

KIC 008952734

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})
008952734-01	OBS	No	368.152882	151.267162	798.3	30.116	7.7	7.3	0.99	6014	2.82	1.07

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
008952734-01	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_MARSHALL_SKYE—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.

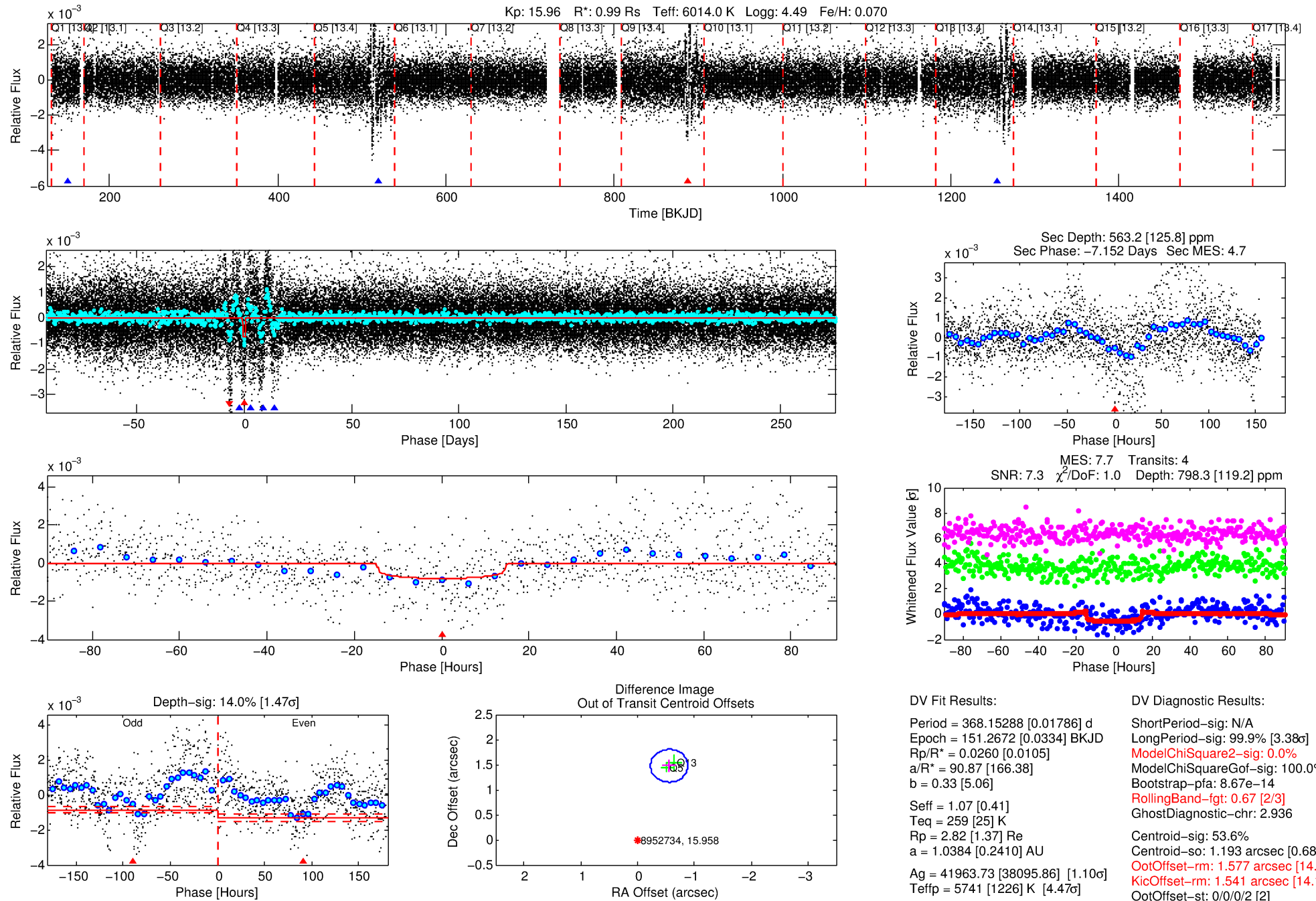
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 008952734-01

No Significant Match Found

DV One-Page Summary

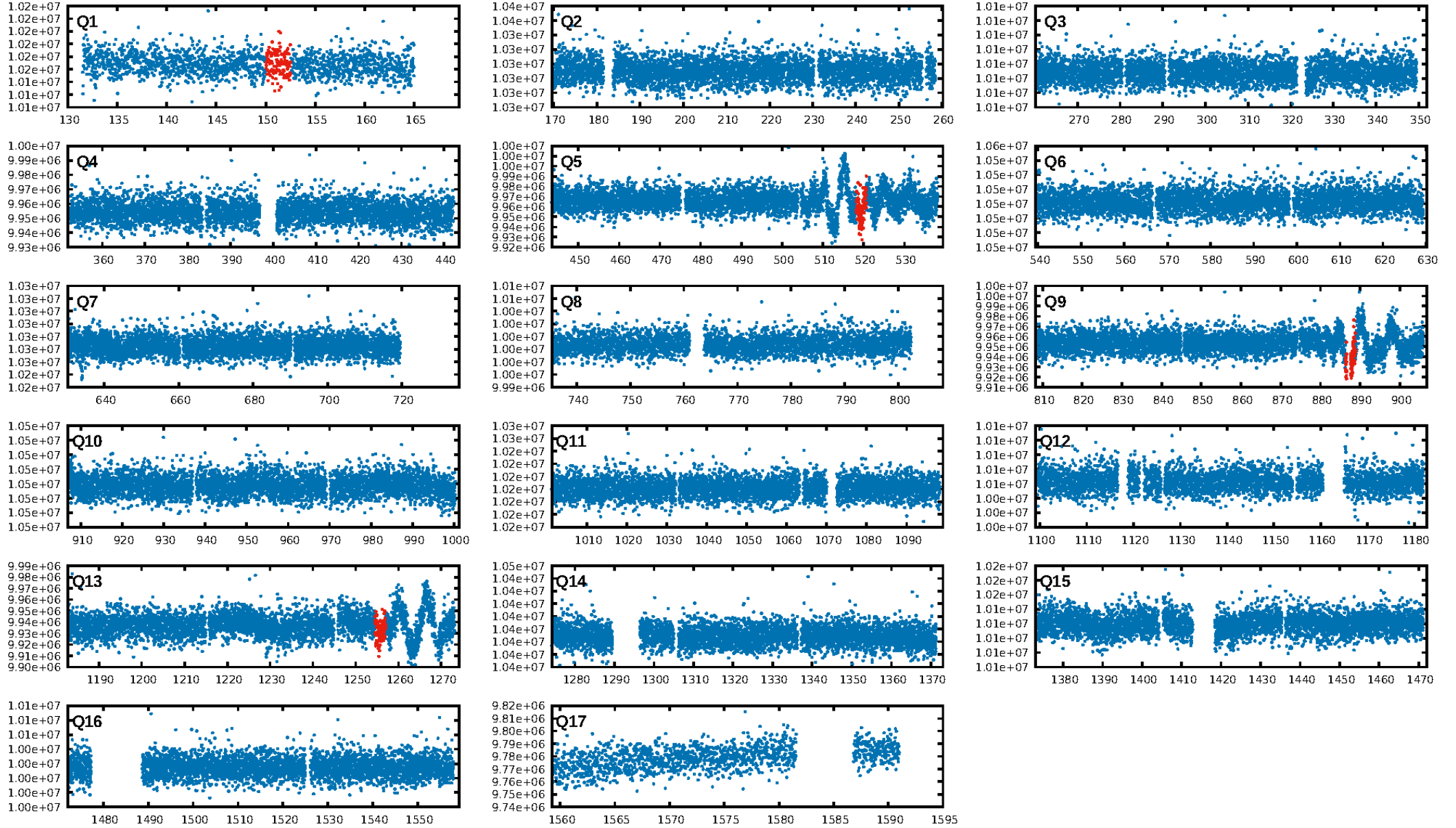
KIC: 8952734 Candidate: 1 of 2 Period: 368.153 d



