



Figure 5 – figure supplement 1 | Simple spike response anticipates after 4 Hz air-puff stimulation

A. Averaged zero-lag correlation (across the 45° line in Fig. 5F) of the instantaneous simple spike rate and whisker position before (magenta) and after (brown) 4 Hz air-puff stimulation, highlighting the faster achievement of the moment of maximal correlation after induction. This shift (again, along the 45° line) is further quantified and illustrated with a box plot (**B**). * $p < 0.05$. **C.** The slopes of the correlations between instantaneous simple spike firing rate and the angle of the

whisker are shown before and after 4 Hz air-puff stimulation for the 14 individual PCs that showed significant correlation. Despite the cells with the highest R correlation values were located in the lateral Crus 2, no clear difference was observed between the slope of the correlation of the PCs of Crus 1 (solid lines) and PCs of Crus 2 (dashed lines). **D.** No slopes change was observed after 4 Hz air-puff stimulation. This indicates that the plasticity induction did not change the amount of movement that corresponded to a certain number of spikes. See also Source Data file.