

KIC 003443582

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})
003443582-01	OBS	8087.01	1.085908	132.044612	487.2	3.938	28.3	29.9	2.40	15896	5.74	372344.31

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
003443582-01	OBS	FP	0.00	0	1	0	0	MOD_SEC_ALT

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

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

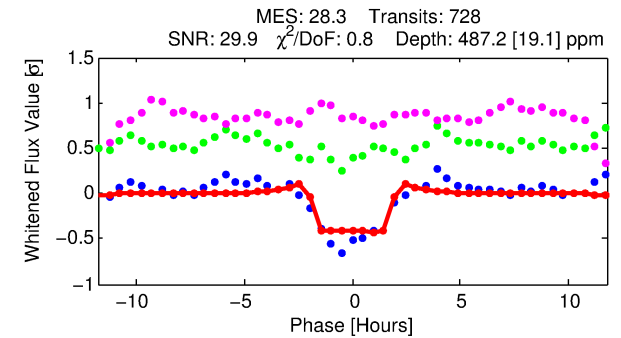
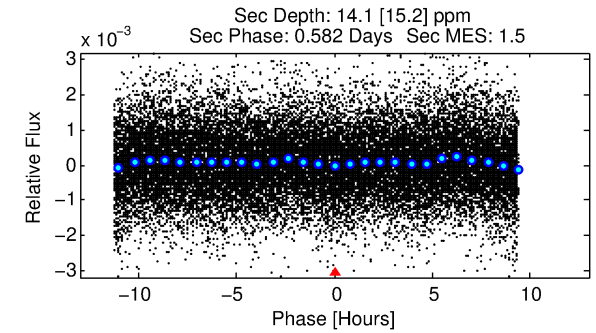
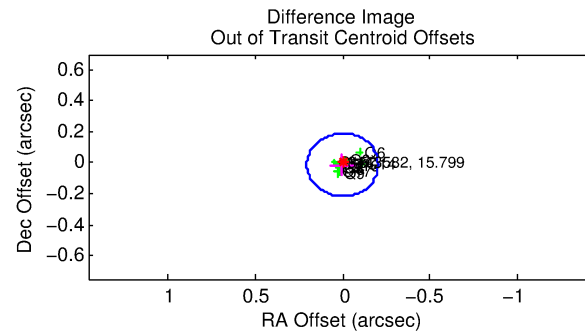
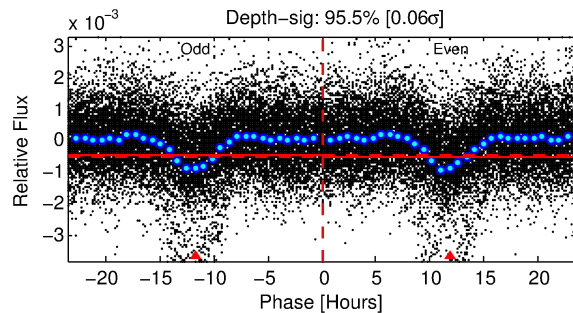
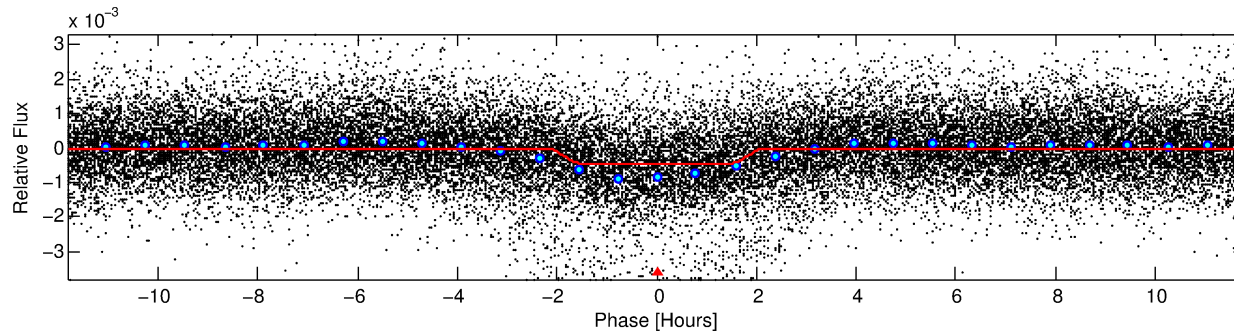
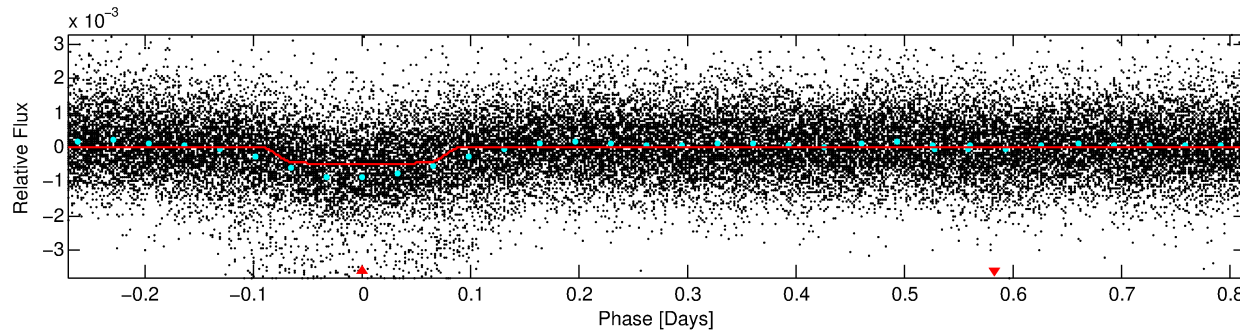
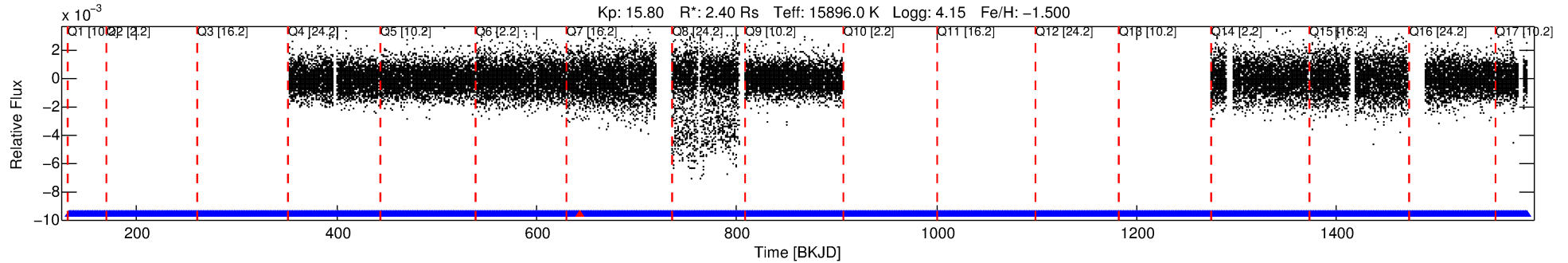
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 003443582-01

No Significant Match Found

DV One-Page Summary

KIC: 3443582 Candidate: 1 of 1 Period: 1.086 d



DV Fit Results:

Period = 1.08591 [0.00000] d
Epoch = 132.0446 [0.0011] BKJD
Rp/R* = 0.0219 [0.0020]
a/R* = 1.75 [1.06]
b = 0.71 [0.62]
Seff = 372344.31 [1.79]
Teff = 6299 [0] K
Rp = 5.74 [0.52] Re
a = 0.0298 [0.0000] AU
Ag = 0.21 [0.23] [-3.45 σ]
Teffp = 6589 [1803] K [0.16 σ]

