

KIC 005517384

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})
005517384-01	OBS	No	364.255452	194.701611	94.0	5.351	8.4	3.2	1.41	6541	1.55	3.16

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
005517384-01	OBS	FP	0.00	1	0	1	0	INDIV_TRANS_MARSHALL—LPP_DV—LPP_ALT—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_POS_DV—MOD_NONUNIQ_ALT— INCONSISTENT_TRANS—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.

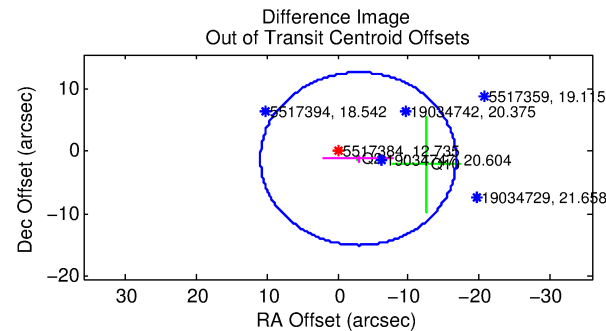
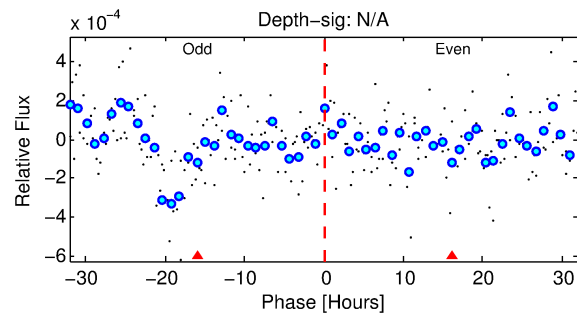
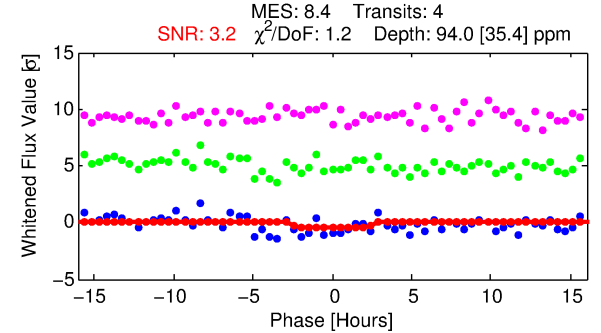
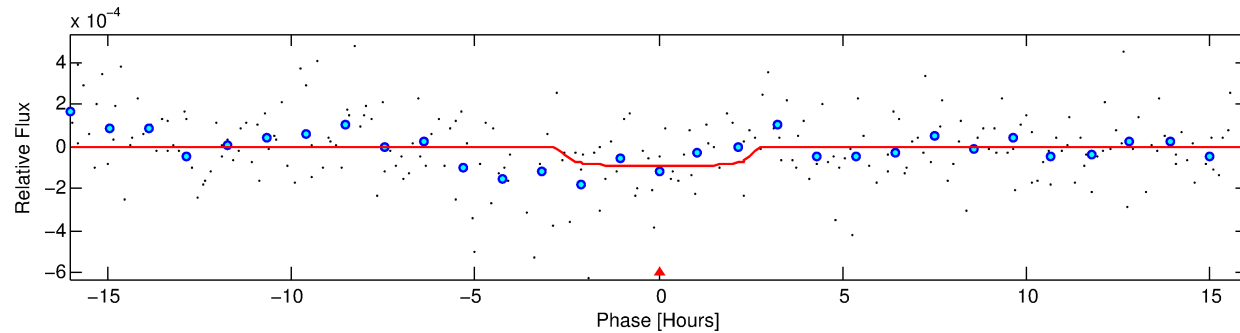
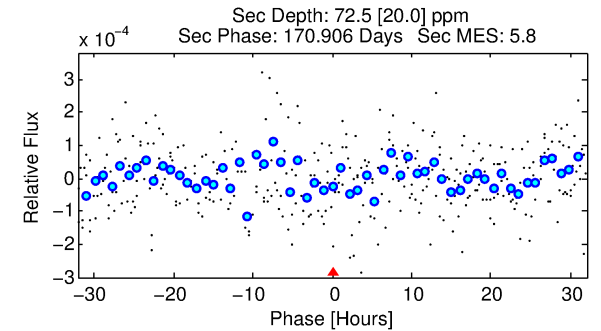
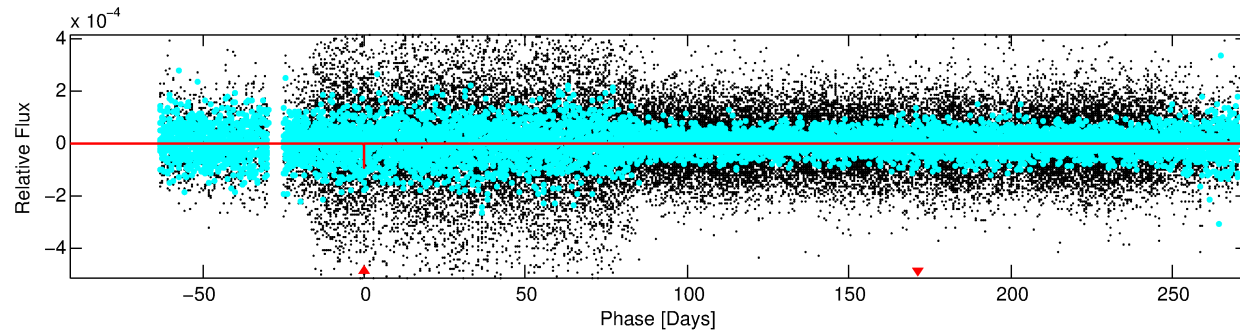
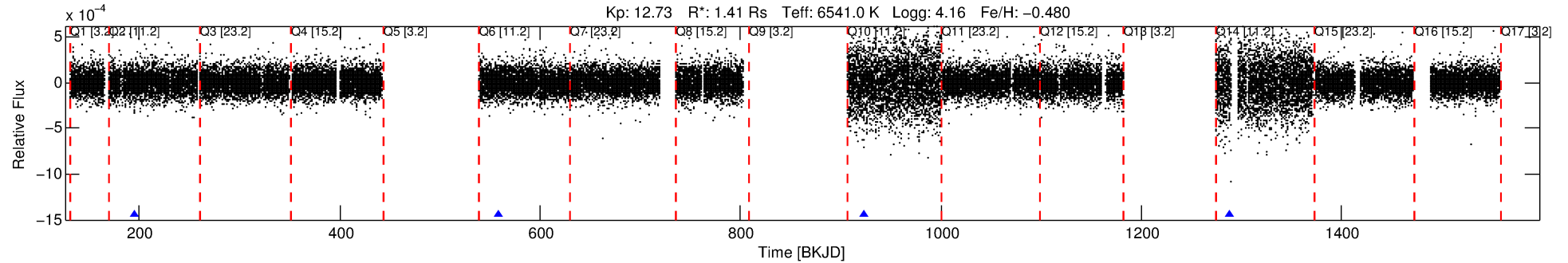
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 005517384-01

No Significant Match Found

DV One-Page Summary

KIC: 5517384 Candidate: 1 of 1 Period: 364.255 d



DV Fit Results:

Period = 364.25545 [0.01595] d
Epoch = 194.7016 [0.0235] BKJD
Rp/R* = 0.0101 [0.0136]
a/R* = 277.36 [2119.68]
b = 0.86 [2.39]
Seff = 3.16 [1.10]
Teq = 340 [29] K
Rp = 1.55 [2.12] Re
a = 1.0170 [0.2116] AU
Ag = 17136.46 [46905.15] [0.37σ]
Teffp = 6013 [4088] K [1.39σ]

