

KIC 006947339

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})
006947339-01	OBS	No	0.566743	131.925926	0.3	5.046	8.0	0.1	0.83	5423	0.04	3611.93

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
006947339-01	OBS	FP	0.00	1	0	0	1	LPP_DV—CENT_FEW_DIFFS—EPHEM_MATCH

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.

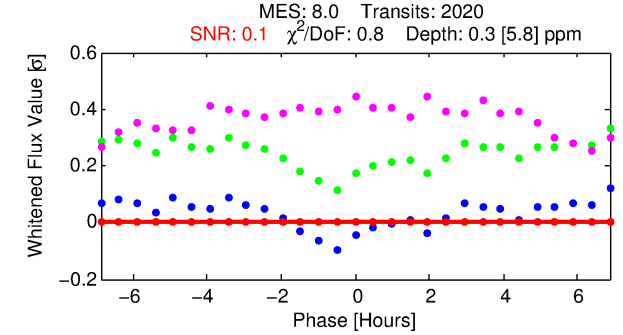
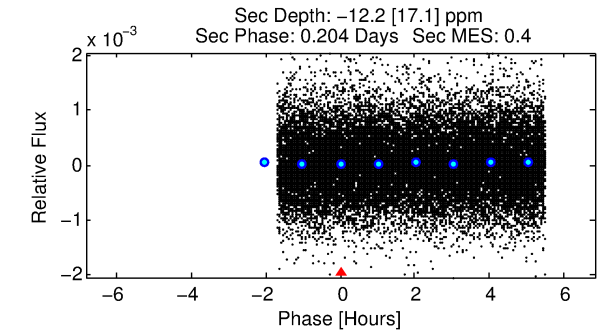
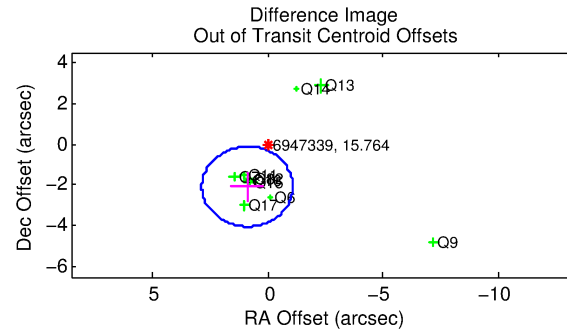
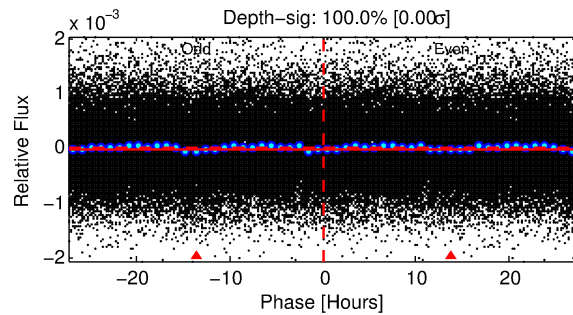
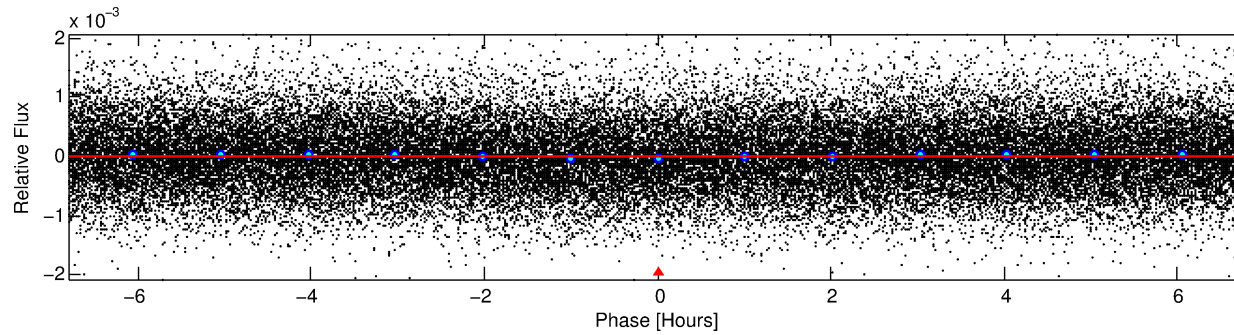
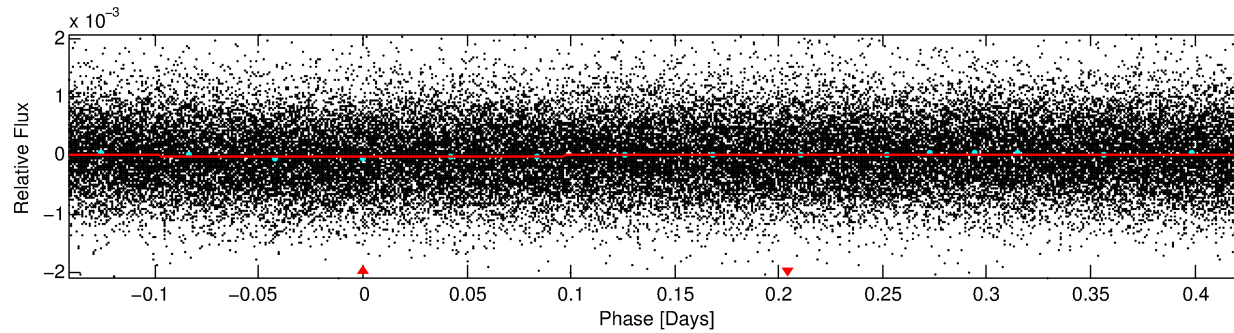
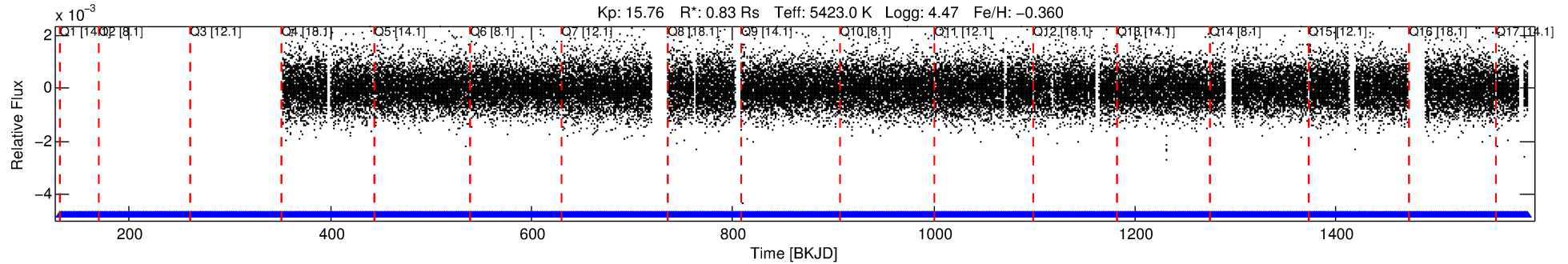
Ephemeris Match Information For 006947339-01

TCE (1)	KIC	Parent (2)	Parent KIC	$P_1:P_2$	Dist ($''$)	Δ Row	Δ Col	m_2	m_1	D_2/D_1	Mechanism	Flag	σ_P	σ_T
006947339-01	6947339	RR-Lyr-pri	7198959	1:1	1147.5	261	-124	7.86	15.76	623300.00	Direct-PRF	0	1.01	16.42

Notes: $P_1:P_2$ is the period ratio. Dist is the distance in arcseconds. Δ Row and Δ Col are the number of pixels apart in row and column. m_2 and m_1 are the magnitudes of the parent and child. D_2/D_1 is the parent's transit depth divided by the child's. σ_P and σ_T are the significance of the match in period and epoch. For a match to be considered significant $\sigma_P < 5.0$ and $\sigma_T < 5.0$. Matches which have σ_P and σ_T very close to this cutoff should receive extra scrutiny, especially if the period ratio is very large.

DV One-Page Summary

KIC: 6947339 Candidate: 1 of 1 Period: 0.567 d



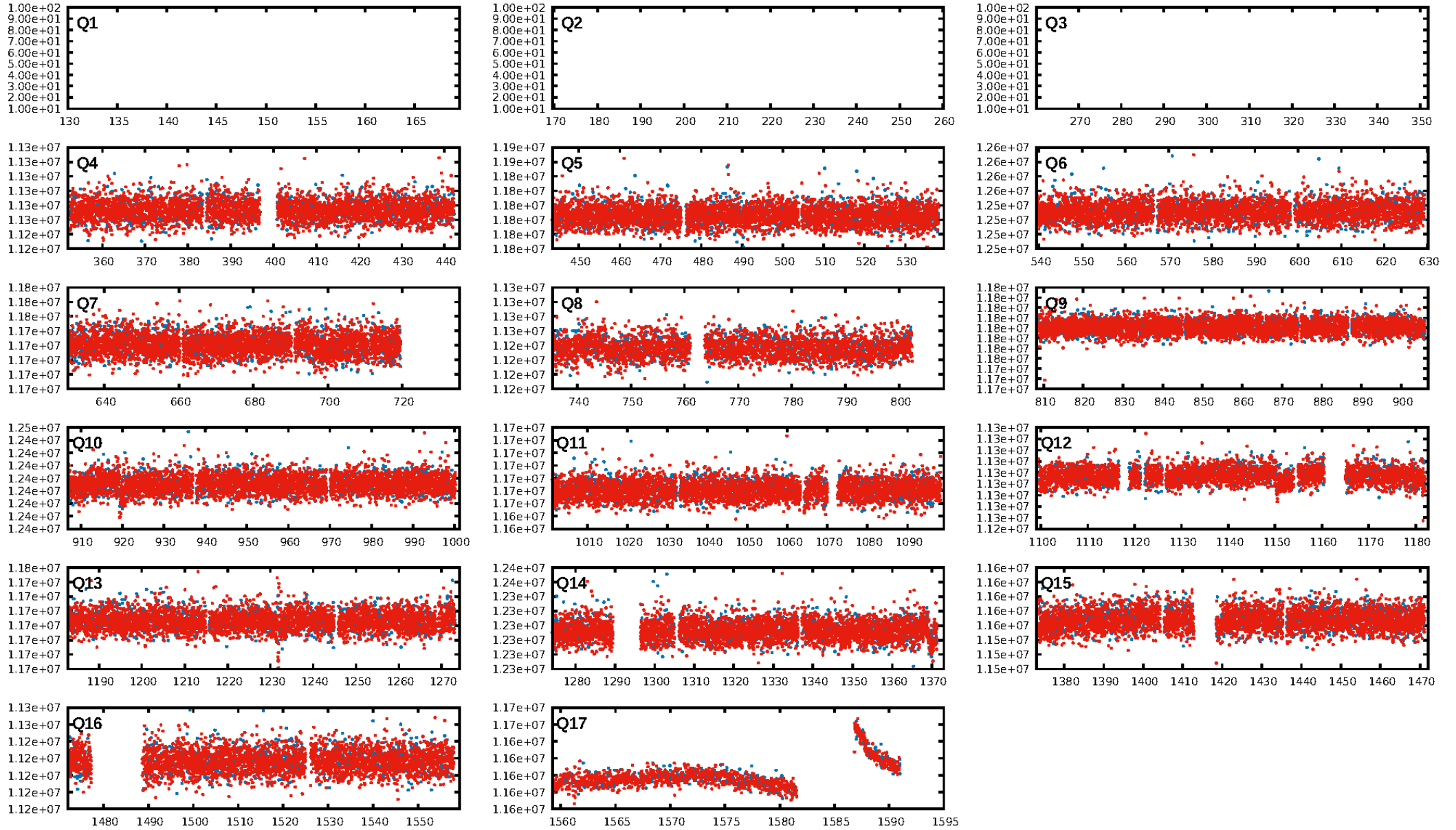
DV Fit Results:

