

KIC 006032320

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})
006032320-02	OBS	No	369.001934	151.700440	1010.6	17.891	12.2	11.0	1.00	5780	3.61	0.99

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
006032320-02	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_MARSHALL_SKYE—LPP_DV—ALL_TRANS_CHASES—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.

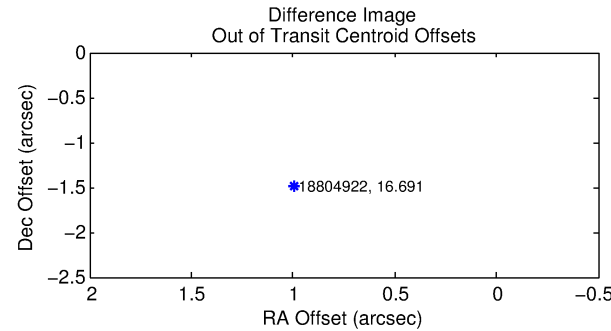
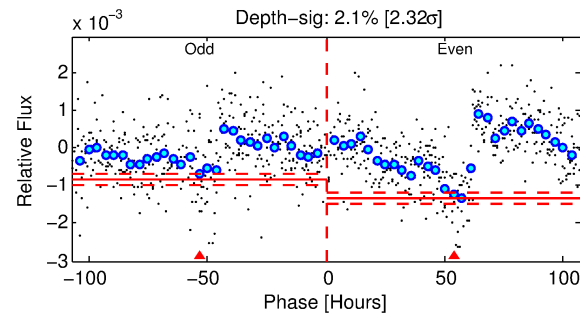
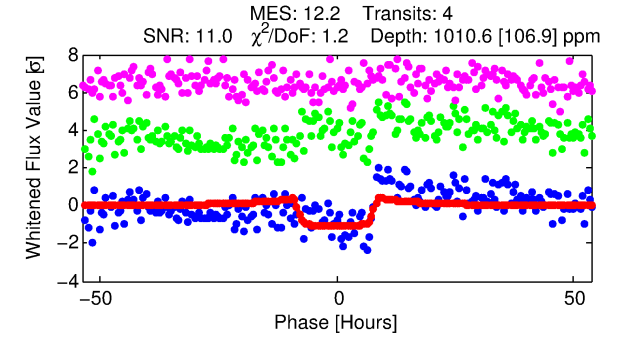
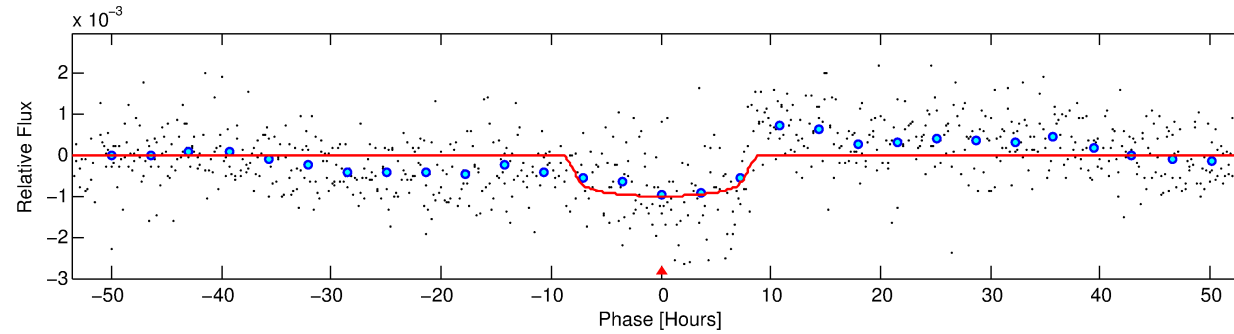
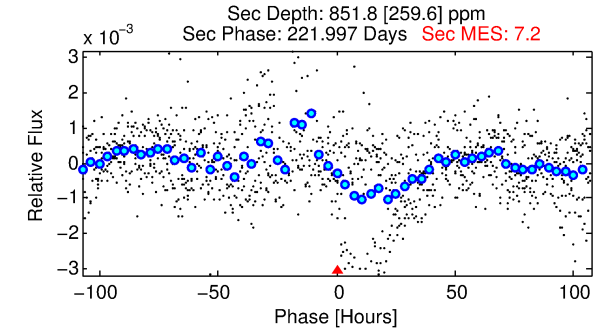
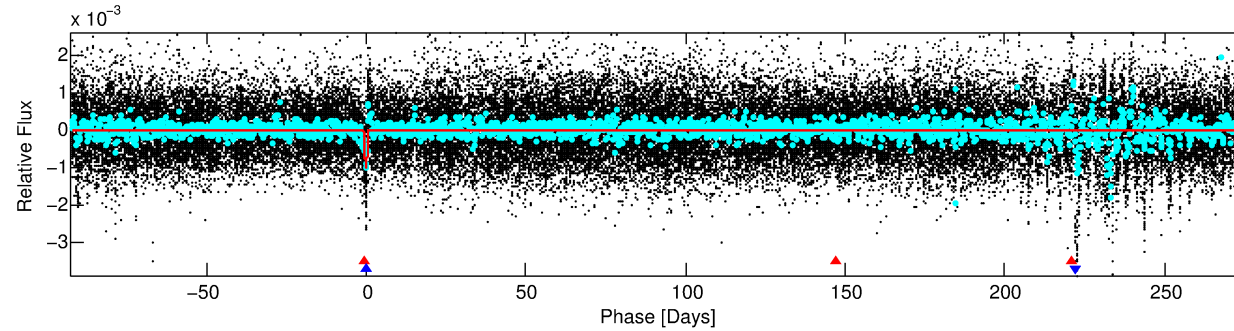
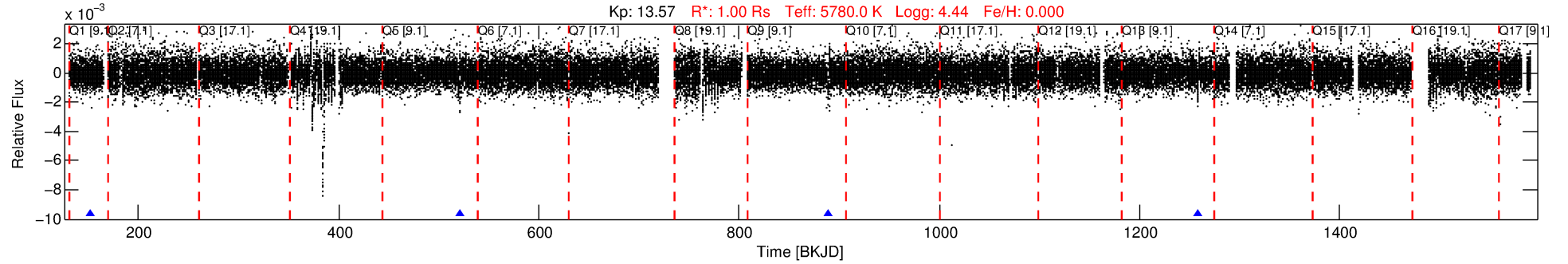
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 006032320-02

No Significant Match Found

DV One-Page Summary

KIC: 6032320 Candidate: 2 of 2 Period: 369.002 d



DV Fit Results:

Period = 369.00193 [0.01211] d
Epoch = 151.7004 [0.0228] BKJD
 $R_p/R^* = 0.0331$ [0.0040]
 $a/R^* = 94.40$ [44.74]
 $b = 0.84$ [0.17]
 $\text{Seff} = 0.99$ [0.00]
 $T_{\text{eq}} = 254$ [0] K
 $R_p = 3.61$ [0.44] R_e
 $a = 1.0070$ [0.0000] AU
 $A_g = 36438.30$ [14234.11] [2.56σ]
 $T_{\text{eff}} = 5428$ [530] K [9.76σ]

