

KIC 005386699

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})
005386699-01	OBS	No	484.081038	377.573488	577.2	19.386	7.8	8.4	0.96	5776	2.37	0.63

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
005386699-01	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.

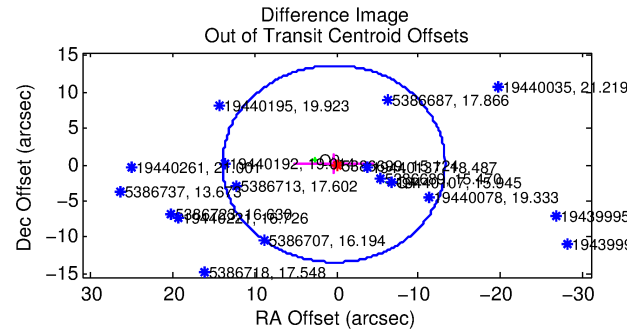
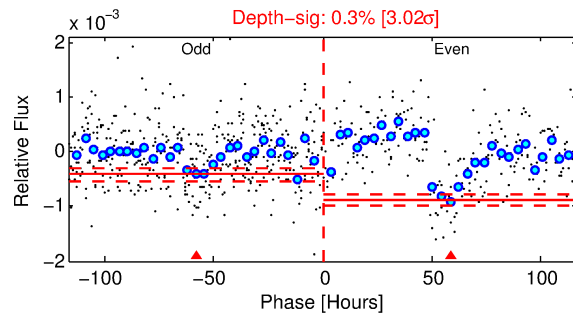
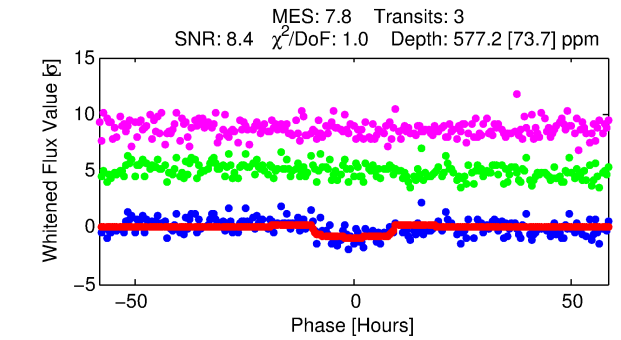
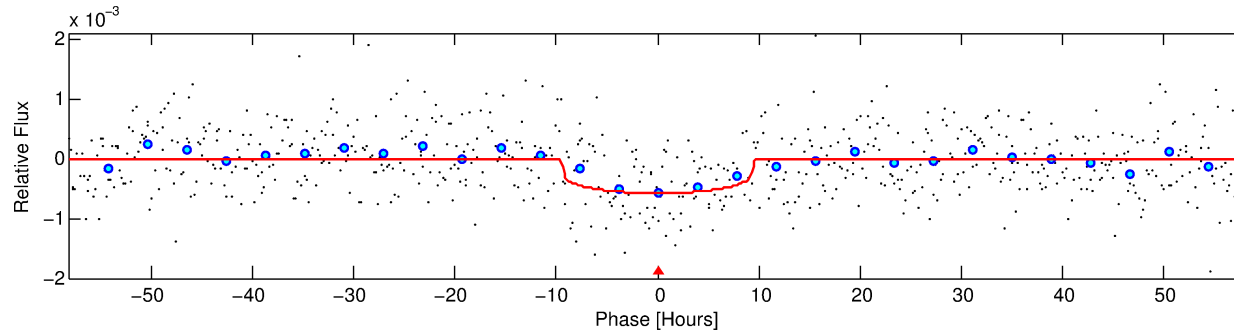
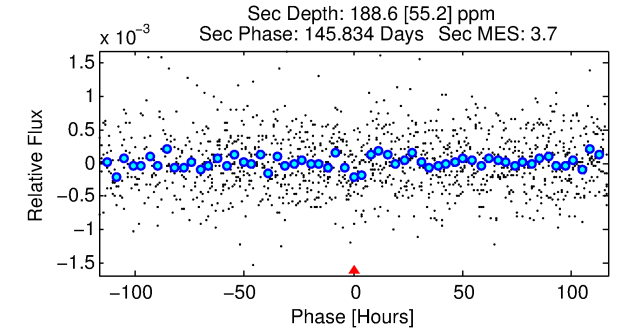
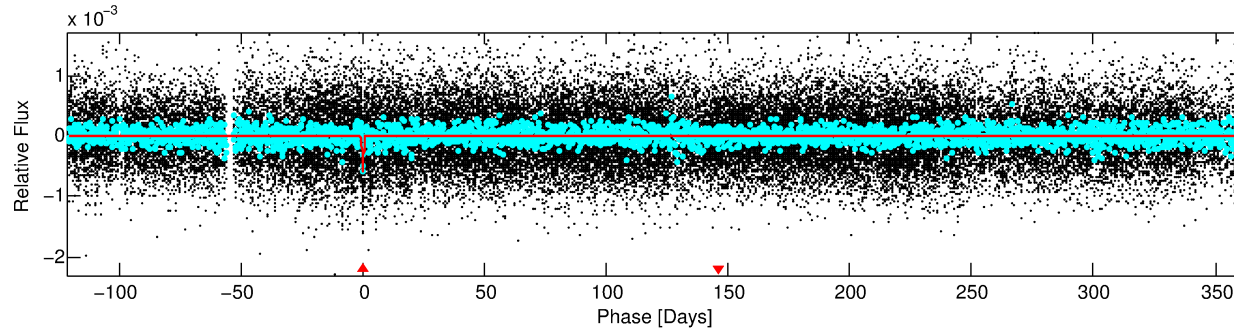
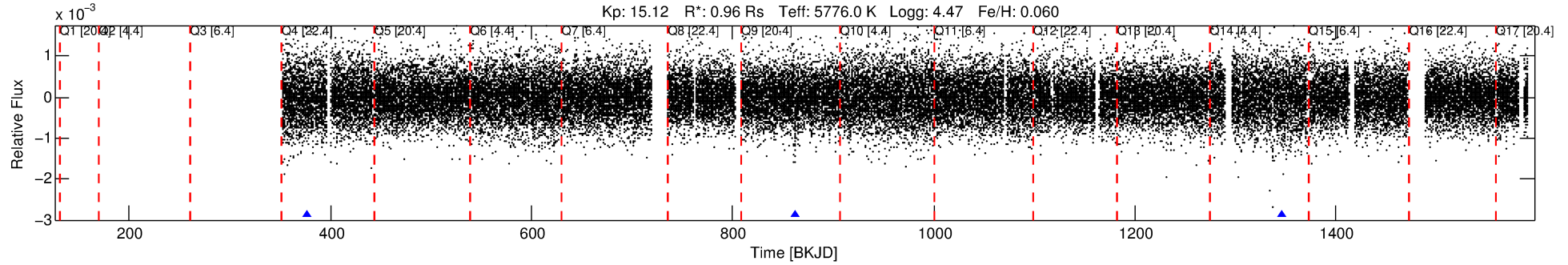
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 005386699-01

No Significant Match Found

DV One-Page Summary

KIC: 5386699 Candidate: 1 of 1 Period: 484.081 d



DV Fit Results:

Period = 484.08104 [0.02044] d
Epoch = 377.5735 [0.0254] BKJD
Rp/R* = 0.0226 [0.0106]
a/R* = 166.63 [334.28]
b = 0.53 [2.73]
Seff = 0.63 [0.24]
Teq = 227 [22] K
Rp = 2.37 [1.32] Re
a = 1.2081 [0.3007] AU
Ag = 26920.48 [28184.67] [0.96σ]
Teffp = 4503 [1118] K [3.82σ]

