

The cone of acceptance and magnetic rigidity cutoff of GCR particles for different models of the IGRF from 1965-2015 in the Deblin airport, Poland

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We present the results of computations of the trajectories (the asymptotic latitude and asymptotic longitude) and the magnetic cutoff rigidity of galactic cosmic ray (GCR) particles for the airport Deblin, Poland (geographical latitude 51°33'32"N, geographical longitude 21°50'53"E) based on the numerical integration of equations of motion of charged particles of cosmic rays in the Earth's magnetic field. The set of allowed trajectories at a given site on the surface of the earth is called the asymptotic cone of acceptance. The initial distance from the center of the Earth was taken to be 20 km above the Earth's surface. At about this altitude, most cosmic rays undergo nuclear collisions.

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