

KIC 004832273

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})
004832273-01	OBS	No	680.454960	205.669779	302.3	13.538	7.8	8.4	1.04	6316	1.94	0.66

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
004832273-01	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_CHASES_MARSHALL_SKYE—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.

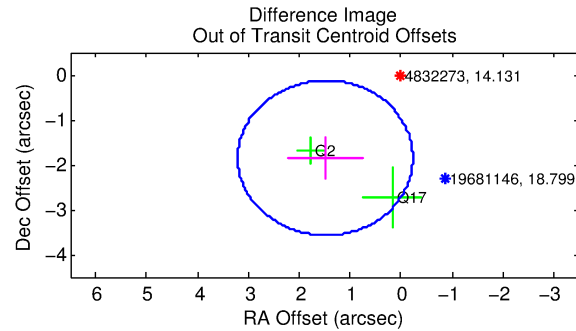
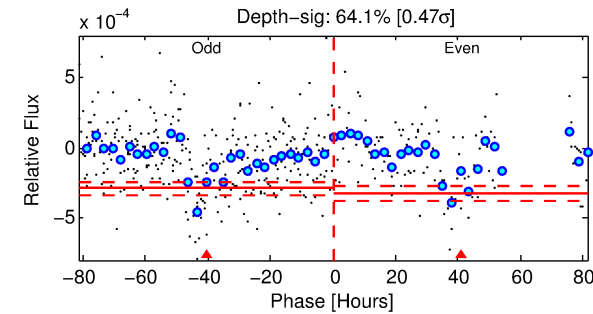
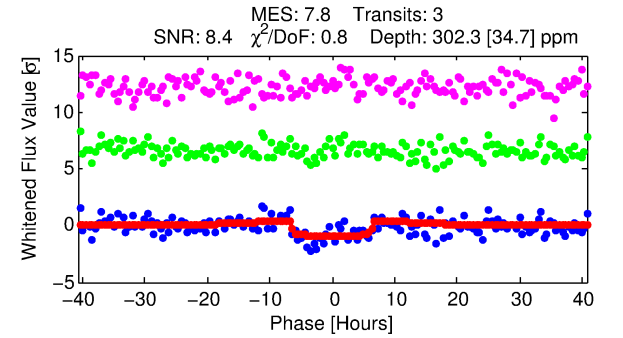
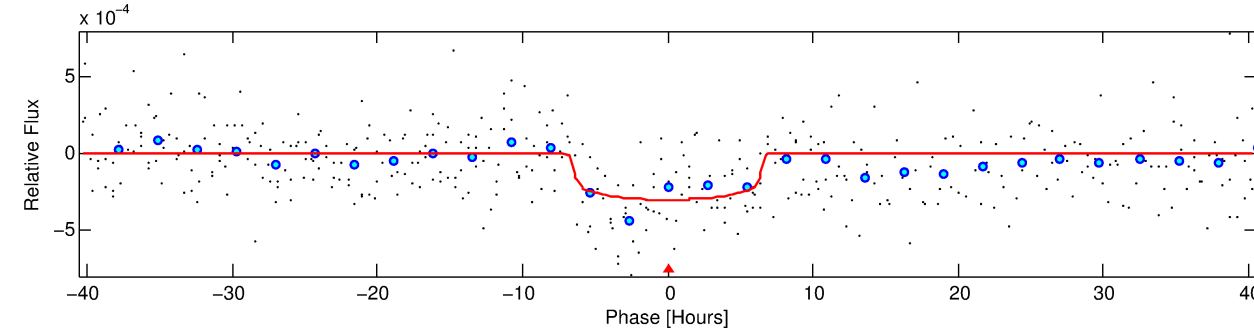
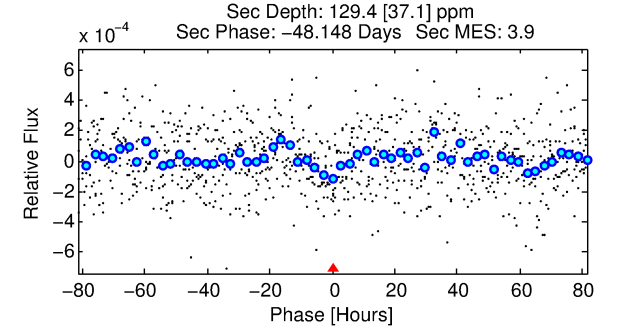
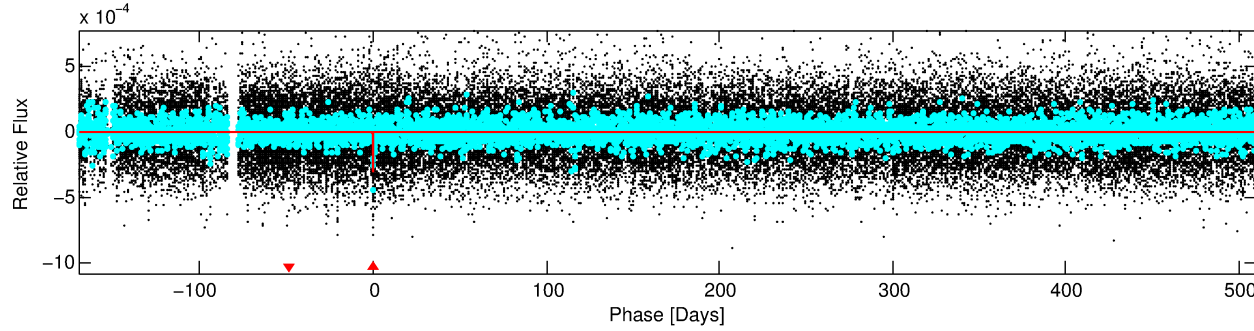
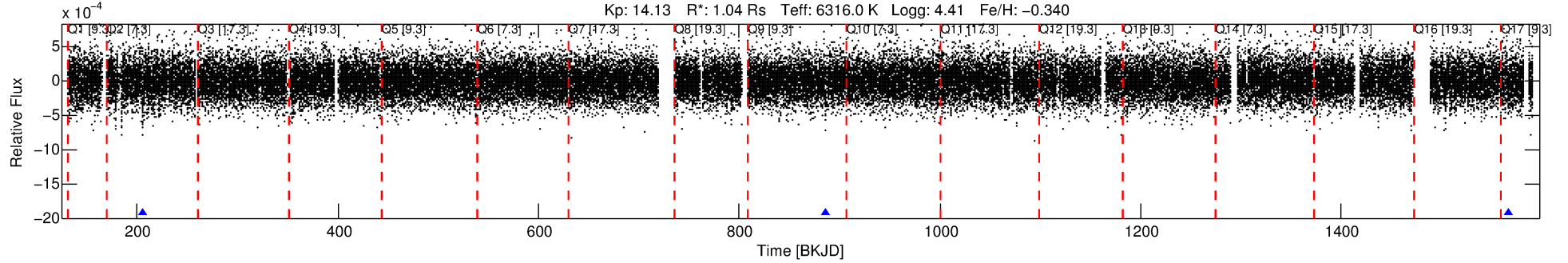
Ephemeris Match Information For 004832273-01

No Significant Match Found

DV One-Page Summary

KIC: 4832273 Candidate: 1 of 1 Period: 680.455 d
KOI: K06455 Corr: No Ephemeris Match

Kp: 14.13 R*: 1.04 Rs Teff: 6316.0 K Logg: 4.41 Fe/H: -0.340



DV Fit Results:

Period = 680.45496 [0.01216] d
Epoch = 205.6698 [0.0165] BKJD
Rp/R* = 0.0172 [0.0054]
a/R* = 273.25 [458.64]
b = 0.73 [1.09]
Seff = 0.66 [0.27]
Teq = 230 [23] K
Rp = 1.94 [0.87] Re
a = 1.5210 [0.4016] AU
Ag = 43726.12 [34776.17] [1.26σ]
Teffp = 5141 [911] K [5.39σ]

