

KIC 008308758

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})
008308758-01	OBS	No	368.332852	235.810401	737.0	28.837	8.6	10.3	0.95	5510	3.02	0.83

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
008308758-01	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_MARSHALL_SKYE—LPP_DV—MOD_NONUNIQ_DV—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.

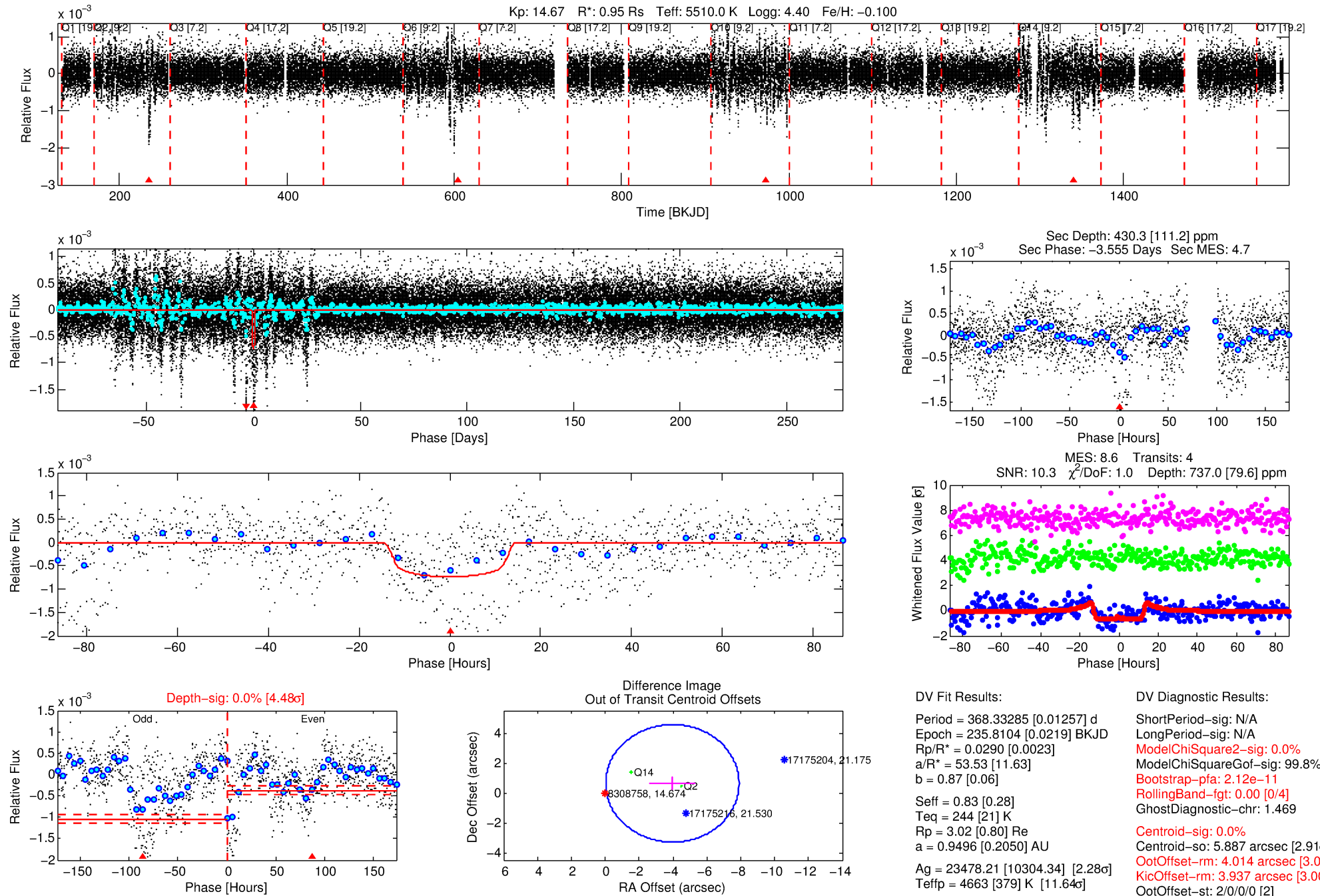
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 008308758-01

No Significant Match Found

DV One-Page Summary

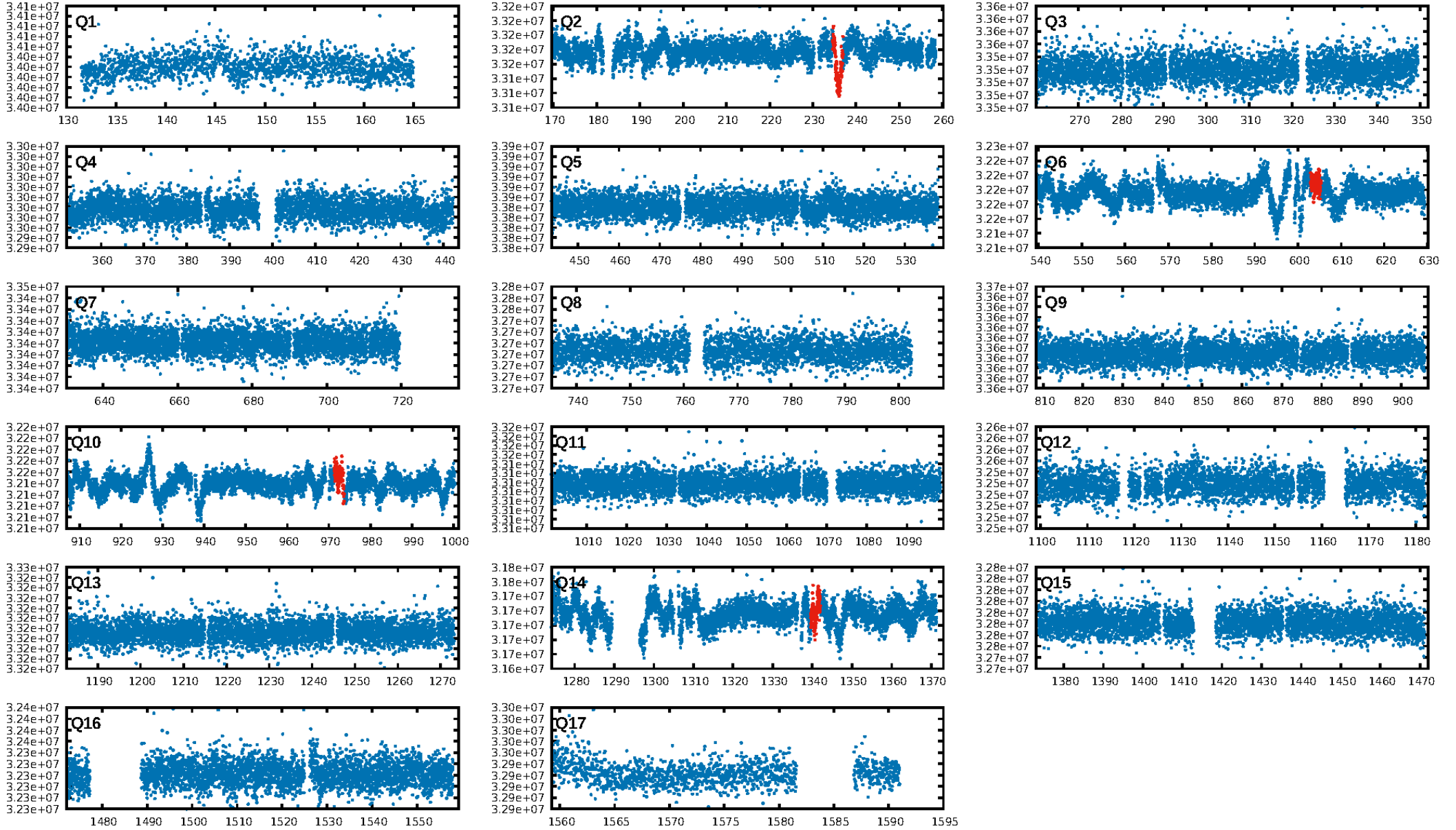
KIC: 8308758 Candidate: 1 of 1 Period: 368.333 d