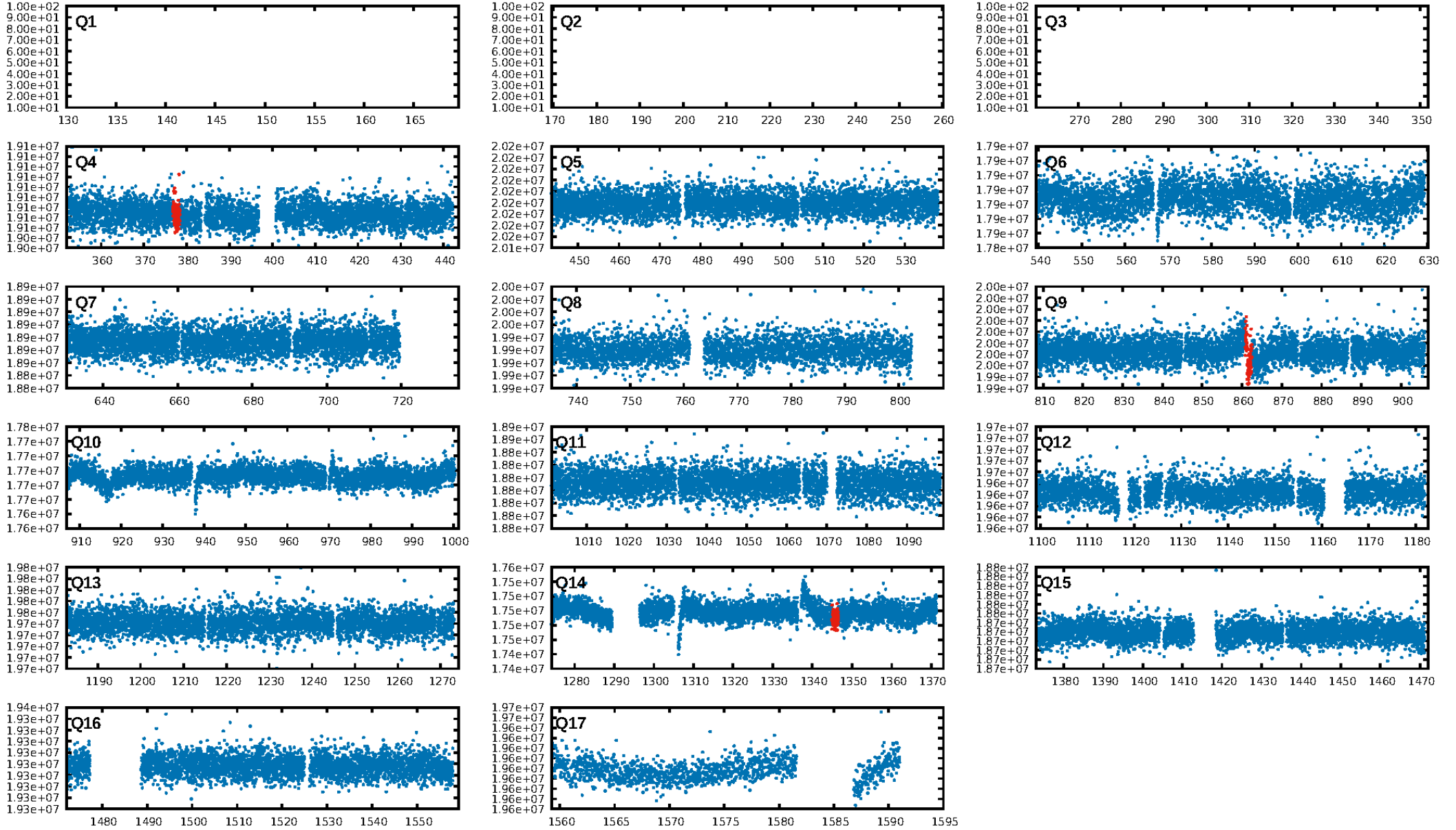
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: 0.7%
ModelChiSquareGof-sig: 99.3%
Bootstrap-pfa: 8.18e-11
RollingBand-fgt: 1.00 [3/3]
GhostDiagnostic-chr: -1.918
Centroid-sig: 0.2%
Centroid-so: 2.390 arcsec [1.90σ]
OotOffset-rm: 0.336 arcsec [0.07σ]
KicOffset-rm: 0.150 arcsec [0.03σ]
OotOffset-st: 0/0/1/1 [2]
KicOffset-st: 0/0/1/1 [2]
DiffImageQuality-fgm: 0.50 [1/2]
DiffImageOverlap-fno: 1.00 [3/3]

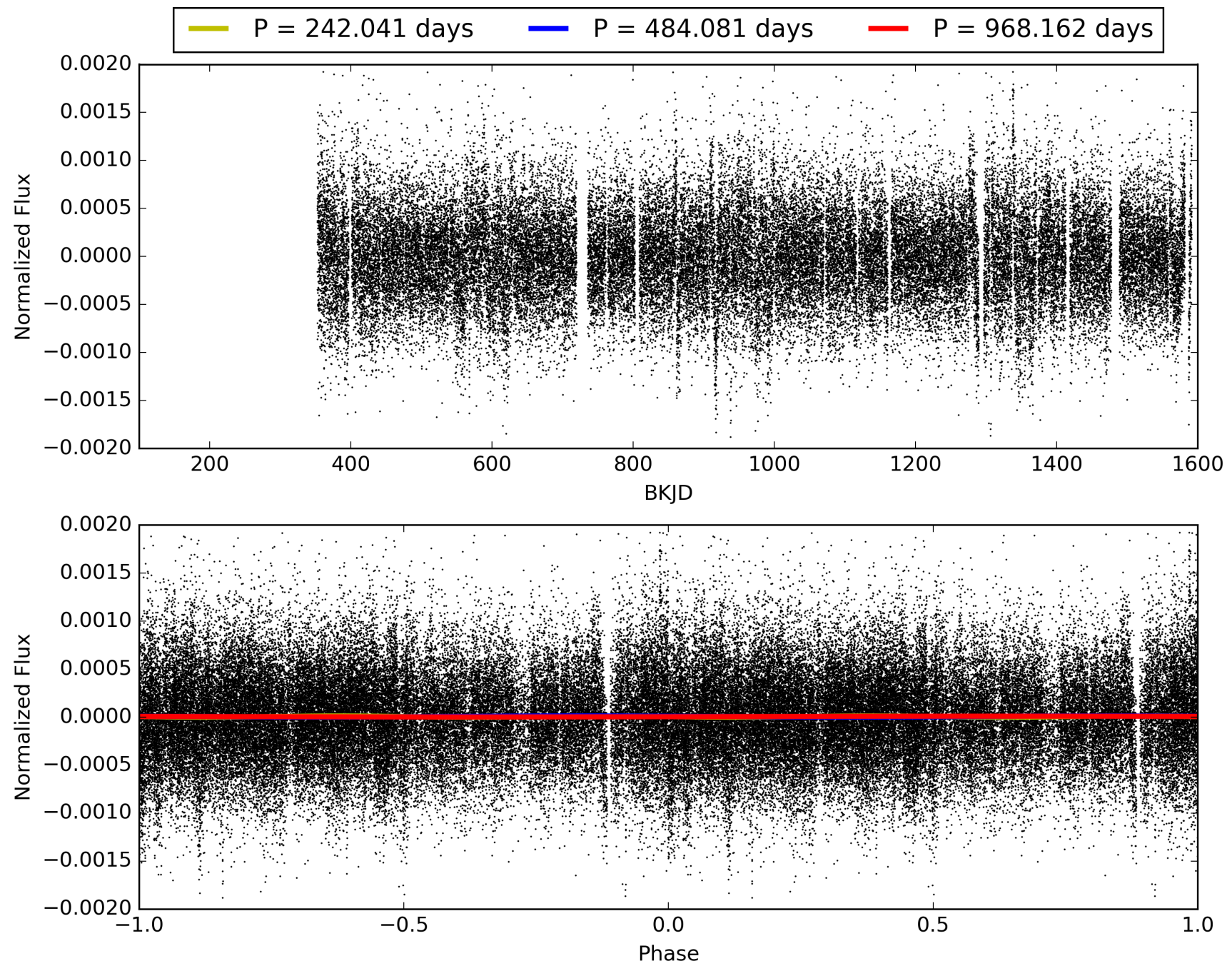
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 29-Jan-2016 06:37:50 Z

