

KIC 007534267

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})
007534267-01	OBS	3147.01	39.442136	169.147701	193.1	6.844	11.9	13.6	1.90	5430	3.07	51.24

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
007534267-01	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.

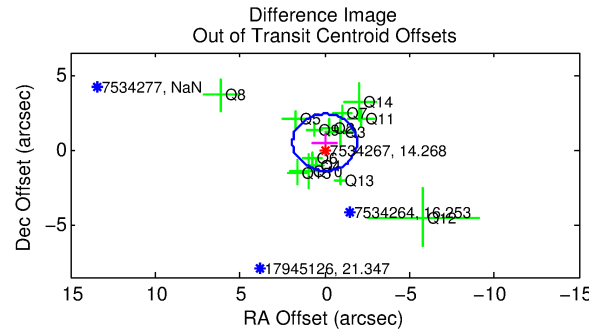
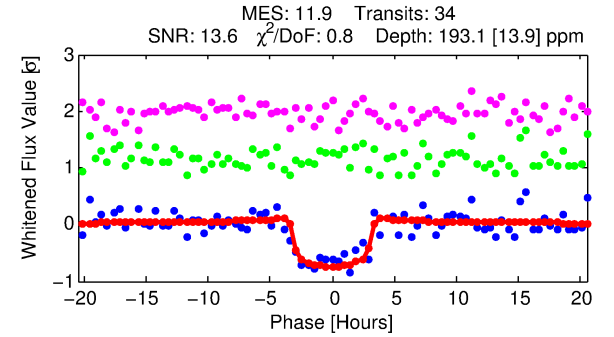
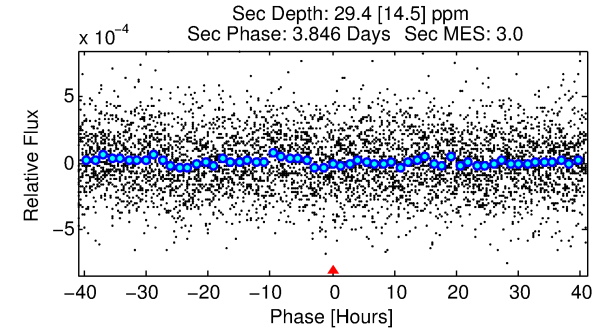
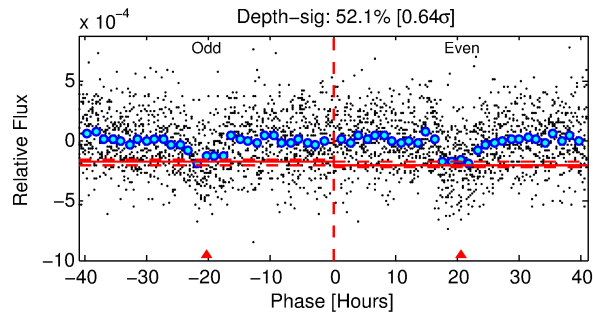
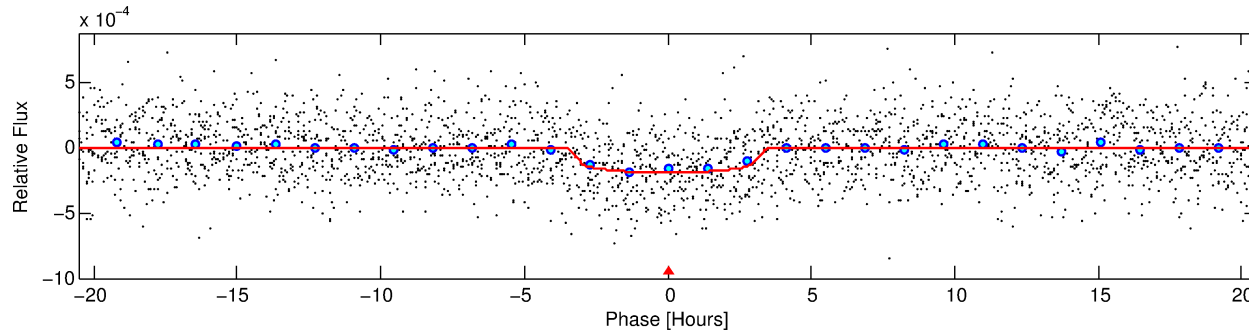
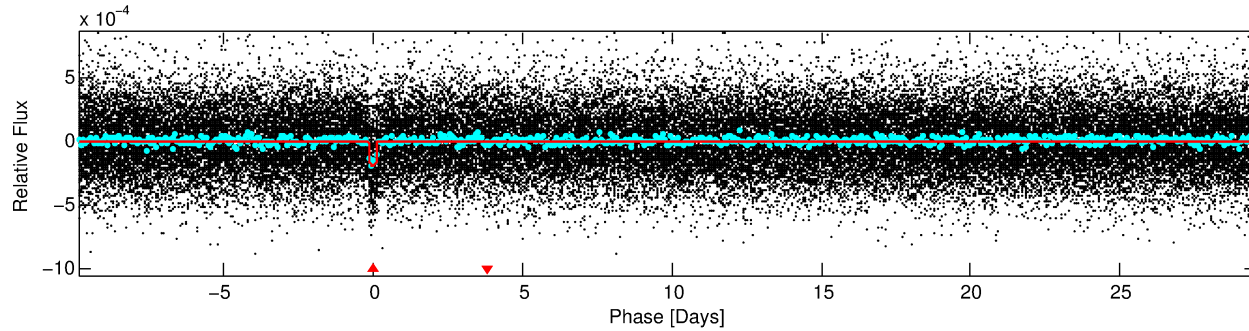
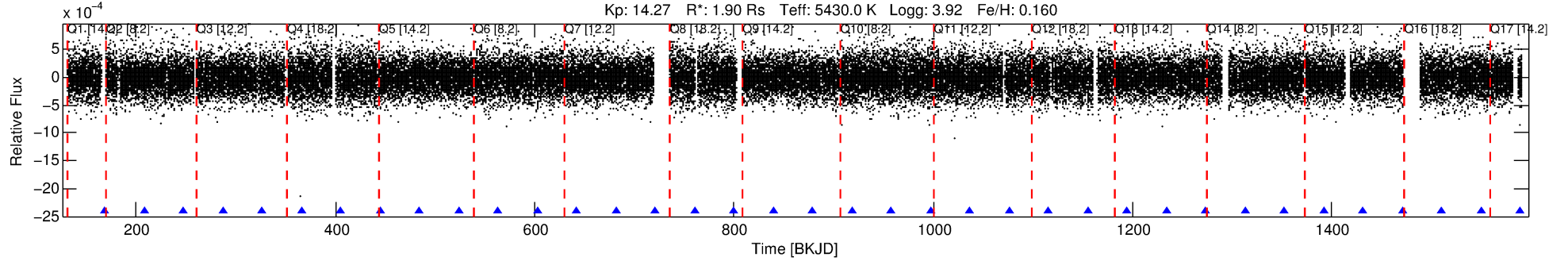
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 007534267-01

No Significant Match Found

DV One-Page Summary

KIC: 7534267 Candidate: 1 of 1 Period: 39.442 d
KOI: K03147.01 Corr: 0.954



DV Fit Results:

Period = 39.44214 [0.00043] d
Epoch = 169.1477 [0.0090] BKJD
Rp/R* = 0.0148 [0.0043]
a/R* = 23.60 [28.90]
b = 0.86 [0.37]
Seff = 51.24 [17.25]
Teq = 682 [57] K
Rp = 3.07 [1.17] Re
a = 0.2345 [0.0510] AU
Ag = 94.56 [78.76] [1.19 σ]
Teffp = 3289 [630] K [4.12 σ]

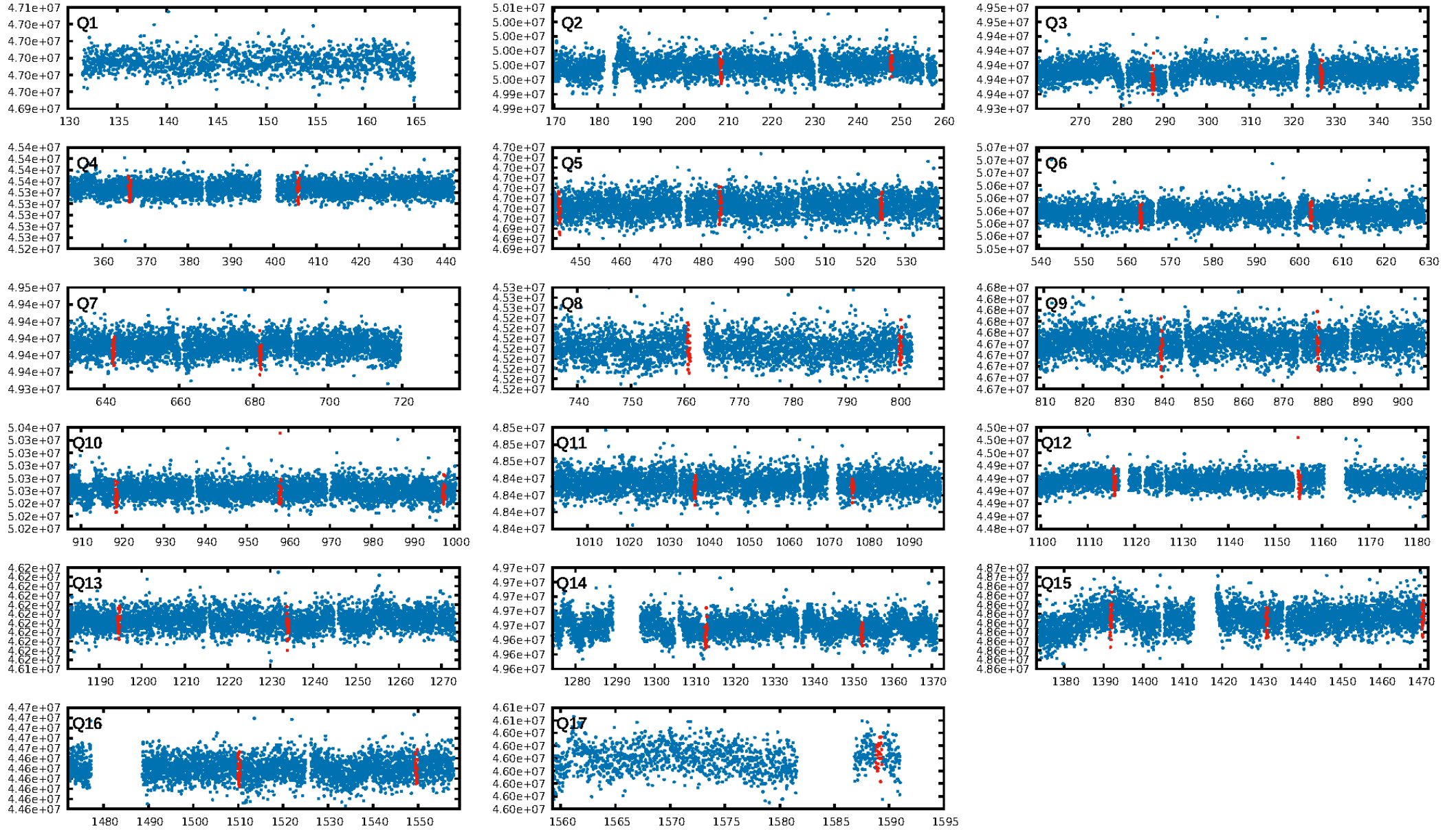
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: 92.4%
ModelChiSquareGof-sig: 100.0%
Bootstrap-pfa: 3.01e-31
RollingBand-fgt: 1.00 [33/33]
GhostDiagnostic-chr: 1.925
Centroid-sig: 0.3%
Centroid-so: 1.618 arcsec [2.01 σ]
OotOffset-rm: 0.486 arcsec [0.77 σ]
KicOffset-rm: 0.068 arcsec [0.09 σ]
OotOffset-st: 4/4/3/3 [14]
KicOffset-st: 4/4/3/3 [14]
DiffImageQuality-fgm: 0.57 [8/14]
DiffImageOverlap-fno: 1.00 [15/15]

