

Table 1. Median values and 68% confidence interval for OGLE-TR-1095.

Parameter	Units	Values
Stellar Parameters:		
M_*	Mass (M_\odot)	$1.83^{+4.4}_{-0.89}$
R_*	Radius (R_\odot)	$2.04^{+0.21}_{-0.18}$
$R_{*,SED}$	Radius ¹ (R_\odot)	$2.05^{+0.24}_{-0.20}$
L_*	Luminosity (L_\odot)	28^{+1900}_{-23}
F_{Bol}	Bolometric Flux (cgs)	$0.00000000037^{+0.000000000045}_{-0.000000000024}$
ρ_*	Density (cgs)	$0.34^{+0.55}_{-0.17}$
$\log g$	Surface gravity (cgs)	$4.11^{+0.46}_{-0.29}$
T_{eff}	Effective Temperature (K)	9500^{+17000}_{-3100}
$T_{eff,SED}$	Effective Temperature ¹ (K)	9500^{+17000}_{-3100}
[Fe/H]	Metallicity (dex)	$-1.8^{+1.6}_{-1.7}$
[Fe/H] ₀	Initial Metallicity ²	$-1.7^{+1.5}_{-1.6}$
Age	Age (Gyr)	$0.77^{+7.0}_{-0.75}$
EEP	Equal Evolutionary Phase ³	381^{+79}_{-58}
A_V	V-band extinction (mag)	$1.08^{+0.45}_{-0.66}$
σ_{SED}	SED photometry error scaling	81^{+13}_{-17}
ϖ	Parallax (mas)	$0.182^{+0.11}_{-0.095}$
d	Distance (pc)	5500^{+5900}_{-2100}
Planetary Parameters:		
		b
P	Period (days)	$0.7848204^{+0.0000016}_{-0.0000022}$
R_P	Radius (R_J)	$1.062^{+0.11}_{-0.092}$
M_P	Mass ⁴ (M_J)	38^{+33}_{-29}
T_C	Time of conjunction ⁵ (BJD _{TDB})	$2455377.2801^{+0.0039}_{-0.0038}$
T_T	Time of minimum projected separation ⁶ (BJD _{TDB})	$2455377.2801^{+0.0039}_{-0.0038}$
T_0	Optimal conjunction Time ⁷ (BJD _{TDB})	$2456680.0818^{+0.0018}_{-0.0024}$
a	Semi-major axis (AU)	$0.0205^{+0.010}_{-0.0040}$
i	Inclination (Degrees)	$69.9^{+14}_{-9.9}$
T_{eq}	Equilibrium temperature ⁸ (K)	4600^{+6000}_{-1200}
τ_{circ}	Tidal circularization timescale (Gyr)	$0.055^{+0.098}_{-0.046}$
K	RV semi-amplitude ⁴ (m/s)	4200^{+5500}_{-3100}
R_P/R_*	Radius of planet in stellar radii	$0.0531^{+0.0043}_{-0.0031}$
a/R_*	Semi-major axis in stellar radii	$2.25^{+0.83}_{-0.46}$
δ	$(R_P/R_*)^2$	$0.00282^{+0.00048}_{-0.00032}$
δ_I	Transit depth in I (fraction)	$0.00279^{+0.00030}_{-0.00026}$
δ_V	Transit depth in V (fraction)	0.00273 ± 0.00025
τ	Ingress/egress transit duration (days)	$0.0105^{+0.012}_{-0.0059}$
T_{14}	Total transit duration (days)	$0.0864^{+0.0093}_{-0.0054}$

Table 1 continued on next page

Table 1 (continued)

Parameter	Units	Values	
T_{FWHM} . . .	FWHM transit duration (days)	0.0761 ^{+0.0044} _{-0.0078}	
b	Transit Impact parameter	0.77 ^{+0.12} _{-0.42}	
$\delta_{S,2.5\mu m}$. . .	Blackbody eclipse depth at 2.5 μm (ppm)	913 ⁺¹⁸⁰ ₋₉₉	
$\delta_{S,5.0\mu m}$. . .	Blackbody eclipse depth at 5.0 μm (ppm)	1100 ⁺³⁰⁰ ₋₁₆₀	
$\delta_{S,7.5\mu m}$. . .	Blackbody eclipse depth at 7.5 μm (ppm)	1170 ⁺³³⁰ ₋₂₀₀	
ρ_P	Density ⁴ (cgs)	42 ⁺⁴⁰ ₋₃₃	
$\log g_P$	Surface gravity ⁴	4.95 ^{+0.28} _{-0.66}	
Θ	Safronov Number	0.64 ^{+1.0} _{-0.48}	
$\langle F \rangle$	Incident Flux (10 ⁹ erg s ⁻¹ cm ⁻²)	100 ⁺²⁷⁰⁰ ₋₇₂	
T_P	Time of Periastron (BJD _{TDB})	2455377.2801 ^{+0.0039} _{-0.0038}	
T_S	Time of eclipse (BJD _{TDB})	2455377.6725 ^{+0.0039} _{-0.0038}	
T_A	Time of Ascending Node (BJD _{TDB})	2455377.8687 ^{+0.0039} _{-0.0038}	
T_D	Time of Descending Node (BJD _{TDB})	2455377.4763 ^{+0.0039} _{-0.0038}	
V_c/V_e	1.00	
$M_P \sin i$	Minimum mass ⁴ (M_J)	36 ⁺³² ₋₂₇	
M_P/M_*	Mass ratio ⁴	0.0133 ^{+0.031} _{-0.0099}	
d/R_*	Separation at mid transit	2.25 ^{+0.83} _{-0.46}	
P_T	A priori non-grazing transit prob	0.42 \pm 0.11	
$P_{T,G}$	A priori transit prob	0.47 ^{+0.12} _{-0.13}	
Wavelength Parameters:		I	V
u_1	linear limb-darkening coeff	0.145 ^{+0.087} _{-0.081}	0.24 ^{+0.13} _{-0.15}
u_2	quadratic limb-darkening coeff	0.243 ^{+0.072} _{-0.069}	0.287 ^{+0.059} _{-0.061}
Transit Parameters:		OGLE UT 2010-06-29 (I)	OGLE UT 2010-06-29 (V)
σ^2	Added Variance	0.00003443 \pm 0.00000053	0.000130 ^{+0.000020} _{-0.000017}
F_0	Baseline flux	1.000252 ^{+0.000059} _{-0.000060}	1.00012 ^{+0.00091} _{-0.00096}

See Table 3 in Eastman, J. et al., 2019, arXiv:1907.09480 for a detailed description of all parameters

¹This value ignores the systematic error and is for reference only

²The metallicity of the star at birth

³Corresponds to static points in a star's evolutionary history. See §2 in Dotter, A., 2016, ApJS, 222, 8

⁴Uses measured radius and estimated mass from Chen, J., & Kipping, D. 2017, ApJ, 834, 17

⁵Time of conjunction is commonly reported as the "transit time"

⁶Time of minimum projected separation is a more correct "transit time"

⁷Optimal time of conjunction minimizes the covariance between T_C and Period

⁸Assumes no albedo and perfect redistribution