

KIC 008612191

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})
008612191-01	OBS	No	368.857683	233.115198	2811.8	37.770	14.0	18.3	1.03	6102	10.11	1.21

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
008612191-01	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_CHASES_MARSHALL_SKYE—LPP_DV—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.

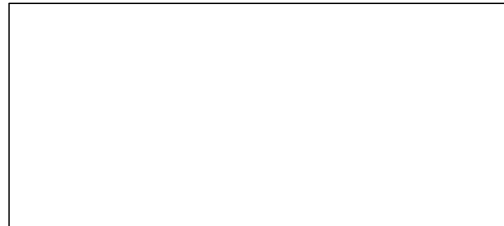
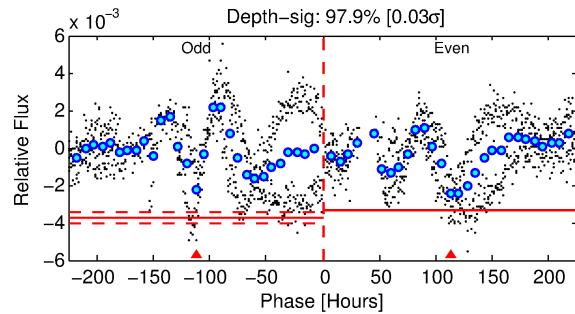
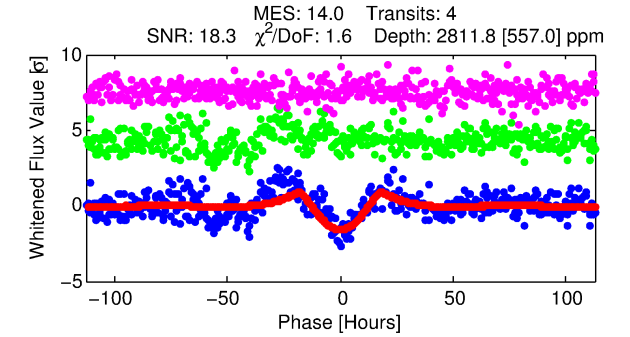
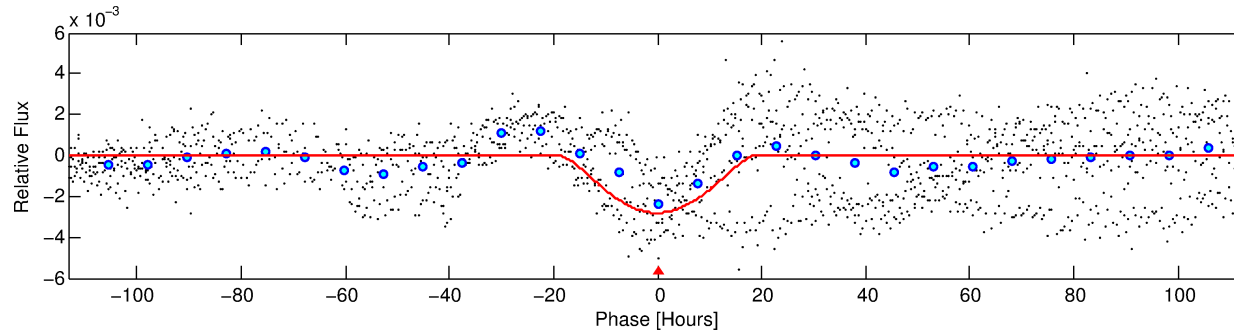
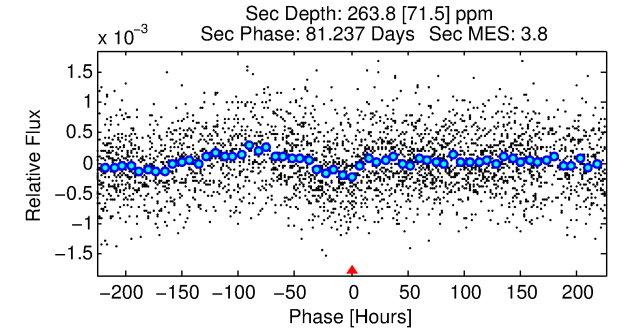
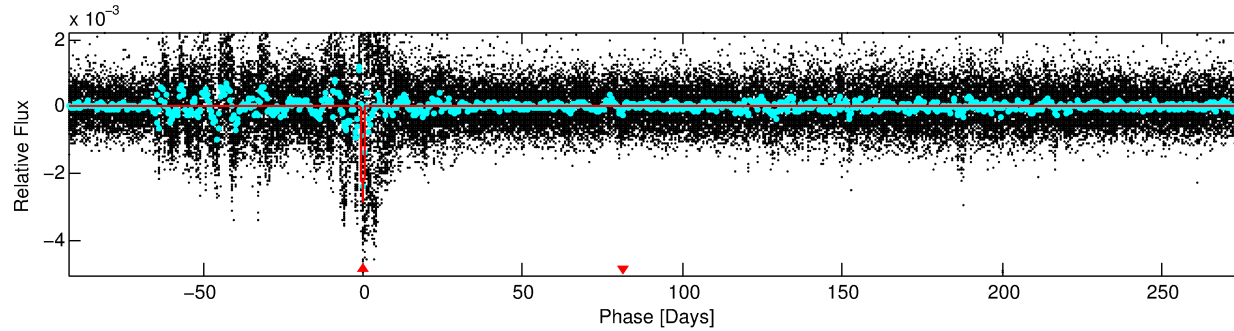
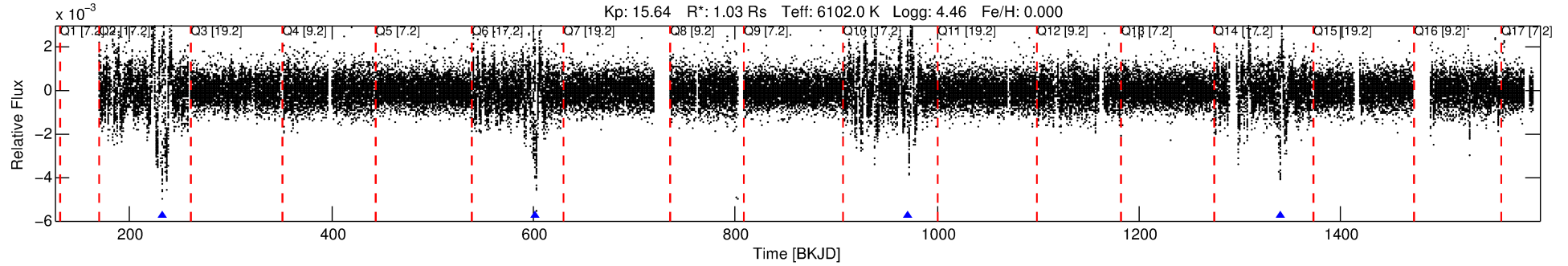
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 008612191-01

No Significant Match Found

DV One-Page Summary

KIC: 8612191 Candidate: 1 of 1 Period: 368.858 d



DV Fit Results:

Period = 368.85768 [0.01965] d
Epoch = 233.1152 [0.0409] BKJD
Rp/R* = 0.0903 [0.1340]
a/R* = 32.44 [9.94]
b = 1.00 [0.20]
Seff = 1.21 [0.52]
Teq = 267 [29] K
Rp = 10.10 [15.37] Re
a = 1.0392 [0.2876] AU
Ag = 1535.08 [4617.99] [0.33σ]
Teffp = 2589 [1932] K [1.20σ]

