

KIC 008260515

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})
008260515-01	OBS	No	298.732401	389.690735	259.4	4.873	7.1	7.5	1.59	6329	2.86	4.29

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
008260515-01	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_MARSHALL_SKYE

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

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

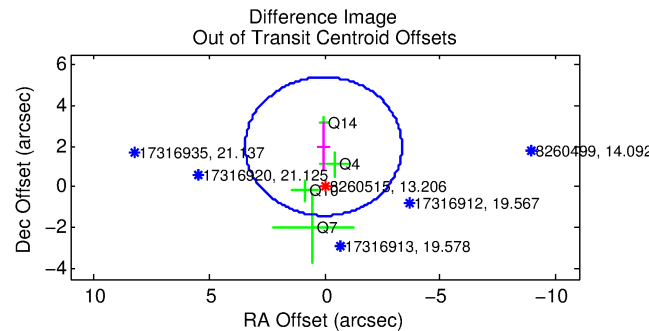
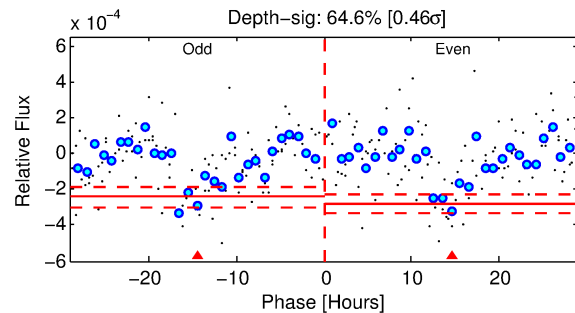
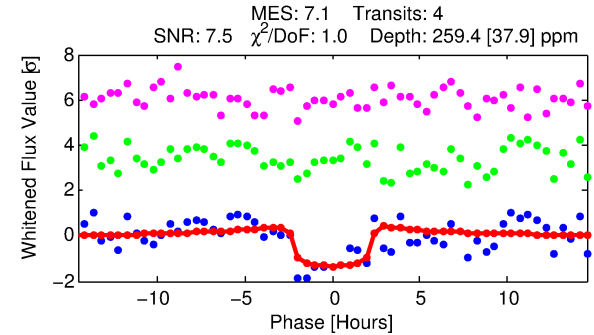
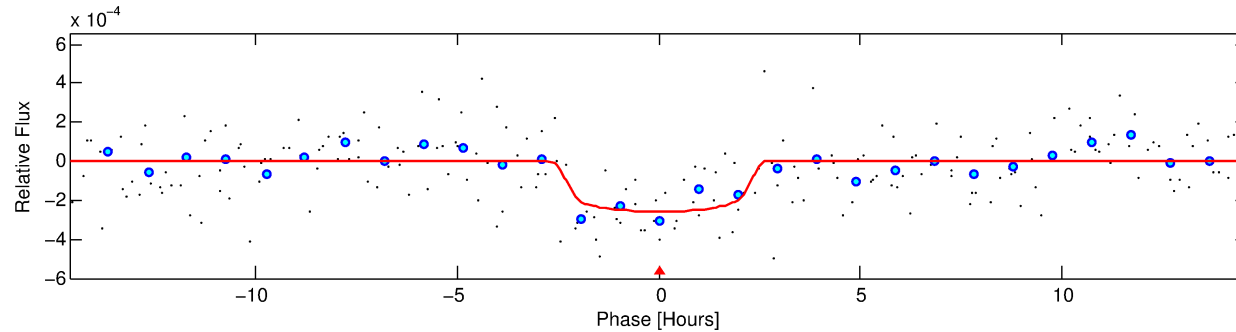
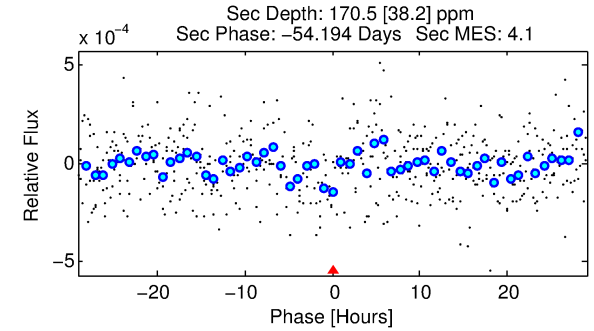
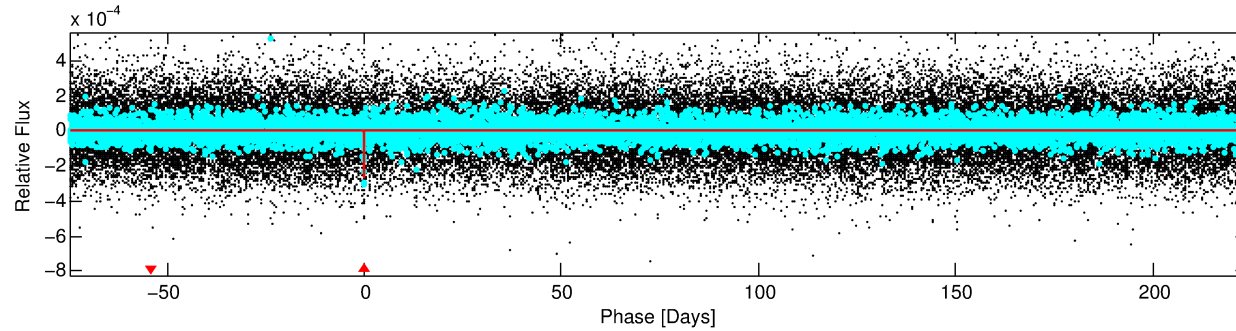
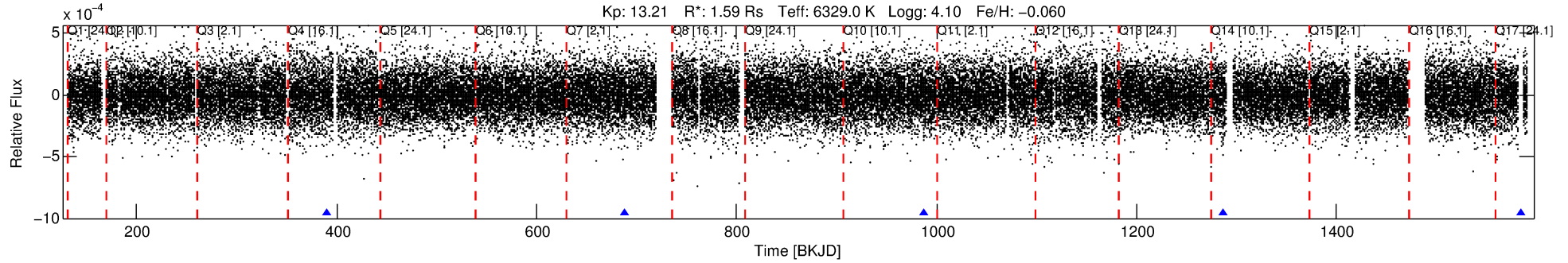
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 008260515-01

No Significant Match Found

DV One-Page Summary

KIC: 8260515 Candidate: 1 of 1 Period: 298.732 d



DV Fit Results:

Period = 298.73240 [0.00577] d
Epoch = 389.6907 [0.0114] BKJD
Rp/R* = 0.0165 [0.0080]
a/R* = 281.75 [712.08]
b = 0.82 [1.02]
Seff = 4.29 [1.94]
Teq = 367 [41] K
Rp = 2.86 [1.62] Re
a = 0.9230 [0.2515] AU
Ag = 9749.34 [10594.61] [0.92σ]
Teffp = 5637 [1418] K [3.72σ]

