

KIC 003660286

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})
003660286-01	OBS	No	371.183125	497.209736	754.6	20.377	7.4	8.0	1.00	6228	2.79	1.33

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
003660286-01	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_MARSHALL—LPP_DV—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.

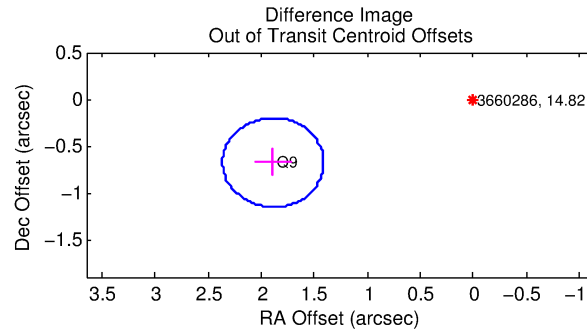
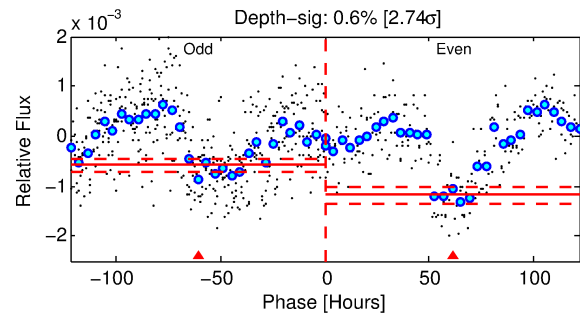
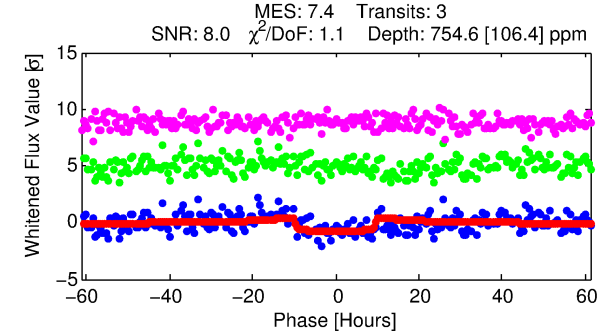
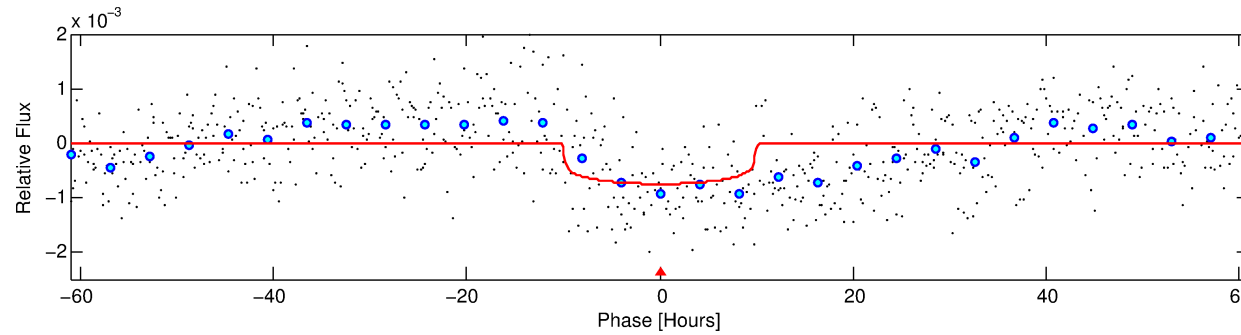
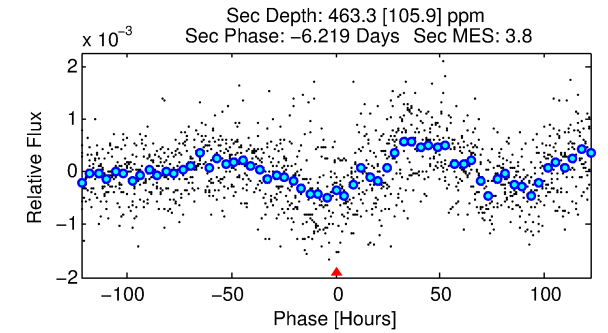
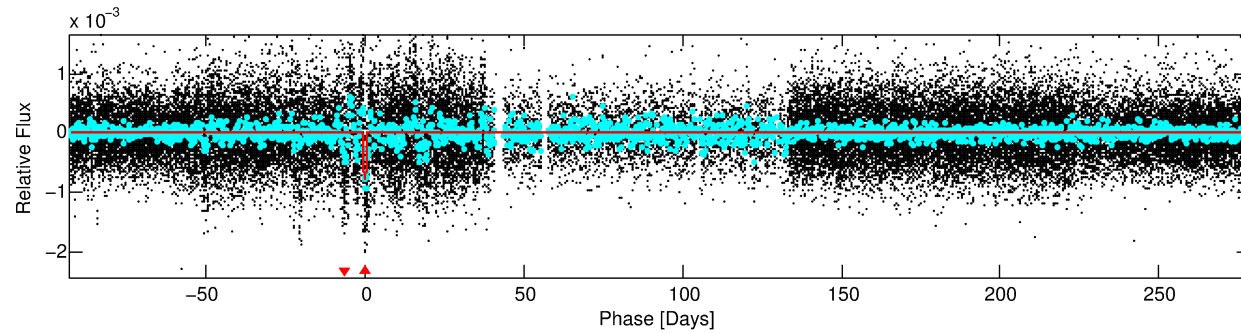
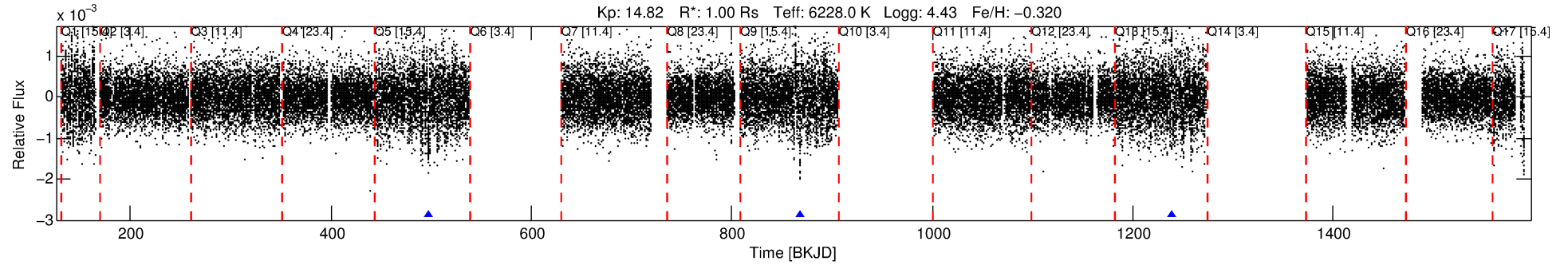
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 003660286-01

No Significant Match Found

DV One-Page Summary

KIC: 3660286 Candidate: 1 of 1 Period: 371.183 d



DV Fit Results:

Period = 371.18312 [0.01644] d
Epoch = 497.2097 [0.0198] BKJD
Rp/R* = 0.0255 [0.0123]
a/R* = 136.68 [334.36]
b = 0.29 [7.60]
Seff = 1.33 [0.54]
Teq = 274 [28] K
Rp = 2.79 [1.61] Re
a = 1.0106 [0.2663] AU
Ag = 33475.25 [35537.12] [0.94σ]
Teff = 5727 [1435] K [3.80σ]

