

Supplementary Material

Motion direction biases and decoding in human visual cortex

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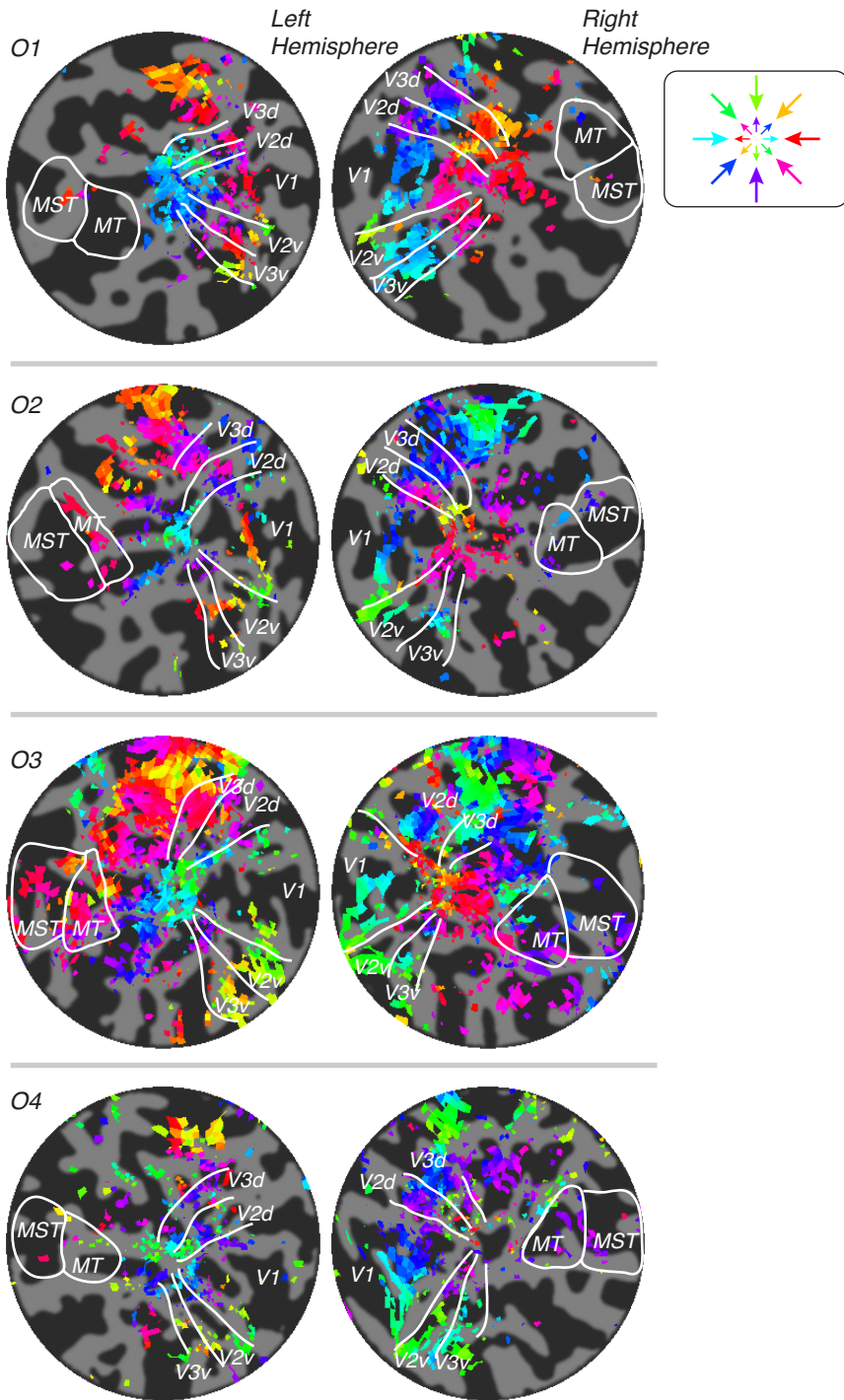


Figure S1. Motion direction preferences for all observers who participated in the large annulus experiment, displayed on flattened representations of their occipital lobes. Dark gray indicates sulci, Light gray, gyri. Flat patches have approximate radii of 65–85 mm. Color indicates phase of each voxel’s fMRI response time series, which corresponds to the voxel’s motion direction preference (see inset). White contours indicate boundaries between visual cortical areas. Panels for observers O1 and O2 are the same as Figs. 1B and C.

