

KIC 007694417

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})
007694417-01	OBS	No	369.563988	233.433057	270.4	17.643	7.3	7.9	1.01	6205	1.74	1.31

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
007694417-01	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_MARSHALL_SKYE—LPP_DV—ALL_TRANS_CHASES—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.

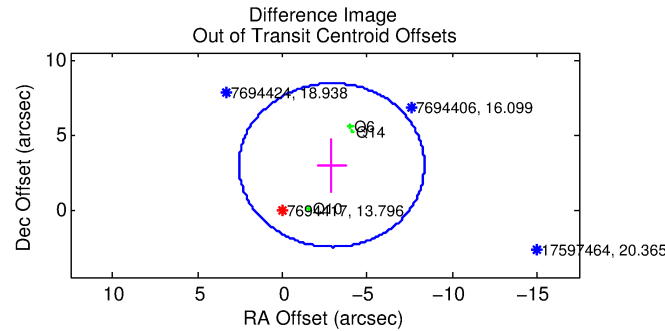
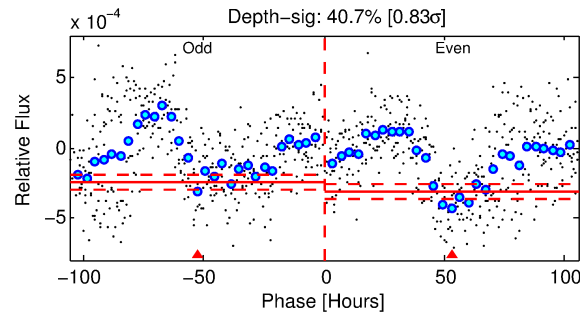
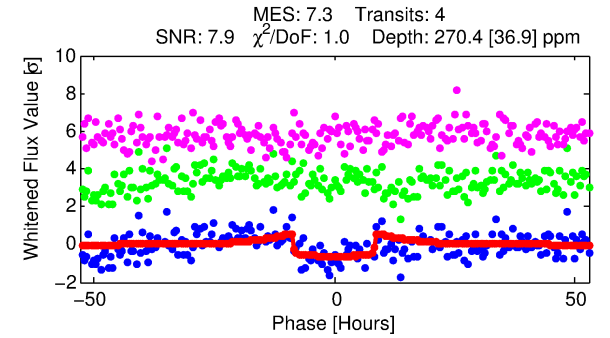
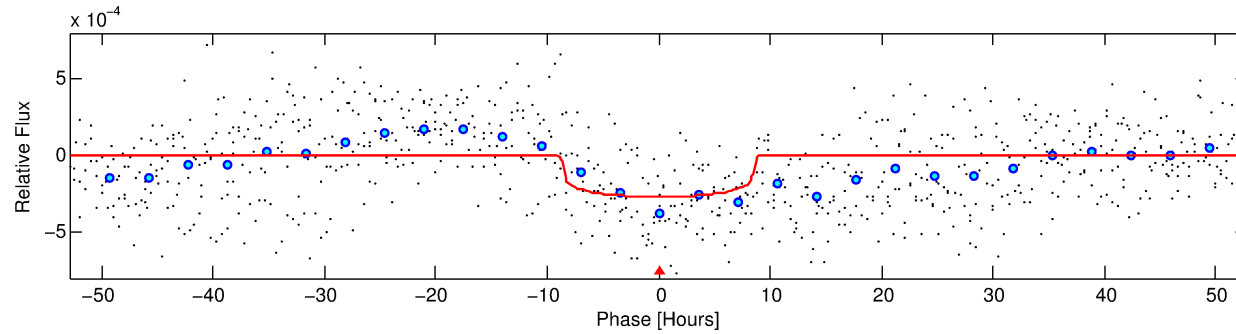
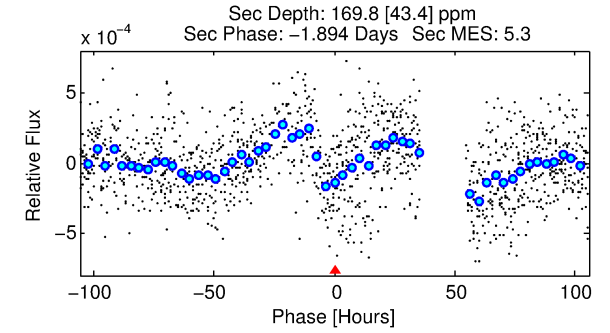
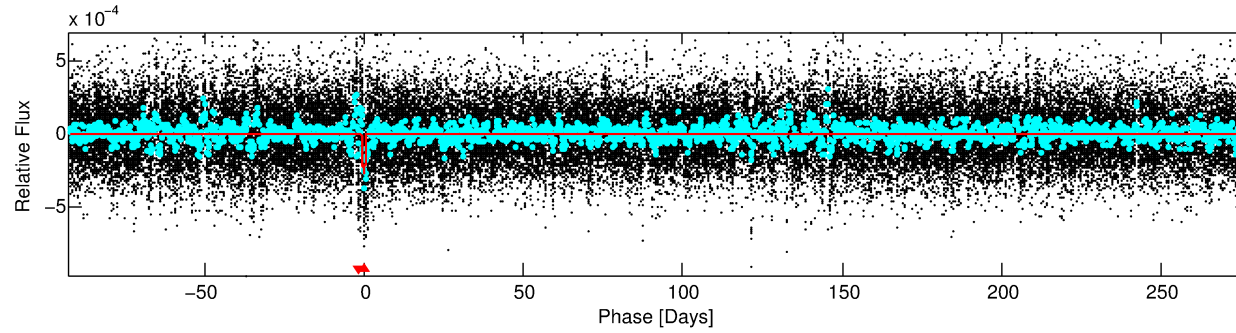
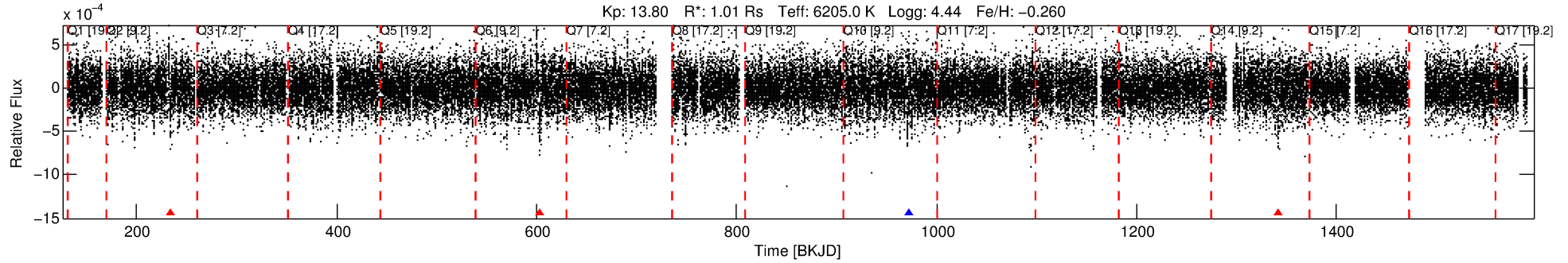
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 007694417-01

No Significant Match Found

DV One-Page Summary

KIC: 7694417 Candidate: 1 of 1 Period: 369.564 d



DV Fit Results:

Period = 369.56399 [0.00971] d
Epoch = 233.4331 [0.0179] BKJD
Rp/R* = 0.0159 [0.0034]
a/R* = 126.71 [129.37]
b = 0.64 [0.96]
Seff = 1.31 [0.53]
Teq = 273 [28] K
Rp = 1.74 [0.66] Re
a = 1.0121 [0.2653] AU
Ag = 31510.34 [19943.15] [1.58σ]
Teffp = 5622 [732] K [7.30σ]

