

KIC 002717094

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})
002717094-01	OBS	No	0.591853	131.999256	107.7	1.304	8.0	7.9	0.91	5984	0.94	4973.49

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
002717094-01	OBS	FP	0.00	1	0	1	0	LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—CENT_RESOLVED_OFFSET

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

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

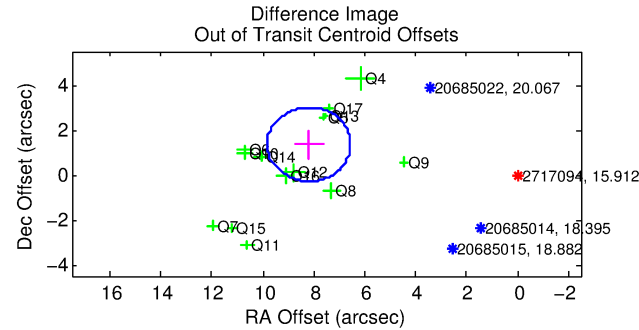
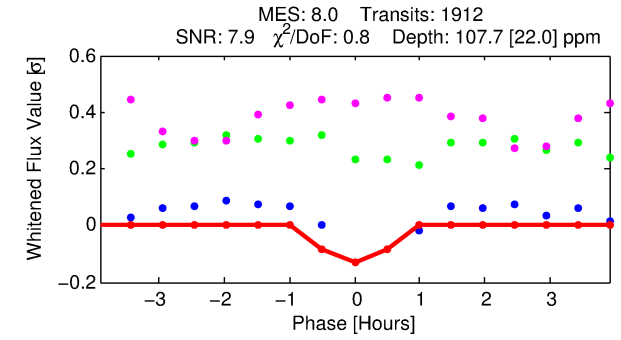
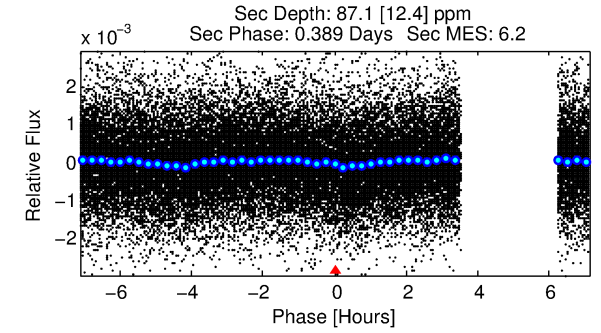
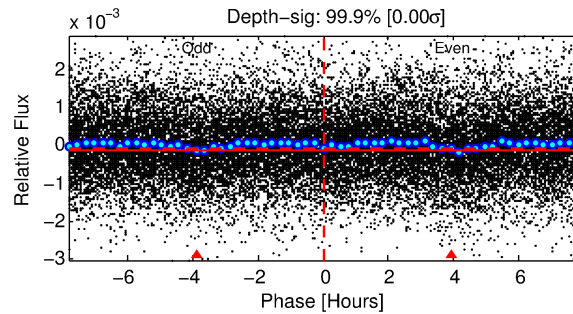
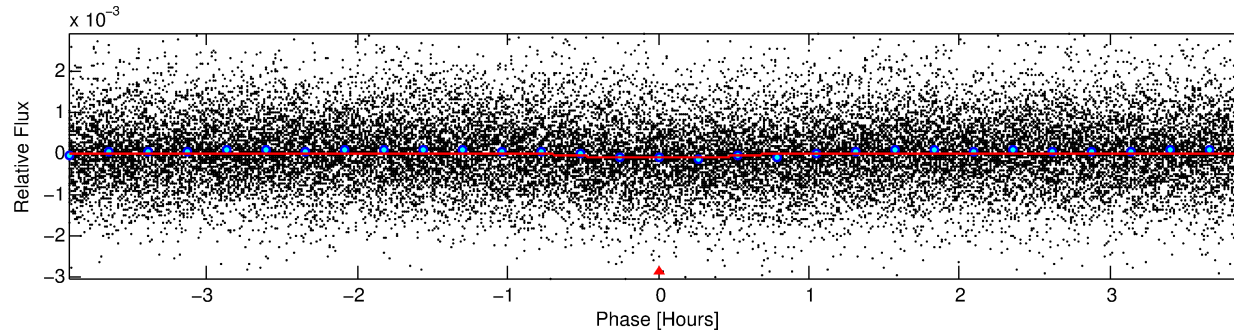
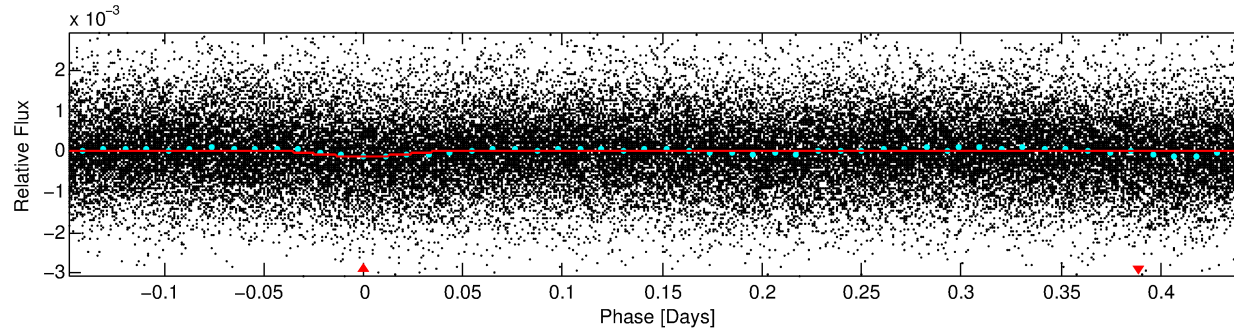
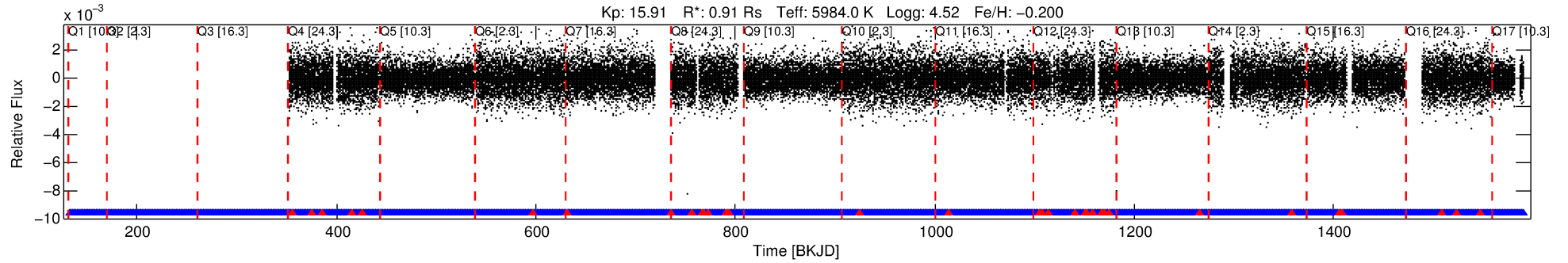
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 002717094-01

No Significant Match Found

DV One-Page Summary

KIC: 2717094 Candidate: 1 of 1 Period: 0.592 d



DV Fit Results:

Period = 0.59185 [0.00002] d
 Epoch = 131.9993 [0.0026] BKJD
 Rp/R* = 0.0095 [0.0209]
 a/R* = 3.53 [34.19]
 b = 0.10 [104.62]
 Seff = 4973.49 [1714.79]
 Teq = 2141 [185] K
 Rp = 0.94 [2.08] Re
 a = 0.0138 [0.0030] AU
 Ag = 10.23 [44.94] [0.21 σ]
 Teffp = 5921 [6489] K [0.58 σ]

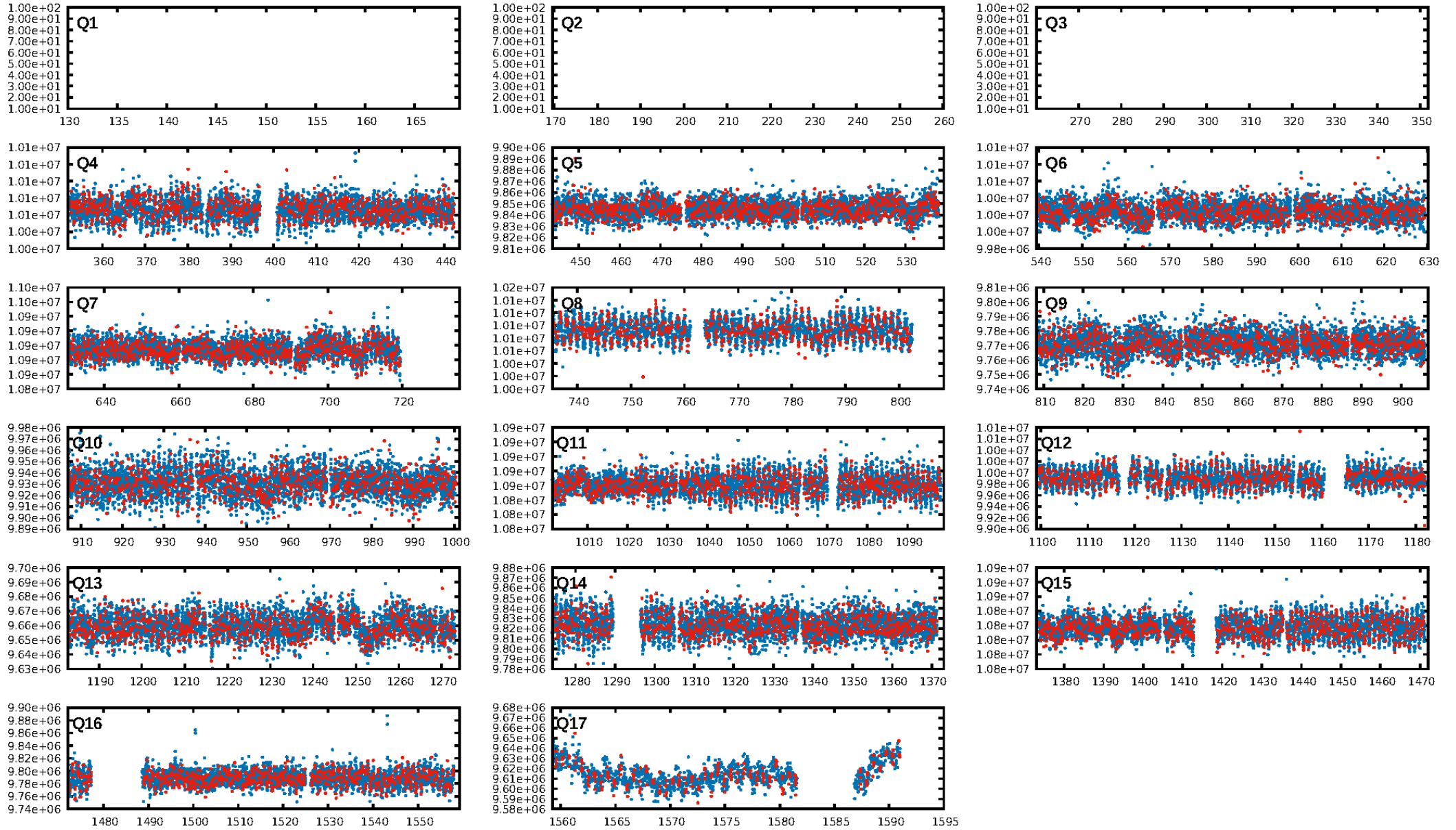
DV Diagnostic Results:

ShortPeriod-sig: N/A
 LongPeriod-sig: N/A
 ModelChiSquare2-sig: N/A
 ModelChiSquareGof-sig: N/A
 Bootstrap-pfa: 7.58e-14
 RollingBand-fgt: 0.98 [1832/1867]
 GhostDiagnostic-chr: 0.7117
 Centroid-sig: 39.5%
 Centroid-so: 2.494 arcsec [1.57 σ]
 OotOffset-rm: 8.301 arcsec [15.17 σ]
 KicOffset-rm: 8.629 arcsec [19.04 σ]
 OotOffset-st: 3/3/4/4 [14]
 KicOffset-st: 3/3/4/4 [14]
 DiffImageQuality-fgm: 0.86 [12/14]
 DiffImageOverlap-fno: 1.00 [14/14]




Software Revision: svn-ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 30-Jan-2016 02:00:50 Z

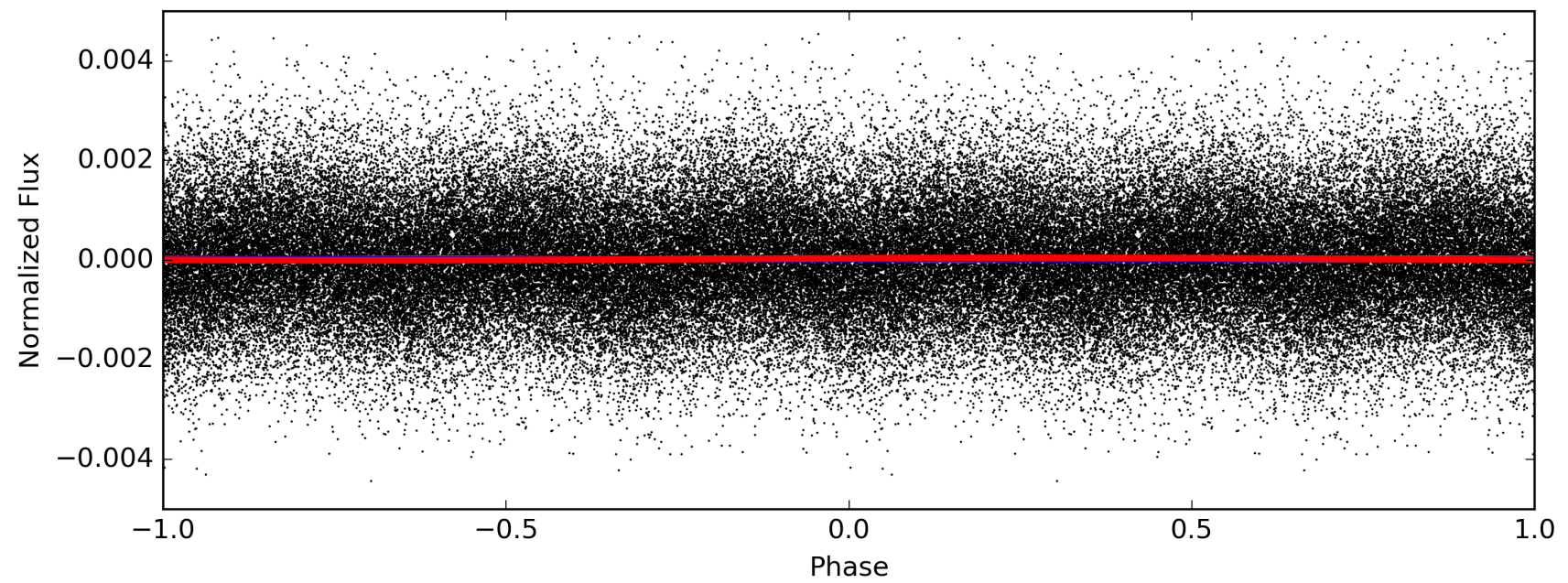
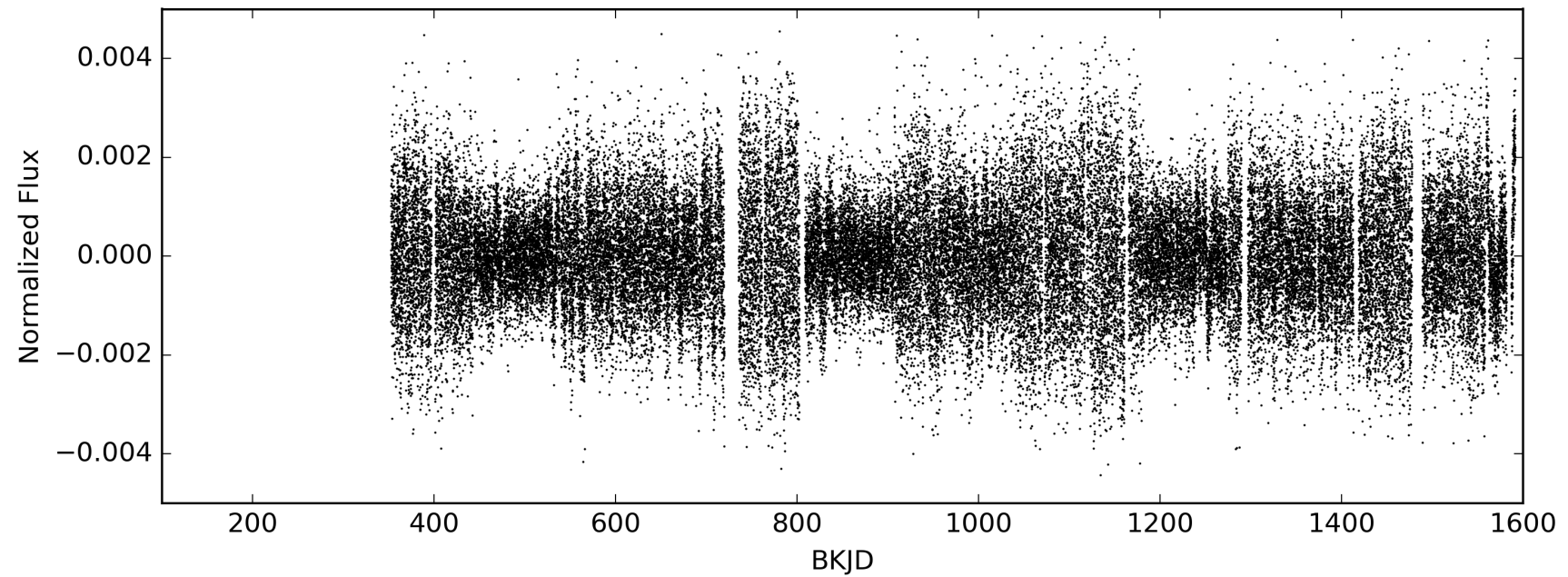
This Data Validation Report Summary was produced in the Kepler Science Operations Center Pipeline at NASA Ames Research Center

