

KIC 007694634

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})
007694634-01	OBS	No	369.686250	231.452609	1561.0	20.419	8.2	13.6	0.61	4388	4.84	0.17

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
007694634-01	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_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.

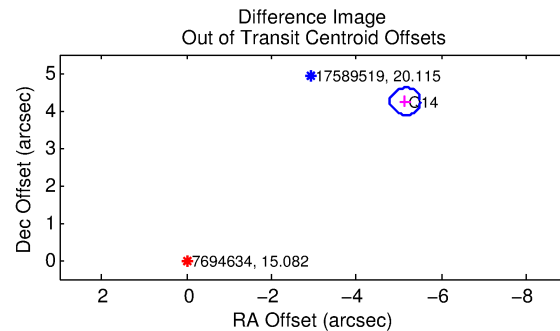
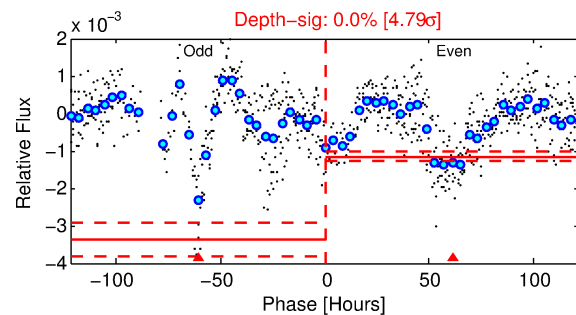
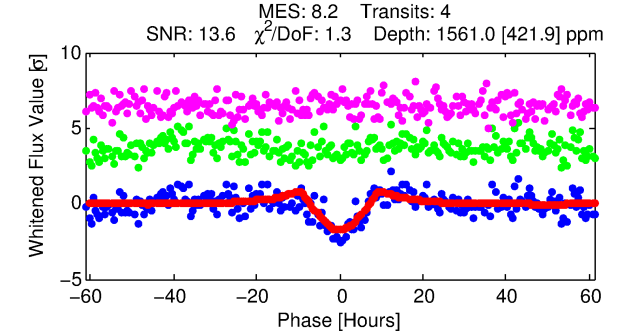
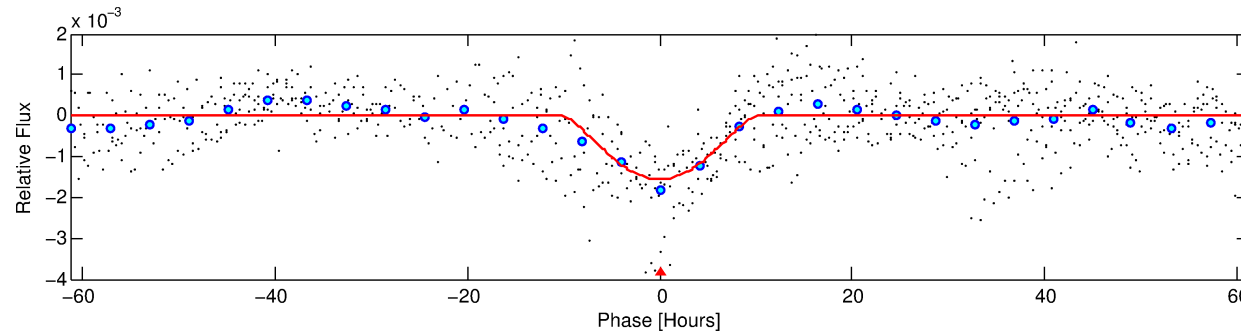
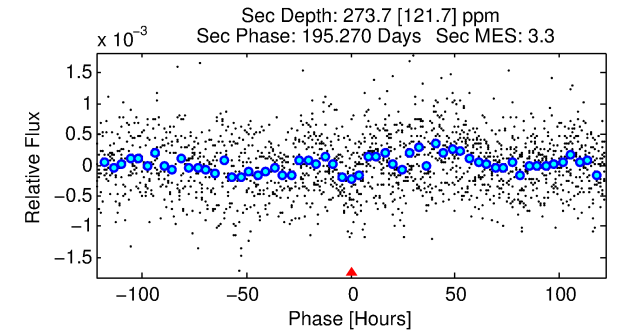
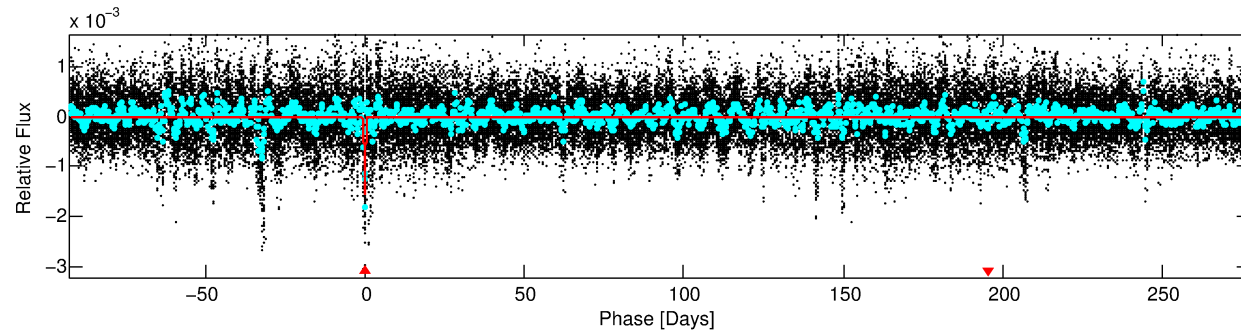
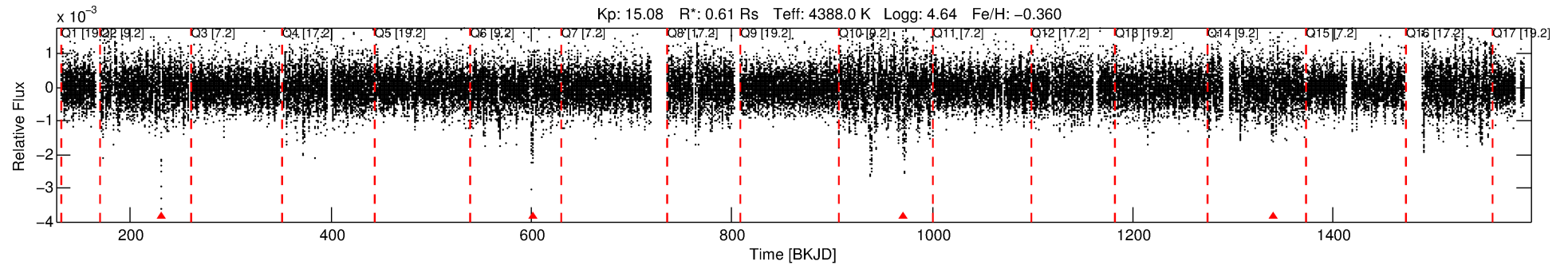
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 007694634-01