Period = 0.56674 [0.00190] d
Epoch = 131.9259 [1.0756] BKJD
Rp/R* = 0.0005 [0.0788]
a/R* = 1.08 [112.32]
b = 0.29 [2300.53]
Seff = 3611.93 [1066.33]
Teq = 1977 [146] K
Rp = 0.04 [7.15] Re
a = 0.0122 [0.0020] AU
Ag = N/A
Teffp = N/A

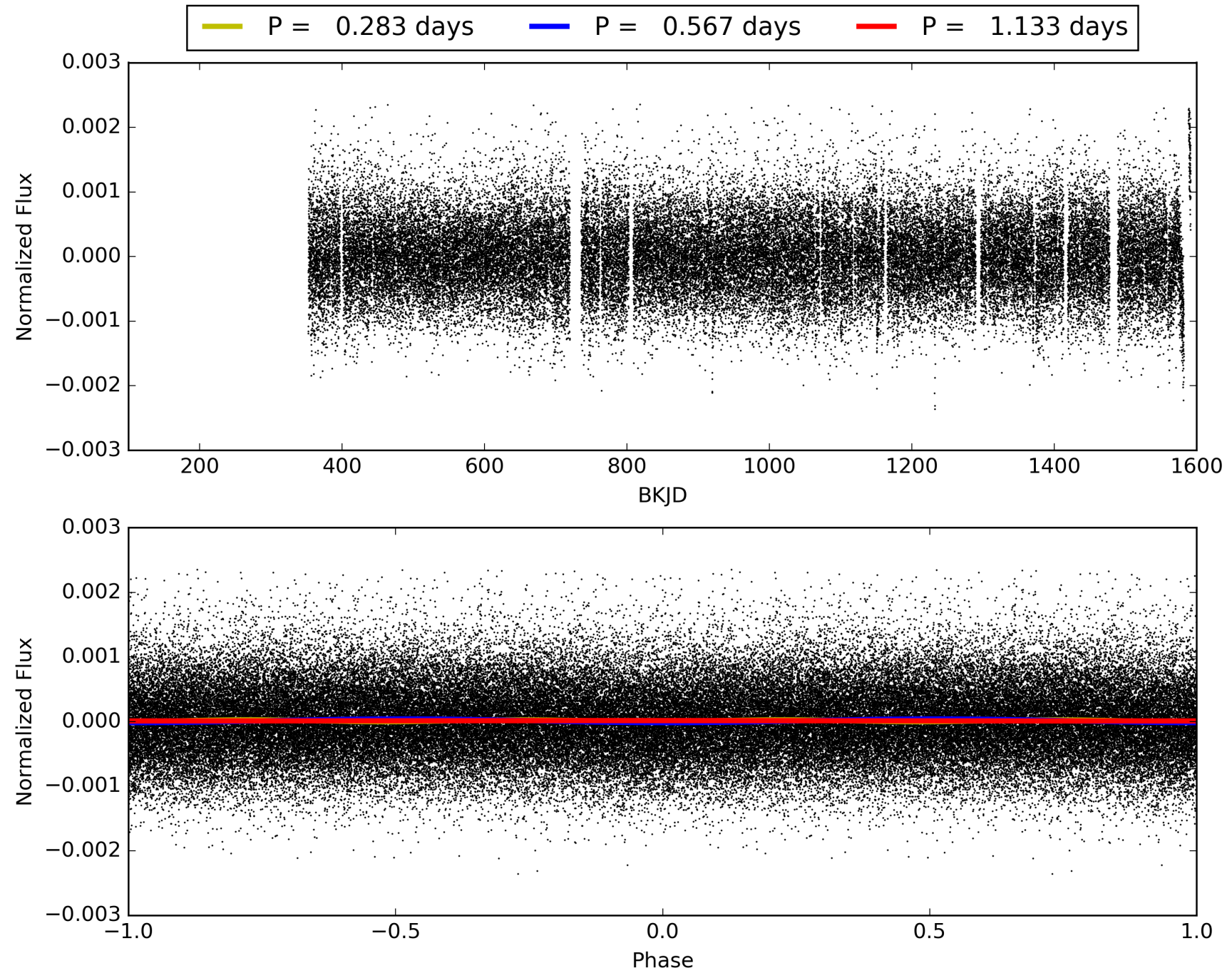
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: N/A
RollingBand-fgt: 1.00 [1972/1972]
GhostDiagnostic-chr: N/A
Centroid-sig: N/A
Centroid-so: N/A
OotOffset-rm: 2.255 arcsec [3.45σ]
KicOffset-rm: 2.271 arcsec [3.15σ]
OotOffset-st: 2/3/3/3 [11]
KicOffset-st: 2/3/3/3 [11]
DiffImageQuality-fgm: 0.64 [7/11]
DiffImageOverlap-fno: 1.00 [14/14]