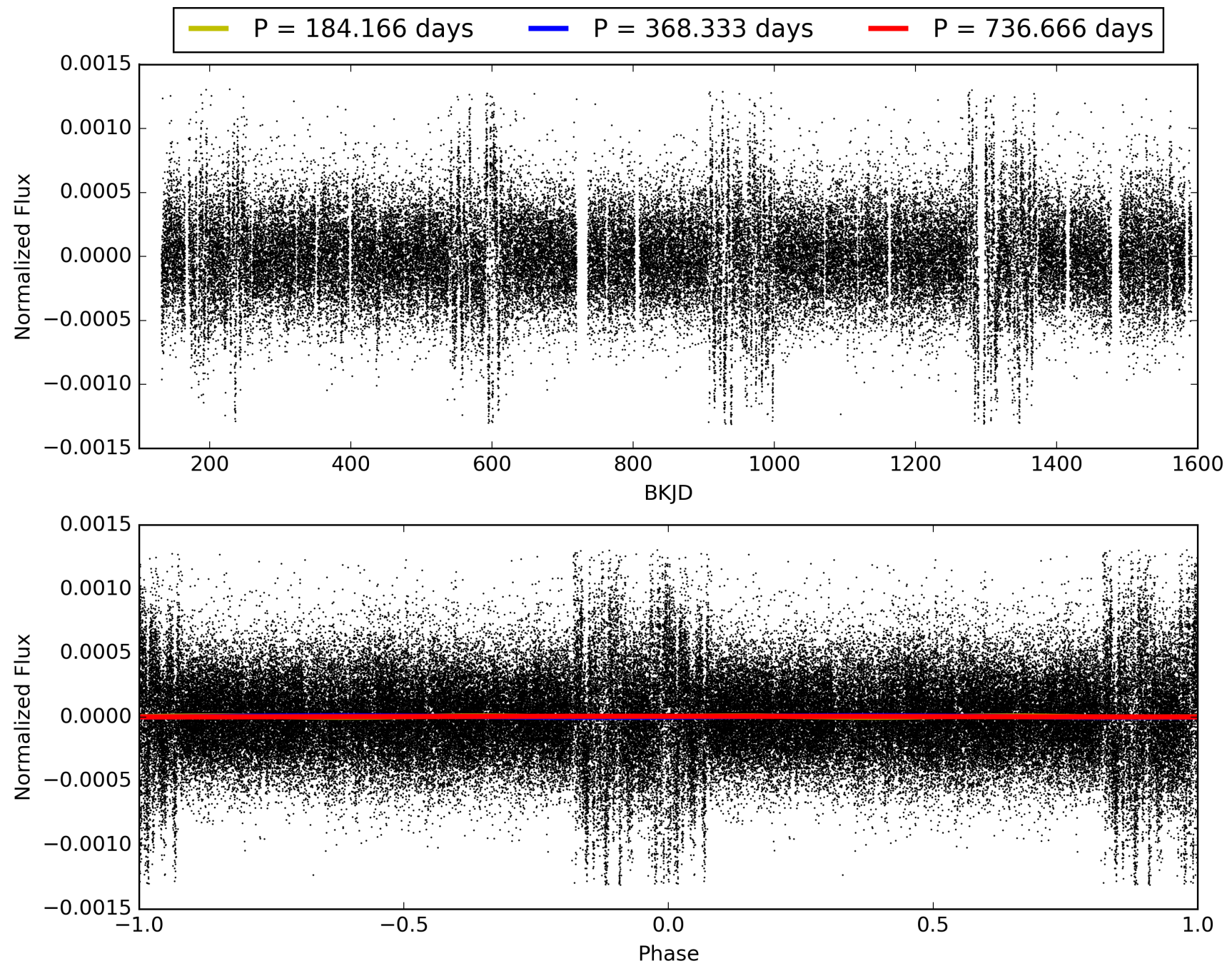
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 29-Jan-2016 01:23:10 Z

