

KIC 008323104

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})
008323104-01	OBS	No	6.043384	132.673109	4.6	20.385	8.3	9.5	2.34	7796	0.59	2984.14

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
008323104-01	OBS	FP	0.00	1	0	0	0	LPP_DV—MOD_NONUNIQ_DV—CENT_SATURATED

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

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

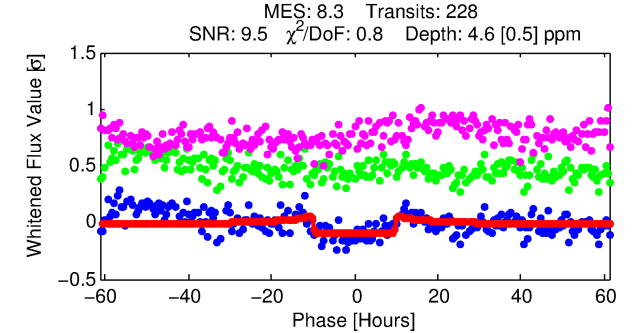
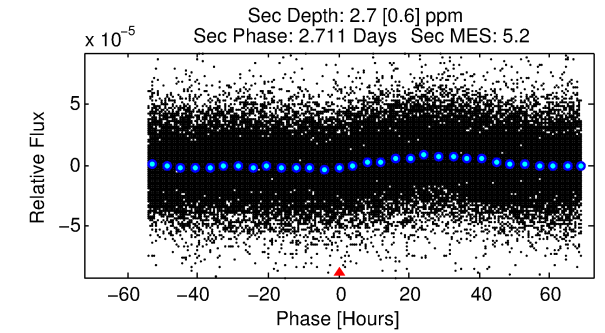
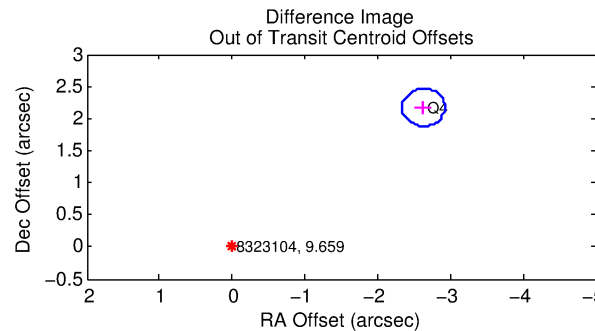
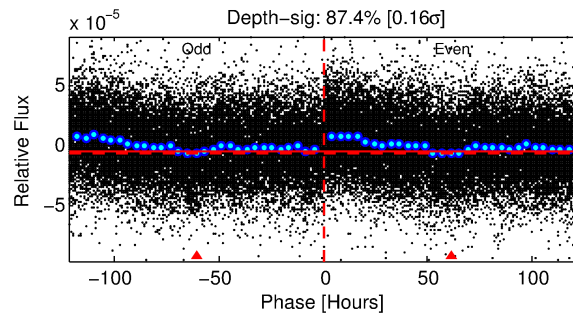
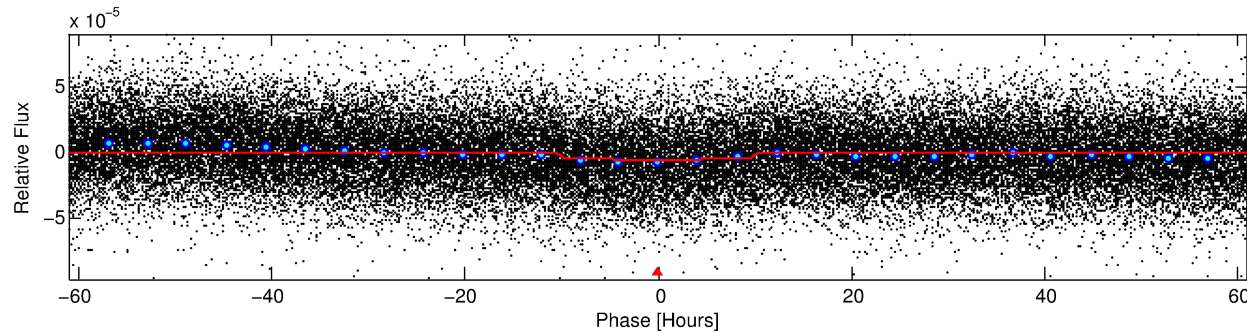
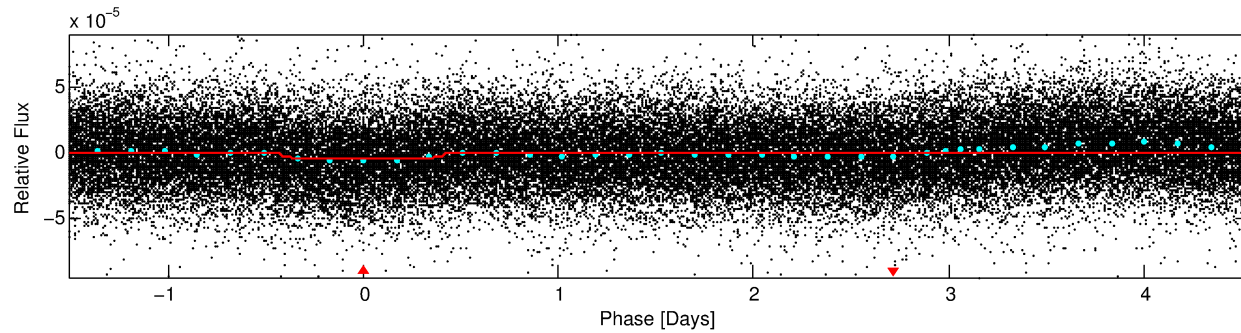
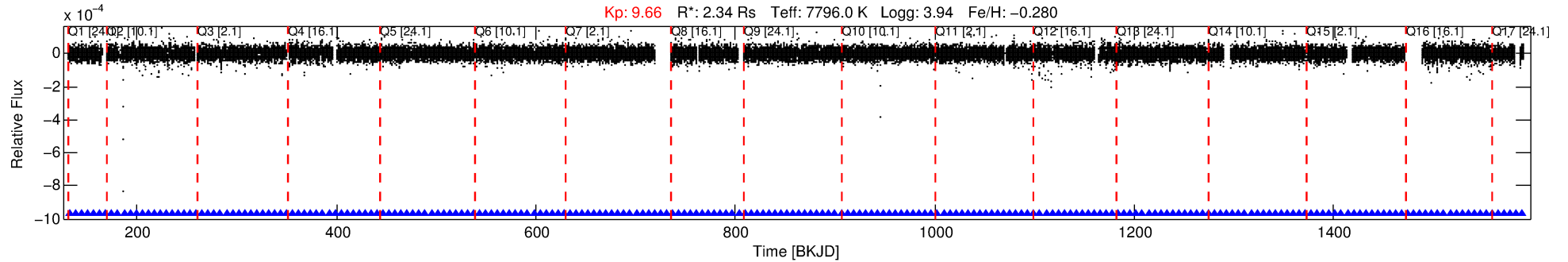
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 008323104-01

No Significant Match Found

DV One-Page Summary

KIC: 8323104 Candidate: 1 of 1 Period: 6.043 d



DV Fit Results:

Period = 6.04338 [0.00010] d
Epoch = 132.6731 [0.0118] BKJD
 $R_p/R^* = 0.0023$ [0.0002]
 $a/R^* = 1.35$ [0.27]
 $b = 0.91$ [0.09]
 $S_{\text{eff}} = 2984.14$ [1538.50]
 $T_{\text{eq}} = 1885$ [243] K
 $R_p = 0.59$ [0.21] R_e
 $a = 0.0779$ [0.0246] AU
 $A_g = 25.83$ [14.48] [1.72 σ]
 $T_{\text{eff}} = 6569$ [529] K [8.04 σ]

