

KIC 003328418

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})
003328418-01	OBS	No	442.589417	151.934451	309.0	4.722	12.0	4.3	0.53	4615	1.09	0.13

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
003328418-01	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_CHASES_MARSHALL_SKYE—LPP_DV—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_POS_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.

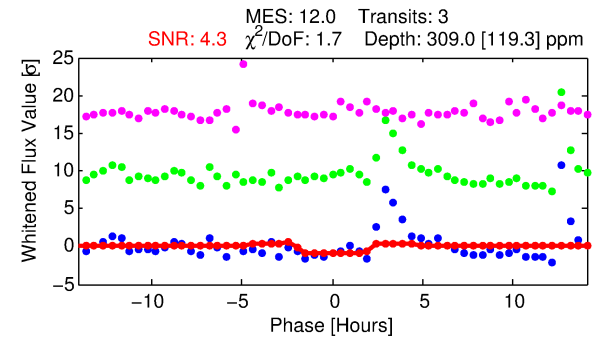
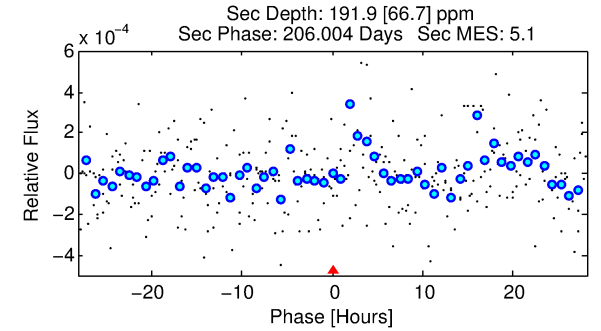
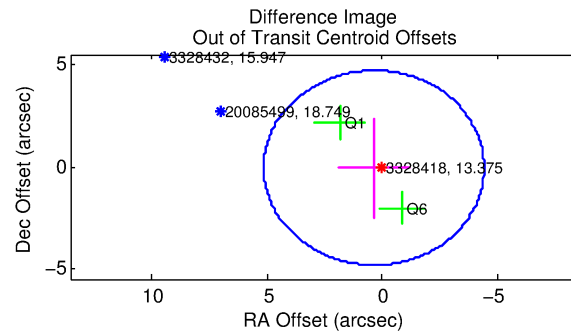
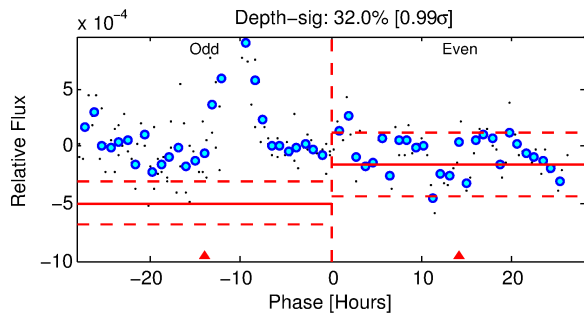
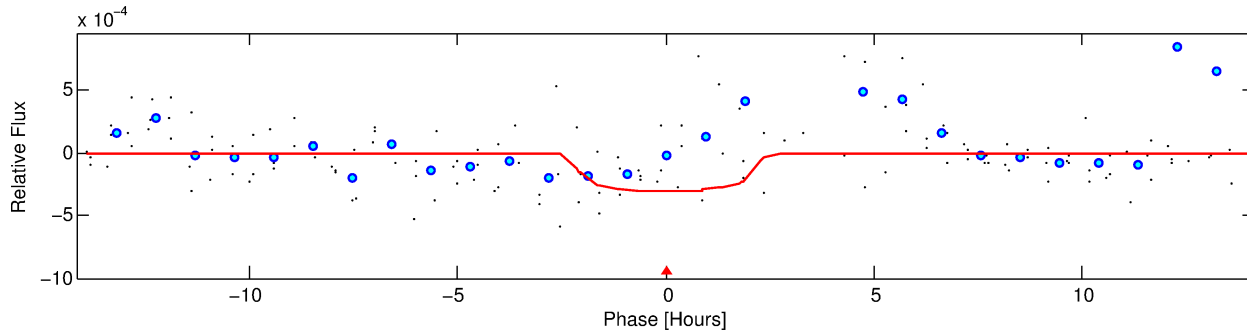
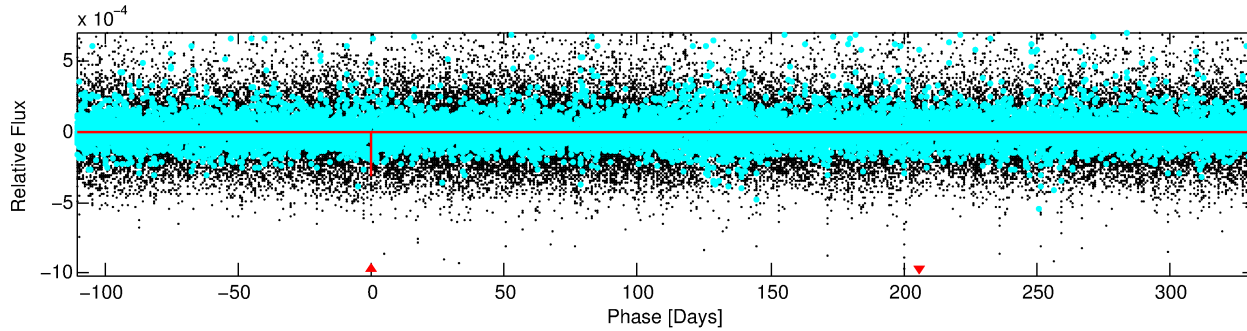
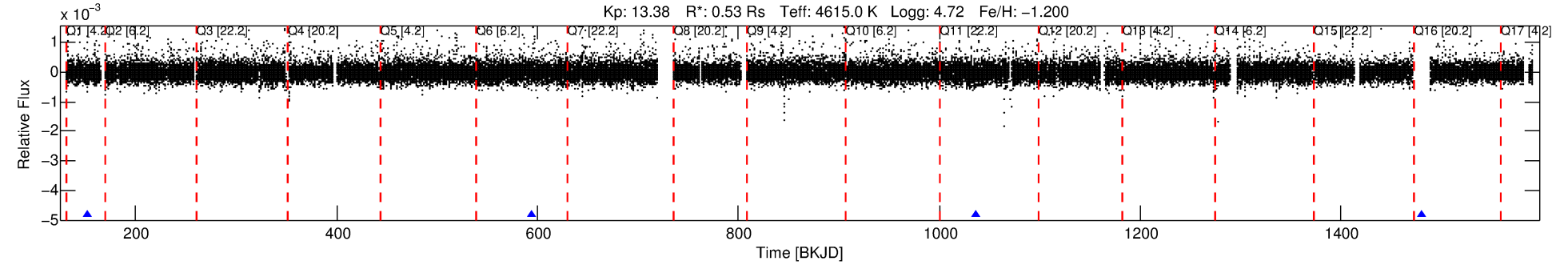
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 003328418-01

No Significant Match Found

DV One-Page Summary

KIC: 3328418 Candidate: 1 of 1 Period: 442.589 d



DV Fit Results:

Period = 442.58942 [0.01635] d
Epoch = 151.9345 [0.0196] BKJD
Rp/R* = 0.0188 [0.0350]
a/R* = 382.59 [2821.57]
b = 0.87 [2.16]
Seff = 0.13 [0.02]
Teq = 154 [6] K
Rp = 1.09 [2.02] Re
a = 0.9216 [0.0565] AU
Ag = 75660.30 [282357.42] [0.27σ]
Teffp = 3959 [3695] K [1.03σ]