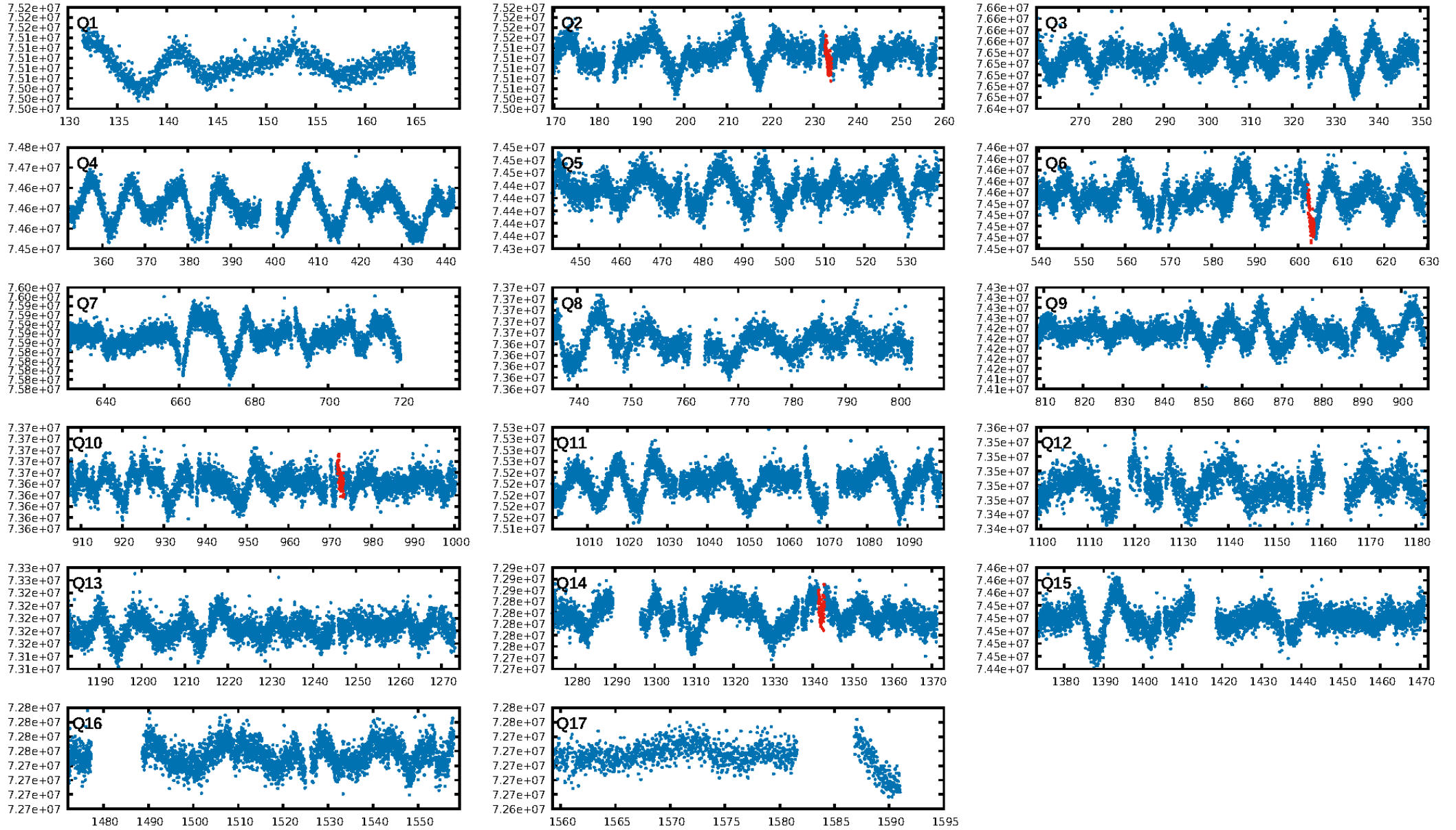
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: 34.3%
ModelChiSquareGof-sig: 100.0%
Bootstrap-pfa: 1.05e-10
RollingBand-fgt: 0.25 [1/4]
GhostDiagnostic-chr: 1.353
Centroid-sig: 58.6%
Centroid-so: 1.606 arcsec [0.72σ]
OotOffset-rm: 4.162 arcsec [2.29σ]
KicOffset-rm: 4.110 arcsec [2.38σ]
OotOffset-st: 3/0/0/0 [3]
KicOffset-st: 3/0/0/0 [3]
DiffImageQuality-fgm: 0.00 [0/3]
DiffImageOverlap-fno: 1.00 [3/3]

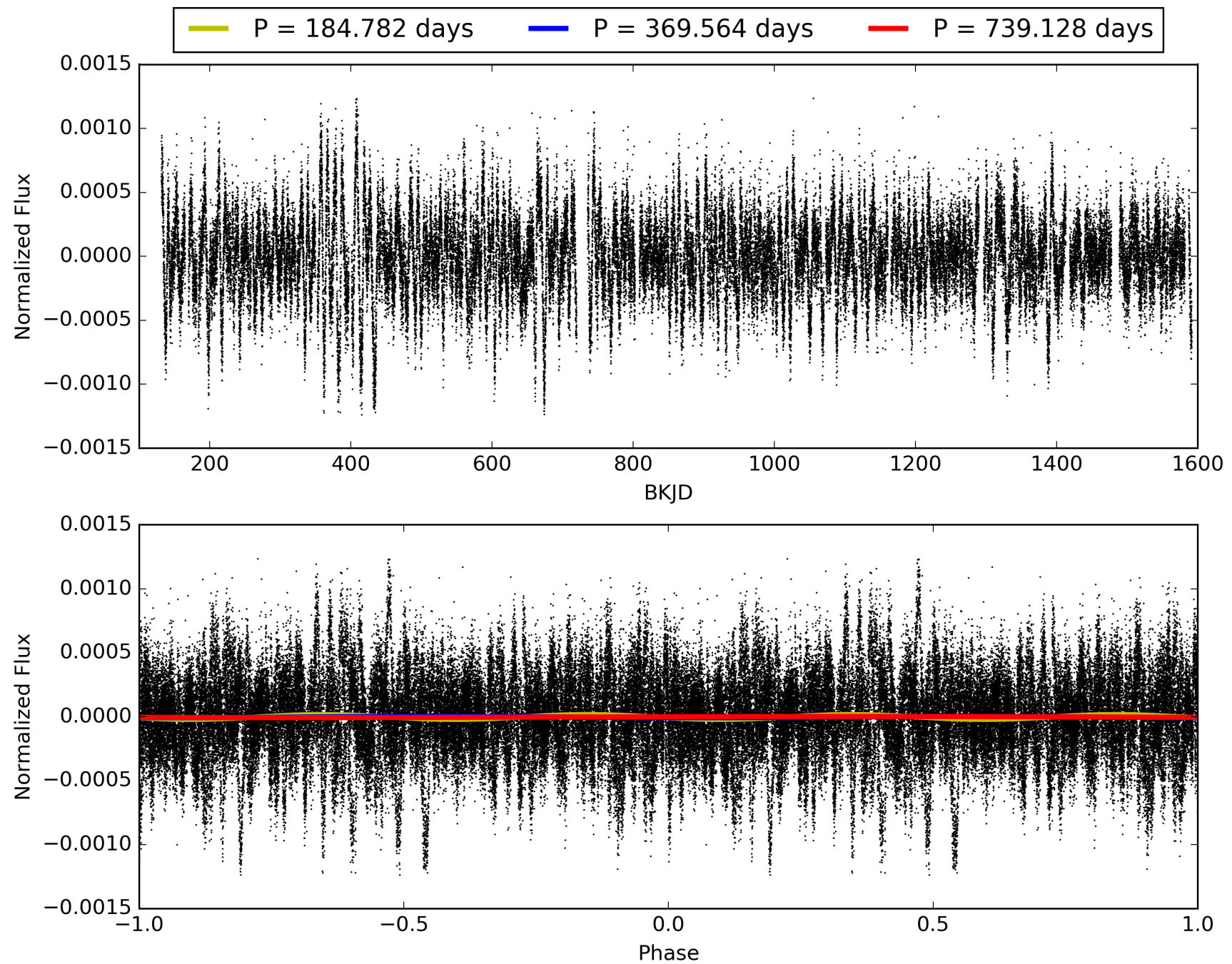
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 29-Jan-2016 00:47:26 Z