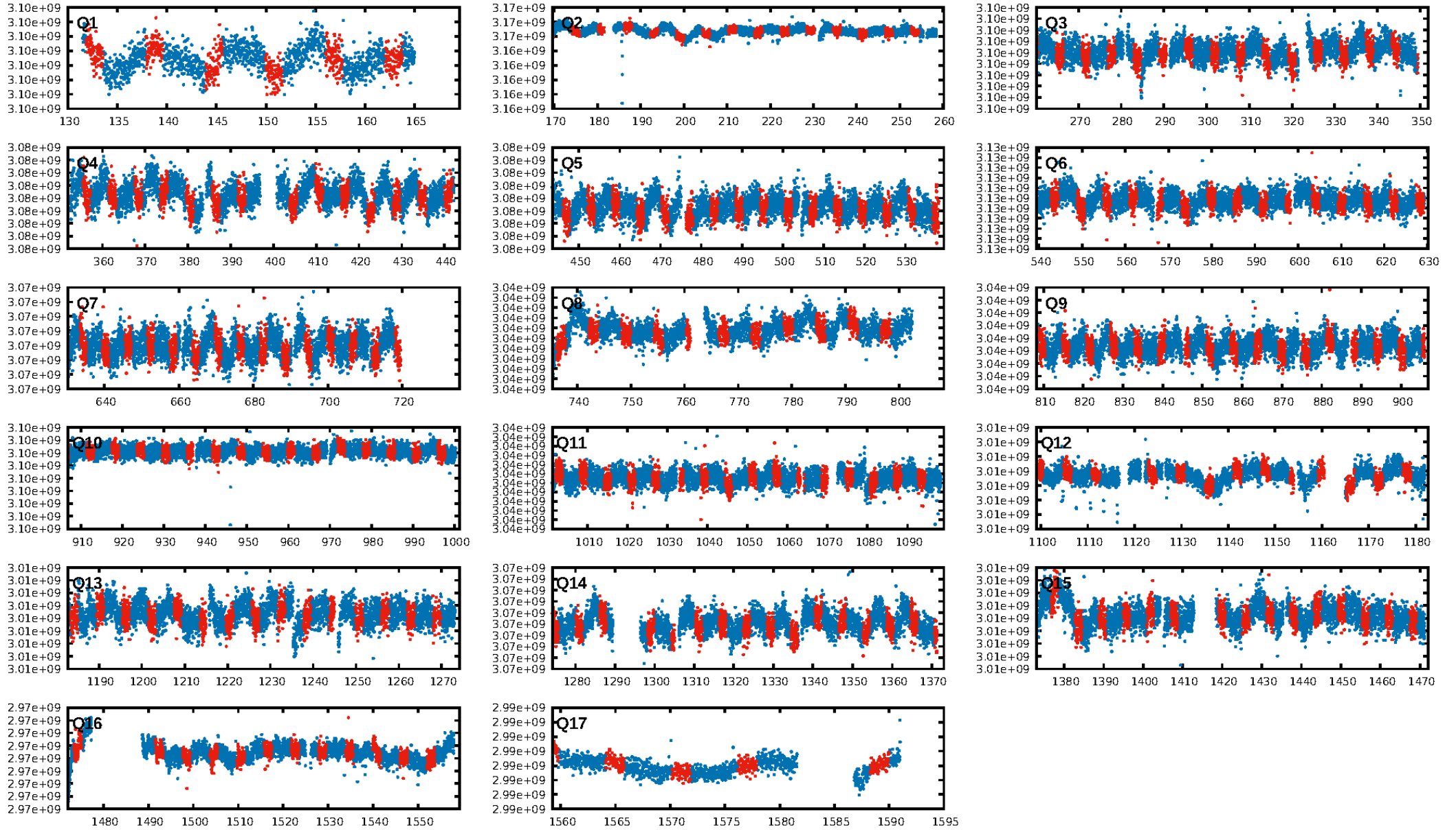
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: 4.73e-18
RollingBand-fgt: 1.00 [217/217]
GhostDiagnostic-chr: N/A
Centroid-sig: N/A
Centroid-so: N/A
OotOffset-rm: 3.411 arcsec [35.04 σ]
KicOffset-rm: 4.543 arcsec [46.25 σ]
OotOffset-st: 0/0/1/0 [1]
KicOffset-st: 0/0/1/0 [1]
DiffImageQuality-fgm: 0.00 [0/1]
DiffImageOverlap-fno: 1.00 [17/17]

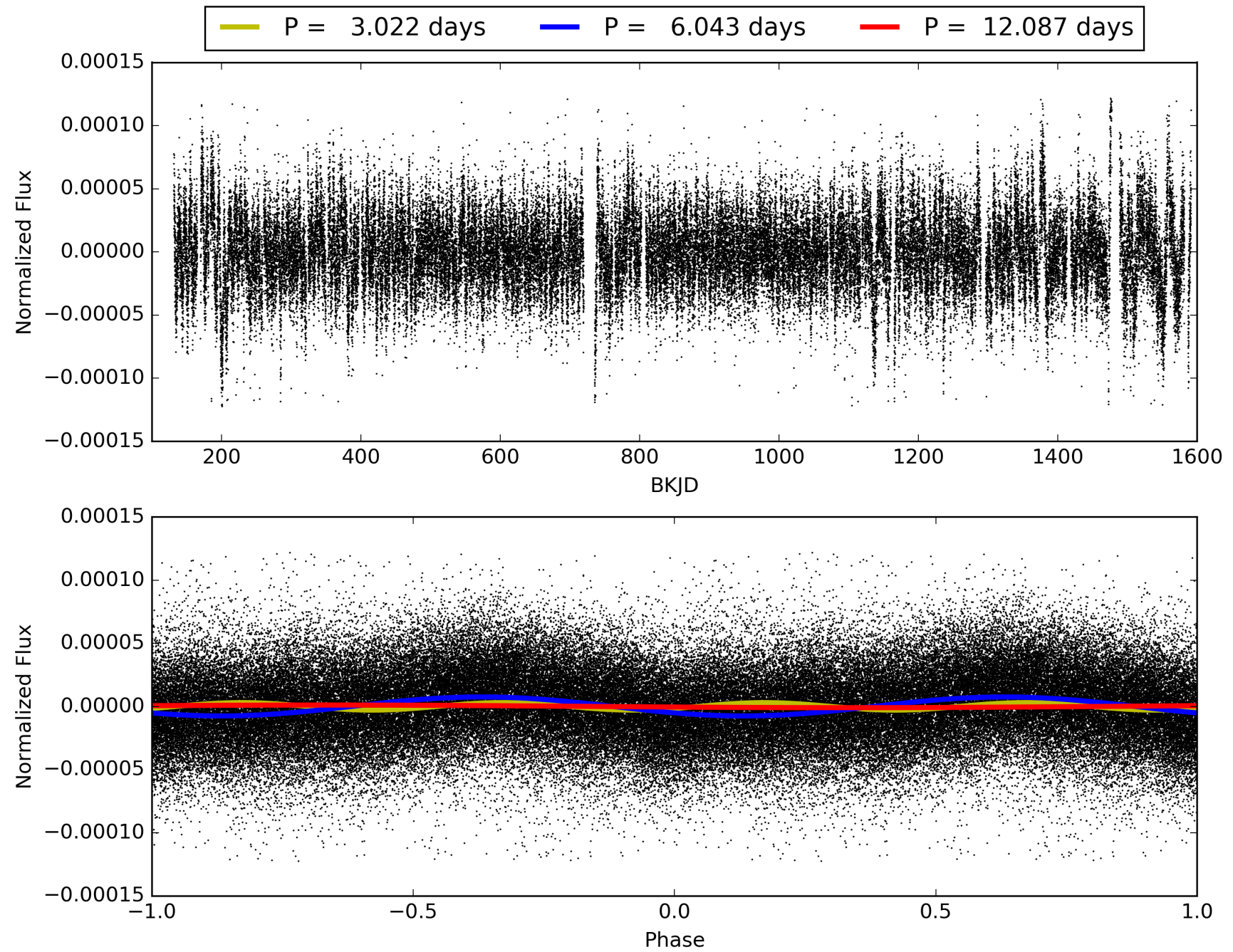
Software Revision: svn-ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 30-Jan-2016 13:41:41 Z

