

KIC 006956014

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})
006956014-01	OBS	0031.01	0.925575	131.751177	256.9	2.128	135.5	114.9	24.49	4094	49.58	0.00

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
006956014-01	OBS	FP	0.00	0	1	0	0	PLANET_IN_STAR—DEPTH_ODDEVEN_ALT—MOD_ODDEVEN_DV—MOD_ODDEVEN_ALT—CENT_SATURATED

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.

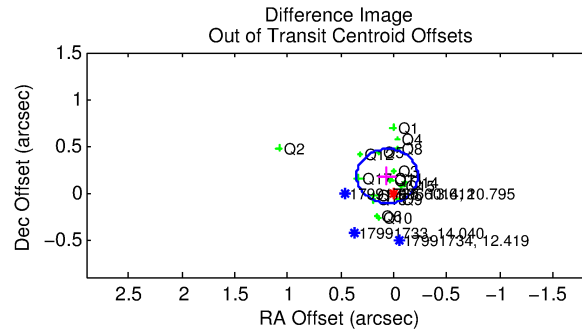
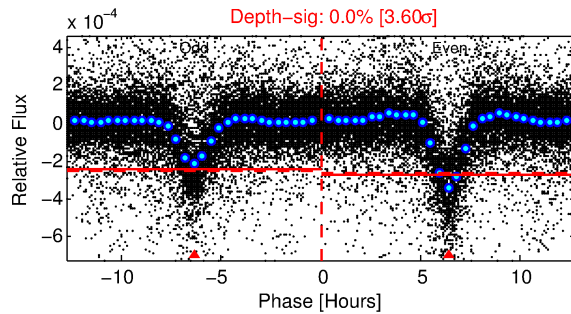
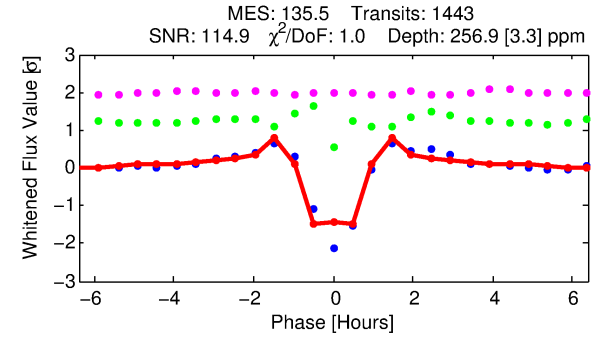
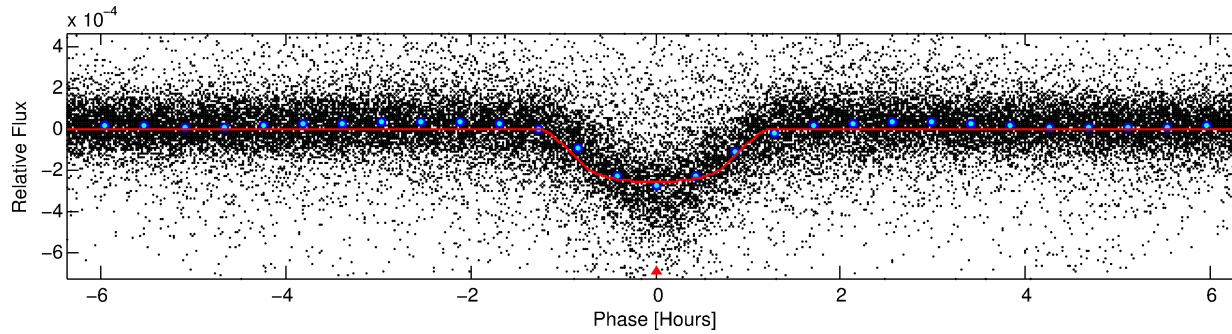
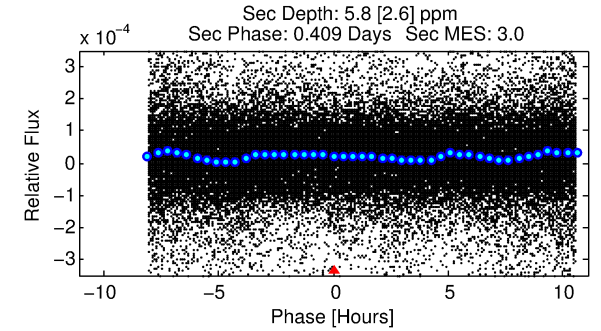
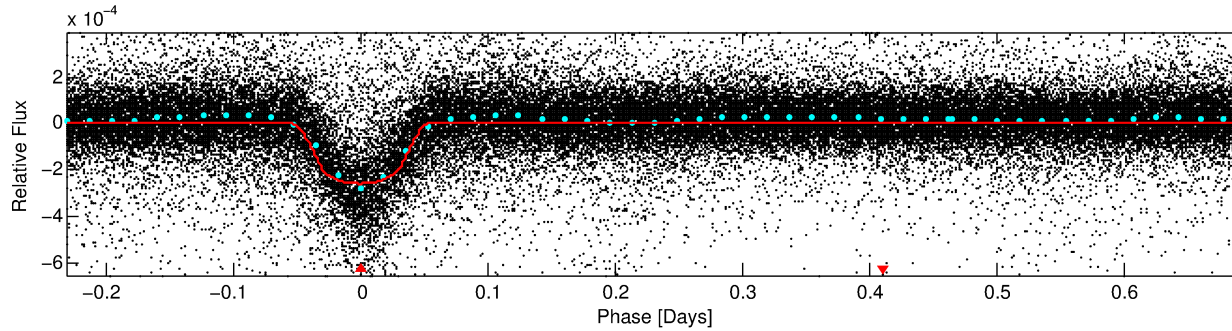
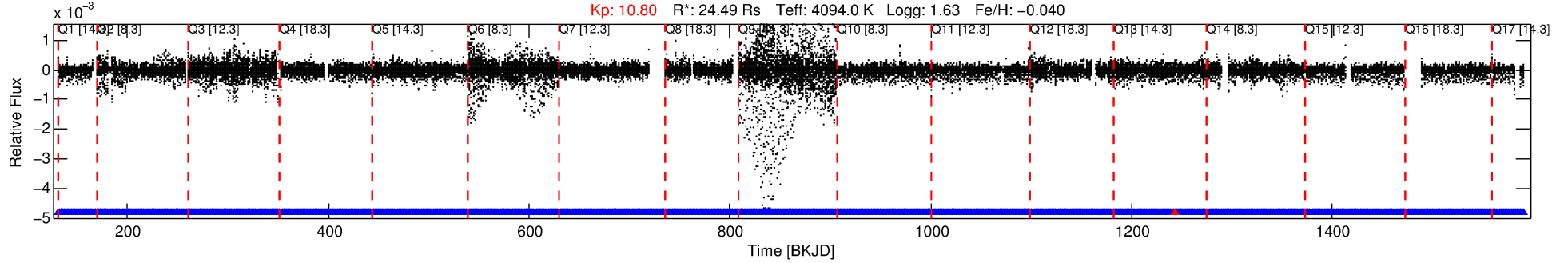
Ephemeris Match Information For 006956014-01

No Significant Match Found

DV One-Page Summary

KIC: 6956014 Candidate: 1 of 1 Period: 0.926 d

KOI: K00031.01 Corr: 0.913



DV Fit Results:

Period = 0.92557 [0.00000] d
Epoch = 131.7512 [0.0002] BKJD
Rp/R* = 0.0186 [0.0008]
a/R* = 1.83 [0.19]
b = 0.90 [0.03]
Seff = N/A
Teq = N/A
Rp = 49.58 [14.72] Re
a = N/A
Ag = N/A
Teffp = N/A

