

KIC 006752502

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})
006752502-01	OBS	0667.01	4.305202	131.708766	10295.5	3.219	210.0	198.8	1.00	5780	12.41	372.63

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
006752502-01	OBS	PC	0.00	0	0	0	0	CENT_KIC_POS

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.

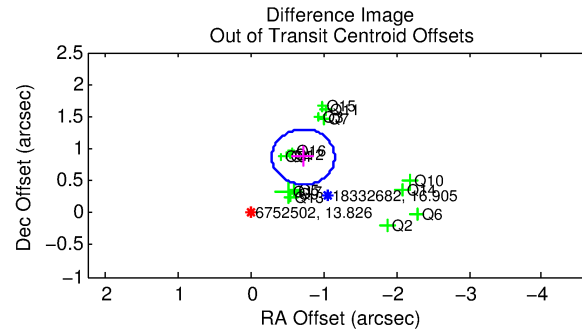
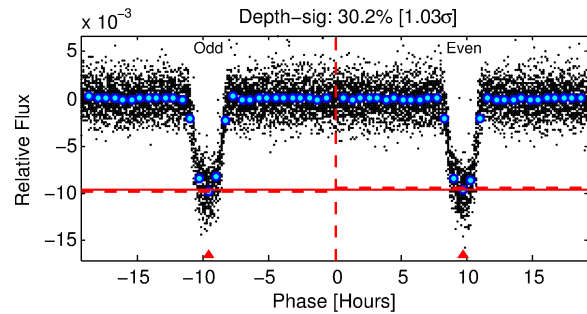
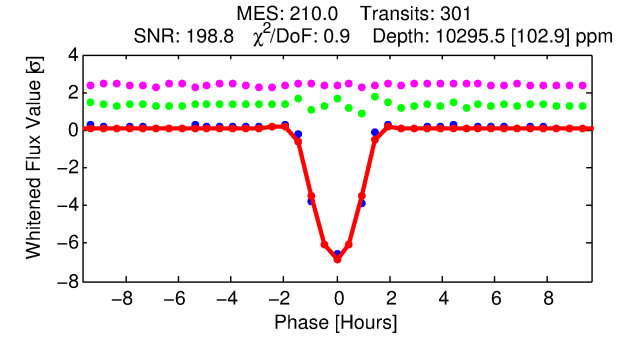
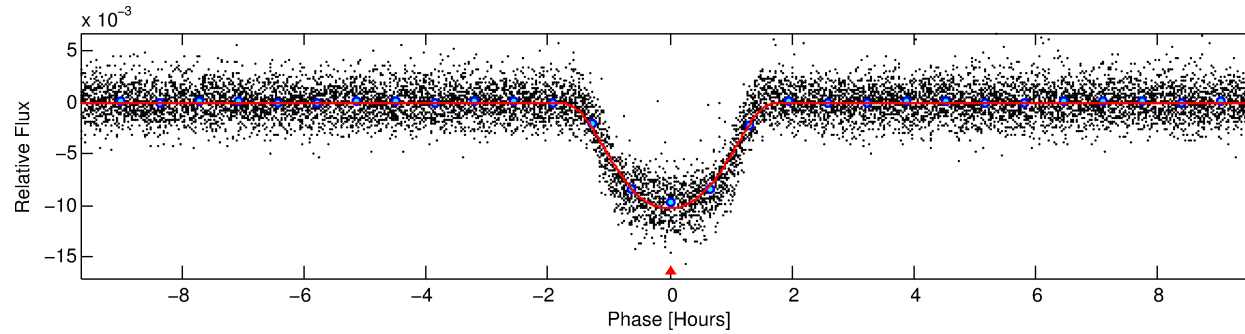
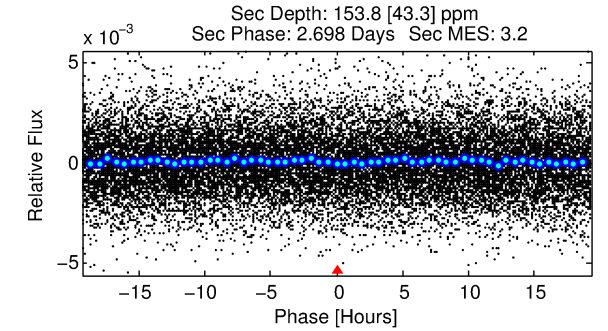
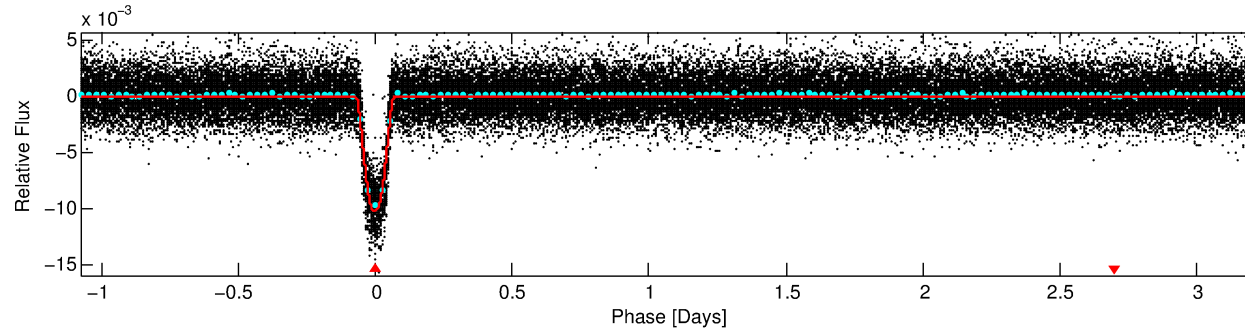
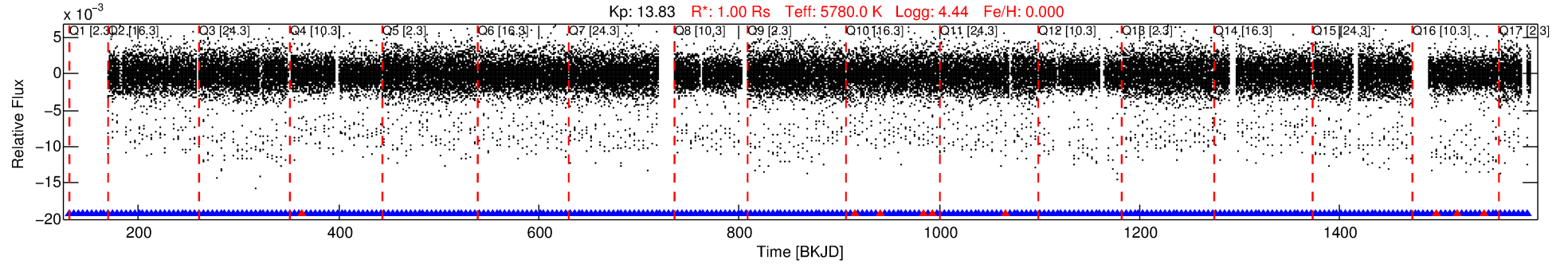
Ephemeris Match Information For 006752502-01

No Significant Match Found

DV One-Page Summary

KIC: 6752502 Candidate: 1 of 1 Period: 4.305 d

KOI: K00667.01 Corr: 0.922



DV Fit Results:

Period = 4.30520 [0.00000] d
Epoch = 131.7088 [0.0004] BKJD
 $R_p/R^* = 0.1137$ [0.0028]
 $a/R^* = 6.79$ [0.12]
 $b = 0.90$ [0.01]
 $S_{\text{eff}} = 372.63$ [0.00]
 $T_{\text{eq}} = 1120$ [0] K
 $R_p = 12.41$ [0.31] R_e
 $a = 0.0518$ [0.0000] AU
 $A_g = 1.48$ [0.42] [1.13σ]
 $T_{\text{effp}} = 1909$ [136] K [5.78σ]

