

KIC 008380282

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})
008380282-01	OBS	No	244.135734	338.027059	955.4	4.984	8.0	7.1	13.86	4992	43.69	110.55

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
008380282-01	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_CHASES_MARSHALL—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_TER_DV

Notes: OBS = Observed. INJ = Injected. INV = Inverted. SCR = Scrambled.

N = Not Transit-Like. S = Stellar Eclipse. C = Centroid Offset. E = Ephemeris Match.

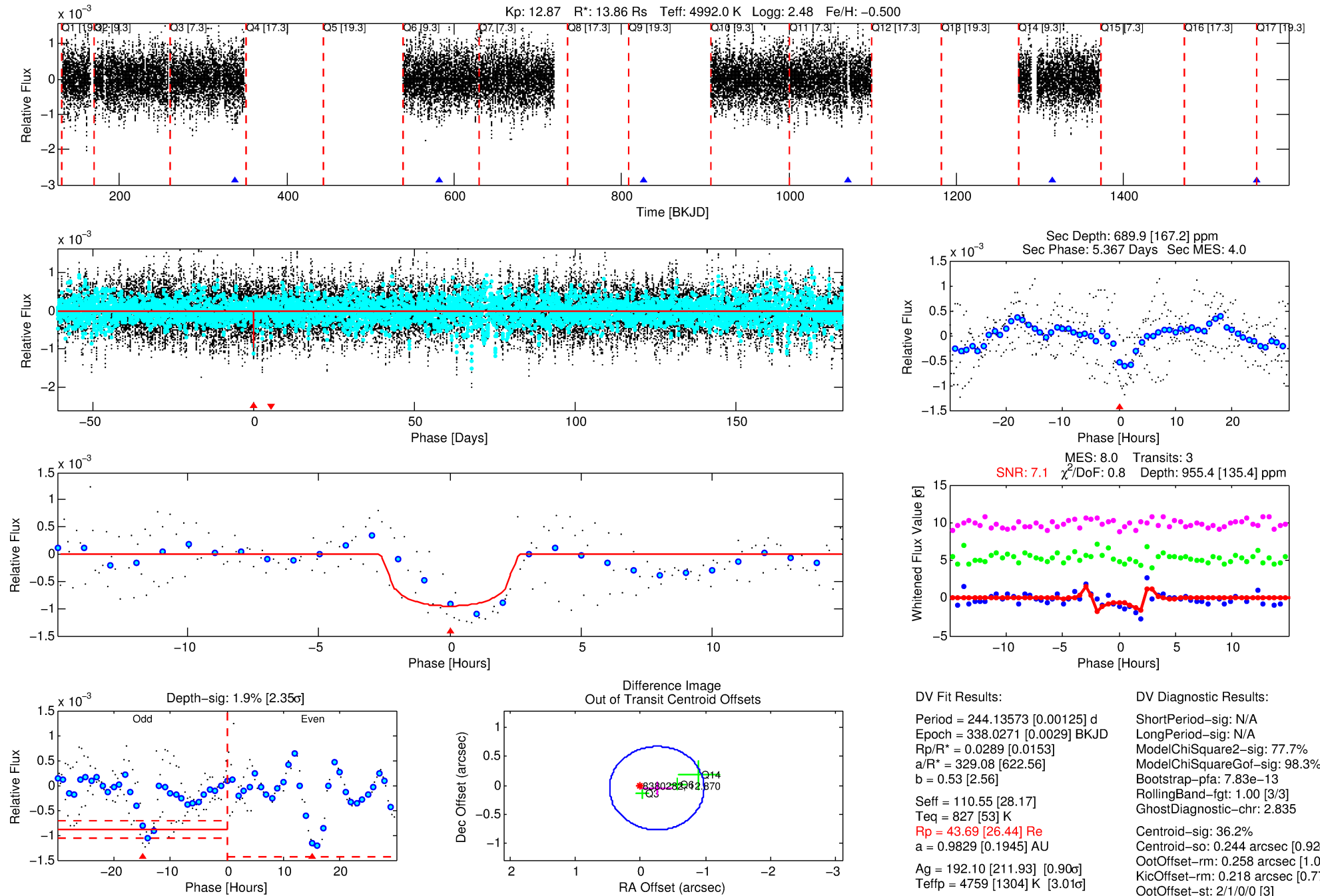
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 008380282-01

No Significant Match Found

DV One-Page Summary

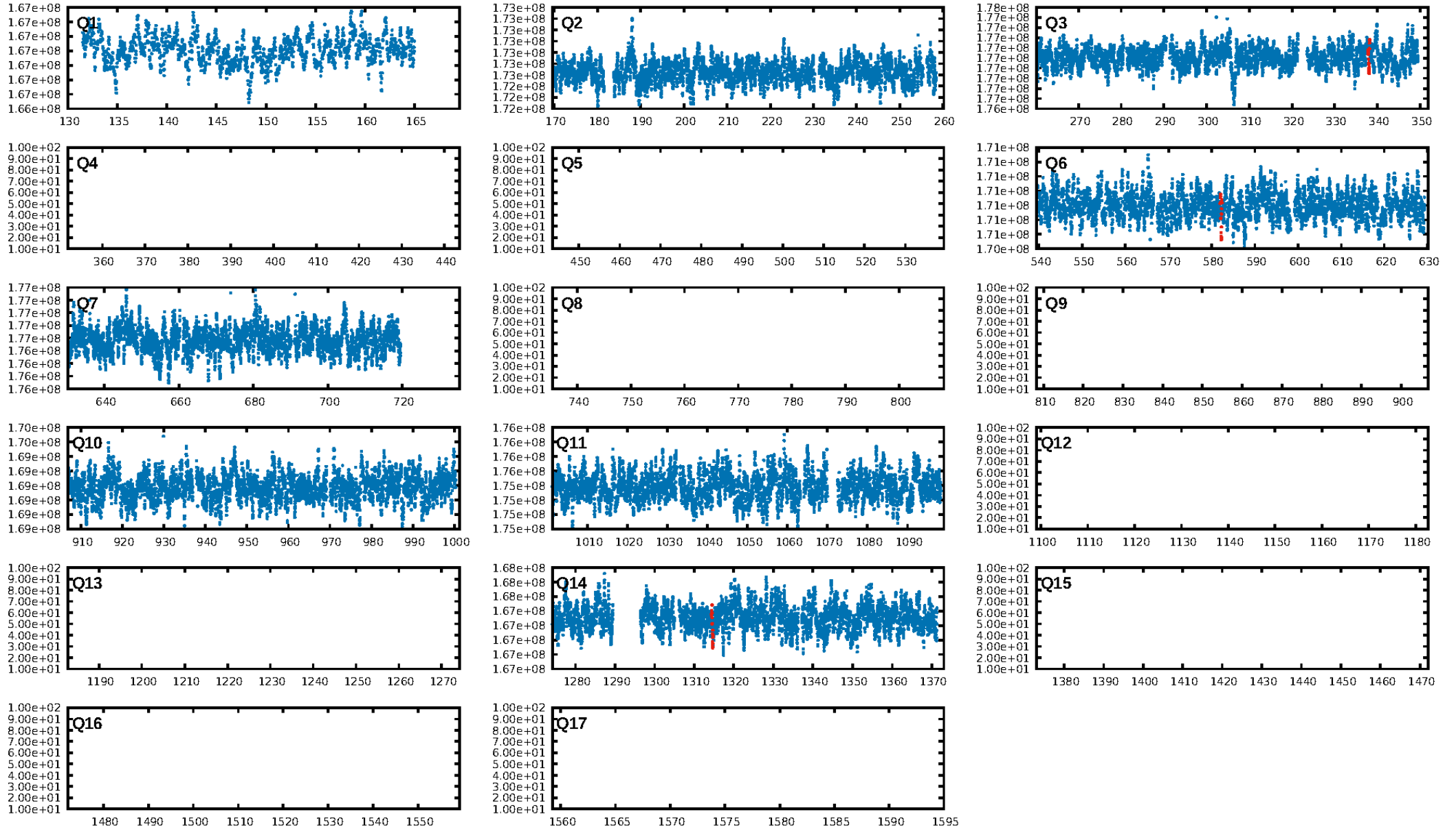
KIC: 8380282 Candidate: 1 of 1 Period: 244.136 d



