European Extremely Large Telescope: Cross-calibration of DIMM Monitors at Aklim Site

Abstract

Differential Image Motion Monitor (DIMM) is the standard instrument for site testing, it has become the instrument of choice to measure the seeing and it is now regularly used in many observatories. Since the DIMM instruments are not identical, a cross-calibration is necessary before making a reliable comparison between any two sites using this instrument. The differences are generally due to the instrumental configuration and data processing. In order to carry out a prospecting campaign at Aklim site in Moroccan Anti-Atlas; it’s one site from four selected sites to harbor the European Extremely Large Telescope (E-ELT) project. To begin a preliminary survey campaign of measurements, a local DIMM instrument a local DIM instrument has been built, and to characterize this instrument, we have carried out a crosscalibration campaign between this local DIMM named LPHEADIMM (DIMM of Laboratory Physics of High Energy and Astrophysics) with a stable existing DIMM, hereafter IAC-DIMM (DIMM of Instituto de Astrofísica de Canarias). In this paper we represent the results of the 11 nights cross-calibration at Aklim site.
References


Index Terms

Computer Science

Information Sciences

Keywords

DIMM, Data analysis, Cross-calibration