

KIC 007695398

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})
007695398-01	OBS	No	317.316931	230.751765	292.2	2.819	8.5	7.1	1.10	6024	2.03	1.81

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
007695398-01	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_MARSHALL_SKYE—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.

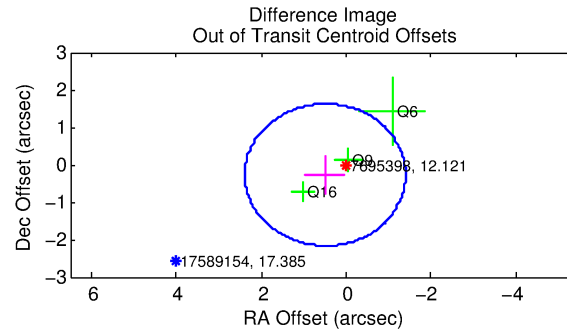
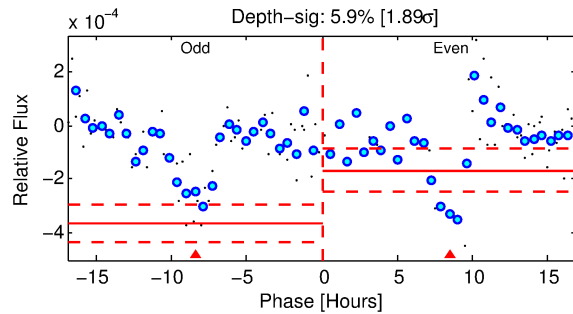
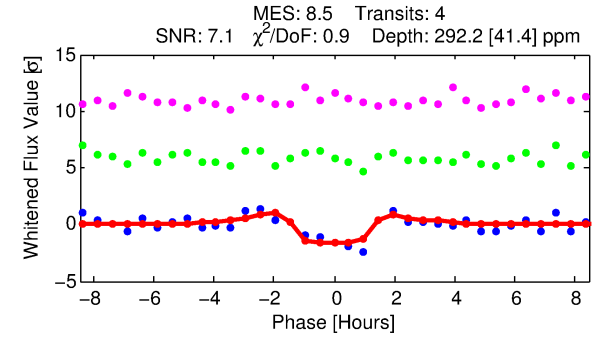
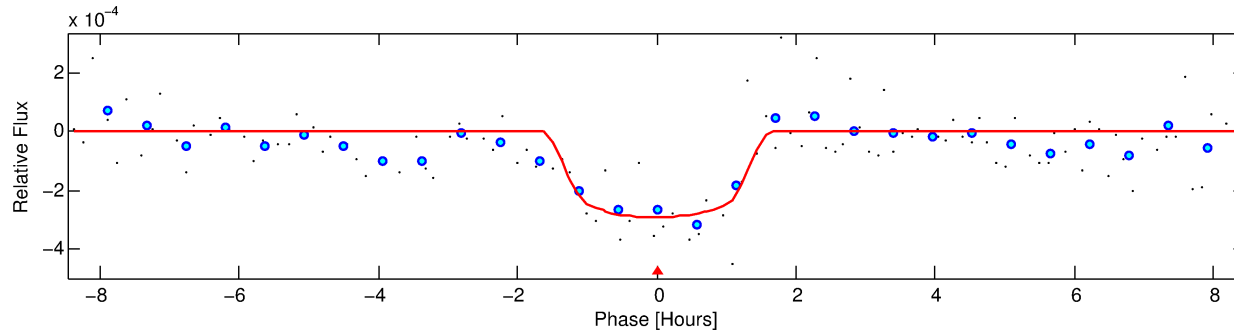
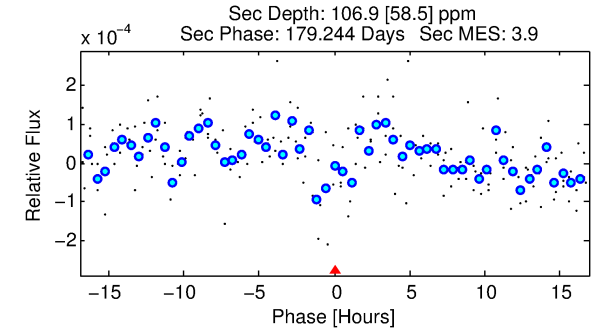
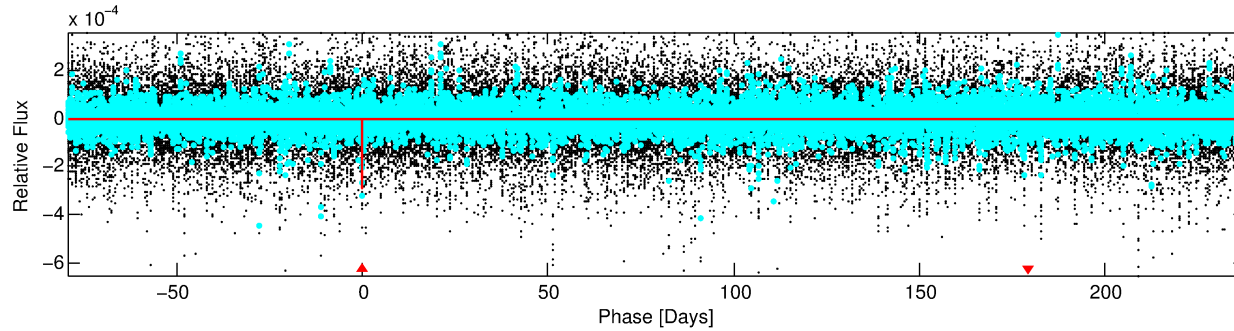
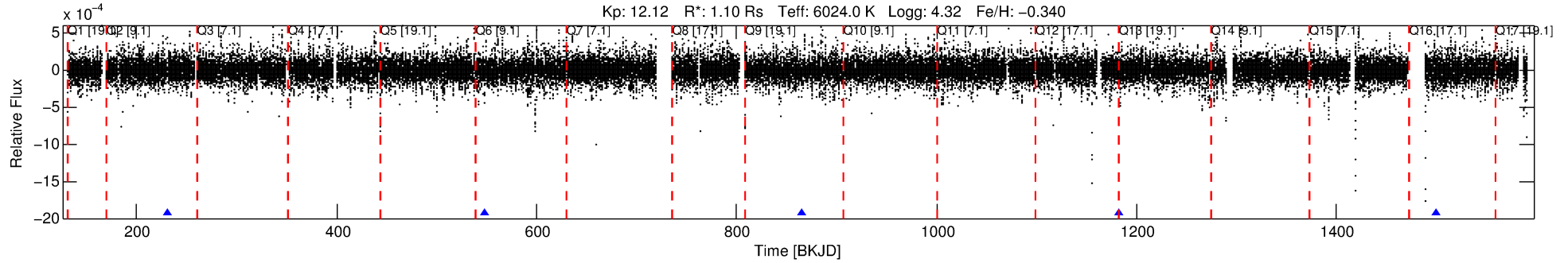
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 007695398-01

No Significant Match Found

DV One-Page Summary

KIC: 7695398 Candidate: 1 of 1 Period: 317.317 d



DV Fit Results:

Period = 317.31693 [0.00260] d
Epoch = 230.7518 [0.0070] BKJD
Rp/R* = 0.0169 [0.0124]
a/R* = 604.96 [2213.79]
b = 0.73 [2.33]
Seff = 1.81 [0.55]
Teq = 296 [22] K
Rp = 2.03 [1.55] Re
a = 0.8872 [0.1657] AU
Ag = 11227.04 [17892.18] [0.63σ]
Teffp = 4707 [1850] K [2.38σ]

