

KIC 008247669

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})
008247669-01	OBS	No	483.568447	149.463098	0.4	2.060	8.5	0.0	153.06	3286	8.92	1547.12

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
008247669-01	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_MARSHALL_ZUMA—LPP_DV—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_POS_DV—MOD_TER_ALT—MOD_POS_ALT— INCONSISTENT_TRANS—CENT_SATURATED

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

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

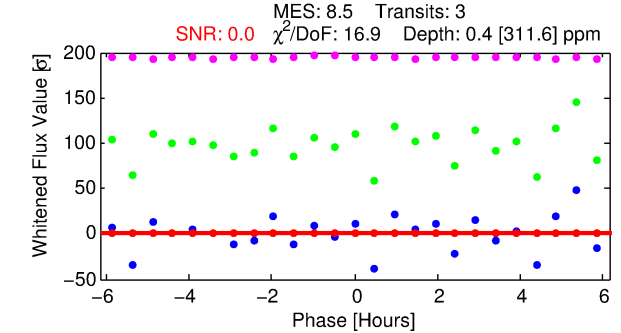
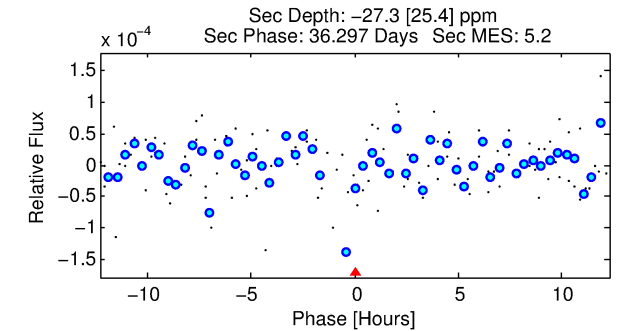
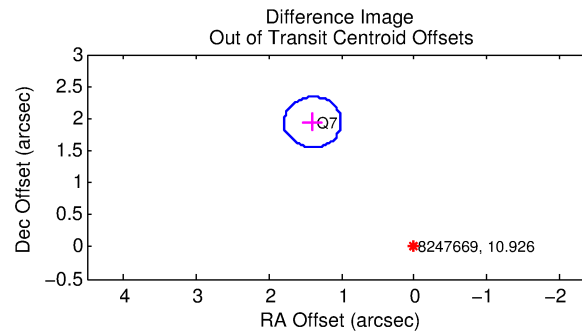
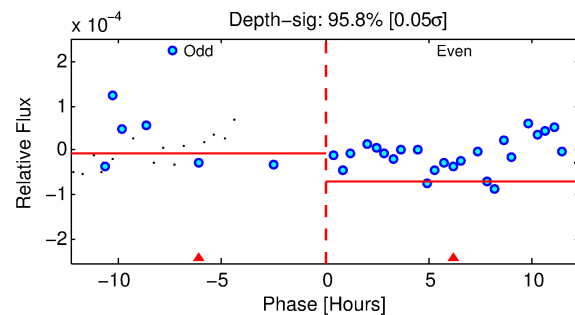
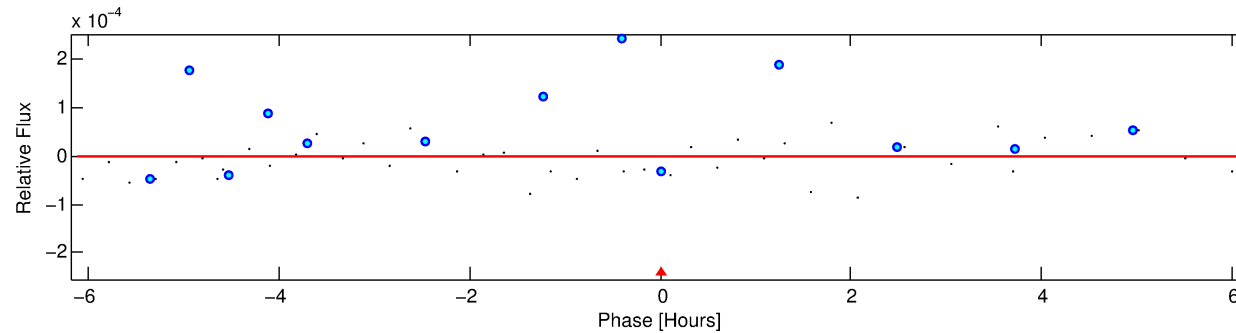
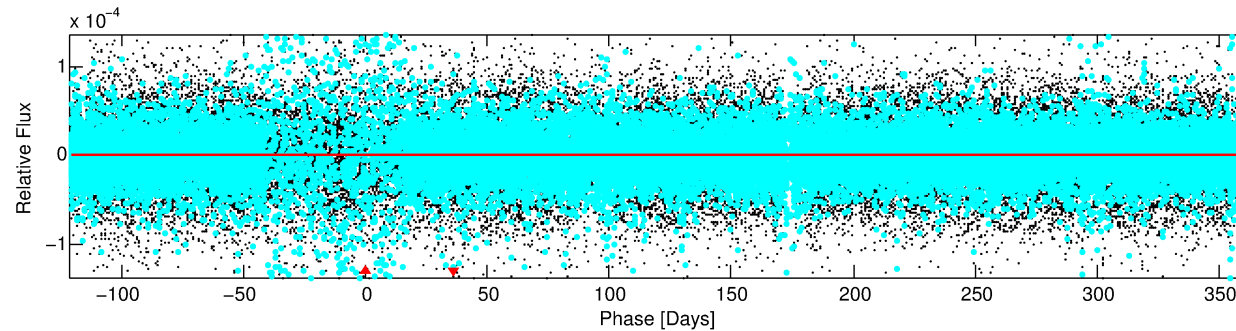
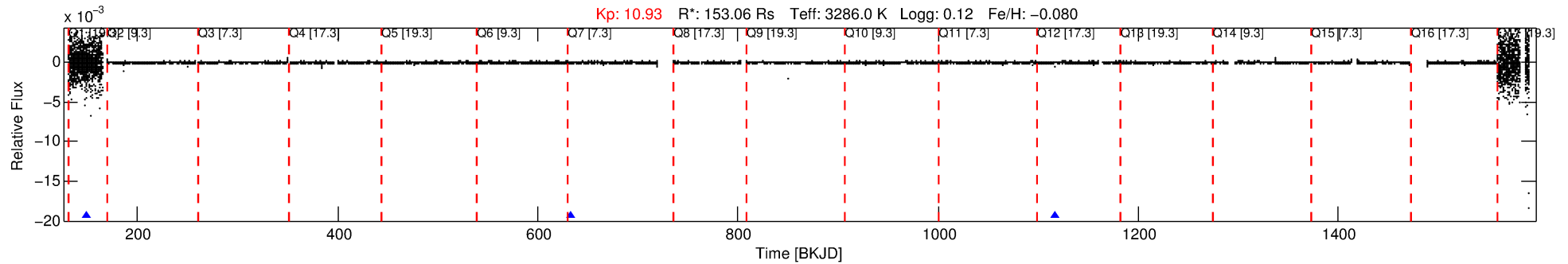
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 008247669-01

No Significant Match Found

DV One-Page Summary

KIC: 8247669 Candidate: 1 of 1 Period: 483.568 d



DV Fit Results:

Period = 483.56845 [8.70396] d
Epoch = 149.4631 [26.8021] BKJD
 $R_p/R^* = 0.0005$ [4.9199]
 $a/R^* = 1793.79$ [29742432.42]
 $b = 0.03$ [606792.37]
 $\text{Seff} = 1547.12$ [556.84]
 $\text{Teq} = 1599$ [144] K
 $R_p = 8.92$ [82173.42] R_e
 $a = 1.2577$ [0.2456] AU
 $\text{Ag} = \text{N/A}$
 $\text{Teffp} = \text{N/A}$

