

**Table 1.** Median values and 68% confidence interval for OGLE-TR-1065.

Parameter	Units	Values
Stellar Parameters:		
$M_*$ . . . . .	Mass ( $M_\odot$ ) . . . . .	$0.93^{+0.36}_{-0.26}$
$R_*$ . . . . .	Radius ( $R_\odot$ ) . . . . .	$1.87^{+0.12}_{-0.14}$
$R_{*,SED}$ . . . . .	Radius <sup>1</sup> ( $R_\odot$ ) . . . . .	$1.82^{+0.25}_{-0.17}$
$L_*$ . . . . .	Luminosity ( $L_\odot$ ) . . . . .	$1.01^{+0.49}_{-0.21}$
$F_{Bol}$ . . . . .	Bolometric Flux (cgs) . . . . .	$0.000000000202^{+0.0000000000017}_{-0.0000000000025}$
$\rho_*$ . . . . .	Density (cgs) . . . . .	$0.197^{+0.11}_{-0.063}$
$\log g$ . . . . .	Surface gravity (cgs) . . . . .	$3.83^{+0.19}_{-0.12}$
$T_{eff}$ . . . . .	Effective Temperature (K) . . . . .	$4270^{+240}_{-220}$
$T_{eff,SED}$ . . . . .	Effective Temperature <sup>1</sup> (K) . . . . .	$4320^{+150}_{-160}$
[Fe/H] . . . . .	Metallicity (dex) . . . . .	$0.25^{+0.24}_{-0.38}$
[Fe/H] <sub>0</sub> . . . . .	Initial Metallicity <sup>2</sup> . . . . .	$0.19^{+0.21}_{-0.37}$
Age . . . . .	Age (Gyr) . . . . .	$0.00190^{+0.0017}_{-0.00069}$
EEP . . . . .	Equal Evolutionary Phase <sup>3</sup> . . . . .	$131^{+23}_{-13}$
$A_V$ . . . . .	V-band extinction (mag) . . . . .	$1.61^{+0.15}_{-0.31}$
$\sigma_{SED}$ . . . . .	SED photometry error scaling . . . . .	$16.8^{+3.7}_{-2.8}$
$\varpi$ . . . . .	Parallax (mas) . . . . .	$0.788^{+0.099}_{-0.15}$
$d$ . . . . .	Distance (pc) . . . . .	$1270^{+310}_{-140}$
Planetary Parameters:		
		b
$P$ . . . . .	Period (days) . . . . .	$4.967119^{+0.00028}_{-0.00025}$
$R_p$ . . . . .	Radius ( $R_J$ ) . . . . .	$1.024^{+0.058}_{-0.092}$
$M_p$ . . . . .	Mass <sup>4</sup> ( $M_J$ ) . . . . .	$50^{+20}_{-28}$
$T_C$ . . . . .	Time of conjunction <sup>5</sup> (BJD <sub>TDB</sub> ) . . . . .	$2455380.6973^{+0.010}_{-0.0095}$
$T_T$ . . . . .	Time of minimum projected separation <sup>6</sup> (BJD <sub>TDB</sub> ) . . . . .	$2455380.6973^{+0.010}_{-0.0095}$
$T_0$ . . . . .	Optimal conjunction Time <sup>7</sup> (BJD <sub>TDB</sub> ) . . . . .	$2456965.2088^{+0.0046}_{-0.0053}$
$a$ . . . . .	Semi-major axis (AU) . . . . .	$0.0564^{+0.0064}_{-0.0056}$
$i$ . . . . .	Inclination (Degrees) . . . . .	$83.8^{+1.4}_{-1.3}$
$T_{eq}$ . . . . .	Equilibrium temperature <sup>8</sup> (K) . . . . .	$1184^{+62}_{-52}$
$\tau_{circ}$ . . . . .	Tidal circularization timescale (Gyr) . . . . .	$160^{+120}_{-100}$
$K$ . . . . .	RV semi-amplitude <sup>4</sup> (m/s) . . . . .	$5700^{+3200}_{-2800}$
$R_p/R_*$ . . . . .	Radius of planet in stellar radii . . . . .	$0.0557^{+0.0026}_{-0.0030}$
$a/R_*$ . . . . .	Semi-major axis in stellar radii . . . . .	$6.49^{+0.98}_{-0.79}$
$\delta$ . . . . .	$(R_p/R_*)^2$ . . . . .	$0.00310^{+0.00029}_{-0.00033}$
$\delta_I$ . . . . .	Transit depth in I (fraction) . . . . .	$0.00334^{+0.00033}_{-0.00038}$
$\delta_V$ . . . . .	Transit depth in V (fraction) . . . . .	$0.00365^{+0.00050}_{-0.00055}$
$\tau$ . . . . .	Ingress/egress transit duration (days) . . . . .	$0.0194^{+0.0038}_{-0.0040}$
$T_{14}$ . . . . .	Total transit duration (days) . . . . .	$0.194^{+0.020}_{-0.016}$

