

Muon component in giant air showers with energies greater than $10^{18.5}$ eV observed by AGASA

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Abstract. Muon component in air showers with energies greater than $10^{18.5}$ eV has been studied from data obtained by Akeno Giant Air Shower Array(AGASA). Average lateral distribution of muons and local muon densities at 600m and 1000m from air shower core have been analyzed as a function of primary energy. Re-lated simulations with dif-

ferent primary compositions and particle interaction models have been also processed including actual experimental conditions. The characteristics of muon component in air shower and a possible chemical com-position of primary cosmic rays will be discussed in this paper.