

**Table 1.** Median values and 68% confidence interval for OGLE-TR-1055.

Parameter	Units	Values
<b>Stellar Parameters:</b>		
$M_*$ . . . . .	Mass ( $M_\odot$ ) . . . . .	$0.97^{+0.21}_{-0.11}$
$R_*$ . . . . .	Radius ( $R_\odot$ ) . . . . .	$3.00^{+0.33}_{-0.25}$
$R_{*,SED}$ . . . . .	Radius <sup>1</sup> ( $R_\odot$ ) . . . . .	$3.09^{+0.38}_{-0.29}$
$L_*$ . . . . .	Luminosity ( $L_\odot$ ) . . . . .	$5.5^{+1.8}_{-1.1}$
$F_{Bol}$ . . . . .	Bolometric Flux (cgs) . . . . .	$0.0000000000539^{+0.0000000000041}_{-0.0000000000058}$
$\rho_*$ . . . . .	Density (cgs) . . . . .	$0.052^{+0.017}_{-0.014}$
$\log g$ . . . . .	Surface gravity (cgs) . . . . .	$3.477^{+0.093}_{-0.10}$
$T_{eff}$ . . . . .	Effective Temperature (K) . . . . .	$5090^{+230}_{-190}$
$T_{eff,SED}$ . . . . .	Effective Temperature <sup>1</sup> (K) . . . . .	$5020^{+240}_{-200}$
[Fe/H] . . . . .	Metallicity (dex) . . . . .	$-0.46^{+0.23}_{-0.48}$
[Fe/H] <sub>0</sub> . . . . .	Initial Metallicity <sup>2</sup> . . . . .	$-0.47^{+0.23}_{-0.46}$
Age . . . . .	Age (Gyr) . . . . .	$8.5^{+3.7}_{-3.9}$
EEP . . . . .	Equal Evolutionary Phase <sup>3</sup> . . . . .	$480.5^{+4.1}_{-3.5}$
$A_V$ . . . . .	V-band extinction (mag) . . . . .	$1.687^{+0.082}_{-0.17}$
$\sigma_{SED}$ . . . . .	SED photometry error scaling . . . . .	$25.3^{+4.5}_{-3.5}$
$\varpi$ . . . . .	Parallax (mas) . . . . .	$0.547^{+0.065}_{-0.069}$
$d$ . . . . .	Distance (pc) . . . . .	$1830^{+260}_{-200}$
<b>Planetary Parameters:</b>		
		<b>b</b>
$P$ . . . . .	Period (days) . . . . .	$2.104221^{+0.000025}_{-0.000026}$
$R_P$ . . . . .	Radius ( $R_J$ ) . . . . .	$1.067^{+0.11}_{-0.089}$
$M_P$ . . . . .	Mass <sup>4</sup> ( $M_J$ ) . . . . .	$43^{+33}_{-31}$
$T_C$ . . . . .	Time of conjunction <sup>5</sup> (BJD <sub>TDB</sub> ) . . . . .	$2455503.963^{+0.022}_{-0.017}$
$T_T$ . . . . .	Time of minimum projected separation <sup>6</sup> (BJD <sub>TDB</sub> ) . . . . .	$2455503.963^{+0.022}_{-0.017}$
$T_0$ . . . . .	Optimal conjunction Time <sup>7</sup> (BJD <sub>TDB</sub> ) . . . . .	$2456882.2281^{+0.0088}_{-0.0067}$
$a$ . . . . .	Semi-major axis (AU) . . . . .	$0.0323^{+0.0021}_{-0.0013}$
$i$ . . . . .	Inclination (Degrees) . . . . .	$72.5^{+4.0}_{-4.3}$
$T_{eq}$ . . . . .	Equilibrium temperature <sup>8</sup> (K) . . . . .	$2370^{+180}_{-130}$
$\tau_{circ}$ . . . . .	Tidal circularization timescale (Gyr) . . . . .	$2.4^{+3.2}_{-1.9}$
$K$ . . . . .	RV semi-amplitude <sup>4</sup> (m/s) . . . . .	$6400^{+4900}_{-4600}$
$R_P/R_*$ . . . . .	Radius of planet in stellar radii . . . . .	$0.0368^{+0.0025}_{-0.0023}$
$a/R_*$ . . . . .	Semi-major axis in stellar radii . . . . .	$2.32^{+0.23}_{-0.24}$
$\delta$ . . . . .	$(R_P/R_*)^2$ . . . . .	$0.00135^{+0.00019}_{-0.00017}$
$\delta_I$ . . . . .	Transit depth in I (fraction) . . . . .	$0.00142^{+0.00017}_{-0.00016}$
$\delta_V$ . . . . .	Transit depth in V (fraction) . . . . .	$0.00147 \pm 0.00020$
$\tau$ . . . . .	Ingress/egress transit duration (days) . . . . .	$0.0165^{+0.0053}_{-0.0035}$
$T_{14}$ . . . . .	Total transit duration (days) . . . . .	$0.236^{+0.024}_{-0.021}$