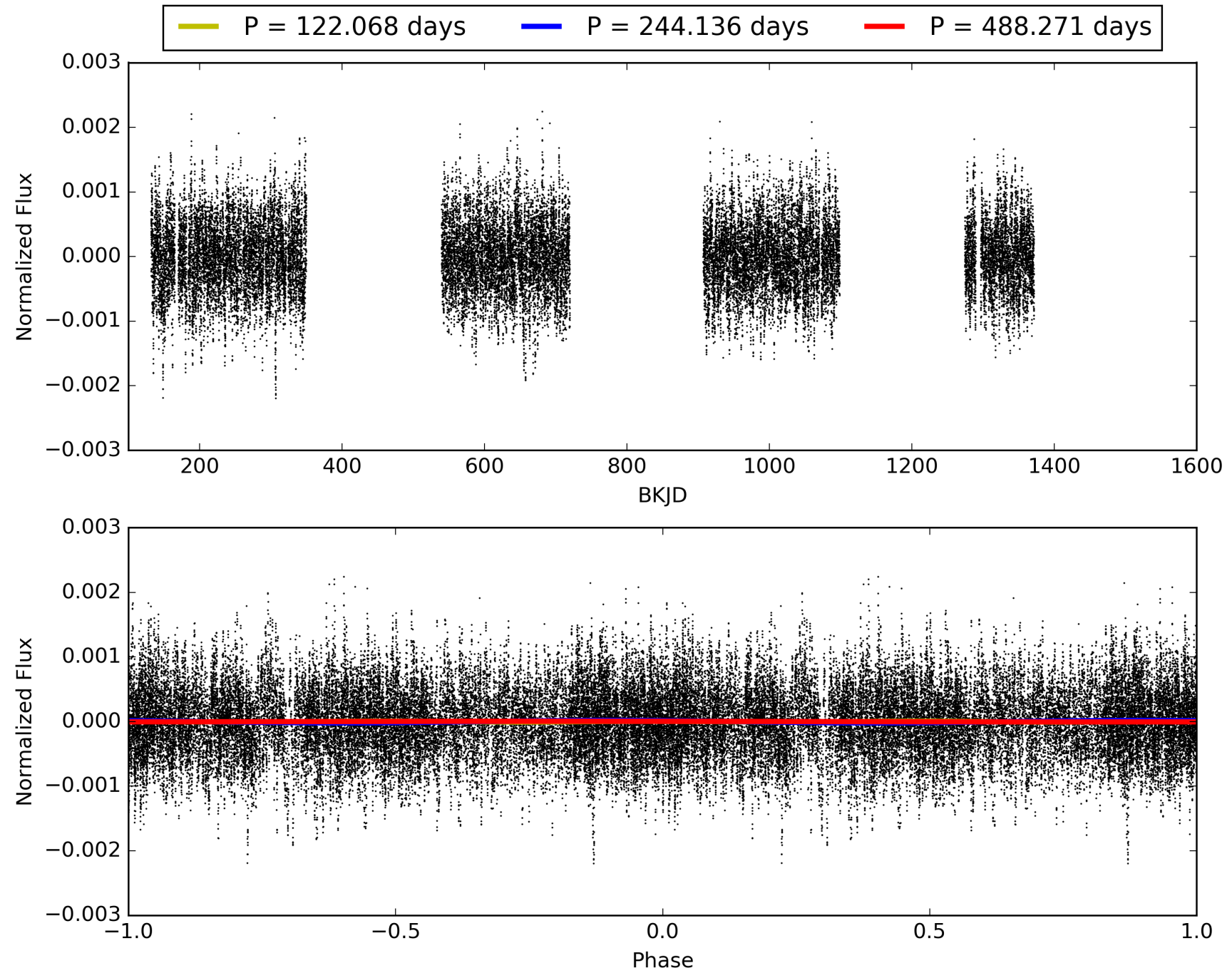
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 30-Jan-2016 12:57:58 Z