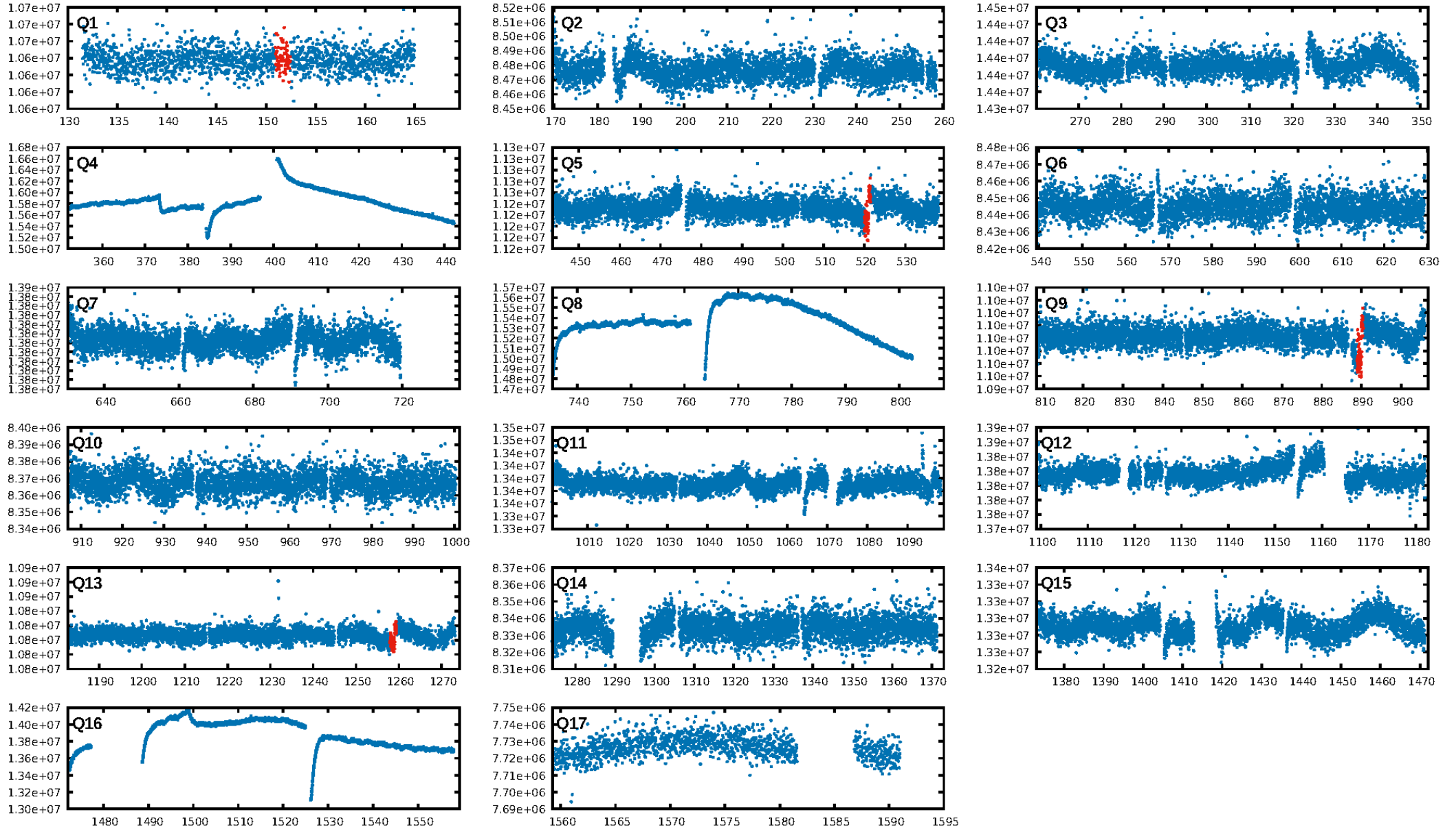
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: 100.0% [196.38σ]
ModelChiSquare2-sig: 0.0%
ModelChiSquareGof-sig: 86.2%
Bootstrap-pfa: 3.12e-18
RollingBand-fgt: 1.00 [3/3]
GhostDiagnostic-chr: 1.453
Centroid-sig: 0.0%
Centroid-so: 7.550 arcsec [22.21σ]
OotOffset-rm: N/A
OotOffset-st: 0/0/0 [0]
KicOffset-rm: 5.394 arcsec [10.98σ]
KicOffset-st: 0/0/0 [1]
DiffImageQuality-fgm: 0.00 [0/1]
DiffImageOverlap-fno: 0.75 [3/4]

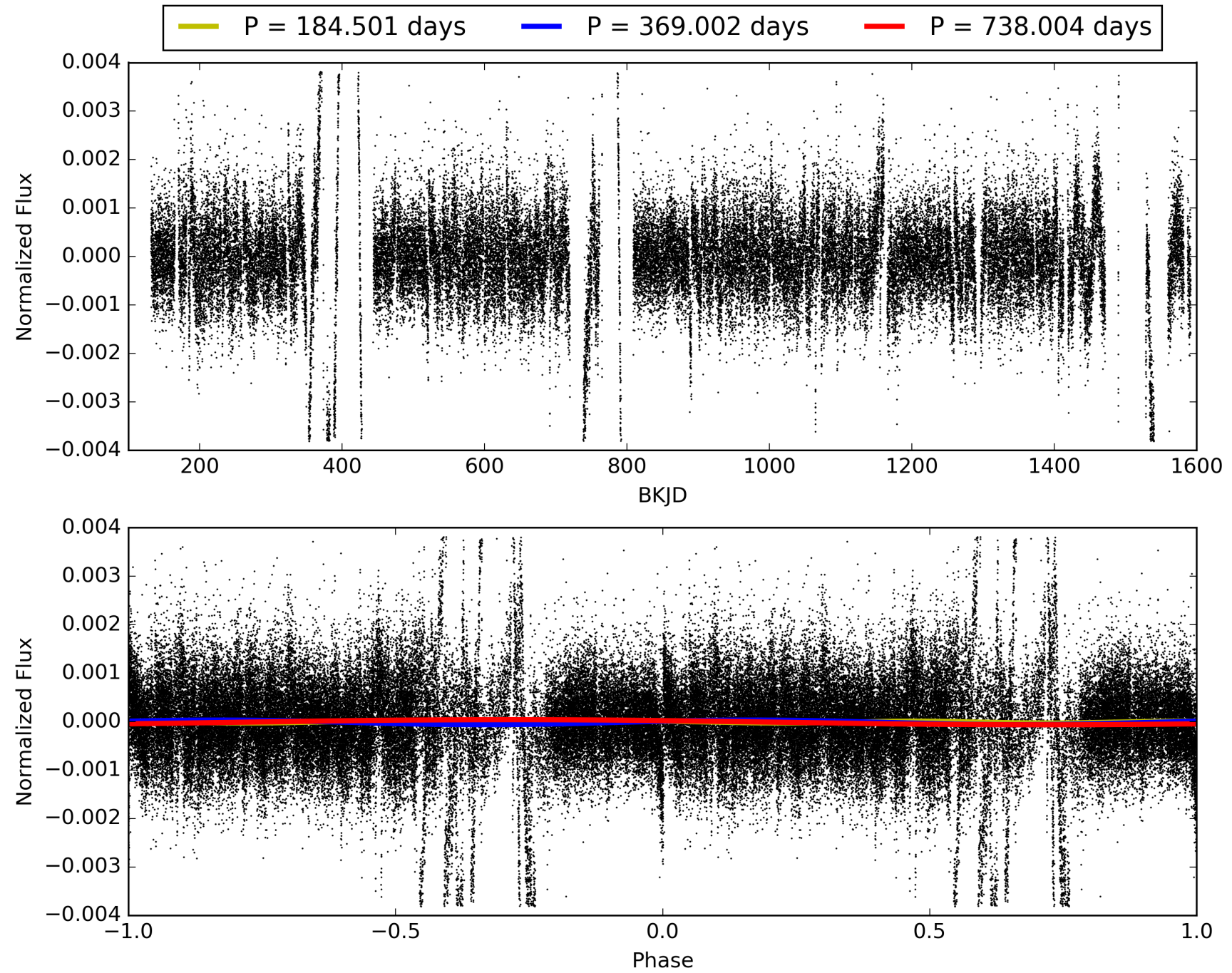
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 31-Jan-2016 18:30:23 Z