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

TCE 008323104-01, PDC Light Curves

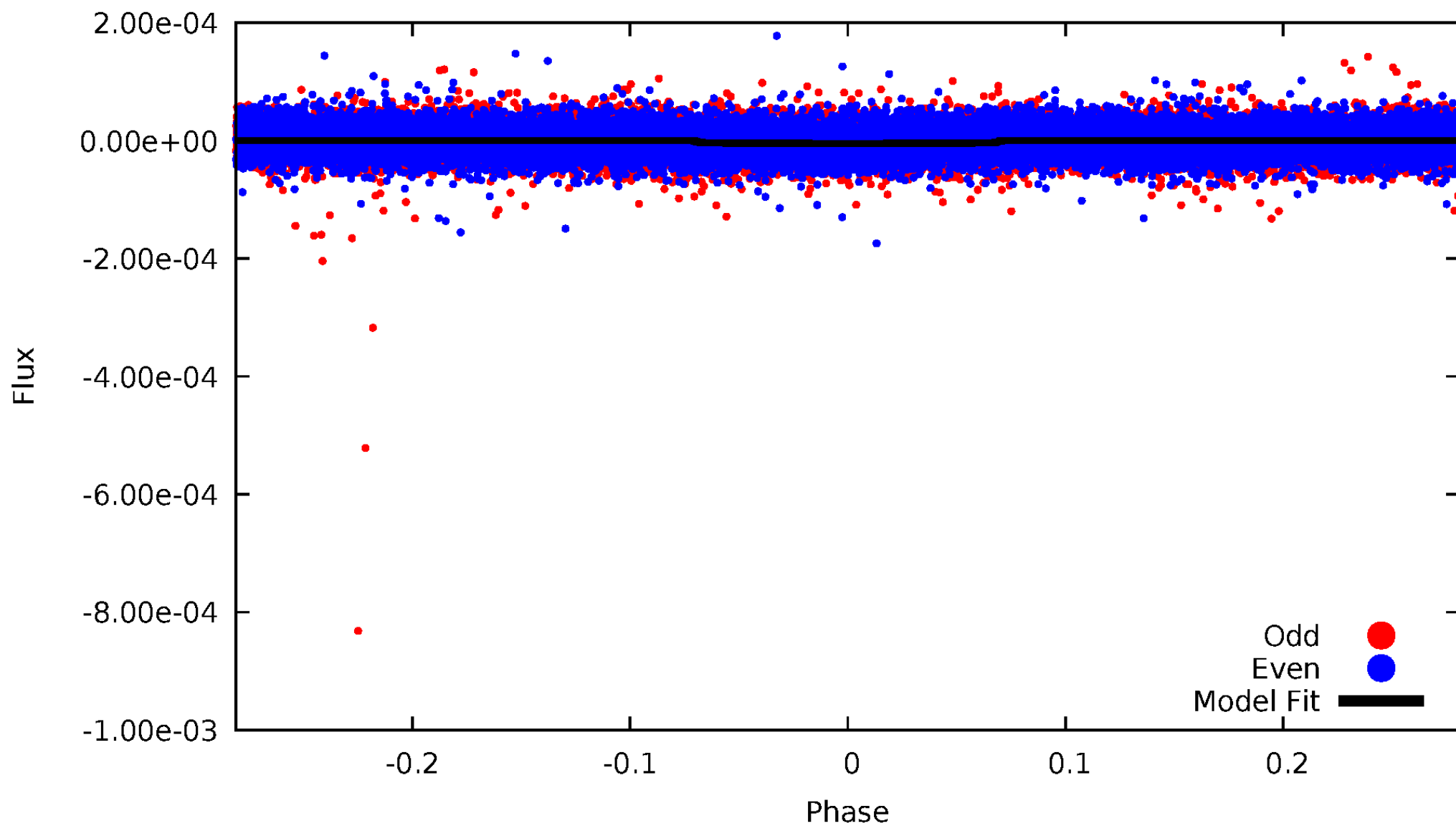


TCE 008323104-01



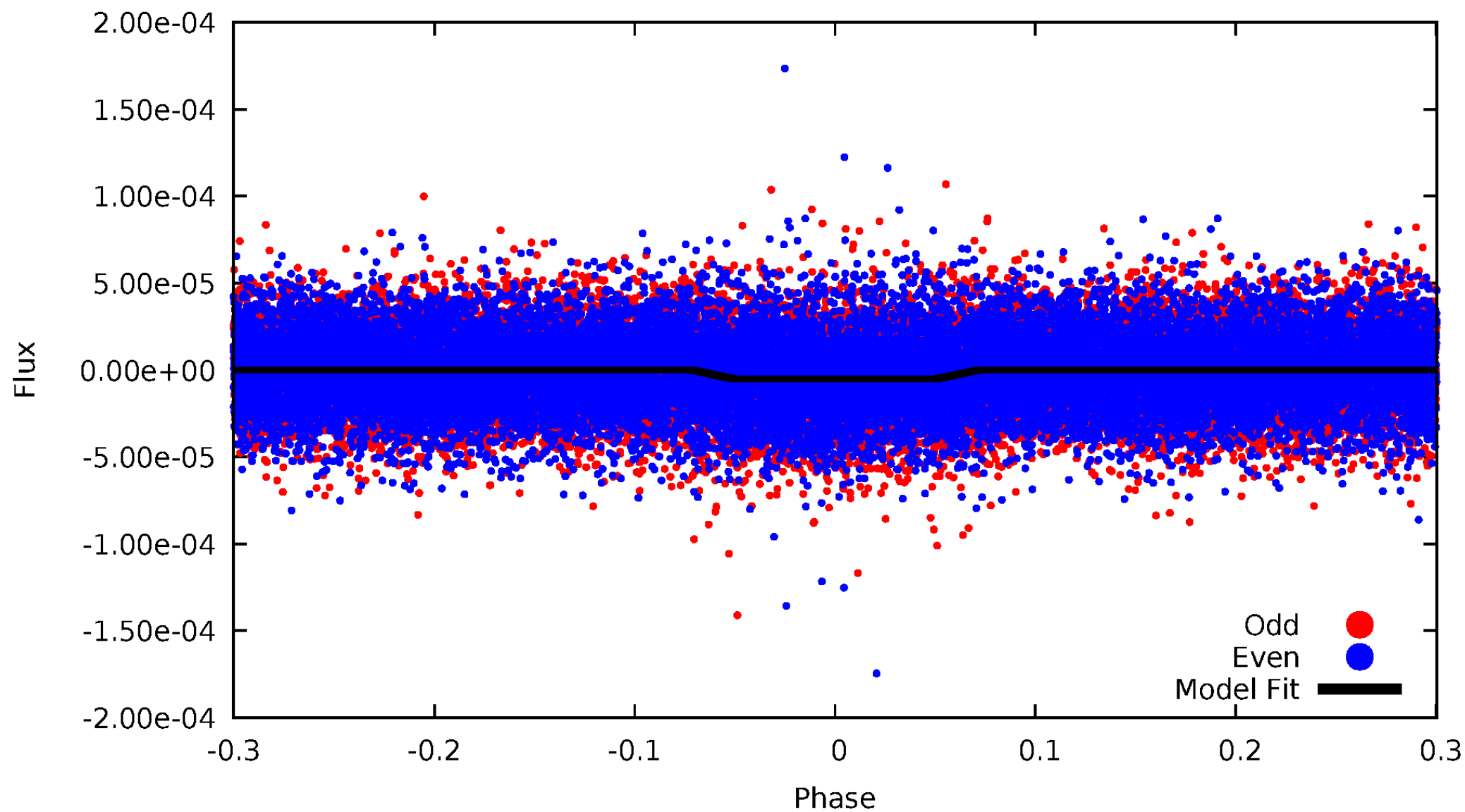
DV Odd/Even

TCE 008323104-01



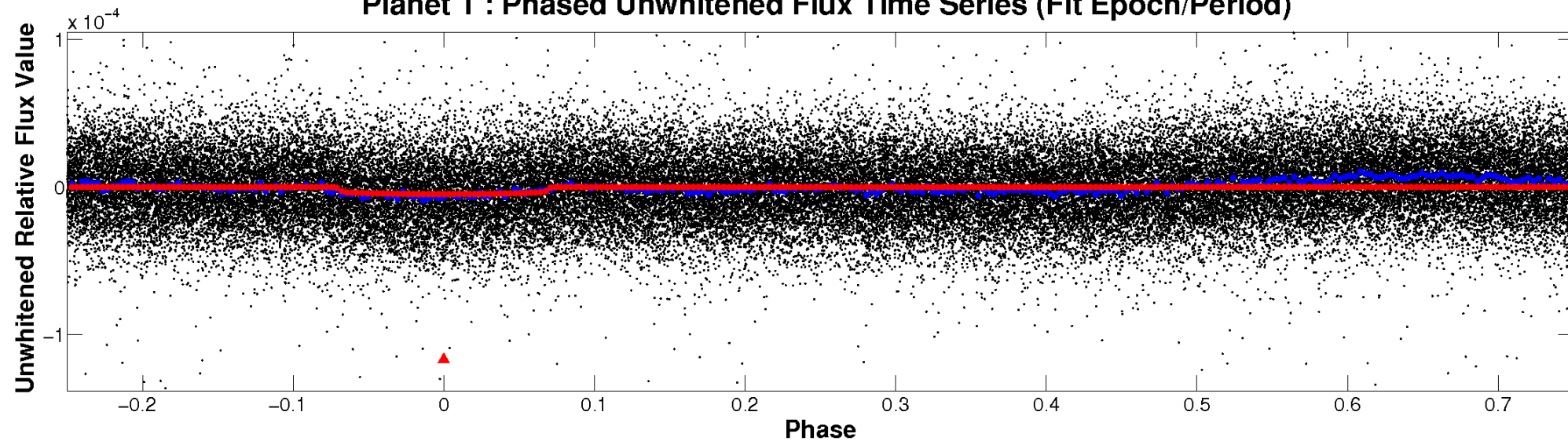
ALT Odd/Even