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

TCE 005386699-01, PDC Light Curves

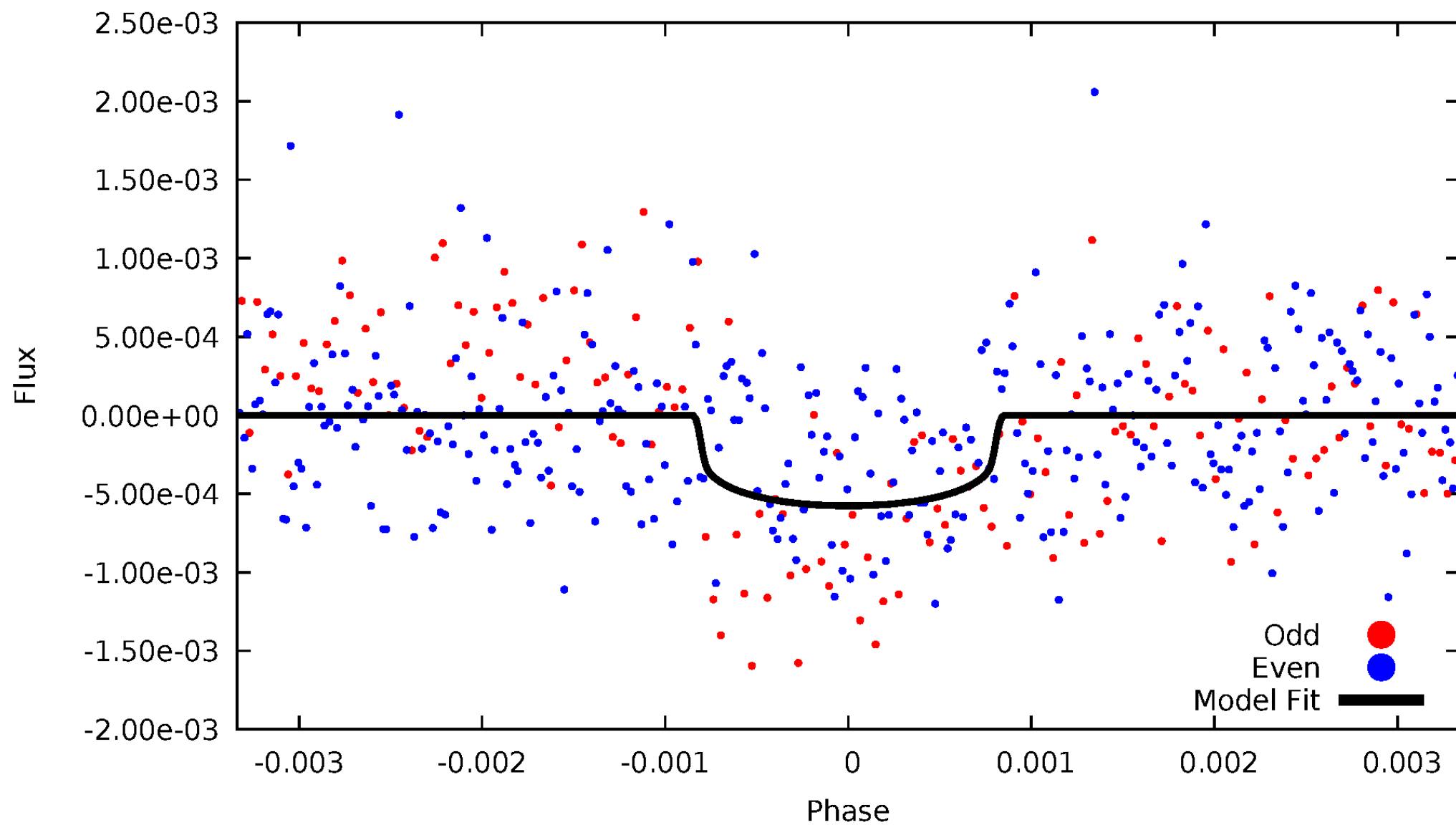


TCE 005386699-01



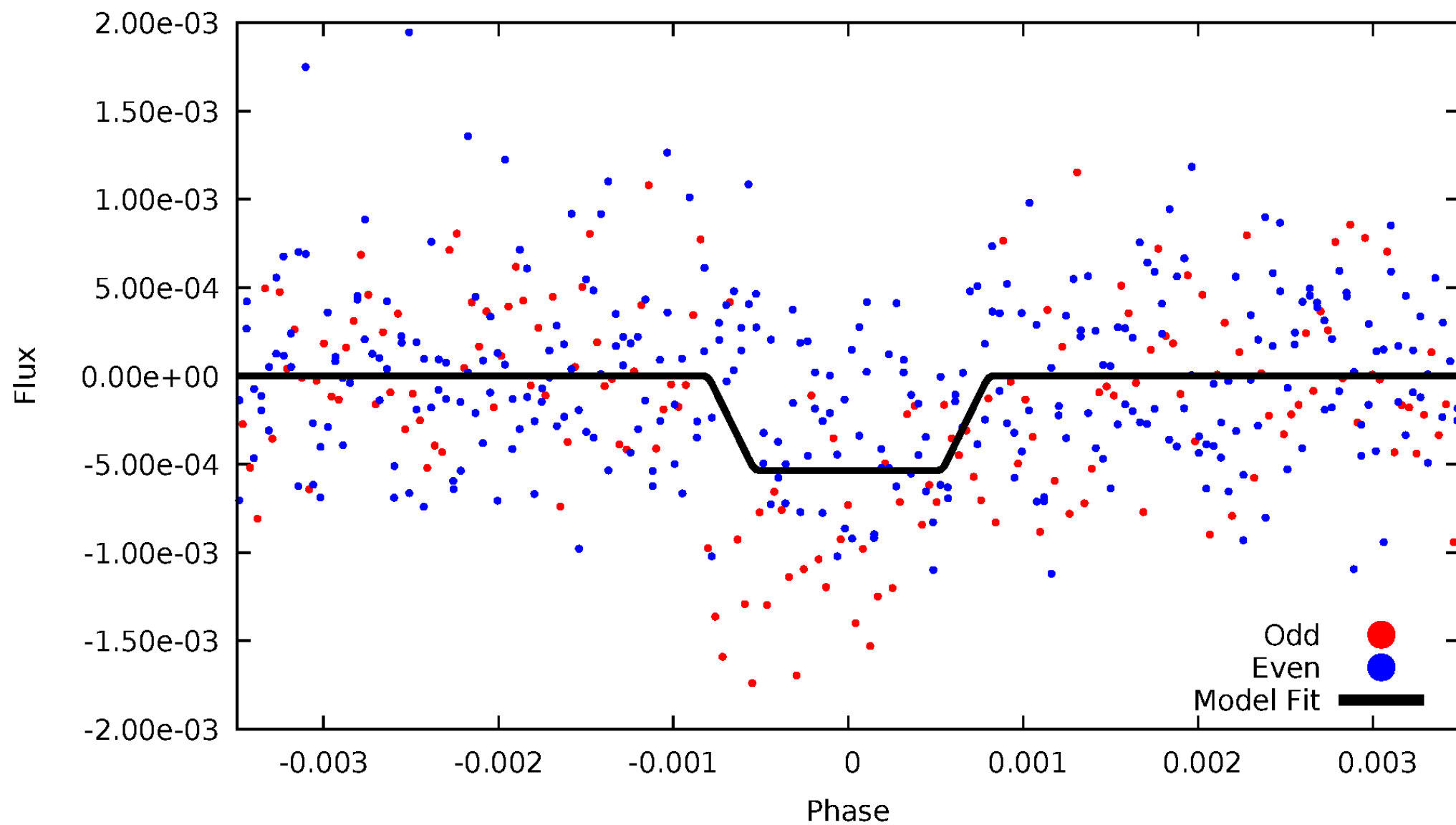
DV Odd/Even

TCE 005386699-01



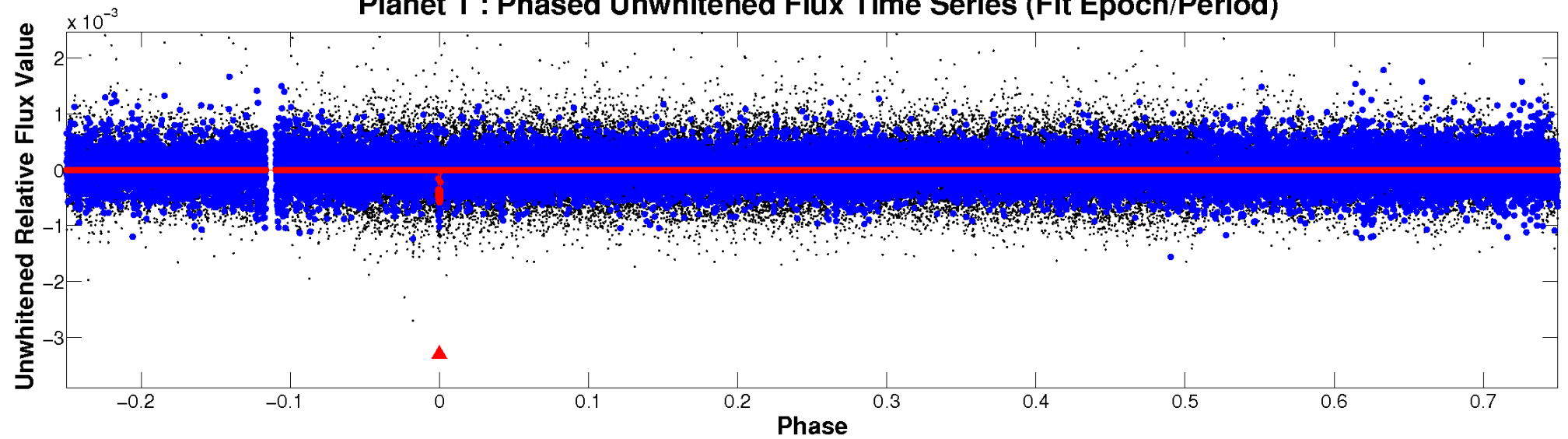