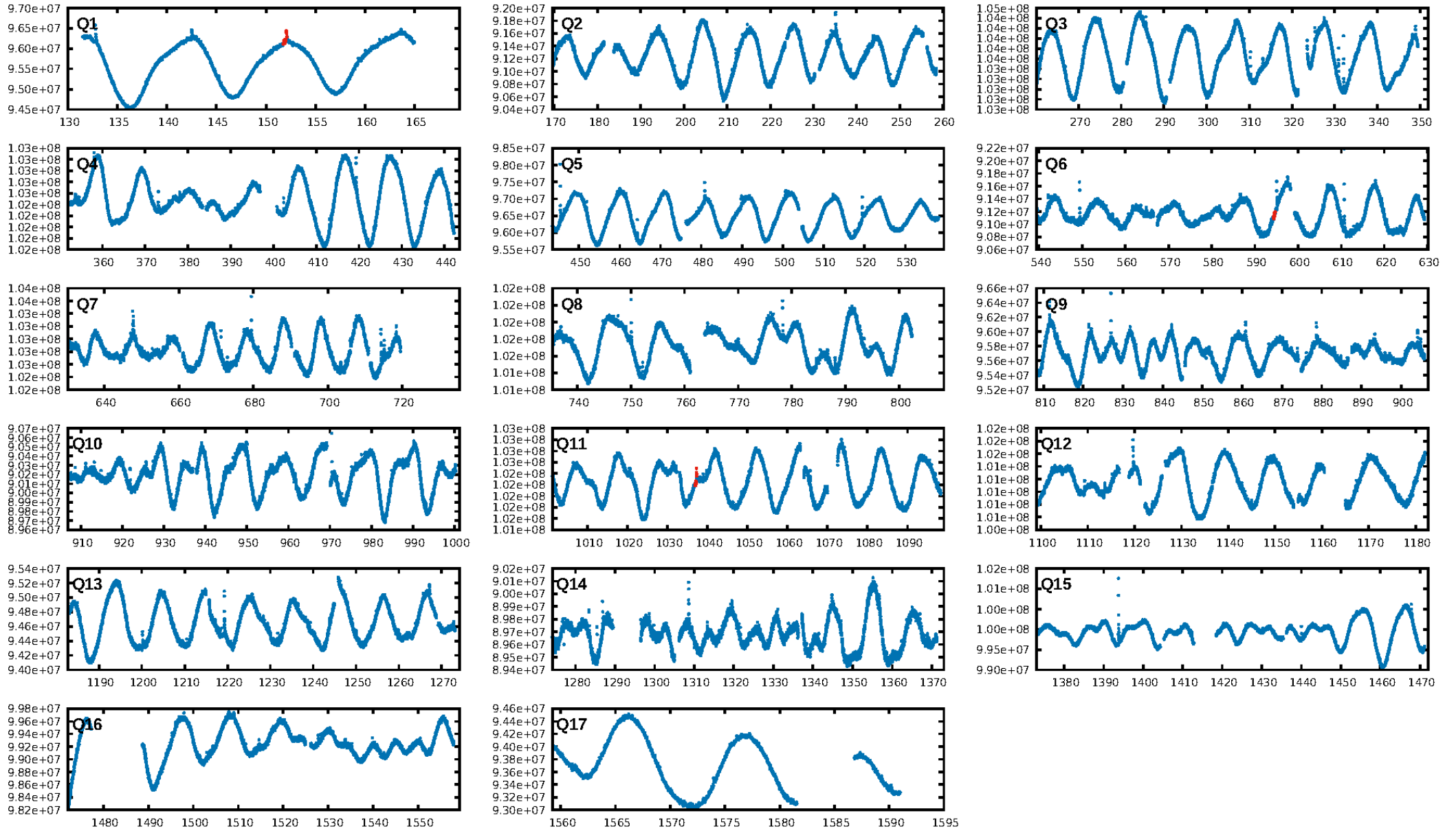
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: 39.7%
ModelChiSquareGof-sig: 29.6%
Bootstrap-pfa: 1.00e-12
RollingBand-fgt: 1.00 [2/2]
GhostDiagnostic-chr: 0.7314
Centroid-sig: 30.9%
Centroid-so: 1.712 arcsec [0.75σ]
OotOffset-rm: 0.371 arcsec [0.23σ]
OotOffset-st: 1/0/0/1 [2]
KicOffset-rm: 0.475 arcsec [0.30σ]
KicOffset-st: 1/0/0/1 [2]
DiffImageQuality-fgm: 0.50 [1/2]
DiffImageOverlap-fno: 1.00 [3/3]

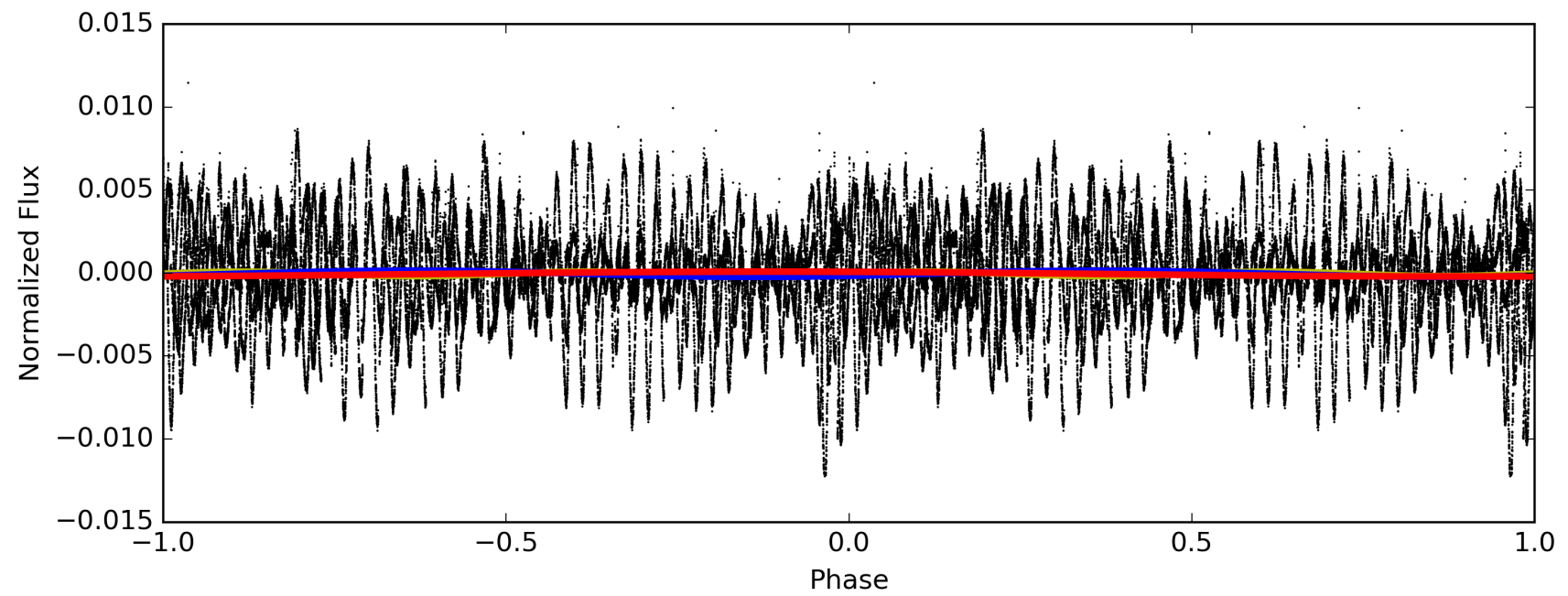
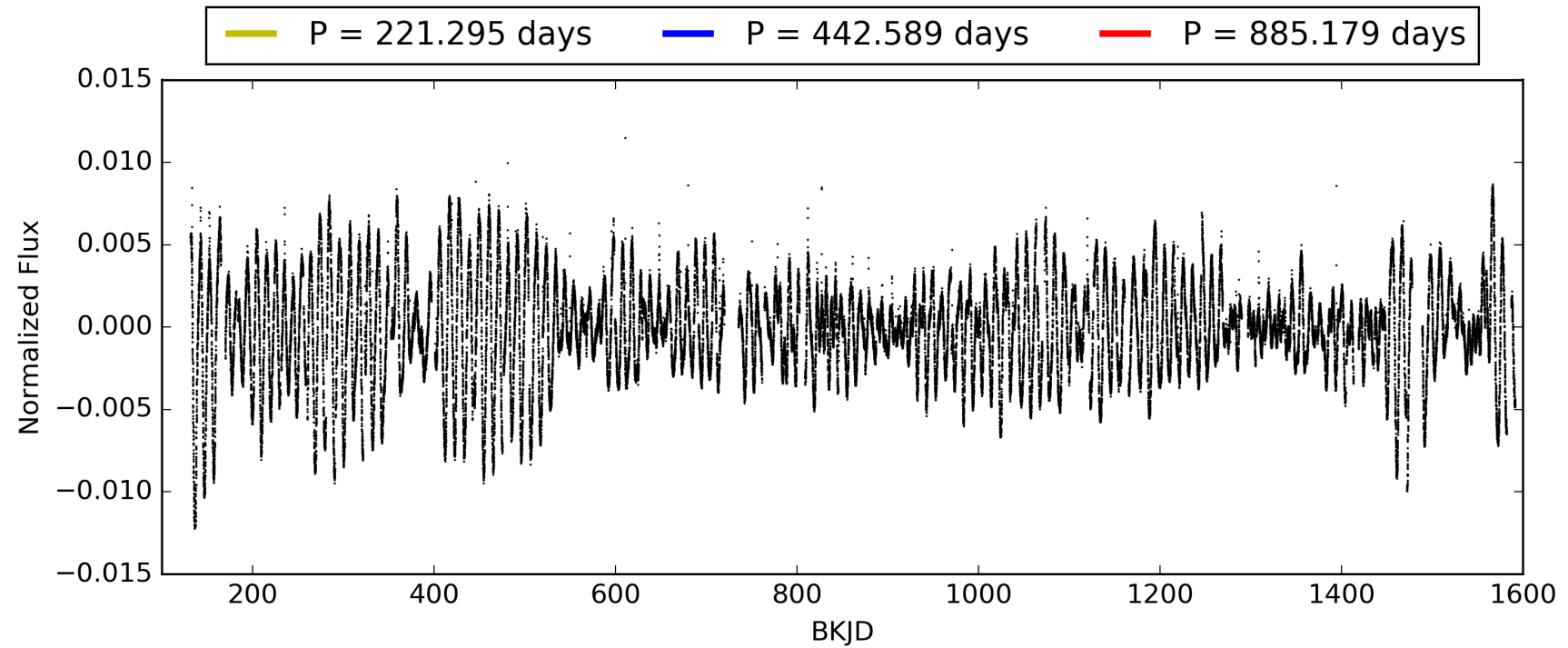
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 31-Jan-2016 18:58:16 Z