TCE 008323104-01

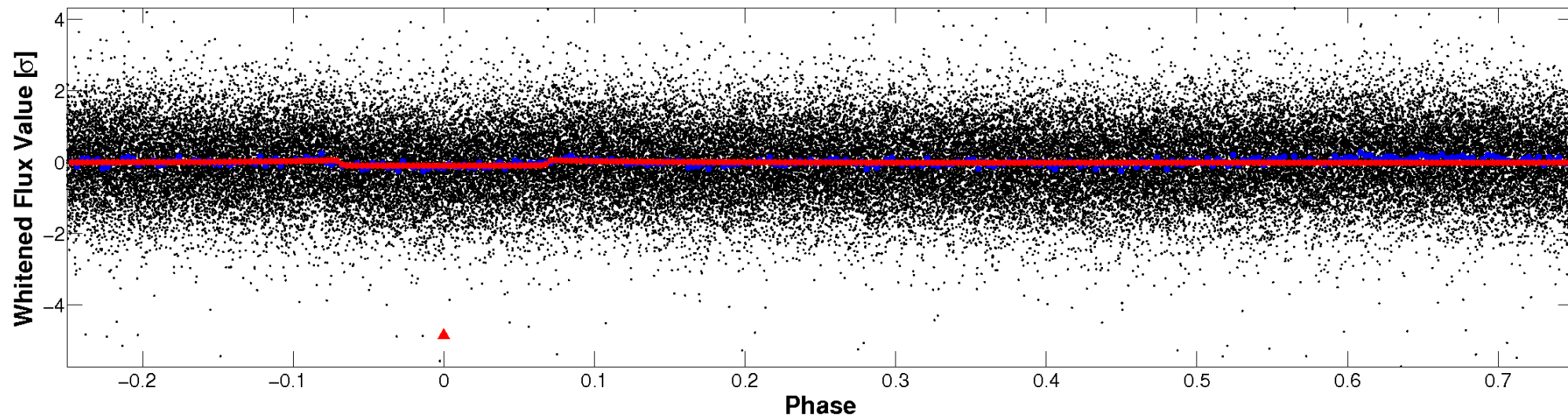


Non-Whitened Vs. Whitened Light Curve

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

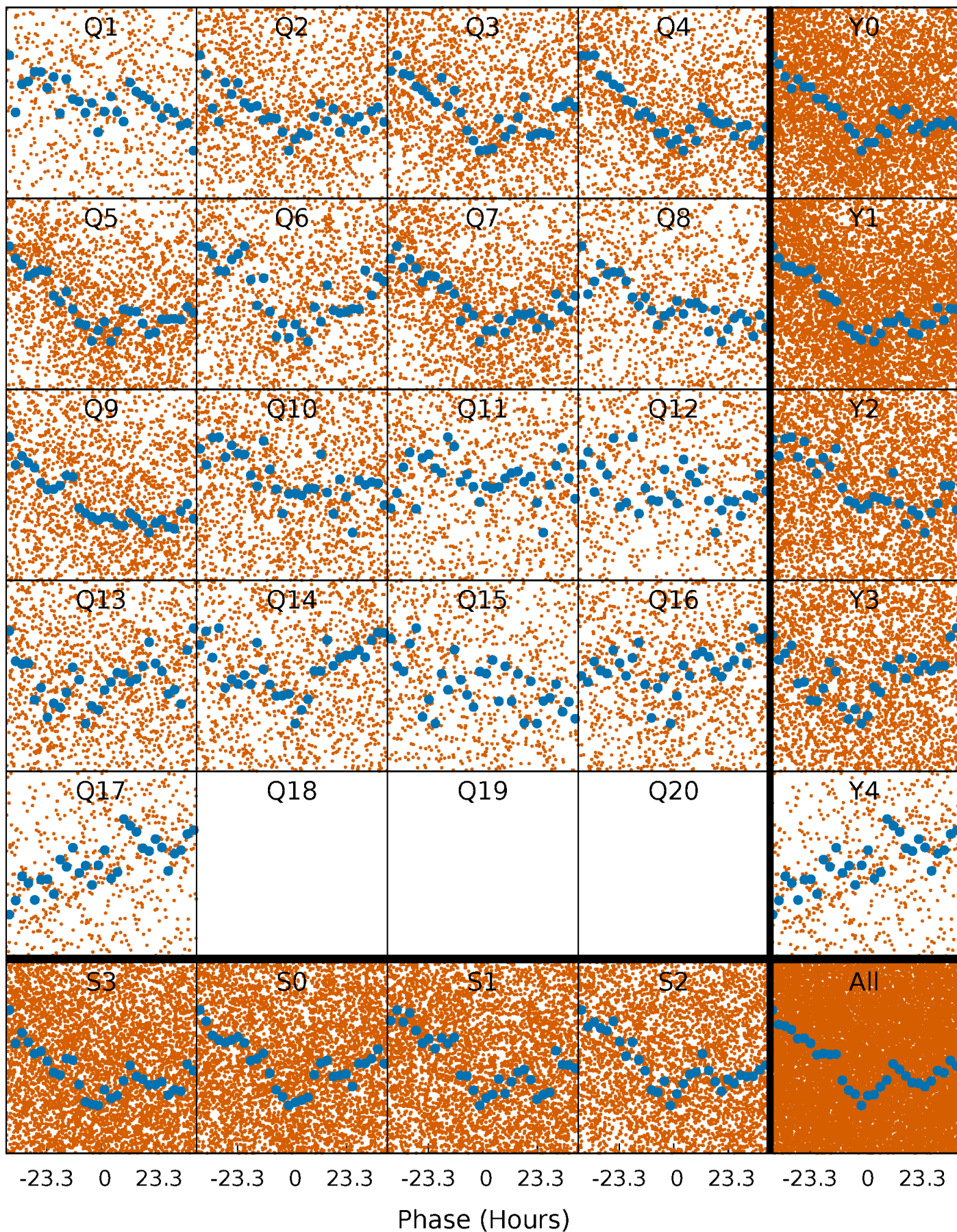


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



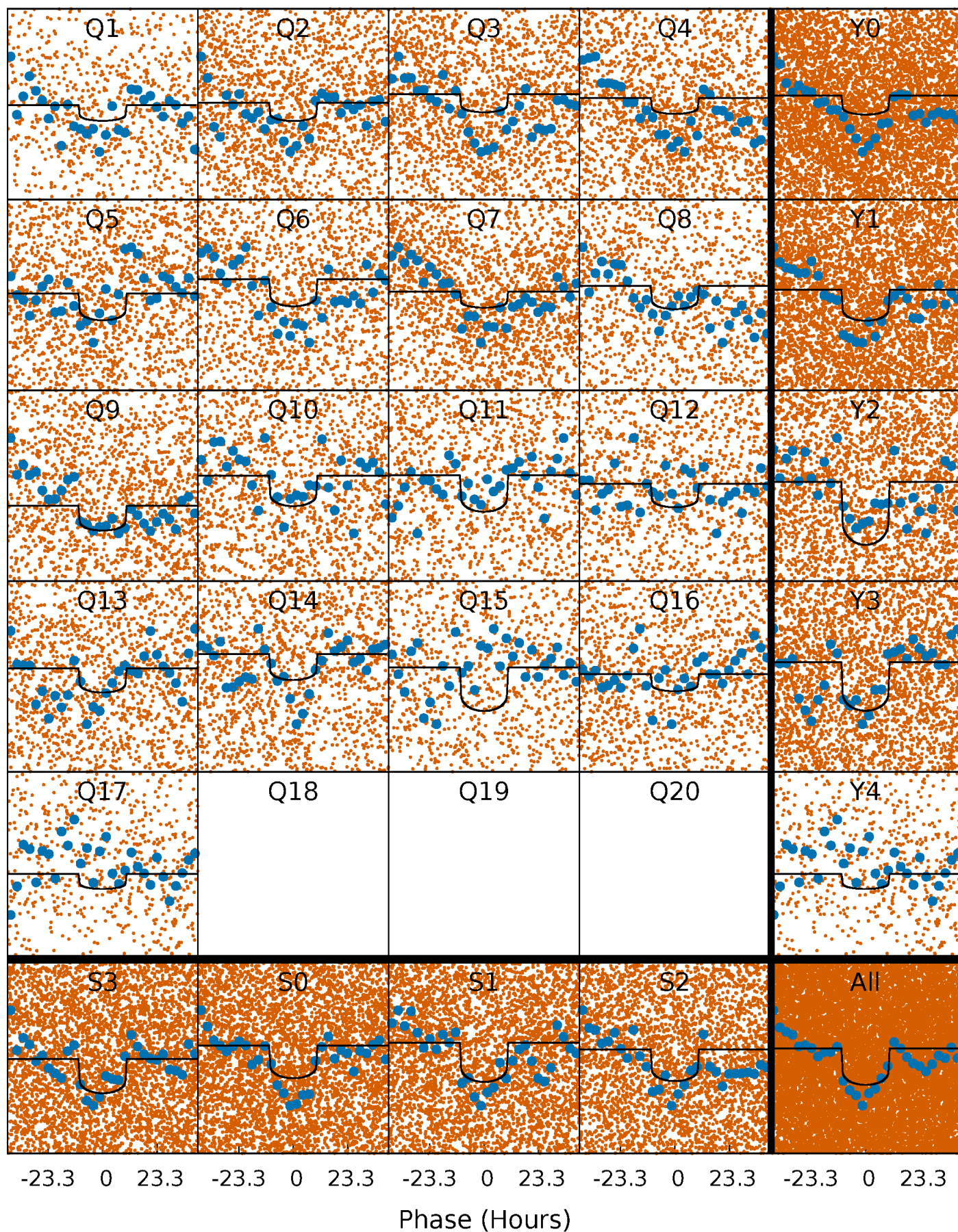