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

TCE 008380282-01, PDC Light Curves

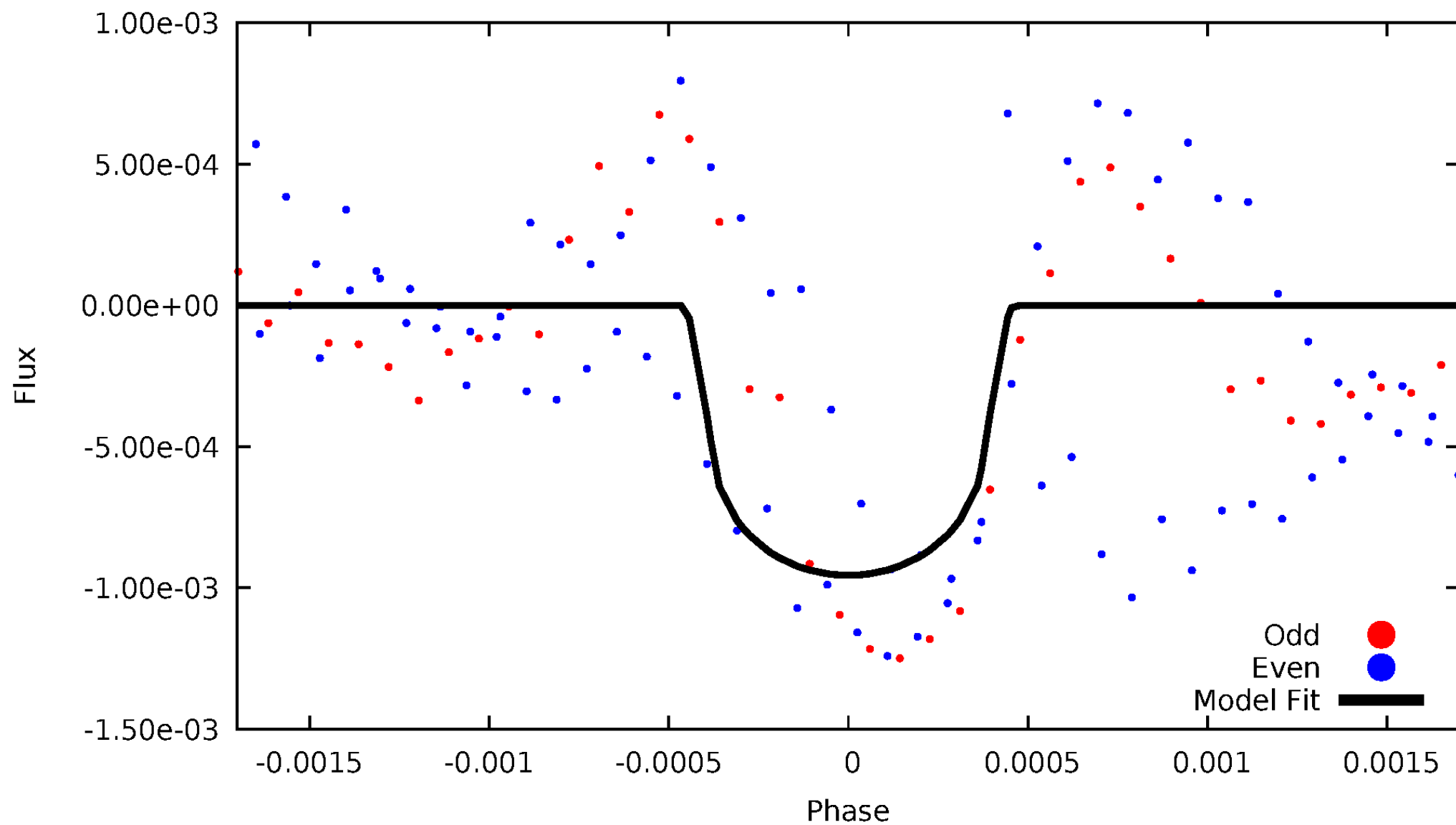


TCE 008380282-01



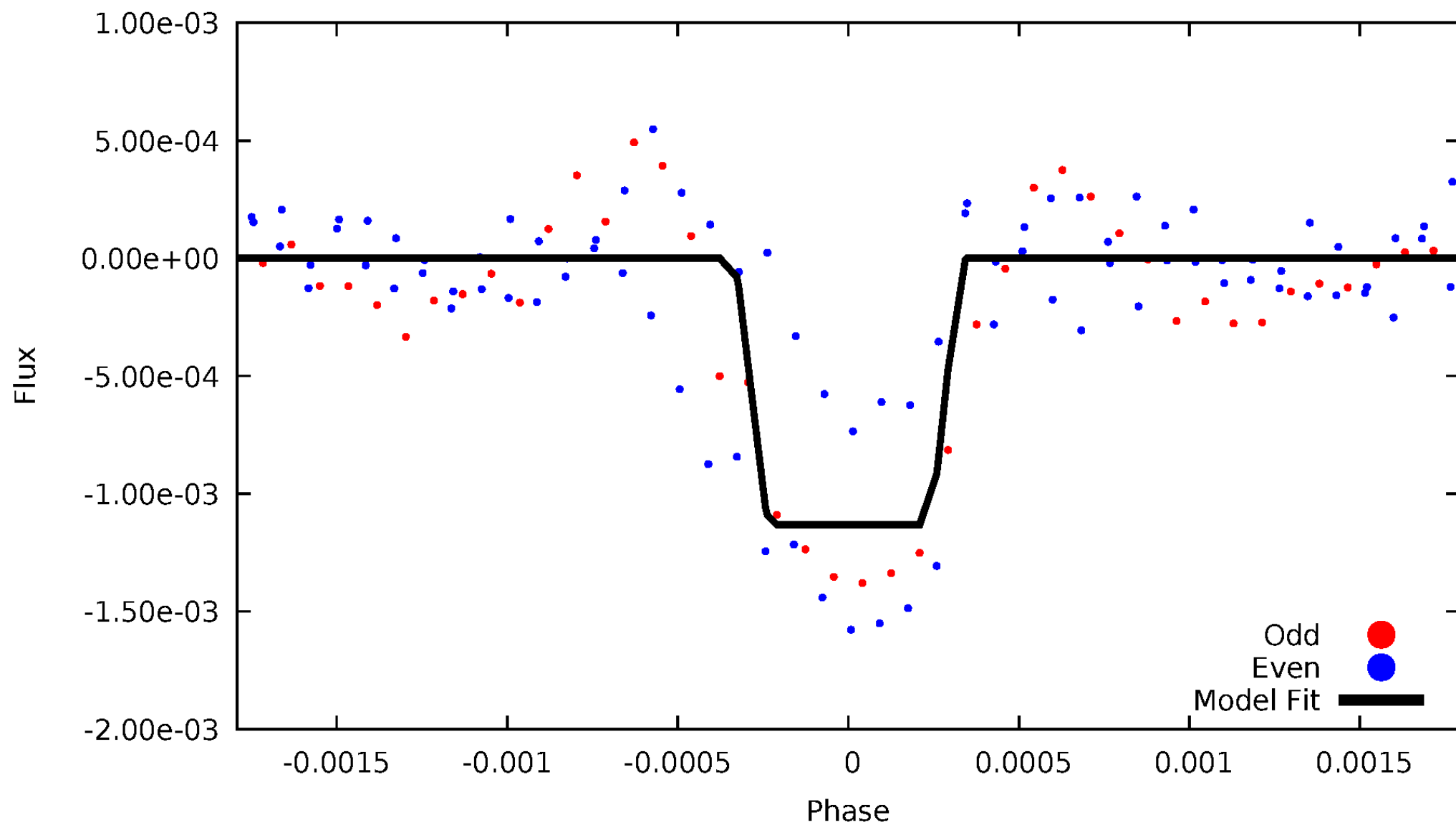
DV Odd/Even

TCE 008380282-01



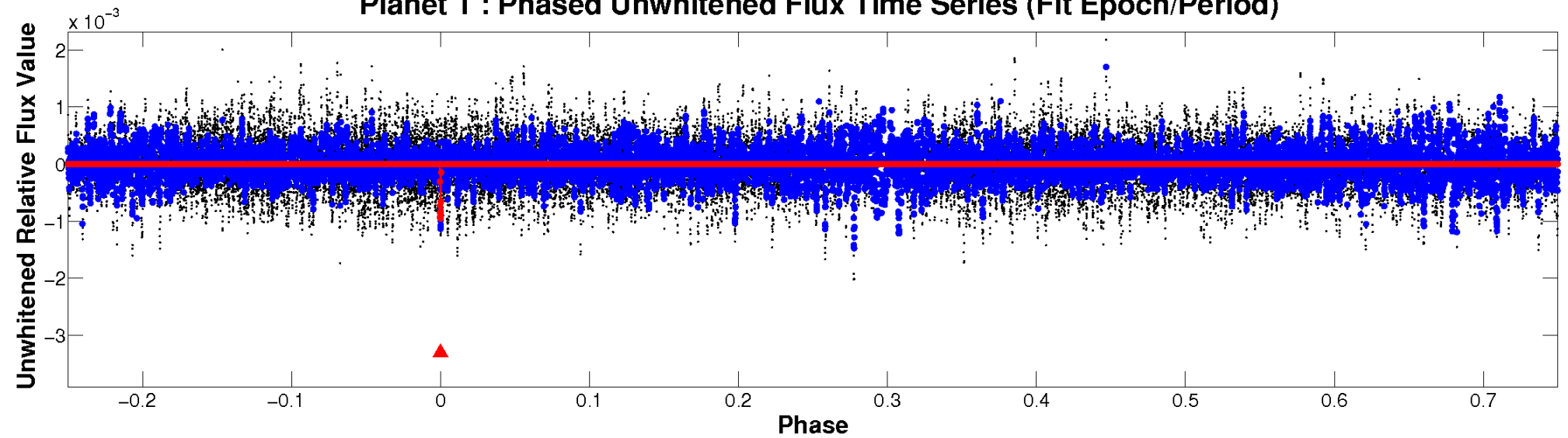
ALT Odd/Even

TCE 008380282-01

