

KIC 003936252

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})
003936252-01	OBS	No	461.295514	543.192041	206.6	15.913	7.4	7.7	1.11	5918	1.73	1.10

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
003936252-01	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_MARSHALL—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.

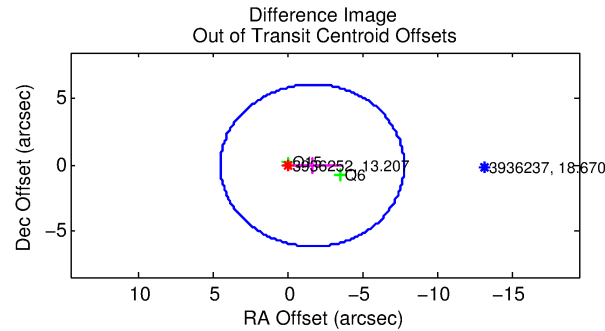
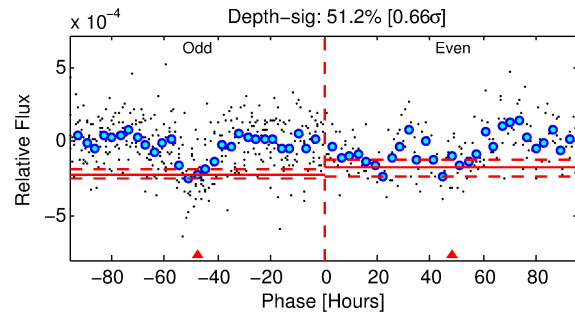
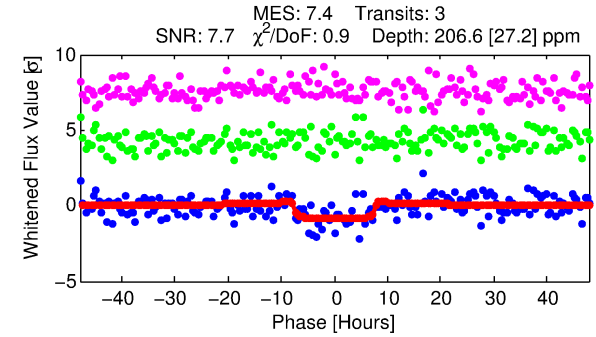
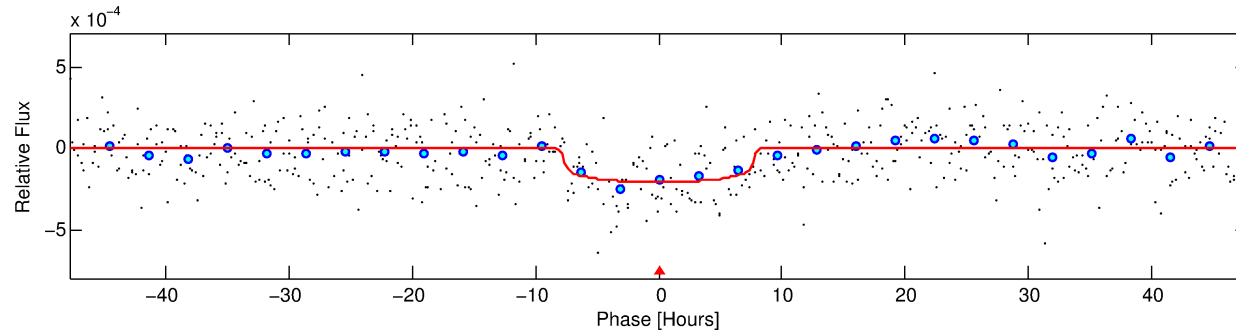
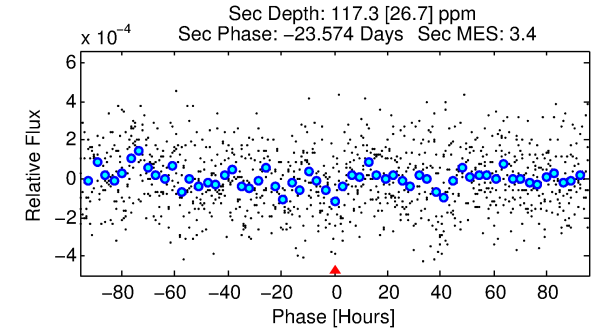
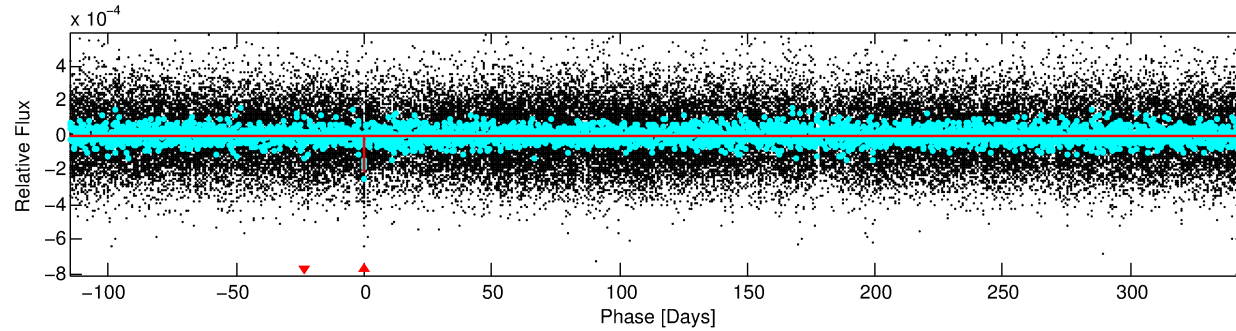
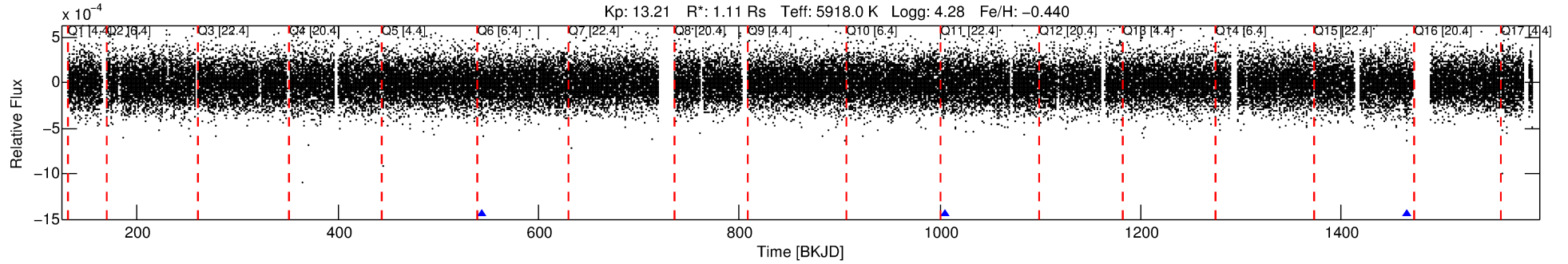
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 003936252-01

No Significant Match Found

DV One-Page Summary

KIC: 3936252 Candidate: 1 of 1 Period: 461.296 d



DV Fit Results:

Period = 461.29551 [0.01585] d
Epoch = 543.1920 [0.0206] BKJD
Rp/R* = 0.0143 [0.0046]
a/R* = 151.02 [236.25]
b = 0.75 [0.92]
Seff = 1.10 [0.46]
Teq = 261 [27] K
Rp = 1.73 [0.76] Re
a = 1.1074 [0.2941] AU
Ag = 26431.00 [21009.44] [1.26σ]
Teffp = 5151 [891] K [5.48σ]

