

KIC 006347423

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})
006347423-01	OBS	No	319.760448	178.111207	2196.6	5.601	14.0	6.3	0.76	4994	3.50	0.47

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
006347423-01	OBS	FP	0.00	1	0	1	0	INDIV_TRANS_CHASES—LPP_DV—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_POS_DV—INCONSISTENT_TRANS—HALO_GHOST

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

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

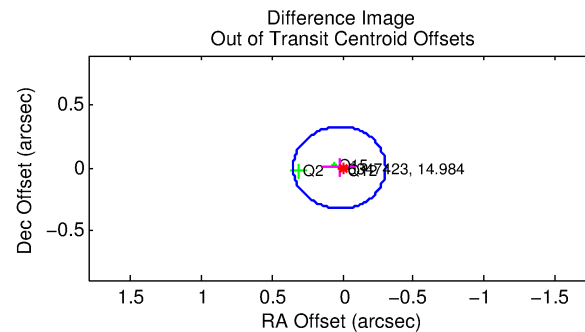
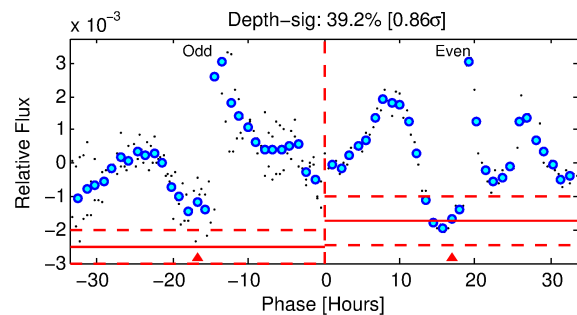
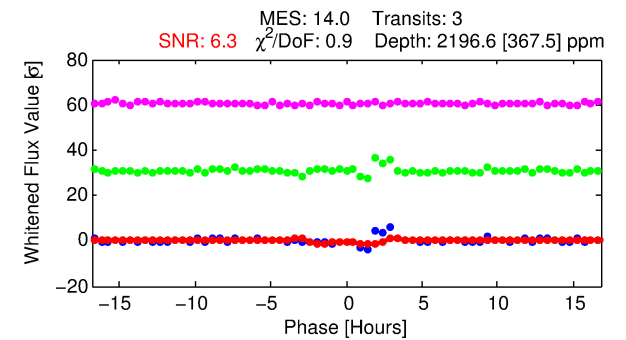
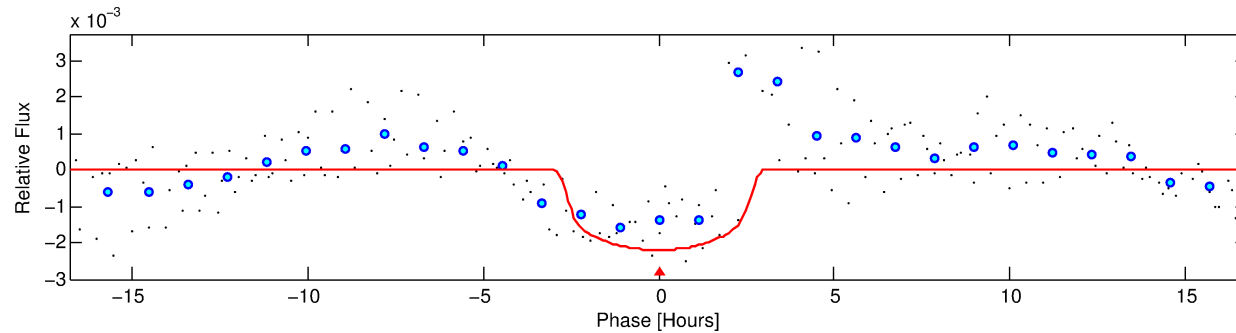
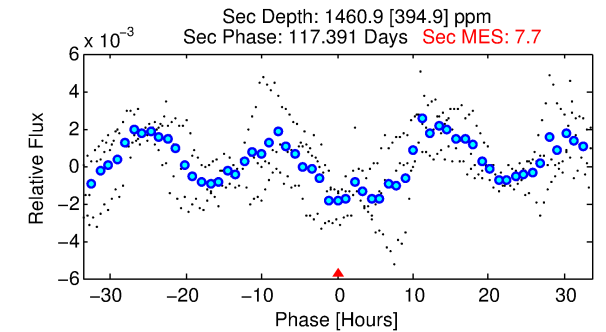
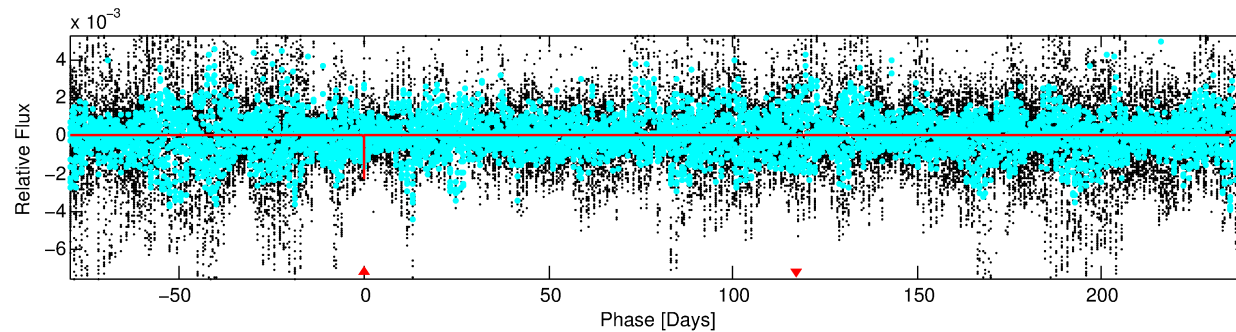
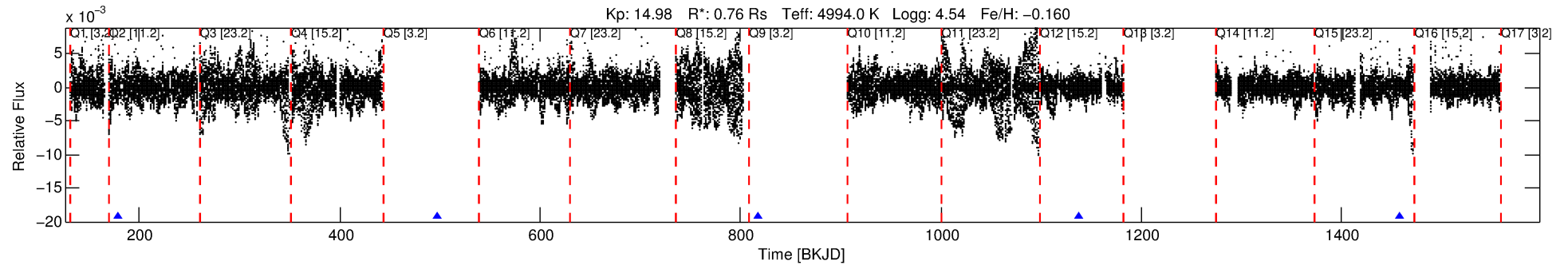
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 006347423-01

No Significant Match Found

DV One-Page Summary

KIC: 6347423 Candidate: 1 of 1 Period: 319.760 d



DV Fit Results:

Period = 319.76045 [0.00197] d
Epoch = 178.1112 [0.0062] BKJD
Rp/R* = 0.0424 [0.0326]
a/R* = 427.31 [1109.18]
b = 0.36 [6.45]
Seff = 0.47 [0.10]
Teq = 211 [11] K
Rp = 3.50 [2.72] Re
a = 0.8227 [0.0861] AU
Ag = 44431.19 [69804.30] [0.64 σ]
Teffp = 4741 [1857] K [2.44 σ]

