

KIC 006034945

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})
006034945-01	OBS	1683.01	9.114994	133.975928	314.9	4.632	24.0	25.4	1.03	5962	1.95	159.75

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
006034945-01	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.

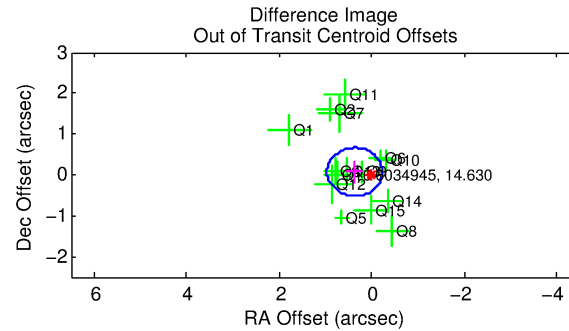
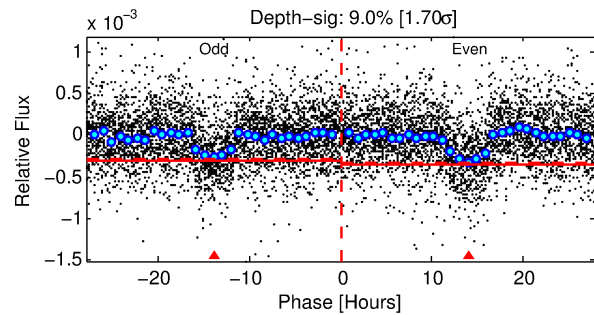
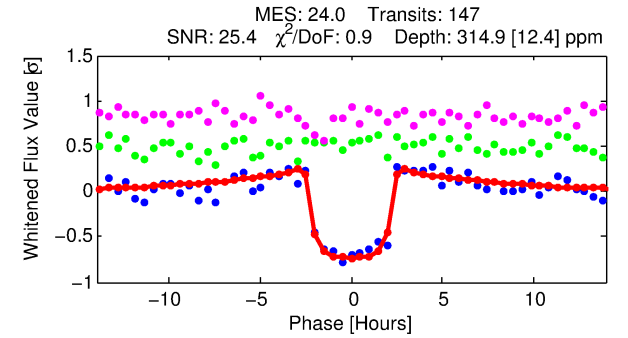
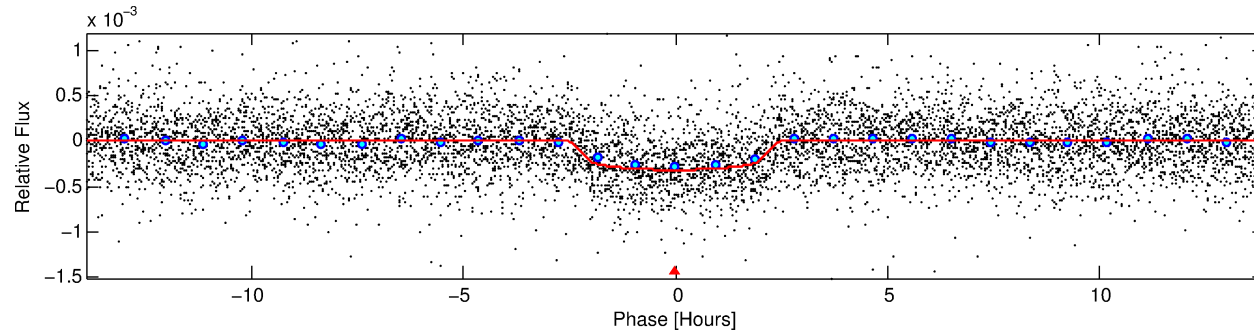
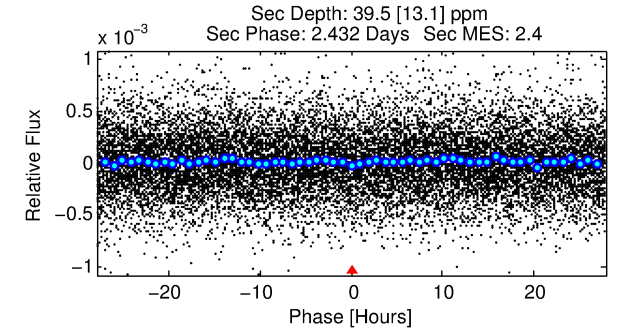
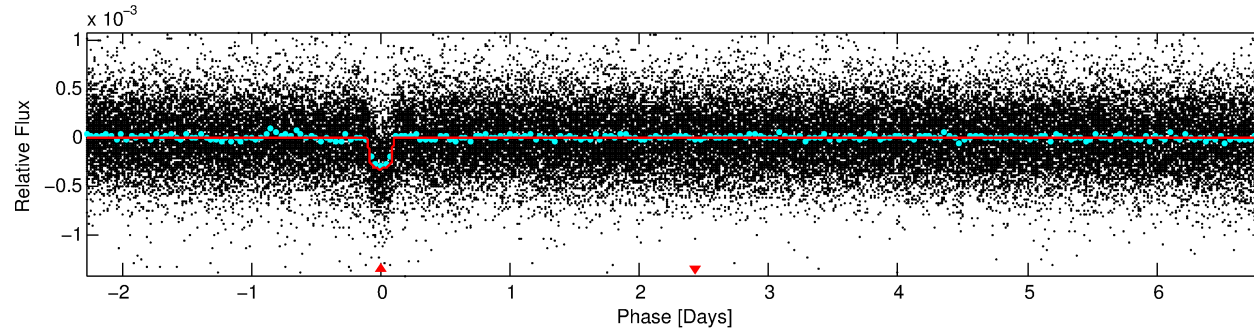
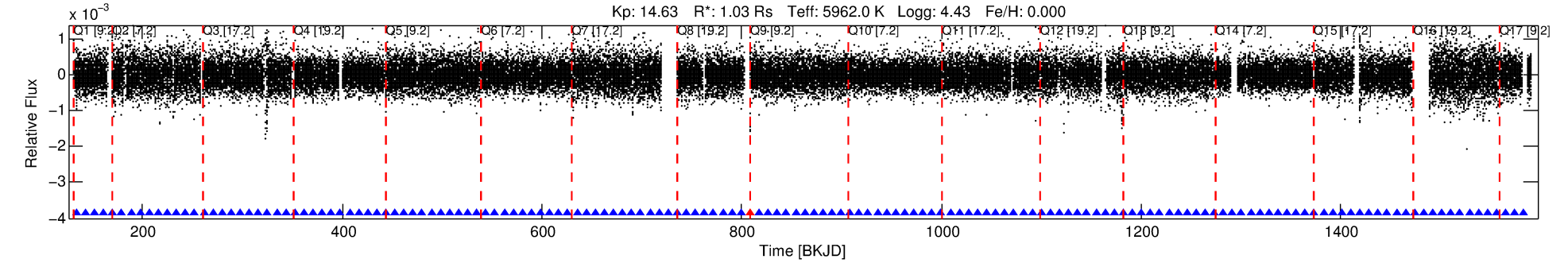
Ephemeris Match Information For 006034945-01

No Significant Match Found

DV One-Page Summary

KIC: 6034945 Candidate: 1 of 1 Period: 9.115 d

KOI: K01683.01 Corr: 0.984



DV Fit Results:

Period = 9.11499 [0.00003] d
Epoch = 133.9759 [0.0027] BKJD
Rp/R* = 0.0174 [0.0055]
a/R* = 11.01 [15.98]
b = 0.71 [1.04]
Seff = 159.75 [64.71]
Teff = 907 [92] K
Rp = 1.95 [0.86] Re
a = 0.0865 [0.0227] AU
Ag = 42.68 [34.39] [1.21 σ]
Teffp = 3582 [645] K [4.10 σ]