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

TCE 007694417-01, PDC Light Curves

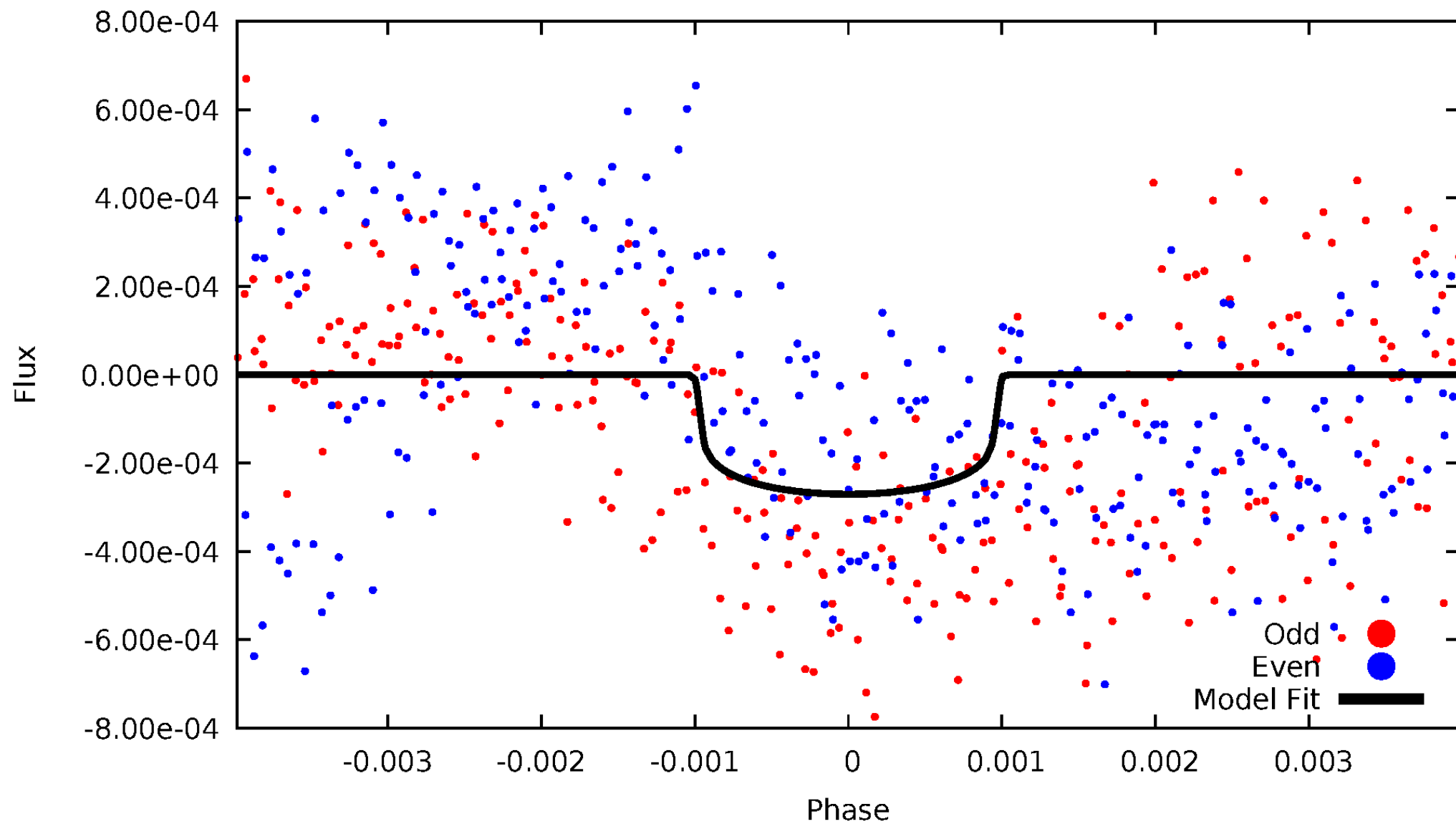


TCE 007694417-01



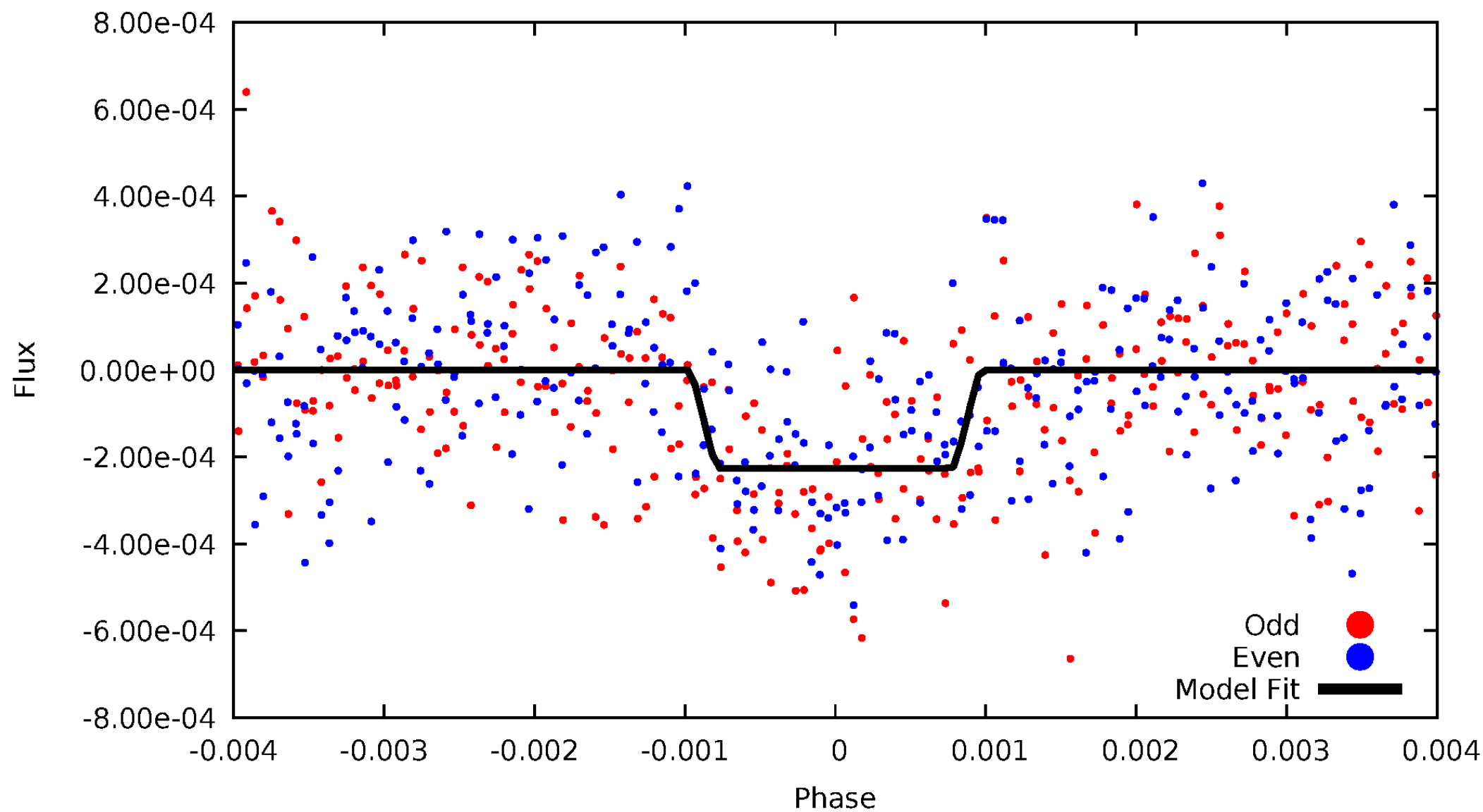
DV Odd/Even

TCE 007694417-01

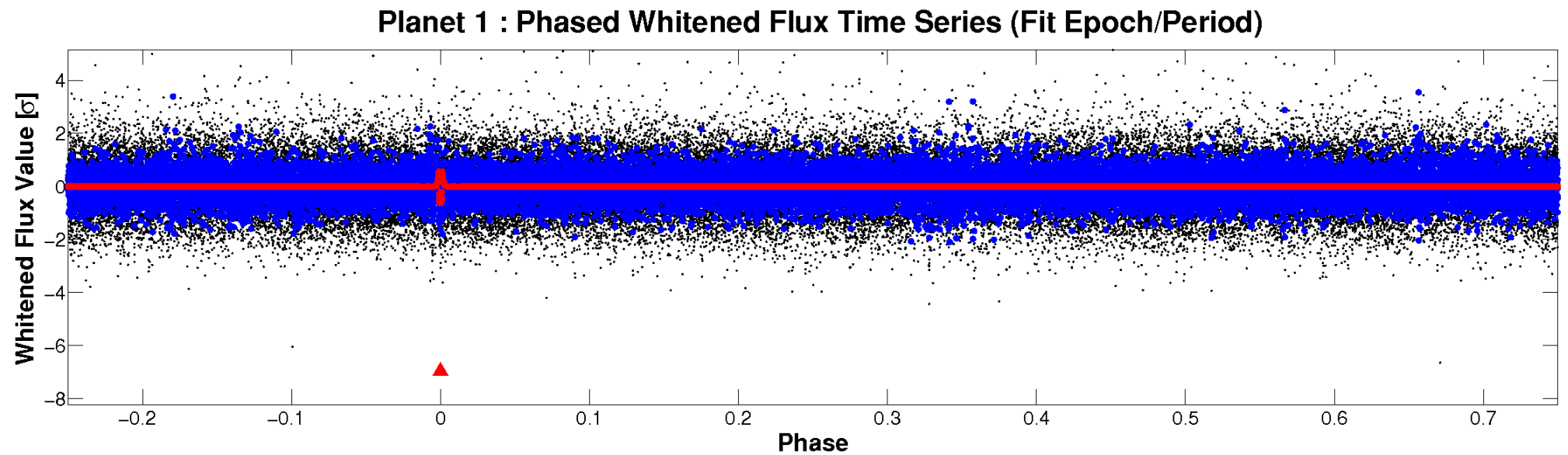
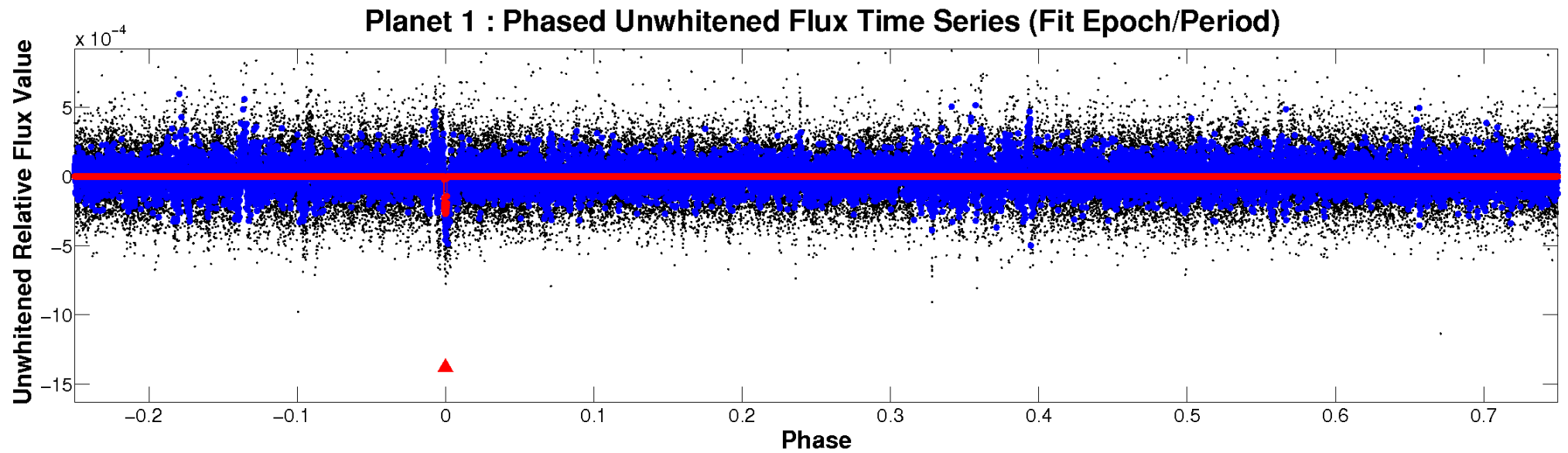