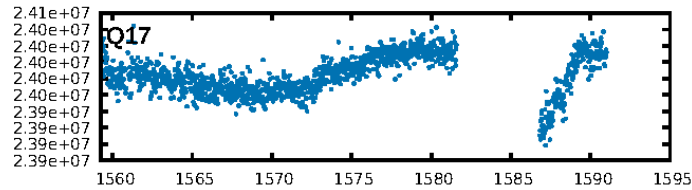
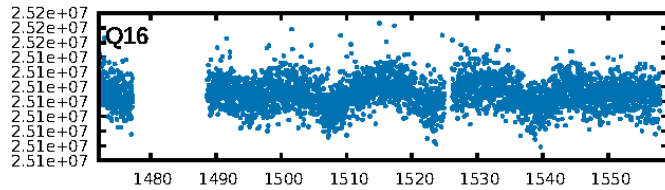
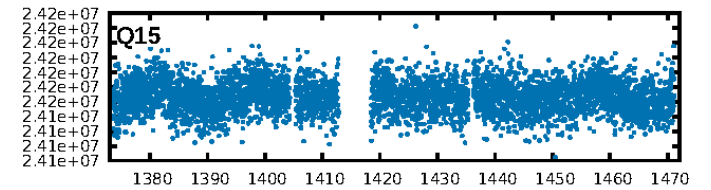
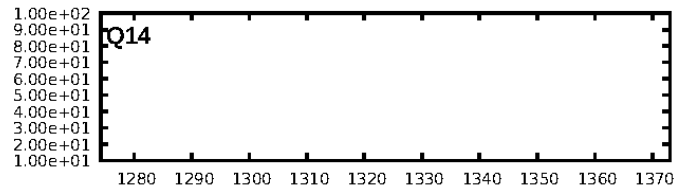
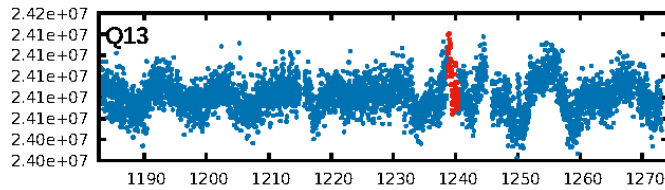
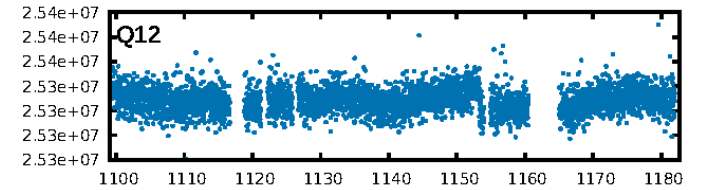
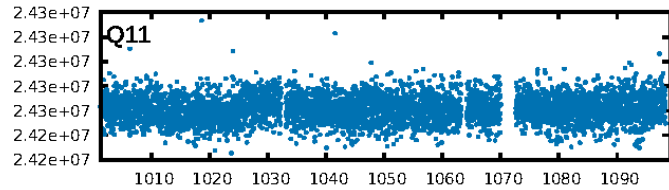
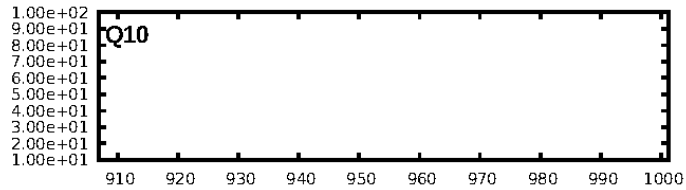
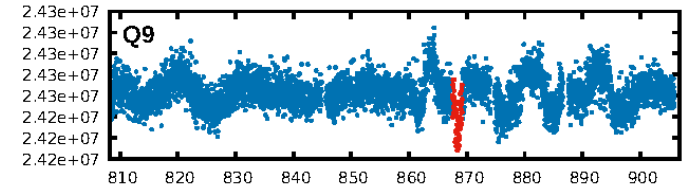
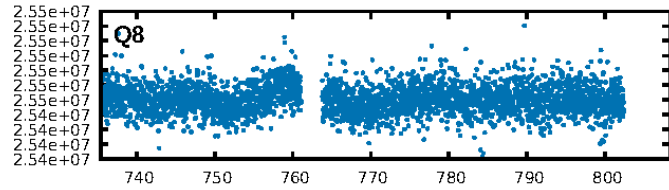
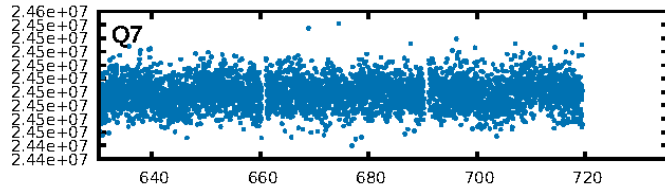
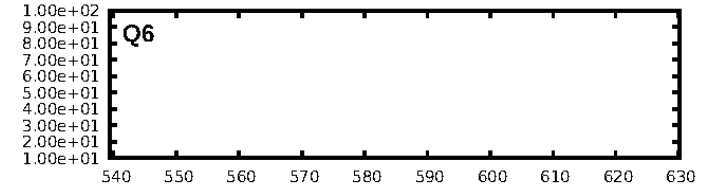
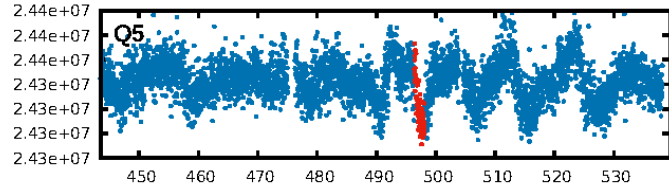
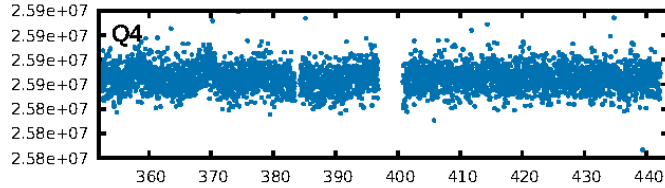
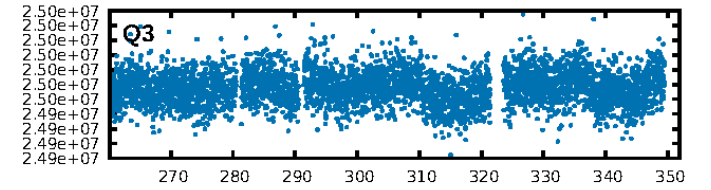
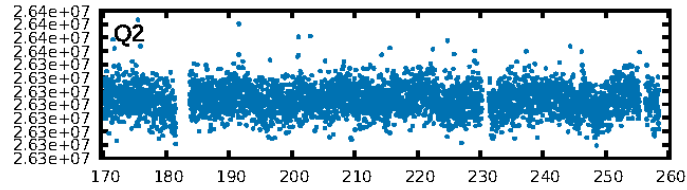
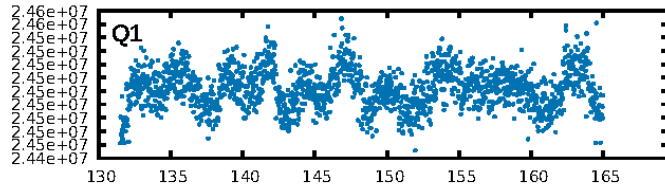
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: 0.7%
ModelChiSquareGof-sig: 99.4%
Bootstrap-pfa: 1.11e-12
RollingBand-fgt: 1.00 [3/3]
GhostDiagnostic-chr: 13.12
Centroid-sig: 0.1%
Centroid-so: 3.860 arcsec [1.91σ]
OotOffset-rm: 2.005 arcsec [12.61σ]
KicOffset-rm: 2.129 arcsec [13.40σ]
OotOffset-st: 0/0/0/1 [1]
KicOffset-st: 0/0/0/1 [1]
DiffImageQuality-fgm: 1.00 [1/1]
DiffImageOverlap-fno: 1.00 [3/3]

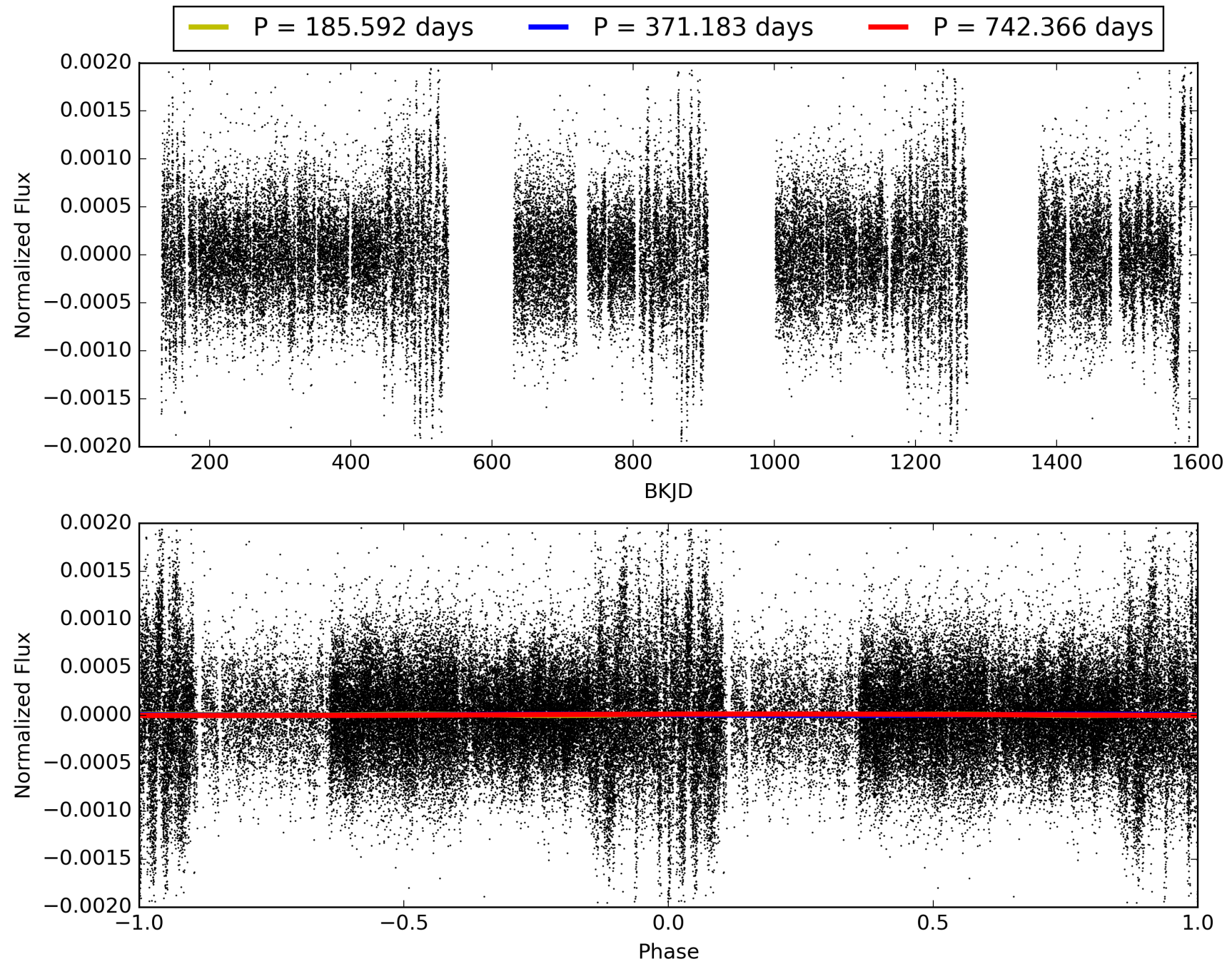
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 30-Jan-2016 11:58:36 Z

