

KIC 008747619

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})
008747619-01	OBS	No	370.910303	230.350373	1822.4	26.554	10.2	10.6	0.90	5763	4.79	0.79

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
008747619-01	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_MARSHALL_SKYE—ALL_TRANS_CHASES—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.

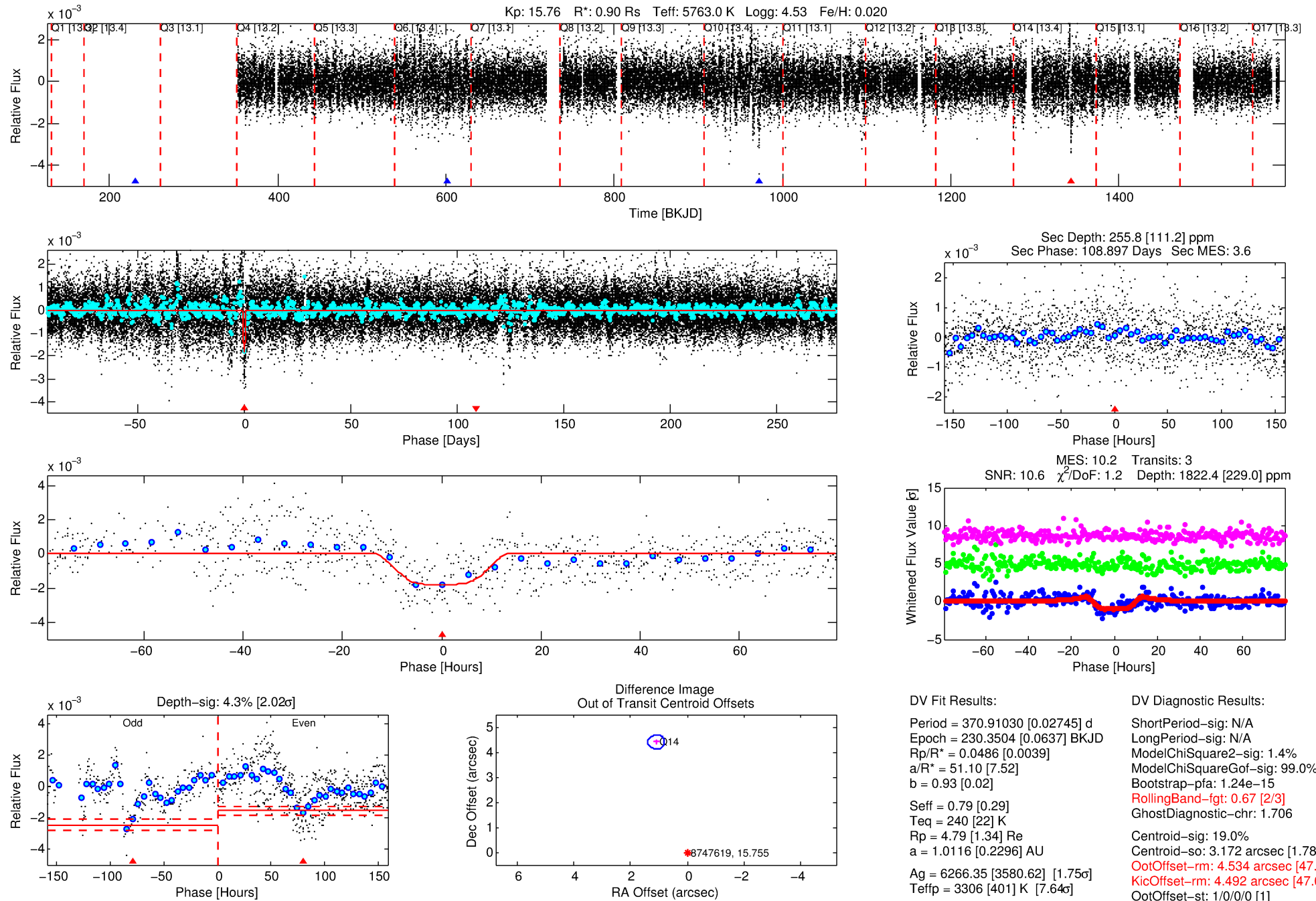
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 008747619-01

No Significant Match Found

DV One-Page Summary

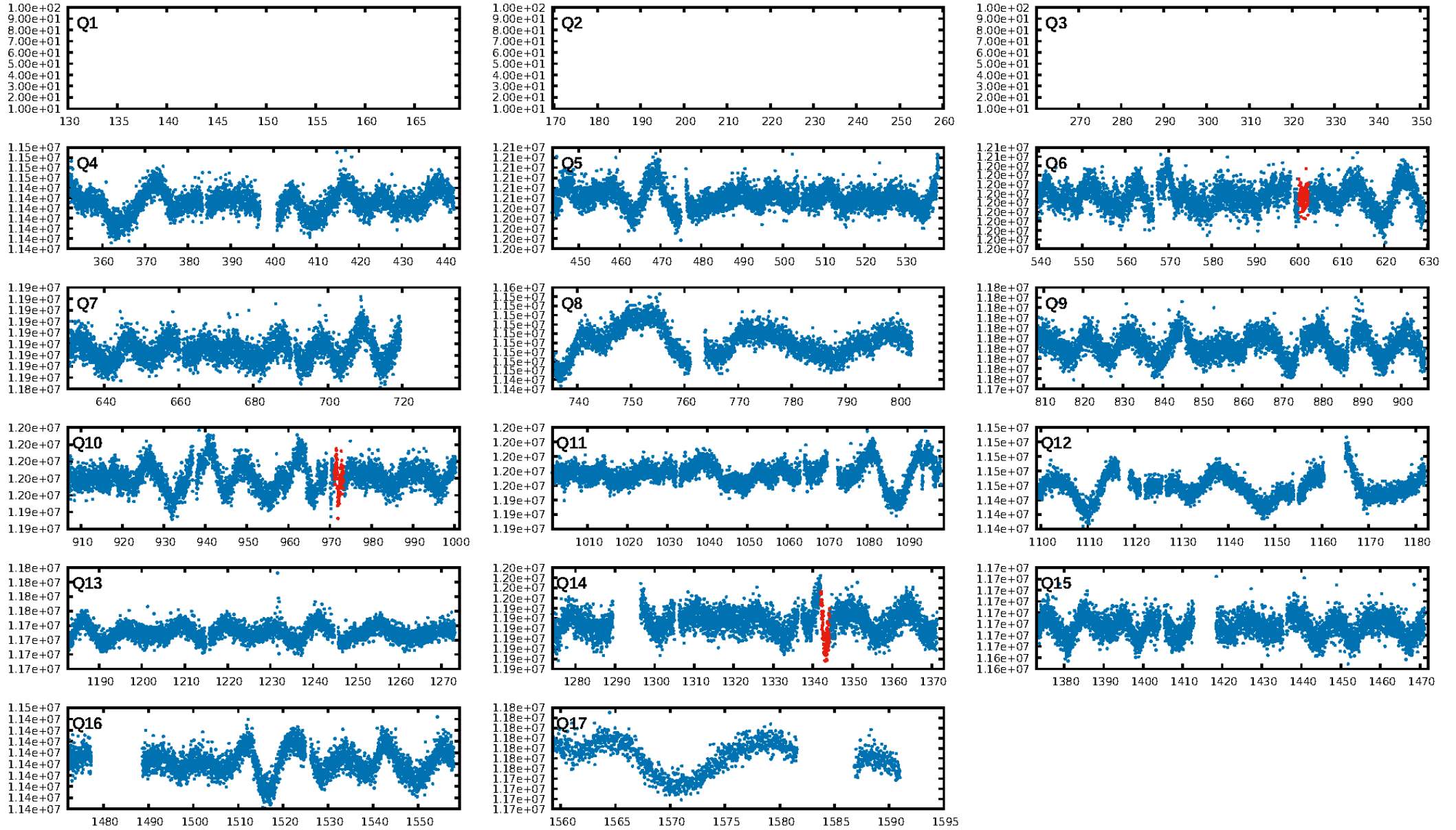
KIC: 8747619 Candidate: 1 of 1 Period: 370.910 d



