

KIC 008308717

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})
008308717-01	OBS	No	358.539243	235.283047	1656.3	49.642	7.4	10.7	1.18	6442	8.90	1.91

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
008308717-01	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_CHASES_MARSHALL_SKYE—MOD_NONUNIQ_ALT—MOD_POS_ALT—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.

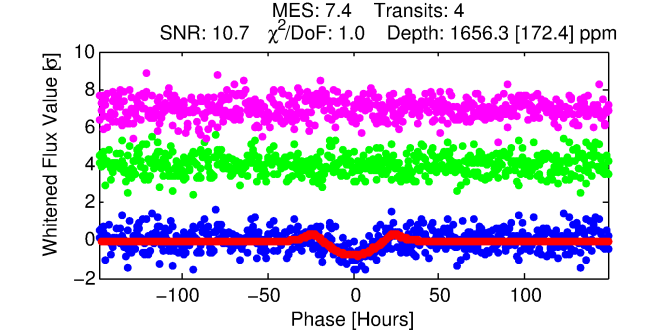
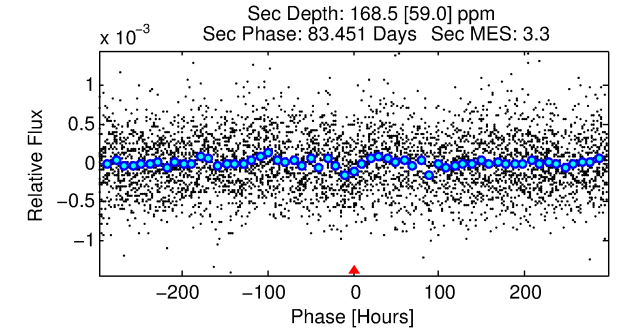
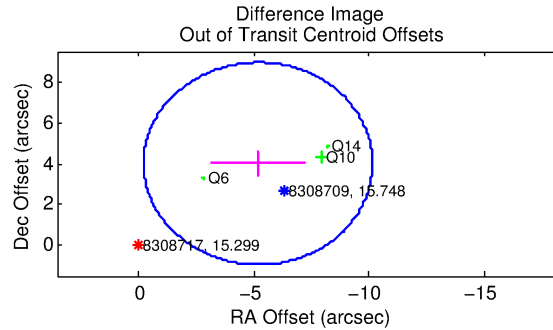
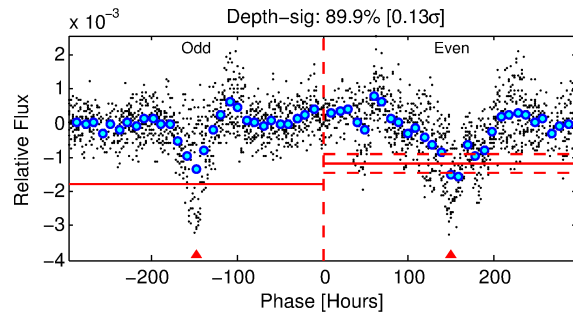
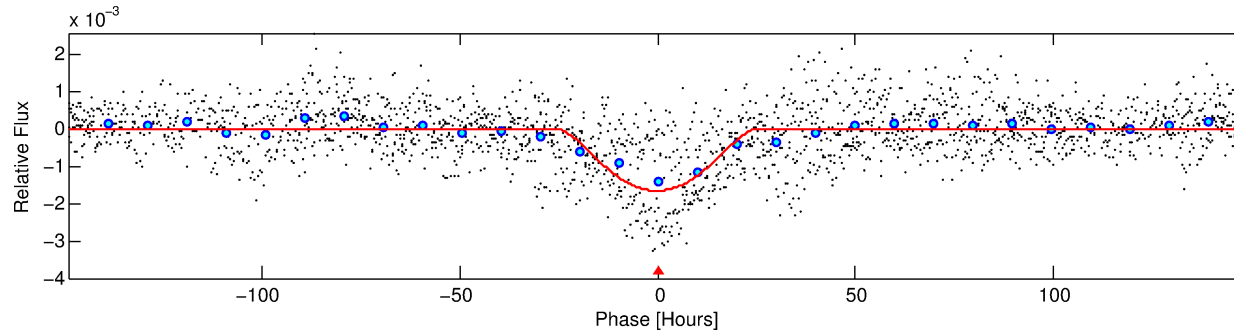
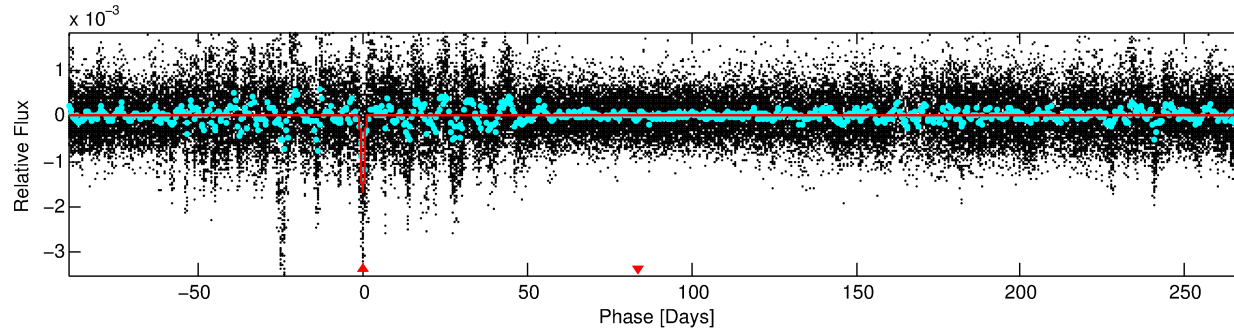
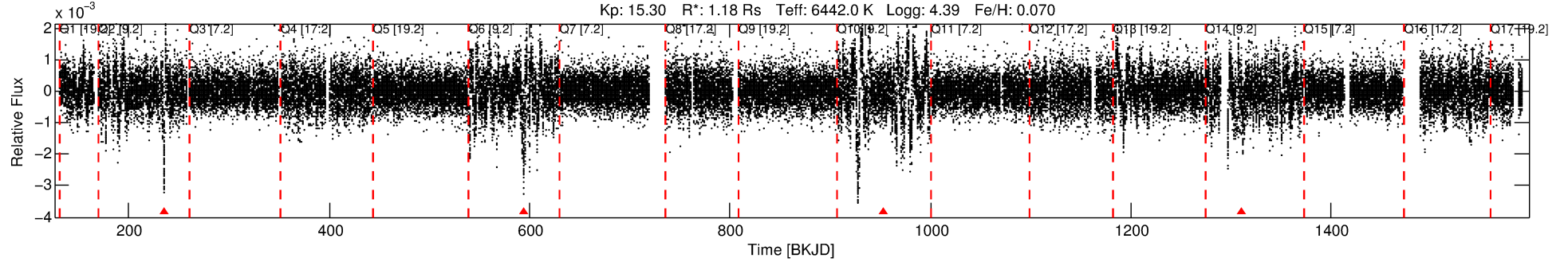
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 008308717-01

No Significant Match Found

DV One-Page Summary

KIC: 8308717 Candidate: 1 of 1 Period: 358.539 d



DV Fit Results:

Period = 358.53924 [0.03730] d
Epoch = 235.2830 [0.0487] BKJD
Rp/R* = 0.0690 [0.1008]
a/R* = 21.02 [6.94]
b = 1.00 [0.14]
Seff = 1.91 [0.74]
Teq = 300 [29] K
Rp = 8.90 [13.30] Re
a = 1.0634 [0.2695] AU
Ag = 1322.31 [3922.00] [0.34 σ]
Teffp = 2795 [2059] K [1.21 σ]