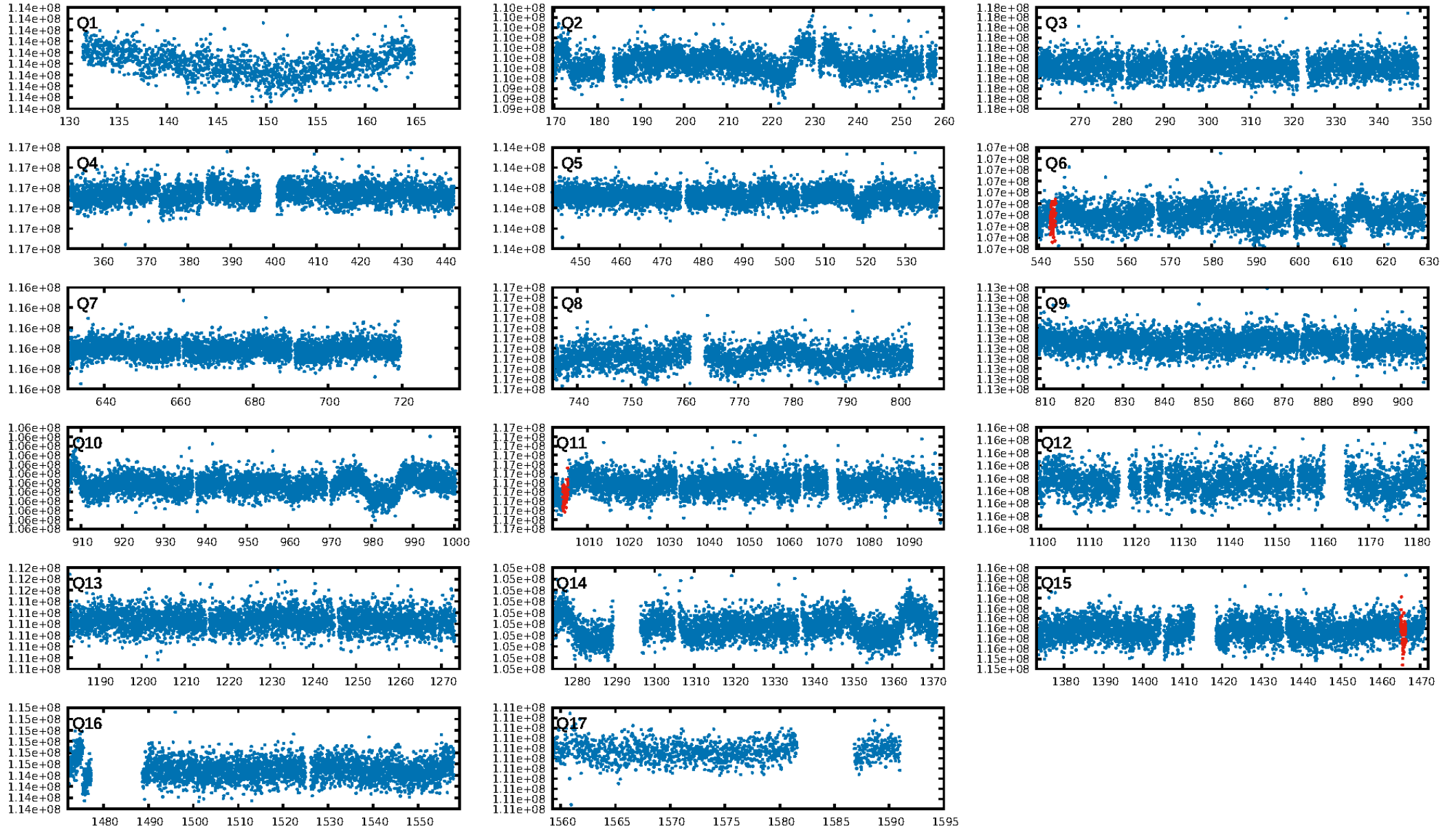
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: 23.6%
ModelChiSquareGof-sig: 99.7%
Bootstrap-pfa: 2.04e-10
RollingBand-fgt: 1.00 [3/3]
GhostDiagnostic-chr: 3.062
Centroid-sig: 67.1%
Centroid-so: 0.683 arcsec [0.47σ]
OotOffset-rm: 1.675 arcsec [0.82σ]
OotOffset-st: 1/1/0/0 [2]
KicOffset-rm: 1.666 arcsec [0.81σ]
KicOffset-st: 1/1/0/0 [2]
DiffImageQuality-fgm: 0.50 [1/2]
DiffImageOverlap-fno: 1.00 [2/2]

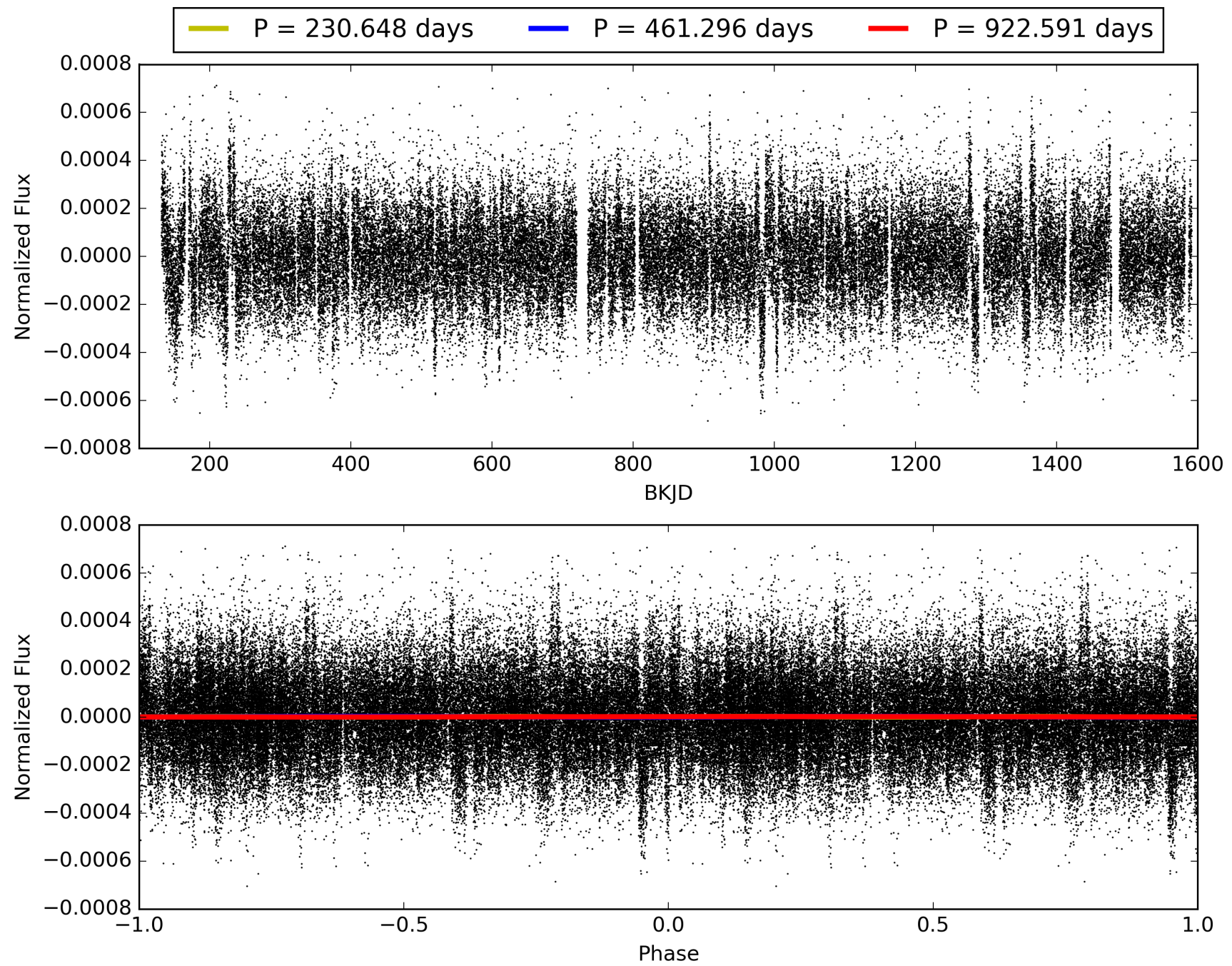
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 31-Jan-2016 23:01:51 Z

