

Enhancement of Cosmic Rays from the Vela Region at $E > 10^{12}$ eV

The BASJE Collaboration

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Abstract

At 25th ICRC we reported enhancement of cosmic rays arriving from the Vela region observed with SAS array at Mt. Chacaltaya in Bolivia. The significance level of this enhancement is 4.3. We, however, could not conclude that this enhancement is caused by primary gamma rays, since the observed air showers not limited with less muons show the same enhancement. To confirm these results with improved statistics and to investigate the energy dependence of this enhancement, we have installed a new air shower array: MAS array. The threshold energy of MAS array is 6×10^{12} eV while that of SAS array is 3×10^{13} eV. The observation with MAS array was started at October 1998. In this report, we will present the preliminary result including new data. Furthermore, we will calculate the degree of enhancement contributed by cosmic rays originated at the Vela SNR to compare with the observed result.