

KIC 006672945

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})
006672945-01	OBS	No	269.414598	255.336439	220.1	3.141	7.4	7.0	1.37	5767	2.36	3.00

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
006672945-01	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_CHASES_SKYE—MOD_NONUNIQ_DV—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.

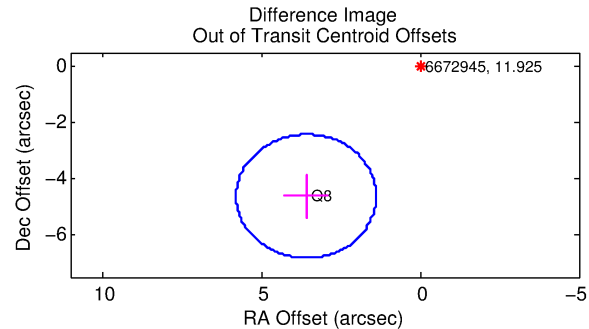
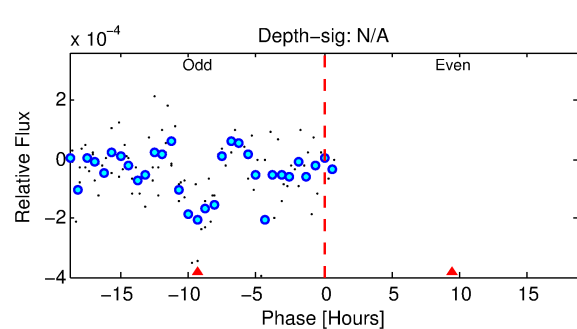
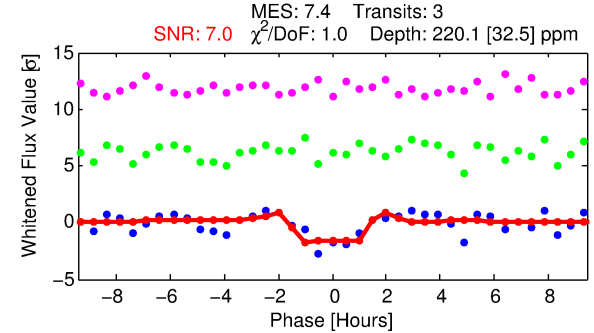
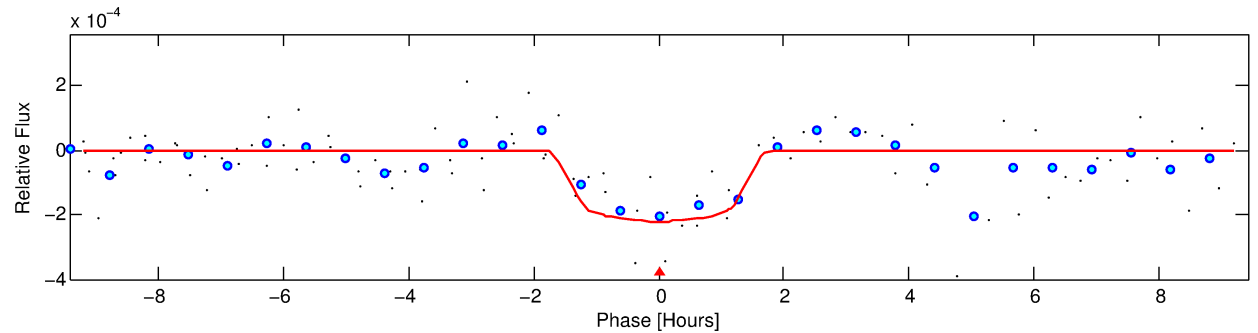
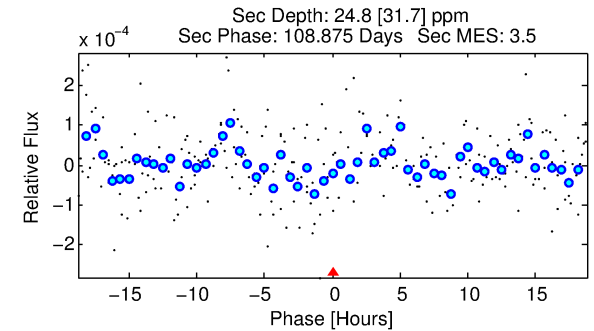
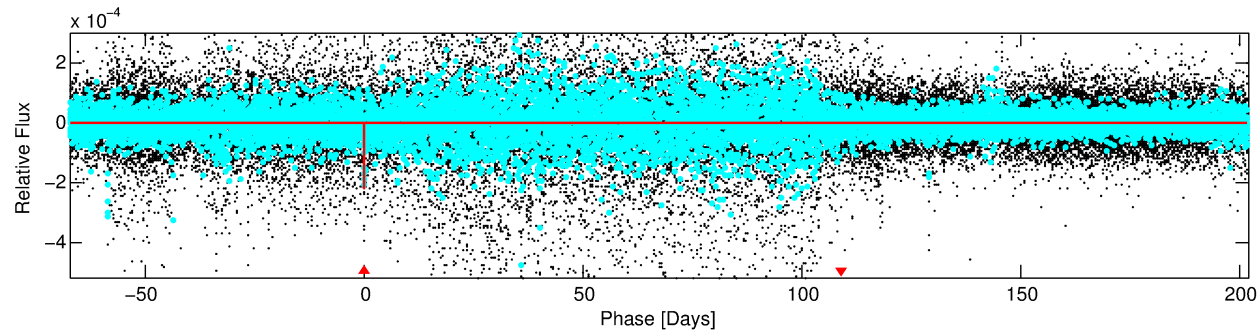
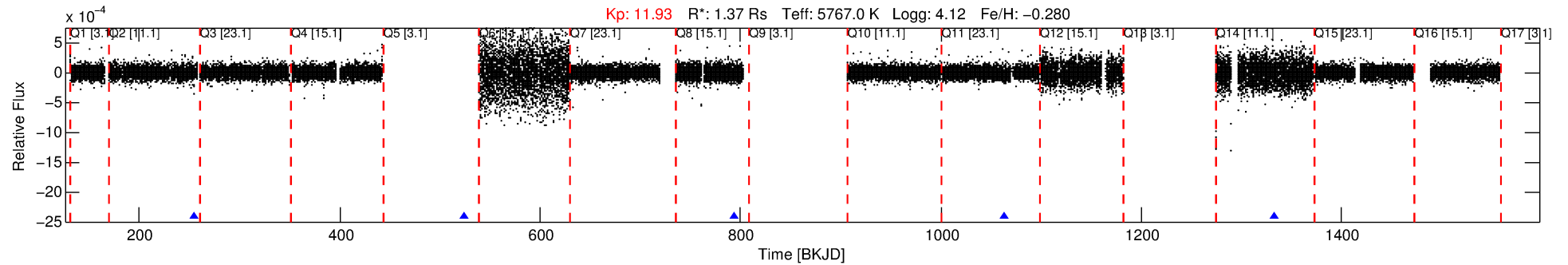
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 006672945-01

No Significant Match Found

DV One-Page Summary

KIC: 6672945 Candidate: 1 of 1 Period: 269.415 d



DV Fit Results:

Period = 269.41460 [0.00264] d
Epoch = 255.3364 [0.0068] BKJD
Rp/R* = 0.0158 [0.0310]
a/R* = 338.32 [3283.61]
b = 0.87 [2.65]
Seff = 3.00 [1.90]
Teq = 336 [53] K
Rp = 2.36 [4.70] Re
a = 0.7863 [0.2918] AU
Ag = 1516.50 [6339.49] [0.24σ]
Teffp = 3239 [3348] K [0.87σ]