TCE 002717094-01, PDC Light Curves



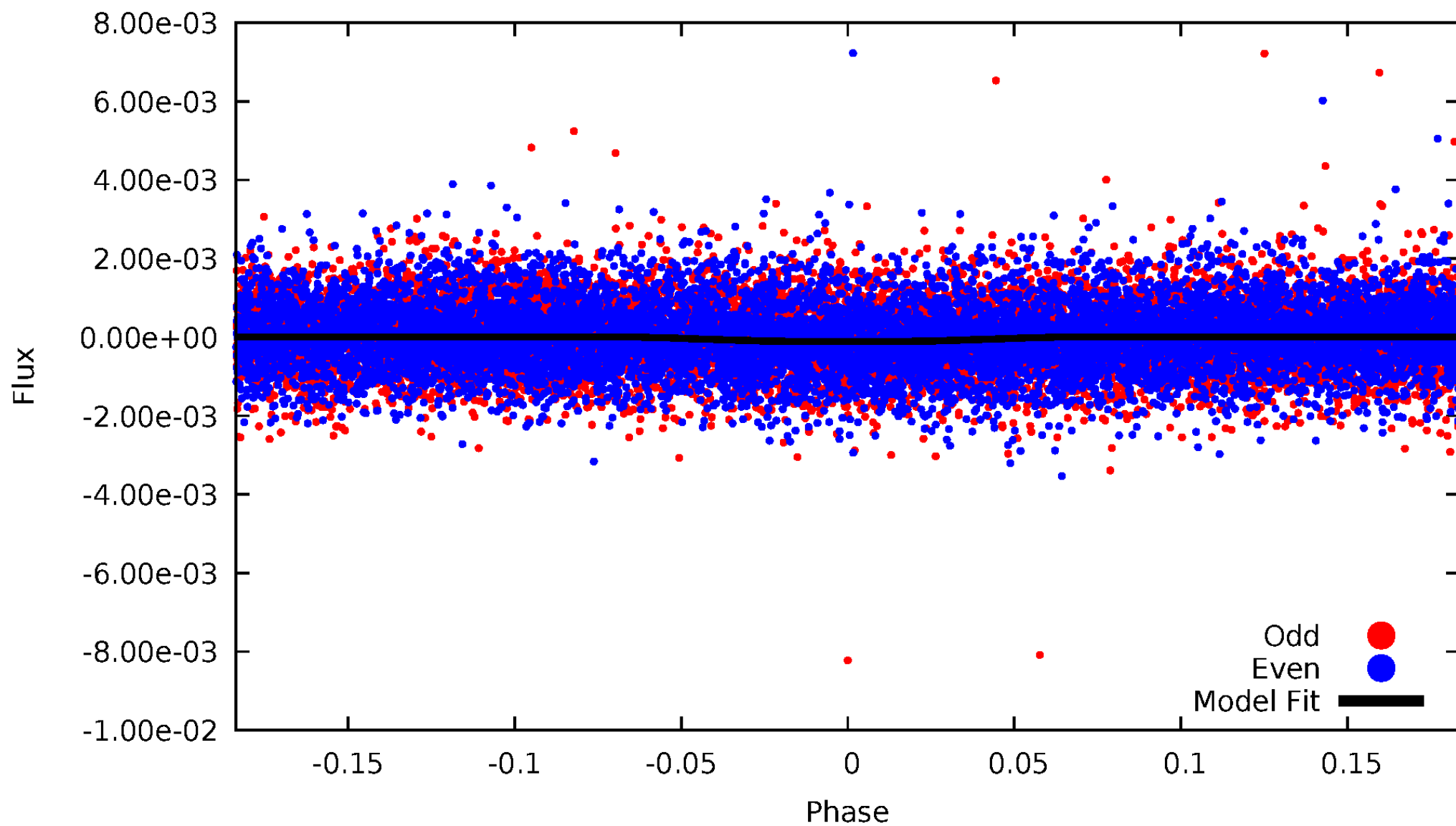
TCE 002717094-01

 P = 0.296 days  P = 0.592 days  P = 1.184 days



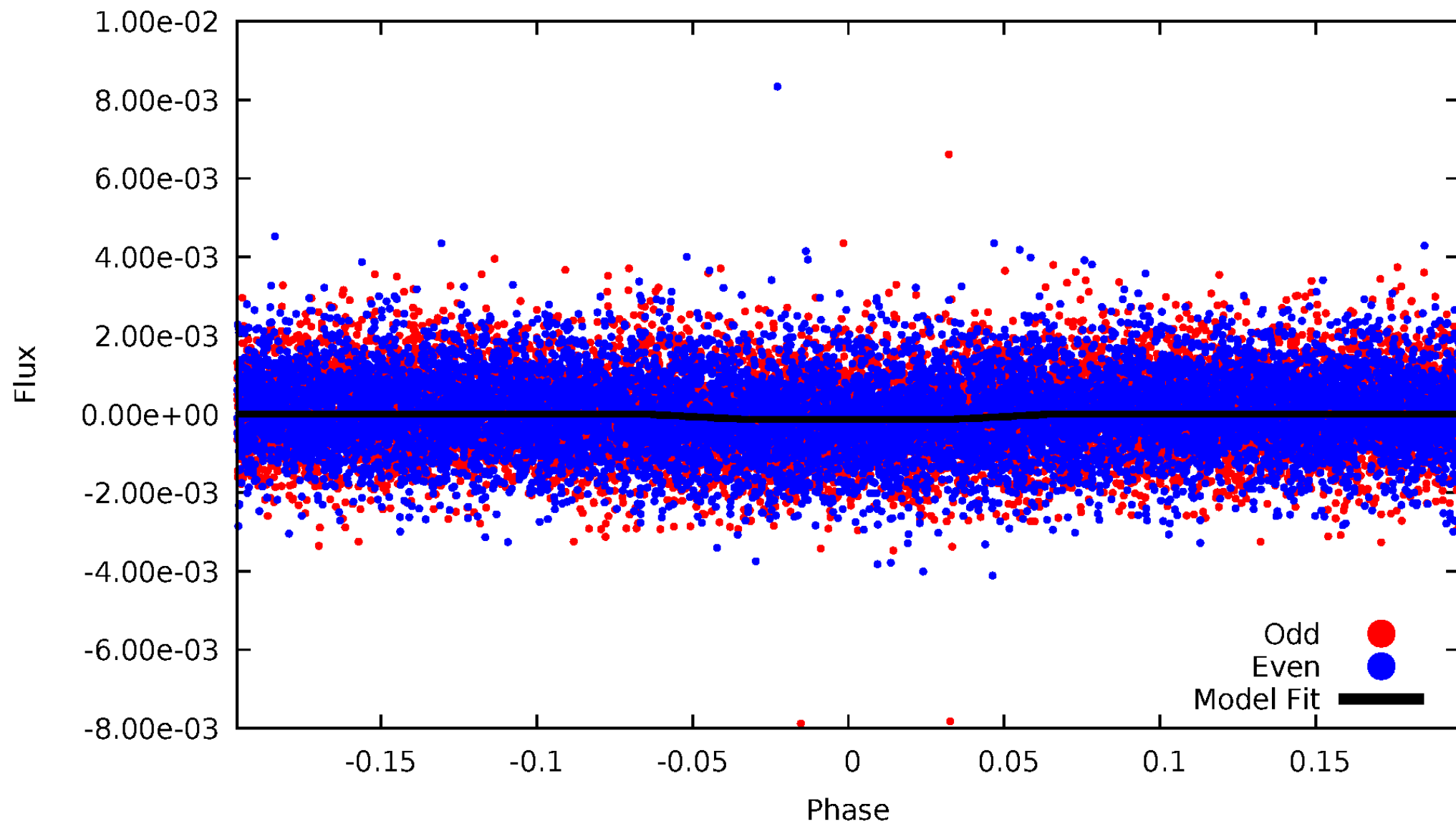
DV Odd/Even

TCE 002717094-01



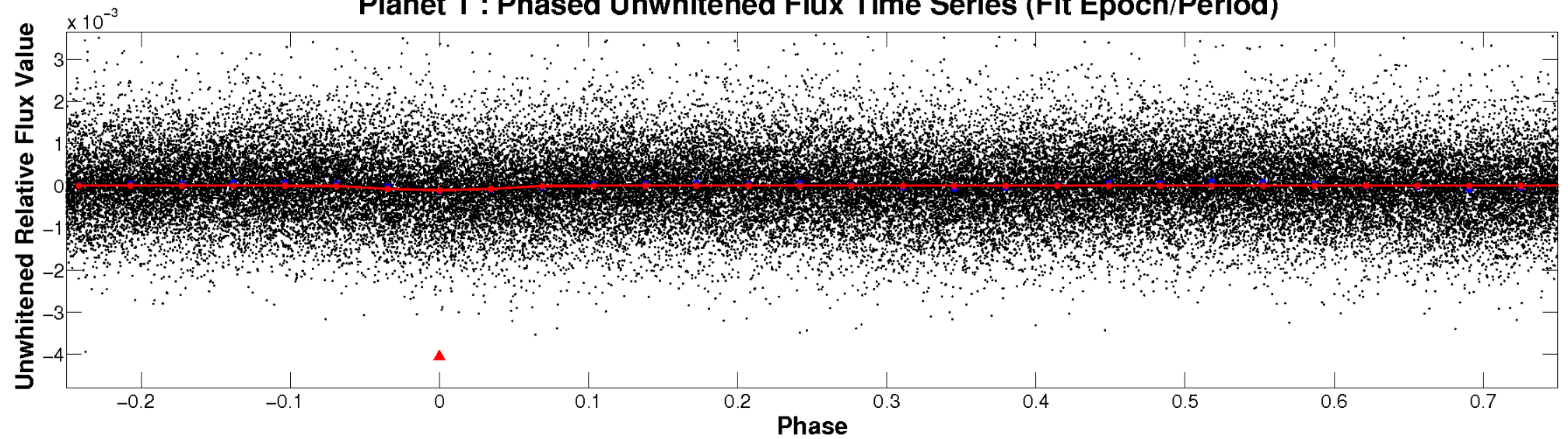
ALT Odd/Even

TCE 002717094-01

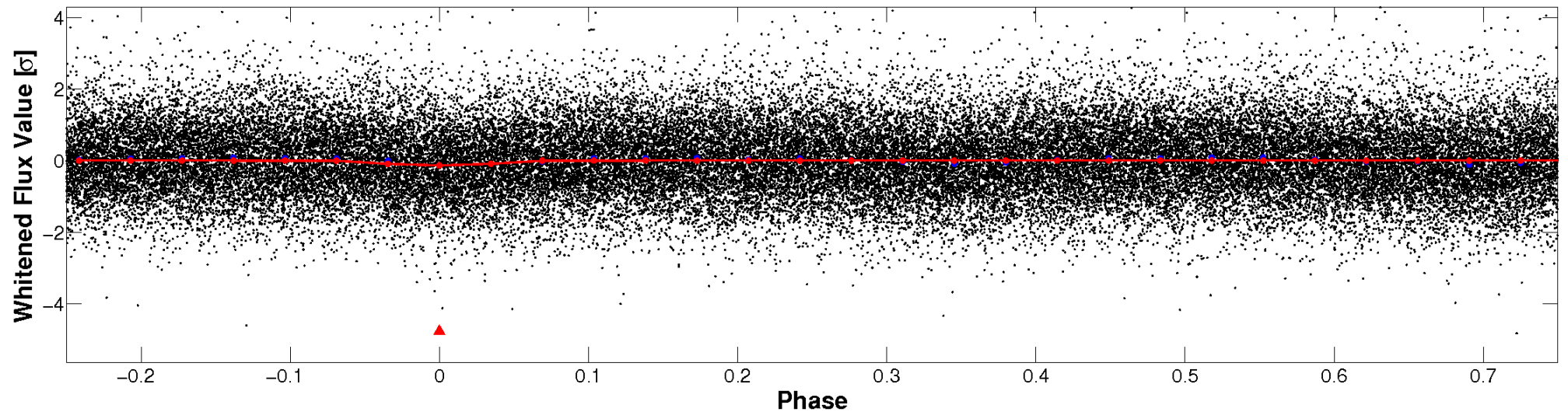


Non-Whitened Vs. Whitened Light Curve

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

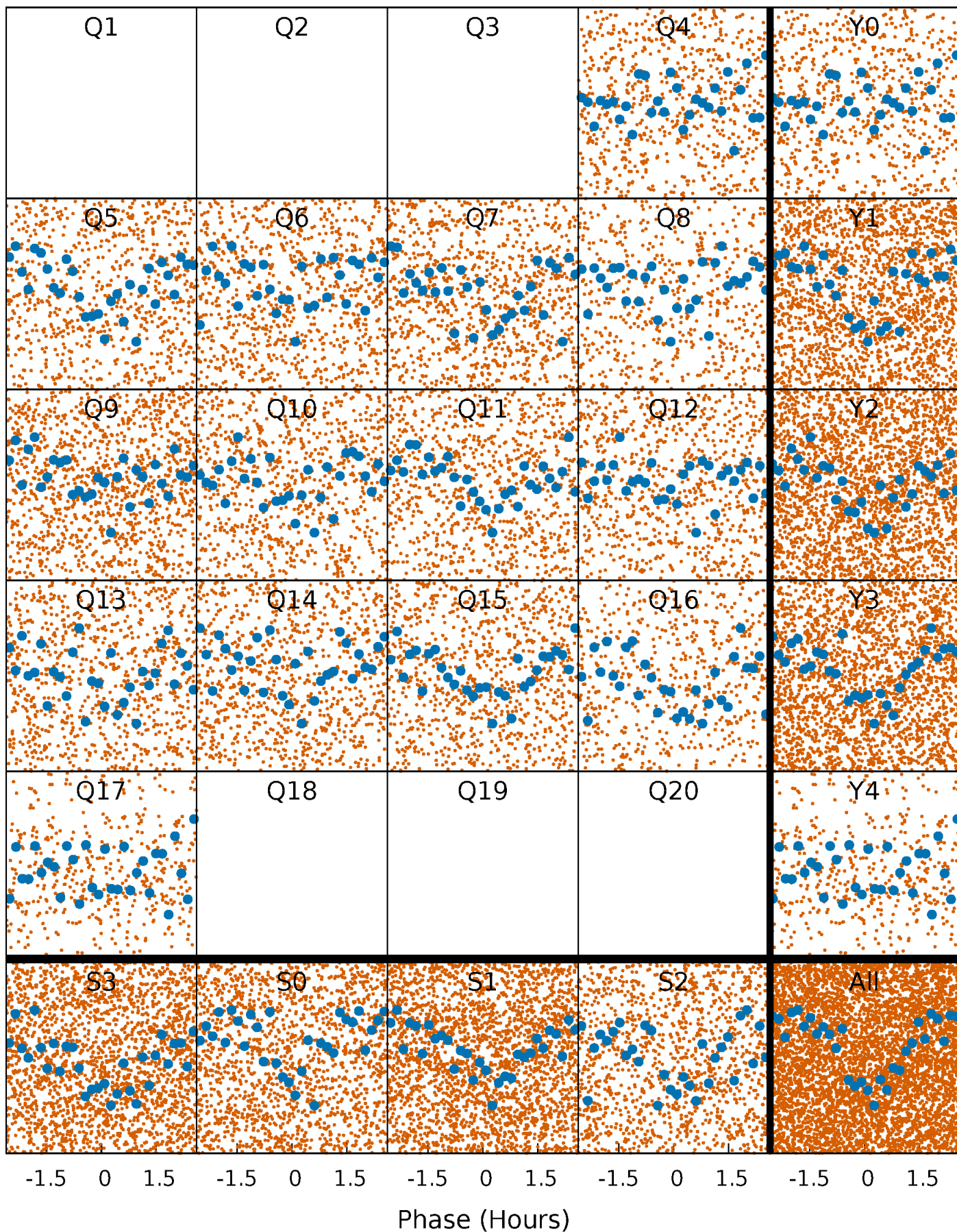