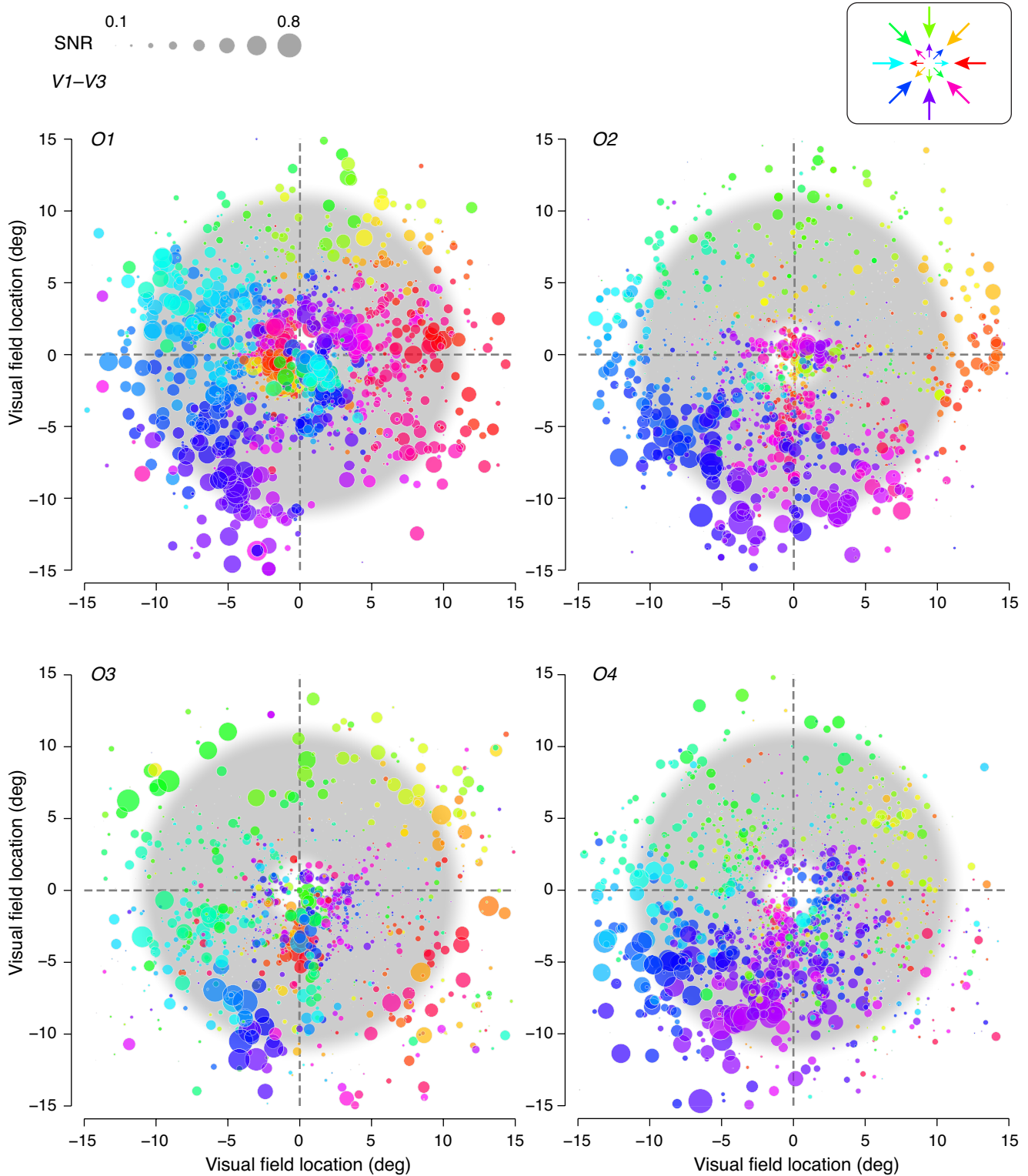


Figure S2. Motion direction preferences for all observers who participated in the large annulus experiment, visualized as a function of their pRF locations in the visual field. Each panel corresponds to a single observer and pooled across V1-V3. Each circle corresponds to a single voxel, the coordinates of which represent the center of the voxel's pRF. Circle size proportional to SNR. Colors indicate motion direction preferences (see inset). Dashed lines, horizontal and vertical visual field meridians. Pale gray patch, stimulus aperture.