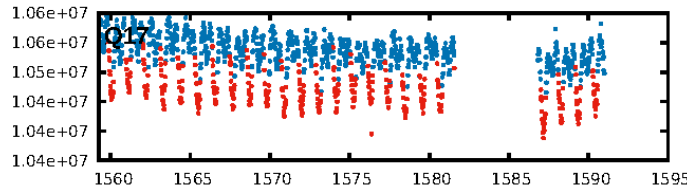
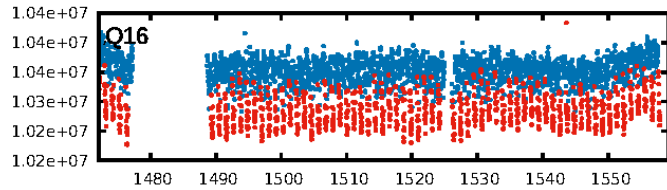
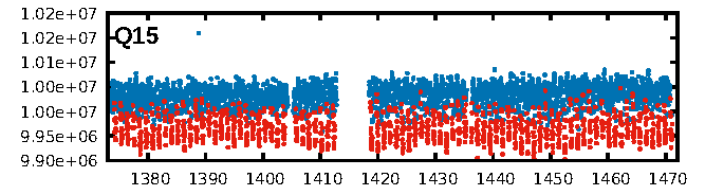
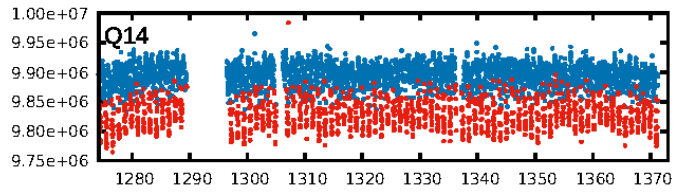
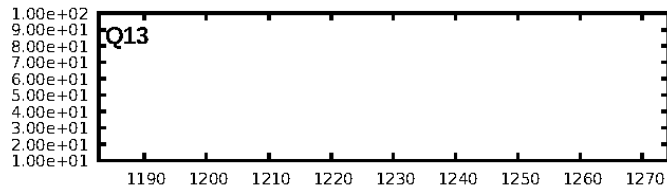
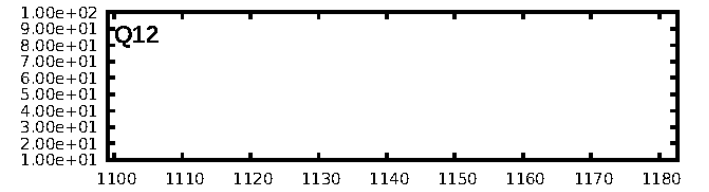
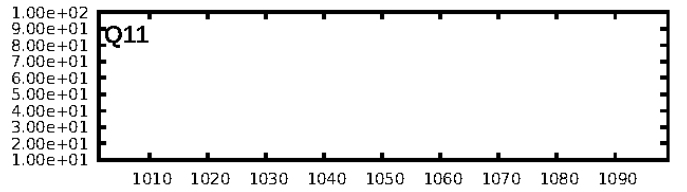
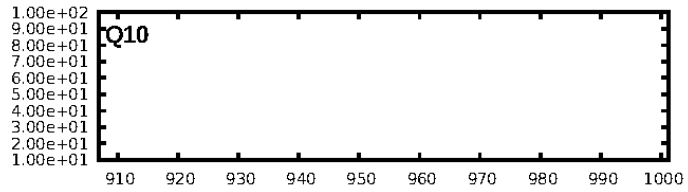
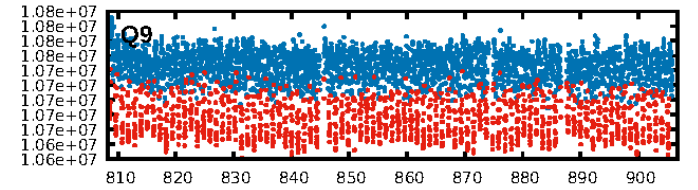
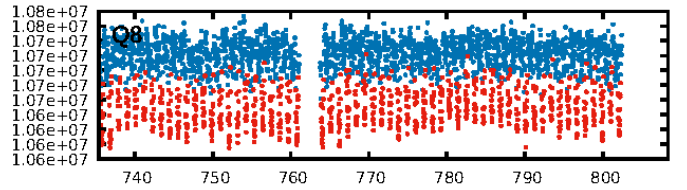
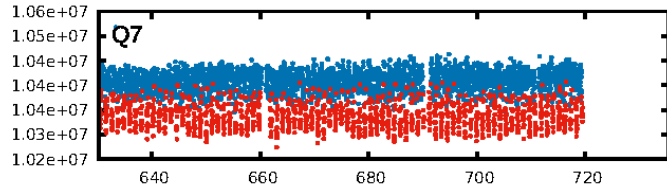
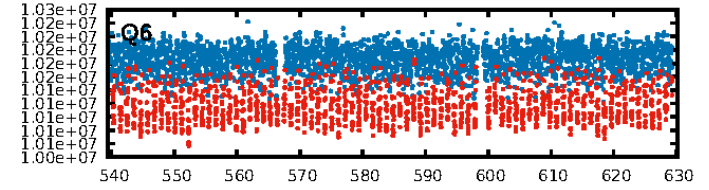
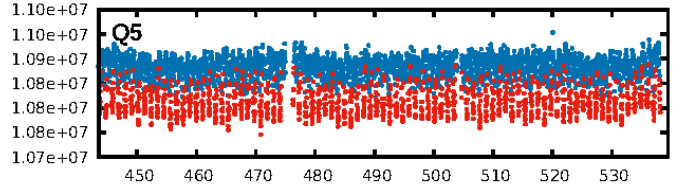
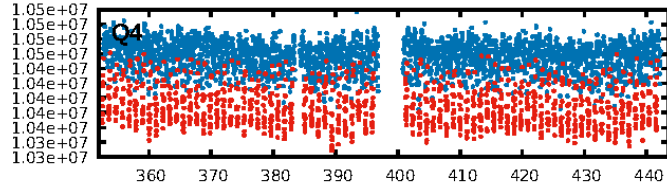
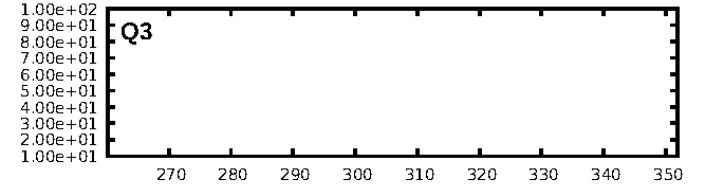
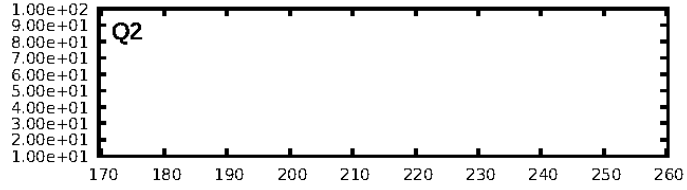
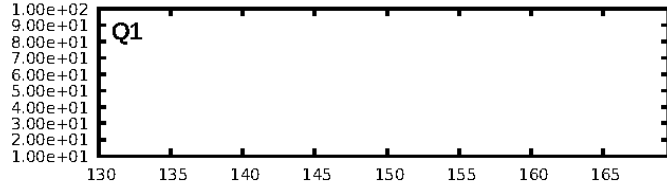
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: 1.46e-137
RollingBand-fgt: 1.00 [703/704]
GhostDiagnostic-chr: 6.333
Centroid-sig: 13.7%
Centroid-so: 0.505 arcsec [1.54 σ]
OotOffset-rm: 0.014 arcsec [0.20 σ]
KicOffset-rm: 0.081 arcsec [1.01 σ]
OotOffset-st: 2/2/3/3 [10]
KicOffset-st: 2/2/3/3 [10]
DiffImageQuality-fgm: 1.00 [10/10]
DiffImageOverlap-fno: 1.00 [10/10]

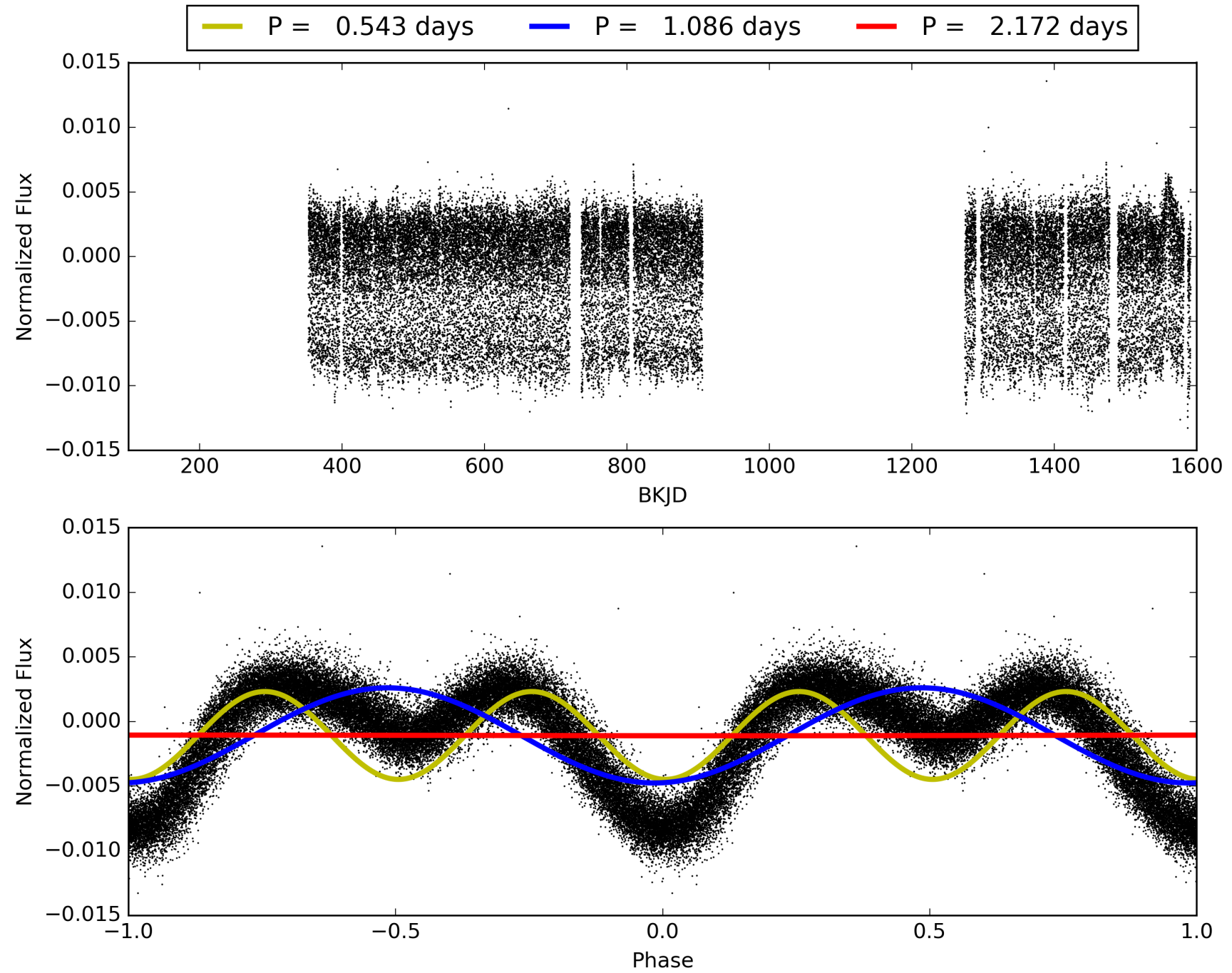
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 31-Jan-2016 14:55:53 Z