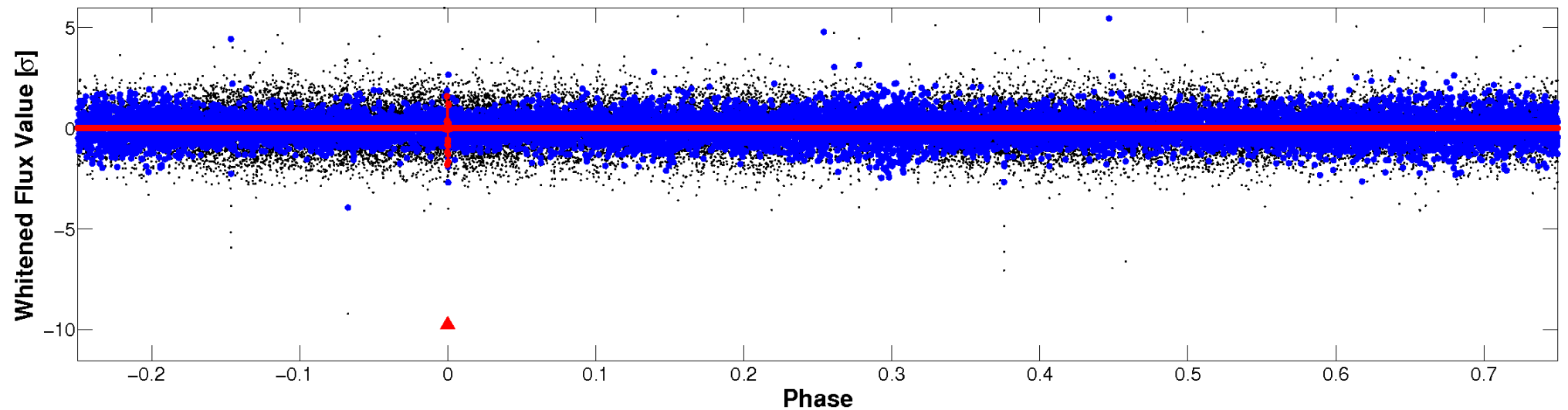


Non-Whitened Vs. Whitened Light Curve

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

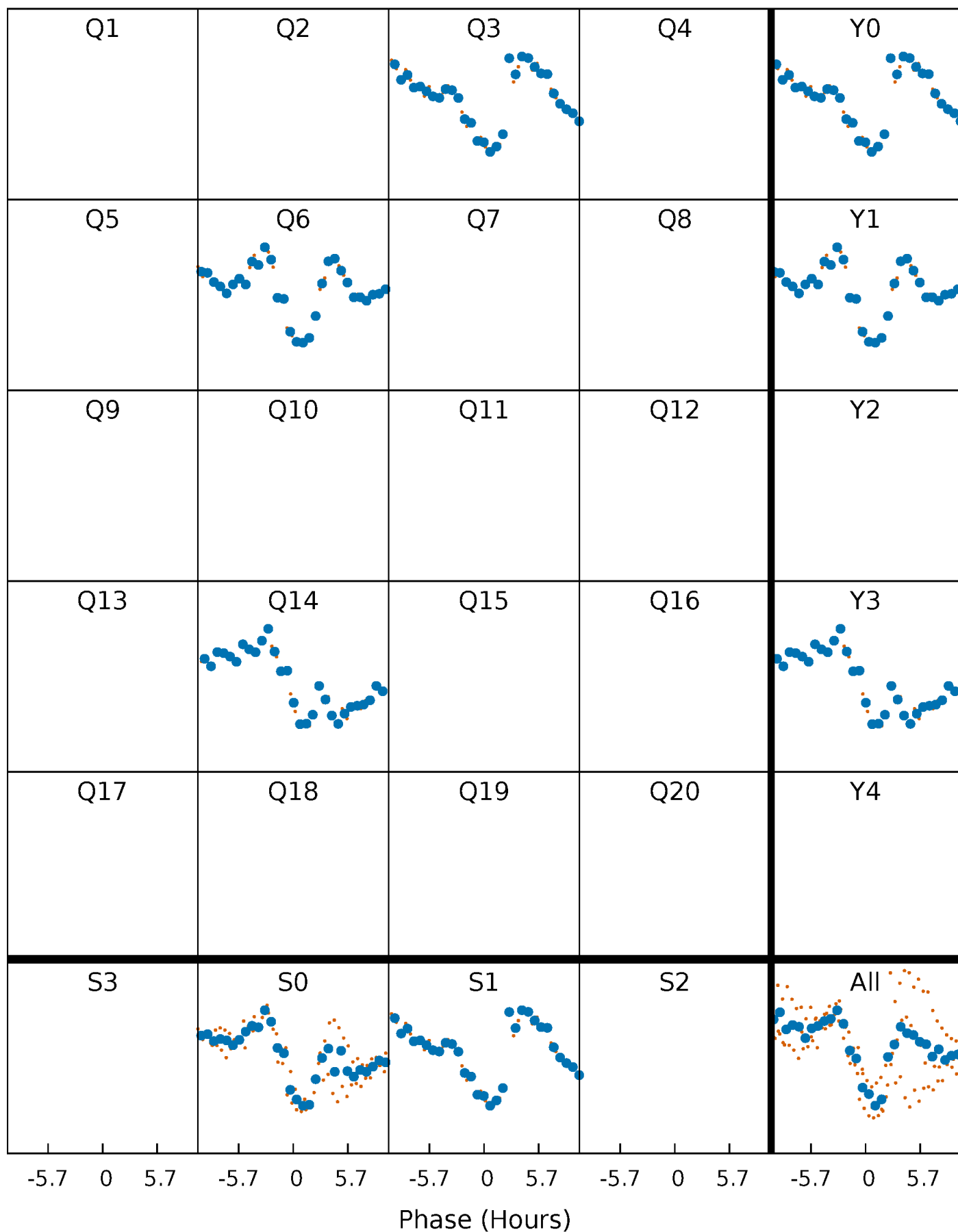


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



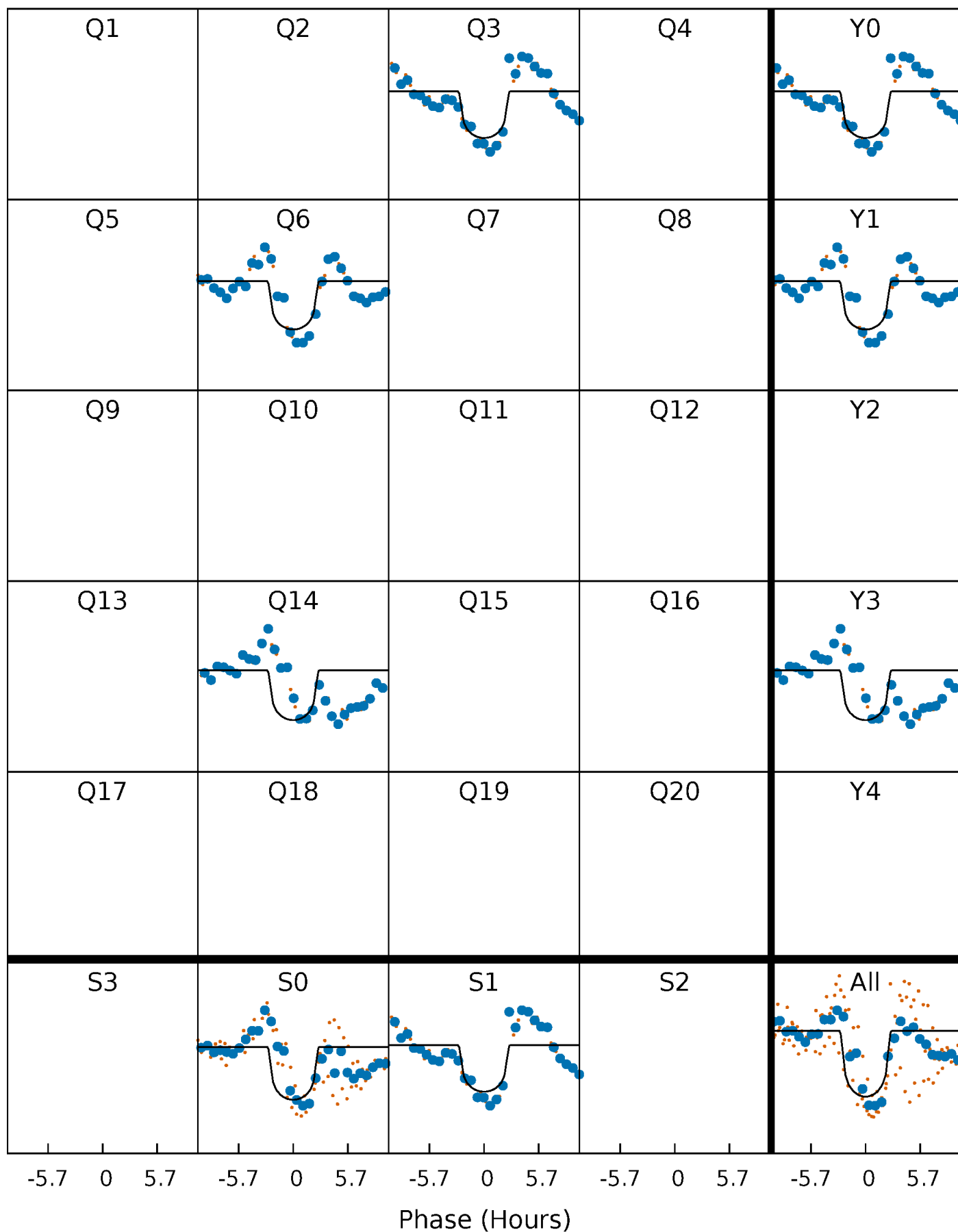
PDC Quarter-Phased Transit Curves