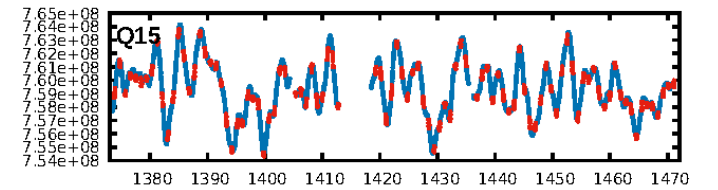
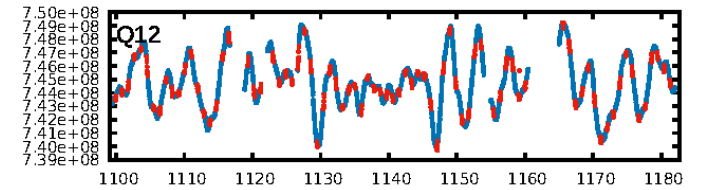
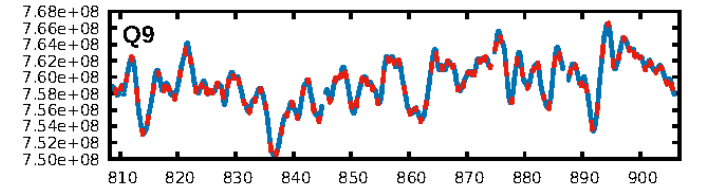
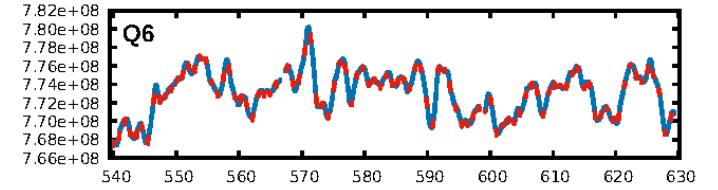
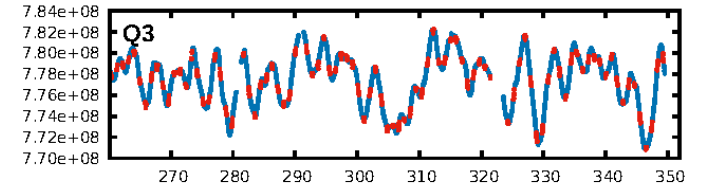
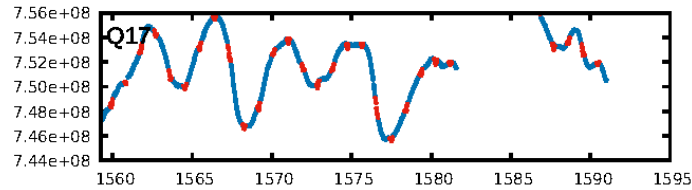
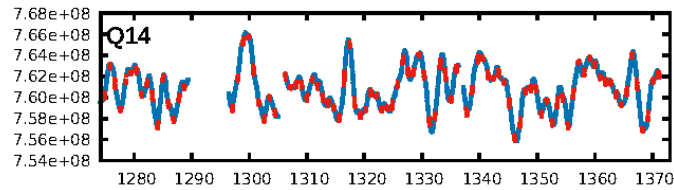
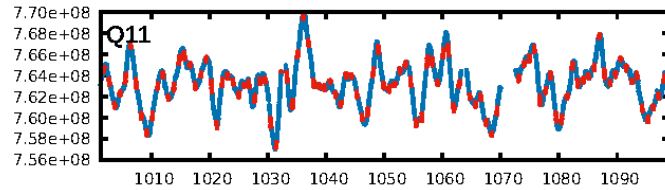
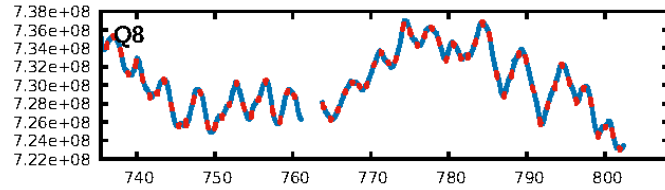
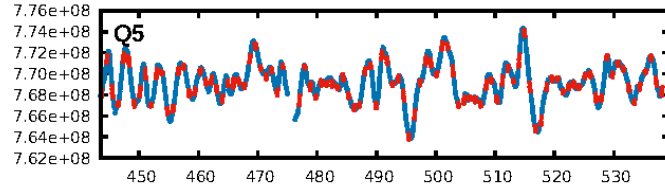
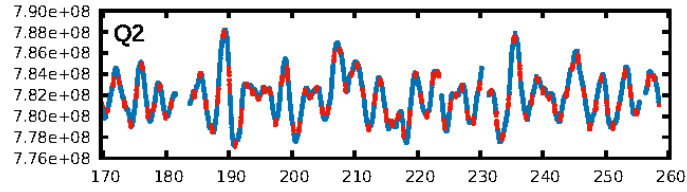
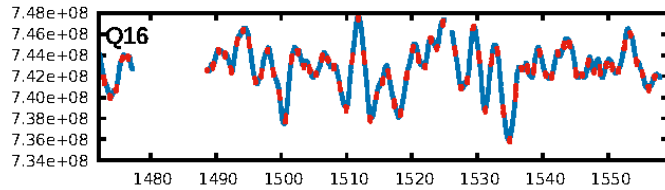
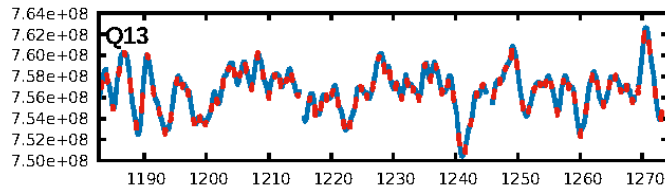
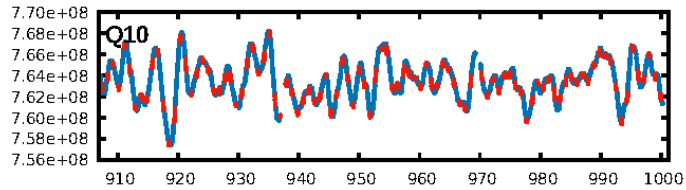
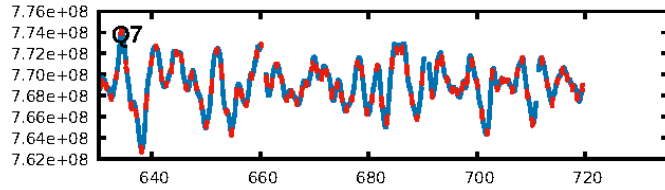
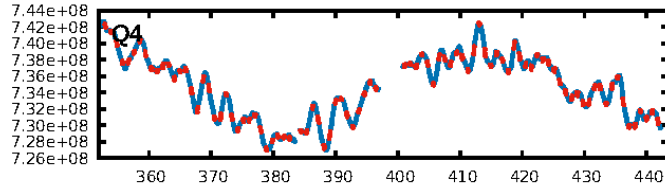
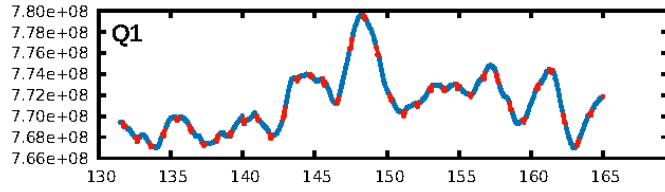
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: 0.00e+00
RollingBand-fgt: 1.00 [1378/1379]
GhostDiagnostic-chr: 1.345
Centroid-sig: 0.0%
Centroid-so: 0.289 arcsec [6.83σ]
OotOffset-rm: 0.189 arcsec [1.96σ]
KicOffset-rm: 0.173 arcsec [1.82σ]
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]

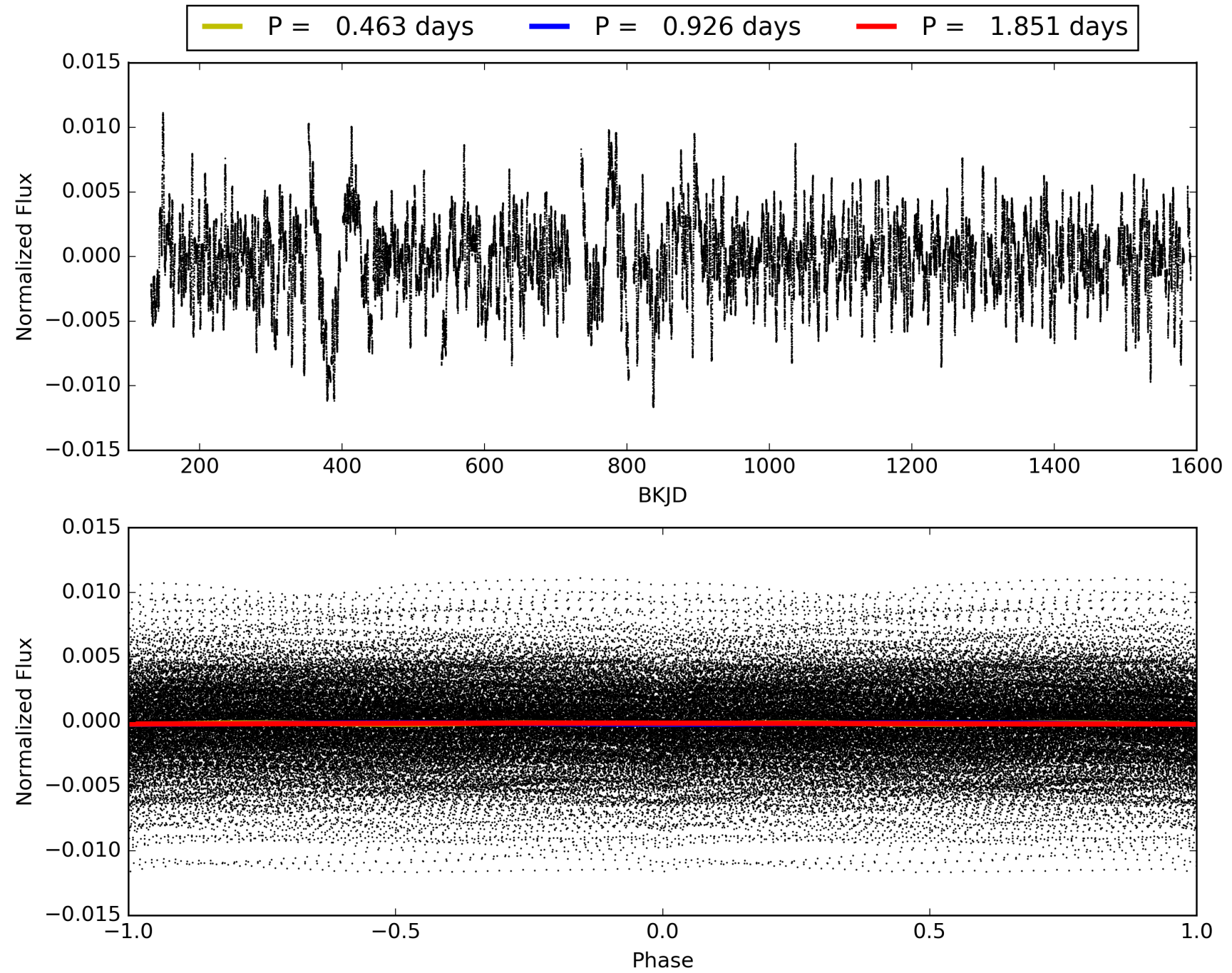
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 31-Jan-2016 01:50:47 Z

