

KIC 005871895

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})
005871895-01	OBS	No	386.221173	266.930177	962.6	26.533	8.1	7.7	0.75	4903	4.78	0.33

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
005871895-01	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_MARSHALL—MOD_NONUNIQ_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.

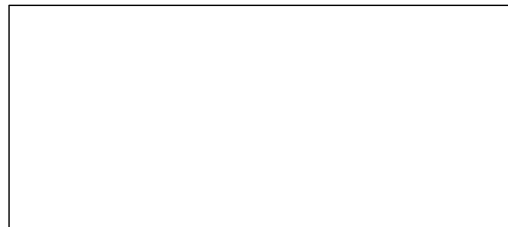
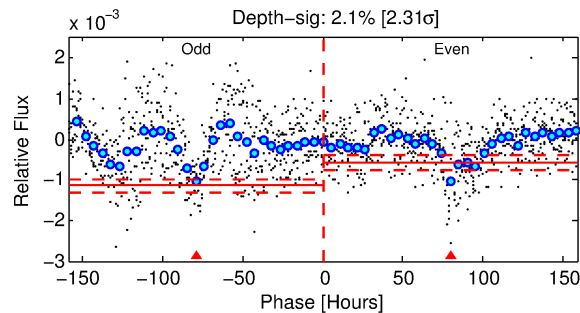
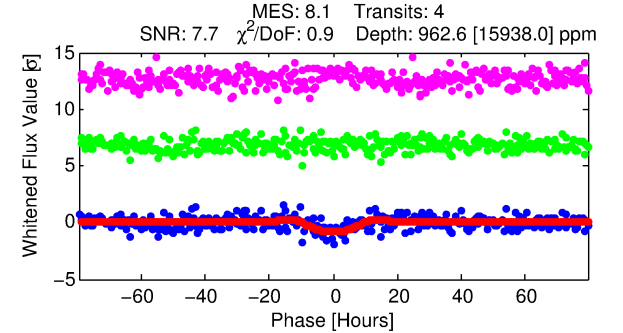
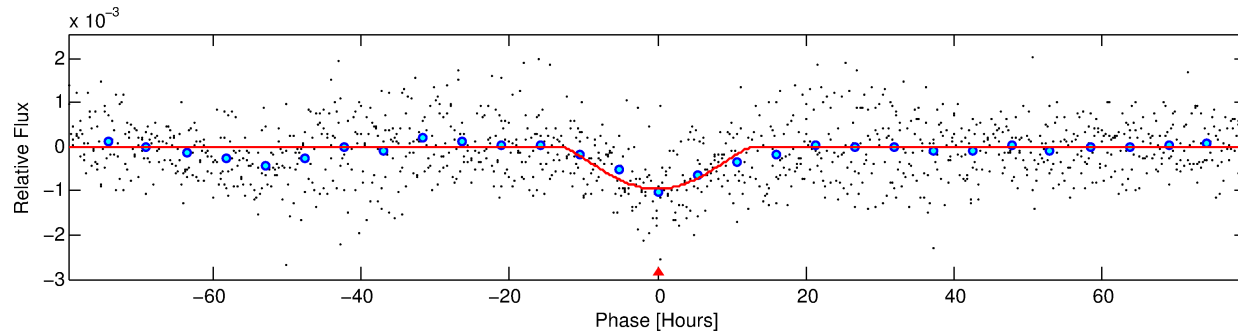
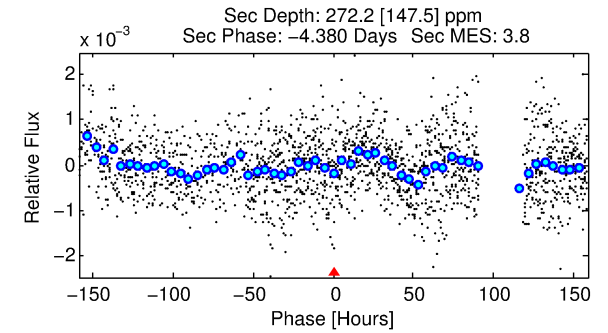
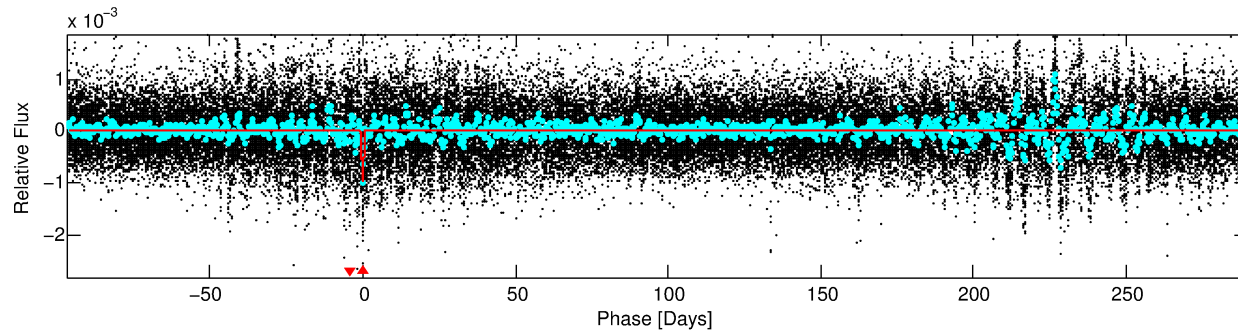
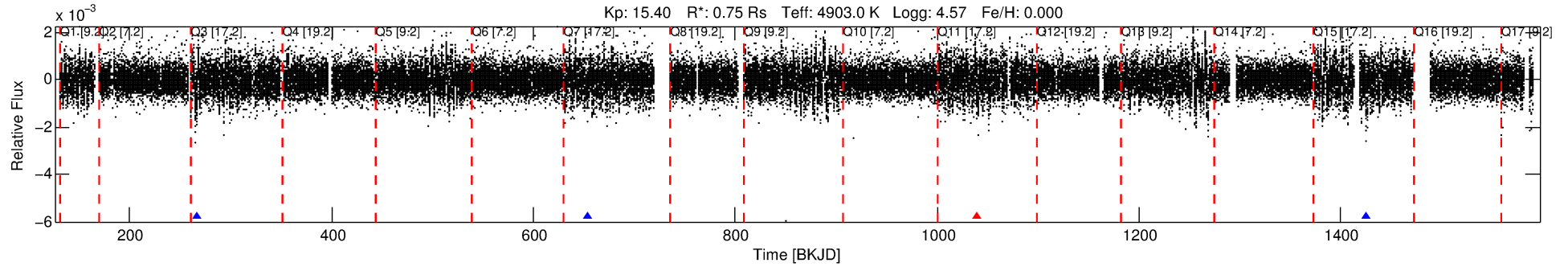
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 005871895-01

No Significant Match Found

DV One-Page Summary

KIC: 5871895 Candidate: 1 of 1 Period: 386.221 d



DV Fit Results:

Period = 386.22117 [0.02858] d
Epoch = 266.9302 [0.0510] BKJD
Rp/R* = 0.0581 [0.1793]
a/R* = 38.48 [27.09]
b = 1.00 [0.38]
Seff = 0.33 [0.05]
Teq = 193 [7] K
Rp = 4.78 [14.74] Re
a = 0.9472 [0.0676] AU
Ag = 5887.64 [36460.41] [0.16σ]
Teffp = 2612 [4044] K [0.60σ]

