Supporting material for
Fred H. Hamker, Marc Zirnsak, Dirk Calow & Markus Lappe: The peri-saccadic perception of objects and space

Text S2: Estimates of the cortical areas involved based on receptive field size

Unfortunately, there are no sufficient quantitative receptive field measurements in human visual cortex, but it is likely that the receptive field size is larger than in monkeys [1]. Thus, we compared the required receptive field sizes of the model with the receptive field sizes from the areas of interest from monkey: V3a [2, 3], V4 [4–6], TEO [4], MT [7–10] (whereas most of the large receptive fields in MT have been reported by [10]), V2 [3, 11], LIP [12, 13], and TE [4]. The receptive fields of area TE are already quite large which might suggest that TE is only involved in object recognition. However, TE seems to contribute to spatial perception as well, since it is connected to LIPd and LIPv, similar as the projection from TEO [14].

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