

KIC 009767392

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})
009767392-01	OBS	6211.01	1.457293	131.579106	88928.8	3.500	5464.5	-1.0	1.42	6630	42.72	4708.99

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
009767392-01	OBS	FP	0.00	0	1	0	0	DEPTH_ODDEVEN_ALT—MOD_ODDEVEN_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 009767392-01

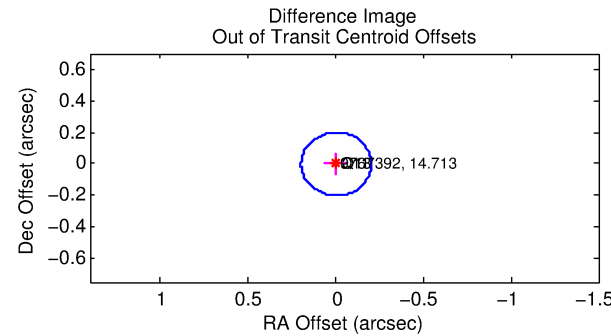
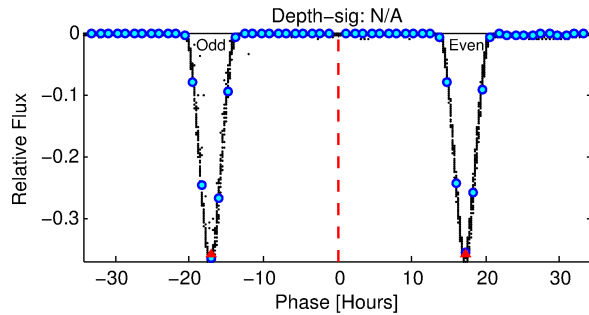
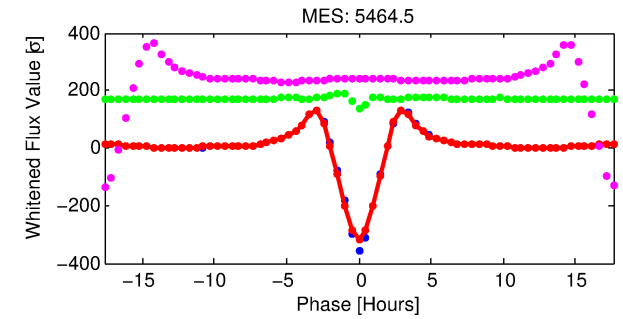
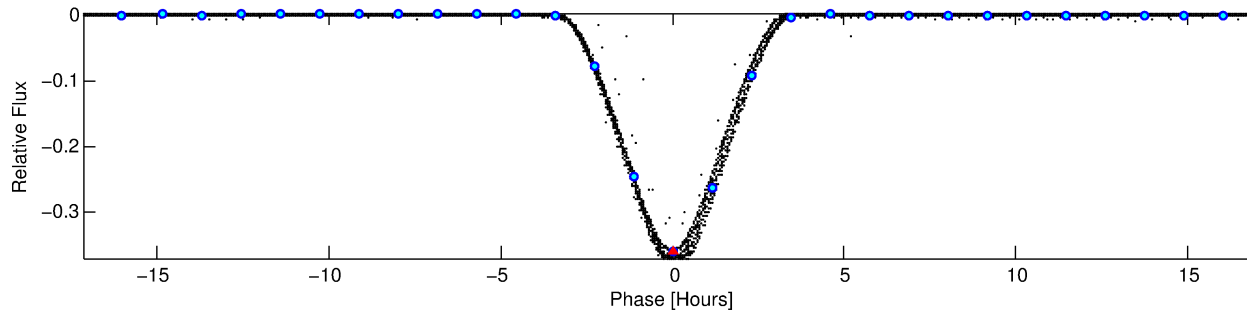
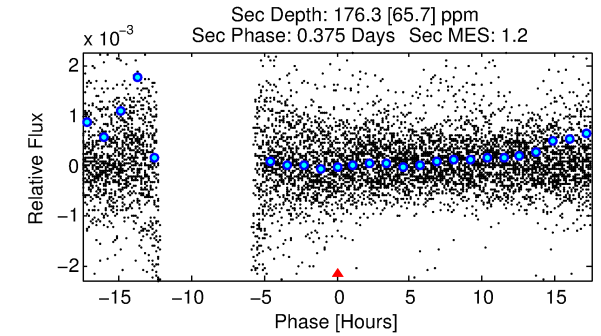
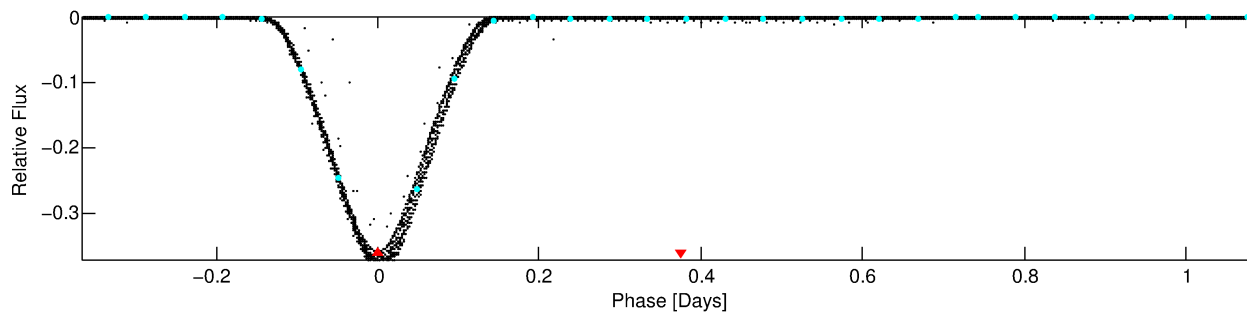
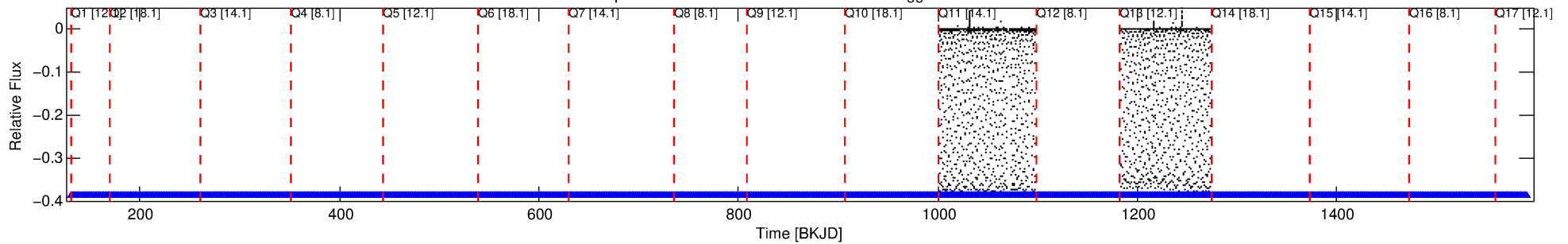
No Significant Match Found

DV One-Page Summary

KIC: 9767392 Candidate: 1 of 1 Period: 1.457 d

KOI: K06211 Corr: No Ephemeris Match

Kp: 14.71 R*: 1.42 Rs Teff: 6630.0 K Logg: 4.24 Fe/H: -0.120



TPS TCE Results:

Period = 1.45729 d
Epoch = 131.5791 BKJD

DV fit results are unavailable

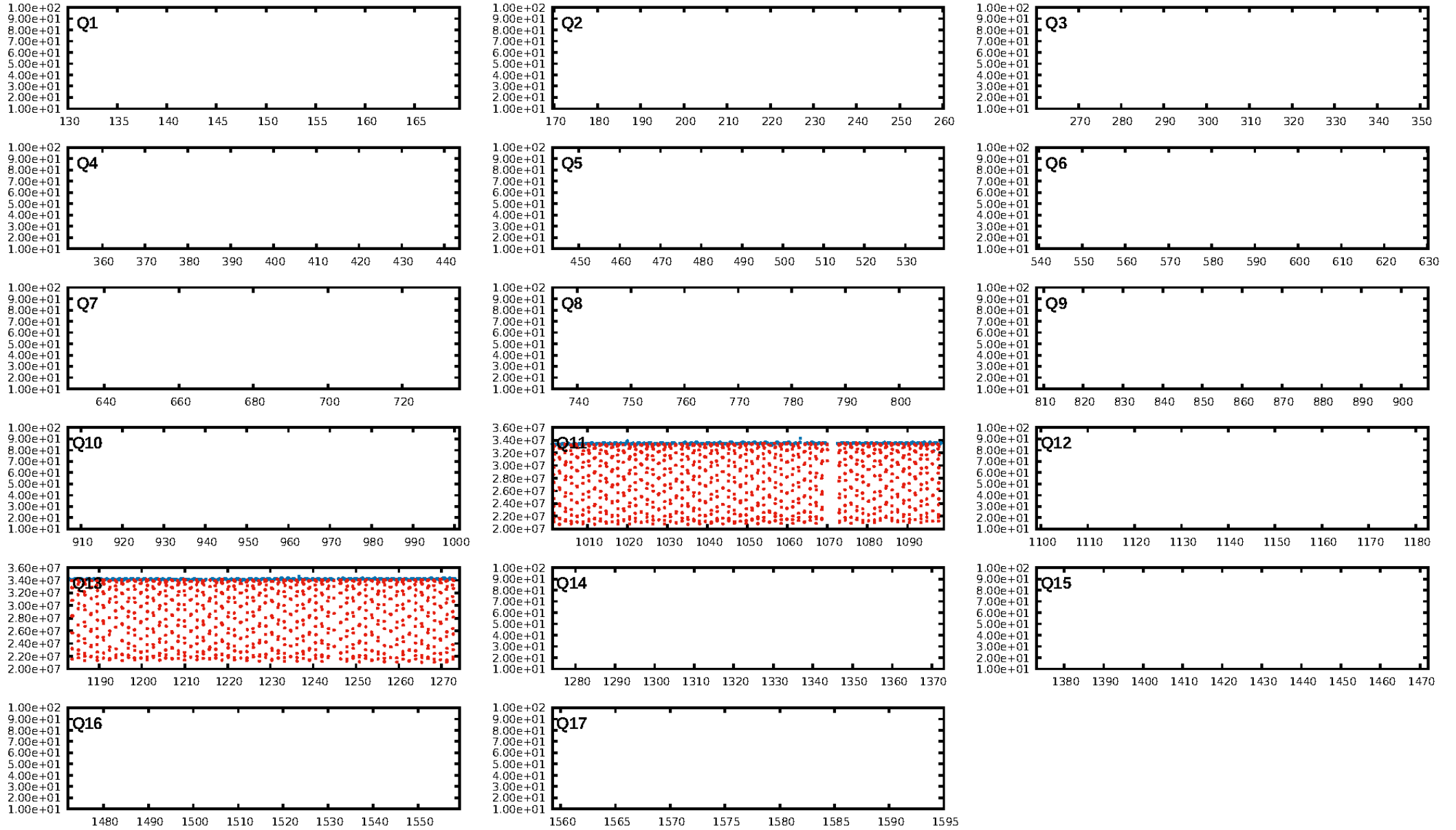
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: N/A
RollingBand-fgt: 1.00 [128/128]
GhostDiagnostic-chr: 1.161
Centroid-sig: N/A
Centroid-so: 0.257 arcsec [275.03σ]
OotOffset-rm: 0.004 arcsec [0.07σ]
KicOffset-rm: 0.149 arcsec [1.59σ]
OotOffset-st: 0/1/0/1 [2]
KicOffset-st: 0/1/0/1 [2]
DiffImageQuality-fgm: 1.00 [2/2]
DiffImageOverlap-fno: 1.00 [2/2]

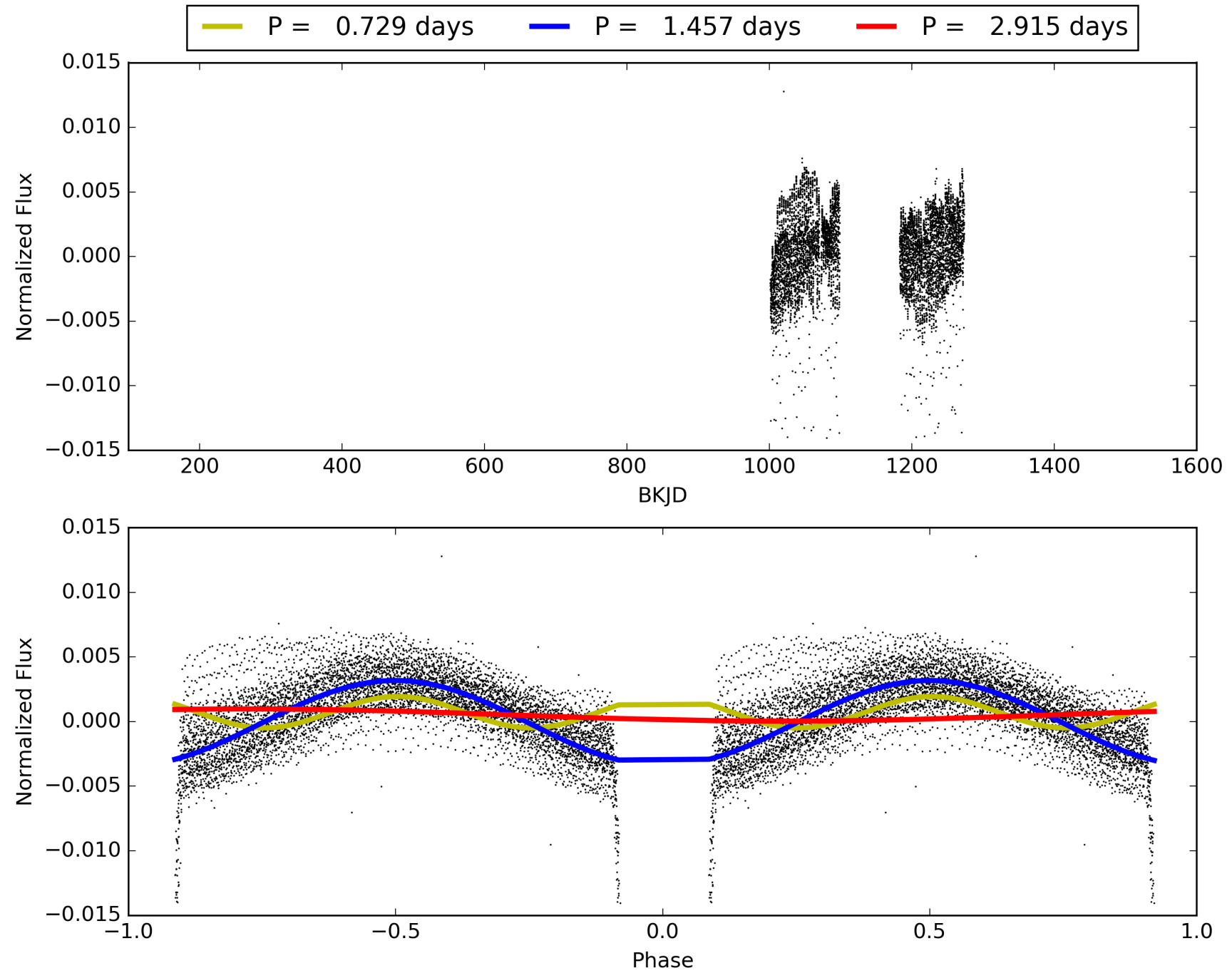
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 30-Jan-2016 05:16:46 Z