Table 1 continued on next page

Table 1 (continued)

Parameter	Units	Values	
$T_{FWHM}$ ..	FWHM transit duration (days) .....	0.175 <sup>+0.015</sup> <sub>-0.014</sub>	
$b$ .....	Transit Impact parameter .....	0.697 <sup>+0.060</sup> <sub>-0.069</sub>	
$\delta_{S,2.5\mu m}$ ..	Blackbody eclipse depth at 2.5 $\mu m$ (ppm) .....	69 <sup>+16</sup> <sub>-13</sub>	
$\delta_{S,5.0\mu m}$ ..	Blackbody eclipse depth at 5.0 $\mu m$ (ppm) .....	287 <sup>+33</sup> <sub>-38</sub>	
$\delta_{S,7.5\mu m}$ ..	Blackbody eclipse depth at 7.5 $\mu m$ (ppm) .....	433 <sup>+49</sup> <sub>-50</sub>	
$\rho_P$ .....	Density <sup>4</sup> (cgs) .....	59 <sup>+31</sup> <sub>-36</sub>	
$\log g_P$ ..	Surface gravity <sup>4</sup> .....	5.09 <sup>+0.16</sup> <sub>-0.38</sub>	
$\Theta$ .....	Safronov Number .....	5.7 <sup>+3.6</sup> <sub>-3.0</sub>	
$\langle F \rangle$ .....	Incident Flux (10 <sup>9</sup> erg s <sup>-1</sup> cm <sup>-2</sup> ) .....	0.446 <sup>+0.10</sup> <sub>-0.073</sub>	
$T_P$ .....	Time of Periastron (BJD <sub>TDB</sub> ) .....	2455380.6973 <sup>+0.010</sup> <sub>-0.0095</sub>	
$T_S$ .....	Time of eclipse (BJD <sub>TDB</sub> ) .....	2455378.2138 <sup>+0.010</sup> <sub>-0.0096</sub>	
$T_A$ .....	Time of Ascending Node (BJD <sub>TDB</sub> ) .....	2455384.4227 <sup>+0.010</sup> <sub>-0.0095</sub>	
$T_D$ .....	Time of Descending Node (BJD <sub>TDB</sub> ) .....	2455381.9391 <sup>+0.010</sup> <sub>-0.0095</sub>	
$V_c/V_e$ ..	.....	1.00	
$M_P \sin i$ ..	Minimum mass <sup>4</sup> ( $M_J$ ) .....	50 <sup>+20</sup> <sub>-28</sub>	
$M_P/M_*$ ..	Mass ratio <sup>4</sup> .....	0.048 <sup>+0.036</sup> <sub>-0.023</sub>	
$d/R_*$ ..	Separation at mid transit .....	6.49 <sup>+0.98</sup> <sub>-0.79</sub>	
$P_T$ .....	A priori non-grazing transit prob .....	0.145 <sup>+0.021</sup> <sub>-0.019</sub>	
$P_{T,G}$ .....	A priori transit prob .....	0.163 <sup>+0.022</sup> <sub>-0.021</sub>	
Wavelength Parameters:		I	V
$u_1$ .....	linear limb-darkening coeff .....	0.495 <sup>+0.061</sup> <sub>-0.075</sub>	0.829 <sup>+0.059</sup> <sub>-0.058</sub>
$u_2$ .....	quadratic limb-darkening coeff .....	0.165 <sup>+0.051</sup> <sub>-0.063</sub>	-0.020 <sup>+0.077</sup> <sub>-0.066</sub>
Transit Parameters:		OGLE UT 2010-07-03 (I)	OGLE UT 2010-07-03 (V)
$\sigma^2$ .....	Added Variance .....	0.00002871 <sup>+0.00000063</sup> <sub>-0.00000039</sub>	0.000050 <sup>+0.000011</sup> <sub>-0.000010</sub>
$F_0$ .....	Baseline flux .....	1.000155 <sup>+0.000061</sup> <sub>-0.000045</sub>	0.99900 <sup>+0.00050</sup> <sub>-0.00060</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