

KIC 004367788

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})
004367788-01	OBS	No	368.424978	497.321870	616.8	18.661	7.3	7.8	1.30	5952	3.35	1.83

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
004367788-01	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.

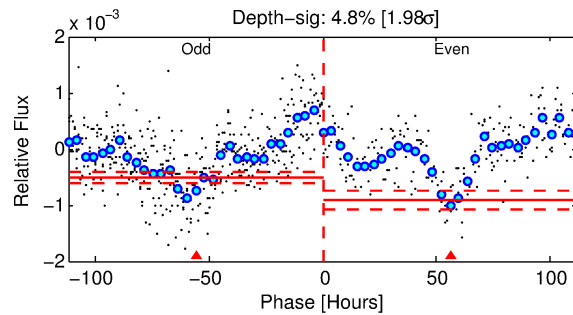
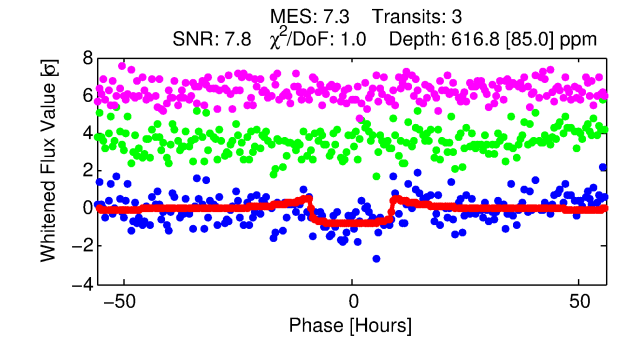
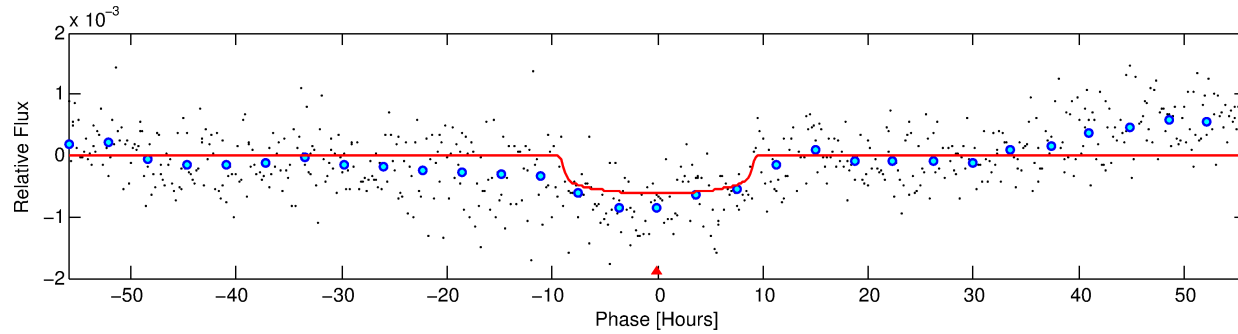
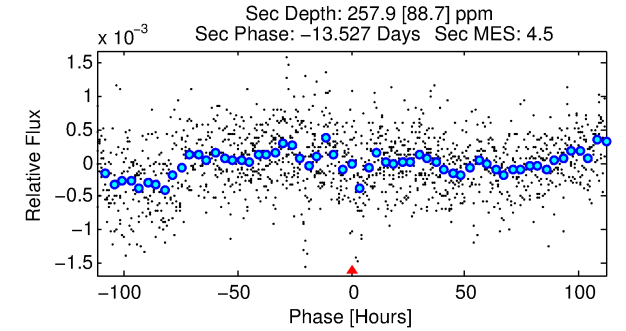
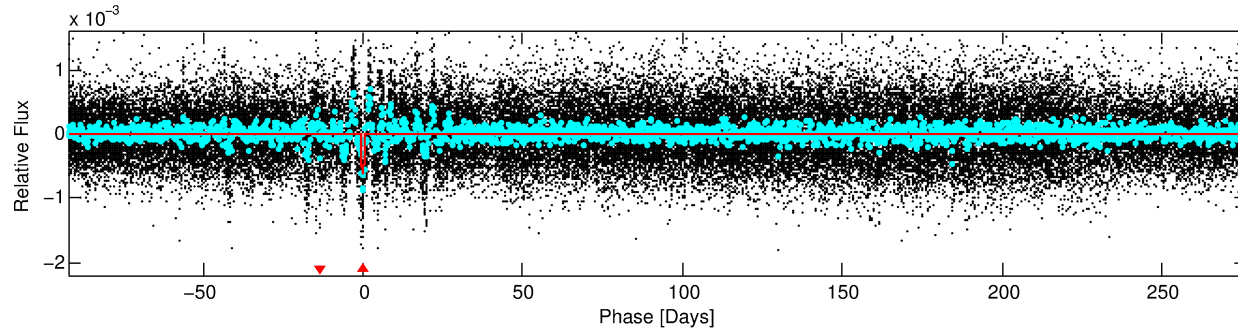
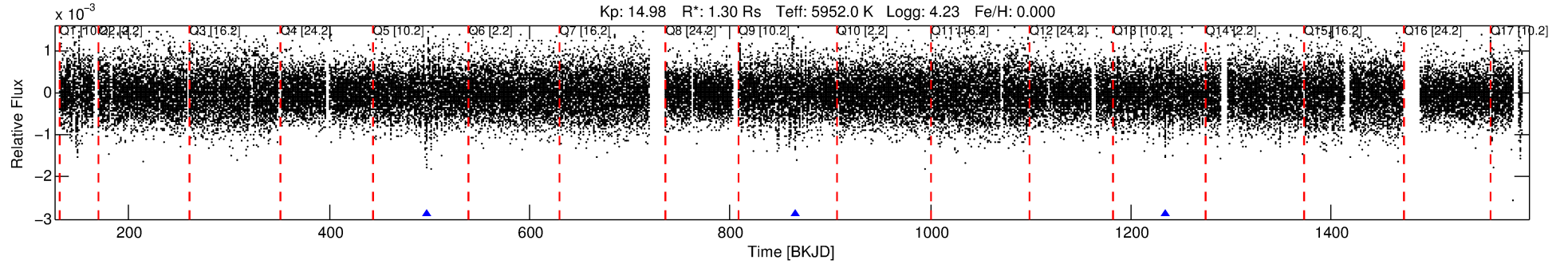
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 004367788-01

No Significant Match Found

DV One-Page Summary

KIC: 4367788 Candidate: 1 of 1 Period: 368.425 d



DV Fit Results:

Period = 368.42498 [0.01404] d
Epoch = 497.3219 [0.0171] BKJD
Rp/R* = 0.0235 [0.0082]
a/R* = 130.08 [203.95]
b = 0.55 [2.00]
Seff = 1.83 [0.51]
Teq = 297 [21] K
Rp = 3.34 [1.30] Re
a = 1.0212 [0.1719] AU
Ag = 13224.78 [10937.20] [1.21σ]
Teffp = 4920 [962] K [4.80σ]