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

TCE 003443582-01, PDC Light Curves

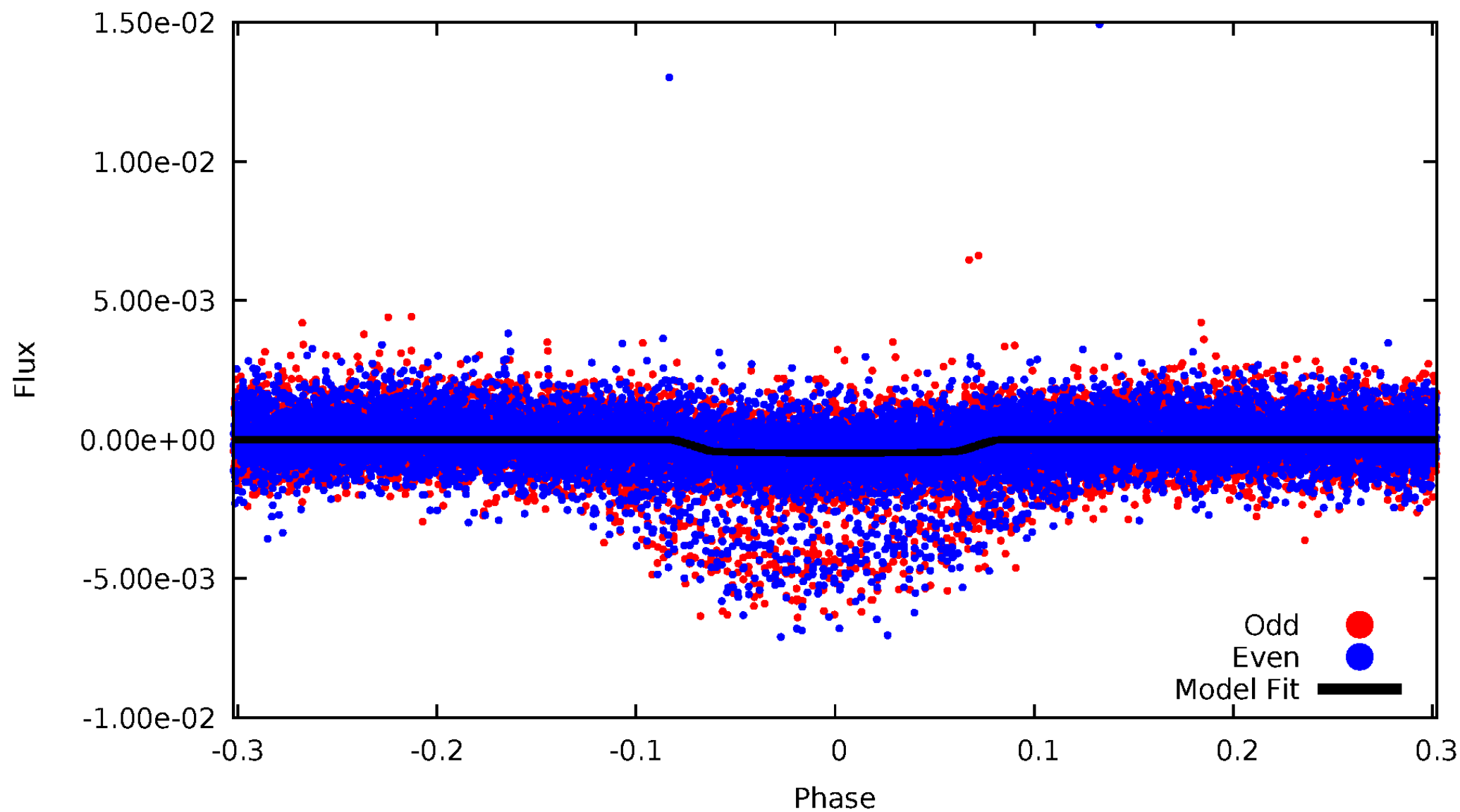


TCE 003443582-01



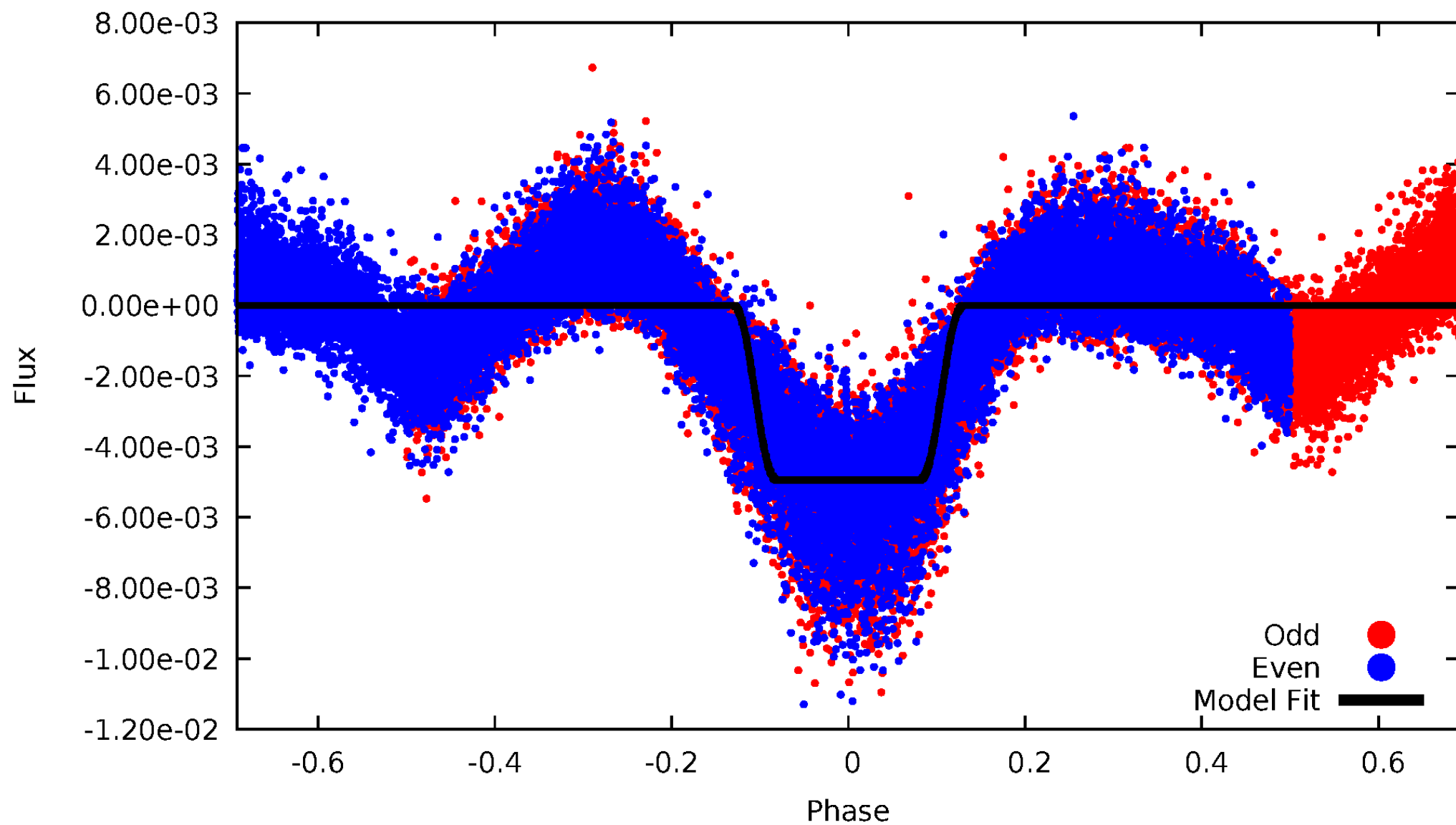
DV Odd/Even

TCE 003443582-01

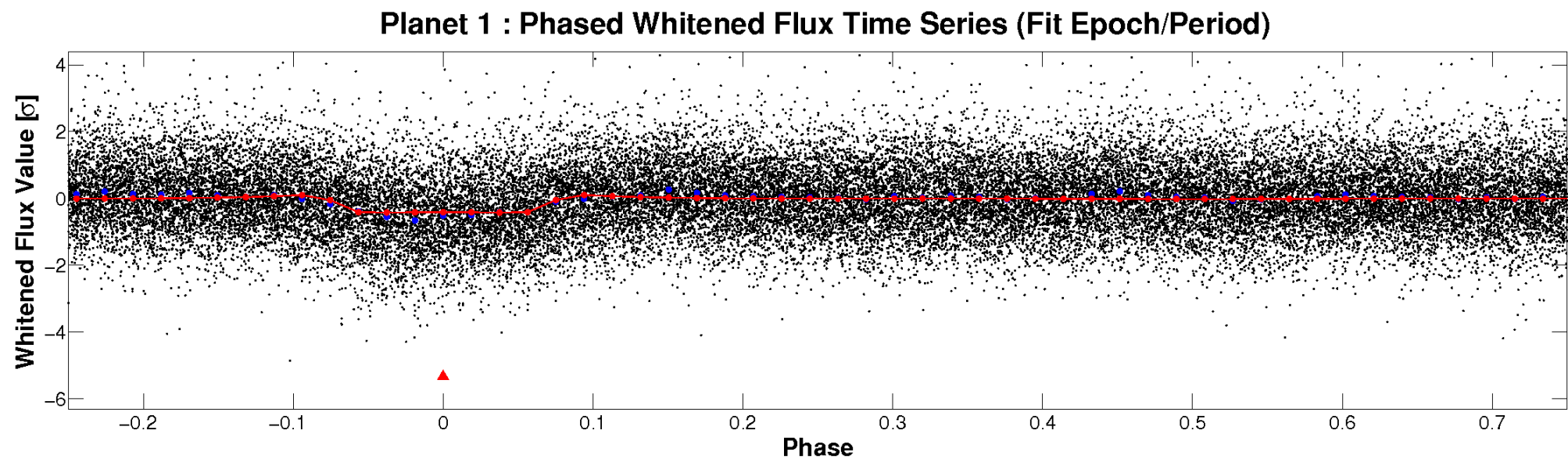
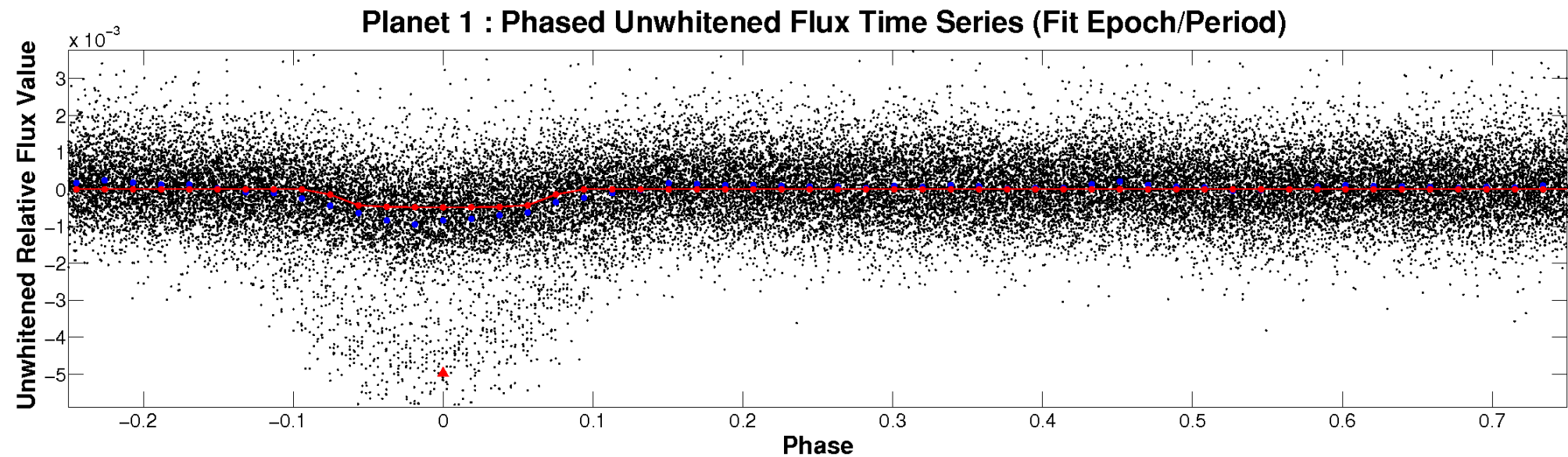