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

TCE 003660286-01, PDC Light Curves

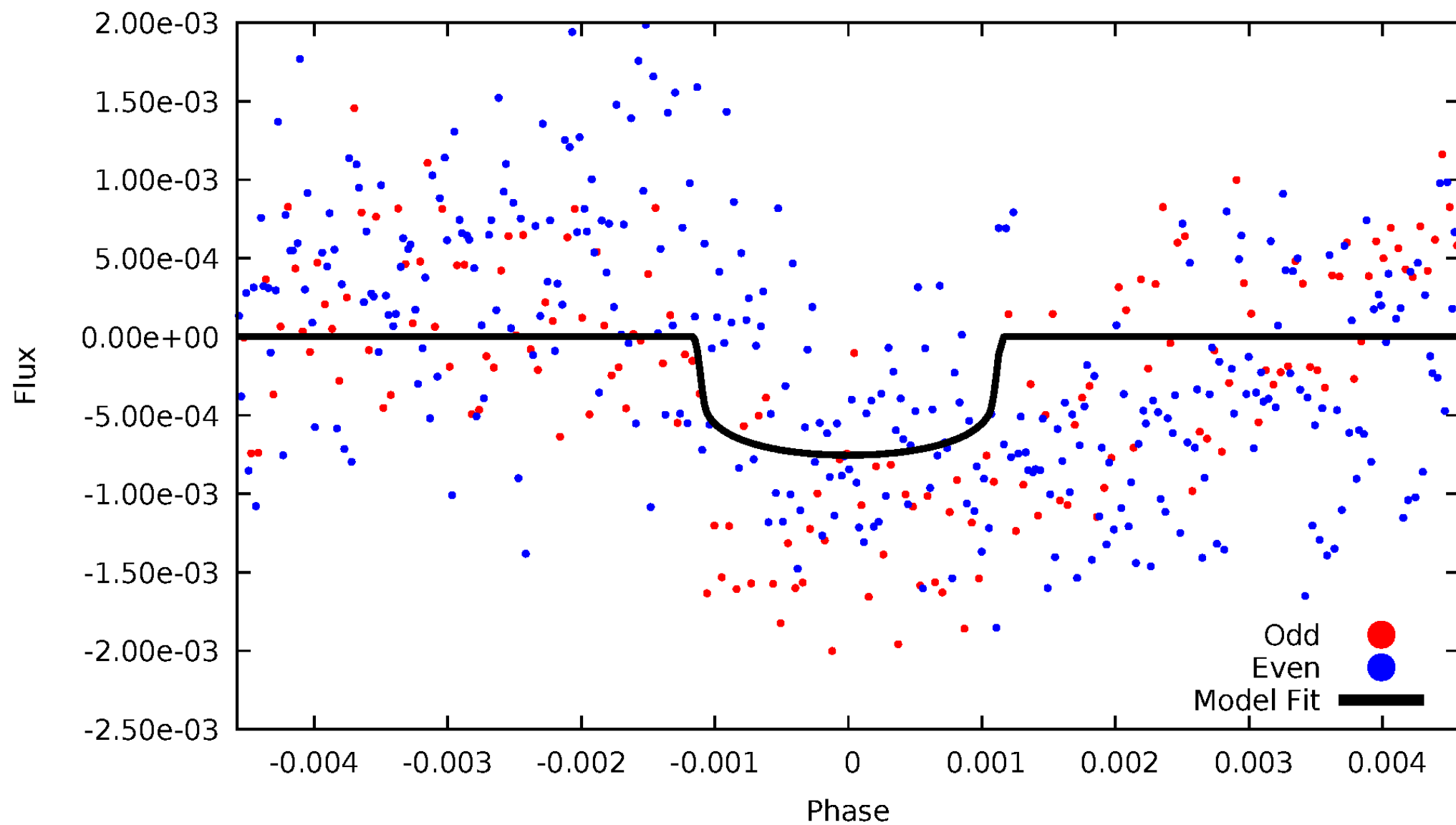


TCE 003660286-01



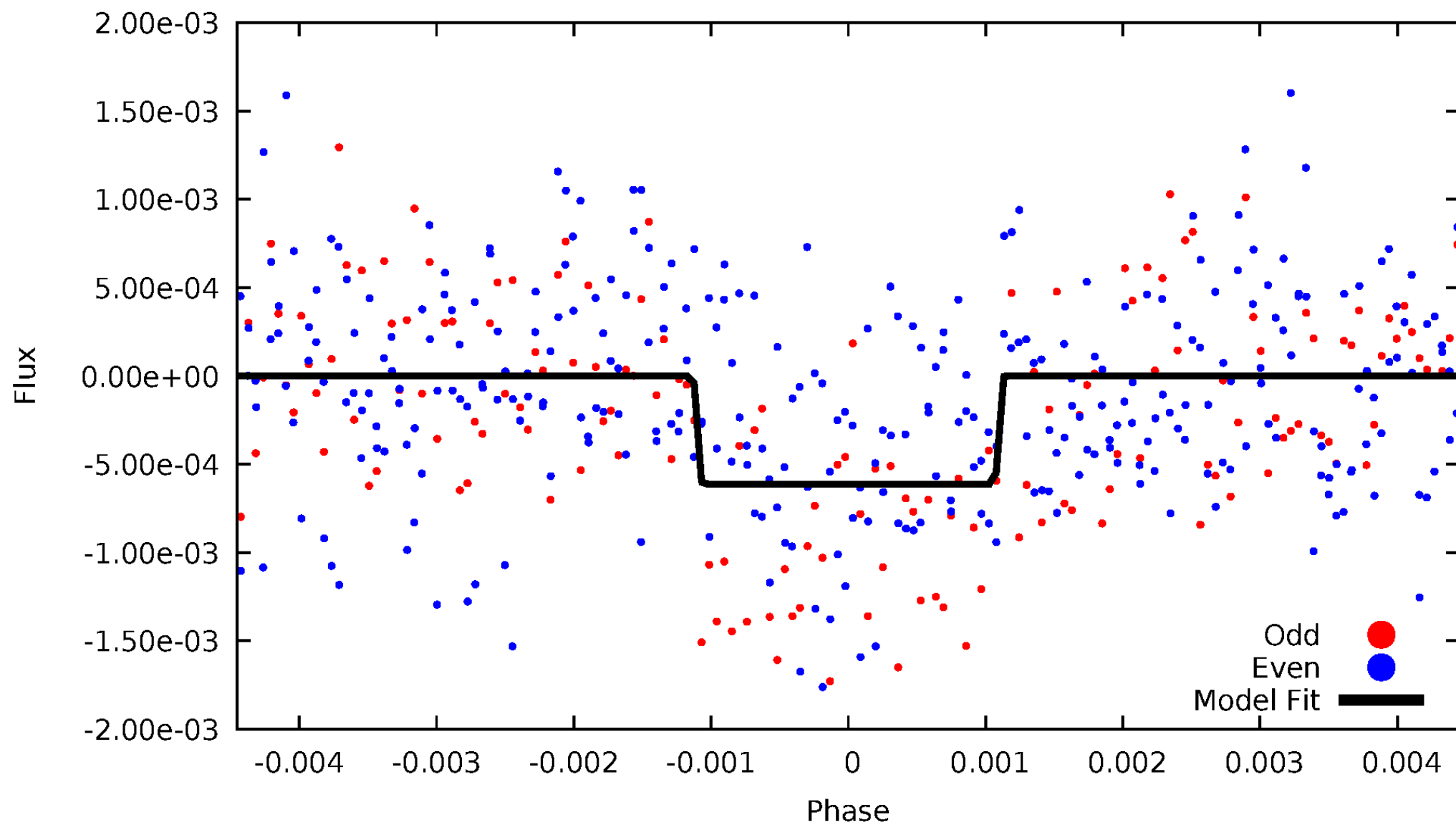
DV Odd/Even

TCE 003660286-01



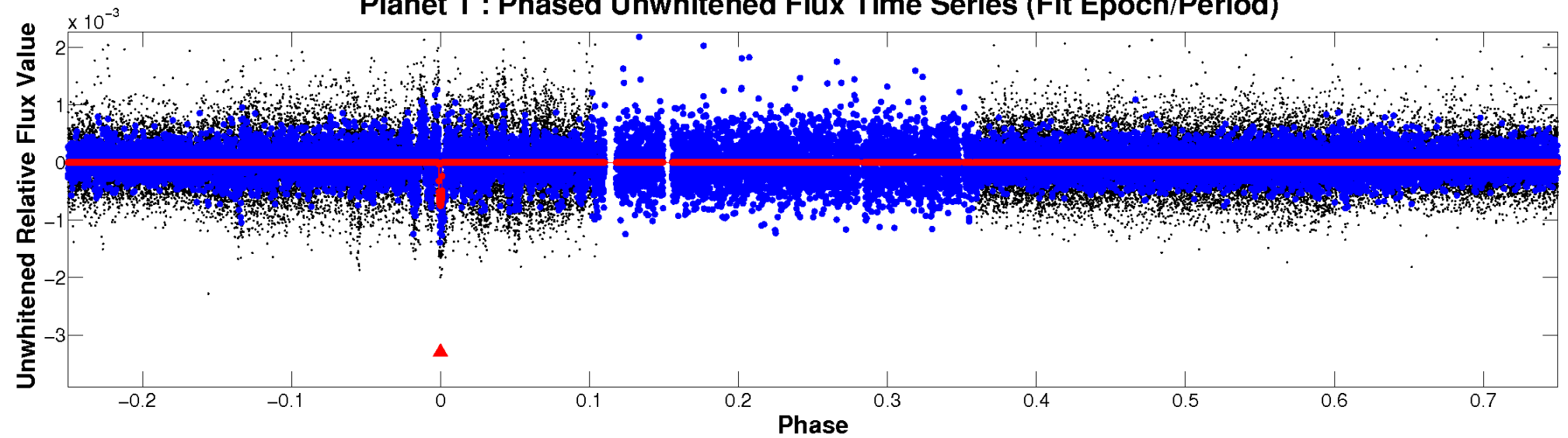
ALT Odd/Even

TCE 003660286-01

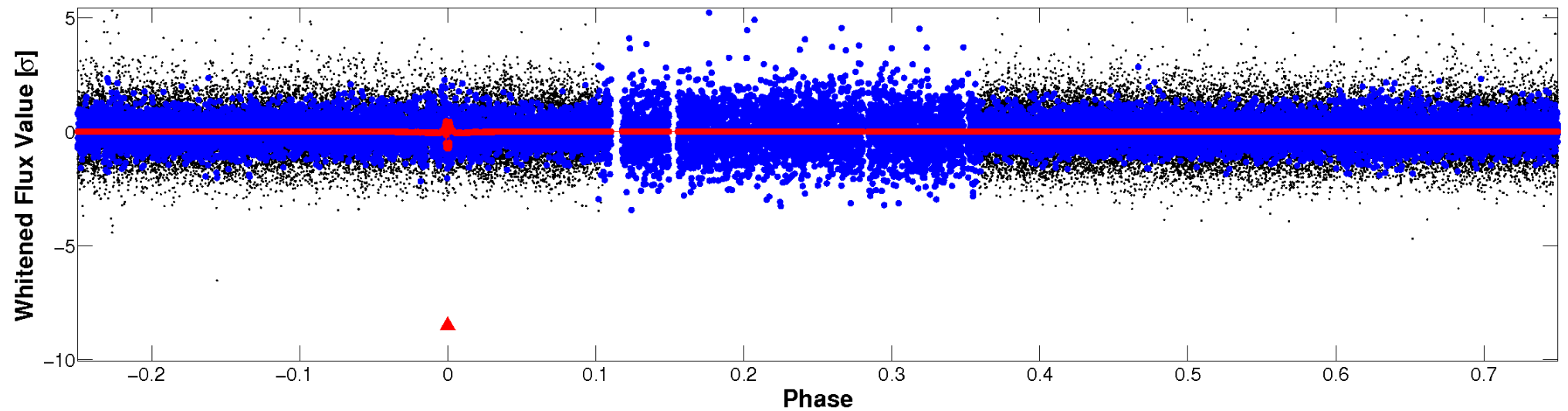


Non-Whitened Vs. Whitened Light Curve