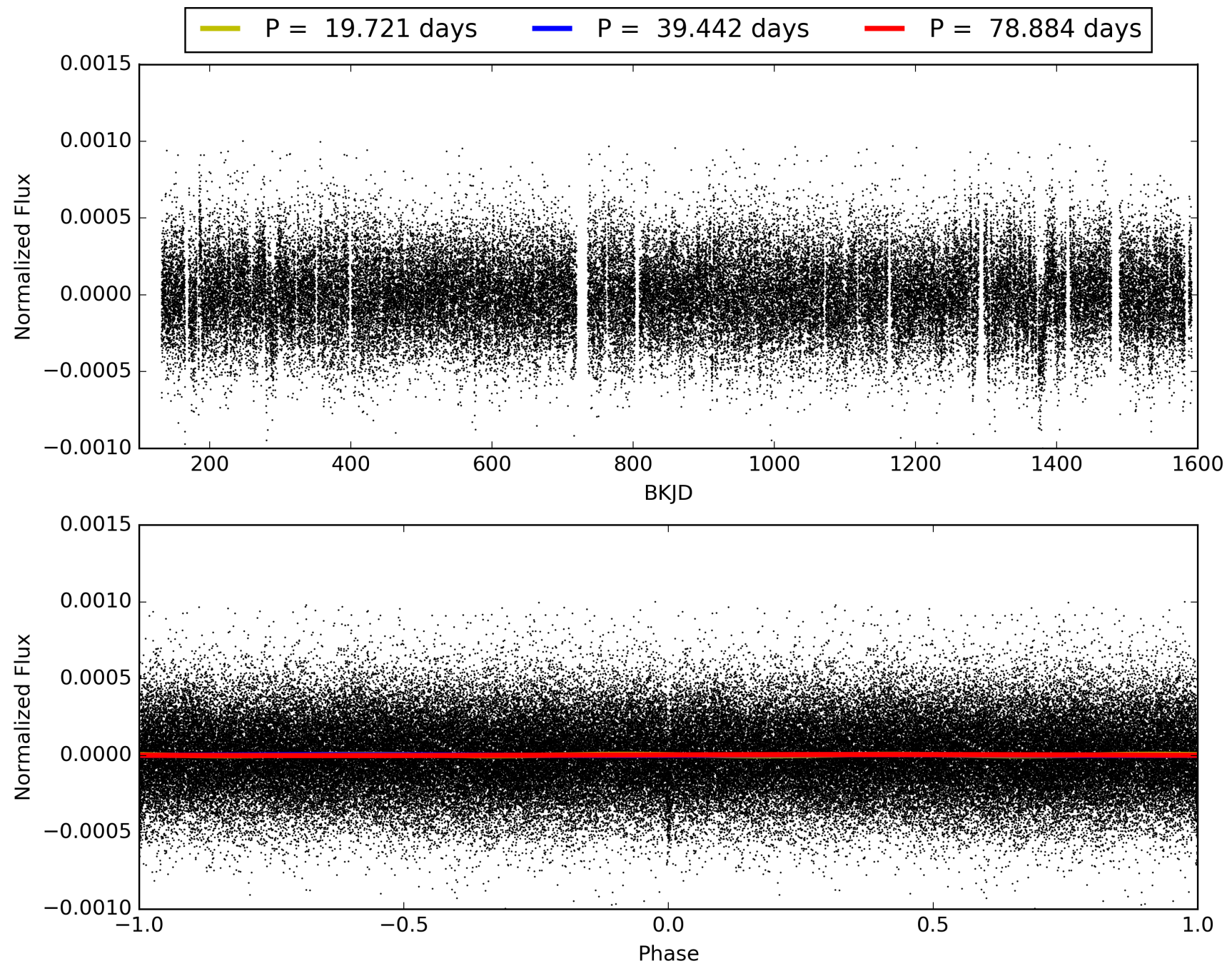
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 31-Jan-2016 03:25:23 Z

