

KIC 003353454

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})
003353454-01	OBS	7654.01	1.689975	132.950413	2214.3	9.102	7.2	11.1	1.00	5780	5.64	1296.48

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
003353454-01	OBS	FP	0.01	1	0	1	0	LPP_DV—CENT_FEW_DIFFS—HALO_GHOST

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

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

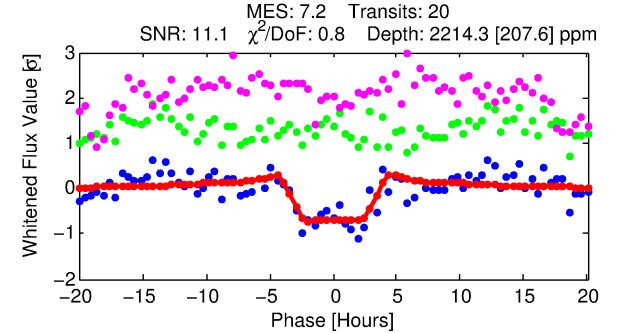
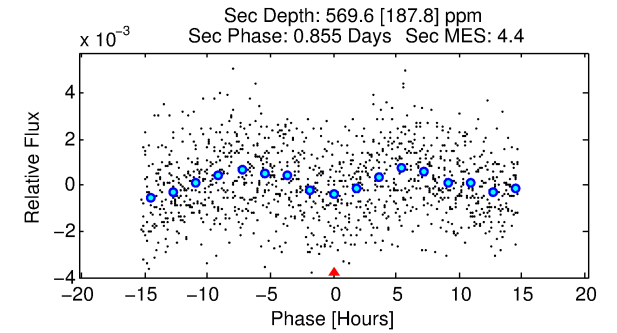
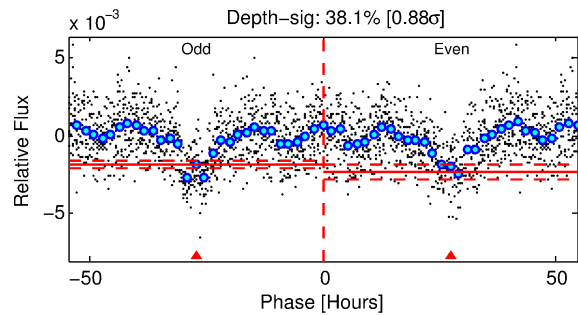
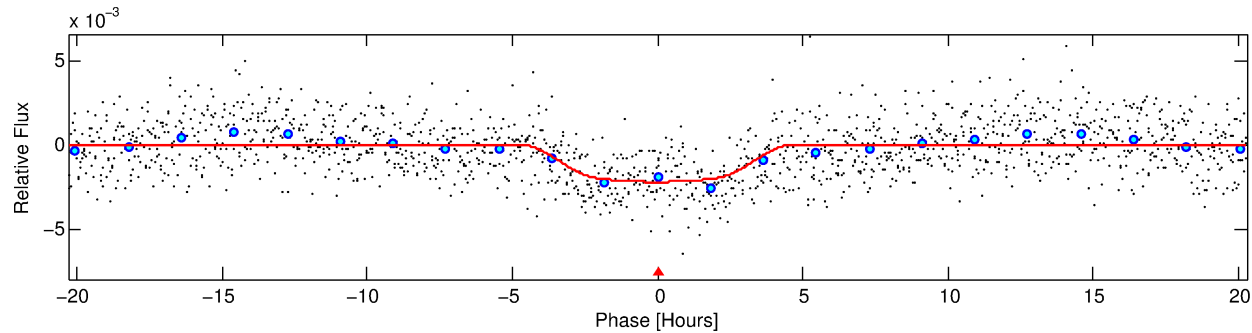
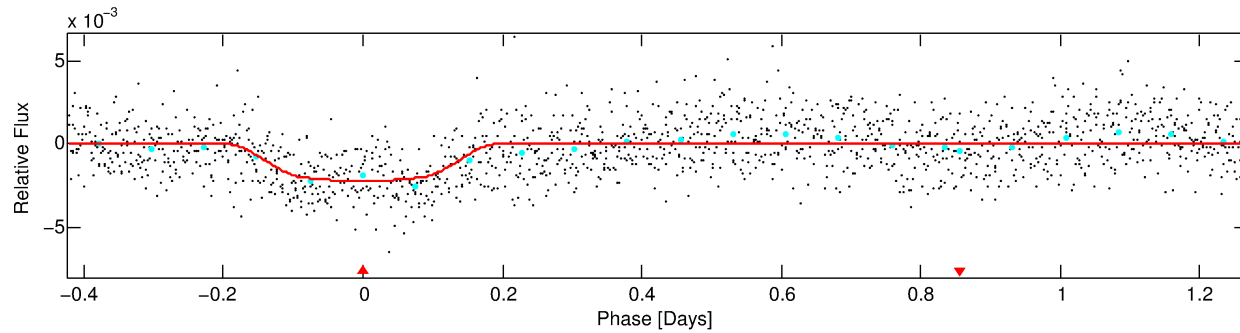
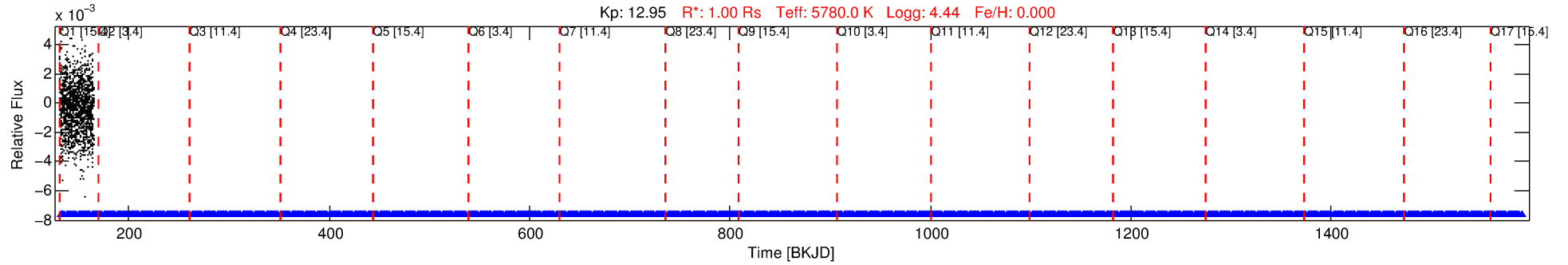
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 003353454-01

No Significant Match Found

DV One-Page Summary

KIC: 3353454 Candidate: 1 of 1 Period: 1.690 d



DV Fit Results:

Period = 1.68997 [0.00116] d
Epoch = 132.9504 [0.0127] BKJD
Rp/R* = 0.0516 [0.0032]
a/R* = 1.23 [0.06]
b = 0.90 [0.03]
Seff = 1296.48 [1.18]
Teq = 1530 [0] K
Rp = 5.64 [0.35] Re
a = 0.0278 [0.0000] AU
Ag = 7.61 [2.68] [2.46 σ]
Teffp = 3929 [346] K [6.93 σ]

