

KIC 003847563

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})
003847563-01	OBS	No	3.501532	133.796147	126.2	5.000	15.1	-1.0	2.57	7617	2.93	6338.39

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
003847563-01	OBS	FP	0.00	1	0	0	0	SWEET_NTL—LPP_DV—LPP_ALT—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—CENT_NOFITS

Notes: OBS = Observed. INJ = Injected. INV = Inverted. SCR = Scrambled.

N = Not Transit-Like. S = Stellar Eclipse. C = Centroid Offset. E = Ephemeris Match.

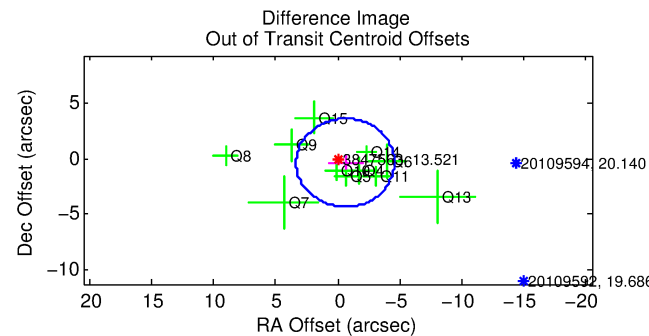
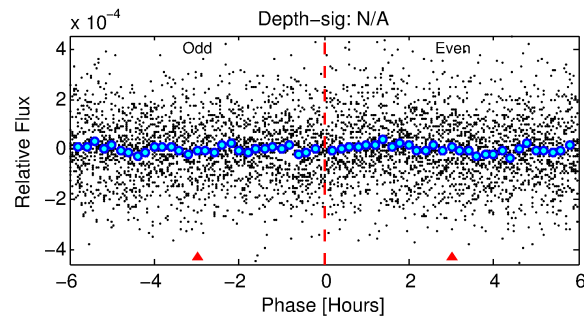
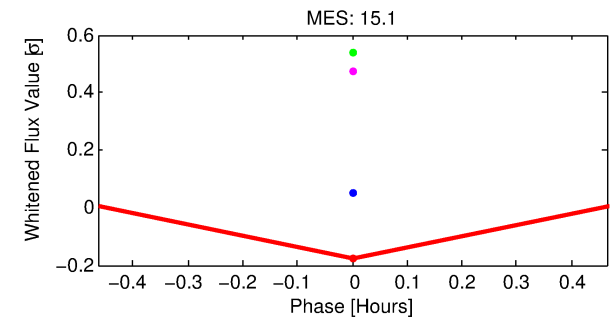
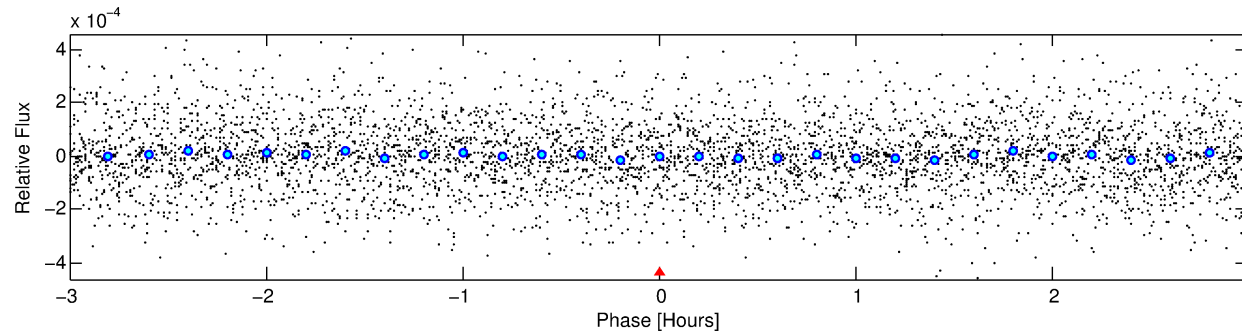
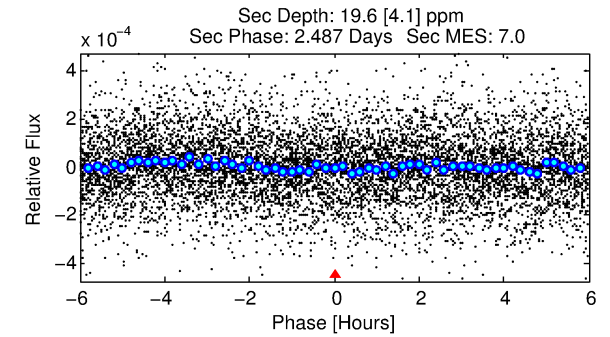
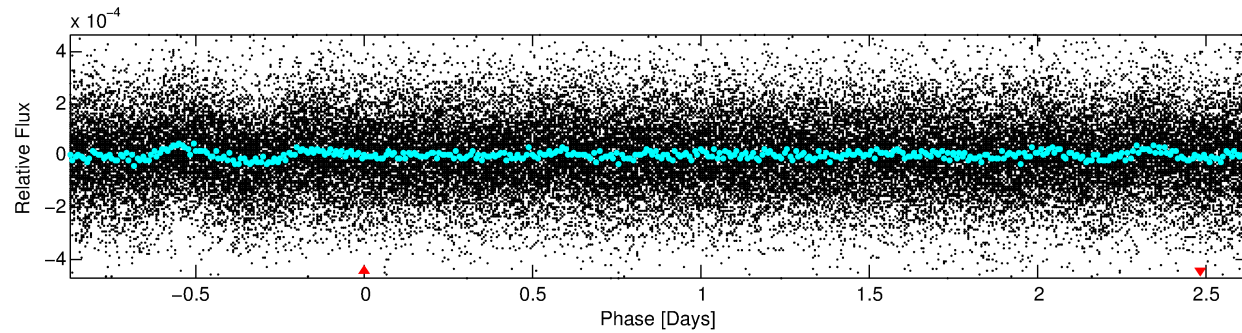
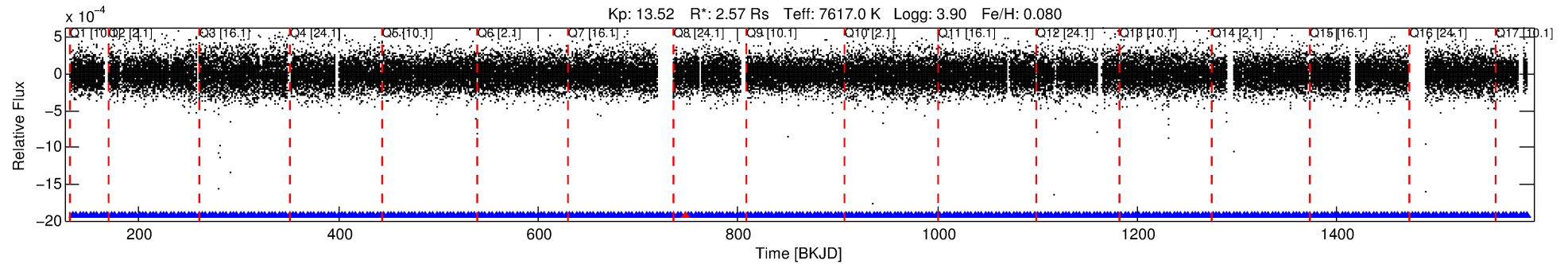
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 003847563-01

No Significant Match Found

DV One-Page Summary

KIC: 3847563 Candidate: 1 of 1 Period: 3.502 d



TPS TCE Results:

Period = 3.50153 d
Epoch = 133.7961 BKJD

DV fit results are unavailable

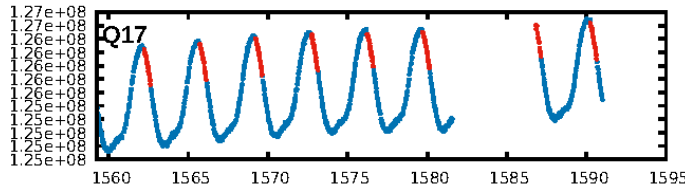
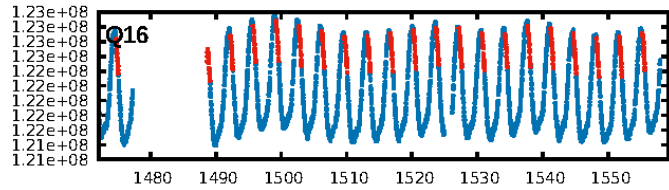
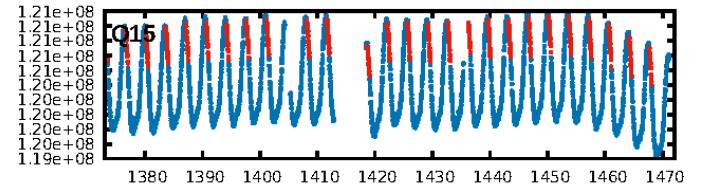
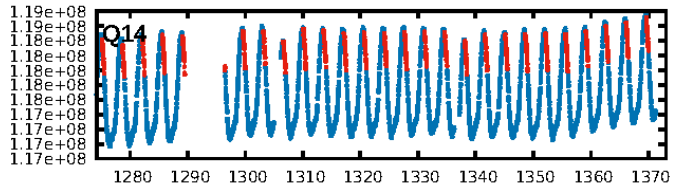
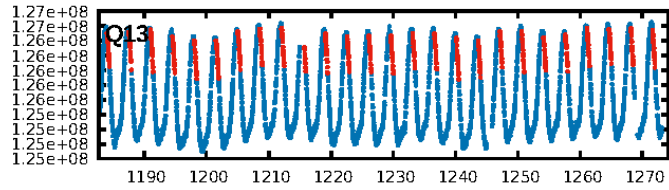
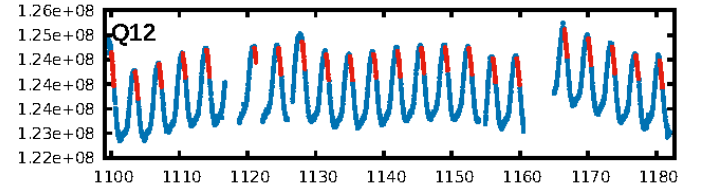
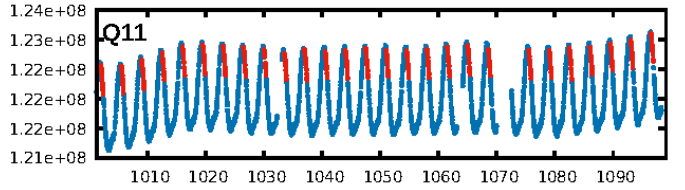
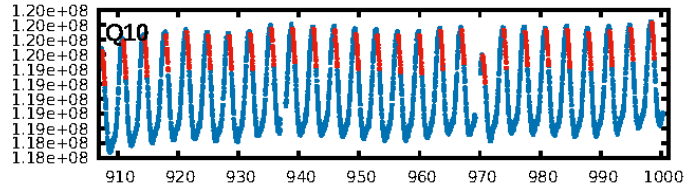
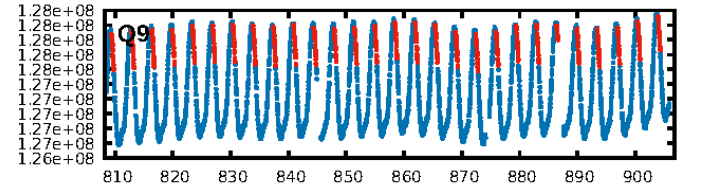
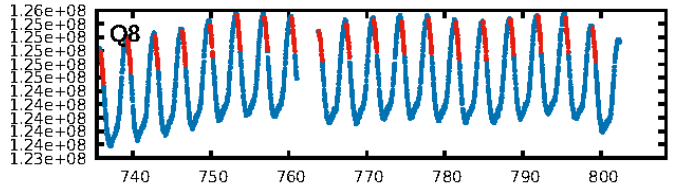
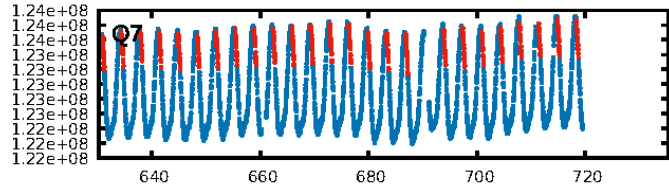
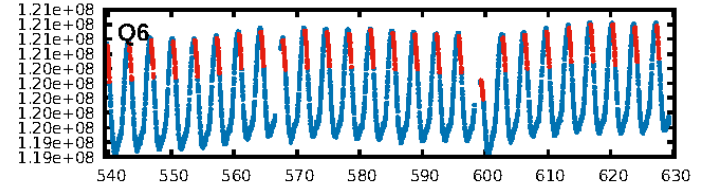
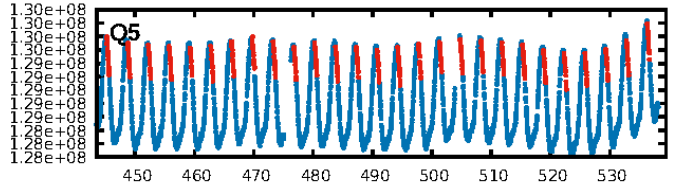
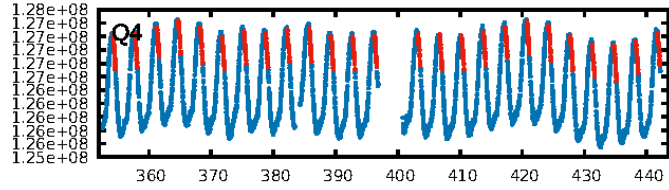
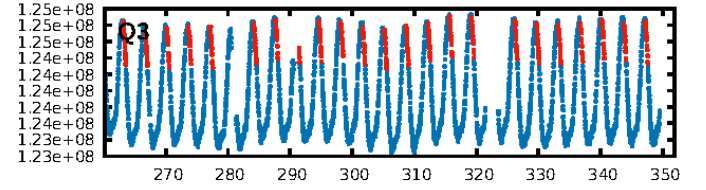
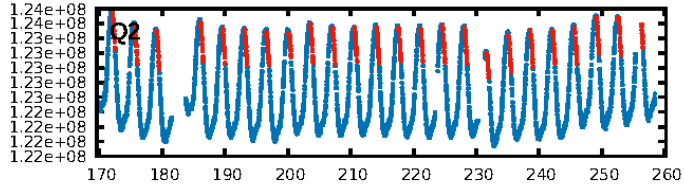
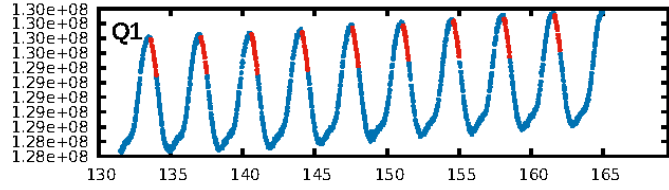
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: 1.13e-46
RollingBand-fgt: 1.00 [367/368]
GhostDiagnostic-chr: N/A
Centroid-sig: N/A
Centroid-so: N/A
OotOffset-rm: 0.715 arcsec [0.54σ]
KicOffset-rm: 0.593 arcsec [0.46σ]
OotOffset-st: 3/3/2/3 [11]
KicOffset-st: 3/3/2/3 [11]
DiffImageQuality-fgm: 0.00 [0/11]
DiffImageOverlap-fno: 1.00 [17/17]

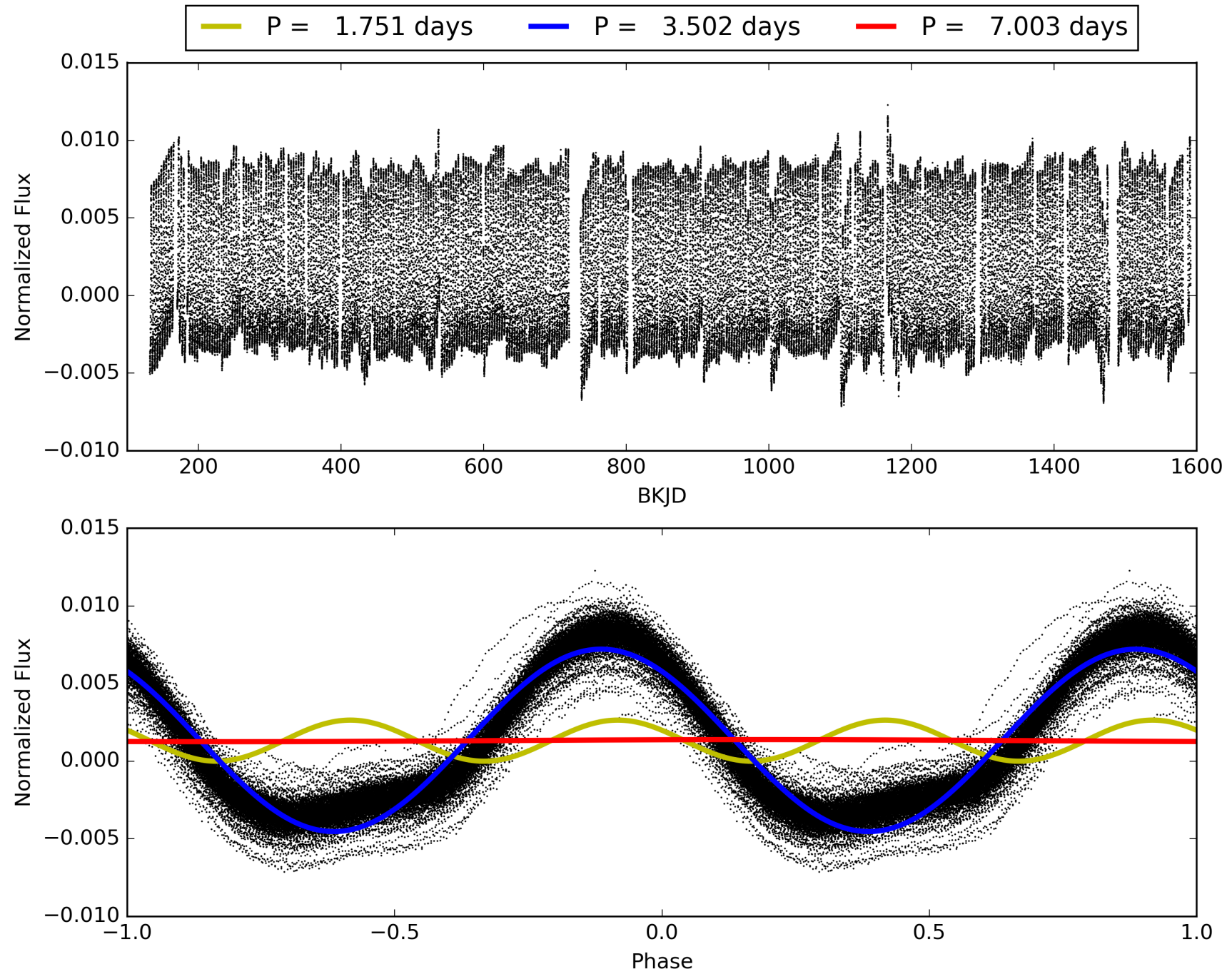
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 30-Jan-2016 12:29:07 Z

