Abstract Submitted
for the APR12 Meeting of
The American Physical Society

Solar Flare Impulse Broadening from Gamma Ground Survey Network MARC LITZ, DAVID BURNS, JAMES CARROLL, Army Research Laboratory, NINO PEREIRA, Ecopulse Inc. — Inexpensive gamma detectors with GPS and wireless communications have been developed and installed to provide a ground survey network for detection of unintended gamma radiation along transport routes. Signals from pedestrian borne and vehicle borne radiation sources have pulse widths that range three orders of magnitude in time from millseconds to seconds. Information collected during the 24/7 operation of this network generated unexpected signals lasting over an hour. These longer time responses have been traced to solar flare events. This paper will discuss the time and intensity correlations with known satellite sensor data. These terrestrial gamma ray flashes will be analysed further as real-time data continues to be collected.

Marc Litz
Army Research Laboratory

Date submitted: 10 Jan 2012 Electronic form version 1.4