

KIC 007968468

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})
007968468-01	OBS	No	367.166081	233.990213	914.0	12.412	8.3	8.7	1.12	6386	3.42	1.69

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
007968468-01	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_MARSHALL_SKYE—ALL_TRANS_CHASES—INCONSISTENT_TRANS—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.

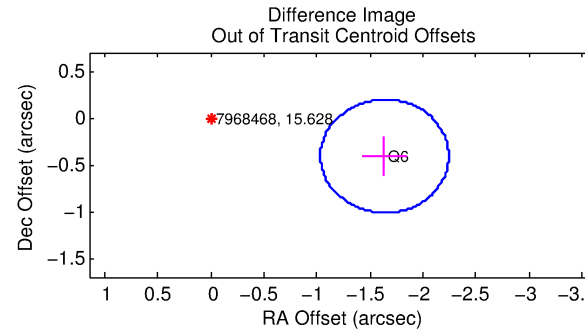
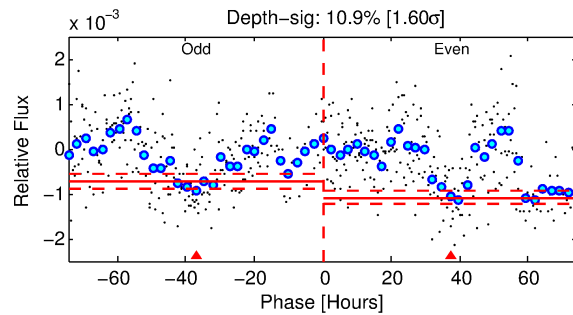
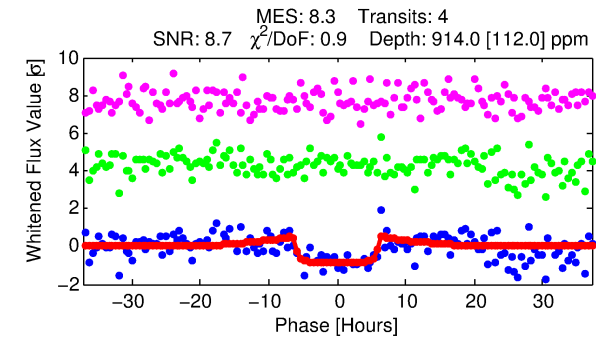
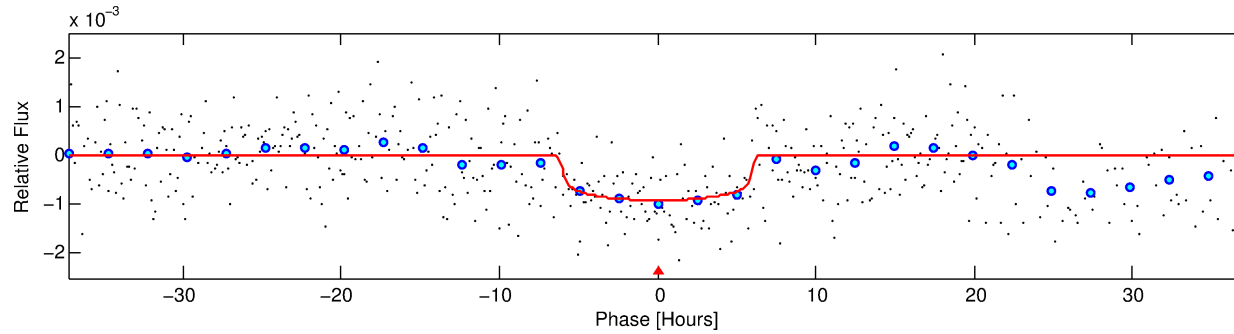
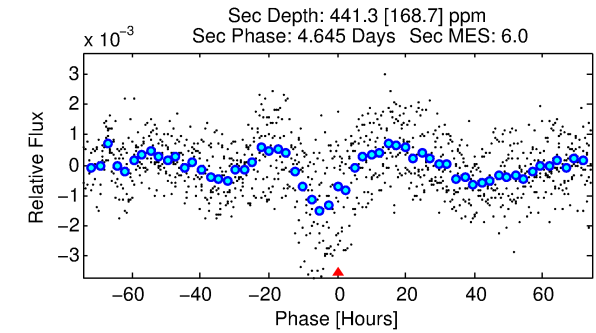
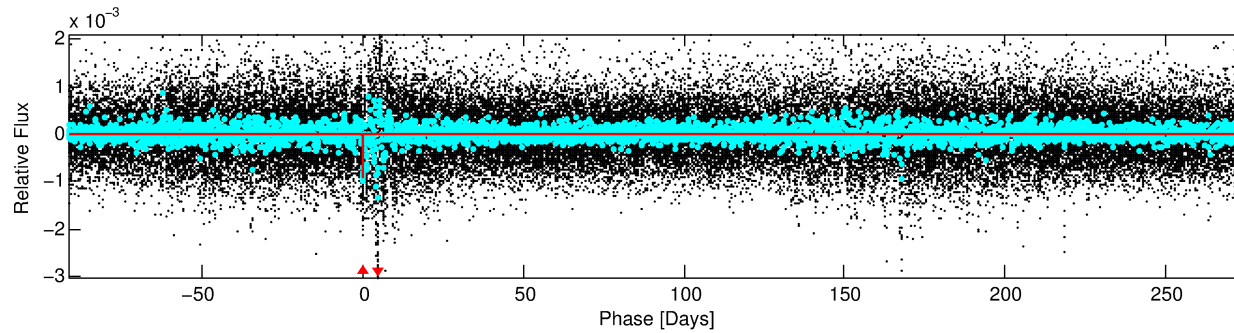
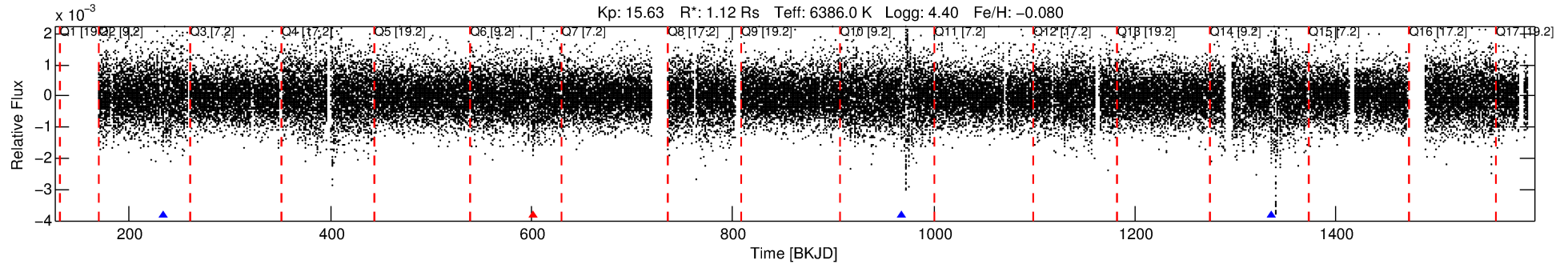
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 007968468-01

No Significant Match Found

DV One-Page Summary

KIC: 7968468 Candidate: 1 of 1 Period: 367.166 d



DV Fit Results:

Period = 367.16608 [0.00743] d
Epoch = 233.9902 [0.0135] BKJD
Rp/R* = 0.0279 [0.0188]
a/R* = 225.93 [772.88]
b = 0.24 [13.56]
Seff = 1.69 [0.68]
Teq = 291 [29] K
Rp = 3.42 [2.54] Re
a = 1.0549 [0.2735] AU
Ag = 23058.50 [33359.40] [0.69σ]
Teffp = 5538 [1947] K [2.69σ]