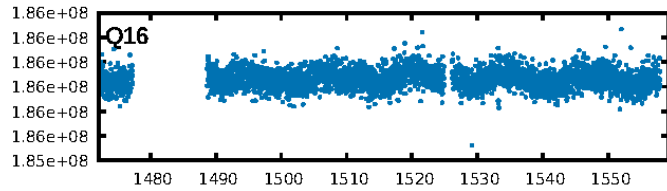
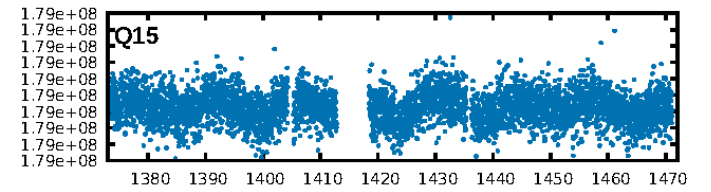
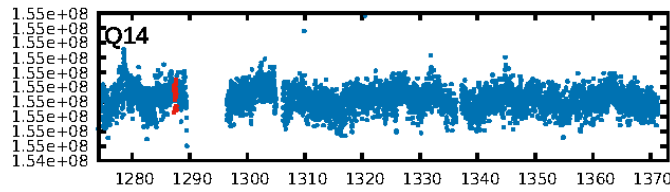
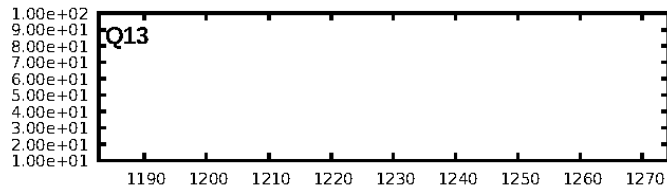
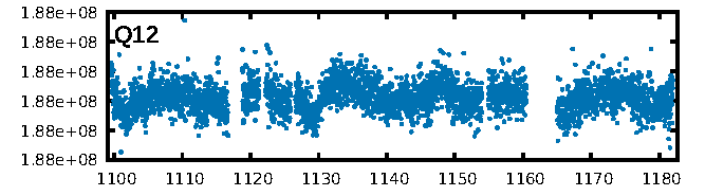
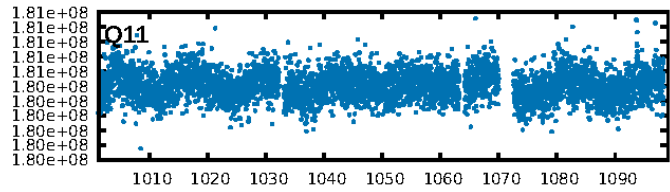
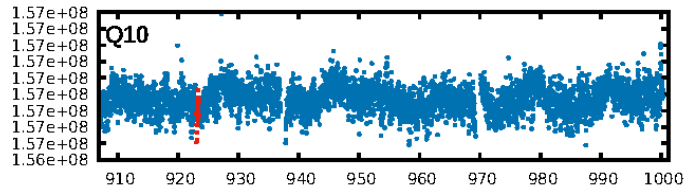
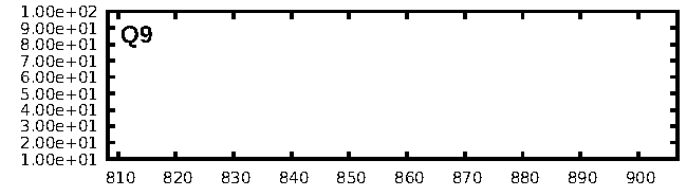
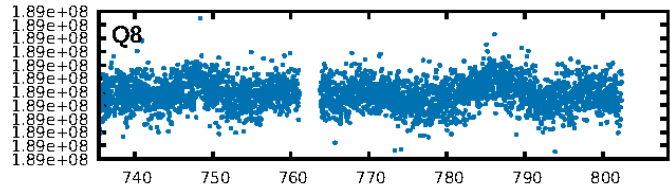
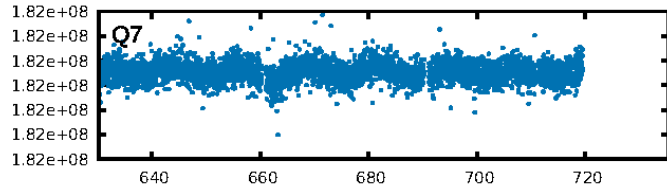
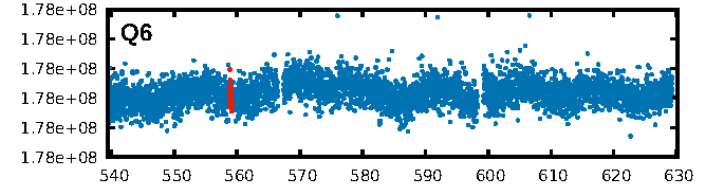
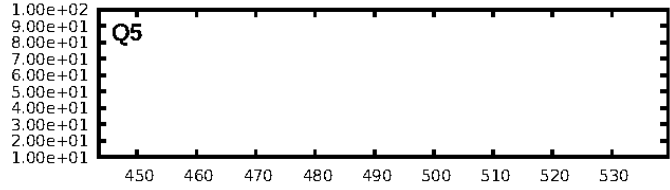
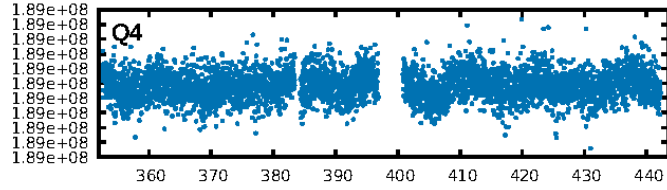
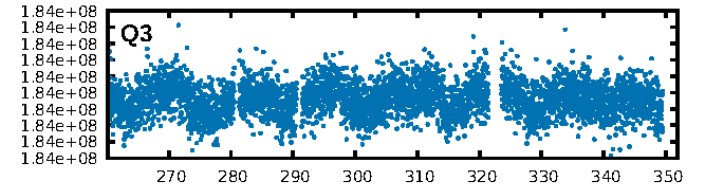
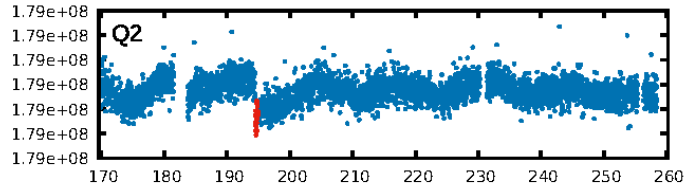
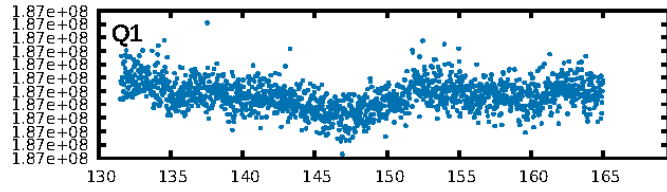
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: 0.6%
ModelChiSquareGof-sig: 83.1%
Bootstrap-pfa: 2.77e-19
RollingBand-fgt: 1.00 [4/4]
GhostDiagnostic-chr: -0.2063
Centroid-sig: 43.5%
Centroid-so: 1.933 arcsec [0.74σ]
OotOffset-rm: 3.188 arcsec [0.69σ]
KicOffset-rm: 2.943 arcsec [1.13σ]
OotOffset-st: 2/0/0/0 [2]
KicOffset-st: 2/0/0/0 [2]
DiffImageQuality-fgm: 0.50 [1/2]
DiffImageOverlap-fno: 1.00 [4/4]

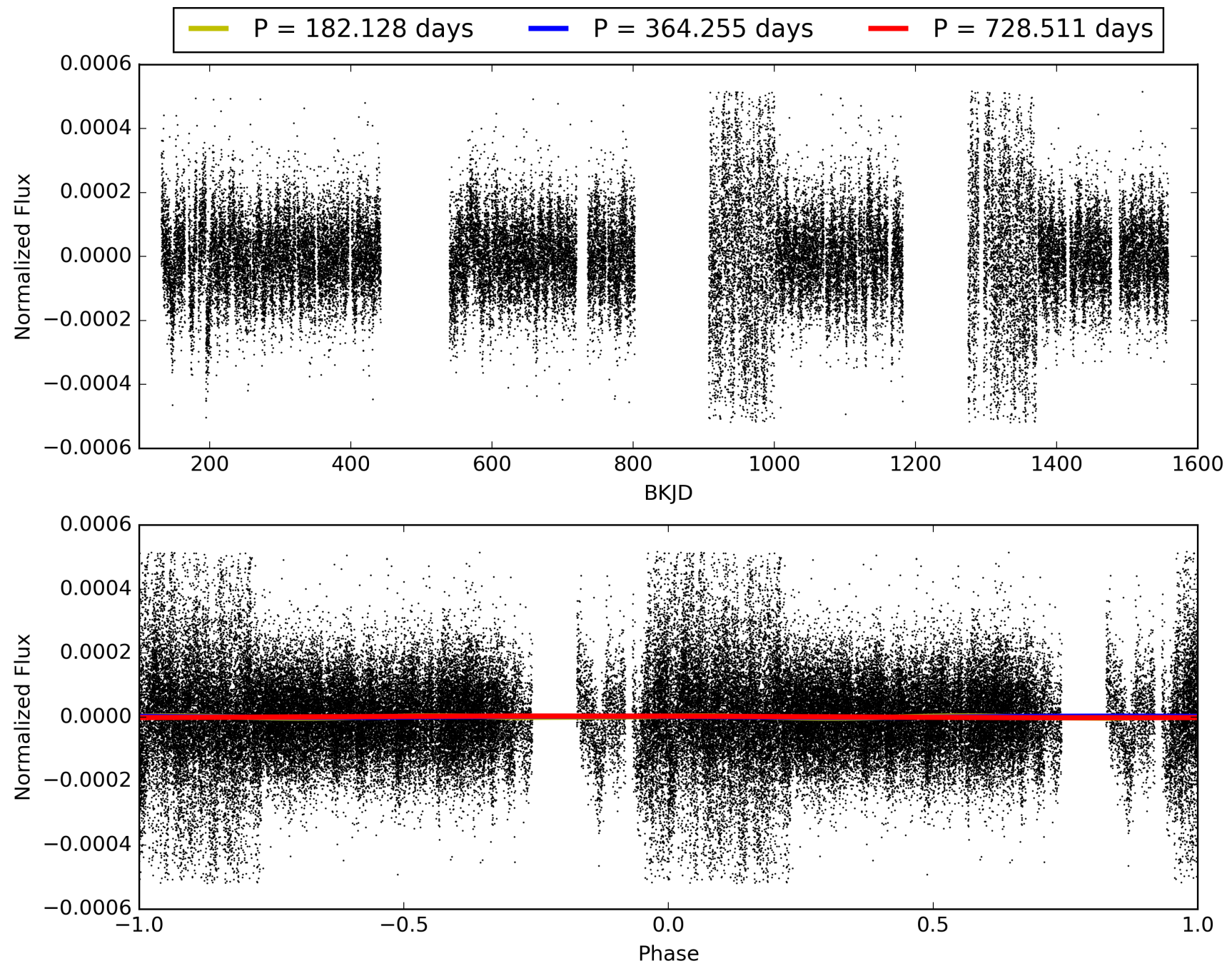
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 31-Jan-2016 21:33:16 Z