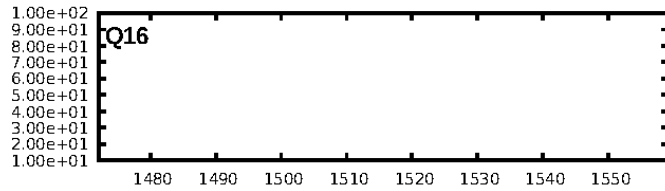
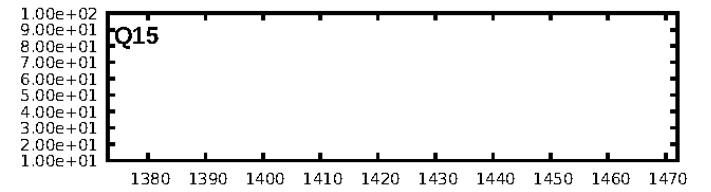
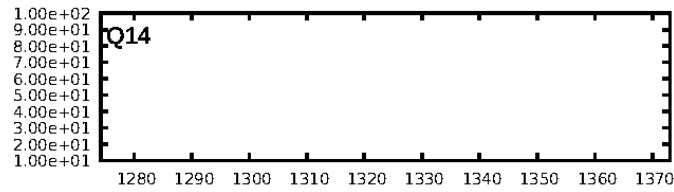
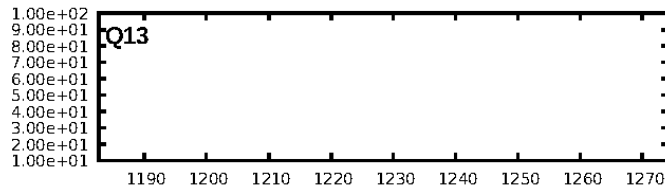
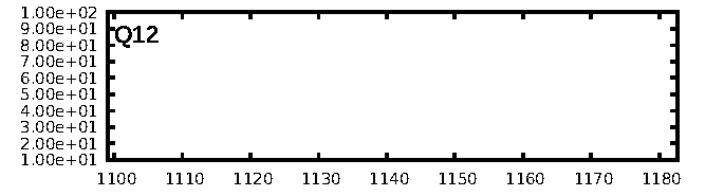
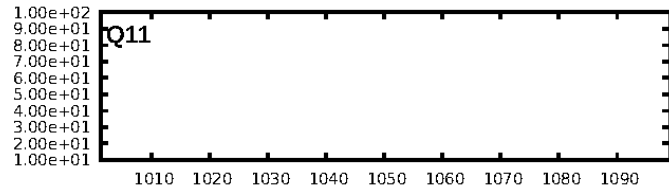
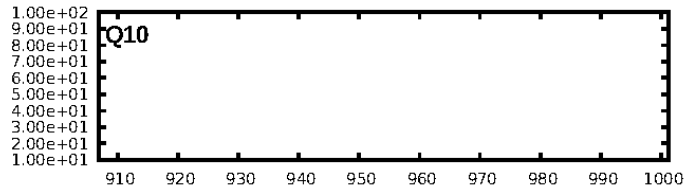
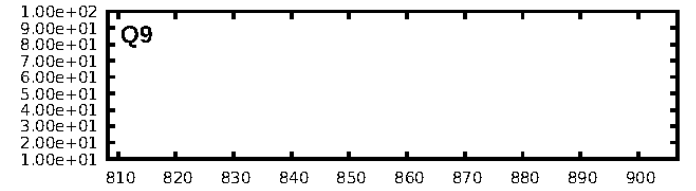
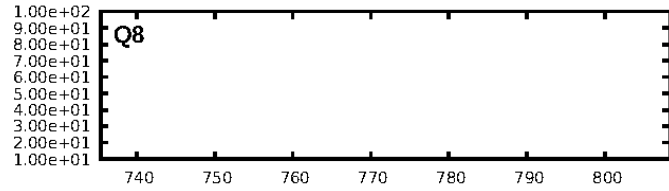
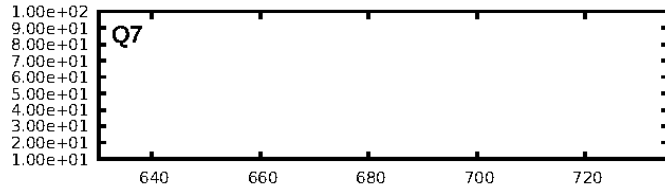
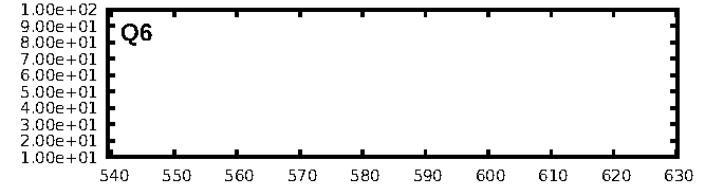
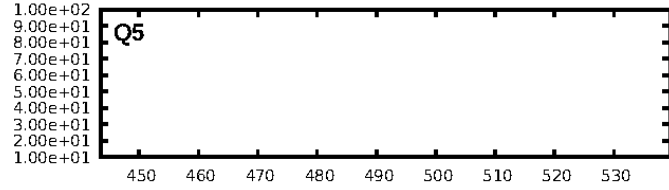
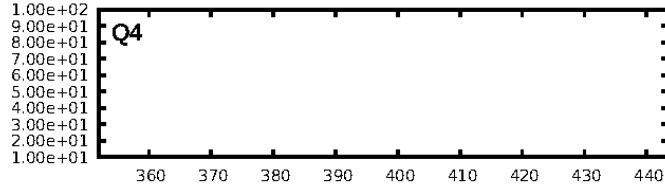
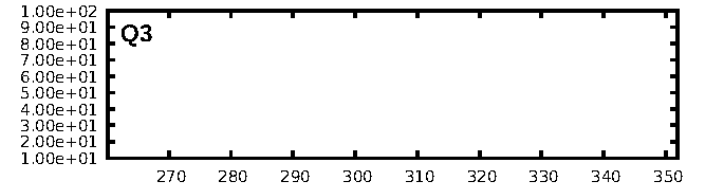
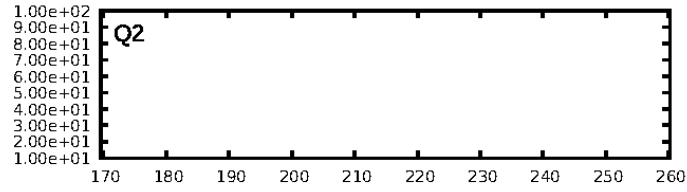
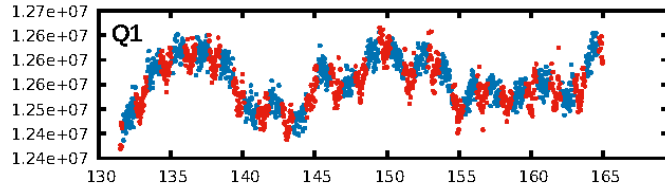
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: 99.5%
ModelChiSquareGoF-sig: 100.0%
Bootstrap-pfa: 1.58e-04
RollingBand-fgt: N/A
GhostDiagnostic-chr: -0.229
Centroid-sig: 29.8%
Centroid-so: 2.192 arcsec [4.64 σ]
OotOffset-rm: N/A
KicOffset-rm: N/A
OotOffset-st: 0/0/0/0 [0]
KicOffset-st: 0/0/0/0 [0]
DiffImageQuality-fgm: N/A
DiffImageOverlap-fno: 1.00 [1/1]

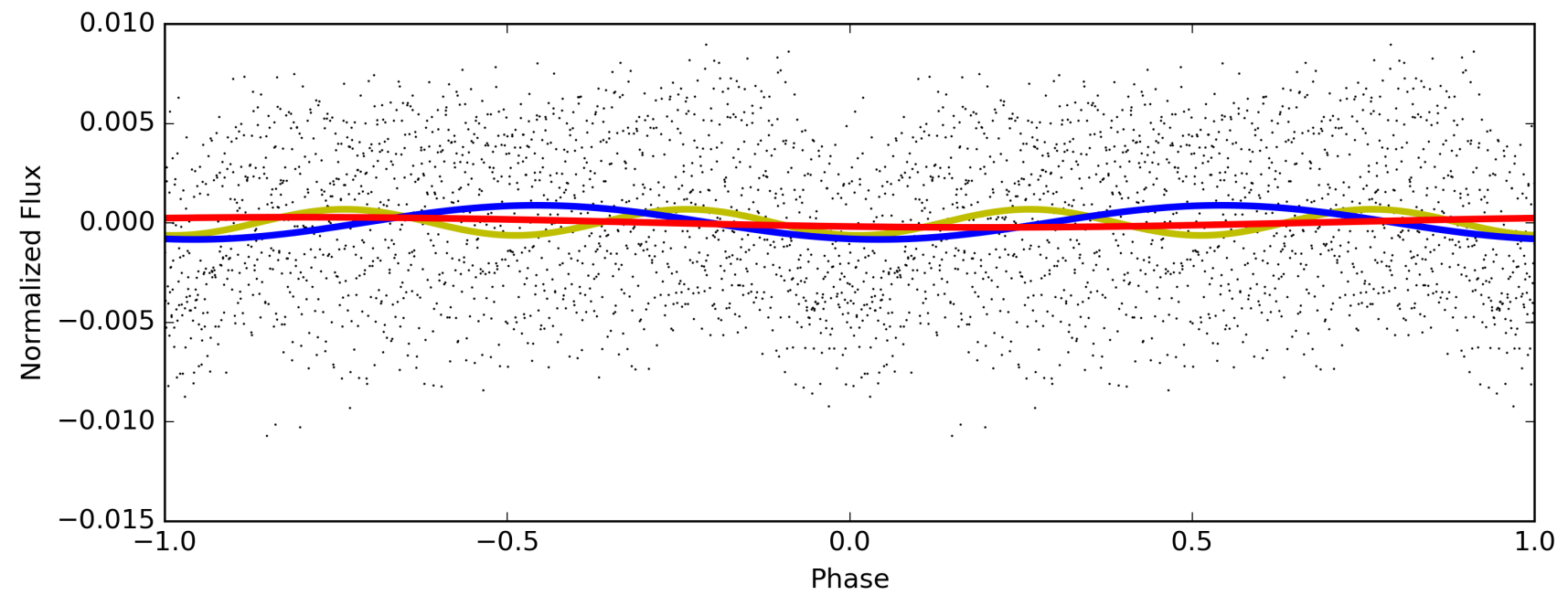
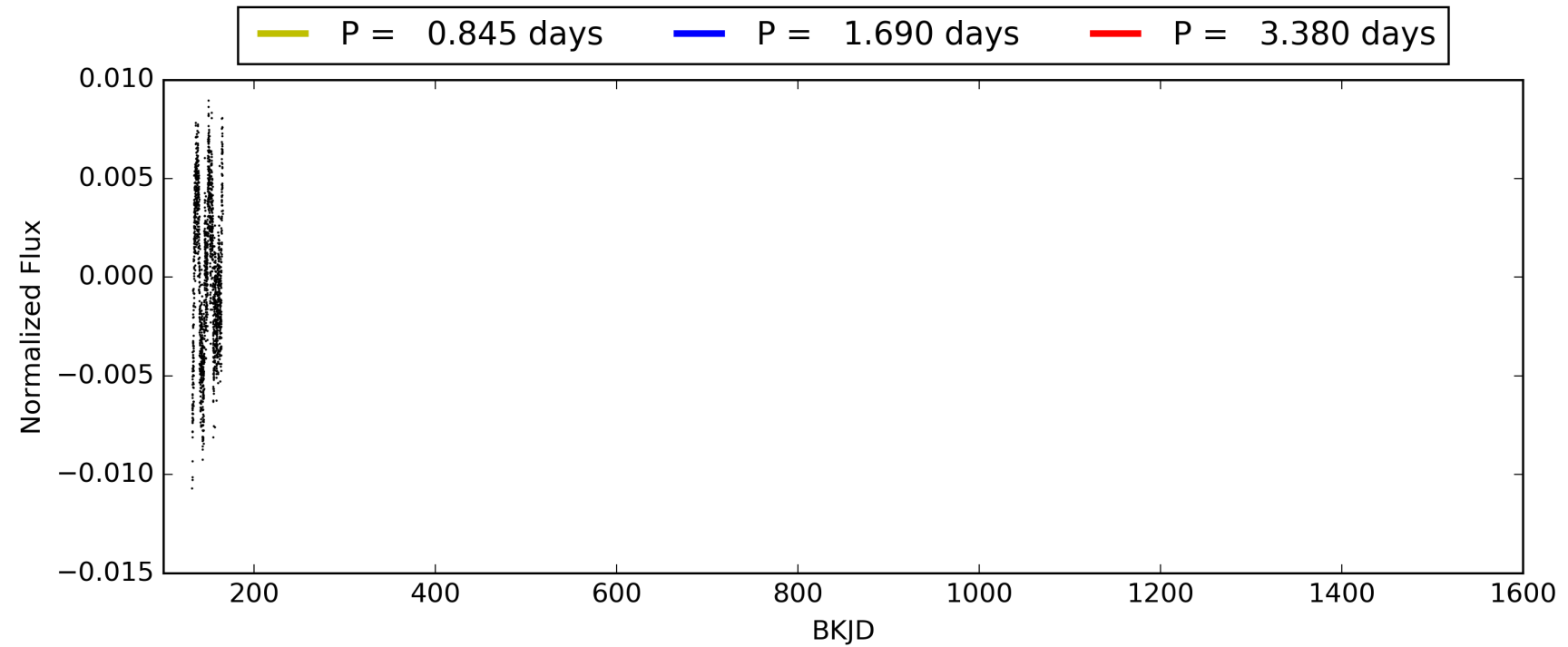
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 31-Jan-2016 11:37:38 Z

