

KIC 005717567

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})
005717567-01	OBS	2752.01	1.287622	132.428264	32.3	0.914	13.3	17.0	1.27	6170	0.86	3470.81

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
005717567-01	OBS	FP	0.00	0	0	1	0	CENT_RESOLVED_OFFSET—HALO_GHOST

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 005717567-01

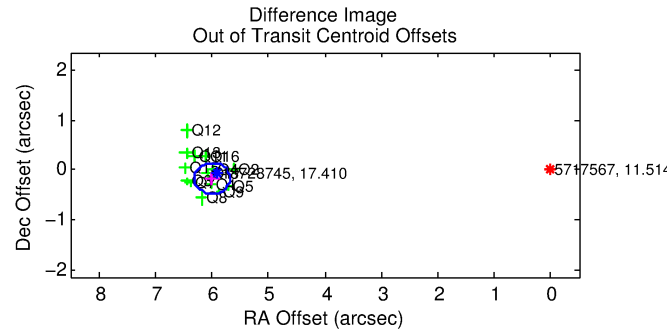
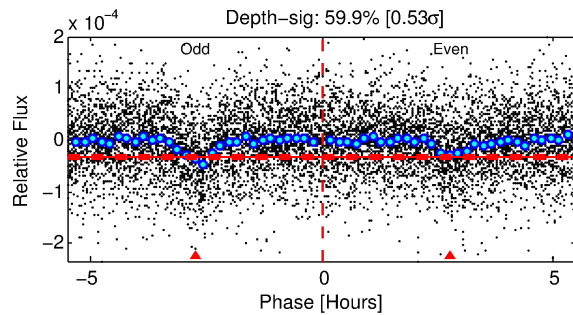
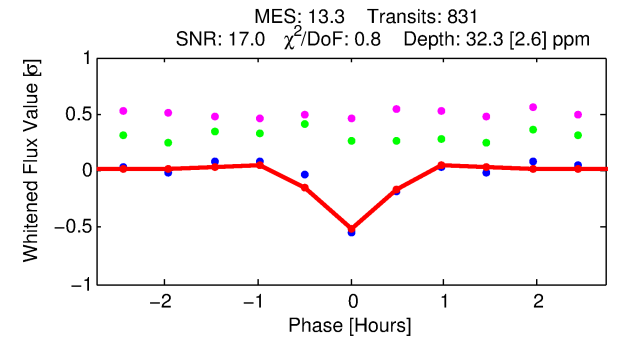
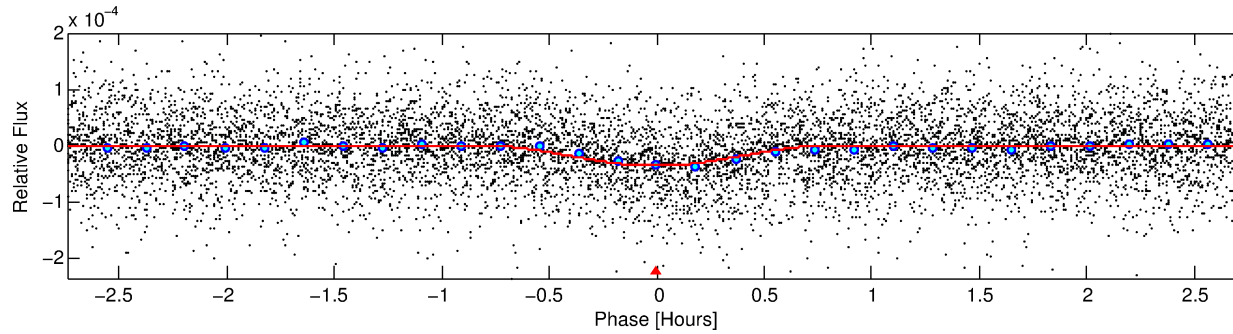
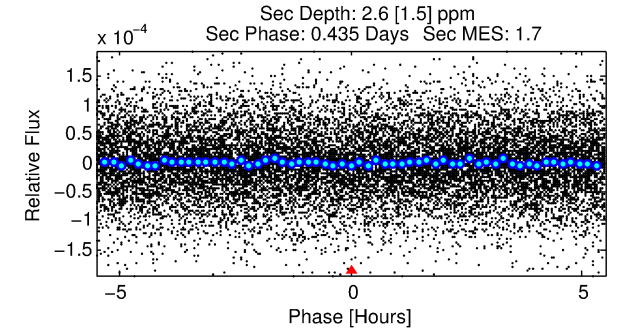
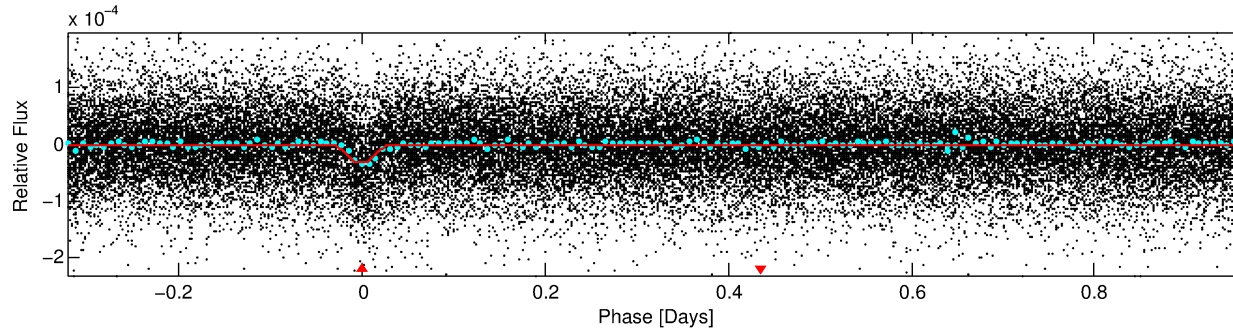
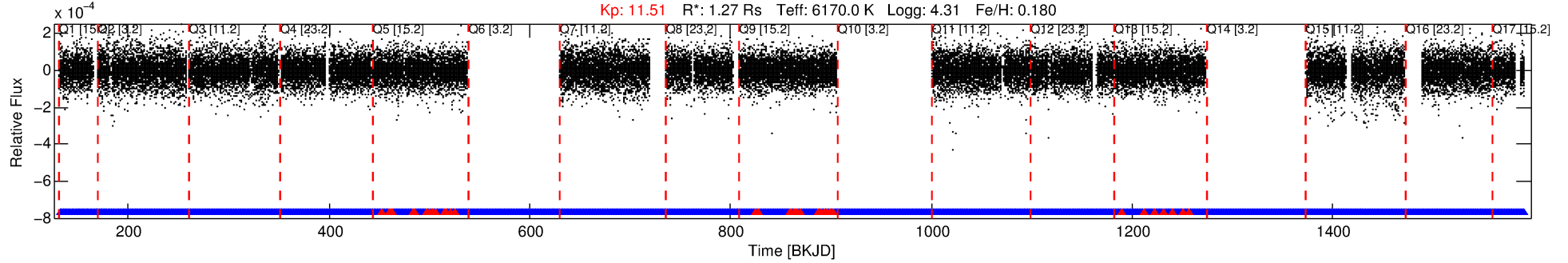
No Significant Match Found

DV One-Page Summary

KIC: 5717567 Candidate: 1 of 1 Period: 1.288 d

KOI: K02752.01 Corr: 0.900

Kp: 11.51 R*: 1.27 Rs Teff: 6170.0 K Logg: 4.31 Fe/H: 0.180



DV Fit Results:

Period = 1.28762 [0.00001] d
Epoch = 132.4283 [0.0009] BKJD
Rp/R* = 0.0062 [0.0009]
a/R* = 4.93 [3.66]
b = 0.90 [0.17]
Seff = 3470.81 [746.09]
Teff = 1957 [105] K
Rp = 0.86 [0.20] Re
a = 0.0246 [0.0035] AU
Ag = 1.16 [0.79] [0.20 sigma]
Teffp = 3140 [509] K [2.28 sigma]