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

TCE 005517384-01, PDC Light Curves

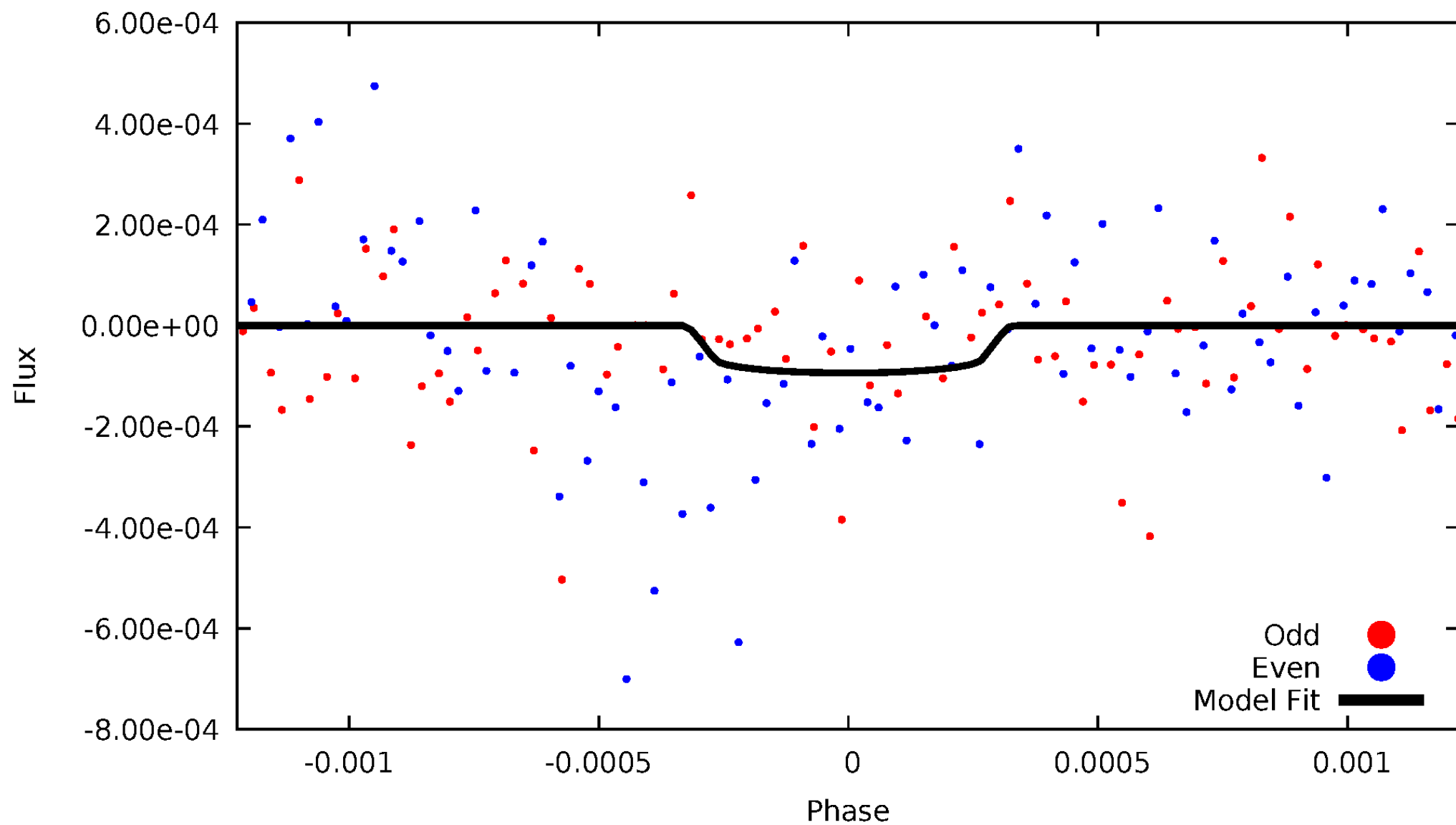


TCE 005517384-01



