

Long term stability and performance of new large muon telescopes of Grapes III at Ooty

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Abstract. We have installed a new muon angle measurement system with the Large Muon Telescope (total area of 560m²) of the GRAPES III shower array at Ooty to observe the modulation of primary cosmic rays flux at energies greater than about 100 GeV in great detail. The performance and stability of the muon detectors have been monitored carefully. Analysis of data shows very good stability and performance

for three years of operation so far. Also we present data on long-term environmental condition such as barometer, temperature and humidity near the Telescope and their correlations with our observations with the Large Muon Telescope.

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