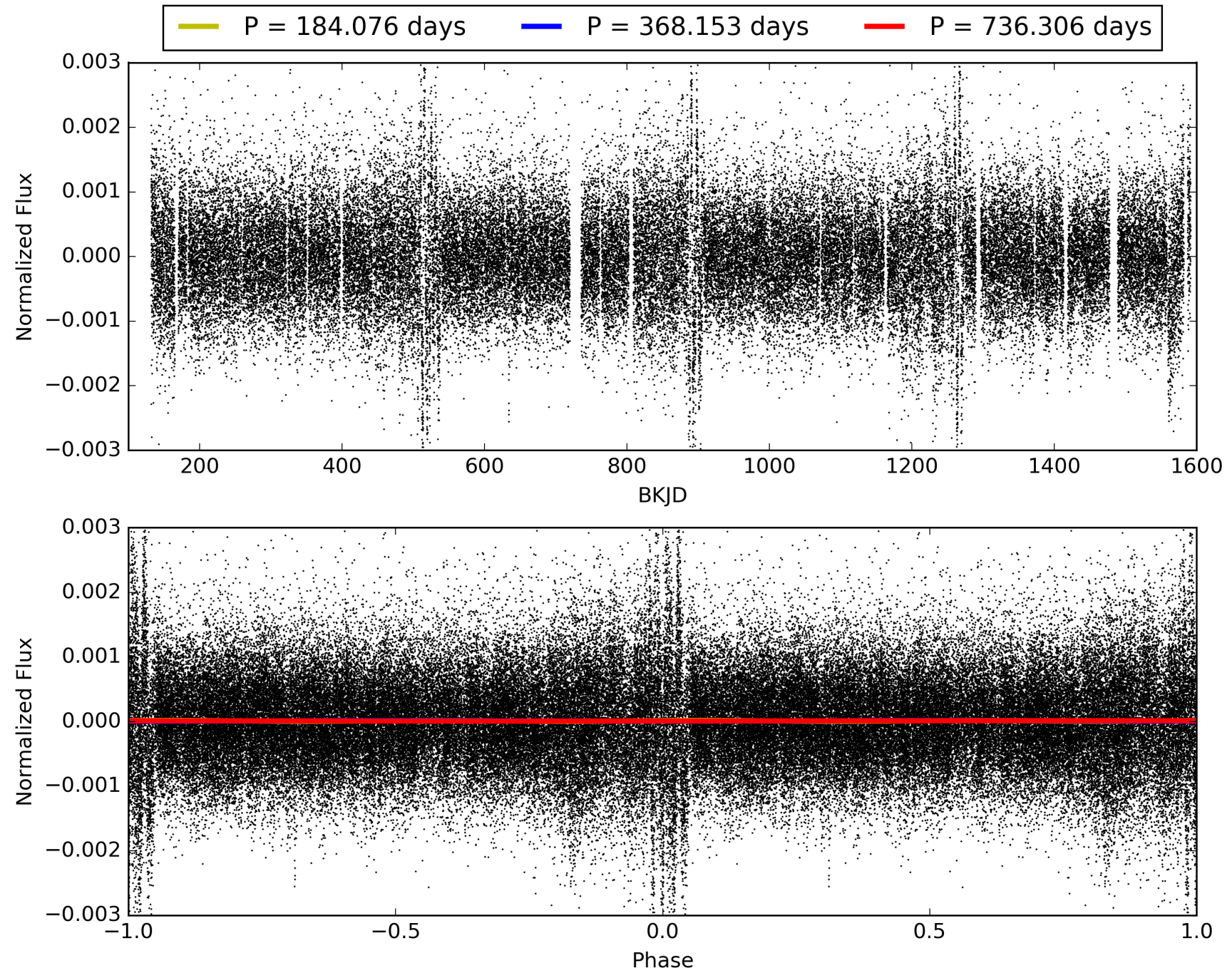
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 30-Jan-2016 19:40:49 Z

