

## Evidence of geomagnetic effect on the azimuthal distribution of cosmic rays

The geomagnetic field causes not only the East-West effect on the primary cosmic rays but also affects the trajectories of the secondary charged particles in the shower, causing their lateral distribution to be stretched. Thus both the density of the secondaries near the shower axis and the trigger efficiency of detector arrays decrease. The effect depends on the direction of the showers, thus involving the measured azimuthal distribution. The non-uniformity of the azimuthal distribution of the events collected by the ARGO-YBJ detector is deeply investigated for different zenith angles in the light of this effect.

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