

KIC 011753352

Q1-17 DR25 TCE Parameters

TCE	Run Type	KOI?	Period (Days)	Epoch (BKJD)	Depth (ppm)	Duration (Hours)	MES	SNR	R_{\star} (R_{\odot})	T_{\star} (K)	R_p (R_{\oplus})	S_p (S_{\oplus})
011753352-01	OBS	No	366.977380	494.762555	424.3	20.694	7.6	8.2	0.91	5799	1.92	0.86

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
011753352-01	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_MARSHALL—CENT_FEW_DIFFS

Notes: OBS = Observed. INJ = Injected. INV = Inverted. SCR = Scrambled.

N = Not Transit-Like. S = Stellar Eclipse. C = Centroid Offset. E = Ephemeris Match.

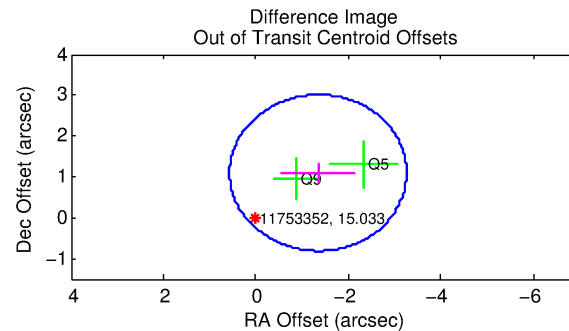
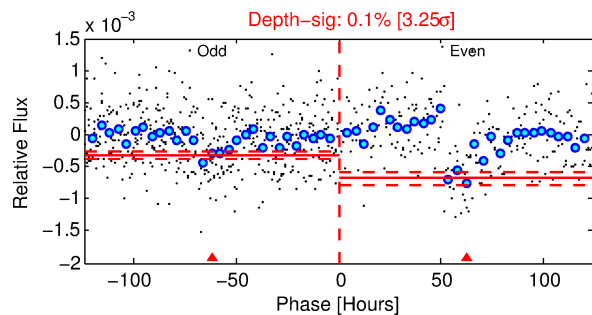
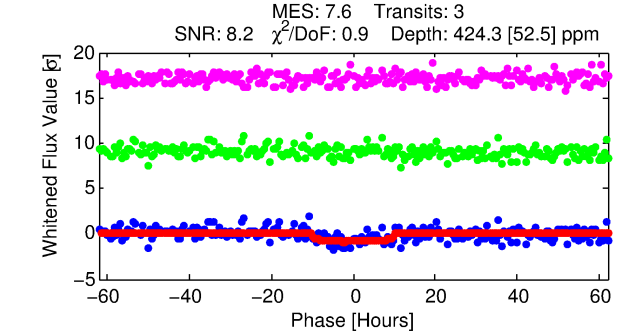
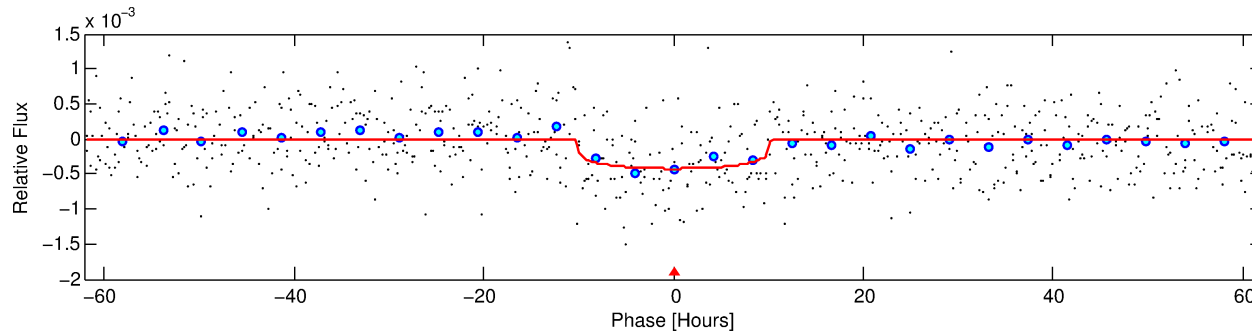
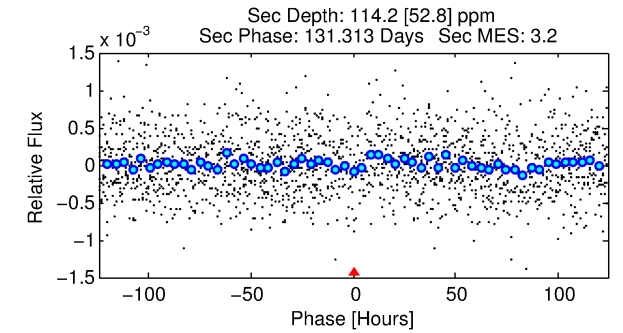
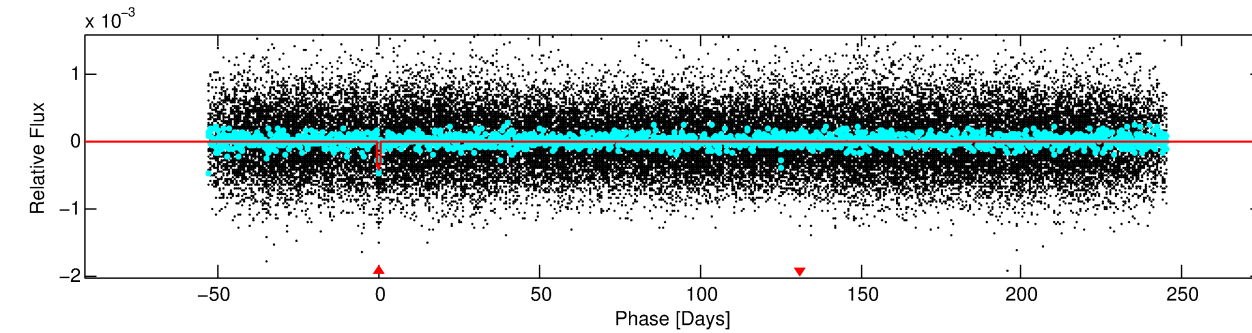
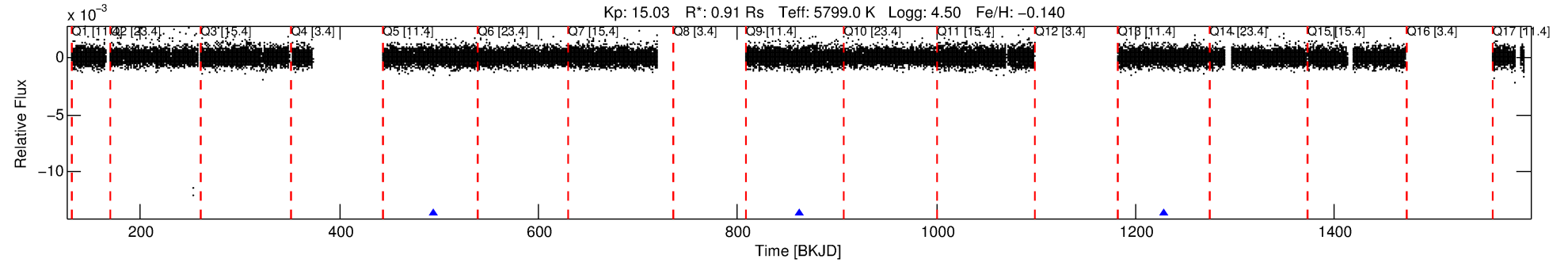
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 011753352-01

No Significant Match Found

DV One-Page Summary

KIC: 11753352 Candidate: 1 of 1 Period: 366.977 d



DV Fit Results:

Period = 366.97738 [0.02205] d
Epoch = 494.7626 [0.0284] BKJD
Rp/R* = 0.0193 [0.0120]
a/R* = 120.28 [335.13]
b = 0.50 [4.20]
Seff = 0.86 [0.32]
Teq = 246 [23] K
Rp = 1.92 [1.32] Re
a = 0.9844 [0.2394] AU
Ag = 16583.84 [22770.05] [0.73σ]
Teffp = 4313 [1438] K [2.83σ]

