Response in changes of the ground - level pressure to Cosmic Ray action

V. E. Timofeev¹, U. G. Grigoryev¹, I. P. Bezrodnykh¹, Y. I. Morozova¹, N. G. Skryabin, and A. T. Filippov

¹Institute of Cosmophysical Research & Aeronomy (Yakutsk)

Abstract. It is assumed that cosmic can form hygroscopes aerosols in the lower atmosphere rays through the ionization. It must lead to some increase of the pressure if the cosmic ray intensity decreases, and to the decrease of the pressure if the intensity increases. The response in changes of the ground-level pressure on Forbush-decreases is determined from experimental data. After the Forbush-decreases the pressure increases. Its mean duration is \( \sim 10 \) days, the amplitude is \( \sim 1.5 \) mb. A type of the response essentially differs from the effect in changes of the ground-level pressure caused by auroral precipitation’s. Its maximum value is observed 6 days after change of cosmic ray intensity.