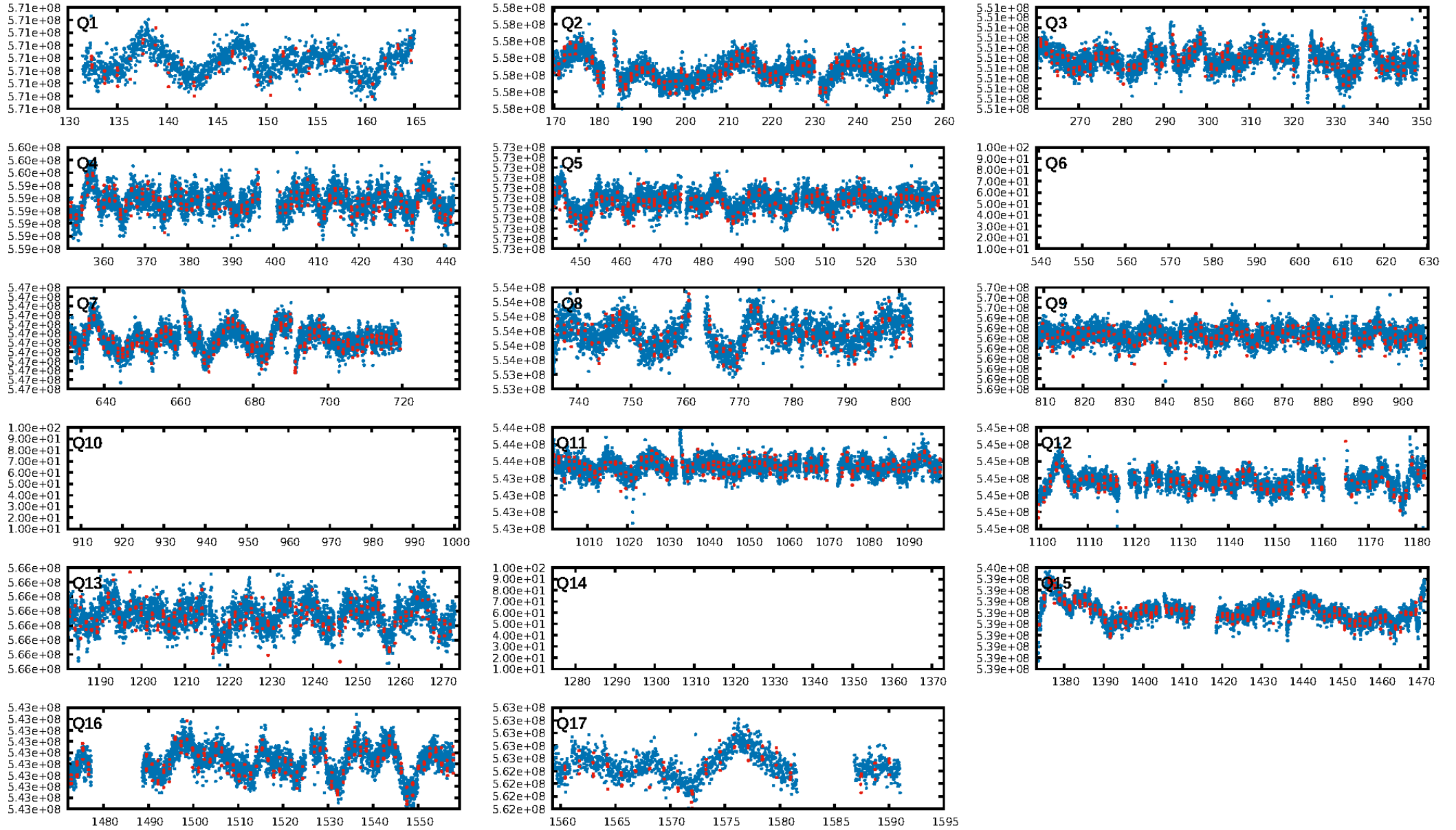
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: N/A
ModelChiSquareGoF-sig: N/A
Bootstrap-pfa: 2.10e-37
RollingBand-fgt: 0.95 [749/785]
GhostDiagnostic-chr: -0.03964
Centroid-sig: 0.0%
Centroid-so: 12.322 arcsec [19.49 sigma]
OotOffset-rm: 5.991 arcsec [57.40 sigma]
KicOffset-rm: 6.174 arcsec [60.20 sigma]
OotOffset-st: 1/4/4/5 [14]
KicOffset-st: 1/4/4/5 [14]
DiffImageQuality-fgm: 0.93 [13/14]
DiffImageOverlap-fno: 1.00 [14/14]

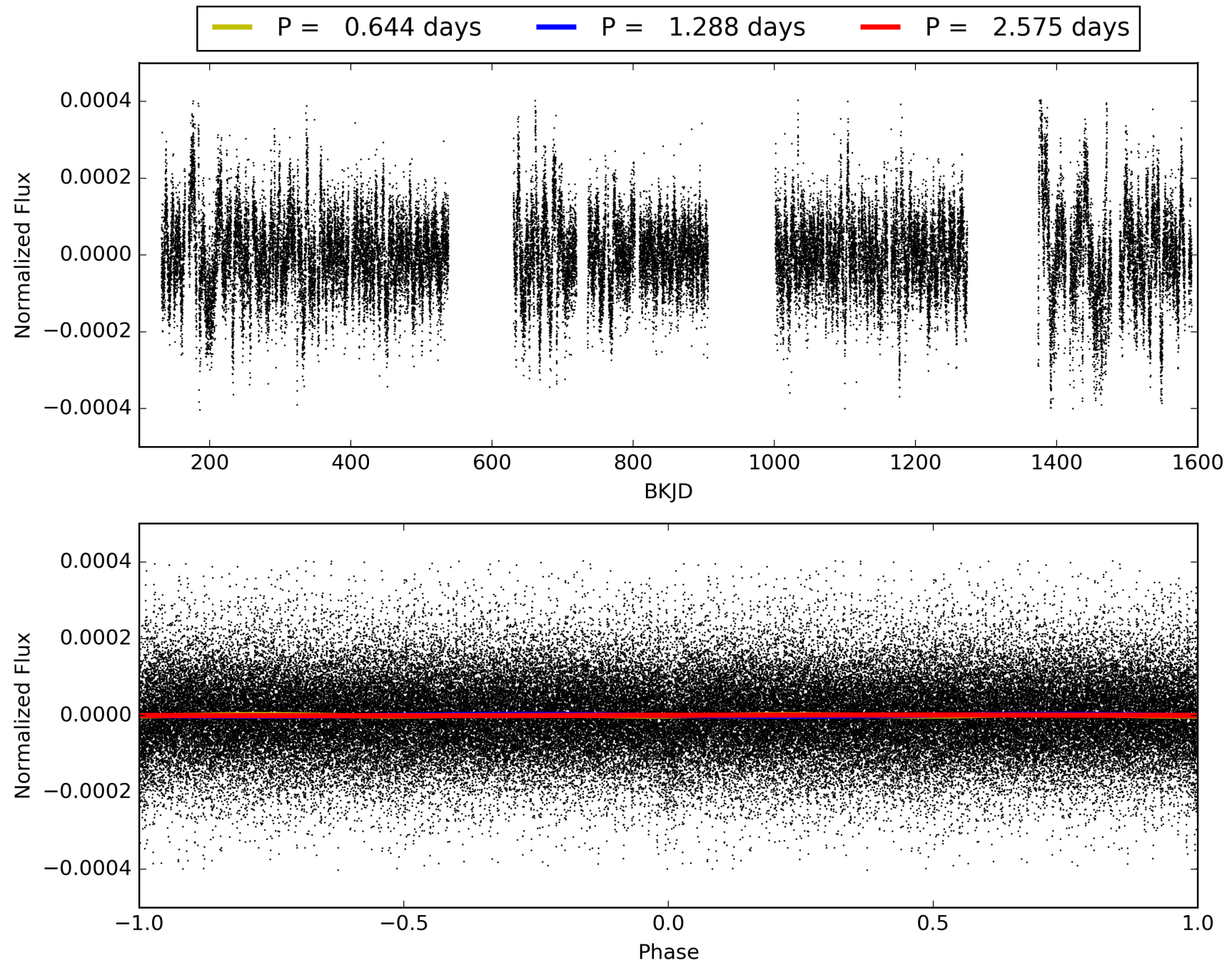
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 29-Jan-2016 21:49:57 Z

