

THE CHARGED PARTICLE ACCESS TO INUVIK NEUTRON MONITOR

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The influence of magnetospheric disturbances on the charged particle access to the Inuvik location (geographic coordinates 68.35 N - 226.28 E and 21 m a.s.l.) was evaluated by computing the particle trajectories in the geomagnetic field for the spring equinox of 1986 (01 UT). For the computations we used the DGRF85/DGRF90 and the TSYG89 (Tsyganenko 1989) magnetospheric models. We show results for cutoff rigidities (RL, RC, RU) and asymptotic directions of vertical incident particles considering different geomagnetic activity levels. We get the information that geomagnetic disturbances induce a significant variability in the Rc values but the effective rigidity for vertical incident charged particles at Inuvik is stable over the years (1955 - 1986). We show also that magnetospheric disturbances mainly concerns cosmic ray rigidities below 20 GV.