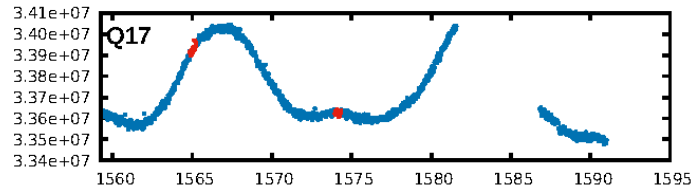
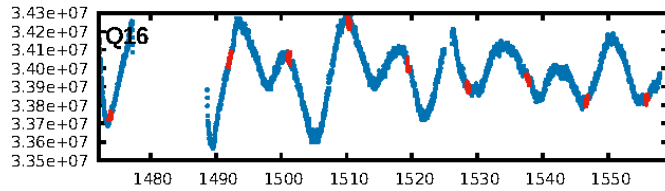
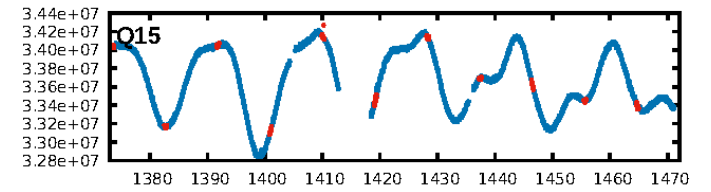
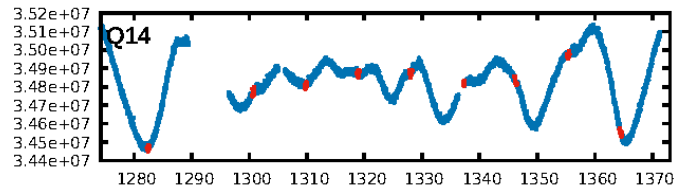
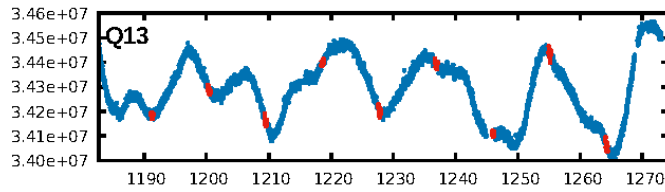
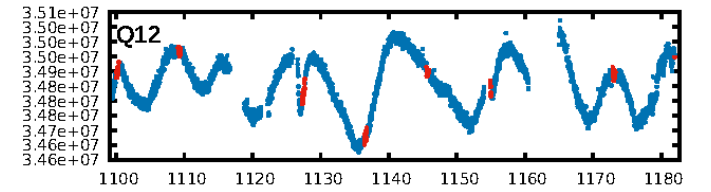
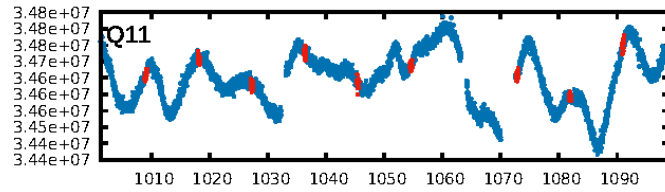
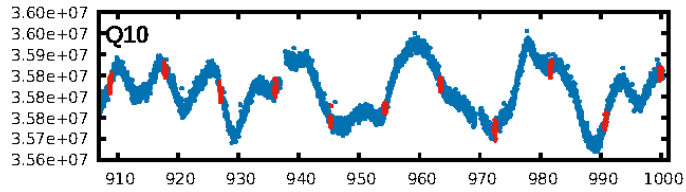
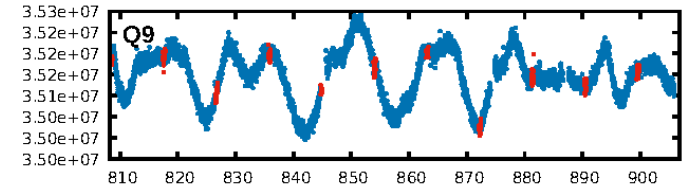
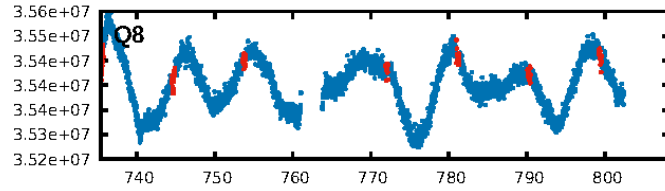
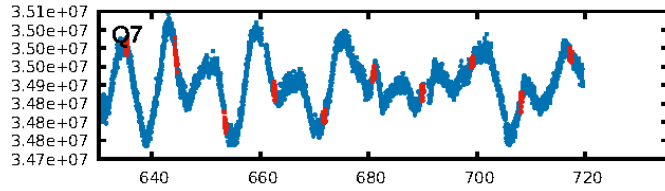
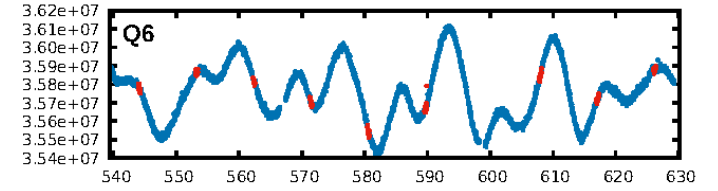
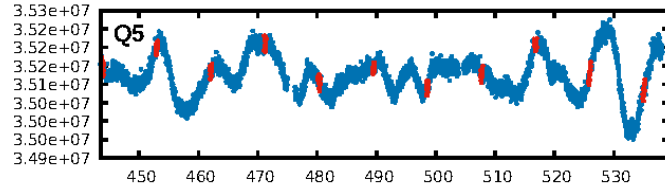
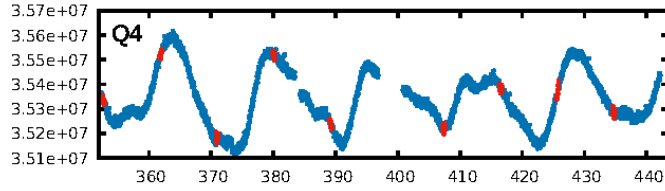
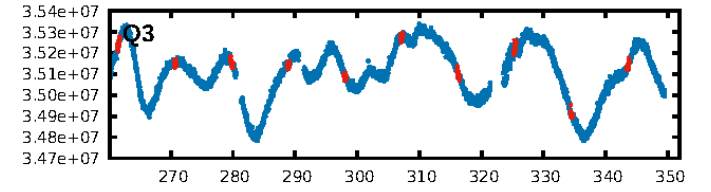
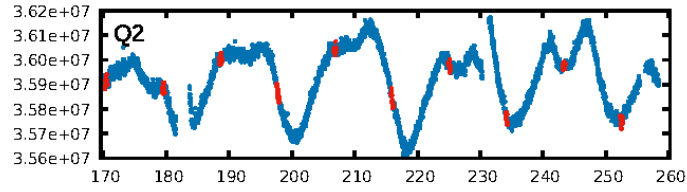
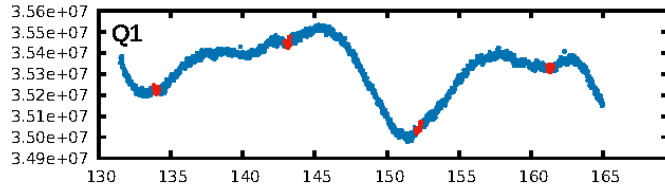
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: 99.4%
ModelChiSquareGof-sig: 100.0%
Bootstrap-pfa: 7.65e-117
RollingBand-fgt: 0.99 [140/141]
GhostDiagnostic-chr: 9.969
Centroid-sig: 11.3%
Centroid-so: 0.487 arcsec [1.18 σ]
OotOffset-rm: 0.379 arcsec [1.91 σ]
KicOffset-rm: 0.294 arcsec [1.70 σ]
OotOffset-st: 4/3/4/4 [15]
KicOffset-st: 4/3/4/4 [15]
DiffImageQuality-fgm: 1.00 [15/15]
DiffImageOverlap-fno: 1.00 [17/17]

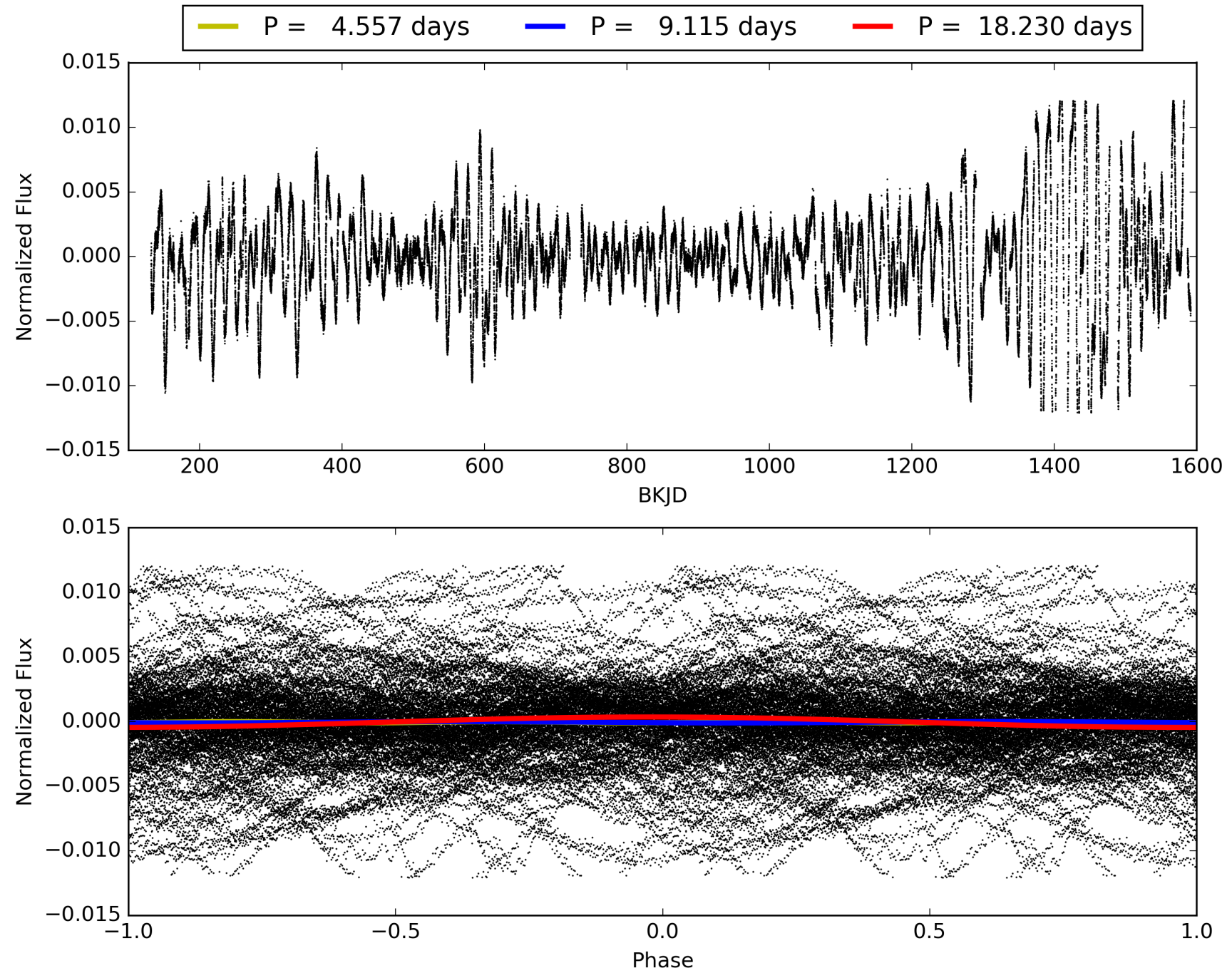
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 29-Jan-2016 17:48:20 Z

