Table 1. Median values and 68% confidence interval for OGLE-TR-1010.

Parameter	Units	Values
Stellar Parameters:		
M_*	Mass ($M_\odot$)	0.826 ± 0.039
R_*	Radius ($R_\odot$)	$1.711^{+0.14}_{-0.095}$
$R_{*,SED}$ ..	Radius[1] ($R_\odot$)	$1.851^{+0.13}_{-0.097}$
L_*	Luminosity ($L_\odot$)	$6.03^{+0.99}_{-0.82}$
F_{Bol}	Bolometric Flux (cgs)	$0.0000000000670^{+0.0000000000081}_{-0.0000000000074}$
ρ_*	Density (cgs)	$0.232^{+0.047}_{-0.050}$
$\log g$	Surface gravity (cgs)	$3.888^{+0.056}_{-0.072}$
$T_{\rm eff}$	Effective Temperature (K)	6900^{+260}_{-270}
$T_{\rm eff,SED}$ ..	Effective Temperature[1] (K)	6670^{+230}_{-260}
[Fe/H]..	Metallicity (dex)	$-4.437^{+0.13}_{-0.076}$
$[{\rm Fe/H}]_0$.	Initial Metallicity[2]	$-3.907^{+0.13}_{-0.066}$
Age	Age (Gyr)	$10.2^{+1.8}_{-1.5}$
EEP	Equal Evolutionary Phase[3]	$444.8^{+5.5}_{-4.5}$
A_V	V-band extinction (mag)	$3.33^{+0.46}_{-0.74}$
σ_{SED}	SED photometry error scaling	$9.6^{+1.4}_{-1.1}$
ϖ	Parallax (mas)	$0.590^{+0.029}_{-0.031}$
d	Distance (pc)	1695^{+96}_{-80}
Planetary Parameters:		b
P	Period (days)	$2.2063895^{+0.0000023}_{-0.0000022}$
R_P	Radius ($R_{\rm J}$)	$1.390^{+0.14}_{-0.092}$
M_P	Mass[4] ($M_{\rm J}$)	$0.87^{+3.4}_{-0.48}$
T_C	Time of conjunction[5] ($\rm BJD_{TDB}$)	2455377.4247 ± 0.0015
T_T	Time of minimum projected separation[6] ($\rm BJD_{TDB}$)	2455377.4247 ± 0.0015
T_0	Optimal conjunction Time[7] ($\rm BJD_{TDB}$)	$2456626.24117^{+0.00085}_{-0.00084}$
a	Semi-major axis (AU)	$0.03116^{+0.00048}_{-0.00050}$
i	Inclination (Degrees)	$83.9^{+3.0}_{-2.8}$
T_{eq}	Equilibrium temperature[8] (K)	2470^{+88}_{-81}
$\tau_{\rm circ}$	Tidal circularization timescale (Gyr)	$0.014^{+0.074}_{-0.010}$
K	RV semi-amplitude[4] (m/s)	152^{+590}_{-84}
R_P/R_* ..	Radius of planet in stellar radii	$0.0836^{+0.0016}_{-0.0013}$
a/R_* ...	Semi-major axis in stellar radii	$3.91^{+0.25}_{-0.31}$
δ	$\left(R_P/R_*\right)^2$	$0.00699^{+0.00026}_{-0.00022}$
$\delta_{\rm I}$	Transit depth in I (fraction)	$0.00766^{+0.00021}_{-0.00020}$
$\delta_{\rm V}$	Transit depth in V (fraction)	$0.00805^{+0.00027}_{-0.00026}$
τ	Ingress/egress transit duration (days)	$0.0171^{+0.0037}_{-0.0024}$
T_{14}	Total transit duration (days)	$0.1826^{+0.0035}_{-0.0030}$

Table 1 continued on next page

Table 1 *(continued)*

Parameter	Units	Values	
T_{FWHM} ..	FWHM transit duration (days)	0.1651 ± 0.0022	
b	Transit Impact parameter	$0.42^{+0.14}_{-0.19}$	
$\delta_{S,2.5\mu m}$ ..	Blackbody eclipse depth at 2.5μm (ppm)	977^{+120}_{-83}	
$\delta_{S,5.0\mu m}$ ..	Blackbody eclipse depth at 5.0μm (ppm)	1630^{+160}_{-110}	
$\delta_{S,7.5\mu m}$ ..	Blackbody eclipse depth at 7.5μm (ppm)	1900^{+170}_{-120}	
ρ_P	Density[4] (cgs)	$0.41^{+1.9}_{-0.27}$	
$logg_P$ ...	Surface gravity[4]	$3.05^{+0.73}_{-0.44}$	
Θ	Safronov Number	$0.047^{+0.19}_{-0.028}$	
$\langle F \rangle$	Incident Flux (10^9 erg s^{-1} cm^{-2})	$8.5^{+1.3}_{-1.1}$	
T_P	Time of Periastron (BJD$_{\rm TDB}$)	2455377.4247 ± 0.0015	
T_S	Time of eclipse (BJD$_{\rm TDB}$)	2455378.5279 ± 0.0015	
T_A	Time of Ascending Node (BJD$_{\rm TDB}$)	2455379.0795 ± 0.0015	
T_D	Time of Descending Node (BJD$_{\rm TDB}$)	2455377.9763 ± 0.0015	
V_c/V_e ...	.....	1.00	
$M_P \sin i$.	Minimum mass[4] ($M_{\rm J}$)	$0.86^{+3.4}_{-0.48}$	
M_P/M_* .	Mass ratio[4]	$0.00100^{+0.0039}_{-0.00055}$	
d/R_* ...	Separation at mid transit	$3.91^{+0.25}_{-0.31}$	
P_T	A priori non-grazing transit prob	$0.234^{+0.020}_{-0.014}$	
$P_{T,G}$	A priori transit prob	$0.277^{+0.024}_{-0.017}$	
Wavelength Parameters:		I	V
u_1	linear limb-darkening coeff	0.218 ± 0.048	$0.329^{+0.052}_{-0.051}$
u_2	quadratic limb-darkening coeff	0.312 ± 0.049	0.306 ± 0.050
Transit Parameters:		OGLE UT 2010-06-29 (I)	OGLE UT 2010-06-29 (V)
σ^2	Added Variance	$0.00001213^{+0.00000024}_{-0.00000023}$	$0.0000189^{+0.0000028}_{-0.0000025}$
F_0	Baseline flux	$1.000355^{+0.000038}_{-0.000039}$	0.99975 ± 0.00036

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

[1] This value ignores the systematic error and is for reference only

[2] The metallicity of the star at birth

[3] Corresponds to static points in a star's evolutionary history. See §2 in Dotter, A., 2016, ApJS, 222, 8

[4] Uses measured radius and estimated mass from Chen, J., & Kipping, D. 2017, ApJ, 834, 17

[5] Time of conjunction is commonly reported as the "transit time"

[6] Time of minimum projected separation is a more correct "transit time"

[7] Optimal time of conjunction minimizes the covariance between T_C and Period

[8] Assumes no albedo and perfect redistribution