

KIC 010467704

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})
010467704-01	OBS	No	342.973182	397.407090	159.5	3.000	12.5	-1.0	74.39	3618	86.73	616.72

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
010467704-01	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_CHASES_MARSHALL—LPP_DV—LPP_ALT—ALL_TRANS_CHASES—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—CENT_SATURATED

Notes: OBS = Observed. INJ = Injected. INV = Inverted. SCR = Scrambled.

N = Not Transit-Like. S = Stellar Eclipse. C = Centroid Offset. E = Ephemeris Match.

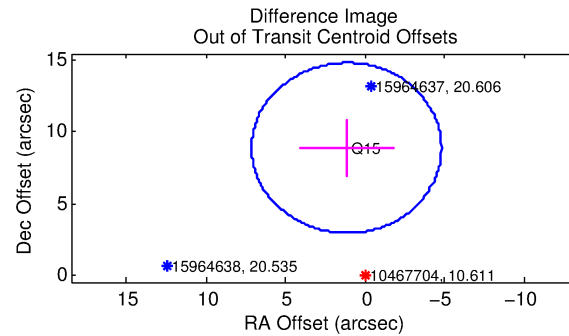
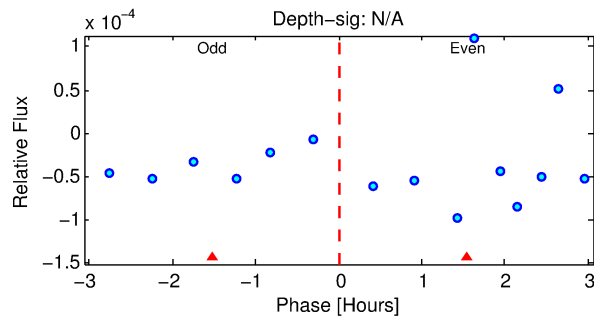
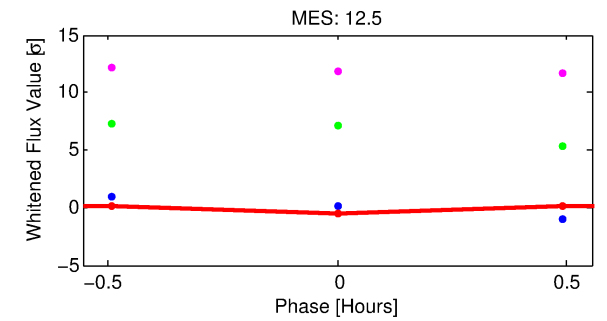
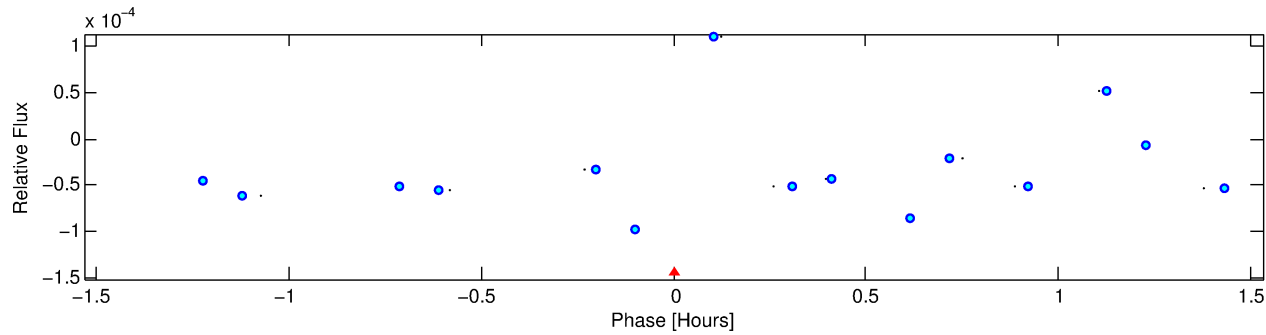
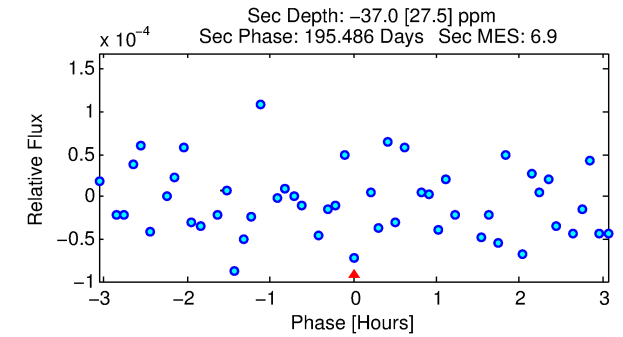
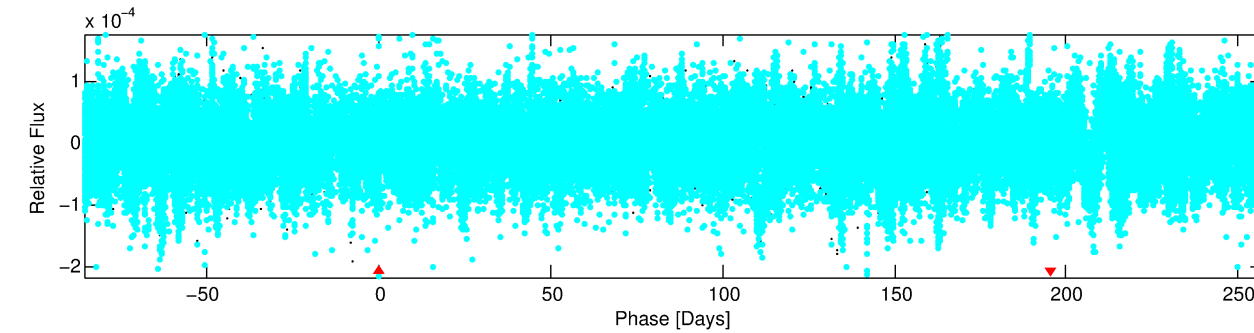
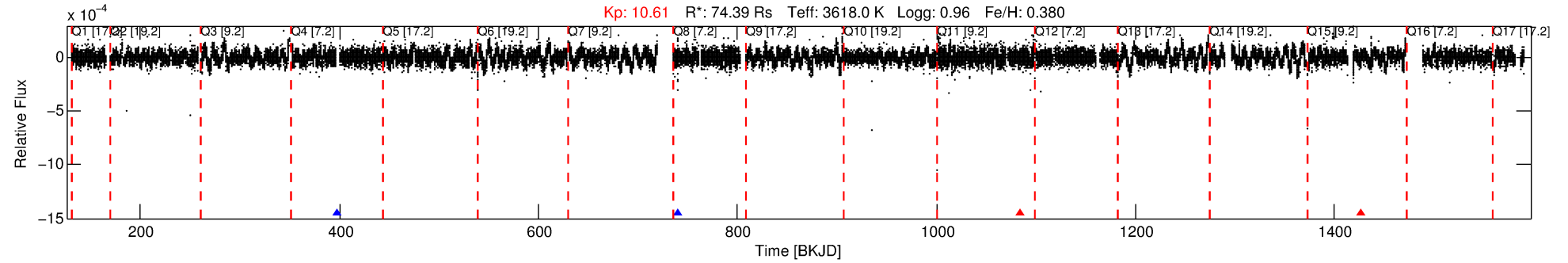
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 010467704-01