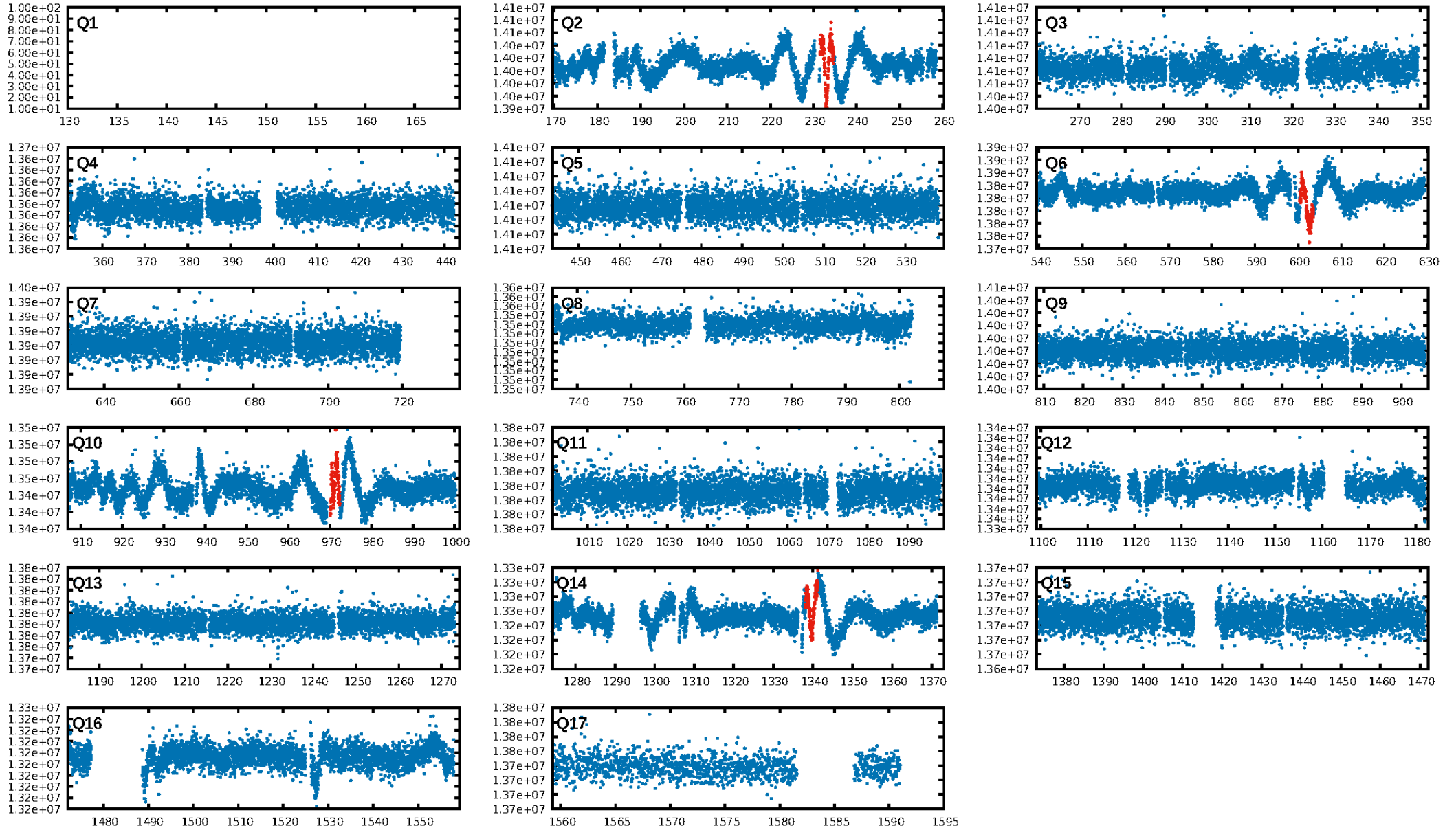
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: 0.0%
ModelChiSquareGof-sig: 5.1%
Bootstrap-pfa: 2.59e-27
RollingBand-fgt: 1.00 [4/4]
GhostDiagnostic-chr: 3.193
Centroid-sig: 0.3%
Centroid-so: 5.357 arcsec [2.95σ]
OotOffset-rm: N/A
KicOffset-rm: N/A
OotOffset-st: 0/0/0 [0]
KicOffset-st: 0/0/0 [0]
DiffImageQuality-fgm: N/A
DiffImageOverlap-fno: N/A

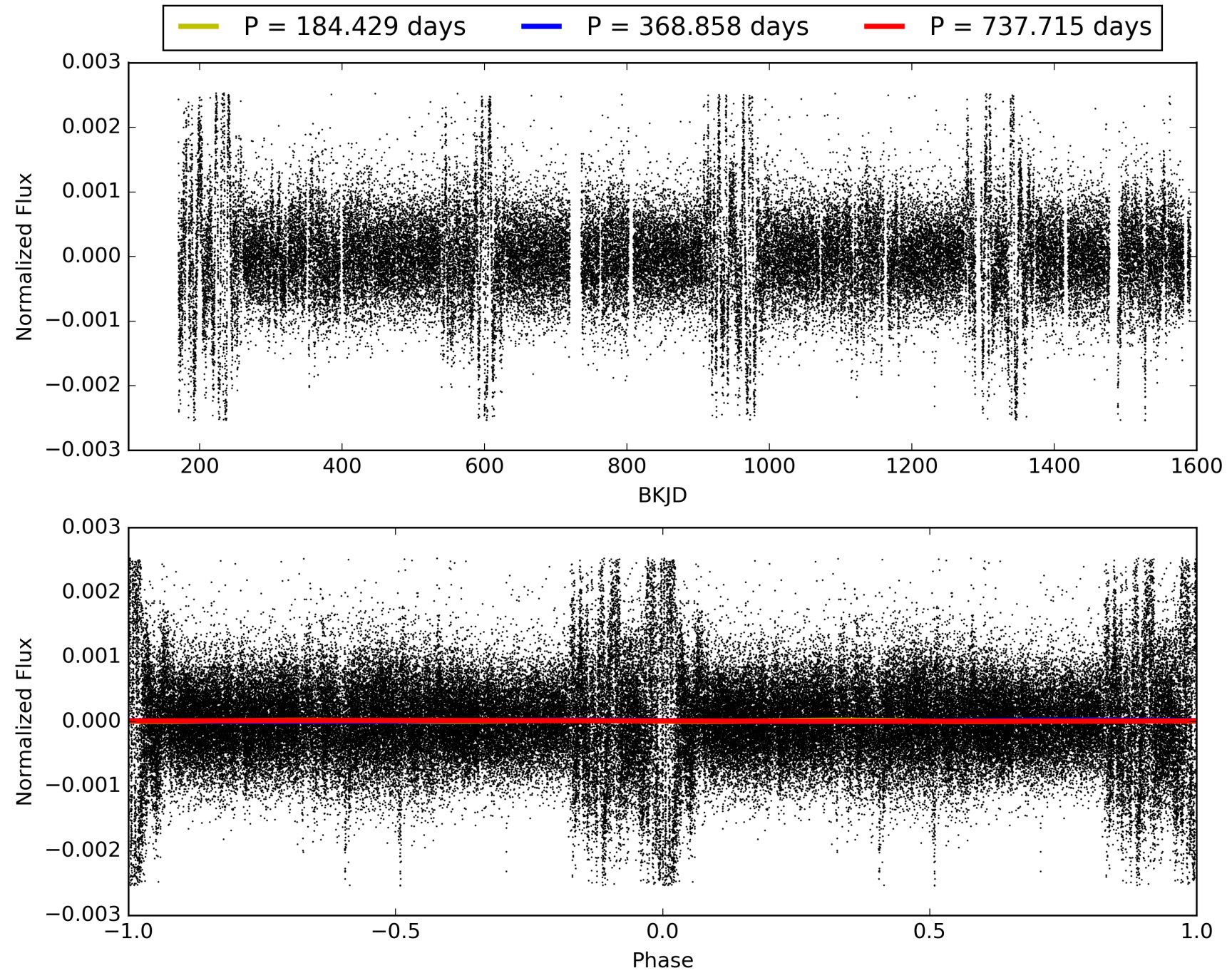
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 28-Jan-2016 21:08:10 Z