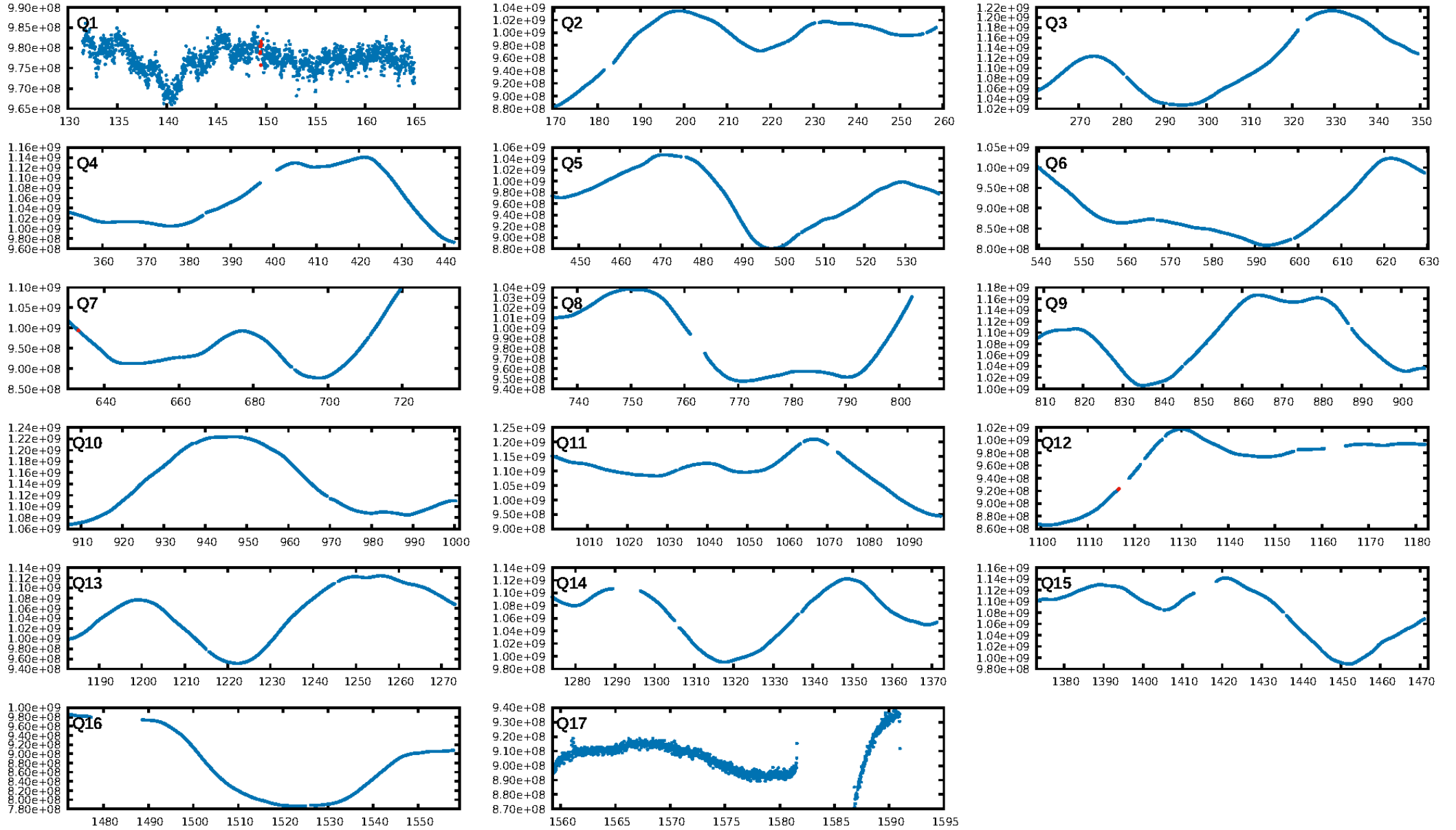
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: 0.0%
ModelChiSquareGof-sig: 0.0%
Bootstrap-pfa: 2.57e-03
RollingBand-fgt: 1.00 [2/2]
GhostDiagnostic-chr: N/A
Centroid-sig: N/A
Centroid-so: N/A
OotOffset-rm: 2.394 arcsec [18.25 σ]
KicOffset-rm: 2.754 arcsec [20.97 σ]
OotOffset-st: 0/1/0/0 [1]
KicOffset-st: 0/1/0/0 [1]
DiffImageQuality-fgm: 0.00 [0/1]
DiffImageOverlap-fno: 1.00 [2/2]

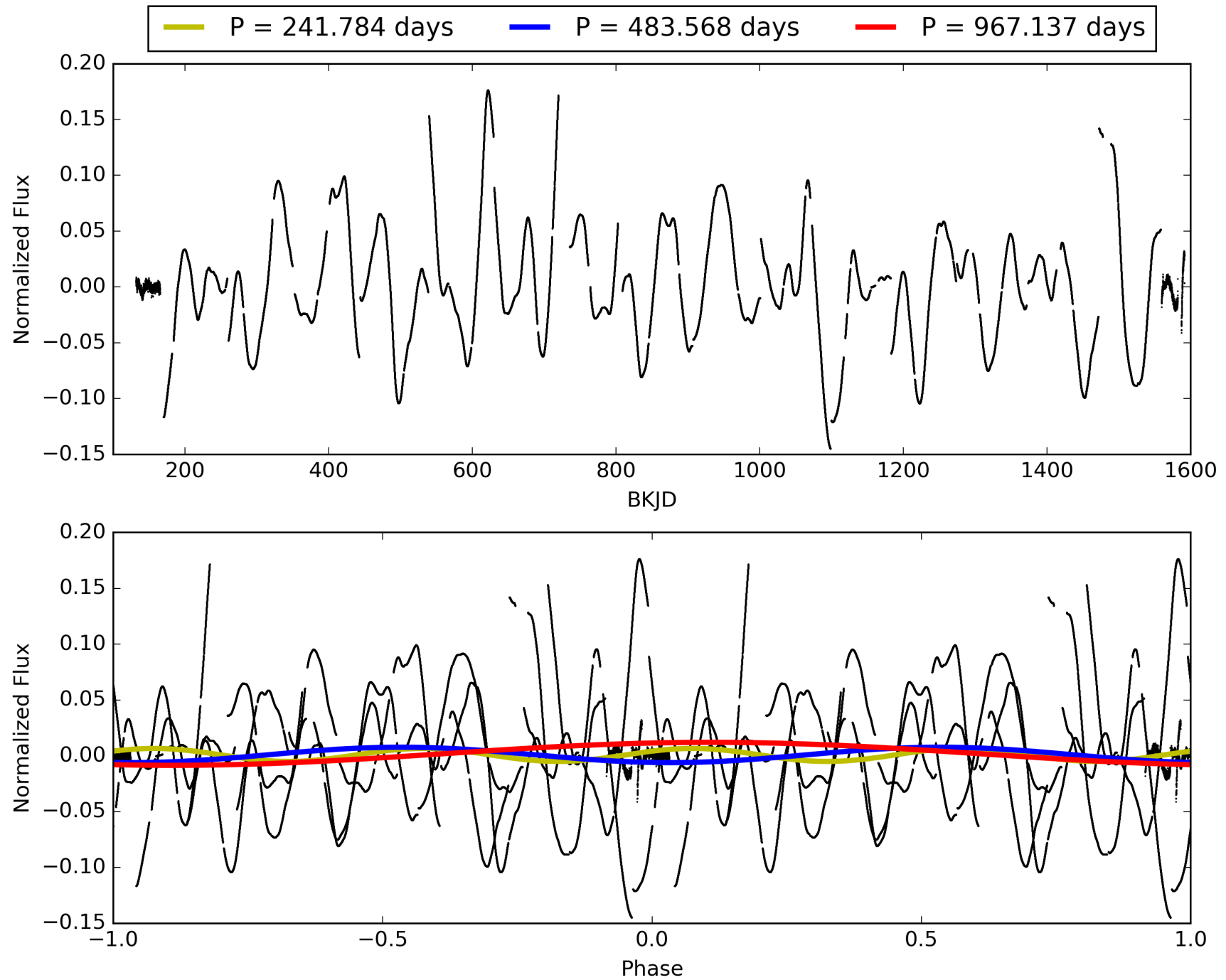
Software Revision: svn-ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 31-Jan-2016 11:40:56 Z