No Significant Match Found

DV One-Page Summary

KIC: 10467704 Candidate: 1 of 1 Period: 342.973 d



TPS TCE Results:

Period = 342.97318 d
Epoch = 397.4071 BKJD

DV fit results are unavailable

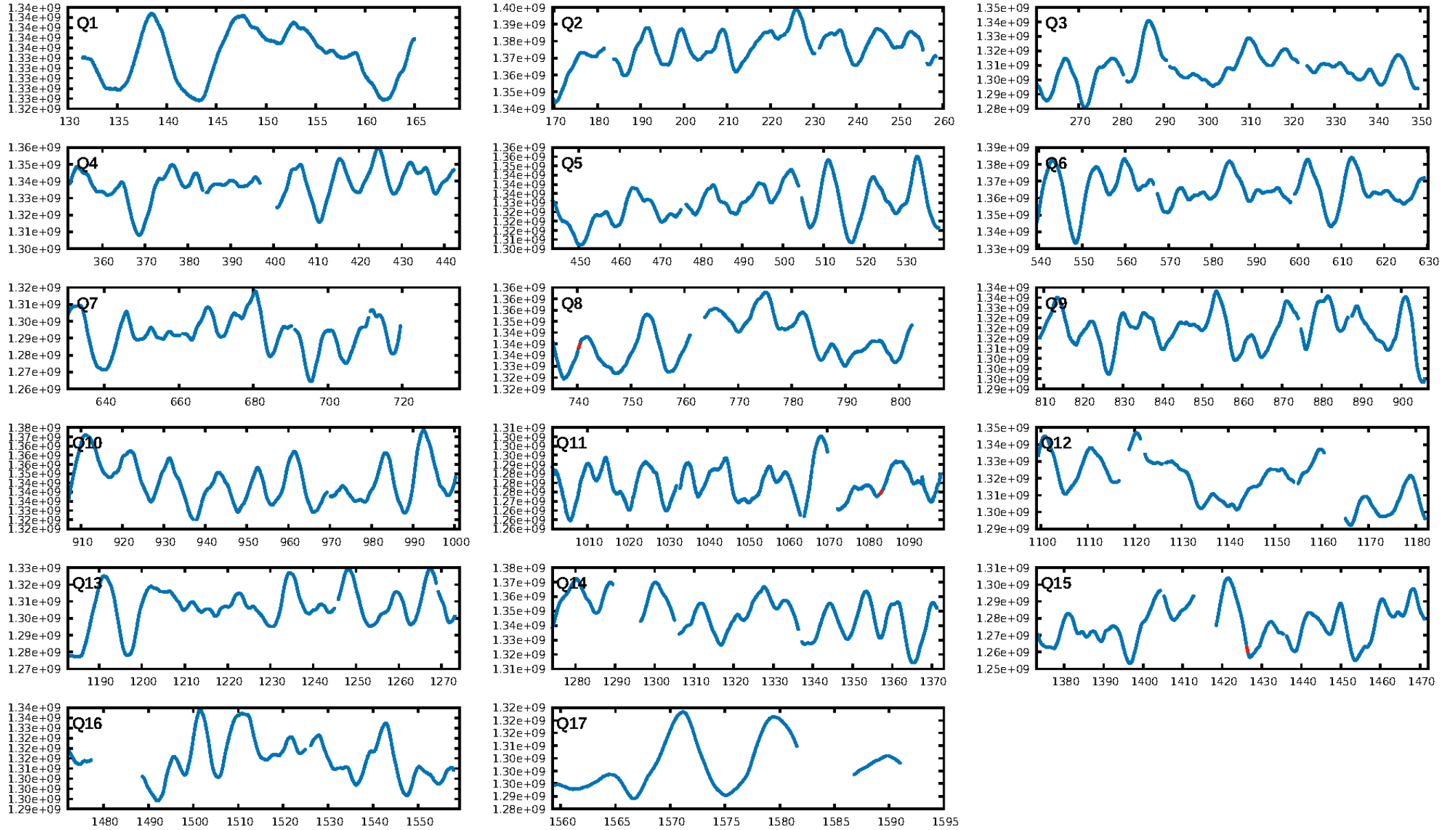
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: 4.77e-08
RollingBand-fgt: 0.33 [1/3]
GhostDiagnostic-chr: 0.5089
Centroid-sig: 88.8%
Centroid-so: 2.515 arcsec [0.19σ]
OotOffset-rm: 8.965 arcsec [4.51σ]
KicOffset-rm: 8.381 arcsec [4.18σ]
OotOffset-st: 0/1/0/0 [1]
KicOffset-st: 0/1/0/0 [1]
DiffImageQuality-fgm: 0.00 [0/1]
DiffImageOverlap-fno: 1.00 [1/1]

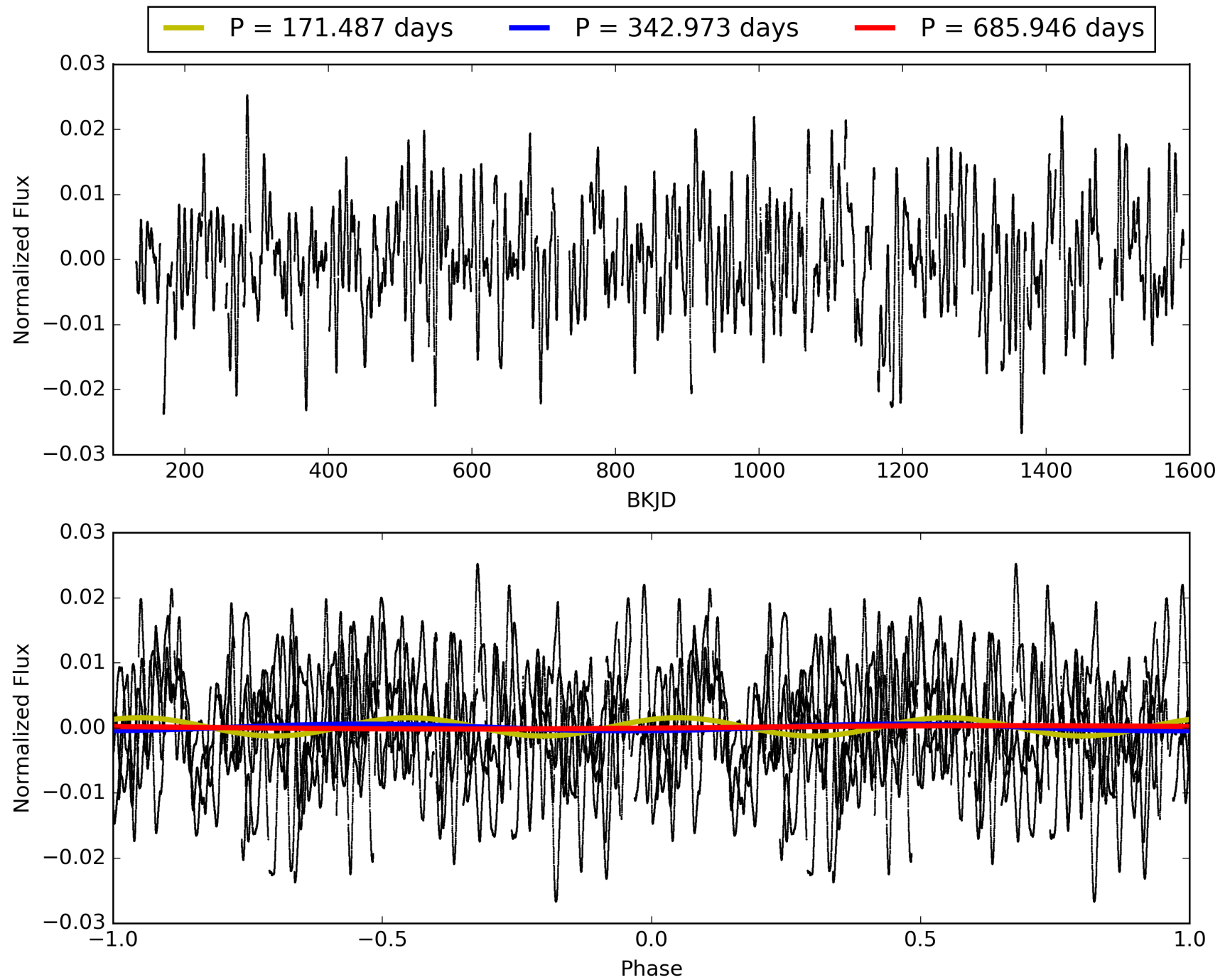
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 28-Jan-2016 22:21:28 Z