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

TCE 006034945-01, PDC Light Curves

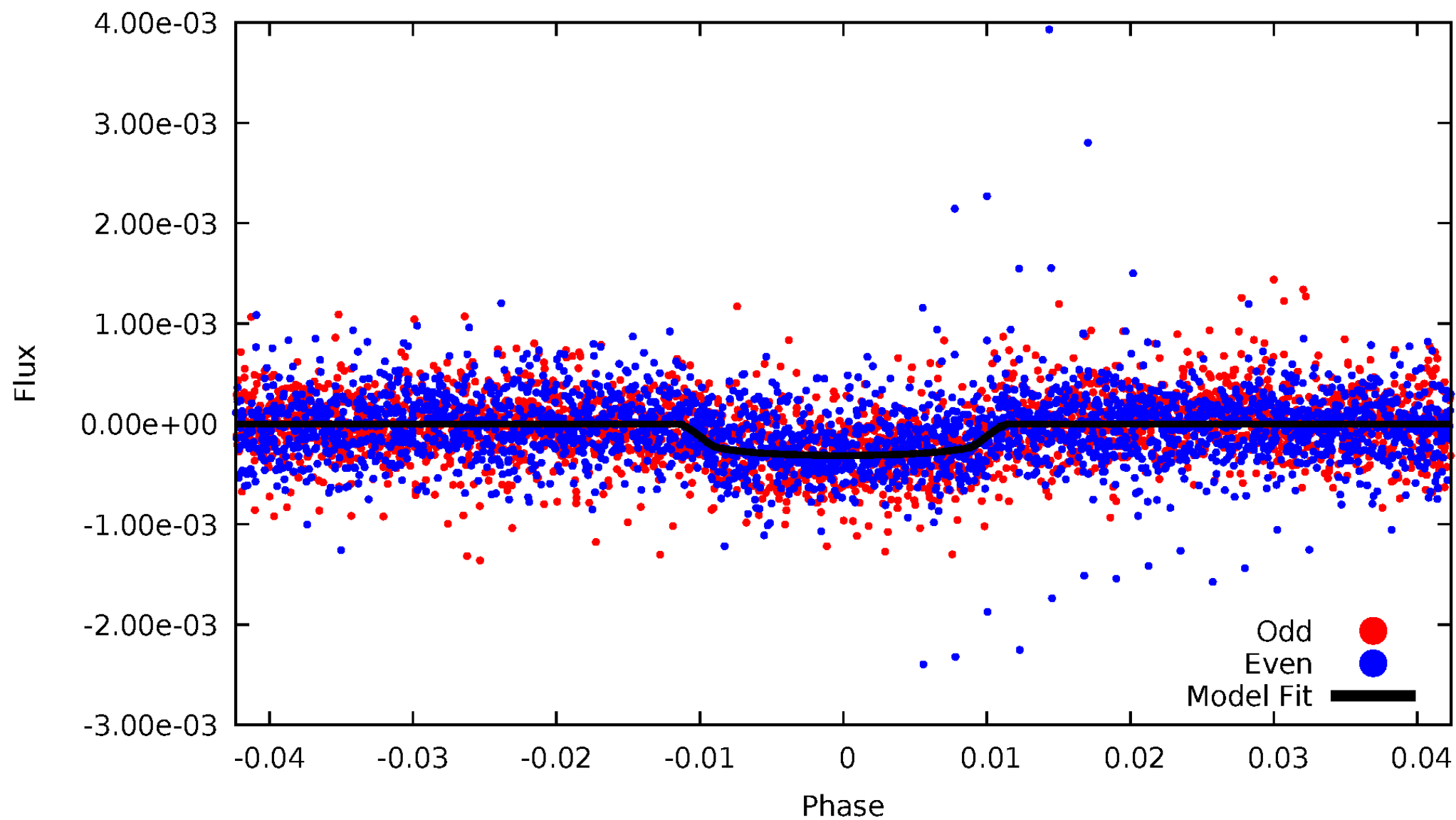


TCE 006034945-01



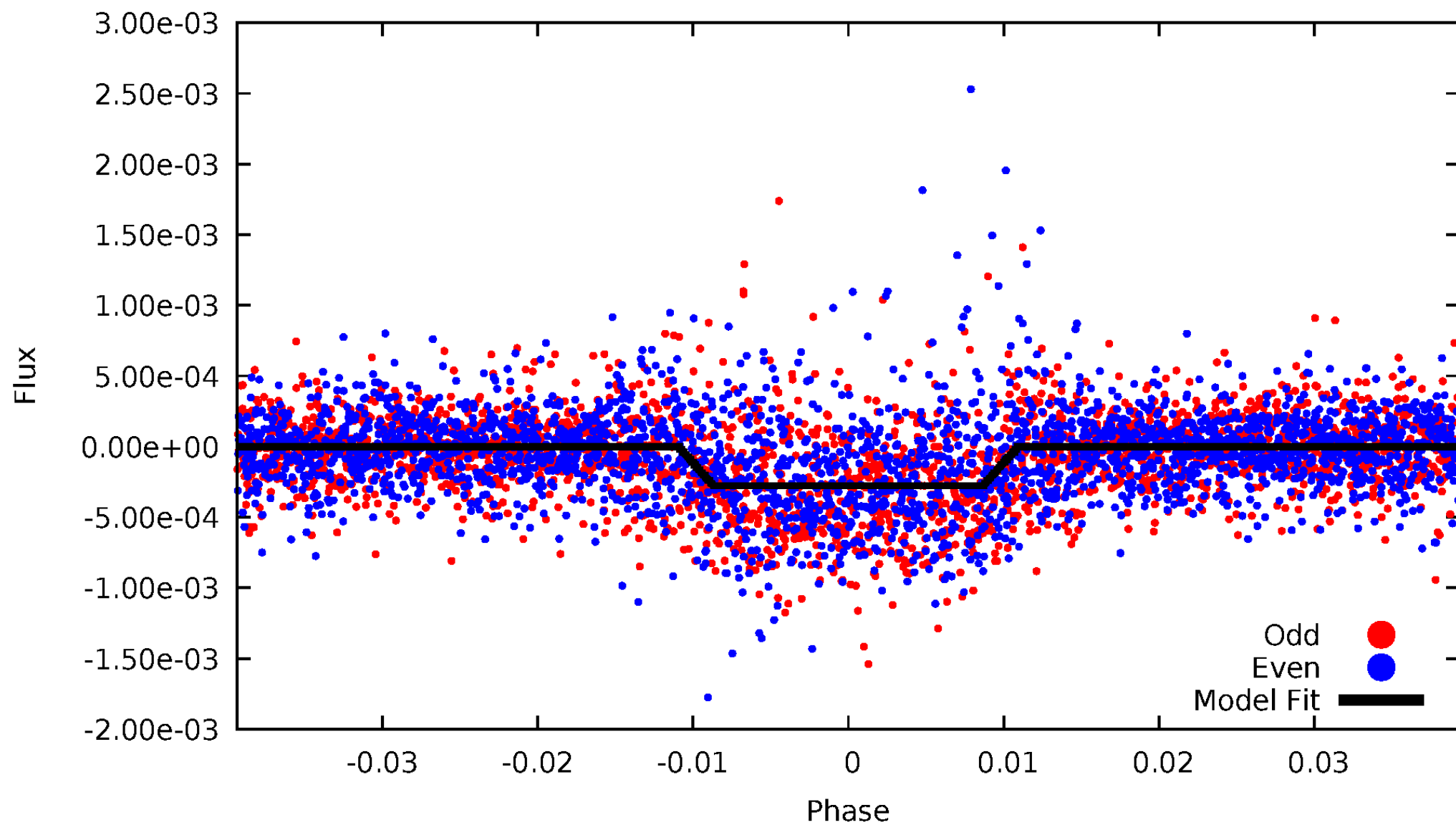
DV Odd/Even

TCE 006034945-01

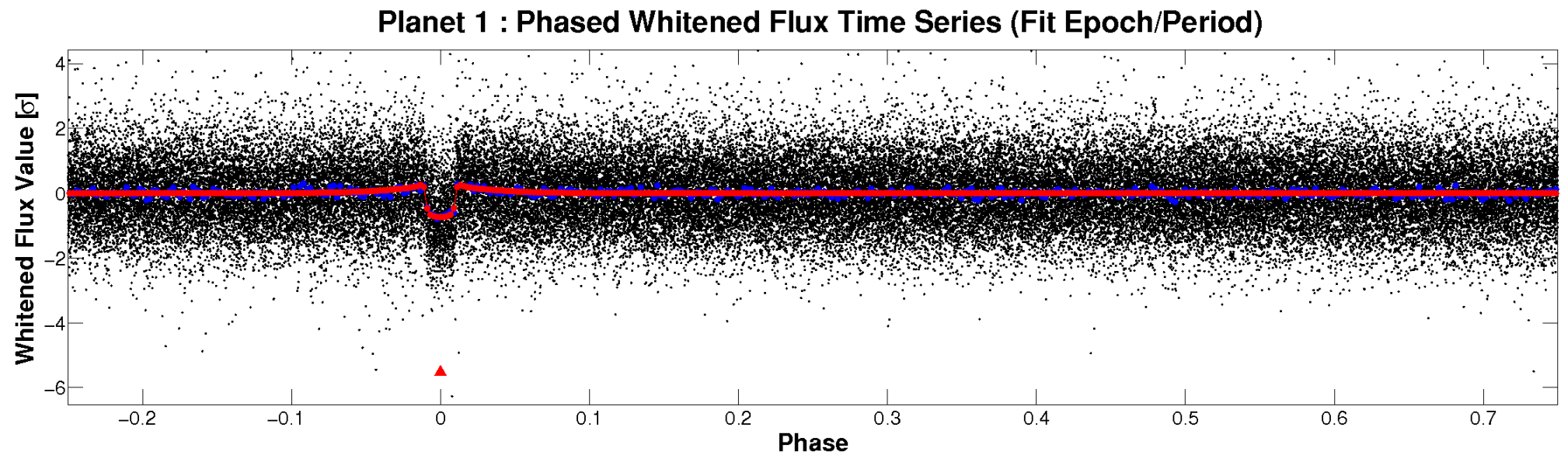
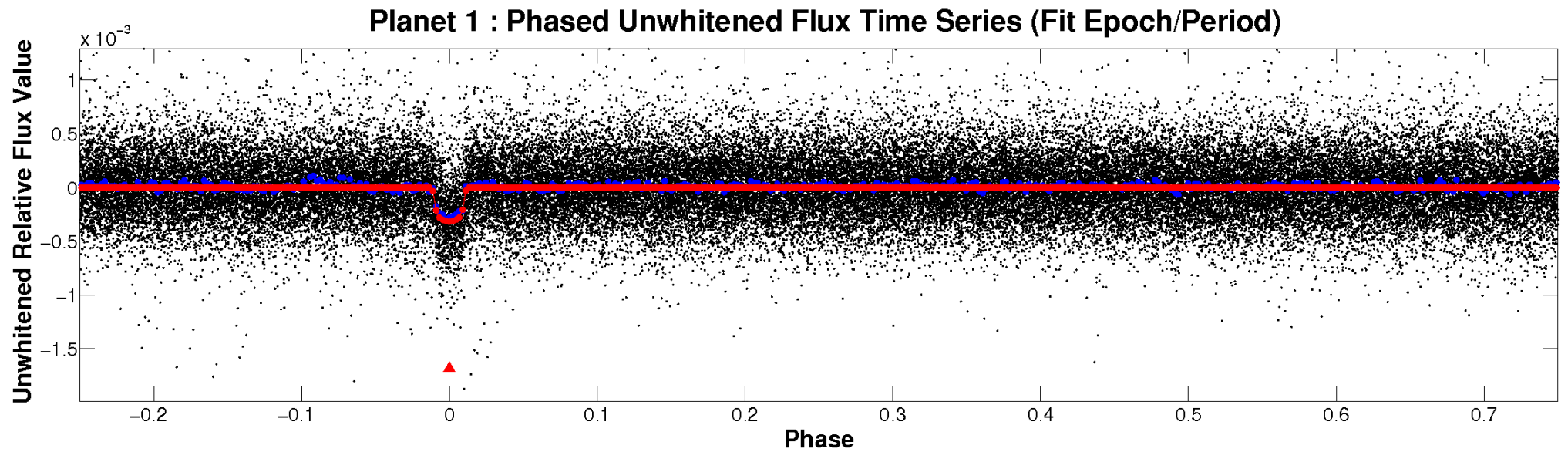