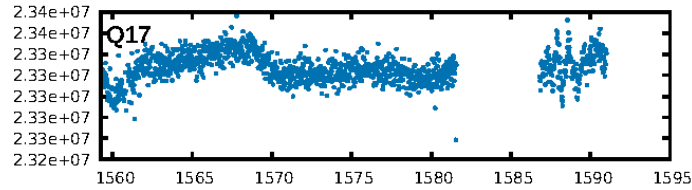
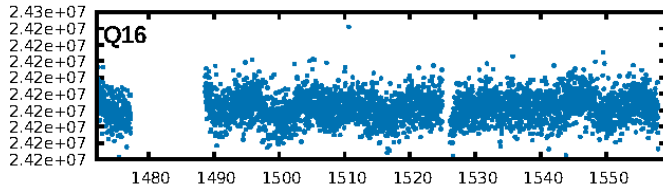
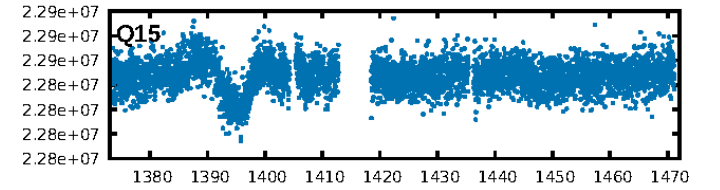
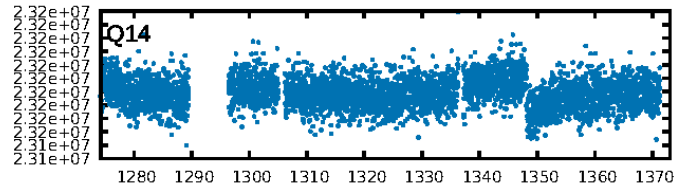
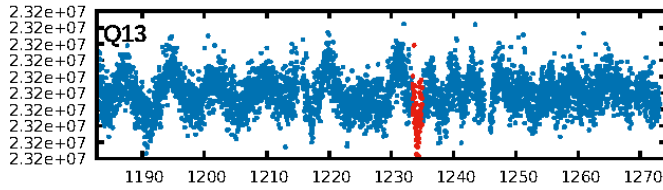
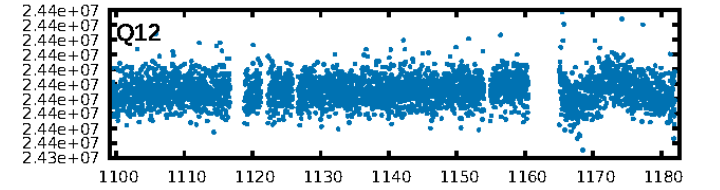
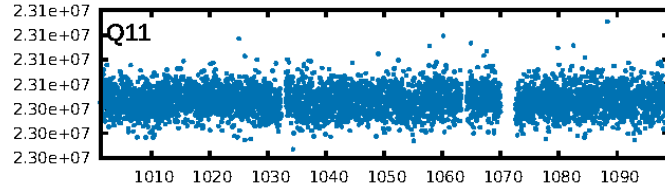
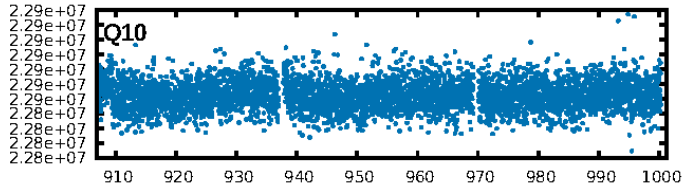
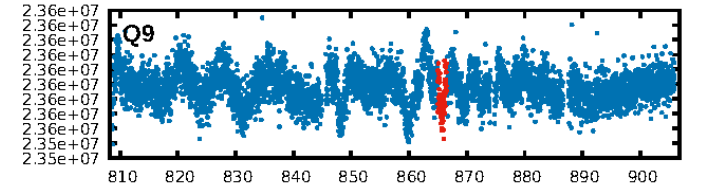
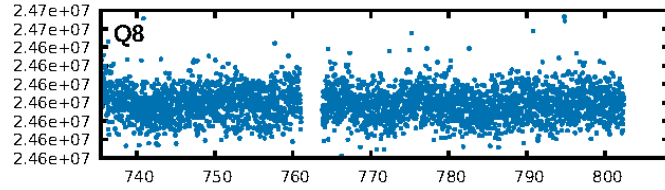
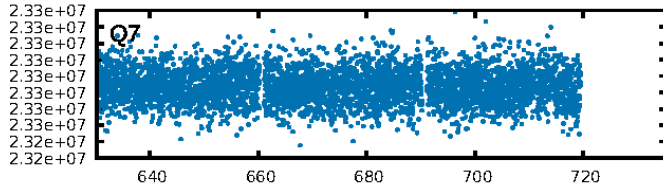
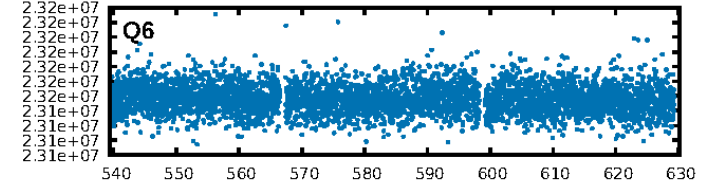
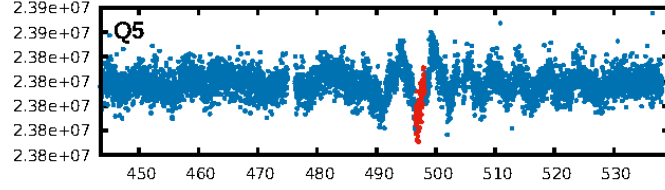
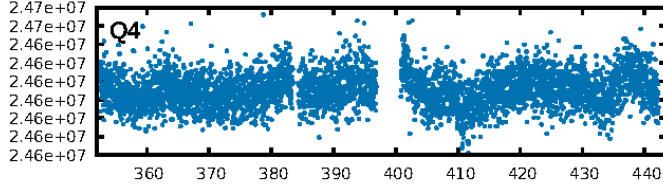
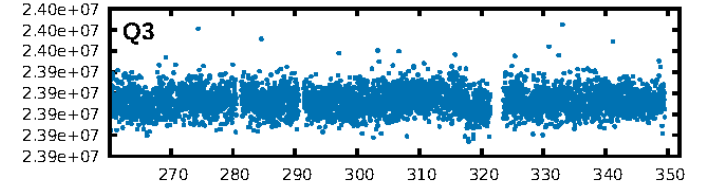
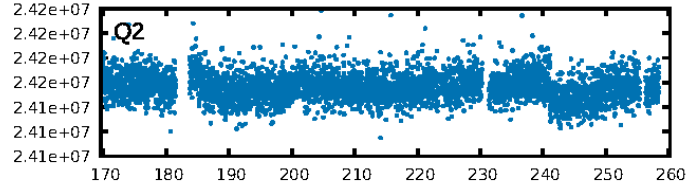
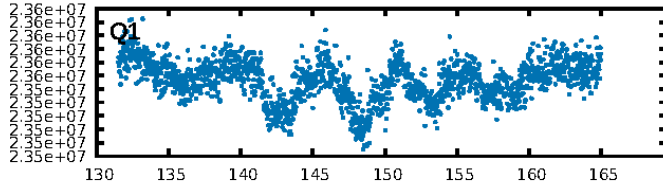
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: 44.0%
ModelChiSquareGof-sig: 99.9%
Bootstrap-pfa: 3.83e-08
RollingBand-fgt: 1.00 [3/3]
GhostDiagnostic-chr: -2.816
Centroid-sig: 12.9%
Centroid-so: 2.282 arcsec [1.25σ]
OotOffset-rm: N/A
KicOffset-rm: N/A
OotOffset-st: 0/0/0 [0]
KicOffset-st: 0/0/0 [0]
DiffImageQuality-fgm: N/A
DiffImageOverlap-fno: 1.00 [3/3]

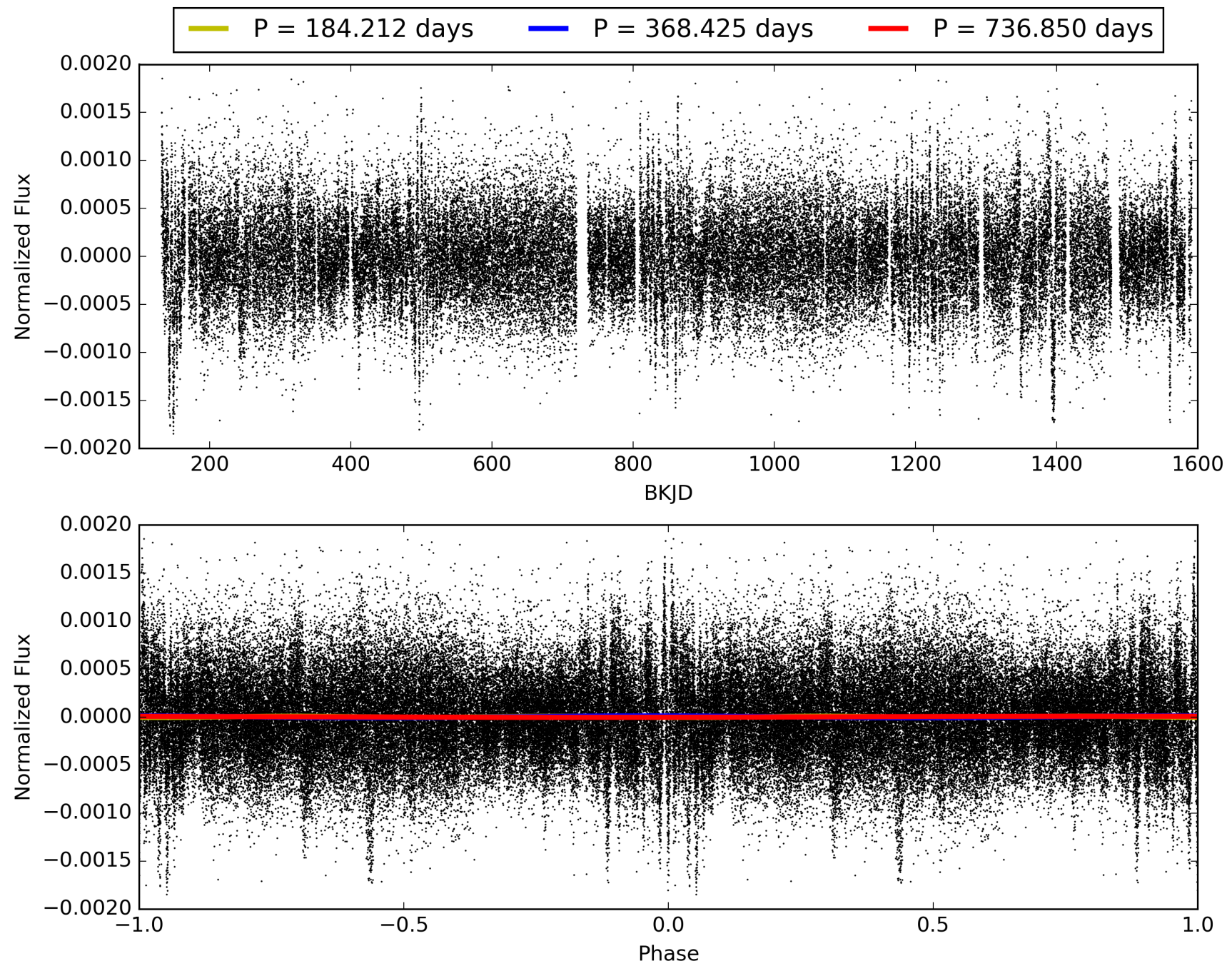
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 30-Jan-2016 21:01:34 Z