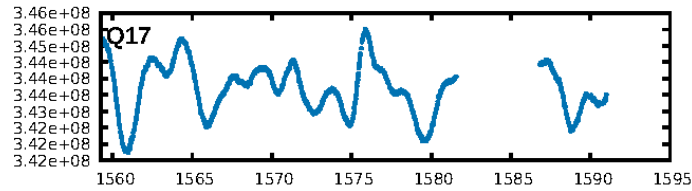
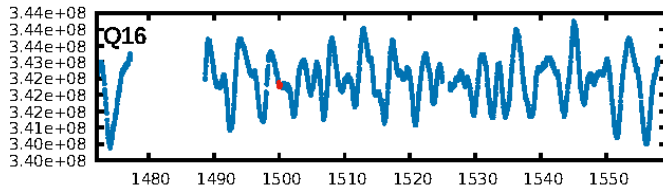
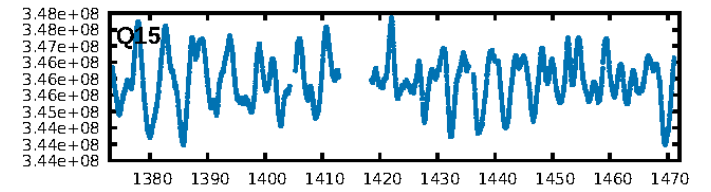
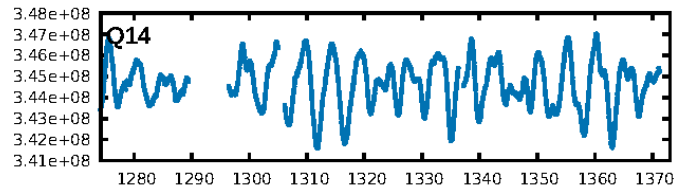
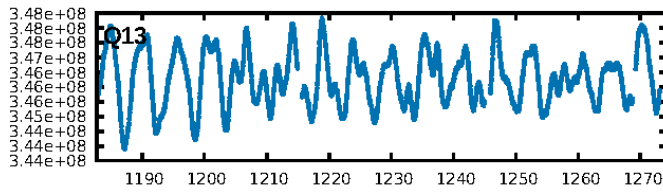
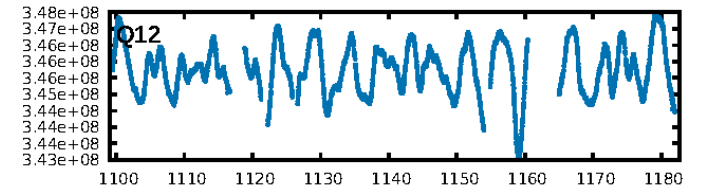
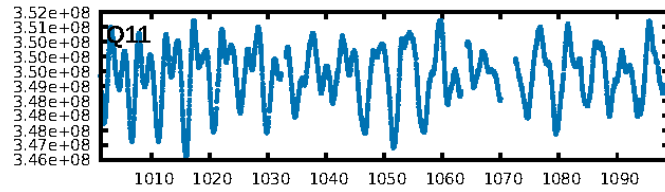
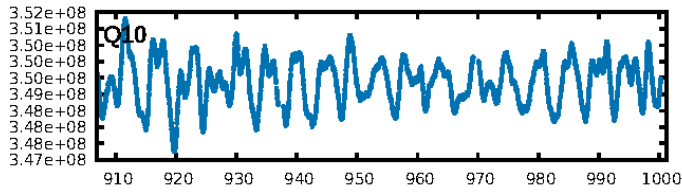
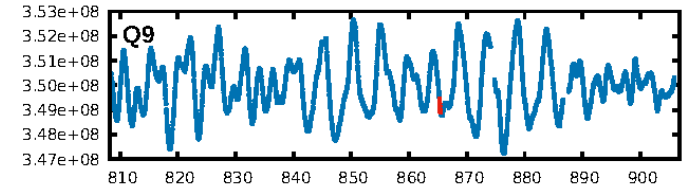
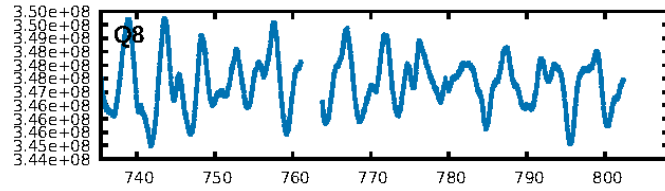
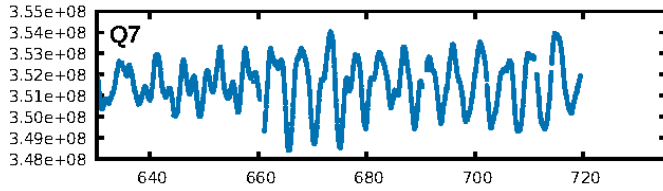
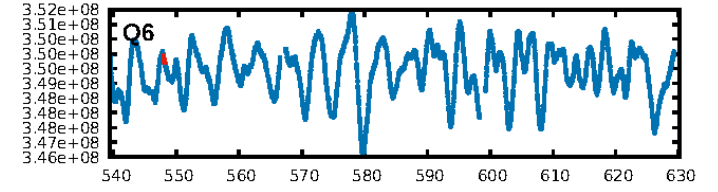
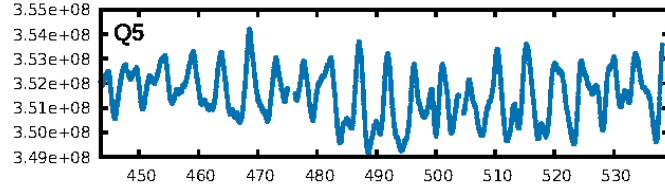
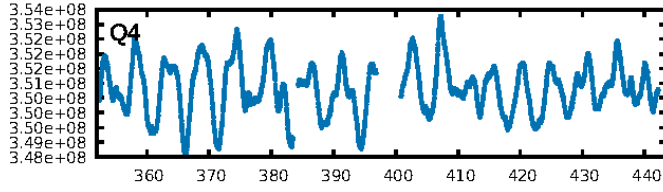
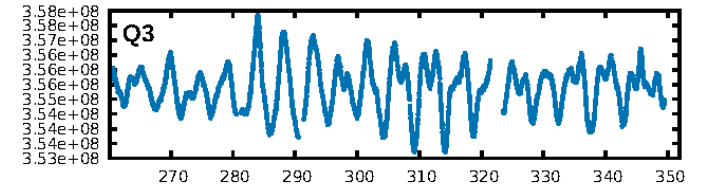
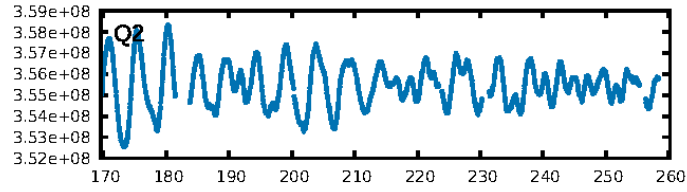
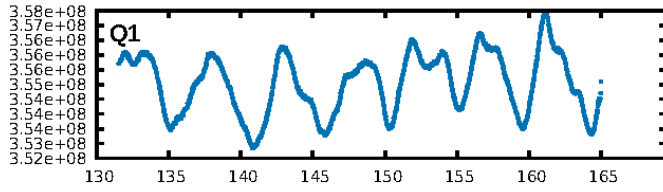
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: 17.0%
ModelChiSquareGof-sig: 96.9%
Bootstrap-pfa: 1.48e-10
RollingBand-fgt: 1.00 [4/4]
GhostDiagnostic-chr: -3.541
Centroid-sig: 92.0%
Centroid-so: 0.237 arcsec [0.32σ]
OotOffset-rm: 0.560 arcsec [0.89σ]
OotOffset-st: 1/0/1/1 [3]
KicOffset-rm: 0.520 arcsec [0.82σ]
KicOffset-st: 1/0/1/1 [3]
DiffImageQuality-fgm: 0.67 [2/3]
DiffImageOverlap-fno: 1.00 [3/3]

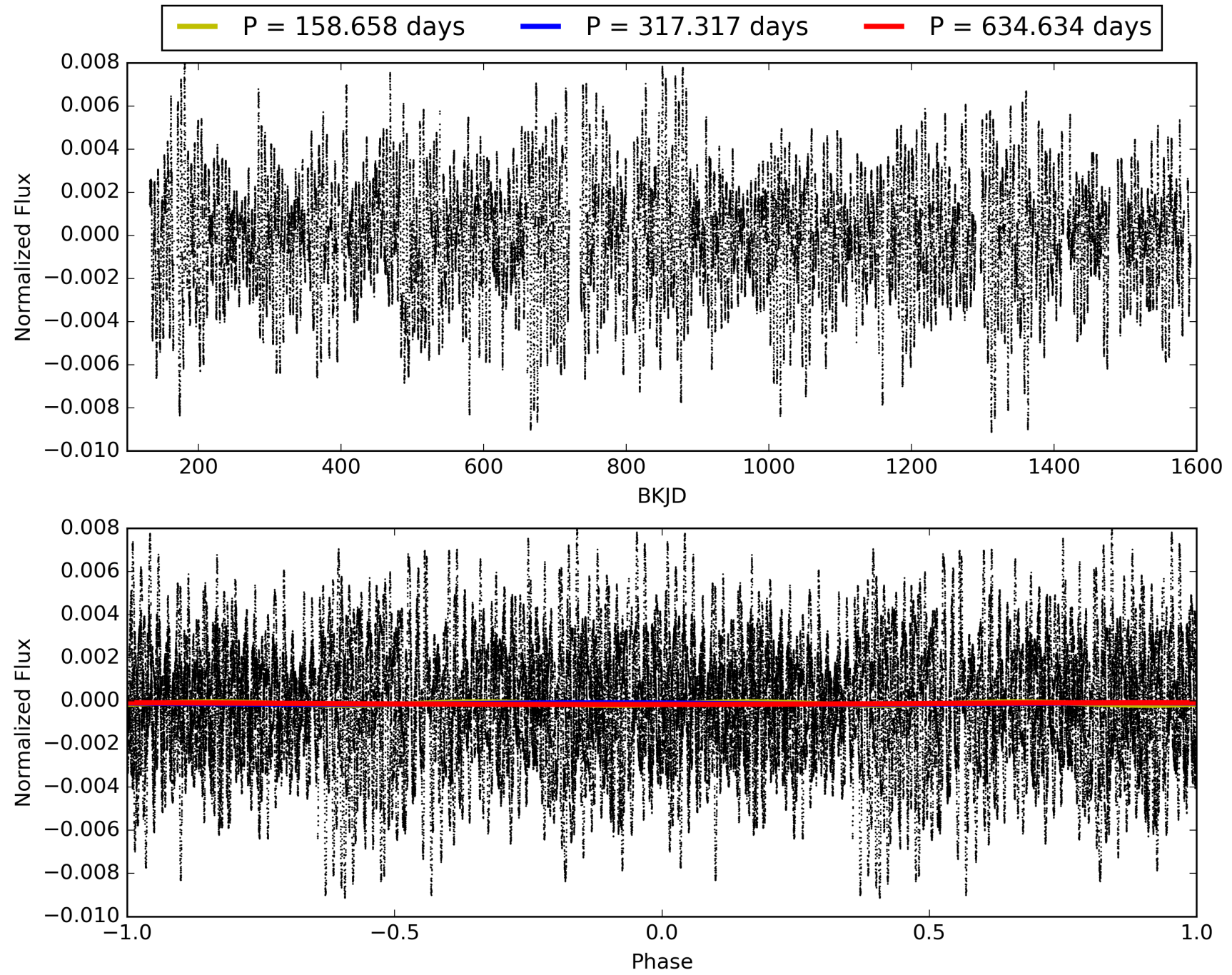
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 30-Jan-2016 13:17:34 Z