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

TCE 006956014-01, PDC Light Curves

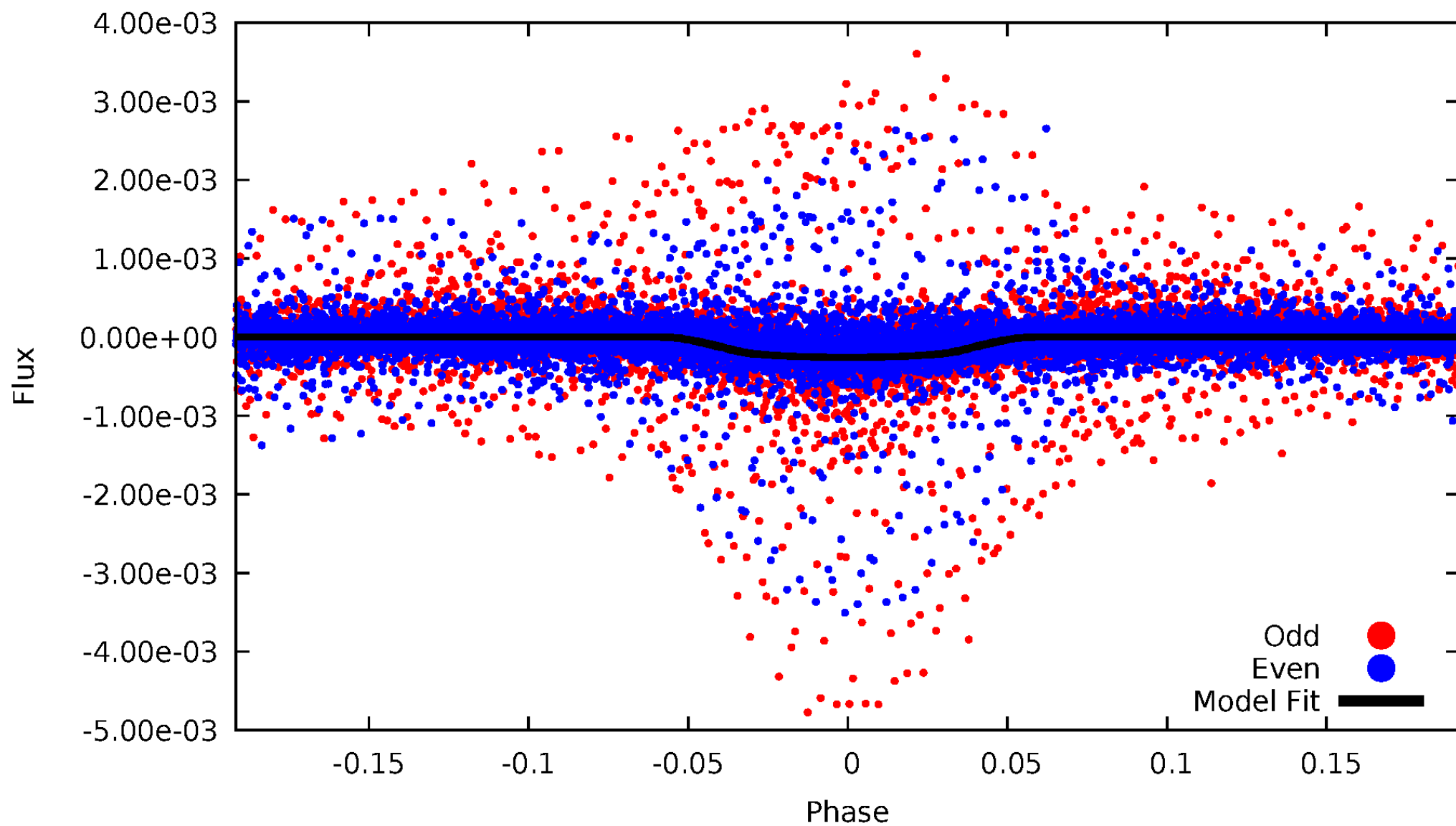


TCE 006956014-01



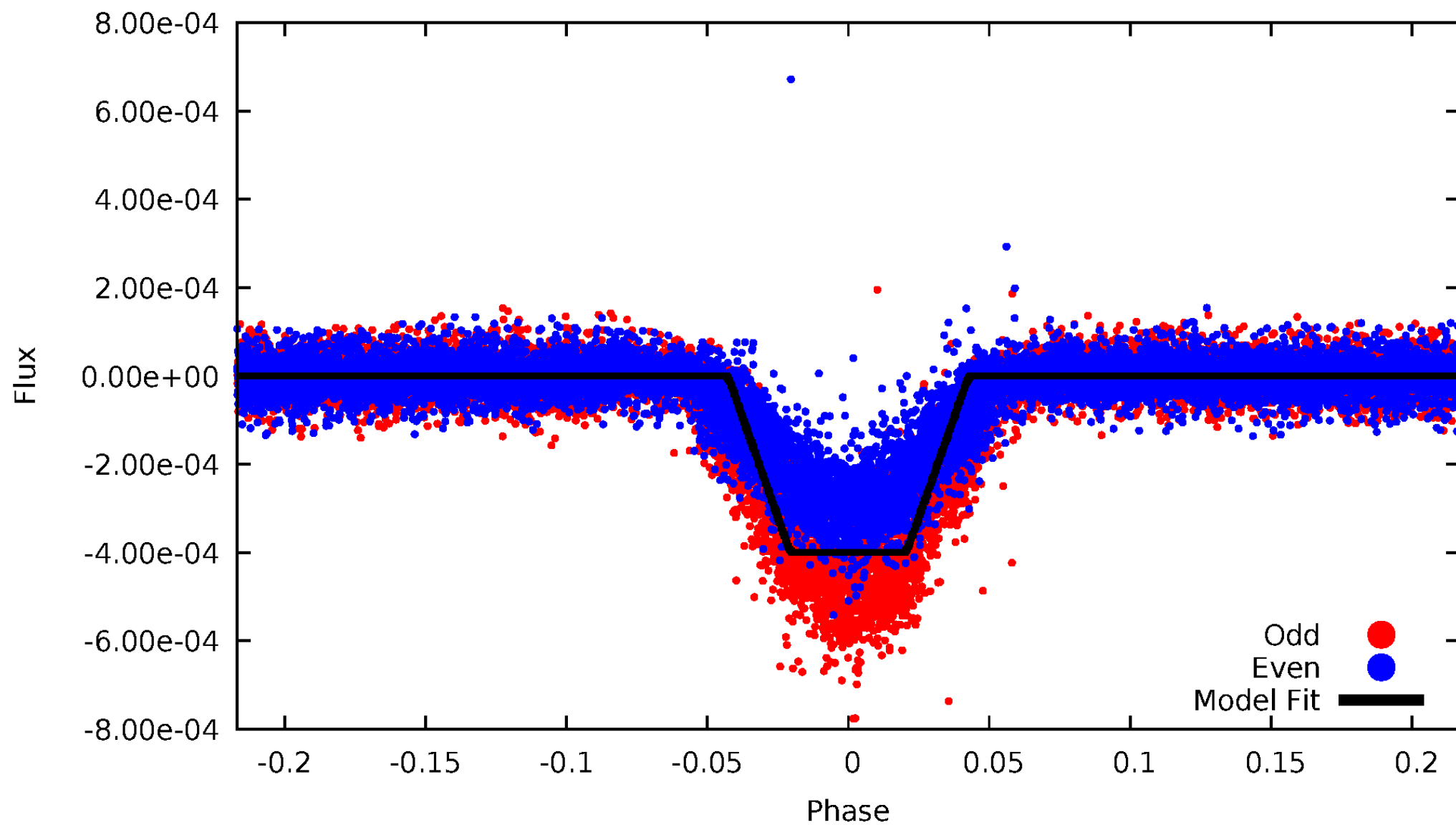
DV Odd/Even

TCE 006956014-01



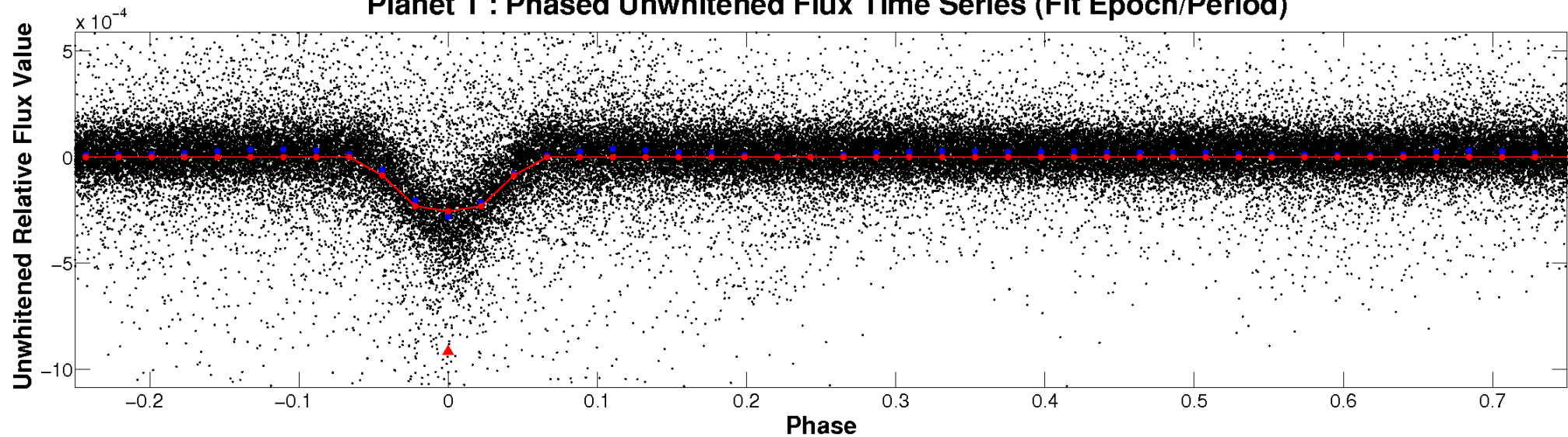
ALT Odd/Even

TCE 006956014-01

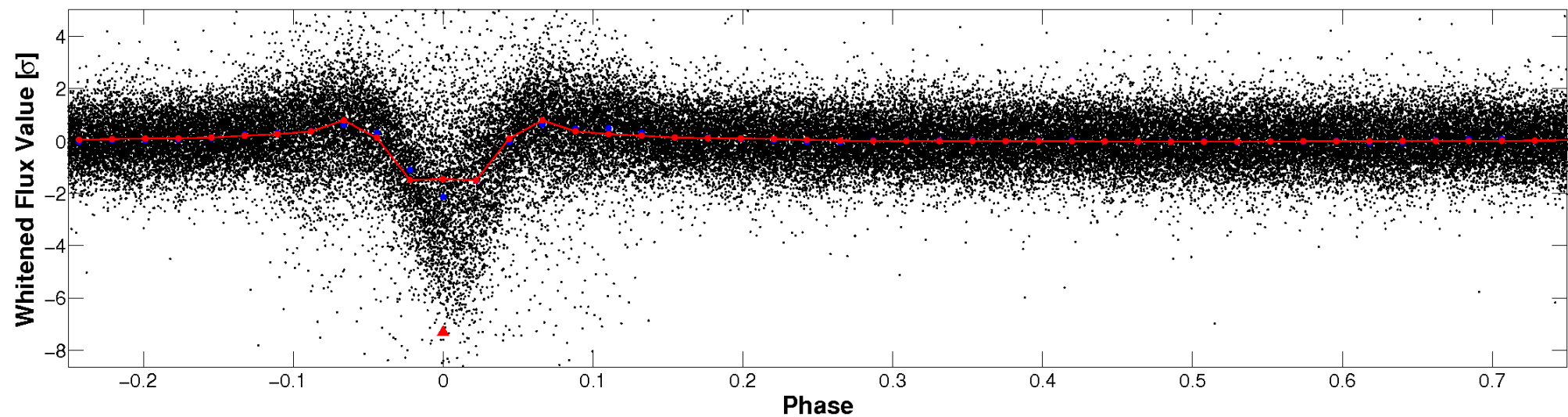


Non-Whitened Vs. Whitened Light Curve

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

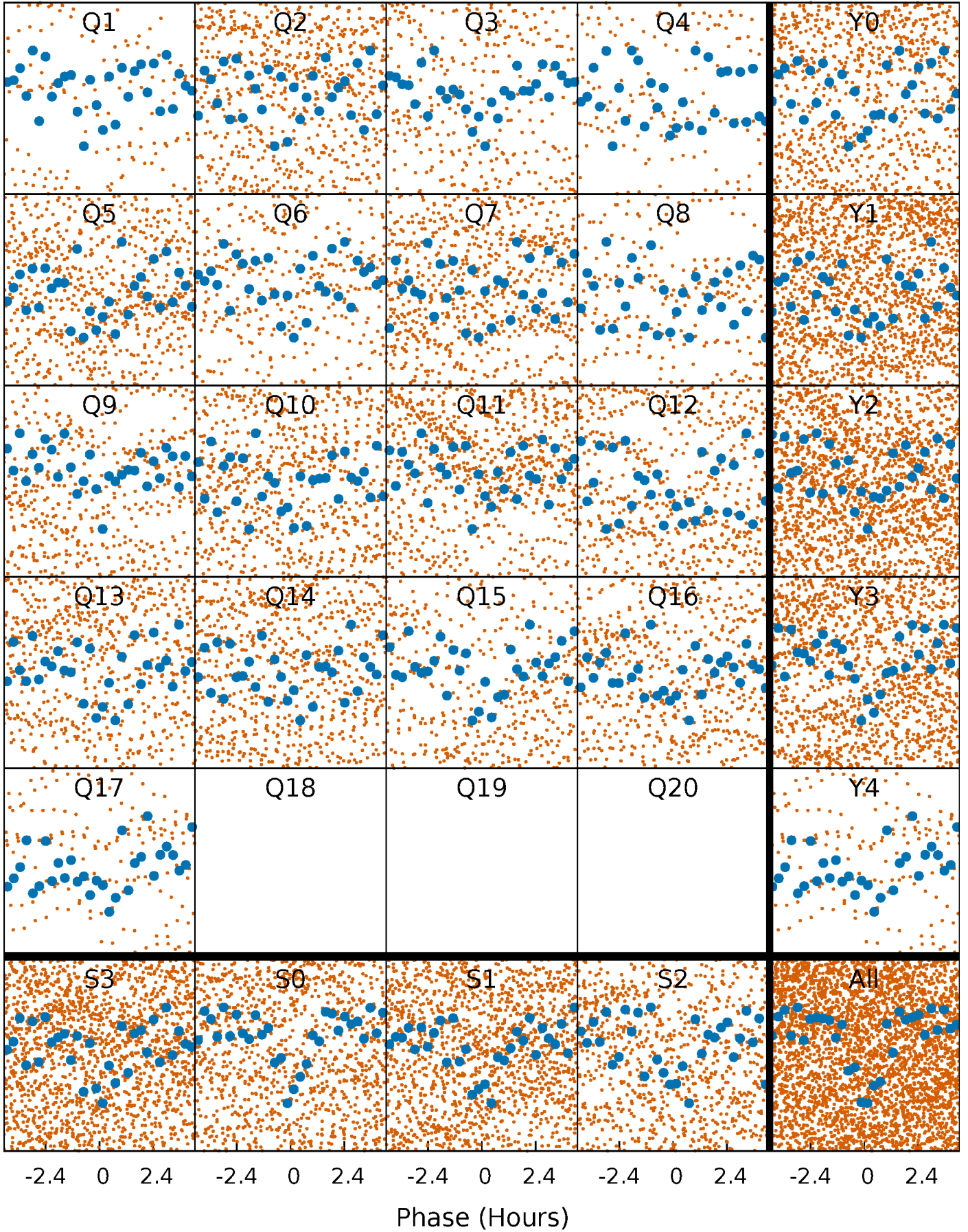


