

KIC 005032343

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})
005032343-01	OBS	No	0.532392	131.933572	33.6	6.389	8.8	6.9	0.49	4467	0.28	797.92

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
005032343-01	OBS	FP	0.00	1	0	0	0	LPP_DV—LPP_ALT

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

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

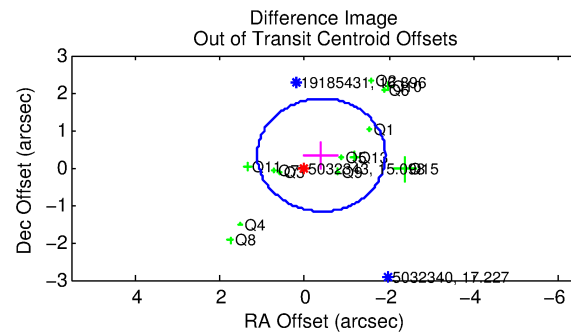
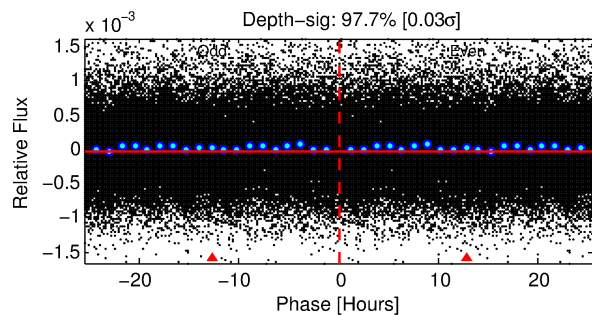
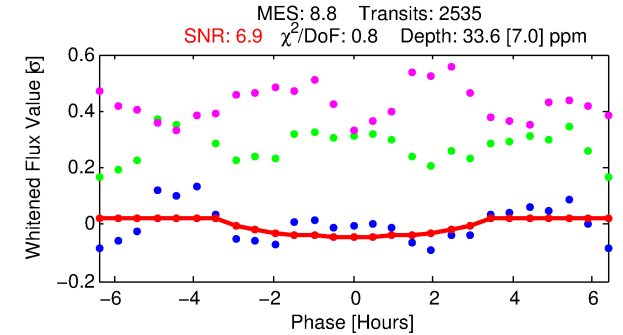
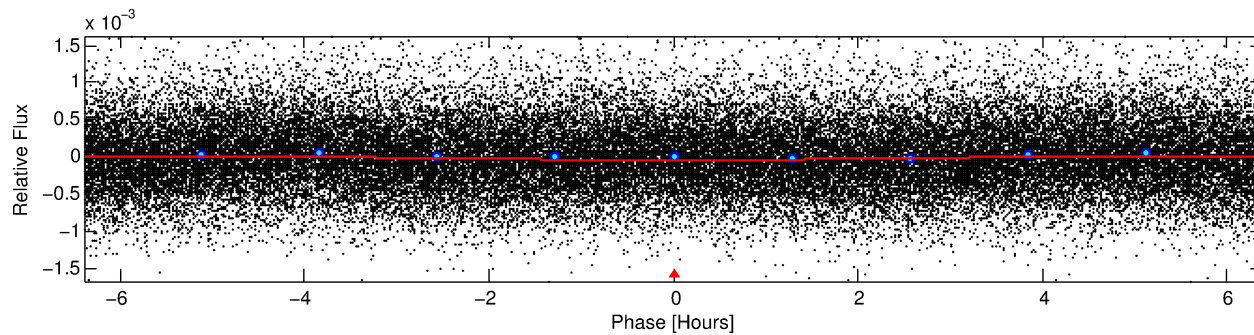
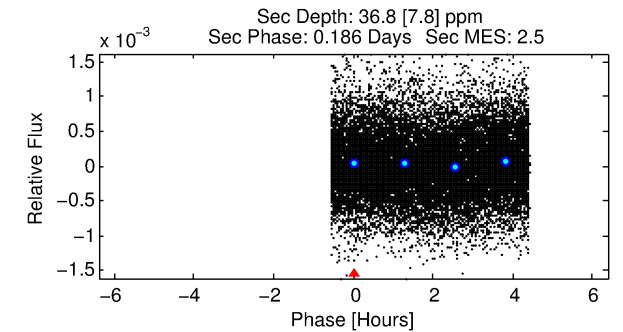
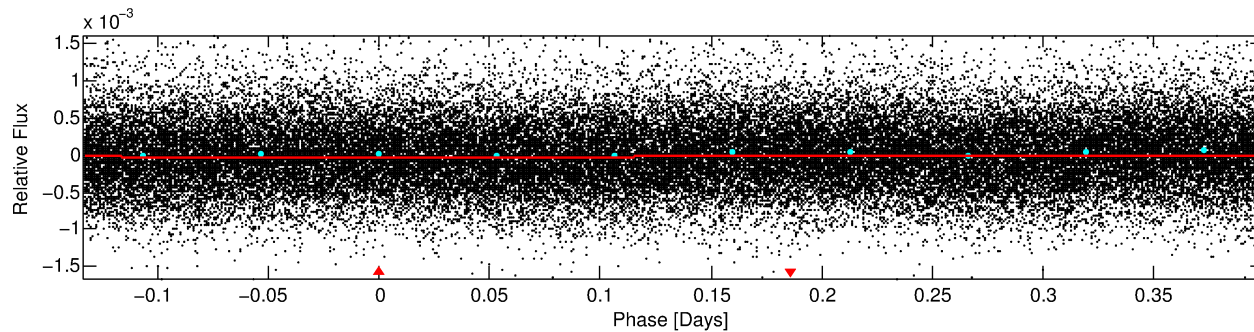
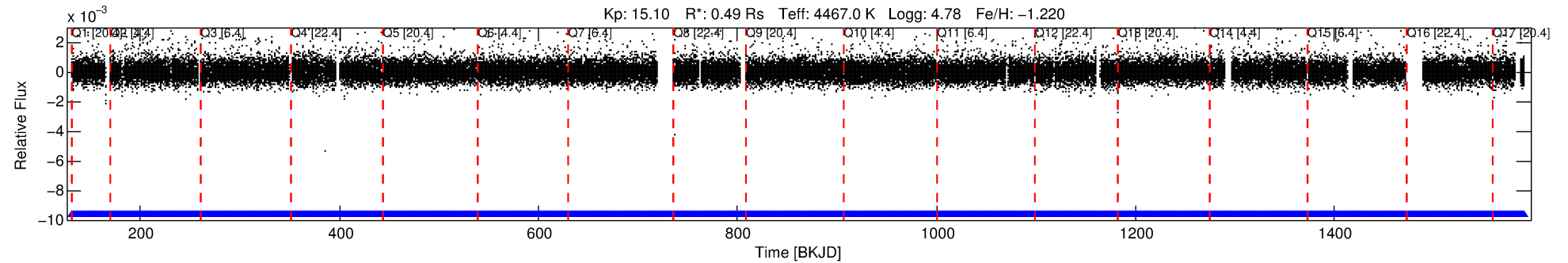
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 005032343-01

No Significant Match Found

DV One-Page Summary

KIC: 5032343 Candidate: 1 of 1 Period: 0.532 d



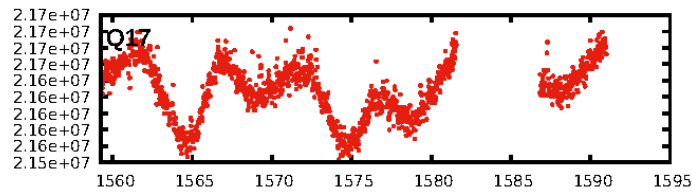
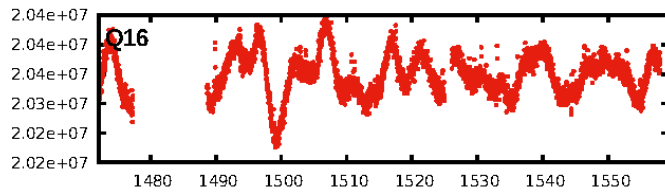
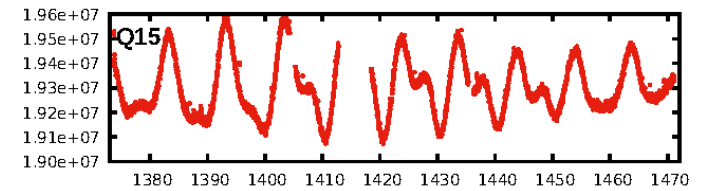
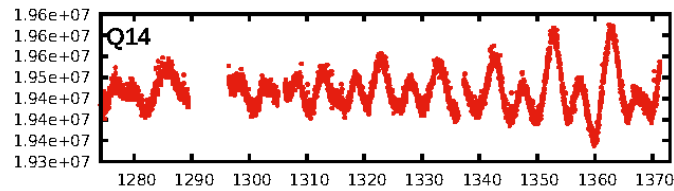
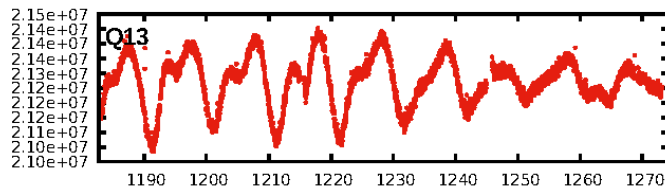
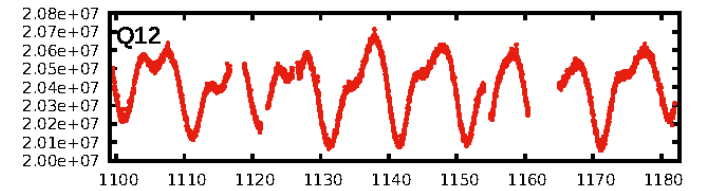
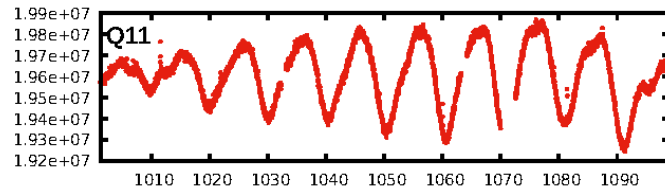
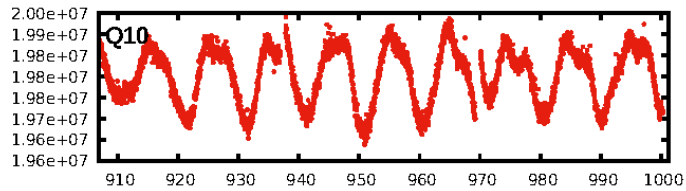
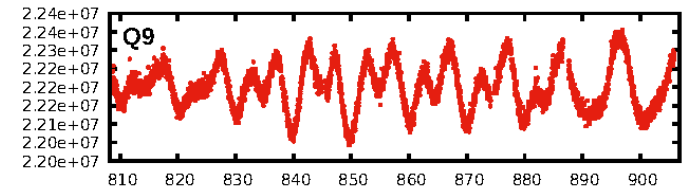
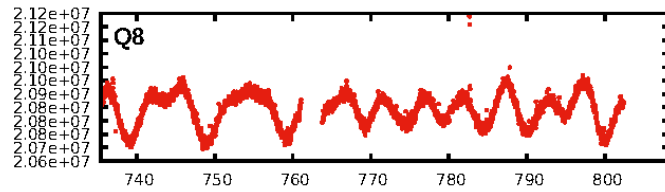
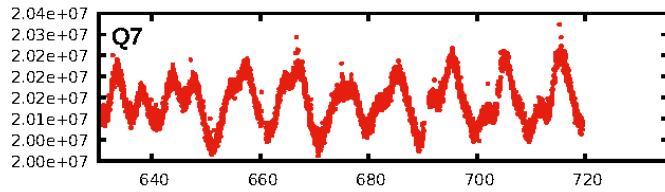
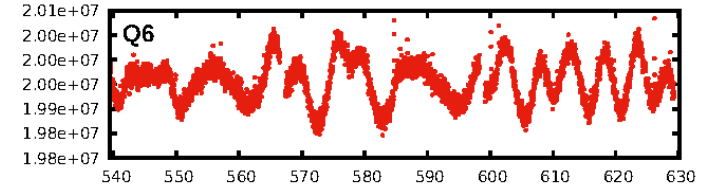
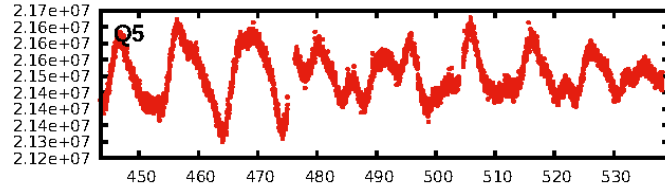
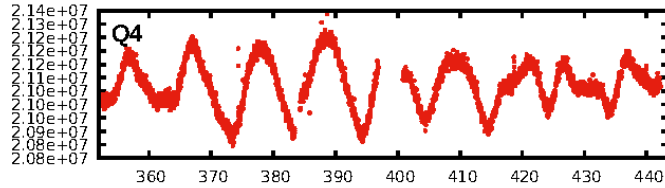
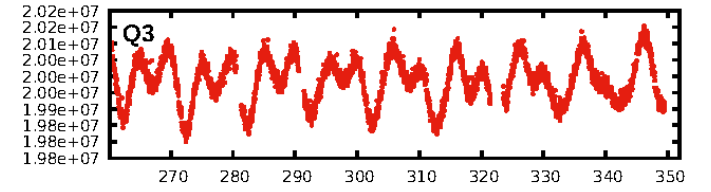
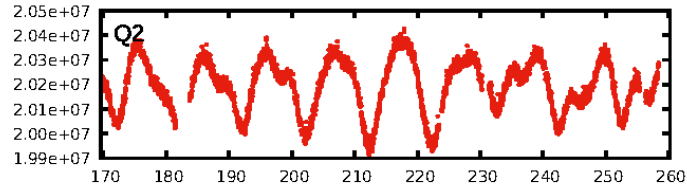
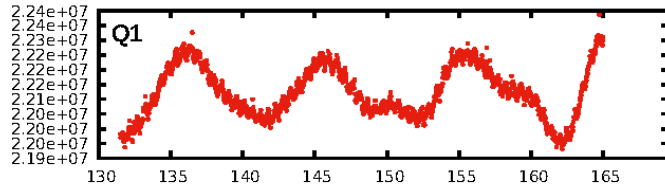
DV Fit Results:

Period = 0.53239 [0.00002] d
Epoch = 131.9336 [0.0082] BKJD
Rp/R* = 0.0053 [0.0037]
a/R* = 1.00 [0.01]
b = 0.26 [10.51]
Seff = 797.92 [127.41]
Teff = 1355 [54] K
Rp = 0.28 [0.20] Re
a = 0.0104 [0.0007] AU
Ag = 27.45 [39.17] [0.68 σ]
Teffp = 4796 [1715] K [2.01 σ]

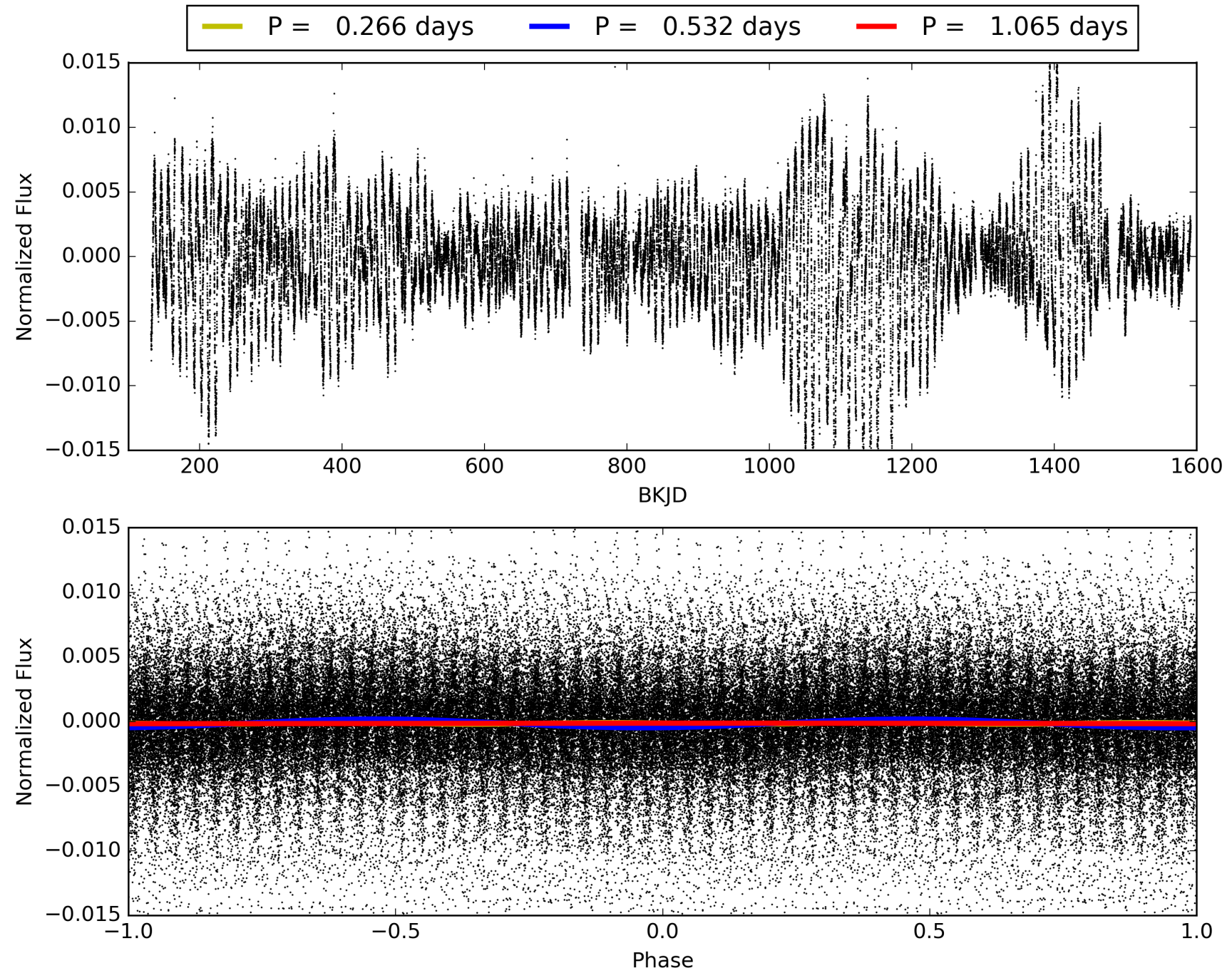
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: N/A
RollingBand-fgt: 1.00 [2420/2420]
GhostDiagnostic-chr: 0.7194
Centroid-sig: 0.0%
Centroid-so: 4.174 arcsec [3.49 σ]
OotOffset-rm: 0.527 arcsec [1.05 σ]
KicOffset-rm: 0.668 arcsec [1.46 σ]
OotOffset-st: 3/4/2/4 [13]
KicOffset-st: 3/4/2/4 [13]
DiffImageQuality-fgm: 0.92 [12/13]
DiffImageOverlap-fno: 1.00 [17/17]