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

TCE 006032320-02, PDC Light Curves

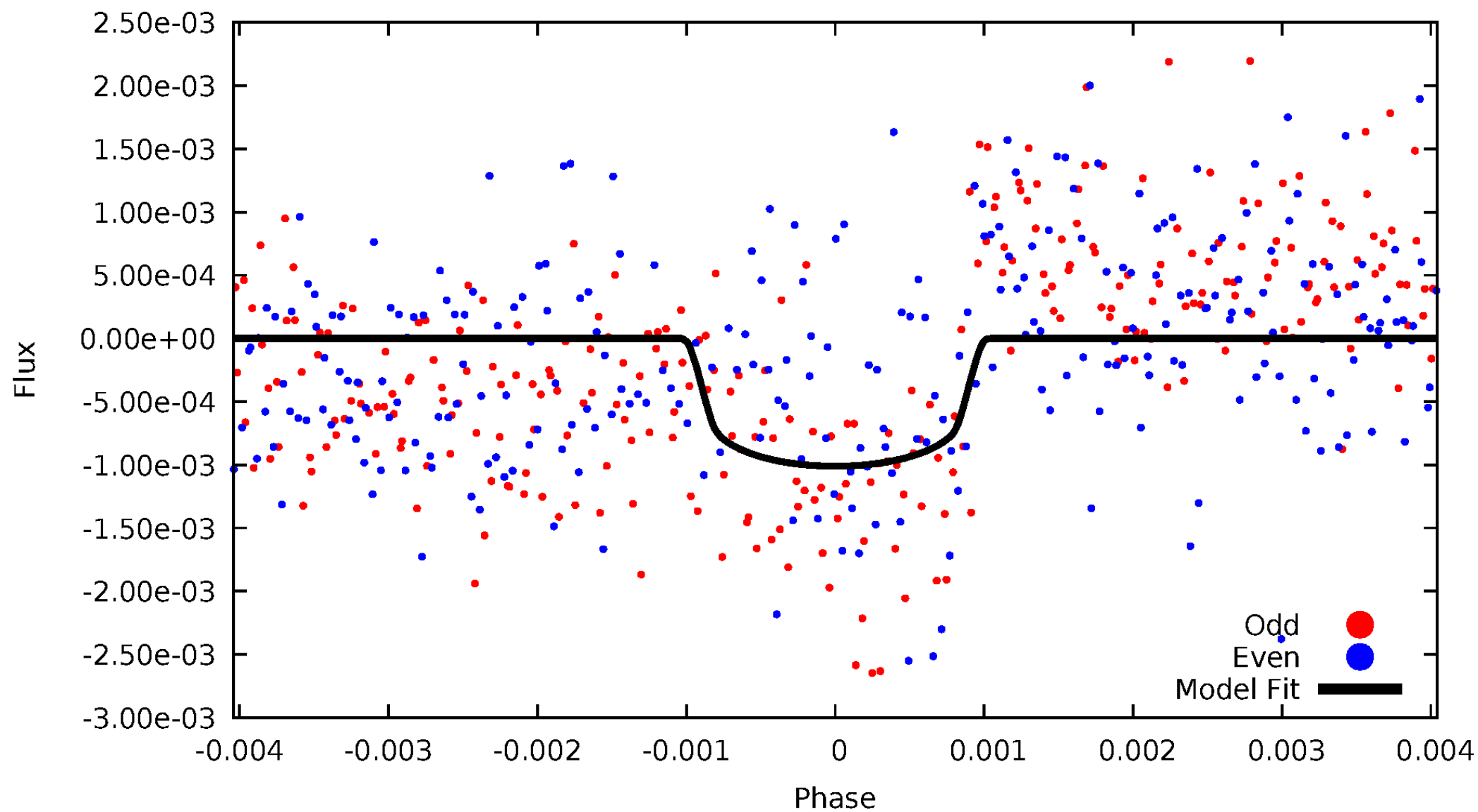


TCE 006032320-02



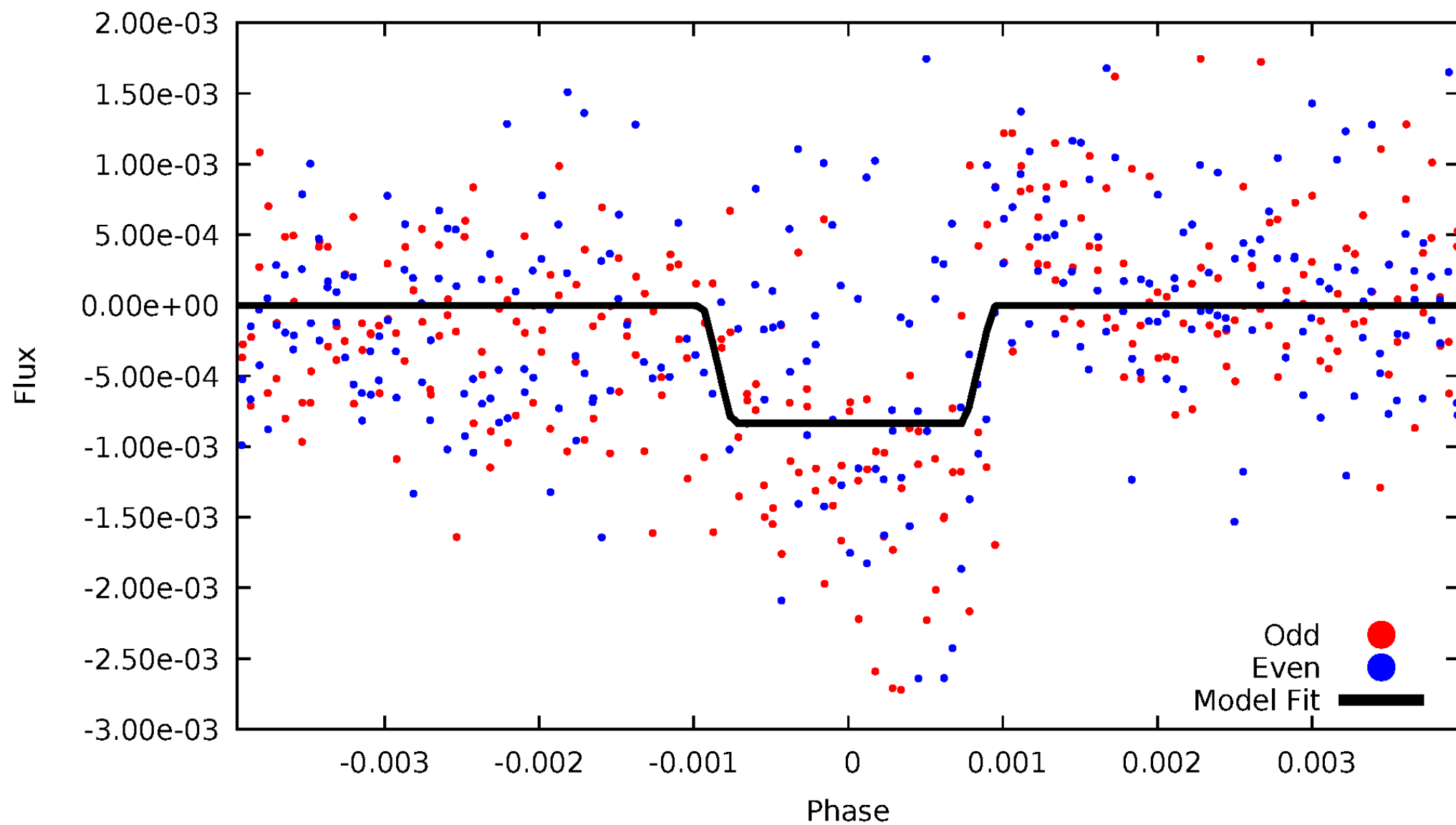
DV Odd/Even

TCE 006032320-02



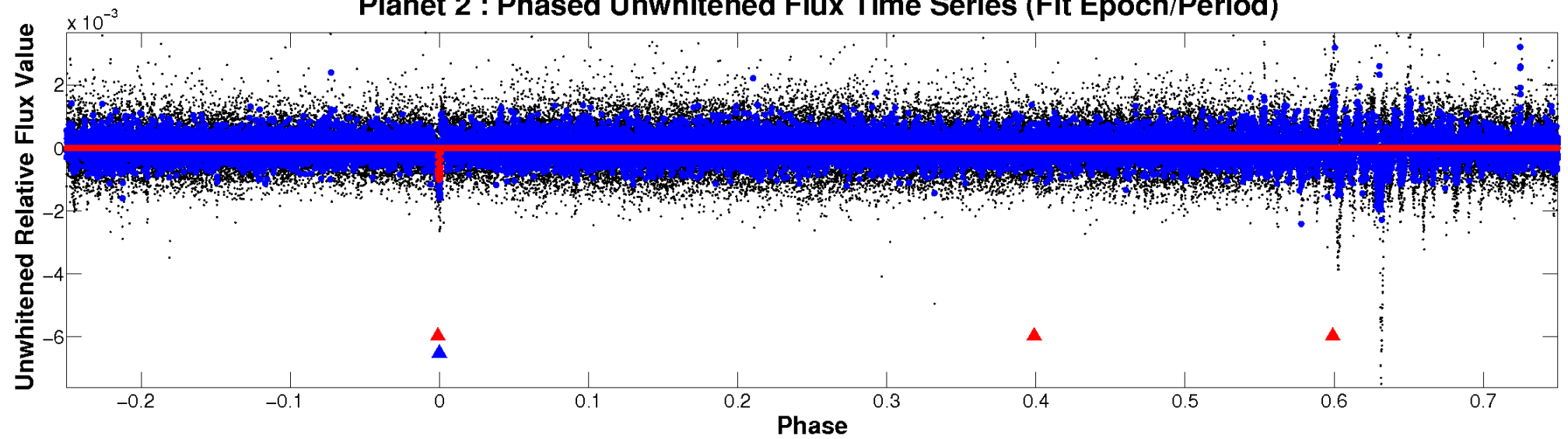
ALT Odd/Even

