

KIC 008244758

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})
008244758-01	OBS	No	1.140231	132.586552	812.7	1.551	8.0	6.2	2.03	7459	6.83	18369.59

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
008244758-01	OBS	FP	0.00	1	0	0	0	LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—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.

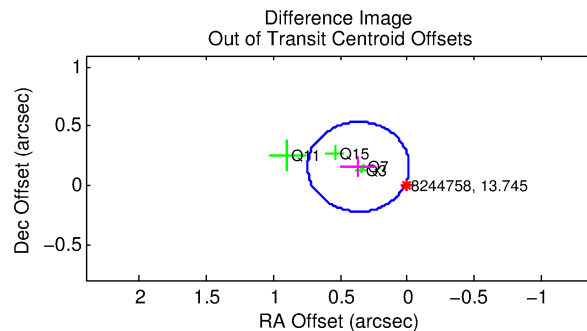
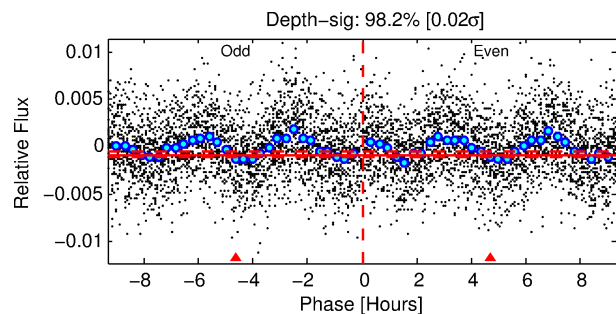
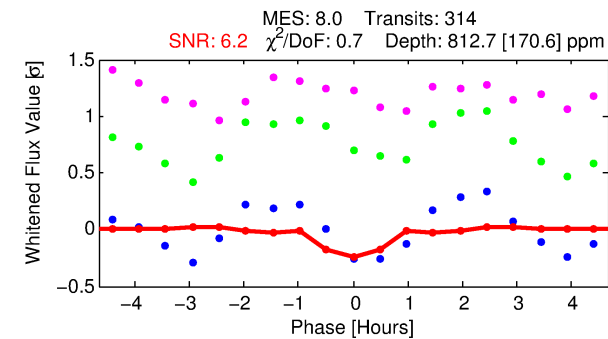
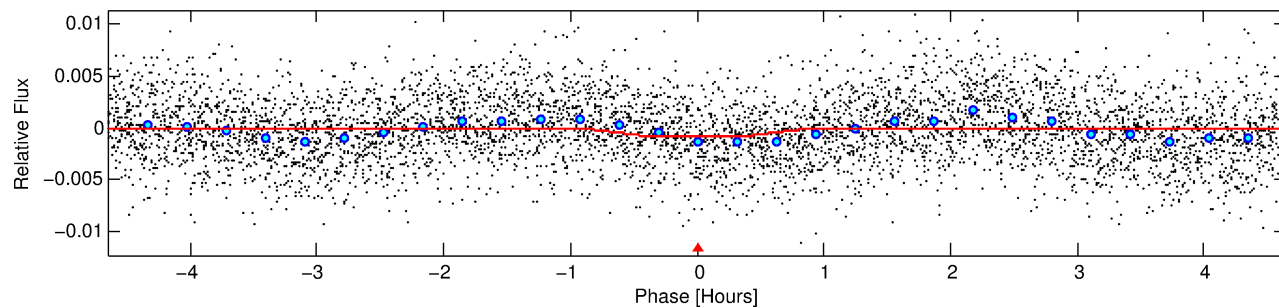
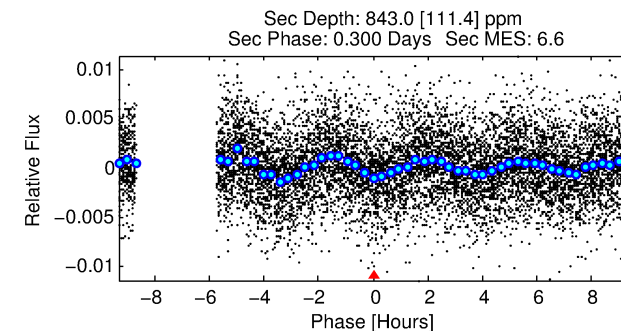
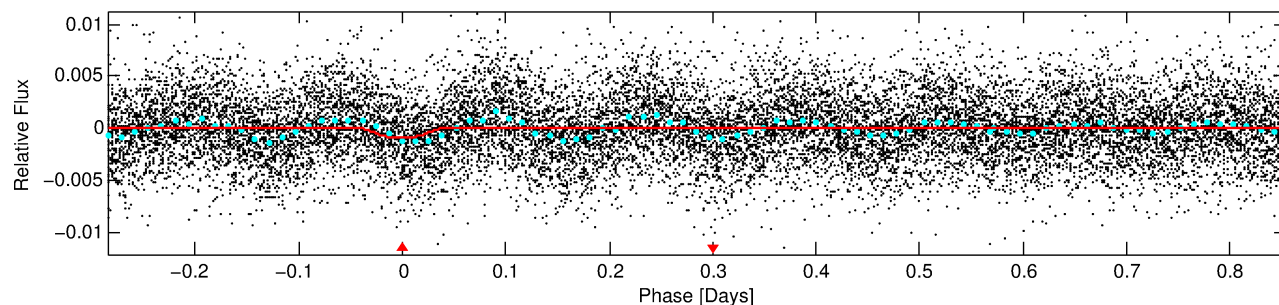
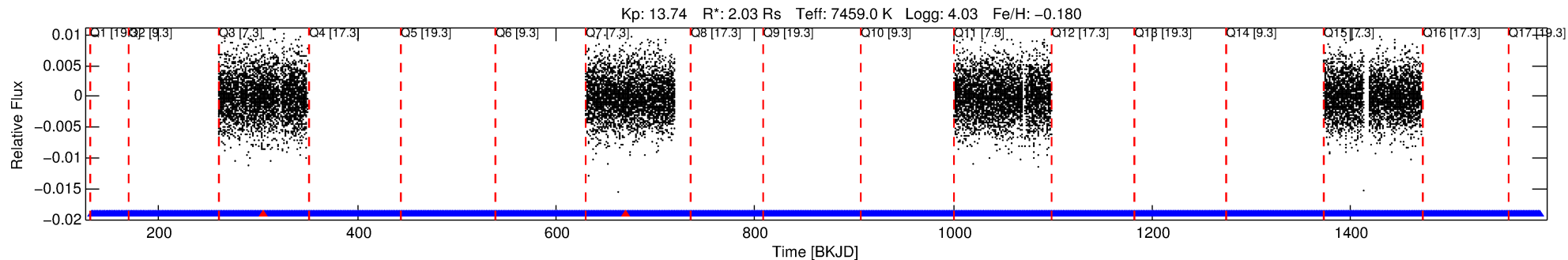
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 008244758-01

No Significant Match Found

DV One-Page Summary

KIC: 8244758 Candidate: 1 of 1 Period: 1.140 d



DV Fit Results:

Period = 1.14023 [0.00002] d
Epoch = 132.5866 [0.0032] BKJD
Rp/R* = 0.0308 [0.0121]
a/R* = 2.96 [5.25]
b = 0.90 [0.42]
Seff = 18369.59 [7325.09]
Teq = 2969 [296] K
Rp = 6.82 [3.25] Re
a = 0.0250 [0.0060] AU
Ag = 6.20 [5.42] [0.96σ]
Teffp = 7243 [1472] K [2.85σ]

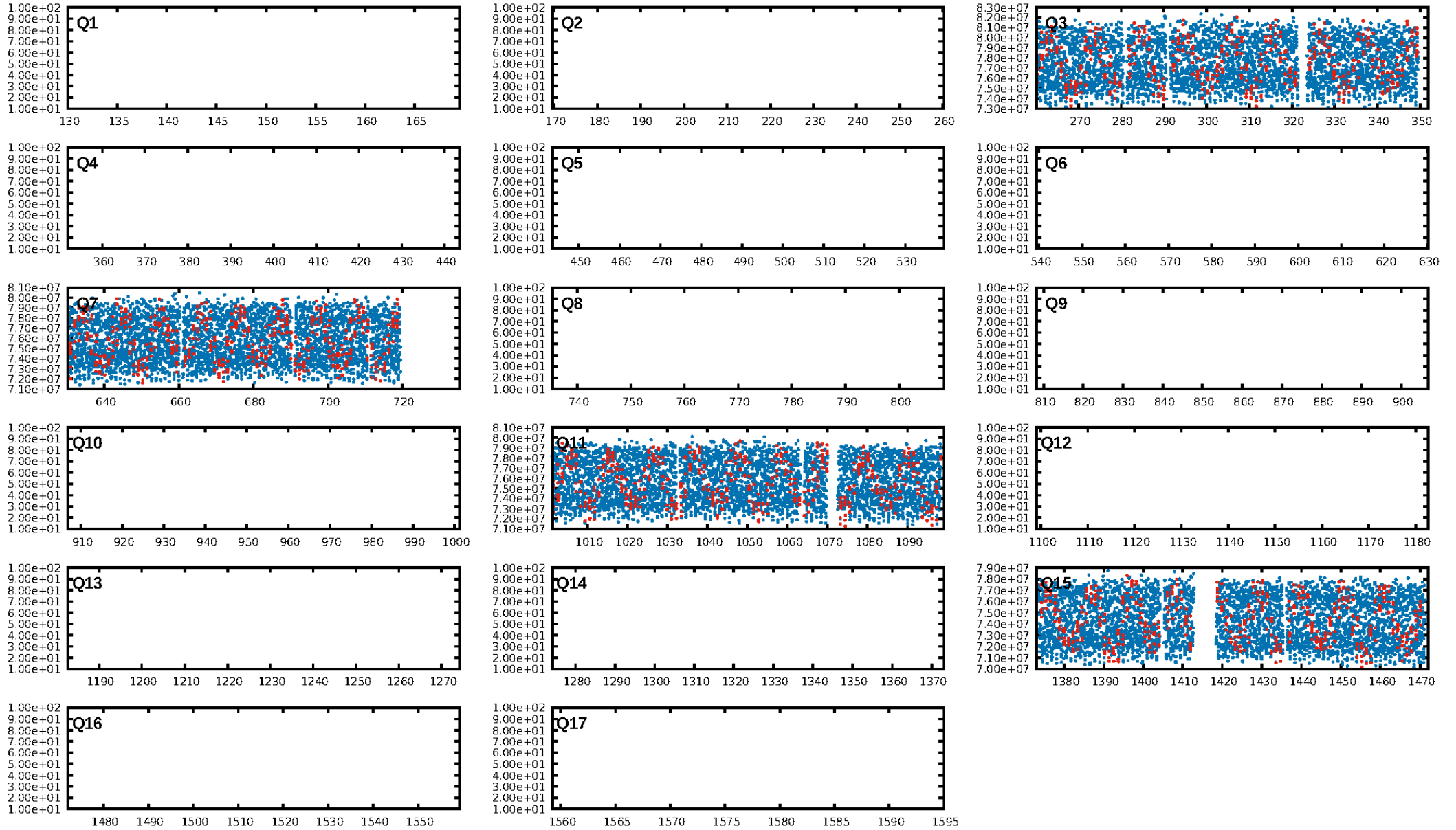
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: 7.10e-18
RollingBand-fgt: 0.99 [312/314]
GhostDiagnostic-chr: 0.4541
Centroid-sig: 2.3%
Centroid-so: 1.090 arcsec [4.74σ]
OotOffset-rm: 0.396 arcsec [3.13σ]
KicOffset-rm: 0.245 arcsec [2.09σ]
OotOffset-st: 0/4/0/0 [4]
KicOffset-st: 0/4/0/0 [4]
DiffImageQuality-fgm: 0.00 [0/4]
DiffImageOverlap-fno: 1.00 [4/4]