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

TCE 008952734-01, PDC Light Curves

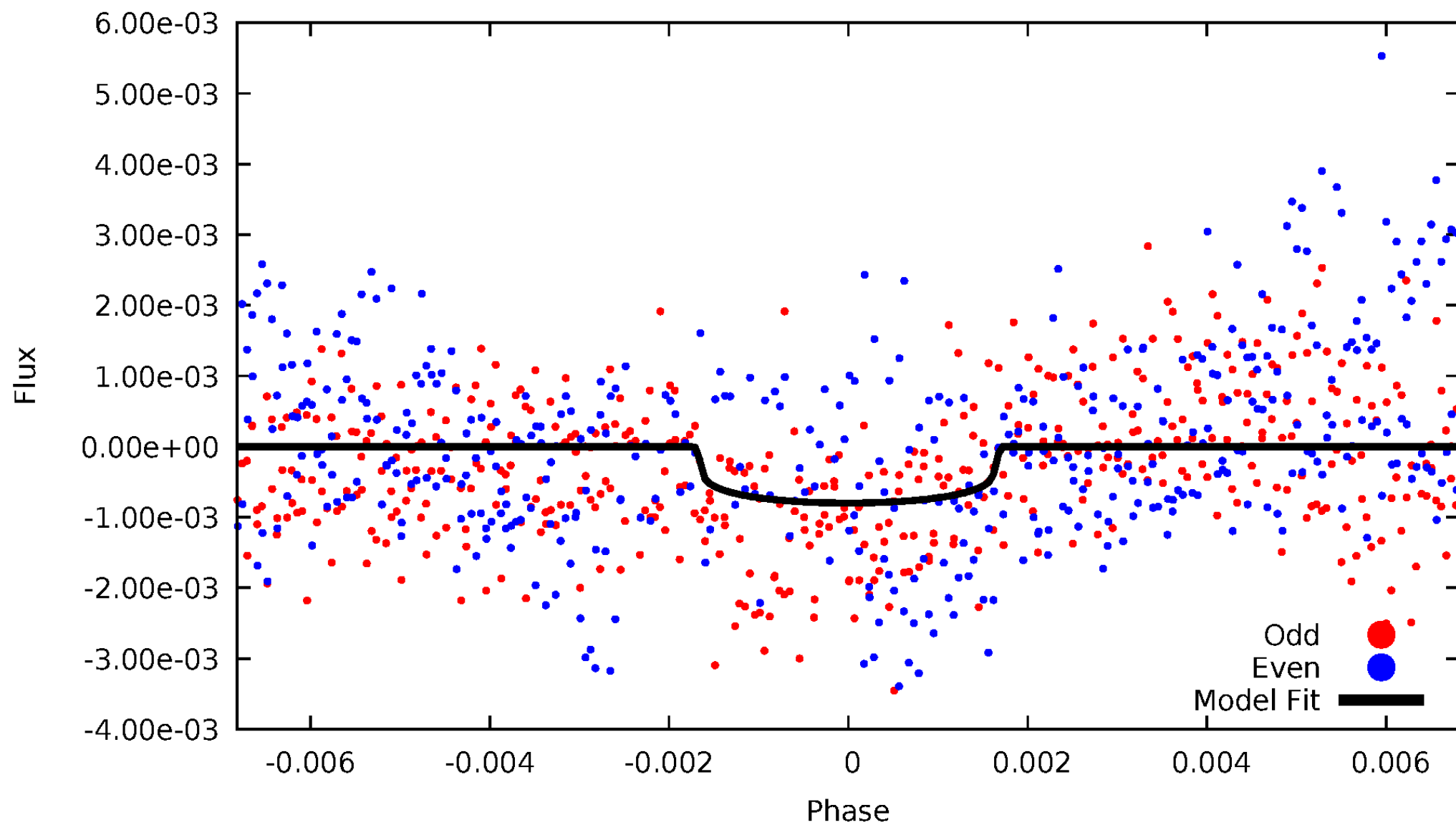


TCE 008952734-01



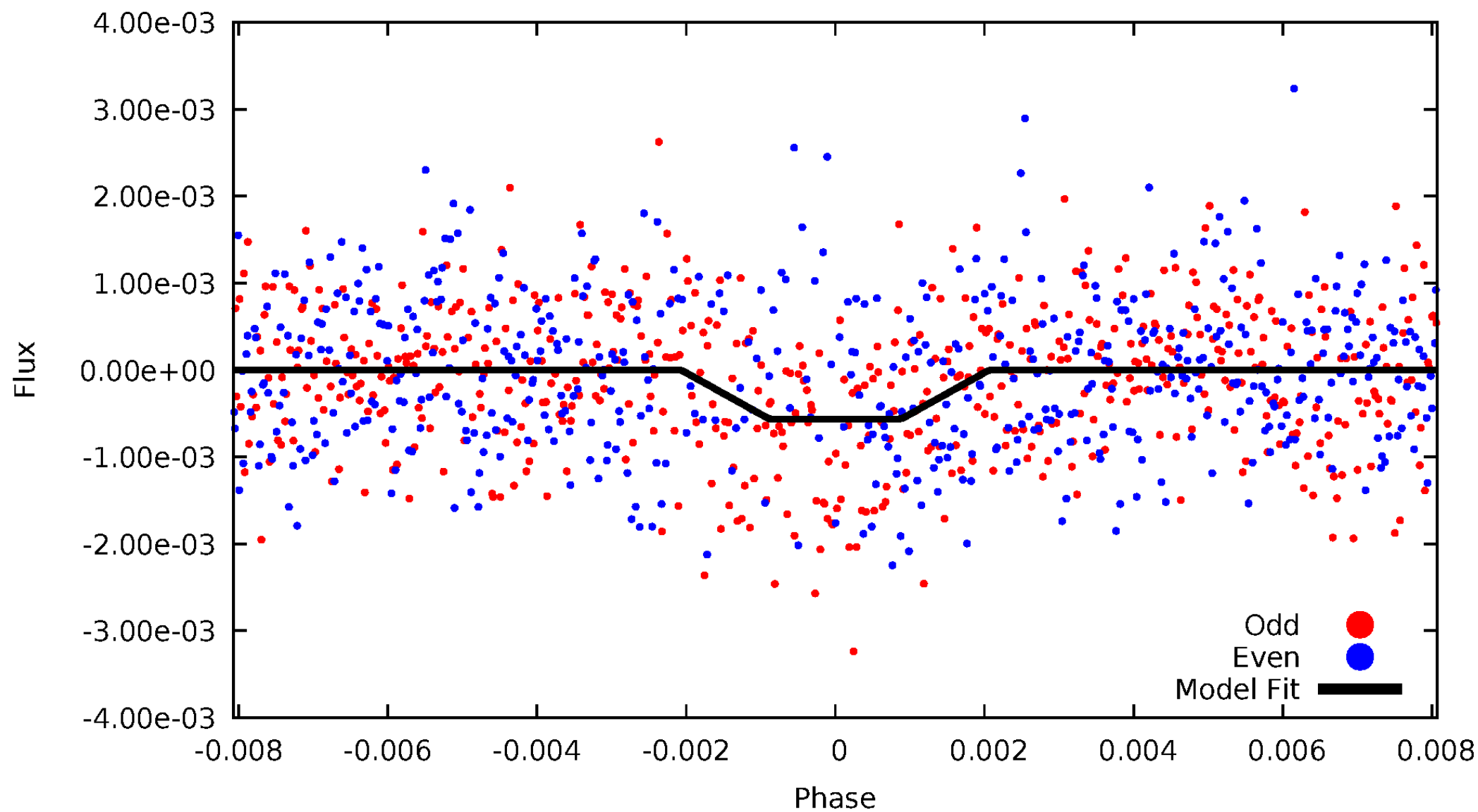
DV Odd/Even

TCE 008952734-01



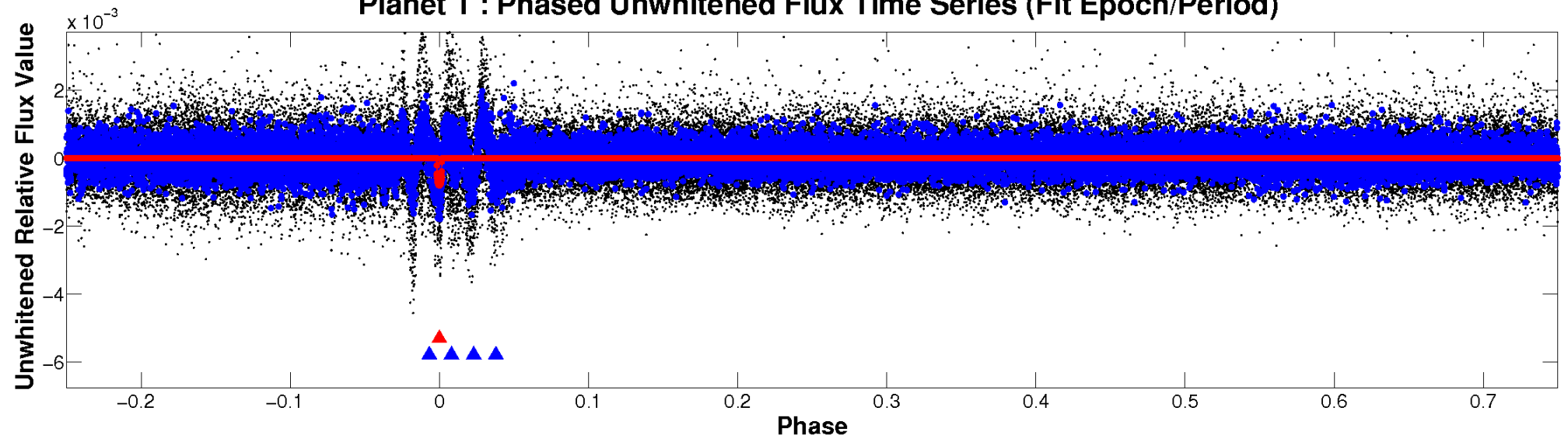
ALT Odd/Even

TCE 008952734-01

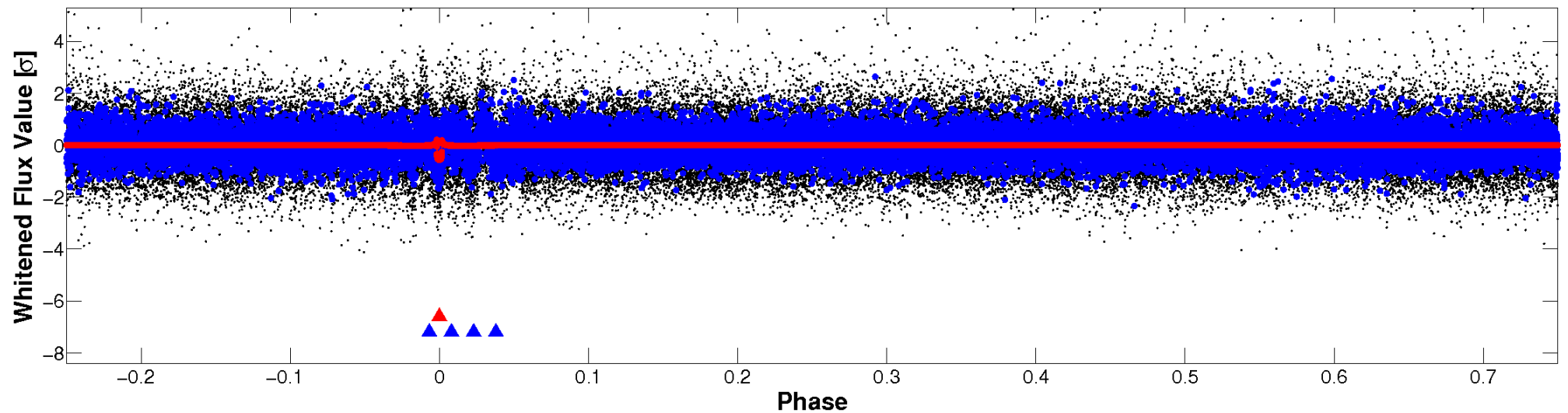


