

KIC 009631762

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})
009631762-01	OBS	0588.01	10.355860	134.257707	659.0	2.965	45.5	49.0	0.78	4646	2.26	34.96

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
009631762-01	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.

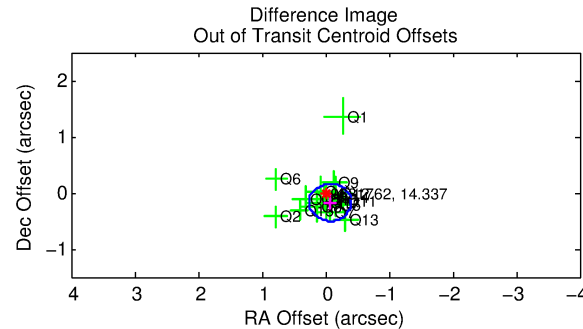
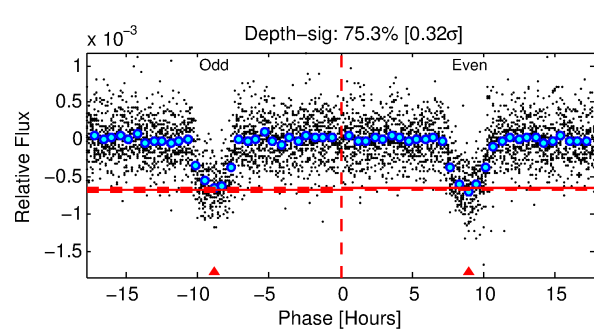
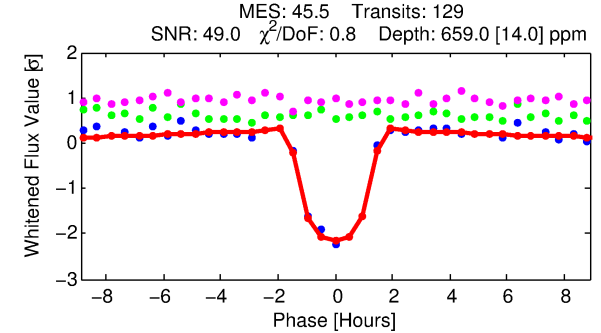
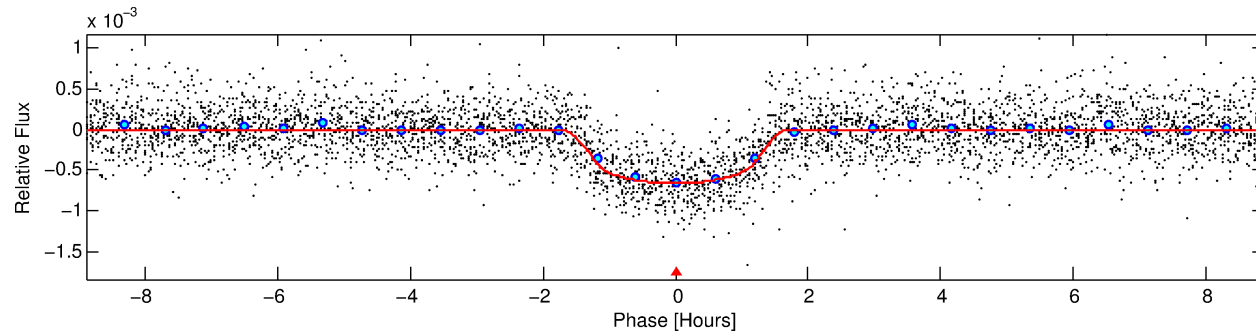
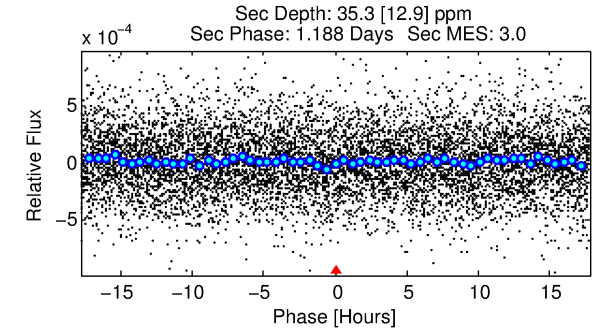
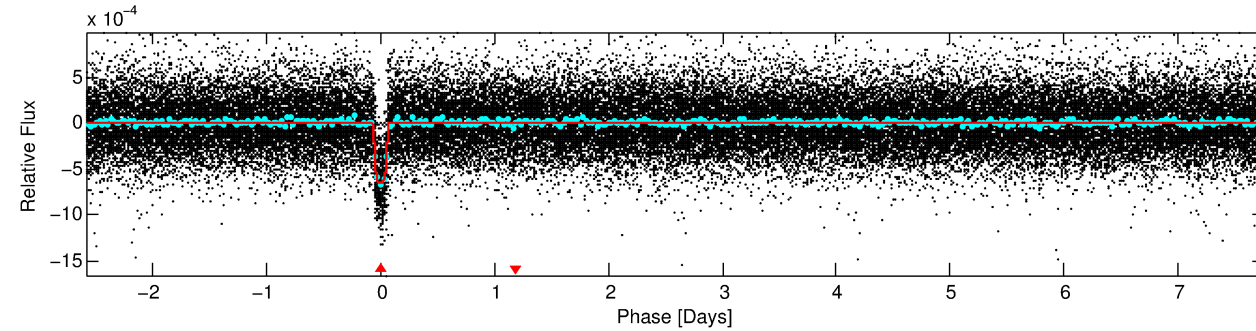
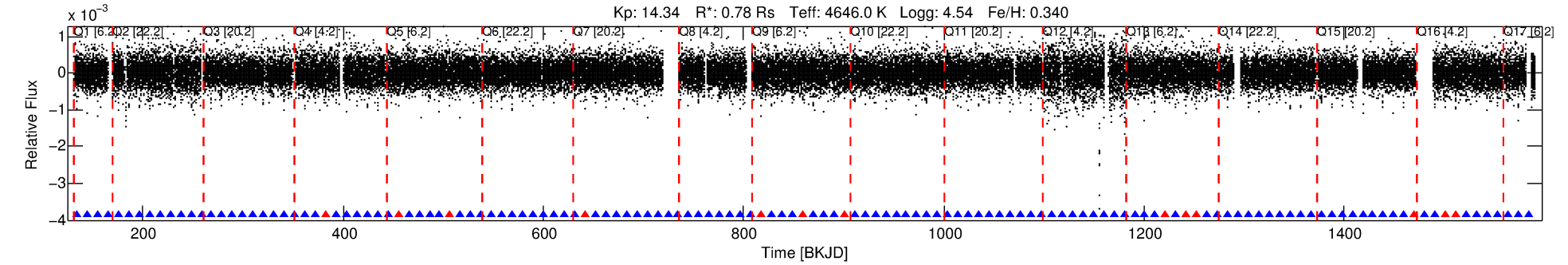
Ephemeris Match Information For 009631762-01

No Significant Match Found

DV One-Page Summary

KIC: 9631762 Candidate: 1 of 1 Period: 10.356 d

KOI: K00588.01 Corr: 0.974



DV Fit Results:

Period = 10.35586 [0.00002] d
Epoch = 134.2577 [0.0013] BKJD
Rp/R* = 0.0266 [0.0054]
a/R* = 17.05 [11.21]
b = 0.80 [0.30]
Seff = 34.96 [4.05]
Teq = 620 [18] K
Rp = 2.26 [0.47] Re
a = 0.0850 [0.0048] AU
Ag = 27.52 [15.22] [1.74 σ]
Teffp = 2196 [302] K [5.21 σ]