ALT Odd/Even

TCE 007694417-01

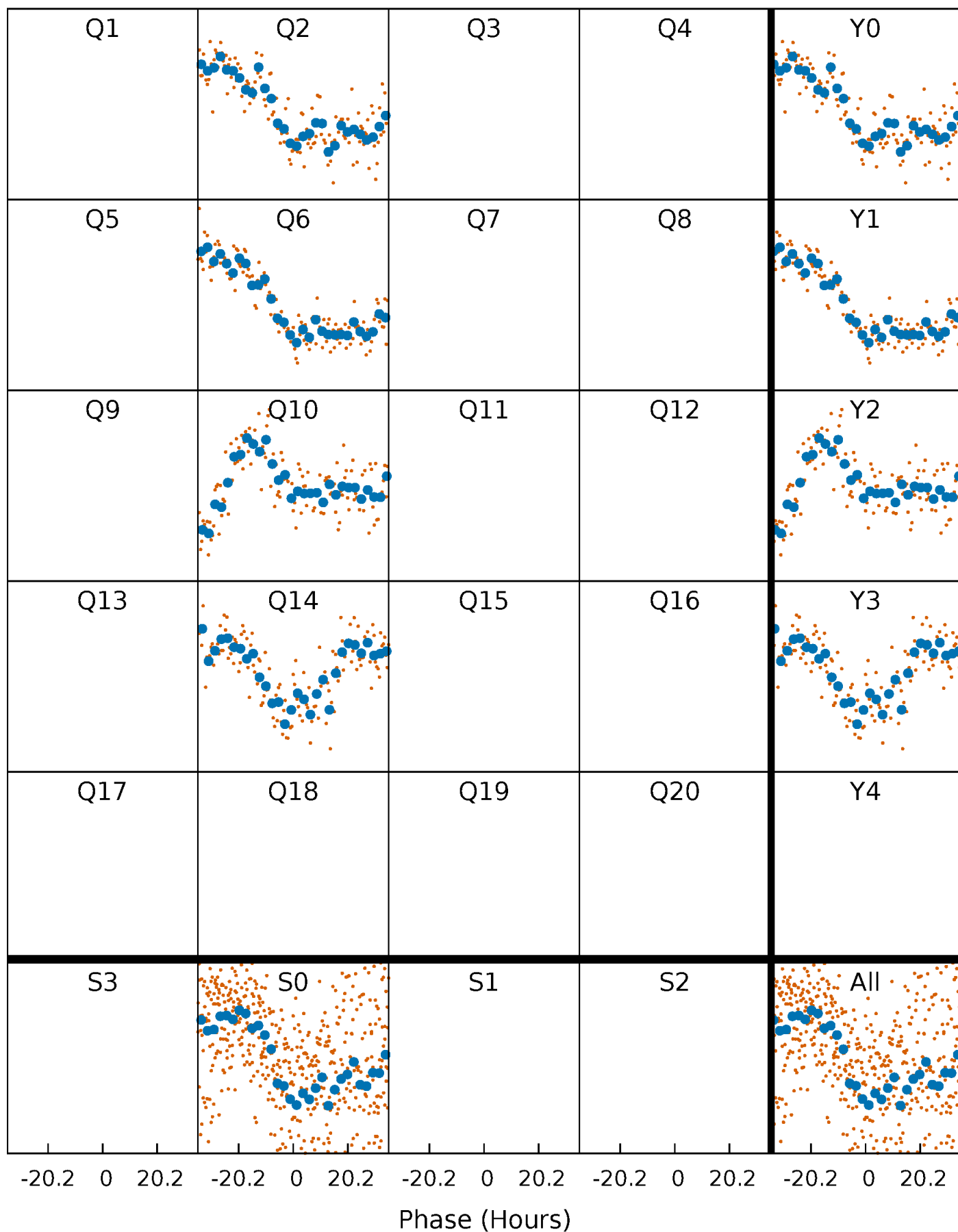


Non-Whitened Vs. Whitened Light Curve



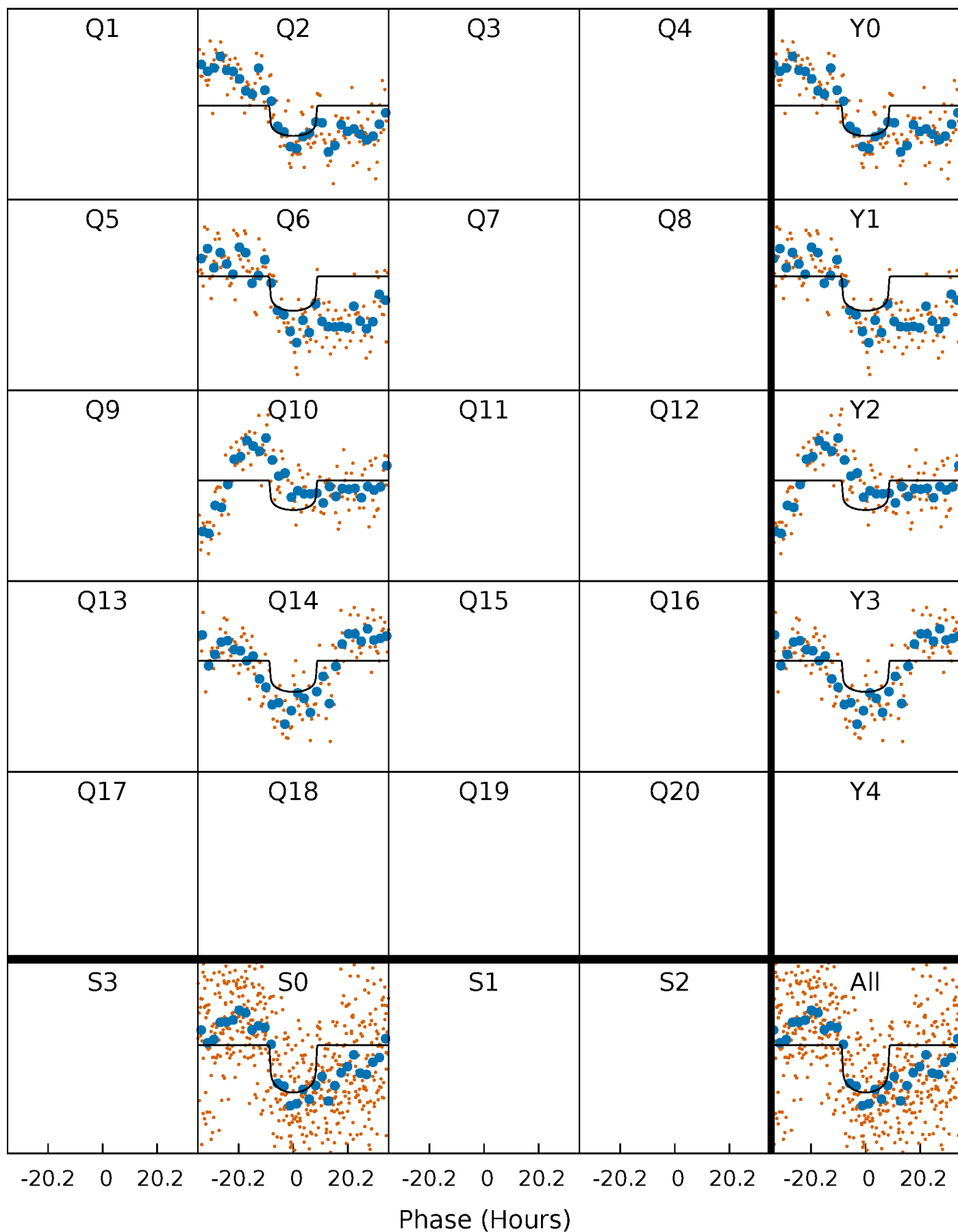
PDC Quarter-Phased Transit Curves

TCE 007694417-01 P=369.563988 Days $T_0=233.433057$ (BKJD)



