

Exploration of Other Destination (6)
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MISSION SCENARIO OF EXOPLANET SEARCHING USING SPACE-BASED RADIAL VELOCITY MEASUREMENT

Abstract

Abstract: A mission scenario on exoplanet searching and confirming, getting rid of space-based platform and high-dispersion radial velocity measurement, is recommended. Feasibility of such indirect technical scenario in seeking new stars and potential planets around them is also mentioned. Discussion on the scientific goal, mission configuration, payload and platform design, as well as the key technology problems need to be solved, dominates this paper. Technical innovations derived from the abovementioned work could benefit subsequent research and development of exoplanet investigation.

Keywords: space-based platform, radial velocity, exoplanet exploration, high dispersion