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

TCE 008612191-01, PDC Light Curves

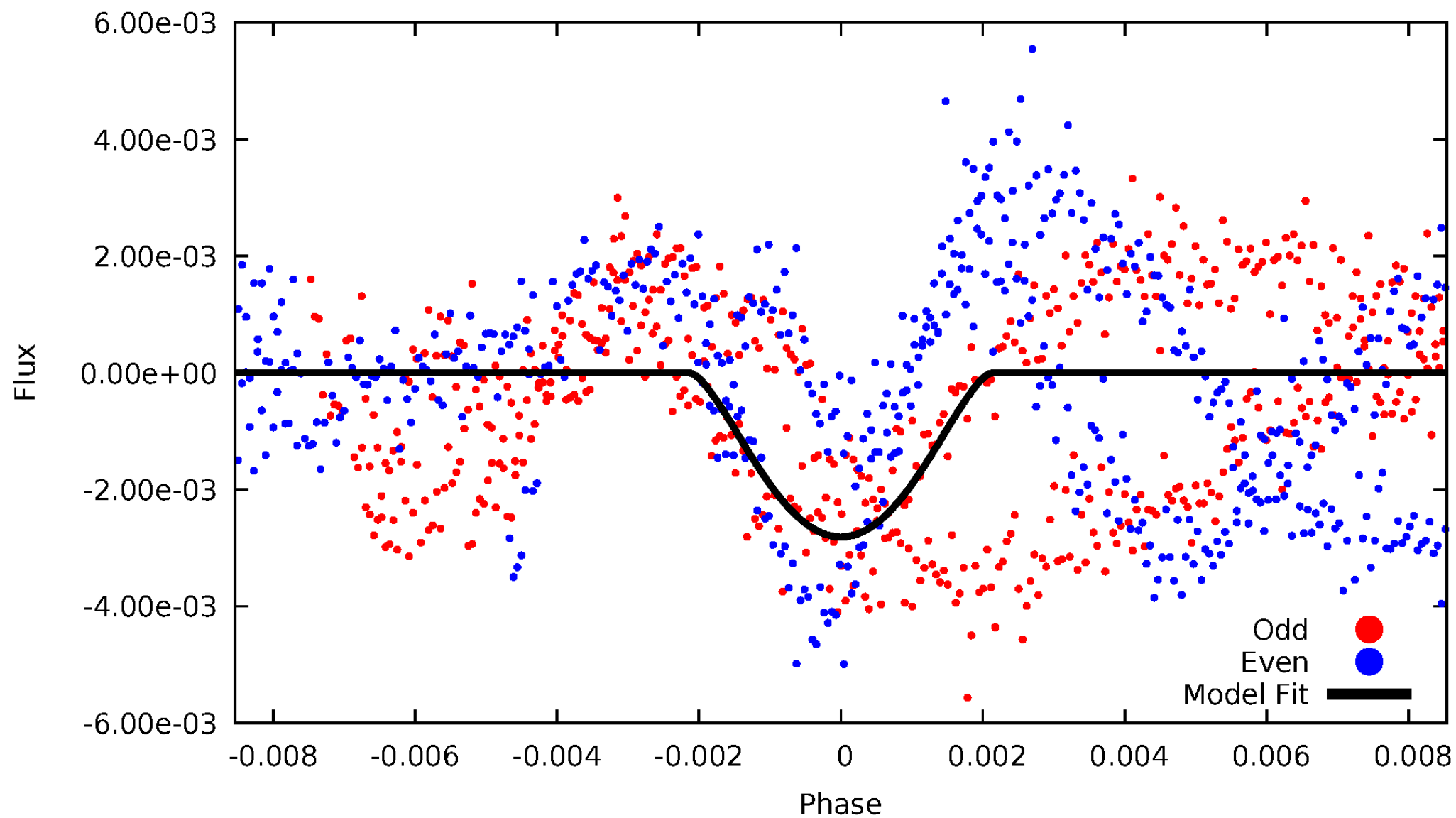


TCE 008612191-01



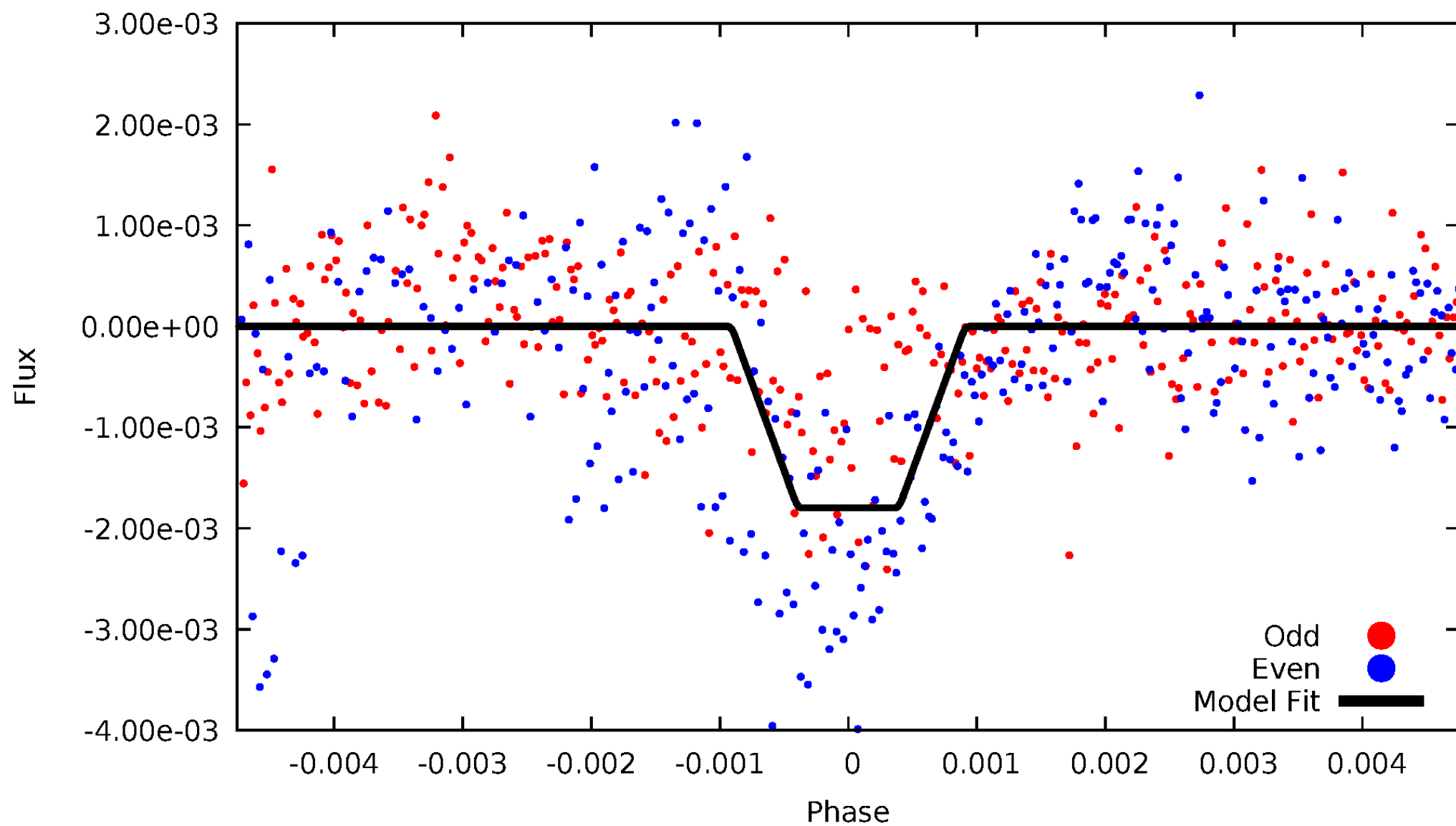
DV Odd/Even

TCE 008612191-01