ALT Odd/Even

TCE 006034945-01

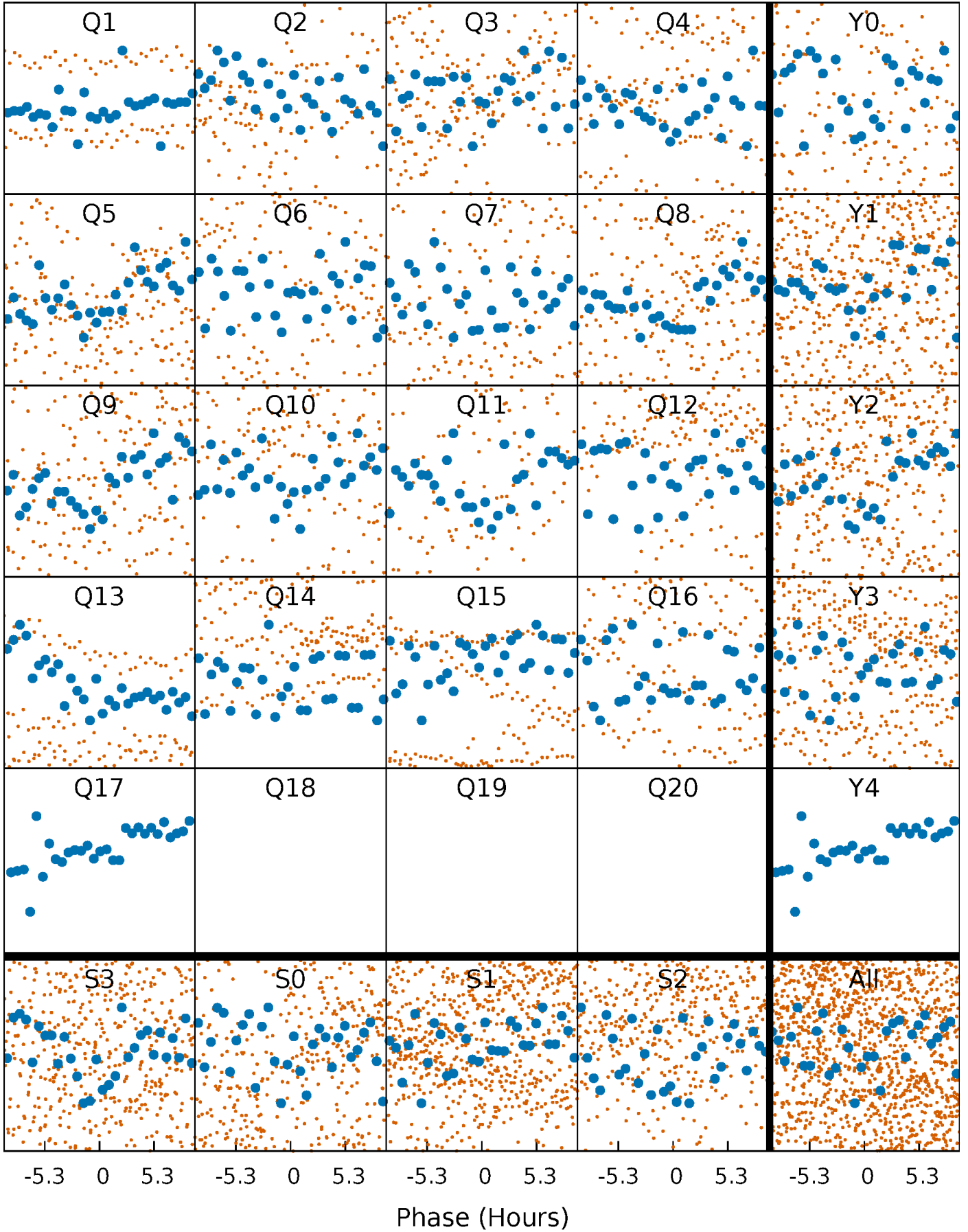


Non-Whitened Vs. Whitened Light Curve



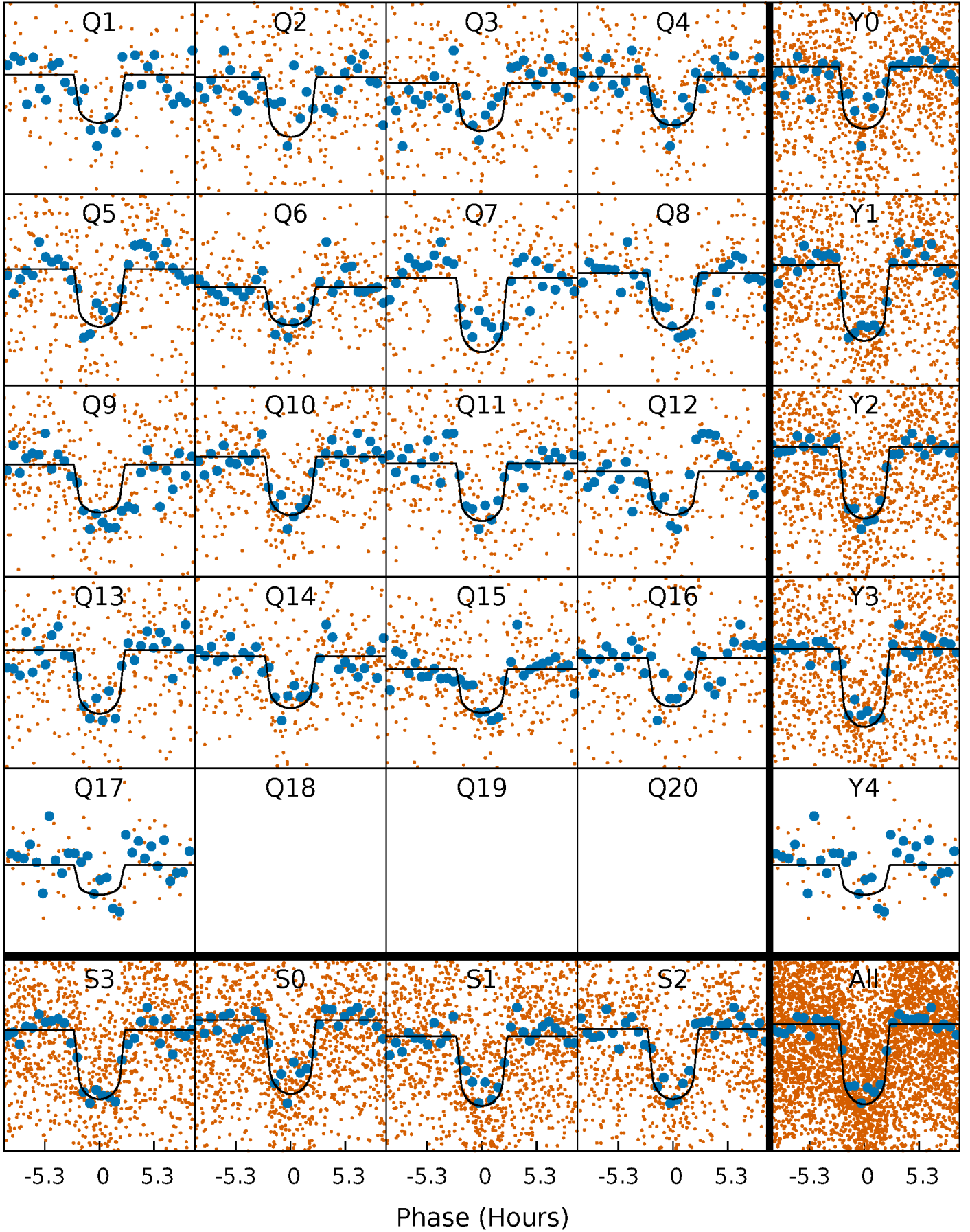
PDC Quarter-Phased Transit Curves

TCE 006034945-01 P= 9.114994 Days $T_0=133.975928$ (BKJD)



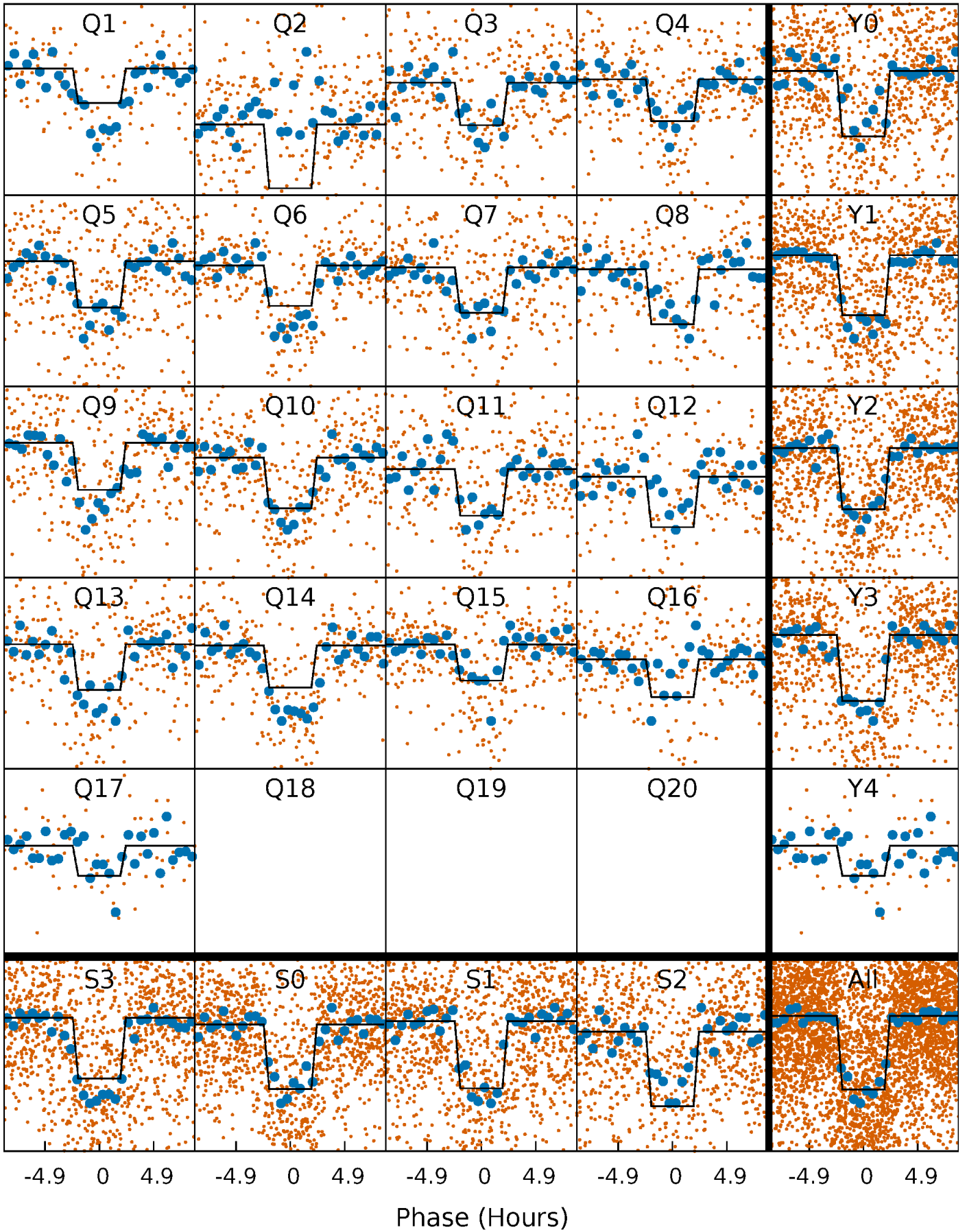
DV Quarter-Phased Transit Curves

TCE 006034945-01 P= 9.114994 Days $T_0=133.975928$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

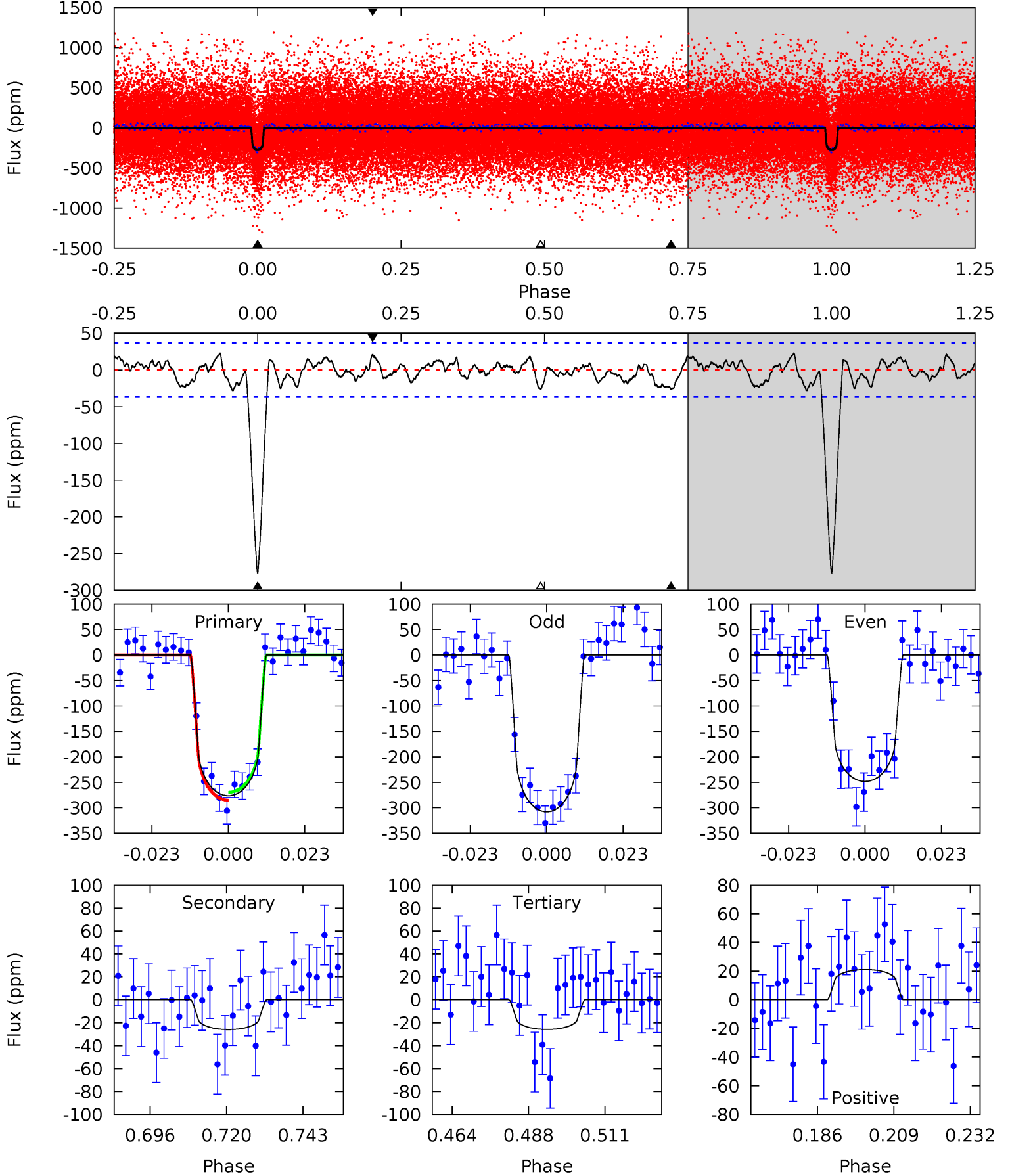
TCE 006034945-01 P= 9.115092 Days $T_0=133.968099$ (BKJD)