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

TCE 007534267-01, PDC Light Curves

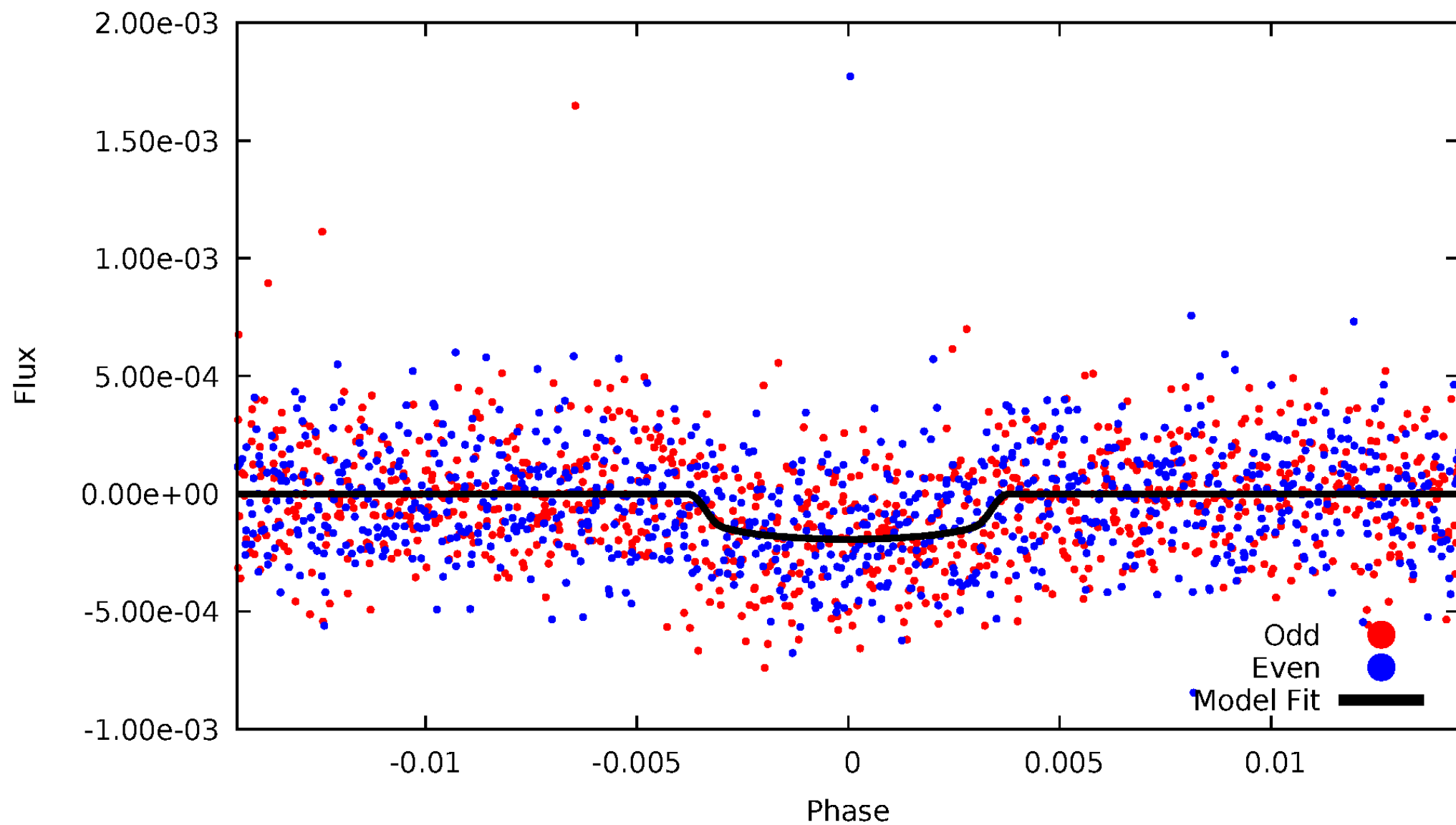


TCE 007534267-01



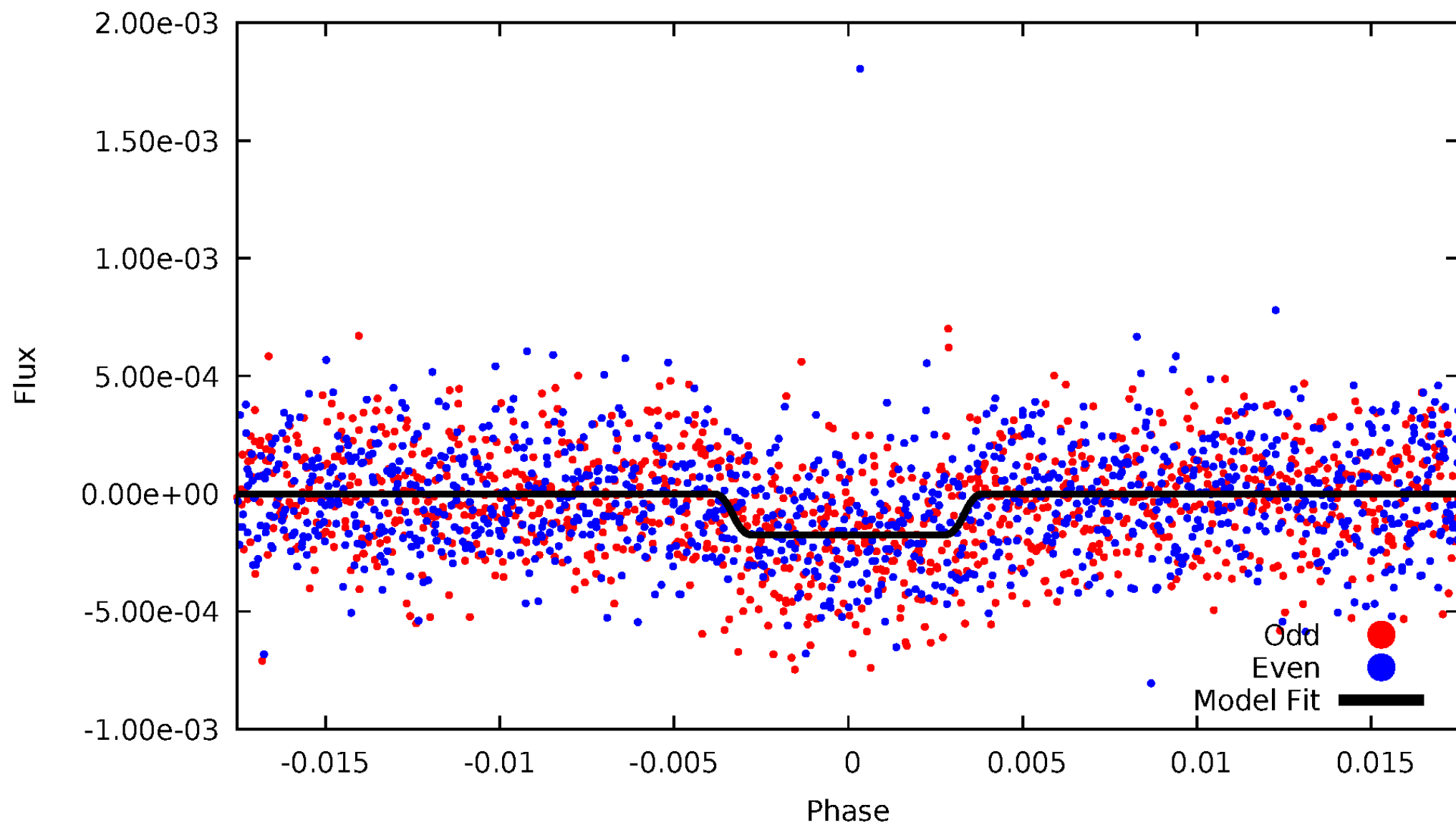
DV Odd/Even

TCE 007534267-01



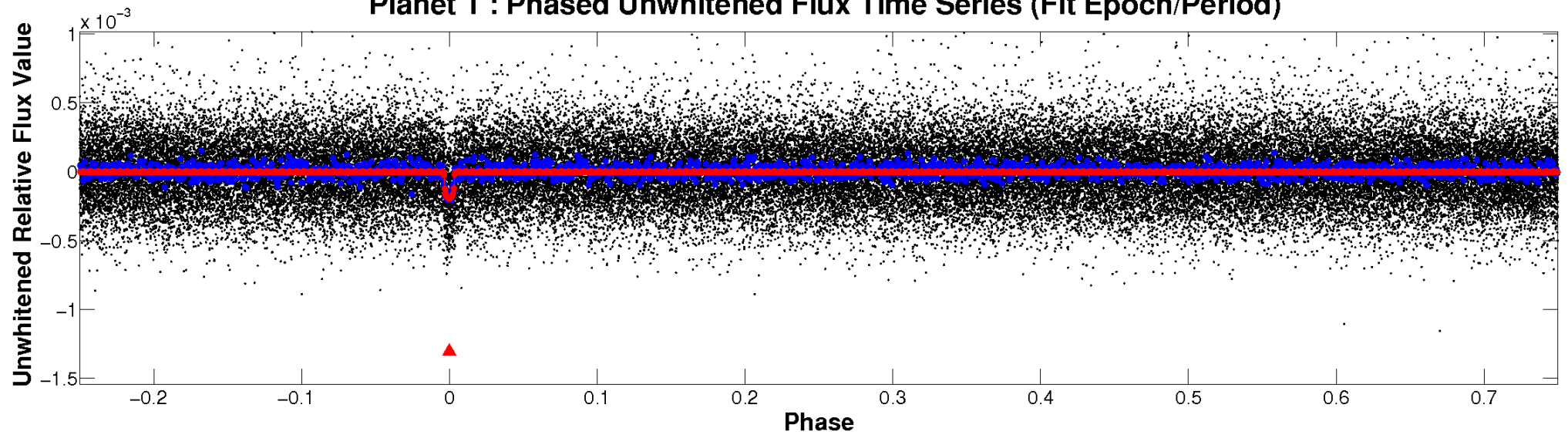
ALT Odd/Even

TCE 007534267-01

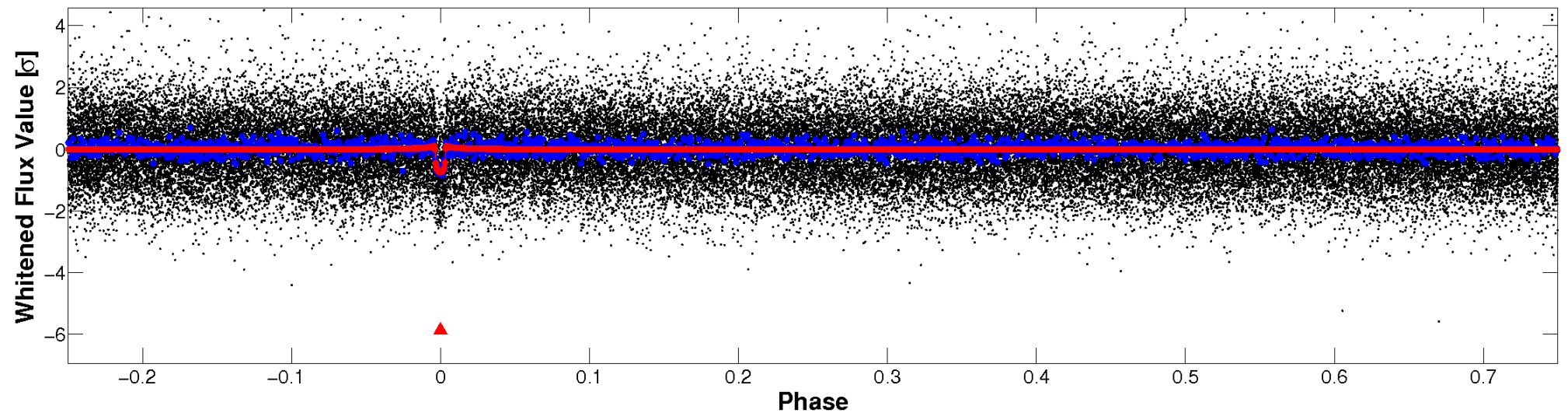


Non-Whitened Vs. Whitened Light Curve

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

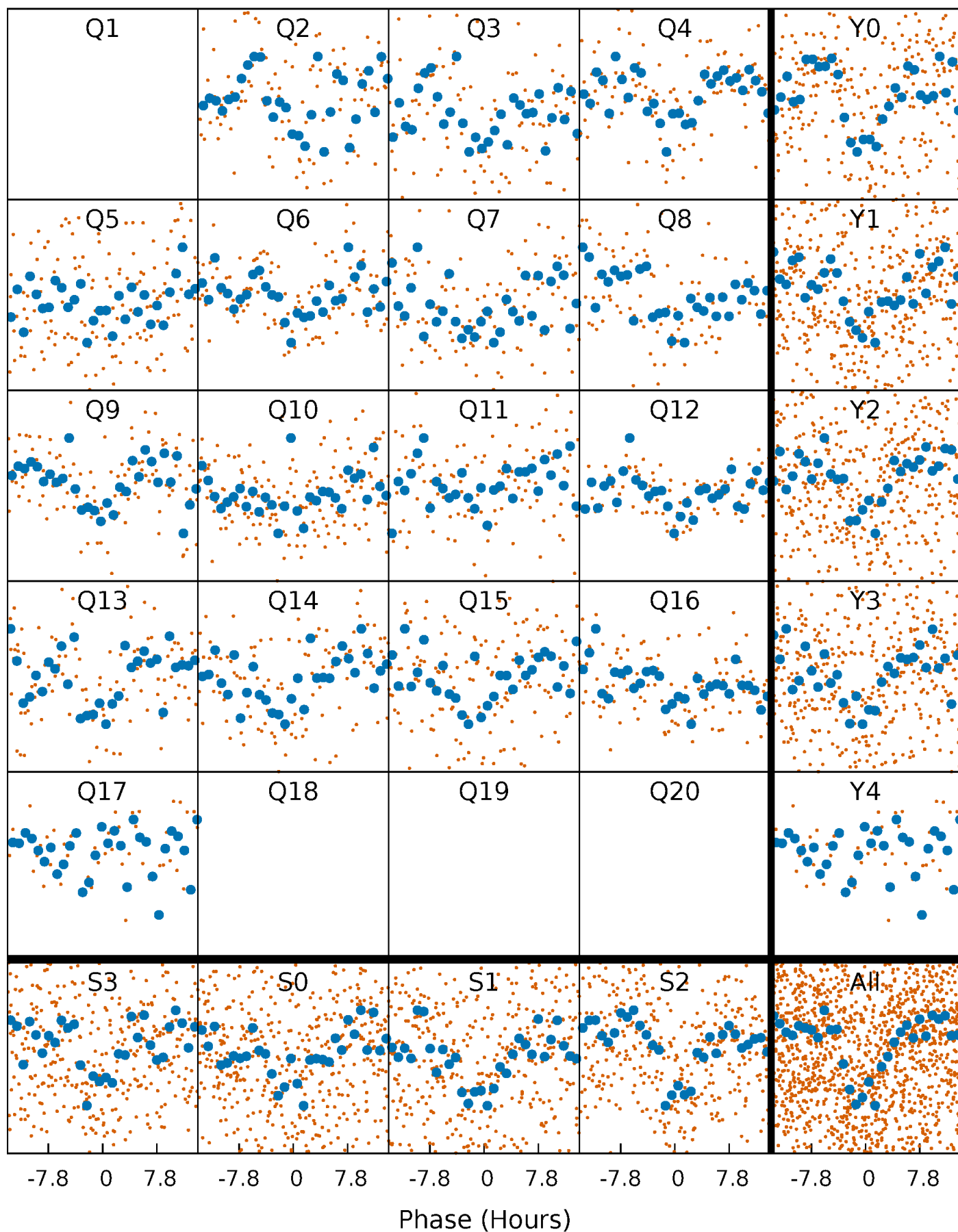