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

TCE 003328418-01, PDC Light Curves

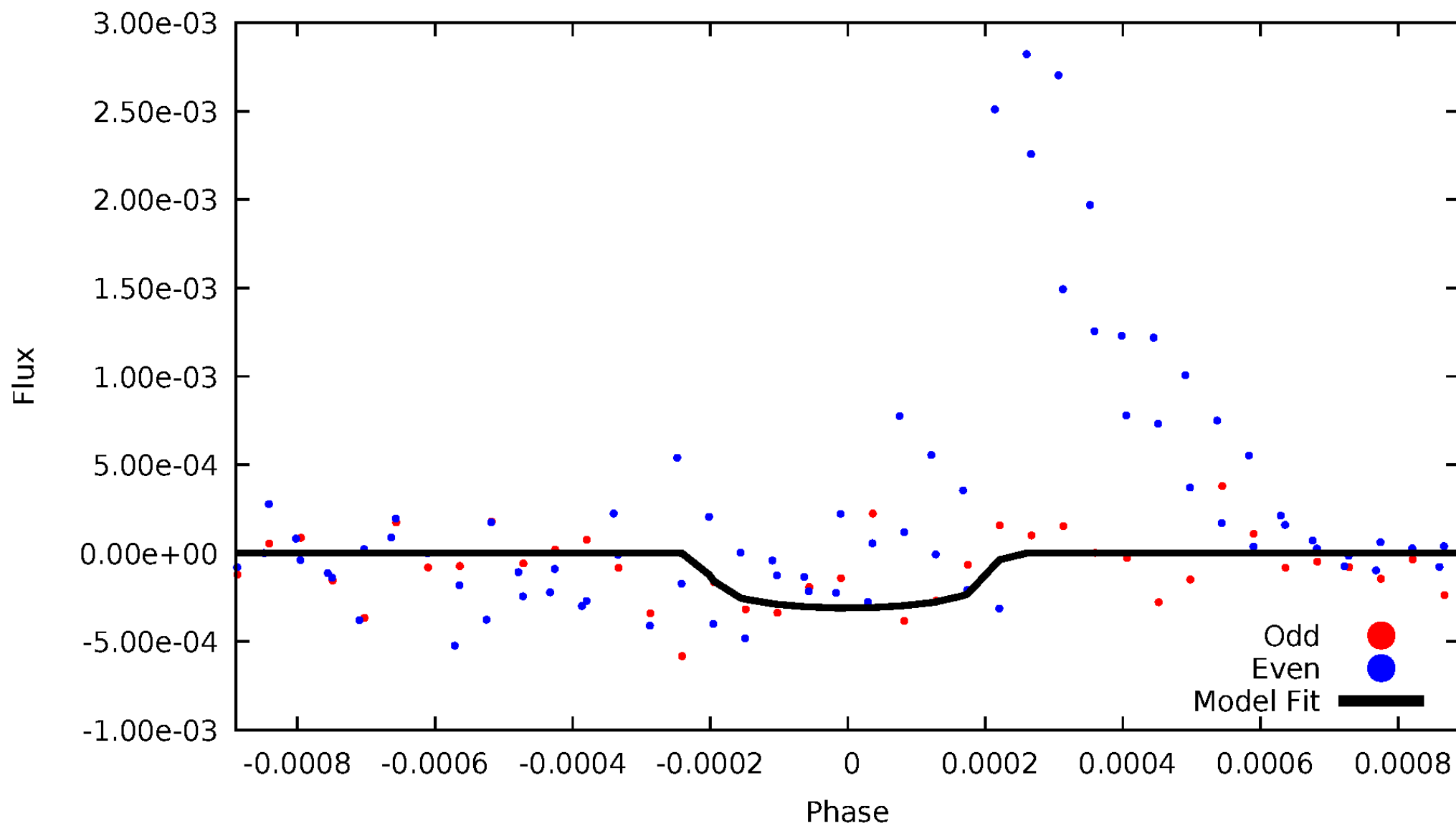


TCE 003328418-01



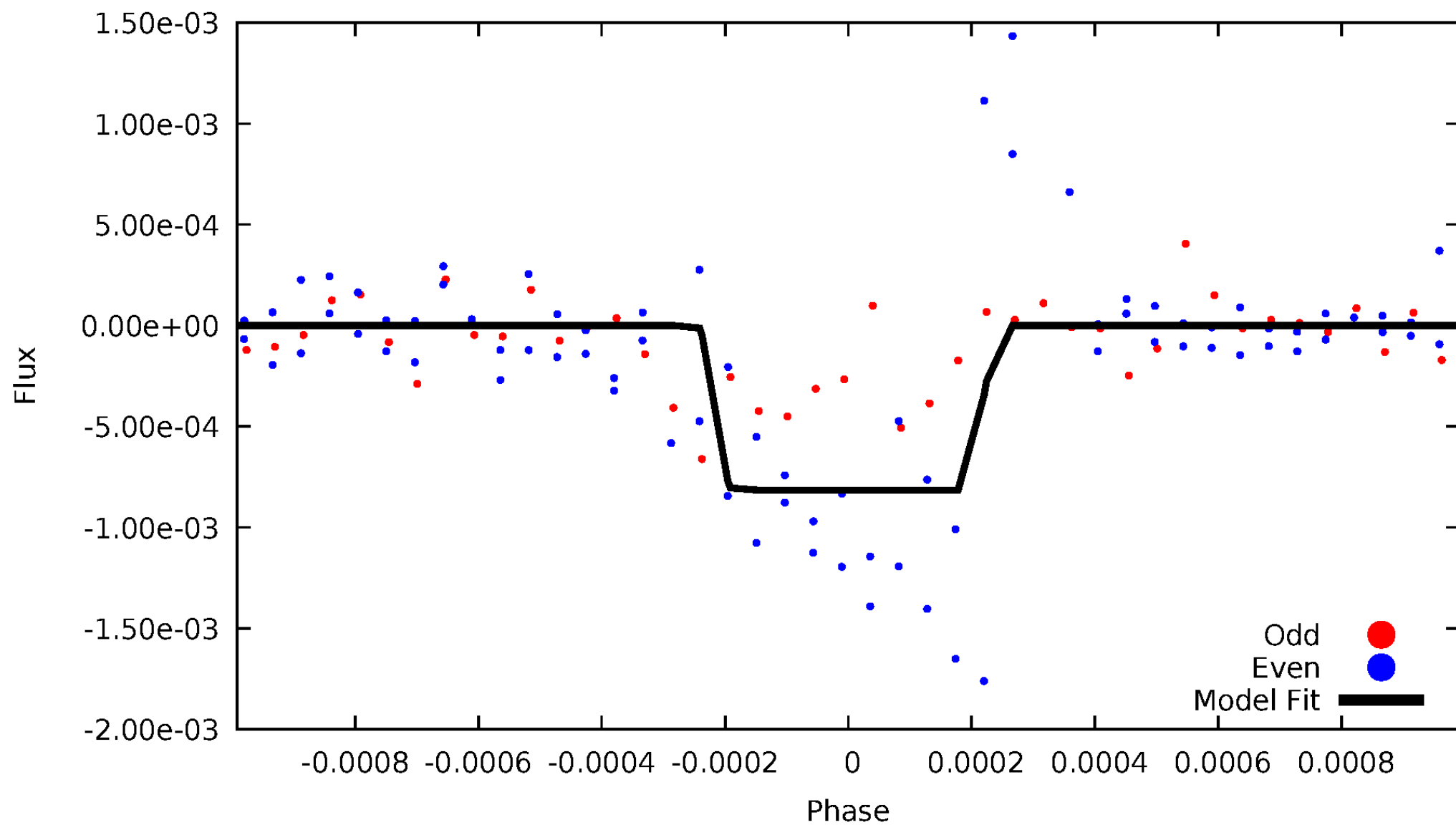
DV Odd/Even

TCE 003328418-01

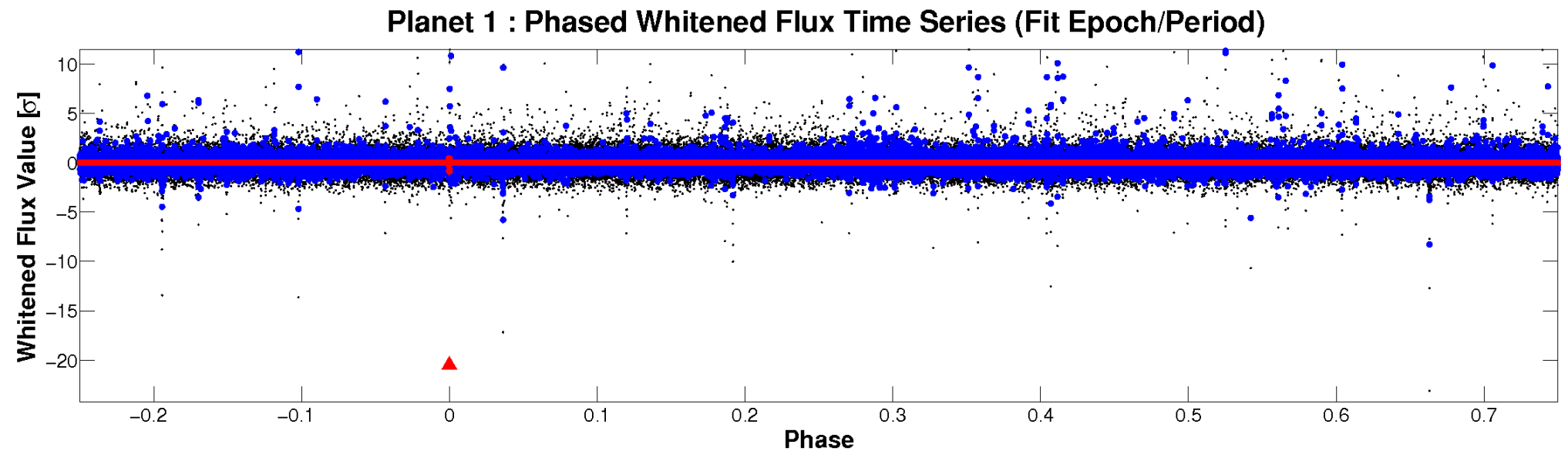
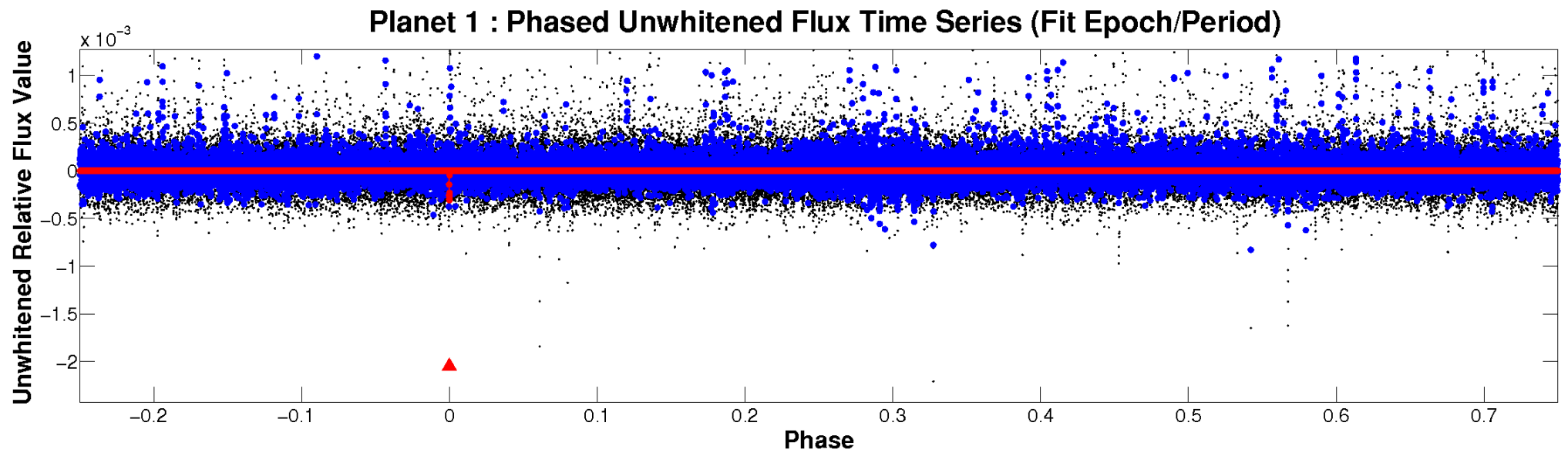