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

TCE 008308758-01, PDC Light Curves

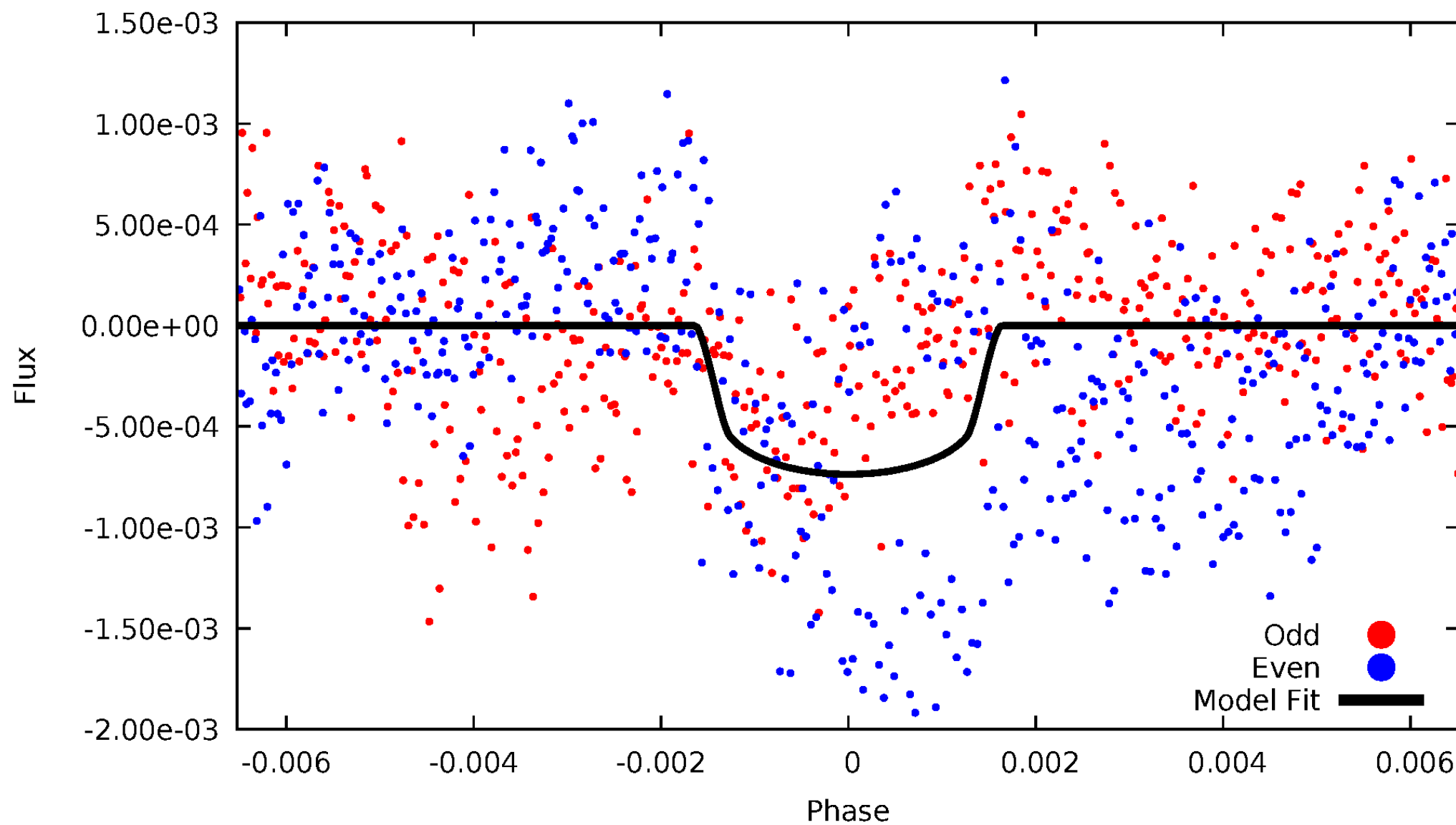


TCE 008308758-01



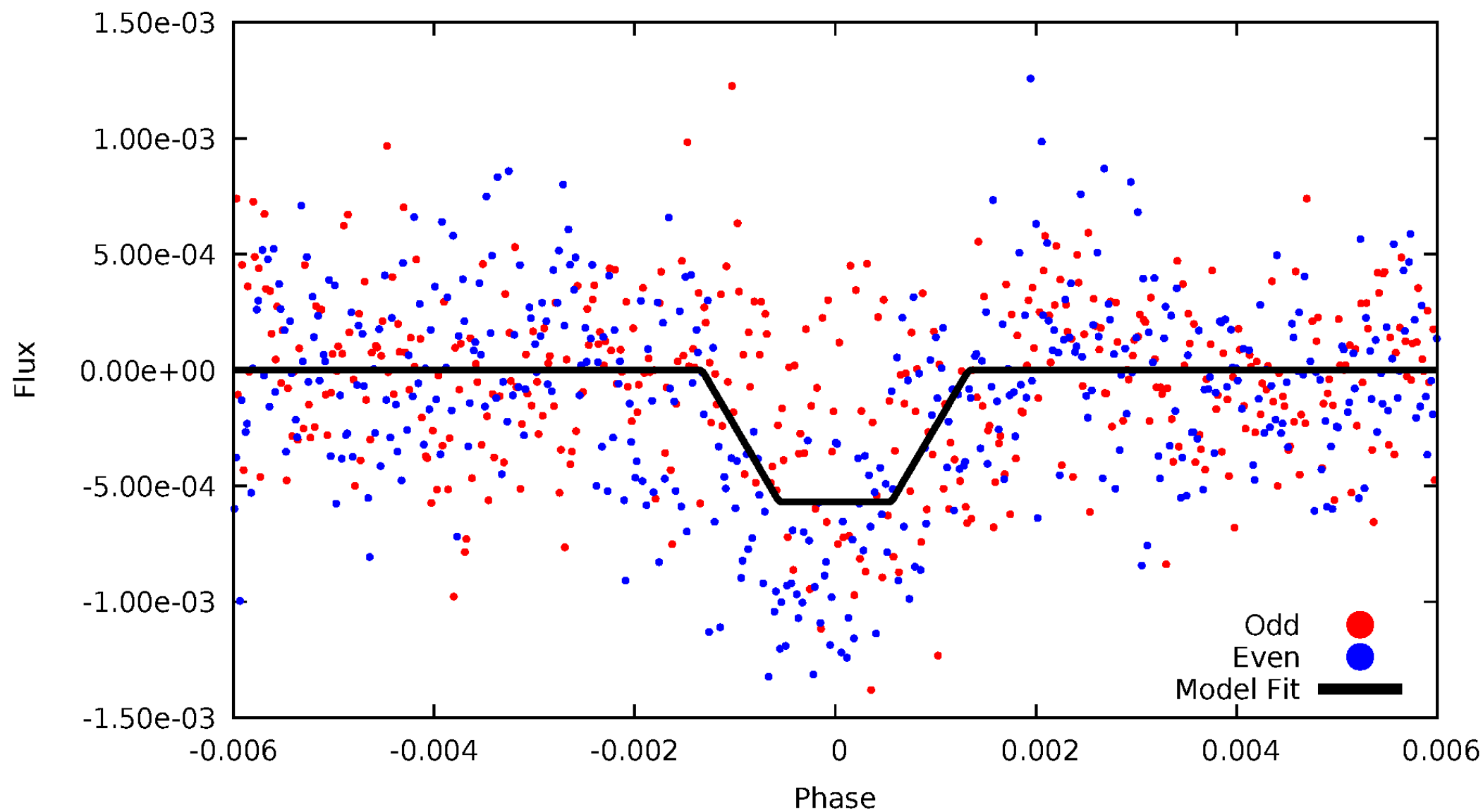
DV Odd/Even

TCE 008308758-01



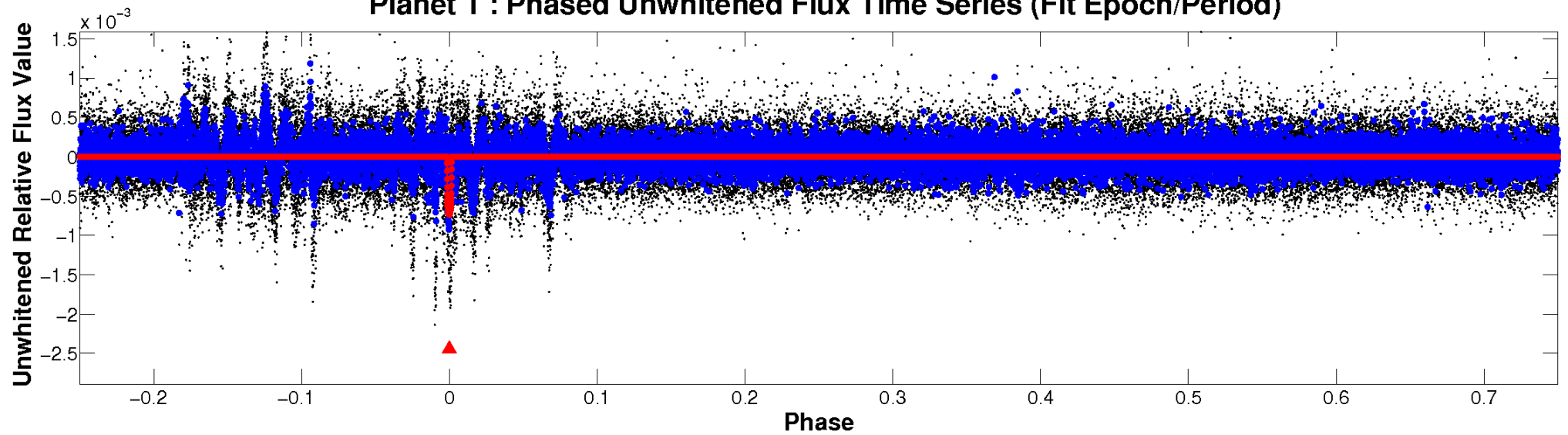
ALT Odd/Even

TCE 008308758-01

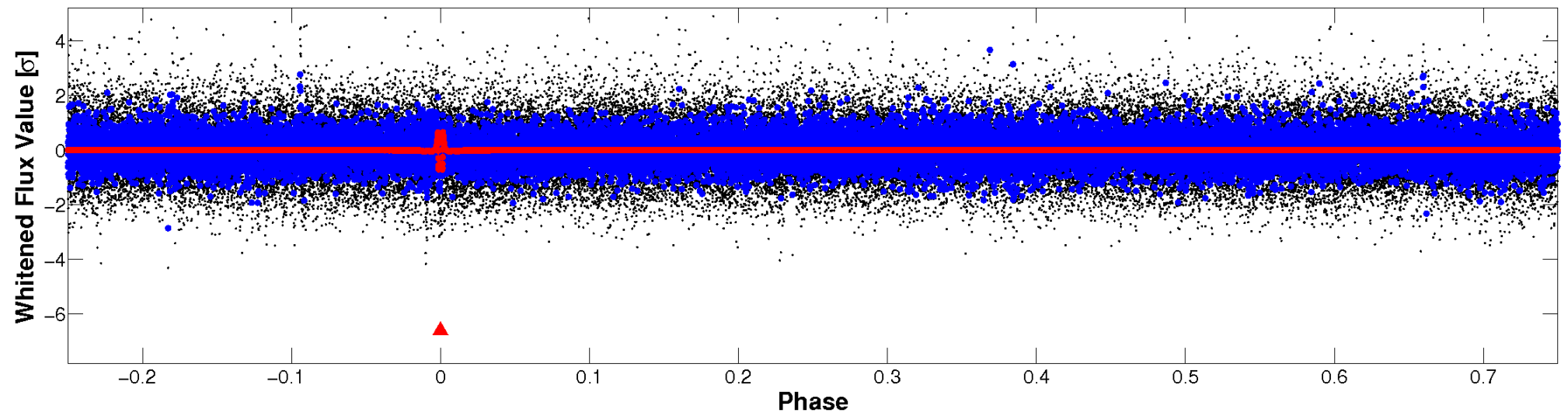


Non-Whitened Vs. Whitened Light Curve

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