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



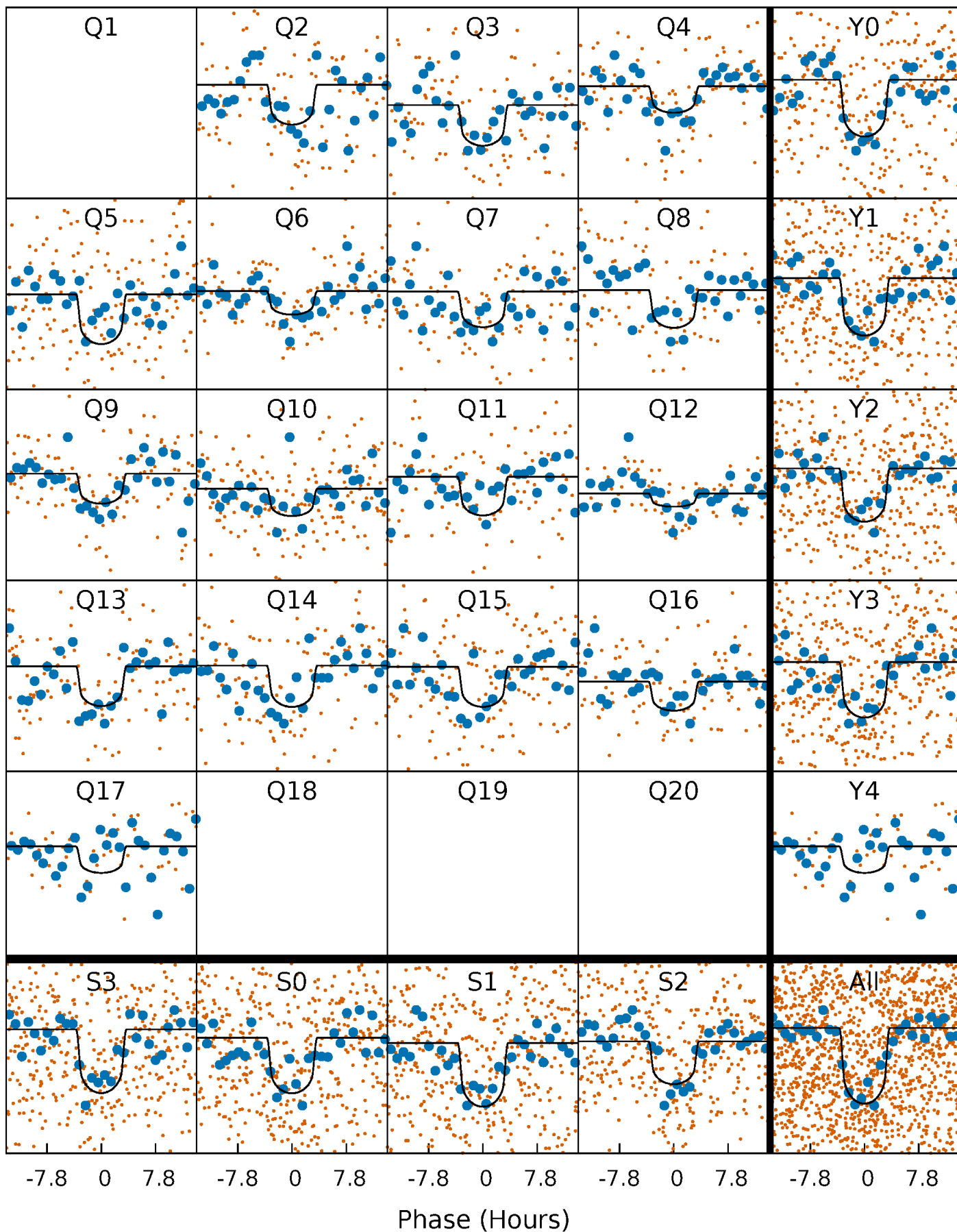
PDC Quarter-Phased Transit Curves

TCE 007534267-01 P= 39.442136 Days $T_0=169.147701$ (BKJD)



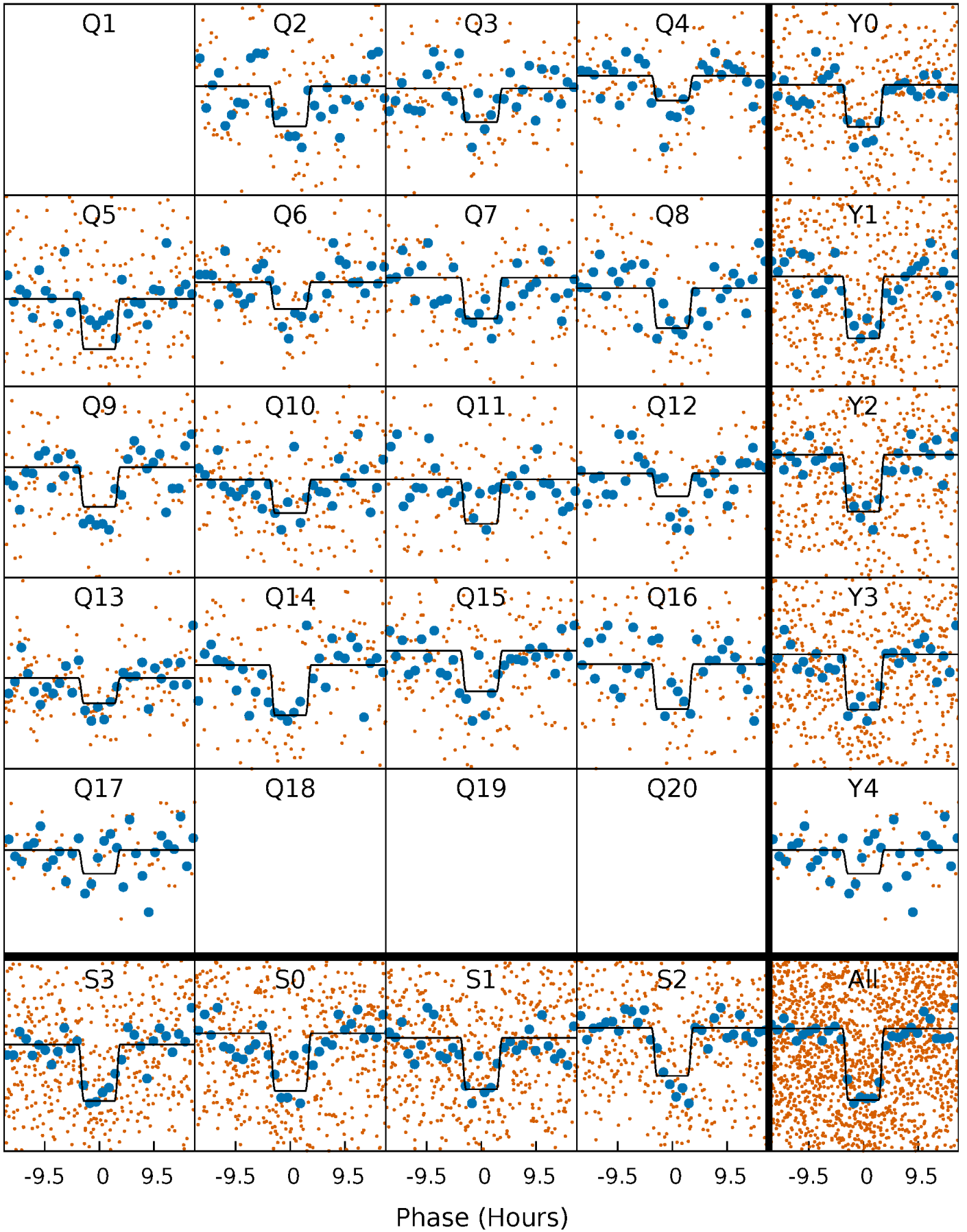
DV Quarter-Phased Transit Curves

TCE 007534267-01 P= 39.442136 Days $T_0=169.147701$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

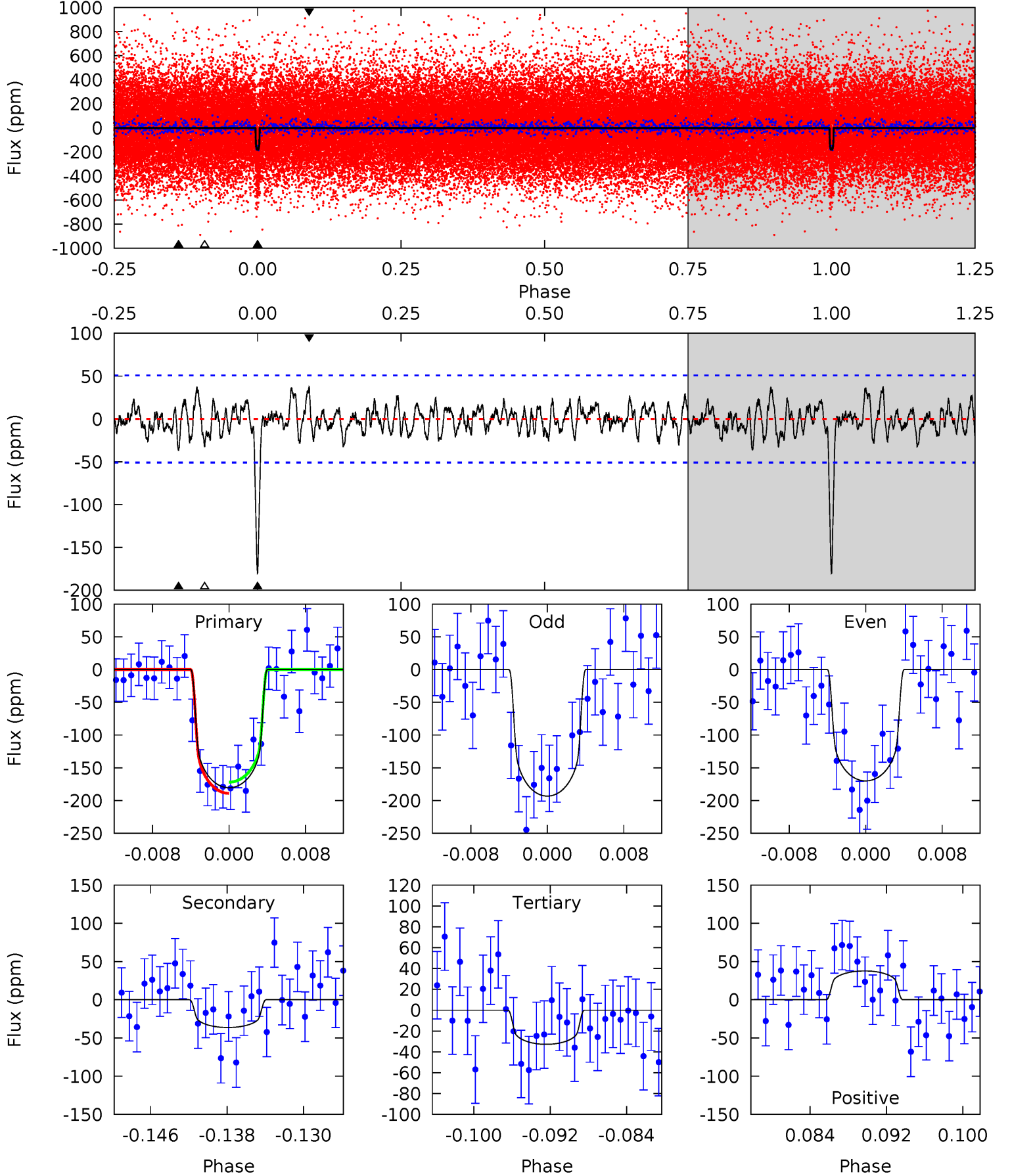
TCE 007534267-01 P= 39.441596 Days $T_0=169.146868$ (BKJD)