PDC Quarter-Phased Transit Curves

TCE 008323104-01 P= 6.043384 Days $T_0=132.673109$ (BKJD)



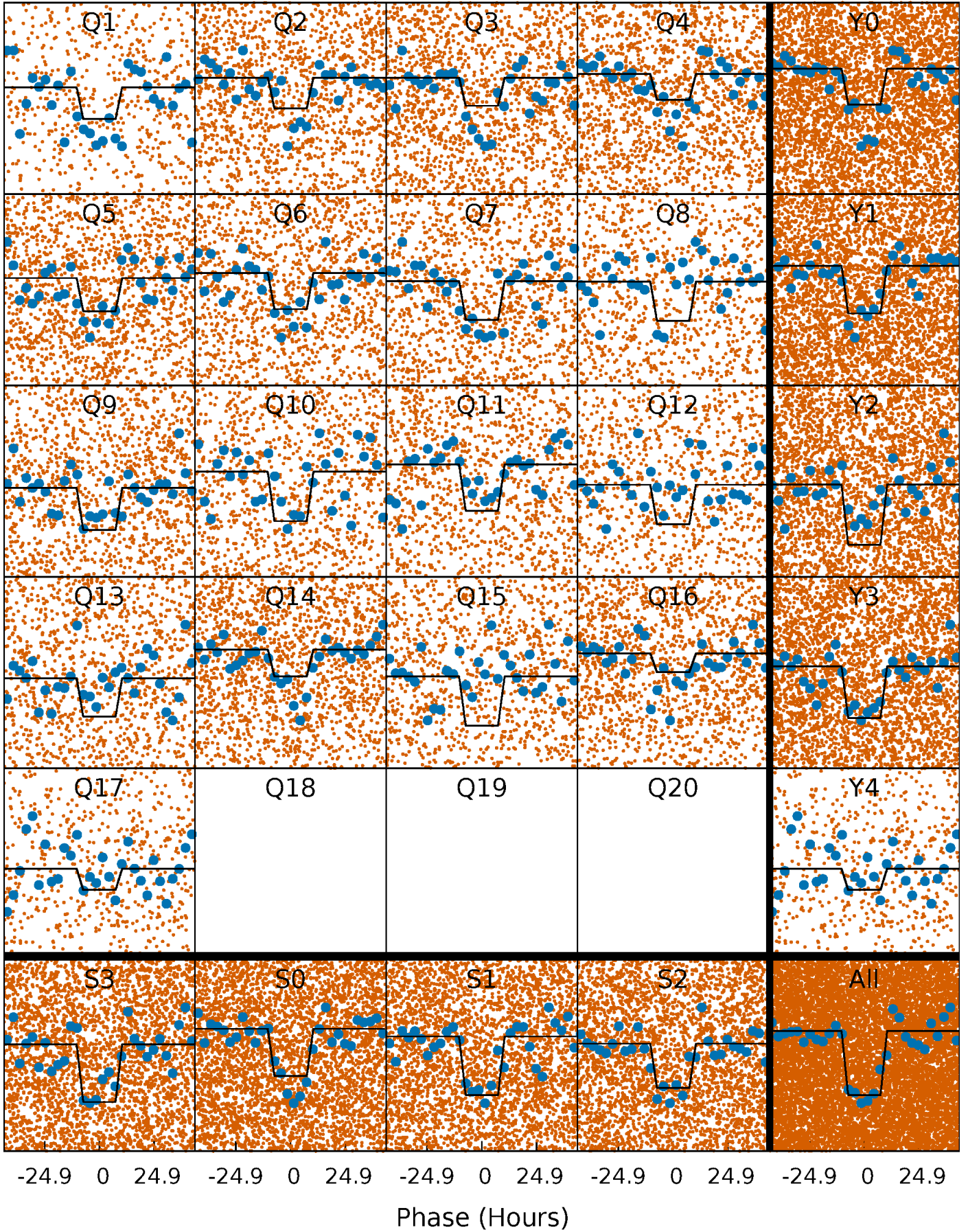
DV Quarter-Phased Transit Curves

TCE 008323104-01 P= 6.043384 Days $T_0=132.673109$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

