## A PROJECT GRAND STUDY OF THE GLE OF 14-JUL-00

I. Poirier, C. D'Andrea, and M. Dunford

Physics Department, University of Notre Dame, Notre Dame IN 46556 USA poirier@nd.edu

The Ground-Level Event (GLE) associated with the X5.7 solar flare detected on July 14th, 2000 is studied by the Project GRAND proportional wire chamber array. Results are compared to those obtained by the Climax Neutron Monitor which detects secondary neutrons. The Climax monitor is located in Climax, Colorado and is operated by the University of Chicago. The time of the GLE signal of the Climax station is examined for a possible signal in the Project GRAND data. Project GRAND is an array of 64 proportional wire chamber stations. The stations are sensitive to secondary muons at energies greater than 0.1 Gev. Monte Carlo studies indicate that hadroproduction of pions by gamma ray primaries will produce secondary muons which reach ground level. The mean energy of gamma ray primaries which produce these muons depends on the spectral index of the primary gamma ray spectrum. For an index of 2.7, the most probable gamma ray energy is about 30 GeV; a similar energy is expected for proton primaries.