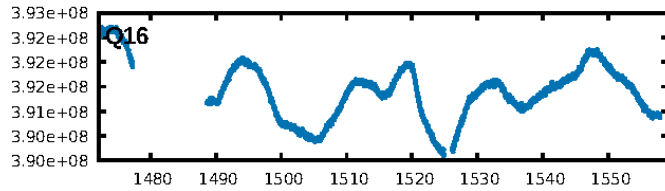
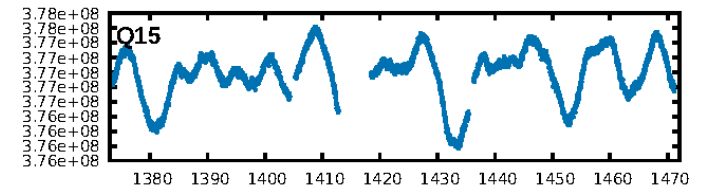
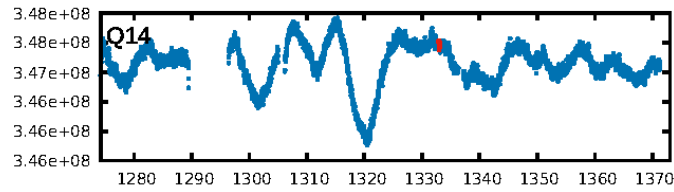
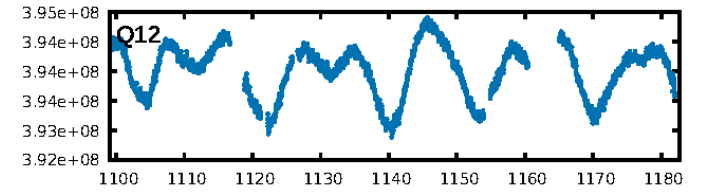
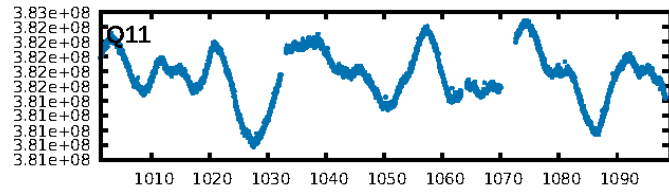
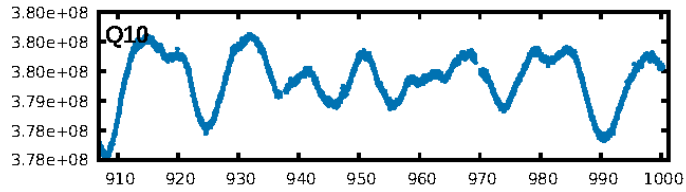
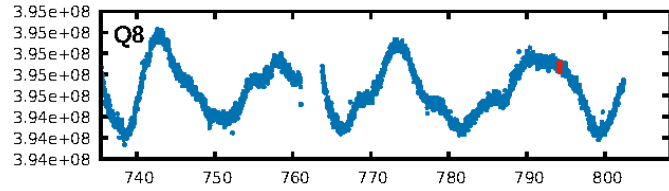
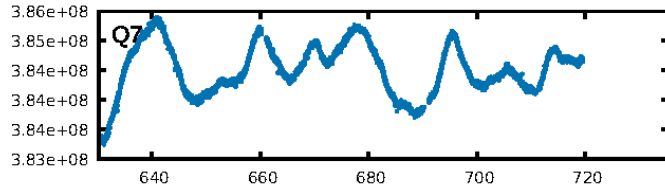
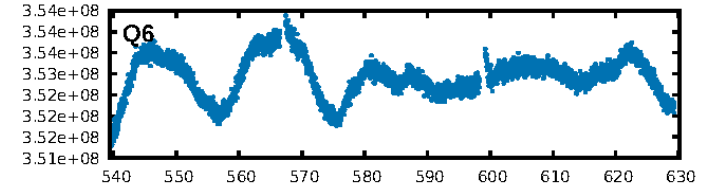
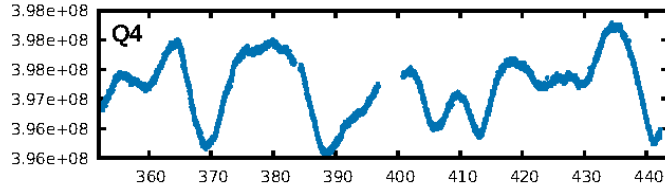
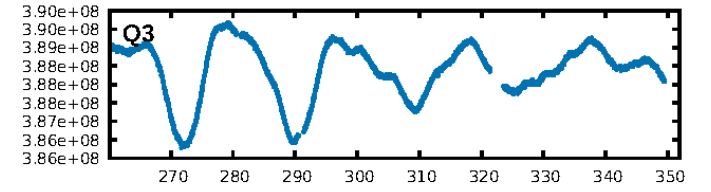
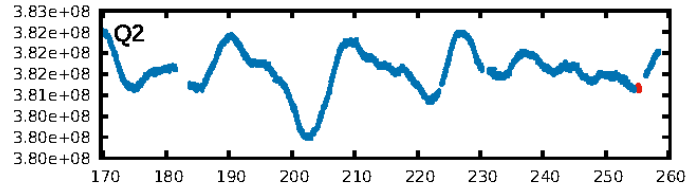
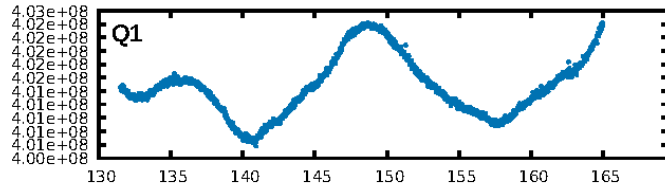
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: 19.4%
ModelChiSquareGof-sig: 66.4%
Bootstrap-pfa: 1.29e-08
RollingBand-fgt: 1.00 [3/3]
GhostDiagnostic-chr: -6.13
Centroid-sig: 18.7%
Centroid-so: 1.109 arcsec [1.12σ]
OotOffset-rm: 5.848 arcsec [7.97σ]
KicOffset-rm: 5.792 arcsec [7.94σ]
OotOffset-st: 0/0/1/0 [1]
KicOffset-st: 0/0/1/0 [1]
DiffImageQuality-fgm: 0.00 [0/1]
DiffImageOverlap-fno: 1.00 [2/2]

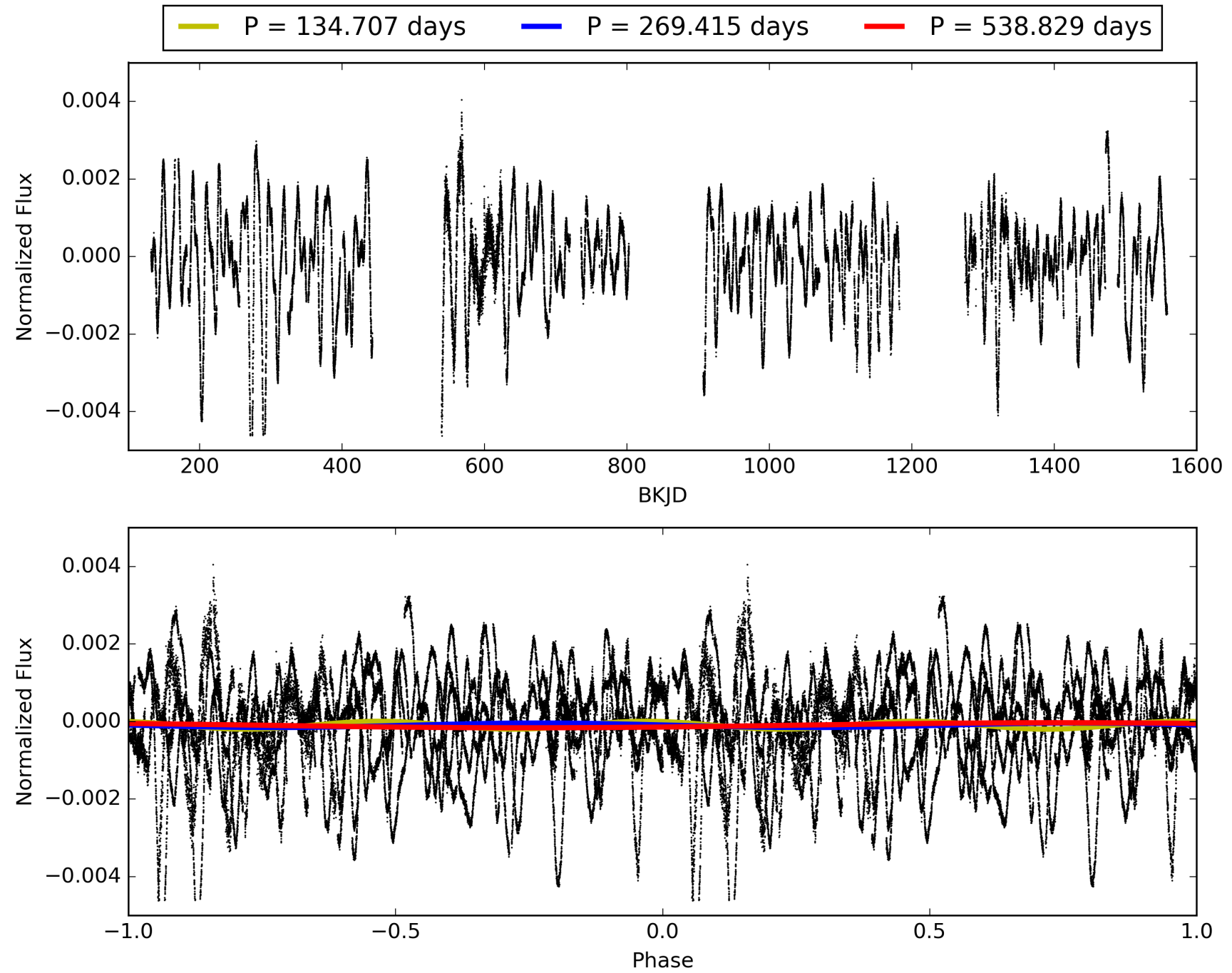
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 31-Jan-2016 21:00:27 Z