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

TCE 010467704-01, PDC Light Curves

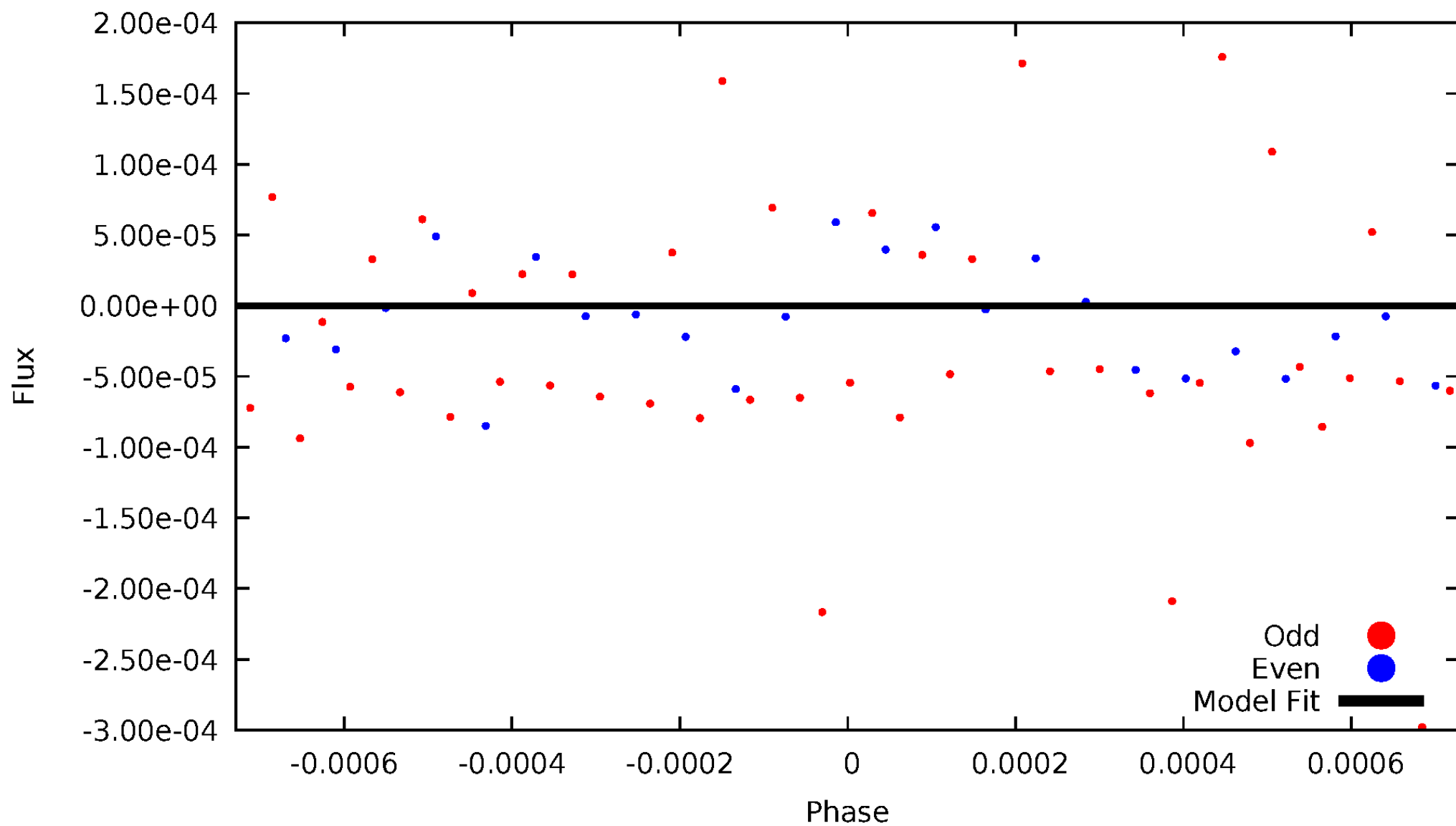


TCE 010467704-01



