

KIC 007432354

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})
007432354-01	OBS	No	529.874649	458.766435	163.5	6.264	8.1	7.7	1.11	6266	1.59	1.03

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
007432354-01	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_CHASES_MARSHALL—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.

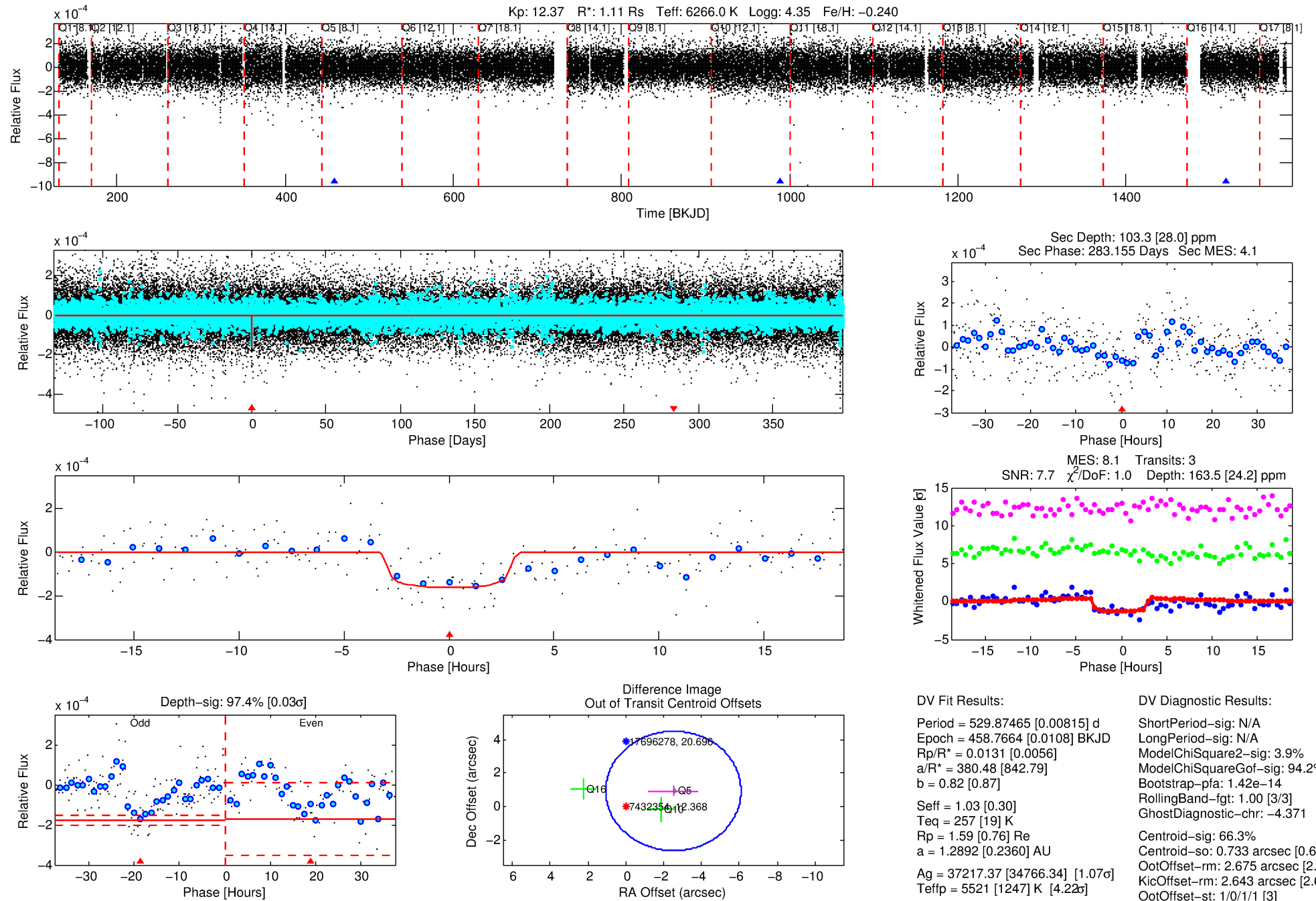
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 007432354-01

No Significant Match Found

DV One-Page Summary

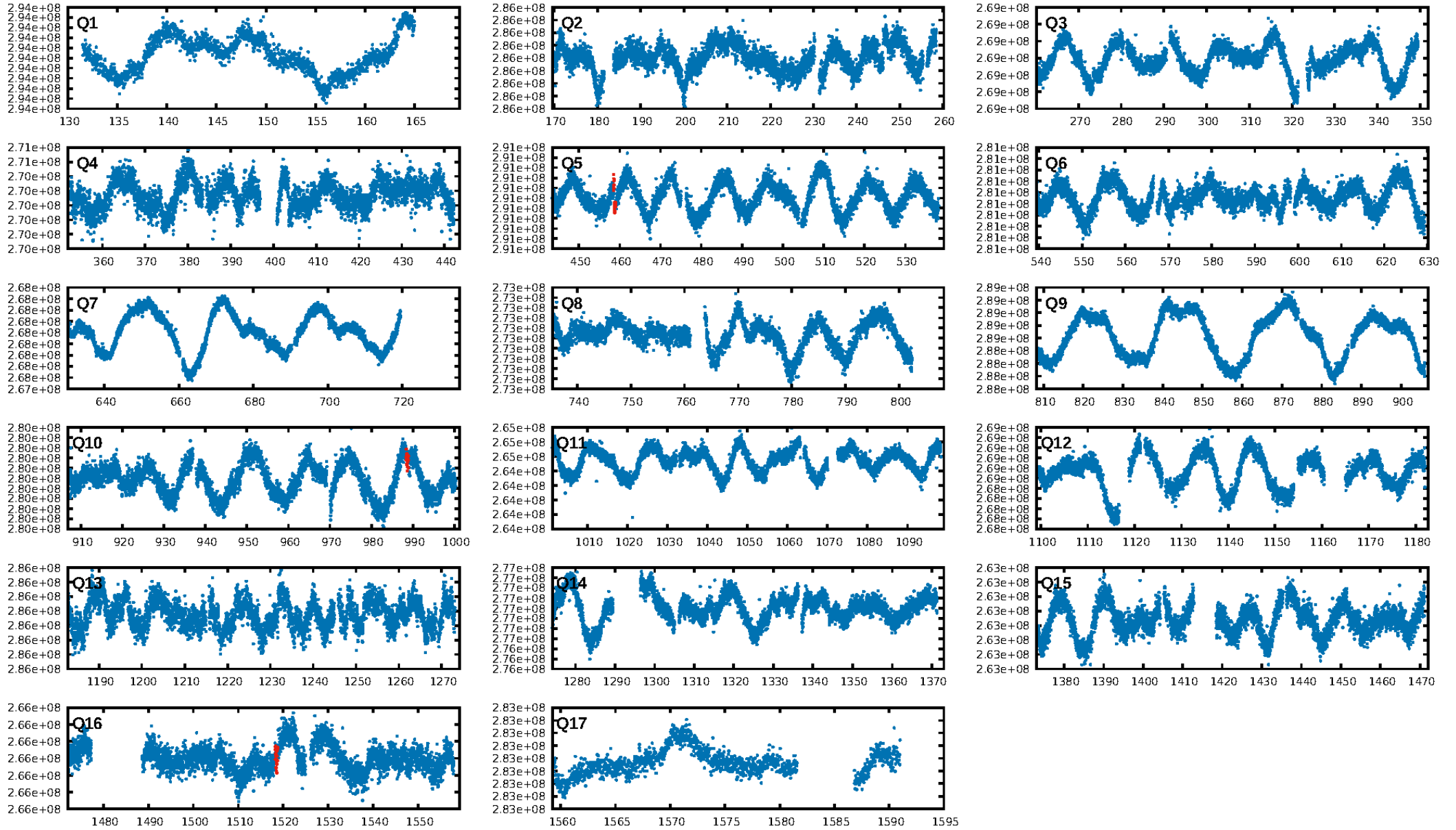
KIC: 7432354 Candidate: 1 of 1 Period: 529.875 d