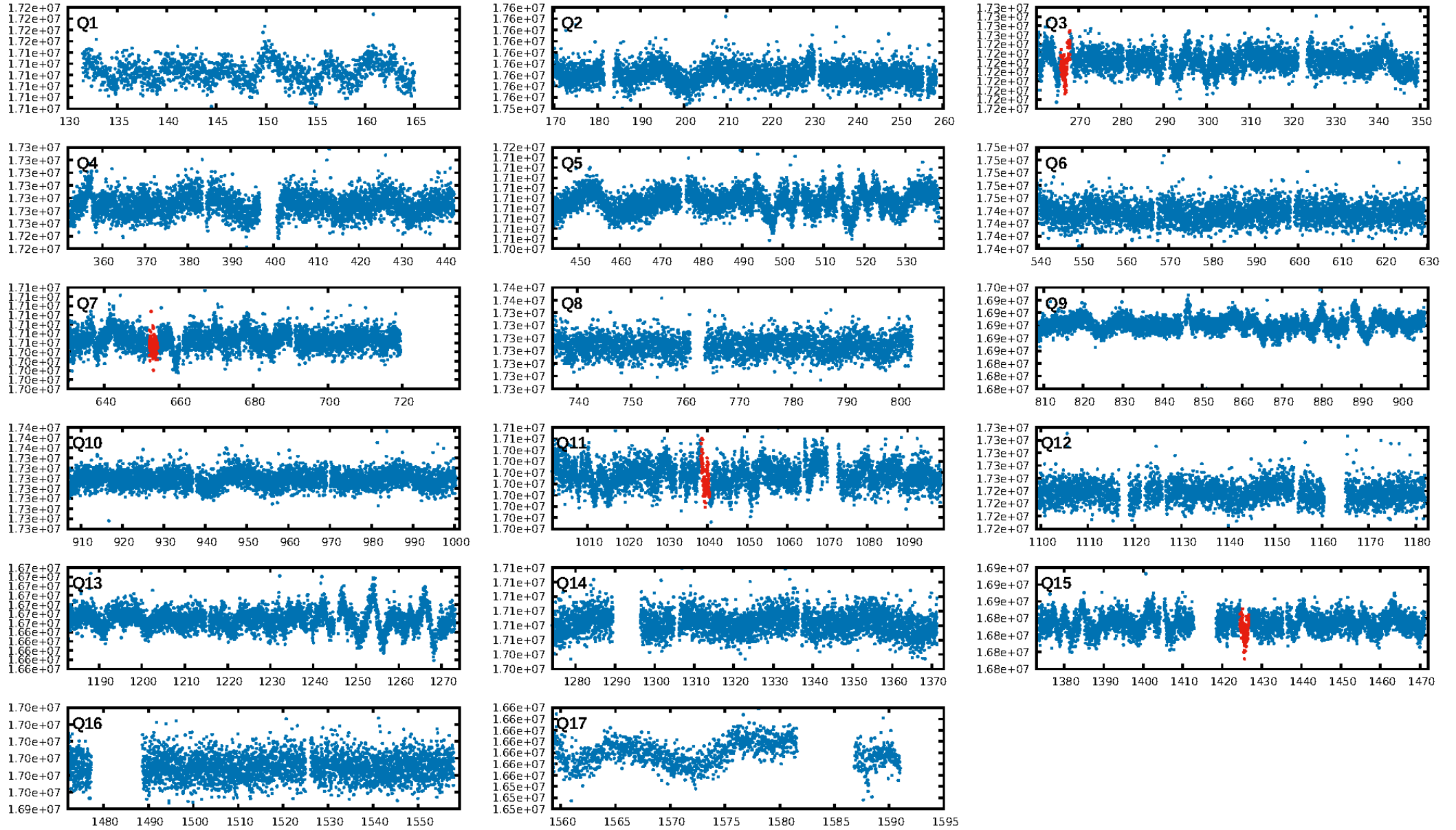
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: 3.7%
ModelChiSquareGof-sig: 100.0%
Bootstrap-pfa: 2.34e-11
RollingBand-fgt: 0.75 [3/4]
GhostDiagnostic-chr: -12.81
Centroid-sig: 3.1%
Centroid-so: 1.943 arcsec [1.09σ]
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: 1.00 [2/2]

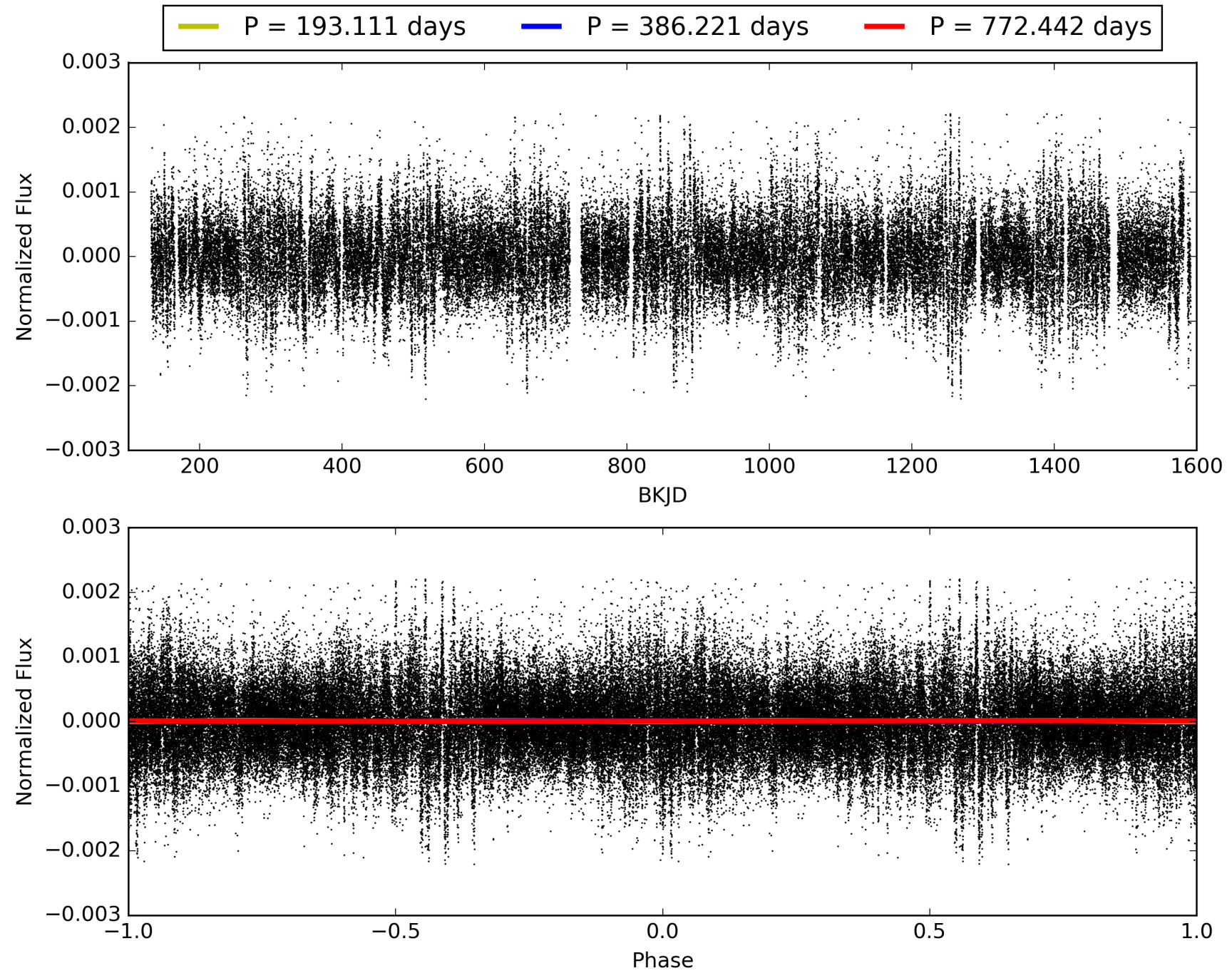
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 29-Jan-2016 16:14:28 Z