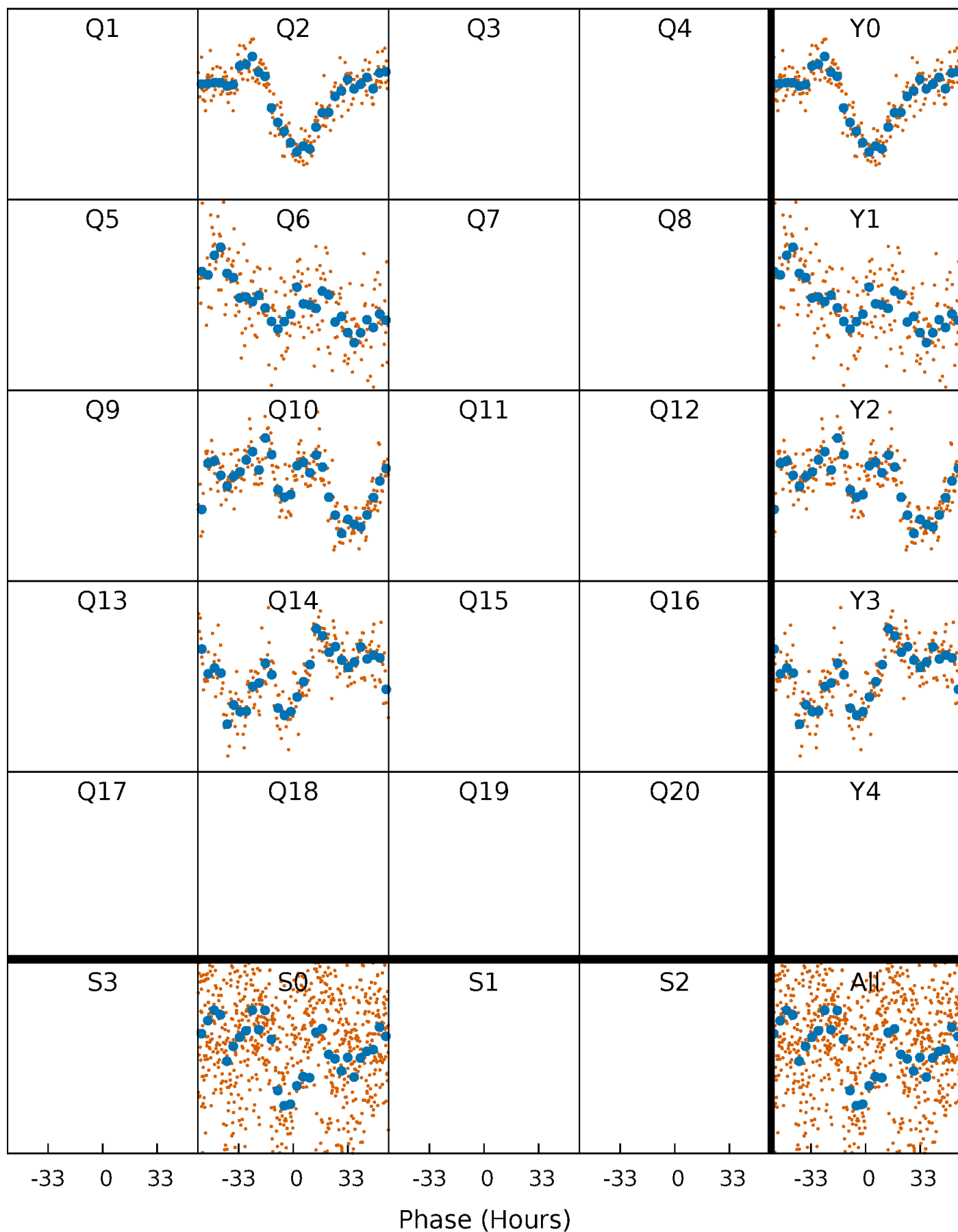


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



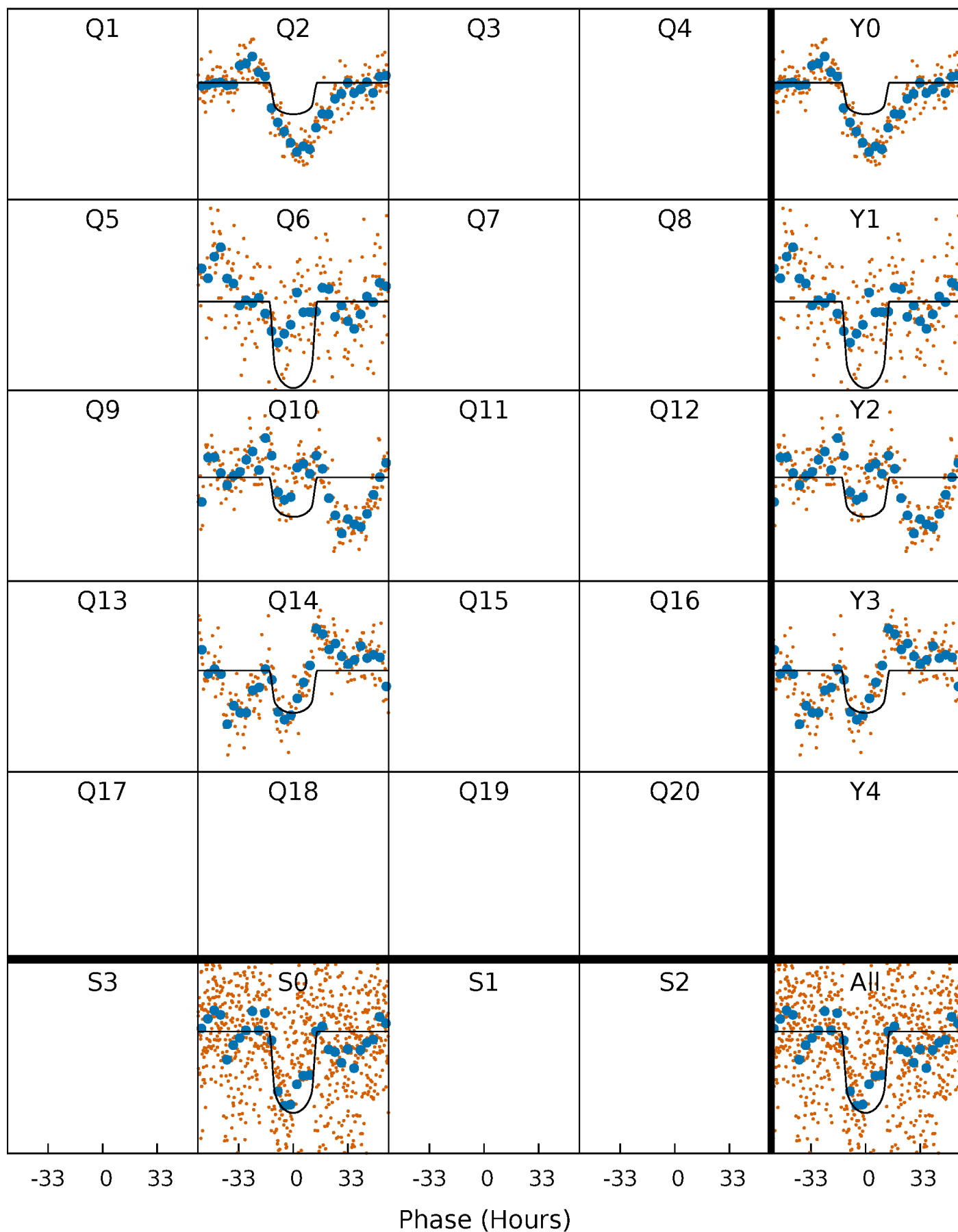
PDC Quarter-Phased Transit Curves

TCE 008308758-01 P=368.332852 Days $T_0=235.810401$ (BKJD)



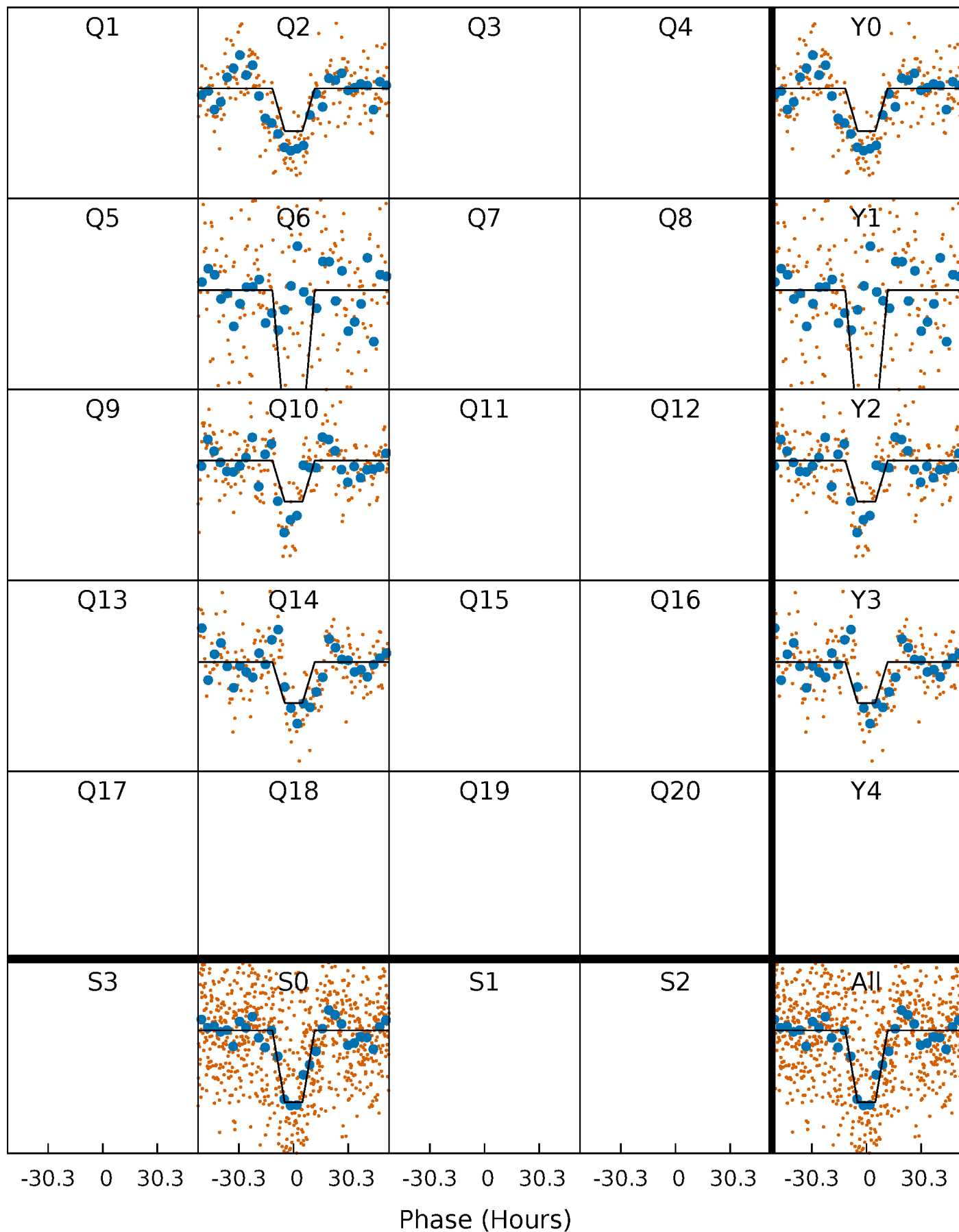
DV Quarter-Phased Transit Curves

TCE 008308758-01 P=368.332852 Days $T_0=235.810401$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