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

TCE 003936252-01, PDC Light Curves

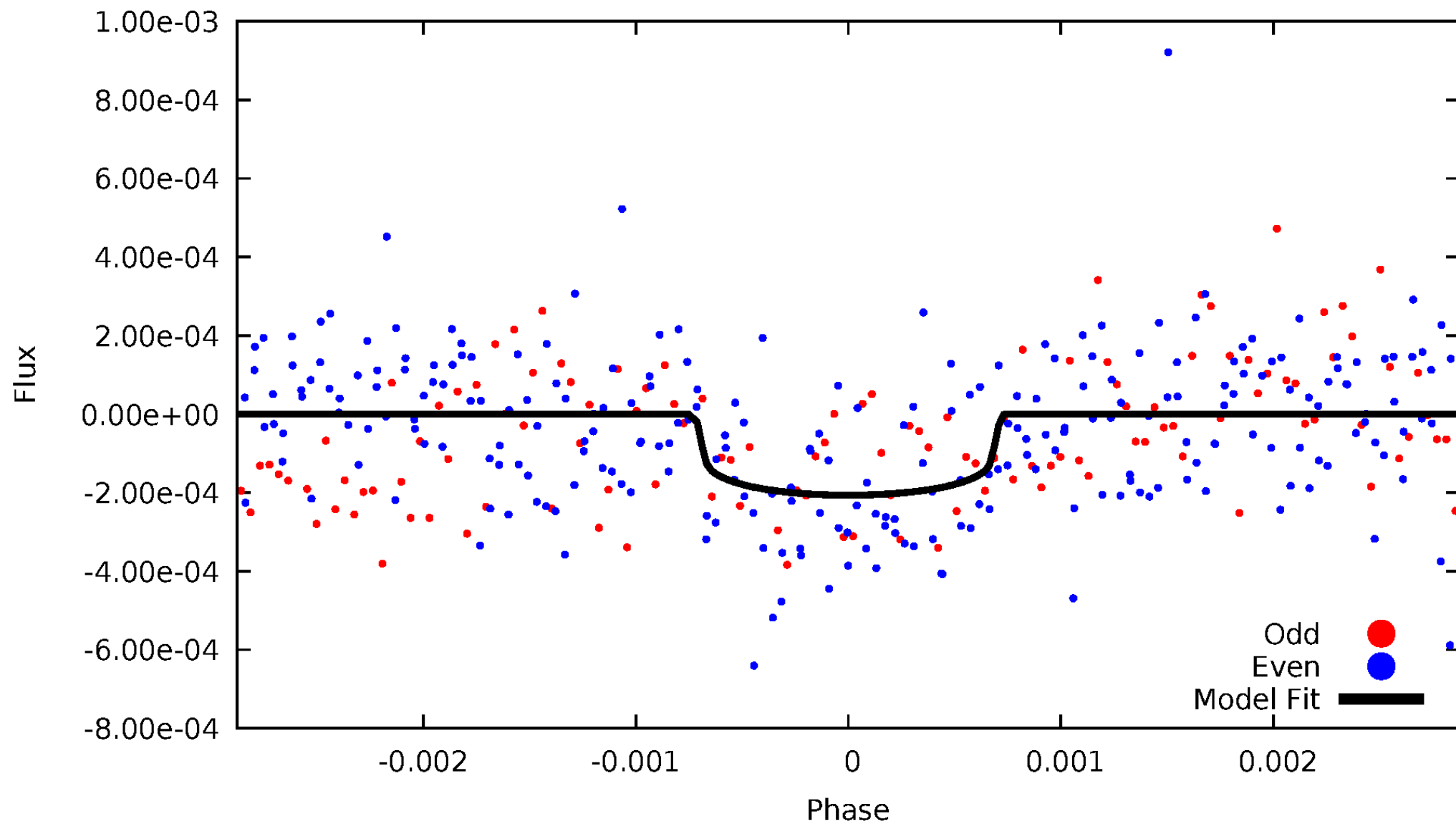


TCE 003936252-01