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

TCE 009767392-01, PDC Light Curves

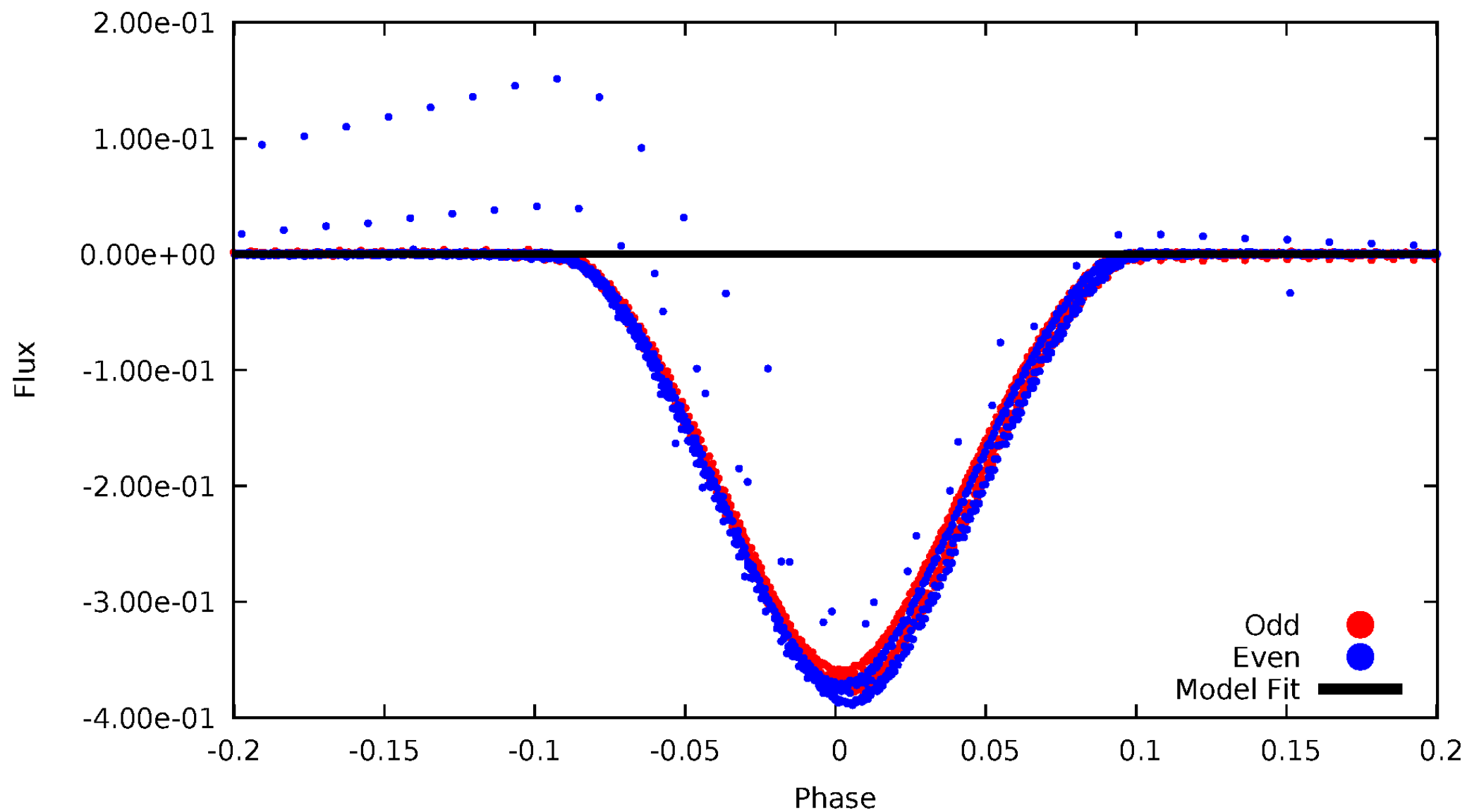


TCE 009767392-01



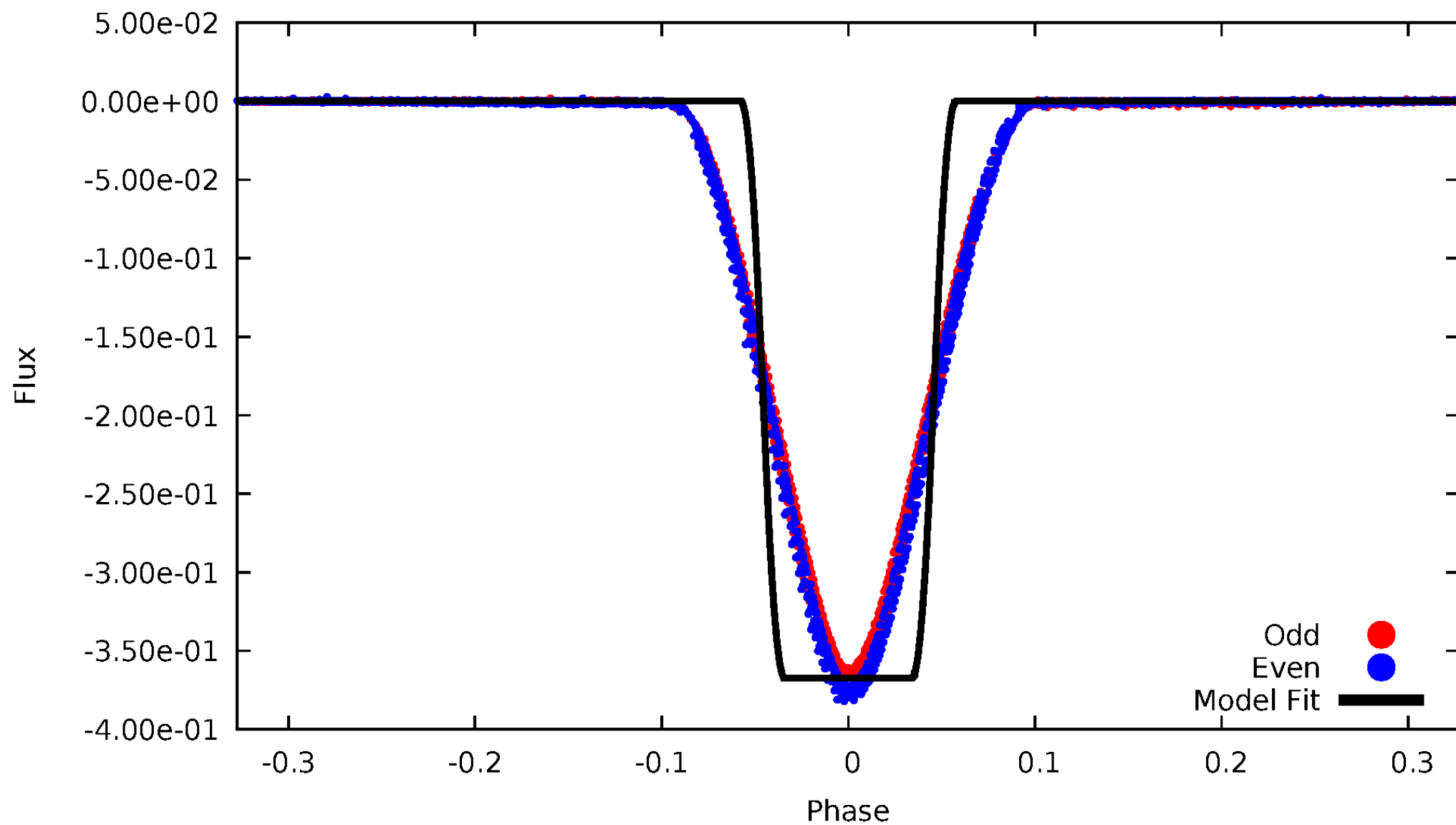
DV Odd/Even

TCE 009767392-01



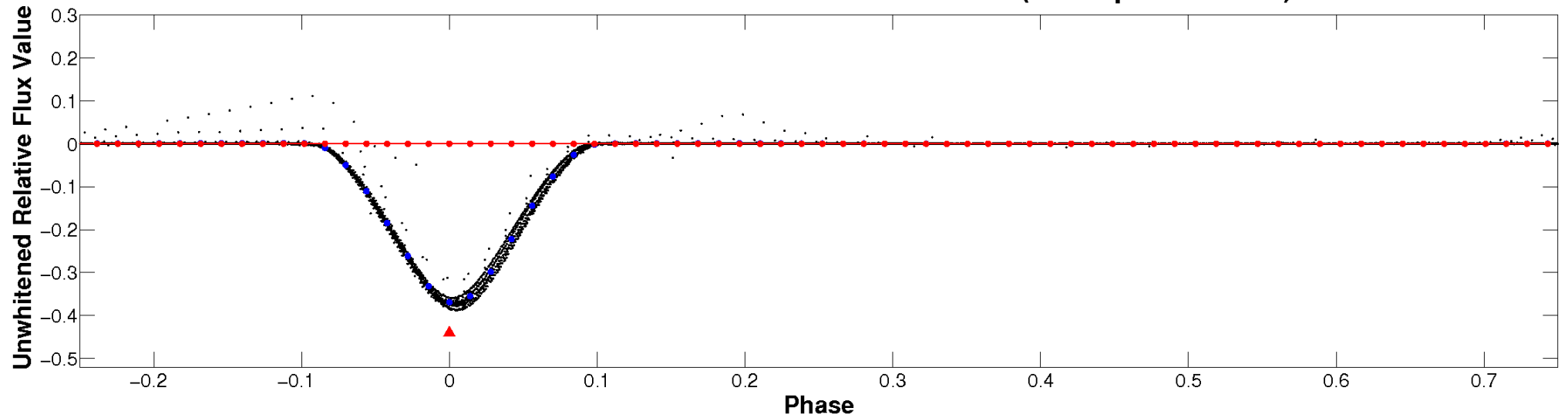