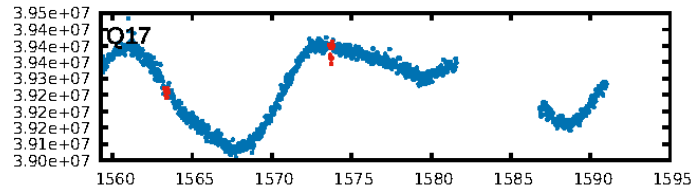
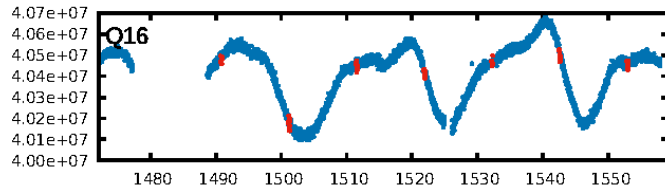
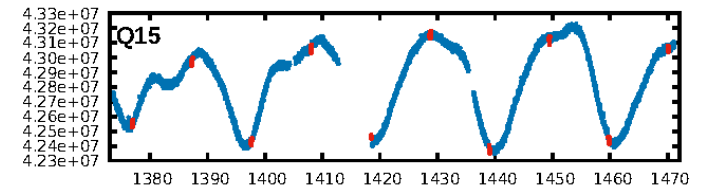
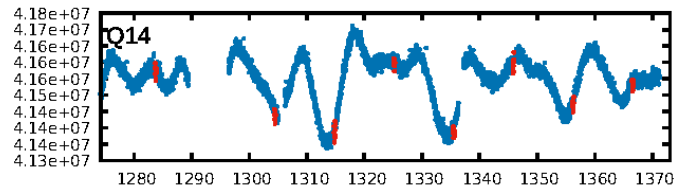
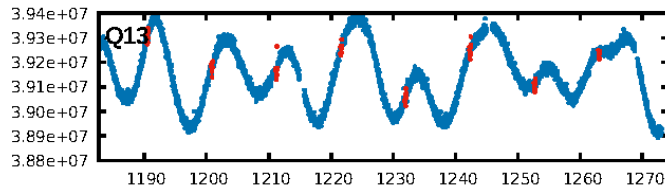
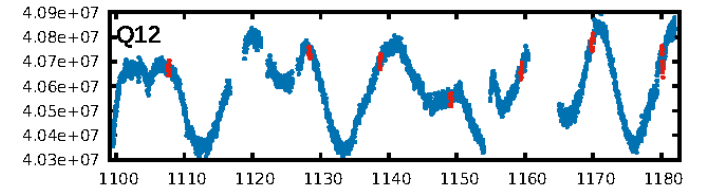
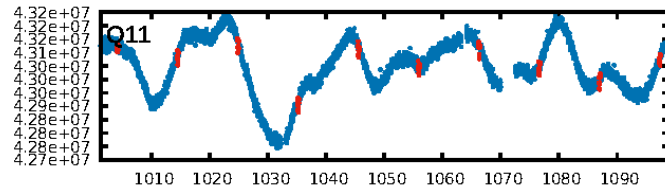
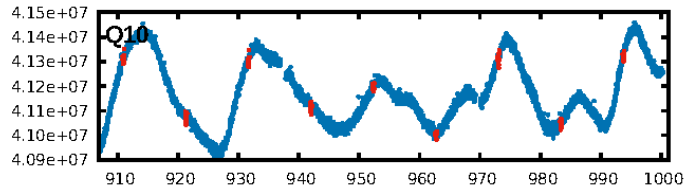
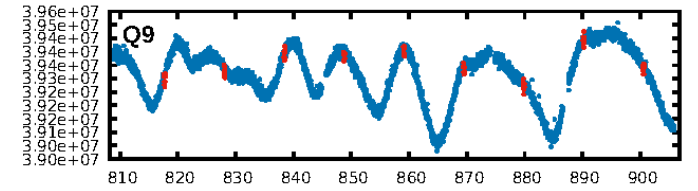
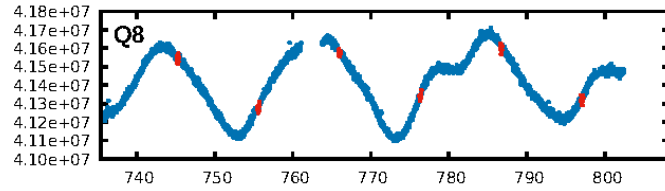
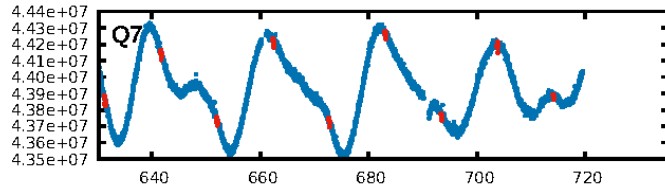
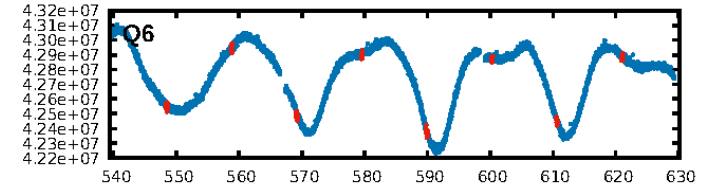
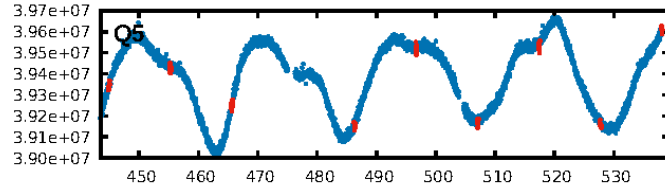
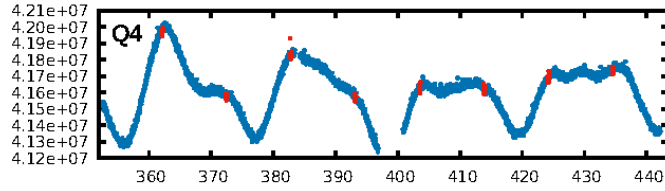
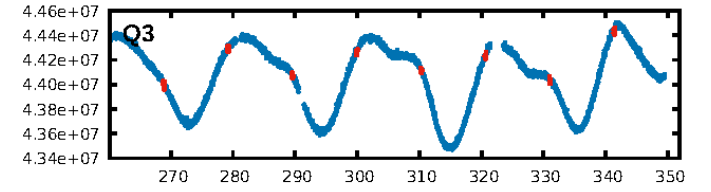
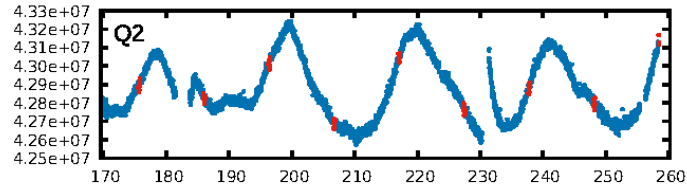
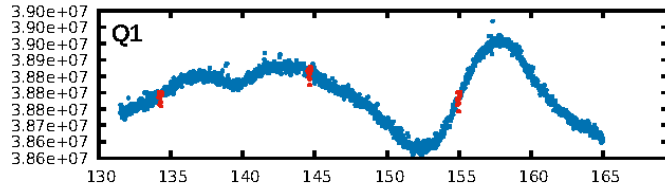
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: 100.0%
ModelChiSquareGof-sig: 100.0%
Bootstrap-pfa: 0.00e+00
RollingBand-fgt: 0.90 [111/124]
GhostDiagnostic-chr: 7.109
Centroid-sig: 0.6%
Centroid-so: 0.609 arcsec [2.07 σ]
OotOffset-rm: 0.189 arcsec [1.72 σ]
KicOffset-rm: 0.274 arcsec [2.23 σ]
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]

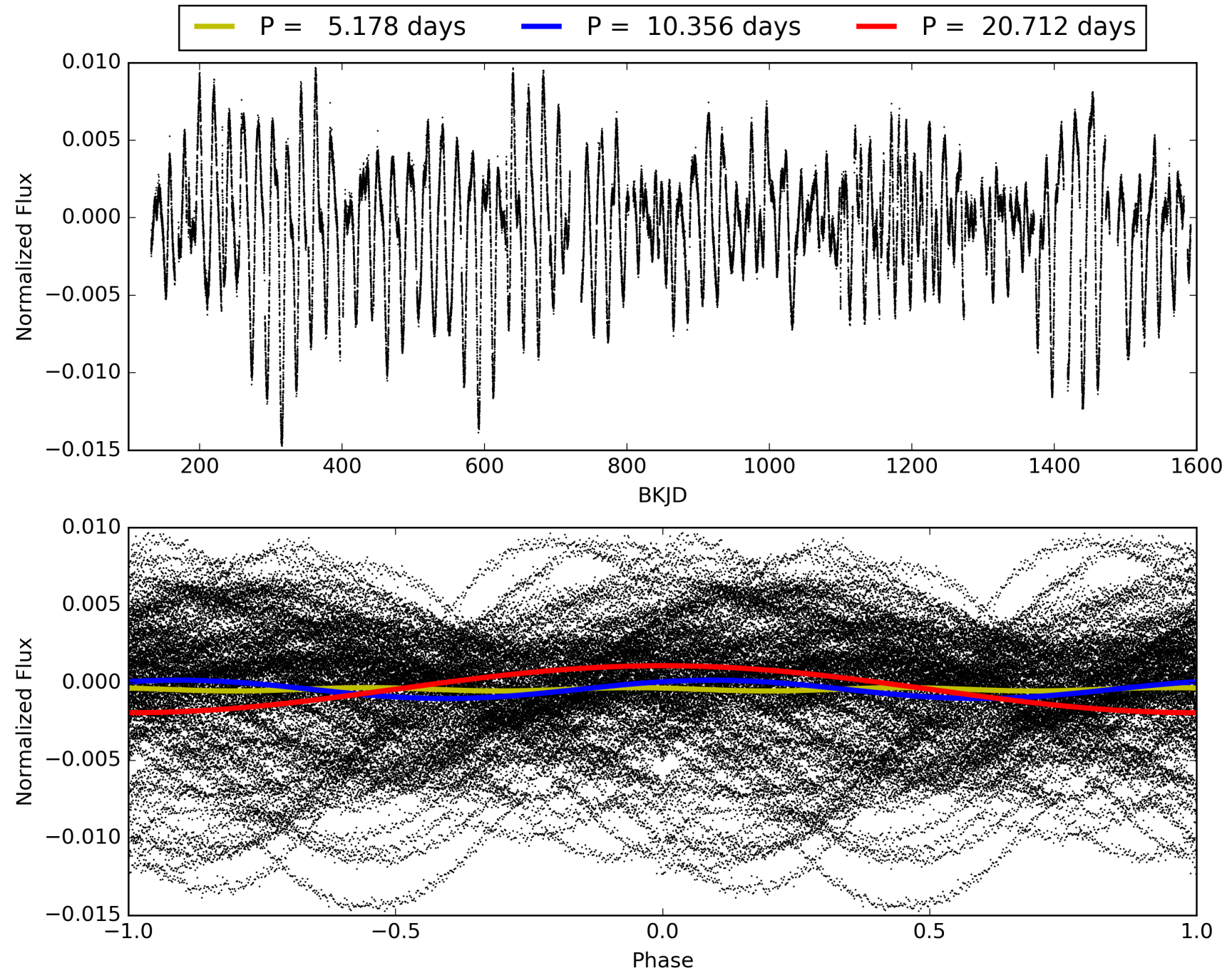
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 28-Jan-2016 20:49:37 Z

