

KIC 011247623

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})
011247623-01	OBS	No	252.206631	276.625355	177.8	12.172	8.4	8.3	1.92	5804	2.81	5.36

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
011247623-01	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_MARSHALL—INCONSISTENT_TRANS—CENT_FEW_DIFFS

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

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

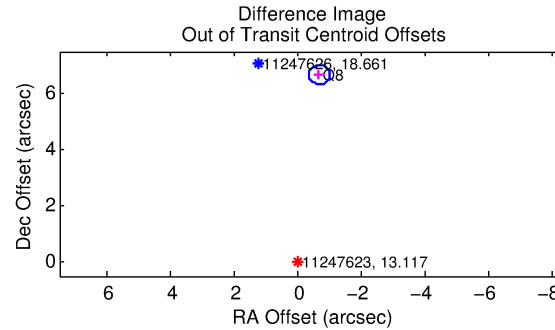
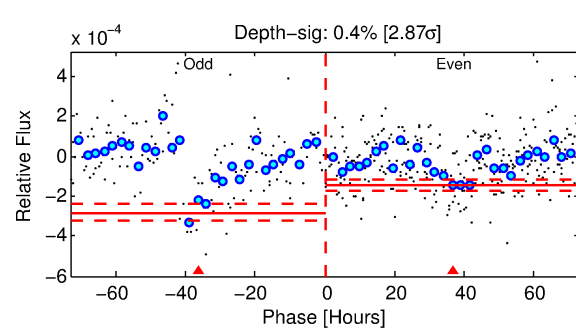
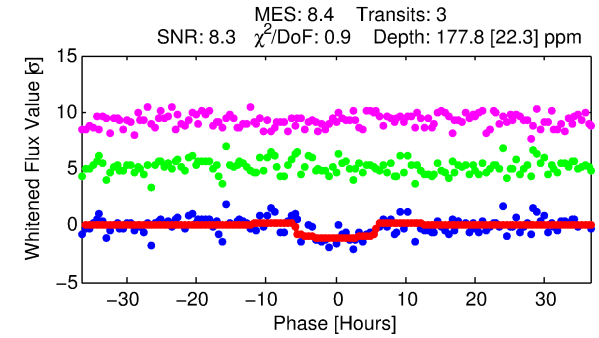
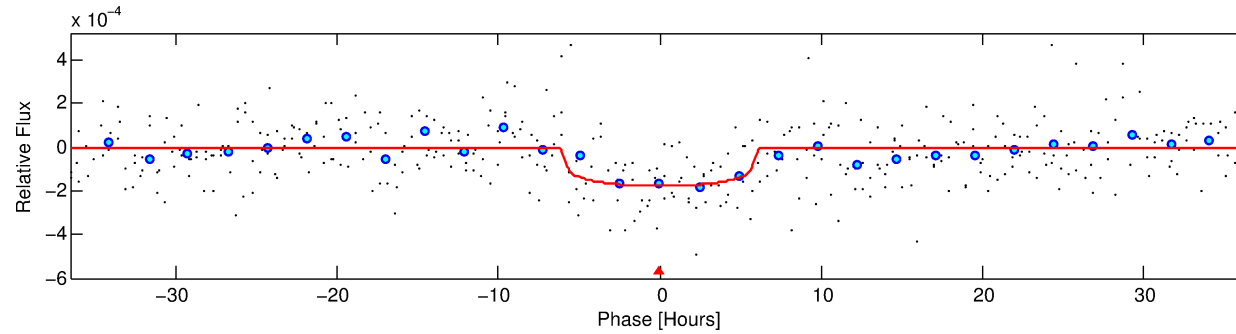
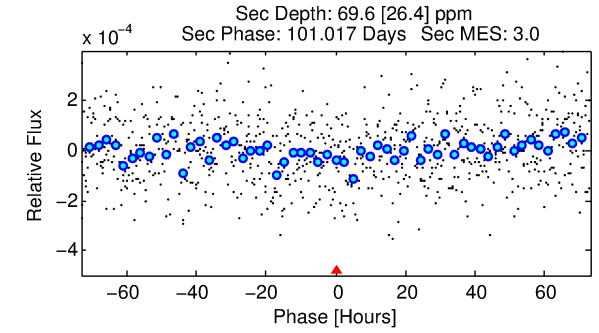
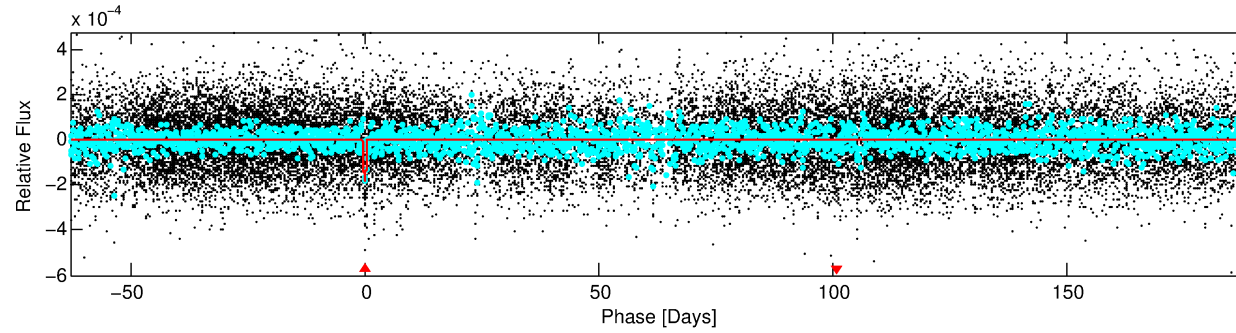
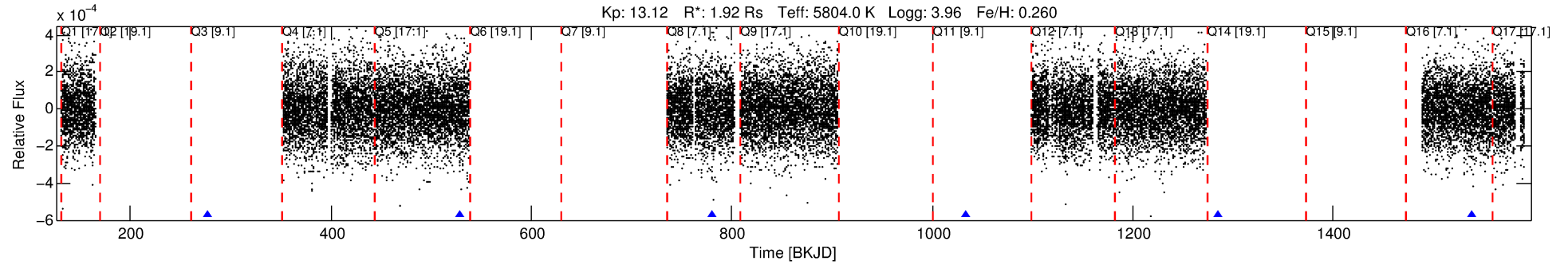
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 011247623-01

No Significant Match Found

DV One-Page Summary

KIC: 11247623 Candidate: 1 of 1 Period: 252.207 d



DV Fit Results:

Period = 252.20663 [0.00677] d
Epoch = 276.6254 [0.0228] BKJD
Rp/R* = 0.0134 [0.0044]
a/R* = 102.39 [145.82]
b = 0.78 [0.72]
Seff = 5.36 [2.68]
Teq = 388 [49] K
Rp = 2.81 [1.26] Re
a = 0.8361 [0.2500] AU
Ag = 3379.47 [3042.41] [1.11σ]
Teff = 4573 [882] K [4.74σ]