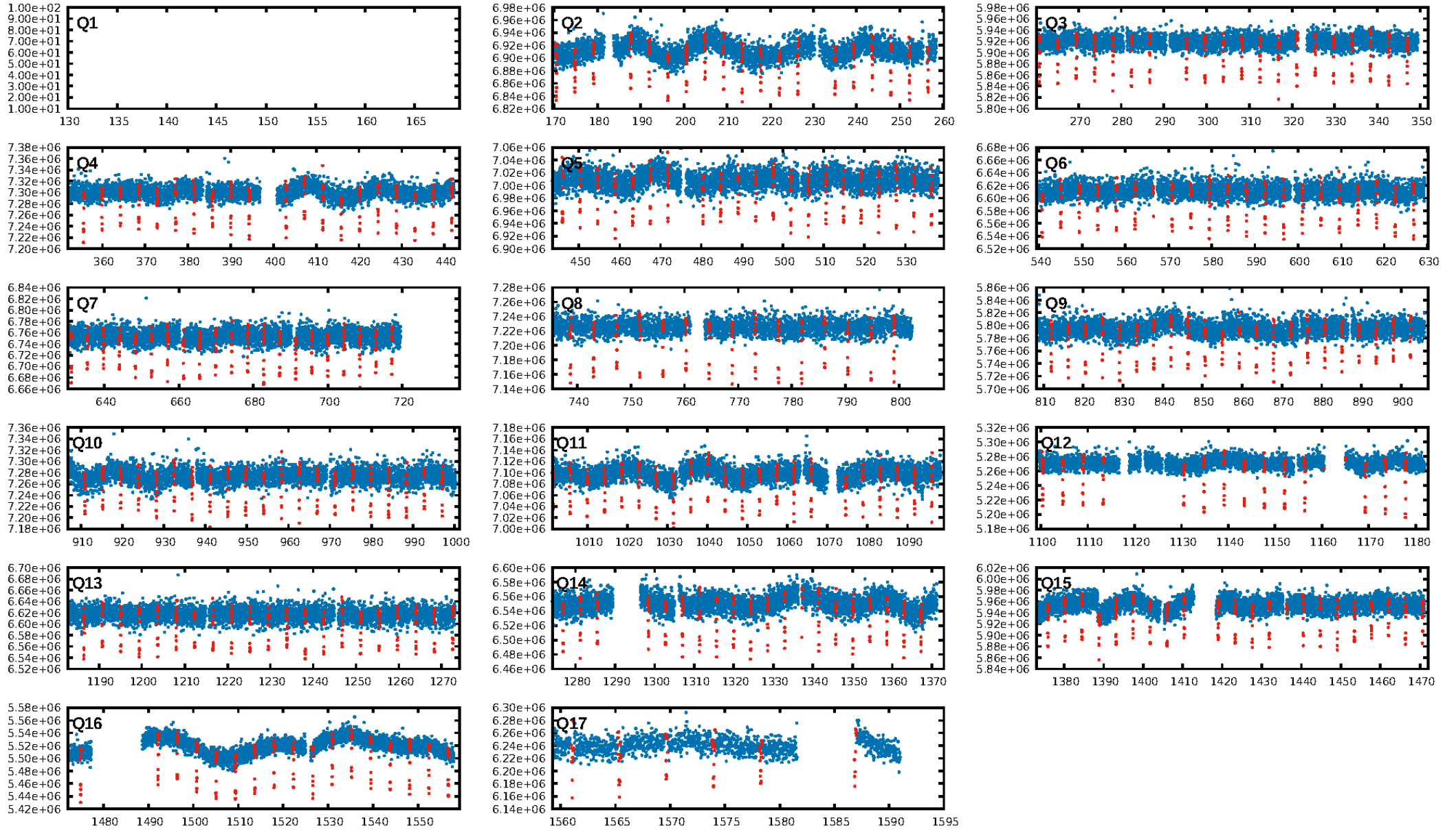
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: 0.00e+00
RollingBand-fgt: 0.97 [286/295]
GhostDiagnostic-chr: 3.085
Centroid-sig: 0.0%
Centroid-so: 1.134 arcsec [17.06σ]
OotOffset-rm: 1.128 arcsec [7.83σ]
KicOffset-rm: 1.146 arcsec [13.33σ]
OotOffset-st: 4/4/4/4 [16]
KicOffset-st: 4/4/4/4 [16]
DiffImageQuality-fgm: 1.00 [16/16]
DiffImageOverlap-fno: 1.00 [16/16]

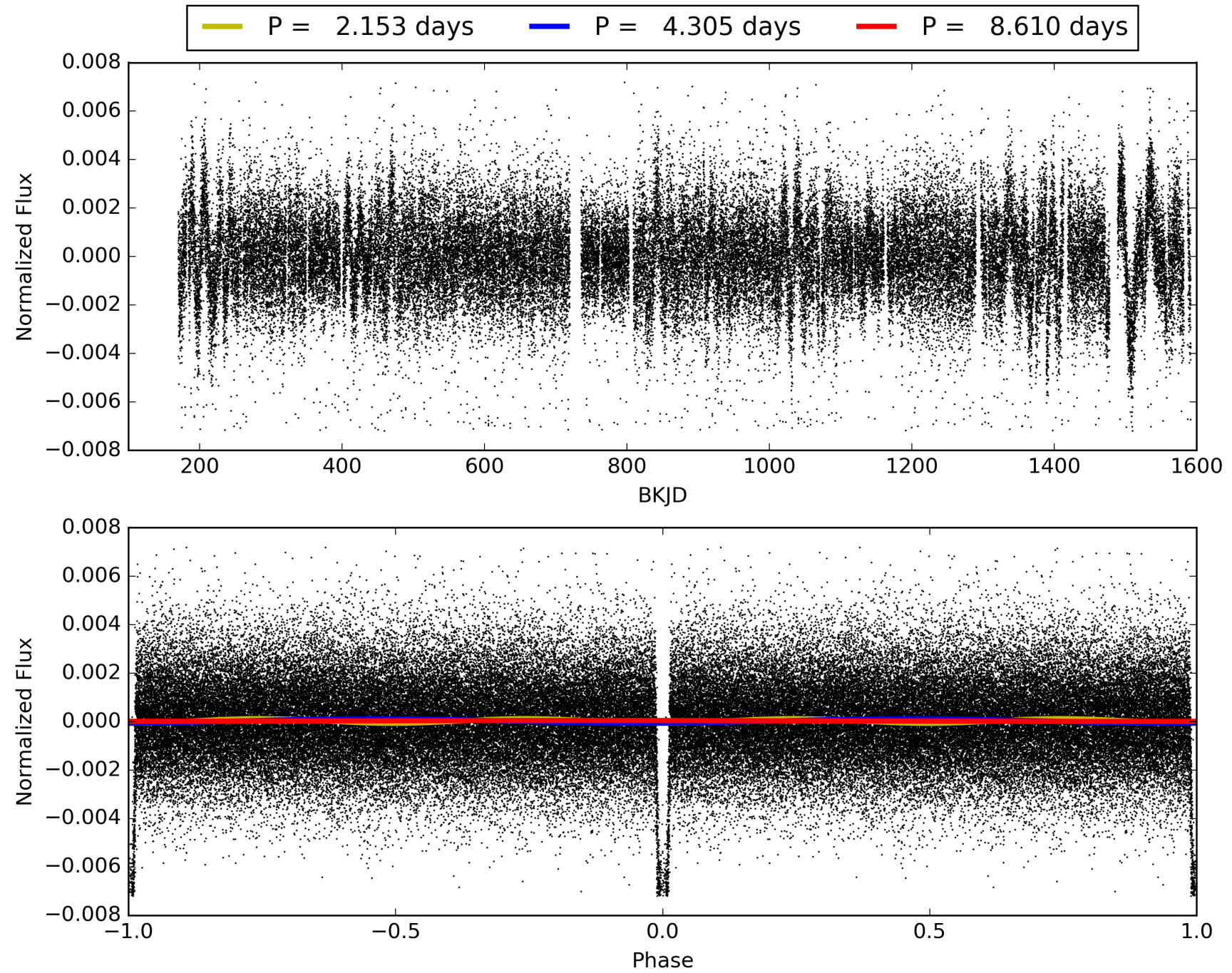
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 01-Feb-2016 02:07:41 Z