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



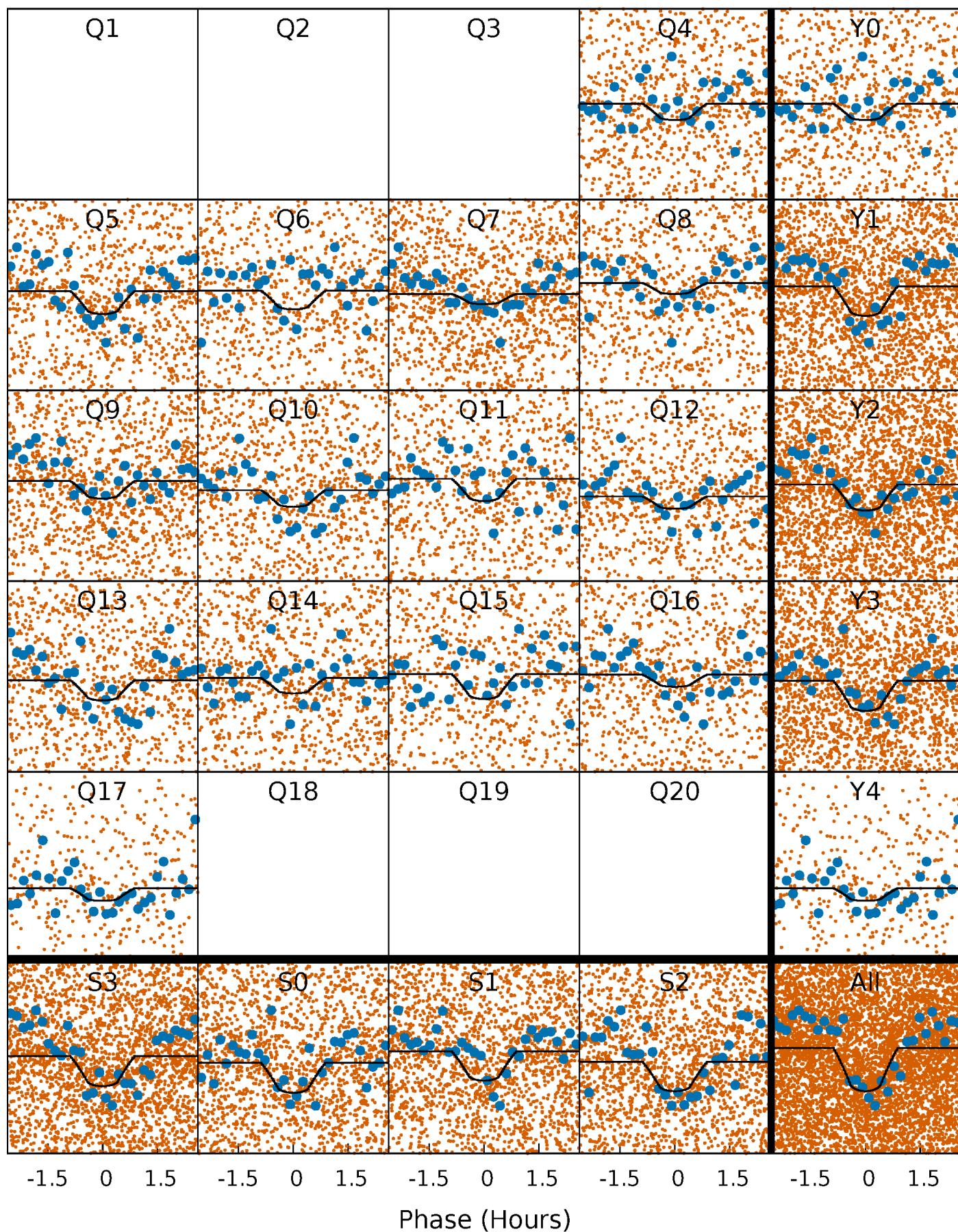
PDC Quarter-Phased Transit Curves

TCE 002717094-01 P= 0.591853 Days $T_0=131.999257$ (BKJD)



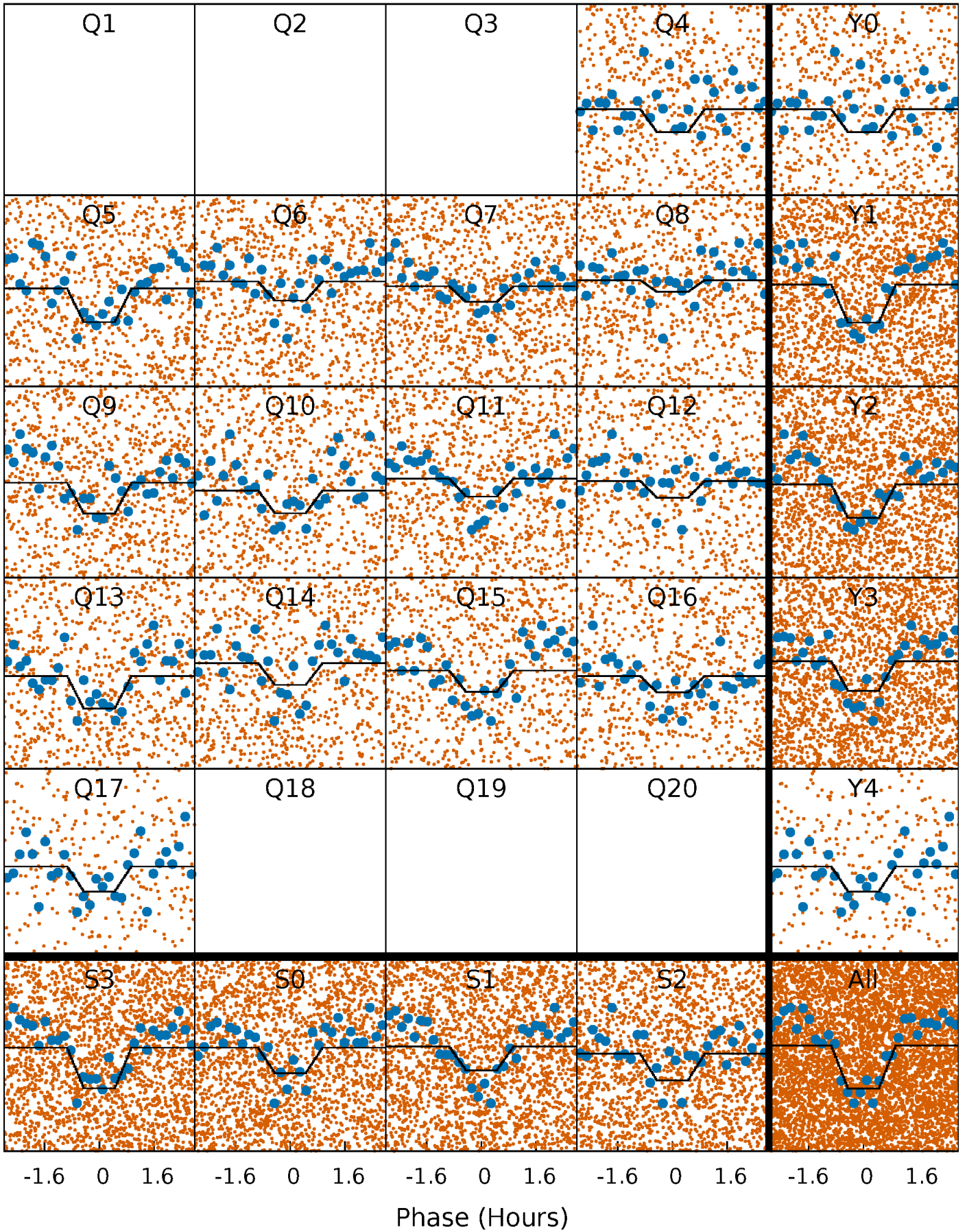
DV Quarter-Phased Transit Curves

TCE 002717094-01 P= 0.591853 Days $T_0=131.999257$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

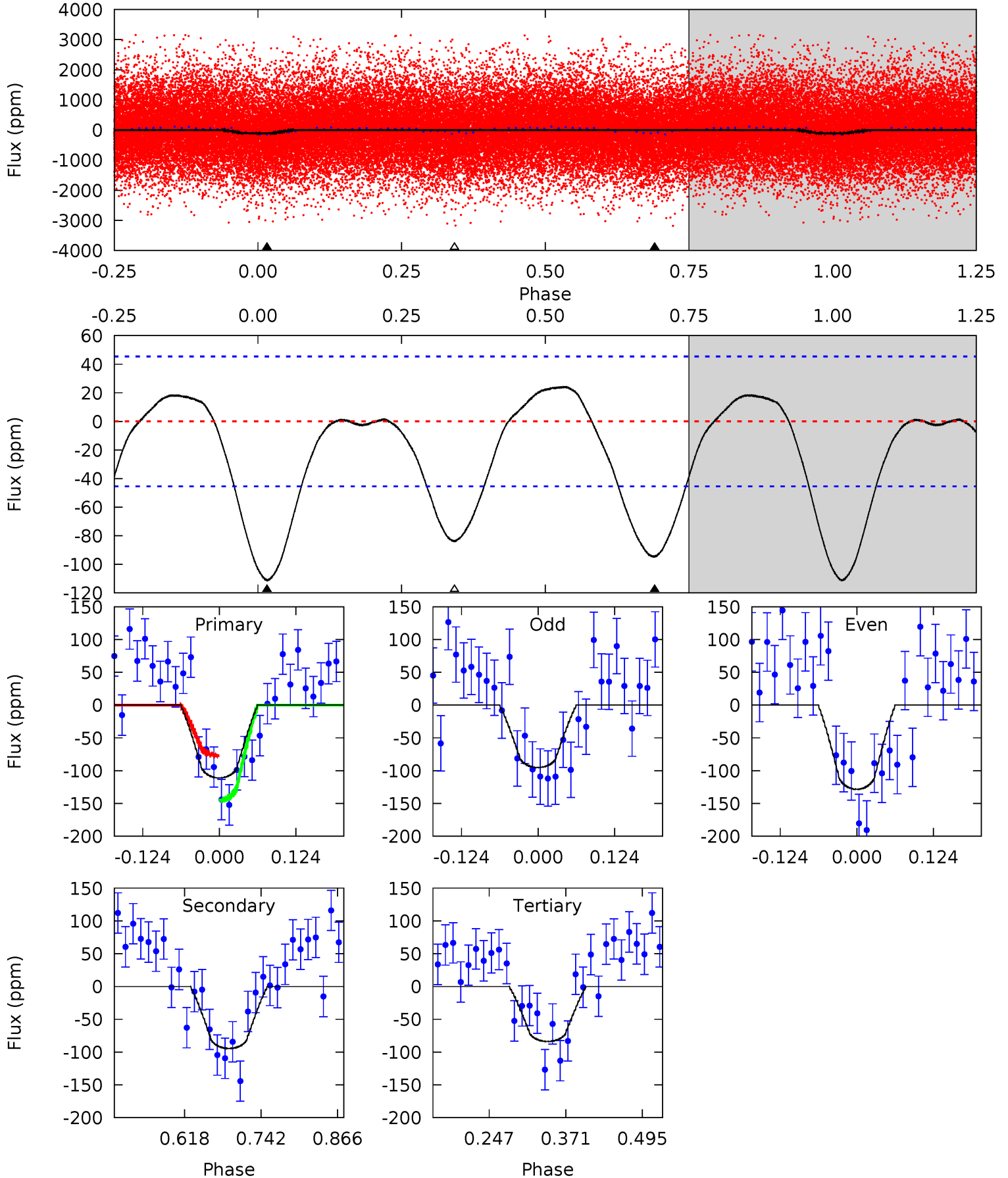
TCE 002717094-01 P= 0.591861 Days $T_0=131.999995$ (BKJD)



