

**Table 1.** Median values and 68% confidence interval for OGLE-TR-1030.

Parameter	Units	Values
Stellar Parameters:		
$M_*$ . . . . .	Mass ( $M_\odot$ ) . . . . .	$1.43^{+0.16}_{-0.17}$
$R_*$ . . . . .	Radius ( $R_\odot$ ) . . . . .	$2.06^{+0.32}_{-0.51}$
$R_{*,SED}$ . . . . .	Radius <sup>1</sup> ( $R_\odot$ ) . . . . .	$2.10^{+0.31}_{-0.42}$
$L_*$ . . . . .	Luminosity ( $L_\odot$ ) . . . . .	$4.6^{+1.8}_{-1.3}$
$F_{Bol}$ . . . . .	Bolometric Flux (cgs) . . . . .	$0.0000000000443^{+0.00000000000082}_{-0.00000000000064}$
$\rho_*$ . . . . .	Density (cgs) . . . . .	$0.228^{+0.31}_{-0.079}$
$\log g$ . . . . .	Surface gravity (cgs) . . . . .	$3.97^{+0.24}_{-0.13}$
$T_{eff}$ . . . . .	Effective Temperature (K) . . . . .	$6020^{+410}_{-360}$
$T_{eff,SED}$ . . . . .	Effective Temperature <sup>1</sup> (K) . . . . .	$5920^{+350}_{-330}$
[Fe/H] . . . . .	Metallicity (dex) . . . . .	$0.33^{+0.12}_{-0.21}$
[Fe/H] <sub>0</sub> . . . . .	Initial Metallicity <sup>2</sup> . . . . .	$0.36^{+0.10}_{-0.20}$
Age . . . . .	Age (Gyr) . . . . .	$2.7^{+2.2}_{-1.4}$
EEP . . . . .	Equal Evolutionary Phase <sup>3</sup> . . . . .	$399^{+59}_{-60}$
$A_V$ . . . . .	V-band extinction (mag) . . . . .	$2.56^{+0.22}_{-0.23}$
$\sigma_{SED}$ . . . . .	SED photometry error scaling . . . . .	$9.8^{+1.6}_{-1.3}$
$\varpi$ . . . . .	Parallax (mas) . . . . .	$0.541^{+0.11}_{-0.069}$
$d$ . . . . .	Distance (pc) . . . . .	$1850^{+270}_{-310}$
Planetary Parameters:		
		b
$P$ . . . . .	Period (days) . . . . .	$18.187449^{+0.000075}_{-0.000076}$
$R_P$ . . . . .	Radius ( $R_J$ ) . . . . .	$1.99^{+0.41}_{-0.60}$
$M_P$ . . . . .	Mass <sup>4</sup> ( $M_J$ ) . . . . .	$182^{+43}_{-180}$
$T_C$ . . . . .	Time of conjunction <sup>5</sup> (BJD <sub>TDB</sub> ) . . . . .	$2455388.3509^{+0.0072}_{-0.0065}$
$T_T$ . . . . .	Time of minimum projected separation <sup>6</sup> (BJD <sub>TDB</sub> ) . . . . .	$2455388.3509^{+0.0072}_{-0.0065}$
$T_0$ . . . . .	Optimal conjunction Time <sup>7</sup> (BJD <sub>TDB</sub> ) . . . . .	$2456625.0977^{+0.0045}_{-0.0044}$
$a$ . . . . .	Semi-major axis (AU) . . . . .	$0.1566^{+0.0072}_{-0.0064}$
$i$ . . . . .	Inclination (Degrees) . . . . .	$87.50^{+1.4}_{-0.69}$
$T_{eq}$ . . . . .	Equilibrium temperature <sup>8</sup> (K) . . . . .	$1029^{+70}_{-65}$
$\tau_{circ}$ . . . . .	Tidal circularization timescale (Gyr) . . . . .	$4800^{+4400}_{-4600}$
$K$ . . . . .	RV semi-amplitude <sup>4</sup> (m/s) . . . . .	$10200^{+2300}_{-10000}$
$R_P/R_*$ . . . . .	Radius of planet in stellar radii . . . . .	$0.0982^{+0.0060}_{-0.0068}$
$a/R_*$ . . . . .	Semi-major axis in stellar radii . . . . .	$16.5^{+4.6}_{-2.0}$
$\delta$ . . . . .	$(R_P/R_*)^2$ . . . . .	$0.0097^{+0.0012}_{-0.0013}$
$\delta_I$ . . . . .	Transit depth in I (fraction) . . . . .	$0.00991^{+0.00075}_{-0.00079}$
$\delta_V$ . . . . .	Transit depth in V (fraction) . . . . .	$0.01011^{+0.00069}_{-0.00070}$
$\tau$ . . . . .	Ingress/egress transit duration (days) . . . . .	$0.051^{+0.022}_{-0.023}$
$T_{14}$ . . . . .	Total transit duration (days) . . . . .	$0.292 \pm 0.016$

