

KIC 006934291

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})
006934291-01	OBS	1367.01	0.567855	131.792043	287.3	1.093	37.0	47.2	0.85	5073	1.78	2764.41

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
006934291-01	OBS	PC	1.00	0	0	0	0	NO_COMMENT

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.

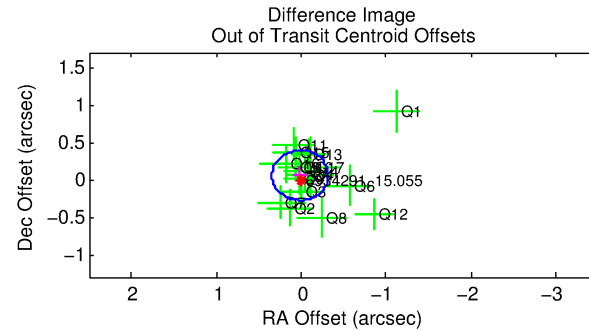
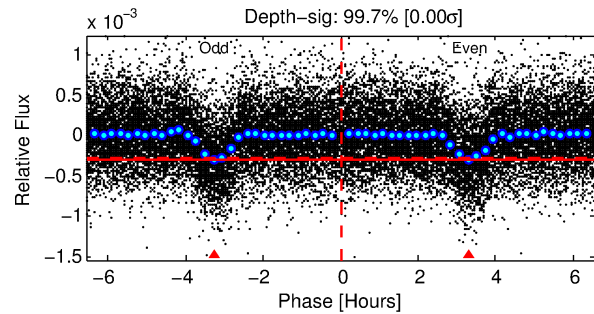
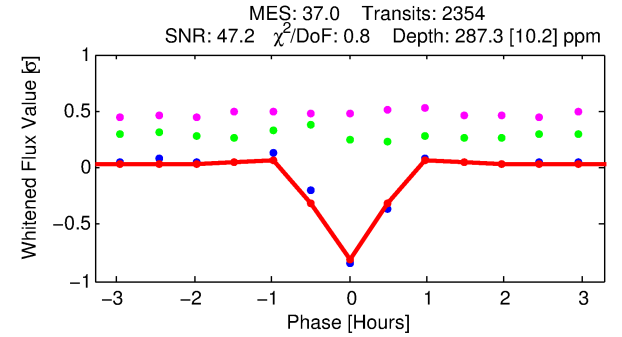
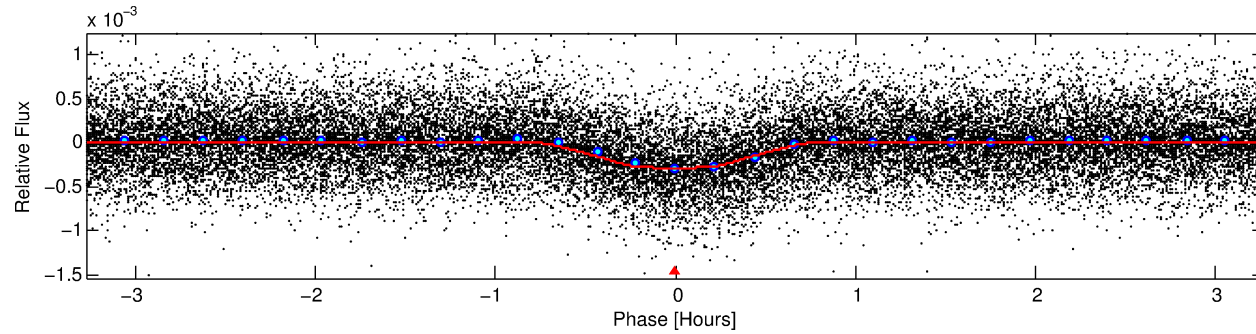
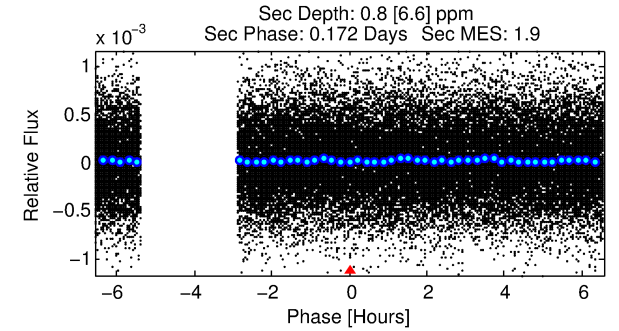
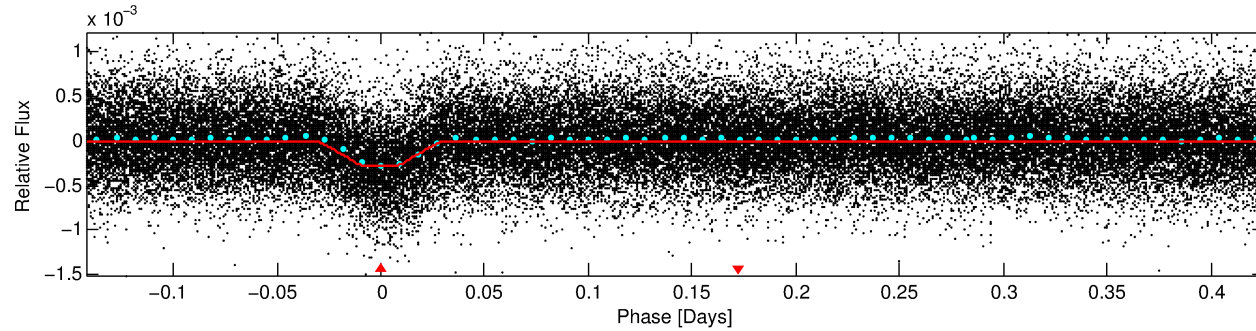
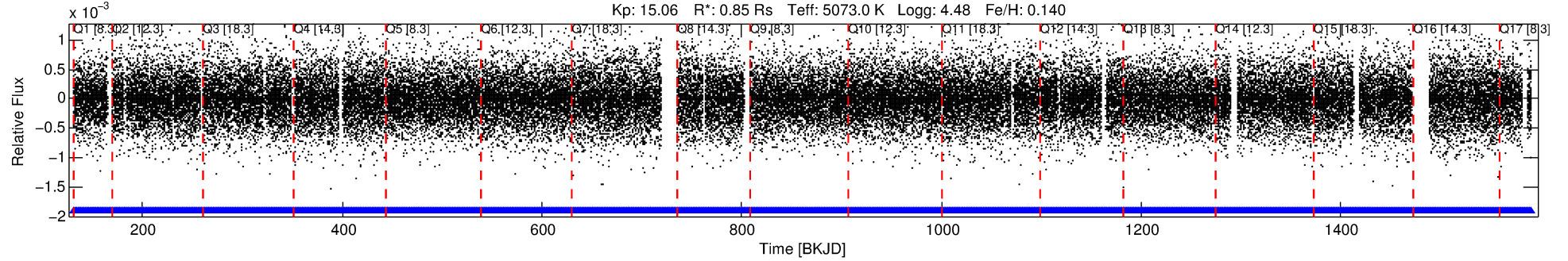
Ephemeris Match Information For 006934291-01

No Significant Match Found

DV One-Page Summary

KIC: 6934291 Candidate: 1 of 1 Period: 0.568 d

KOI: K01367.01 Corr: 0.939



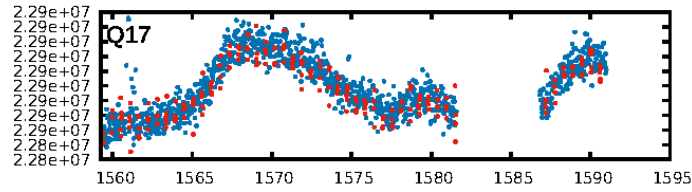
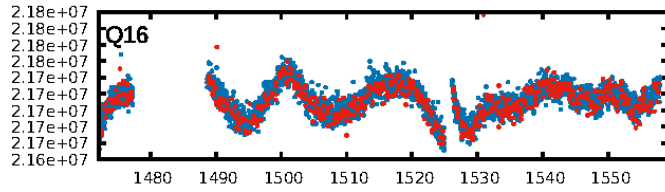
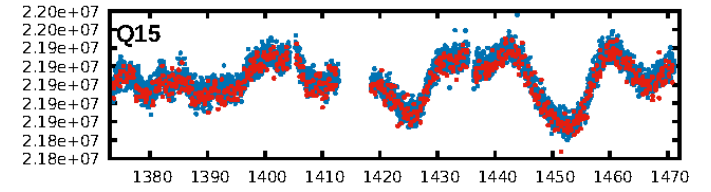
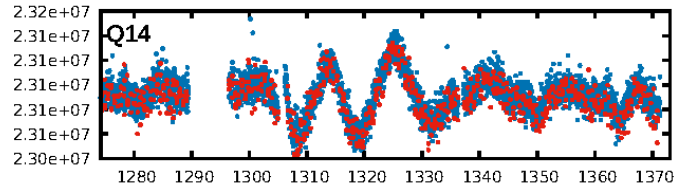
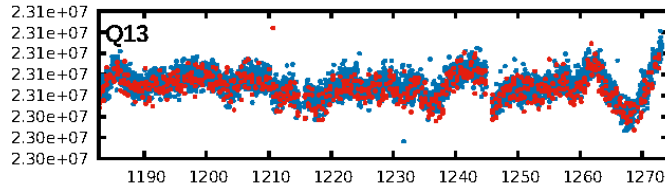
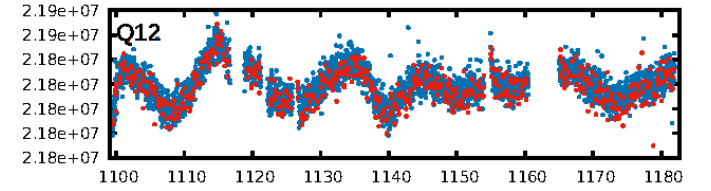
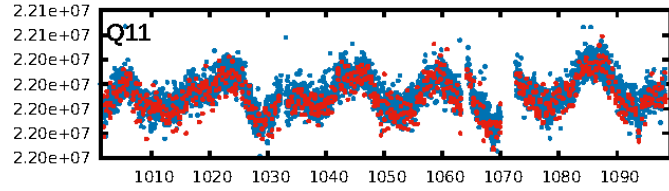
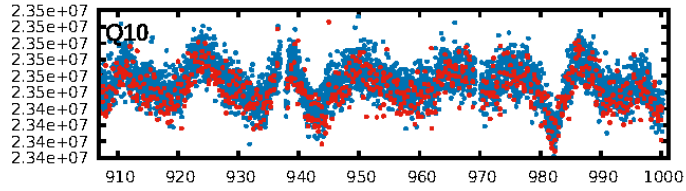
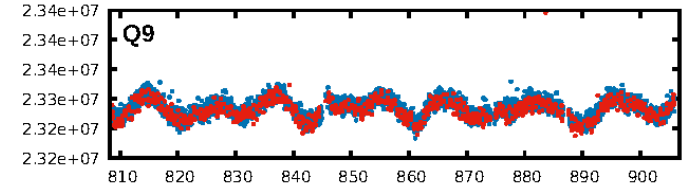
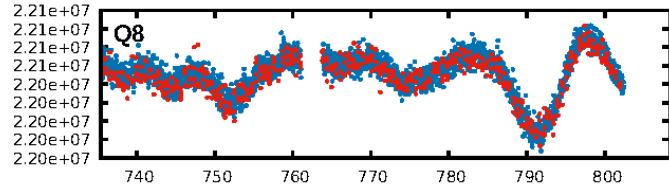
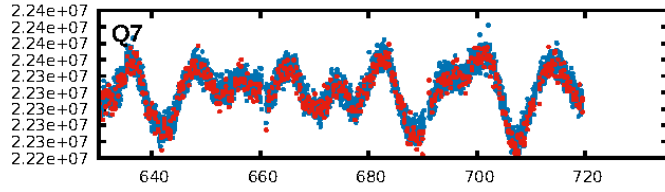
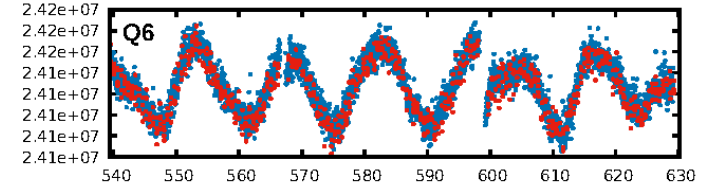
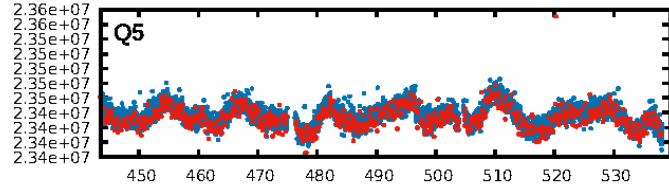
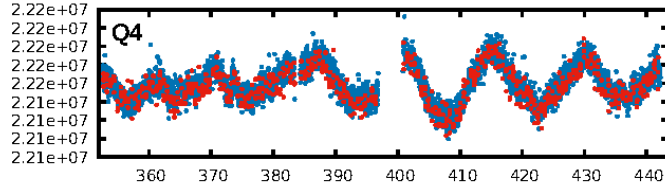
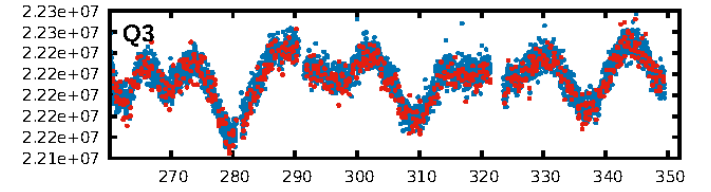
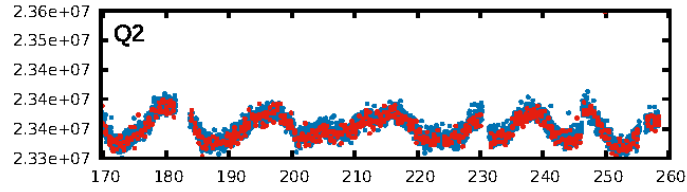
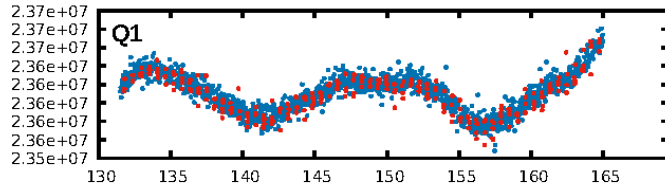
DV Fit Results:

Period = 0.56785 [0.00000] d
Epoch = 131.7920 [0.0004] BKJD
Rp/R* = 0.0191 [0.0039]
a/R* = 2.12 [1.34]
b = 0.90 [0.18]
Seff = 2764.41 [421.91]
Teff = 1849 [71] K
Rp = 1.78 [0.40] Re
a = 0.0125 [0.0011] AU
Ag = 0.02 [0.18] [-5.44σ]
Teffp = 1105 [2220] K [-0.33σ]

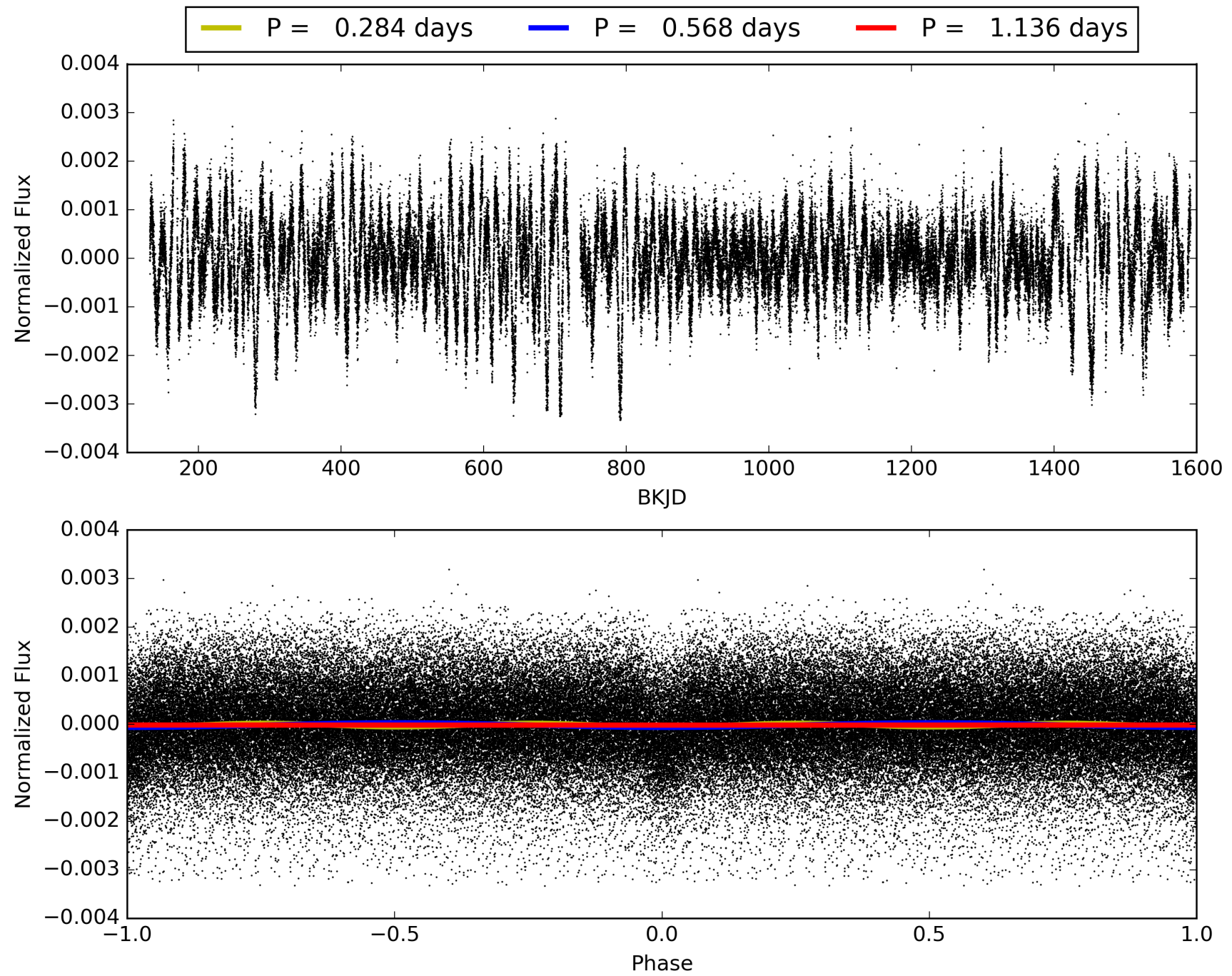
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: 6.09e-260
RollingBand-fgt: 1.00 [2248/2248]
GhostDiagnostic-chr: 3.698
Centroid-sig: 29.7%
Centroid-so: 0.336 arcsec [1.28σ]
OotOffset-rm: 0.057 arcsec [0.51σ]
KicOffset-rm: 0.049 arcsec [0.45σ]
OotOffset-st: 4/4/4/5 [17]
KicOffset-st: 4/4/4/5 [17]
DiffImageQuality-fgm: 1.00 [17/17]
DiffImageOverlap-fno: 1.00 [17/17]