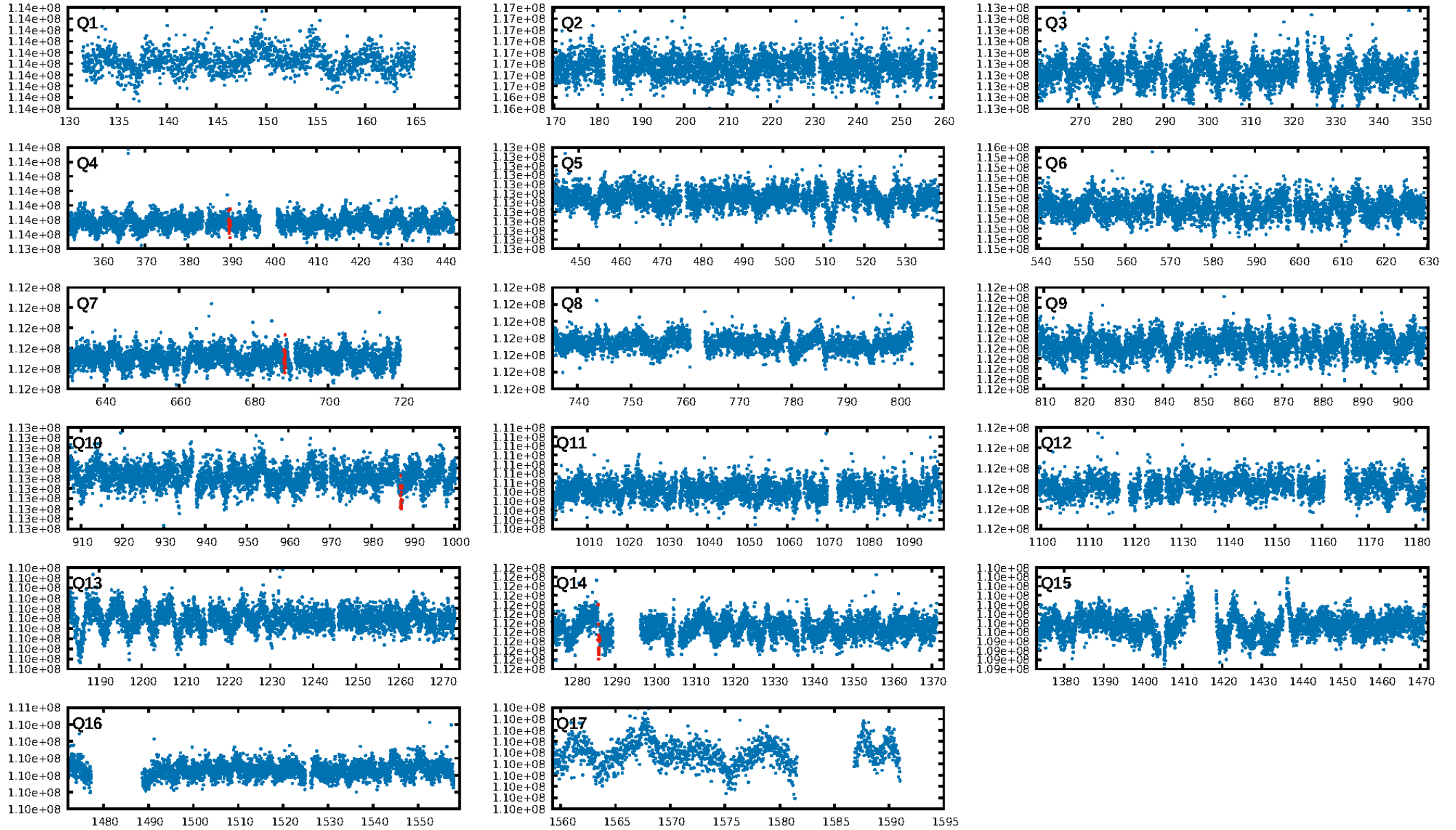
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: 1.2%
ModelChiSquareGof-sig: 96.9%
Bootstrap-pfa: 3.49e-12
RollingBand-fgt: 1.00 [4/4]
GhostDiagnostic-chr: -19.59
Centroid-sig: 0.0%
Centroid-so: 3.466 arcsec [2.48σ]
OotOffset-rm: 1.992 arcsec [1.76σ]
KicOffset-rm: 2.153 arcsec [2.19σ]
OotOffset-st: 2/1/1/0 [4]
KicOffset-st: 2/1/1/0 [4]
DiffImageQuality-fgm: 0.75 [3/4]
DiffImageOverlap-fno: 1.00 [4/4]

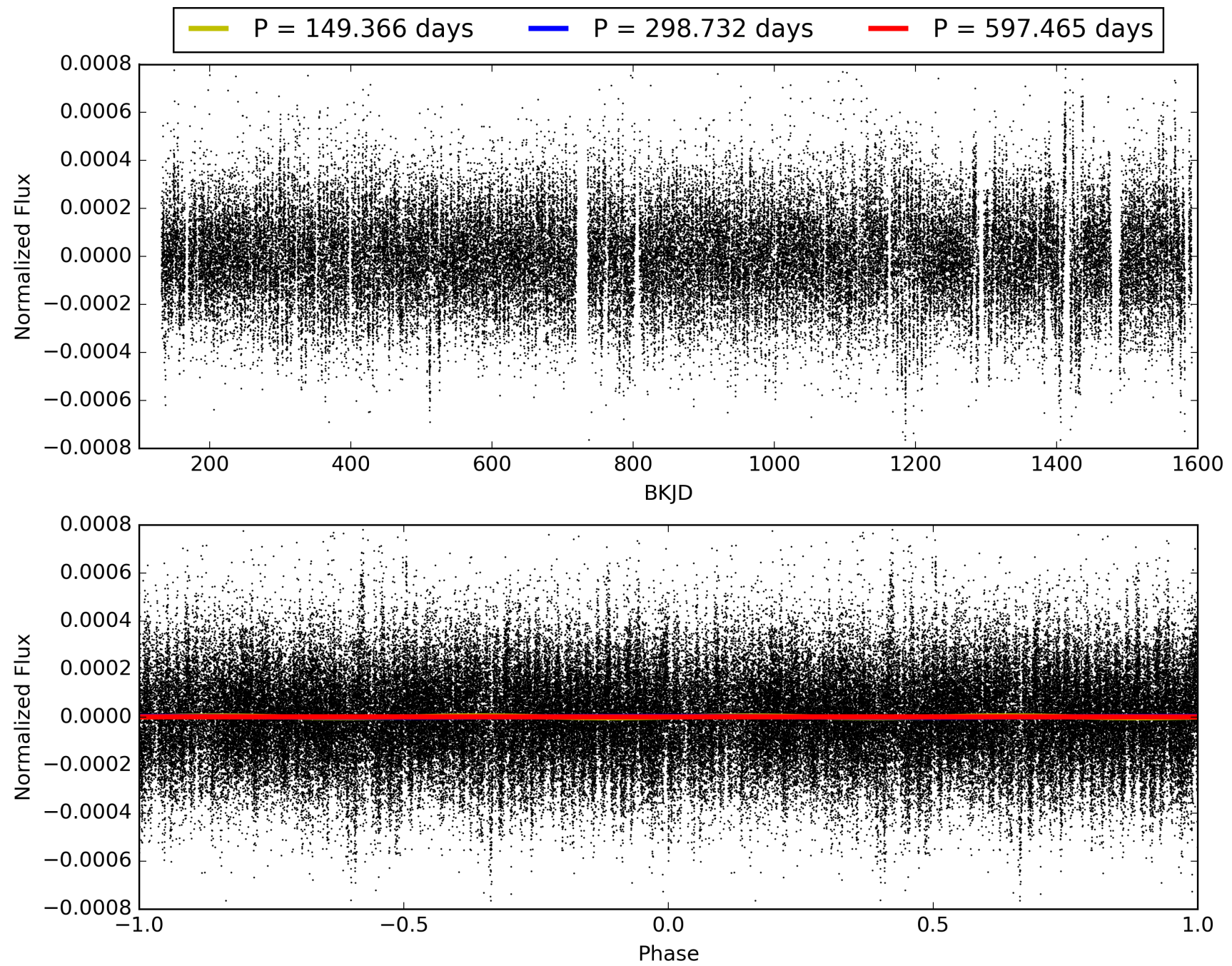
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 30-Jan-2016 12:56:57 Z

