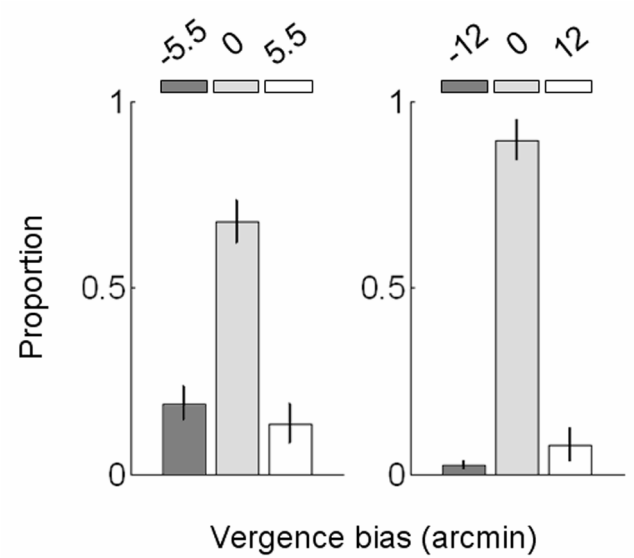
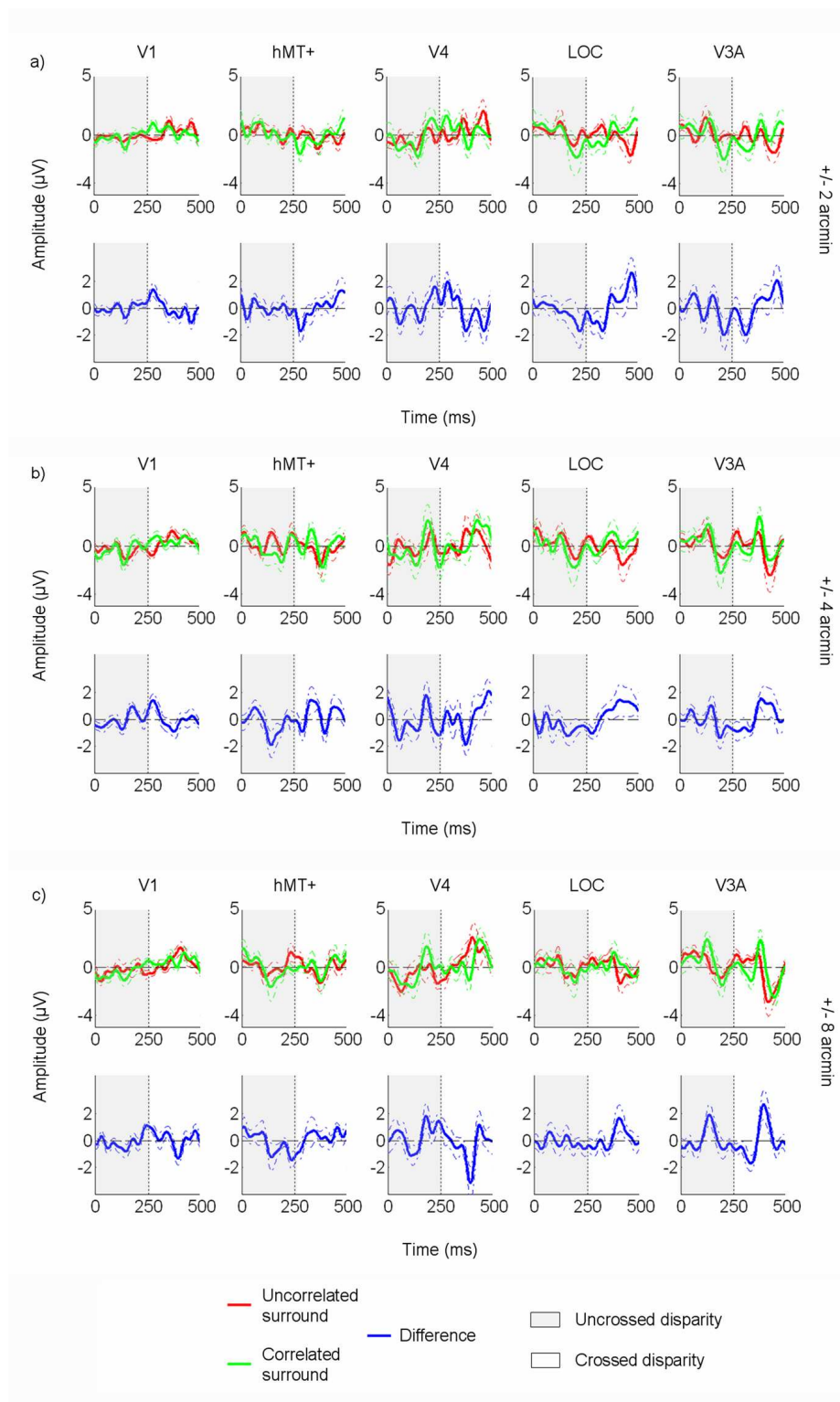