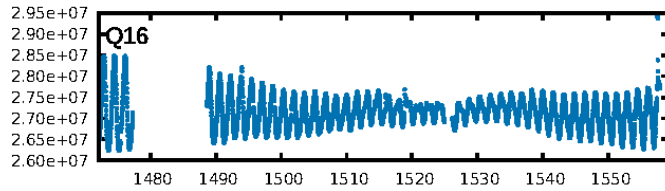
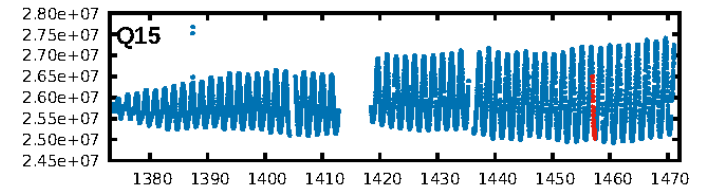
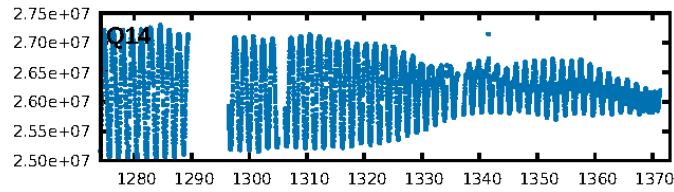
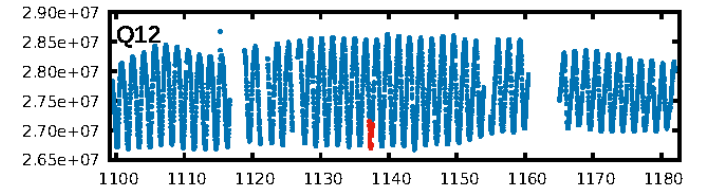
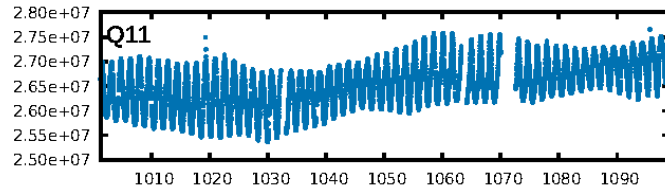
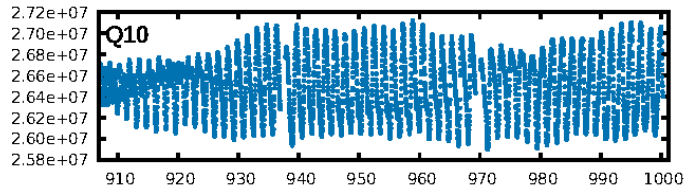
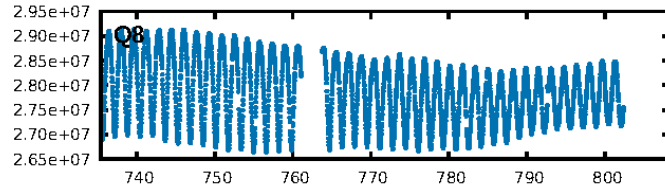
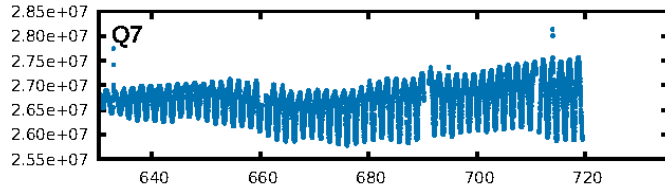
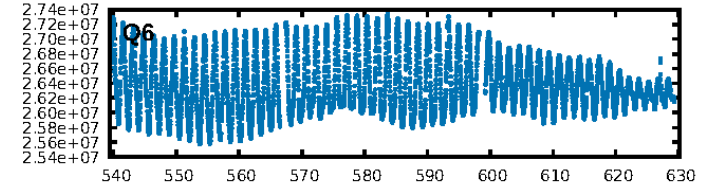
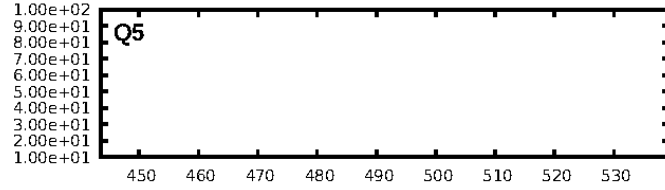
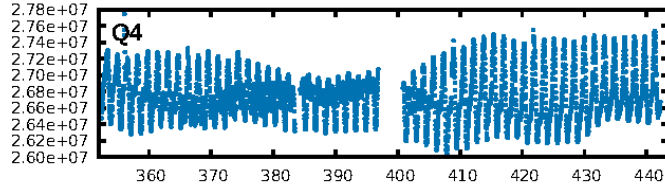
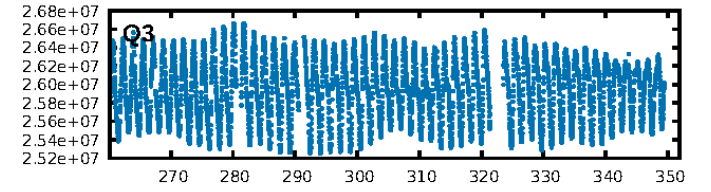
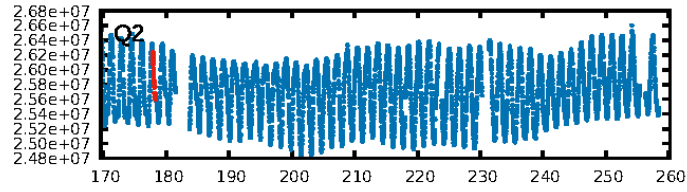
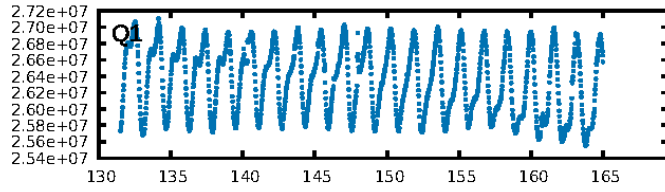
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: 80.2%
ModelChiSquareGoF-sig: 96.3%
Bootstrap-pfa: 4.98e-13
RollingBand-fgt: 1.00 [3/3]
GhostDiagnostic-chr: -0.1242
Centroid-sig: 4.7%
Centroid-so: 0.968 arcsec [1.80 σ]
OotOffset-rm: 0.023 arcsec [0.21 σ]
KicOffset-rm: 0.118 arcsec [1.53 σ]
OotOffset-st: 1/1/1/0 [3]
KicOffset-st: 1/1/1/0 [3]
DiffImageQuality-fgm: 1.00 [3/3]
DiffImageOverlap-fno: 1.00 [3/3]

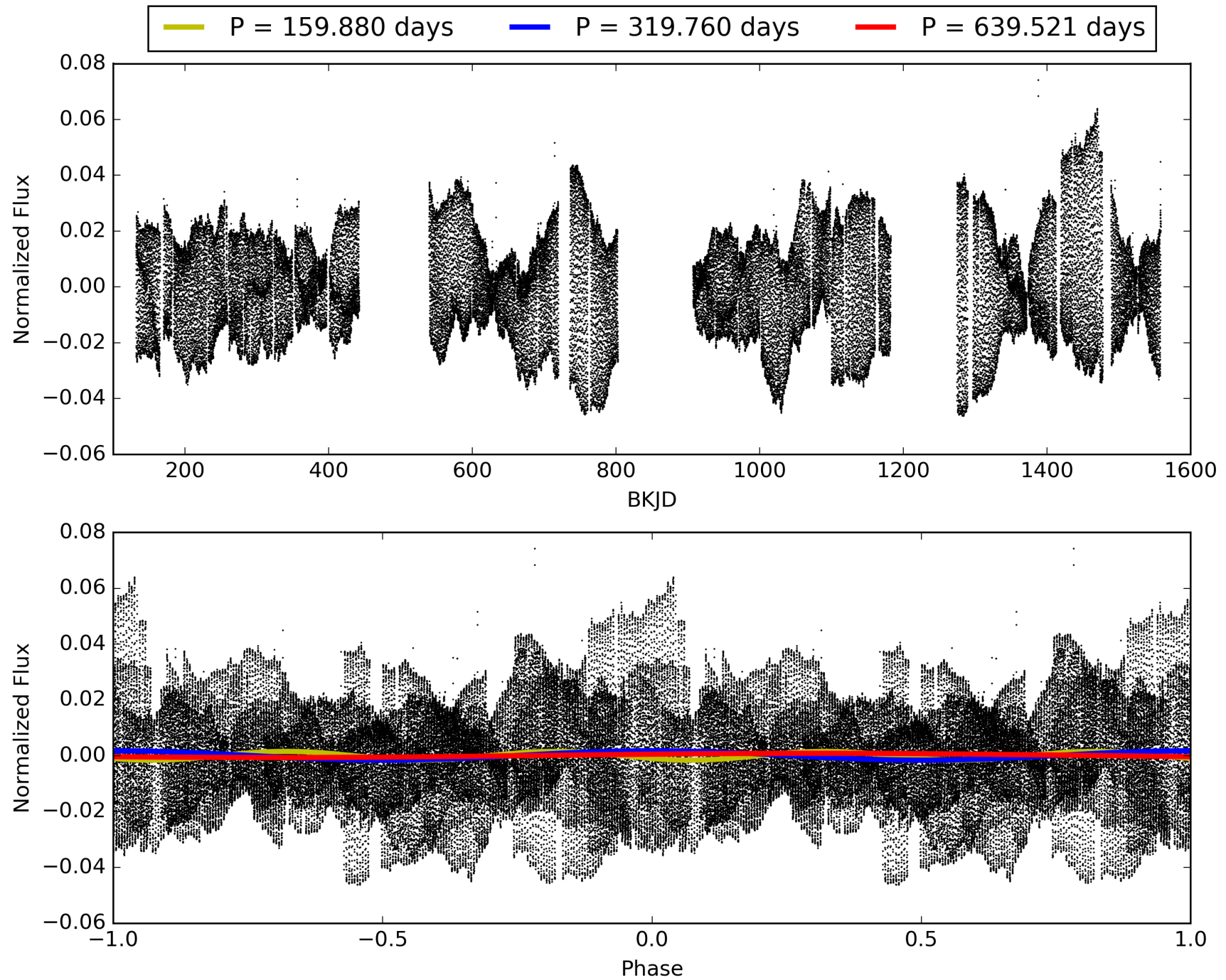
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 31-Jan-2016 23:50:08 Z