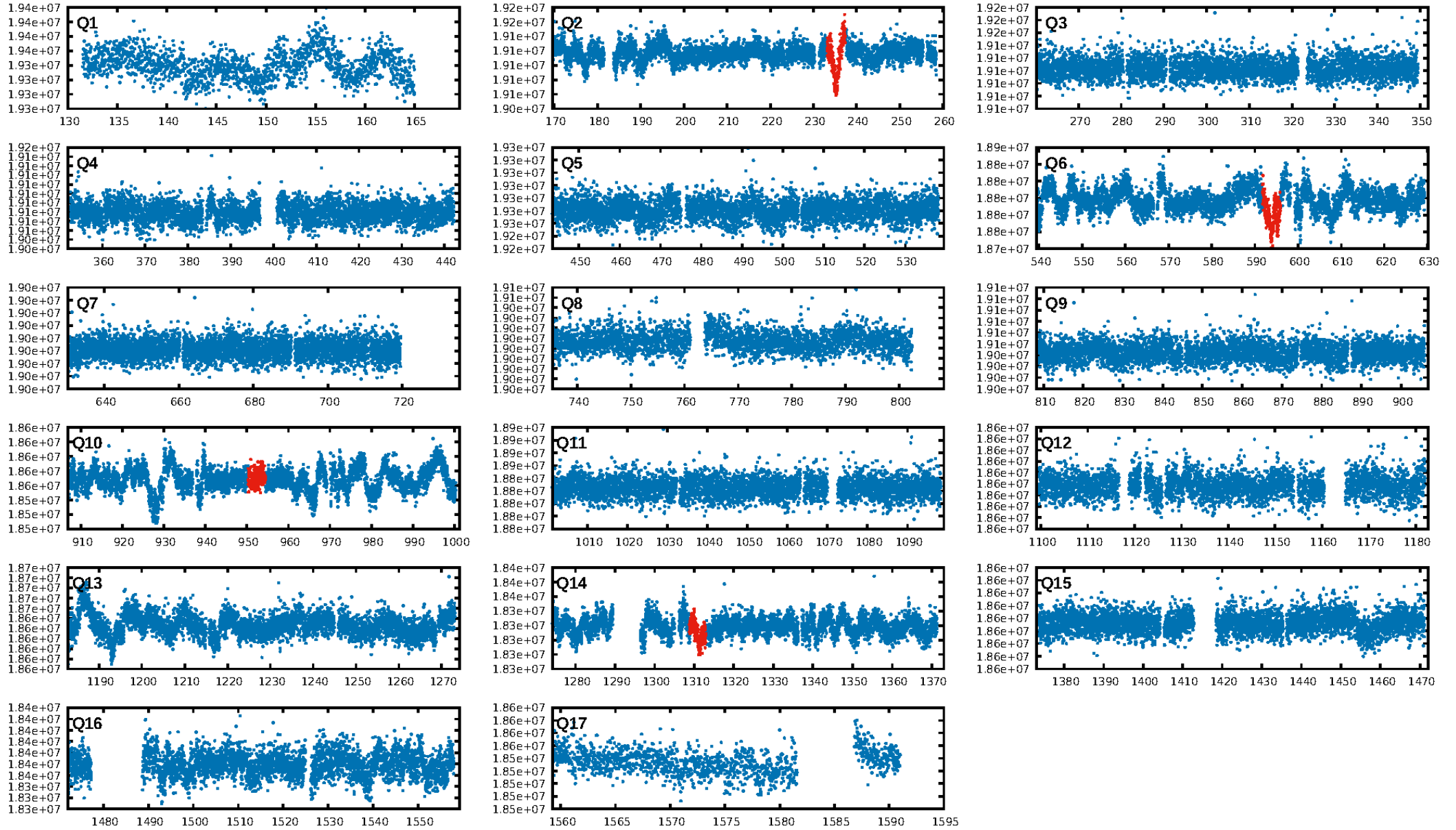
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: 0.3%
ModelChiSquareGof-sig: 100.0%
Bootstrap-pfa: 1.19e-08
RollingBand-fgt: 0.00 [0/4]
GhostDiagnostic-chr: 14.4
Centroid-sig: 17.8%
Centroid-so: 2.584 arcsec [2.15 σ]
OotOffset-rm: 6.555 arcsec [3.97 σ]
KicOffset-rm: 6.772 arcsec [3.99 σ]
OotOffset-st: 3/0/0/0 [3]
KicOffset-st: 3/0/0/0 [3]
DiffImageQuality-fgm: 0.33 [1/3]
DiffImageOverlap-fno: 1.00 [3/3]

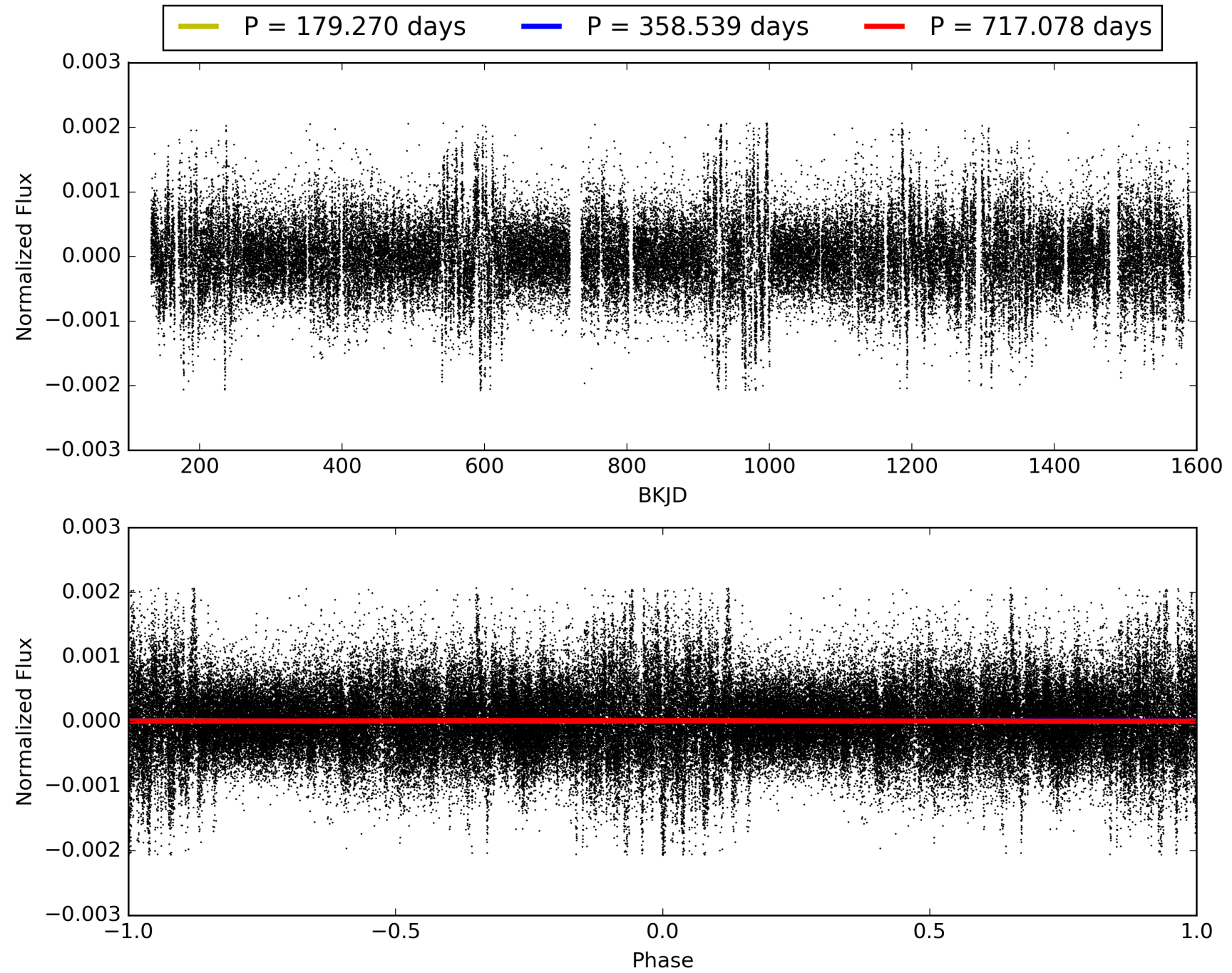
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 29-Jan-2016 01:43:00 Z