TCE 005032343-01, PDC Light Curves

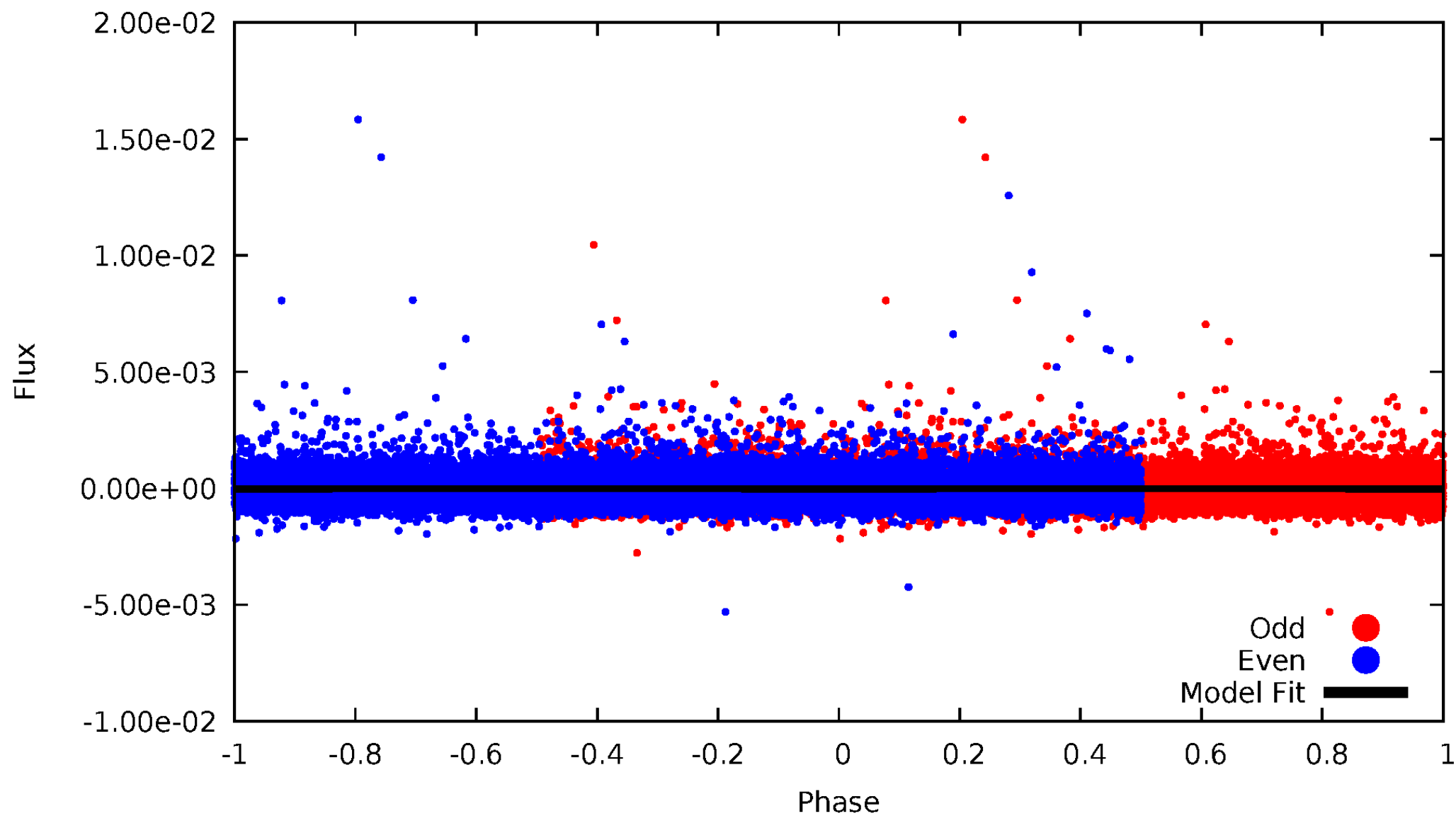


TCE 005032343-01



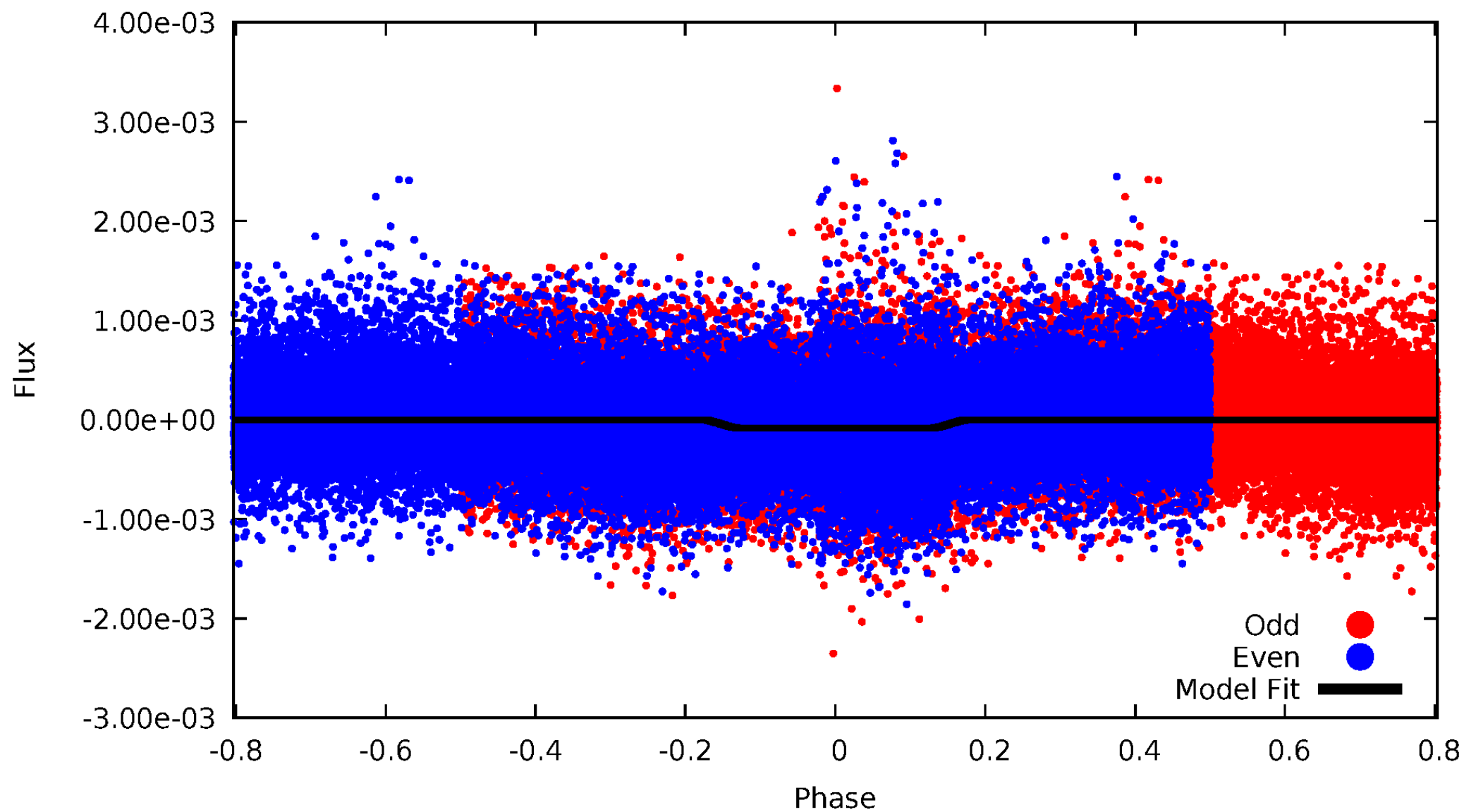
DV Odd/Even

TCE 005032343-01



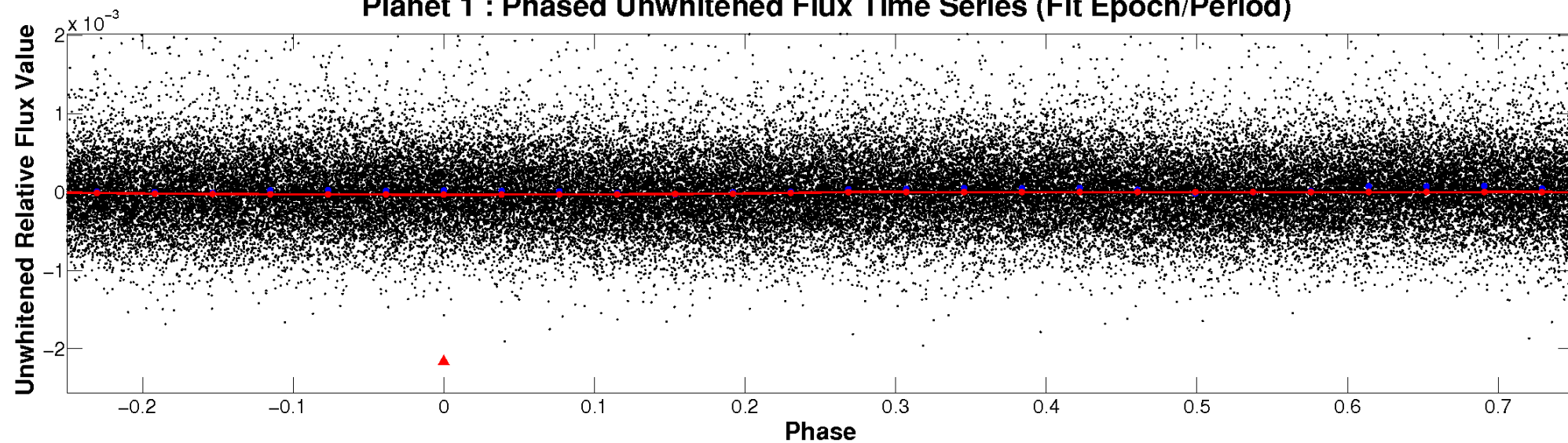
ALT Odd/Even

TCE 005032343-01

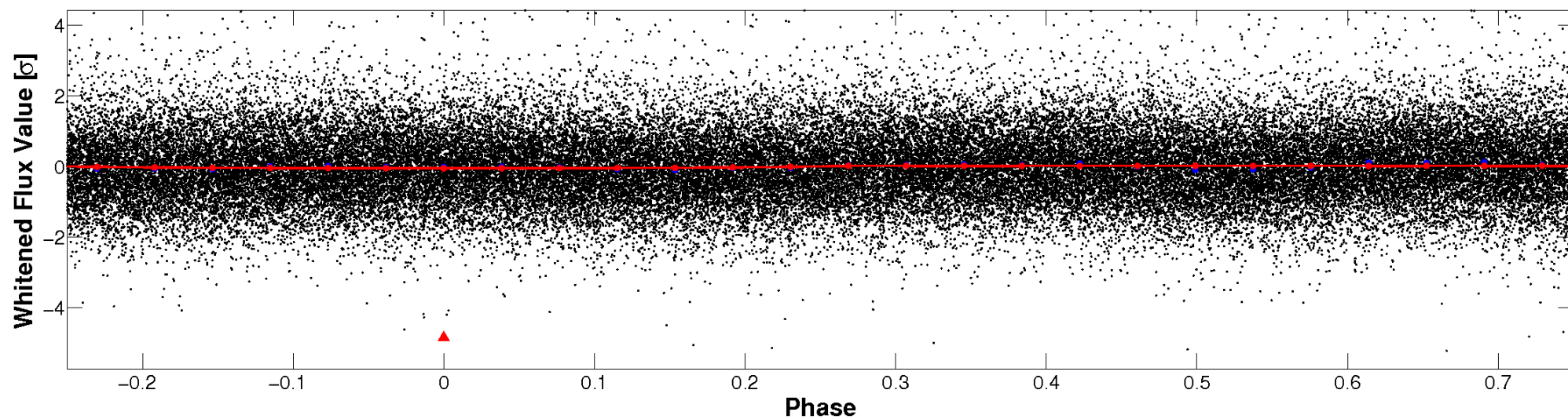


Non-Whitened Vs. Whitened Light Curve

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

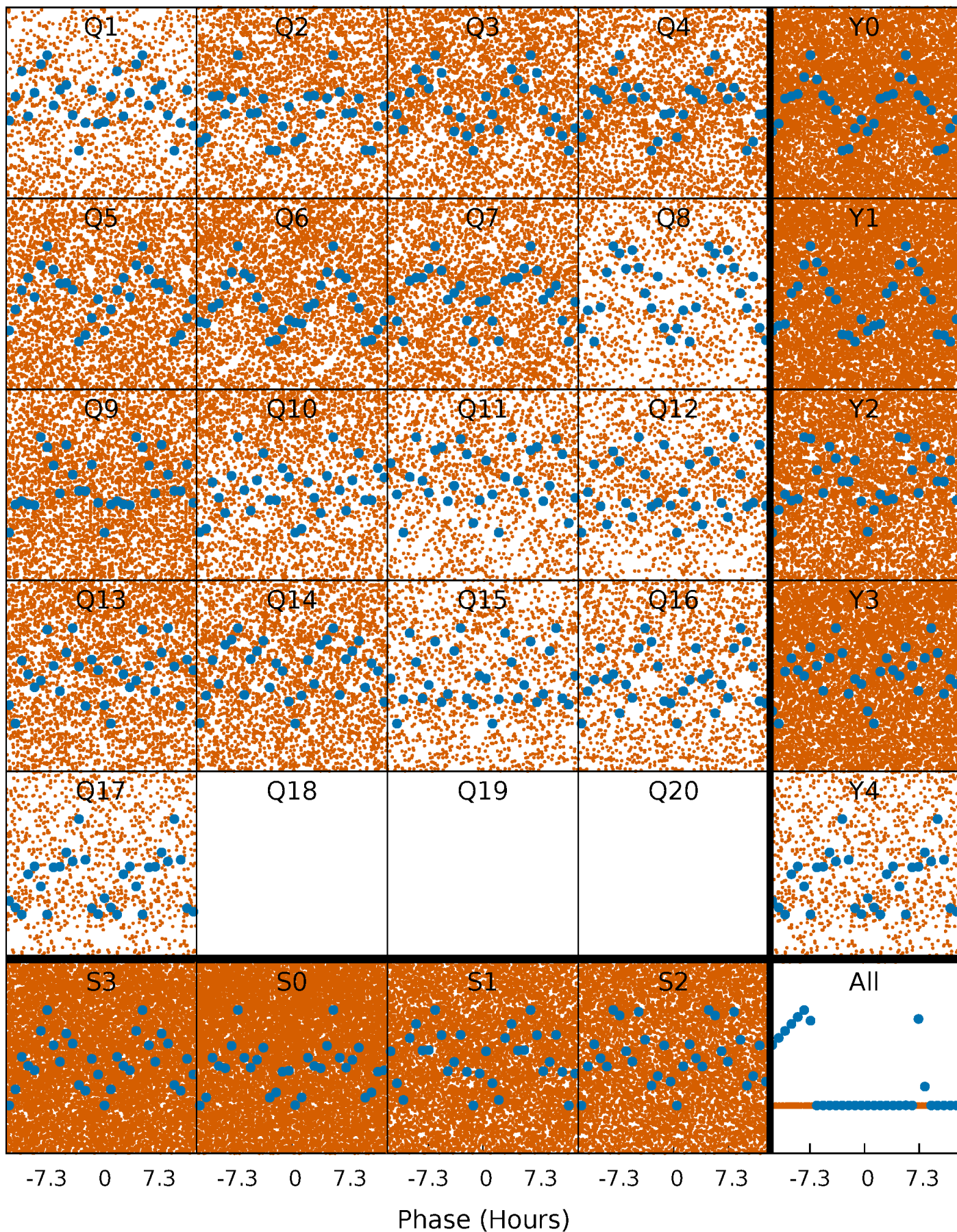