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

TCE 003353454-01, PDC Light Curves

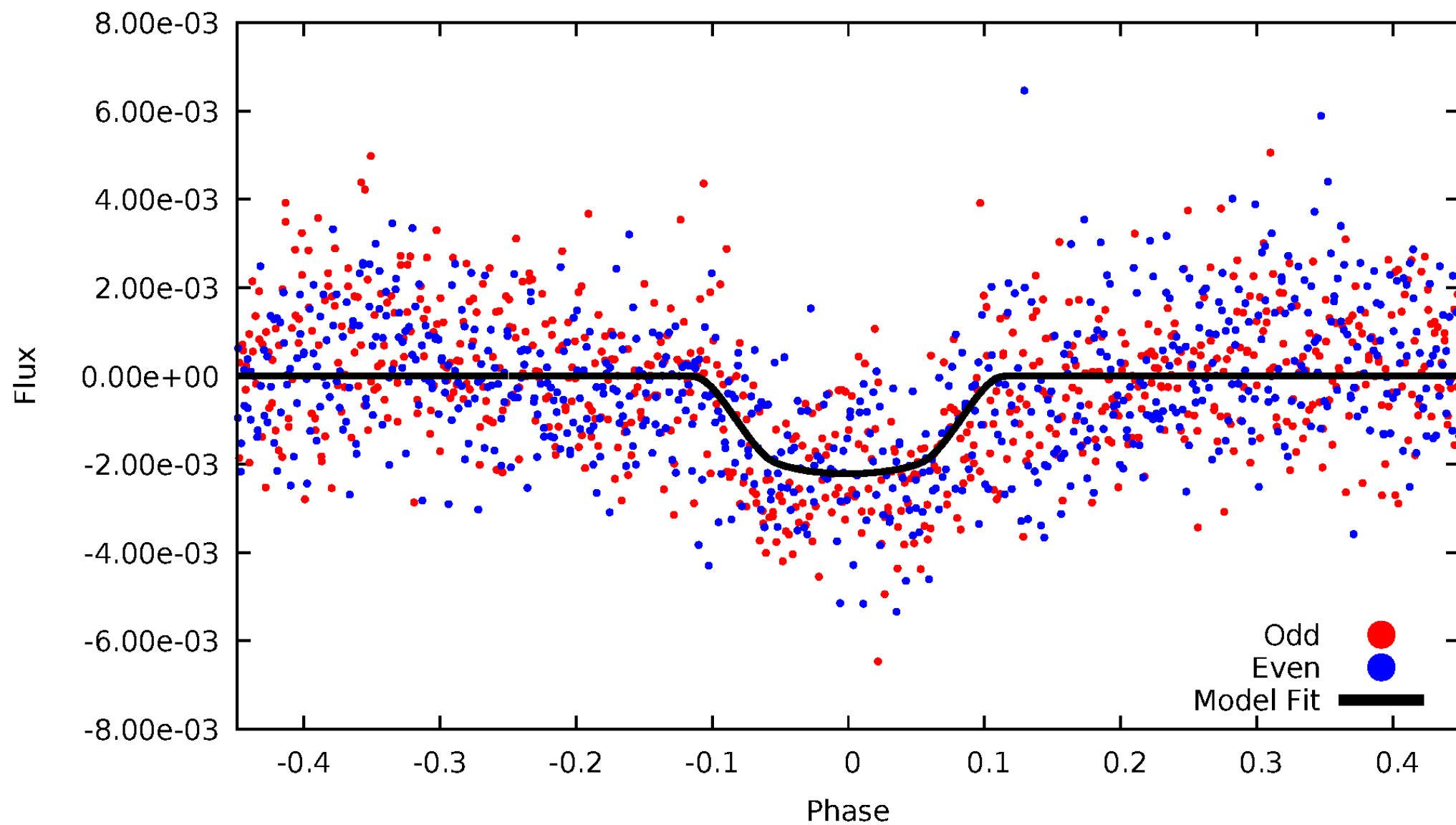


TCE 003353454-01



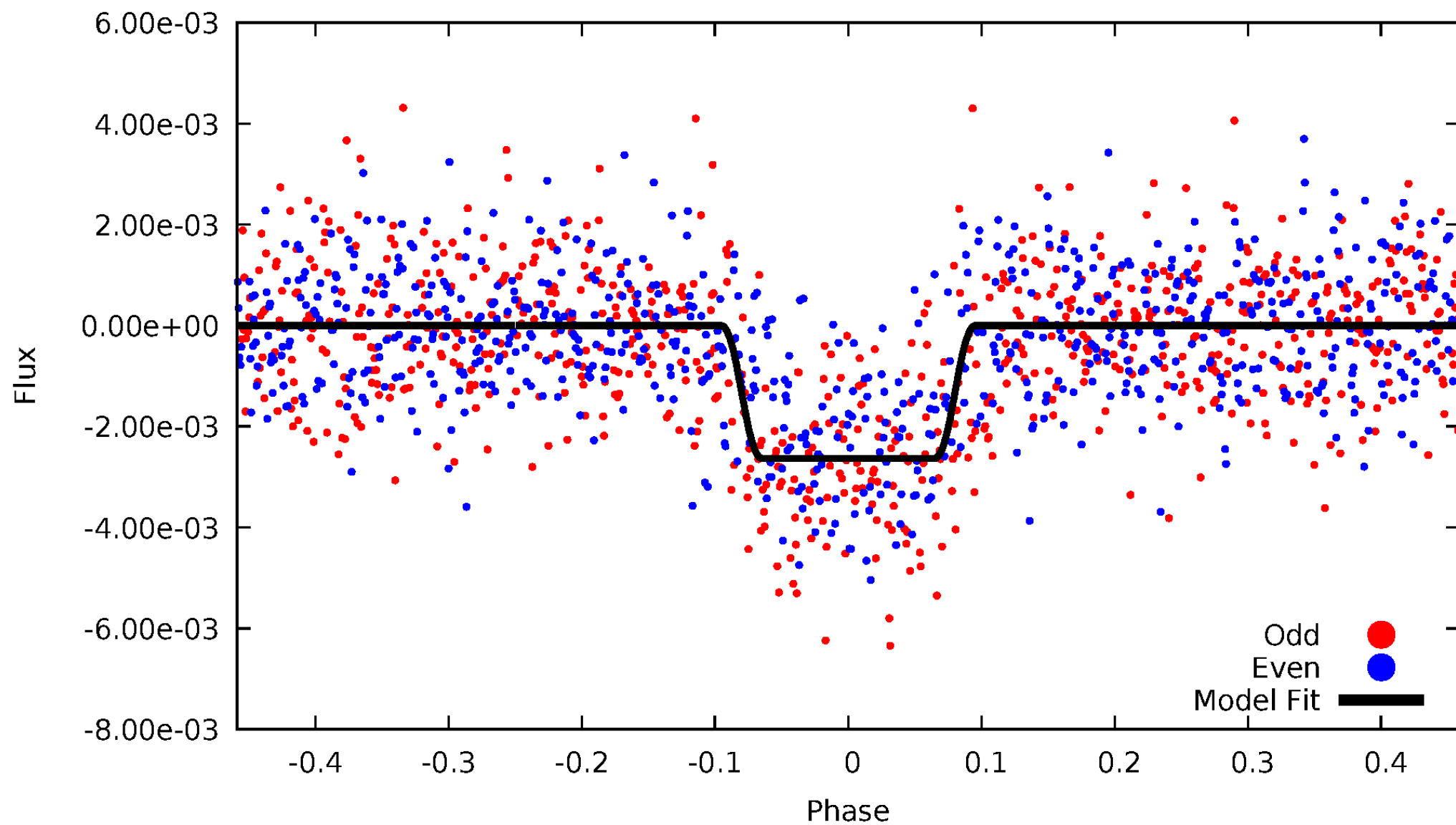
DV Odd/Even

TCE 003353454-01



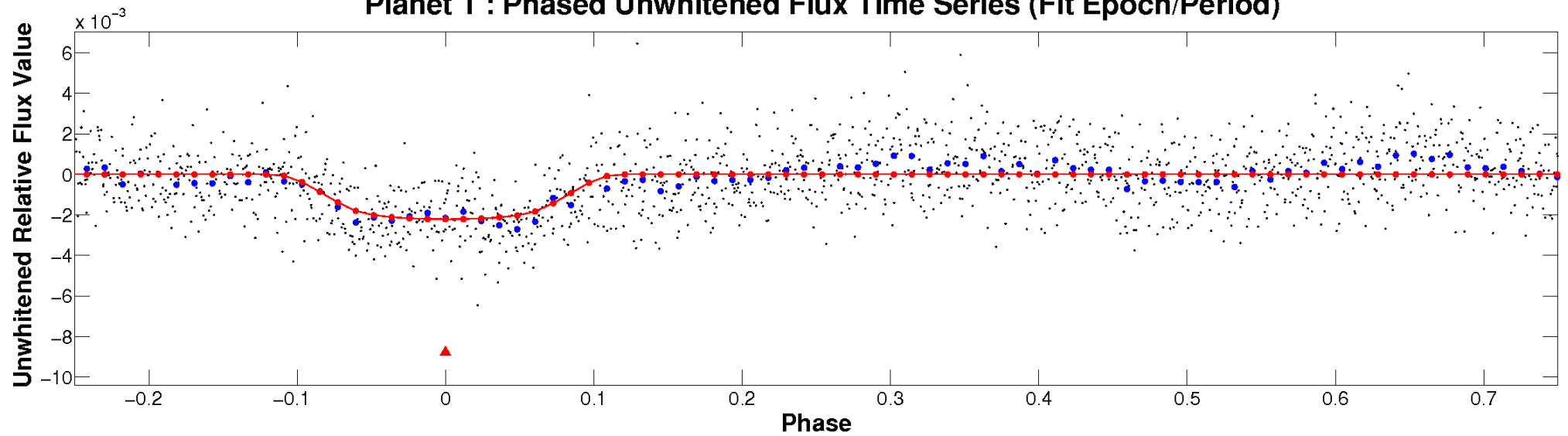
ALT Odd/Even

TCE 003353454-01