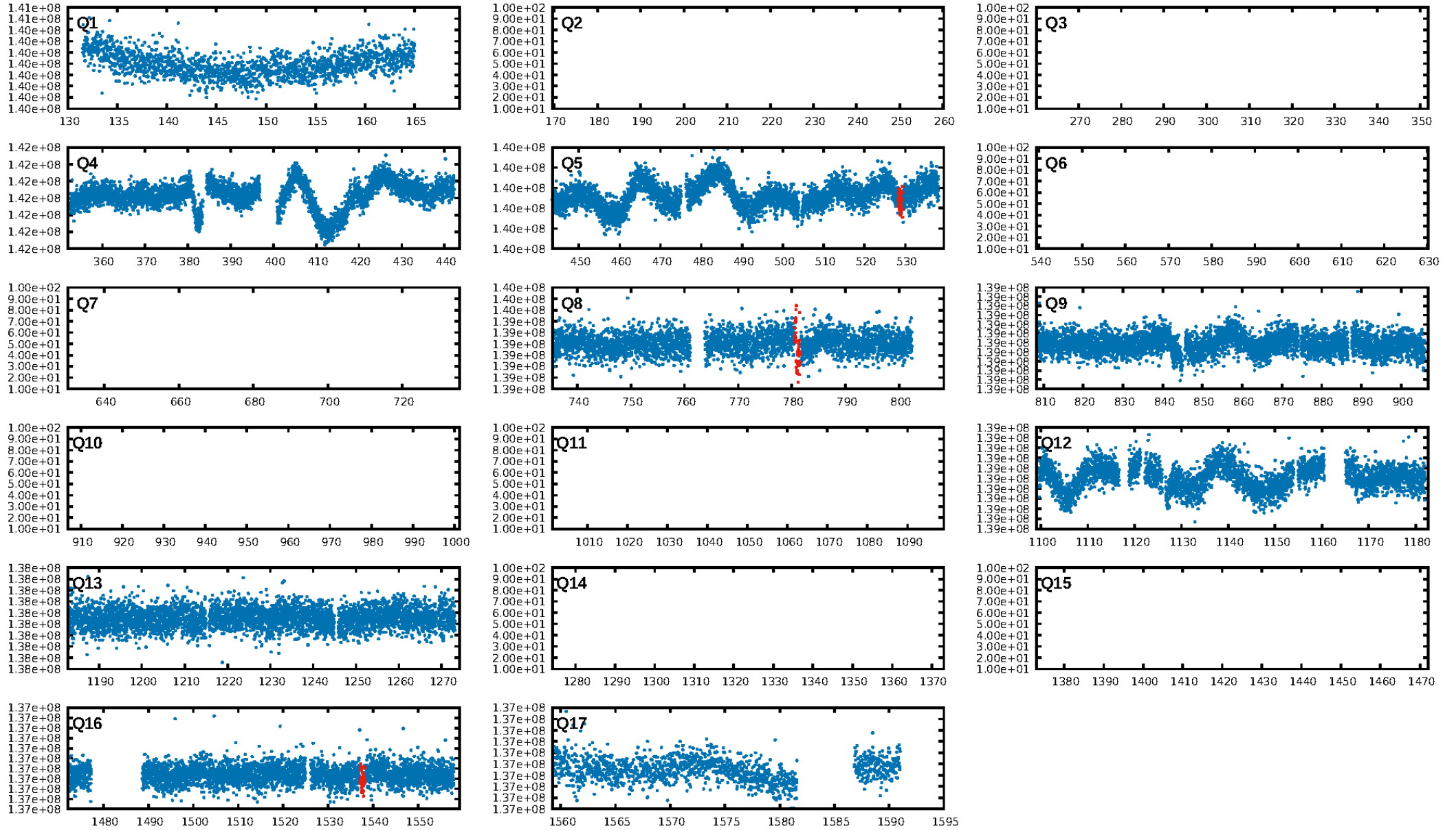
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: 6.7%
ModelChiSquareGoF-sig: 99.7%
Bootstrap-pfa: 1.99e-14
RollingBand-fgt: 1.00 [3/3]
GhostDiagnostic-chr: 1.354
Centroid-sig: 0.7%
Centroid-so: 2.332 arcsec [1.70σ]
OotOffset-rm: 6.698 arcsec [60.58σ]
KicOffset-rm: 6.969 arcsec [63.08σ]
OotOffset-st: 0/0/1/0 [1]
KicOffset-st: 0/0/1/0 [1]
DiffImageQuality-fgm: 1.00 [1/1]
DiffImageOverlap-fno: 1.00 [3/3]

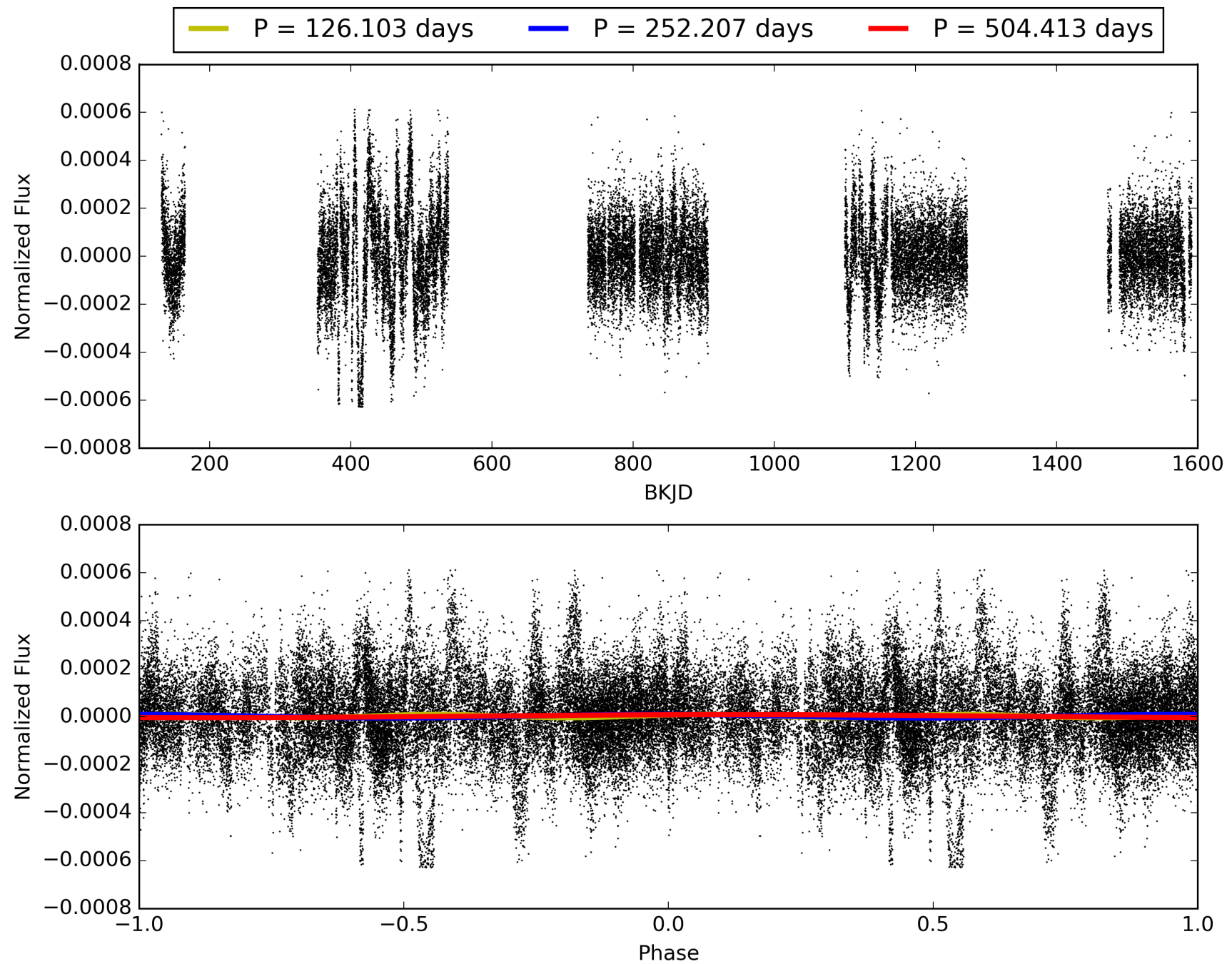
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 28-Jan-2016 20:54:00 Z