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

TCE 008260515-01, PDC Light Curves

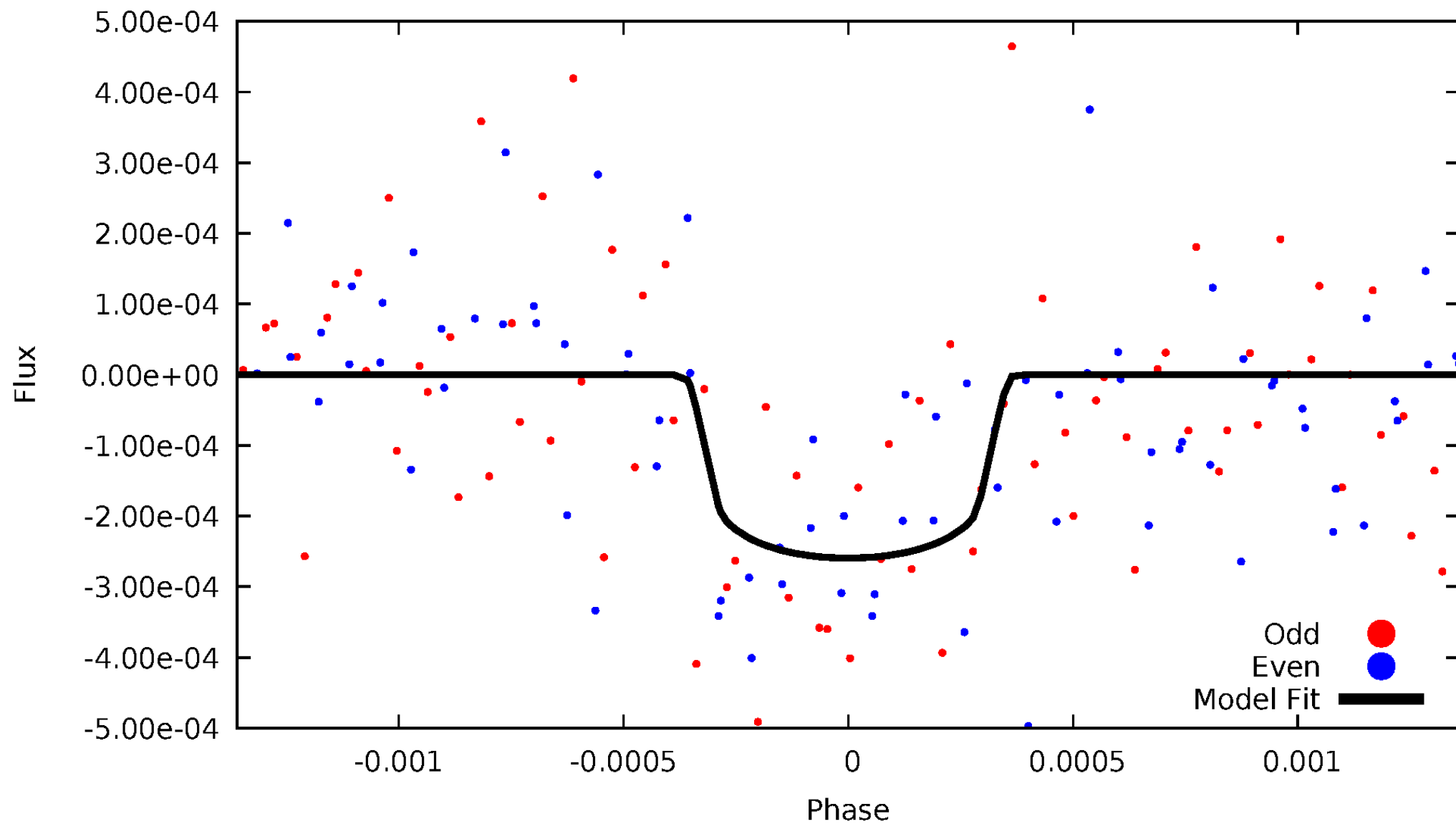


TCE 008260515-01



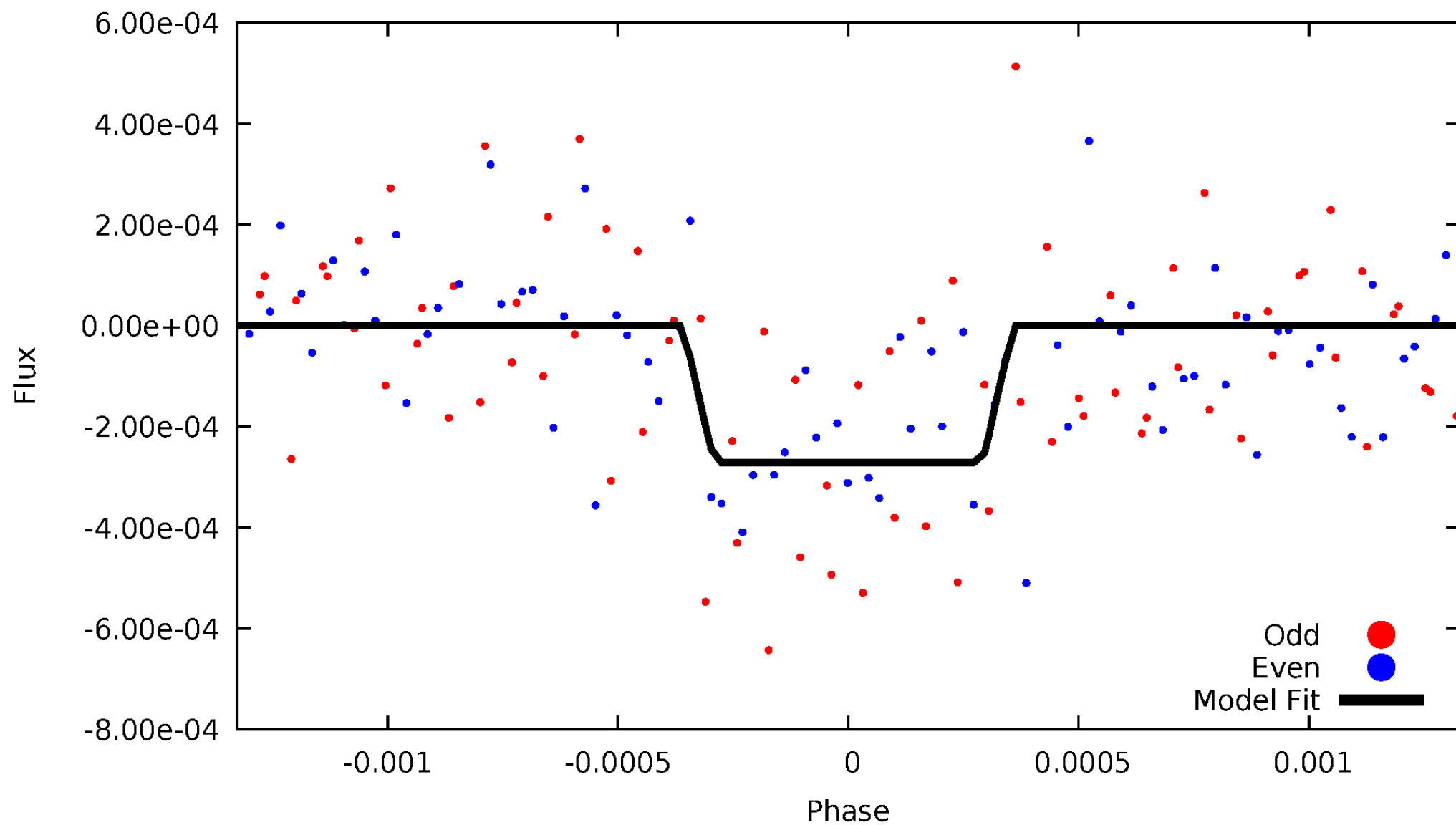
DV Odd/Even

TCE 008260515-01



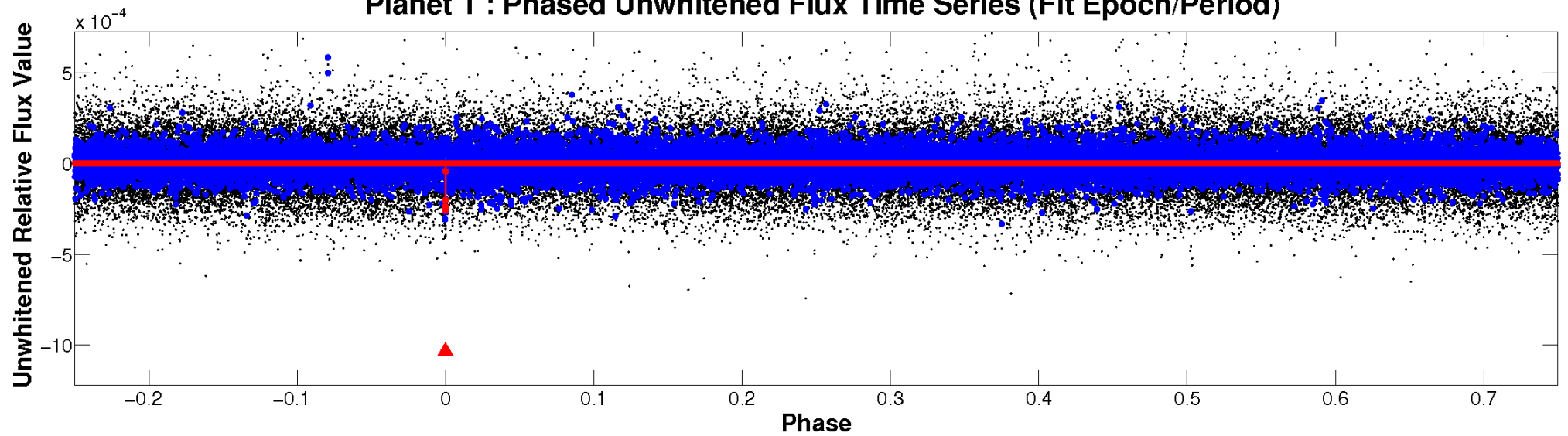
ALT Odd/Even

TCE 008260515-01

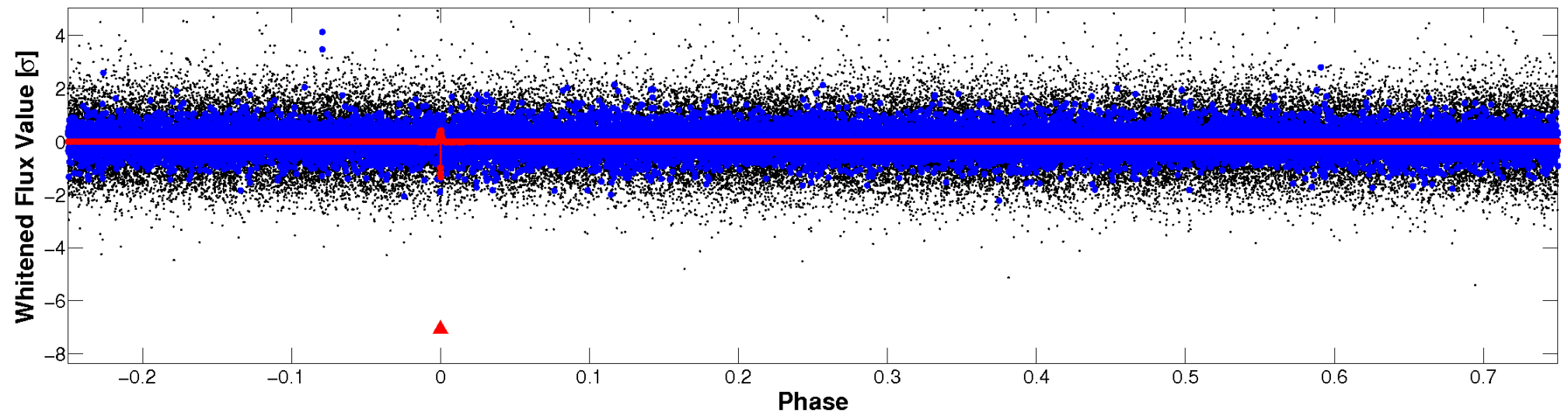