Non-Whitened Vs. Whitened Light Curve

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

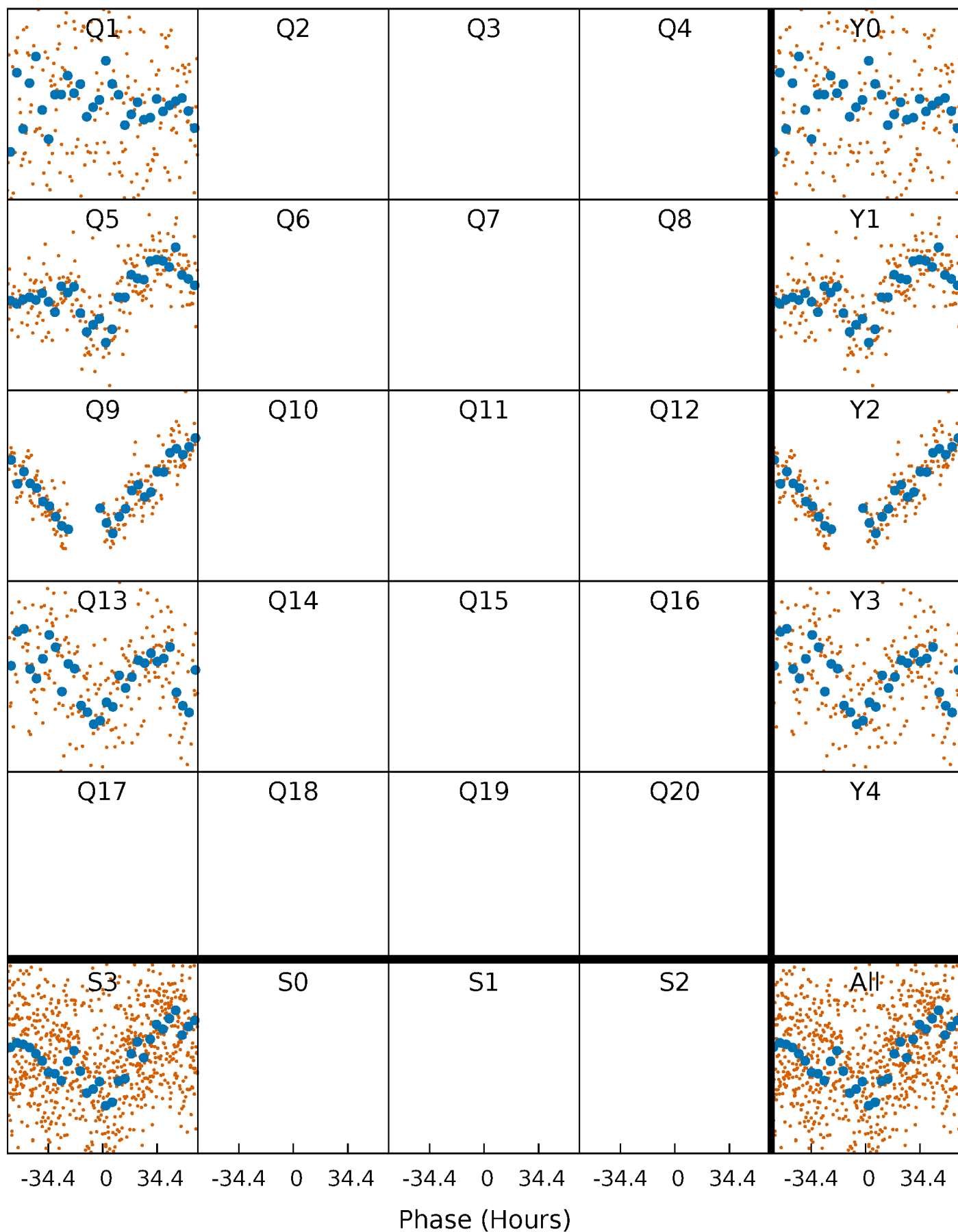


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



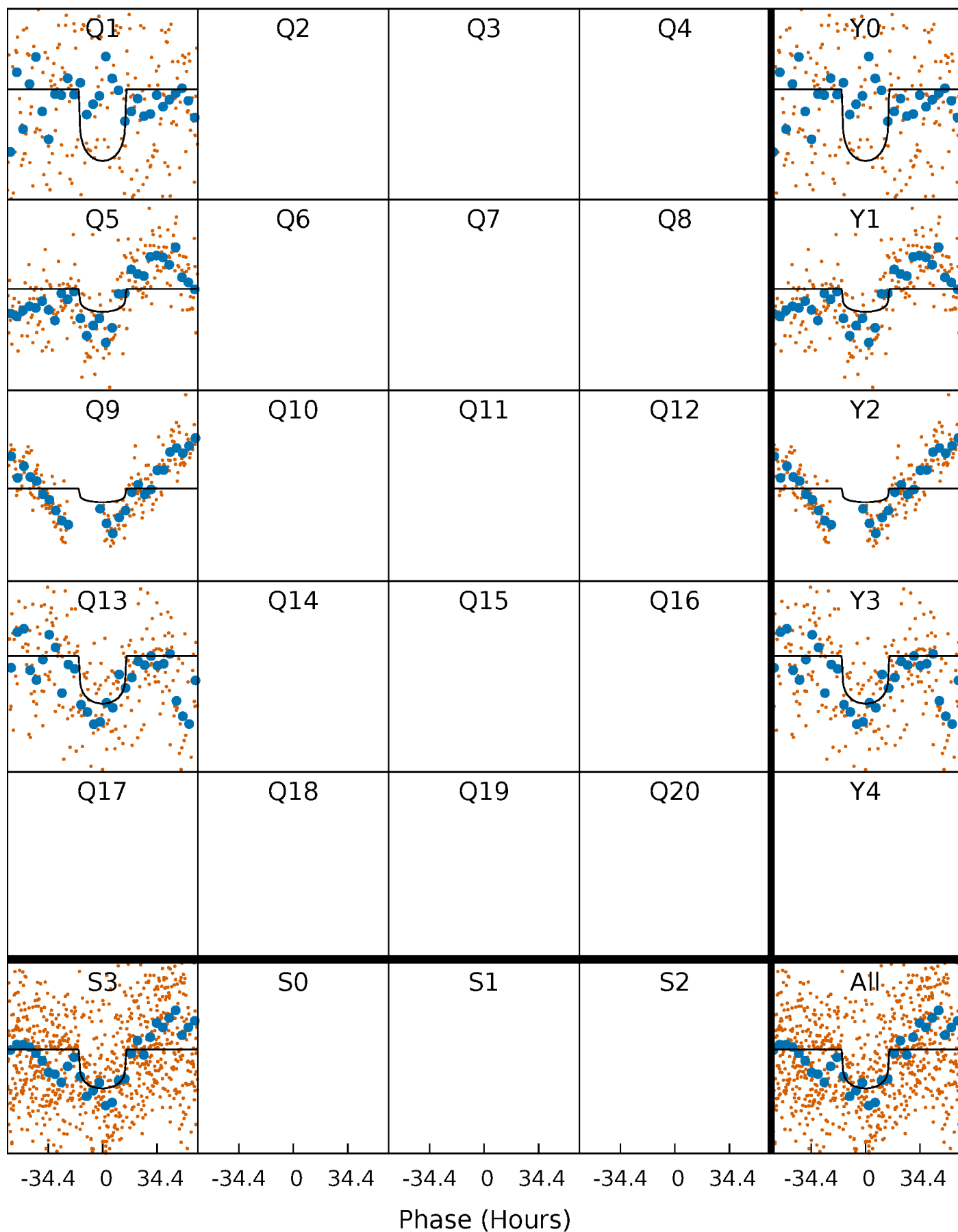
PDC Quarter-Phased Transit Curves

TCE 008952734-01 P=368.152882 Days $T_0=151.267162$ (BKJD)



