

KIC 003867256

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})
003867256-01	OBS	No	1.015416	132.090687	176.5	12.185	11.6	17.7	1.46	7396	2.53	11498.87

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
003867256-01	OBS	FP	0.00	1	0	0	0	LPP_DV—LPP_ALT—CENT_FEW_MEAS

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

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

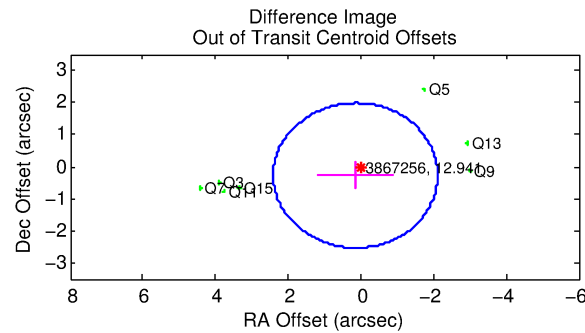
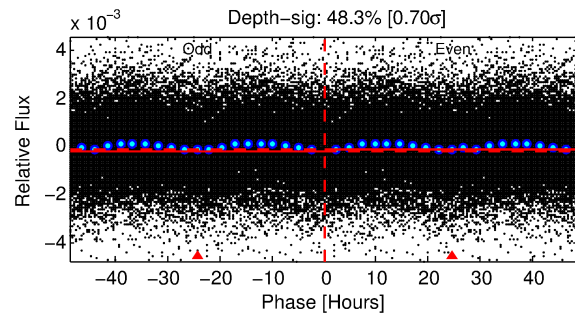
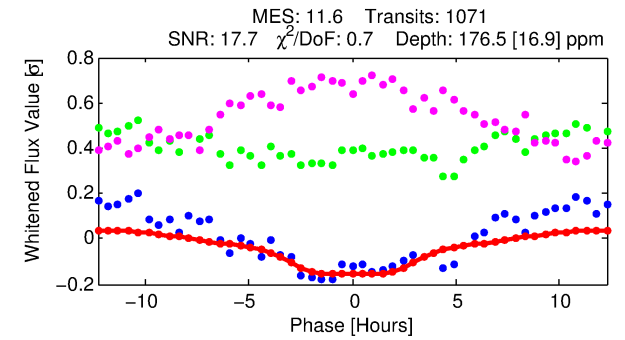
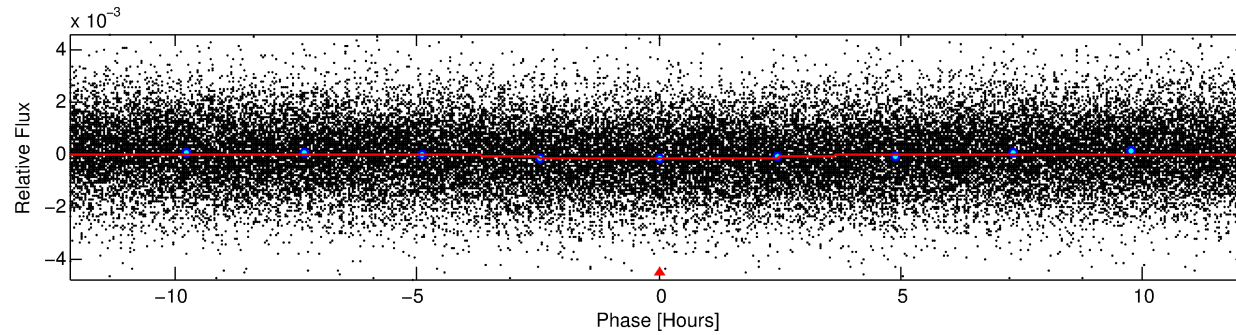
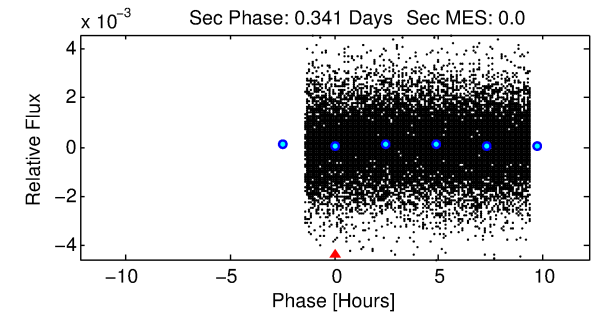
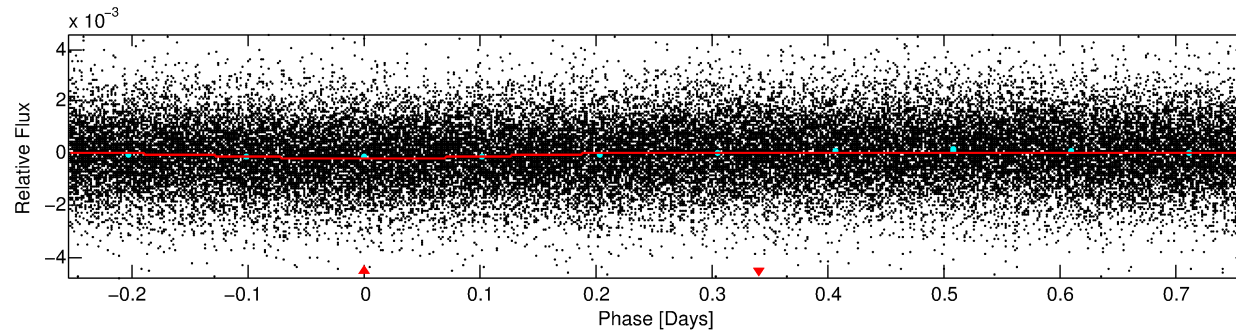
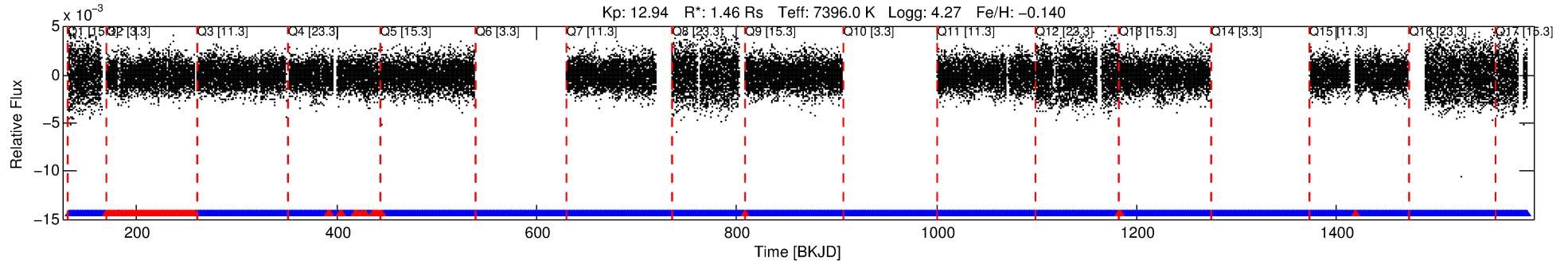
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 003867256-01

No Significant Match Found

DV One-Page Summary

KIC: 3867256 Candidate: 1 of 1 Period: 1.015 d



DV Fit Results:

Period = 1.01542 [0.00002] d
Epoch = 132.0907 [0.0124] BKJD
Rp/R* = 0.0159 [0.0009]
a/R* = 1.02 [0.00]
b = 0.98 [0.01]
Seff = 11498.87 [5110.79]
Teq = 2641 [293] K
Rp = 2.53 [0.94] Re
a = 0.0223 [0.0066] AU
Ag = N/A
Teffp = N/A

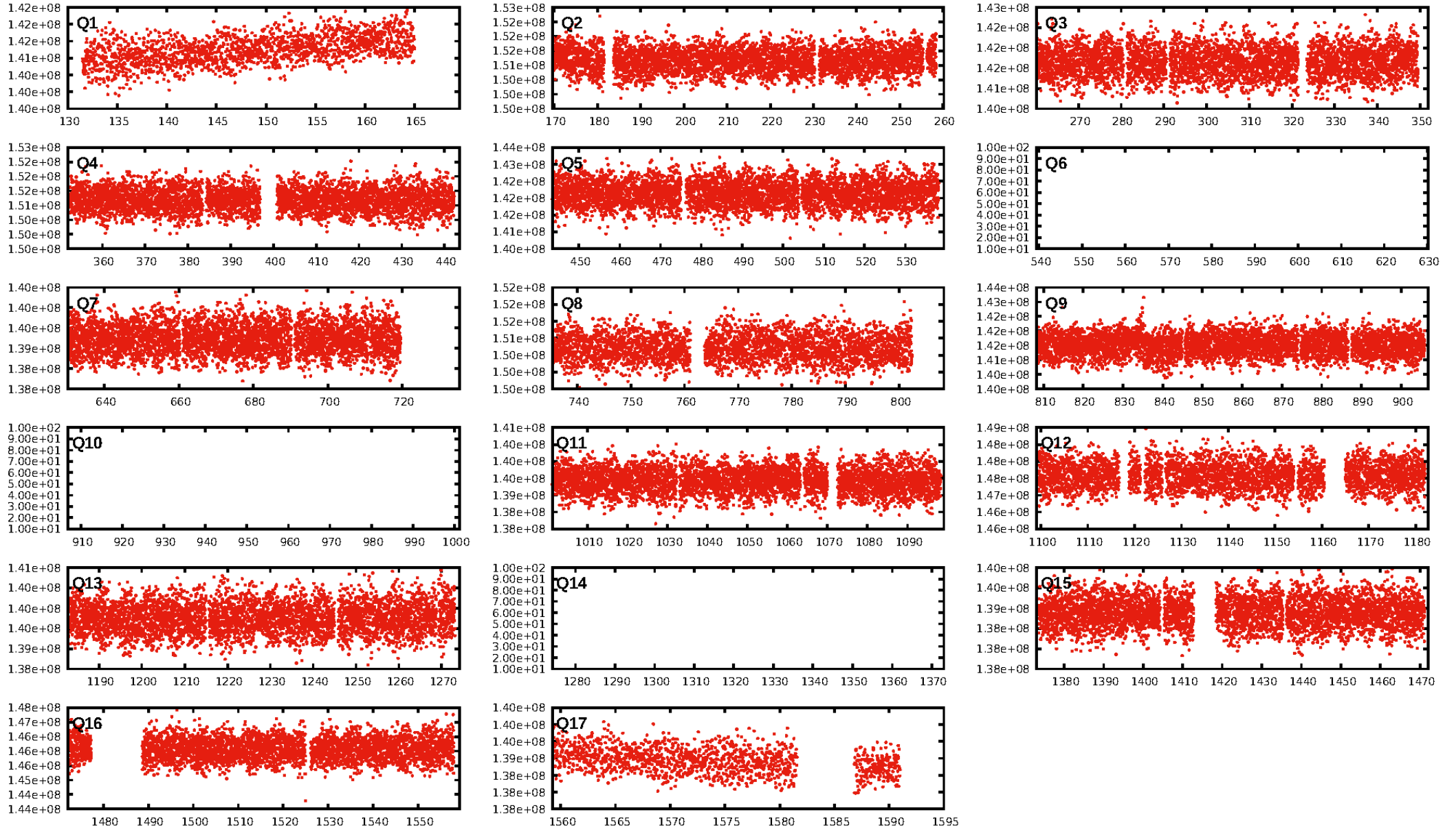
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: N/A
RollingBand-fgt: 0.89 [904/1011]
GhostDiagnostic-chr: 2.101
Centroid-sig: 0.1%
Centroid-so: 0.294 arcsec [2.08σ]
OotOffset-rm: 0.313 arcsec [0.42σ]
KicOffset-rm: 0.219 arcsec [0.34σ]
OotOffset-st: 0/4/0/3 [7]
KicOffset-st: 0/4/0/3 [7]
DiffImageQuality-fgm: 0.00 [0/7]
DiffImageOverlap-fno: 1.00 [14/14]

