise timestamps, rather than imprecision in the neural activity.

DOI: 10.1523/JNEUROSCI.5738-12.2013