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

TCE 005717567-01, PDC Light Curves

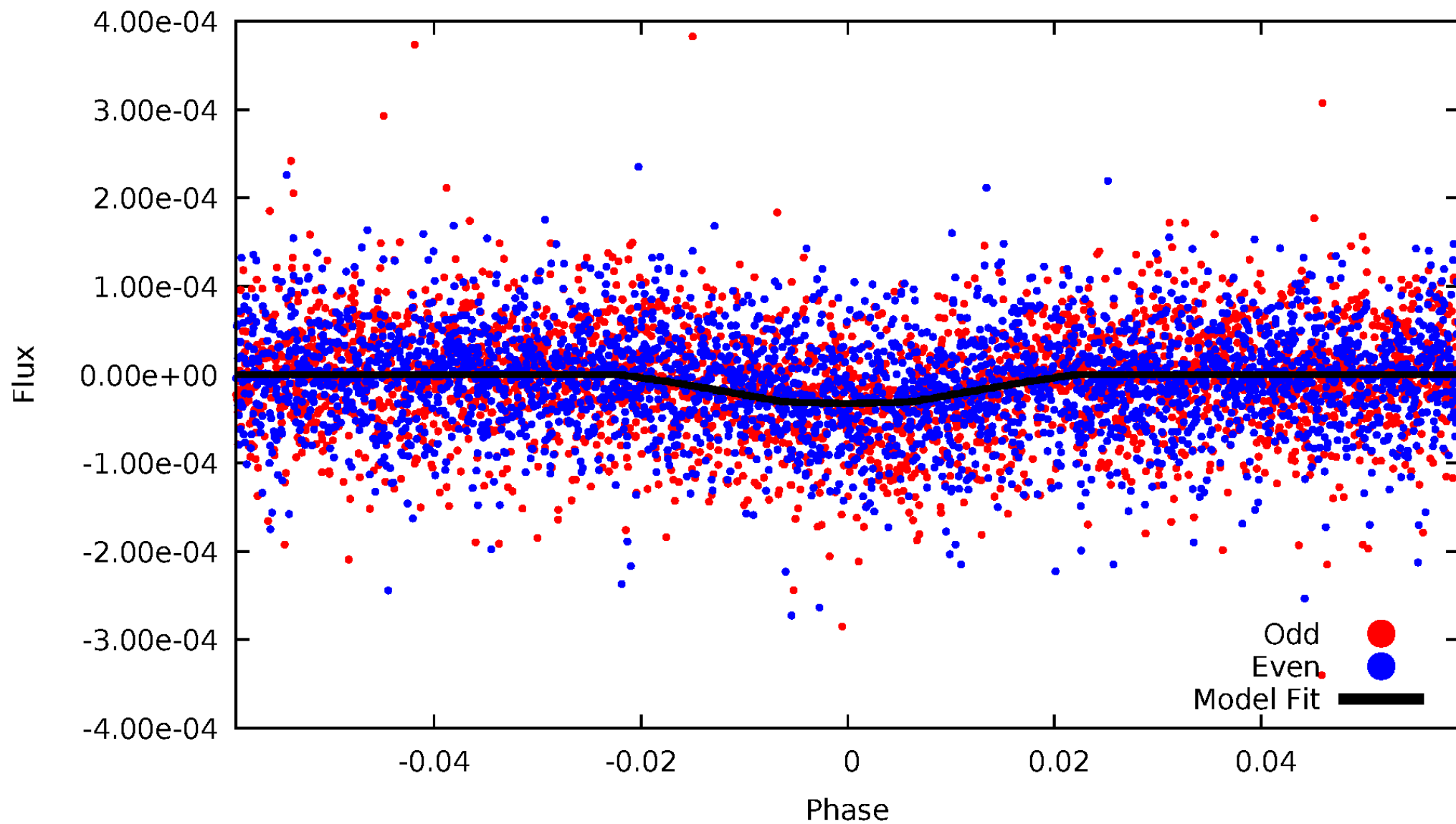


TCE 005717567-01



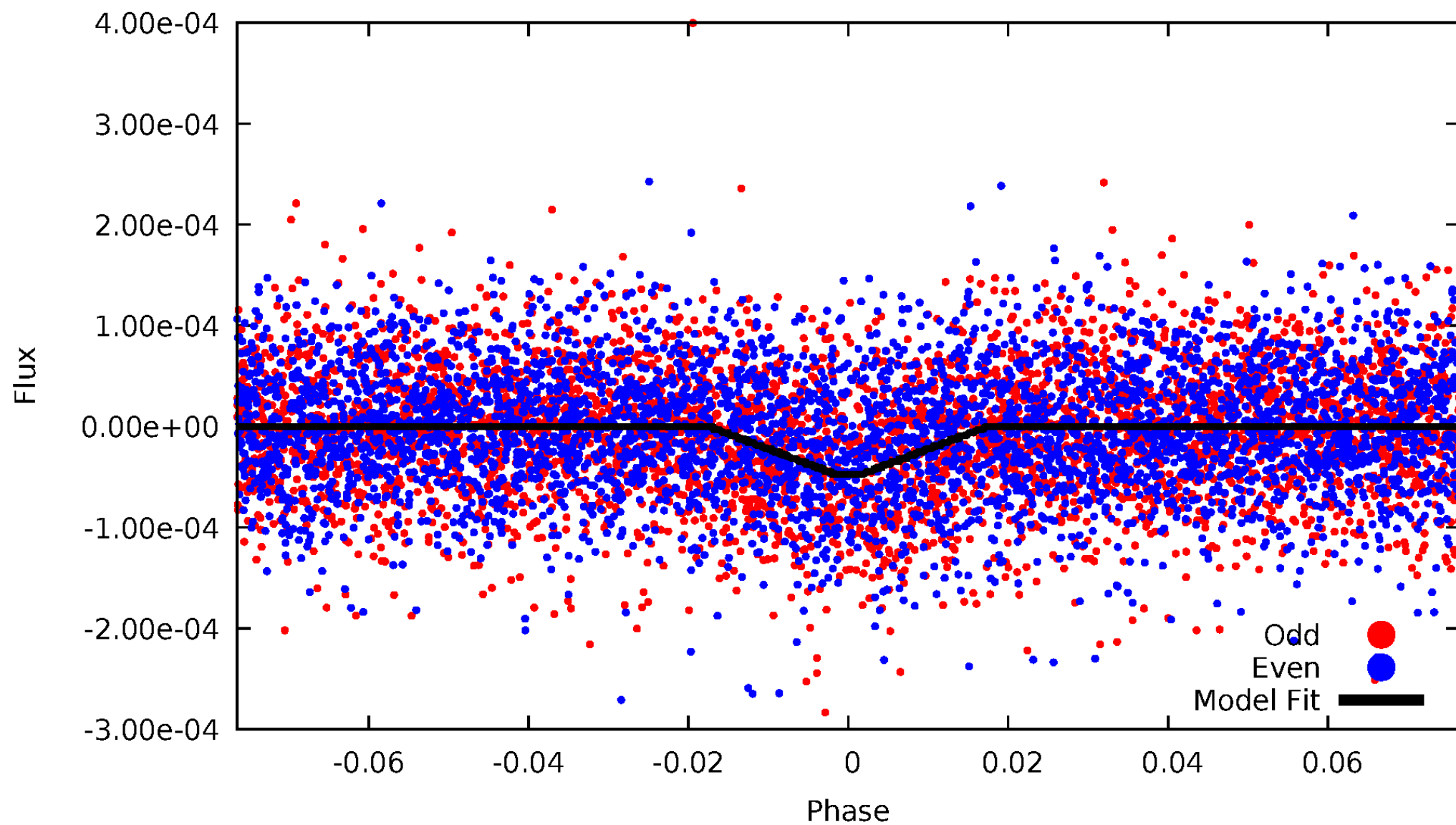
DV Odd/Even

TCE 005717567-01

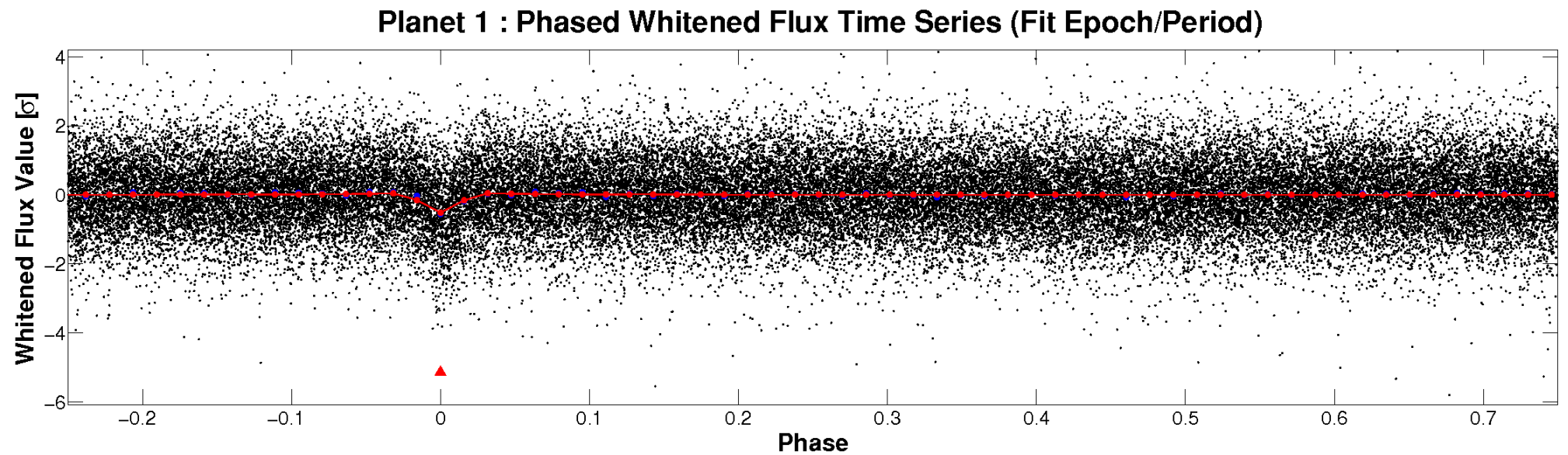
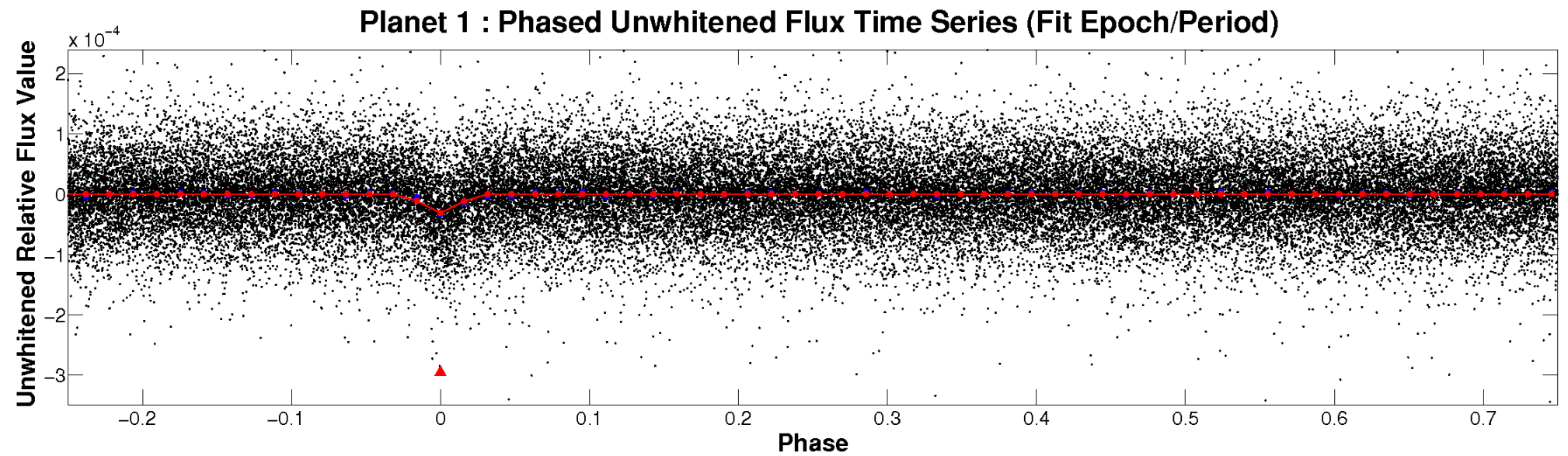