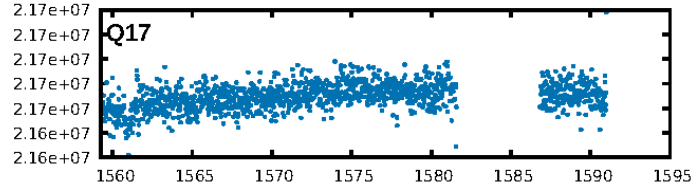
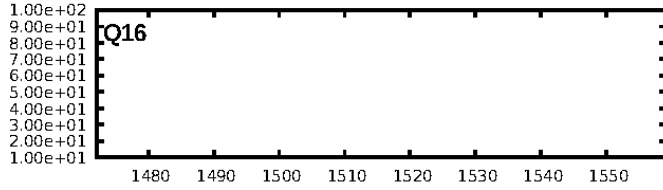
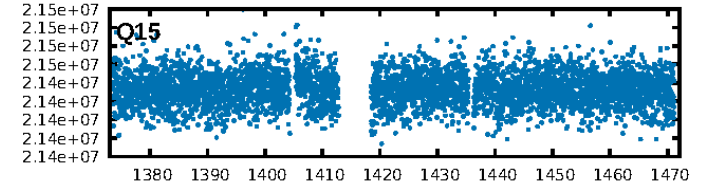
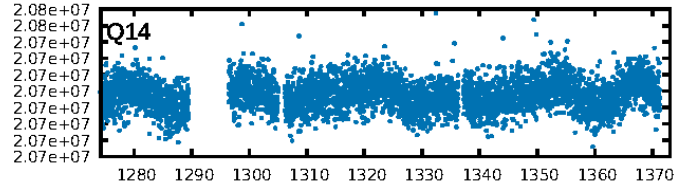
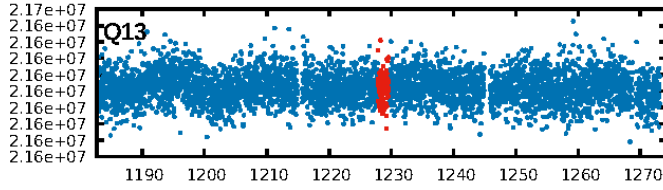
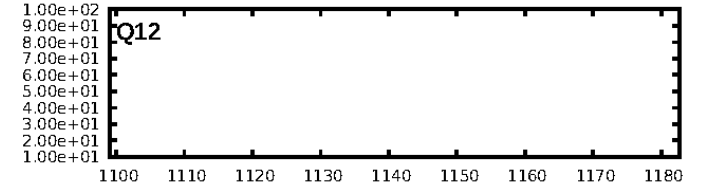
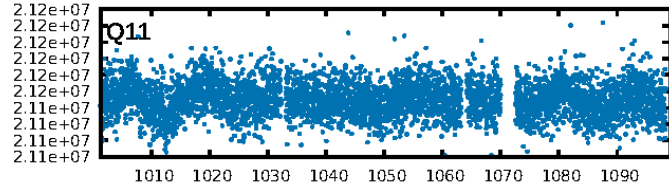
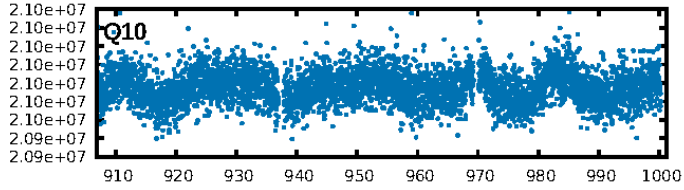
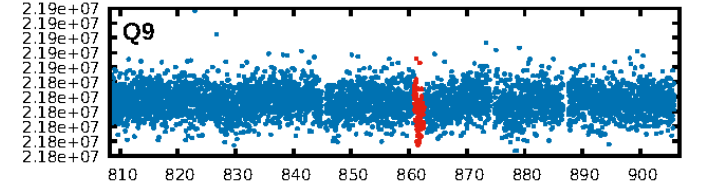
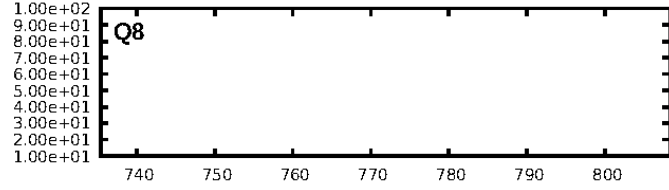
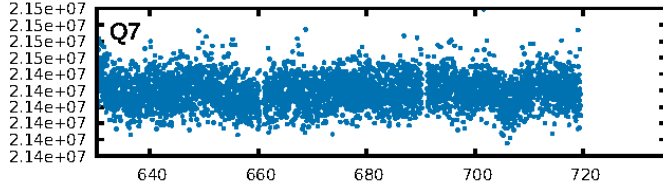
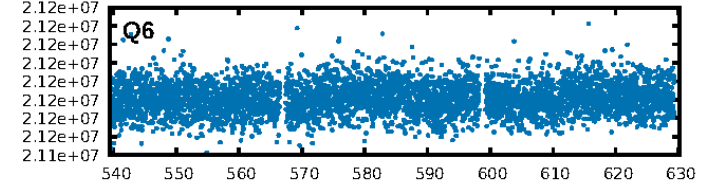
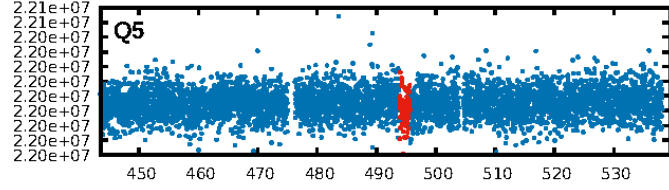
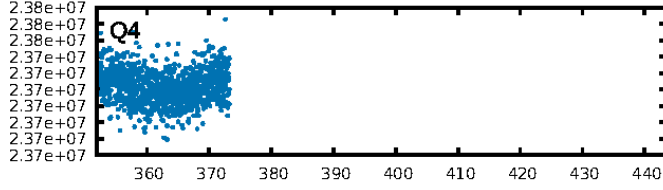
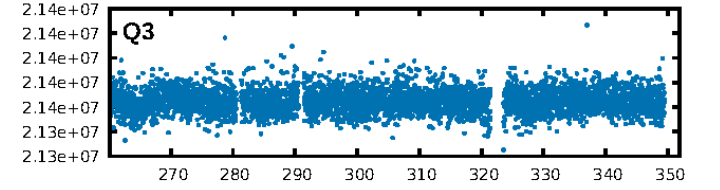
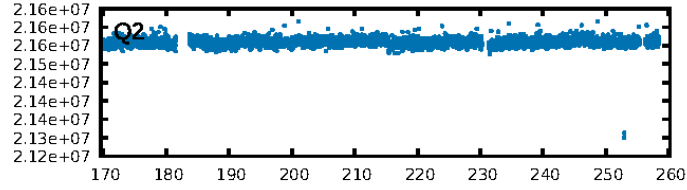
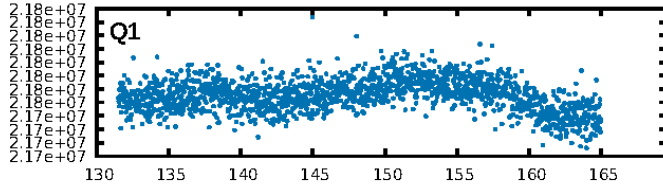
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: 2.4%
ModelChiSquareGof-sig: 100.0%
Bootstrap-pfa: 1.20e-09
RollingBand-fgt: 1.00 [3/3]
GhostDiagnostic-chr: 2.285
Centroid-sig: 36.7%
Centroid-so: 1.723 arcsec [1.03σ]
OotOffset-rm: 1.733 arcsec [2.72σ]
OotOffset-st: 0/0/0/2 [2]
KicOffset-rm: 1.886 arcsec [3.10σ]
OotOffset-st: 0/0/0/2 [2]
KicOffset-st: 0/0/0/2 [2]
DiffImageQuality-fgm: 1.00 [2/2]
DiffImageOverlap-fno: 1.00 [2/2]

