

KIC 010208495

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})
010208495-01	OBS	No	371.733881	134.681534	559.2	15.876	7.6	7.8	1.06	6170	2.93	1.32

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
010208495-01	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_SKYE—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.

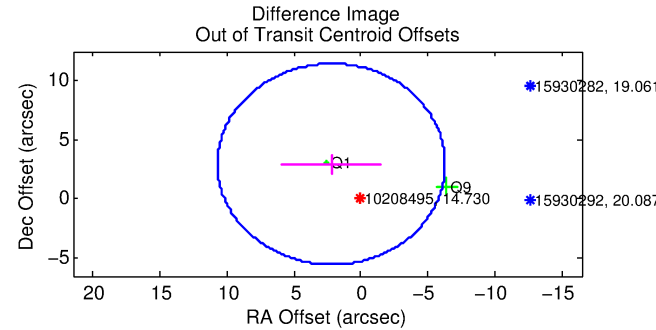
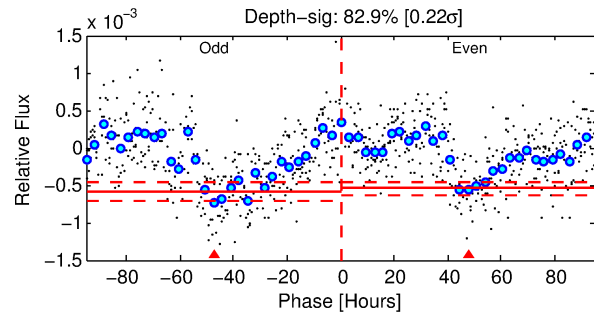
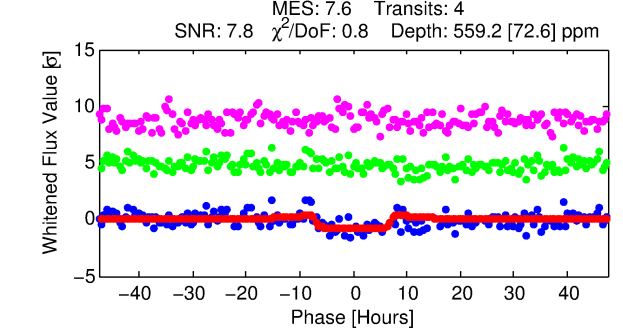
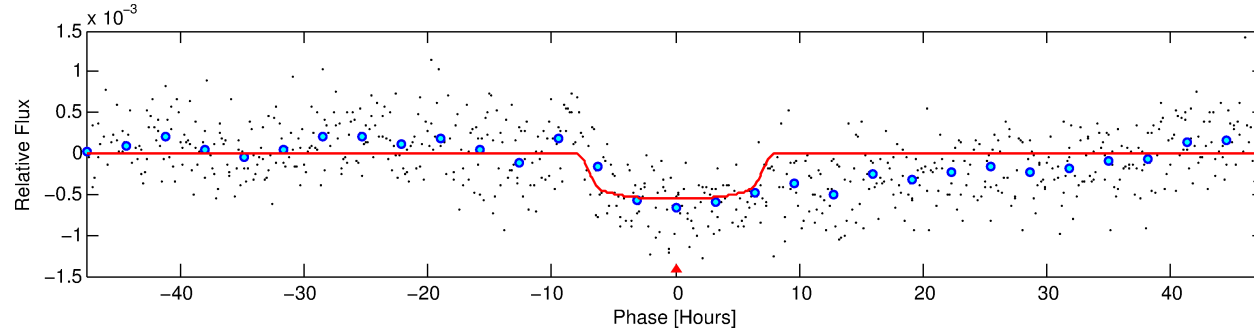
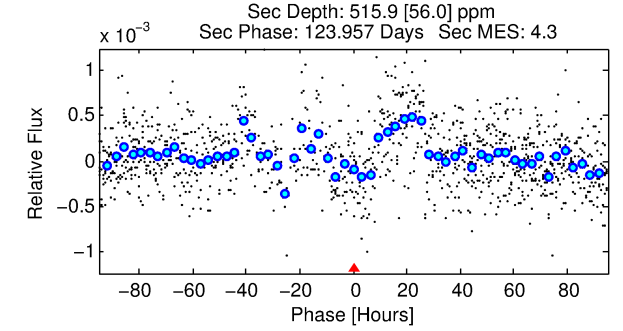
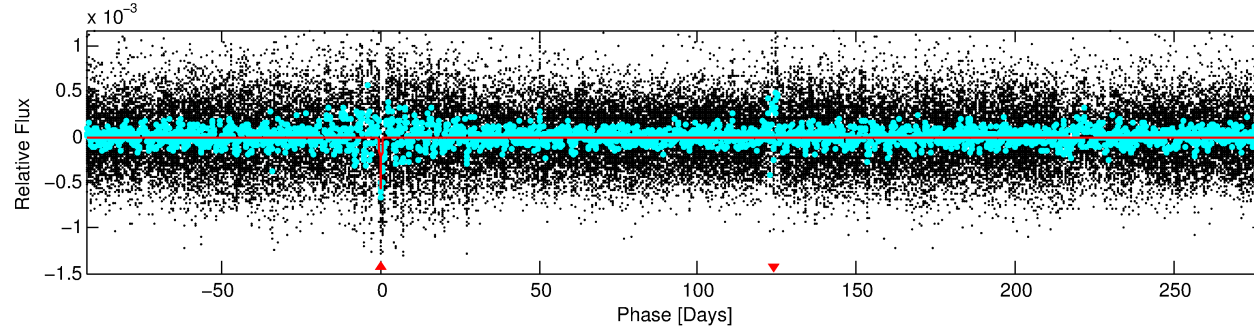
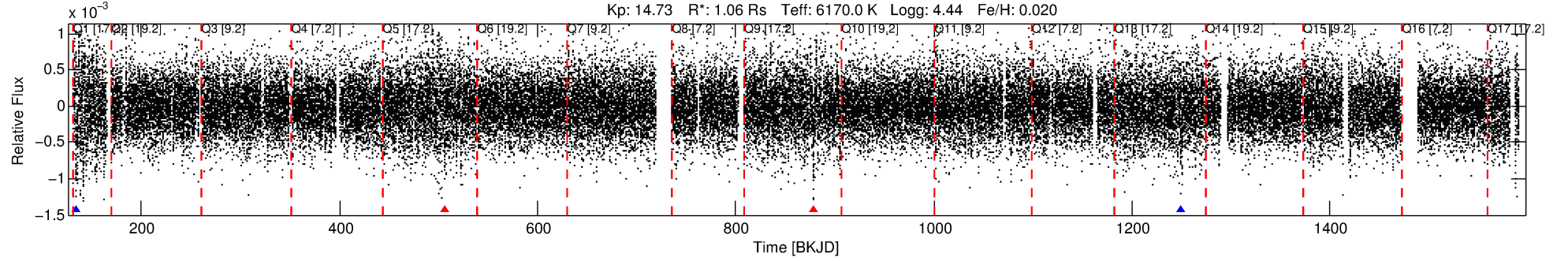
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 010208495-01

No Significant Match Found

DV One-Page Summary

KIC: 10208495 Candidate: 1 of 1 Period: 371.734 d



DV Fit Results:

Period = 371.73388 [0.01134] d
Epoch = 134.6815 [0.0231] BKJD
Rp/R* = 0.0253 [0.0025]
a/R* = 90.76 [30.86]
b = 0.89 [0.08]
Seff = 1.32 [0.58]
Teff = 273 [30] K
Rp = 2.93 [1.03] Re
a = 1.0520 [0.2978] AU
Ag = 36546.11 [17129.86] [2.13 σ]
Teffp = 5844 [398] K [13.95 σ]