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

TCE 007695398-01, PDC Light Curves

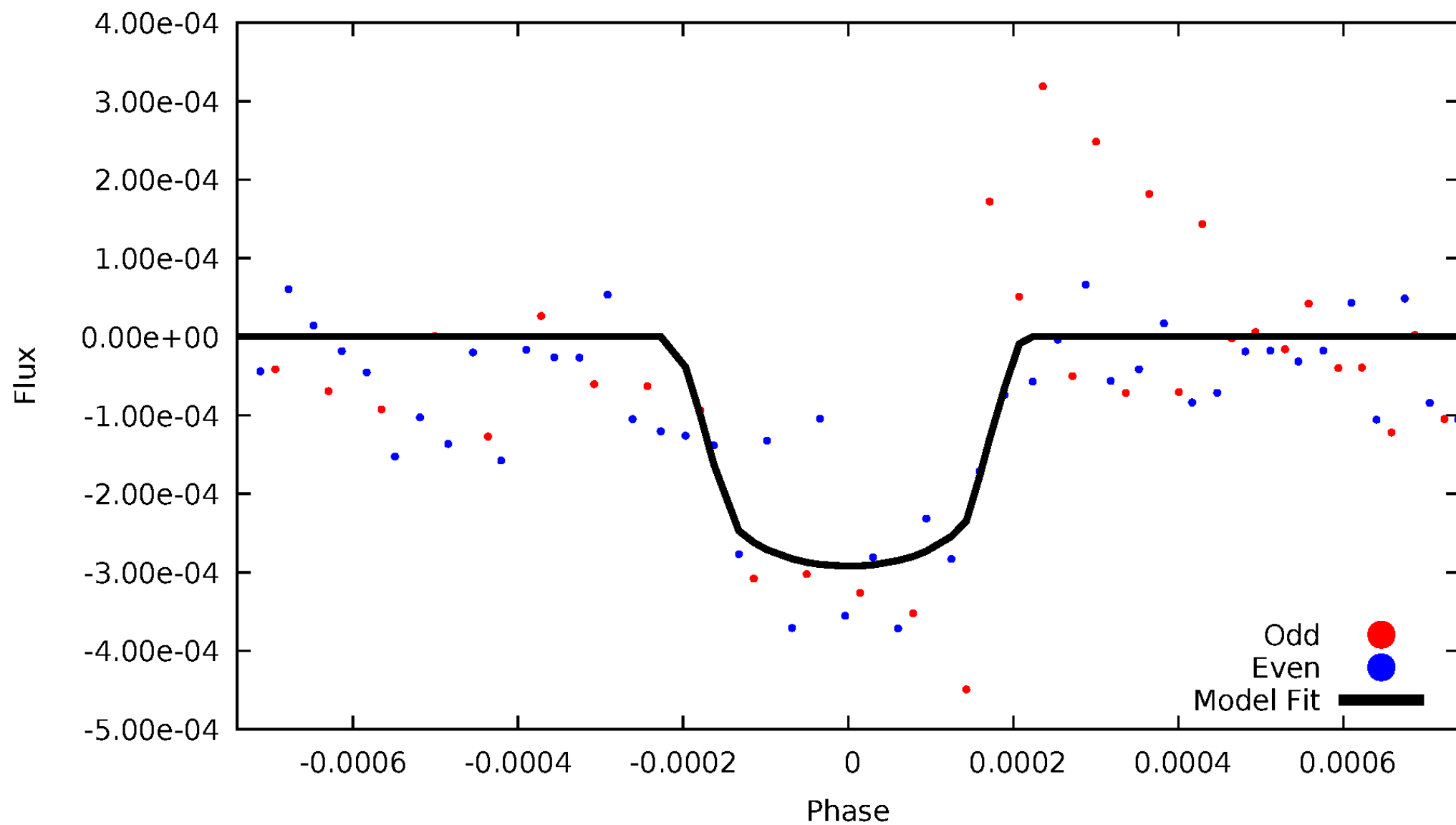


TCE 007695398-01