DV Model-Shift Uniqueness Test

002717094-01, P = 0.591853 Days, E = 131.999257 Days

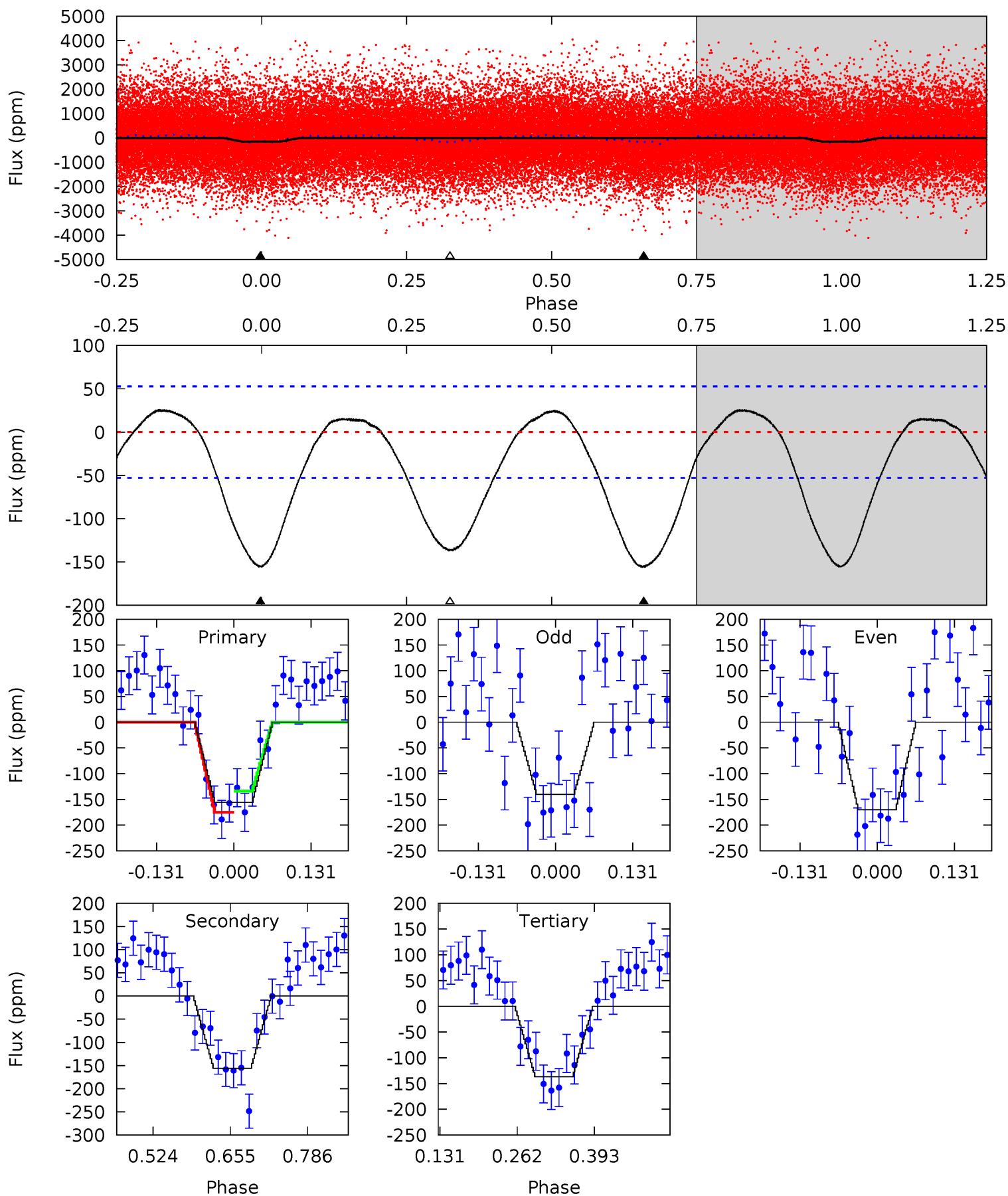
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
11.1	9.41	8.33	0	4.52	1.54	3.30	2.72	11.1	1.07	9.41	1.67	0.81	0.18	3.41



Alt Model-Shift Uniqueness Test

002717094-01, P = 0.591861 Days, E = 131.999995 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
13.3	13.3	11.7	0	4.51	1.51	4.75	1.60	13.3	1.61	13.3	1.27	1.11	0.14	1.77



Stellar Parameters For KIC 002717094

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	5984^{+188}_{-209}	$4.521^{+0.046}_{-0.172}$	$-0.200^{+0.250}_{-0.350}$	$0.906^{+0.234}_{-0.100}$	$0.993^{+0.118}_{-0.131}$	$1.883^{+0.439}_{-0.873}$
	+3%/-3%	+1%/-4%	+125%/-175%	+26%/-11%	+12%/-13%	+23%/-46%
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 002717094-01 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	A_{obs}
DV	-95 ± 10	$1.88^{+1.68}_{-1.30}$	3053^{+212}_{-151}	4402^{+3644}_{-1075}	$2.718^{+26.998}_{-1.946}$
Alt.	-156 ± 12	$2.08^{+1.89}_{-1.43}$	3055^{+179}_{-148}	4693^{+4043}_{-1109}	$3.612^{+34.368}_{-2.592}$

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

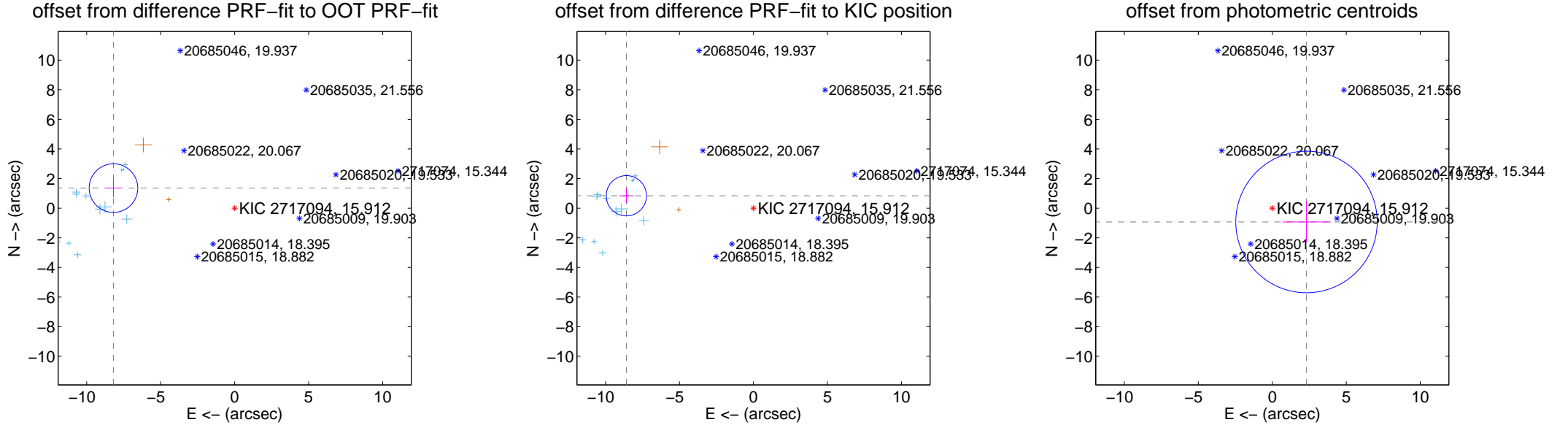
DV Centroid Data

Supplemental centroid analysis for 002717094-01. Kepler magnitude: 15.91. Transit SNR 7.85

