STUDY OF UHE PRIMARY COSMIC RAY COMPOSITION WITH ATMOSPHERIC CHERENKOV LIGHT OBSERVATIONS

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An EAS array with capabilities of e- γ density detection, air Cherenkov light observation and muon number counting have been set up on Mt. Liang Wang (24.7N,102.9E,2720m a.s.l.). It is located at the south-east of Kunming,China (about 60km away from downtown) and the local climate is suitable for Cherenkov light observation. A comparison between the air Cherenkov data and our MC simulation with minijet model indicated that the mean mass of primary cosmic rays has no drastic changes below the knee,but a heavier tendency is clearly appeared above the knee.