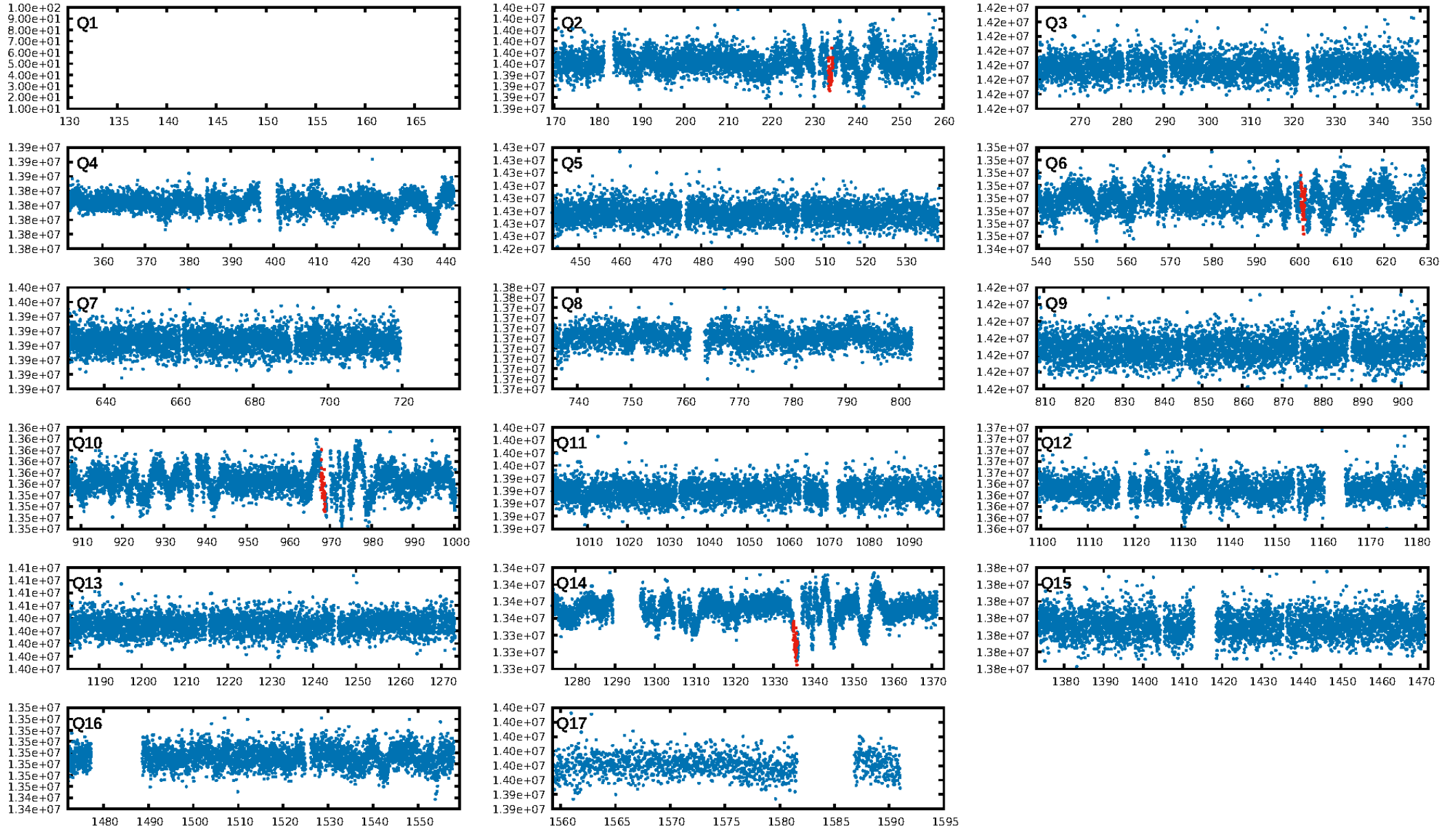
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: 64.2%
ModelChiSquareGof-sig: 100.0%
Bootstrap-pfa: 2.48e-09
RollingBand-fgt: 0.75 [3/4]
GhostDiagnostic-chr: 3.931
Centroid-sig: 0.2%
Centroid-so: 6.555 arcsec [2.33σ]
OotOffset-rm: 1.688 arcsec [8.38σ]
KicOffset-rm: 1.795 arcsec [8.91σ]
OotOffset-st: 1/0/0/0 [1]
KicOffset-st: 1/0/0/0 [1]
DiffImageQuality-fgm: 0.00 [0/1]
DiffImageOverlap-fno: 1.00 [3/3]

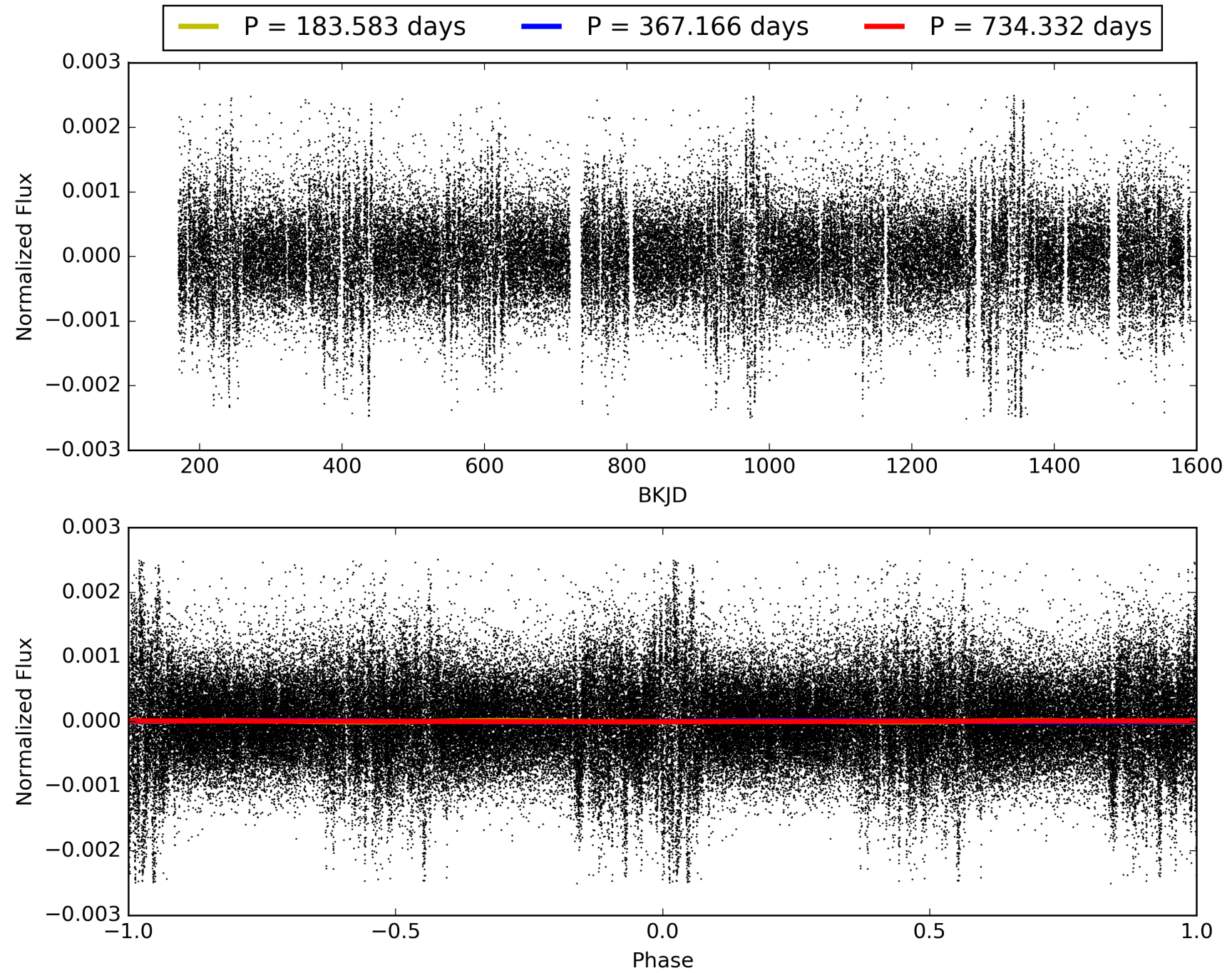
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 29-Jan-2016 02:20:45 Z