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

TCE 006672945-01, PDC Light Curves

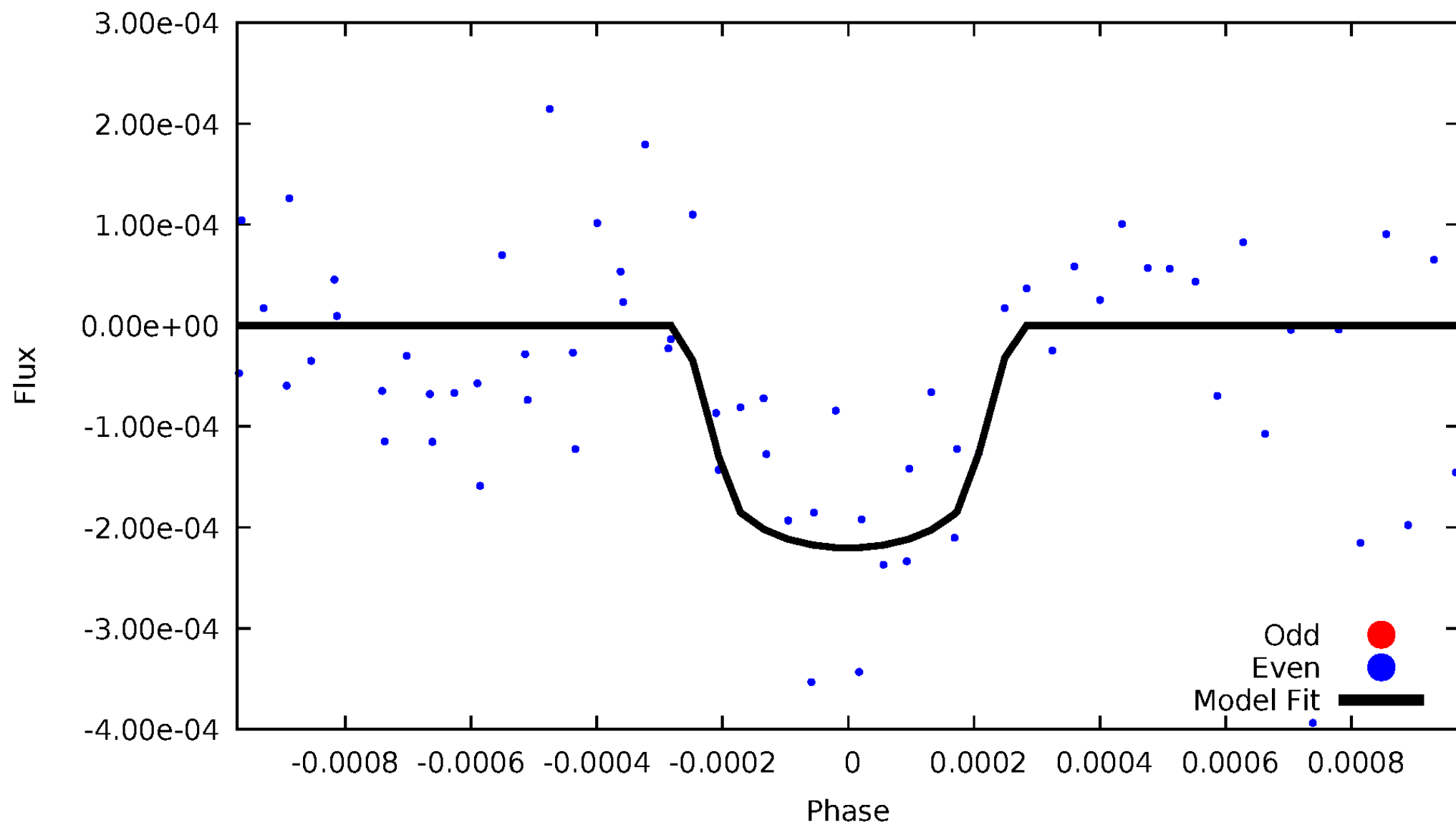


TCE 006672945-01



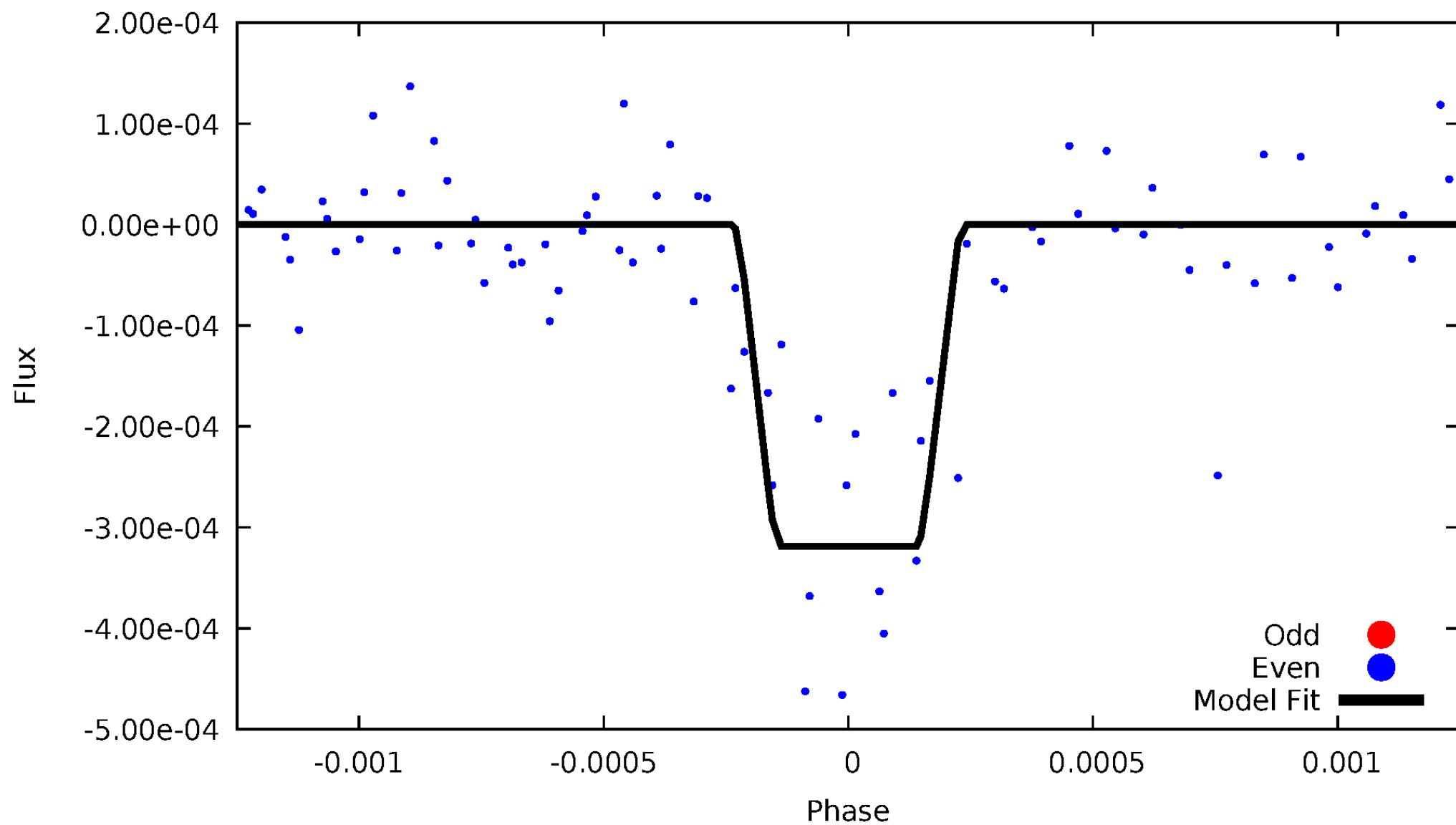
DV Odd/Even

TCE 006672945-01



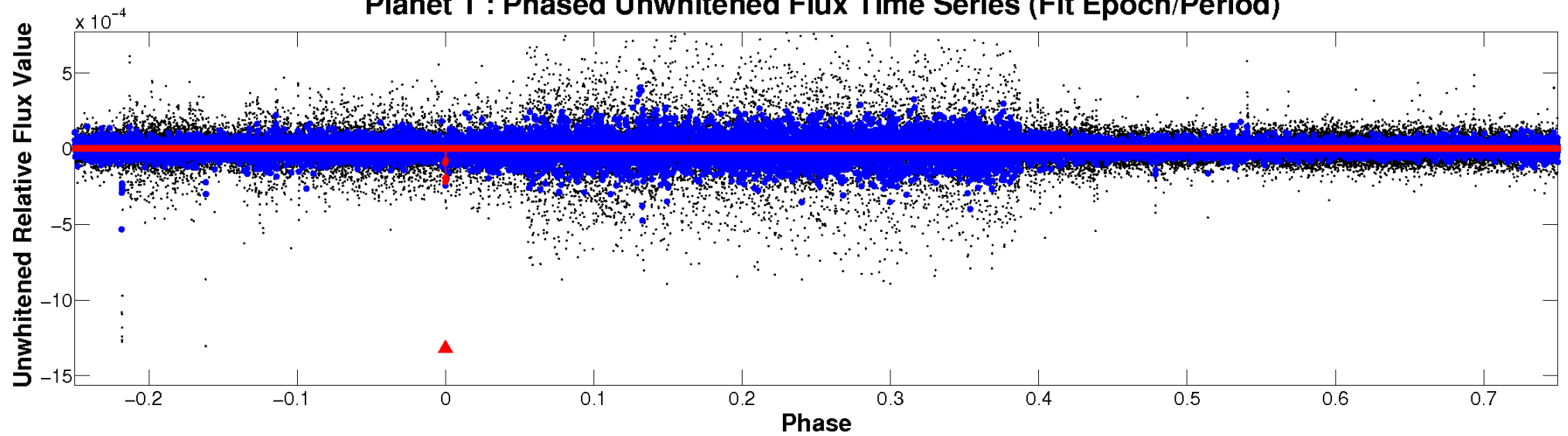
ALT Odd/Even

TCE 006672945-01

