Table 1. Median values and 68% confidence interval for OGLE-TR-1089.

Parameter	Units	Values
Stellar Parameters:		
M_*	Mass ($M_\odot$)	$1.259^{+0.089}_{-0.10}$
R_*	Radius ($R_\odot$)	$1.294^{+0.087}_{-0.086}$
$R_{*,SED}$ . .	Radius[1] ($R_\odot$)	$1.410^{+0.11}_{-0.099}$
L_*	Luminosity ($L_\odot$)	$2.00^{+0.50}_{-0.38}$
F_{Bol}	Bolometric Flux (cgs)	$0.0000000000294^{+0.0000000000041}_{-0.0000000000033}$
ρ_*	Density (cgs)	$0.82^{+0.16}_{-0.14}$
$\log g$	Surface gravity (cgs)	$4.317^{+0.049}_{-0.059}$
$T_{\rm eff}$	Effective Temperature (K)	6050 ± 240
$T_{\rm eff,SED}$ . .	Effective Temperature[1] (K)	5800^{+260}_{-240}
[Fe/H] . .	Metallicity (dex)	$0.434^{+0.092}_{-0.16}$
$[Fe/H]_0$.	Initial Metallicity[2]	$0.406^{+0.069}_{-0.13}$
Age	Age (Gyr)	$1.6^{+2.9}_{-1.2}$
EEP	Equal Evolutionary Phase[3]	336^{+58}_{-46}
A_V	V-band extinction (mag)	1.24 ± 0.17
σ_{SED}	SED photometry error scaling	$8.9^{+1.4}_{-1.1}$
ϖ	Parallax (mas)	$0.677^{+0.053}_{-0.048}$
d	Distance (pc)	1480 ± 110
Planetary Parameters:		b
P	Period (days)	$51.09021^{+0.00075}_{-0.00062}$
R_P	Radius ($R_{\rm J}$)	$1.72^{+0.13}_{-0.14}$
M_P	Mass[4] ($M_{\rm J}$)	$0.400^{+0.012}_{-0.024}$
T_C	Time of conjunction[5] ($BJD_{\rm TDB}$)	2455384.643 ± 0.014
T_T	Time of minimum projected separation[6] ($BJD_{\rm TDB}$)	2455384.643 ± 0.014
T_0	Optimal conjunction Time[7] ($BJD_{\rm TDB}$)	$2456355.3576^{+0.0061}_{-0.0060}$
a	Semi-major axis (AU)	$0.2910^{+0.0067}_{-0.0080}$
i	Inclination (Degrees)	$89.42^{+0.21}_{-0.16}$
T_{eq}	Equilibrium temperature[8] (K)	614^{+29}_{-27}
$\tau_{\rm circ}$	Tidal circularization timescale (Gyr)	2320^{+1200}_{-700}
K	RV semi-amplitude[4] (m/s)	$18.6^{+1.5}_{-1.2}$
R_P/R_* . .	Radius of planet in stellar radii	0.1365 ± 0.0053
a/R_* . . .	Semi-major axis in stellar radii	48.4 ± 3.0
δ	$\left(R_P/R_* \right)^2$	$0.0186^{+0.0015}_{-0.0014}$
$\delta_{\rm I}$	Transit depth in I (fraction)	0.0206 ± 0.0015
$\delta_{\rm V}$	Transit depth in V (fraction)	$0.0224^{+0.0018}_{-0.0017}$
τ	Ingress/egress transit duration (days)	$0.0528^{+0.0084}_{-0.0076}$
T_{14}	Total transit duration (days)	0.346 ± 0.013

Table 1 *(continued)*

Parameter	Units	Values	
T_{FWHM} ..	FWHM transit duration (days)	$0.293^{+0.014}_{-0.015}$	
b	Transit Impact parameter	$0.49^{+0.10}_{-0.16}$	
$\delta_{S,2.5\mu m}$ ..	Blackbody eclipse depth at $2.5\mu m$ (ppm)	$2.57^{+1.2}_{-0.86}$	
$\delta_{S,5.0\mu m}$ ..	Blackbody eclipse depth at $5.0\mu m$ (ppm)	106^{+23}_{-21}	
$\delta_{S,7.5\mu m}$ ..	Blackbody eclipse depth at $7.5\mu m$ (ppm)	322^{+48}_{-46}	
ρ_P	Density[4] (cgs)	$0.095^{+0.027}_{-0.019}$	
$logg_P$ ...	Surface gravity[4]	$2.515^{+0.073}_{-0.063}$	
Θ	Safronov Number	$0.106^{+0.014}_{-0.011}$	
$\langle F \rangle$	Incident Flux (10^9 erg s^{-1} cm^{-2})	$0.0324^{+0.0067}_{-0.0053}$	
T_P	Time of Periastron (BJD$_{TDB}$)	2455384.643 ± 0.014	
T_S	Time of eclipse (BJD$_{TDB}$)	2455410.188 ± 0.014	
T_A	Time of Ascending Node (BJD$_{TDB}$)	2455422.961 ± 0.014	
T_D	Time of Descending Node (BJD$_{TDB}$)	2455397.415 ± 0.014	
V_c/V_e ...	....	1.00	
$M_P \sin i$.	Minimum mass[4] (M_J)	$0.400^{+0.012}_{-0.024}$	
M_P/M_* .	Mass ratio[4]	$0.000300^{+0.000035}_{-0.000025}$	
d/R_* ...	Separation at mid transit	48.4 ± 3.0	
P_T	A priori non-grazing transit prob	$0.0178^{+0.0012}_{-0.0010}$	
$P_{T,G}$	A priori transit prob	$0.0235^{+0.0015}_{-0.0014}$	

Wavelength Parameters:		I	V
u_1	linear limb-darkening coeff	$0.266^{+0.060}_{-0.061}$	$0.452^{+0.069}_{-0.068}$
u_2	quadratic limb-darkening coeff	$0.300^{+0.052}_{-0.053}$	$0.278^{+0.057}_{-0.058}$

Transit Parameters:		OGLE UT 2010-07-07 (I)	OGLE UT 2010-07-07 (V)
σ^2	Added Variance	$0.0000574^{+0.0000012}_{-0.0000011}$	$0.0000542^{+0.0000087}_{-0.0000074}$
F_0	Baseline flux	$0.999956^{+0.00010}_{-0.000099}$	1.00019 ± 0.00070

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