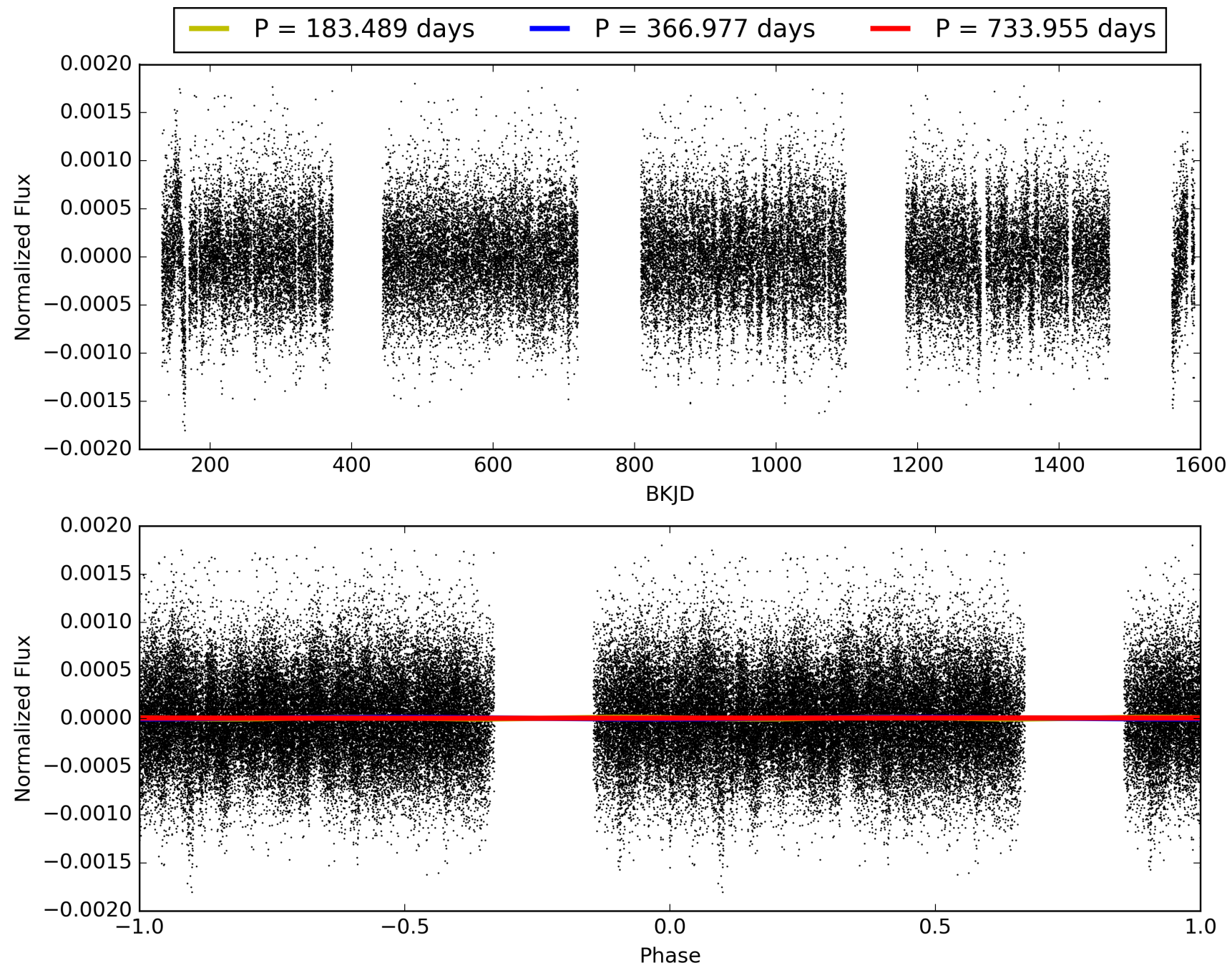
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 01-Feb-2016 00:35:03 Z

This Data Validation Report Summary was produced in the Kepler Science Operations Center Pipeline at NASA Ames Research Center