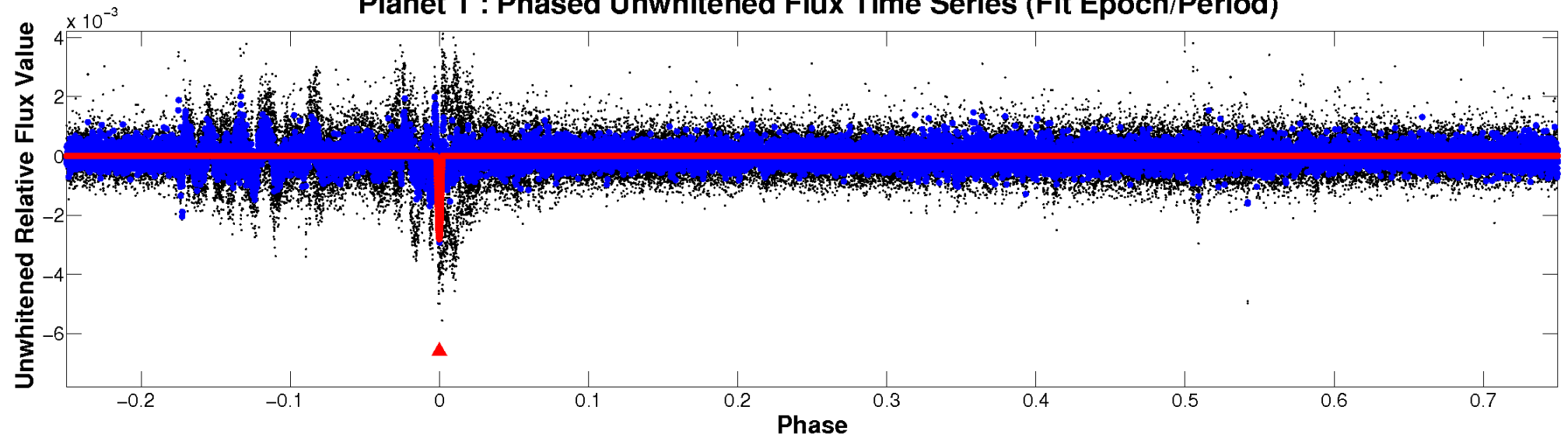
ALT Odd/Even

TCE 008612191-01

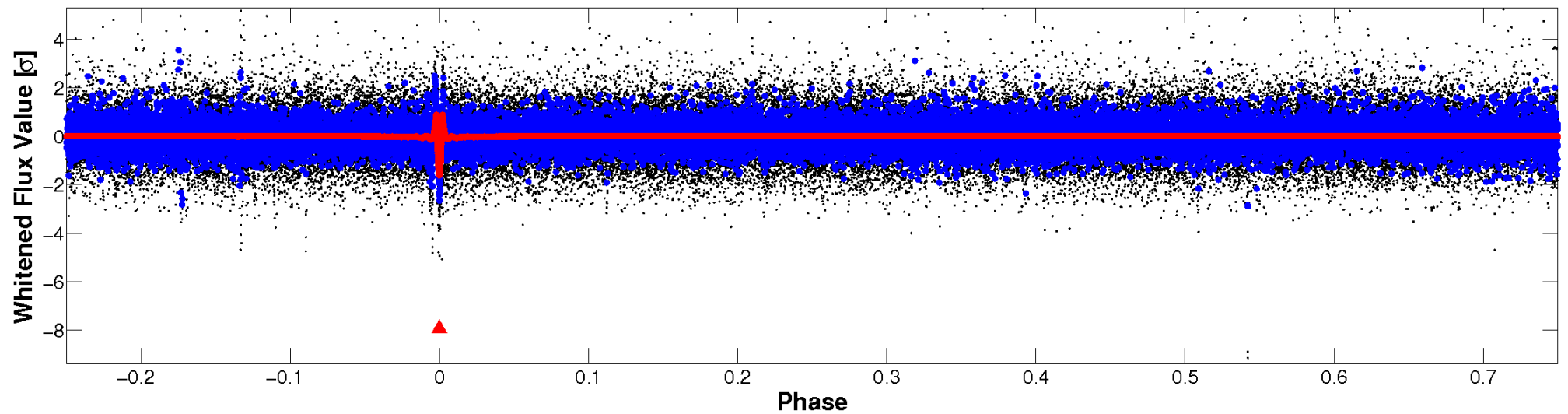


Non-Whitened Vs. Whitened Light Curve

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

