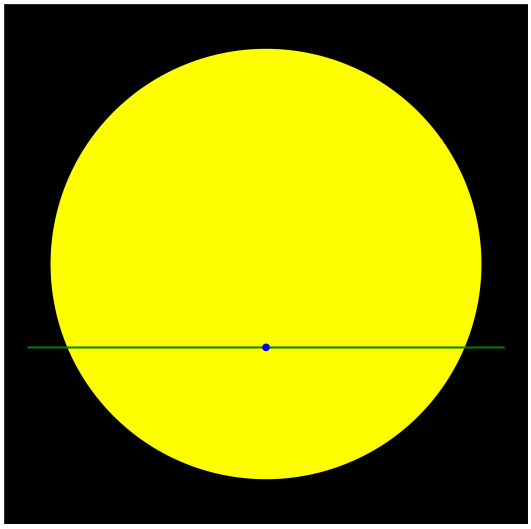
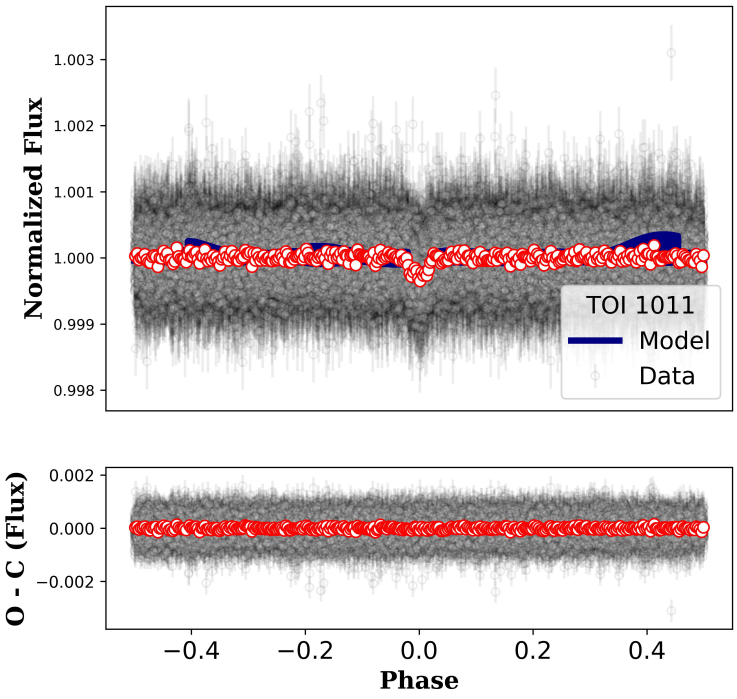
Modelling Transit Light Curve through `Juliet`

TOI 1011





Stellar Parameters

- Magnitude (V) : 8.2388 ± 0.006
- Mass of the Star (M_*) : 0.94 ± 0.119244 $M_\odot$
- Radius of the Star (R_*) : 0.941335 ± 0.0546131 $R_\odot$
- Temperature (T) : 5413.68 ± 132.798 K
- Luminosity (L) : 0.6857309 ± 0.0160353 $L_\odot$

Median values and 68% confidence interval from `Juliet`

Parameters	Description (Unit)	Values
P	Period (days)	$2.470495\ ^{+0.000005}_{-0.000005}$
R_P	Radius (R_J)	$0.137483\ ^{+0.000000}_{-0.000000}$
R_P	Radius (R_E)	$1.508644\ ^{+0.000000}_{-0.000000}$
T_C	Epoch Time (BJD)	$2459231.128038\ ^{+0.001242}_{-0.001413}$
T_d	Transit Duration (days)	$0.098171\ ^{+0.042908}_{-0.030458}$
a	Semi-major Axis (AU)	$0.032745\ ^{+0.000000}_{-0.000000}$
i	Inclination (Degree)	$87.032058\ ^{+2.152472}_{-4.364433}$
e	Eccentricity	0 (Fixed)
ω	Argument of Periastron (Degree)	90 (Fixed)
T_{eqq}	Equilibrium Temperature (K)	$1400.300528\ ^{+0.000000}_{-0.000000}$
S	Insolation (S_E)	$639.529355\ ^{+14.954912}_{-14.954912}$
R_P/R_S	Radius of planet in stellar radii	$0.014663\ ^{+0.001236}_{-0.000725}$
a/R_S	Semi-major axis in stellar radii	$7.473304\ ^{+0.619632}_{-1.821364}$
δ	Transit Depth (Fraction)	$0.000215\ ^{+0.168644}_{-0.098930}$
b	Impact Parameter	$0.388707\ ^{+0.340393}_{-0.273165}$
u_1	Limb Darkening Parameter	$0.597014\ ^{+0.403579}_{-0.364641}$
u_2	Limb Darkening Parameter	$0.006531\ ^{+0.463599}_{-0.359936}$