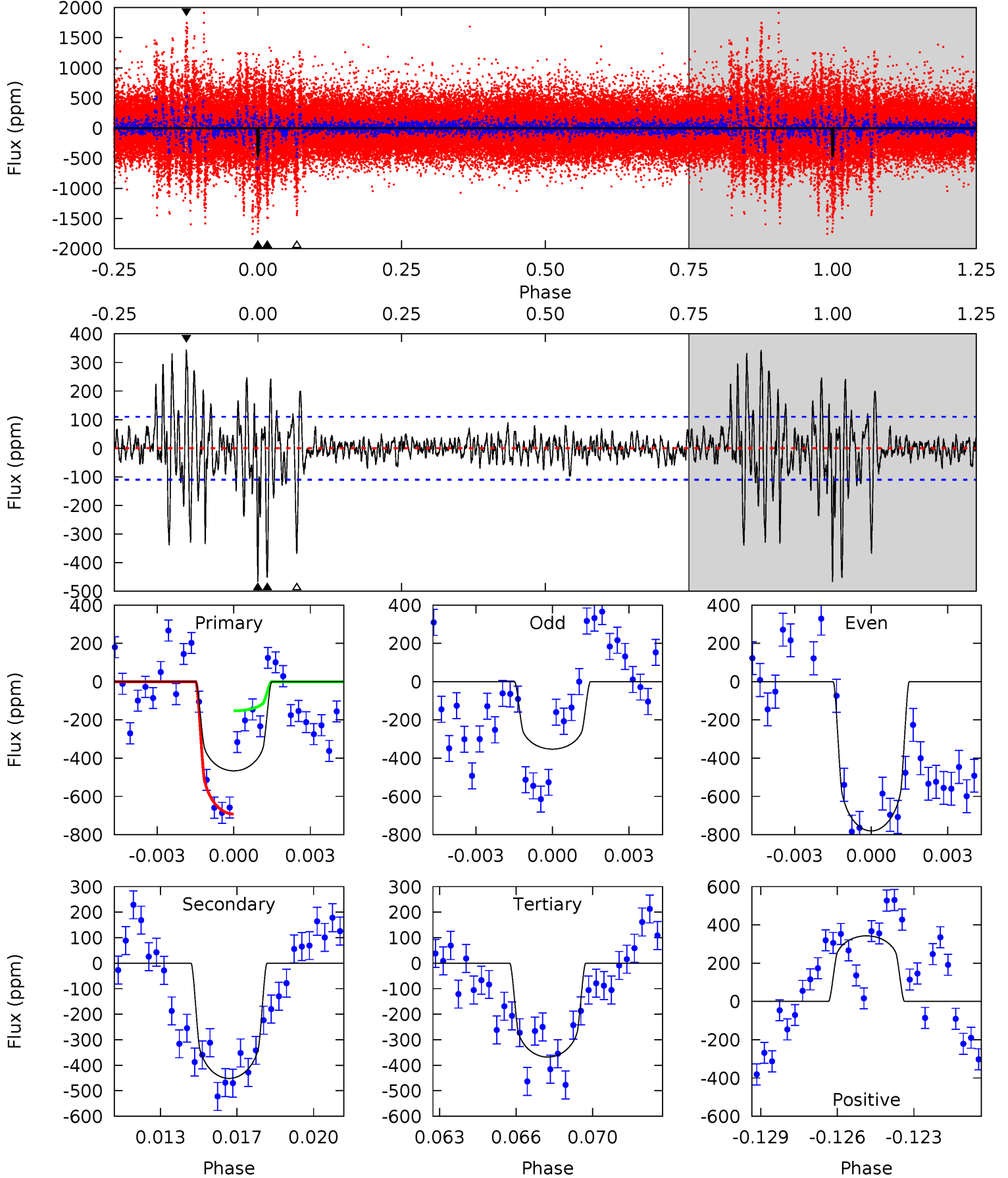
TCE 008308758-01 P=368.185506 Days $T_0=236.004929$ (BKJD)



DV Model-Shift Uniqueness Test

008308758-01, P = 368.332852 Days, E = 235.810401 Days

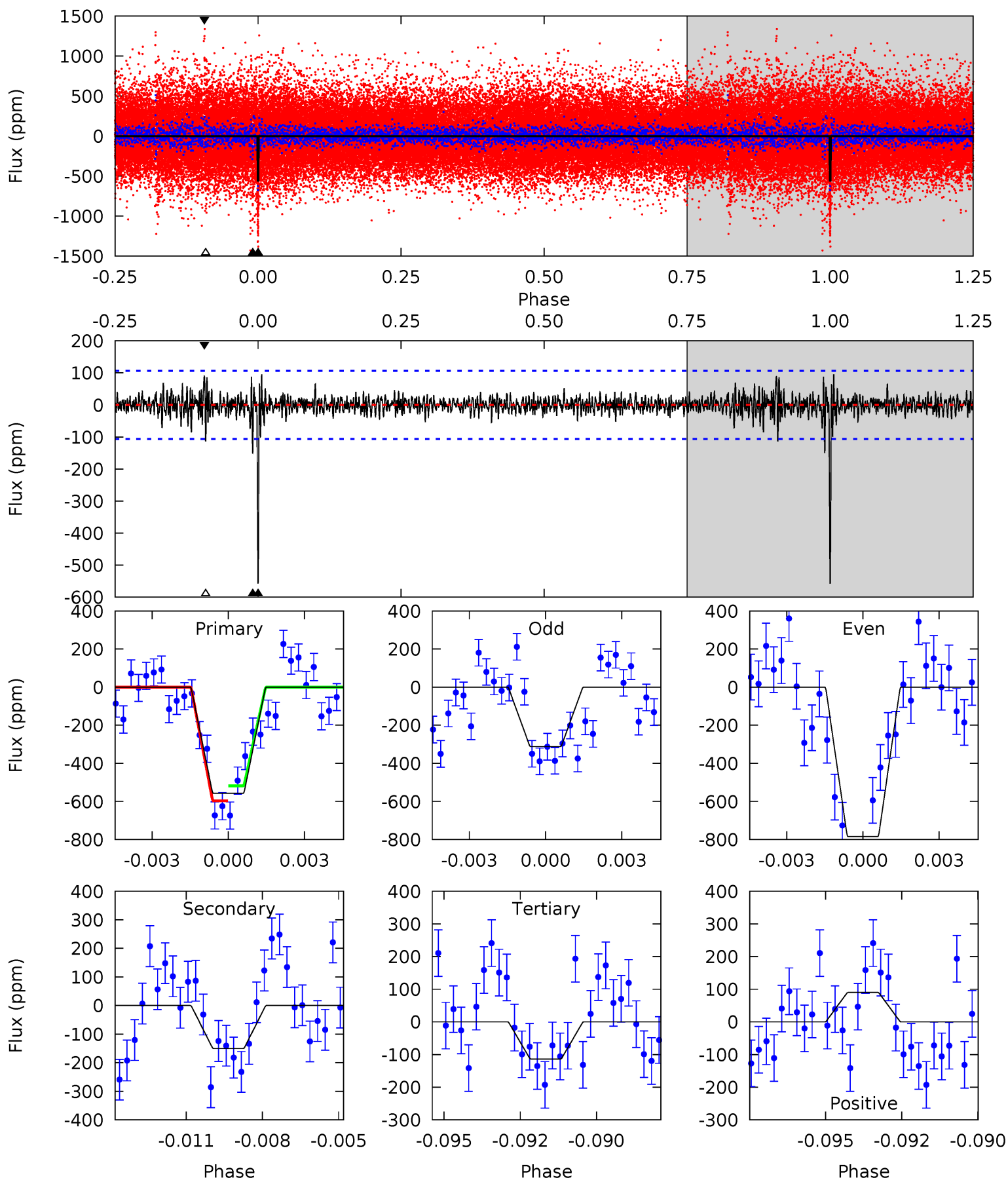
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
22.2	21.5	17.5	16.4	5.23	2.94	3.33	4.70	5.89	3.98	5.18	10.4	1.62	0.42	12.8