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

TCE 008308717-01, PDC Light Curves

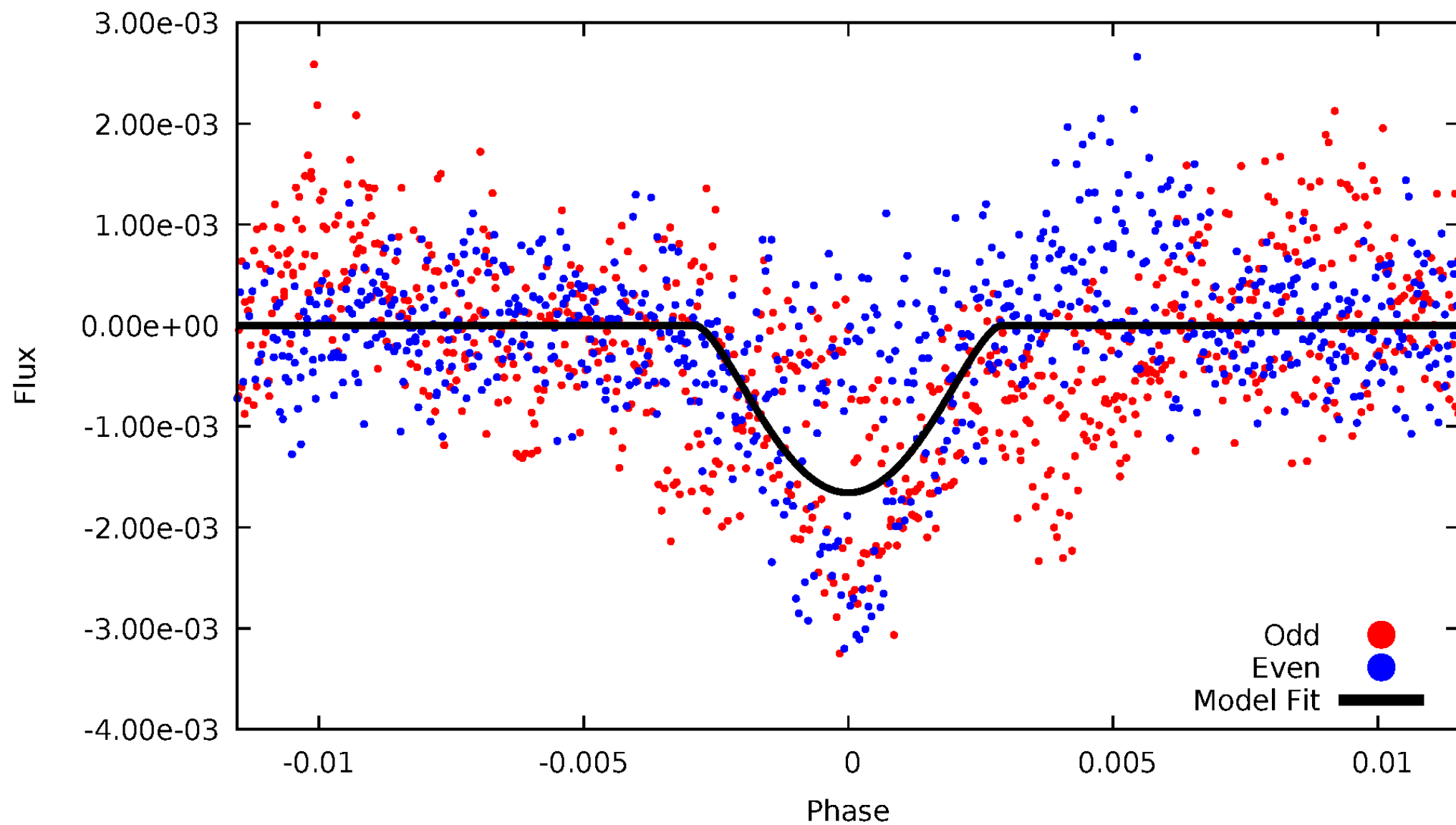


TCE 008308717-01



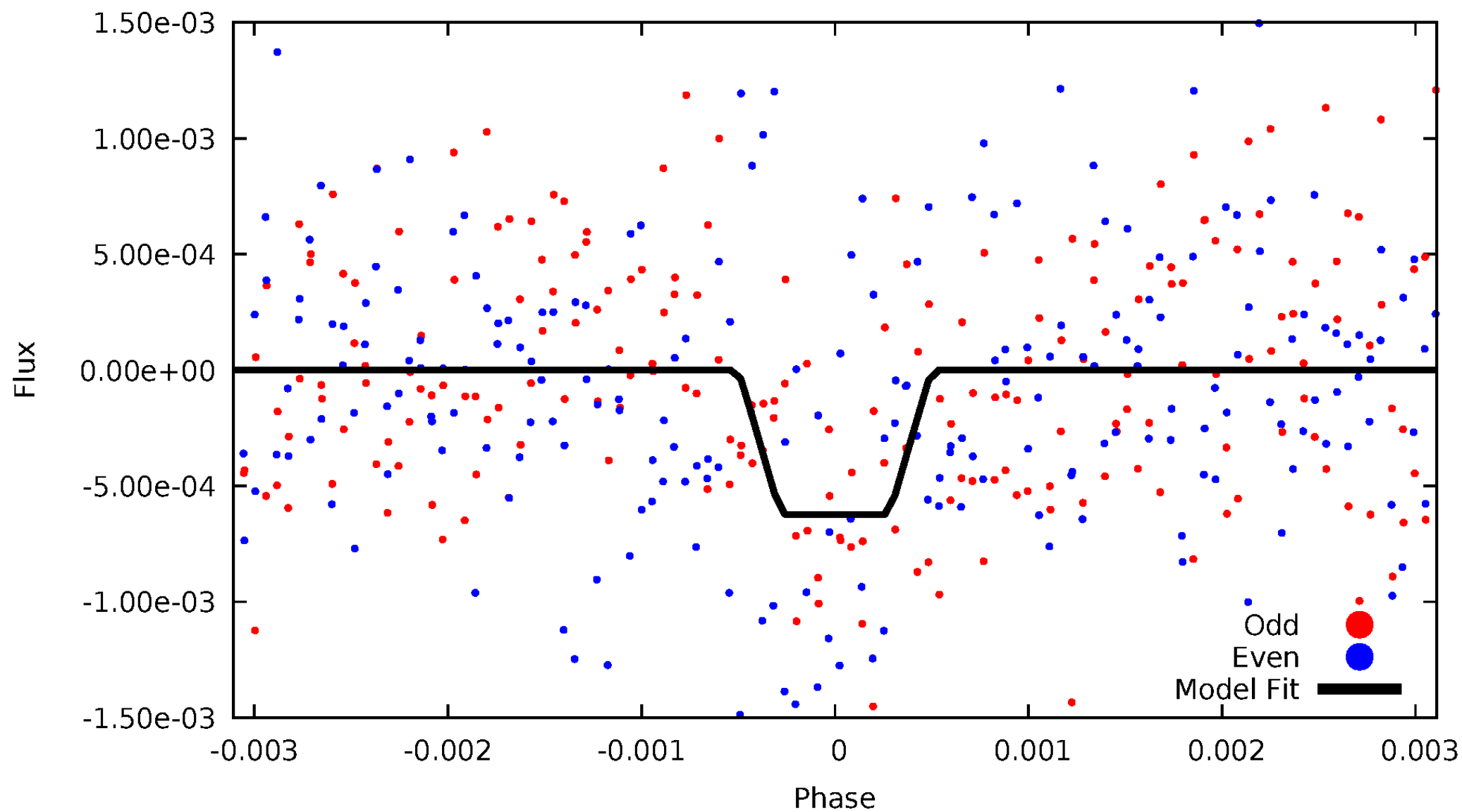
DV Odd/Even

TCE 008308717-01



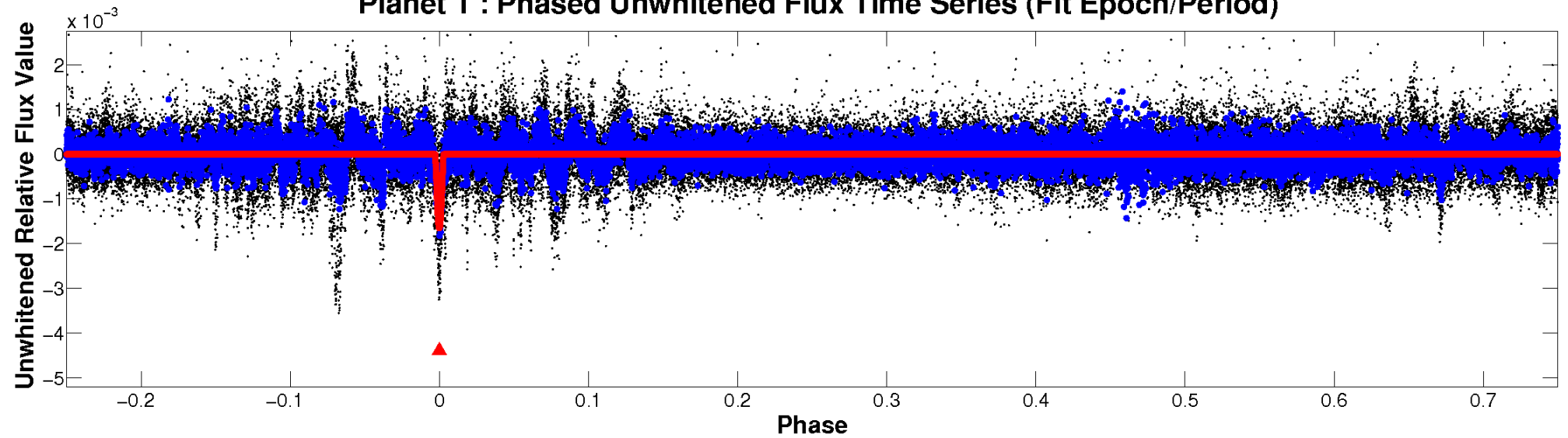
ALT Odd/Even

TCE 008308717-01

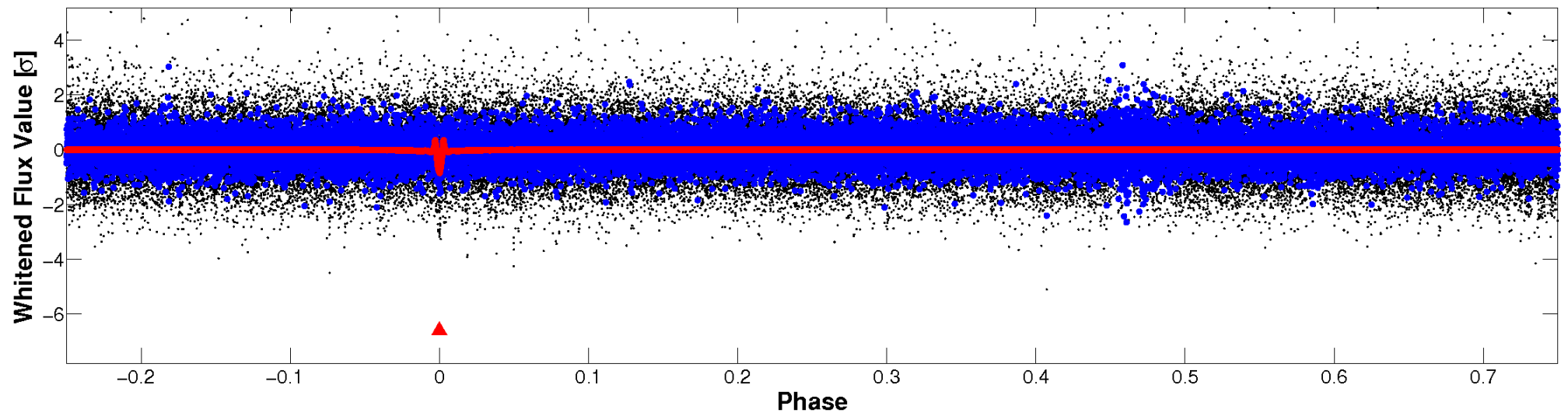