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

TCE 006347423-01, PDC Light Curves

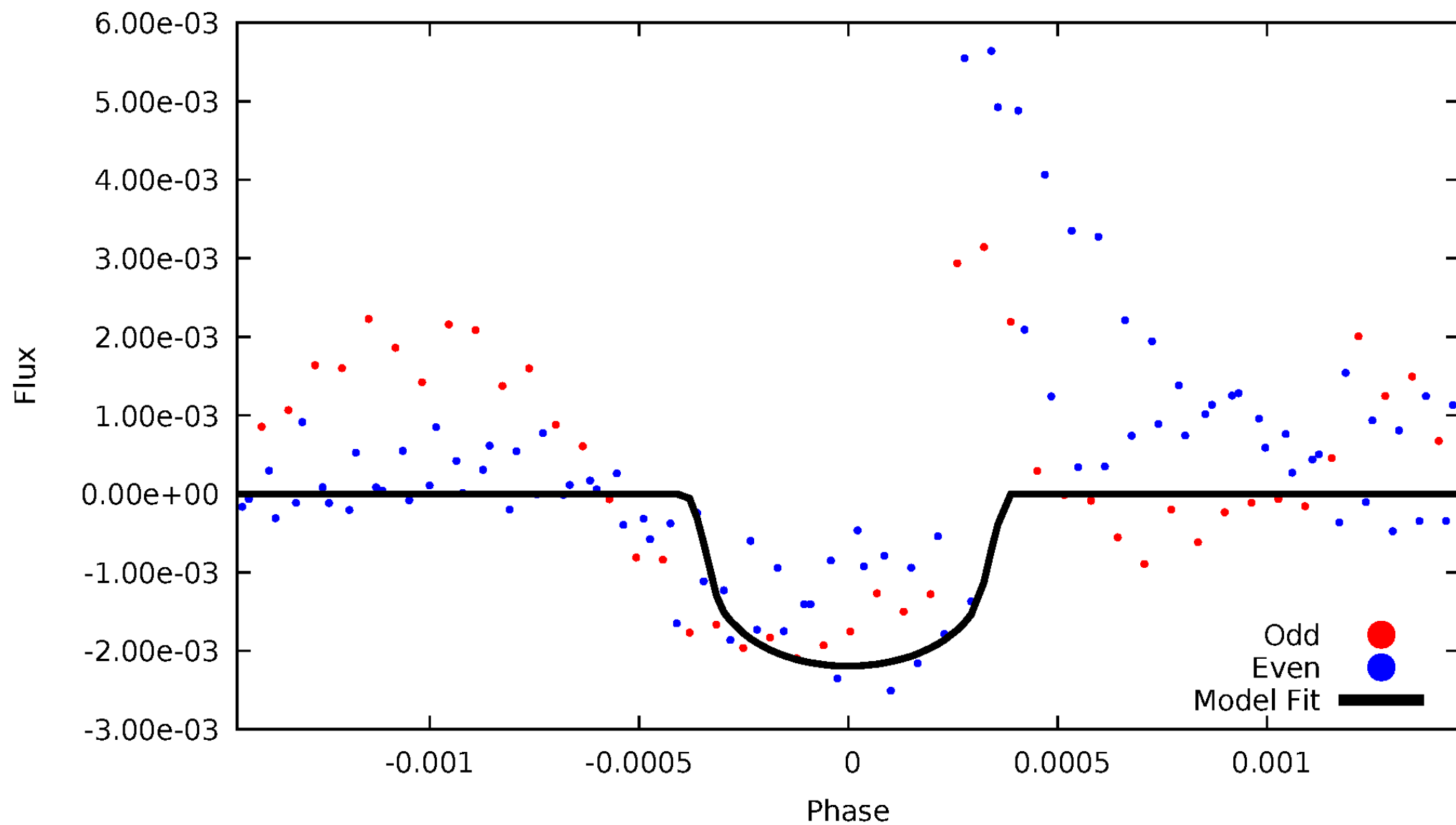


TCE 006347423-01