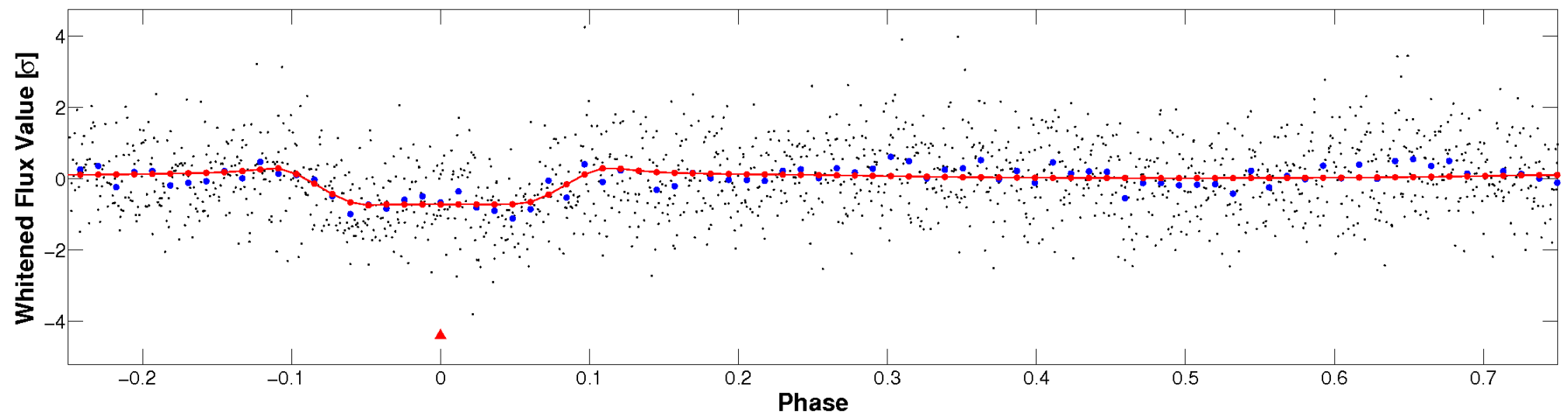


Non-Whitened Vs. Whitened Light Curve

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

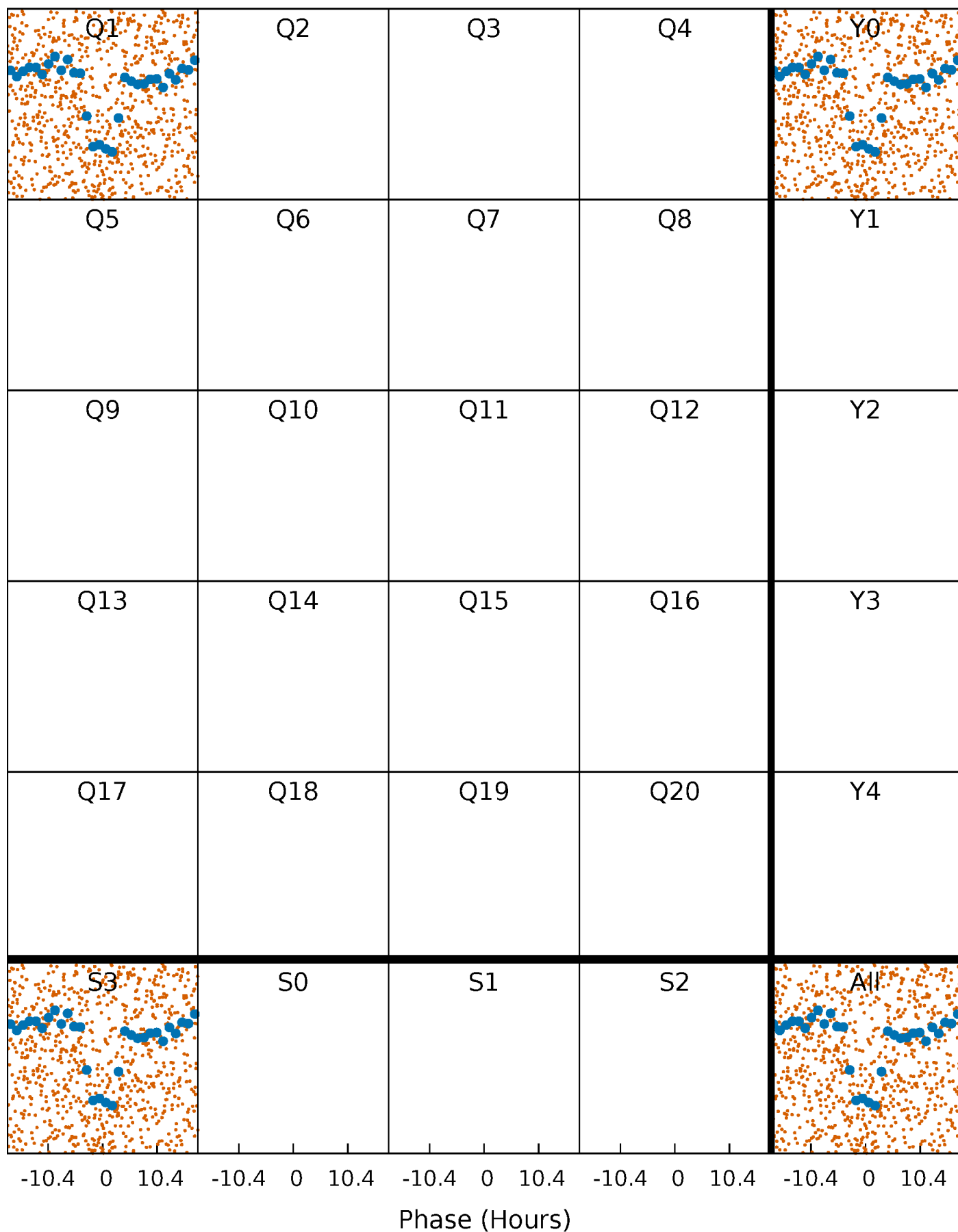


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



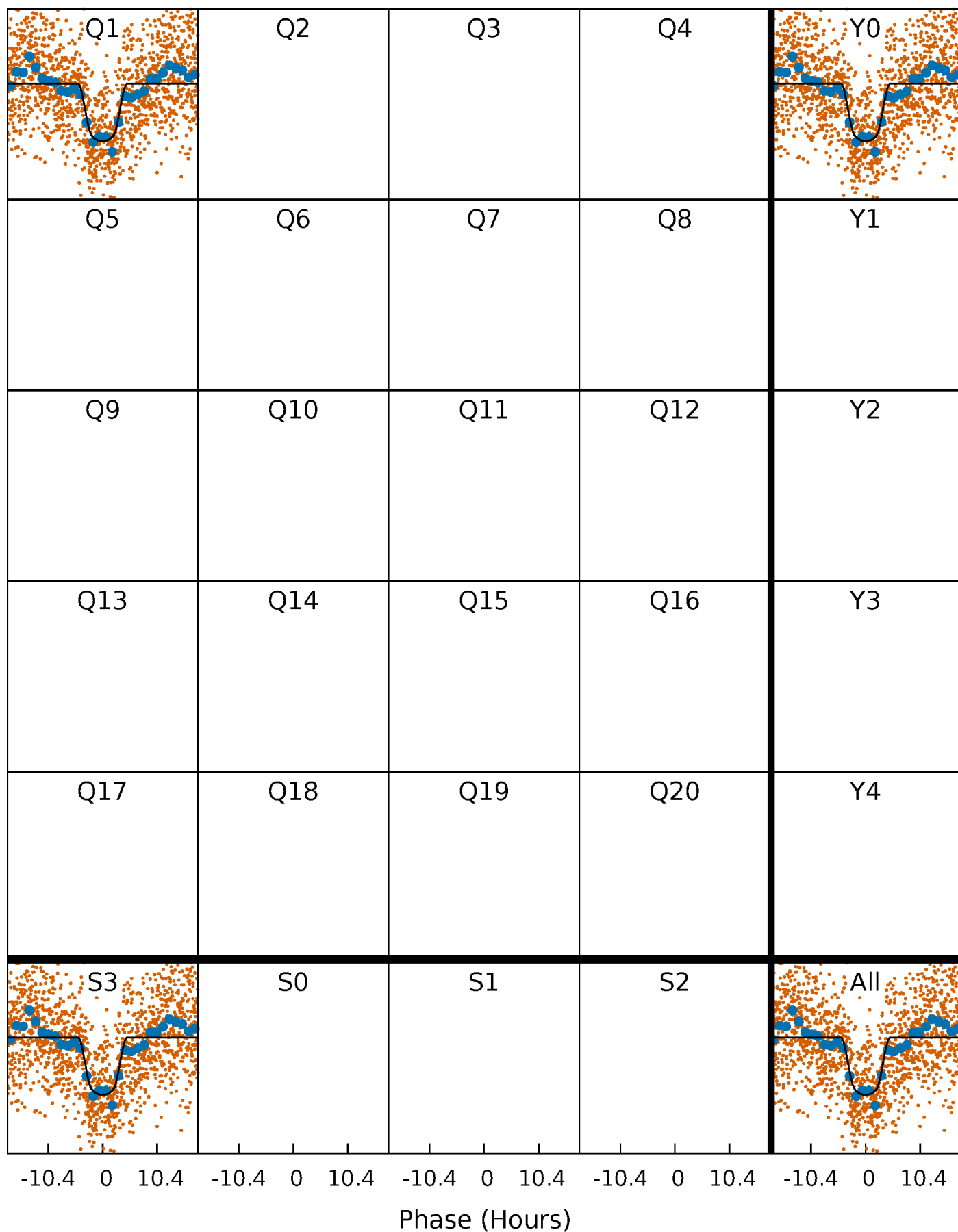
PDC Quarter-Phased Transit Curves