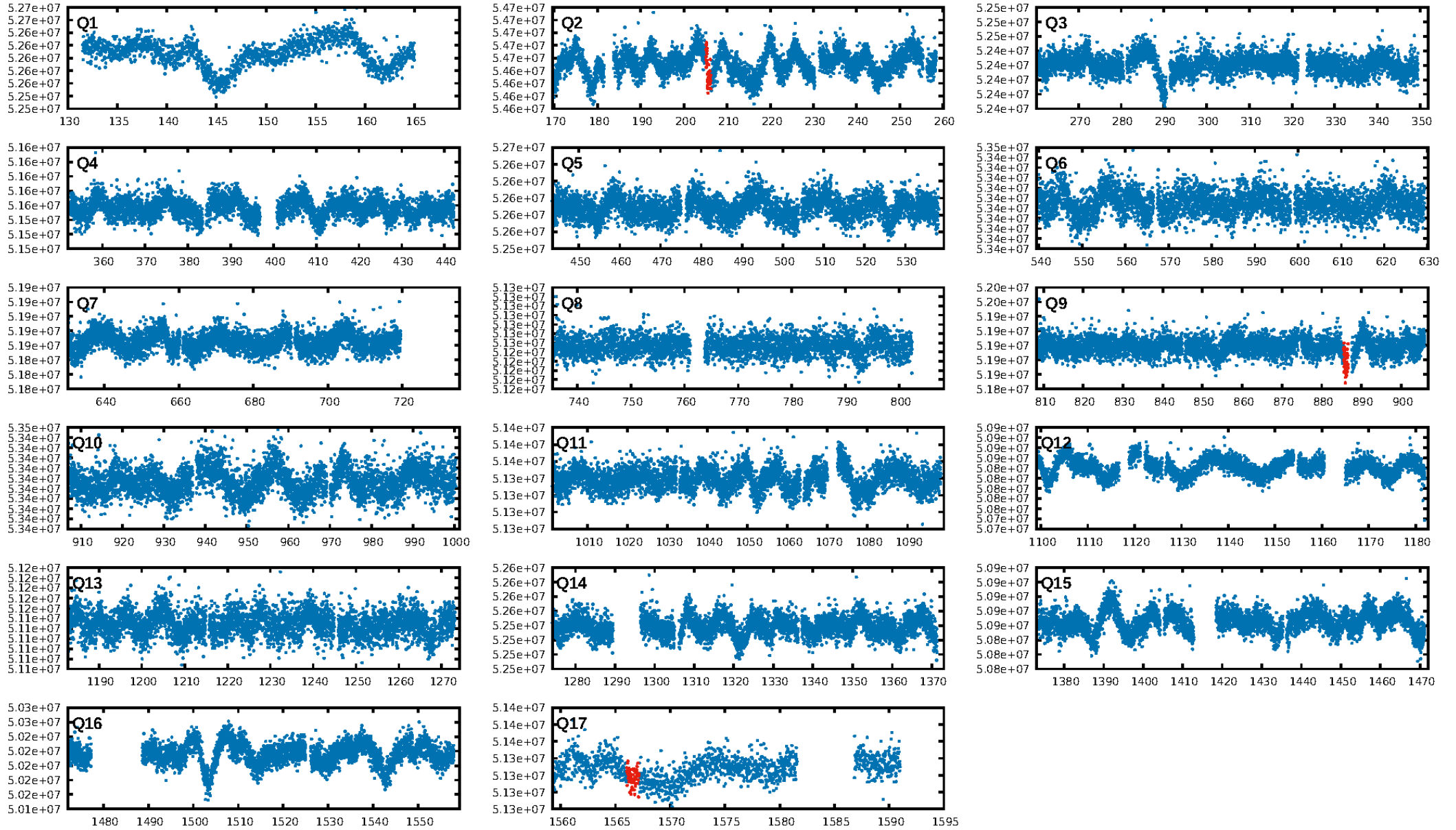
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: 7.9%
ModelChiSquareGof-sig: 100.0%
Bootstrap-pfa: 7.41e-15
RollingBand-fgt: 1.00 [2/2]
GhostDiagnostic-chr: 10.02
Centroid-sig: 17.0%
Centroid-so: 1.484 arcsec [1.23σ]
OotOffset-rm: 2.373 arcsec [4.14σ]
KicOffset-rm: 2.339 arcsec [4.27σ]
OotOffset-st: 1/0/0/1 [2]
KicOffset-st: 1/0/0/1 [2]
DiffImageQuality-fgm: 1.00 [2/2]
DiffImageOverlap-fno: 1.00 [2/2]

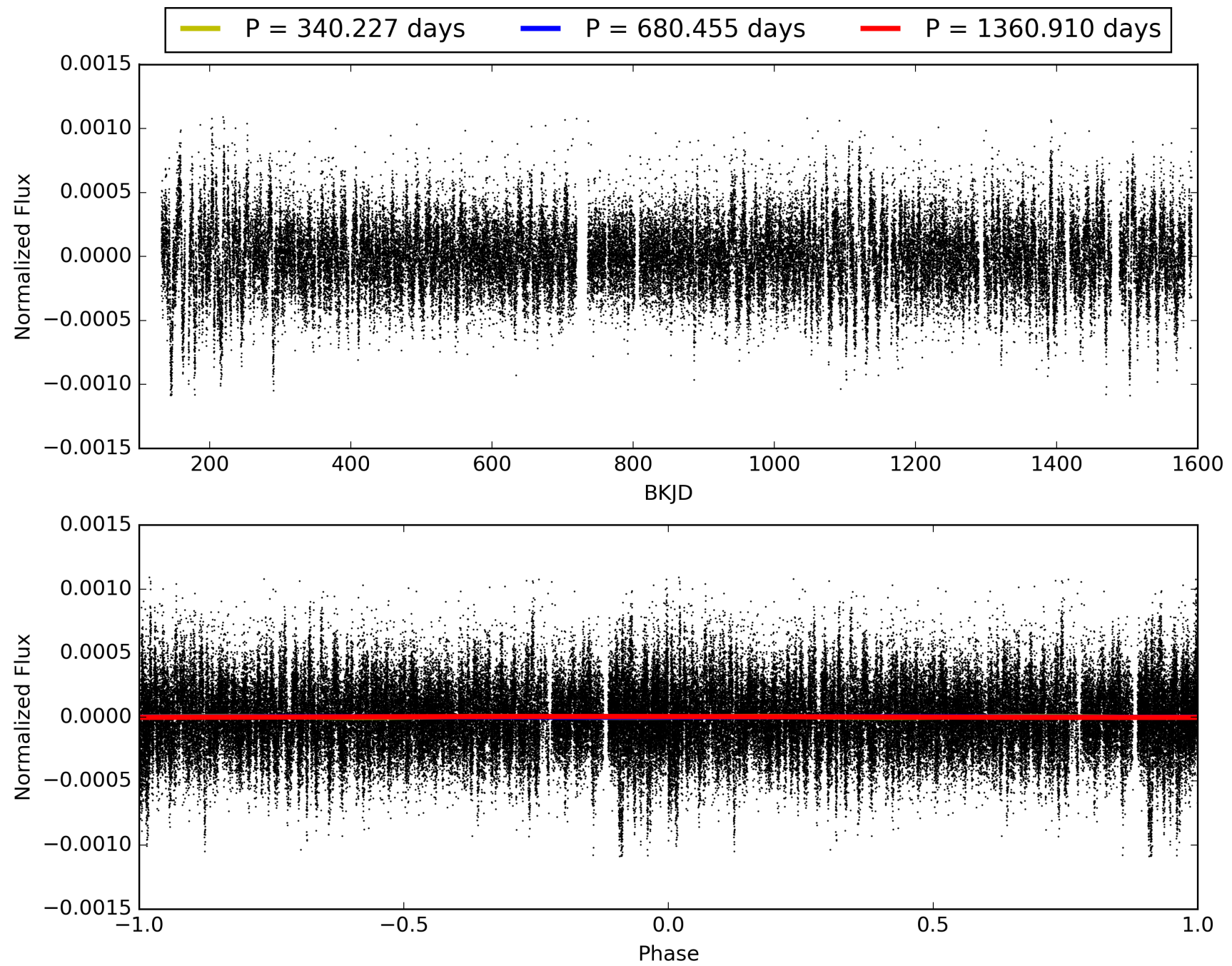
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 31-Jan-2016 03:55:31 Z

