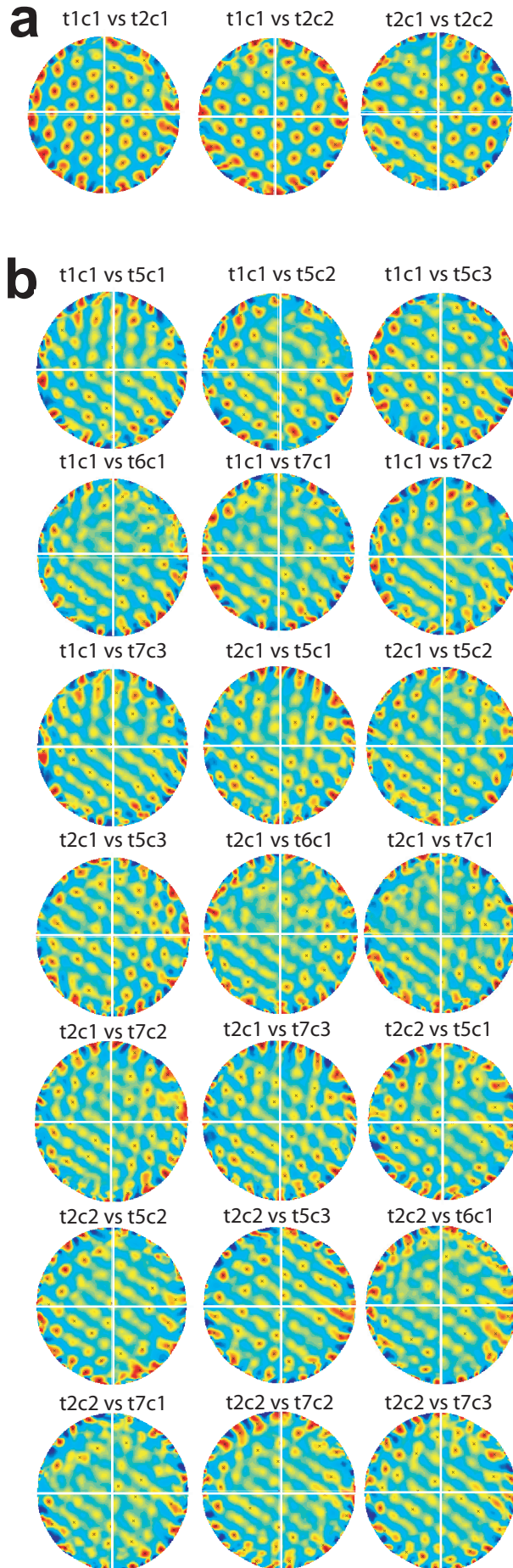


## Supplementary Figure S5



*Spatial cross-correlation between cells in areas with different spacing of the grid. **a**, Cross-correlation between three cells recorded at the same tetrode location (shown also in Figure 2g). **b**, Cross-correlation between cells in **a** (tetrode t1 and t2; Figure 2c) and each of 7 cells from a more dorsal location (t5, t6 and t7; Figure 2d).*

Peaks above  $r = 0.20$  are indicated with an X in the crosscorrelogram. Fewer peaks exceed this threshold in **b** than in **a** ( $33 \pm 1$  vs.  $44 \pm 2$ ;  $t(22) = 3.5$ ,  $P < 0.005$ ), as expected when grid orientation and grid spacing are more different. The difference was especially pronounced in the central half of the cross-correlogram, which contained the majority of the location pairs ( $4 \pm 1$  vs.  $11 \pm 2$  peaks;  $t(22) = 5.6$ ,  $P < 0.001$ ).