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



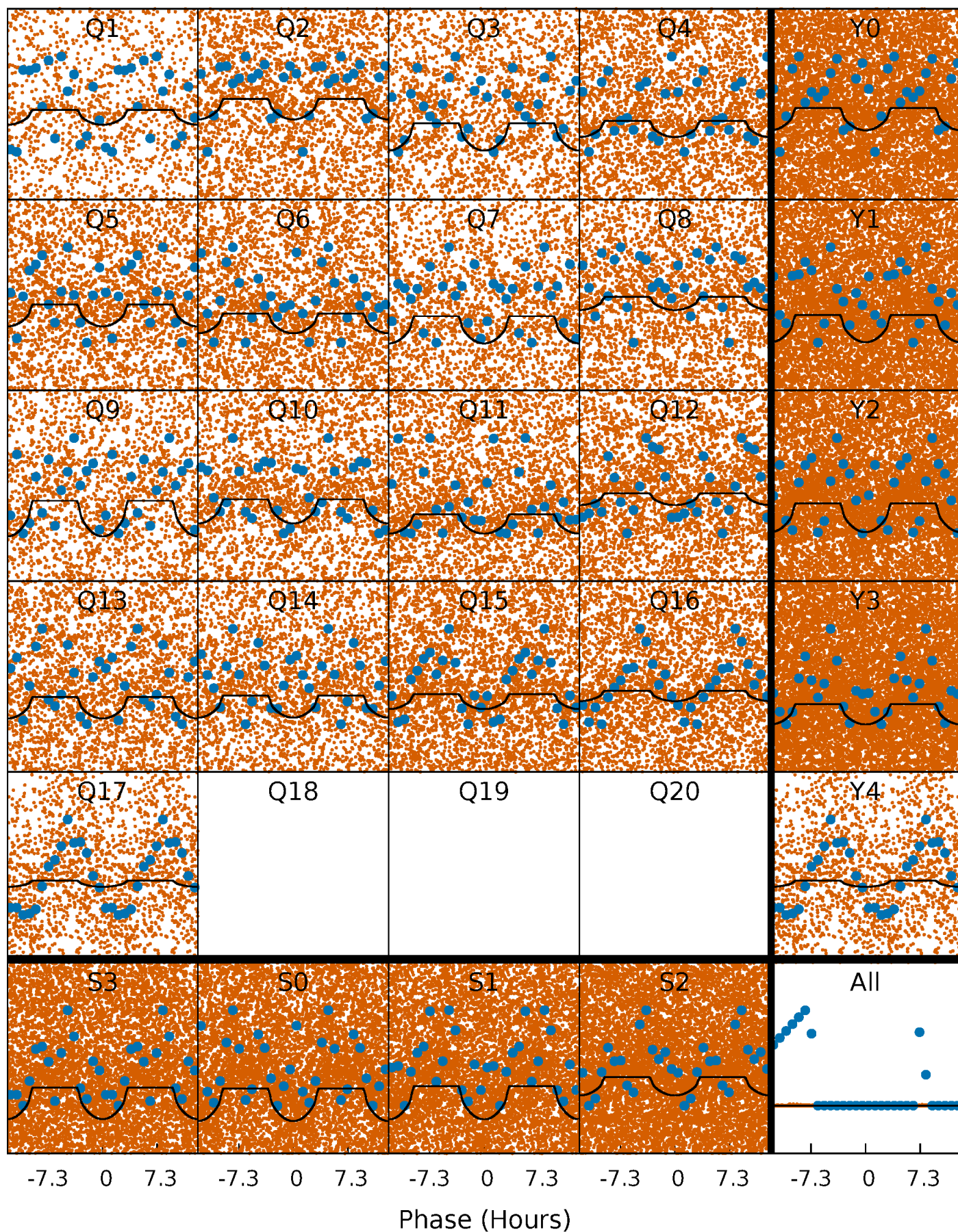
PDC Quarter-Phased Transit Curves

TCE 005032343-01 P= 0.532392 Days $T_0=131.933572$ (BKJD)



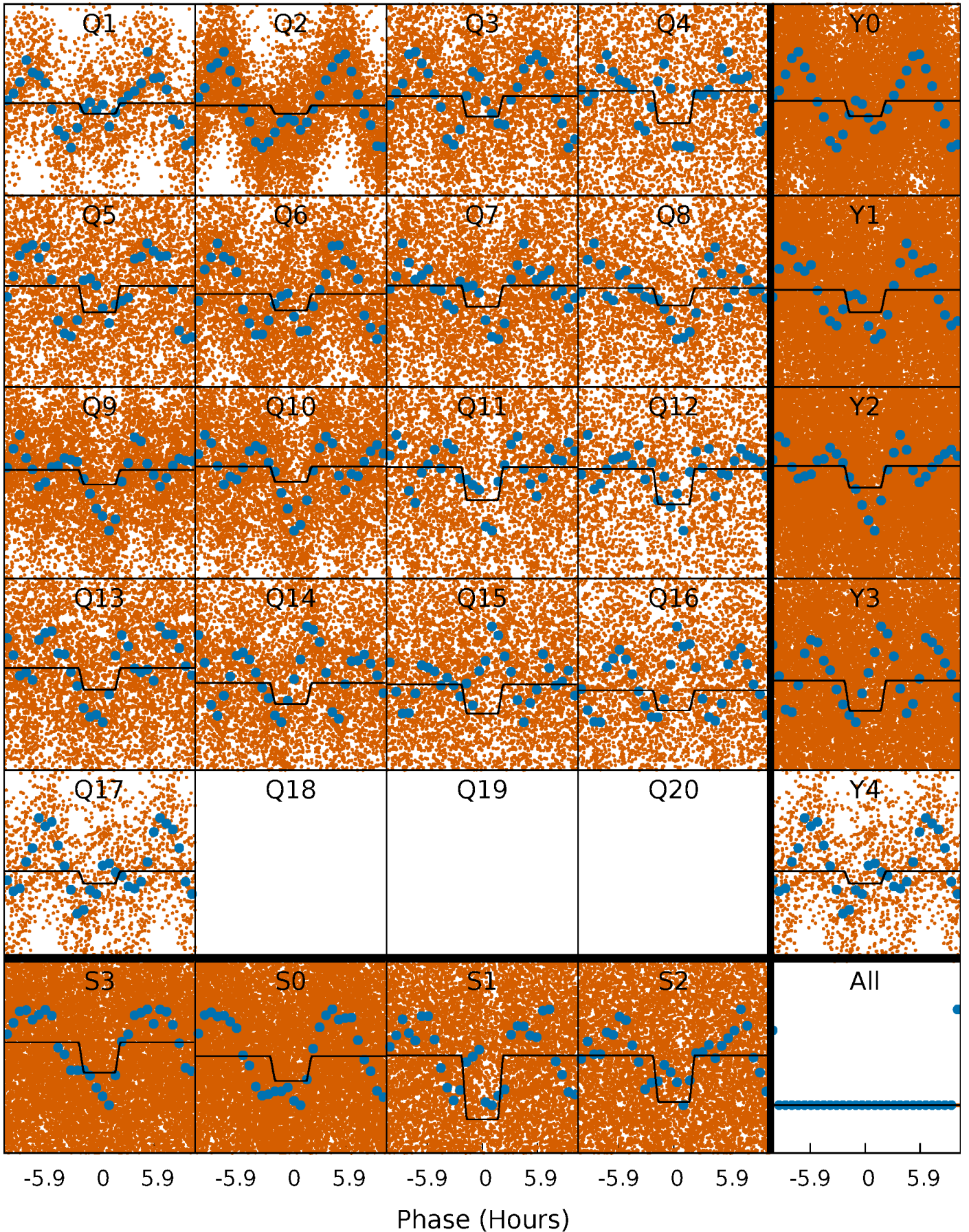
DV Quarter-Phased Transit Curves

TCE 005032343-01 P= 0.532392 Days $T_0=131.933572$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

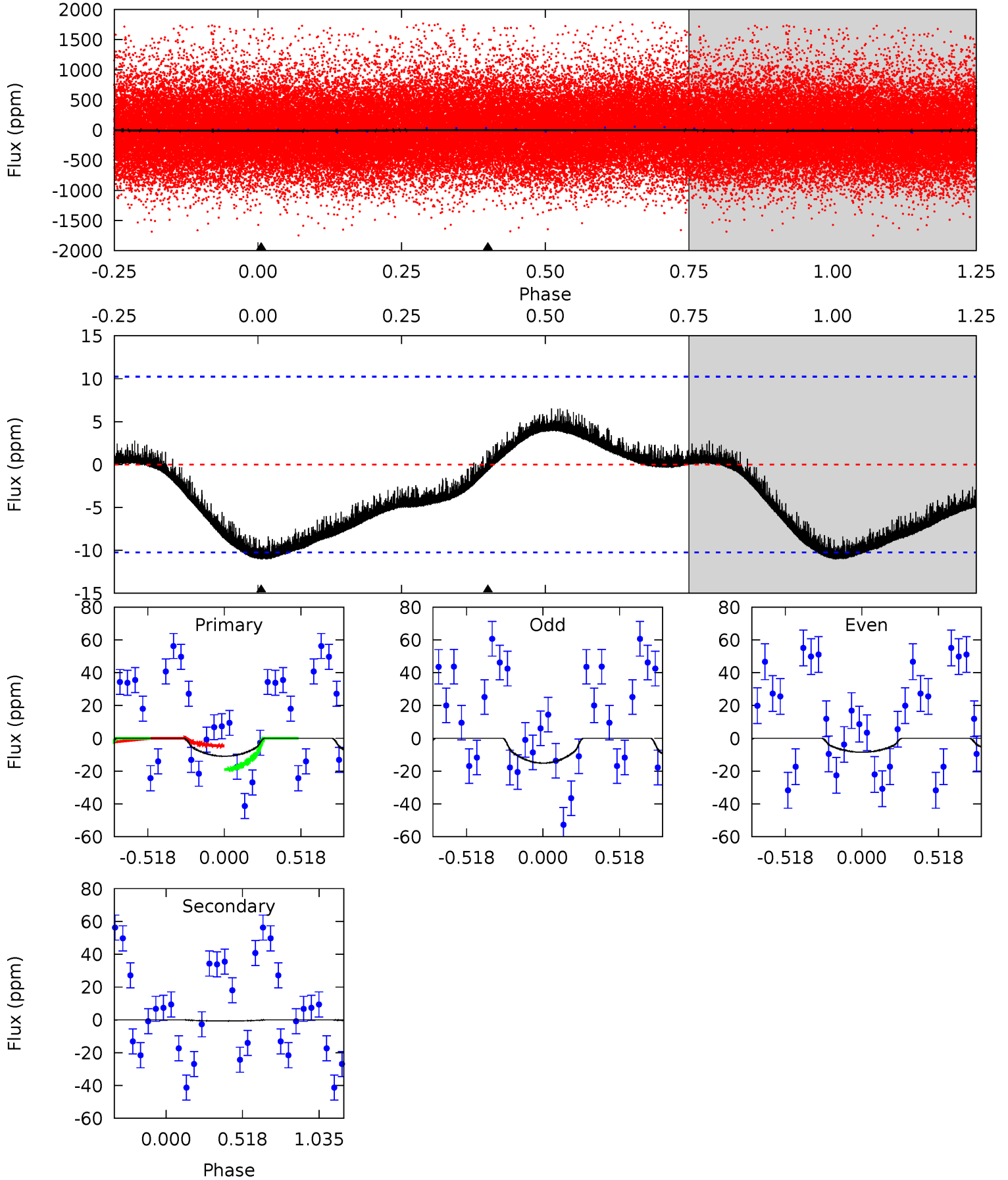
TCE 005032343-01 P= 0.532421 Days $T_0=131.947350$ (BKJD)