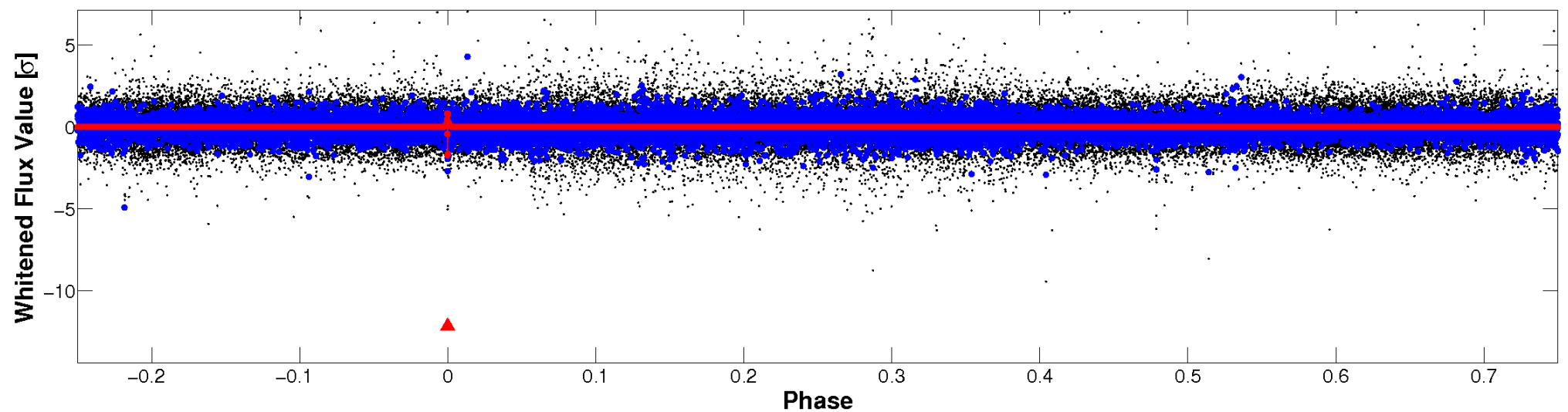


Non-Whitened Vs. Whitened Light Curve

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

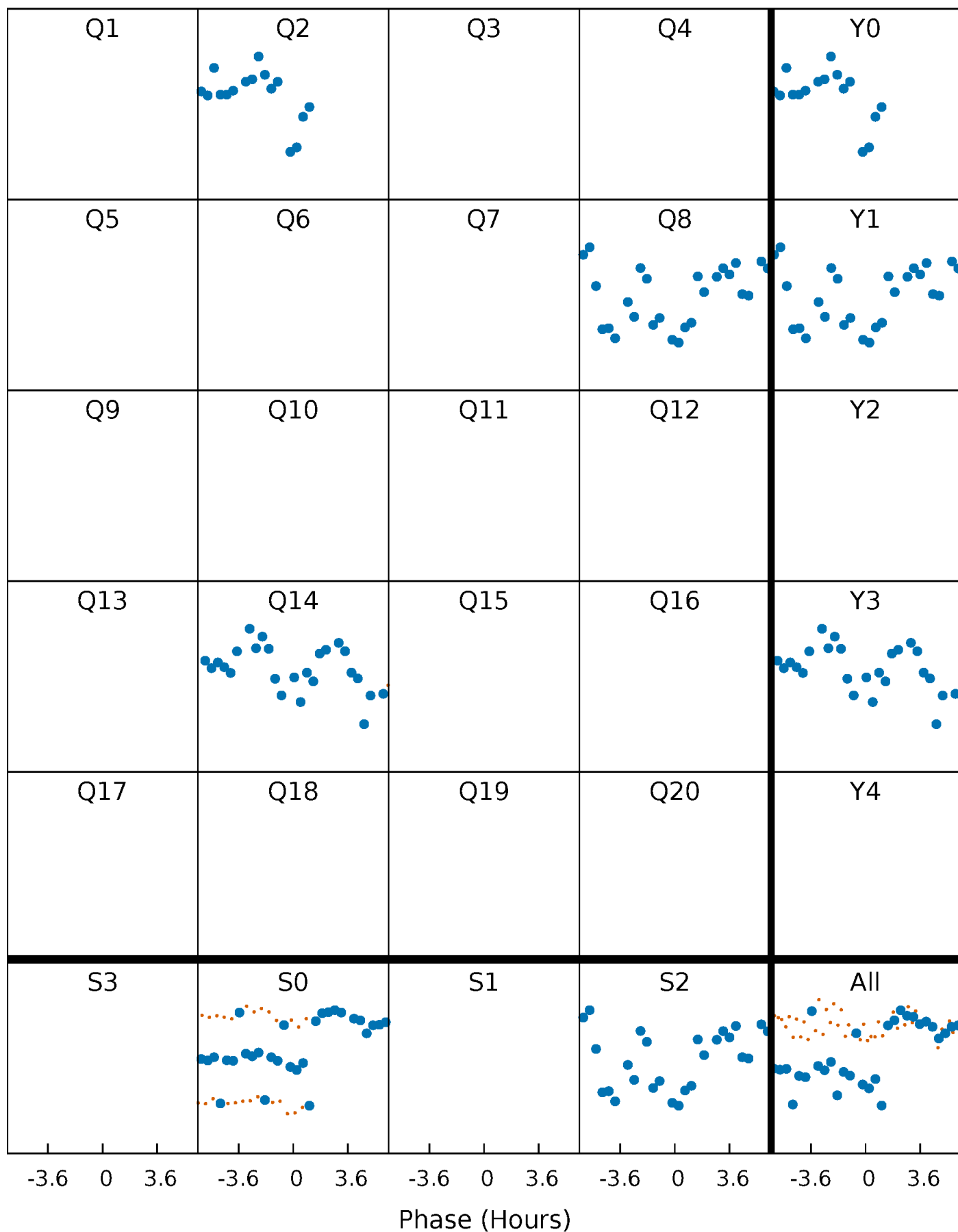


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



PDC Quarter-Phased Transit Curves

TCE 006672945-01 P=269.414598 Days $T_0=255.336439$ (BKJD)



