Table 1. Median values and 68% confidence interval for OGLE-TR-1072.

Parameter	Units	Values
Stellar Parameters:		
M_*	Mass ($M_\odot$)	$0.97^{+0.16}_{-0.15}$
R_*	Radius ($R_\odot$)	$1.137^{+0.069}_{-0.068}$
$R_{*,SED}$ ..	Radius[1] ($R_\odot$)	$1.137^{+0.078}_{-0.073}$
L_*	Luminosity ($L_\odot$)	$1.74^{+0.62}_{-0.41}$
F_{Bol}	Bolometric Flux (cgs)	$0.0000000000249^{+0.0000000000078}_{-0.0000000000052}$
ρ_*	Density (cgs)	$0.94^{+0.22}_{-0.18}$
$\log g$	Surface gravity (cgs)	$4.317^{+0.073}_{-0.077}$
$T_{\rm eff}$	Effective Temperature (K)	6190^{+570}_{-380}
$T_{\rm eff,SED}$ ..	Effective Temperature[1] (K)	6200^{+550}_{-400}
[Fe/H]..	Metallicity (dex)	$-0.29^{+0.39}_{-2.3}$
$[{\rm Fe/H}]_0$.	Initial Metallicity[2]	$-0.20^{+0.32}_{-1.8}$
Age	Age (Gyr)	$6.4^{+4.9}_{-4.5}$
EEP	Equal Evolutionary Phase[3]	403^{+24}_{-63}
A_V	V-band extinction (mag)	$1.08^{+0.31}_{-0.26}$
σ_{SED}	SED photometry error scaling	$10.4^{+1.6}_{-1.3}$
ϖ	Parallax (mas)	$0.671^{+0.042}_{-0.041}$
d	Distance (pc)	1490^{+97}_{-87}
Planetary Parameters:		b
P	Period (days)	1.6133902 ± 0.0000014
R_P	Radius ($R_{\rm J}$)	$0.993^{+0.070}_{-0.068}$
M_P	Mass[4] ($M_{\rm J}$)	49^{+24}_{-29}
T_C	Time of conjunction[5] ($\rm BJD_{TDB}$)	2455377.4959 ± 0.0015
T_T	Time of minimum projected separation[6] ($\rm BJD_{TDB}$)	2455377.4959 ± 0.0015
T_0	Optimal conjunction Time[7] ($\rm BJD_{TDB}$)	$2456919.89690 \pm 0.00069$
a	Semi-major axis (AU)	0.0271 ± 0.0014
i	Inclination (Degrees)	$84.5^{+2.0}_{-1.6}$
T_{eq}	Equilibrium temperature[8] (K)	1930^{+190}_{-130}
$\tau_{\rm circ}$	Tidal circularization timescale (Gyr)	$1.32^{+1.1}_{-0.87}$
K	RV semi-amplitude[4] (m/s)	8400^{+4000}_{-4800}
R_P/R_* ..	Radius of planet in stellar radii	0.0898 ± 0.0019
a/R_* ...	Semi-major axis in stellar radii	$5.13^{+0.37}_{-0.35}$
δ	$\left(R_P/R_*\right)^2$	$0.00807^{+0.00035}_{-0.00034}$
$\delta_{\rm I}$	Transit depth in I (fraction)	0.00883 ± 0.00033
$\delta_{\rm V}$	Transit depth in V (fraction)	$0.00939^{+0.00049}_{-0.00041}$
τ	Ingress/egress transit duration (days)	$0.0105^{+0.0019}_{-0.0016}$
T_{14}	Total transit duration (days)	$0.0986^{+0.0021}_{-0.0019}$

Table 1 continued on next page

Table 1 *(continued)*

Parameter	Units	Values	
T_{FWHM} ..	FWHM transit duration (days)	0.0880 ± 0.0017	
b	Transit Impact parameter	$0.49^{+0.10}_{-0.15}$	
$\delta_{S,2.5\mu m}$ ..	Blackbody eclipse depth at 2.5μm (ppm)	670^{+130}_{-100}	
$\delta_{S,5.0\mu m}$ ..	Blackbody eclipse depth at 5.0μm (ppm)	1390^{+160}_{-140}	
$\delta_{S,7.5\mu m}$ ..	Blackbody eclipse depth at 7.5μm (ppm)	1720^{+160}_{-150}	
ρ_P	Density[4] (cgs)	62^{+37}_{-38}	
$logg_P$ ...	Surface gravity[4]	$5.09^{+0.19}_{-0.40}$	
Θ	Safronov Number	$2.8^{+1.5}_{-1.7}$	
$\langle F \rangle$	Incident Flux (10^9 erg s^{-1} cm^{-2})	$3.17^{+1.4}_{-0.77}$	
T_P	Time of Periastron (BJD$_{\rm TDB}$)	2455377.4959 ± 0.0015	
T_S	Time of eclipse (BJD$_{\rm TDB}$)	2455376.6892 ± 0.0015	
T_A	Time of Ascending Node (BJD$_{\rm TDB}$)	2455378.7059 ± 0.0015	
T_D	Time of Descending Node (BJD$_{\rm TDB}$)	2455377.8992 ± 0.0015	
V_c/V_e ...	.....	1.00	
$M_P \sin i$.	Minimum mass[4] ($M_{\rm J}$)	49^{+24}_{-29}	
M_P/M_* .	Mass ratio[4]	$0.048^{+0.025}_{-0.028}$	
d/R_* ...	Separation at mid transit	$5.13^{+0.37}_{-0.35}$	
P_T	A priori non-grazing transit prob	$0.177^{+0.013}_{-0.012}$	
$P_{T,G}$	A priori transit prob	$0.212^{+0.016}_{-0.015}$	
Wavelength Parameters:		I	V
u_1	linear limb-darkening coeff	$0.234^{+0.067}_{-0.062}$	$0.379^{+0.087}_{-0.071}$
u_2	quadratic limb-darkening coeff	0.290 ± 0.052	$0.294^{+0.054}_{-0.058}$
Transit Parameters:		OGLE UT 2010-06-29 (I)	OGLE UT 2010-06-29 (V)
σ^2	Added Variance	$0.00002844^{+0.00000049}_{-0.00000048}$	$0.0000358^{+0.0000057}_{-0.0000047}$
F_0	Baseline flux	$1.000272^{+0.000058}_{-0.000059}$	1.00017 ± 0.00054

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