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

TCE 008247669-01, PDC Light Curves

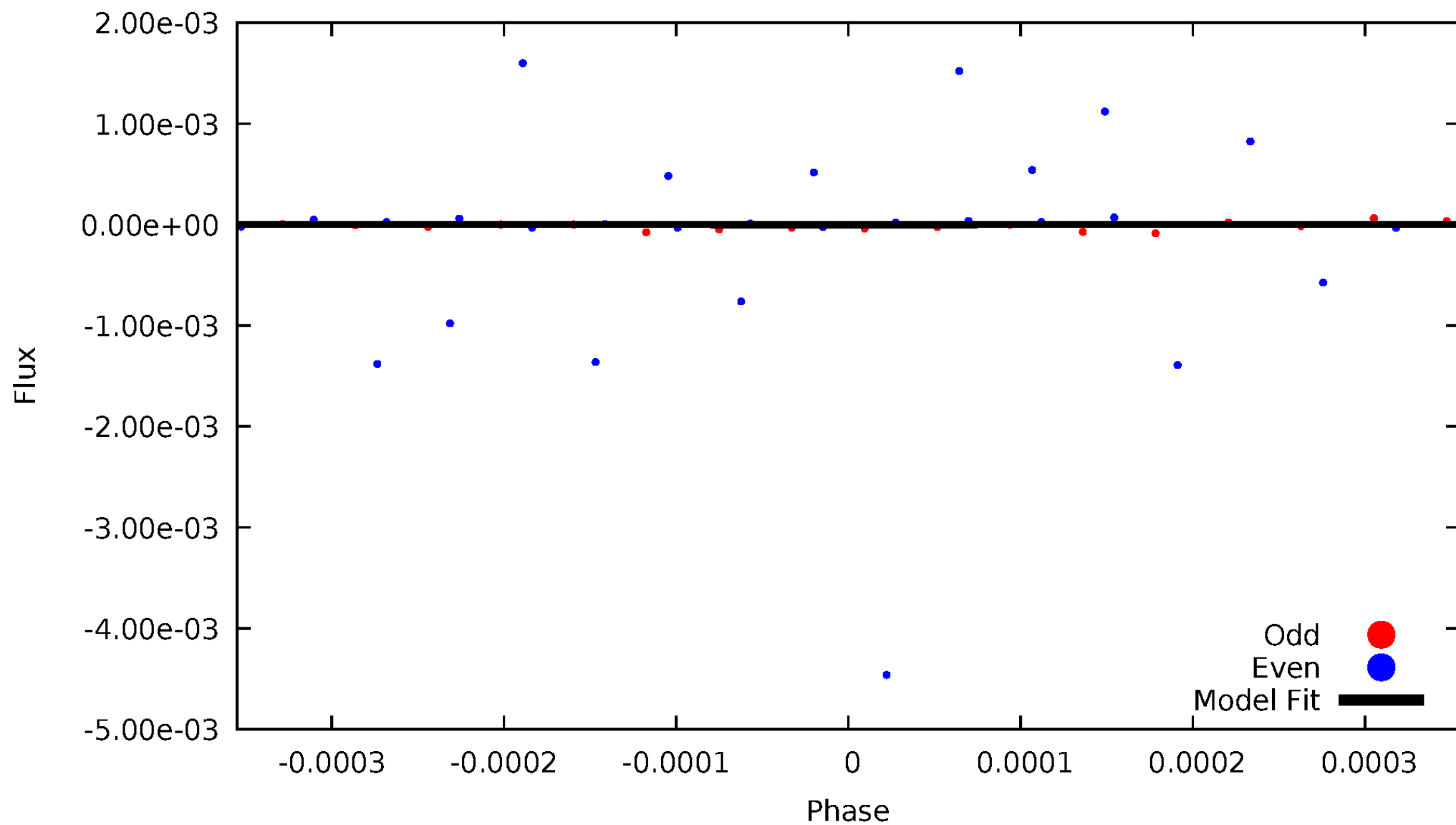


TCE 008247669-01



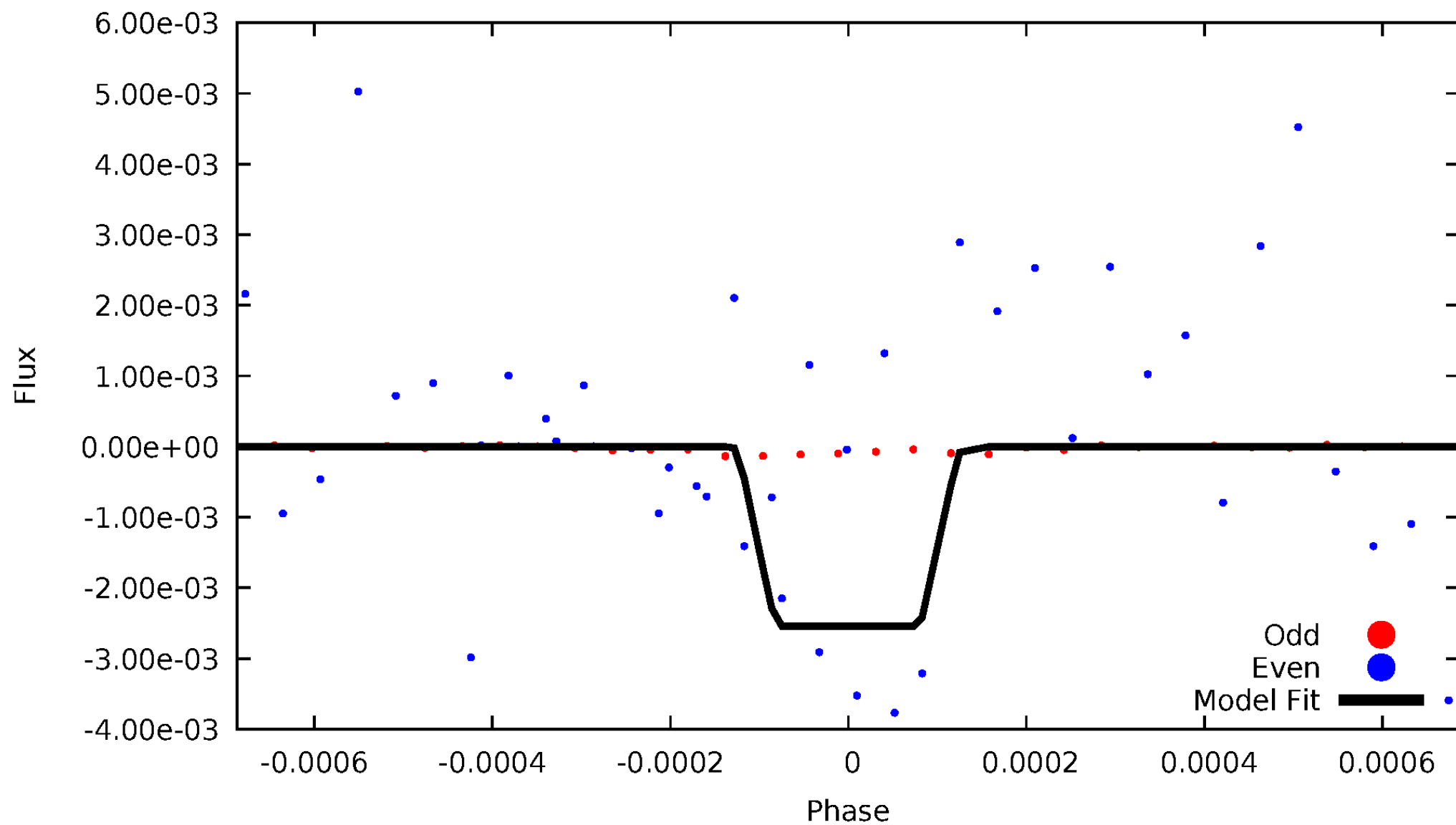
DV Odd/Even

TCE 008247669-01



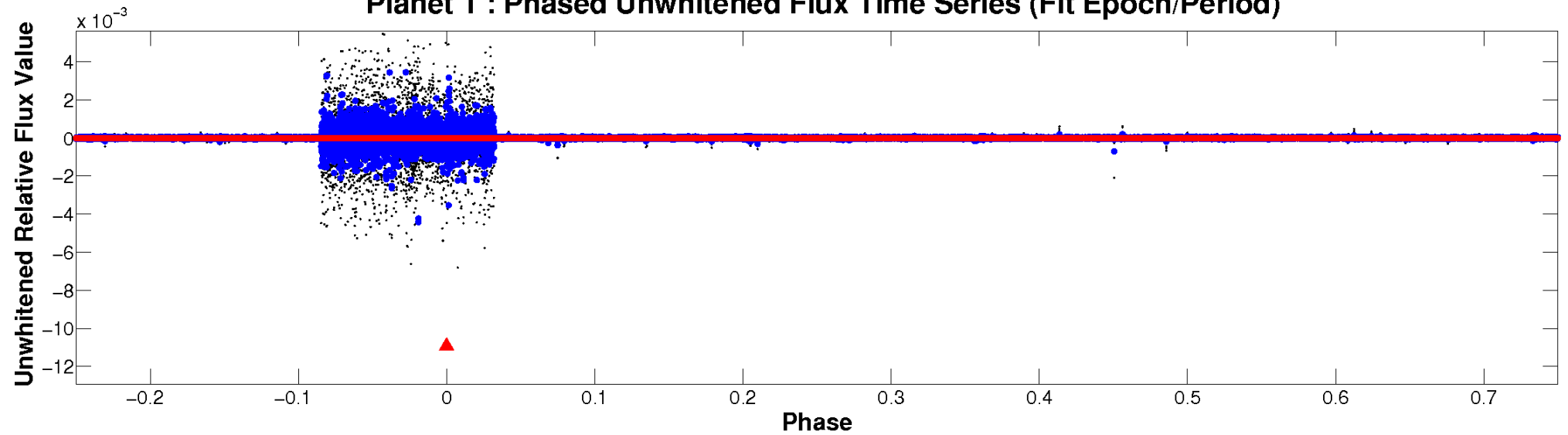
ALT Odd/Even

TCE 008247669-01