TCE 006032320-02

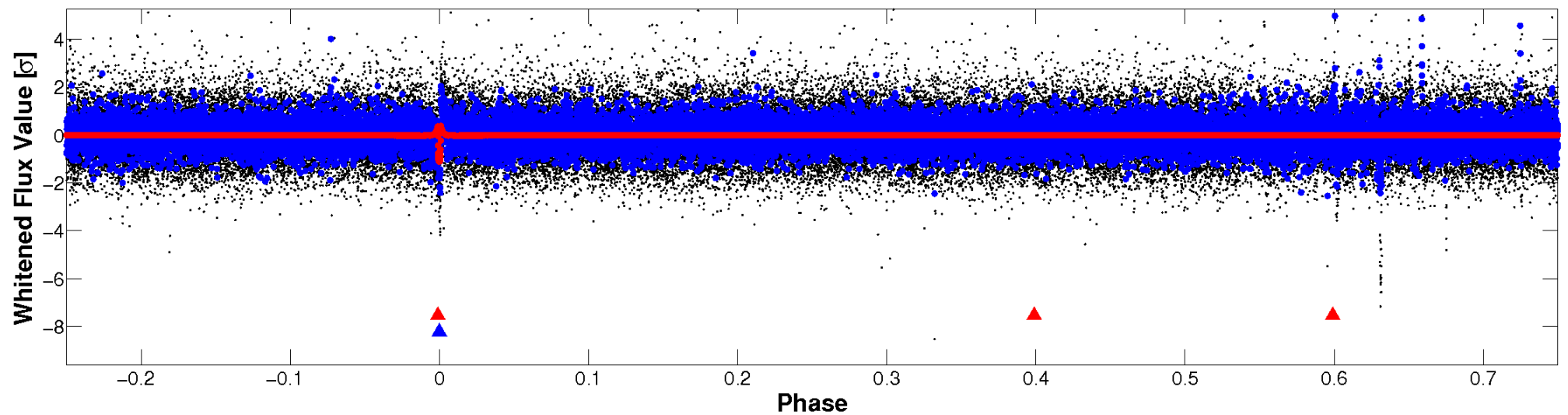


Non-Whitened Vs. Whitened Light Curve

Planet 2 : Phased Unwhitened Flux Time Series (Fit Epoch/Period)

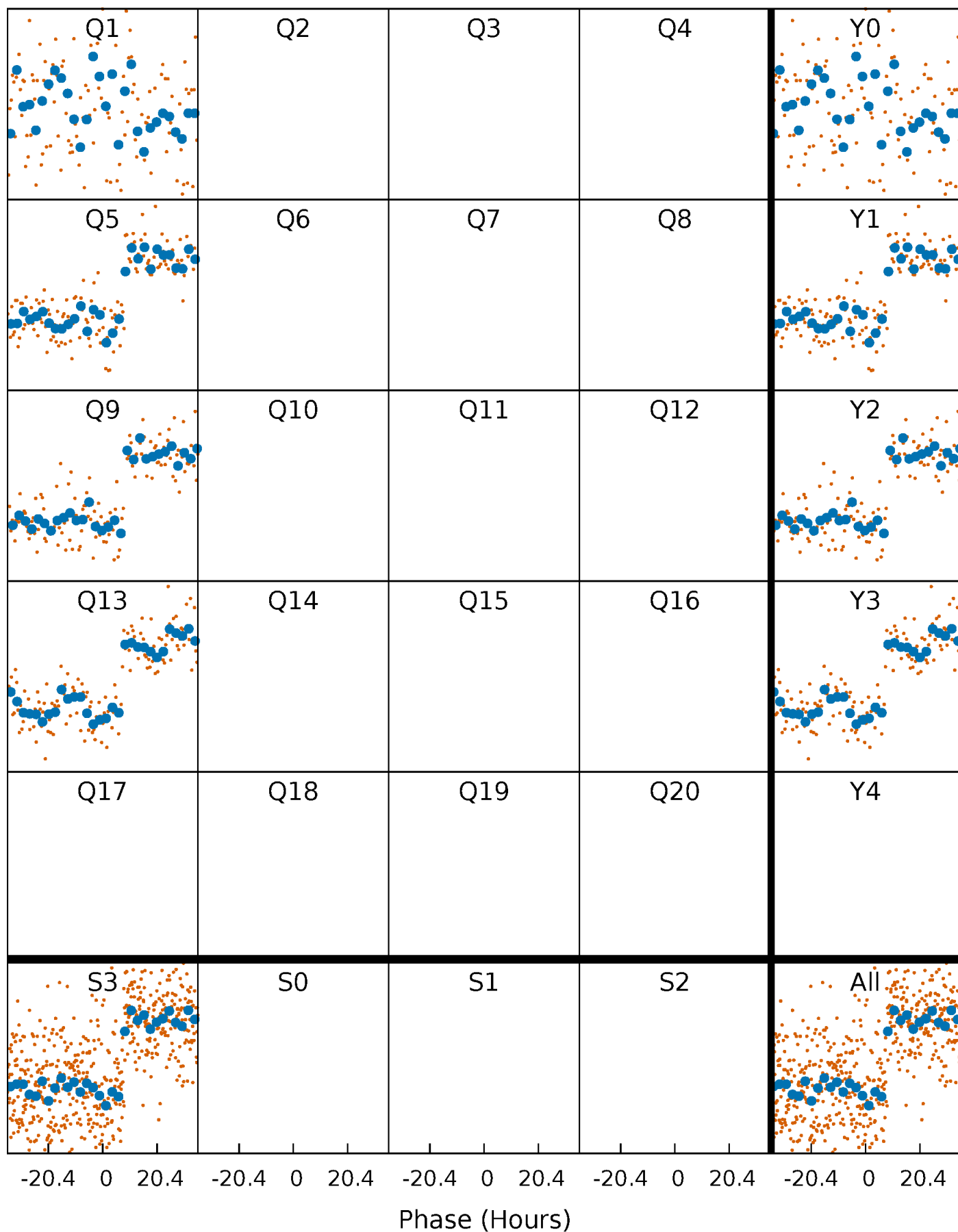


Planet 2 : Phased Whitened Flux Time Series (Fit Epoch/Period)