Non-Whitened Vs. Whitened Light Curve

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

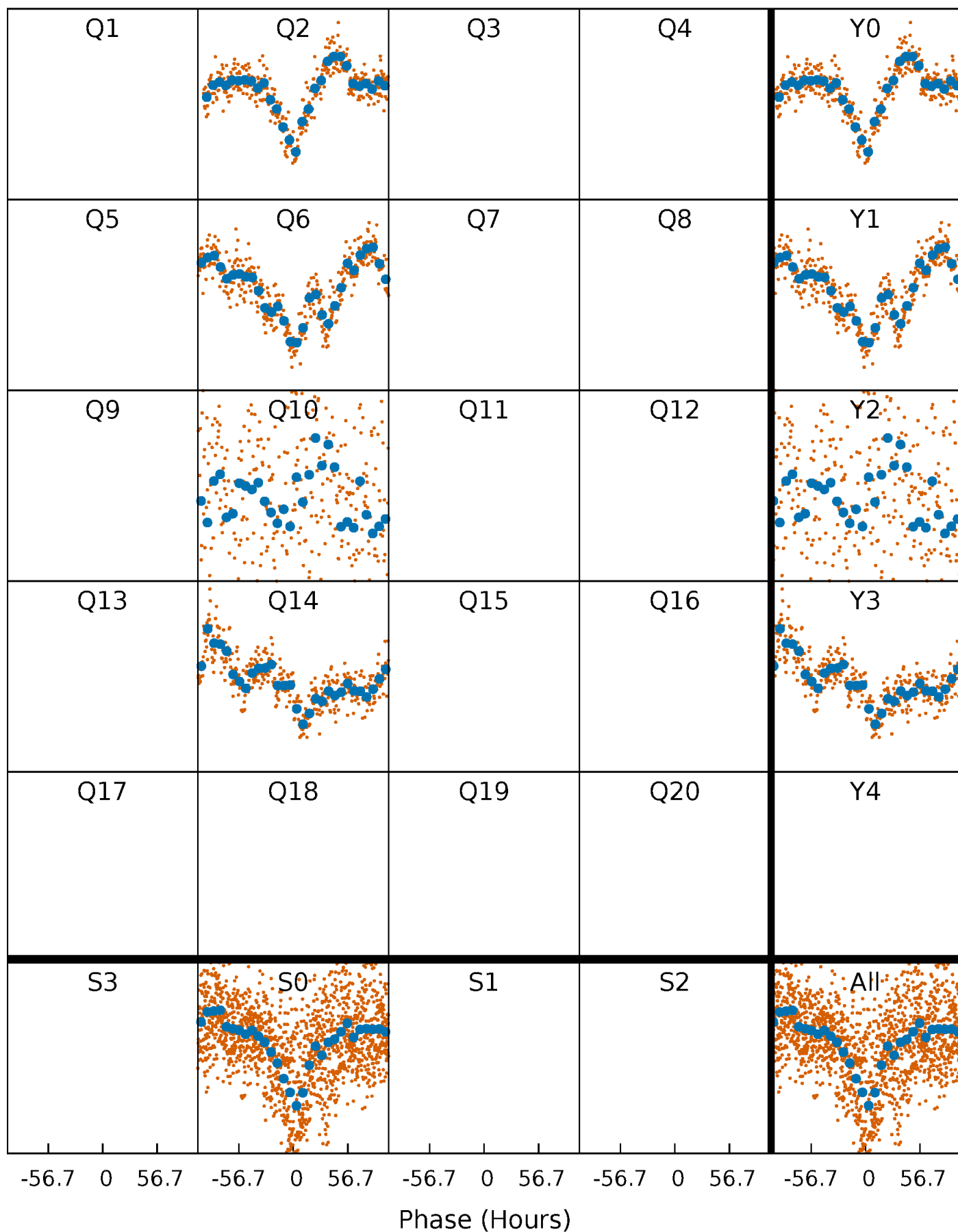


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



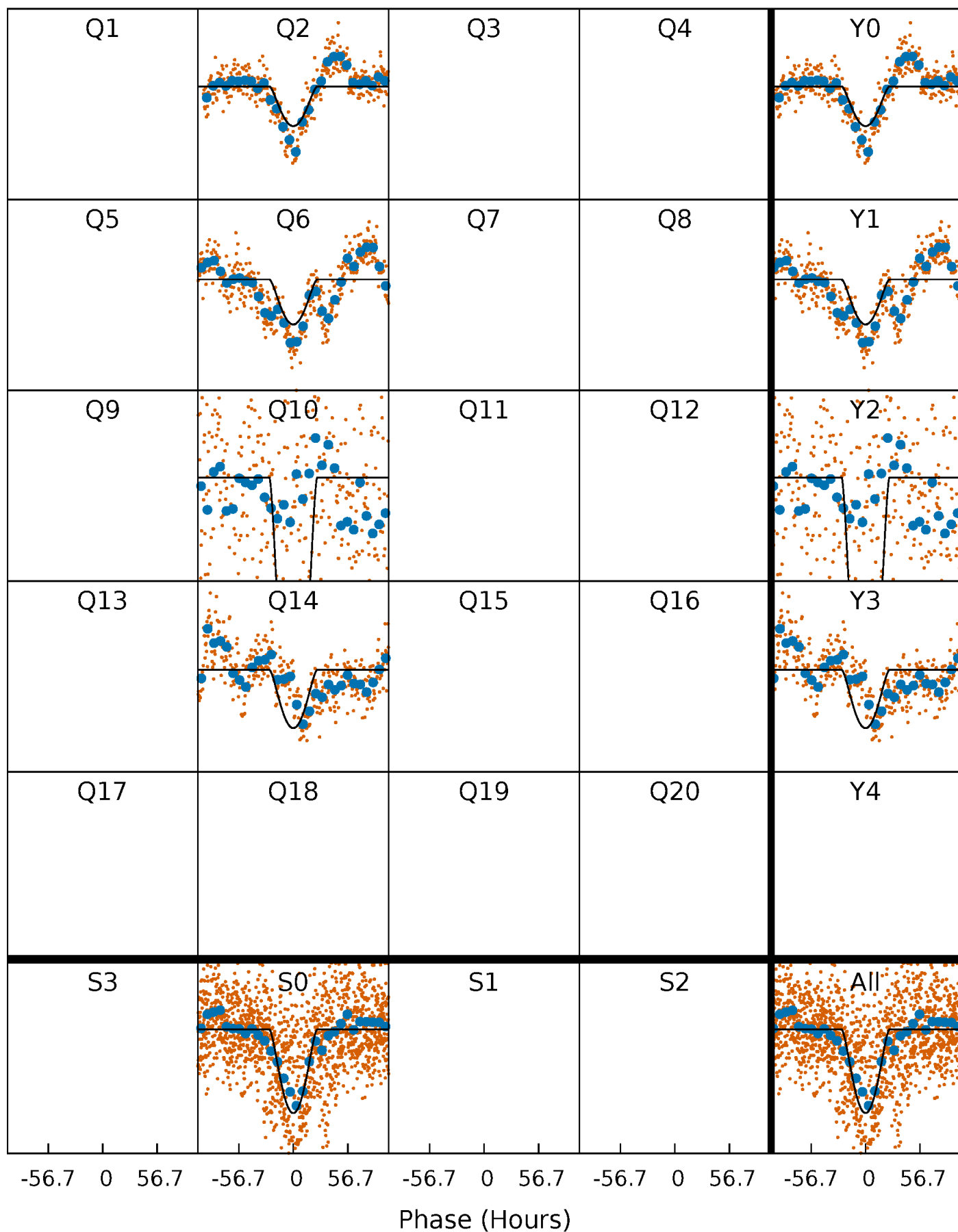
PDC Quarter-Phased Transit Curves

TCE 008308717-01 P=358.539243 Days $T_0=235.283047$ (BKJD)