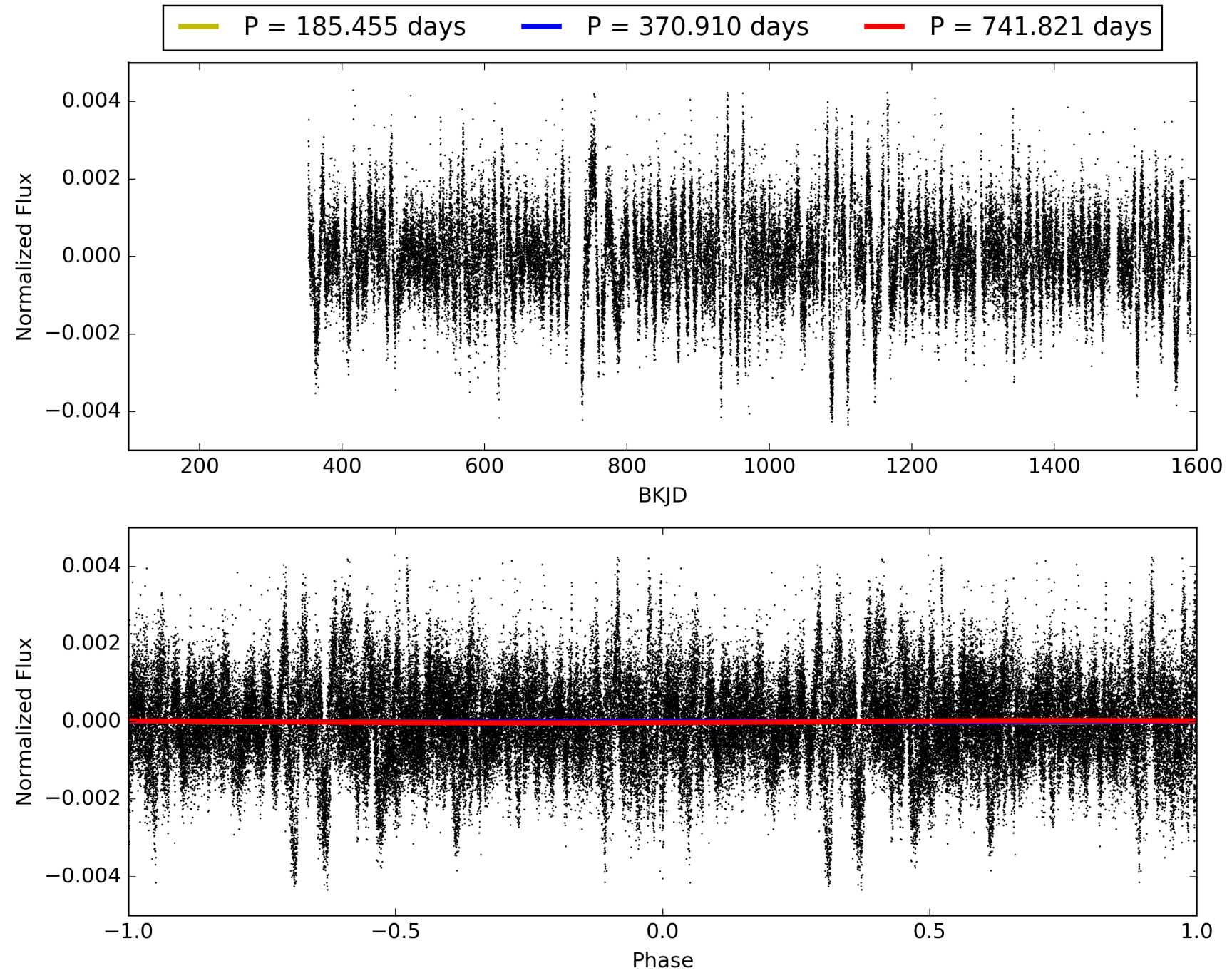
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 30-Jan-2016 15:43:48 Z