TCE 003353454-01 P= 1.689975 Days $T_0=132.950413$ (BKJD)



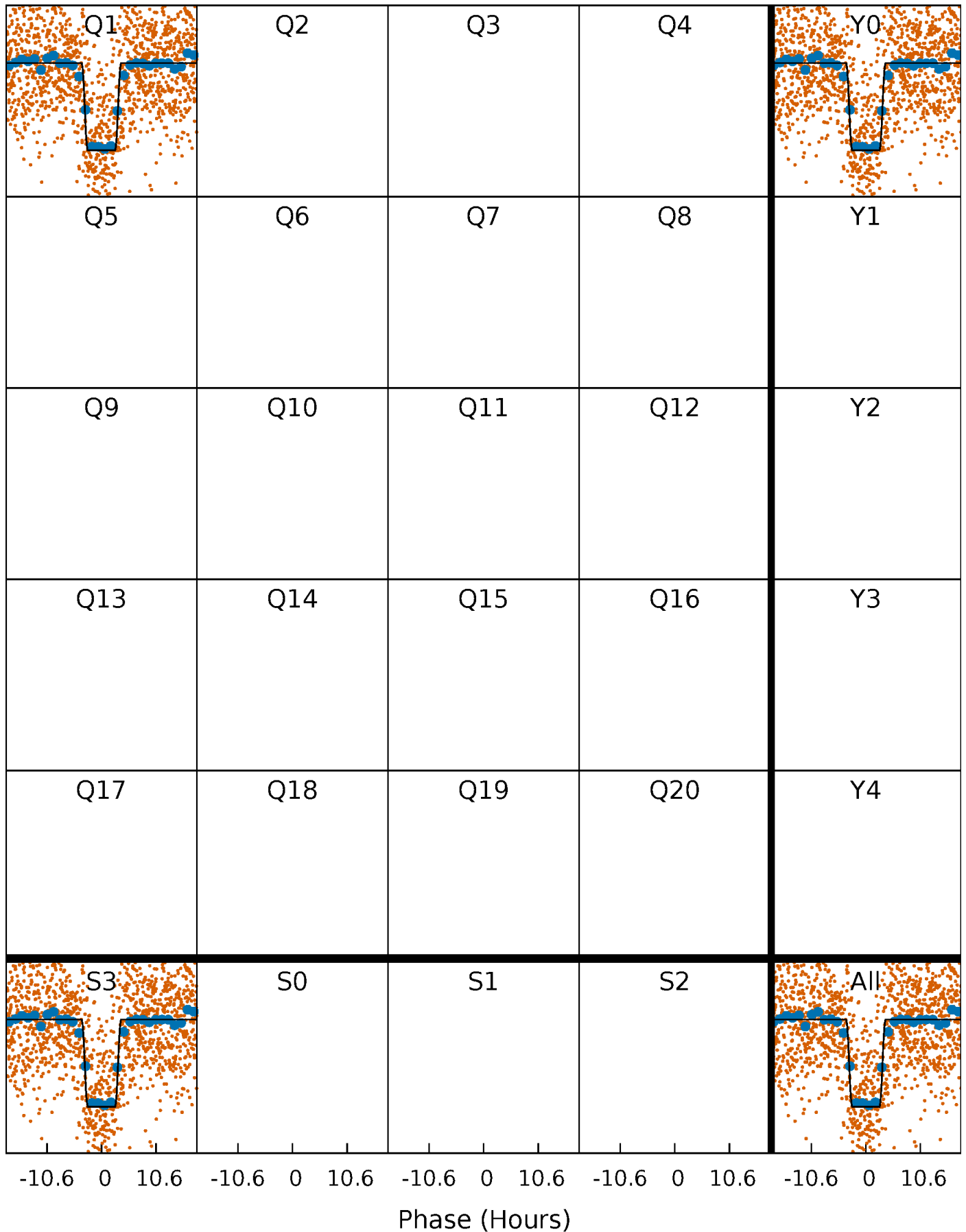
DV Quarter-Phased Transit Curves

TCE 003353454-01 $P = 1.689975$ Days $T_0 = 132.950413$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

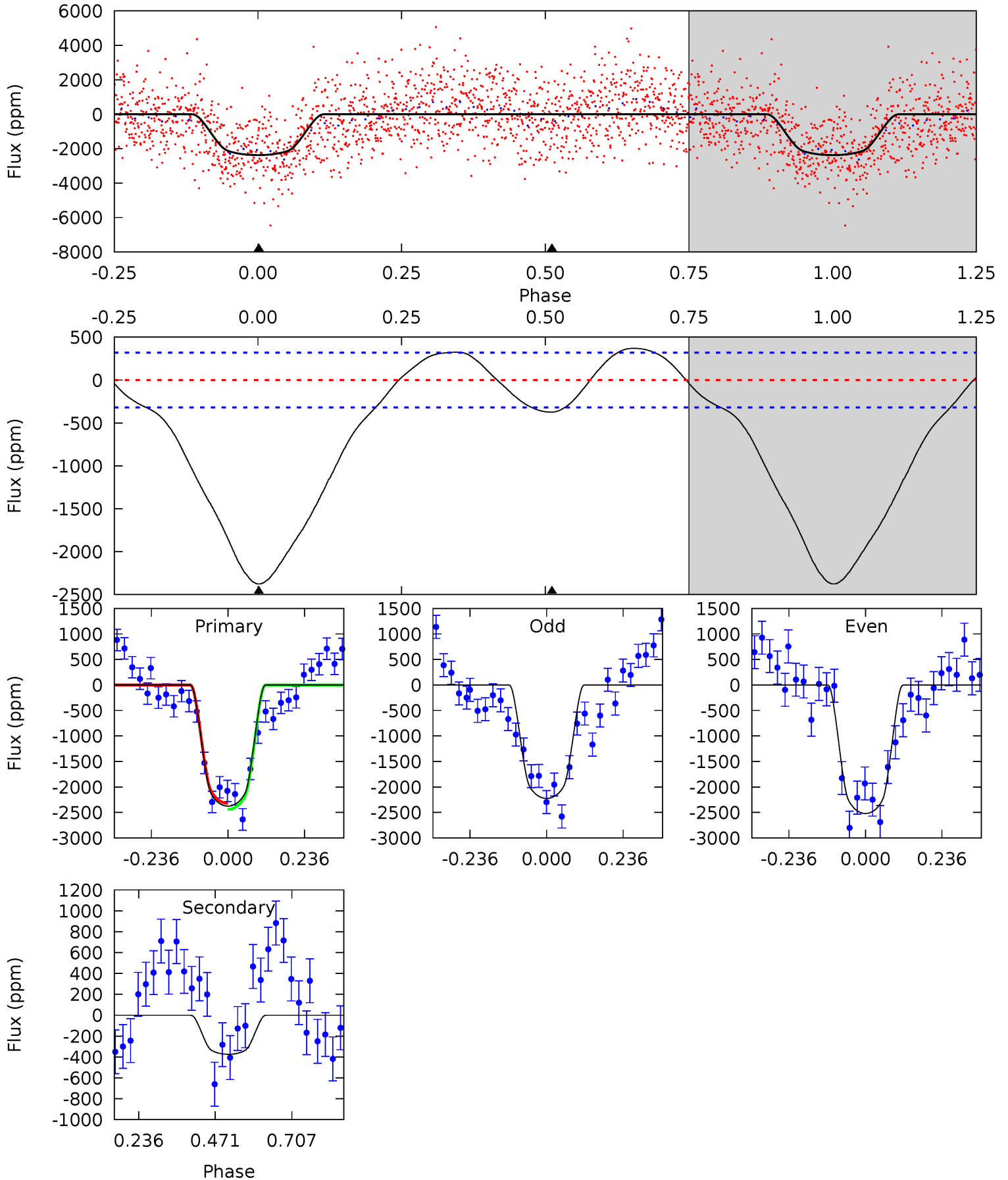
TCE 003353454-01 P= 1.686415 Days $T_0=132.985254$ (BKJD)