Table 1 continued on next page

Table 1 (continued)

Parameter	Units	Values	
$T_{FWHM}$ ..	FWHM transit duration (days) .....	0.242 <sup>+0.014</sup> <sub>-0.016</sub>	
$b$ .....	Transit Impact parameter .....	0.717 <sup>+0.089</sup> <sub>-0.31</sub>	
$\delta_{S,2.5\mu m}$ ..	Blackbody eclipse depth at 2.5 $\mu m$ (ppm) .....	61 <sup>+28</sup> <sub>-27</sub>	
$\delta_{S,5.0\mu m}$ ..	Blackbody eclipse depth at 5.0 $\mu m$ (ppm) .....	400 <sup>+110</sup> <sub>-140</sub>	
$\delta_{S,7.5\mu m}$ ..	Blackbody eclipse depth at 7.5 $\mu m$ (ppm) .....	690 <sup>+160</sup> <sub>-210</sub>	
$\rho_P$ .....	Density <sup>4</sup> (cgs) .....	21.3 <sup>+8.8</sup> <sub>-21</sub>	
$\log g_P$ .....	Surface gravity <sup>4</sup> .....	4.998 <sup>+0.070</sup> <sub>-1.8</sub>	
$\Theta$ .....	Safronov Number .....	19.4 <sup>+2.8</sup> <sub>-19</sub>	
$\langle F \rangle$ .....	Incident Flux (10 <sup>9</sup> erg s <sup>-1</sup> cm <sup>-2</sup> ) .....	0.255 <sup>+0.077</sup> <sub>-0.058</sub>	
$T_P$ .....	Time of Periastron (BJD <sub>TDB</sub> ) .....	2455388.3509 <sup>+0.0072</sup> <sub>-0.0065</sub>	
$T_S$ .....	Time of eclipse (BJD <sub>TDB</sub> ) .....	2455397.4447 <sup>+0.0072</sup> <sub>-0.0065</sub>	
$T_A$ .....	Time of Ascending Node (BJD <sub>TDB</sub> ) .....	2455401.9915 <sup>+0.0071</sup> <sub>-0.0064</sub>	
$T_D$ .....	Time of Descending Node (BJD <sub>TDB</sub> ) .....	2455392.8978 <sup>+0.0072</sup> <sub>-0.0064</sub>	
$V_c/V_e$ .....	.....	1.00	
$M_P \sin i$ ..	Minimum mass <sup>4</sup> ( $M_J$ ) .....	182 <sup>+43</sup> <sub>-180</sub>	
$M_P/M_*$ .....	Mass ratio <sup>4</sup> .....	0.119 <sup>+0.034</sup> <sub>-0.12</sub>	
$d/R_*$ .....	Separation at mid transit .....	16.5 <sup>+4.6</sup> <sub>-2.0</sub>	
$P_T$ .....	A priori non-grazing transit prob .....	0.0547 <sup>+0.0075</sup> <sub>-0.012</sub>	
$P_{T,G}$ .....	A priori transit prob .....	0.0667 <sup>+0.0097</sup> <sub>-0.015</sub>	
Wavelength Parameters:		I	V
$u_1$ .....	linear limb-darkening coeff .....	0.262 <sup>+0.070</sup> <sub>-0.069</sub>	0.438 <sup>+0.089</sup> <sub>-0.083</sub>
$u_2$ .....	quadratic limb-darkening coeff .....	0.303 <sup>+0.055</sup> <sub>-0.058</sub>	0.276 <sup>+0.064</sup> <sub>-0.068</sub>
Transit Parameters:		OGLE UT 2010-07-10 (I)	OGLE UT 2010-07-10 (V)
$\sigma^2$ .....	Added Variance .....	0.00002450 <sup>+0.00000045</sup> <sub>-0.00000044</sub>	0.0000234 <sup>+0.00000044</sup> <sub>-0.00000037</sub>
$F_0$ .....	Baseline flux .....	1.000054 <sup>+0.000056</sup> <sub>-0.000057</sub>	1.00054 <sup>+0.00045</sup> <sub>-0.00044</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