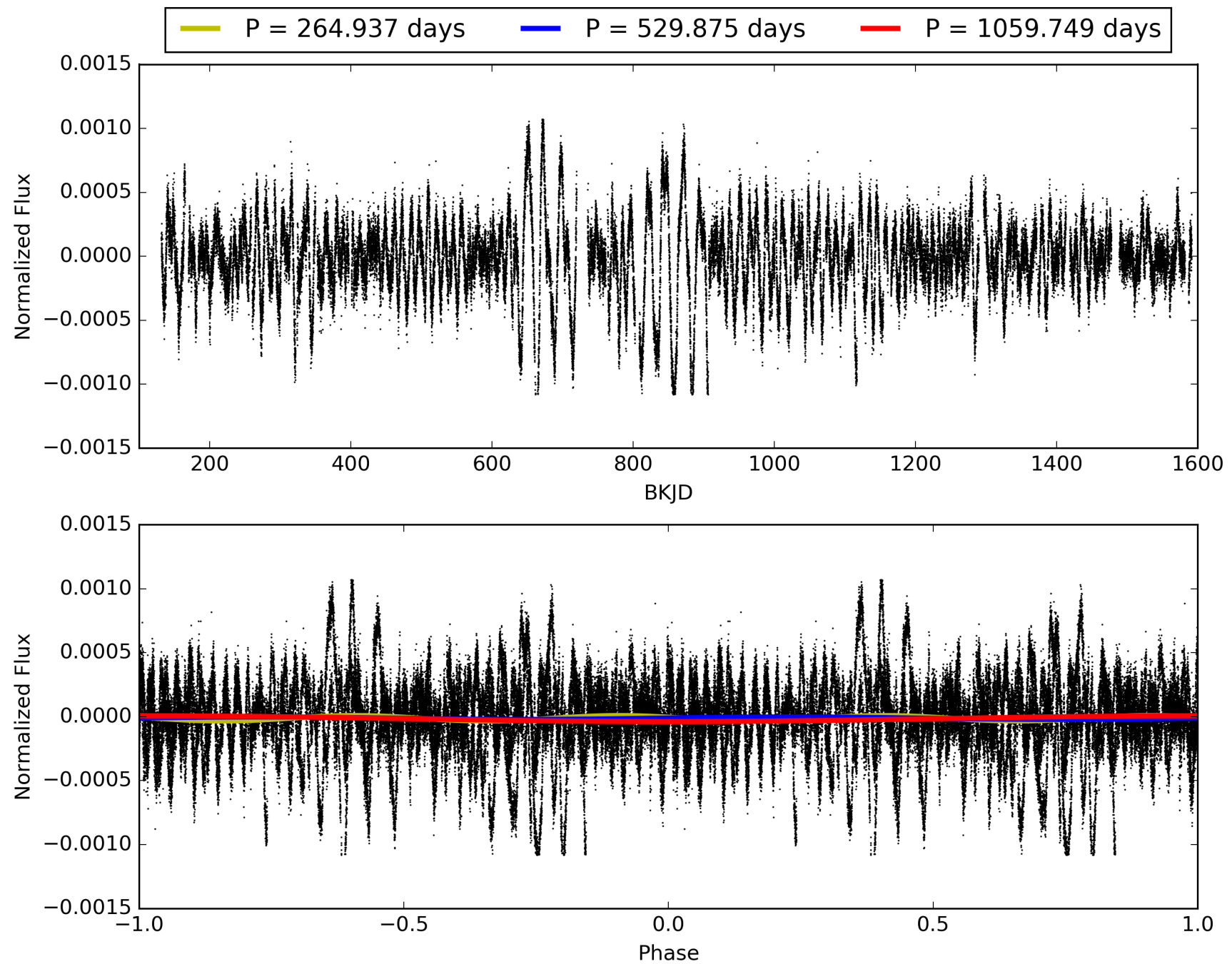
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 31-Jan-2016 22:24:06 Z

