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Supplemental information

**Parallel signatures of cognitive maturation
in primate antisaccade performance
and prefrontal activity**

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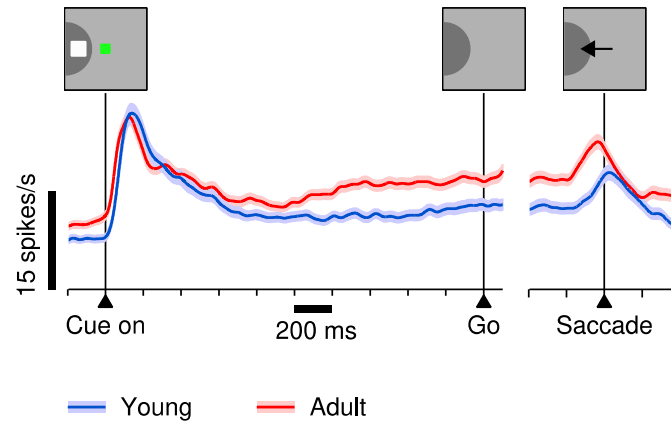


Figure S1. Young- versus adult-stage activity during the ODR task. Related to Figures 5, 6.

Results are from VM neurons recorded in the ODR task in the young- (blue trace) and adult-stage animals (red trace). Activity traces correspond to mean firing rate (± 1 SE across neurons) as a function of time for correct saccades into the RF (cue in, saccade in). The data are the same as the magenta traces in panels A (young animals) and B (adult animals) of Fig. 5, but superimposed. In adults (red trace), higher goal-directed activity is evident during the memory delay and is followed by an earlier perisaccadic burst.

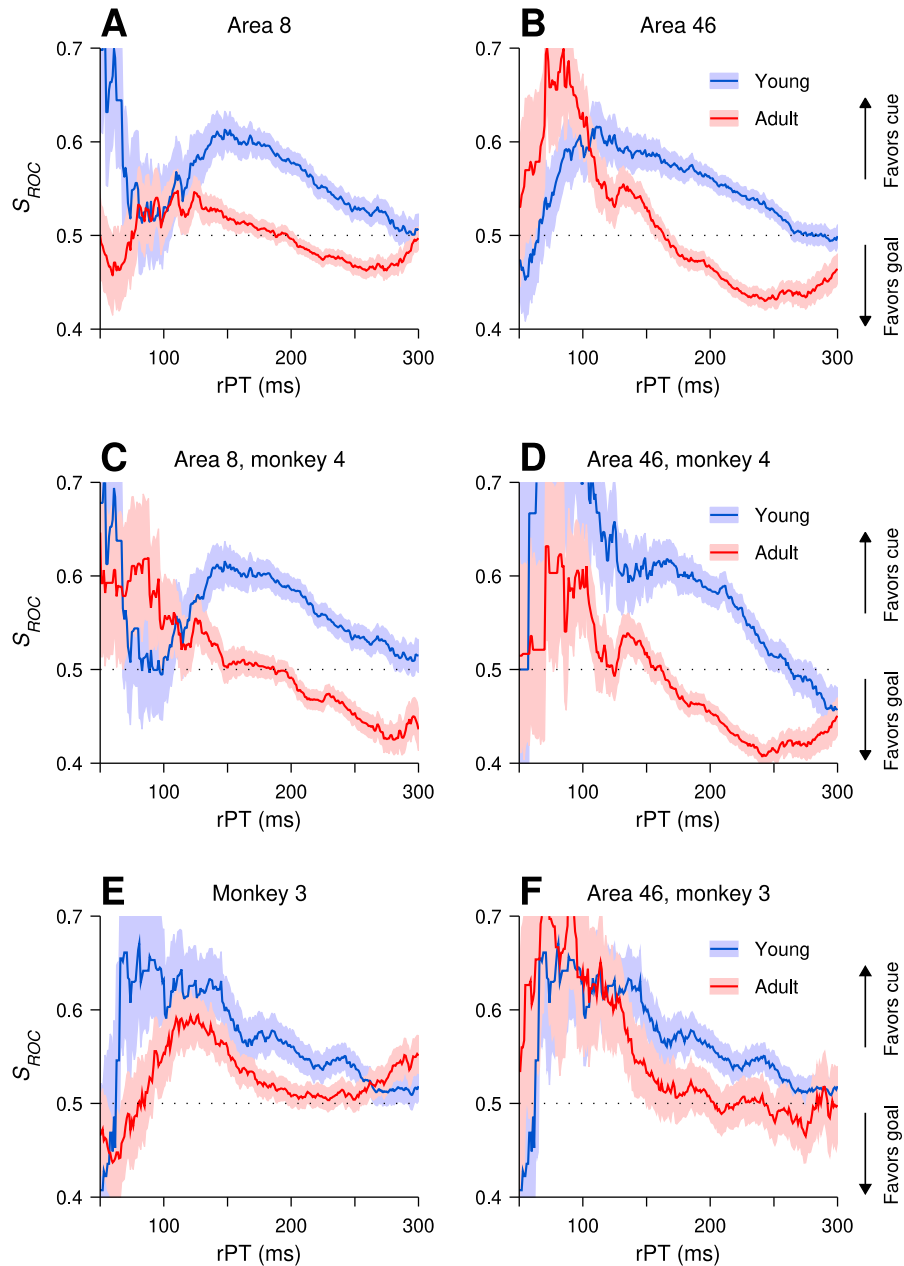


Figure S2. Qualitatively similar age-related changes in the spatial signal were observed for prefrontal neurons recorded from areas 8a and 46, and from individual monkeys. Related to Figures 7, 8.

(A, B) Neurometric curves based on VM neurons recorded from area 8a (A) and area 46 (B) for all monkey subjects combined. (C, D) Neurometric curves based on VM neurons recorded from area 8a (C) and area 46 (D) from monkey 4. (E) Neurometric curves based on all VM neurons (Areas 8a and 46) recorded from monkey 3. (F) Neurometric curves based on VM neurons recorded from area 46 from monkey 3. All S_{ROC} values were generated as described for Fig. 7E. Age-related changes were consistent across subsets of the recorded data.