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

TCE 009631762-01, PDC Light Curves

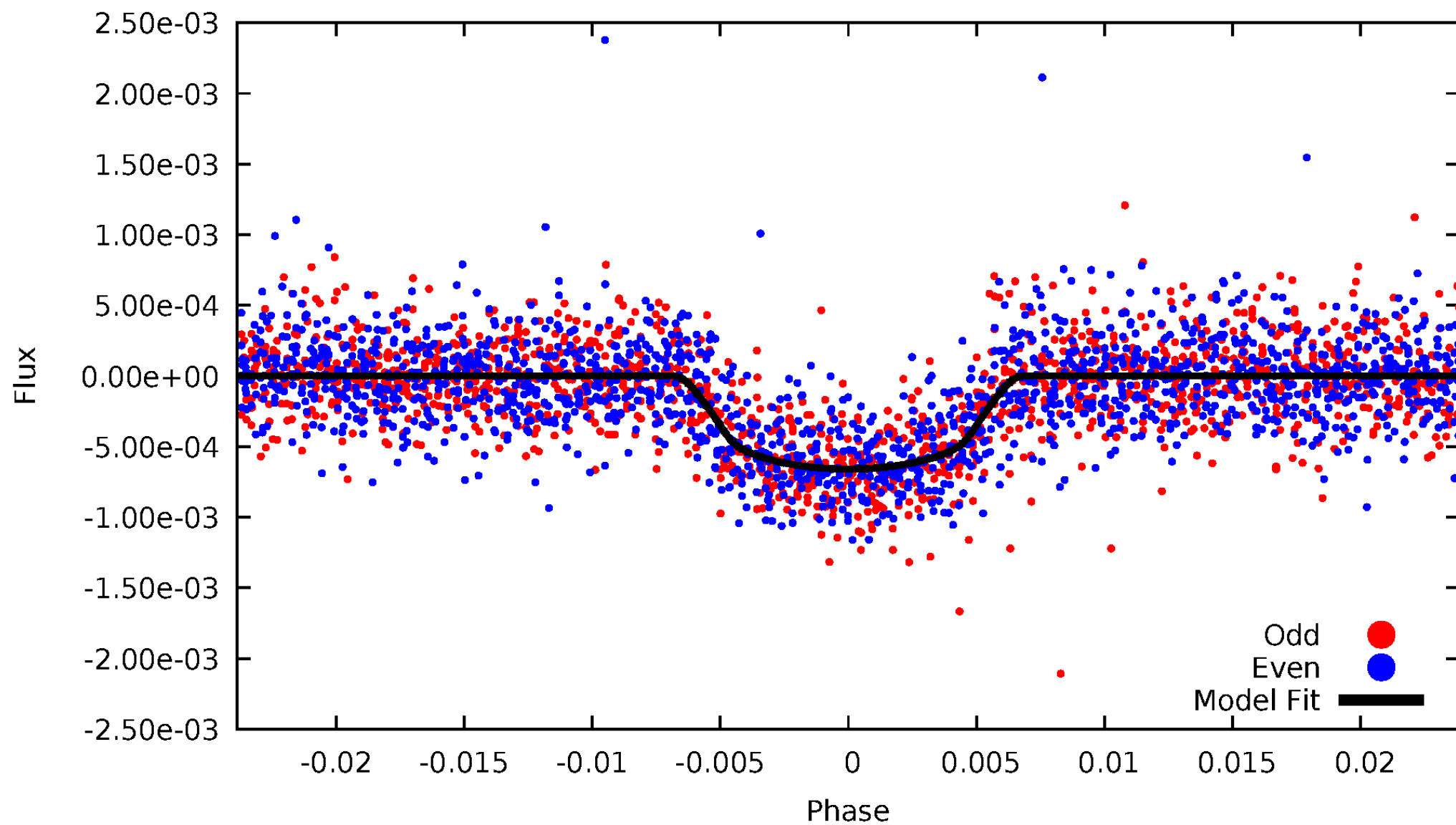


TCE 009631762-01



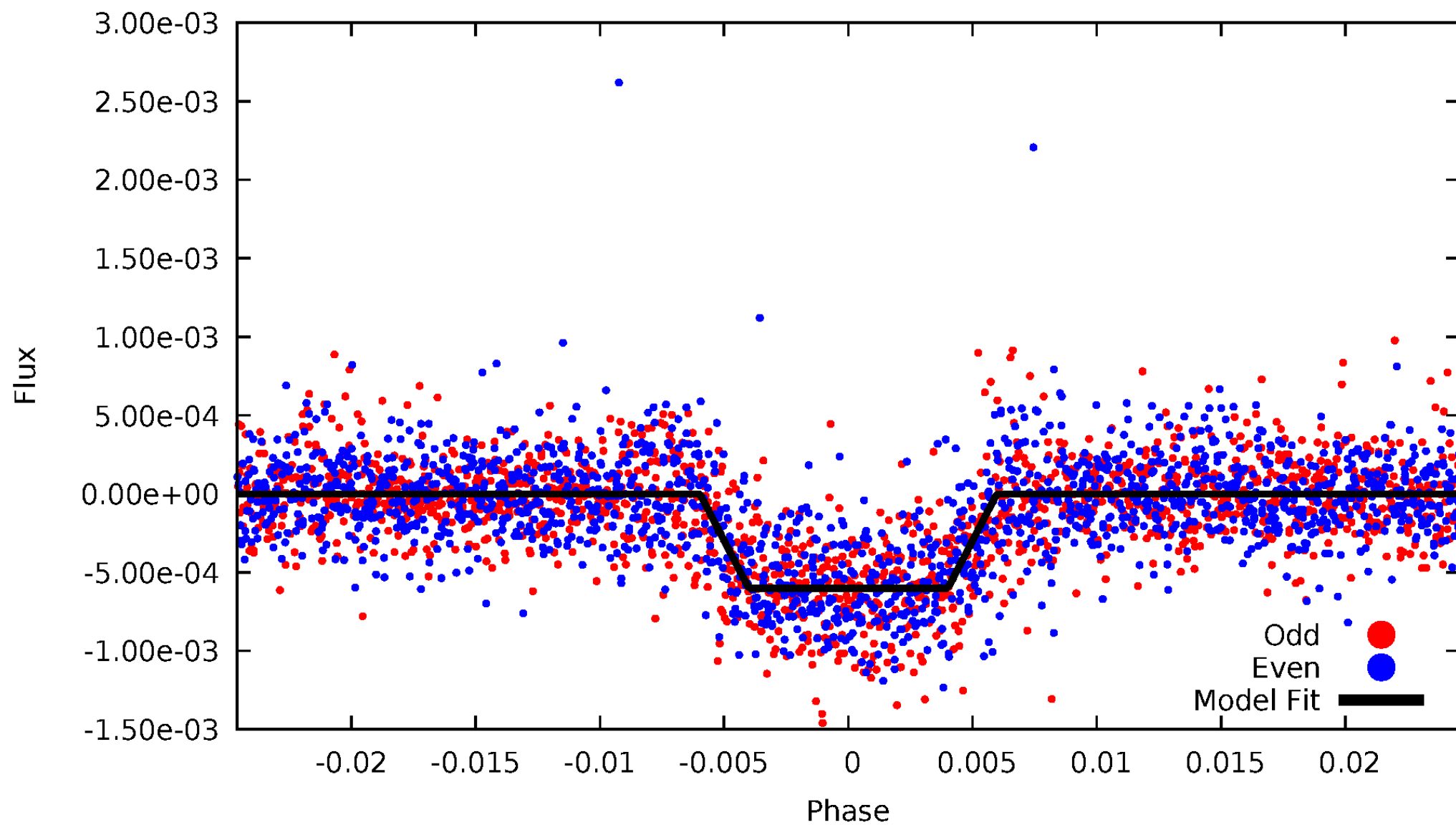
DV Odd/Even

TCE 009631762-01

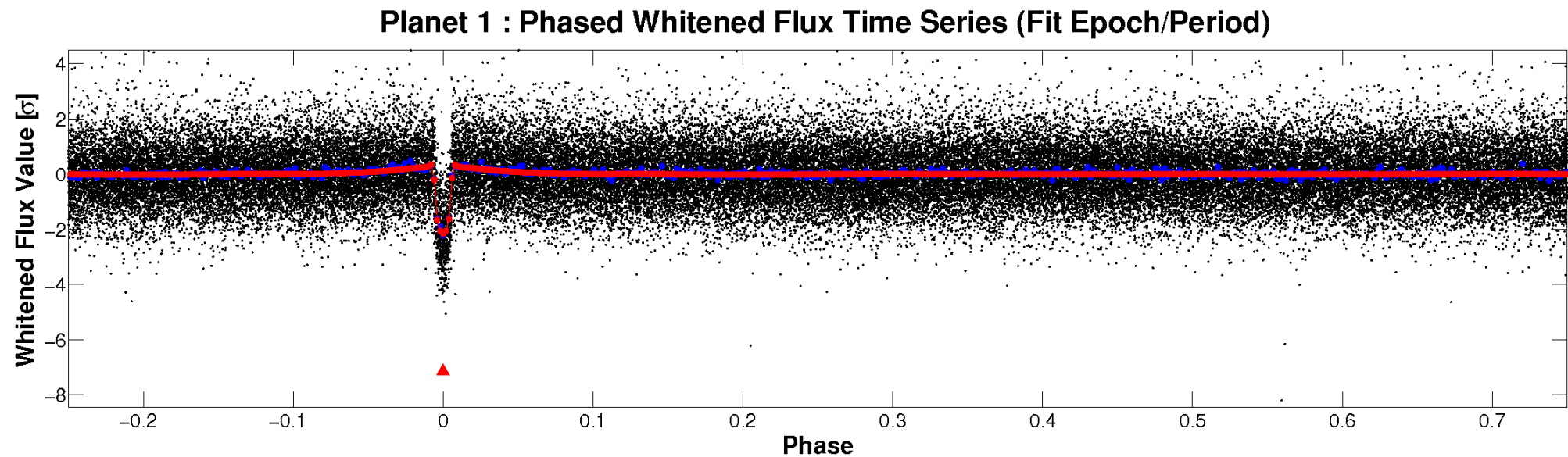
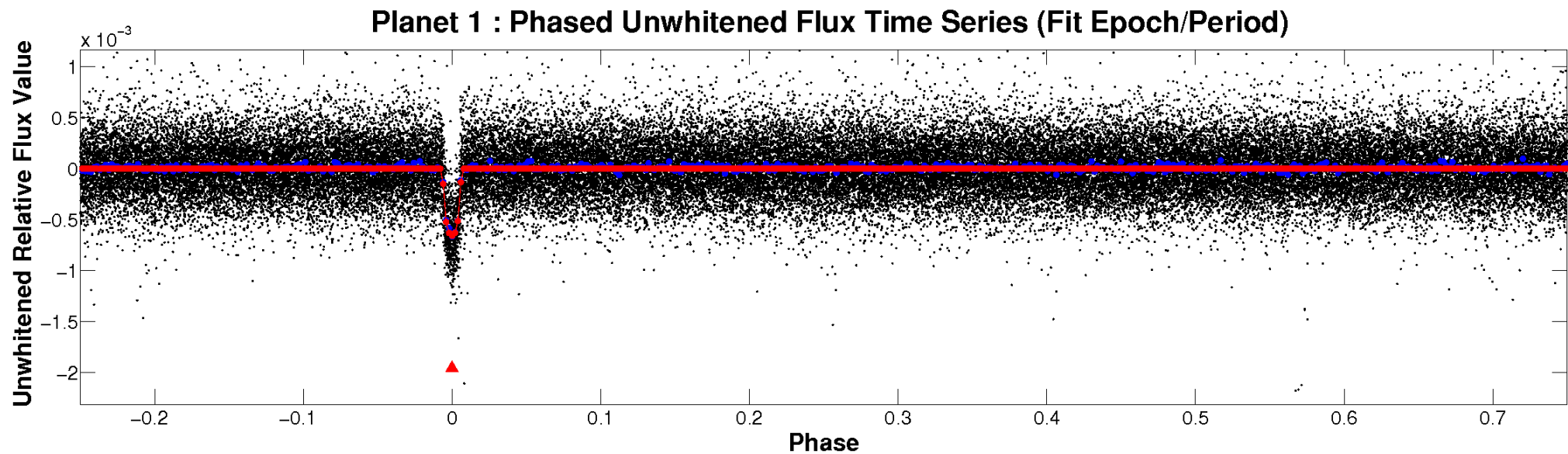


