The Cosmic Ray Intensity Correlation with the Sunspot Number in LAAS Experiments


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Abstract

In order to study the correlation of cosmic ray intensity with solar activity (sunspot numbers), extensive air shower (EAS) data are analyzed for the data period of 1996-2002 in Large Area Air Shower (LAAS) project. The LAAS project has operated 5 arrays at sea level in a large part of Japan. These arrays cover the primary energy range more than $10^{14}$ eV, but their angular resolution is about 7 degree. Data on the basis of daily count rates in diurnal phase, are compared with the sunspot indices given by SIDC.