ALT Odd/Even

TCE 003443582-01

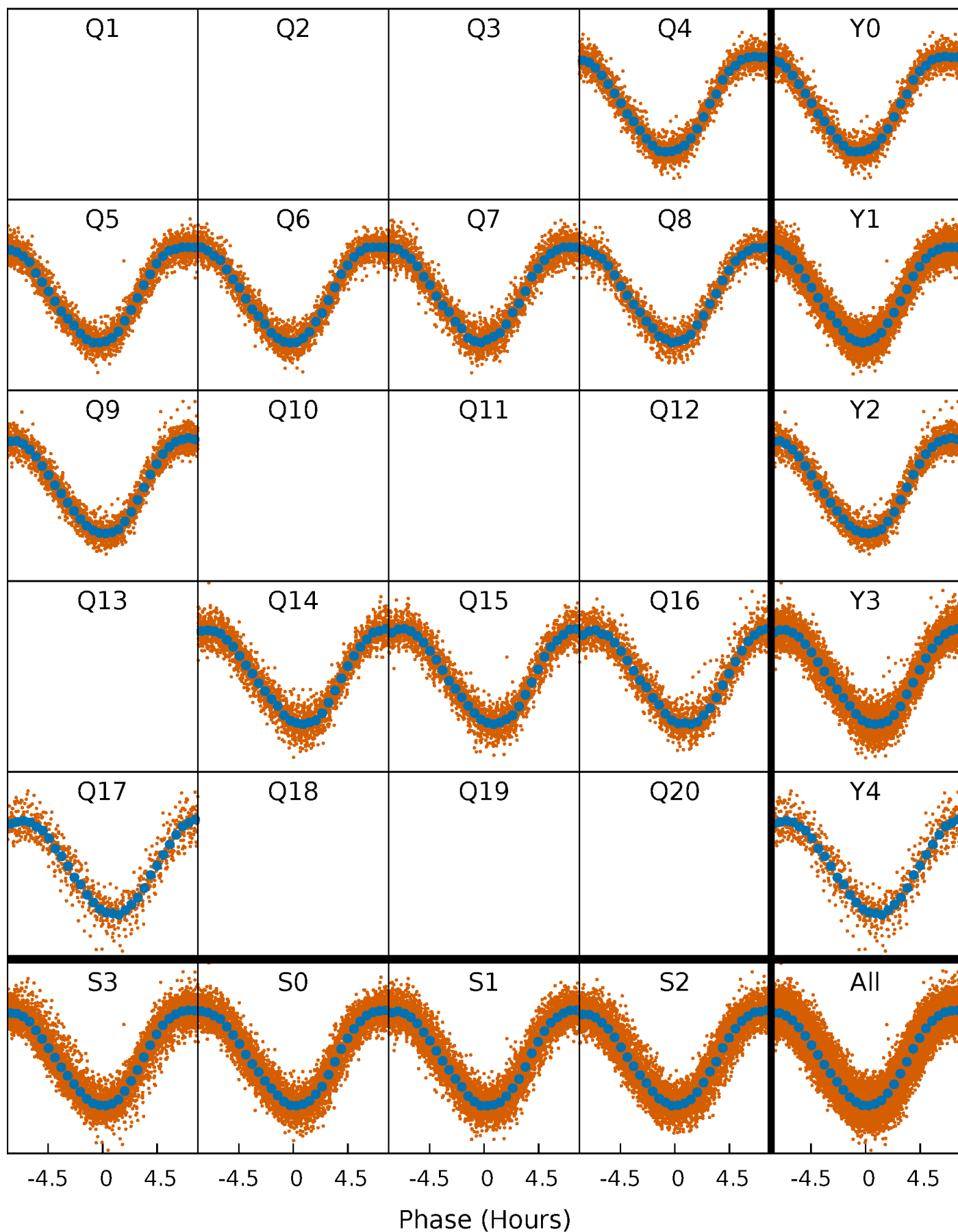


Non-Whitened Vs. Whitened Light Curve



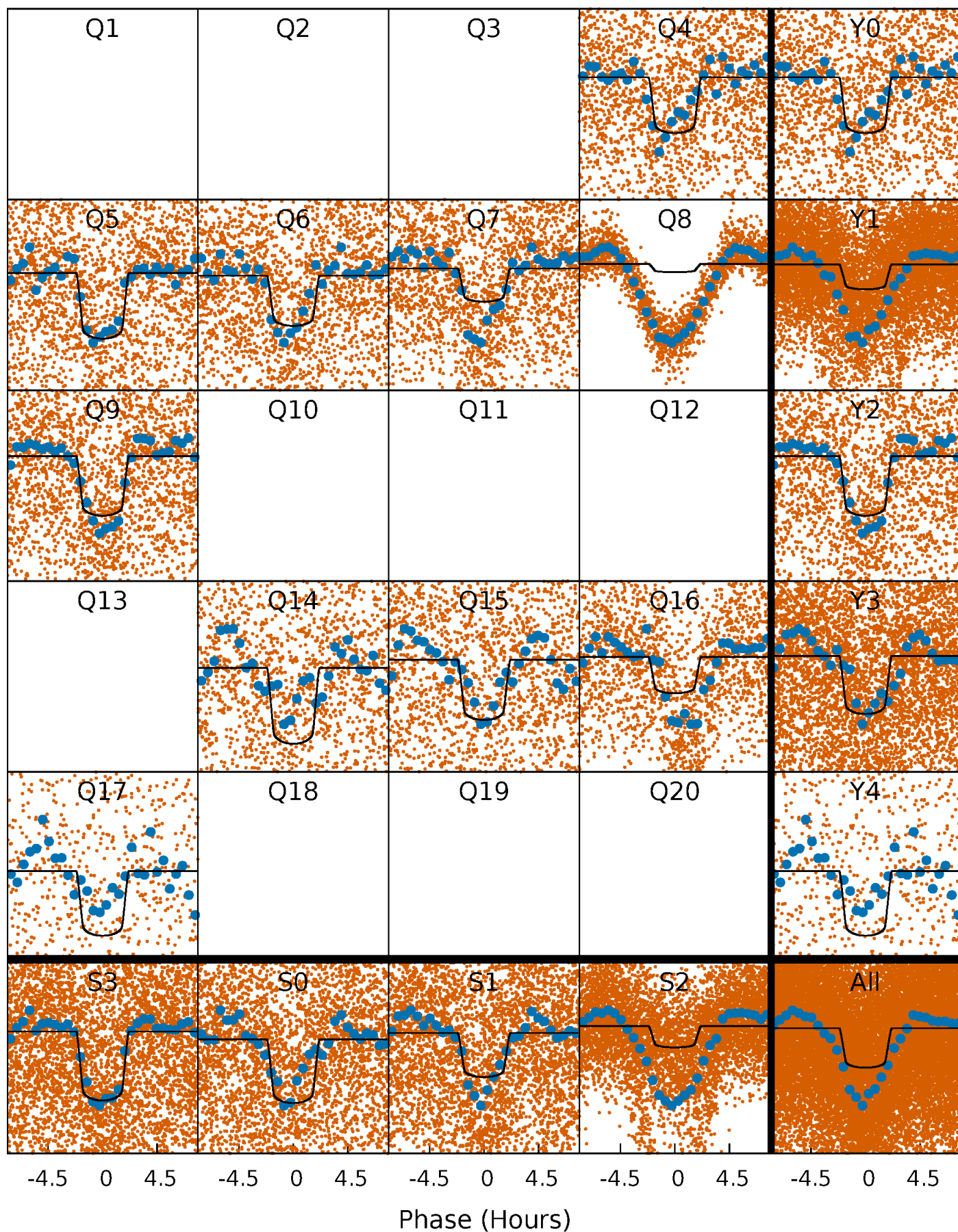
PDC Quarter-Phased Transit Curves

TCE 003443582-01 P= 1.085908 Days $T_0=132.044612$ (BKJD)