1) Control of the vergence bias in the absence of a fixation point:



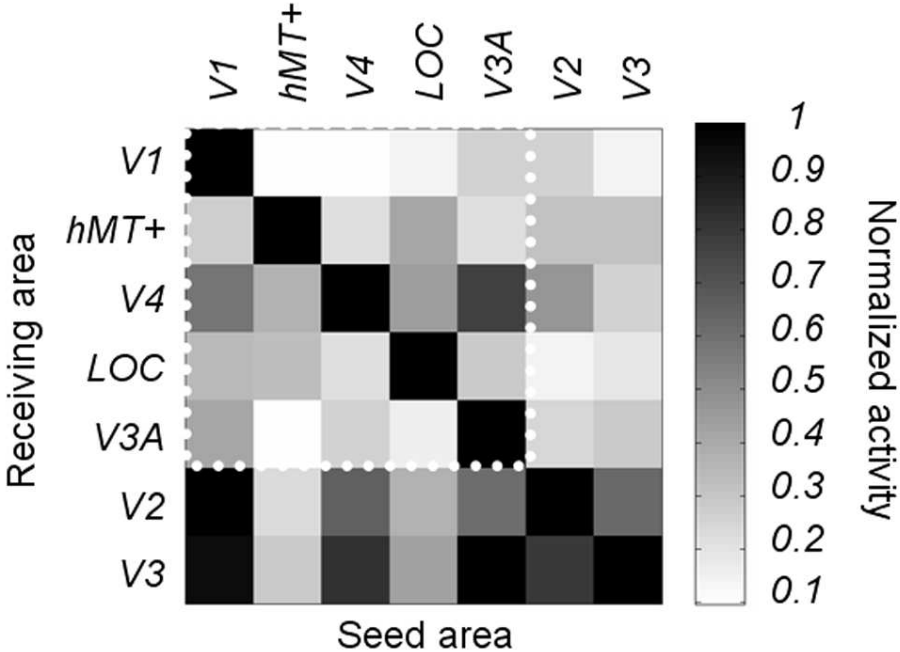
Supplemental Figure 1: distribution of the fixation disparity after 11 seconds of stimulation in the absence of a fixation point. Responses averaged across 5 subjects for two intervals between the upper lines (5.5 and 12 arcmin respectively). The bars give the standard errors.

## 2) Evoked potential in the different ROIs:



Supplemental Figure 2: Evoked potentials in the different ROIs corresponding to a disparity of 2, 4 and 8 arcmin. See Figure 4 for the details of the legend.

3) Influence of the definition of the visual areas on the simulations:



Supplemental Figure 3: Cross-talk matrix obtained from visual areas restricted to the cortical regions corresponding to the central disk of 5° diameter used in the EEG experiment (i.e. the ROIs were re-defined by limiting their extend to 2.5° in radius).