Alt Model-Shift Uniqueness Test

008308758-01, P = 368.185506 Days, E = 236.004929 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
27.7	7.45	5.63	4.47	5.27	3.00	1.00	22.0	23.2	1.82	2.98	11.8	0.83	0.15	1.95



Stellar Parameters For KIC 008308758

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	5510^{+166}_{-149}	$4.404^{+0.144}_{-0.176}$	$-0.100^{+0.300}_{-0.300}$	$0.954^{+0.241}_{-0.141}$	$0.842^{+0.122}_{-0.071}$	$1.366^{+0.887}_{-0.659}$
	+3%/-3%	+3%/-4%	+300%/-300%	+25%/-15%	+14%/-8%	+65%/-48%
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 008308758-01 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	-451 ± 21	$3.04^{+0.49}_{-0.40}$	341^{+26}_{-20}	4831^{+222}_{-210}	24413^{+8050}_{-6077}
Alt.	-150 ± 20	$2.49^{+0.42}_{-0.35}$	342^{+23}_{-20}	4207^{+218}_{-190}	12064^{+4503}_{-3554}

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

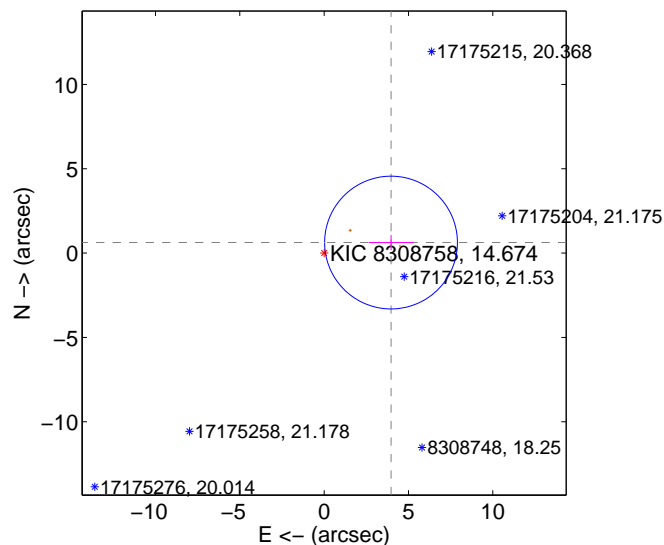
Supplemental centroid analysis for 008308758-01. Kepler magnitude: 14.67. Transit SNR 10.33

There are 0 quarters with good PRF difference image offsets

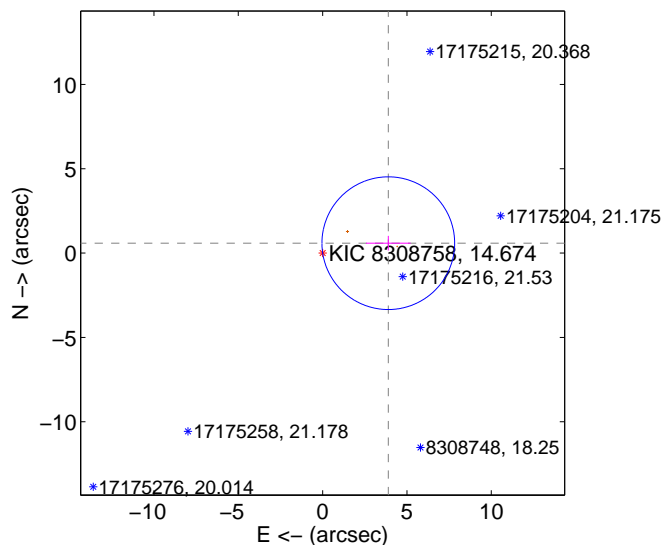
The direct PRF centroid is offset from the target star catalog position by about 0.10 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	4.014 ± 1.312	3.06	-3.965 ± 1.326	0.625 ± 0.452
PRF-fit source offset from KIC position	3.937 ± 1.311	3.00	-3.893 ± 1.324	0.588 ± 0.433
photometric centroid source offset	5.89 ± 2.02	2.91	-1.68 ± 1.92	-5.64 ± 2.03

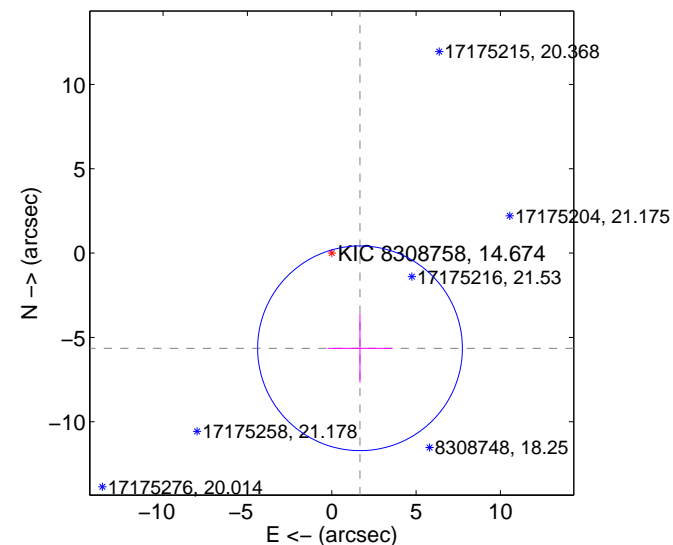
offset from difference PRF-fit to OOT PRF-fit