ALT Odd/Even

TCE 005717567-01

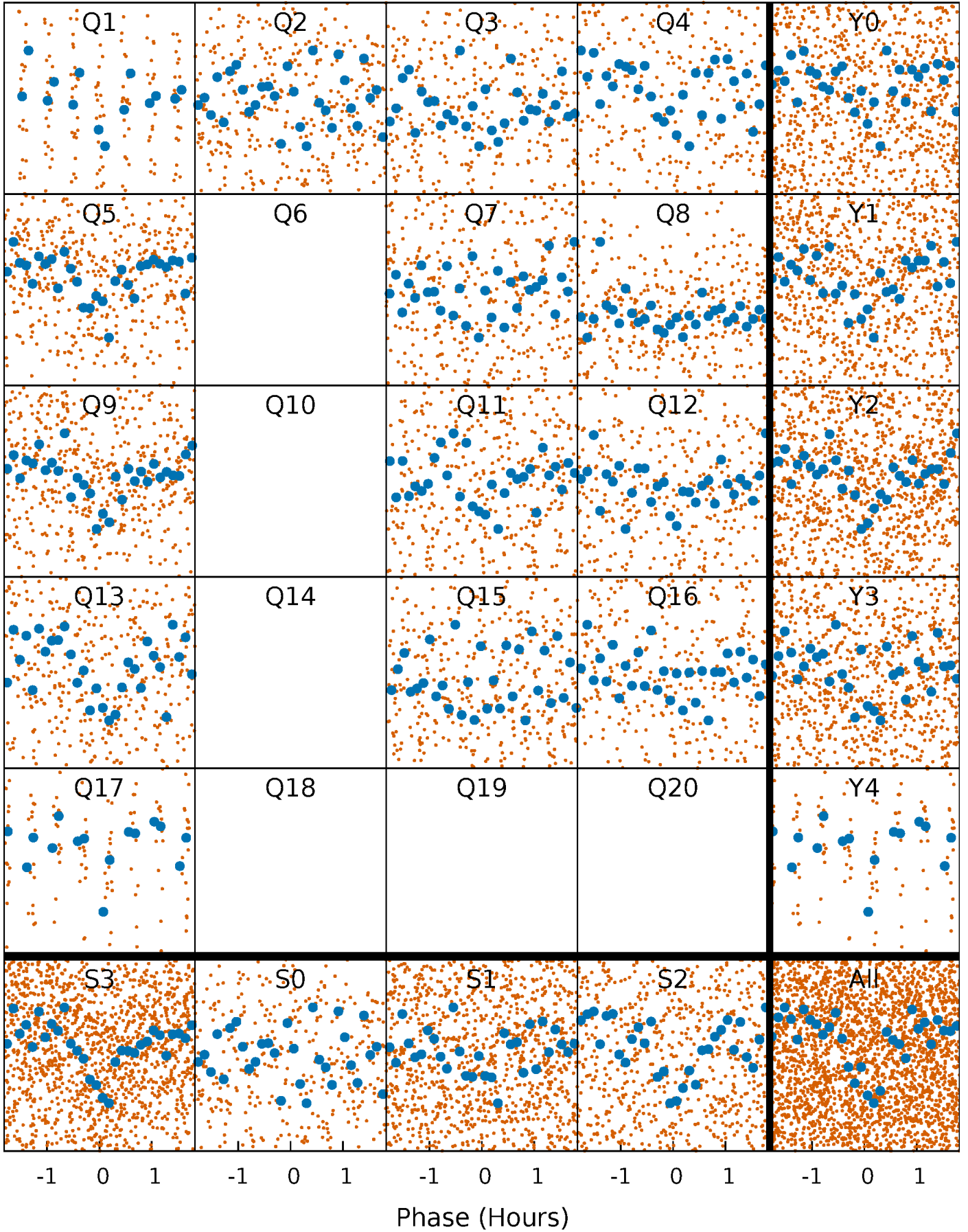


Non-Whitened Vs. Whitened Light Curve



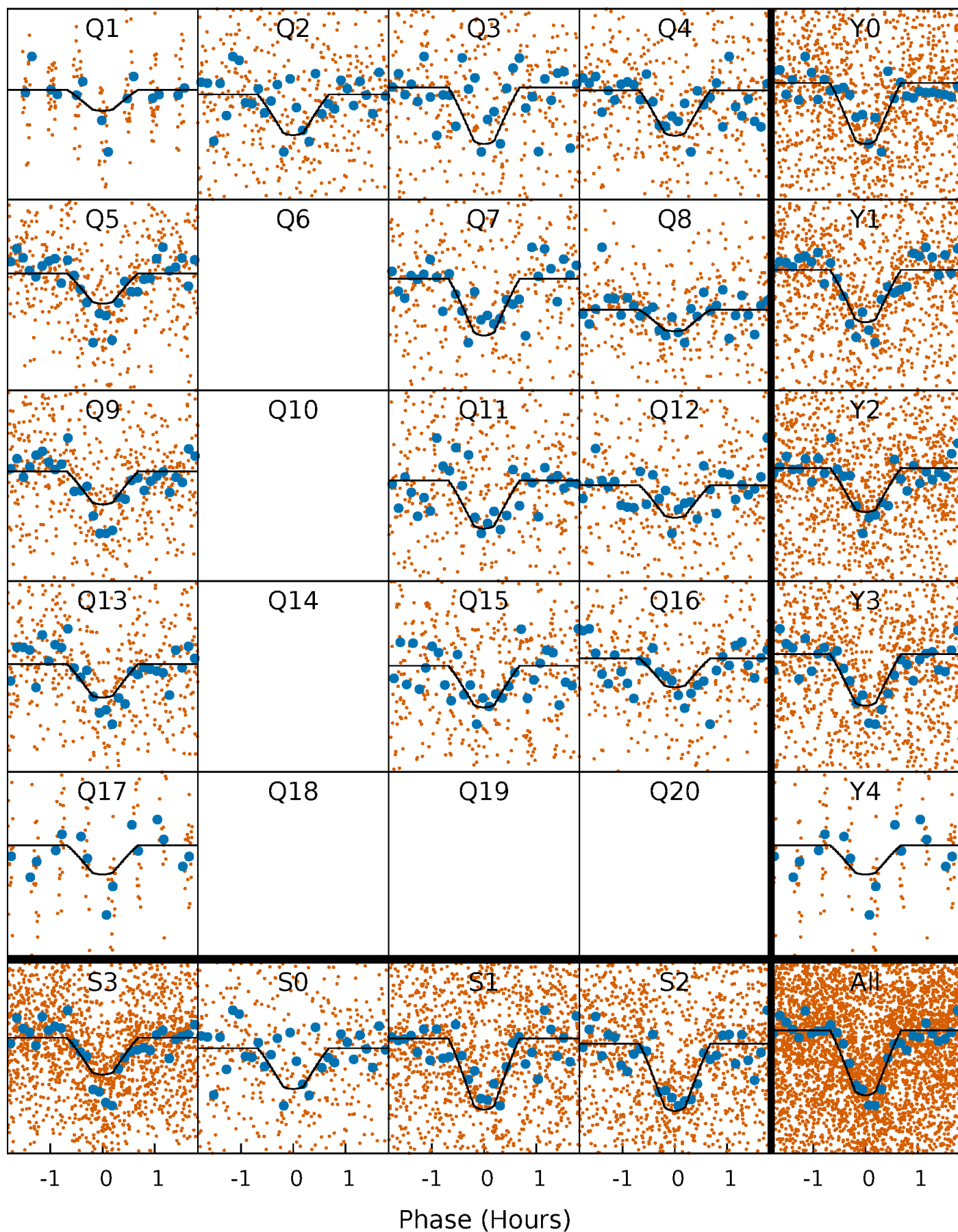
PDC Quarter-Phased Transit Curves

TCE 005717567-01 P= 1.287622 Days $T_0=132.428264$ (BKJD)



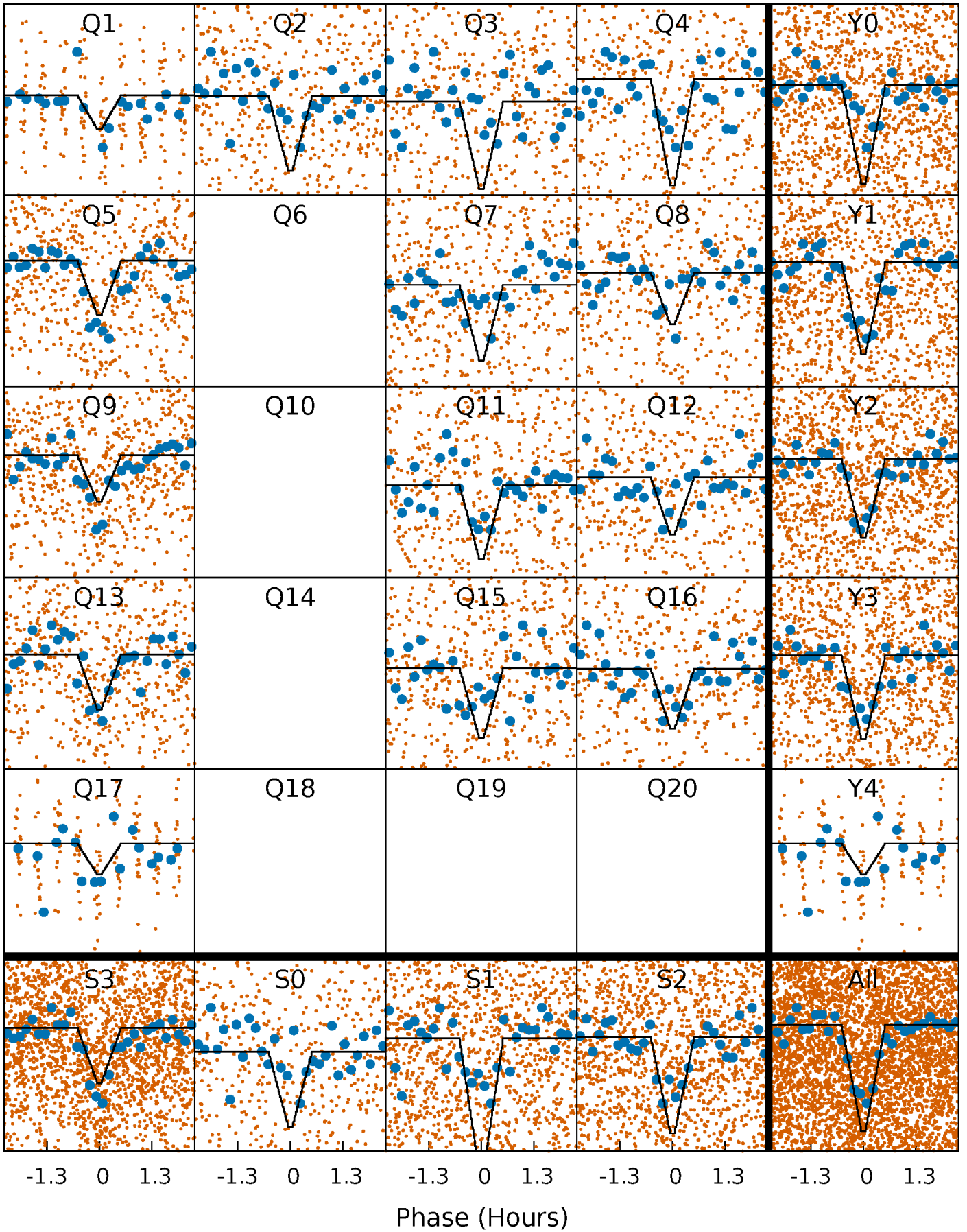
DV Quarter-Phased Transit Curves

TCE 005717567-01 P= 1.287622 Days $T_0=132.428264$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