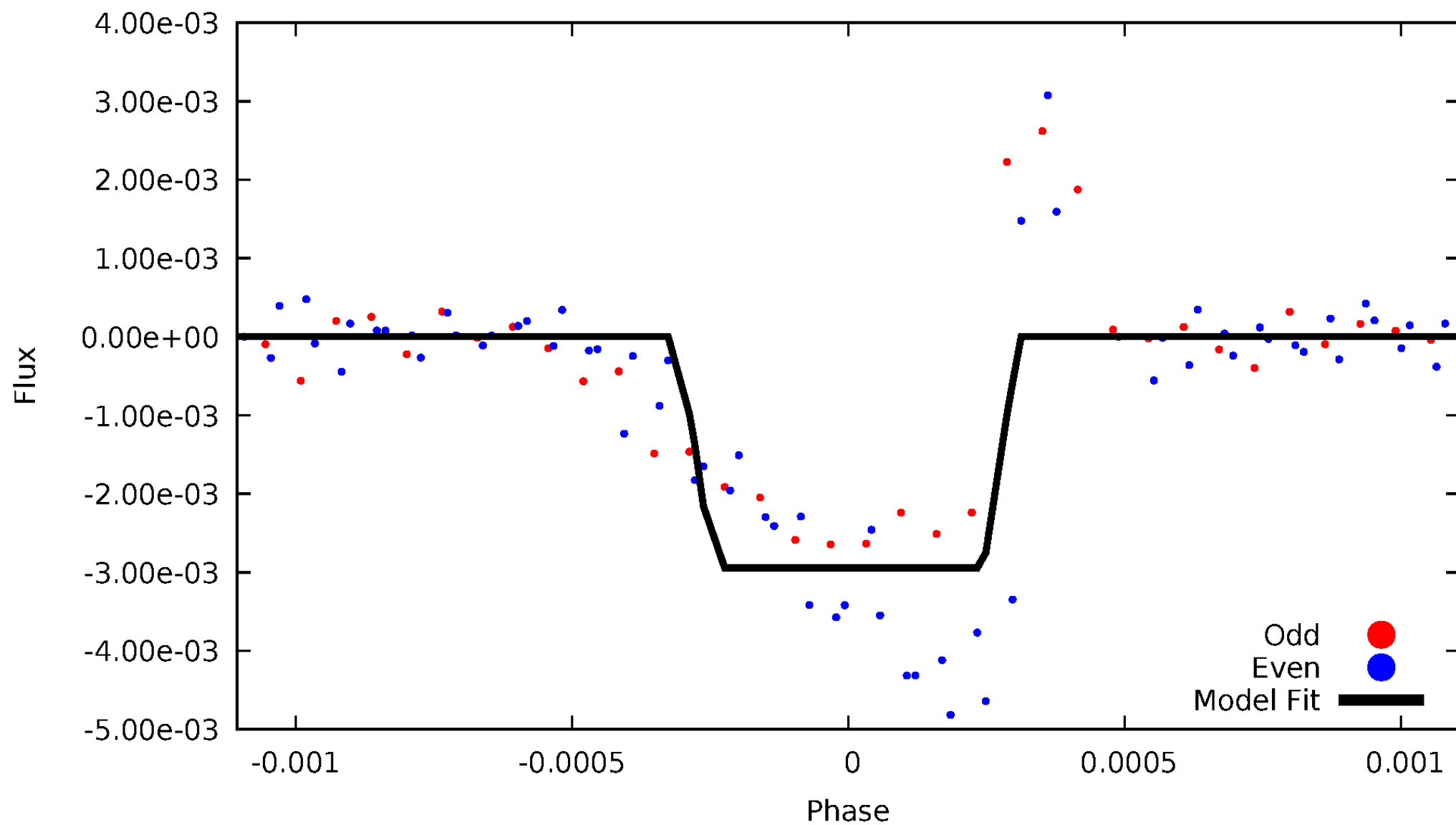
DV Odd/Even

TCE 006347423-01

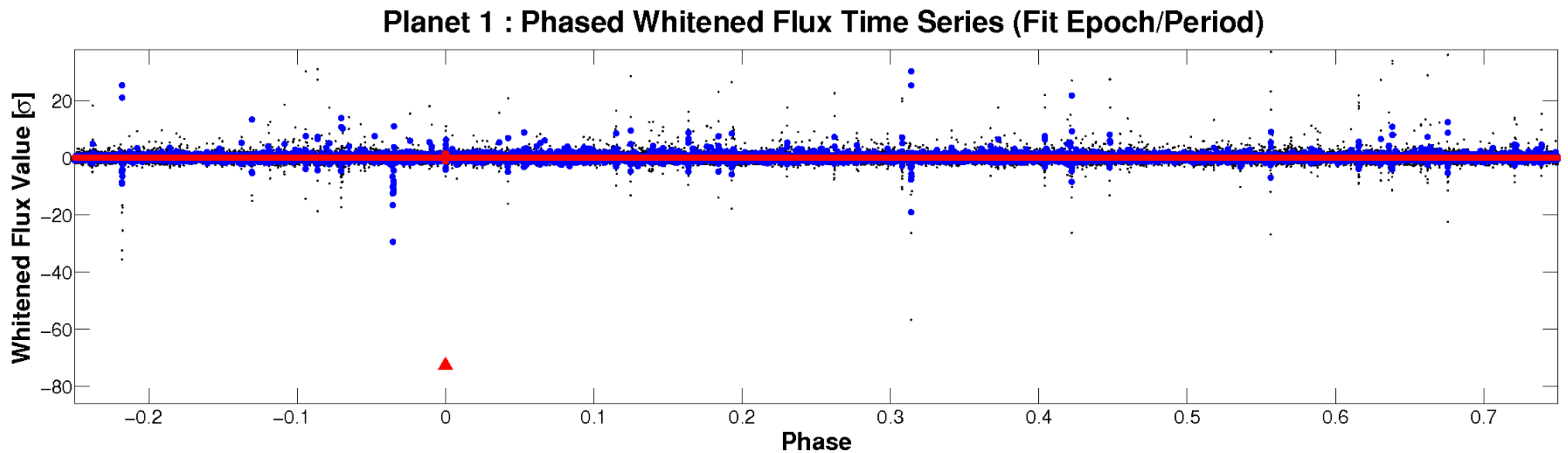
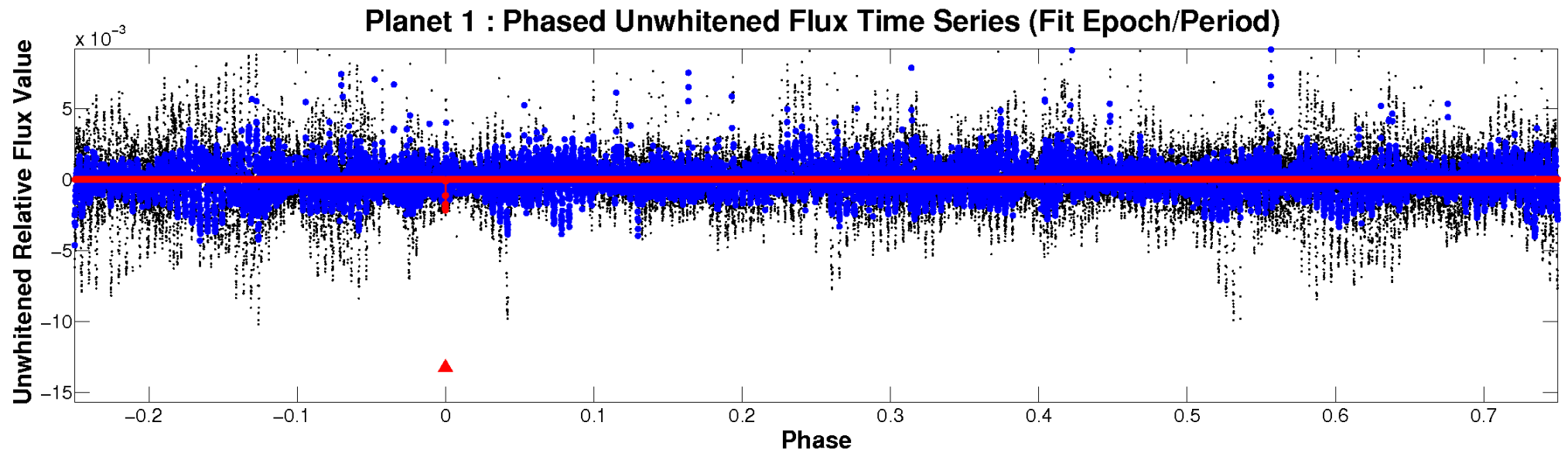