offset from difference PRF-fit to KIC position

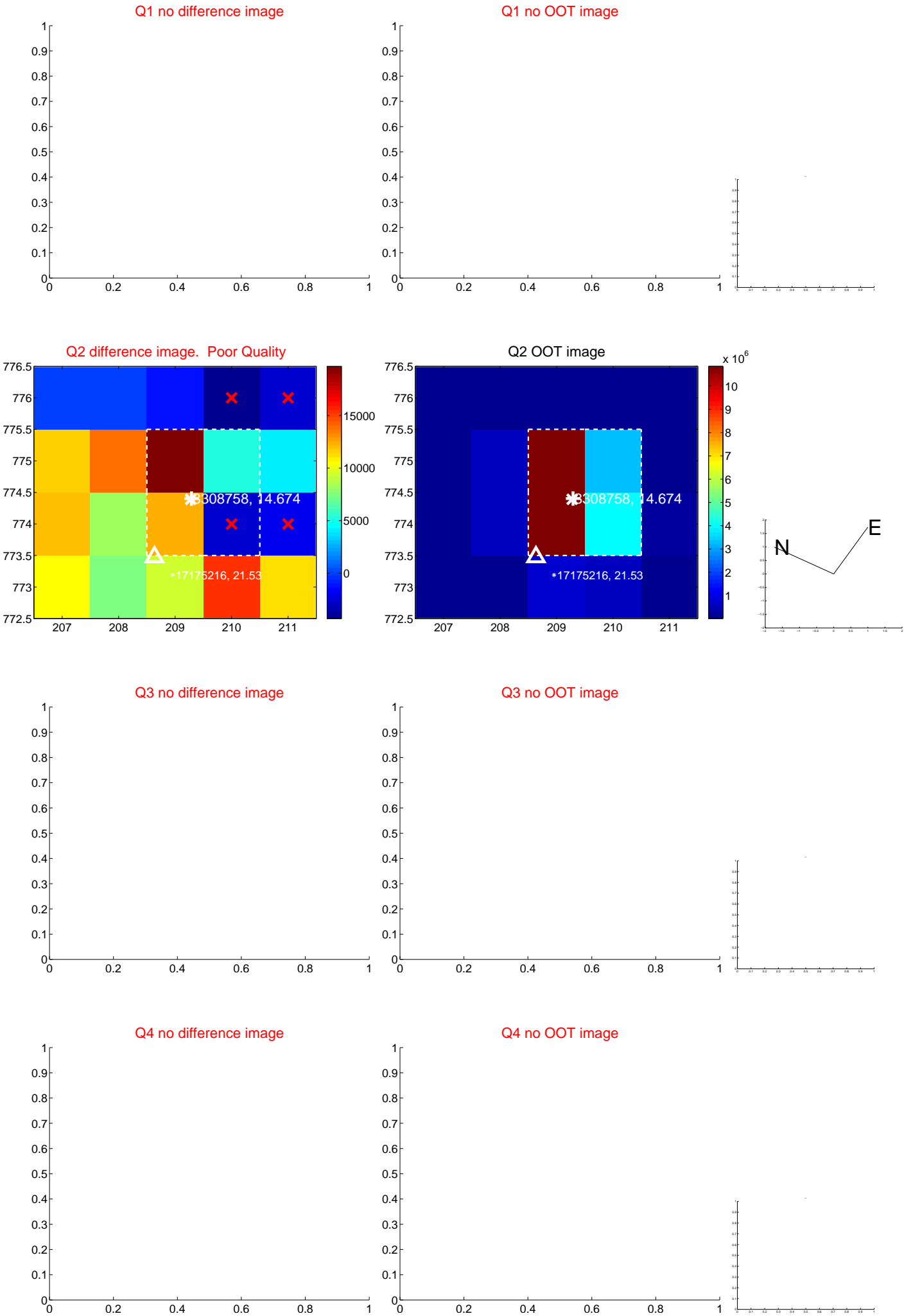


offset from photometric centroids

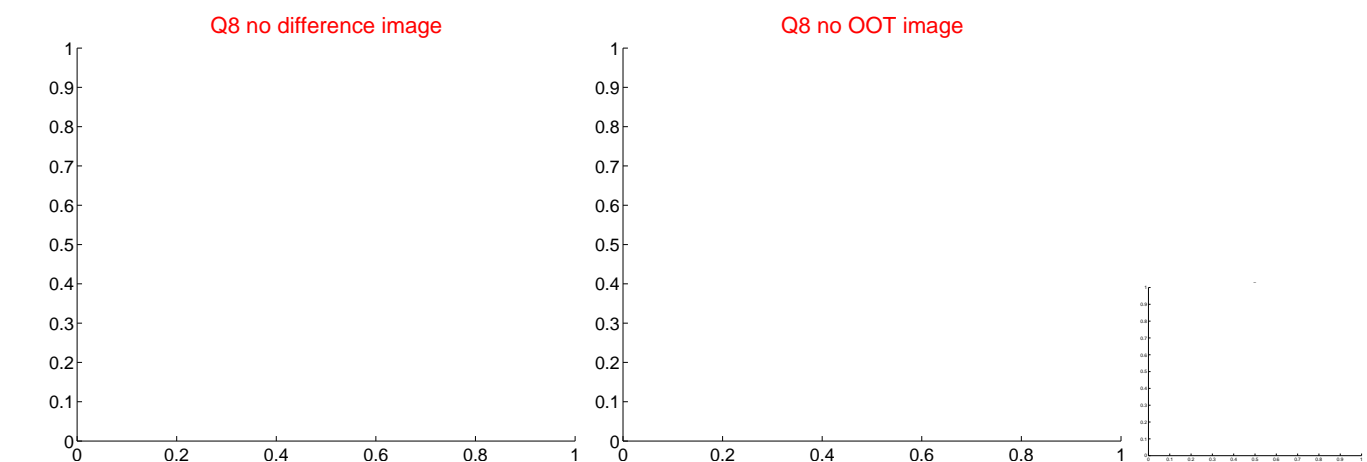
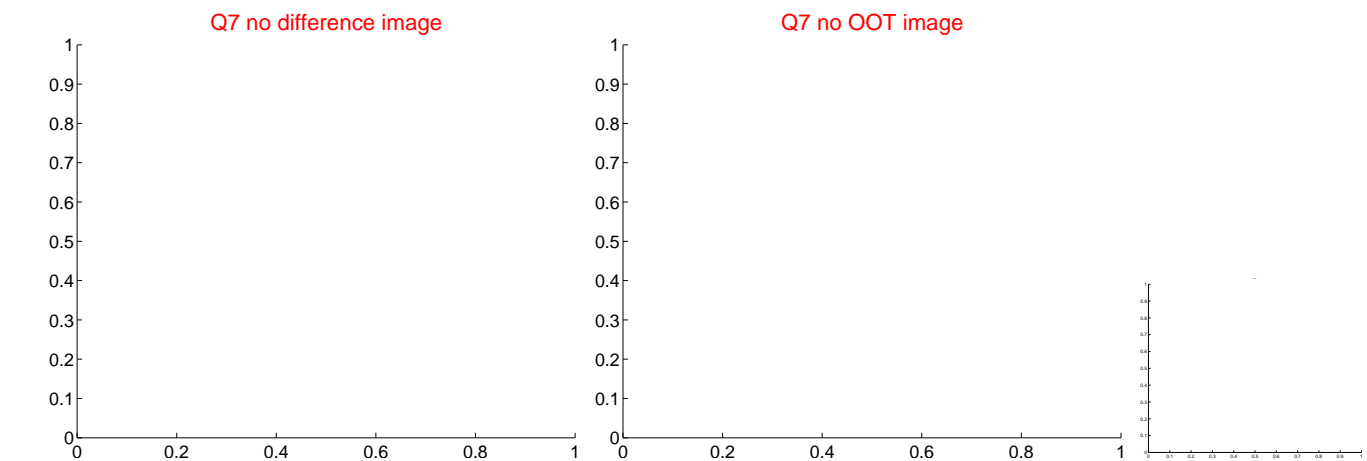
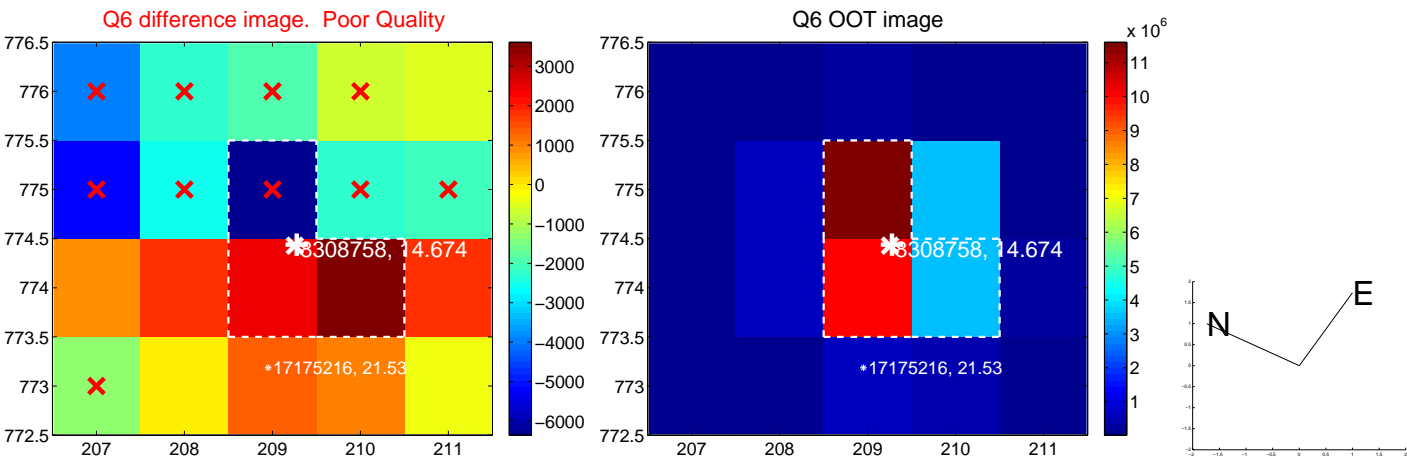
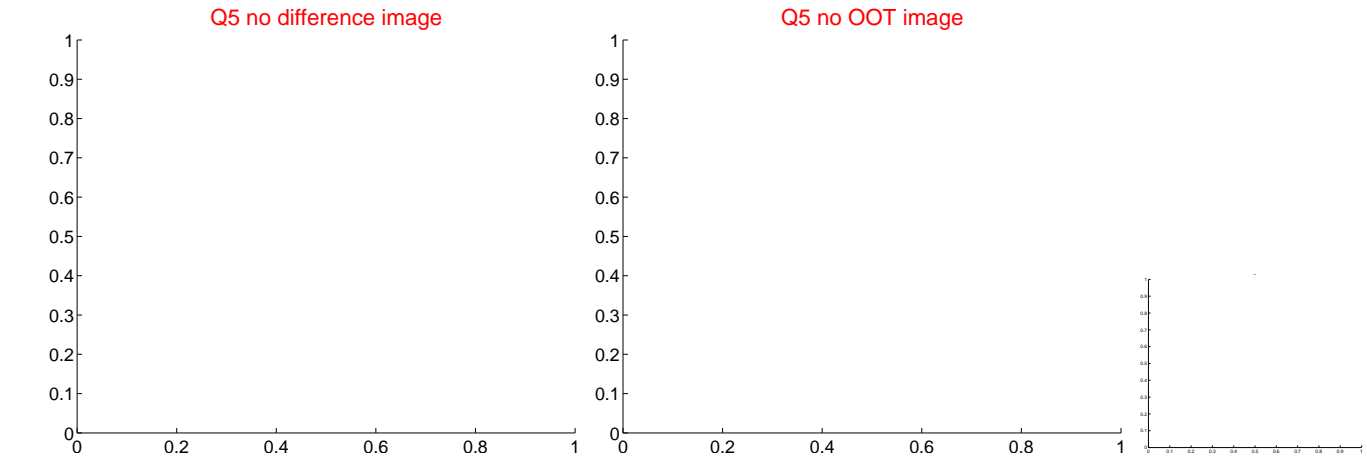


