

14TH IAA SYMPOSIUM ON SPACE DEBRIS (A6)
Measurements (1)

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THE PERFORMANCE ANALYSIS OF TELESCOPE ARRAY FOR OBSERVATION OF SPACE
DEBRIS IN LEO

Abstract

The optical observation is mainly used to GEO ring debris in recent years. However, more and more researchers or organizations start to search for more applications about optical telescope in space debris detection, such as extend to MEO and LEO region. Due to the mostly enough brightness, it is possible to make some relatively cheap telescopes up an array to replace the corresponding expensive large device, for the same detected effect. In the paper, a numerical simulation process of the telescope in observation performance was provided, and the detected strategy for LEO ring was designed, then the performance of the devices and their strategy was analyzed, and finally the relatively proper observed strategy and its advanced performance estimated result for observation of LEO region debris using array of small aperture telescopes was gained.