TCE 008380282-01 $P=244.135734$ Days $T_0=338.027059$ (BKJD)



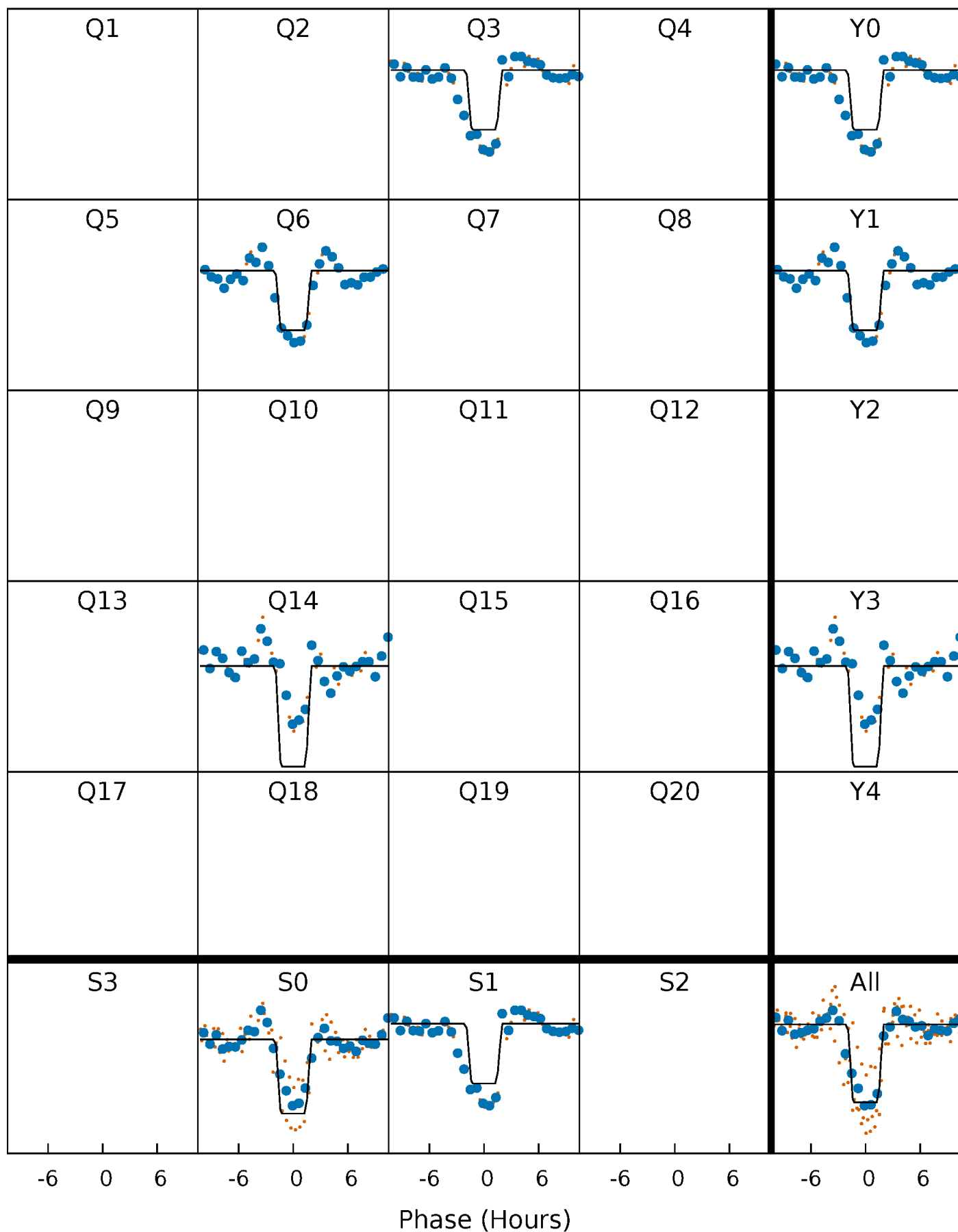
DV Quarter-Phased Transit Curves

TCE 008380282-01 P=244.135734 Days $T_0=338.027059$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

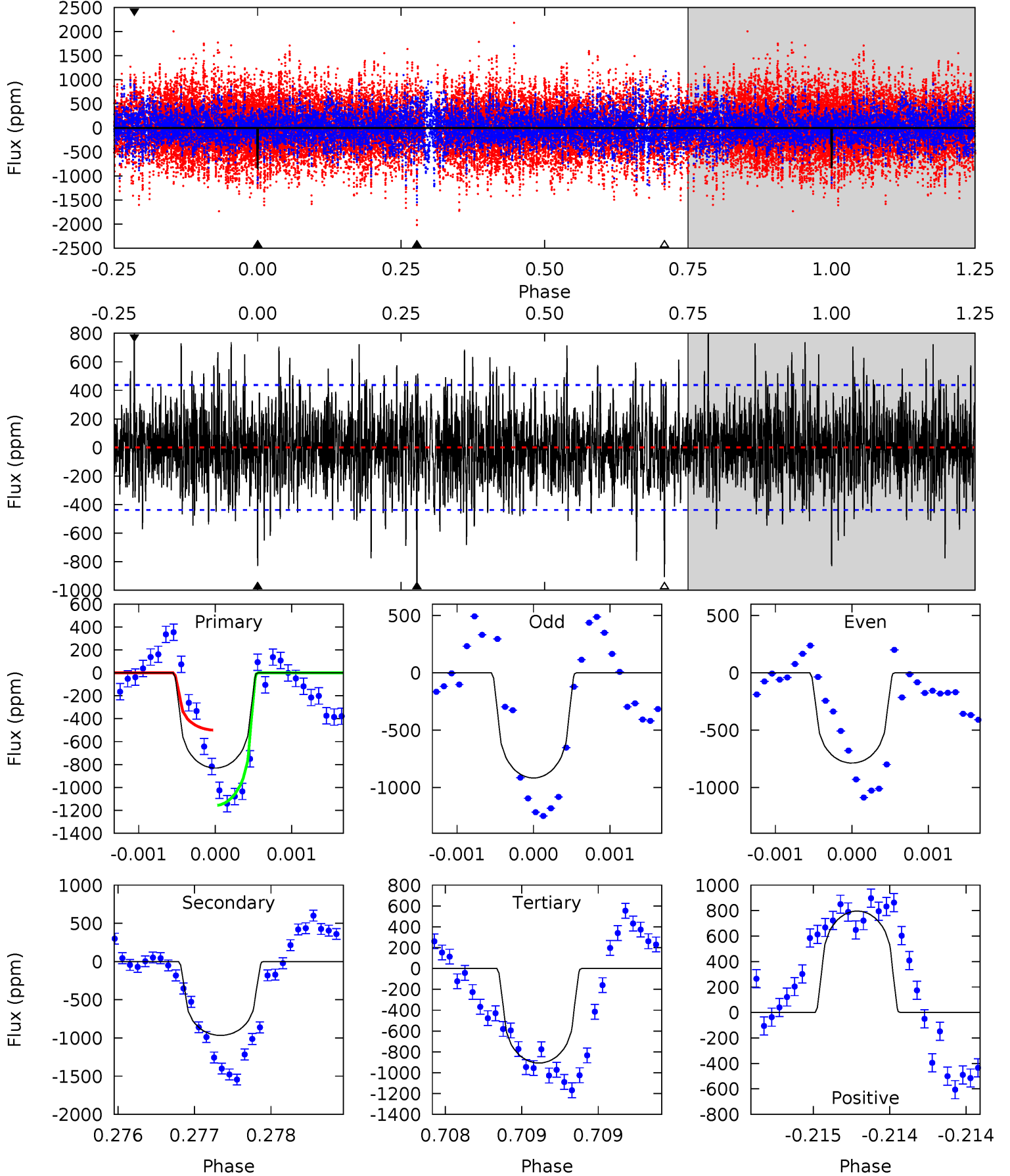
TCE 008380282-01 P=244.136044 Days $T_0=338.051652$ (BKJD)