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

TCE 004367788-01, PDC Light Curves

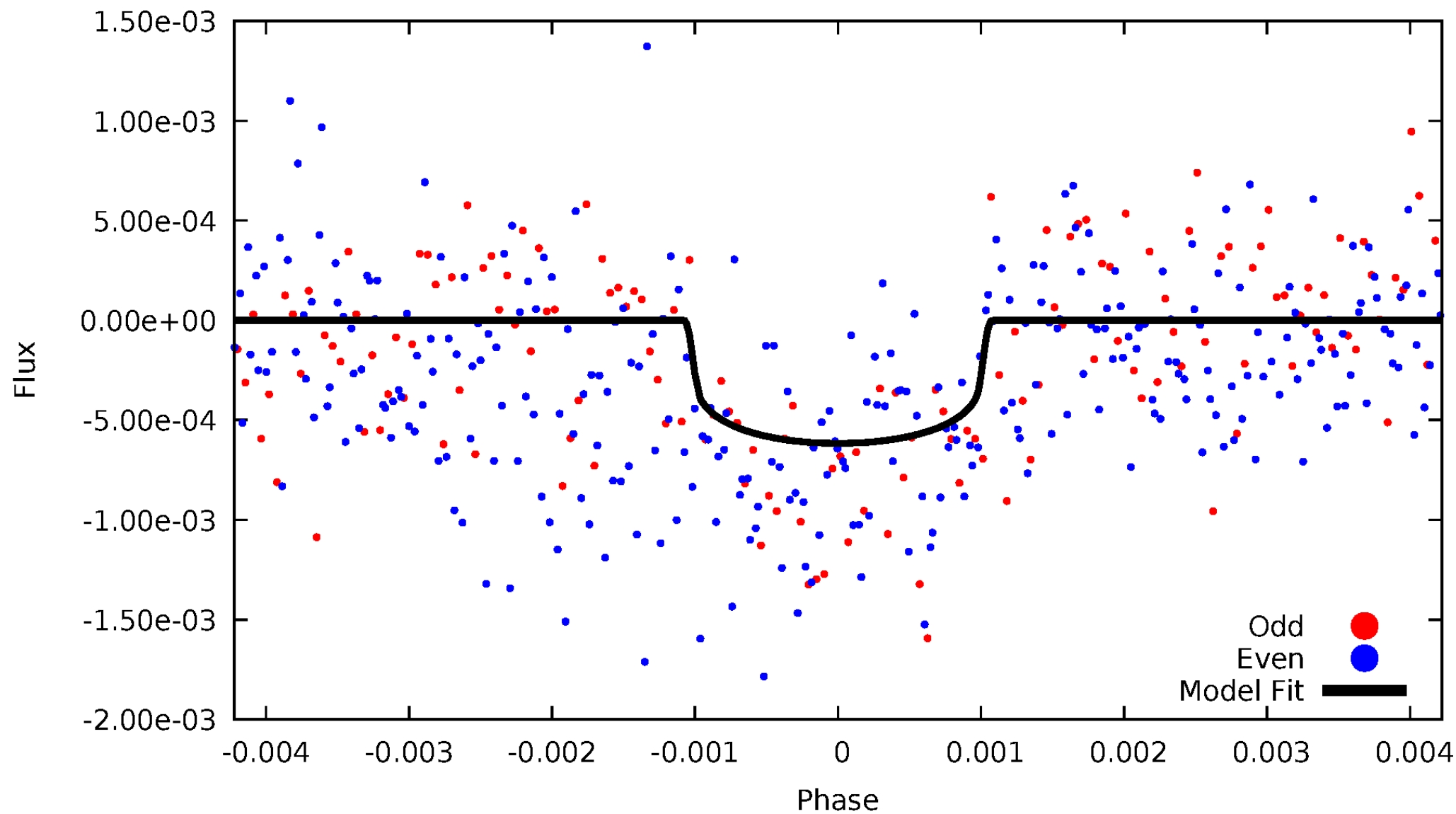


TCE 004367788-01



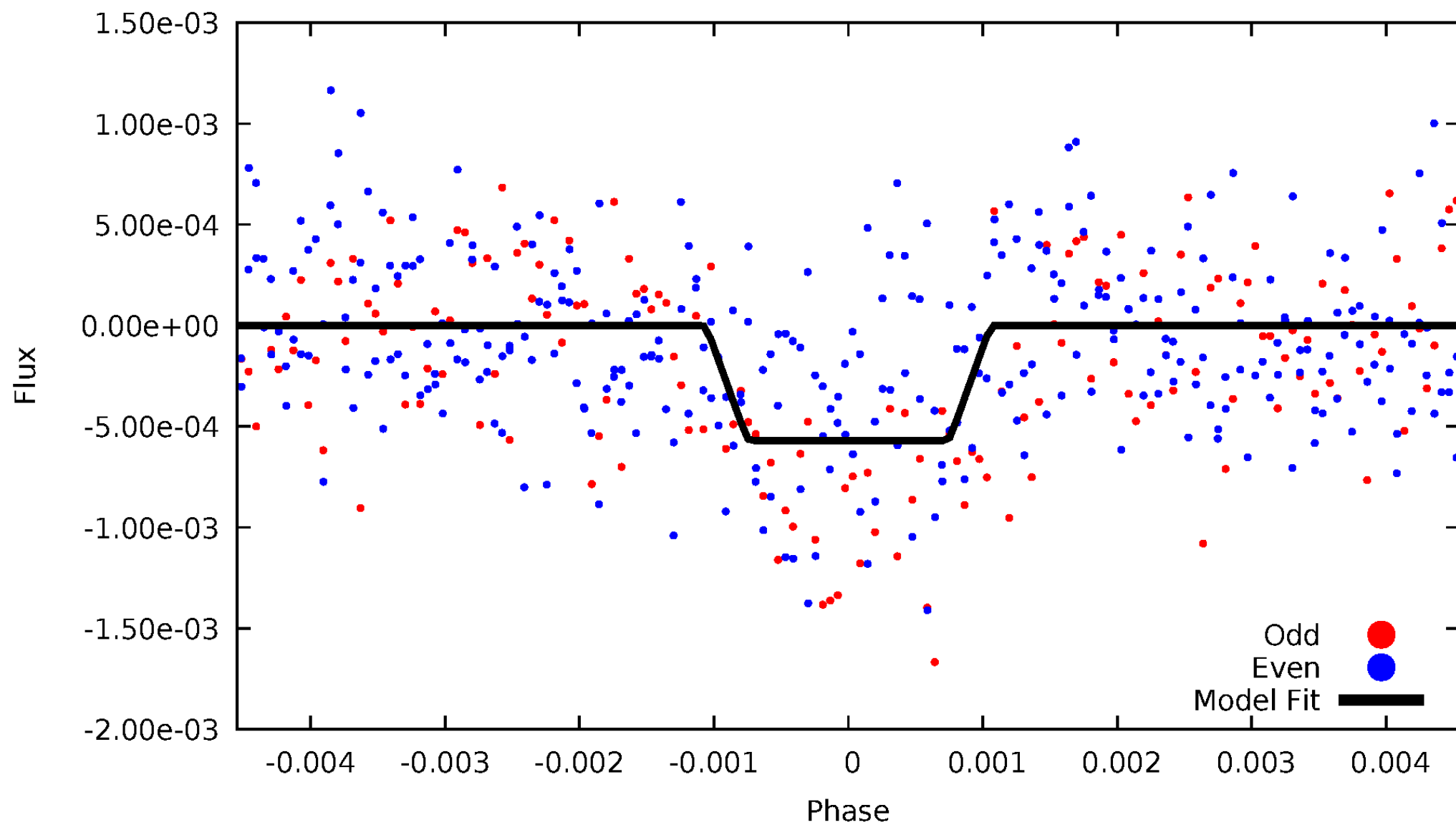
DV Odd/Even

TCE 004367788-01



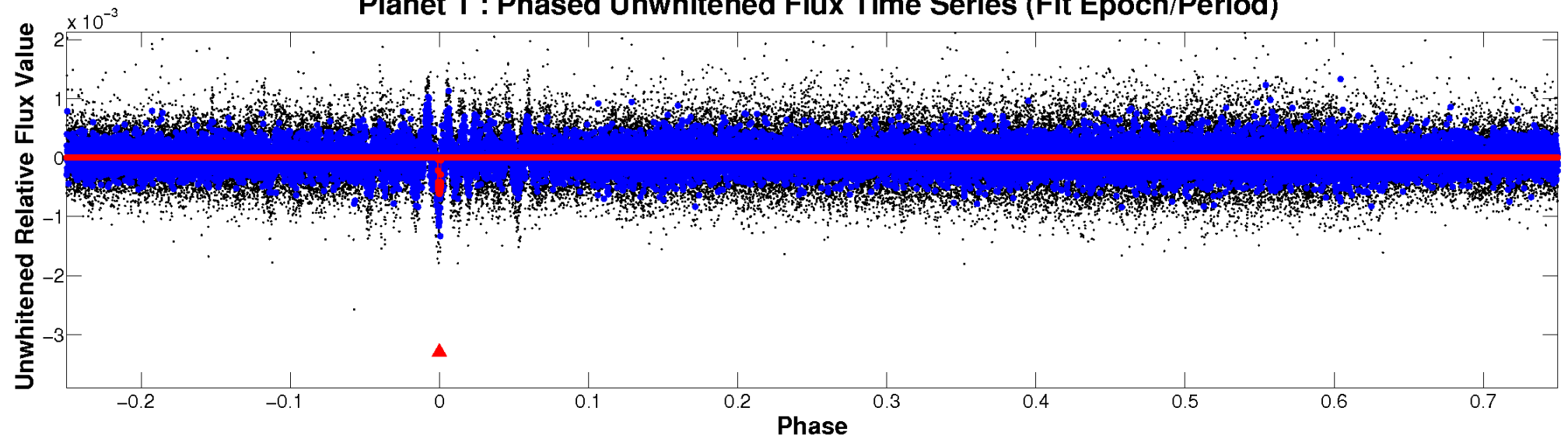
ALT Odd/Even

TCE 004367788-01

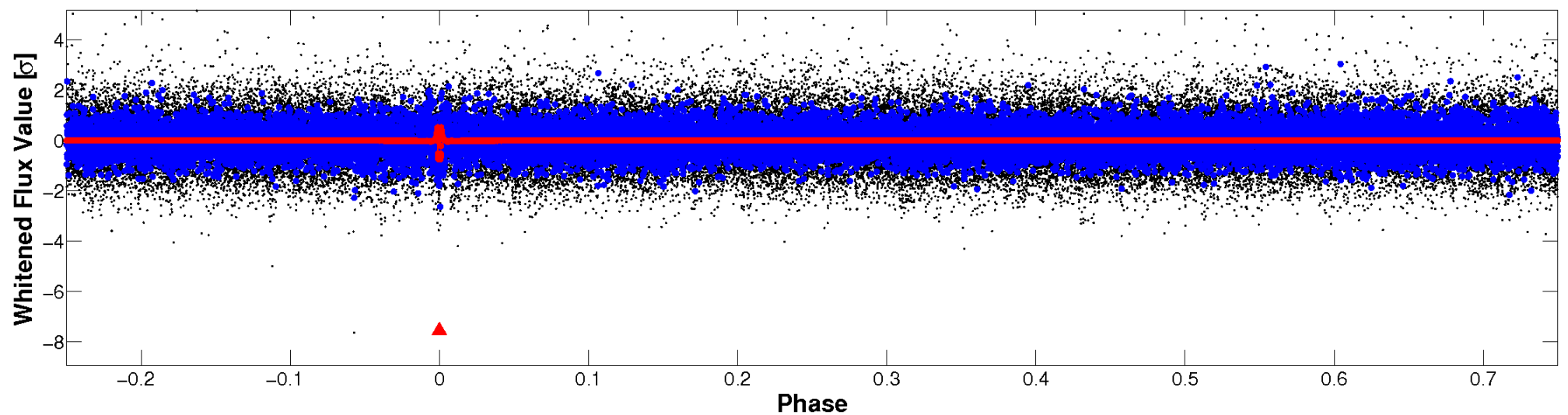