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

TCE 006752502-01, PDC Light Curves

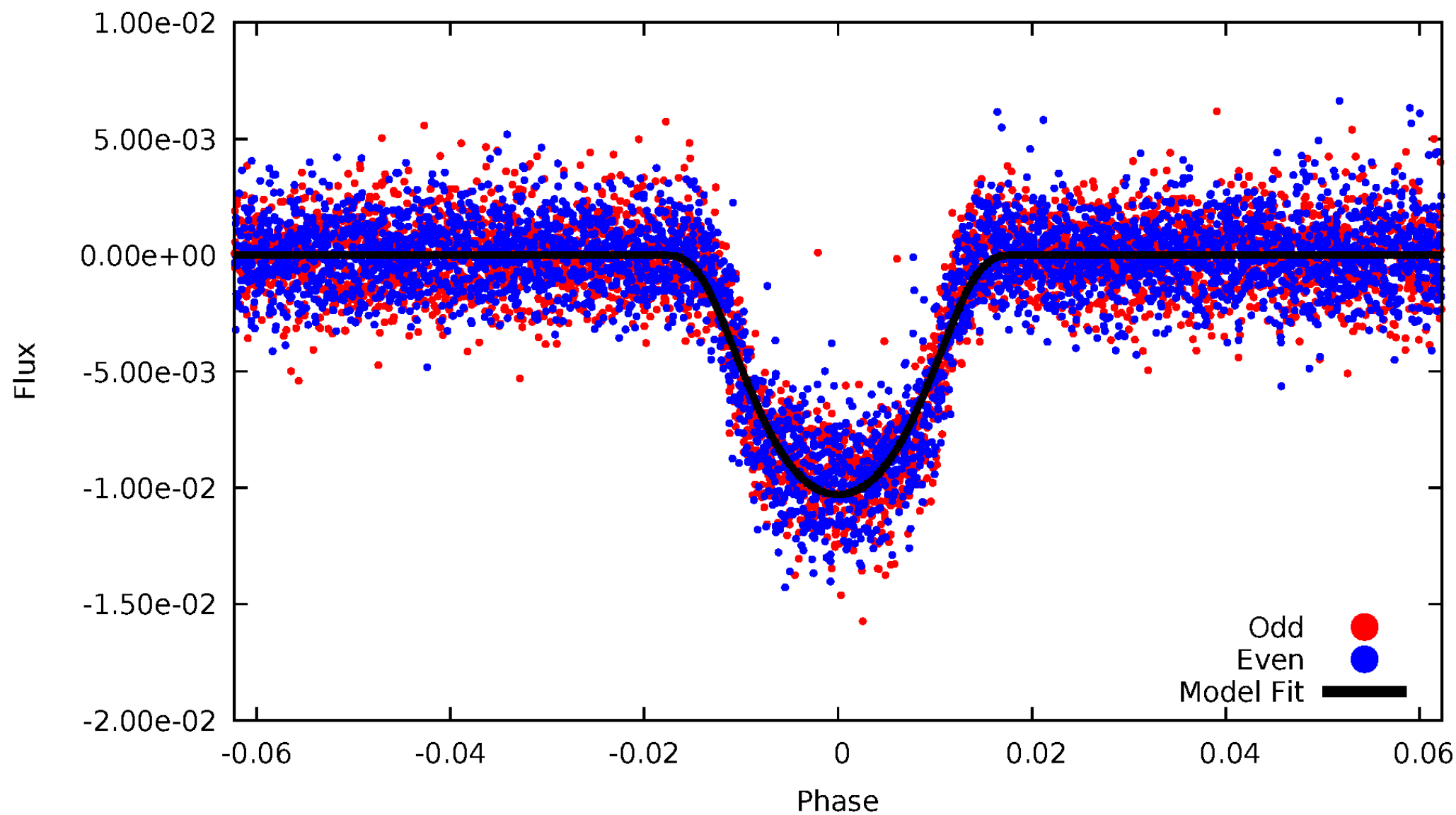


TCE 006752502-01



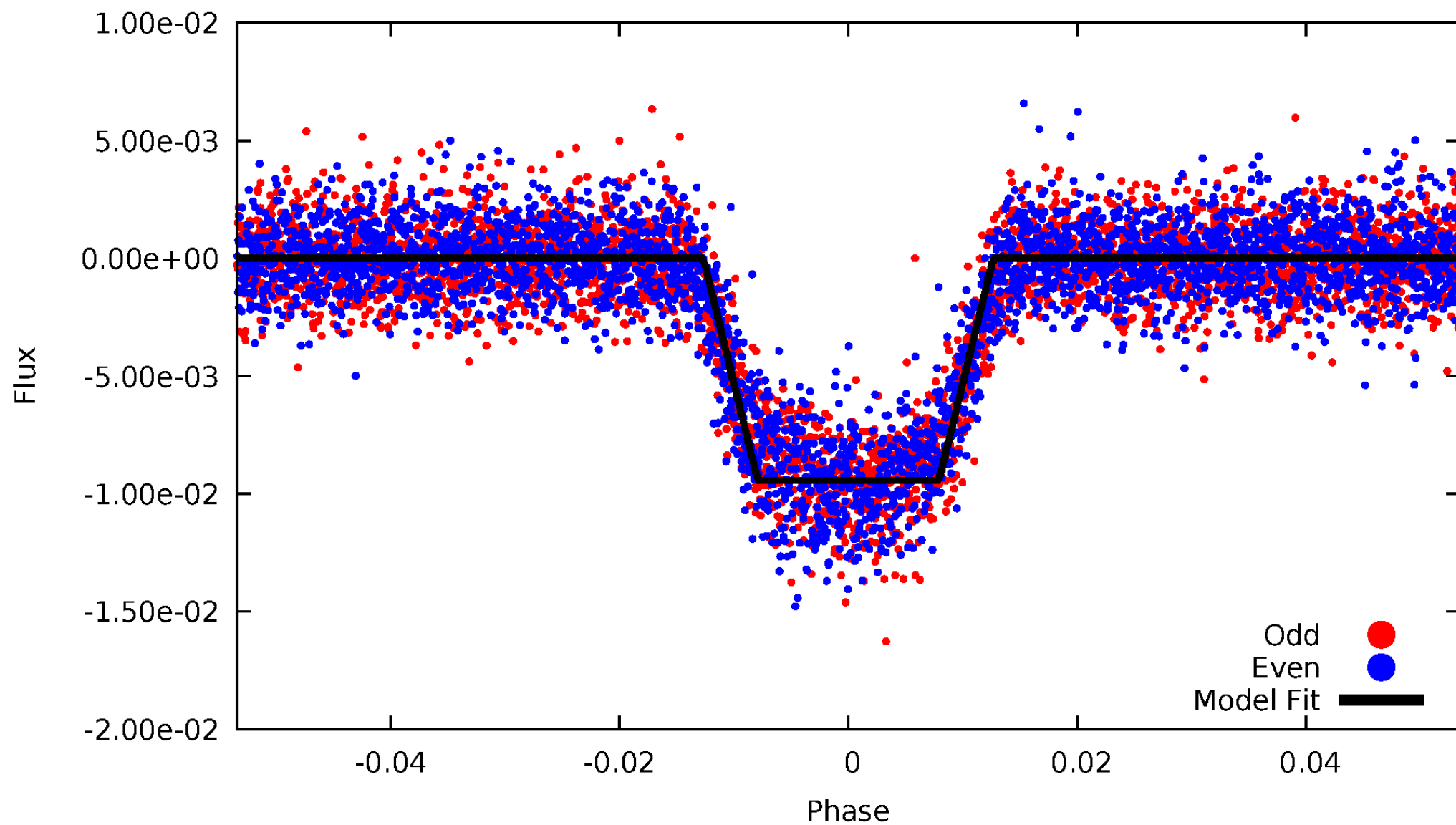
DV Odd/Even

TCE 006752502-01



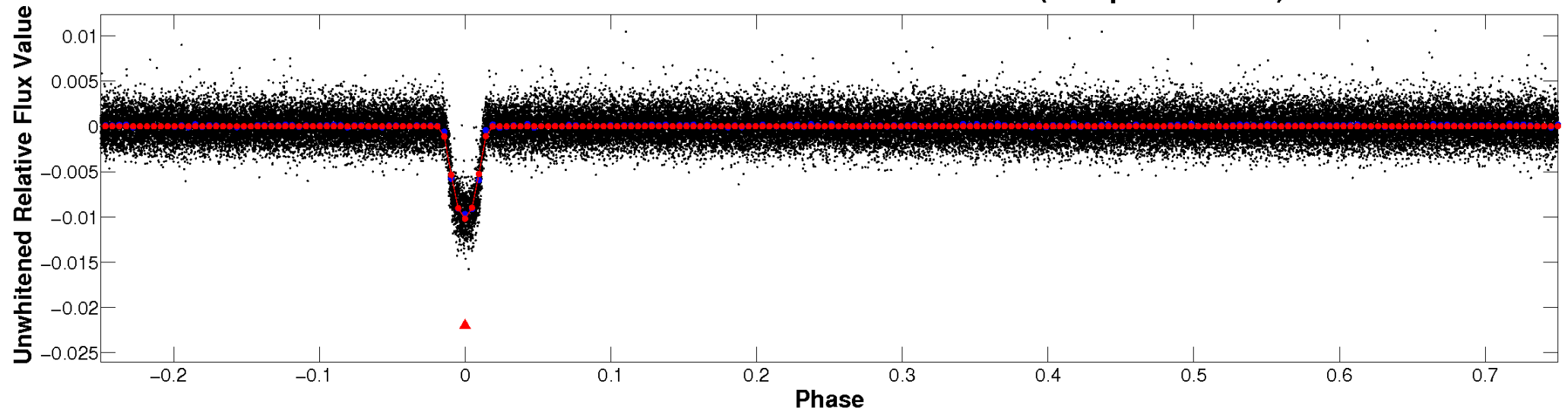
ALT Odd/Even

TCE 006752502-01

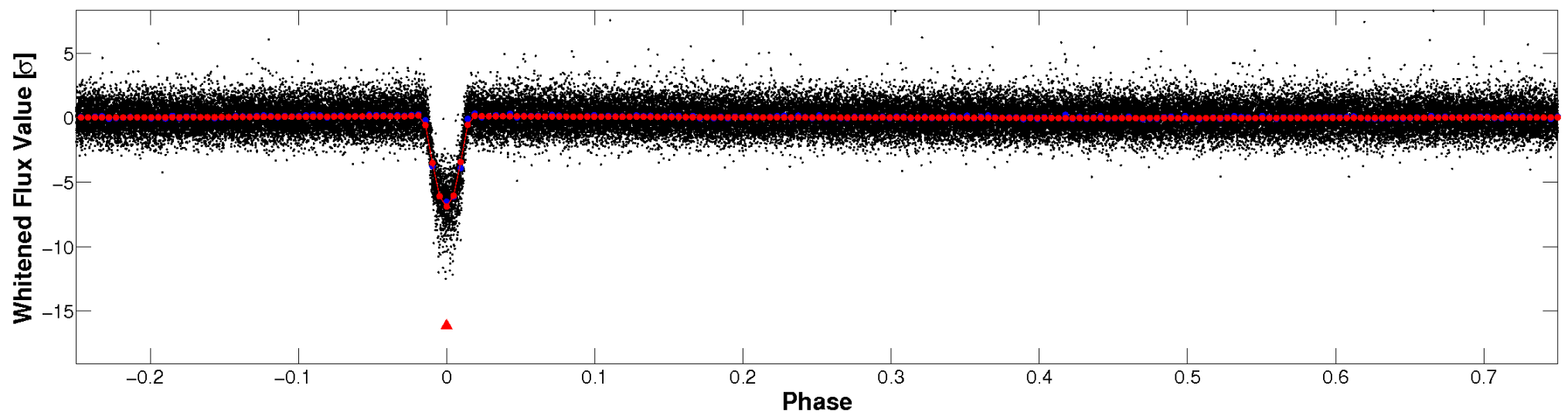


Non-Whitened Vs. Whitened Light Curve

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