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

TCE 004832273-01, PDC Light Curves

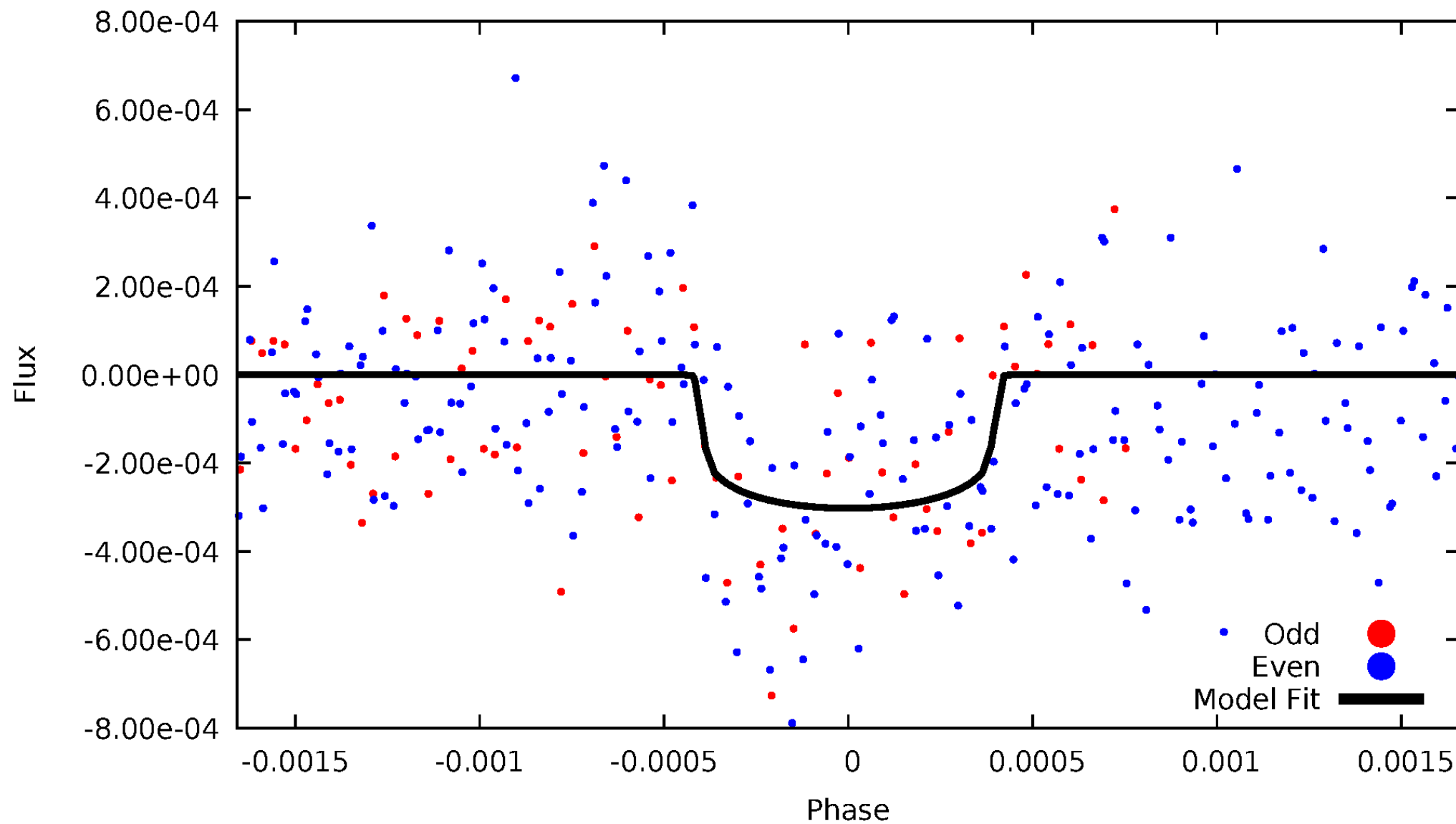


TCE 004832273-01



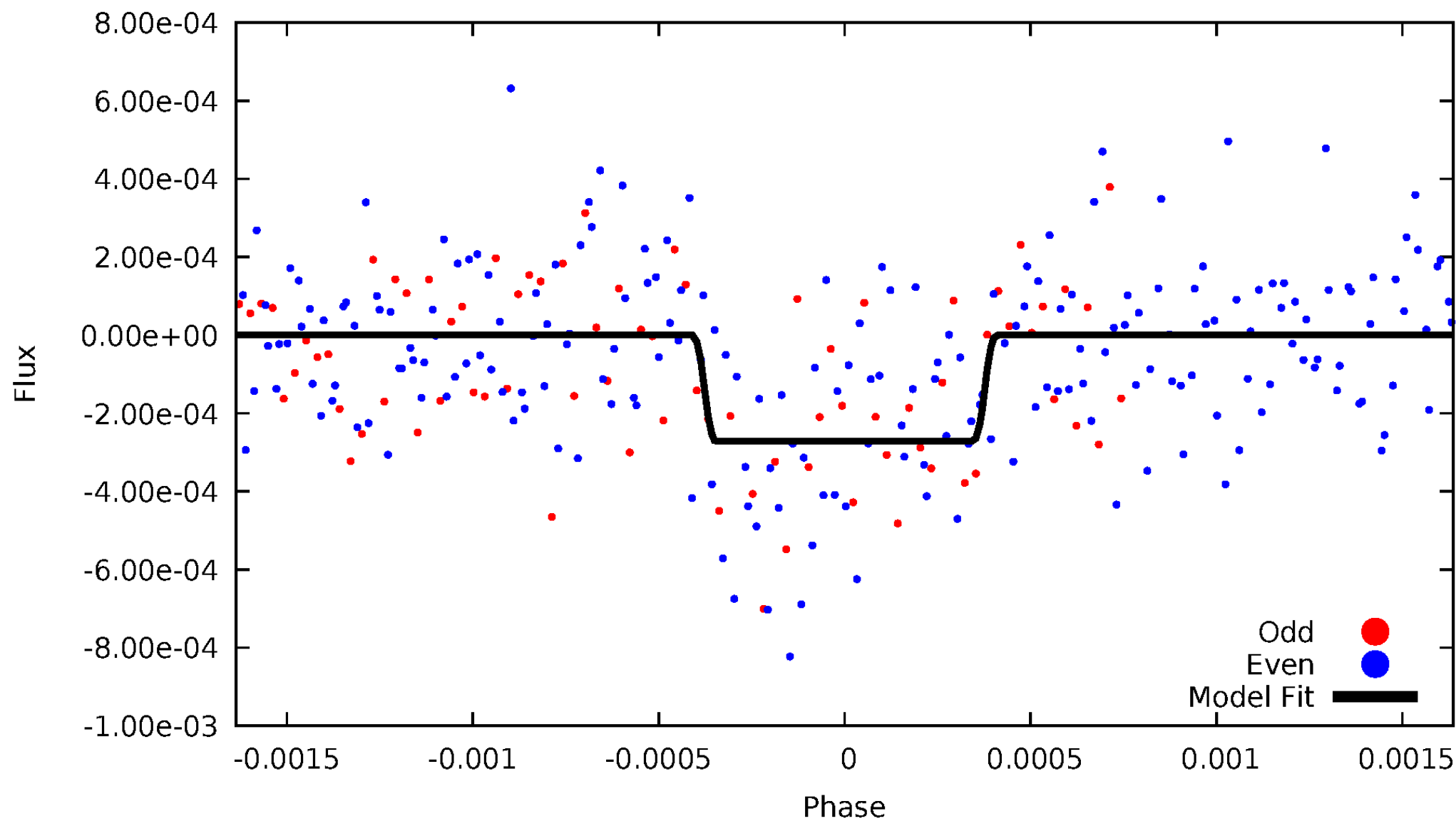
DV Odd/Even

TCE 004832273-01



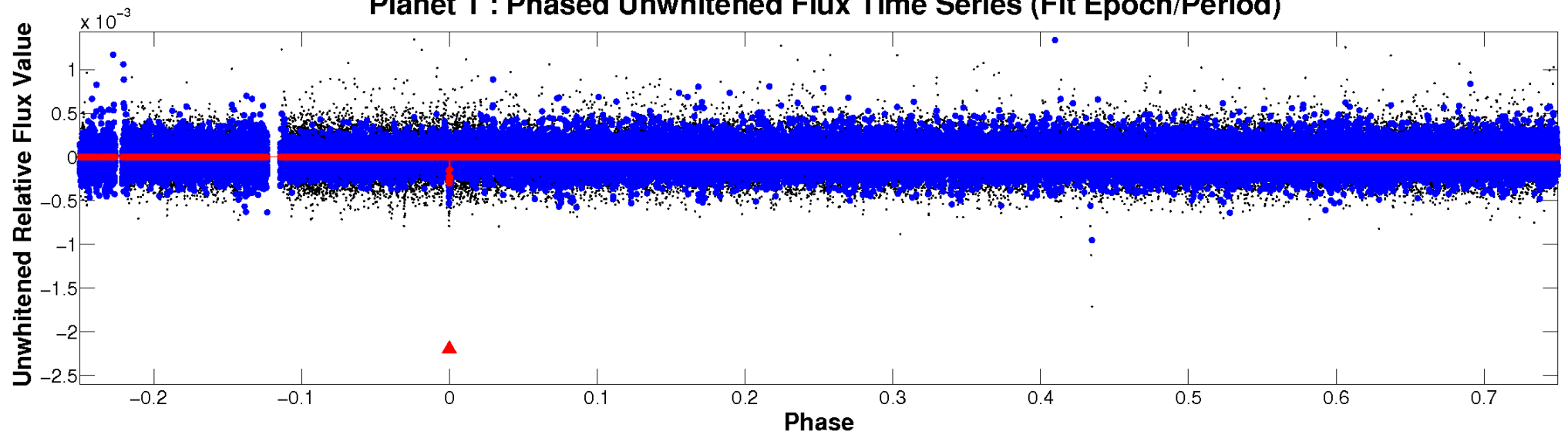
ALT Odd/Even