TCE 006947339-01, PDC Light Curves

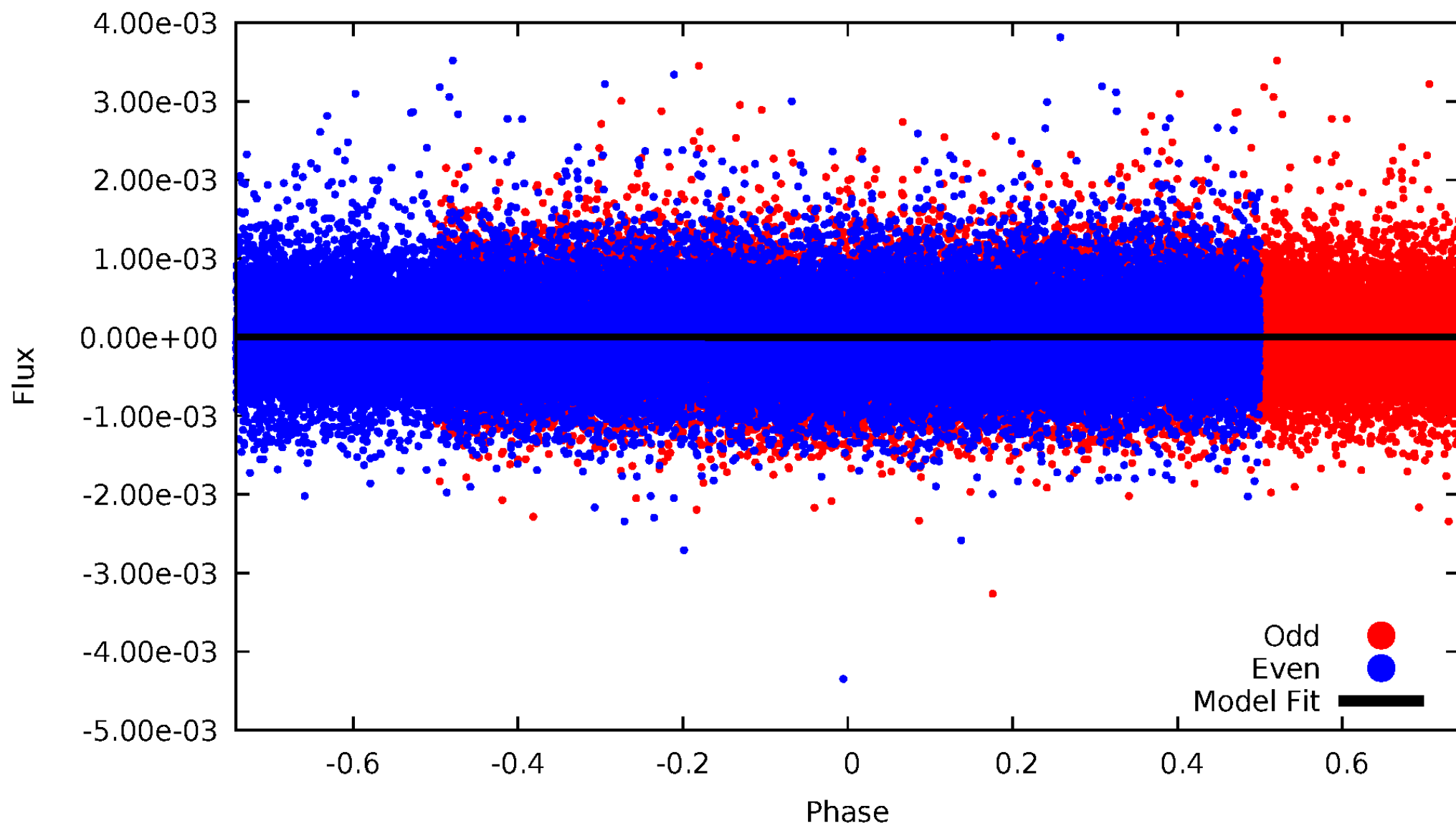


TCE 006947339-01



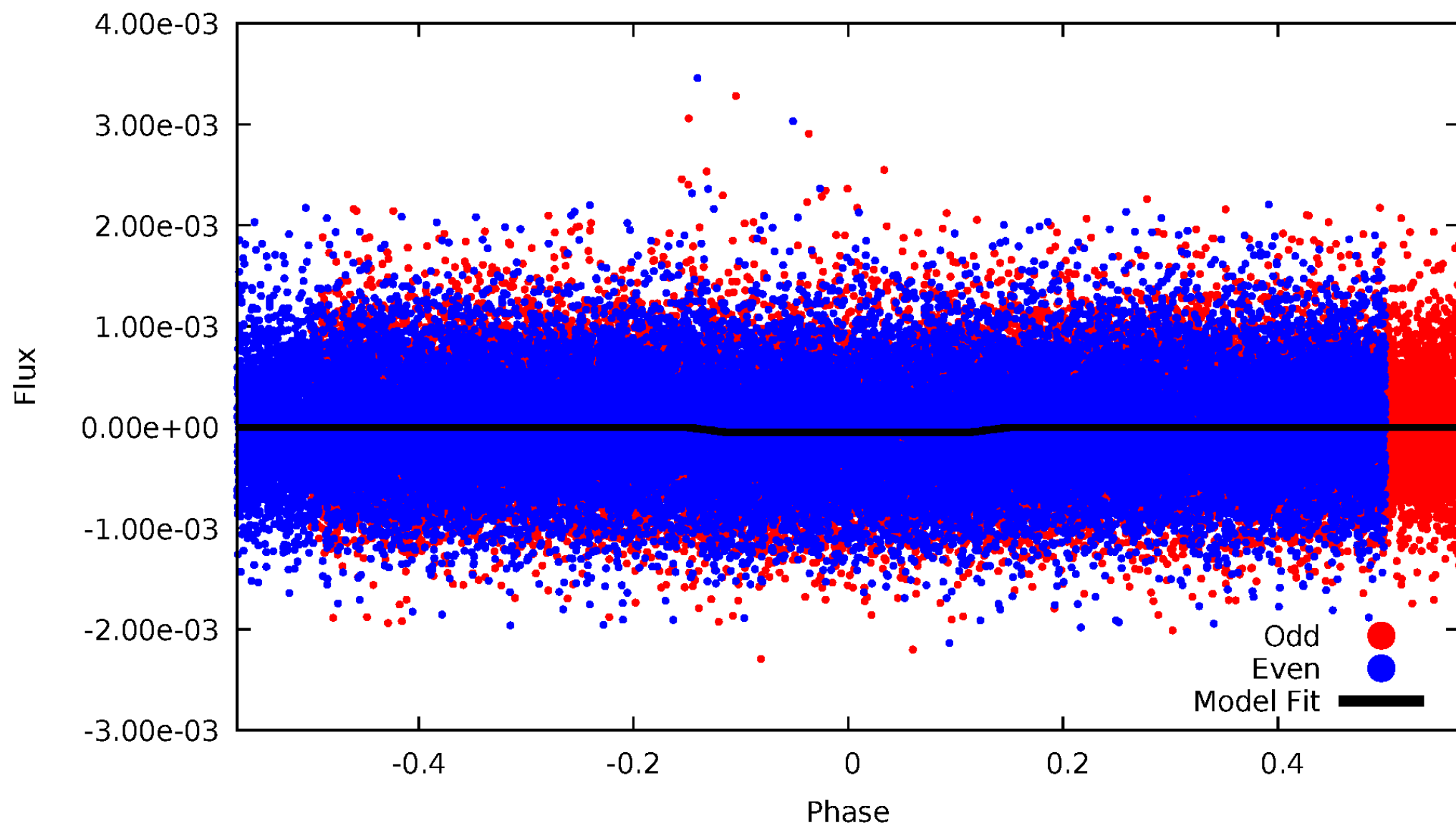
DV Odd/Even

TCE 006947339-01



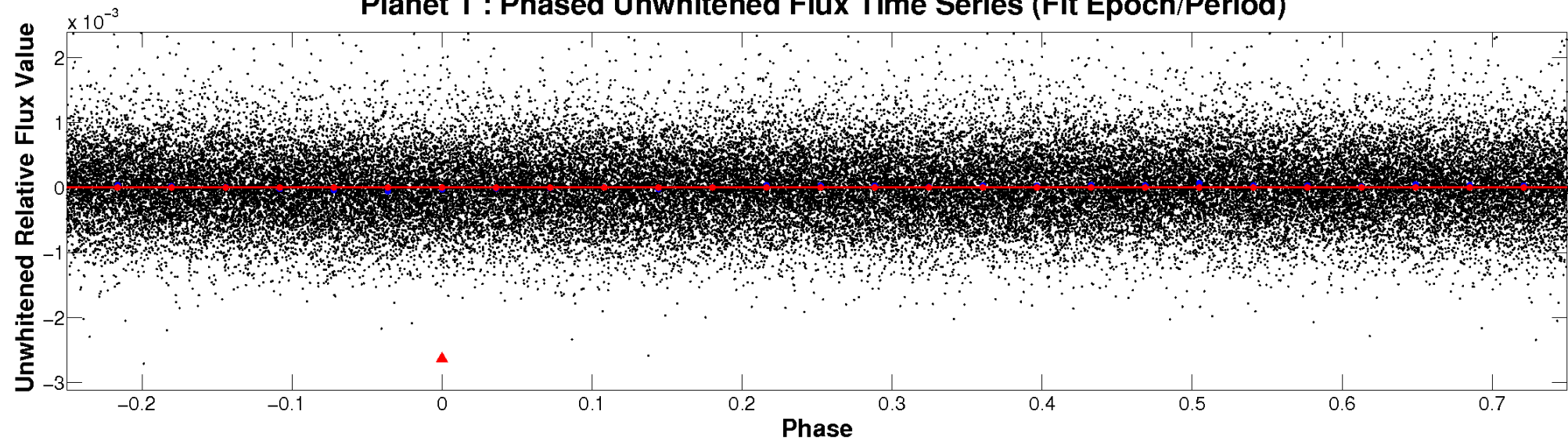
ALT Odd/Even

TCE 006947339-01

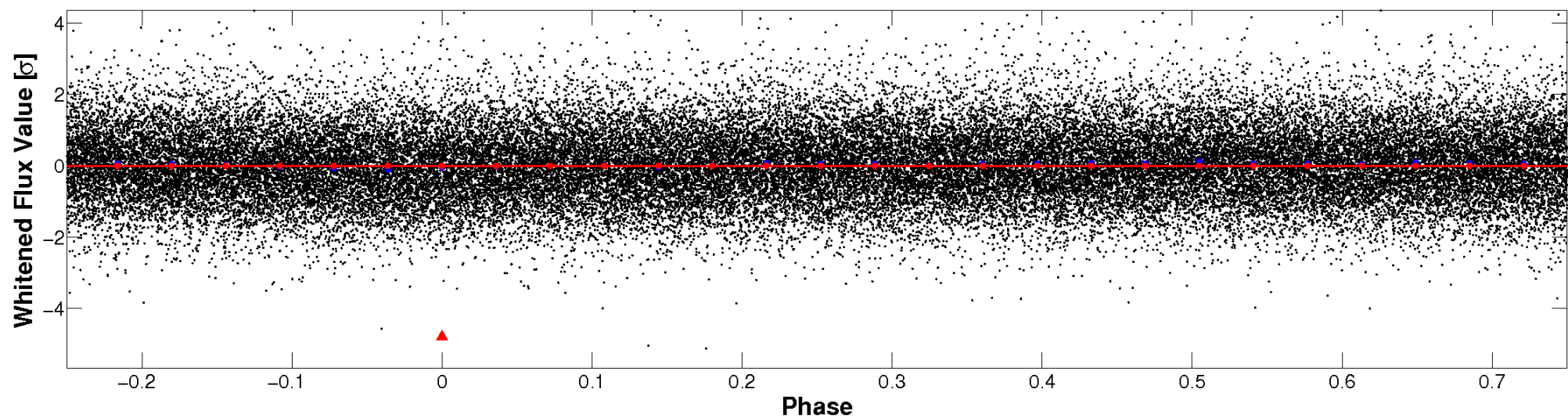


Non-Whitened Vs. Whitened Light Curve

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

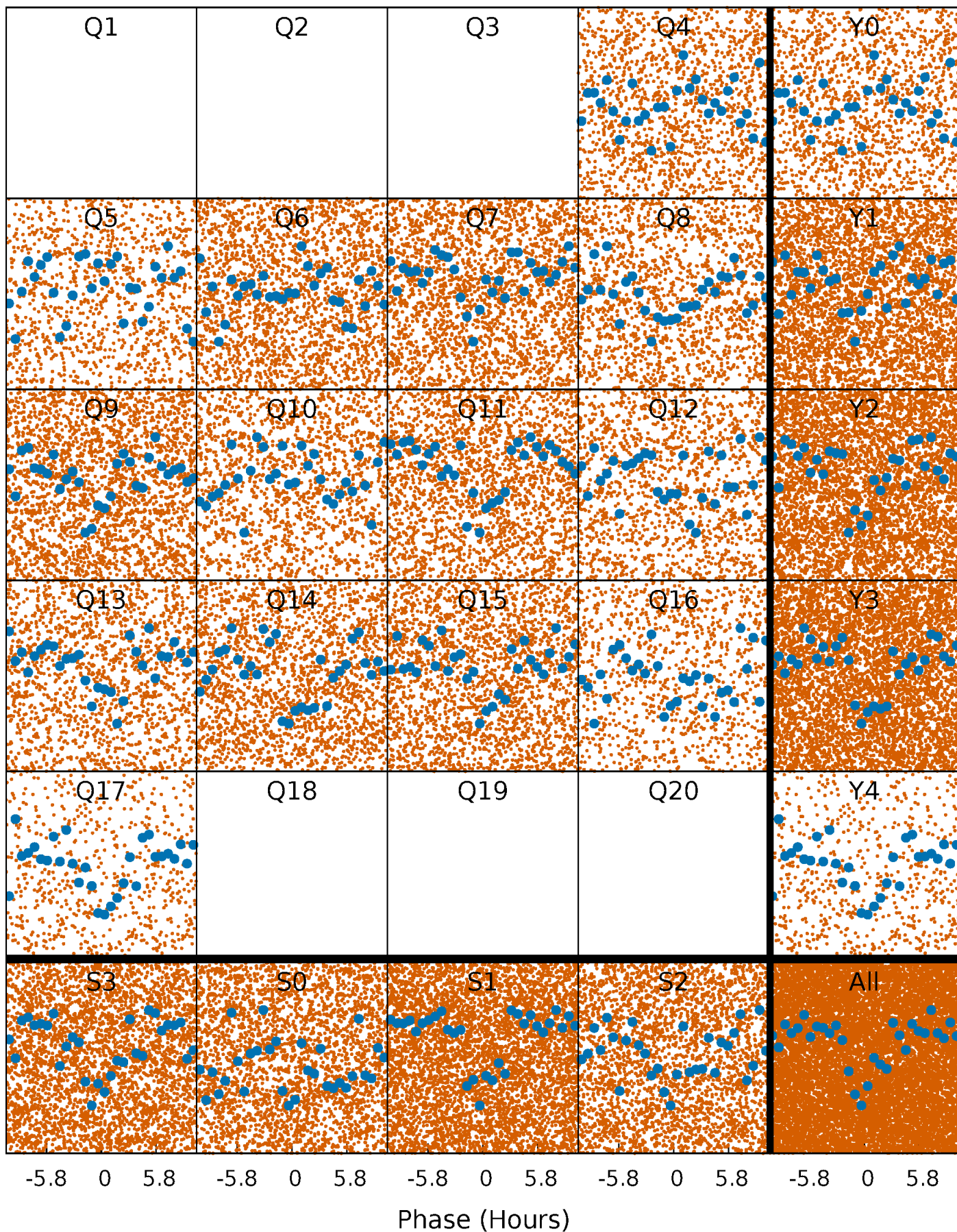