Non-Whitened Vs. Whitened Light Curve

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

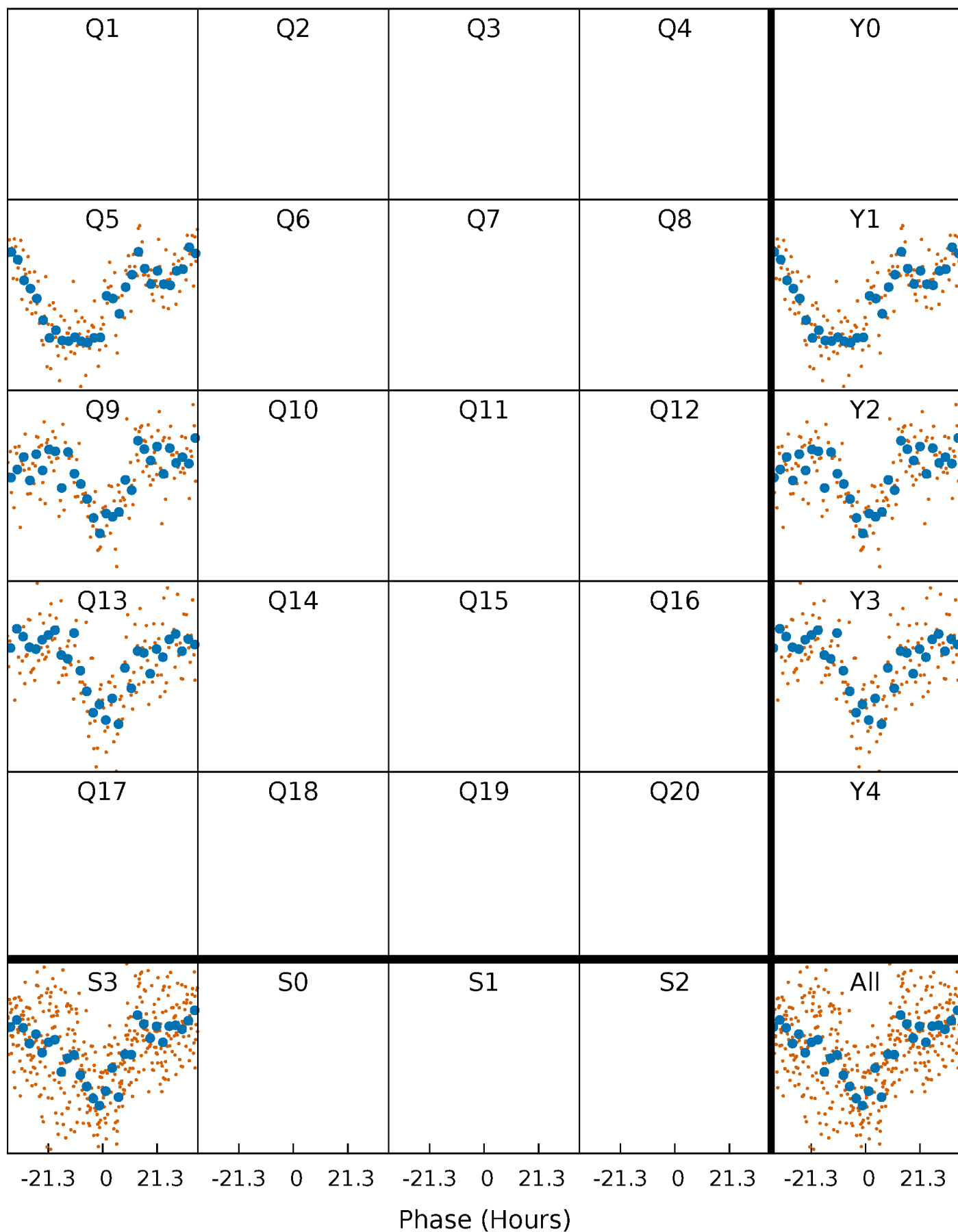


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



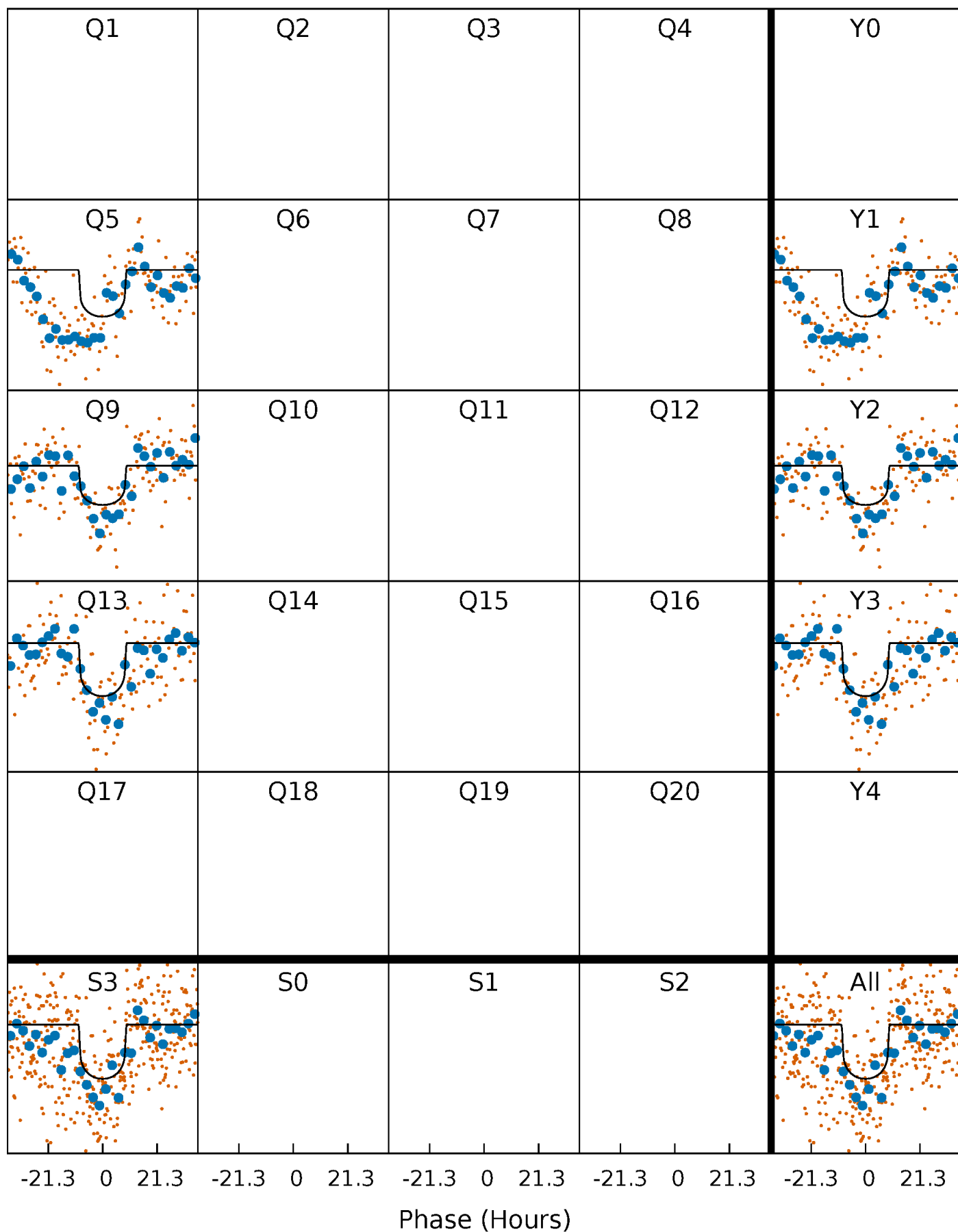
PDC Quarter-Phased Transit Curves

TCE 004367788-01 $P=368.424978$ Days $T_0=497.321870$ (BKJD)