DV Model-Shift Uniqueness Test

005032343-01, P = 0.532392 Days, E = 131.401180 Days

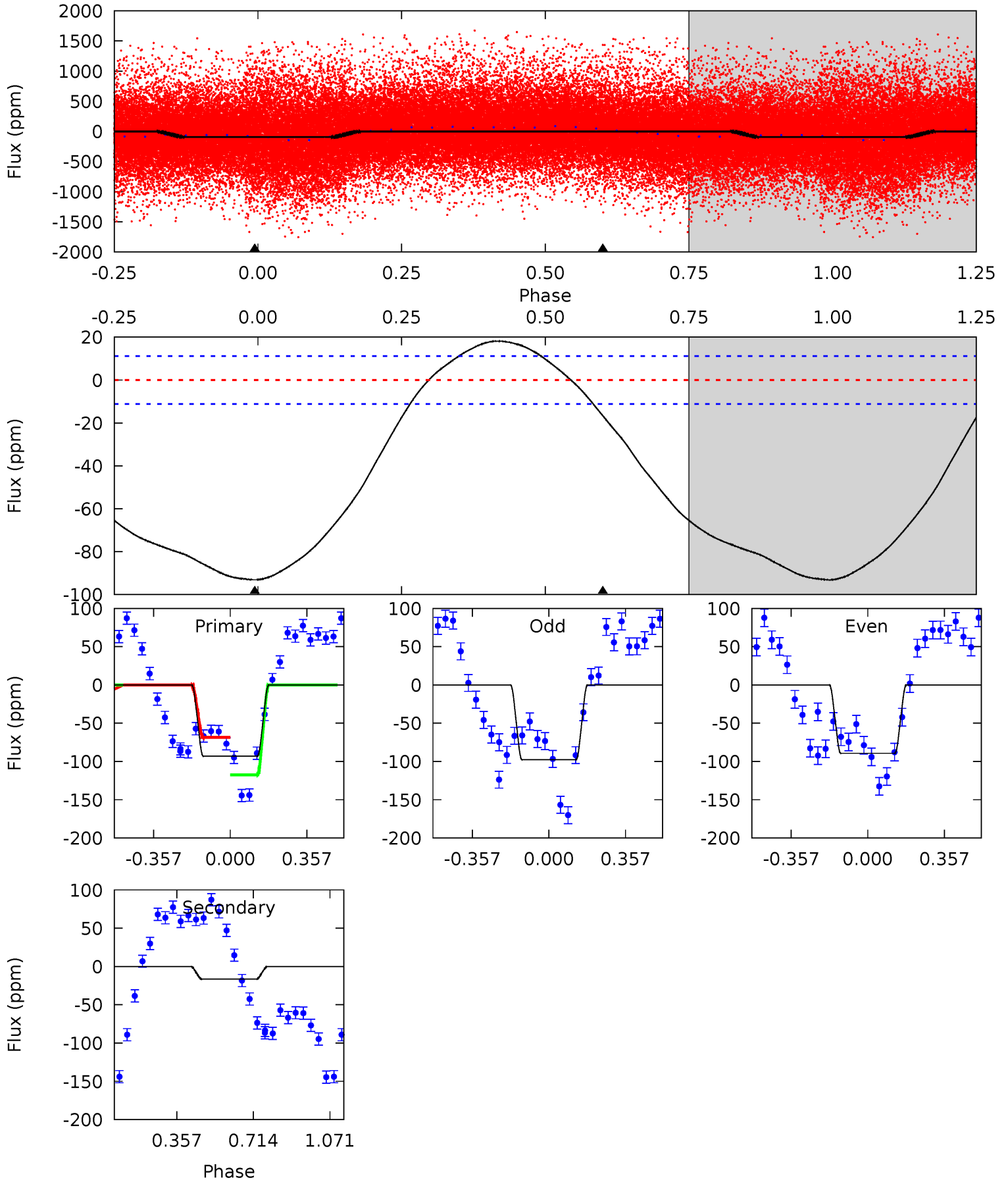
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
4.50	0.27	0	0	4.21	0.65	0.13	4.50	4.50	0.27	0.27	1.37	-2.28	0.37	3.03



Alt Model-Shift Uniqueness Test

005032343-01, P = 0.532421 Days, E = 131.414929 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
35.8	6.38	0	0	4.29	0.92	3.32	35.8	35.8	6.38	6.38	1.60	0.97	0.16	9.33



Stellar Parameters For KIC 005032343

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	$M(M_{\odot})$	p_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	4467^{+120}_{-146}	$4.778^{+0.041}_{-0.050}$	$-1.220^{+0.300}_{-0.300}$	$0.492^{+0.037}_{-0.037}$	$0.531^{+0.029}_{-0.040}$	$6.264^{+1.257}_{-1.046}$
	+3%/-3%	+1%/-1%	+25%/-25%	+8%/-8%	+5%/-8%	+20%/-17%
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 005032343-01 / KOI

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	-1 ± 2	$0.31^{+0.19}_{-0.17}$	1895^{+64}_{-69}	-2017^{+5129}_{-964}	$0.232^{+2.480}_{-1.652}$
Alt.	-17 ± 3	$0.49^{+0.22}_{-0.18}$	1895^{+64}_{-68}	3323^{+636}_{-378}	$3.993^{+6.560}_{-2.092}$

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

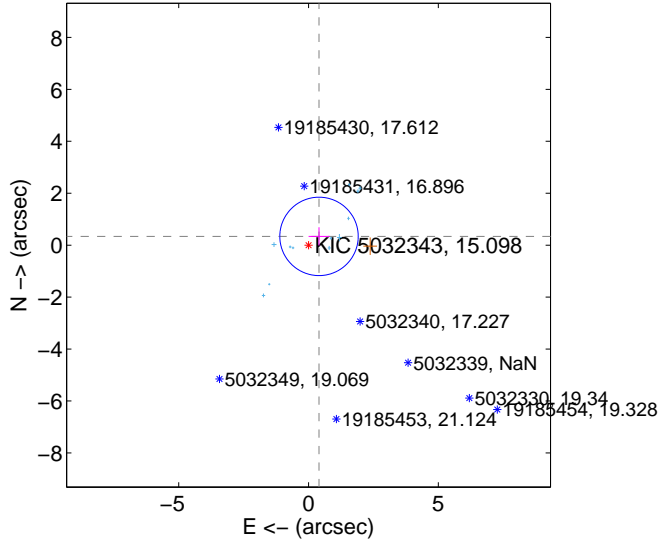
Supplemental centroid analysis for 005032343-01. Kepler magnitude: 15.10. Transit SNR 6.90

There are 12 quarters with good PRF difference image offsets

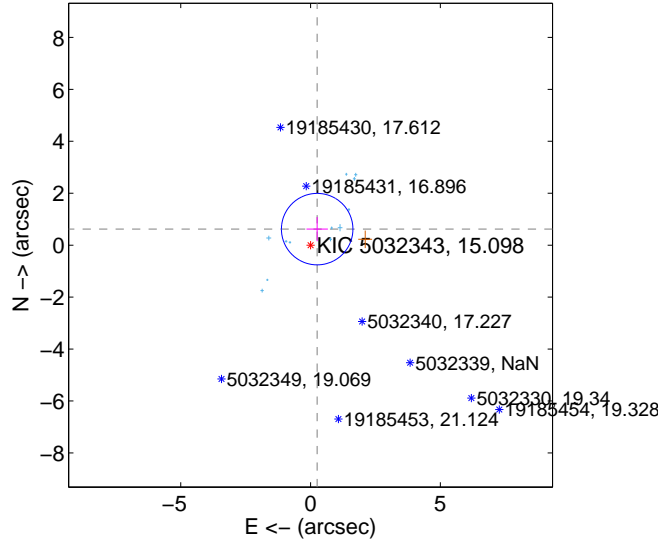
The direct PRF centroid is offset from the target star catalog position by about 0.38 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.527 ± 0.503	1.05	-0.404 ± 0.403	0.338 ± 0.354
PRF-fit source offset from KIC position	0.668 ± 0.459	1.46	-0.255 ± 0.413	0.618 ± 0.466
photometric centroid source offset	4.17 ± 1.20	3.49	-0.55 ± 1.25	-4.14 ± 1.20

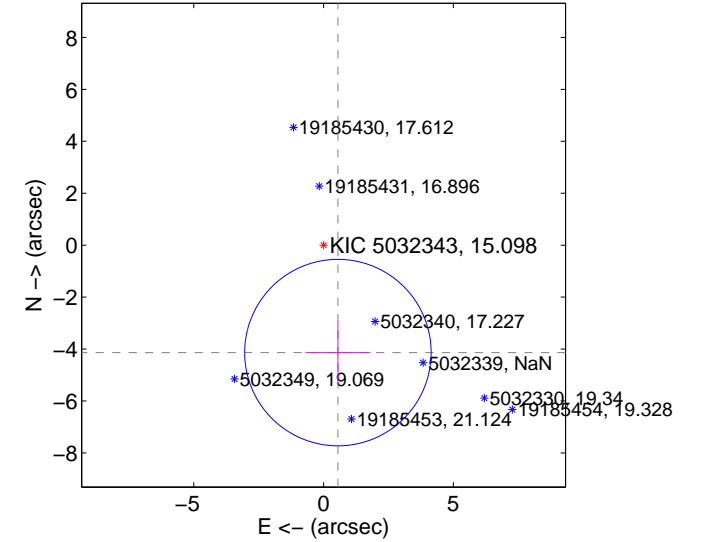
offset from difference PRF-fit to OOT PRF-fit



