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Time sequence of TGFs and optical pulses detected by ASIM

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In 2018, the Atmospheric Space Interactions Monitor (ASIM) was launched and mounted onboard the Columbus module of the International Space Station (ISS). Using data from the Modular X- and Gamma-Ray Sensor (MXGS) and the Modular Multispectral Imaging Array (MMIA), we investigate the time sequence of the TGFs detected by MXGS and the optical pulses detected by the MMIA. The optical pulses are observed in the 337 nm and 777.4 nm, and the X- and gamma-rays are detected by the High Energy Detector of MXGS, which is sensitive to energies from 300 keV to more than 30 MeV. We will also look into the TGF duration and any correlation with the time between the TGFs and the main optical signals. The data used is from June 2018 (shortly after mounting on the Columbus module) until the end of March 2019, when the relative timing uncertainty between the two instruments was +/- 80 us. The data after this is presented in Skeie et al.