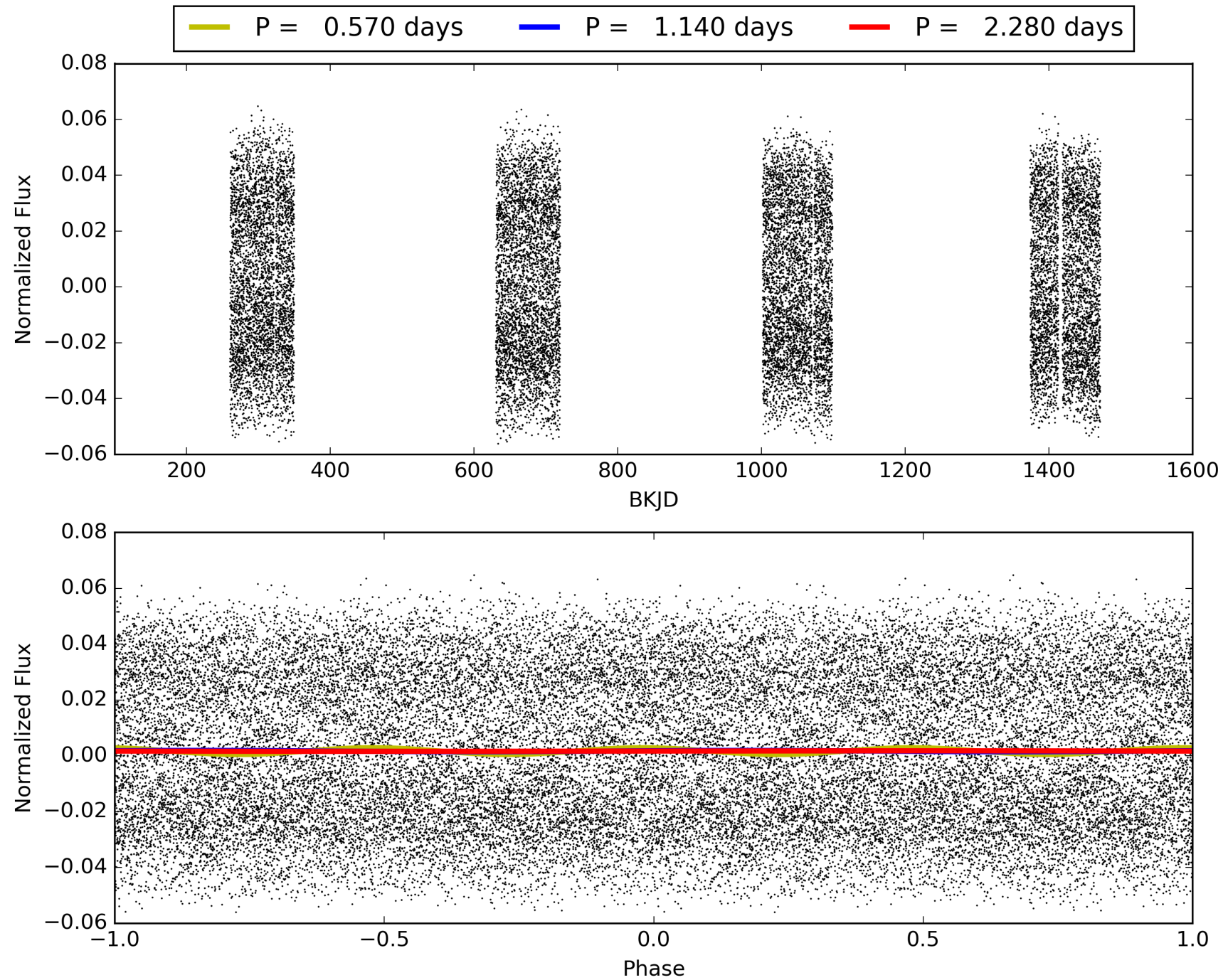
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 30-Jan-2016 20:20:34 Z