ALT Odd/Even

TCE 009631762-01

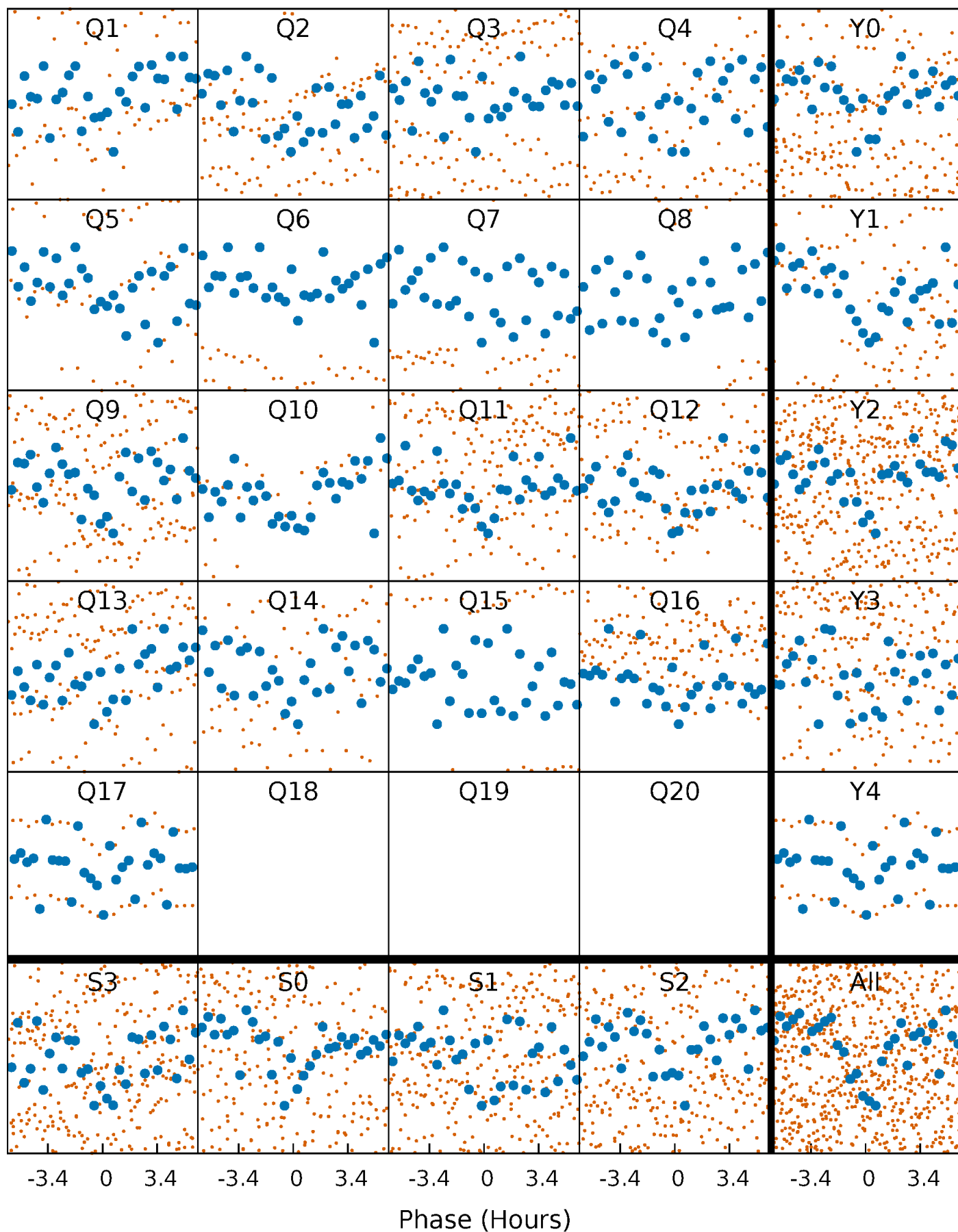


Non-Whitened Vs. Whitened Light Curve



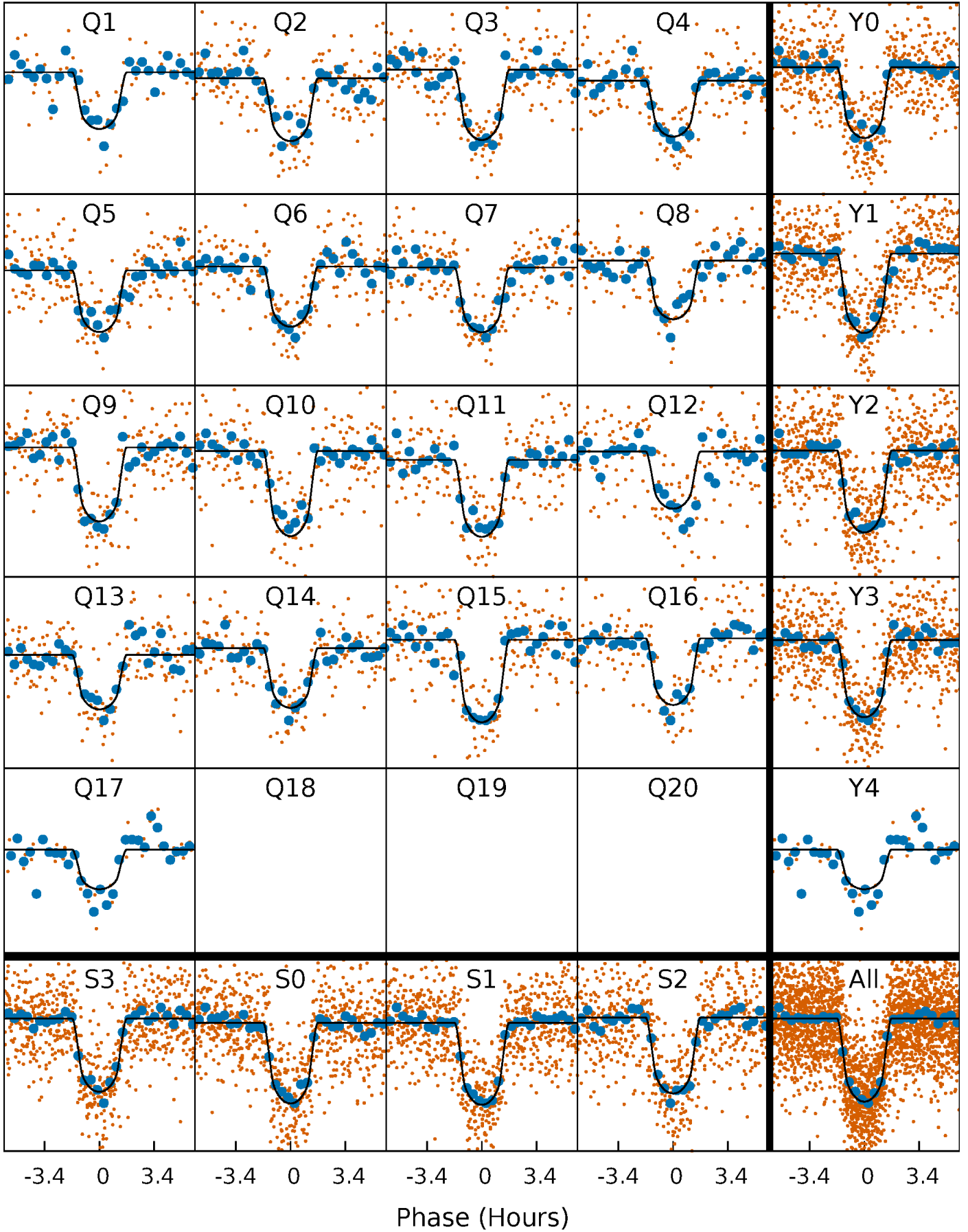
PDC Quarter-Phased Transit Curves

TCE 009631762-01 P= 10.355860 Days $T_0=134.257707$ (BKJD)



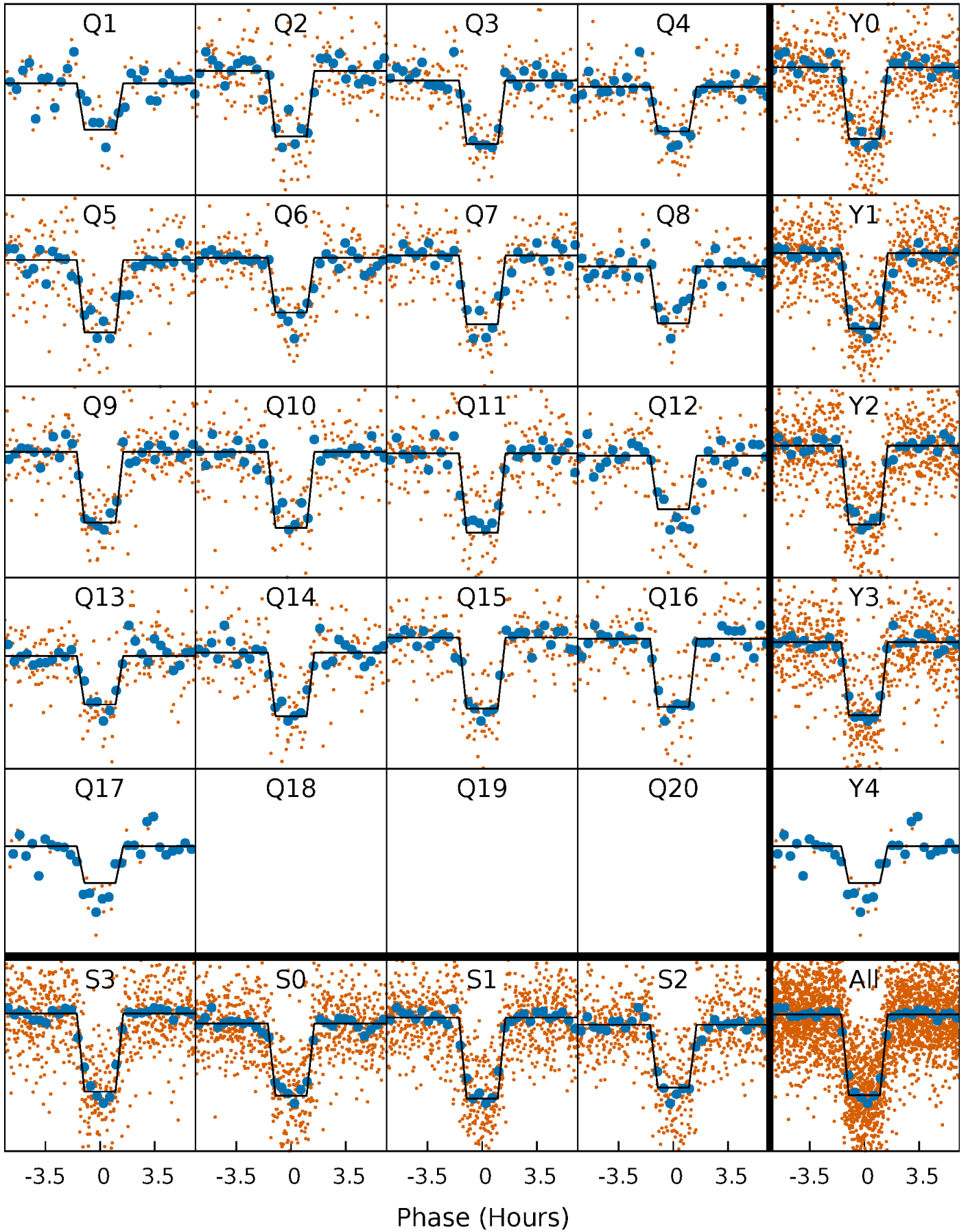
DV Quarter-Phased Transit Curves

TCE 009631762-01 P= 10.355860 Days $T_0=134.257707$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