DV Model-Shift Uniqueness Test

008380282-01, $P = 244.135734$ Days, $E = 93.891325$ Days

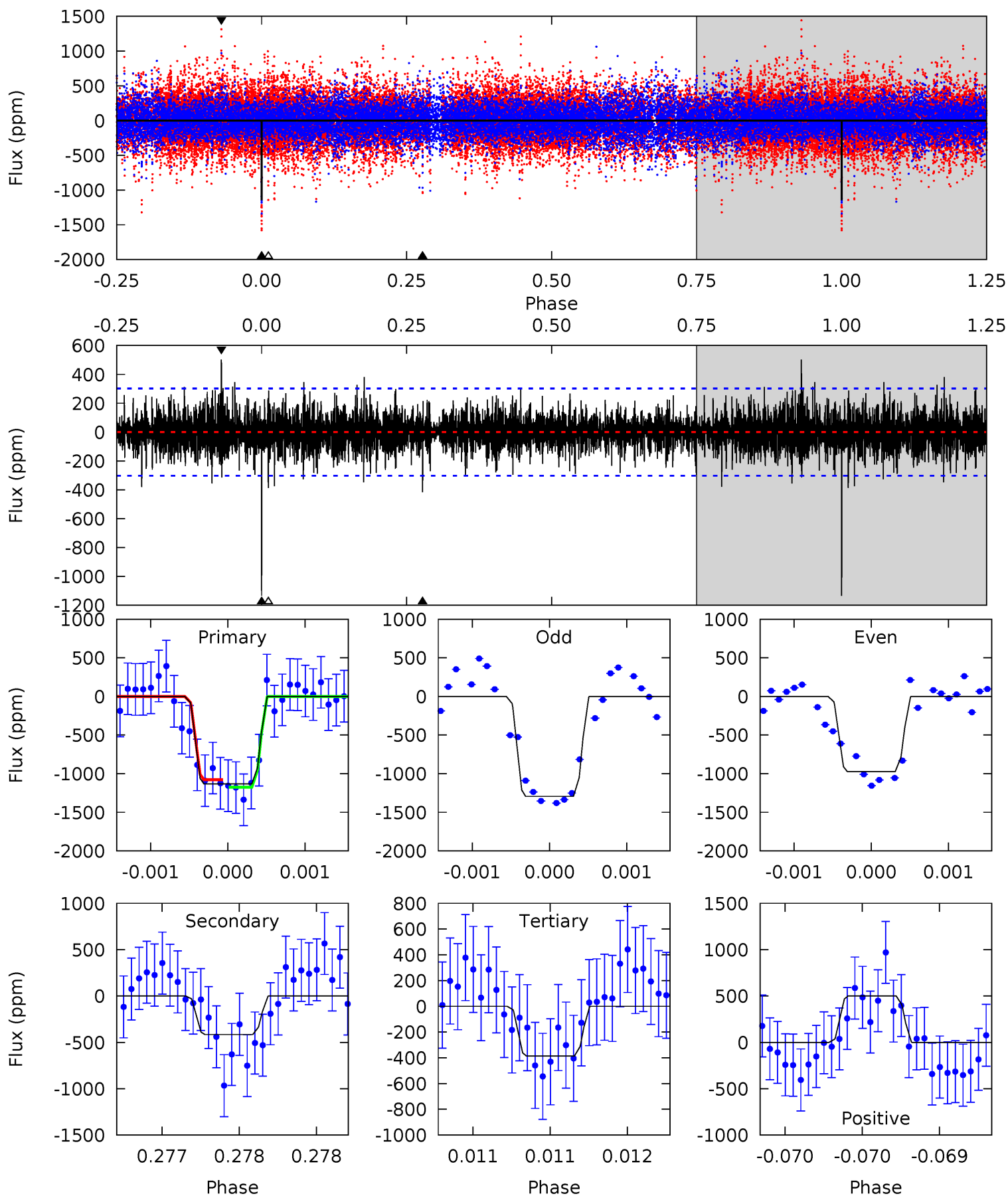
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
10.4	12.1	11.4	9.96	5.48	3.34	2.65	-0.96	0.43	0.74	2.13	0.76	0.91	0.45	4.11



Alt Model-Shift Uniqueness Test

008380282-01, P = 244.136044 Days, E = 93.915608 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
20.7	7.59	7.06	9.16	5.52	3.40	1.81	13.6	11.5	0.53	-1.57	2.82	0.83	0.31	0.88



Stellar Parameters For KIC 008380282

	$T_{\text{eff}} (K)$	$\log(g)$	$[\text{Fe}/\text{H}]$	$R (R_{\odot})$	$M (M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	4992^{+74}_{-194}	$2.482^{+0.030}_{-0.030}$	$-0.500^{+0.200}_{-0.300}$	$13.855^{+2.042}_{-4.085}$	$2.121^{+0.565}_{-1.049}$	$0.001^{+0.000}_{-0.000}$
	+1%/-4%	+1%/-1%	+40%/-60%	+15%/-29%	+27%/-49%	+41%/-11%
Source	PHO1	AST9	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 008380282-01 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	A_{obs}
DV	-966 ± 80	$44.96^{+25.11}_{-23.45}$	1153^{+35}_{-51}	5080^{+2040}_{-805}	258^{+800}_{-152}
Alt.	-415 ± 55	$51.79^{+26.60}_{-23.54}$	1152^{+36}_{-51}	4046^{+1046}_{-508}	84^{+173}_{-44}