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

TCE 008244758-01, PDC Light Curves

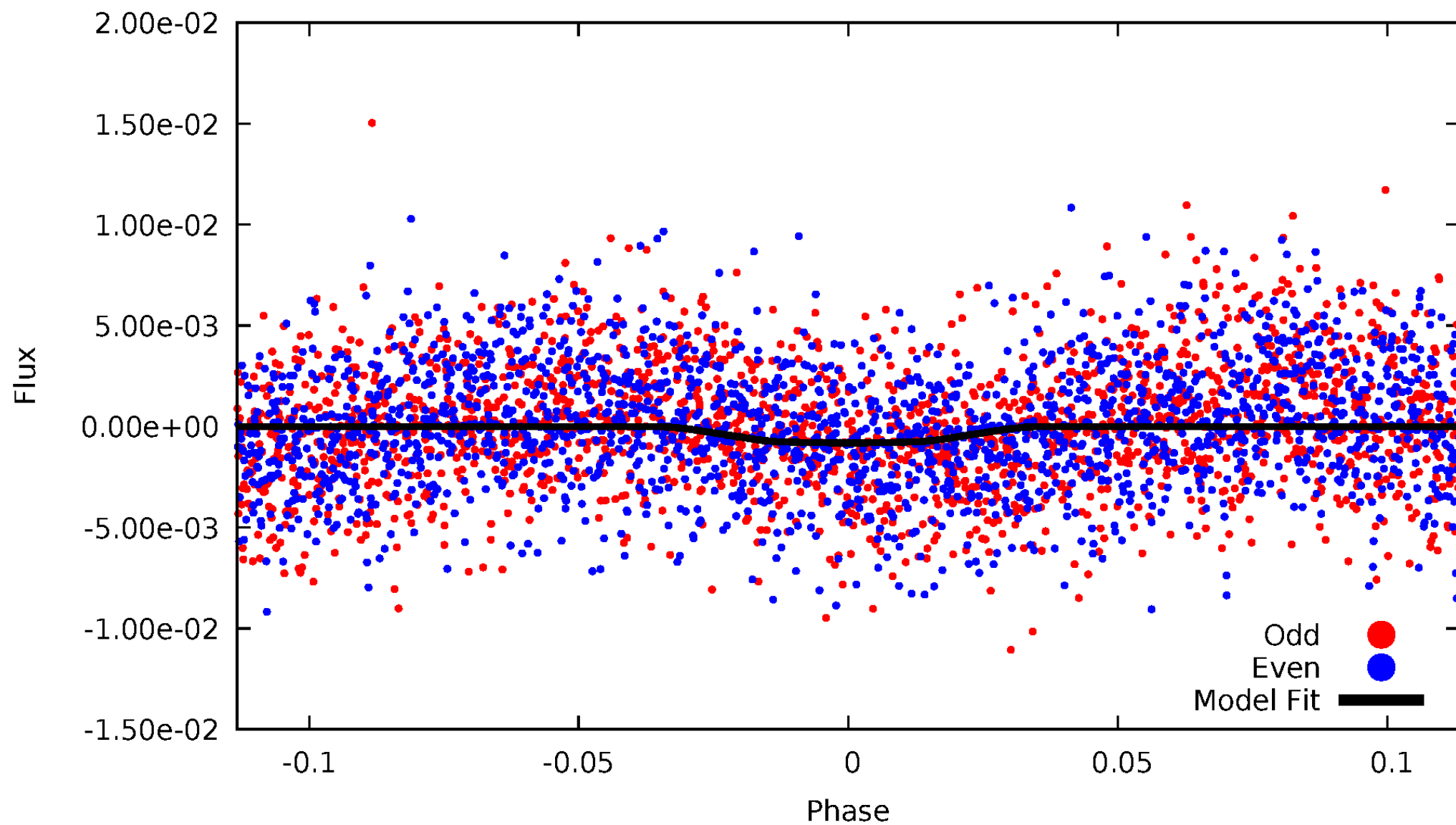


TCE 008244758-01



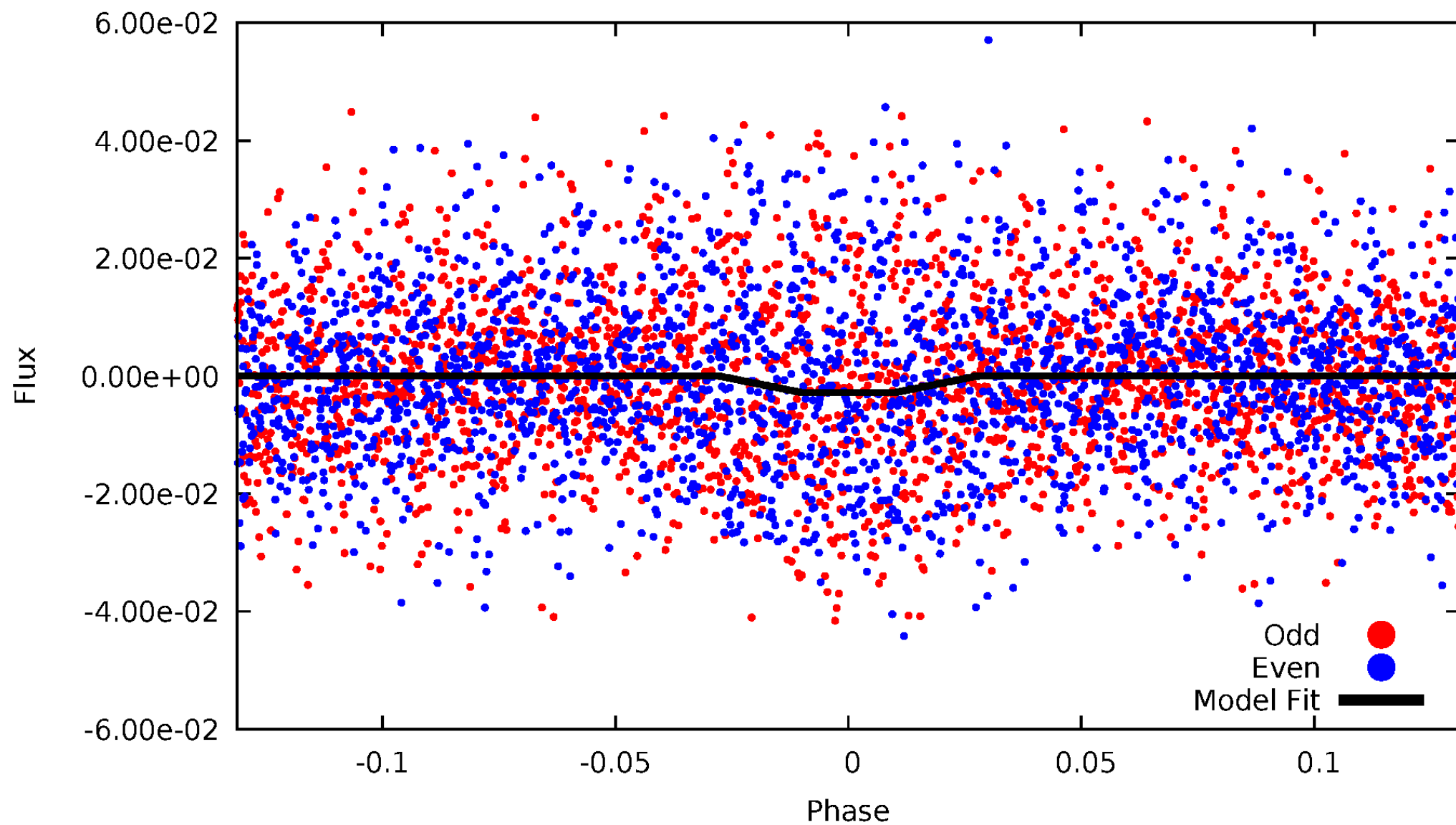
DV Odd/Even

TCE 008244758-01



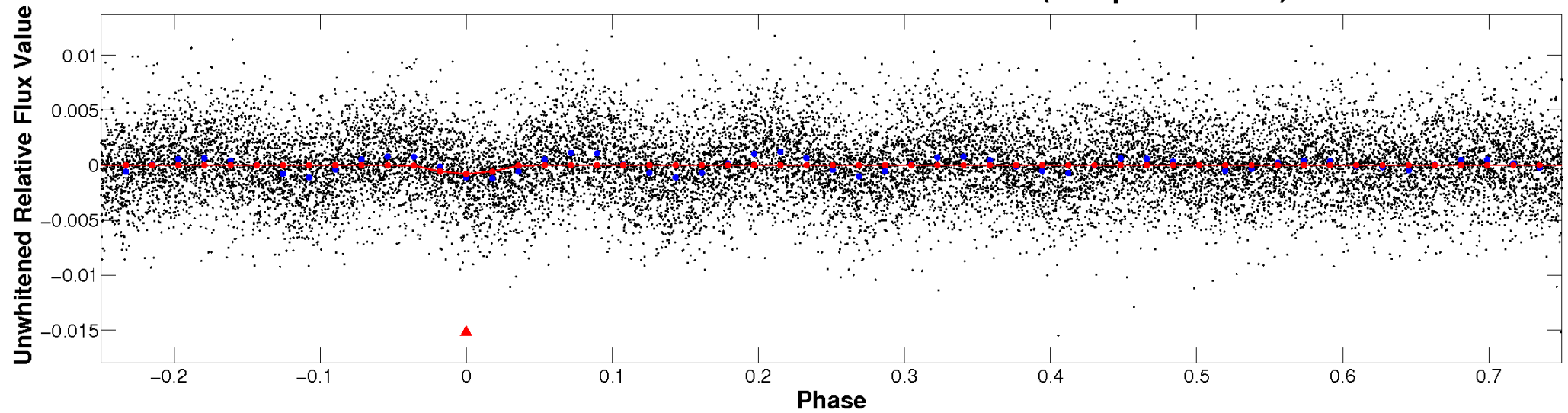
ALT Odd/Even

TCE 008244758-01

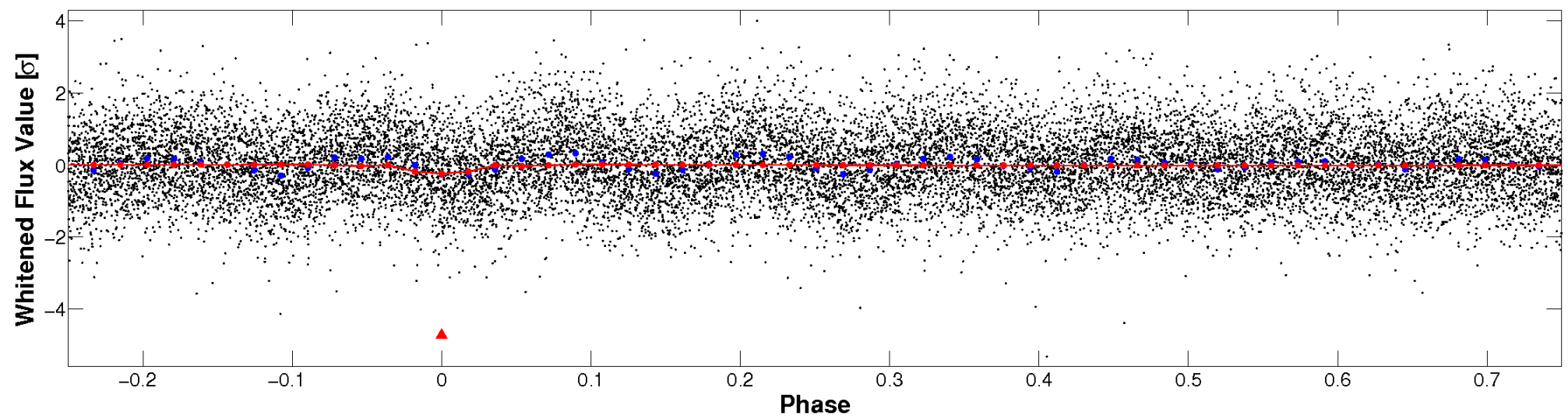


Non-Whitened Vs. Whitened Light Curve

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

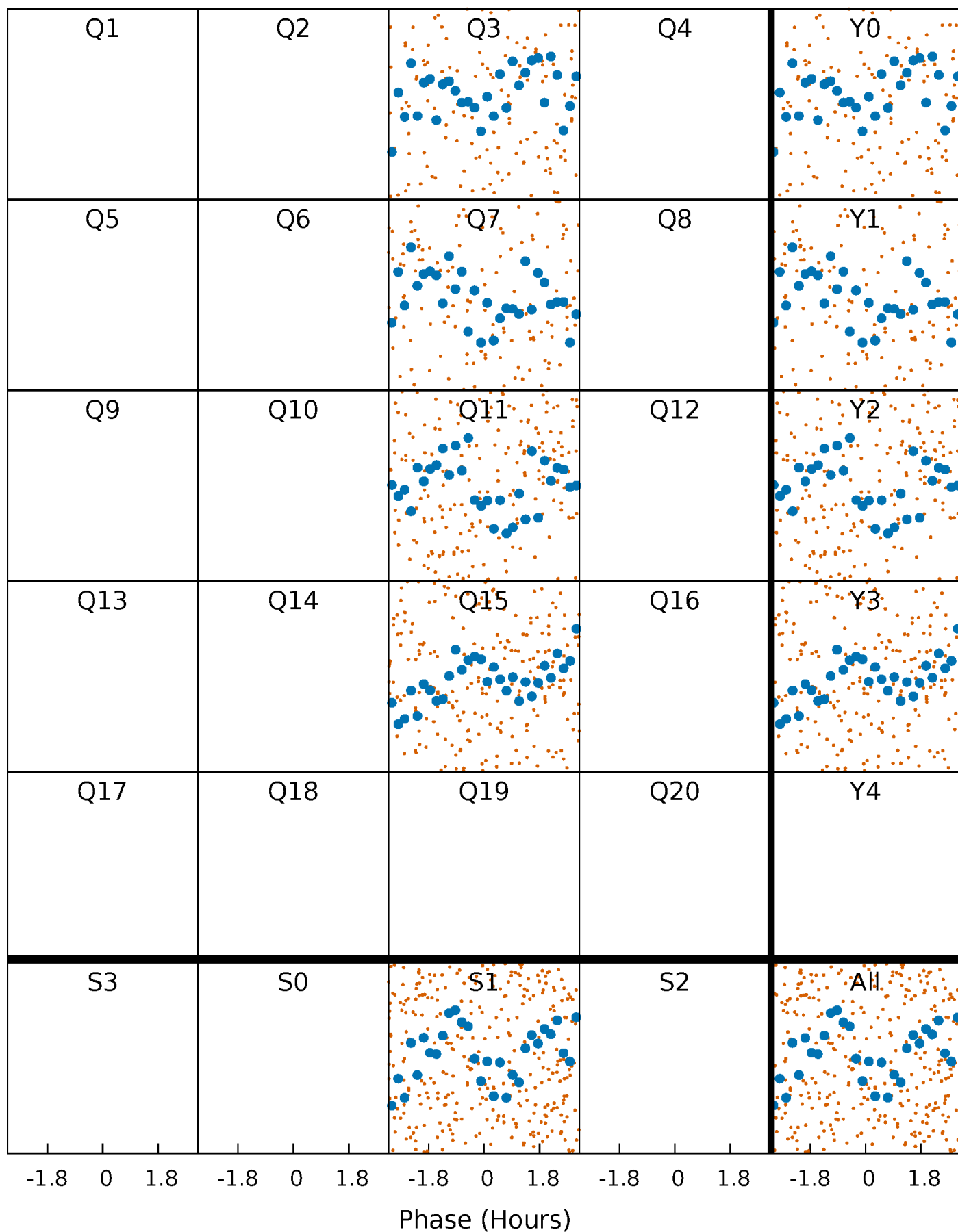