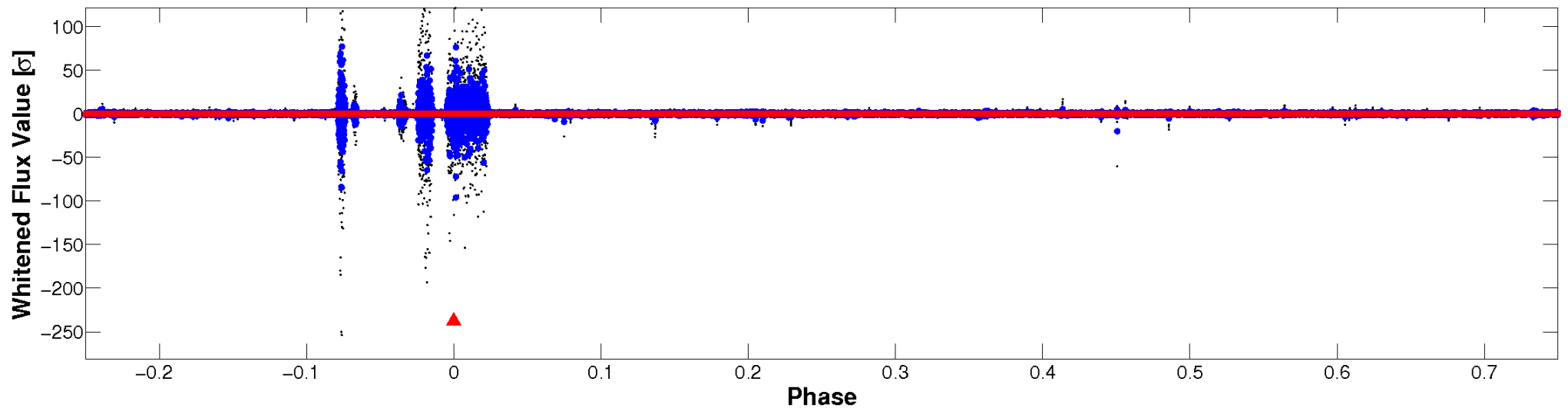


Non-Whitened Vs. Whitened Light Curve

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

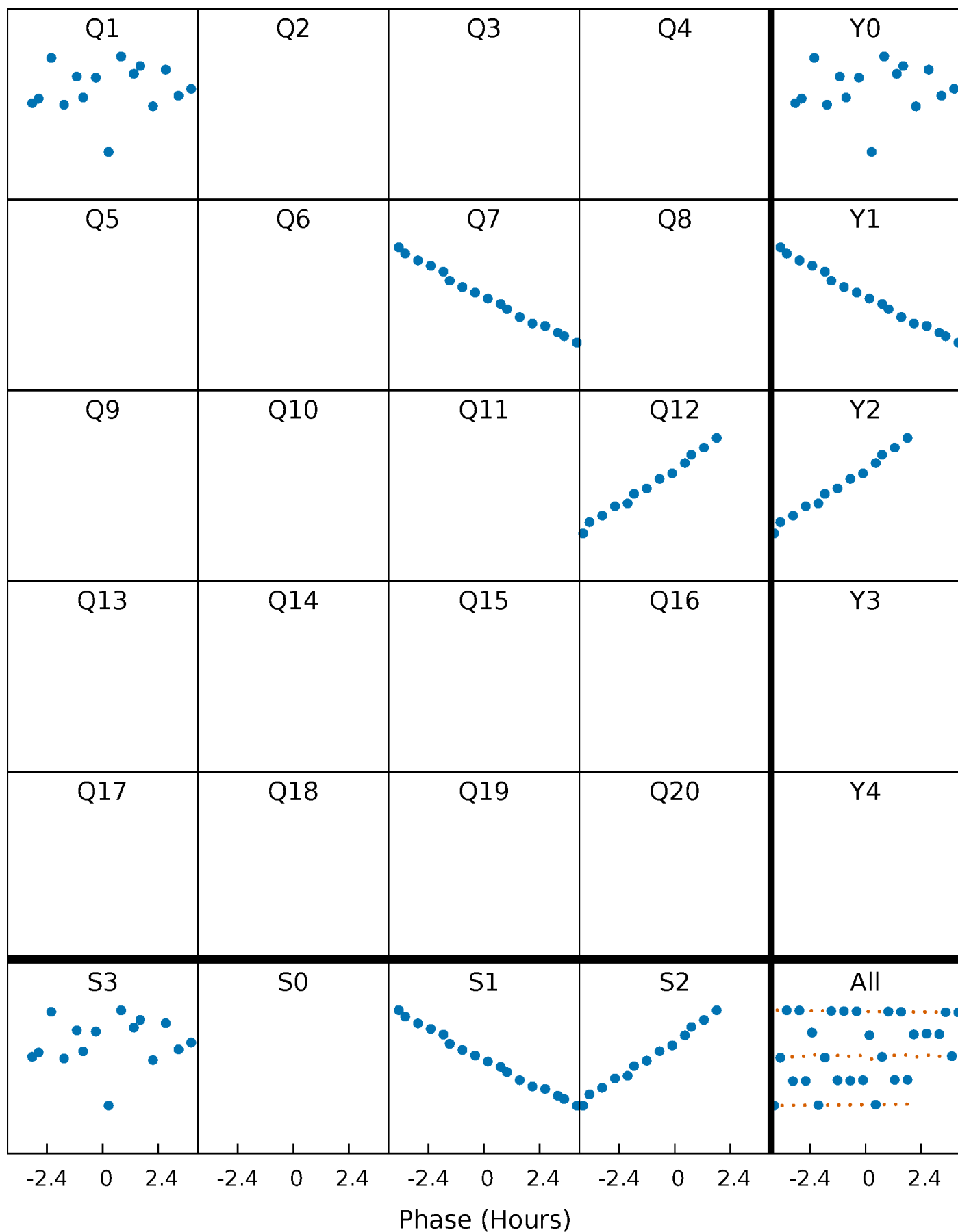


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



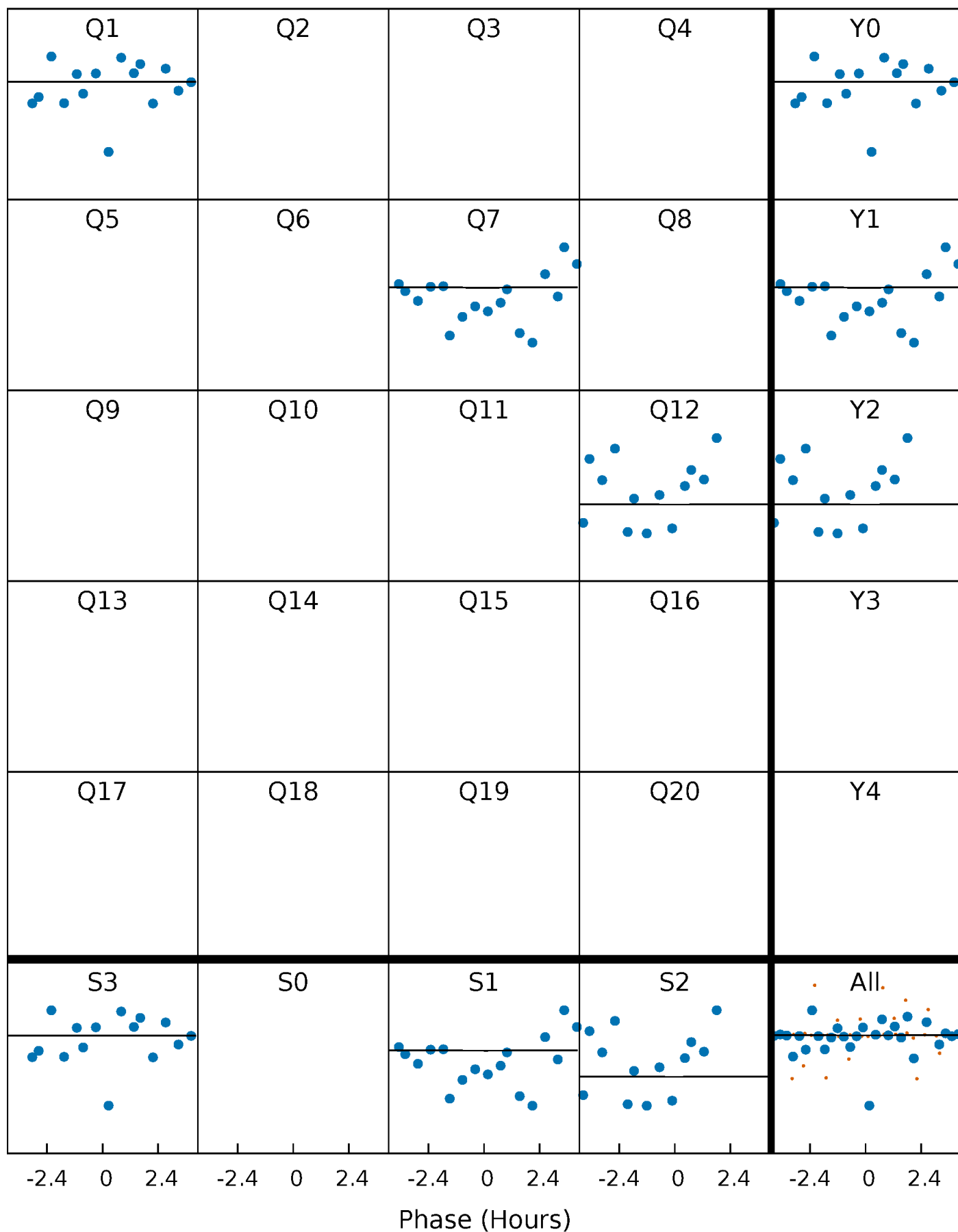
PDC Quarter-Phased Transit Curves