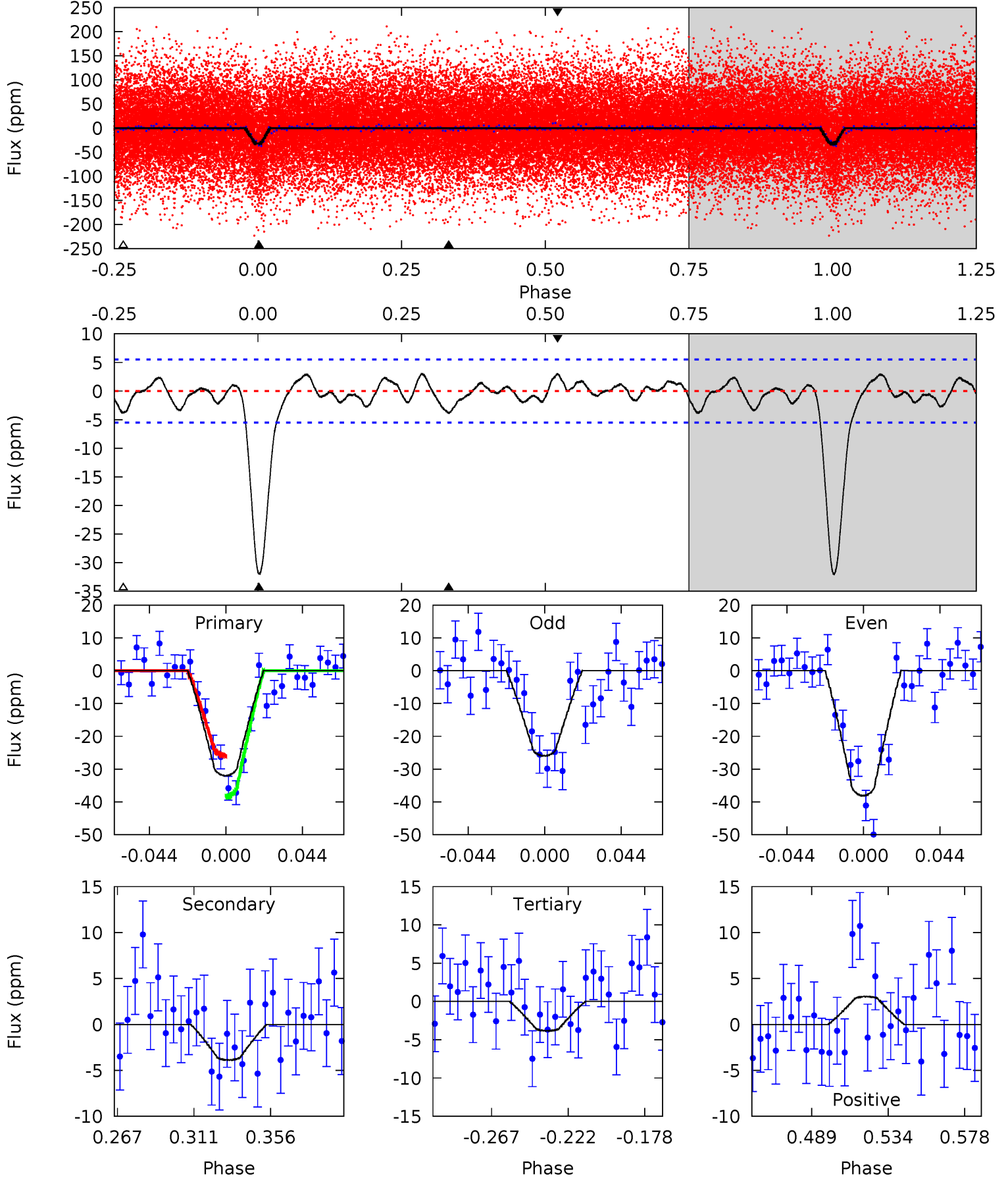
TCE 005717567-01 P= 1.287633 Days $T_0=132.424761$ (BKJD)



DV Model-Shift Uniqueness Test

005717567-01, P = 1.287622 Days, E = 131.140642 Days

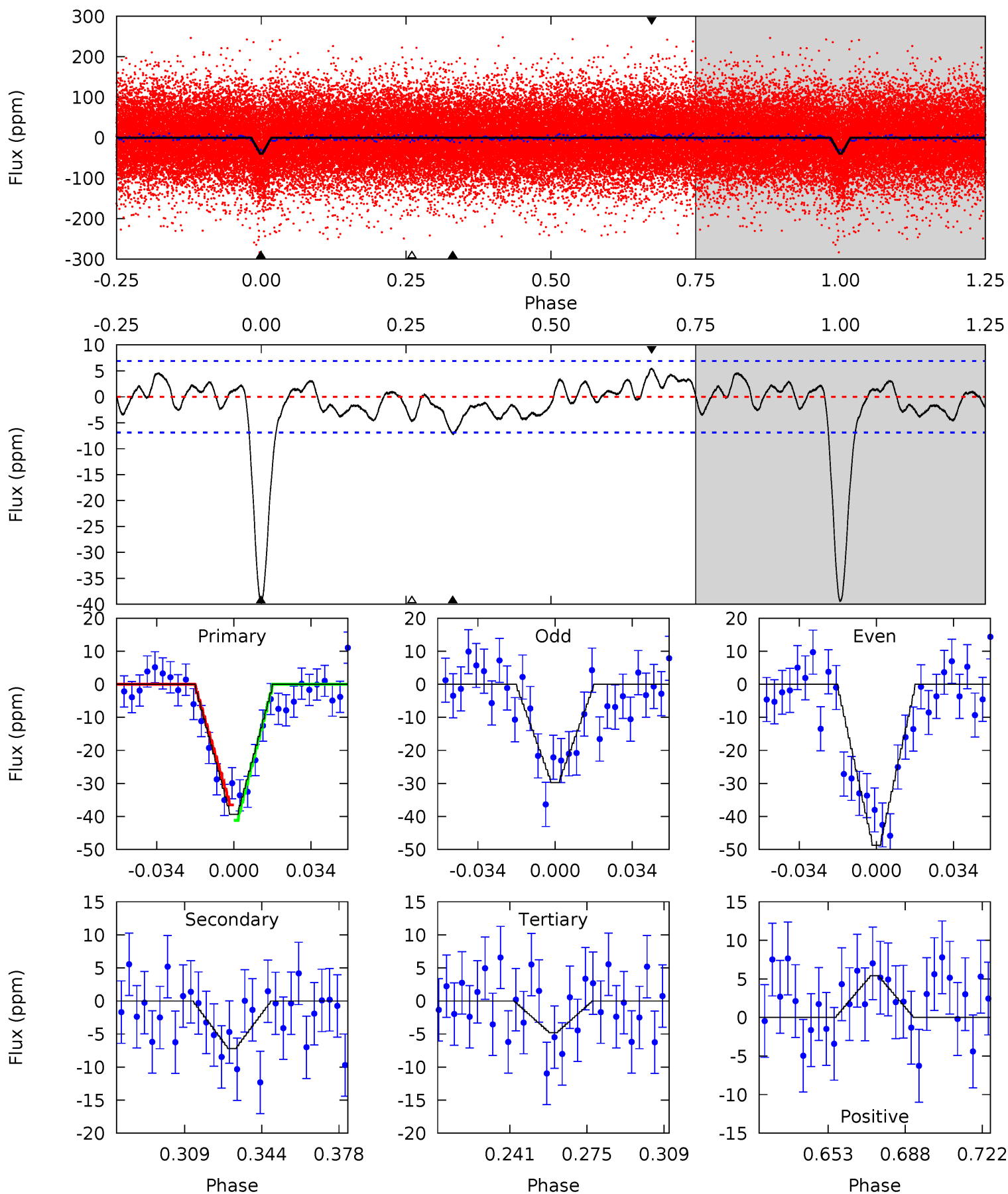
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
27.5	3.33	3.30	2.60	4.73	2.01	1.22	24.2	24.9	0.03	0.73	5.23	1.03	0.09	5.42



Alt Model-Shift Uniqueness Test

005717567-01, P = 1.287633 Days, E = 131.137128 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
27.4	5.01	3.33	3.78	4.78	2.12	1.68	24.1	23.6	1.68	1.23	6.60	1.05	0.12	1.62



Stellar Parameters For KIC 005717567

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	$M(M_{\odot})$	p_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	6170^{+74}_{-80}	$4.308^{+0.076}_{-0.114}$	$0.180^{+0.150}_{-0.150}$	$1.274^{+0.217}_{-0.133}$	$1.208^{+0.075}_{-0.084}$	$0.823^{+0.235}_{-0.288}$
	+1%/-1%	+2%/-3%	+83%/-83%	+17%/-10%	+6%/-7%	+29%/-35%
Source	SPE68	SPE68	SPE68	DSEP		

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

Secondary Eclipse Parameters for KIC 005717567-01 / KOI 2752.01

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	-4 ± 1	$0.87^{+0.15}_{-0.16}$	2747^{+106}_{-95}	3705^{+356}_{-328}	$1.685^{+1.033}_{-0.667}$
Alt.	-7 ± 1	$0.96^{+0.16}_{-0.14}$	2744^{+103}_{-87}	4034^{+318}_{-246}	$2.564^{+1.180}_{-0.721}$