DV Model-Shift Uniqueness Test

007534267-01, P = 39.442136 Days, E = 129.705565 Days

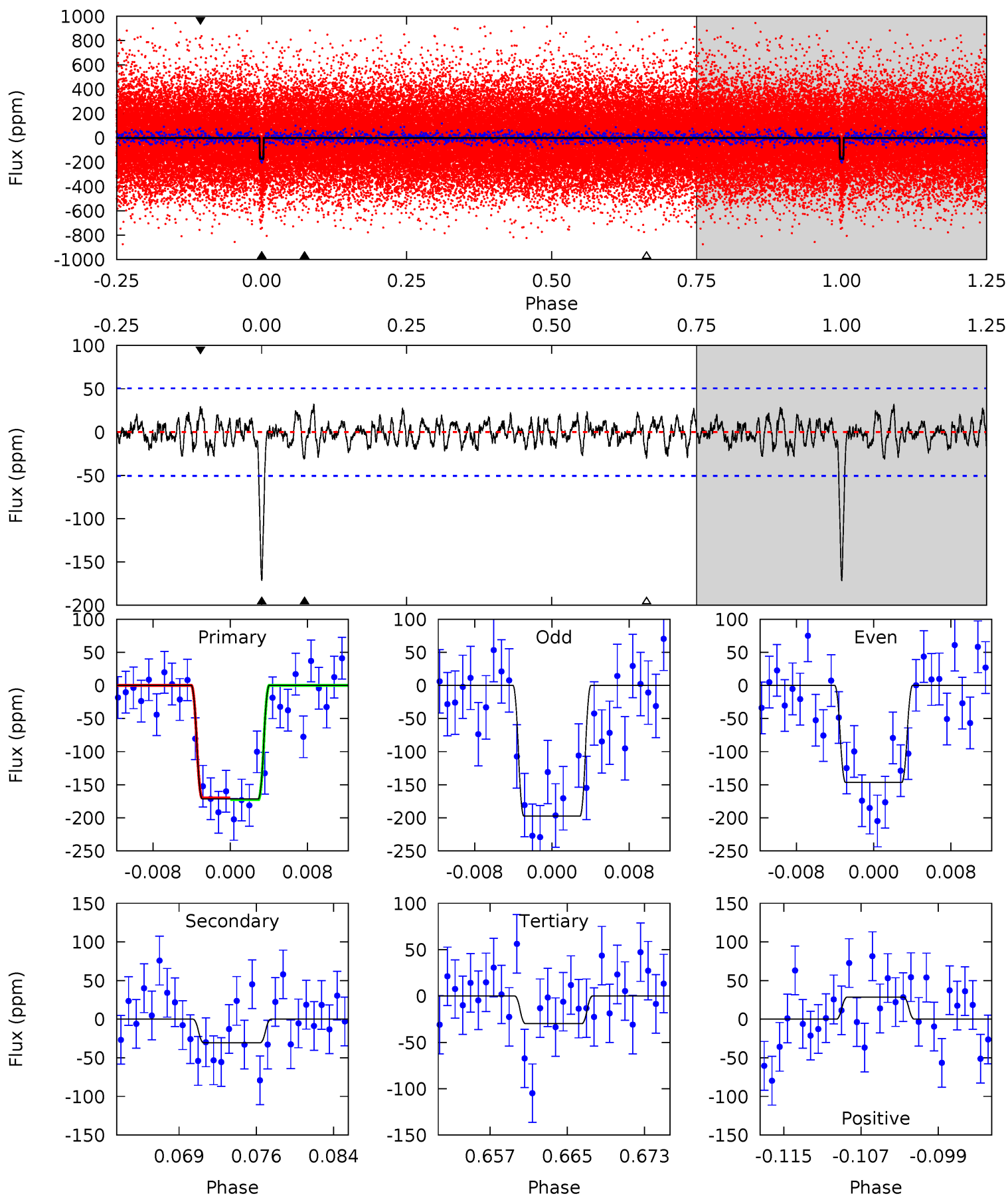
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
18.0	3.62	3.27	3.76	5.08	2.67	1.27	14.7	14.2	0.35	-0.14	1.16	1.03	0.17	0.85



Alt Model-Shift Uniqueness Test

007534267-01, P = 39.441596 Days, E = 129.705272 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
17.2	3.08	3.00	2.87	5.08	2.67	1.08	14.2	14.3	0.08	0.21	2.54	1.08	0.16	0.14



Stellar Parameters For KIC 007534267

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	$M(M_{\odot})$	p_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	5430^{+81}_{-73}	$3.923^{+0.188}_{-0.101}$	$0.160^{+0.150}_{-0.100}$	$1.902^{+0.309}_{-0.464}$	$1.106^{+0.120}_{-0.147}$	$0.226^{+0.238}_{-0.073}$
	+1%/-1%	+5%/-3%	+94%/-62%	+16%/-24%	+11%/-13%	+105%/-32%
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 007534267-01 / KOI 3147.01

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	-36 ± 10	$2.96^{+1.04}_{-0.92}$	951^{+43}_{-60}	3824^{+526}_{-383}	125^{+136}_{-62}
Alt.	-31 ± 10	$2.65^{+0.98}_{-0.88}$	949^{+43}_{-54}	3845^{+653}_{-426}	129^{+172}_{-69}

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

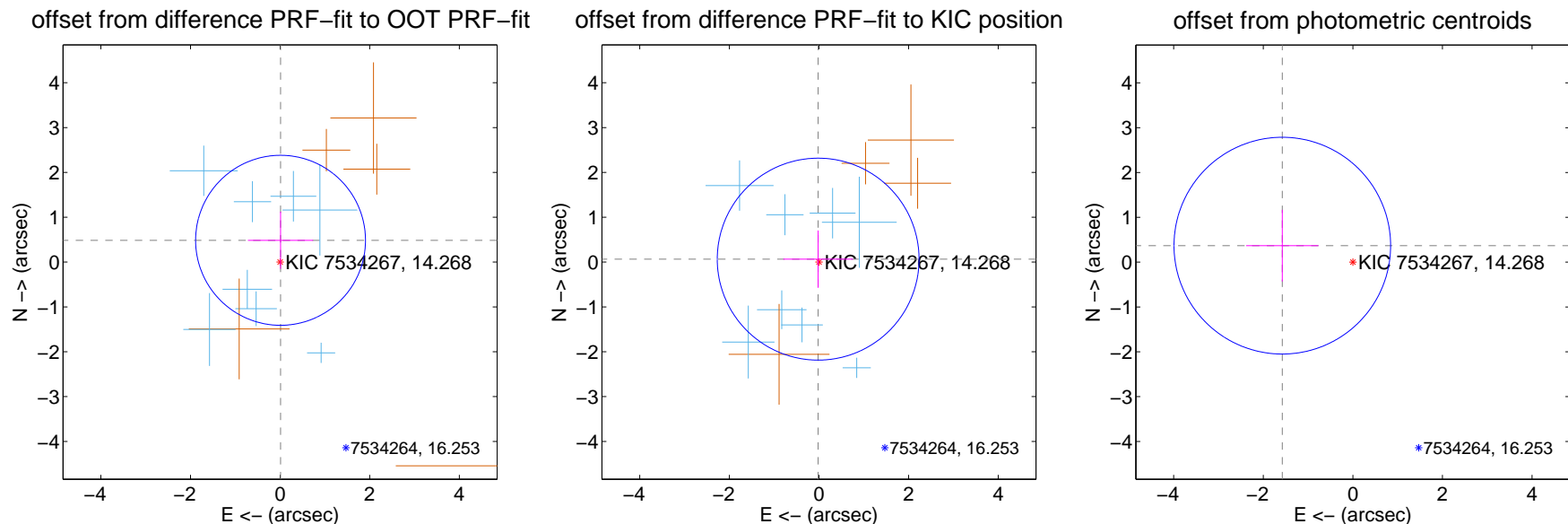
DV Centroid Data

Supplemental centroid analysis for 007534267-01. Kepler magnitude: 14.27. Transit SNR 13.58

There are 8 quarters with good PRF difference image offsets

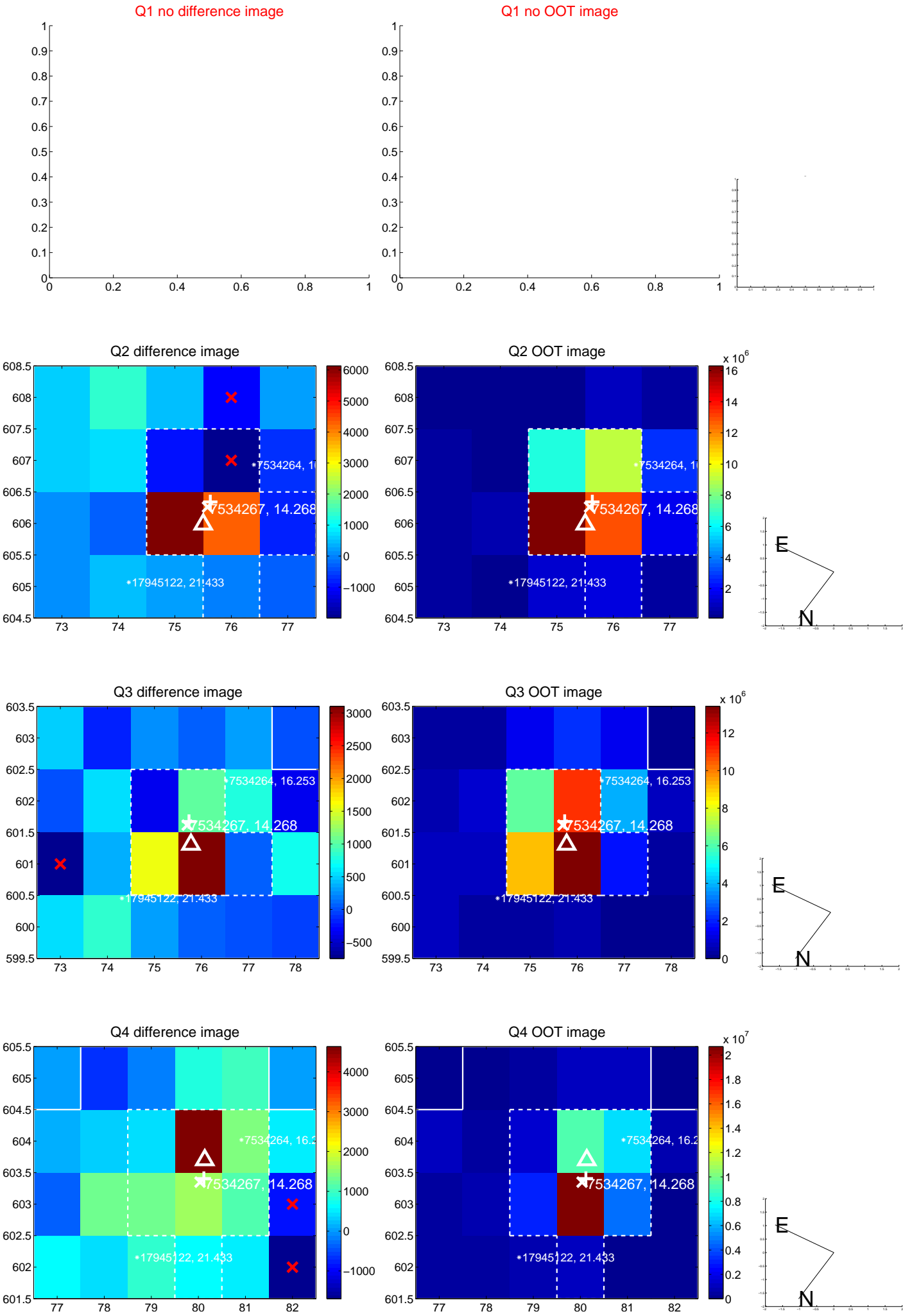
The direct PRF centroid is offset from the target star catalog position by about 0.28 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.486 ± 0.632	0.77	-0.010 ± 0.727	0.486 ± 0.638
PRF-fit source offset from KIC position	0.068 ± 0.751	0.09	0.019 ± 0.777	0.066 ± 0.640
photometric centroid source offset	1.62 ± 0.81	2.01	1.58 ± 0.81	0.37 ± 0.80