ALT Odd/Even

TCE 003328418-01

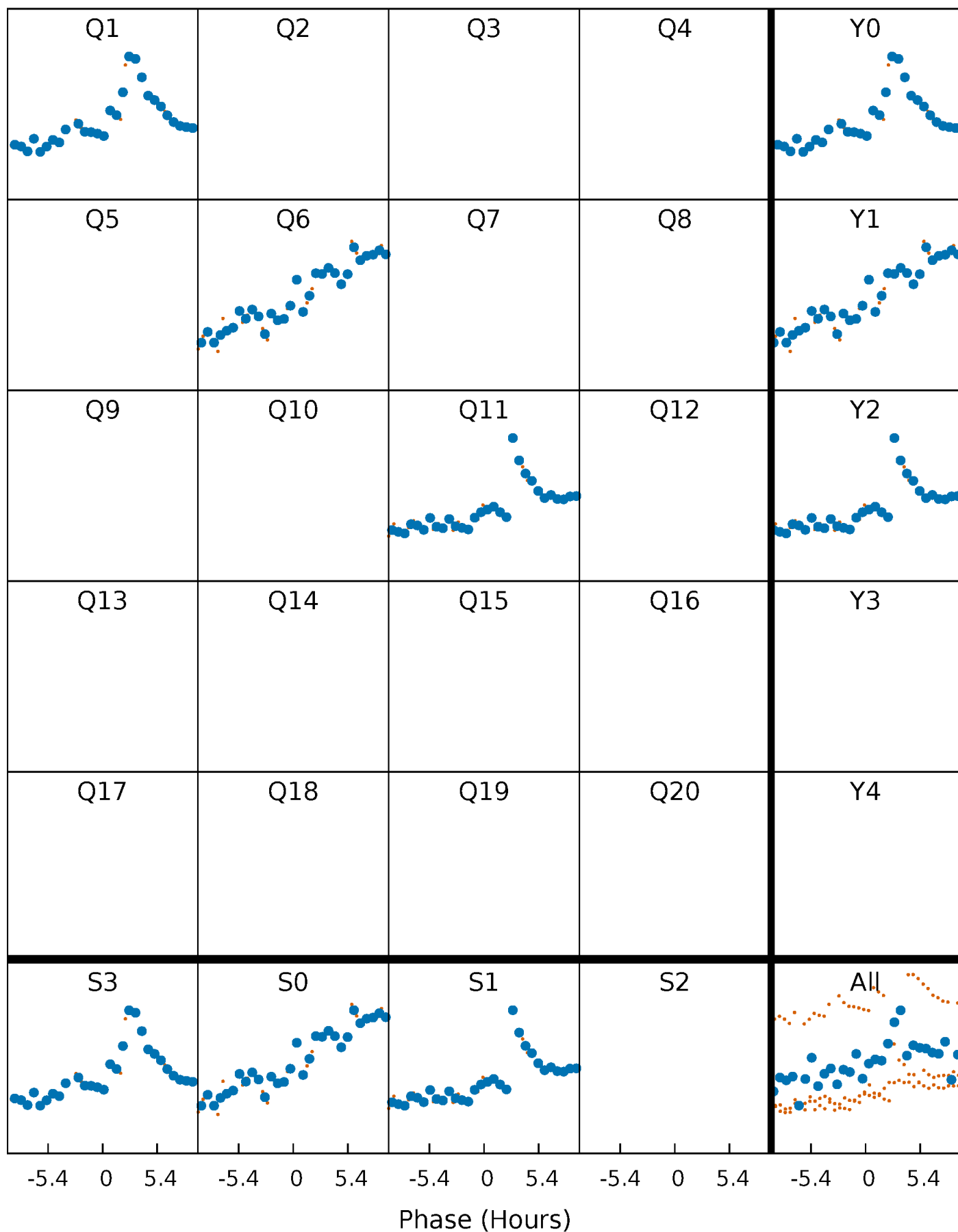


Non-Whitened Vs. Whitened Light Curve



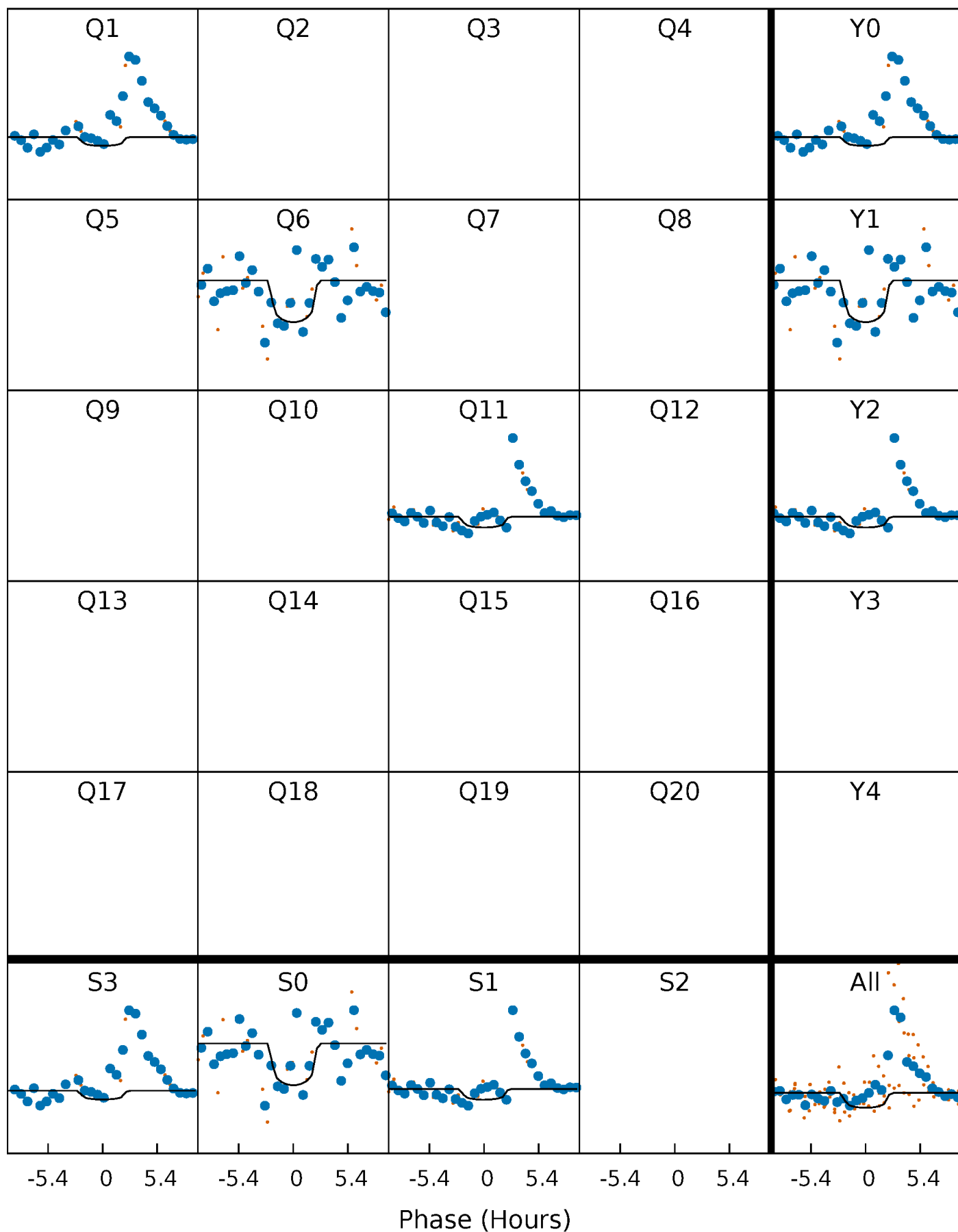
PDC Quarter-Phased Transit Curves

TCE 003328418-01 P=442.589418 Days $T_0=151.934451$ (BKJD)