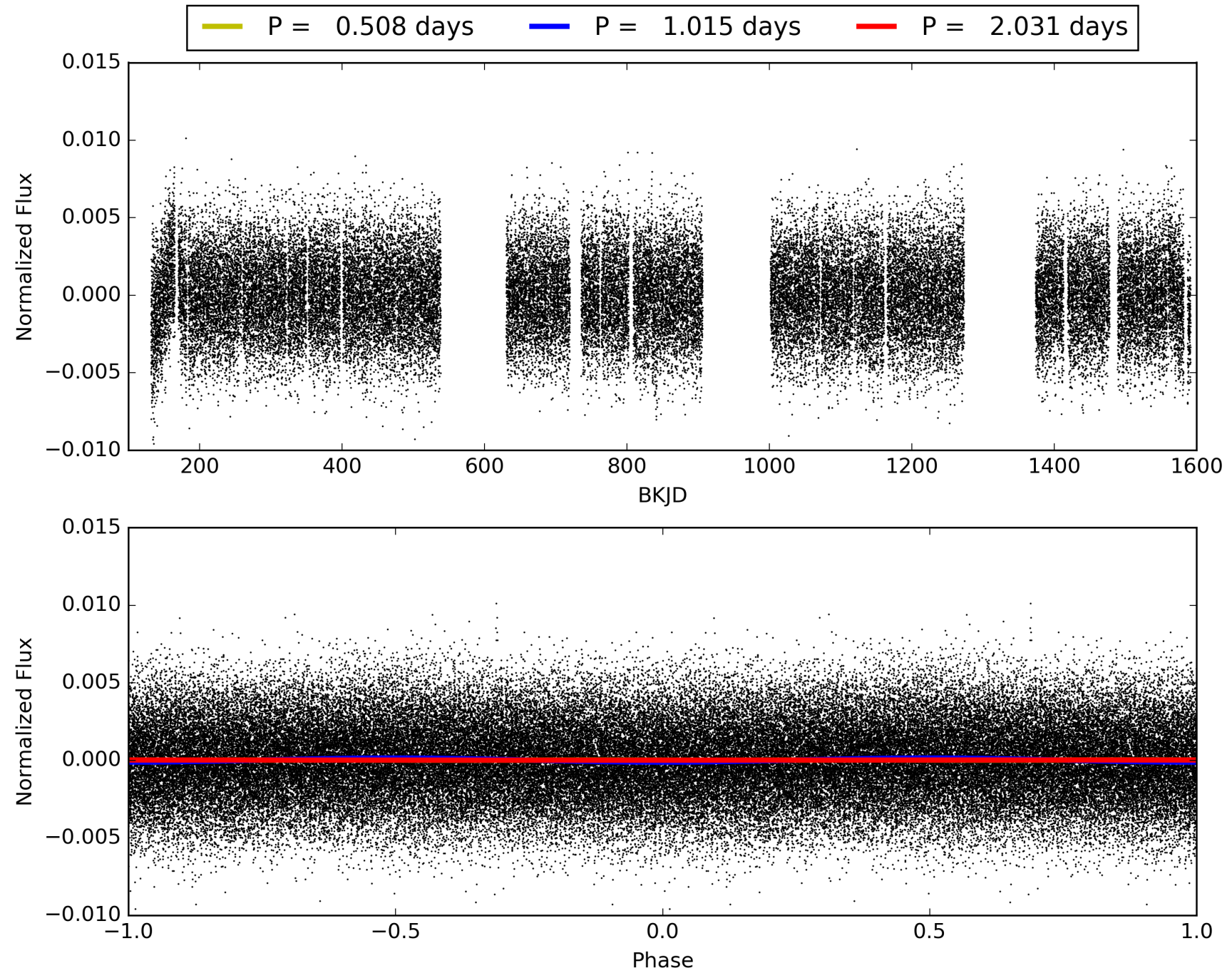
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 30-Jan-2016 20:01:10 Z