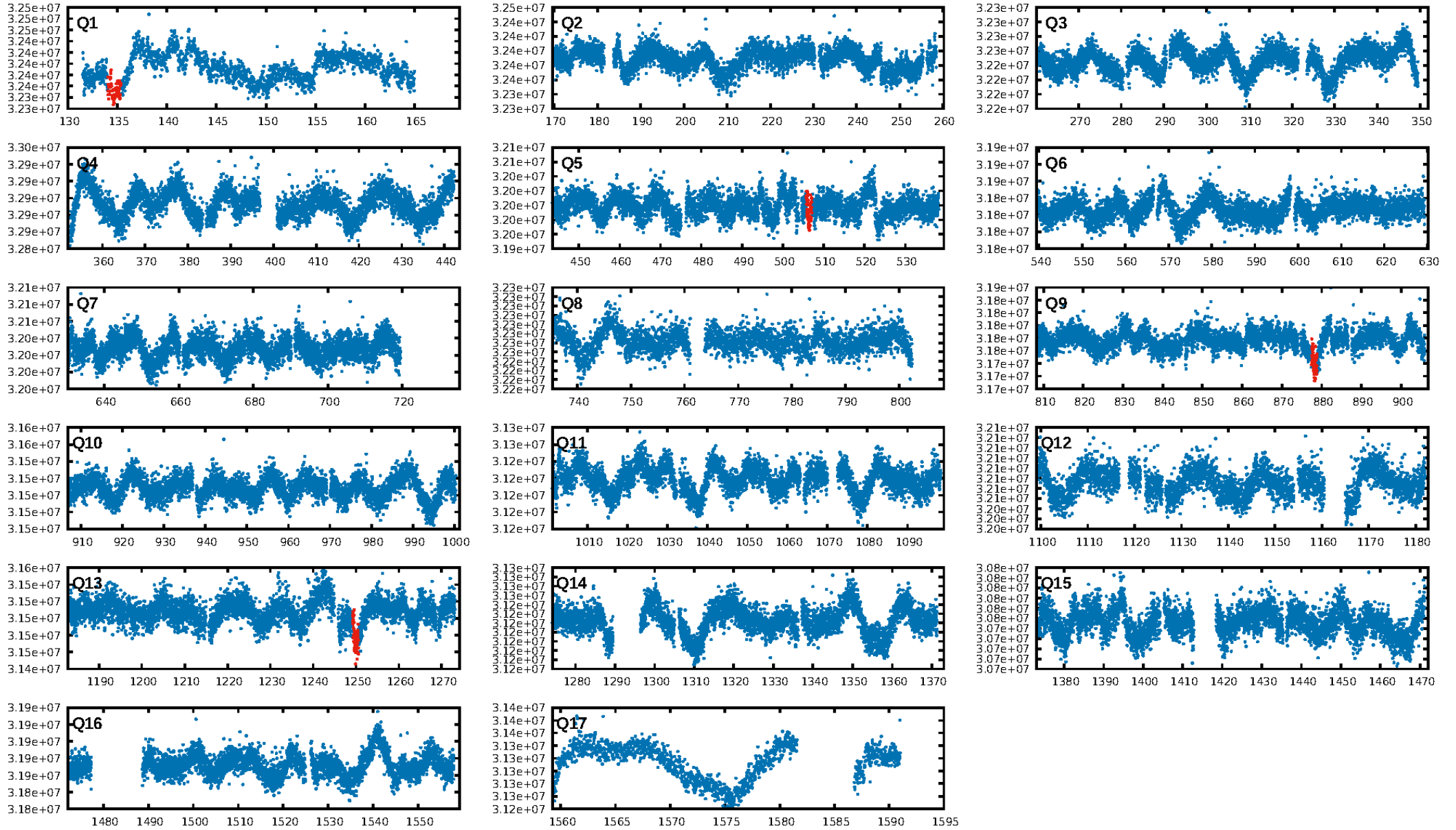
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: 82.8%
ModelChiSquareGof-sig: 100.0%
Bootstrap-pfa: 7.27e-15
RollingBand-fgt: 0.33 [1/3]
GhostDiagnostic-chr: -1.443
Centroid-sig: 66.8%
Centroid-so: 0.601 arcsec [0.38 σ]
OotOffset-rm: 3.690 arcsec [1.30 σ]
KicOffset-rm: 3.678 arcsec [1.27 σ]
OotOffset-st: 0/0/0/2 [2]
KicOffset-st: 0/0/0/2 [2]
DiffImageQuality-fgm: 0.00 [0/2]
DiffImageOverlap-fno: 1.00 [3/3]

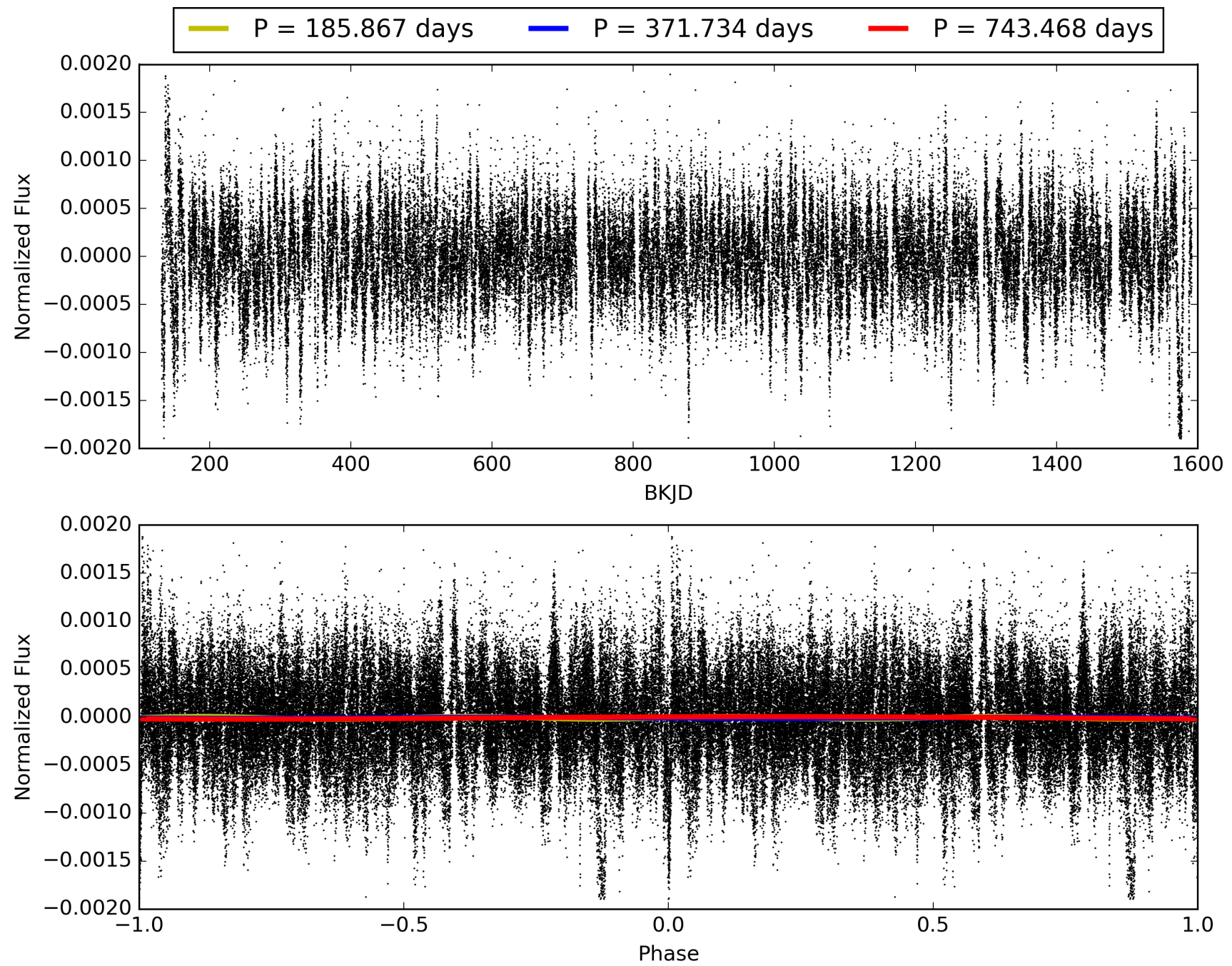
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 28-Jan-2016 20:48:37 Z