Non-Whitened Vs. Whitened Light Curve

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

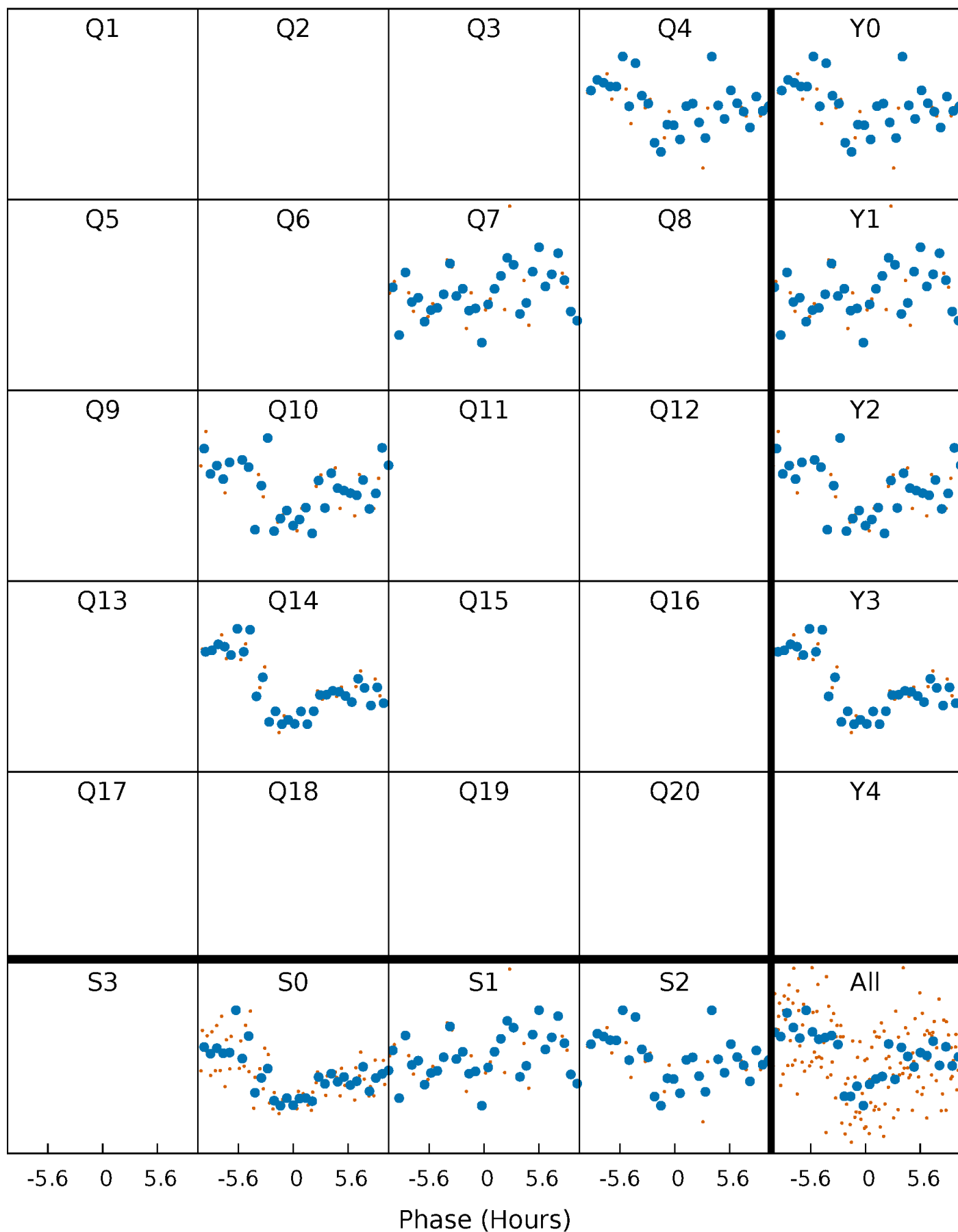


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



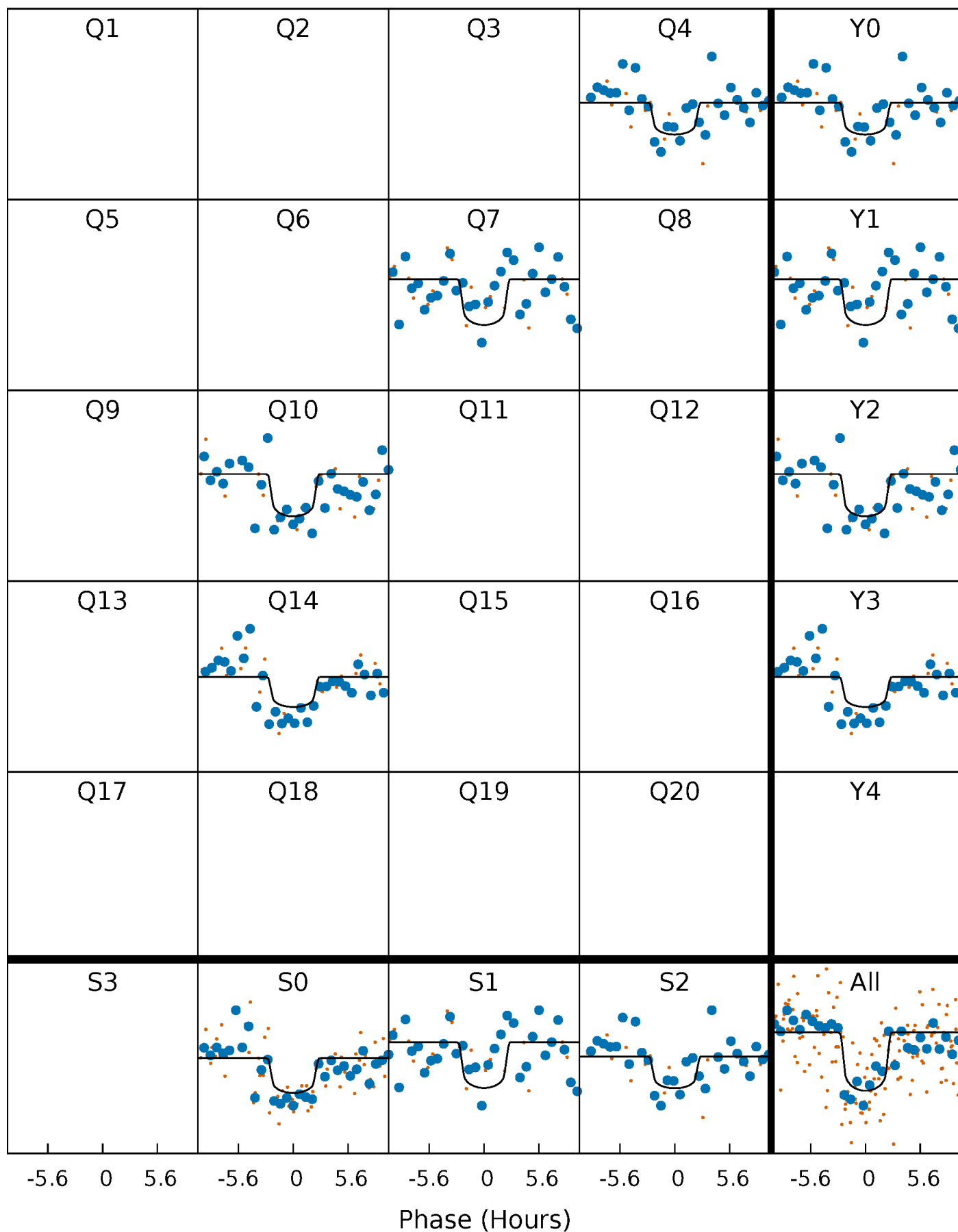
PDC Quarter-Phased Transit Curves

TCE 008260515-01 P=298.732401 Days $T_0=389.690735$ (BKJD)