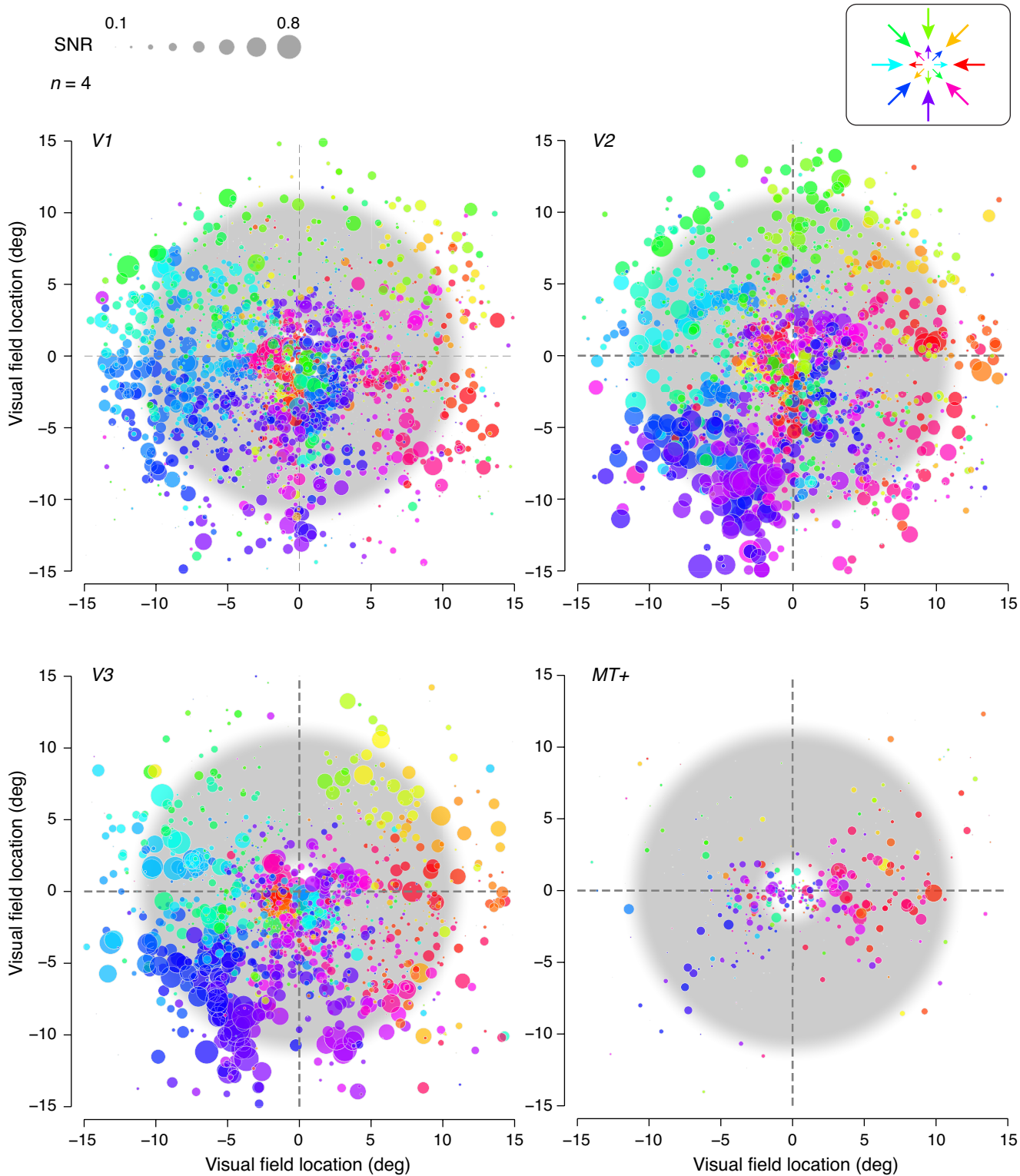


Figure S3. Motion direction preferences for the large annulus experiment, shown separately for each visual area, pooled across observers ($n = 4$). Each panel corresponds to a different visual area. The format within each panel is analogous to that in Fig. S2, but the circles correspond to voxels from all observers.