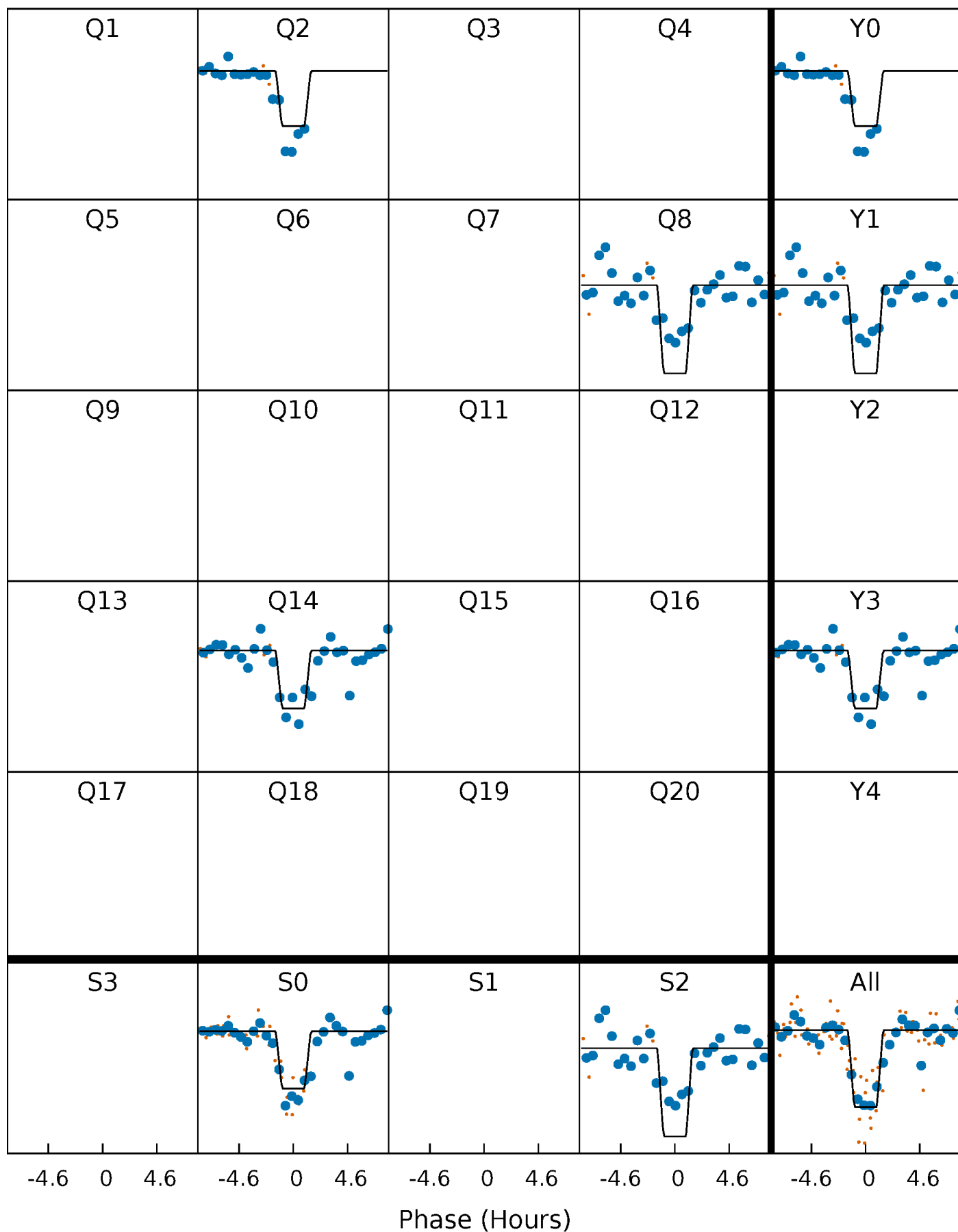
DV Quarter-Phased Transit Curves

TCE 006672945-01 P=269.414598 Days $T_0=255.336439$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

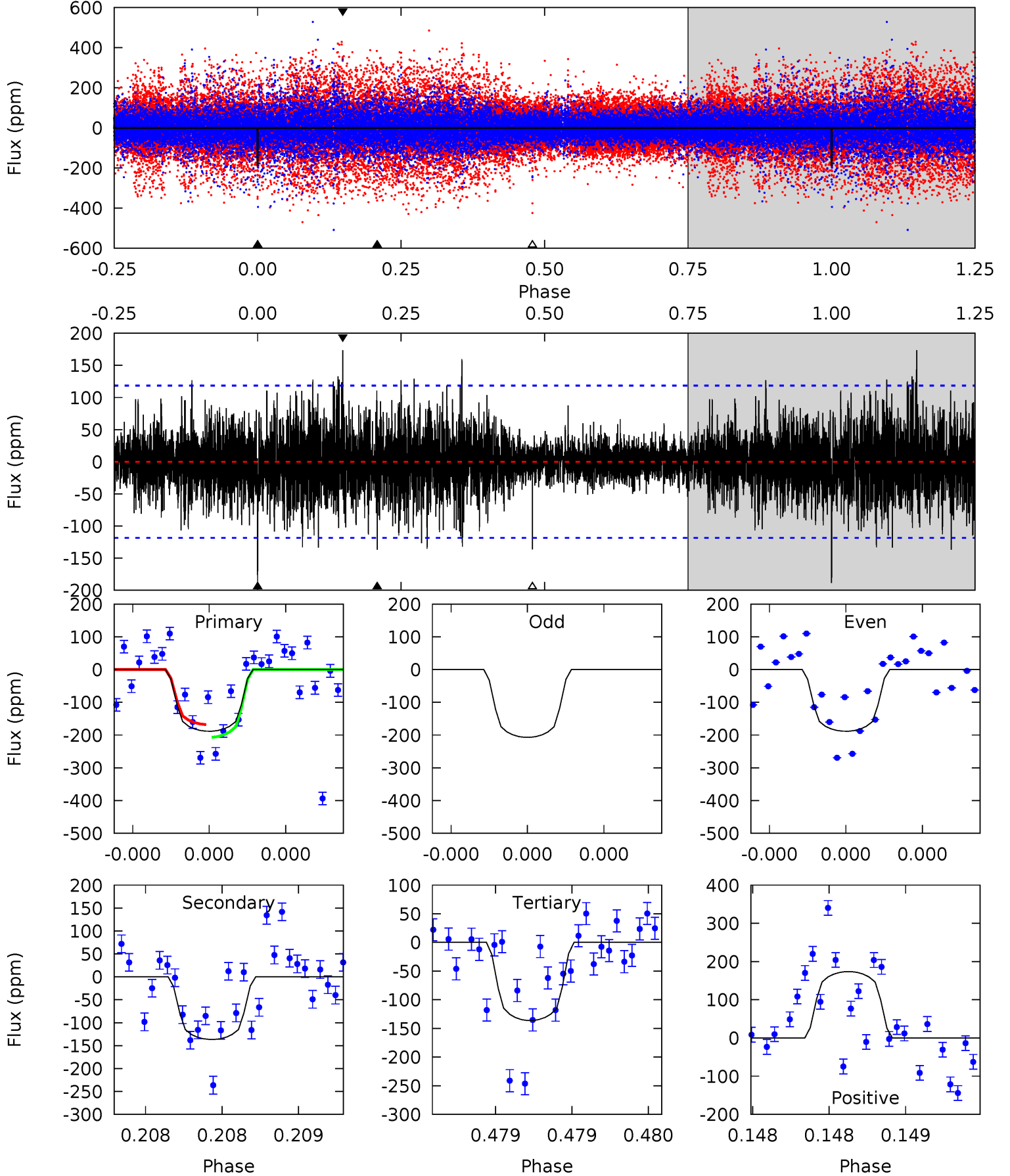
TCE 006672945-01 P=269.411497 Days $T_0=255.344383$ (BKJD)