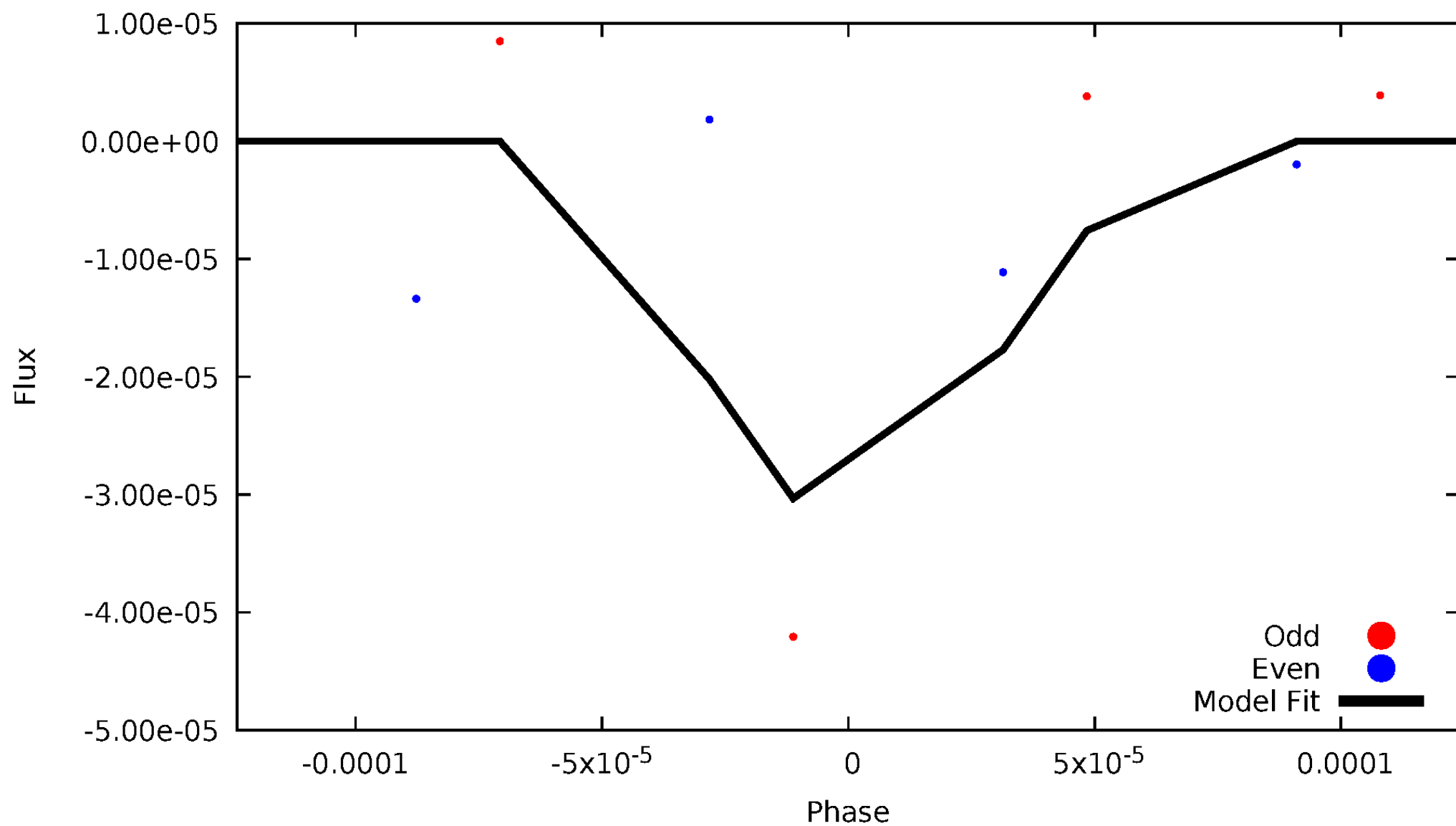
DV Odd/Even

TCE 010467704-01

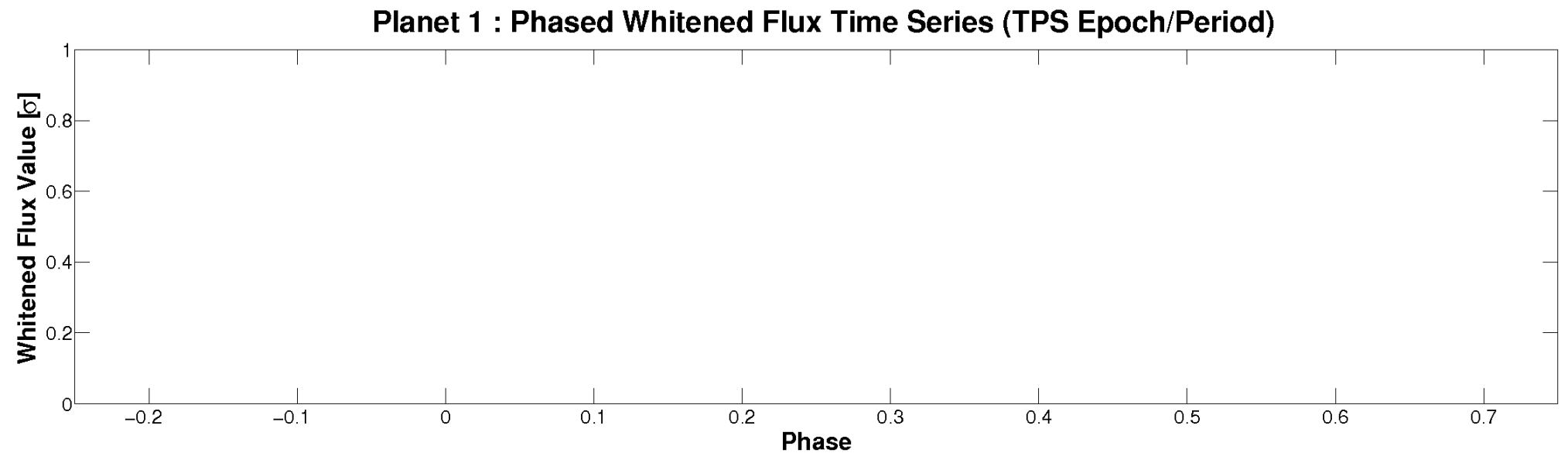
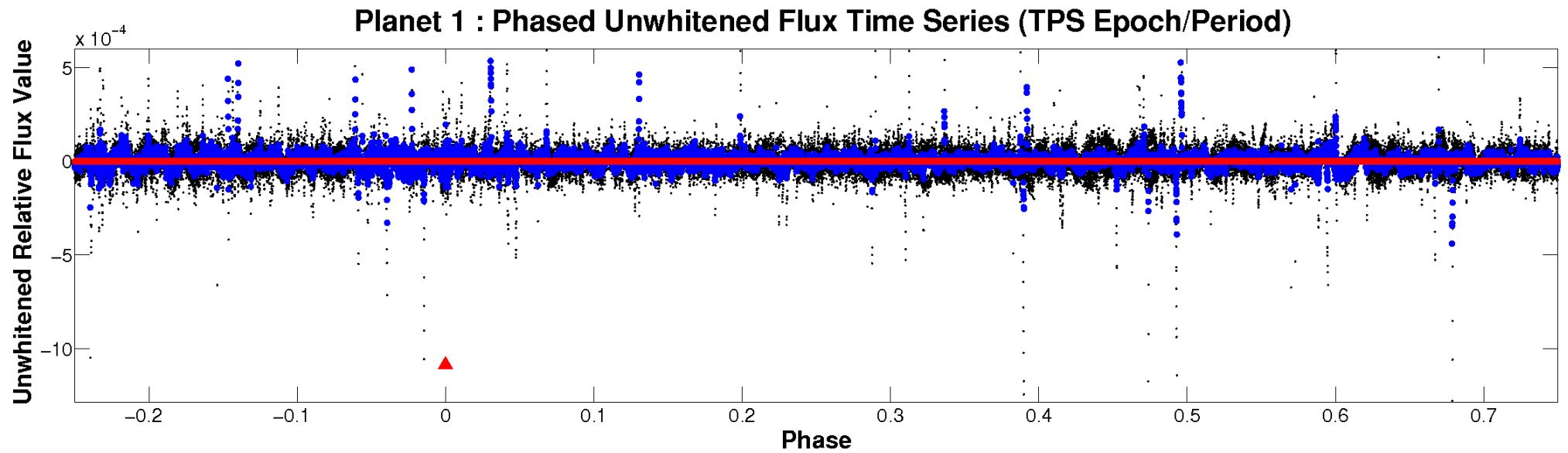


