

KIC 007186436

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})
007186436-01	OBS	No	397.725584	436.455043	666.1	7.535	8.6	7.8	0.90	5779	2.39	0.73

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
007186436-01	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_CHASES_MARSHALL_SKYE—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.

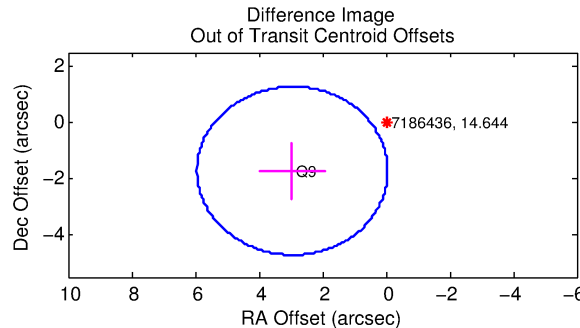
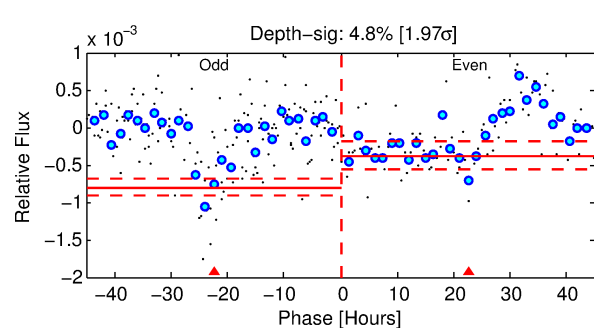
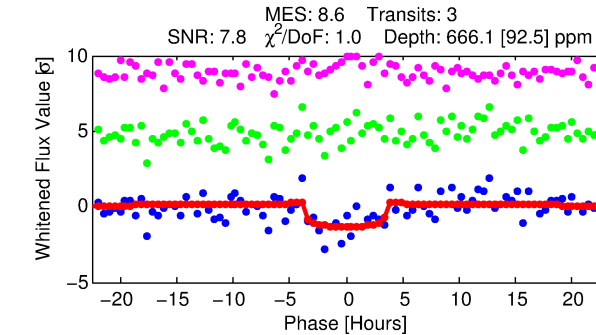
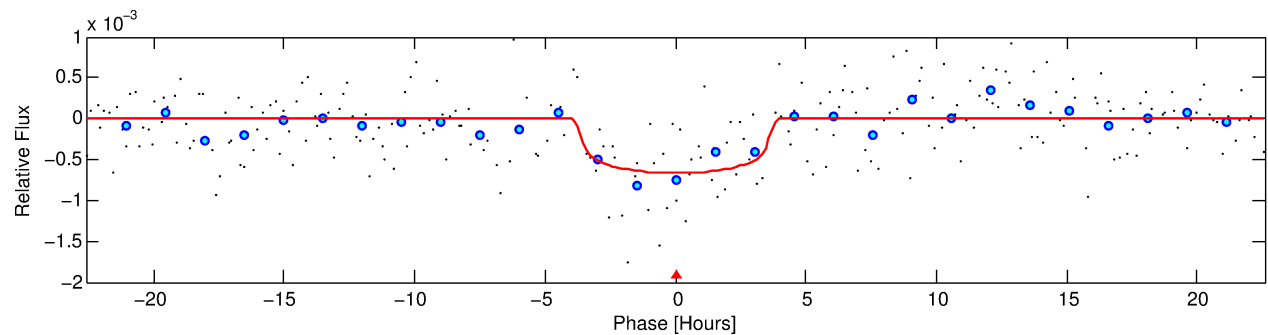
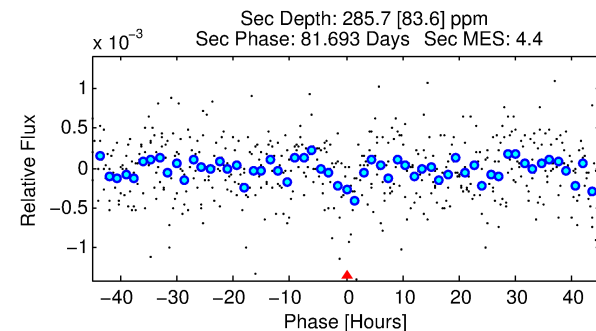
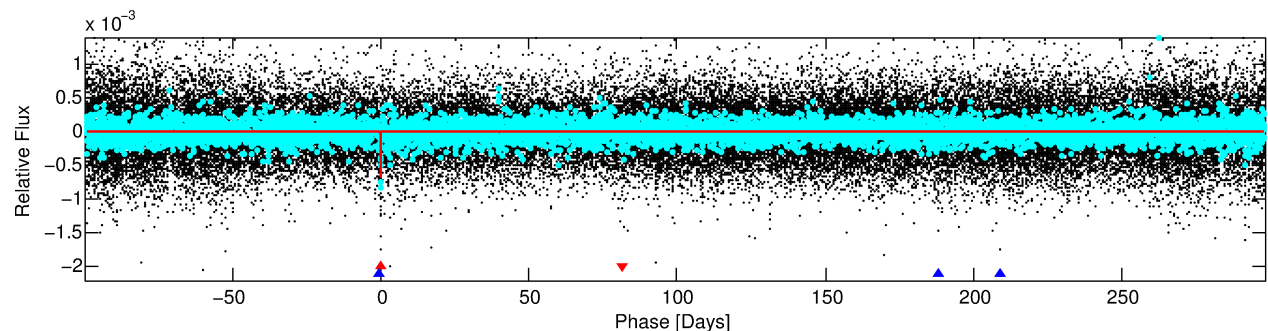
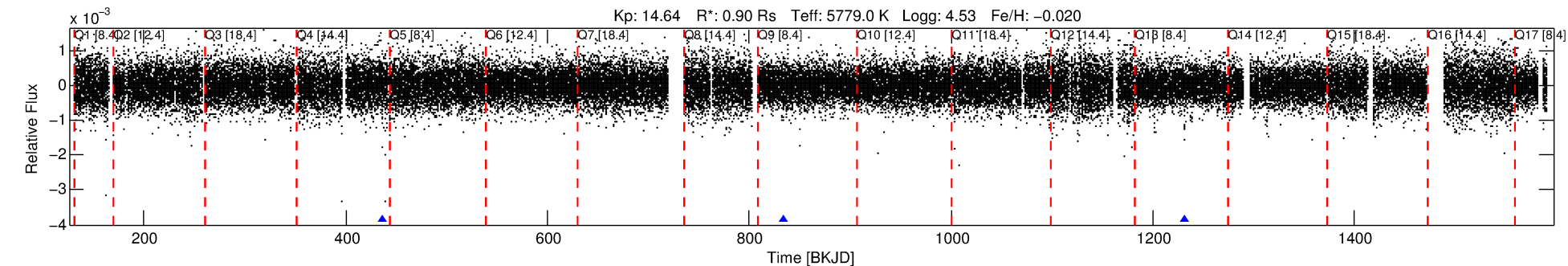
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 007186436-01

No Significant Match Found

DV One-Page Summary

KIC: 7186436 Candidate: 1 of 2 Period: 397.726 d
KOI: K05365 Corr: No Ephemeris Match



DV Fit Results:

Period = 397.72558 [0.01316] d
Epoch = 436.4550 [0.0152] BKJD
Rp/R* = 0.0243 [0.0243]
a/R* = 351.40 [1533.09]
b = 0.54 [5.80]
Seff = 0.73 [0.28]
Teq = 235 [23] K
Rp = 2.39 [2.49] Re
a = 1.0566 [0.2609] AU
Ag = 30698.46 [63126.11] [0.49 σ]
Teffp = 4818 [2441] K [1.88 σ]

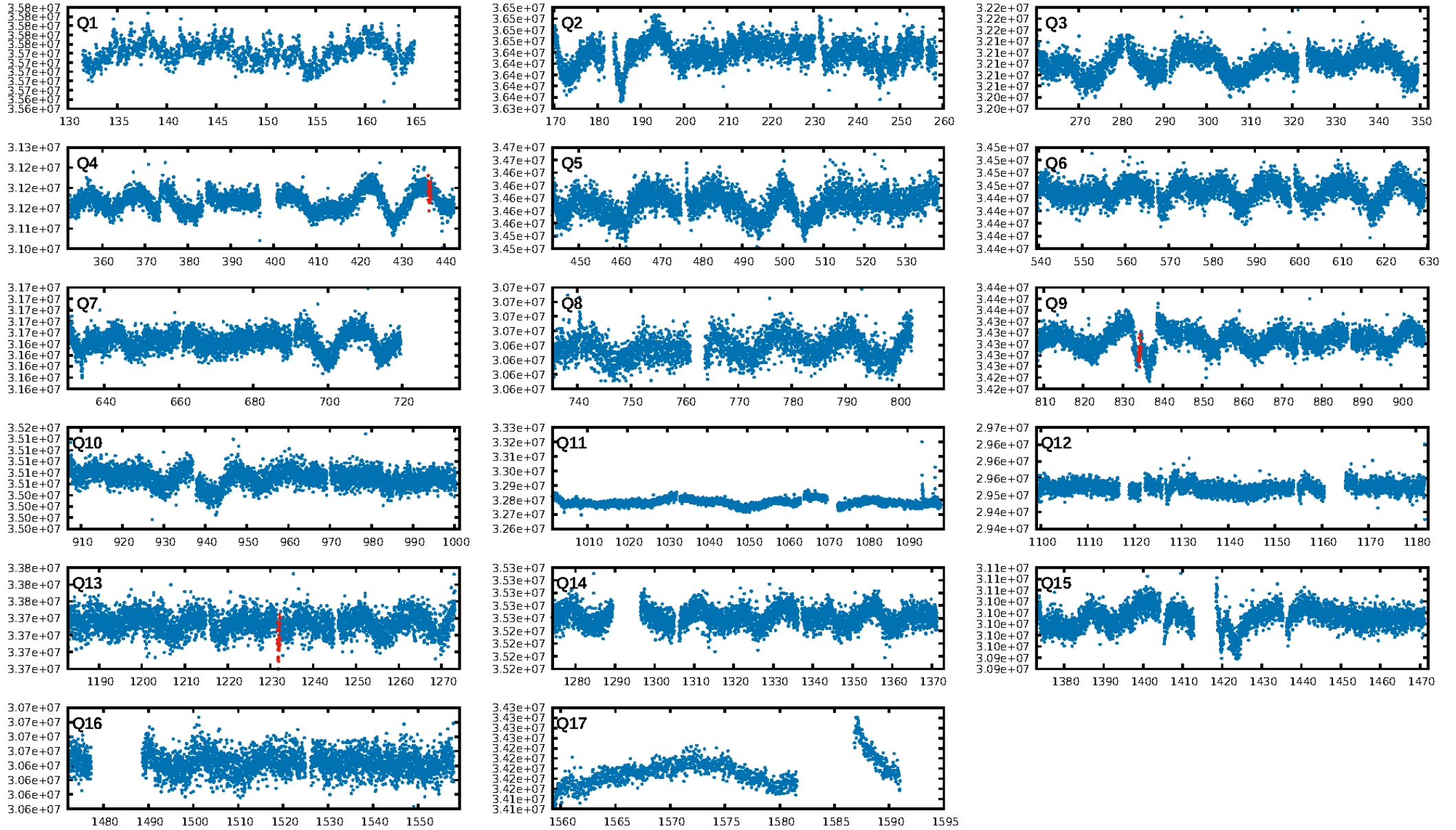
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: 100.0% [245.16 σ]
ModelChiSquare2-sig: 9.6%
ModelChiSquareGof-sig: 87.8%
Bootstrap-pfa: 1.42e-09
RollingBand-fgt: 1.00 [3/3]
GhostDiagnostic-chr: 1.005
Centroid-sig: 0.0%
Centroid-so: 1.331 arcsec [2.74 σ]
OotOffset-rm: 3.411 arcsec [3.41 σ]
KicOffset-rm: 1.127 arcsec [1.12 σ]
OotOffset-st: 0/0/0/1 [1]
KicOffset-st: 0/0/0/1 [1]
DiffImageQuality-fgm: 0.00 [0/1]
DiffImageOverlap-fno: 0.00 [0/1]

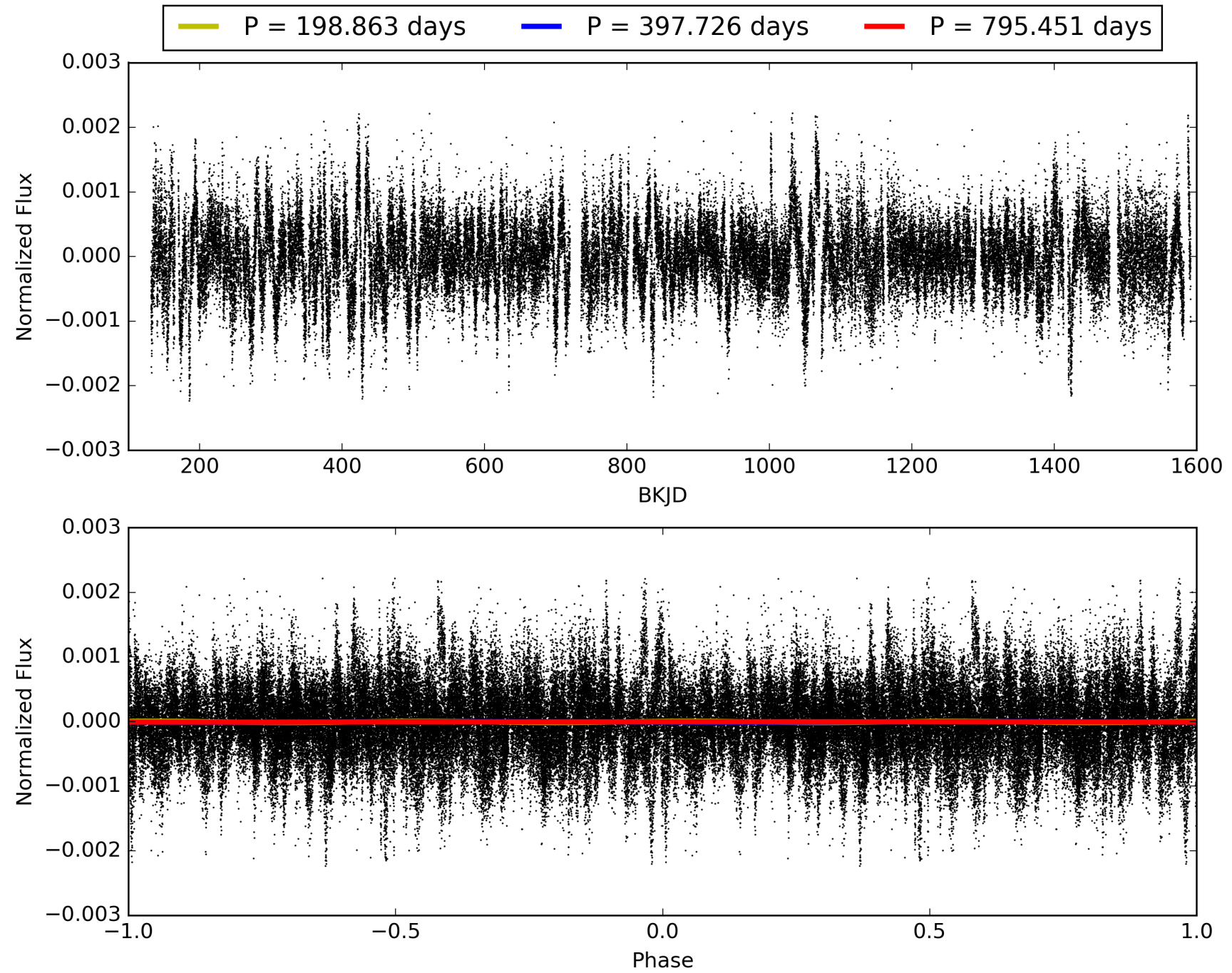
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 01-Feb-2016 01:57:10 Z