ALT Odd/Even

TCE 009767392-01

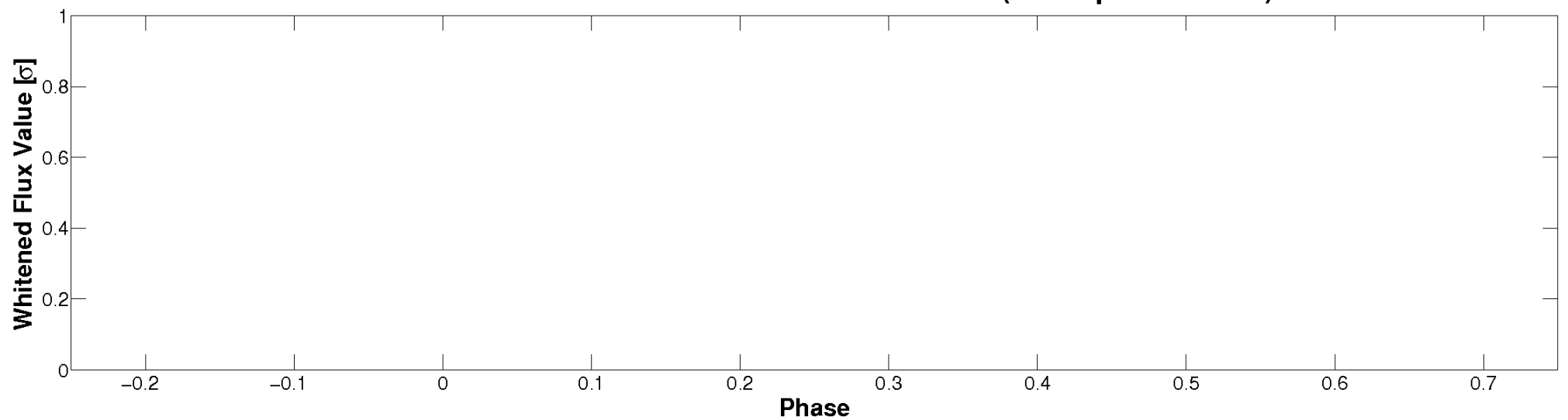


Non-Whitened Vs. Whitened Light Curve

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

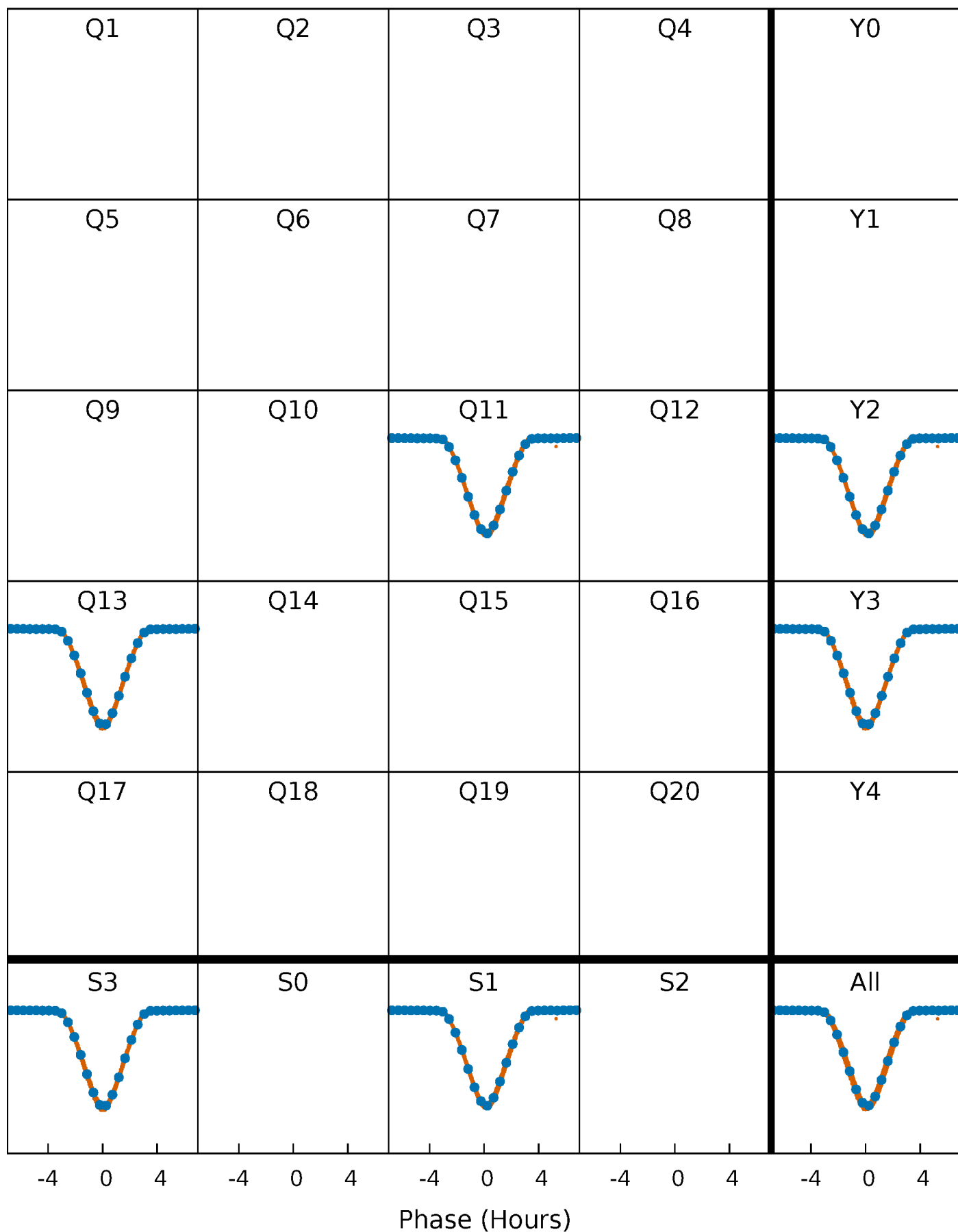


Planet 1 : Phased Whitened Flux Time Series (TPS Epoch/Period)