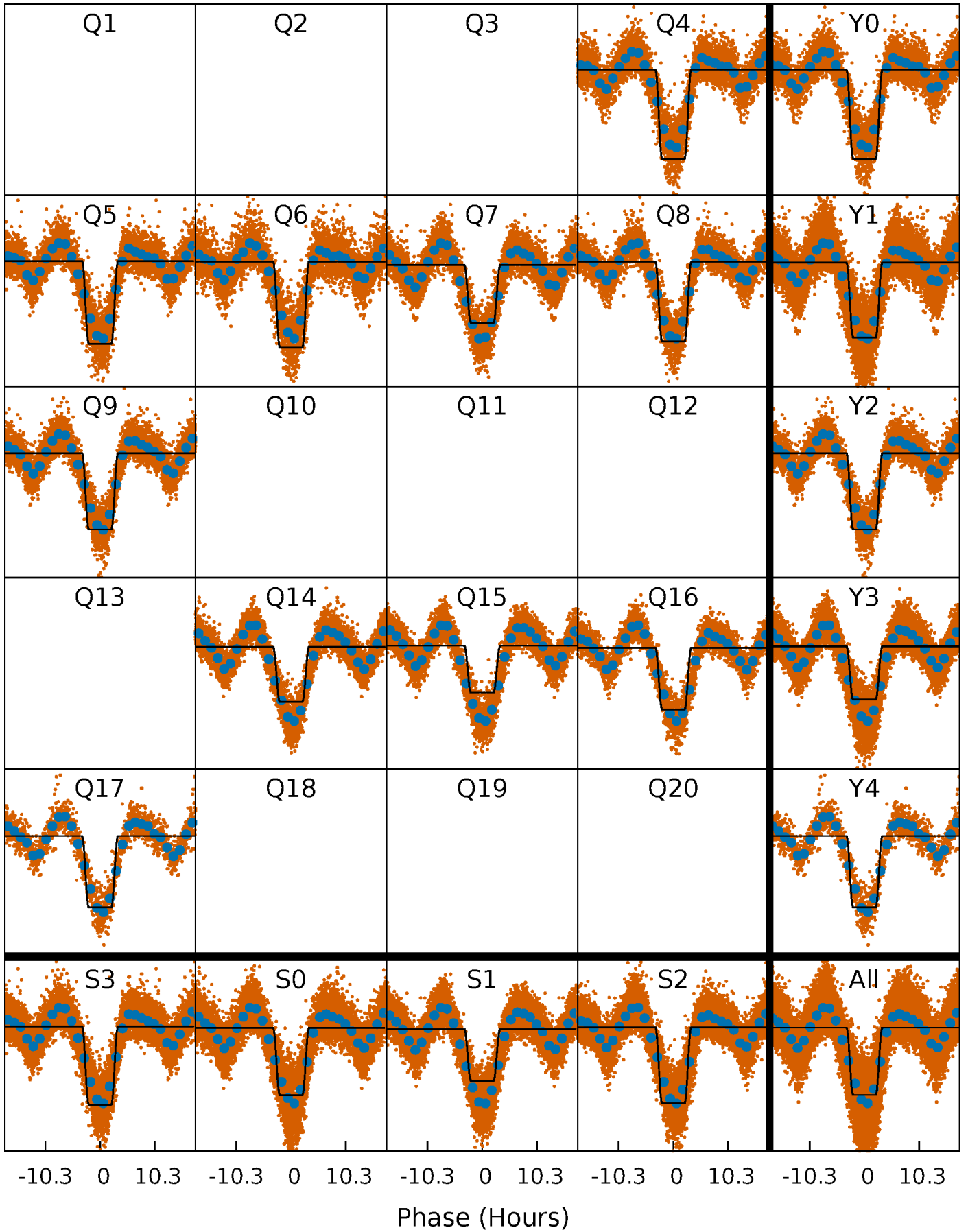
DV Quarter-Phased Transit Curves

TCE 003443582-01 P= 1.085908 Days $T_0=132.044612$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

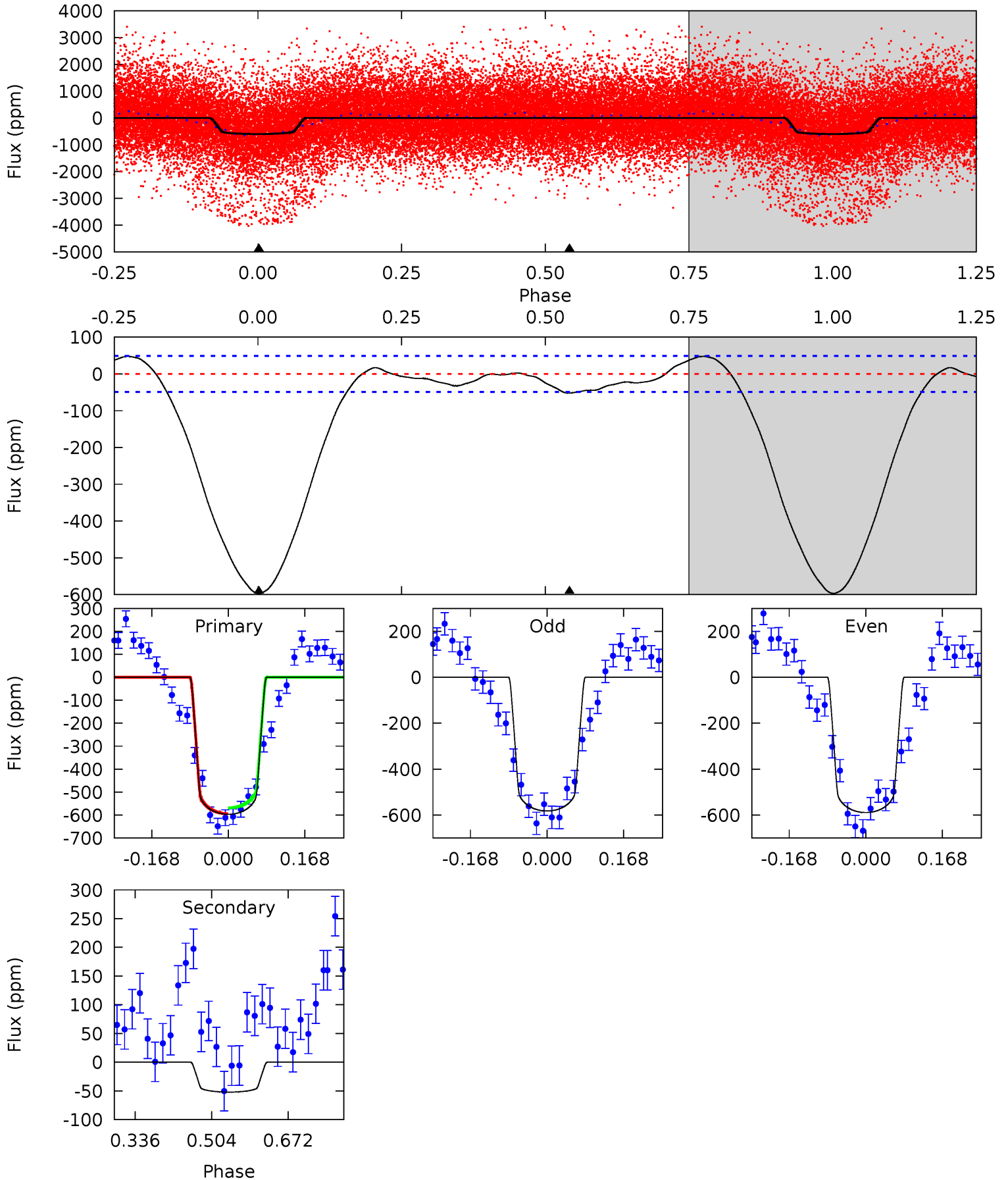
TCE 003443582-01 P= 1.085942 Days $T_0=132.031598$ (BKJD)



DV Model-Shift Uniqueness Test

003443582-01, P = 1.085908 Days, E = 132.044612 Days

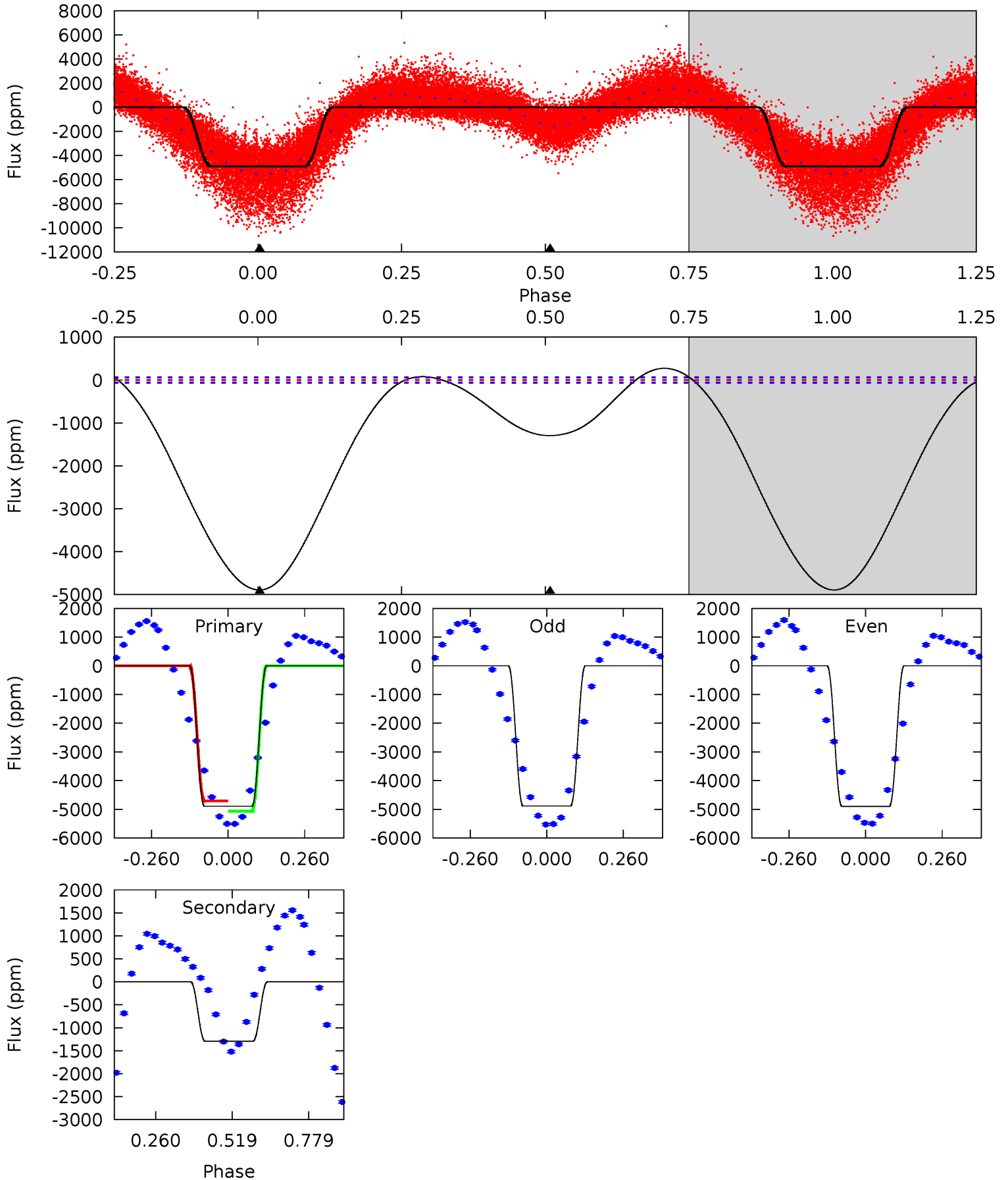
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
54.5	4.75	0	0	4.45	1.38	2.21	54.5	54.5	4.75	4.75	0.32	1.59	0.07	1.17