TCE 006934291-01, PDC Light Curves

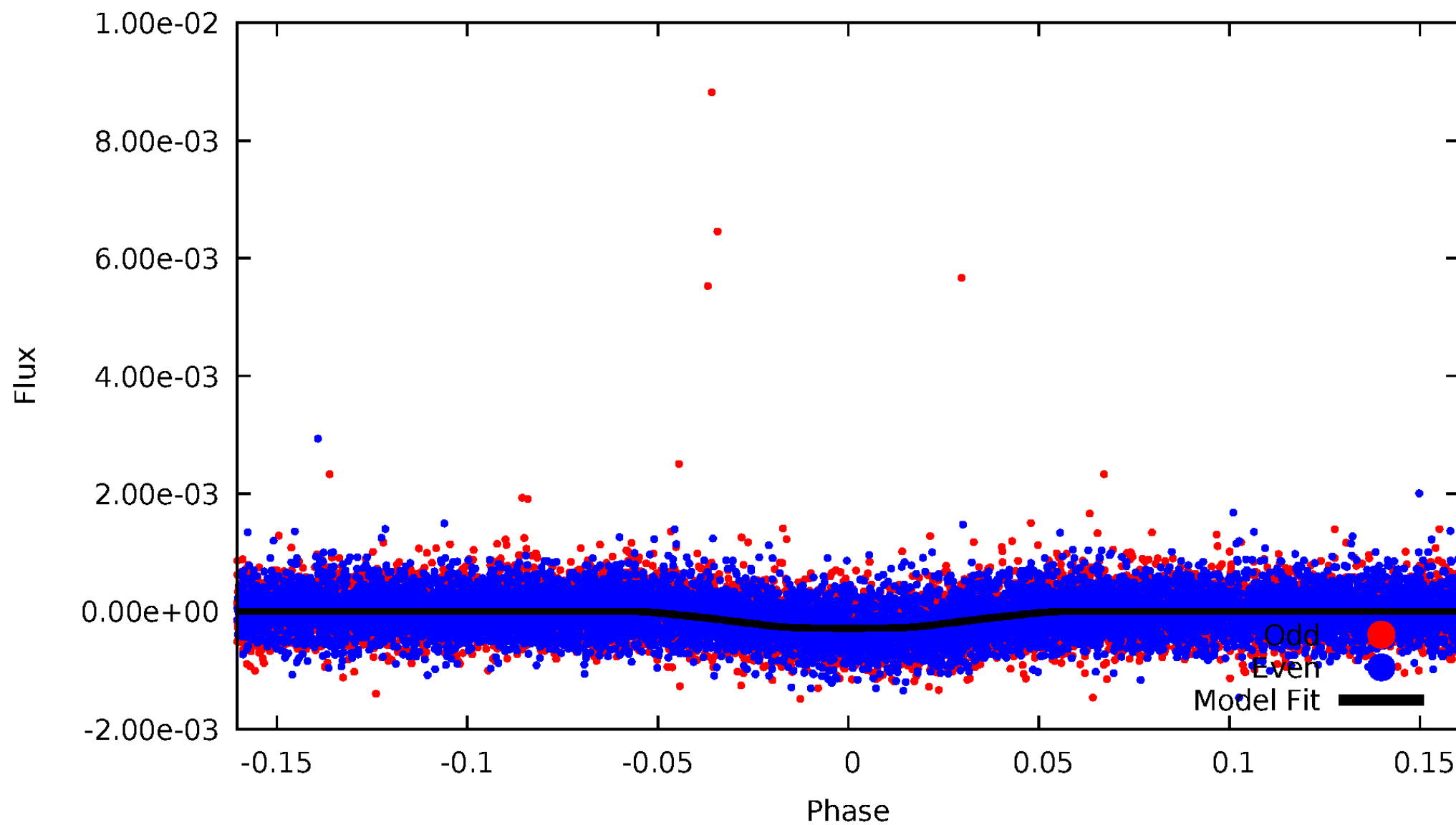


TCE 006934291-01



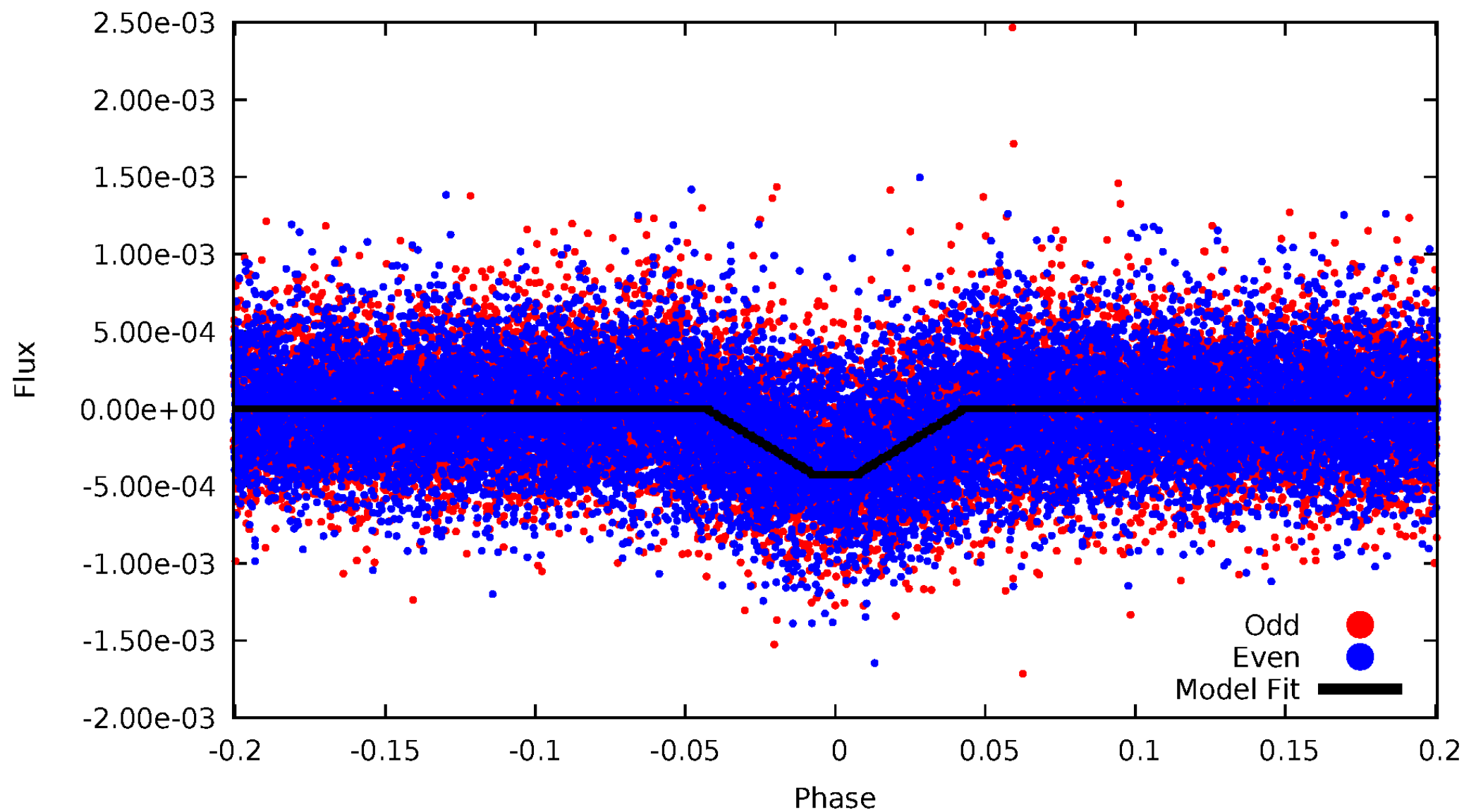
DV Odd/Even

TCE 006934291-01



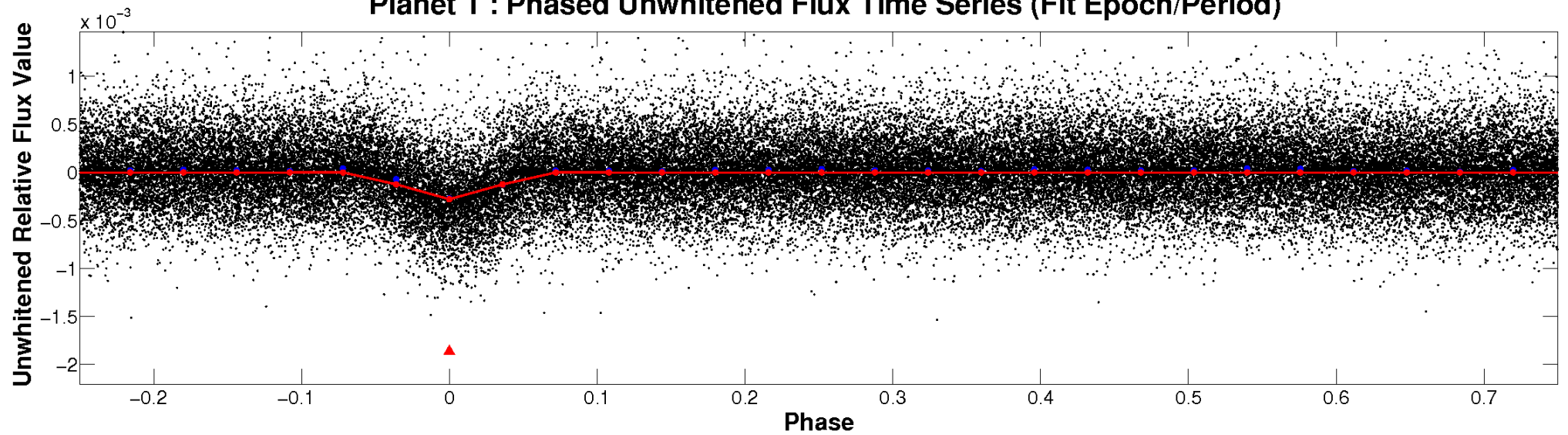
ALT Odd/Even

TCE 006934291-01

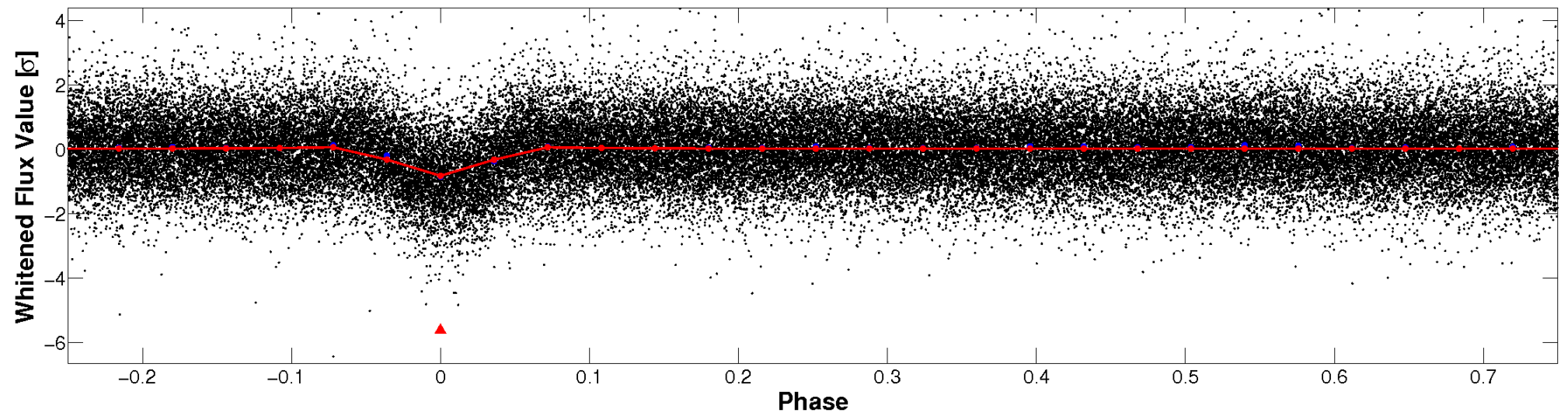


Non-Whitened Vs. Whitened Light Curve

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

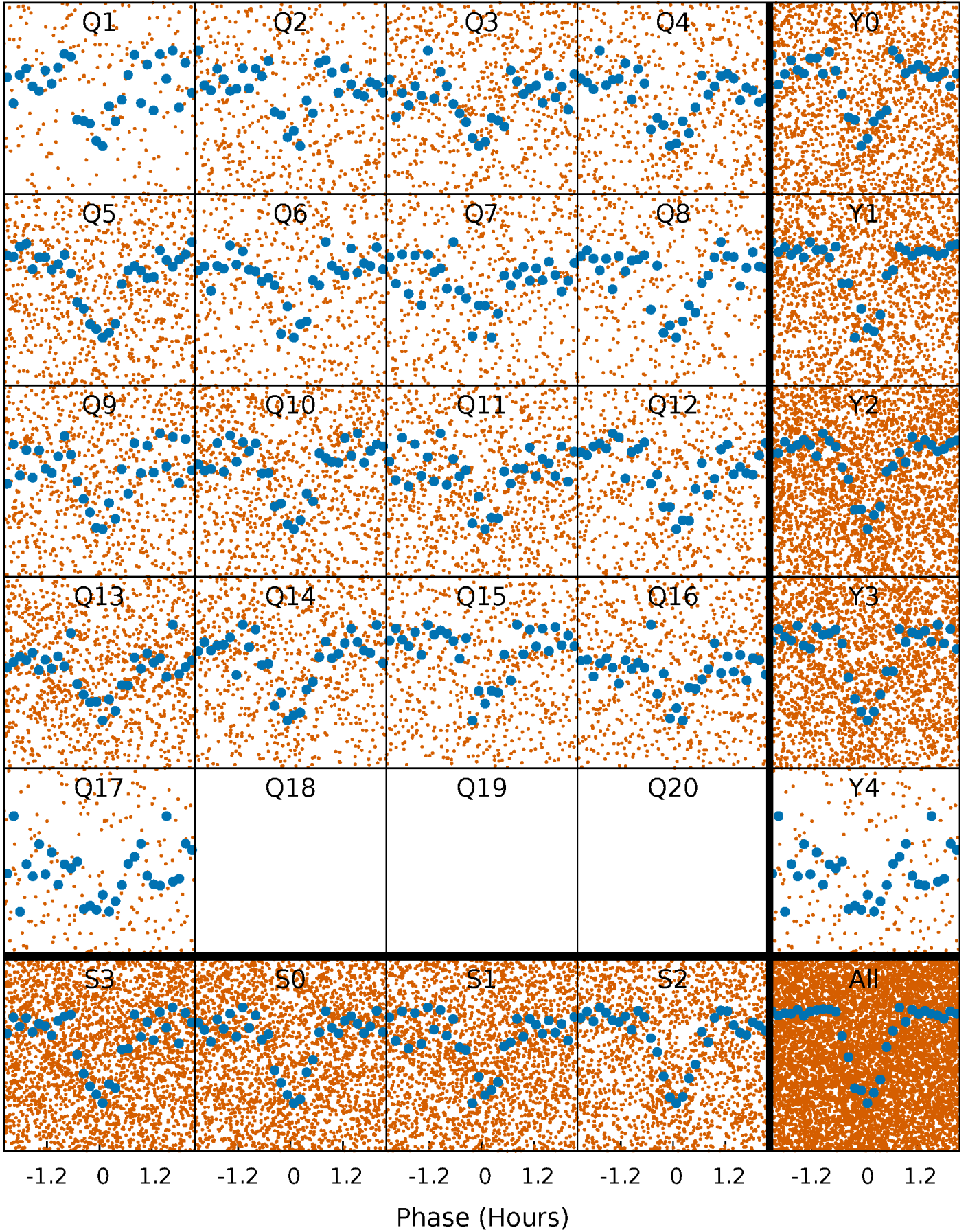