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

TCE 003867256-01, PDC Light Curves

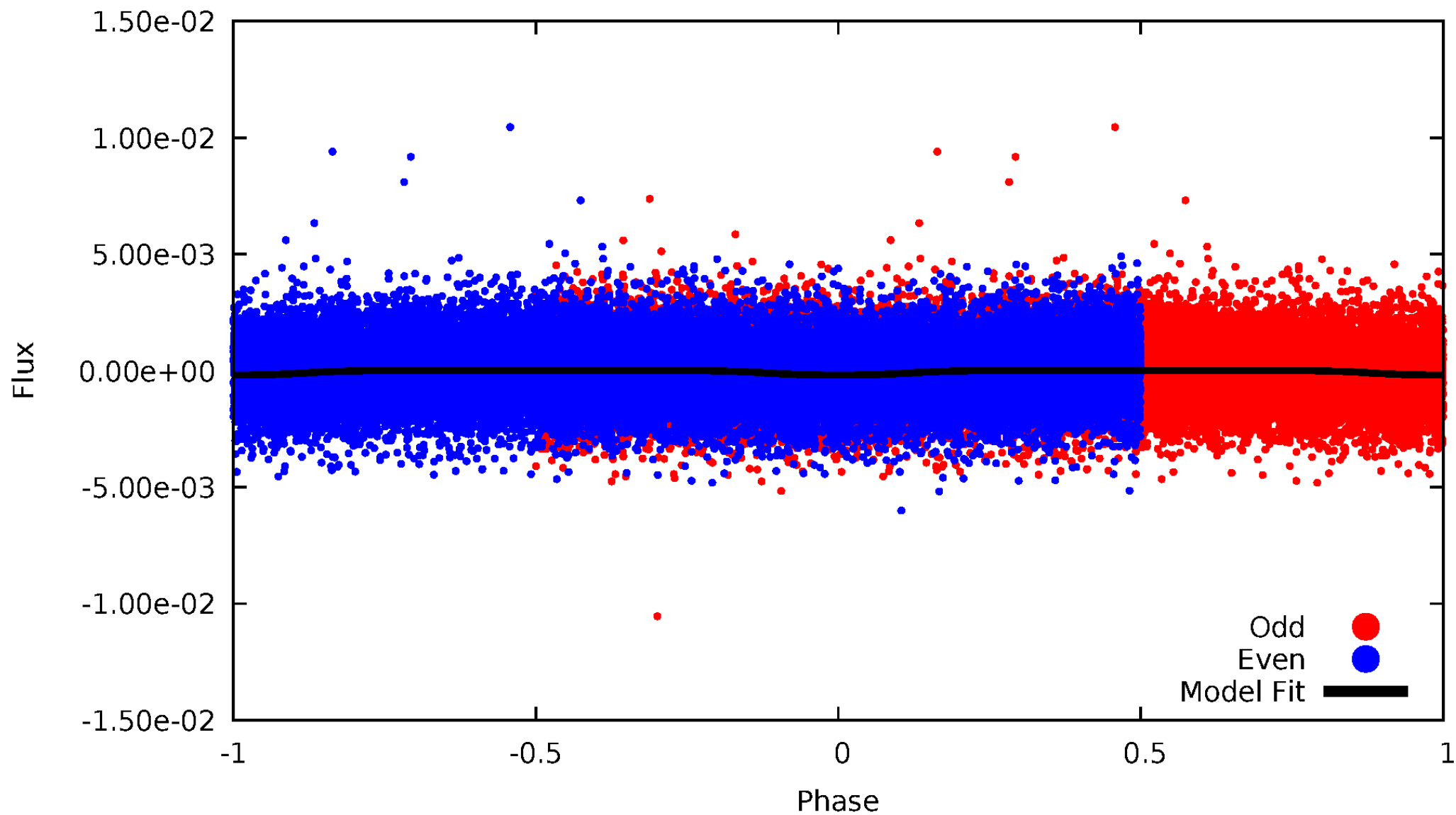


TCE 003867256-01



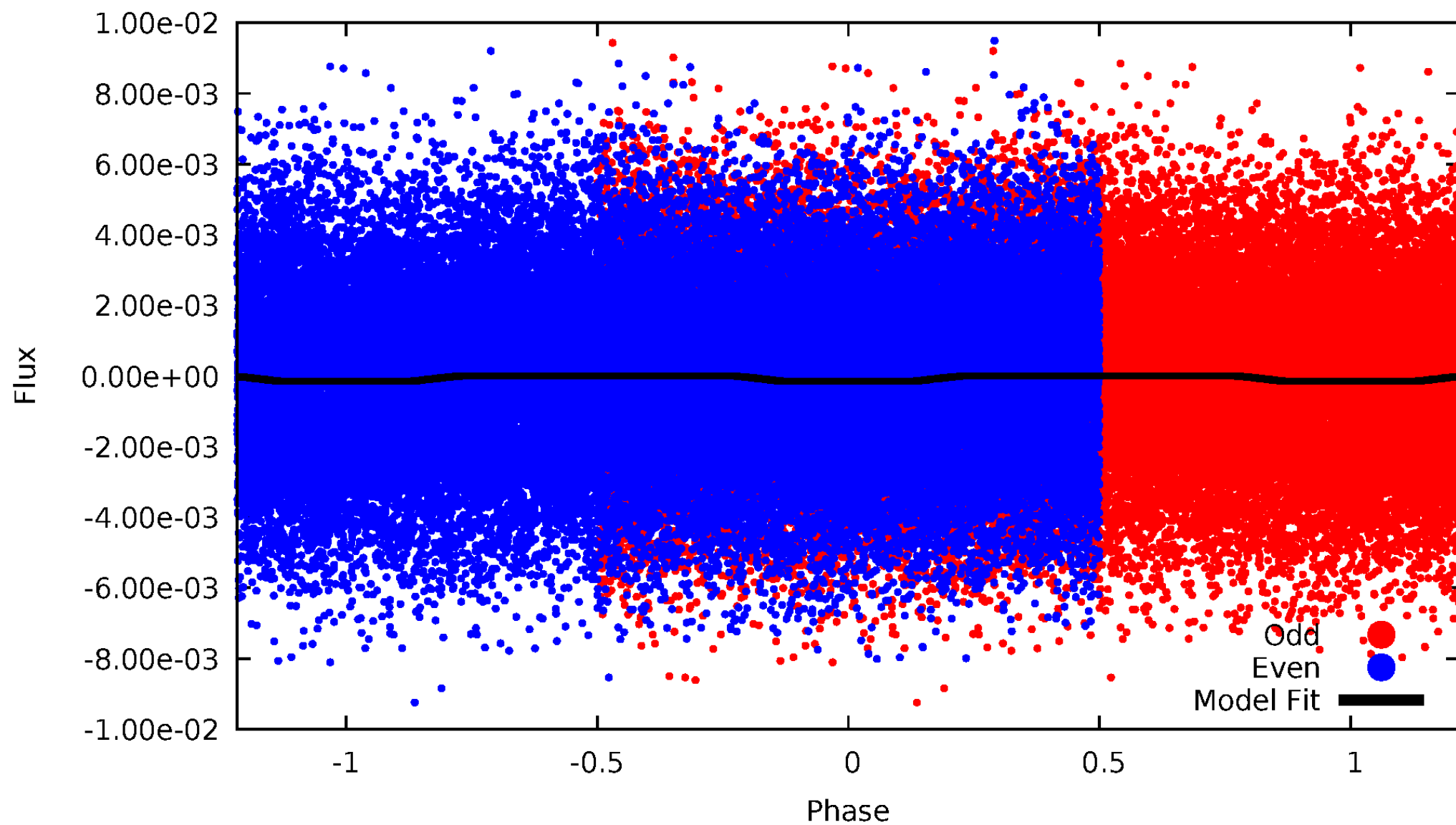
DV Odd/Even

TCE 003867256-01



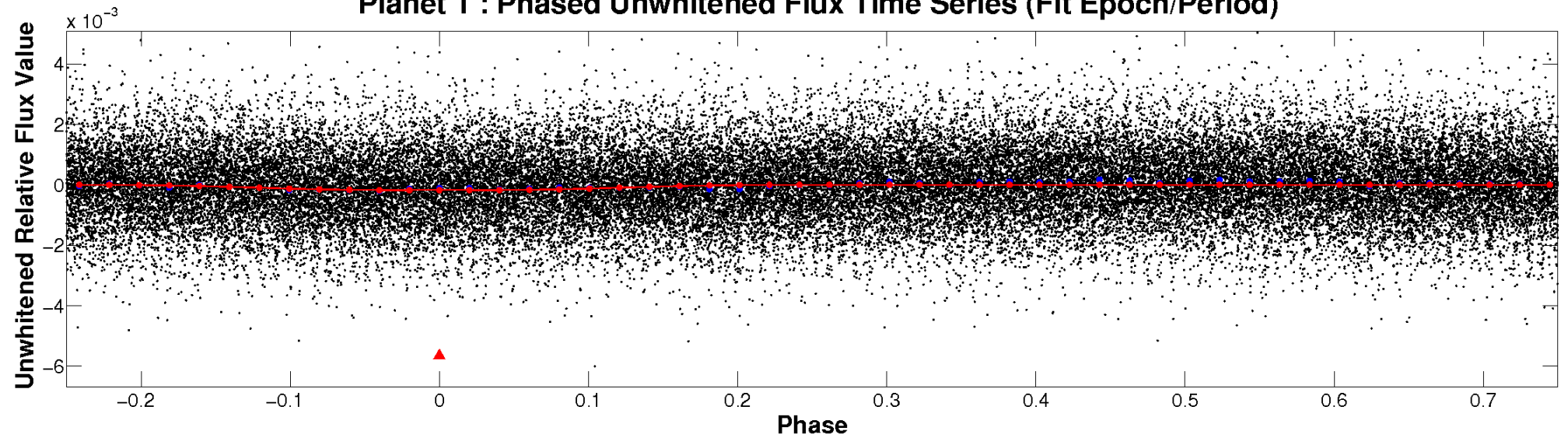
ALT Odd/Even

TCE 003867256-01

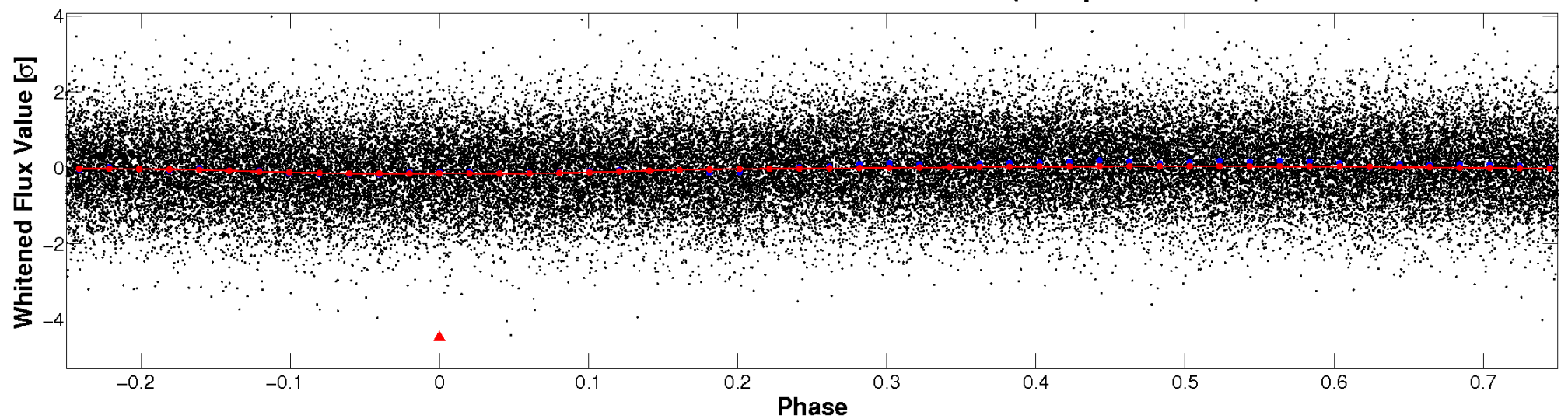


Non-Whitened Vs. Whitened Light Curve

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

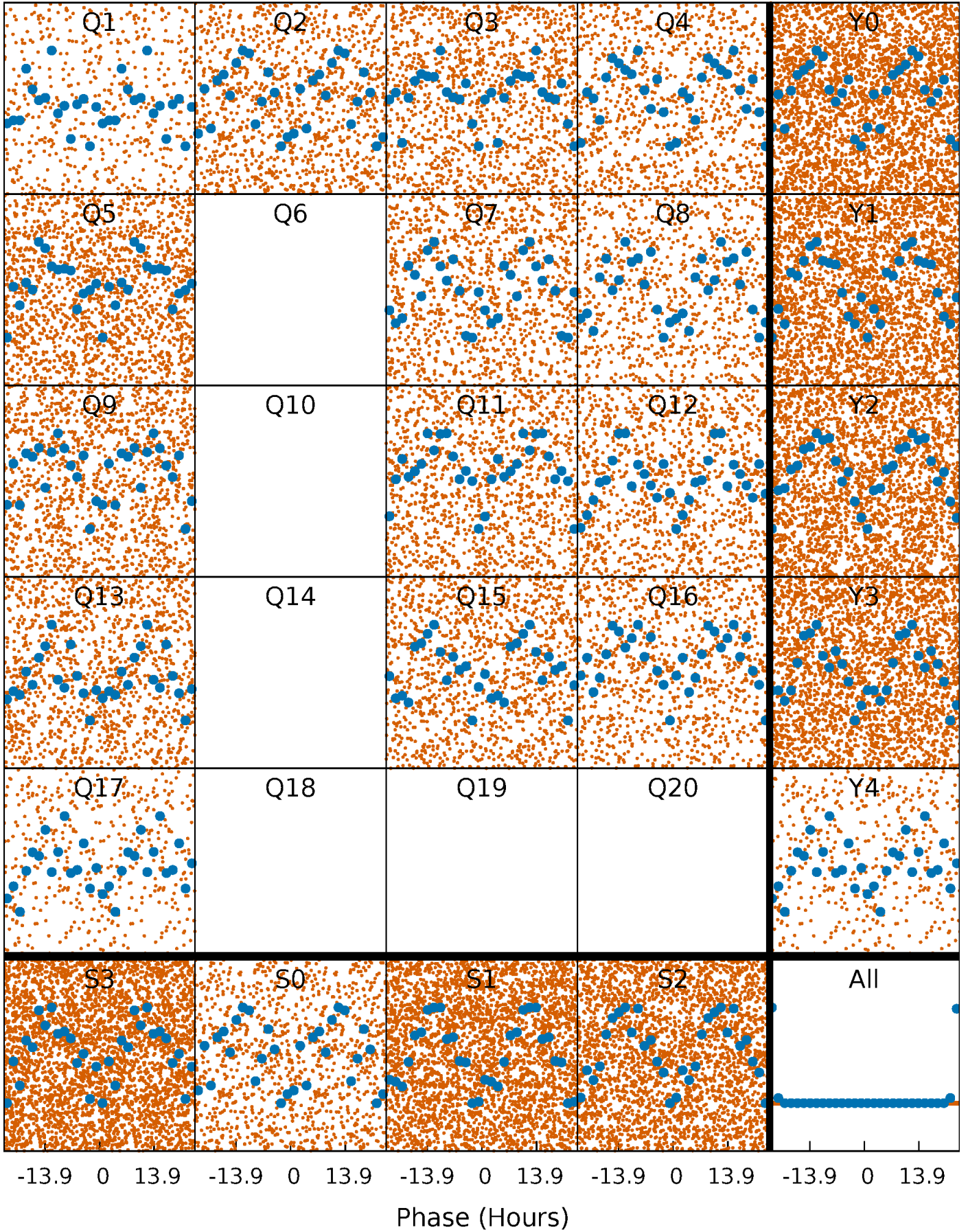


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



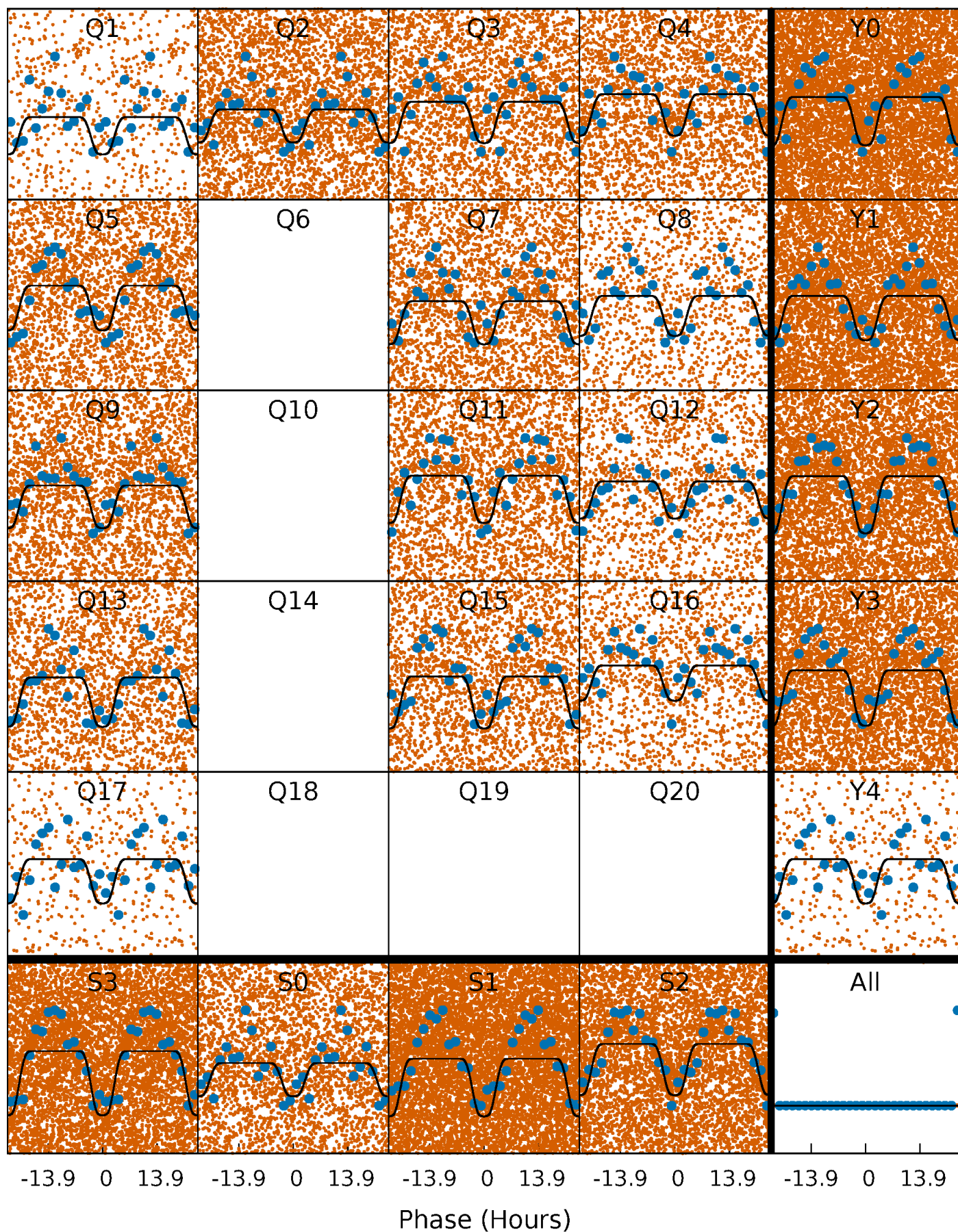
PDC Quarter-Phased Transit Curves

TCE 003867256-01 P= 1.015416 Days $T_0=132.090687$ (BKJD)



