Table 1. Median values and 68% confidence interval for OGLE-TR-1022.

Parameter	Units	Values
Stellar Parameters:		
M_*	Mass ($M_\odot$)	$0.877^{+0.062}_{-0.057}$
R_*	Radius ($R_\odot$)	$2.45^{+0.55}_{-0.23}$
$R_{*,SED}$ ..	Radius[1] ($R_\odot$)	$2.60^{+0.44}_{-0.21}$
L_*	Luminosity ($L_\odot$)	$10.6^{+2.3}_{-1.6}$
F_{Bol}	Bolometric Flux (cgs)	$0.000000000097 \pm 0.000000000017$
ρ_*	Density (cgs)	$0.084^{+0.029}_{-0.040}$
$\log g$	Surface gravity (cgs)	$3.603^{+0.087}_{-0.18}$
$T_{\rm eff}$	Effective Temperature (K)	6630^{+370}_{-590}
$T_{\rm eff,SED}$ ..	Effective Temperature[1] (K)	6480^{+330}_{-490}
[Fe/H]..	Metallicity (dex)	$-4.22^{+0.30}_{-0.14}$
$[{\rm Fe/H}]_0$.	Initial Metallicity[2]	$-3.898^{+0.21}_{-0.075}$
Age	Age (Gyr)	$8.5^{+2.2}_{-1.8}$
EEP	Equal Evolutionary Phase[3]	$462.8^{+10.}_{-5.5}$
A_V	V-band extinction (mag)	$2.52^{+0.65}_{-0.81}$
σ_{SED}	SED photometry error scaling	$14.1^{+2.2}_{-1.8}$
ϖ	Parallax (mas)	$0.535^{+0.037}_{-0.051}$
d	Distance (pc)	1870^{+200}_{-120}
Planetary Parameters:		b
P	Period (days)	$8.102822^{+0.000045}_{-0.000039}$
R_P	Radius ($R_{\rm J}$)	$1.36^{+0.38}_{-0.15}$
M_P	Mass[4] ($M_{\rm J}$)	30^{+120}_{-29}
T_C	Time of conjunction[5] ($\rm BJD_{TDB}$)	$2455383.7024^{+0.0085}_{-0.0090}$
T_T	Time of minimum projected separation[6] ($\rm BJD_{TDB}$)	$2455383.7024^{+0.0085}_{-0.0090}$
T_0	Optimal conjunction Time[7] ($\rm BJD_{TDB}$)	$2456834.1077^{+0.0044}_{-0.0041}$
a	Semi-major axis (AU)	$0.0771^{+0.0029}_{-0.0021}$
i	Inclination (Degrees)	$84.7^{+1.4}_{-2.4}$
T_{eq}	Equilibrium temperature[8] (K)	1808^{+71}_{-67}
$\tau_{\rm circ}$	Tidal circularization timescale (Gyr)	220^{+370}_{-210}
K	RV semi-amplitude[4] (m/s)	3300^{+12000}_{-3200}
R_P/R_* ..	Radius of planet in stellar radii	$0.0573^{+0.0022}_{-0.0020}$
a/R_* ...	Semi-major axis in stellar radii	$6.73^{+0.66}_{-1.1}$
δ	$\left(R_P/R_*\right)^2$	$0.00329^{+0.00026}_{-0.00022}$
$\delta_{\rm I}$	Transit depth in I (fraction)	$0.00344^{+0.00019}_{-0.00020}$
$\delta_{\rm V}$	Transit depth in V (fraction)	$0.00355^{+0.00021}_{-0.00019}$
τ	Ingress/egress transit duration (days)	$0.0283^{+0.014}_{-0.0054}$
T_{14}	Total transit duration (days)	$0.331^{+0.014}_{-0.011}$

Table 1 continued on next page

Table 1 *(continued)*

Parameter	Units	Values
T_{FWHM} ..	FWHM transit duration (days)	$0.3014^{+0.0094}_{-0.0095}$
b	Transit Impact parameter	$0.63^{+0.13}_{-0.12}$
$\delta_{S,2.5\mu m}$ ..	Blackbody eclipse depth at 2.5μm (ppm)	197^{+45}_{-28}
$\delta_{S,5.0\mu m}$ ..	Blackbody eclipse depth at 5.0μm (ppm)	456^{+88}_{-51}
$\delta_{S,7.5\mu m}$ ..	Blackbody eclipse depth at 7.5μm (ppm)	582^{+110}_{-61}
ρ_P	Density[4] (cgs)	22^{+26}_{-22}
$logg_P$ ...	Surface gravity[4]	$4.73^{+0.43}_{-1.5}$
Θ	Safronov Number	$4.4^{+12}_{-4.3}$
$\langle F \rangle$	Incident Flux (10^9 erg s^{-1} cm^{-2})	$2.43^{+0.41}_{-0.34}$
T_P	Time of Periastron (BJD$_{\rm TDB}$)	$2455383.7024^{+0.0085}_{-0.0090}$
T_S	Time of eclipse (BJD$_{\rm TDB}$)	$2455387.7538^{+0.0085}_{-0.0090}$
T_A	Time of Ascending Node (BJD$_{\rm TDB}$)	$2455389.7795^{+0.0085}_{-0.0090}$
T_D	Time of Descending Node (BJD$_{\rm TDB}$)	$2455385.7281^{+0.0085}_{-0.0090}$
V_c/V_e ...	.....	1.00
$M_P \sin i$.	Minimum mass[4] (M_J)	30^{+120}_{-29}
M_P/M_* .	Mass ratio[4]	$0.033^{+0.13}_{-0.032}$
d/R_* ...	Separation at mid transit	$6.73^{+0.66}_{-1.1}$
P_T	A priori non-grazing transit prob	$0.140^{+0.026}_{-0.012}$
$P_{T,G}$	A priori transit prob	$0.157^{+0.030}_{-0.014}$
Wavelength Parameters:		I	V
u_1	linear limb-darkening coeff	$0.199^{+0.052}_{-0.053}$	$0.344^{+0.053}_{-0.048}$
u_2	quadratic limb-darkening coeff	0.291 ± 0.053	$0.303^{+0.050}_{-0.052}$
Transit Parameters:		OGLE UT 2010-07-06 (I)	OGLE UT 2010-07-06 (V)
σ^2	Added Variance	$0.00000208^{+0.00000014}_{-0.00000013}$	$0.0000257^{+0.0000035}_{-0.0000032}$
F_0	Baseline flux	$0.999994^{+0.000033}_{-0.000034}$	$0.99976^{+0.00039}_{-0.00040}$

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