offset from difference PRF-fit to KIC position

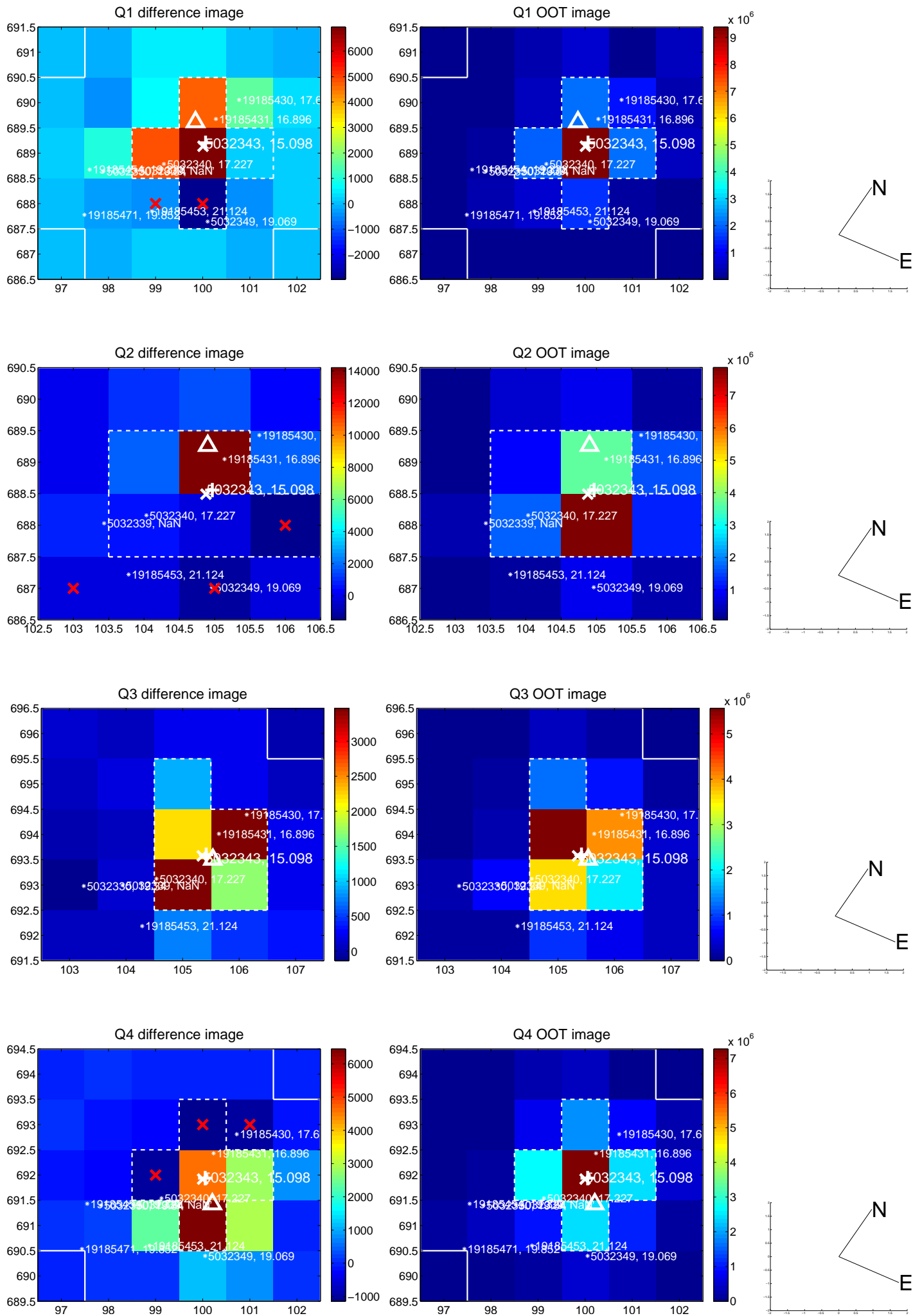


offset from photometric centroids

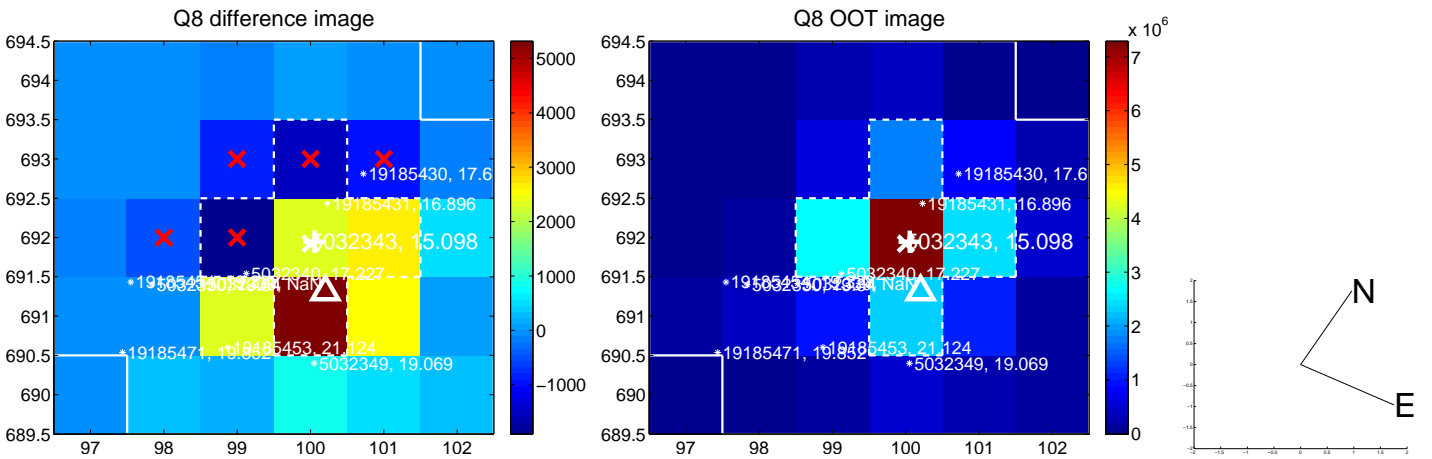
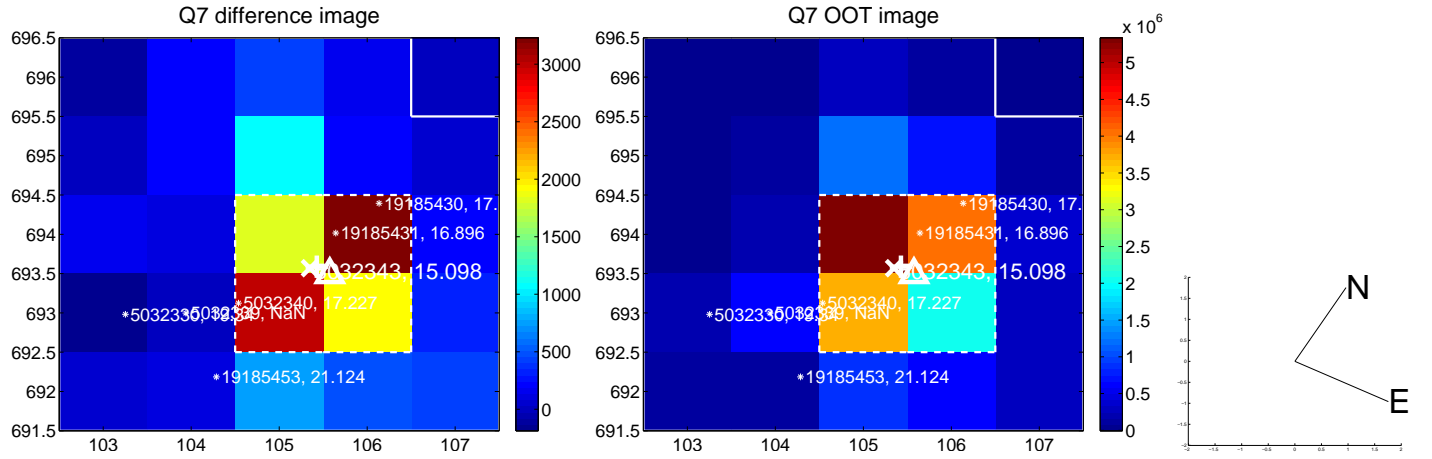
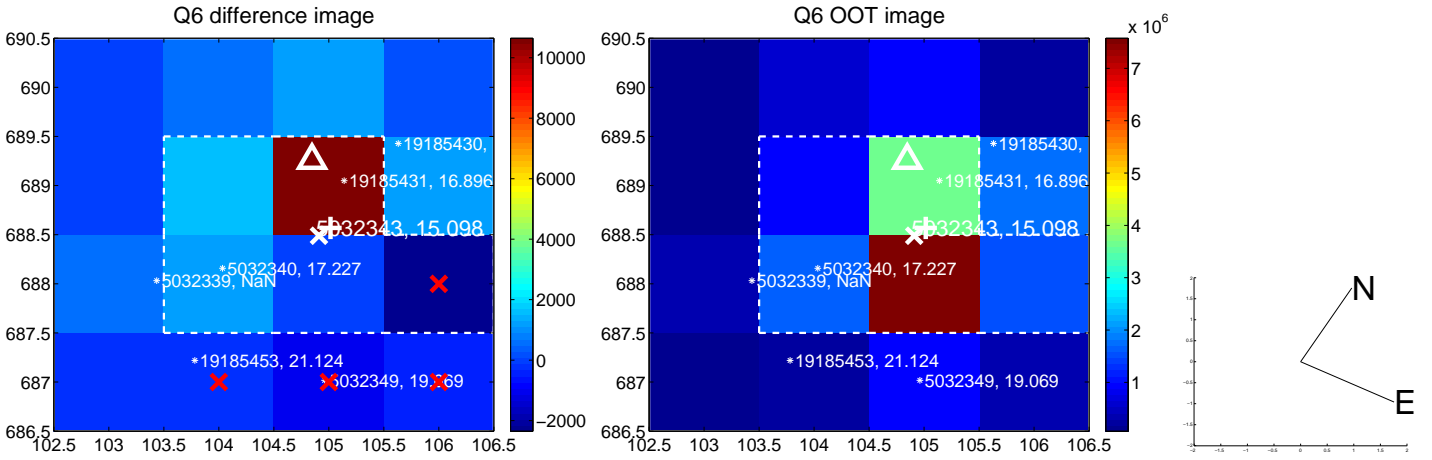
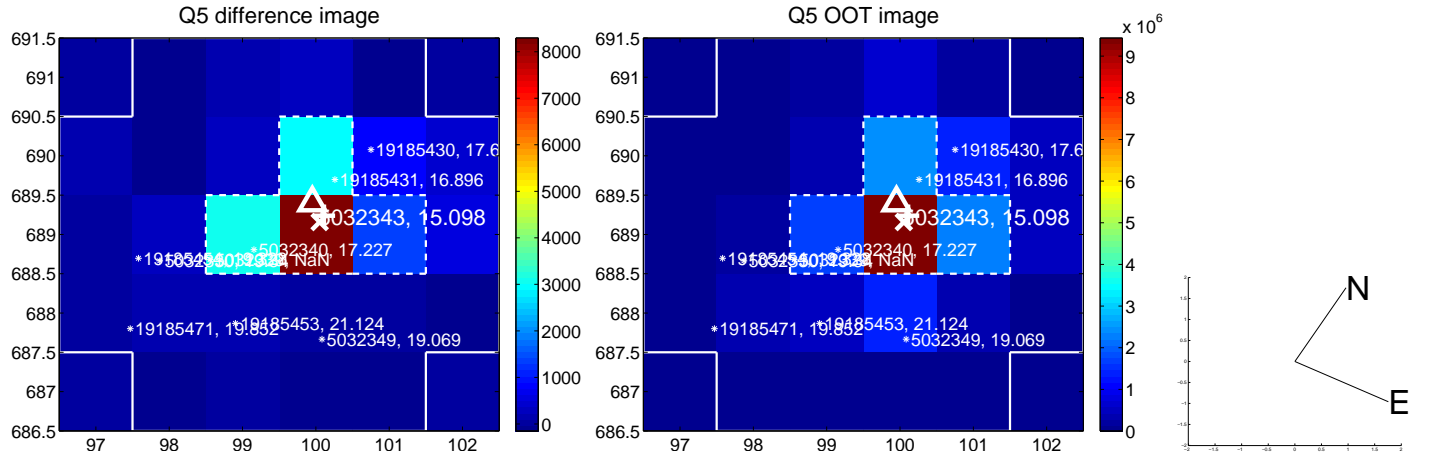


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses:** good quarterly centroid offsets; **Vermillion crosses:** bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