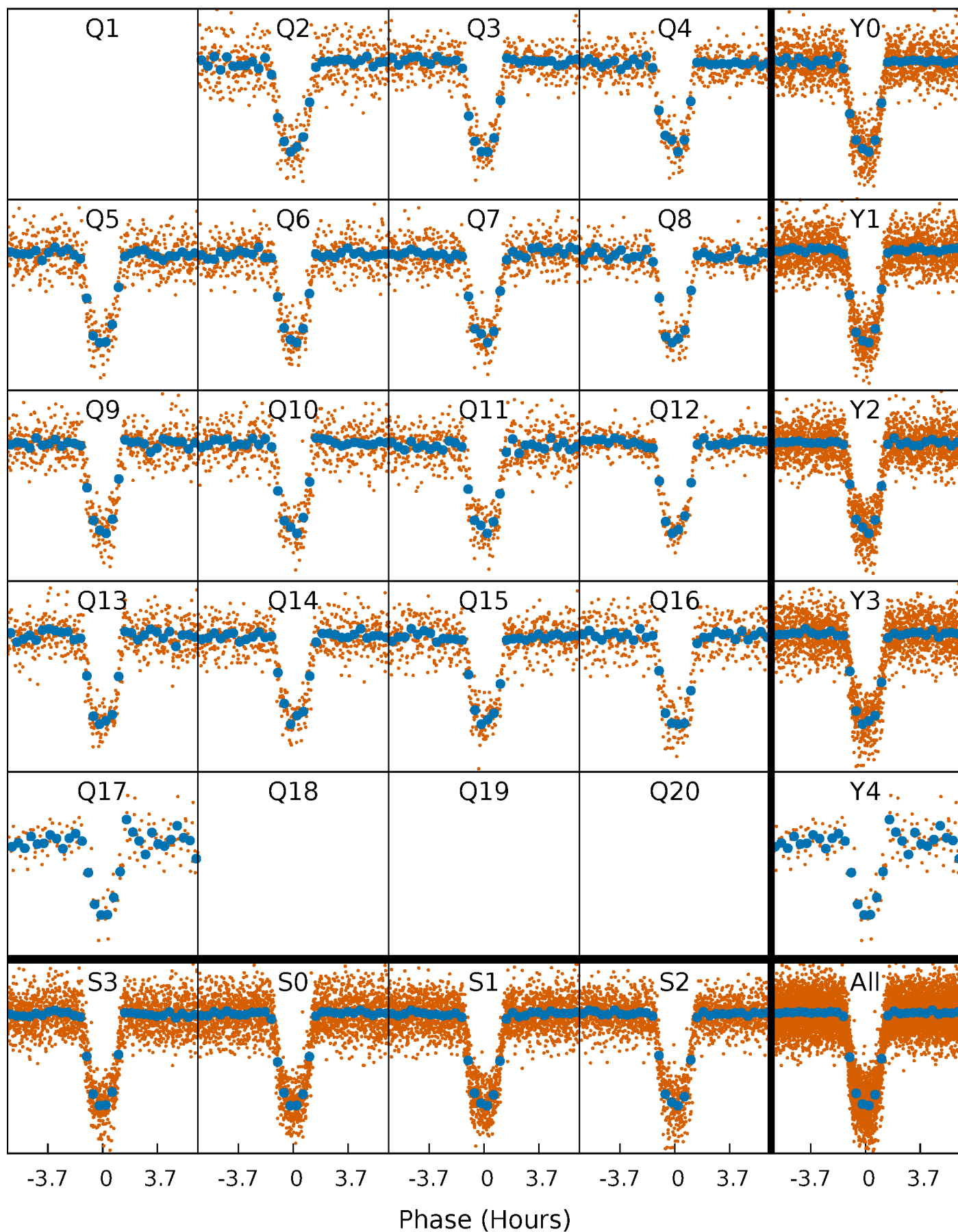


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



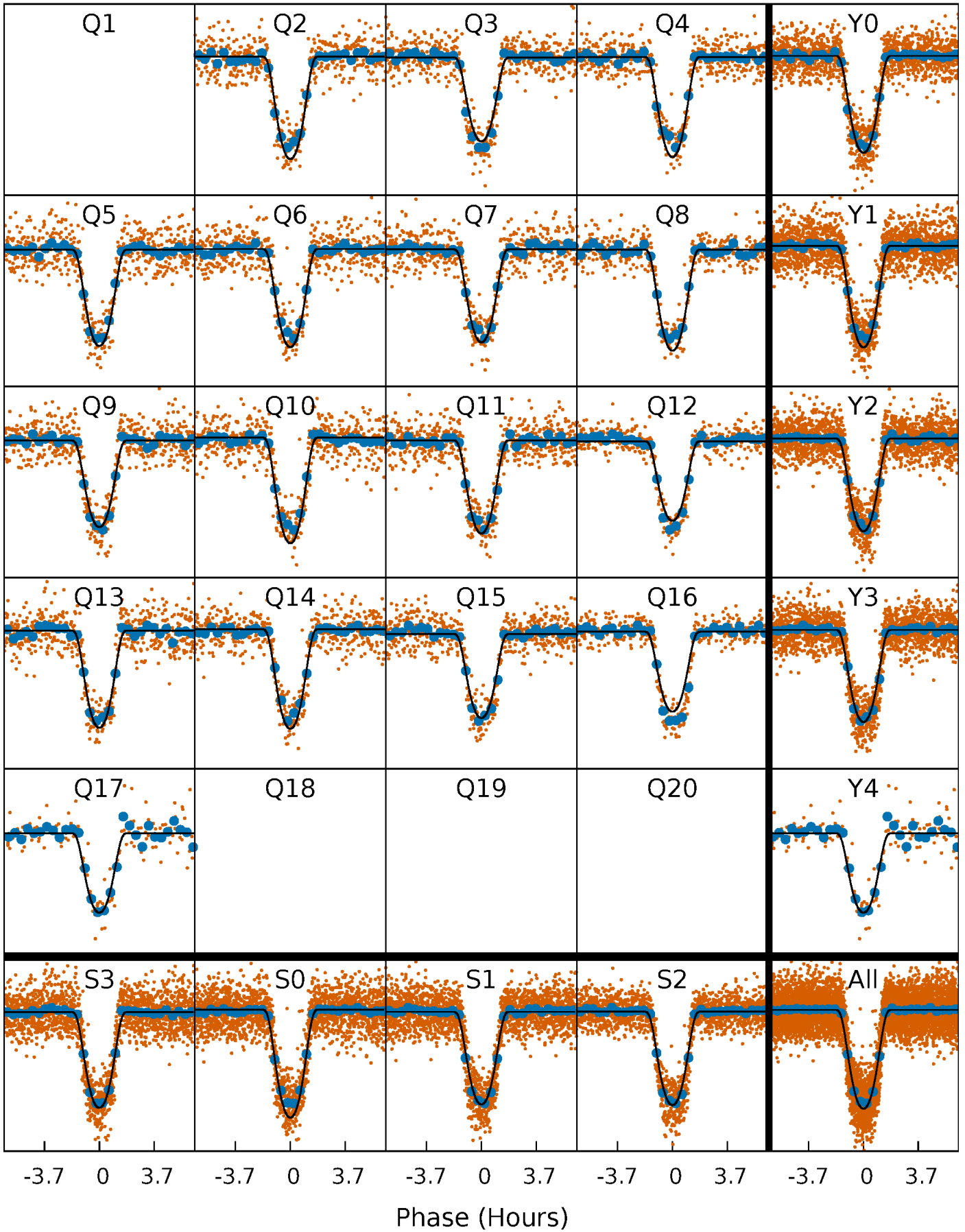
PDC Quarter-Phased Transit Curves

TCE 006752502-01 P= 4.305202 Days $T_0=131.708766$ (BKJD)



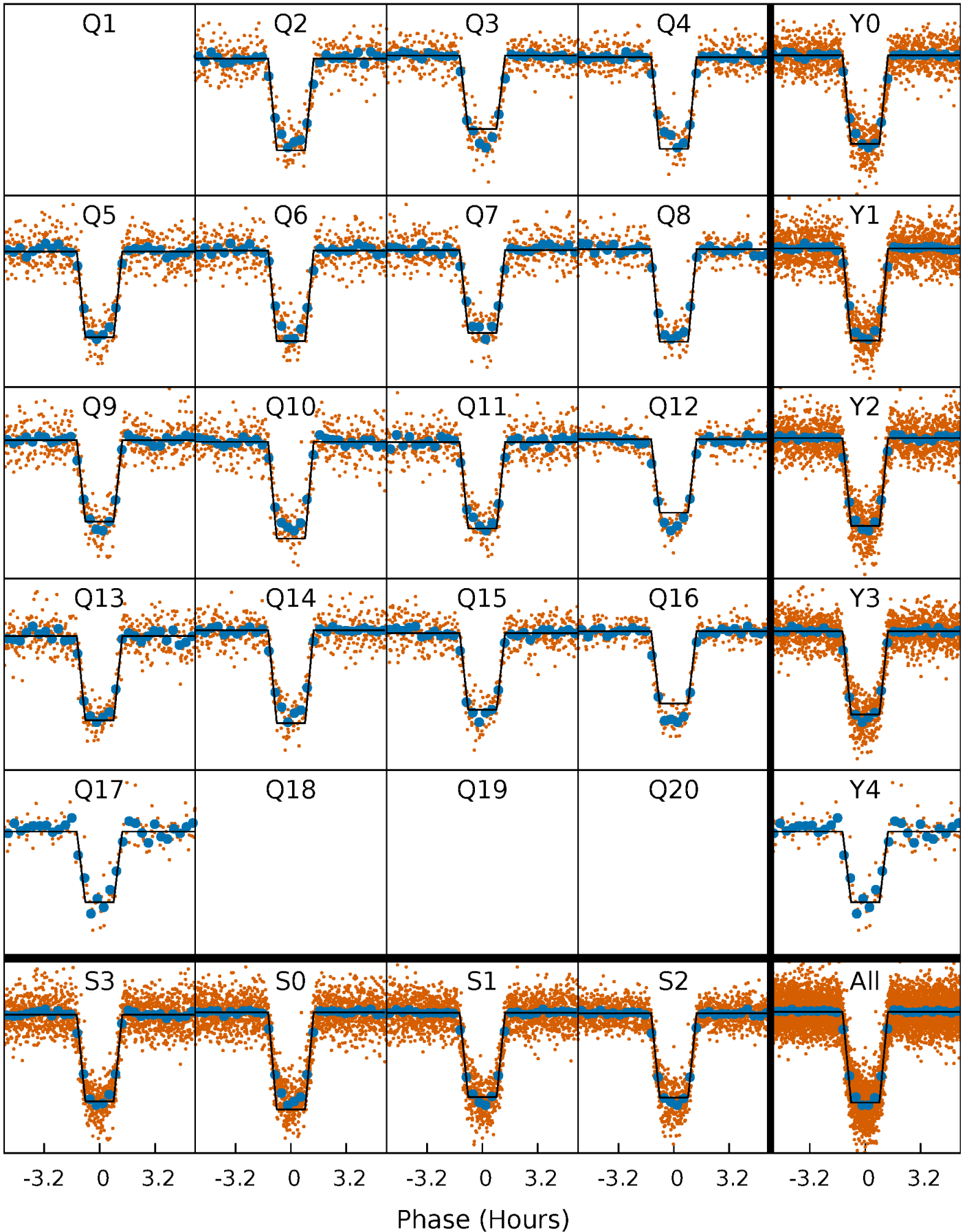
DV Quarter-Phased Transit Curves

TCE 006752502-01 P= 4.305202 Days $T_0=131.708766$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