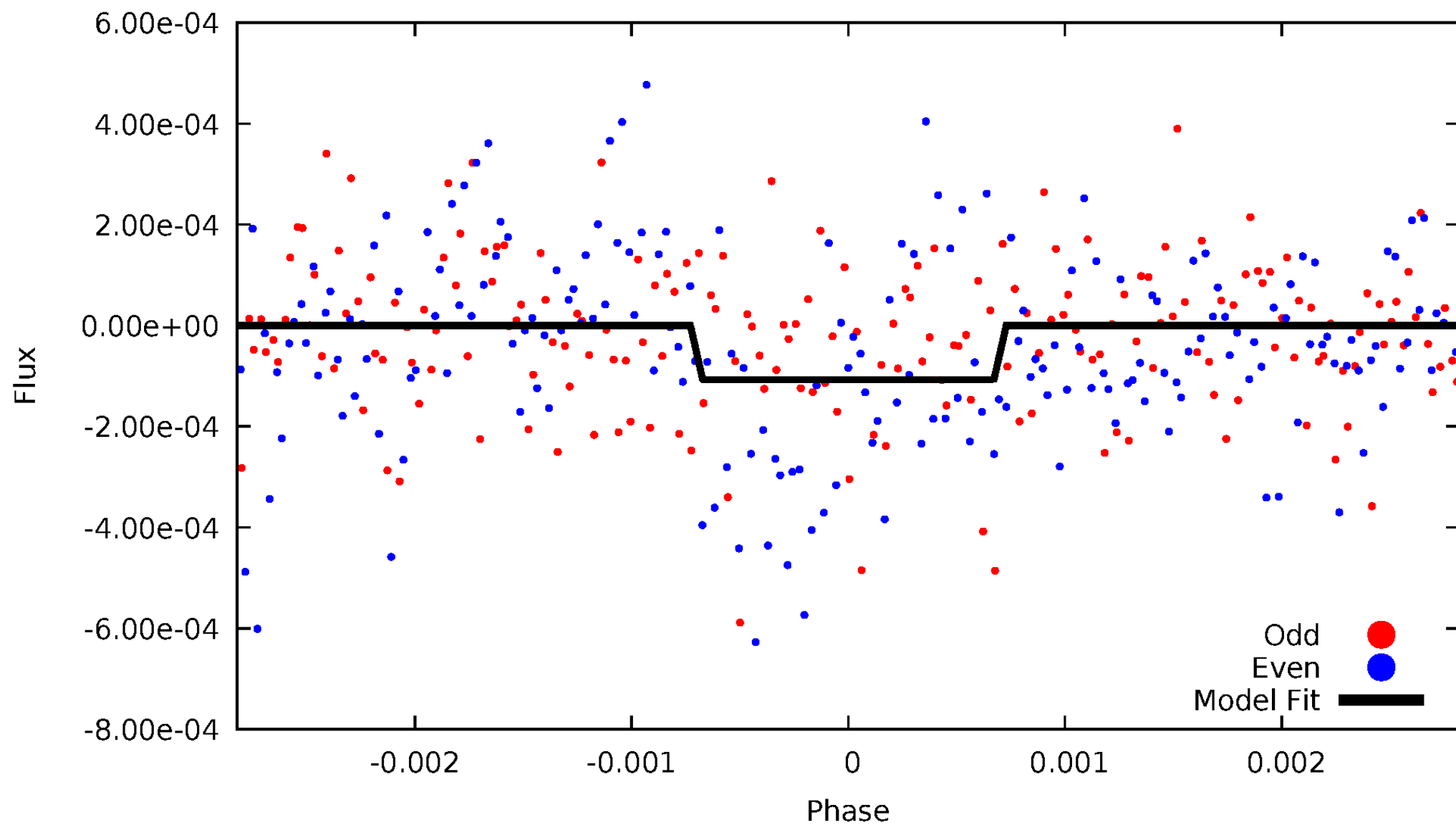
DV Odd/Even

TCE 005517384-01

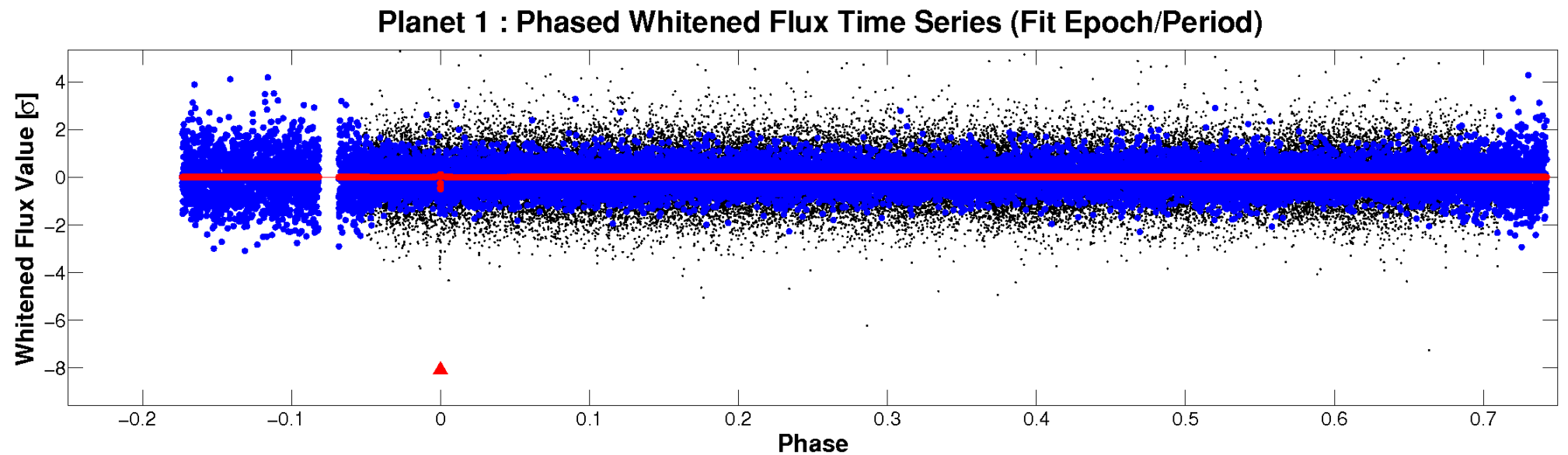
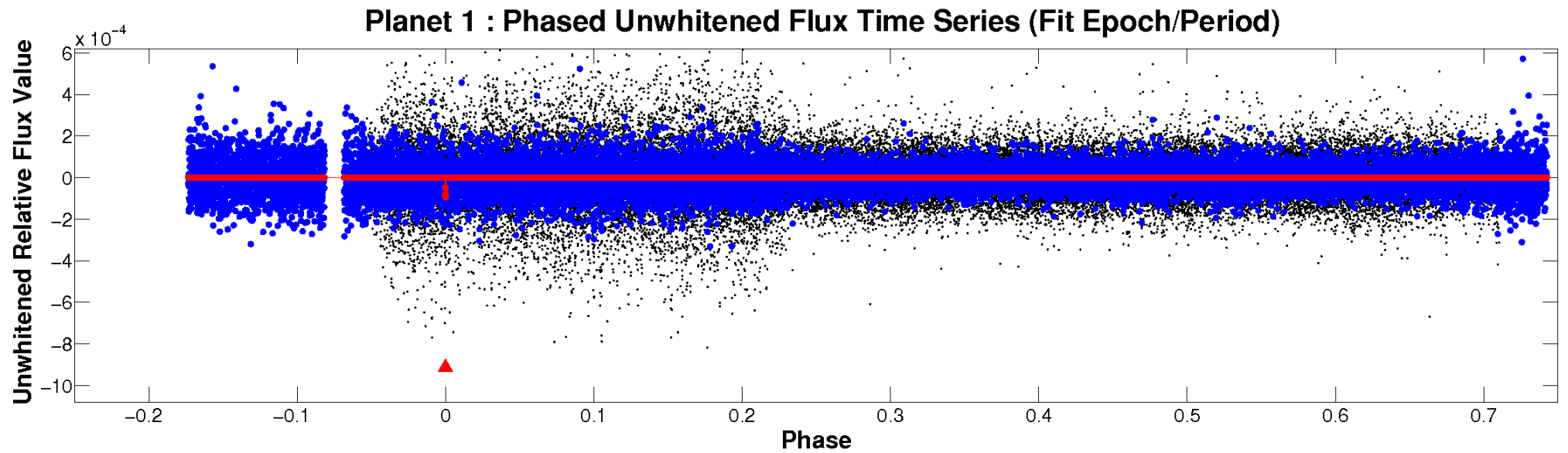


