

Analyzed Report 6

Electrons $E \geq 30$ keV of magnetospheric origin penetrating to atmosphere contribute to production rate below 100 km especially on night side. Electrons of MeV energy found at geostationary orbit, pronouncing relation to solar and geomagnetic activity, cause maximum ED at 40 to 60 km. More accurate treatment need assuming of individual HE solar flare particles, cut off rigidities in geomagnetic field and their changes during magnetospheric disturbances. Galactic CR depending on solar cycle phase and latitude are dominant source of ED by corpuscular radiation below 50 to 60 km. High temporal variability, local time dependence and complicated energy spectra lead to complicated structure of electron ED rate. Below 20 km secondaries must be assumed.