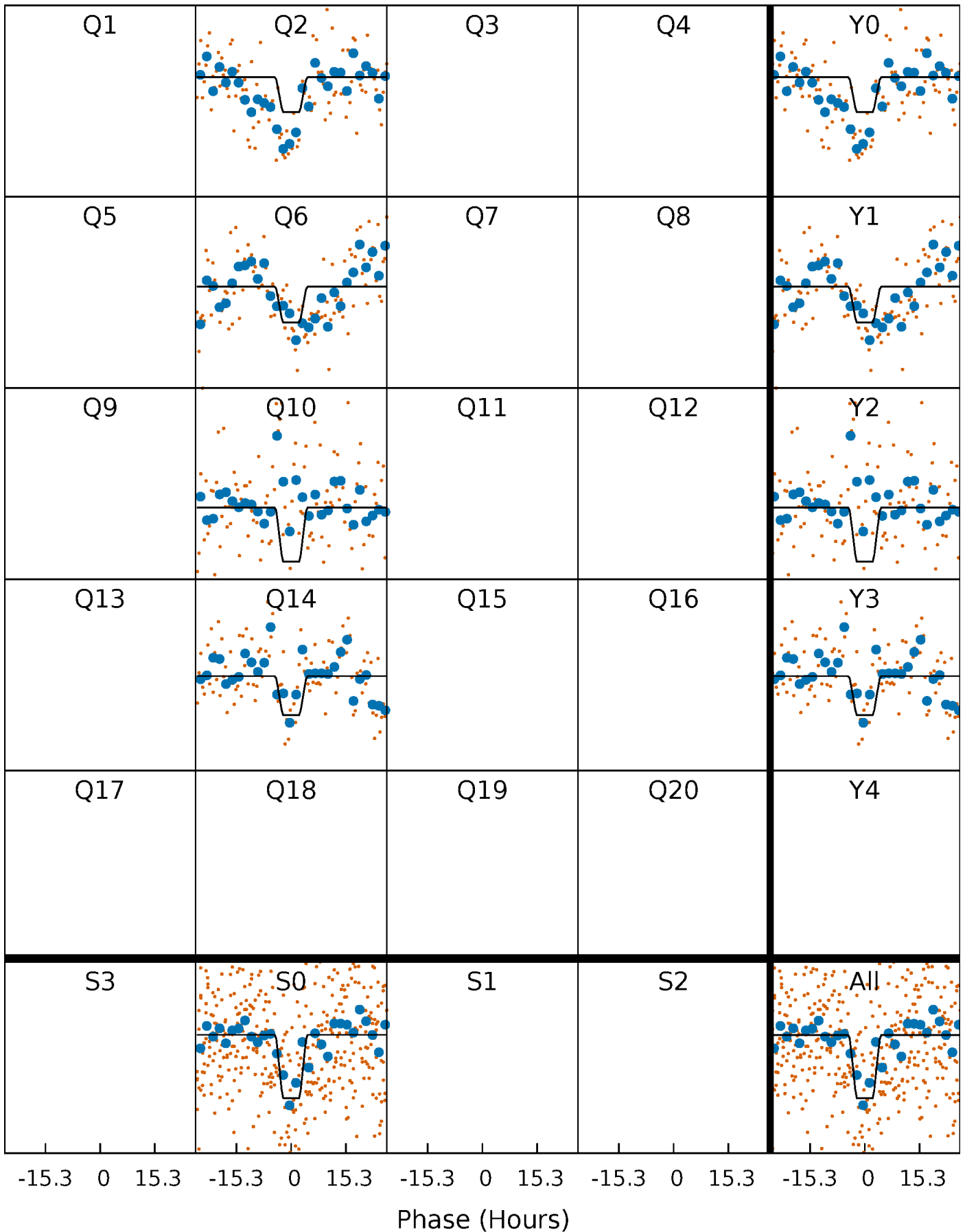
DV Quarter-Phased Transit Curves

TCE 008308717-01 P=358.539243 Days $T_0=235.283047$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

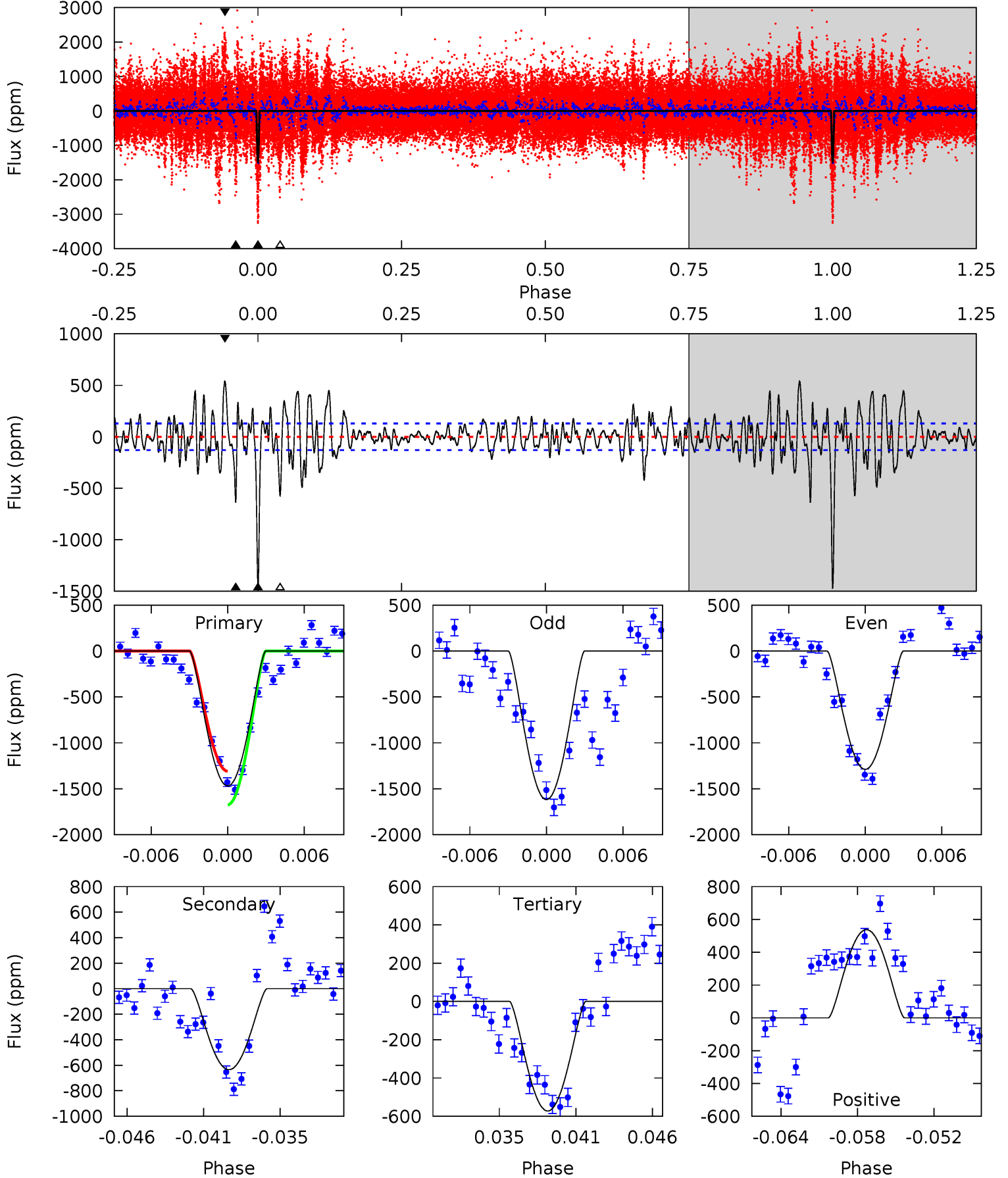
TCE 008308717-01 P=358.261608 Days $T_0=235.431006$ (BKJD)