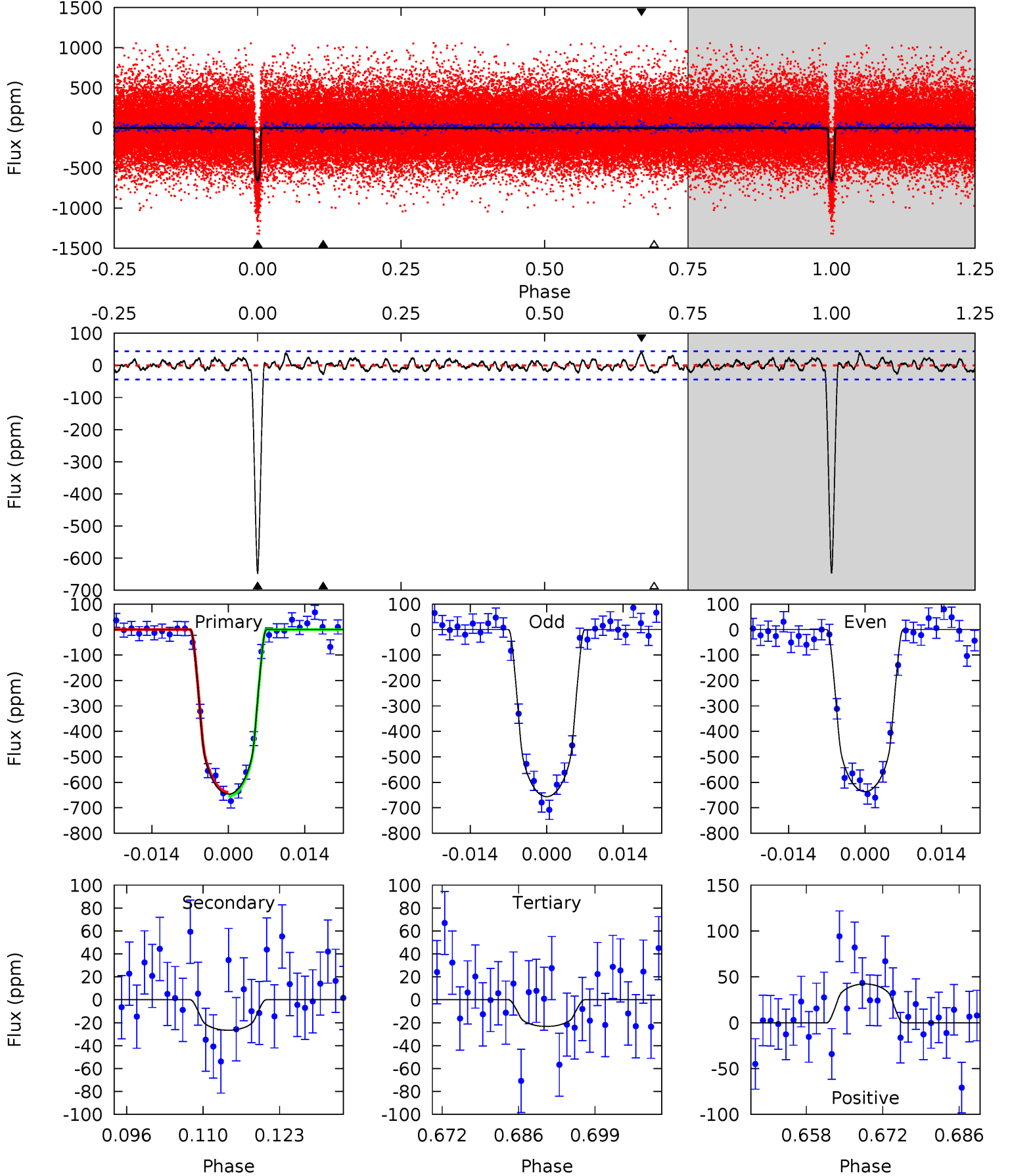
TCE 009631762-01 P= 10.355911 Days $T_0=134.253626$ (BKJD)



DV Model-Shift Uniqueness Test

009631762-01, P = 10.355860 Days, E = 123.901847 Days

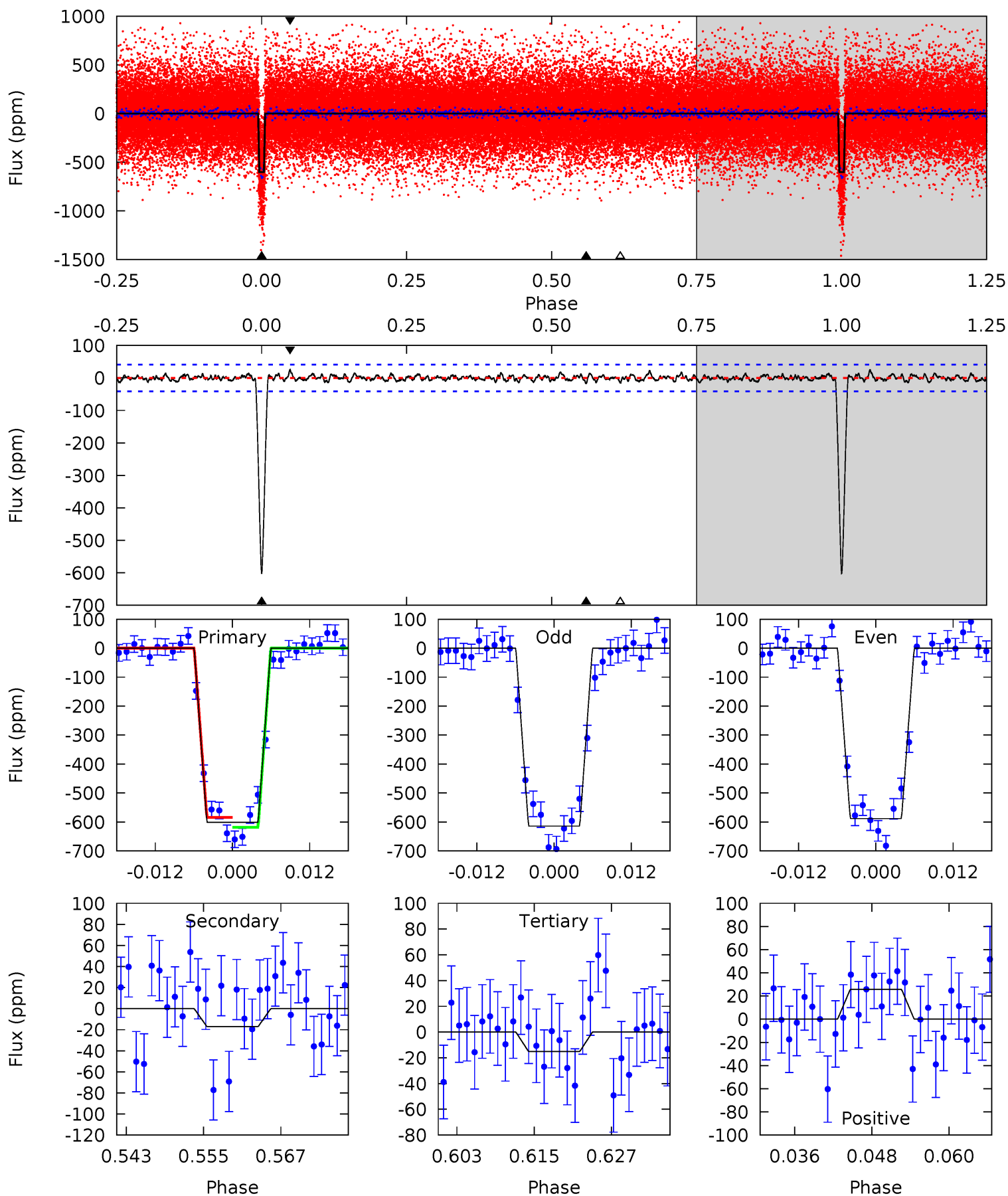
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
73.3	3.02	2.64	4.79	4.97	2.46	1.34	70.7	68.5	0.38	-1.77	1.11	0.99	0.06	0.85



Alt Model-Shift Uniqueness Test

009631762-01, P = 10.355911 Days, E = 123.897715 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
73.1	2.07	1.83	3.13	4.99	2.51	0.78	71.3	70.0	0.24	-1.06	1.57	1.00	0.04	2.10



Stellar Parameters For KIC 009631762

	$T_{\text{eff}}(K)$	$\log(g)$	$[\text{Fe}/\text{H}]$	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	4646^{+74}_{-83}	$4.539^{+0.054}_{-0.012}$	$0.340^{+0.150}_{-0.150}$	$0.778^{+0.019}_{-0.044}$	$0.764^{+0.030}_{-0.023}$	$2.286^{+0.461}_{-0.128}$
	+2%/-2%	+1%/-0%	+44%/-44%	+2%/-6%	+4%/-3%	+20%/-6%
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 009631762-01 / KOI 0588.01

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	A_{obs}
DV	-27 ± 9	$2.21^{+0.51}_{-0.44}$	859^{+16}_{-18}	2745^{+216}_{-195}	21^{+16}_{-9}
Alt.	-17 ± 8	$2.05^{+0.47}_{-0.46}$	861^{+16}_{-19}	2638^{+236}_{-221}	16^{+14}_{-8}

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

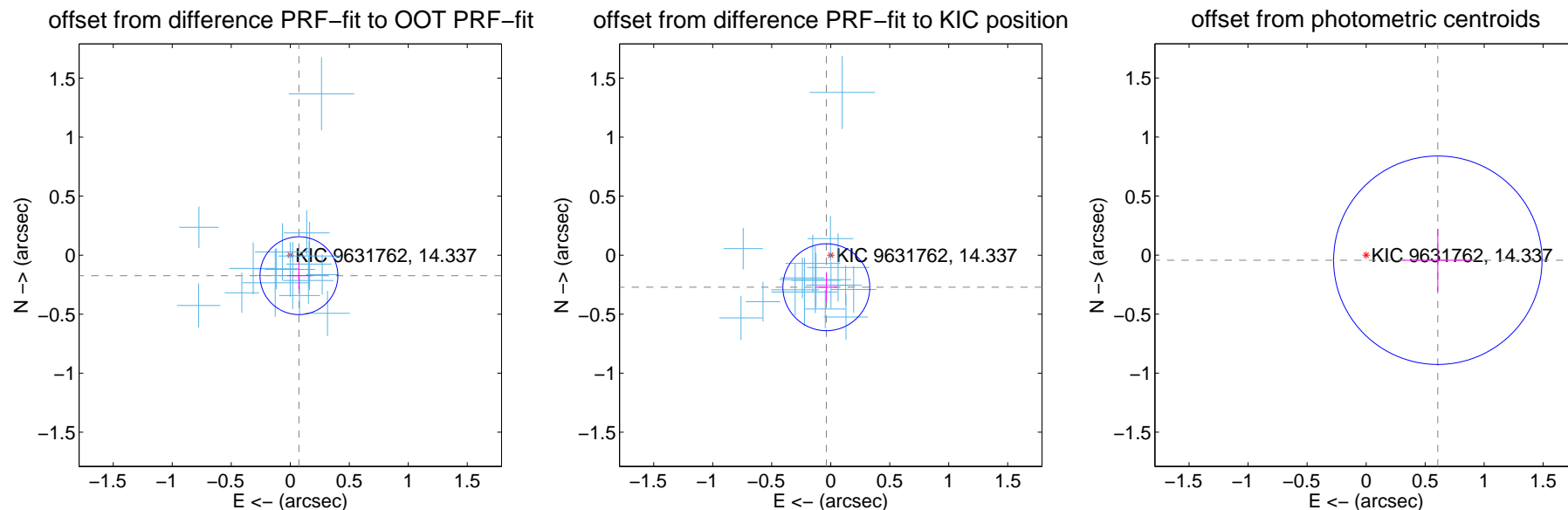
DV Centroid Data

Supplemental centroid analysis for 009631762-01. Kepler magnitude: 14.34. Transit SNR 49.04