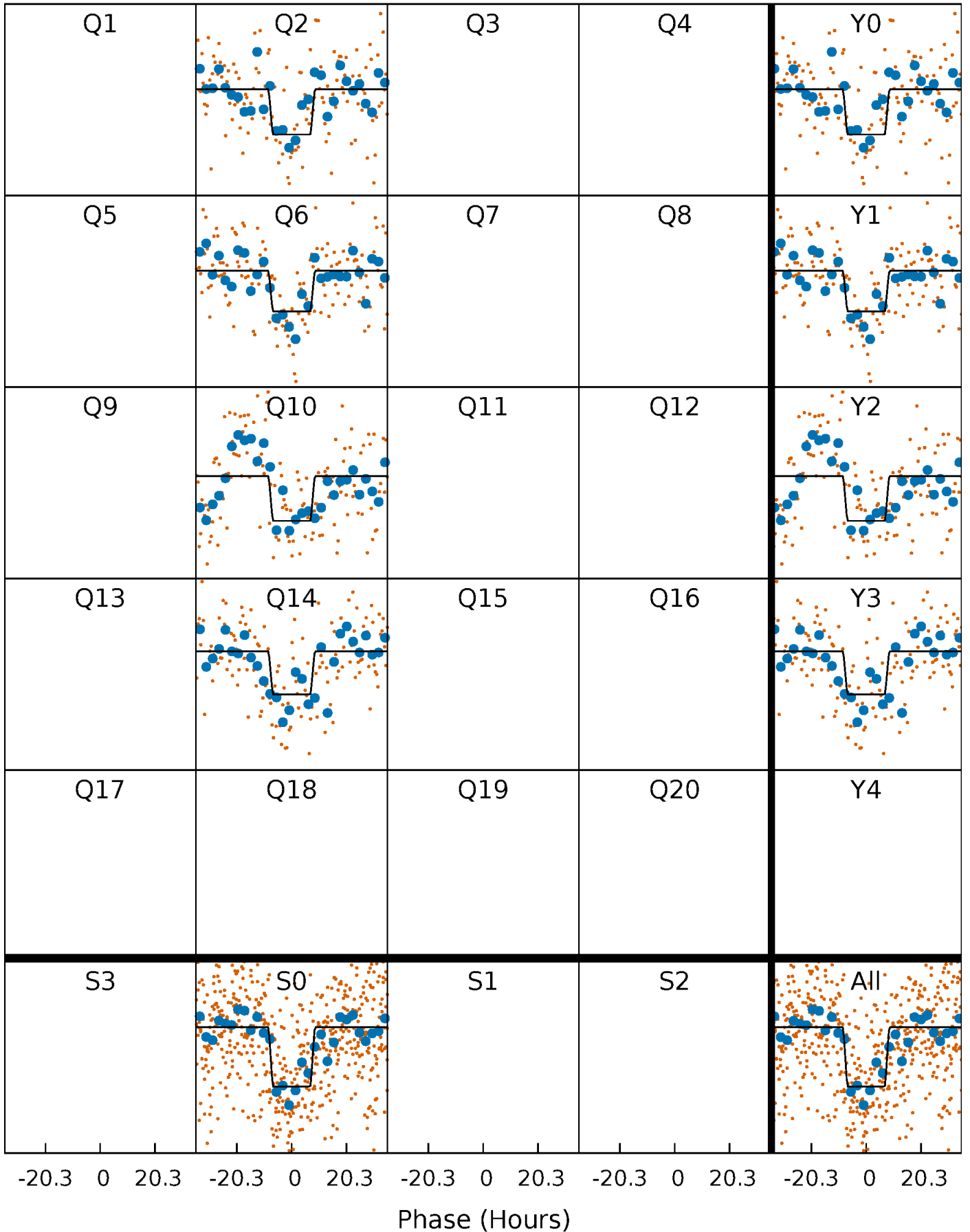
DV Quarter-Phased Transit Curves

TCE 007694417-01 P=369.563988 Days $T_0=233.433057$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

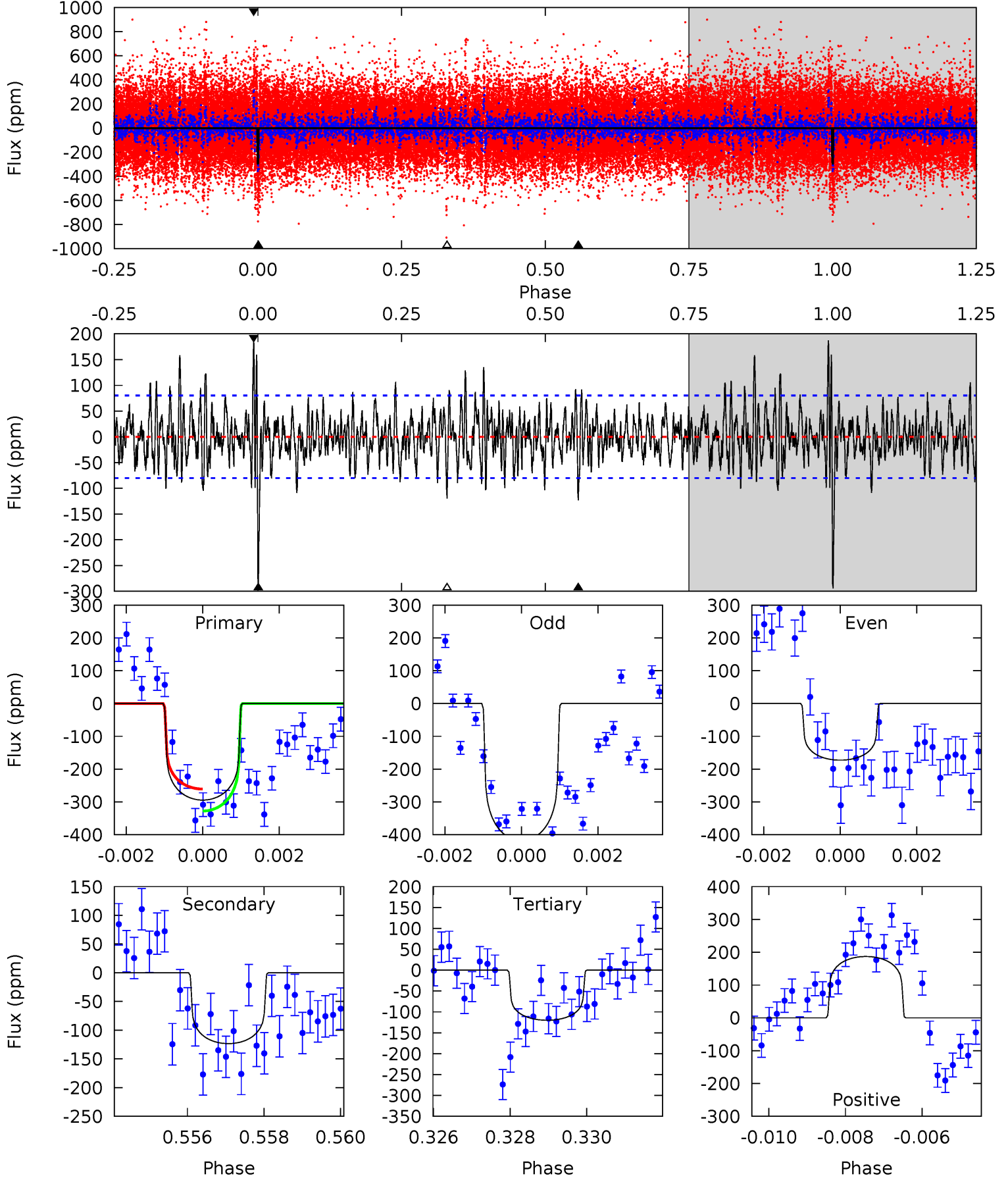
TCE 007694417-01 P=369.561366 Days $T_0=233.434205$ (BKJD)



DV Model-Shift Uniqueness Test

007694417-01, P = 369.563988 Days, E = 233.433057 Days

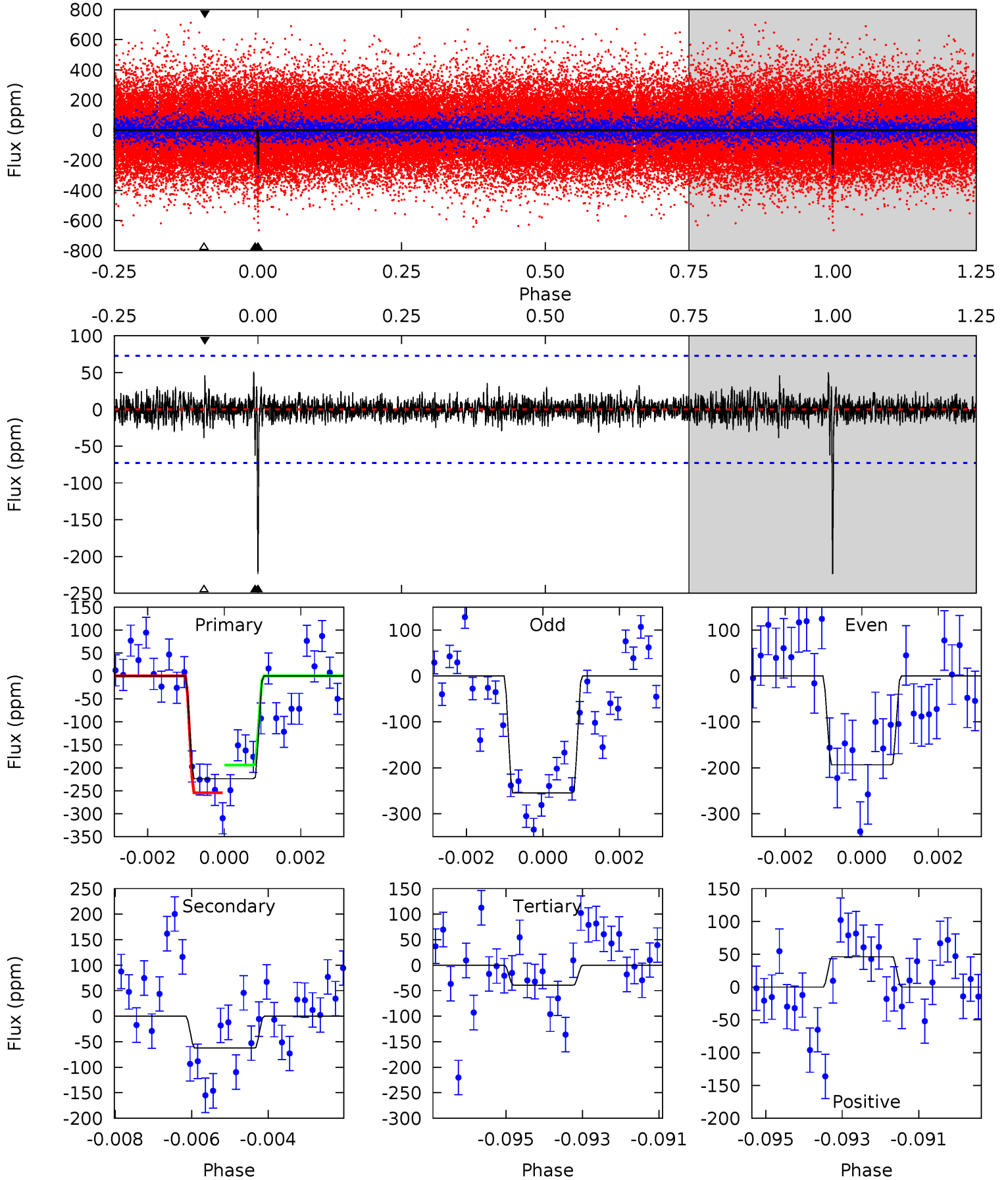
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
19.6	8.20	7.97	12.4	5.33	3.09	2.53	11.6	7.14	0.22	-4.23	8.16	0.87	0.39	2.23