DV Model-Shift Uniqueness Test

003353454-01, P = 1.689975 Days, E = 131.260438 Days

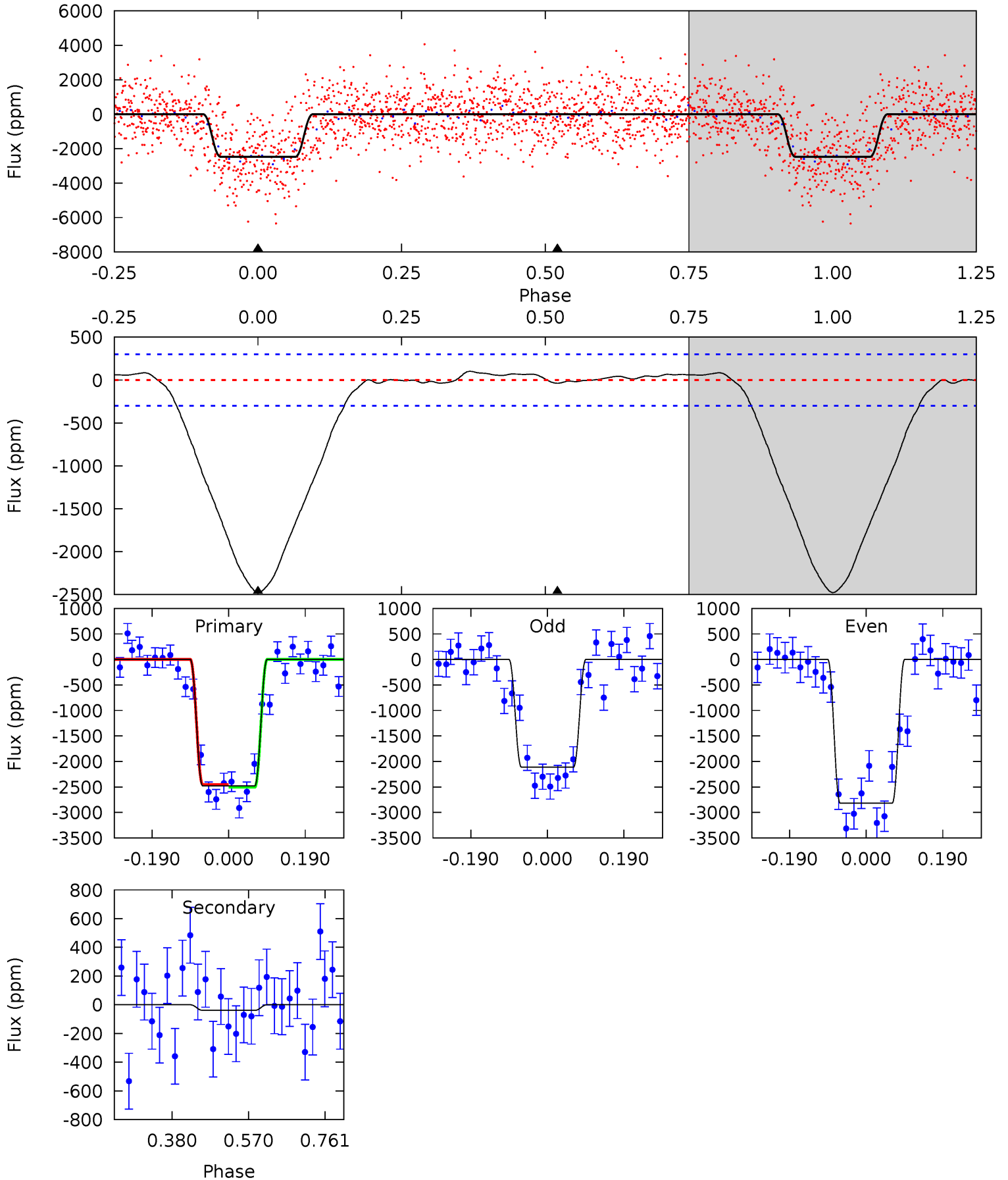
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
32.5	5.13	0	0	4.38	1.19	1.68	32.5	32.5	5.13	5.13	2.04	0.95	0.13	0.82



Alt Model-Shift Uniqueness Test

003353454-01, P = 1.686415 Days, E = 131.298839 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
36.6	0.58	0	0	4.43	1.31	0.62	36.6	36.6	0.58	0.58	5.31	1.09	0.04	0.40



Stellar Parameters For KIC 003353454

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	5780^{+1}_{-1}	$4.438^{+1.000}_{-1.000}$	$0.000^{+1.000}_{-1.000}$	$1.000^{+1.000}_{-1.000}$	$-1.000^{+1.000}_{-1.000}$	$-1.000^{+1.000}_{-1.000}$
	+0%/-0%	+23%/-23%	+inf%/-inf%	+100%/-100%	+100%/-100%	+100%/-100%
Source	Solar	Solar	Solar	Solar		

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

Secondary Eclipse Parameters for KIC 003353454-01 / KOI 7654.01

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	-375 ± 73	$5.65^{+0.54}_{-0.49}$	2139^{+100}_{-103}	3826^{+203}_{-181}	$4.905^{+1.561}_{-1.162}$
Alt.	-39 ± 68	$5.60^{+0.54}_{-0.49}$	2146^{+104}_{-101}	2524^{+573}_{-5447}	$0.552^{+0.933}_{-1.008}$

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 $T_{obs} \gg T_{max}$ AND $A_{obs} \gg 1.0$

DV Centroid Data

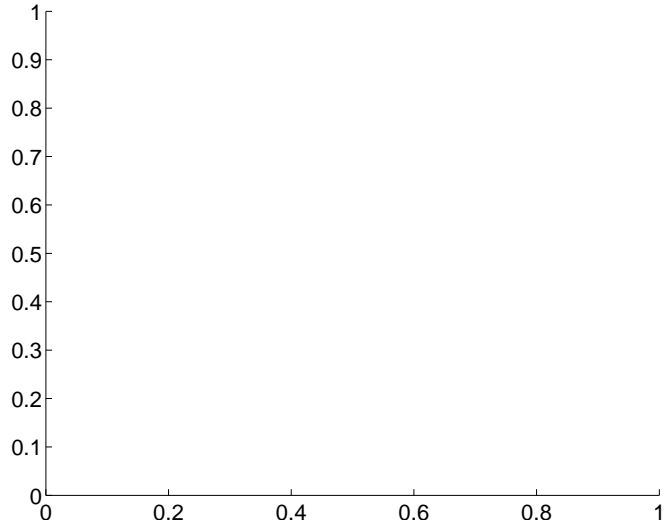
Supplemental centroid analysis for 003353454-01. Kepler magnitude: 12.95. Transit SNR 11.10

There are 0 quarters with good PRF difference image offsets

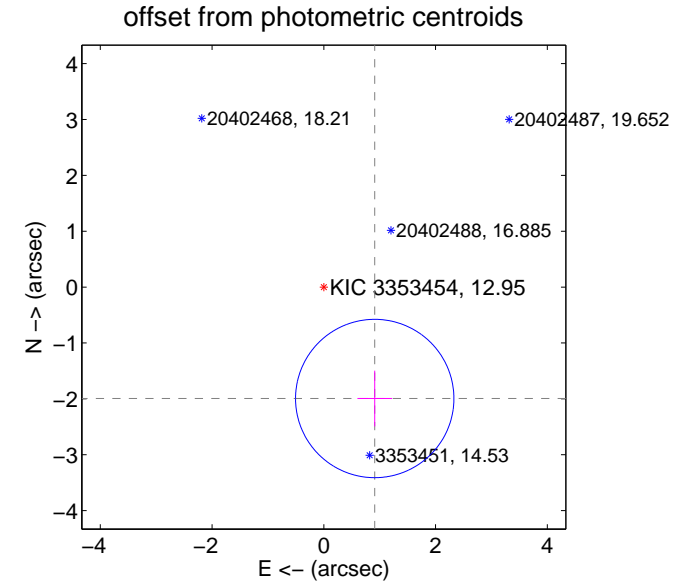
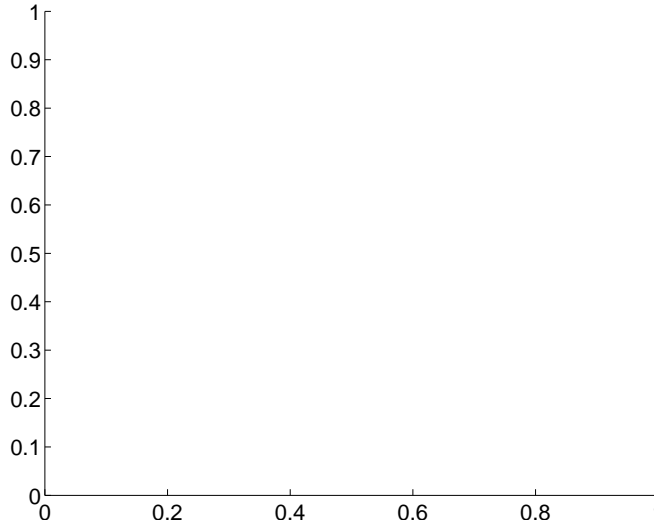
The direct PRF centroid is offset from the target star catalog position by about NaN arcsec

	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	2.19 ± 0.47	4.64	-0.91 ± 0.31	-1.99 ± 0.50