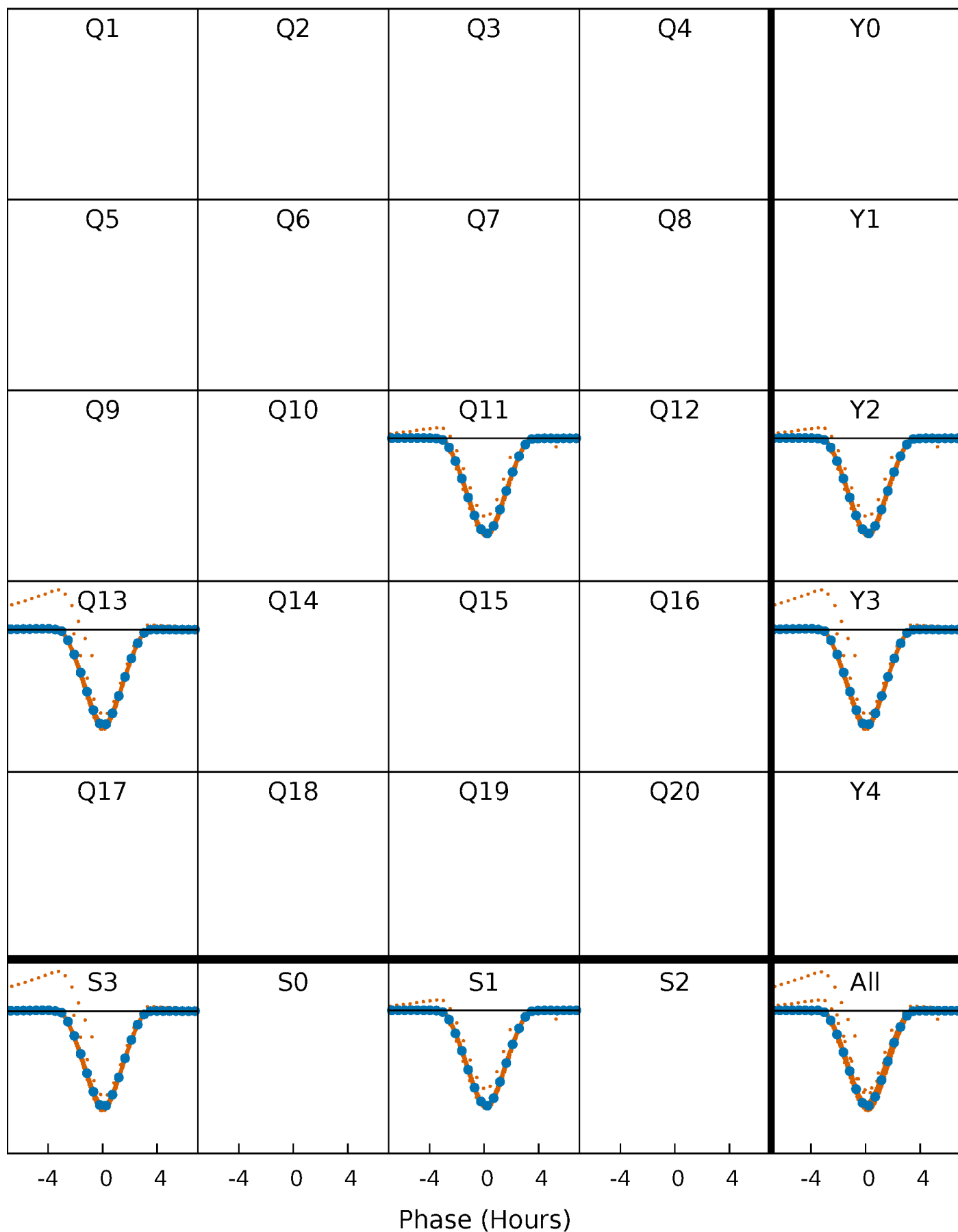
PDC Quarter-Phased Transit Curves

TCE 009767392-01 P= 1.457293 Days $T_0=131.579106$ (BKJD)



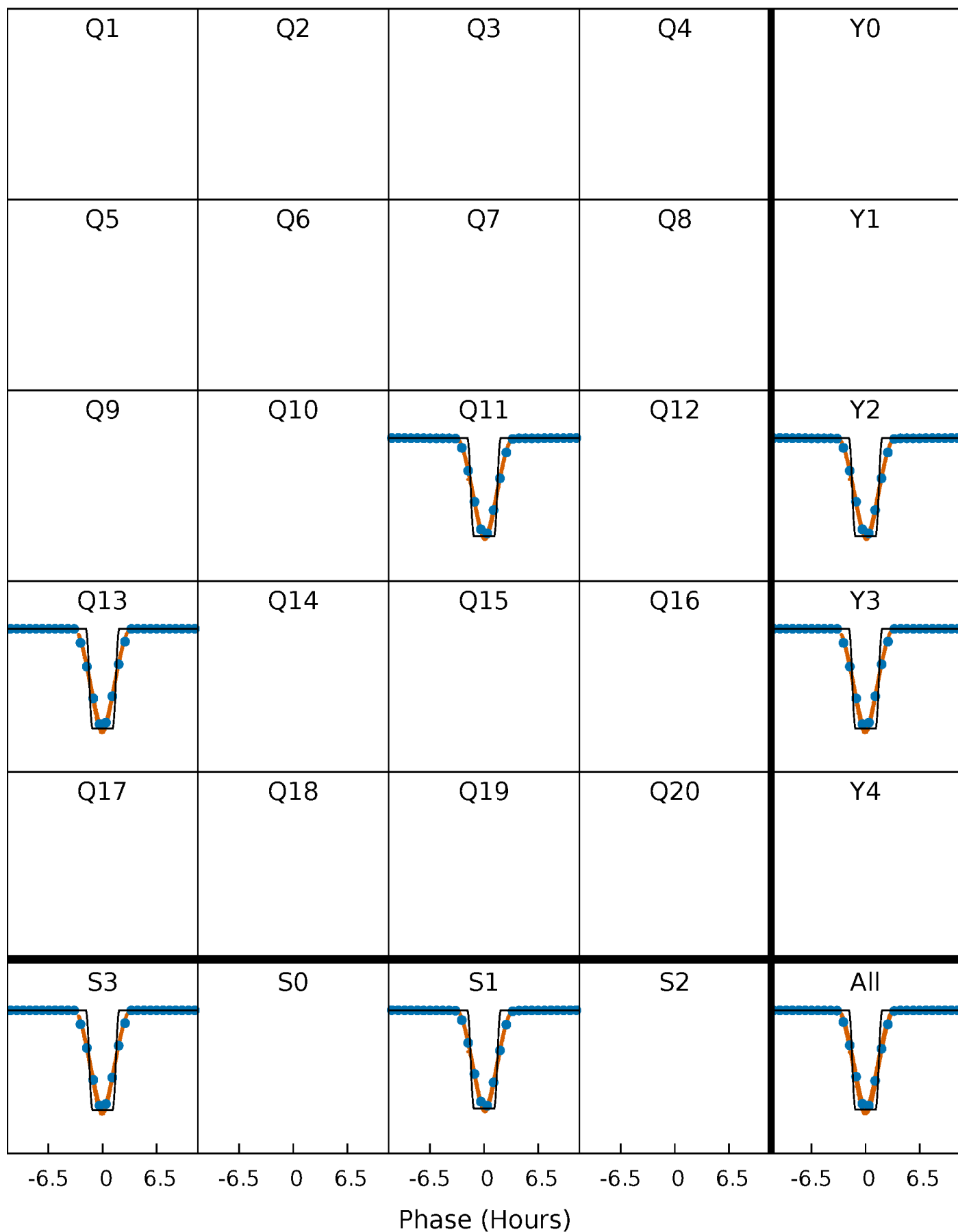
DV Quarter-Phased Transit Curves

TCE 009767392-01 P= 1.457293 Days $T_0=131.579106$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

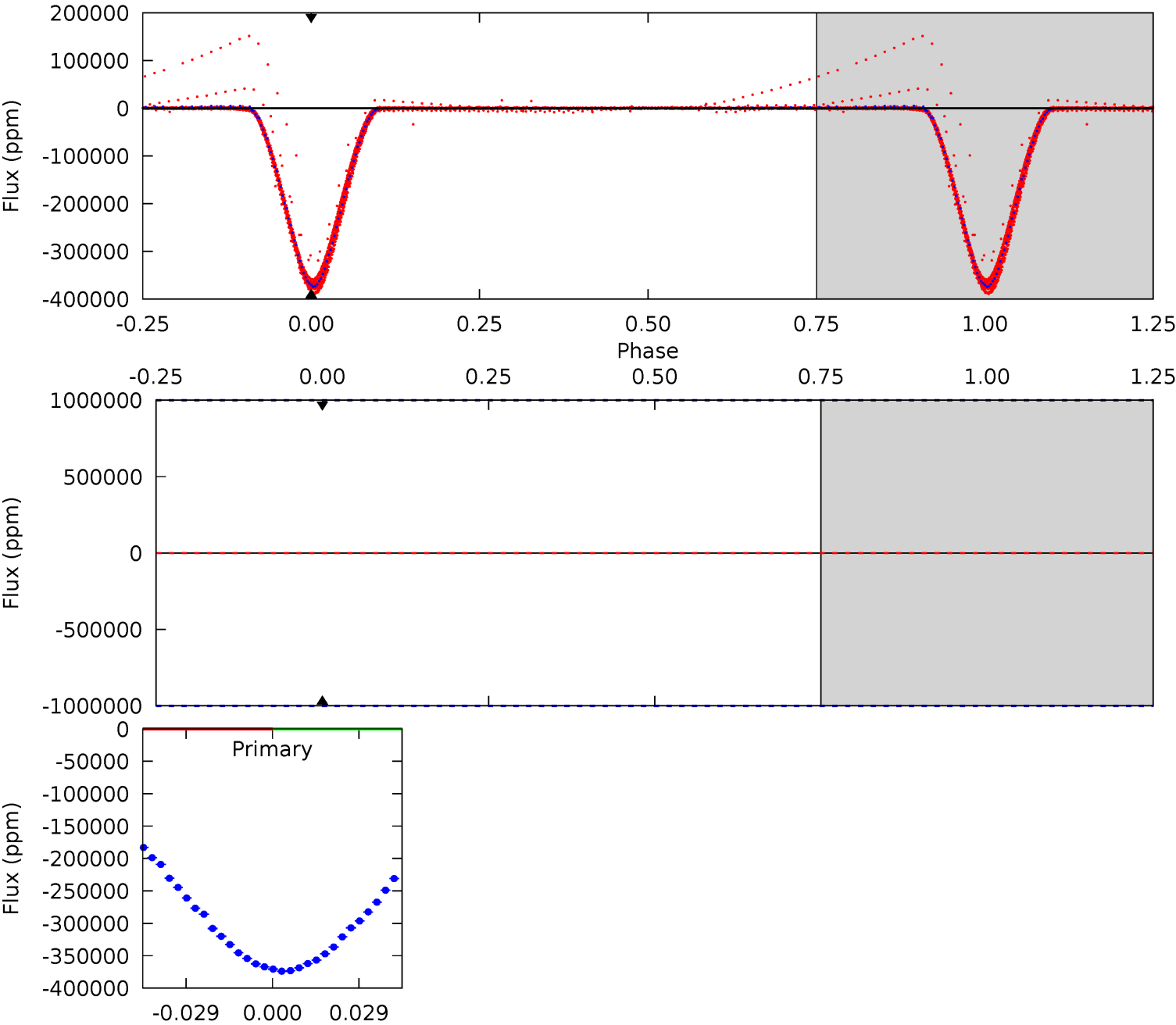
TCE 009767392-01 P= 1.457293 Days $T_0=131.581902$ (BKJD)