DV Model-Shift Uniqueness Test

006672945-01, P = 269.414598 Days, E = 255.336439 Days

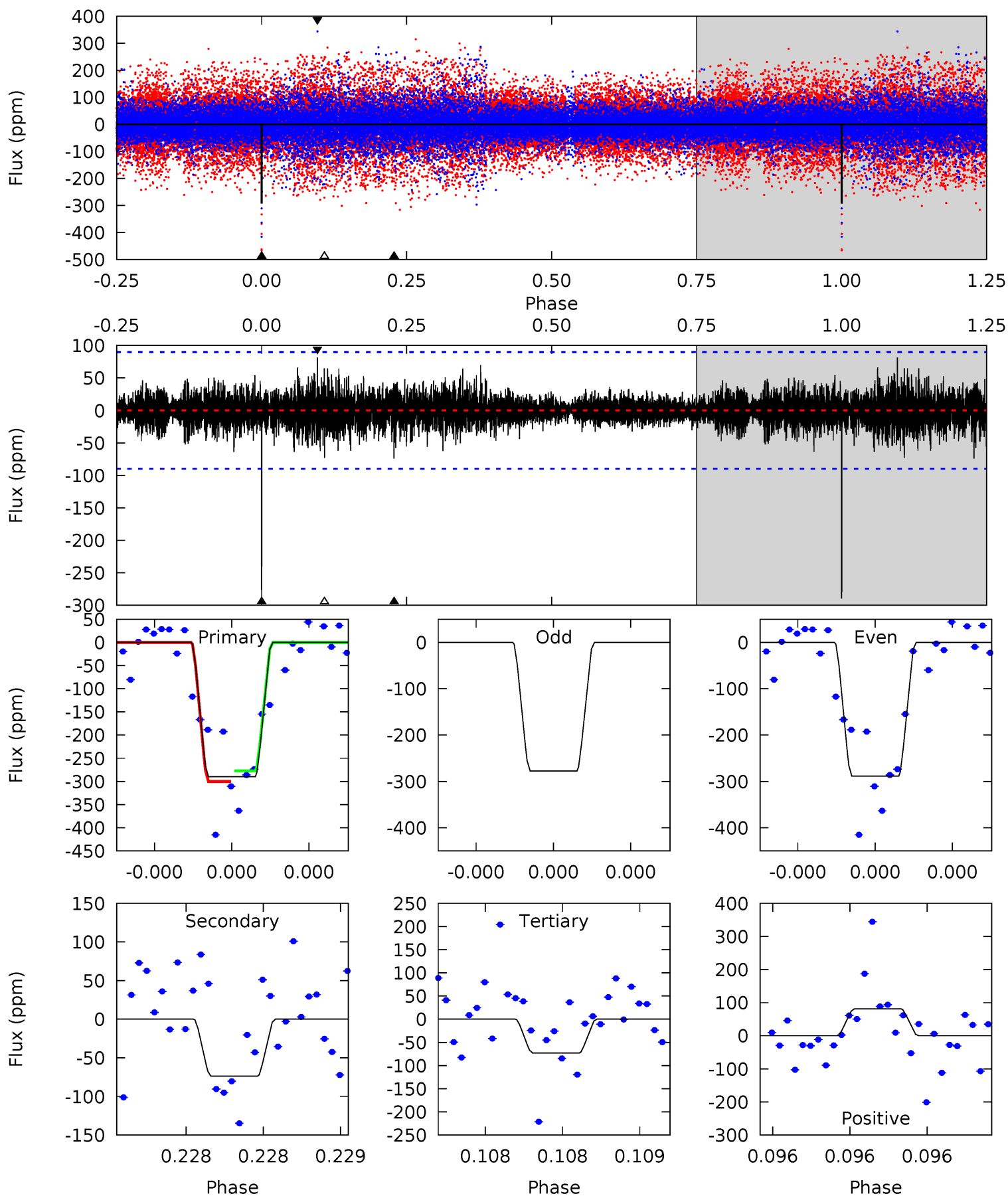
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
8.87	6.43	6.41	8.18	5.58	3.48	1.50	2.46	0.69	0.02	-1.75	0.48	1.12	0.48	0.91



Alt Model-Shift Uniqueness Test

006672945-01, P = 269.411497 Days, E = 255.344383 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
18.0	4.59	4.53	5.05	5.59	3.51	0.91	13.5	13.0	0.05	-0.46	0.36	0.93	0.22	0.68



Stellar Parameters For KIC 006672945

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	5767^{+138}_{-155}	$4.116^{+0.378}_{-0.162}$	$-0.280^{+0.300}_{-0.250}$	$1.369^{+0.388}_{-0.475}$	$0.893^{+0.120}_{-0.087}$	$0.490^{+1.339}_{-0.235}$
	+2%/-3%	+9%/-4%	+107%/-89%	+28%/-35%	+13%/-10%	+273%/-48%
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 006672945-01 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	-136 ± 21	$4.16^{+3.59}_{-2.81}$	460^{+35}_{-46}	3953^{+2312}_{-725}	2728^{+23038}_{-1940}
Alt.	-74 ± 16	$4.09^{+3.72}_{-2.79}$	463^{+37}_{-44}	3590^{+2022}_{-630}	1509^{+12659}_{-1091}