TCE 011753352-01, PDC Light Curves

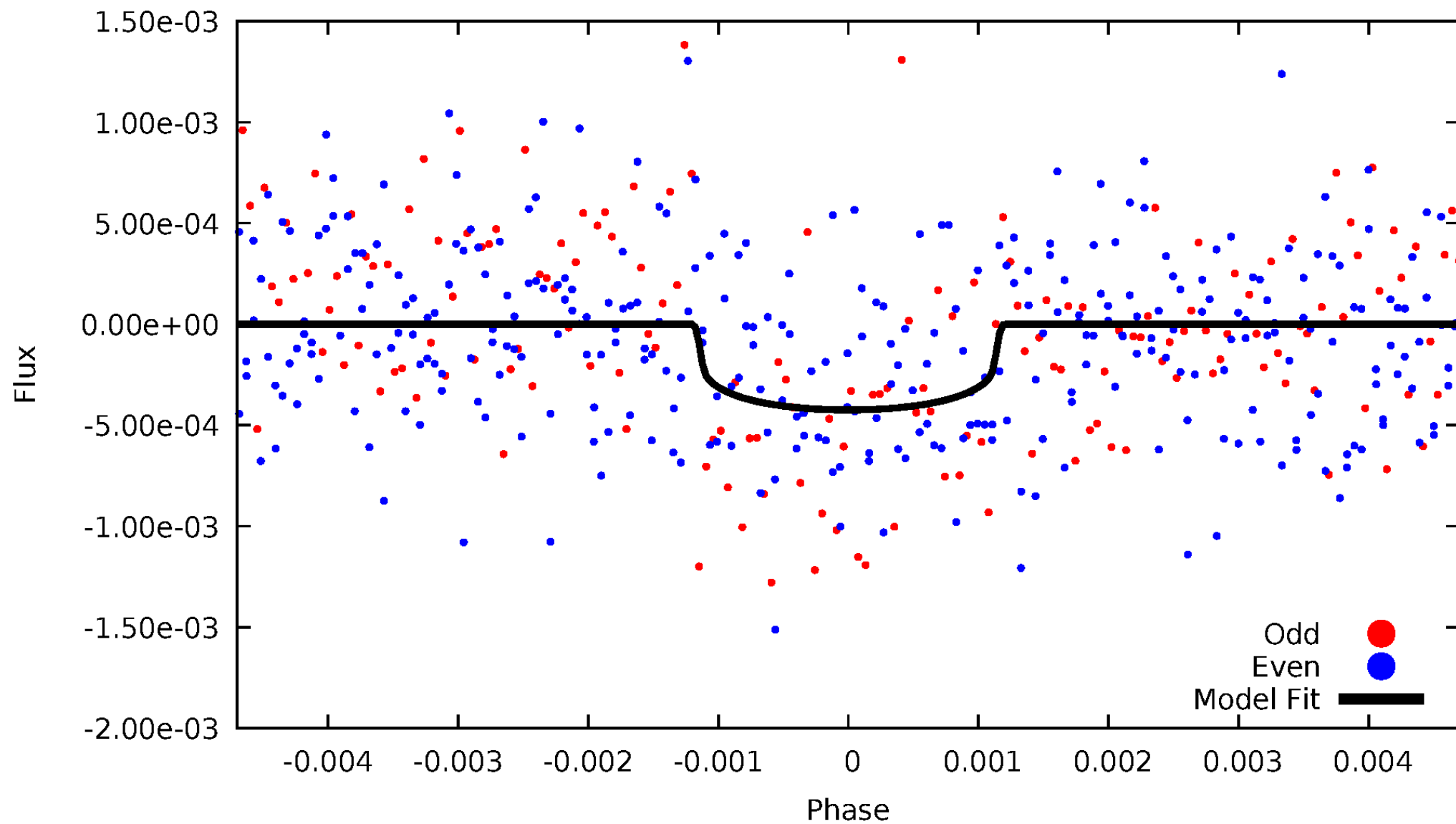


TCE 011753352-01



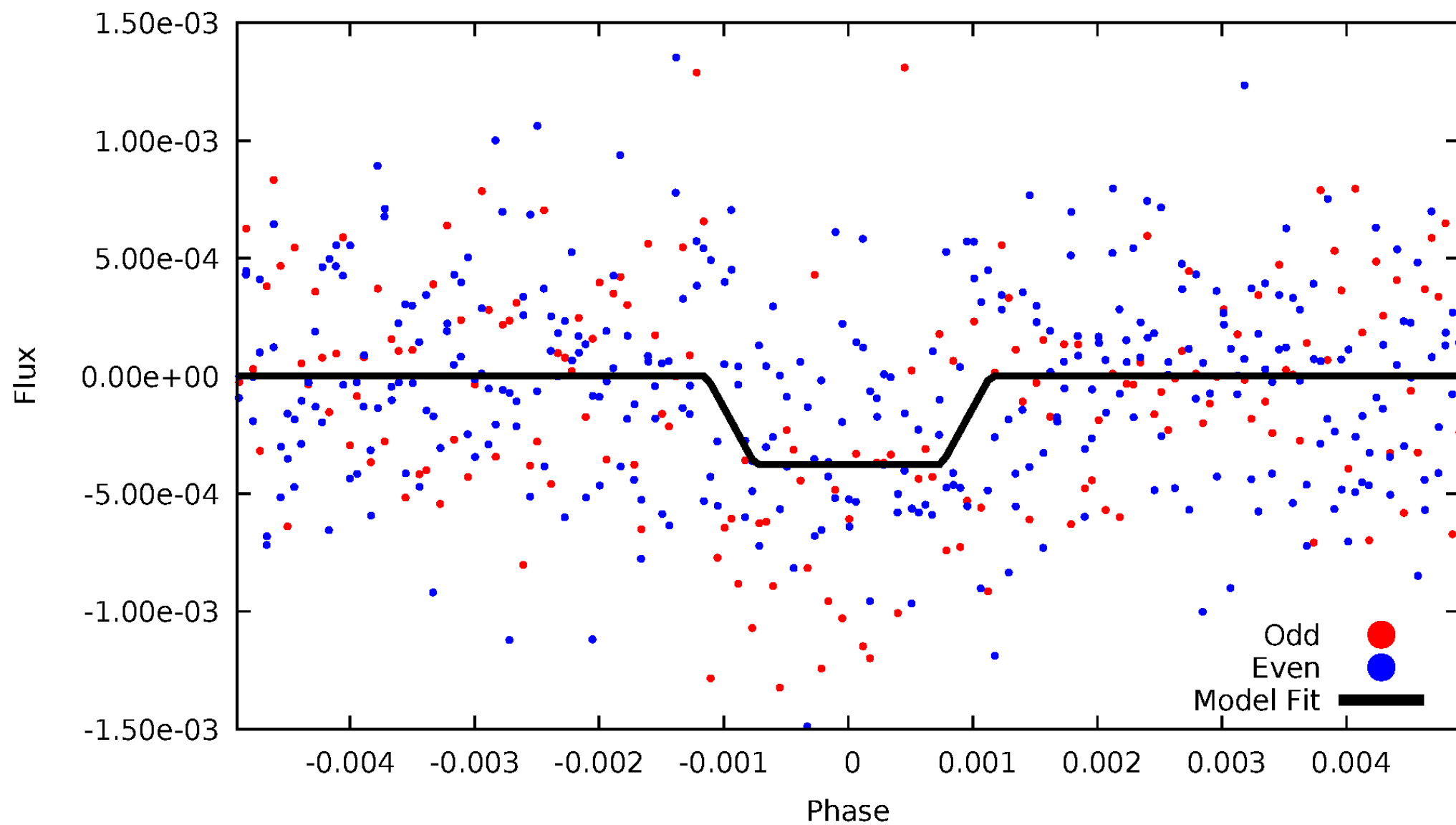
DV Odd/Even

TCE 011753352-01



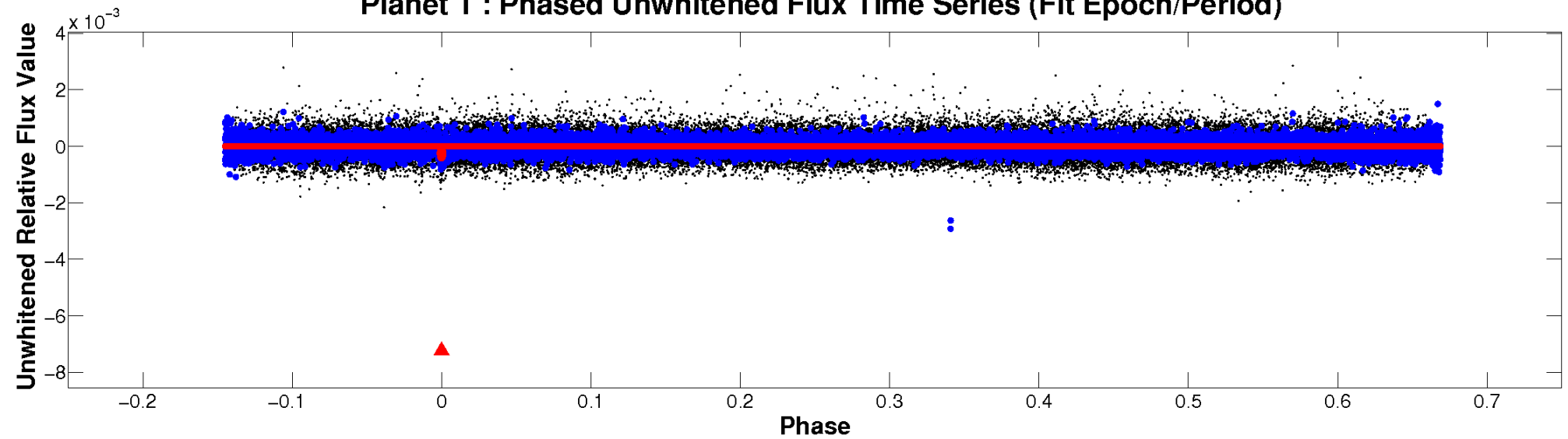
ALT Odd/Even

TCE 011753352-01

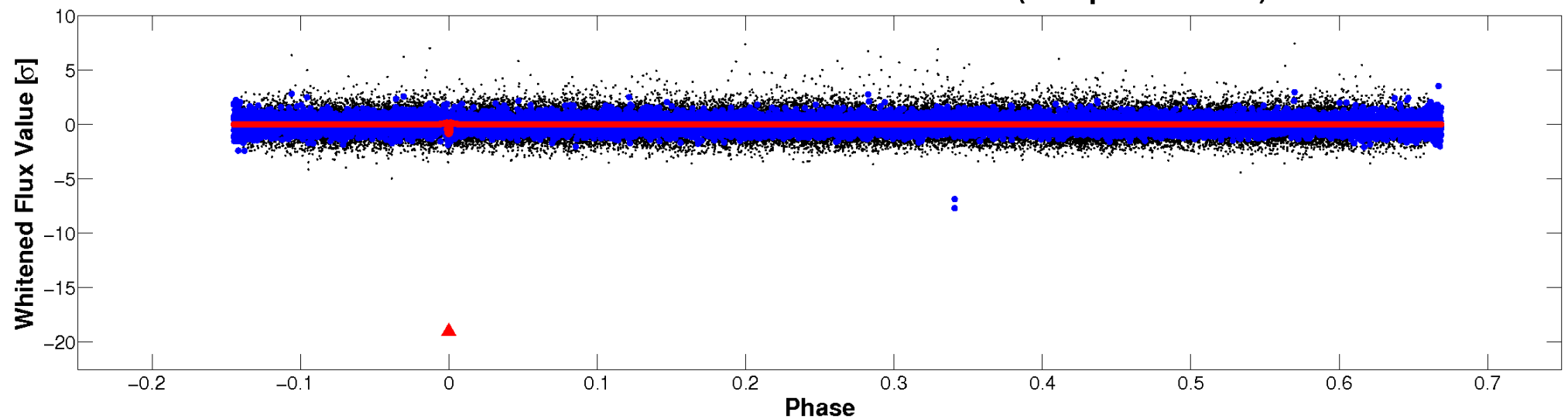


Non-Whitened Vs. Whitened Light Curve

Planet 1 : Phased Unwhitened Flux Time Series (Fit Epoch/Period)