There is no PRF-fit offset from OOT-fit

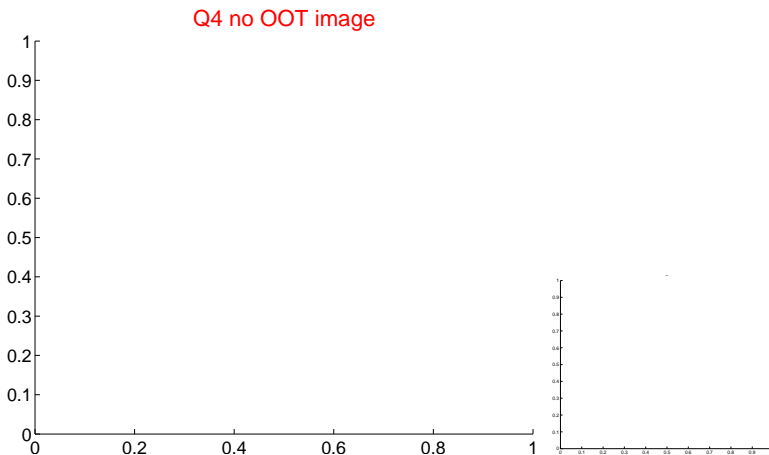
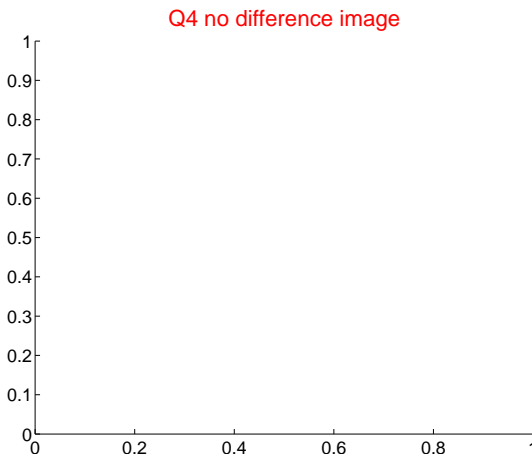
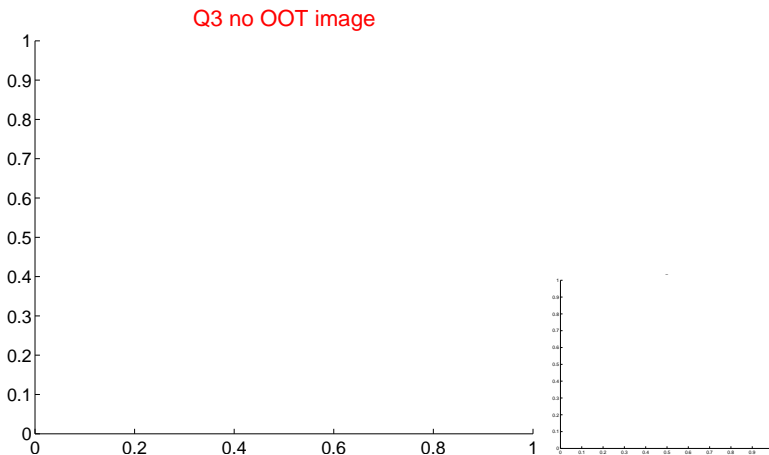
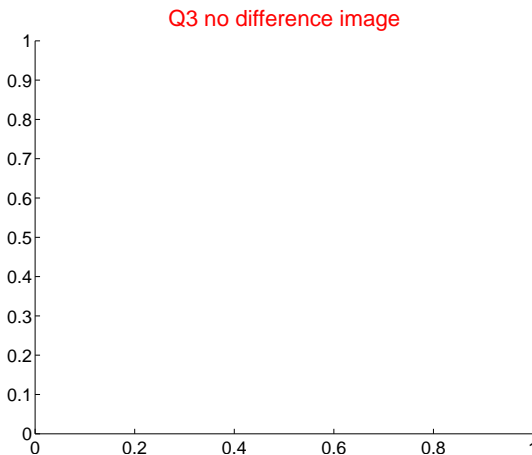
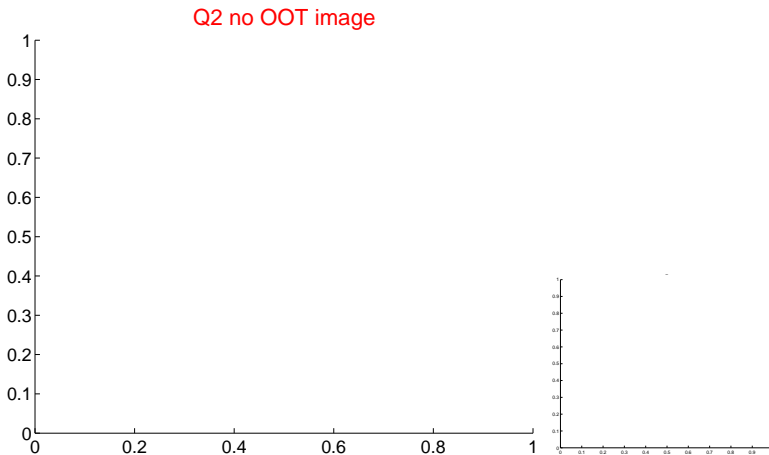
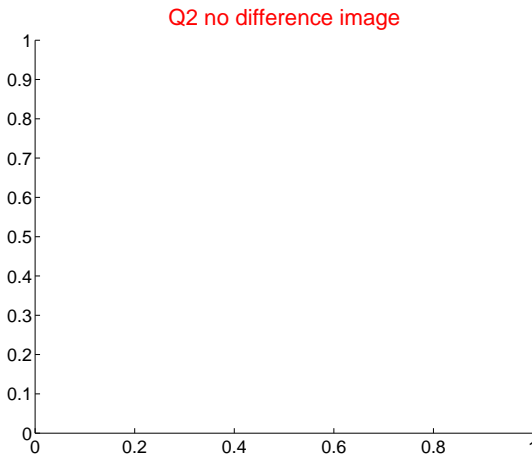
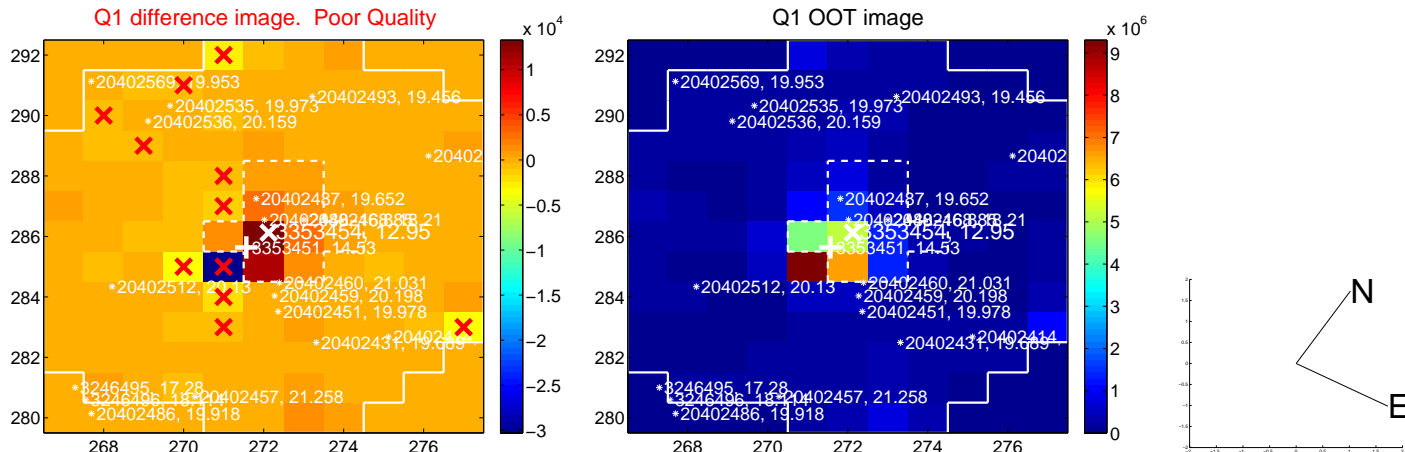


There is no PRF-fit offset from KIC



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.