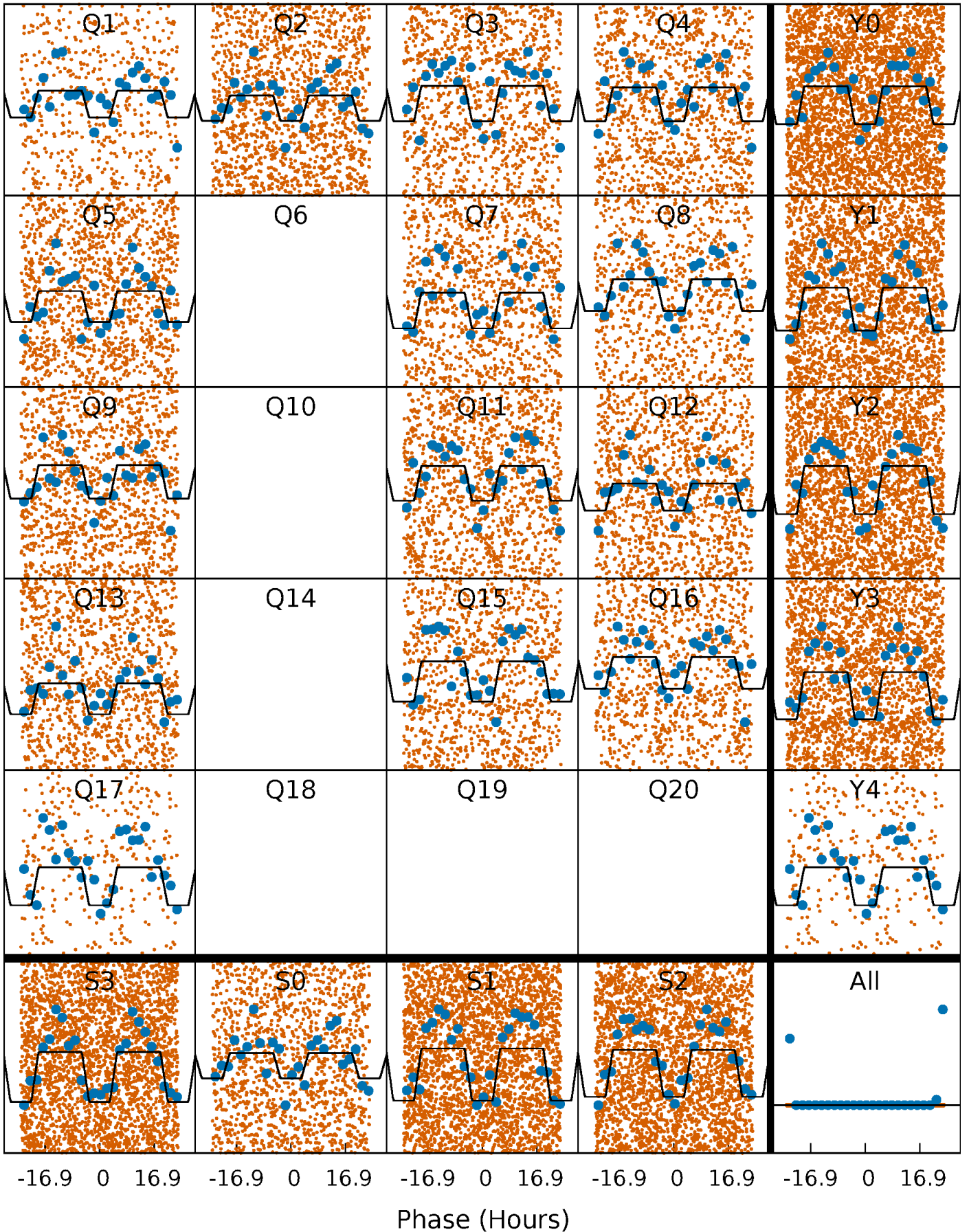
DV Quarter-Phased Transit Curves

TCE 003867256-01 P= 1.015416 Days $T_0=132.090687$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

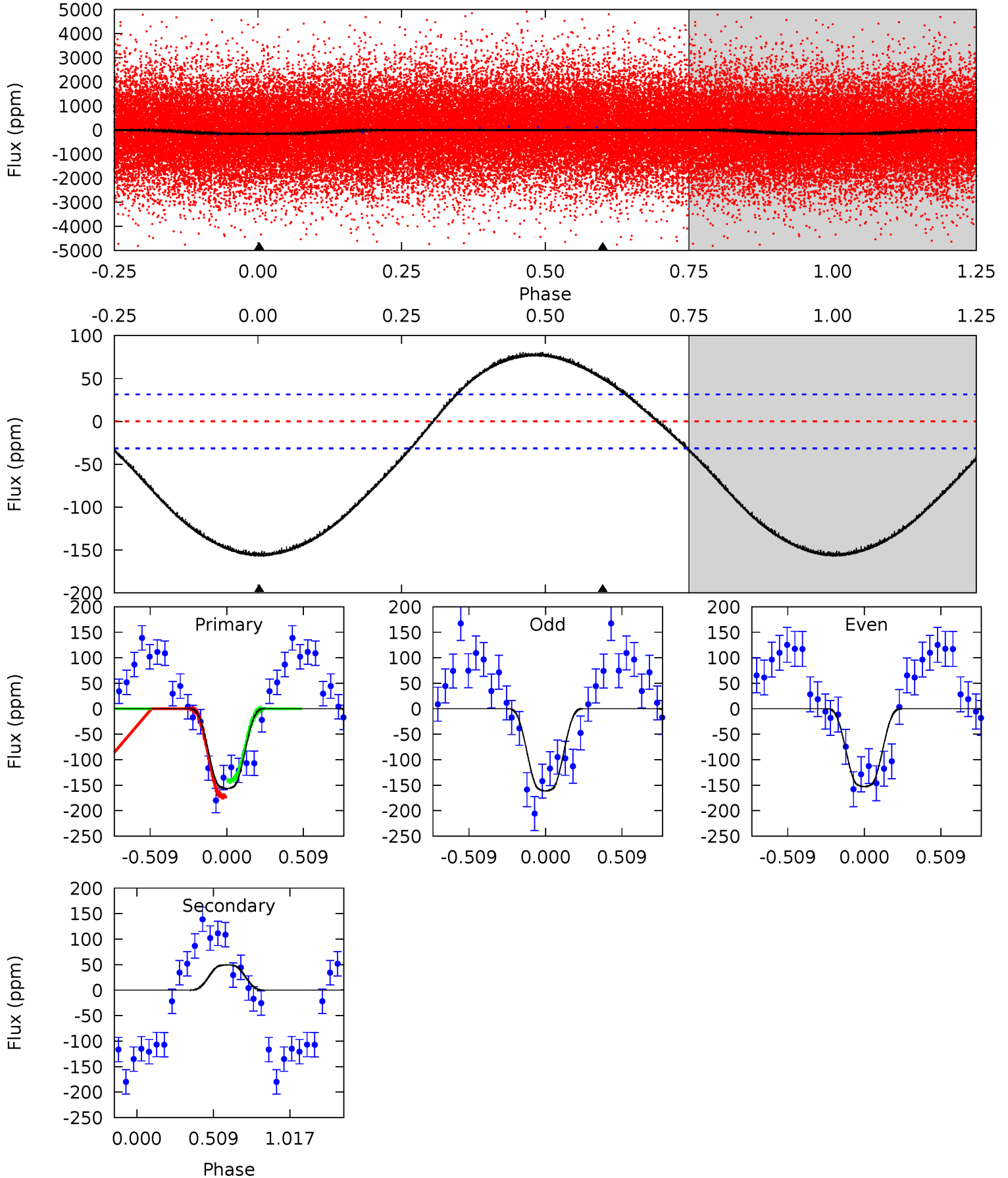
TCE 003867256-01 P= 1.015465 Days $T_0=132.062428$ (BKJD)



DV Model-Shift Uniqueness Test

003867256-01, P = 1.015416 Days, E = 131.075271 Days

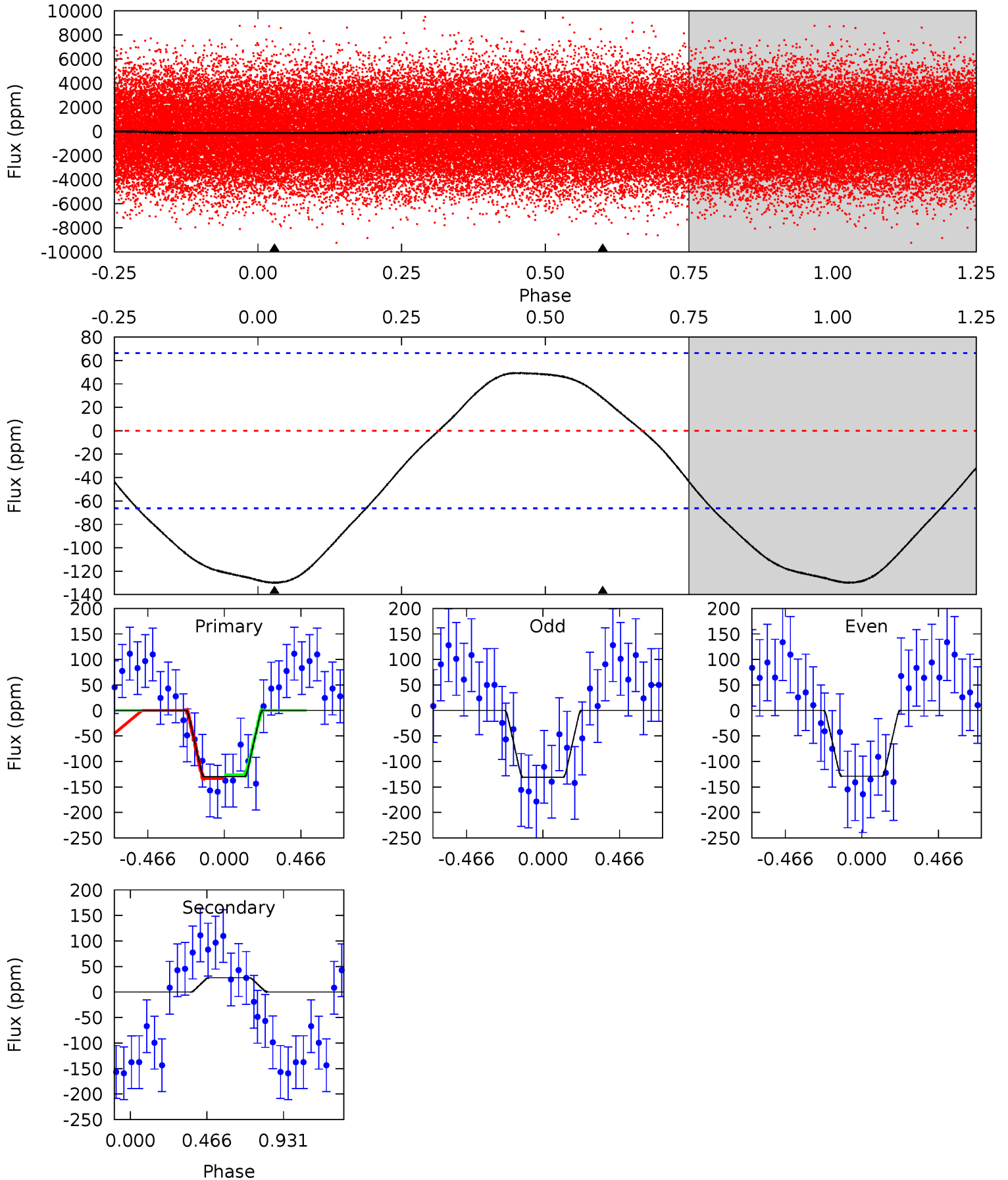
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
20.9	-6.59	0	0	4.21	0.66	3.16	20.9	20.9	-6.59	-6.59	0.57	28.3	0.34	2.09