ALT Odd/Even

TCE 005386699-01

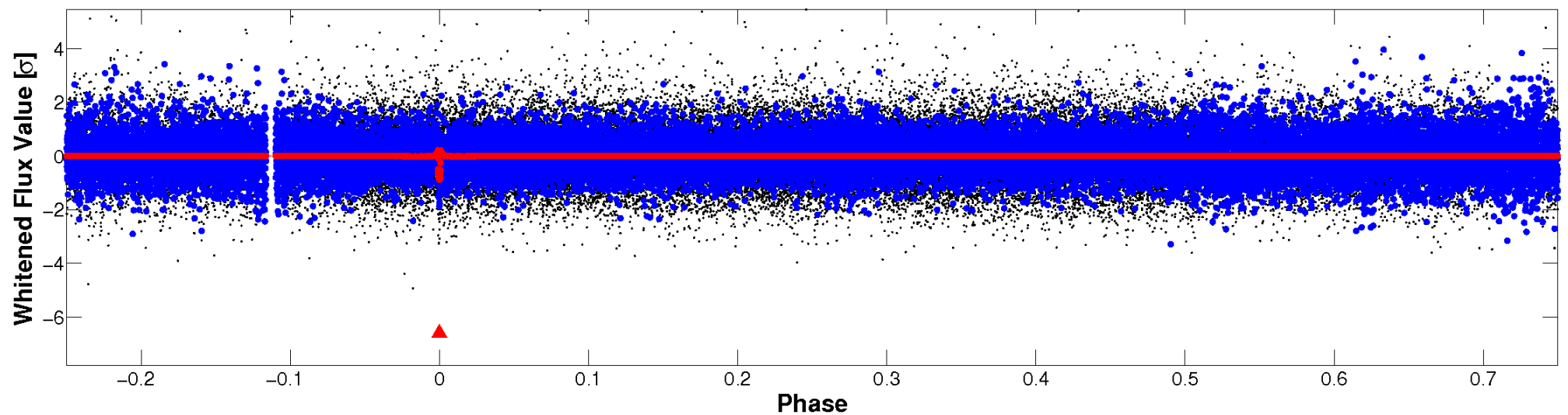


Non-Whitened Vs. Whitened Light Curve

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

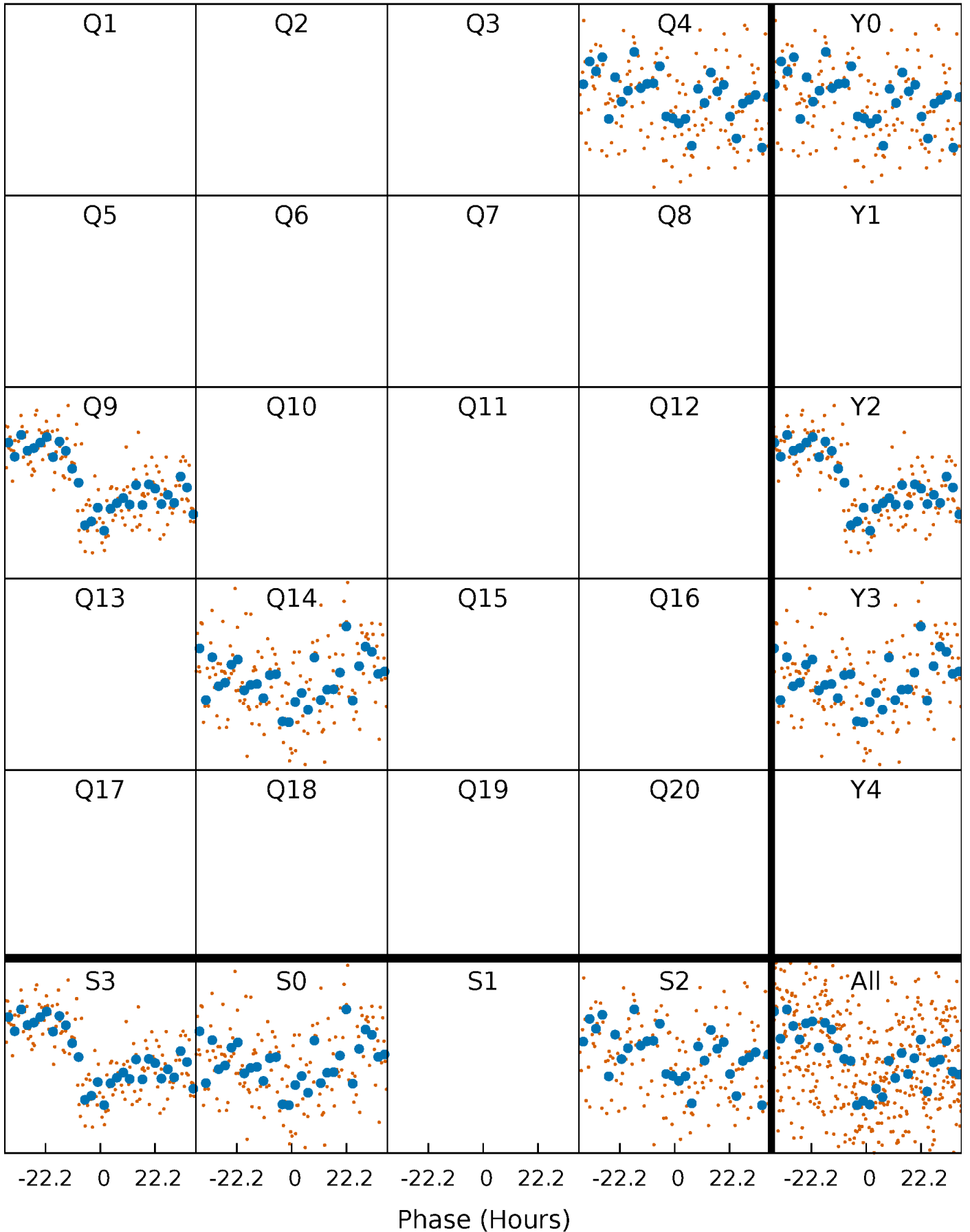


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