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



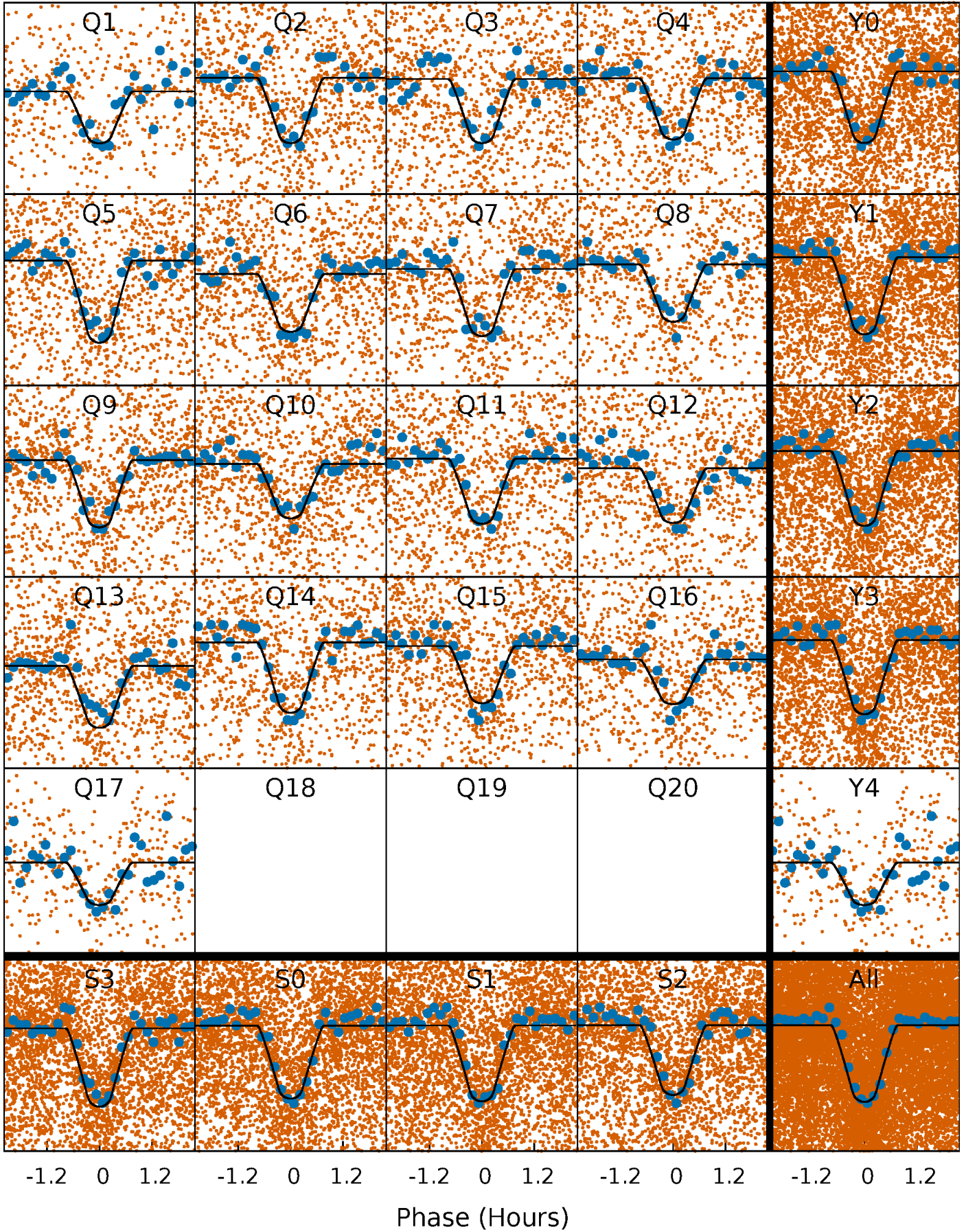
PDC Quarter-Phased Transit Curves

TCE 006934291-01 P= 0.567855 Days $T_0=131.792044$ (BKJD)



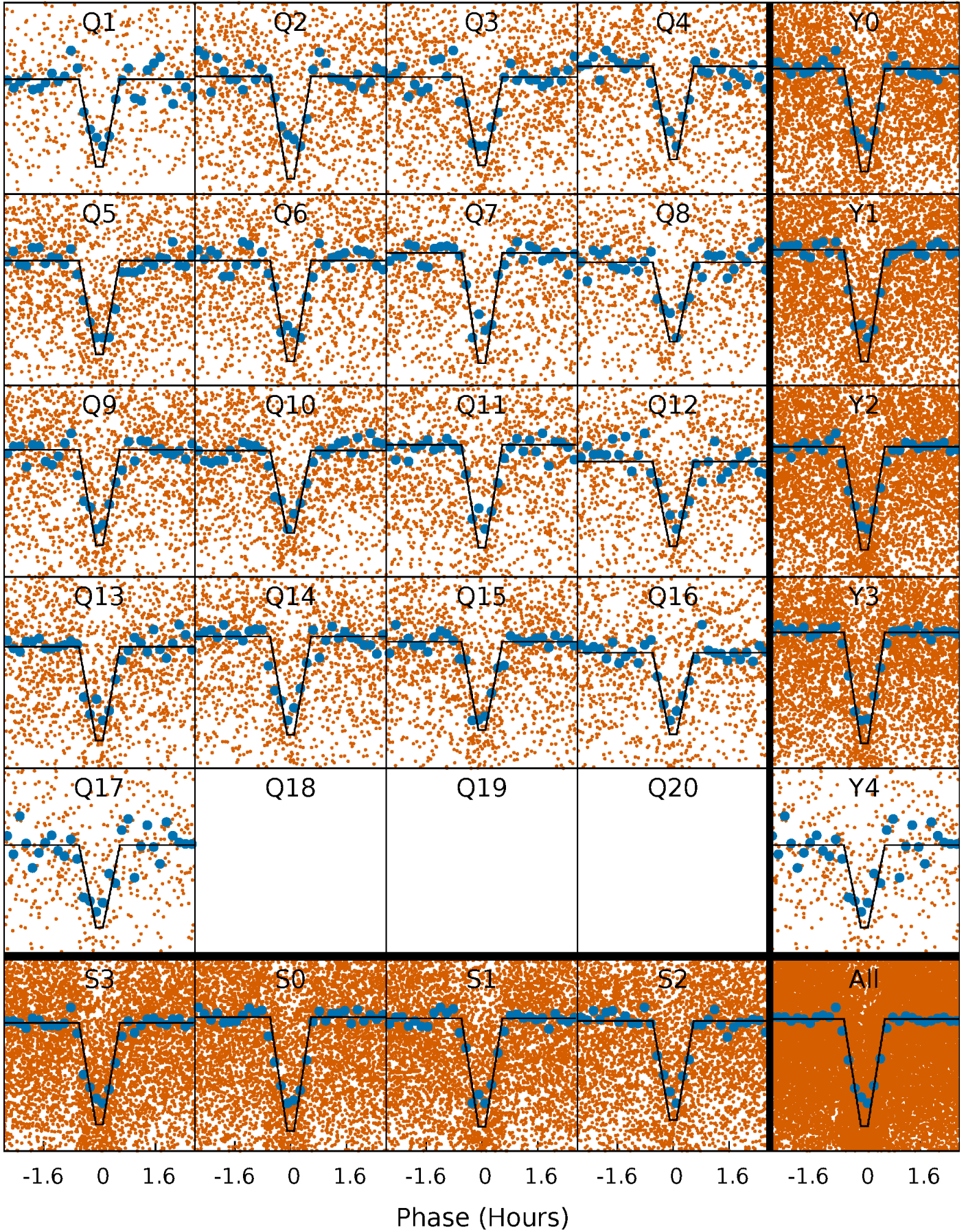
DV Quarter-Phased Transit Curves

TCE 006934291-01 P= 0.567855 Days $T_0=131.792044$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

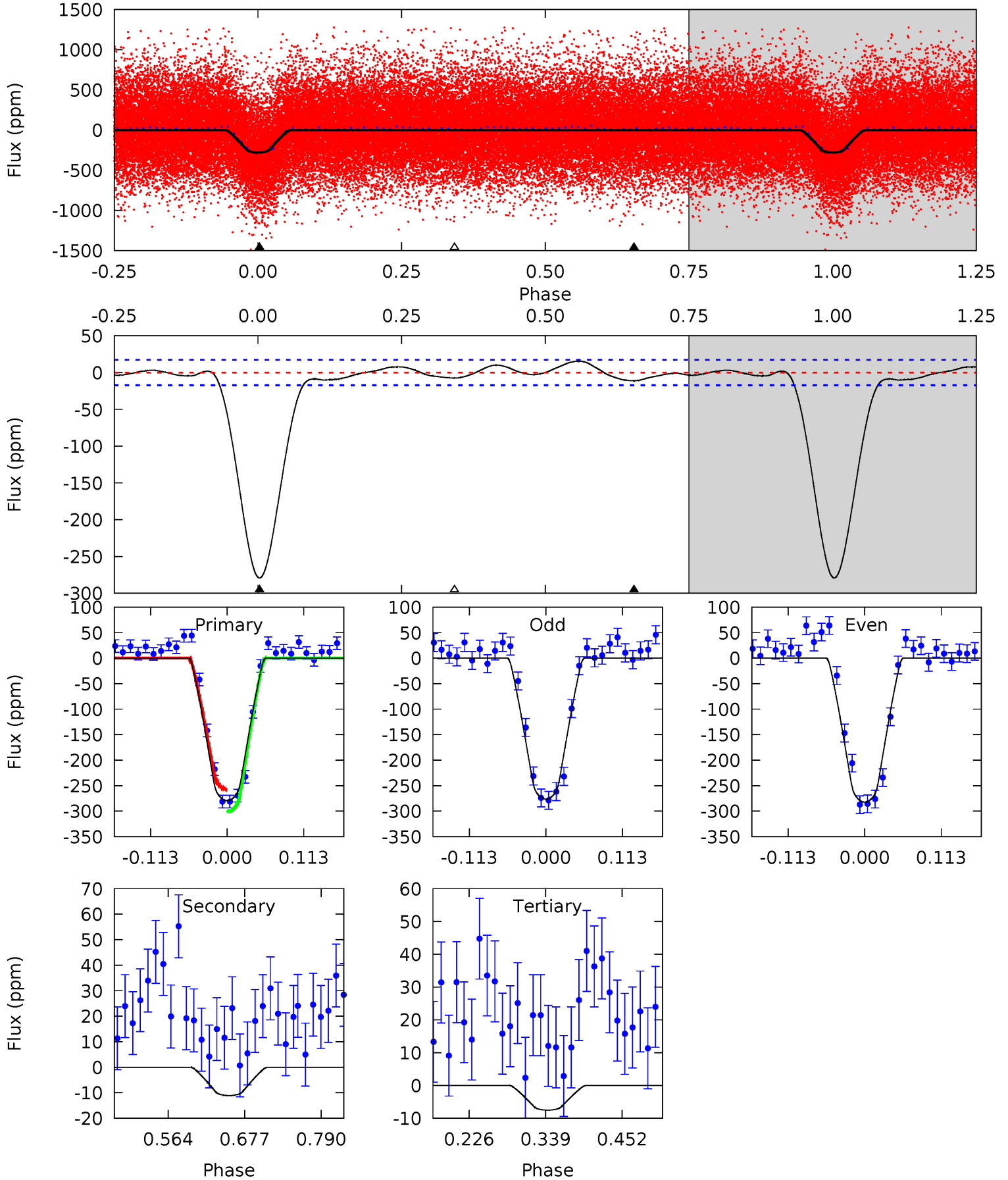
TCE 006934291-01 P= 0.567857 Days $T_0=131.790726$ (BKJD)



