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# An alternative way to monitor telescope pointing: application to LST-1

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The first prototype of the Large Size Telescopes (LST) proposed for the forthcoming Cherenkov Telescope Array (CTA) has recently started to operate in La Palma and is finalizing its commissioning period. The large structure of LST-1 (24 m diameter mirror) imposes a strict control of the telescope bending and deformations that could affect the pointing accuracy and its overall performances. According to CTA specifications, LST pointing accuracy should be better than 14 arcseconds. To achieve this, the LST-1 pointing accuracy is monitored by means of dedicated devices, for example a starguider camera and a Camera Displacement Monitor. In this work, we propose an alternative approach by using the stars that are naturally present in the field of view during observations. By cleaning from the Cherenkov showers the events registered by the camera, it is possible to obtain a picture of the sky at the pointed direction. The reconstructed positions of the stars in the field of view can be compared to their nominal expected position, providing a direct measurement of the mispointing of the telescope.

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