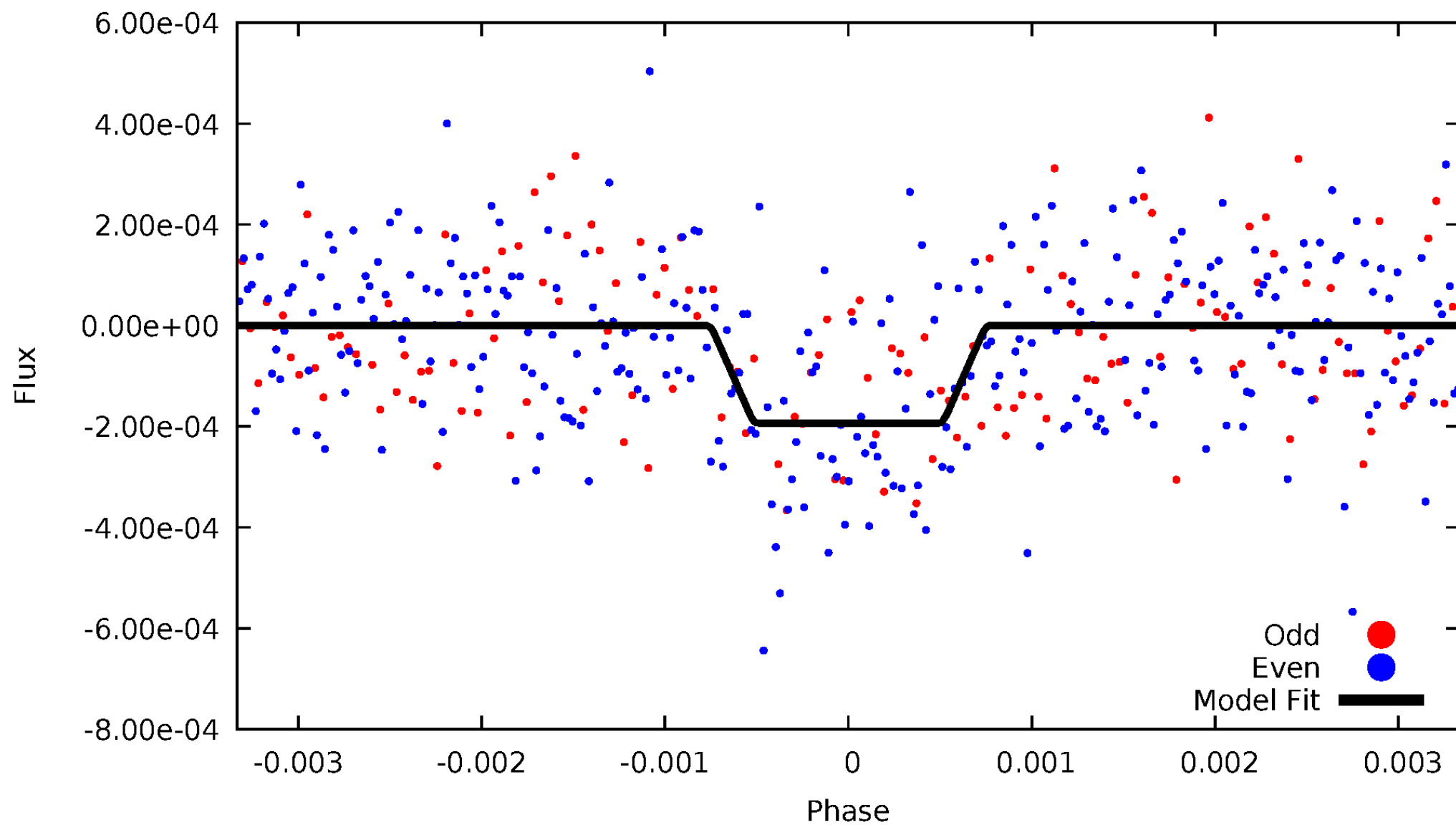
DV Odd/Even

TCE 003936252-01

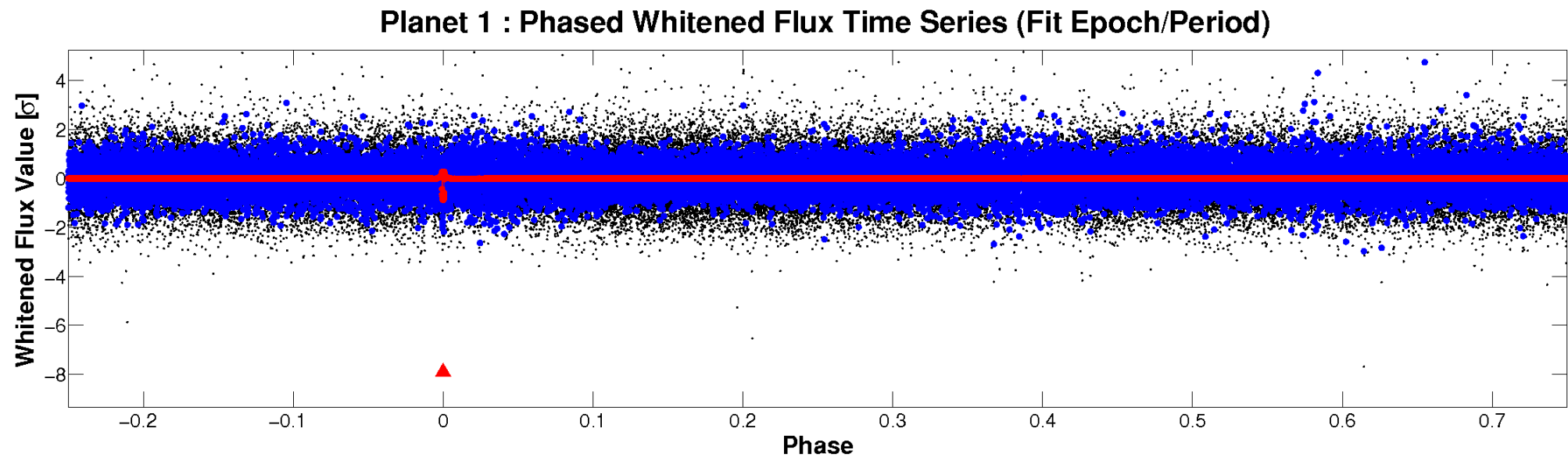
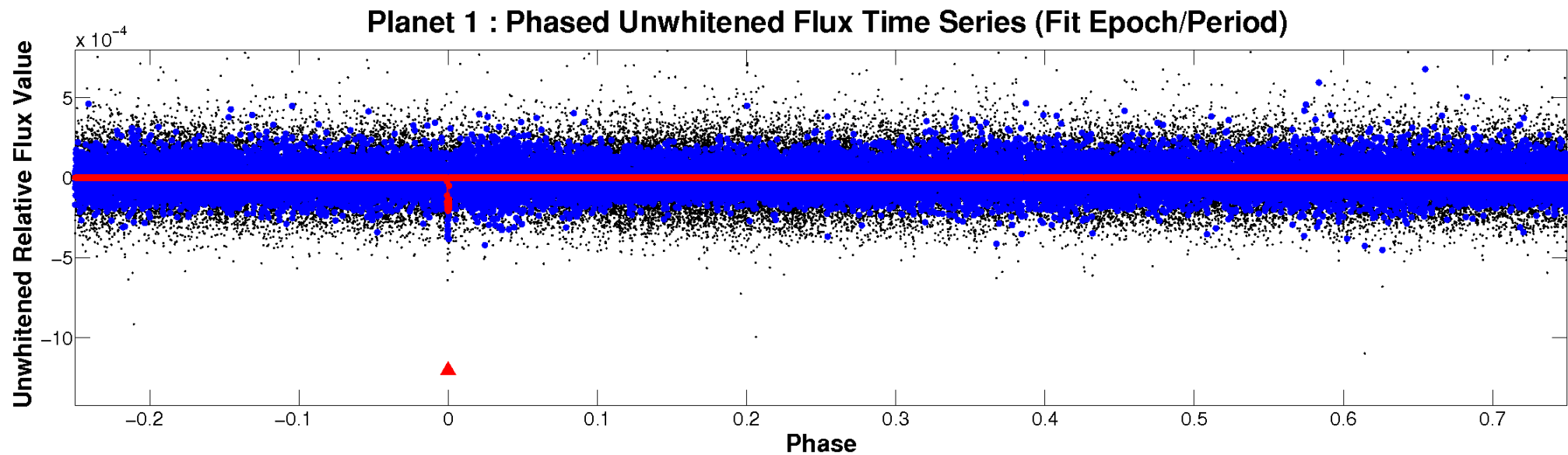