TCE 004832273-01

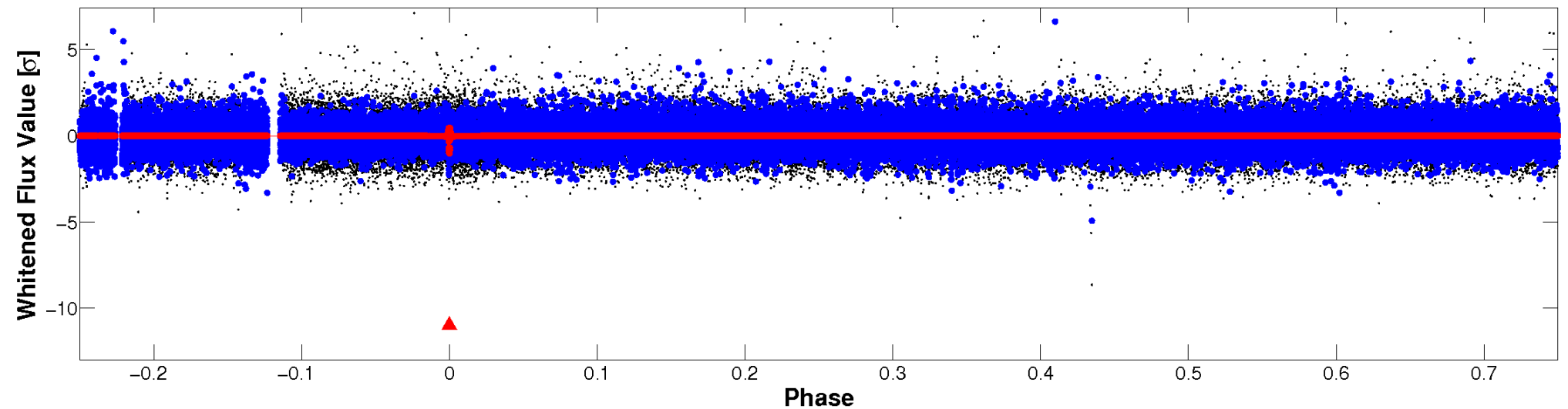


Non-Whitened Vs. Whitened Light Curve

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

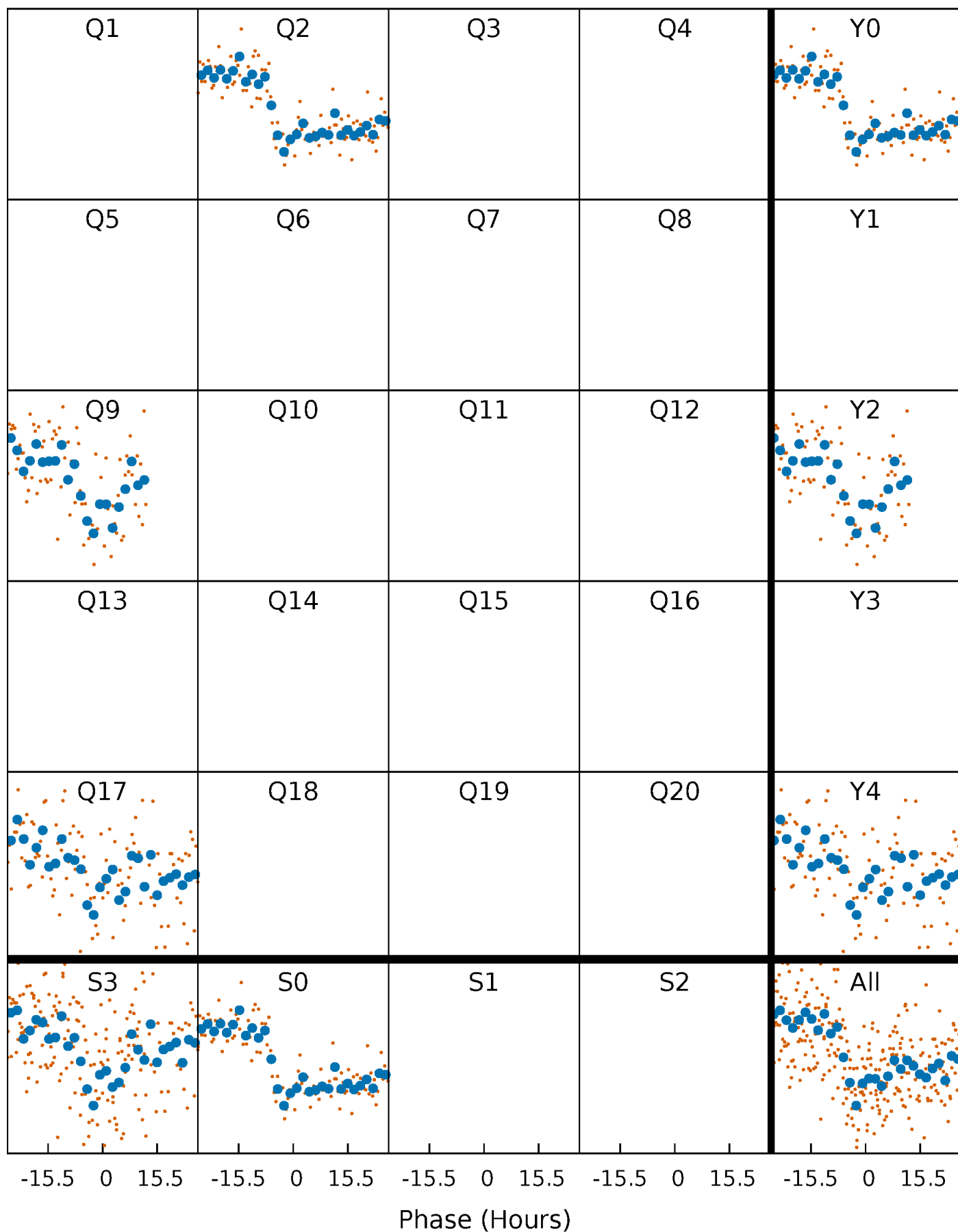


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



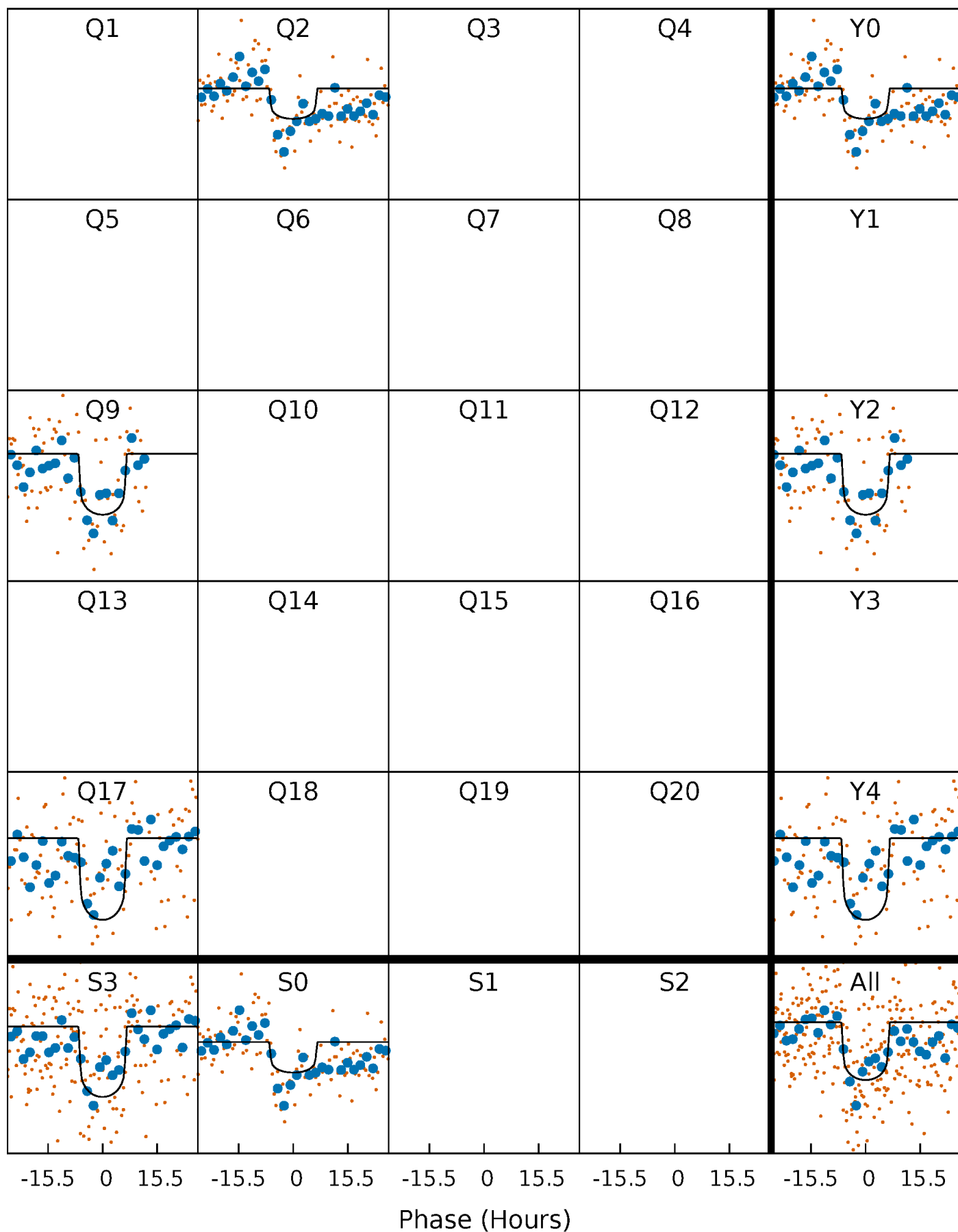