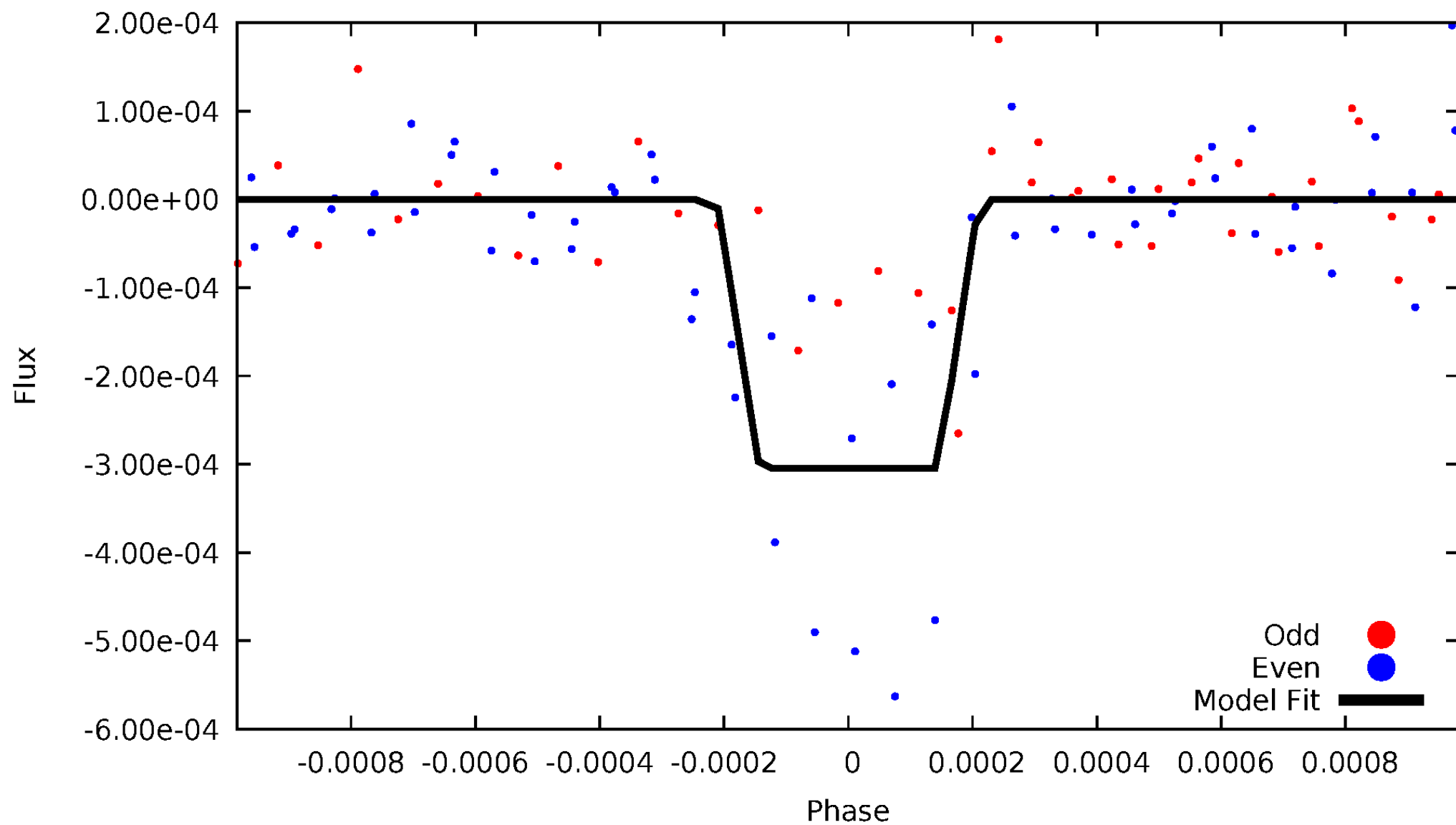
DV Odd/Even

TCE 007695398-01

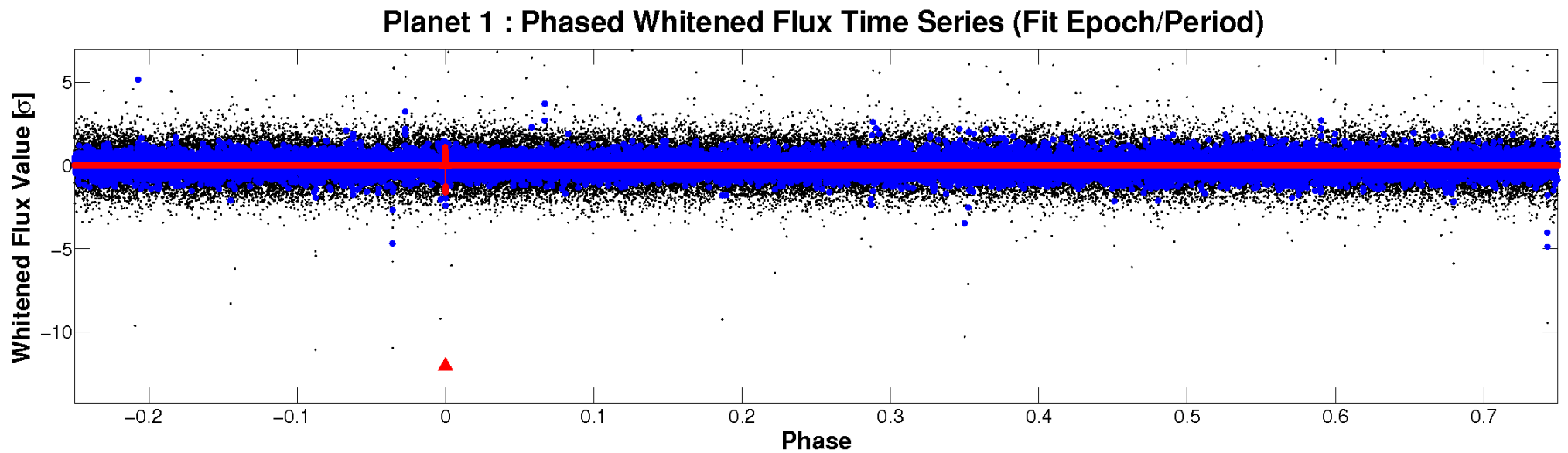
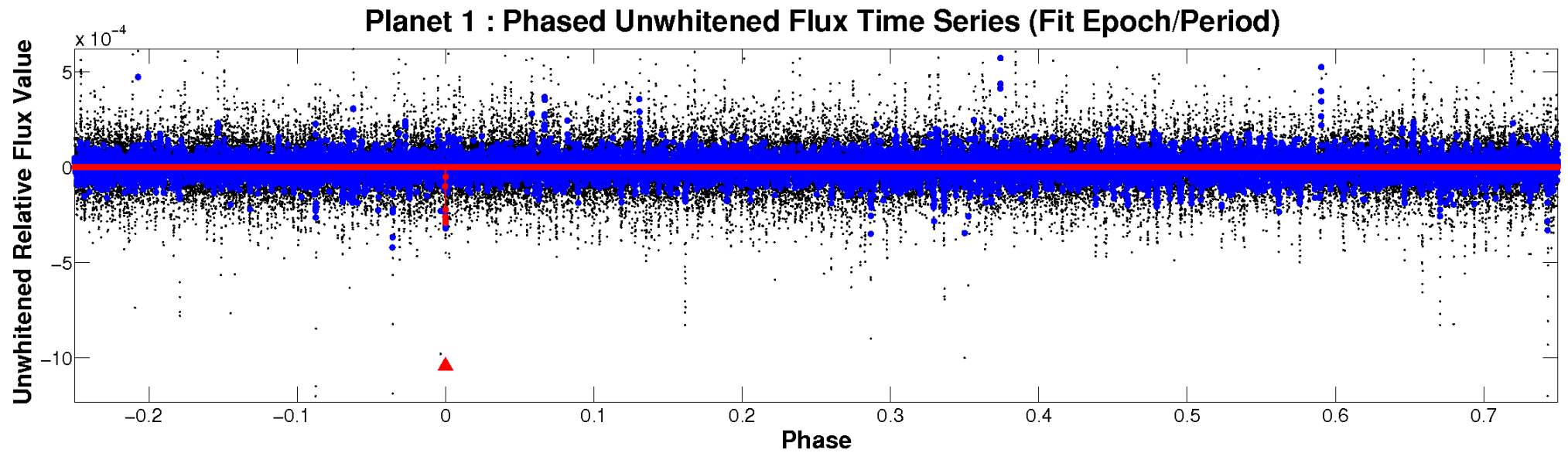