DV Model-Shift Uniqueness Test

009767392-01, P = 1.457293 Days, E = 131.579106 Days

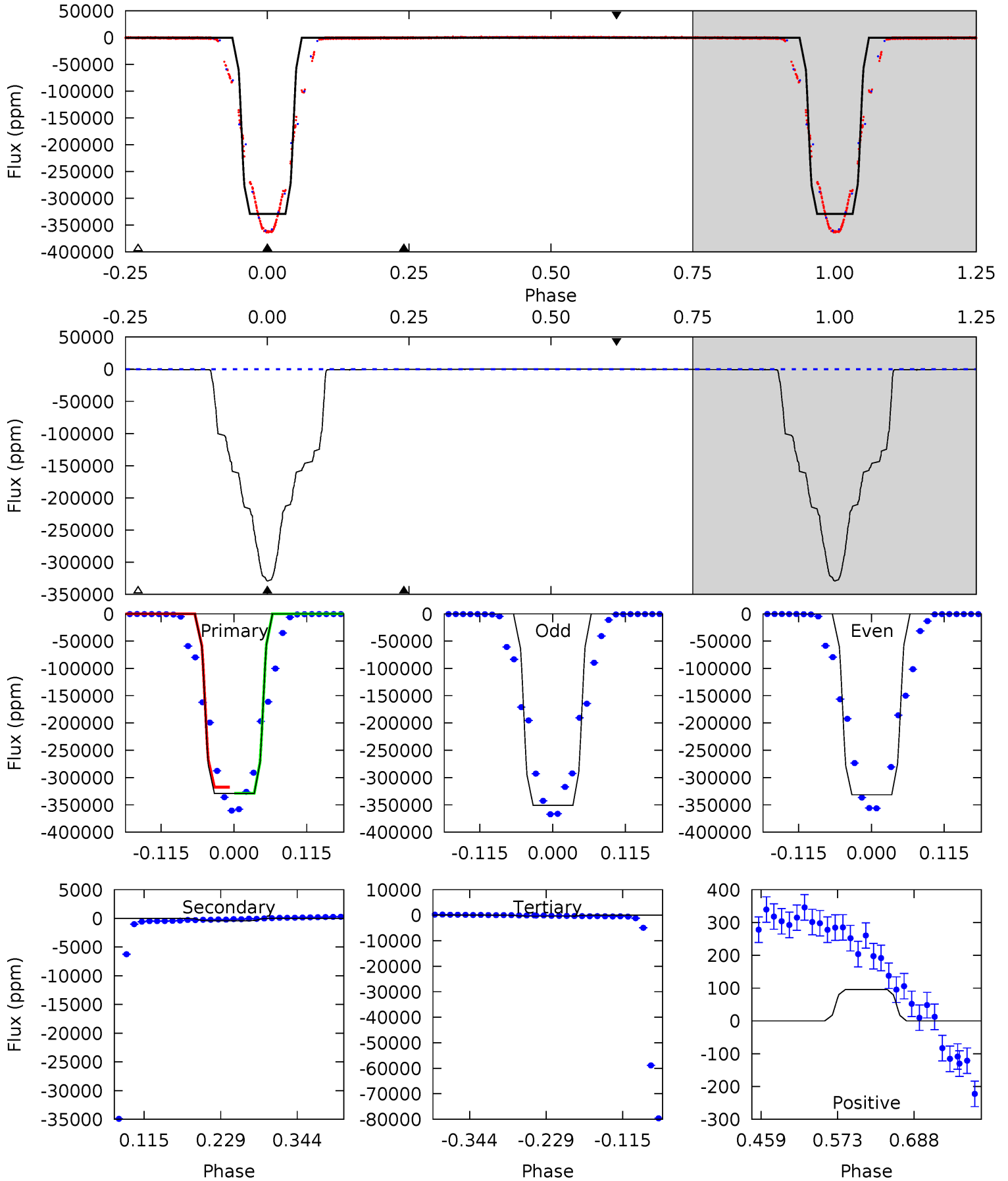
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
0	0	0	0	1.00	1.00	1.00	0	0	0	0	0	0	0	0



Alt Model-Shift Uniqueness Test

009767392-01, P = 1.457293 Days, E = 131.581902 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
8320	10.4	9.47	2.42	4.54	1.58	7.22	8310	8317	0.88	7.94	212.2	1.00	0.00	0



Stellar Parameters For KIC 009767392

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	6630^{+187}_{-258}	$4.235^{+0.128}_{-0.192}$	$-0.120^{+0.250}_{-0.300}$	$1.416^{+0.441}_{-0.257}$	$1.260^{+0.187}_{-0.206}$	$0.625^{+0.401}_{-0.331}$
	+3%/-4%	+3%/-5%	+208%/-250%	+31%/-18%	+15%/-16%	+64%/-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 009767392-01 / KOI 6211.01

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	A_{obs}
DV	0 ± 1000000	$42.76^{+18.58}_{-15.72}$	2965^{+213}_{-178}	3052^{+4457}_{-10330}	$0.629^{+26.999}_{-21.986}$
Alt.	-409 ± 40	$96.60^{+22.74}_{-19.66}$	2971^{+223}_{-180}	-3041^{+110}_{-141}	$0.018^{+0.010}_{-0.006}$

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

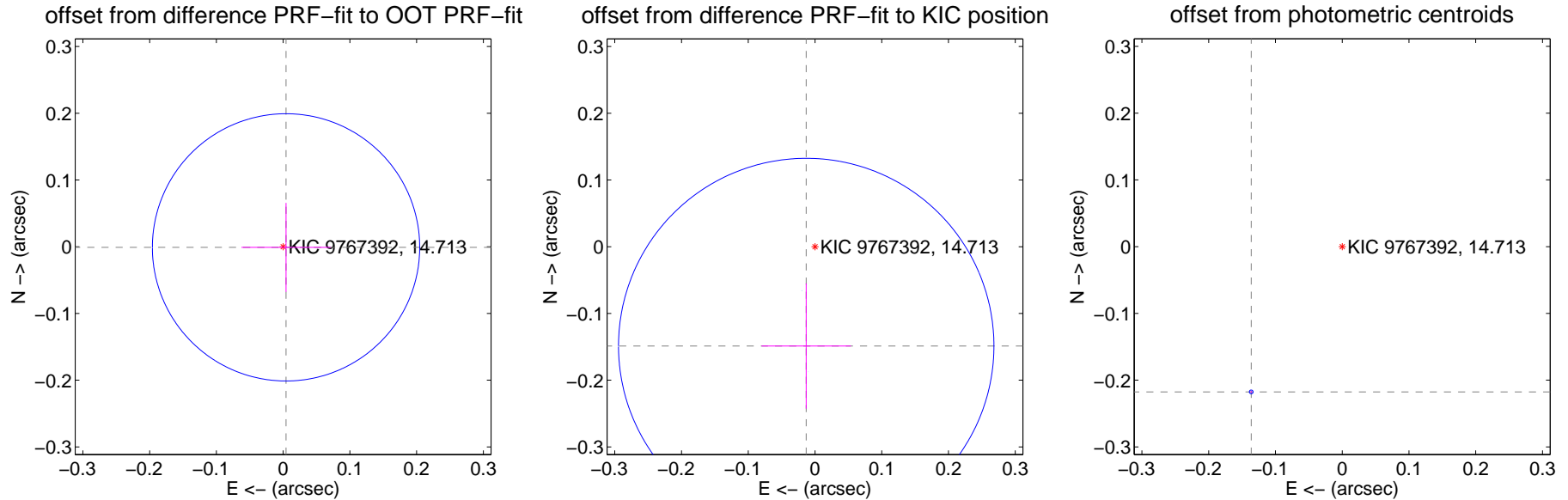
DV Centroid Data

Supplemental centroid analysis for 009767392-01. Kepler magnitude: 14.71. Transit SNR -1.00

There are 2 quarters with good PRF difference image offsets

The direct PRF centroid is offset from the target star catalog position by about 0.07 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.004 ± 0.067	0.07	-0.004 ± 0.067	-0.001 ± 0.067
PRF-fit source offset from KIC position	0.149 ± 0.094	1.59	0.013 ± 0.067	-0.149 ± 0.094
photometric centroid source offset	0.26 ± 0.00	275.03	0.14 ± 0.00	-0.22 ± 0.00



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.