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

TCE 003847563-01, PDC Light Curves

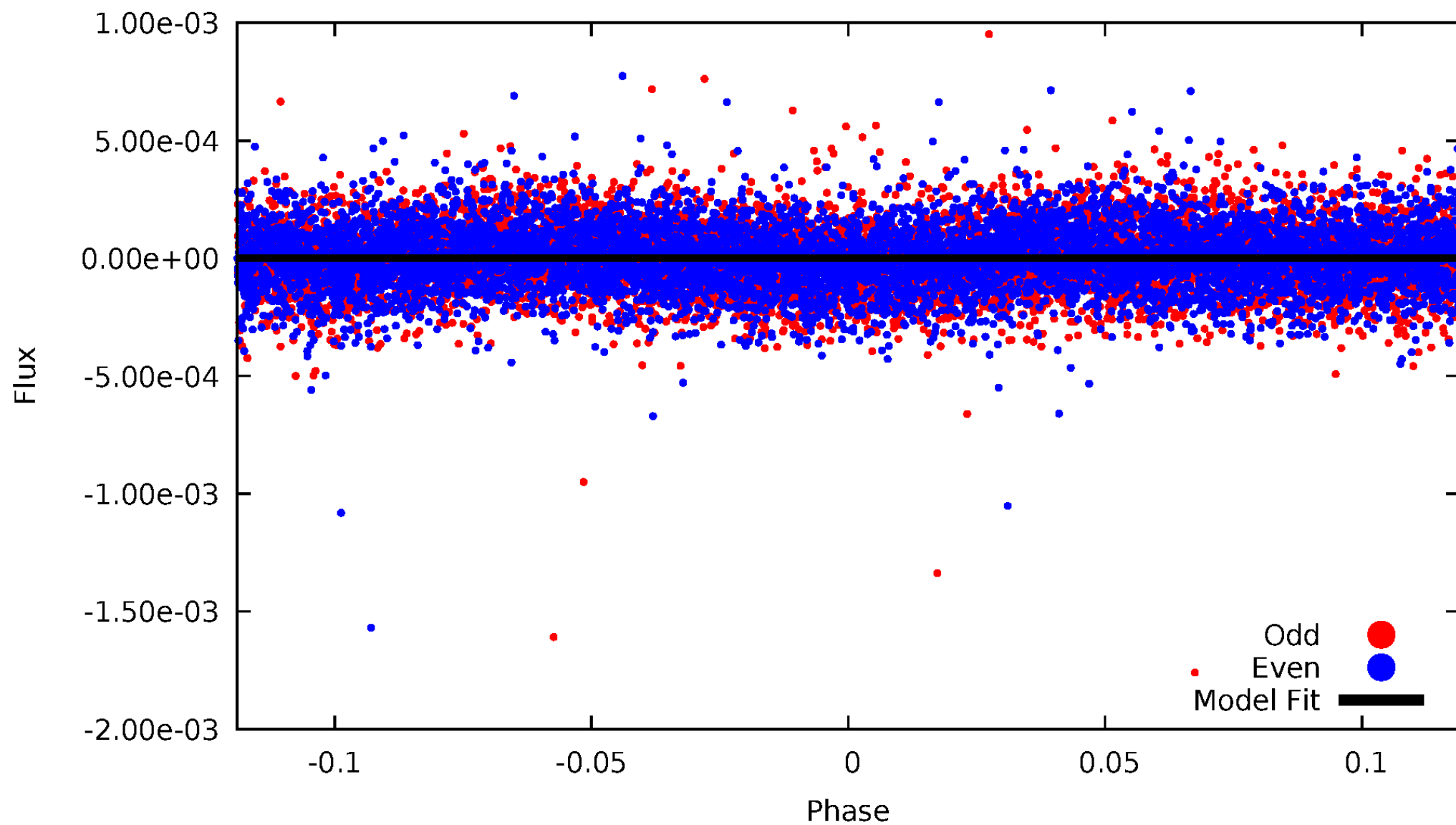


TCE 003847563-01



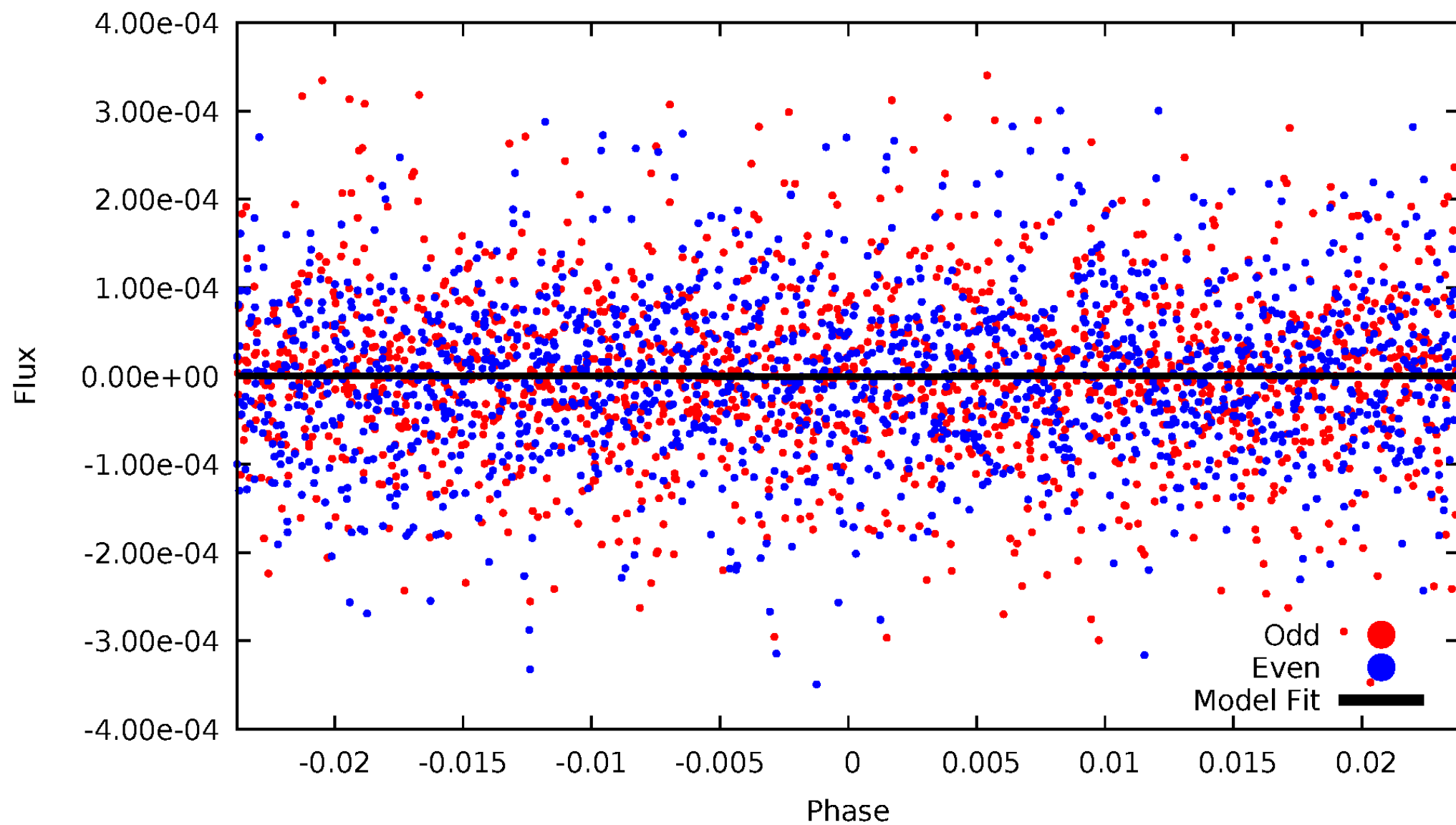
DV Odd/Even

TCE 003847563-01

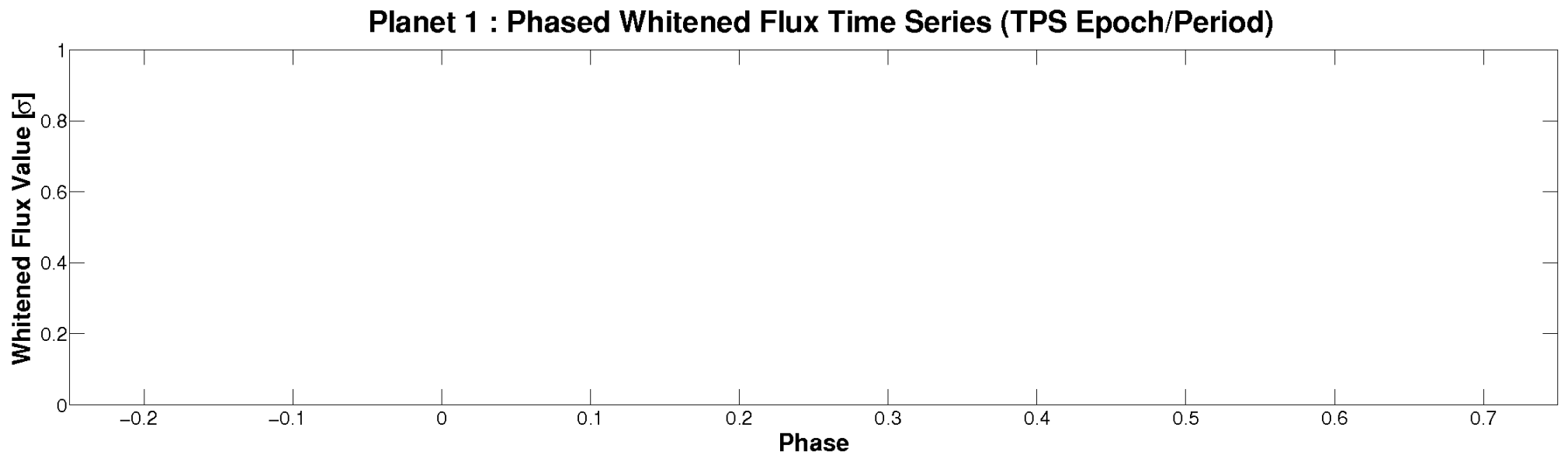
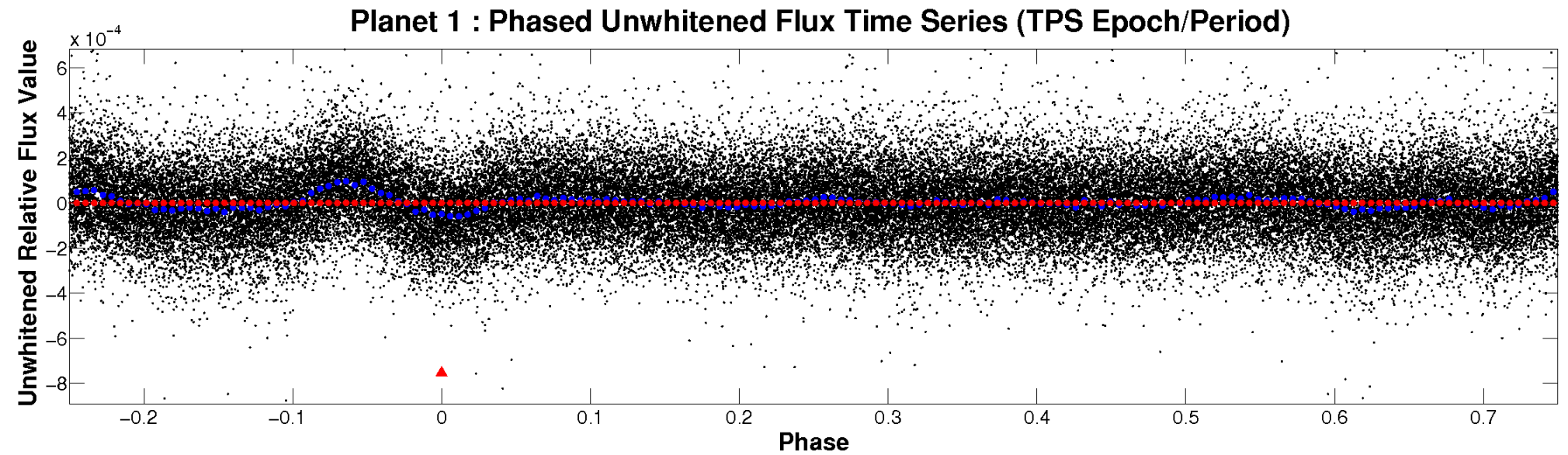