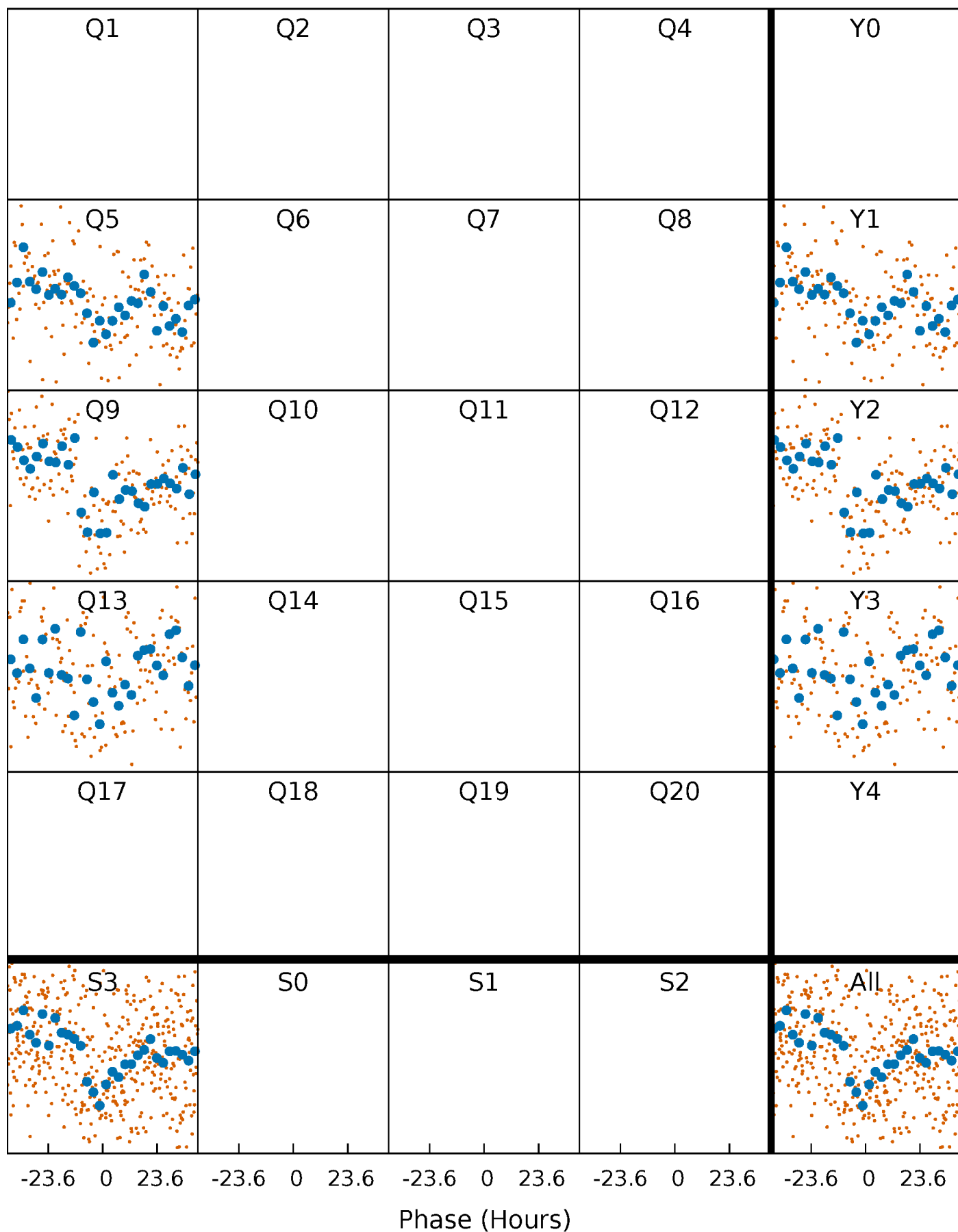


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



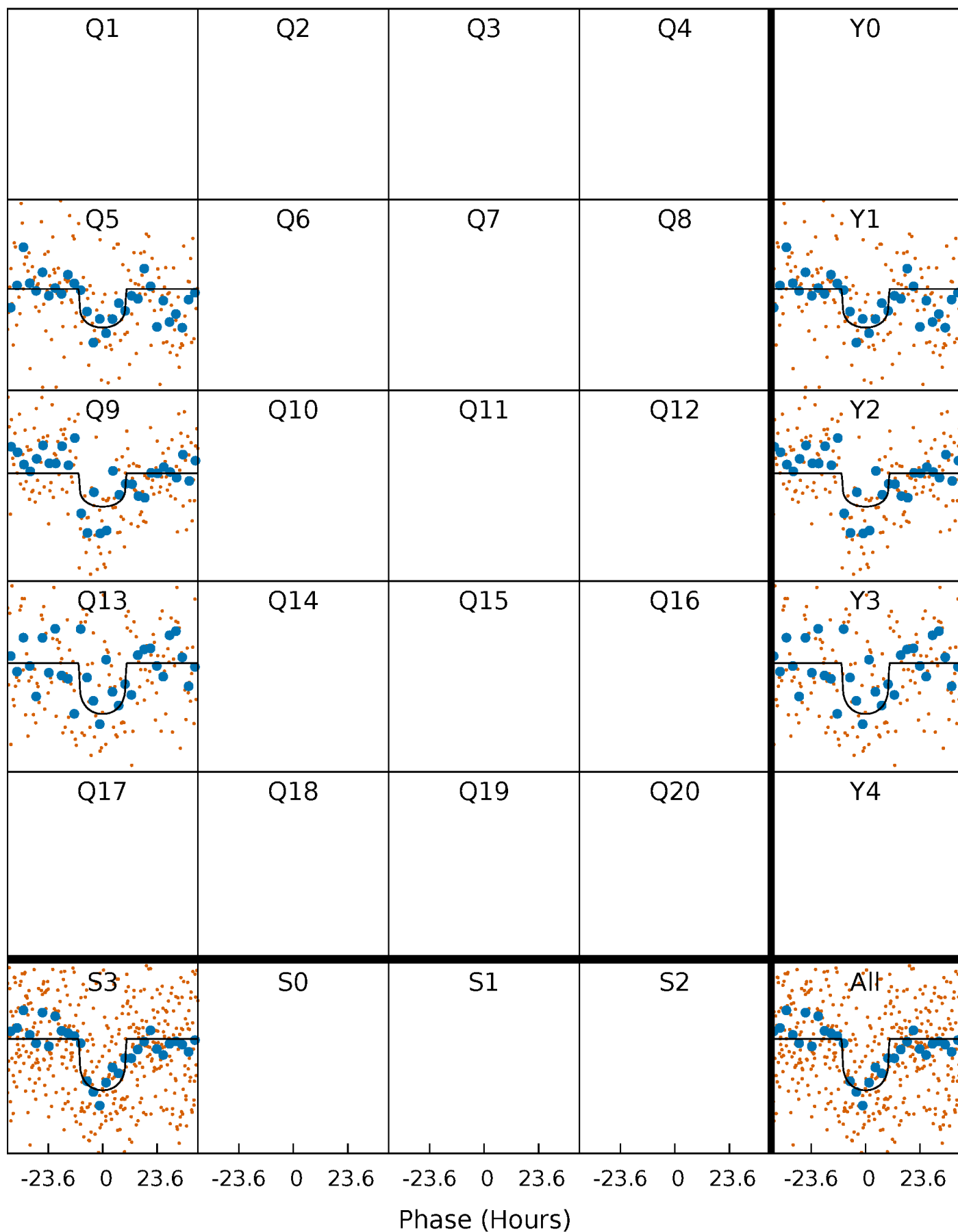
PDC Quarter-Phased Transit Curves

TCE 011753352-01 P=366.977380 Days $T_0=494.762556$ (BKJD)



