30th International Cosmic Ray Conference



Contribution ID: 954 Type: Poster

Seven-year observation of multi-TeV gamma rays from the Crab Nebula with the Tibet air shower array

Friday, 6 July 2007 14:45 (0:00)

Abstract content

The Tibet air shower array, consisting of 533 scintillation counters which are placed in a lattice with 7.5 m spacing, has been in operation since 1999 at Yangbajing in Tibet, China at an altitude of 4,300 m above sea level. In this conference, we will report on the continuous observation of multi-TeV gamma rays from the Crab Nebula with the Tibet air shower array. We found no evidence for time variability of flux intensity from the Crab Nebula at multi-TeV energies. Also the gamma-ray energy spectrum of the Crab Nebula is consistent with our previous results and other observations by the atmospheric imaging Cherenkov telescopes. In addition, we will discuss our systematic errors, such as the stability in pointing accuracy, angular resolution and the absolute energy scale error, which have been checked by monitoring the Moon's shadow in the cosmic-ray flux.

If this papers is presented for a collaboration, please specify the collaboration

The Tibet ASgamma Collaboration

Summary

Reference

Proceedings of the 30th International Cosmic Ray Conference; Rogelio Caballero, Juan Carlos D'Olivo, Gustavo Medina-Tanco, Lukas Nellen, Federico A. Sánchez, José F. Valdés-Galicia (eds.); Universidad Nacional Autónoma de México, Mexico City, Mexico, 2008; Vol. 2 (OG part 1), pages 799-802

Primary author(s): Dr. OHNISHI, Munchiro (Institute for Cosmic Ray Research, University of Tokyo); Dr. TAKITA, Masato (Institute for Cosmic Ray Research, University of Tokyo)

Presenter(s): Dr. TAKITA, Masato (Institute for Cosmic Ray Research, University of Tokyo)

Session Classification : Posters 2 + Coffee

Track Classification: OG.2.2