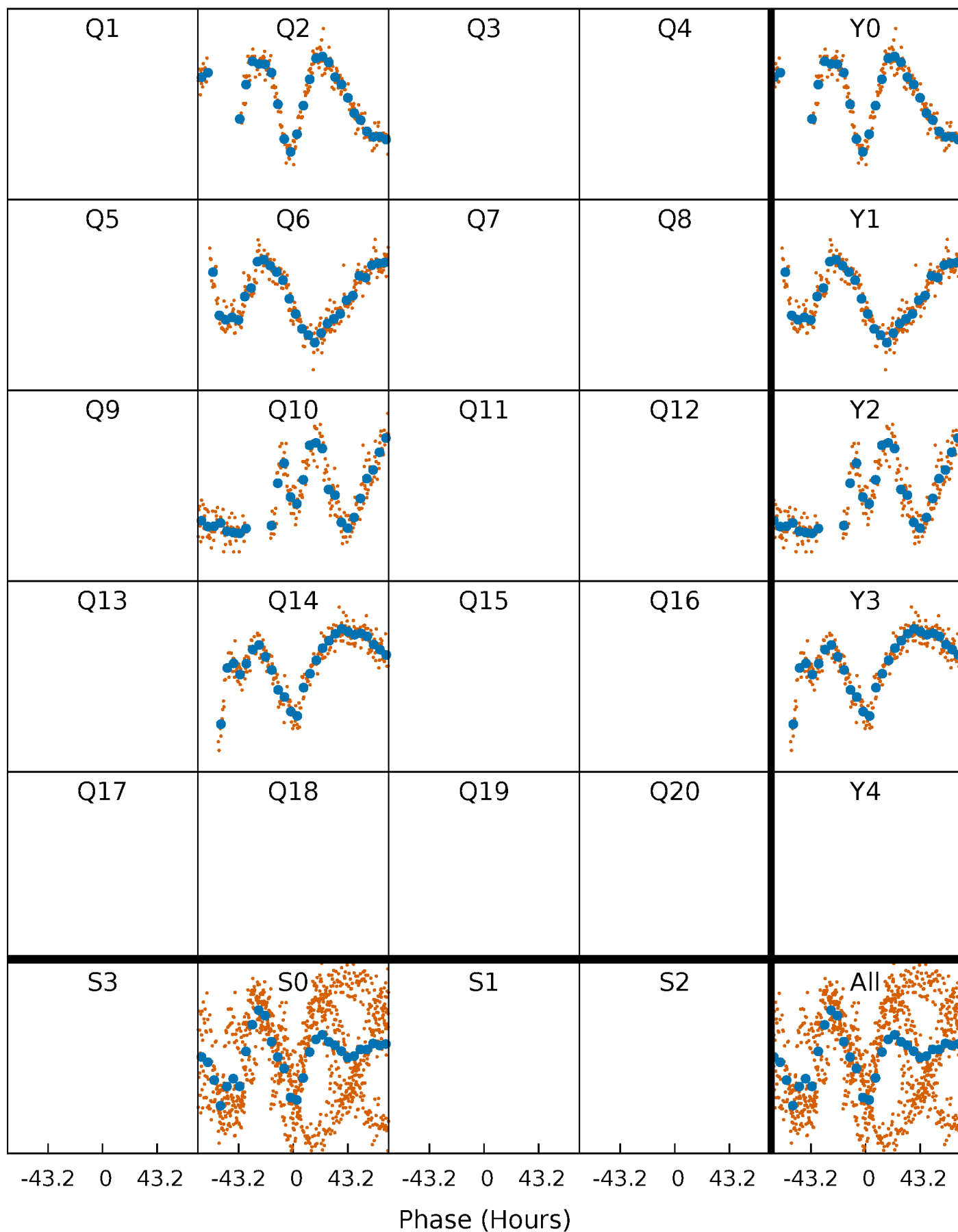


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



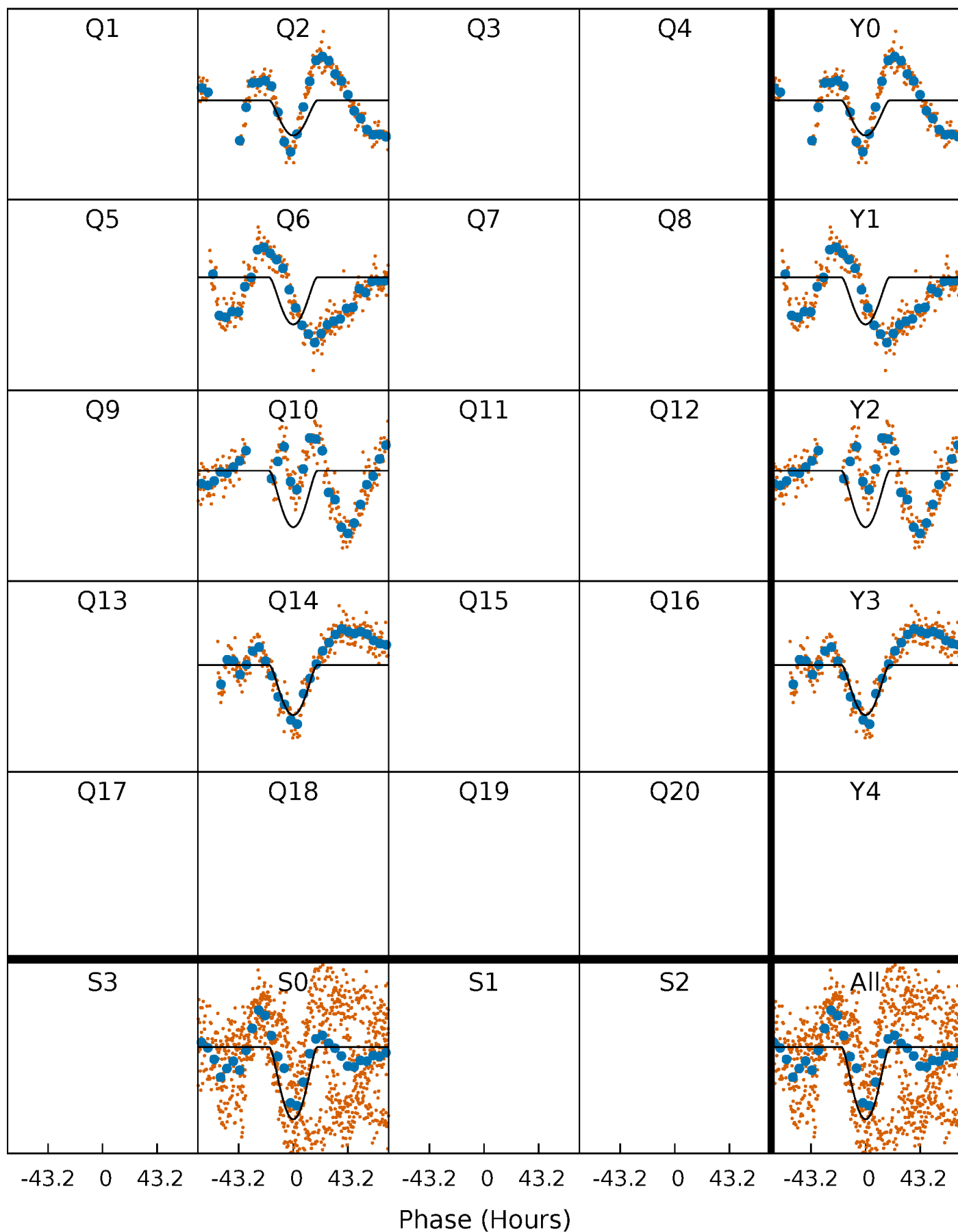
PDC Quarter-Phased Transit Curves

TCE 008612191-01 P=368.857683 Days $T_0=233.115198$ (BKJD)