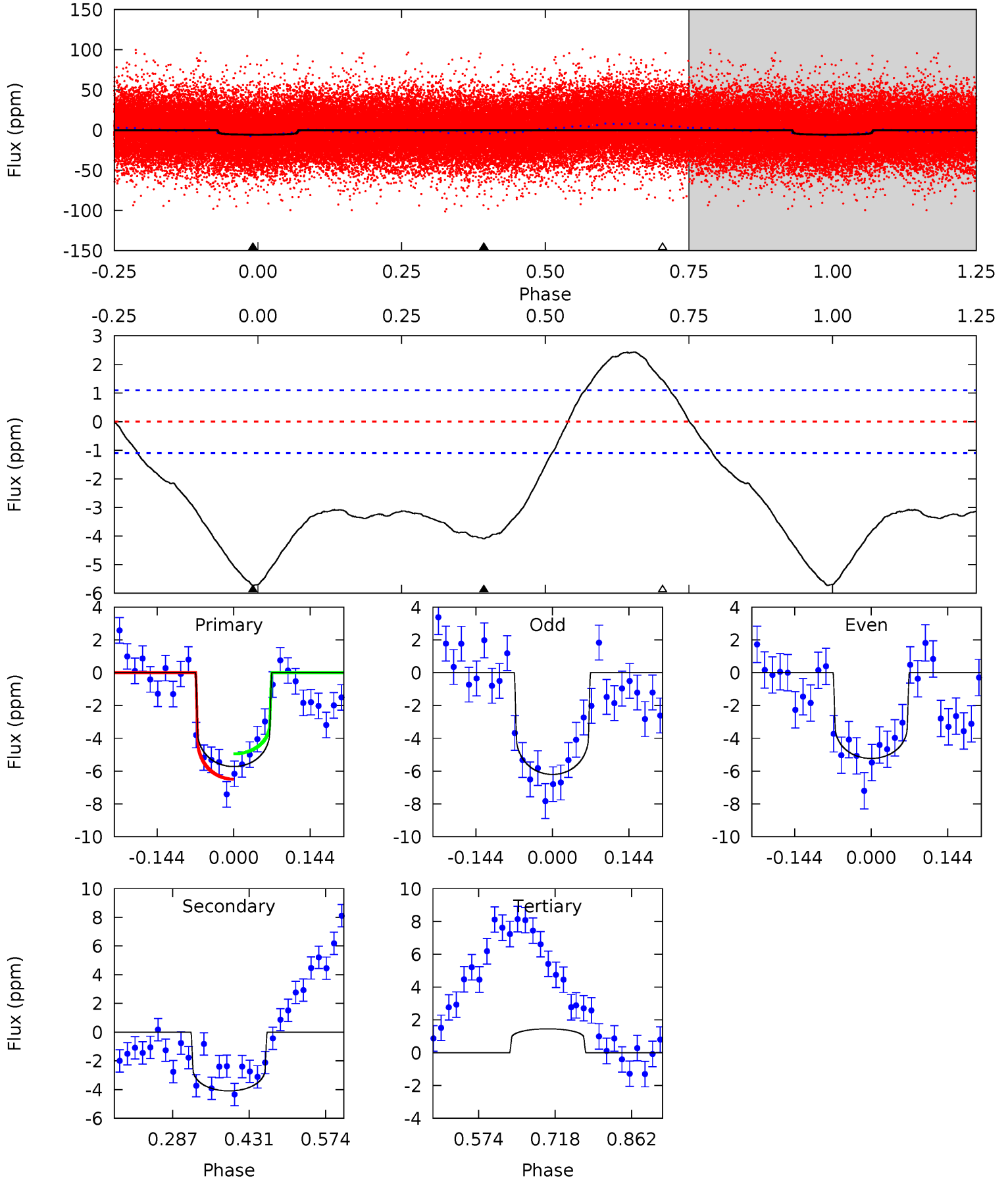
TCE 008323104-01 P= 6.043367 Days $T_0=132.632176$ (BKJD)



DV Model-Shift Uniqueness Test

008323104-01, P = 6.043384 Days, E = 126.629725 Days

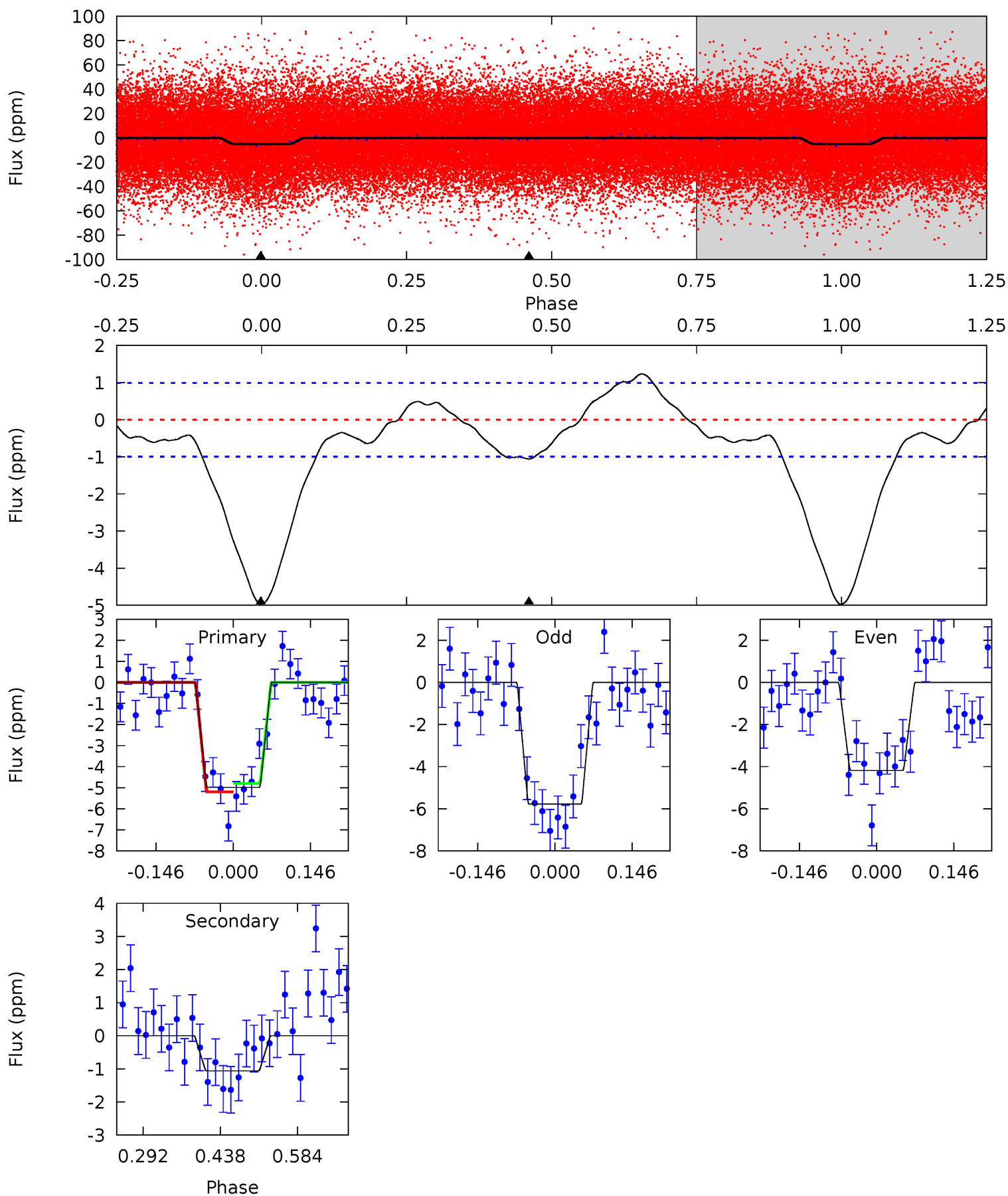
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
23.3	16.7	-5.93	0	4.49	1.46	8.68	29.3	23.3	22.6	16.7	1.99	1.04	0.30	3.20



Alt Model-Shift Uniqueness Test

008323104-01, P = 6.043367 Days, E = 126.588809 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
22.5	4.79	0	0	4.48	1.45	2.70	22.5	22.5	4.79	4.79	3.59	0.91	0.20	0.92



Stellar Parameters For KIC 008323104

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	7796^{+244}_{-325}	$3.937^{+0.280}_{-0.120}$	$-0.280^{+0.200}_{-0.300}$	$2.340^{+0.436}_{-0.810}$	$1.725^{+0.182}_{-0.338}$	$0.190^{+0.368}_{-0.071}$
	+3%/-4%	+7%/-3%	+71%/-107%	+19%/-35%	+11%/-20%	+194%/-37%
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 008323104-01 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	-4 ± 0	$0.58^{+0.10}_{-0.11}$	2598^{+178}_{-236}	7176^{+518}_{-434}	41^{+20}_{-10}
Alt.	-1 ± 0	$0.56^{+0.09}_{-0.11}$	2598^{+174}_{-218}	5162^{+358}_{-360}	11^{+6}_{-3}