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

TCE 007968468-01, PDC Light Curves

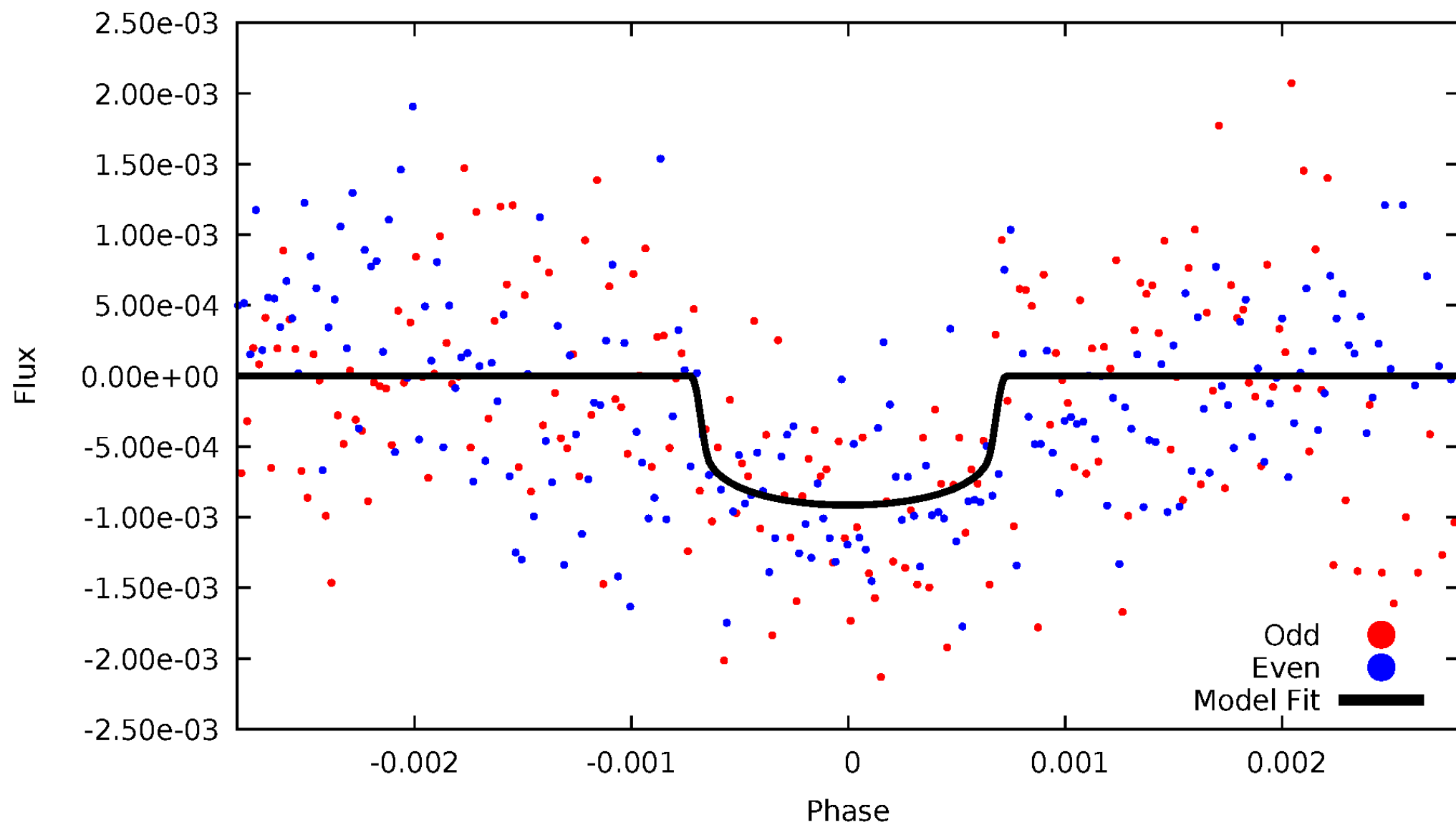


TCE 007968468-01



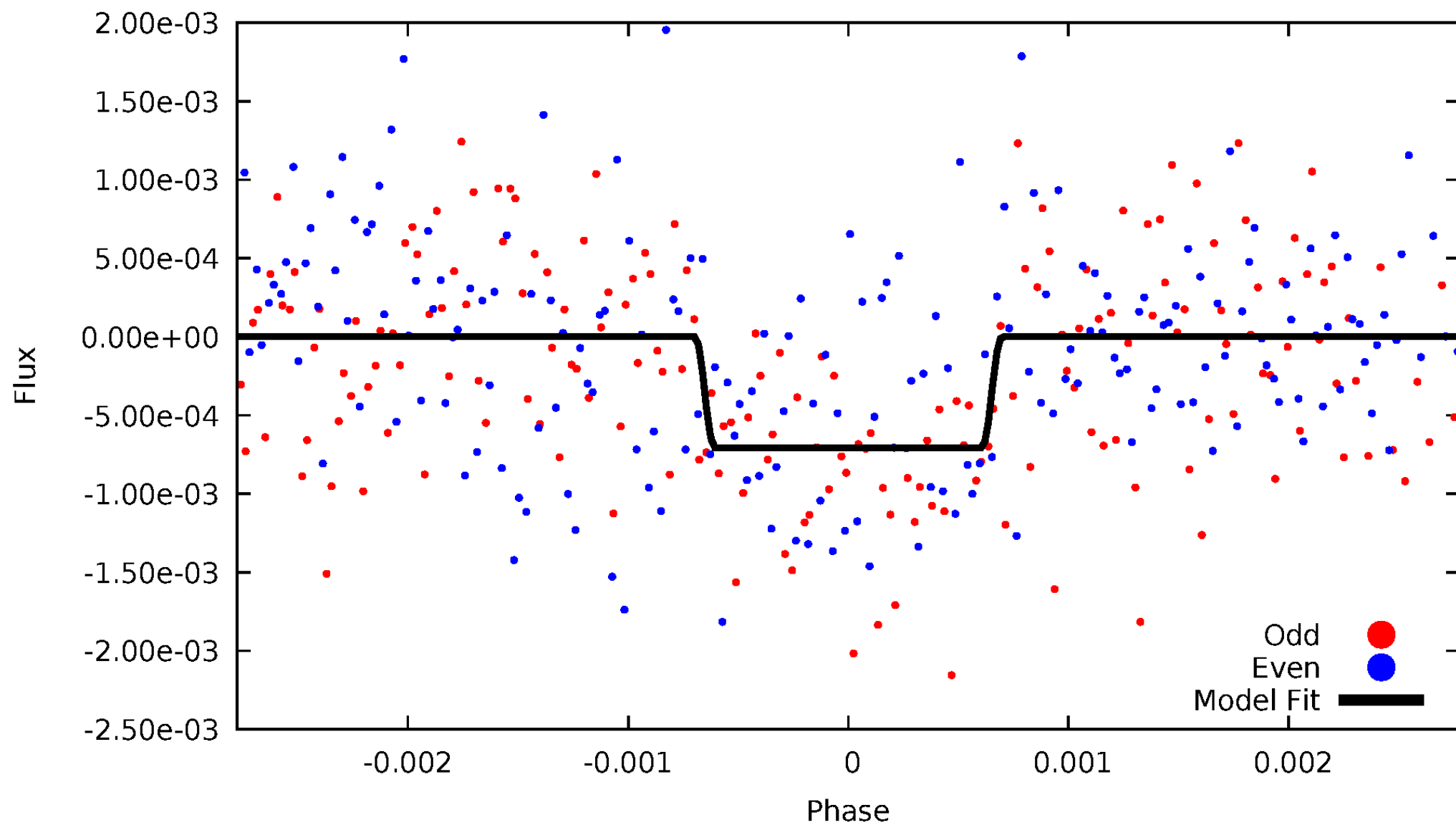
DV Odd/Even

TCE 007968468-01

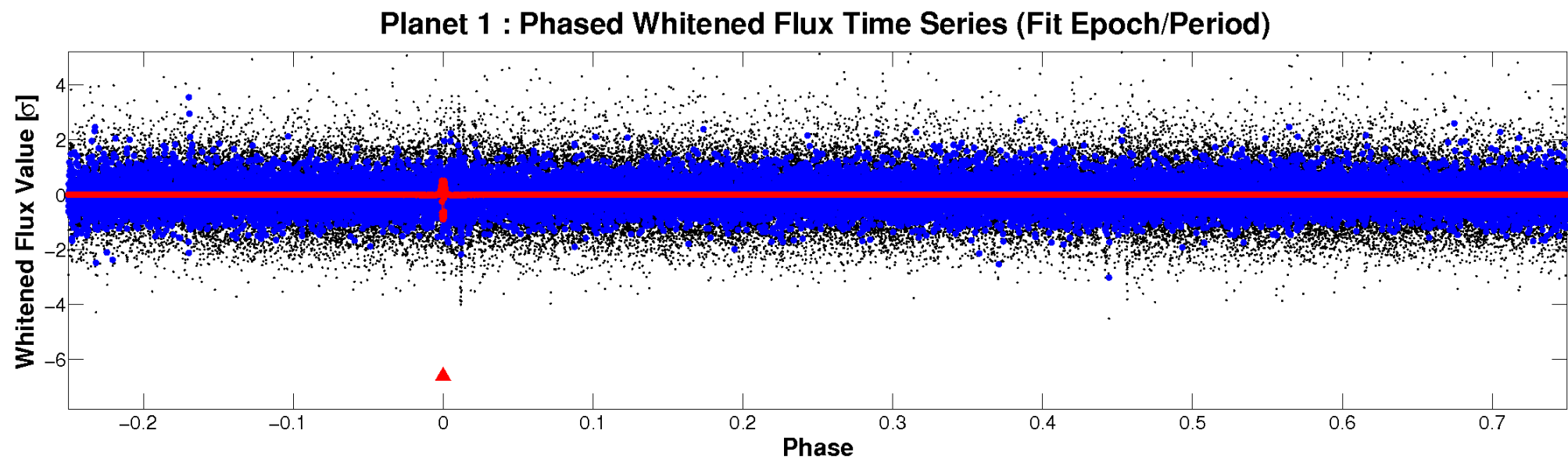
