

AtmoHEAD: Atmospheric Monitoring for High-Energy Astroparticle Detectors



ID de Contribution: 31

Type: **Talk**

Atmospheric monitoring of Telescope Array experiment

lundi 10 juin 2013 11:40 (30 minutes)

Atmospheric monitoring is very important for the observation of air showers by the airfluorescence technique.

In the Telescope Array (TA) experiment, the LIDAR (LIght Detection And Ranging) system and the CLF (Central Laser Facility) system are used for the measurement of atmospheric transparency. The LIDAR system is located southeast of TA site, and the CLF is located in the center of the TA site. The usefulness of the CLF and LIDAR systems are demonstrated by analyzing the time variation of atmospheric transparency with the systems. The two atmospheric monitor systems are complementary. We have installed a new LIDAR system at the CLF location, and we expect this will yield valuable data. Clouds are observed with a CCD camera and an IR camera and by visual checks. In addition, we have also measured atmospheric parameters at the ground level using several weather systems. In this talk, these detector systems will be described.

Auteur principal: Dr TOMIDA, Takayuki (RIKEN)

Orateur: Dr TOMIDA, Takayuki (RIKEN)

Classification de Session: Monday morning

Classification de thématique: Monitoring facilities in operation