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 $A_{obs} \gg 1.0$

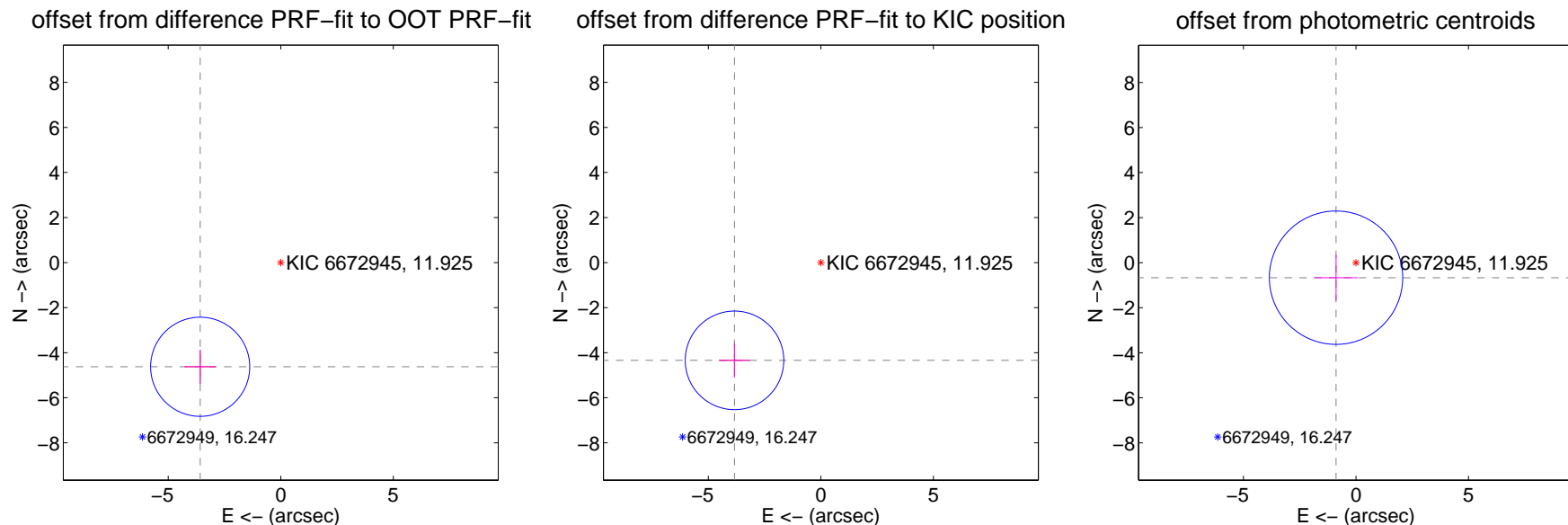
DV Centroid Data

Supplemental centroid analysis for 006672945-01. **Kepler magnitude: 11.93.** Transit SNR 6.98

There are 0 quarters with good PRF difference image offsets

The direct PRF centroid is offset from the target star catalog position by about 0.38 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	5.848 \pm 0.734	7.97	3.578 \pm 0.692	-4.625 \pm 0.757
PRF-fit source offset from KIC position	5.792 \pm 0.729	7.94	3.835 \pm 0.692	-4.340 \pm 0.757
photometric centroid source offset	1.11 \pm 0.99	1.12	0.89 \pm 0.97	-0.67 \pm 1.02

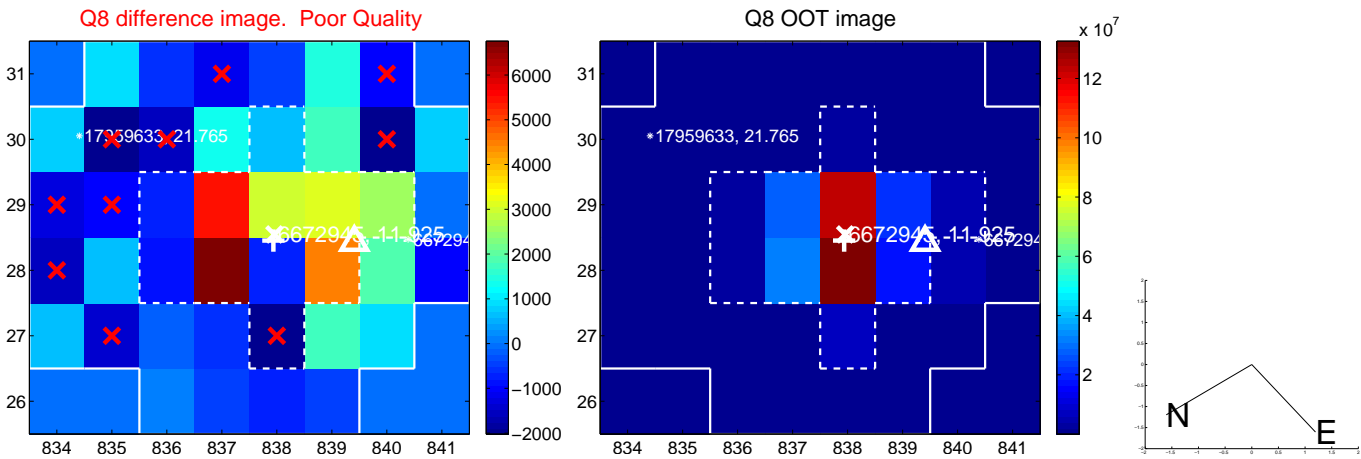


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets;** magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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