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

TCE 007186436-01, PDC Light Curves

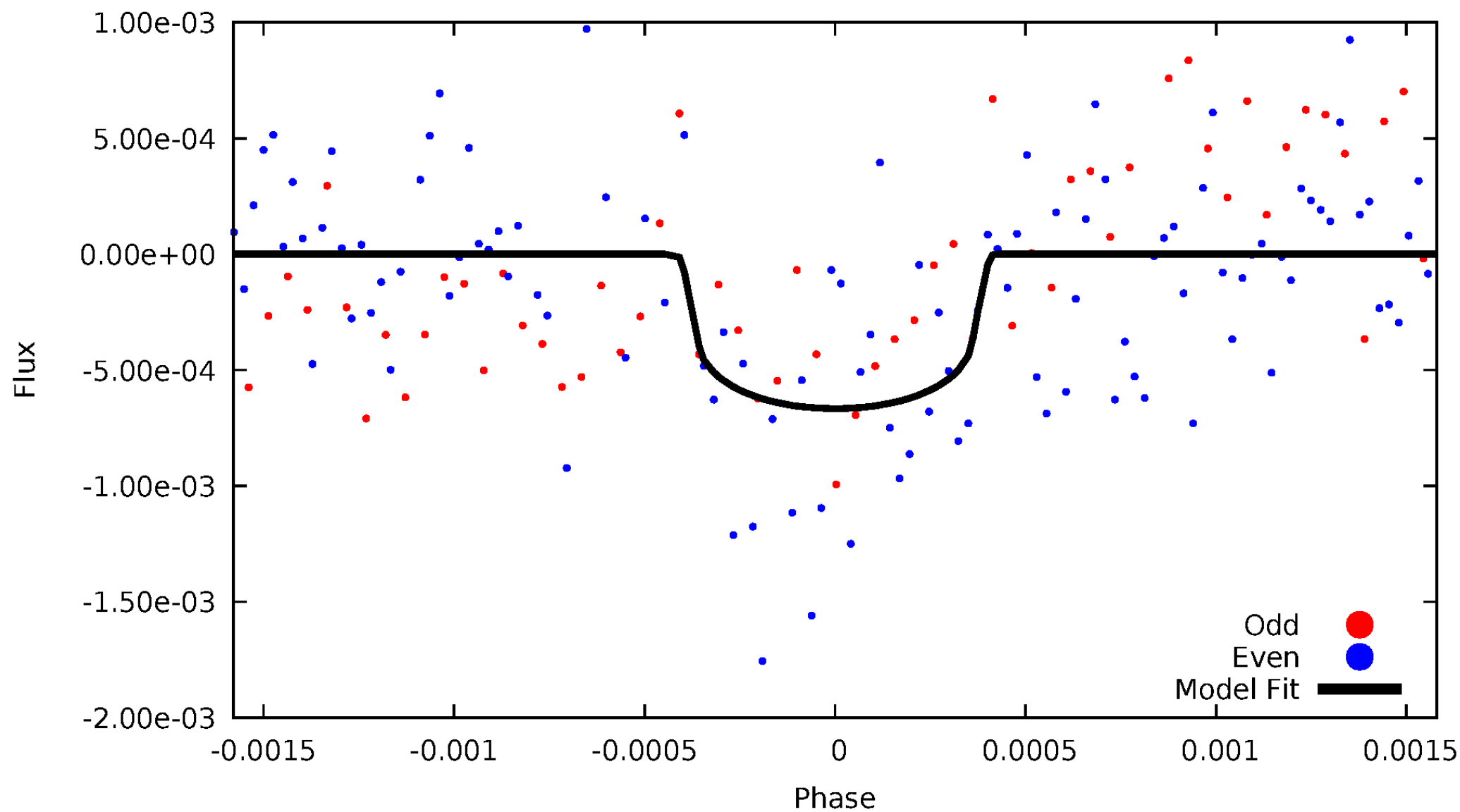


TCE 007186436-01



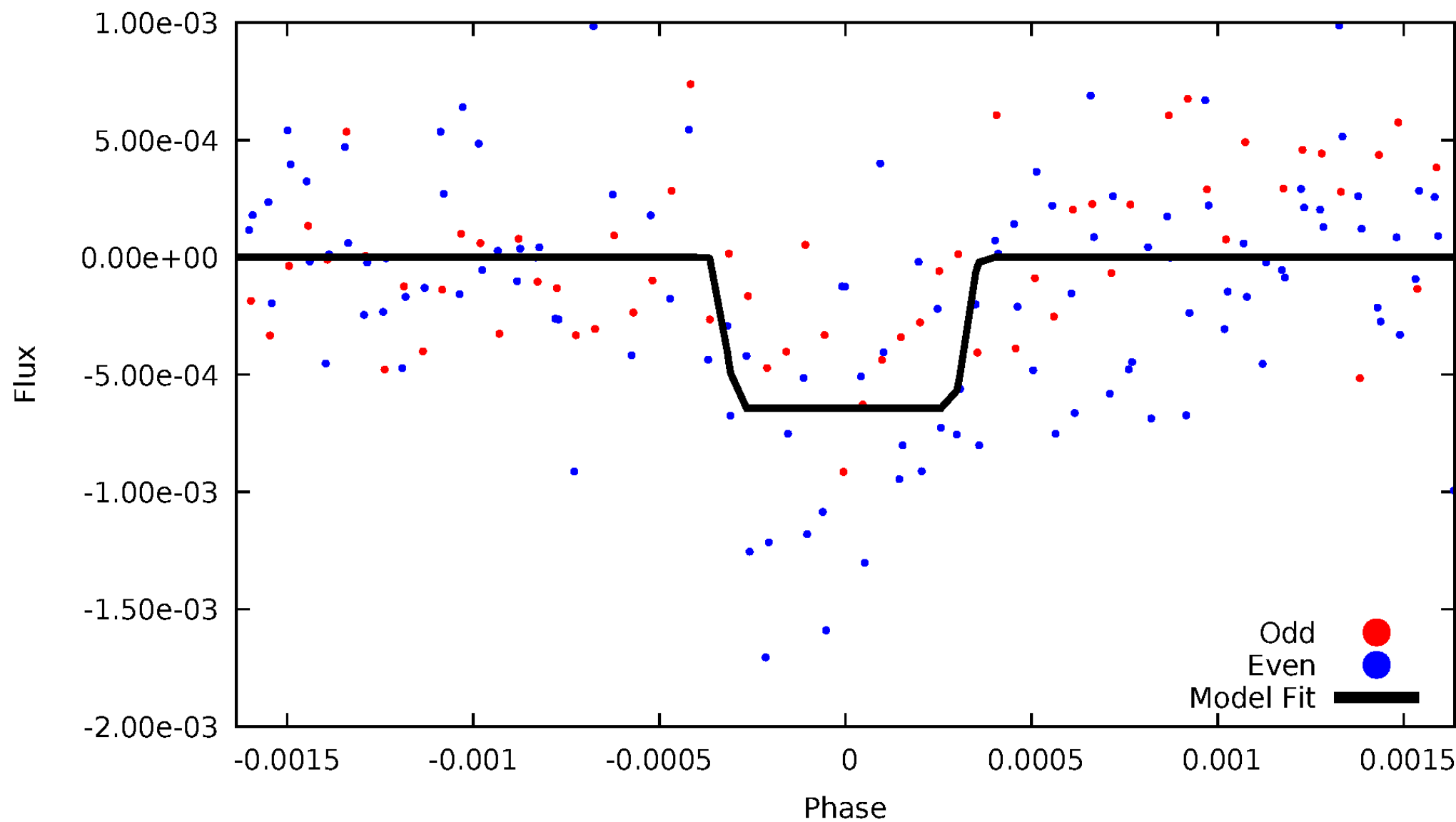
DV Odd/Even

TCE 007186436-01