DV Model-Shift Uniqueness Test

008308717-01, P = 358.539243 Days, E = 235.283047 Days

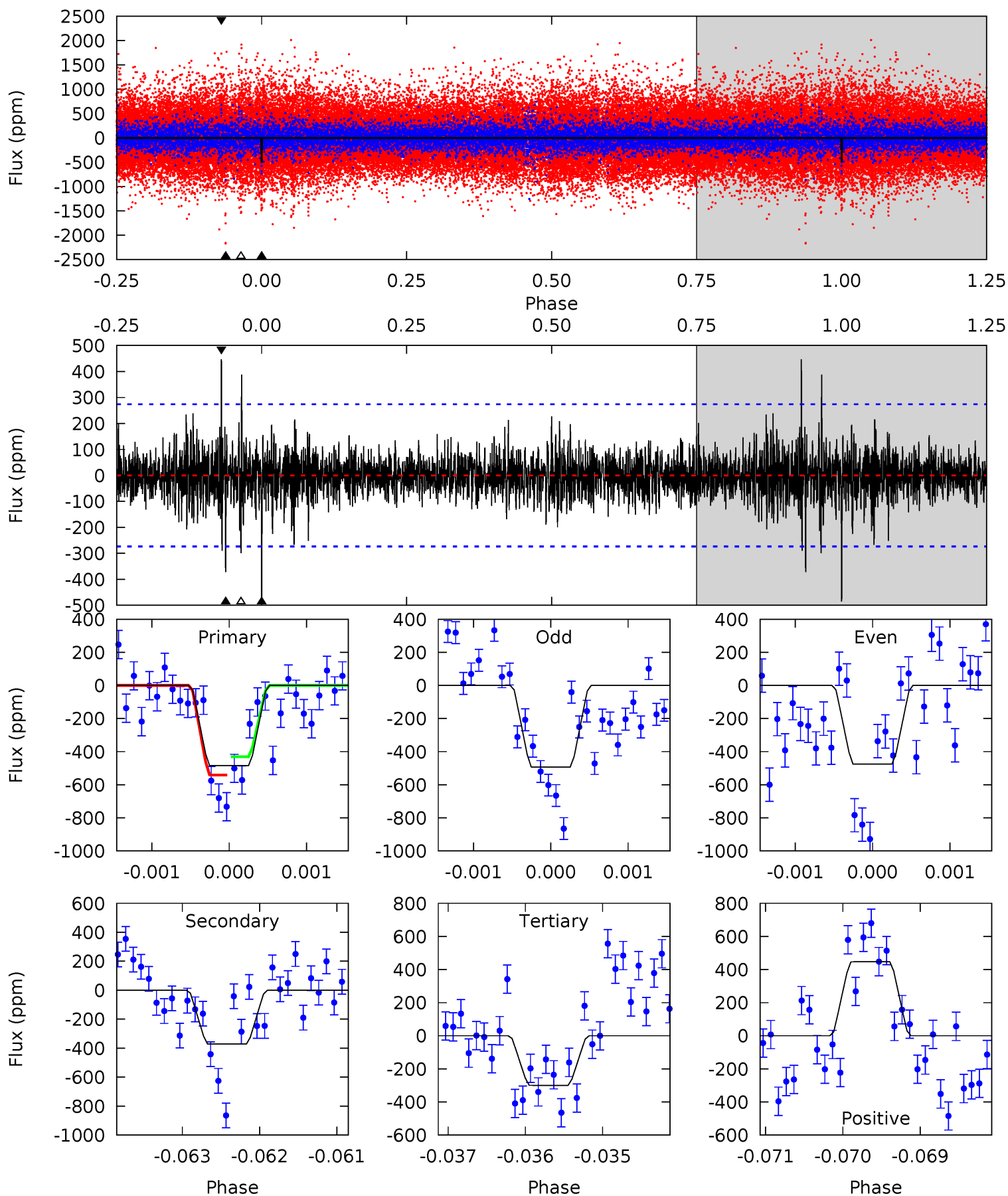
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
58.6	25.3	22.8	21.4	5.13	2.76	5.82	35.7	37.1	2.48	3.87	6.58	0.89	0.27	7.25



Alt Model-Shift Uniqueness Test

008308717-01, P = 358.261608 Days, E = 235.431006 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
9.64	7.39	5.96	8.88	5.45	3.28	1.27	3.69	0.76	1.43	-1.49	0.18	0.95	0.48	1.10



Stellar Parameters For KIC 008308717

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$\rho_{\star} (\text{g}\cdot\text{cm}^{-3})$
	6442^{+157}_{-224}	$4.388^{+0.065}_{-0.195}$	$0.070^{+0.200}_{-0.350}$	$1.183^{+0.363}_{-0.156}$	$1.250^{+0.152}_{-0.202}$	$1.062^{+0.305}_{-0.569}$
	+2%/-3%	+1%/-4%	+286%/-500%	+31%/-13%	+12%/-16%	+29%/-54%
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 008308717-01 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	-635 ± 25	$13.25^{+12.32}_{-8.98}$	425^{+31}_{-21}	3660^{+2029}_{-646}	2238^{+18956}_{-1648}
Alt.	-372 ± 50	$9.55^{+10.39}_{-6.88}$	426^{+31}_{-22}	3764^{+2660}_{-774}	2379^{+28126}_{-1812}

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 $A_{obs} \gg 1.0$

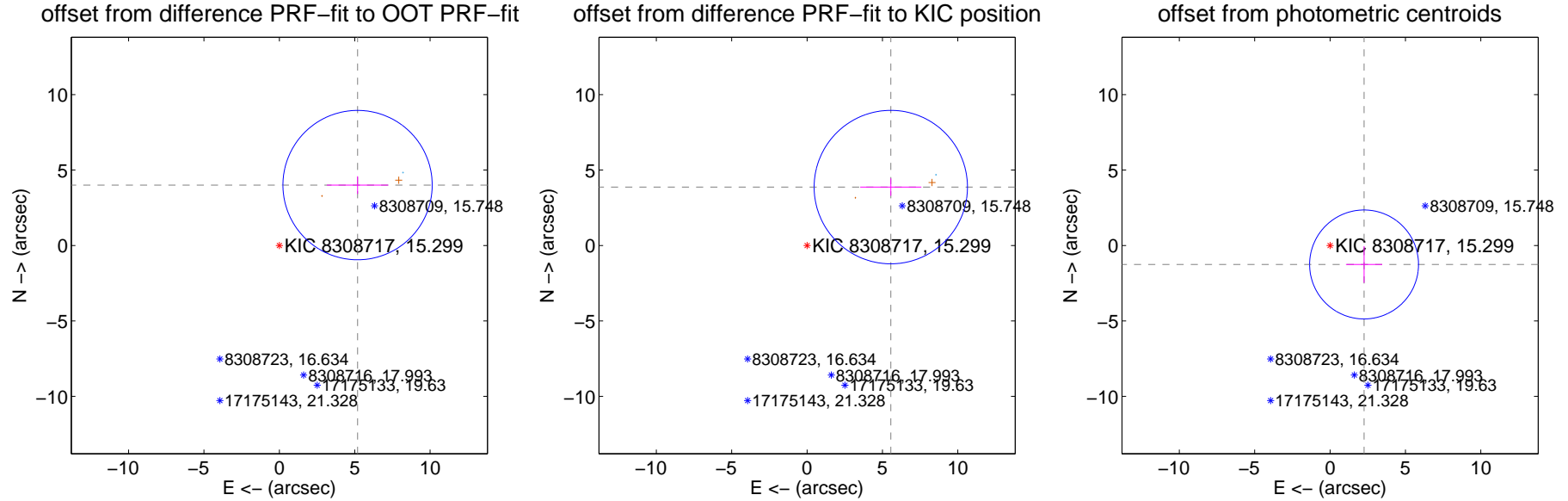
DV Centroid Data

Supplemental centroid analysis for 008308717-01. Kepler magnitude: 15.30. Transit SNR 10.71

There are 1 quarters with good PRF difference image offsets

The direct PRF centroid is offset from the target star catalog position by about 0.38 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	6.555 ± 1.651	3.97	-5.190 ± 2.035	4.004 ± 0.586
PRF-fit source offset from KIC position	6.772 ± 1.696	3.99	-5.556 ± 2.027	3.872 ± 0.576
photometric centroid source offset	2.58 ± 1.20	2.15	-2.26 ± 1.20	-1.26 ± 1.21