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

TCE 010208495-01, PDC Light Curves

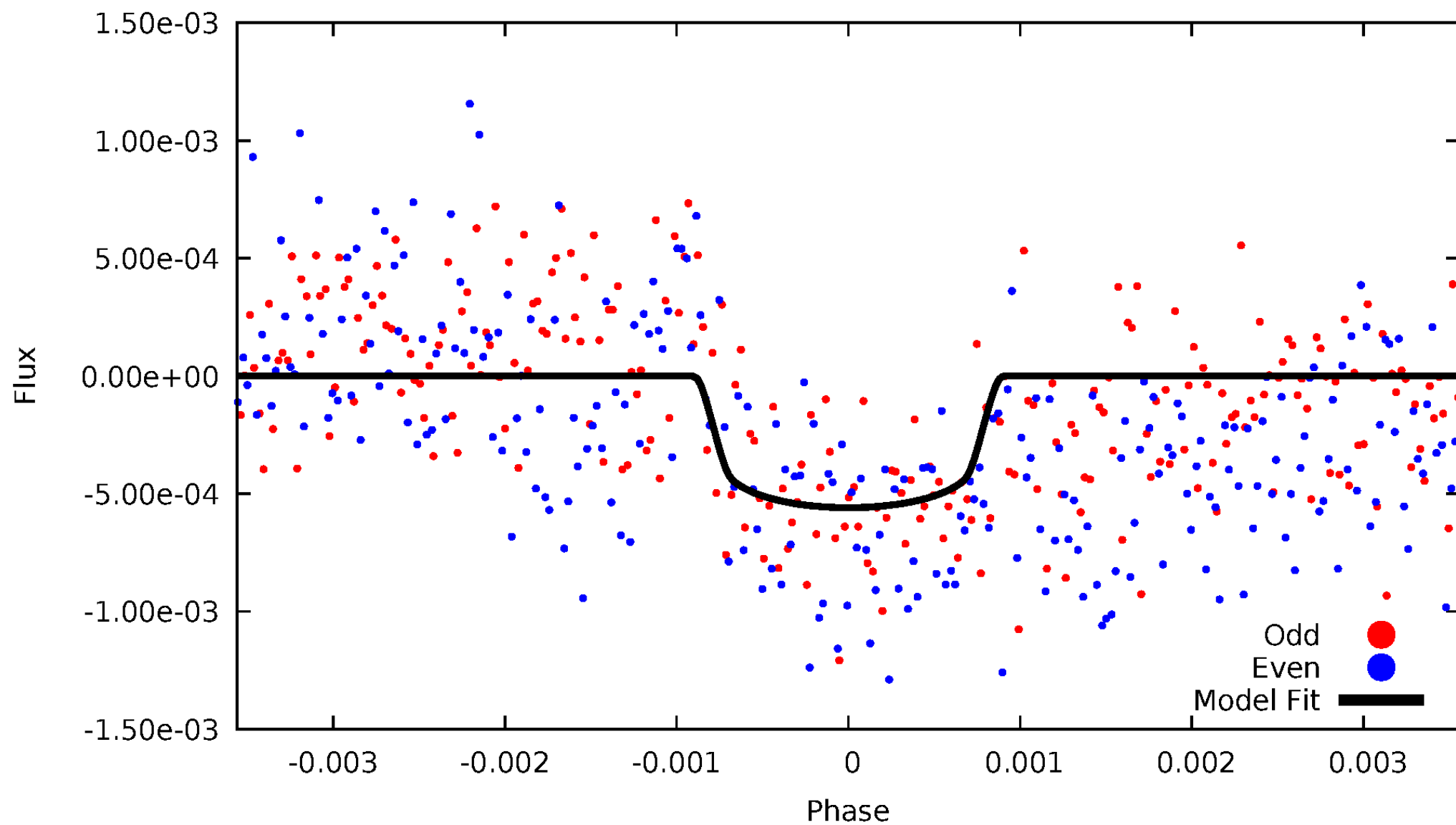


TCE 010208495-01



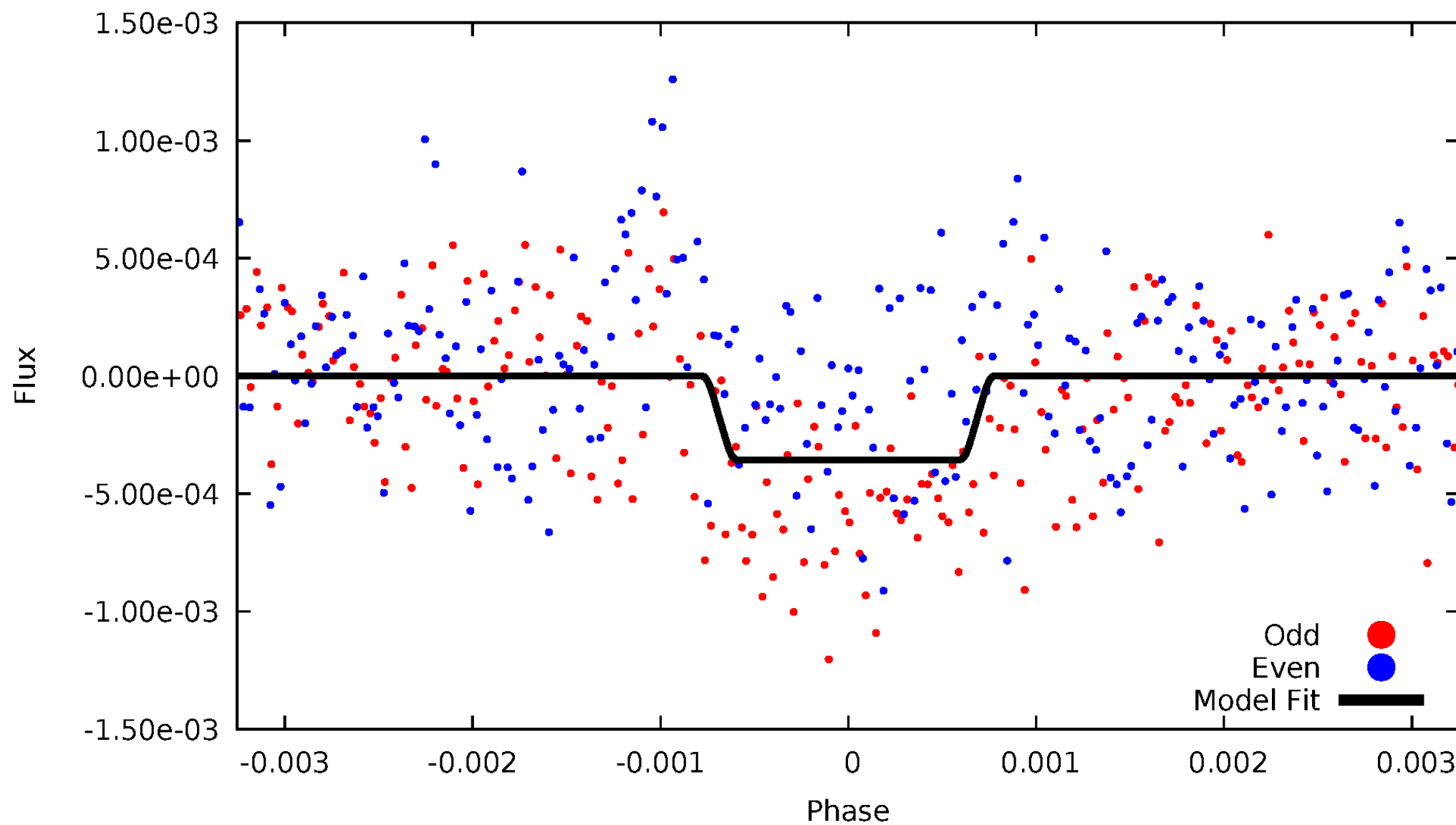
DV Odd/Even

TCE 010208495-01

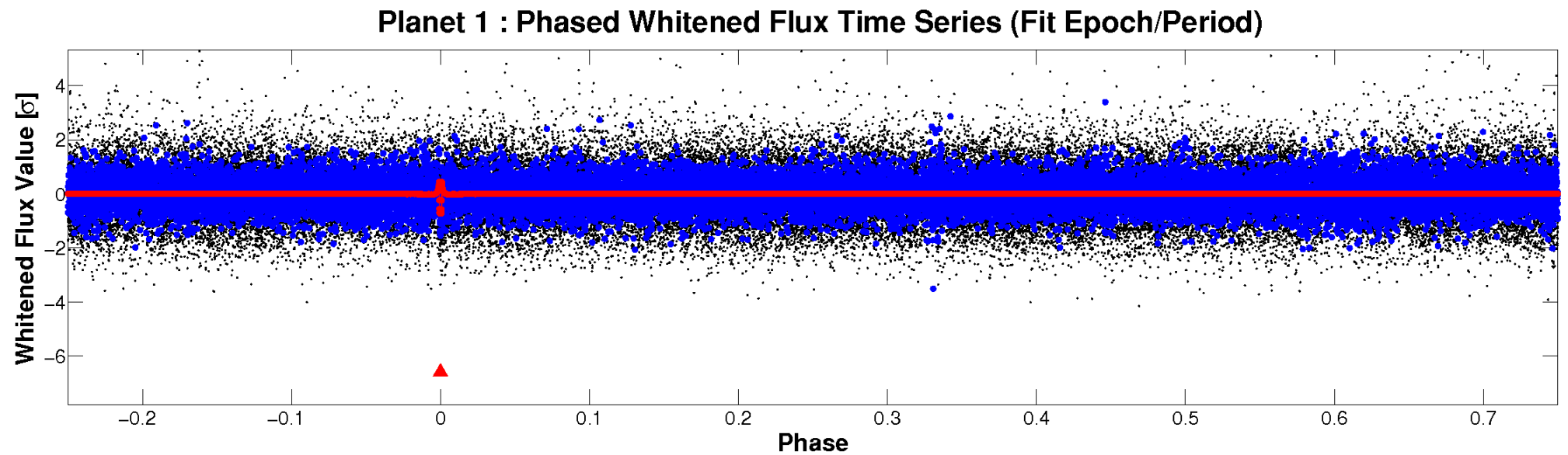