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



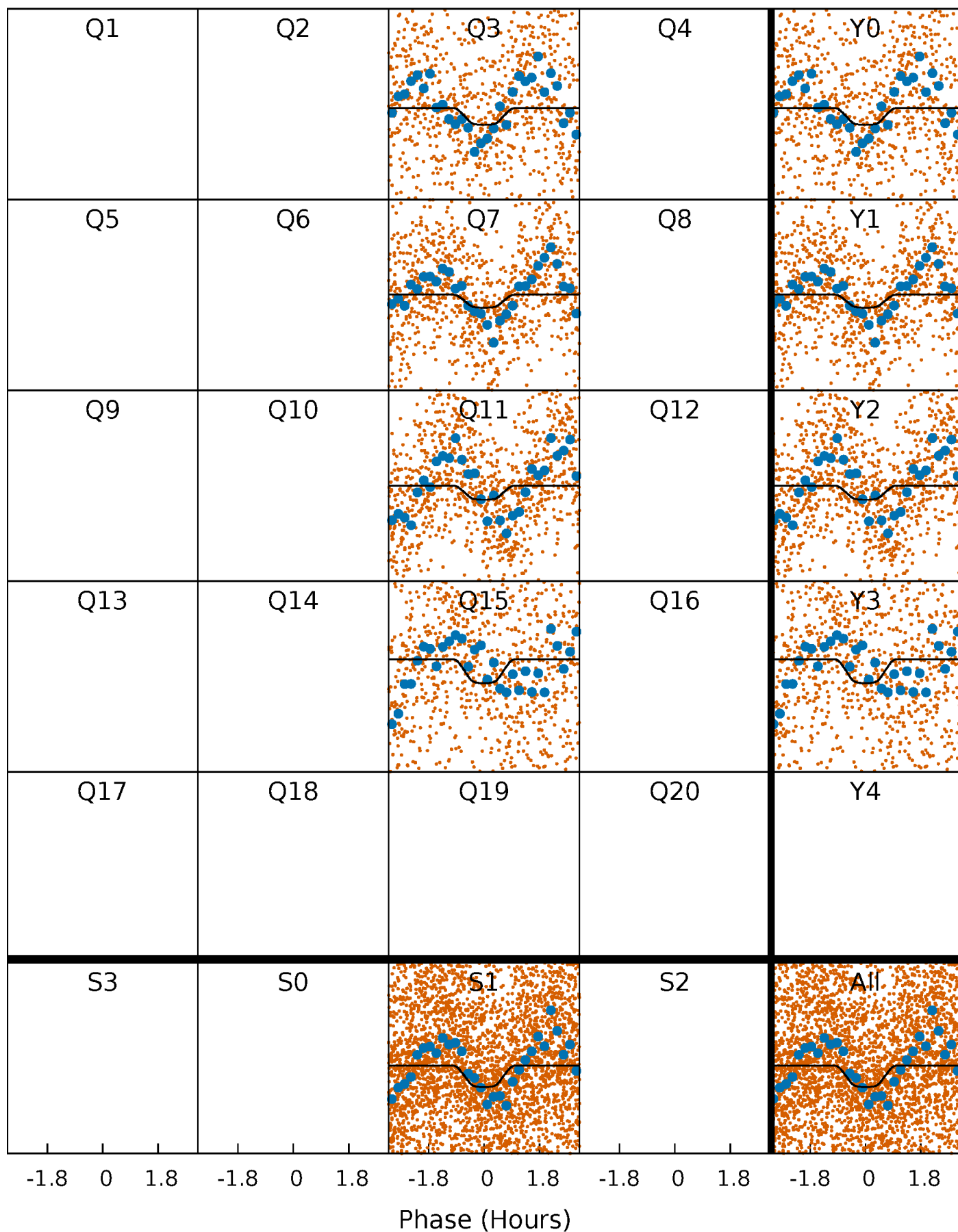
PDC Quarter-Phased Transit Curves

TCE 008244758-01 P= 1.140231 Days $T_0=132.586552$ (BKJD)



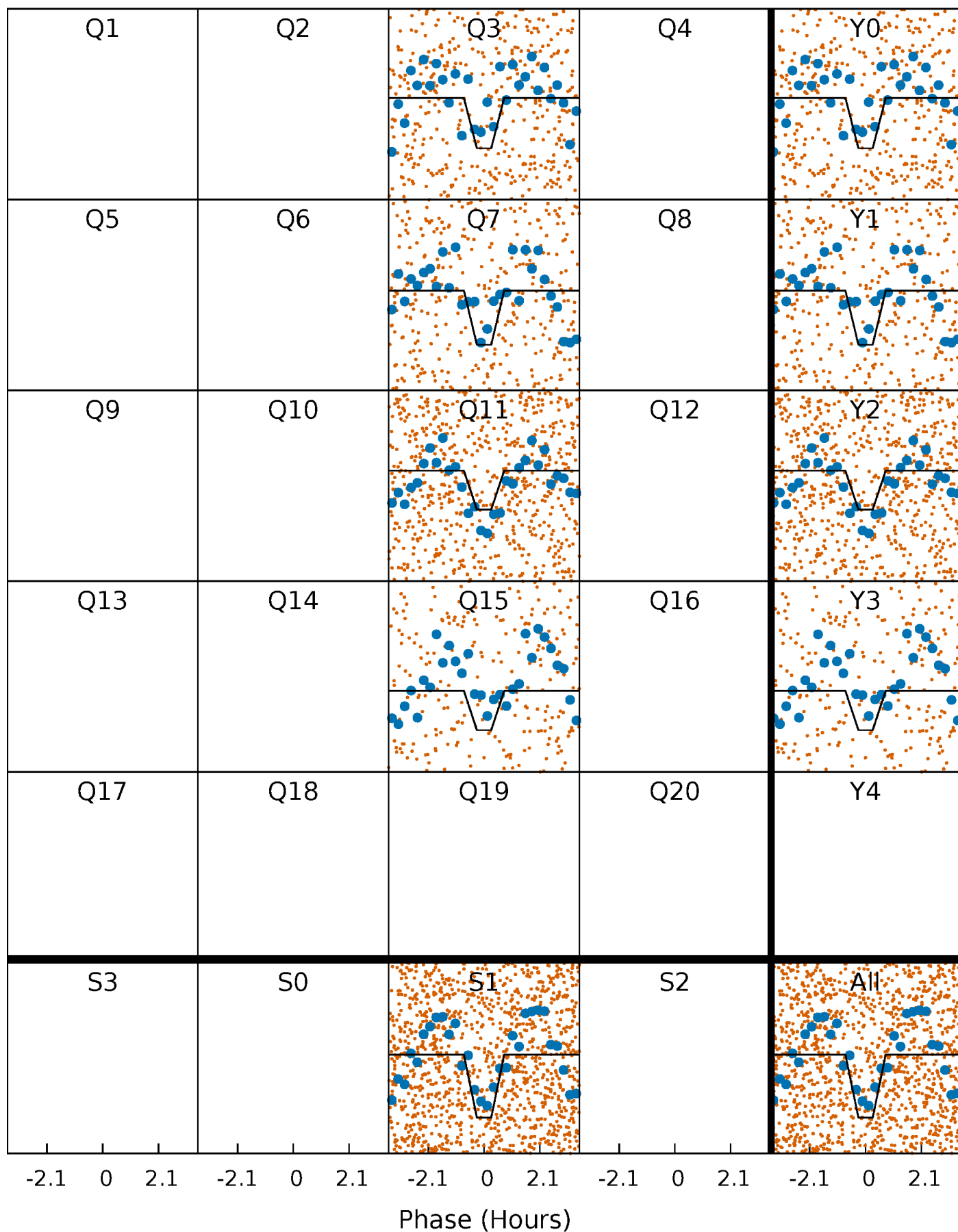
DV Quarter-Phased Transit Curves

TCE 008244758-01 P= 1.140231 Days $T_0=132.586552$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

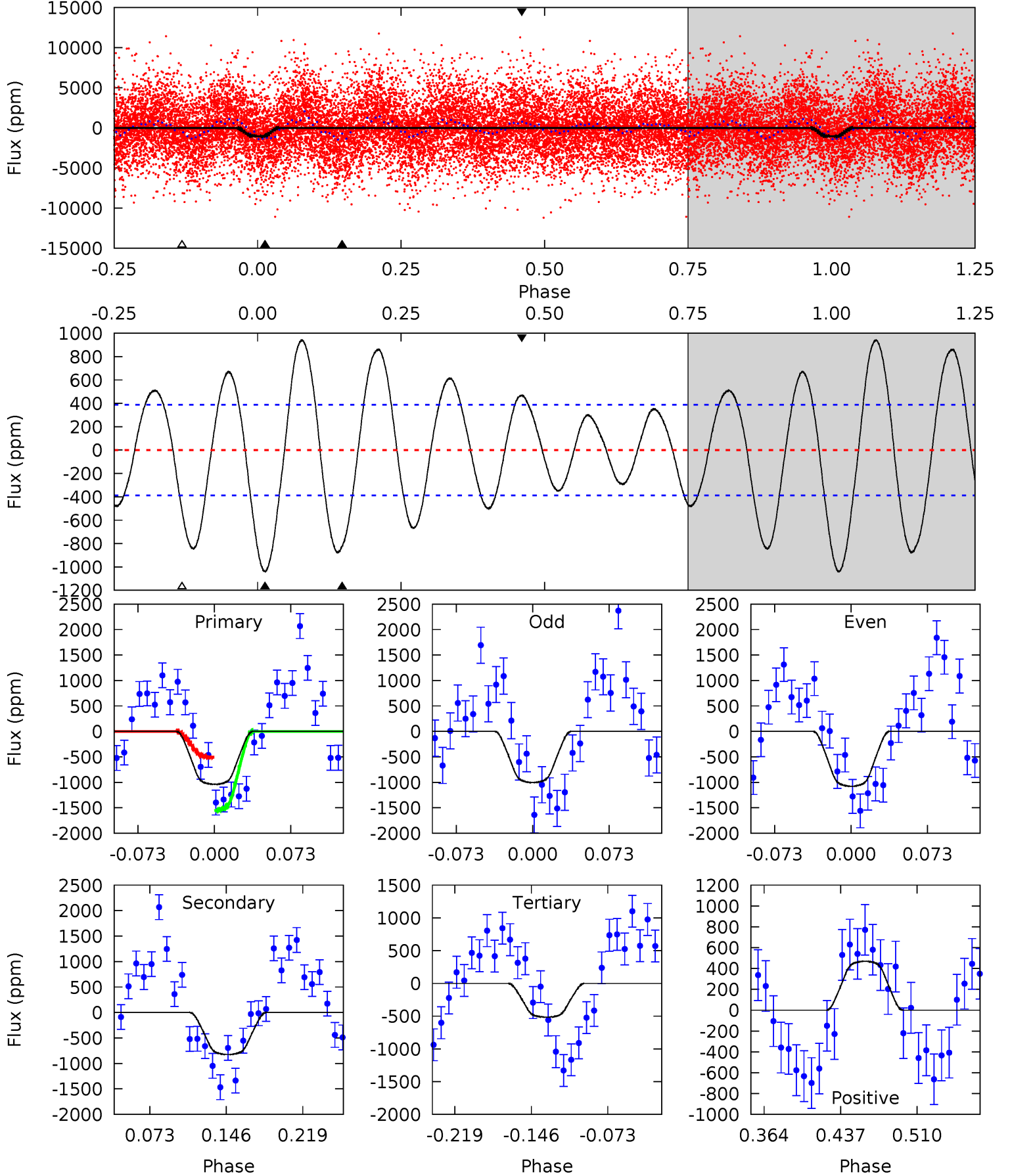
TCE 008244758-01 P= 1.140271 Days $T_0=132.580249$ (BKJD)