Alt Model-Shift Uniqueness Test

003443582-01, P = 1.085942 Days, E = 132.031598 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
337.9	89.5	0	0	4.36	1.13	8.39	337.9	337.9	89.5	89.5	0.35	1.05	0.05	11.9



Stellar Parameters For KIC 003443582

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	15896^{+1}_{-1}	$4.152^{+1.000}_{-1.000}$	$-1.500^{+1.000}_{-1.000}$	$2.404^{+1.000}_{-1.000}$	$2.995^{+1.000}_{-1.000}$	$0.304^{+1.000}_{-1.000}$
	+0%/-0%	+24%/-24%	+67%/-67%	+42%/-42%	+33%/-33%	+329%/-329%
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 003443582-01 / KOI 8087.01

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	A_{obs}
DV	-52 ± 11	$5.71^{+0.56}_{-0.55}$	8800^{+184}_{-184}	6132^{+749}_{-721}	$0.773^{+0.251}_{-0.200}$
Alt.	-1296 ± 14	$18.51^{+0.89}_{-0.87}$	8809^{+181}_{-204}	8620^{+222}_{-219}	$1.853^{+0.182}_{-0.174}$

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

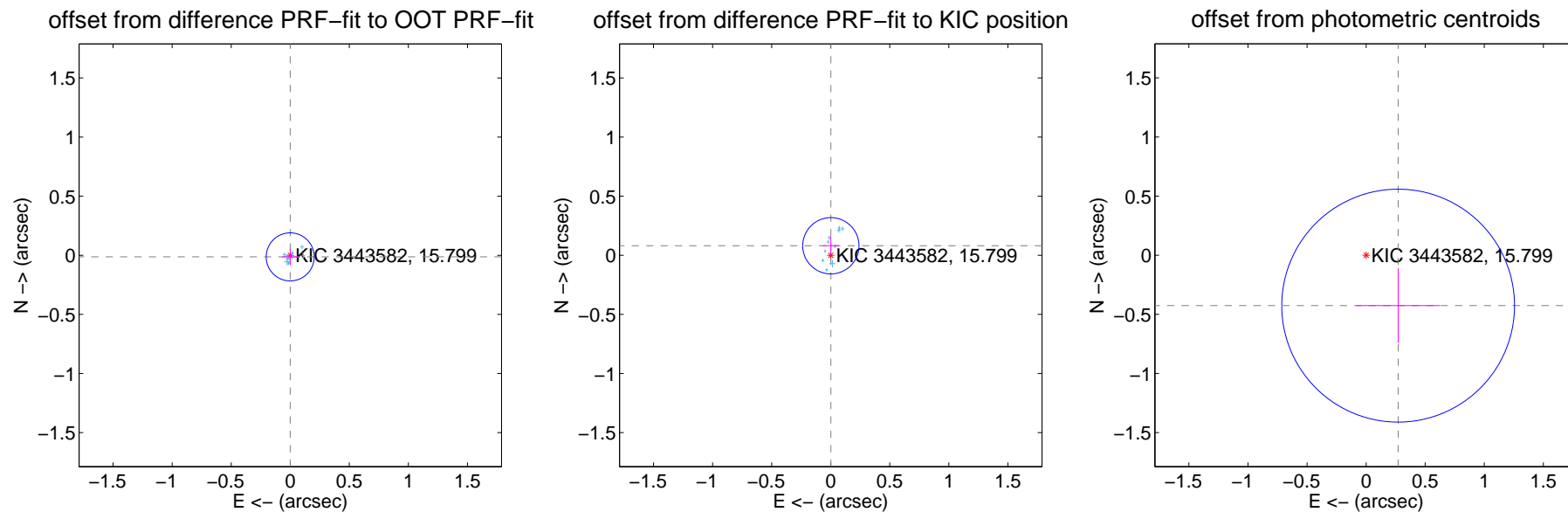
DV Centroid Data

Supplemental centroid analysis for 003443582-01. Kepler magnitude: 15.80. Transit SNR 29.92

There are 10 quarters with good PRF difference image offsets

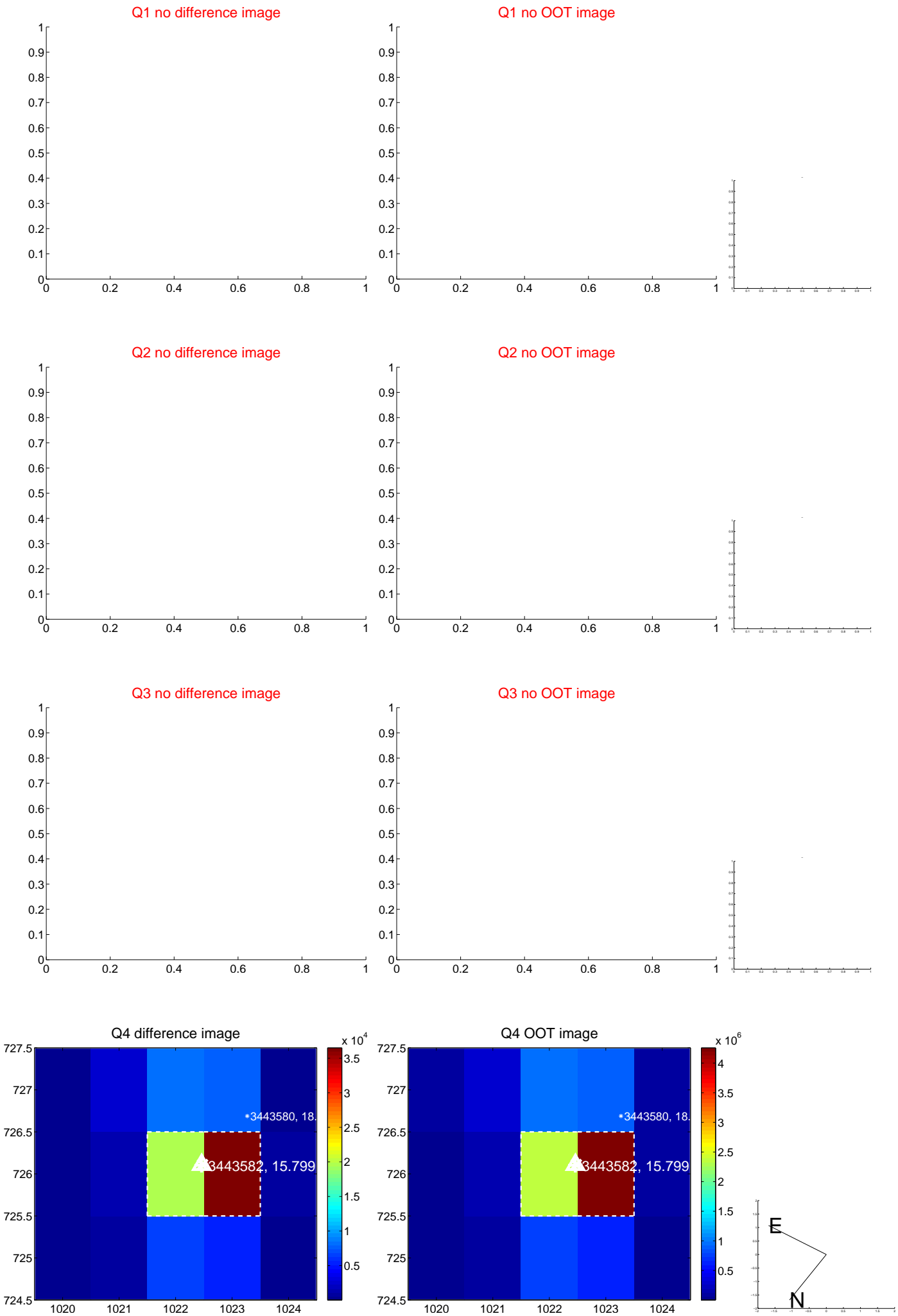
The direct PRF centroid is offset from the target star catalog position by about 0.04 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.014 ± 0.068	0.20	0.001 ± 0.069	-0.014 ± 0.068
PRF-fit source offset from KIC position	0.081 ± 0.079	1.01	-0.001 ± 0.070	0.081 ± 0.079
photometric centroid source offset	0.51 ± 0.33	1.54	-0.27 ± 0.35	-0.43 ± 0.32