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



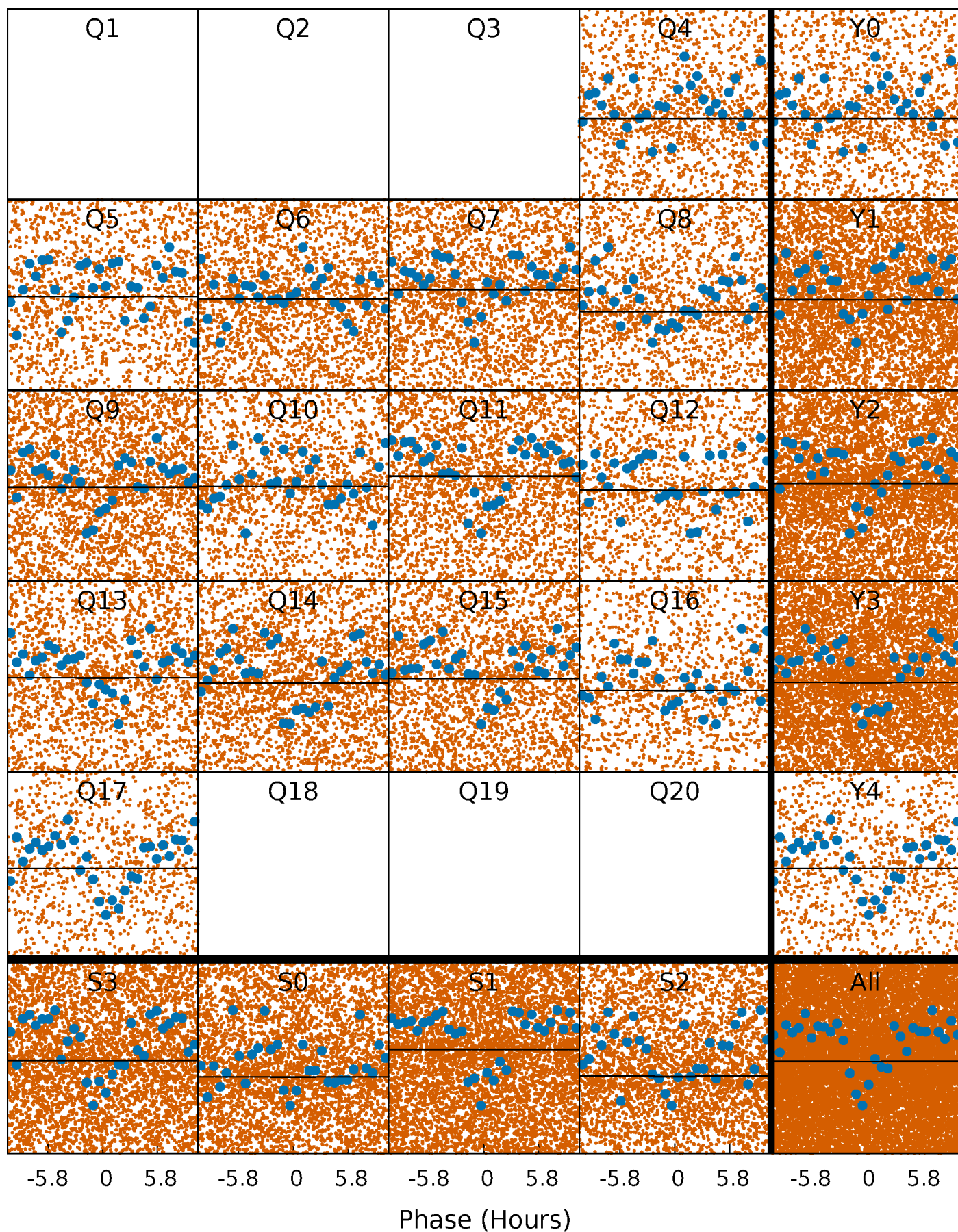
PDC Quarter-Phased Transit Curves

TCE 006947339-01 P= 0.566743 Days $T_0=131.925926$ (BKJD)



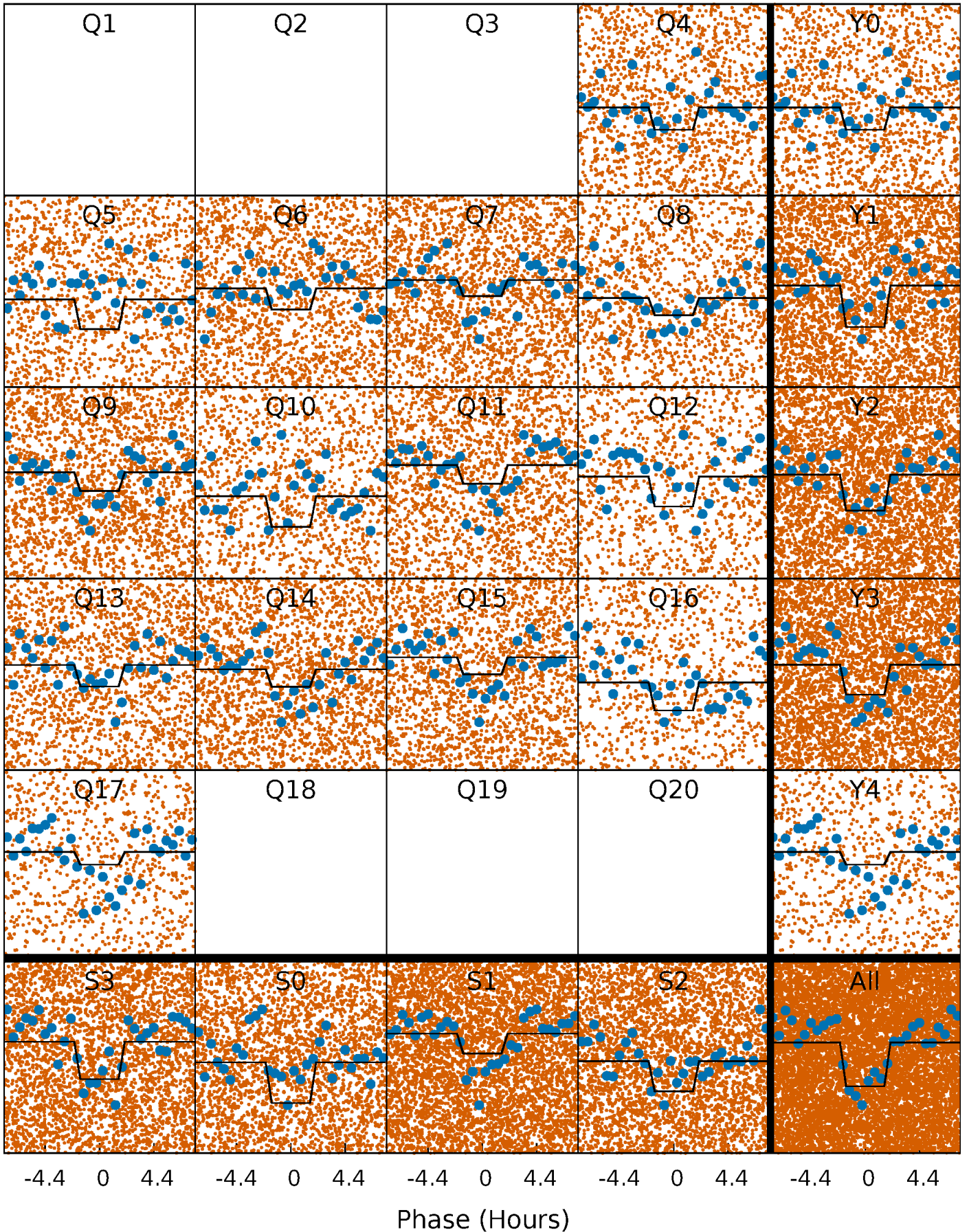
DV Quarter-Phased Transit Curves

TCE 006947339-01 P= 0.566743 Days $T_0=131.925926$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

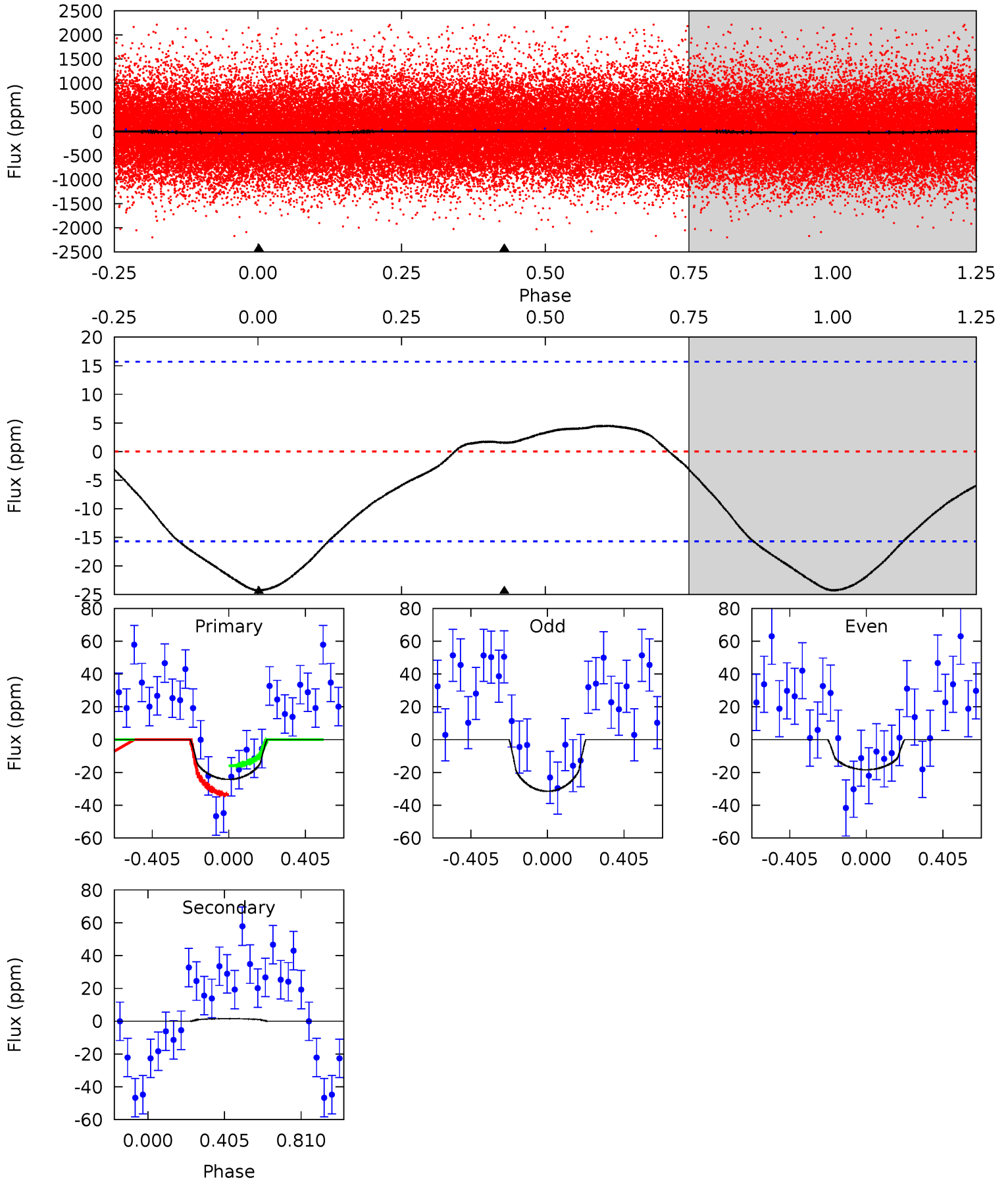
TCE 006947339-01 P= 0.566775 Days $T_0=131.867212$ (BKJD)