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

TCE 011247623-01, PDC Light Curves

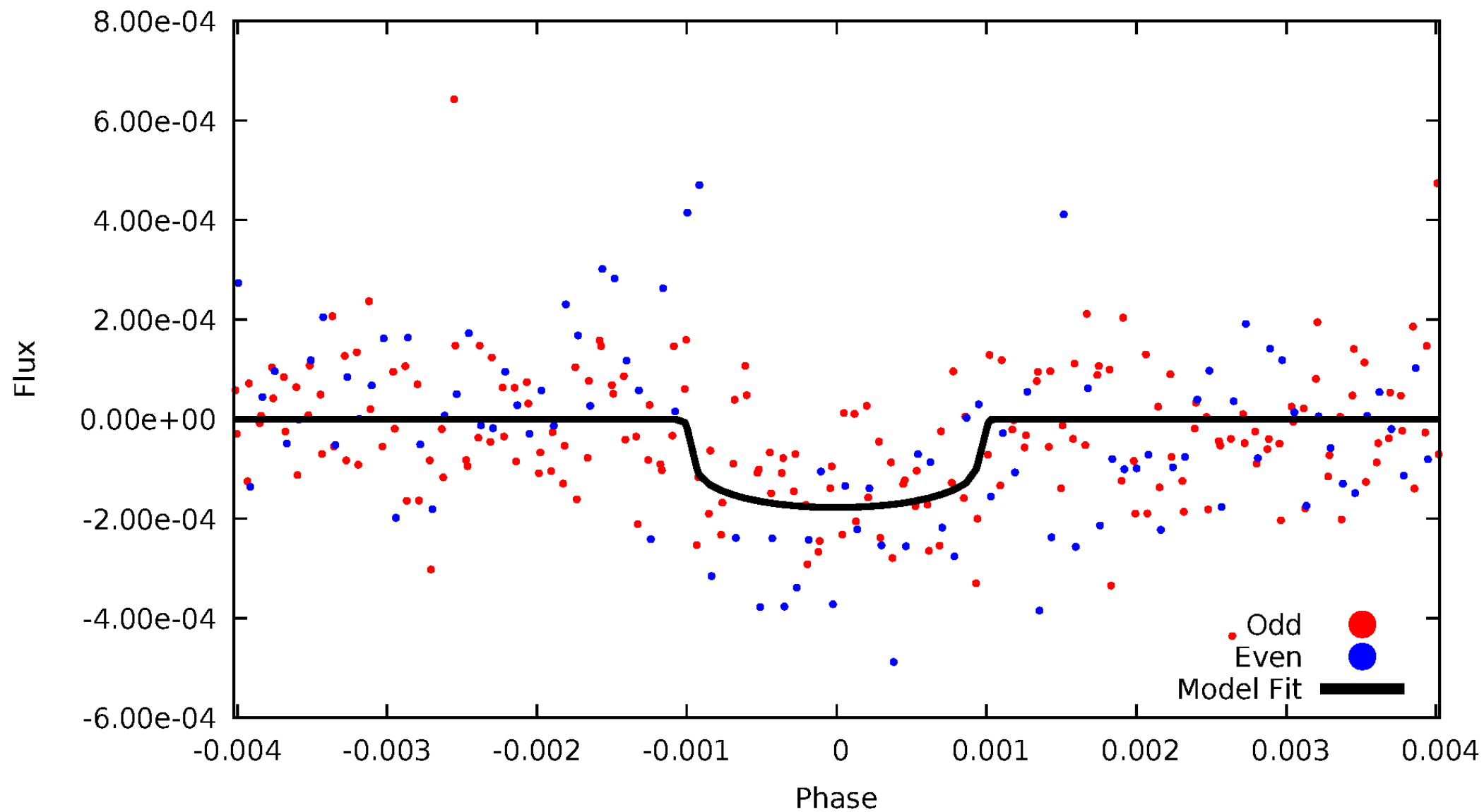


TCE 011247623-01



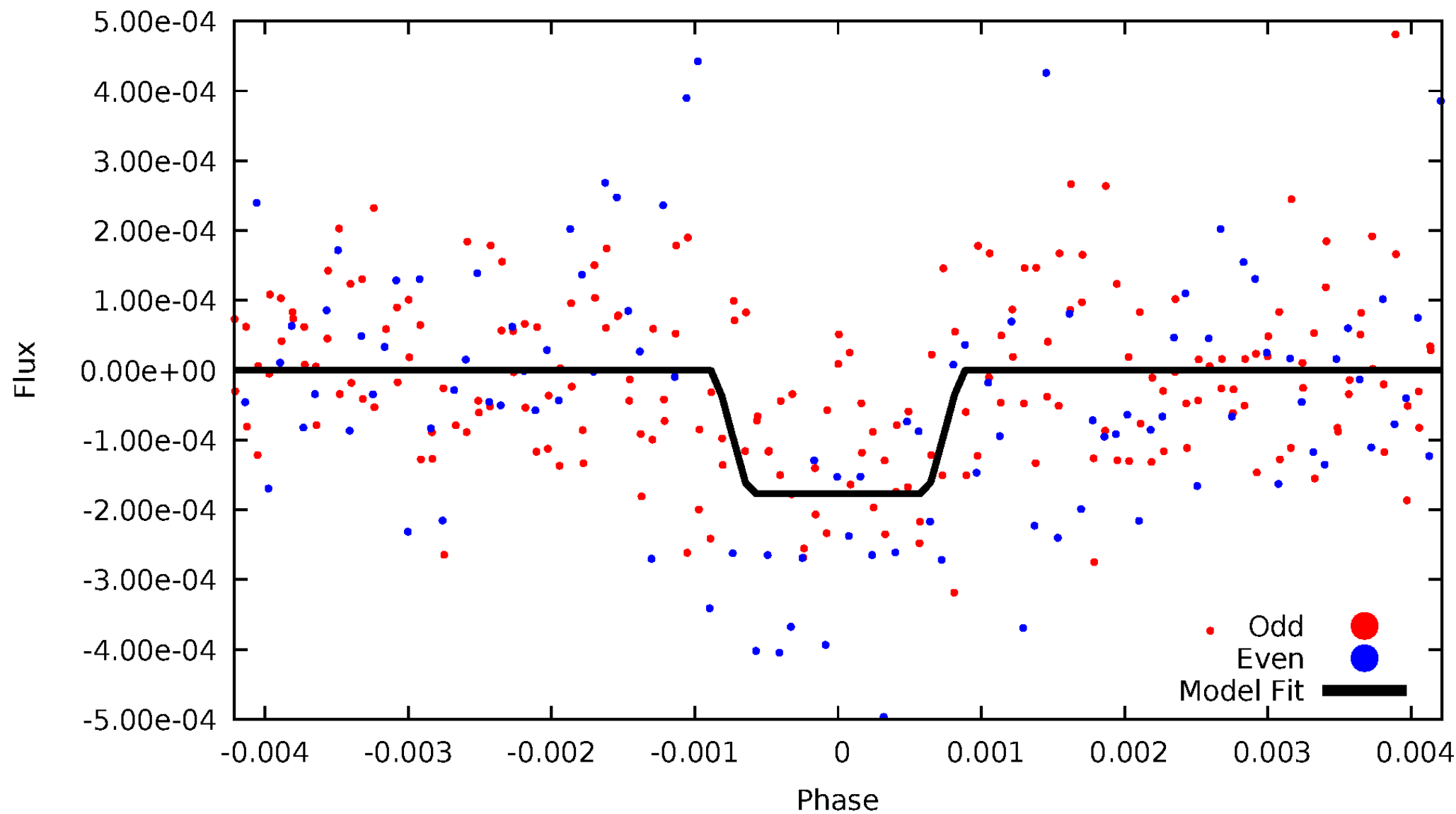
DV Odd/Even

TCE 011247623-01



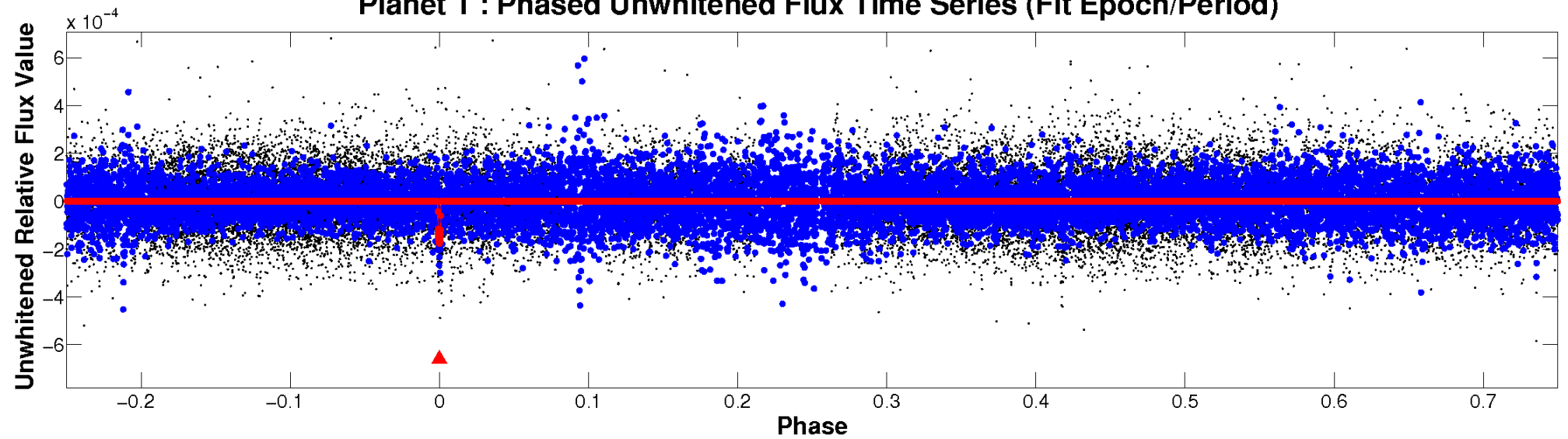
ALT Odd/Even

TCE 011247623-01

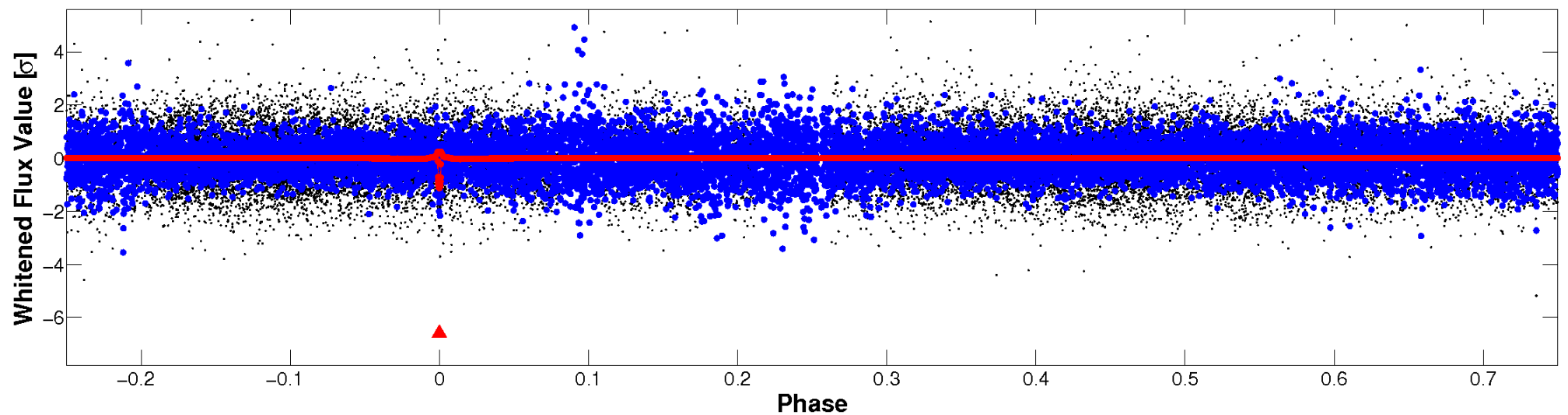


Non-Whitened Vs. Whitened Light Curve

