Electrical field modeling

In order to calculate the electric field induced by transcranial magnetic stimulation (TMS), we utilized the SimNIBS 4 package [1]. The head model employed in this simulation was based on the NIHPD atlas [2, 3], which consists of average brain volumes from 324 children aged 4.5 to 18.5 years. The maximal rate of change of current (dI/dt) at 100% maximum stimulator output (MSO) of the MagVenture MC-B70 Butterfly coil was calculated to be 155.3 A/μs [4]. During our simulations, we set the primary field caused by the coil to be 80% of the AMT (averaged among participants), which we determined to be 55.22 A/μs.

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