ALT Odd/Even

TCE 010467704-01

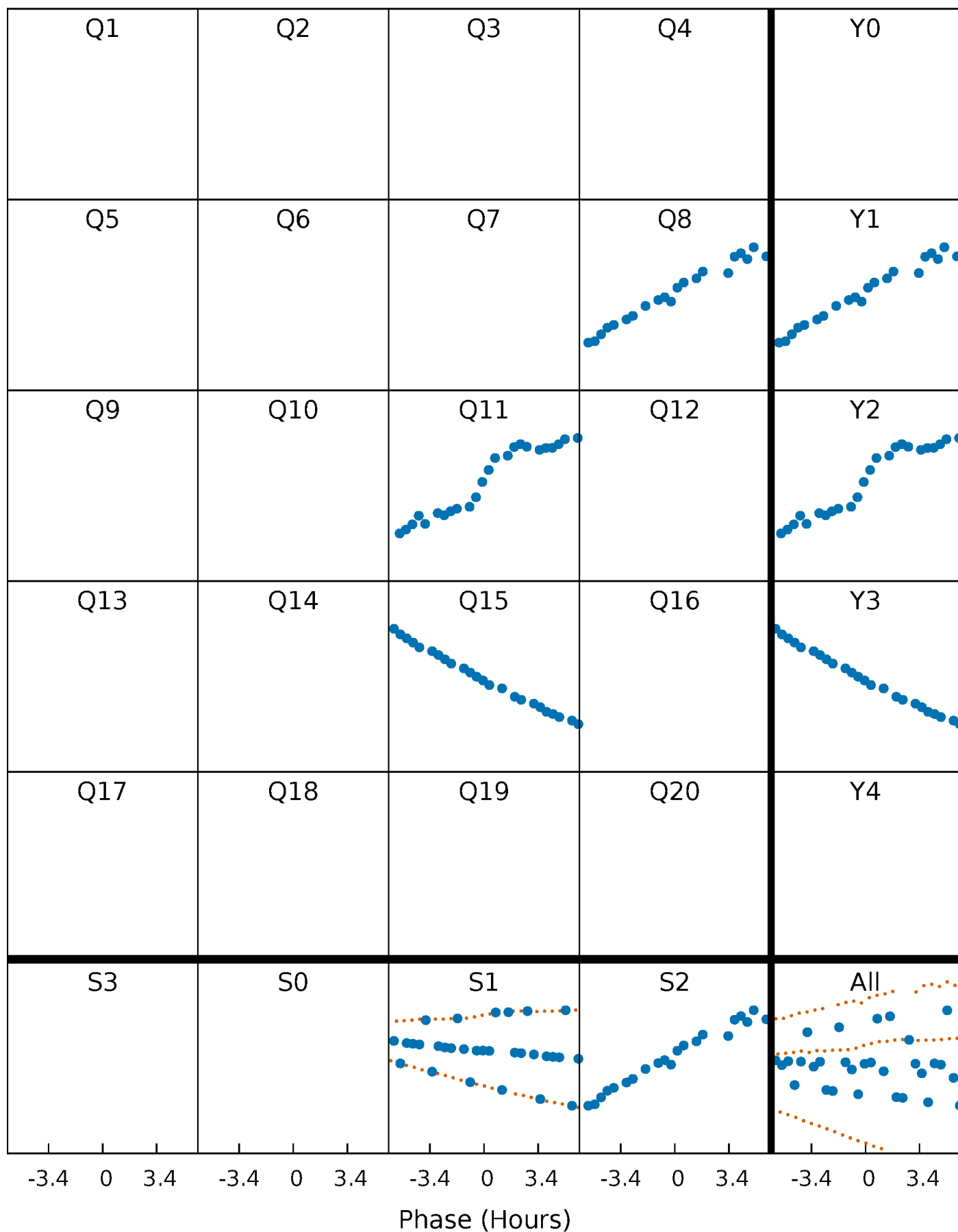


Non-Whitened Vs. Whitened Light Curve



PDC Quarter-Phased Transit Curves

TCE 010467704-01 P=342.973182 Days $T_0=397.407090$ (BKJD)