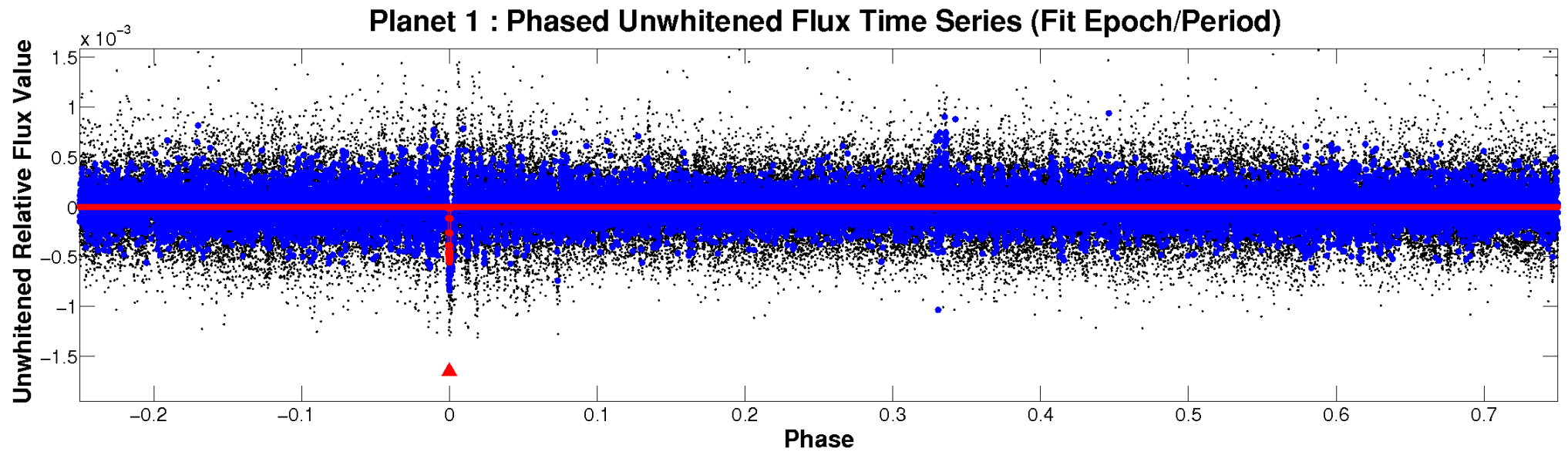


ALT Odd/Even

TCE 010208495-01

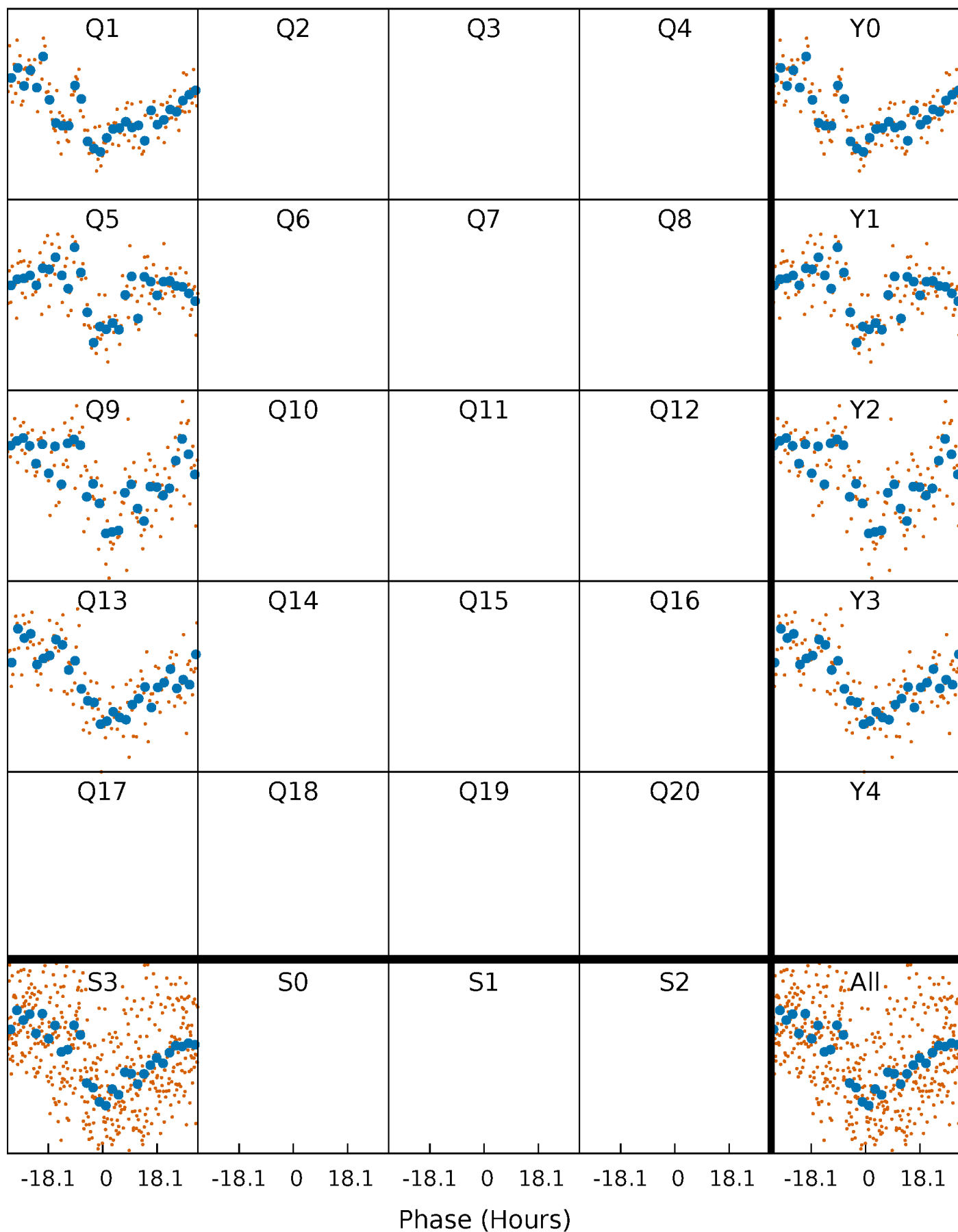


Non-Whitened Vs. Whitened Light Curve



PDC Quarter-Phased Transit Curves

TCE 010208495-01 P=371.733881 Days $T_0=134.681534$ (BKJD)



