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GPS energetic electron observations of sawtooth events in the inner magnetosphere

R. H. W. Friedel (1), T. Pulkkinen (1,2), N. Ganushkina (2), T. C. Cayton (1) and J. C. Ingraham (1)

(1) Los Alamos National Laboratory, Sapce and Atmospheric Sciences (ISR-1), (friedel@lanl.gov, tcayton@lanl.gov, ingraham@lanl.gov,tuija@lanl.gov), (2) Finish Meterologiacl Institute (tuija.pulkkinen@fmi.fi)

Los Alamos CXD instruments on the GPS satellites are now in orbit on 6 GPS spacecraft providing an unprecedented constellation of energetic electron measurements in the inner magnetosphere from L=4 outward. Sawtooth events have recently been investigated as substorm-like global events observed as geosynchronous orbit. We combine here event-oriented magnetic field models and GPS measurements at best-model calculated L-values to investigate the signature of these events between geosynchronous orbit and L=4 to investigate the efficiency of these steady driven events for driving energetic electrons deep into the radiation belts.