Calibration of TA Surface Detectors

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Abstract: The surface detector of Telescope Array (TA) experiment are deployed in desert of western Utah, USA. The detector consists of two layers of plastic scintillators of 3m² area with wave length shifter fiber (WLS fiber). There are 2 PMTs and each PMT is connected with fibers from corresponding layer. To check PMT linearity, 2 LEDs are equipped for each layer. To estimate no of shower particles with good accuracy, it is needed to know the response for 1 minimum ionization particle and monitoring the environmental effect on it. And PMT linearity are also needed to be monitored and calibrated. Here we report observed variation on detector response and its calibration. And the result of linearity check with LEDs also will be reported.