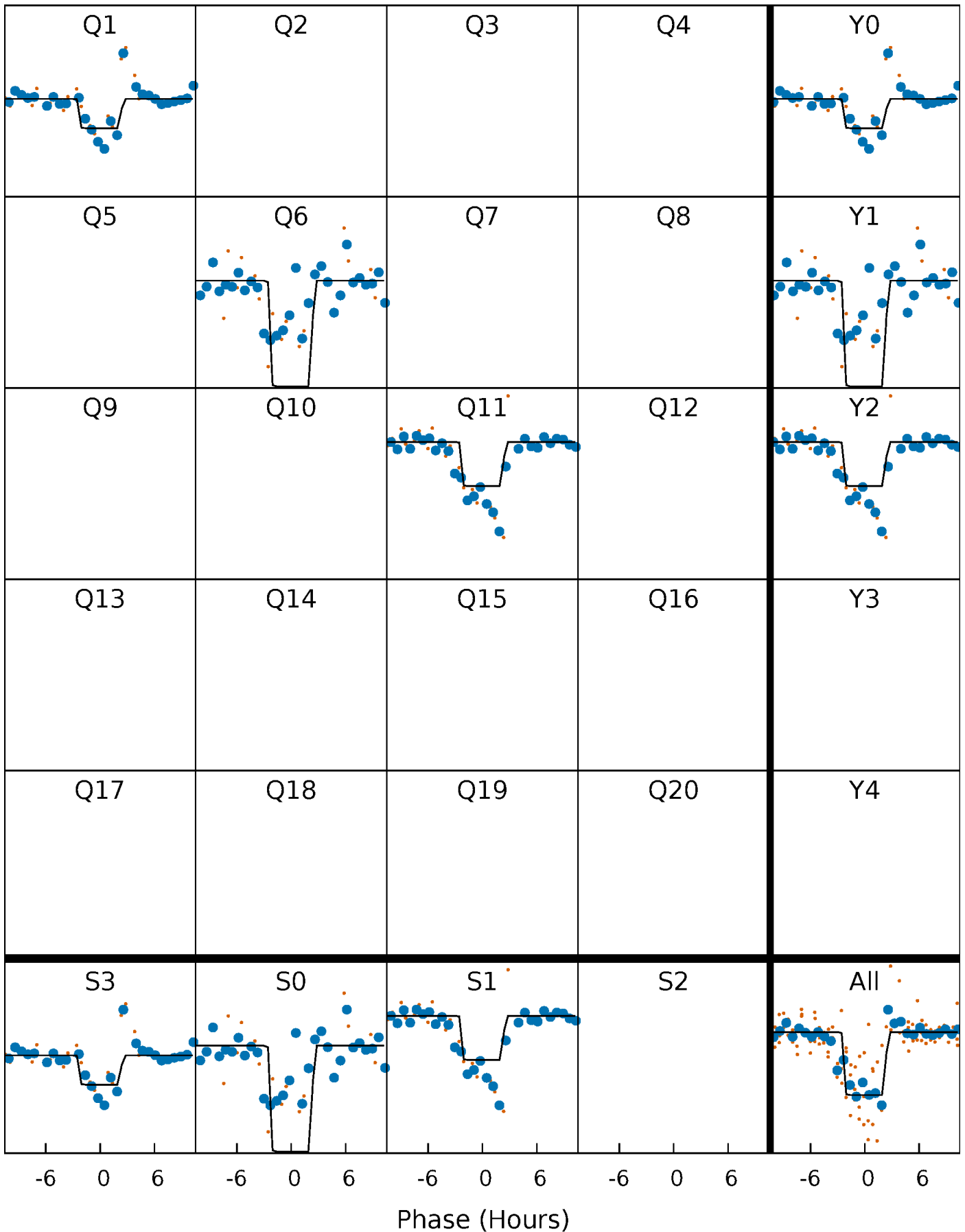
DV Quarter-Phased Transit Curves

TCE 003328418-01 $P=442.589418$ Days $T_0=151.934451$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

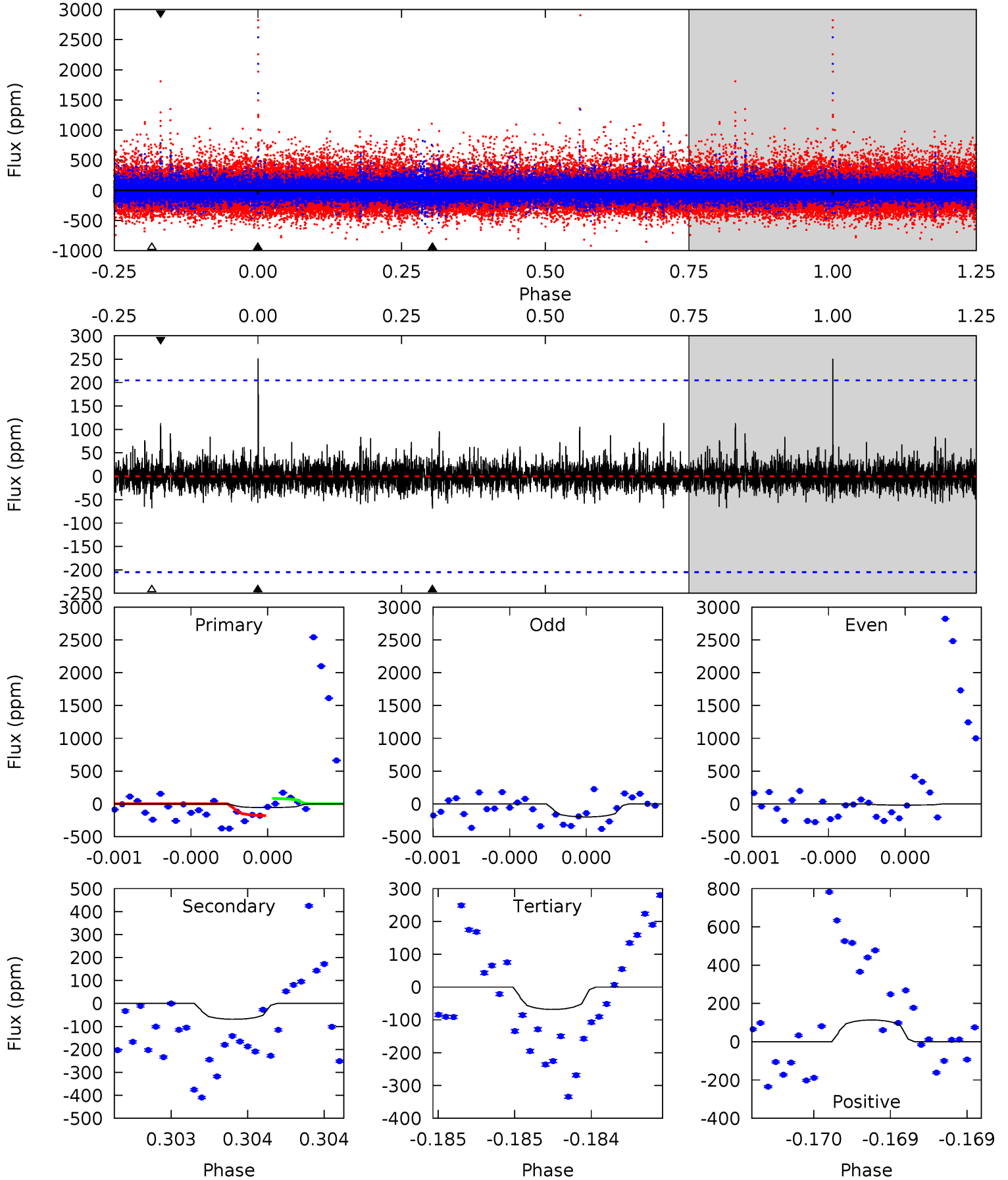
TCE 003328418-01 P=442.590910 Days $T_0=151.931564$ (BKJD)



