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# HD 97658 and its super-Earth

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## Abstract

Super-Earths transiting nearby bright stars are key objects that simultaneously allow for accurate measurements of both their mass and radius, providing essential constraints on their internal composition. We present here the confirmation, based on Spitzer transit observations, that the super-Earth HD 97658 b transits its host star. HD 97658 is a low-mass ( $M_* = 0.77 \pm 0.05 M_{\odot}$ ) K1 dwarf, as determined from the Hipparcos parallaxes, HIREs radial velocities, and MOST and Spitzer photometry. HD 97658 b is a massive ( $M_P = 7.55^{+0.83}_{-0.79} M_{\oplus}$ )

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