PDC Quarter-Phased Transit Curves

TCE 005386699-01 P=484.081038 Days $T_0=377.573488$ (BKJD)



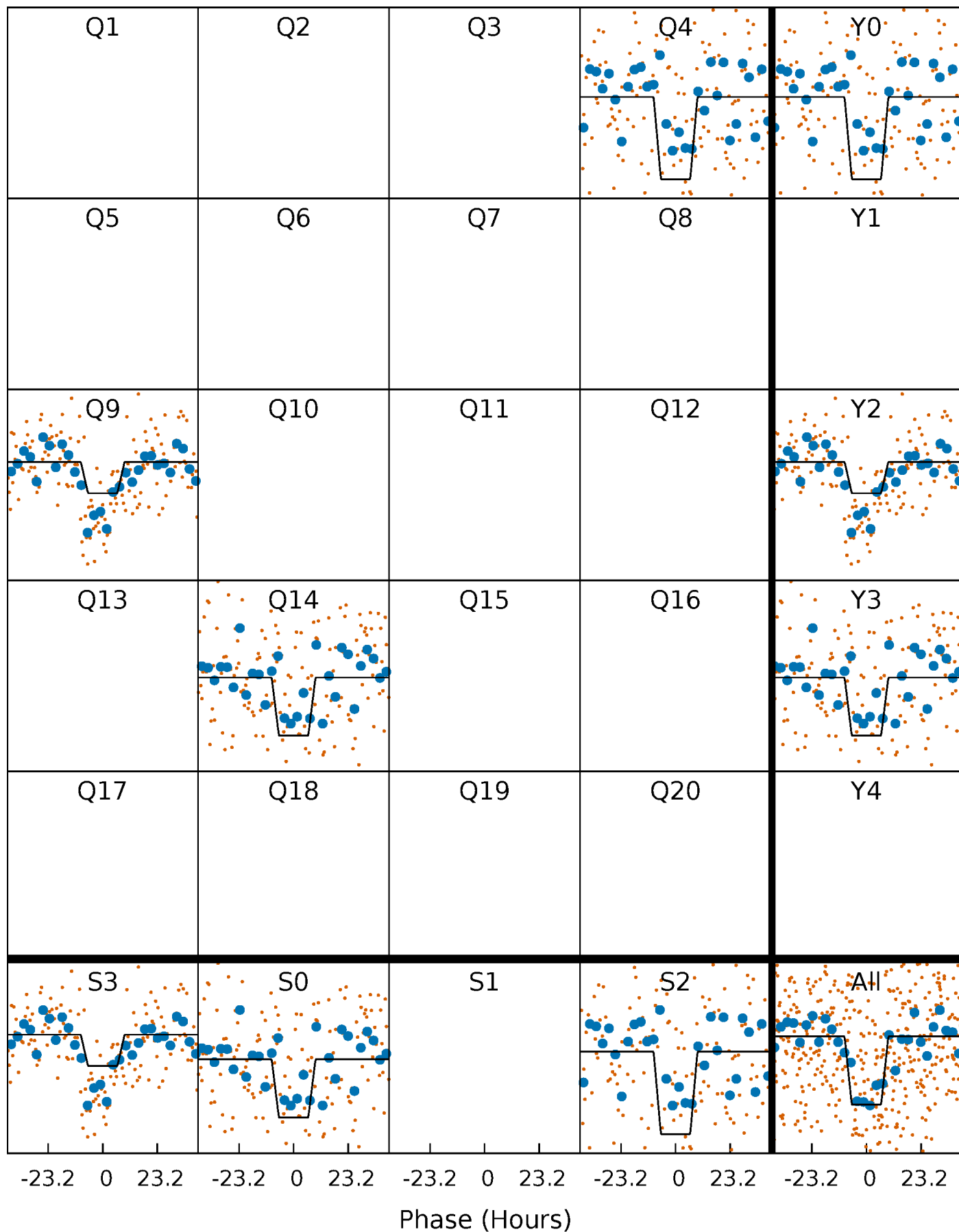
DV Quarter-Phased Transit Curves

TCE 005386699-01 P=484.081038 Days $T_0=377.573488$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