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

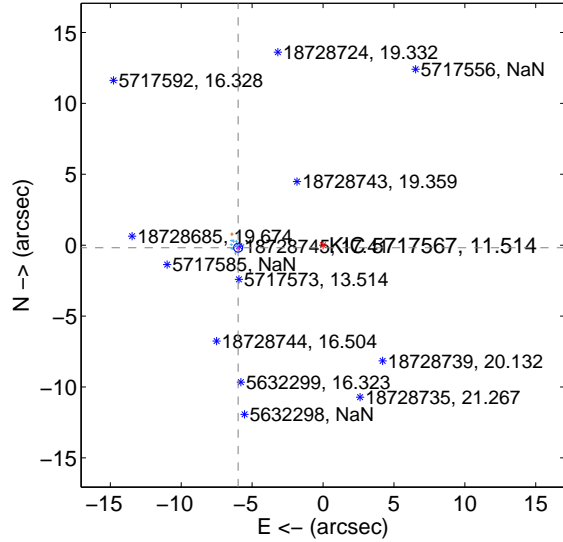
Supplemental centroid analysis for 005717567-01. **Kepler magnitude: 11.51.** Transit SNR 16.97

There are 13 quarters with good PRF difference image offsets

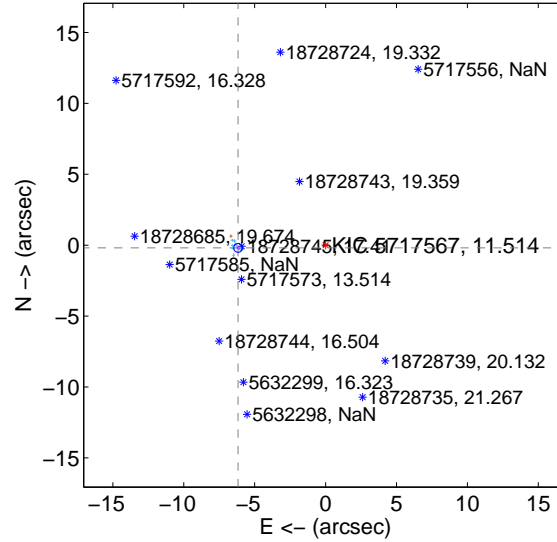
The direct PRF centroid is offset from the target star catalog position by about 0.18 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	5.991 \pm 0.104	57.40	5.988 \pm 0.104	-0.178 \pm 0.111
PRF-fit source offset from KIC position	6.174 \pm 0.103	60.20	6.171 \pm 0.103	-0.194 \pm 0.099
photometric centroid source offset	12.32 \pm 0.63	19.49	12.31 \pm 0.63	0.64 \pm 0.55

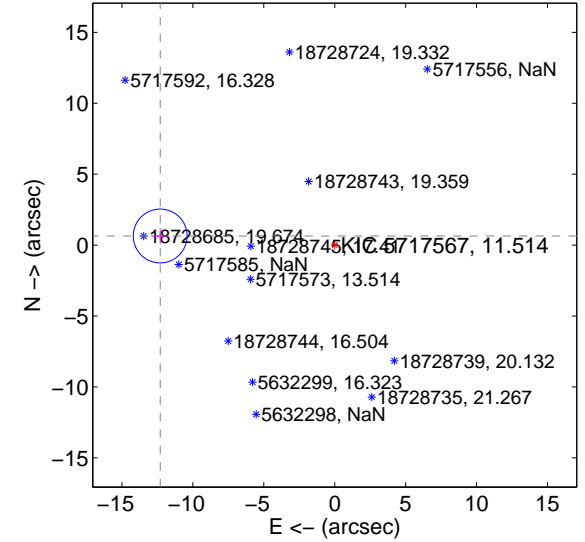
offset from difference PRF-fit to OOT PRF-fit