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 $A_{obs} \gg 1.0$

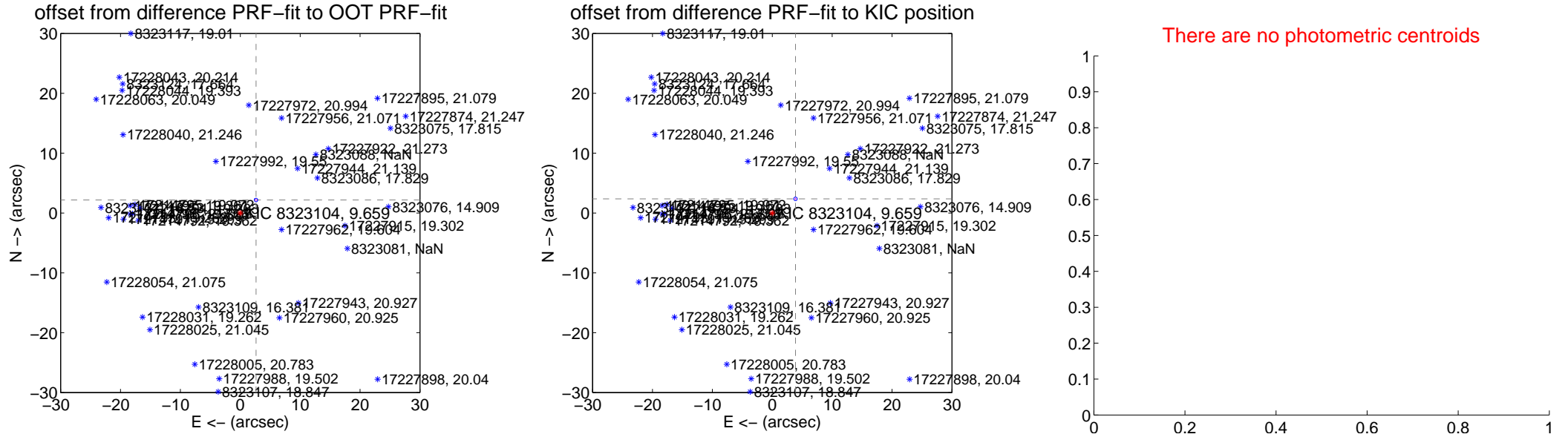
DV Centroid Data

Supplemental centroid analysis for 008323104-01. **Kepler magnitude: 9.66.** Transit SNR 9.49

There are 0 quarters with good PRF difference image offsets

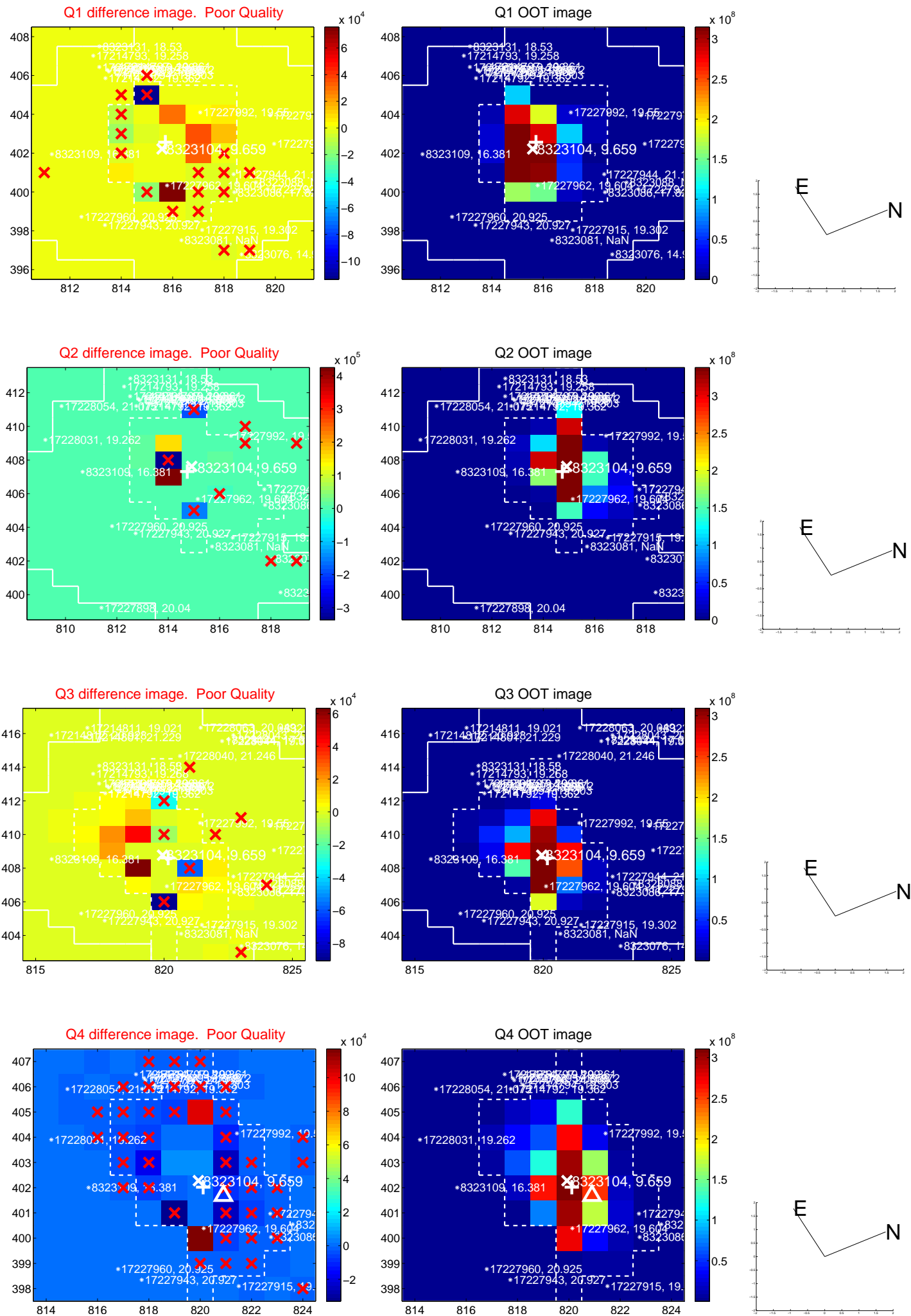
The direct PRF centroid is offset from the target star catalog position by about 1.26 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	3.411 \pm 0.097	35.04	-2.628 \pm 0.100	2.174 \pm 0.093
PRF-fit source offset from KIC position	4.543 \pm 0.098	46.25	-3.879 \pm 0.100	2.365 \pm 0.093
photometric centroid source offset	—	—	—	—

