Abstract Submitted for the DFD11 Meeting of The American Physical Society

Simulated tornado debris tracks: implications for inferring corner flow structure¹ MICHAEL ZIMMERMAN, NASA Goddard Space Flight Center, DAVID LEWELLEN, West Virginia University — A large collection of three-dimensional large eddy simulations of tornadoes with fine debris have been recently been performed as part of a longstanding effort at West Virginia University to understand tornado corner flow structure and dynamics. Debris removal and deposition is accounted for at the surface, in effect simulating formation of tornado surface marks. Physical origins and properties of the most prominent marks will be presented, and the possibility of inferring tornado corner flow structure from real marks in the field will be discussed.

¹This material is based upon work supported by the National Science Foundation under Grants No. 0635681 and AGS-1013154.

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Date submitted: 04 Aug 2011 Electronic form version 1.4