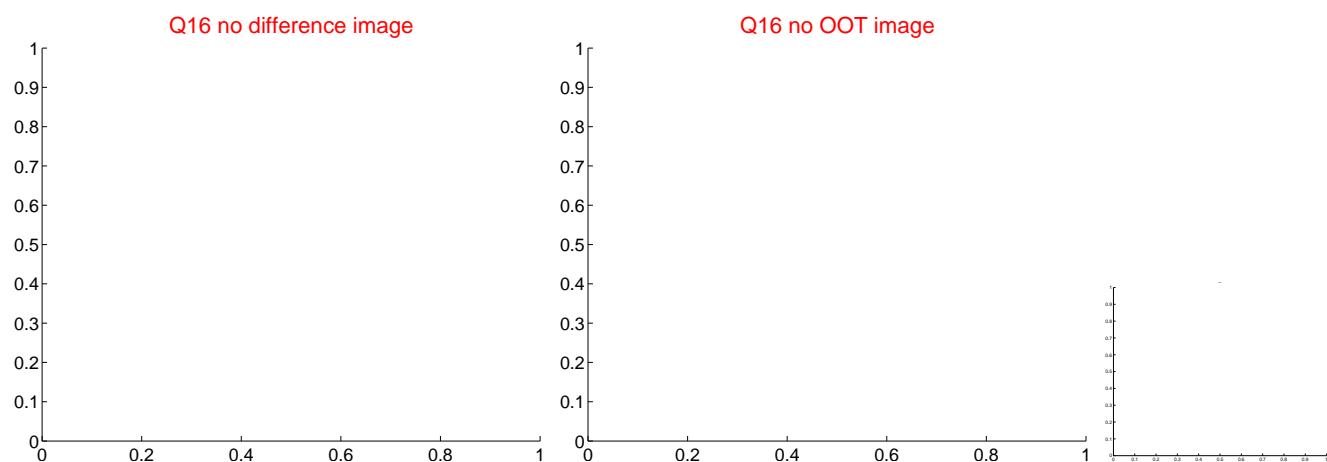
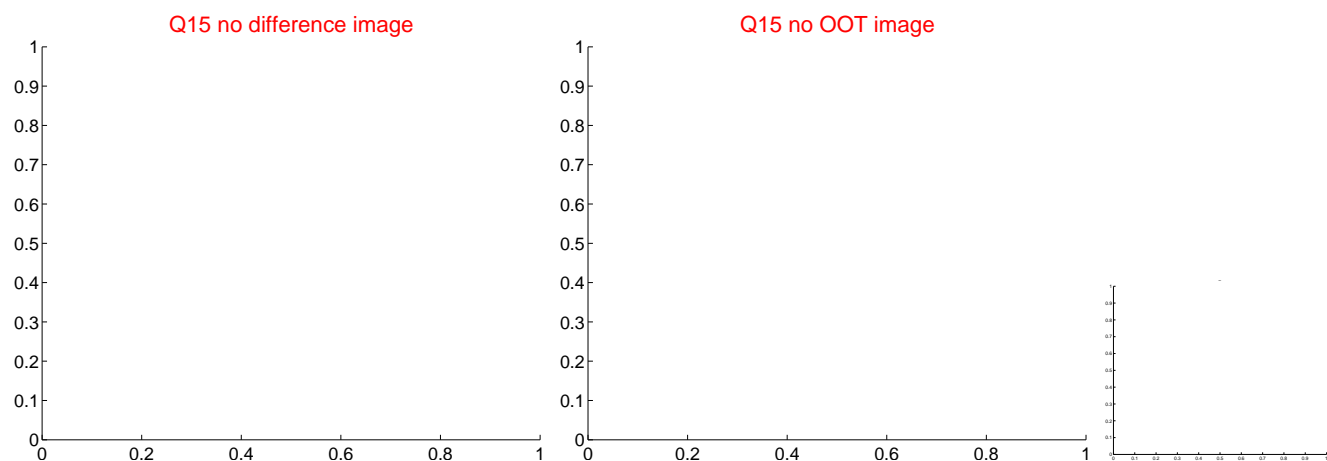
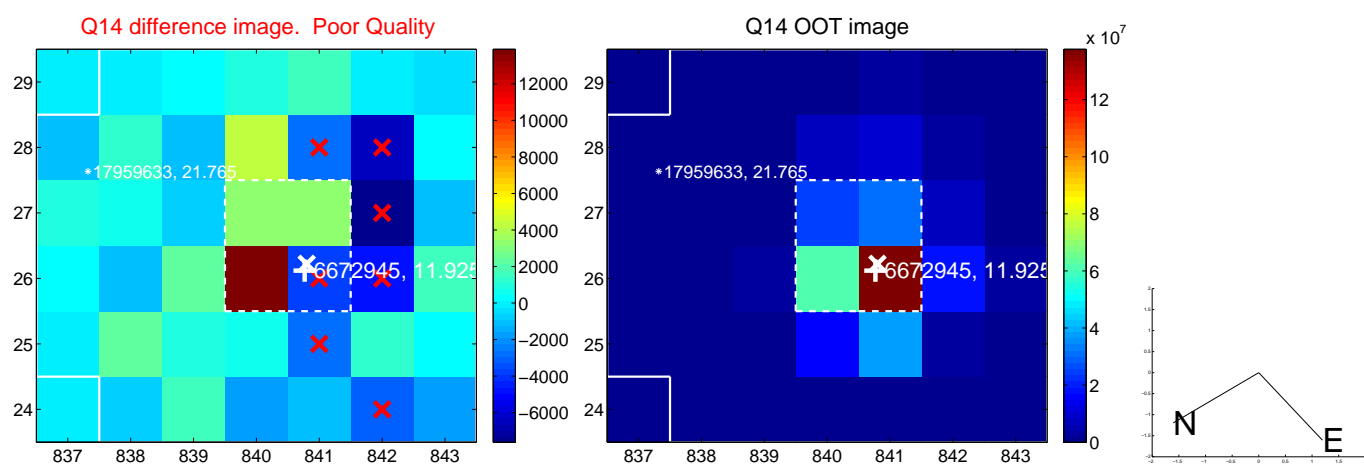
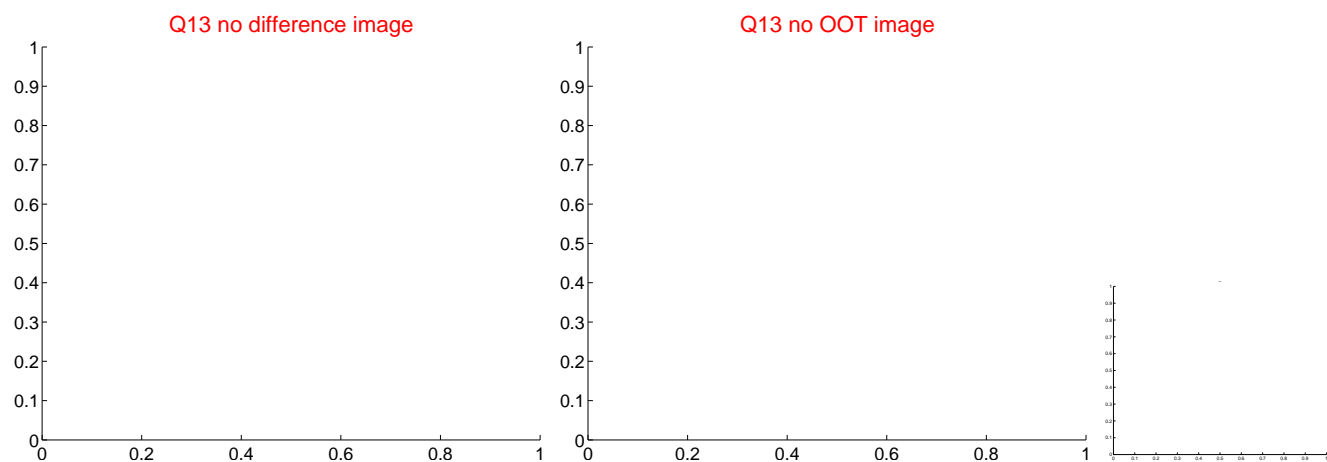
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



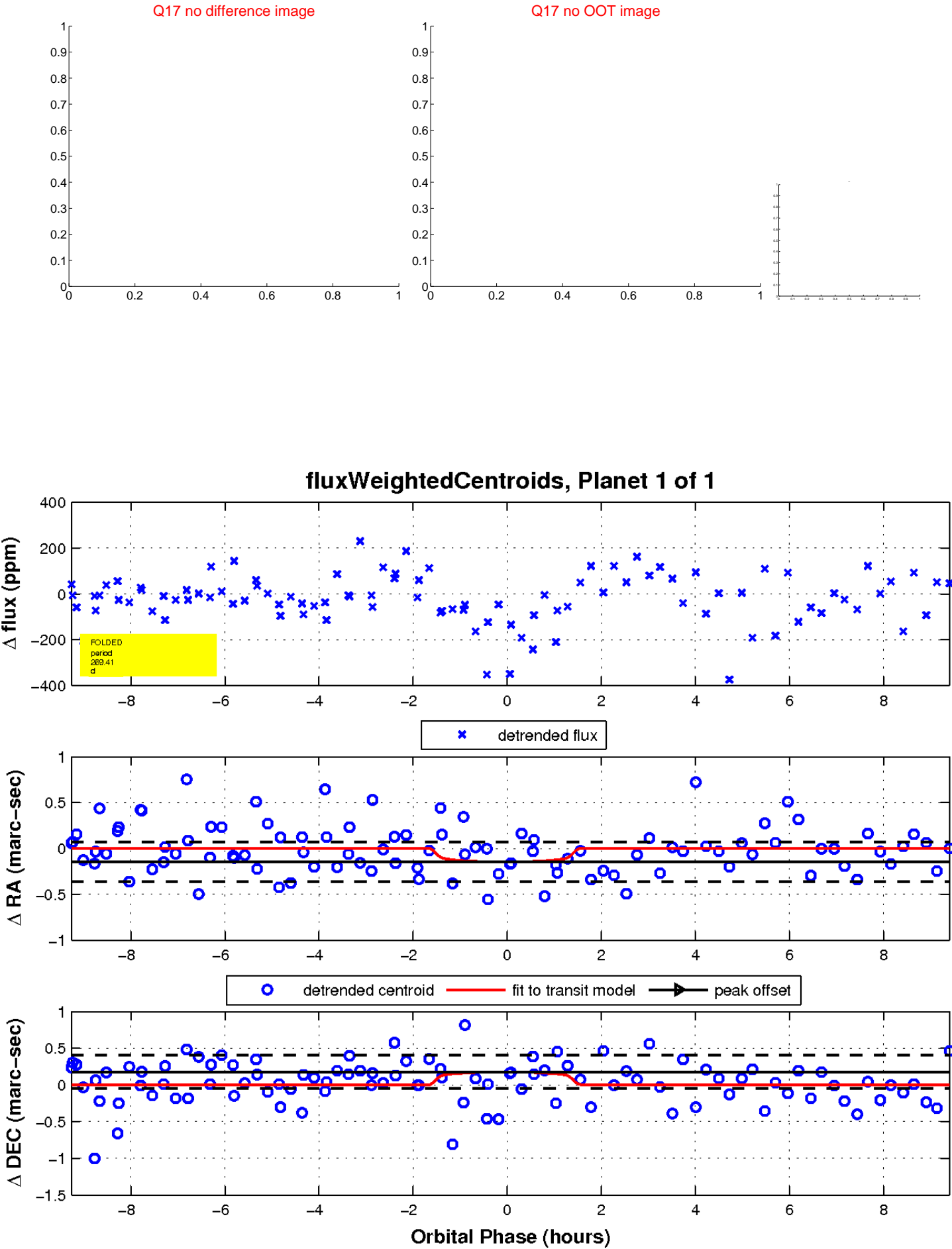
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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UKIRT Image