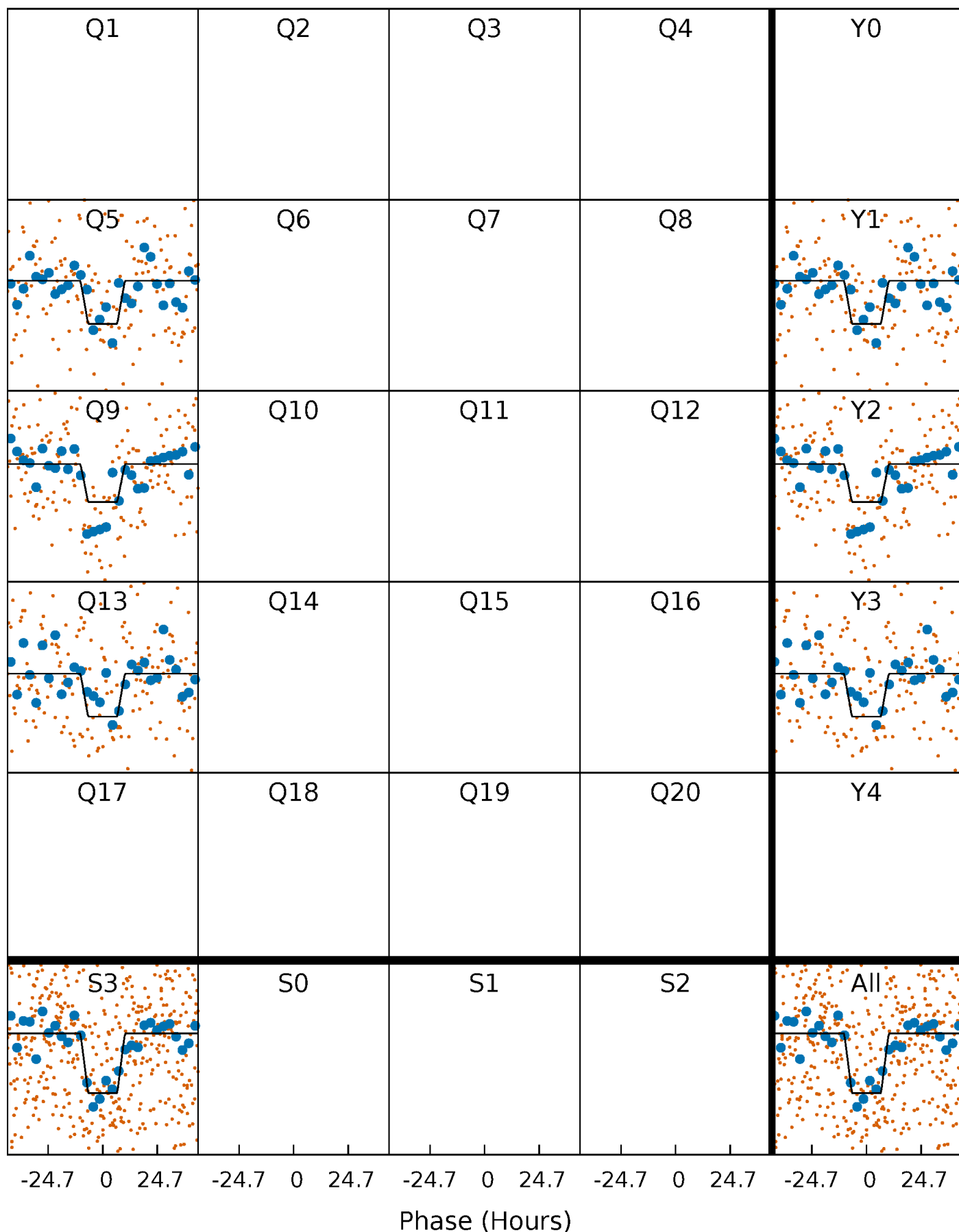
DV Quarter-Phased Transit Curves

TCE 011753352-01 P=366.977380 Days $T_0=494.762556$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

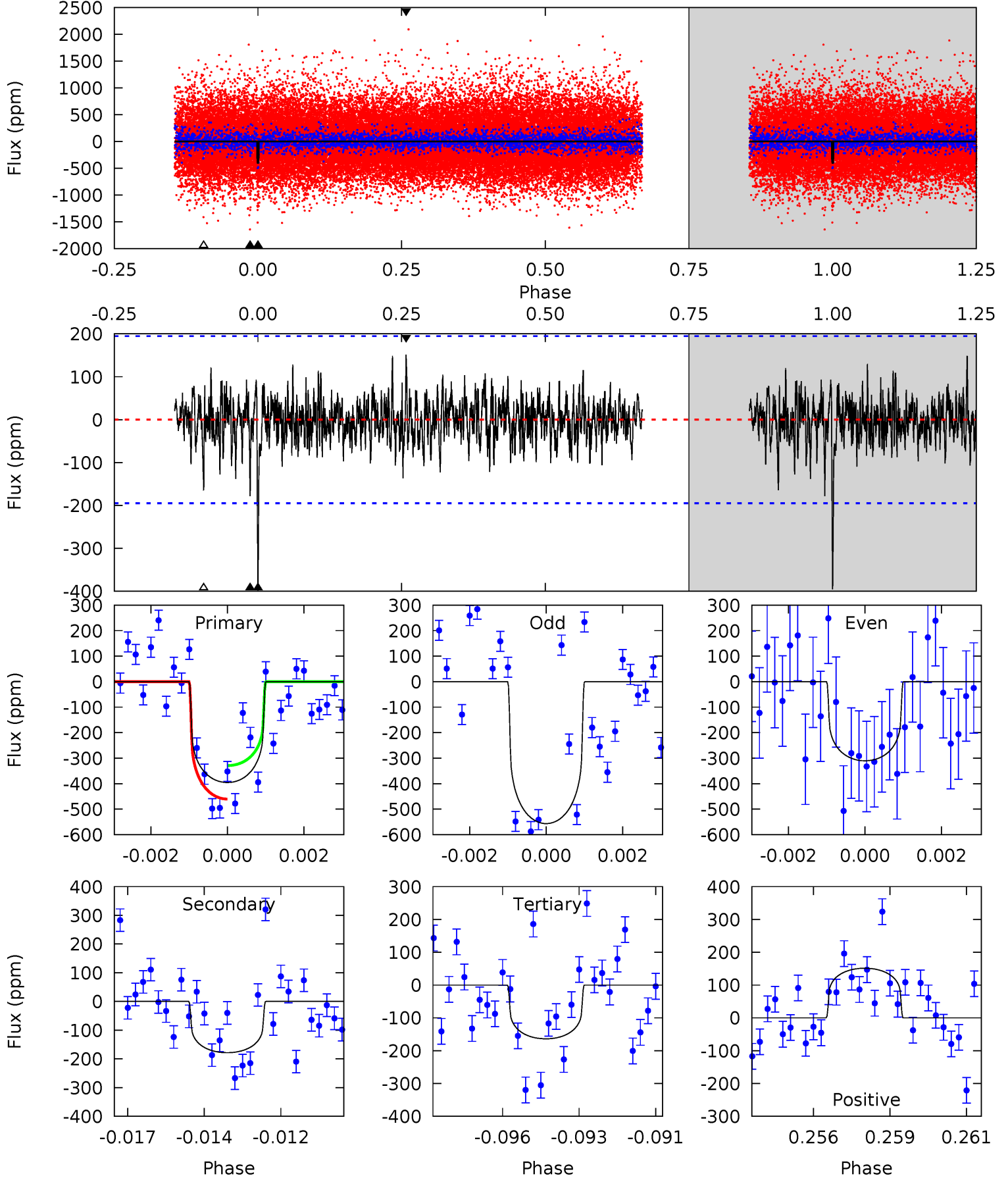
TCE 011753352-01 P=367.048038 Days $T_0=494.676396$ (BKJD)