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



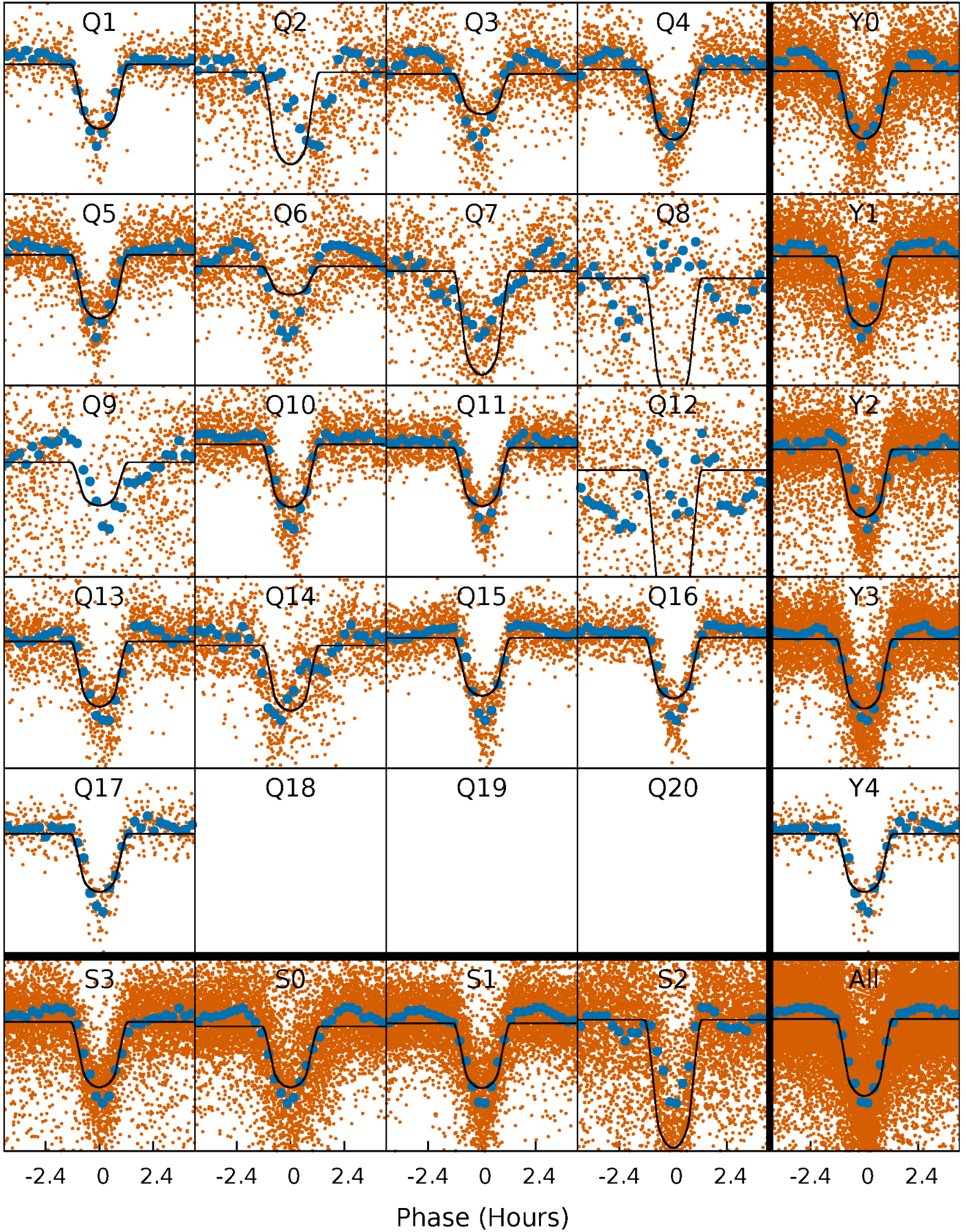
PDC Quarter-Phased Transit Curves

TCE 006956014-01 P= 0.925575 Days $T_0=131.751177$ (BKJD)



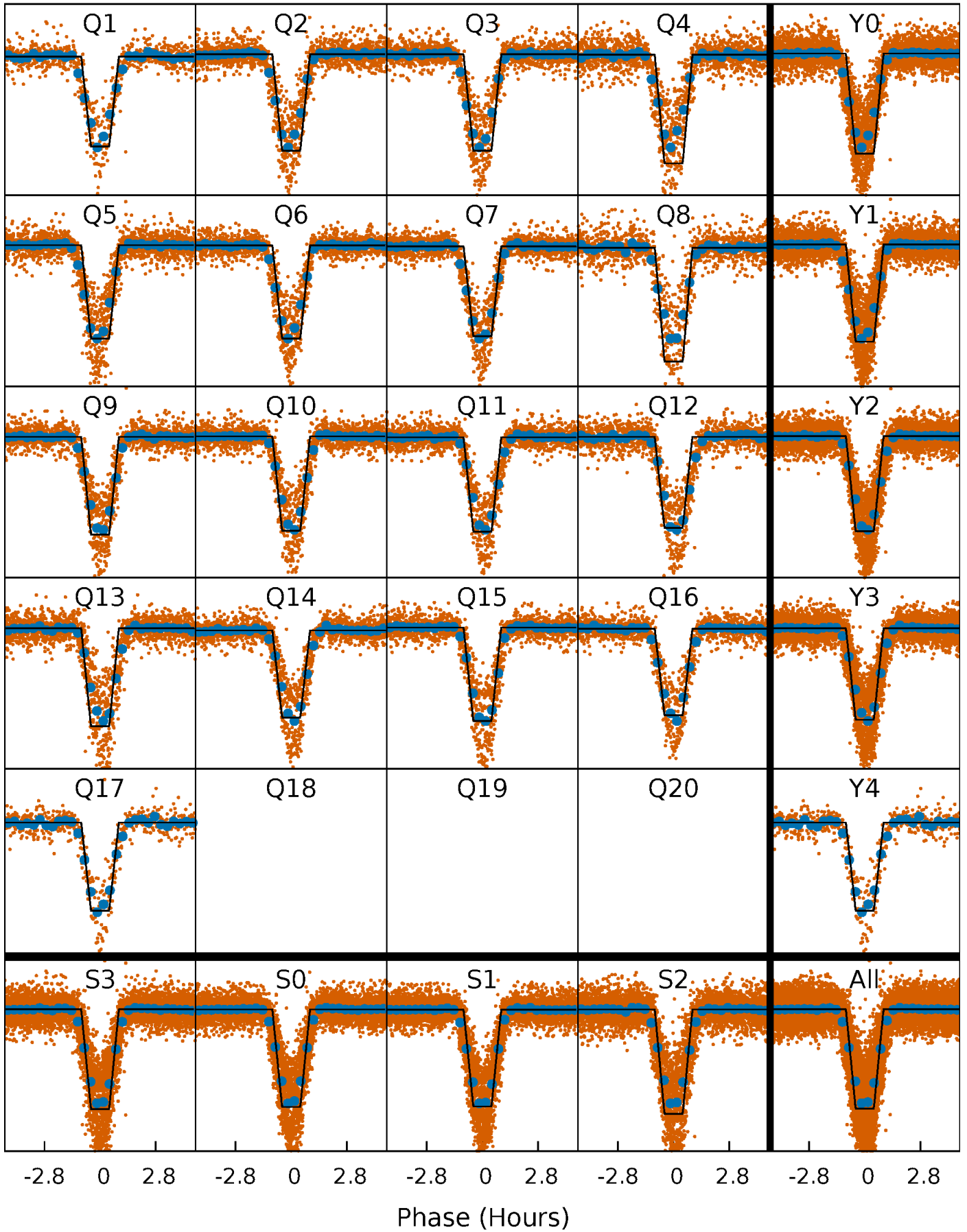
DV Quarter-Phased Transit Curves

TCE 006956014-01 P= 0.925575 Days $T_0=131.751177$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

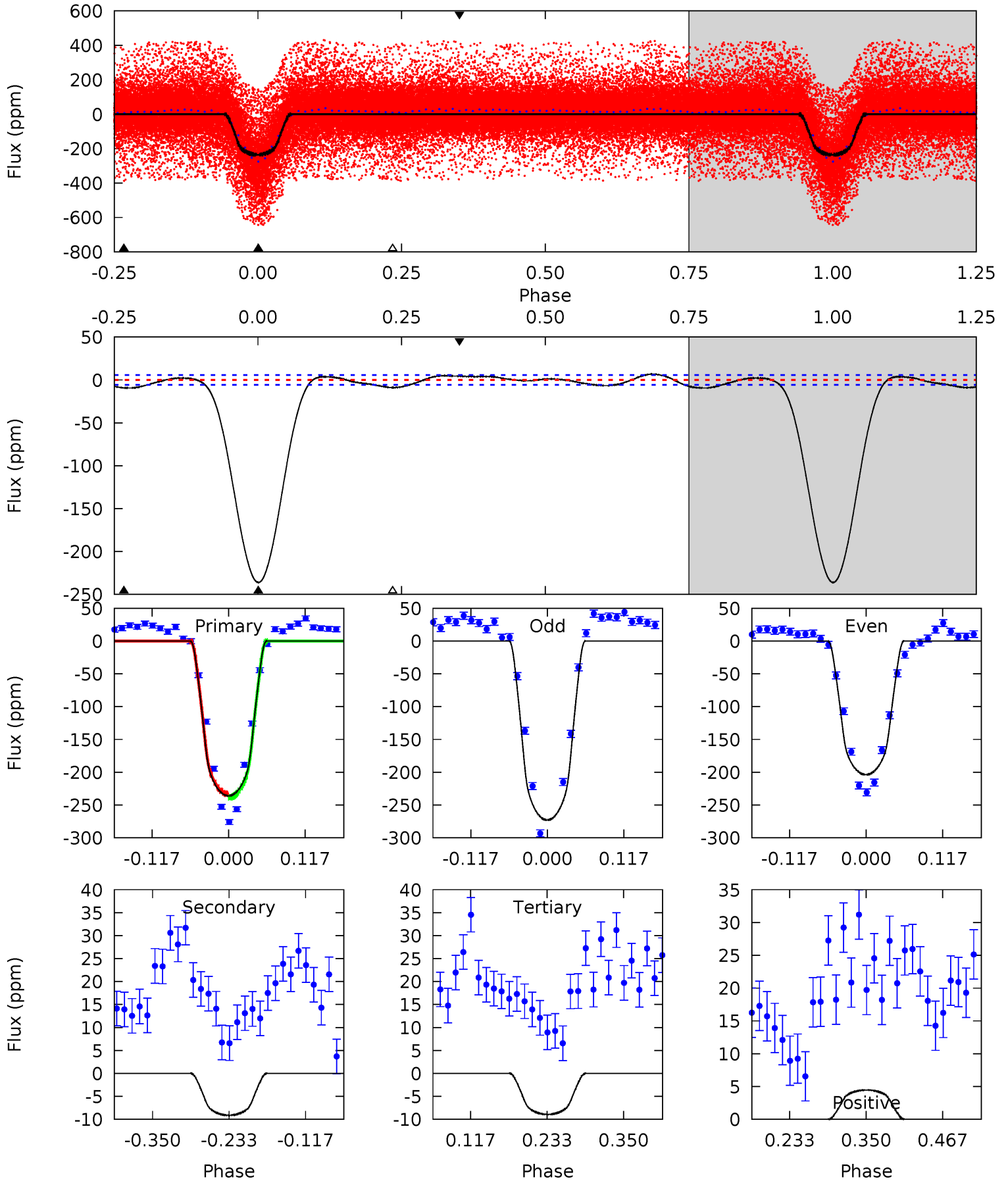
TCE 006956014-01 P= 0.925580 Days $T_0=131.748971$ (BKJD)



