PLATO: PSF modelling using a micro-scanning technique

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Abstract

The PLATO space mission, PLanetary Transits and Oscillations of stars, is designed to detect telluric planets in the habitable zone of solar type stars, and simultaneously characterise the host star using ultra high precision photometry.
PLATO photometry will be performed on board using weighted masks. However, to reach the required precision, corrections (for jitter, for example) will have to be performed by the ground segment and will rely on precise knowledge of the instrument PSF (Point Spread Function).
We propose to model the PSF using microscanning combined with an inversion method. This method will be presented together with preliminary results.

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