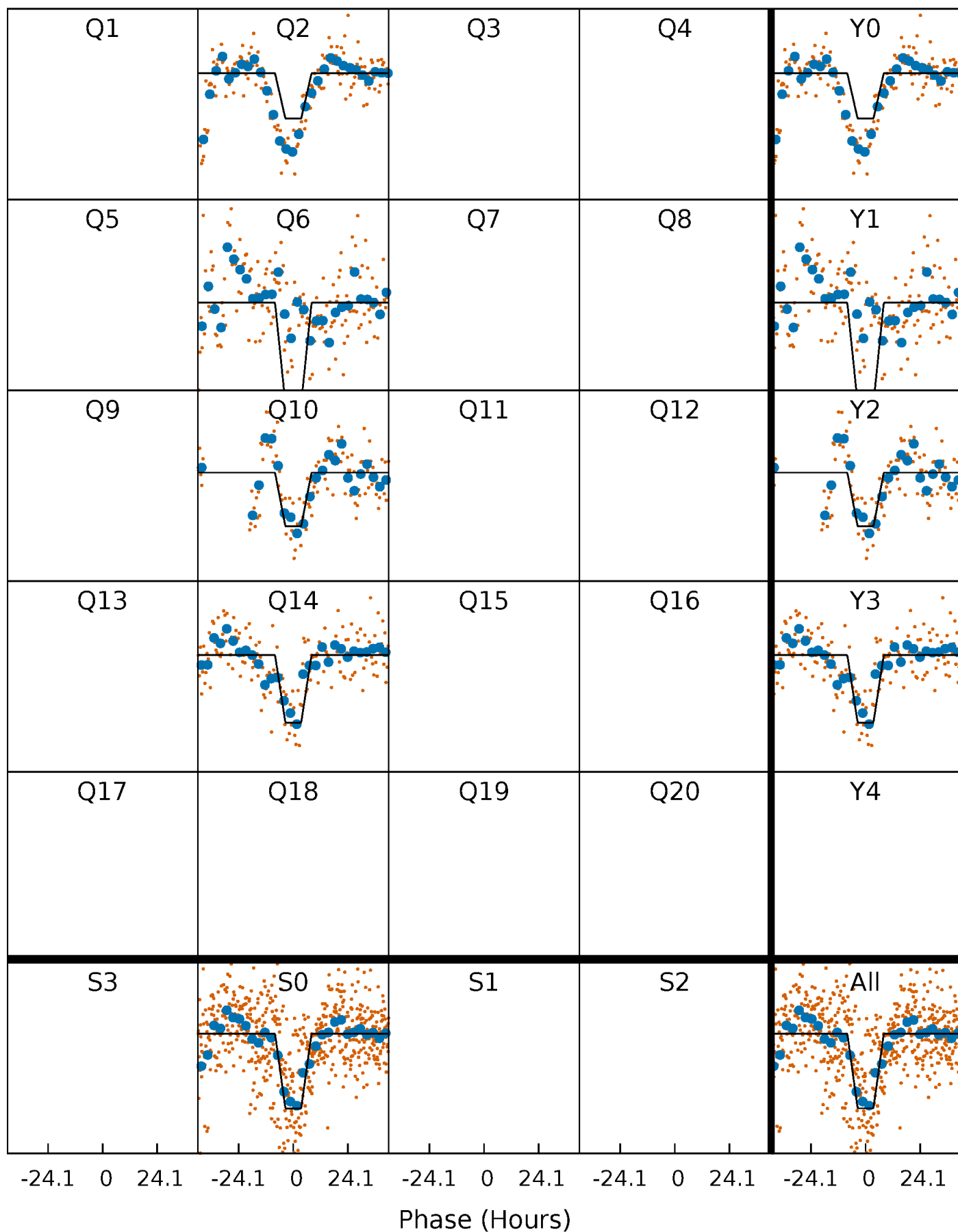
DV Quarter-Phased Transit Curves

TCE 008612191-01 P=368.857683 Days $T_0=233.115198$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

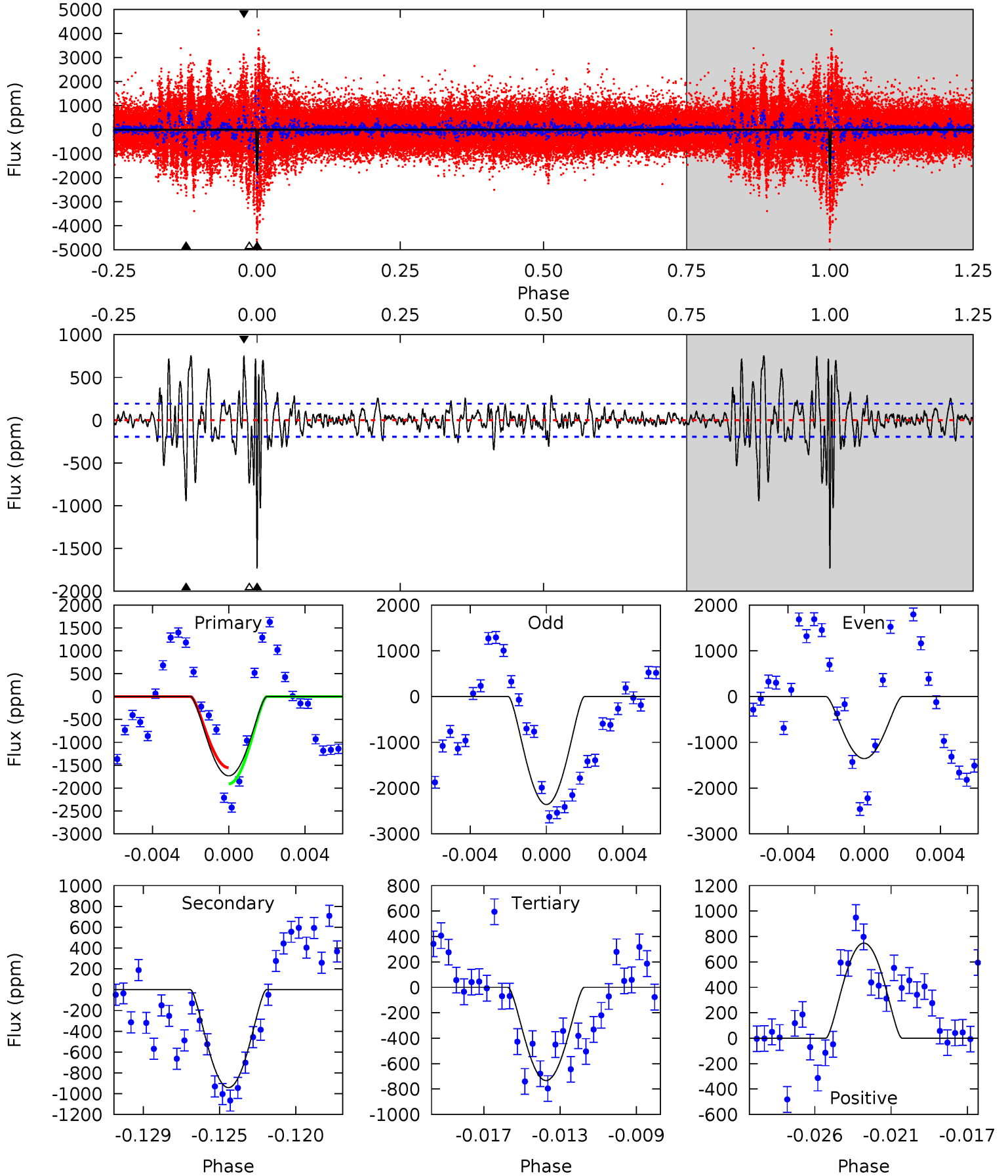
TCE 008612191-01 P=368.893870 Days $T_0=233.102909$ (BKJD)