DV Model-Shift Uniqueness Test

006934291-01, P = 0.567855 Days, E = 131.224189 Days

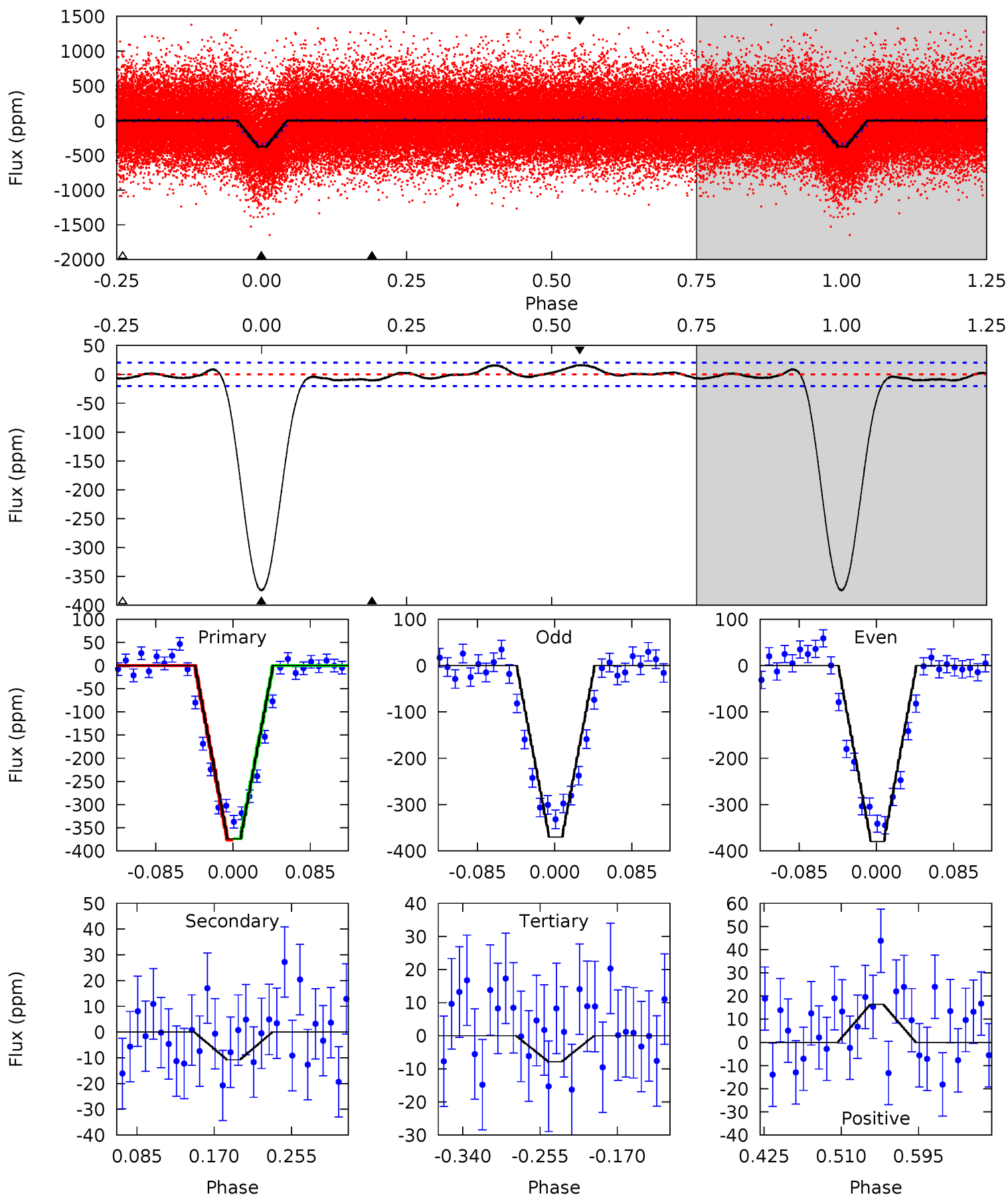
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
73.3	2.92	1.97	0	4.54	1.59	1.43	71.4	73.3	0.94	2.92	0.78	0.97	0.05	5.80



Alt Model-Shift Uniqueness Test

006934291-01, P = 0.567857 Days, E = 131.222869 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
84.7	2.43	1.78	3.71	4.60	1.72	1.42	82.9	80.9	0.65	-1.27	1.06	0.97	0.04	0.36



Stellar Parameters For KIC 006934291

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	5073^{+83}_{-76}	$4.483^{+0.082}_{-0.027}$	$0.140^{+0.150}_{-0.150}$	$0.853^{+0.039}_{-0.072}$	$0.806^{+0.056}_{-0.030}$	$1.829^{+0.532}_{-0.204}$
	+2%/-1%	+2%/-1%	+107%/-107%	+5%/-8%	+7%/-4%	+29%/-11%
Source	SPE90	SPE90	SPE90	DSEP		

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

Secondary Eclipse Parameters for KIC 006934291-01 / KOI 1367.01

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	A_{obs}
DV	-11 ± 4	$1.76^{+0.37}_{-0.35}$	2565^{+52}_{-67}	1809^{+896}_{-4305}	$0.307^{+0.221}_{-0.124}$
Alt.	-11 ± 4	$1.91^{+0.37}_{-0.41}$	2567^{+60}_{-68}	-2278^{+4883}_{-326}	$0.246^{+0.226}_{-0.111}$

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

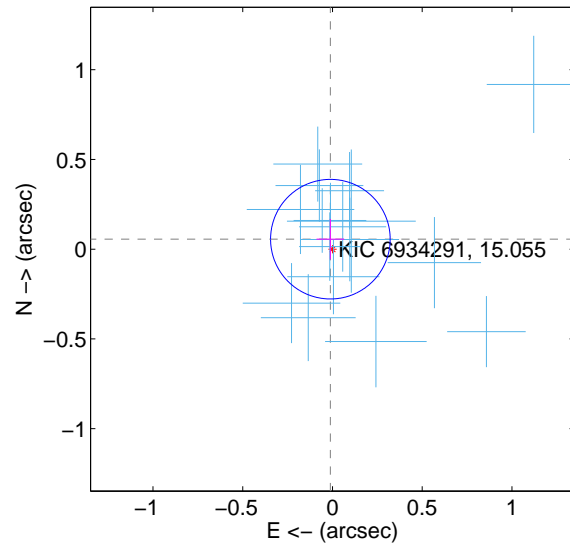
Supplemental centroid analysis for 006934291-01. Kepler magnitude: 15.05. Transit SNR 47.16

There are 17 quarters with good PRF difference image offsets

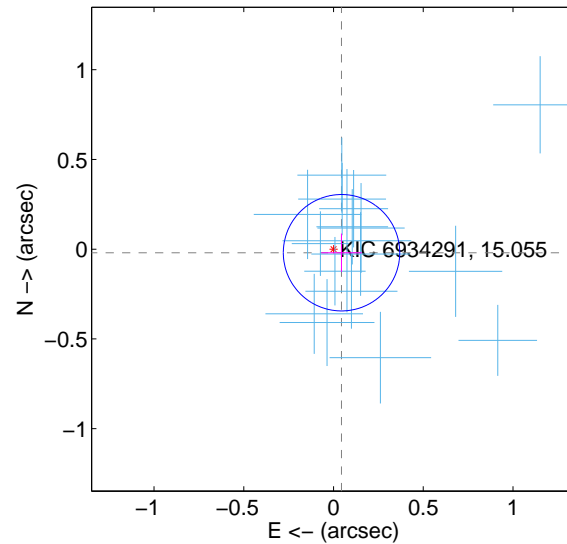
The direct PRF centroid is offset from the target star catalog position by about 0.11 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.057 ± 0.111	0.51	0.012 ± 0.077	0.056 ± 0.112
PRF-fit source offset from KIC position	0.049 ± 0.108	0.45	-0.045 ± 0.113	-0.020 ± 0.107
photometric centroid source offset	0.34 ± 0.26	1.28	-0.31 ± 0.26	-0.13 ± 0.27

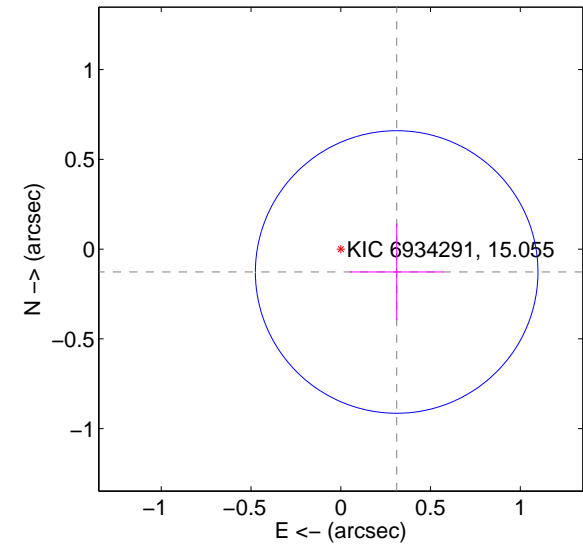
offset from difference PRF-fit to OOT PRF-fit