PDC Quarter-Phased Transit Curves

TCE 004832273-01 $P=680.454960$ Days $T_0=205.669779$ (BKJD)



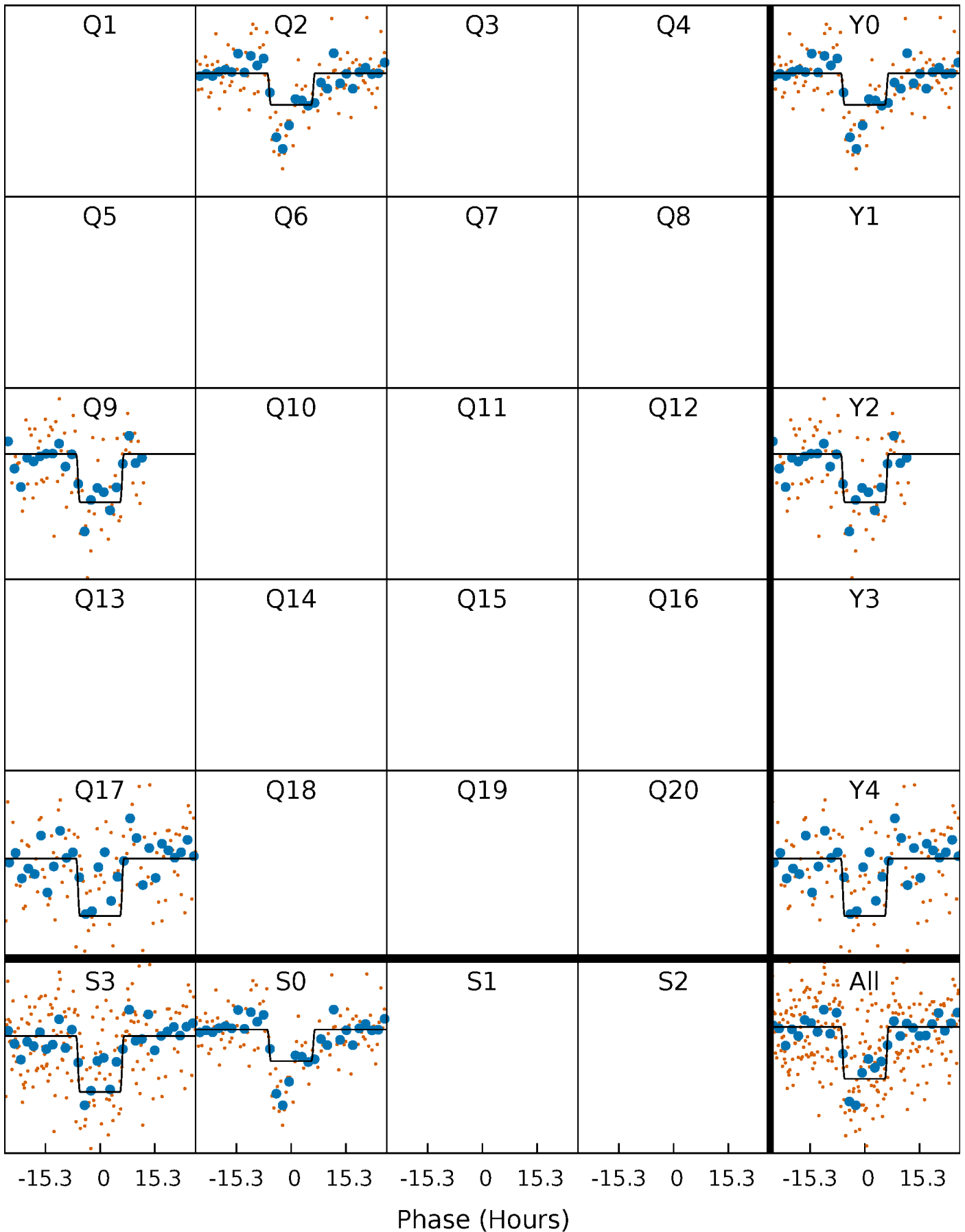
DV Quarter-Phased Transit Curves

TCE 004832273-01 P=680.454960 Days $T_0=205.669779$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