offset from difference PRF-fit to KIC position

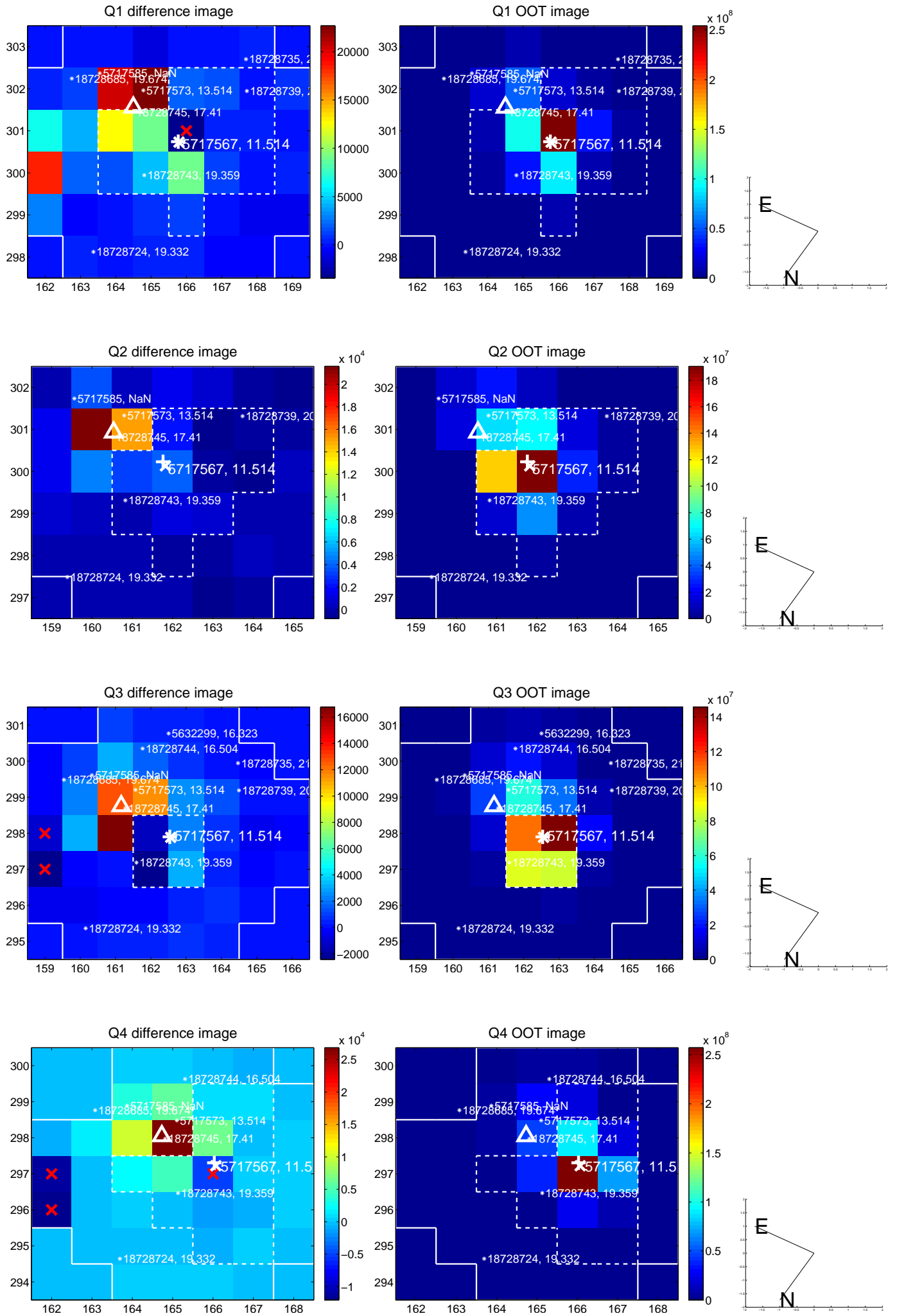


offset from photometric centroids

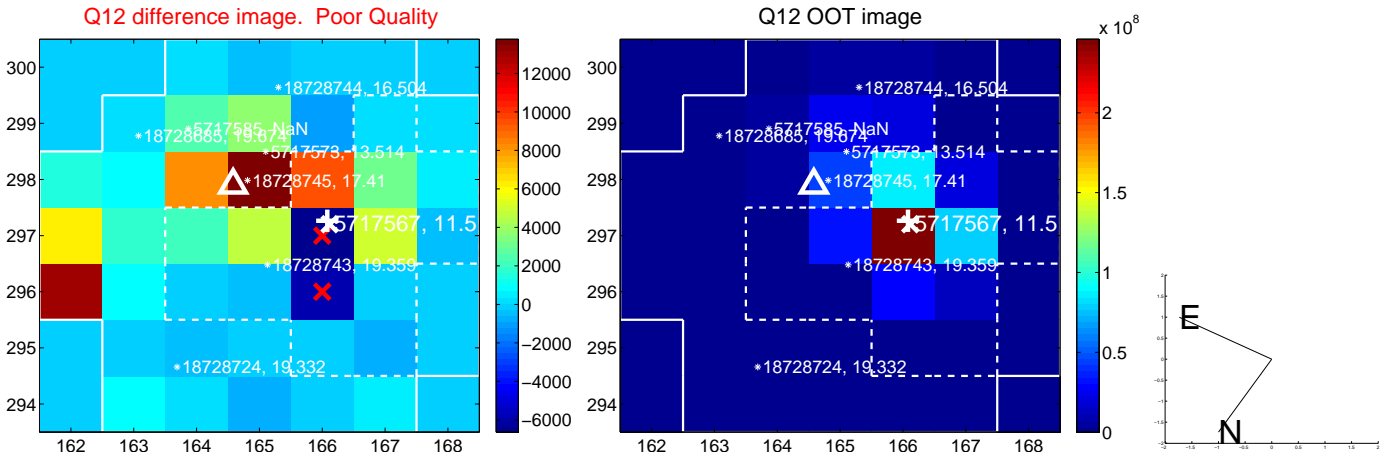
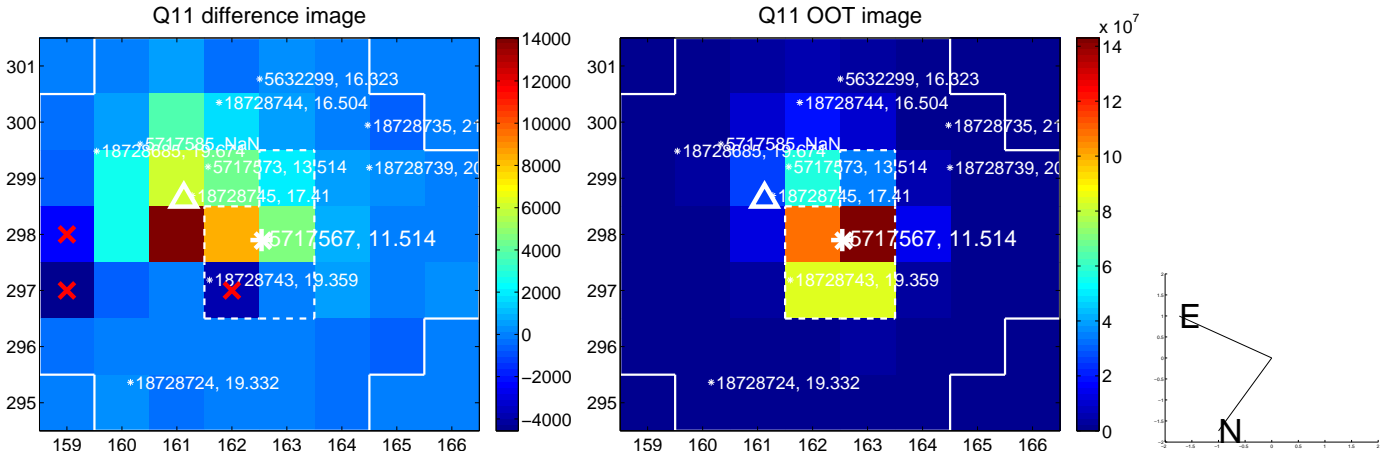
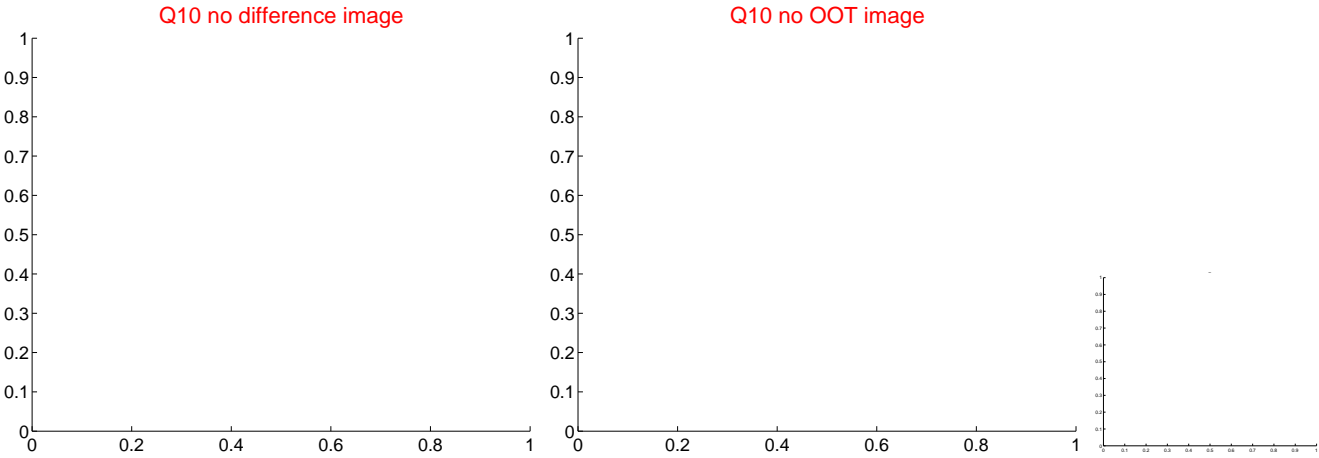
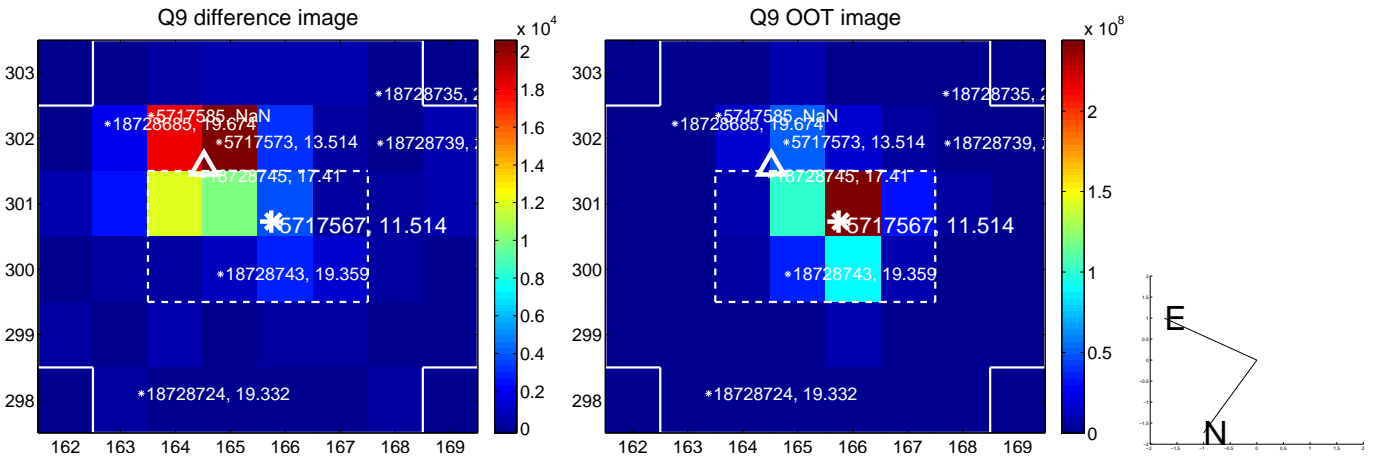


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets;** magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

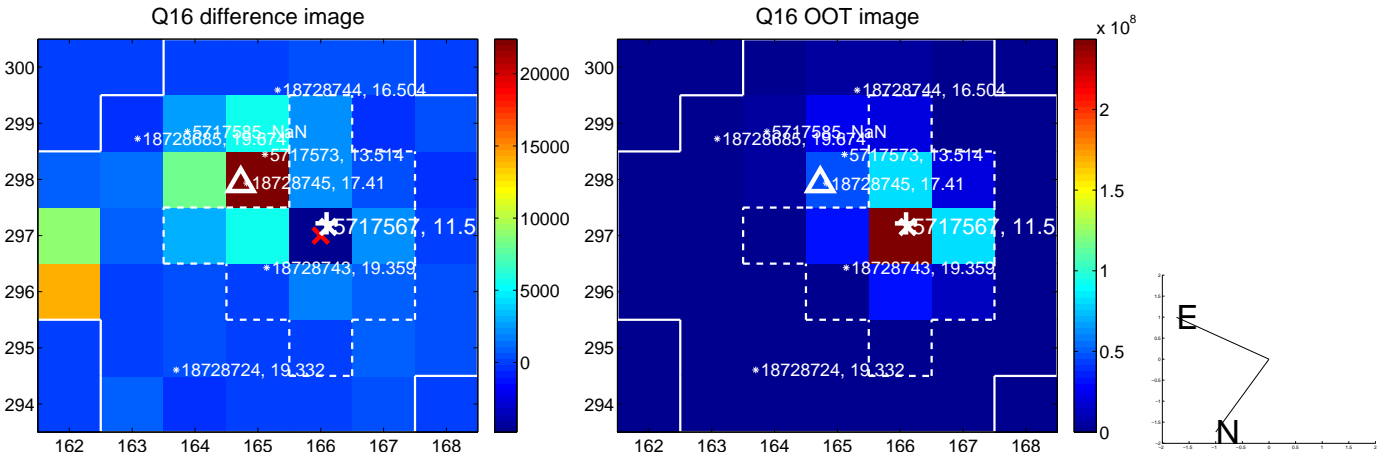
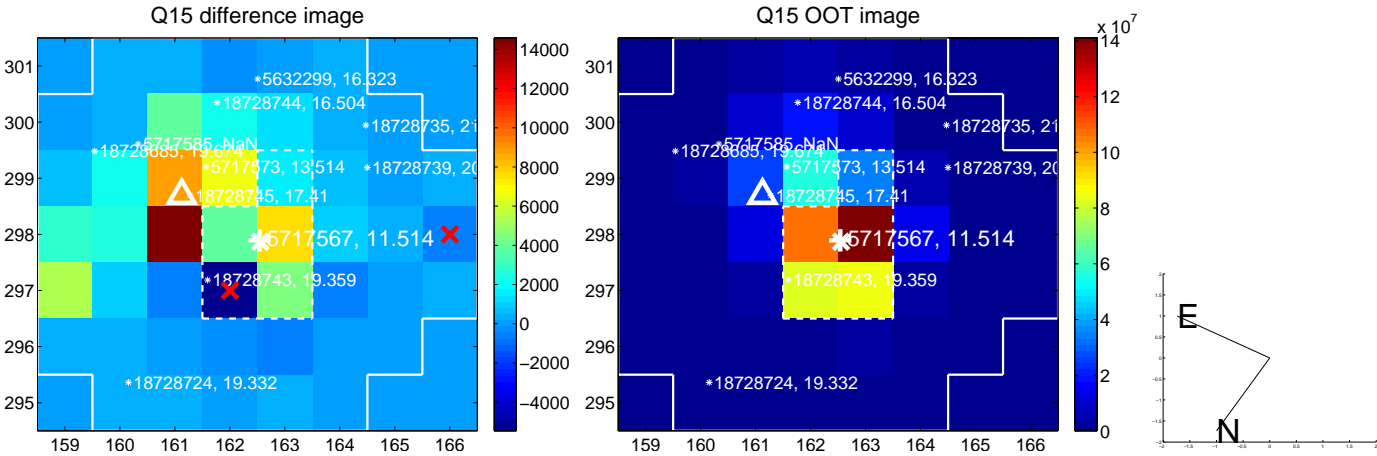
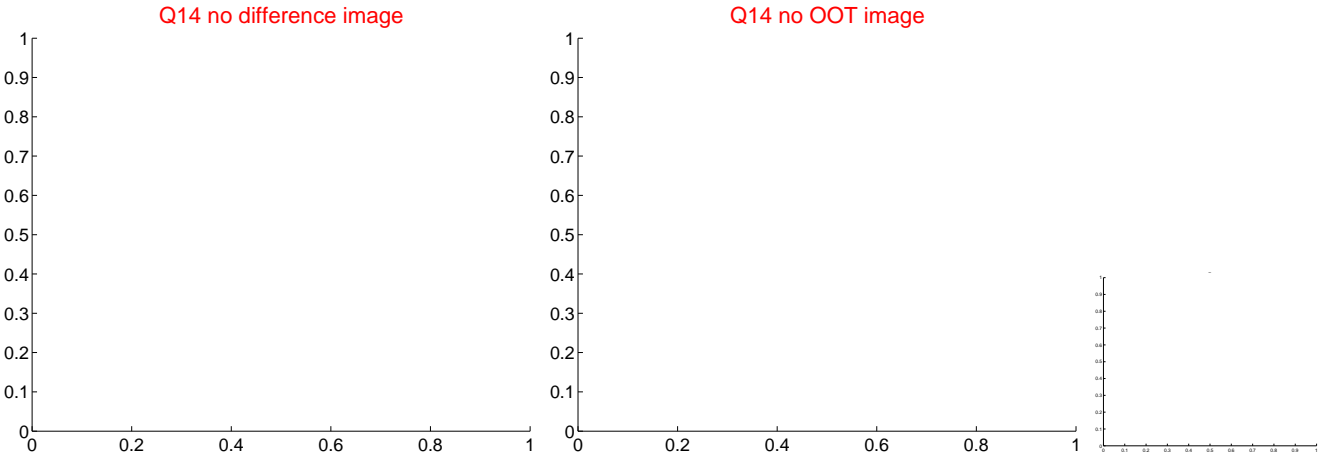
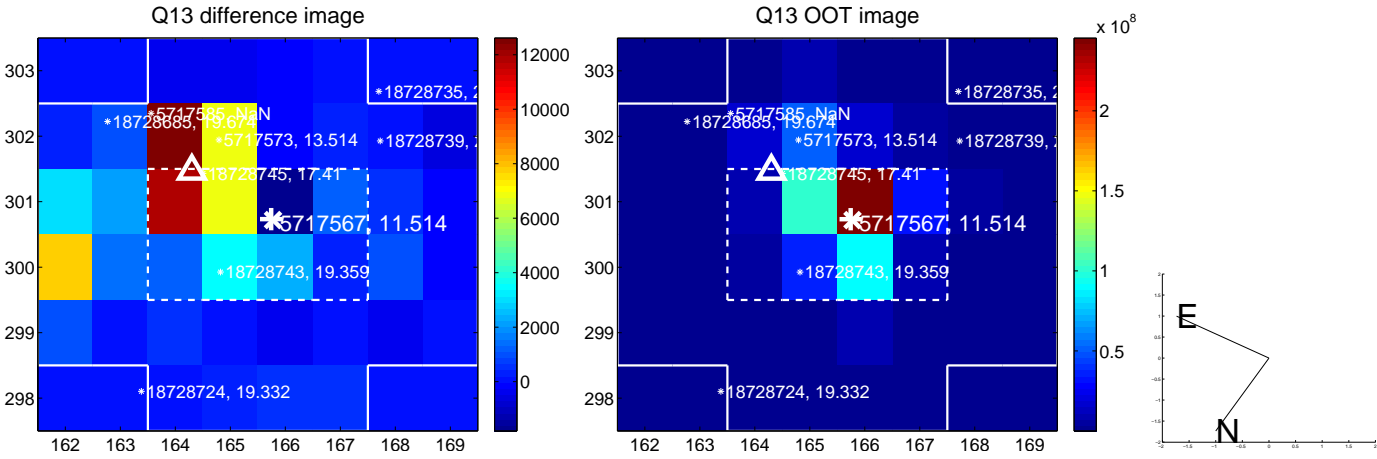
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



