Table 1: Median Reduced χ^2: 0.73 – Maximum-Likelihood Reduced χ^2: 0.81

Parameter	Median and 1σ Values	Maximum-Likelihood
P [days]	$678.7^{+1.7}_{-1.6}$	678.6
t_{tran} [BJD - 2454833]	$3325.48^{+0.51}_{-0.50}$	3325.43
$\sqrt{e}cos\omega$	$0.2343^{+0.0049}_{-0.0051}$	0.2341
$\sqrt{e}sin\omega$	$0.012^{+0.010}_{-0.010}$	0.013
K [km/s]	$9.049^{+0.015}_{-0.015}$	9.044
$\gamma[km/s]$	$7.481^{+0.018}_{-0.019}$	7.481
$\sigma_j[km/s]$	$0.0134^{+0.0143}_{-0.0095}$	0.0017
e	$0.0551^{+0.0024}_{-0.0024}$	0.055
ω [deg]	$2.9^{+2.5}_{-2.5}$	3.1

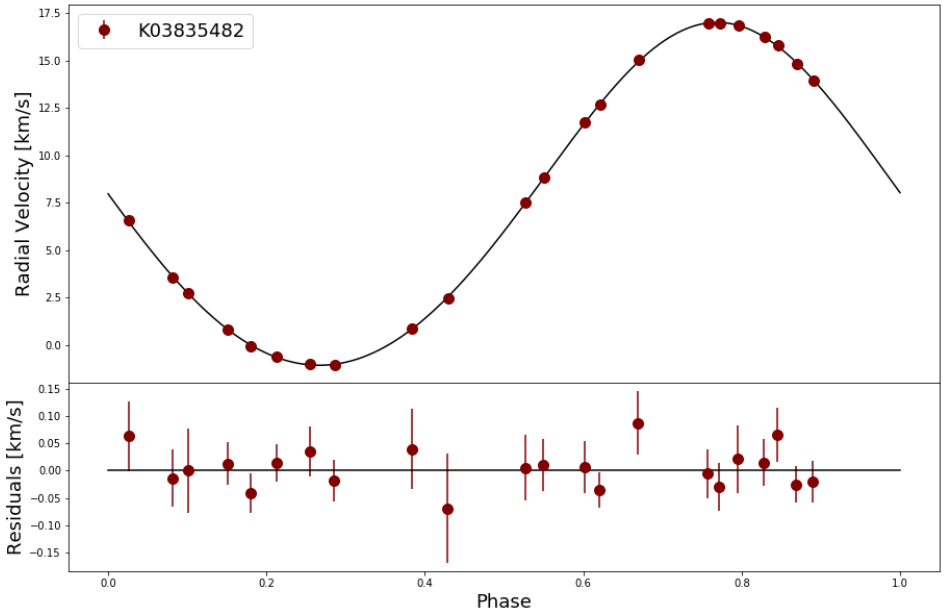

Figure 1: Phase folded median MCMC RV model and observations. RMS residual velocity of 0.04 km s^{-1}.

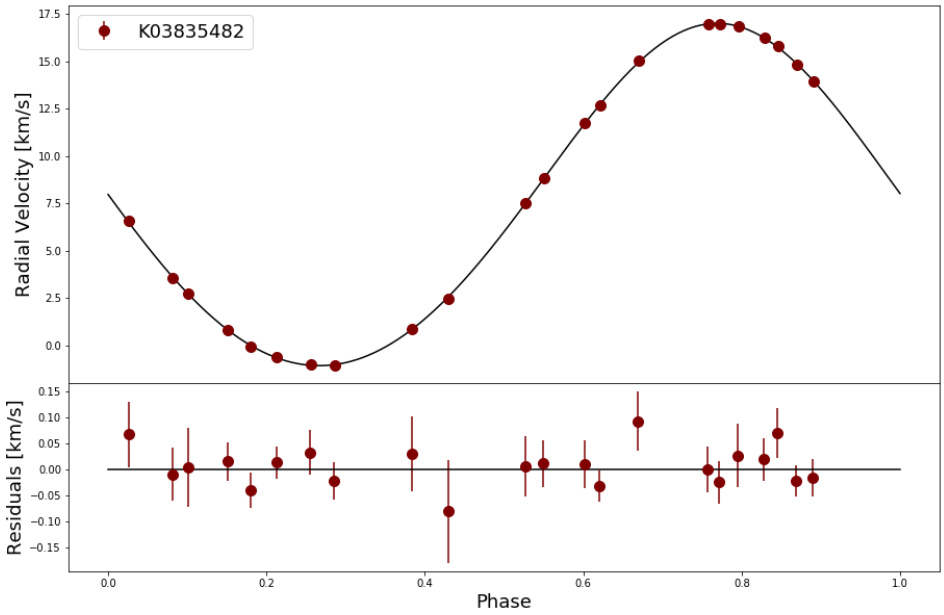

Figure 2: Phase folded maximum-likelihood MCMC RV model and observations. RMS residual velocity of 0.04 km s^{-1}.