Alt Model-Shift Uniqueness Test

003867256-01, P = 1.015465 Days, E = 131.046963 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
8.28	-1.78	0	0	4.23	0.73	0.88	8.28	8.28	-1.78	-1.78	0.06	0.83	0.28	0.25



Stellar Parameters For KIC 003867256

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	7396^{+207}_{-337}	$4.266^{+0.075}_{-0.210}$	$-0.140^{+0.200}_{-0.350}$	$1.462^{+0.539}_{-0.215}$	$1.436^{+0.217}_{-0.196}$	$0.647^{+0.255}_{-0.346}$
	+3%/-5%	+2%/-5%	+143%/-250%	+37%/-15%	+15%/-14%	+39%/-53%
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 003867256-01 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	A_{obs}
DV	49 ± 7	$2.58^{+0.44}_{-0.27}$	3730^{+308}_{-218}	-5103^{+222}_{-236}	$-1.987^{+0.548}_{-0.609}$
Alt.	28 ± 16	$1.99^{+0.40}_{-0.25}$	3742^{+297}_{-213}	-5036^{+582}_{-540}	$-1.785^{+0.994}_{-1.344}$

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

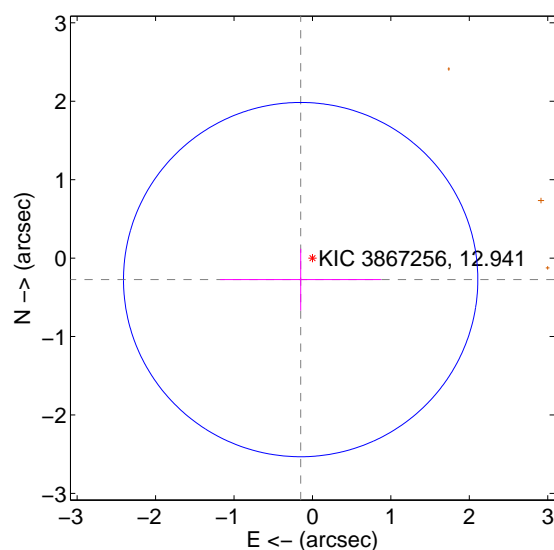
Supplemental centroid analysis for 003867256-01. Kepler magnitude: 12.94. Transit SNR 17.71

There are 0 quarters with good PRF difference image offsets

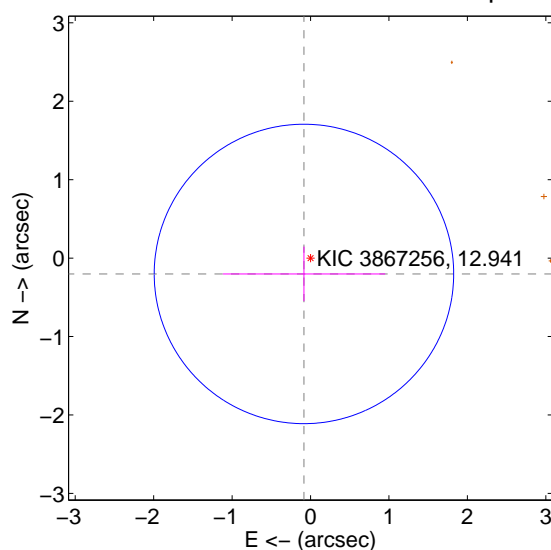
The direct PRF centroid is offset from the target star catalog position by about 0.10 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.313 ± 0.753	0.42	0.150 ± 1.026	-0.274 ± 0.393
PRF-fit source offset from KIC position	0.219 ± 0.636	0.34	0.084 ± 1.034	-0.202 ± 0.348
photometric centroid source offset	0.29 ± 0.14	2.08	-0.13 ± 0.13	0.26 ± 0.14

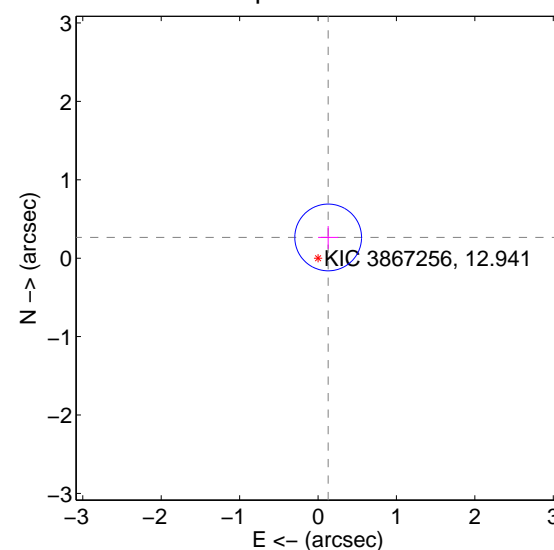
offset from difference PRF-fit to OOT PRF-fit



offset from difference PRF-fit to KIC position

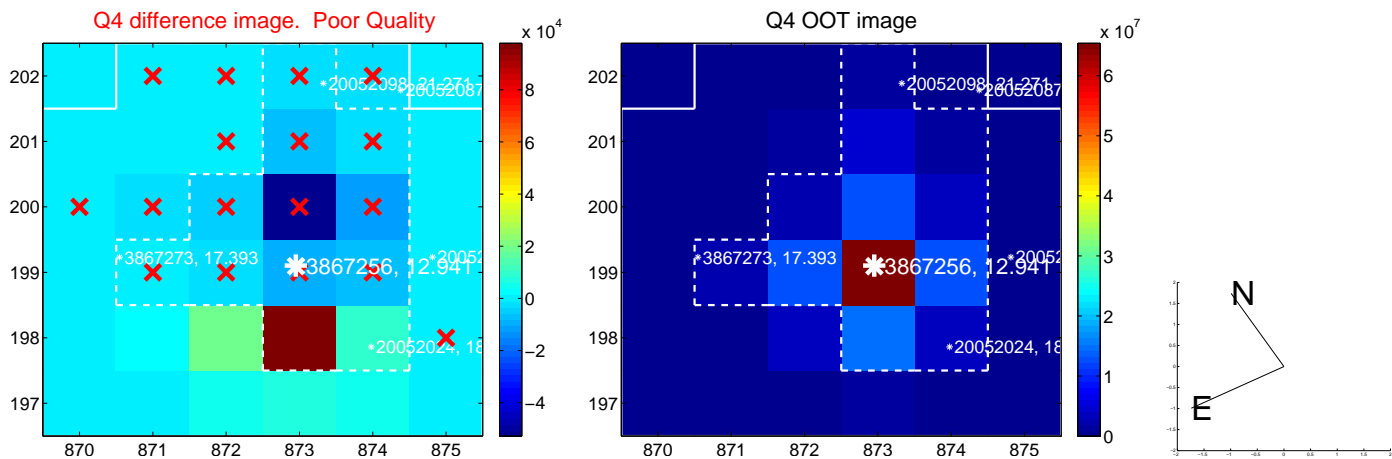
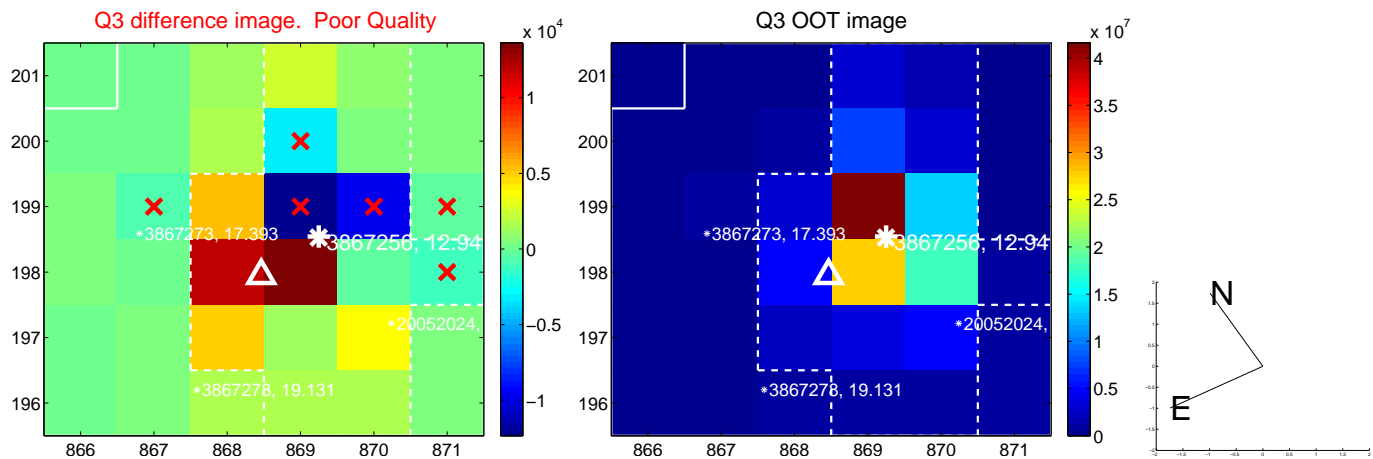
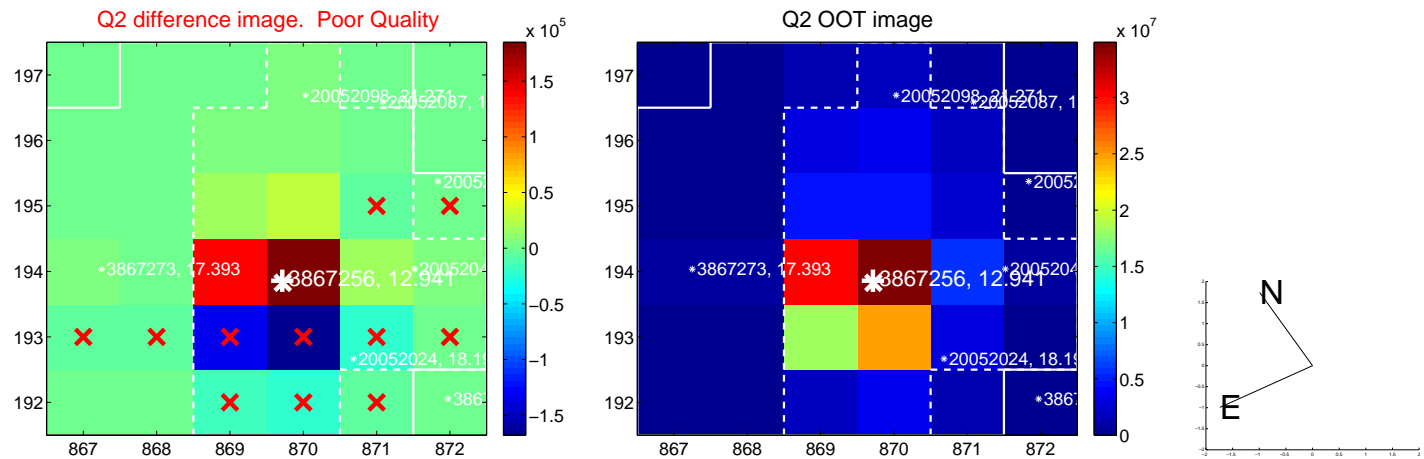
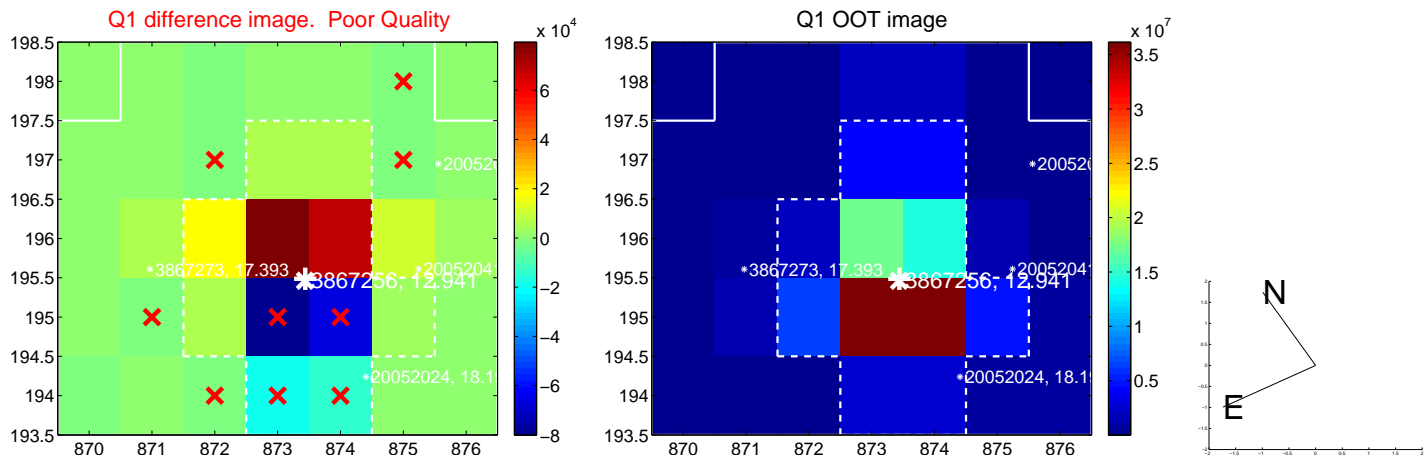