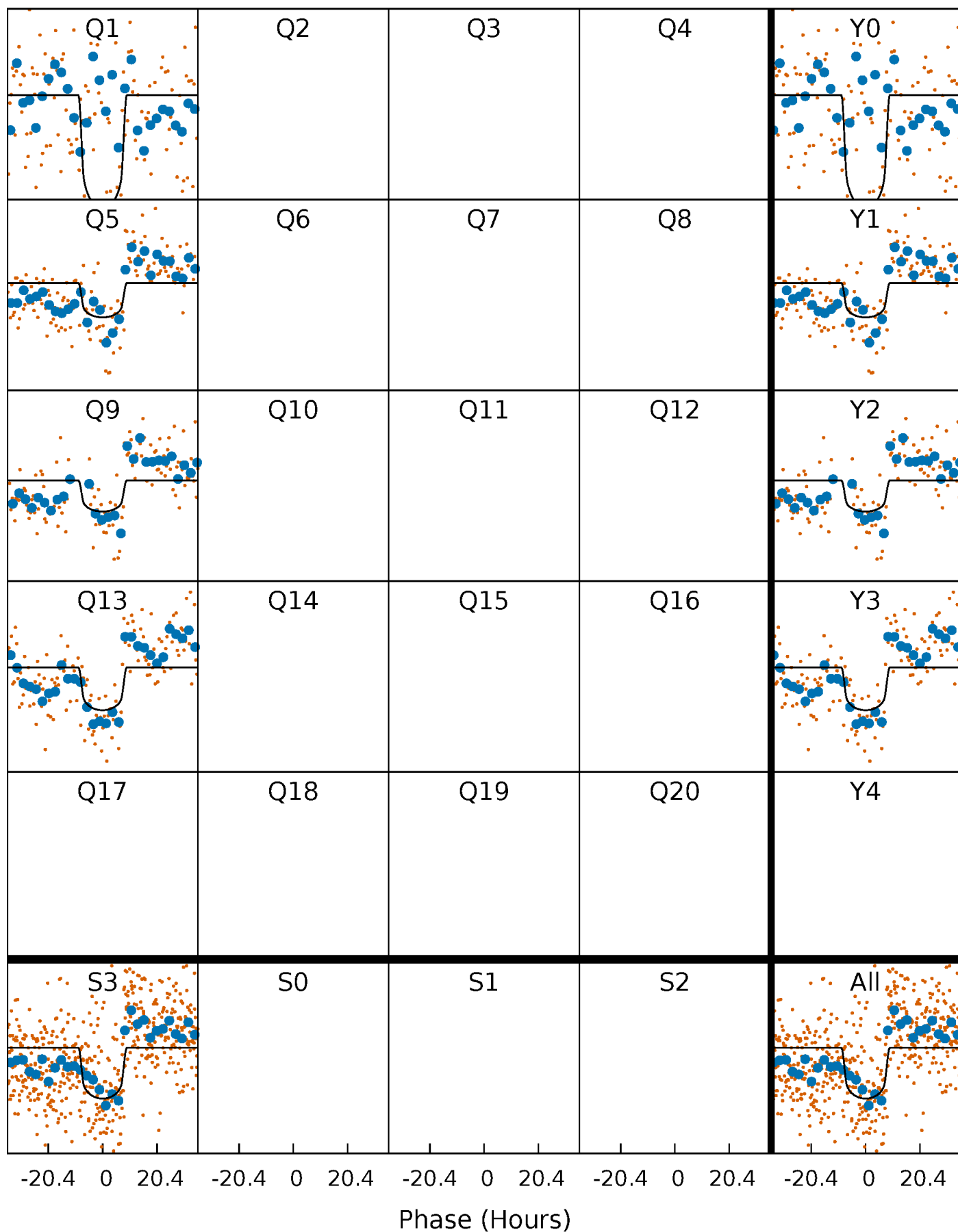
PDC Quarter-Phased Transit Curves

TCE 006032320-02 $P=369.001934$ Days $T_0=151.700440$ (BKJD)



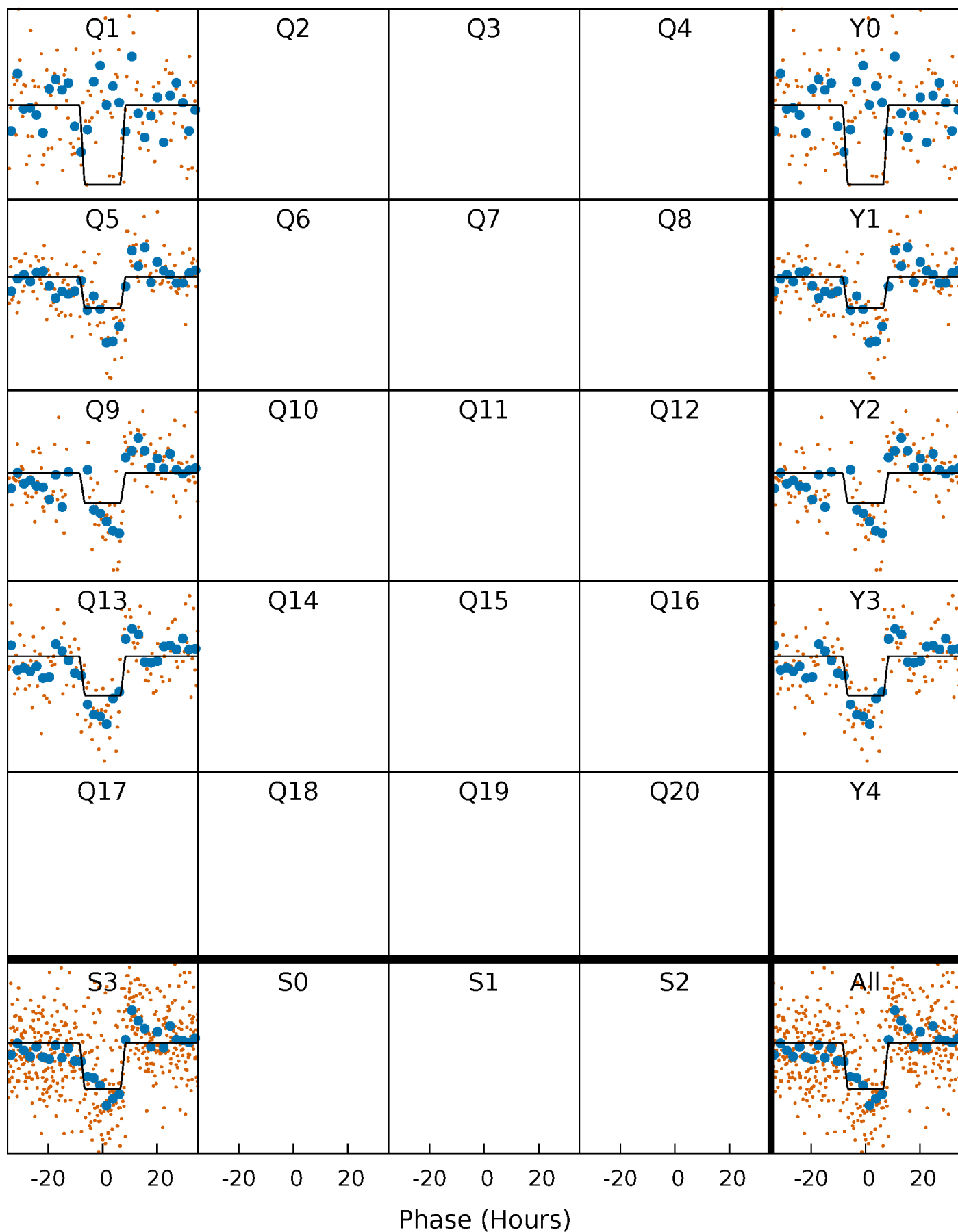
DV Quarter-Phased Transit Curves

TCE 006032320-02 $P=369.001934$ Days $T_0=151.700440$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