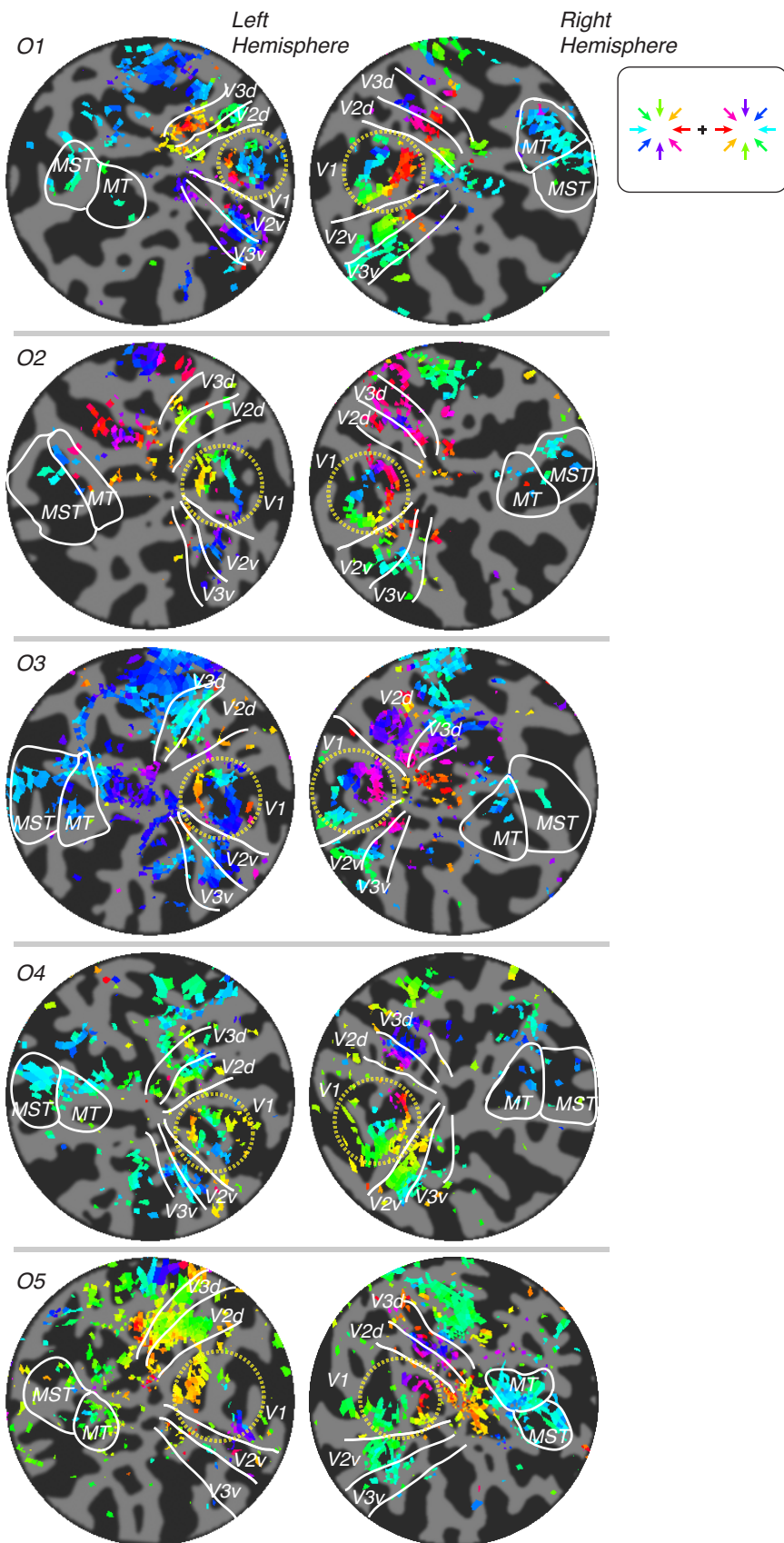


Figure S4. Motion direction preferences for all observers who participated in the two circles experiment (blank background condition), displayed on flattened representations of their occipital lobes. Same format as Fig. S1. Right hemispheres of observers O1 and O2 are the same as Figs. 2C and D.