ALT Odd/Even

TCE 003847563-01

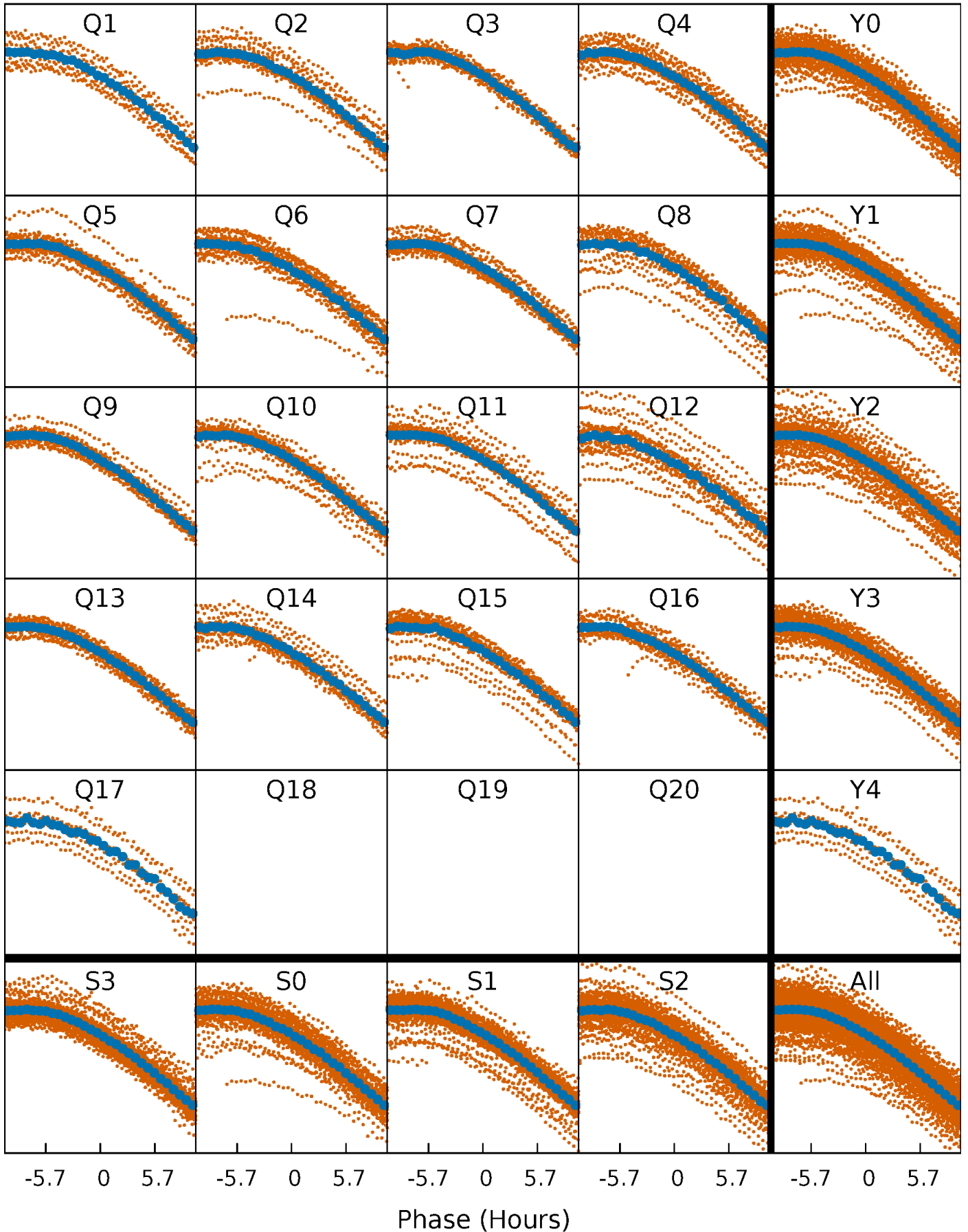


Non-Whitened Vs. Whitened Light Curve



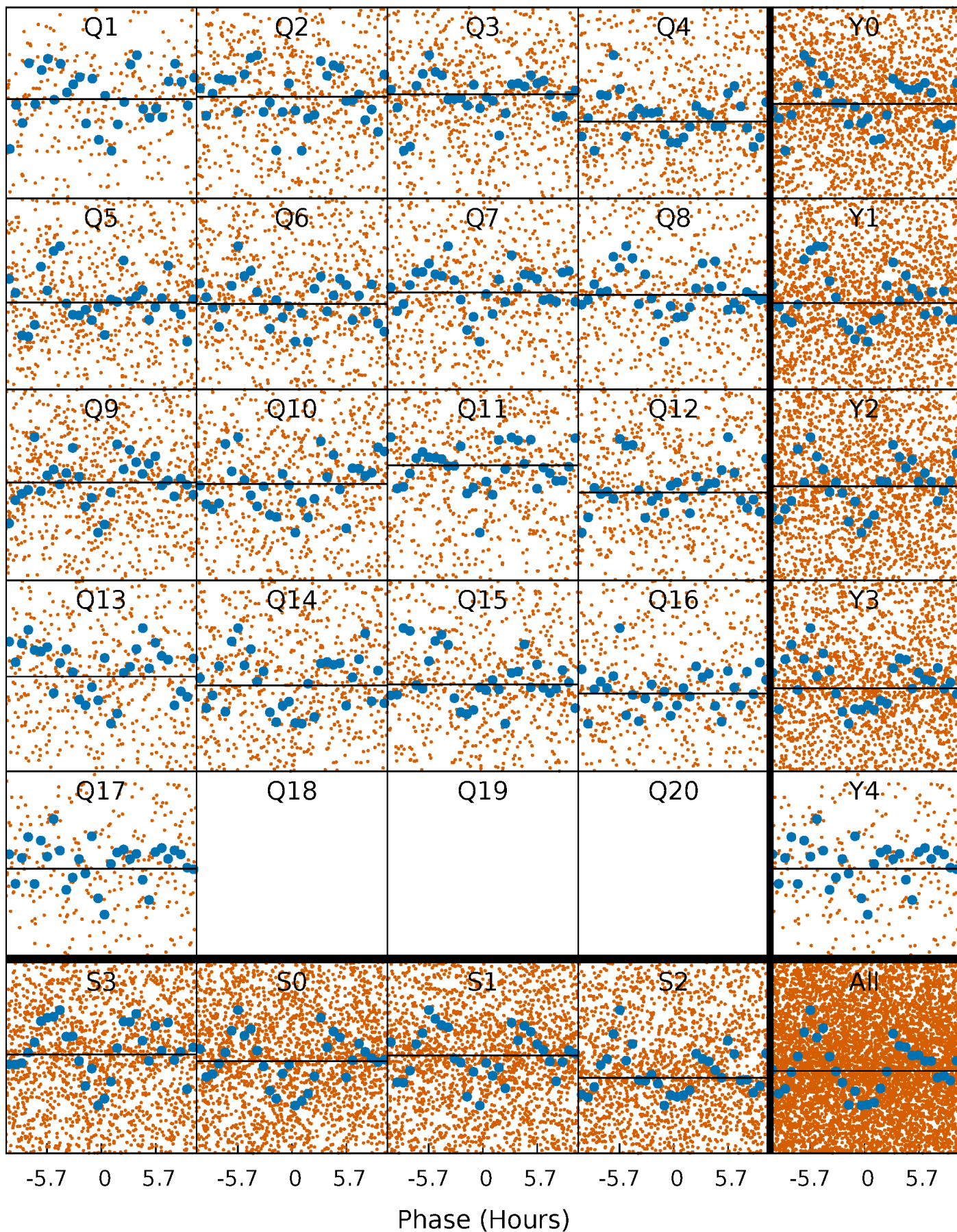
PDC Quarter-Phased Transit Curves

TCE 003847563-01 P= 3.501532 Days $T_0=133.796147$ (BKJD)