TCE 008247669-01 P=483.568447 Days $T_0=149.463098$ (BKJD)



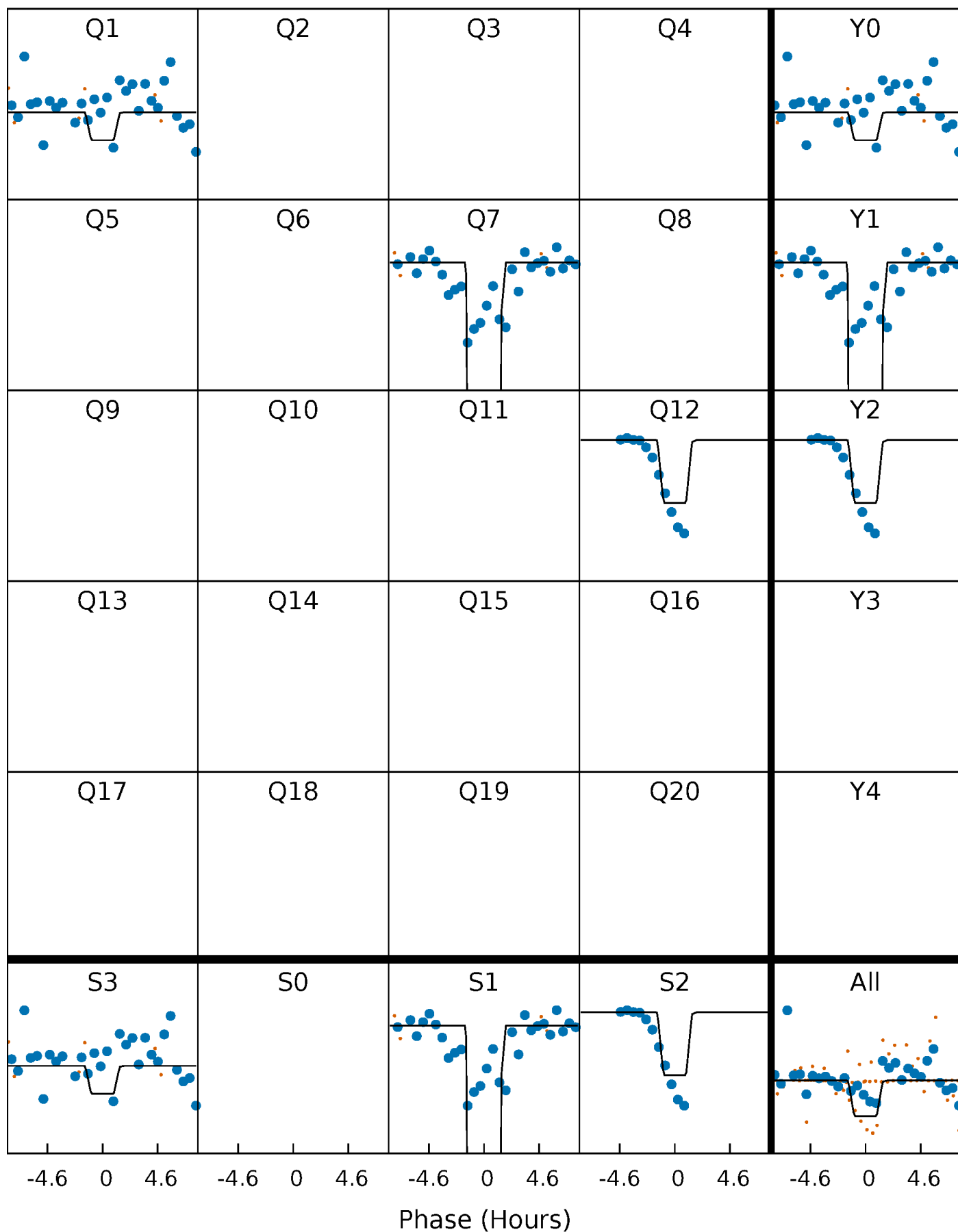
DV Quarter-Phased Transit Curves

TCE 008247669-01 P=483.568447 Days $T_0=149.463098$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

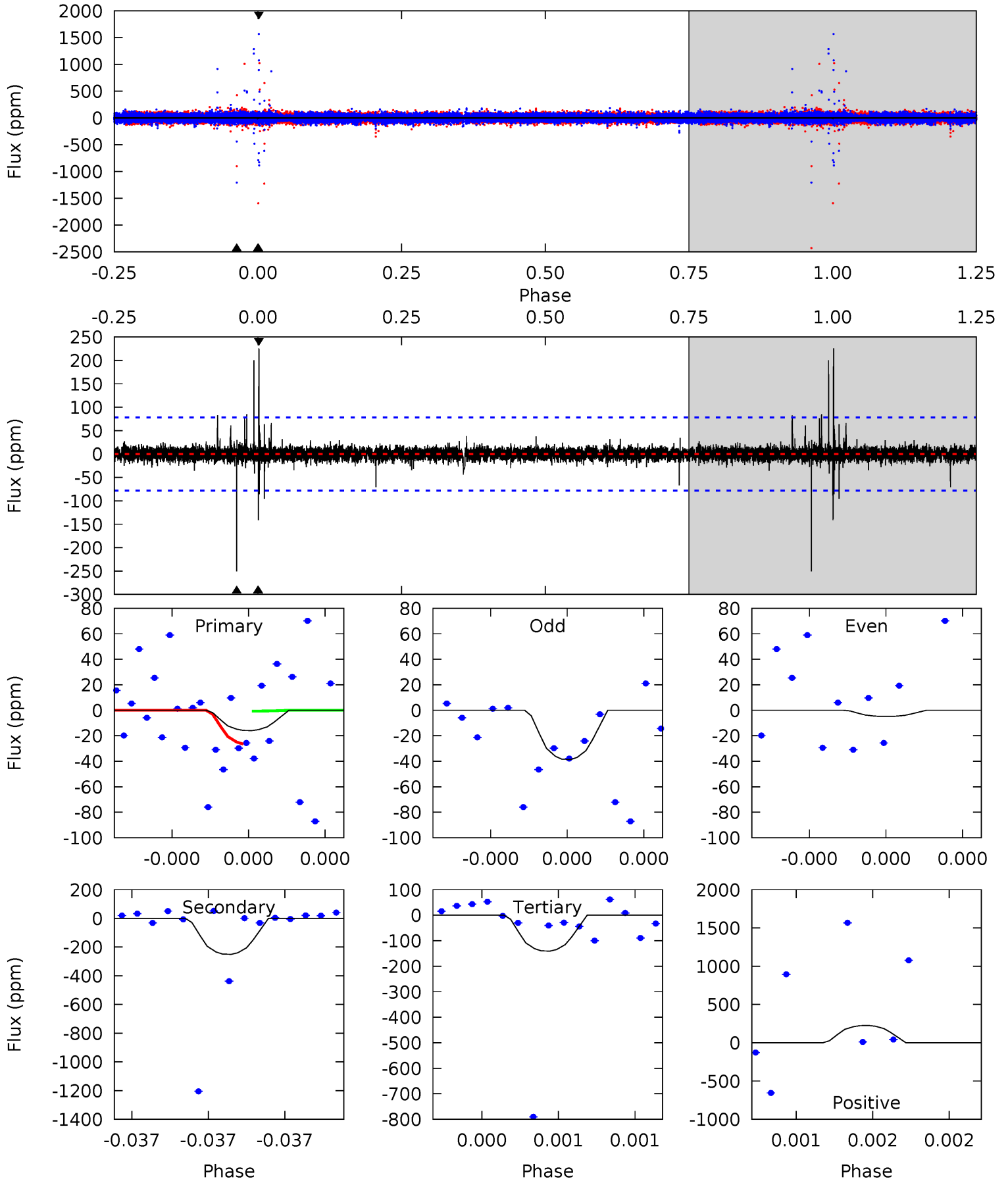
TCE 008247669-01 P=483.607876 Days $T_0=149.433733$ (BKJD)