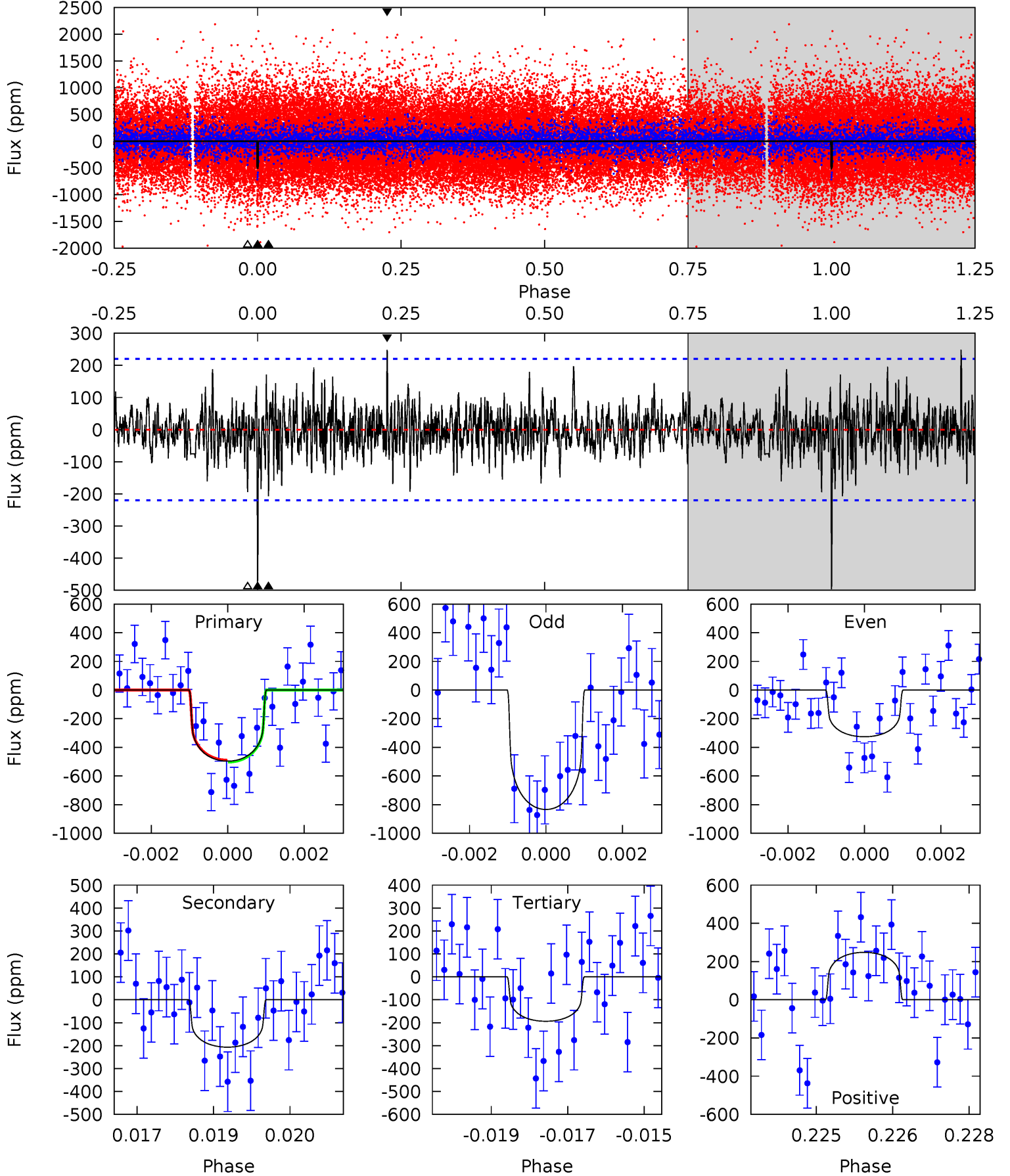
TCE 005386699-01 P=484.064225 Days $T_0=377.601529$ (BKJD)



DV Model-Shift Uniqueness Test

005386699-01, P = 484.081038 Days, E = 377.573488 Days

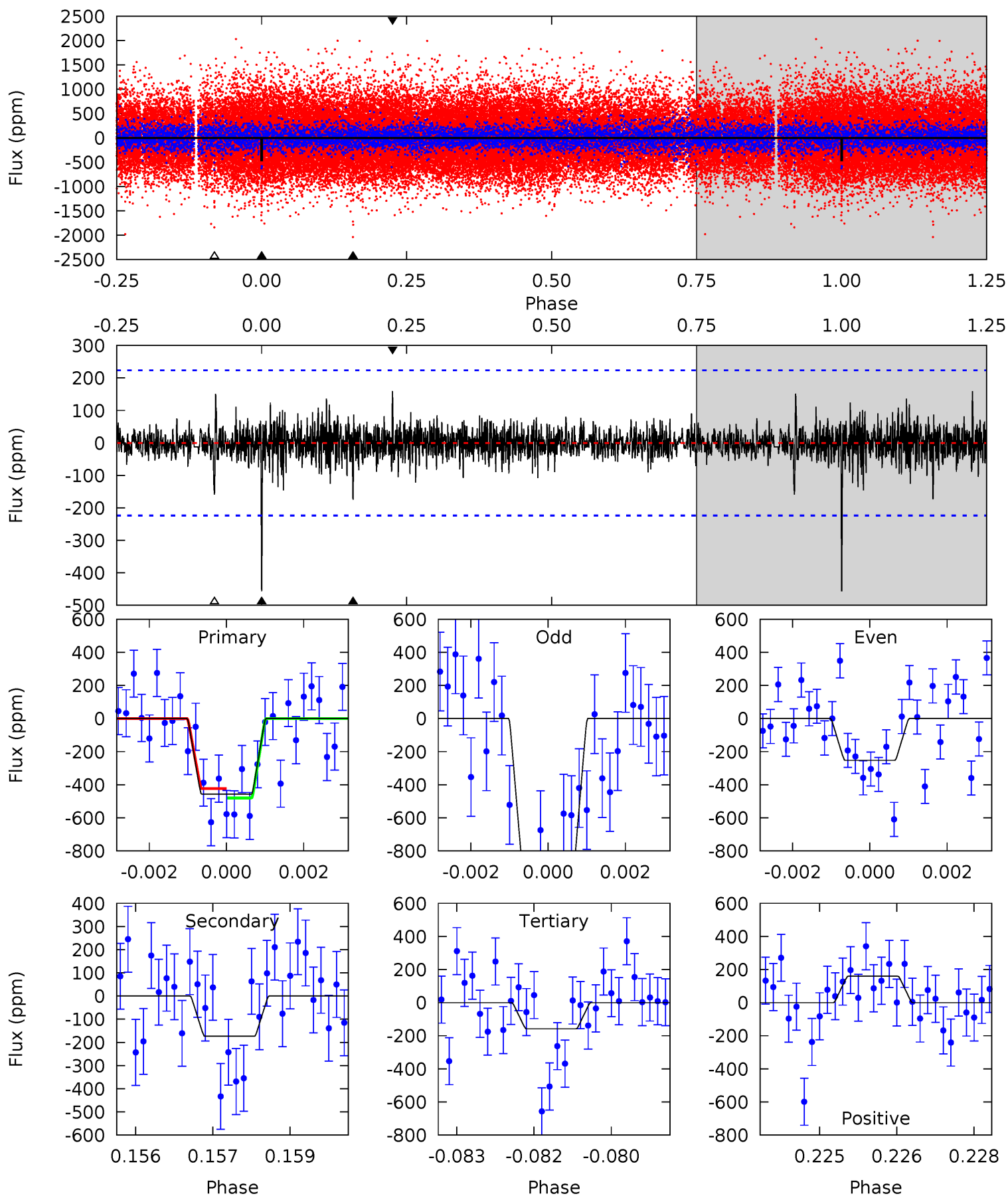
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
12.1	5.03	4.72	6.04	5.36	3.14	1.31	7.37	6.04	0.31	-1.01	5.85	1.24	0.33	0.16



Alt Model-Shift Uniqueness Test

005386699-01, P = 484.064225 Days, E = 377.601529 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
11.0	4.17	3.80	3.83	5.37	3.16	0.83	7.17	7.14	0.36	0.34	7.48	1.69	0.26	0.68



Stellar Parameters For KIC 005386699

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	5776^{+161}_{-202}	$4.473^{+0.065}_{-0.195}$	$0.060^{+0.250}_{-0.300}$	$0.962^{+0.287}_{-0.096}$	$1.003^{+0.124}_{-0.124}$	$1.585^{+0.436}_{-0.823}$
	+3%/-3%	+1%/-4%	+417%/-500%	+30%/-10%	+12%/-12%	+28%/-52%
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 005386699-01 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	A_{obs}
DV	-207 ± 41	$2.47^{+1.17}_{-1.12}$	324^{+25}_{-17}	4717^{+1485}_{-655}	27327^{+58634}_{-15175}
Alt.	-174 ± 42	$2.58^{+1.24}_{-1.12}$	322^{+23}_{-15}	4469^{+1281}_{-615}	20905^{+41927}_{-11916}