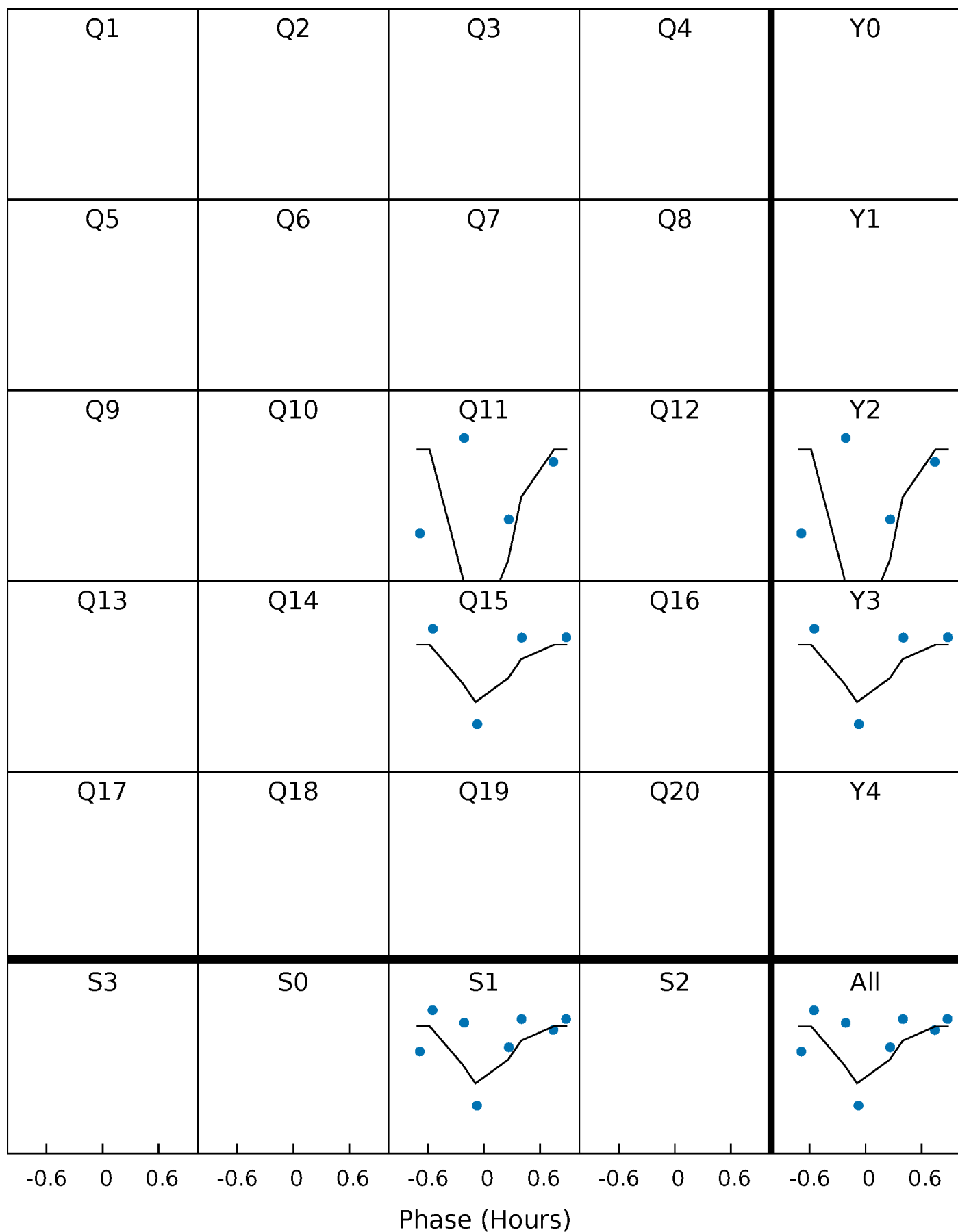
DV Quarter-Phased Transit Curves

TCE 010467704-01 P=342.973182 Days $T_0=397.407090$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

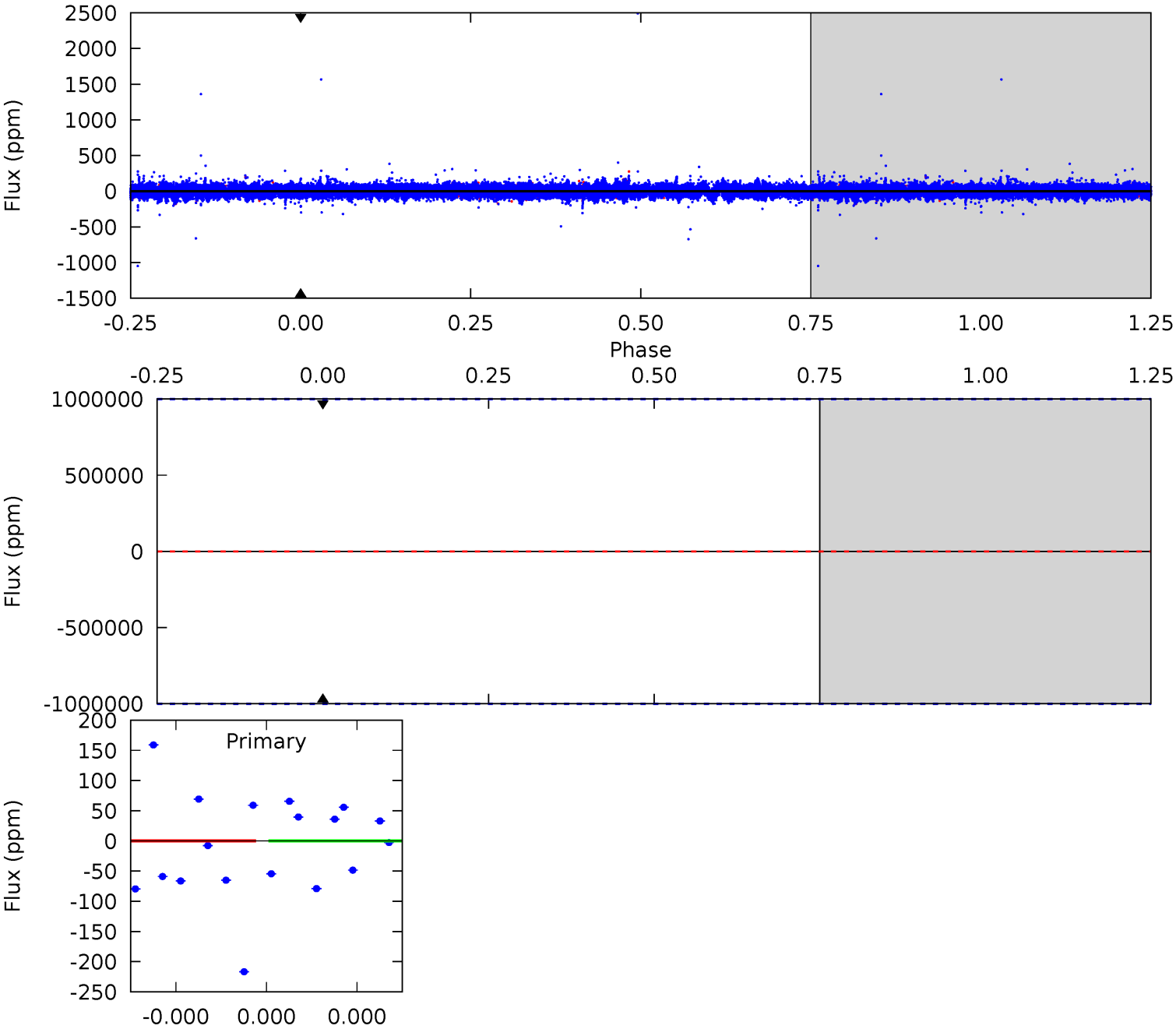
TCE 010467704-01 P=342.973182 Days $T_0=397.575302$ (BKJD)