ALT Odd/Even

TCE 007695398-01

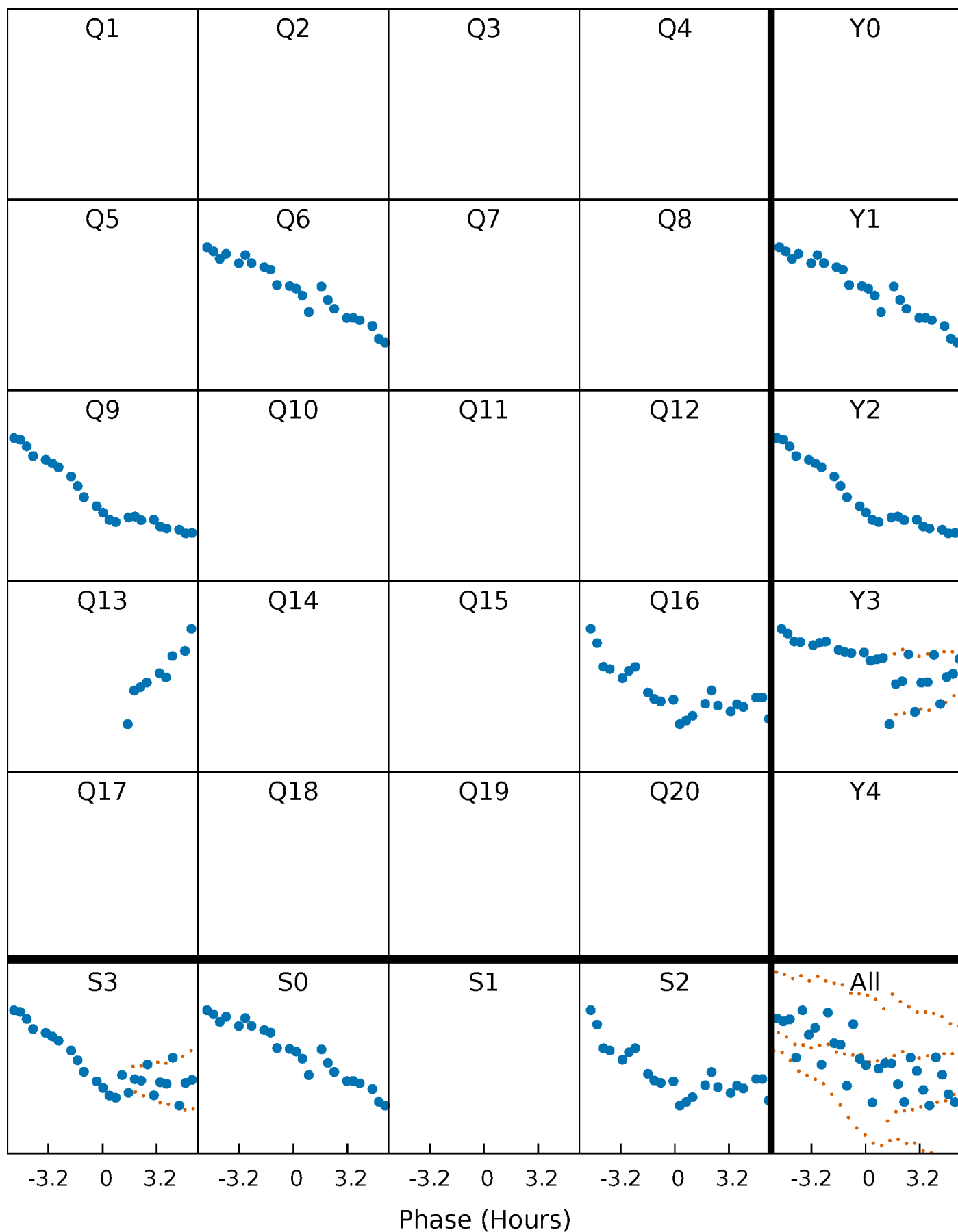


Non-Whitened Vs. Whitened Light Curve



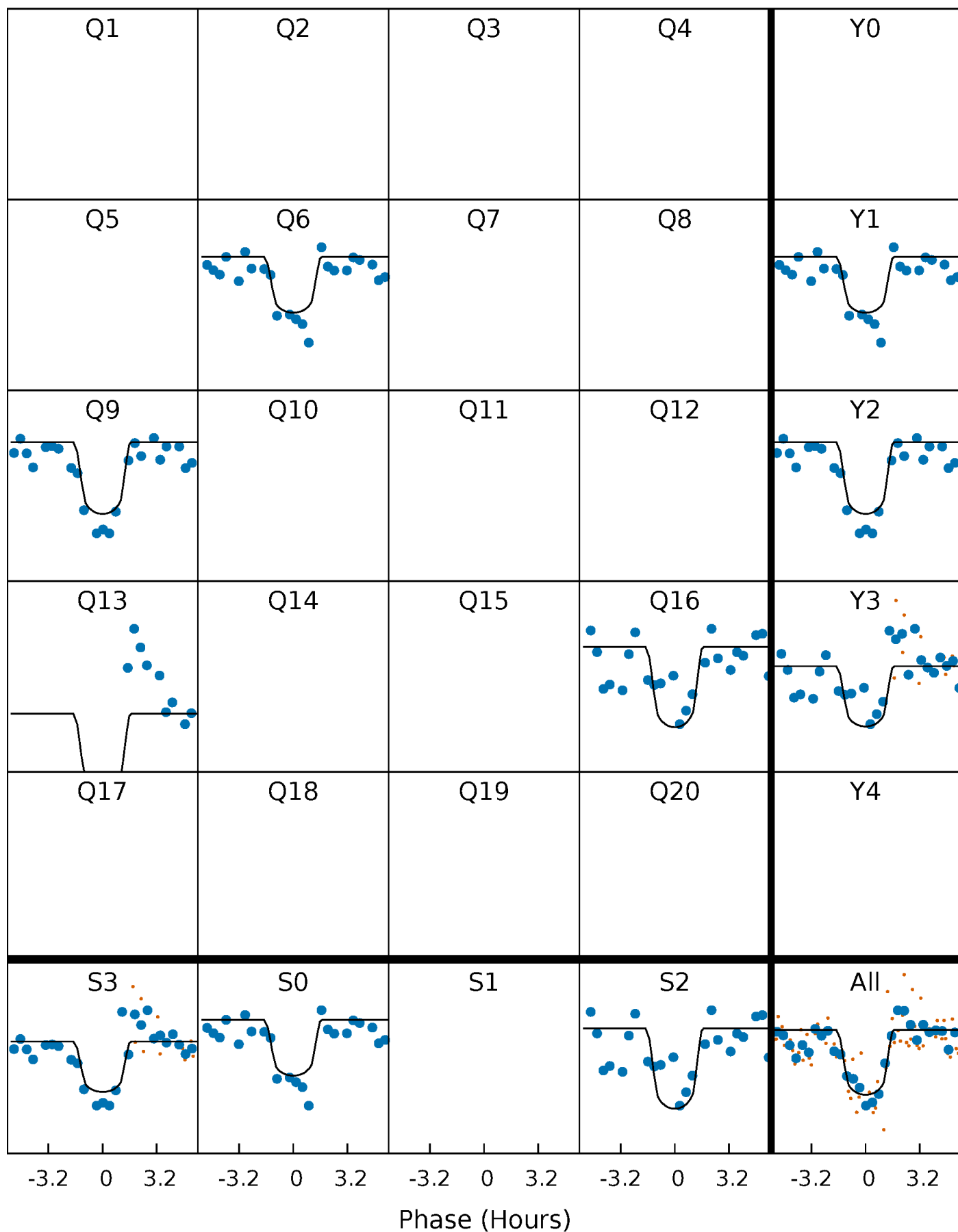
PDC Quarter-Phased Transit Curves

TCE 007695398-01 P=317.316931 Days $T_0=230.751765$ (BKJD)



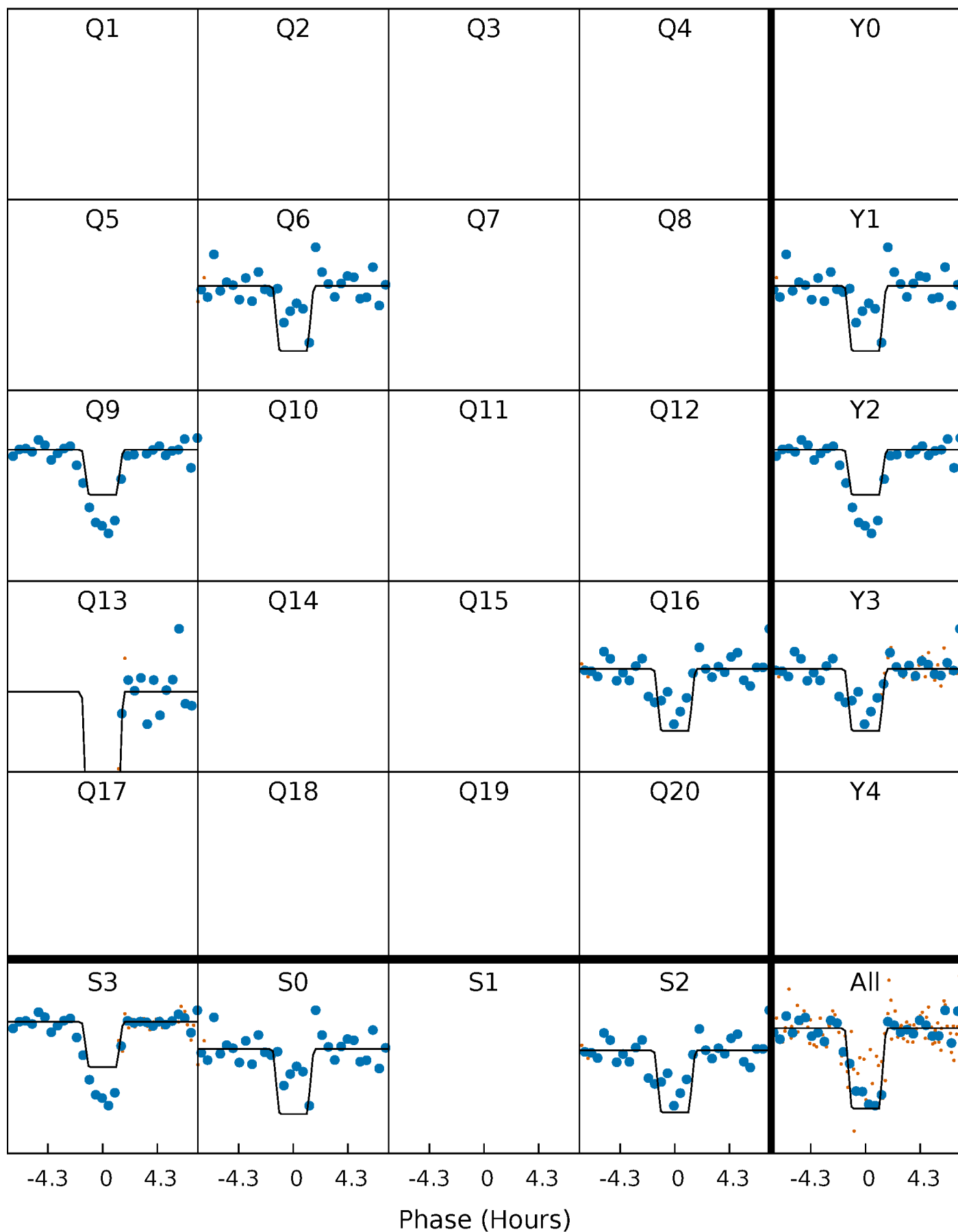
DV Quarter-Phased Transit Curves

TCE 007695398-01 P=317.316931 Days $T_0=230.751765$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