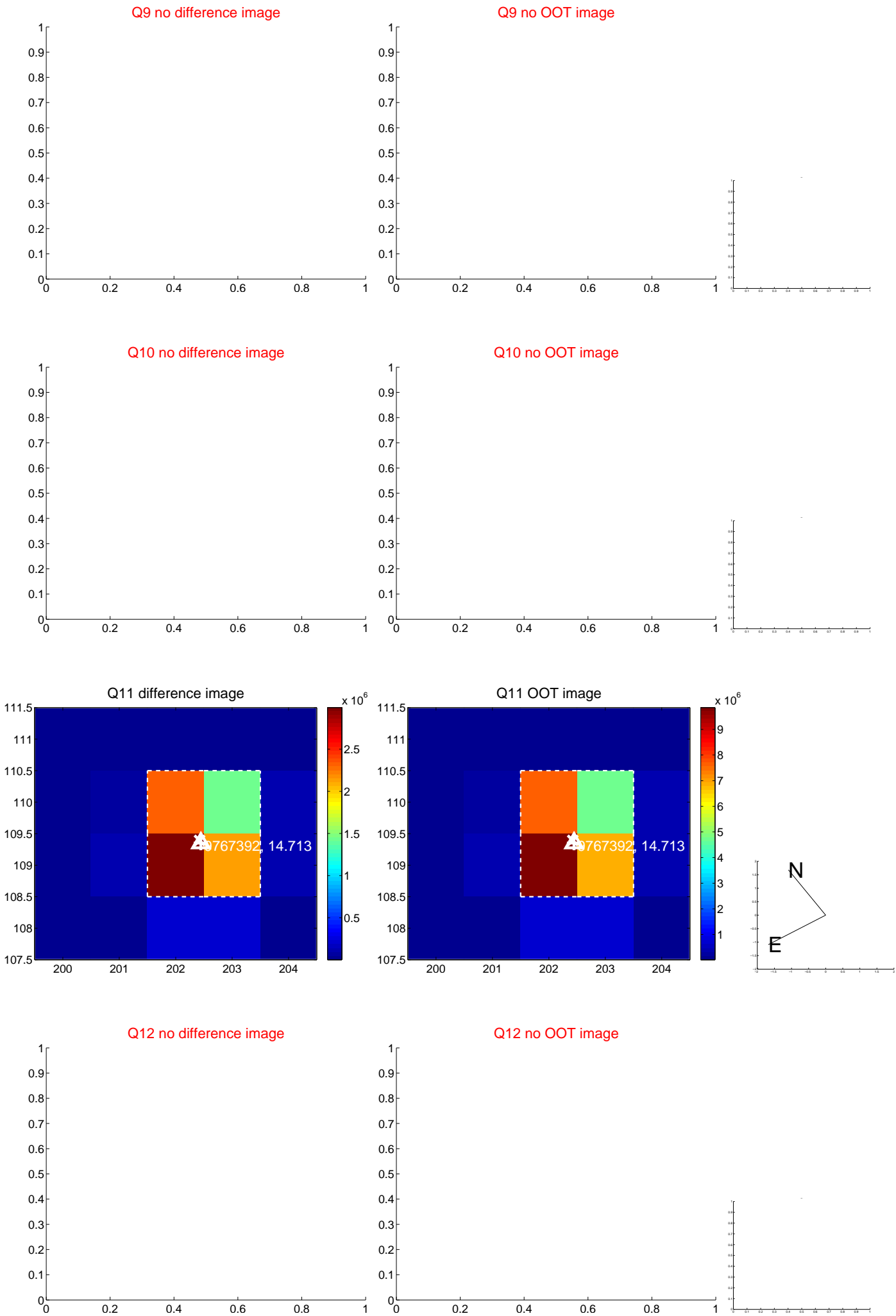
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



