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## Efficiency of the radiation monitor onboard Akebono using Geant4

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Natural high-energy electrons and protons (keV~MeV) in the space contaminate the data each other. In order to calibrate data from the radiation monitor (RDM) onboard the Akebono satellite, the RDM instrument is investigated using a toolkit of computational particle tracing, Geant4. The results indicate that relativistic electrons of MeV behave quite complicatedly because of particle-material interaction in the instrument and that efficiency of detection and contamination is dependent on energy. This study compares the electron data from Akebono RDM with the simultaneous observation of CRRES and tries to lead the values of correction for each of the energy channels.

Keywords: radiation belts, high energy particles, particle detector, Geant4