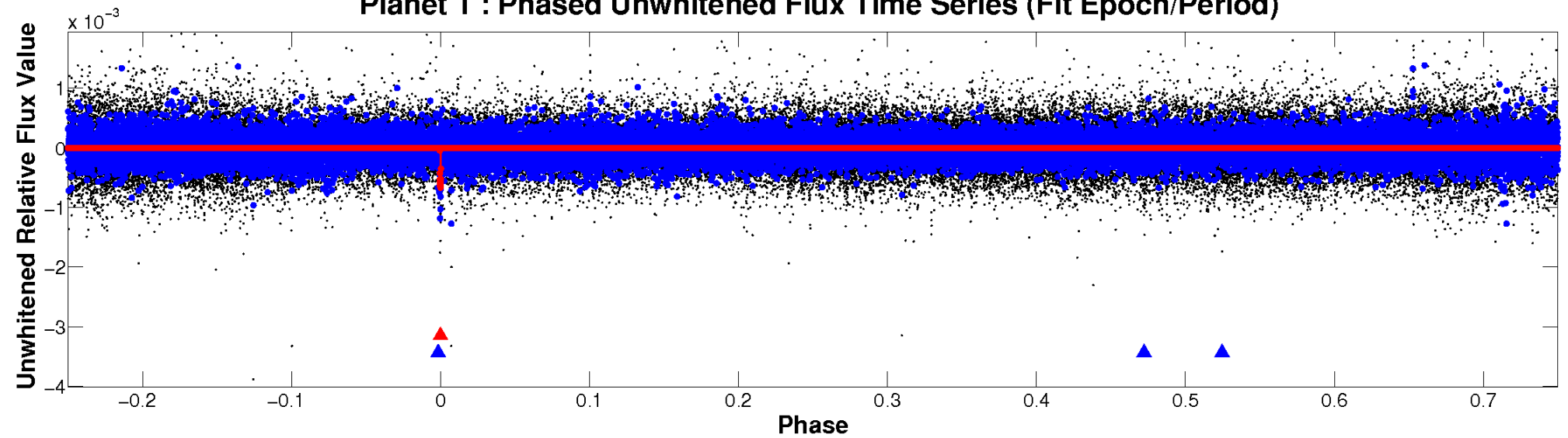
ALT Odd/Even

TCE 007186436-01

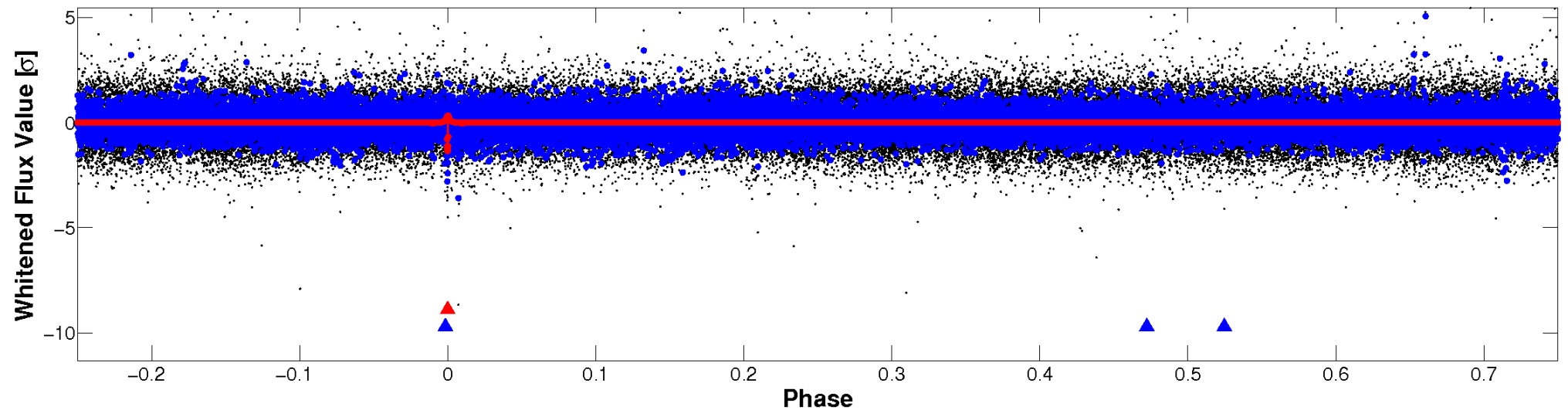


Non-Whitened Vs. Whitened Light Curve

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