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

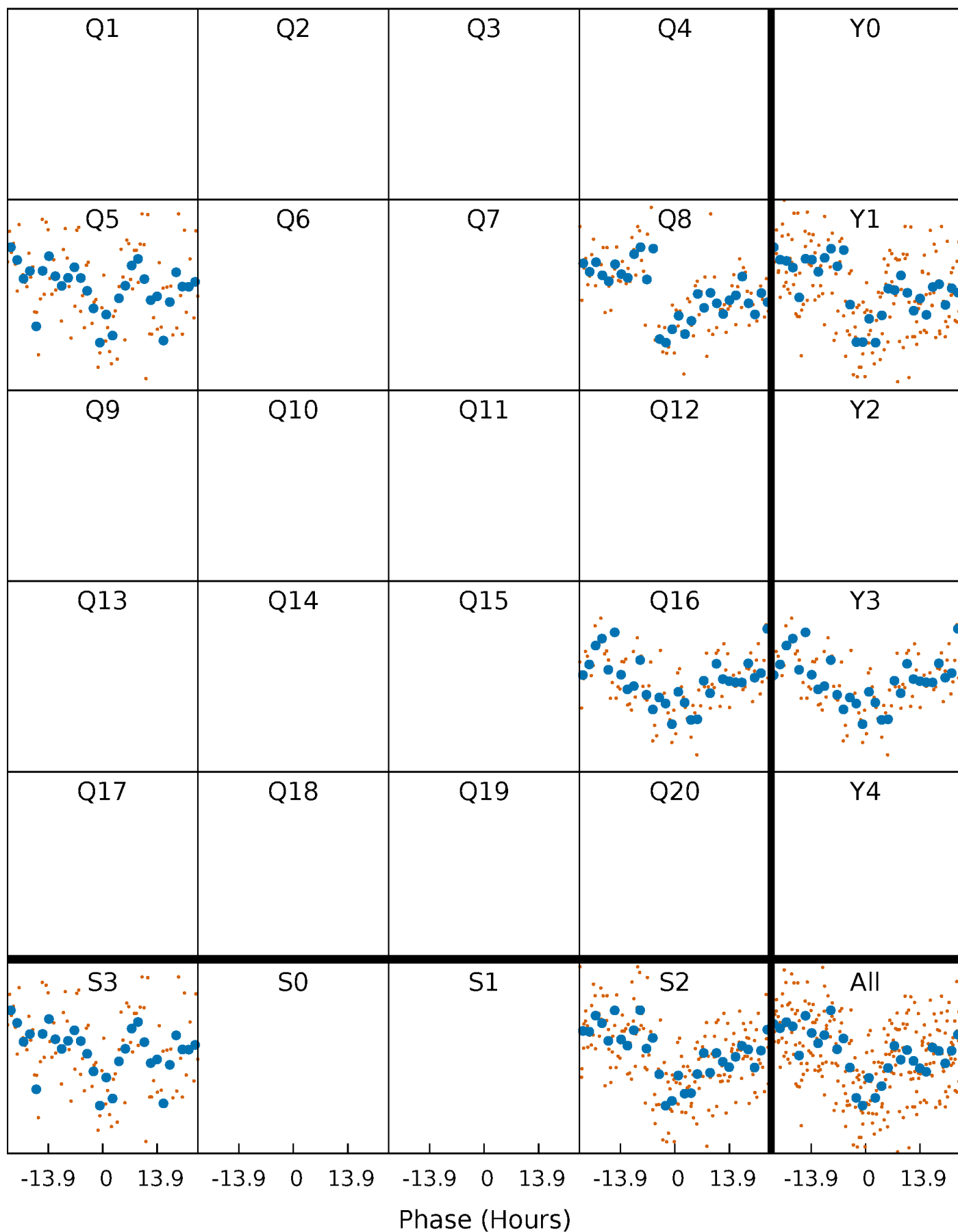


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



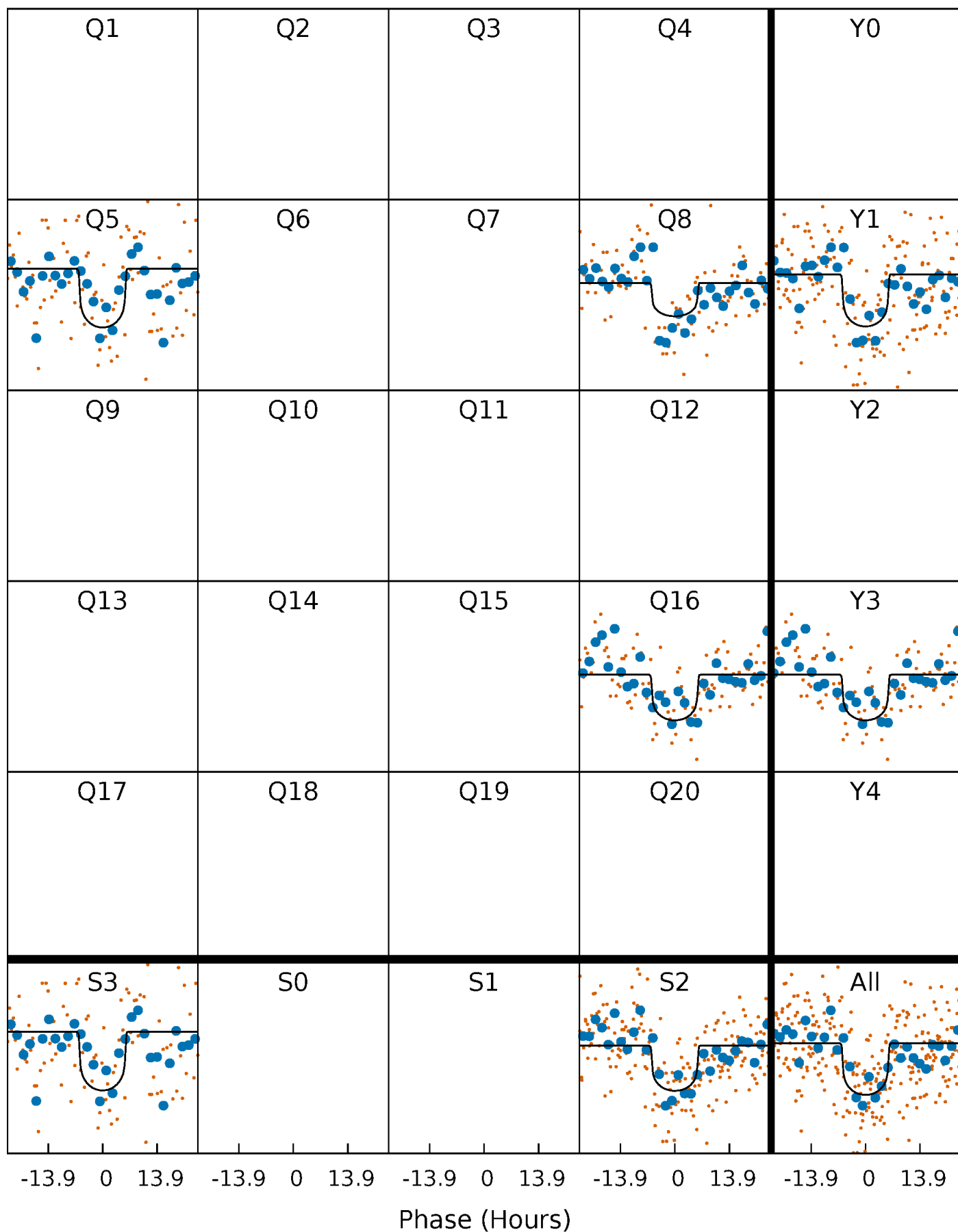
PDC Quarter-Phased Transit Curves

TCE 011247623-01 P=252.206631 Days $T_0=276.625355$ (BKJD)



DV Quarter-Phased Transit Curves

TCE 011247623-01 P=252.206631 Days $T_0=276.625355$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