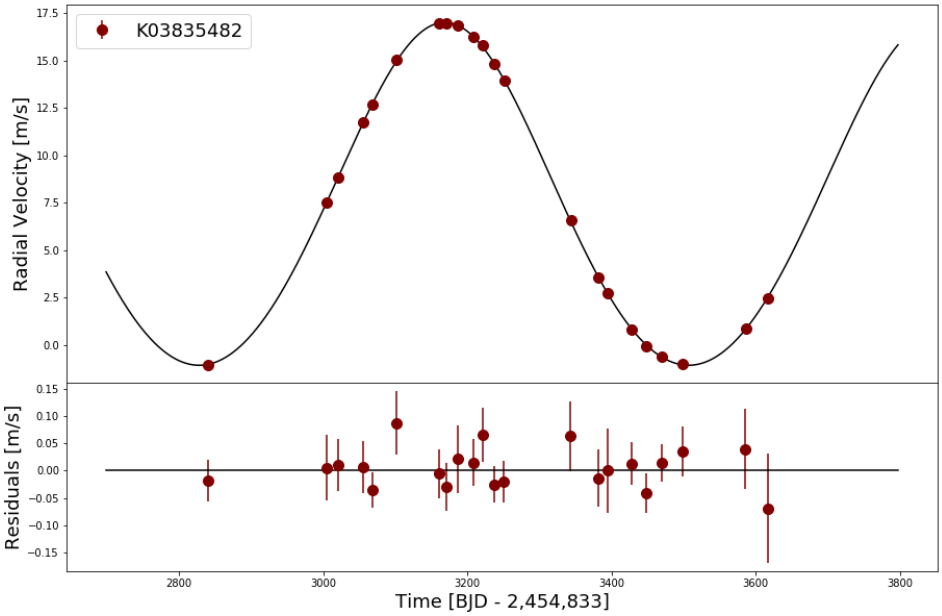

Figure 3: Time series median MCMC RV model and observations. RMS residual velocity of 0.04 km s^{-1}.

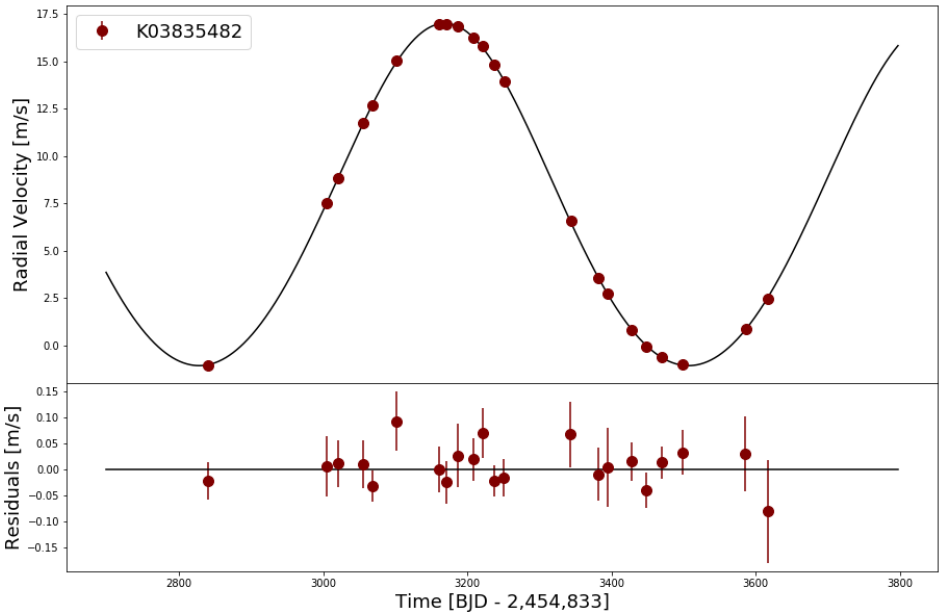

Figure 4: Time series maximum-likelihood MCMC RV model and observations. RMS residual velocity of 0.04 km s^{-1}.