DV Model-Shift Uniqueness Test

008612191-01, P = 368.857683 Days, E = 233.115198 Days

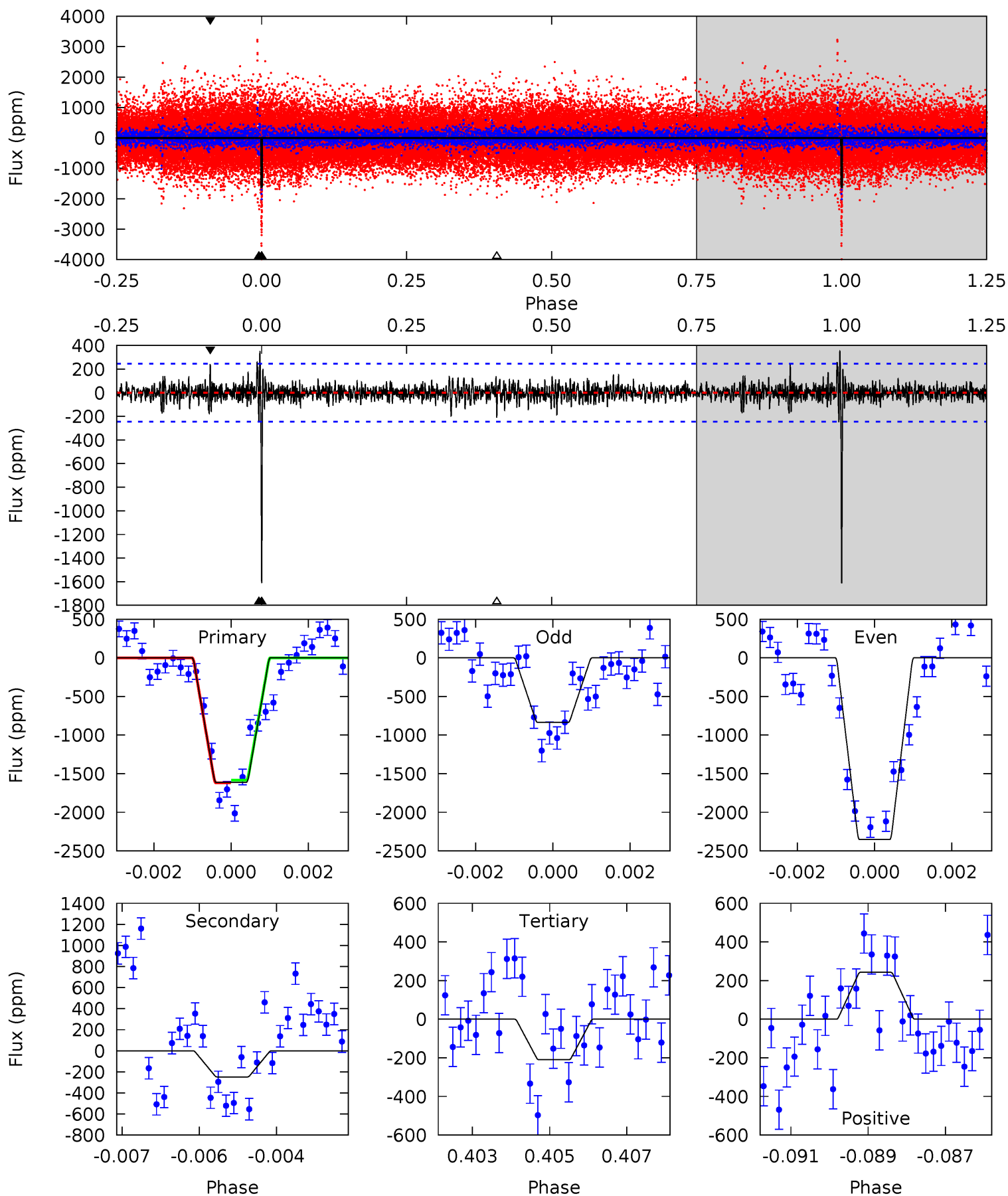
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
46.5	25.3	19.7	20.1	5.19	2.86	4.67	26.8	26.4	5.60	5.20	13.9	0.83	0.30	4.69



Alt Model-Shift Uniqueness Test

008612191-01, P = 368.893870 Days, E = 233.102909 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
35.0	5.39	4.55	5.28	5.34	3.11	1.06	30.5	29.8	0.84	0.12	16.7	1.00	0.18	0.39



Stellar Parameters For KIC 008612191

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	6102^{+193}_{-236}	$4.457^{+0.054}_{-0.216}$	$0.000^{+0.250}_{-0.300}$	$1.026^{+0.341}_{-0.114}$	$1.099^{+0.151}_{-0.151}$	$1.433^{+0.422}_{-0.771}$
	+3%/-4%	+1%/-5%	+inf%/-inf%	+33%/-11%	+14%/-14%	+29%/-54%
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 008612191-01 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	-941 ± 37	$15.29^{+14.23}_{-9.72}$	382^{+31}_{-23}	3456^{+1594}_{-596}	2313^{+15629}_{-1689}
Alt.	-248 ± 46	$12.46^{+12.25}_{-8.68}$	382^{+28}_{-21}	3006^{+1465}_{-501}	935^{+9322}_{-714}

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

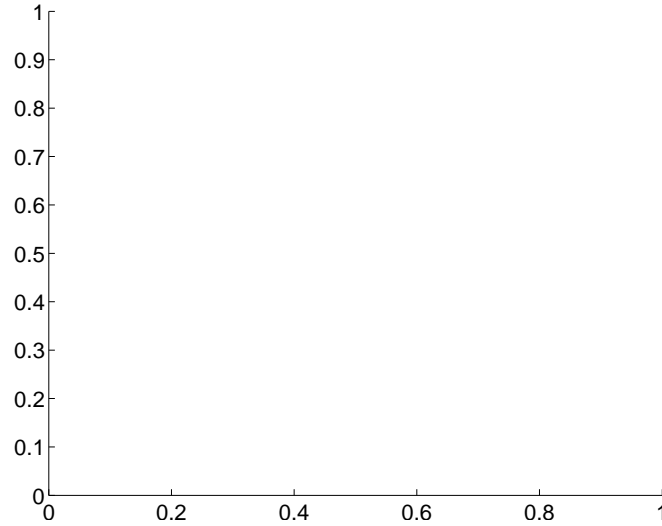
Supplemental centroid analysis for 008612191-01. Kepler magnitude: 15.64. Transit SNR 18.26

There are 0 quarters with good PRF difference image offsets

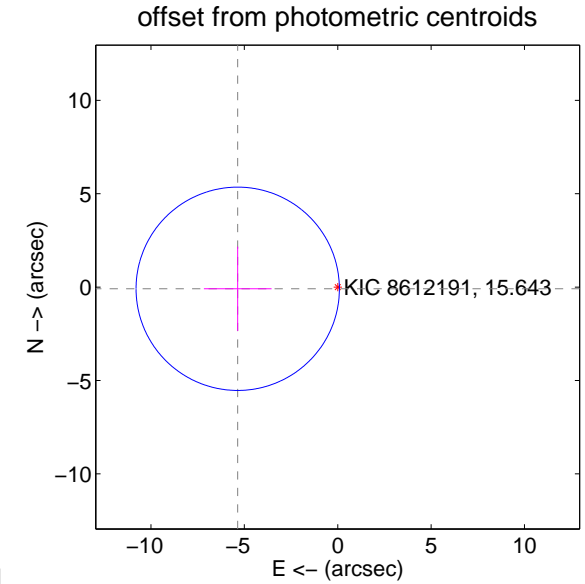
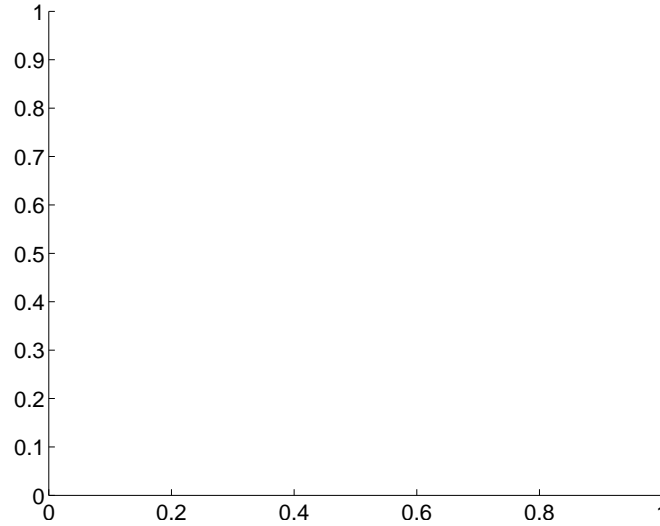
The direct PRF centroid is offset from the target star catalog position by about NaN arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	—	—	—	—
PRF-fit source offset from KIC position	—	—	—	—
photometric centroid source offset	5.36 ± 1.82	2.95	5.36 ± 1.81	-0.09 ± 2.26