Table 1 continued on next page

Table 1 (continued)

Parameter	Units	Values		
$T_{FWHM}$ . . .	FWHM transit duration (days) . . . . .	0.217 <sup>+0.025</sup> <sub>-0.020</sub>		
$b$ . . . . .	Transit Impact parameter . . . . .	0.706 <sup>+0.087</sup> <sub>-0.12</sub>		
$\delta_{S,2.5\mu m}$ . . .	Blackbody eclipse depth at 2.5 $\mu m$ (ppm) . . . . .	269 <sup>+54</sup> <sub>-40</sub>		
$\delta_{S,5.0\mu m}$ . . .	Blackbody eclipse depth at 5.0 $\mu m$ (ppm) . . . . .	428 <sup>+69</sup> <sub>-55</sub>		
$\delta_{S,7.5\mu m}$ . . .	Blackbody eclipse depth at 7.5 $\mu m$ (ppm) . . . . .	491 <sup>+75</sup> <sub>-61</sub>		
$\rho_P$ . . . . .	Density <sup>4</sup> (cgs) . . . . .	42 <sup>+38</sup> <sub>-31</sub>		
$\log g_P$ . . . . .	Surface gravity <sup>4</sup> . . . . .	4.98 <sup>+0.24</sup> <sub>-0.59</sub>		
$\Theta$ . . . . .	Safronov Number . . . . .	2.7 <sup>+2.2</sup> <sub>-2.0</sub>		
$\langle F \rangle$ . . . . .	Incident Flux (10 <sup>9</sup> erg s <sup>-1</sup> cm <sup>-2</sup> ) . . . . .	7.1 <sup>+2.4</sup> <sub>-1.5</sub>		
$T_P$ . . . . .	Time of Periastron (BJD <sub>TDB</sub> ) . . . . .	2455503.963 <sup>+0.022</sup> <sub>-0.017</sub>		
$T_S$ . . . . .	Time of eclipse (BJD <sub>TDB</sub> ) . . . . .	2455502.911 <sup>+0.022</sup> <sub>-0.017</sub>		
$T_A$ . . . . .	Time of Ascending Node (BJD <sub>TDB</sub> ) . . . . .	2455505.541 <sup>+0.021</sup> <sub>-0.017</sub>		
$T_D$ . . . . .	Time of Descending Node (BJD <sub>TDB</sub> ) . . . . .	2455504.489 <sup>+0.021</sup> <sub>-0.017</sub>		
$V_c/V_e$ . . . . .		1.00		
$M_P \sin i$ . . . . .	Minimum mass <sup>4</sup> ( $M_J$ ) . . . . .	41 <sup>+32</sup> <sub>-30</sub>		
$M_P/M_*$ . . . . .	Mass ratio <sup>4</sup> . . . . .	0.041 <sup>+0.034</sup> <sub>-0.030</sub>		
$d/R_*$ . . . . .	Separation at mid transit . . . . .	2.32 <sup>+0.23</sup> <sub>-0.24</sub>		
$P_T$ . . . . .	A priori non-grazing transit prob . . . . .	0.414 <sup>+0.049</sup> <sub>-0.038</sub>		
$P_{T,G}$ . . . . .	A priori transit prob . . . . .	0.446 <sup>+0.052</sup> <sub>-0.040</sub>		
Wavelength Parameters:		I	V	
$u_1$ . . . . .	linear limb-darkening coeff . . . . .	0.350 <sup>+0.061</sup> <sub>-0.075</sub>	0.558 <sup>+0.088</sup> <sub>-0.11</sub>	
$u_2$ . . . . .	quadratic limb-darkening coeff . . . . .	0.242 <sup>+0.048</sup> <sub>-0.046</sub>	0.196 <sup>+0.073</sup> <sub>-0.069</sub>	
Transit Parameters:		OGLE UT 2010-03-06 (I)	OGLE UT 2010-03-06 (V)	OGLE UT 2010-11-03
$\sigma^2$ . . . . .	Added Variance . . . . .	0.00003630 <sup>+0.0000053</sup> <sub>-0.0000052</sub>	0.0000436 <sup>+0.0000069</sup> <sub>-0.0000062</sub>	0.00003632 <sup>+0.0000053</sup> <sub>-0.0000051</sub>
$F_0$ . . . . .	Baseline flux . . . . .	1.000227 $\pm$ 0.000056	1.00004 $\pm$ 0.00056	1.000226 $\pm$ 0.000056

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

<sup>1</sup>This value ignores the systematic error and is for reference only

<sup>2</sup>The metallicity of the star at birth

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

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

<sup>5</sup>Time of conjunction is commonly reported as the "transit time"

<sup>6</sup>Time of minimum projected separation is a more correct "transit time"

<sup>7</sup>Optimal time of conjunction minimizes the covariance between  $T_C$  and Period

<sup>8</sup>Assumes no albedo and perfect redistribution