Table 1: Median Reduced χ^2: 0.87 – Maximum-Likelihood Reduced χ^2: 2.07

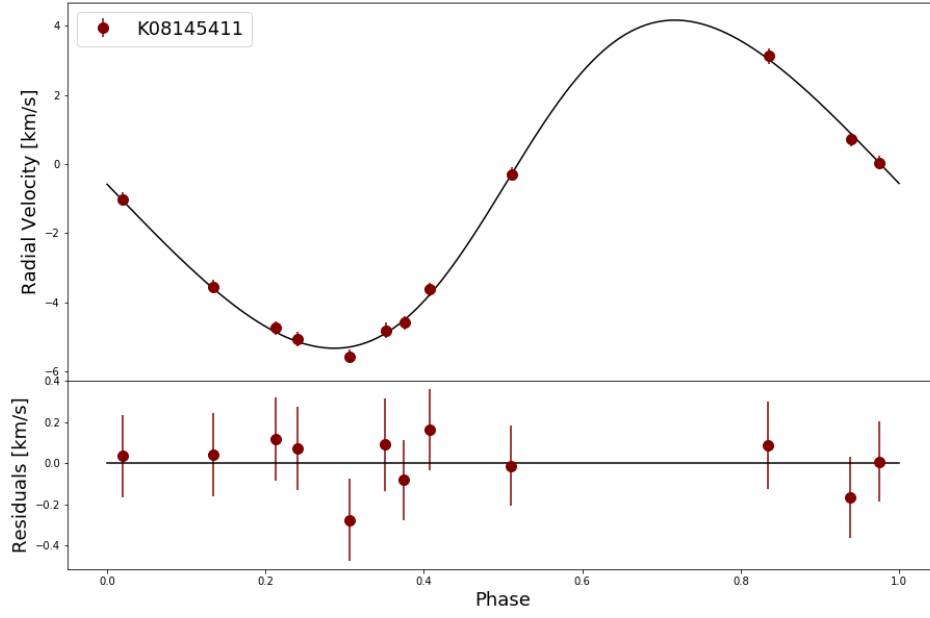| Parameter	Median and 1σ Values	Maximum-Likelihood
P [days]	$442.4^{+5.8}_{-4.9}$	442.1
t_{tran} [BJD - 2454833]	$3451.2^{+5.4}_{-5.8}$	3450.0
$\sqrt{e}cos\omega$	$0.012^{+0.091}_{-0.091}$	0.019
$\sqrt{e}sin\omega$	$-0.333^{+0.045}_{-0.034}$	-0.347
K [km/s]	$4.75^{+0.21}_{-0.19}$	4.79
$\gamma[km/s]$	$-0.60^{+0.12}_{-0.11}$	-0.58
$\sigma_j[km/s]$	$0.188^{+0.098}_{-0.058}$	0.11
e	$0.117^{+0.027}_{-0.025}$	0.121
ω [deg]	-88^{+15}_{-16}	-87.0

Figure 1: Phase folded median MCMC RV model and observations. RMS residual velocity of 0.12 km s^{-1}.
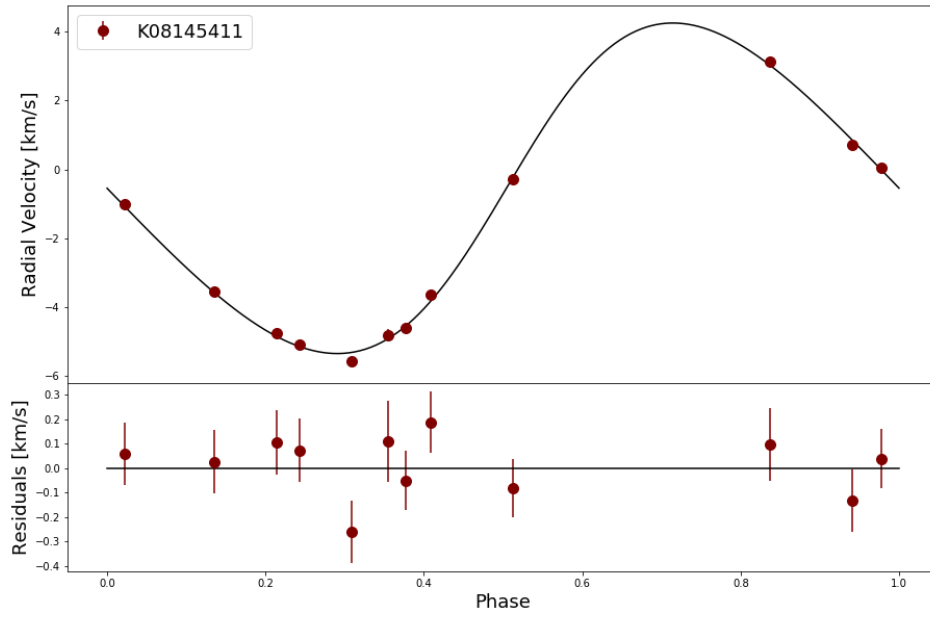

