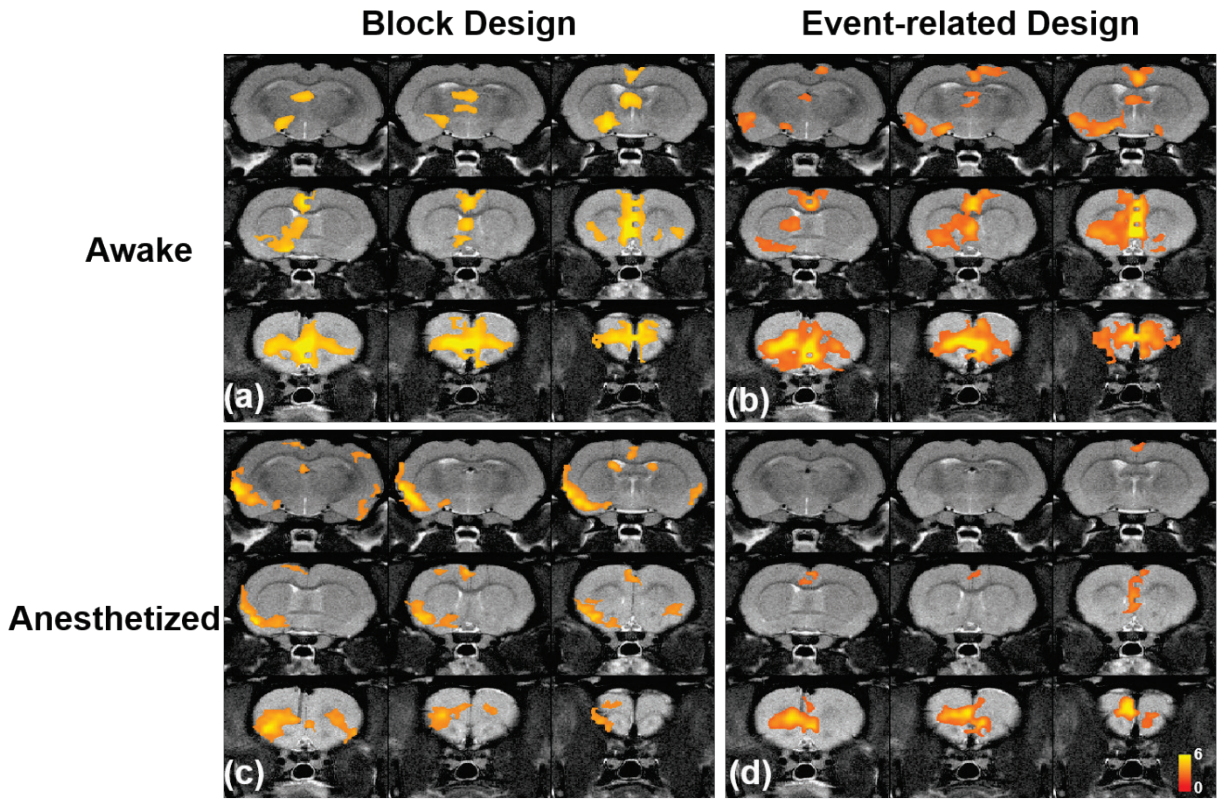


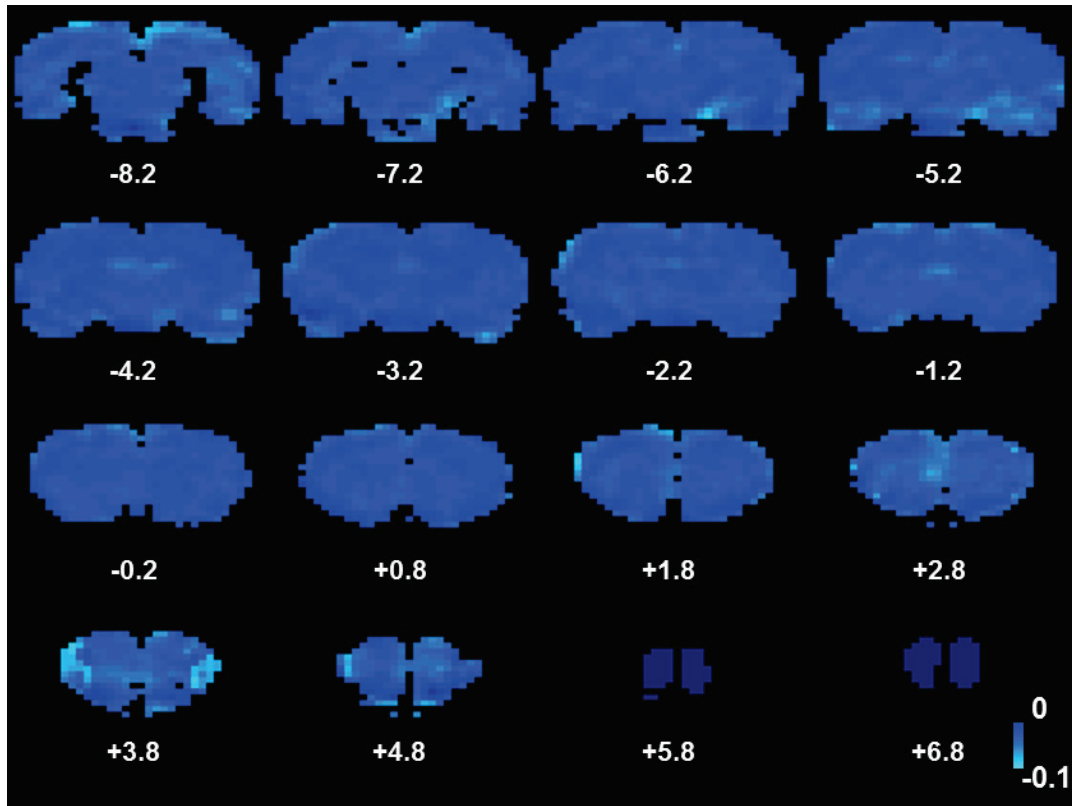
**Supplemental Table 1.**

<b>Rat #</b>	<b>Rat 1</b>	<b>Rat 2</b>	<b>Rat 3</b>	<b>Rat 4</b>	<b>Rat 5</b>	<b>Rat 6</b>	<b>Rat 7</b>
Correlation Coefficient	<i>0.45</i>	<i>0.63</i>	<i>0.65</i>	<i>0.70</i>	<i>0.66</i>	<i>0.37</i>	<i>0.52</i>
<i>P value</i>	<i>&lt;10<sup>-20</sup></i>	<i>&lt;10<sup>-20</sup></i>	<i>&lt;10<sup>-20</sup></i>	<i>&lt;10<sup>-20</sup></i>	<i>&lt;10<sup>-20</sup></i>	<i>&lt;10<sup>-20</sup></i>	<i>&lt;10<sup>-20</sup></i>

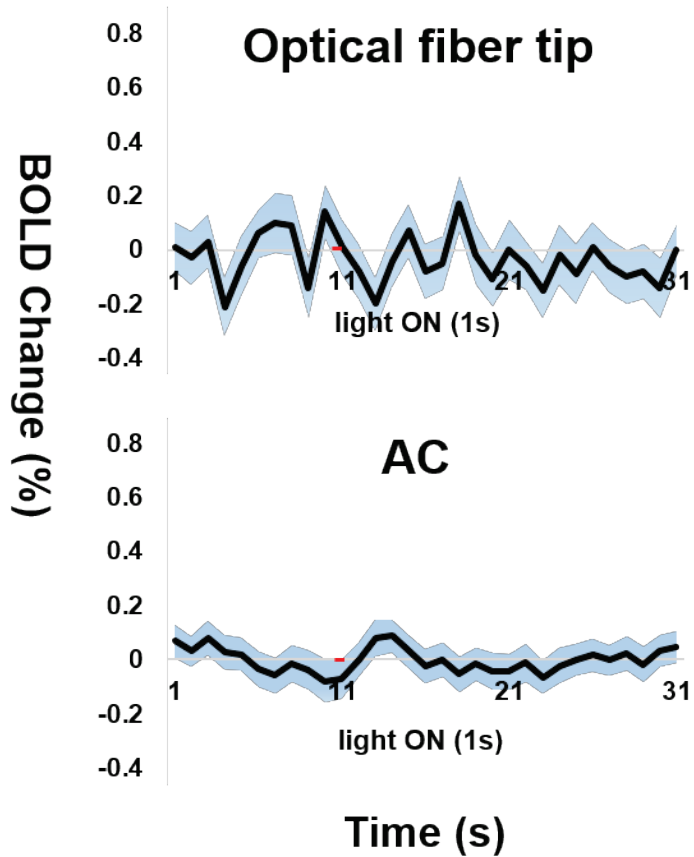
Voxel-wise correlation coefficients of activation maps between two awake imaging sessions for individual animals.



**Supplemental Figure 1:** Consistent activation maps between block and event-related paradigms. The averaged activation maps of a) block and b) event-related paradigms in the awake state. The averaged activation maps of c) block and d) event-related paradigms in the anesthetized state.



**Supplemental Figure 2.** The correlation map between motion (i.e. volume-to-volume displacement) and BOLD time courses of individual voxels averaged across all awake scans in all animals.



**Supplemental Figure 3.** The BOLD time courses in response to optical stimulation in the (a) optical fiber tip area and (b) AC in the control rat in the awake state. No appreciable BOLD activation was observed in either region.