DV Model-Shift Uniqueness Test

010467704-01, P = 342.973182 Days, E = 54.433908 Days

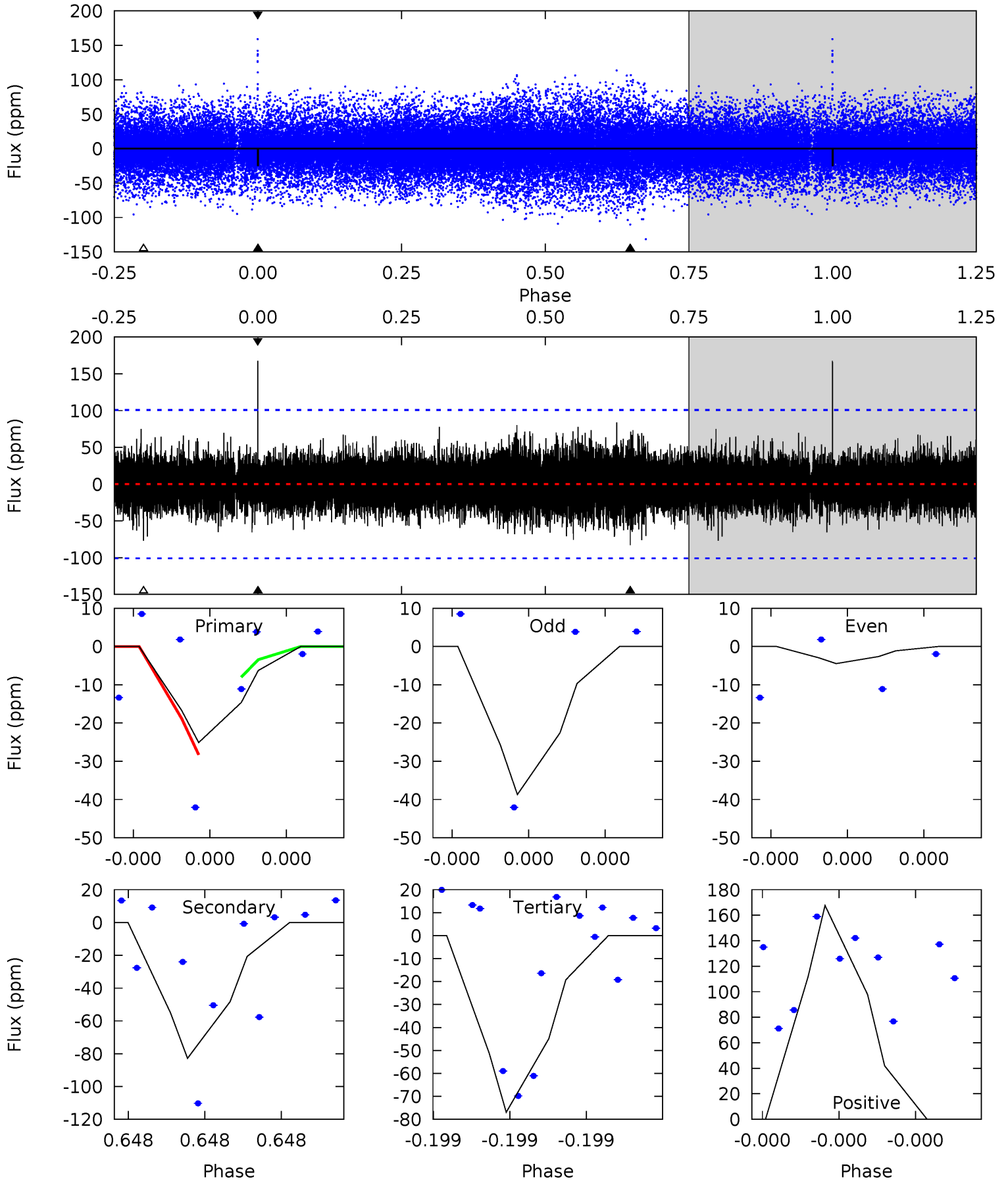
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
0	0	0	0	1.00	1.00	1.00	0	0	0	0	0	0	0	0



Alt Model-Shift Uniqueness Test

010467704-01, P = 342.973182 Days, E = 54.602120 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
1.47	4.84	4.49	9.79	5.89	3.95	1.01	-3.03	-8.32	0.34	-4.95	0.96	1.00	0.67	0.60



Stellar Parameters For KIC 010467704

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	3618^{+85}_{-71}	$0.958^{+0.030}_{-0.030}$	$0.380^{+0.050}_{-0.250}$	$74.388^{+15.345}_{-15.345}$	$1.831^{+1.093}_{-0.638}$	$0.000^{+0.000}_{-0.000}$
	+2%/-2%	+3%/-3%	+13%/-66%	+21%/-21%	+60%/-35%	+27%/-10%
Source	PHO54	AST54	PHO54	DSEP		

KIC = Kepler Input Catalog; PHO = Photometry; SPE = Spectroscopy; AST = Asteroseismology
 TRA = Transits; DESP = Dartmouth Models; MULT = Multiple Models

Secondary Eclipse Parameters for KIC 010467704-01 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	A_{obs}
DV	0 ± 1000000	$613.91^{+614.55}_{-434.86}$	1785^{+62}_{-62}	3140^{+4842}_{-10542}	$4.956^{+406.635}_{-318.085}$
Alt.	-83 ± 17	$581.20^{+607.71}_{-424.44}$	1782^{+62}_{-61}	-2015^{+4836}_{-175}	$0.183^{+2.288}_{-0.139}$

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

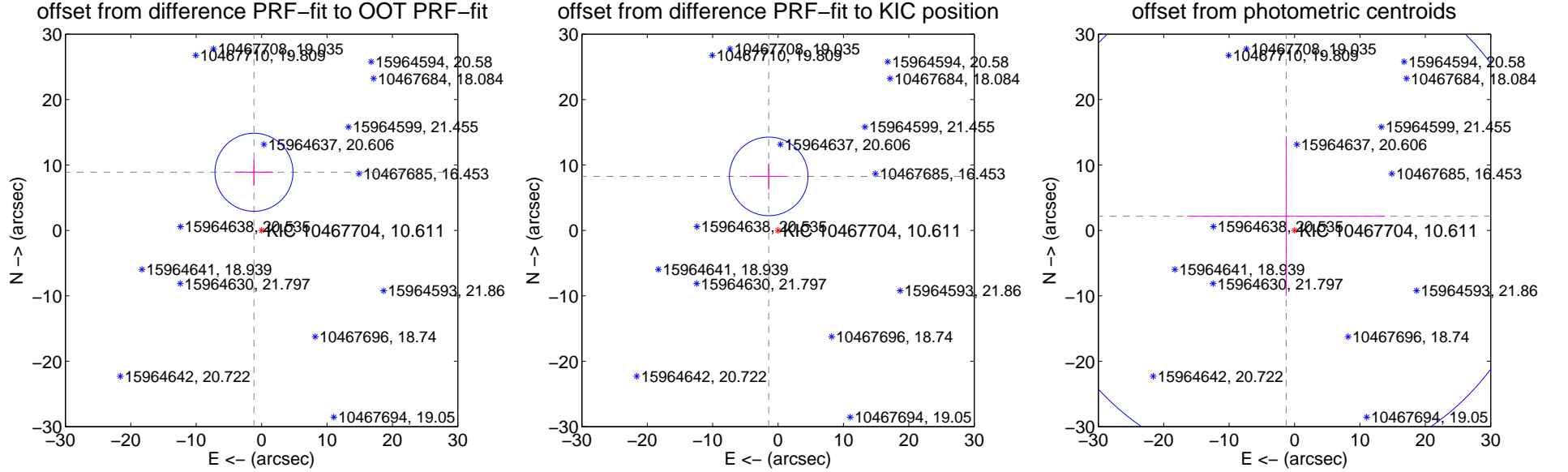
DV Centroid Data

Supplemental centroid analysis for 010467704-01. **Kepler magnitude: 10.61.** Transit SNR -1.00

There are 0 quarters with good PRF difference image offsets

The direct PRF centroid is offset from the target star catalog position by about 0.68 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	8.965 ± 1.989	4.51	1.171 ± 2.920	8.888 ± 1.969
PRF-fit source offset from KIC position	8.381 ± 2.003	4.18	1.430 ± 2.920	8.258 ± 1.969
photometric centroid source offset	2.52 ± 13.01	0.19	1.27 ± 15.14	2.17 ± 12.20



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.