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

TCE 005871895-01, PDC Light Curves

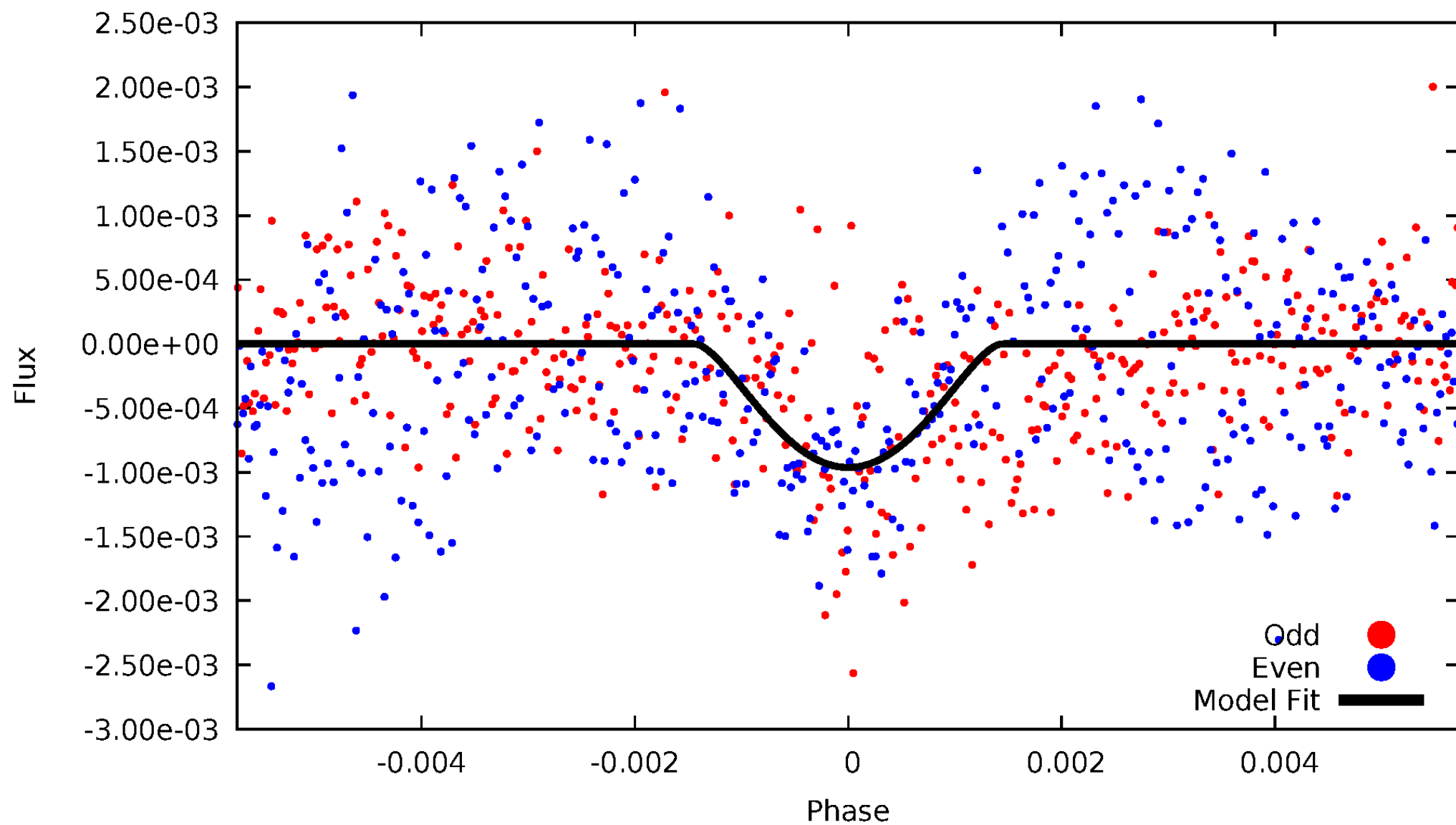


TCE 005871895-01



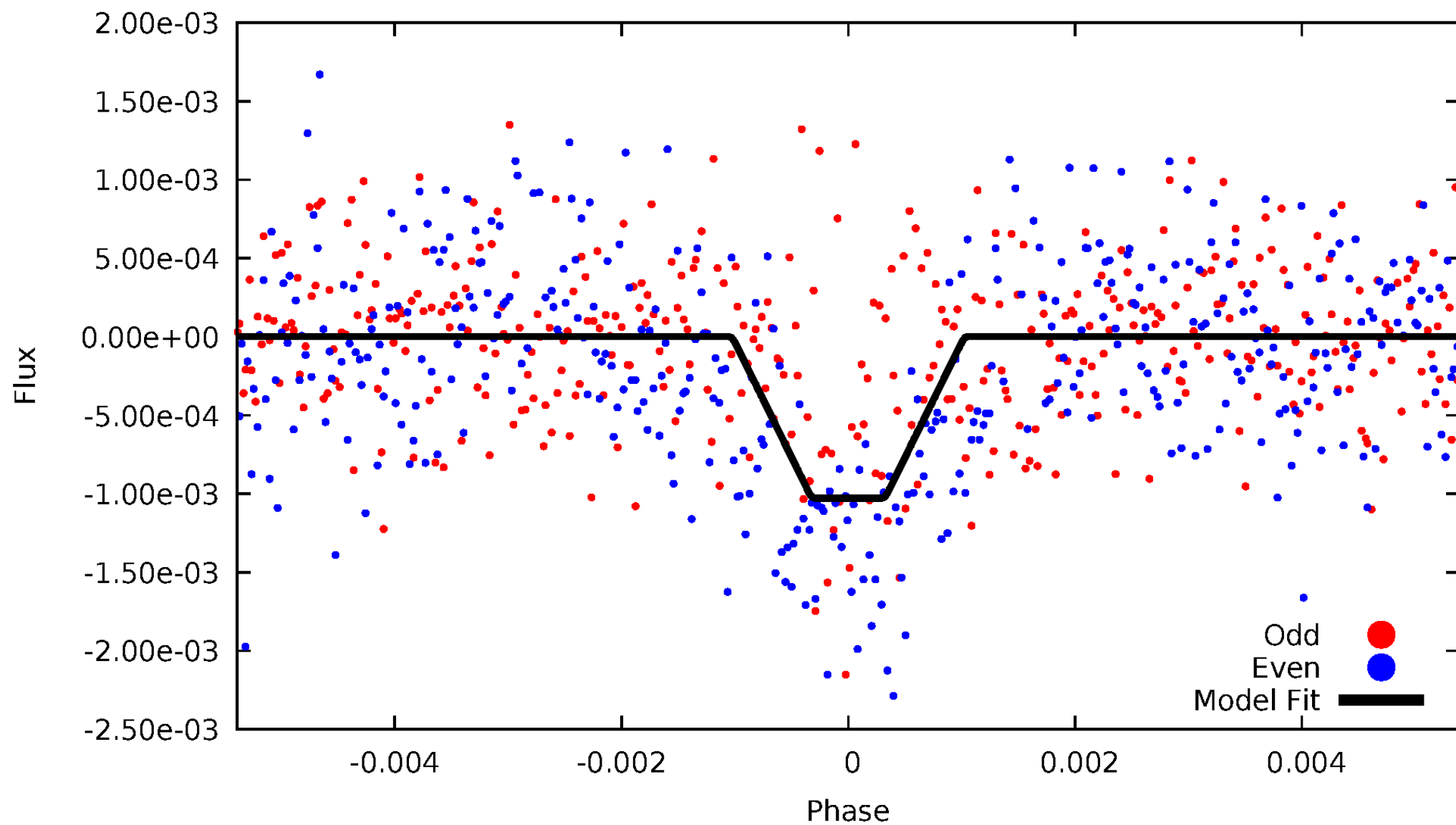
DV Odd/Even

TCE 005871895-01