ALT Odd/Even

TCE 003936252-01

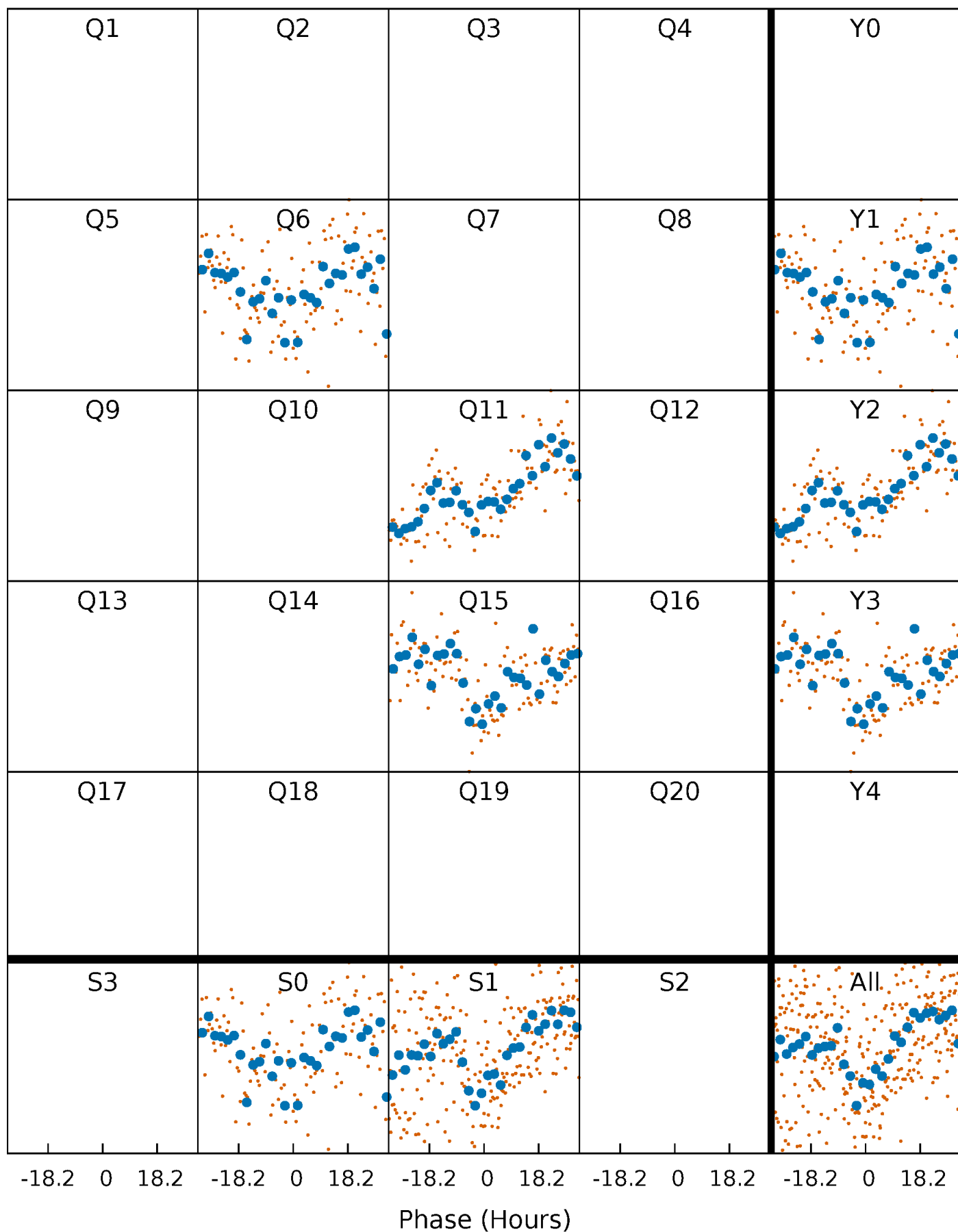


Non-Whitened Vs. Whitened Light Curve



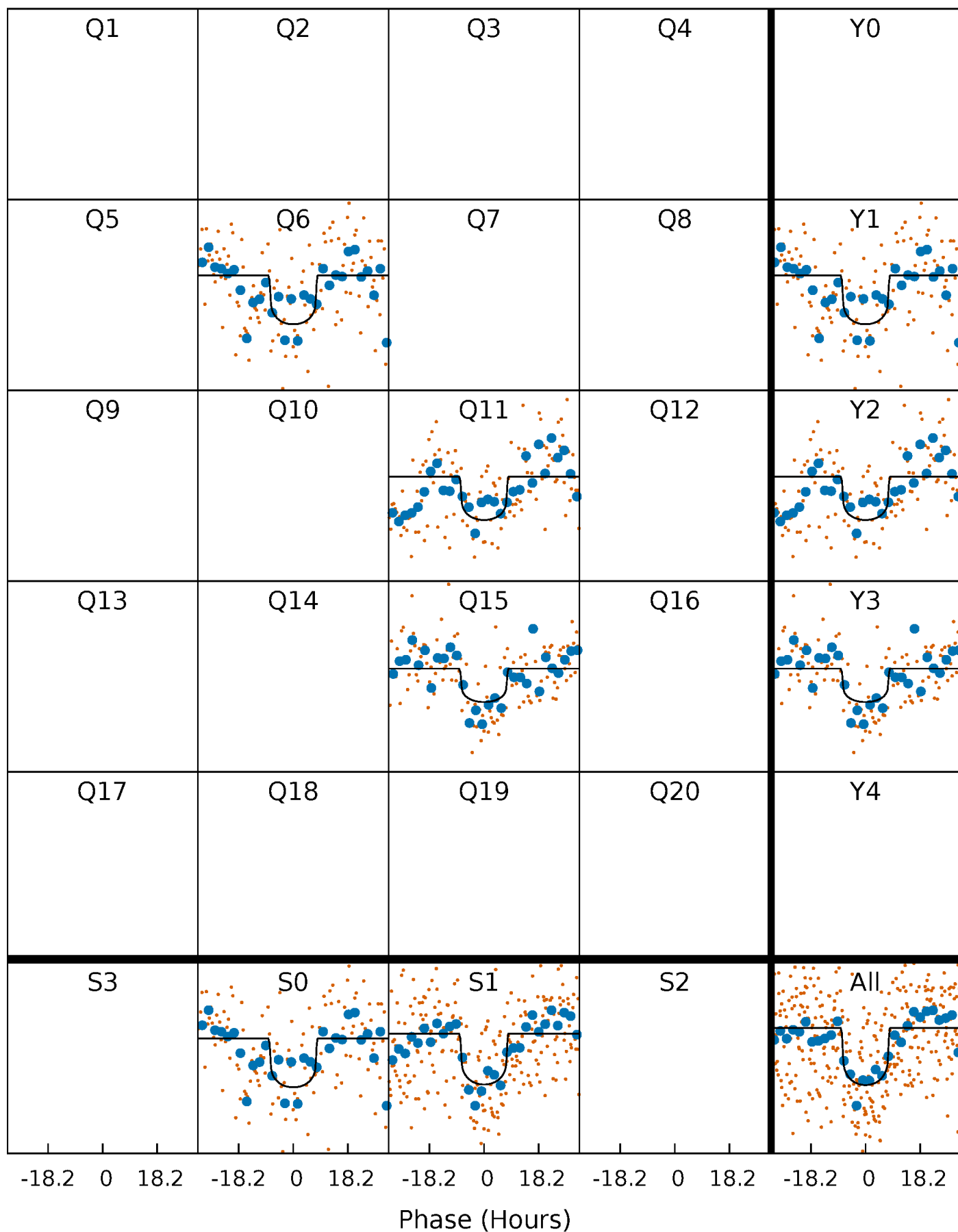
PDC Quarter-Phased Transit Curves

TCE 003936252-01 P=461.295514 Days $T_0=543.192040$ (BKJD)



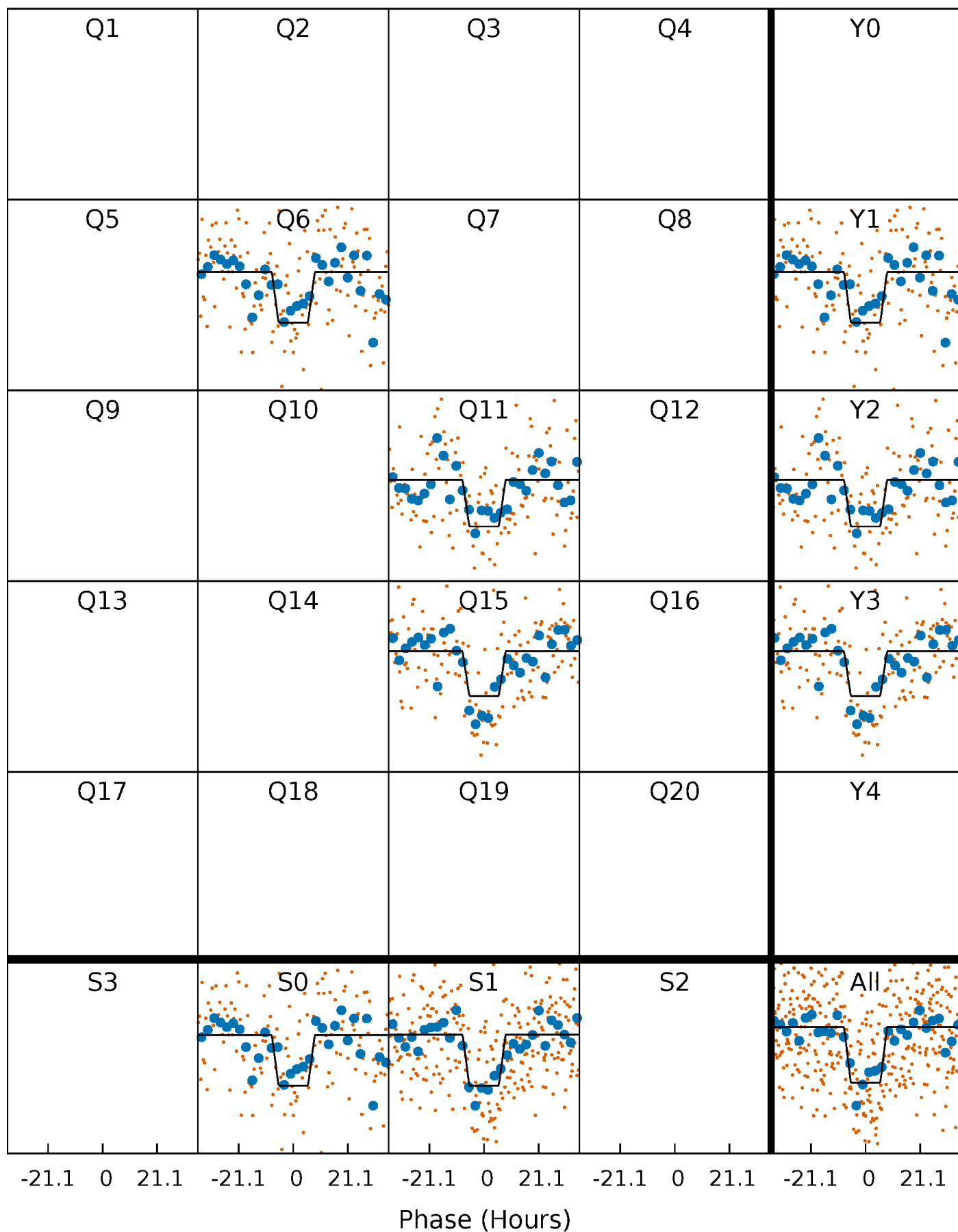
DV Quarter-Phased Transit Curves

TCE 003936252-01 P=461.295514 Days $T_0=543.192040$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