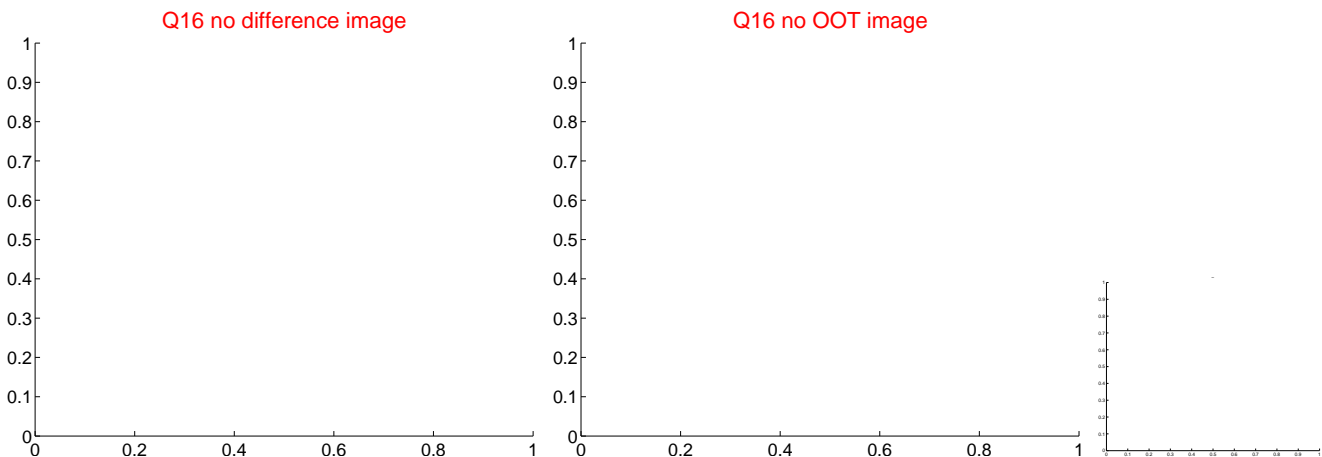
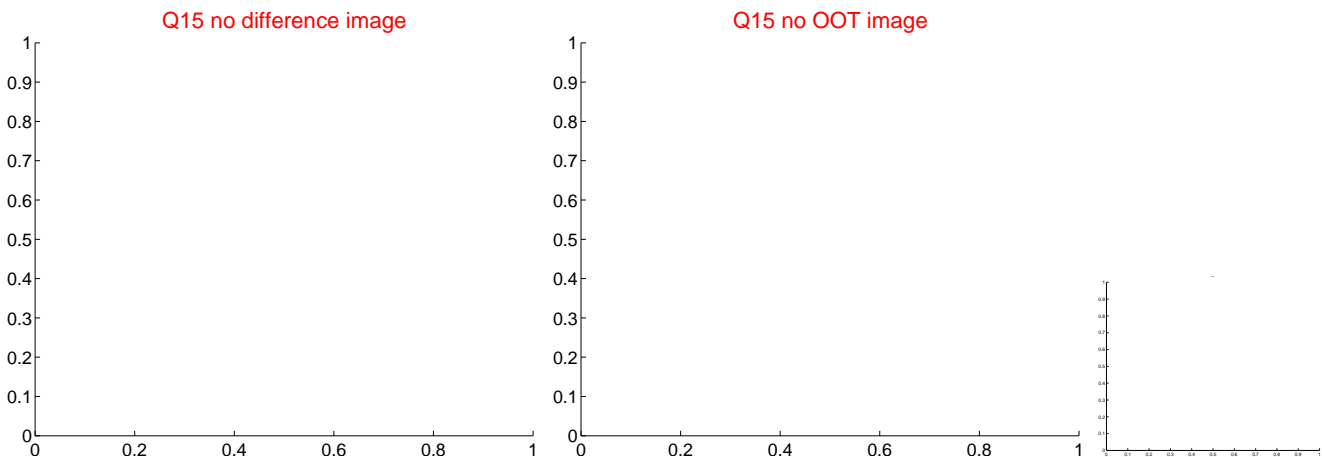
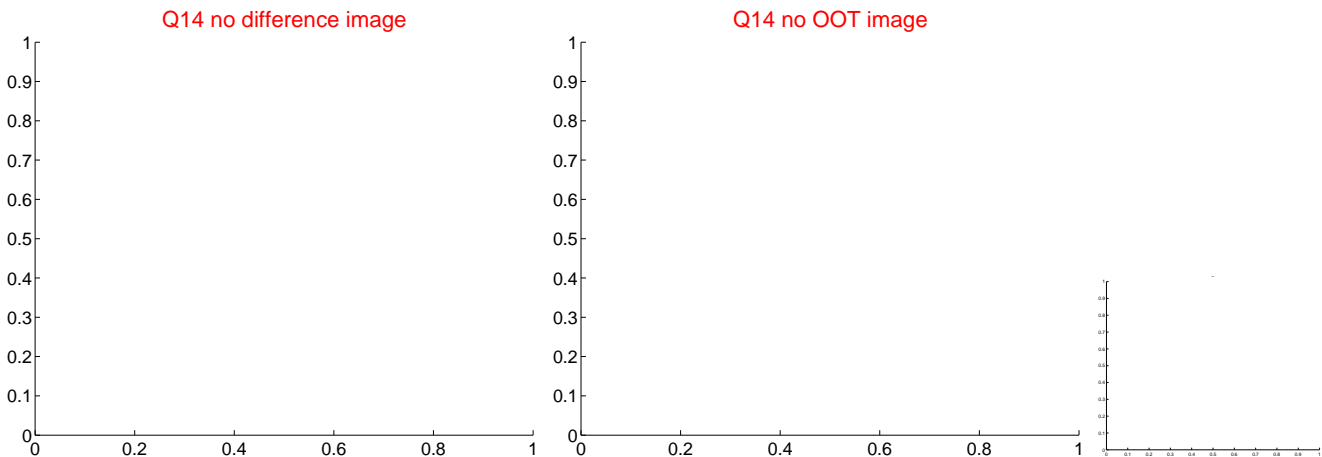
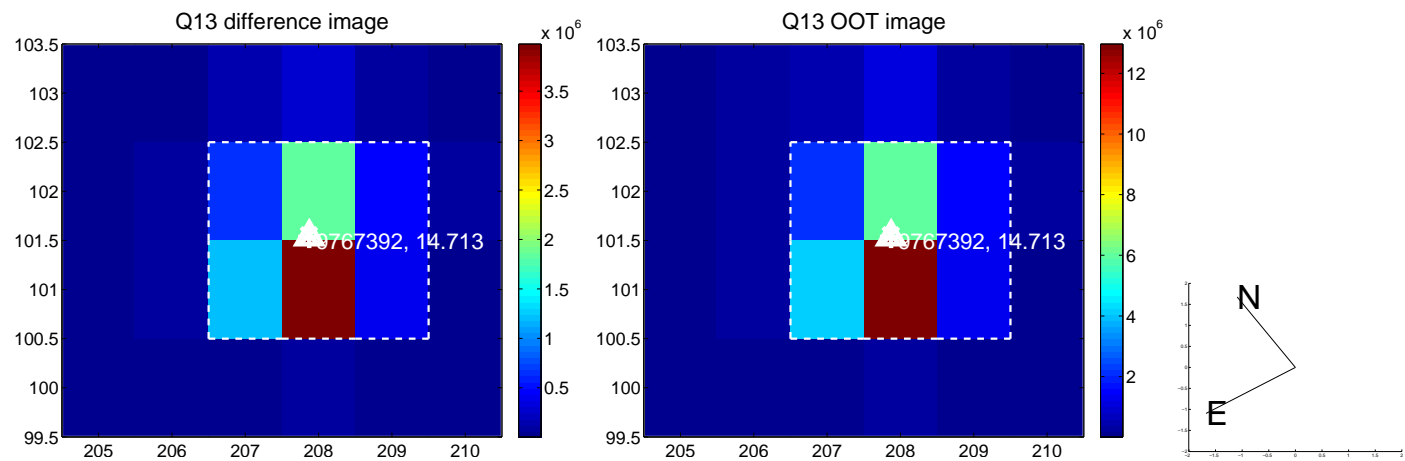
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



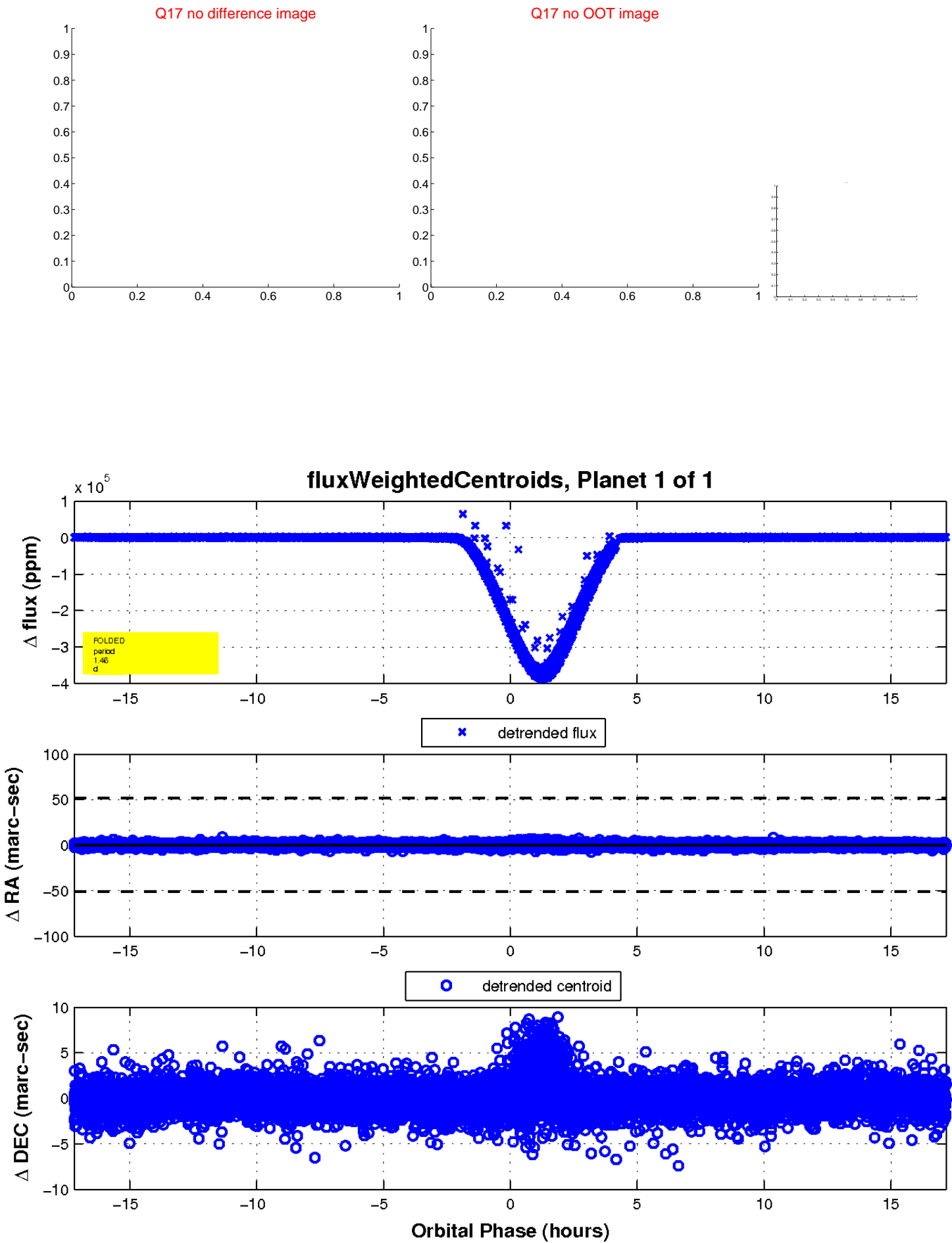
white ×: KIC target position; +: OOT centroid; △: difference centroid. red ✕: large negative pixel value.



white \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.



UKIRT Image

Declination