DV Model-Shift Uniqueness Test

008244758-01, P = 1.140231 Days, E = 132.586552 Days

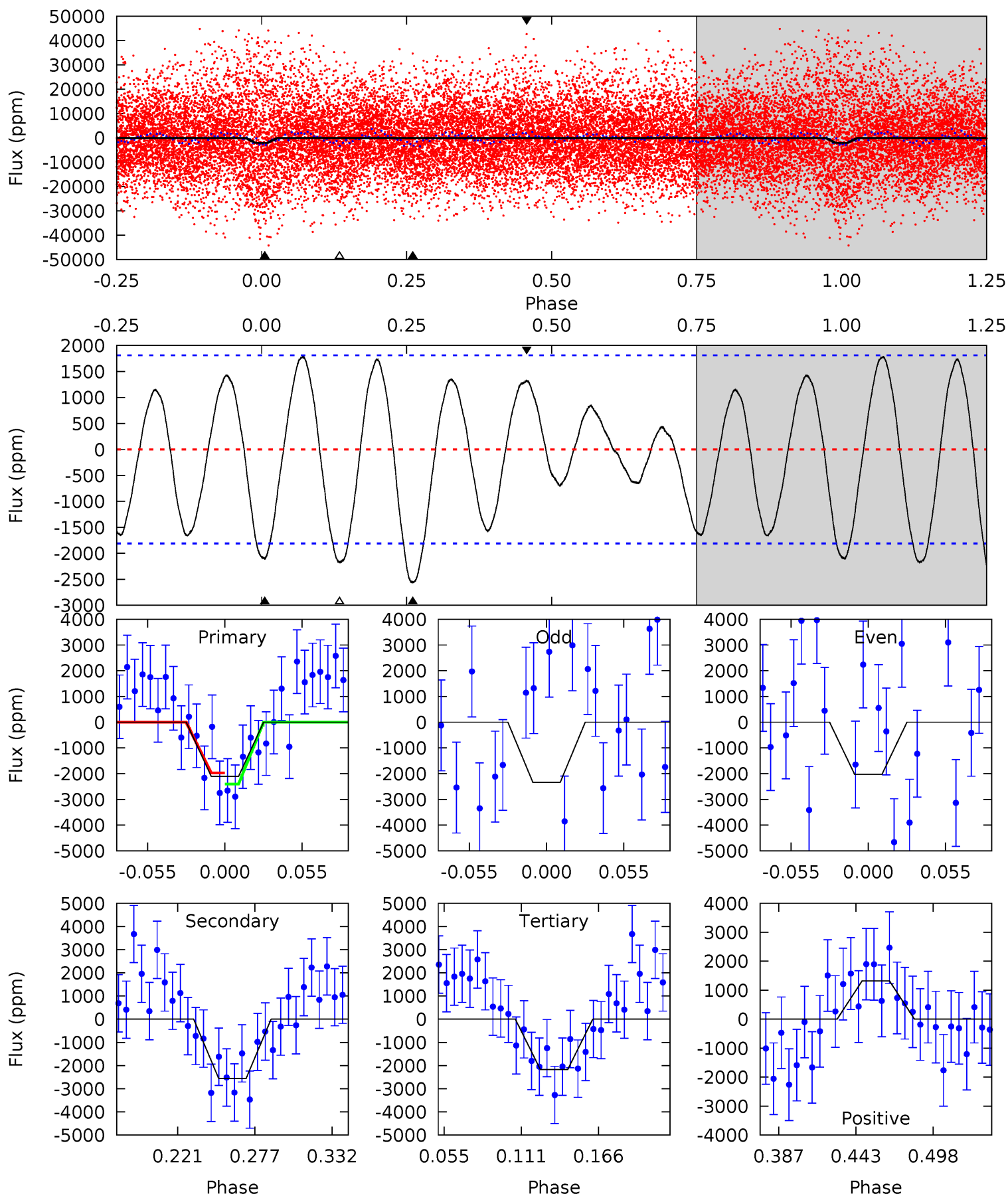
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
12.4	9.85	6.17	5.60	4.63	1.79	4.41	6.26	6.82	3.68	4.24	0.44	0.95	0.47	6.18



Alt Model-Shift Uniqueness Test

008244758-01, P = 1.140271 Days, E = 132.580249 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
5.45	6.63	5.63	3.42	4.69	1.92	2.61	-0.18	2.03	1.00	3.21	0.40	0.47	0.41	0.55



Stellar Parameters For KIC 008244758

	$T_{\text{eff}} (K)$	$\log(g)$	$[\text{Fe}/\text{H}]$	$R (R_{\odot})$	$M (M_{\odot})$	$\rho_{\star} (\text{g}\cdot\text{cm}^{-3})$
	7459^{+209}_{-314}	$4.025^{+0.204}_{-0.167}$	$-0.180^{+0.250}_{-0.350}$	$2.031^{+0.550}_{-0.550}$	$1.591^{+0.200}_{-0.275}$	$0.268^{+0.337}_{-0.121}$
	+3%/-4%	+5%/-4%	+139%/-194%	+27%/-27%	+13%/-17%	+126%/-45%
Source	KIC0	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 008244758-01 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	A_{obs}
DV	-824 ± 84	$6.75^{+2.85}_{-2.71}$	4116^{+306}_{-335}	6976^{+2553}_{-1206}	$6.182^{+10.857}_{-3.127}$
Alt.	-2560 ± 386	$11.75^{+3.48}_{-3.02}$	4109^{+319}_{-311}	7063^{+1288}_{-858}	$6.366^{+5.576}_{-2.676}$

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

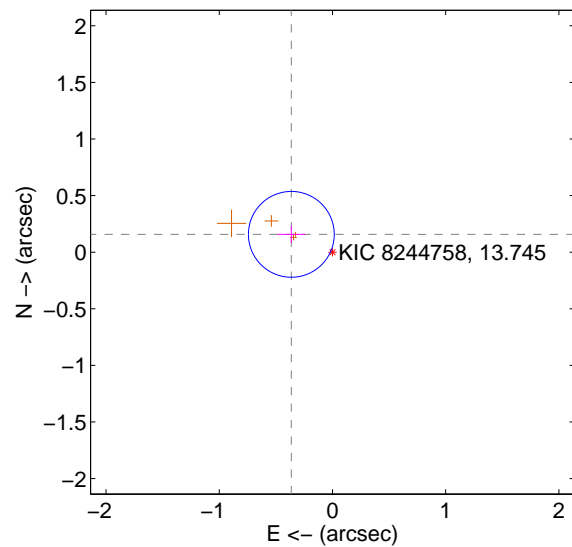
Supplemental centroid analysis for 008244758-01. Kepler magnitude: 13.74. Transit SNR 6.22

There are 0 quarters with good PRF difference image offsets

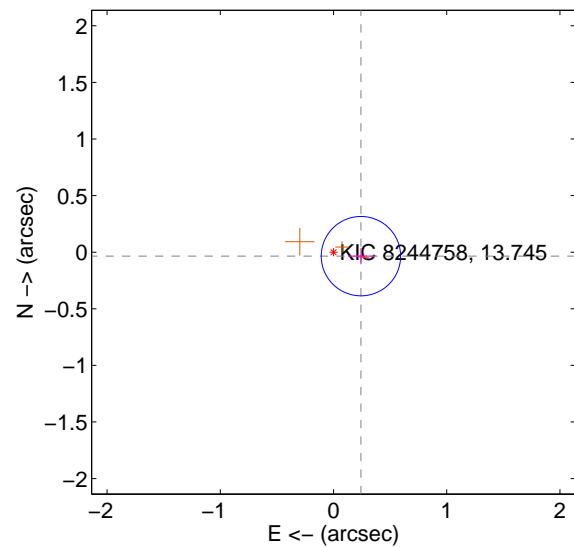
The direct PRF centroid is offset from the target star catalog position by about 0.66 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.396 ± 0.126	3.13	0.363 ± 0.123	0.158 ± 0.076
PRF-fit source offset from KIC position	0.245 ± 0.117	2.09	-0.242 ± 0.115	-0.035 ± 0.072
photometric centroid source offset	1.09 ± 0.23	4.74	-1.09 ± 0.23	-0.02 ± 0.13

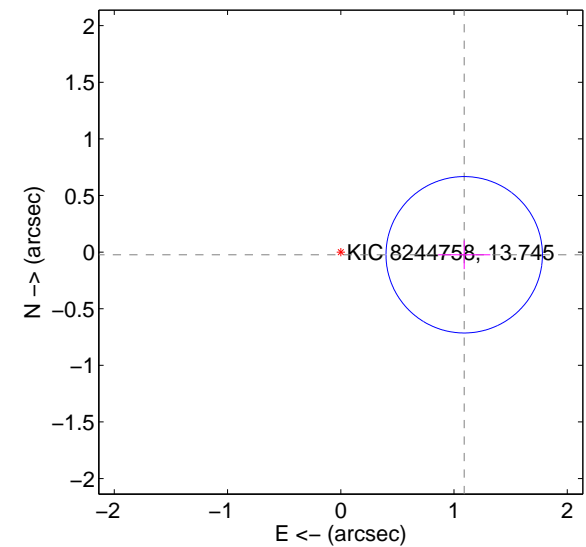
offset from difference PRF-fit to OOT PRF-fit