DV Model-Shift Uniqueness Test

006034945-01, P = 9.114994 Days, E = 124.860934 Days

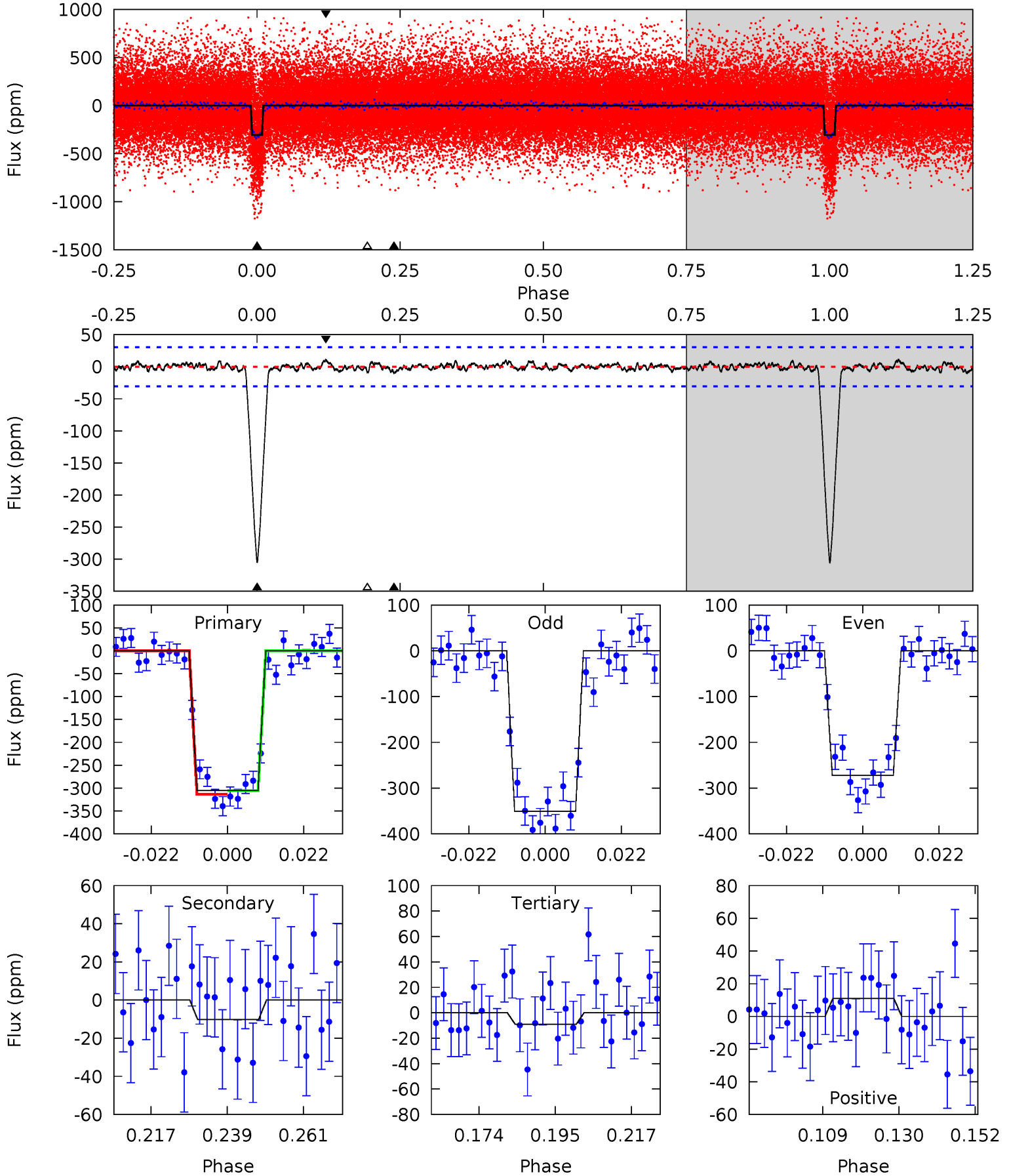
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
36.5	3.43	3.42	2.78	4.86	2.27	1.38	33.1	33.7	0.01	0.65	3.96	0.93	0.07	1.03



Alt Model-Shift Uniqueness Test

006034945-01, P = 9.115092 Days, E = 124.853007 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
48.6	1.63	1.45	1.75	4.88	2.30	0.58	47.2	46.9	0.18	-0.12	6.27	0.75	0.03	0.59



Stellar Parameters For KIC 006034945

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	5962^{+160}_{-195}	$4.431^{+0.070}_{-0.210}$	$0.000^{+0.250}_{-0.300}$	$1.028^{+0.320}_{-0.137}$	$1.039^{+0.142}_{-0.129}$	$1.348^{+0.494}_{-0.700}$
	+3%/-3%	+2%/-5%	+inf%/-inf%	+31%/-13%	+14%/-12%	+37%/-52%
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 006034945-01 / KOI 1683.01

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	A_{obs}
DV	-26 ± 8	$2.05^{+0.69}_{-0.66}$	1289^{+94}_{-65}	3636^{+526}_{-380}	25^{+31}_{-13}
Alt.	-10 ± 6	$1.95^{+0.67}_{-0.63}$	1290^{+101}_{-72}	3158^{+497}_{-460}	10^{+16}_{-7}

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

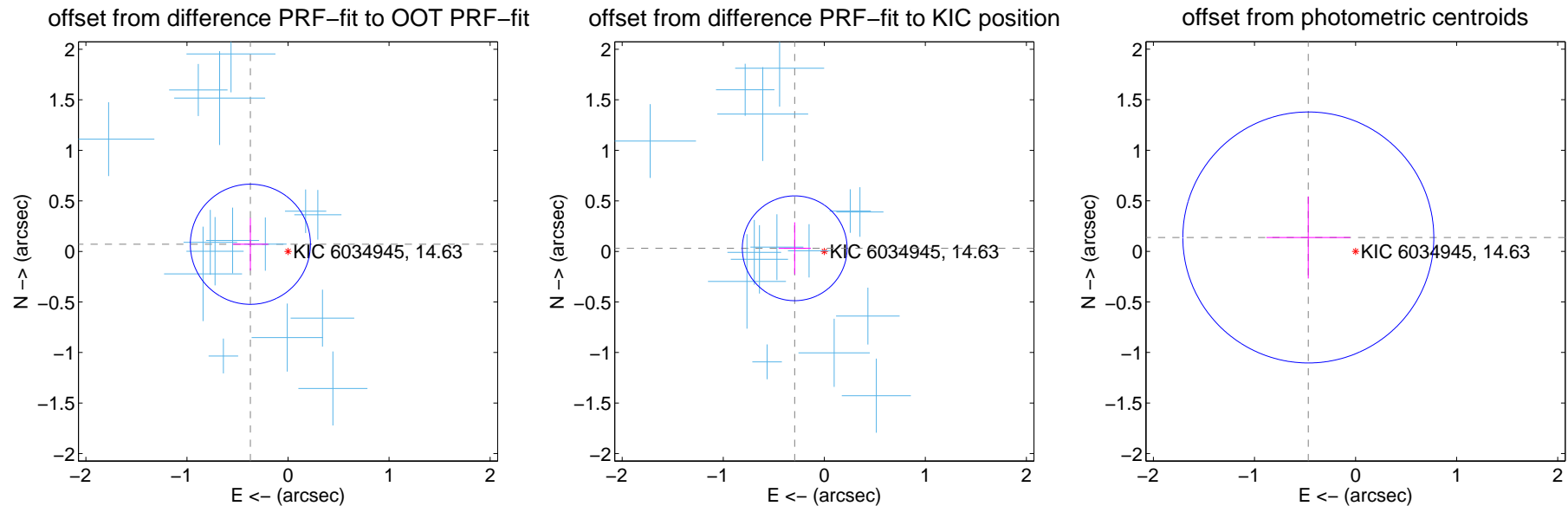
DV Centroid Data

Supplemental centroid analysis for 006034945-01. Kepler magnitude: 14.63. Transit SNR 25.40