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

TCE 007432354-01, PDC Light Curves

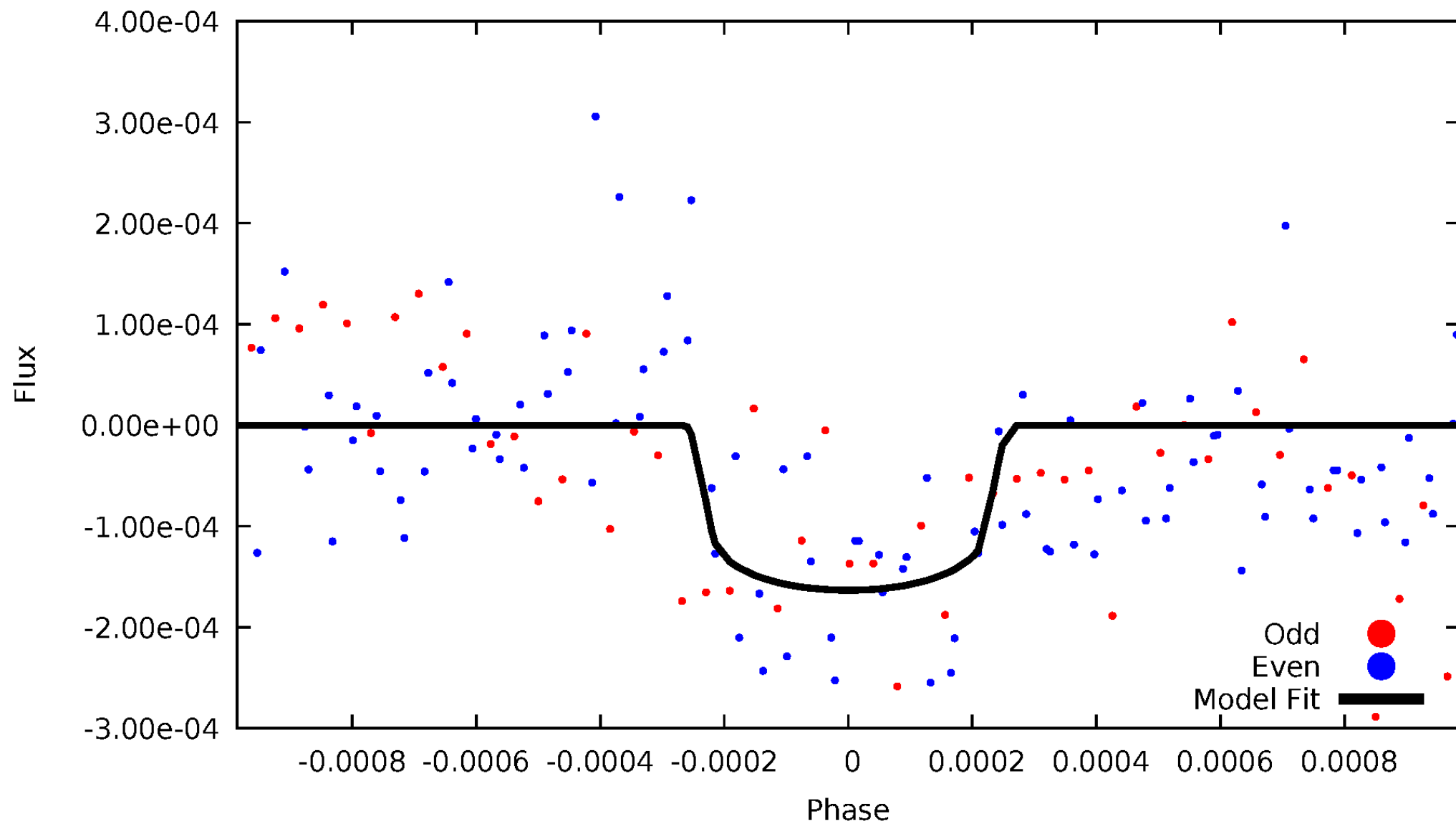


TCE 007432354-01



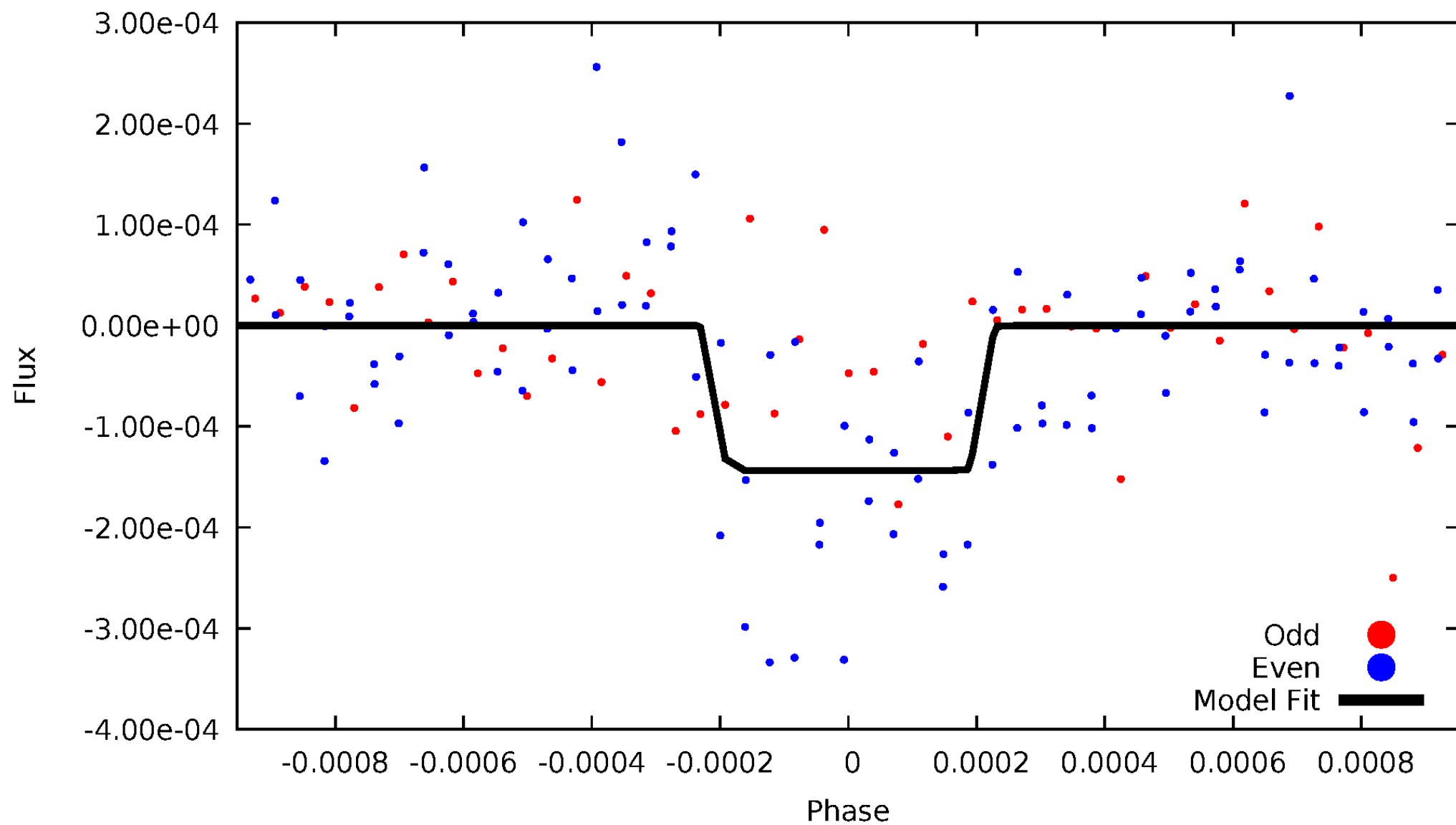
DV Odd/Even

TCE 007432354-01



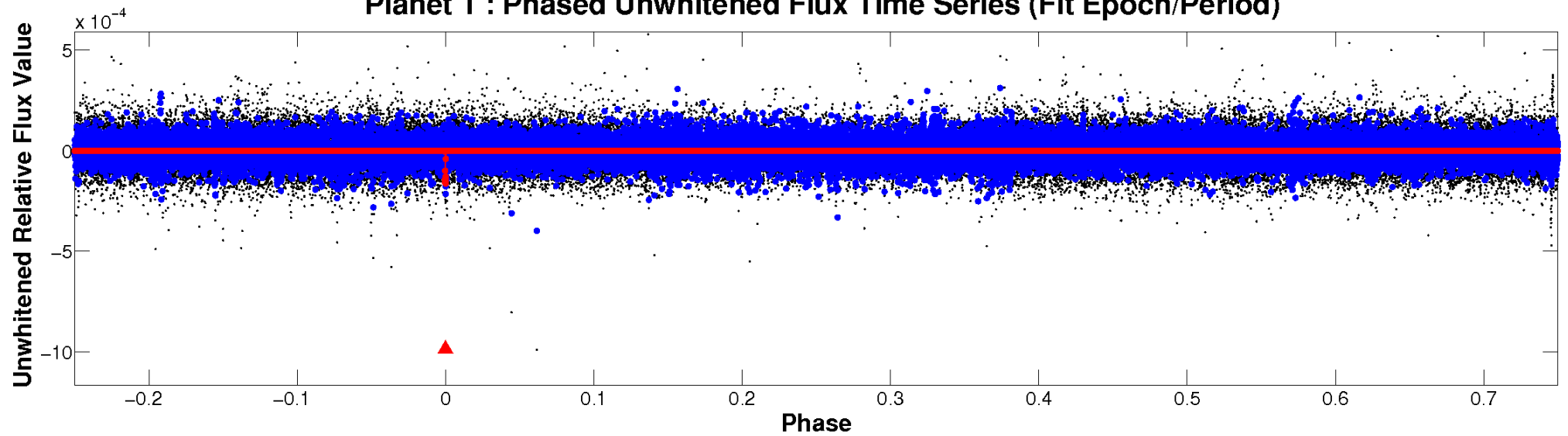
ALT Odd/Even

TCE 007432354-01

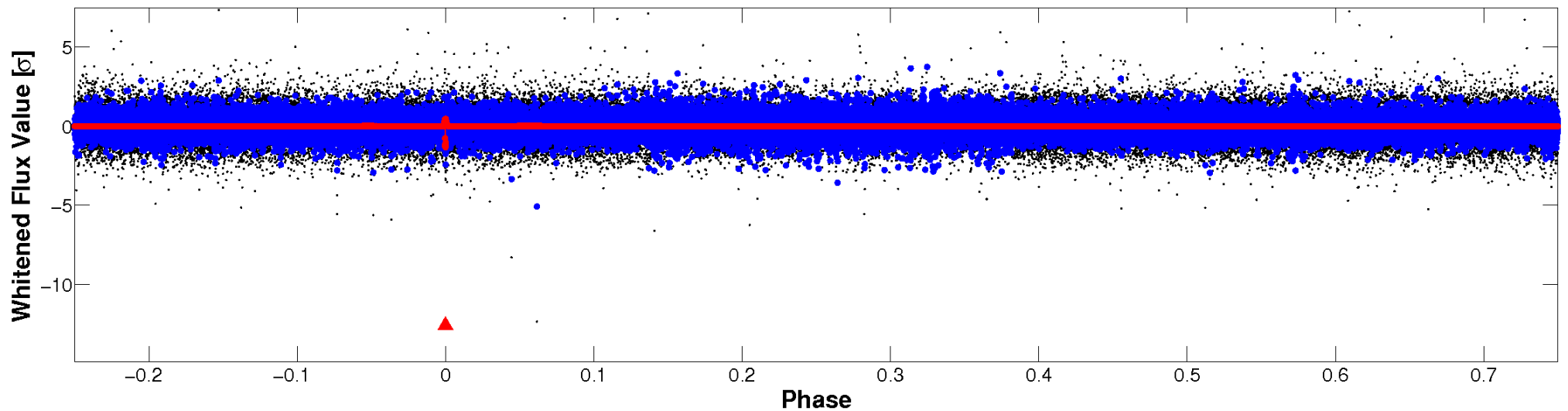