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

TCE 008747619-01, PDC Light Curves

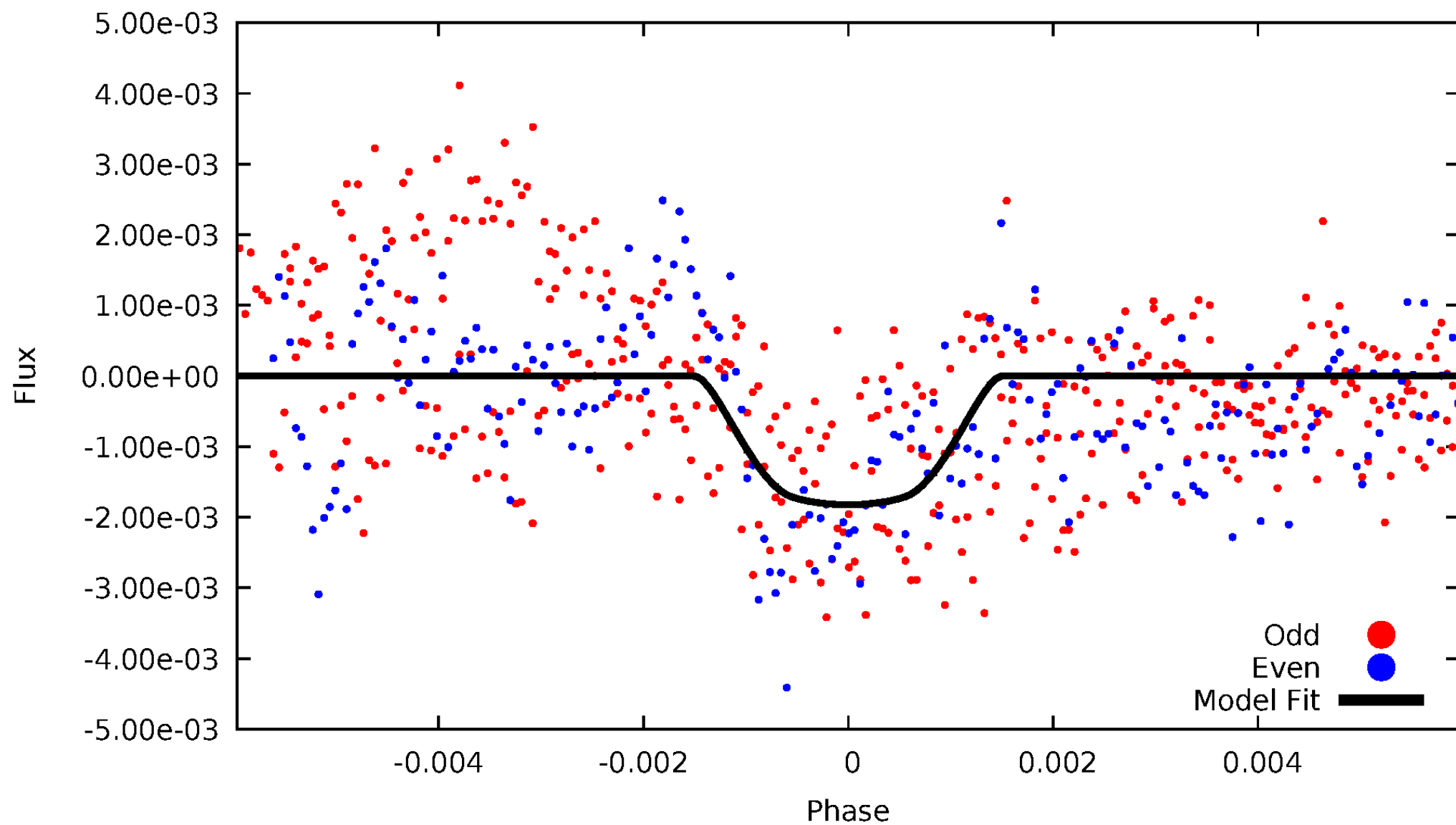


TCE 008747619-01



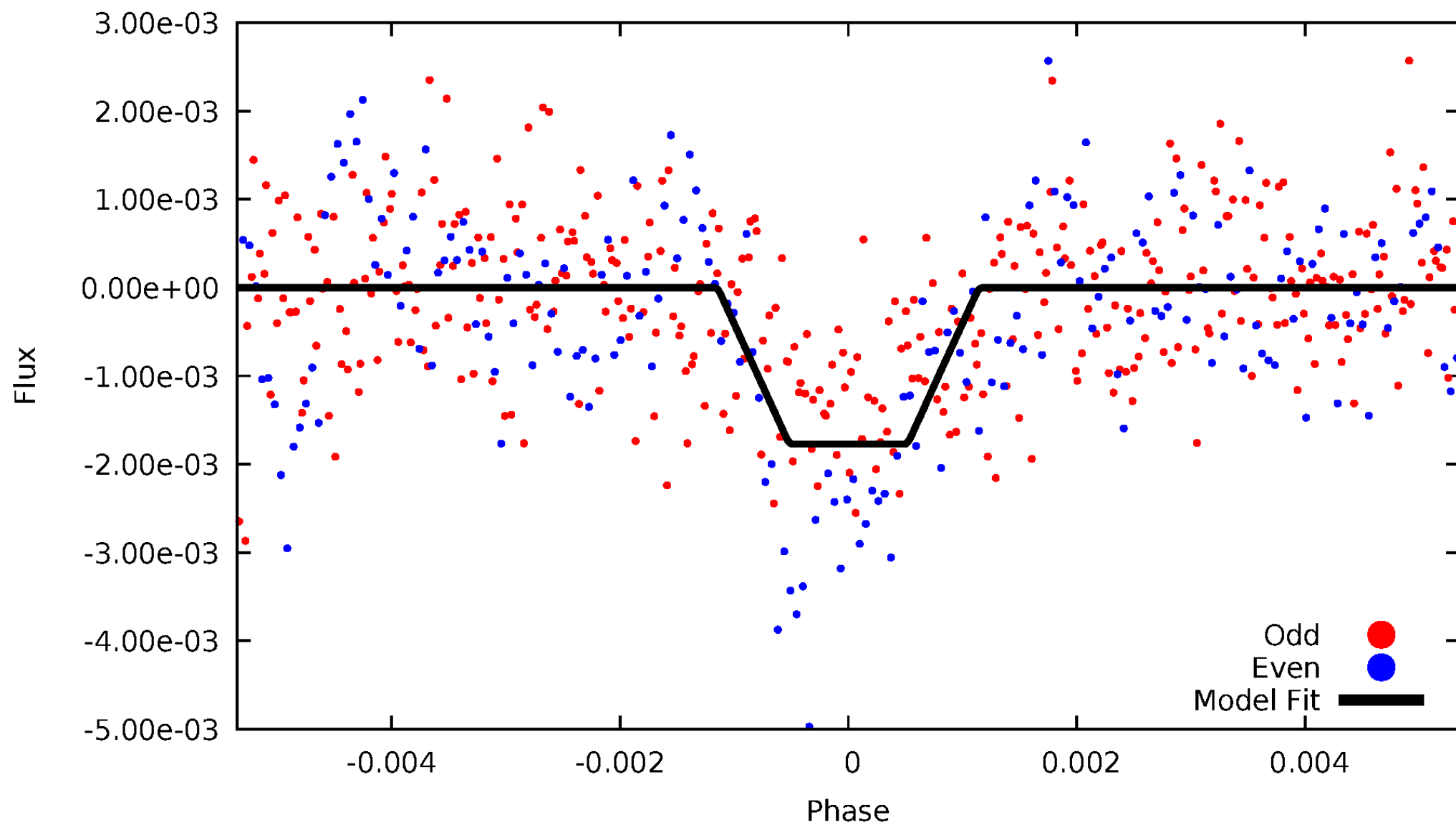
DV Odd/Even

TCE 008747619-01



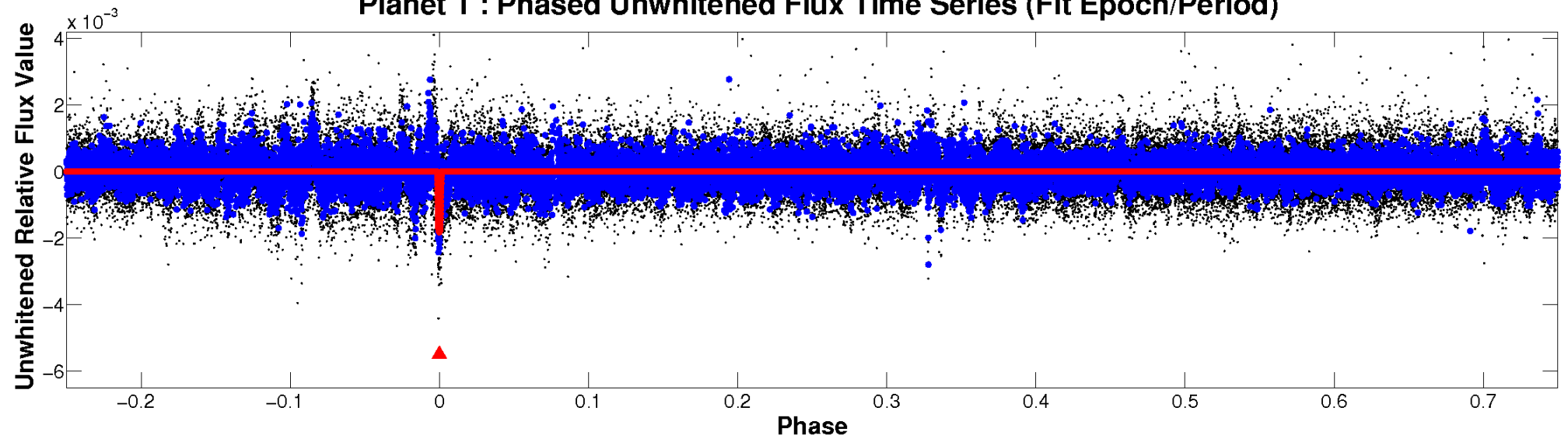