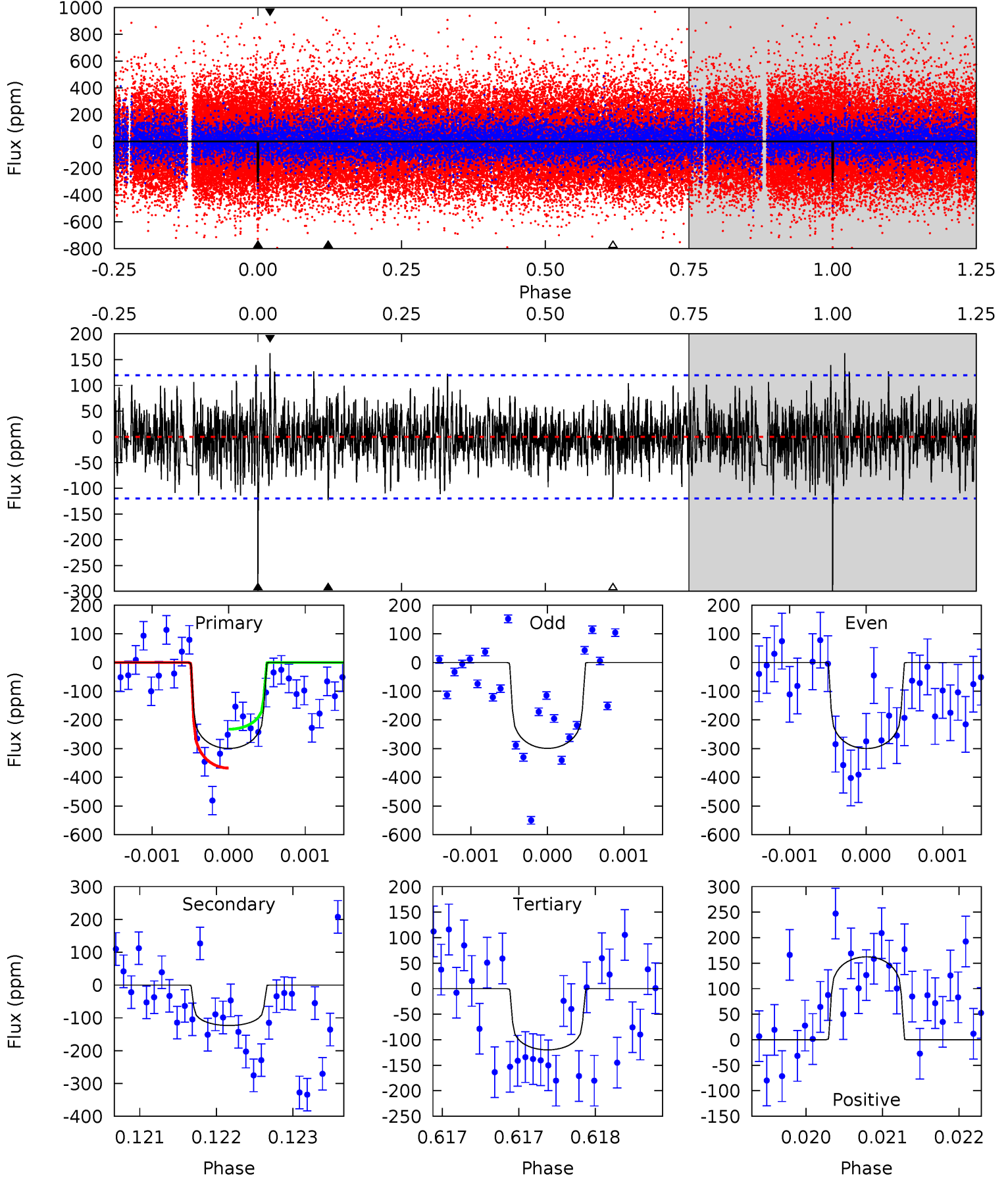
TCE 004832273-01 P=680.464793 Days $T_0=205.665931$ (BKJD)



DV Model-Shift Uniqueness Test

004832273-01, P = 680.454960 Days, E = 205.669779 Days

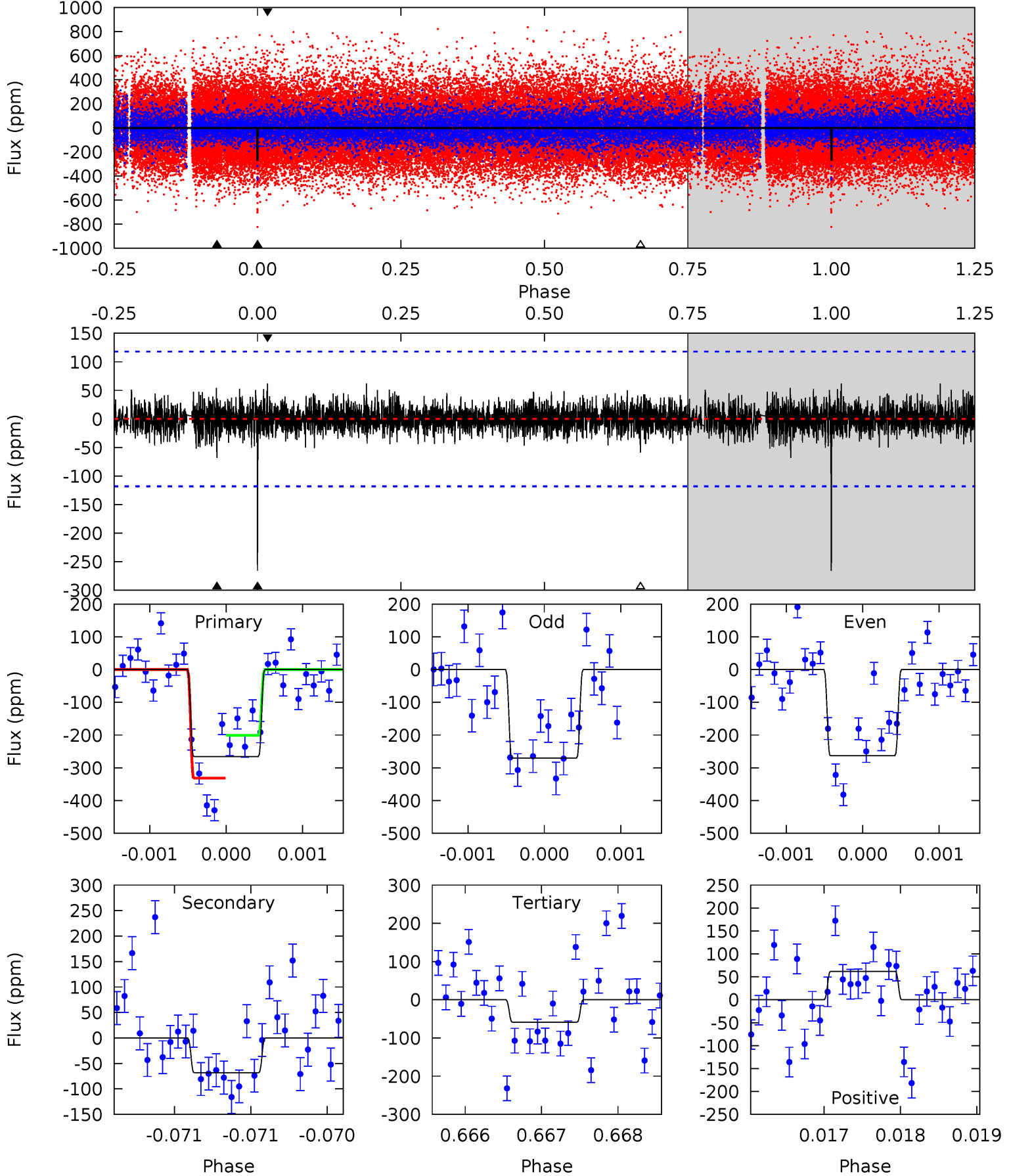
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
13.7	5.65	5.49	7.44	5.48	3.34	1.69	8.23	6.28	0.16	-1.79	0.01	1.00	0.35	3.11



