

**Table 1.** Median values and 68% confidence interval for OGLE-TR-1057.

Parameter	Units	Values
Stellar Parameters:		
$M_*$	Mass ( $M_\odot$ )	$0.782^{+0.029}_{-0.014}$
$R_*$	Radius ( $R_\odot$ )	$3.67 \pm 0.10$
$R_{*,SED}$	Radius <sup>1</sup> ( $R_\odot$ )	$3.67 \pm 0.21$
$L_*$	Luminosity ( $L_\odot$ )	$11.8^{+2.1}_{-1.9}$
$F_{Bol}$	Bolometric Flux (cgs)	$0.000000000127^{+0.000000000090}_{-0.000000000045}$
$\rho_*$	Density (cgs)	$0.0225^{+0.0019}_{-0.0017}$
$\log g$	Surface gravity (cgs)	$3.206^{+0.024}_{-0.023}$
$T_{eff}$	Effective Temperature (K)	$5590^{+220}_{-240}$
$T_{eff,SED}$	Effective Temperature <sup>1</sup> (K)	$5590^{+260}_{-270}$
[Fe/H]	Metallicity (dex)	$-2.71^{+1.0}_{-0.91}$
[Fe/H] <sub>0</sub>	Initial Metallicity <sup>2</sup>	$-2.69^{+1.0}_{-0.90}$
Age	Age (Gyr)	$12.89^{+0.69}_{-1.4}$
EEP	Equal Evolutionary Phase <sup>3</sup>	$487.1^{+2.7}_{-3.2}$
$A_V$	V-band extinction (mag)	$0.95^{+0.84}_{-0.64}$
$\sigma_{SED}$	SED photometry error scaling	$43^{+20}_{-12}$
$\varpi$	Parallax (mas)	$0.185^{+0.057}_{-0.038}$
$d$	Distance (pc)	$5400^{+1400}_{-1300}$
Planetary Parameters:		
		b
$P$	Period (days)	$5.854539^{+0.000032}_{-0.000040}$
$R_p$	Radius ( $R_J$ )	$2.498 \pm 0.084$
$M_p$	Mass <sup>4</sup> ( $M_J$ )	$0.4088^{+0.0039}_{-0.0081}$
$T_C$	Time of conjunction <sup>5</sup> (BJD <sub>TDB</sub> )	$2455378.9814^{+0.0094}_{-0.0098}$
$T_T$	Time of minimum projected separation <sup>6</sup> (BJD <sub>TDB</sub> )	$2455378.9814^{+0.0094}_{-0.0098}$
$T_0$	Optimal conjunction Time <sup>7</sup> (BJD <sub>TDB</sub> )	$2456374.2525^{+0.0068}_{-0.0073}$
$a$	Semi-major axis (AU)	$0.05857^{+0.00071}_{-0.00034}$
$i$	Inclination (Degrees)	$88.86^{+0.80}_{-1.2}$
$T_{eq}$	Equilibrium temperature <sup>8</sup> (K)	$2130^{+89}_{-95}$
$\tau_{circ}$	Tidal circularization timescale (Gyr)	$0.0230^{+0.0042}_{-0.0034}$
$K$	RV semi-amplitude <sup>4</sup> (m/s)	$54.0^{+1.0}_{-1.6}$
$R_p/R_*$	Radius of planet in stellar radii	$0.0700 \pm 0.0020$
$a/R_*$	Semi-major axis in stellar radii	$3.444^{+0.094}_{-0.089}$
$\delta$	$(R_p/R_*)^2$	$0.00491 \pm 0.00028$
$\delta_I$	Transit depth in I (fraction)	$0.00552^{+0.00033}_{-0.00032}$
$\delta_V$	Transit depth in V (fraction)	$0.00604^{+0.00041}_{-0.00038}$
$\tau$	Ingress/egress transit duration (days)	$0.0398^{+0.0015}_{-0.0014}$
$T_{14}$	Total transit duration (days)	$0.586^{+0.015}_{-0.016}$

Table 1 continued on next page

Table 1 (continued)