Non-Whitened Vs. Whitened Light Curve

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

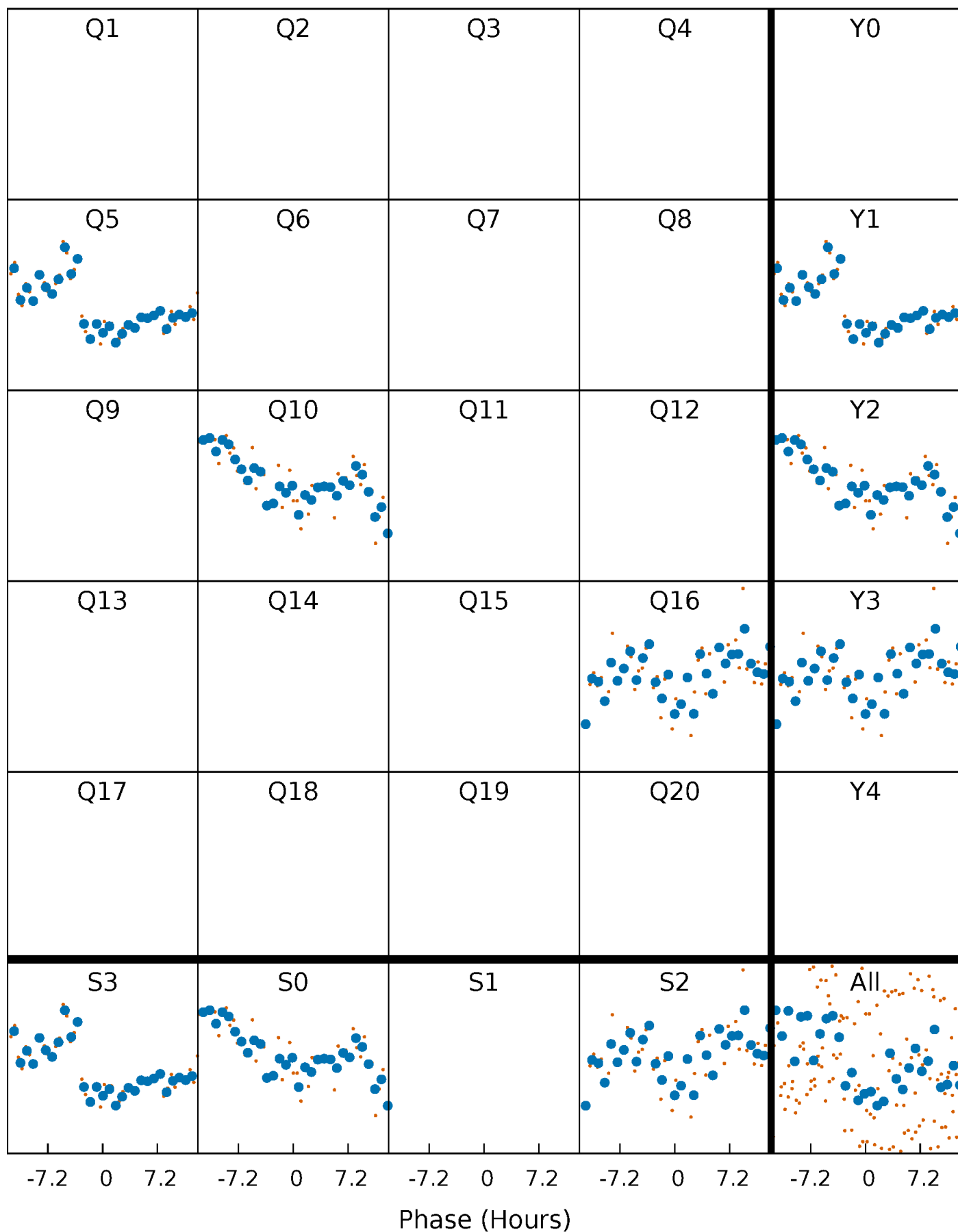


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



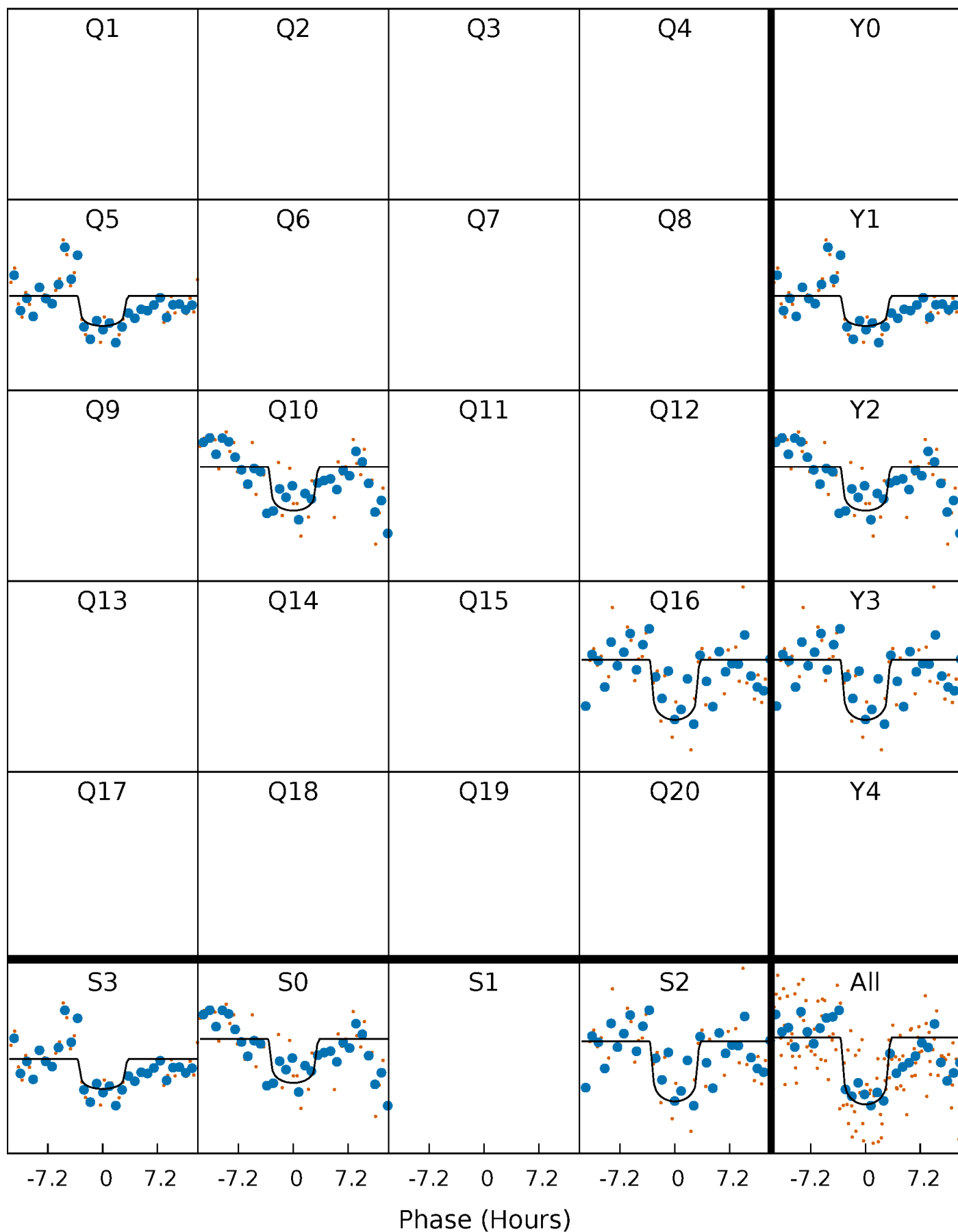
PDC Quarter-Phased Transit Curves

TCE 007432354-01 P=529.874649 Days $T_0=458.766435$ (BKJD)