offset from photometric centroids

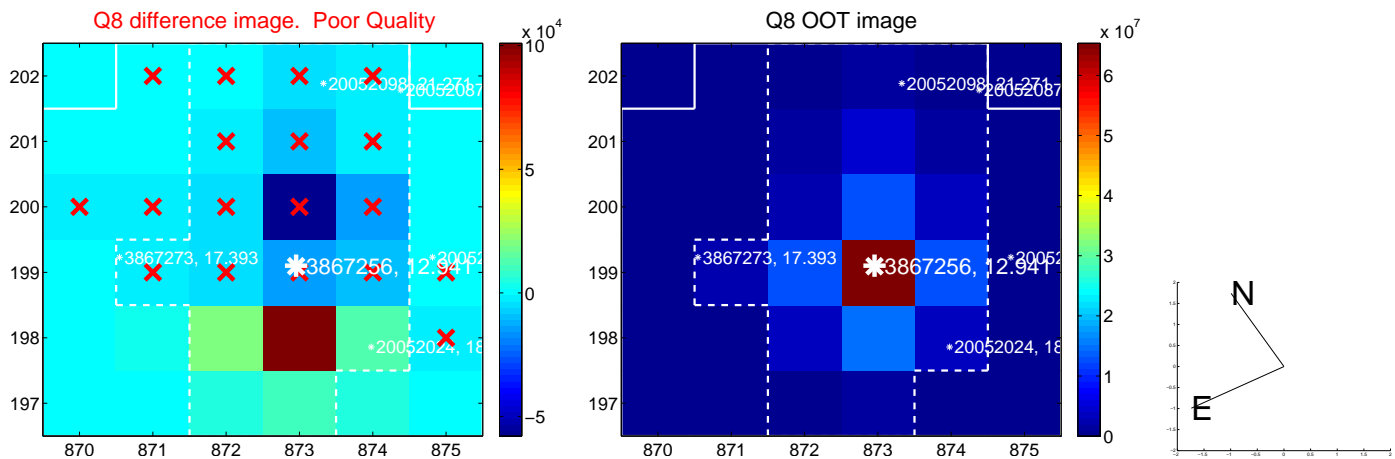
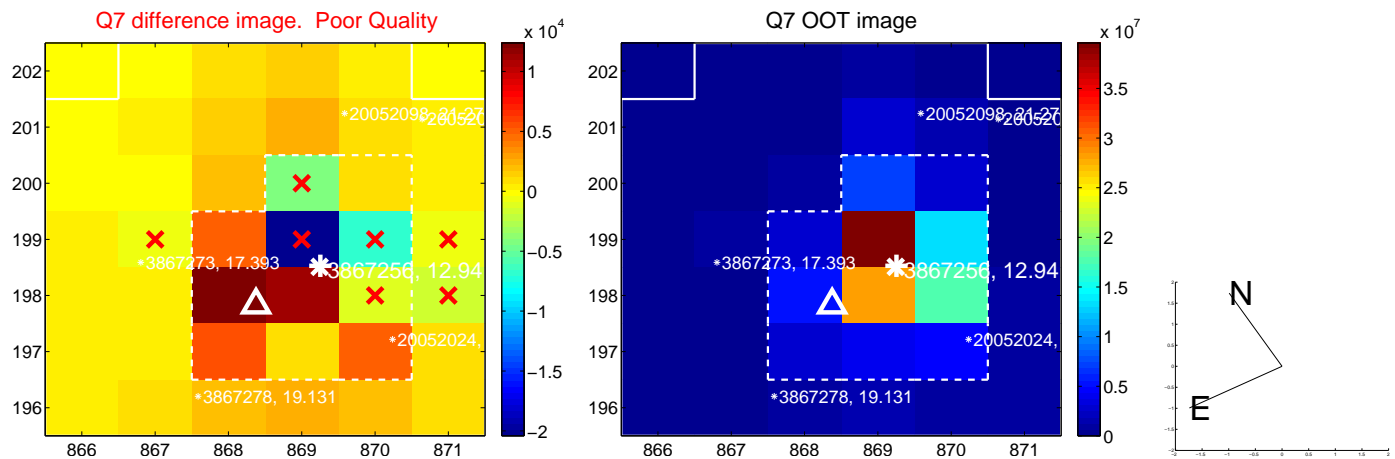
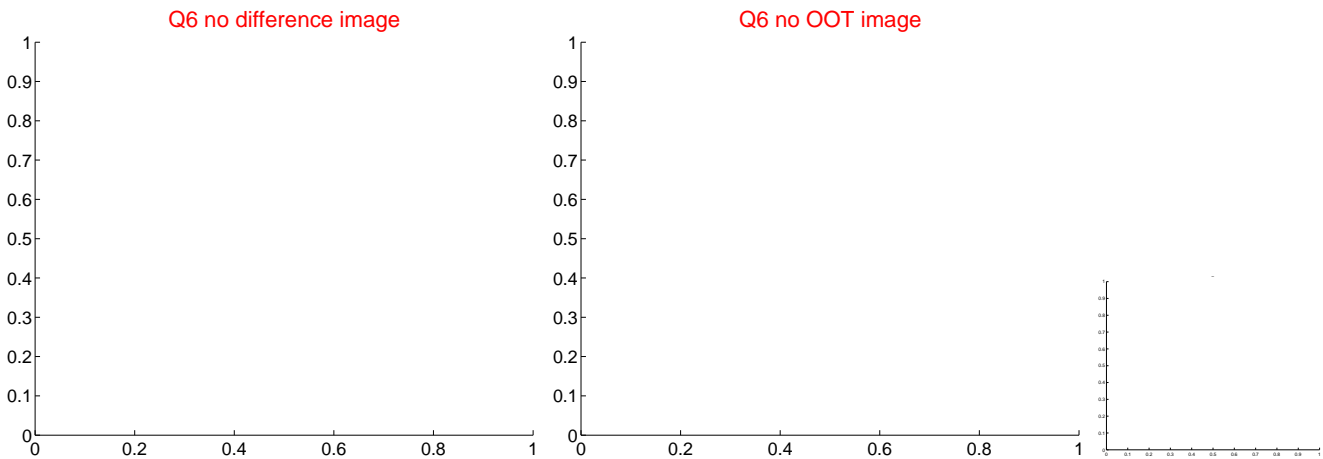
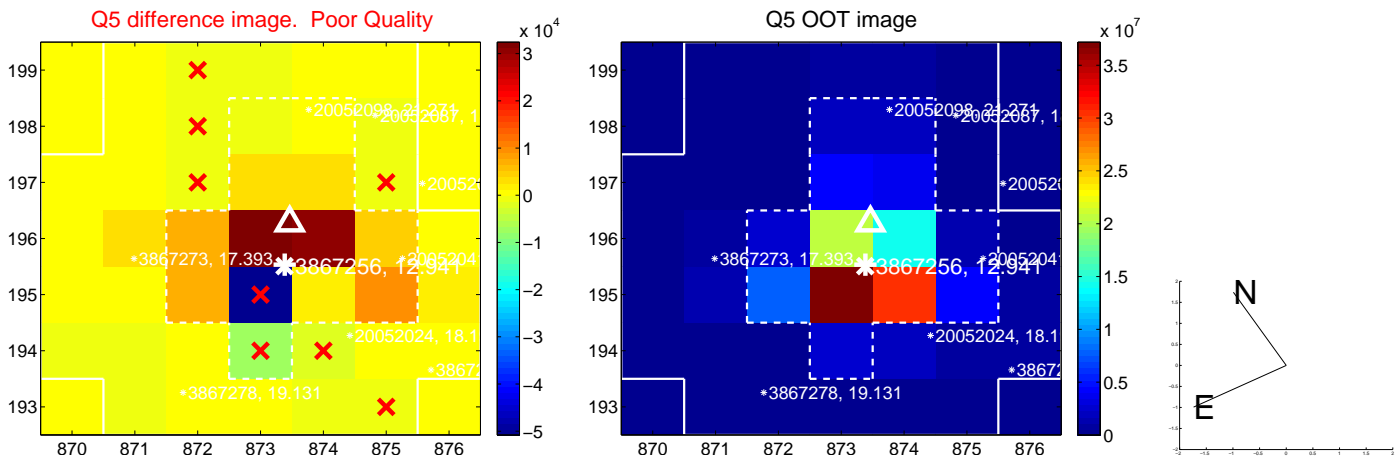