DV Model-Shift Uniqueness Test

003328418-01, P = 442.589418 Days, E = 151.934451 Days

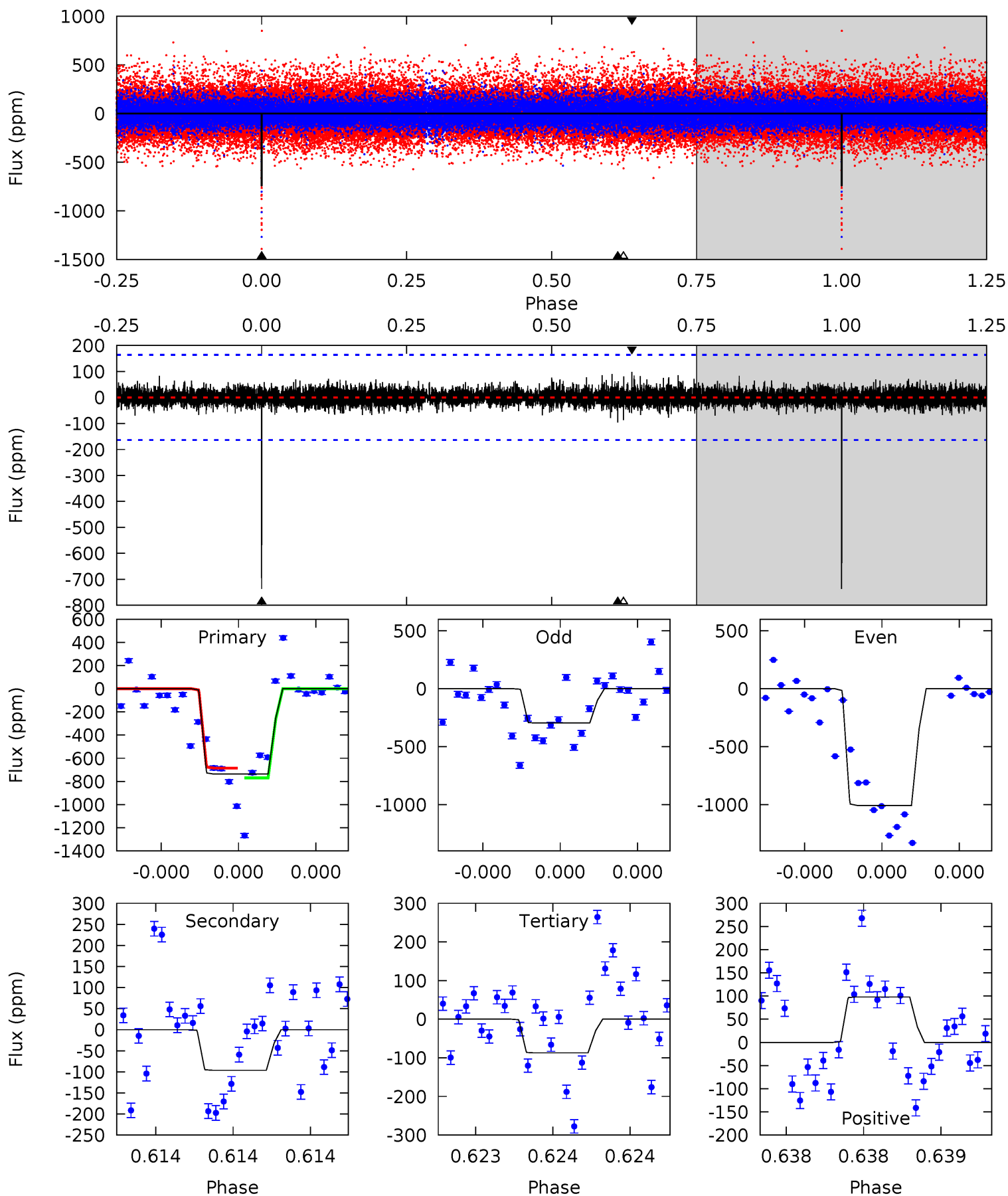
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
1.54	1.88	1.86	3.10	5.59	3.50	0.52	-0.32	-1.56	0.02	-1.22	2.14	0.30	0.78	1.33



Alt Model-Shift Uniqueness Test

003328418-01, P = 442.590910 Days, E = 151.931564 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
25.1	3.28	2.98	3.34	5.59	3.50	0.63	22.2	21.8	0.30	-0.06	12.4	1.00	0.12	1.44



Stellar Parameters For KIC 003328418

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	$M(M_{\odot})$	p_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	4615^{+125}_{-153}	$4.716^{+0.052}_{-0.028}$	$-1.200^{+0.300}_{-0.300}$	$0.530^{+0.033}_{-0.037}$	$0.533^{+0.039}_{-0.025}$	$5.044^{+0.995}_{-0.571}$
	+3%/-3%	+1%/-1%	+25%/-25%	+6%/-7%	+7%/-5%	+20%/-11%
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 003328418-01 / KOI

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	-69 ± 37	$1.77^{+1.80}_{-1.20}$	215^{+7}_{-8}	2900^{+1356}_{-521}	8662^{+82895}_{-6873}
Alt.	-96 ± 29	$2.16^{+1.69}_{-1.40}$	215^{+7}_{-8}	2951^{+1160}_{-453}	9749^{+61182}_{-7172}

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

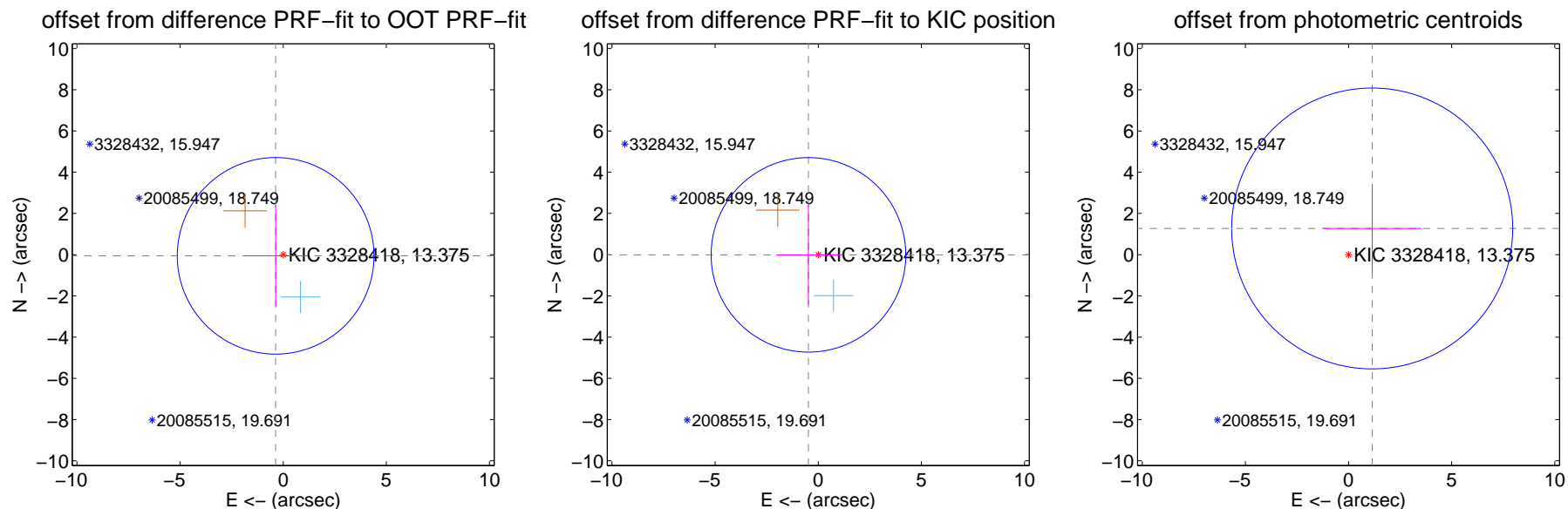
DV Centroid Data

Supplemental centroid analysis for 003328418-01. Kepler magnitude: 13.38. Transit SNR 4.30