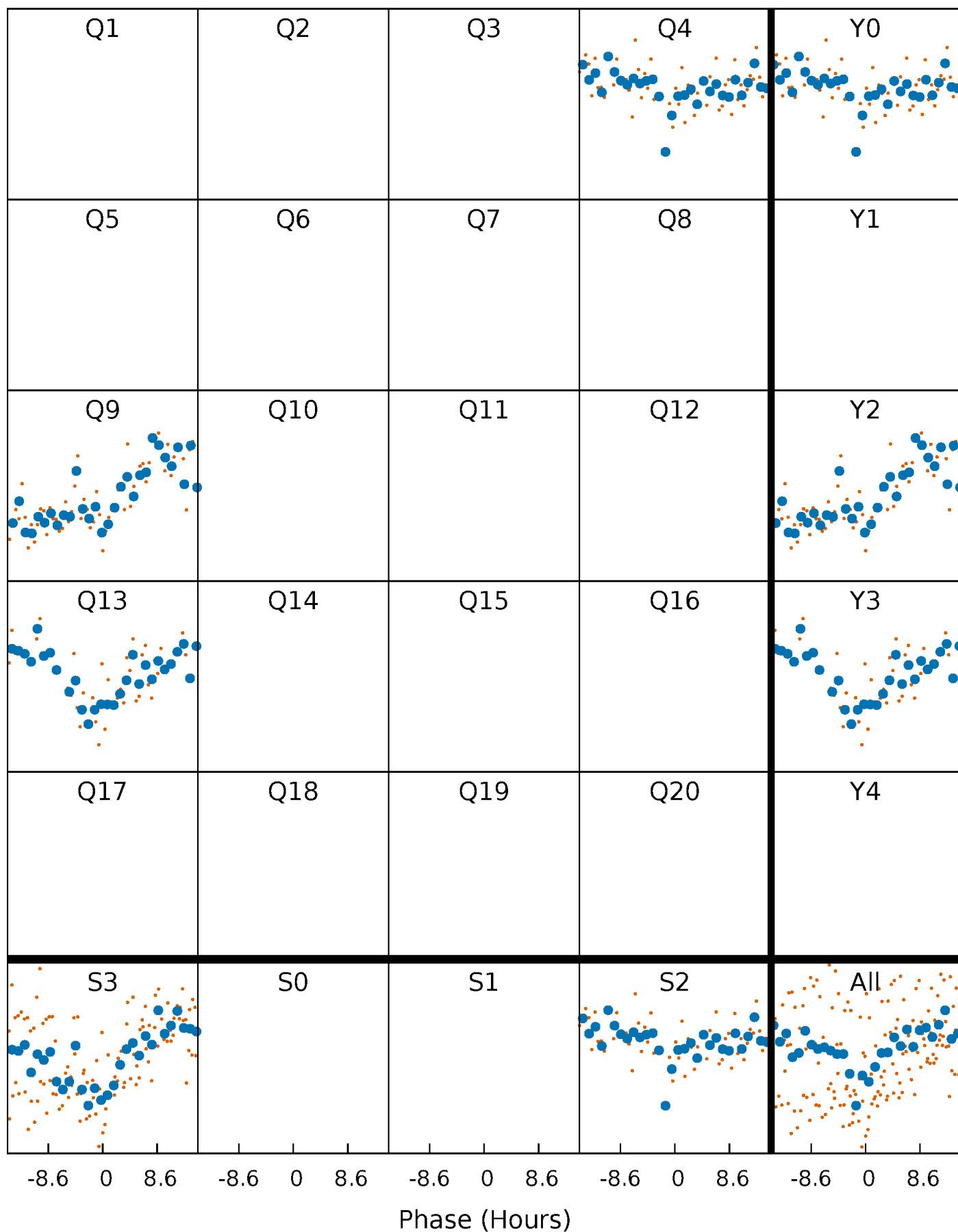


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



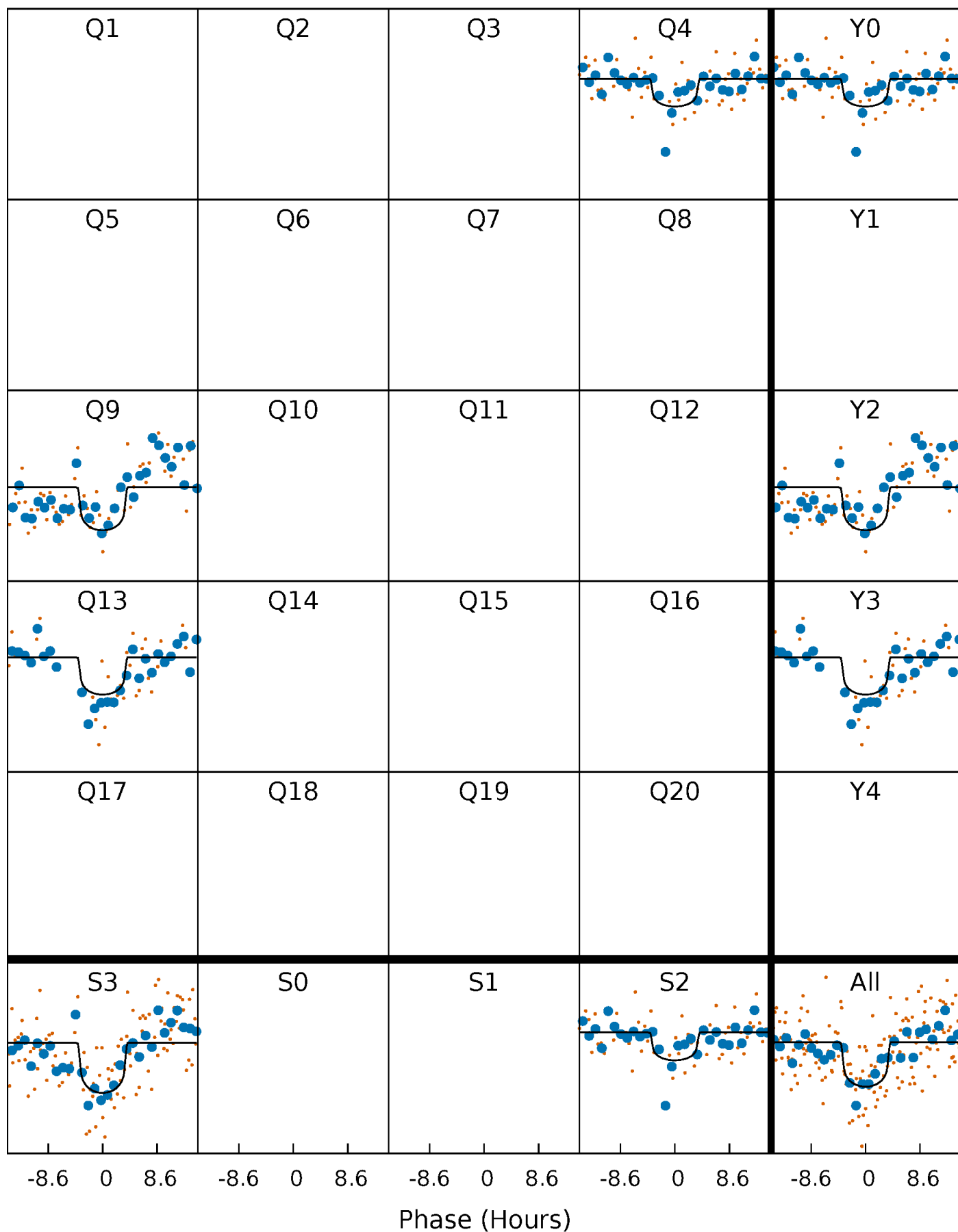
PDC Quarter-Phased Transit Curves

TCE 007186436-01 P=397.725584 Days $T_0=436.455043$ (BKJD)



