Table 1. Median values and 68% confidence interval for OGLE-TR-1085.

Parameter	Units	Values
Stellar Parameters:		
M_*	Mass ($M_\odot$)	$0.924^{+0.042}_{-0.40}$
R_*	Radius ($R_\odot$)	$1.71^{+0.23}_{-0.15}$
$R_{*,SED}$ ..	Radius[1] ($R_\odot$)	$1.81^{+0.19}_{-0.17}$
L_*	Luminosity ($L_\odot$)	$1.89^{+0.39}_{-0.38}$
F_{Bol}	Bolometric Flux (cgs)	$0.00000000002351^{+0.00000000000091}_{-0.00000000000014}$
ρ_*	Density (cgs)	$0.261^{+0.083}_{-0.16}$
$\log g$	Surface gravity (cgs)	$3.938^{+0.079}_{-0.37}$
$T_{\rm eff}$	Effective Temperature (K)	5220^{+150}_{-350}
$T_{\rm eff,SED}$ ..	Effective Temperature[1] (K)	5060^{+140}_{-210}
[Fe/H]..	Metallicity (dex)	$-0.19^{+0.15}_{-2.5}$
$[{\rm Fe/H}]_0$.	Initial Metallicity[2]	$-0.16^{+0.17}_{-2.5}$
Age	Age (Gyr)	$11.5^{+1.6}_{-12}$
EEP	Equal Evolutionary Phase[3]	$458.9^{+3.1}_{-360}$
A_V	V-band extinction (mag)	$1.669^{+0.027}_{-0.076}$
σ_{SED}	SED photometry error scaling	$12.2^{+1.6}_{-1.3}$
ϖ	Parallax (mas)	$0.621^{+0.056}_{-0.047}$
d	Distance (pc)	1610 ± 130
Planetary Parameters:		b
P	Period (days)	$3.636724^{+0.000015}_{-0.000037}$
R_P	Radius ($R_{\rm J}$)	$0.942^{+0.076}_{-0.044}$
M_P	Mass[4] ($M_{\rm J}$)	34^{+23}_{-21}
T_C	Time of conjunction[5] ($\rm BJD_{TDB}$)	$2455377.8549^{+0.0059}_{-0.0083}$
T_T	Time of minimum projected separation[6] ($\rm BJD_{TDB}$)	$2455377.8549^{+0.0059}_{-0.0083}$
T_0	Optimal conjunction Time[7] ($\rm BJD_{TDB}$)	$2455603.3311^{+0.0068}_{-0.0073}$
a	Semi-major axis (AU)	$0.04551^{+0.00091}_{-0.0073}$
i	Inclination (Degrees)	$81.49^{+0.56}_{-3.7}$
T_{eq}	Equilibrium temperature[8] (K)	1573^{+96}_{-130}
$\tau_{\rm circ}$	Tidal circularization timescale (Gyr)	39^{+17}_{-28}
K	RV semi-amplitude[4] (m/s)	4900^{+4000}_{-3100}
R_P/R_* ..	Radius of planet in stellar radii	$0.0562^{+0.0055}_{-0.0031}$
a/R_* ...	Semi-major axis in stellar radii	$5.73^{+0.57}_{-1.5}$
δ	$\left(R_P/R_*\right)^2$	$0.00316^{+0.00065}_{-0.00034}$
$\delta_{\rm I}$	Transit depth in I (fraction)	$0.00285^{+0.00035}_{-0.00030}$
$\delta_{\rm V}$	Transit depth in V (fraction)	$0.00255^{+0.00028}_{-0.00039}$
τ	Ingress/egress transit duration (days)	$0.0244^{+0.012}_{-0.0038}$
T_{14}	Total transit duration (days)	$0.129^{+0.028}_{-0.024}$

Table 1 continued on next page

Table 1 *(continued)*

Parameter	Units	Values
T_{FWHM} ..	FWHM transit duration (days)	$0.107^{+0.015}_{-0.029}$
b	Transit Impact parameter	$0.869^{+0.042}_{-0.031}$
$\delta_{S,2.5\mu m}$ ..	Blackbody eclipse depth at 2.5μm (ppm)	161^{+57}_{-14}
$\delta_{S,5.0\mu m}$ ..	Blackbody eclipse depth at 5.0μm (ppm)	447^{+73}_{-39}
$\delta_{S,7.5\mu m}$ ..	Blackbody eclipse depth at 7.5μm (ppm)	592^{+77}_{-49}
ρ_P	Density[4] (cgs)	52^{+29}_{-35}
$logg_P$ ...	Surface gravity[4]	$4.99^{+0.19}_{-0.48}$
Θ	Safronov Number	$3.8^{+3.2}_{-2.4}$
$\langle F \rangle$	Incident Flux (10^9 erg s^{-1} cm^{-2})	$1.39^{+0.37}_{-0.39}$
T_P	Time of Periastron (BJD$_{\rm TDB}$)	$2455377.8549^{+0.0059}_{-0.0083}$
T_S	Time of eclipse (BJD$_{\rm TDB}$)	$2455376.0366^{+0.0058}_{-0.0084}$
T_A	Time of Ascending Node (BJD$_{\rm TDB}$)	$2455380.5825^{+0.0059}_{-0.0082}$
T_D	Time of Descending Node (BJD$_{\rm TDB}$)	$2455378.7641^{+0.0059}_{-0.0083}$
V_c/V_e ...	.....	1.00
$M_P \sin i$.	Minimum mass[4] (M_J)	33^{+23}_{-21}
M_P/M_* .	Mass ratio[4]	$0.039^{+0.034}_{-0.023}$
d/R_* ...	Separation at mid transit	$5.73^{+0.57}_{-1.5}$
P_T	A priori non-grazing transit prob	$0.164^{+0.060}_{-0.015}$
$P_{T,G}$	A priori transit prob	$0.184^{+0.066}_{-0.016}$

Wavelength Parameters:		I	V
u_1	linear limb-darkening coeff	$0.325^{+0.049}_{-0.11}$	$0.553^{+0.066}_{-0.17}$
u_2	quadratic limb-darkening coeff	$0.268^{+0.087}_{-0.077}$	$0.228^{+0.074}_{-0.066}$

Transit Parameters:		OGLE UT 2010-06-30 (I)	OGLE UT 2010-06-30 (V)
σ^2	Added Variance	$0.00002251^{+0.00000035}_{-0.00000032}$	$0.0000186^{+0.0000023}_{-0.0000032}$
F_0	Baseline flux	$1.000227^{+0.000032}_{-0.000049}$	$1.00040^{+0.00038}_{-0.00075}$

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