Visual processing of informative multipoint correlations arises primarily in V2

Figure 2—figure supplement 1.

Yunguo Yu, Anita M Schmid, Jonathan D Victor

Weill Cornell Medical College, United States

Article DOI: http://dx.doi.org/10.7554/eLife.06604
Figure DOI: http://dx.doi.org/10.7554/eLife.06604.004

Figure 2—figure supplement 1.

Sensitivity to multipoint correlations in V1 and V2 as a function of RF area and number of checks within the RF.

Each point represents a neuron with a mappable RF (see ‘Materials and methods’): V1 in blue, V2 in red. Left: MCDI as a function of RF area, computed by counting the number of stimulus checks in the RF, and multiplying by the area of each check. Right: MCDI as a function of the number of checks in the RF. The solid lines indicate the moving average of 9 cells, ranked in order shown on the abscissa. Note that when neurons are equated for RF area, either in deg^2 or in terms of the number of checks contained, the MCDI is higher in V2 than in V1. This holds across the population and in the supragranular and granular layers. In the infragranular layer, there appears to be a subpopulation of V1 neurons with large RFs and MCDI's that are greater than their counterparts in infragranular V2—though not as great as in granular and supragranular V2.

DOI: http://dx.doi.org/10.7554/eLife.06604.004