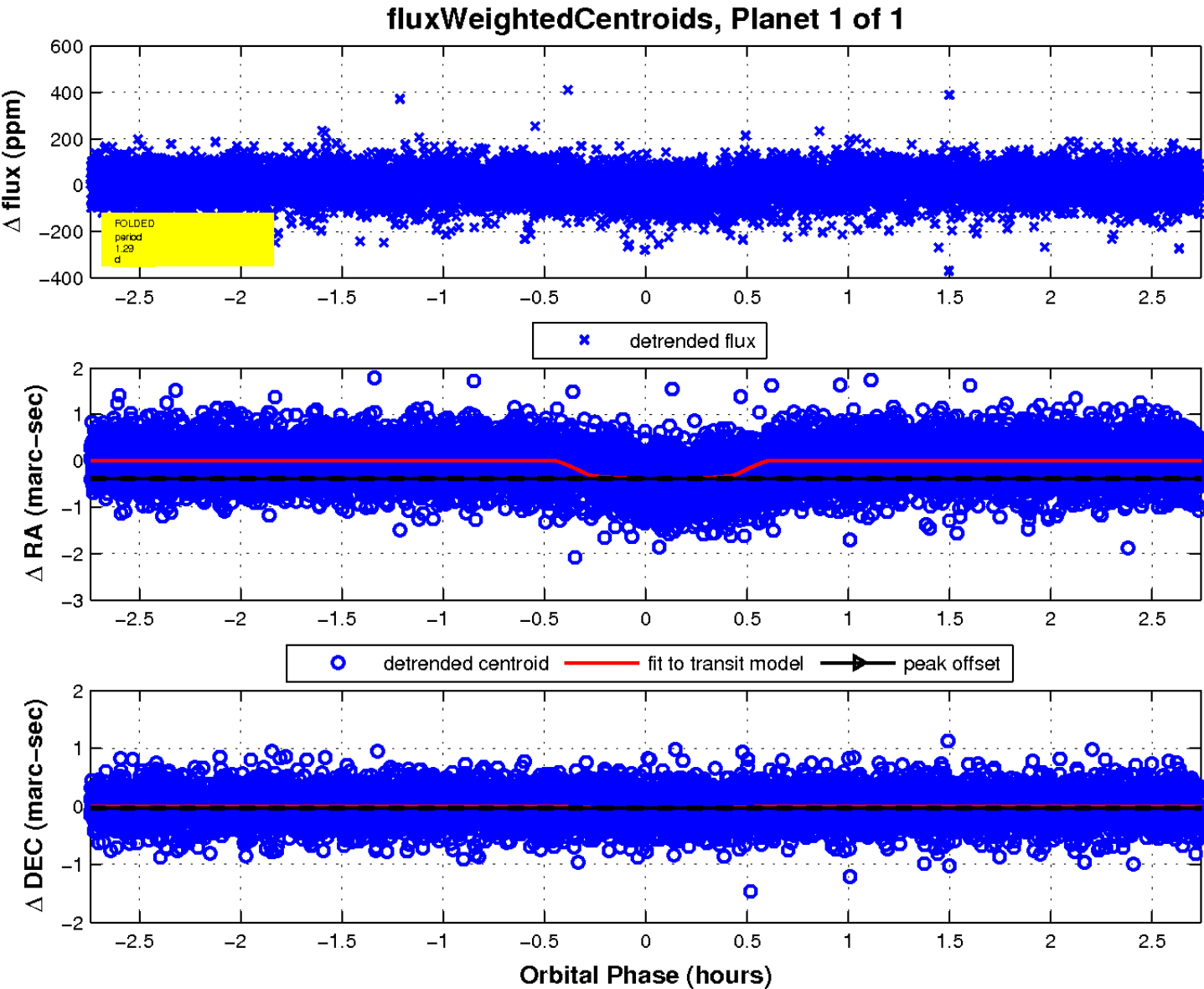
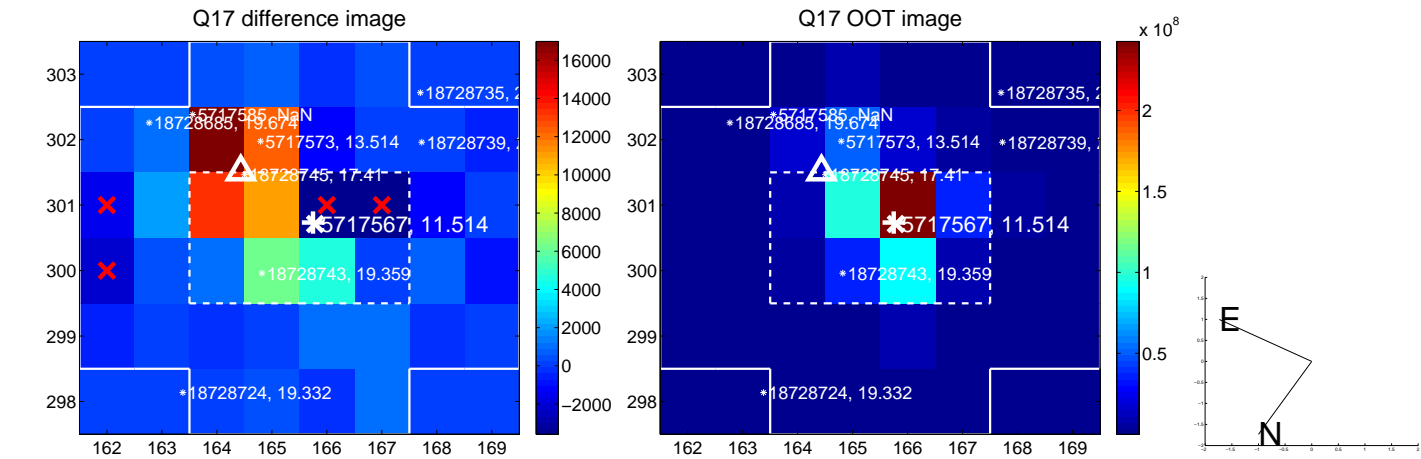
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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