ALT Odd/Even

TCE 006347423-01

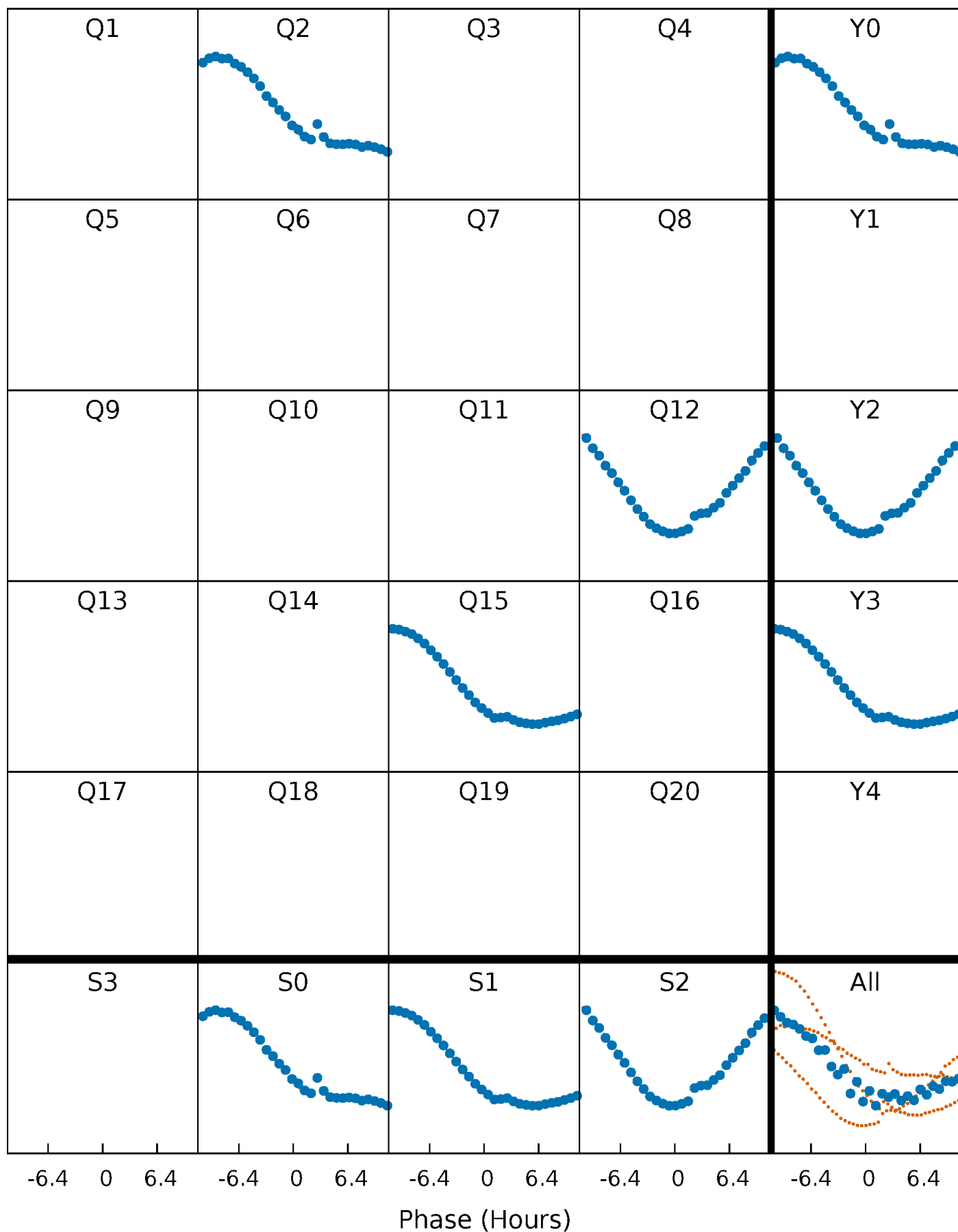


Non-Whitened Vs. Whitened Light Curve



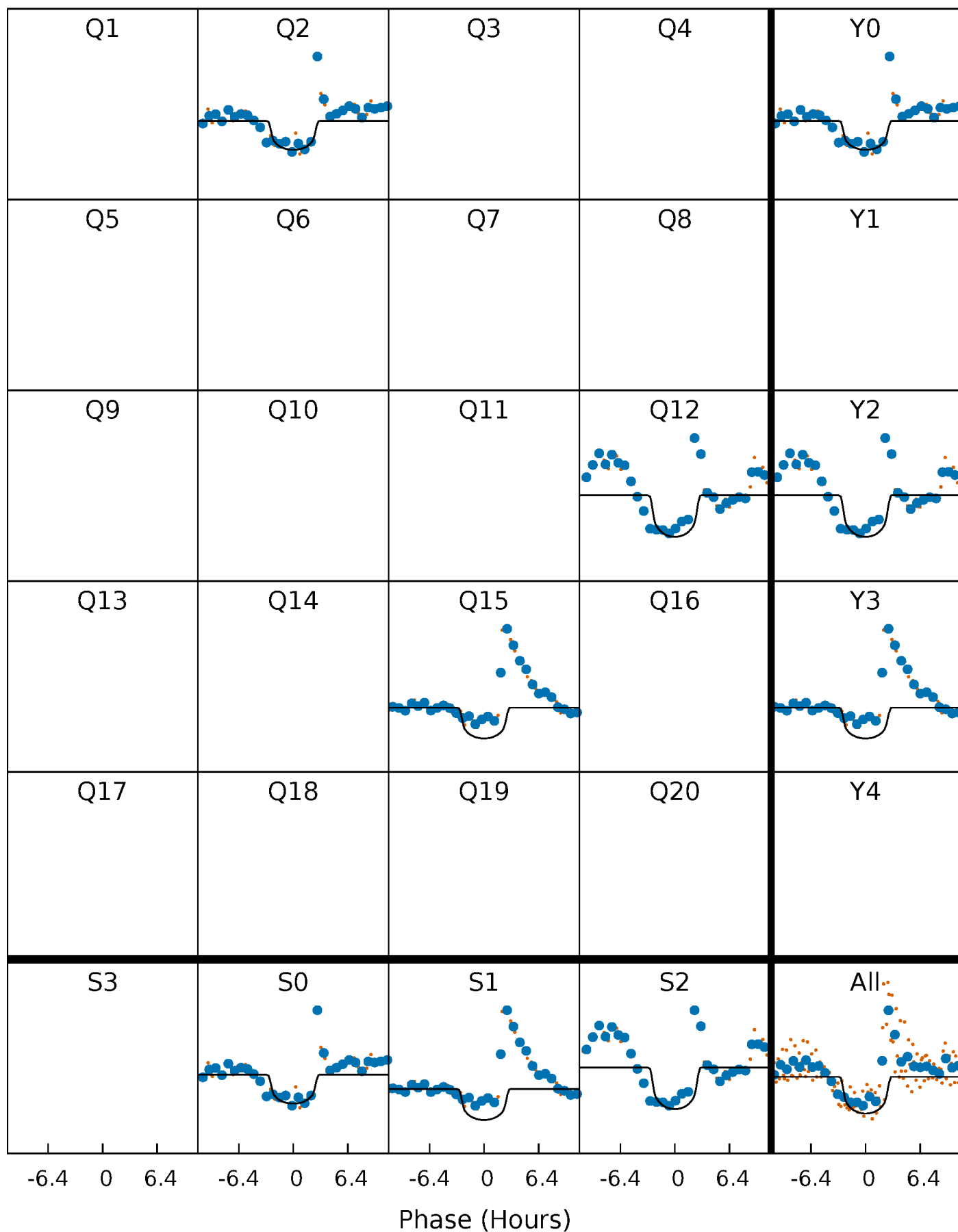
PDC Quarter-Phased Transit Curves

TCE 006347423-01 P=319.760447 Days $T_0=178.111207$ (BKJD)



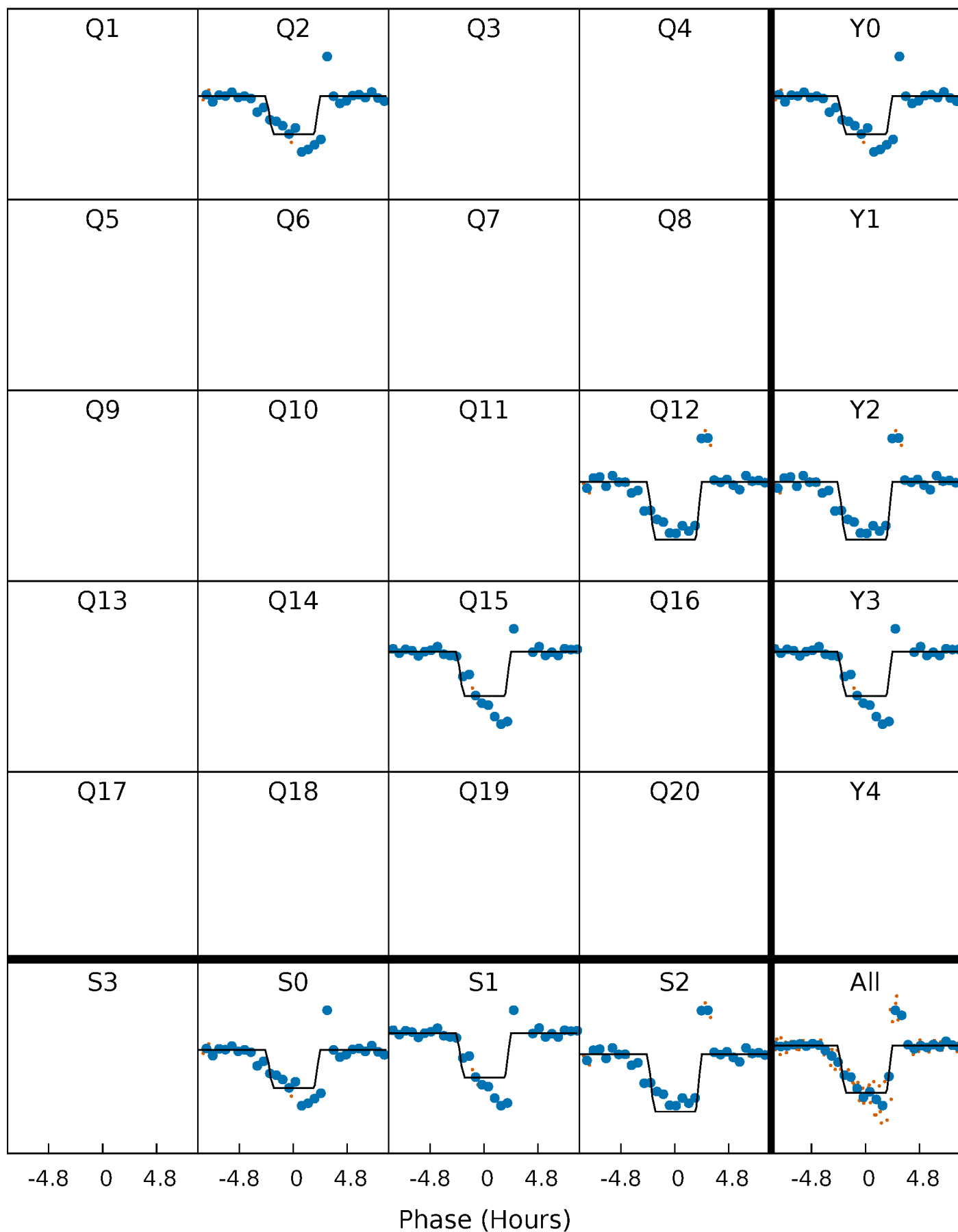
DV Quarter-Phased Transit Curves

TCE 006347423-01 P=319.760447 Days $T_0=178.111207$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