There are 17 quarters with good PRF difference image offsets

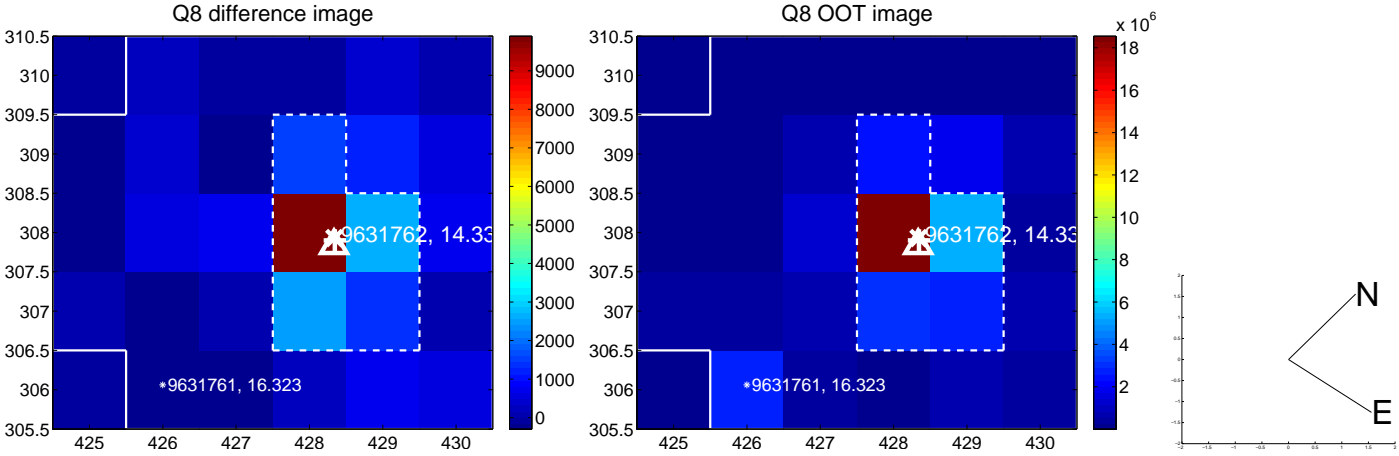
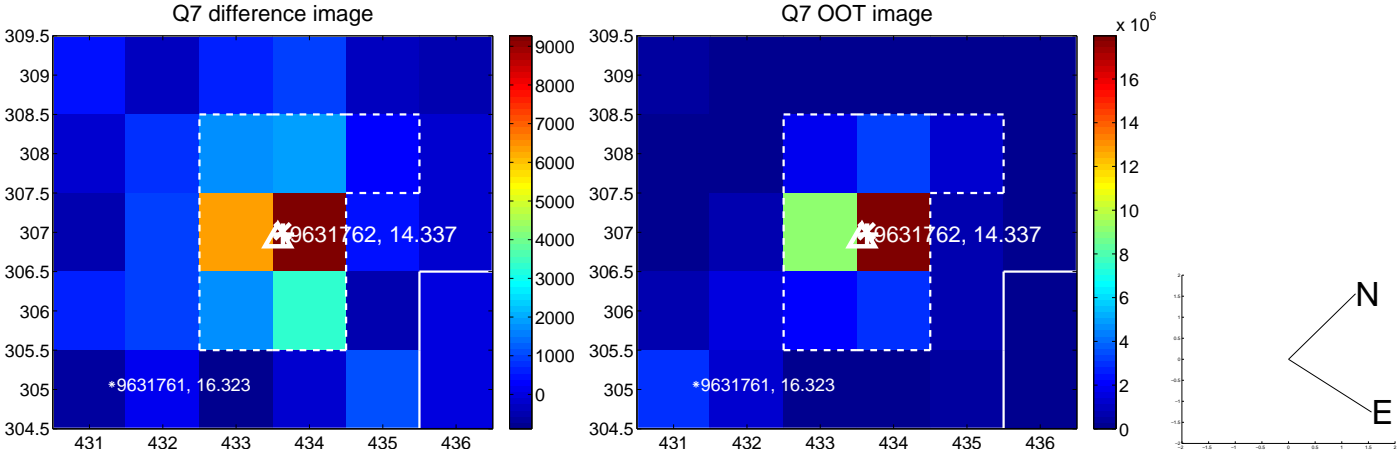
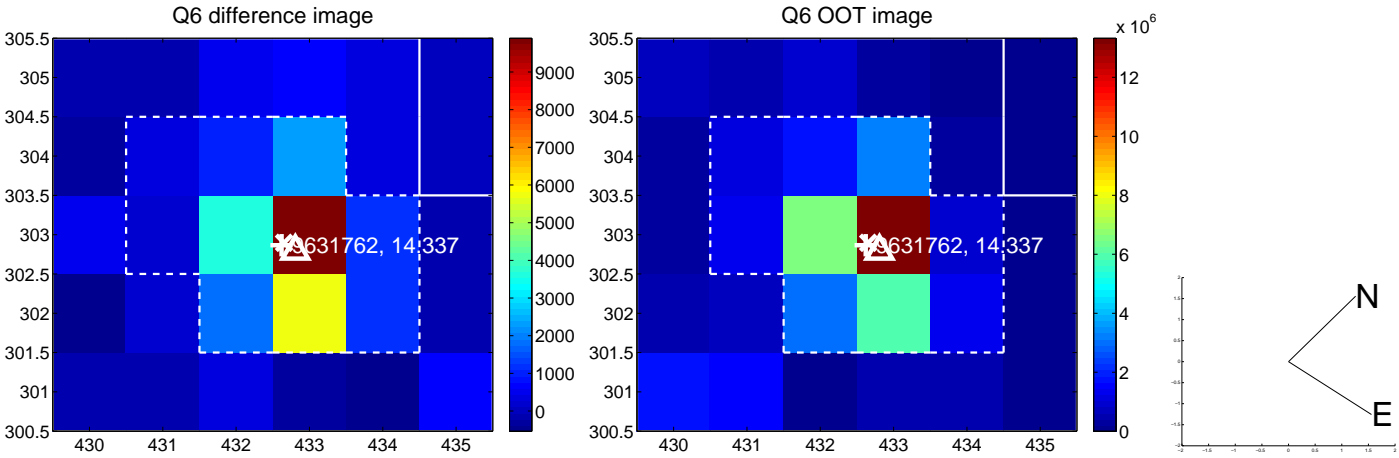
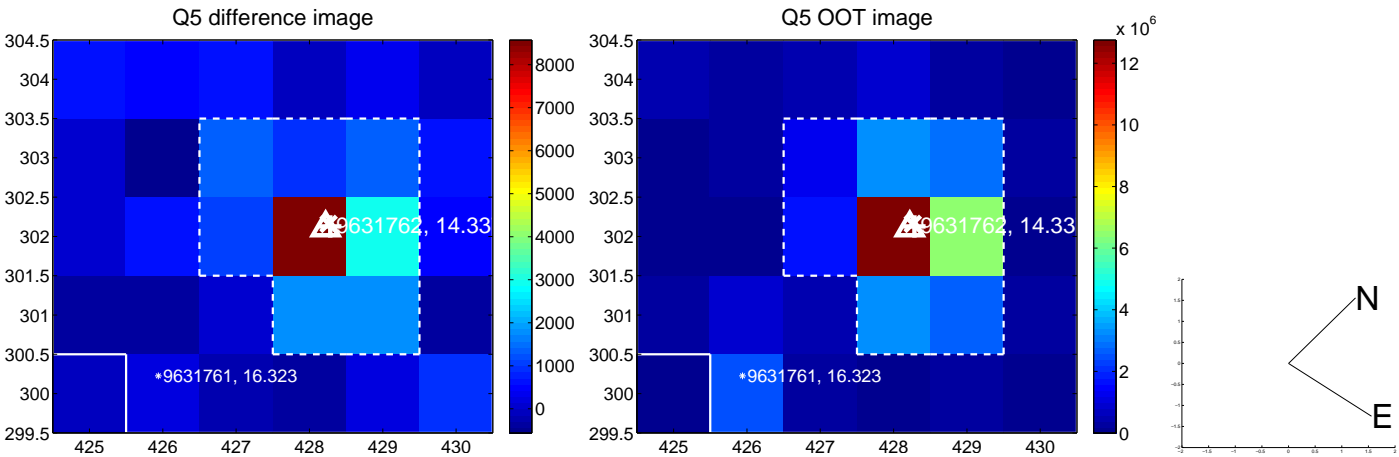
The direct PRF centroid is offset from the target star catalog position by about 0.16 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.189 ± 0.110	1.72	-0.074 ± 0.103	-0.174 ± 0.115
PRF-fit source offset from KIC position	0.274 ± 0.123	2.23	0.037 ± 0.095	-0.272 ± 0.121
photometric centroid source offset	0.61 ± 0.29	2.07	-0.61 ± 0.29	-0.04 ± 0.27