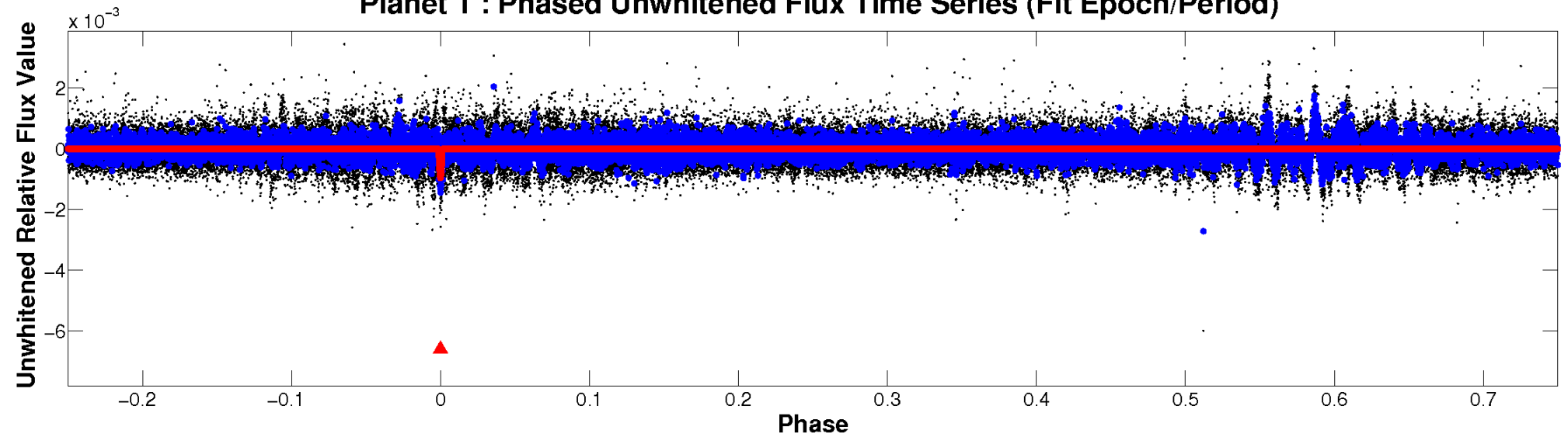
ALT Odd/Even

TCE 005871895-01

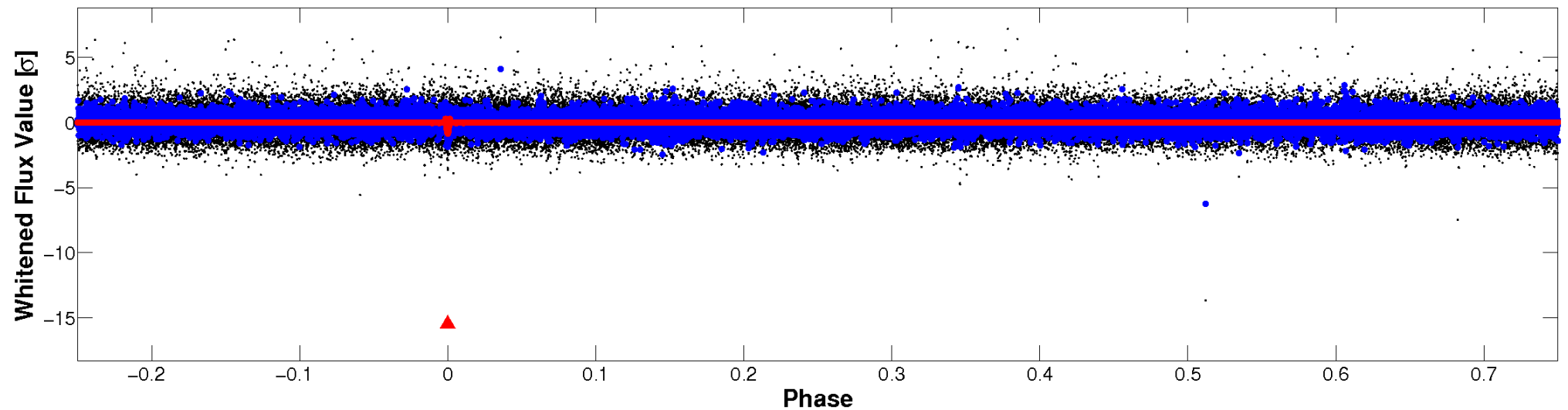


Non-Whitened Vs. Whitened Light Curve

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