There are 15 quarters with good PRF difference image offsets

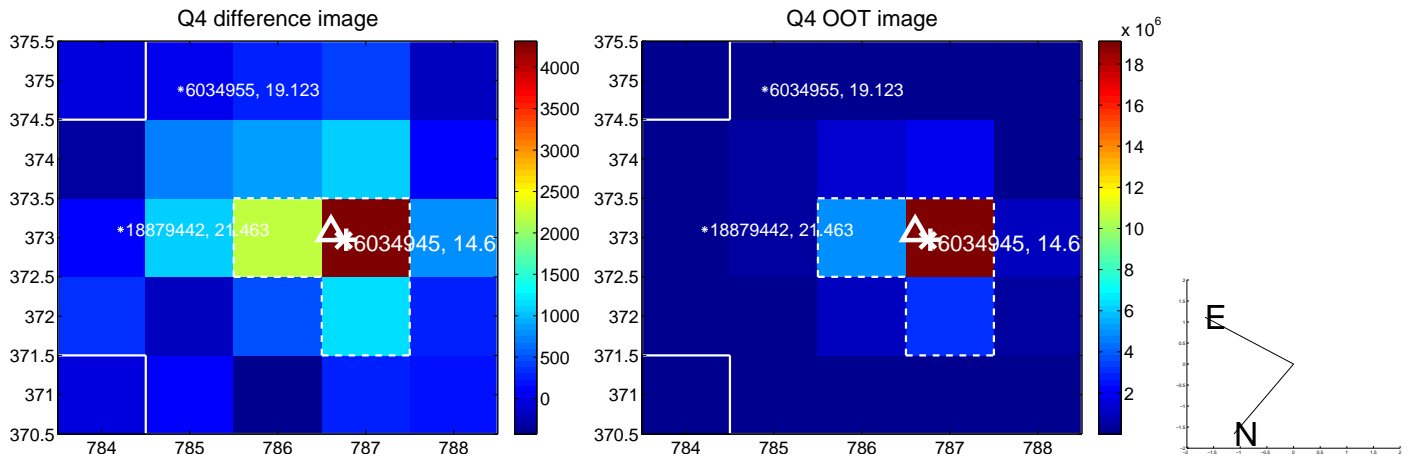
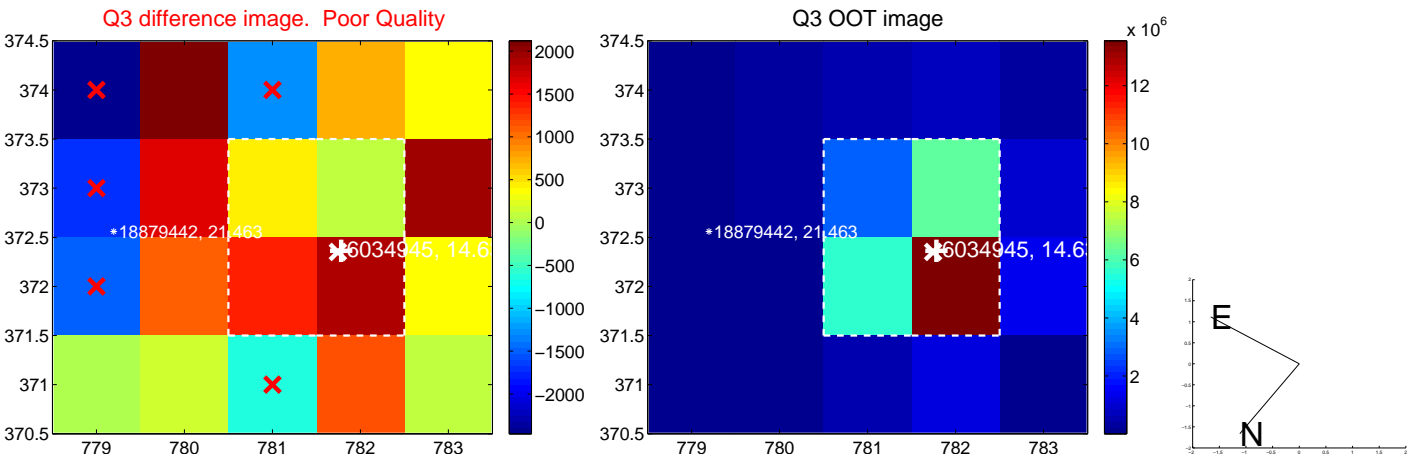
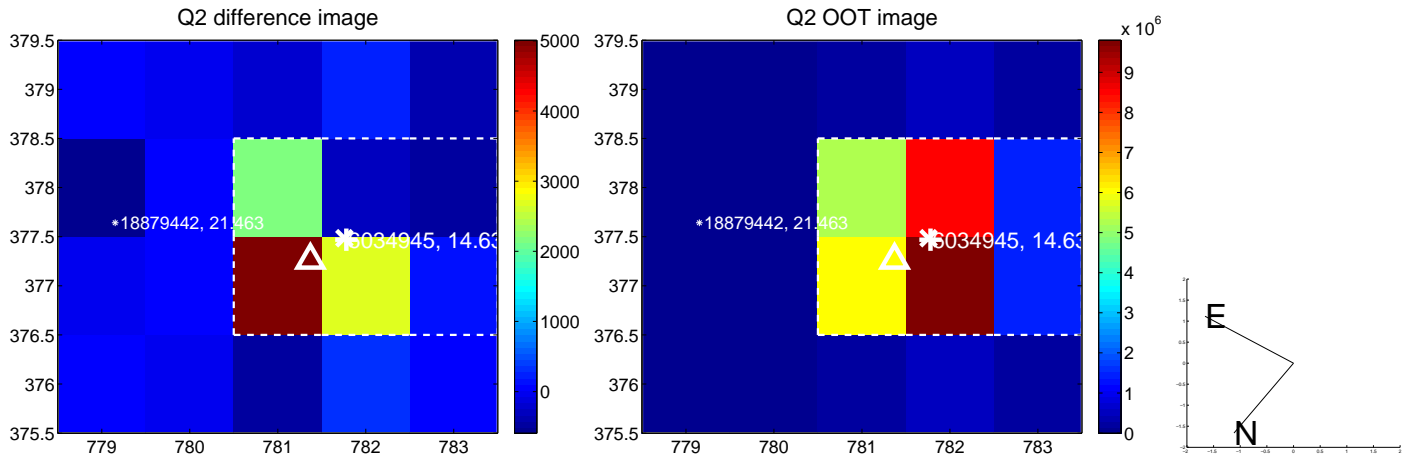
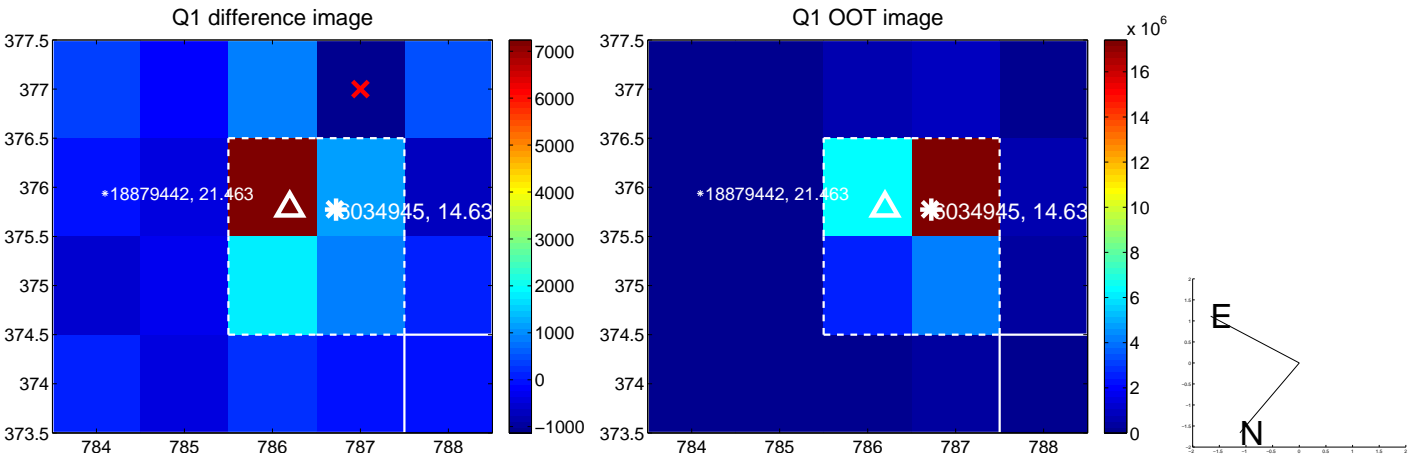
The direct PRF centroid is offset from the target star catalog position by about 0.11 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.379 ± 0.198	1.91	0.372 ± 0.176	0.071 ± 0.260
PRF-fit source offset from KIC position	0.294 ± 0.173	1.70	0.293 ± 0.160	0.031 ± 0.257
photometric centroid source offset	0.49 ± 0.41	1.18	0.47 ± 0.41	0.14 ± 0.41