offset from difference PRF-fit to KIC position

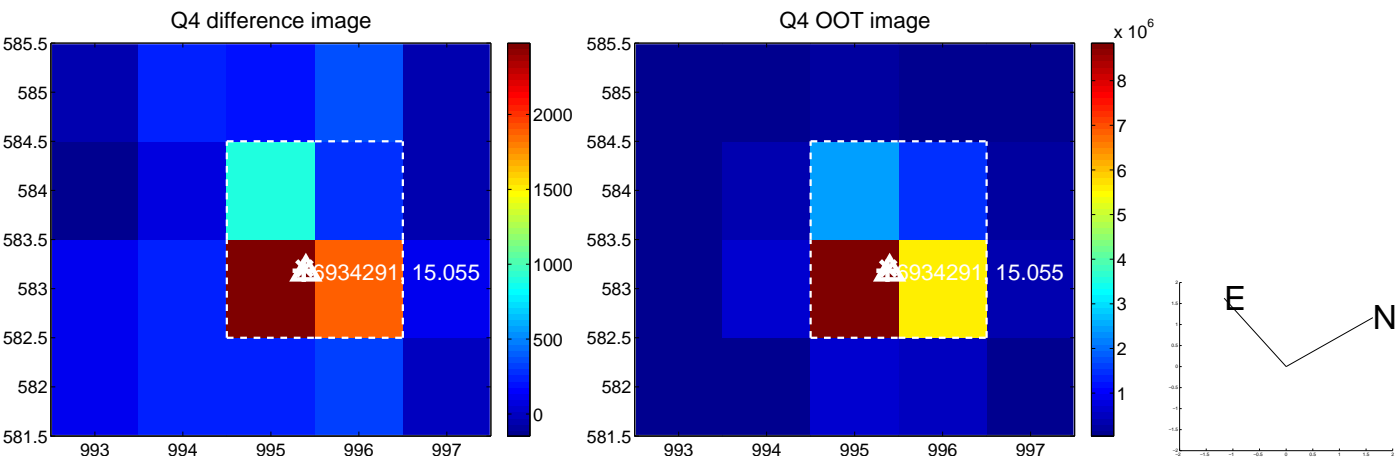
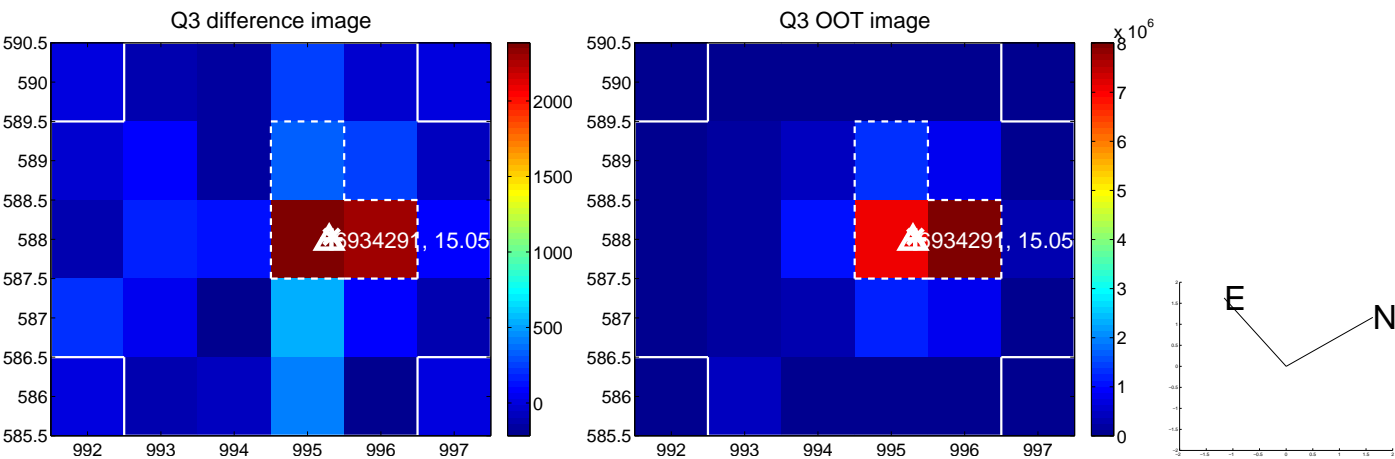
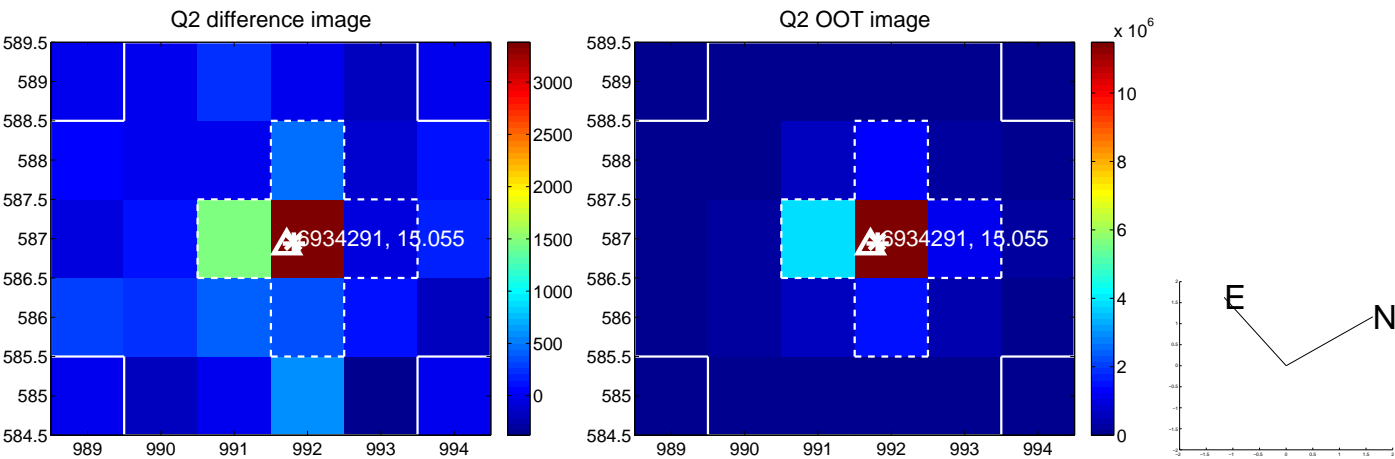
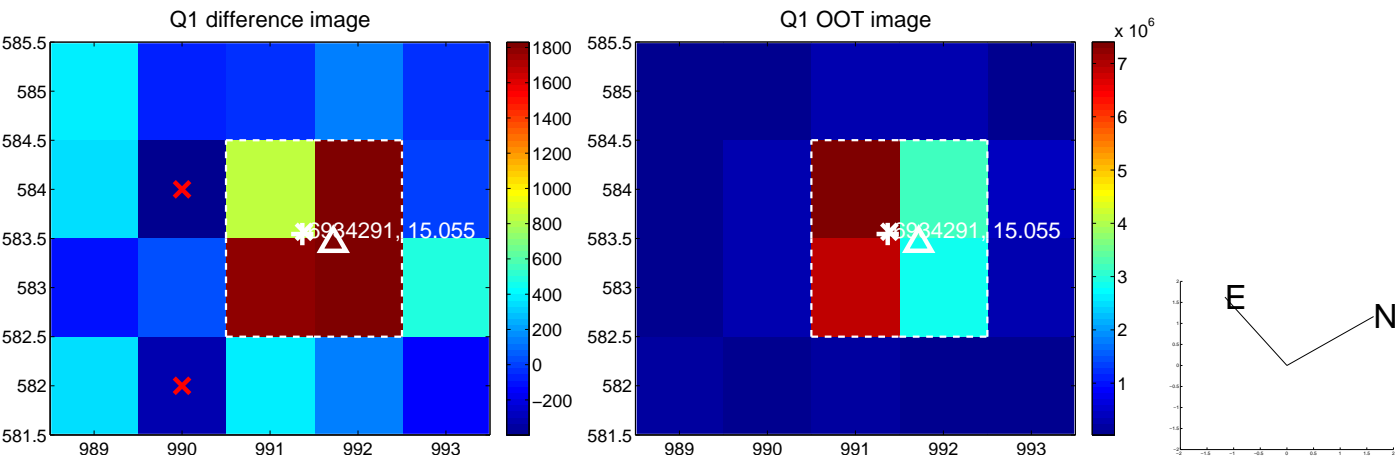


offset from photometric centroids

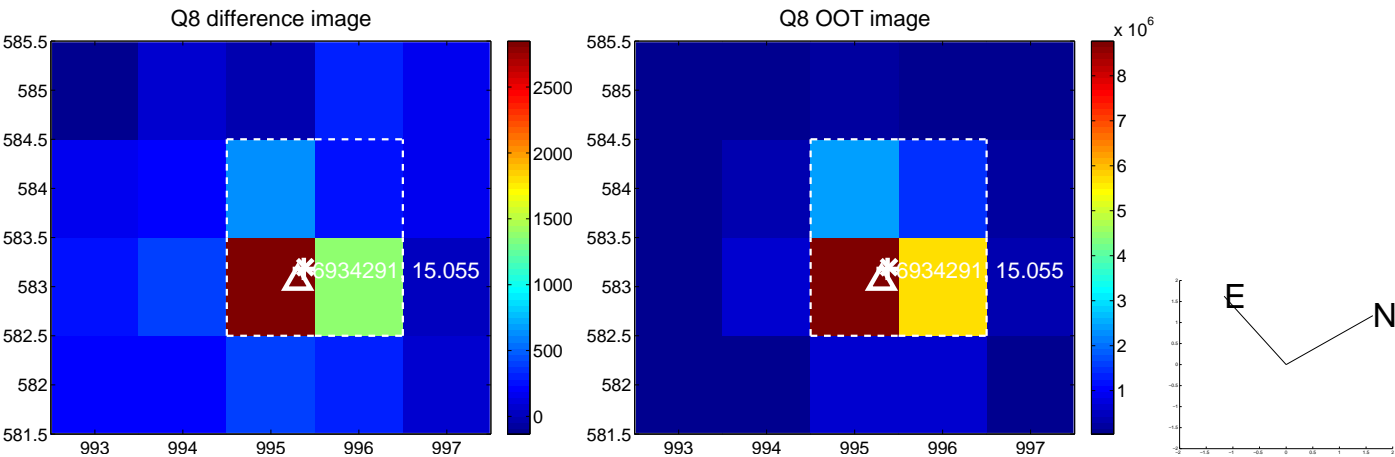
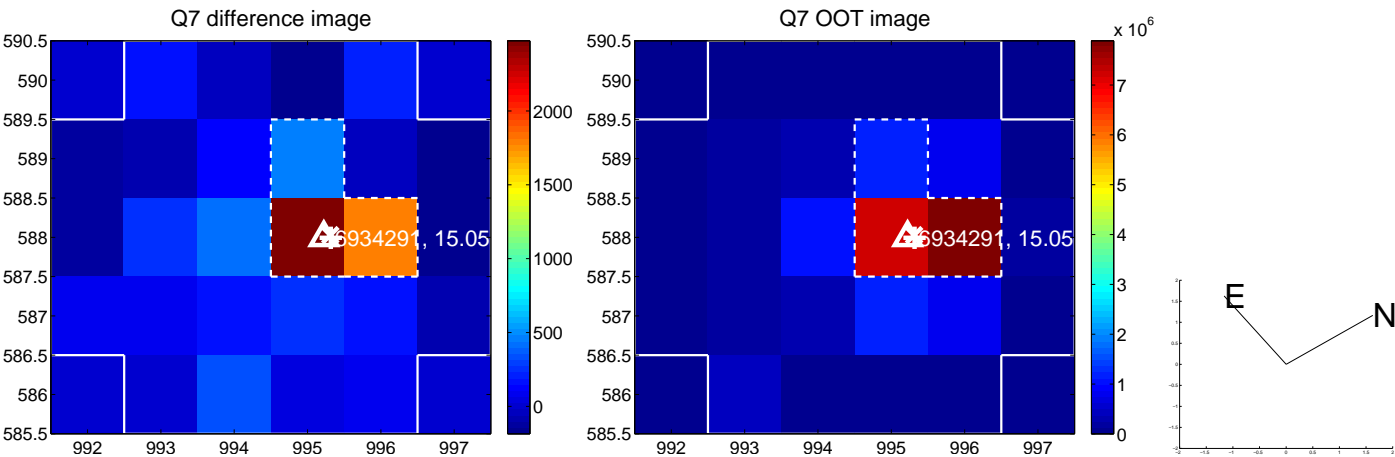
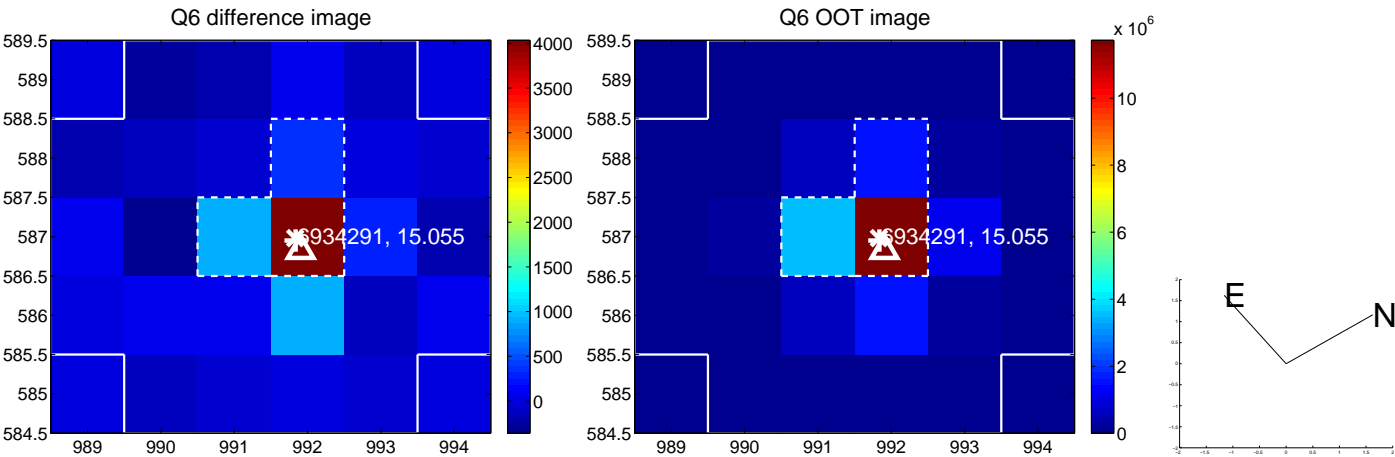
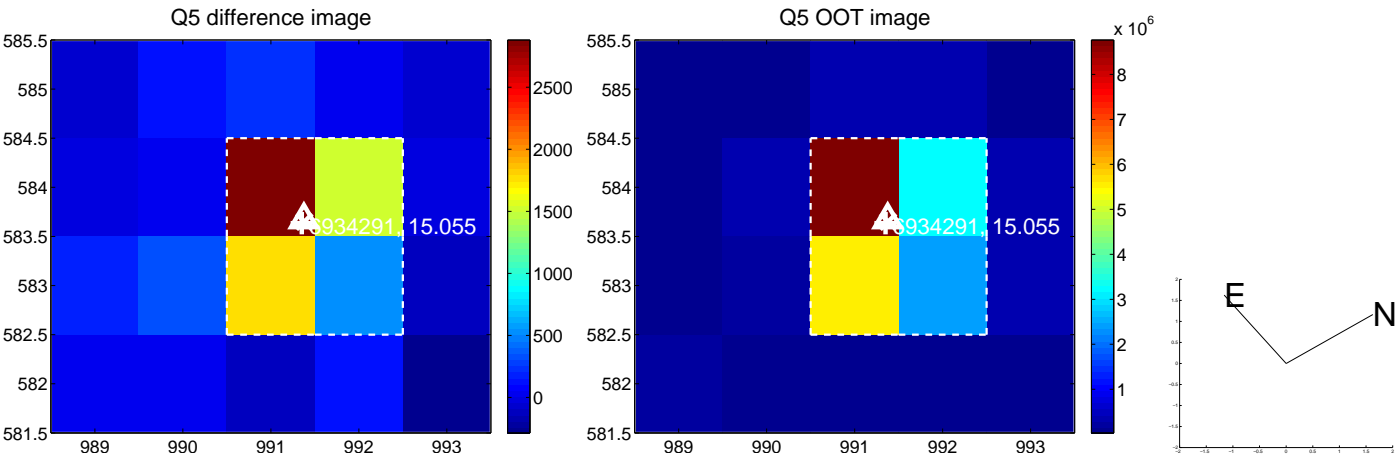


