

**Table 1.** Median values and 68% confidence interval for OGLE-TR-1006.

Parameter	Units	Values
Stellar Parameters:		
$M_*$	Mass ( $M_\odot$ )	$1.74^{+0.14}_{-0.17}$
$R_*$	Radius ( $R_\odot$ )	$2.19^{+0.20}_{-0.15}$
$R_{*,SED}$	Radius <sup>1</sup> ( $R_\odot$ )	$2.25^{+0.20}_{-0.16}$
$L_*$	Luminosity ( $L_\odot$ )	$3.47^{+0.78}_{-0.65}$
$F_{Bol}$	Bolometric Flux (cgs)	$0.000000000476^{+0.0000000000062}_{-0.0000000000058}$
$\rho_*$	Density (cgs)	$0.235^{+0.044}_{-0.058}$
$\log g$	Surface gravity (cgs)	$4.003^{+0.044}_{-0.086}$
$T_{eff}$	Effective Temperature (K)	$5310^{+300}_{-310}$
$T_{eff,SED}$	Effective Temperature <sup>1</sup> (K)	$5250^{+280}_{-300}$
[Fe/H]	Metallicity (dex)	$0.30^{+0.21}_{-0.26}$
[Fe/H] <sub>0</sub>	Initial Metallicity <sup>2</sup>	$0.24^{+0.19}_{-0.24}$
Age	Age (Gyr)	$0.0047^{+0.0038}_{-0.0025}$
EEP	Equal Evolutionary Phase <sup>3</sup>	$171^{+14}_{-16}$
$A_V$	V-band extinction (mag)	$2.18^{+0.21}_{-0.25}$
$\sigma_{SED}$	SED photometry error scaling	$6.38^{+1.00}_{-0.79}$
$\varpi$	Parallax (mas)	$0.658^{+0.045}_{-0.048}$
$d$	Distance (pc)	$1520^{+120}_{-97}$
Planetary Parameters:		
		b
$P$	Period (days)	$1.8082001^{+0.0000055}_{-0.0000053}$
$R_p$	Radius ( $R_J$ )	$1.131^{+0.15}_{-0.088}$
$M_p$	Mass <sup>4</sup> ( $M_J$ )	$35^{+47}_{-29}$
$T_C$	Time of conjunction <sup>5</sup> (BJD <sub>TDB</sub> )	$2455377.0093^{+0.0053}_{-0.0052}$
$T_T$	Time of minimum projected separation <sup>6</sup> (BJD <sub>TDB</sub> )	$2455377.0093^{+0.0053}_{-0.0052}$
$T_0$	Optimal conjunction Time <sup>7</sup> (BJD <sub>TDB</sub> )	$2456854.3089^{+0.0029}_{-0.0028}$
$a$	Semi-major axis (AU)	$0.03521^{+0.00090}_{-0.0011}$
$i$	Inclination (Degrees)	$75.1^{+1.1}_{-2.0}$
$T_{eq}$	Equilibrium temperature <sup>8</sup> (K)	$2022^{+100}_{-84}$
$\tau_{circ}$	Tidal circularization timescale (Gyr)	$0.99^{+1.7}_{-0.81}$
$K$	RV semi-amplitude <sup>4</sup> (m/s)	$3900^{+5300}_{-3200}$
$R_p/R_*$	Radius of planet in stellar radii	$0.0536^{+0.0044}_{-0.0032}$
$a/R_*$	Semi-major axis in stellar radii	$3.46^{+0.21}_{-0.30}$
$\delta$	$(R_p/R_*)^2$	$0.00287^{+0.00049}_{-0.00034}$
$\delta_I$	Transit depth in I (fraction)	$0.00238^{+0.00027}_{-0.00026}$
$\delta_V$	Transit depth in V (fraction)	$0.00193^{+0.00032}_{-0.00043}$
$\tau$	Ingress/egress transit duration (days)	$0.0214^{+0.0091}_{-0.0036}$
$T_{14}$	Total transit duration (days)	$0.0970^{+0.0069}_{-0.0062}$