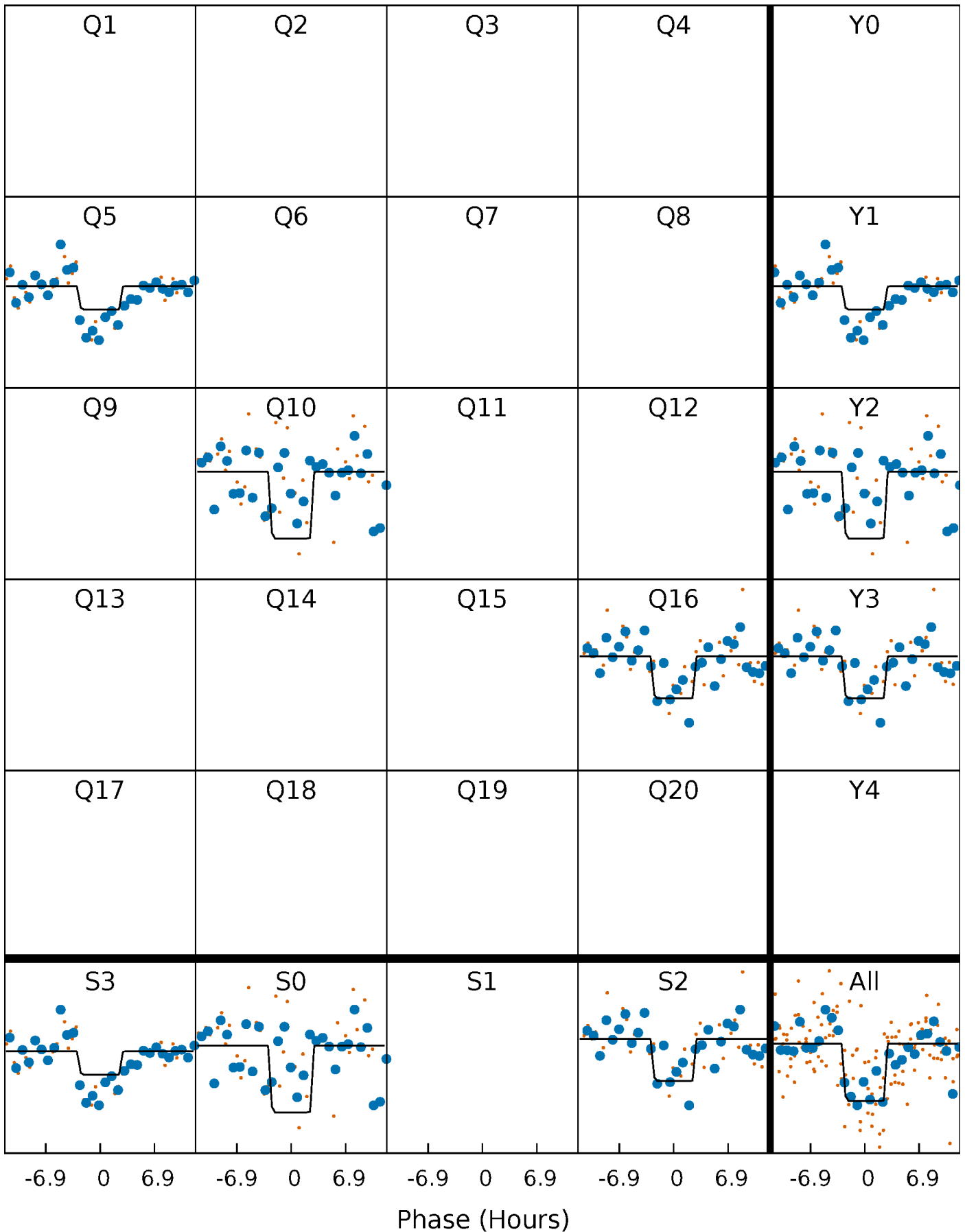
DV Quarter-Phased Transit Curves

TCE 007432354-01 P=529.874649 Days $T_0=458.766435$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

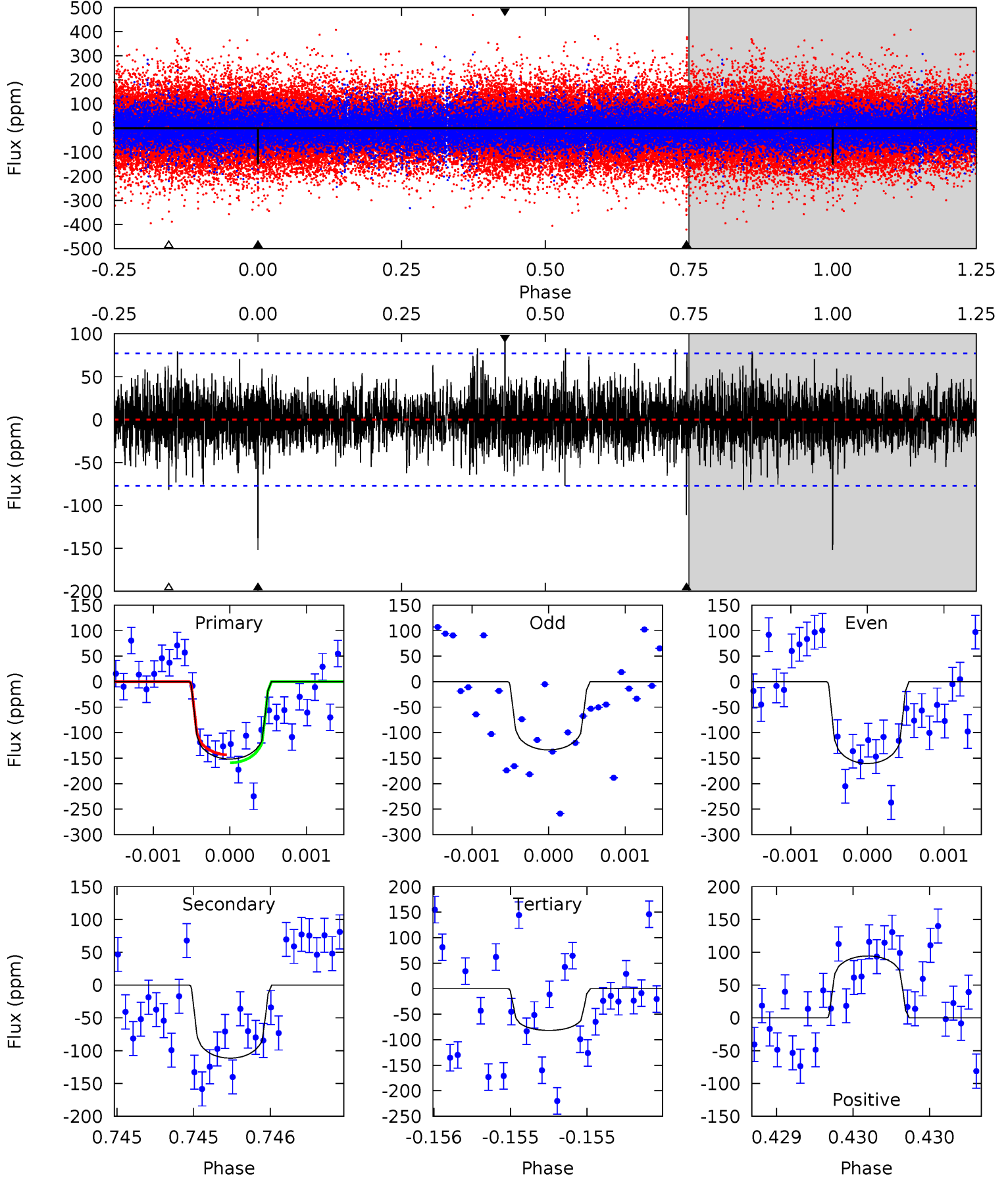
TCE 007432354-01 P=529.883078 Days $T_0=458.758505$ (BKJD)