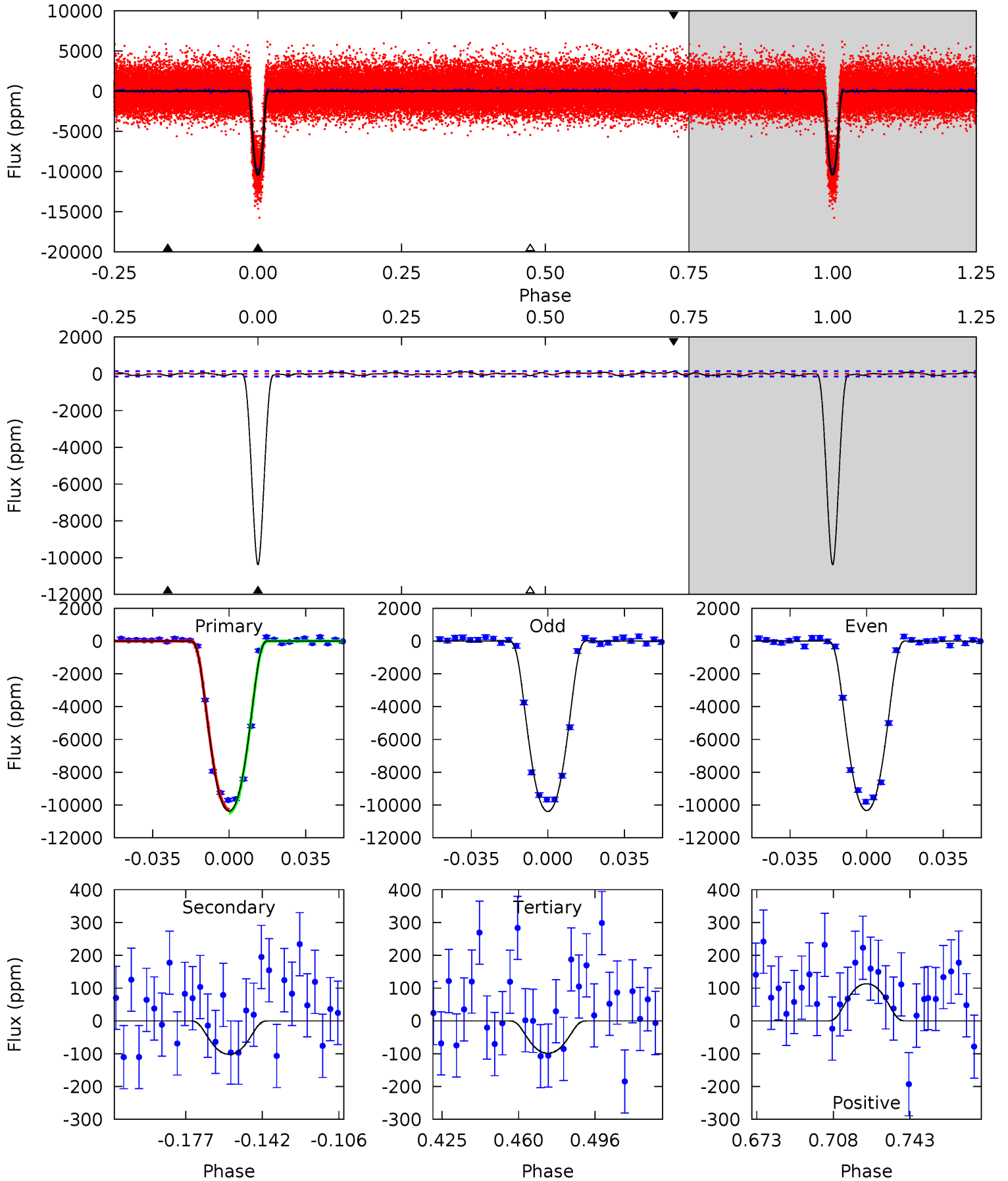
TCE 006752502-01 $P = 4.305230$ Days $T_0 = 131.704254$ (BKJD)



DV Model-Shift Uniqueness Test

006752502-01, P = 4.305202 Days, E = 131.708766 Days

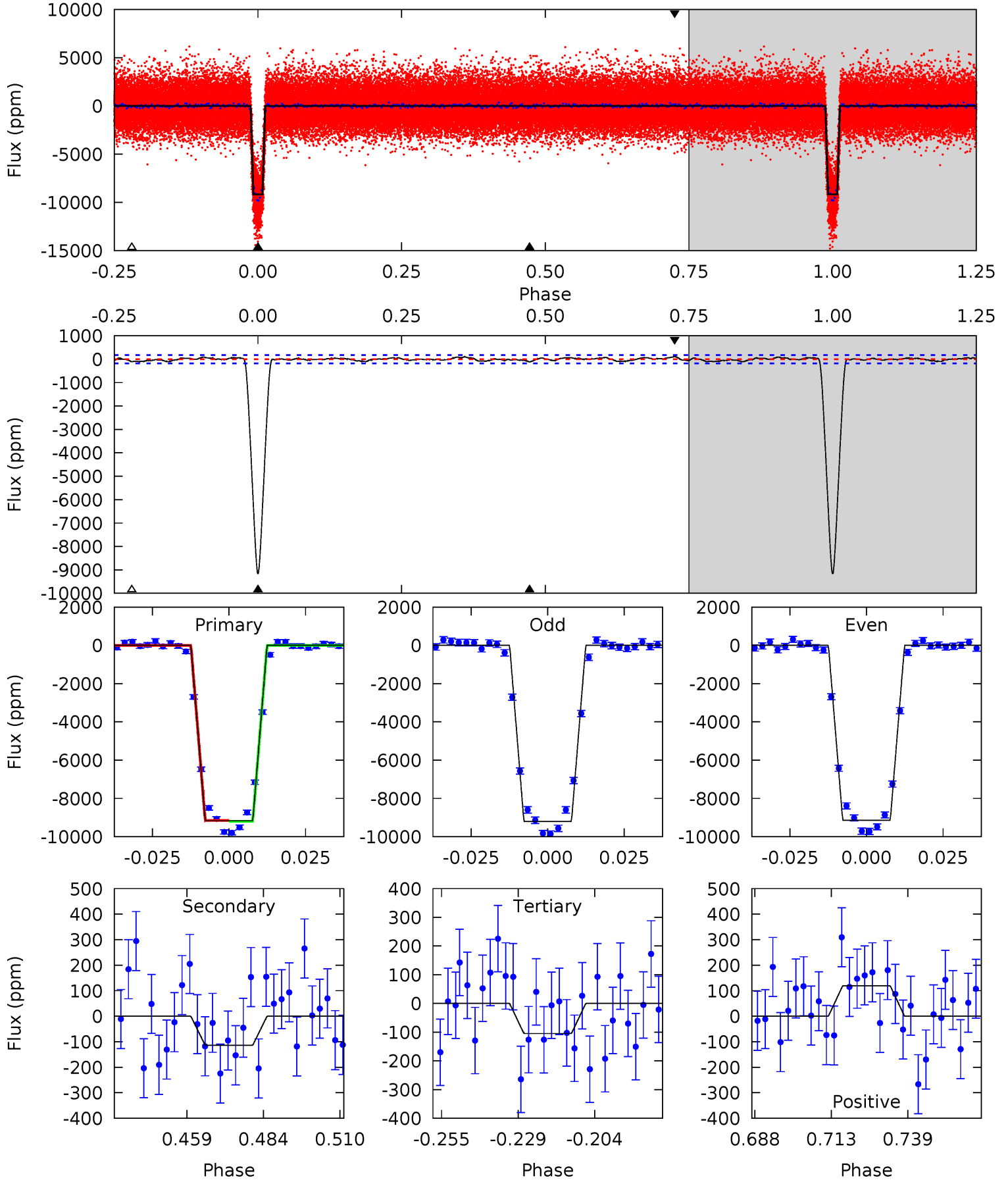
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
330.8	3.25	3.15	3.61	4.78	2.10	1.66	327.6	327.2	0.10	-0.37	0.93	1.00	0.01	2.66



Alt Model-Shift Uniqueness Test

006752502-01, P = 4.305230 Days, E = 131.704254 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
249.3	3.10	2.85	3.24	4.84	2.23	1.29	246.5	246.1	0.25	-0.15	0.81	1.02	0.01	0.60



Stellar Parameters For KIC 006752502

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	$M(M_{\odot})$	p_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	5780^{+1}_{-1}	$4.438^{+1.000}_{-1.000}$	$0.000^{+1.000}_{-1.000}$	$1.000^{+1.000}_{-1.000}$	$-1.000^{+1.000}_{-1.000}$	$-1.000^{+1.000}_{-1.000}$
	+0%/-0%	+23%/-23%	+inf%/-inf%	+100%/-100%	+100%/-100%	+100%/-100%
Source	Solar	Solar	Solar	Solar		

KIC = Kepler Input Catalog; PHO = Photometry; SPE = Spectroscopy; AST = Asteroseismology
 TRA = Transits; DESP = Dartmouth Models; MULT = Multiple Models