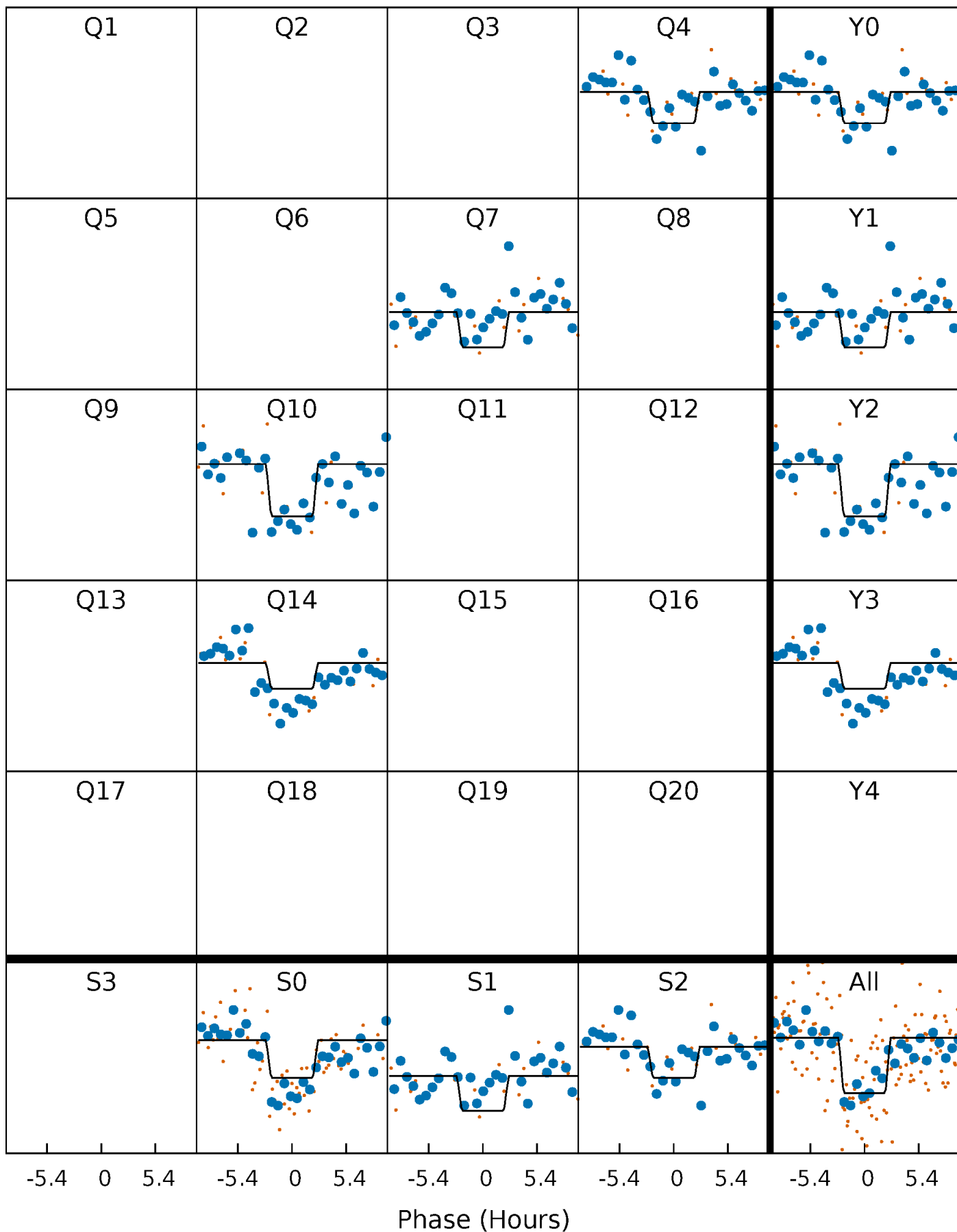
DV Quarter-Phased Transit Curves

TCE 008260515-01 P=298.732401 Days $T_0=389.690735$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

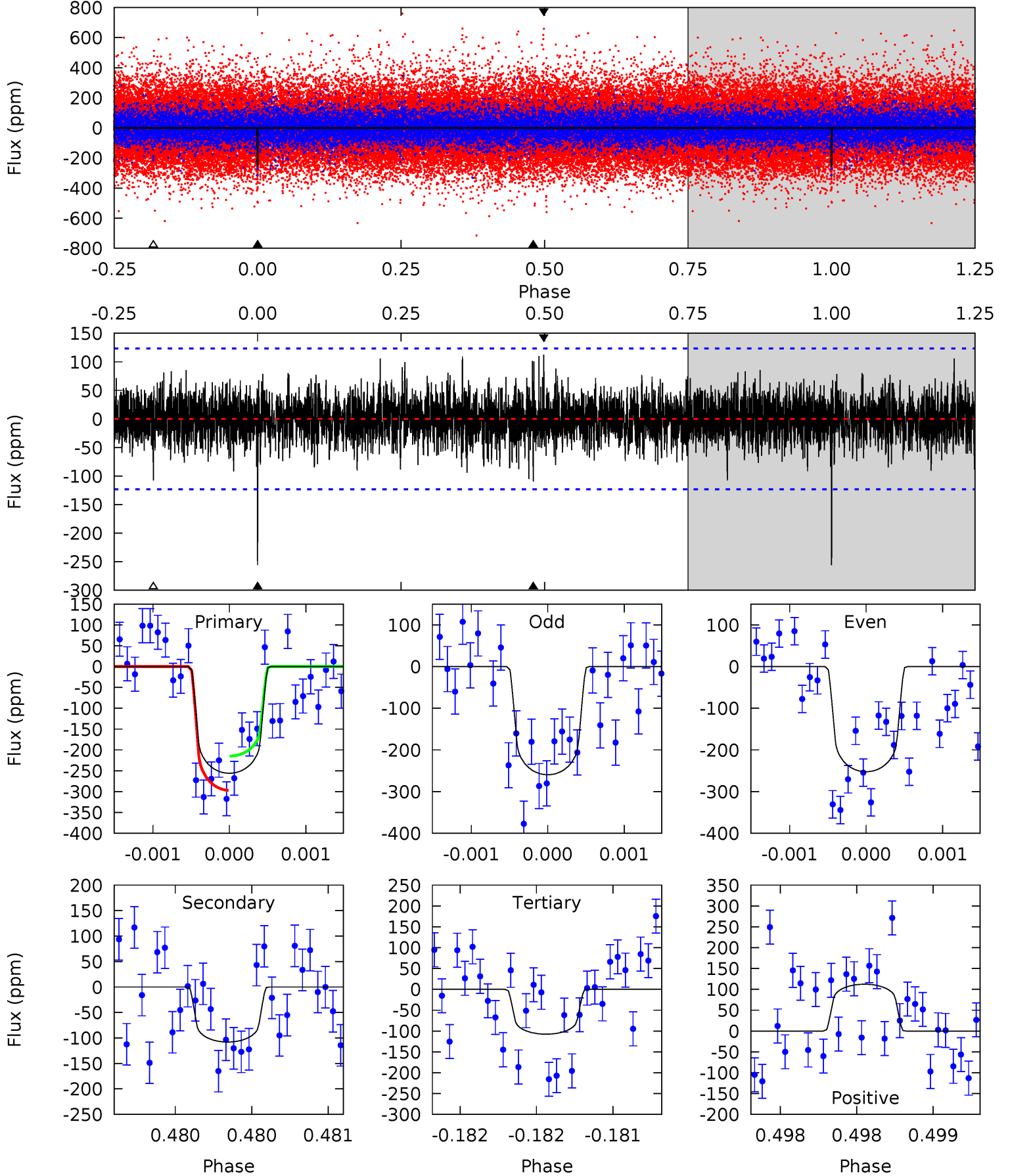
TCE 008260515-01 P=298.728171 Days $T_0=389.695003$ (BKJD)