ALT Odd/Even

TCE 008747619-01

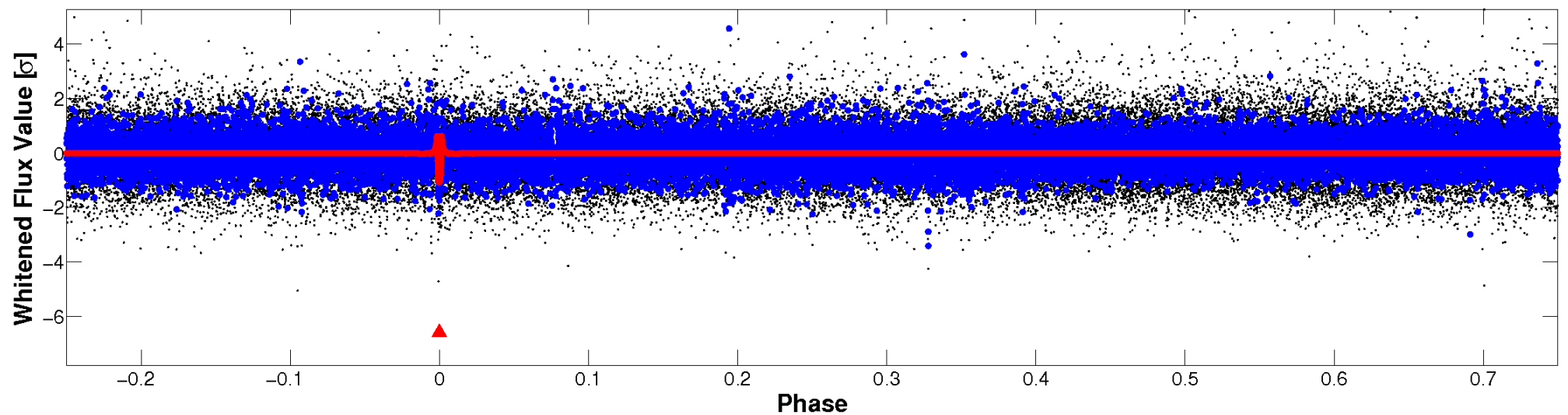


Non-Whitened Vs. Whitened Light Curve

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

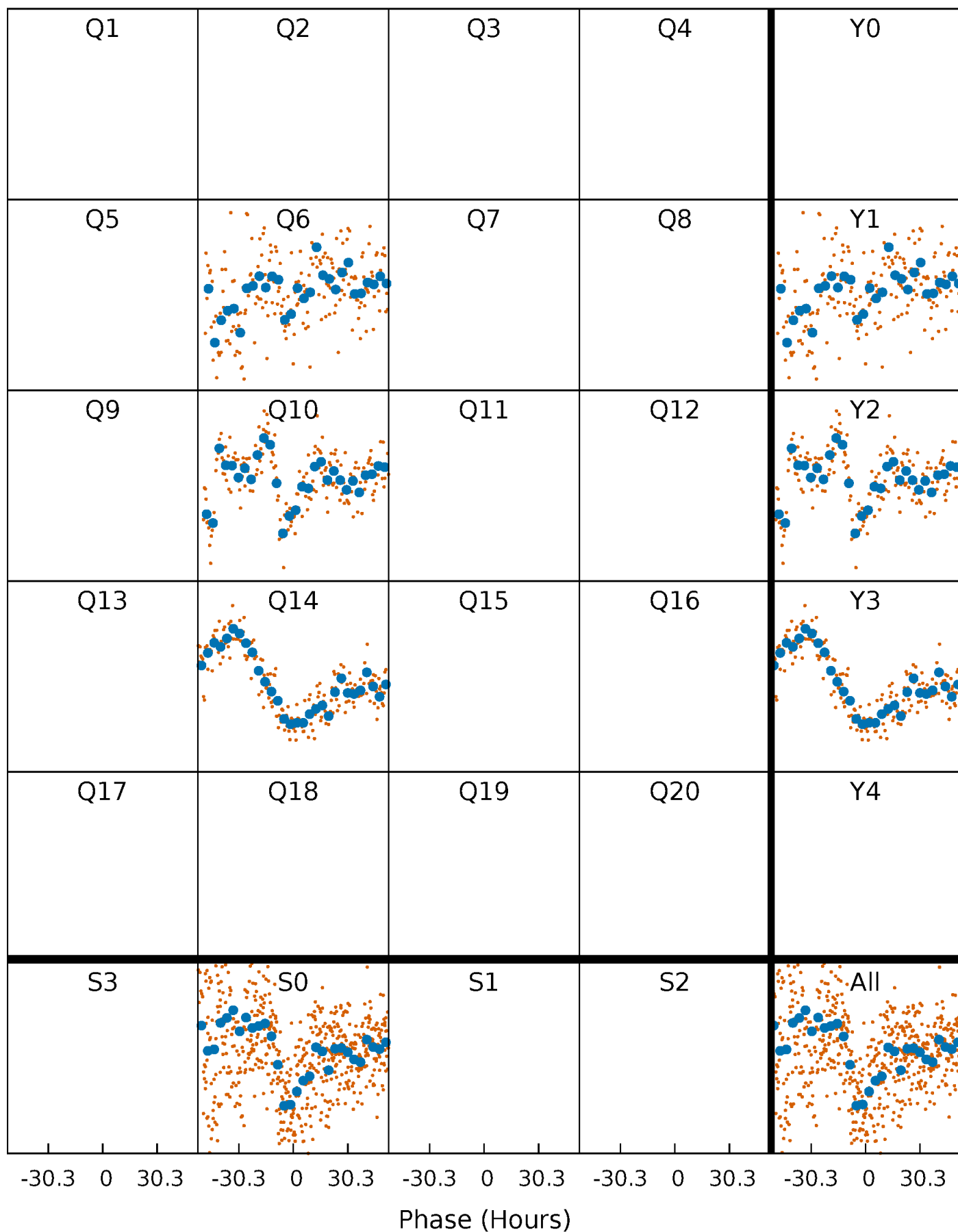


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