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

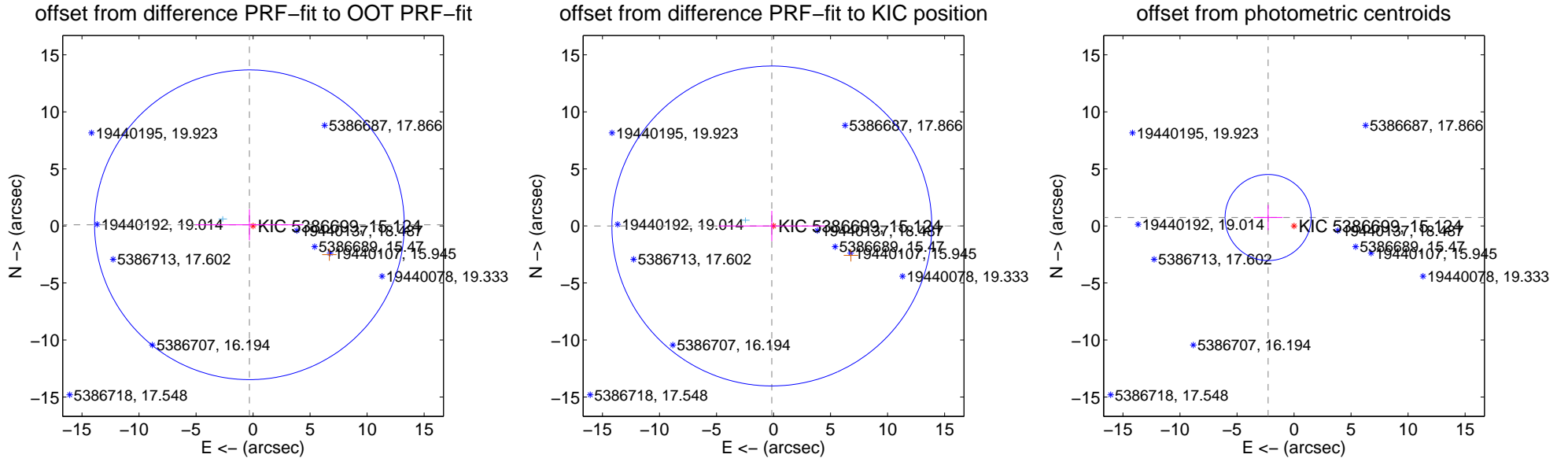
DV Centroid Data

Supplemental centroid analysis for 005386699-01. Kepler magnitude: 15.12. Transit SNR 8.37

There are 1 quarters with good PRF difference image offsets

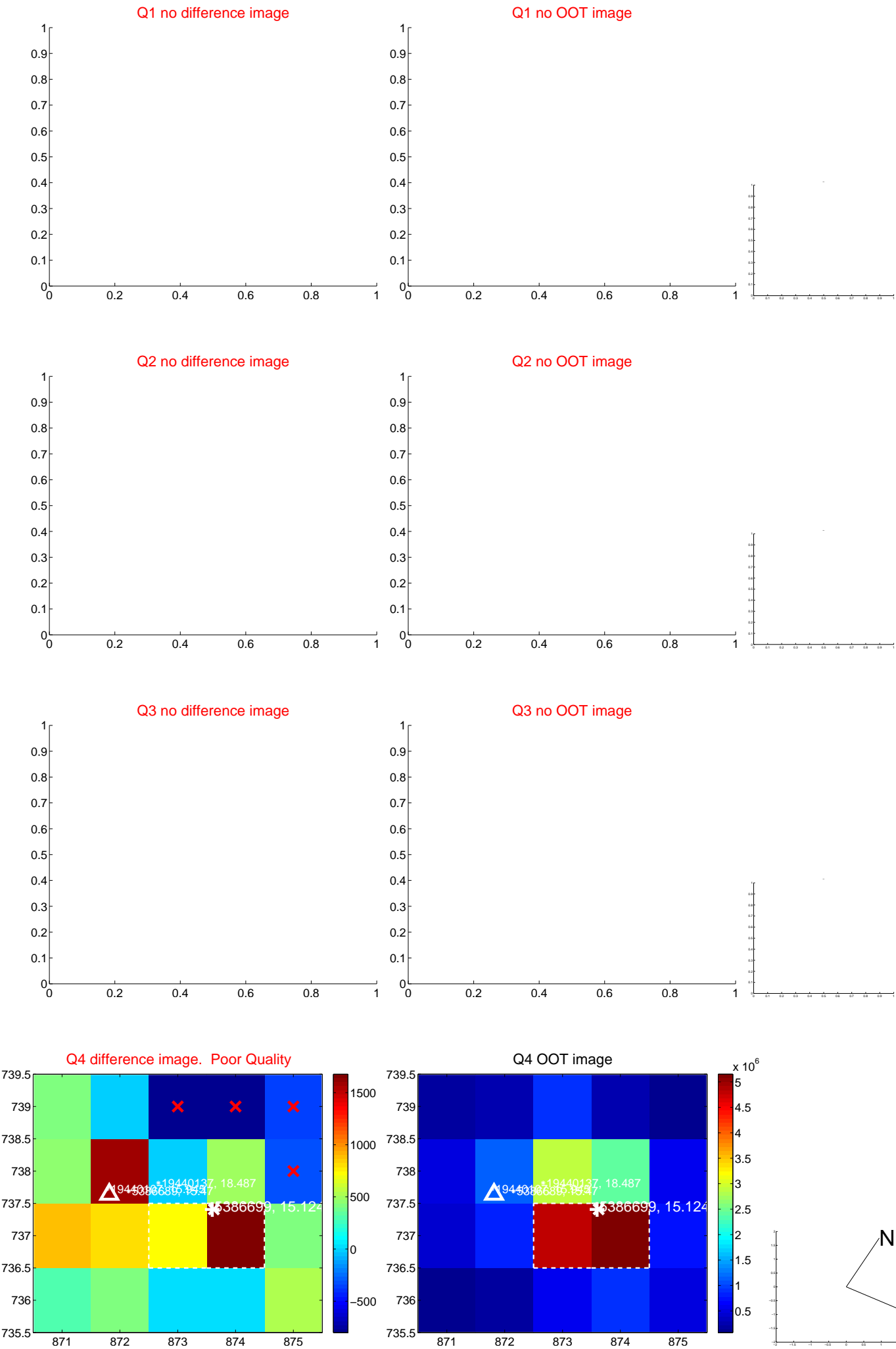
The direct PRF centroid is offset from the target star catalog position by about 0.23 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.336 ± 4.526	0.07	0.320 ± 4.728	0.101 ± 1.356
PRF-fit source offset from KIC position	0.150 ± 4.675	0.03	0.150 ± 4.677	-0.004 ± 1.331
photometric centroid source offset	2.39 ± 1.26	1.90	2.27 ± 1.27	0.74 ± 1.10



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.