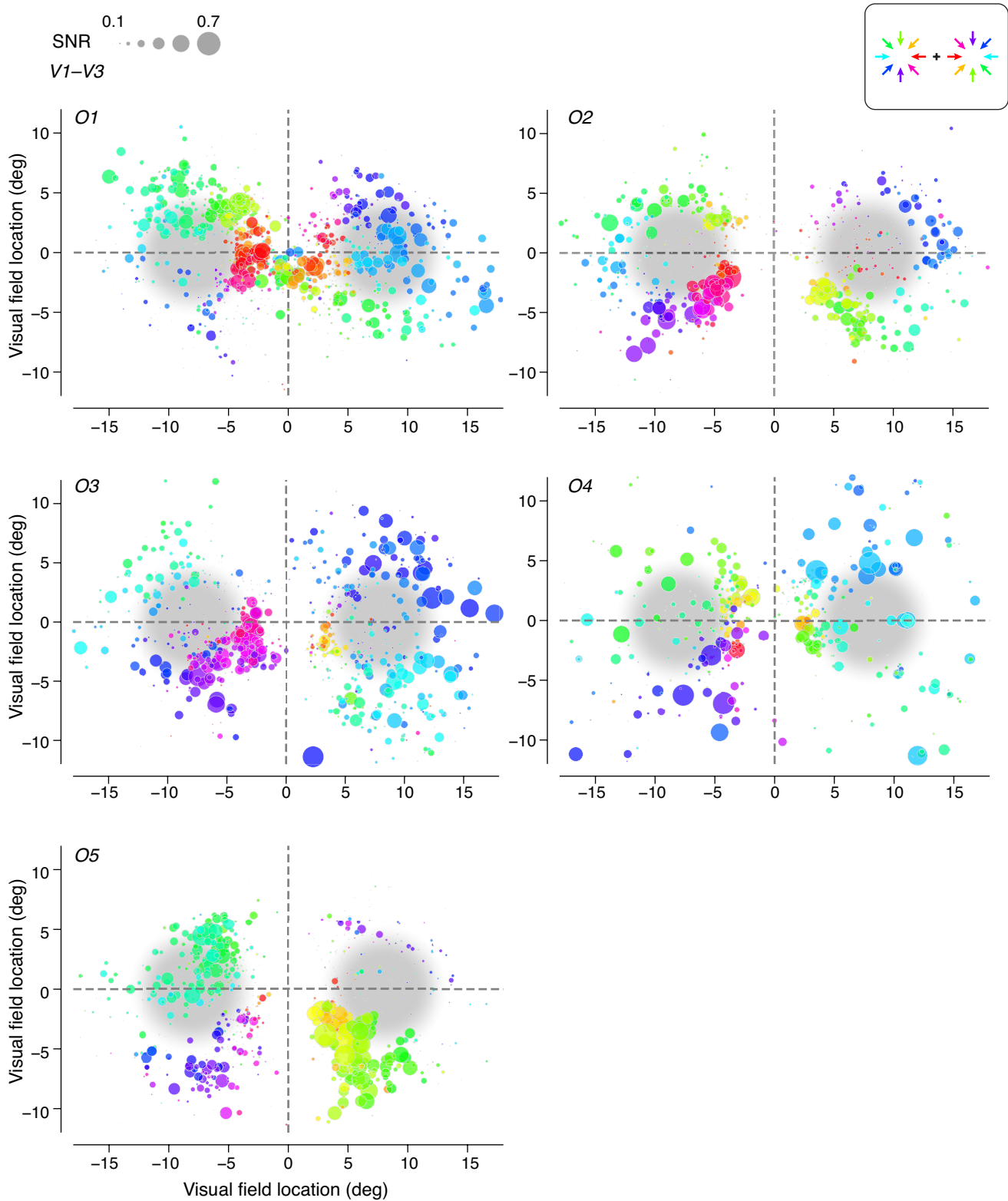


Figure S5. Motion direction preferences for all observers who participated in the two circles experiment (blank background condition). Same format as Fig. S2.