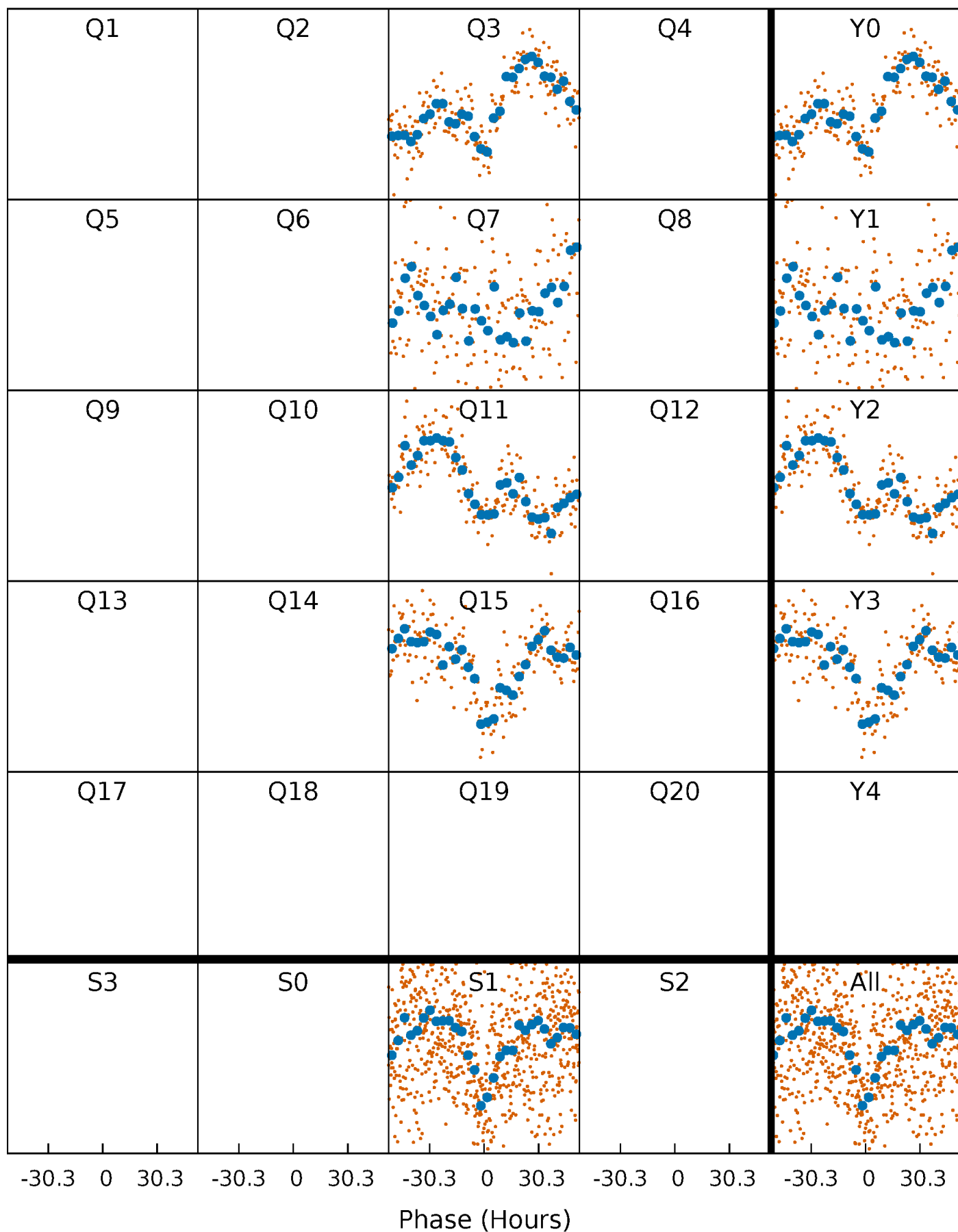


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



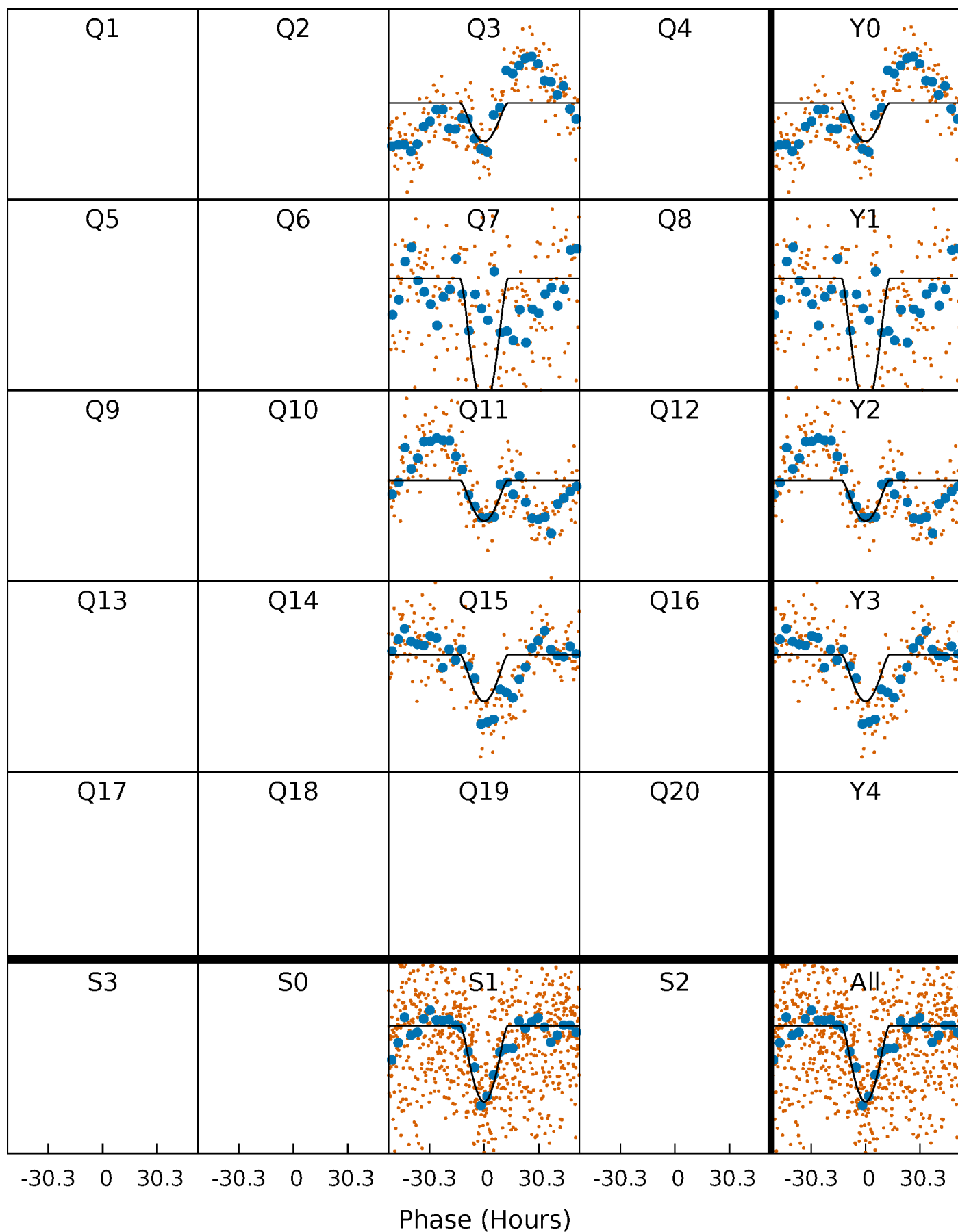
PDC Quarter-Phased Transit Curves

TCE 005871895-01 P=386.221173 Days $T_0=266.930177$ (BKJD)