offset from difference PRF-fit to KIC position

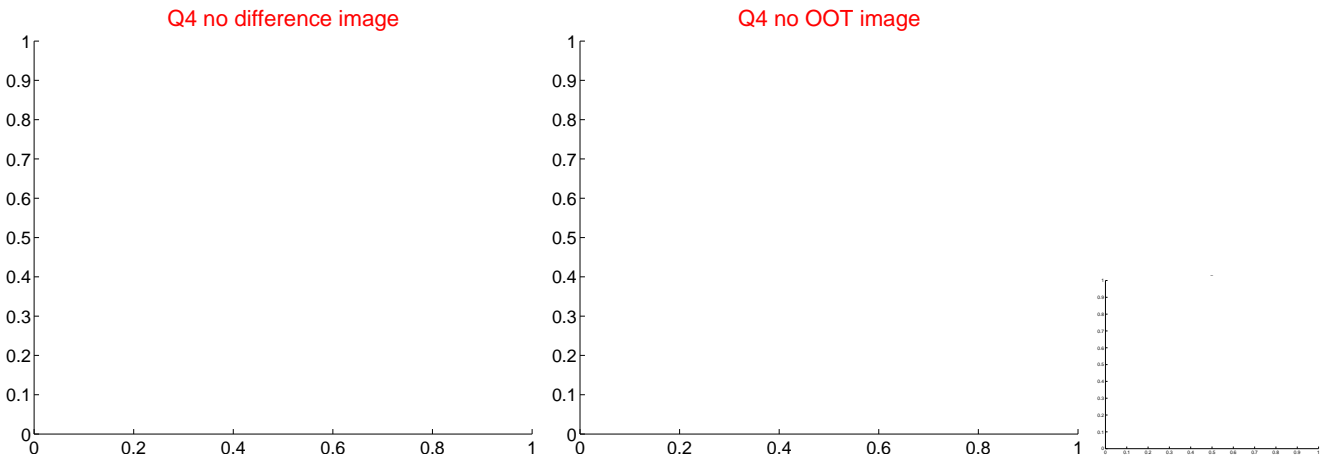
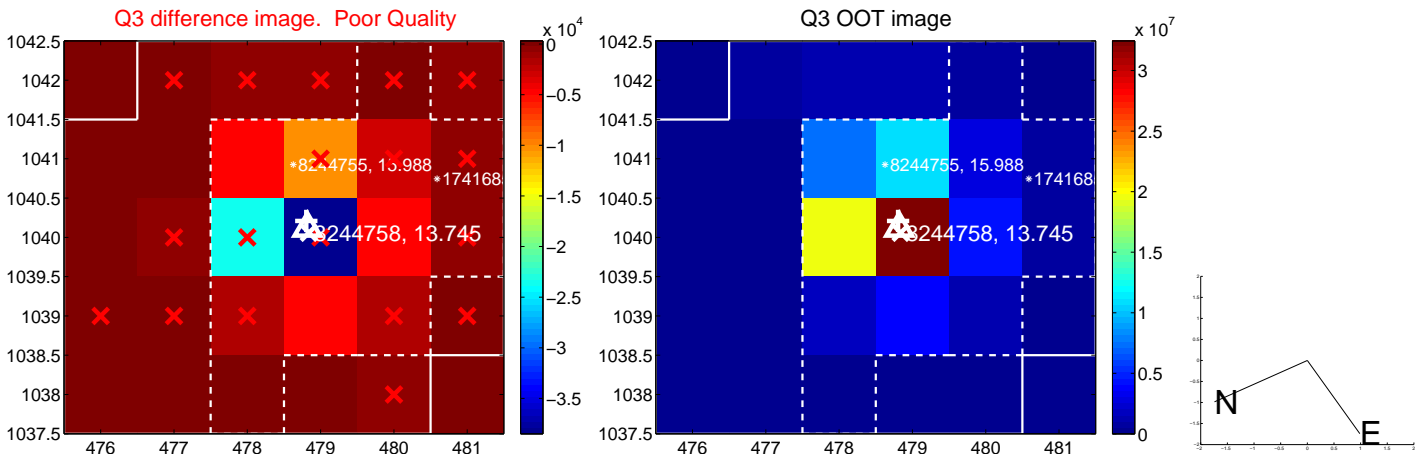
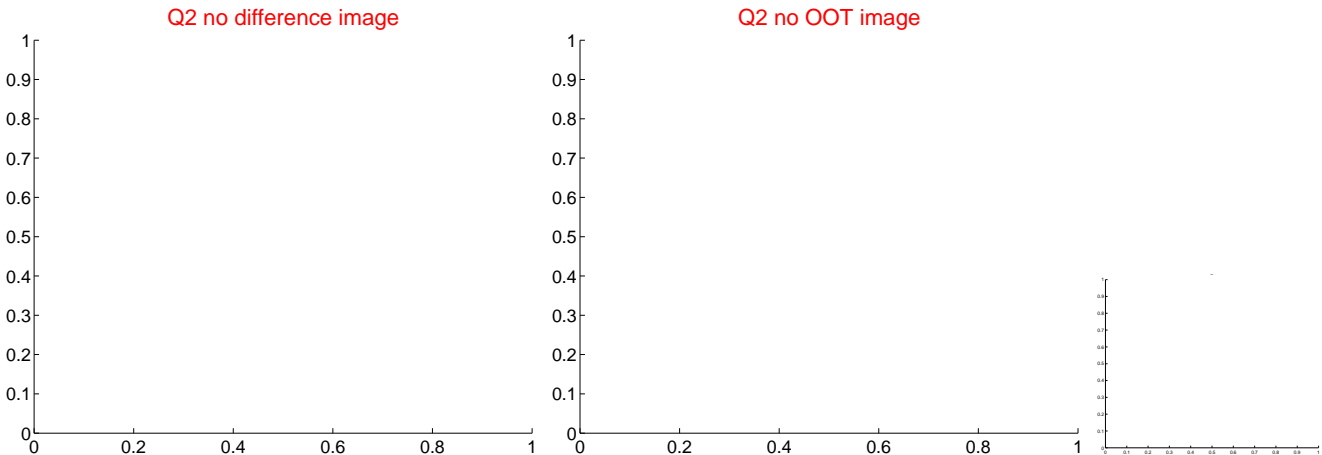
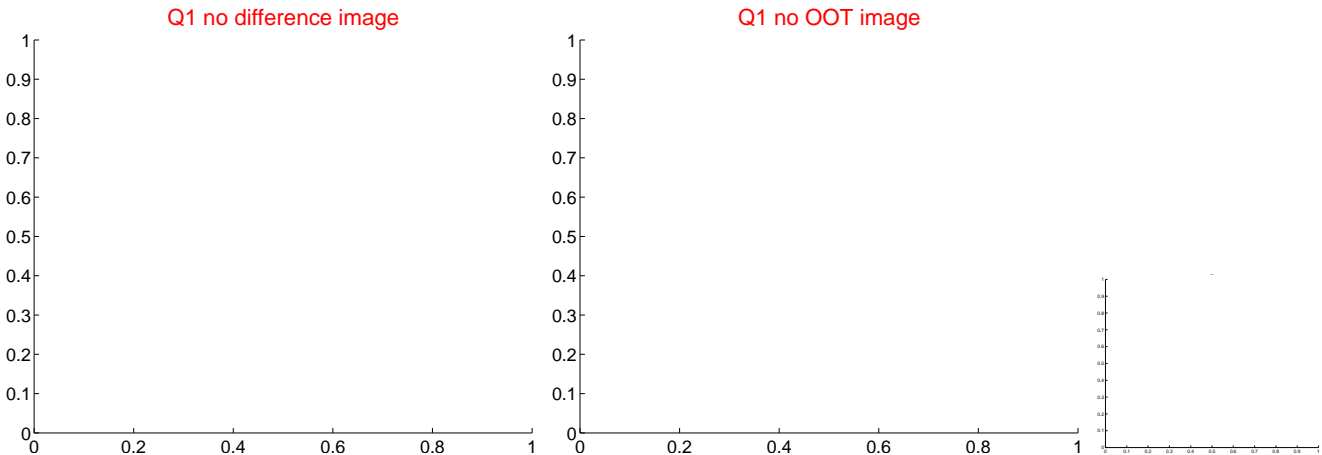


offset from photometric centroids

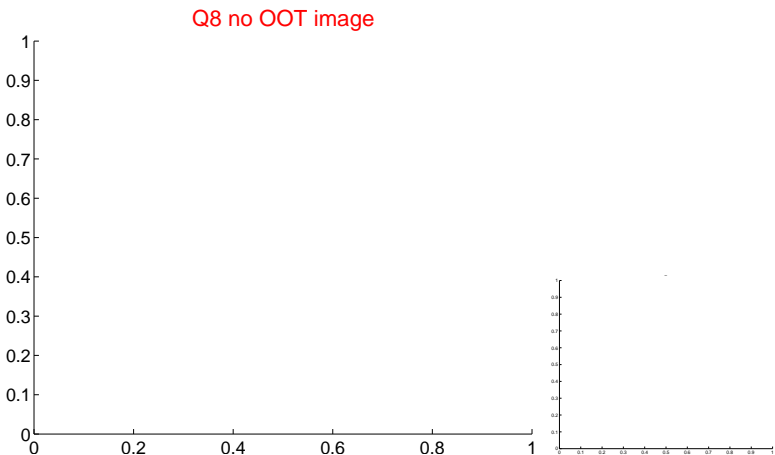
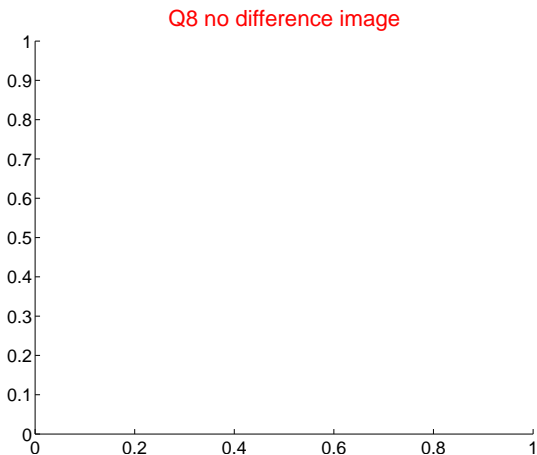
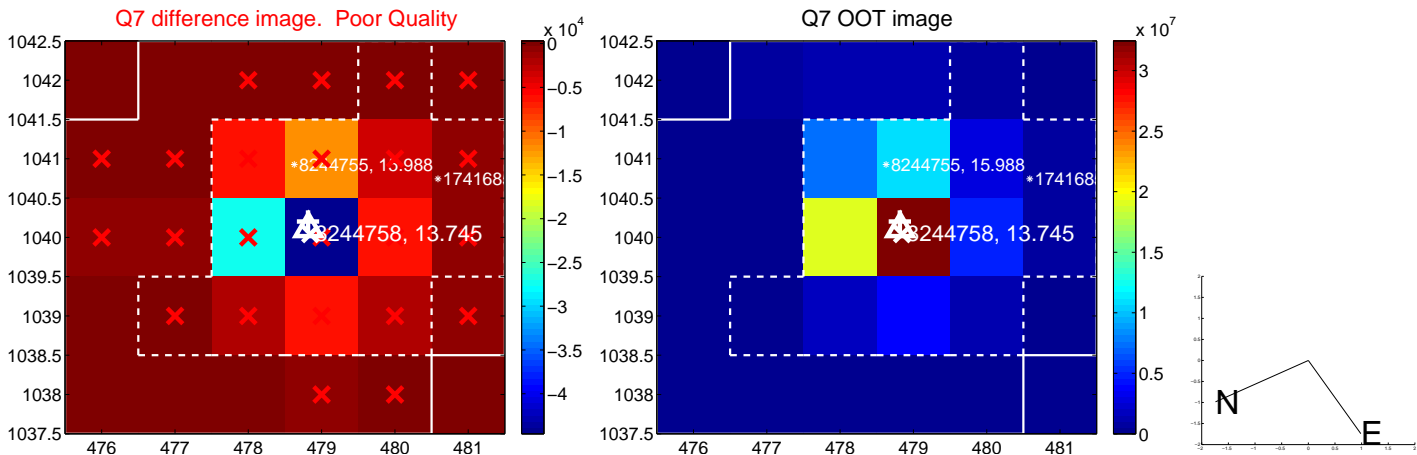
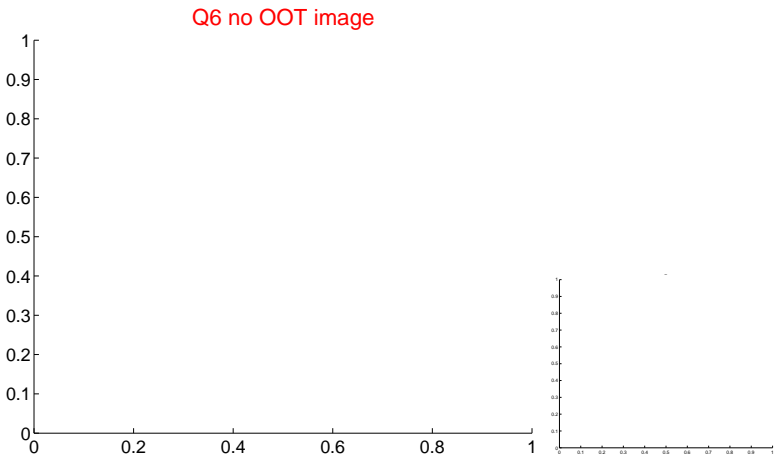
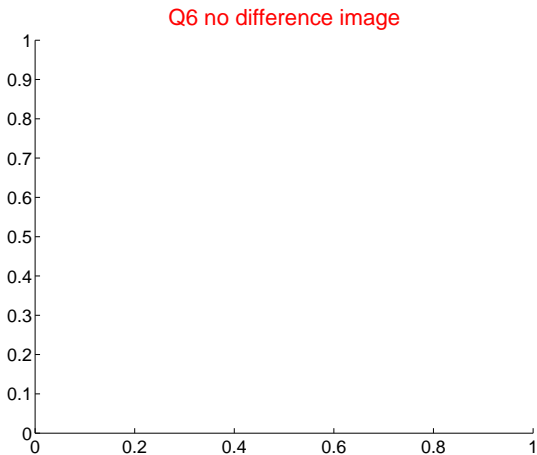
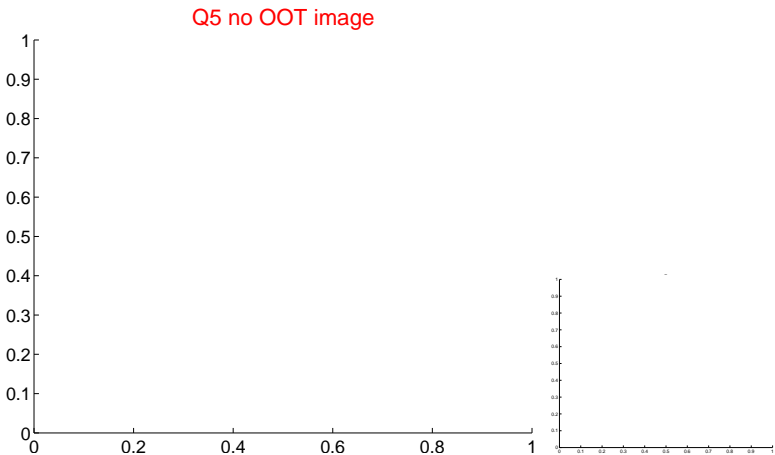
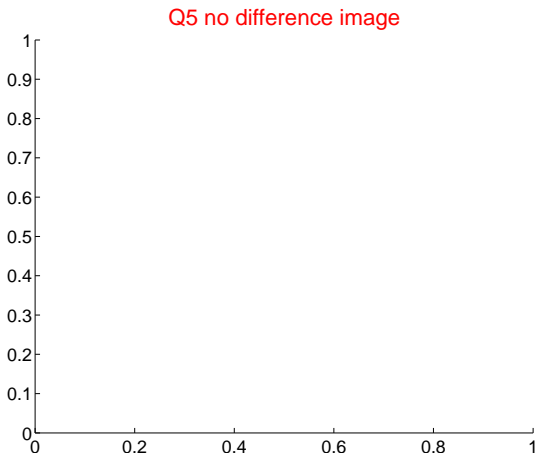


