

A Study of Solar Interplanetary Distributions and their Effects on the Variation of the Cosmos Ray during Solar Cycle 24

Vidya Sagar Chaudhary¹, Vivek Dwivedi², Sri Krishna Singh³, C. M. Tiwari⁴, A. K. Saxena⁵

Department of Physics, Awadhesh Pratap Singh University, Rewa, MP, India
vidyasagar342@gmail.com

Abstract: *Taking interested to description of cosmic ray observation during solar cycle-24 and the availability of modern methods are used in this research work, we conducted a comprehensive correlative analysis for the solar cycles 24 involving cosmic rays and various parameters of solar activity. The role of various solar and interplanetary parameters in the long-term modulation of cosmic rays has been deduced from our research. We gathered this information from a variety of neutron monitor station websites as well as the Solar Geophysical data books' cosmic ray, solar interplanetary and geomagnetic data. After conducting a thorough analysis, a number of statistical techniques were used to arrive at the results. At long last we make basic assessment of the outcomes introduced in past part and those connected by different agents to finish up our discoveries. Draw the following inferences from the observations.*

Keywords: Cosmic Ray, Sola cycle, Geomagnetic Strom, IMF, Solar Wind, Neutron Monitor