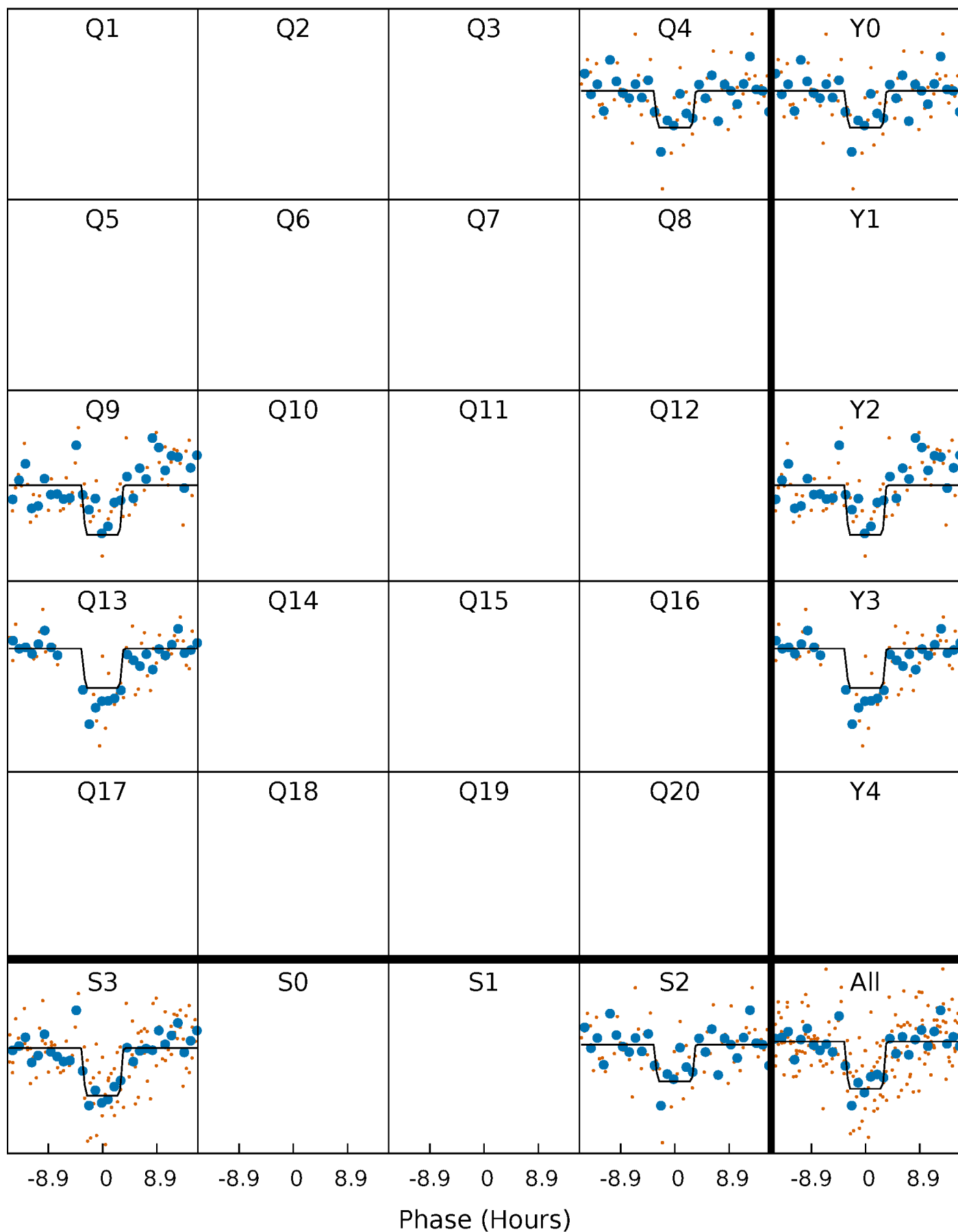
DV Quarter-Phased Transit Curves

TCE 007186436-01 P=397.725584 Days $T_0=436.455043$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

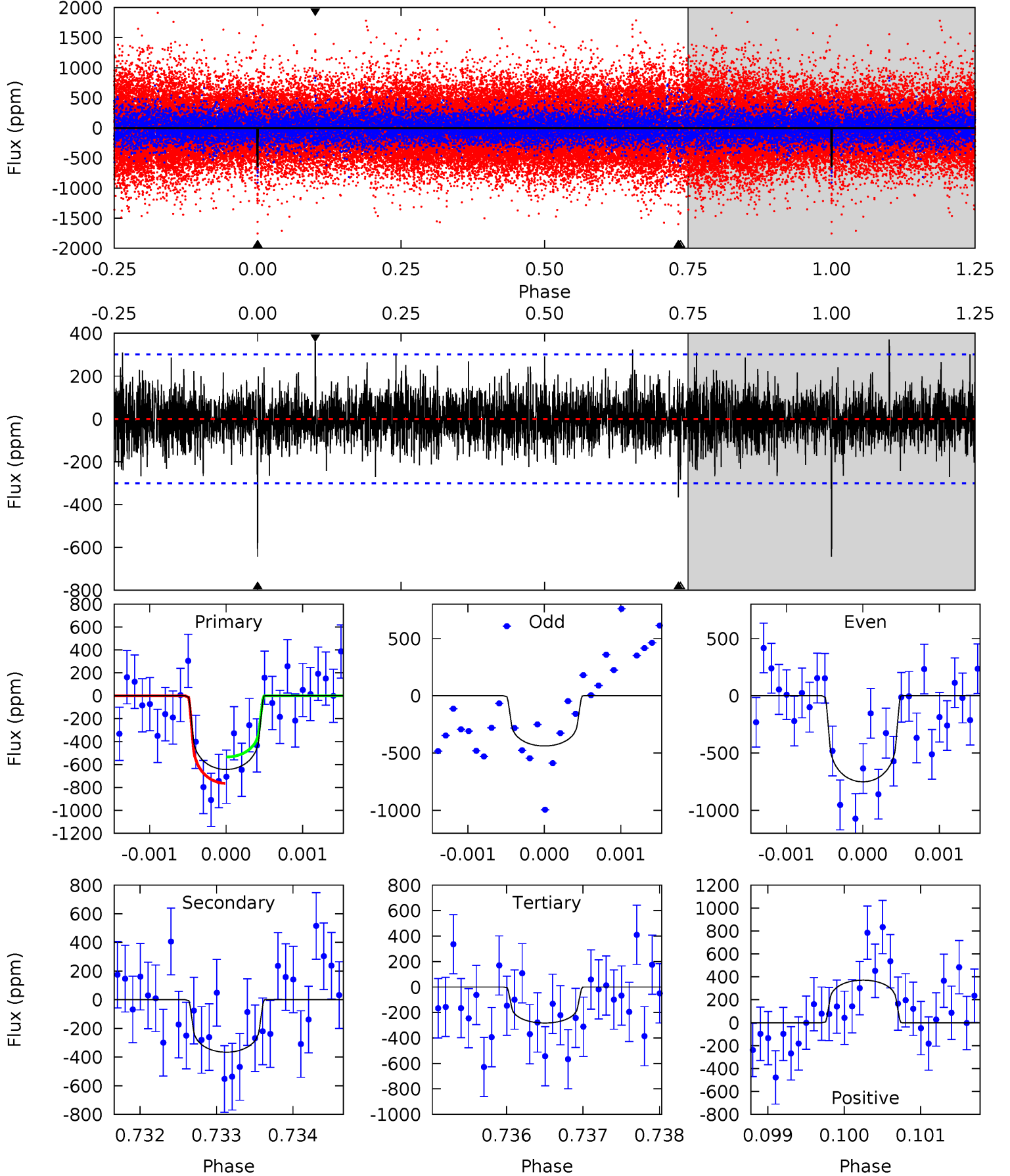
TCE 007186436-01 P=397.718812 Days $T_0=436.464744$ (BKJD)