DV Model-Shift Uniqueness Test

006947339-01, P = 0.566743 Days, E = 131.925926 Days

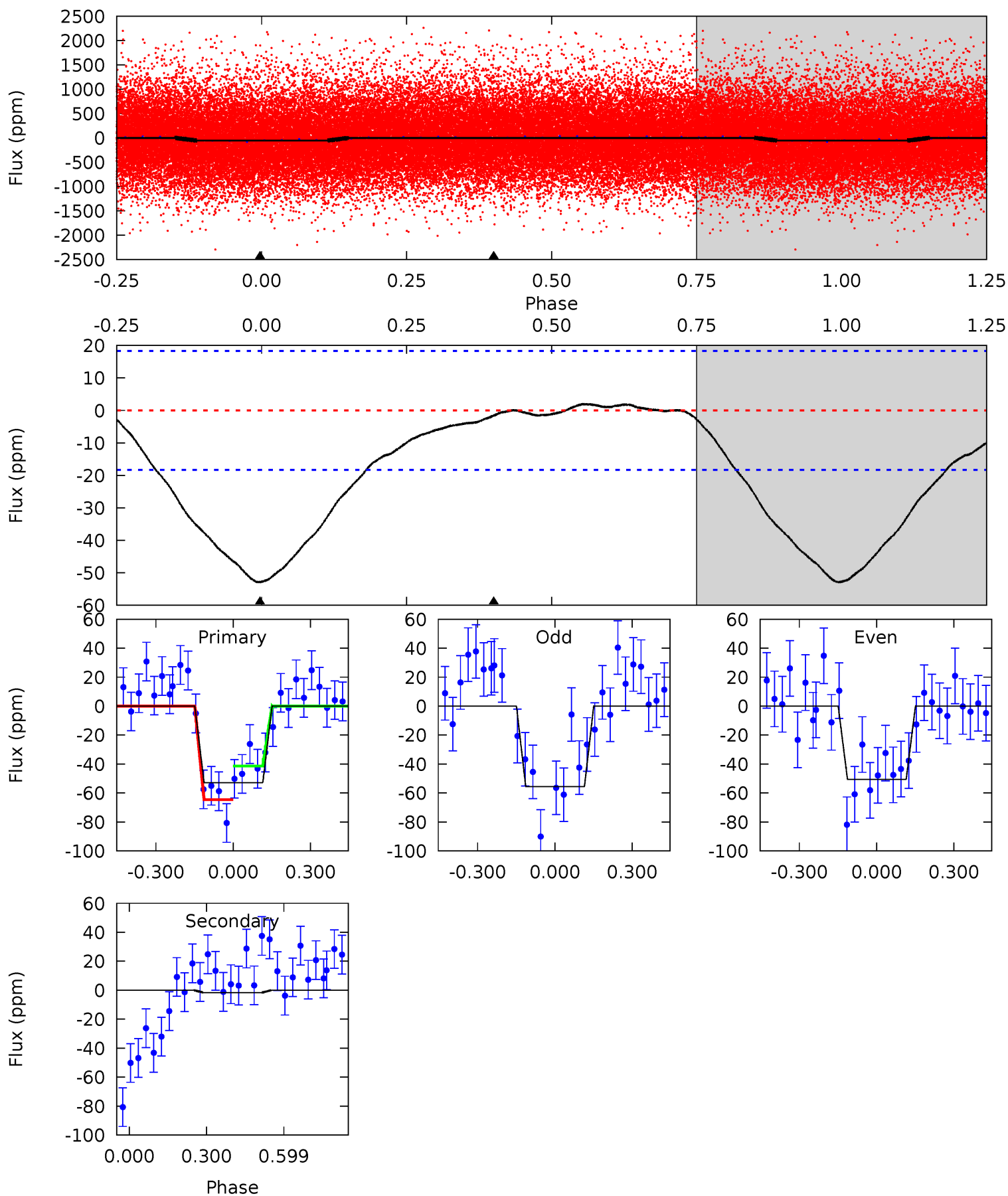
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
6.59	-0.41	0	0	4.26	0.83	0.69	6.59	6.59	-0.41	-0.41	1.78	1.05	0.16	2.40



Alt Model-Shift Uniqueness Test

006947339-01, P = 0.566775 Days, E = 131.867212 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
12.5	0.38	0	0	4.33	1.04	0.18	12.5	12.5	0.38	0.38	0.59	1.00	0.04	2.70



Stellar Parameters For KIC 006947339

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	$M(M_{\odot})$	p_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	5423^{+206}_{-187}	$4.473^{+0.130}_{-0.143}$	$-0.360^{+0.350}_{-0.300}$	$0.831^{+0.157}_{-0.118}$	$0.749^{+0.118}_{-0.050}$	$1.840^{+0.932}_{-0.729}$
	+4%/-3%	+3%/-3%	+97%/-83%	+19%/-14%	+16%/-7%	+51%/-40%
Source	KIC0	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 006947339-01 / KOI

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	2 ± 4	$4.91^{+5.50}_{-3.25}$	2777^{+156}_{-161}	-2966^{+132}_{-129}	$-0.002^{+0.010}_{-0.038}$
Alt.	-2 ± 4	$5.22^{+5.72}_{-3.66}$	2763^{+173}_{-146}	-2932^{+138}_{-124}	$0.003^{+0.037}_{-0.009}$

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

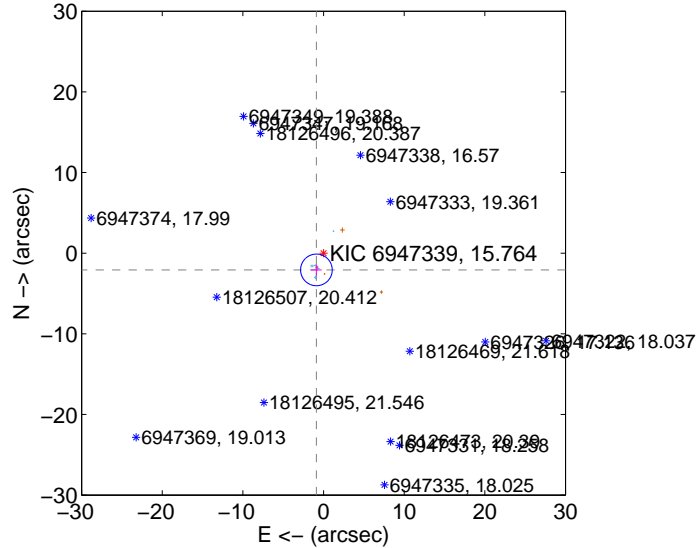
Supplemental centroid analysis for 006947339-01. Kepler magnitude: 15.76. Transit SNR 0.06

There are 7 quarters with good PRF difference image offsets

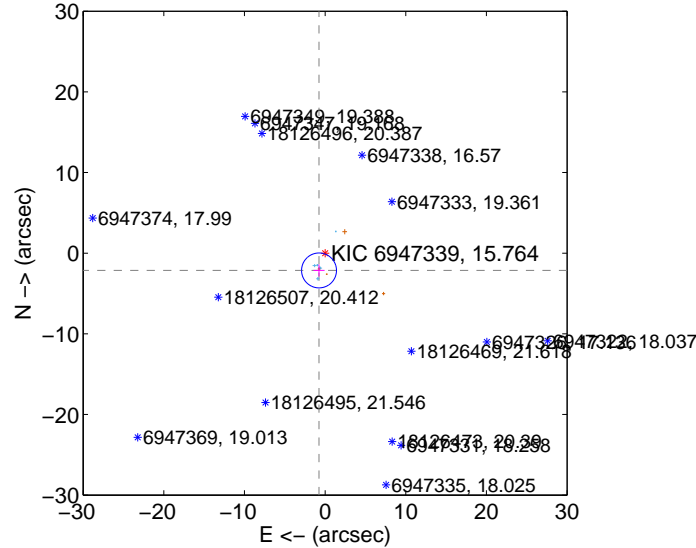
The direct PRF centroid is offset from the target star catalog position by about 0.21 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	2.255 ± 0.654	3.45	0.883 ± 0.665	-2.075 ± 0.695
PRF-fit source offset from KIC position	2.271 ± 0.721	3.15	0.755 ± 0.692	-2.141 ± 0.739
photometric centroid source offset	—	—	—	—