PDC Quarter-Phased Transit Curves

TCE 008747619-01 P=370.910303 Days $T_0=230.350373$ (BKJD)



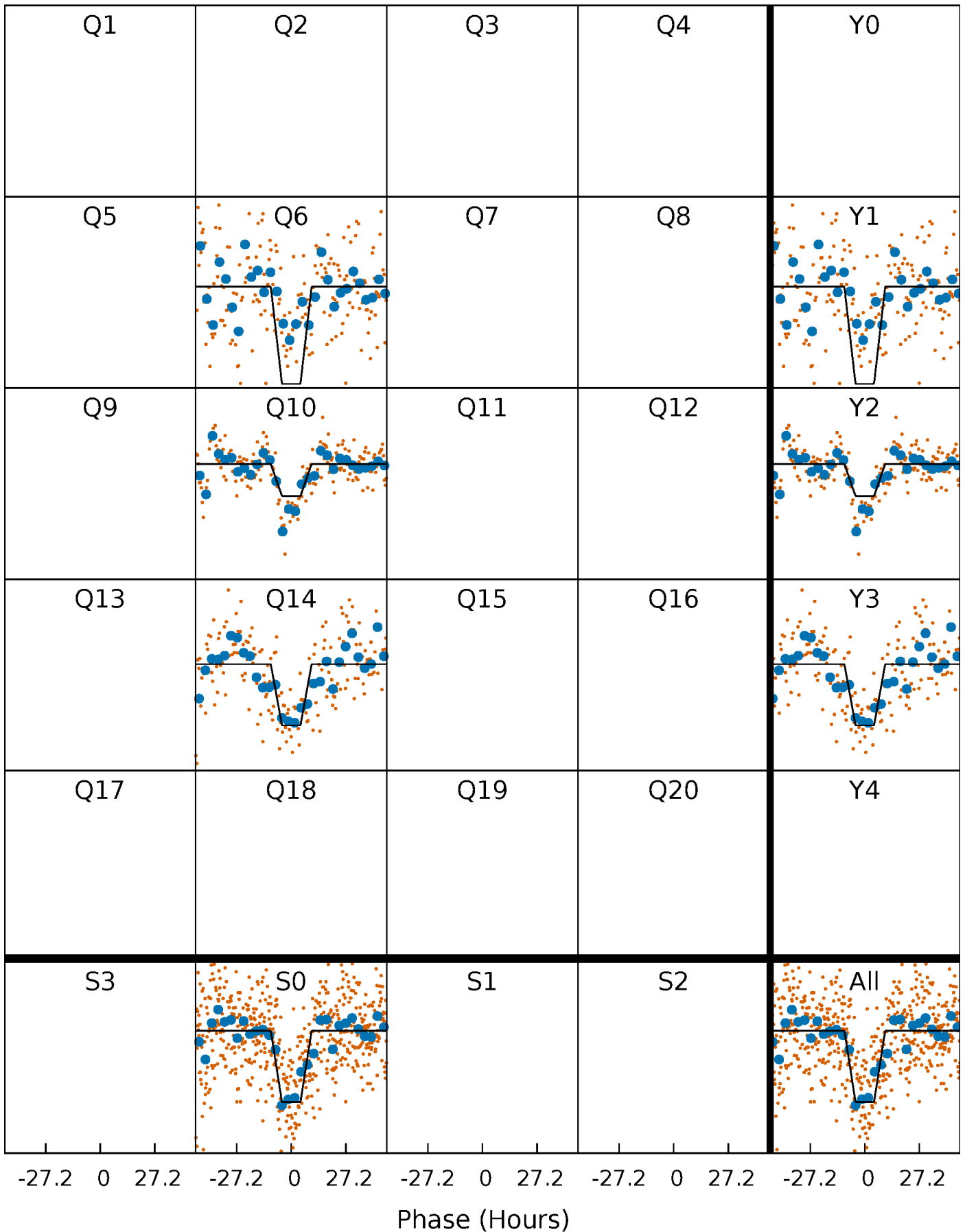
DV Quarter-Phased Transit Curves

TCE 008747619-01 P=370.910303 Days $T_0=230.350373$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