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

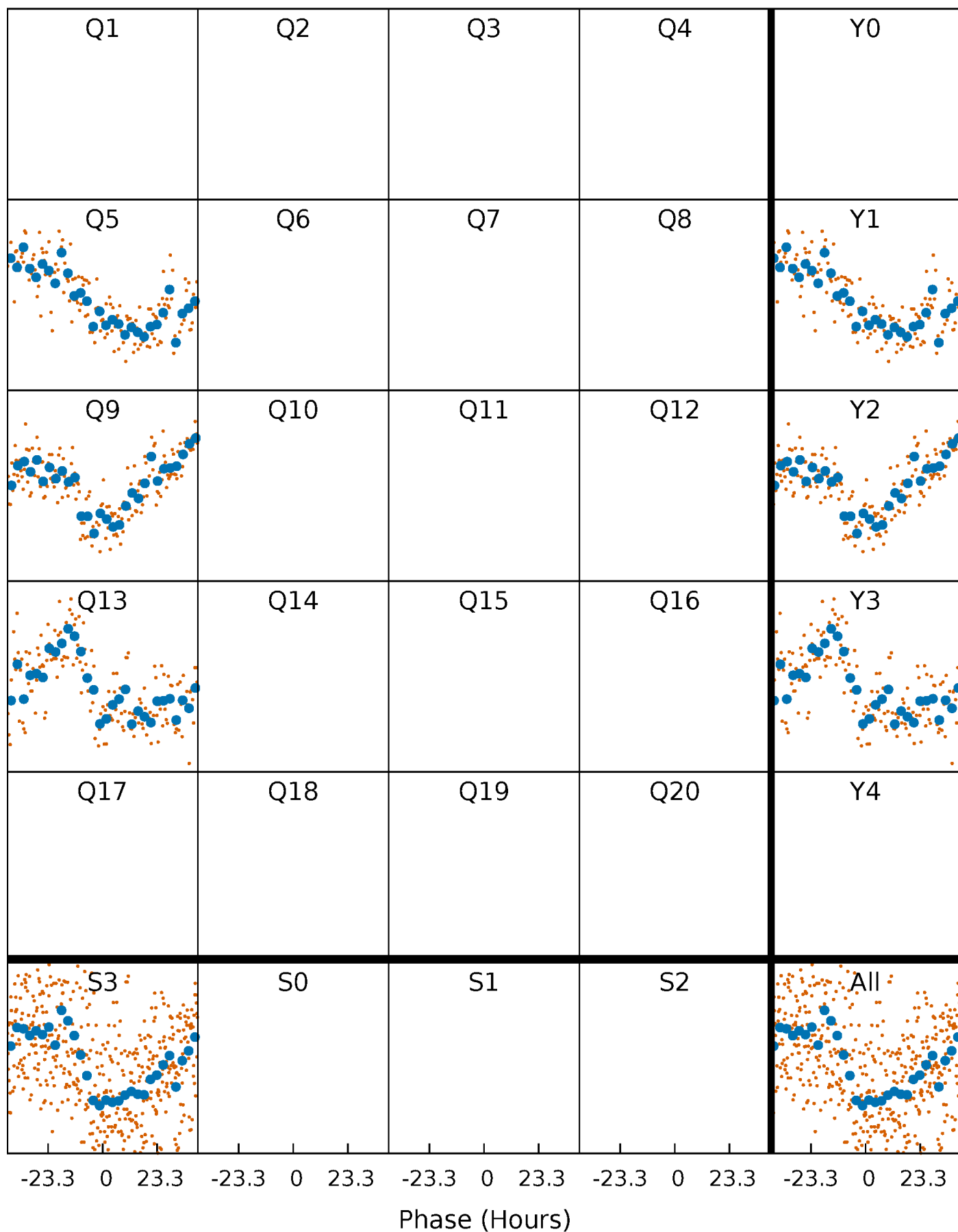


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



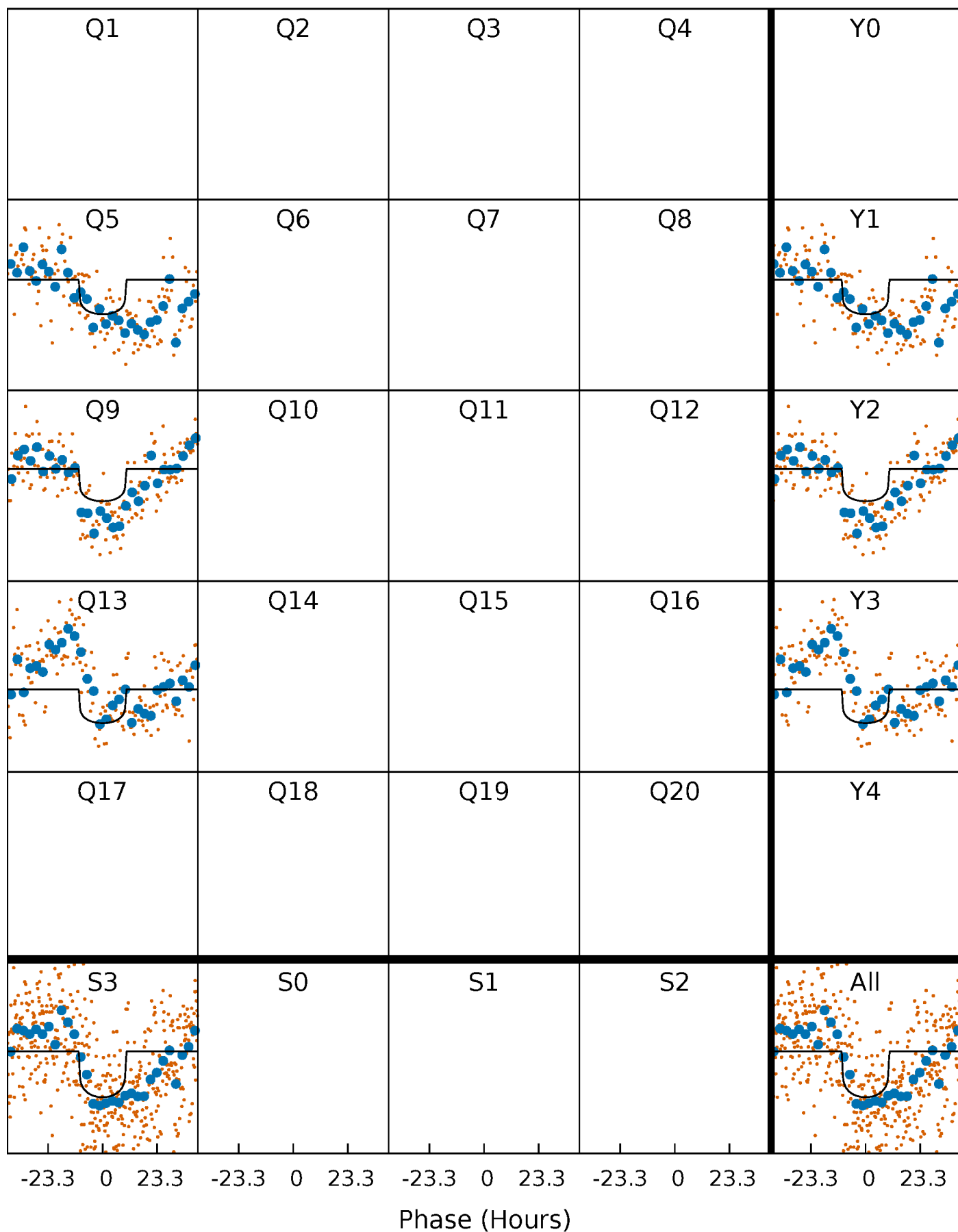
PDC Quarter-Phased Transit Curves

TCE 003660286-01 P=371.183125 Days $T_0=497.209736$ (BKJD)



DV Quarter-Phased Transit Curves

TCE 003660286-01 P=371.183125 Days $T_0=497.209736$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