No Significant Match Found

DV One-Page Summary

KIC: 7694634 Candidate: 1 of 1 Period: 369.686 d



DV Fit Results:

Period = 369.68625 [0.01512] d
Epoch = 231.4526 [0.0284] BKJD
Rp/R* = 0.0724 [0.1501]
a/R* = 53.62 [23.93]
b = 1.00 [0.20]
Seff = 0.17 [0.03]
Teq = 164 [6] K
Rp = 4.84 [10.03] Re
a = 0.8507 [0.0606] AU
Ag = 4655.03 [19401.76] [0.24σ]
Teff = 2097 [2185] K [0.88σ]

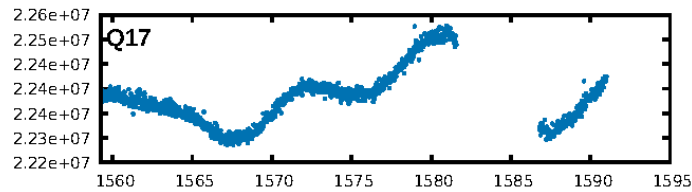
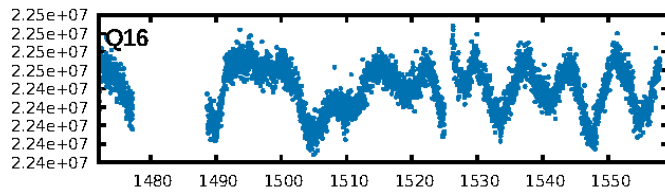
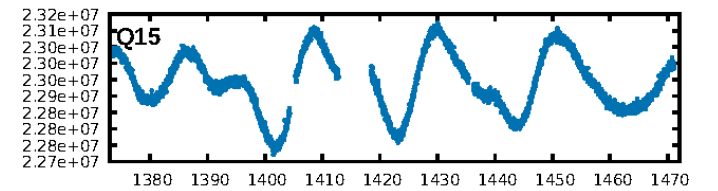