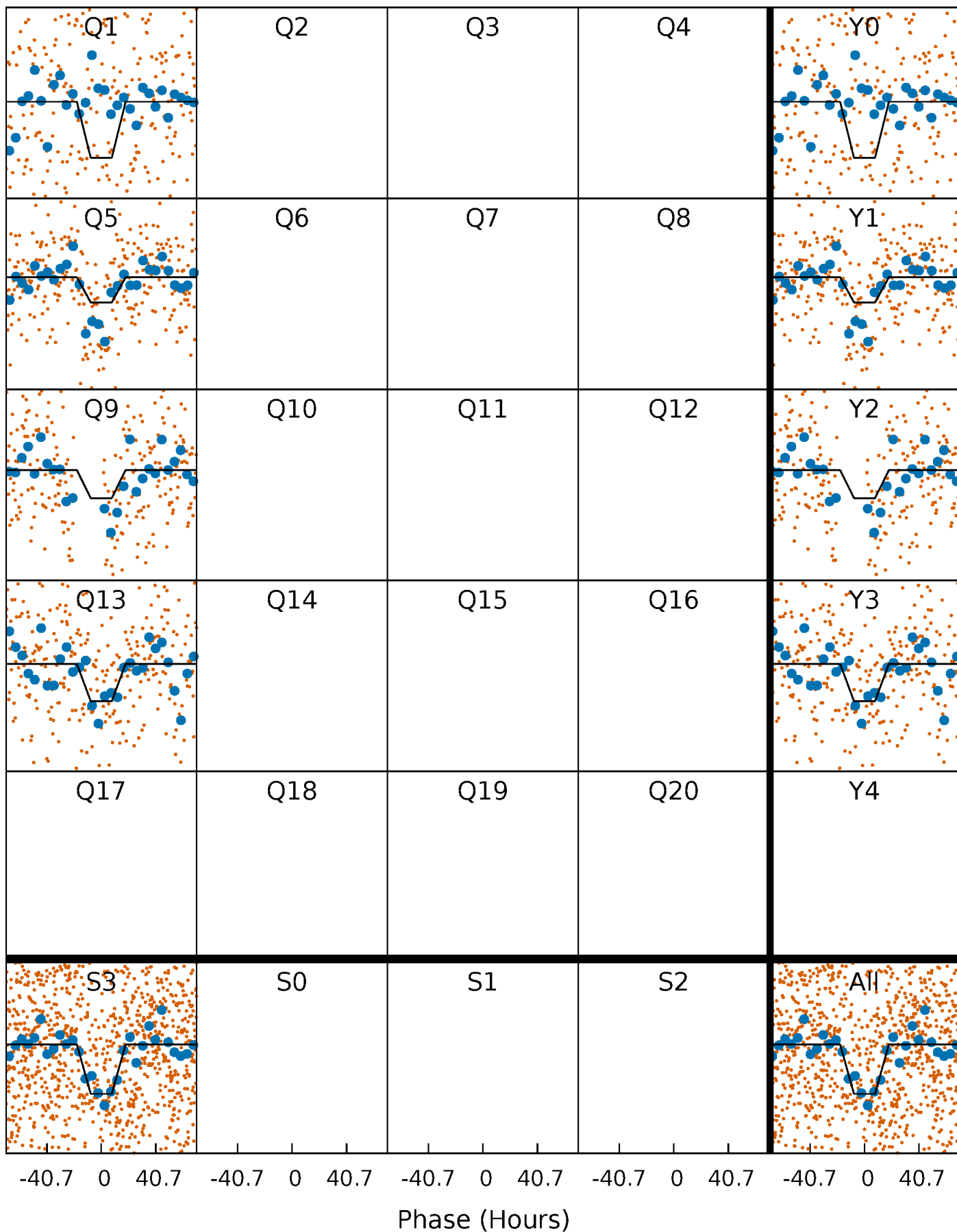
DV Quarter-Phased Transit Curves

TCE 008952734-01 P=368.152882 Days $T_0=151.267162$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

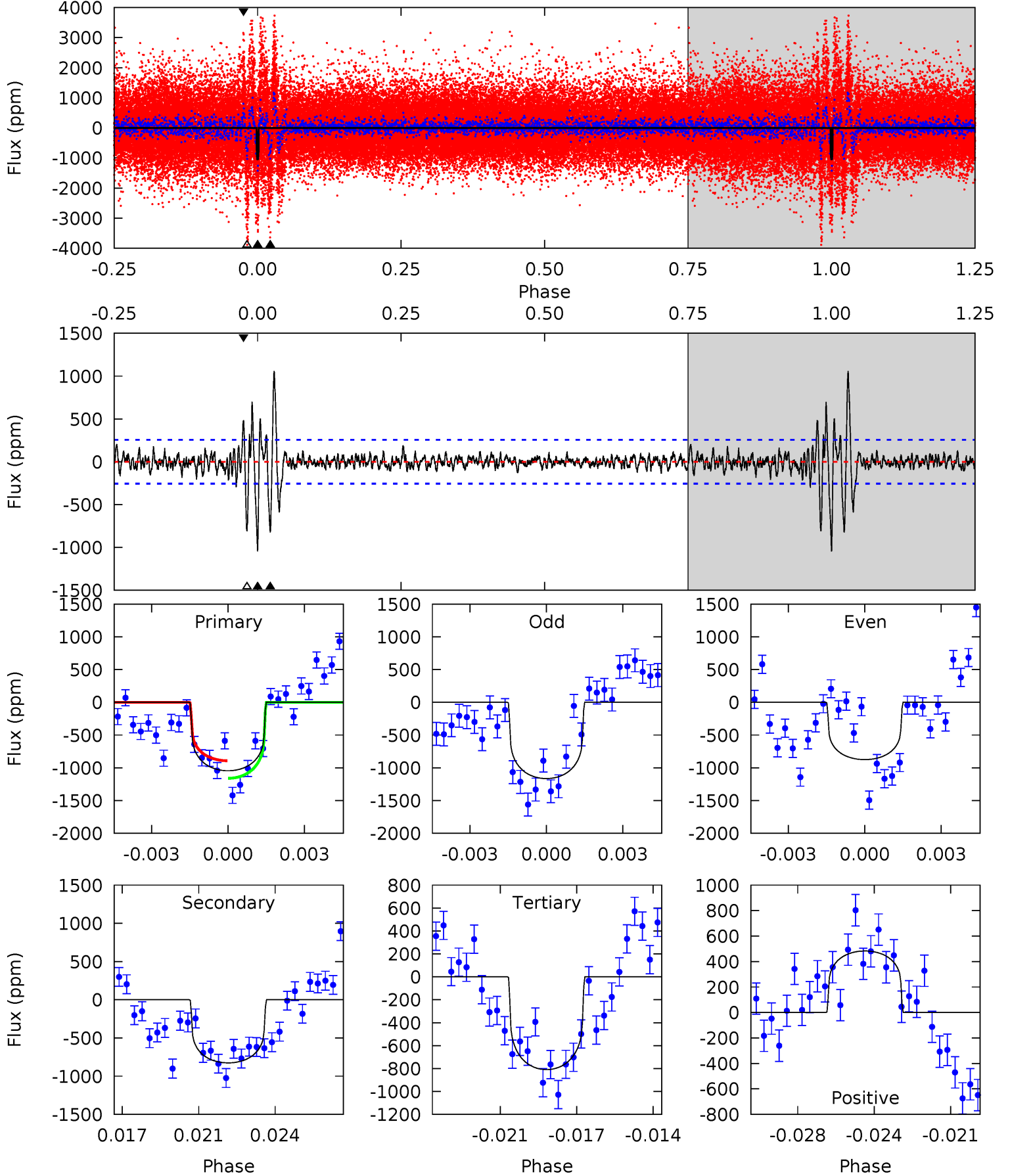
TCE 008952734-01 P=367.981171 Days $T_0=151.536722$ (BKJD)