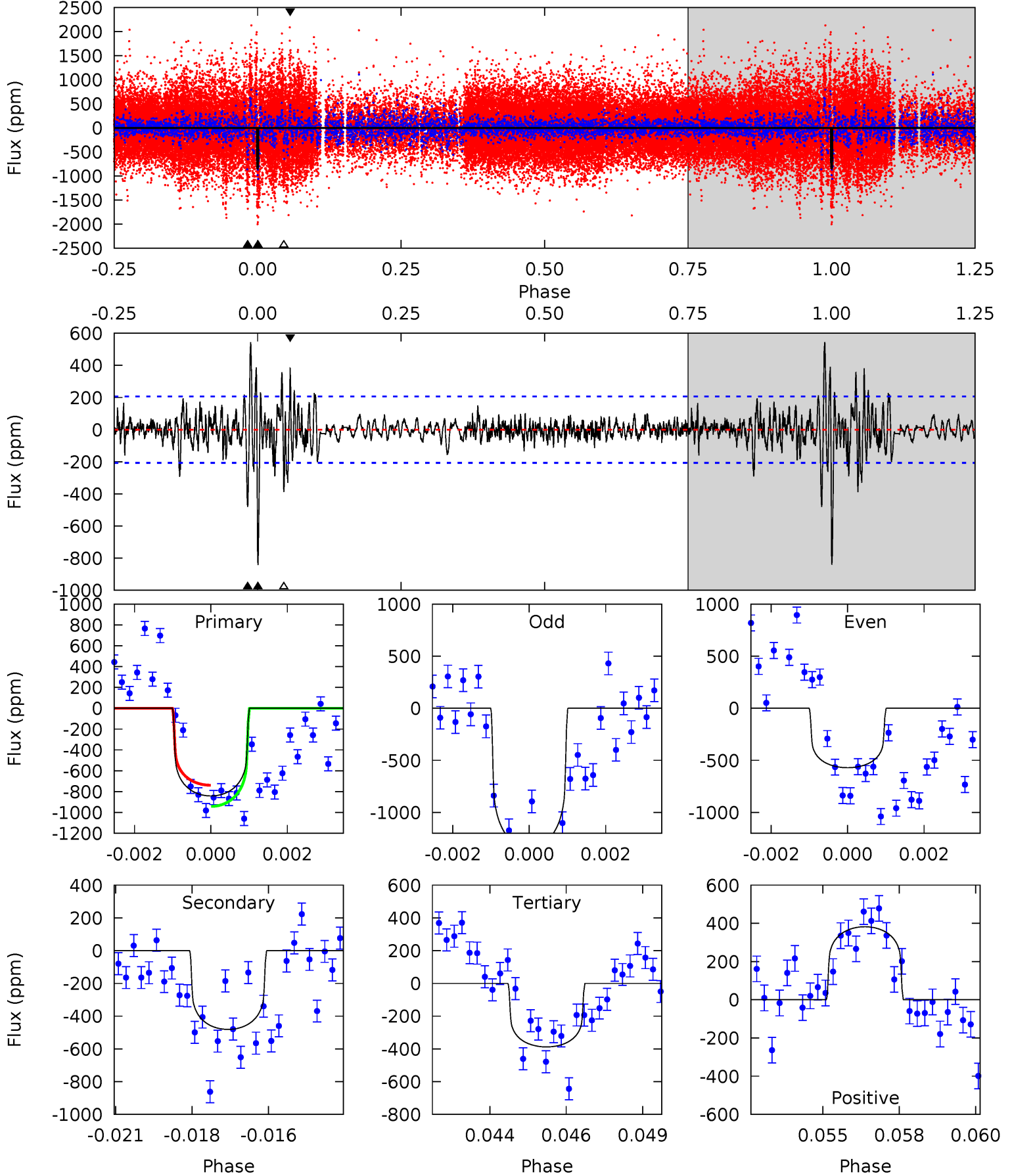
TCE 003660286-01 P=371.175617 Days $T_0=497.221330$ (BKJD)



DV Model-Shift Uniqueness Test

003660286-01, P = 371.183125 Days, E = 126.026611 Days

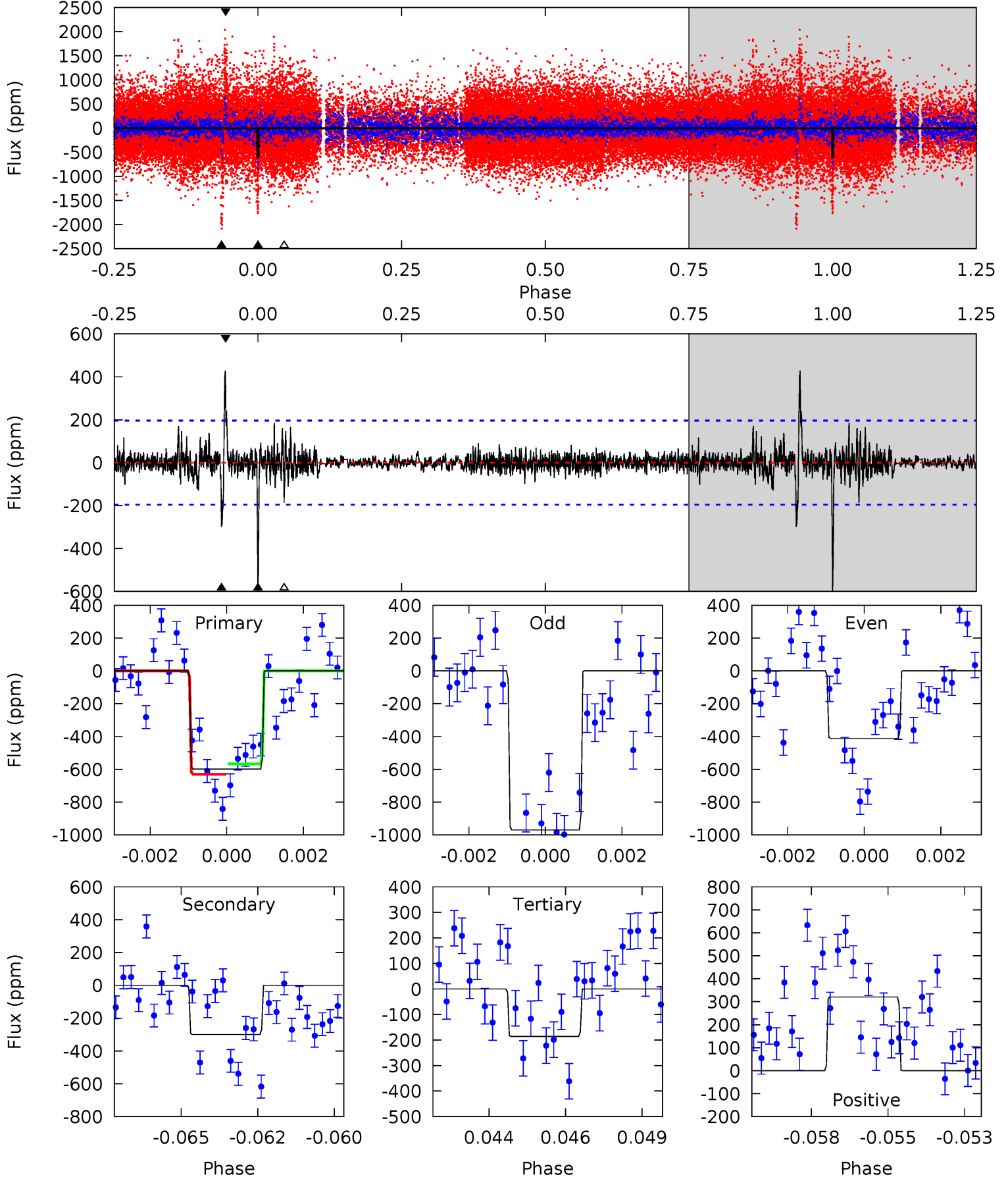
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
21.6	12.3	9.96	9.81	5.30	3.05	2.01	11.6	11.8	2.39	2.54	9.37	0.97	0.39	2.58



Alt Model-Shift Uniqueness Test

003660286-01, P = 371.175617 Days, E = 126.045713 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
16.2	8.09	5.04	8.66	5.30	3.05	1.08	11.1	7.51	3.05	-0.57	7.11	0.92	0.42	0.85



Stellar Parameters For KIC 003660286

	$T_{\text{eff}} (K)$	$\log(g)$	$[\text{Fe}/\text{H}]$	$R (R_{\odot})$	$M (M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	6228^{+197}_{-219}	$4.434^{+0.072}_{-0.203}$	$-0.320^{+0.300}_{-0.300}$	$1.004^{+0.320}_{-0.128}$	$0.995^{+0.147}_{-0.120}$	$1.384^{+0.504}_{-0.713}$
	+3%/-4%	+2%/-5%	+94%/-94%	+32%/-13%	+15%/-12%	+36%/-51%
Source	PHO1	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 003660286-01 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	A_{obs}
DV	-481 ± 39	$2.93^{+1.46}_{-1.22}$	390^{+29}_{-21}	5764^{+1985}_{-921}	30703^{+63288}_{-16852}
Alt.	-299 ± 37	$2.85^{+1.43}_{-1.41}$	389^{+28}_{-21}	5244^{+2173}_{-817}	20353^{+65957}_{-11504}

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

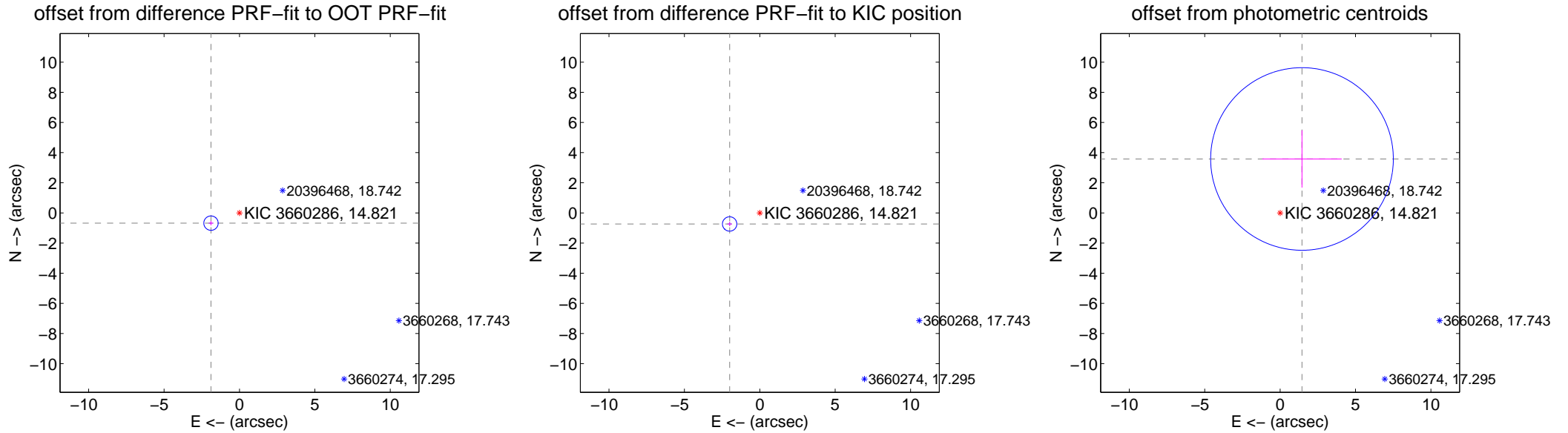
DV Centroid Data

Supplemental centroid analysis for 003660286-01. Kepler magnitude: 14.82. Transit SNR 7.98