DV Model-Shift Uniqueness Test

008247669-01, P = 483.568447 Days, E = 149.463098 Days

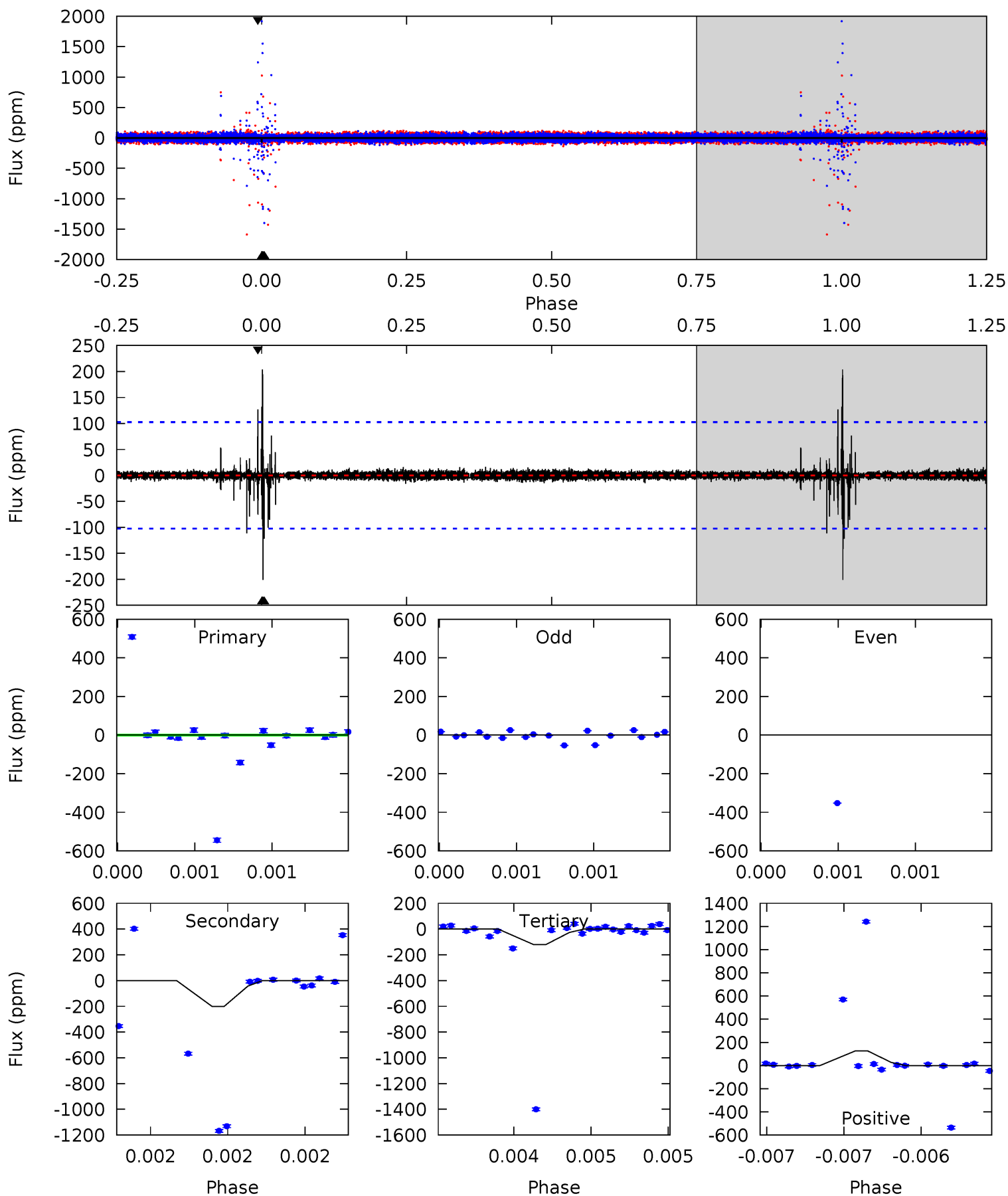
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
1.17	18.4	10.3	16.5	5.72	3.71	0.59	-9.15	-15.4	8.04	1.83	0.73	10.0	0.47	0.95



Alt Model-Shift Uniqueness Test

008247669-01, P = 483.607876 Days, E = 149.433733 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
4.27	11.1	6.73	7.03	5.68	3.64	0.24	-2.45	-2.76	4.41	4.11	17.9	4.71	0.50	0.46



Stellar Parameters For KIC 008247669

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	$M(M_{\odot})$	p_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	3286^{+117}_{-88}	$0.123^{+0.200}_{-0.050}$	$-0.080^{+0.250}_{-0.150}$	$153.058^{+9.192}_{-27.576}$	$1.134^{+0.189}_{-0.155}$	$0.000^{+0.000}_{-0.000}$
	+4%/-3%	+163%/-41%	+312%/-188%	+6%/-18%	+17%/-14%	+93%/-14%
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 008247669-01 / KOI

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	-251 ± 14	$52213.11^{+58188.49}_{-37034.30}$	2199^{+103}_{-109}	-2384^{+73}_{-73}	$0.000^{+0.001}_{-0.000}$
Alt.	-201 ± 18	$50081.71^{+59694.12}_{-34191.05}$	2204^{+96}_{-117}	-2384^{+72}_{-72}	$0.000^{+0.001}_{-0.000}$

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 $A_{obs} \gg 1.0$

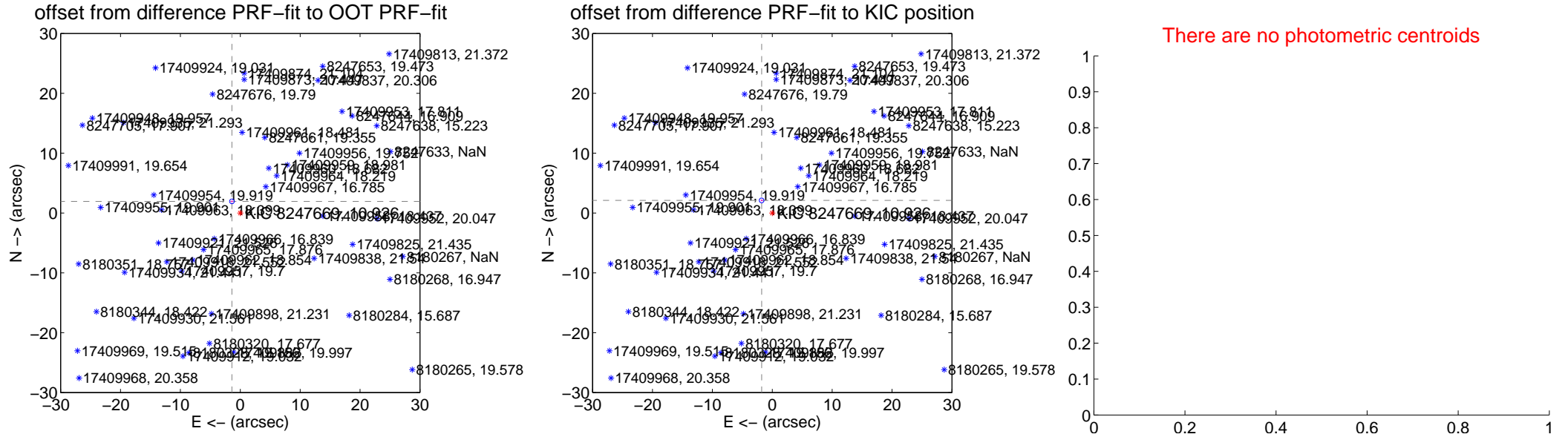
DV Centroid Data

Supplemental centroid analysis for 008247669-01. **Kepler magnitude: 10.93.** Transit SNR 0.02