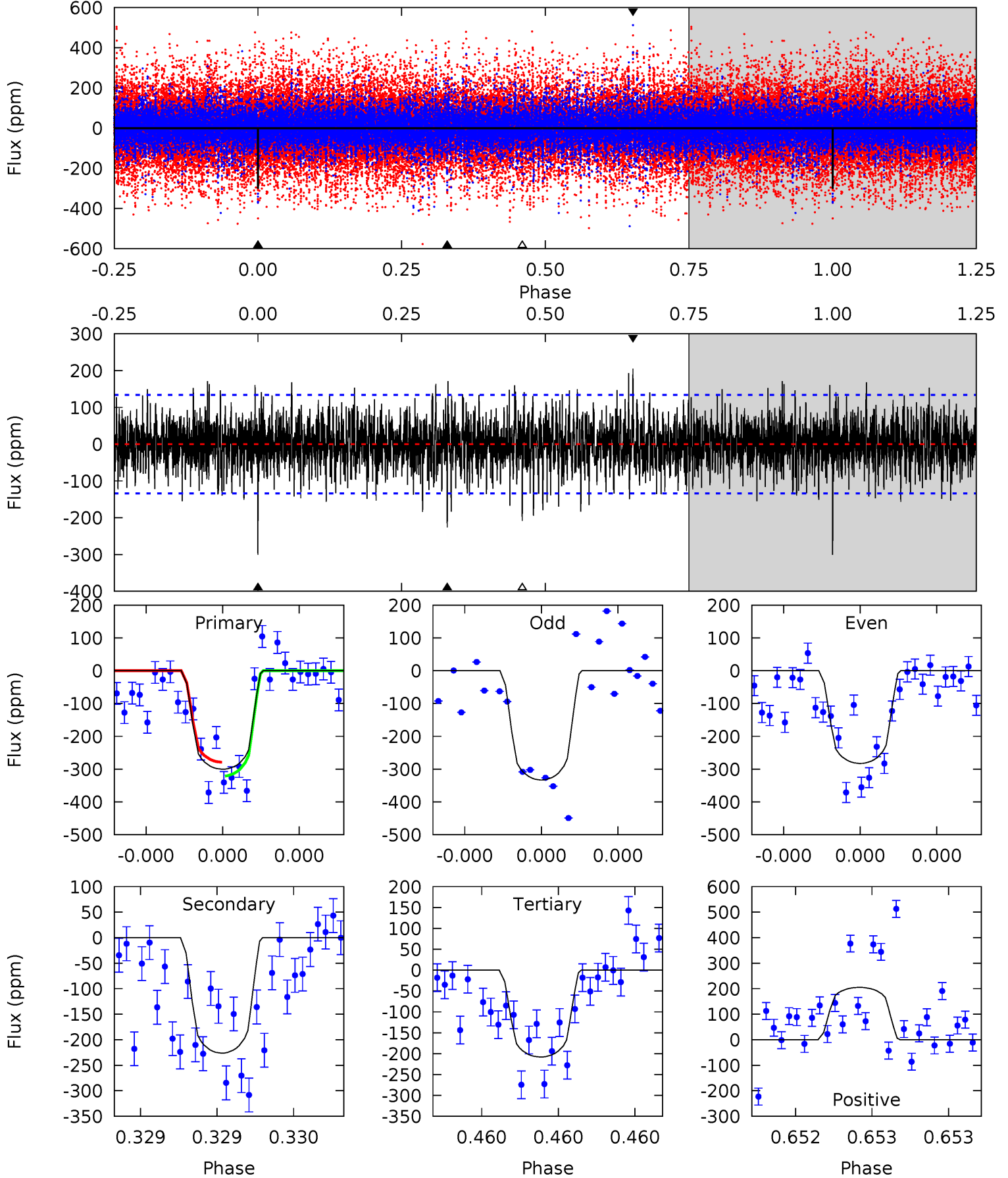
TCE 007695398-01 P=317.323175 Days $T_0=230.734640$ (BKJD)



DV Model-Shift Uniqueness Test

007695398-01, P = 317.316931 Days, E = 230.751765 Days

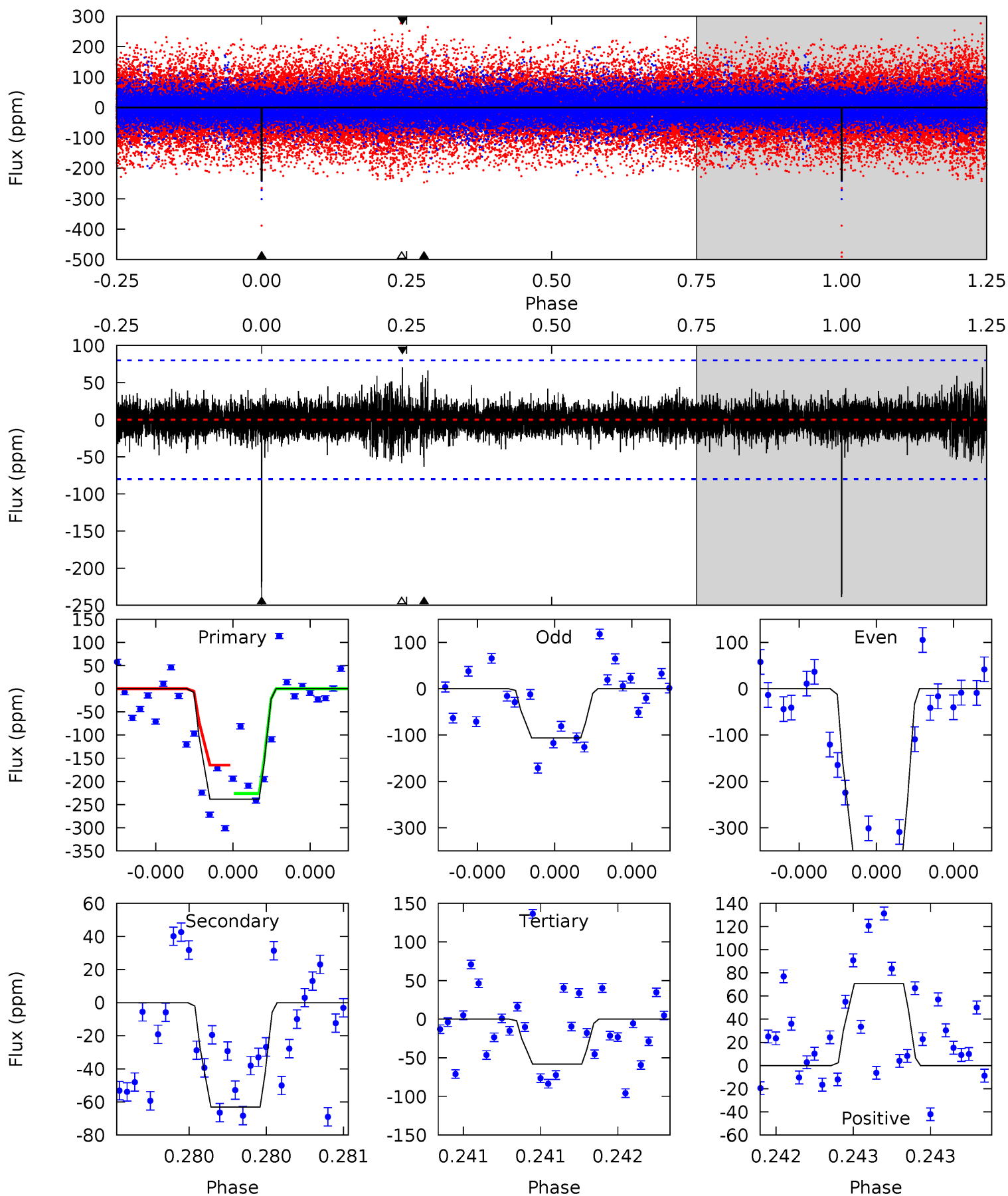
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
12.6	9.46	8.70	8.59	5.60	3.53	1.96	3.86	3.98	0.76	0.87	1.01	0.86	0.41	0.88



Alt Model-Shift Uniqueness Test

007695398-01, P = 317.323175 Days, E = 230.734640 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
16.7	4.42	4.08	4.94	5.61	3.53	0.85	12.6	11.8	0.34	-0.52	8.84	1.44	0.23	1.99



Stellar Parameters For KIC 007695398

	$T_{\text{eff}}(K)$	$\log(g)$	$[\text{Fe}/\text{H}]$	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	6024^{+163}_{-163}	$4.322^{+0.160}_{-0.131}$	$-0.340^{+0.300}_{-0.300}$	$1.099^{+0.232}_{-0.190}$	$0.923^{+0.120}_{-0.098}$	$0.980^{+0.747}_{-0.362}$
	+3%/-3%	+4%/-3%	+88%/-88%	+21%/-17%	+13%/-11%	+76%/-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 007695398-01 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	A_{obs}
DV	-226 ± 24	$2.20^{+1.51}_{-1.28}$	412^{+25}_{-24}	5452^{+3394}_{-1001}	19915^{+94088}_{-12690}
Alt.	-63 ± 14	$2.19^{+1.55}_{-1.17}$	412^{+26}_{-24}	4208^{+1602}_{-723}	5717^{+20385}_{-3875}