There are 1 quarters with good PRF difference image offsets

The direct PRF centroid is offset from the target star catalog position by about 0.12 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	2.005 ± 0.159	12.61	1.887 ± 0.161	-0.678 ± 0.141
PRF-fit source offset from KIC position	2.129 ± 0.159	13.40	1.999 ± 0.161	-0.733 ± 0.141
photometric centroid source offset	3.86 ± 2.02	1.91	-1.45 ± 2.63	3.58 ± 1.90

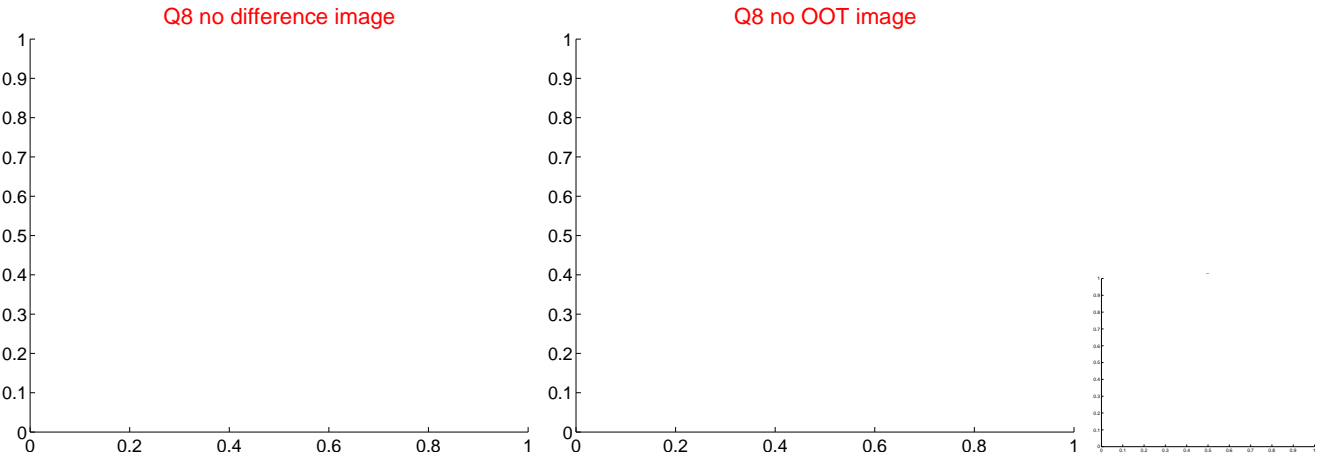
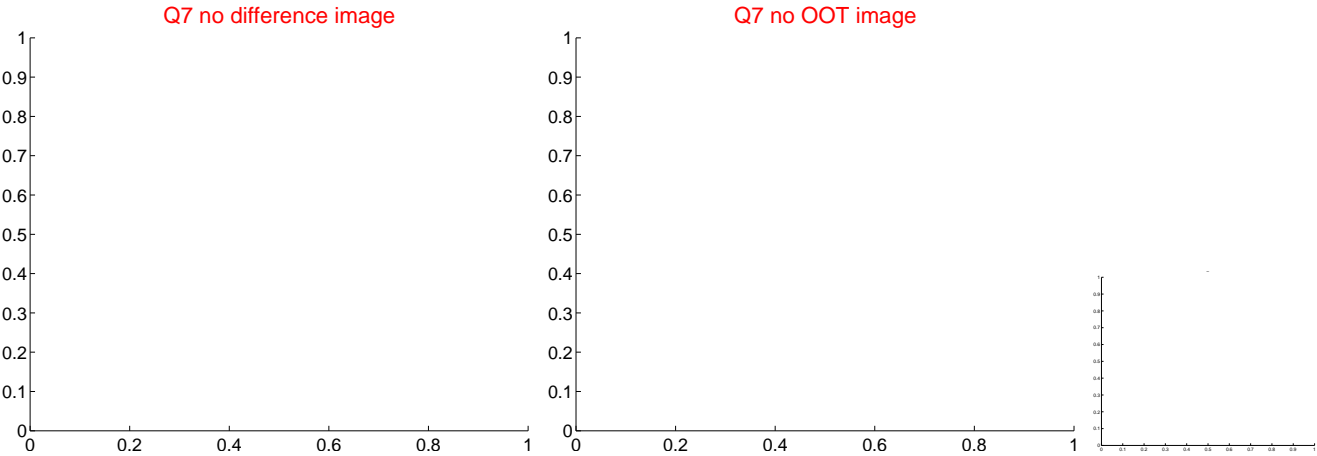
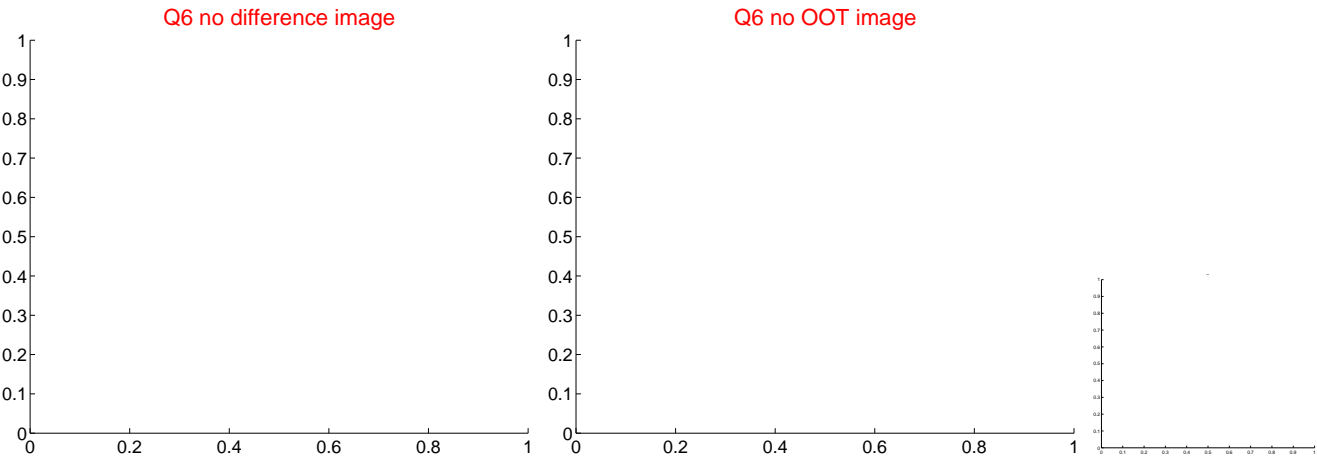
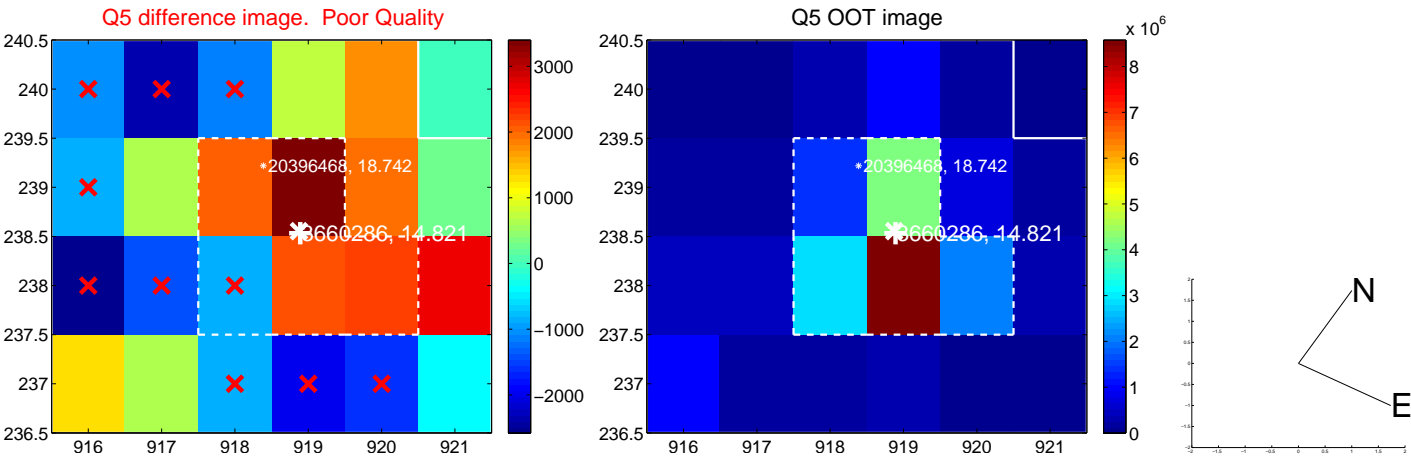


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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