Alt Model-Shift Uniqueness Test

004832273-01, P = 680.464793 Days, E = 205.665931 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
12.4	3.17	2.73	2.88	5.49	3.35	0.73	9.63	9.48	0.44	0.29	0.17	0.97	0.19	3.04



Stellar Parameters For KIC 004832273

	$T_{\text{eff}}(K)$	$\log(g)$	$[\text{Fe}/\text{H}]$	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	6316^{+170}_{-207}	$4.413^{+0.084}_{-0.210}$	$-0.340^{+0.250}_{-0.300}$	$1.036^{+0.325}_{-0.116}$	$1.010^{+0.159}_{-0.106}$	$1.278^{+0.467}_{-0.660}$
	+3%/-3%	+2%/-5%	+74%/-88%	+31%/-11%	+16%/-10%	+37%/-52%
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 004832273-01 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	A_{obs}
DV	-123 ± 22	$1.97^{+0.74}_{-0.64}$	324^{+23}_{-15}	5167^{+1053}_{-622}	40065^{+47263}_{-18781}
Alt.	-68 ± 21	$1.92^{+0.67}_{-0.68}$	326^{+24}_{-18}	4619^{+1001}_{-602}	22636^{+34783}_{-11625}

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

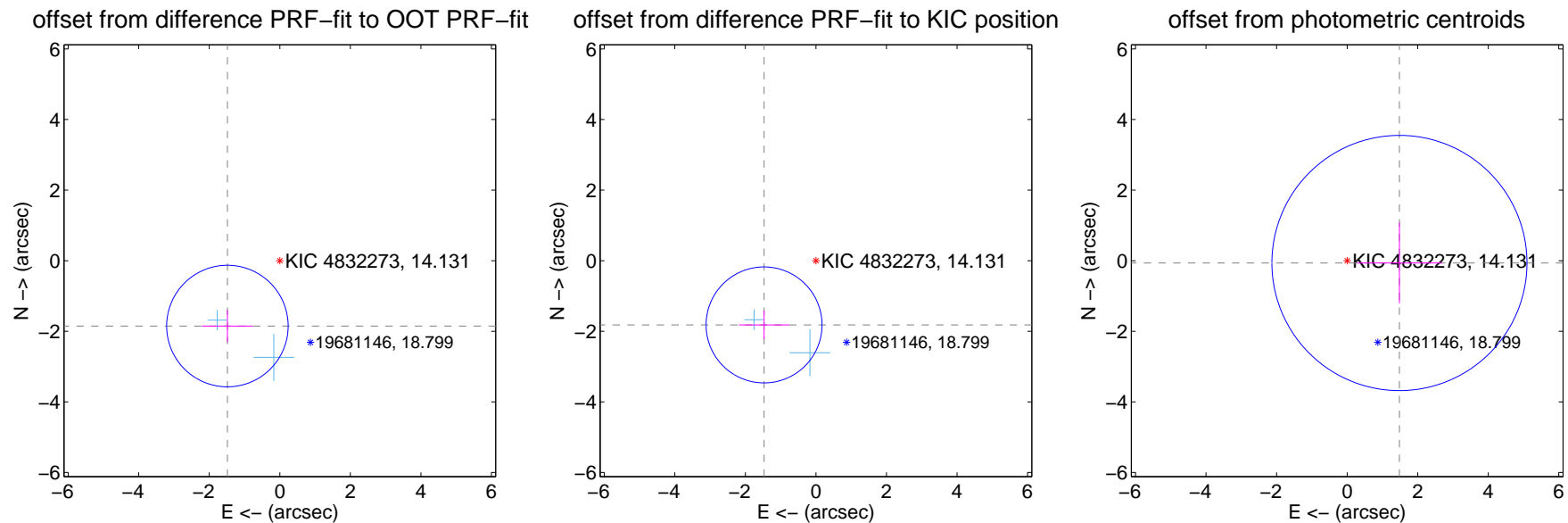
DV Centroid Data

Supplemental centroid analysis for 004832273-01. Kepler magnitude: 14.13. Transit SNR 8.40

There are 2 quarters with good PRF difference image offsets

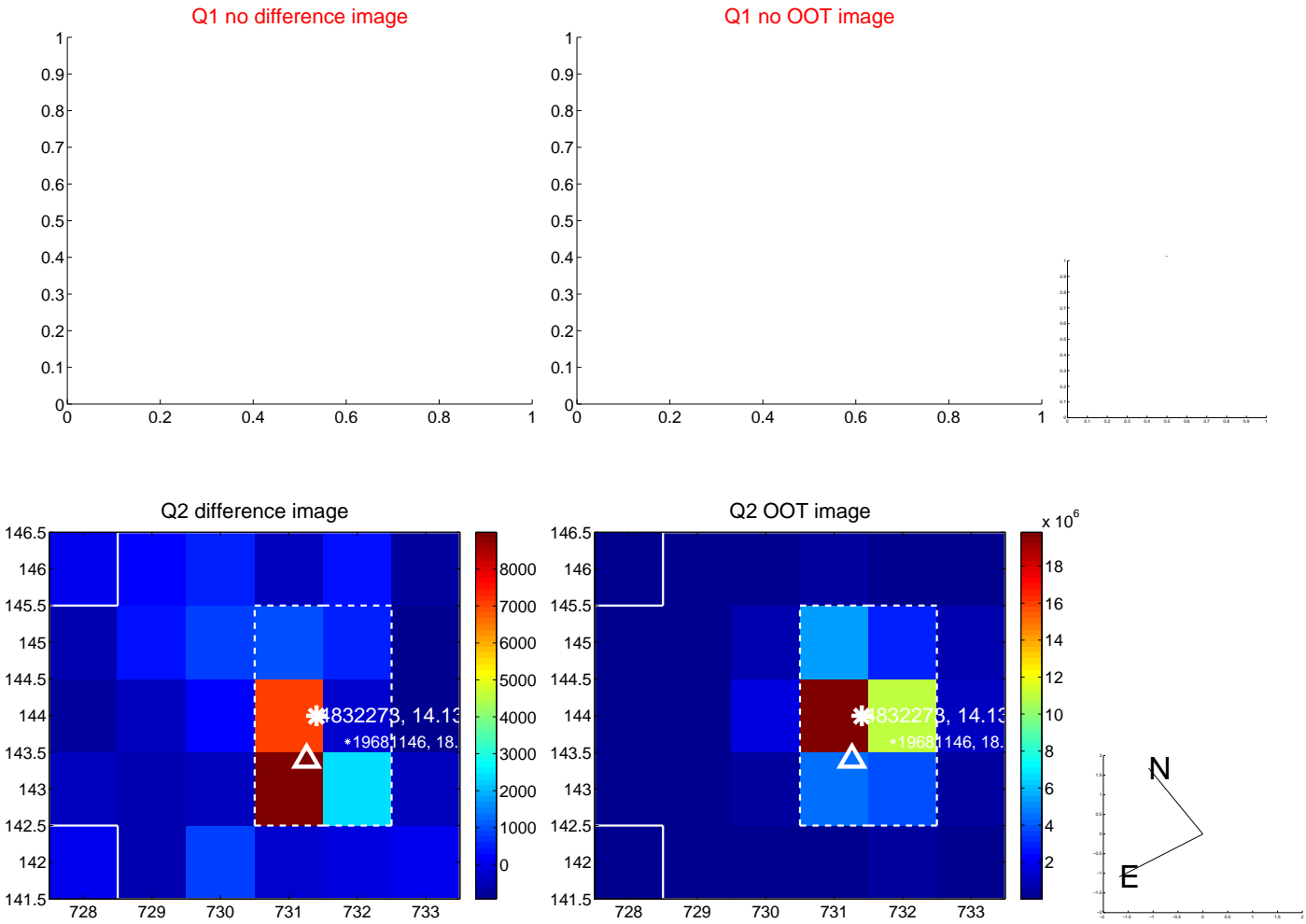
The direct PRF centroid is offset from the target star catalog position by about 0.13 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	2.373 ± 0.574	4.14	1.485 ± 0.722	-1.851 ± 0.454
PRF-fit source offset from KIC position	2.339 ± 0.548	4.27	1.470 ± 0.713	-1.819 ± 0.404
photometric centroid source offset	1.48 ± 1.21	1.23	-1.48 ± 1.21	-0.06 ± 1.14



