Comparison cosmic ray irradiation simulation and particle beam test on UFFO Burst Alert & Trigger telescope (UBAT) detectors - DTU Orbit (02/12/2018)

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Ultra-Fast Flash Observatory pathfinder (UFFO-p) was launched onboard Lomonosov on 28th of April, 2016, and now is under various types of calibration for detection of Gamma Ray Bursts (GRBs). Since last September UFFO-p has taken X-ray data in space with UFFO Burst Alert & Trigger telescope (UBAT), those X-rays are mostly diffused backgrounds however, the rate turns out to be higher than expected by a factor of three. We assumed cosmic rays can contribute by making the count rate higher. We did such a simulation to investigate the effect of cosmic rays. In December 2016, we irradiated fragmented high energy heavy ions at CERN on the UBAT detector. We will report the result of comparison between simulation and beam test.

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