ALT Odd/Even

TCE 005517384-01

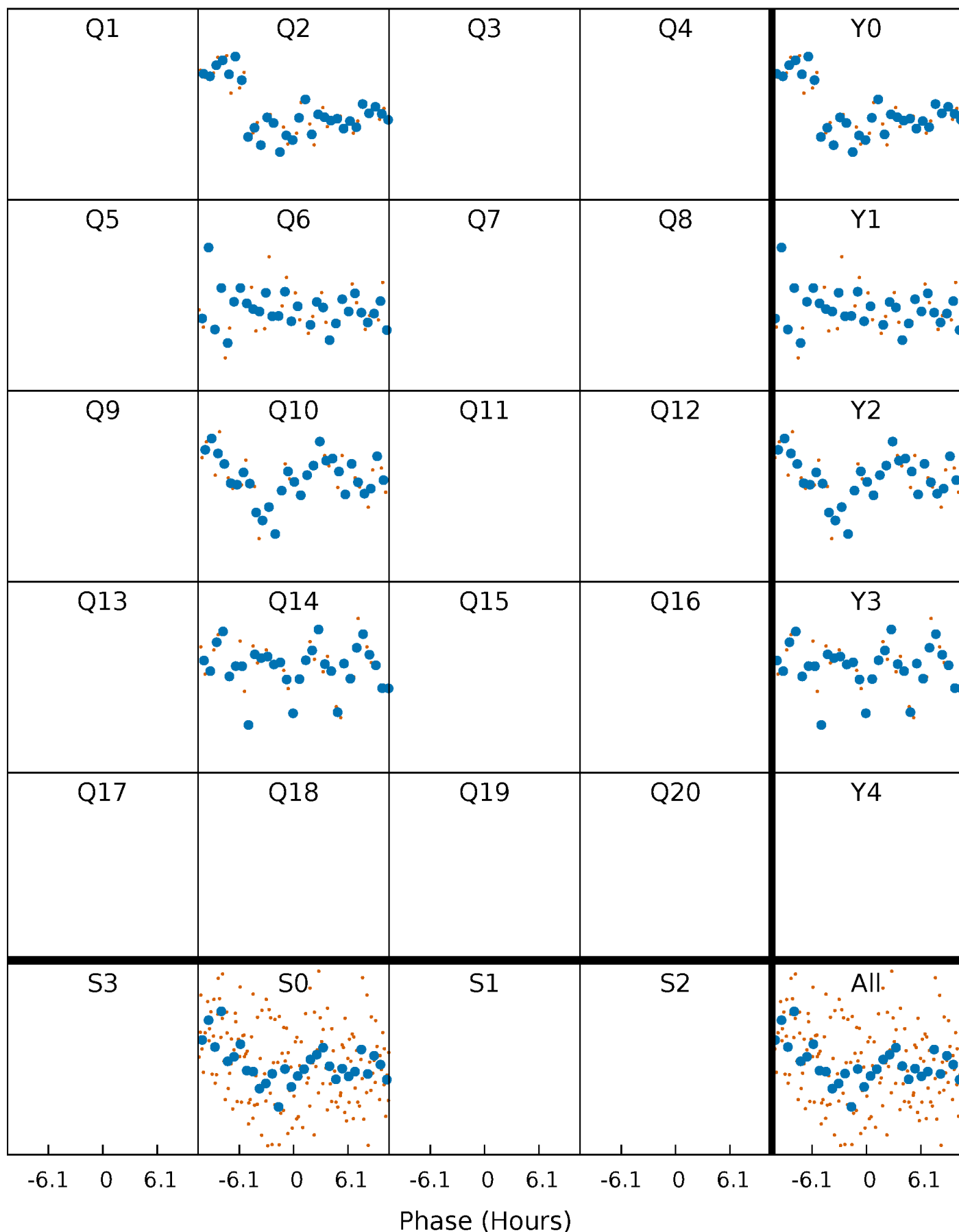


Non-Whitened Vs. Whitened Light Curve



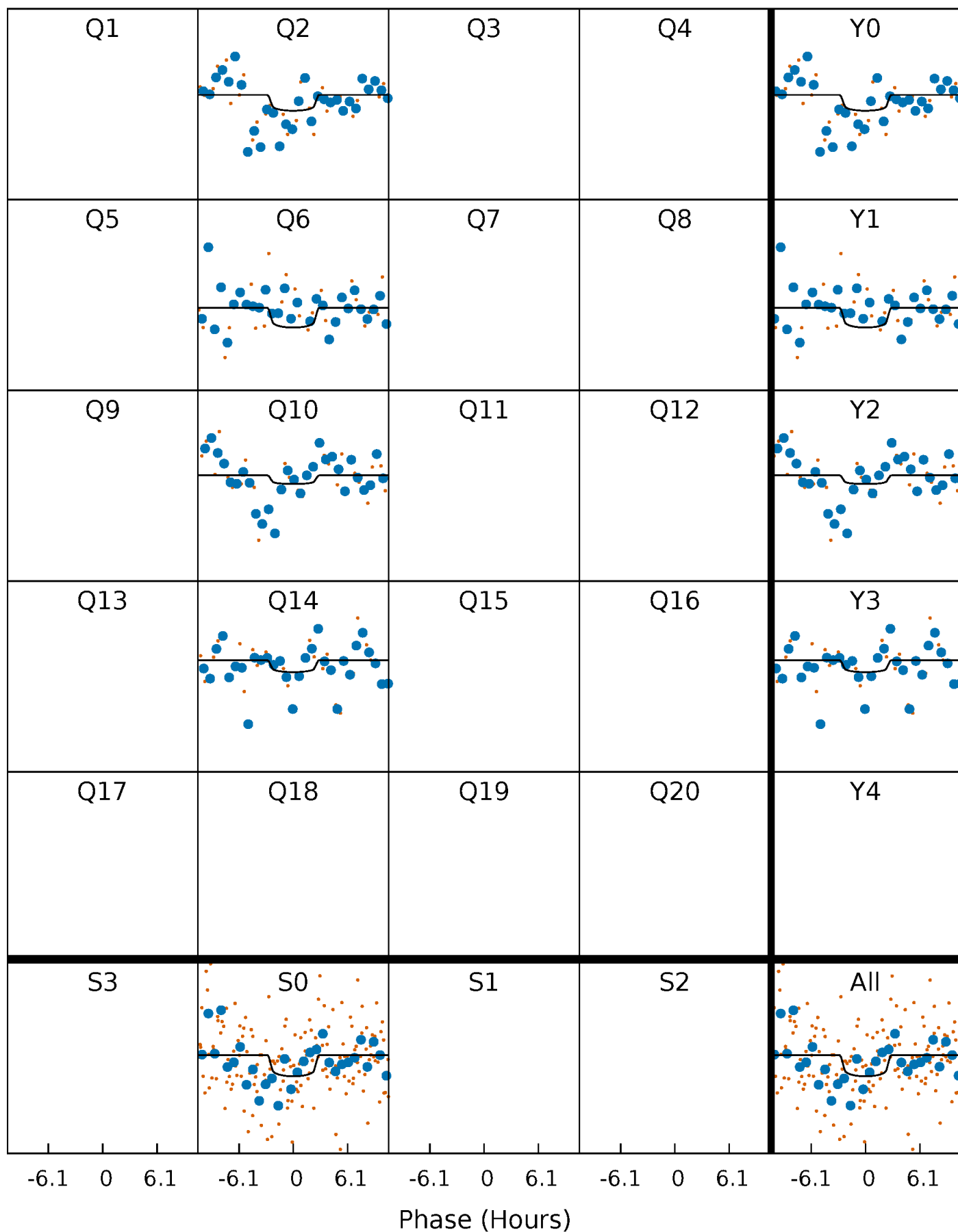
PDC Quarter-Phased Transit Curves

TCE 005517384-01 P=364.255452 Days $T_0=194.701611$ (BKJD)



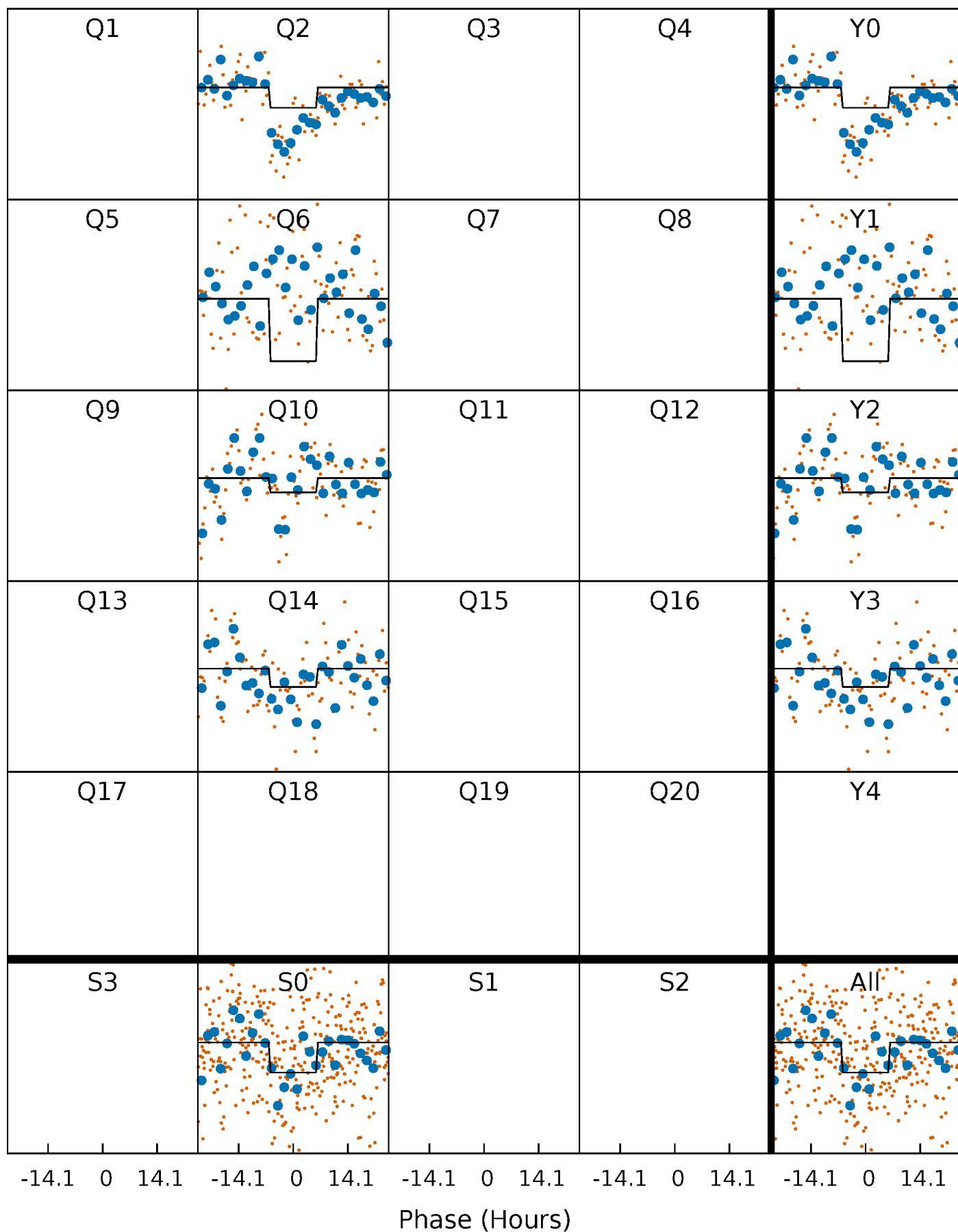
DV Quarter-Phased Transit Curves

TCE 005517384-01 P=364.255452 Days $T_0=194.701611$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