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses:** good quarterly centroid offsets; **Vermillion crosses:** bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

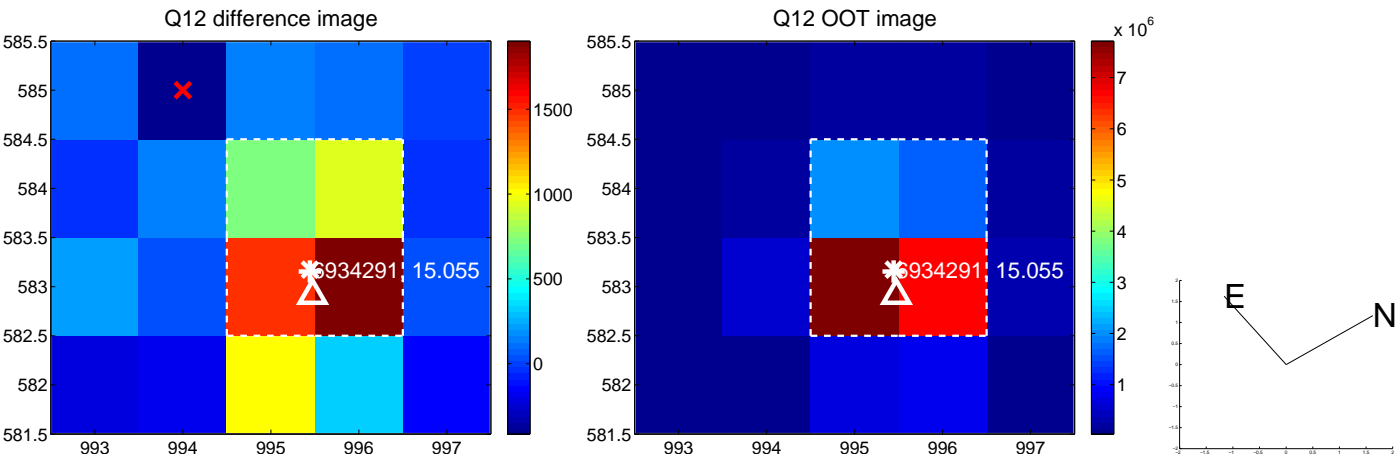
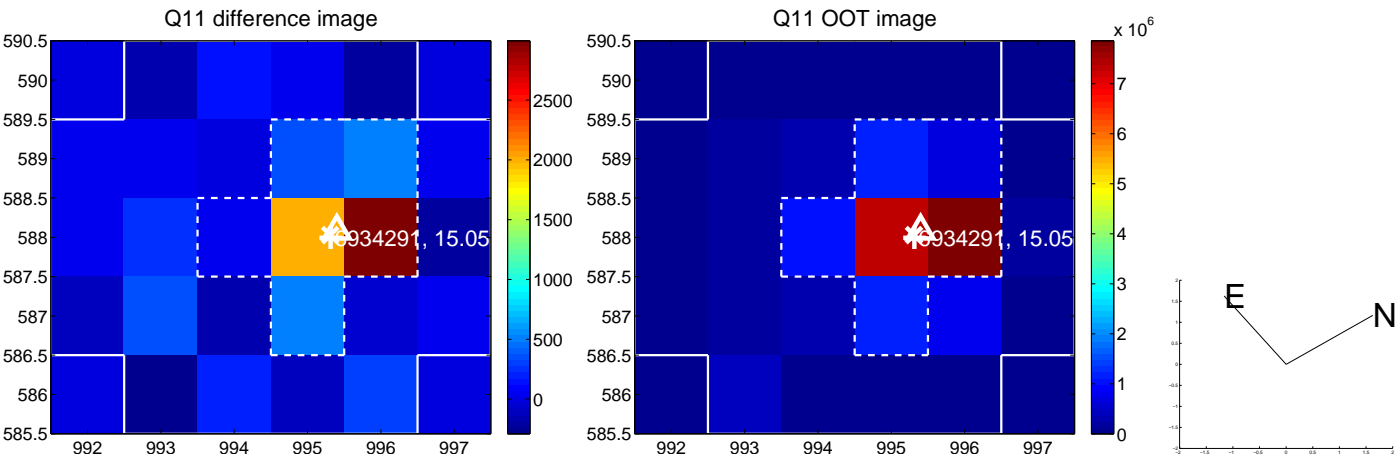
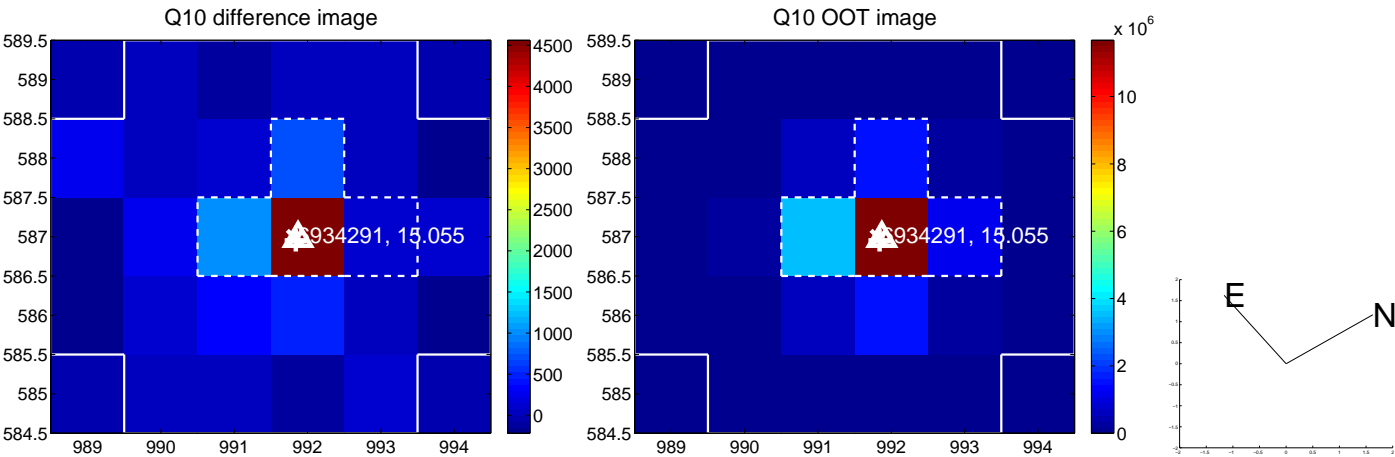
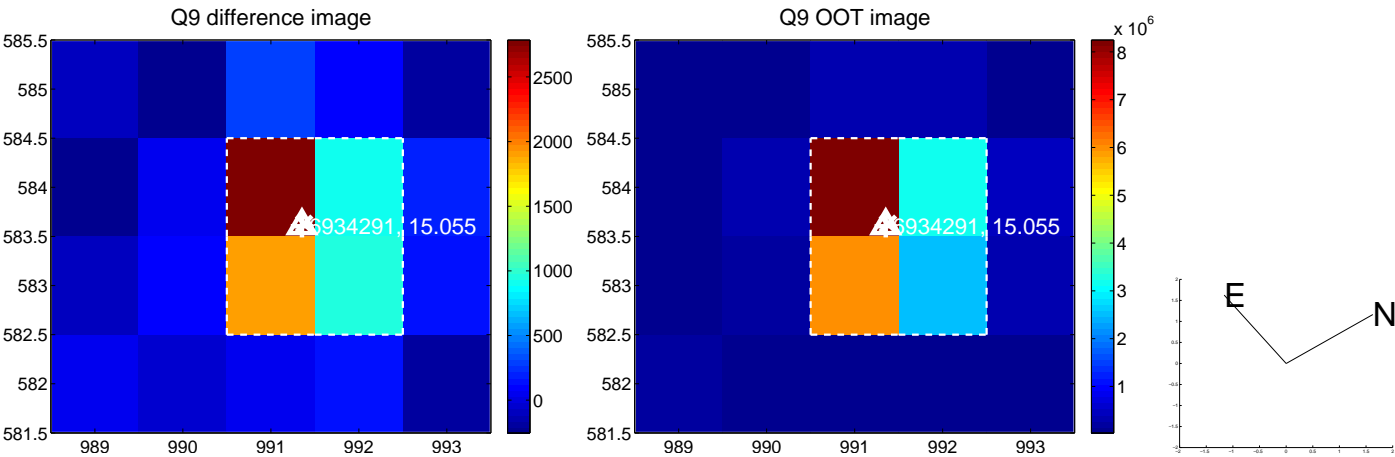
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