DV Model-Shift Uniqueness Test

007186436-01, $P = 397.725584$ Days, $E = 38.729459$ Days

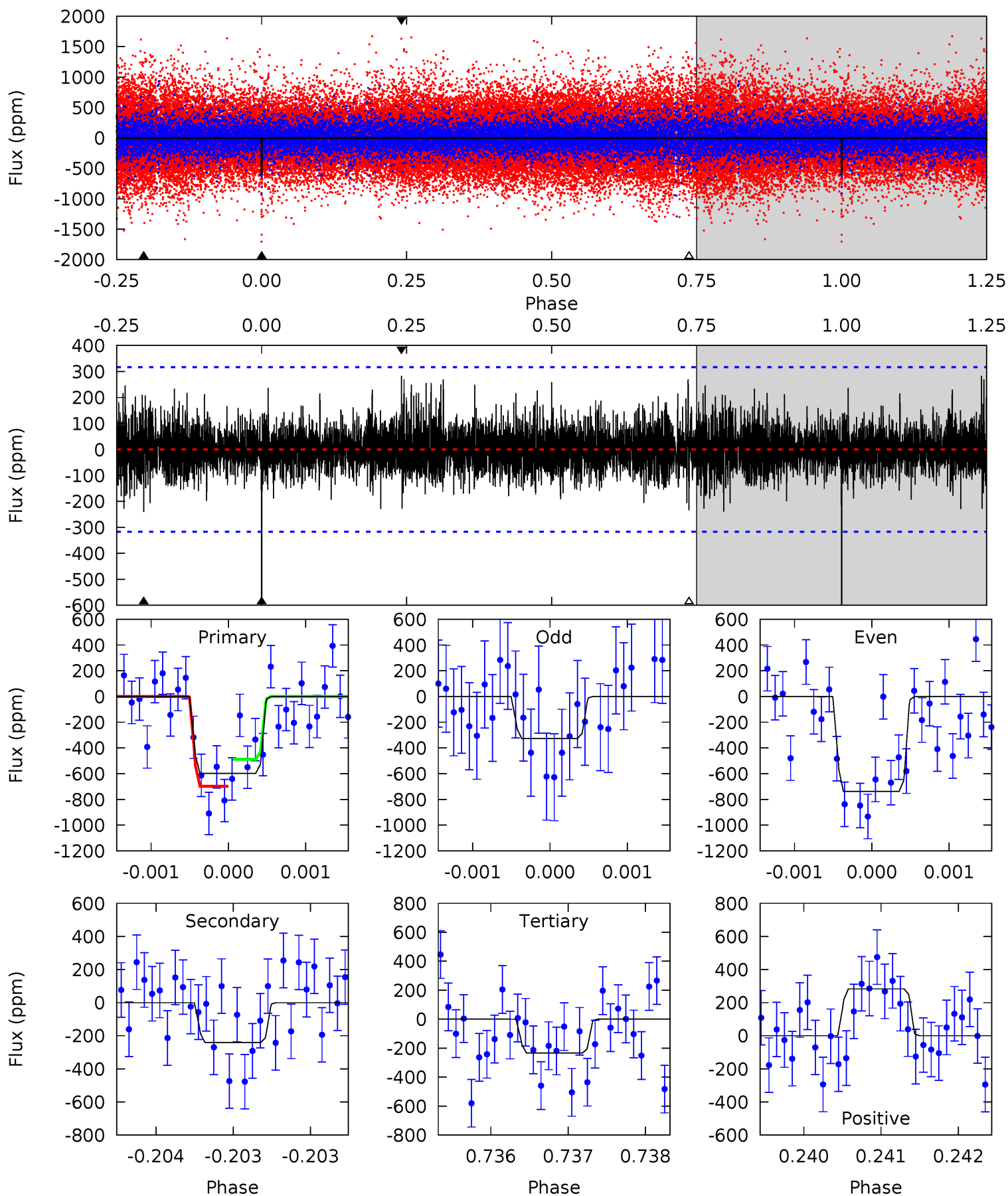
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
11.7	6.67	5.15	6.76	5.48	3.34	1.45	6.57	4.96	1.52	-0.09	2.73	1.10	0.37	2.08



Alt Model-Shift Uniqueness Test

007186436-01, $P = 397.718812$ Days, $E = 38.745932$ Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
10.4	4.19	4.06	4.92	5.51	3.38	1.13	6.32	5.46	0.12	-0.73	3.41	1.11	0.32	1.83



Stellar Parameters For KIC 007186436

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	$M(M_{\odot})$	p_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	5779^{+156}_{-173}	$4.526^{+0.048}_{-0.204}$	$-0.020^{+0.250}_{-0.300}$	$0.901^{+0.258}_{-0.086}$	$0.993^{+0.102}_{-0.125}$	$1.913^{+0.384}_{-0.990}$
	+3%/-3%	+1%/-5%	+1250%/-1500%	+29%/-10%	+10%/-13%	+20%/-52%
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 007186436-01 / KOI

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	-366 ± 55	$2.96^{+2.56}_{-1.89}$	335^{+23}_{-15}	4799^{+3316}_{-969}	$24257^{+174857}_{-17043}$
Alt.	-241 ± 58	$3.14^{+2.35}_{-1.84}$	336^{+22}_{-15}	4292^{+2003}_{-757}	14184^{+69131}_{-9766}

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 $A_{obs} \gg 1.0$

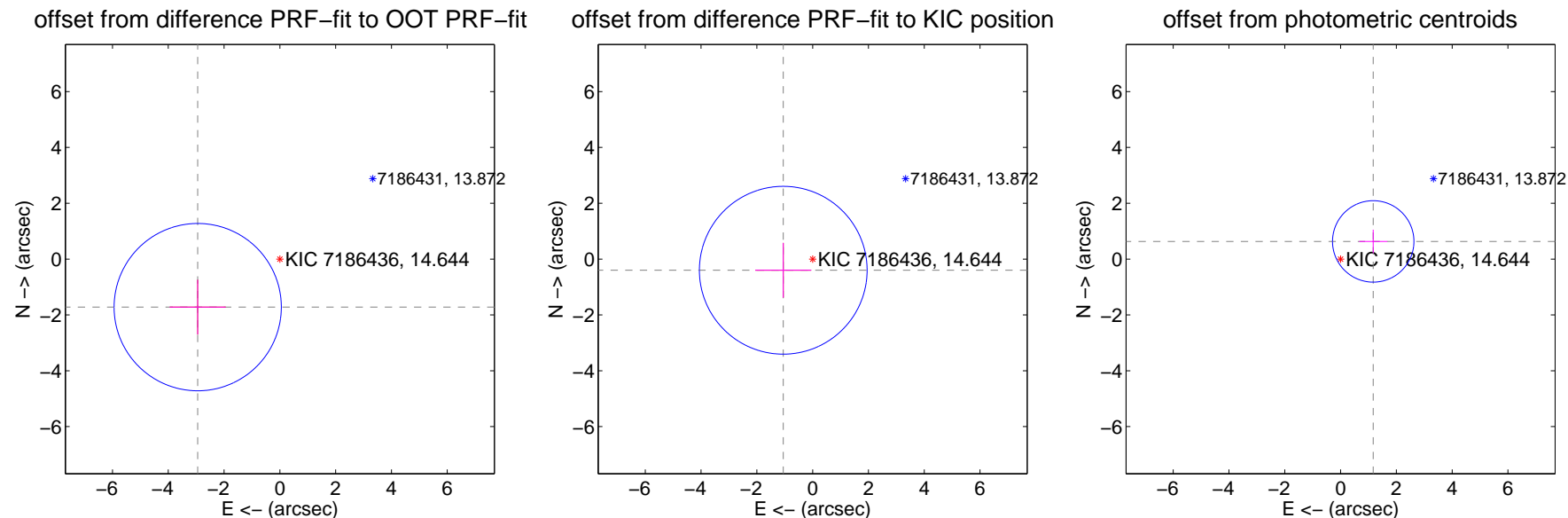
DV Centroid Data

Supplemental centroid analysis for 007186436-01. Kepler magnitude: 14.64. Transit SNR 7.82

There are 0 quarters with good PRF difference image offsets

The OOT PRF centroid is offset from the target star catalog position by about 2.31 arcsec so the offset from difference PRF-fit to OOT-fit may be invalid.