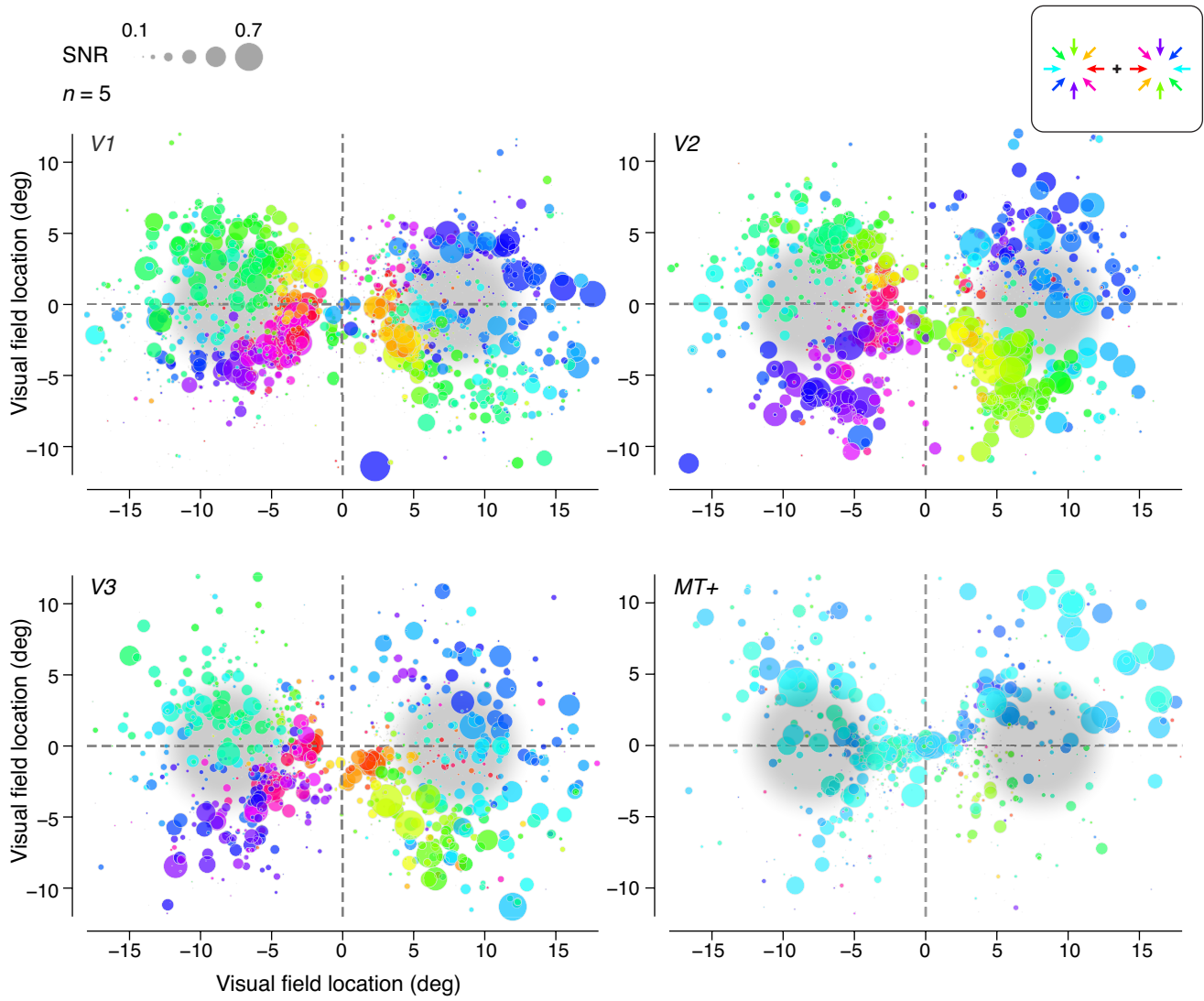


Figure S6. Motion direction preferences for the two circles experiment, shown separately for each visual area, pooled across observers ($n = 5$). Same format as Fig. S3. Panel for V1 is the same as Fig. 3.