DV Model-Shift Uniqueness Test

007432354-01, P = 529.874649 Days, E = 458.766435 Days

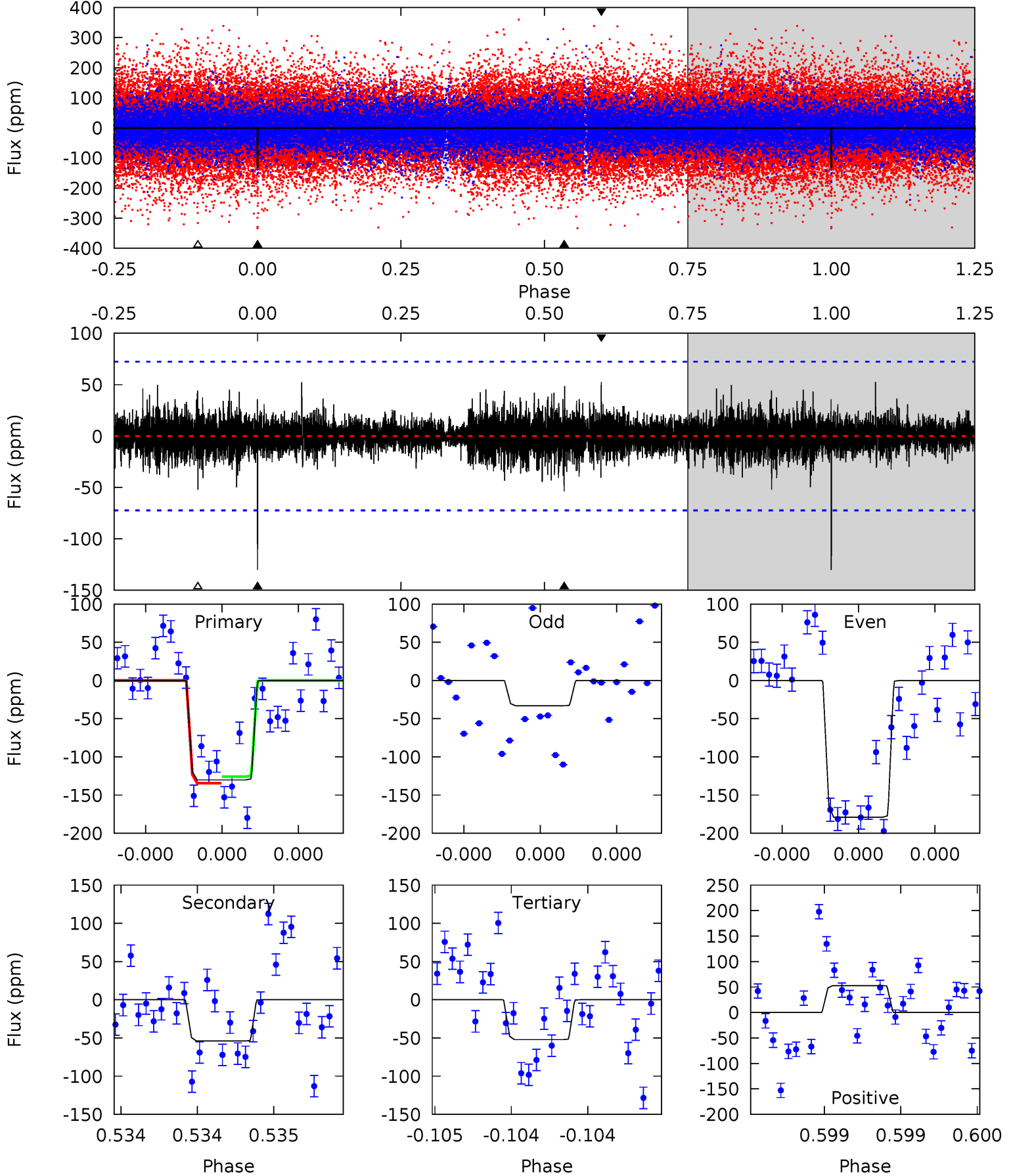
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
11.0	8.05	5.91	6.81	5.57	3.48	1.50	5.05	4.15	2.14	1.23	0.91	1.13	0.38	0.56



Alt Model-Shift Uniqueness Test

007432354-01, P = 529.883078 Days, E = 458.758505 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
10.0	4.15	4.02	4.06	5.58	3.48	0.84	6.00	5.96	0.13	0.09	5.37	1.26	0.29	0.32



Stellar Parameters For KIC 007432354

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	6266^{+169}_{-188}	$4.351^{+0.096}_{-0.144}$	$-0.240^{+0.250}_{-0.300}$	$1.115^{+0.244}_{-0.163}$	$1.014^{+0.148}_{-0.111}$	$1.031^{+0.499}_{-0.423}$
	+3%/-3%	+2%/-3%	+104%/-125%	+22%/-15%	+15%/-11%	+48%/-41%
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 007432354-01 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	-111±14	$1.61^{+0.72}_{-0.72}$	363^{+19}_{-19}	5673^{+1995}_{-860}	39411^{+85983}_{-20998}
Alt.	-54±13	$1.45^{+0.71}_{-0.65}$	361^{+21}_{-20}	5017^{+1494}_{-760}	22794^{+49956}_{-12598}