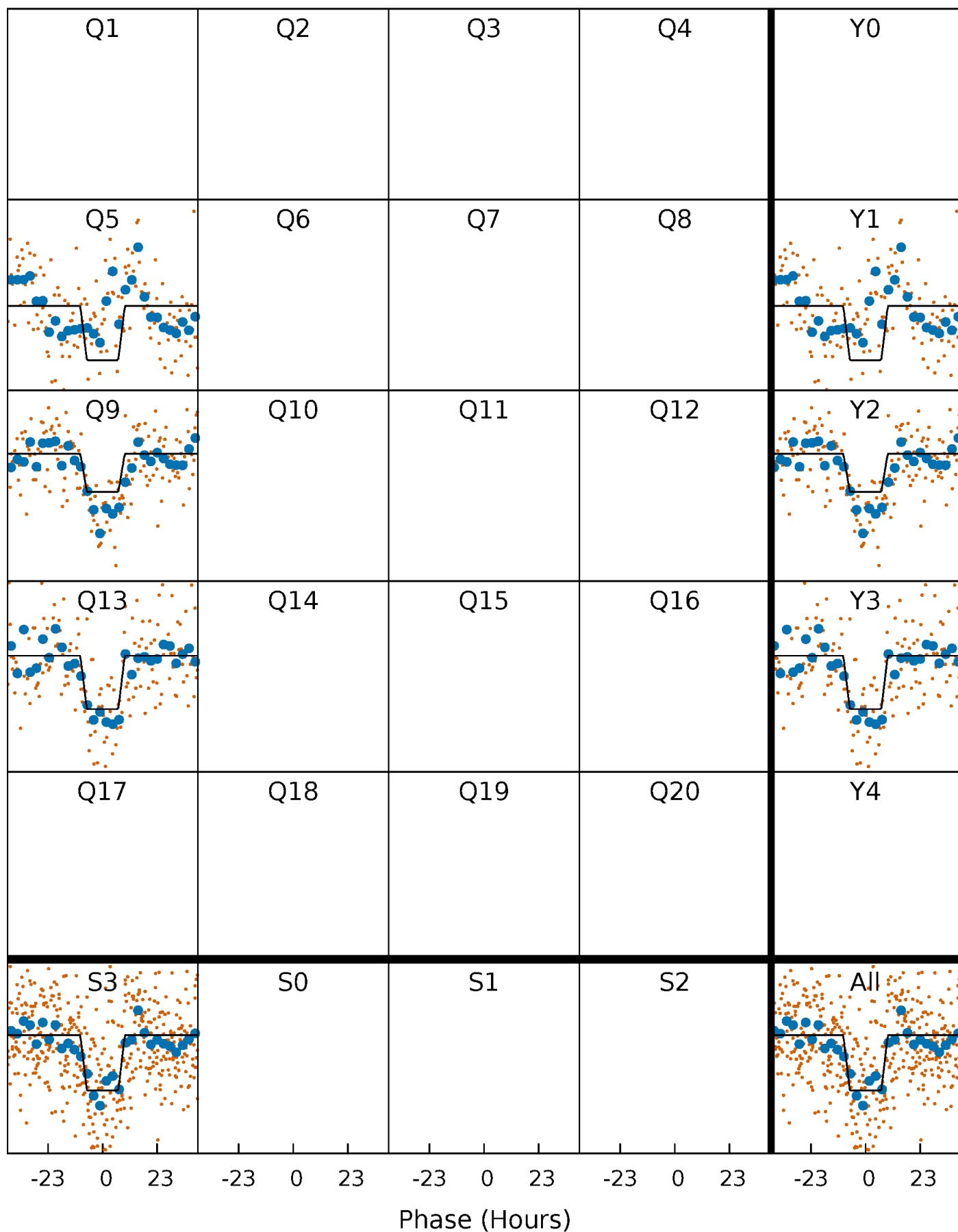
DV Quarter-Phased Transit Curves

TCE 004367788-01 $P=368.424978$ Days $T_0=497.321870$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

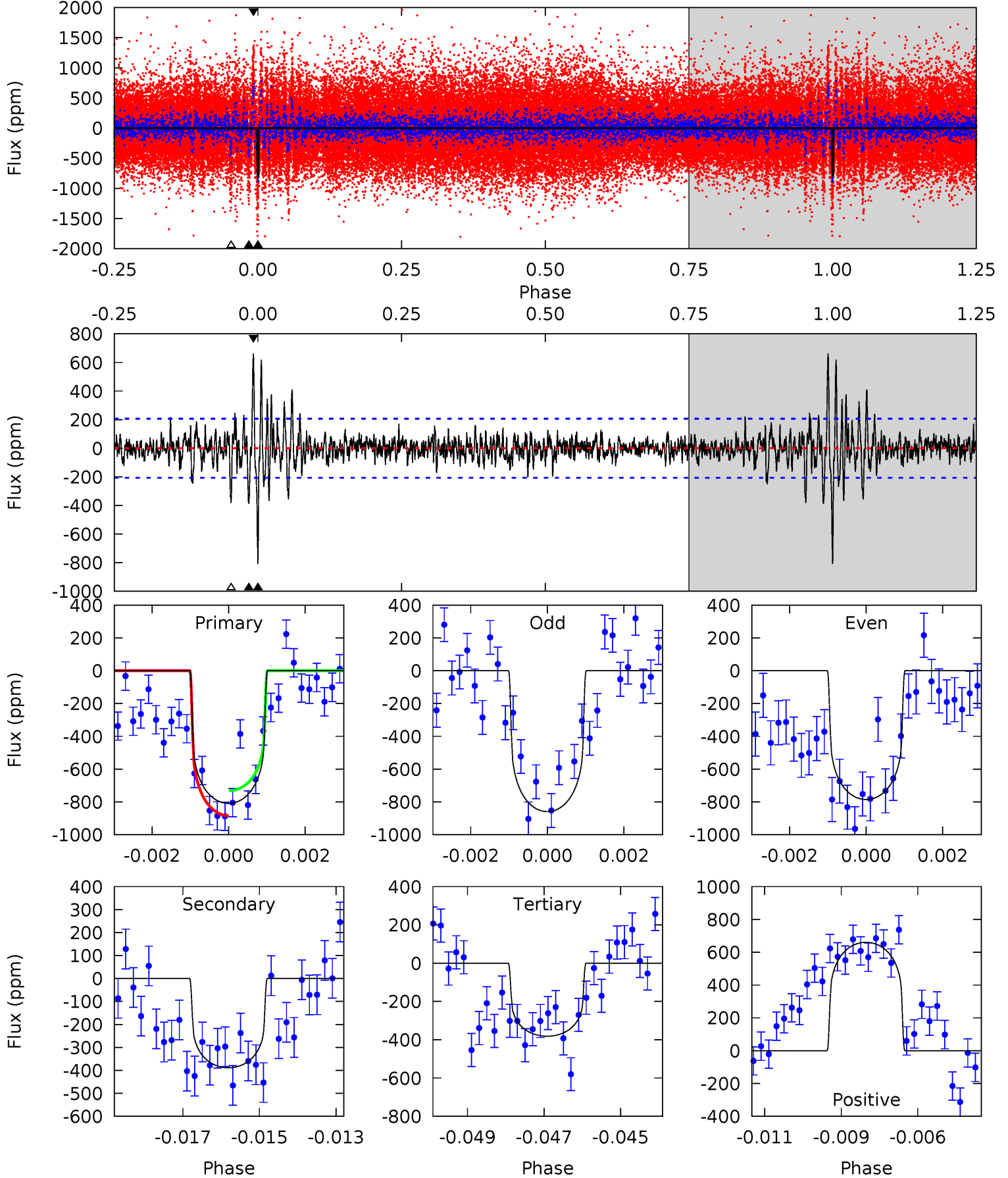
TCE 004367788-01 P=368.437520 Days $T_0=497.303206$ (BKJD)



DV Model-Shift Uniqueness Test

004367788-01, P = 368.424978 Days, E = 128.896892 Days

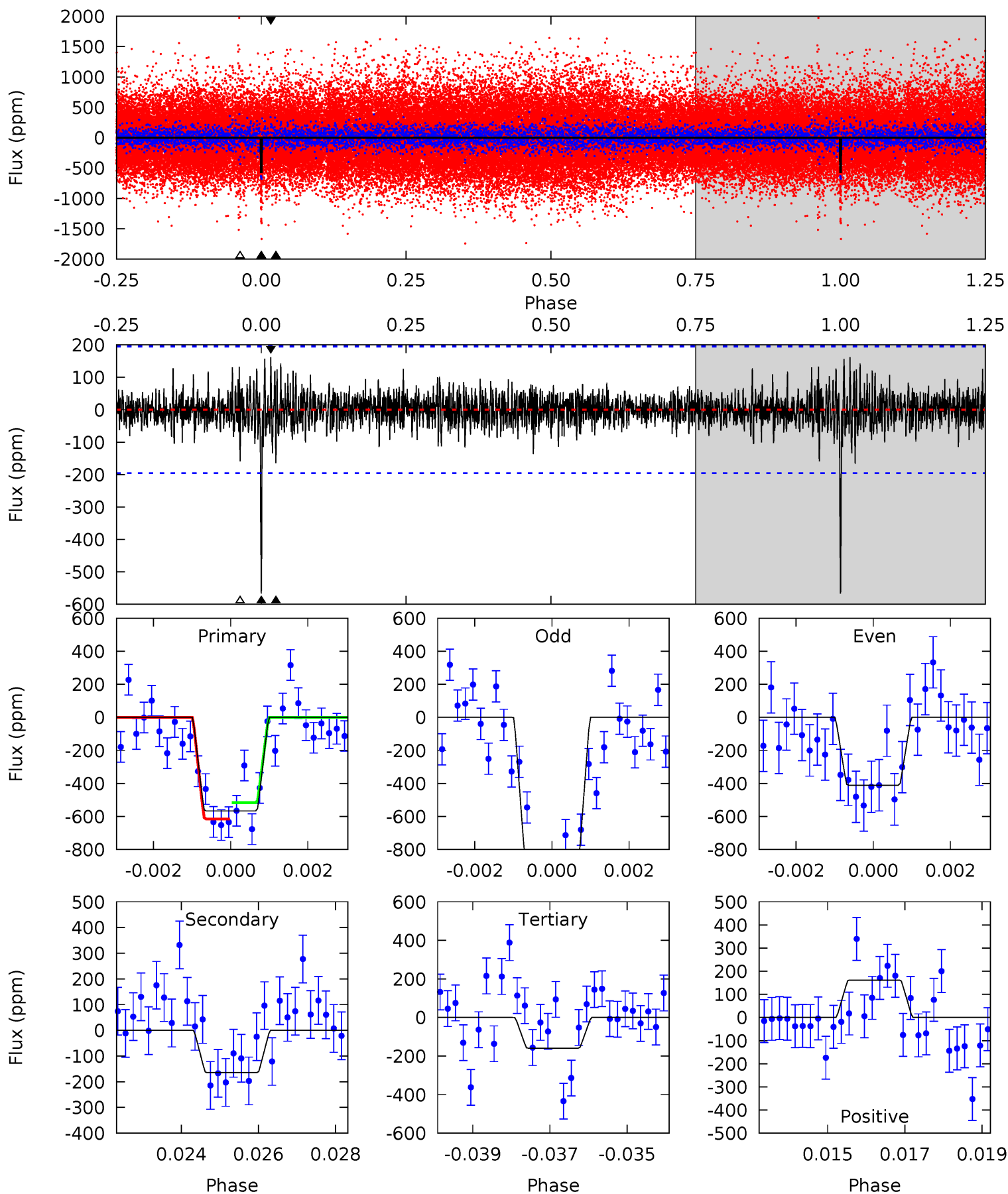
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
20.9	10.0	9.84	17.0	5.32	3.07	2.15	11.0	3.84	0.18	-7.01	0.89	1.00	0.45	1.95



Alt Model-Shift Uniqueness Test

004367788-01, P = 368.437520 Days, E = 128.865686 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
15.4	4.47	4.34	4.40	5.31	3.07	1.01	11.1	11.0	0.14	0.08	6.09	0.84	0.22	1.34