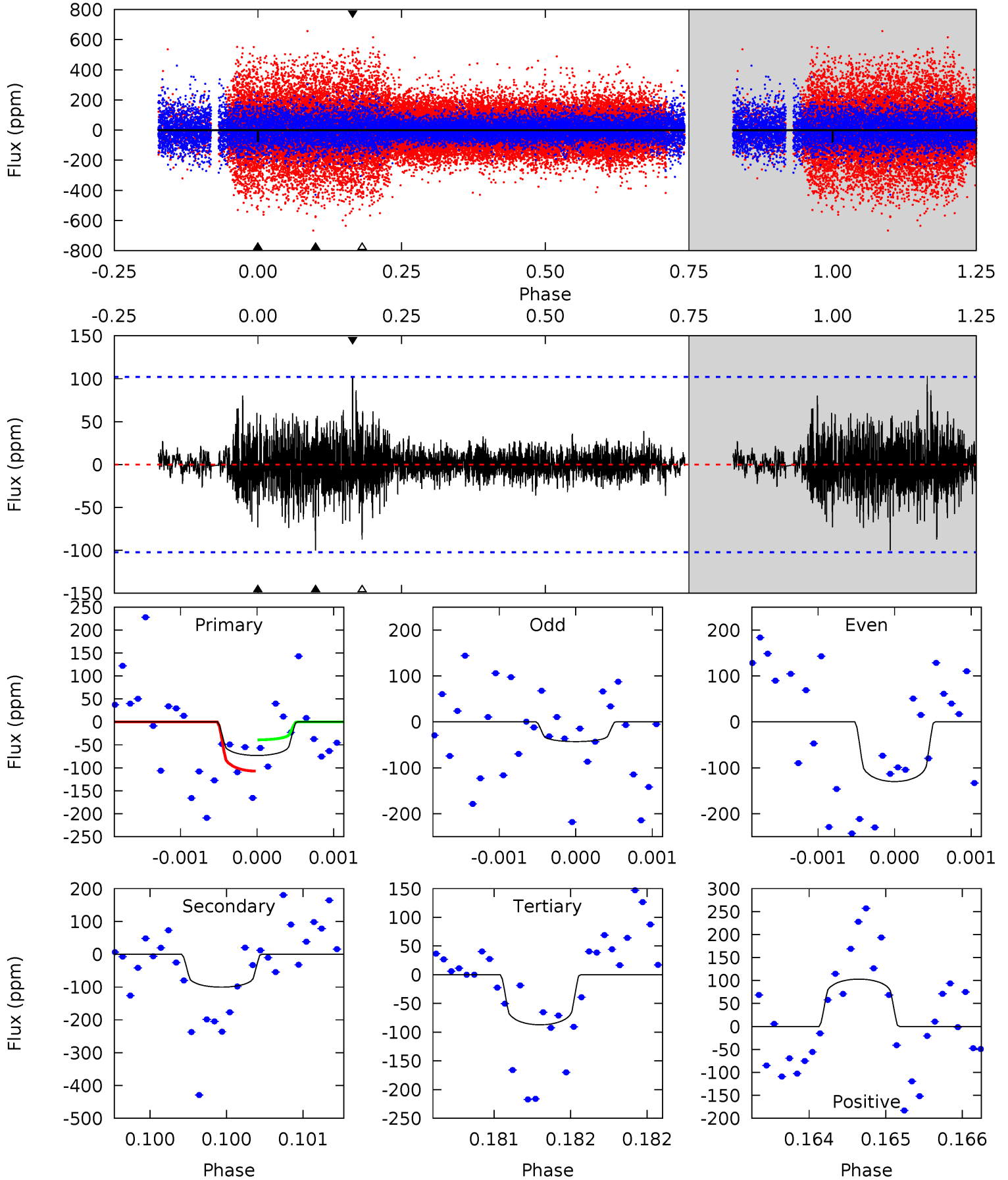
TCE 005517384-01 P=364.235018 Days $T_0=194.736112$ (BKJD)



DV Model-Shift Uniqueness Test

005517384-01, P = 364.255452 Days, E = 194.701611 Days

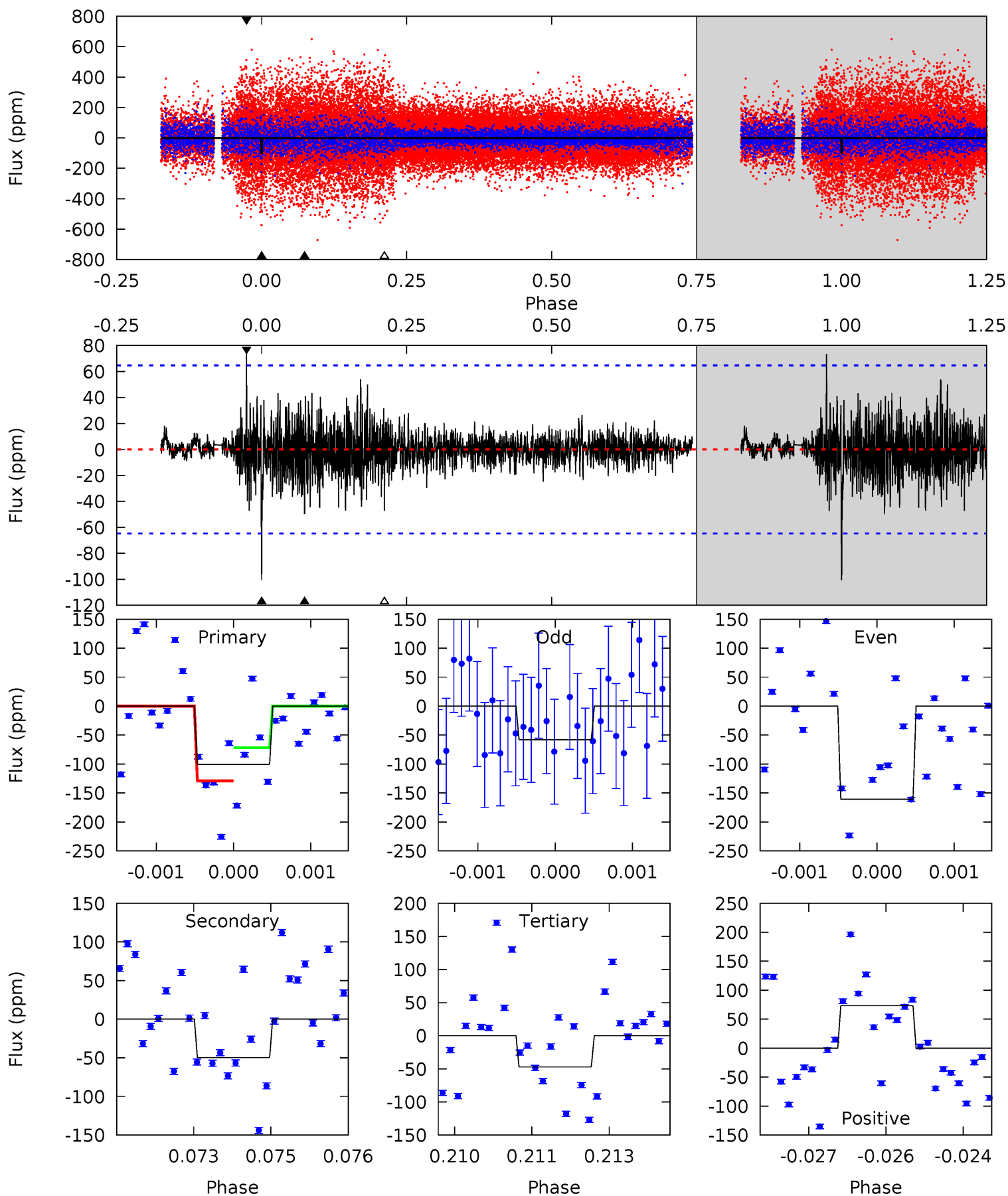
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
3.96	5.43	4.72	5.57	5.53	3.41	0.93	-0.76	-1.61	0.71	-0.15	2.35	0.79	0.51	1.90



Alt Model-Shift Uniqueness Test

005517384-01, P = 364.235018 Days, E = 194.736112 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
8.38	4.14	3.93	6.10	5.39	3.19	0.95	4.44	2.28	0.21	-1.95	4.19	1.02	0.42	2.42



Stellar Parameters For KIC 005517384

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	$M(M_{\odot})$	ρ_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	6541^{+146}_{-178}	$4.163^{+0.192}_{-0.128}$	$-0.480^{+0.300}_{-0.300}$	$1.411^{+0.280}_{-0.311}$	$1.057^{+0.162}_{-0.118}$	$0.529^{+0.533}_{-0.195}$
	+2%/-3%	+5%/-3%	+62%/-62%	+20%/-22%	+15%/-11%	+101%/-37%
Source	PHO1	FLK73	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 005517384-01 / KOI