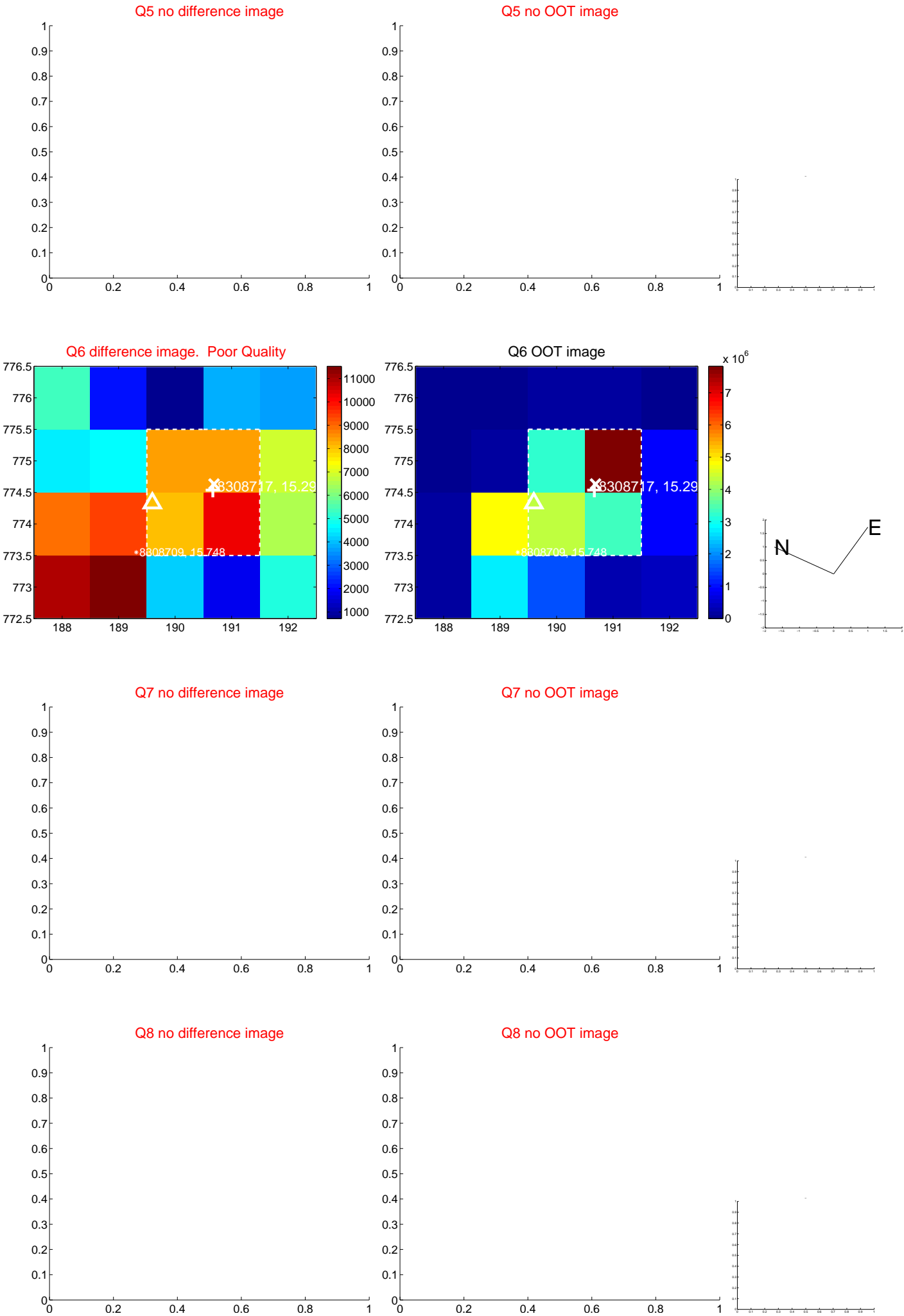


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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

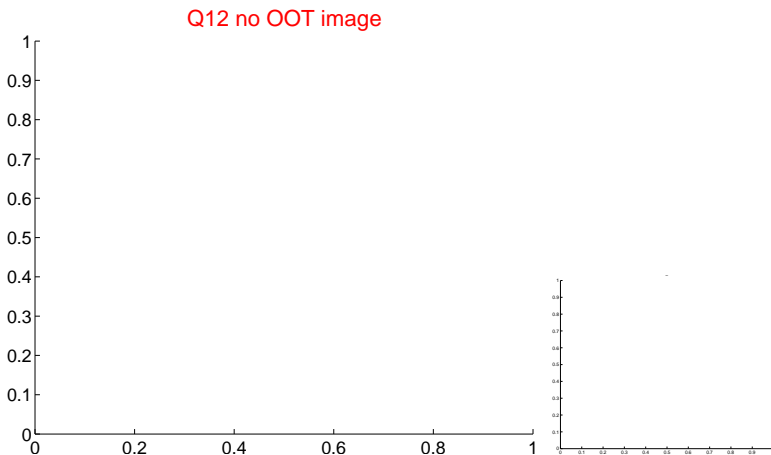
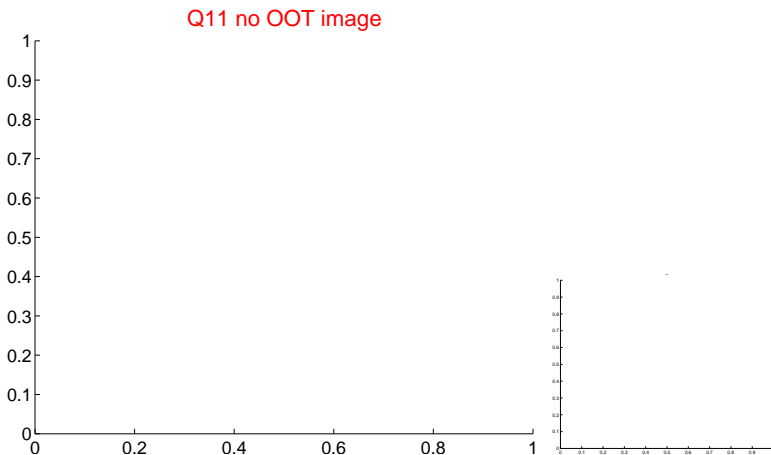
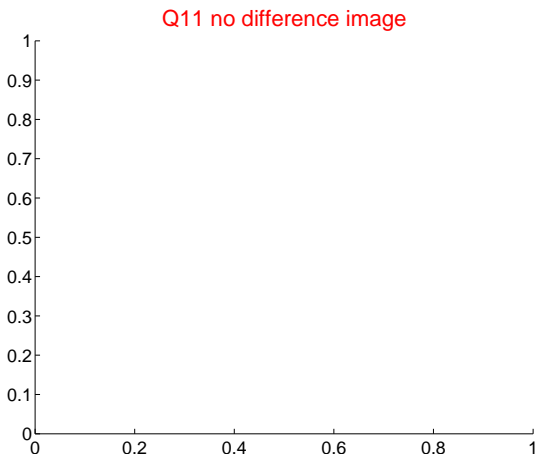
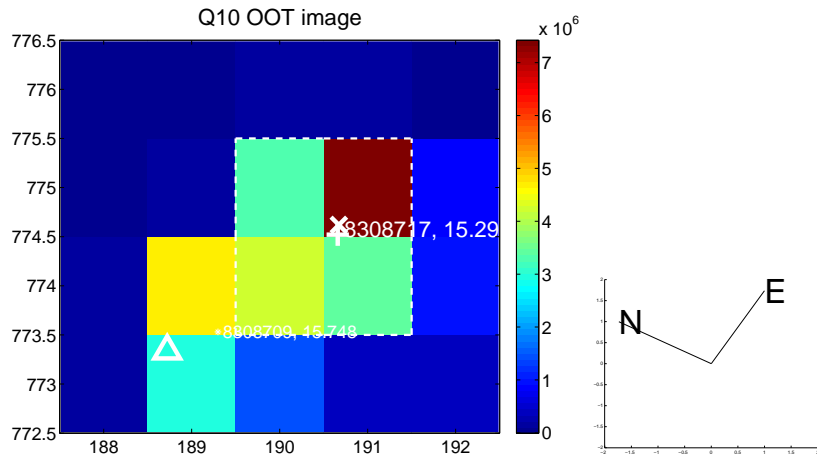
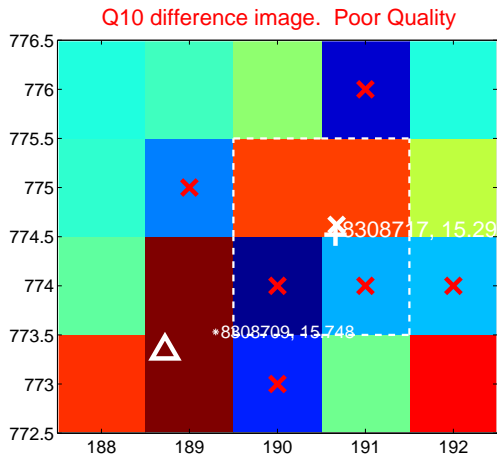
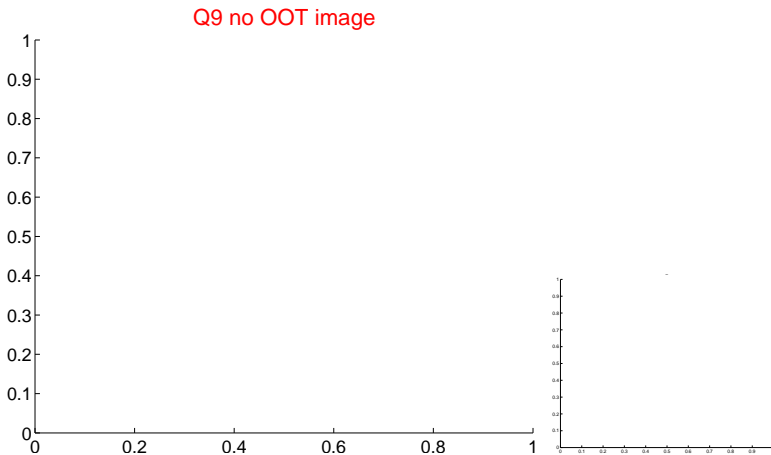
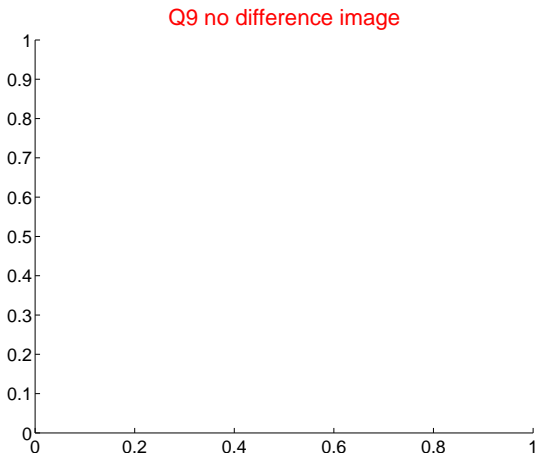
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



