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Data acquisition system of air fluorescence detectors for the Telescope Array experiment

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Abstract content

The construction of the fluorescence detectors (FDs) of the Telescope Array (TA) experiment will be completed in June 2007, and the first observation with the full configuration is planned in summer in this year. In this paper, we describe the development of the data acquisition (DAQ) system for the TA FD observations. The DAQ system of each TA FD station is comprised of 16 CPUs: 13 for controls of the FD front-end electronics and 1 for data storage and 1 for environment monitoring, and 1 for the central control of the whole system. We employ the Network Shared Memory system (NSM) for communication of the CPUs. We will present the detail of the system and the performance in the test observations and the first science run.

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

The Telescope Array 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. 5 (HE part 2), pages 1017-1020

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