There are 1 quarters with good PRF difference image offsets

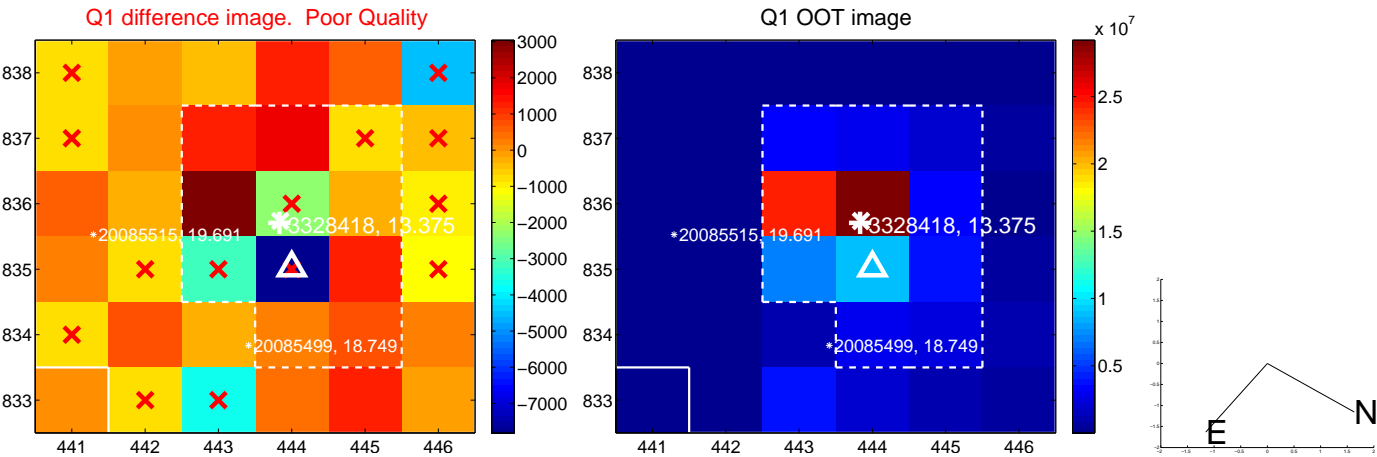
The direct PRF centroid is offset from the target star catalog position by about 0.12 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.371 ± 1.589	0.23	0.367 ± 1.562	-0.057 ± 2.440
PRF-fit source offset from KIC position	0.475 ± 1.572	0.30	0.475 ± 1.572	-0.010 ± 2.422
photometric centroid source offset	1.71 ± 2.27	0.75	-1.15 ± 2.39	1.27 ± 2.17

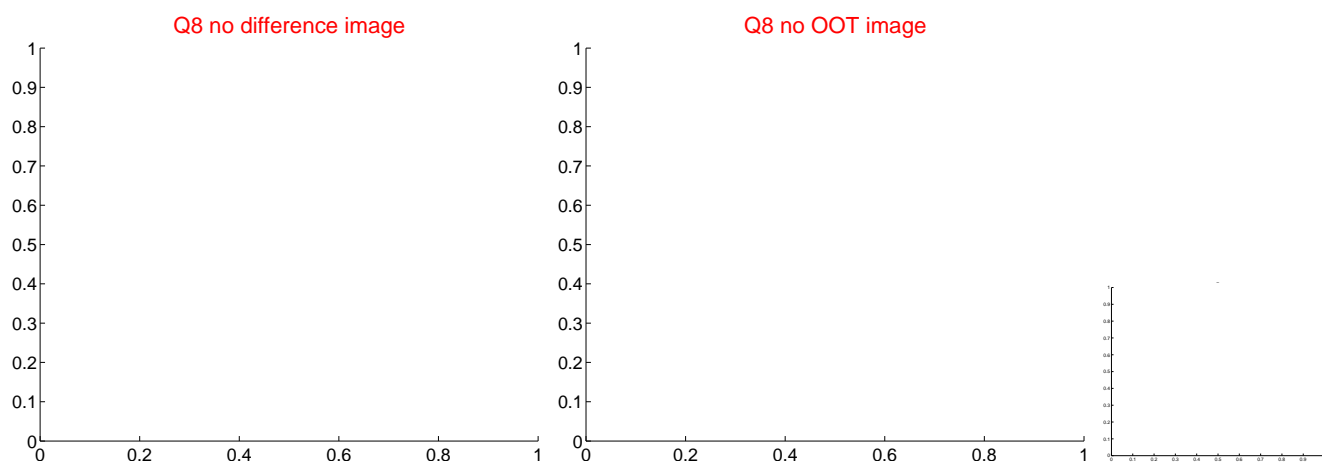
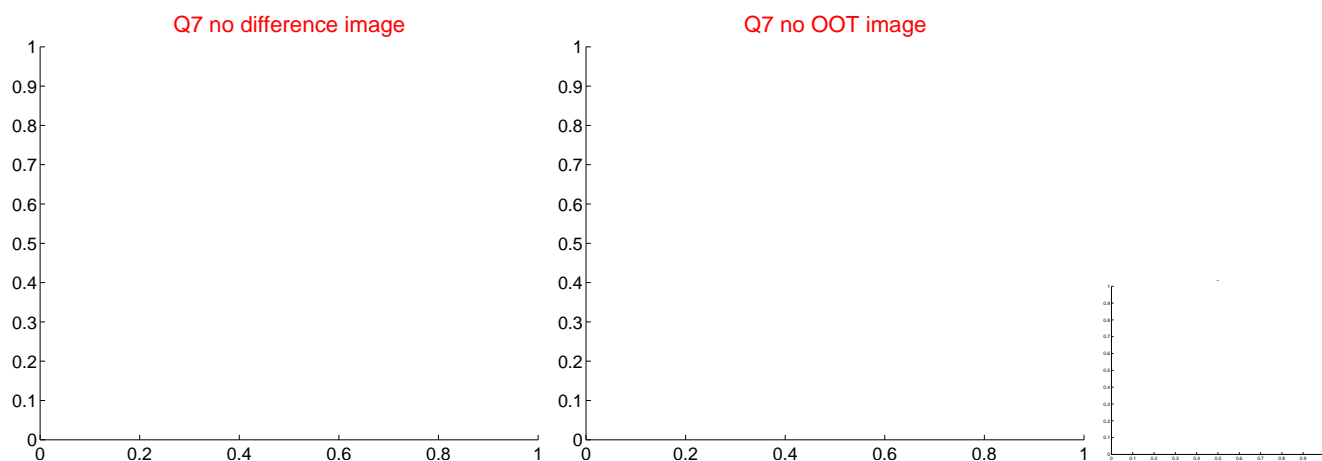
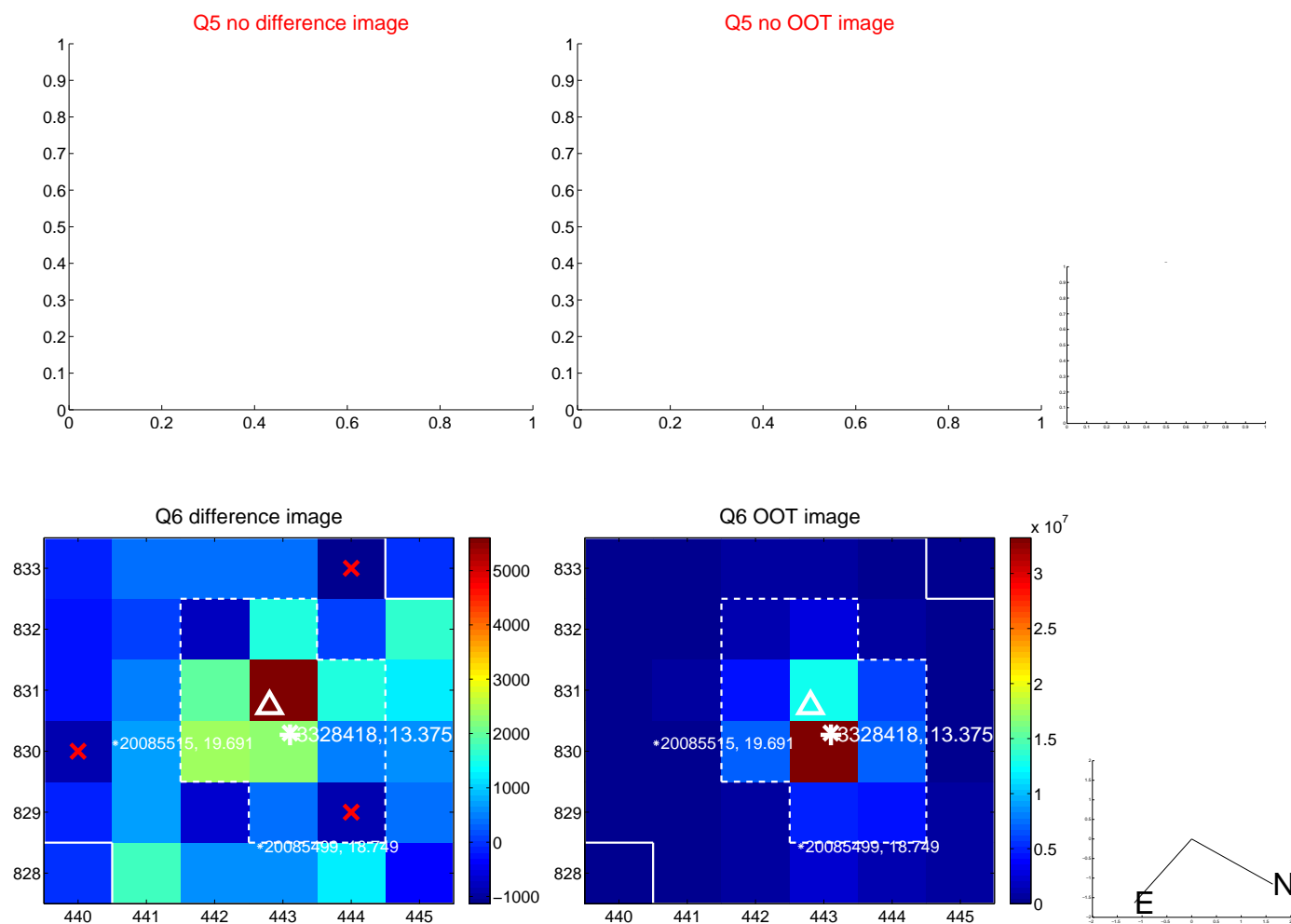