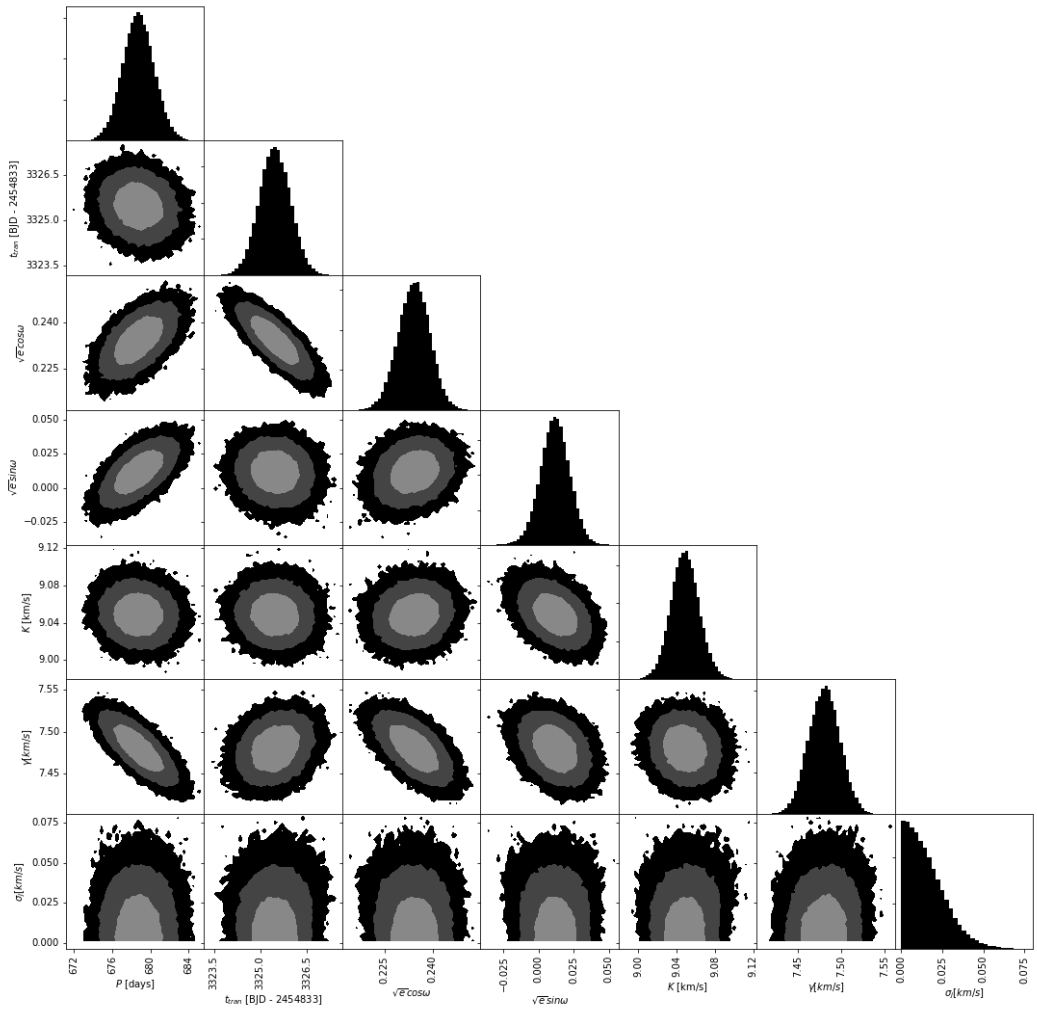

Figure 5: Contour plots showing the 1σ, 2σ, and 3σ constraints on pairs of parameters for the MCMC model.

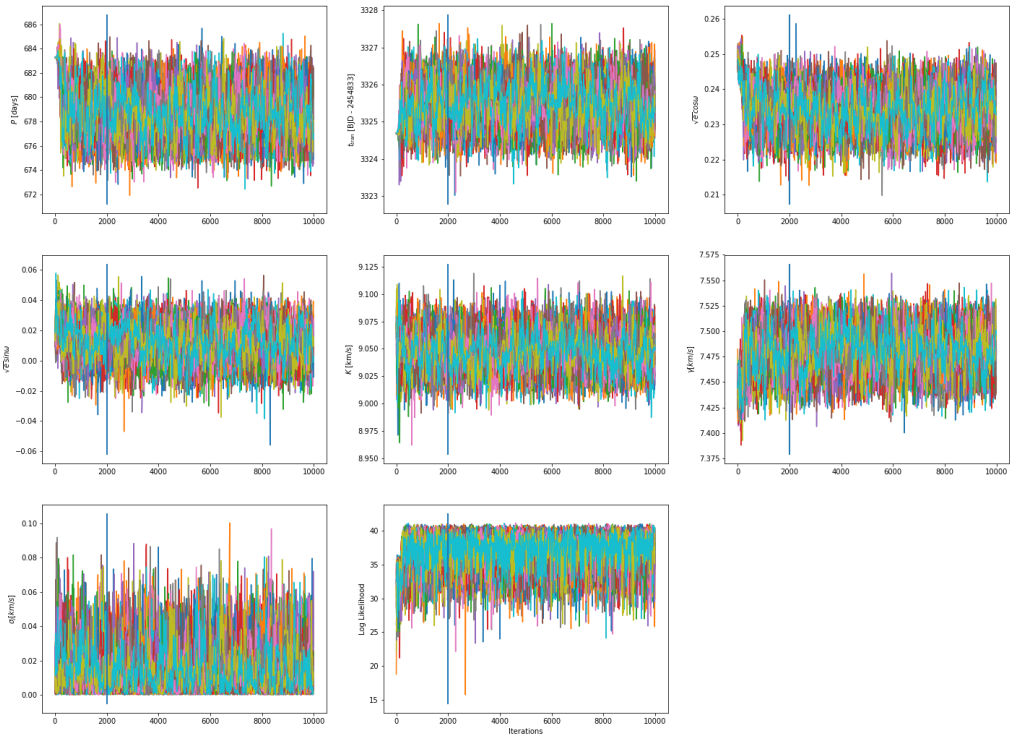

Figure 6: MCMC chains for all 50 walkers. Blue line is burnout: 2000 steps.