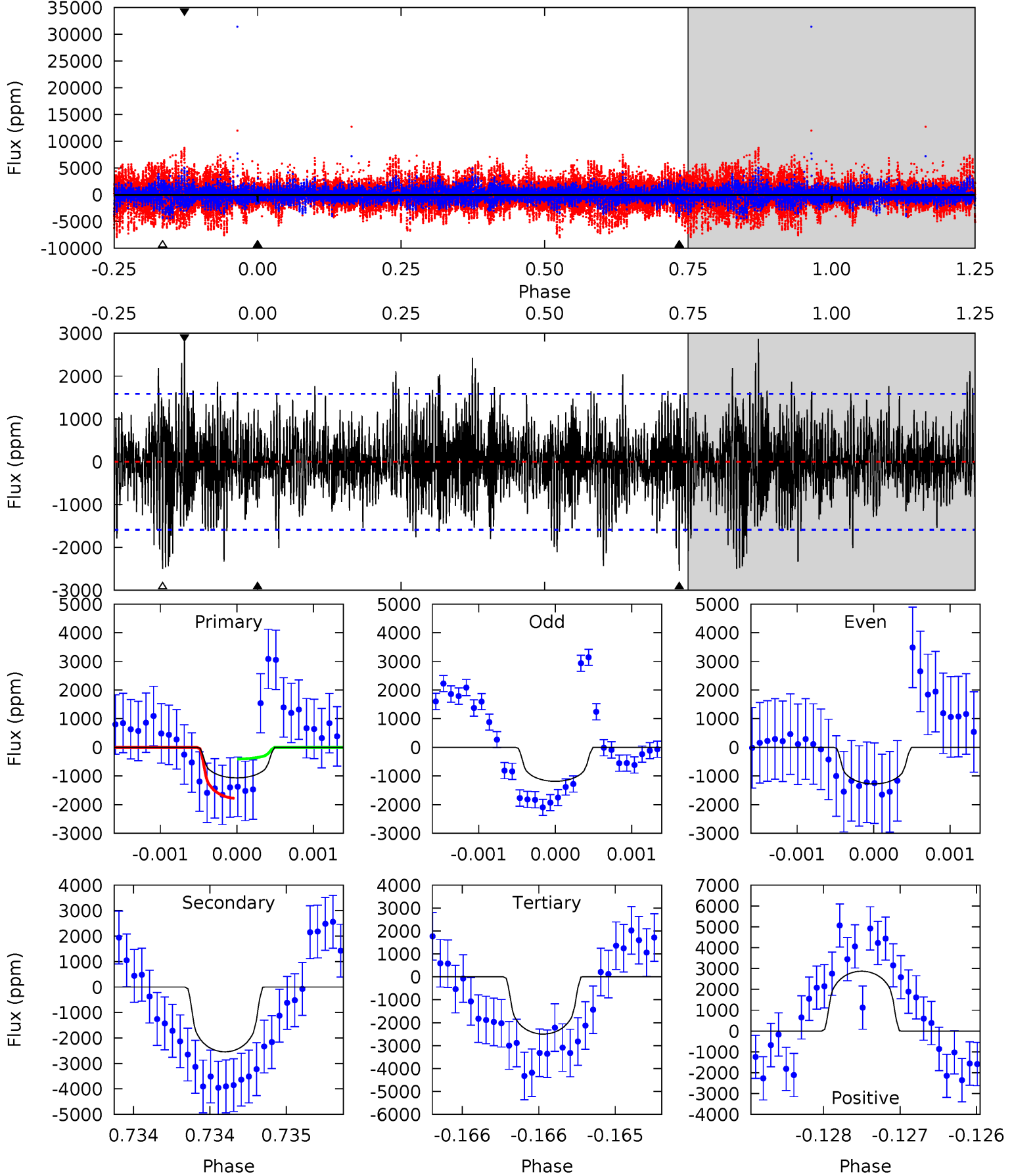
TCE 006347423-01 P=319.757969 Days $T_0=178.109907$ (BKJD)



DV Model-Shift Uniqueness Test

006347423-01, P = 319.760447 Days, E = 178.111207 Days

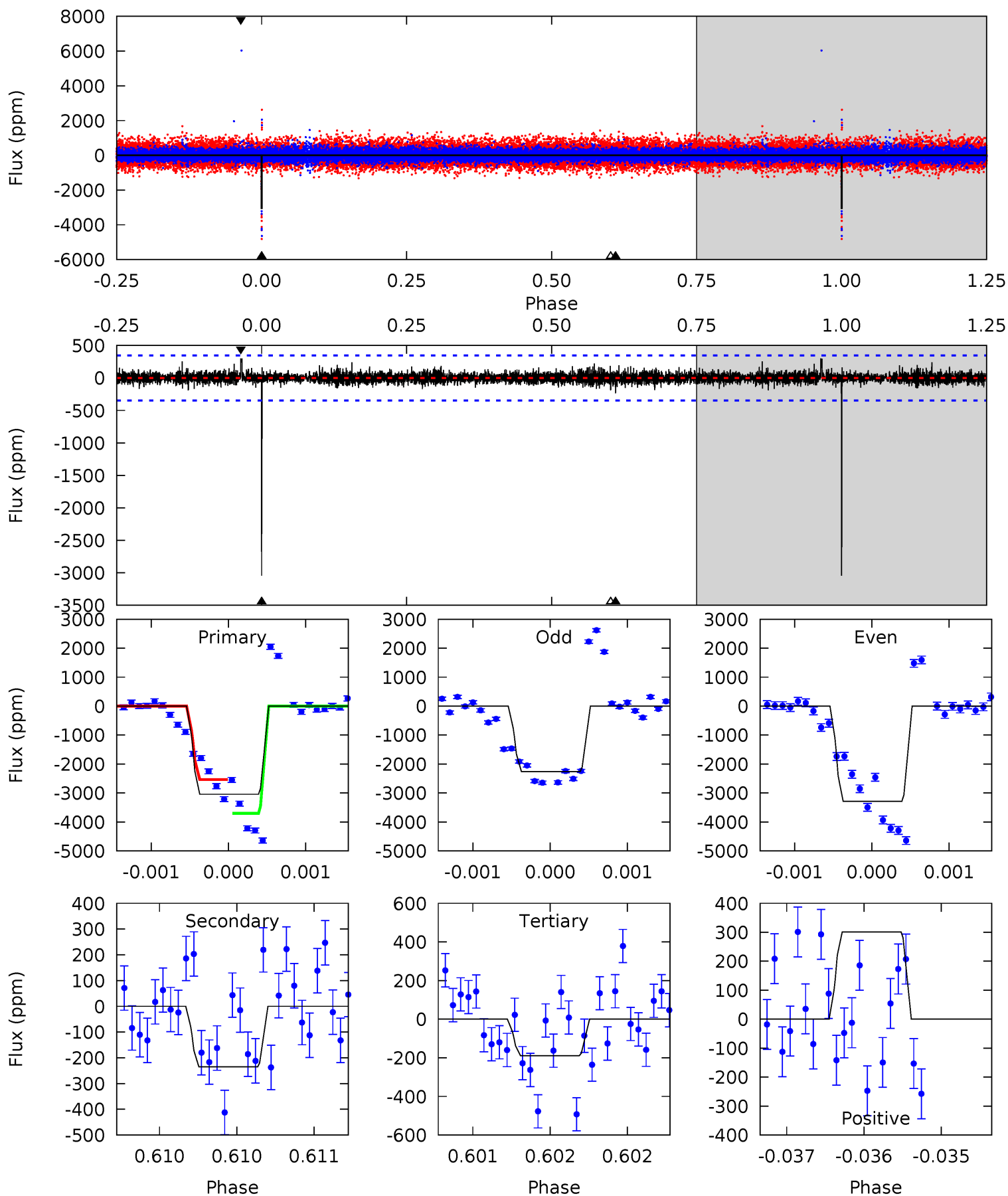
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
3.69	8.81	8.65	9.94	5.49	3.36	2.32	-4.96	-6.25	0.16	-1.13	0.13	0.90	0.53	2.38



Alt Model-Shift Uniqueness Test

006347423-01, P = 319.757969 Days, E = 178.109907 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
48.5	3.74	3.01	4.80	5.54	3.43	0.76	45.5	43.7	0.73	-1.06	8.16	0.93	0.09	9.20



Stellar Parameters For KIC 006347423

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (g \cdot \text{cm}^{-3})$
	4994^{+151}_{-151}	$4.542^{+0.068}_{-0.094}$	$-0.160^{+0.300}_{-0.250}$	$0.756^{+0.086}_{-0.078}$	$0.726^{+0.103}_{-0.055}$	$2.365^{+0.709}_{-0.599}$
	+3%/-3%	+1%/-2%	+188%/-156%	+11%/-10%	+14%/-8%	+30%/-25%
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 006347423-01 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	-2544 ± 289	$3.81^{+2.61}_{-2.17}$	297^{+12}_{-12}	5206^{+2843}_{-960}	$65469^{+280987}_{-42075}$
Alt.	-235 ± 63	$4.74^{+2.62}_{-2.62}$	296^{+13}_{-12}	3156^{+899}_{-406}	3865^{+14454}_{-2363}

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

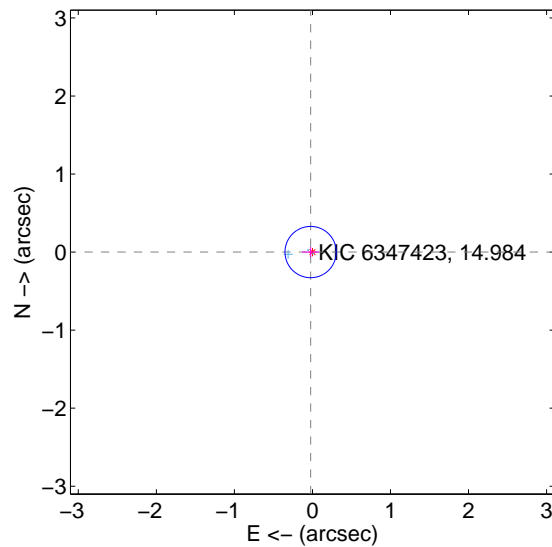
Supplemental centroid analysis for 006347423-01. Kepler magnitude: 14.98. Transit SNR 6.30