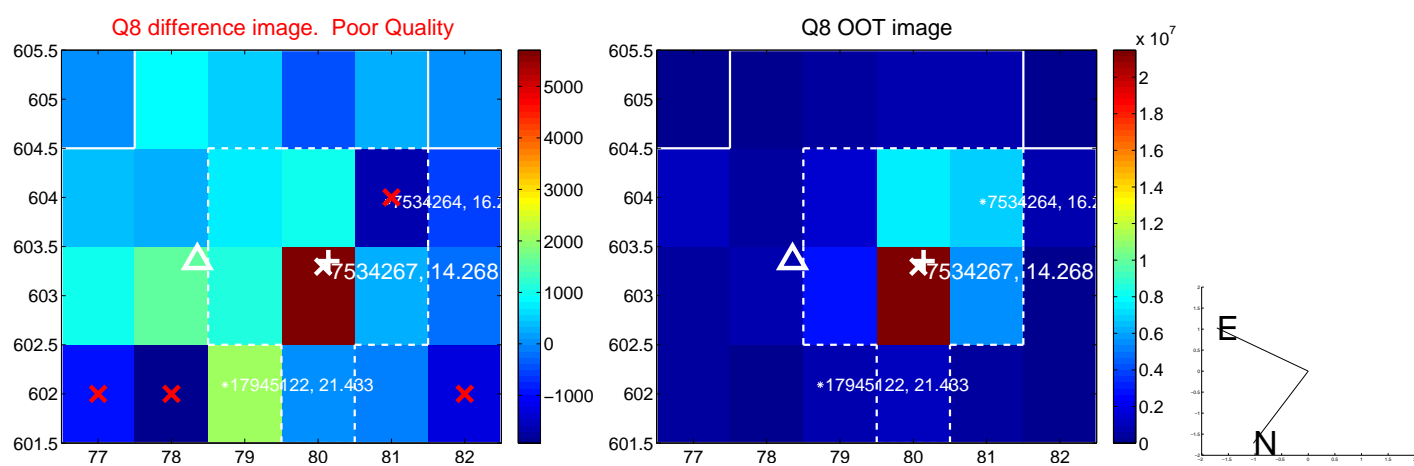
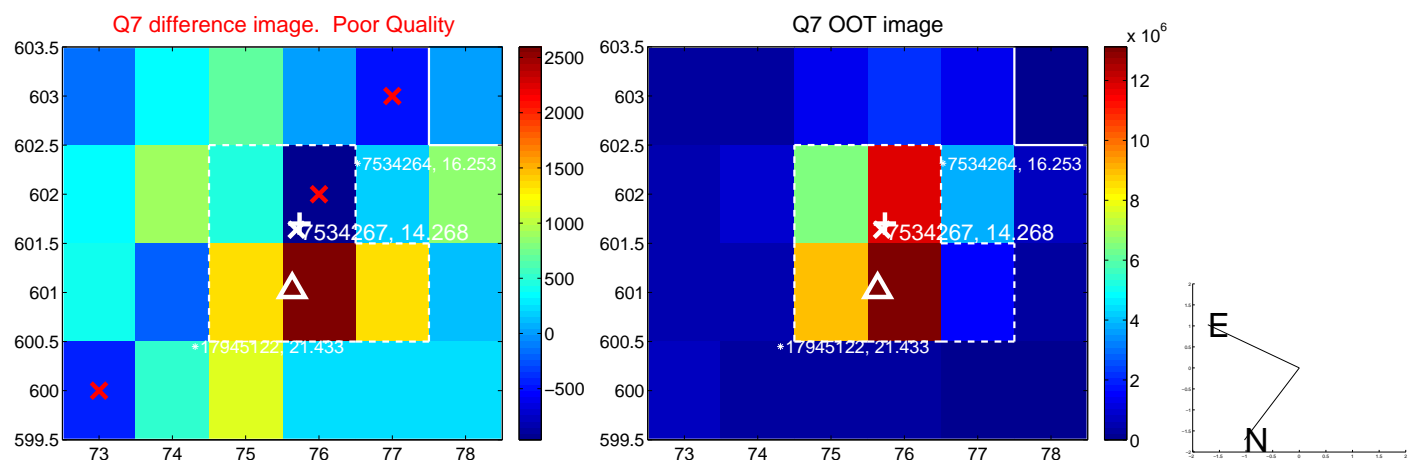
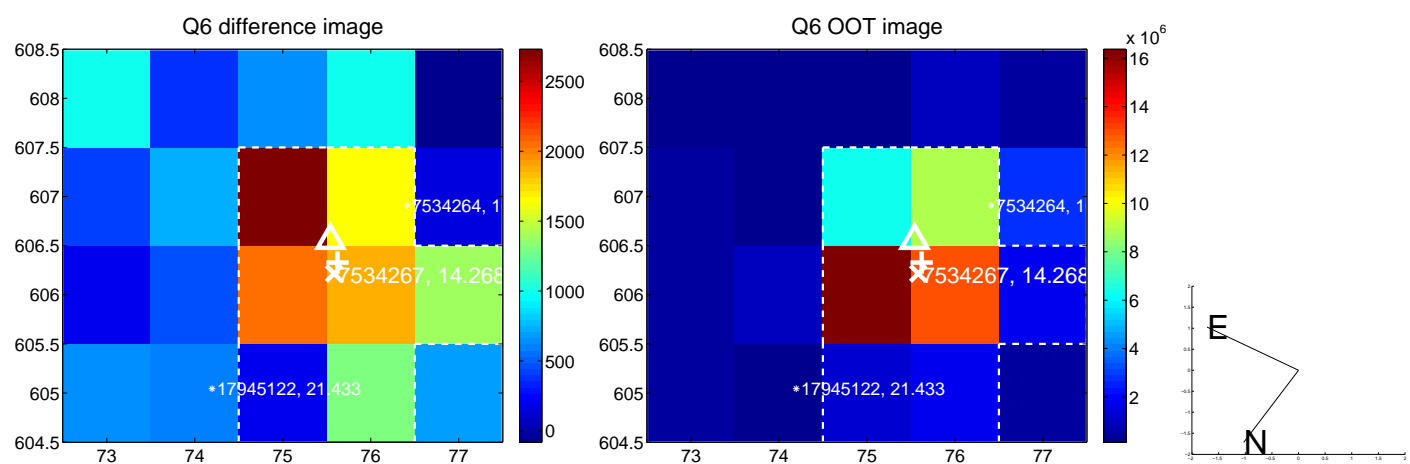
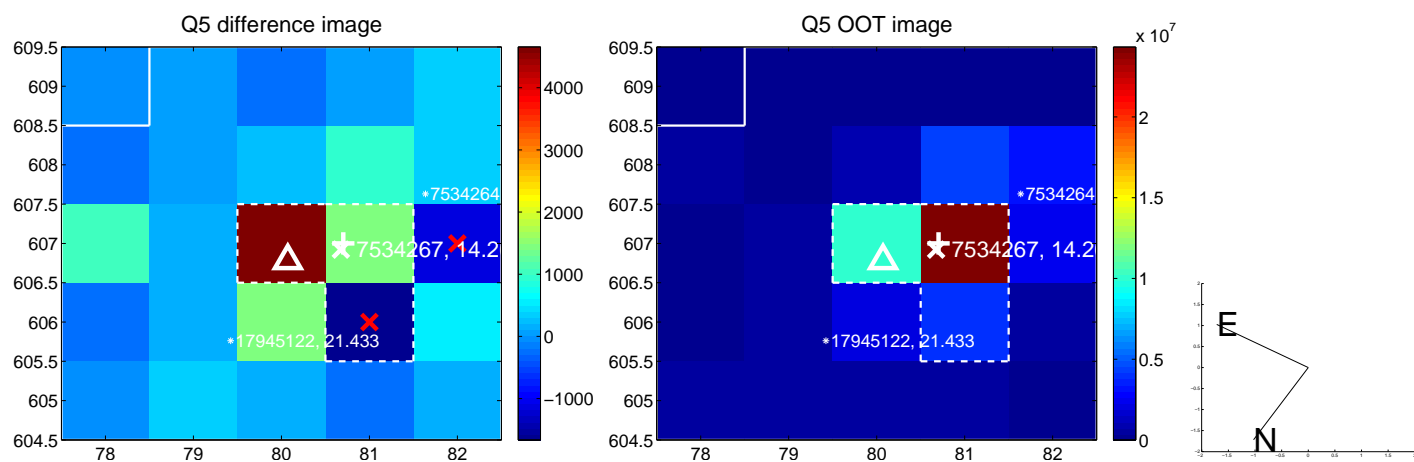


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses:** good quarterly centroid offsets; **Vermillion crosses:** bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