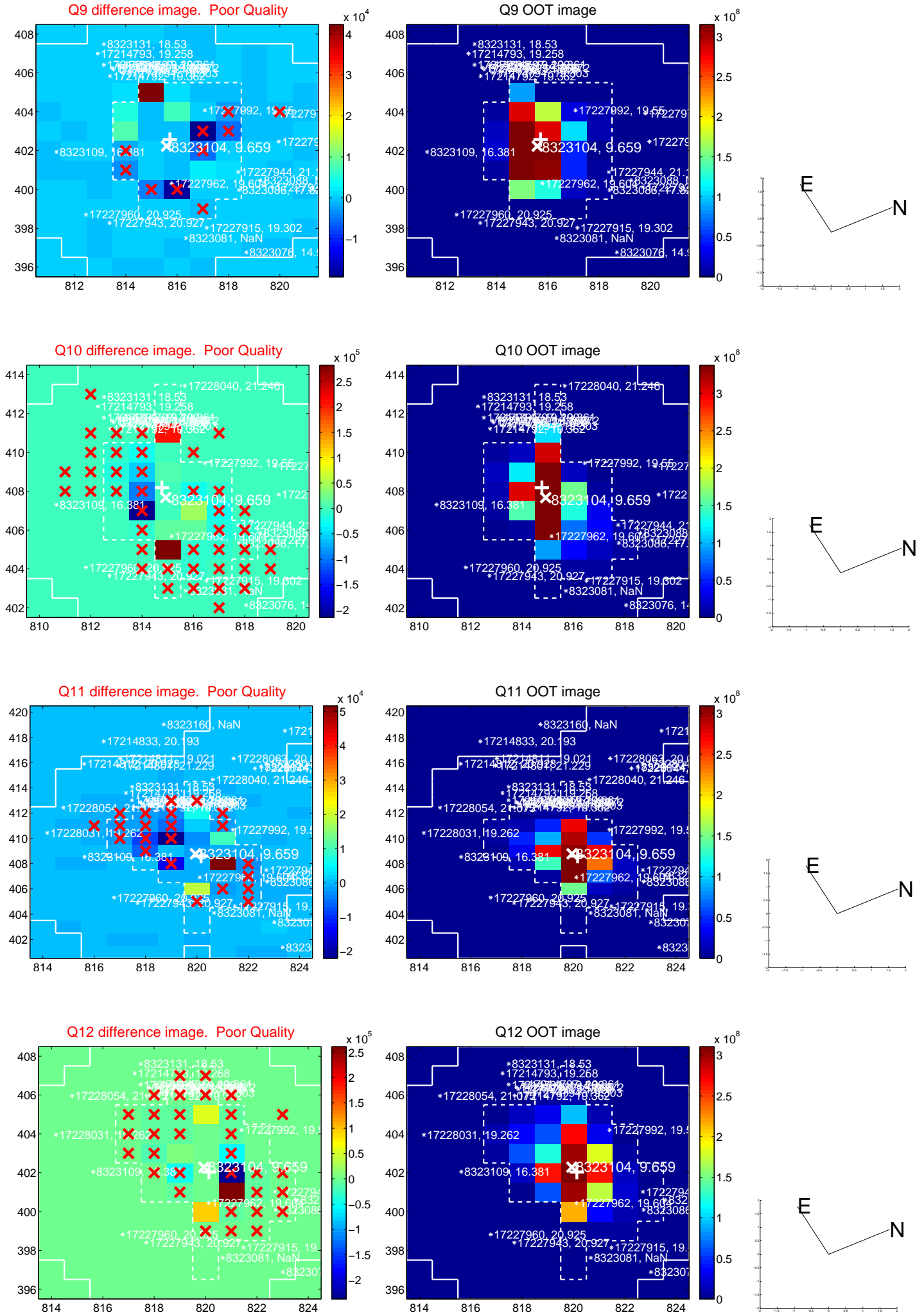


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets;** magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

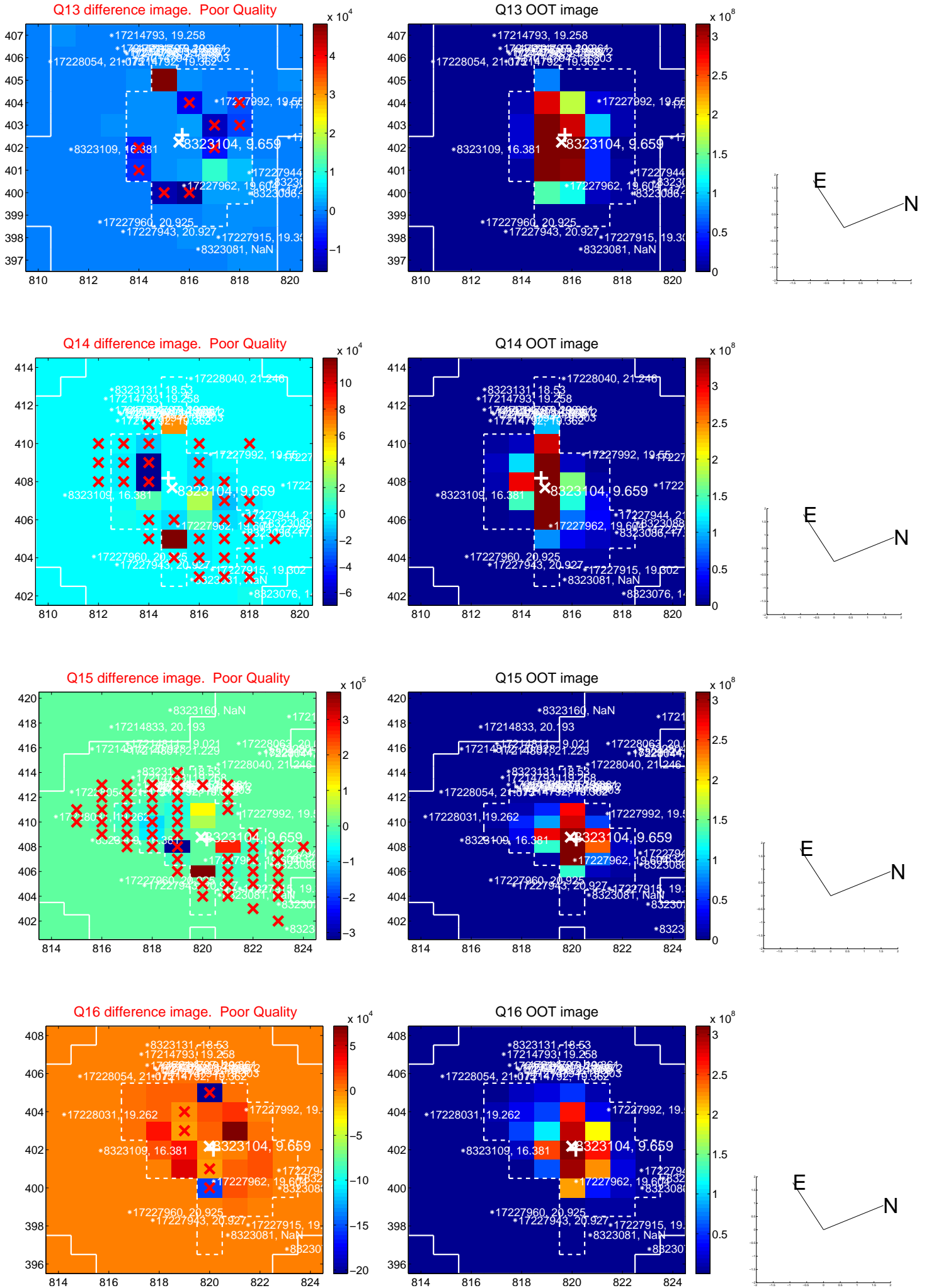
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



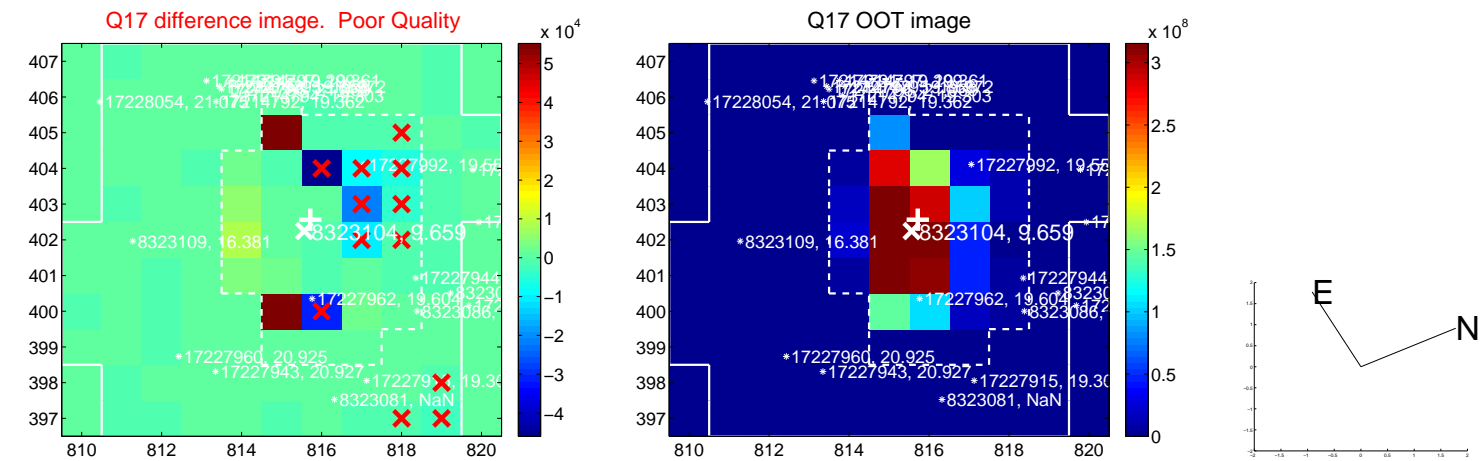
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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



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



folded centroid time series figure for this object.

UKIRT Image

Declination