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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

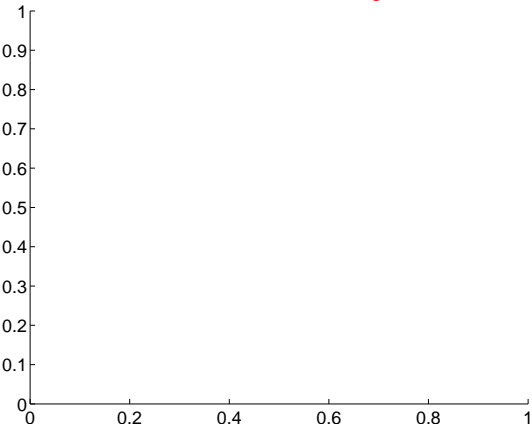


white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value

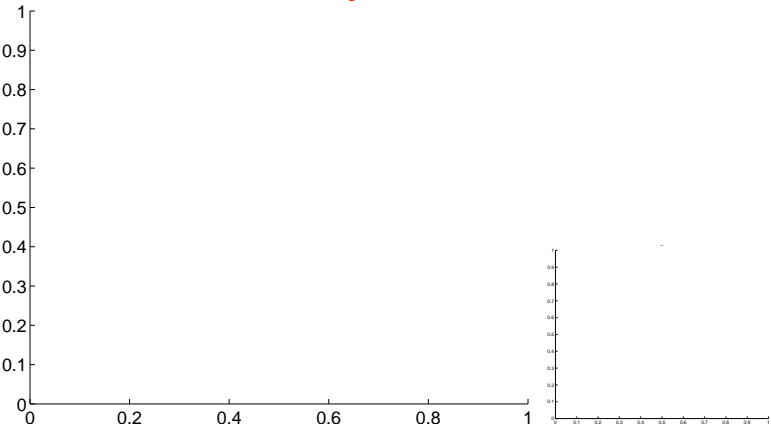


white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.

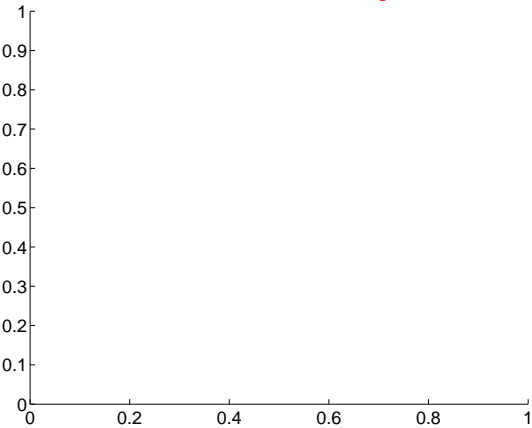
Q9 no difference image



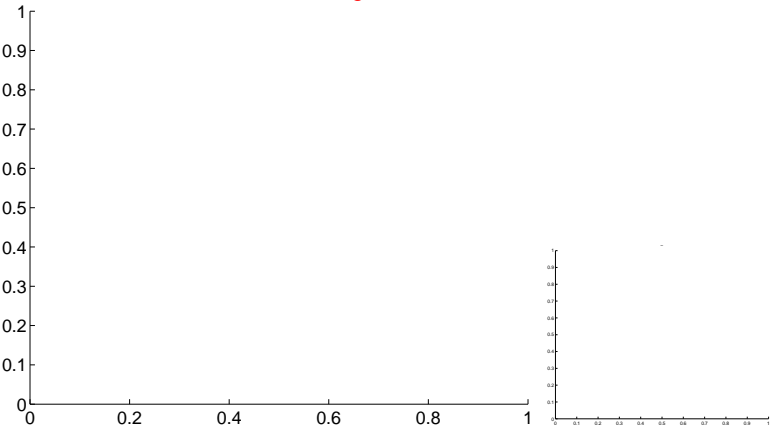
Q9 no OOT image



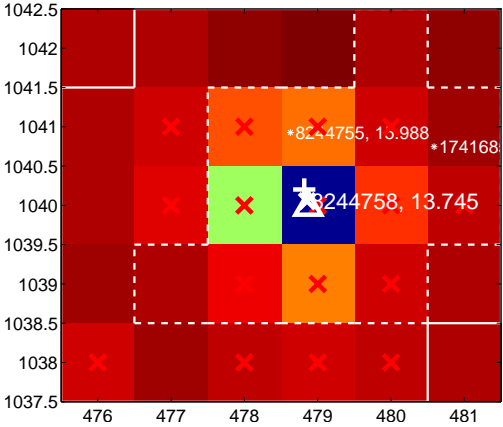
Q10 no difference image



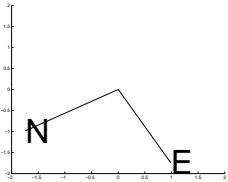
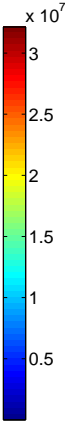
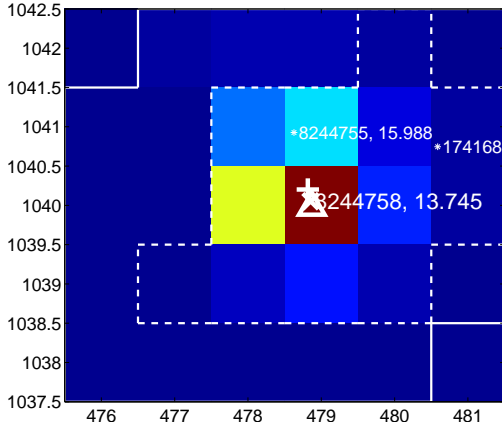
Q10 no OOT image