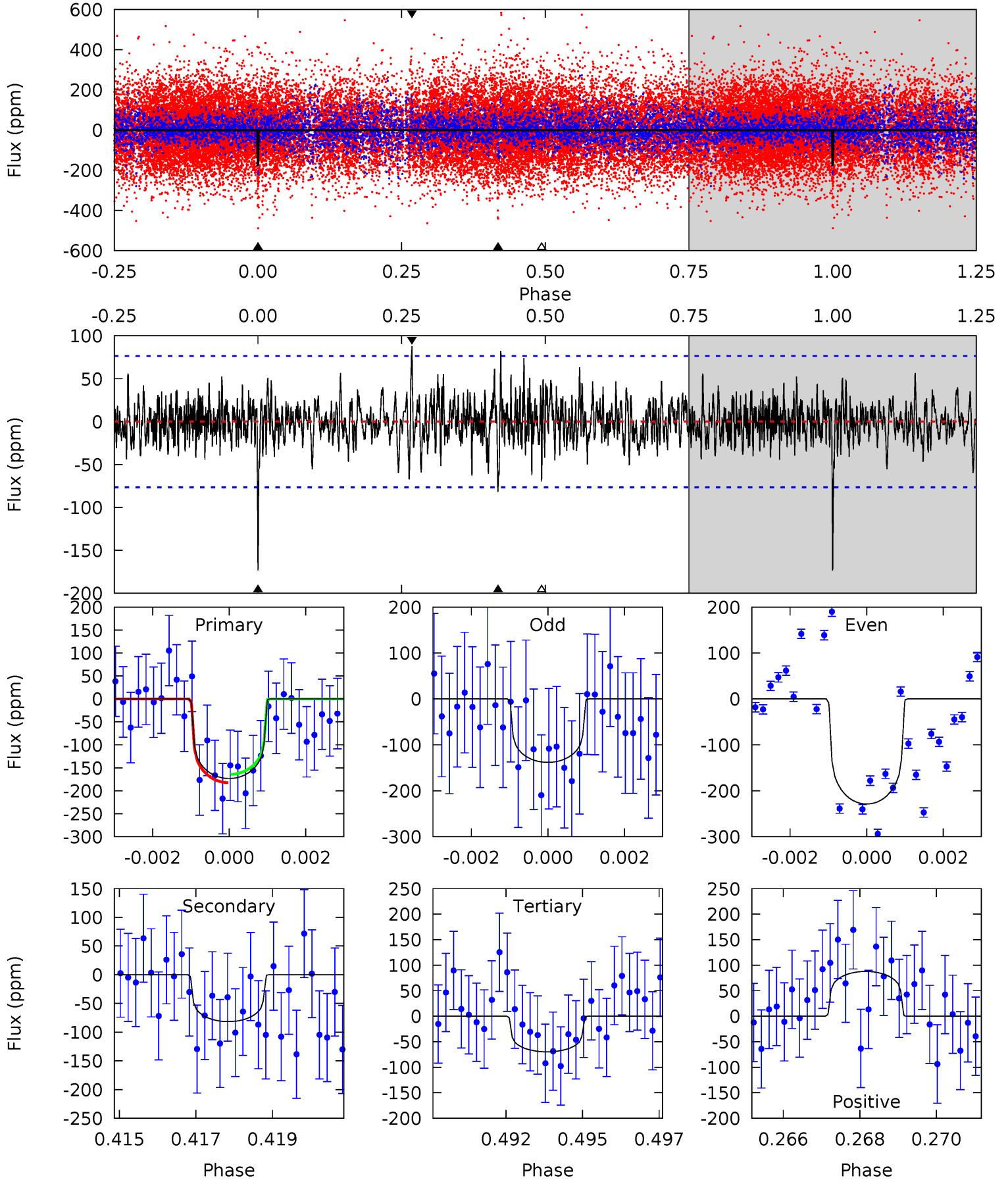
TCE 011247623-01 P=252.211431 Days $T_0=276.631345$ (BKJD)



DV Model-Shift Uniqueness Test

011247623-01, $P = 252.206631$ Days, $E = 24.418724$ Days

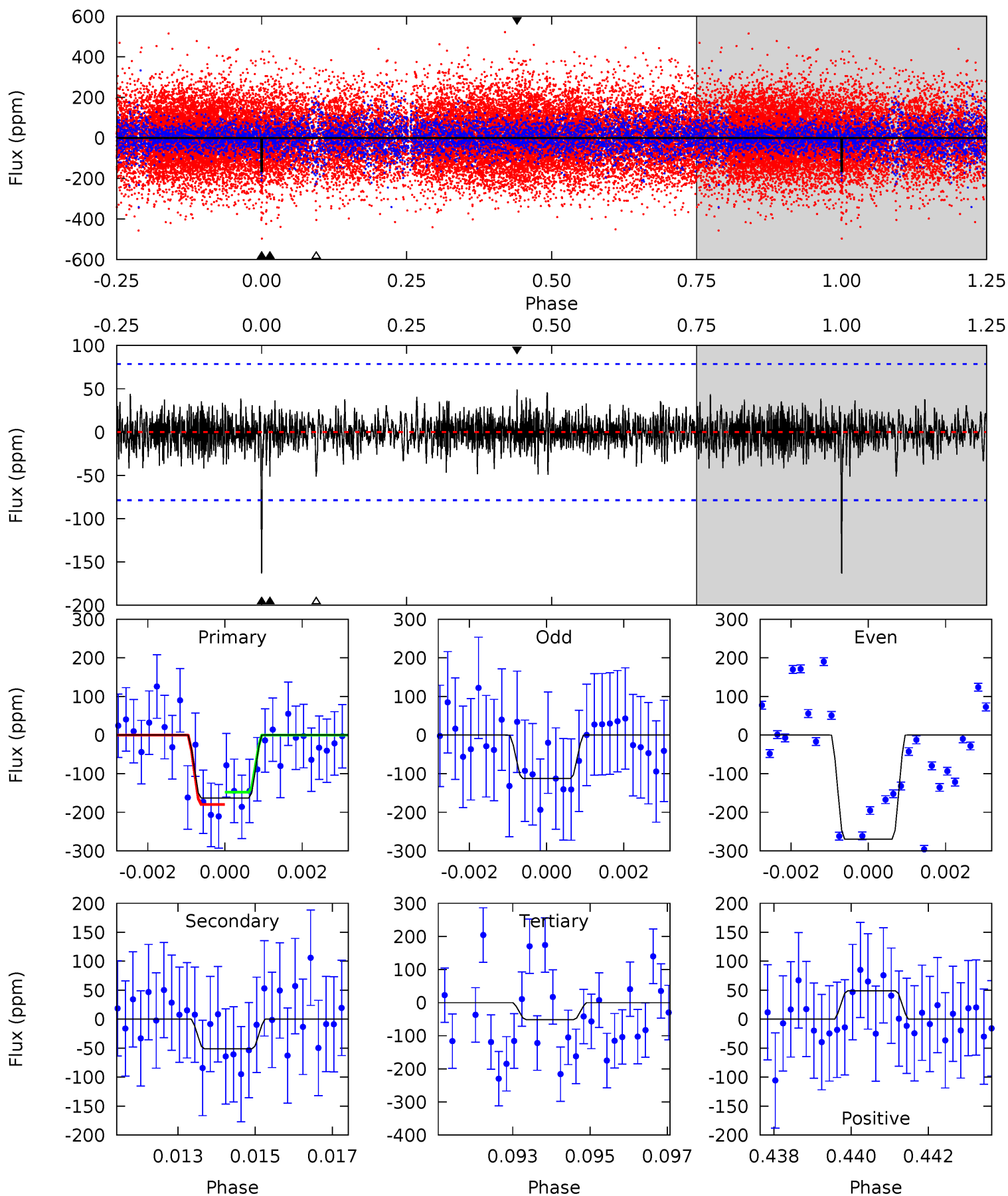
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
12.0	5.67	4.85	6.10	5.32	3.08	1.38	7.19	5.94	0.82	-0.43	2.94	1.15	0.34	0.63



Alt Model-Shift Uniqueness Test

011247623-01, P = 252.211431 Days, E = 24.419914 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
11.1	3.47	3.47	3.33	5.34	3.11	0.95	7.62	7.76	0.00	0.14	4.98	1.24	0.23	1.09



Stellar Parameters For KIC 011247623

	$T_{\text{eff}}(K)$	$\log(g)$	$[\text{Fe}/\text{H}]$	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	5804^{+193}_{-175}	$3.960^{+0.285}_{-0.095}$	$0.260^{+0.200}_{-0.250}$	$1.919^{+0.343}_{-0.587}$	$1.225^{+0.158}_{-0.210}$	$0.244^{+0.460}_{-0.073}$
	+3%/-3%	+7%/-2%	+77%/-96%	+18%/-31%	+13%/-17%	+188%/-30%
Source	KIC0	FLK73	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 011247623-01 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	A_{obs}
DV	-82 ± 14	$2.64^{+1.00}_{-0.95}$	531^{+35}_{-45}	4853^{+972}_{-523}	4439^{+6188}_{-2117}
Alt.	-51 ± 15	$2.61^{+1.07}_{-0.98}$	534^{+30}_{-46}	4455^{+849}_{-533}	2920^{+4289}_{-1586}