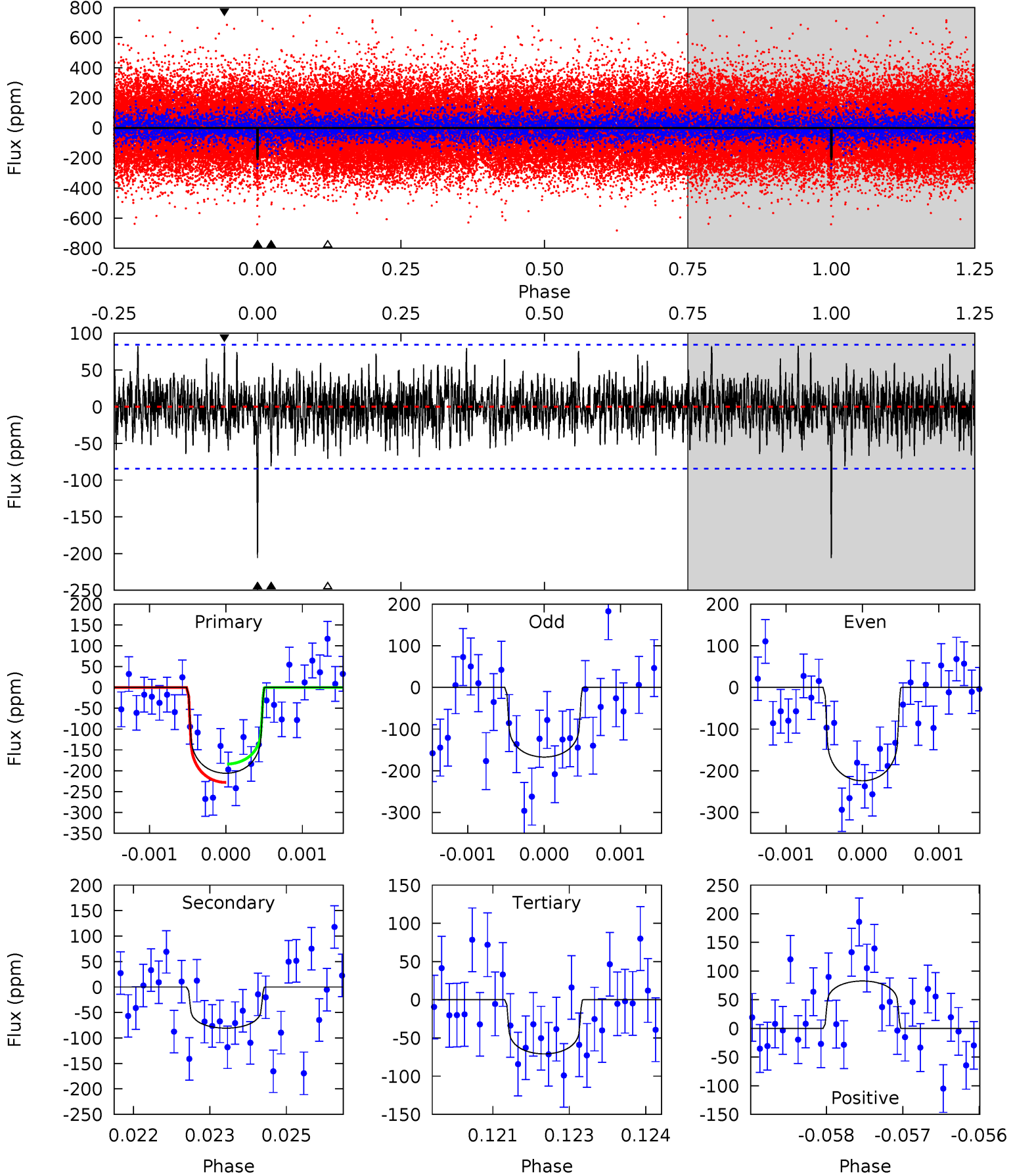
TCE 003936252-01 P=461.280806 Days $T_0=543.229654$ (BKJD)



DV Model-Shift Uniqueness Test

003936252-01, P = 461.295514 Days, E = 81.896526 Days

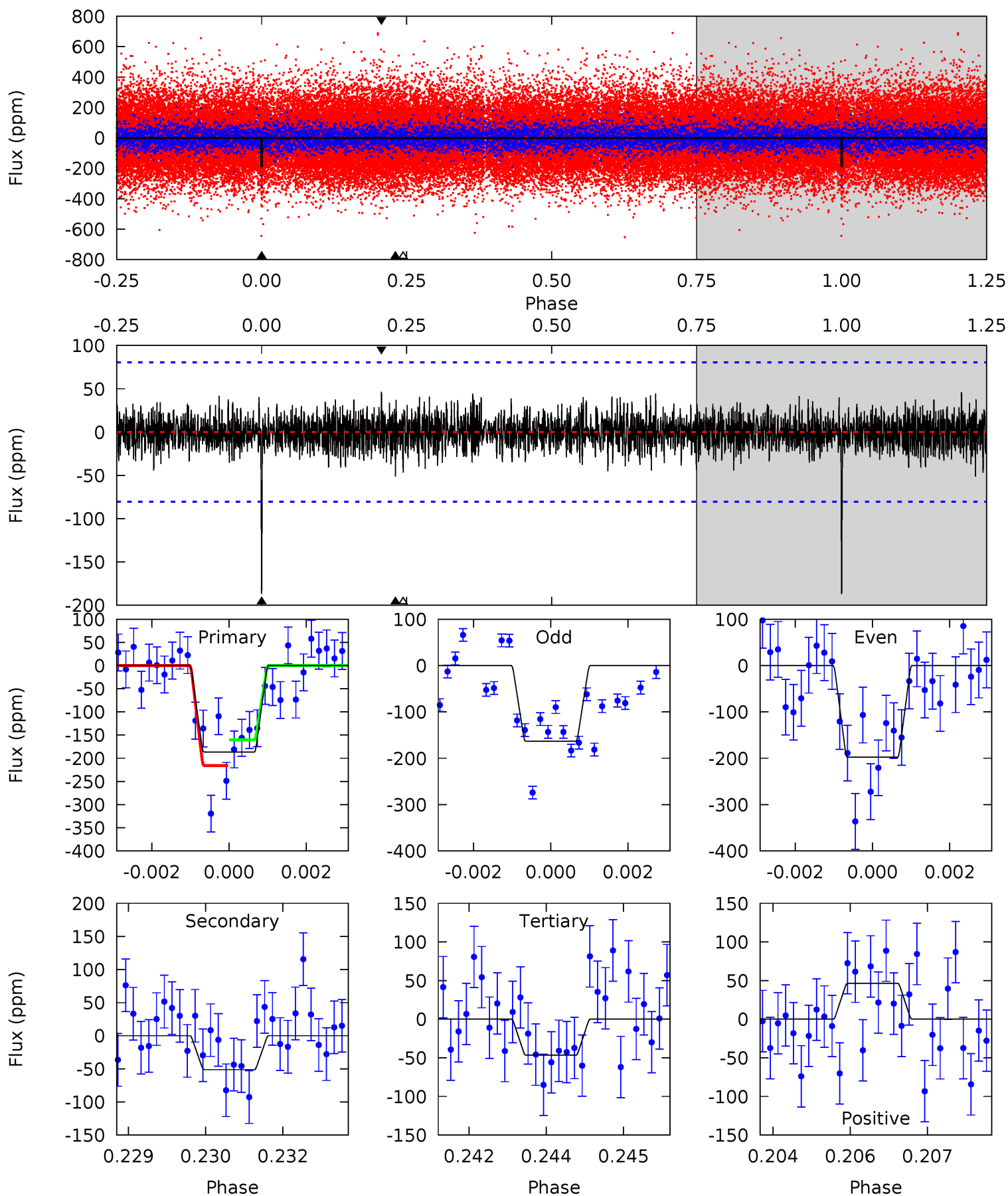
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
13.2	5.16	4.52	5.28	5.38	3.18	1.42	8.63	7.87	0.63	-0.13	1.70	1.14	0.29	1.41