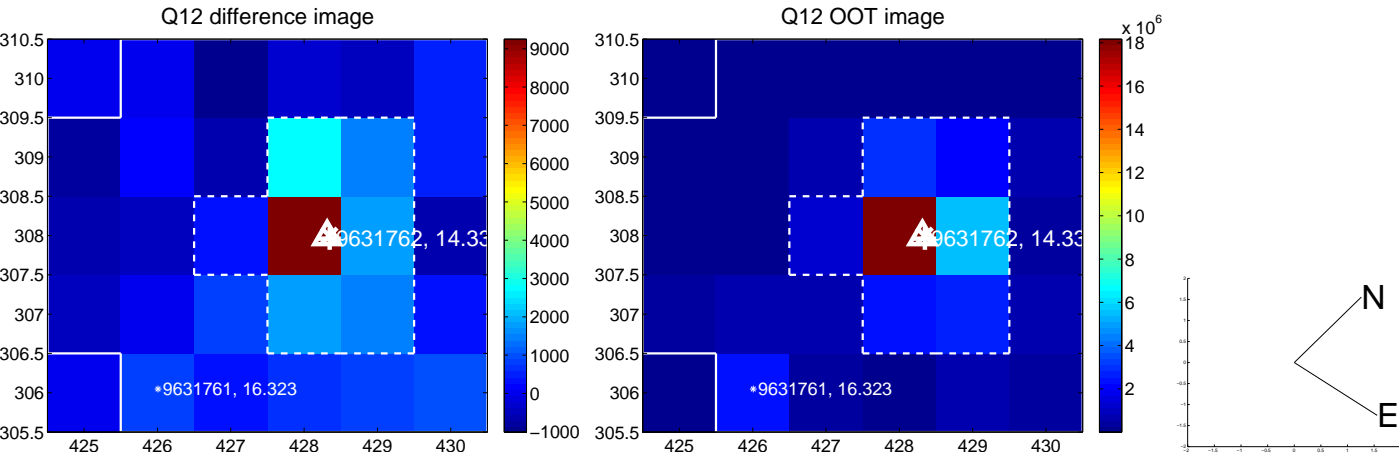
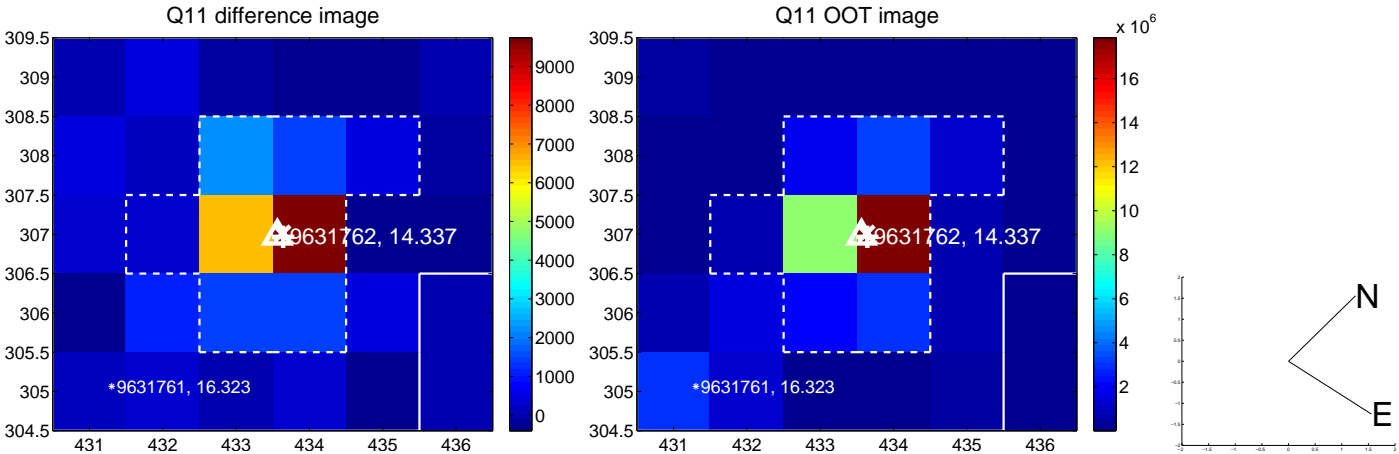
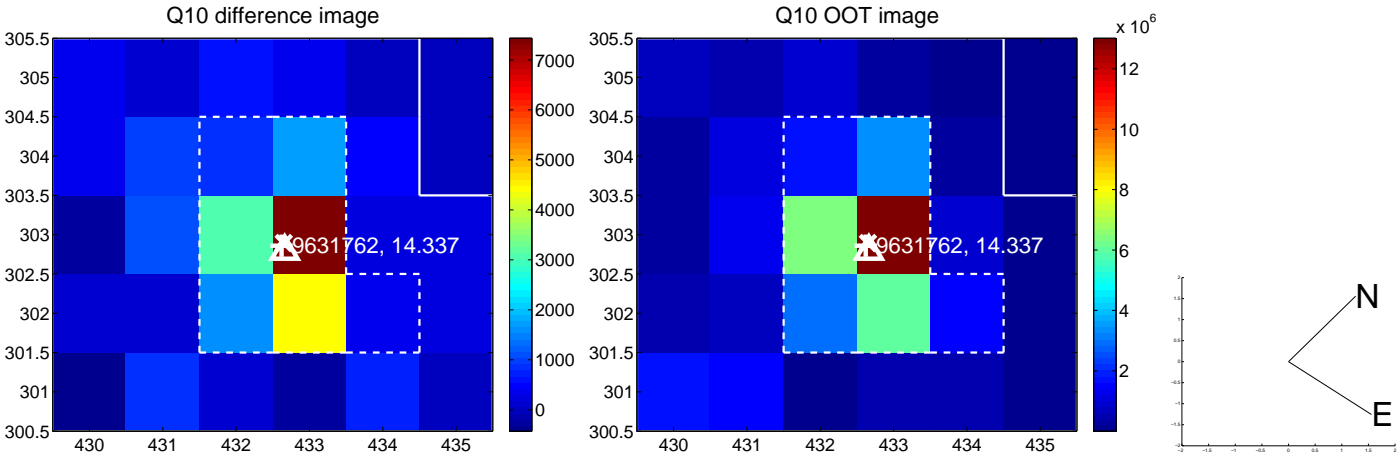
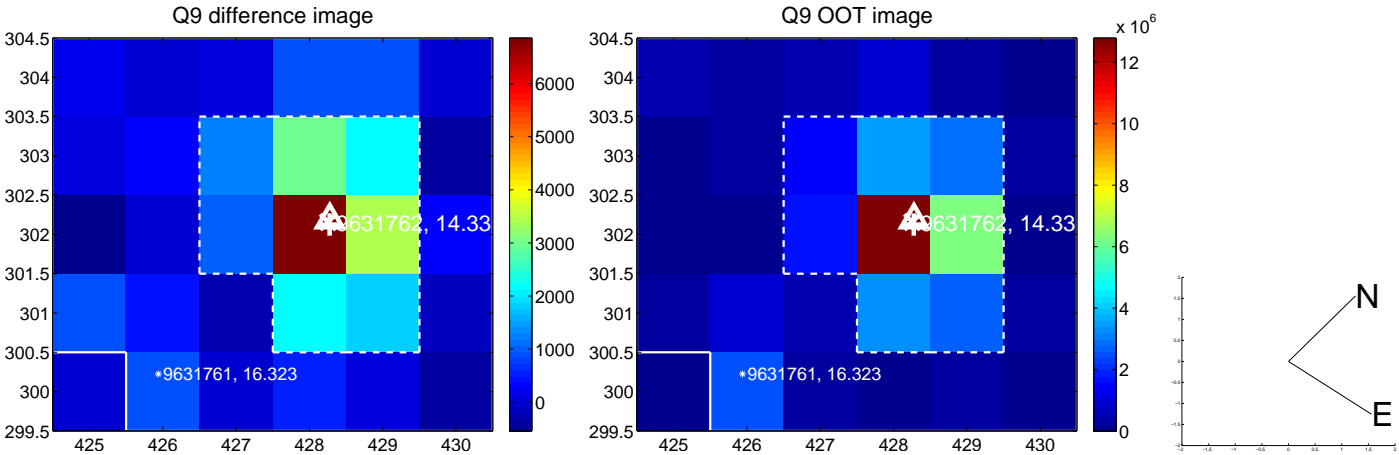


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses:** good quarterly centroid offsets; **Vermillion crosses:** bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

