

The study of the longitude development of muons in air shower

- ✓ It has a great contribution to the identification composition of cosmic rays.
- ✓ This topic is study X_{max}^{μ} which is the position with muon production reaching maximum and it is sensitive to the mass composition of cosmic rays.
- ✓ We use CORSIKA simulation and timing information of muons to reconstructed the muon production depth.
- ✓ X_{max}^{μ} is $500g/cm^2$ with bias about $32g/cm^2$ for proton with energy = $10^{16}eV$ and zenith angle 45° . And correlation between the number of muons and X_{max}^{μ} is weak.