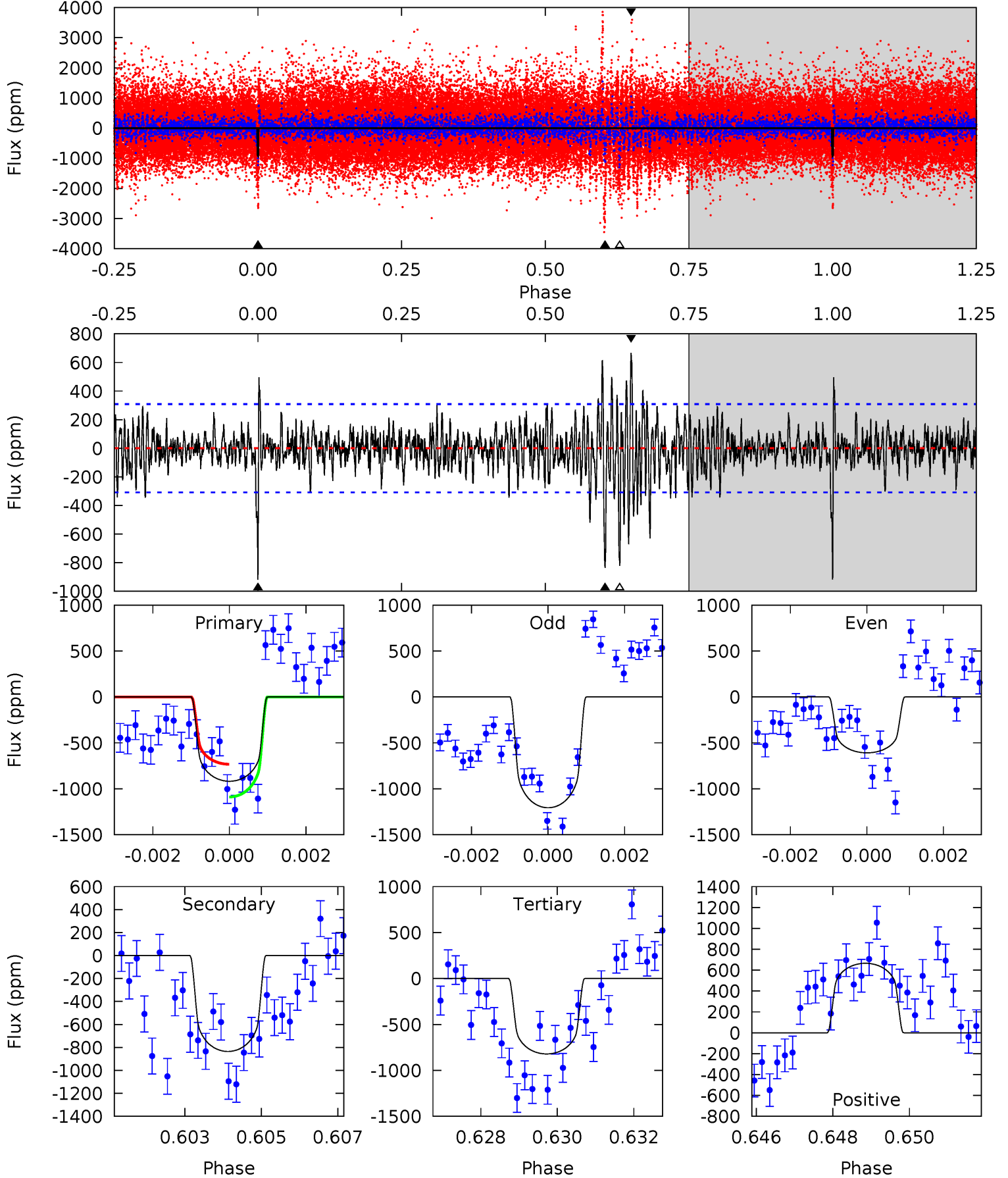
TCE 006032320-02 P=369.030094 Days $T_0=151.658459$ (BKJD)



DV Model-Shift Uniqueness Test

006032320-02, P = 369.001934 Days, E = 151.700440 Days

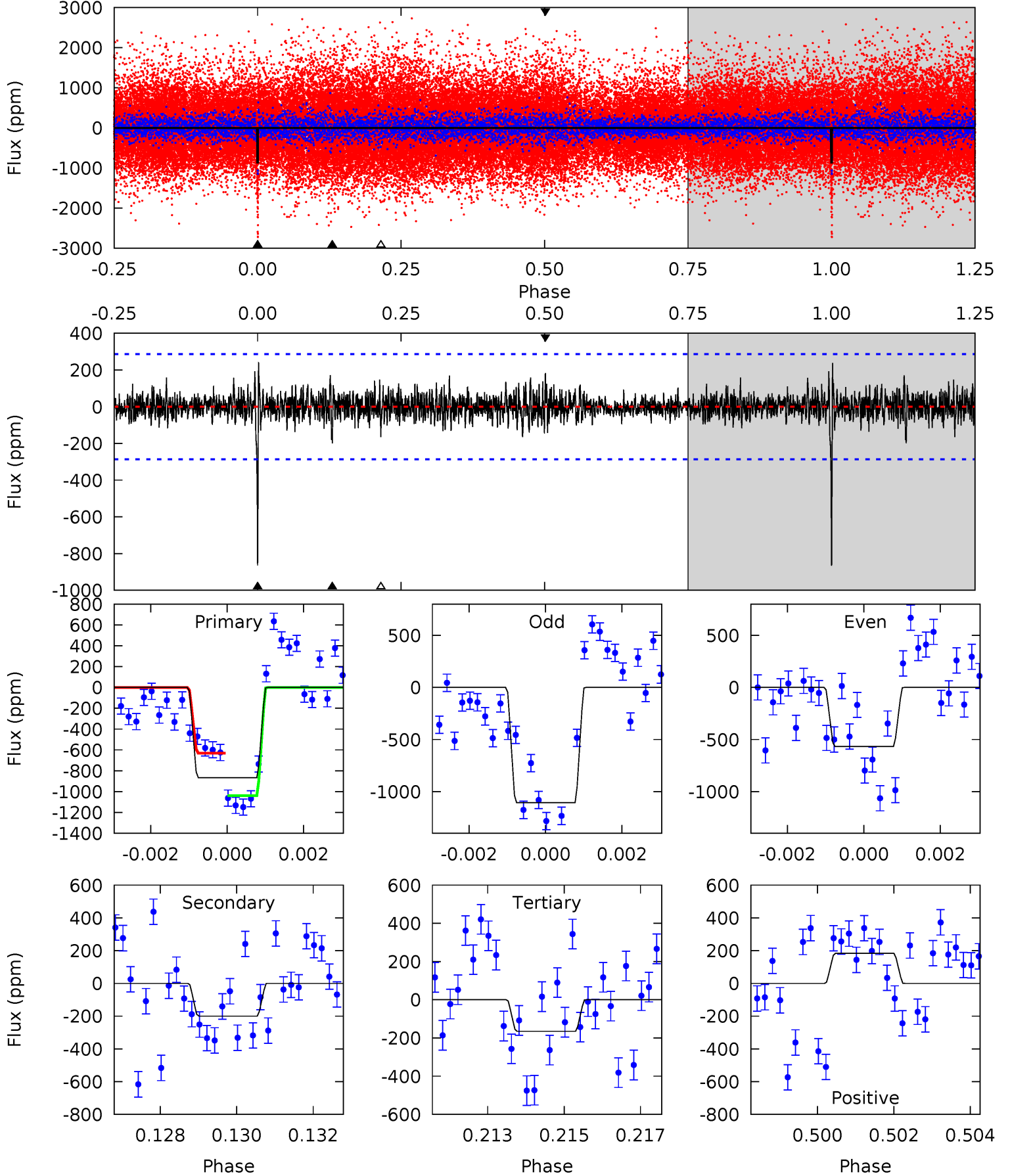
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
15.8	14.4	14.2	11.5	5.32	3.08	2.40	1.67	4.36	0.24	2.93	5.06	0.76	0.42	3.06



Alt Model-Shift Uniqueness Test

006032320-02, P = 369.030094 Days, E = 151.658459 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
16.1	3.72	3.08	3.41	5.34	3.11	0.86	13.0	12.7	0.65	0.31	5.00	0.77	0.22	3.84