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

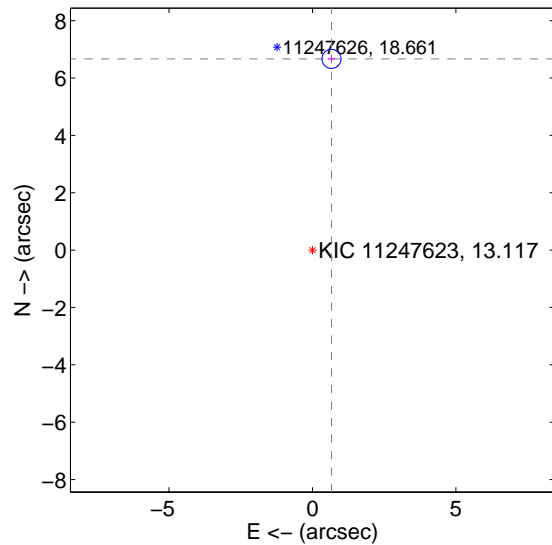
Supplemental centroid analysis for 011247623-01. Kepler magnitude: 13.12. Transit SNR 8.28

There are 1 quarters with good PRF difference image offsets

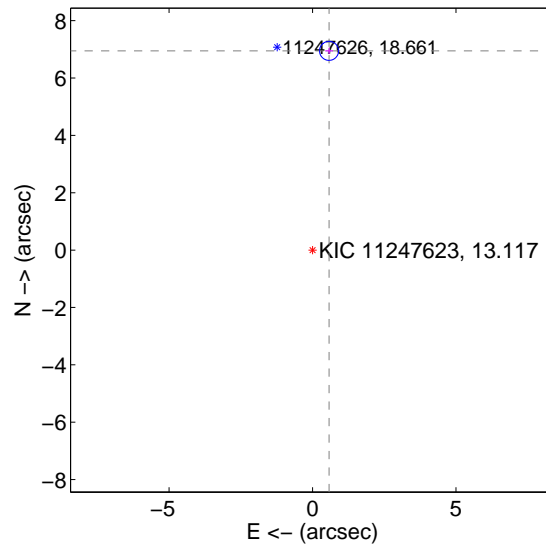
The direct PRF centroid is offset from the target star catalog position by about 0.29 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	6.698 \pm 0.111	60.58	-0.663 \pm 0.137	6.666 \pm 0.110
PRF-fit source offset from KIC position	6.969 \pm 0.110	63.08	-0.576 \pm 0.137	6.945 \pm 0.110
photometric centroid source offset	2.33 \pm 1.37	1.70	1.13 \pm 1.21	2.04 \pm 1.42

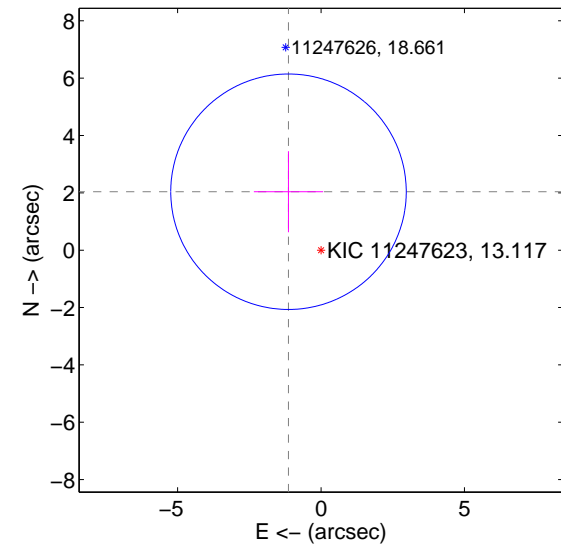
offset from difference PRF-fit to OOT PRF-fit



offset from difference PRF-fit to KIC position

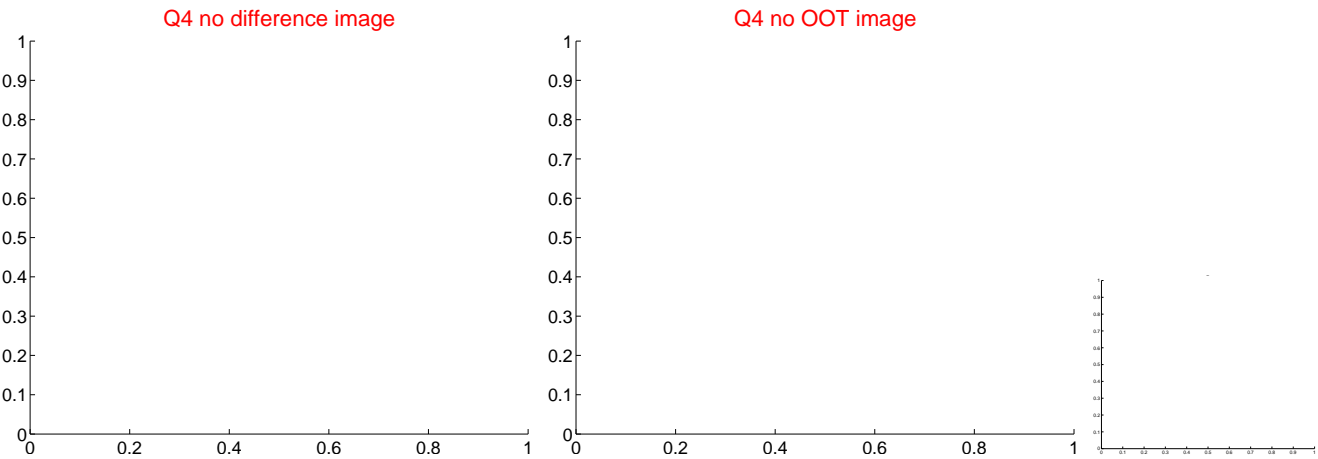
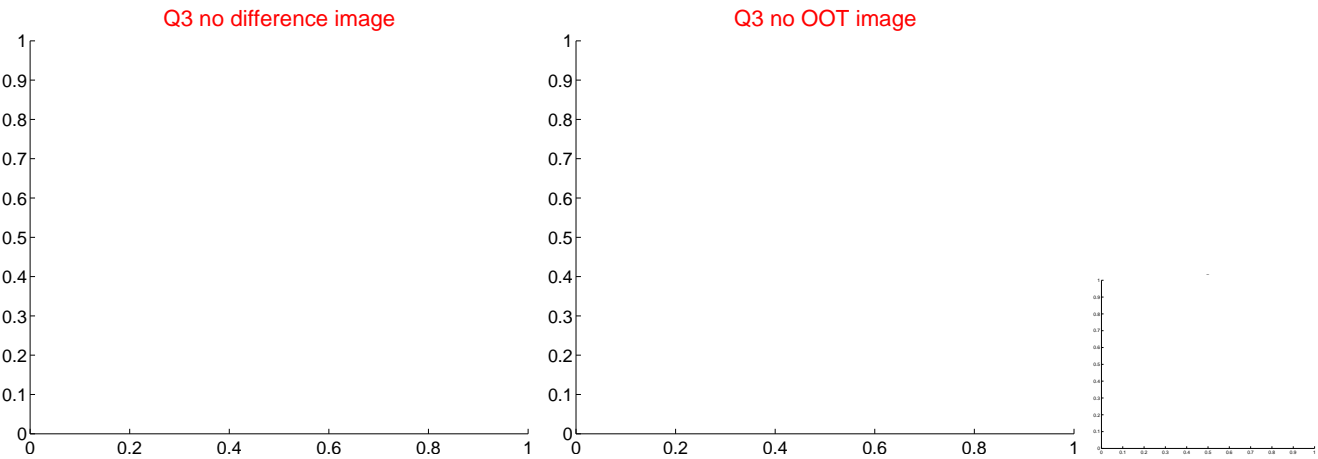
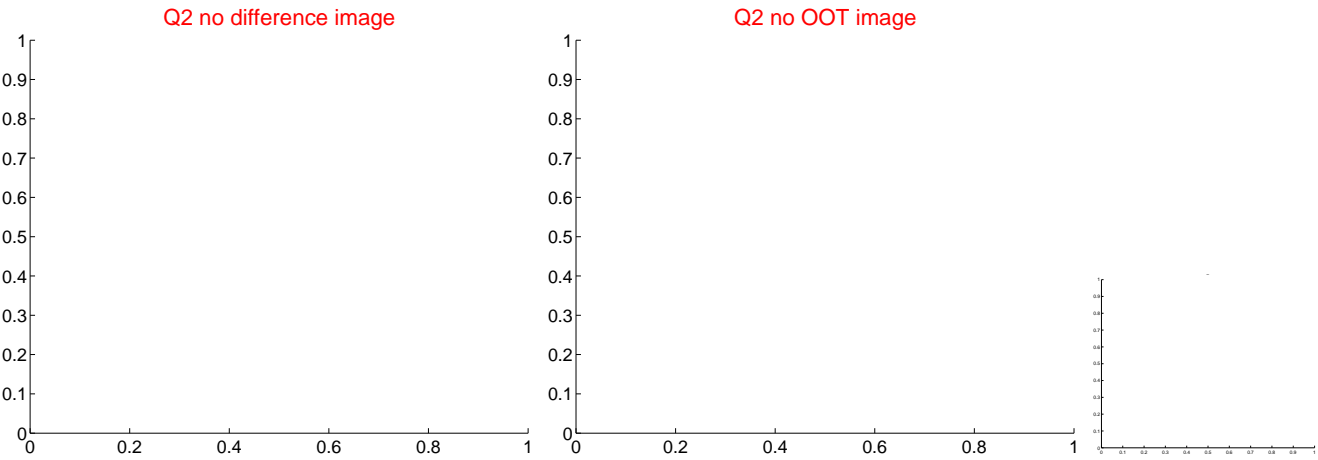
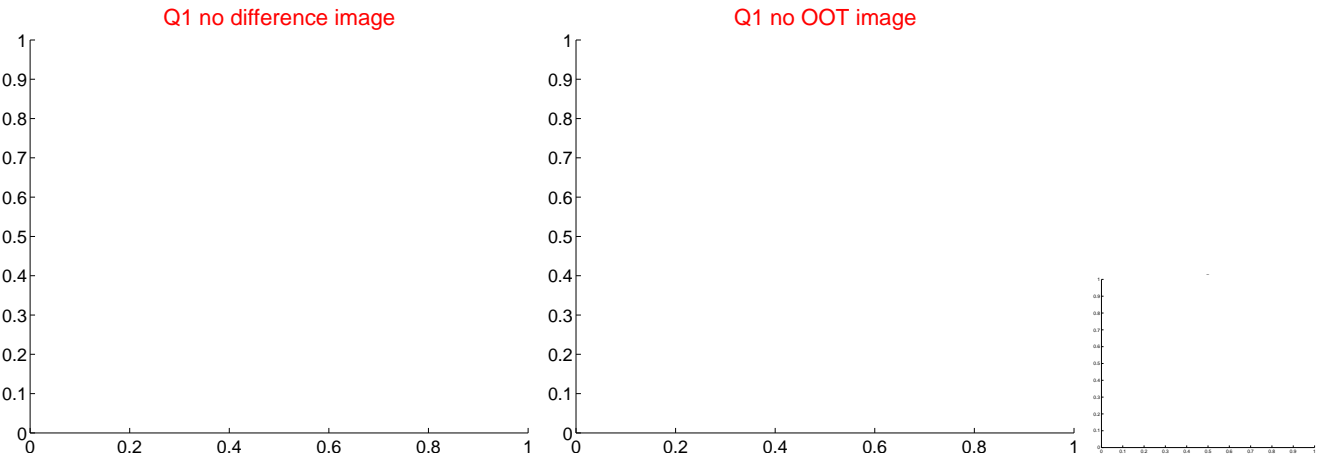