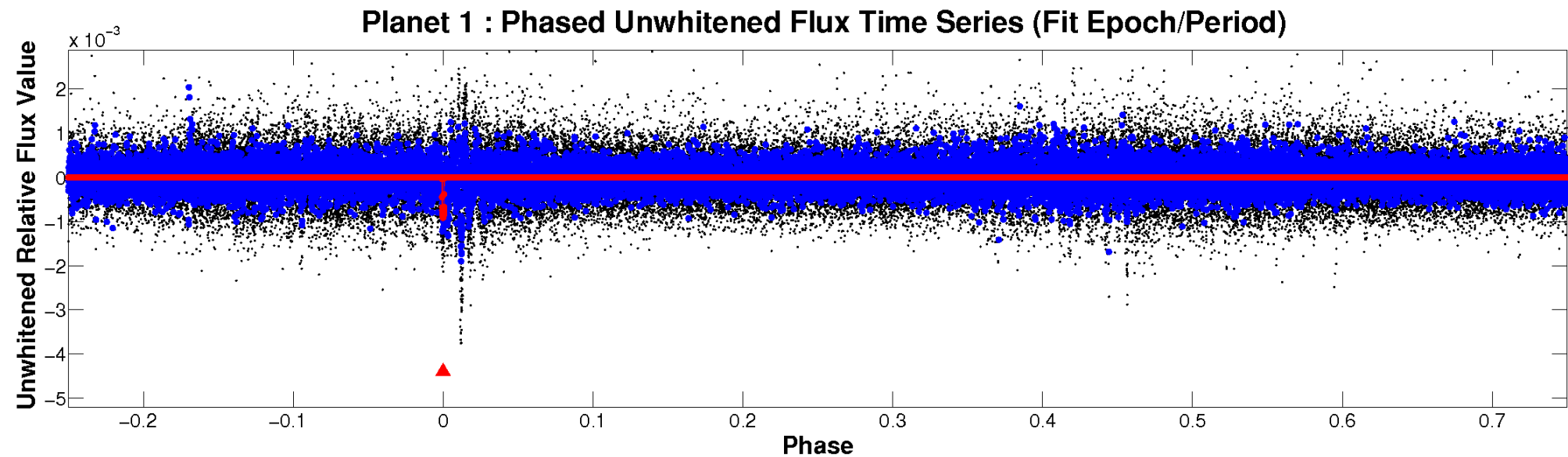


ALT Odd/Even

TCE 007968468-01

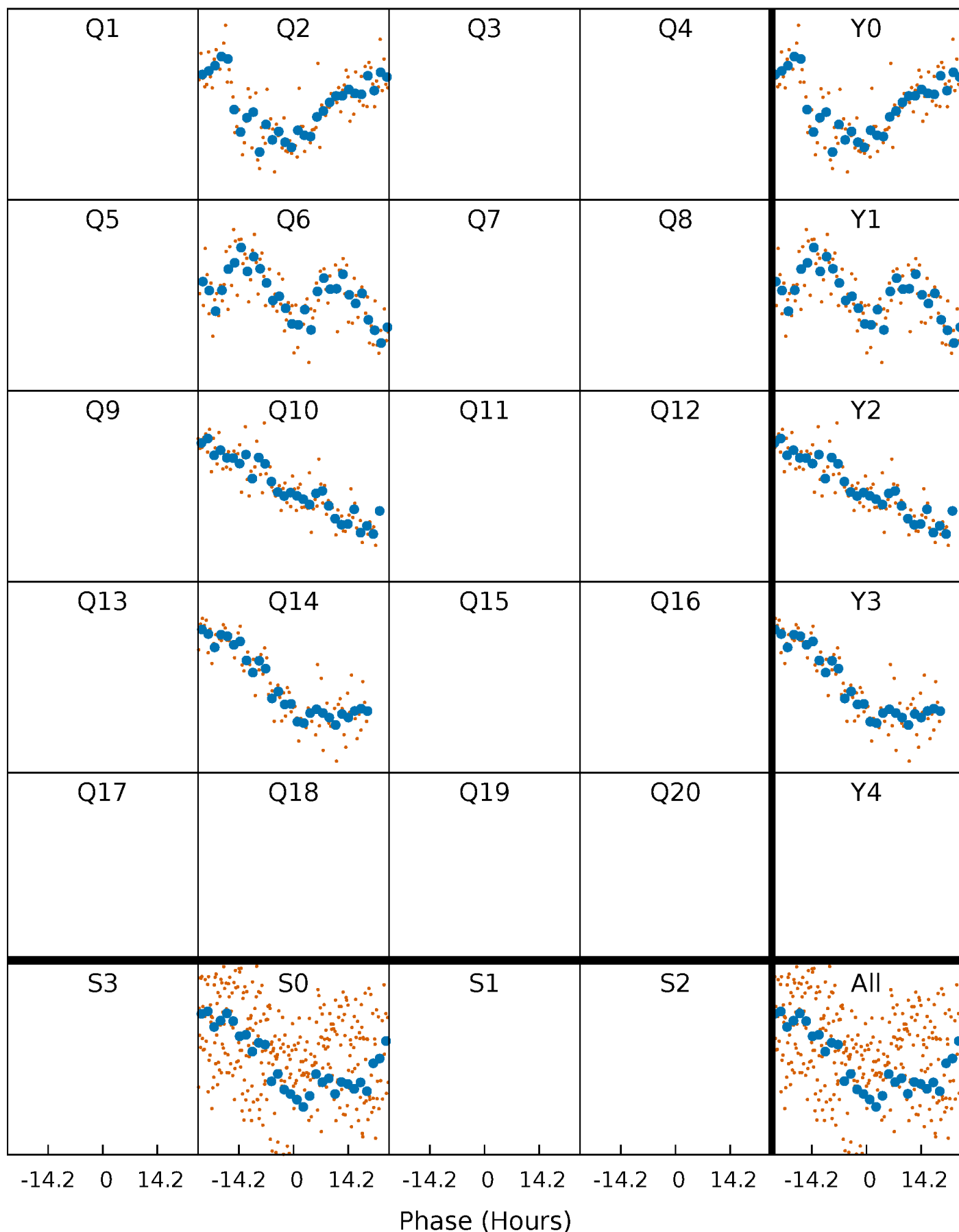


Non-Whitened Vs. Whitened Light Curve



PDC Quarter-Phased Transit Curves

TCE 007968468-01 P=367.166081 Days $T_0=233.990213$ (BKJD)