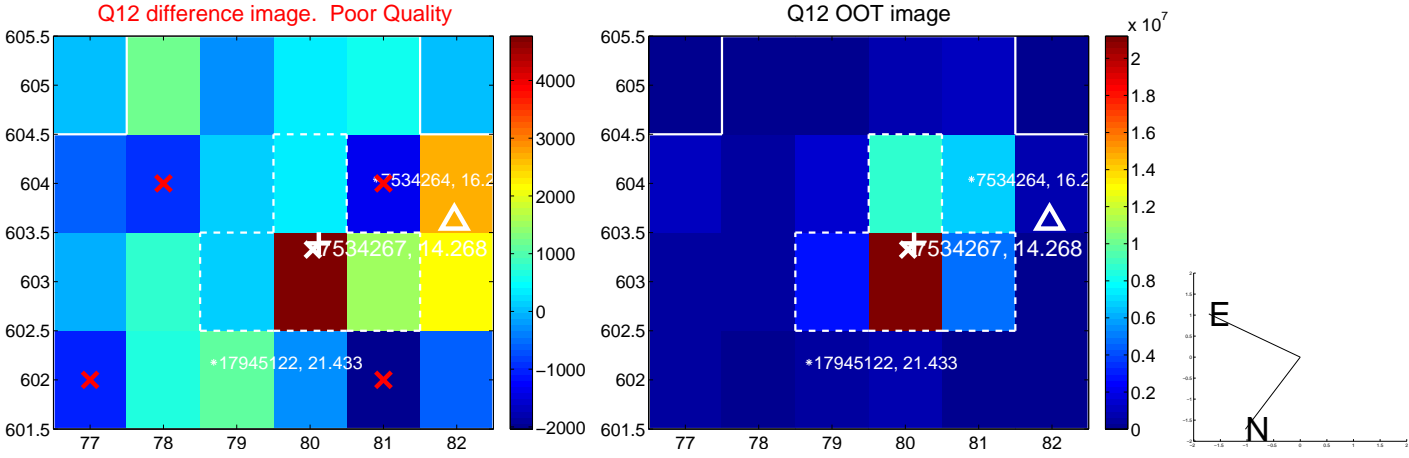
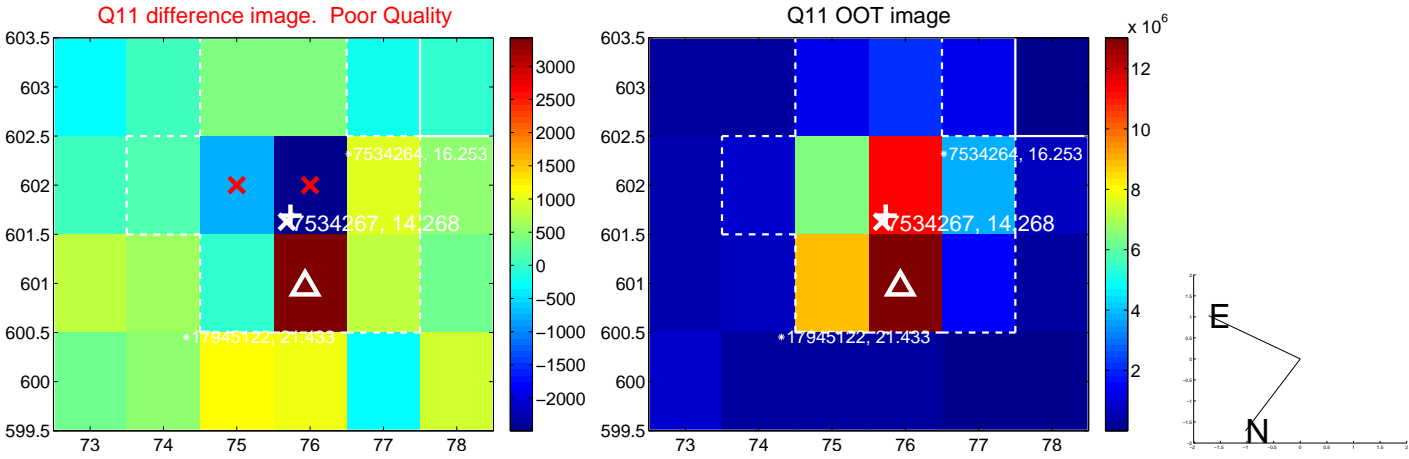
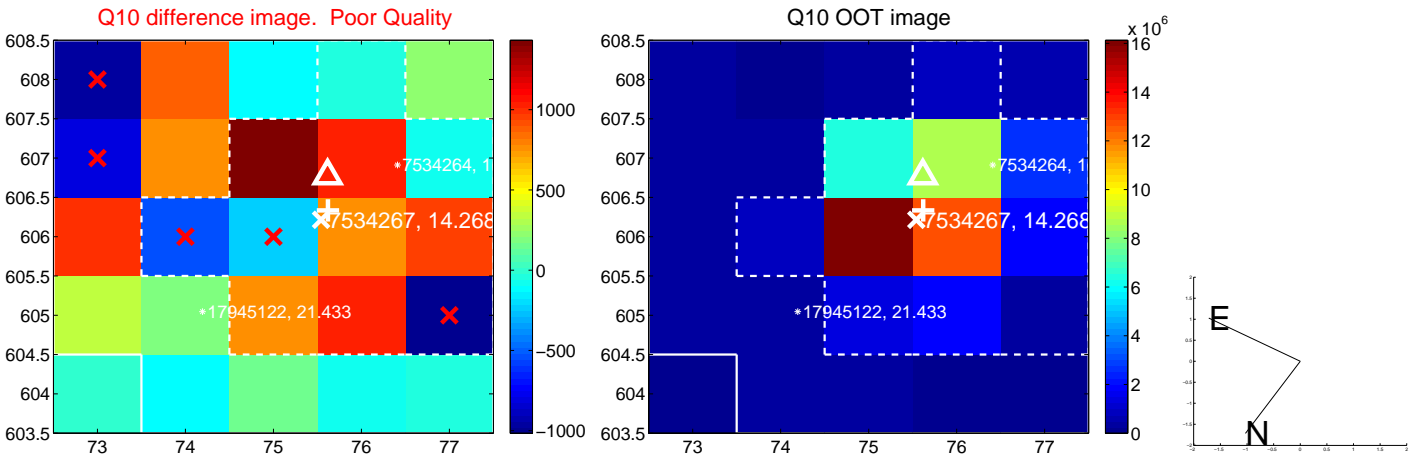
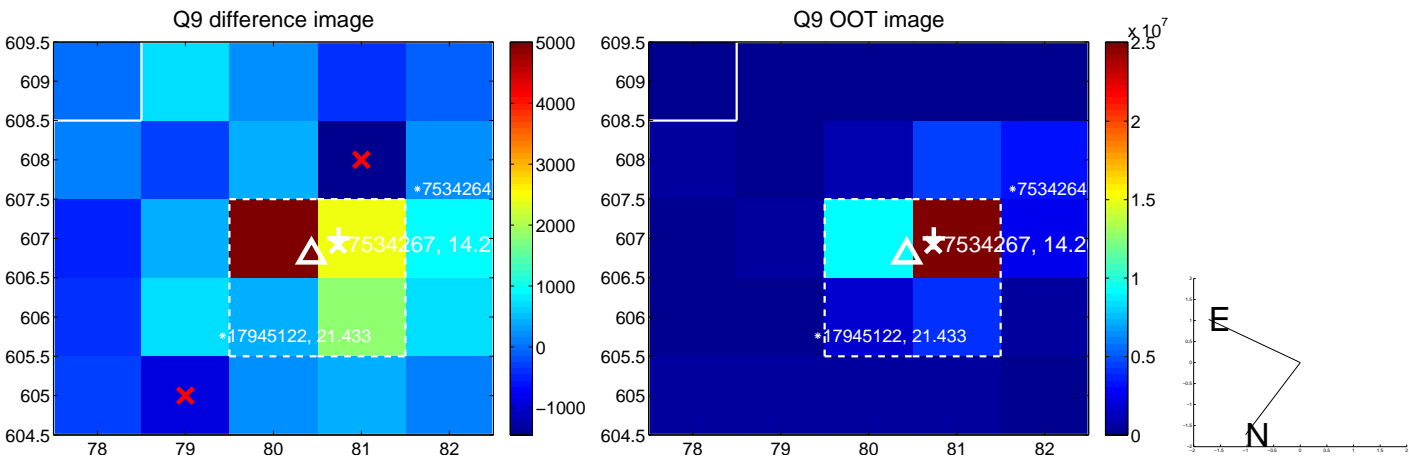
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



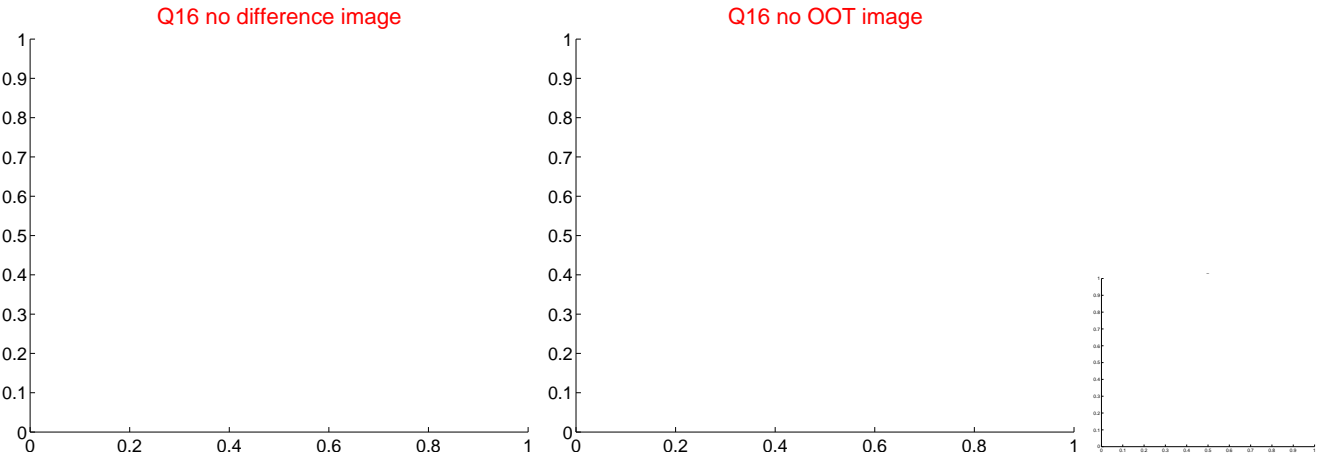
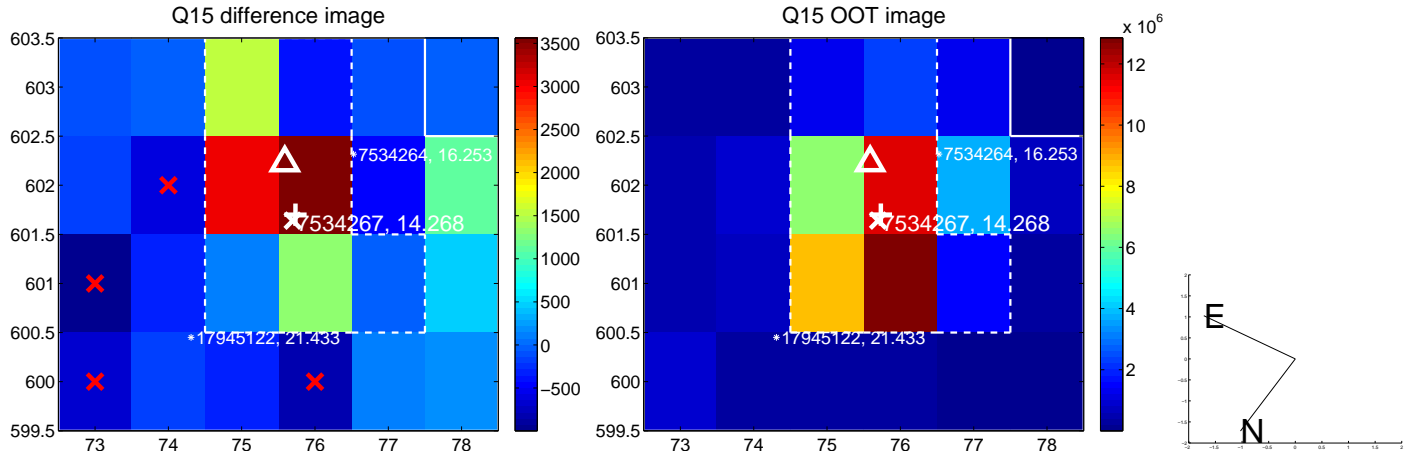
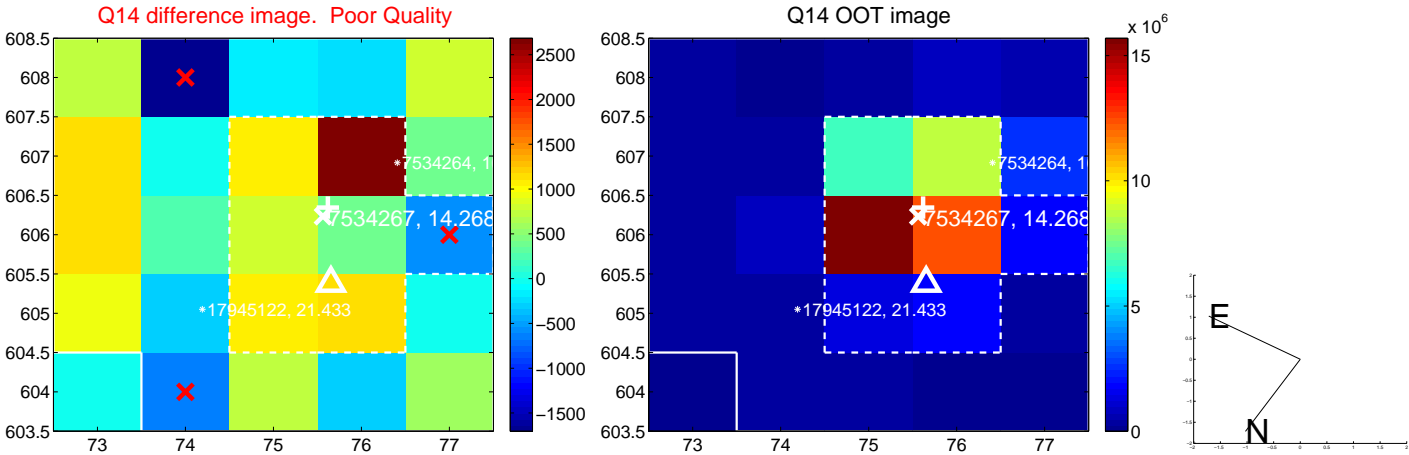
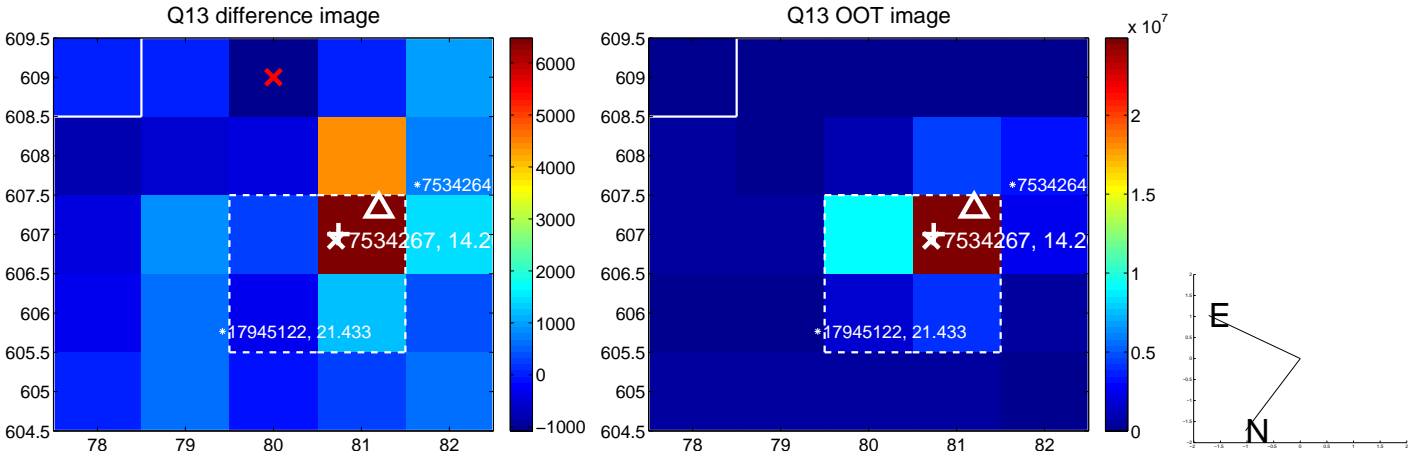
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



