Figure 2. Saccade detection experiment. A) Task design. During smooth pursuit subjects made a saccade towards a target (squares) at one out of four possible locations at different distances from the smooth pursuit target (black disc). For three distances (1, 2 and 3 degrees) the target moved on a circular trajectory (grey curved lines) while for the largest distance (8.75 degrees) the target remained stationary at the screen center. In the ‘no saccade’ condition, only the smooth pursuit movement was required. B) Spatial eye position traces of example trials in the different conditions. The grey curved lines indicate the distances of the saccade target trajectories. C) Velocity profiles of the example trials in ‘B’ for the ‘no-saccade’ trial (upper panel) and the saccade trials (lower panel). The red dashed line indicates the velocity criterion (20 degrees/s) of the saccade detection algorithm and the black solid line the velocity of the smooth pursuit target. Color-coding follows conventions in ‘B’. D) Average peak velocity. The error bars represent Std.