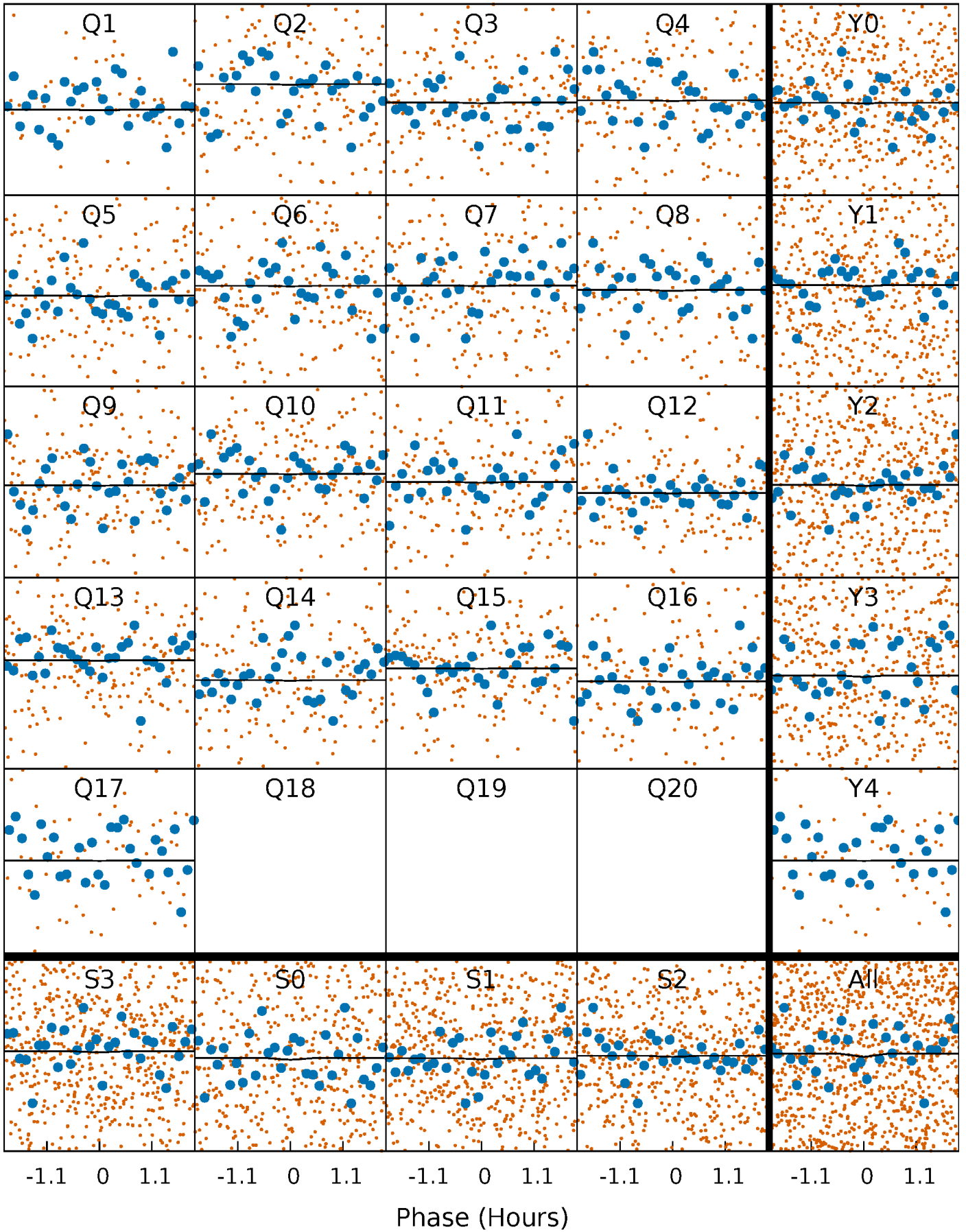
DV Quarter-Phased Transit Curves

TCE 003847563-01 P= 3.501532 Days $T_0=133.796147$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

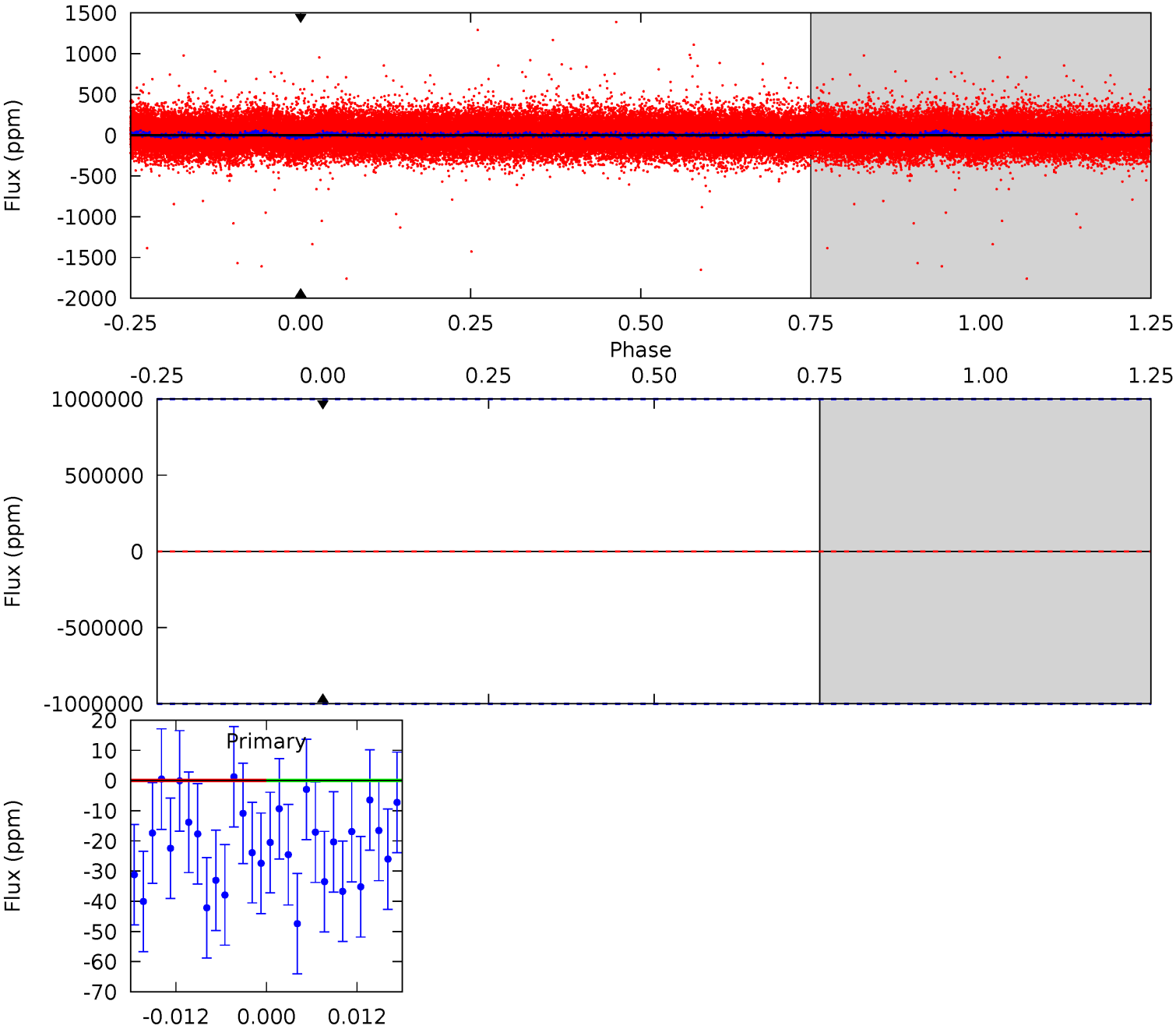
TCE 003847563-01 P= 3.501532 Days $T_0=134.113795$ (BKJD)



DV Model-Shift Uniqueness Test

003847563-01, P = 3.501532 Days, E = 130.294615 Days

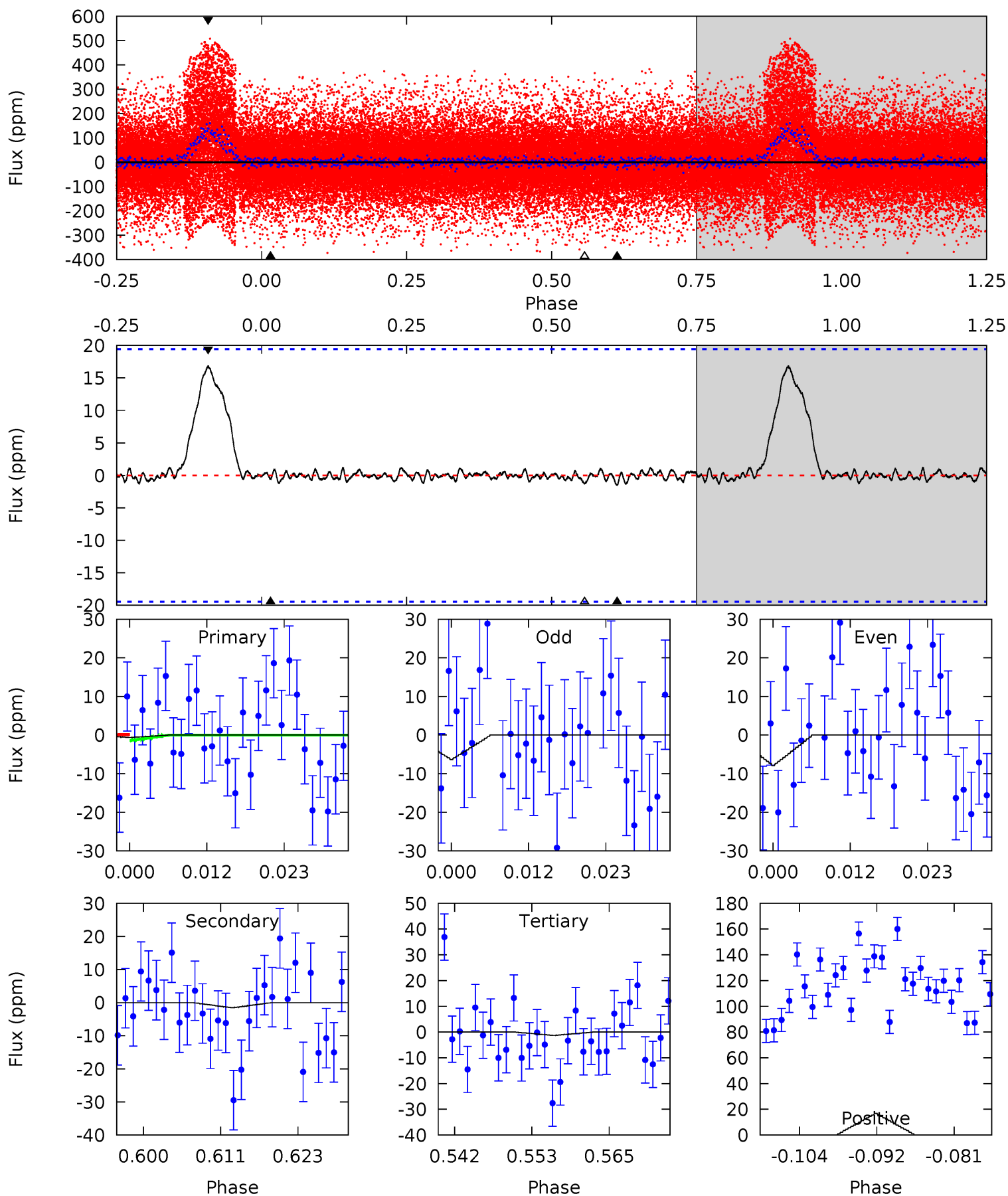
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
0	0	0	0	1.00	1.00	1.00	0	0	0	0	0	0	0	0



Alt Model-Shift Uniqueness Test

003847563-01, P = 3.501532 Days, E = 130.612263 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
0.16	0.40	0.34	4.32	5.00	2.53	0.86	-0.18	-4.16	0.06	-3.92	0.21	3.22	0.92	0.17