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	-100 ± 18	$2.14^{+1.97}_{-1.34}$	471^{+29}_{-30}	5509^{+4534}_{-1310}	12417^{+84025}_{-9202}
Alt.	-50 ± 12	$2.04^{+1.88}_{-1.31}$	473^{+24}_{-29}	4796^{+3127}_{-1057}	6598^{+46505}_{-4805}

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

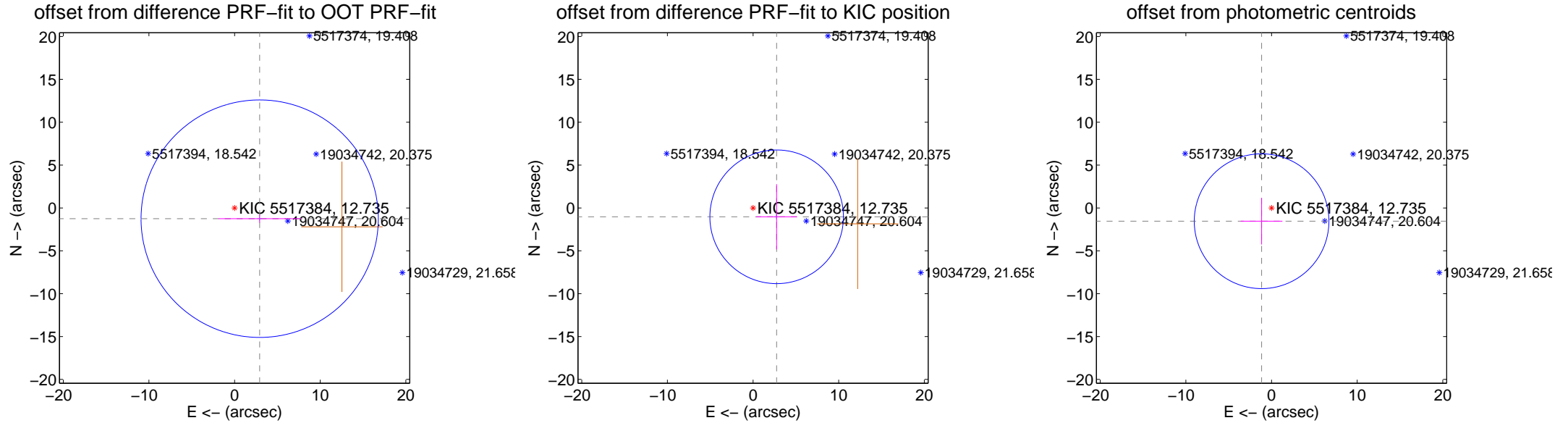
DV Centroid Data

Supplemental centroid analysis for 005517384-01. Kepler magnitude: 12.73. Transit SNR 3.21

There are 1 quarters with good PRF difference image offsets

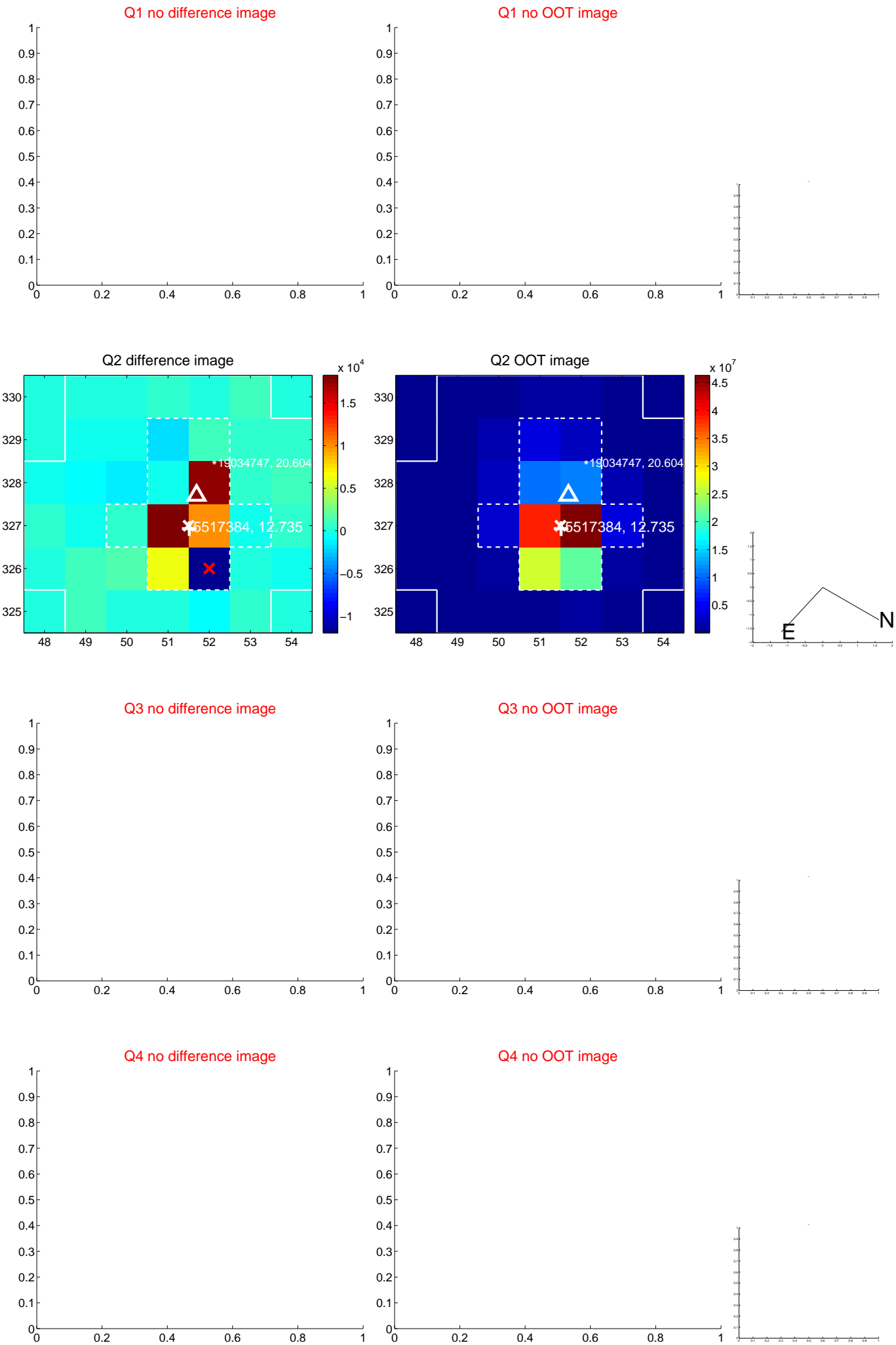
The direct PRF centroid is offset from the target star catalog position by about 0.48 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	3.188 ± 4.617	0.69	-2.931 ± 4.817	-1.252 ± 0.479
PRF-fit source offset from KIC position	2.943 ± 2.599	1.13	-2.756 ± 2.381	-1.033 ± 3.804
photometric centroid source offset	1.93 ± 2.62	0.74	1.16 ± 2.44	-1.55 ± 2.72



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.

