

Abstract Submitted  
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**Detailed study of the hot and cold spots in the CMB** DAVID LARSON, BENJAMIN WANDEL, University of Illinois at Urbana-Champaign — We perform a detailed statistical analysis of the one and two-point properties of the local extrema in the WMAP (Wilkinson Microwave Anisotropy Probe) data. For the one-point functions, our previous work found that the simple white noise model indicated a 95% detection of non-Gaussianity in the mean temperature of the hot and cold spots: the hot and cold spots are not hot and cold enough. We will discuss the relevance this result and our new findings in light of other studies of non-Gaussianity in the literature. We will also discuss how the results of the white and correlated noise differ at varying resolutions.

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