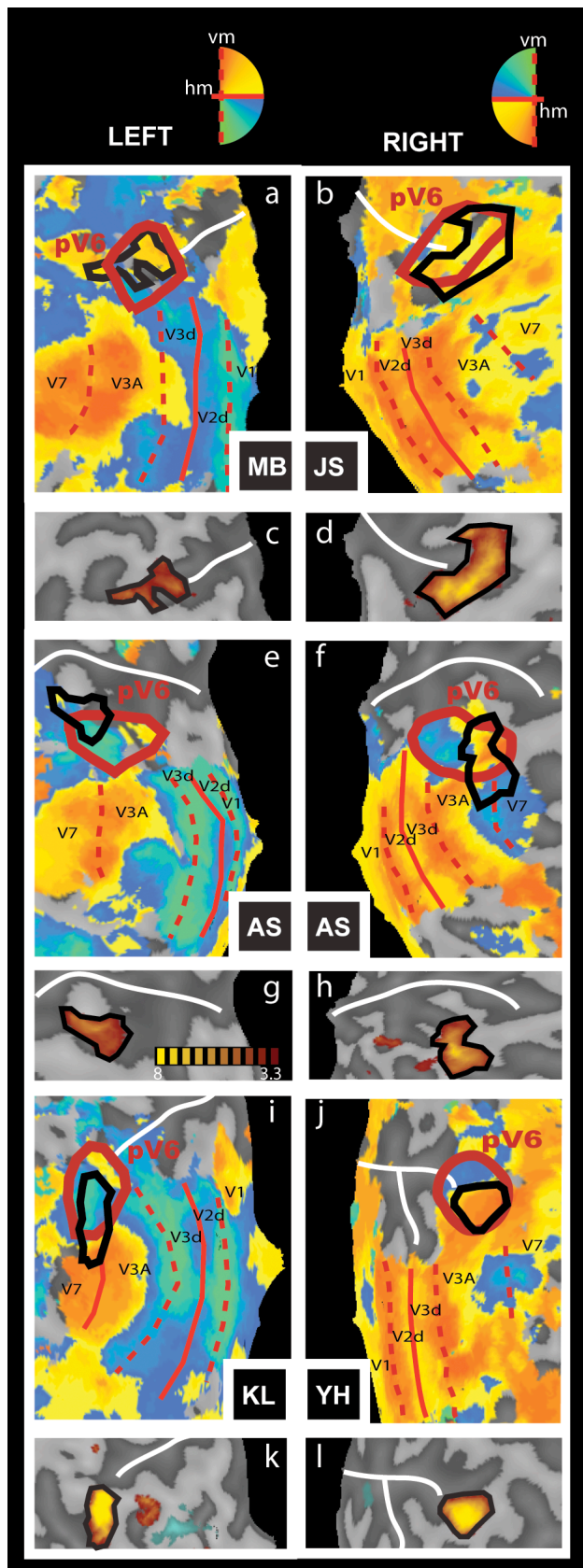
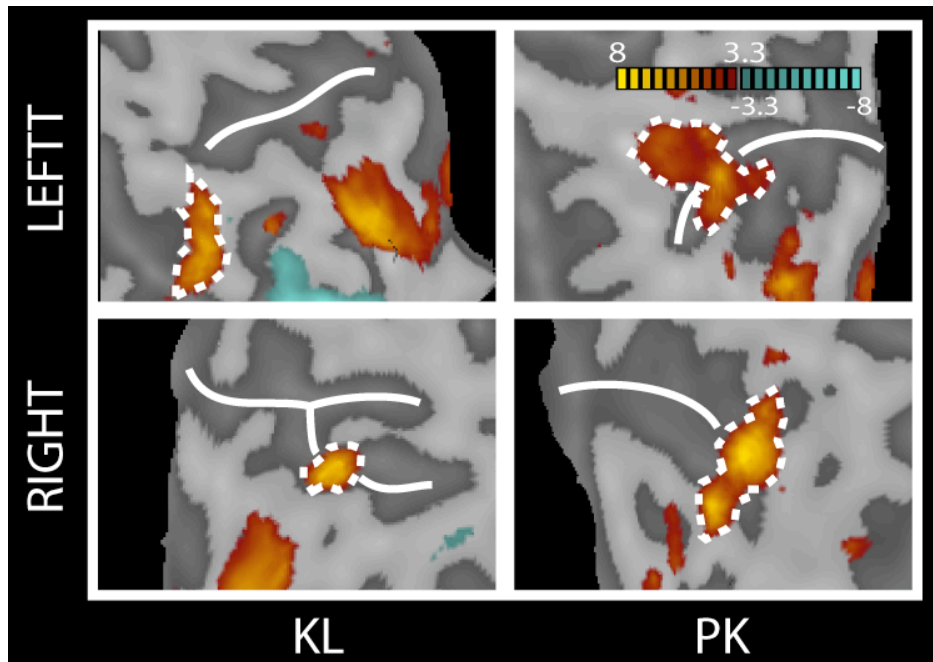