There are 3 quarters with good PRF difference image offsets

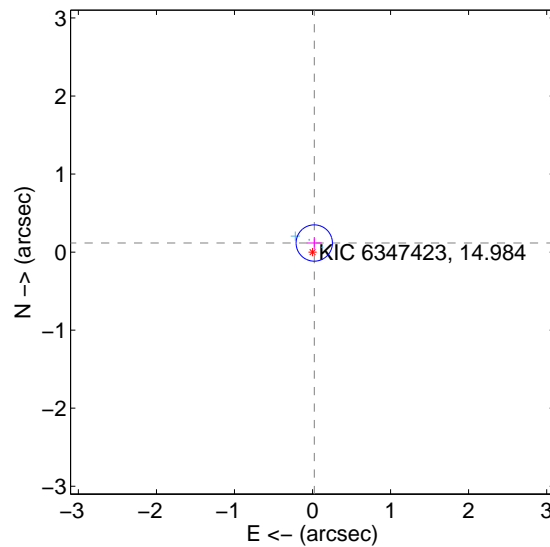
The direct PRF centroid is offset from the target star catalog position by about 0.19 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.023 ± 0.109	0.21	0.023 ± 0.110	0.001 ± 0.068
PRF-fit source offset from KIC position	0.118 ± 0.078	1.53	-0.022 ± 0.096	0.116 ± 0.077
photometric centroid source offset	0.97 ± 0.54	1.80	0.96 ± 0.54	0.13 ± 0.47

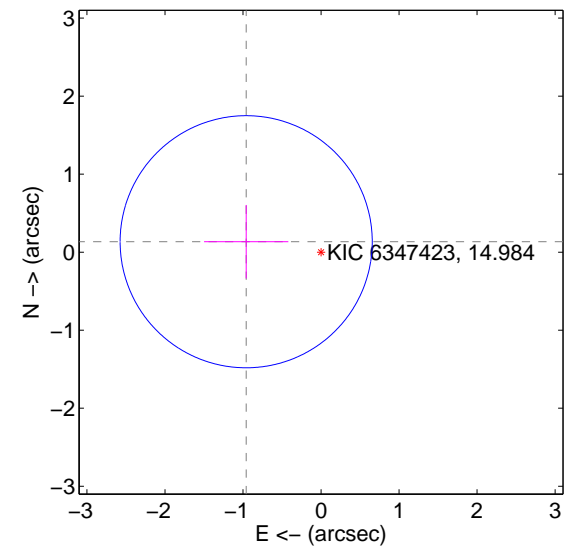
offset from difference PRF-fit to OOT PRF-fit



offset from difference PRF-fit to KIC position

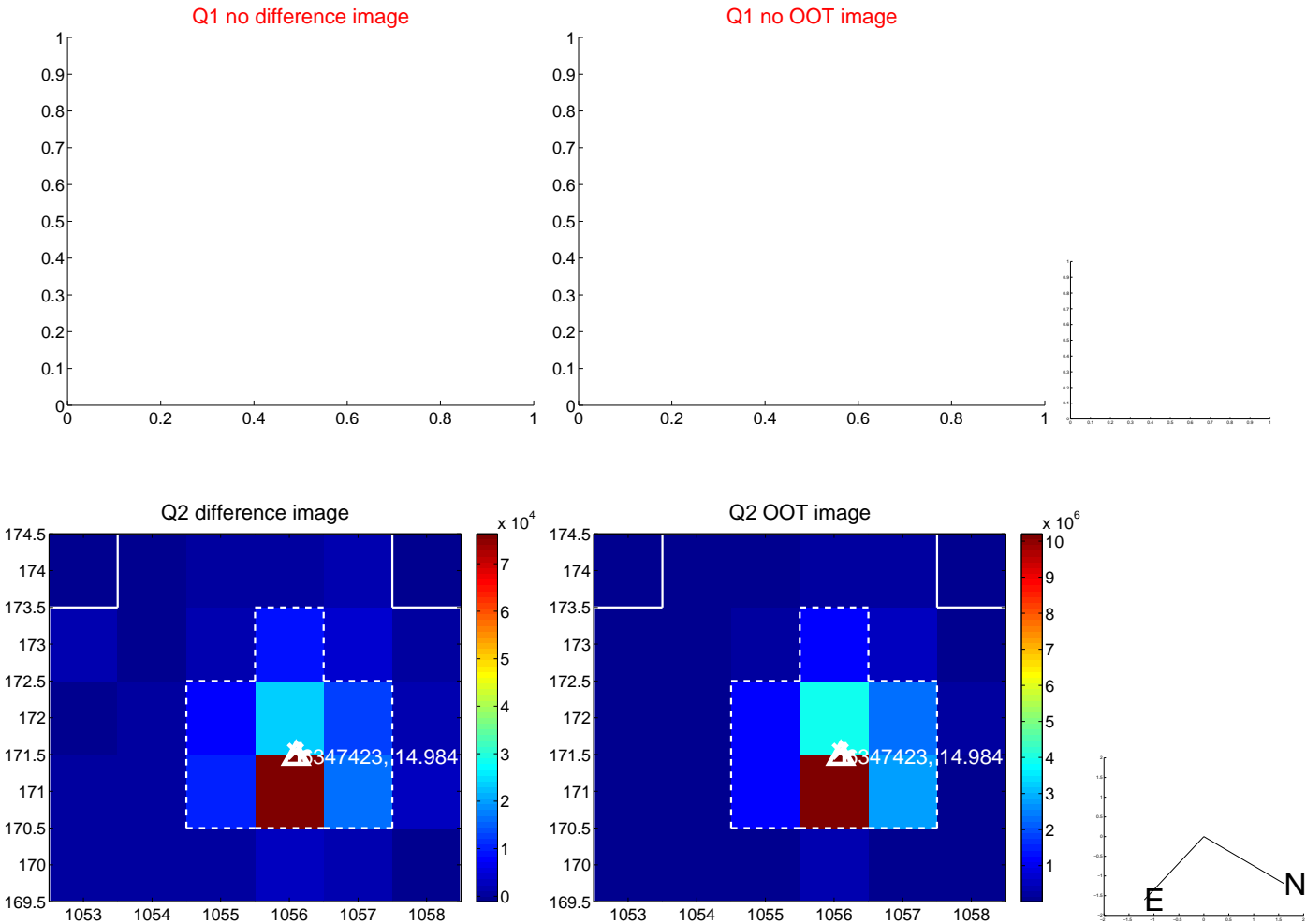


offset from photometric centroids



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.

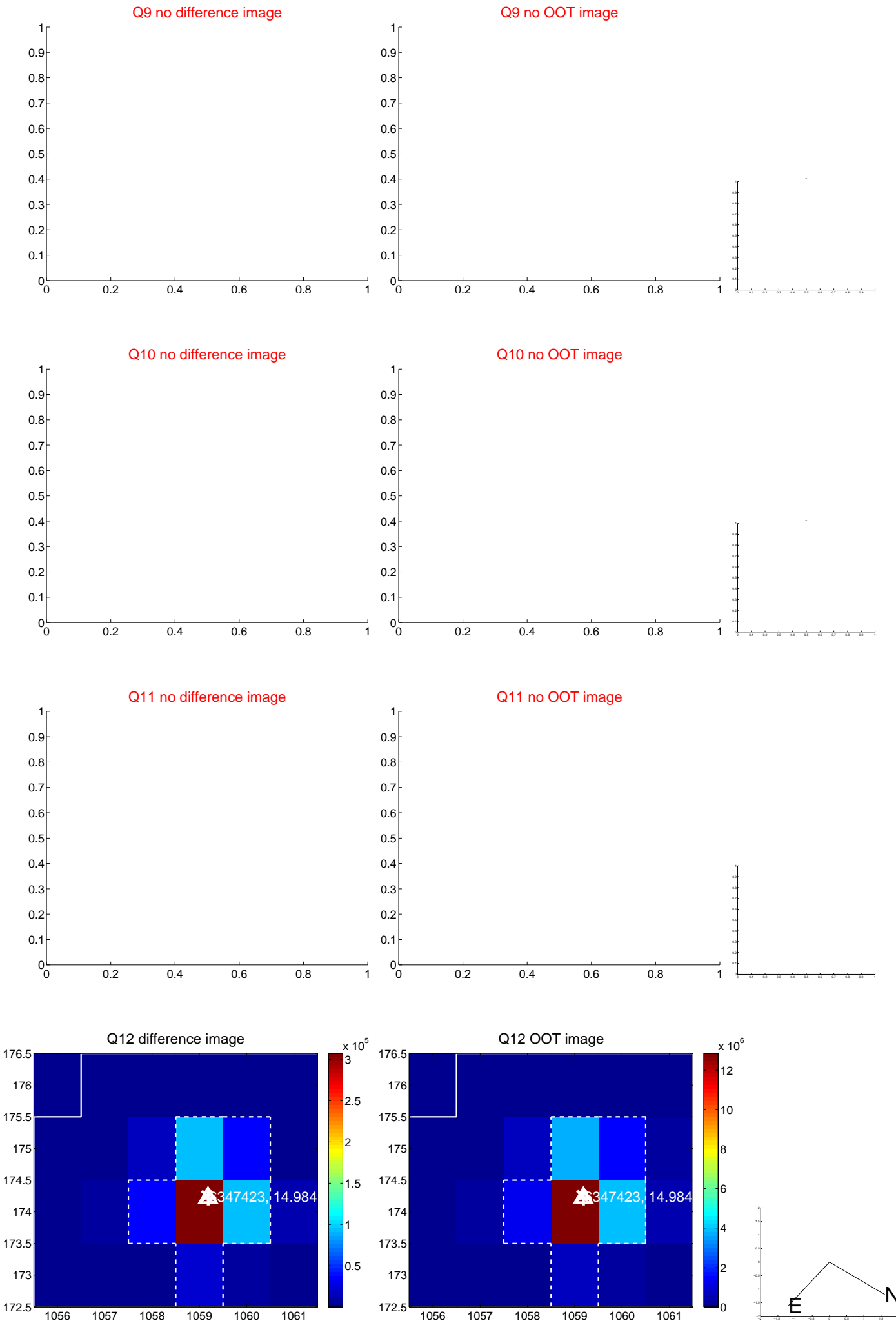
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



