

DISTRIBUTION OF EAS ARRIVAL TIMES ACCORDING TO DATA OF THE EAS-1000 PROTOTYPE ARRAY

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We have analysed arrival times of extensive air showers (EAS) registered with the EAS-1000 prototype array over the period from August 1977 till February 1999. Our analysis that was based on certain non-parametric statistical methods has revealed that though the vast majority of EAS arrival times obey the Poisson distribution, there are sequences of showers that have another distribution of arrival times and thus violate the homogeneity hypothesis. The search for correlation between such events and clusters of showers and events with big delays between arrival times was also carried out.