

Crowding and image metamers

Freeman J & Simoncelli EP, Metamers of the ventral stream, *Nature Neuroscience*, **13**:1554-1559 (2011).

http://www.nature.com/neuro/journal/v14/n9/full/nn.2889.html?WT.ec_id=NEURO-201109

1. Explain what is meant by a metamer.
2. Describe the phenomenon of visual crowding.
3. The authors utilize a model of the responses of V2 neurons in which each V2 neuron combines the activity of a bunch of V1 neurons. Describe the way(s) in which V2 neurons are proposed to combine information from V1.
4. Explain how the authors infer that perceptual performance in their psychophysical task is determined by the activity of neurons in V2.
5. Can you devise a further experiment (perhaps using different methods) that would provide a complementary test of the authors' hypothesis?