Table 1 continued on next page

Table 1 (continued)

Parameter	Units	Values	
$T_{FWHM}$ ..	FWHM transit duration (days) .....	0.0742 <sup>+0.0084</sup> <sub>-0.011</sub>	
$b$ .....	Transit Impact parameter .....	0.895 <sup>+0.030</sup> <sub>-0.026</sub>	
$\delta_{S,2.5\mu m}$ ..	Blackbody eclipse depth at 2.5 $\mu m$ (ppm) .....	344 <sup>+77</sup> <sub>-46</sub>	
$\delta_{S,5.0\mu m}$ ..	Blackbody eclipse depth at 5.0 $\mu m$ (ppm) .....	651 <sup>+130</sup> <sub>-77</sub>	
$\delta_{S,7.5\mu m}$ ..	Blackbody eclipse depth at 7.5 $\mu m$ (ppm) .....	784 <sup>+150</sup> <sub>-91</sub>	
$\rho_P$ .....	Density <sup>4</sup> (cgs) .....	30 <sup>+33</sup> <sub>-25</sub>	
$\log g_P$ ..	Surface gravity <sup>4</sup> .....	4.86 <sup>+0.31</sup> <sub>-0.77</sub>	
$\Theta$ .....	Safronov Number .....	1.3 <sup>+1.9</sup> <sub>-1.1</sub>	
$\langle F \rangle$ .....	Incident Flux (10 <sup>9</sup> erg s <sup>-1</sup> cm <sup>-2</sup> ) .....	3.79 <sup>+0.83</sup> <sub>-0.59</sub>	
$T_P$ .....	Time of Periastron (BJD <sub>TDB</sub> ) .....	2455377.0093 <sup>+0.0053</sup> <sub>-0.0052</sub>	
$T_S$ .....	Time of eclipse (BJD <sub>TDB</sub> ) .....	2455376.1052 <sup>+0.0053</sup> <sub>-0.0052</sub>	
$T_A$ .....	Time of Ascending Node (BJD <sub>TDB</sub> ) .....	2455378.3654 <sup>+0.0053</sup> <sub>-0.0052</sub>	
$T_D$ .....	Time of Descending Node (BJD <sub>TDB</sub> ) .....	2455377.4613 <sup>+0.0053</sup> <sub>-0.0052</sub>	
$V_c/V_e$ ..	.....	1.00	
$M_P \sin i$ ..	Minimum mass <sup>4</sup> ( $M_J$ ) .....	34 <sup>+45</sup> <sub>-28</sub>	
$M_P/M_*$ ..	Mass ratio <sup>4</sup> .....	0.020 <sup>+0.028</sup> <sub>-0.016</sub>	
$d/R_*$ ..	Separation at mid transit .....	3.46 <sup>+0.21</sup> <sub>-0.30</sub>	
$P_T$ .....	A priori non-grazing transit prob .....	0.274 <sup>+0.025</sup> <sub>-0.016</sub>	
$P_{T,G}$ .....	A priori transit prob .....	0.304 <sup>+0.030</sup> <sub>-0.017</sub>	
Wavelength Parameters:		I	V
$u_1$ .....	linear limb-darkening coeff .....	0.368 <sup>+0.065</sup> <sub>-0.066</sub>	0.598 <sup>+0.084</sup> <sub>-0.080</sub>
$u_2$ .....	quadratic limb-darkening coeff .....	0.238 $\pm$ 0.059	0.169 <sup>+0.069</sup> <sub>-0.071</sub>
Transit Parameters:		OGLE UT 2010-06-29 (I)	OGLE UT 2010-06-29 (V)
$\sigma^2$ .....	Added Variance .....	0.00001767 <sup>+0.00000030</sup> <sub>-0.00000029</sub>	0.0000258 <sup>+0.00000041</sup> <sub>-0.00000035</sub>
$F_0$ .....	Baseline flux .....	1.000084 $\pm$ 0.000043	1.00009 <sup>+0.00044</sup> <sub>-0.00043</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