DV Model-Shift Uniqueness Test

006956014-01, P = 0.925575 Days, E = 130.825602 Days

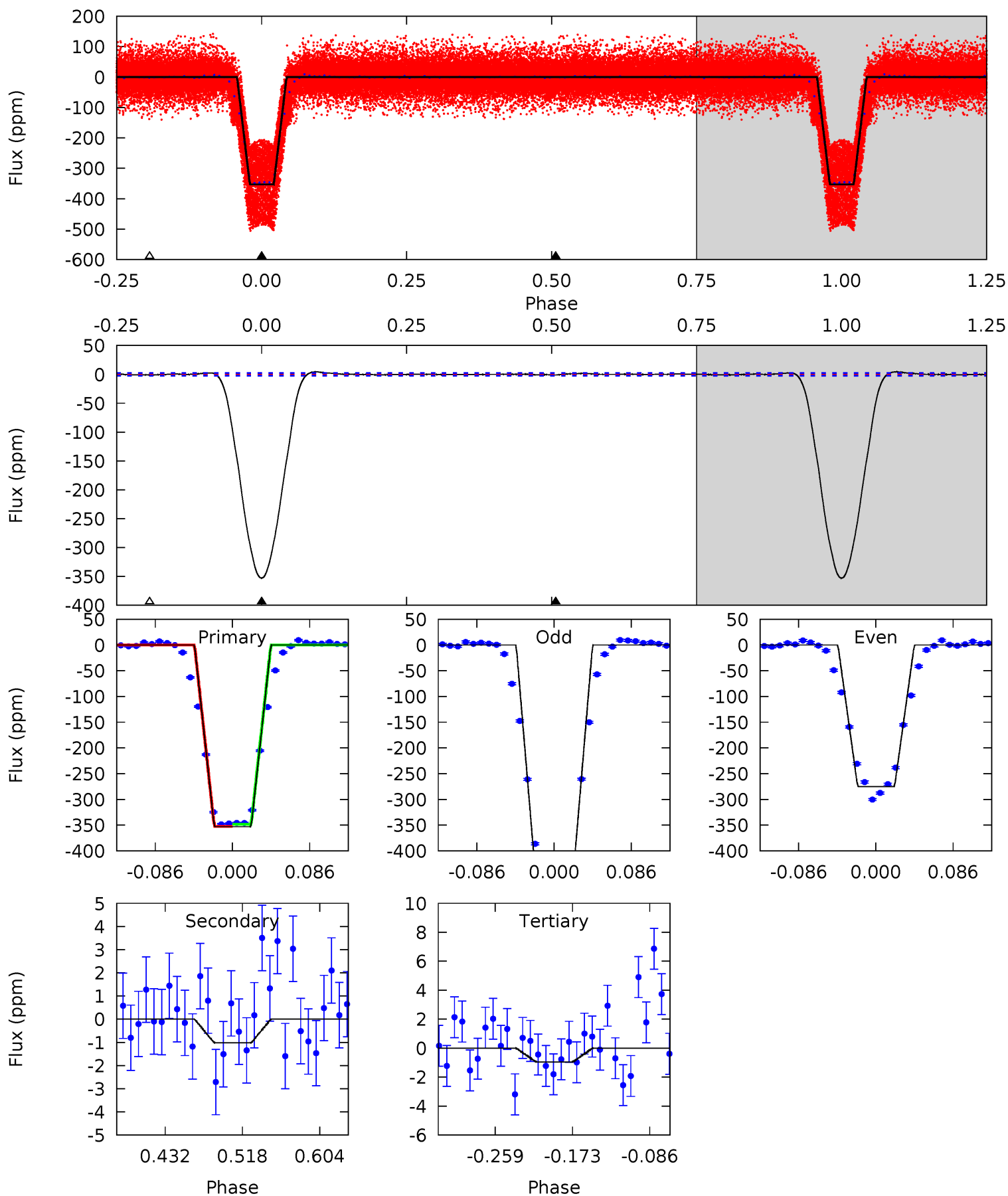
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
187.8	7.26	7.11	3.55	4.53	1.57	3.39	180.7	184.2	0.16	3.71	27.8	1.02	0.03	2.10



Alt Model-Shift Uniqueness Test

006956014-01, P = 0.925580 Days, E = 130.823391 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
686.0	1.99	1.84	0	4.60	1.72	1.83	684.1	686.0	0.14	1.99	187.8	1.03	0.01	3.93



Stellar Parameters For KIC 006956014

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	4094^{+73}_{-55}	$1.627^{+0.120}_{-0.120}$	$-0.040^{+0.150}_{-0.150}$	$24.488^{+7.185}_{-2.566}$	$0.925^{+0.431}_{-0.023}$	$0.000^{+0.000}_{-0.000}$
	+2%/-1%	+7%/-7%	+375%/-375%	+29%/-10%	+47%/-2%	+43%/-42%
Source	SPE18	SPE18	SPE18	DSEP		

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

Secondary Eclipse Parameters for KIC 006956014-01 / KOI 0031.01

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	-9 ± 1	$49.74^{+8.03}_{-4.72}$	9214^{+506}_{-384}	-7053^{+344}_{-483}	$0.001^{+0.000}_{-0.000}$
Alt.	-1 ± 1	$53.65^{+8.44}_{-4.81}$	9238^{+523}_{-380}	-7081^{+347}_{-474}	$0.000^{+0.000}_{-0.000}$

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

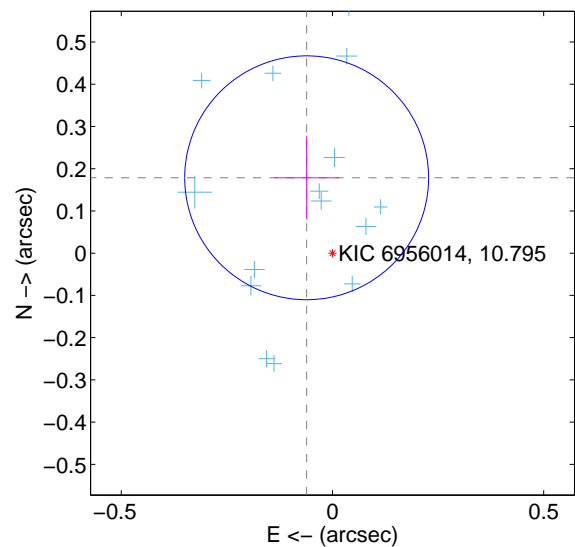
Supplemental centroid analysis for 006956014-01. **Kepler magnitude: 10.79.** Transit SNR 114.88

There are 17 quarters with good PRF difference image offsets

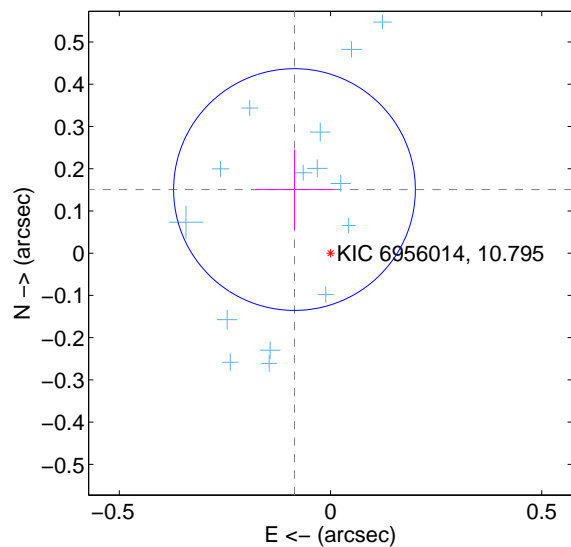
The direct PRF centroid is offset from the target star catalog position by about 0.07 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.189 ± 0.096	1.96	0.061 ± 0.076	0.178 ± 0.098
PRF-fit source offset from KIC position	0.173 ± 0.095	1.82	0.085 ± 0.093	0.151 ± 0.095
photometric centroid source offset	0.29 ± 0.04	6.83	0.02 ± 0.04	-0.29 ± 0.04

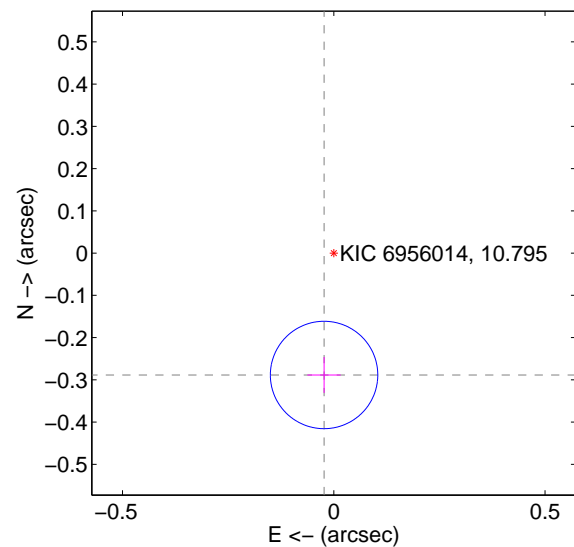
offset from difference PRF-fit to OOT PRF-fit