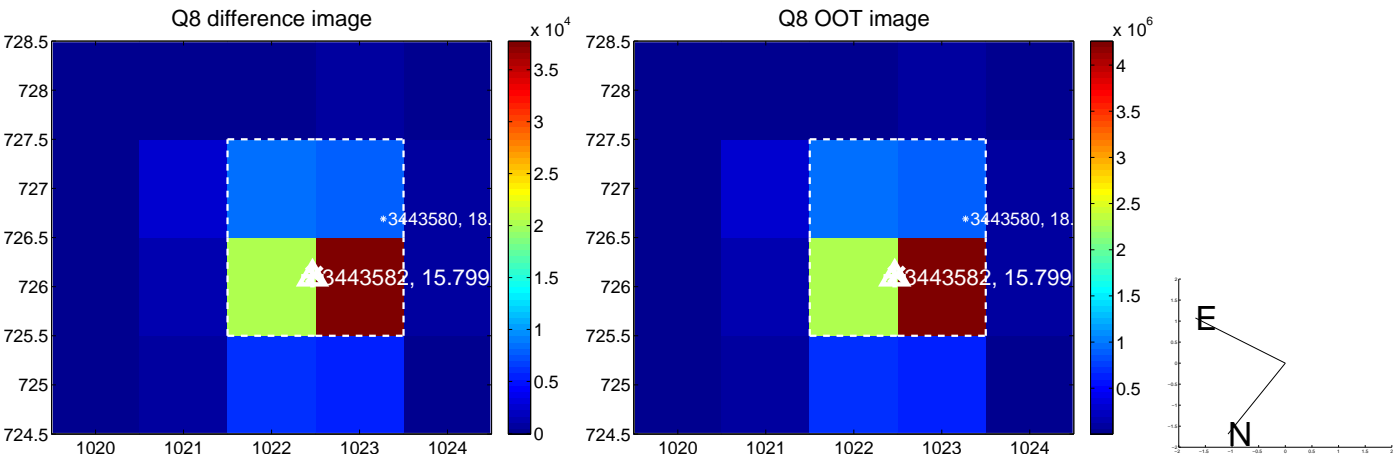
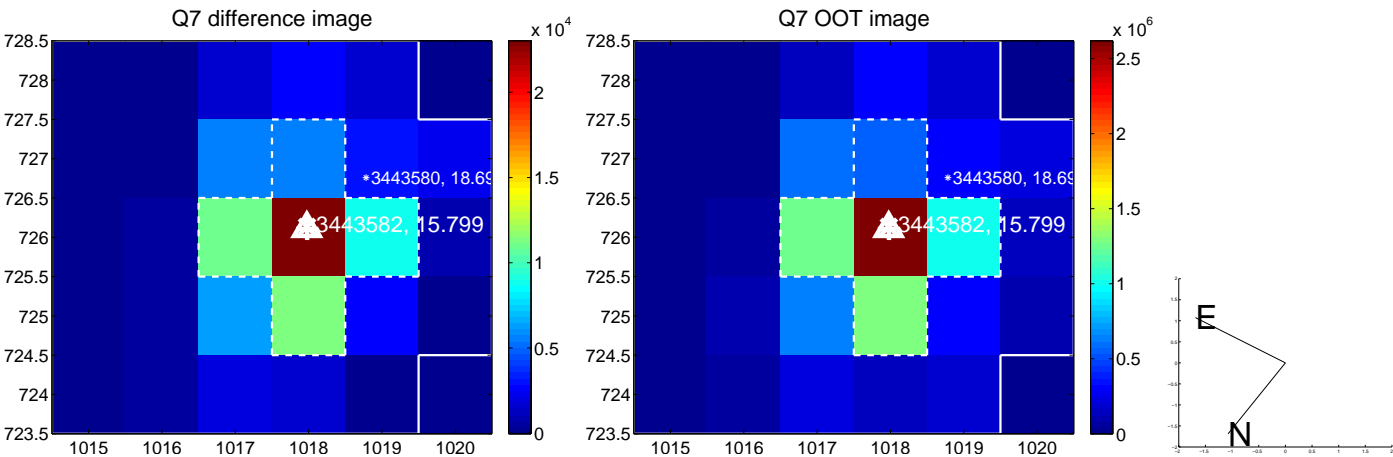
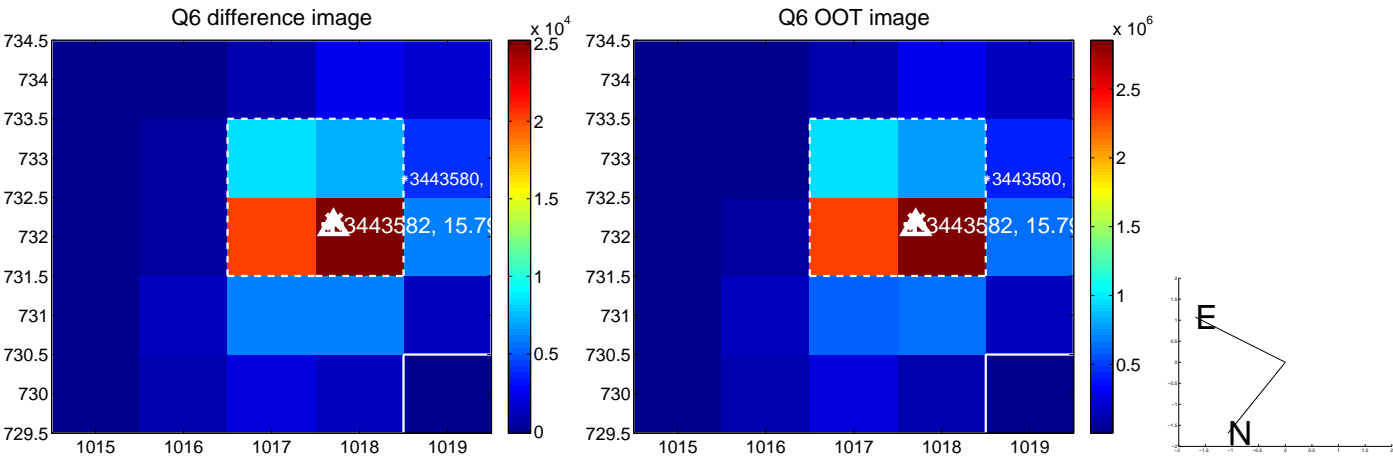
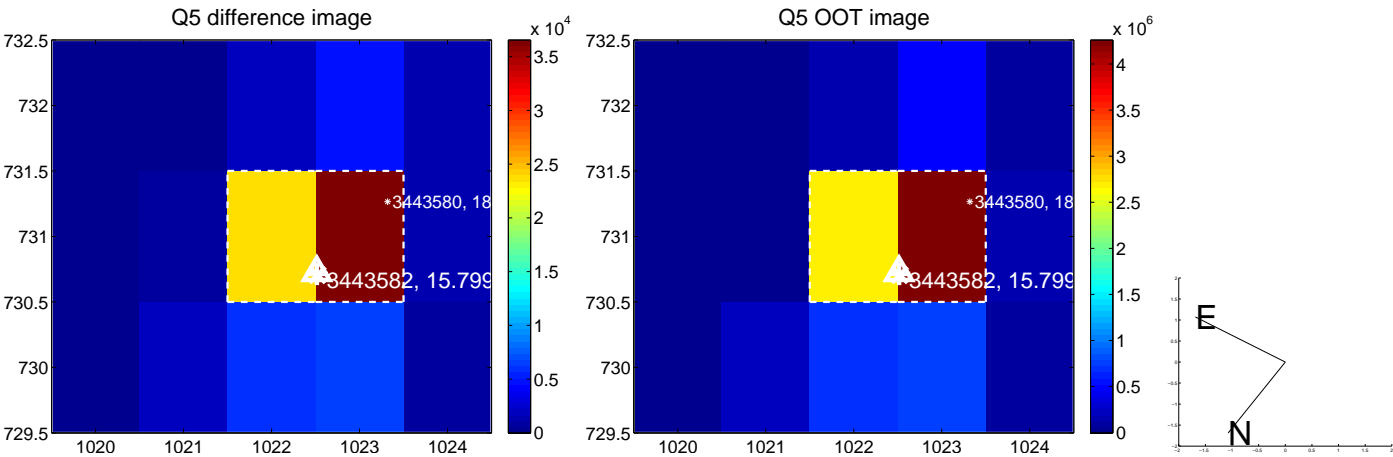


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets**; **Vermillion crosses: bad quarterly centroid offsets**; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

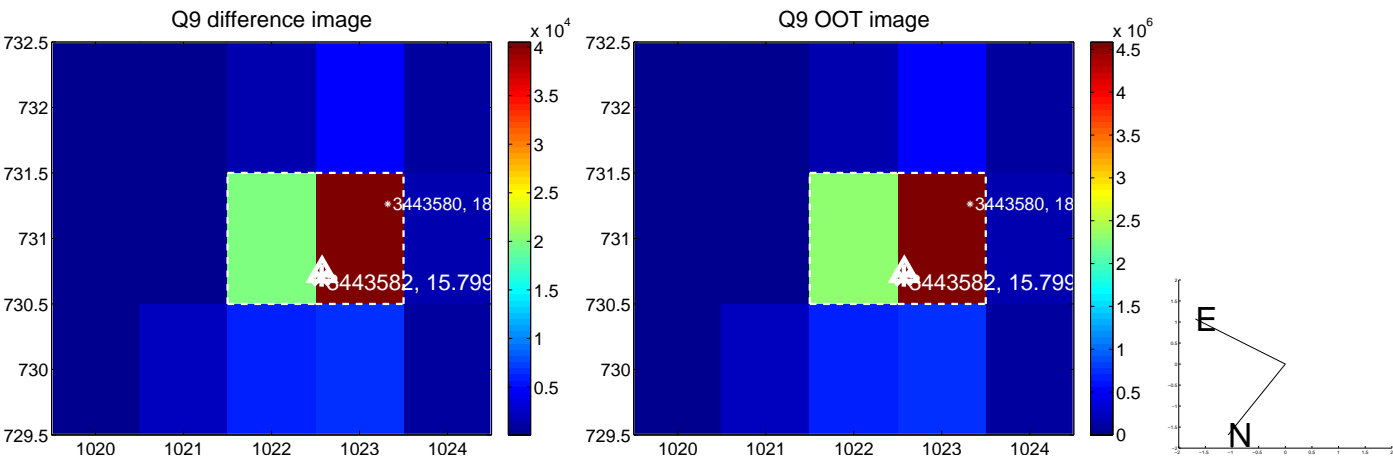
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