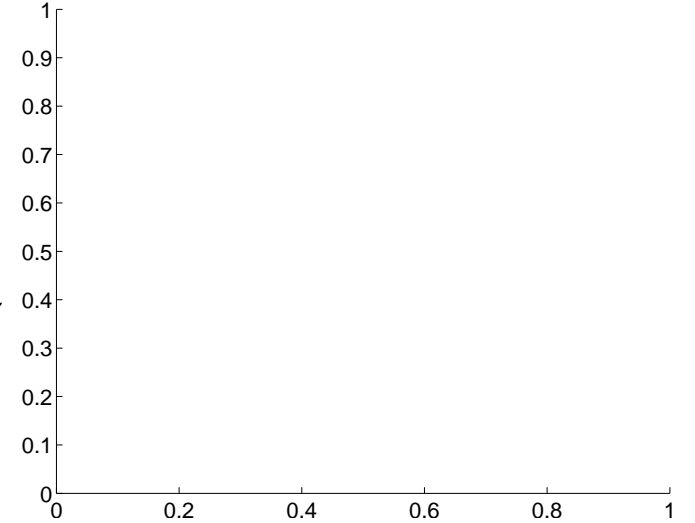
offset from difference PRF-fit to OOT PRF-fit



offset from difference PRF-fit to KIC position

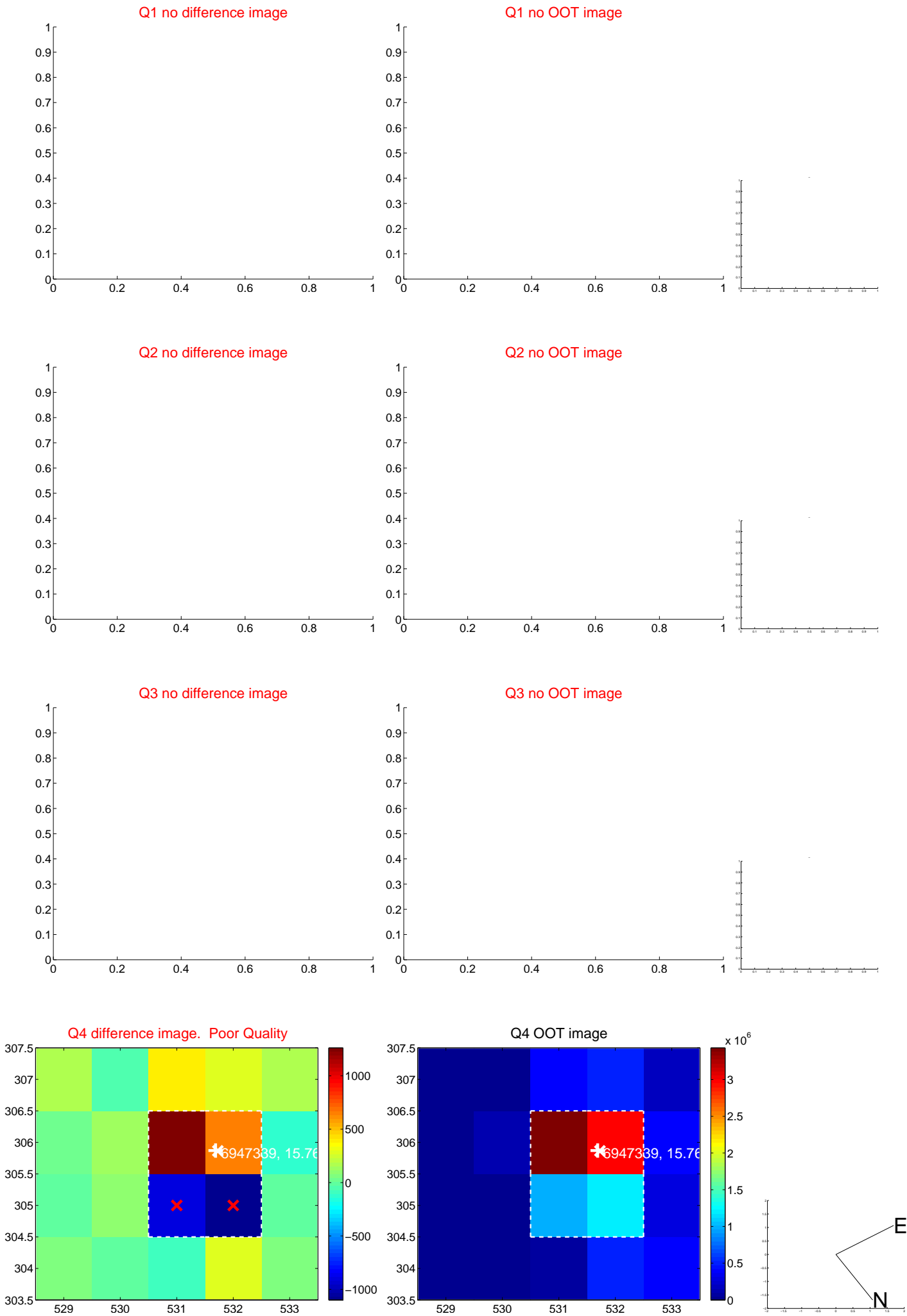


There are no photometric centroids

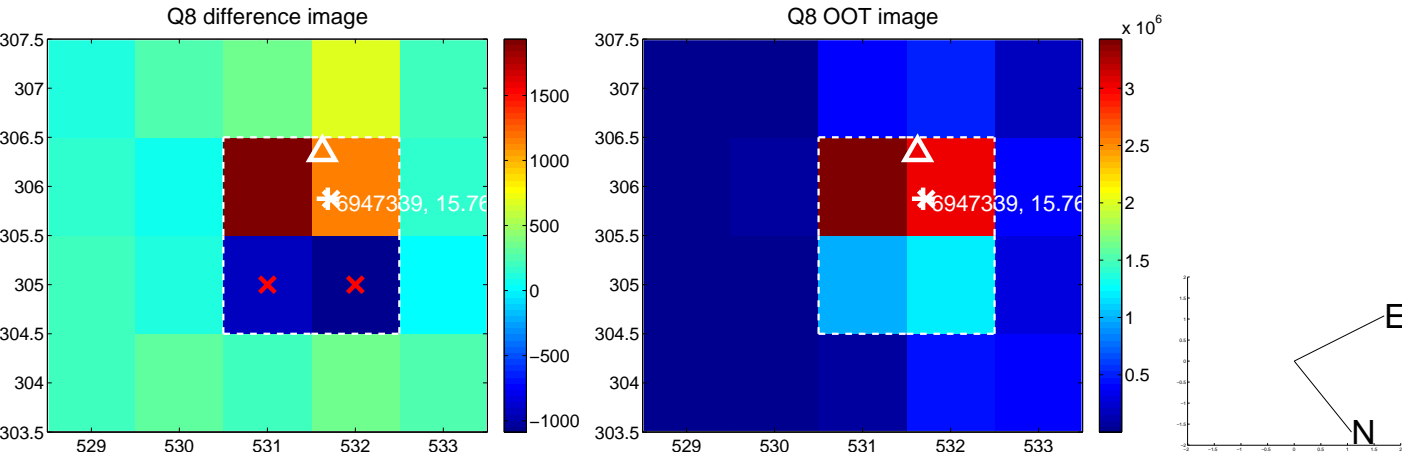
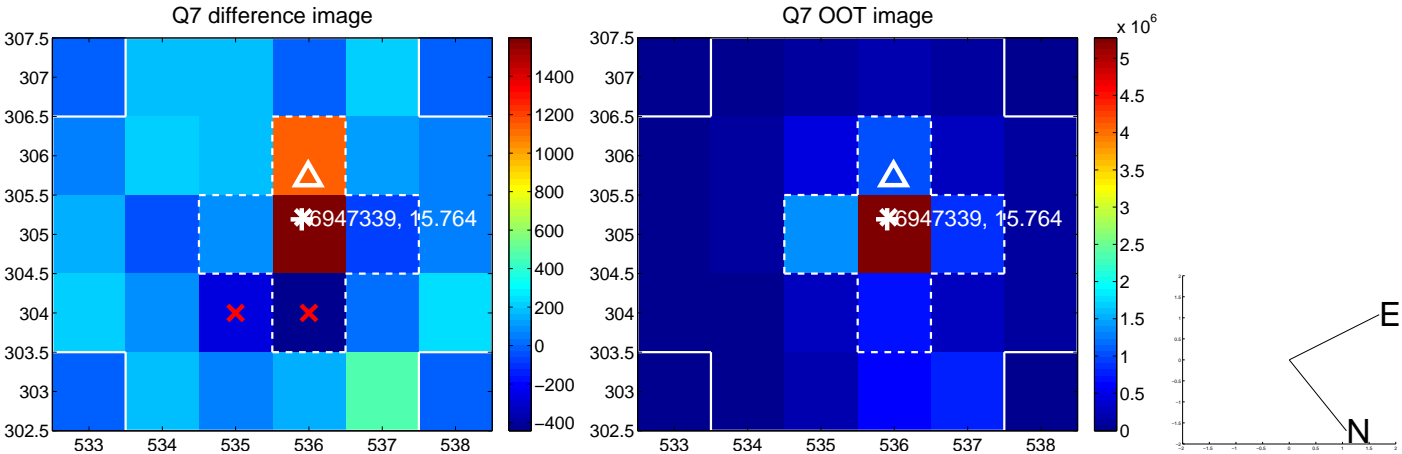
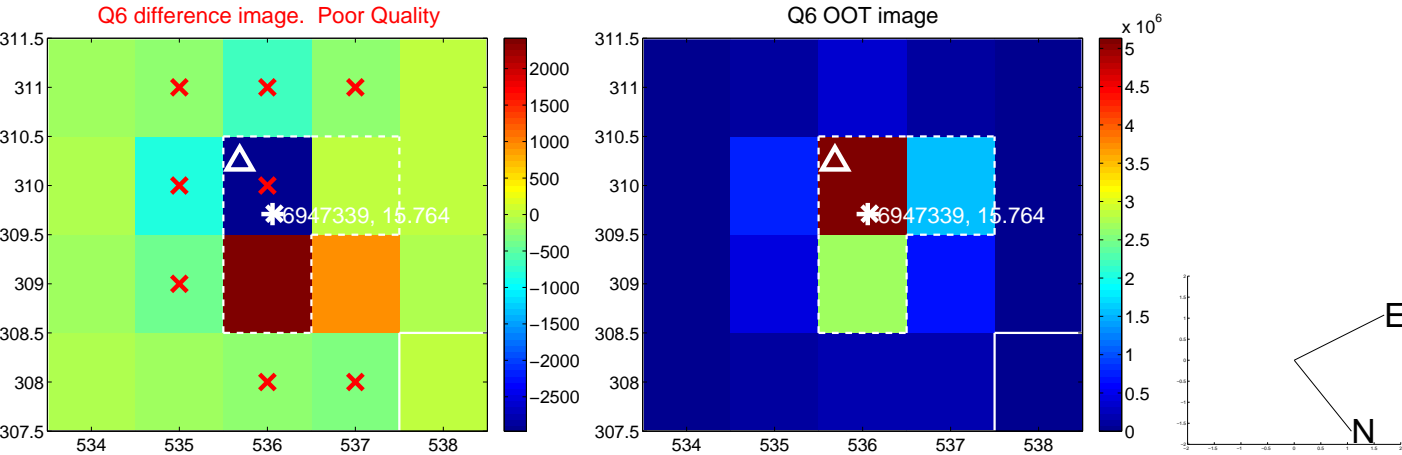
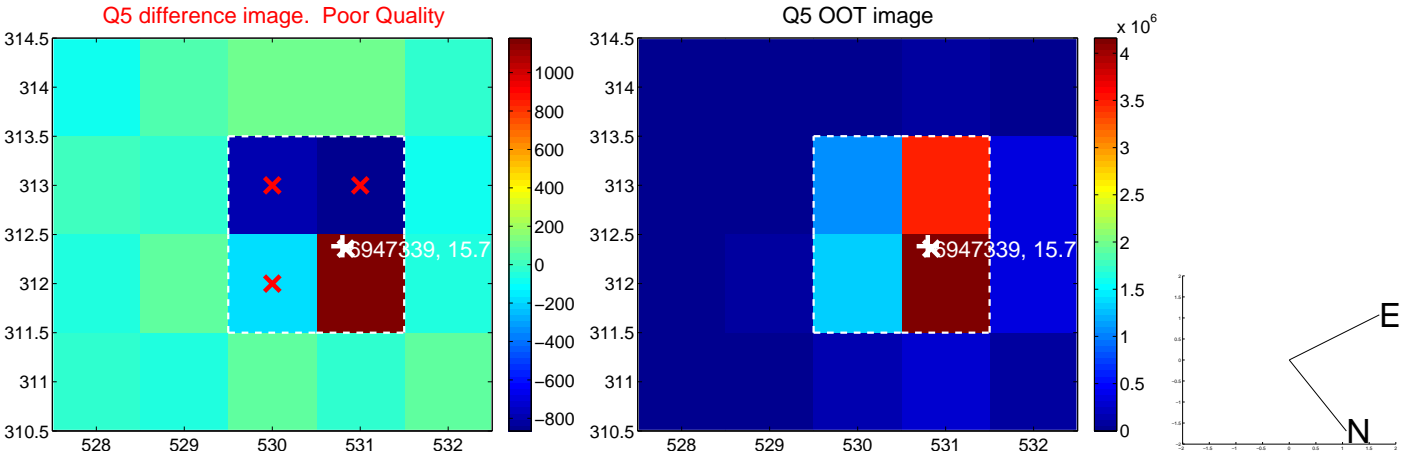