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 $A_{obs} \gg 1.0$

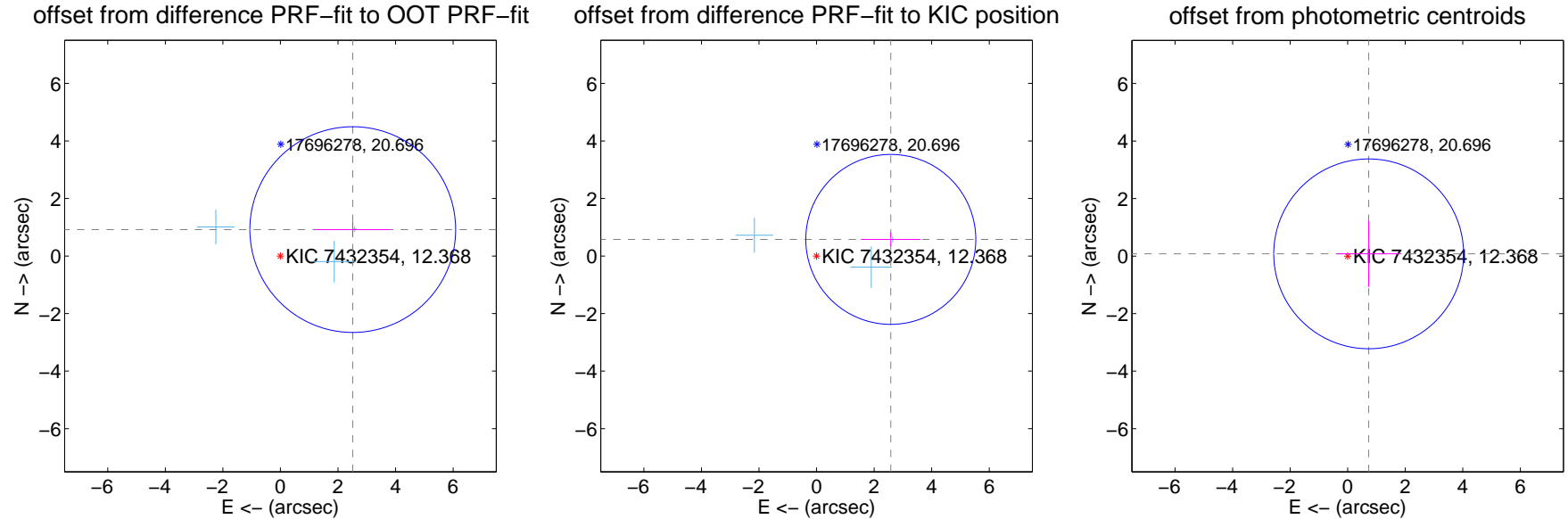
DV Centroid Data

Supplemental centroid analysis for 007432354-01. Kepler magnitude: 12.37. Transit SNR 7.65

There are 3 quarters with good PRF difference image offsets

The direct PRF centroid is offset from the target star catalog position by about 0.30 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	2.675 ± 1.192	2.24	-2.513 ± 1.295	0.919 ± 0.267
PRF-fit source offset from KIC position	2.643 ± 0.984	2.68	-2.579 ± 1.040	0.578 ± 0.246
photometric centroid source offset	0.73 ± 1.10	0.67	-0.73 ± 1.10	0.08 ± 1.15

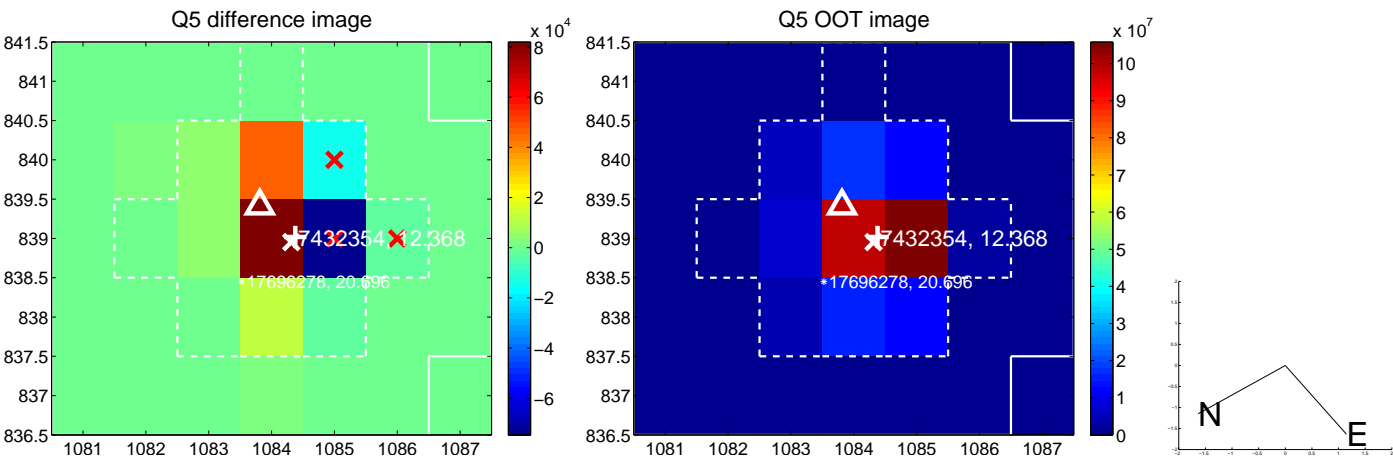


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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

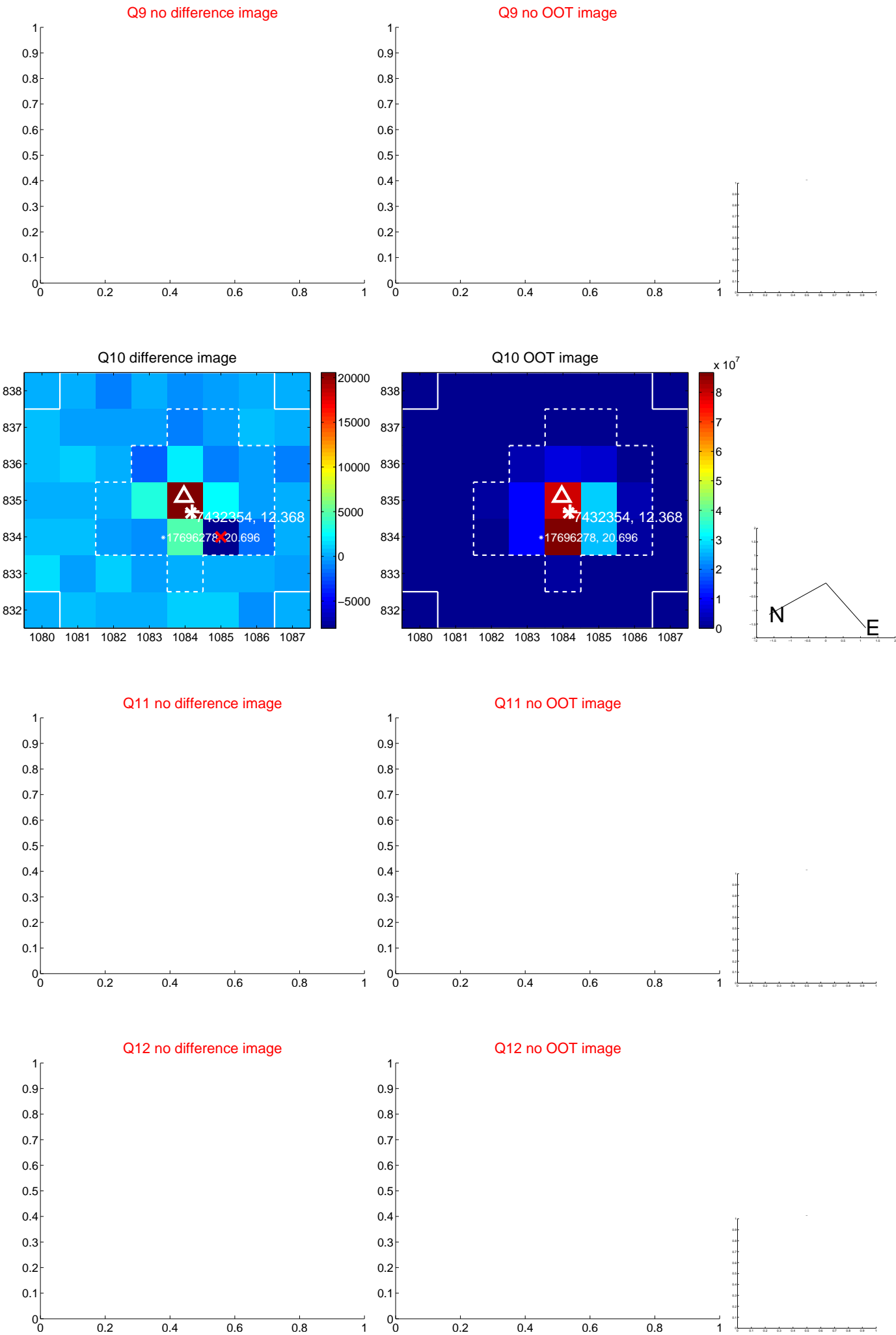
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