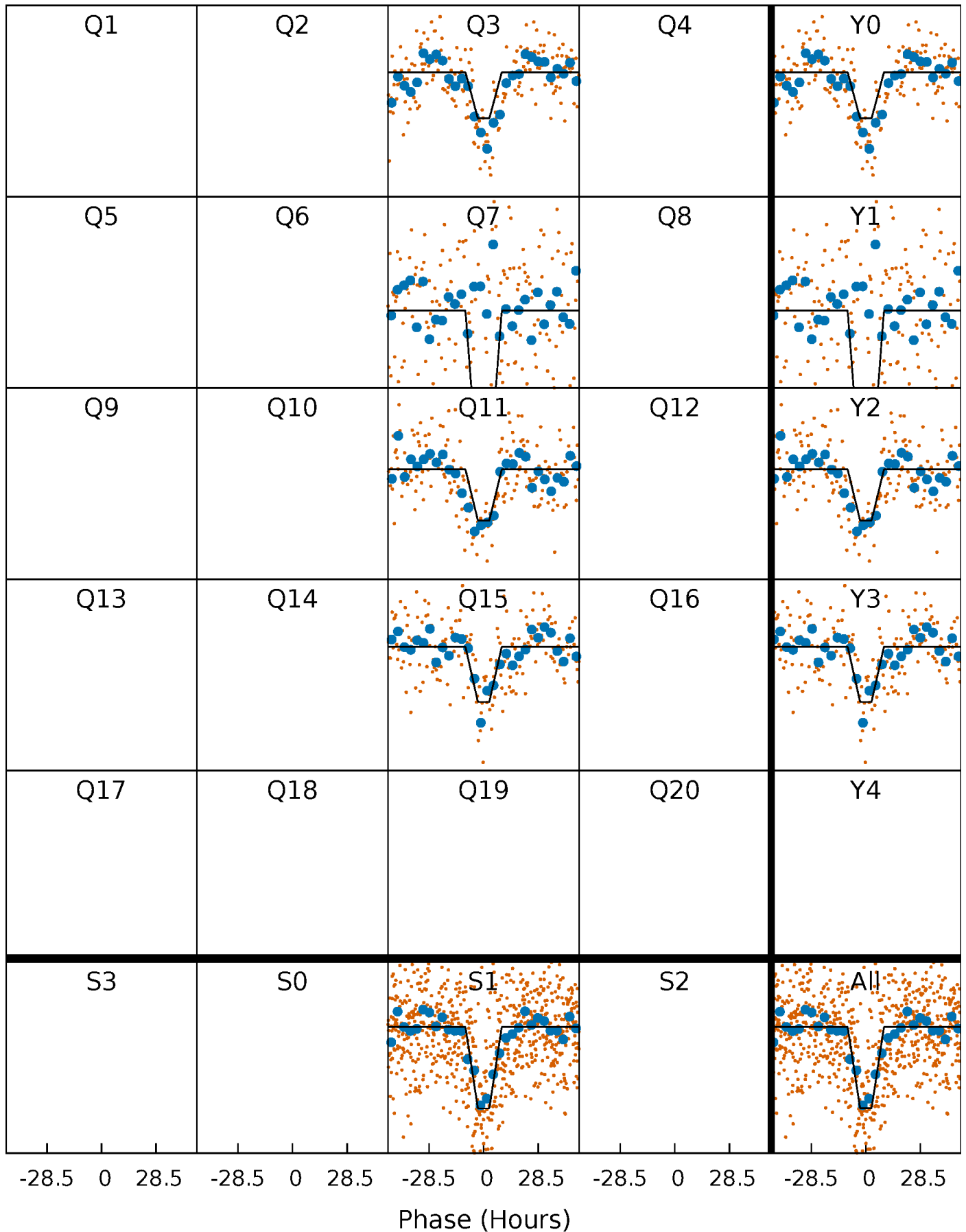
DV Quarter-Phased Transit Curves

TCE 005871895-01 P=386.221173 Days $T_0=266.930177$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

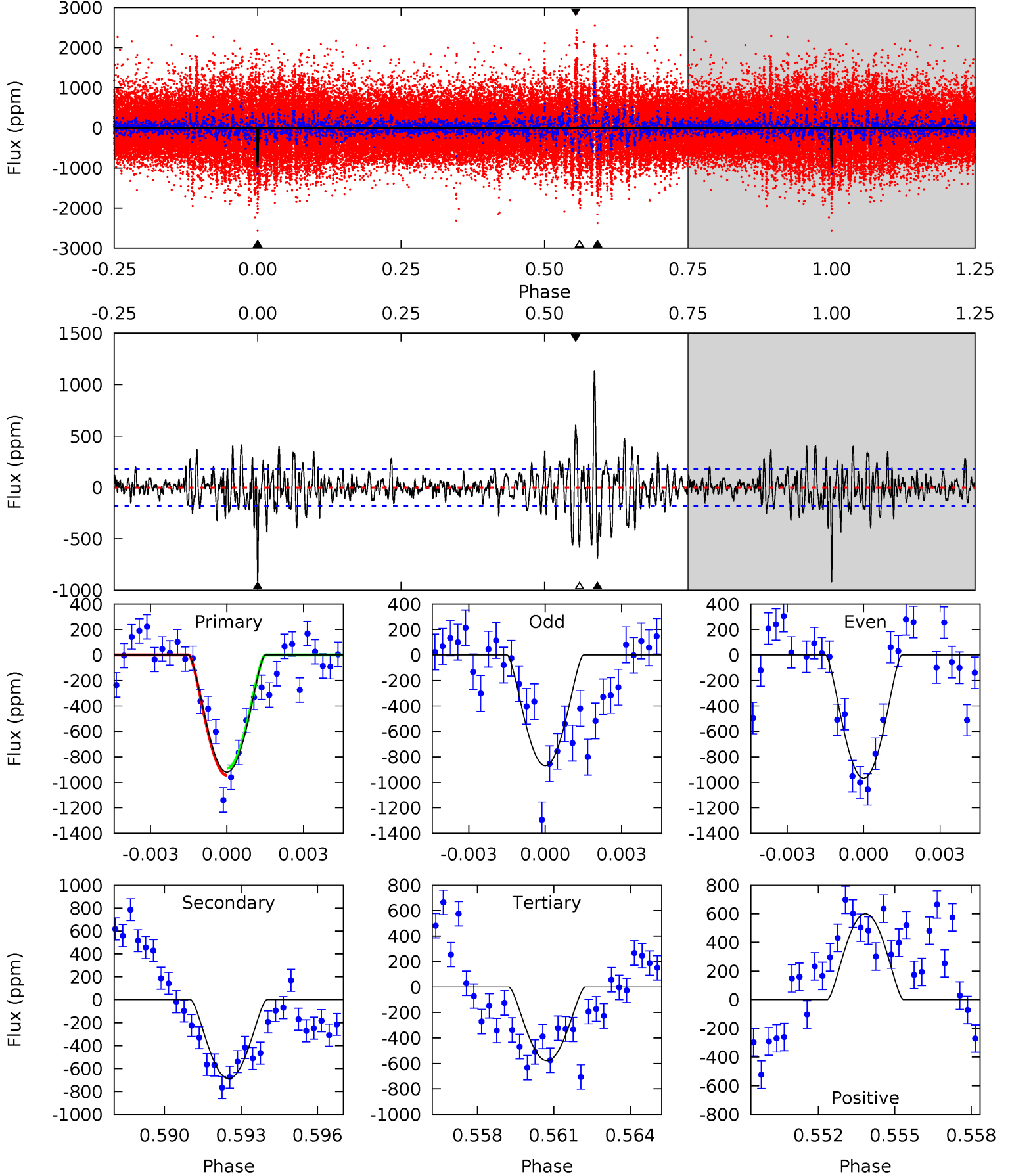
TCE 005871895-01 P=386.241962 Days $T_0=266.895553$ (BKJD)



DV Model-Shift Uniqueness Test

005871895-01, P = 386.221173 Days, E = 266.930177 Days

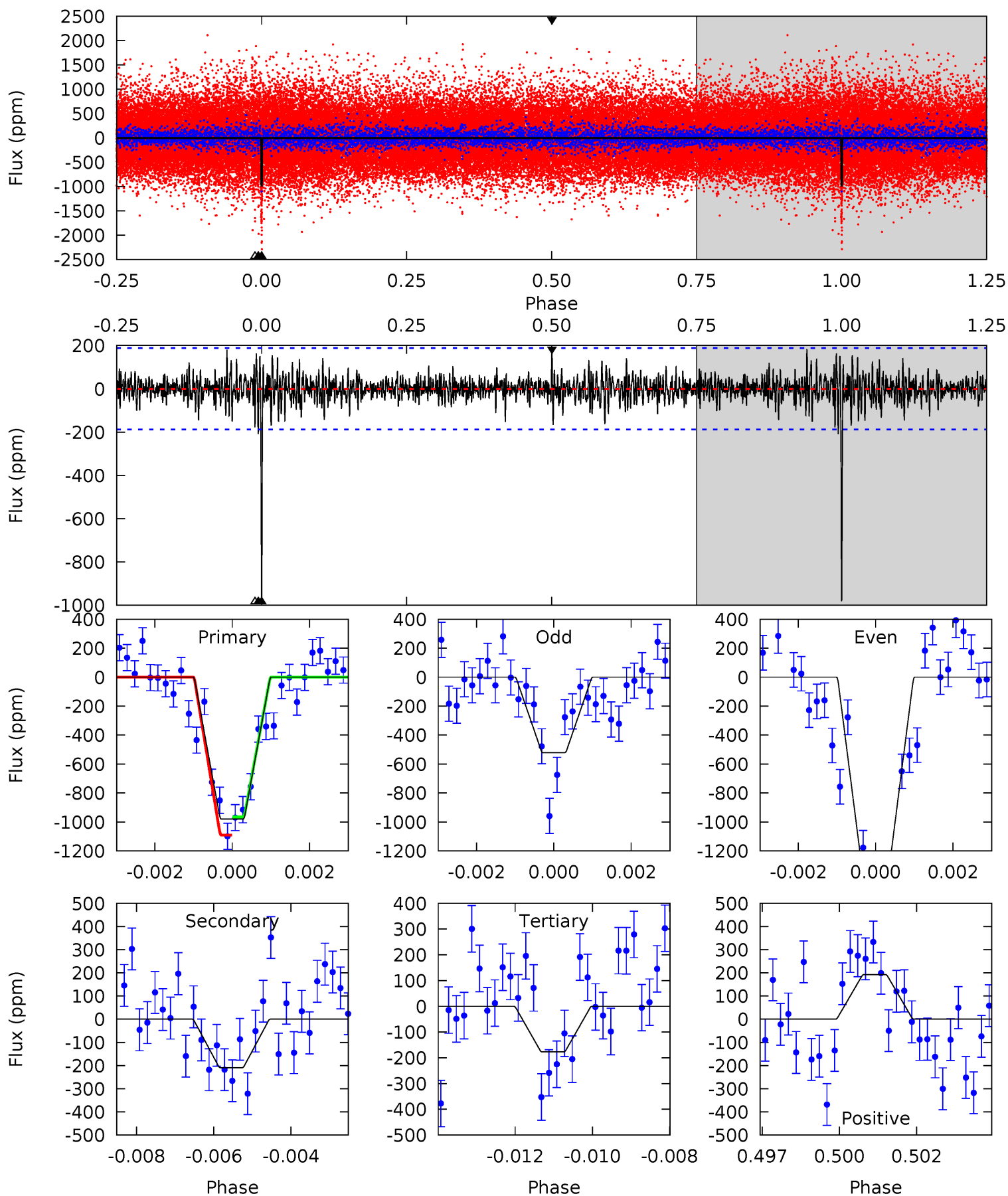
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
26.8	20.1	16.9	17.5	5.26	2.98	4.37	9.95	9.31	3.20	2.56	1.42	0.92	0.55	0.80