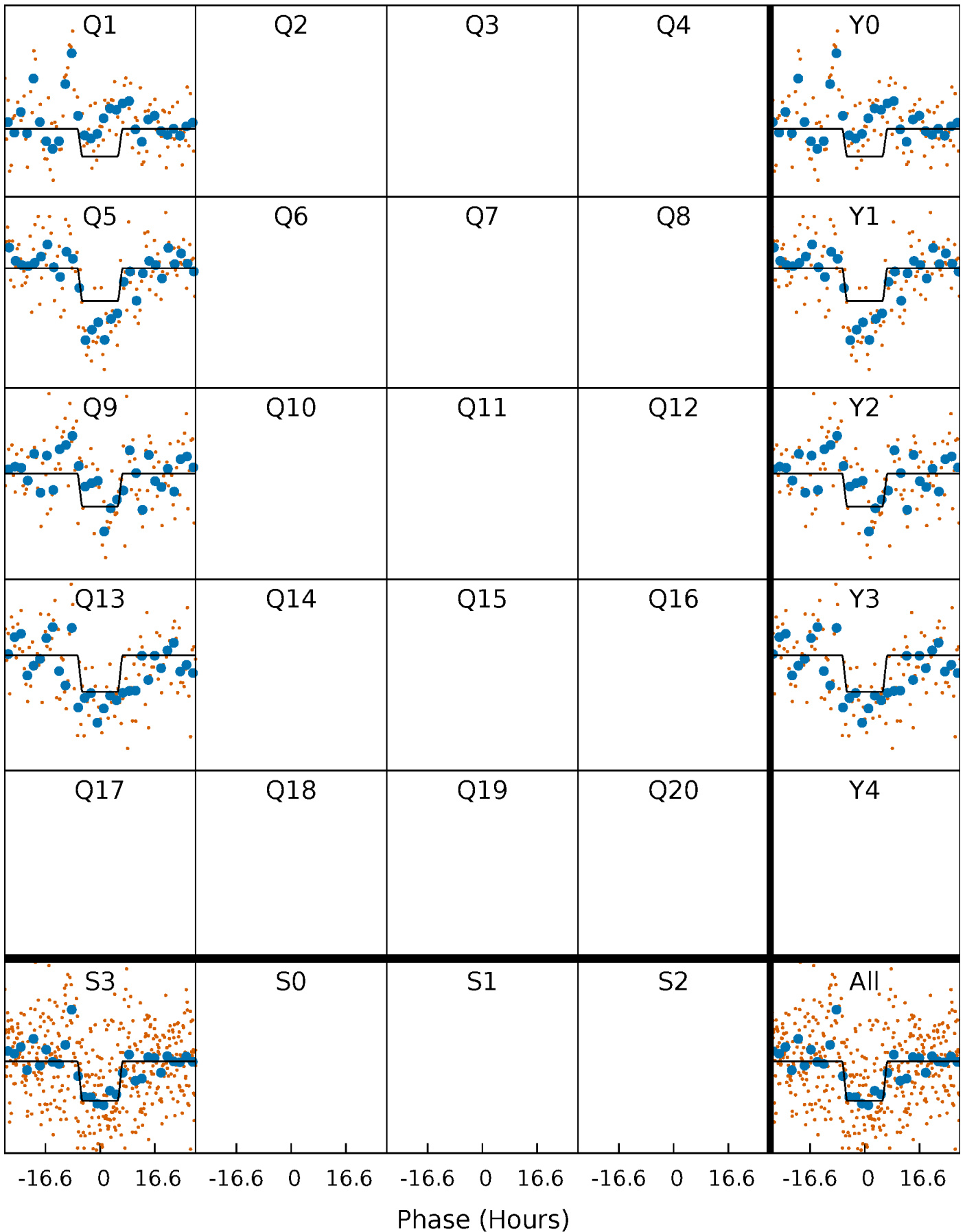
DV Quarter-Phased Transit Curves

TCE 010208495-01 P=371.733881 Days $T_0=134.681534$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

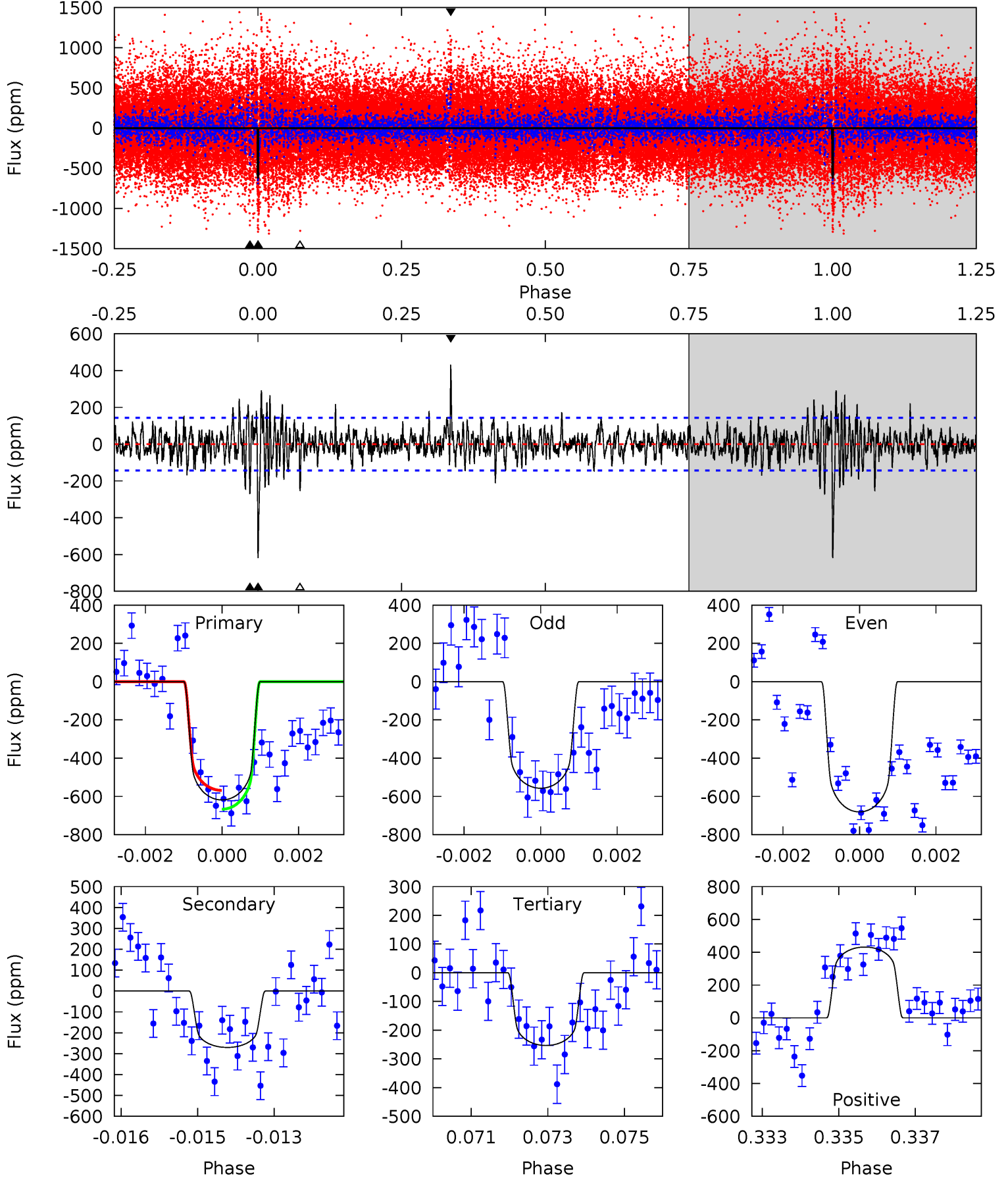
TCE 010208495-01 $P=371.734135$ Days $T_0=134.699948$ (BKJD)