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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

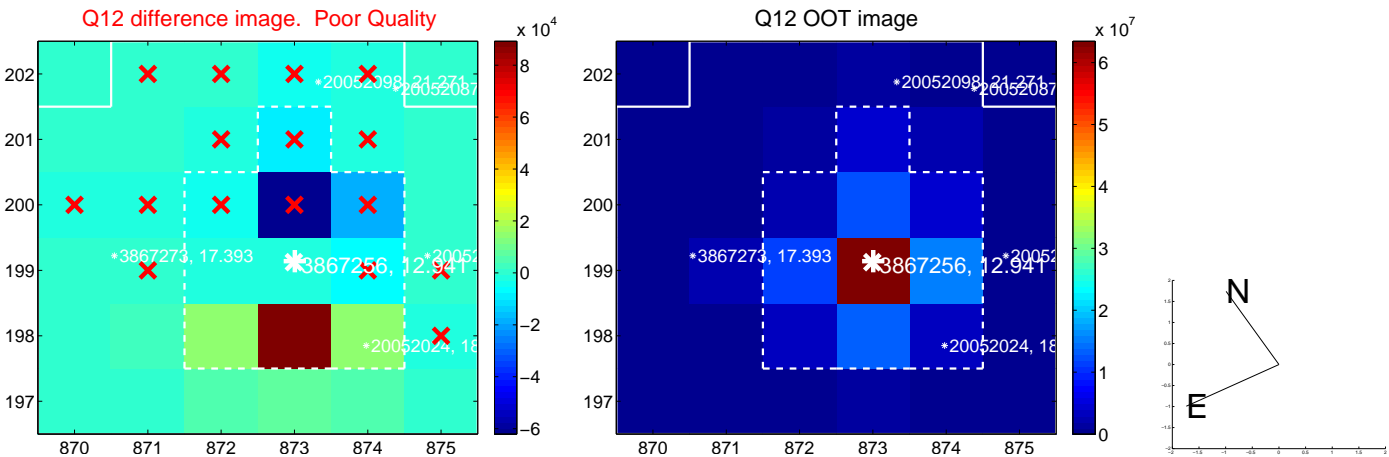
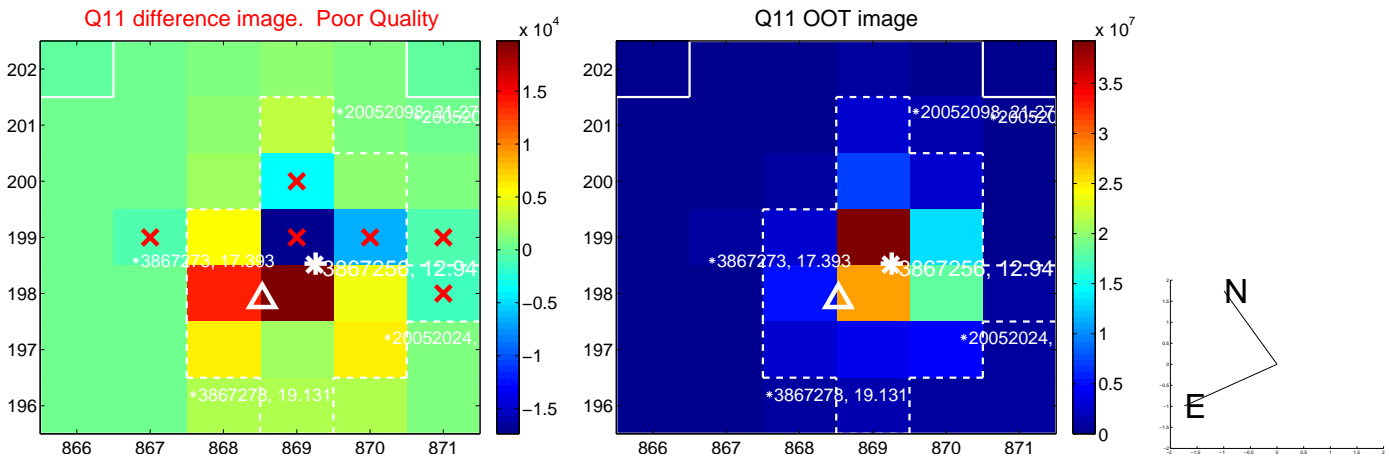
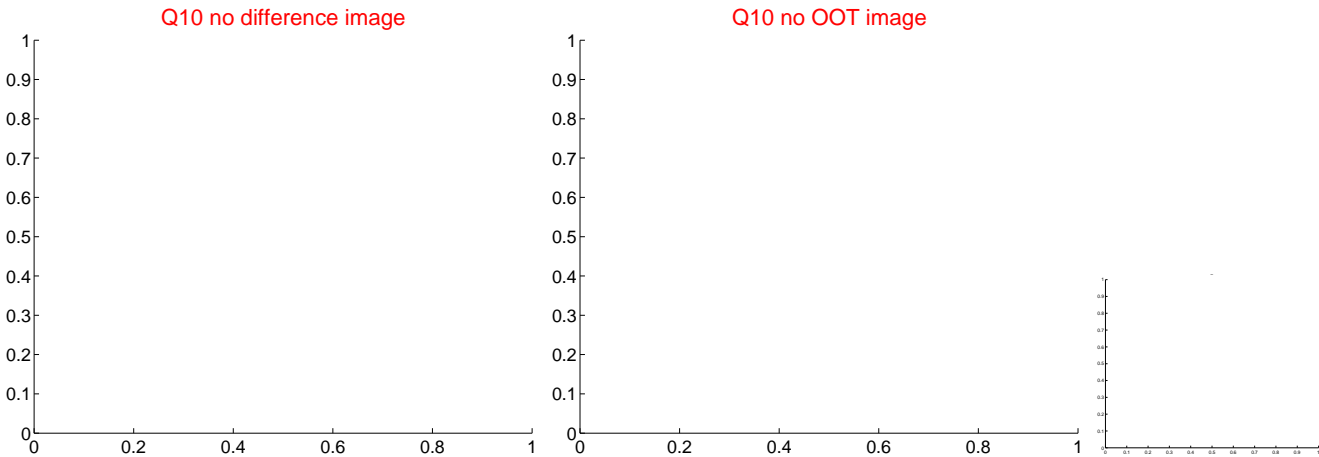
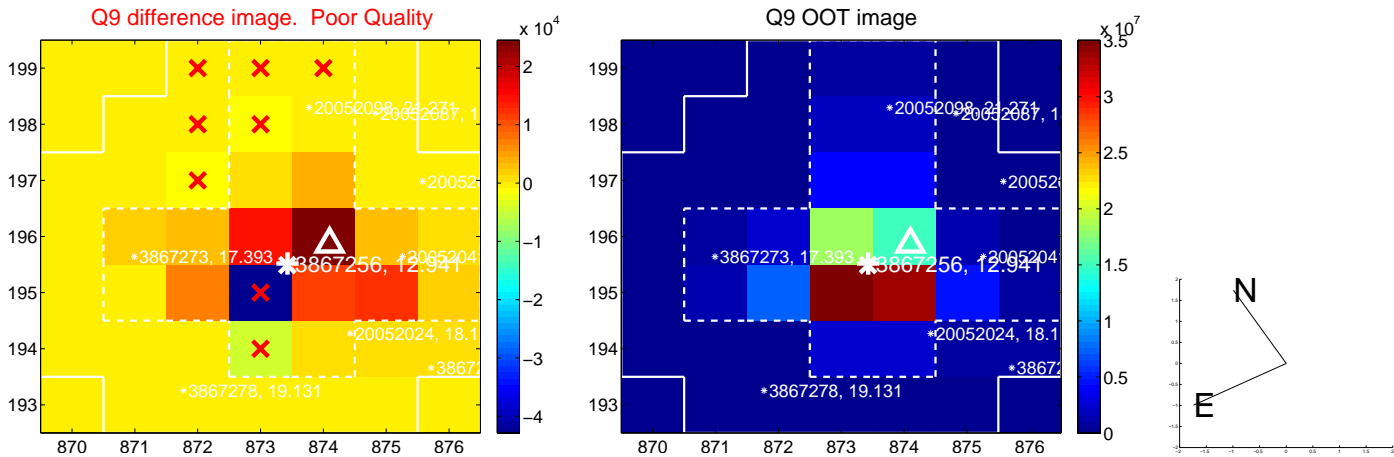
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



