

Simulations and Theory of the Effect of Atmospheric Electricity on Cosmic Rays

Monday, 27 March 2023 09:30 (0:15)

Abstract

Simulations with CORSIKA and EXPACS Software were performed to complete calculations based on Dorman's general theory of atmospheric electric field effects on secondary cosmic rays. The calculations were done for the particles detected at the Sierra Negra Cosmic Ray Observatory, located at a height of 4580 m a.s.l. Variations of 1.15-3.47% on the intensity of the charged component were estimated.

Comments

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Session Classification : D1-Talks