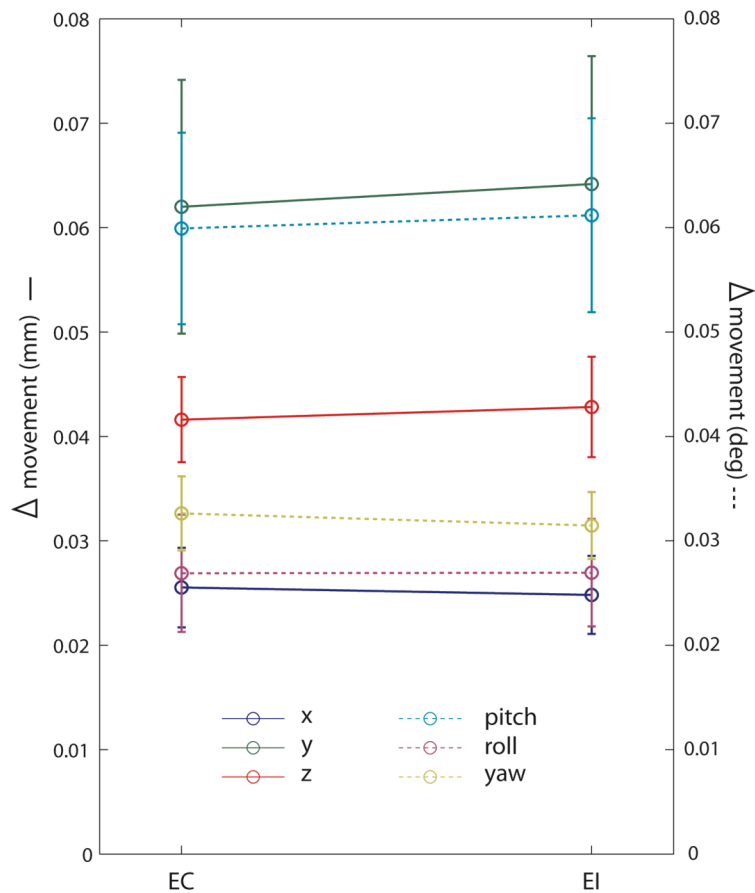
SUPPLEMENTARY FIGURES



Supplementary Figure 1. Localisation of pV6 using EC stimulation and retinotopic mapping in additional hemispheres not shown in Fig 3A. Localisation of a region selectively responsive to EC stimulation in the POS (c, d, g, h, k, l) and retinotopic maps (a, b, e, f, i, j) of six hemispheres from five participants (MB, JS, AS, KL, and YH) are shown, overlaid onto flattened representations of the right and left occipital lobes. Retinotopic maps (shown thresholded at $p < 0.01$) were obtained with wide-field (70 deg) stimulation, and show the demarcation of human pV6 defined retinotopically (thick red line) and by selective sensitivity to EC stimuli (solid black line) for comparison. Thin red lines show the border between visual areas [dashed: vertical meridian (vm); continuous: horizontal meridian (hm)]. Representations of different parts of the visual field are color-coded (see color wheel). The white line marks the POS.



Supplementary Figure 2. Localisation of an EC sensitive region (dashed white line) in the POS using narrow-field (20 deg) stimulation. Activation maps obtained for the right and left hemispheres of two participants (KL and PK) from the contrast [EC-EI] are overlaid onto flattened representations of the region around the POS. T-values are color-coded (see color bar). The solid white line marks the POS.



Supplementary Figure 3. Average head movements while viewing EC and EI stimuli. The figure shows the average head motion in mm for each of the 3 translation directions (x, y, z) and in degrees for the 3 rotation axes (pitch, roll, yaw), for each experimental condition. To calculate the averages, we first identified a timepoint (volume) immediately before the onset of each trial. The head position at this point was compared with position at the two following timepoints, corresponding to the time when the stimulus was being viewed. The larger difference (i.e. the motion that occurred as a result of stimulus presentation) was then averaged separately for EI and EC stimuli, across trials and participants. A repeated measures ANOVA with factors experimental condition (EC, EI) and motion parameter (x, y, z, pitch, roll, yaw), showed no significant main effect of experimental condition ($F_{[1,10]} < 1$, $p = 0.55$), and no significant interaction ($F_{[5,50]} = 1.08$, $p = 0.38$). This suggests that there are no differences in head motion associated with a particular stimulus presentation.