Abstract Submitted for the SES12 Meeting of The American Physical Society

Minimum-Bias Studies Using the Energy Scan Data from the Fermilab Tevatron Collider DAVID WILSON, University of Virginia, CRAIG GROUP, University of Virginia & Fermilab, RICK FIELD, University of Florida, CDF COLLABORATION — We report on an analysis of the minimum-bias event data (that is, events with the least selective trigger criteria) taken at the Tevatron collider at Fermilab, in particular an energy scan recording collisions at  $\sqrt{s} = 0.3$ , 0.9, and 1.96 TeV. This data set represents a rare chance to analyze the energy dependence of several minimum-bias observables; for example, the pseudorapidity  $(dN/d\eta)$  distribution. We present the results of a comparison of these observables with the PYTHIA Monte Carlo simulation.

> David Wilson The University of Virginia

Date submitted: 11 Sep 2012

Electronic form version 1.4