Stellar Parameters For KIC 006032320

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	5780^{+1}_{-1}	$4.438^{+1.000}_{-1.000}$	$0.000^{+1.000}_{-1.000}$	$1.000^{+1.000}_{-1.000}$	$-1.000^{+1.000}_{-1.000}$	$-1.000^{+1.000}_{-1.000}$
	+0%/-0%	+23%/-23%	+inf%/-inf%	+100%/-100%	+100%/-100%	+100%/-100%
Source	Solar	Solar	Solar	Solar		

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

Secondary Eclipse Parameters for KIC 006032320-02 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	-835 ± 58	$3.63^{+0.49}_{-0.56}$	356^{+16}_{-18}	5428^{+417}_{-316}	35686^{+13625}_{-8311}
Alt.	-200 ± 54	$3.15^{+0.54}_{-0.46}$	356^{+16}_{-17}	4261^{+352}_{-304}	11002^{+5345}_{-3722}

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 $T_{obs} \gg T_{max}$ AND $A_{obs} \gg 1.0$

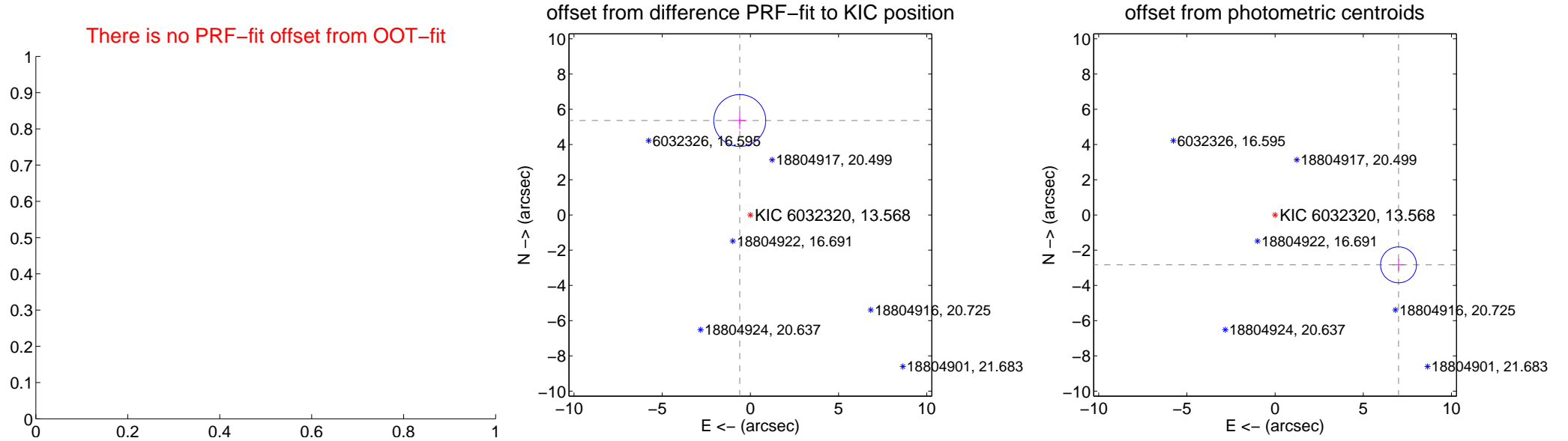
DV Centroid Data

Supplemental centroid analysis for 006032320-02. Kepler magnitude: 13.57. Transit SNR 10.97

There are 0 quarters with good PRF difference image offsets

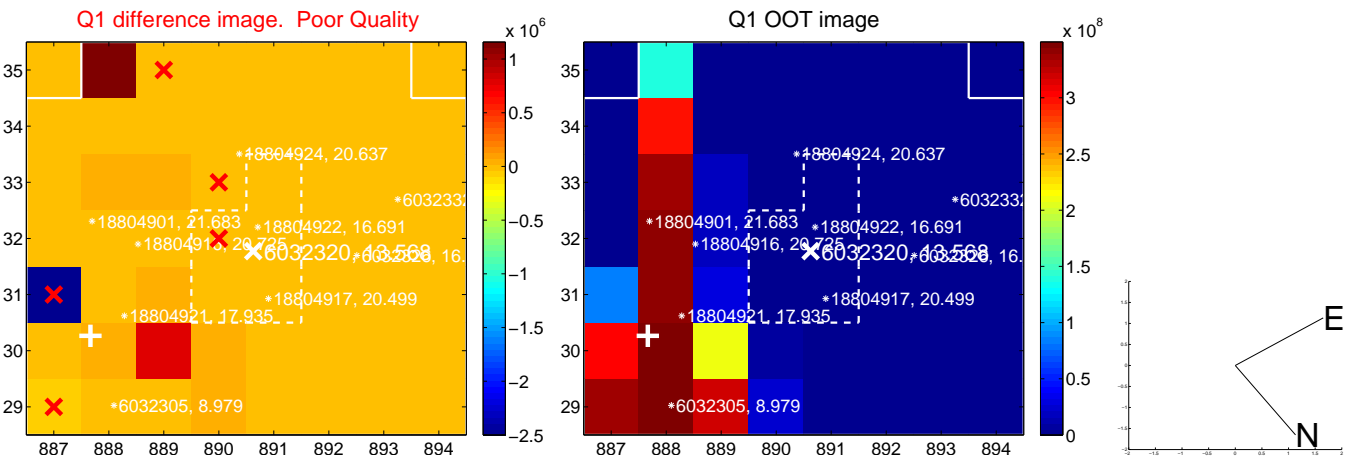
The direct PRF centroid is offset from the target star catalog position by about NaN arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	—	—	—	—
PRF-fit source offset from KIC position	5.394 \pm 0.491	10.98	0.602 \pm 0.351	5.360 \pm 0.493
photometric centroid source offset	7.55 \pm 0.34	22.21	-7.00 \pm 0.34	-2.83 \pm 0.33

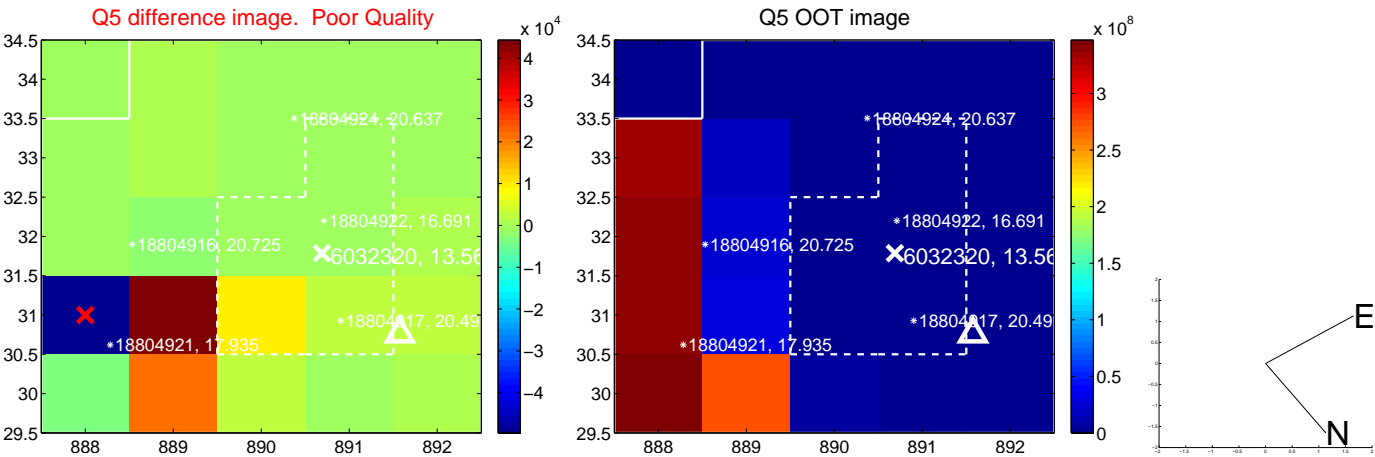


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ . Red *: target star. Blue *: Other stars. Text next to a star gives its KIC ID and kepmag. KIC IDs > 15,000, are from the UKIRT catalog.