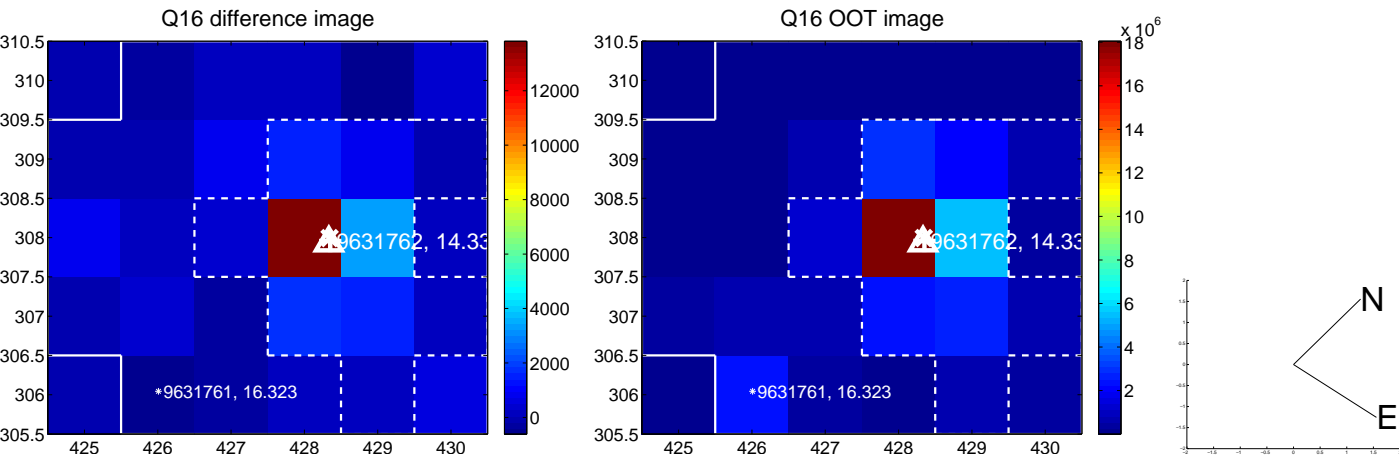
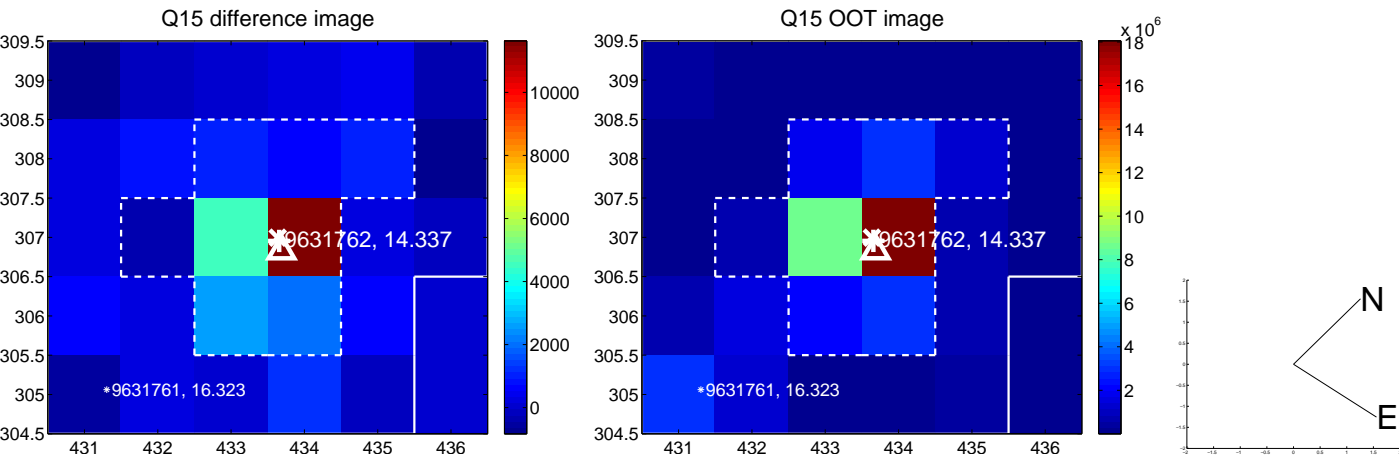
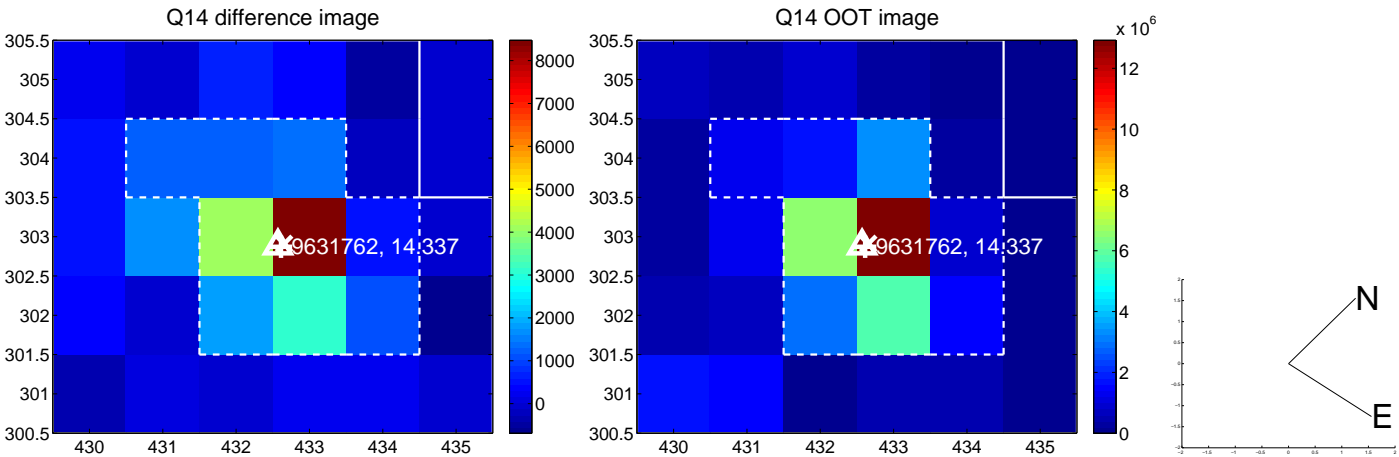
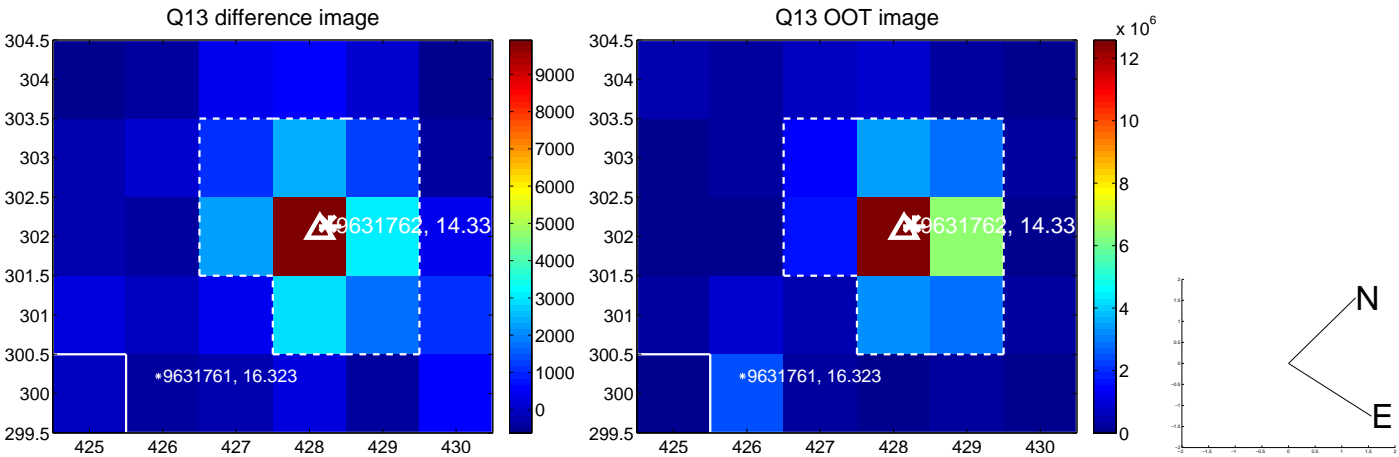
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



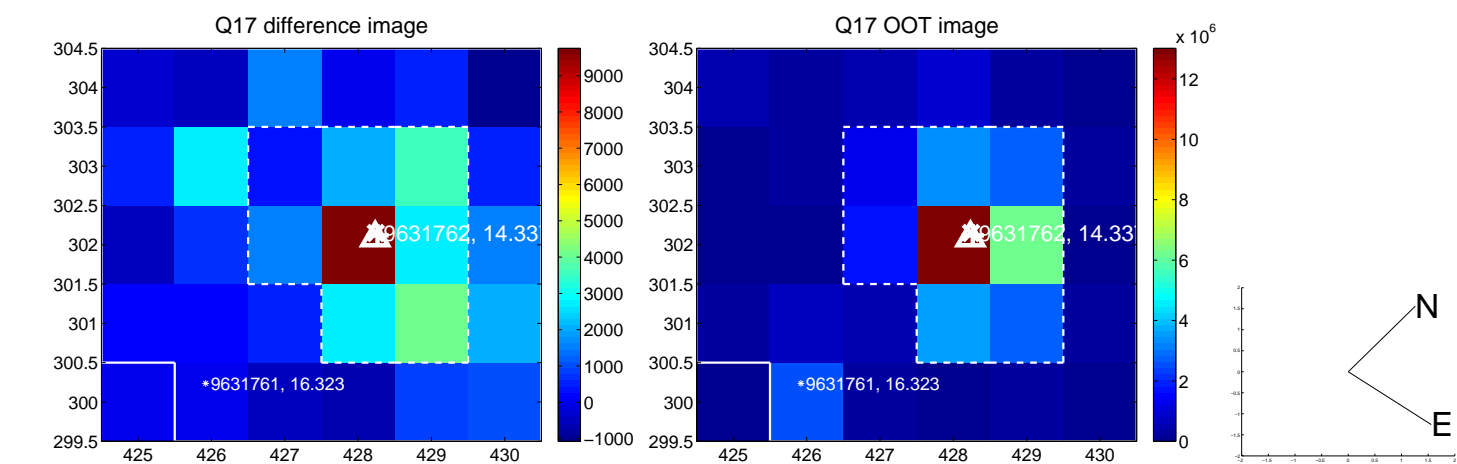
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



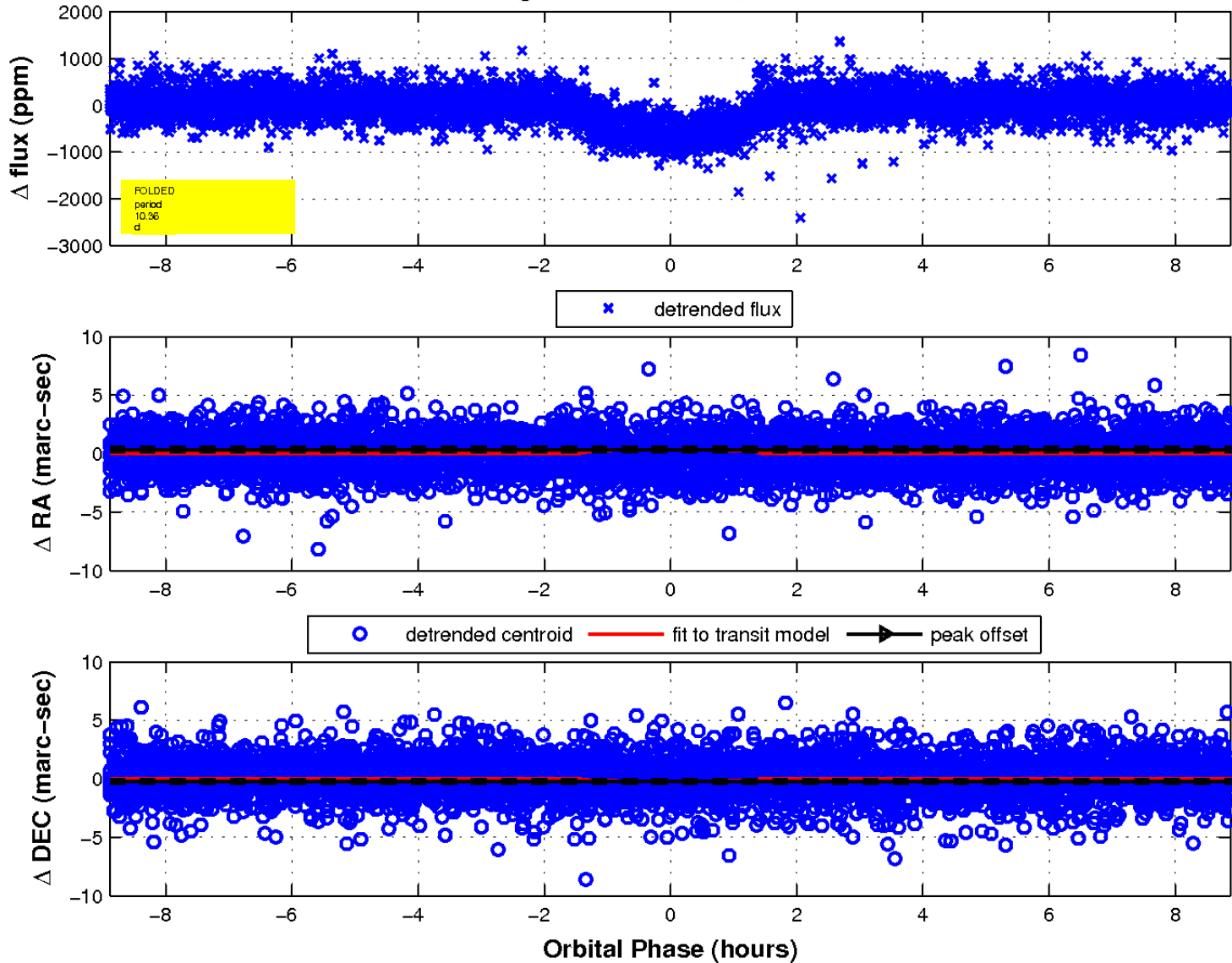
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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



fluxWeightedCentroids, Planet 1 of 1



UKIRT Image