DV Model-Shift Uniqueness Test

008952734-01, P = 368.152882 Days, E = 151.267162 Days

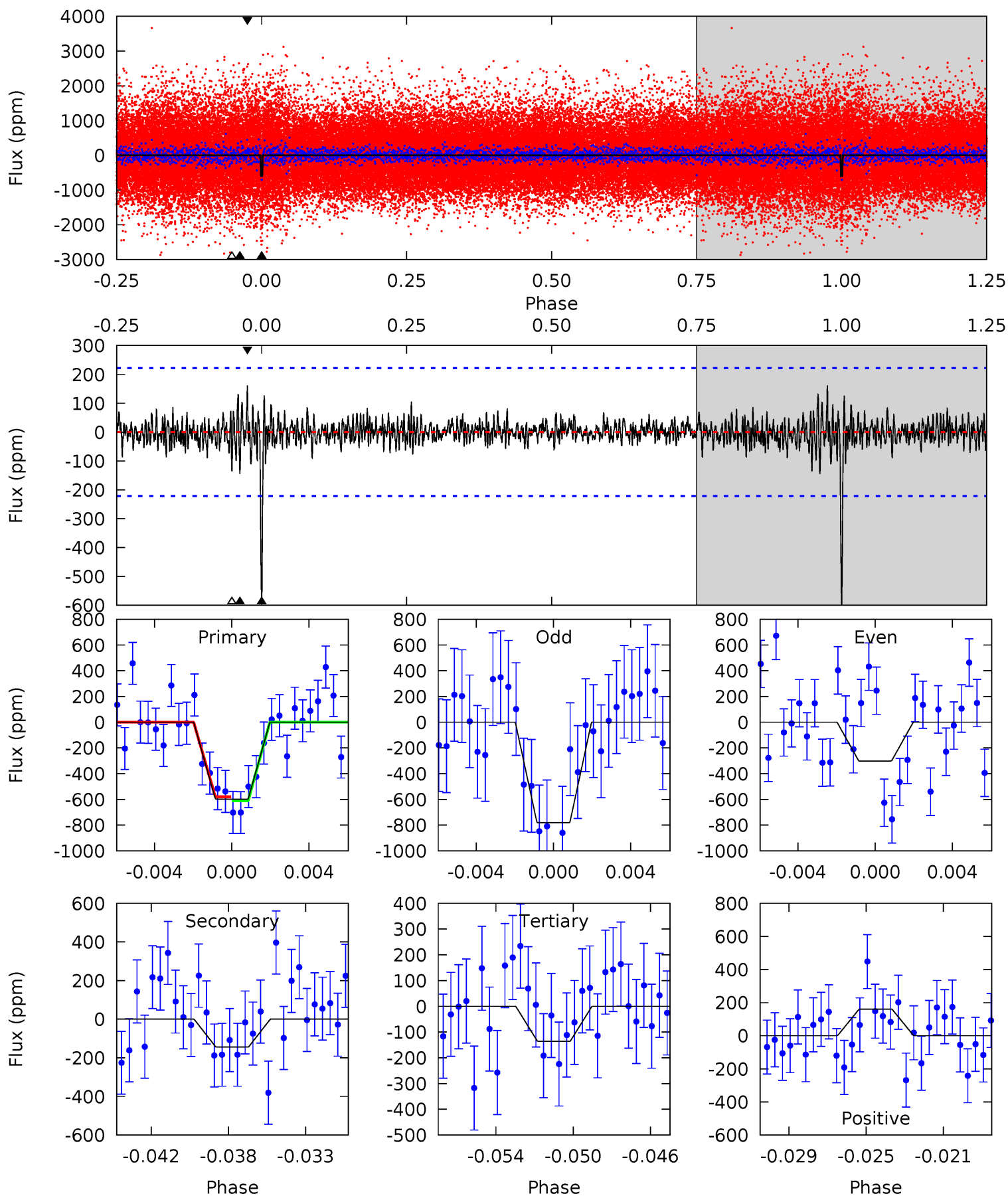
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
21.3	16.9	16.5	9.85	5.23	2.93	2.44	4.81	11.5	0.34	7.00	2.92	1.01	0.50	2.71



Alt Model-Shift Uniqueness Test

008952734-01, P = 367.981171 Days, E = 151.536722 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
14.0	3.37	3.18	3.77	5.19	2.86	0.72	10.8	10.2	0.19	-0.40	5.56	0.84	0.21	0.35



Stellar Parameters For KIC 008952734

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	6014^{+169}_{-232}	$4.486^{+0.048}_{-0.192}$	$0.070^{+0.250}_{-0.350}$	$0.993^{+0.267}_{-0.114}$	$1.101^{+0.120}_{-0.160}$	$1.584^{+0.396}_{-0.772}$
	+3%/-4%	+1%/-4%	+357%/-500%	+27%/-11%	+11%/-15%	+25%/-49%
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 008952734-01 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	A_{obs}
DV	-826 ± 49	$2.99^{+1.33}_{-1.20}$	370^{+25}_{-18}	6273^{+2153}_{-950}	53477^{+94390}_{-26973}
Alt.	-144 ± 43	$2.69^{+1.39}_{-1.19}$	369^{+25}_{-18}	4393^{+1337}_{-647}	10712^{+24953}_{-6189}

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

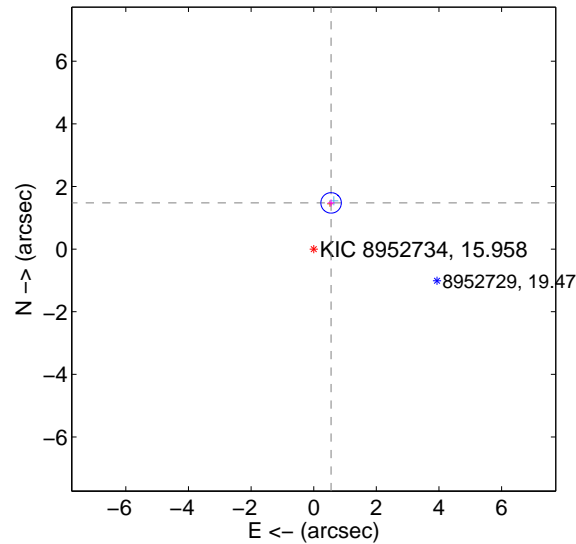
Supplemental centroid analysis for 008952734-01. Kepler magnitude: 15.96. Transit SNR 7.32

There are 1 quarters with good PRF difference image offsets

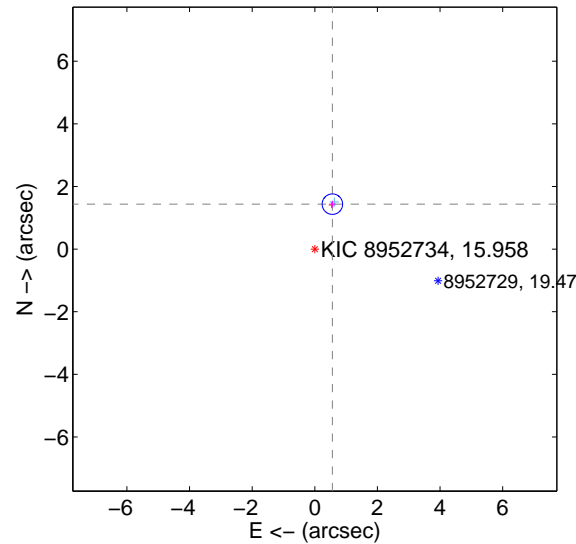
The direct PRF centroid is offset from the target star catalog position by about 0.04 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	1.577 ± 0.109	14.47	-0.556 ± 0.108	1.476 ± 0.109
PRF-fit source offset from KIC position	1.541 ± 0.109	14.14	-0.562 ± 0.108	1.435 ± 0.109
photometric centroid source offset	1.19 ± 1.75	0.68	0.30 ± 1.63	1.16 ± 1.76