Secondary Eclipse Parameters for KIC 006752502-01 / KOI 0667.01

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	-102 ± 31	$12.46^{+0.88}_{-0.92}$	1571^{+77}_{-76}	2436^{+135}_{-152}	$0.946^{+0.385}_{-0.276}$
Alt.	-114 ± 37	$10.67^{+0.87}_{-0.80}$	1569^{+78}_{-70}	2627^{+121}_{-171}	$1.495^{+0.546}_{-0.477}$

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 $A_{obs} \gg 1.0$

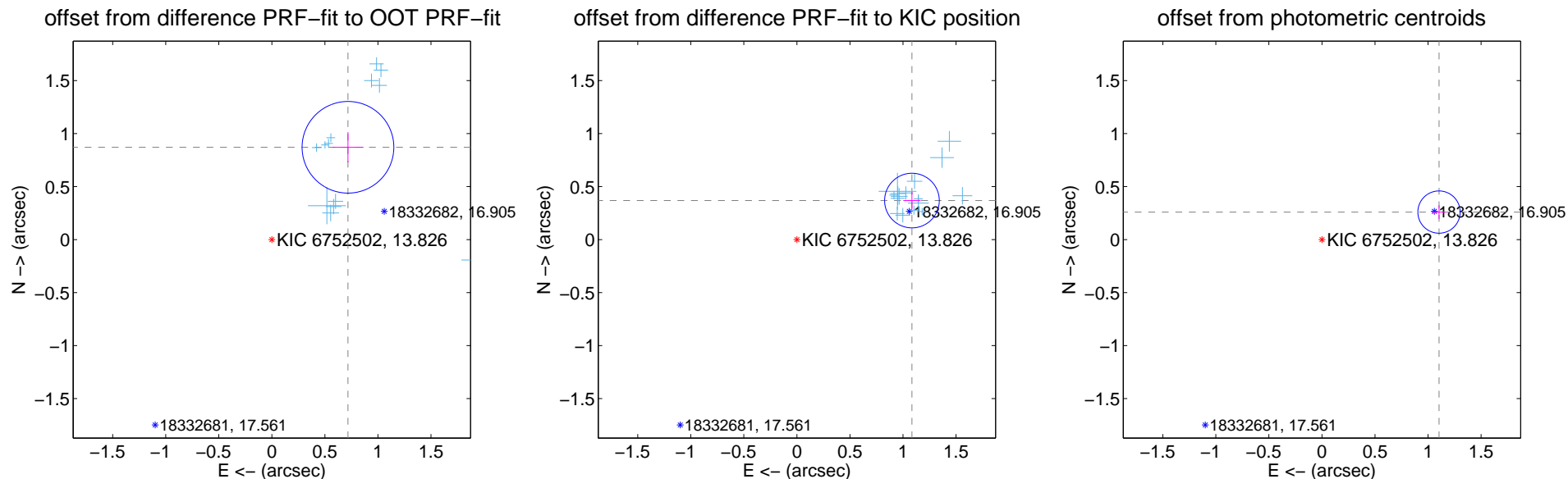
DV Centroid Data

Supplemental centroid analysis for 006752502-01. Kepler magnitude: 13.83. Transit SNR 198.79

There are 16 quarters with good PRF difference image offsets

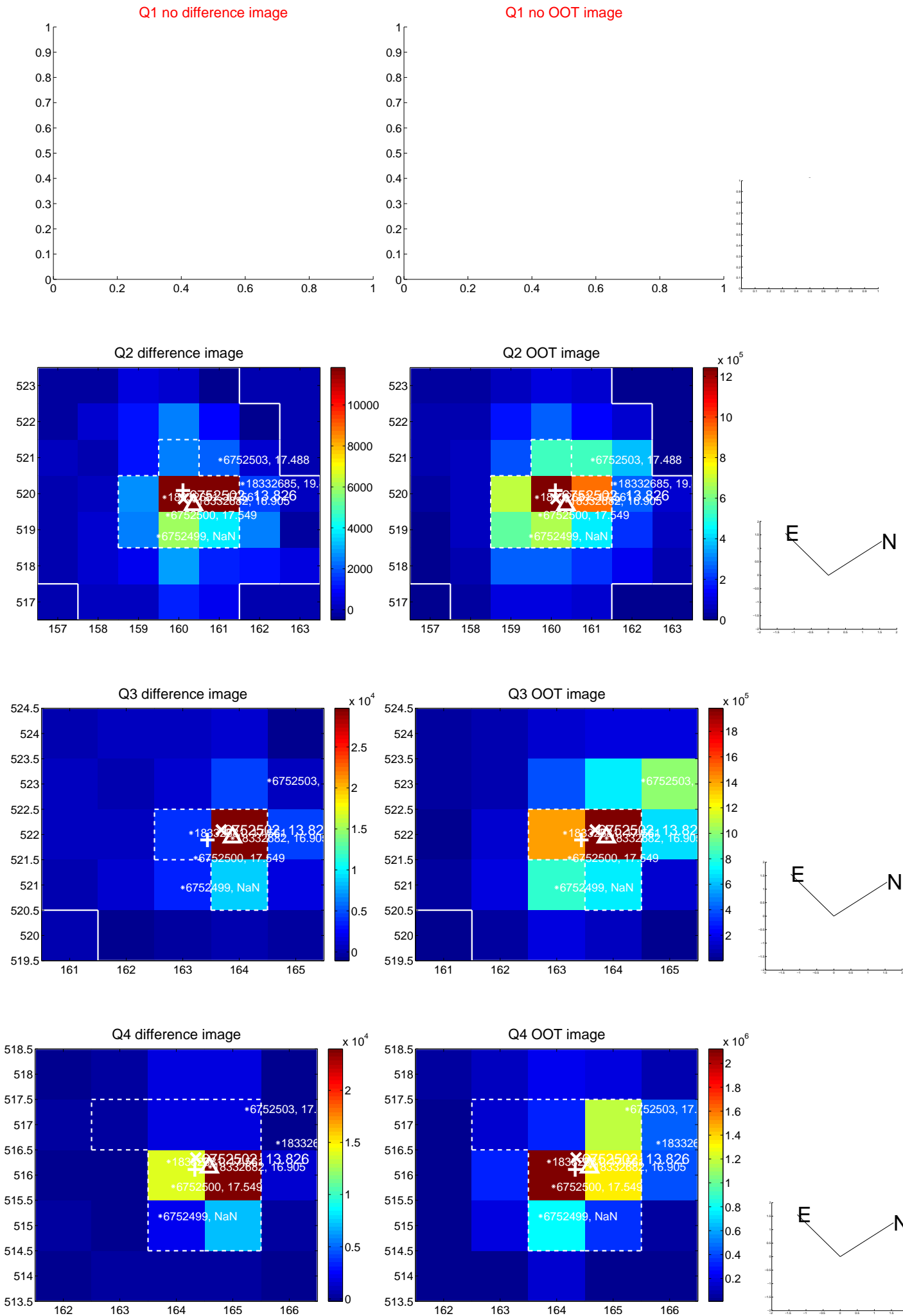
The direct PRF centroid is offset from the target star catalog position by about 0.45 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	1.128 ± 0.144	7.83	-0.718 ± 0.146	0.871 ± 0.143
PRF-fit source offset from KIC position	1.146 ± 0.086	13.33	-1.085 ± 0.082	0.368 ± 0.081
photometric centroid source offset	1.13 ± 0.07	17.06	-1.10 ± 0.07	0.26 ± 0.07