There is no PRF-fit offset from OOT-fit



There is no PRF-fit offset from KIC

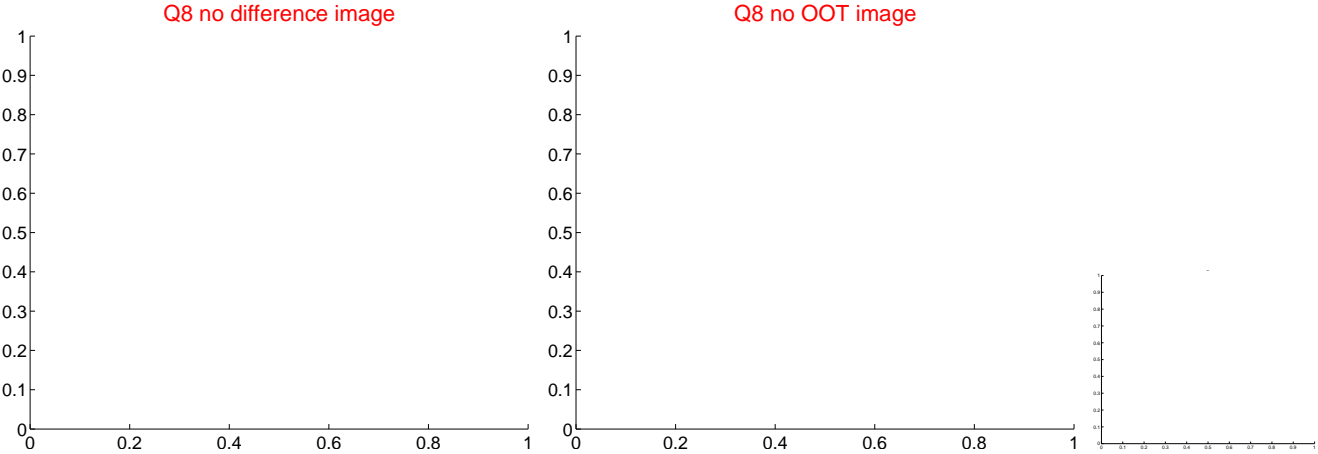


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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



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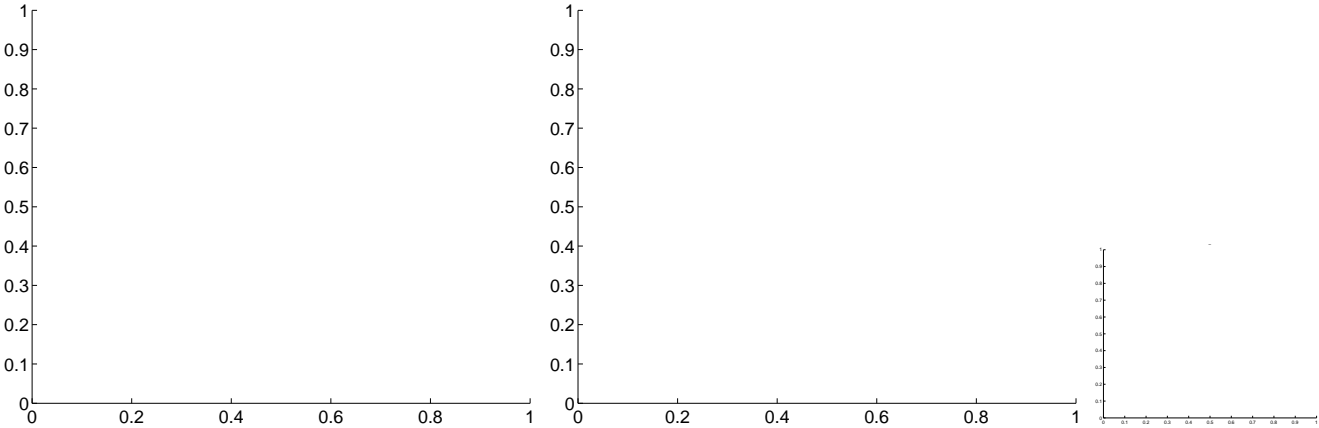
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



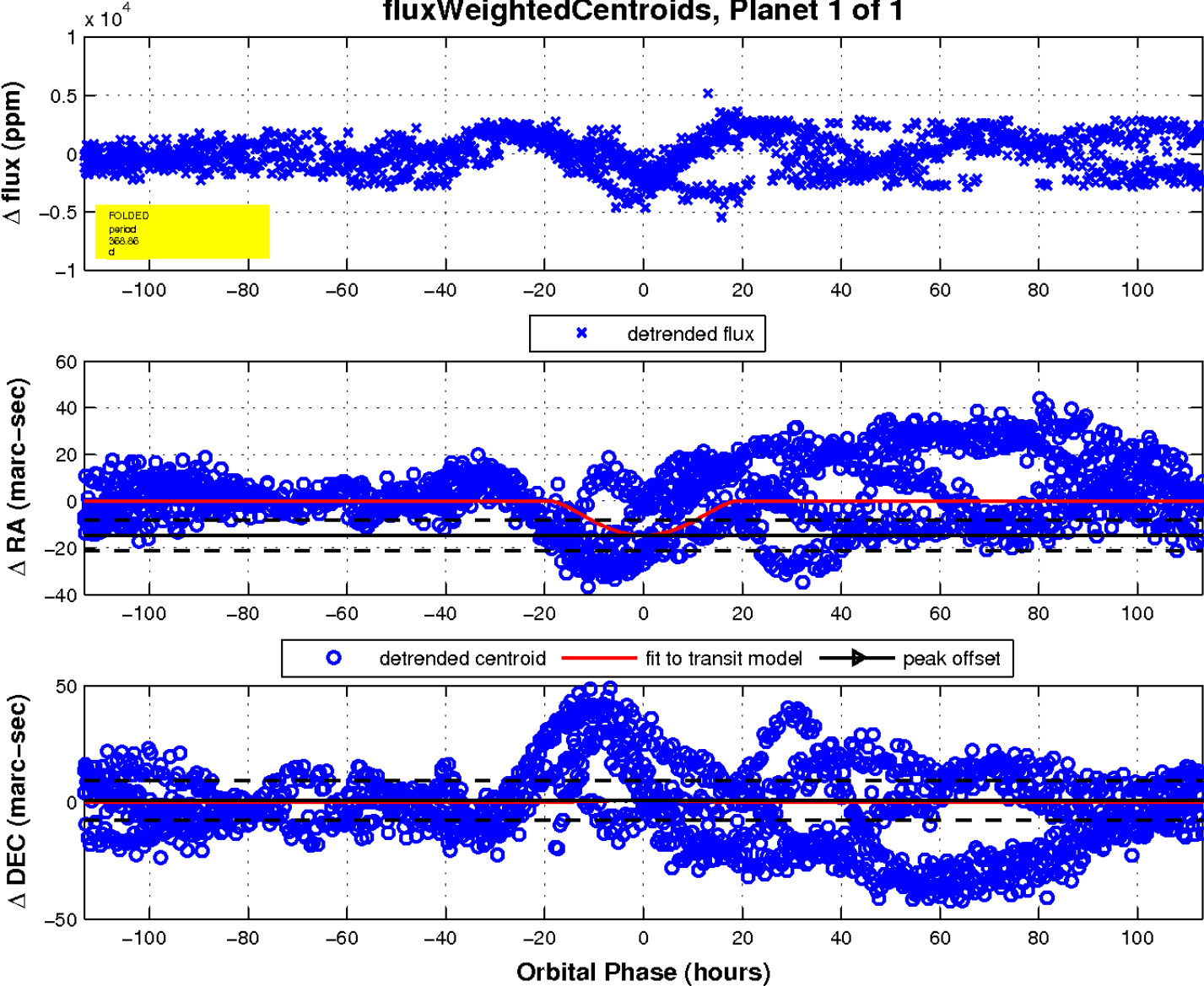
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.

Q17 no difference image

Q17 no OOT image



fluxWeightedCentroids, Planet 1 of 1



UKIRT Image

Declination