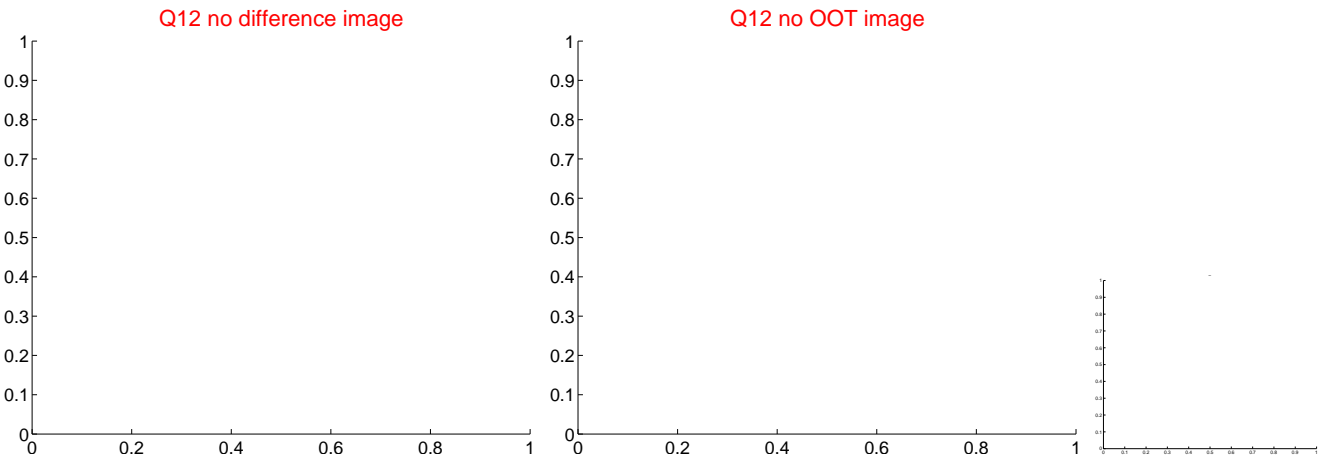
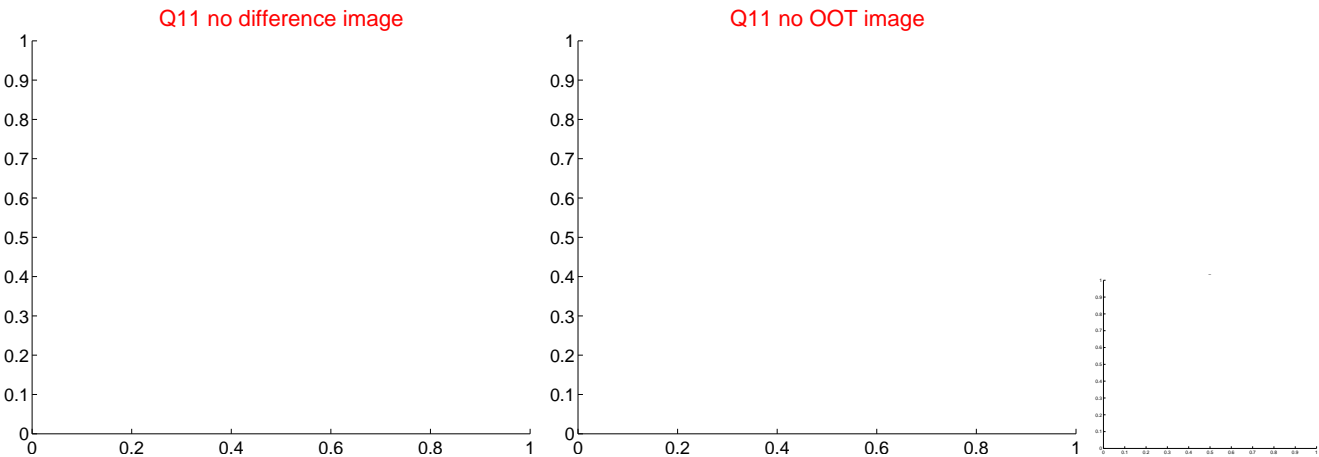
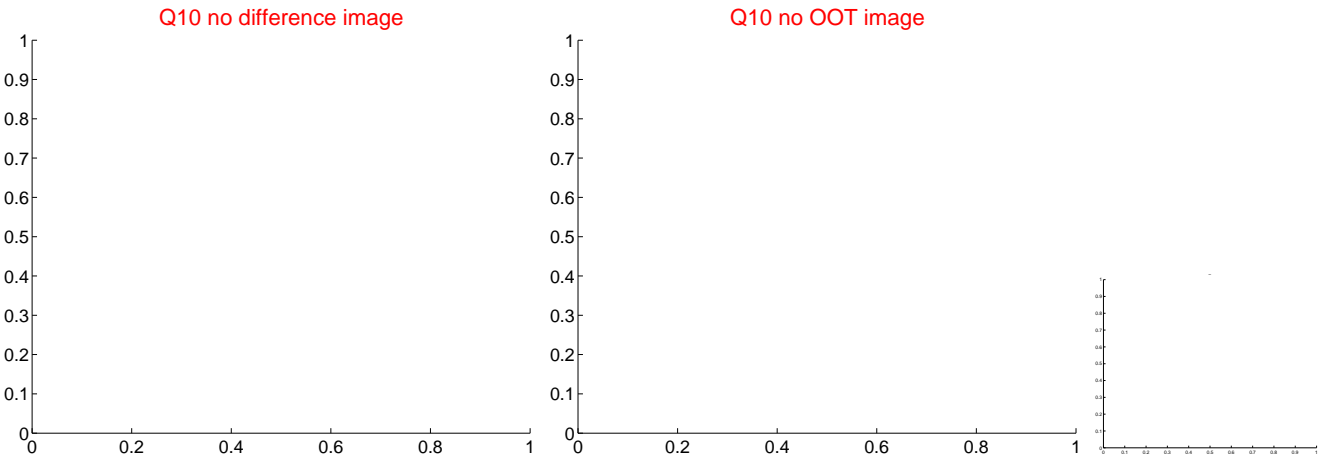
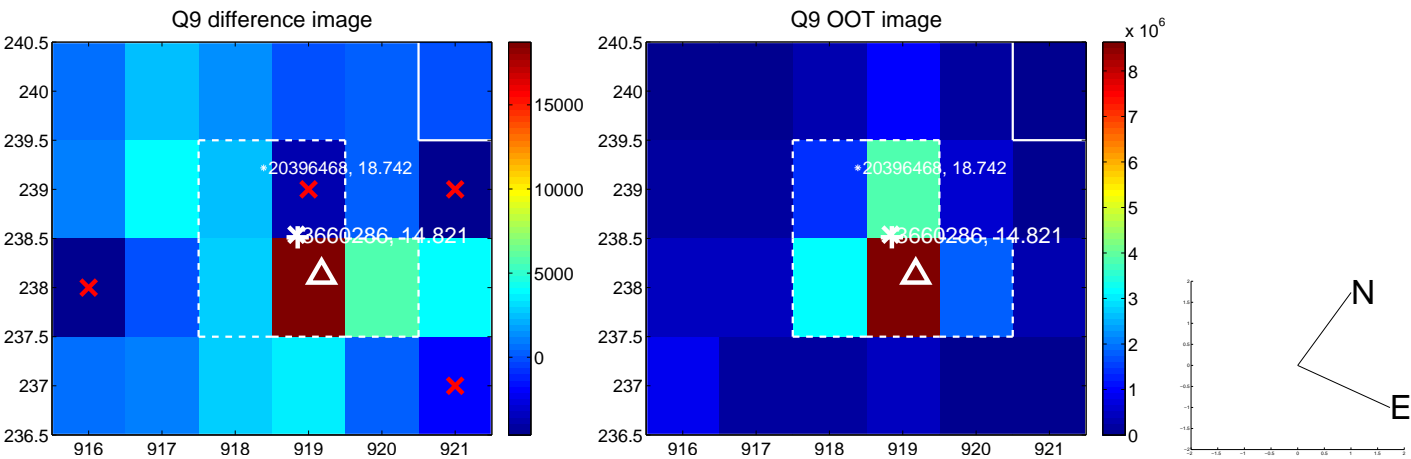
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