offset from difference PRF-fit to KIC position

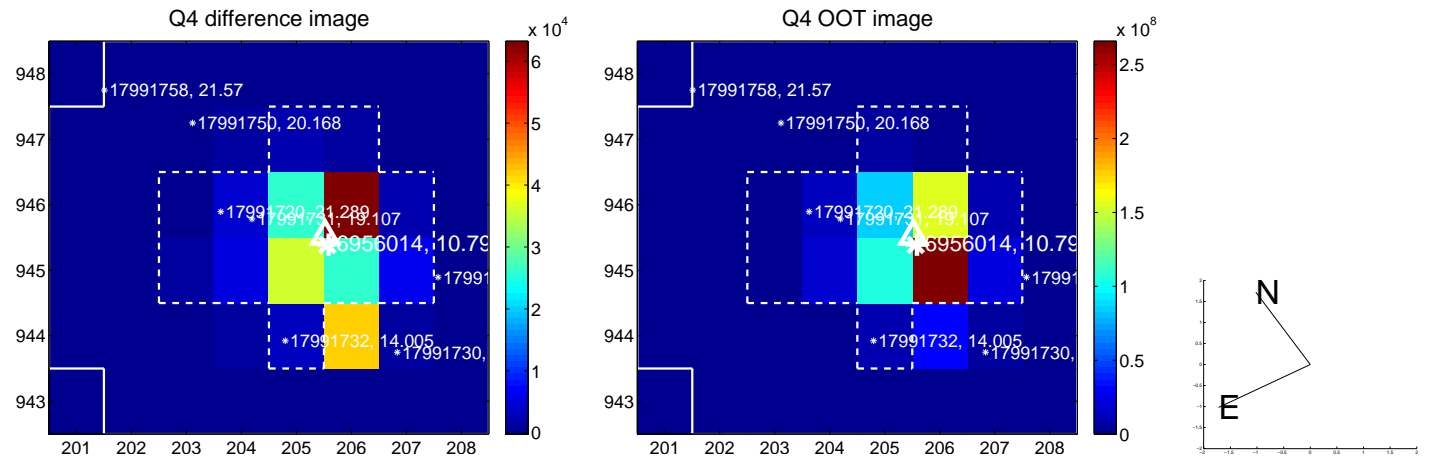
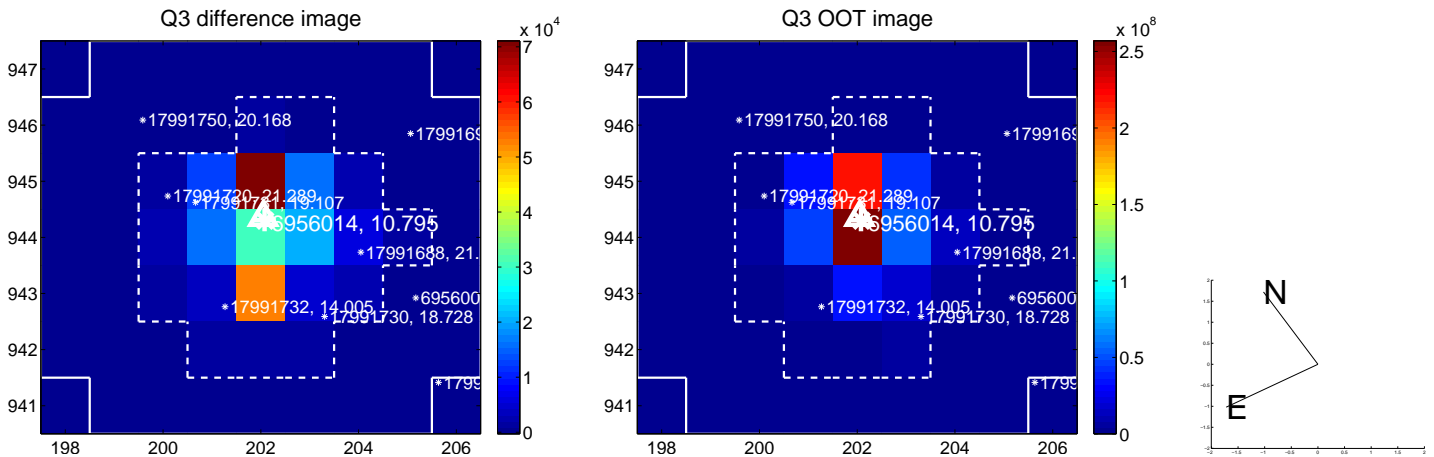
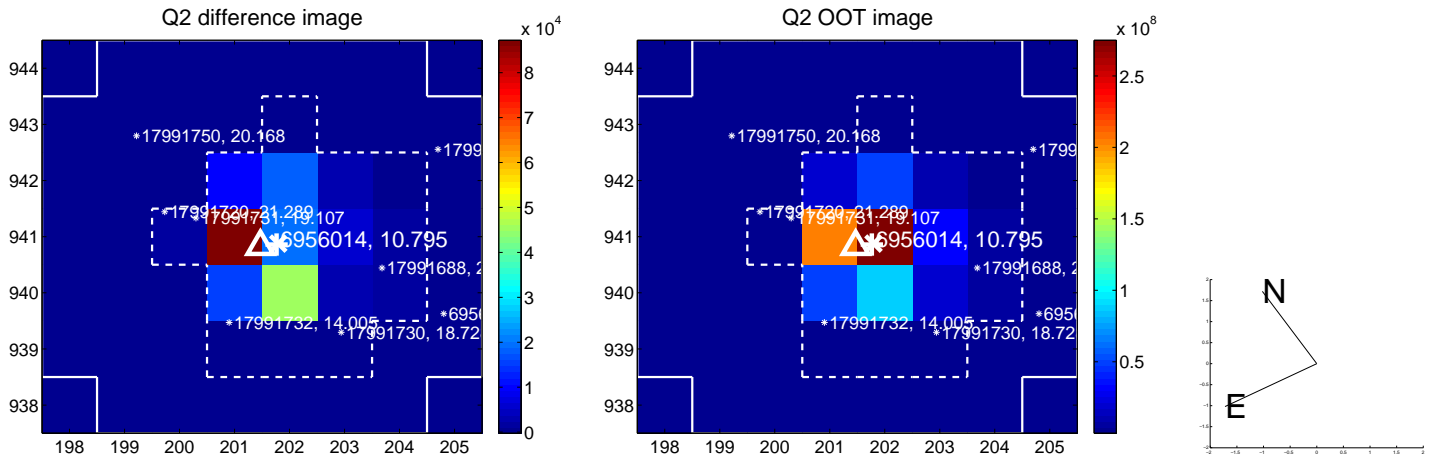
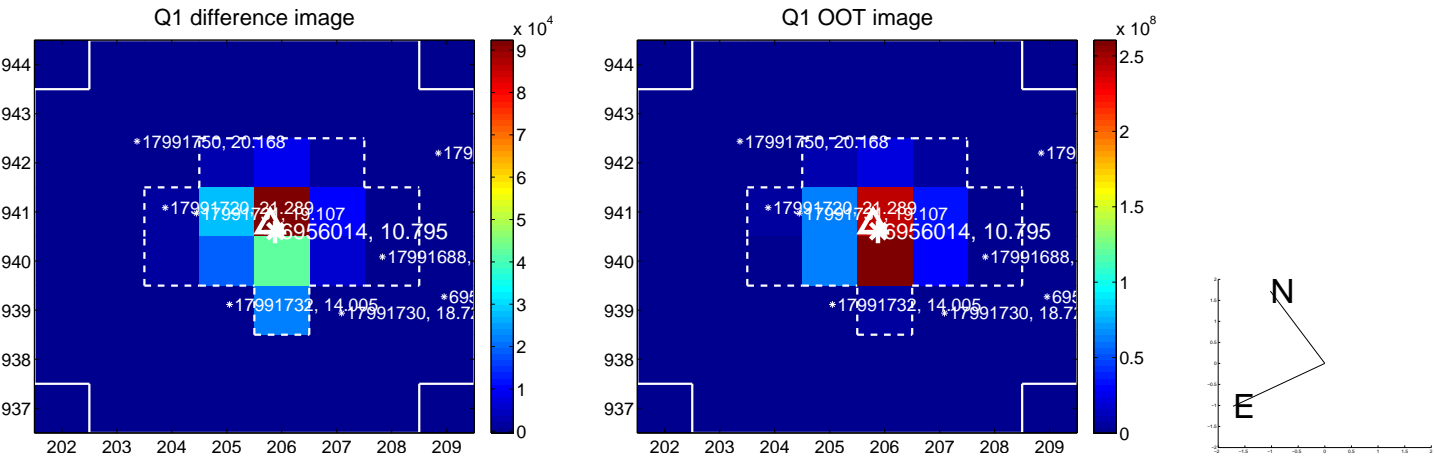