offset from photometric centroids

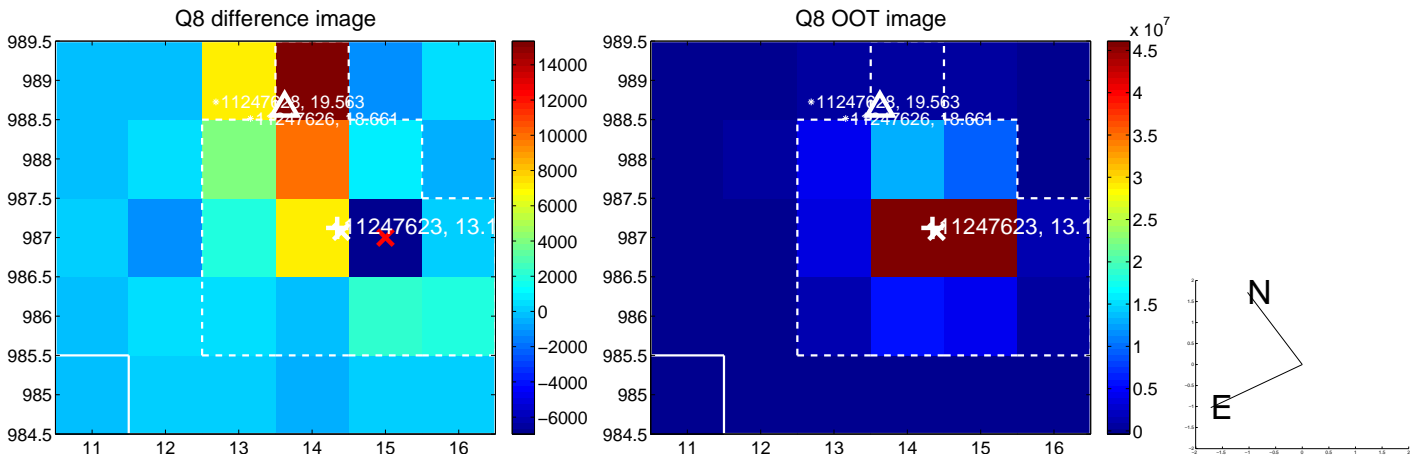
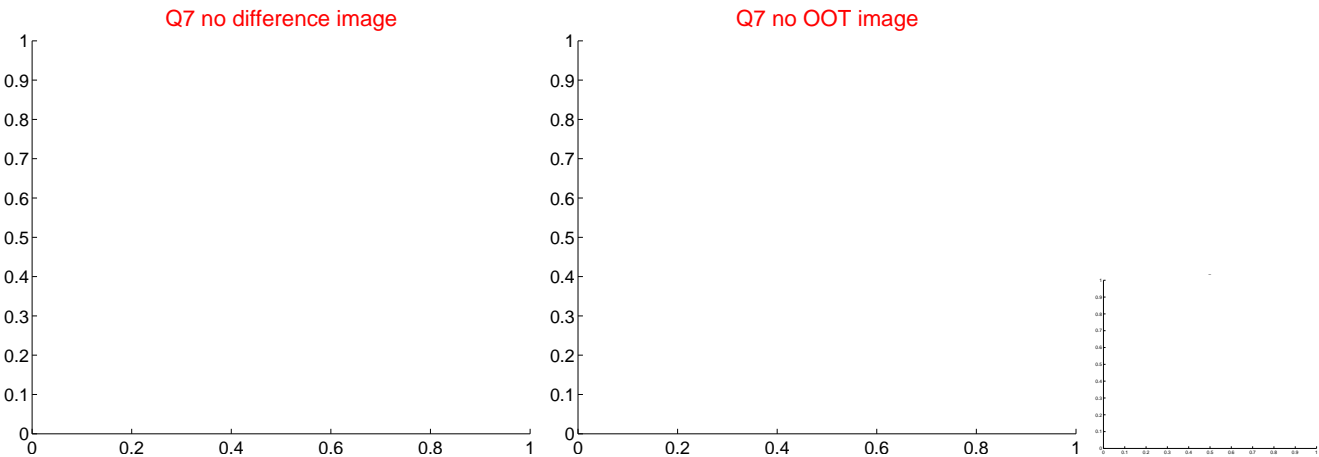
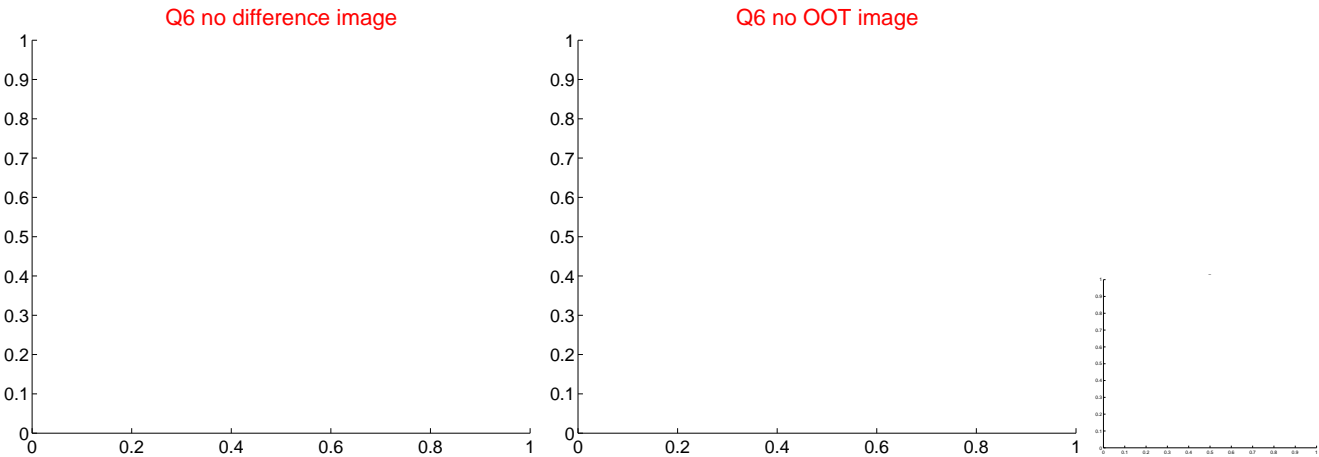
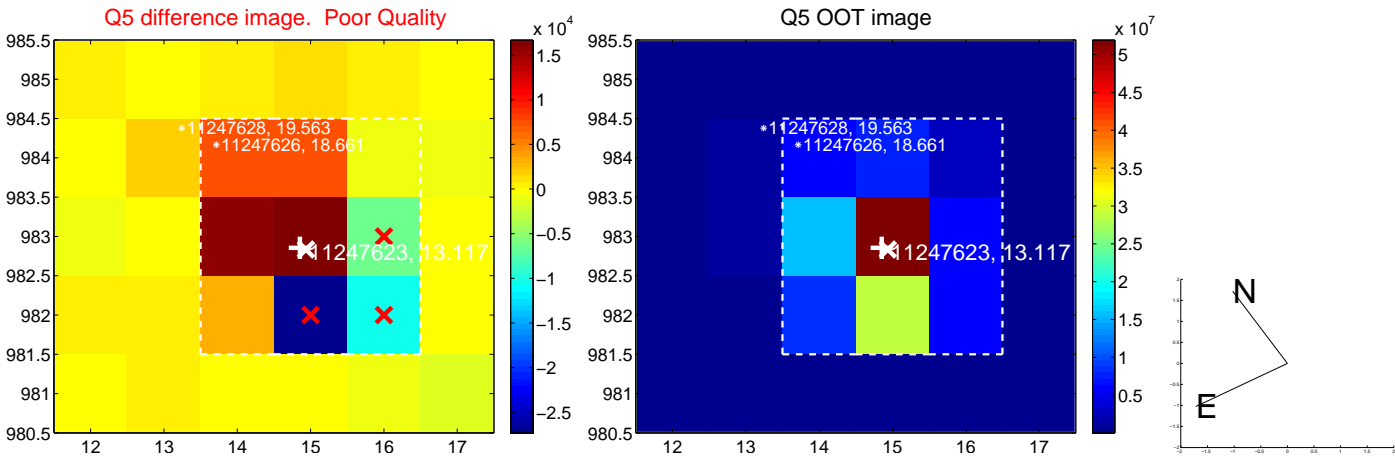