There are 12 quarters with good PRF difference image offsets

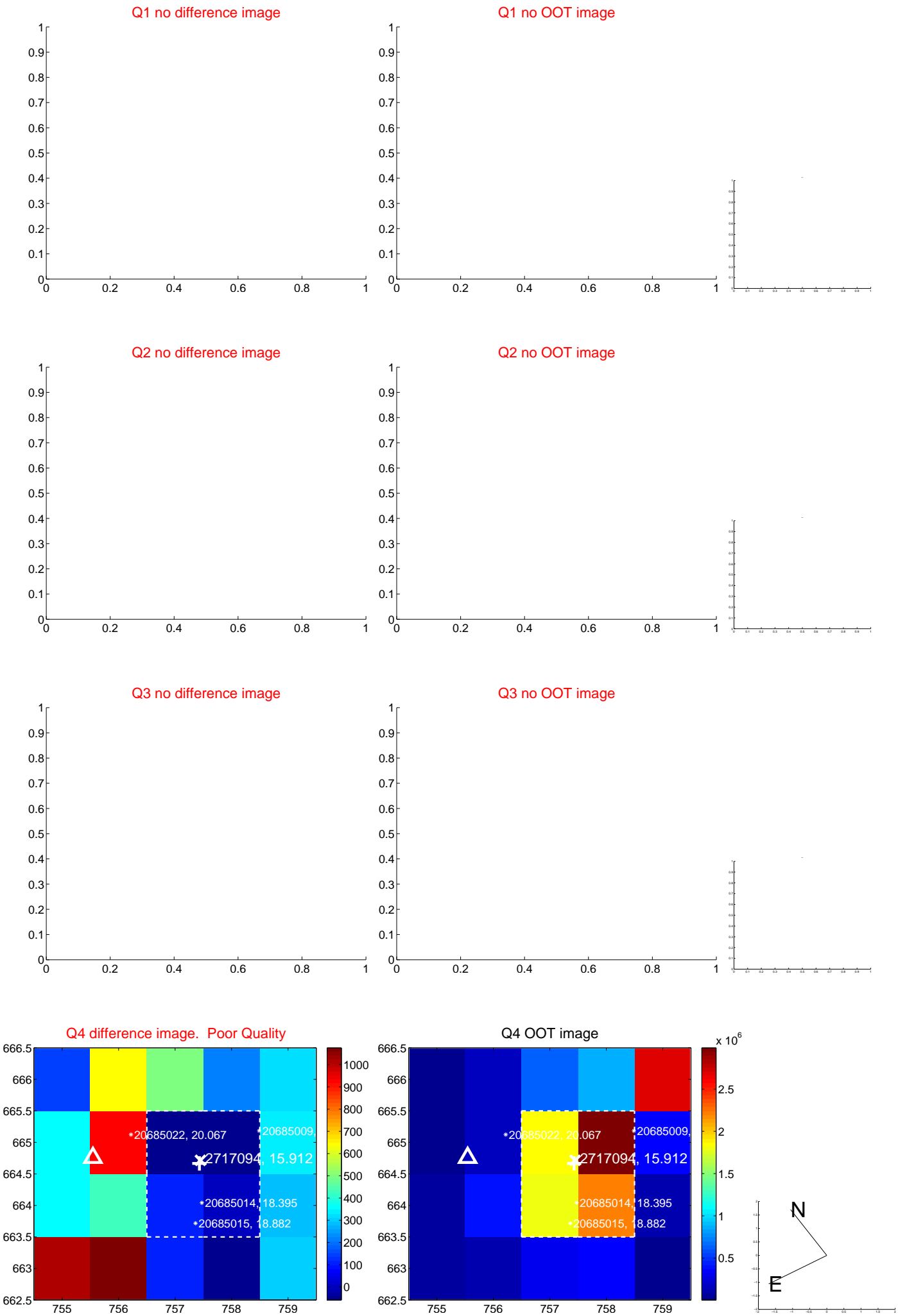
The direct PRF centroid is offset from the target star catalog position by about 0.95 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	8.301 ± 0.547	15.17	8.190 ± 0.545	1.356 ± 0.617
PRF-fit source offset from KIC position	8.629 ± 0.453	19.04	8.589 ± 0.477	0.840 ± 0.501
photometric centroid source offset	2.49 ± 1.59	1.57	-2.31 ± 1.62	-0.93 ± 1.39

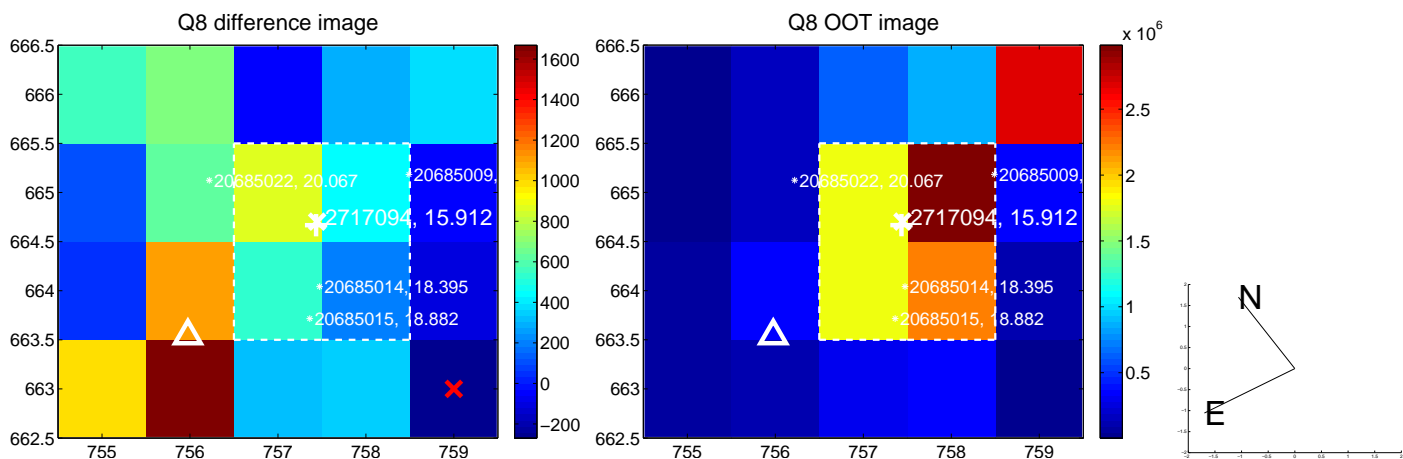
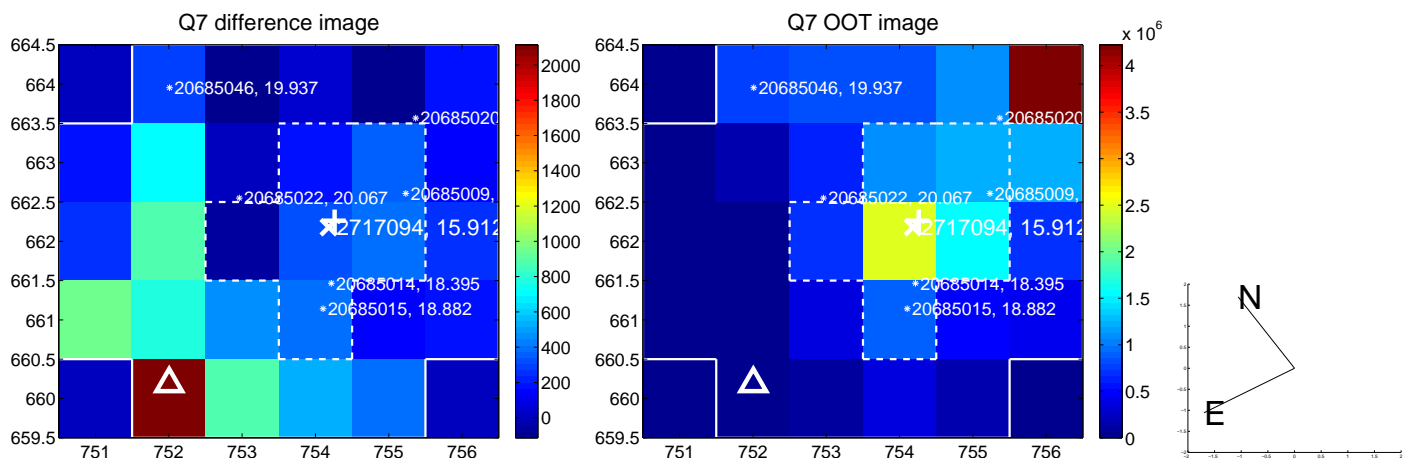
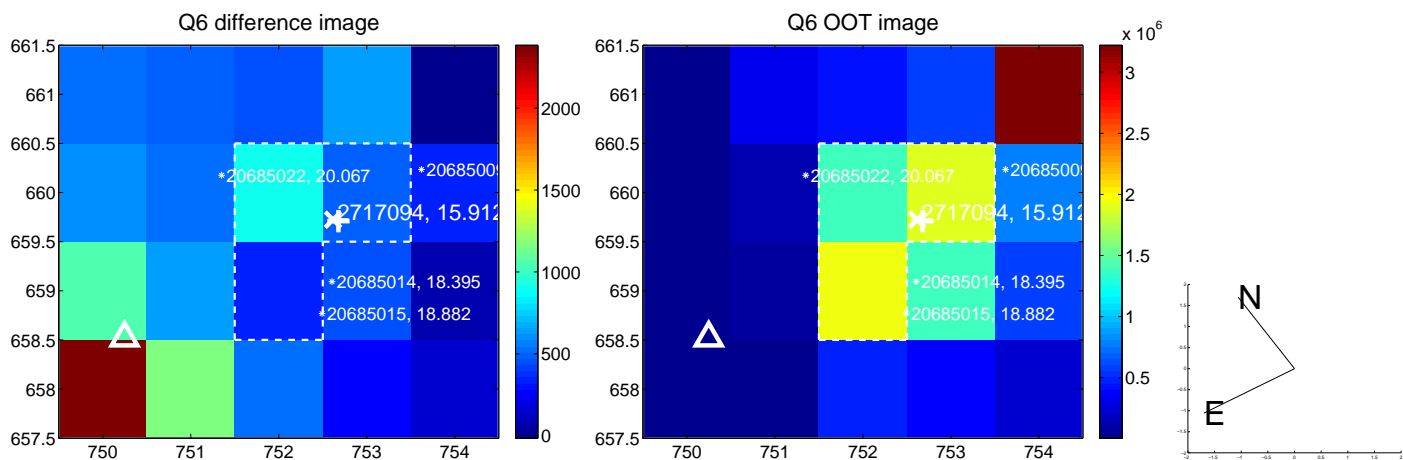
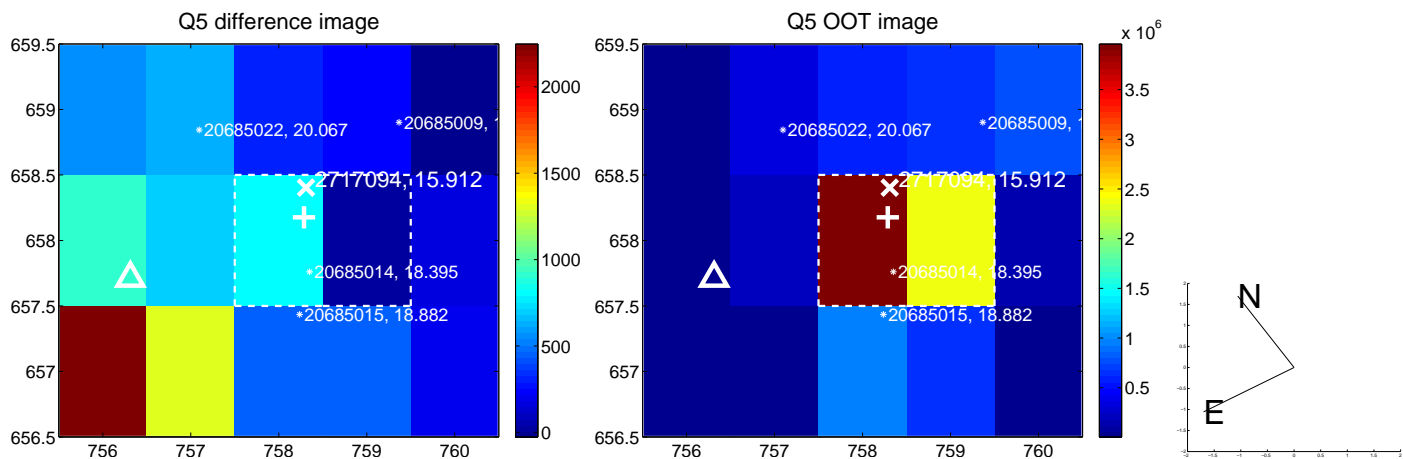


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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