DV Model-Shift Uniqueness Test

010208495-01, P = 371.733881 Days, E = 134.681534 Days

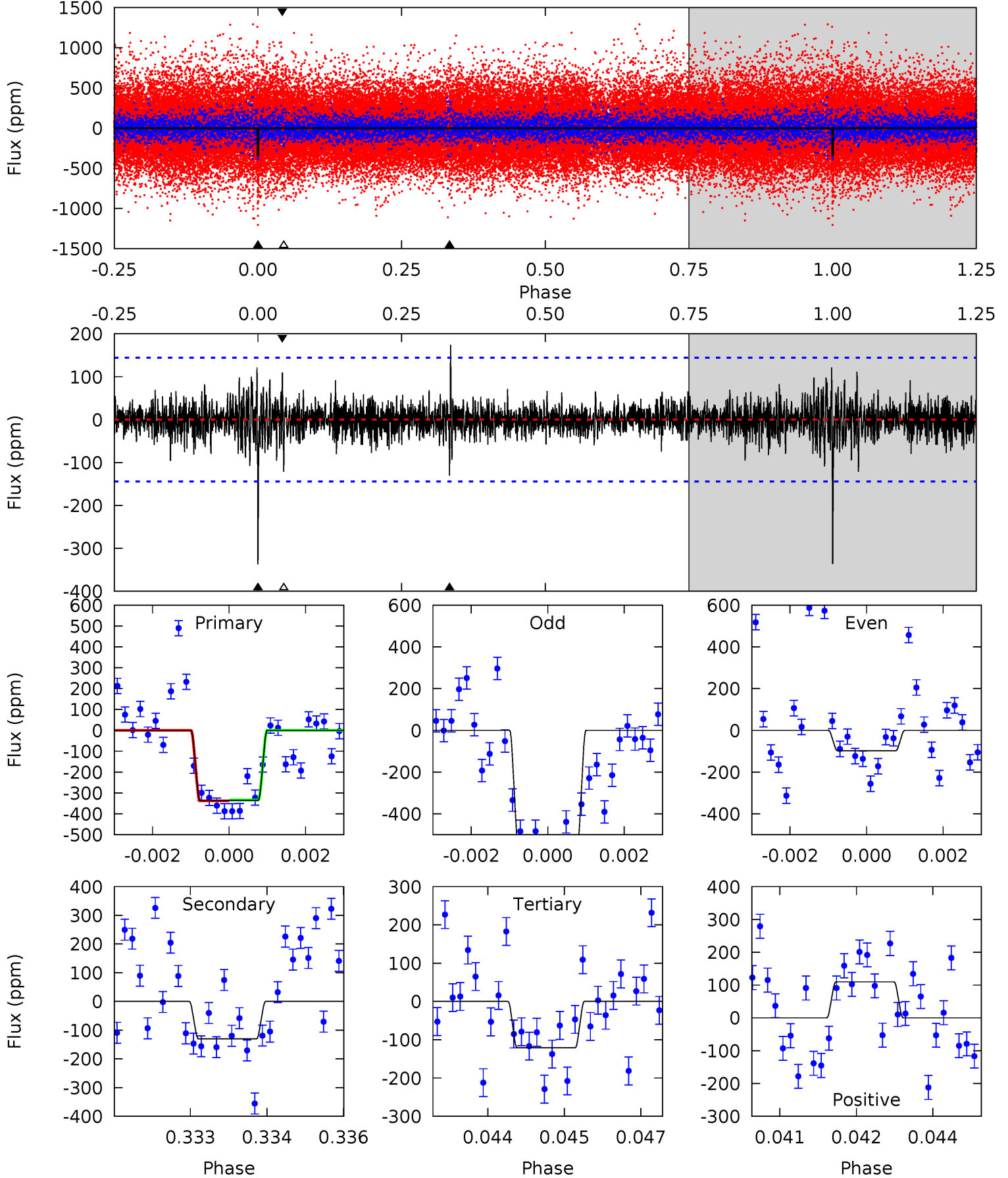
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
23.1	10.1	9.45	16.1	5.34	3.12	2.41	13.6	6.95	0.63	-6.02	2.31	1.02	0.41	1.83



Alt Model-Shift Uniqueness Test

010208495-01, P = 371.734135 Days, E = 134.699948 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	4.85	4.50	4.08	5.37	3.16	0.97	8.01	8.42	0.35	0.77	8.79	0.90	0.34	0.08



Stellar Parameters For KIC 010208495

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	6170^{+171}_{-236}	$4.437^{+0.056}_{-0.224}$	$0.020^{+0.250}_{-0.300}$	$1.061^{+0.358}_{-0.119}$	$1.123^{+0.151}_{-0.151}$	$1.325^{+0.396}_{-0.724}$
	+3%/-4%	+1%/-5%	+1250%/-1500%	+34%/-11%	+13%/-13%	+30%/-55%
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 010208495-01 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	-270 ± 27	$3.08^{+0.58}_{-0.44}$	391^{+31}_{-22}	5042^{+295}_{-262}	16783^{+6295}_{-4812}
Alt.	-130 ± 27	$2.31^{+0.43}_{-0.41}$	390^{+32}_{-21}	4896^{+395}_{-381}	14353^{+7822}_{-4774}

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 $A_{obs} \gg 1.0$

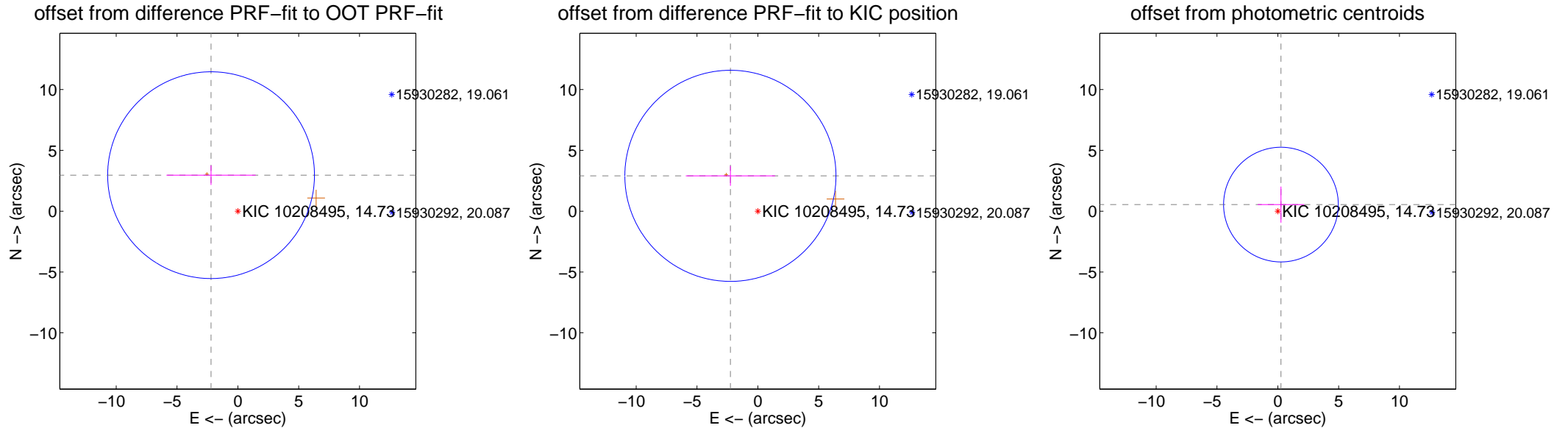
DV Centroid Data

Supplemental centroid analysis for 010208495-01. Kepler magnitude: 14.73. Transit SNR 7.83

