

Table 1: Median Reduced χ^2 : 1.06 – Maximum-Likelihood Reduced χ^2 : 1.89

Parameter	Median and 1σ Values	Maximum-Likelihood
P [days]	693^{+32}_{-22}	684.0
t_{tran} [BJD - 2454833]	$3173.3^{+1.8}_{-2.5}$	3173.8
$\sqrt{e}\cos\omega$	$-0.115^{+0.052}_{-0.061}$	-0.094
$\sqrt{e}\sin\omega$	$0.2995^{+0.0099}_{-0.0160}$	0.304
K [km/s]	$9.22^{+0.30}_{-0.21}$	9.14
γ [km/s]	$6.28^{+0.44}_{-0.31}$	6.16
σ_j [km/s]	$0.056^{+0.031}_{-0.027}$	0.022
e	$0.1036^{+0.0086}_{-0.0048}$	0.1013
ω [deg]	$110.9^{+10.8}_{-9.4}$	107.2

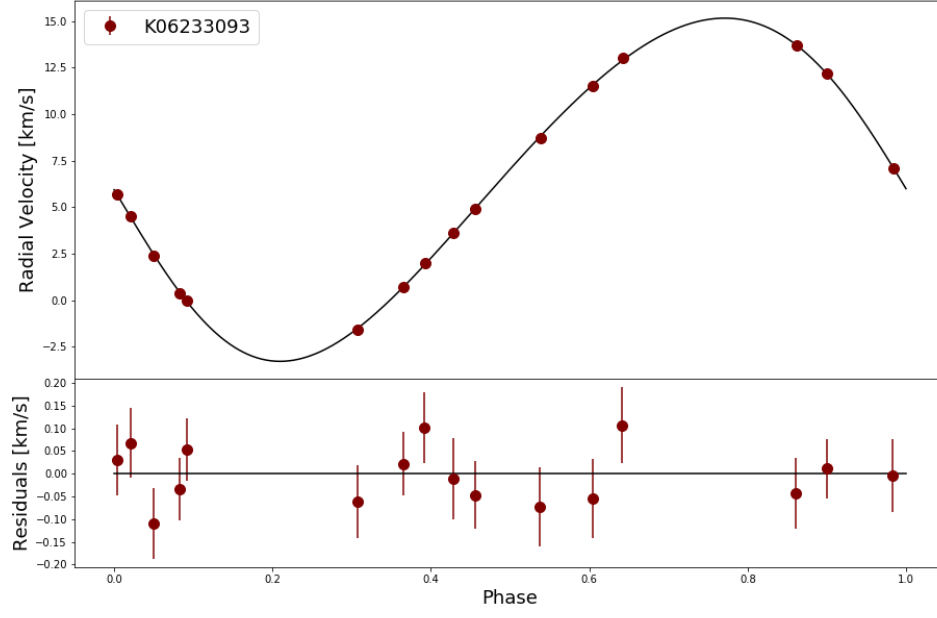


Figure 1: Phase folded median MCMC RV model and observations. RMS residual velocity of 0.06 km s^{-1} .

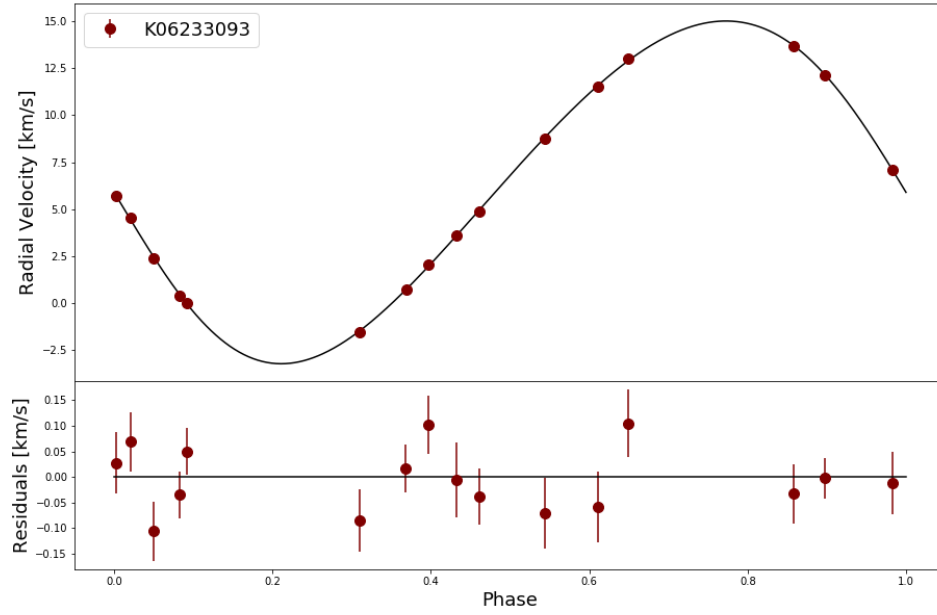


Figure 2: Phase folded maximum-likelihood MCMC RV model and observations. RMS residual velocity of 0.06 km s^{-1} .

