Table 1. Median values and 68% confidence interval for OGLE-TR-1041.

Parameter	Units	Values
Stellar Parameters:		
M_*	Mass ($M_\odot$)	$1.06^{+0.21}_{-0.14}$
R_*	Radius ($R_\odot$)	$1.248^{+0.069}_{-0.061}$
$R_{*,SED}$ ..	Radius[1] ($R_\odot$)	$1.276^{+0.077}_{-0.071}$
L_*	Luminosity ($L_\odot$)	$3.6^{+1.9}_{-1.6}$
F_{Bol}	Bolometric Flux (cgs)	$0.000000000063^{+0.000000000028}_{-0.000000000029}$
ρ_*	Density (cgs)	$0.791^{+0.049}_{-0.079}$
$\log g$	Surface gravity (cgs)	$4.279^{+0.035}_{-0.043}$
$T_{\rm eff}$	Effective Temperature (K)	7190^{+790}_{-1100}
$T_{\rm eff,SED}$ ..	Effective Temperature[1] (K)	7110^{+800}_{-1100}
[Fe/H] ..	Metallicity (dex)	$-1.4^{+1.6}_{-2.1}$
$[{\rm Fe/H}]_0$.	Initial Metallicity[2]	$-0.9^{+1.1}_{-1.9}$
Age	Age (Gyr)	$4.2^{+2.5}_{-3.1}$
EEP	Equal Evolutionary Phase[3]	410^{+14}_{-79}
A_V	V-band extinction (mag)	$2.36^{+0.41}_{-0.59}$
σ_{SED}	SED photometry error scaling	$25.6^{+3.6}_{-2.9}$
ϖ	Parallax (mas)	$0.730^{+0.043}_{-0.041}$
d	Distance (pc)	1370^{+82}_{-76}
Planetary Parameters:		b
P	Period (days)	3.0470709 ± 0.0000023
R_P	Radius ($R_{\rm J}$)	$1.140^{+0.060}_{-0.054}$
M_P	Mass[4] ($M_{\rm J}$)	23^{+36}_{-18}
T_C	Time of conjunction[5] ($\rm BJD_{TDB}$)	2455377.2418 ± 0.0011
T_T	Time of minimum projected separation[6] ($\rm BJD_{TDB}$)	2455377.2418 ± 0.0011
T_0	Optimal conjunction Time[7] ($\rm BJD_{TDB}$)	$2456608.25847 \pm 0.00064$
a	Semi-major axis (AU)	$0.0423^{+0.0025}_{-0.0018}$
i	Inclination (Degrees)	$88.73^{+0.88}_{-1.3}$
T_{eq}	Equilibrium temperature[8] (K)	1880^{+200}_{-290}
$\tau_{\rm circ}$	Tidal circularization timescale (Gyr)	$5.2^{+9.6}_{-4.1}$
K	RV semi-amplitude[4] (m/s)	3100^{+5000}_{-2400}
R_P/R_* ..	Radius of planet in stellar radii	0.0939 ± 0.0013
a/R_* ...	Semi-major axis in stellar radii	$7.37^{+0.14}_{-0.26}$
δ	$\left(R_P/R_*\right)^2$	0.00881 ± 0.00024
$\delta_{\rm I}$	Transit depth in I (fraction)	$0.00969^{+0.00031}_{-0.00029}$
$\delta_{\rm V}$	Transit depth in V (fraction)	$0.01058^{+0.00054}_{-0.00043}$
τ	Ingress/egress transit duration (days)	$0.01260^{+0.0011}_{-0.00036}$
T_{14}	Total transit duration (days)	$0.1426^{+0.0019}_{-0.0017}$

Table 1 continued on next page

Table 1 *(continued)*

Parameter	Units	Values	
T_{FWHM} ..	FWHM transit duration (days)	$0.1297^{+0.0016}_{-0.0015}$	
b	Transit Impact parameter	$0.16^{+0.15}_{-0.11}$	
$\delta_{S,2.5\mu m}$ ..	Blackbody eclipse depth at 2.5μm (ppm)	535^{+98}_{-160}	
$\delta_{S,5.0\mu m}$ ..	Blackbody eclipse depth at 5.0μm (ppm)	1200^{+100}_{-170}	
$\delta_{S,7.5\mu m}$ ..	Blackbody eclipse depth at 7.5μm (ppm)	1514^{+93}_{-140}	
ρ_P	Density[4] (cgs)	19^{+33}_{-16}	
$logg_P$ ...	Surface gravity[4]	$4.65^{+0.42}_{-0.66}$	
Θ	Safronov Number	$1.6^{+2.8}_{-1.3}$	
$\langle F \rangle$	Incident Flux (10^9 erg s^{-1} cm^{-2})	2.9 ± 1.4	
T_P	Time of Periastron (BJD$_{\rm TDB}$)	2455377.2418 ± 0.0011	
T_S	Time of eclipse (BJD$_{\rm TDB}$)	2455375.7183 ± 0.0011	
T_A	Time of Ascending Node (BJD$_{\rm TDB}$)	2455379.5271 ± 0.0011	
T_D	Time of Descending Node (BJD$_{\rm TDB}$)	2455378.0036 ± 0.0011	
V_c/V_e ...	.....	1.00	
$M_P \sin i$.	Minimum mass[4] ($M_{\rm J}$)	23^{+36}_{-18}	
M_P/M_* .	Mass ratio[4]	$0.021^{+0.036}_{-0.016}$	
d/R_* ...	Separation at mid transit	$7.37^{+0.14}_{-0.26}$	
P_T	A priori non-grazing transit prob	$0.1230^{+0.0045}_{-0.0023}$	
$P_{T,G}$	A priori transit prob	$0.1484^{+0.0056}_{-0.0027}$	
Wavelength Parameters:		I	V
u_1	linear limb-darkening coeff	$0.187^{+0.068}_{-0.058}$	$0.343^{+0.095}_{-0.064}$
u_2	quadratic limb-darkening coeff	$0.281^{+0.053}_{-0.056}$	$0.311^{+0.056}_{-0.057}$
Transit Parameters:		OGLE UT 2010-06-29 (I)	OGLE UT 2010-06-29 (V)
σ^2	Added Variance	$0.00001681 \pm 0.00000029$	$0.0000179^{+0.0000029}_{-0.0000026}$
F_0	Baseline flux	1.000255 ± 0.000041	$1.00044^{+0.00038}_{-0.00037}$

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