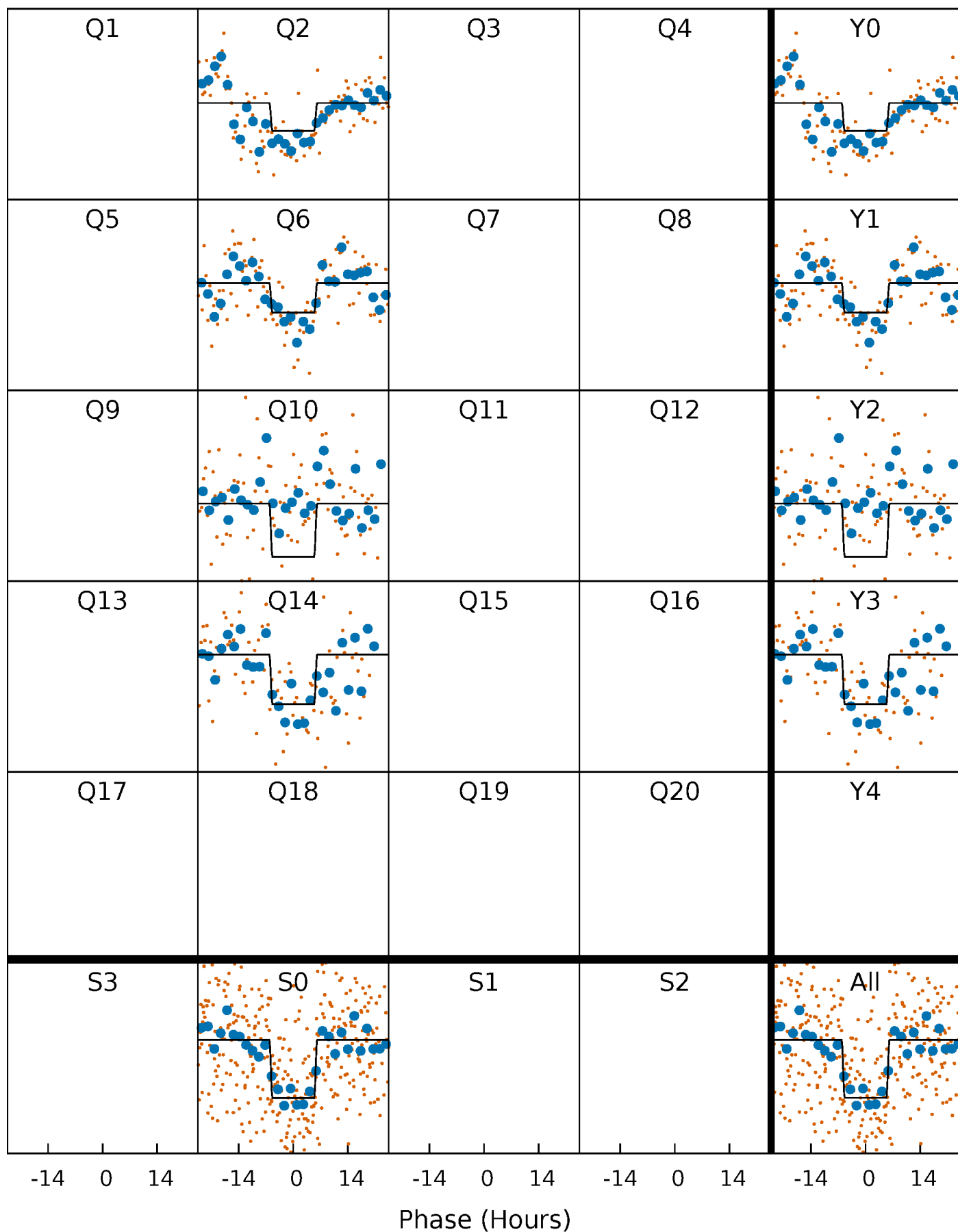
DV Quarter-Phased Transit Curves

TCE 007968468-01 P=367.166081 Days $T_0=233.990213$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

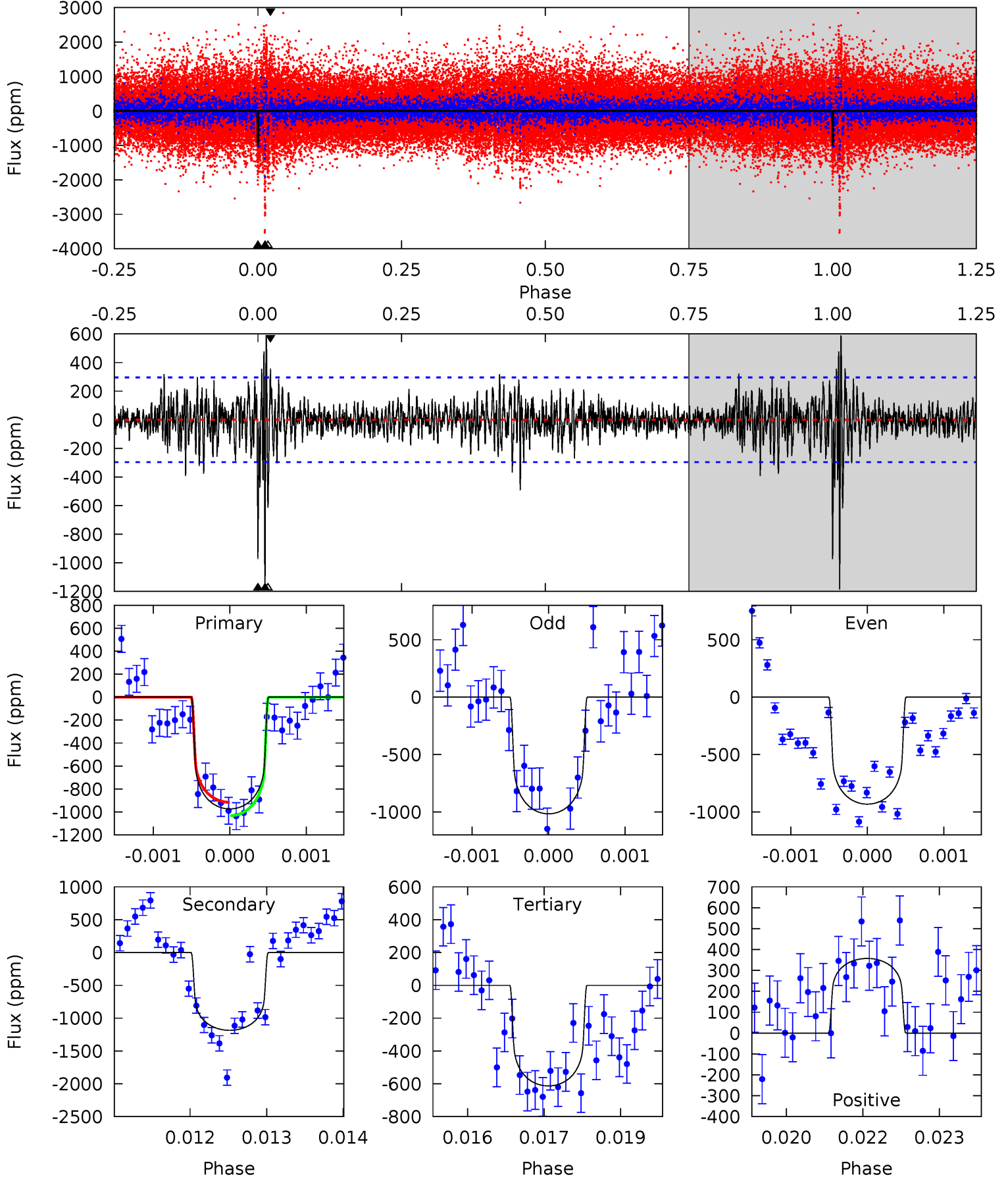
TCE 007968468-01 P=367.157017 Days $T_0=233.994430$ (BKJD)