DV Model-Shift Uniqueness Test

008260515-01, $P = 298.732401$ Days, $E = 90.958334$ Days

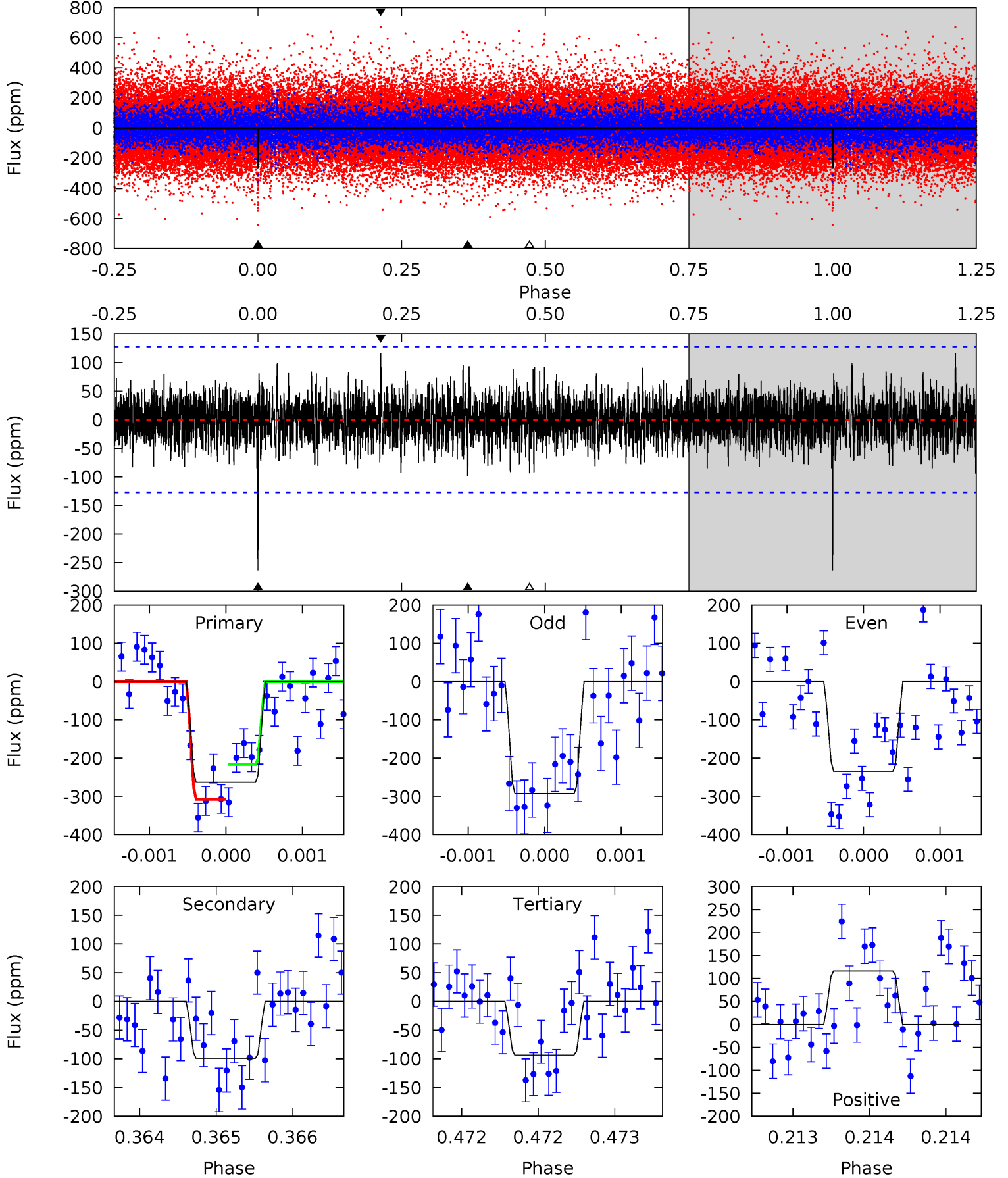
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
11.4	4.83	4.80	5.01	5.51	3.38	1.25	6.63	6.42	0.02	-0.19	0.16	1.01	0.30	1.84



Alt Model-Shift Uniqueness Test

008260515-01, P = 298.728171 Days, E = 90.966832 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
11.4	4.30	4.05	5.05	5.51	3.39	1.18	7.38	6.38	0.25	-0.75	1.27	1.13	0.31	1.97



Stellar Parameters For KIC 008260515

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	6329^{+170}_{-208}	$4.103^{+0.252}_{-0.168}$	$-0.060^{+0.250}_{-0.300}$	$1.594^{+0.459}_{-0.459}$	$1.173^{+0.189}_{-0.170}$	$0.408^{+0.630}_{-0.188}$
	+3%/-3%	+6%/-4%	+417%/-500%	+29%/-29%	+16%/-14%	+154%/-46%
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 008260515-01 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	-108 ± 22	$2.75^{+1.50}_{-1.31}$	507^{+39}_{-43}	5073^{+1856}_{-752}	6651^{+16725}_{-3914}
Alt.	-99 ± 23	$2.85^{+1.53}_{-1.37}$	509^{+37}_{-41}	4931^{+1644}_{-728}	5656^{+14365}_{-3335}

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 $A_{obs} \gg 1.0$

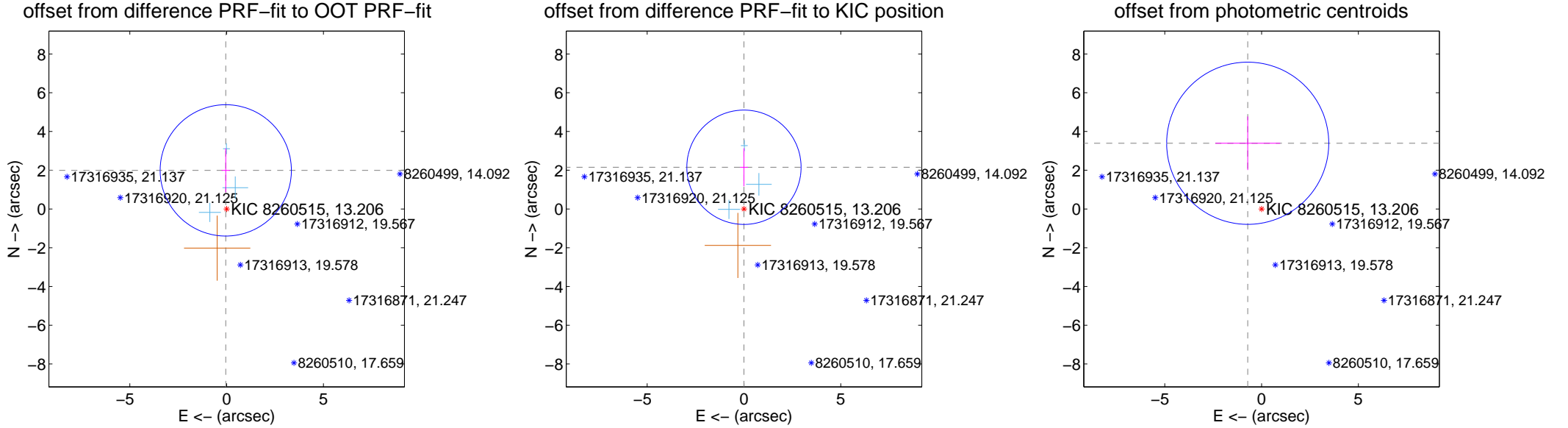
DV Centroid Data

Supplemental centroid analysis for 008260515-01. Kepler magnitude: 13.21. Transit SNR 7.51