Alt Model-Shift Uniqueness Test

007694417-01, P = 369.561366 Days, E = 233.434205 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
16.4	4.56	2.86	3.38	5.33	3.10	0.68	13.5	13.0	1.70	1.17	2.24	1.00	0.18	2.20



Stellar Parameters For KIC 007694417

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	M (M_{\odot})	p_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	6205^{+169}_{-206}	$4.438^{+0.070}_{-0.210}$	$-0.260^{+0.250}_{-0.350}$	$1.006^{+0.312}_{-0.112}$	$1.007^{+0.147}_{-0.120}$	$1.394^{+0.504}_{-0.746}$
	+3%/-3%	+2%/-5%	+96%/-135%	+31%/-11%	+15%/-12%	+36%/-54%
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 007694417-01 / KOI

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	-123 ± 15	$1.80^{+0.48}_{-0.39}$	387^{+30}_{-21}	5243^{+630}_{-456}	21014^{+15198}_{-7756}
Alt.	-62 ± 14	$1.70^{+0.51}_{-0.43}$	387^{+28}_{-20}	4636^{+589}_{-416}	11974^{+9984}_{-5496}

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

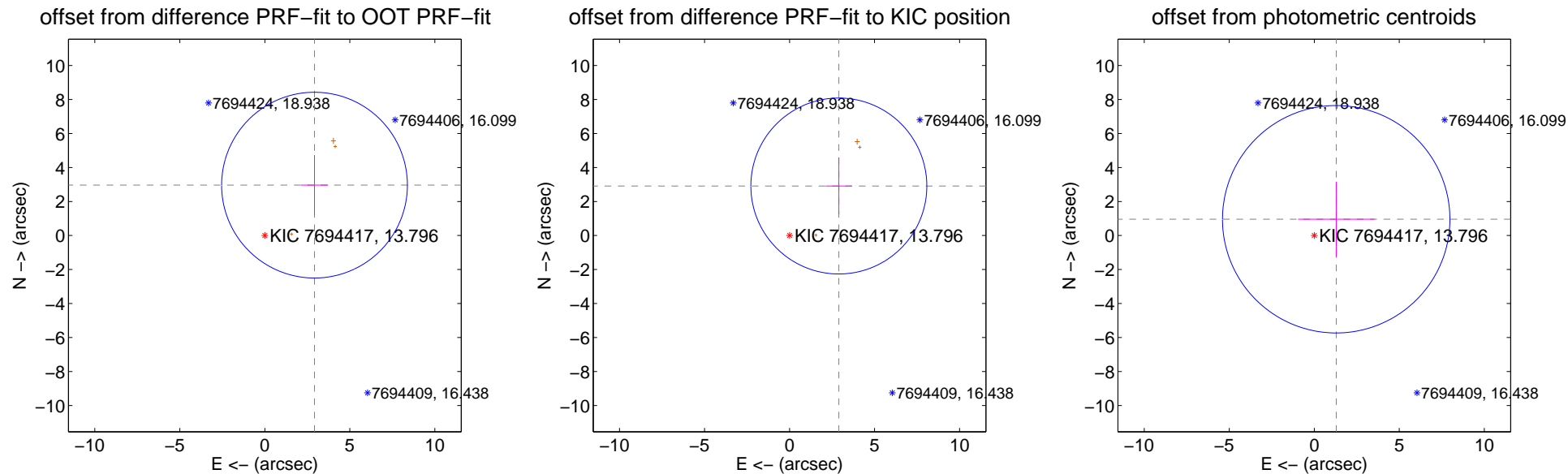
DV Centroid Data

Supplemental centroid analysis for 007694417-01. Kepler magnitude: 13.80. Transit SNR 7.93

There are 0 quarters with good PRF difference image offsets

The direct PRF centroid is offset from the target star catalog position by about 0.05 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	4.162 ± 1.821	2.29	-2.923 ± 0.806	2.964 ± 1.767
PRF-fit source offset from KIC position	4.110 ± 1.725	2.38	-2.900 ± 0.769	2.913 ± 1.675
photometric centroid source offset	1.61 ± 2.23	0.72	-1.29 ± 2.24	0.96 ± 2.21

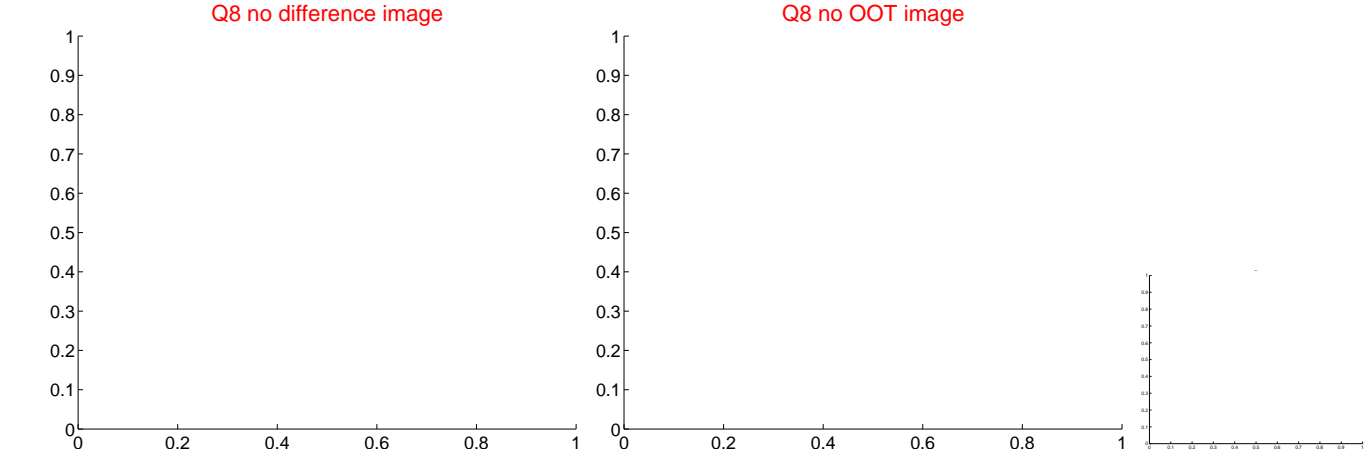
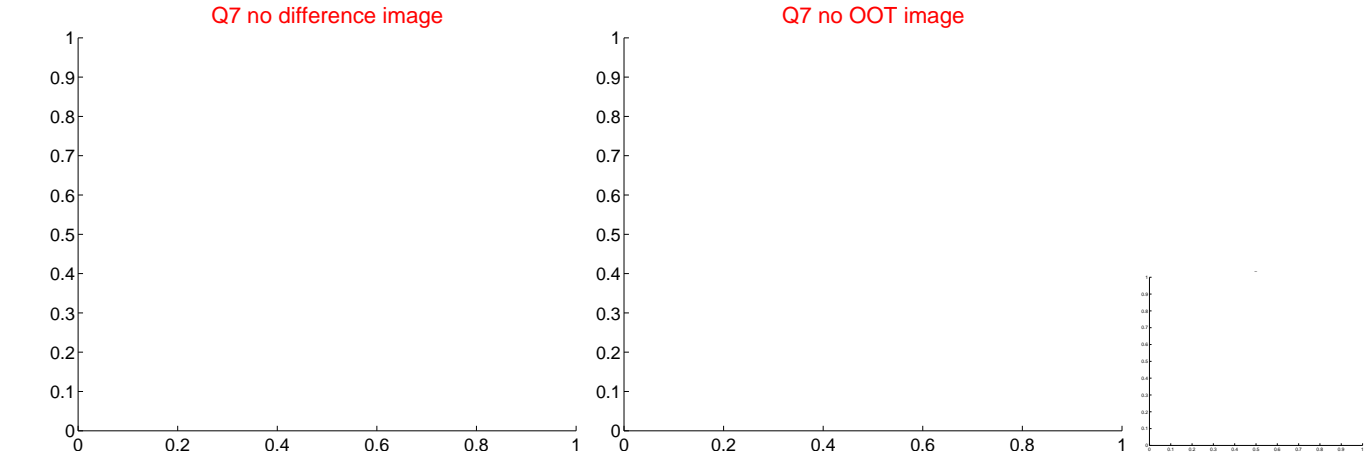
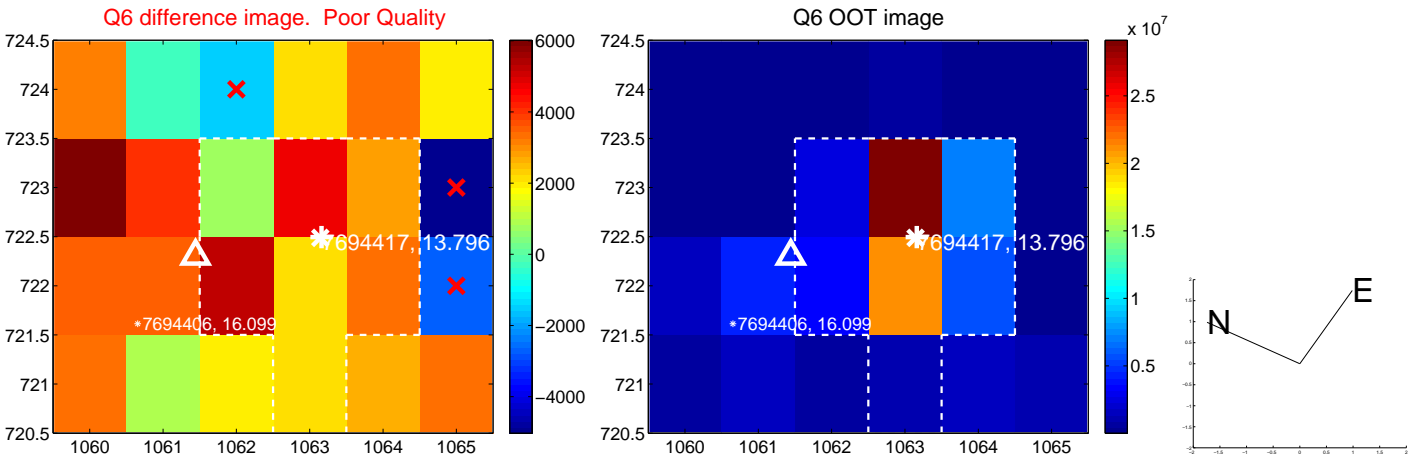
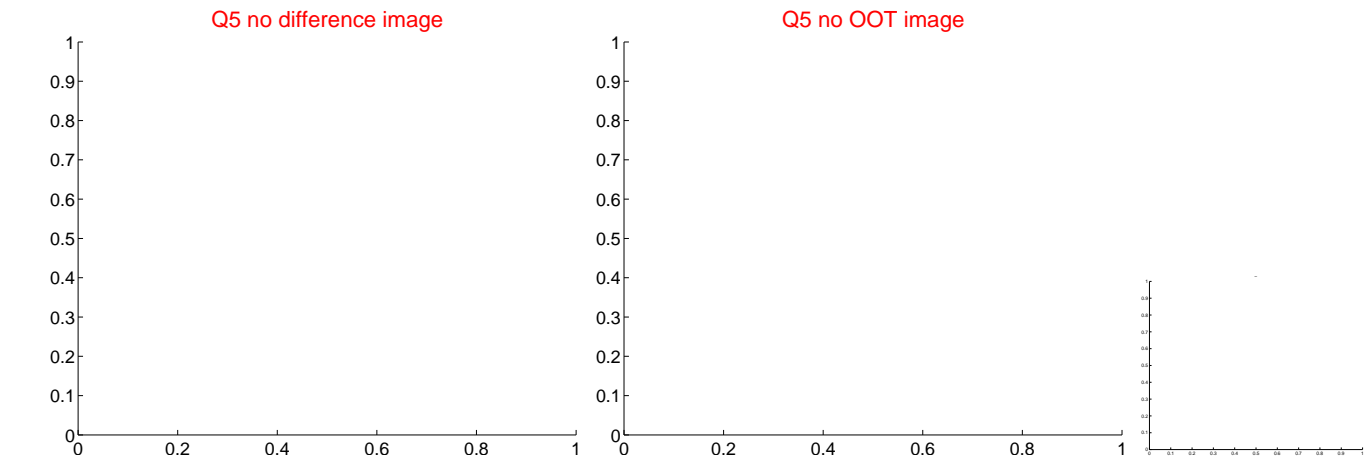


