Table 1. Median values and 68% confidence interval for OGLE-TR-1037.

Parameter	Units	Values
Stellar Parameters:		
M_*	Mass ($M_\odot$)	$1.42^{+0.32}_{-0.59}$
R_*	Radius ($R_\odot$)	$2.56^{+0.26}_{-0.22}$
$R_{*,SED}$ ..	Radius[1] ($R_\odot$)	$2.55^{+0.28}_{-0.23}$
L_*	Luminosity ($L_\odot$)	$7.8^{+2.7}_{-2.3}$
F_{Bol}	Bolometric Flux (cgs)	$0.000000000048^{+0.000000000011}_{-0.000000000012}$
ρ_*	Density (cgs)	$0.118^{+0.056}_{-0.057}$
$\log g$	Surface gravity (cgs)	$3.78^{+0.13}_{-0.27}$
$T_{\rm eff}$	Effective Temperature (K)	6090^{+440}_{-750}
$T_{\rm eff,SED}$ ..	Effective Temperature[1] (K)	6120^{+460}_{-800}
[Fe/H] ..	Metallicity (dex)	$0.00^{+0.31}_{-2.3}$
$[{\rm Fe/H}]_0$.	Initial Metallicity[2]	$0.06^{+0.31}_{-2.2}$
Age	Age (Gyr)	$3.0^{+7.9}_{-1.5}$
EEP	Equal Evolutionary Phase[3]	455^{+21}_{-74}
A_V	V-band extinction (mag)	$1.67^{+0.27}_{-0.52}$
σ_{SED}	SED photometry error scaling	$12.0^{+1.7}_{-1.4}$
ϖ	Parallax (mas)	0.438 ± 0.035
d	Distance (pc)	2280^{+200}_{-170}
Planetary Parameters:		b
P	Period (days)	$6.535826^{+0.00010}_{-0.000066}$
R_P	Radius ($R_{\rm J}$)	$1.001^{+0.085}_{-0.080}$
M_P	Mass[4] ($M_{\rm J}$)	47^{+25}_{-29}
T_C	Time of conjunction[5] ($\rm BJD_{TDB}$)	$2455381.591^{+0.023}_{-0.026}$
T_T	Time of minimum projected separation[6] ($\rm BJD_{TDB}$)	$2455381.591^{+0.023}_{-0.026}$
T_0	Optimal conjunction Time[7] ($\rm BJD_{TDB}$)	$2457041.691^{+0.016}_{-0.011}$
a	Semi-major axis (AU)	$0.0778^{+0.0053}_{-0.012}$
i	Inclination (Degrees)	$83.3^{+1.6}_{-2.3}$
T_{eq}	Equilibrium temperature[8] (K)	1690^{+120}_{-110}
$\tau_{\rm circ}$	Tidal circularization timescale (Gyr)	620^{+670}_{-440}
K	RV semi-amplitude[4] (m/s)	4100^{+2300}_{-2500}
R_P/R_* ..	Radius of planet in stellar radii	$0.0402^{+0.0034}_{-0.0036}$
a/R_* ...	Semi-major axis in stellar radii	$6.49^{+0.90}_{-1.3}$
δ	$\left(R_P/R_*\right)^2$	0.00162 ± 0.00028
$\delta_{\rm I}$	Transit depth in I (fraction)	$0.00161^{+0.00027}_{-0.00026}$
$\delta_{\rm V}$	Transit depth in V (fraction)	$0.00162^{+0.00029}_{-0.00028}$
τ	Ingress/egress transit duration (days)	$0.0205^{+0.0094}_{-0.0053}$
T_{14}	Total transit duration (days)	$0.232^{+0.047}_{-0.029}$

Table 1 continued on next page

Table 1 *(continued)*

Parameter	Units	Values	
T_{FWHM} ..	FWHM transit duration (days)	$0.210^{+0.049}_{-0.031}$	
b	Transit Impact parameter	$0.762^{+0.091}_{-0.13}$	
$\delta_{S,2.5\mu m}$ ..	Blackbody eclipse depth at 2.5μm (ppm)	86^{+22}_{-15}	
$\delta_{S,5.0\mu m}$ ..	Blackbody eclipse depth at 5.0μm (ppm)	217^{+42}_{-32}	
$\delta_{S,7.5\mu m}$ ..	Blackbody eclipse depth at 7.5μm (ppm)	284^{+52}_{-42}	
ρ_P	Density[4] (cgs)	59^{+40}_{-39}	
$logg_P$ ...	Surface gravity[4]	$5.08^{+0.20}_{-0.45}$	
Θ	Safronov Number	$5.5^{+3.3}_{-3.4}$	
$\langle F \rangle$	Incident Flux (10^9 erg s^{-1} cm^{-2})	$1.83^{+0.57}_{-0.42}$	
T_P	Time of Periastron (BJD$_{\rm TDB}$)	$2455381.591^{+0.023}_{-0.026}$	
T_S	Time of eclipse (BJD$_{\rm TDB}$)	$2455384.859^{+0.023}_{-0.026}$	
T_A	Time of Ascending Node (BJD$_{\rm TDB}$)	$2455386.493^{+0.023}_{-0.026}$	
T_D	Time of Descending Node (BJD$_{\rm TDB}$)	$2455383.225^{+0.023}_{-0.026}$	
V_c/V_e ...	.....	1.00	
$M_P \sin i$.	Minimum mass[4] ($M_{\rm J}$)	47^{+25}_{-29}	
M_P/M_* .	Mass ratio[4]	$0.033^{+0.024}_{-0.020}$	
d/R_* ...	Separation at mid transit	$6.49^{+0.90}_{-1.3}$	
P_T	A priori non-grazing transit prob	$0.148^{+0.036}_{-0.018}$	
$P_{T,G}$	A priori transit prob	$0.160^{+0.038}_{-0.019}$	
Wavelength Parameters:		I	V
u_1	linear limb-darkening coeff	$0.230^{+0.088}_{-0.067}$	$0.391^{+0.11}_{-0.068}$
u_2	quadratic limb-darkening coeff	$0.303^{+0.056}_{-0.061}$	$0.291^{+0.059}_{-0.072}$
Transit Parameters:		OGLE UT 2010-07-04 (I)	OGLE UT 2010-07-04 (V)
σ^2	Added Variance	$0.00001184 \pm 0.00000027$	$0.0000213^{+0.0000030}_{-0.0000026}$
F_0	Baseline flux	$1.000044^{+0.000045}_{-0.000044}$	0.99914 ± 0.00037

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