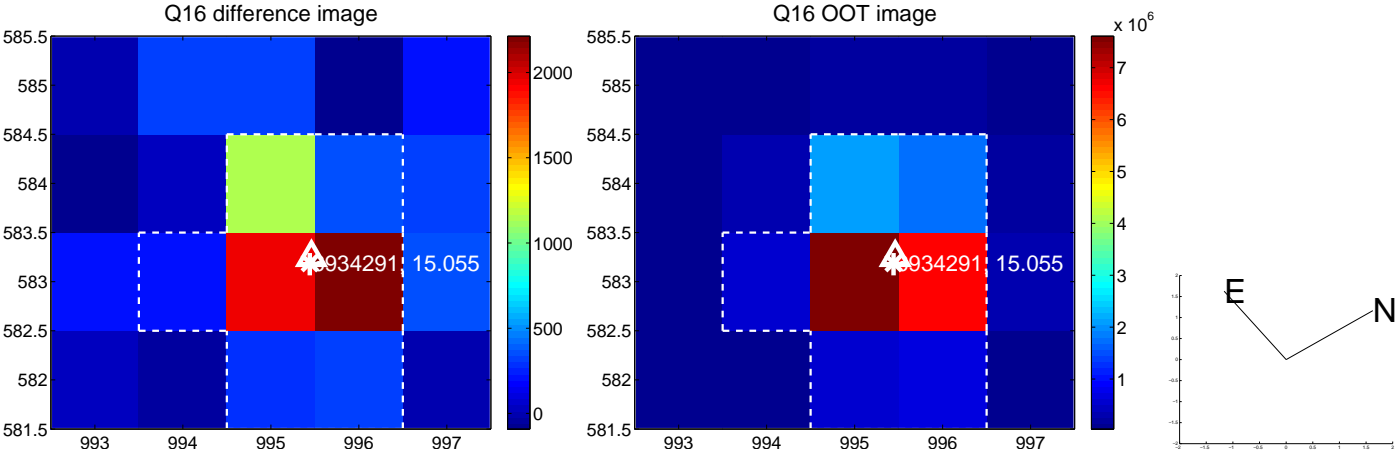
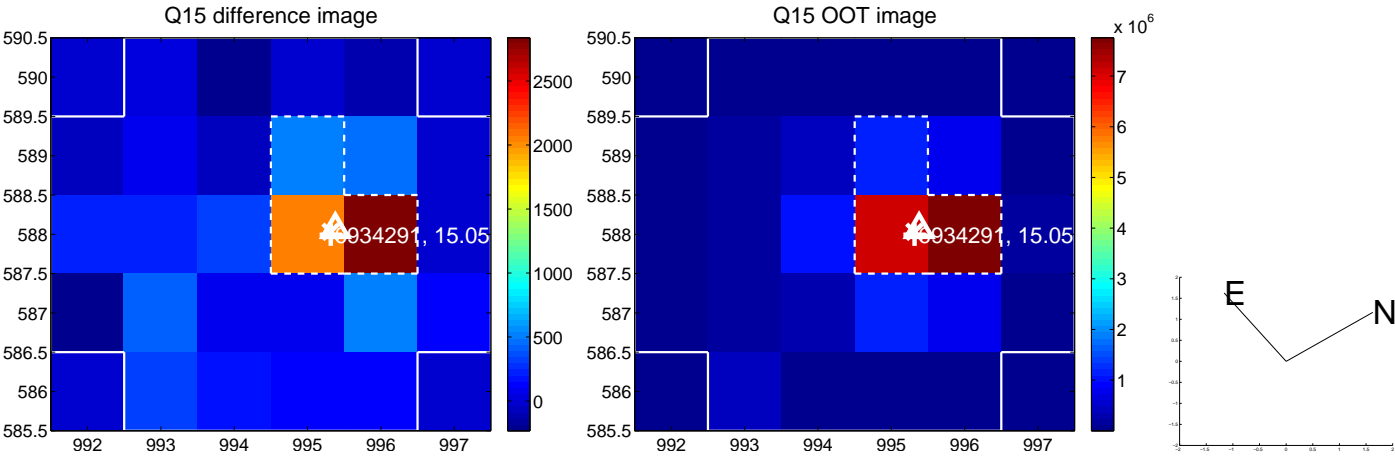
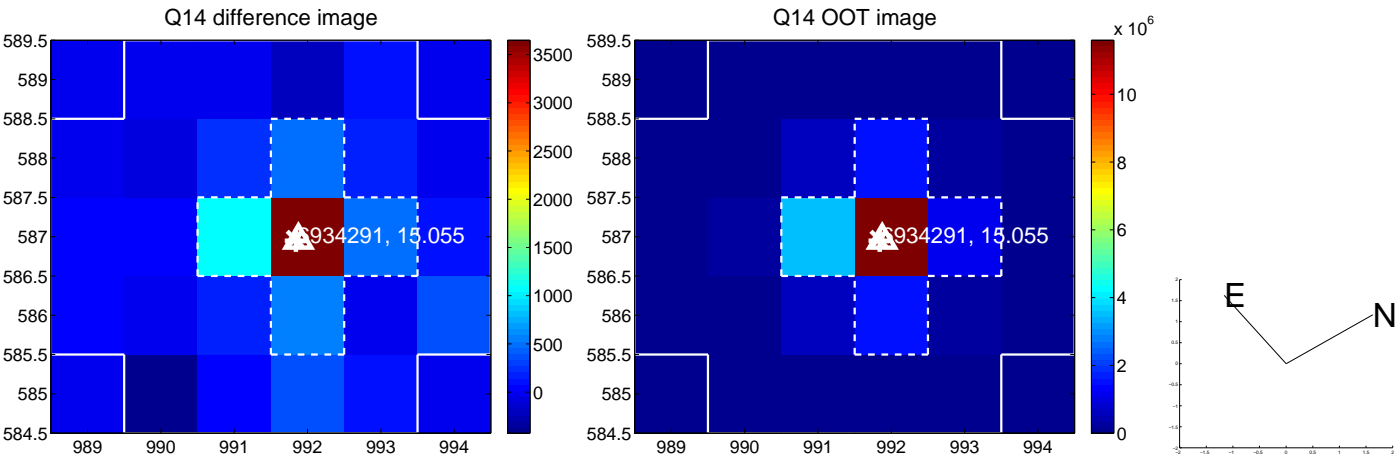
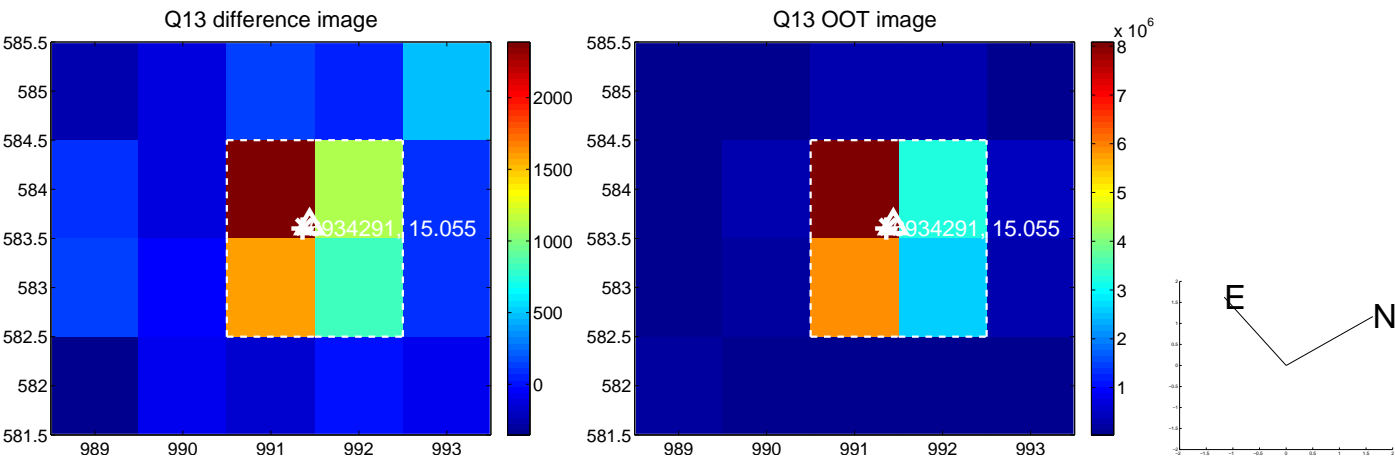
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



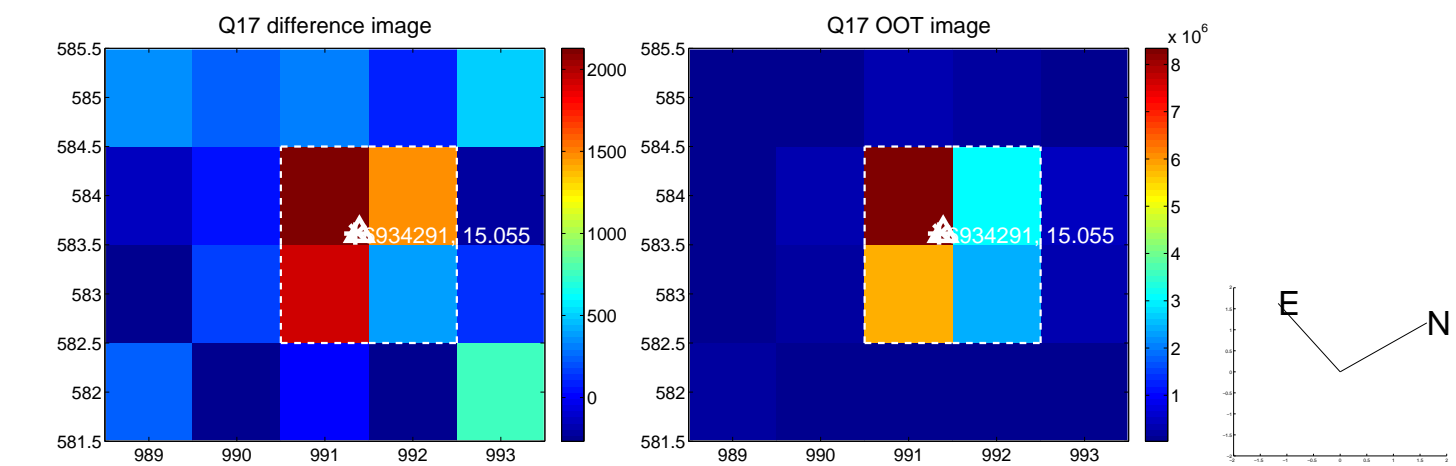
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



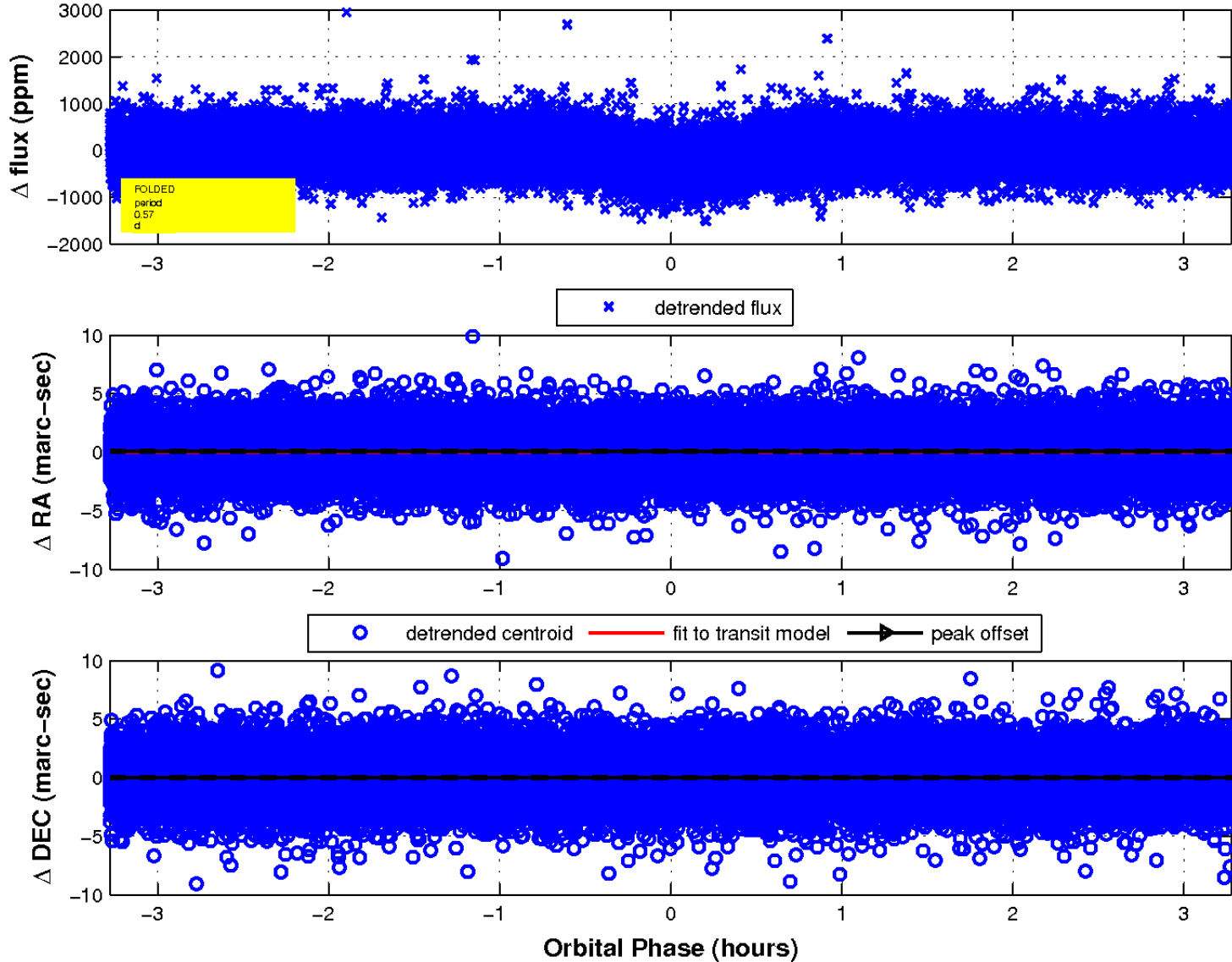
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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



fluxWeightedCentroids, Planet 1 of 1



UKIRT Image

Declination

