THE ENERGY SPECTRUM AROUND THE KNEE REGION OBSERVED AT MT. CHACALTAYA

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Observation of EAS with the combination of emulsion chamber and EAS array is undergone at Mt.Chacaltaya. We report on the size spectrum of EAS observed in about 5 years and discuss the energy spectrum and composition in this spectrum range. The corresponding energy range is between 10^{14}eV and 10^{16}eV and includes the knee region. To discuss these characteristics, detailed EAS simulations were fulfilled with the condition of arrangement of the array, trigger and detector response. Specially, by the method of the different trigger efficiency between initiated low and high mass composition, the result of proton spectrum obtained at near 10^{14}eV is also reported.