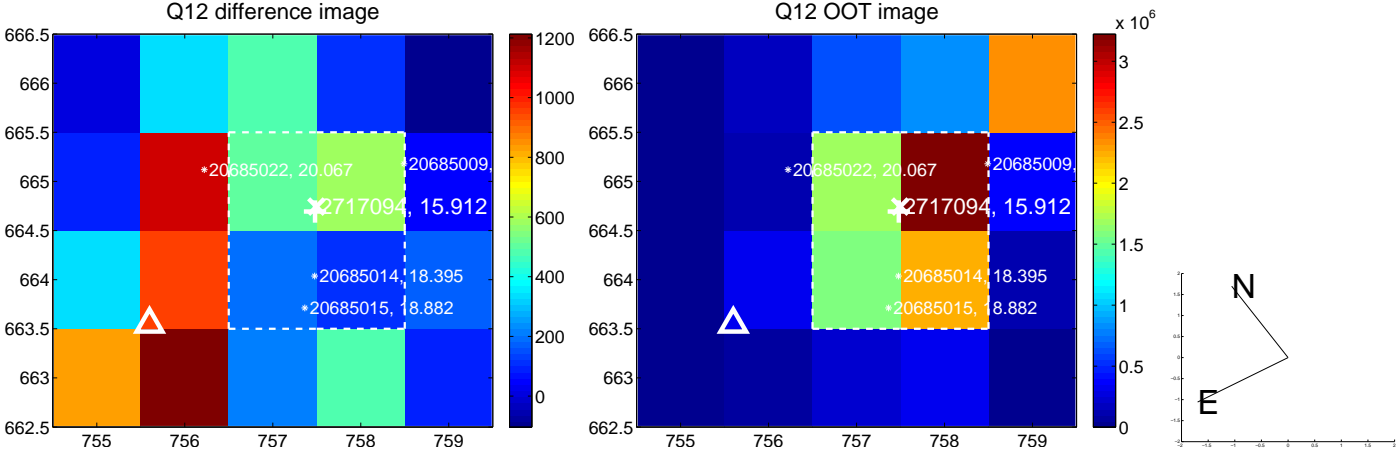
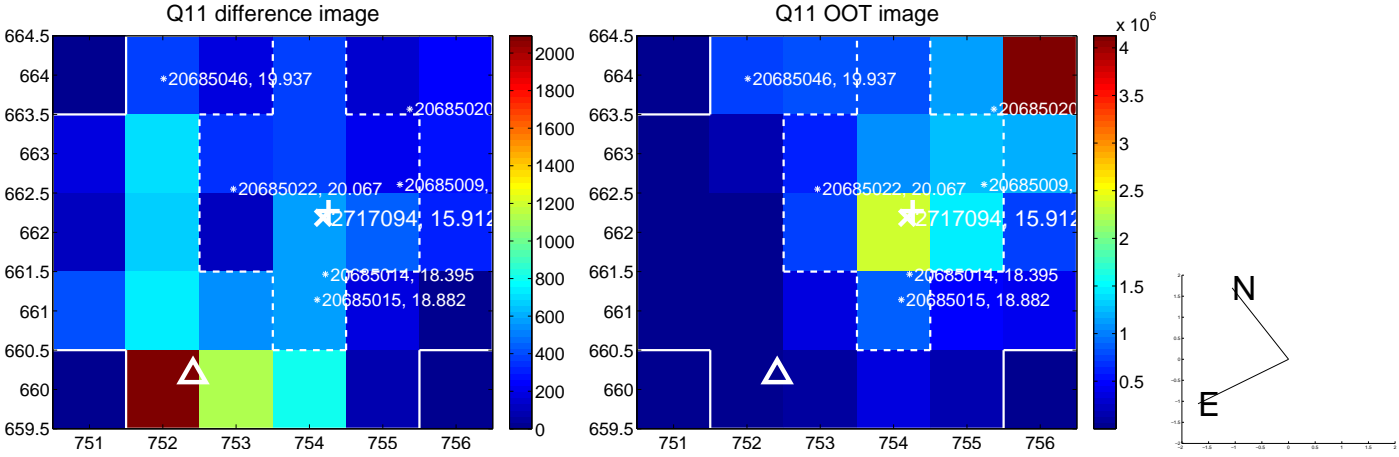
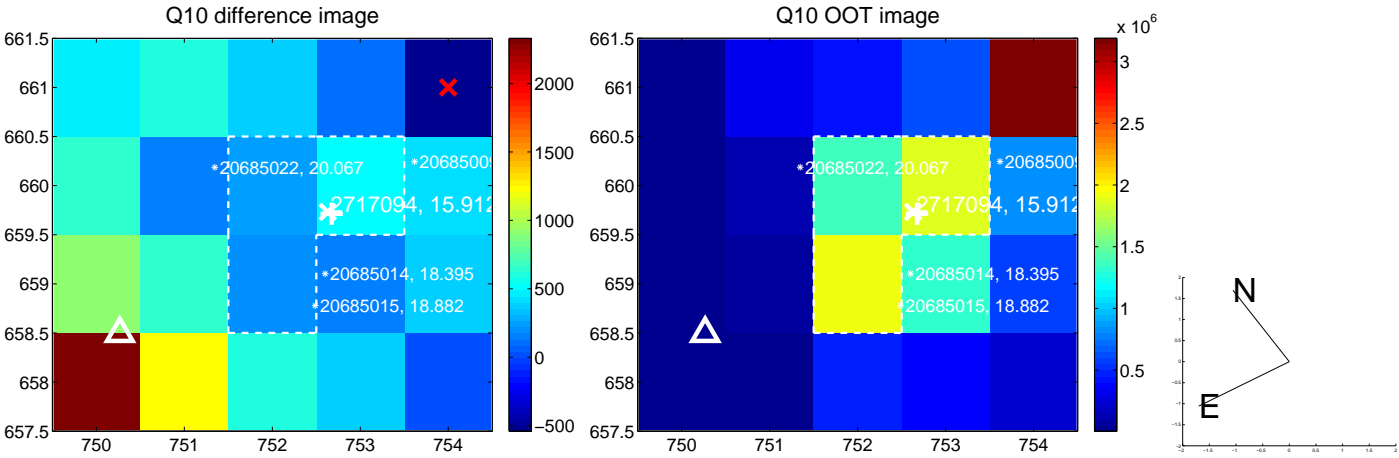
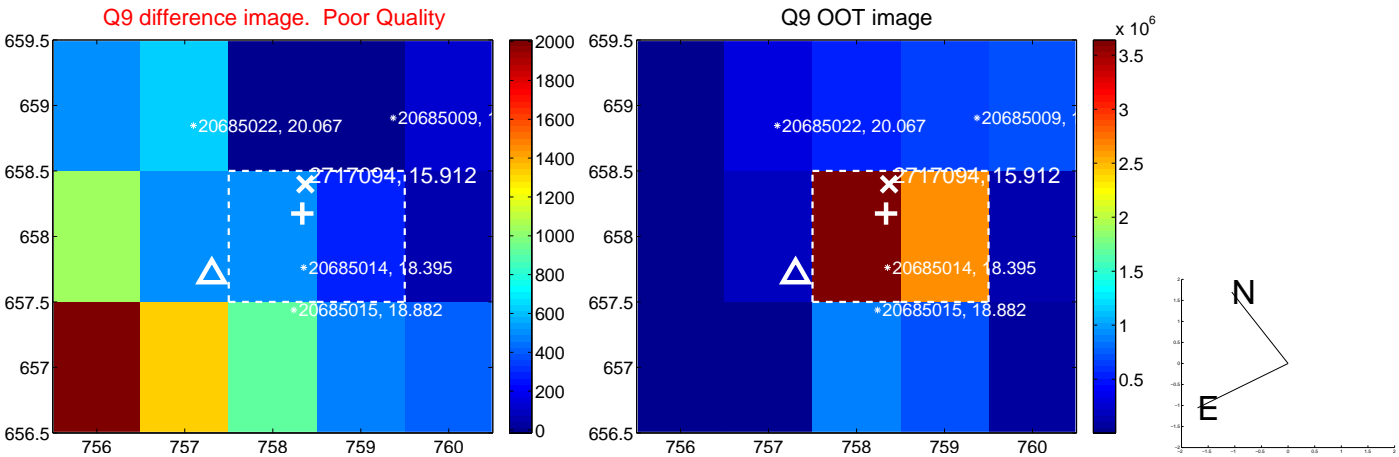
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