Stellar Parameters For KIC 003847563

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	7617^{+211}_{-316}	$3.901^{+0.253}_{-0.117}$	$0.080^{+0.200}_{-0.350}$	$2.573^{+0.468}_{-0.870}$	$1.923^{+0.104}_{-0.415}$	$0.159^{+0.290}_{-0.057}$
	+3%/-4%	+6%/-3%	+250%/-438%	+18%/-34%	+5%/-22%	+183%/-36%
Source	PHO54	PHO54	PHO54	DSEP		

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

Secondary Eclipse Parameters for KIC 003847563-01 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	A_{obs}
DV	0 ± 1000000	$18.81^{+21.25}_{-13.42}$	3129^{+209}_{-277}	6691^{+40498}_{-41923}	15^{+993}_{-755}
Alt.	-2 ± 4	$17.70^{+20.50}_{-12.84}$	3137^{+205}_{-285}	-3111^{+259}_{-160}	$0.004^{+0.087}_{-0.017}$

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

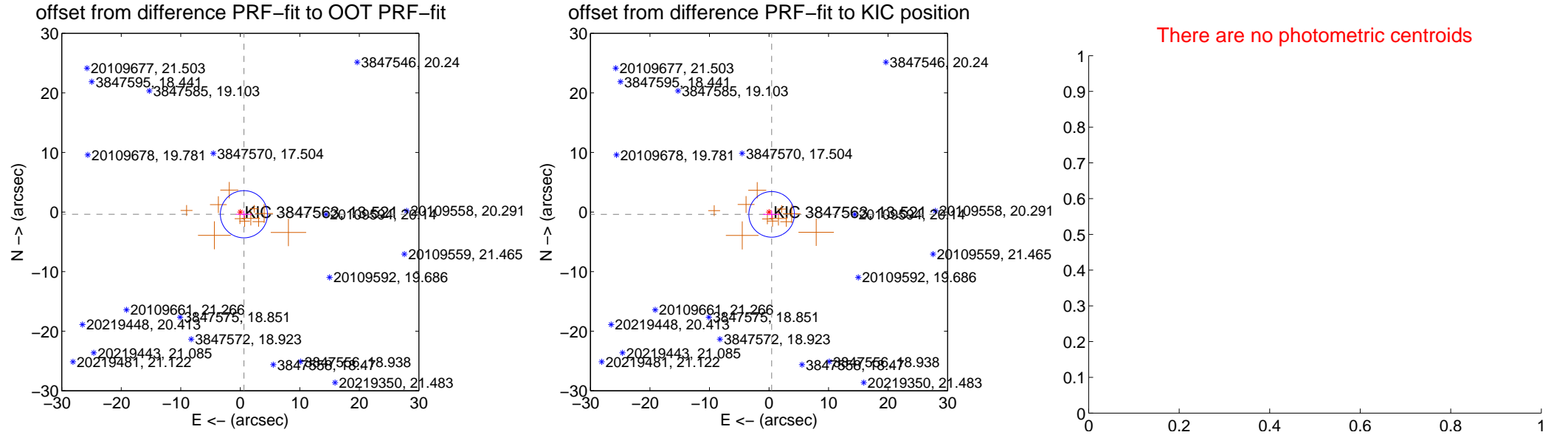
DV Centroid Data

Supplemental centroid analysis for 003847563-01. Kepler magnitude: 13.52. Transit SNR -1.00

There are 0 quarters with good PRF difference image offsets

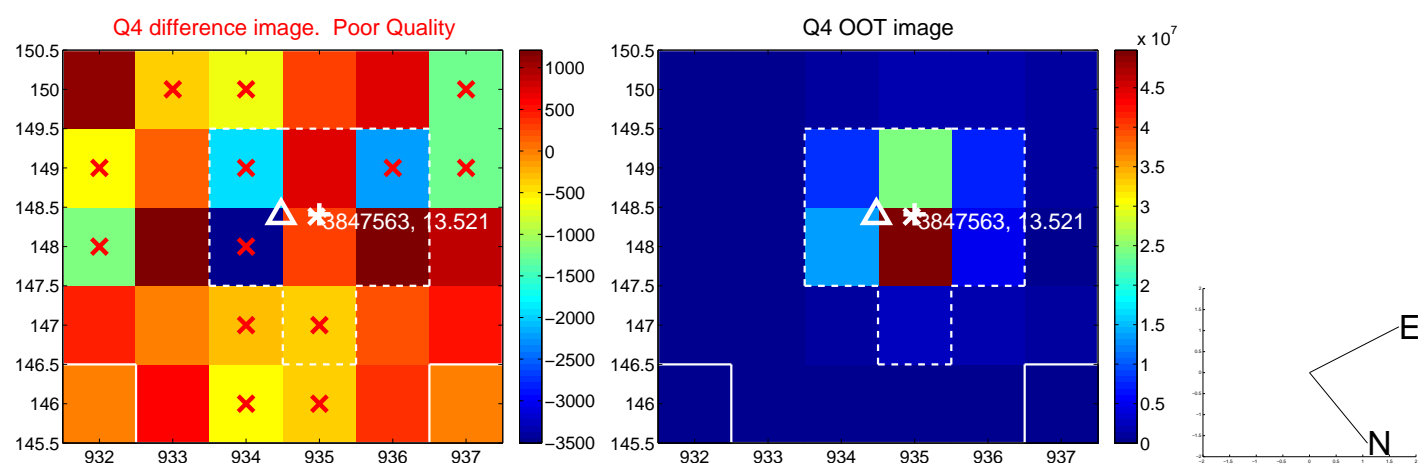
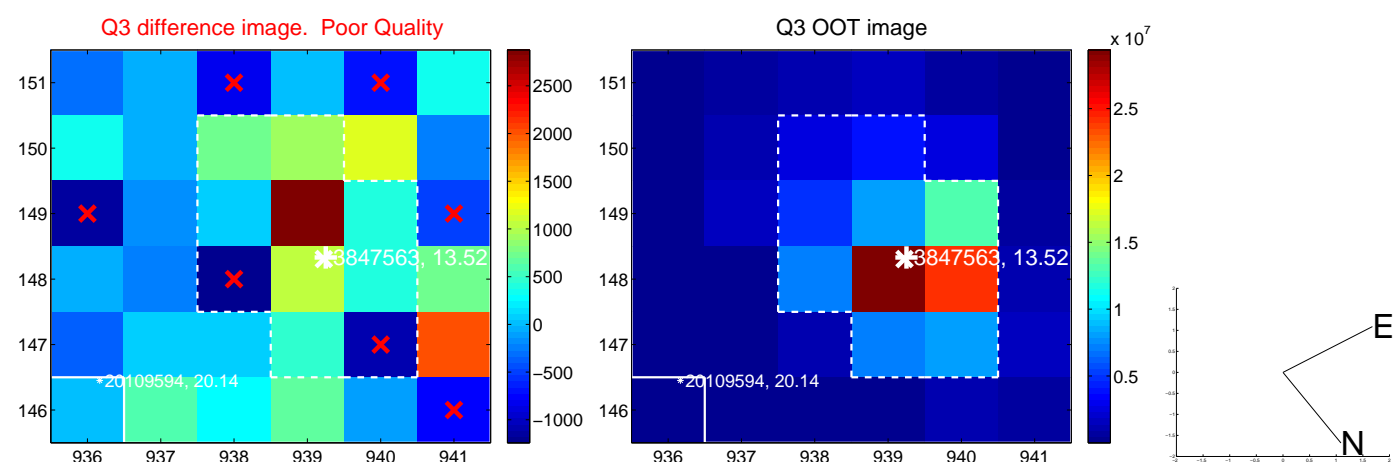
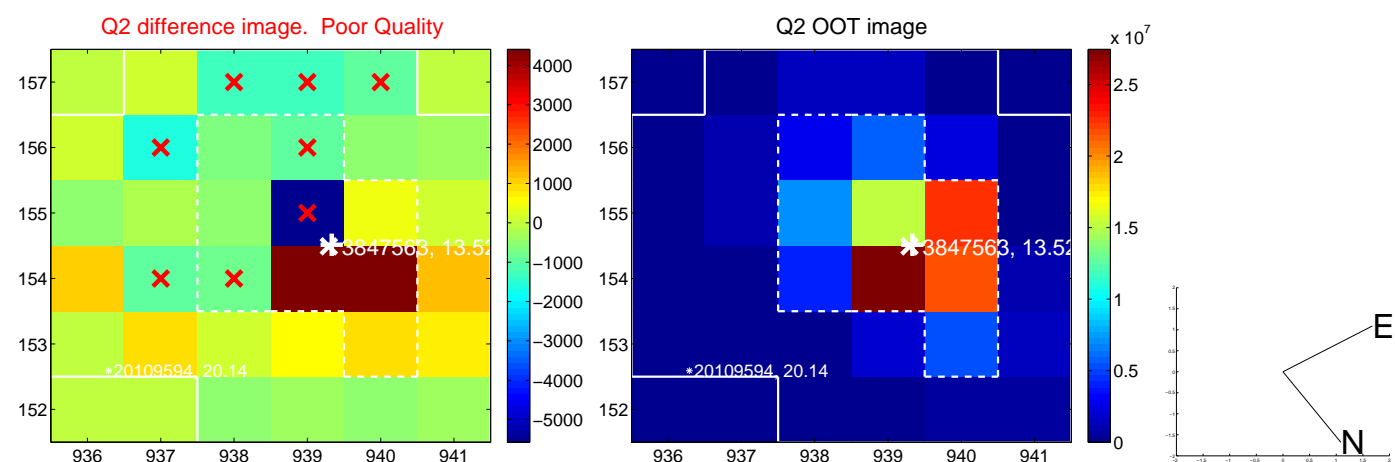
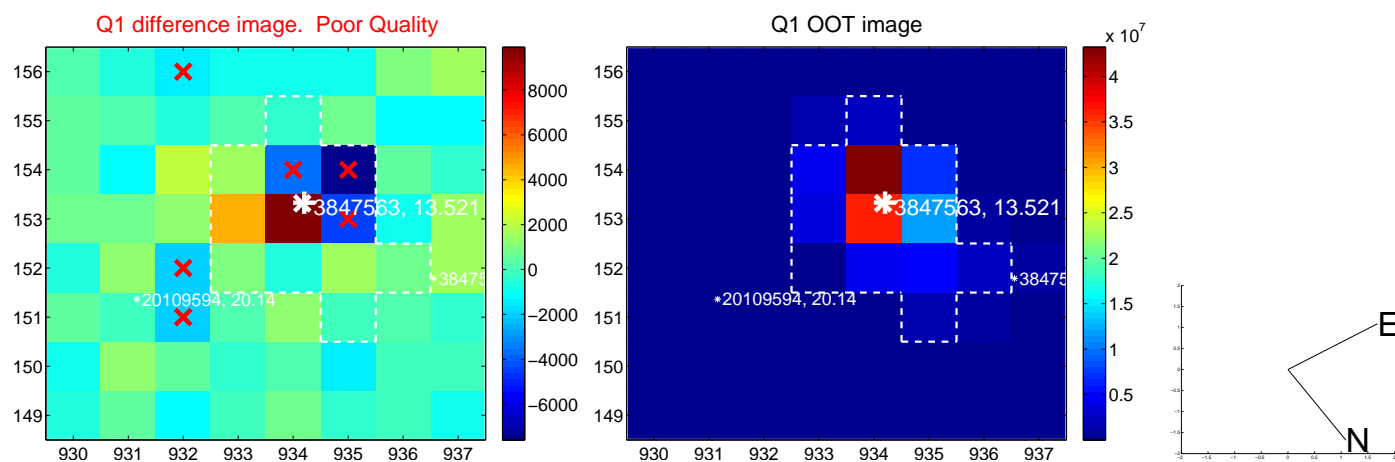
The direct PRF centroid is offset from the target star catalog position by about 0.13 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.715 ± 1.320	0.54	-0.612 ± 1.350	-0.370 ± 0.624
PRF-fit source offset from KIC position	0.593 ± 1.276	0.46	-0.442 ± 1.422	-0.394 ± 0.662
photometric centroid source offset	—	—	—	—

