APPENDIX

Calculation of the Chiasm Coefficient

To cope with drift and offset, the calculation starts with a high-pass filtering of the recorded signal. This is established by subtracting the average of the previous τ ms of the recorded signal from the recorded signal:

$$V(t) = V_r(t) - (1/\tau)\int_{t-\tau}^{t} V_r(t')\mathrm{d}t' \qquad (1)$$

where $V(t)$ is the filtered signal and $V_r(t)$ the recorded signal. Calculations were performed with τ = 60 ms. Subsequently the chiasm coefficient *cc* is calculated:

$$cc = \frac{\int_{t1}^{t2} [V_{RH,OD}(t)-V_{LH,OD}(t)]\cdot[V_{RH,OS}(t)-V_{LH,OS}(t)]\ \mathrm{d}t}{\int_{t1}^{t2} |[V_{RH,OD}(t)-V_{LH,OD}(t)]\cdot[V_{RH,OS}(t)-V_{LH,OS}(t)]|\ \mathrm{d}t} \qquad (2)$$

where $V_{RH,OD}$ is the signal recorded from the right hemisphere while stimulating OD, $V_{LH,OD}$ the signal from the left hemisphere while stimulating OD, $V_{RH,OS}$ the signal from the right hemisphere while stimulating OS, and $V_{LH,OS}$ the signal from the left hemisphere while stimulating OS. Calculations were performed with t_1 = 60 ms and t_2 = 300 ms; stimulus is given at t = 0 ms.