

A wide sky survey to search for TeV gamma-ray sources by the Tibet air shower array

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Abstract. A wide sky survey for TeV gamma-ray source was done using nearly two years data of the Tibet II high density air shower array. This high density scintillation counter array located at altitude 4,300m has observed small air showers of mode energy 3TeV. The accuracy of incident angle of these small air showers is 1.0 degree. The surveyed sky area ranges from 10 degree through 50 degree of declination for

all directions of right ascension. Several celestial directions including Crab direction are found to have significance level higher than four sigma. These significant directions are going to be checked by the new data of the Tibet III which is consist of high density detector array of about 22,000 m².