Stellar Parameters For KIC 004367788

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	$M(M_{\odot})$	p_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	5952^{+71}_{-79}	$4.227^{+0.162}_{-0.108}$	$0.000^{+0.150}_{-0.150}$	$1.304^{+0.222}_{-0.222}$	$1.046^{+0.093}_{-0.069}$	$0.664^{+0.503}_{-0.229}$
	+1%/-1%	+4%/-3%	+inf%/-inf%	+17%/-17%	+9%/-7%	+76%/-34%
Source	SPE68	SPE68	SPE68	DSEP		

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

Secondary Eclipse Parameters for KIC 004367788-01 / KOI

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	-389 ± 39	$3.29^{+1.20}_{-1.15}$	413^{+18}_{-21}	5470^{+1272}_{-649}	20738^{+28332}_{-9748}
Alt.	-164 ± 37	$3.40^{+1.13}_{-1.30}$	413^{+19}_{-20}	4503^{+1025}_{-490}	8016^{+13663}_{-3789}

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 $A_{\text{obs}} \gg 1.0$

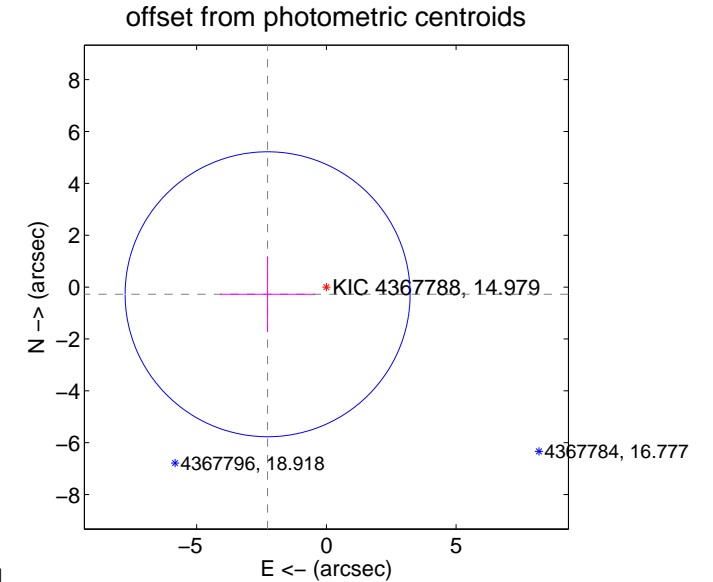
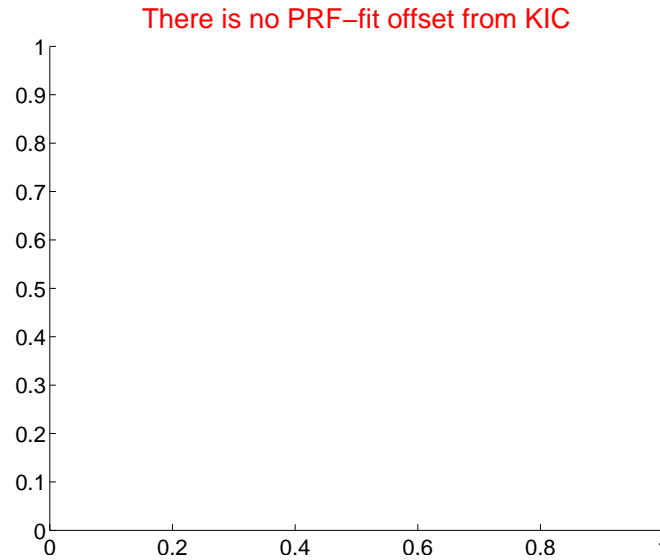
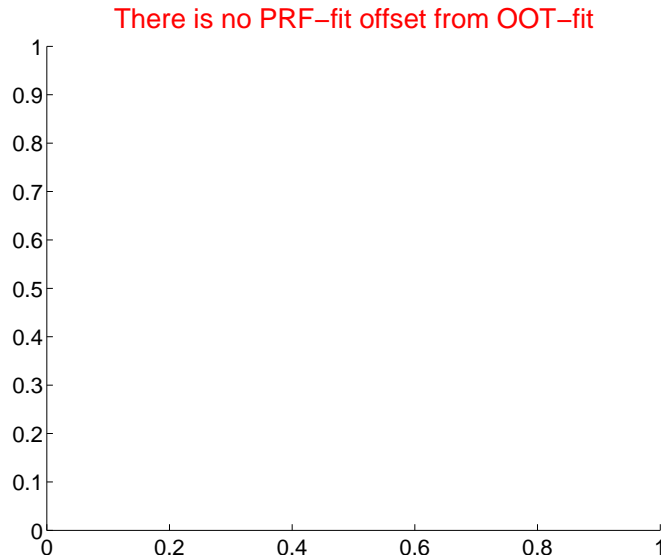
DV Centroid Data

Supplemental centroid analysis for 004367788-01. Kepler magnitude: 14.98. Transit SNR 7.78

There are 0 quarters with good PRF difference image offsets

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

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	—	—	—	—
PRF-fit source offset from KIC position	—	—	—	—
photometric centroid source offset	2.28 ± 1.83	1.25	2.27 ± 1.84	-0.28 ± 1.46

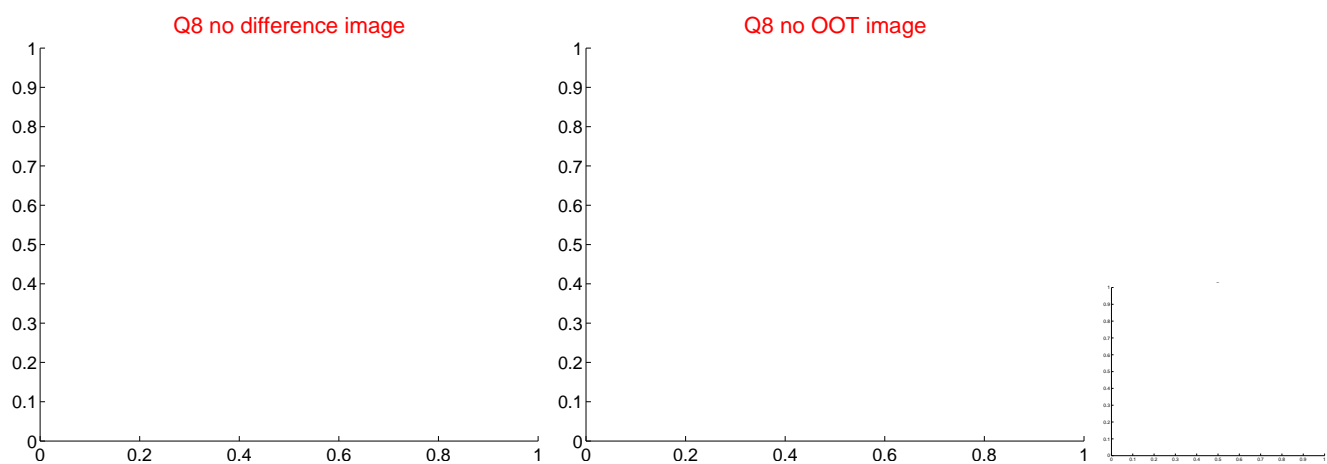
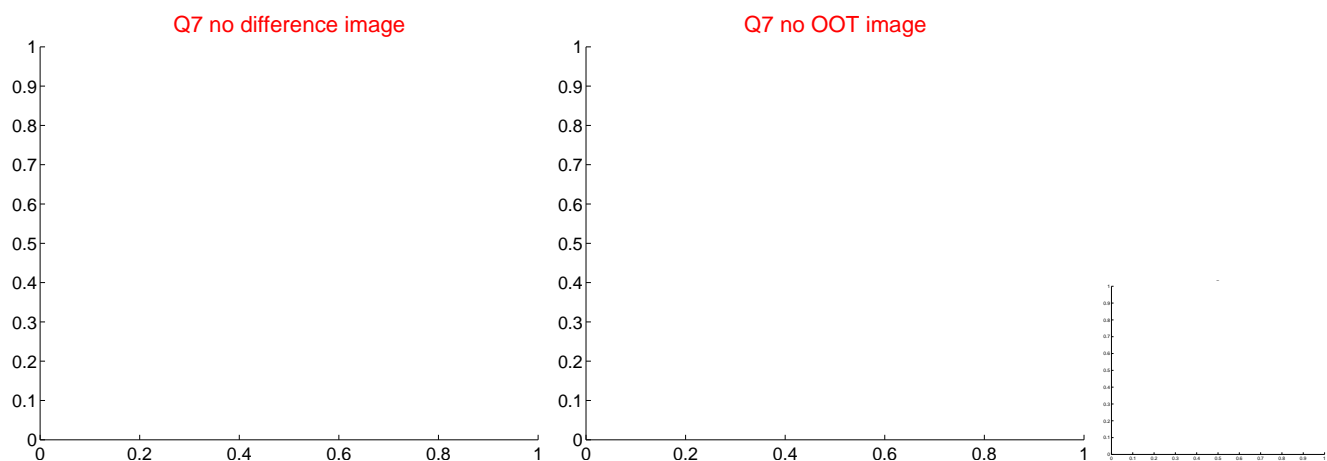
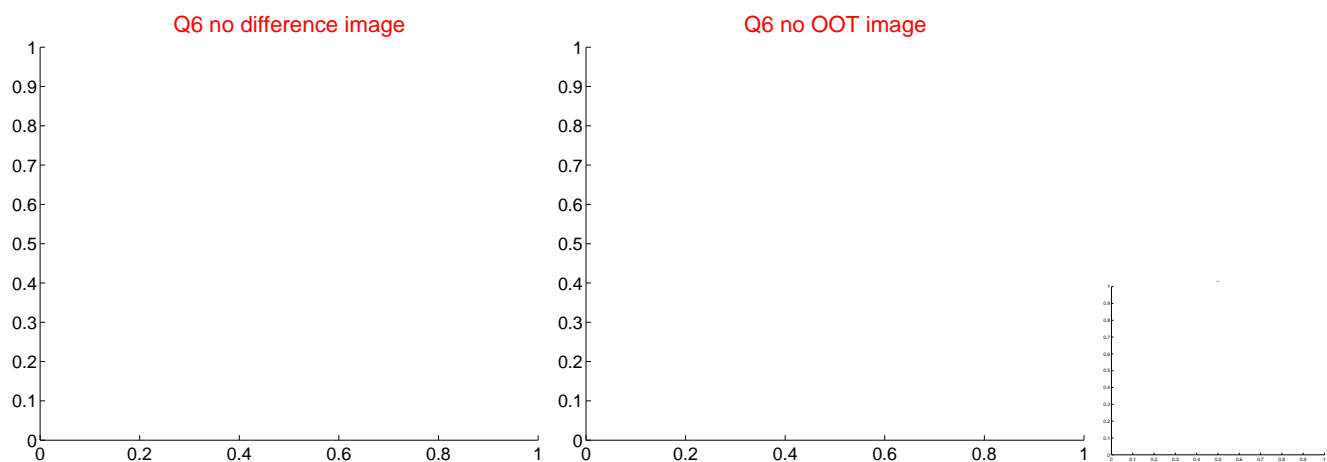
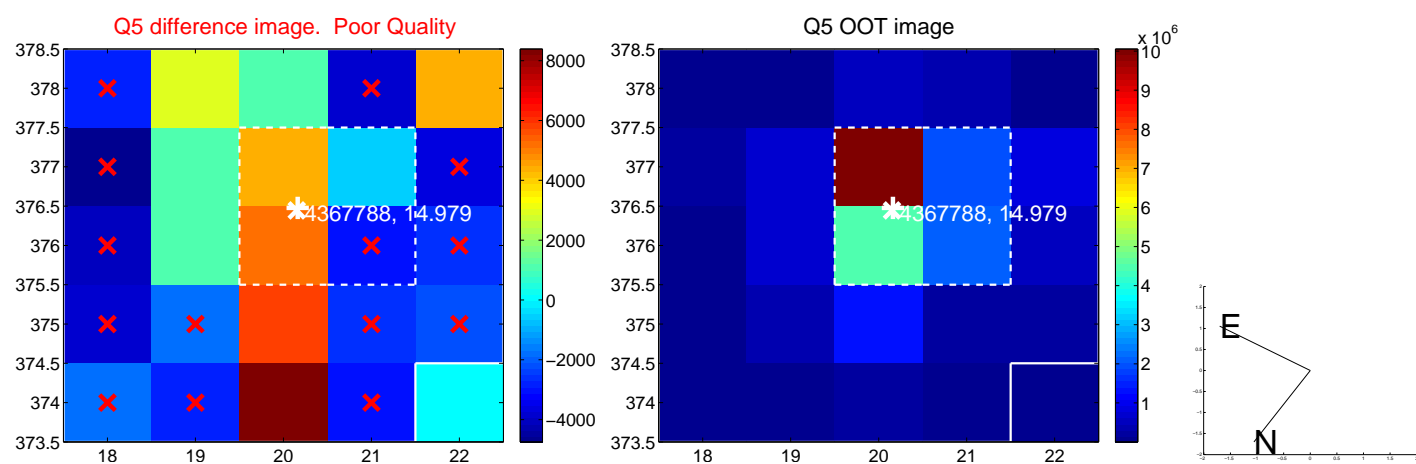


