

Abstract Submitted
for the CUWIP21 Meeting of
The American Physical Society

HCCs Next Generation of Exoplanet Research¹ FARAH AL-ABDULRAZZAK, NICHOLE WARNER, JOHNATHON HERNANDEZ, BRYAN CHEUNG, BRENDAN DIAMOND, Howard Community College — As the field of exoplanet research has progressed, further improvements to the quality of data are necessary to detect more subtle signals. Four aspects of the telescopes camera hardware were analyzed in our research: choice of calibration method, linearity of the camera, uniformity of focus, and the impact of telescope balance. The twilight sky was determined to be slightly more precise than images of a calibration light panel. The camera detector was determined to be linear in its response to incident light, and the detector is precise for measurements of light. For the focus, there was a clear systematic difference that yielded a focus that was not uniform, possible corrections are discussed. Rebalancing the telescope has significantly improved the telescope tracking.

¹National Science Foundation

Farah Alabdulrazzak
Howard Community College

Date submitted: 30 Dec 2020

Electronic form version 1.4