DV Model-Shift Uniqueness Test

007968468-01, P = 367.166081 Days, E = 233.990213 Days

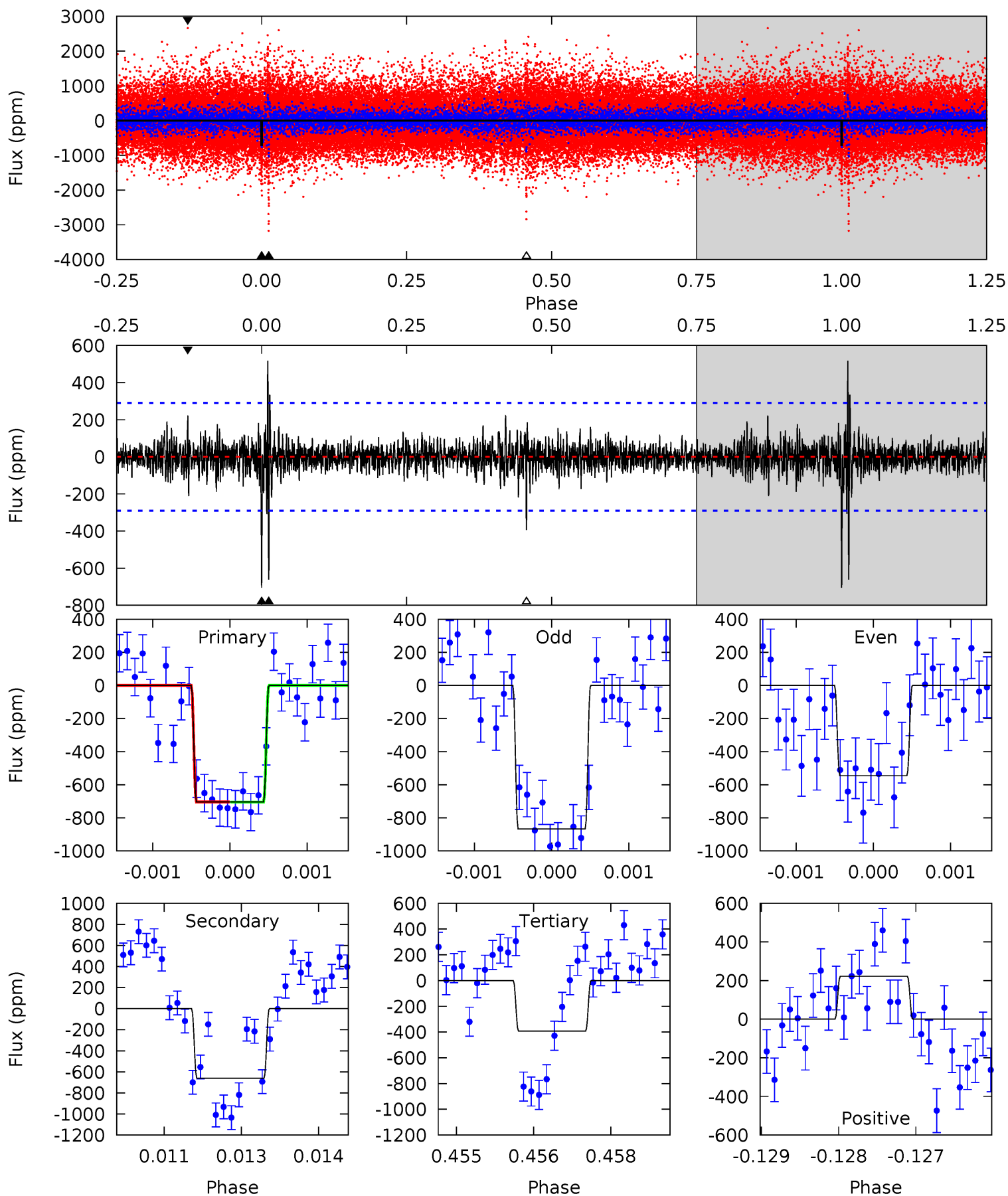
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
17.7	21.6	11.2	6.50	5.39	3.19	1.81	6.56	11.2	10.4	15.1	0.77	1.04	0.33	1.06



Alt Model-Shift Uniqueness Test

007968468-01, P = 367.157017 Days, E = 233.994430 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
13.1	12.3	7.31	4.12	5.39	3.20	1.06	5.78	8.97	4.98	8.17	3.02	0.81	0.42	0.01



Stellar Parameters For KIC 007968468

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	$M(M_{\odot})$	p_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	6386^{+157}_{-246}	$4.402^{+0.067}_{-0.202}$	$-0.080^{+0.250}_{-0.300}$	$1.123^{+0.350}_{-0.140}$	$1.161^{+0.157}_{-0.157}$	$1.154^{+0.401}_{-0.580}$
	+2%/-4%	+2%/-5%	+312%/-375%	+31%/-12%	+14%/-14%	+35%/-50%
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 007968468-01 / KOI

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	-1185 ± 55	$3.82^{+2.52}_{-2.25}$	413^{+28}_{-23}	6837^{+5363}_{-1521}	$47894^{+232551}_{-30353}$
Alt.	-662 ± 54	$3.52^{+2.35}_{-1.98}$	412^{+31}_{-22}	6173^{+3849}_{-1268}	$31770^{+131817}_{-19973}$

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 $A_{obs} \gg 1.0$

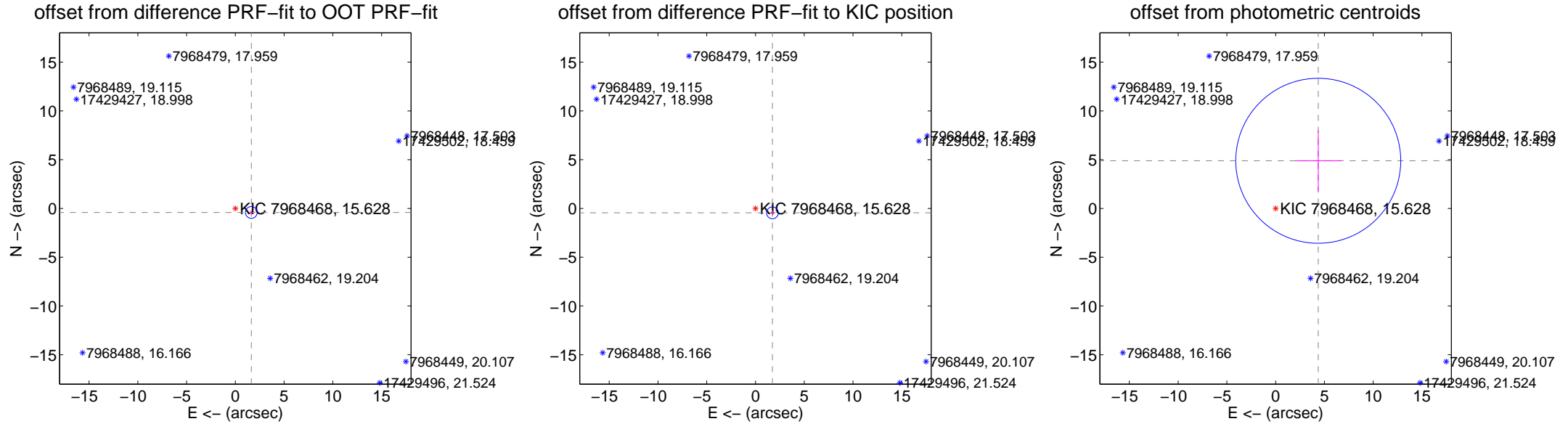
DV Centroid Data

Supplemental centroid analysis for 007968468-01. Kepler magnitude: 15.63. Transit SNR 8.69