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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



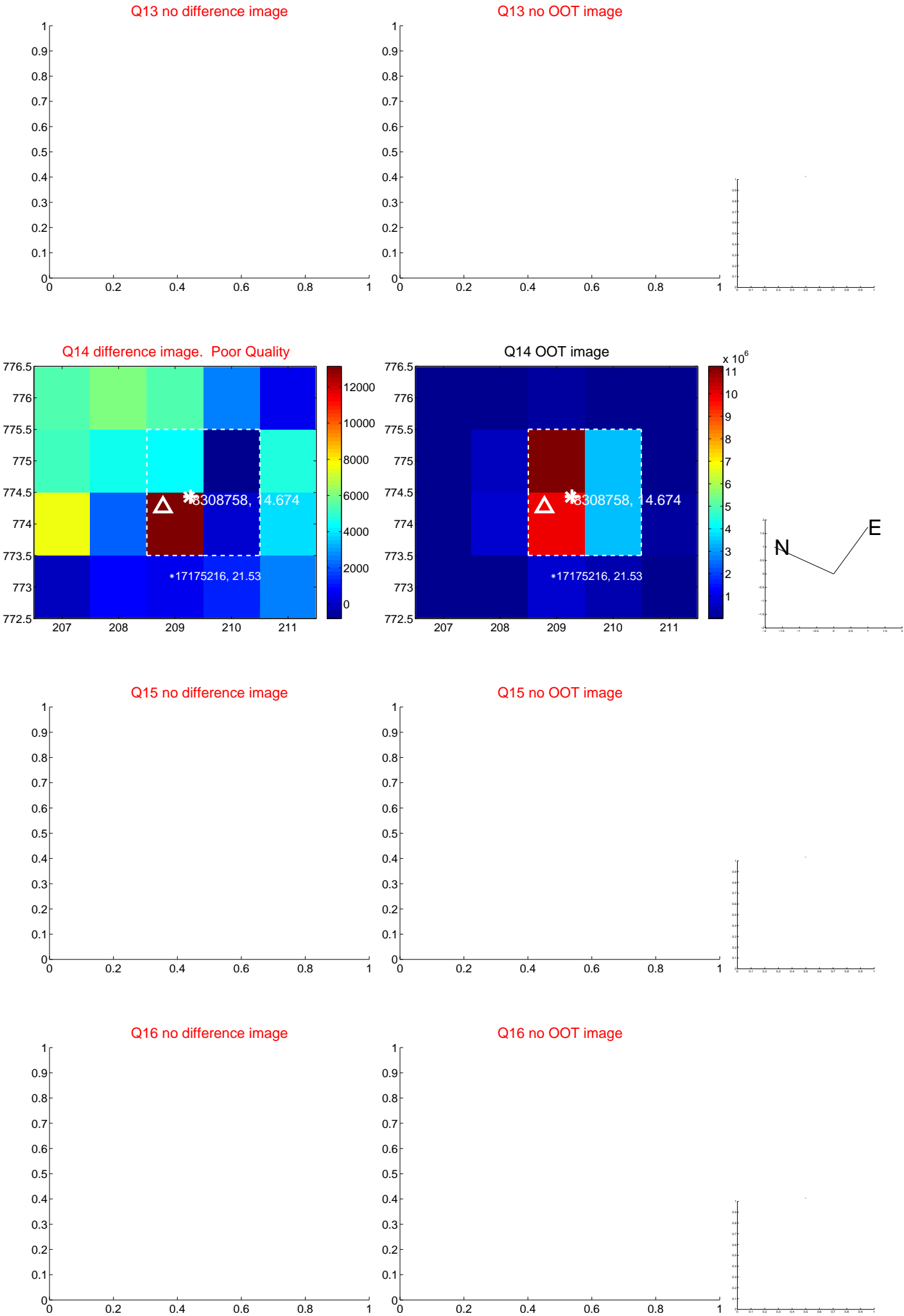
white ×: KIC target position; +: OOT centroid; △: difference centroid. red ✕: large negative pixel value.



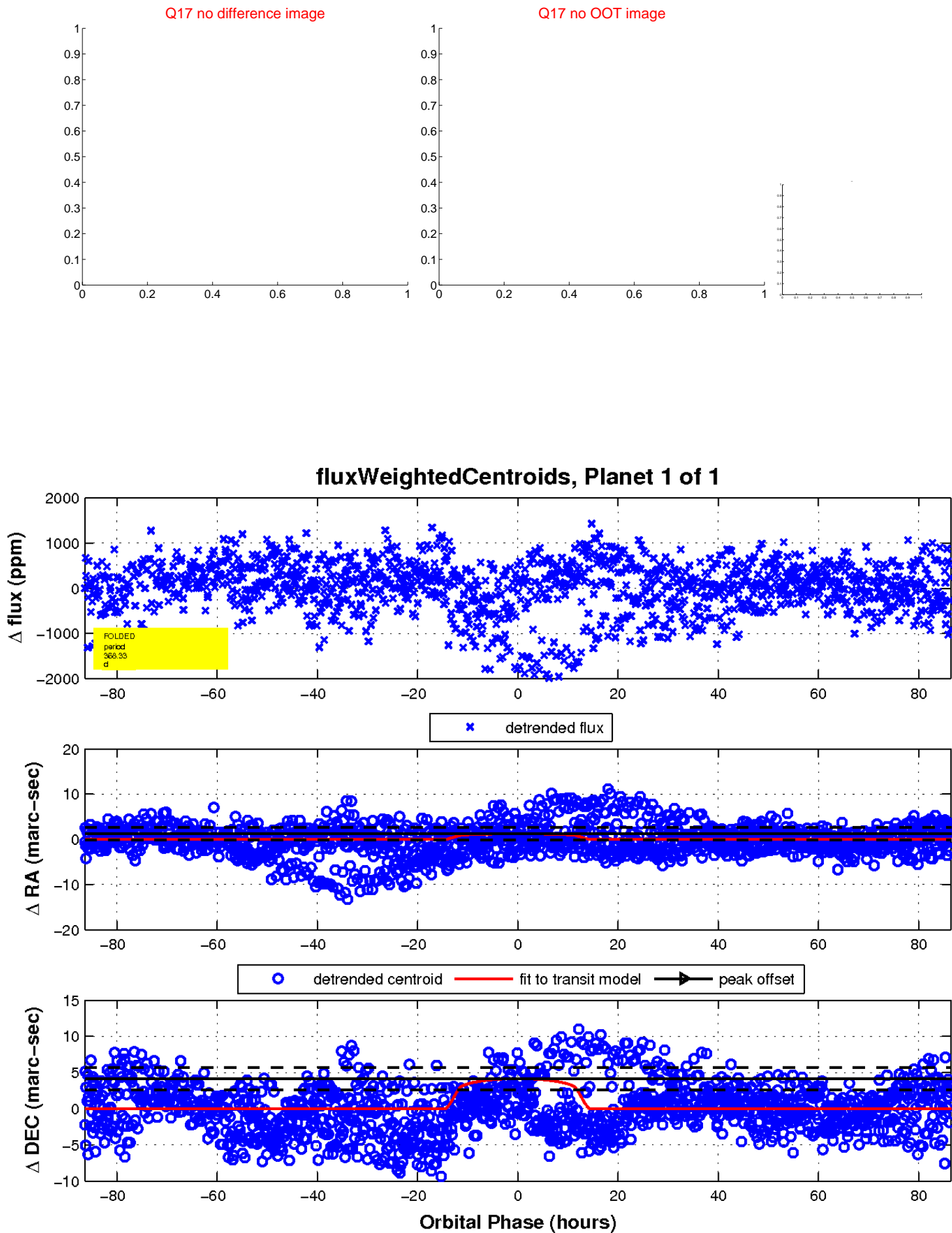
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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