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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

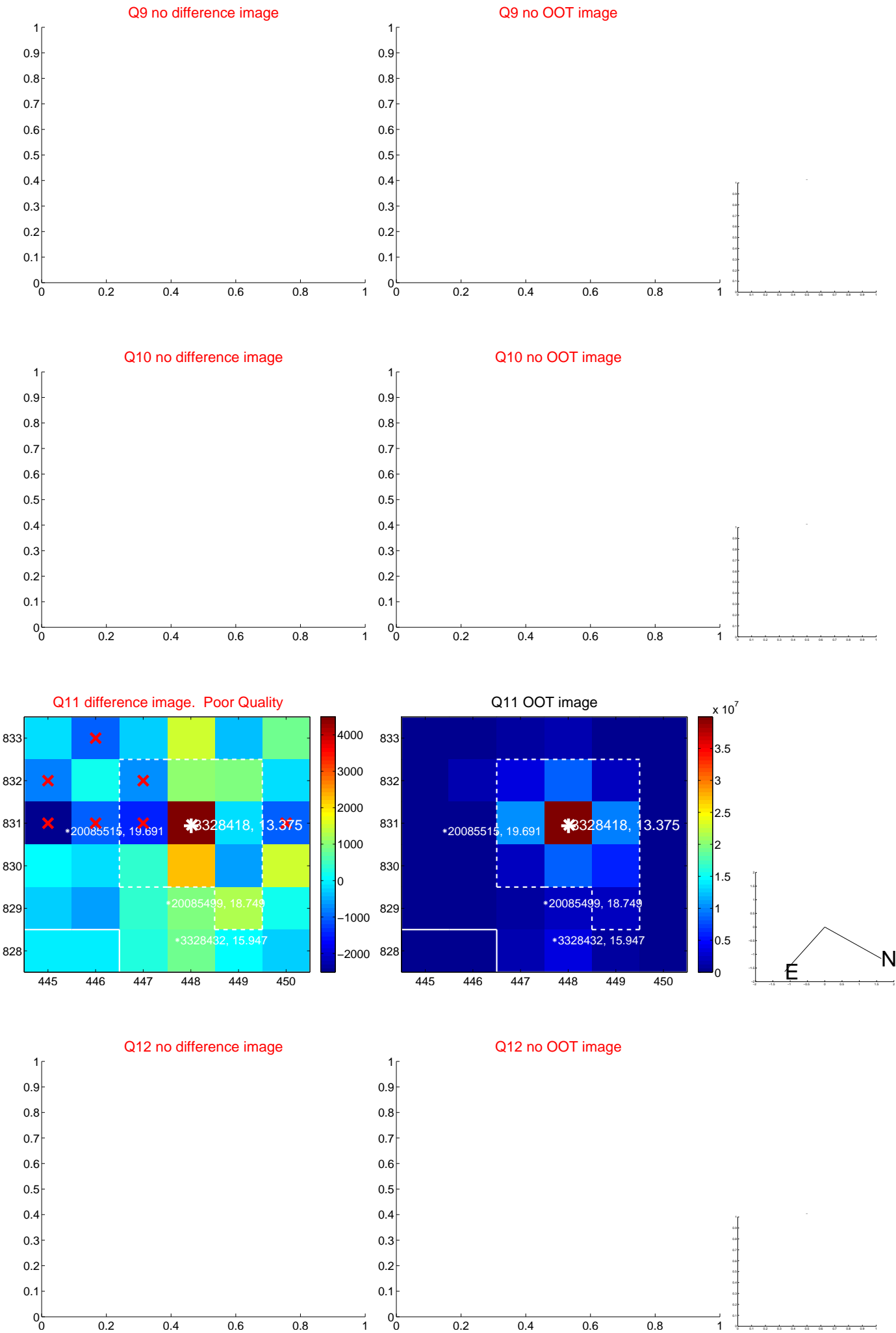
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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



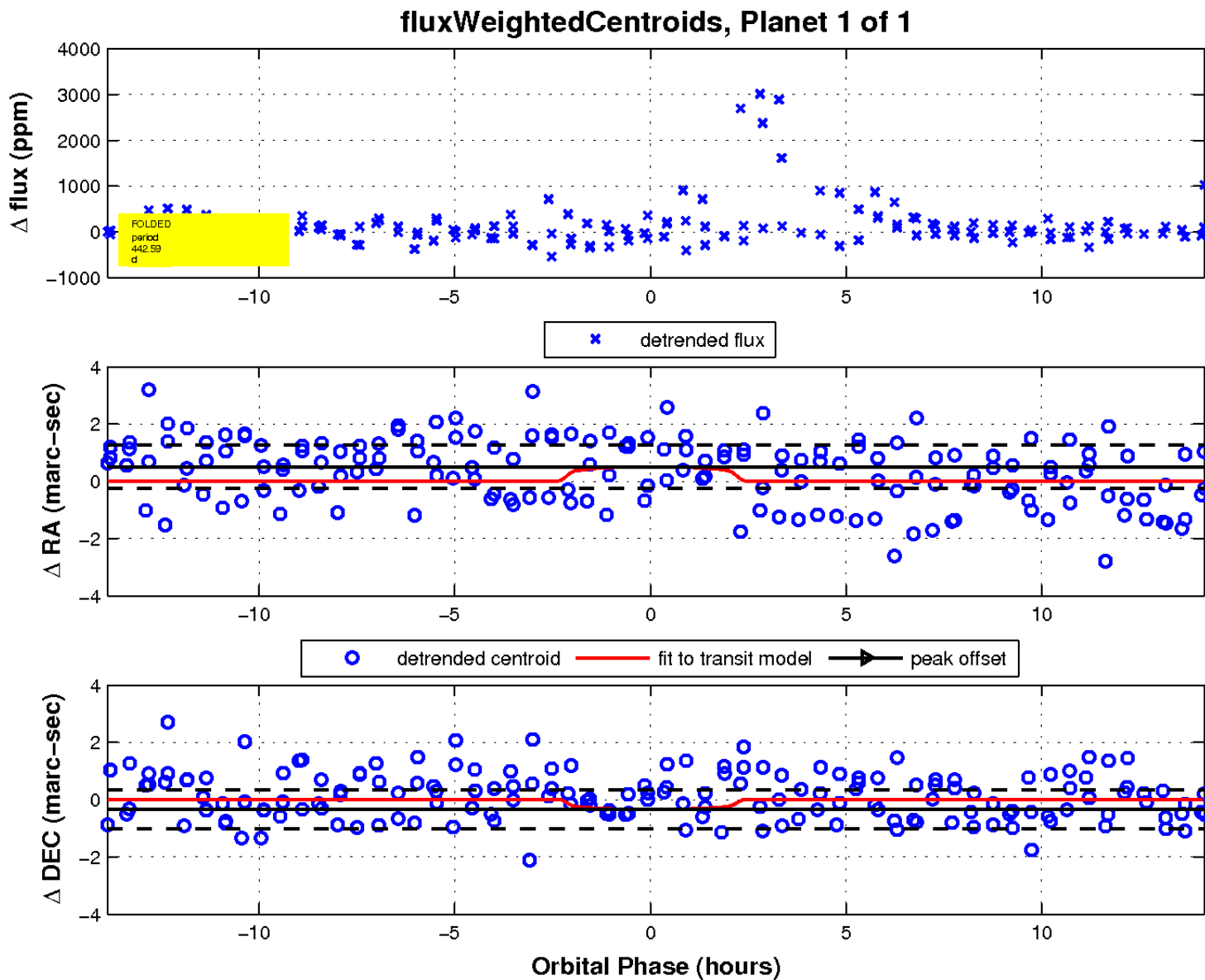
white ×: KIC target position; +: OOT centroid; △: difference centroid. red ✕: large negative pixel value.



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