There are 0 quarters with good PRF difference image offsets

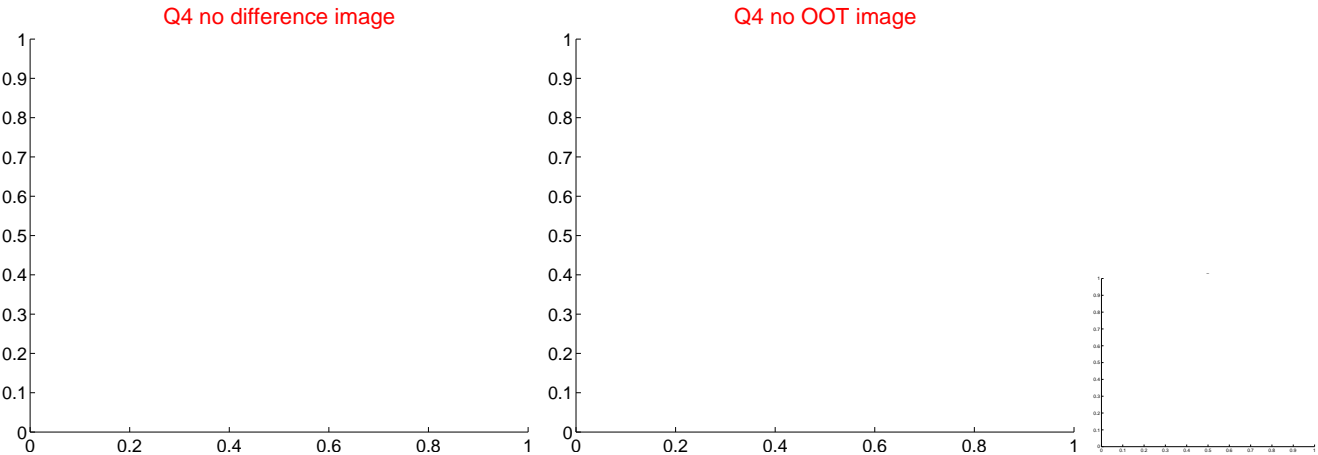
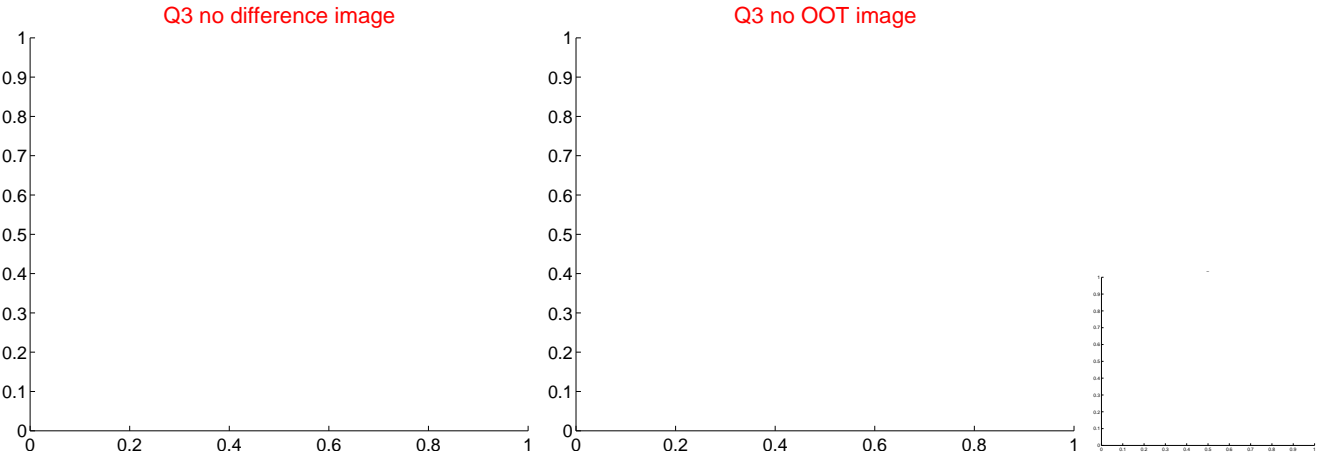
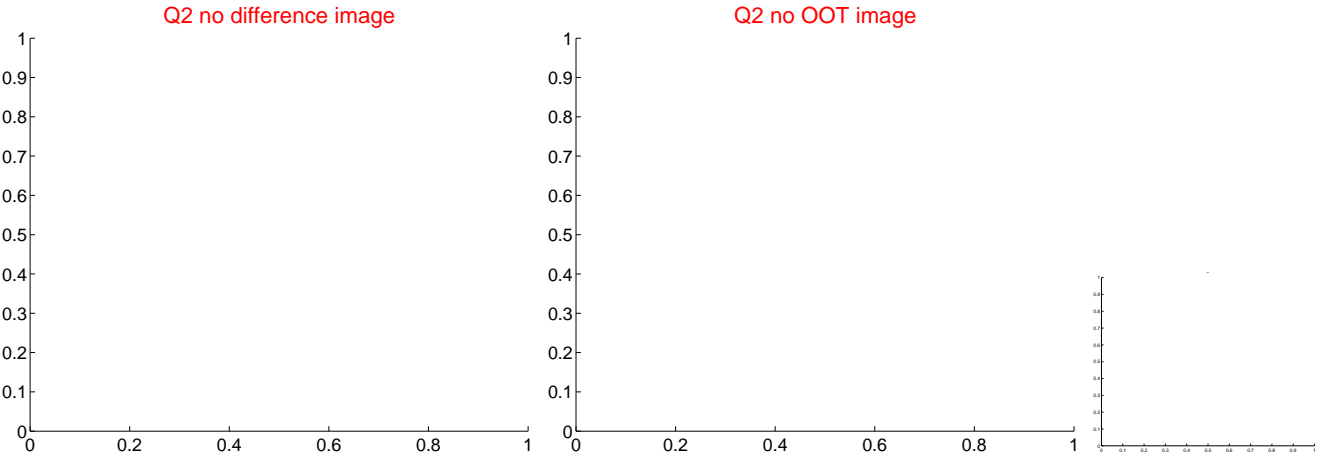
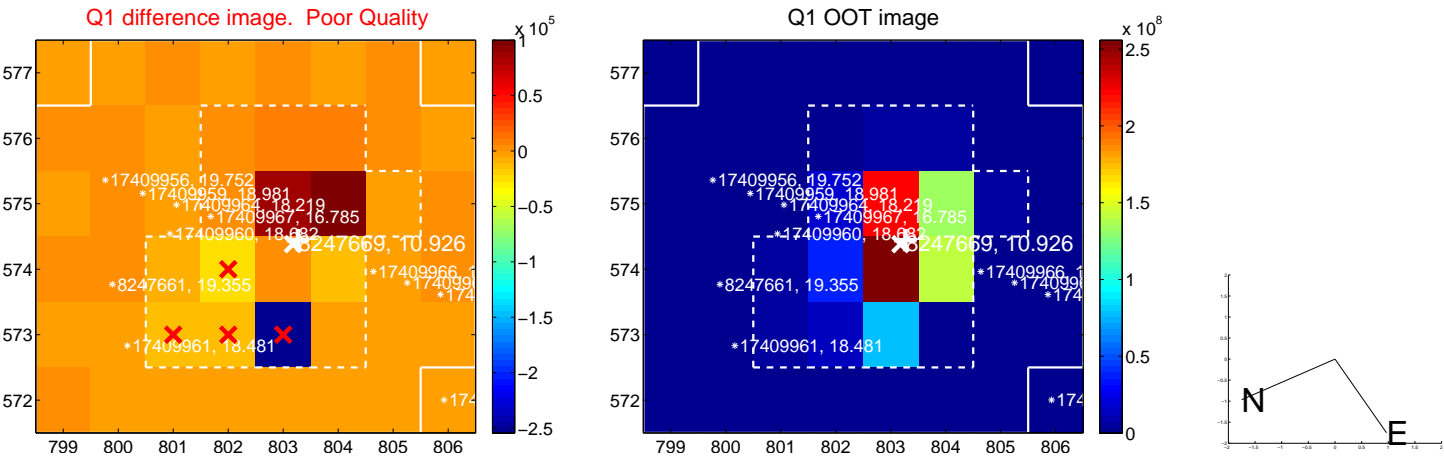
The direct PRF centroid is offset from the target star catalog position by about 0.41 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	2.394 \pm 0.131	18.25	1.395 \pm 0.132	1.945 \pm 0.131
PRF-fit source offset from KIC position	2.754 \pm 0.131	20.97	1.774 \pm 0.132	2.106 \pm 0.131
photometric centroid source offset	—	—	—	—