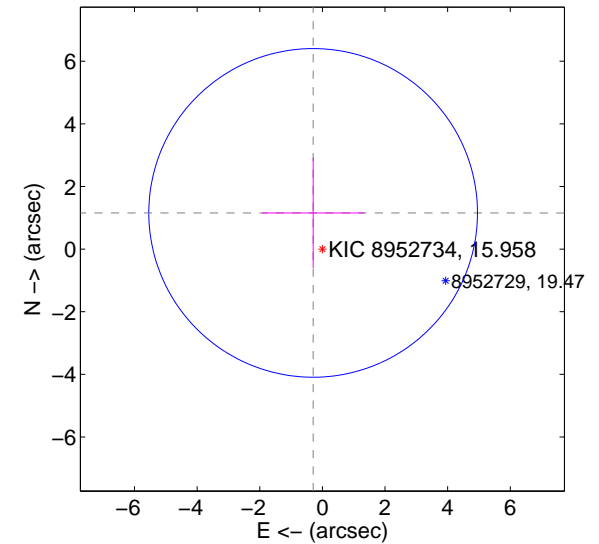
offset from difference PRF-fit to OOT PRF-fit



offset from difference PRF-fit to KIC position

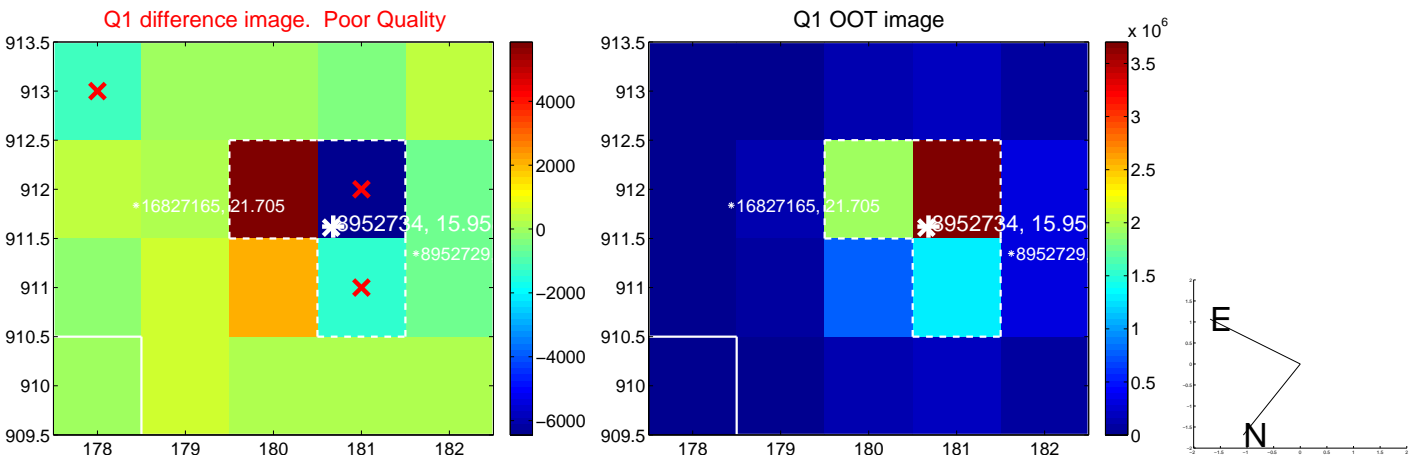


offset from photometric centroids

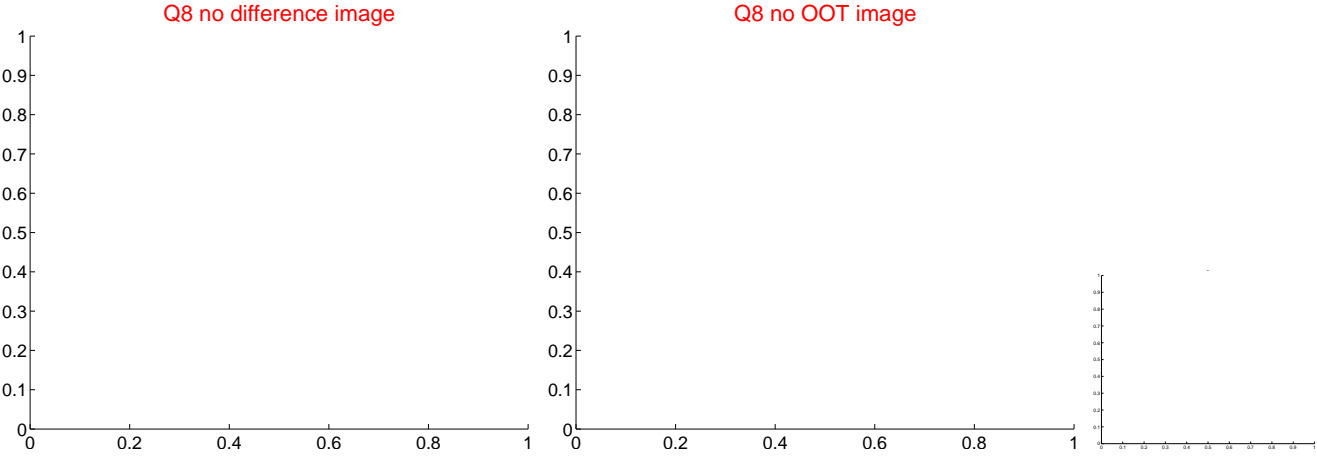
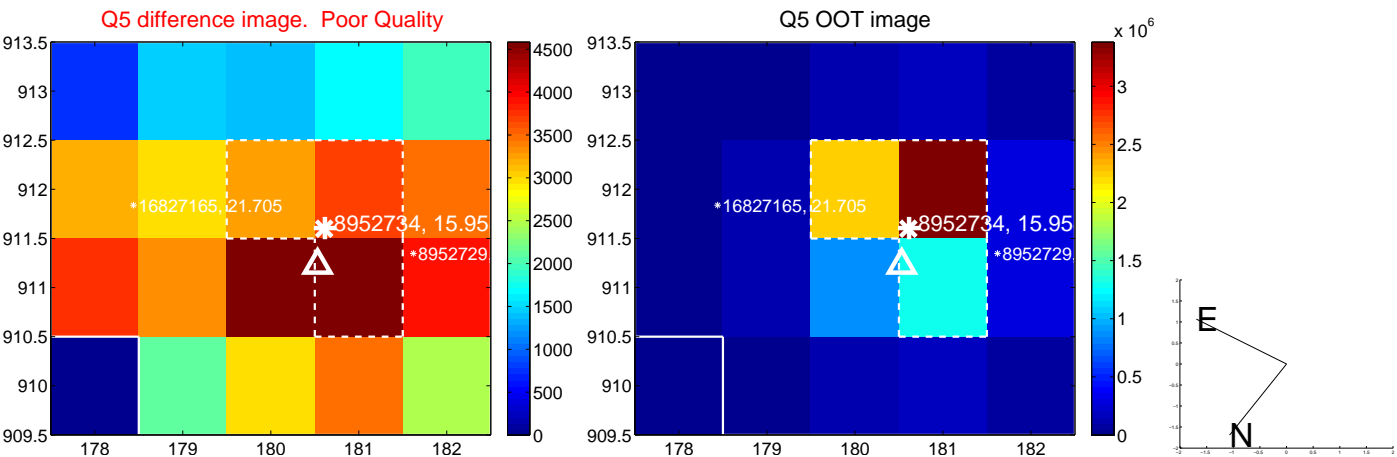


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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