offset from photometric centroids

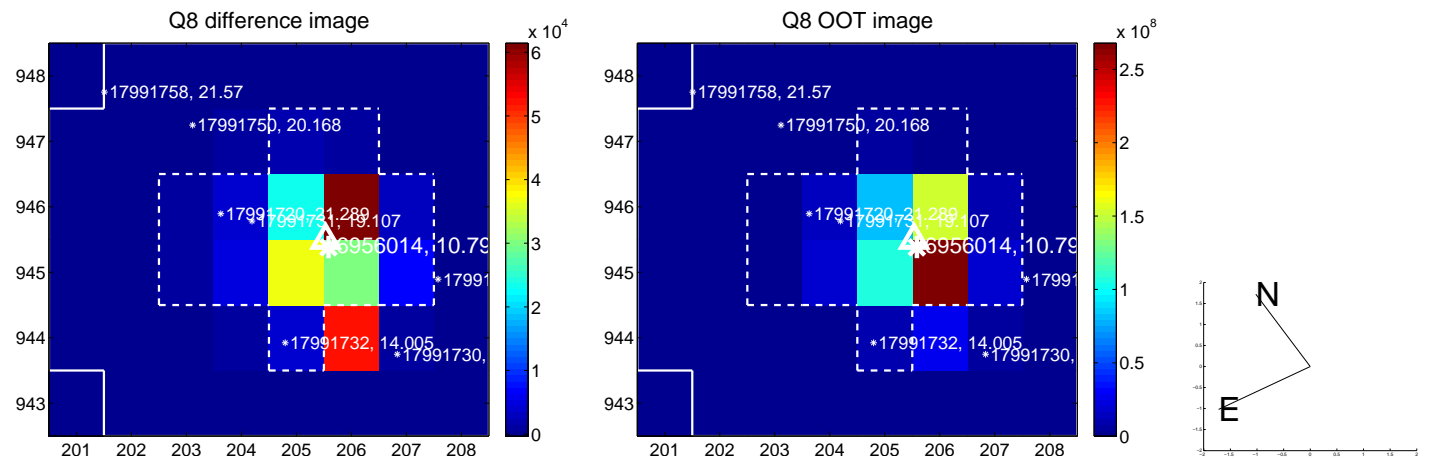
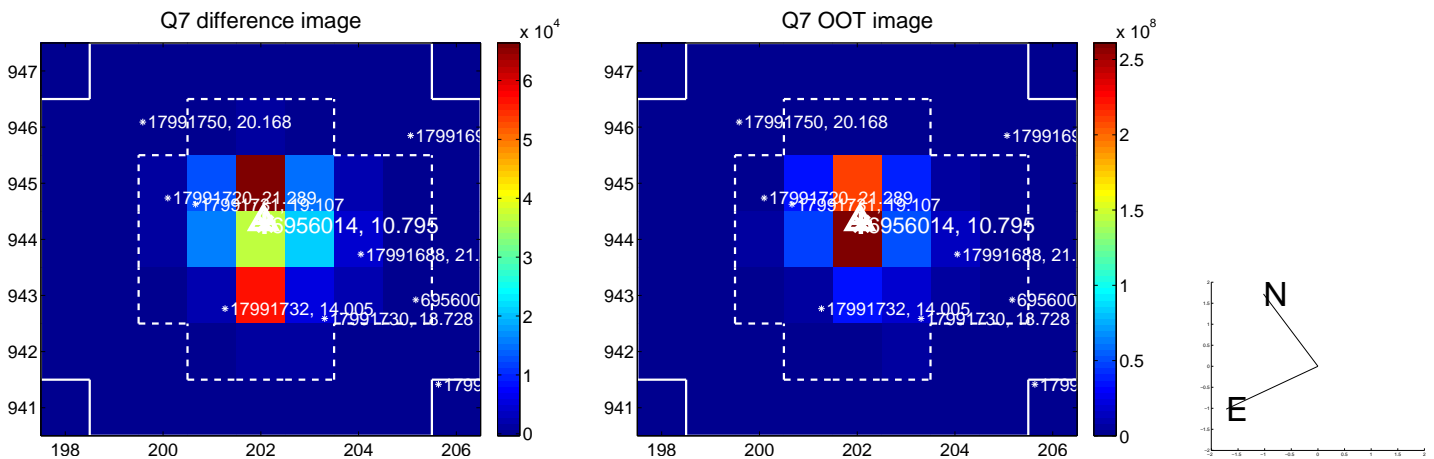
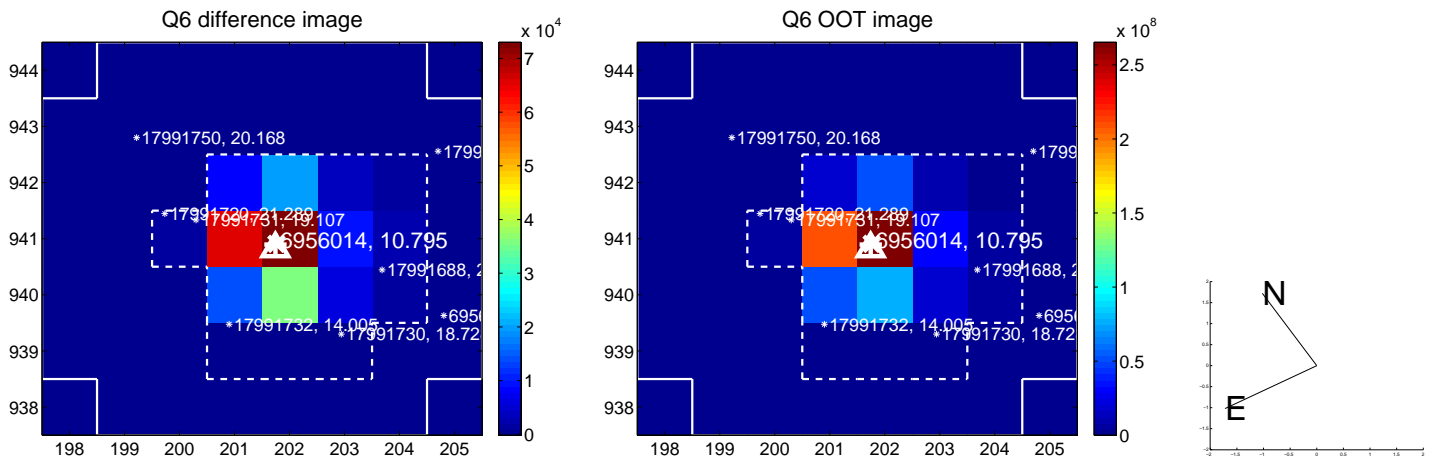
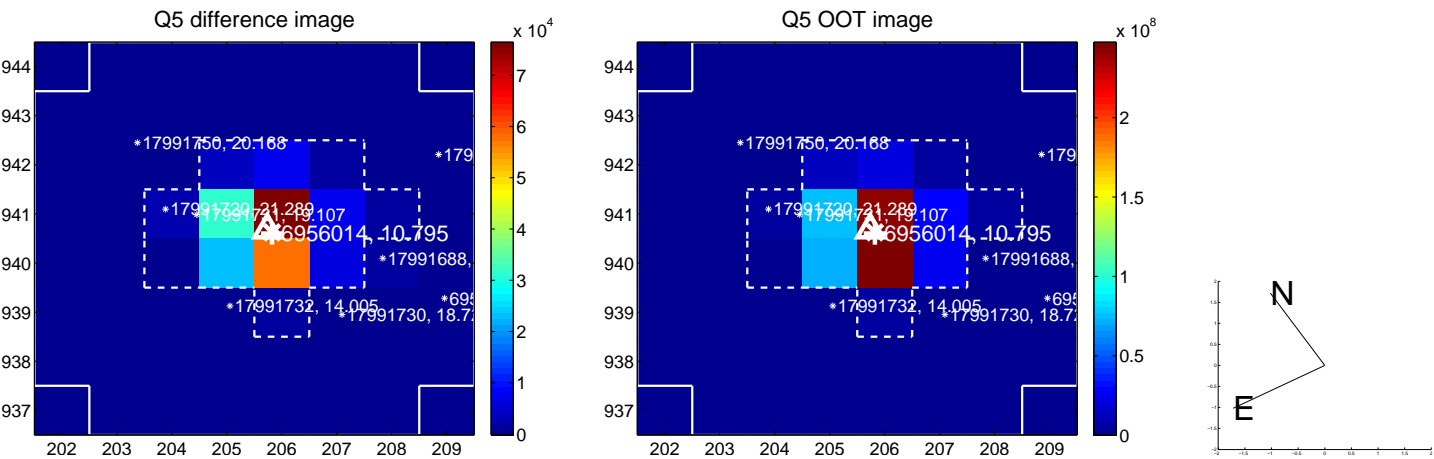


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets;** magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

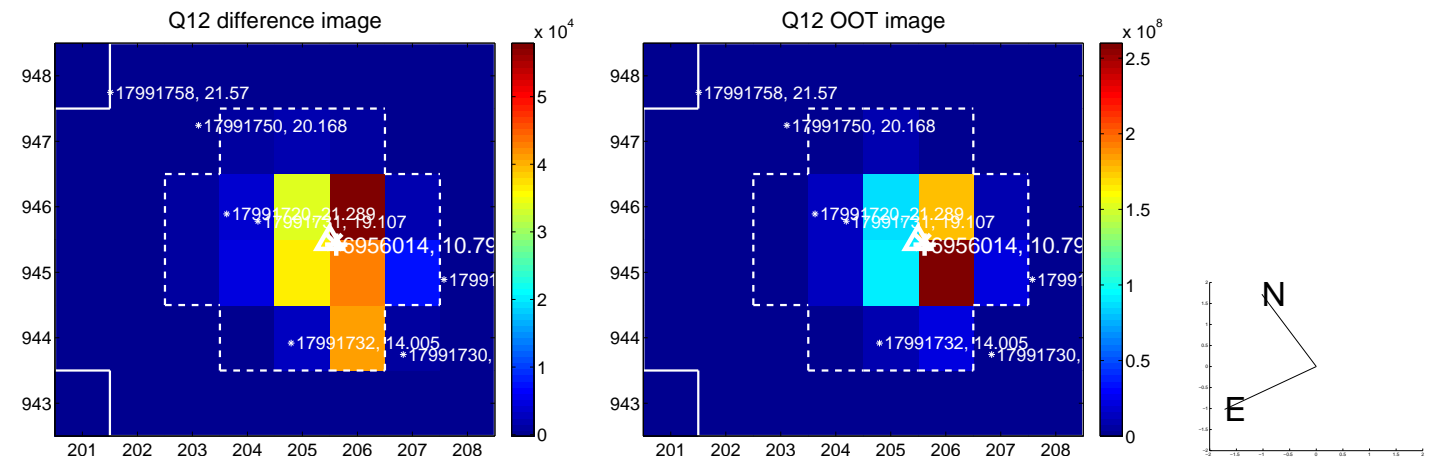
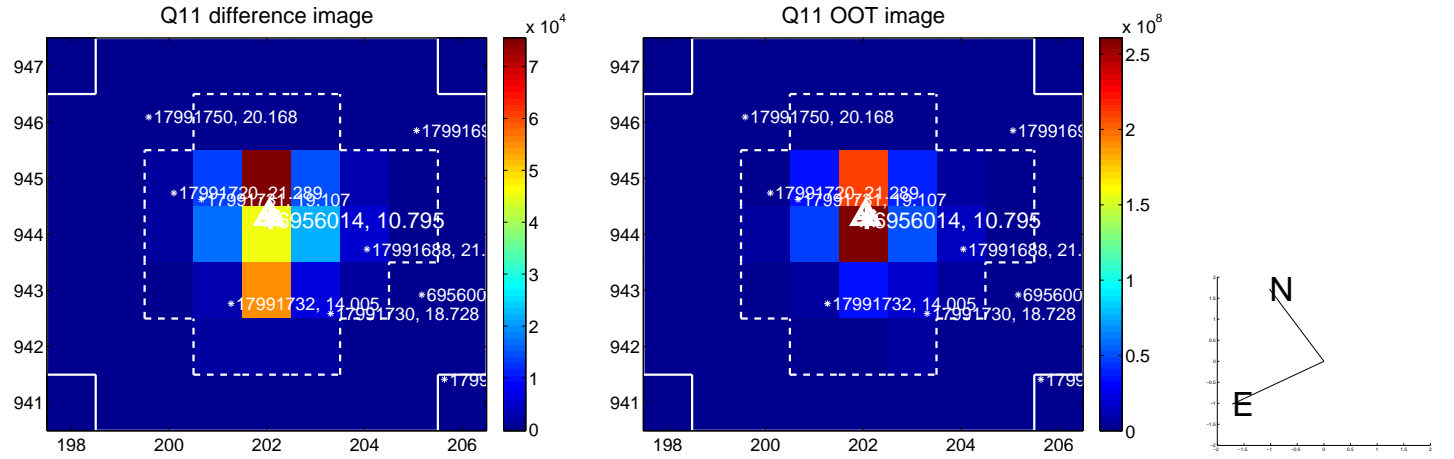
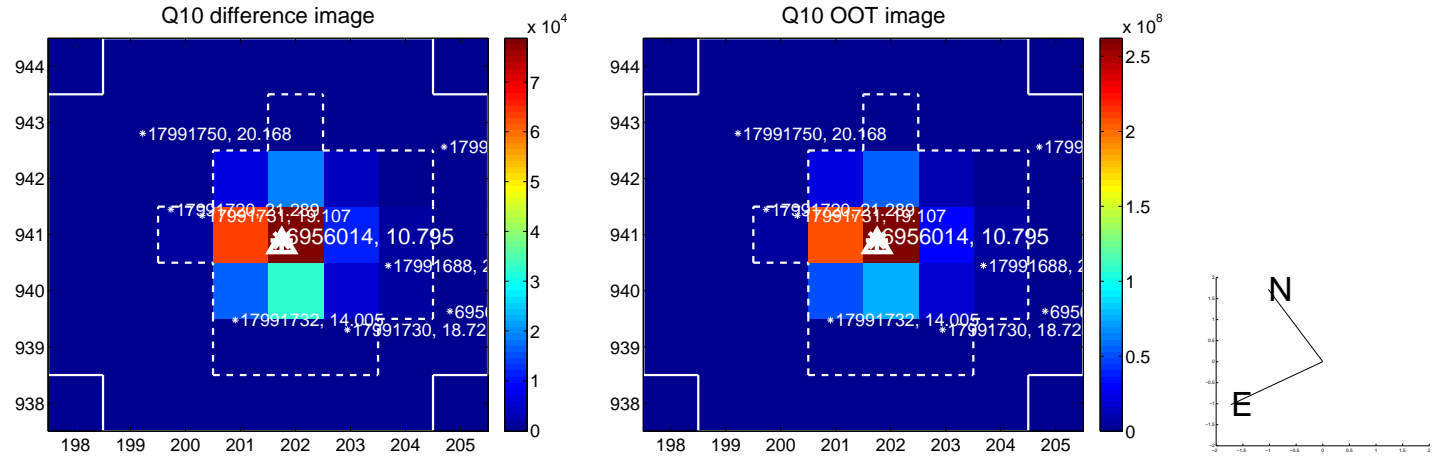
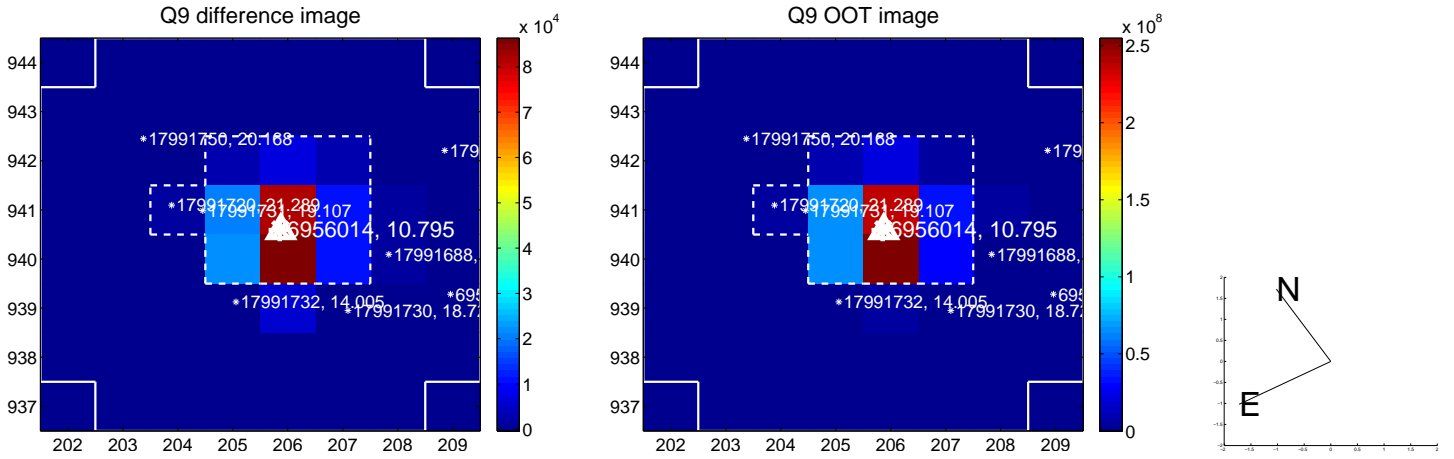
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