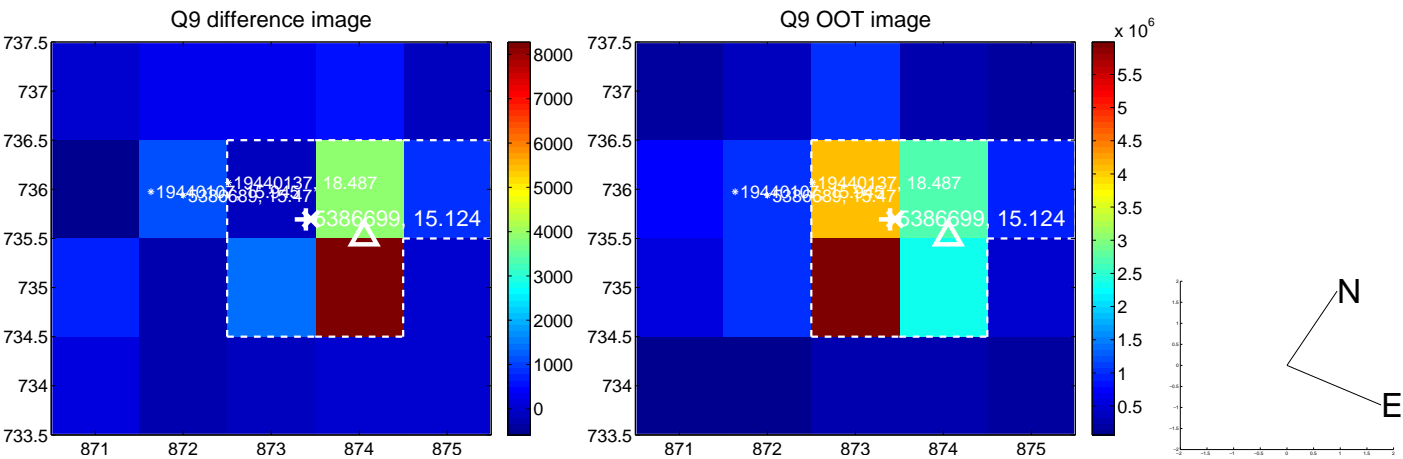
white ×: KIC target position; +: OOT centroid; △: difference centroid. red ×: large negative pixel value.



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.



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

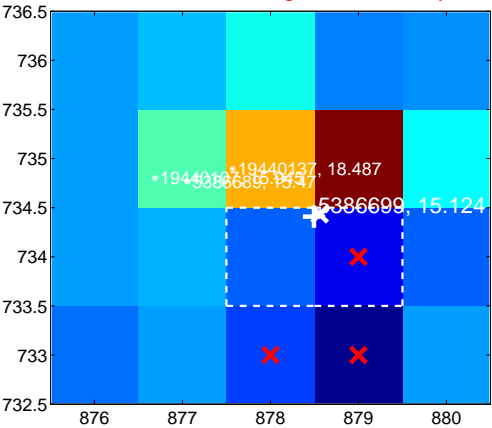
Q13 no difference image



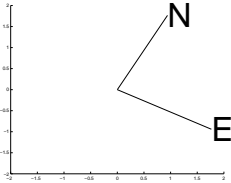
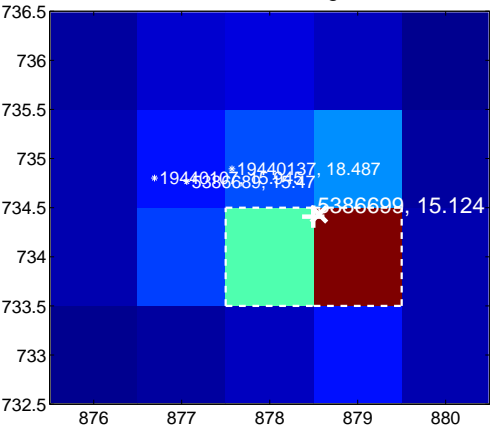
Q13 no OOT image



Q14 difference image. Poor Quality



Q14 OOT image



Q15 no difference image



Q15 no OOT image



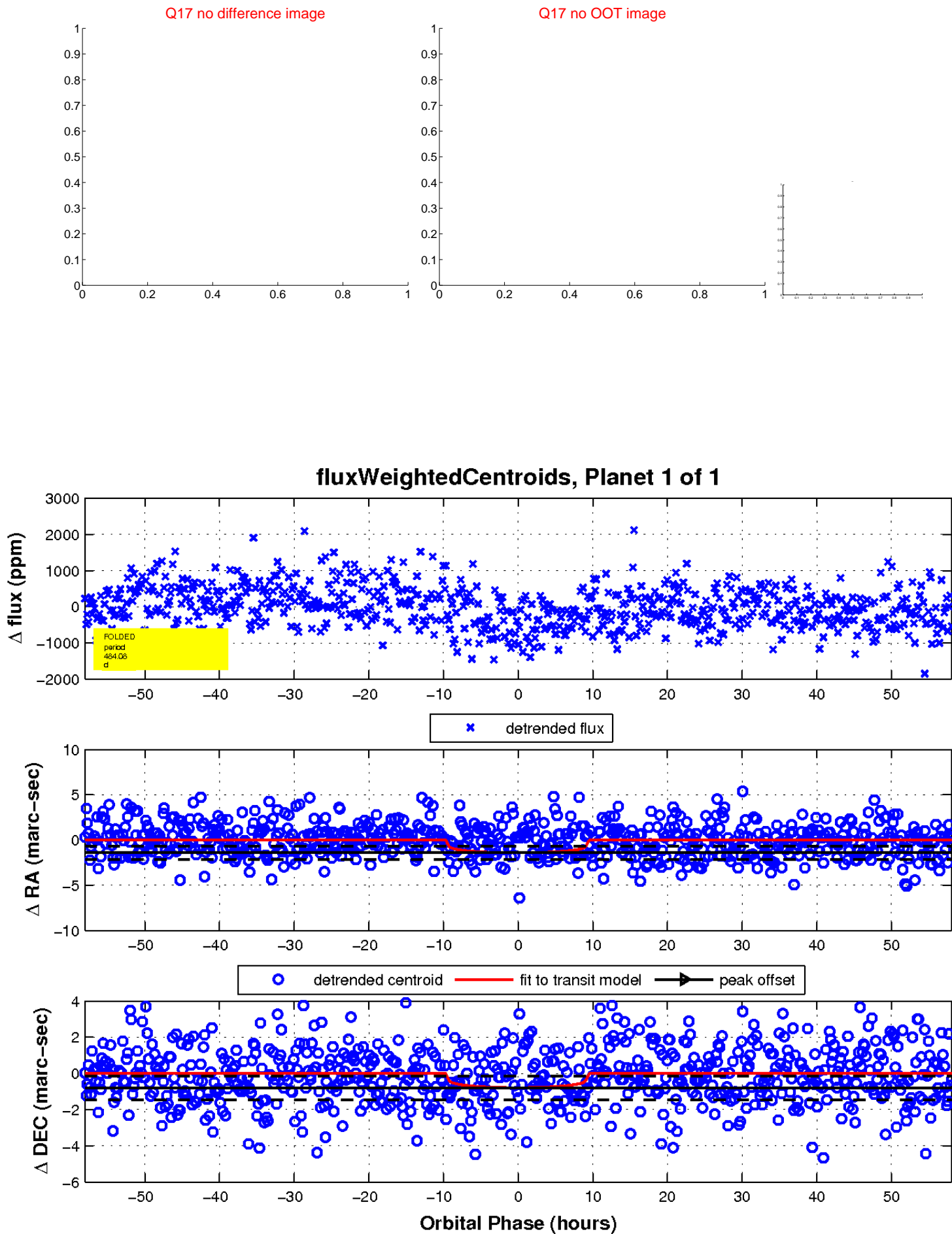
Q16 no difference image



Q16 no OOT image



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



UKIRT Image

Declination