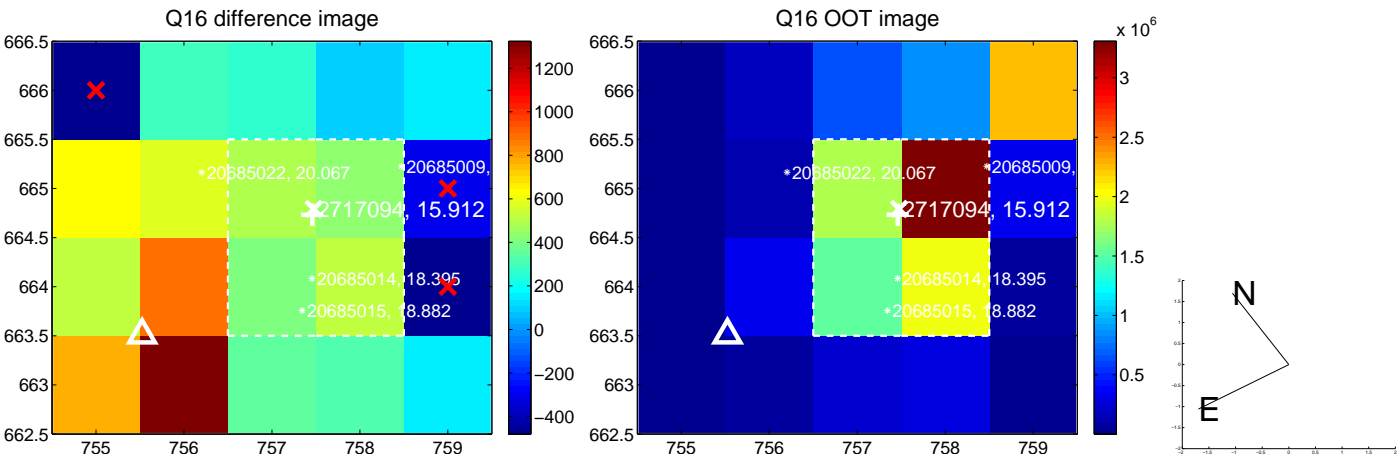
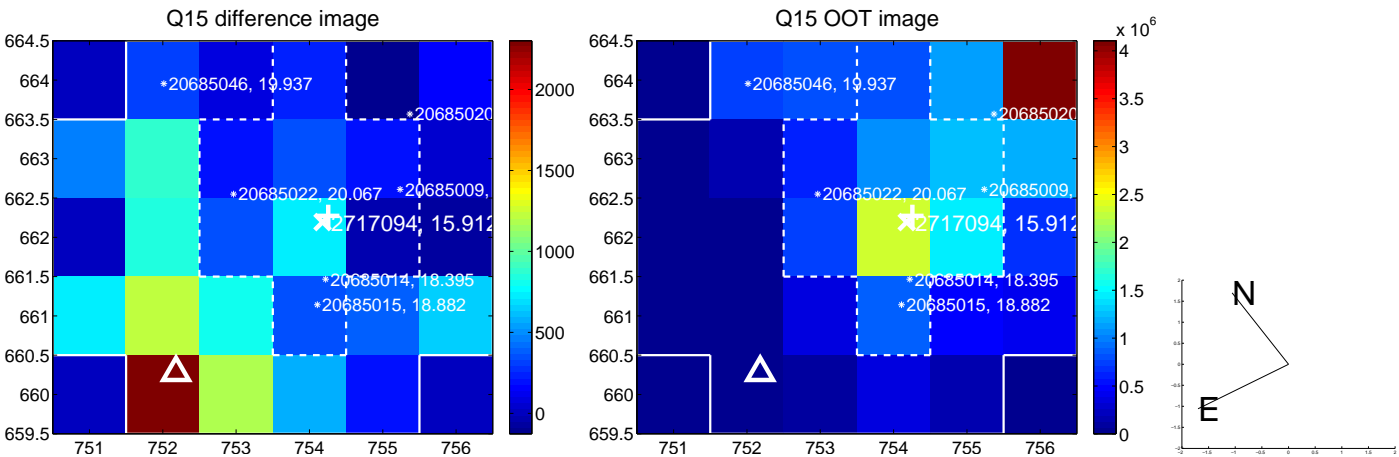
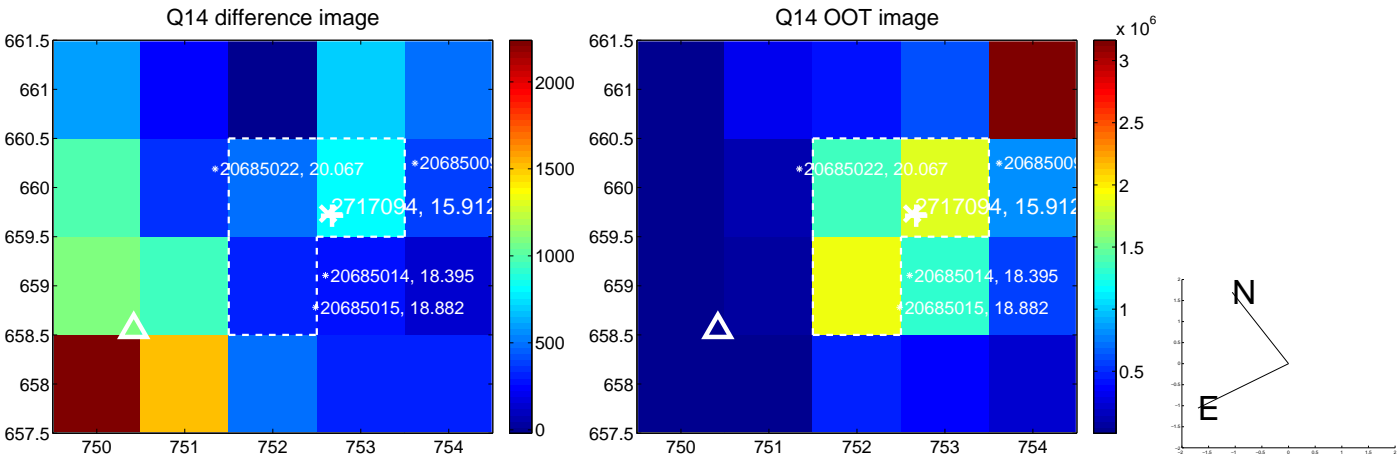
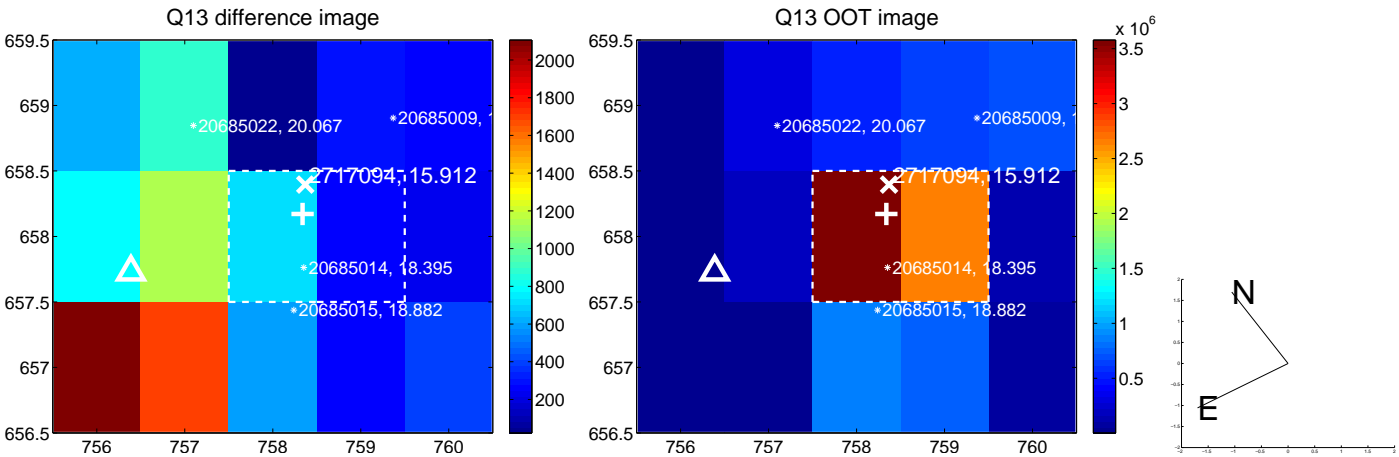
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



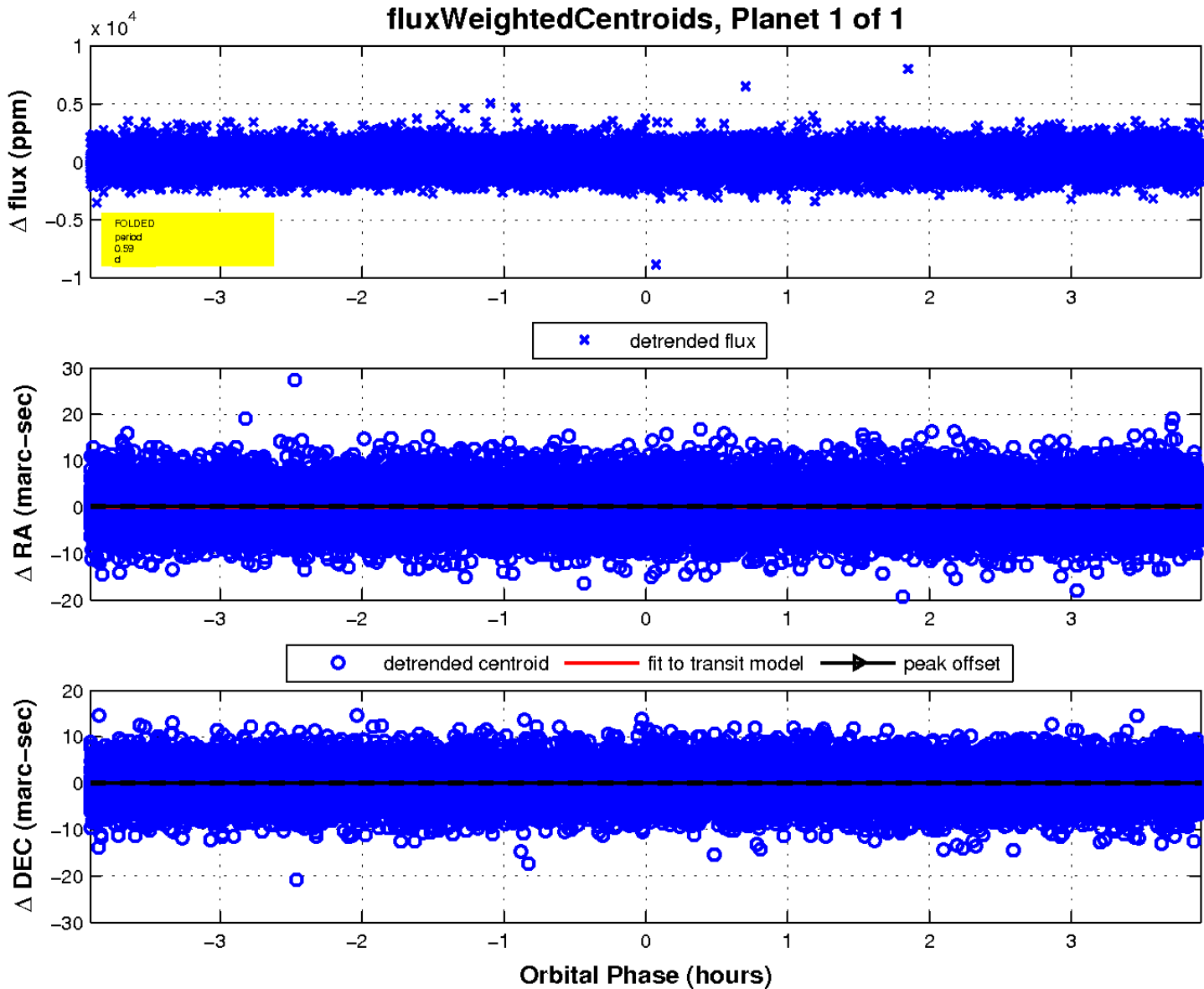
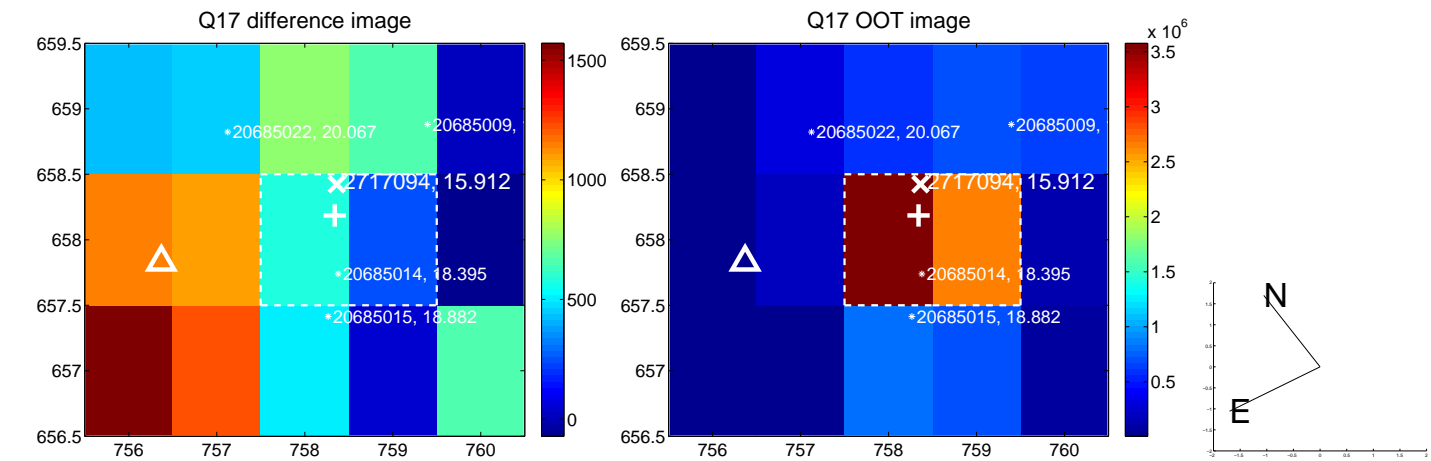
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



white \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

Declination