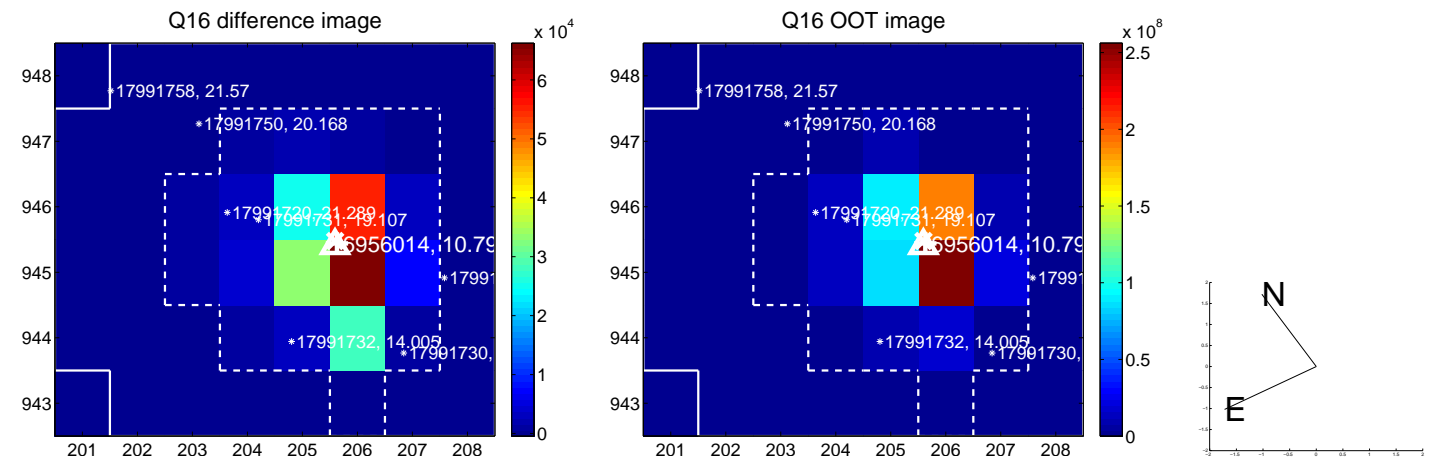
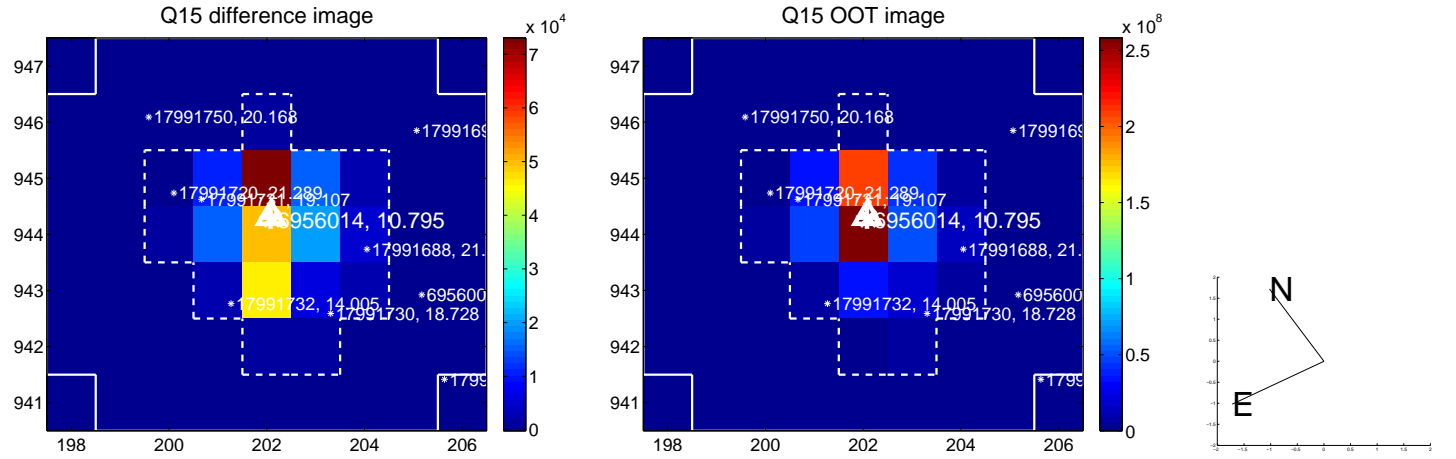
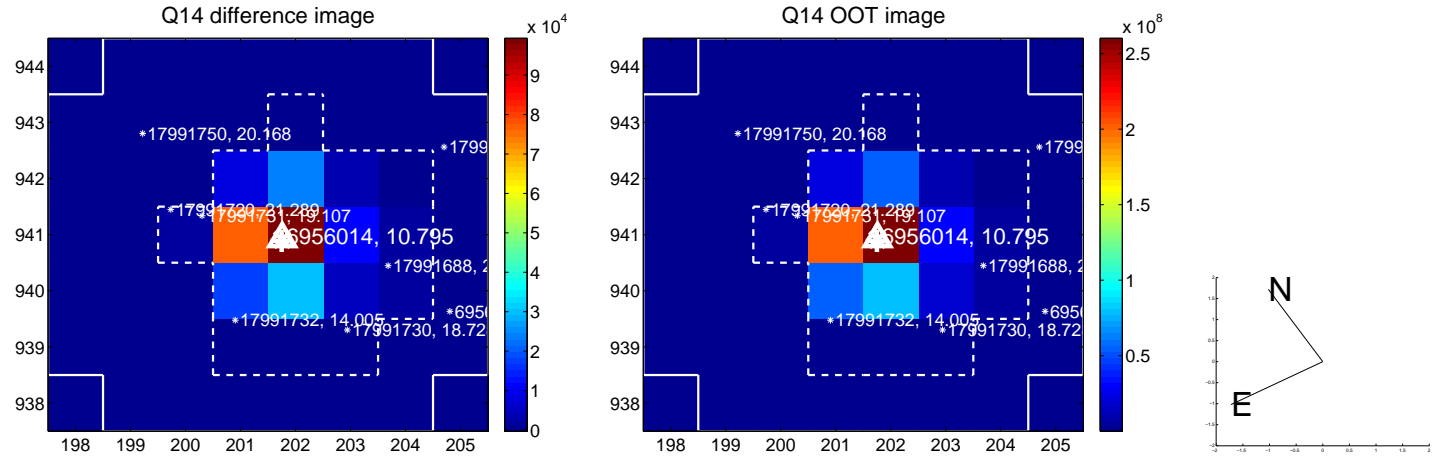
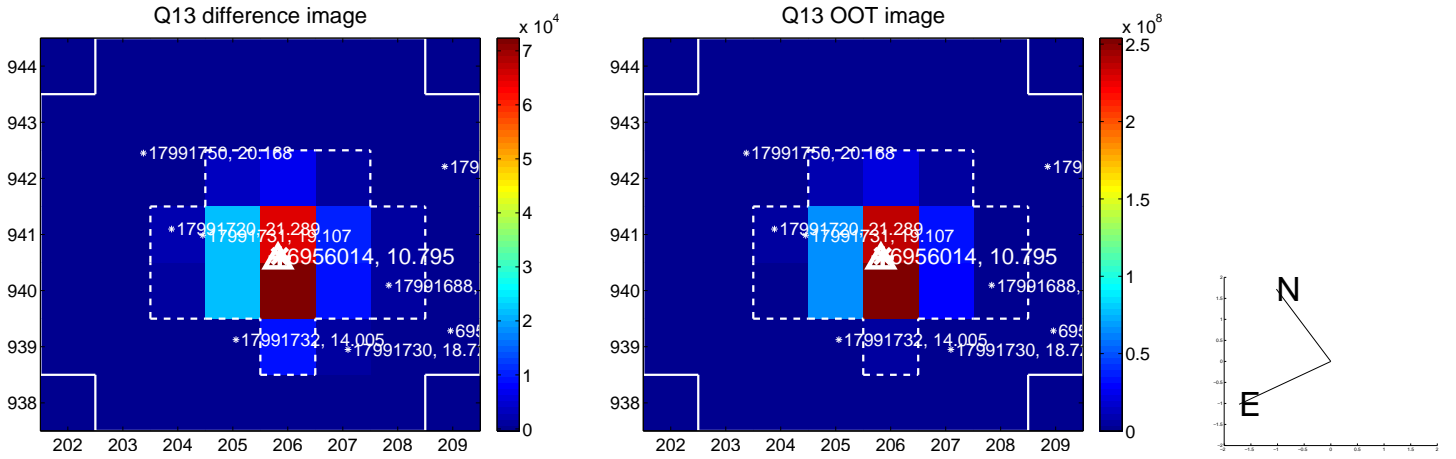
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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.



UKIRT Image