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 $A_{\text{obs}} \gg 1.0$

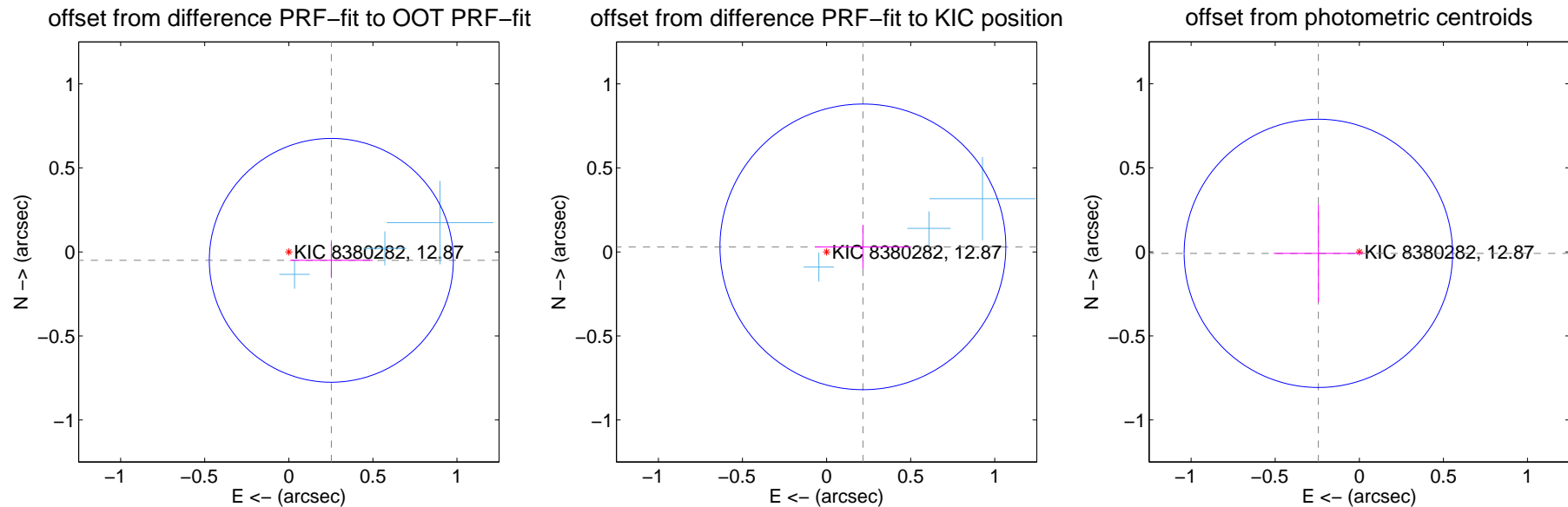
DV Centroid Data

Supplemental centroid analysis for 008380282-01. Kepler magnitude: 12.87. Transit SNR 7.10

There are 3 quarters with good PRF difference image offsets

The direct PRF centroid is offset from the target star catalog position by about 0.14 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.258 ± 0.242	1.07	-0.253 ± 0.246	-0.050 ± 0.105
PRF-fit source offset from KIC position	0.218 ± 0.283	0.77	-0.216 ± 0.285	0.030 ± 0.131
photometric centroid source offset	0.24 ± 0.27	0.92	0.24 ± 0.27	-0.01 ± 0.29



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.