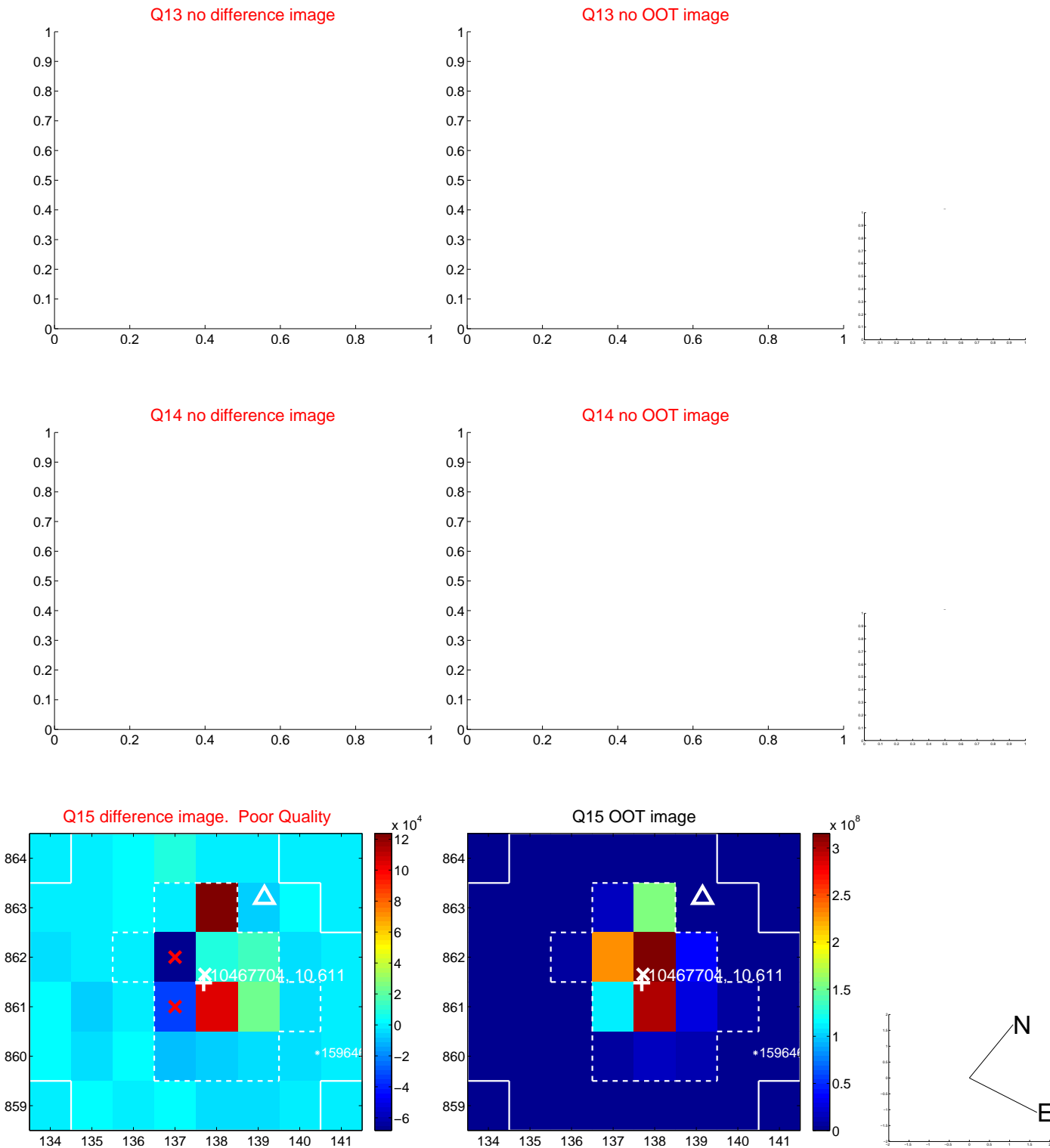
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



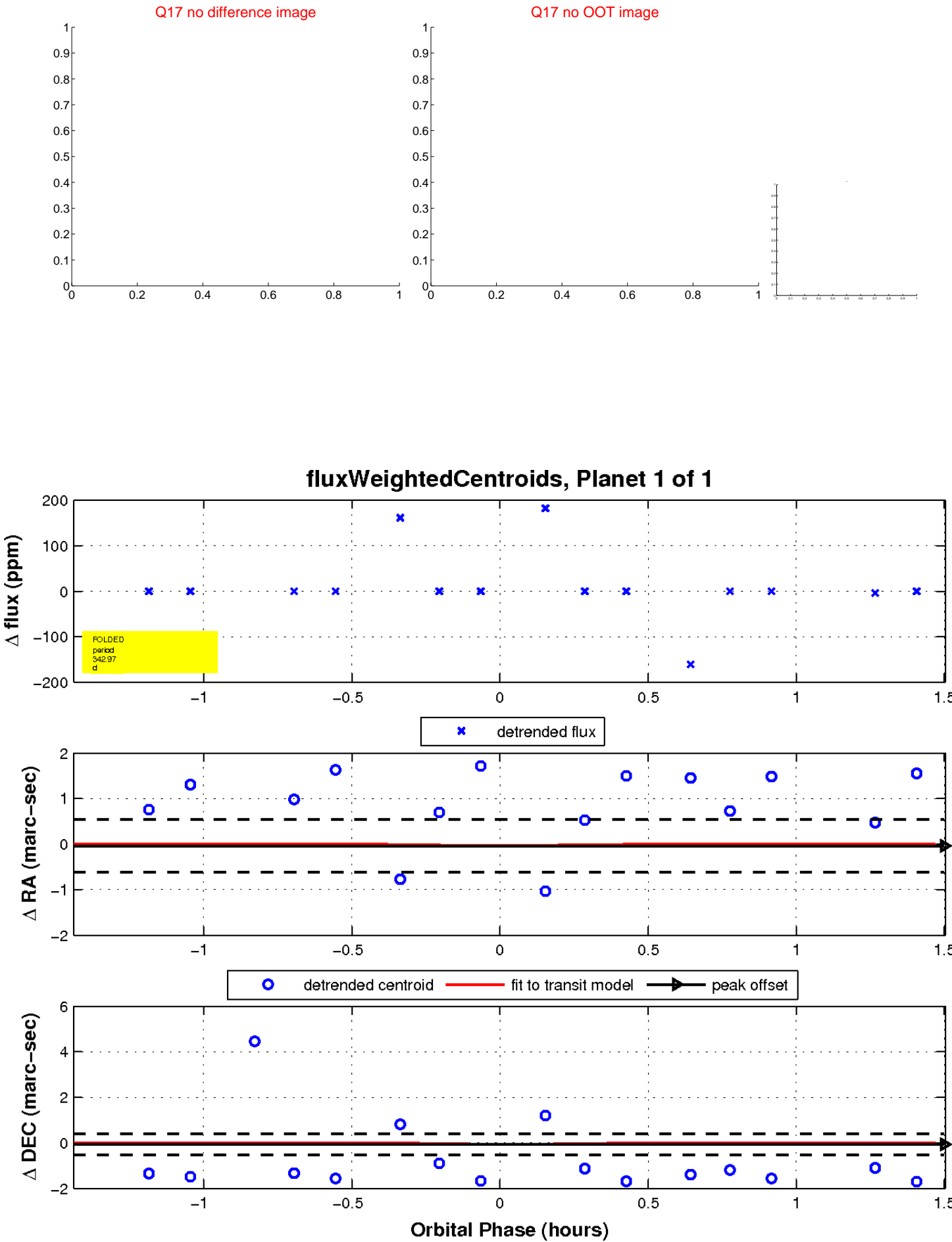
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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.



UKIRT Image

