Radiation Dose Nowcast for the Ground Level Enhancement on 10-11 September 2017

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A ground level enhancement event occurred on 10-11 September 2017, associated with an X8.2 solar flare on the western limb of the Sun. We report the results of our manually conducted nowcast using Auto-WASAVIES (Sato et al., 2018, Space Weather). The maximum radiation dose rate at a flight altitude of 12 km was estimated to be approximately 3 uSv/h, which is less than half of the dose rate due to galactic cosmic rays. We also discuss a possible quasi-parallel shock-acceleration mechanism that may have led to the exceptionally soft proton energy spectrum as ground level enhancement events.