Alt Model-Shift Uniqueness Test

003936252-01, P = 461.280806 Days, E = 81.948848 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
12.5	3.42	3.11	3.10	5.38	3.17	0.95	9.38	9.40	0.31	0.33	1.07	1.14	0.20	1.86



Stellar Parameters For KIC 003936252

	$T_{\text{eff}} (K)$	$\log(g)$	$[\text{Fe}/\text{H}]$	$R (R_{\odot})$	$M (M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	5918^{+147}_{-162}	$4.278^{+0.231}_{-0.189}$	$-0.440^{+0.300}_{-0.300}$	$1.109^{+0.329}_{-0.269}$	$0.852^{+0.125}_{-0.068}$	$0.879^{+0.996}_{-0.438}$
	+2%/-3%	+5%/-4%	+68%/-68%	+30%/-24%	+15%/-8%	+113%/-50%
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 003936252-01 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	A_{obs}
DV	-81 ± 16	$1.71^{+0.62}_{-0.53}$	365^{+26}_{-28}	4790^{+875}_{-519}	18235^{+21289}_{-8285}
Alt.	-51 ± 15	$1.65^{+0.64}_{-0.55}$	364^{+29}_{-25}	4455^{+840}_{-552}	12903^{+18106}_{-7056}

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

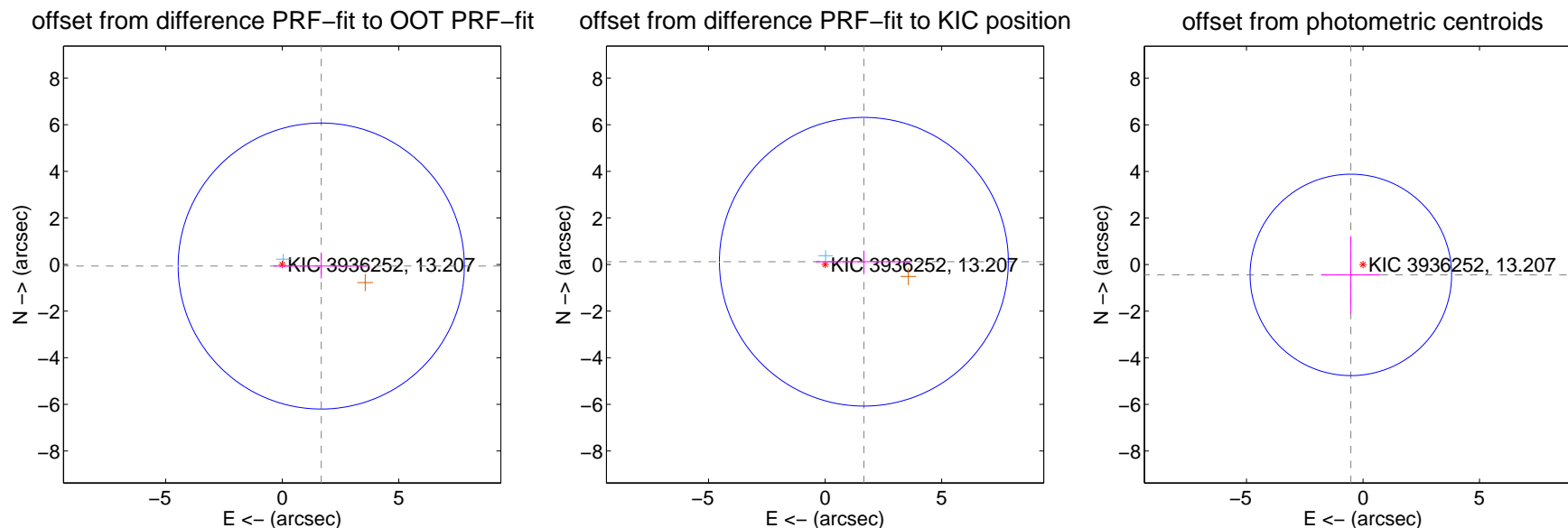
DV Centroid Data

Supplemental centroid analysis for 003936252-01. Kepler magnitude: 13.21. Transit SNR 7.68

There are 1 quarters with good PRF difference image offsets

The direct PRF centroid is offset from the target star catalog position by about 0.16 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	1.675 ± 2.046	0.82	-1.674 ± 2.047	-0.065 ± 0.535
PRF-fit source offset from KIC position	1.666 ± 2.065	0.81	-1.662 ± 2.070	0.120 ± 0.479
photometric centroid source offset	0.68 ± 1.44	0.47	0.52 ± 1.26	-0.44 ± 1.66

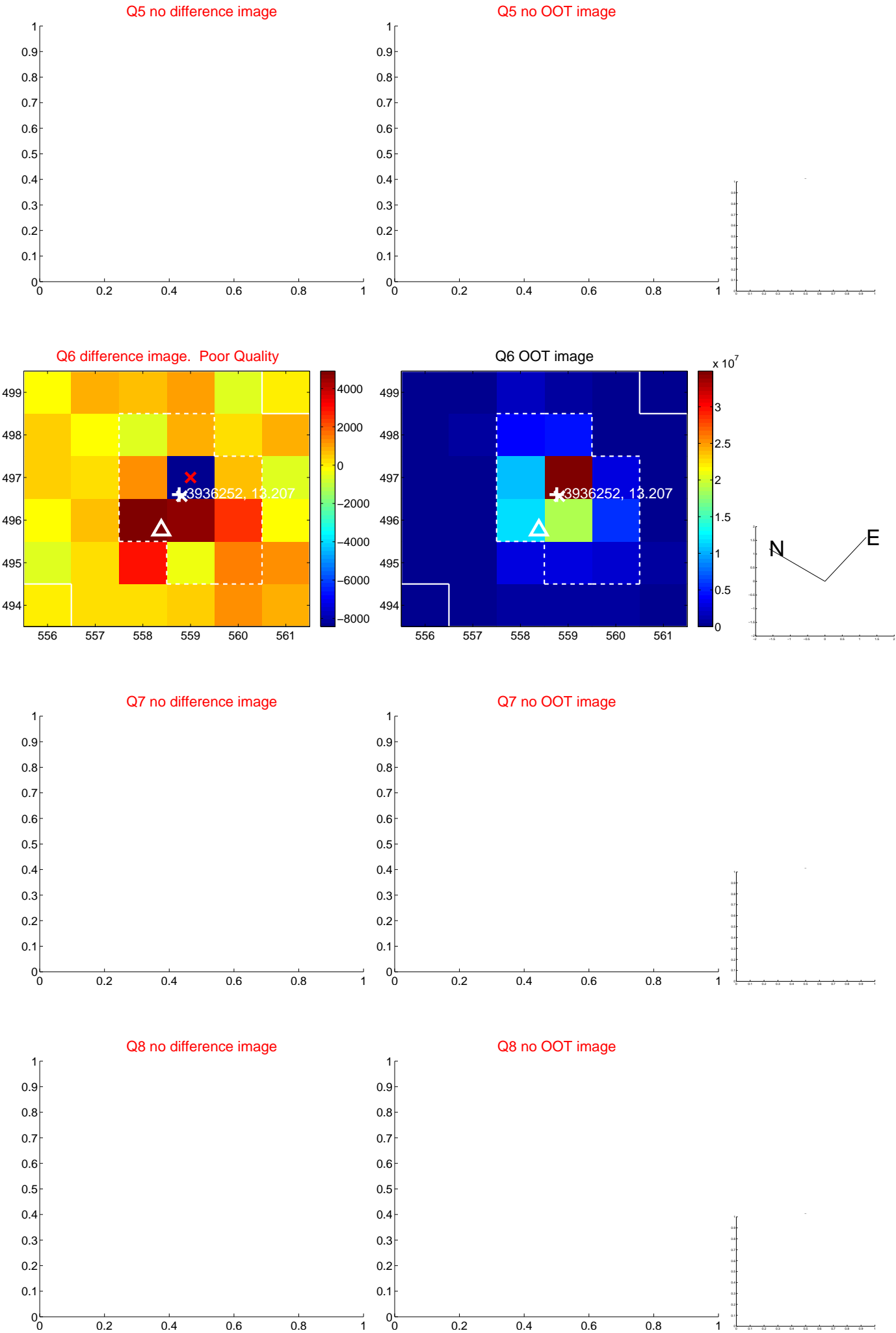


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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