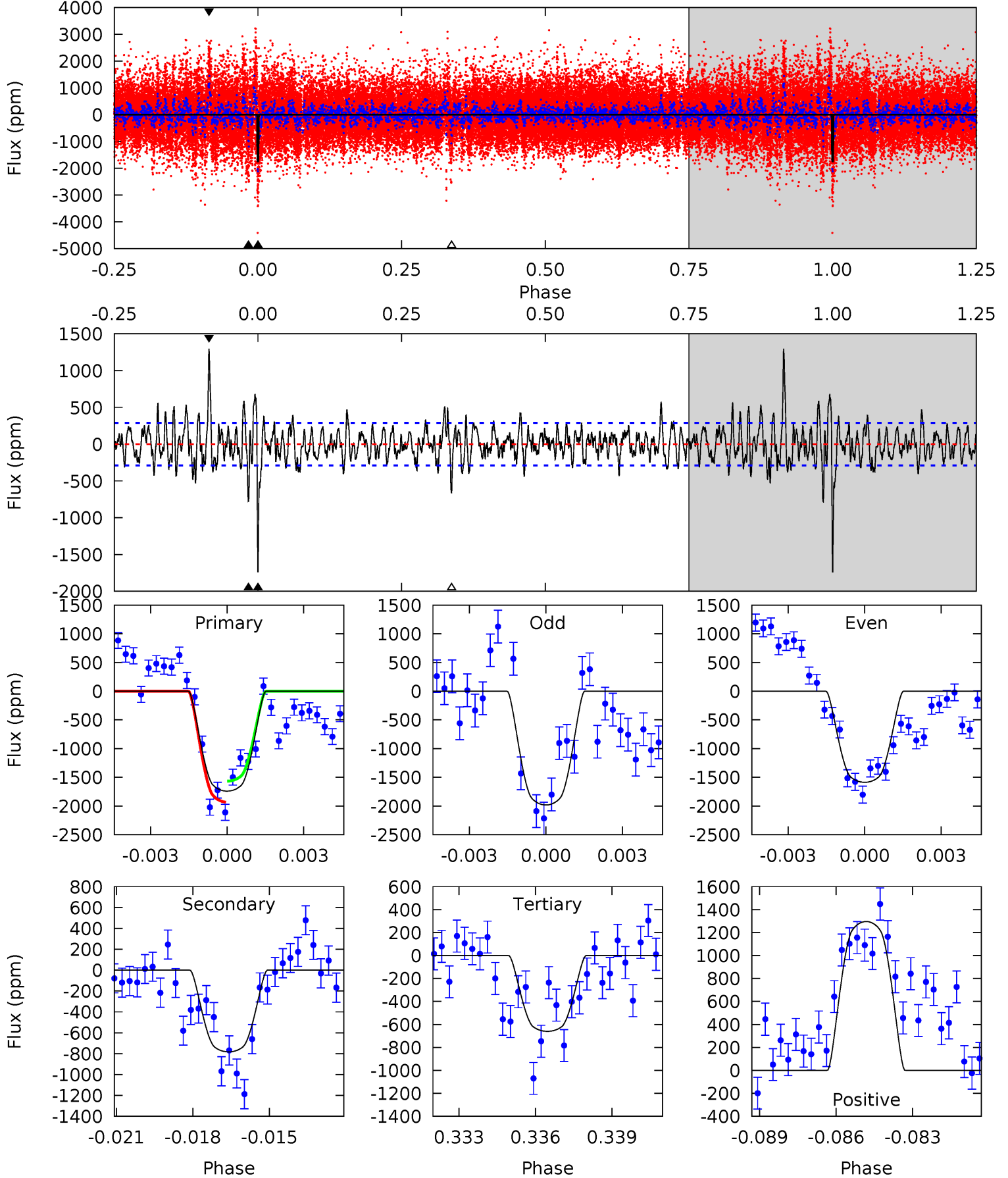
TCE 008747619-01 P=370.903170 Days $T_0=230.268569$ (BKJD)



DV Model-Shift Uniqueness Test

008747619-01, P = 370.910303 Days, E = 230.350373 Days

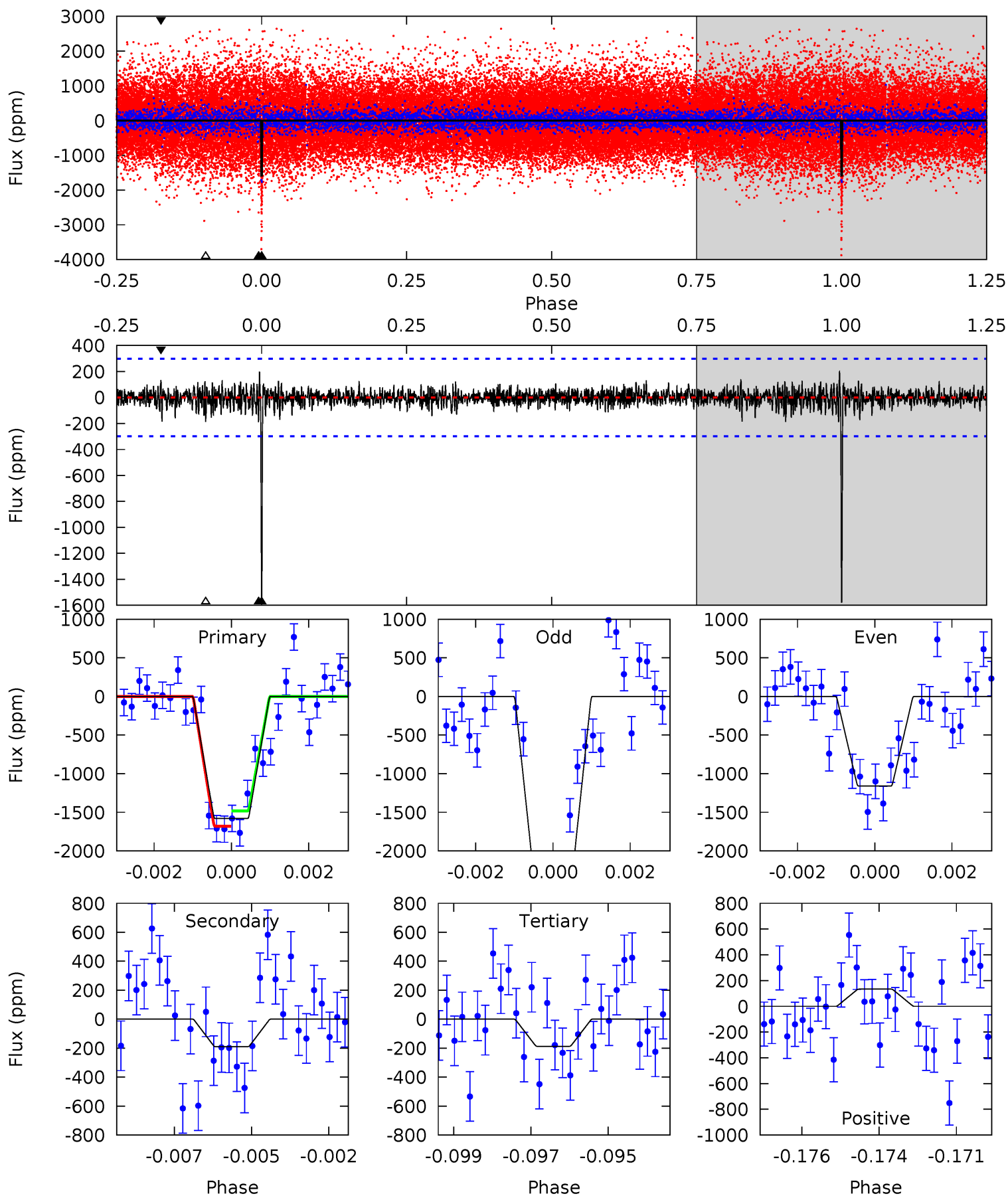
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
31.7	14.2	12.0	23.6	5.25	2.97	3.54	19.7	8.09	2.23	-9.33	3.42	0.87	0.43	3.32



