Table 1. Median values and 68% confidence interval for OGLE-TR-1016.

Parameter	Units	Values
Stellar Parameters:		
M_*	Mass ($M_\odot$)	$1.01^{+0.42}_{-0.18}$
R_*	Radius ($R_\odot$)	$2.32^{+0.29}_{-0.31}$
$R_{*,SED}$ ..	Radius[1] ($R_\odot$)	2.28 ± 0.30
L_*	Luminosity ($L_\odot$)	$4.8^{+2.2}_{-1.3}$
F_{Bol}	Bolometric Flux (cgs)	$0.0000000000213^{+0.0000000000071}_{-0.0000000000048}$
ρ_*	Density (cgs)	$0.117^{+0.094}_{-0.041}$
$\log g$	Surface gravity (cgs)	$3.72^{+0.21}_{-0.14}$
$T_{\rm eff}$	Effective Temperature (K)	5620^{+650}_{-510}
$T_{\rm eff,SED}$ ..	Effective Temperature[1] (K)	5650^{+680}_{-520}
[Fe/H]..	Metallicity (dex)	$-0.29^{+0.42}_{-1.2}$
$[{\rm Fe/H}]_0$.	Initial Metallicity[2]	$-0.28^{+0.47}_{-1.2}$
Age	Age (Gyr)	$7.6^{+4.4}_{-4.8}$
EEP	Equal Evolutionary Phase[3]	$468.6^{+6.8}_{-61}$
A_V	V-band extinction (mag)	$0.87^{+0.42}_{-0.39}$
σ_{SED}	SED photometry error scaling	$17.4^{+2.4}_{-2.0}$
ϖ	Parallax (mas)	$0.373^{+0.045}_{-0.040}$
d	Distance (pc)	2680^{+320}_{-290}
Planetary Parameters:		b
P	Period (days)	$3.918334^{+0.000060}_{-0.00026}$
R_P	Radius ($R_{\rm J}$)	$0.983^{+0.088}_{-0.084}$
M_P	Mass[4] ($M_{\rm J}$)	49^{+24}_{-29}
T_C	Time of conjunction[5] ($\rm BJD_{TDB}$)	$2455377.401^{+0.052}_{-0.019}$
T_T	Time of minimum projected separation[6] ($\rm BJD_{TDB}$)	$2455377.401^{+0.052}_{-0.019}$
T_0	Optimal conjunction Time[7] ($\rm BJD_{TDB}$)	$2456215.9211^{+0.0083}_{-0.0096}$
a	Semi-major axis (AU)	$0.0495^{+0.0058}_{-0.0029}$
i	Inclination (Degrees)	$79.9^{+2.0}_{-1.9}$
T_{eq}	Equilibrium temperature[8] (K)	1830^{+190}_{-130}
$\tau_{\rm circ}$	Tidal circularization timescale (Gyr)	67^{+71}_{-46}
K	RV semi-amplitude[4] (m/s)	5800^{+3000}_{-3400}
R_P/R_* ..	Radius of planet in stellar radii	$0.0429^{+0.0072}_{-0.0039}$
a/R_* ...	Semi-major axis in stellar radii	$4.63^{+1.00}_{-0.63}$
δ	$\left(R_P/R_*\right)^2$	$0.00184^{+0.00067}_{-0.00032}$
$\delta_{\rm I}$	Transit depth in I (fraction)	$0.00180^{+0.00044}_{-0.00030}$
$\delta_{\rm V}$	Transit depth in V (fraction)	$0.00174^{+0.00035}_{-0.00030}$
τ	Ingress/egress transit duration (days)	$0.0218^{+0.0086}_{-0.0059}$
T_{14}	Total transit duration (days)	$0.186^{+0.027}_{-0.059}$

Table 1 continued on next page

Table 1 *(continued)*

Parameter	Units	Values
T_{FWHM} ..	FWHM transit duration (days)	$0.166^{+0.028}_{-0.067}$
b	Transit Impact parameter	$0.825^{+0.078}_{-0.11}$
$\delta_{S,2.5\mu m}$ ..	Blackbody eclipse depth at 2.5μm (ppm)	153^{+39}_{-29}
$\delta_{S,5.0\mu m}$ ..	Blackbody eclipse depth at 5.0μm (ppm)	334^{+74}_{-56}
$\delta_{S,7.5\mu m}$ ..	Blackbody eclipse depth at 7.5μm (ppm)	416^{+95}_{-68}
ρ_P	Density[4] (cgs)	64^{+43}_{-41}
$logg_P$ ...	Surface gravity[4]	$5.11^{+0.20}_{-0.42}$
Θ	Safronov Number	$4.7^{+2.7}_{-2.9}$
$\langle F \rangle$	Incident Flux (10^9 erg s^{-1} cm^{-2})	$2.53^{+1.2}_{-0.64}$
T_P	Time of Periastron (BJD$_{\rm TDB}$)	$2455377.401^{+0.052}_{-0.019}$
T_S	Time of eclipse (BJD$_{\rm TDB}$)	$2455375.441^{+0.052}_{-0.019}$
T_A	Time of Ascending Node (BJD$_{\rm TDB}$)	$2455380.339^{+0.052}_{-0.019}$
T_D	Time of Descending Node (BJD$_{\rm TDB}$)	$2455378.380^{+0.052}_{-0.019}$
V_c/V_e ...	.....	1.00
$M_P \sin i$.	Minimum mass[4] ($M_{\rm J}$)	48^{+24}_{-29}
M_P/M_* .	Mass ratio[4]	$0.043^{+0.027}_{-0.025}$
d/R_* ...	Separation at mid transit	$4.63^{+1.00}_{-0.63}$
P_T	A priori non-grazing transit prob	$0.206^{+0.033}_{-0.037}$
$P_{T,G}$	A priori transit prob	$0.225^{+0.035}_{-0.039}$

Wavelength Parameters:		I	V
u_1	linear limb-darkening coeff	$0.273^{+0.10}_{-0.082}$	$0.442^{+0.14}_{-0.099}$
u_2	quadratic limb-darkening coeff	$0.278^{+0.058}_{-0.063}$	$0.263^{+0.070}_{-0.090}$

Transit Parameters:		OGLE UT 2010-06-29 (I)	OGLE UT 2010-06-29 (V)
σ^2	Added Variance	$0.00001961 \pm 0.00000032$	$0.0000170^{+0.0000026}_{-0.0000023}$
F_0	Baseline flux	$1.000070^{+0.000045}_{-0.000046}$	$0.99990^{+0.00035}_{-0.00036}$

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