DV Model-Shift Uniqueness Test

011753352-01, $P = 366.977380$ Days, $E = 127.785176$ Days

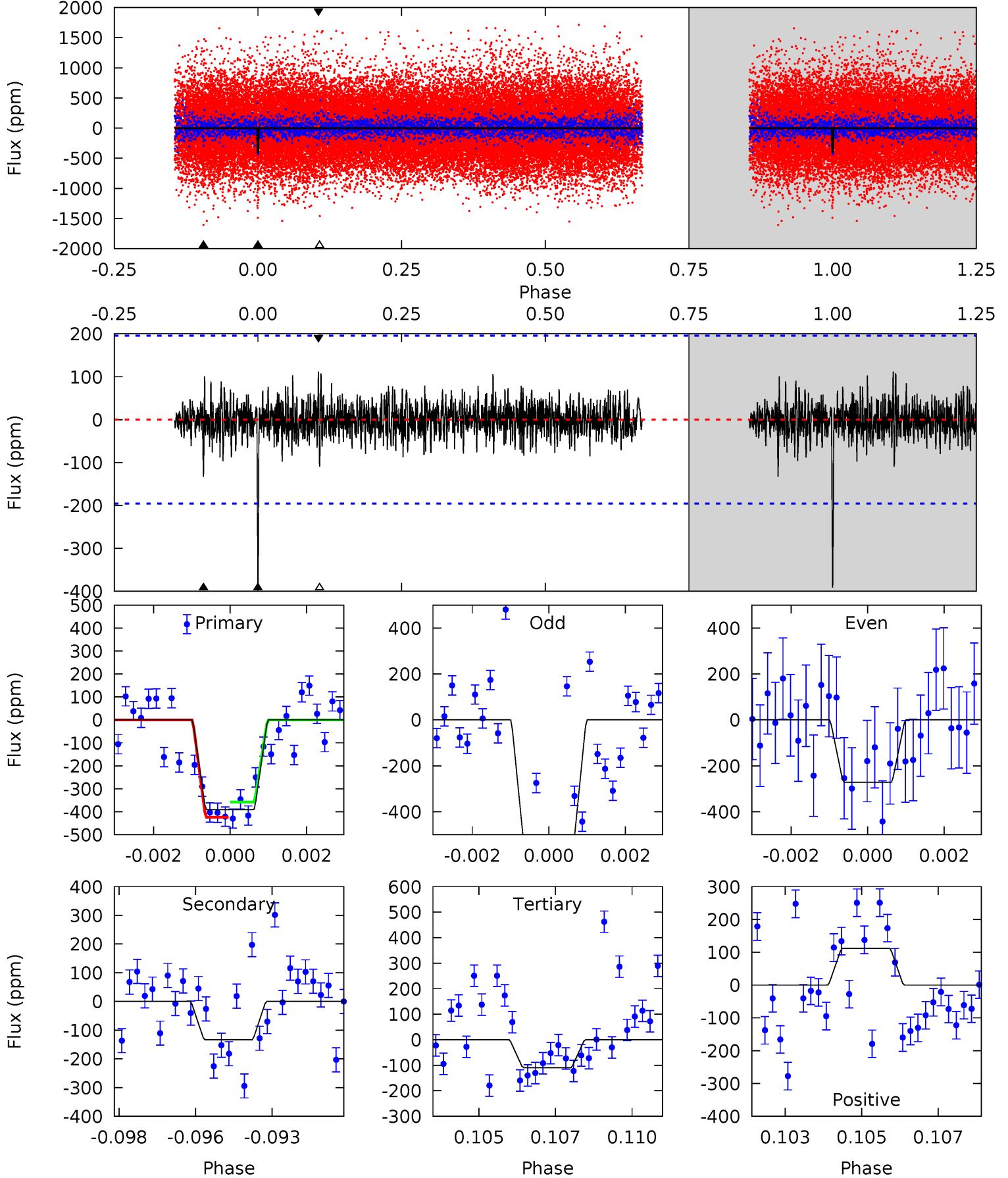
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
10.8	4.86	4.46	4.12	5.29	3.04	1.13	6.30	6.64	0.40	0.74	3.20	1.07	0.28	1.78



Alt Model-Shift Uniqueness Test

011753352-01, P = 367.048038 Days, E = 127.628358 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
10.6	3.61	2.97	3.03	5.30	3.04	0.82	7.62	7.56	0.64	0.58	3.73	1.17	0.22	0.90



Stellar Parameters For KIC 011753352

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	M (M_{\odot})	p_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	5799^{+155}_{-172}	$4.496^{+0.062}_{-0.188}$	$-0.140^{+0.300}_{-0.300}$	$0.909^{+0.267}_{-0.089}$	$0.944^{+0.111}_{-0.100}$	$1.769^{+0.475}_{-0.906}$
	+3%/-3%	+1%/-4%	+214%/-214%	+29%/-10%	+12%/-11%	+27%/-51%
Source	PHO1	KIC0	KIC0	DSEP		

KIC = Kepler Input Catalog; PHO = Photometry; SPE = Spectroscopy; AST = Asteroseismology
 TRA = Transits; DESP = Dartmouth Models; MULT = Multiple Models

Secondary Eclipse Parameters for KIC 011753352-01 / KOI

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	-178 ± 37	$2.01^{+1.29}_{-1.10}$	348^{+22}_{-15}	4836^{+2273}_{-811}	22704^{+90075}_{-14324}
Alt.	-133 ± 37	$2.02^{+1.35}_{-1.07}$	348^{+24}_{-15}	4548^{+1930}_{-767}	15607^{+63653}_{-9724}

T_{max} = Theoretical Maximum Planetary Temperature

T_{obs} = Observed Planetary Temperature (Assuming $A=0.3$)

A_{obs} = Observed Albedo (Assuming $T=0$)

If a secondary eclipse is present, the system is likely an EB if $T_{\text{obs}} \gg T_{\text{max}}$ AND $A_{\text{obs}} \gg 1.0$

DV Centroid Data

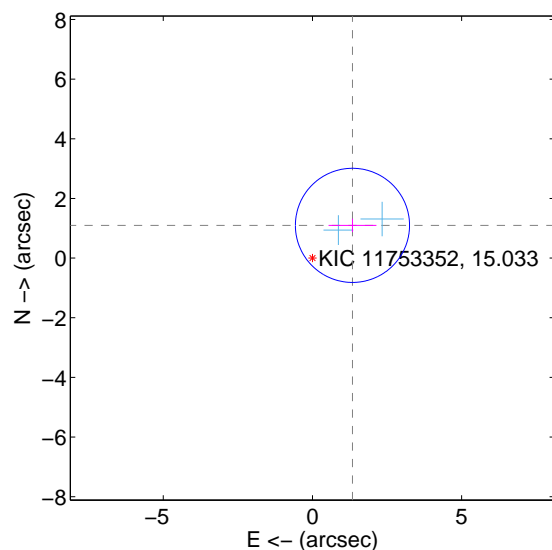
Supplemental centroid analysis for 011753352-01. Kepler magnitude: 15.03. Transit SNR 8.21

There are 2 quarters with good PRF difference image offsets

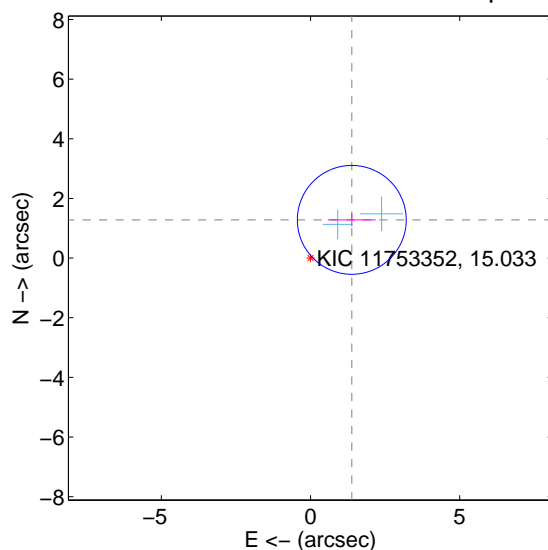
The direct PRF centroid is offset from the target star catalog position by about 0.20 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	1.733 ± 0.638	2.72	-1.342 ± 0.803	1.097 ± 0.226
PRF-fit source offset from KIC position	1.886 ± 0.608	3.10	-1.383 ± 0.805	1.282 ± 0.215
photometric centroid source offset	1.72 ± 1.68	1.03	1.44 ± 1.60	0.95 ± 1.84

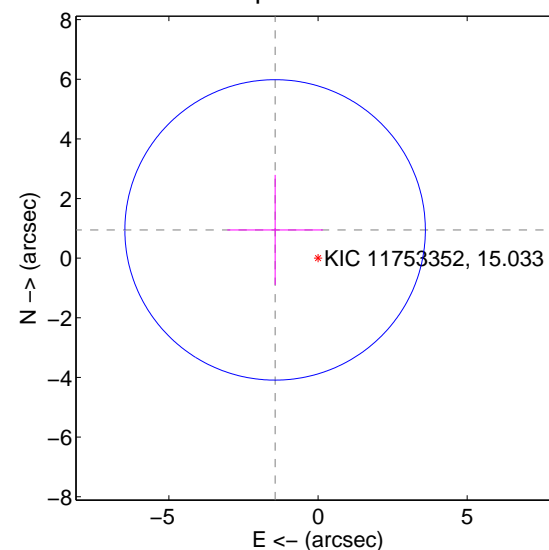
offset from difference PRF-fit to OOT PRF-fit