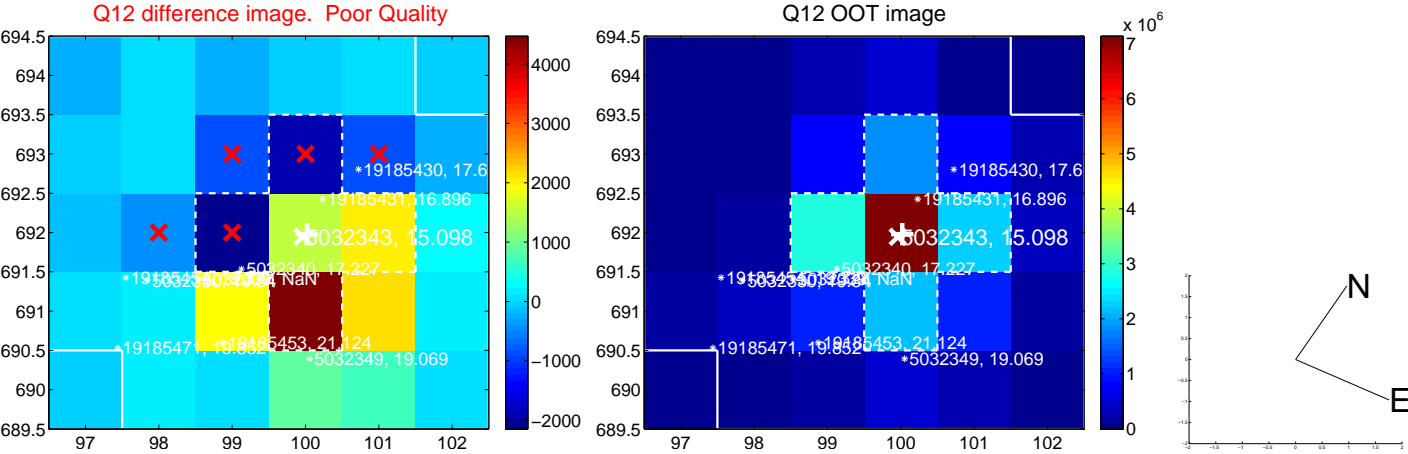
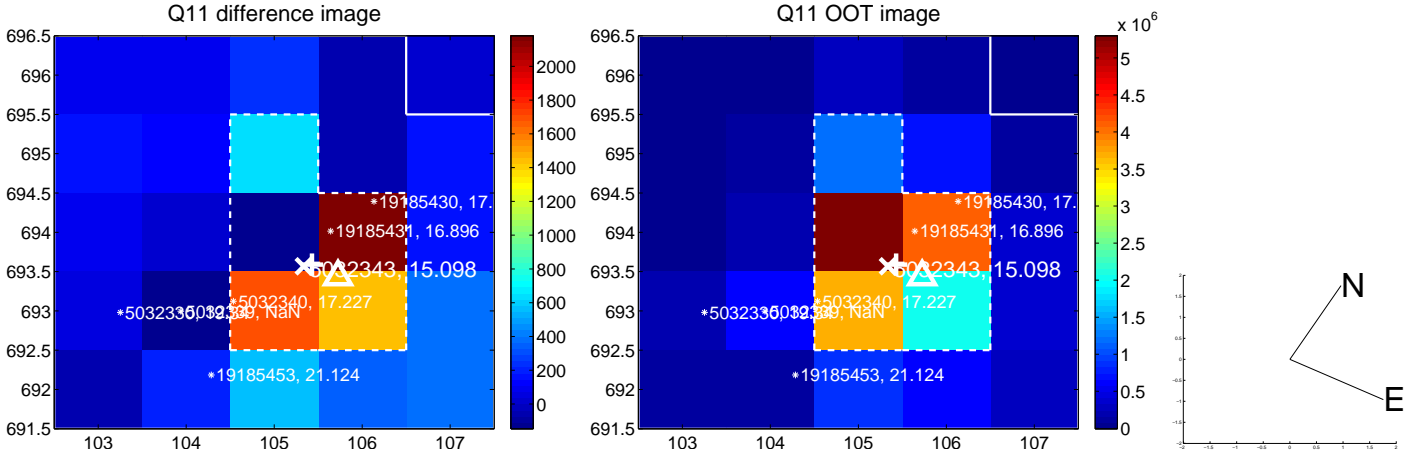
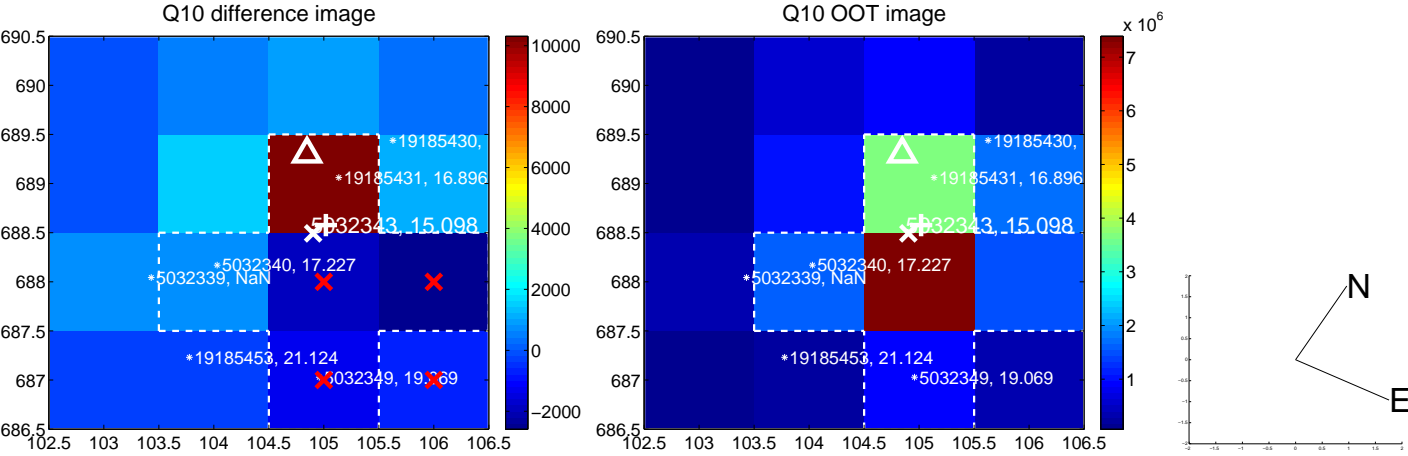
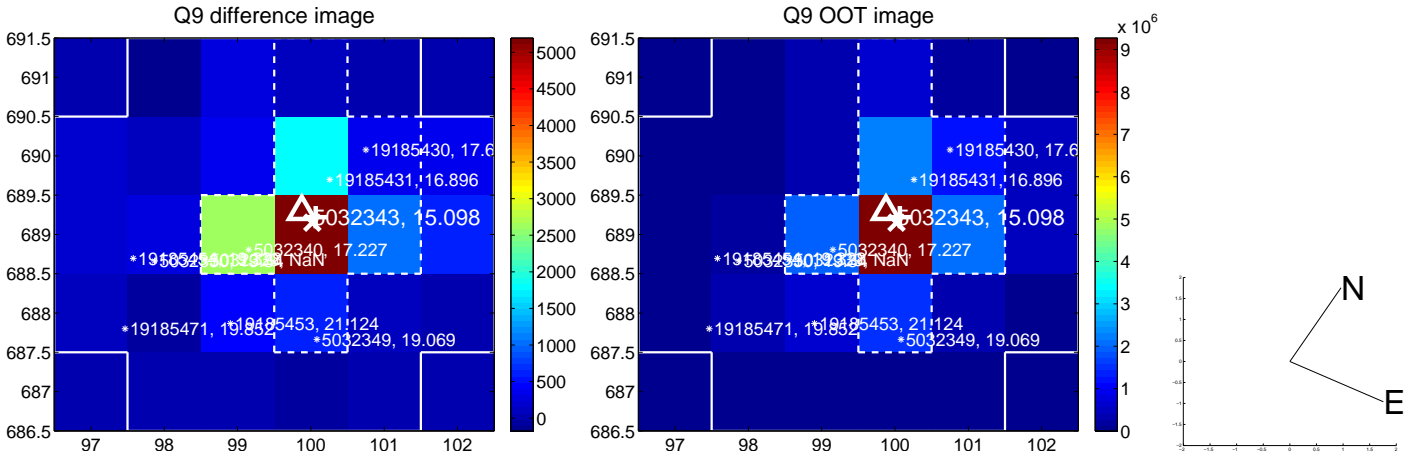
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