There are 0 quarters with good PRF difference image offsets

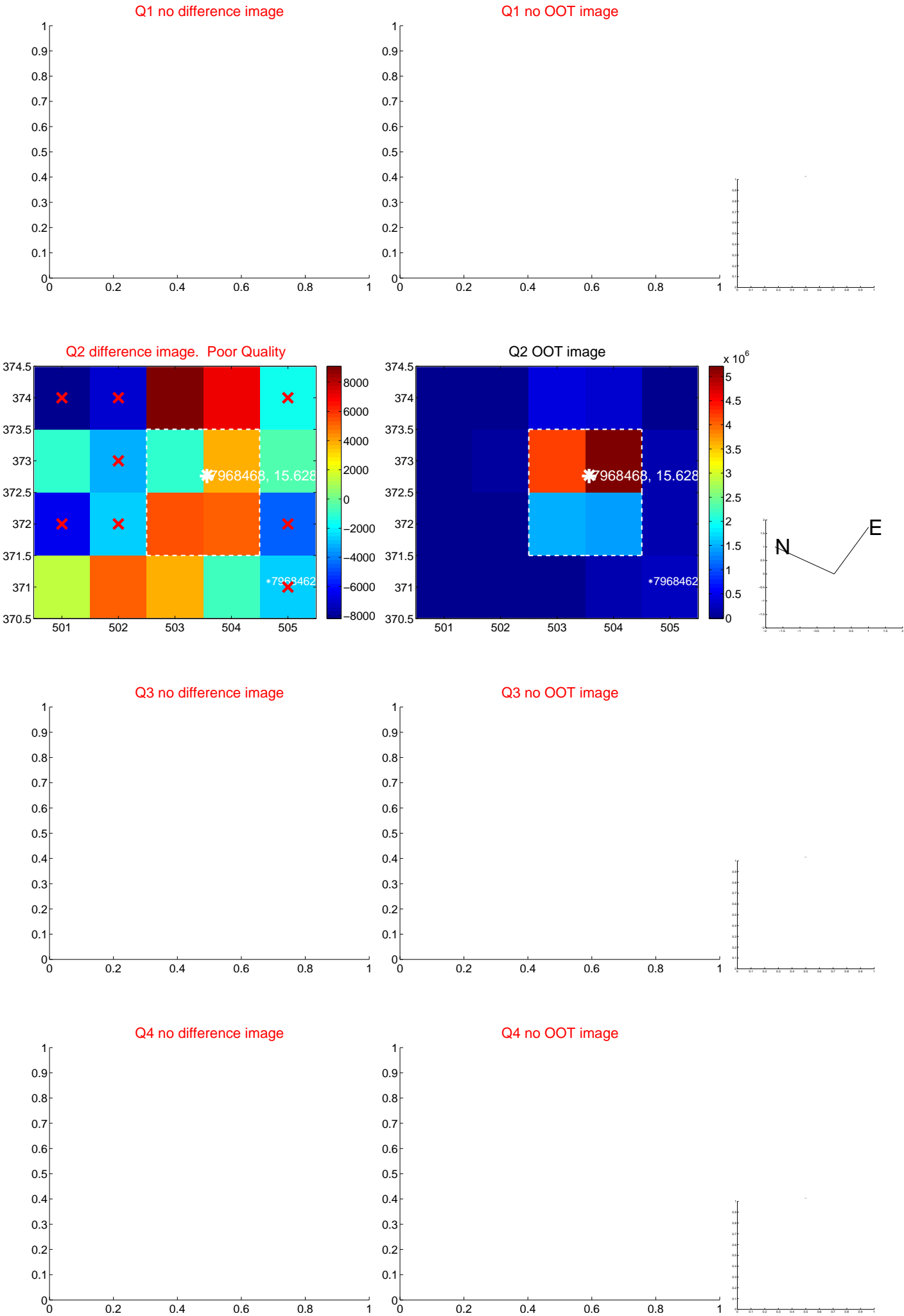
The direct PRF centroid is offset from the target star catalog position by about 0.11 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	1.688 ± 0.202	8.38	-1.638 ± 0.202	-0.410 ± 0.198
PRF-fit source offset from KIC position	1.795 ± 0.202	8.91	-1.738 ± 0.202	-0.452 ± 0.198
photometric centroid source offset	6.55 ± 2.82	2.33	-4.37 ± 2.37	4.89 ± 3.13

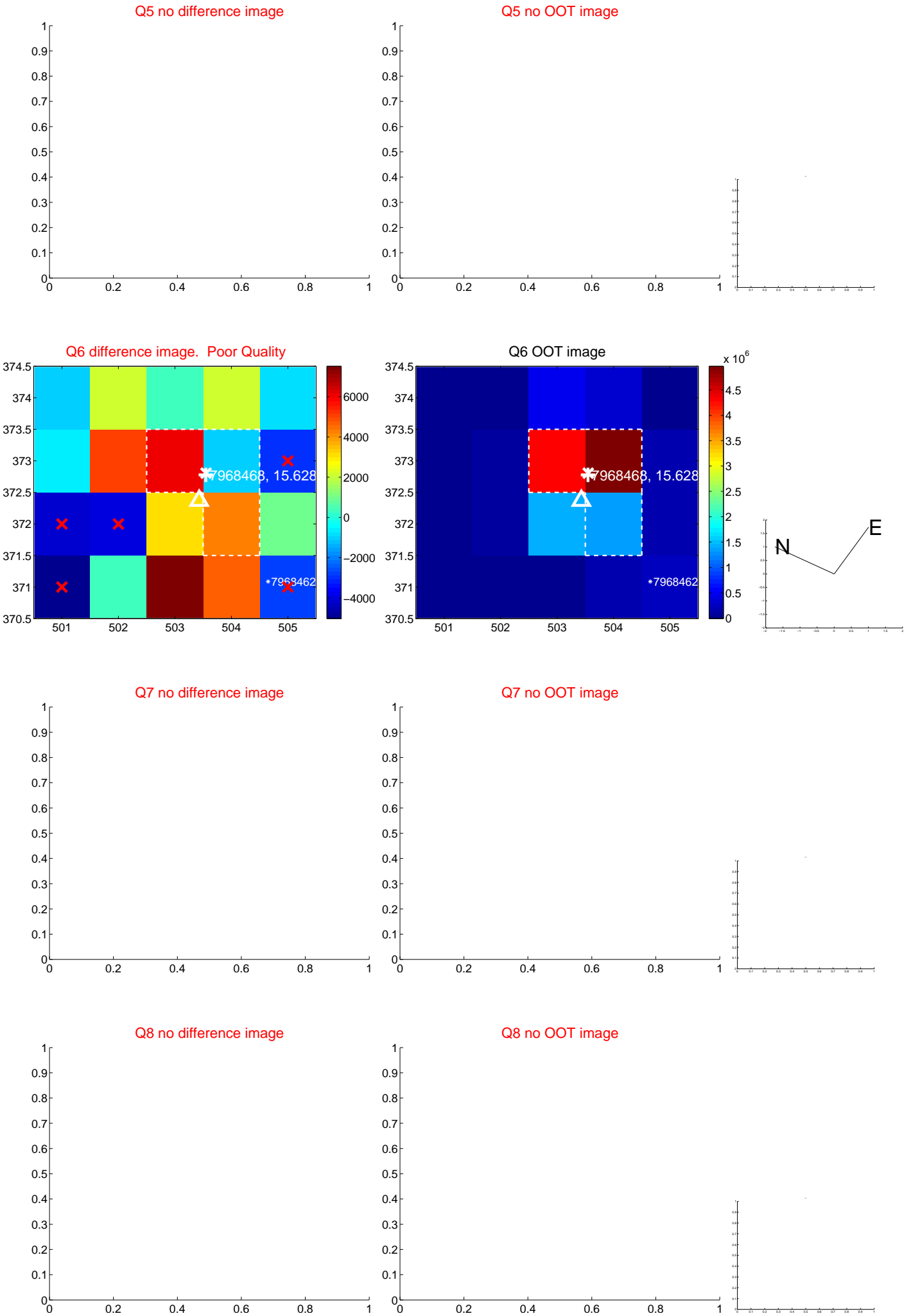


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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