There are 3 quarters with good PRF difference image offsets

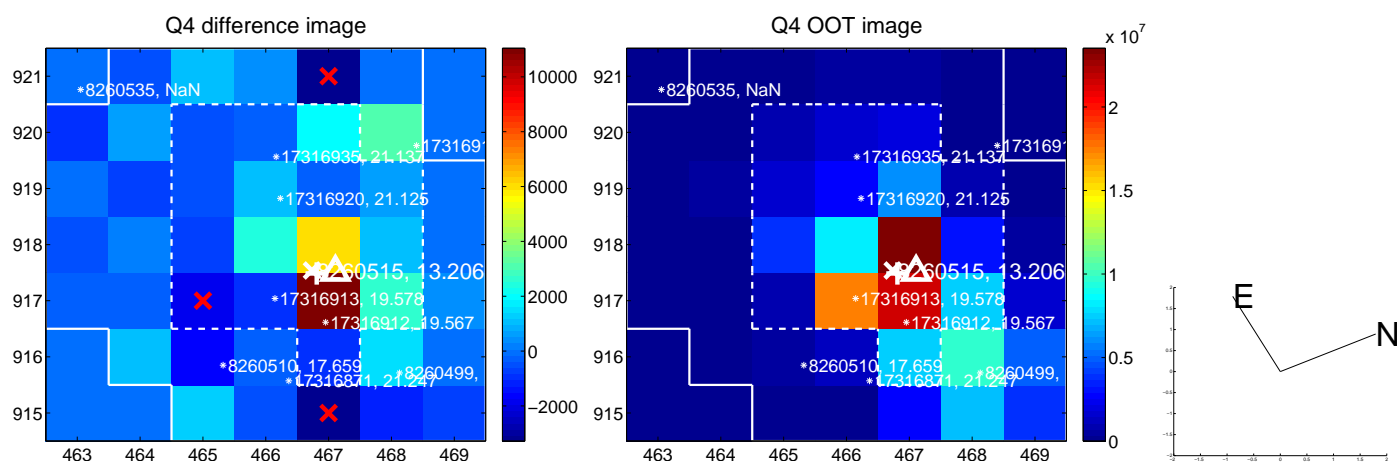
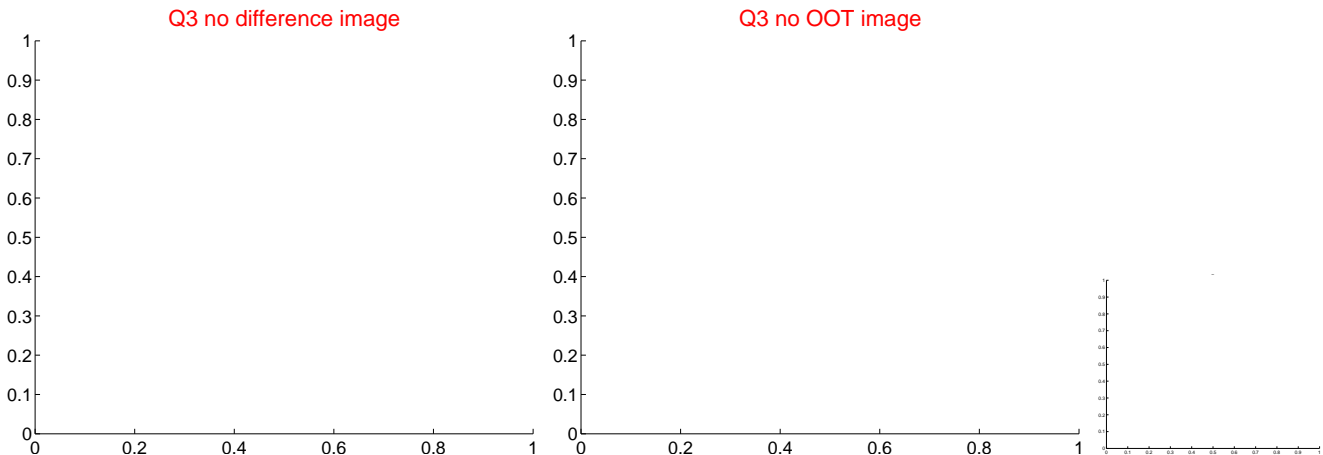
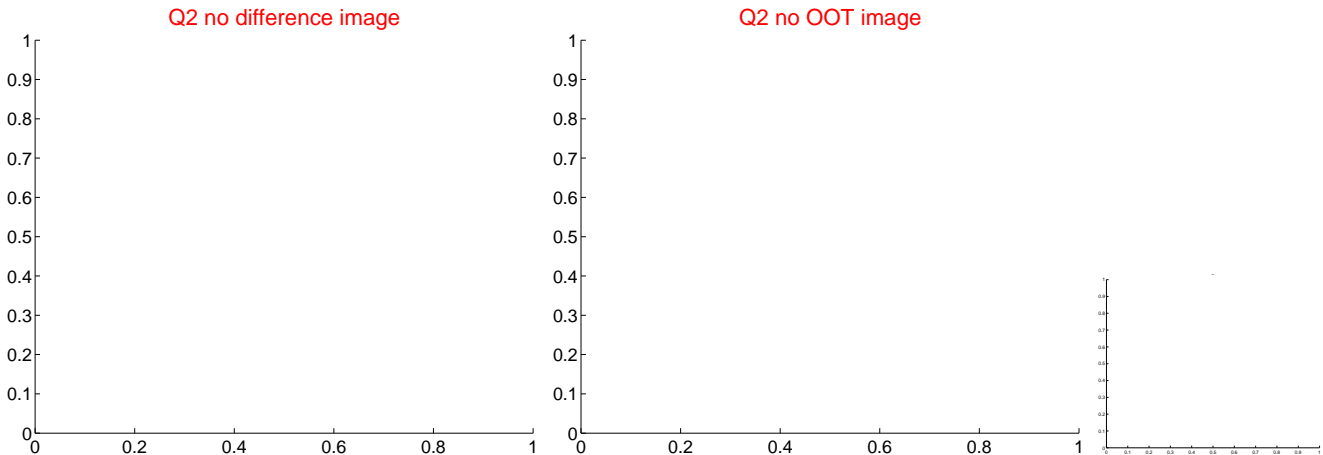
The direct PRF centroid is offset from the target star catalog position by about 0.16 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	1.992 ± 1.130	1.76	0.045 ± 0.214	1.991 ± 1.133
PRF-fit source offset from KIC position	2.153 ± 0.983	2.19	0.001 ± 0.205	2.153 ± 0.983
photometric centroid source offset	3.47 ± 1.40	2.48	0.72 ± 1.67	3.39 ± 1.38



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.

Q5 no difference image



Q5 no OOT image



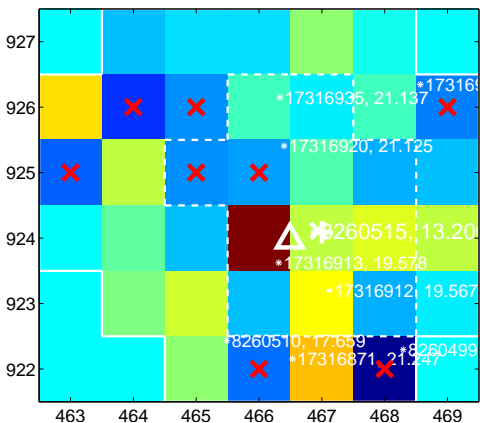
Q6 no difference image



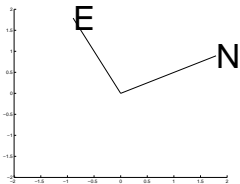
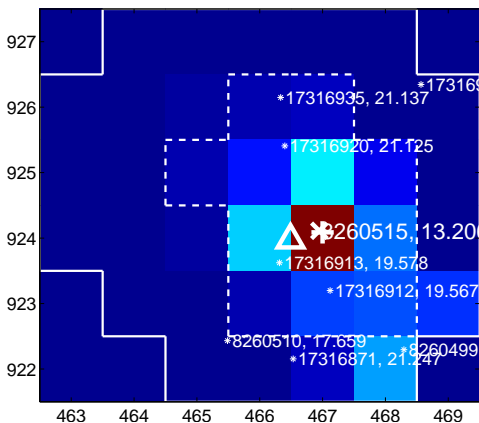
Q6 no OOT image



Q7 difference image. Poor Quality



Q7 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.

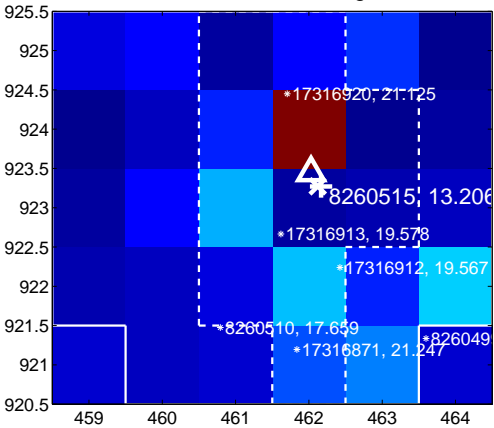
Q9 no difference image



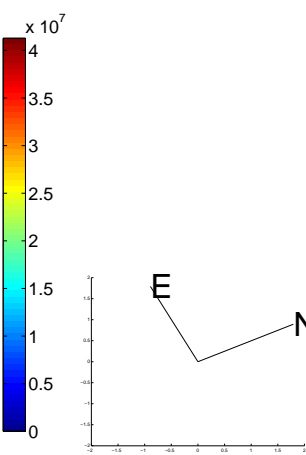
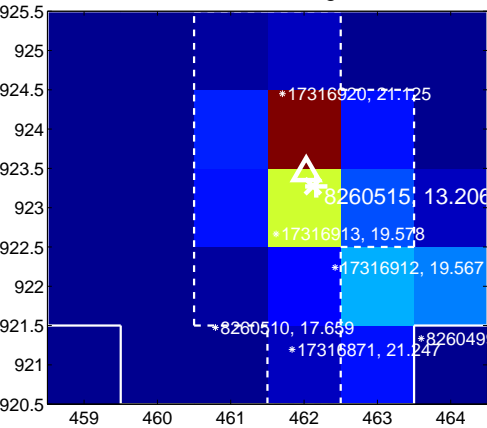
Q9 no OOT image