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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

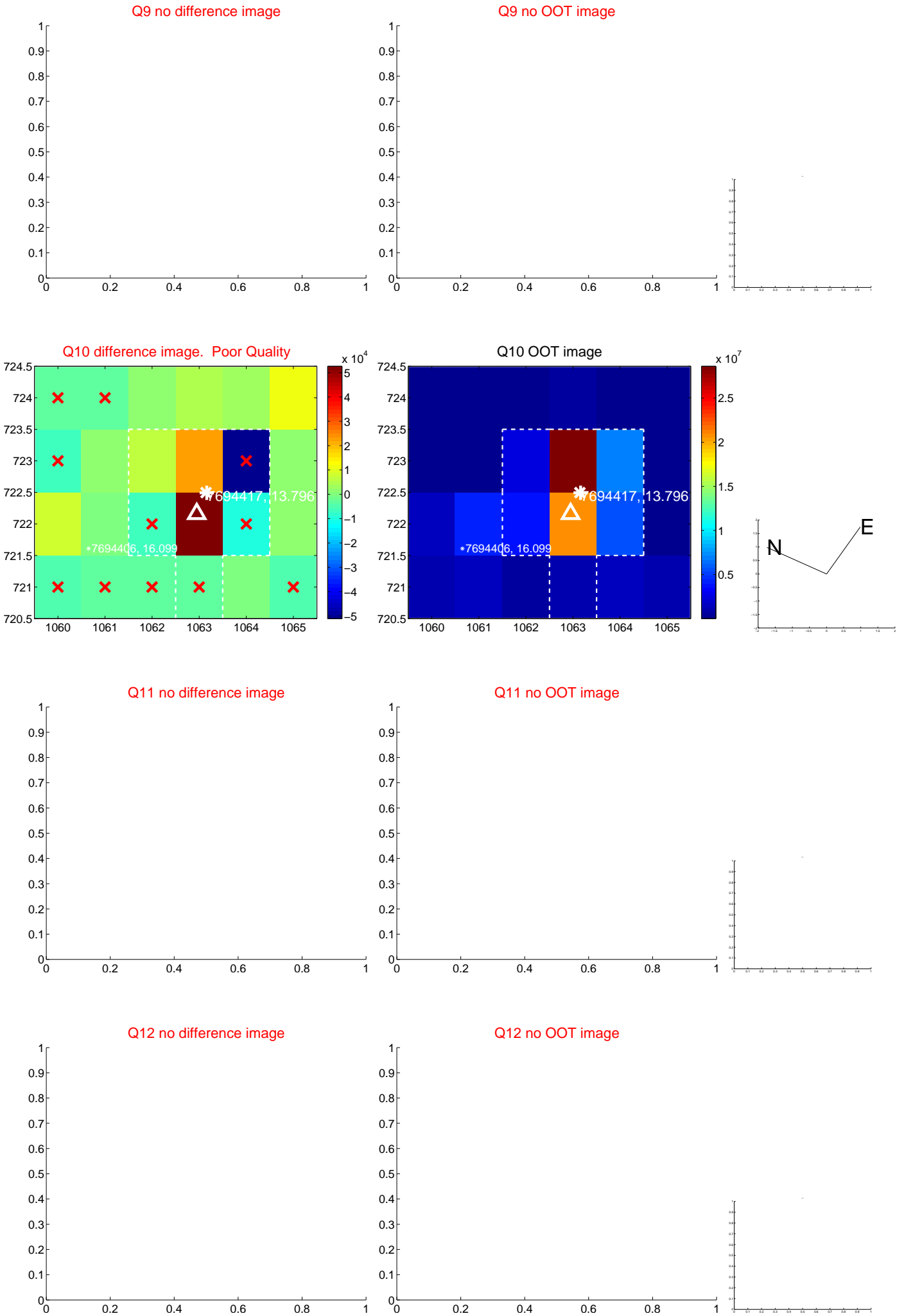
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