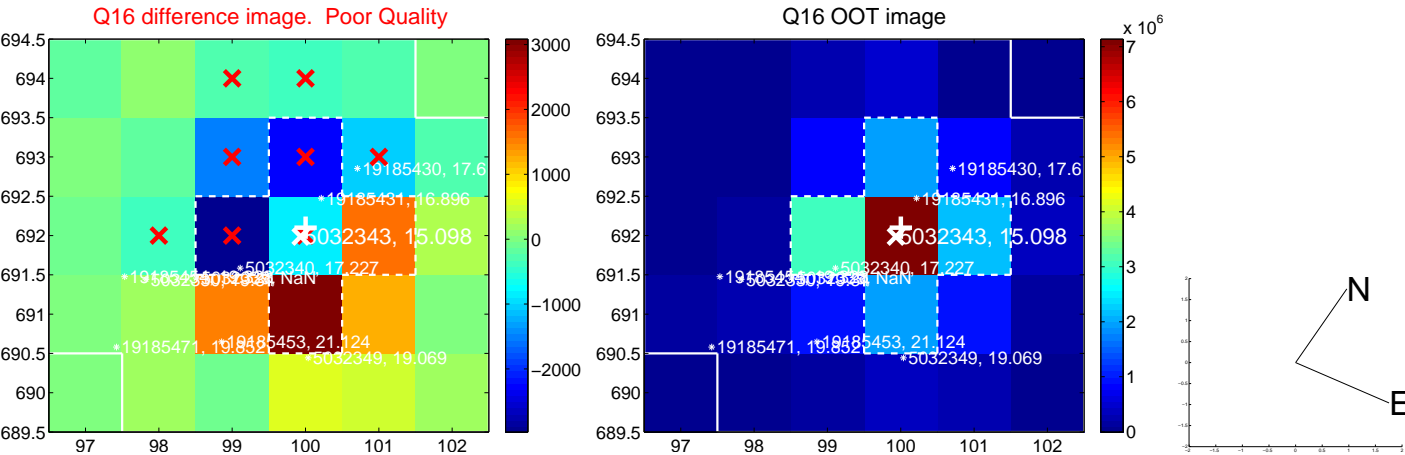
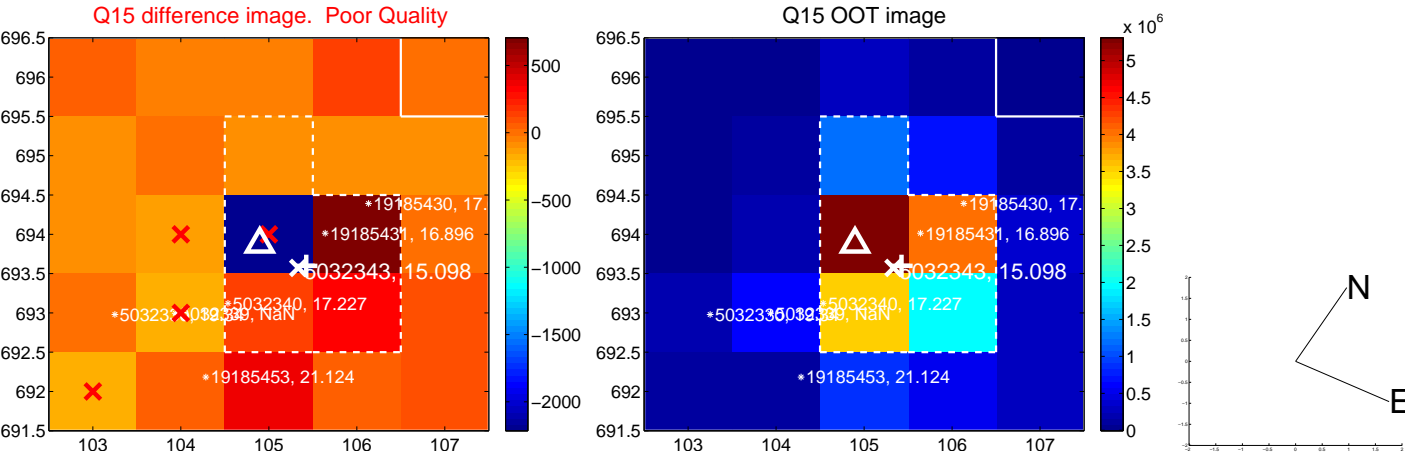
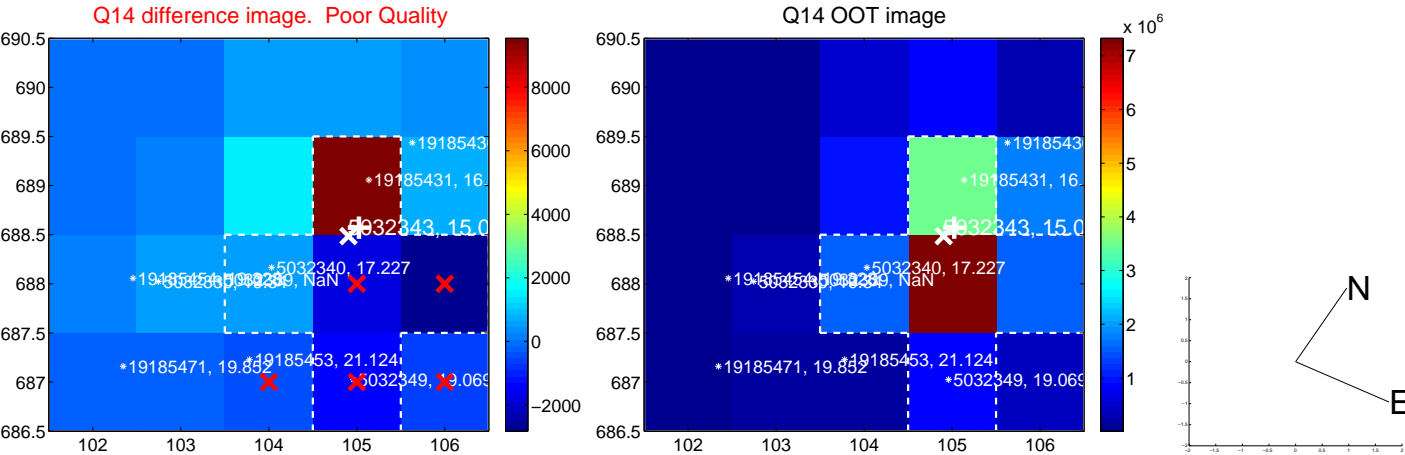
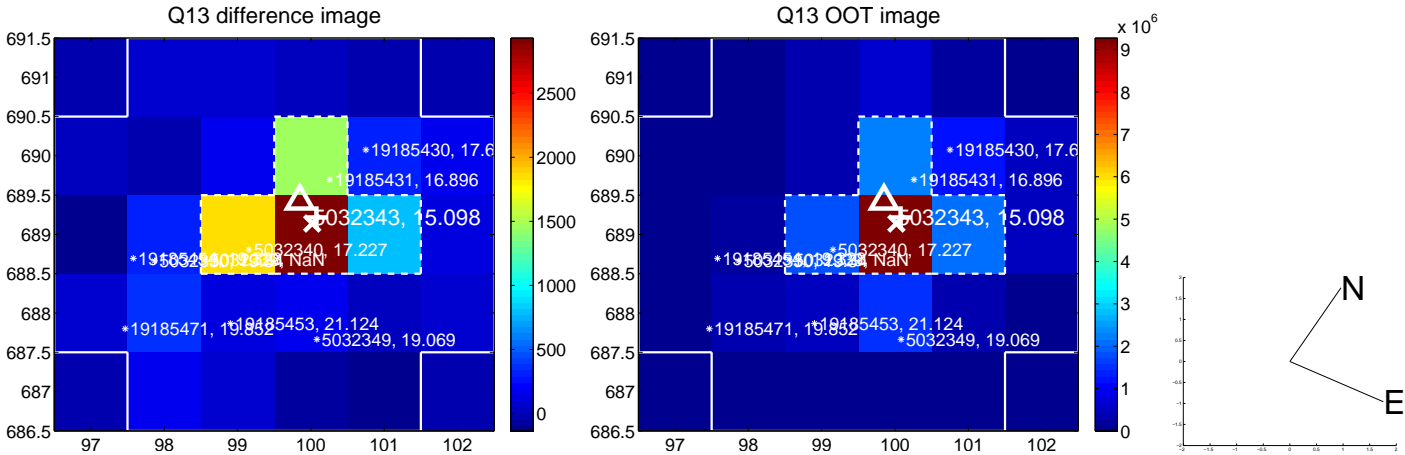
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



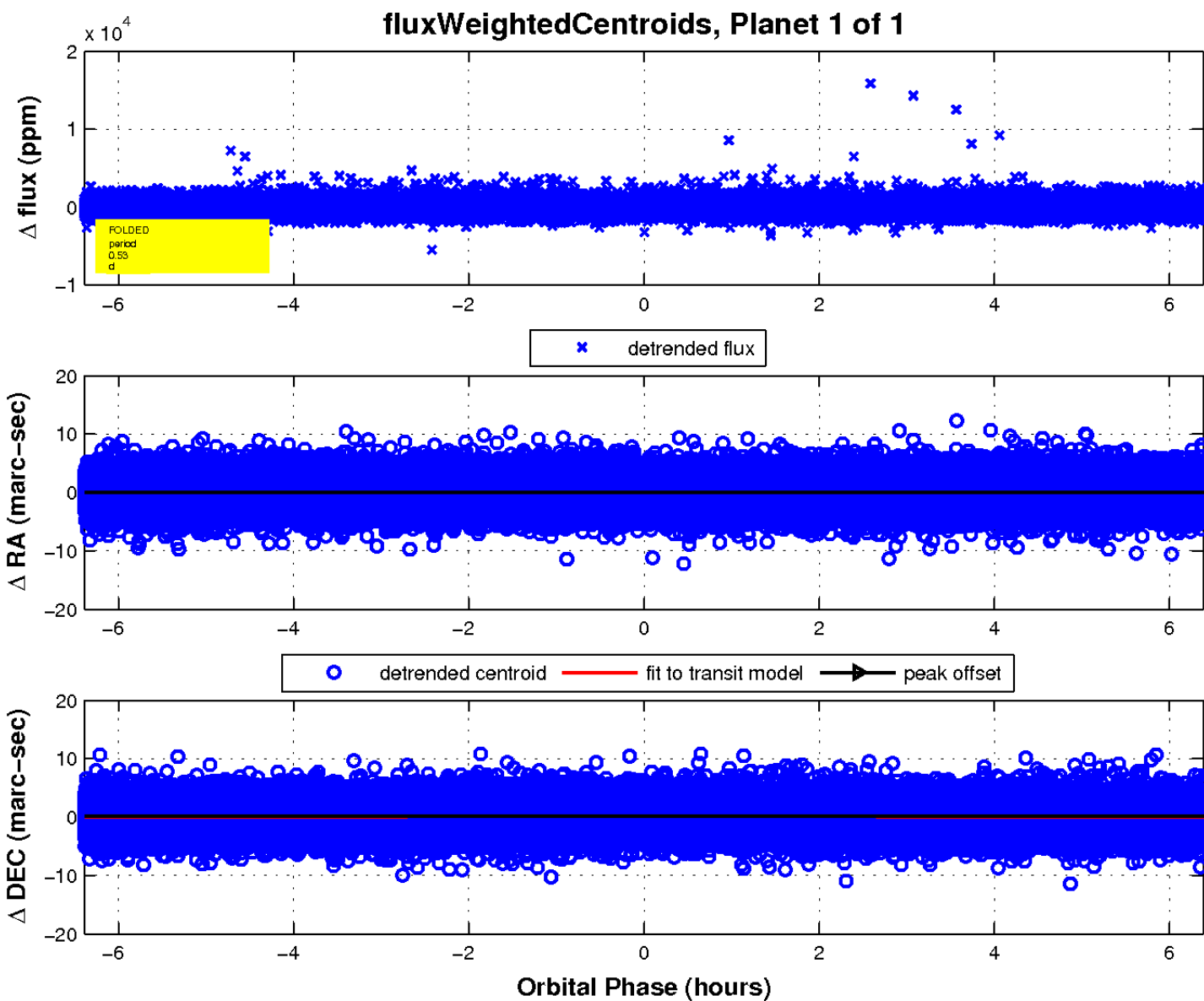
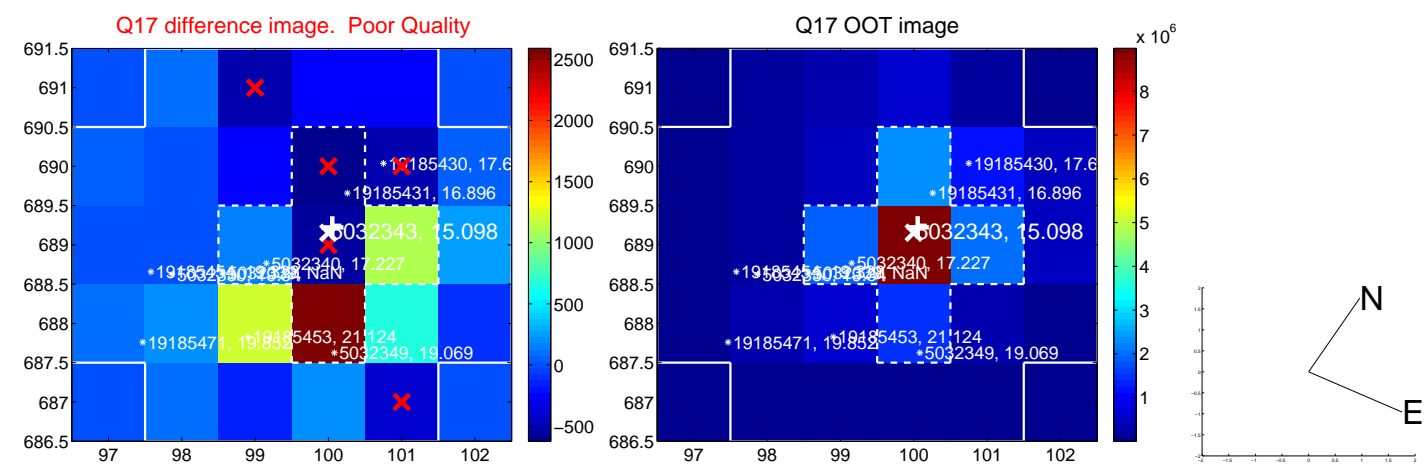
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white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



UKIRT Image

Declination