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	3.411 ± 0.999	3.41	2.945 ± 1.005	-1.721 ± 0.981
PRF-fit source offset from KIC position	1.127 ± 1.002	1.12	1.054 ± 1.005	-0.400 ± 0.981
photometric centroid source offset	1.33 ± 0.49	2.74	-1.17 ± 0.50	0.63 ± 0.42



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.

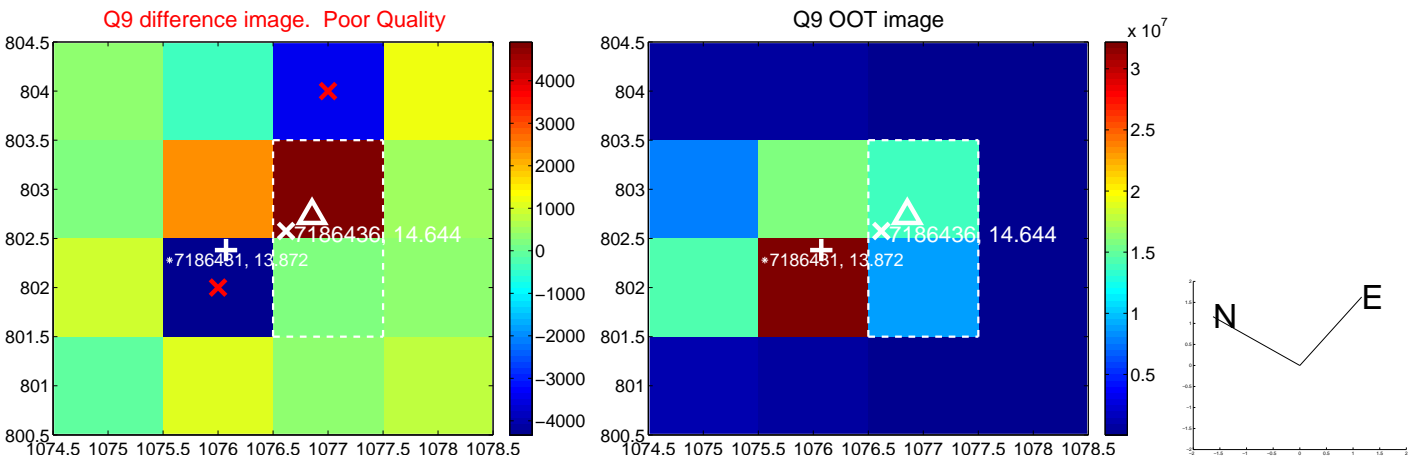
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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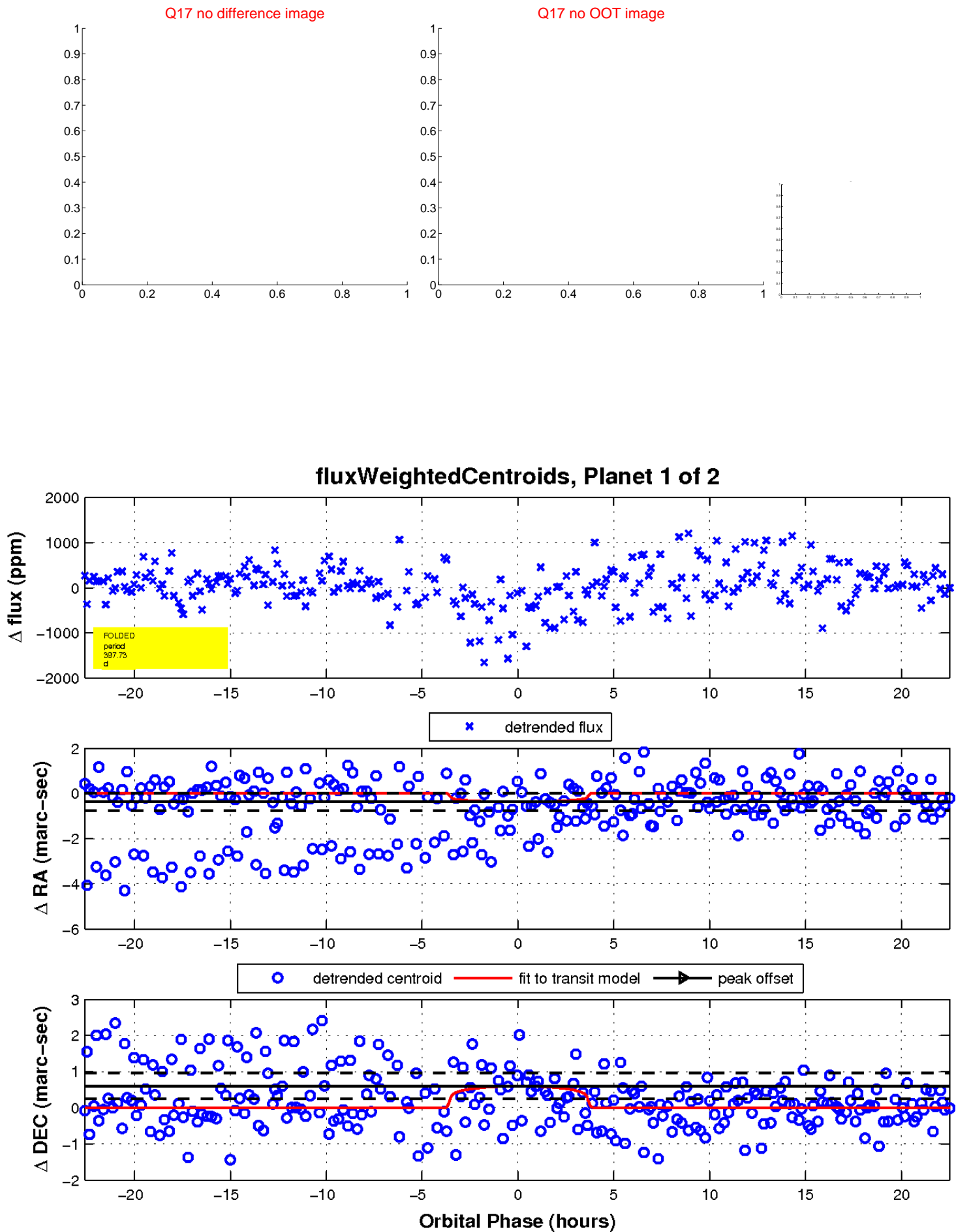
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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UKIRT Image

Declination