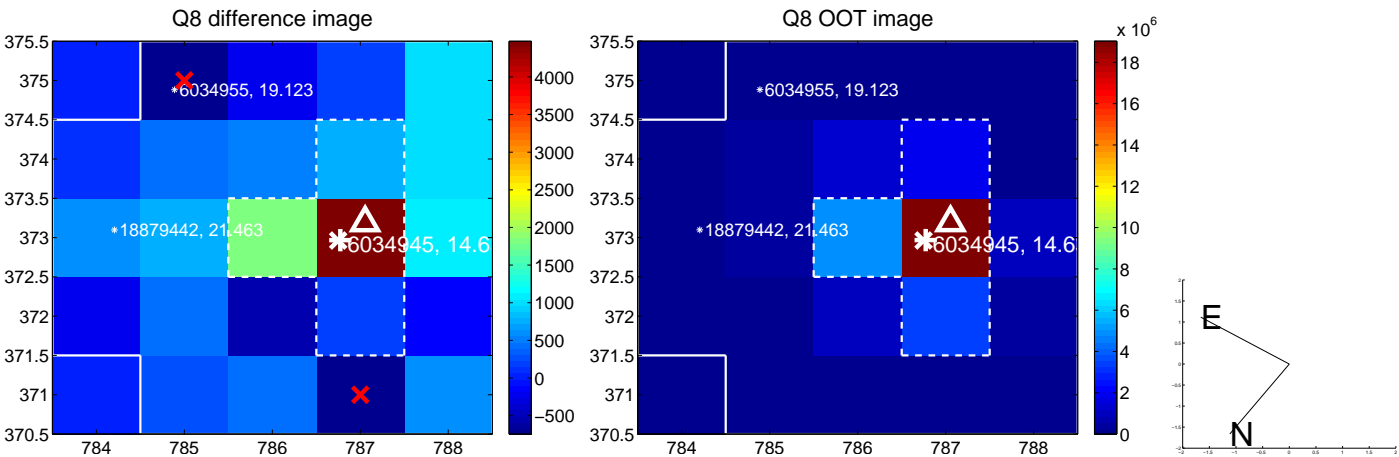
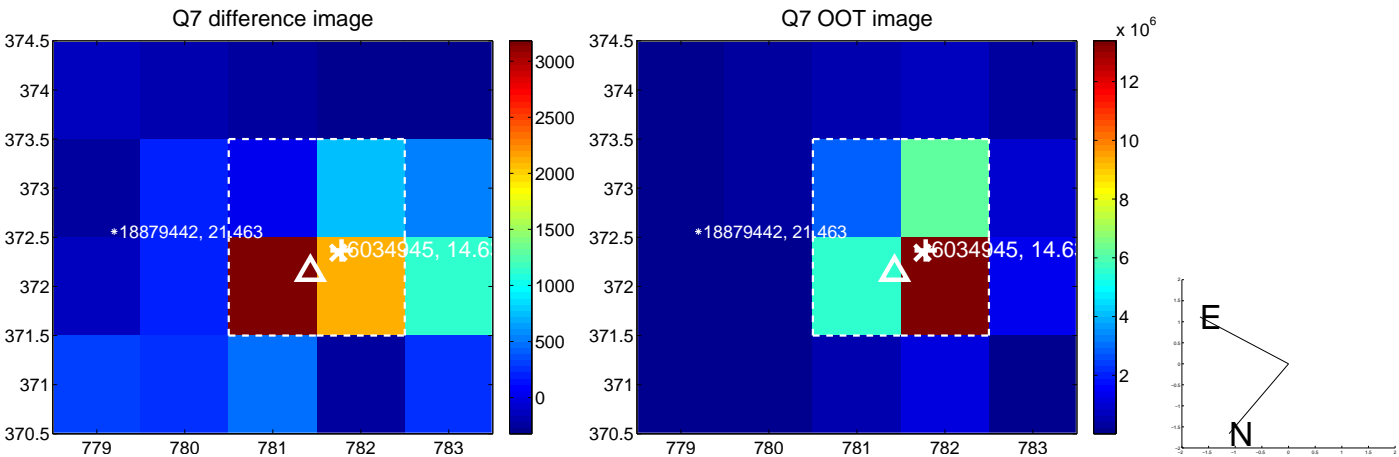
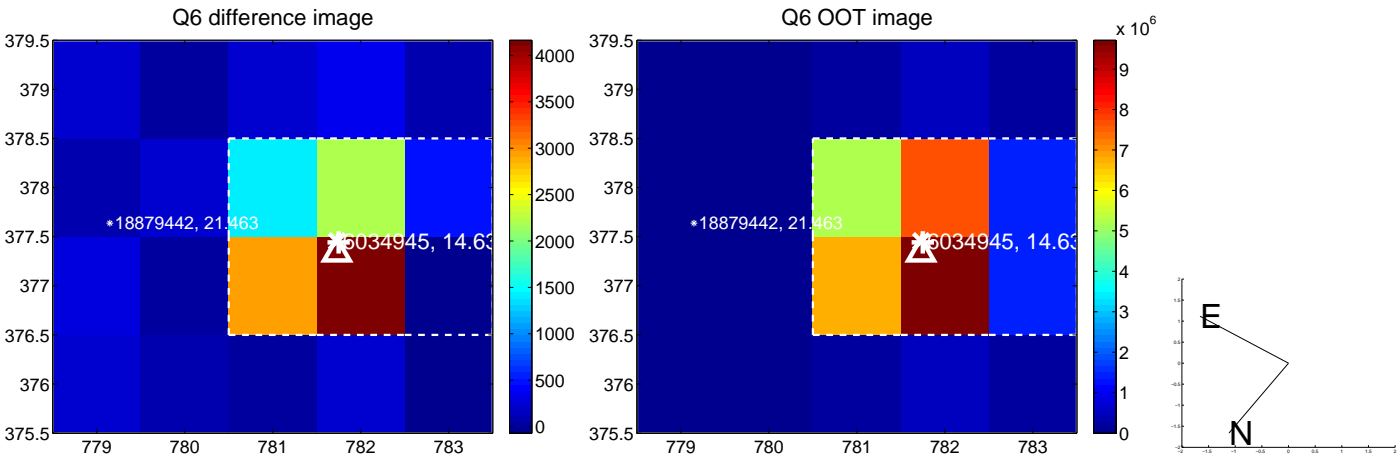
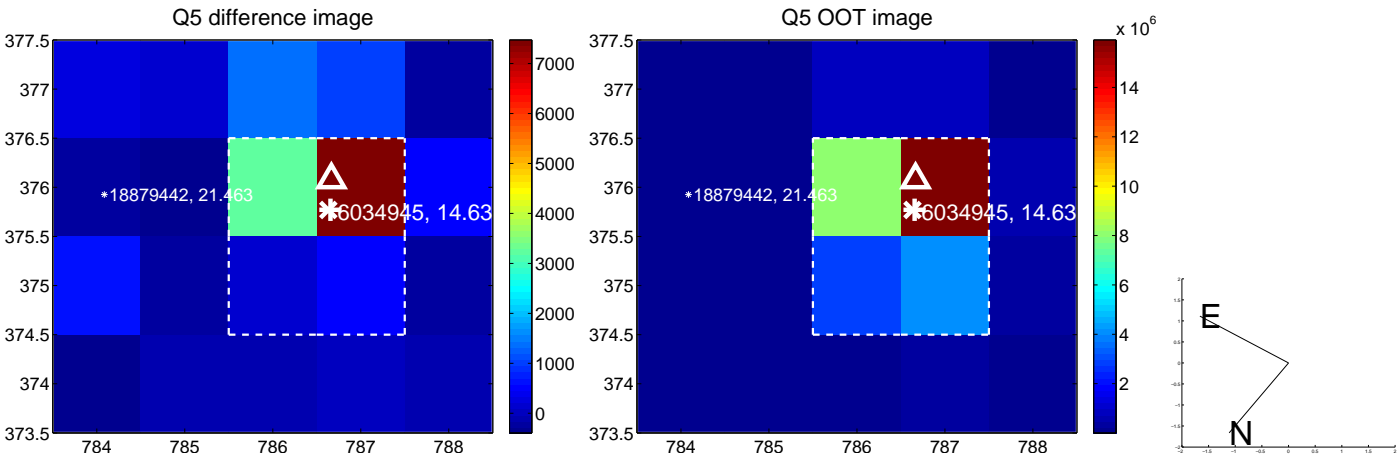


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses:** good quarterly centroid offsets; **Vermillion crosses:** bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

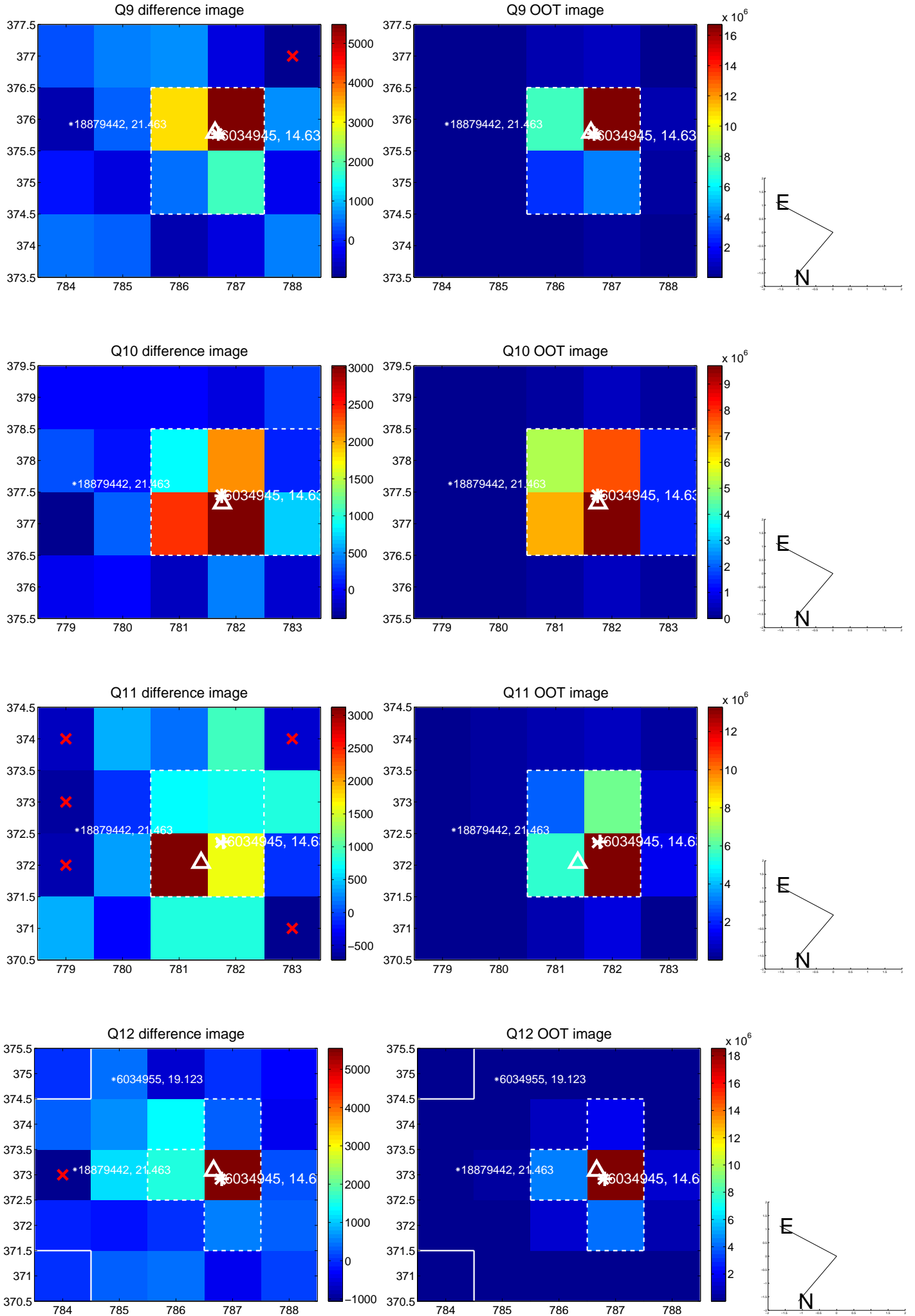
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