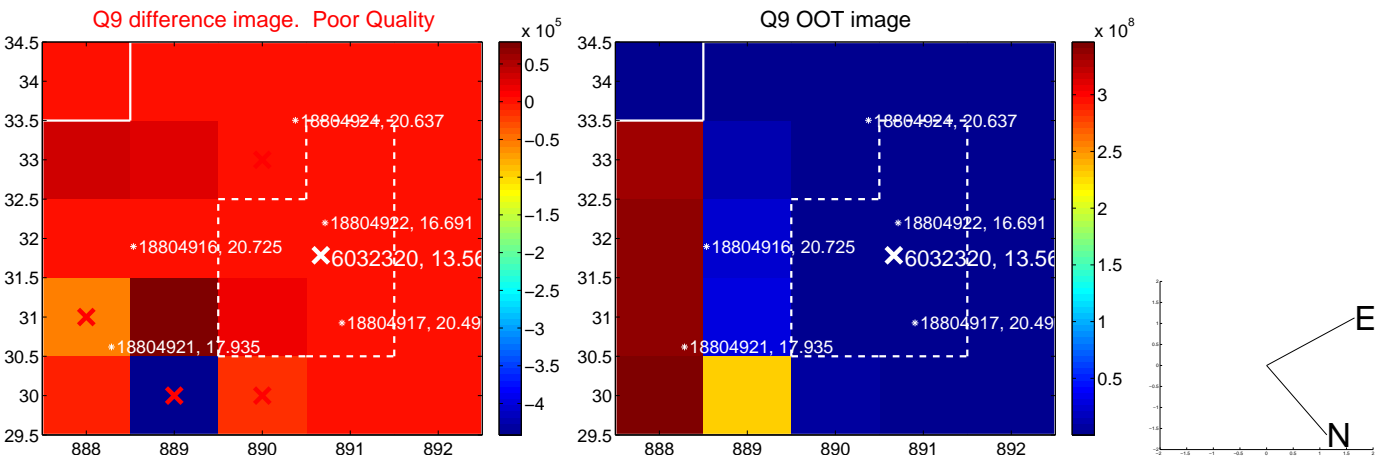
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



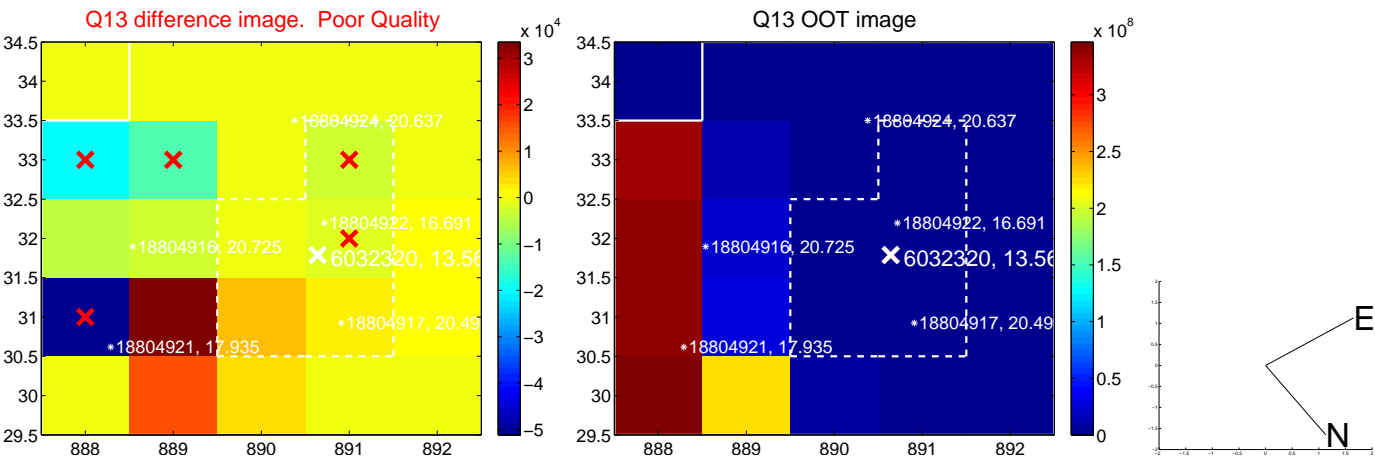
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



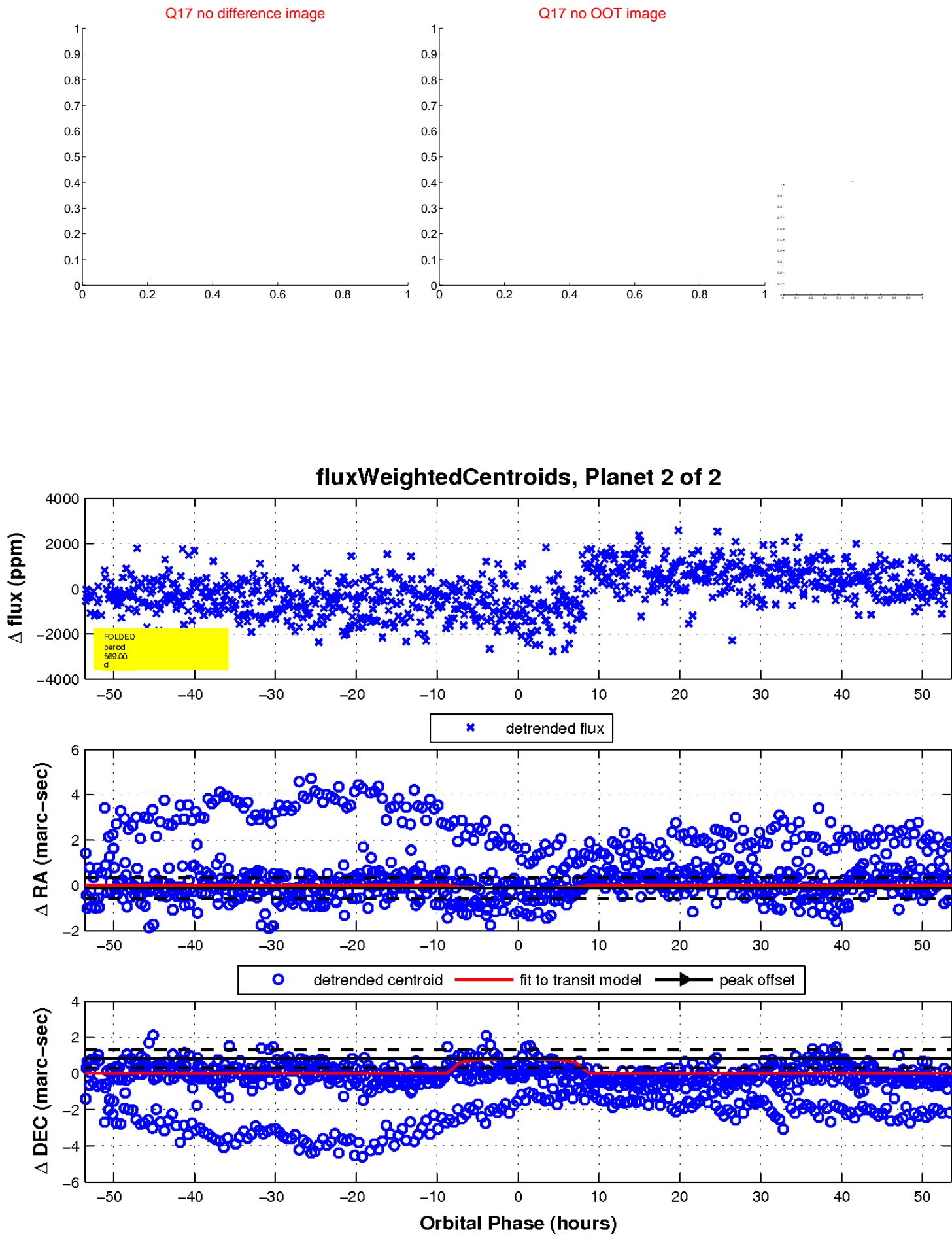
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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



UKIRT Image

Declination