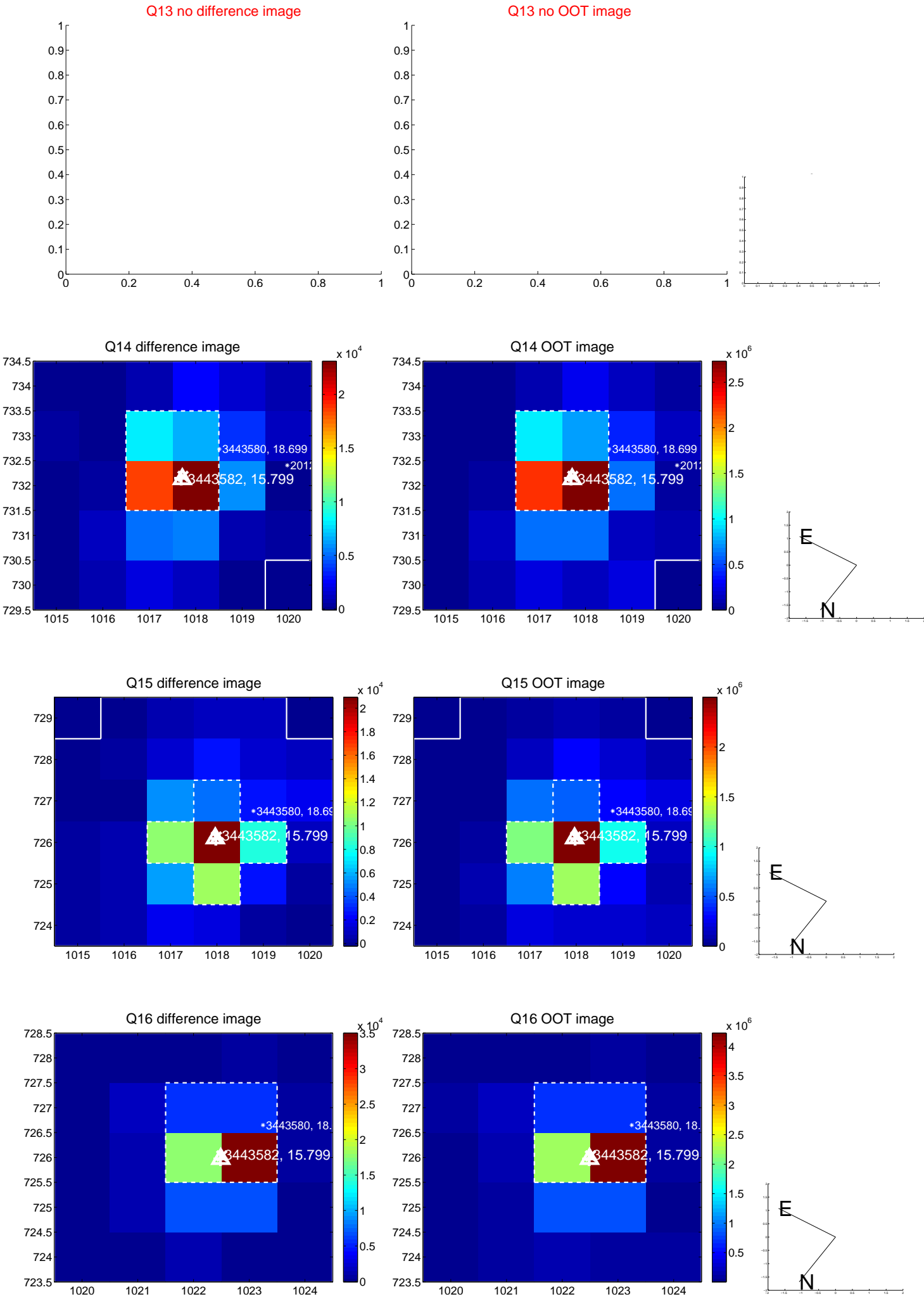
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



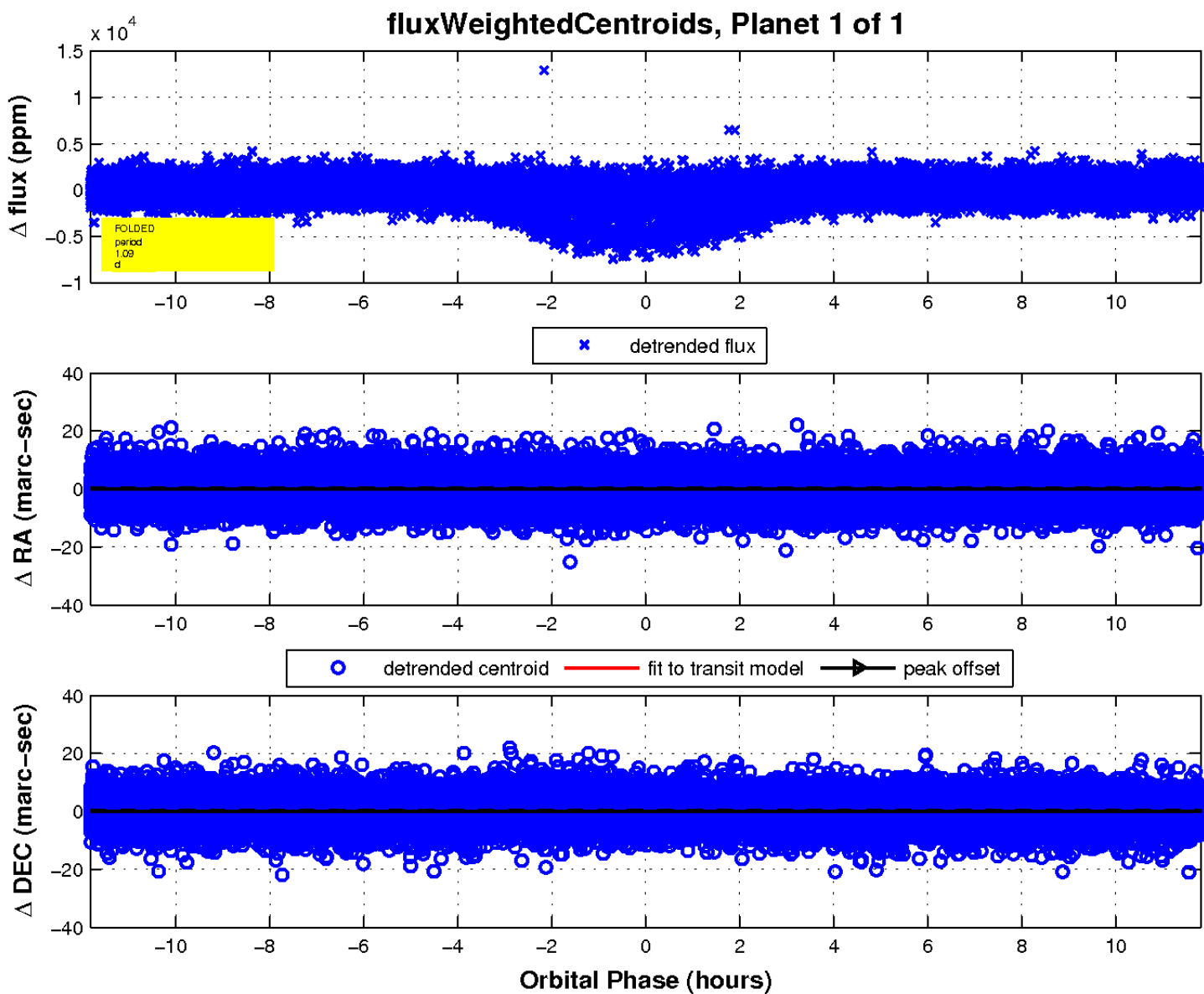
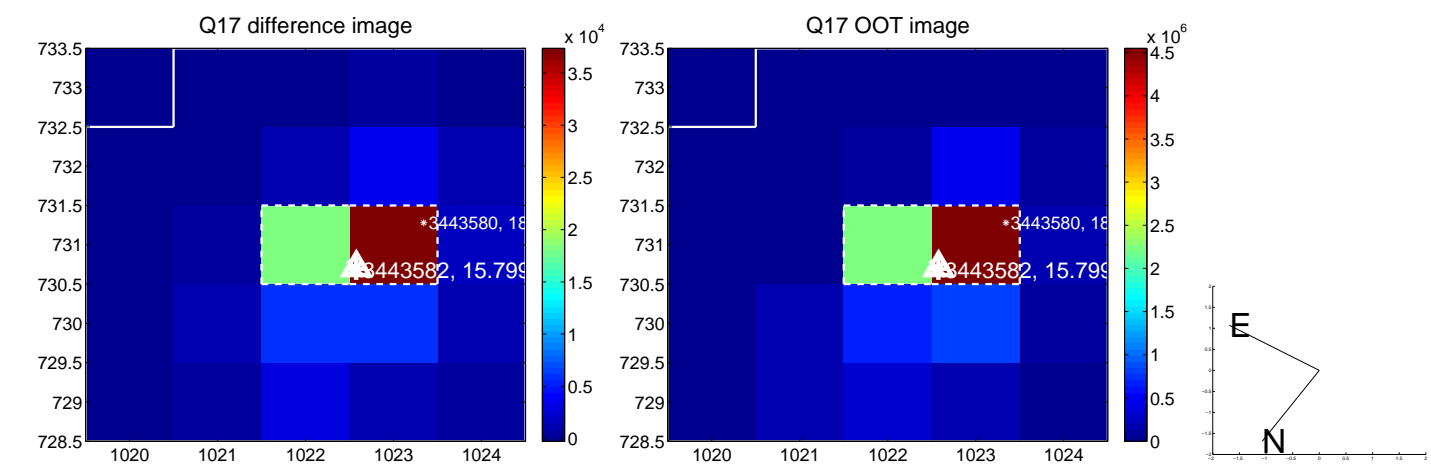
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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