Figure 2: Phase folded maximum-likelihood MCMC RV model and observations. RMS residual velocity of 0.12 km s^{-1}.
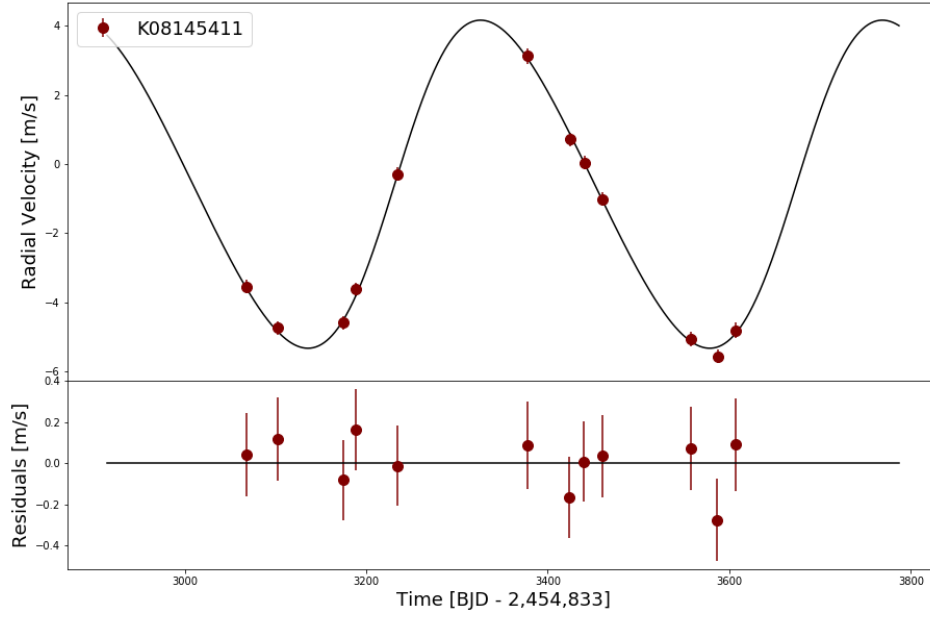
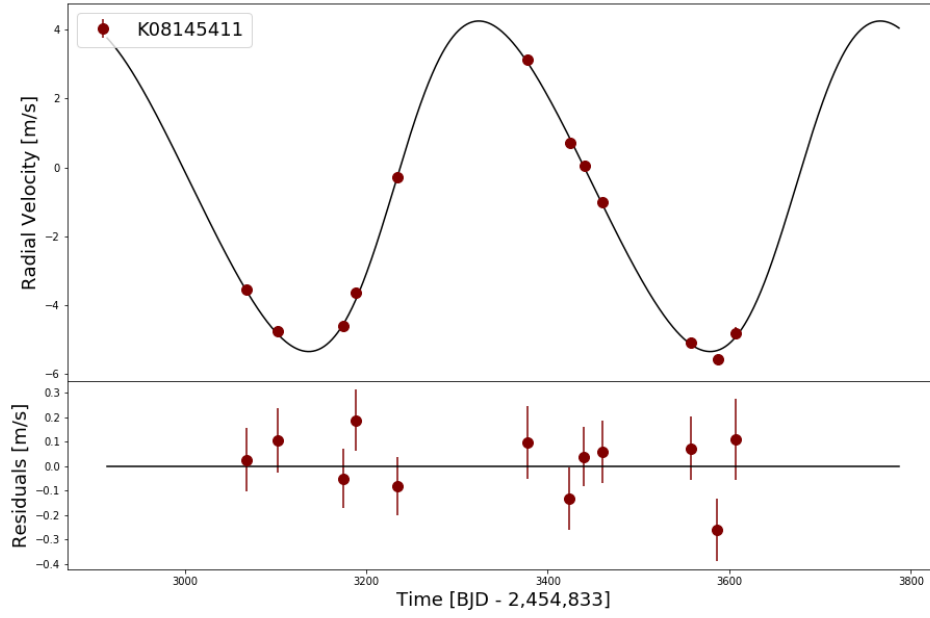Figure 3: Time series median MCMC RV model and observations. RMS residual velocity of 0.12 km s^{-1}.

