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Fluence of photons from Terrestrial Gamma ray flashes in aircraft and balloon altitudes - dependence of initial parameters in simulations

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Based on simulations of photon propagation in air we find the photon fluence at different observational points at aircraft and balloon altitudes. The observed fluence is highly affected by the initial parameters of the simulated Terrestrial Gamma ray flashes. Important parameters are initial altitude, altitude distribution, angular distribution and amount of feedback. The differences in altitude, altitude distribution and amount of feedback is especially important for the fluence of photons observed at altitudes less than 20 km, and for instruments with energy threshold larger than 100 keV.