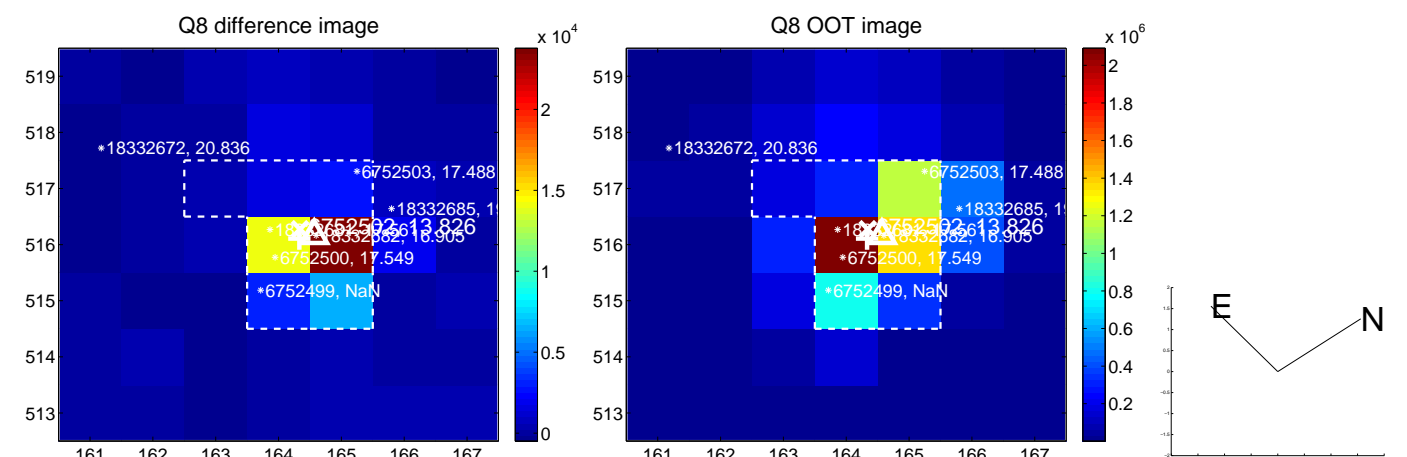
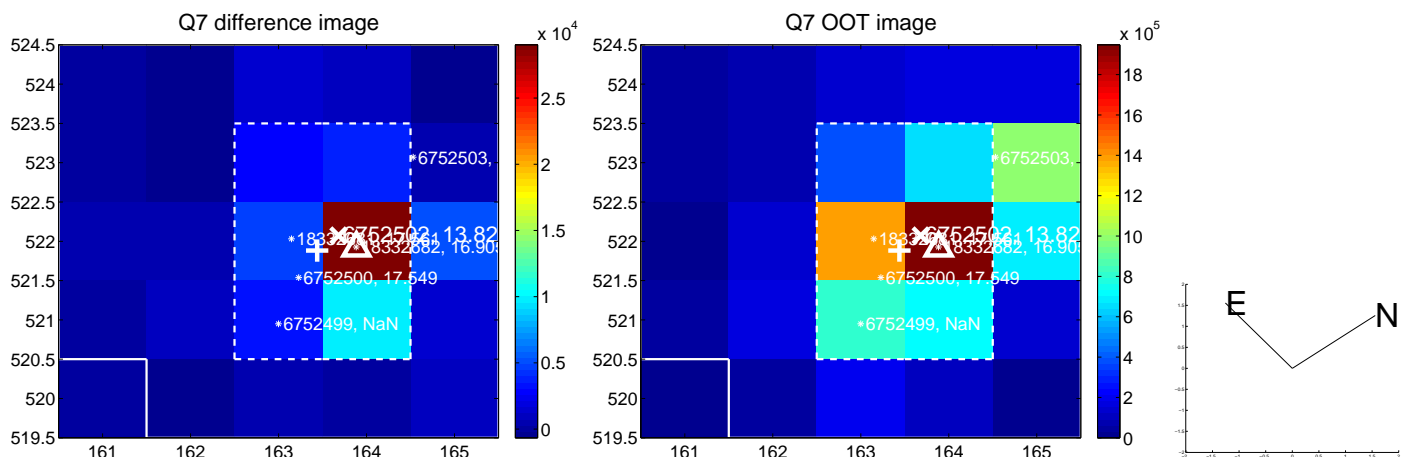
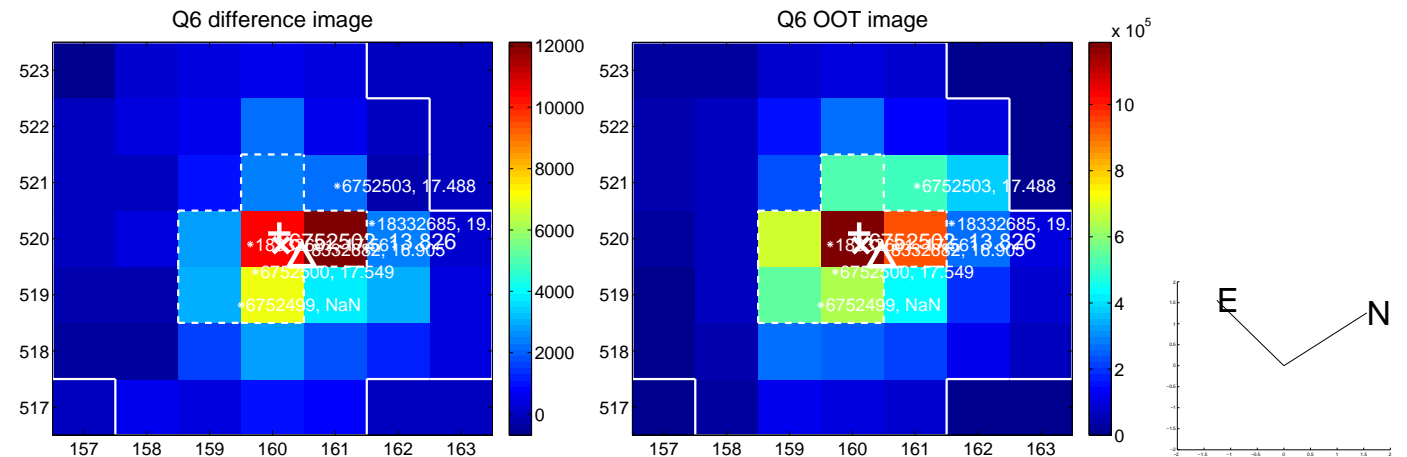
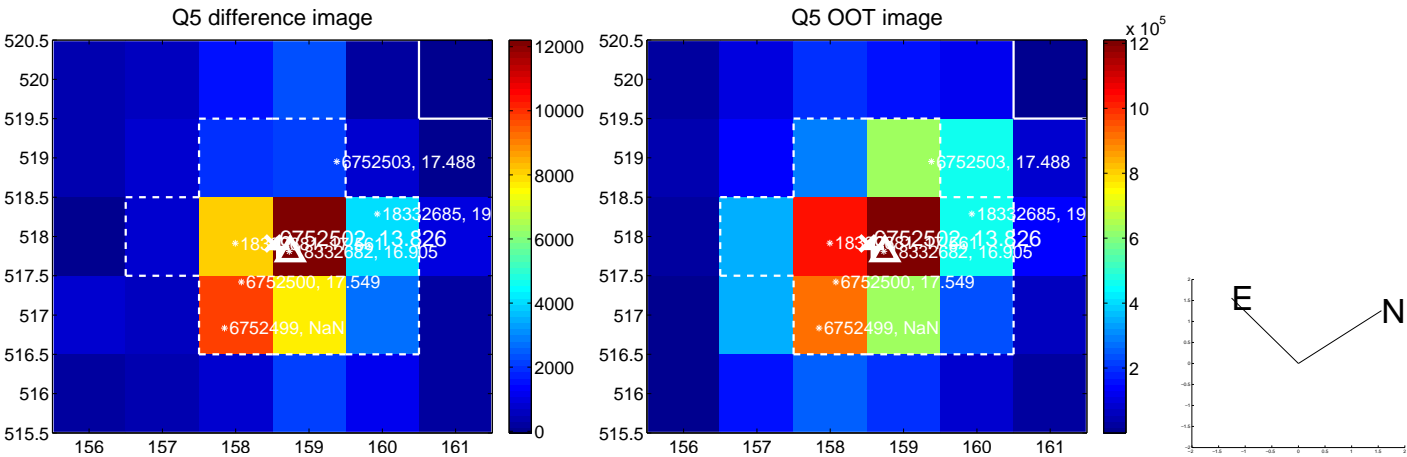


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets**; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

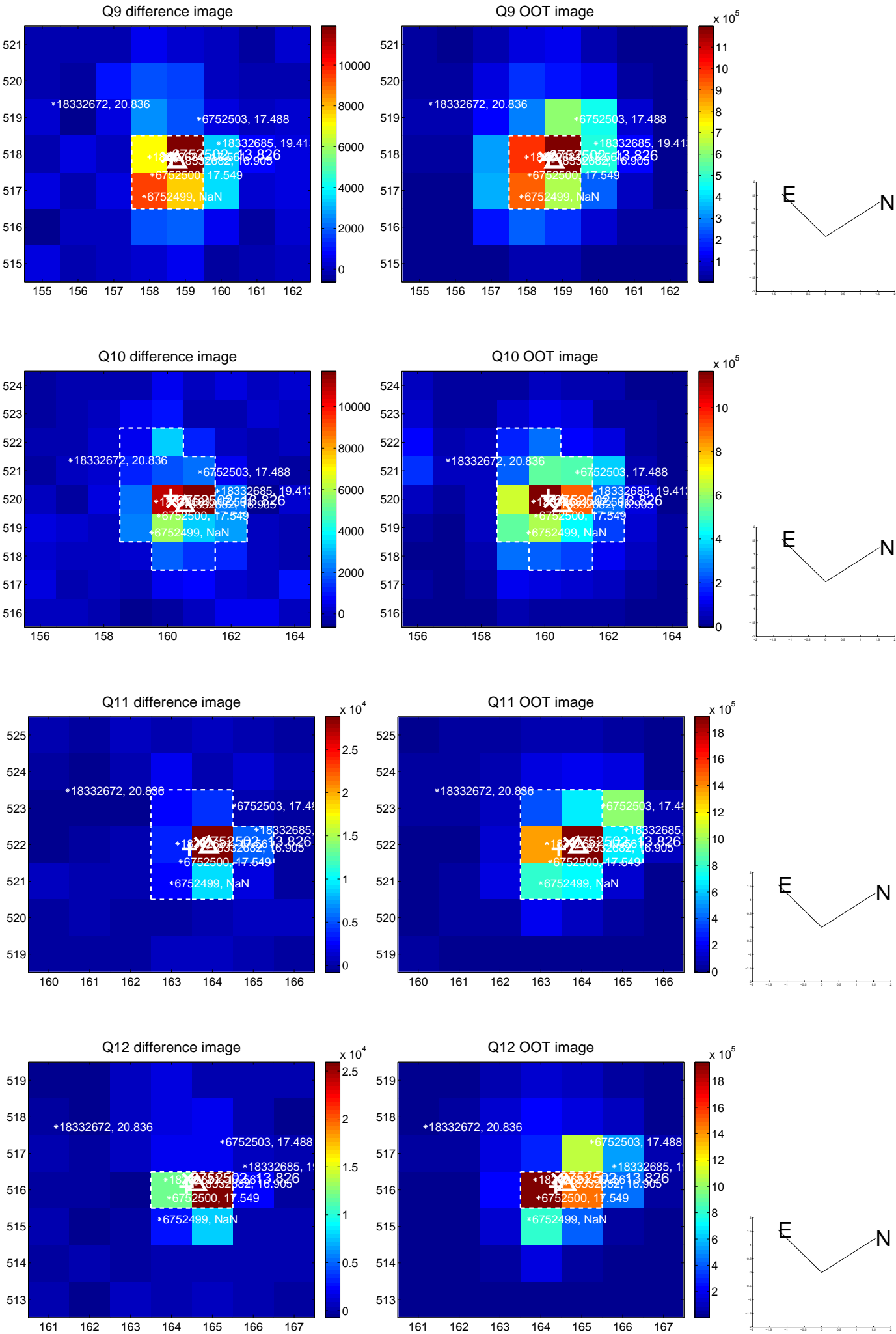
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