Parameter	Units	Values	
$T_{FWHM}$ ..	FWHM transit duration (days) .....	0.547 <sup>+0.014</sup> <sub>-0.015</sub>	
$b$ .....	Transit Impact parameter .....	0.068 <sup>+0.073</sup> <sub>-0.048</sub>	
$\delta_{S,2.5\mu m}$ ..	Blackbody eclipse depth at 2.5 $\mu m$ (ppm) .....	632 <sup>+50</sup> <sub>-51</sub>	
$\delta_{S,5.0\mu m}$ ..	Blackbody eclipse depth at 5.0 $\mu m$ (ppm) .....	1150 $\pm$ 69	
$\delta_{S,7.5\mu m}$ ..	Blackbody eclipse depth at 7.5 $\mu m$ (ppm) .....	1370 $\pm$ 78	
$\rho_P$ .....	Density <sup>4</sup> (cgs) .....	0.0324 <sup>+0.0035</sup> <sub>-0.0030</sub>	
$\log g_P$ .....	Surface gravity <sup>4</sup> .....	2.208 <sup>+0.030</sup> <sub>-0.029</sub>	
$\Theta$ .....	Safronov Number .....	0.0243 <sup>+0.0010</sup> <sub>-0.0011</sub>	
$\langle F \rangle$ .....	Incident Flux (10 <sup>9</sup> erg s <sup>-1</sup> cm <sup>-2</sup> ) .....	4.67 <sup>+0.83</sup> <sub>-0.78</sub>	
$T_P$ .....	Time of Periastron (BJD <sub>TDB</sub> ) .....	2455378.9814 <sup>+0.0094</sup> <sub>-0.0098</sub>	
$T_S$ .....	Time of eclipse (BJD <sub>TDB</sub> ) .....	2455381.9087 <sup>+0.0094</sup> <sub>-0.0098</sub>	
$T_A$ .....	Time of Ascending Node (BJD <sub>TDB</sub> ) .....	2455383.3723 <sup>+0.0094</sup> <sub>-0.0097</sub>	
$T_D$ .....	Time of Descending Node (BJD <sub>TDB</sub> ) .....	2455380.4451 <sup>+0.0094</sup> <sub>-0.0098</sub>	
$V_c/V_e$ .....	.....	1.00	
$M_P \sin i$ ..	Minimum mass <sup>4</sup> ( $M_J$ ) .....	0.4086 <sup>+0.0039</sup> <sub>-0.0081</sub>	
$M_P/M_*$ .....	Mass ratio <sup>4</sup> .....	0.000496 <sup>+0.000012</sup> <sub>-0.000020</sub>	
$d/R_*$ .....	Separation at mid transit .....	3.444 <sup>+0.094</sup> <sub>-0.089</sub>	
$P_T$ .....	A priori non-grazing transit prob .....	0.2700 $\pm$ 0.0073	
$P_{T,G}$ .....	A priori transit prob .....	0.3107 <sup>+0.0080</sup> <sub>-0.0081</sub>	
Wavelength Parameters:		I	V
$u_1$ .....	linear limb-darkening coeff .....	0.224 <sup>+0.054</sup> <sub>-0.051</sub>	0.377 <sup>+0.057</sup> <sub>-0.053</sub>
$u_2$ .....	quadratic limb-darkening coeff .....	0.299 <sup>+0.050</sup> <sub>-0.051</sub>	0.296 <sup>+0.051</sup> <sub>-0.052</sub>
Transit Parameters:		OGLE UT 2010-07-01 (I)	OGLE UT 2010-07-01 (V)
$\sigma^2$ .....	Added Variance .....	0.00005993 <sup>+0.0000010</sup> <sub>-0.00000100</sub>	0.0000526 <sup>+0.0000085</sup> <sub>-0.0000074</sub>
$F_0$ .....	Baseline flux .....	1.000351 <sup>+0.000088</sup> <sub>-0.000087</sub>	1.00040 <sup>+0.00062</sup> <sub>-0.00063</sub>

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