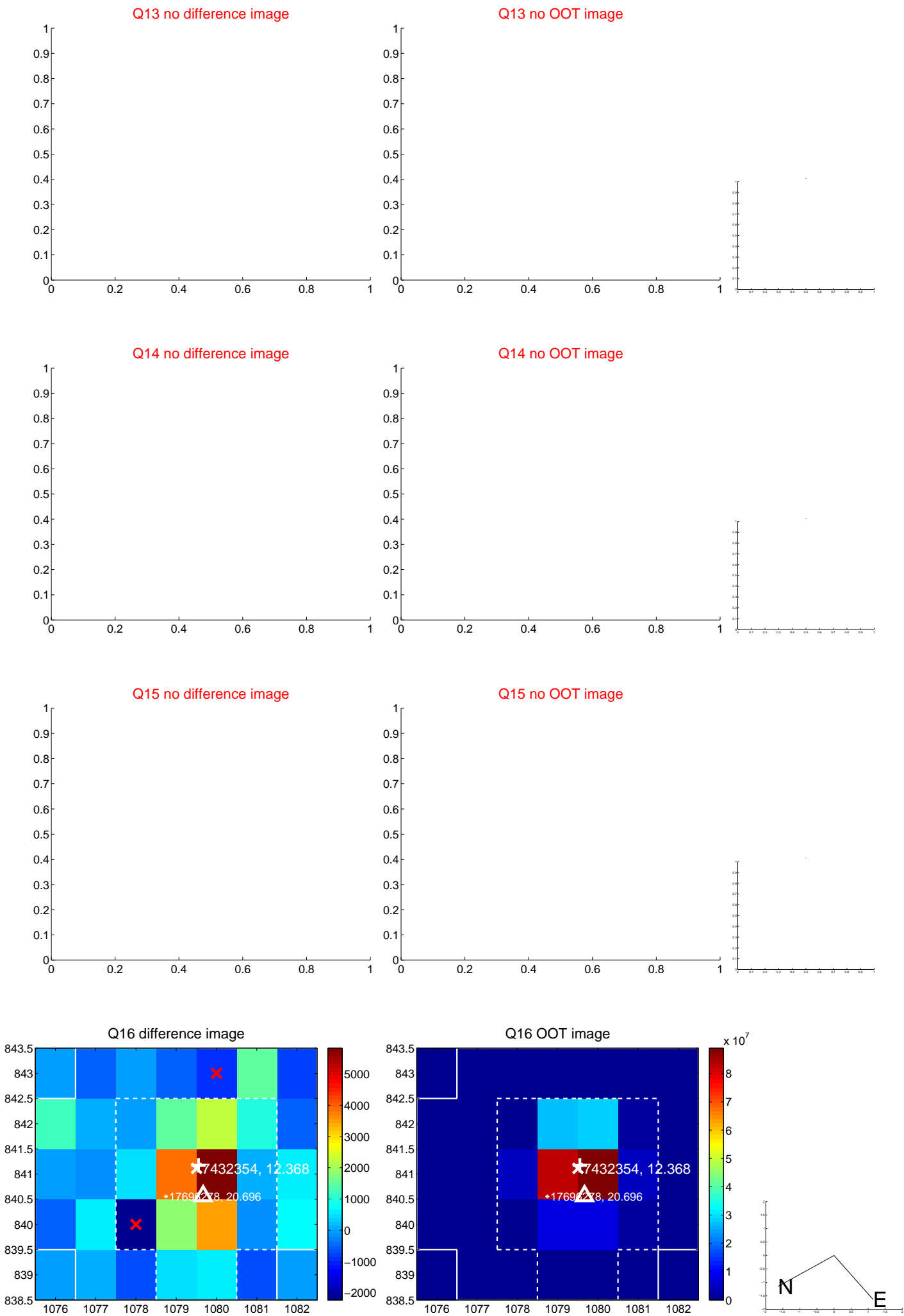
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



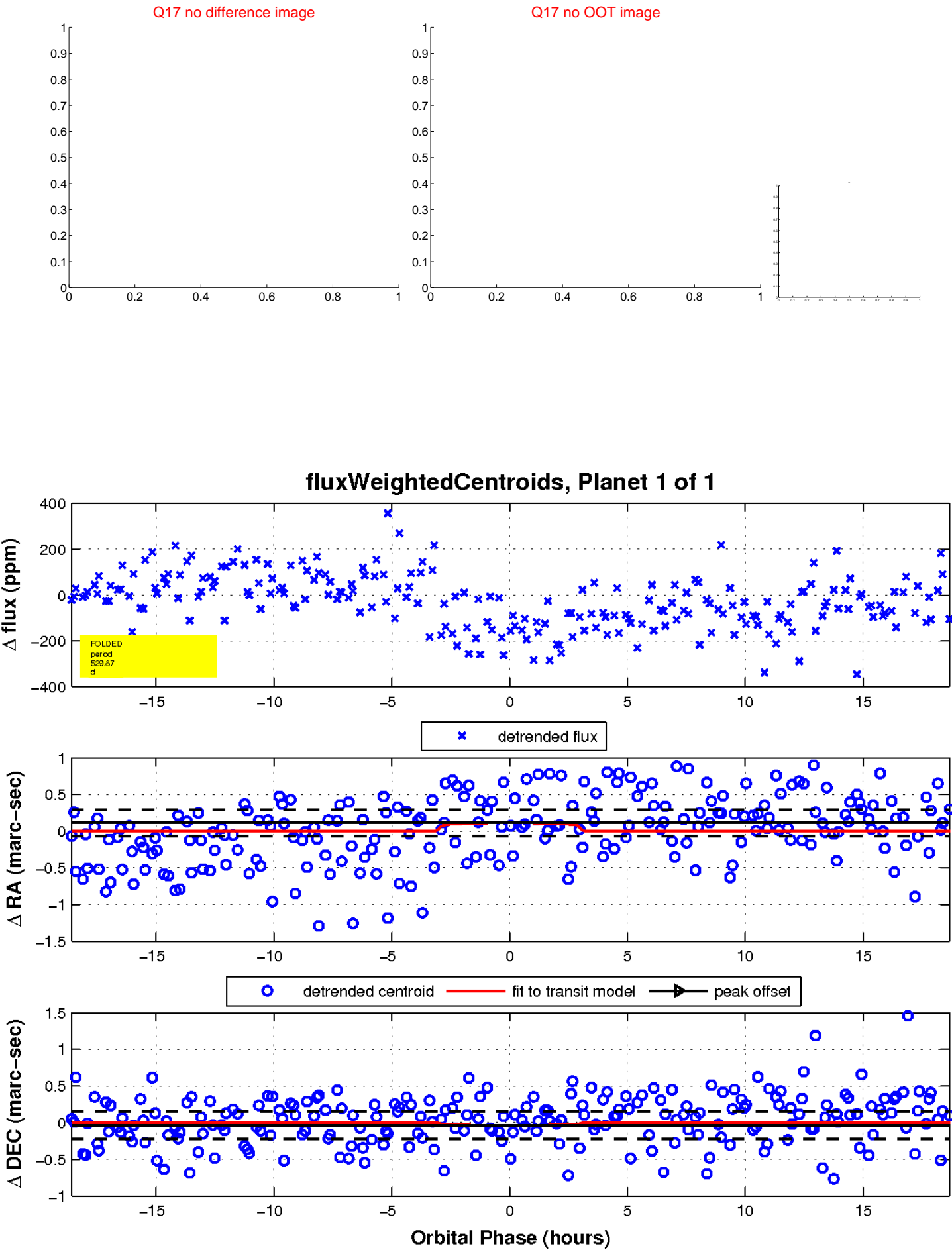
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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