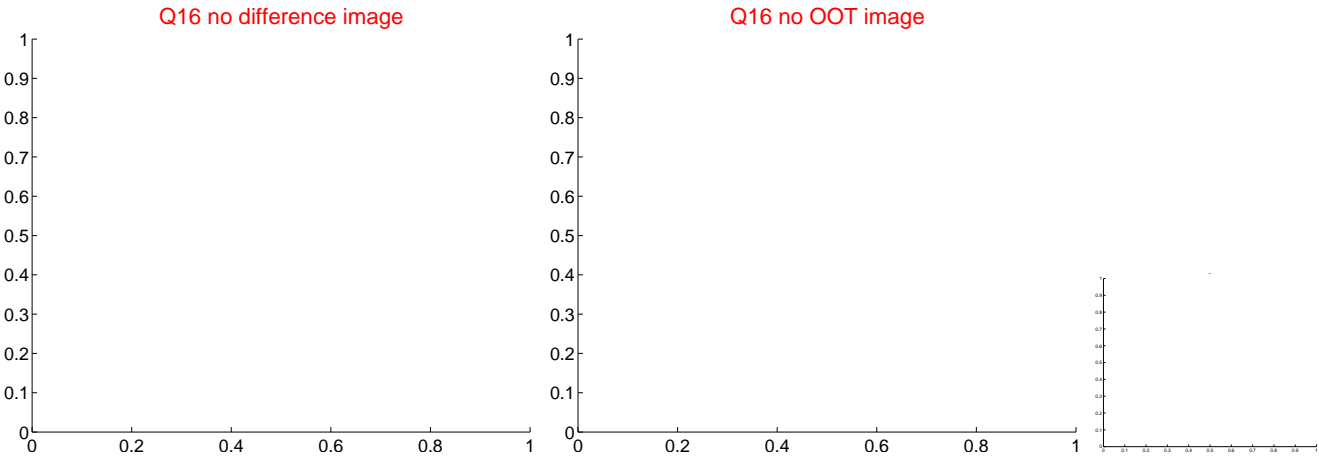
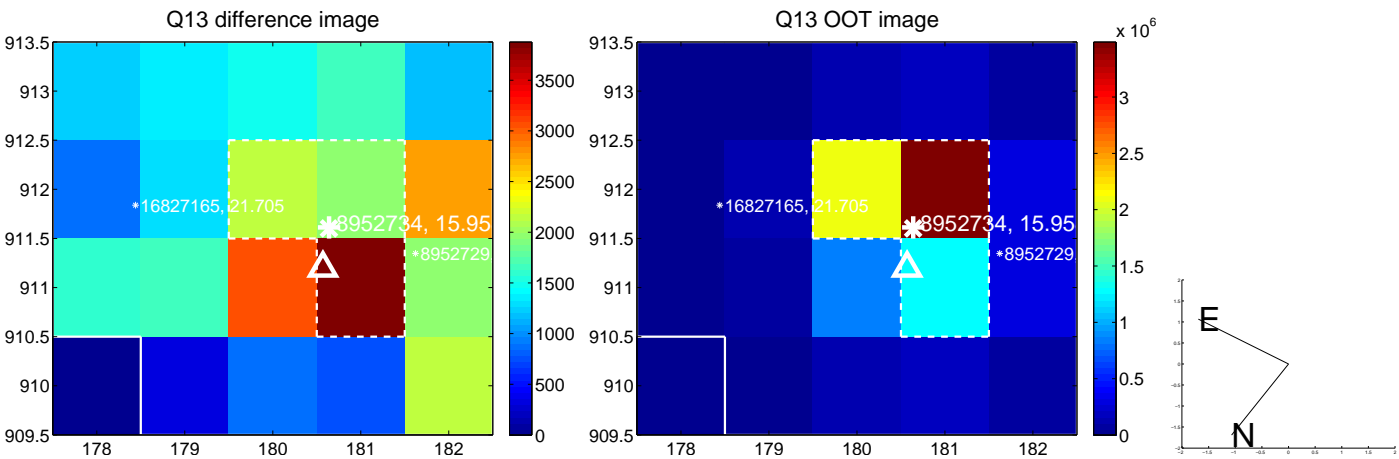
white ×: KIC target position; +: OOT centroid; △: difference centroid. red ×: large negative pixel value.



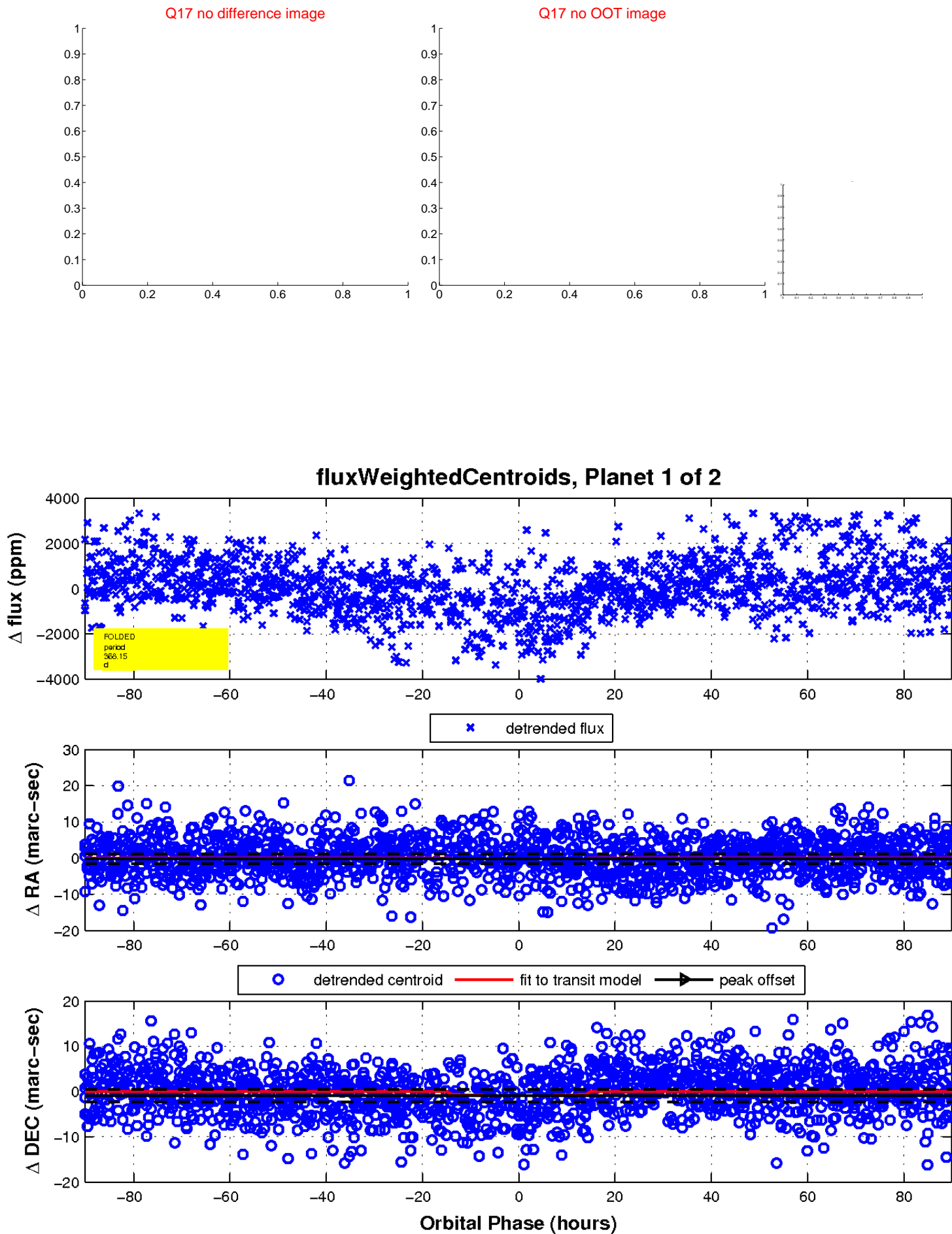
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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



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



UKIRT Image

Declination