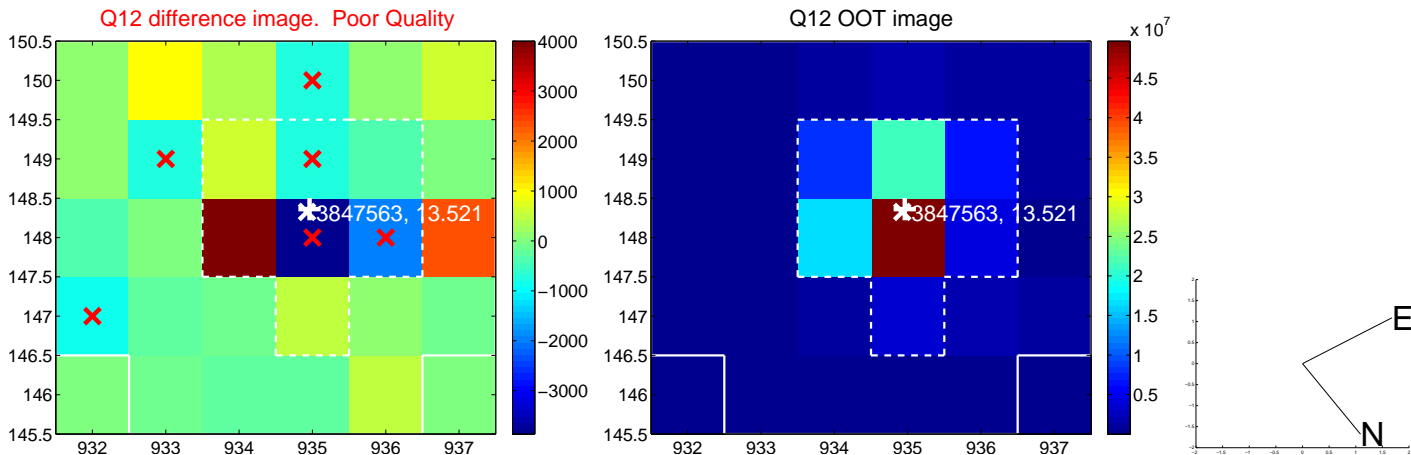
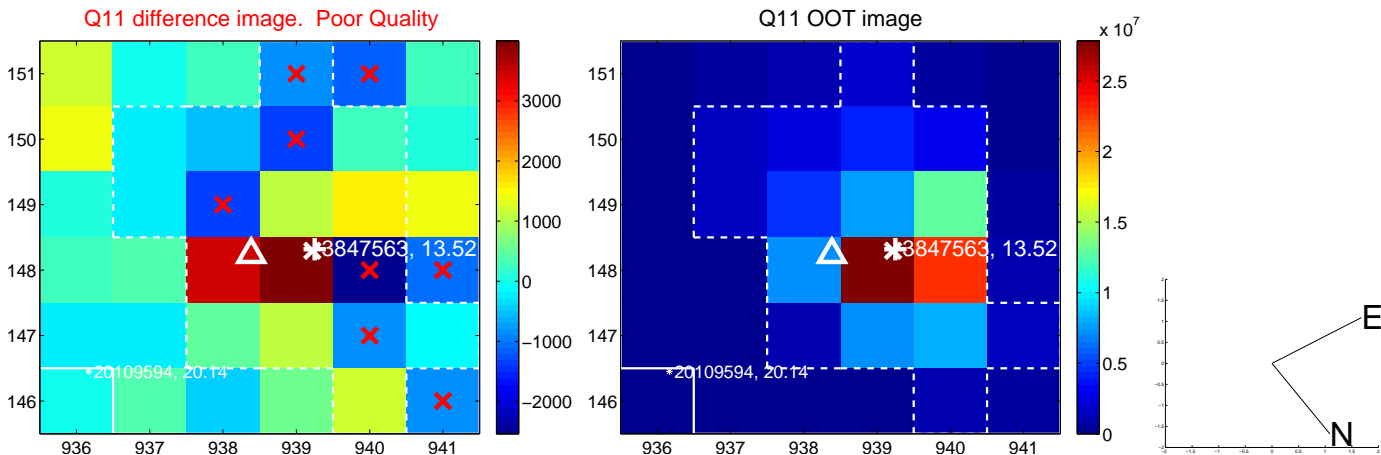
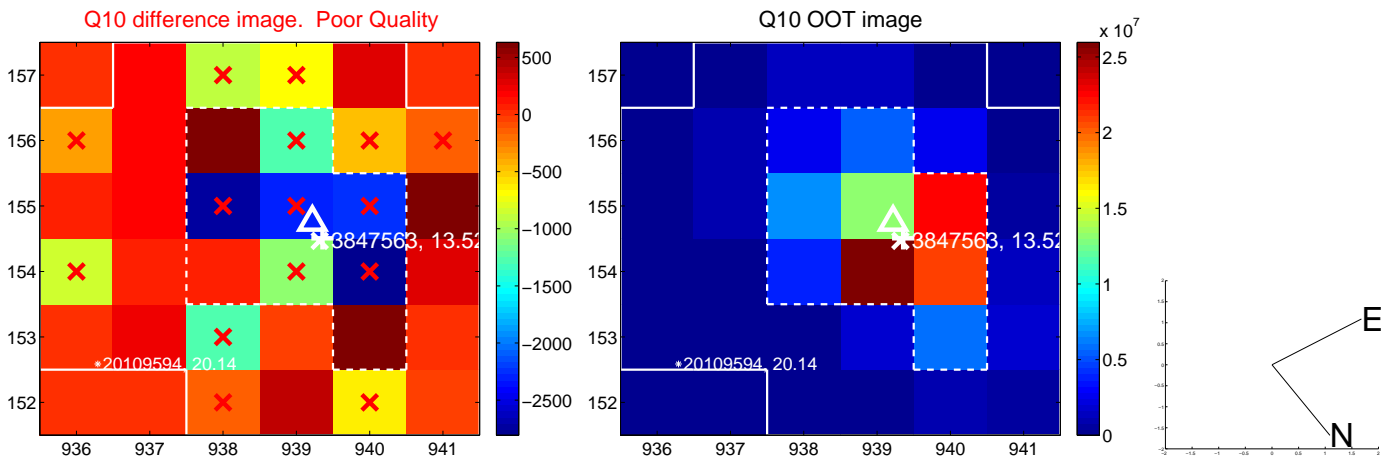
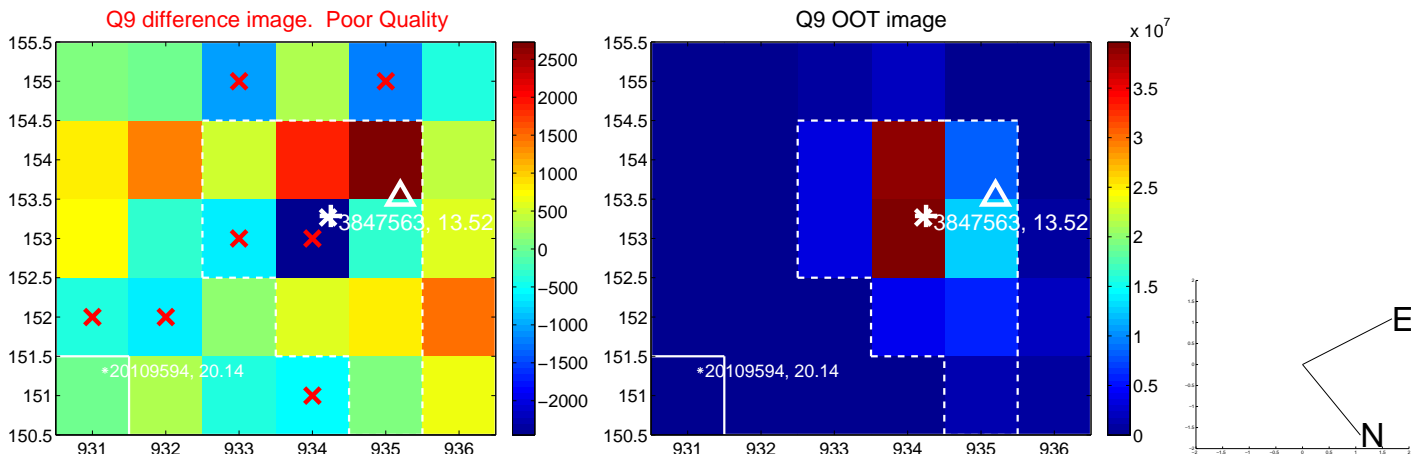


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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