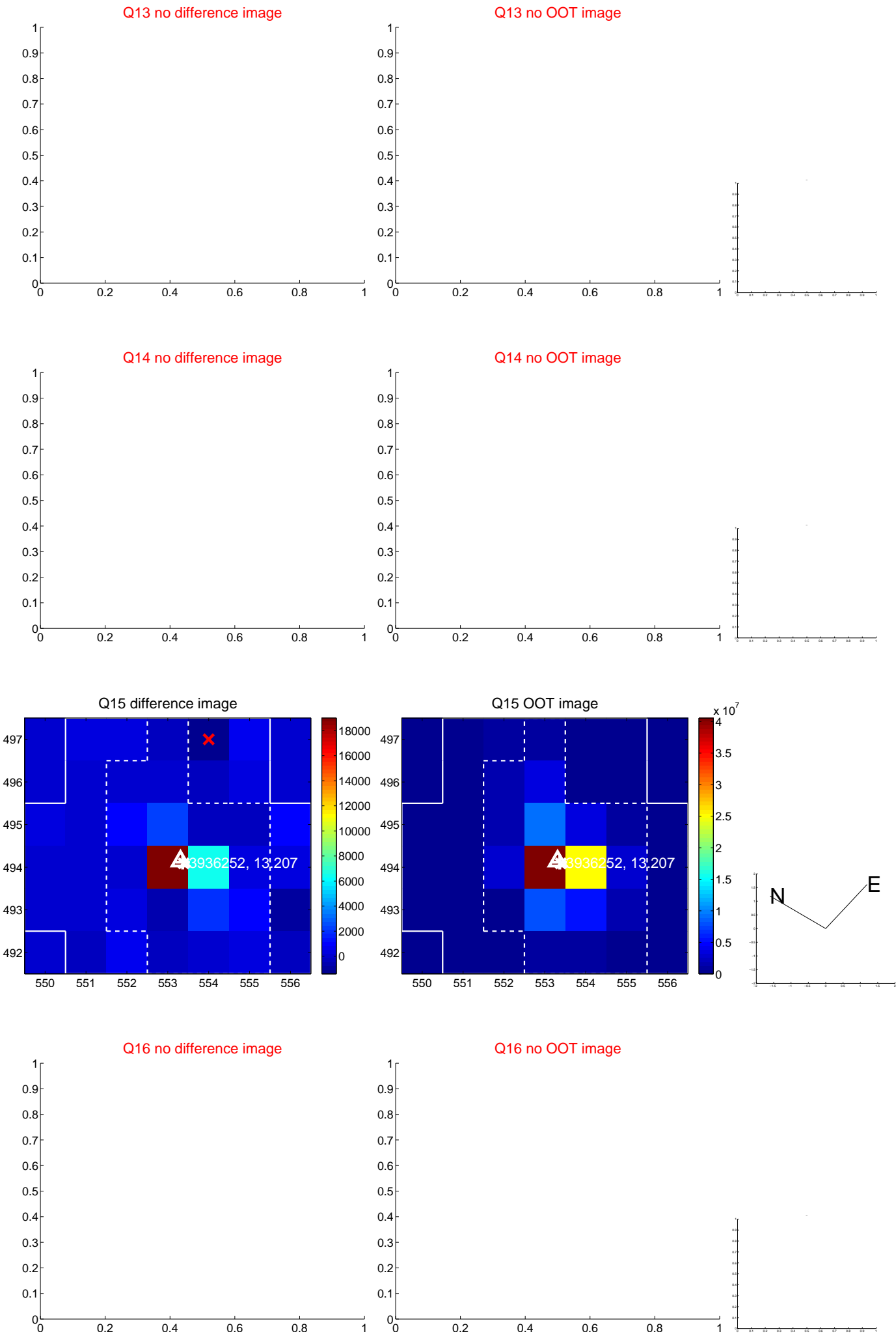
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



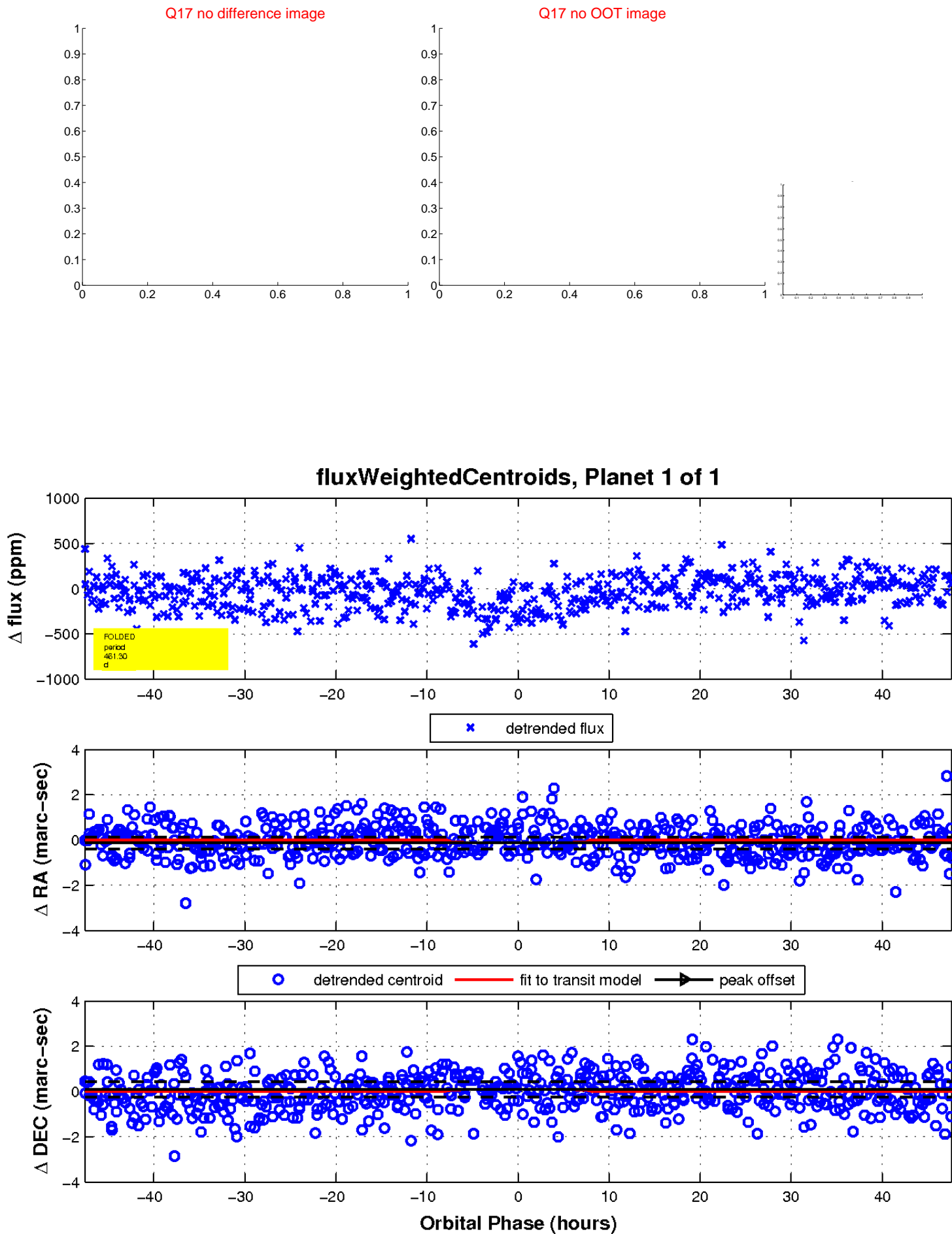
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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



UKIRT Image

