

## **OBSERVATION OF COSMIC RAY SIDEREAL TIME VARIATION BY GRAPES III MUON TELESCOPE AT OOTY**

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We analyzed the sidereal time variation in the data of muons counting rate observed by the large muon telescope of GRAPES . ( total area  $560 \text{ m}^2$  , muon's energy  $> 1\text{GeV}$ ) air shower experiment over 3 years at Ooty (  $11.4 \text{ deg}$  latitude,  $76.7 \text{ deg}$  longitude). The large counting rate of 53,000 counts /sec observed with this detector is of great advantage for modulation measurement. The analysis based on the data of such high-statistics enable us to compare the sidereal diurnal variation even with each single year's result. We have observed the Tail-in and Loss cone anisotropies through detailed analysis. During 1999-2000, we have installed a new angle measurement system for a part of the muon telescope for measurement of direction of individual muons with accuracy of about 8 degrees . We present here some results on the sidereal daily variation obtained by this new system too.