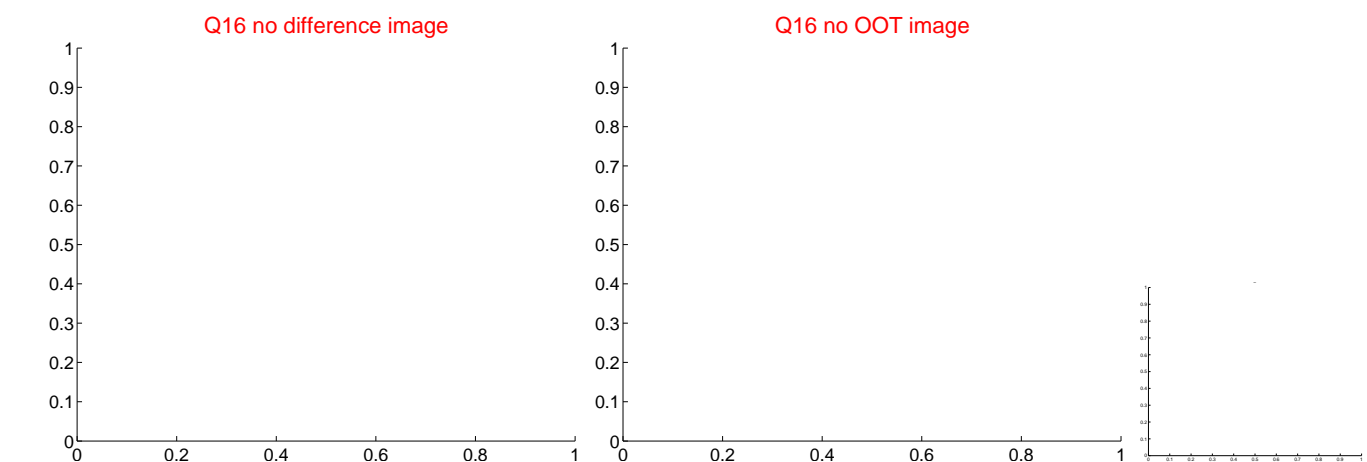
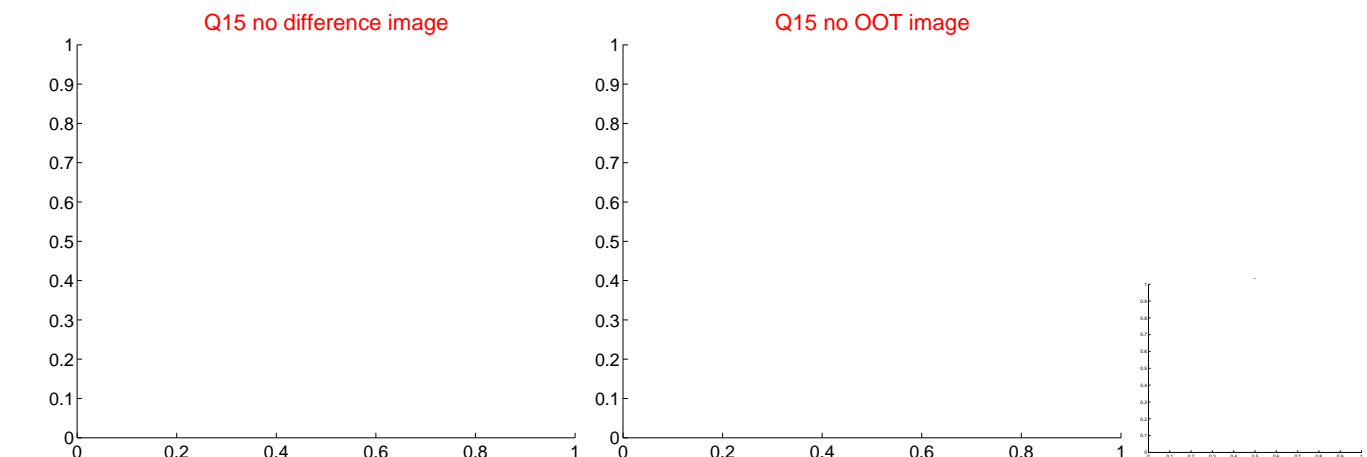
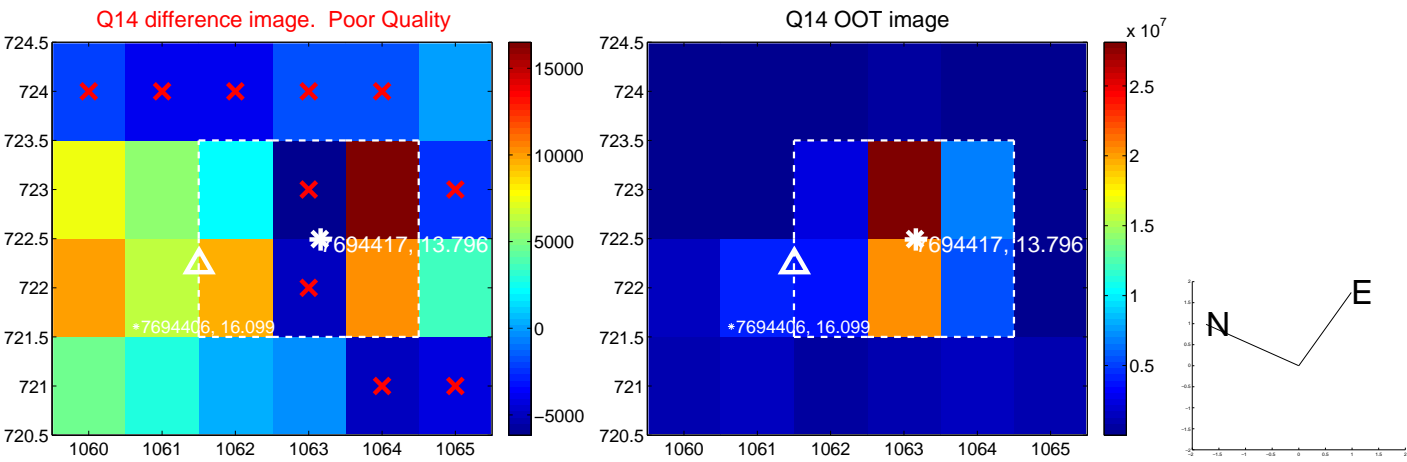
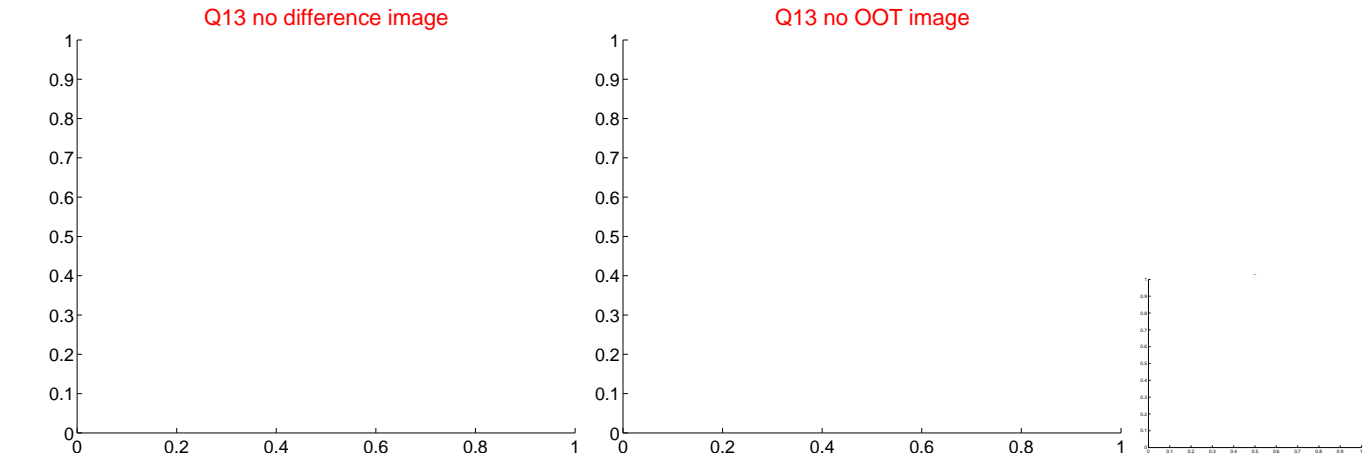
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



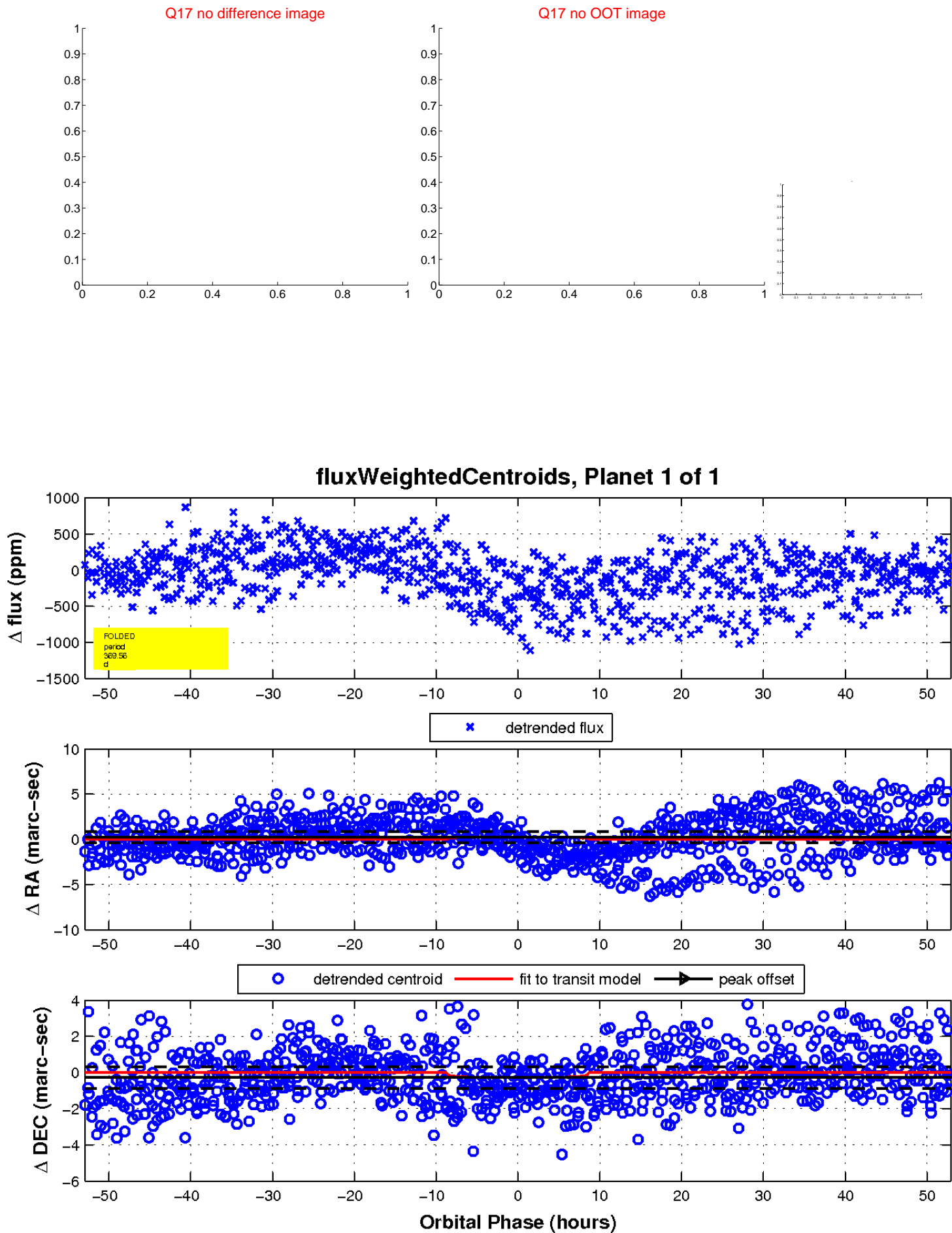
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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

