STUDY OF DIURNAL ANISOTROPY OF COSMIC RAY INTENSITY DURING INTERPLANETARY MAGNETIC CLOUDS

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Cosmic ray intensity have been observed during the consecutive days having abnormally high diurnal amplitude and unusually low diurnal amplitude, for the period 1981 – 97. In all 32 High Amplitude Events (HAE) and 27 Low Amplitude Events (LAE) have been selected. During the periods of HAE and LAE number of Interplanetary Magnetic Clouds have been identified using IMF and SWP data for each event. It has been found that the amplitude of the diurnal anisotropy increases on the day of the magnetic cloud as compared to the earlier days of the period of event and it decreases as the cloud passes the Earth. The majority of HAE and LAE have occurred when the solar wind velocity being average or moderate, which indicates that these events are not caused during the periods of occurrence of High Speed Solar Wind Streams.