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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

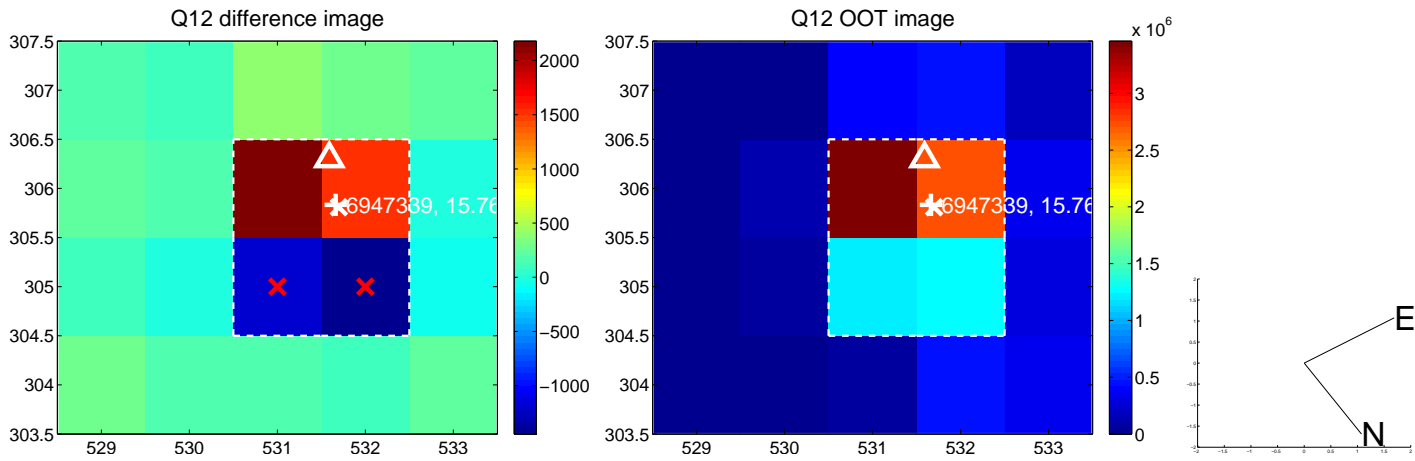
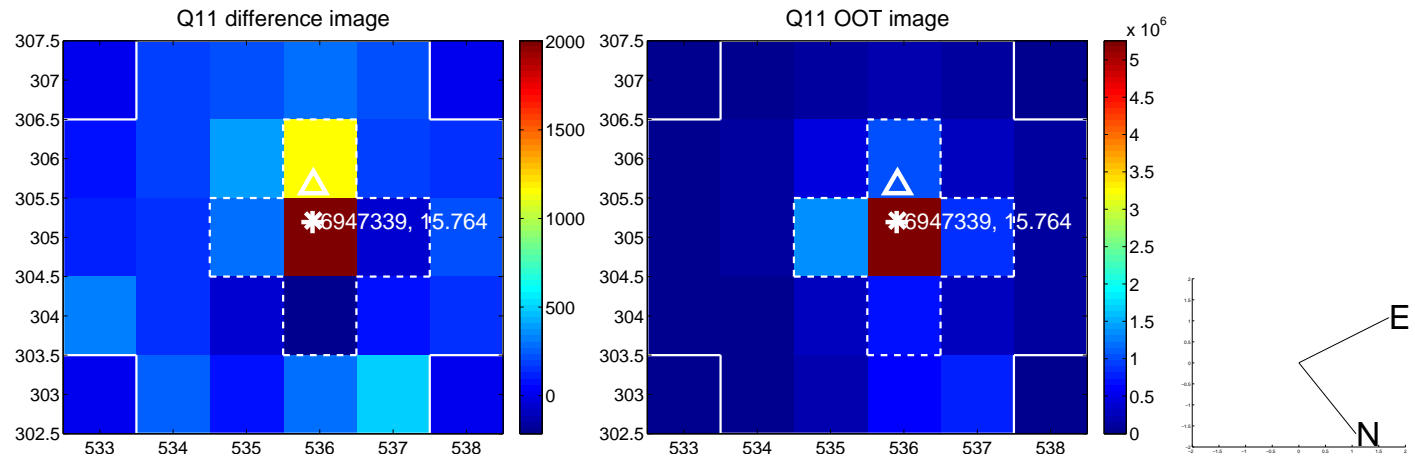
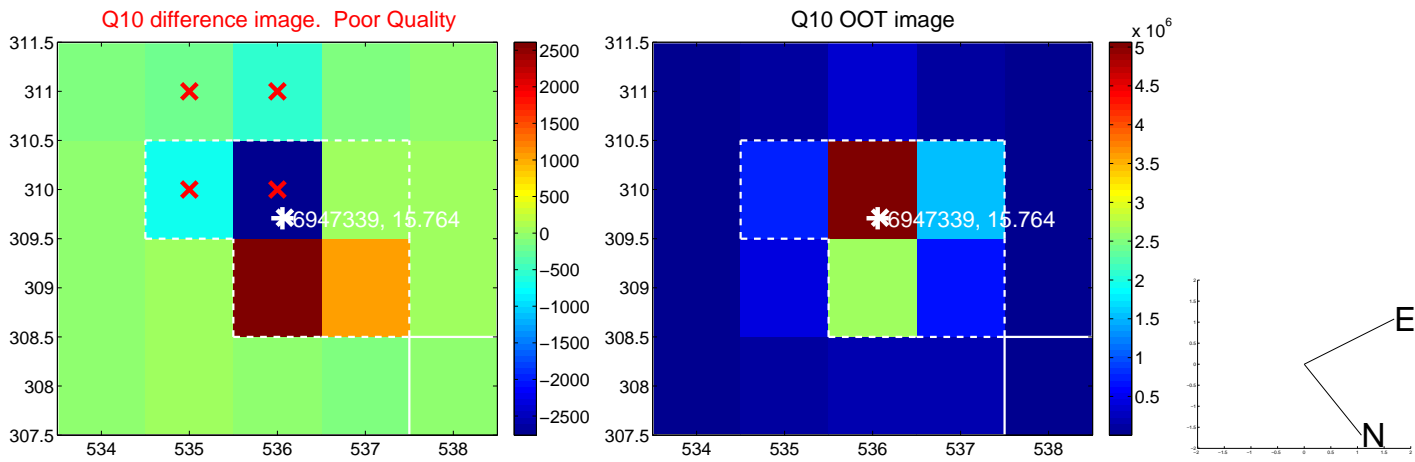
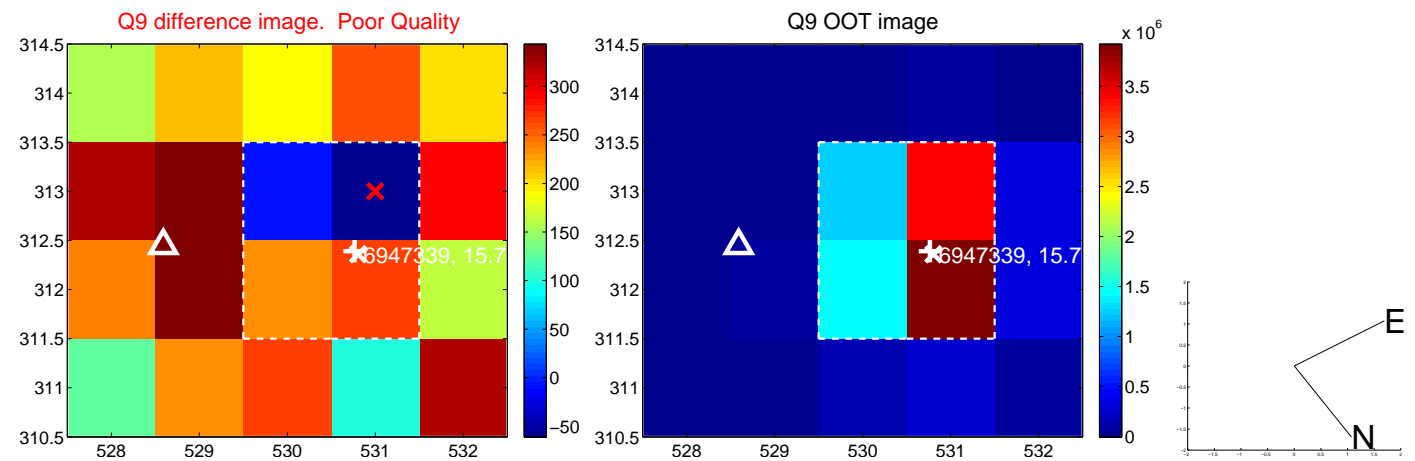
white ×: KIC target position; +: OOT centroid; △: difference centroid. red ✕: large negative pixel value.