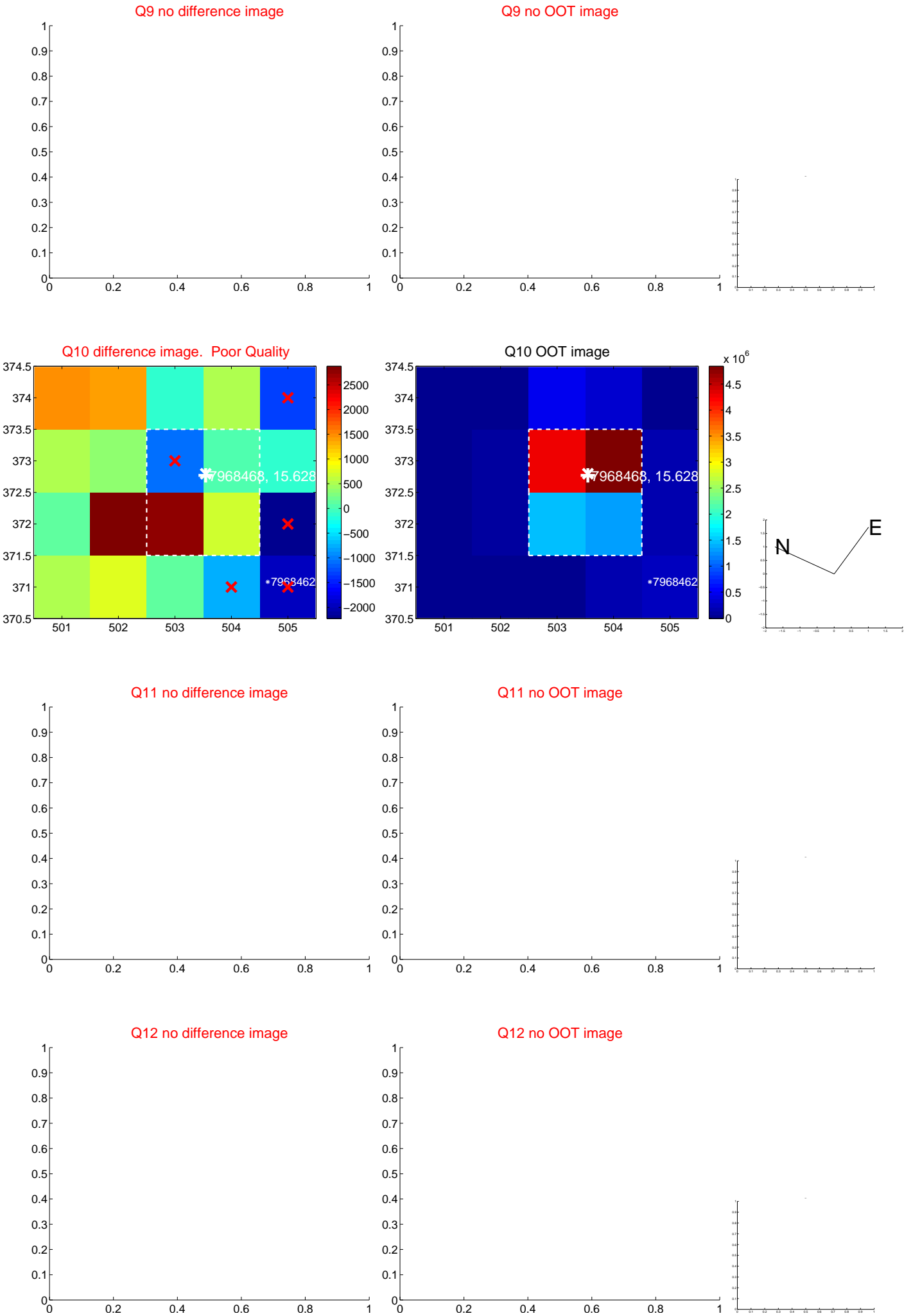
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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



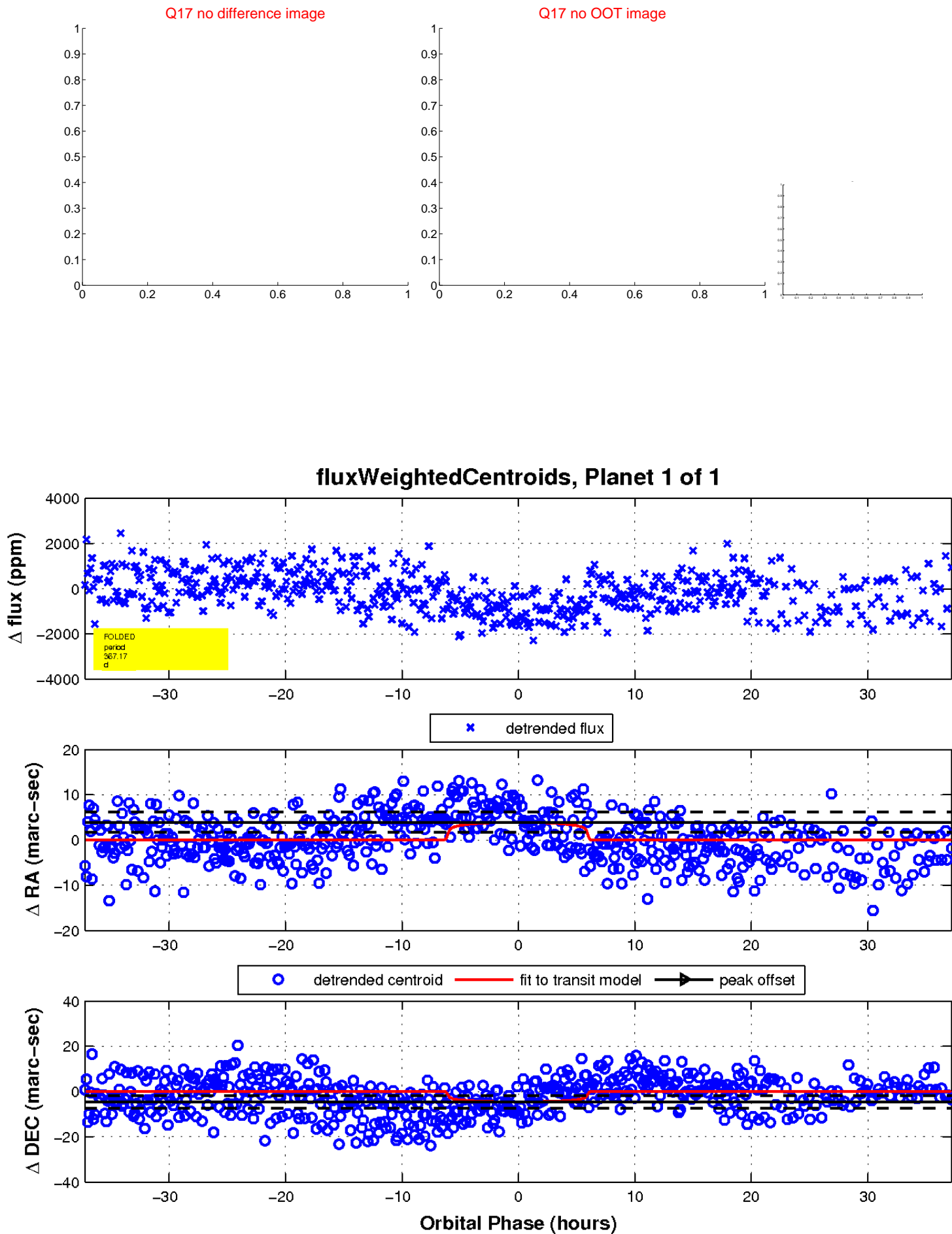
white ×: KIC target position; +: OOT centroid; △: difference centroid. red ✕: large negative pixel value.



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

Declination