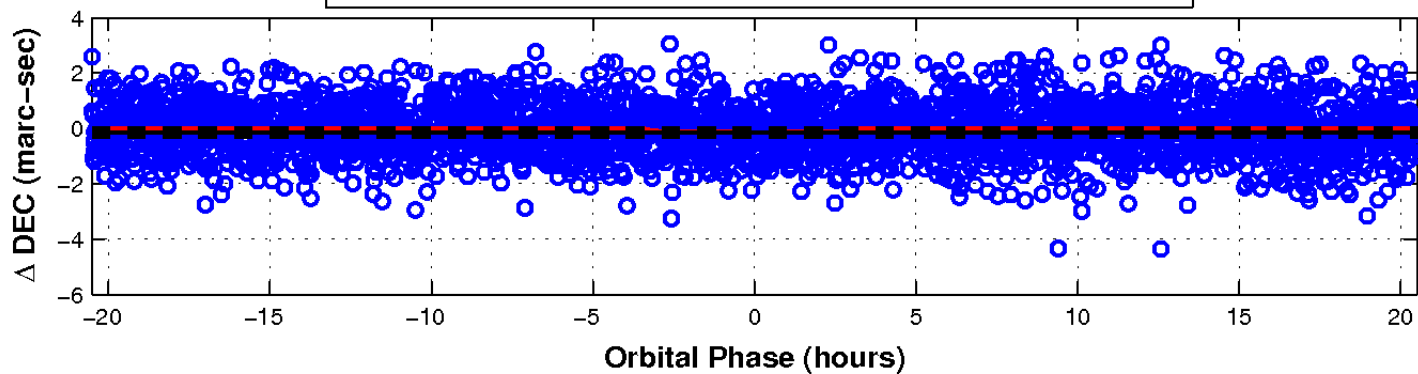
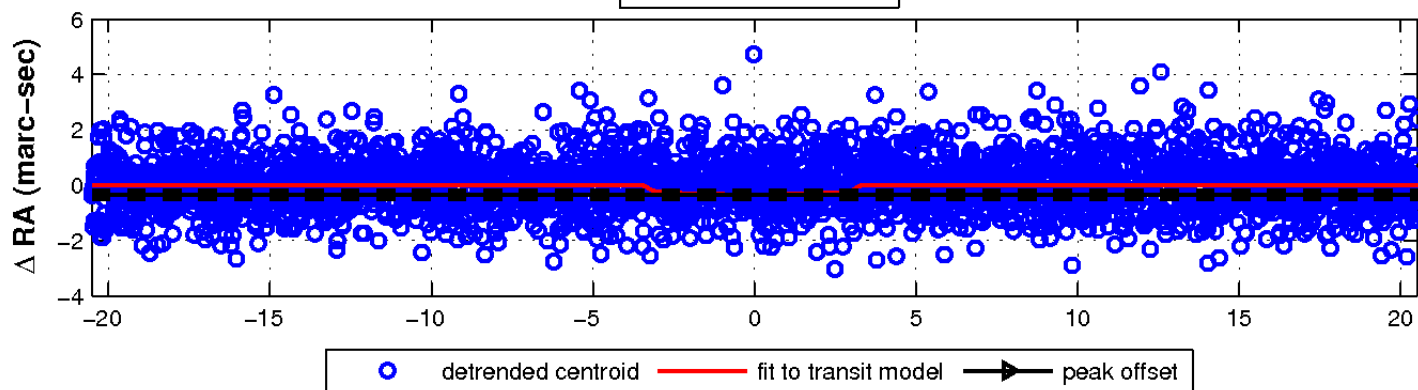
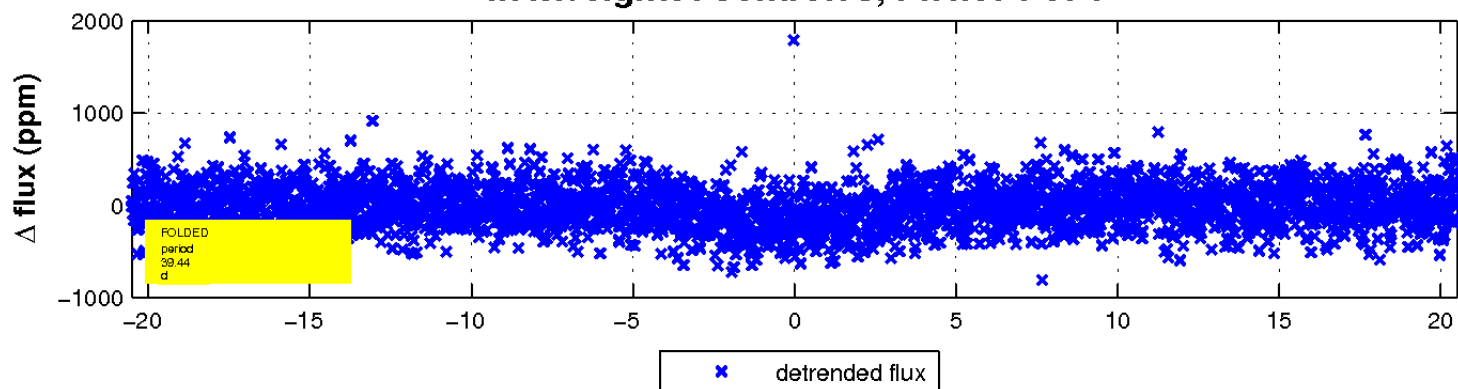
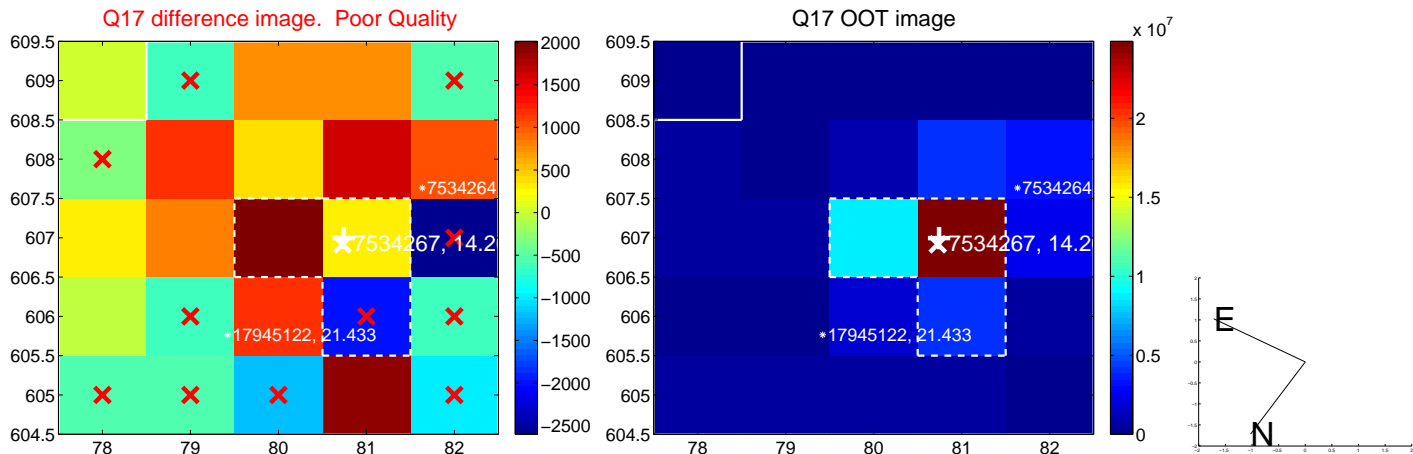
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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.



UKIRT Image