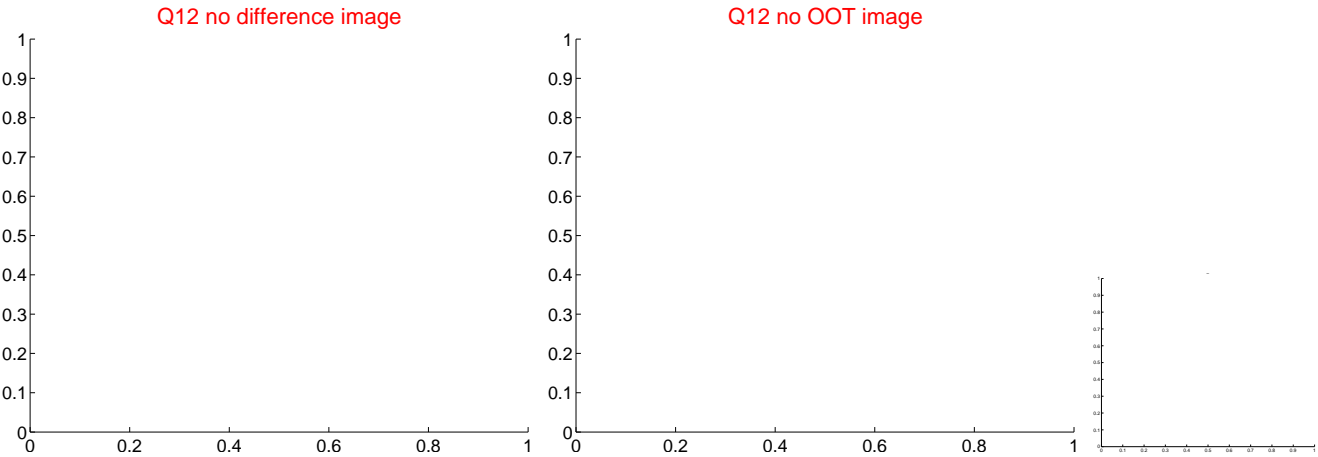
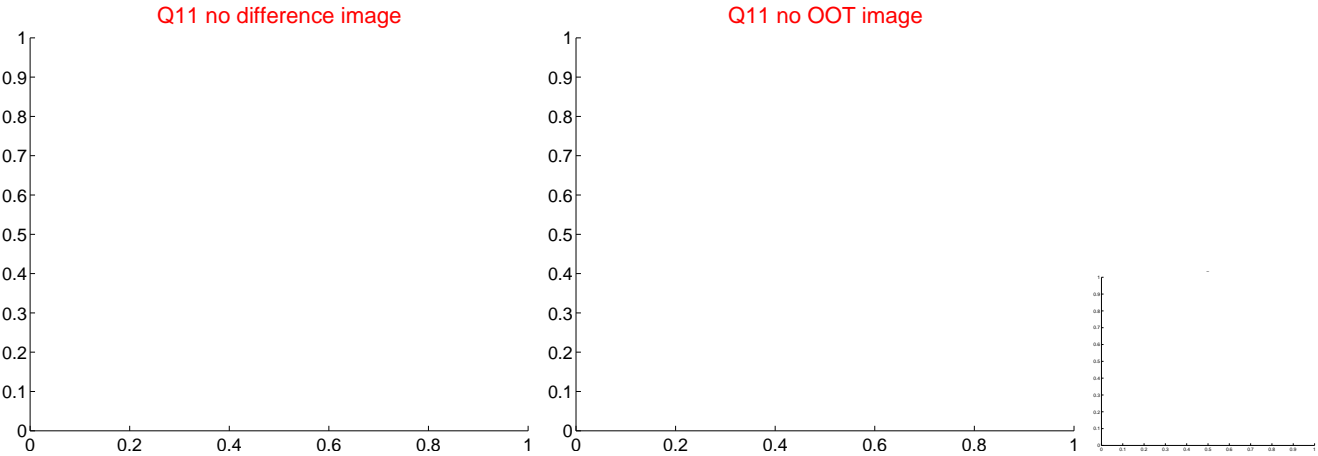
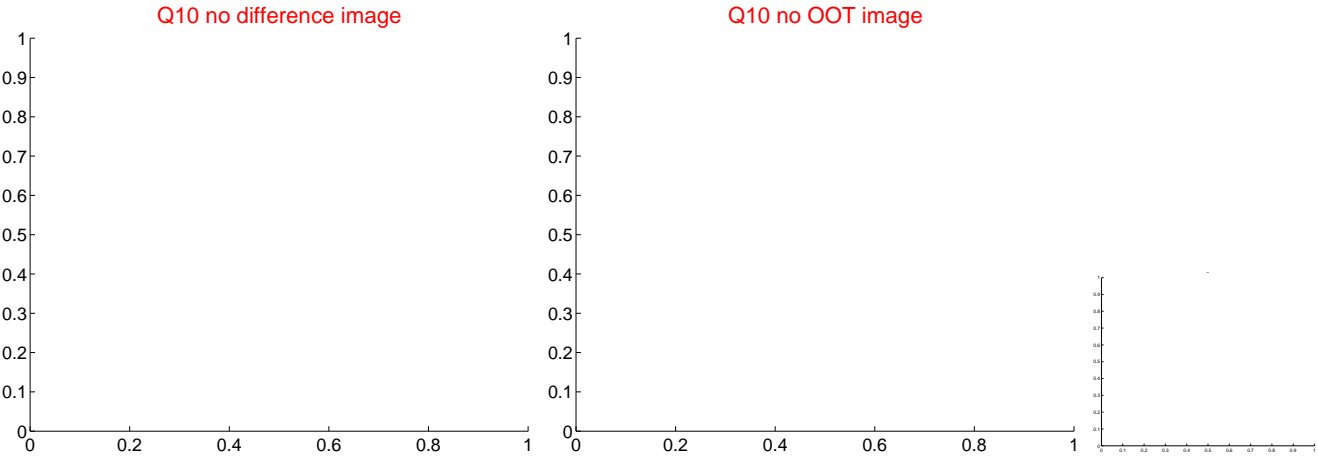
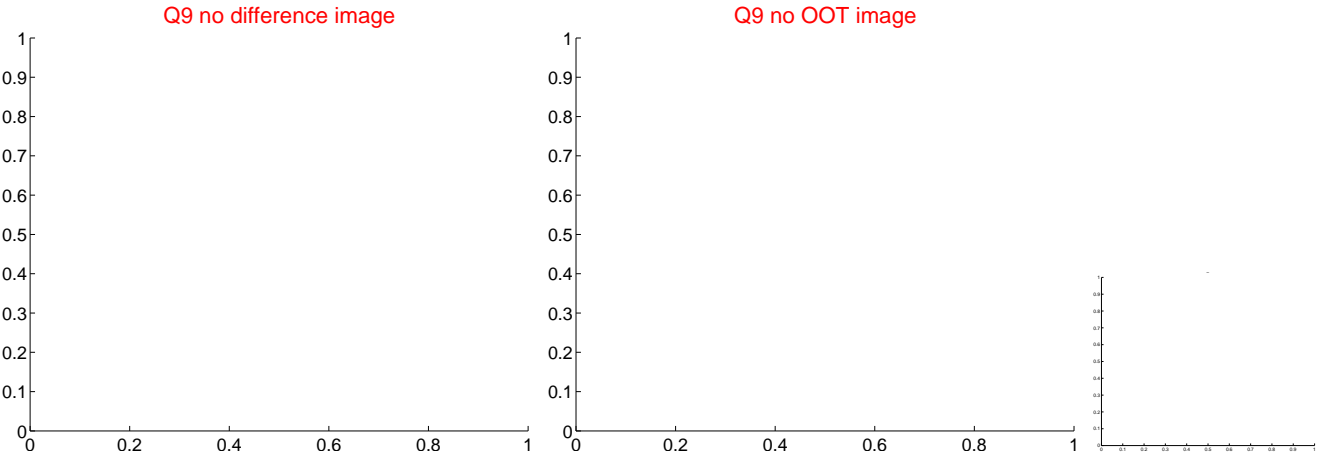
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value



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



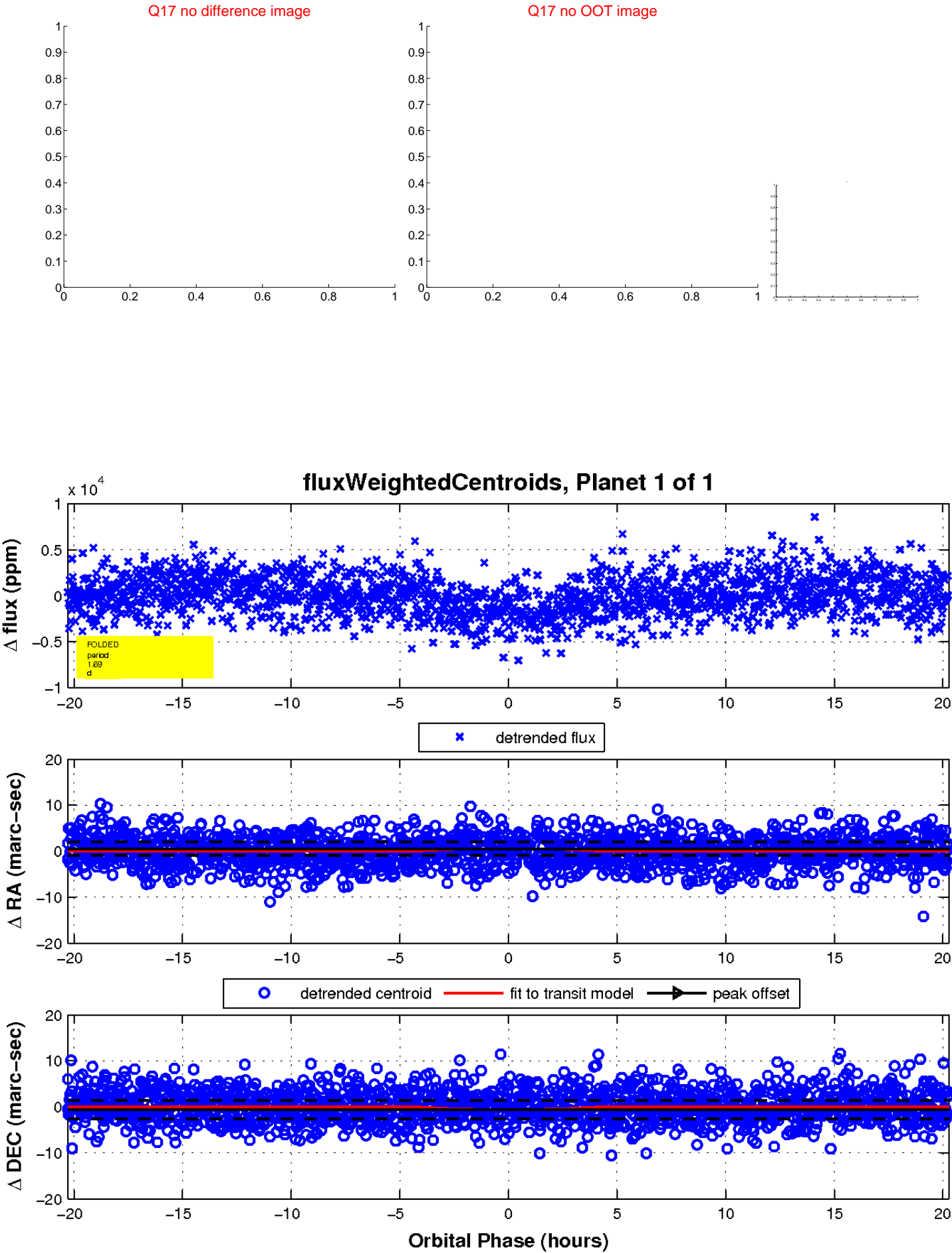
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



white \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

Declination