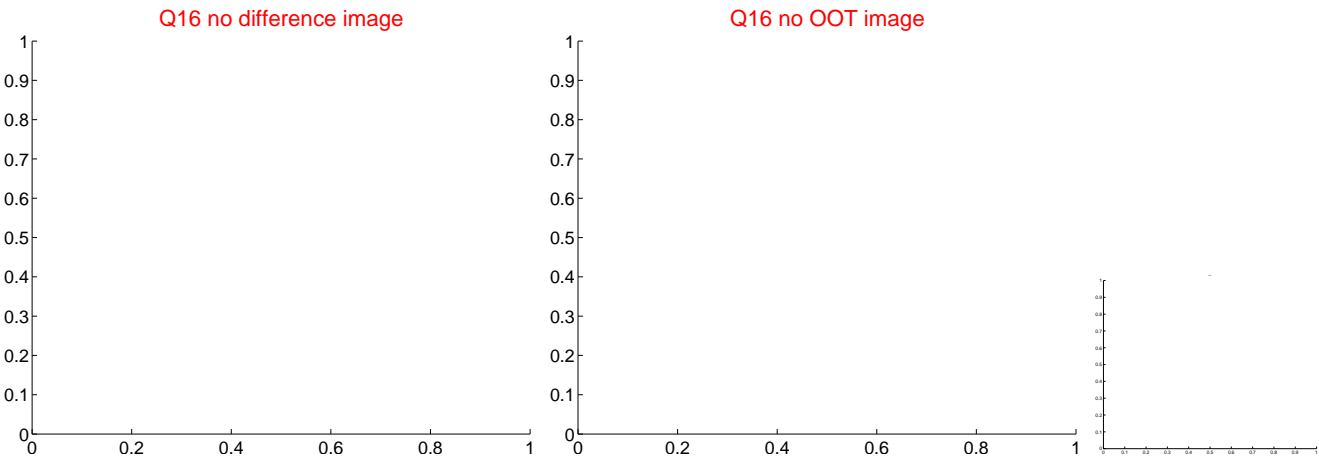
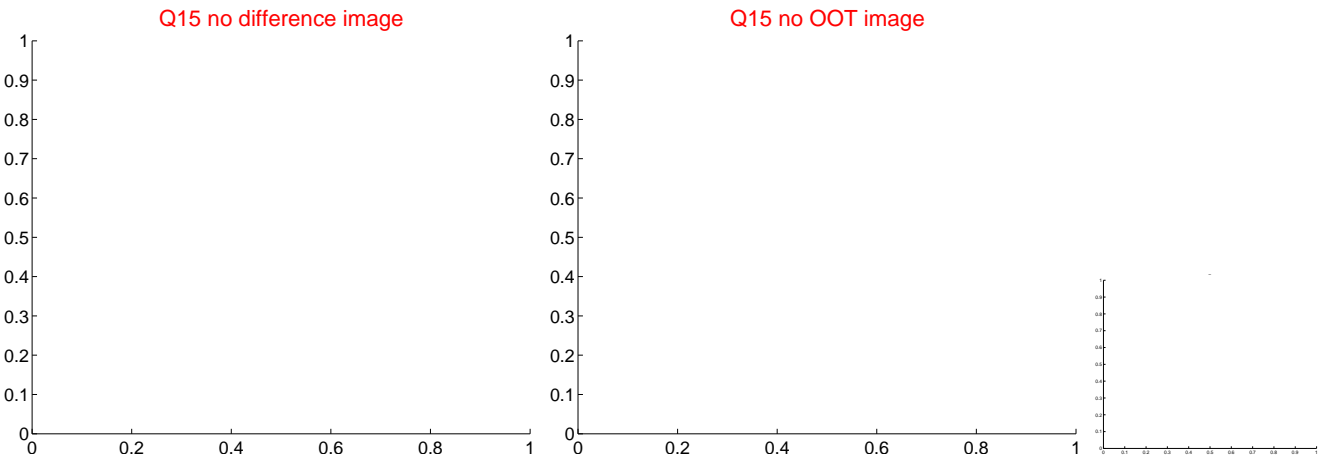
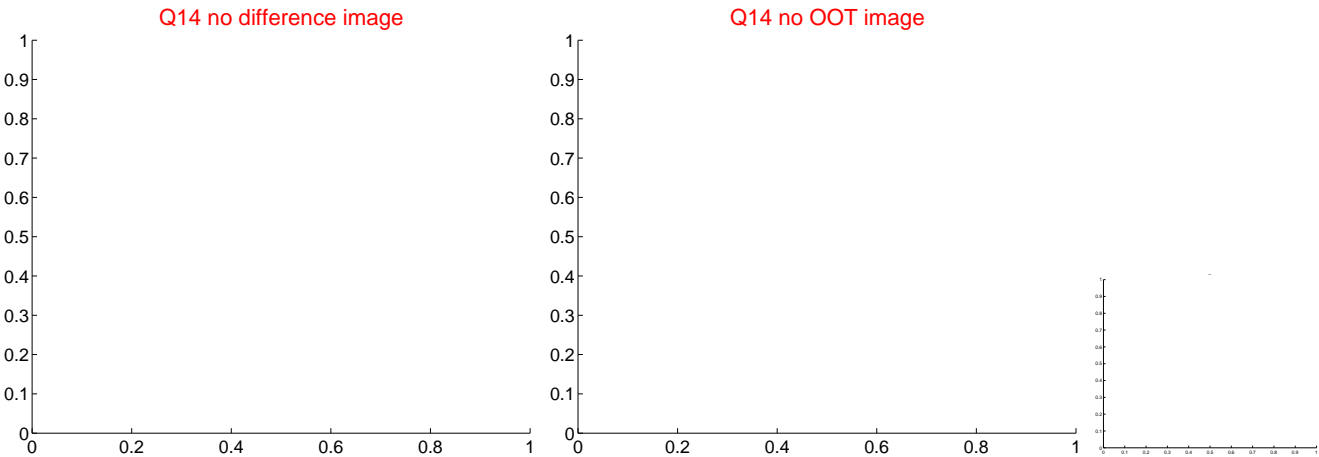
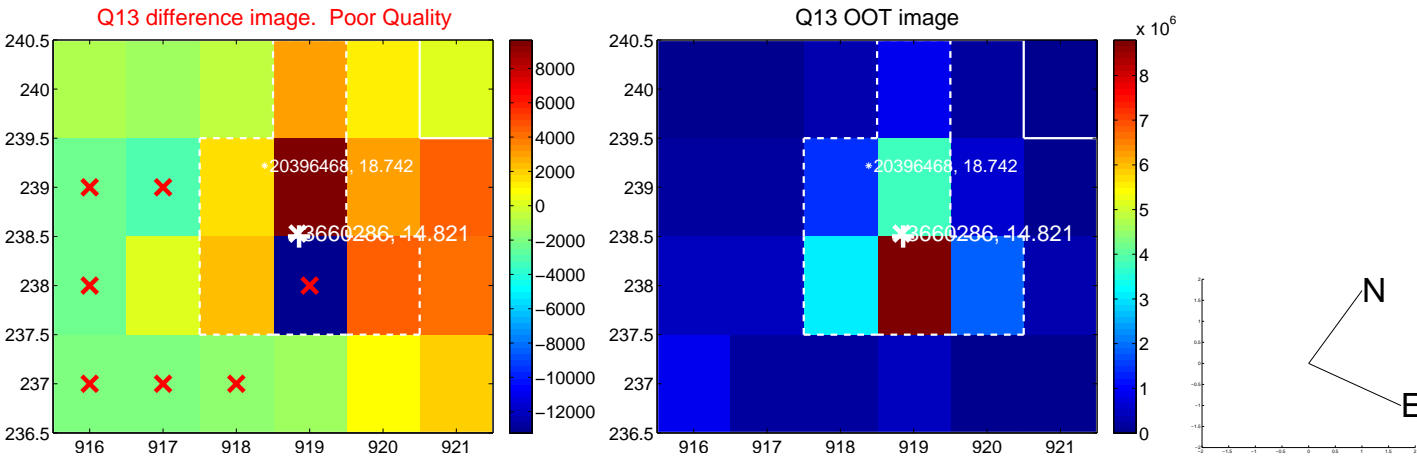
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



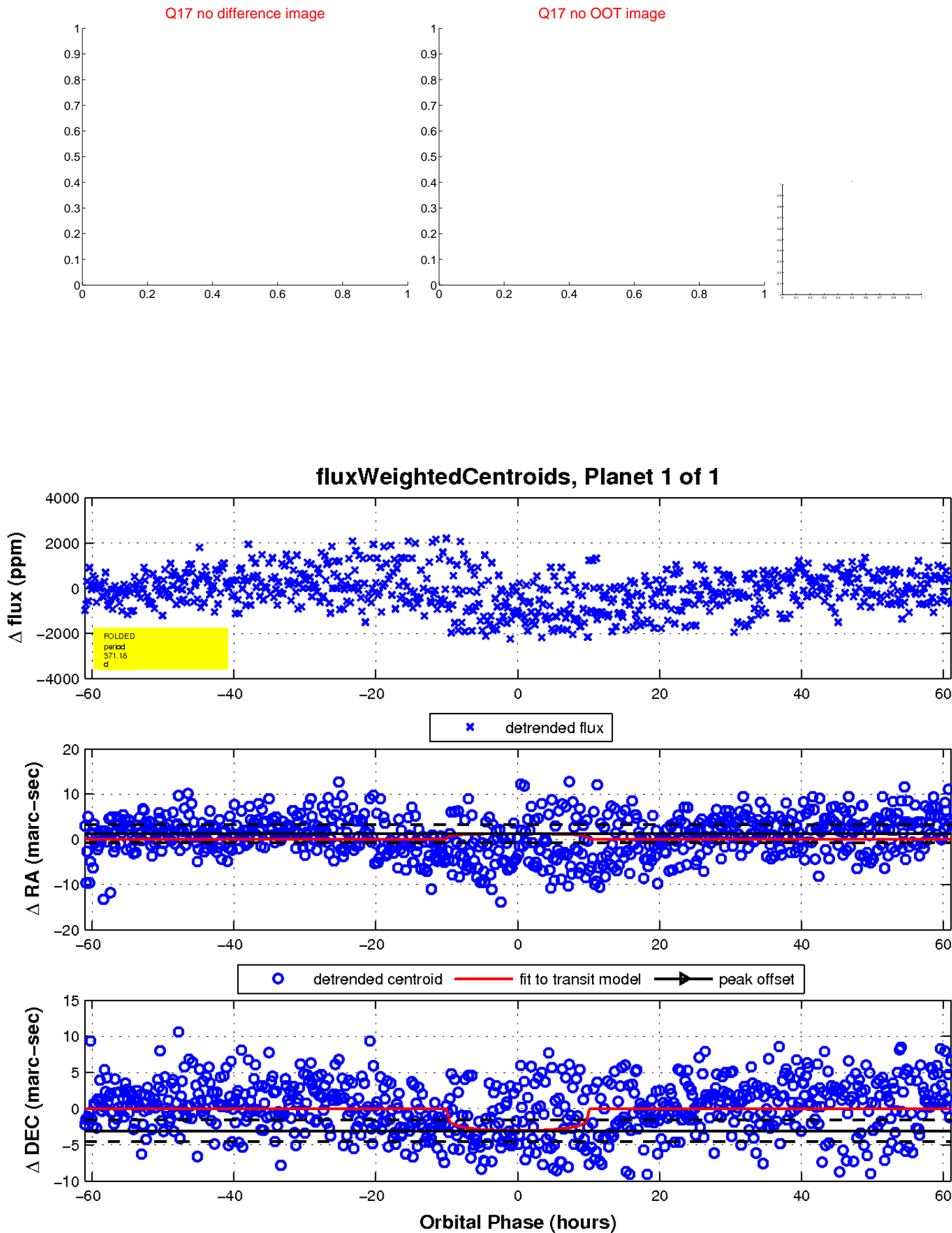
white ×: KIC target position; +: OOT centroid; △: difference centroid. red ×: large negative pixel value.



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.



UKIRT Image

Declination