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 ×: 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.



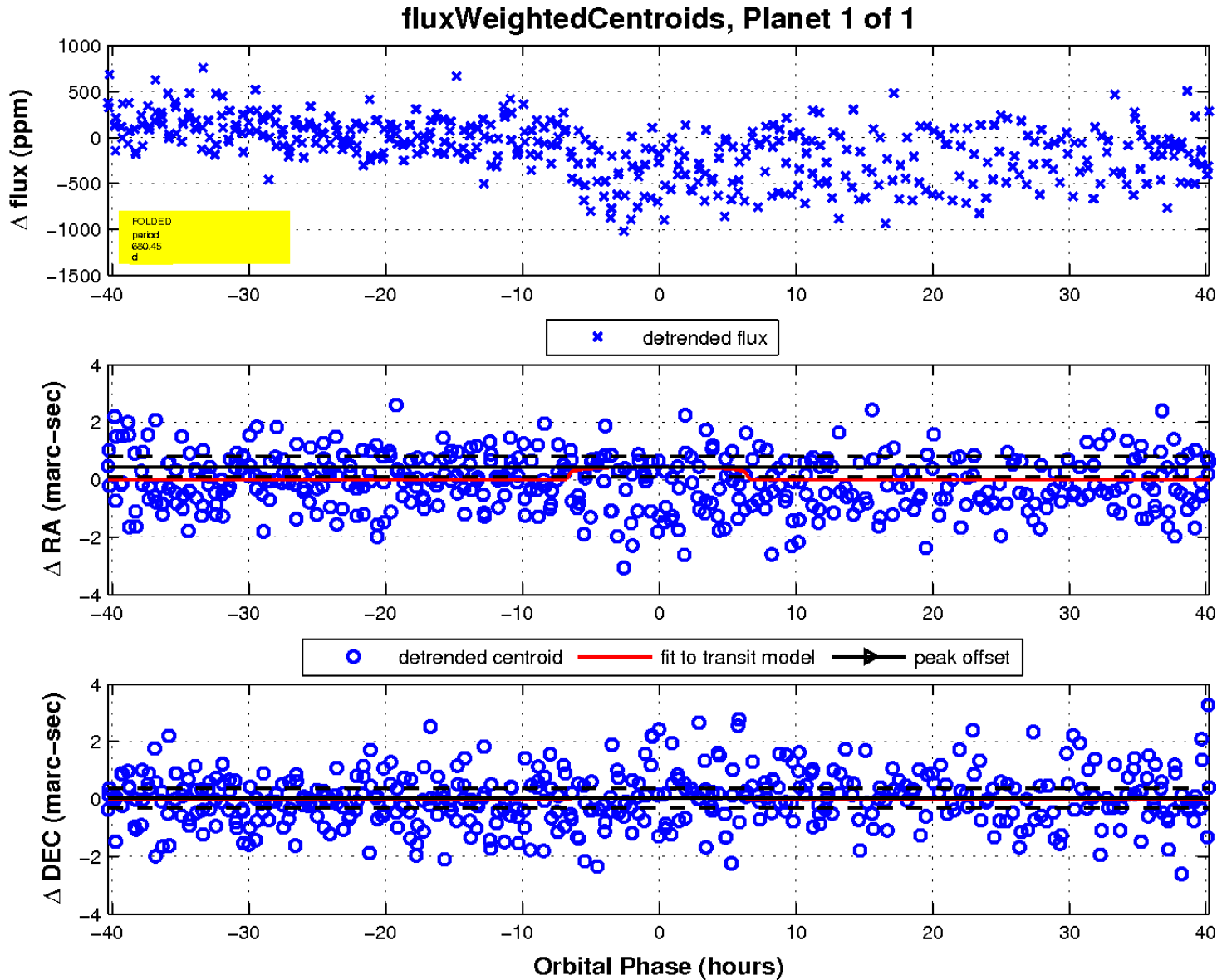
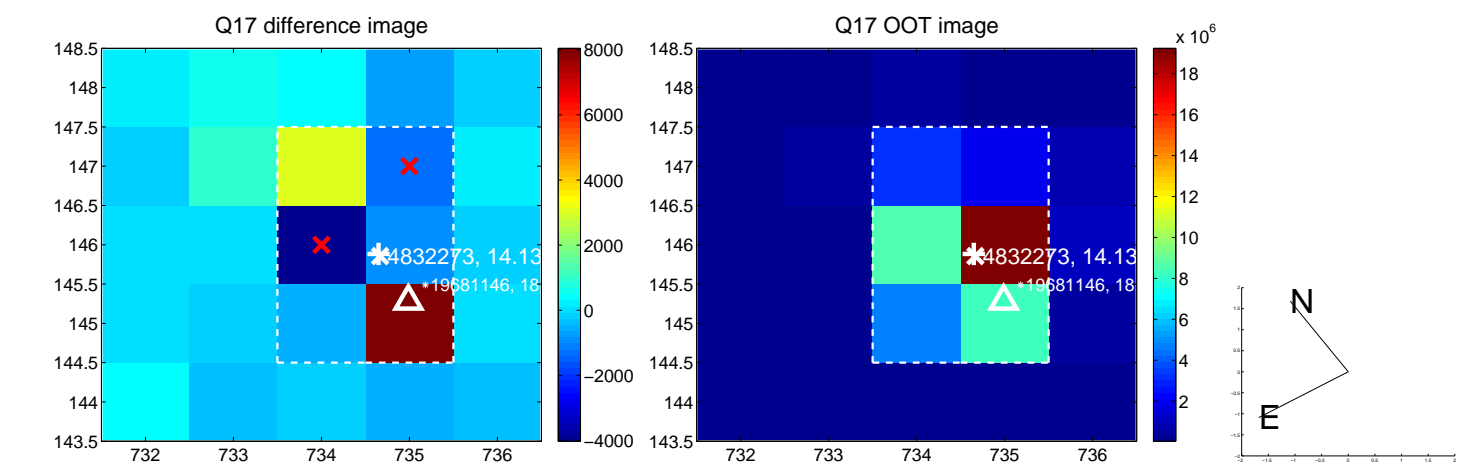
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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UKIRT Image

Declination