Q1 no difference image



Q1 no OOT image



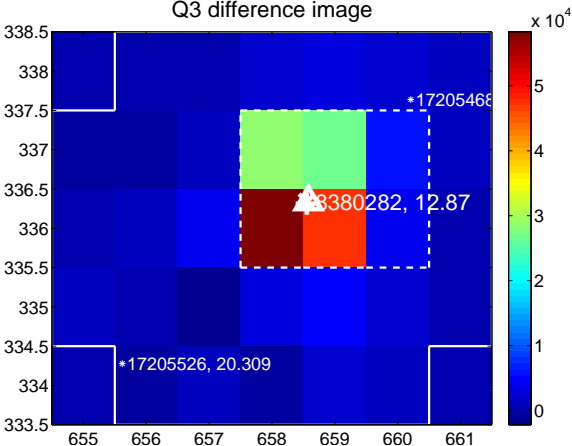
Q2 no difference image



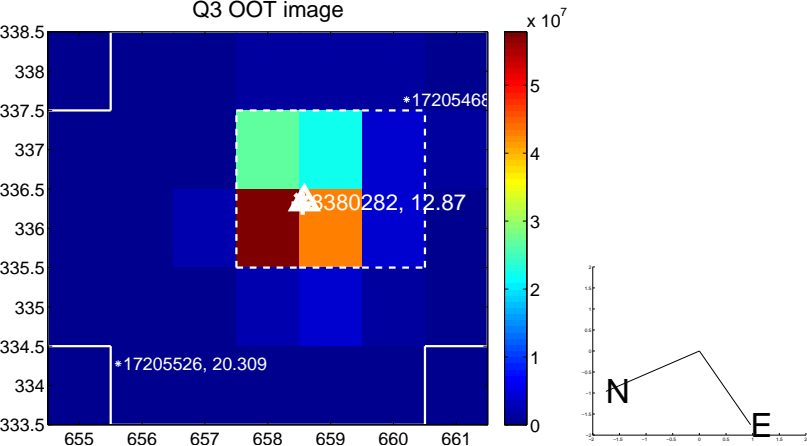
Q2 no OOT image



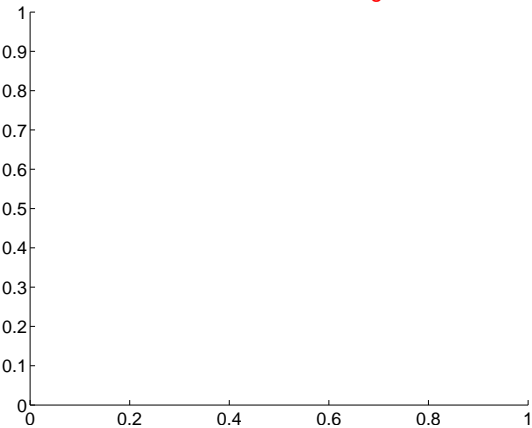
Q3 difference image



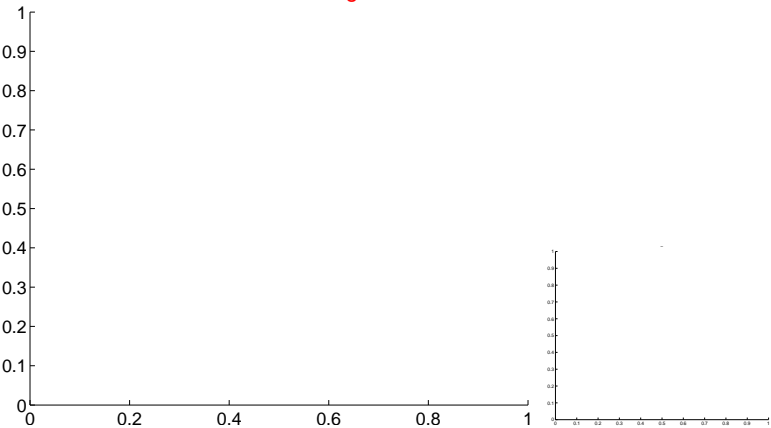
Q3 OOT image



Q4 no difference image



Q4 no OOT image



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

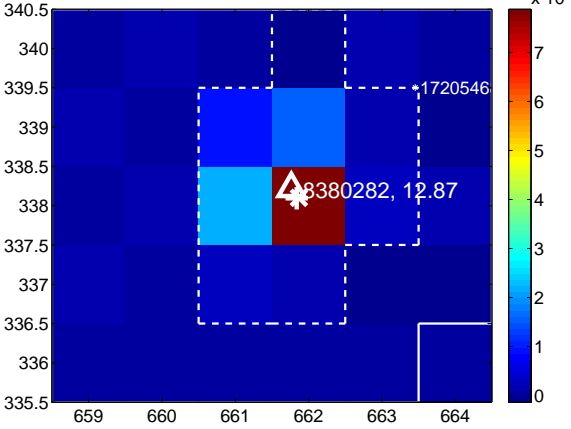
Q5 no difference image



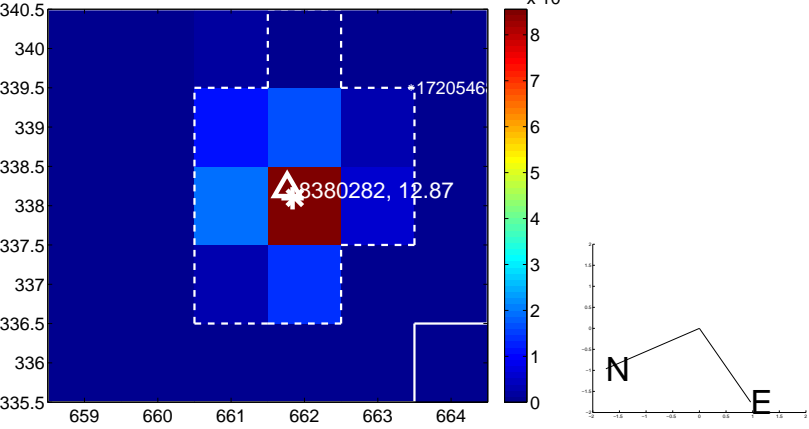
Q5 no OOT image



Q6 difference image



Q6 OOT image



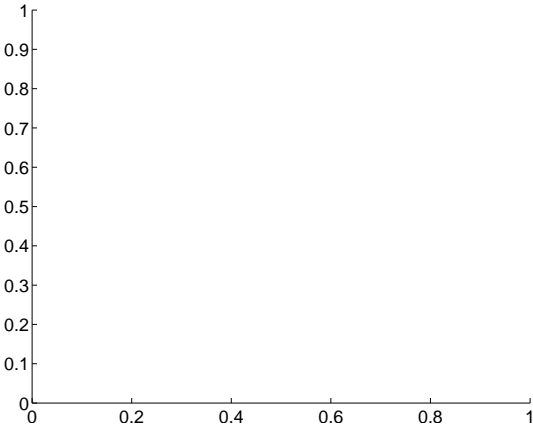
Q7 no difference image



Q7 no OOT image



Q8 no difference image



Q8 no OOT image



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.

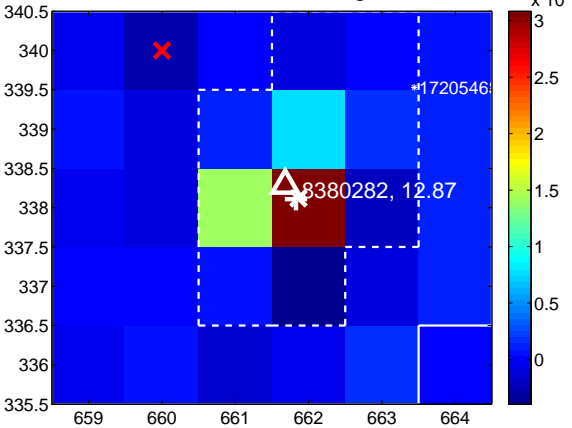
Q13 no difference image



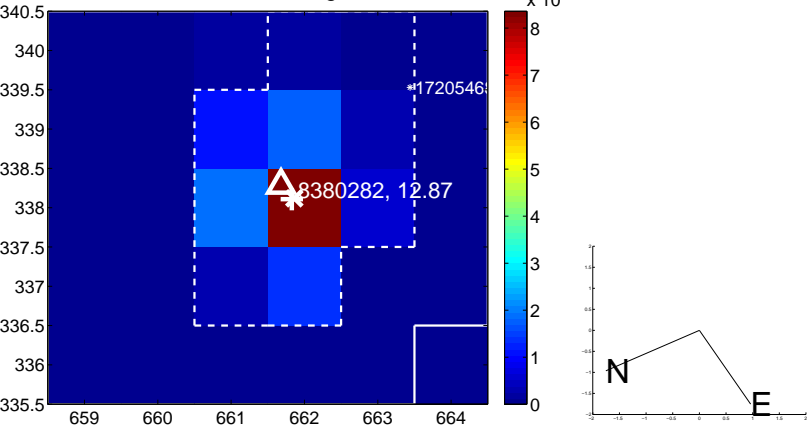
Q13 no OOT image



Q14 difference image



Q14 OOT image



Q15 no difference image



Q15 no OOT image



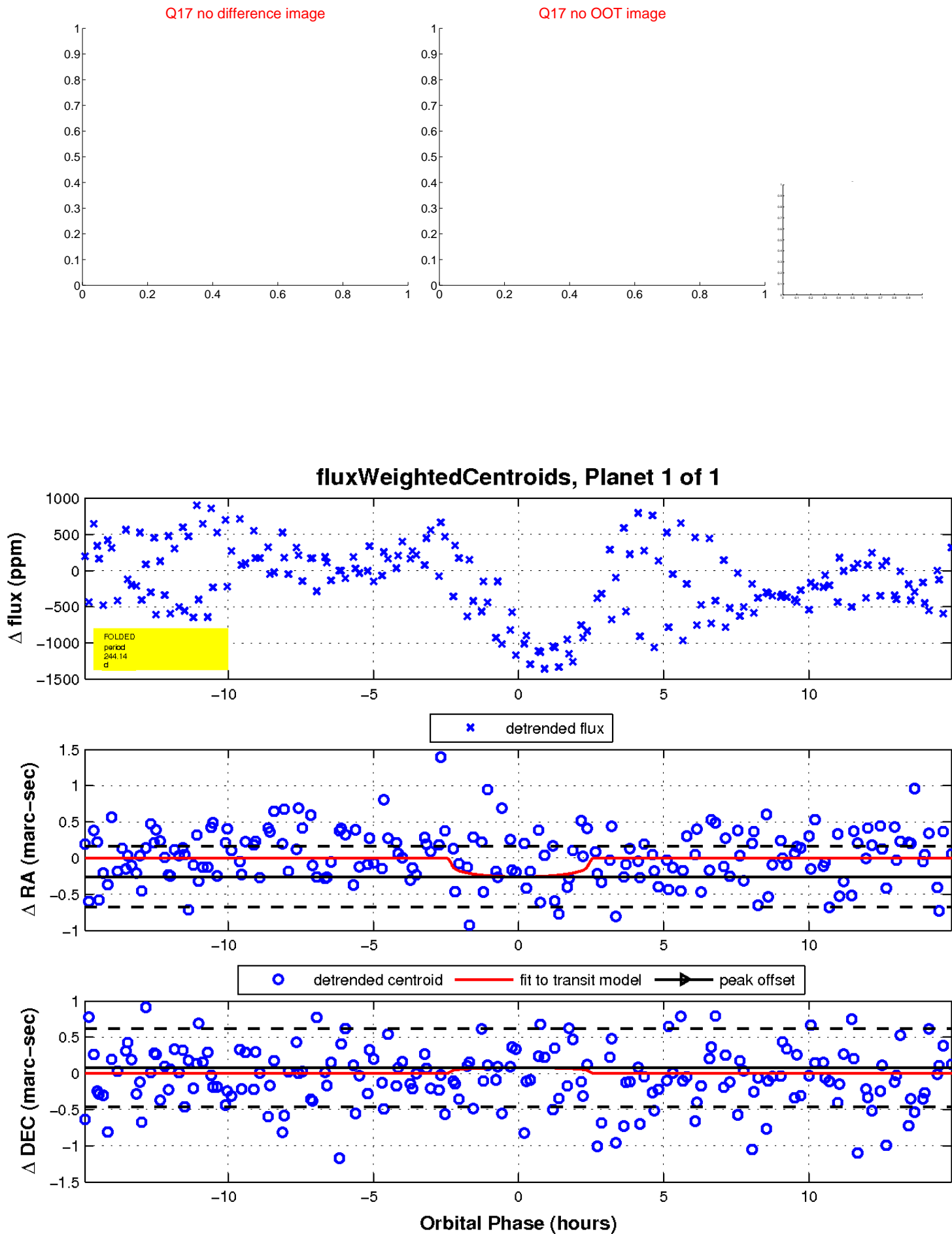
Q16 no difference image



Q16 no OOT image



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



UKIRT Image

Declination