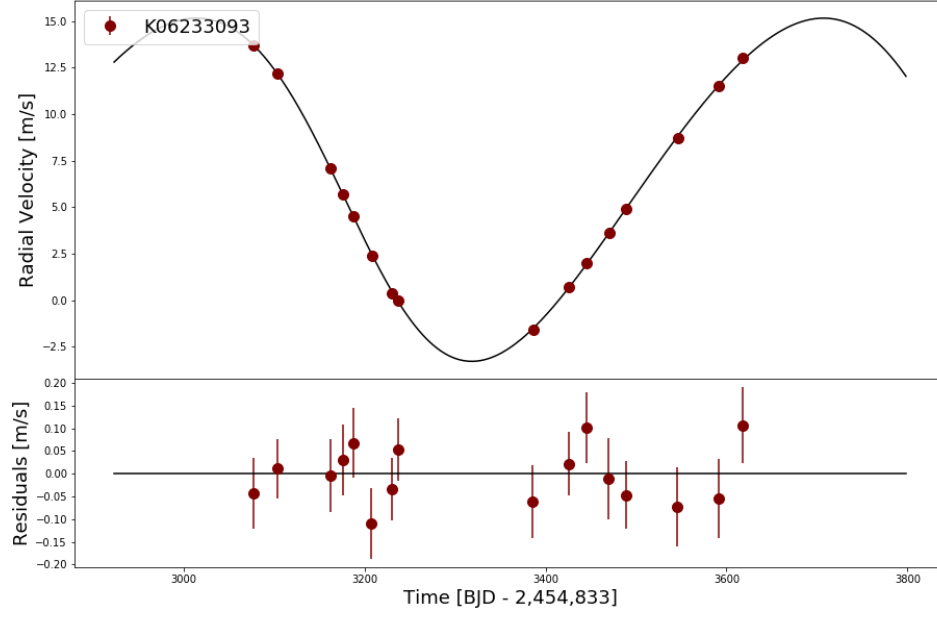


Figure 3: Time series median MCMC RV model and observations. RMS residual velocity of 0.06 km s^{-1} .

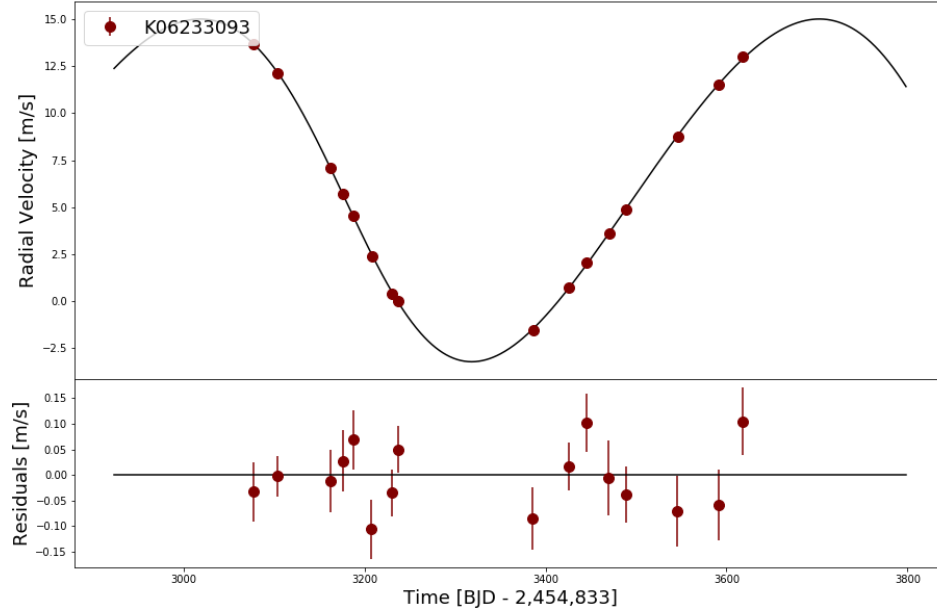


Figure 4: Time series maximum-likelihood MCMC RV model and observations. RMS residual velocity of 0.06 km s^{-1} .