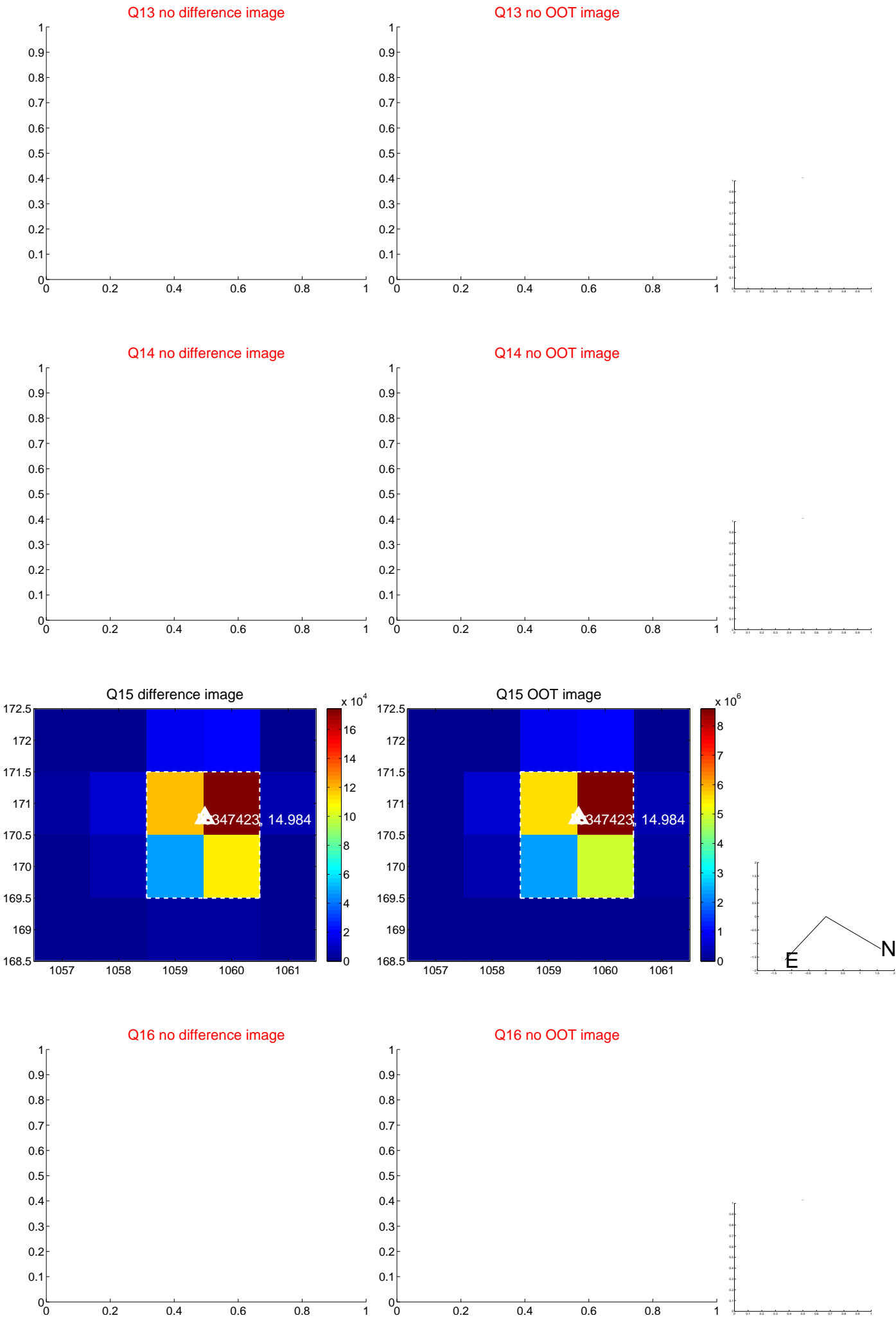
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



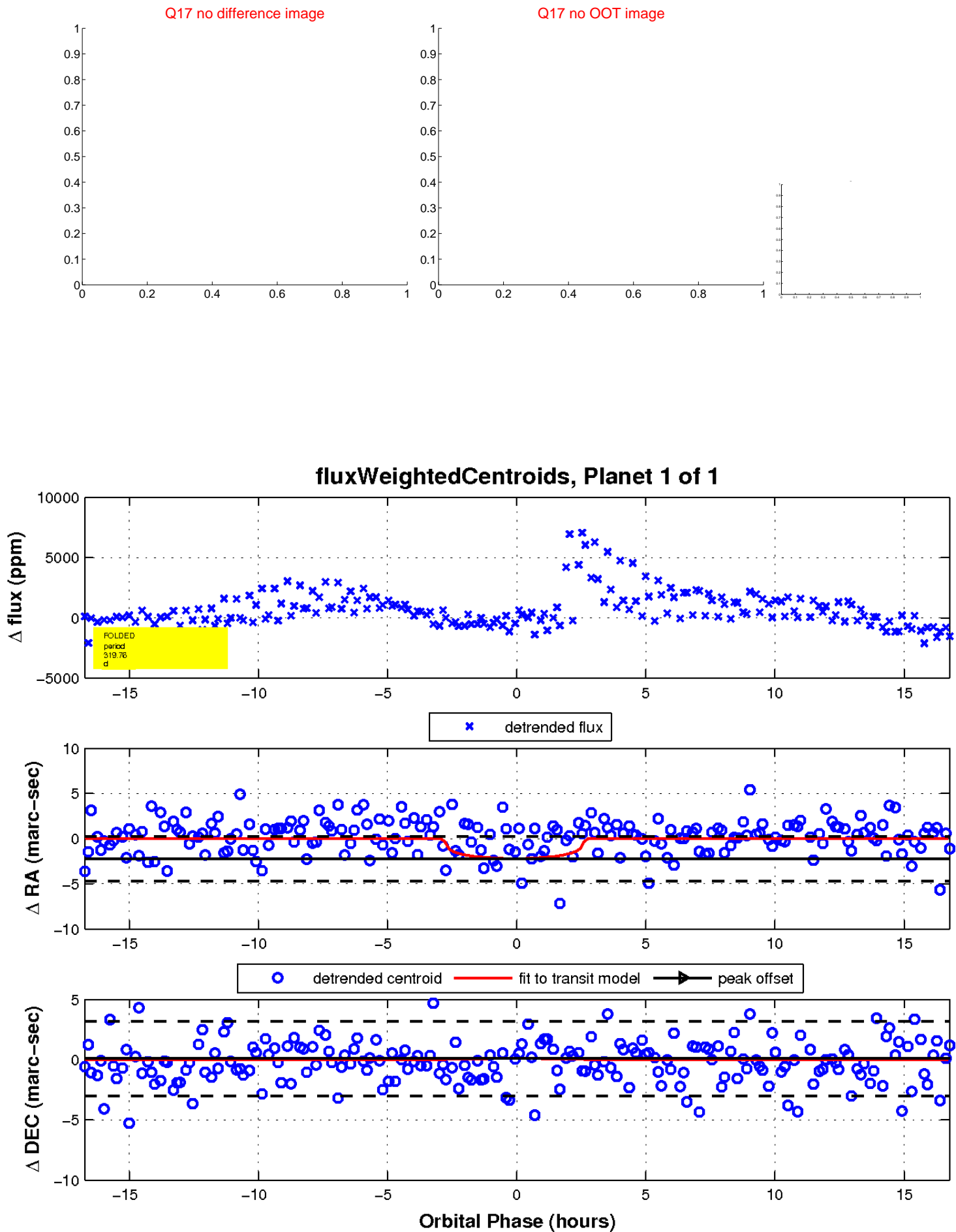
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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.



UKIRT Image

Declination

