

Investigating the photometric stability of EChO

Poster : yes

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Photometric stability is a key requirement for time-resolved spectroscopic observations of transiting extrasolar planets. In the context of the EChO mission design, we here present and investigate means of translating space-craft pointing instabilities as well as temperature fluctuation of its optical chain into an overall error budget of the exoplanetary spectrum to be retrieved. Given the instrument specifications as of date, we investigate the magnitudes of these photometric instabilities in the context of simulated observations.