Alt Model-Shift Uniqueness Test

008747619-01, P = 370.903170 Days, E = 230.268569 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
28.1	3.37	3.32	2.36	5.30	3.05	0.78	24.7	25.7	0.04	1.00	11.9	1.00	0.11	1.75



Stellar Parameters For KIC 008747619

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	5763^{+161}_{-202}	$4.527^{+0.046}_{-0.184}$	$0.020^{+0.250}_{-0.300}$	$0.904^{+0.241}_{-0.086}$	$1.002^{+0.099}_{-0.124}$	$1.913^{+0.371}_{-0.934}$
	+3%/-4%	+1%/-4%	+1250%/-1500%	+27%/-10%	+10%/-12%	+19%/-49%
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 008747619-01 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	-783 ± 55	$4.92^{+0.79}_{-0.52}$	342^{+21}_{-15}	4539^{+180}_{-187}	17581^{+4548}_{-4180}
Alt.	-190 ± 56	$4.30^{+0.69}_{-0.54}$	343^{+21}_{-16}	3695^{+239}_{-265}	5446^{+2692}_{-1963}

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 $A_{obs} \gg 1.0$

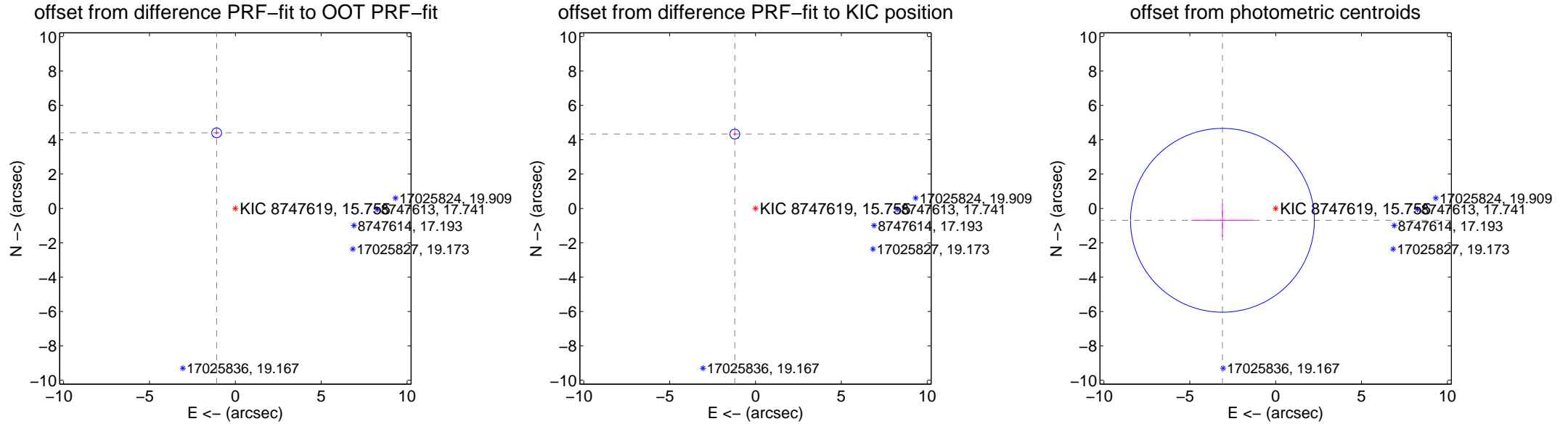
DV Centroid Data

Supplemental centroid analysis for 008747619-01. Kepler magnitude: 15.76. Transit SNR 10.60

There are 0 quarters with good PRF difference image offsets

The direct PRF centroid is offset from the target star catalog position by about 0.14 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	4.534 \pm 0.095	47.53	1.088 \pm 0.099	4.402 \pm 0.095
PRF-fit source offset from KIC position	4.492 \pm 0.095	47.07	1.202 \pm 0.099	4.329 \pm 0.095
photometric centroid source offset	3.17 \pm 1.78	1.78	3.10 \pm 1.81	-0.69 \pm 0.97



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.