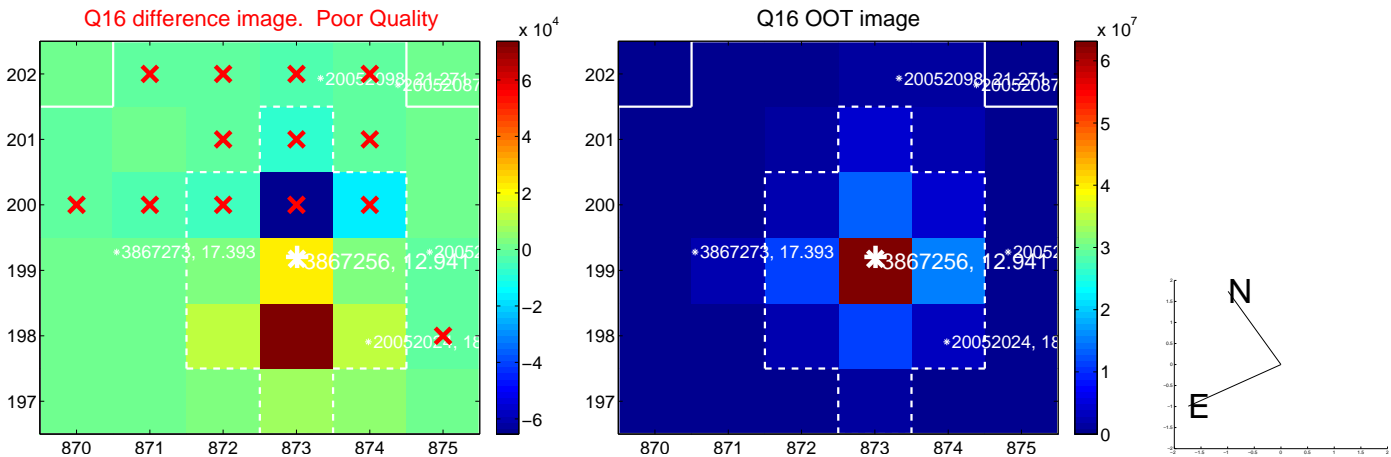
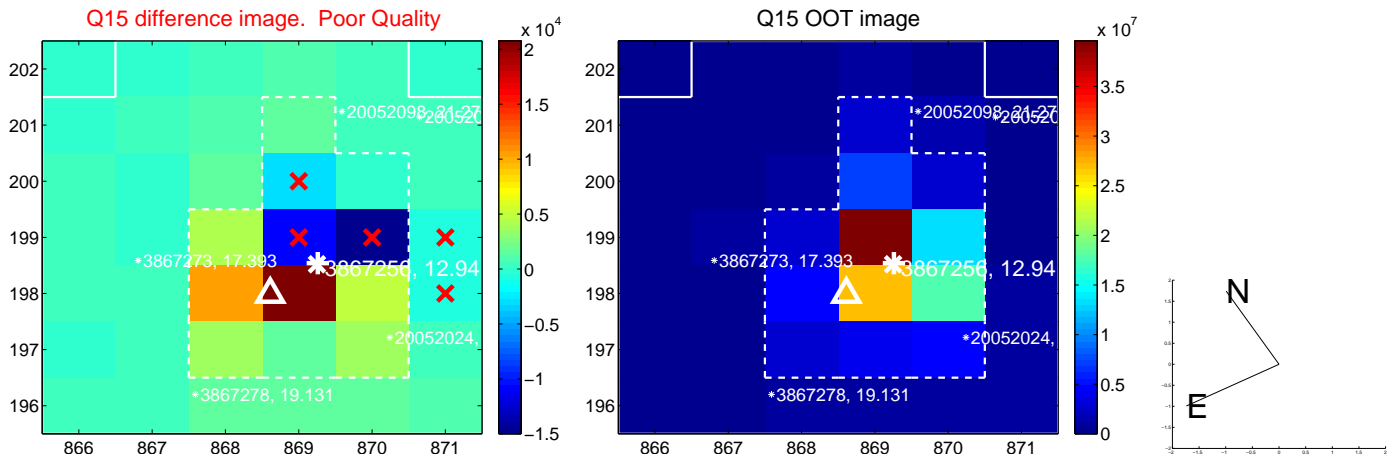
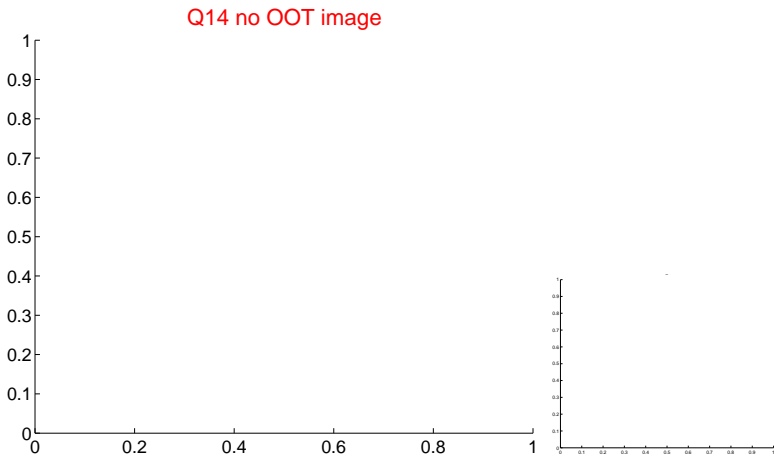
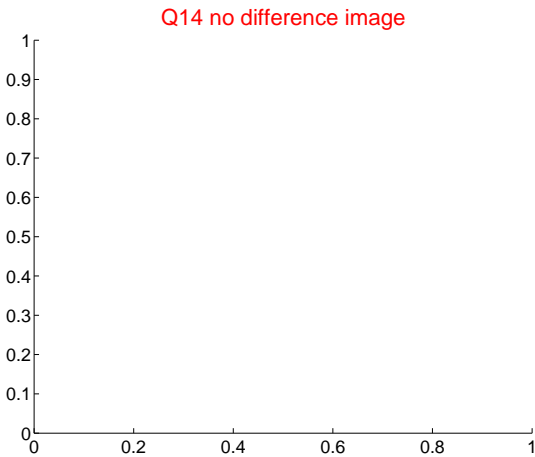
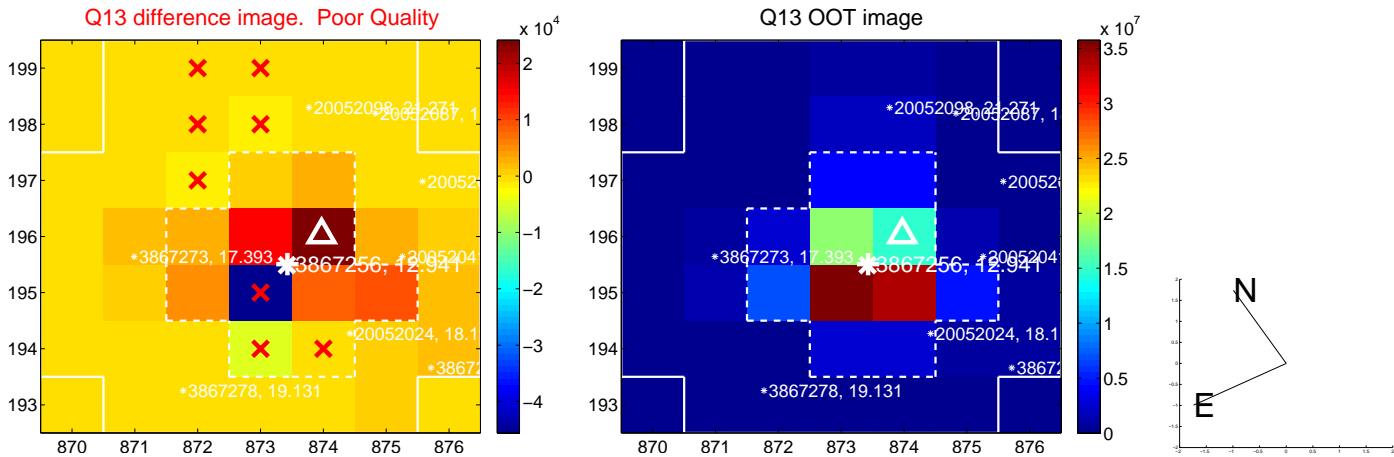
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



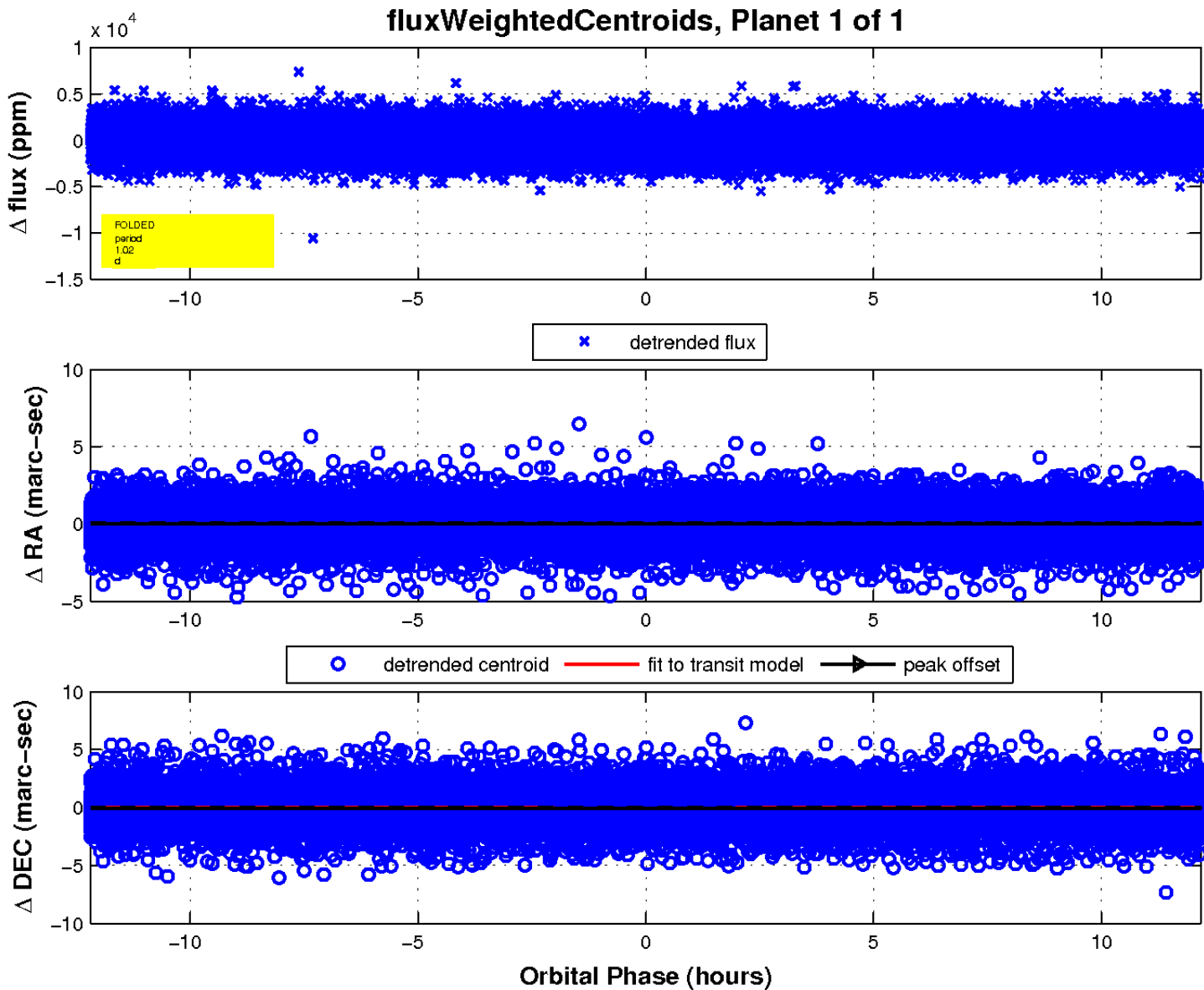
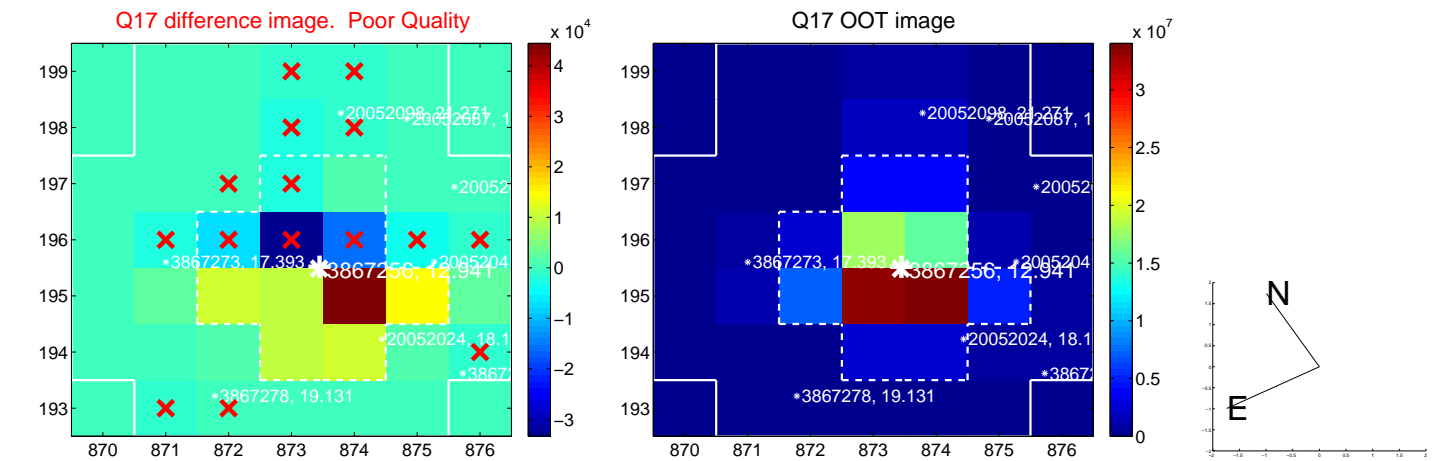
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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



UKIRT Image