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ . 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.

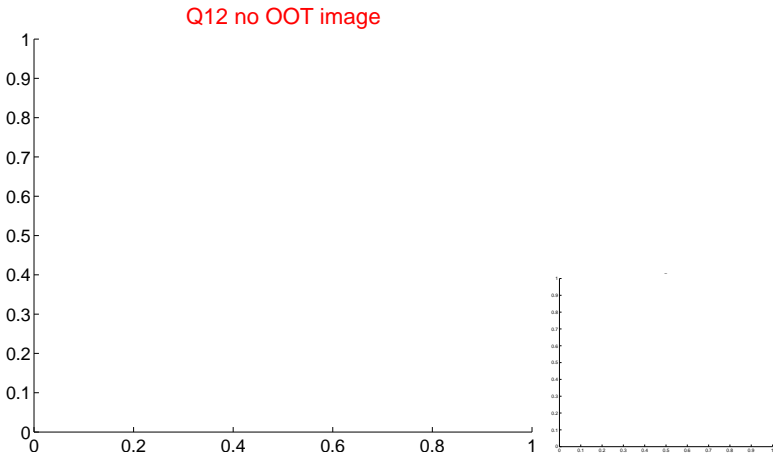
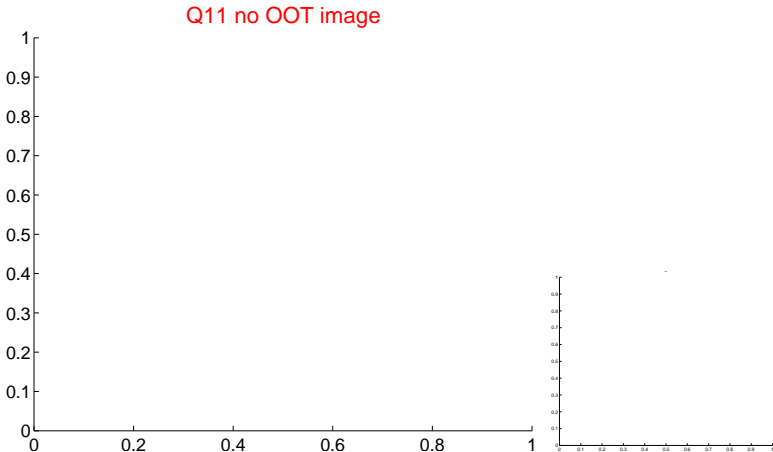
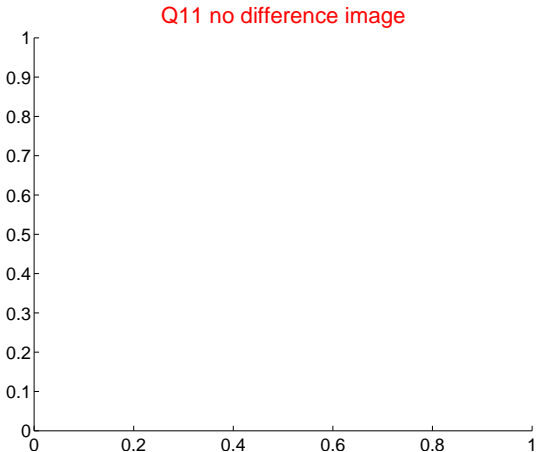
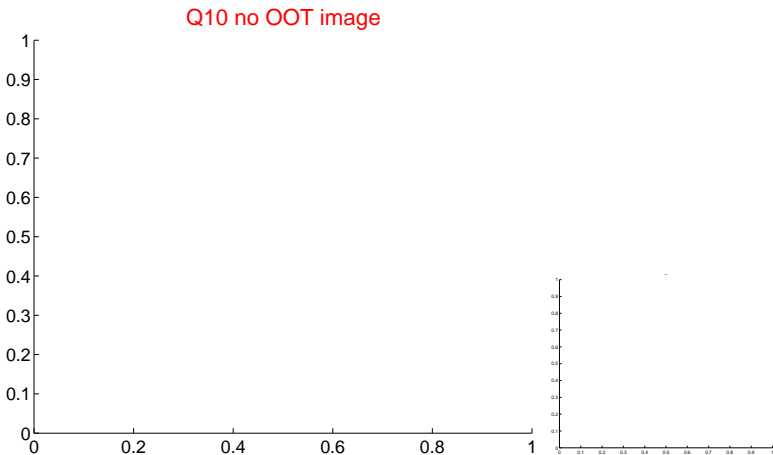
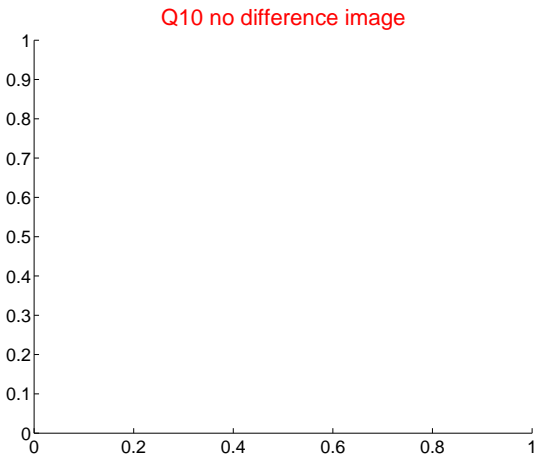
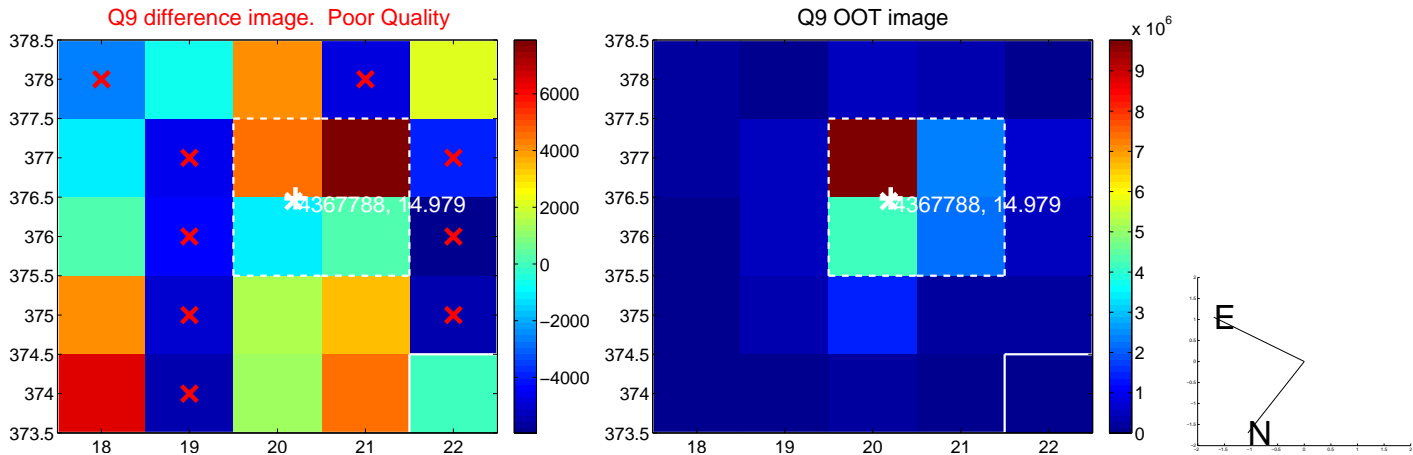
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