Alt Model-Shift Uniqueness Test

005871895-01, P = 386.241962 Days, E = 266.895553 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
27.7	5.92	5.00	5.44	5.32	3.08	1.27	22.7	22.3	0.91	0.48	12.5	0.81	0.16	1.76



Stellar Parameters For KIC 005871895

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	M (M_{\odot})	p_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	4903^{+148}_{-133}	$4.565^{+0.050}_{-0.045}$	$0.000^{+0.250}_{-0.300}$	$0.753^{+0.062}_{-0.068}$	$0.760^{+0.074}_{-0.060}$	$2.509^{+0.567}_{-0.386}$
	+3%/-3%	+1%/-1%	+inf%/-inf%	+8%/-9%	+10%/-8%	+23%/-15%
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 005871895-01 / KOI

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	-688 ± 34	$11.61^{+12.17}_{-7.83}$	270^{+9}_{-9}	2812^{+1166}_{-457}	2484^{+22014}_{-1885}
Alt.	-209 ± 35	$11.00^{+11.81}_{-7.38}$	269^{+9}_{-9}	2461^{+839}_{-387}	870^{+6804}_{-677}

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 $A_{obs} \gg 1.0$

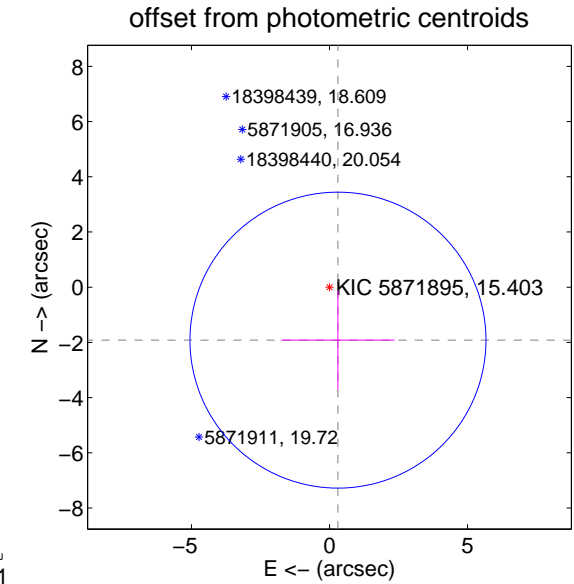
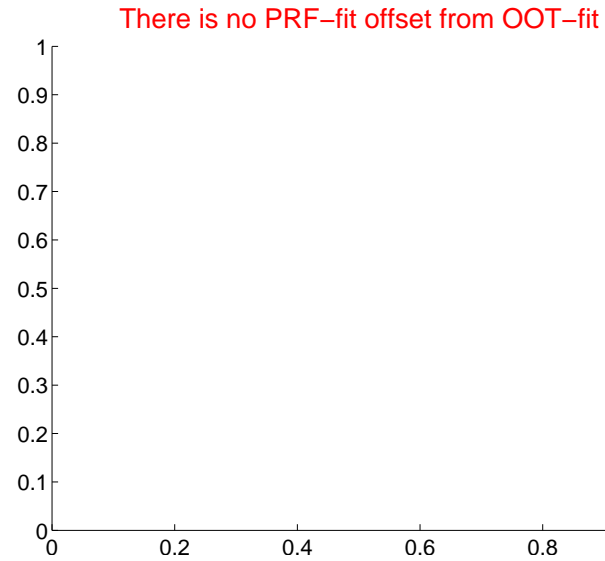
DV Centroid Data

Supplemental centroid analysis for 005871895-01. Kepler magnitude: 15.40. Transit SNR 7.65

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	1.94 ± 1.79	1.09	-0.31 ± 2.06	-1.92 ± 1.78