There are 0 quarters with good PRF difference image offsets

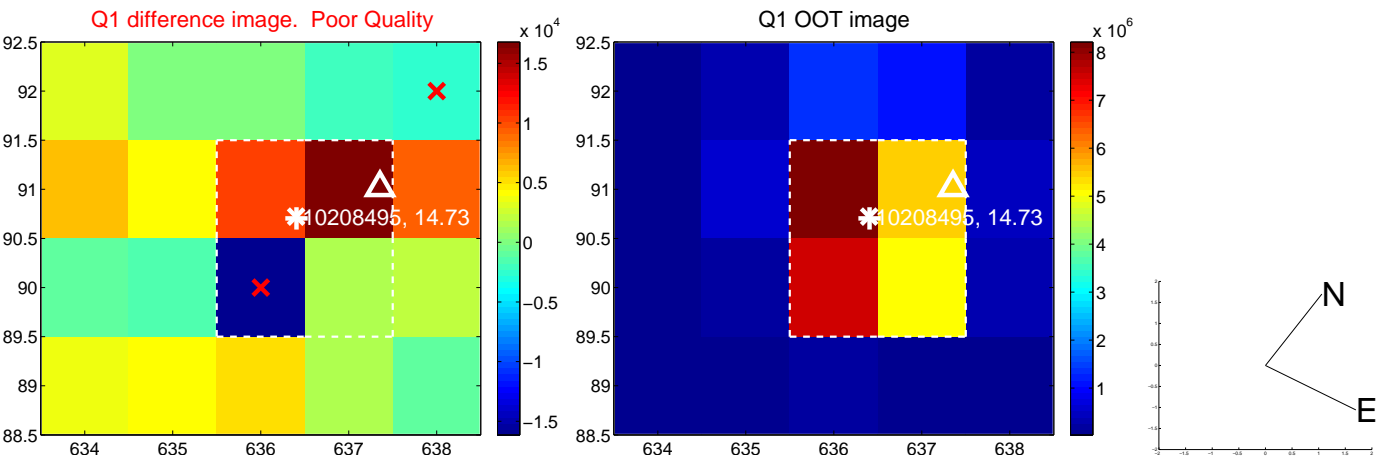
The direct PRF centroid is offset from the target star catalog position by about 0.10 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	3.690 ± 2.833	1.30	2.203 ± 3.667	2.960 ± 0.805
PRF-fit source offset from KIC position	3.678 ± 2.893	1.27	2.254 ± 3.669	2.906 ± 0.817
photometric centroid source offset	0.60 ± 1.57	0.38	-0.26 ± 1.91	0.54 ± 1.48



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.

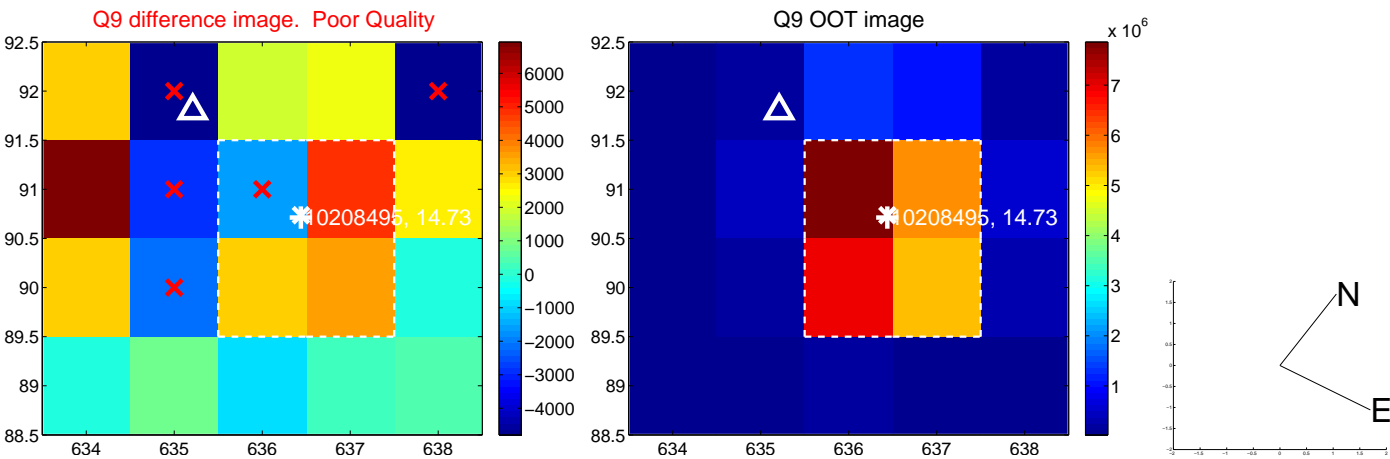
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



