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Title: Characterization of Kepler Exoplanet Host Stars

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Abstract: Co-authors: Mark E. Everett, David R. Ciardi, David Silva, Paula

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Using a sample of 220 exoplanet host stars for which uniform spectral classification and physical properties have been determined,

we examine their spatial, physical, and time variable properties. Covering effective temperatures from 4670K to 6400K (types K4 to F4) and masses from 0.7 to 1.4 M-sun, this sample represents host stars covering the entire Kepler field of view. The majority of the host stars contain one or more Earth-size planets and range in log g (cgs) from 4 to 4.7 and [Fe/H] from -0.24 to +0.3. Using Yale-Yonsei isochrone fits and the UBV survey of the Kepler field allows us to examine the distances to these stars, in particular their z-height and thus their location in the thin or thick disk population of the Milky Way. The variability of this sample of stars is examined in terms of time scale and amplitude.