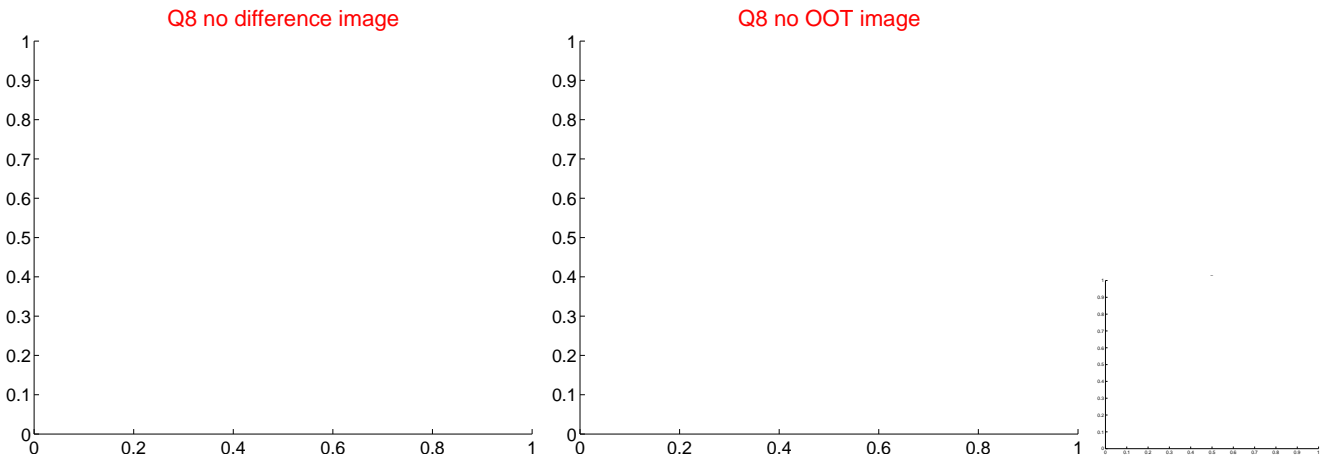
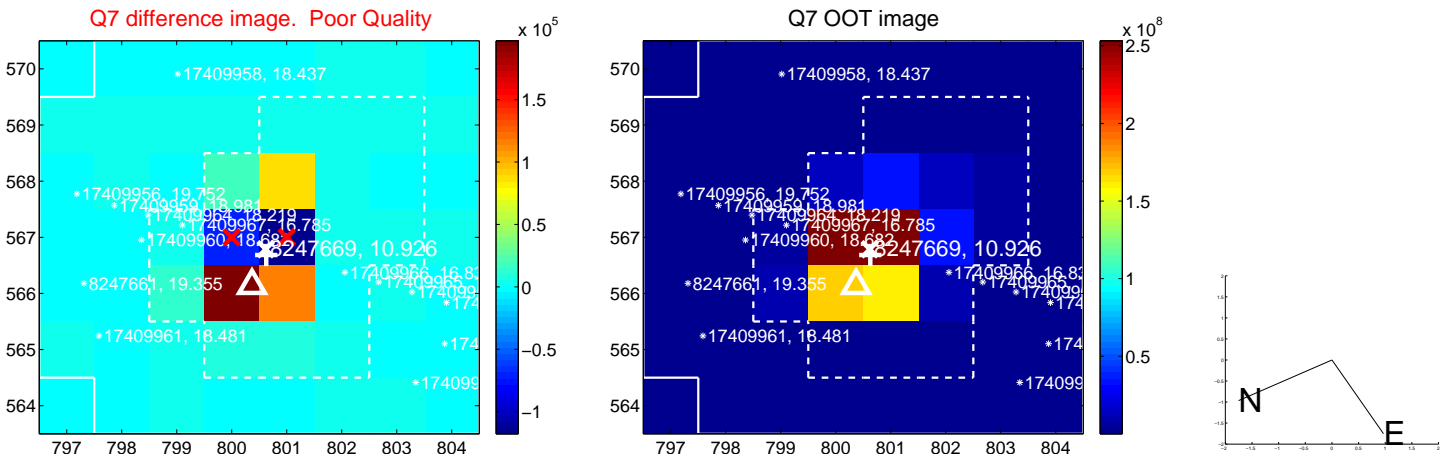
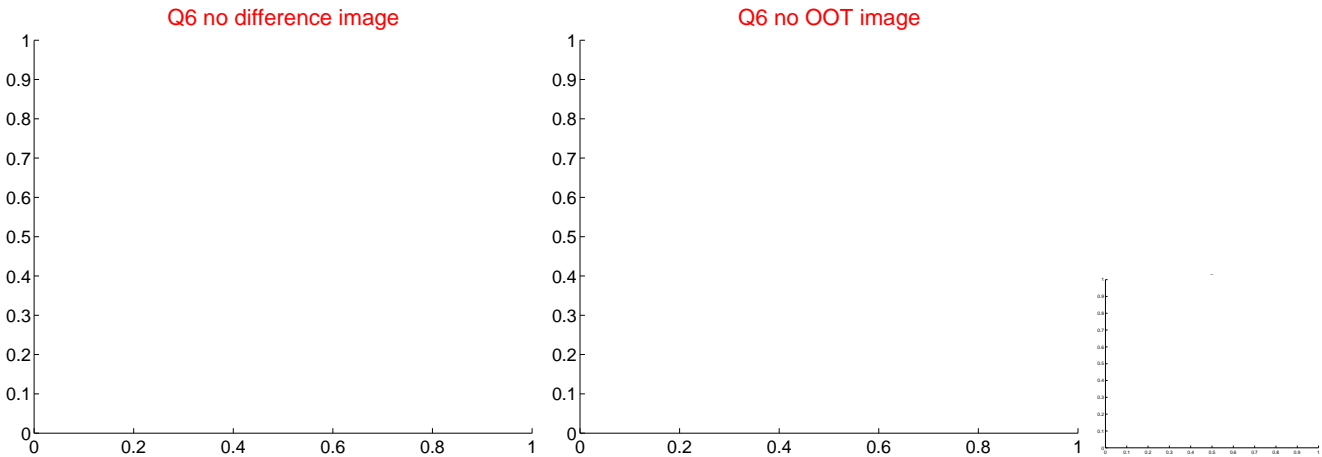
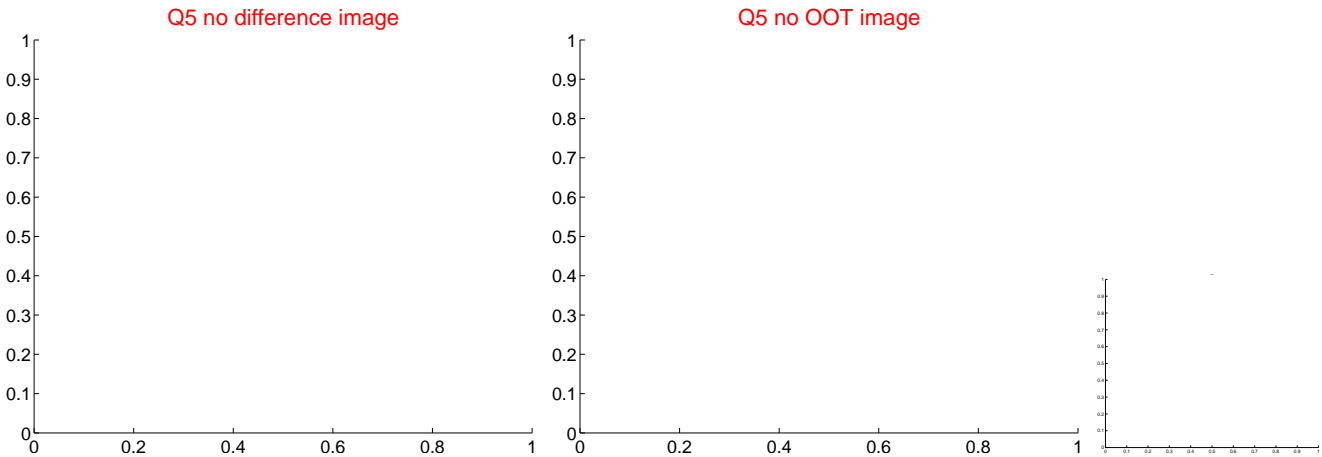


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets;** magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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



folded centroid time series figure for this object.

UKIRT Image

Declination