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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



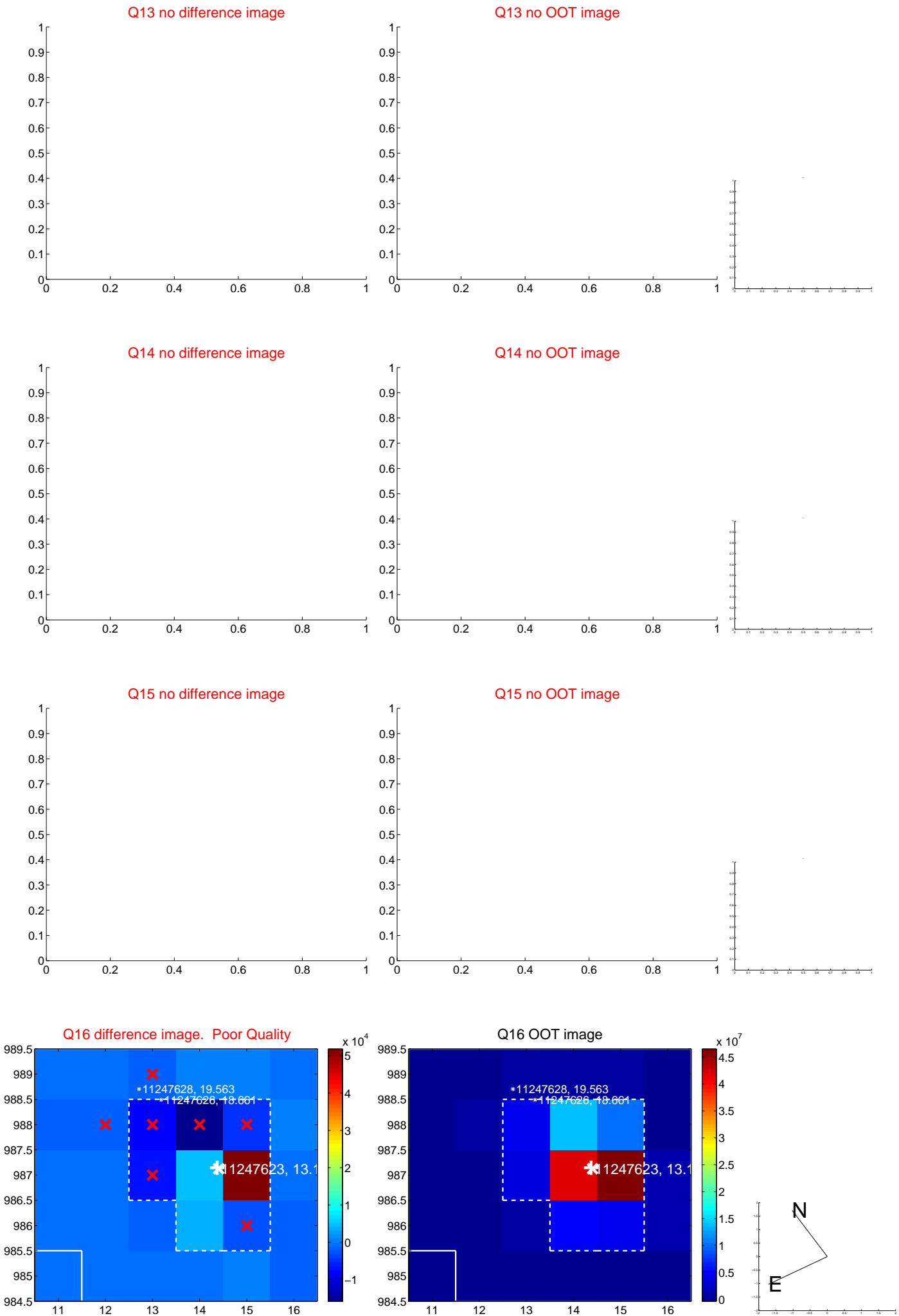
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



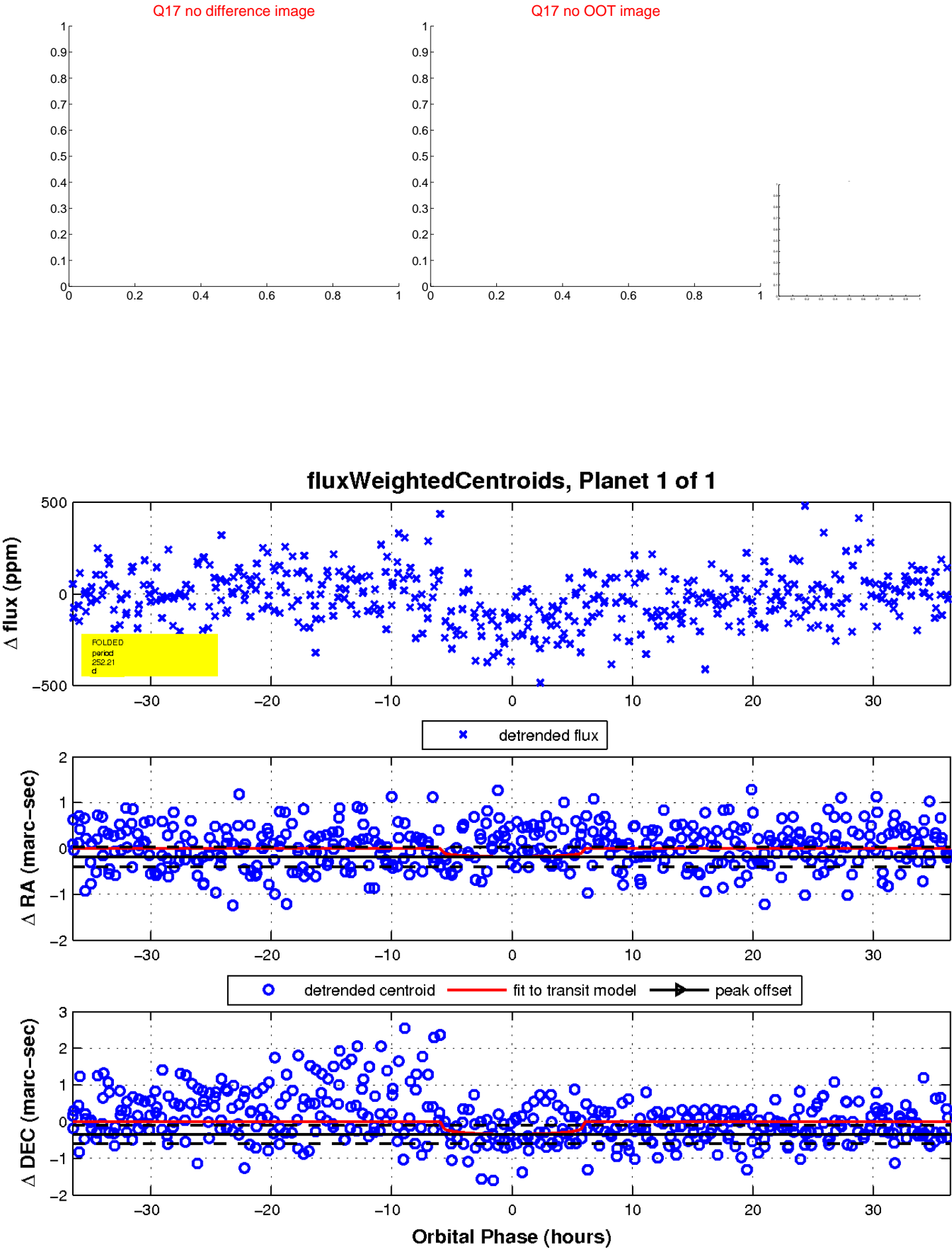
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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



UKIRT Image