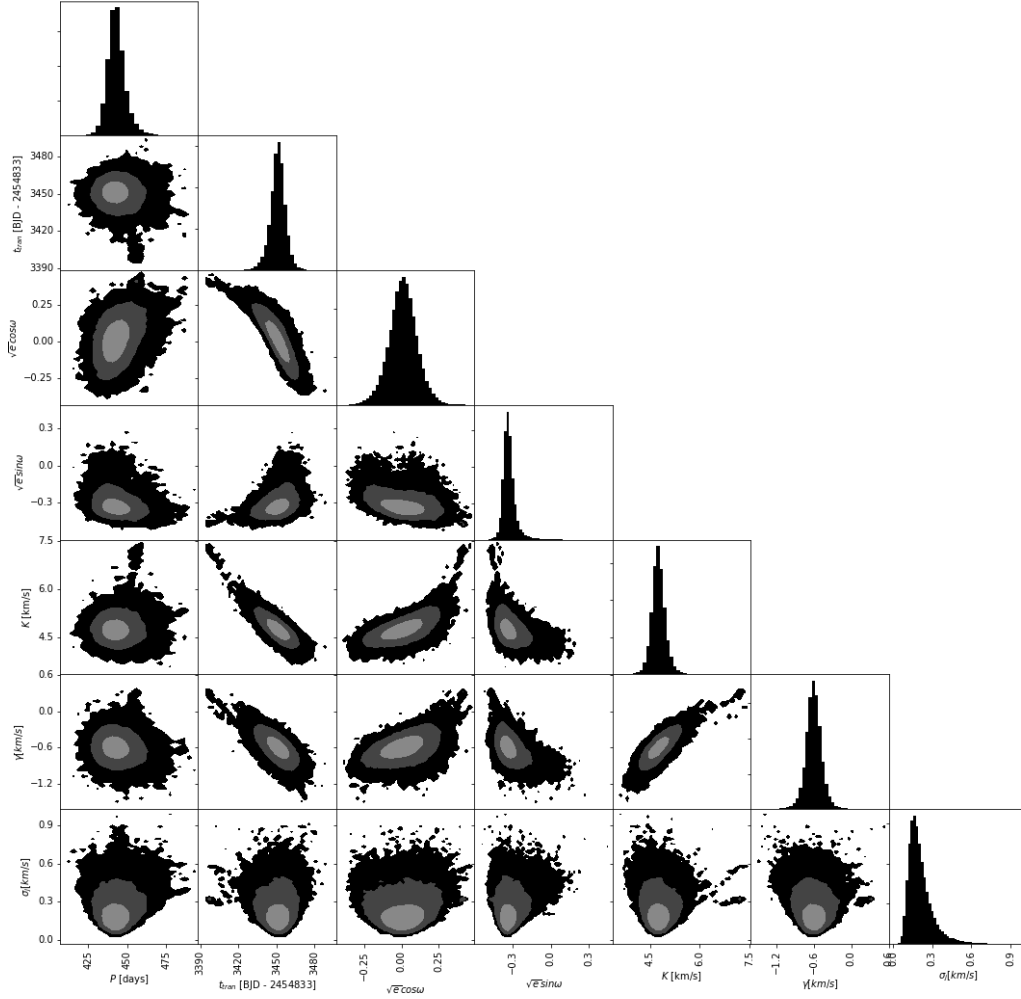Figure 4: Time series maximum-likelihood MCMC RV model and observations. RMS residual velocity of 0.12 km s^{-1}.

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Figure 5: Contour plots showing the 1σ, 2σ, and 3σ constraints on pairs of parameters for the MCMC model.
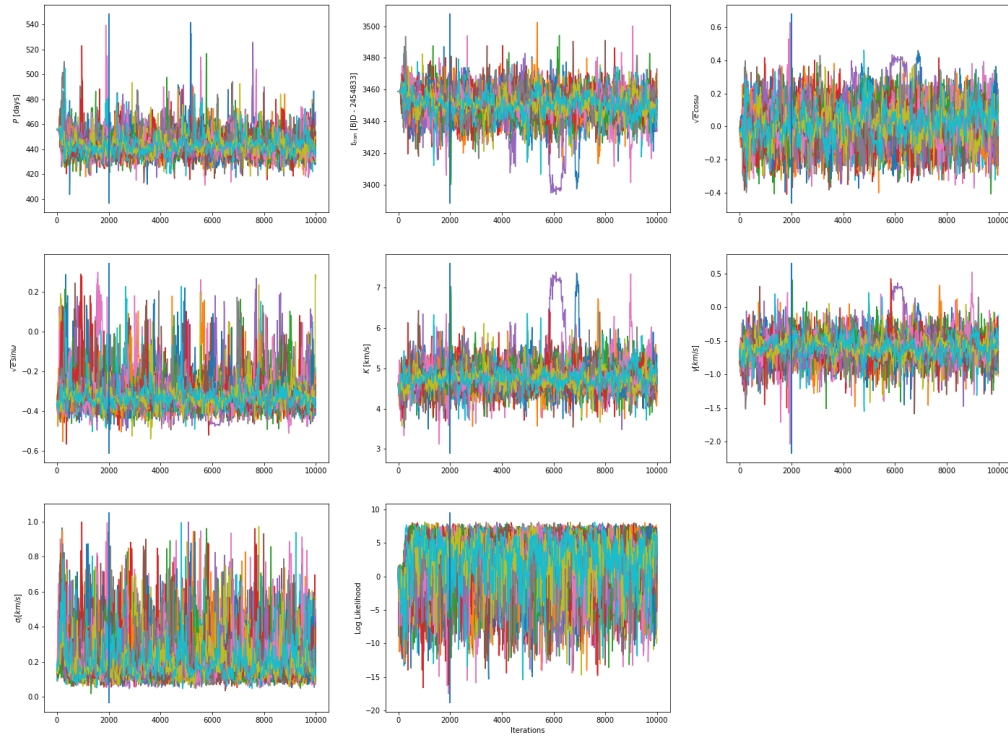
Figure 6: MCMC chains for all 50 walkers. Blue line is burnout: 2000 steps.