

## Supporting information:

### Experiment 1:

**Table S1. Post-hoc tests for RTs and for duration of Map<sub>MIR</sub> and Map<sub>OBT</sub> \***

Subject of analysis	Effect	F <sub>(1,13)</sub>	p
RTs: MIR-task	Orientation (back vs. front)	31.59	<0.01*
RTs: OBT-task	Orientation (back vs. front)	15.88	<0.01*
Duration Map <sub>MIR</sub> : MIR-task	Orientation (back vs. front)	4.6	0.04
Duration Map <sub>MIR</sub> : OBT-task	Orientation (back vs. front)	2.6	0.12
Duration Map <sub>OBT</sub> : MIR-task	Orientation (back vs. front)	3.09	0.10
Duration Map <sub>OBT</sub> : OBT-task	Orientation (back vs. front)	4.2	0.05

\*post-hoc tests include n=2, planned simple tests per significant interaction; values that are significant after Bonferroni corrections are marked with asterisks.

## Experiment 2:

**Table S2. Post-hoc tests for RTs and for duration of Map<sub>MIR</sub> and Map<sub>OBT</sub>\***

Position	Subject of analysis	Effect	F <sub>(1,9)</sub>	p
Sitting	RTs: MIR-task	Orientation (back vs. front)	13.72	<0.01*
	RTs: OBT-task	Orientation (back vs. front)	30.45	<0.01*
	Duration Map <sub>MIR</sub> : MIR-task	Orientation (back vs. front)	4.33	0.06
	Duration Map <sub>MIR</sub> : OBT-task	Orientation (back vs. front)	5.60	0.04
	Duration Map <sub>OBT</sub> : MIR-task	Orientation (back vs. front)	3.50	0.09
	Duration Map <sub>OBT</sub> : OBT-task	Orientation (back vs. front)	7.21	0.02*
Supine	RTs: MIR-task	Orientation (back vs. front)	16.70	<0.01
	RTs: OBT-task	Orientation (back vs. front)	8.08	<0.01
	Duration Map <sub>MIR</sub> : MIR-task	Orientation (back vs. front)	1.98	0.19
	Duration Map <sub>MIR</sub> : OBT-task	Orientation (back vs. front)	0.11	0.74
	Duration Map <sub>OBT</sub> : MIR-task	Orientation (back vs. front)	4.34	0.06
	Duration Map <sub>OBT</sub> : OBT-task	Orientation (back vs. front)	5.62	0.04

\*post-hoc tests include n=2, planned simple tests per significant interaction; values that are significant after Bonferroni corrections are marked with asterisks

**Table S3. Statistical results of GFP for Map<sub>POS</sub>**

<b>Effect</b>	<b>F<sub>(1,9)</sub></b>	<b>p</b>
Position (sitting vs. supine)	6.81	0.028
Task (MIR vs. OBT)	0.91	0.364
Orientation (back vs. front)	11.4	0.008
Interaction (Position × Task)	0.9	0.366
Interaction (Position × Orientation)	0.36	0.562
Interaction (Task × Orientation)	3.47	0.096
Interaction (Position × Task × Orientation)	0.27	0.615

**Table S4. Measurements and statistical results of GFP for Map<sub>MIR</sub> and Map<sub>OBT</sub>**

<b>Map</b>	<b>GFP</b>	<b>Statistical Results</b>
<b>Map<sub>MIR</sub></b>	Sitting position: 1.14±0.79μV	For all comparisons (Position, Task, Orientation) 0.70 < p < 0.70
	Supine position: 1.10±0.64μV	For all interactions 0.18 < p < 0.93
<b>Map<sub>OBT</sub></b>	Sitting position: 0.58±0.44μV	For all comparisons (Position, Task, Orientation) 0.45 < p < 0.96
	Supine position: 0.53±0.34μV	For all interactions 0.14 < p < 0.93

**Table S5. Measurements and statistical analysis of GFP for maps 1, 2, 3, and 4**

<b>Map</b>	<b>GFP</b>	<b>Statistical Results</b>
<b>1</b>	Sitting position: 0.49±0.37μV	For all comparisons (Position, Task, Orientation) 0.15 < p < 0.48
	Supine position: 0.41±0.25μV	For all interactions 0.13 < p < 0.81
<b>2</b>	Sitting position: 1.36±1.00μV	For all comparisons (Position, Task, Orientation) 0.43 < p < 0.82
	Supine position: 1.48±0.91μV	For all interactions 0.54 < p < 0.97
<b>3</b>	Sitting position: 1.97±1.44μV	For all comparisons (Position, Task, Orientation) 0.26 < p < 0.60
	Supine position: 1.68±1.49μV	For all interactions 0.16 < p < 0.83
<b>4</b>	Sitting position: 3.46±1.51μV	No effect of position (p = 0.25); effects of Task (p = 0.01) and Orientation (p = 0.01)
	Supine position: 3.10±1.71μV	For all interactions 0.42 < p < 0.91



**Table S6. Statistical analysis of the checkerboard task in the two positions (Fig. 4; sitting position is indicated with (\*))**

<b>Map</b>	<b>GFP (<math>\mu\text{V}</math>)</b>	<b>F<sub>(1,9)</sub></b>	<b>p</b>
<b>1</b>	0.65±0.48*	0.02	0.91
	0.67±0.45		
<b>2</b>	1.55±0.97*	0.01	0.95
	1.54±1.01		
<b>3</b>	0.45±0.42*	0.01	0.92
	0.44±0.28		
<b>4</b>	0.92±0.48*	0.09	0.93
	0.94±0.55		
<b>5</b>	0.47±0.19*	0.37	0.56
	0.51±0.22		