

The Astroparticle Physics Conference

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ANALYZING THE 2014 JANUARY 6 GROUND LEVEL ENHANCEMENT

Saturday 1 August 2015 15:30 (1 hour)

We investigated the variations in the cosmic ray (CR) rigidity spectrum and anisotropy during the 2014 January 6 Ground Level Enhancement (GLE) from the ground-based observations of CRs at the global network of stations and with spacecraft by using the method of spectrographic global survey.

Presented are the CR rigidity and variation spectra, as well as the relative variations in the 4-GV CR intensity in the solar-ecliptic geocentric coordinate system during individual periods of the event under investigation. During this GLE, the proton acceleration is shown to reach the particle rigidity of R $^{\circ}$ 2.4 GV, and the CR differential rigidity spectra are described neither by the power nor by the exponential function of the particle rigidity within the $^{\circ}$ 0.3 - $^{\circ}$ 2.4 GV rigidity range. During this GLE, the Earth was in the IMF loop-like structure

Collaboration

- not specified -

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