Table 1. Median values and 68% confidence interval for OGLE-TR-1005.

Parameter	Units	Values
Stellar Parameters:		
M_*	Mass ($M_\odot$)	$0.965^{+0.33}_{-0.075}$
R_*	Radius ($R_\odot$)	$1.763^{+0.21}_{-0.090}$
$R_{*,SED}$ ..	Radius[1] ($R_\odot$)	$1.93^{+0.17}_{-0.12}$
L_*	Luminosity ($L_\odot$)	$10.3^{+6.8}_{-2.5}$
F_{Bol}	Bolometric Flux (cgs)	$0.000000000068^{+0.000000000031}_{-0.000000000014}$
ρ_*	Density (cgs)	$0.264^{+0.029}_{-0.049}$
$\log g$	Surface gravity (cgs)	$3.949^{+0.052}_{-0.062}$
$T_{\rm eff}$	Effective Temperature (K)	7800^{+830}_{-470}
$T_{\rm eff,SED}$ ..	Effective Temperature[1] (K)	7490^{+730}_{-430}
[Fe/H] ..	Metallicity (dex)	$-3.99^{+1.2}_{-0.31}$
$[{\rm Fe/H}]_0$.	Initial Metallicity[2]	$-3.64^{+1.1}_{-0.29}$
Age	Age (Gyr)	$6.0^{+1.9}_{-3.6}$
EEP	Equal Evolutionary Phase[3]	$449.3^{+9.5}_{-5.9}$
A_V	V-band extinction (mag)	$2.42^{+0.64}_{-0.48}$
σ_{SED}	SED photometry error scaling	$8.9^{+1.7}_{-1.2}$
ϖ	Parallax (mas)	$0.452^{+0.028}_{-0.047}$
d	Distance (pc)	2210^{+260}_{-130}
Planetary Parameters:		b
P	Period (days)	$4.5659828^{+0.0000082}_{-0.0000076}$
R_P	Radius ($R_{\rm J}$)	$1.389^{+0.18}_{-0.078}$
M_P	Mass[4] ($M_{\rm J}$)	$0.83^{+3.0}_{-0.44}$
T_C	Time of conjunction[5] ($\rm BJD_{TDB}$)	$2455380.5474^{+0.0028}_{-0.0027}$
T_T	Time of minimum projected separation[6] ($\rm BJD_{TDB}$)	$2455380.5474^{+0.0028}_{-0.0027}$
T_0	Optimal conjunction Time[7] ($\rm BJD_{TDB}$)	2456773.1723 ± 0.0014
a	Semi-major axis (AU)	$0.0533^{+0.0055}_{-0.0014}$
i	Inclination (Degrees)	$87.9^{+1.5}_{-1.8}$
T_{eq}	Equilibrium temperature[8] (K)	2160^{+230}_{-120}
$\tau_{\rm circ}$	Tidal circularization timescale (Gyr)	$0.36^{+1.6}_{-0.25}$
K	RV semi-amplitude[4] (m/s)	103^{+390}_{-62}
R_P/R_* ..	Radius of planet in stellar radii	$0.0810^{+0.0014}_{-0.0013}$
a/R_* ...	Semi-major axis in stellar radii	$6.64^{+0.23}_{-0.44}$
δ	$\left(R_P/R_*\right)^2$	$0.00655^{+0.00022}_{-0.00021}$
$\delta_{\rm I}$	Transit depth in I (fraction)	$0.00715^{+0.00028}_{-0.00026}$
$\delta_{\rm V}$	Transit depth in V (fraction)	$0.00770^{+0.00039}_{-0.00037}$
τ	Ingress/egress transit duration (days)	$0.0184^{+0.0030}_{-0.0011}$
T_{14}	Total transit duration (days)	$0.2317^{+0.0043}_{-0.0040}$

Table 1 continued on next page

Table 1 *(continued)*

Parameter	Units	Values
T_{FWHM} ..	FWHM transit duration (days)	$0.2125^{+0.0032}_{-0.0031}$
b	Transit Impact parameter	$0.24^{+0.18}_{-0.17}$
$\delta_{S,2.5\mu m}$ ..	Blackbody eclipse depth at 2.5μm (ppm)	533^{+120}_{-52}
$\delta_{S,5.0\mu m}$ ..	Blackbody eclipse depth at 5.0μm (ppm)	1045^{+130}_{-64}
$\delta_{S,7.5\mu m}$ ..	Blackbody eclipse depth at 7.5μm (ppm)	1274^{+120}_{-67}
ρ_P	Density[4] (cgs)	$0.39^{+1.6}_{-0.27}$
$logg_P$ ...	Surface gravity[4]	$3.03^{+0.70}_{-0.45}$
Θ	Safronov Number	$0.066^{+0.26}_{-0.042}$
$\langle F \rangle$	Incident Flux (10^9 erg s^{-1} cm^{-2})	$4.90^{+2.4}_{-0.99}$
T_P	Time of Periastron (BJD$_{\rm TDB}$)	$2455380.5474^{+0.0028}_{-0.0027}$
T_S	Time of eclipse (BJD$_{\rm TDB}$)	$2455378.2644^{+0.0028}_{-0.0027}$
T_A	Time of Ascending Node (BJD$_{\rm TDB}$)	$2455383.9719^{+0.0028}_{-0.0027}$
T_D	Time of Descending Node (BJD$_{\rm TDB}$)	$2455381.6889^{+0.0028}_{-0.0027}$
V_c/V_e ...	.....	1.00
$M_P \sin i$.	Minimum mass[4] ($M_{\rm J}$)	$0.83^{+3.0}_{-0.44}$
M_P/M_* .	Mass ratio[4]	$0.00081^{+0.0031}_{-0.00051}$
d/R_* ...	Separation at mid transit	$6.64^{+0.23}_{-0.44}$
P_T	A priori non-grazing transit prob	$0.1385^{+0.0098}_{-0.0047}$
$P_{T,G}$	A priori transit prob	$0.1628^{+0.012}_{-0.0054}$

Wavelength Parameters:		I	V
u_1	linear limb-darkening coeff	$0.184^{+0.066}_{-0.064}$	$0.333^{+0.070}_{-0.089}$
u_2	quadratic limb-darkening coeff	$0.230^{+0.065}_{-0.060}$	$0.288^{+0.056}_{-0.059}$

Transit Parameters:		OGLE UT 2010-07-03 (I)	OGLE UT 2010-07-03 (V)
σ^2	Added Variance	$0.00001535 \pm 0.00000026$	$0.0000254^{+0.0000035}_{-0.0000031}$
F_0	Baseline flux	$1.000029^{+0.000041}_{-0.000040}$	$0.99972^{+0.00041}_{-0.00040}$

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