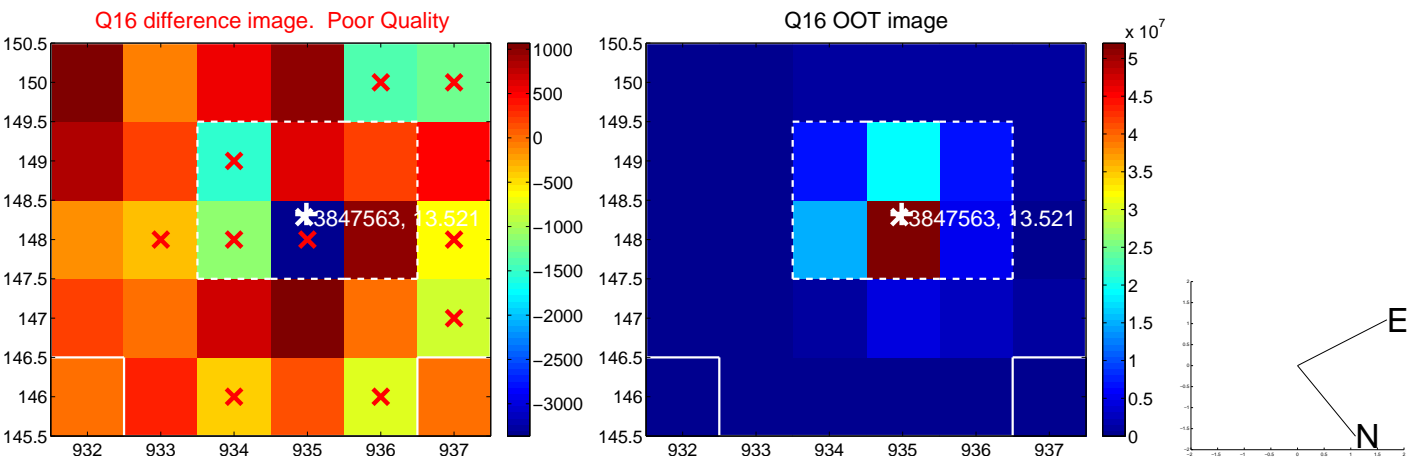
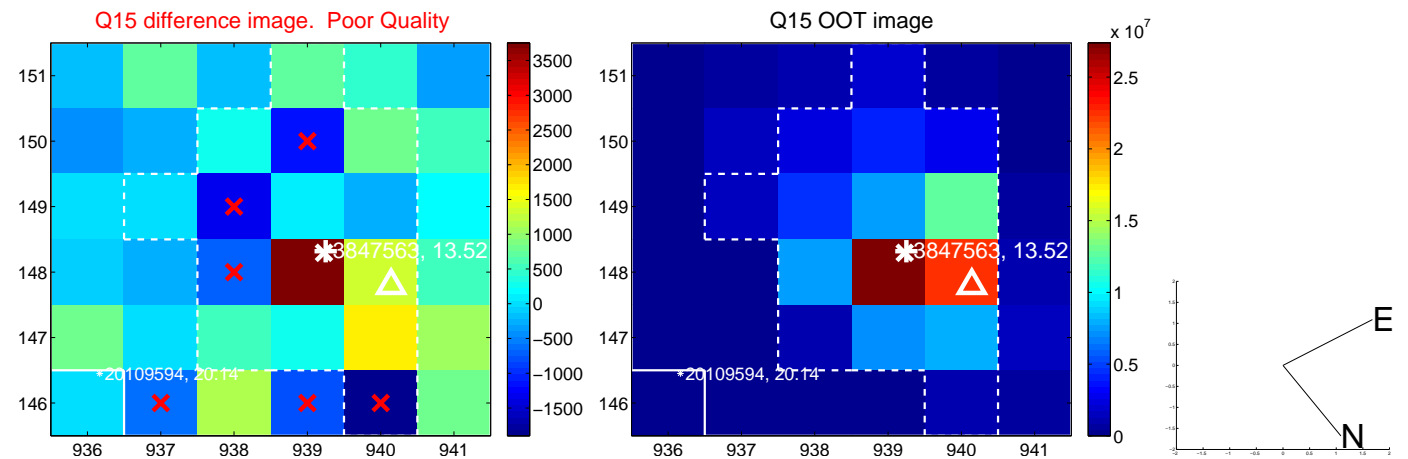
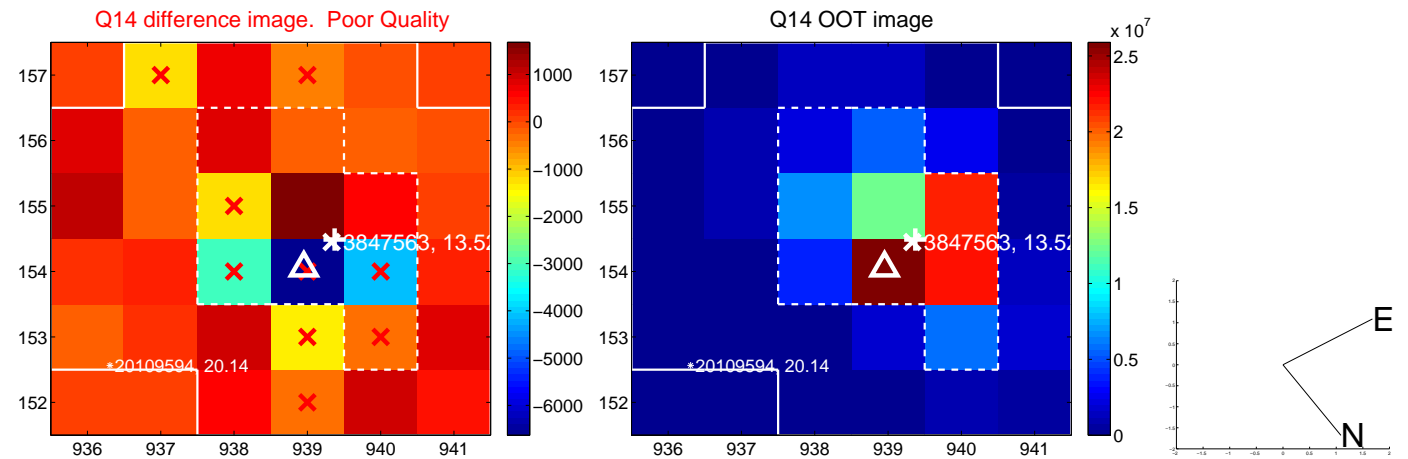
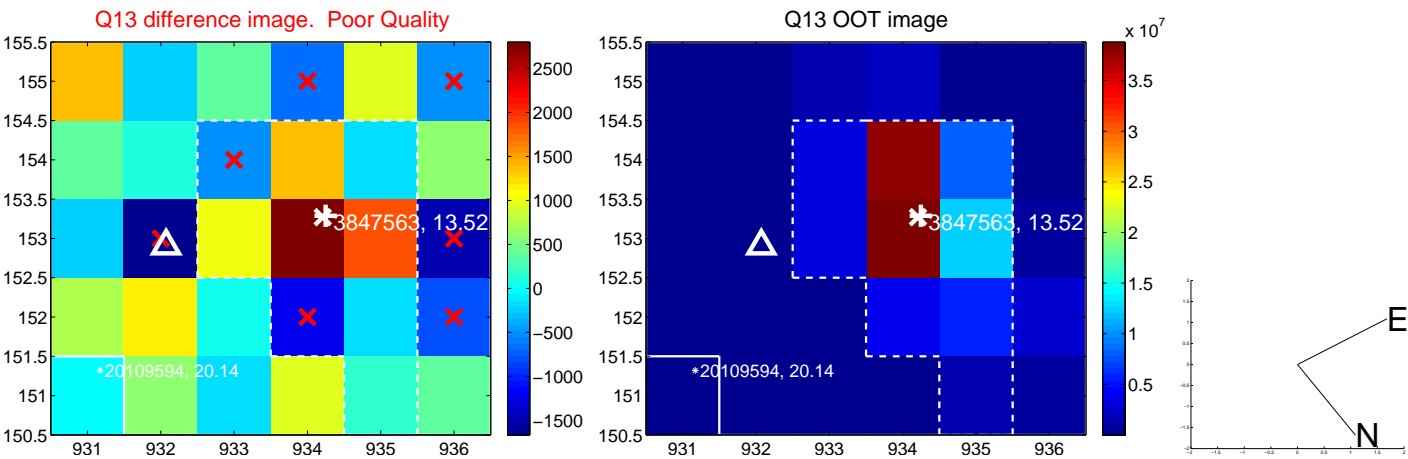
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



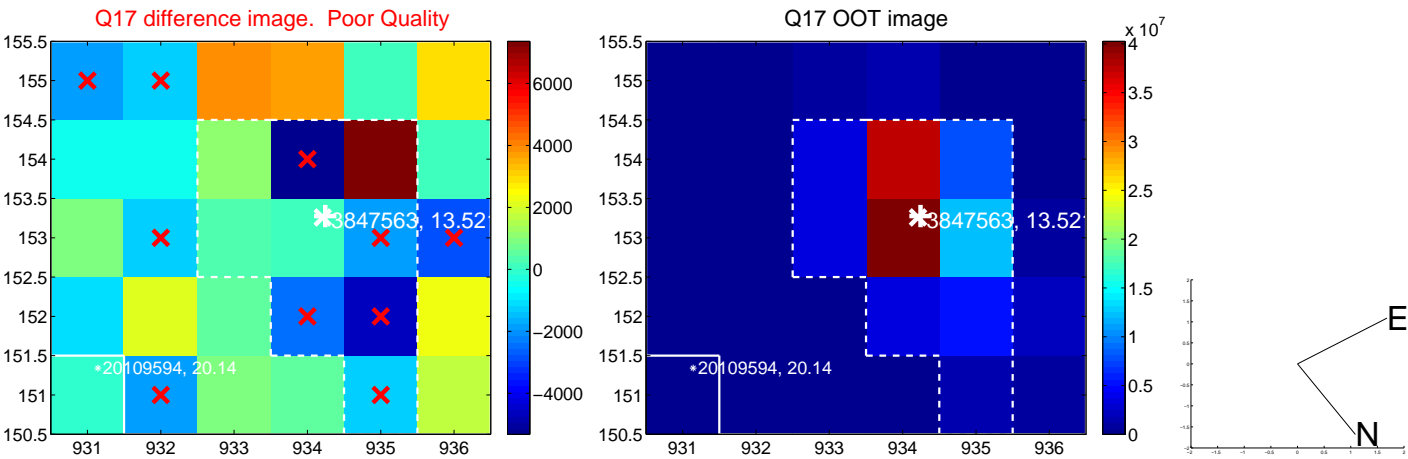
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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



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



folded centroid time series figure for this object.

UKIRT Image

Declination