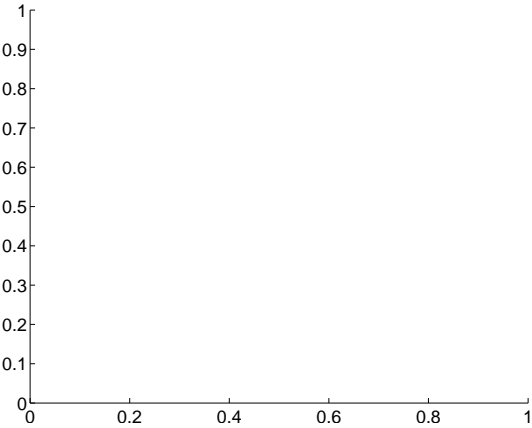
Q11 difference image. Poor Quality



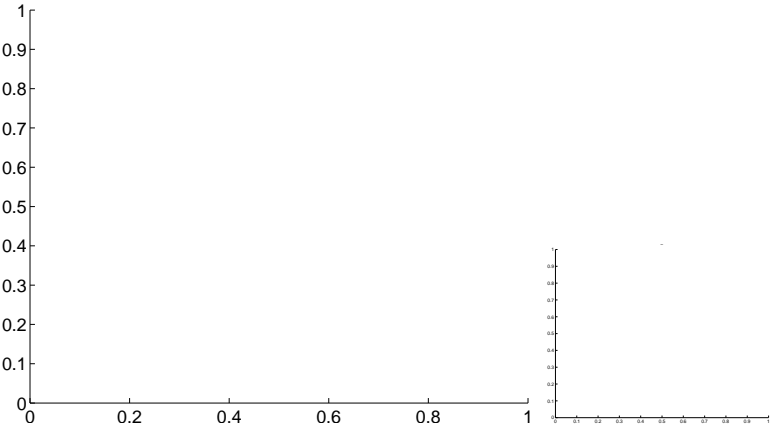
Q11 OOT image



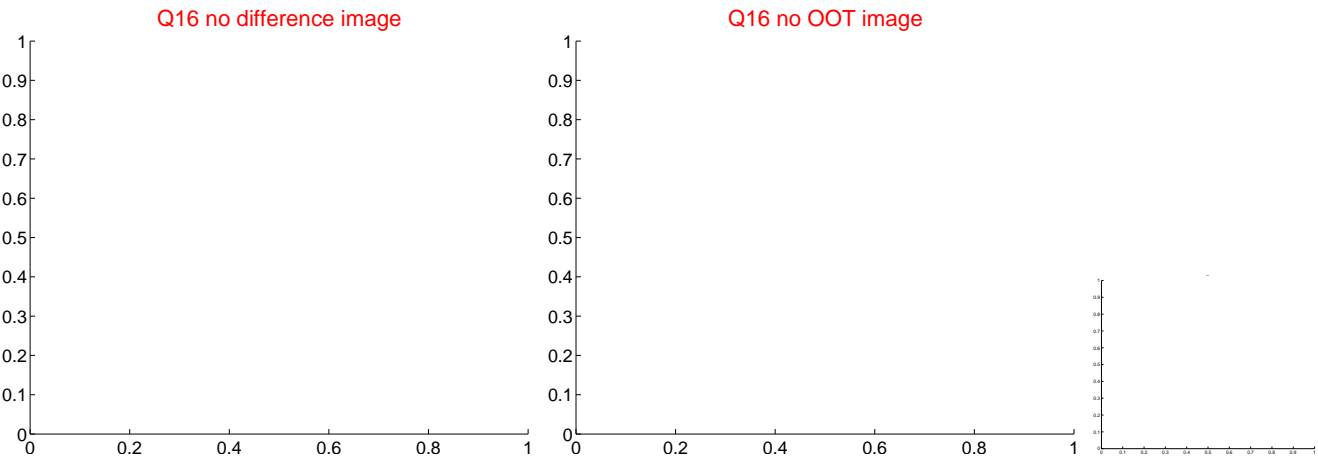
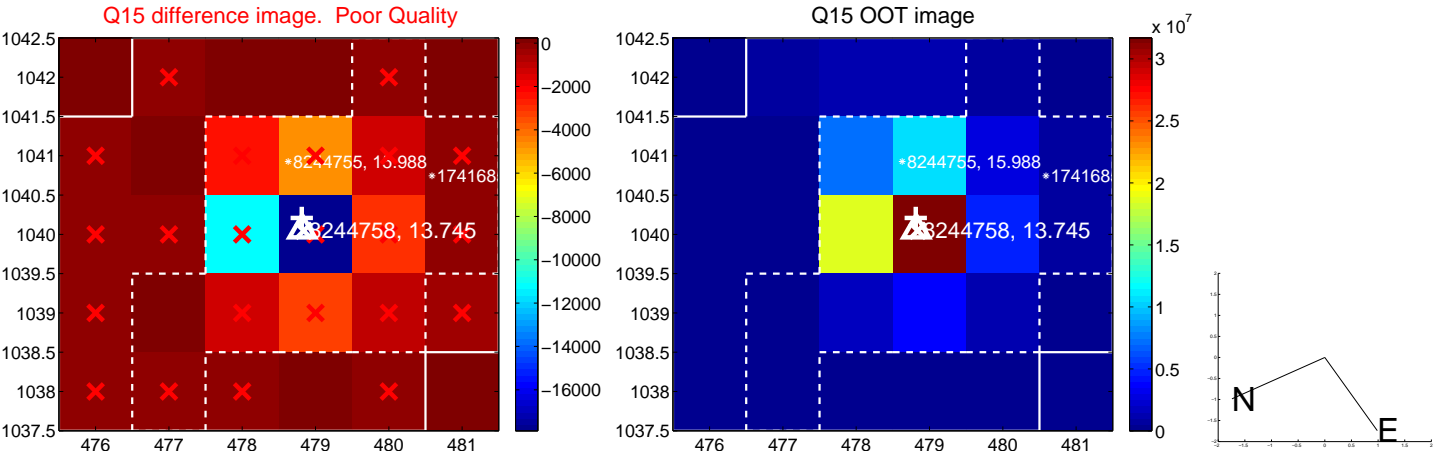
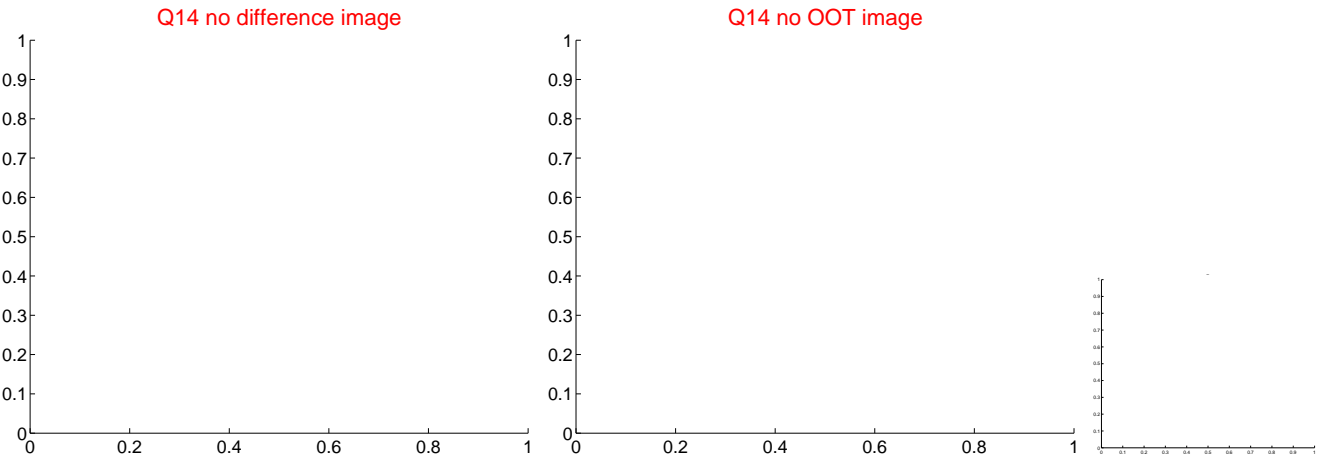
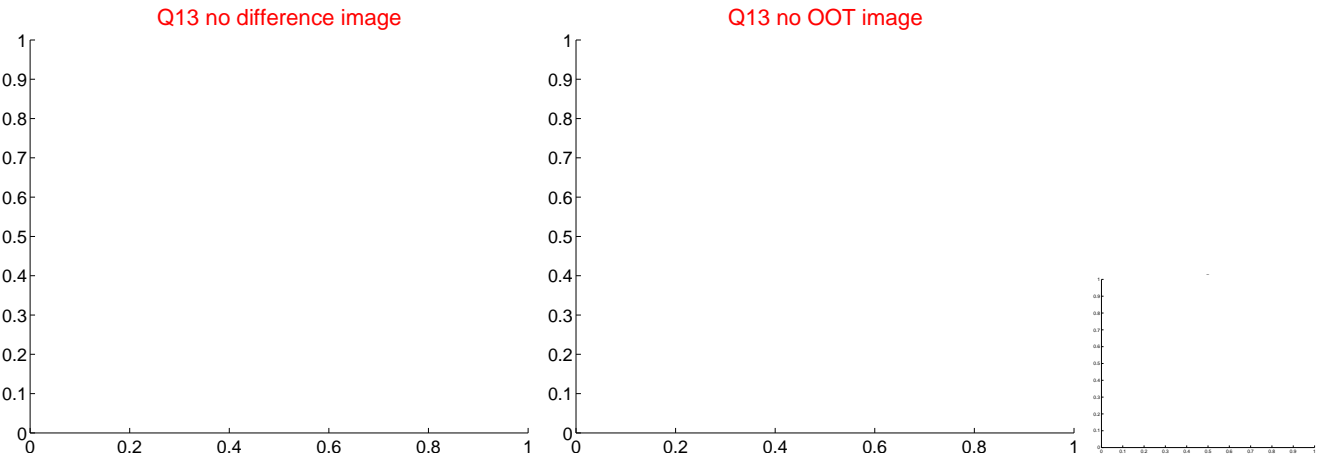
Q12 no difference image



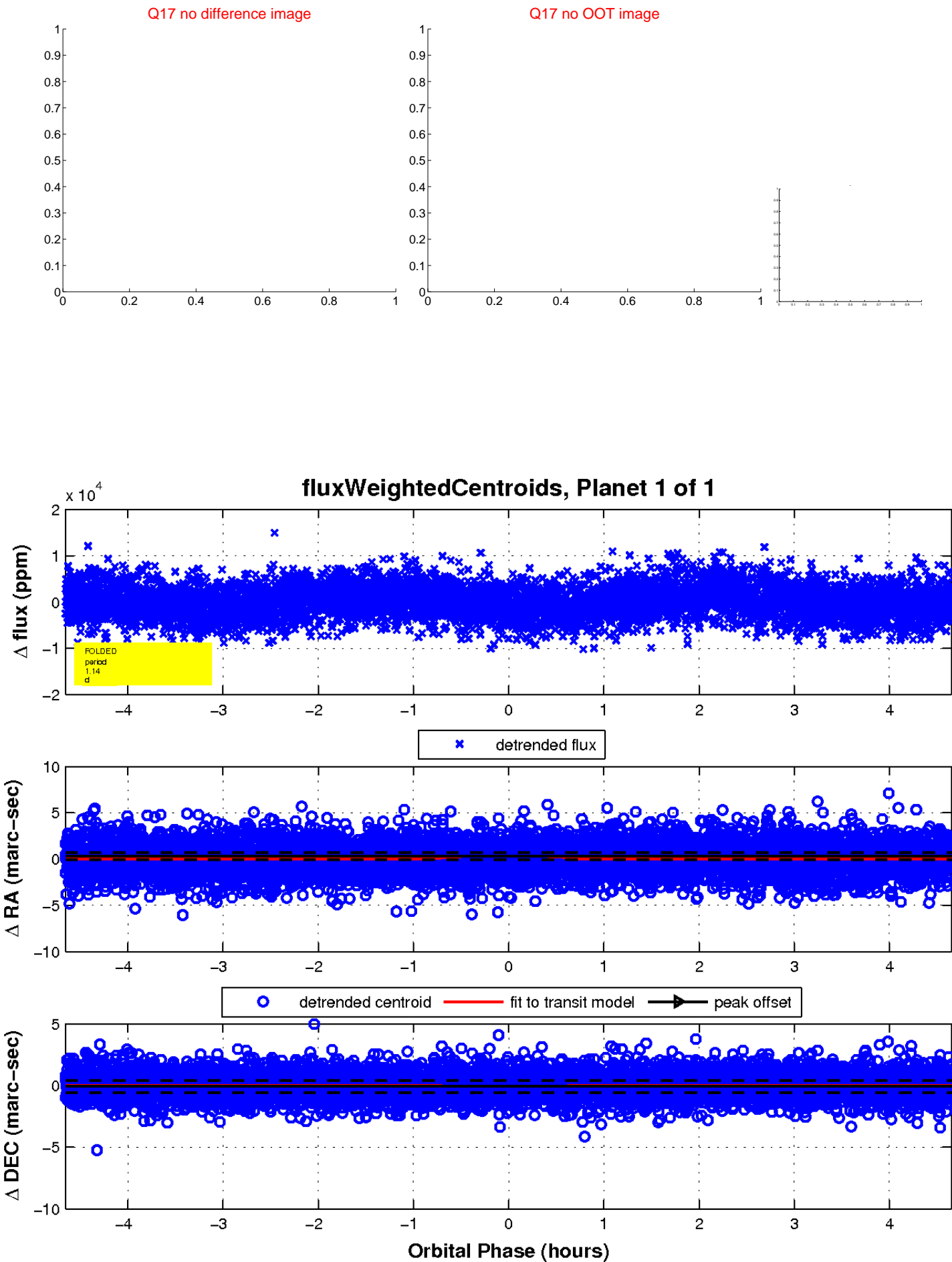
Q12 no OOT image



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.



UKIRT Image