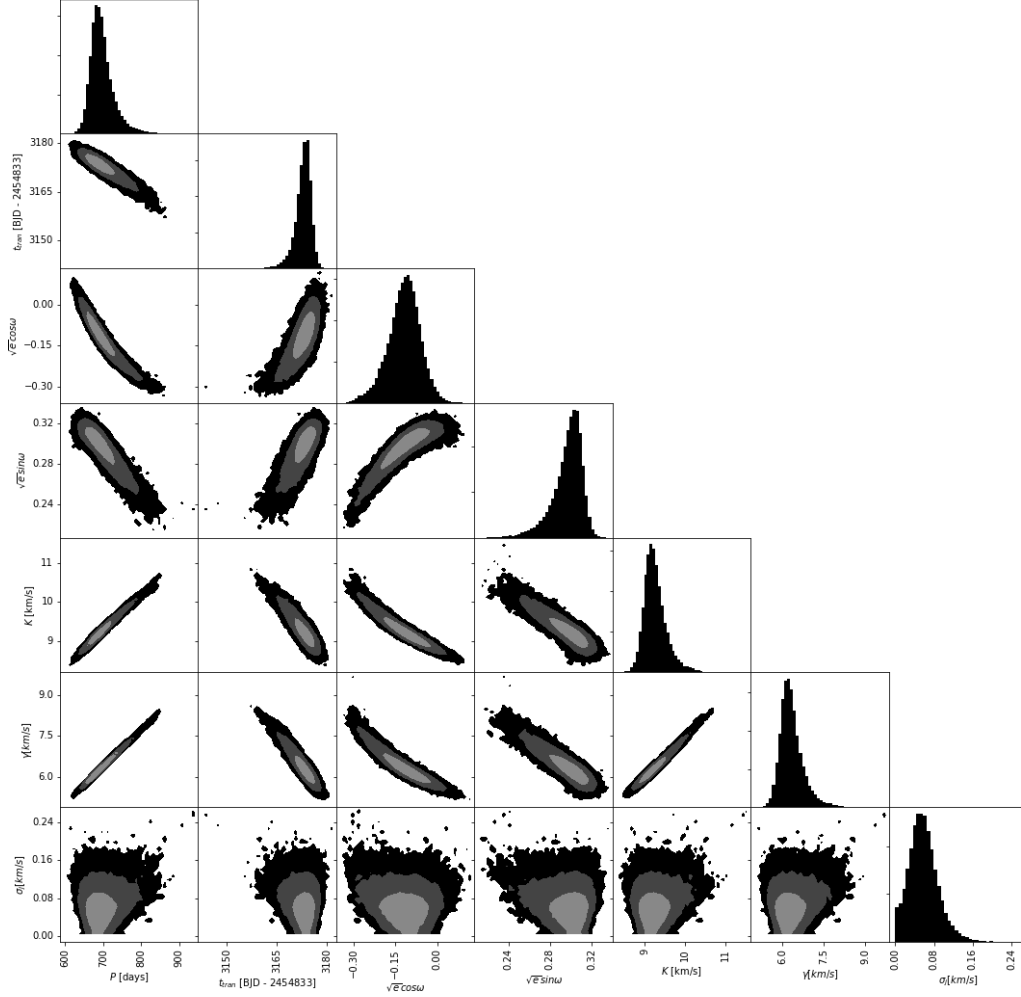


Figure 5: Contour plots showing the 1σ , 2σ , and 3σ constraints on pairs of parameters for the MCMC model.

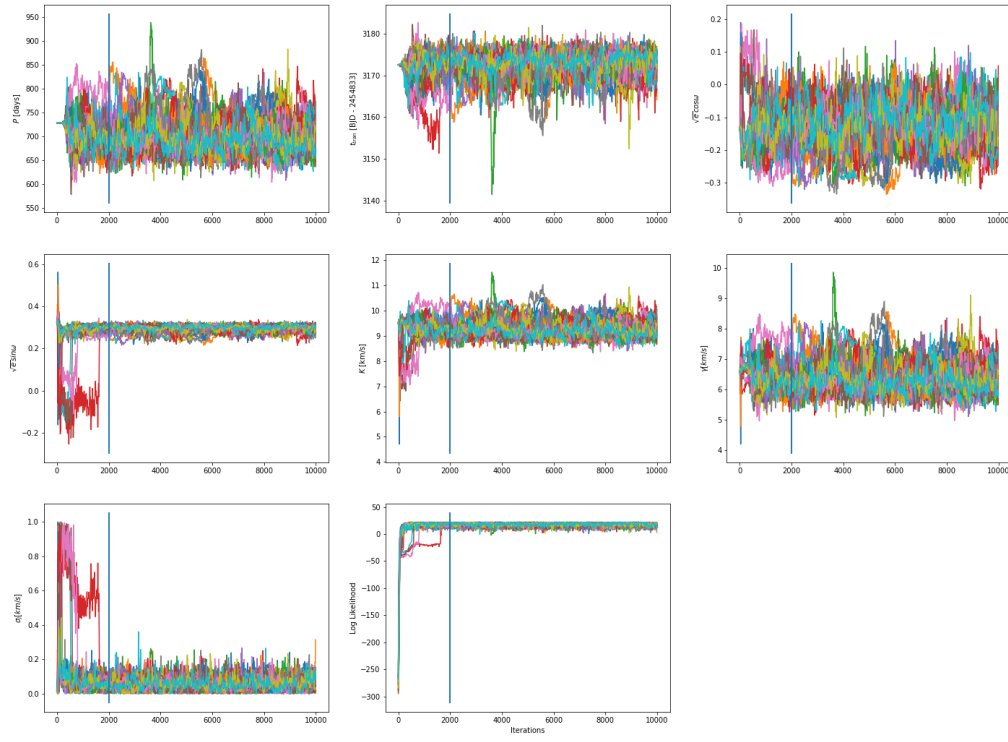


Figure 6: MCMC chains for all 50 walkers. Blue line is burnout: 2000 steps.