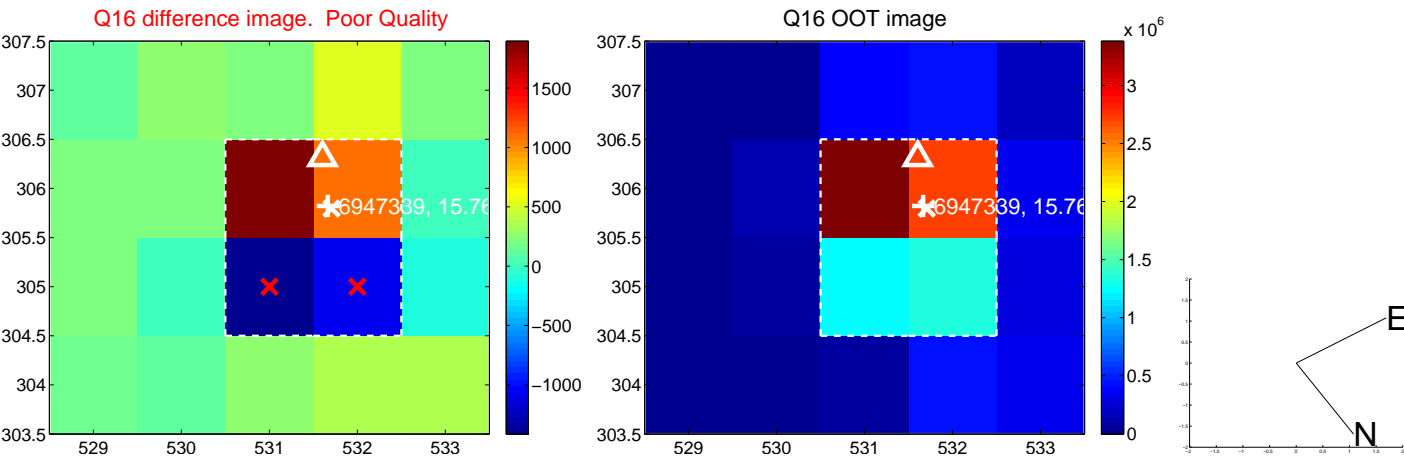
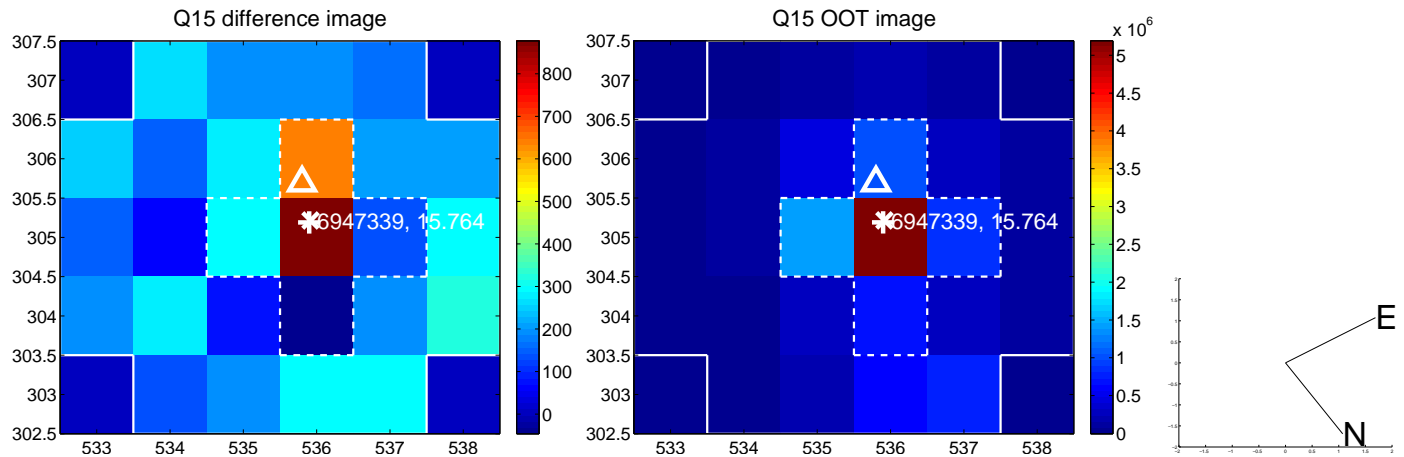
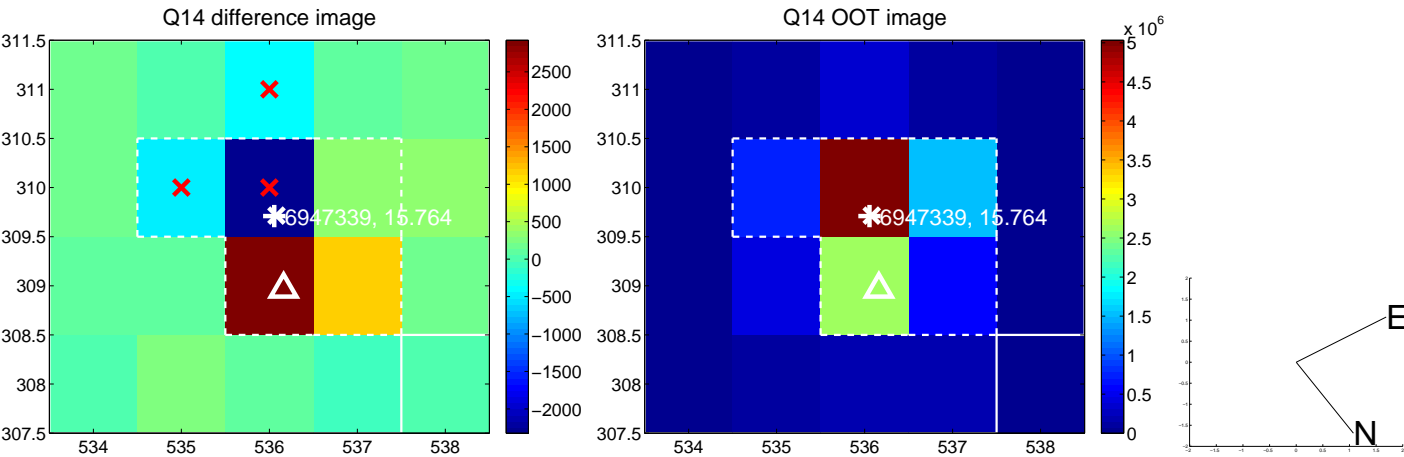
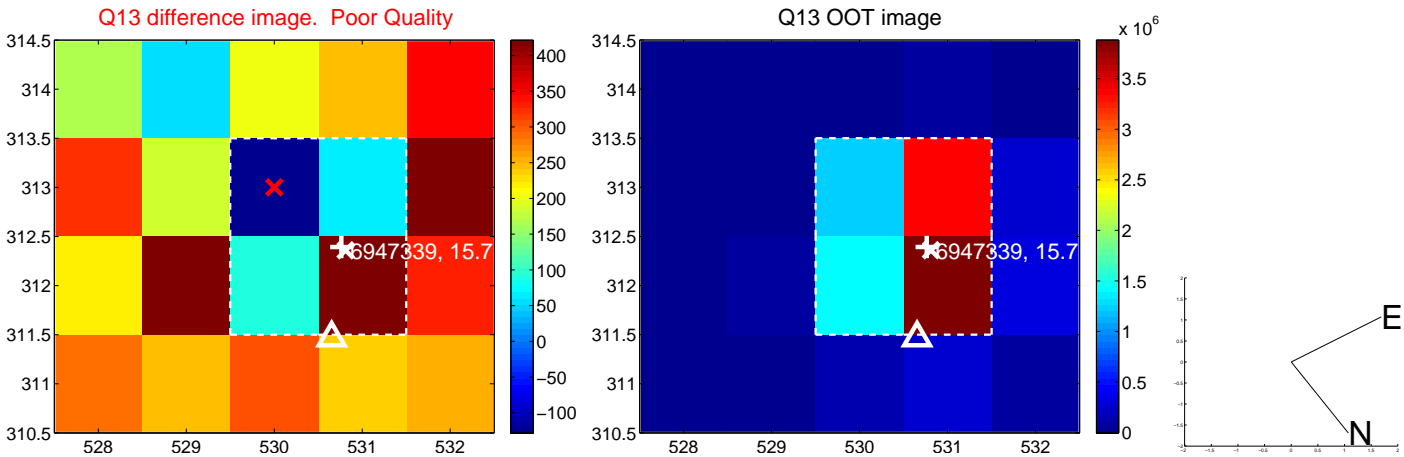
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



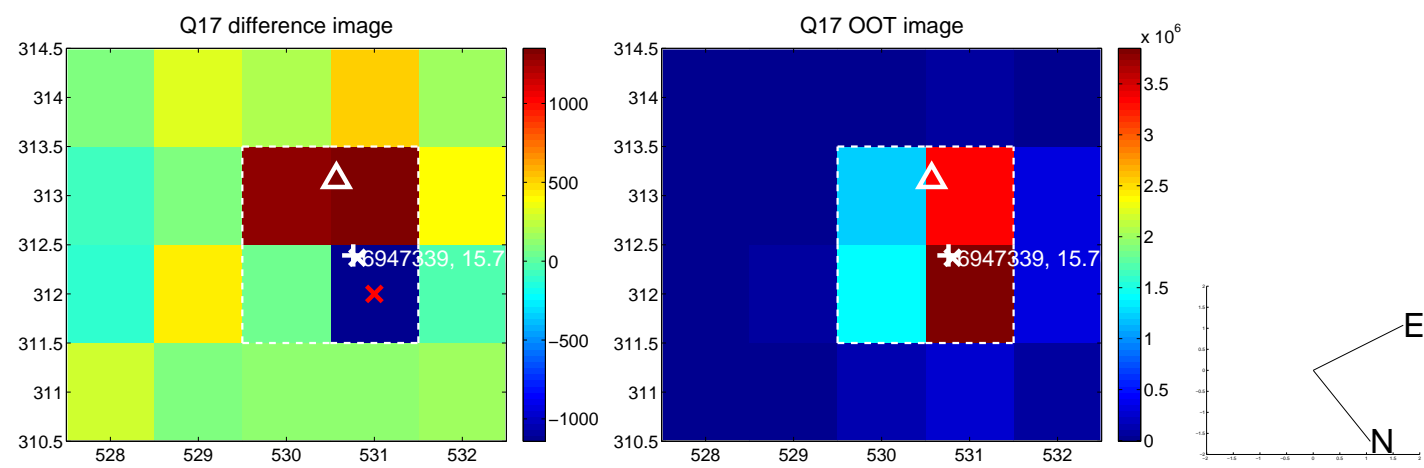
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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



folded centroid time series figure for this object.

UKIRT Image

Declination