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

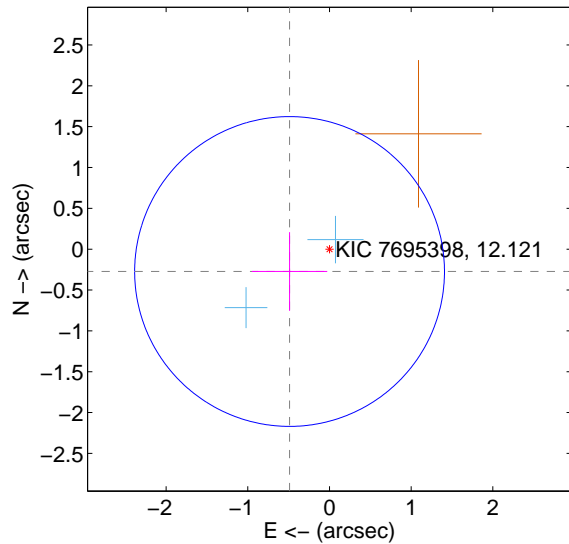
Supplemental centroid analysis for 007695398-01. Kepler magnitude: 12.12. Transit SNR 7.15

There are 2 quarters with good PRF difference image offsets

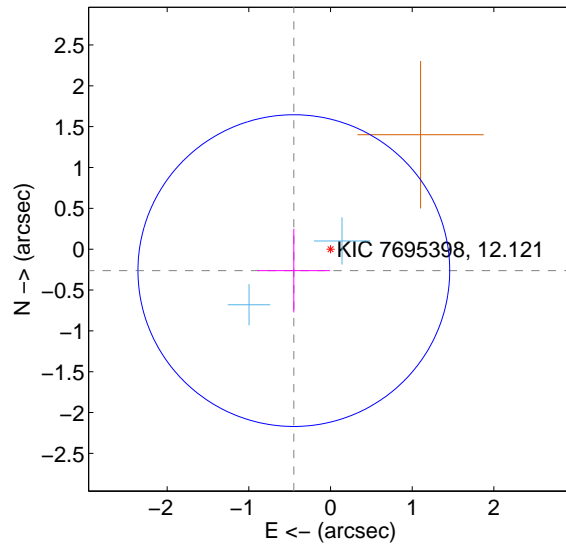
The direct PRF centroid is offset from the target star catalog position by about 0.04 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.560 ± 0.632	0.89	0.489 ± 0.462	-0.273 ± 0.481
PRF-fit source offset from KIC position	0.520 ± 0.636	0.82	0.449 ± 0.443	-0.262 ± 0.512
photometric centroid source offset	0.24 ± 0.74	0.32	-0.20 ± 0.75	-0.12 ± 0.73

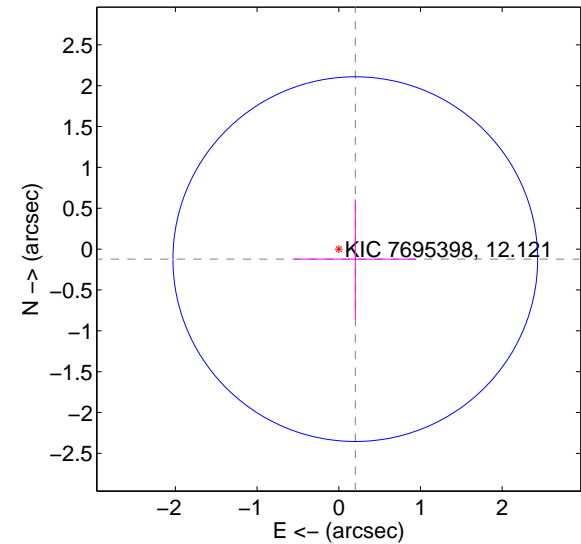
offset from difference PRF-fit to OOT PRF-fit



offset from difference PRF-fit to KIC position



offset from photometric centroids

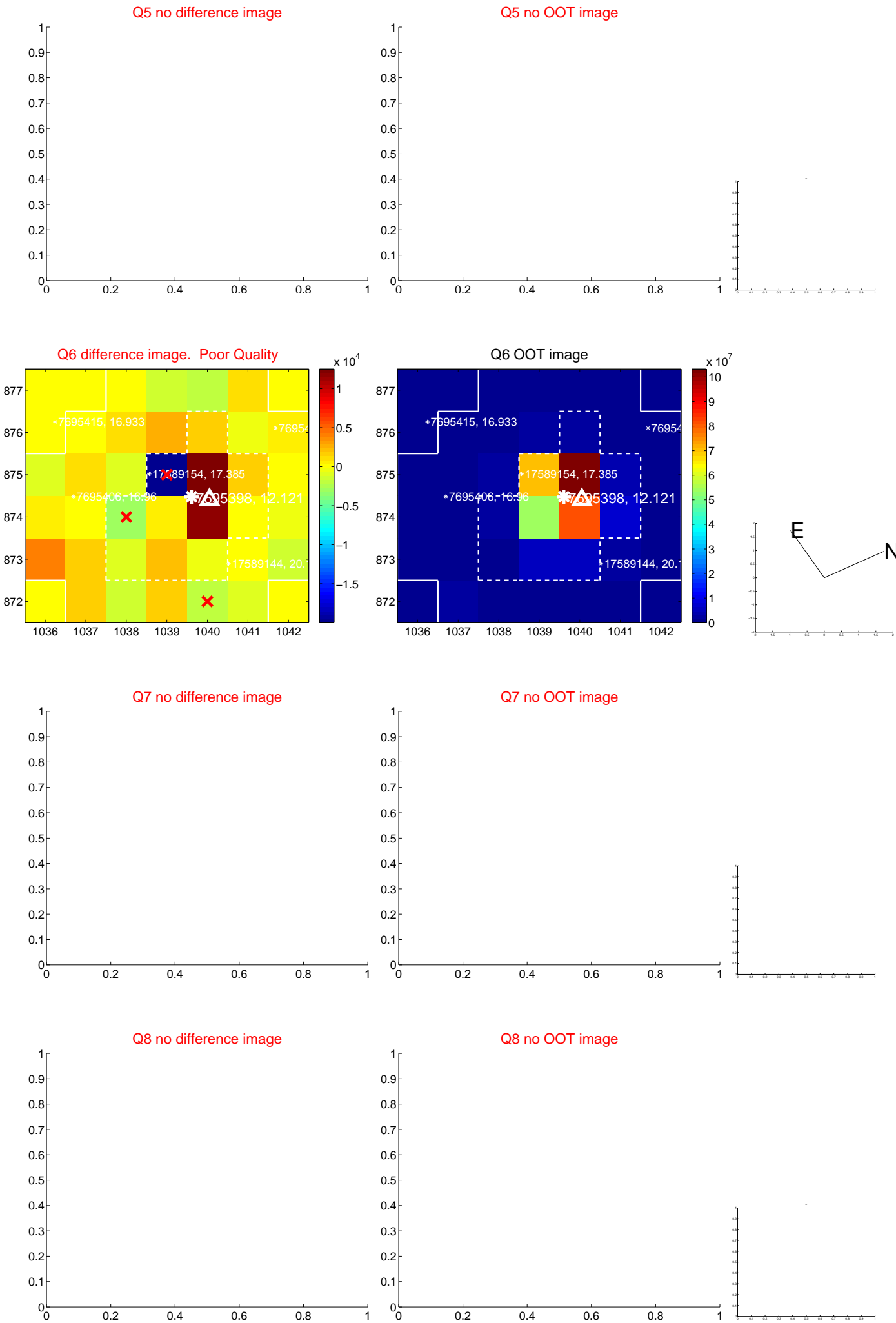


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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