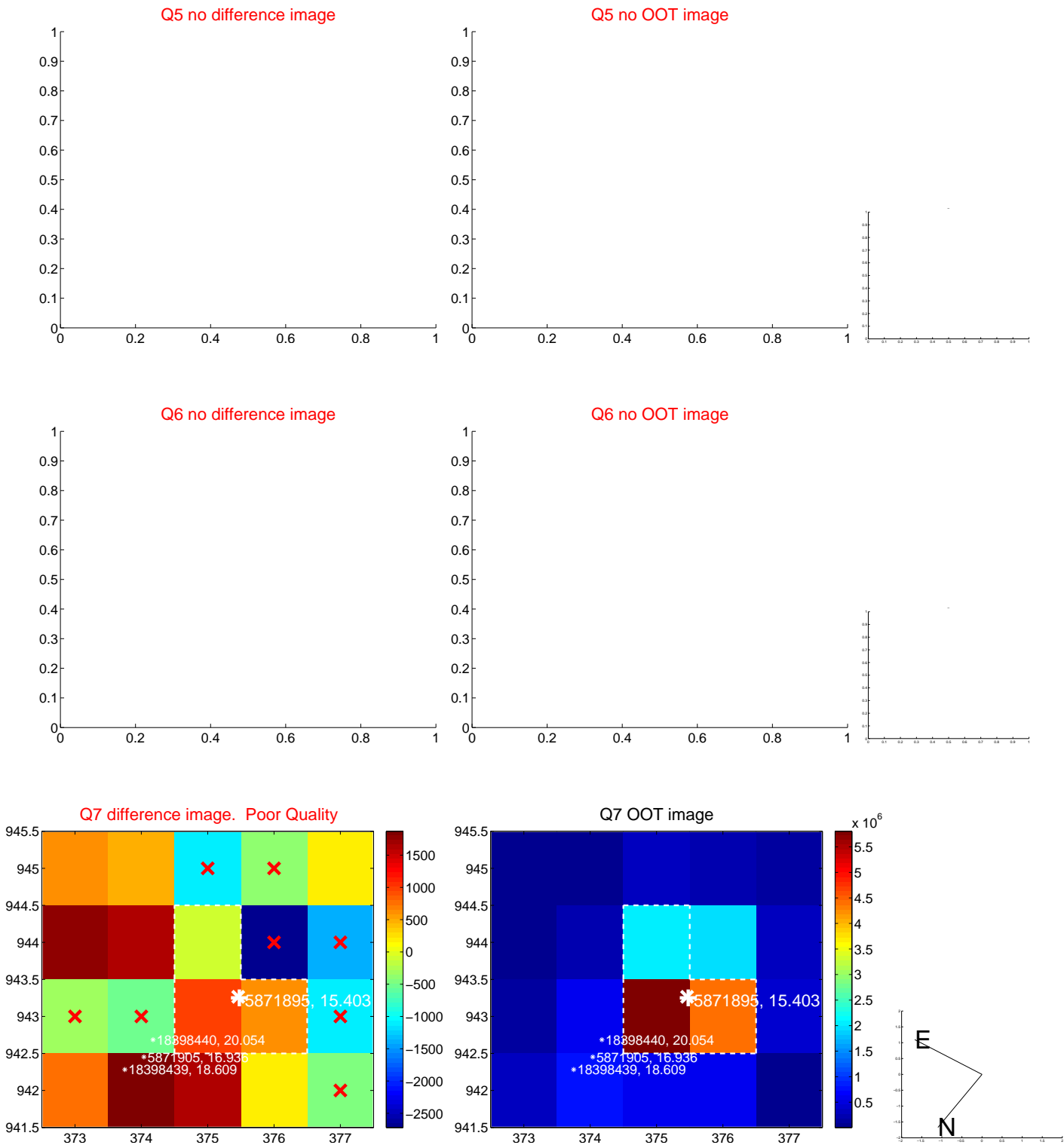


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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



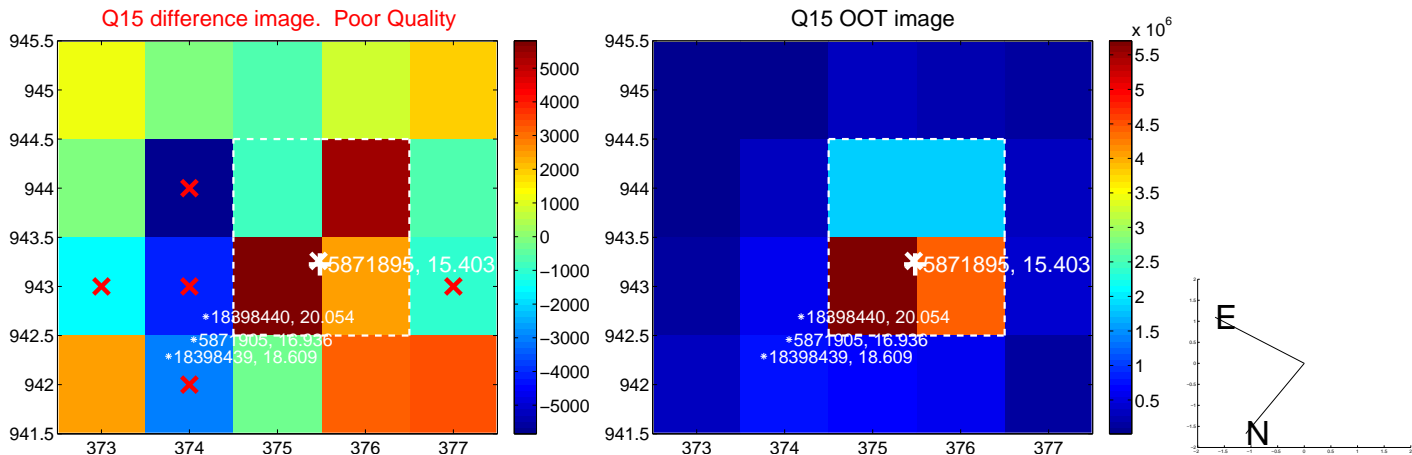
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



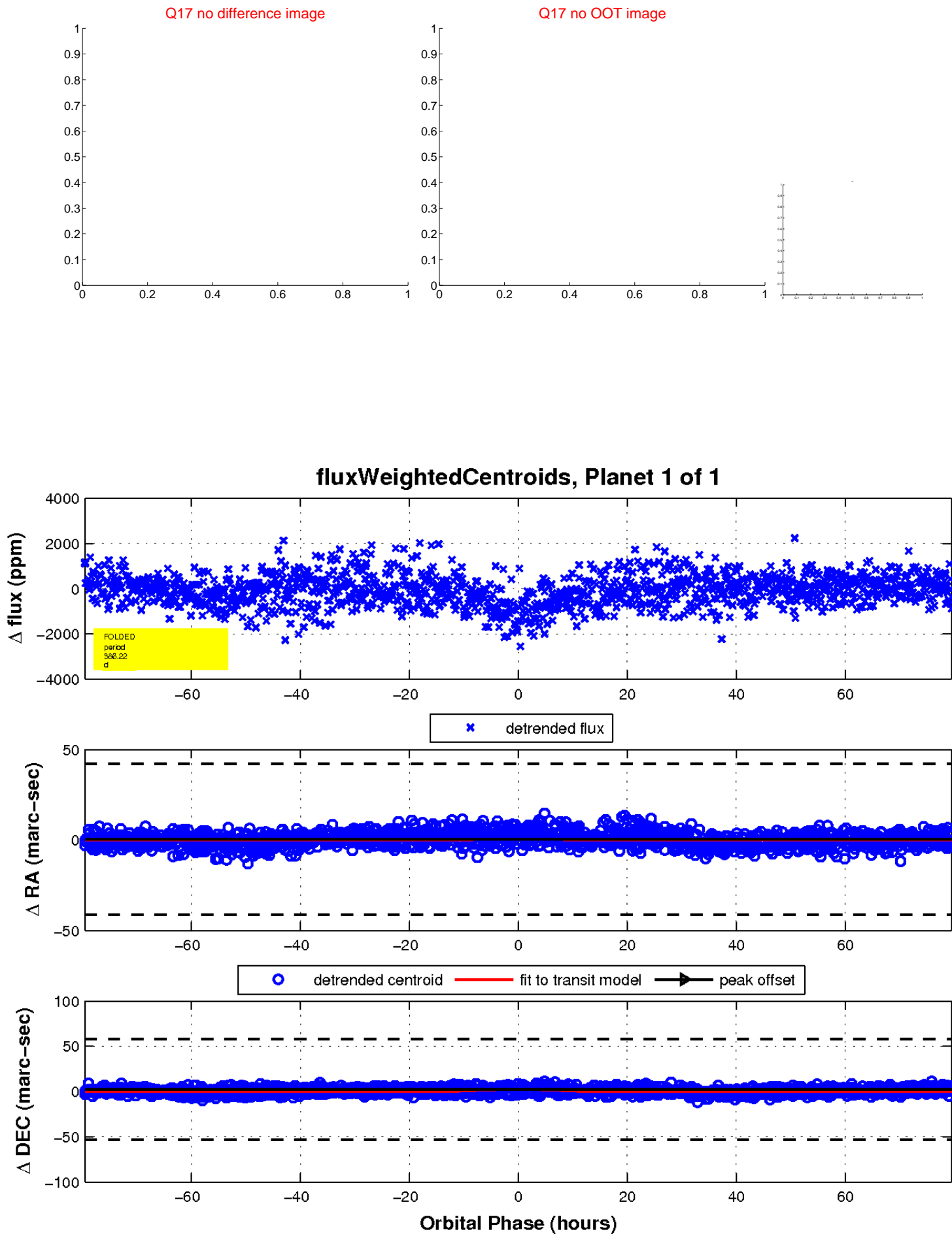
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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



UKIRT Image

Declination