offset from difference PRF-fit to KIC position



offset from photometric centroids

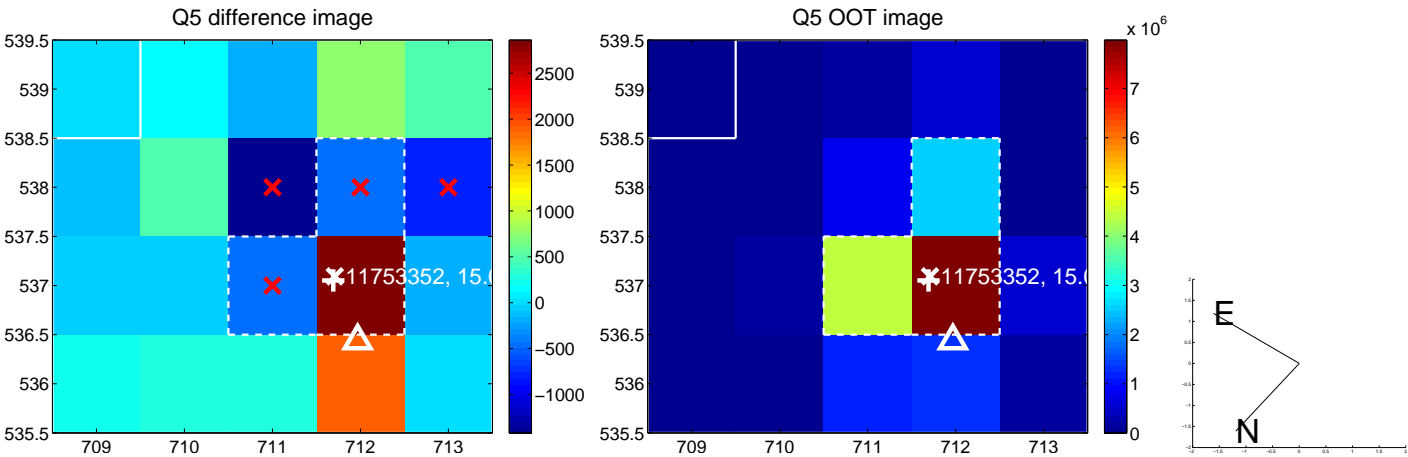


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ . Red *: target star. Blue *: Other stars. Text next to a star gives its KIC ID and kepmag. KIC IDs > 15,000,000 are from the UKIRT catalog.

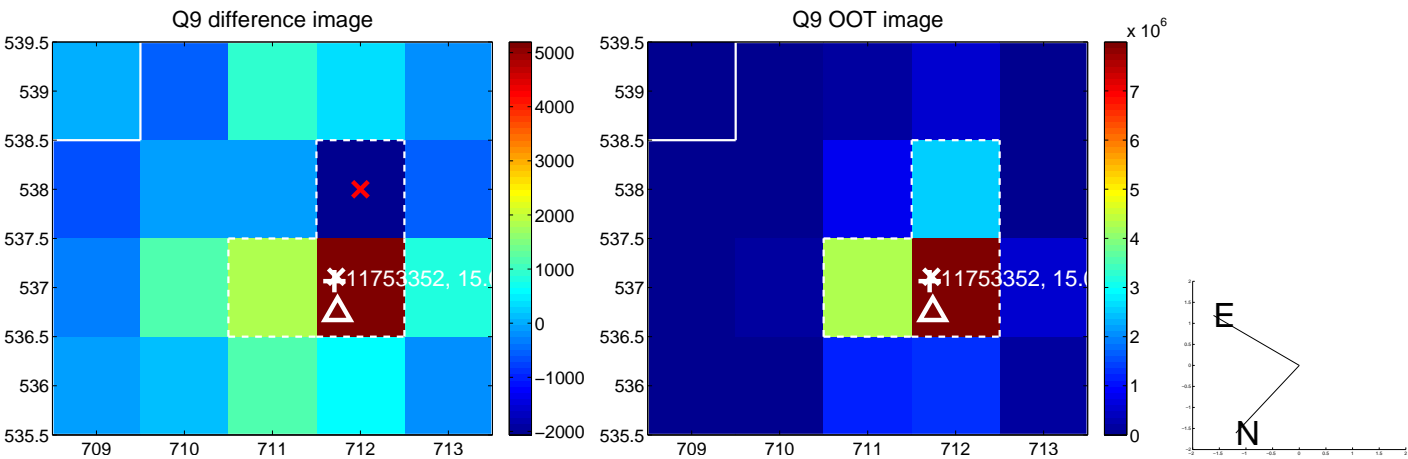
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



white ×: KIC target position; +: OOT centroid; △: difference centroid. red ×: large negative pixel value.



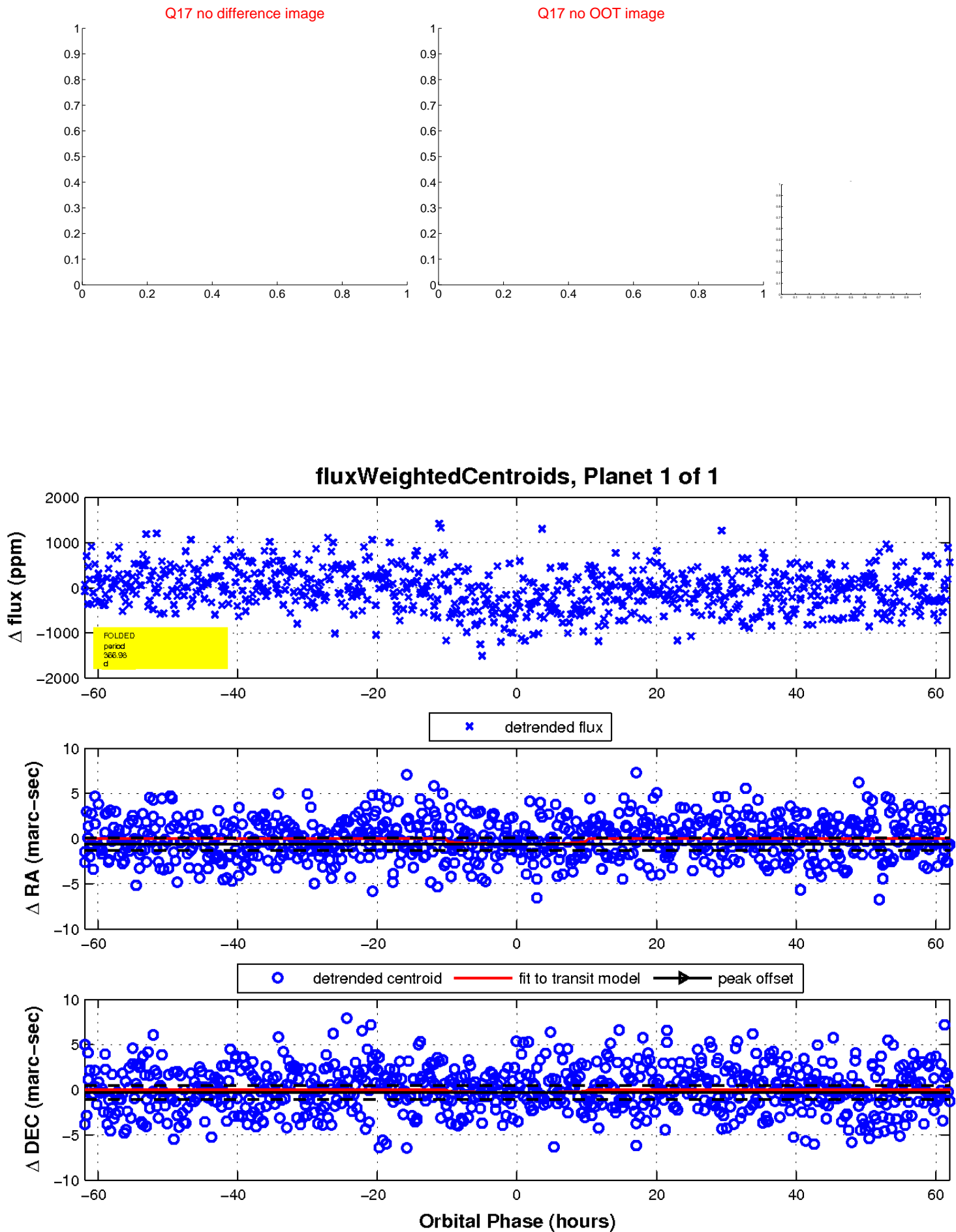
white ×: KIC target position; +: OOT centroid; △: difference centroid. red ✕: large negative pixel value.



white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



UKIRT Image