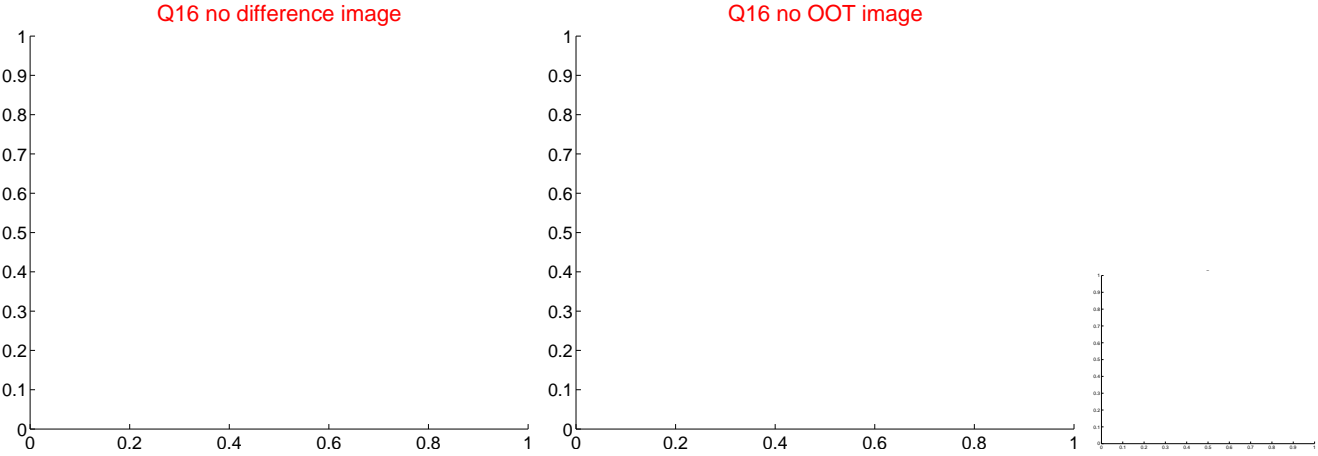
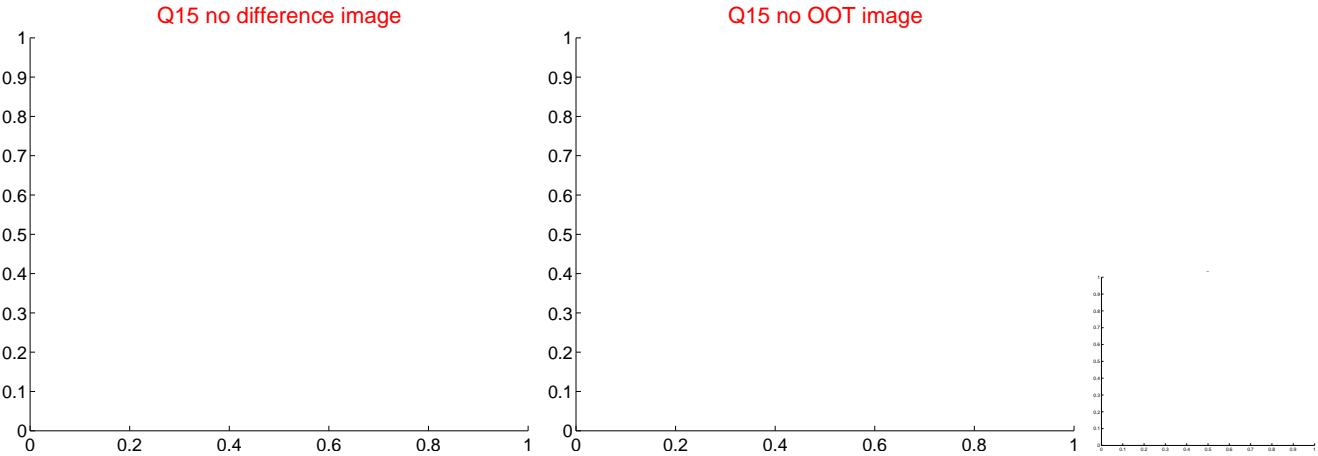
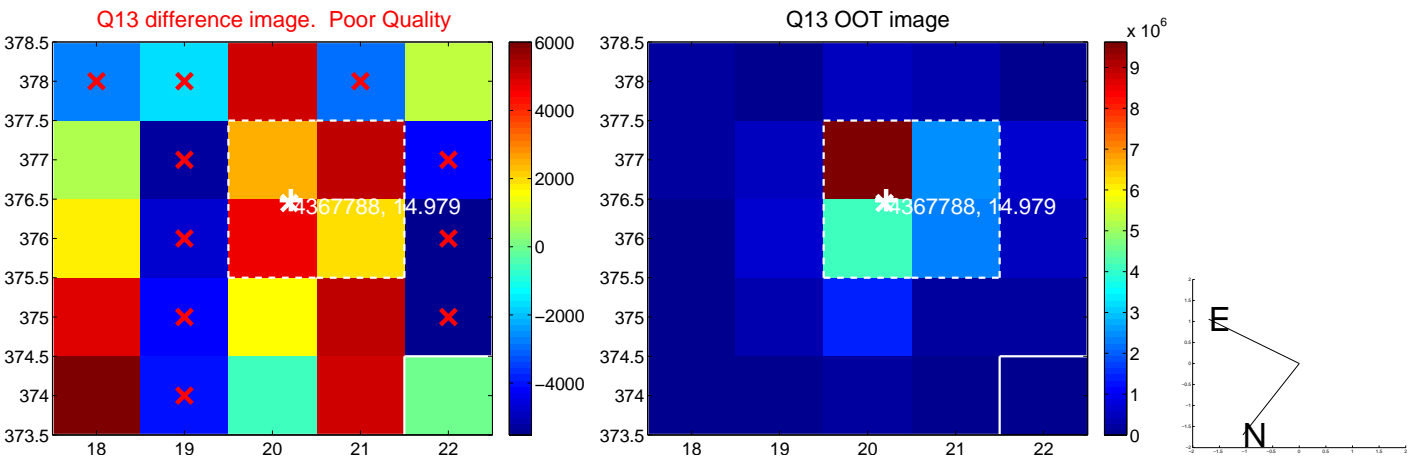
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



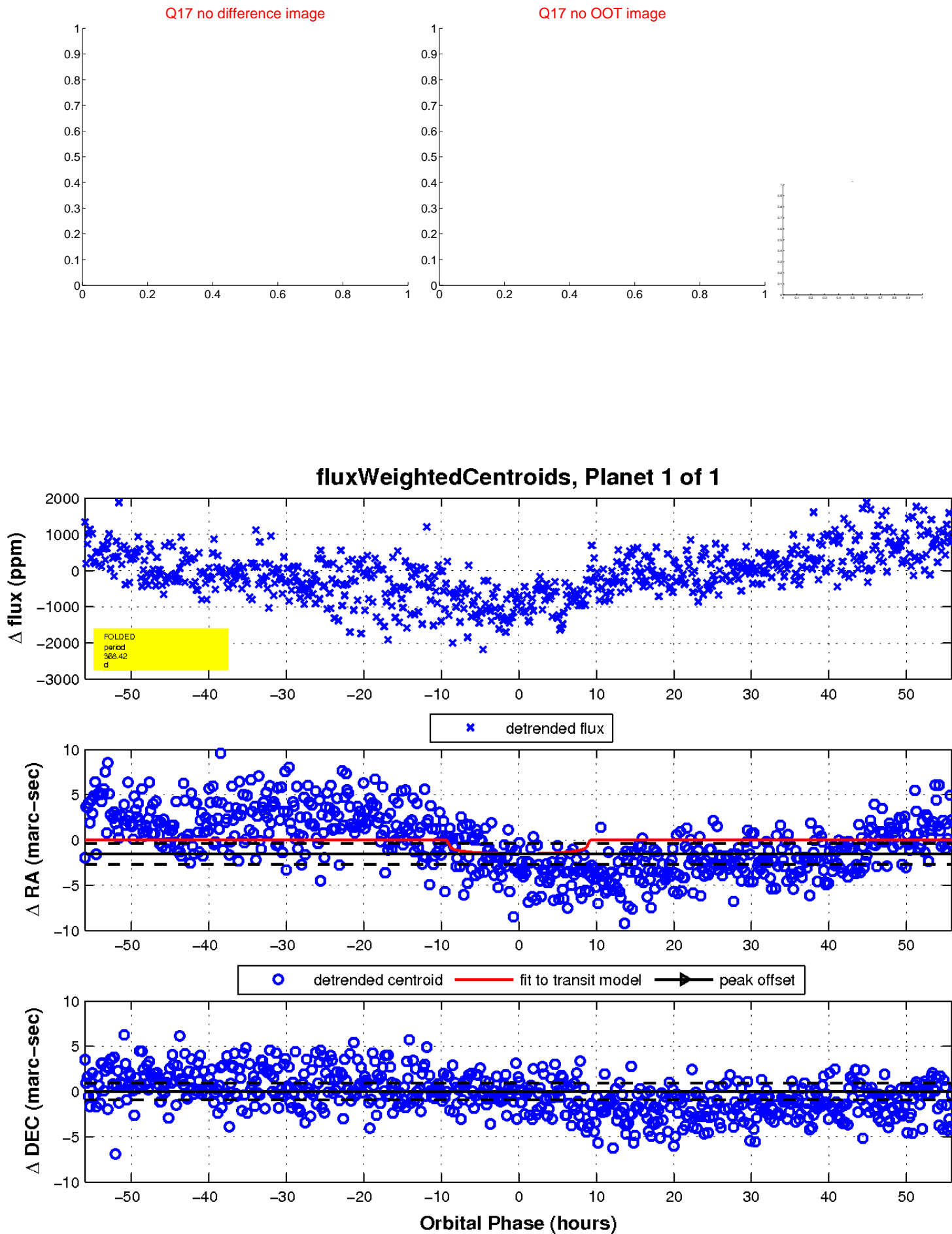
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value



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.



UKIRT Image

Declination