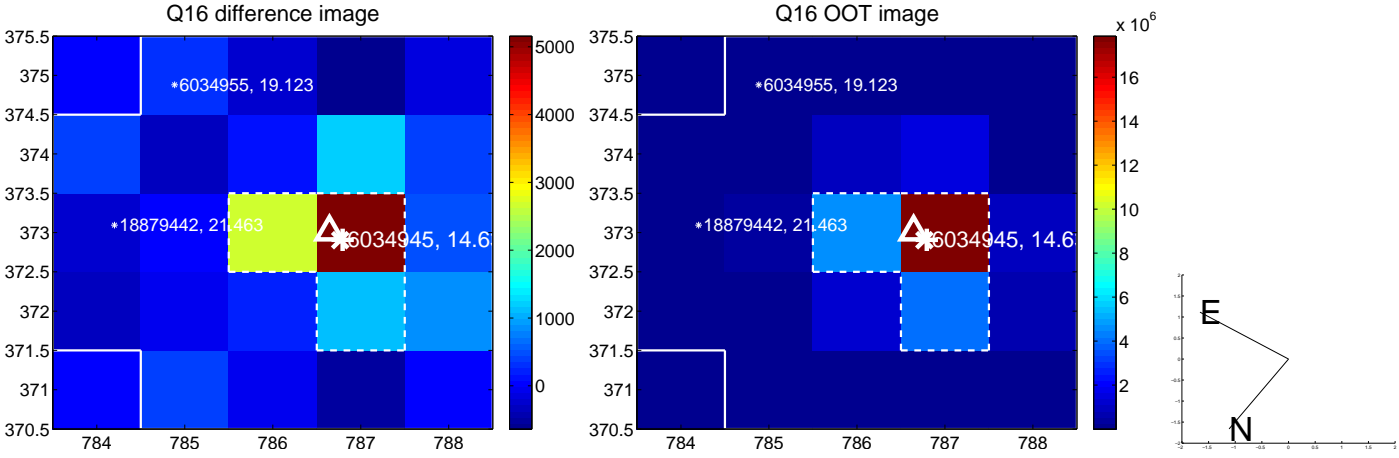
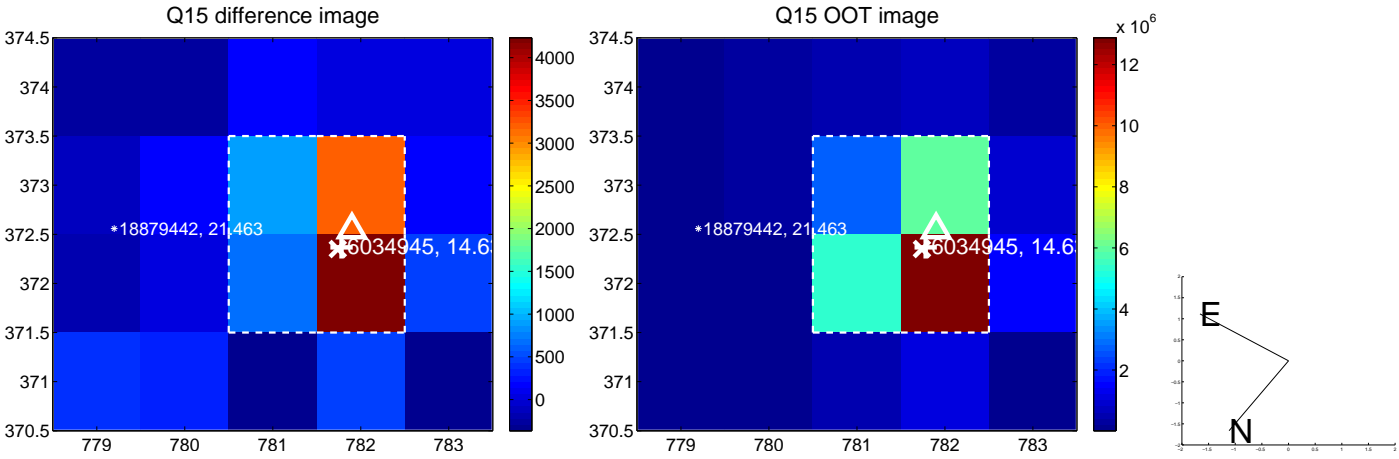
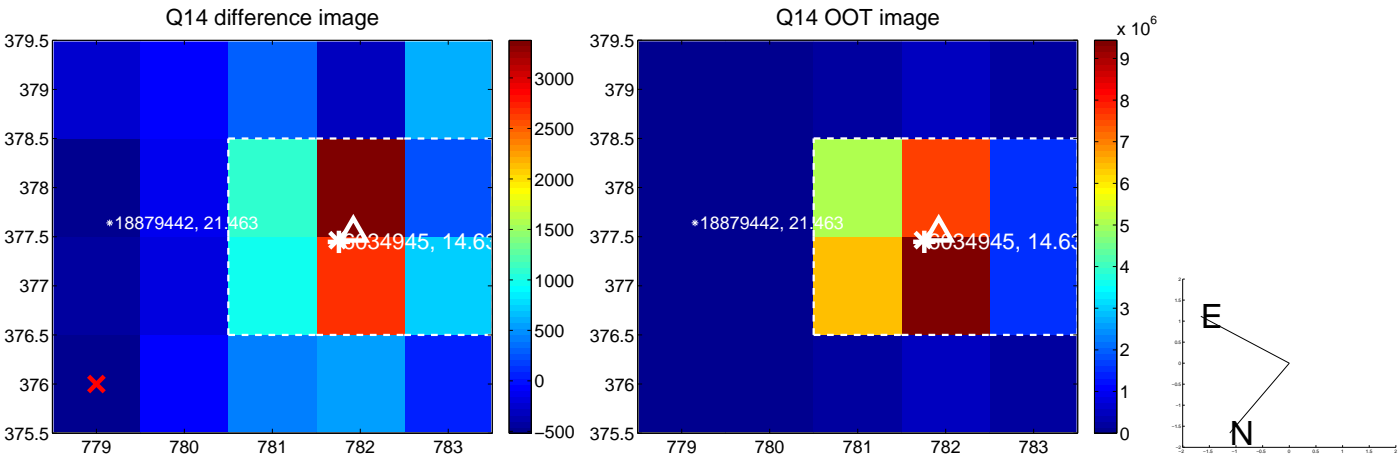
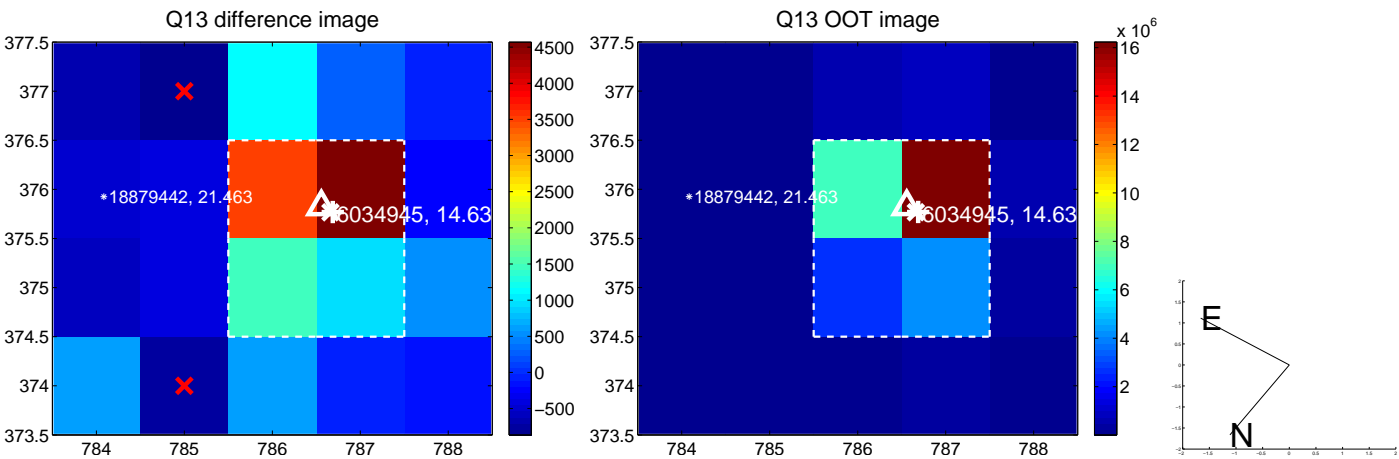
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



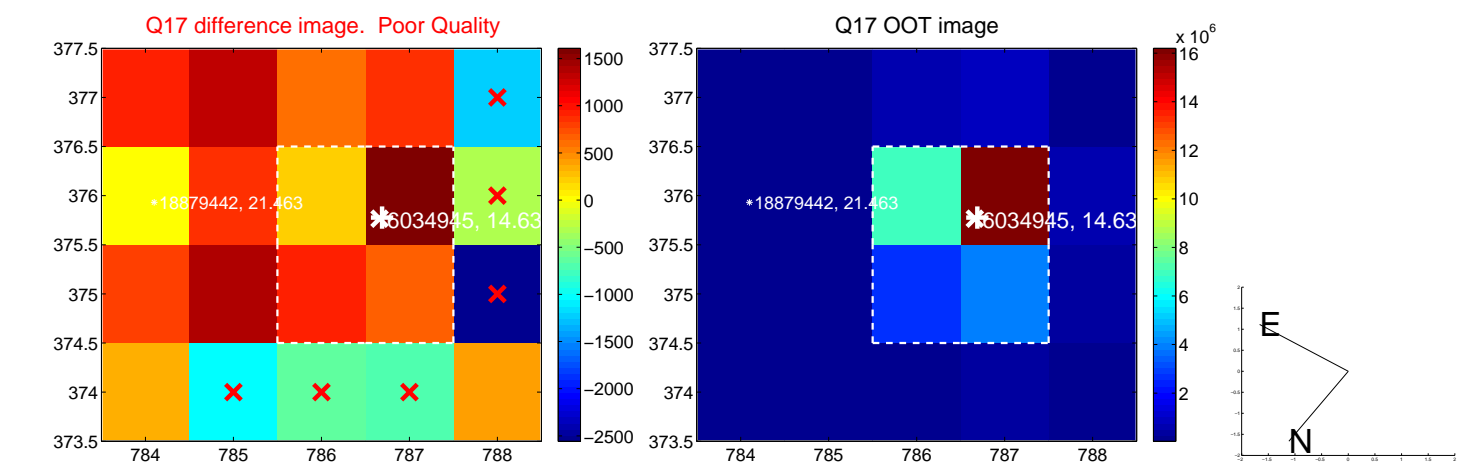
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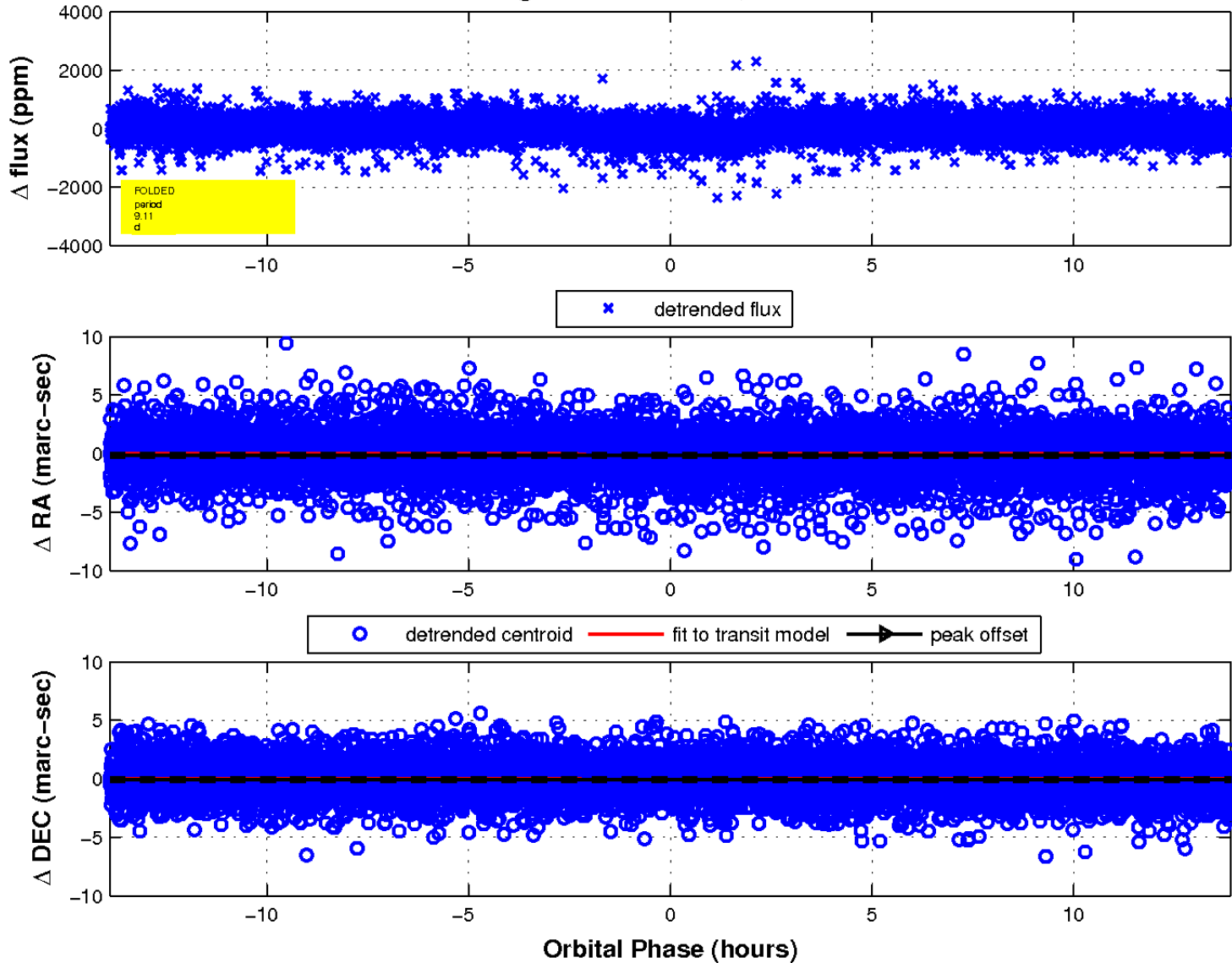
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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



fluxWeightedCentroids, Planet 1 of 1



UKIRT Image

Declination