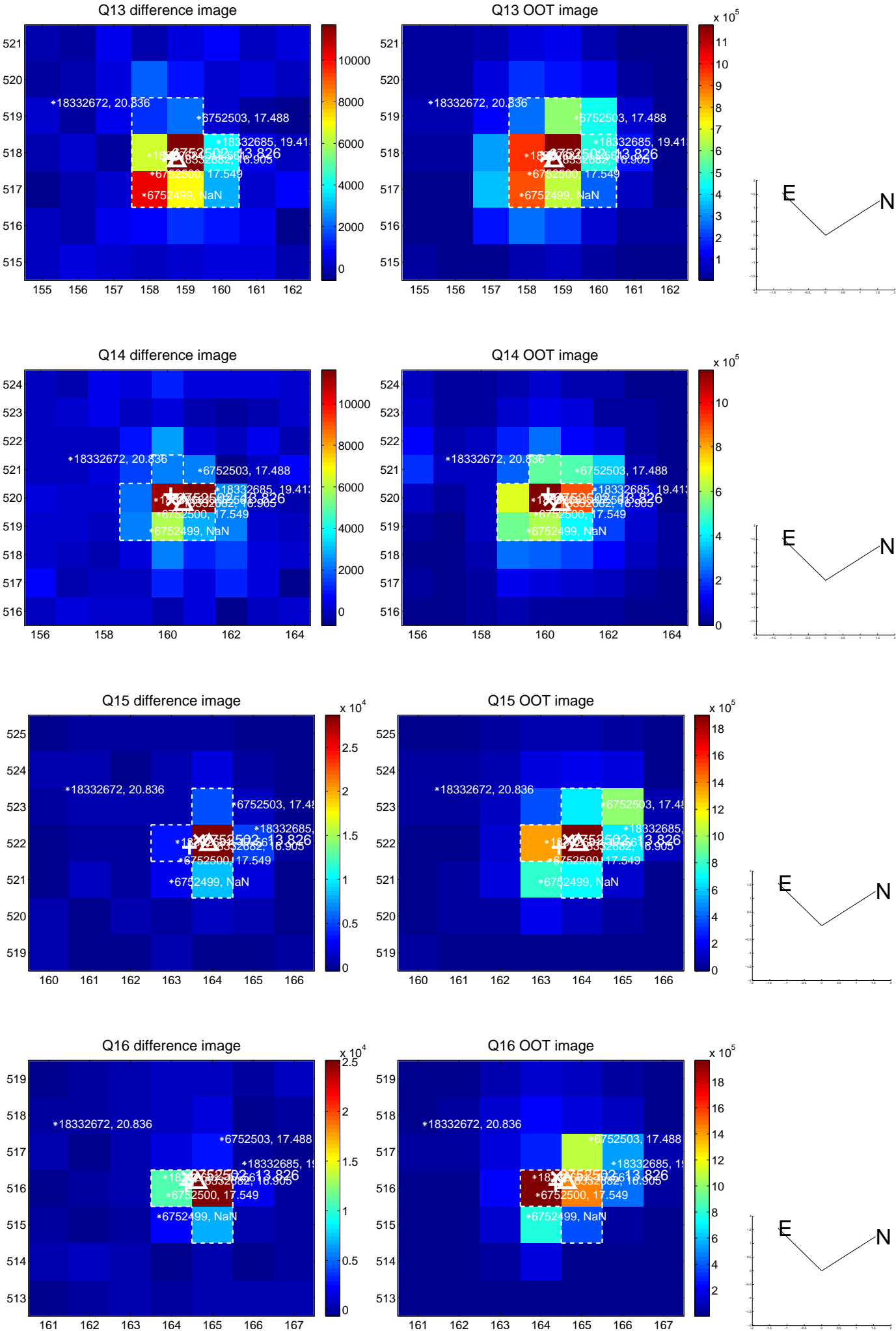
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



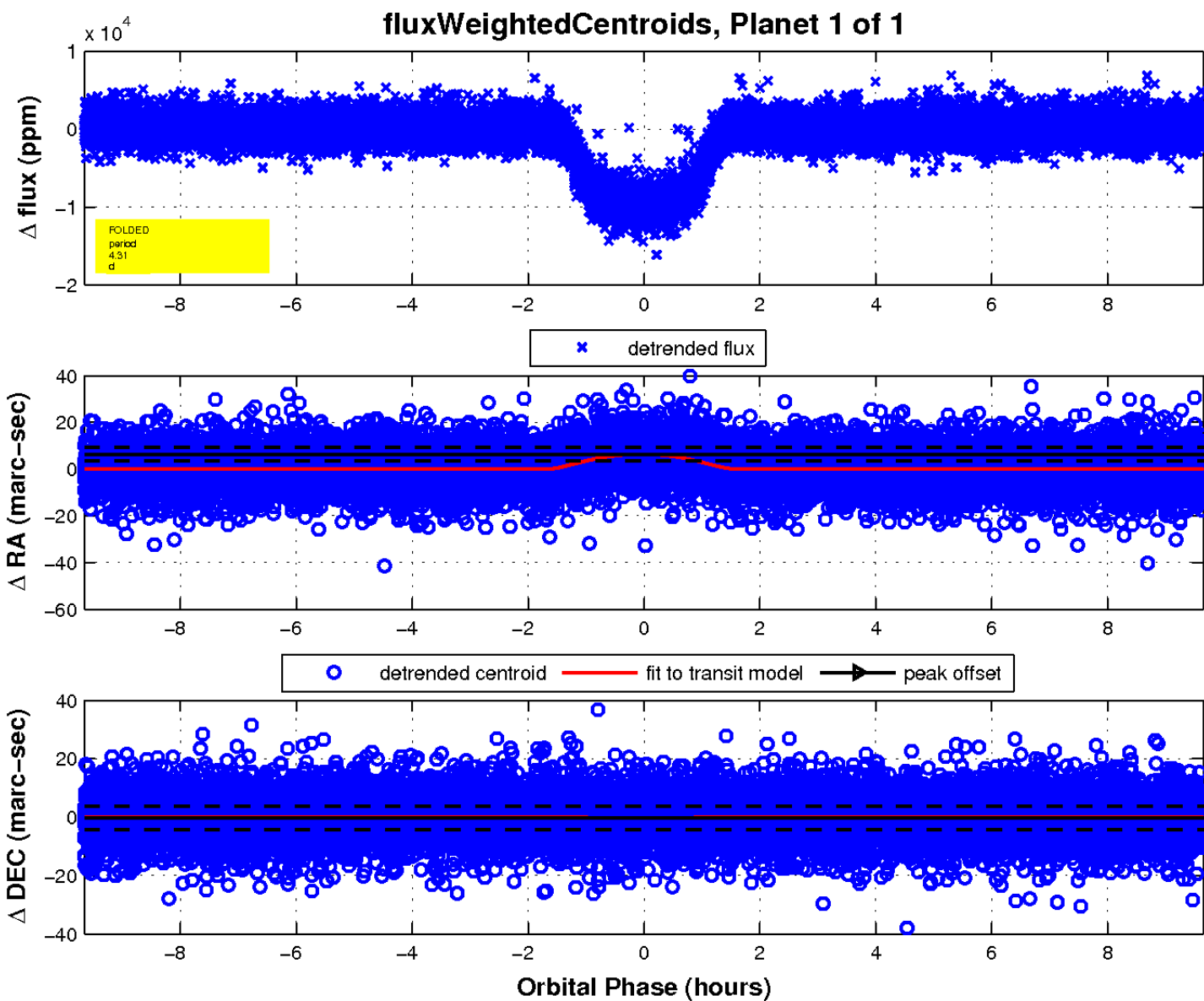
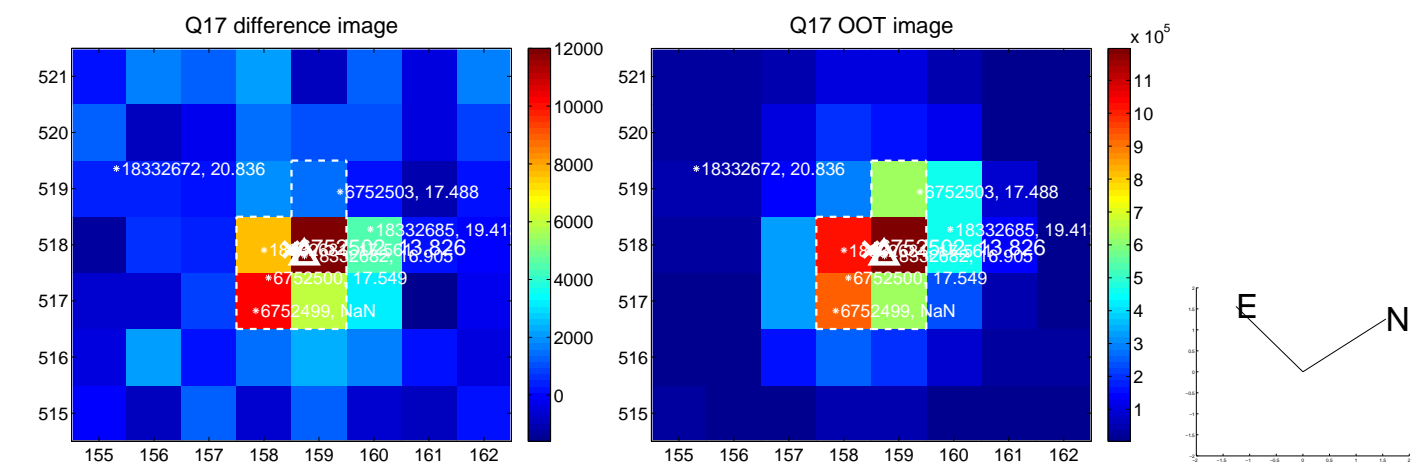
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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