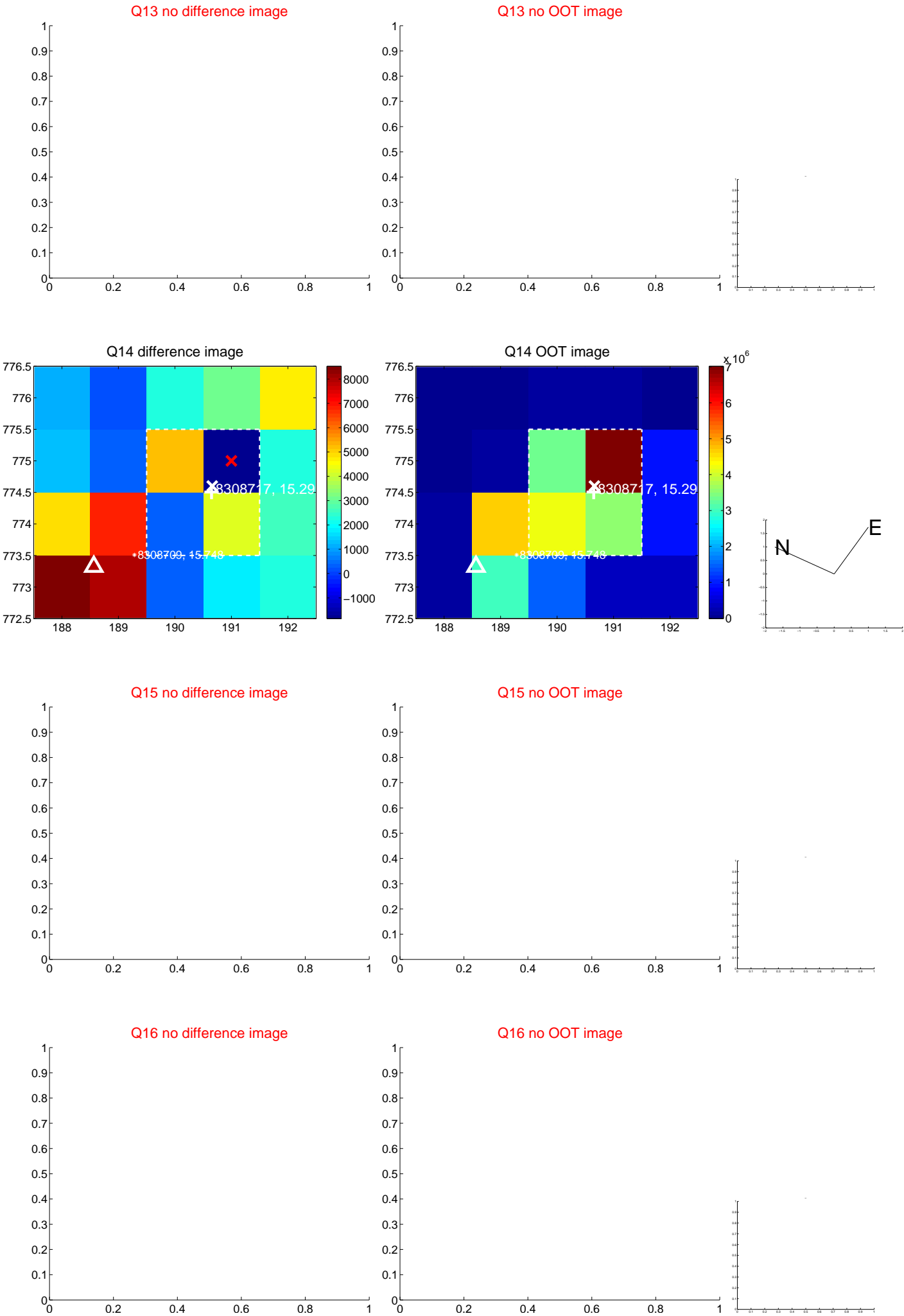
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



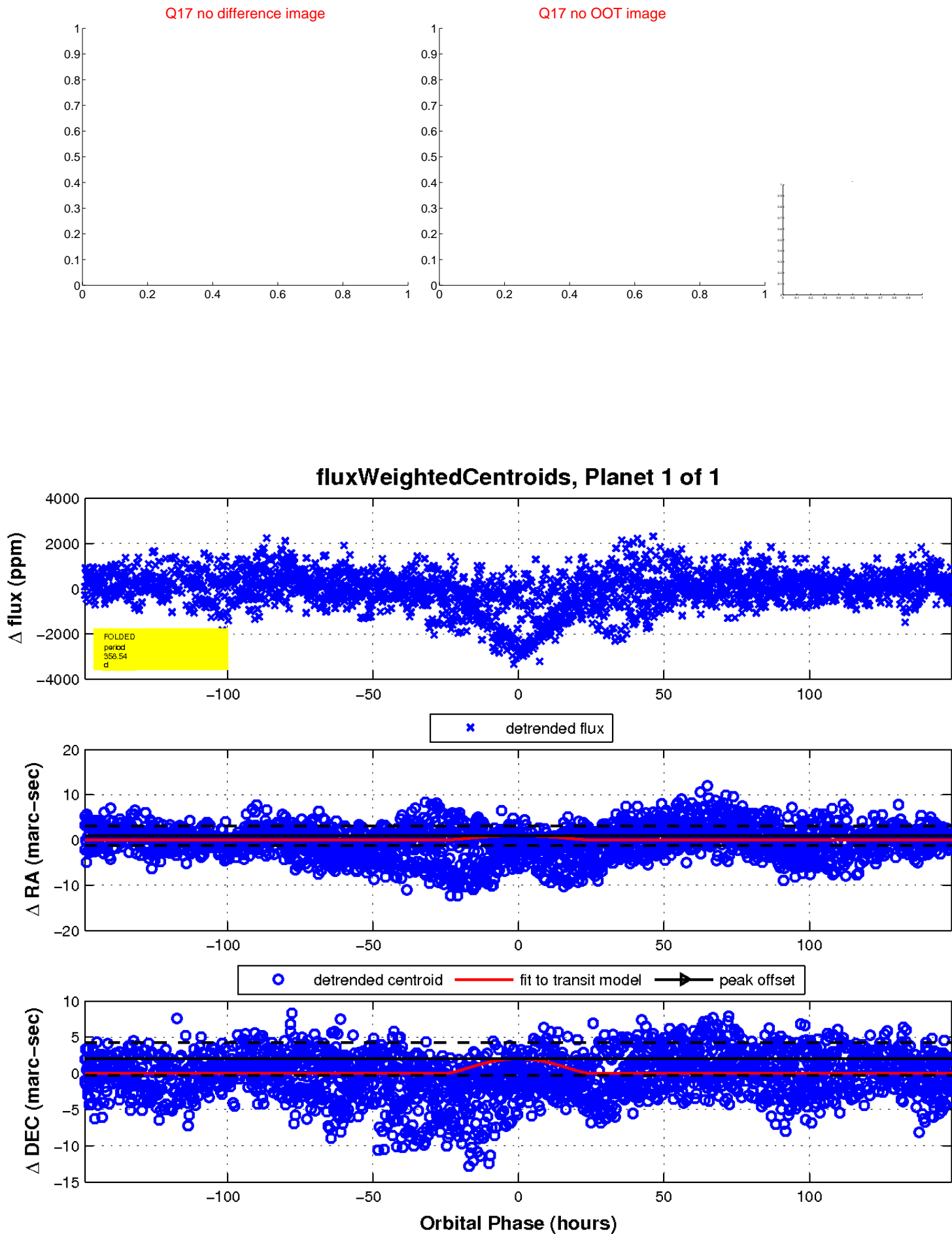
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value



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



UKIRT Image

Declination