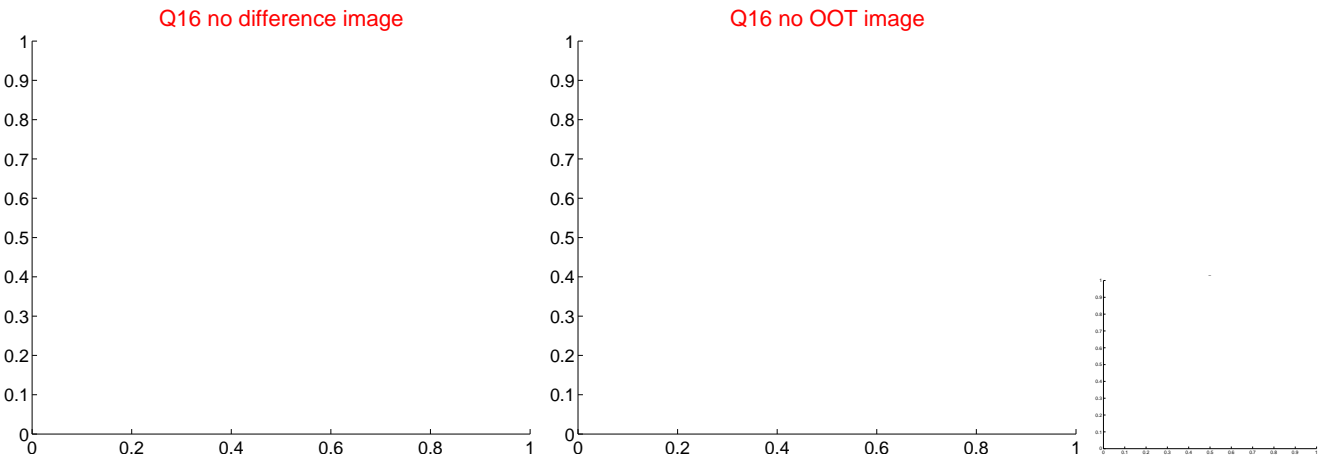
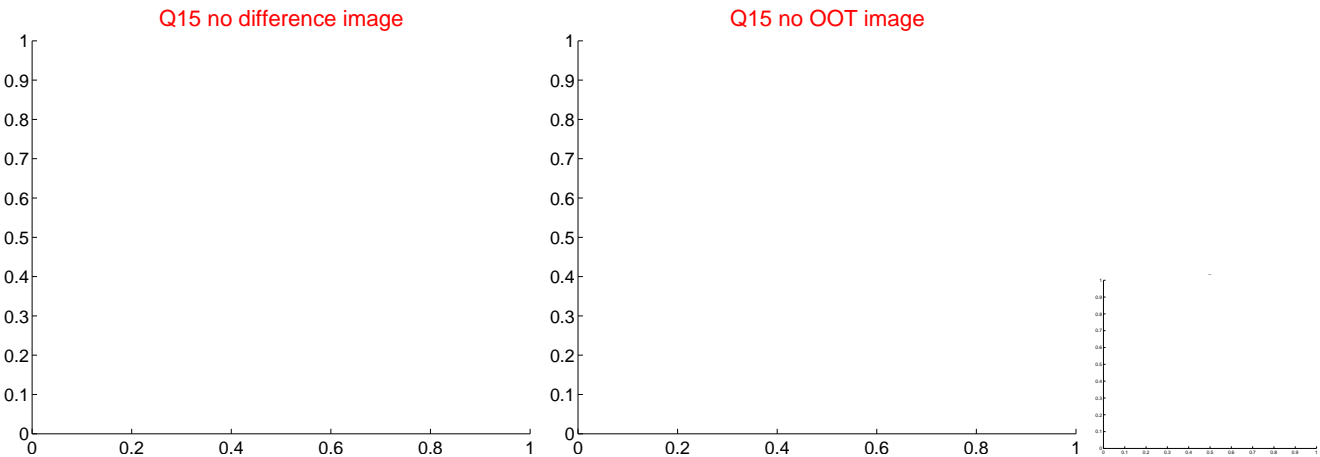
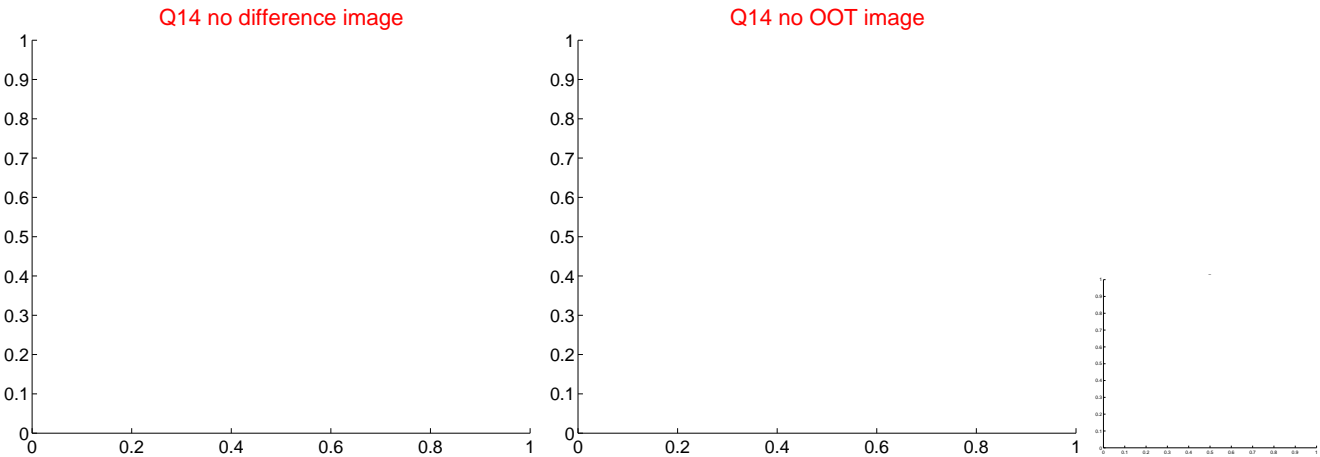
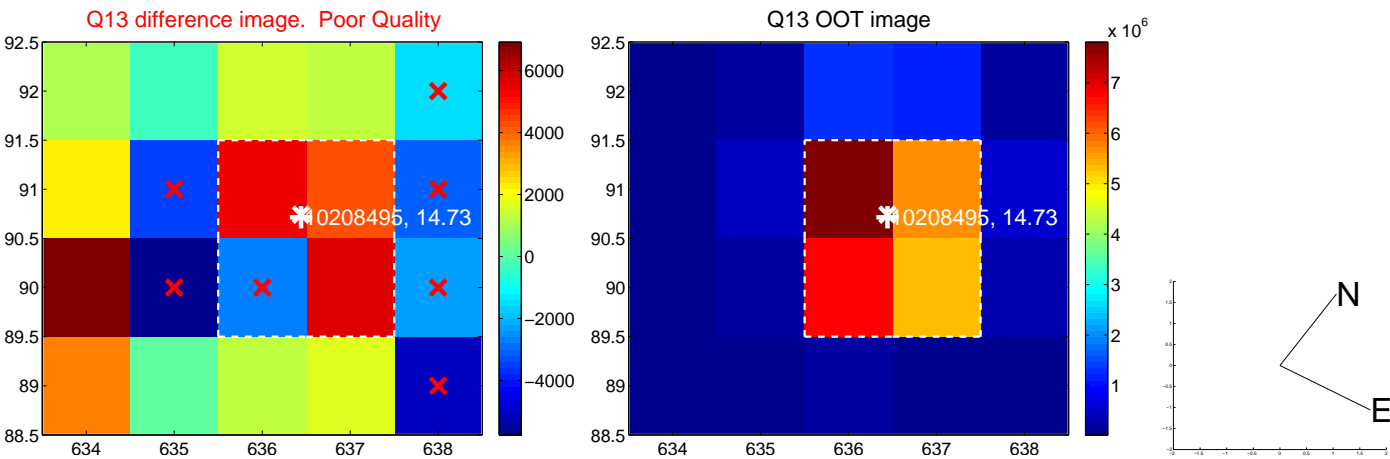
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



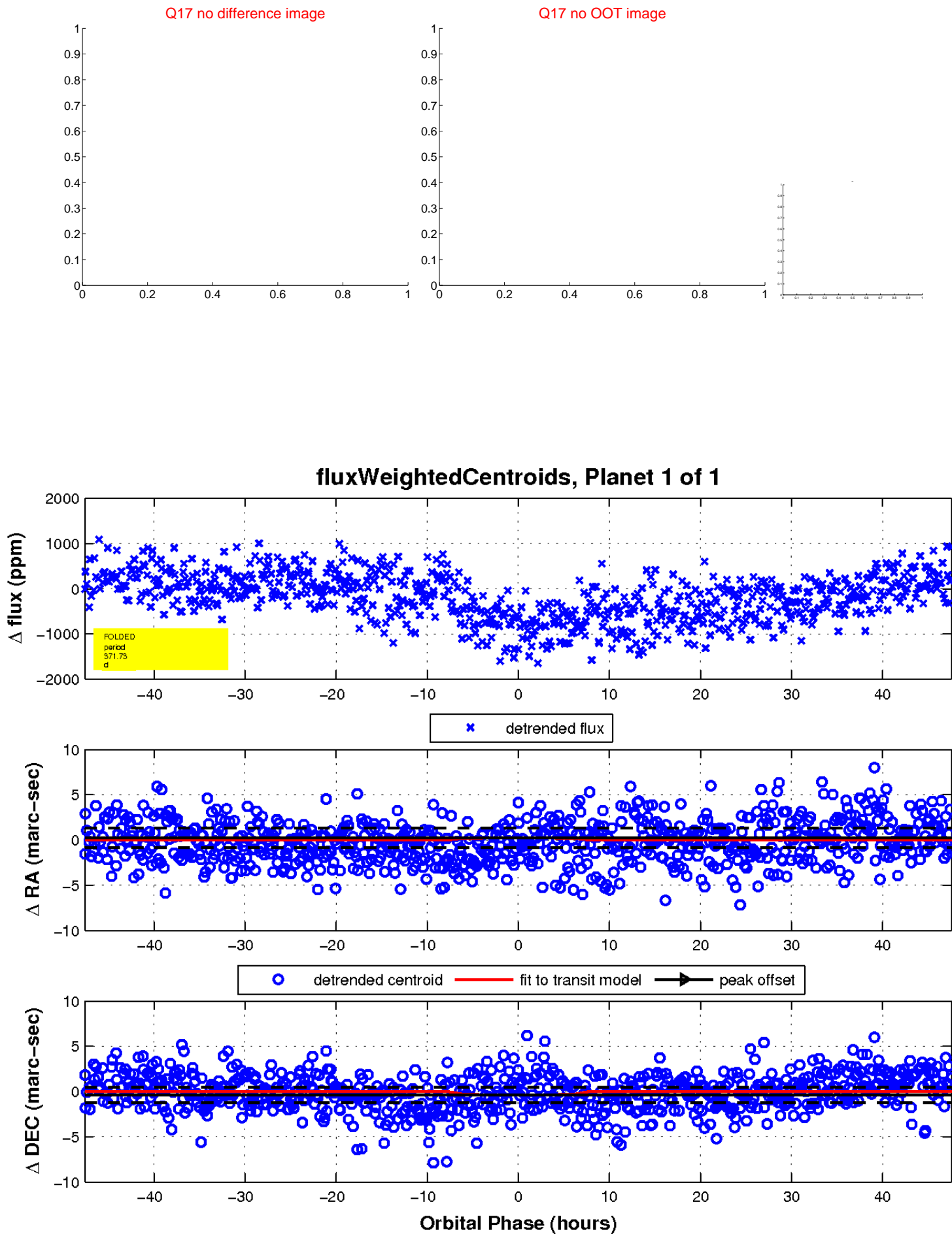
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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



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



UKIRT Image

Declination

