Table 1. Median values and 68% confidence interval for OGLE-TR-1038.

Parameter	Units	Values
Stellar Parameters:		
M_*	Mass ($M_\odot$)	$0.271^{+0.11}_{-0.073}$
R_*	Radius ($R_\odot$)	$2.66^{+0.19}_{-0.18}$
$R_{*,SED}$ ..	Radius[1] ($R_\odot$)	$2.68^{+0.15}_{-0.14}$
L_*	Luminosity ($L_\odot$)	$2.89^{+0.46}_{-0.36}$
F_{Bol}	Bolometric Flux (cgs)	$0.0000000000658^{+0.0000000000088}_{-0.0000000000074}$
ρ_*	Density (cgs)	$0.0202^{+0.011}_{-0.0064}$
$\log g$	Surface gravity (cgs)	$3.02^{+0.17}_{-0.15}$
$T_{\rm eff}$	Effective Temperature (K)	4630^{+230}_{-220}
$T_{\rm eff,SED}$ ..	Effective Temperature[1] (K)	4600^{+230}_{-210}
[Fe/H]..	Metallicity (dex)	$-3.51^{+0.68}_{-0.35}$
$[{\rm Fe/H}]_0$.	Initial Metallicity[2]	$-3.53^{+0.68}_{-0.34}$
Age	Age (Gyr)	$0.000038^{+0.000066}_{-0.000022}$
EEP	Equal Evolutionary Phase[3]	43^{+27}_{-24}
A_V	V-band extinction (mag)	$0.54^{+0.25}_{-0.26}$
σ_{SED}	SED photometry error scaling	$21.0^{+3.3}_{-2.6}$
ϖ	Parallax (mas)	$0.842^{+0.030}_{-0.028}$
d	Distance (pc)	1187^{+41}_{-40}
Planetary Parameters:		b
P	Period (days)	$3.769846^{+0.000090}_{-0.00010}$
R_P	Radius ($R_{\rm J}$)	$1.79^{+0.22}_{-0.39}$
M_P	Mass[4] ($M_{\rm J}$)	162^{+23}_{-150}
T_C	Time of conjunction[5] ($\rm BJD_{TDB}$)	$2455379.148^{+0.028}_{-0.026}$
T_T	Time of minimum projected separation[6] ($\rm BJD_{TDB}$)	$2455379.148^{+0.028}_{-0.026}$
T_0	Optimal conjunction Time[7] ($\rm BJD_{TDB}$)	$2456069.030^{+0.020}_{-0.021}$
a	Semi-major axis (AU)	$0.0352^{+0.0031}_{-0.0028}$
i	Inclination (Degrees)	$84.5^{+3.9}_{-5.0}$
T_{eq}	Equilibrium temperature[8] (K)	1936^{+100}_{-80}
$\tau_{\rm circ}$	Tidal circularization timescale (Gyr)	$8.0^{+3.5}_{-5.9}$
K	RV semi-amplitude[4] (m/s)	36100^{+6900}_{-32000}
R_P/R_* ..	Radius of planet in stellar radii	$0.0690^{+0.0067}_{-0.011}$
a/R_* ...	Semi-major axis in stellar radii	$2.83^{+0.32}_{-0.26}$
δ	$\left(R_P/R_*\right)^2$	$0.00477^{+0.00096}_{-0.0014}$
$\delta_{\rm I}$	Transit depth in I (fraction)	$0.0052^{+0.0010}_{-0.0015}$
$\delta_{\rm V}$	Transit depth in V (fraction)	$0.0057^{+0.0012}_{-0.0017}$
τ	Ingress/egress transit duration (days)	$0.0324^{+0.0065}_{-0.0051}$
T_{14}	Total transit duration (days)	$0.436^{+0.054}_{-0.040}$

Table 1 continued on next page

Table 1 *(continued)*

Parameter	Units	Values
T_{FWHM} ..	FWHM transit duration (days)	$0.403^{+0.054}_{-0.040}$
b	Transit Impact parameter	$0.28^{+0.23}_{-0.19}$
$\delta_{S,2.5\mu m}$ ..	Blackbody eclipse depth at 2.5μm (ppm)	630^{+130}_{-150}
$\delta_{S,5.0\mu m}$ ..	Blackbody eclipse depth at 5.0μm (ppm)	1190^{+230}_{-310}
$\delta_{S,7.5\mu m}$ ..	Blackbody eclipse depth at 7.5μm (ppm)	1430^{+280}_{-390}
ρ_P	Density[4] (cgs)	$31.3^{+7.8}_{-23}$
$logg_P$ ...	Surface gravity[4]	$5.074^{+0.045}_{-0.76}$
Θ	Safronov Number	$21.9^{+8.1}_{-20}$
$\langle F \rangle$	Incident Flux (10^9 erg s^{-1} cm^{-2})	$3.19^{+0.71}_{-0.50}$
T_P	Time of Periastron (BJD$_{\rm TDB}$)	$2455379.148^{+0.028}_{-0.026}$
T_S	Time of eclipse (BJD$_{\rm TDB}$)	$2455377.263^{+0.028}_{-0.026}$
T_A	Time of Ascending Node (BJD$_{\rm TDB}$)	$2455381.975^{+0.028}_{-0.026}$
T_D	Time of Descending Node (BJD$_{\rm TDB}$)	$2455380.090^{+0.028}_{-0.026}$
V_c/V_e ...	.....	1.00
$M_P \sin i$.	Minimum mass[4] ($M_{\rm J}$)	161^{+22}_{-150}
M_P/M_* .	Mass ratio[4]	$0.53^{+0.26}_{-0.48}$
d/R_* ...	Separation at mid transit	$2.83^{+0.32}_{-0.26}$
P_T	A priori non-grazing transit prob	0.330 ± 0.034
$P_{T,G}$	A priori transit prob	$0.378^{+0.037}_{-0.038}$
Wavelength Parameters:		I / V
u_1	linear limb-darkening coeff	$0.183^{+0.066}_{-0.054}$ / $0.361^{+0.072}_{-0.057}$
u_2	quadratic limb-darkening coeff	$0.354^{+0.054}_{-0.060}$ / $0.307^{+0.055}_{-0.060}$
Transit Parameters:		OGLE UT 2010-07-01 (I) / OGLE UT 2010-07-01 (V)
σ^2	Added Variance	$0.0000808^{+0.0000032}_{-0.0000030}$ / $0.000075^{+0.000066}_{-0.000033}$
F_0	Baseline flux	1.00031 ± 0.00026 / 0.9983 ± 0.0028

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