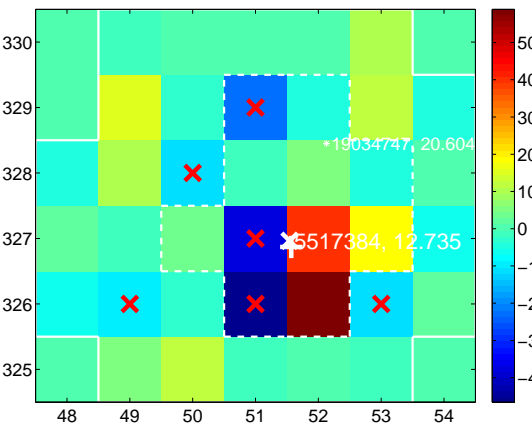
Q5 no difference image



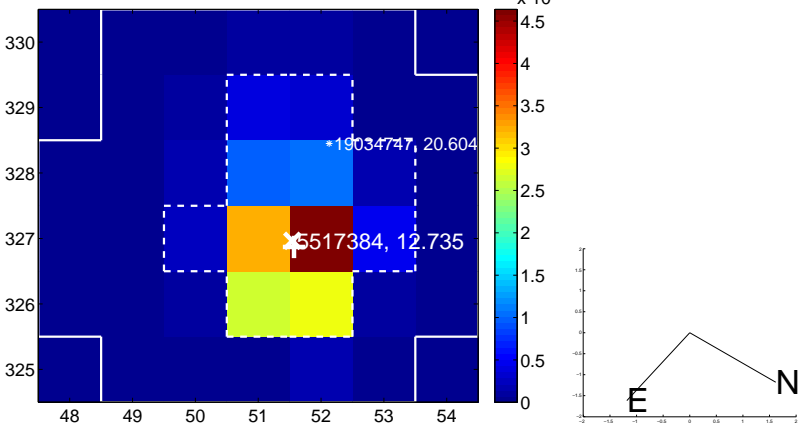
Q5 no OOT image



Q6 difference image. Poor Quality



Q6 OOT image



Q7 no difference image



Q7 no OOT image



Q8 no difference image



Q8 no OOT image



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

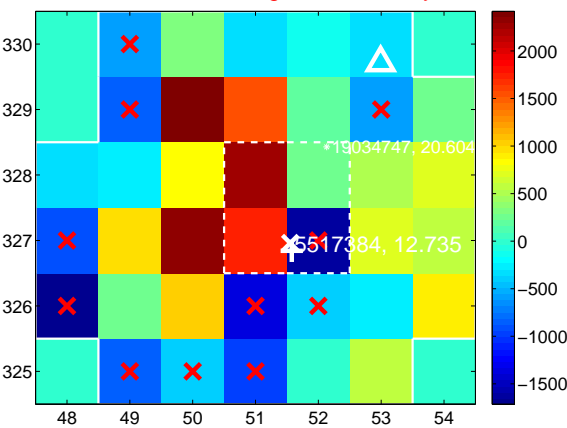
Q9 no difference image



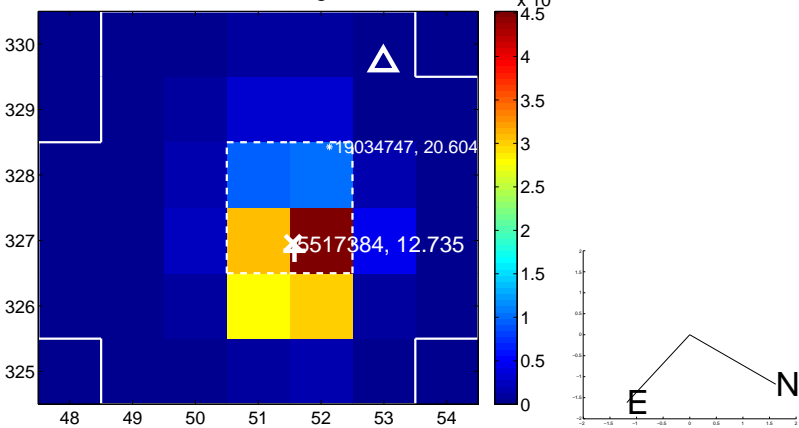
Q9 no OOT image



Q10 difference image. Poor Quality



Q10 OOT image



Q11 no difference image



Q11 no OOT image



Q12 no difference image



Q12 no OOT image



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

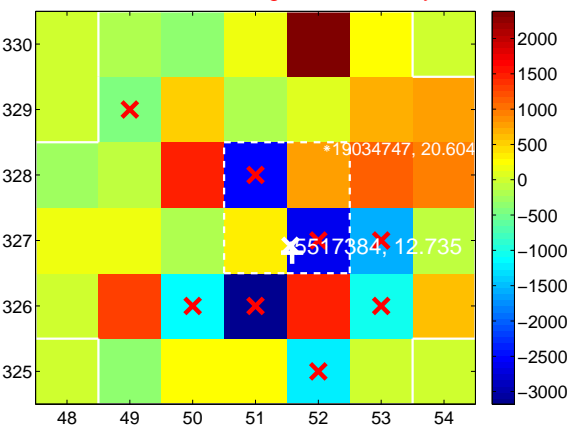
Q13 no difference image



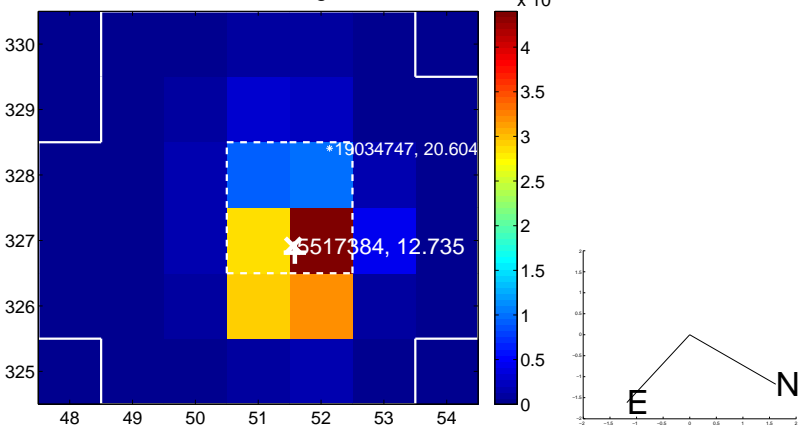
Q13 no OOT image



Q14 difference image. Poor Quality



Q14 OOT image



Q15 no difference image



Q15 no OOT image



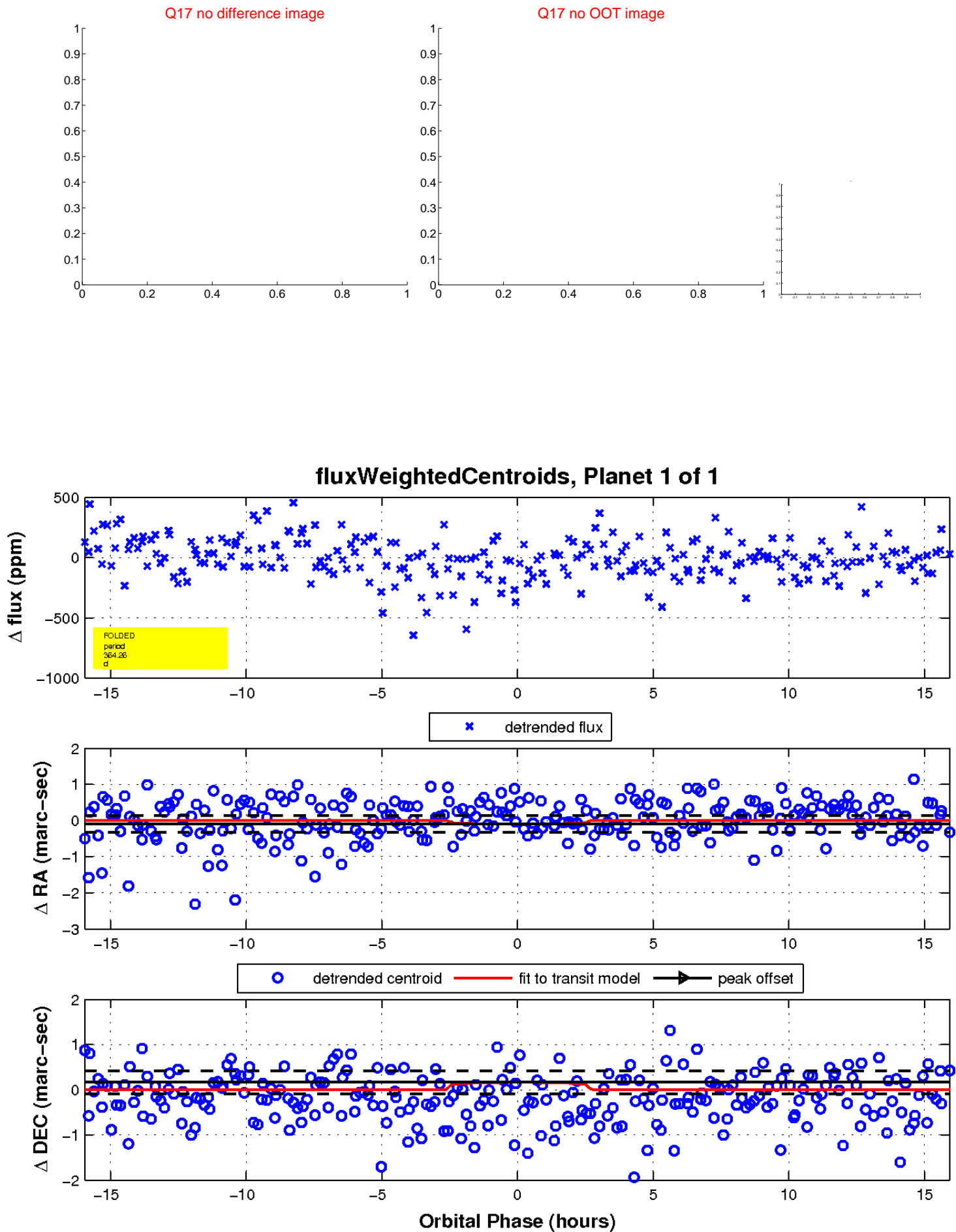
Q16 no difference image



Q16 no OOT image



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



UKIRT Image

Declination