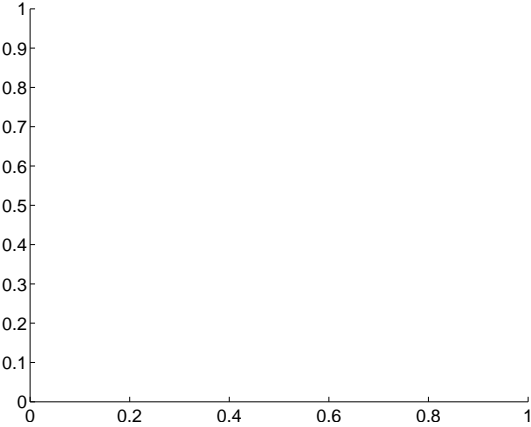
Q10 difference image



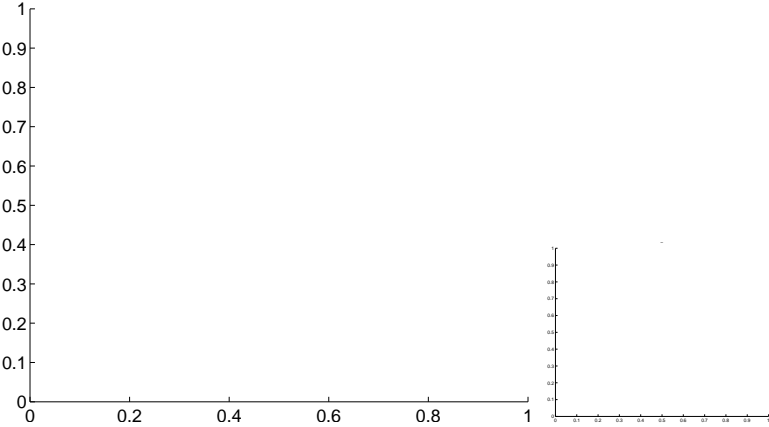
Q10 OOT image



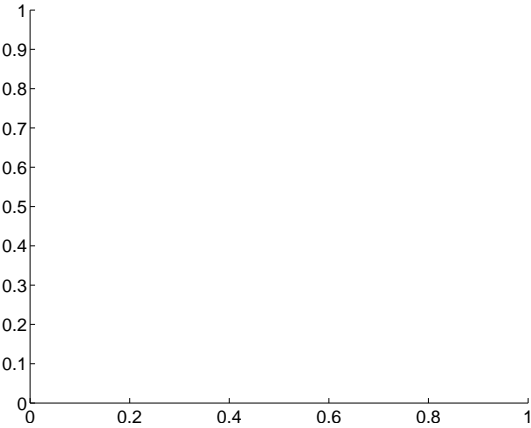
Q11 no difference image



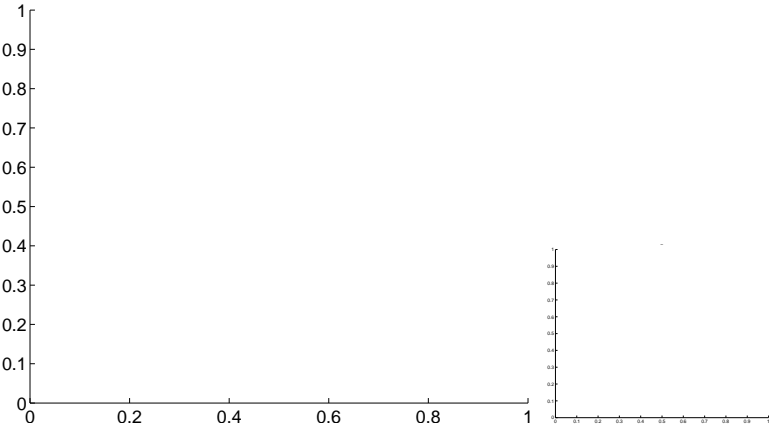
Q11 no OOT image



Q12 no difference image



Q12 no OOT image



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

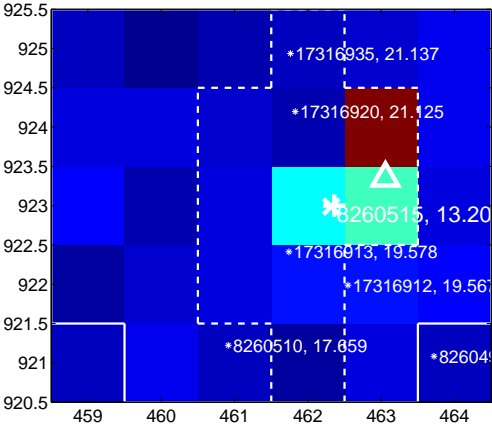
Q13 no difference image



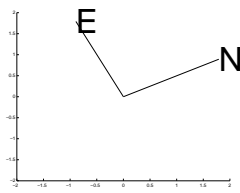
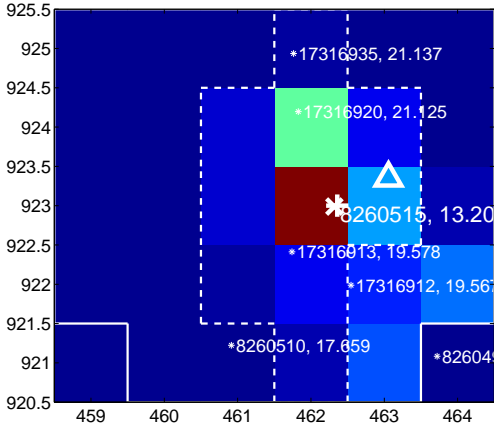
Q13 no OOT image



Q14 difference image



Q14 OOT image



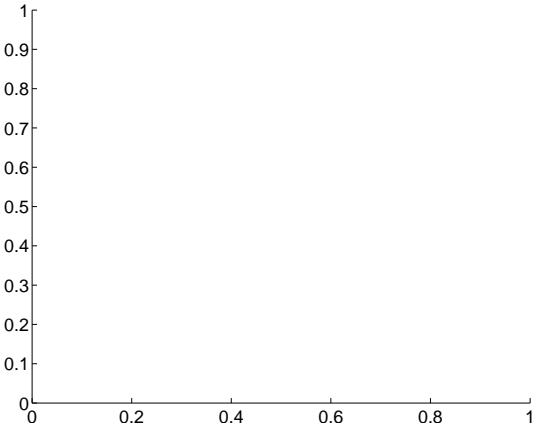
Q15 no difference image



Q15 no OOT image



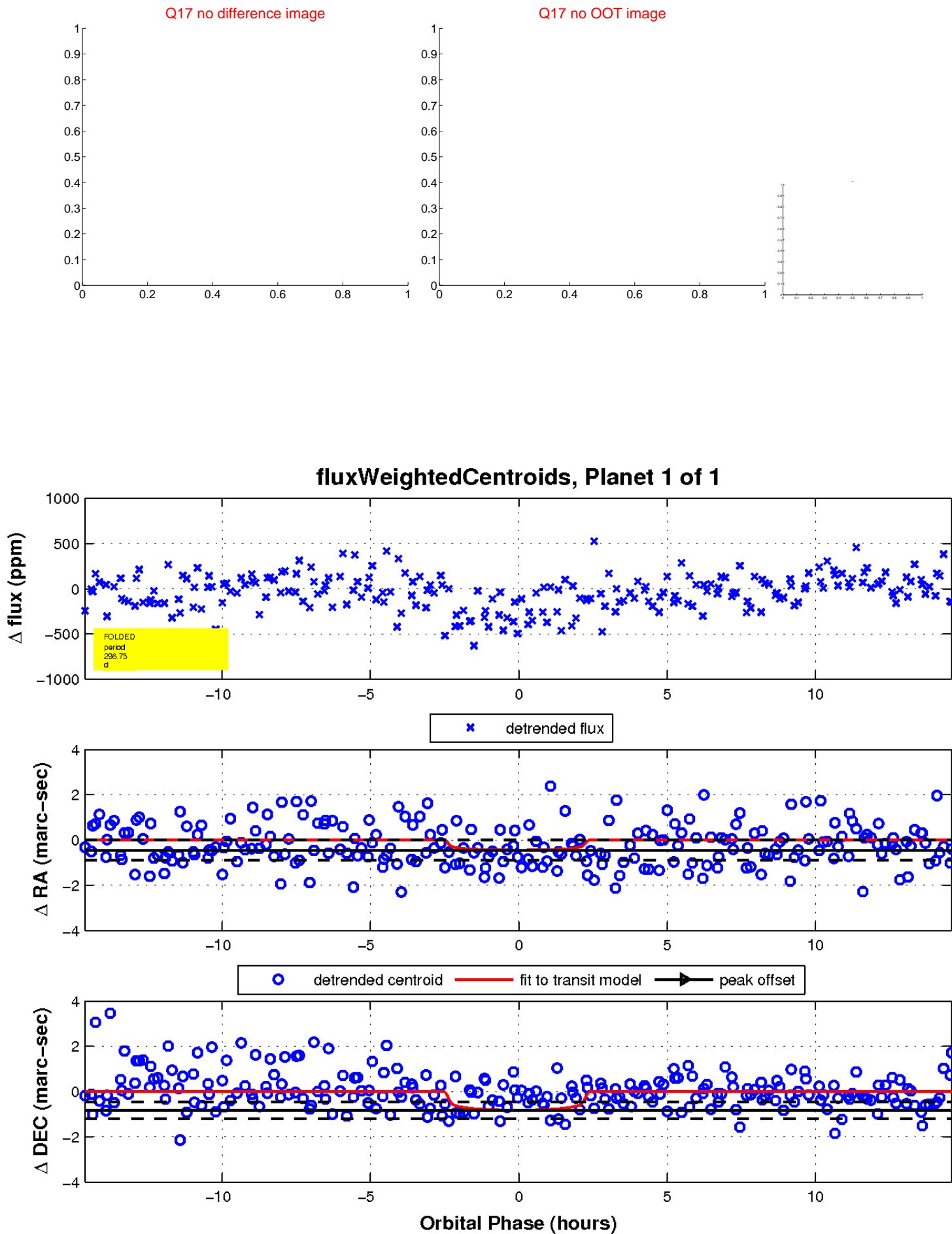
Q16 no difference image



Q16 no OOT image



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



UKIRT Image

Declination

