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Fluctuations of the charged particle distribution and the mass composition of cosmic rays in the region 10^{15} - 10^{19} eV by Yakutsk EAS Array data

Abstract content

In the framework of scaling formalism, a parameter $R(m.s.)$ (mean square radius) of the EAS charged particle lateral distribution function in the wide energy interval is analyzed. The fluctuations of $R(m.s.)$ and their comparison with calculated values according to the QGSJET model in the case of different primary nuclei are given. The probable mass composition of cosmic rays in the region of superhigh energies is reconstructed by using the interpolation method in the framework of the two-component model.

If this papers is presented for a collaboration, please specify the collaboration

Summary

Reference

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