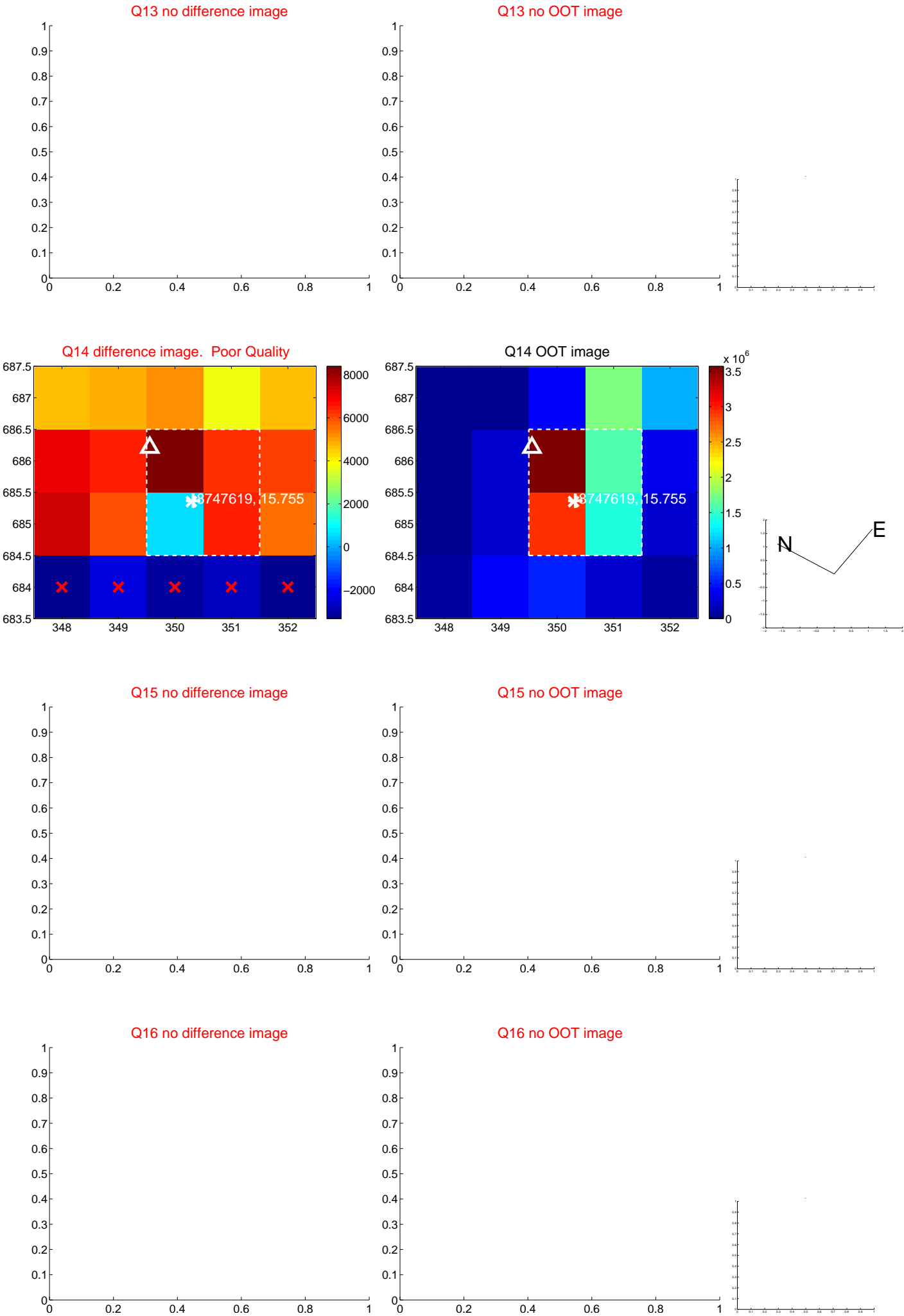
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



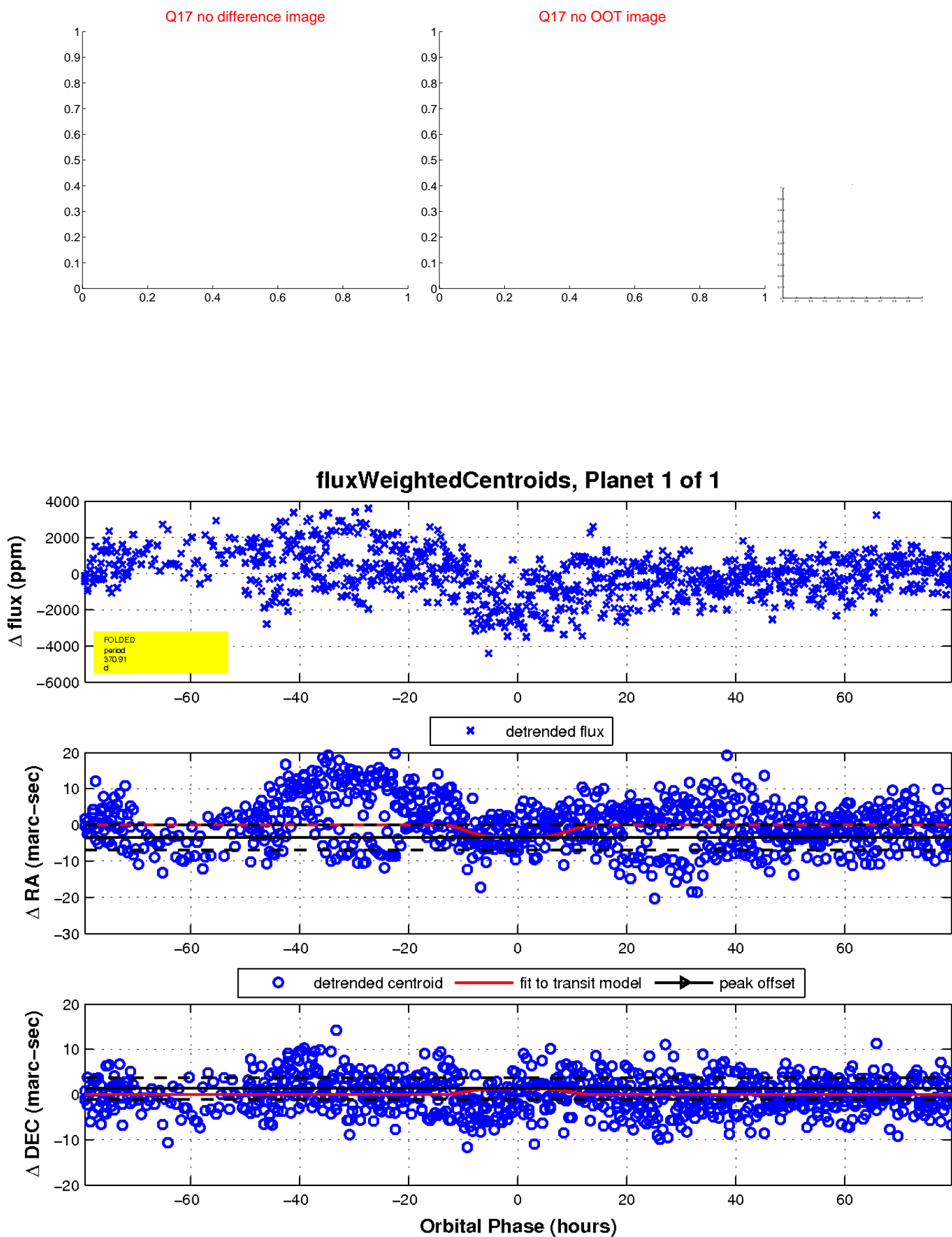
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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UKIRT Image

Declination