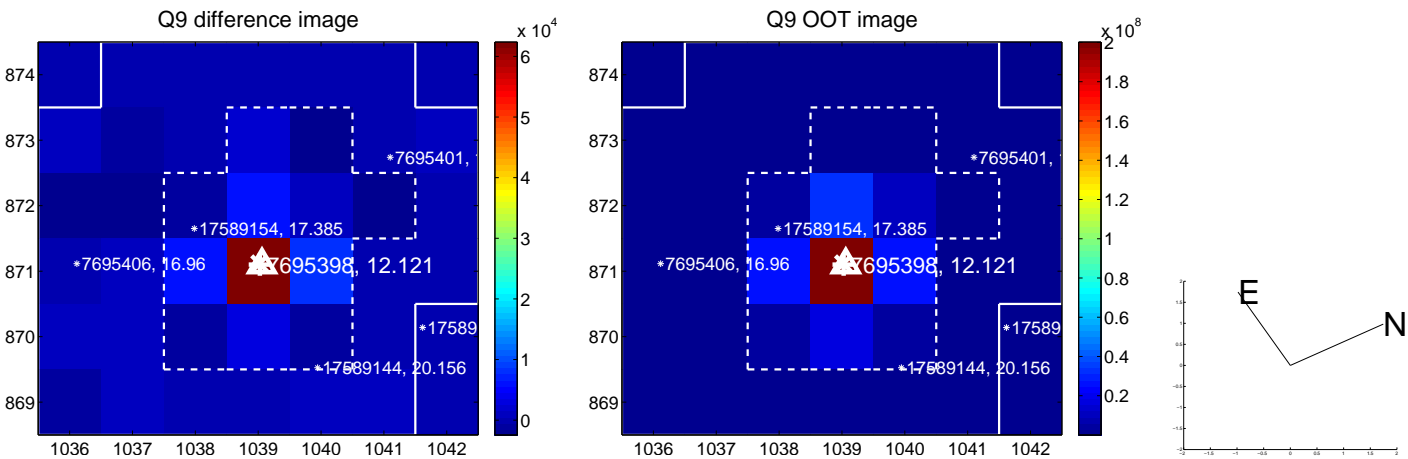
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



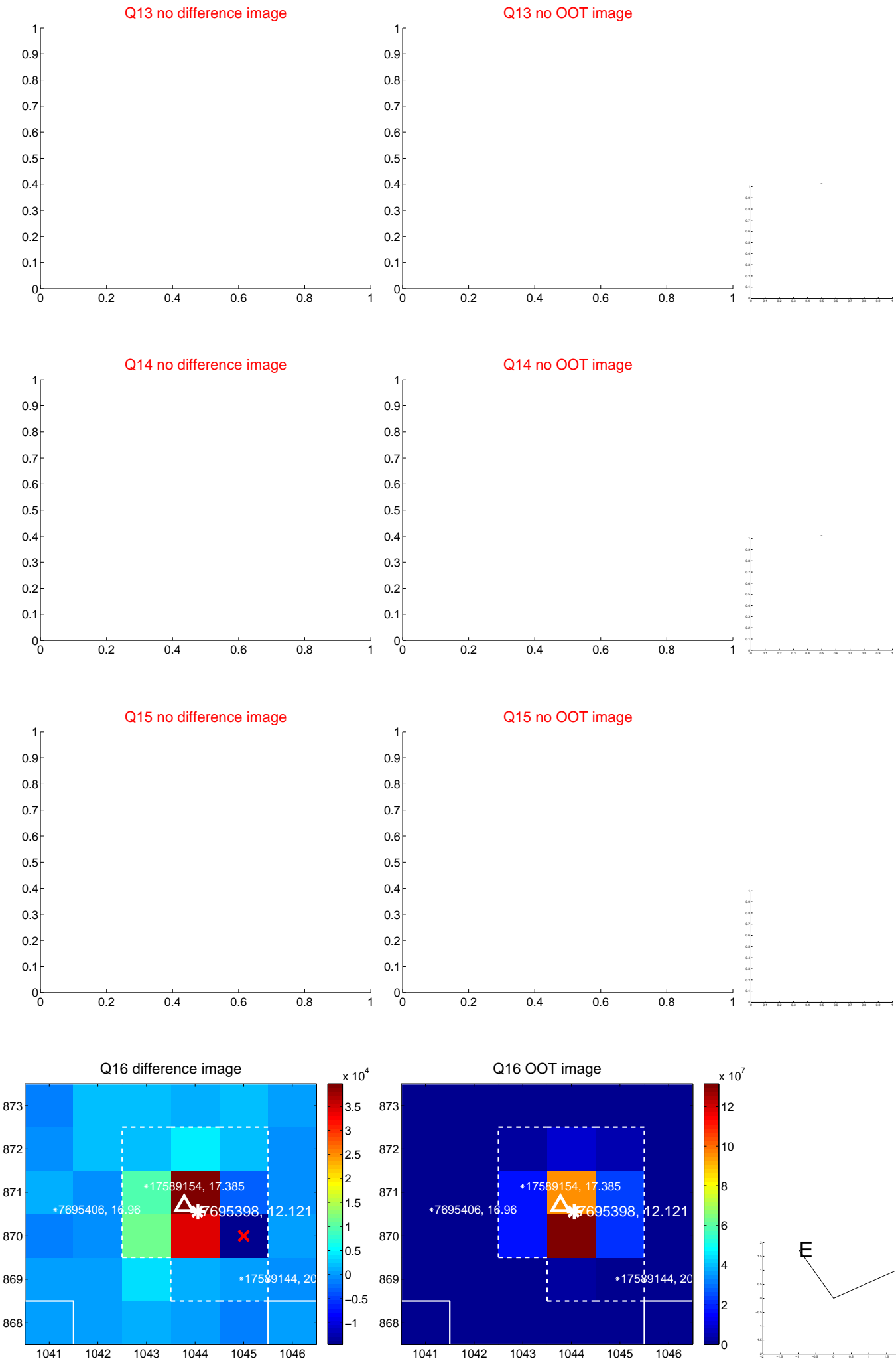
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



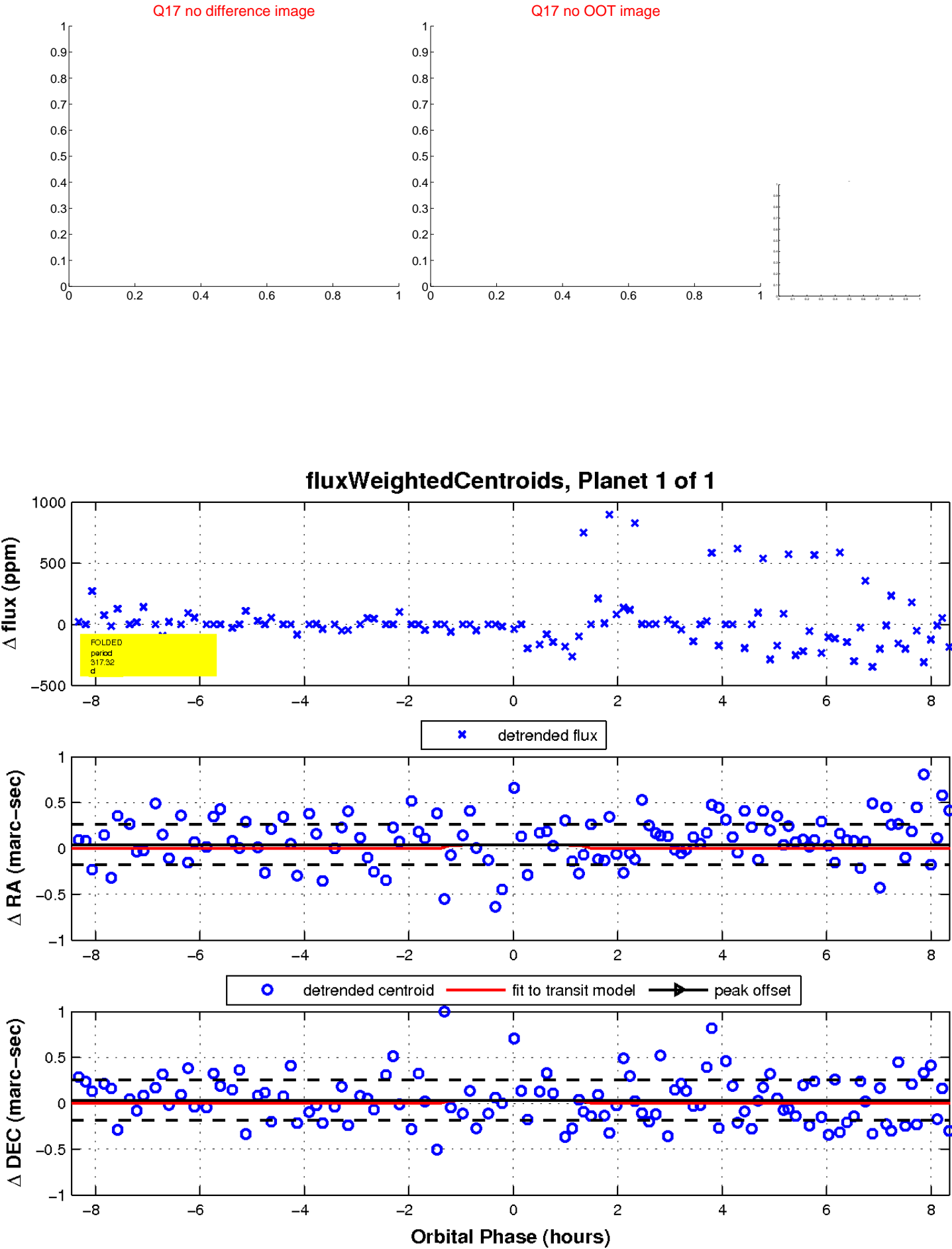
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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