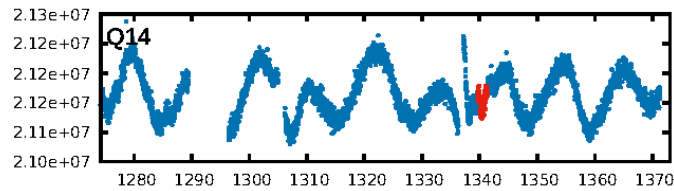
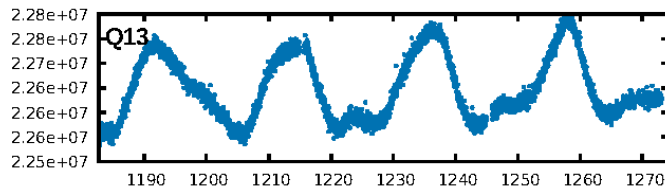
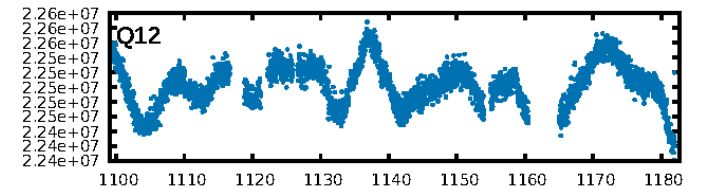
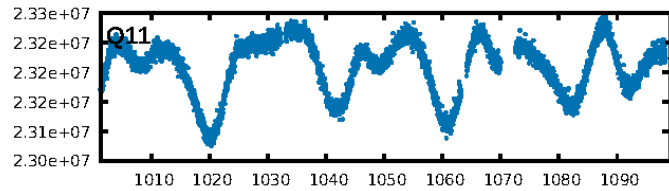
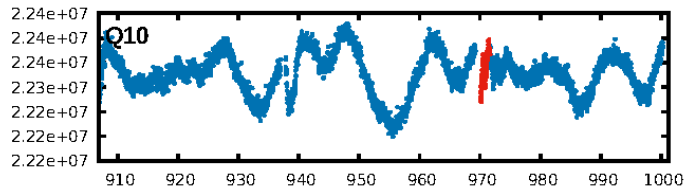
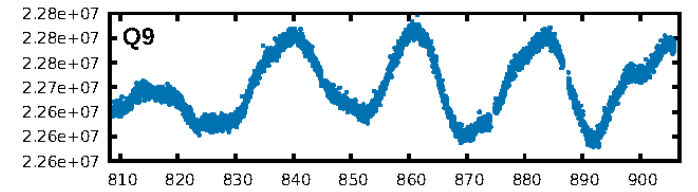
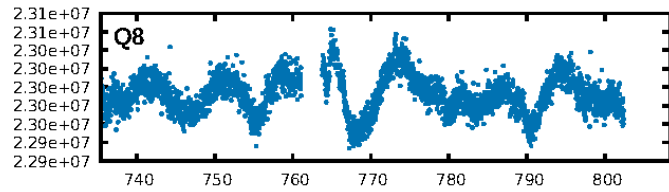
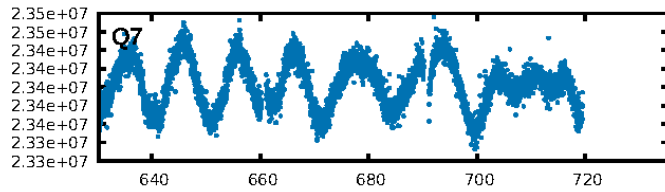
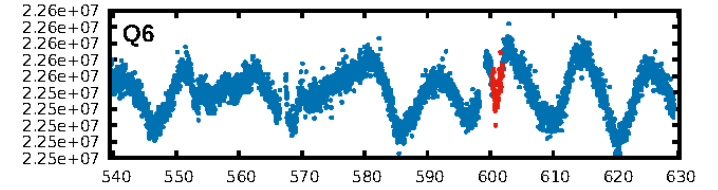
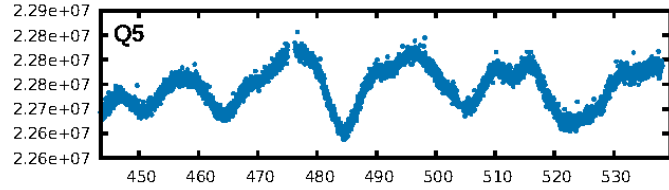
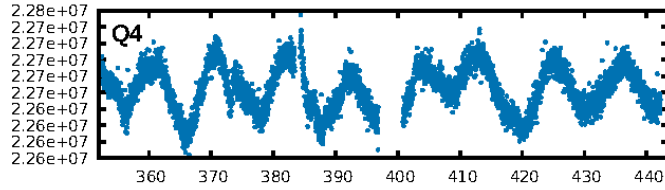
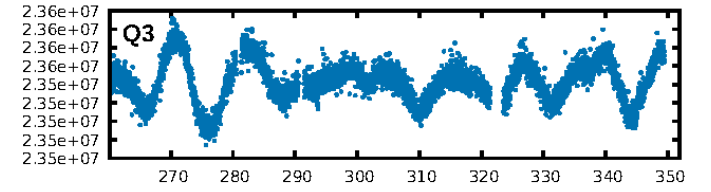
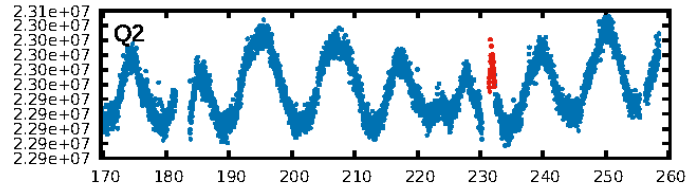
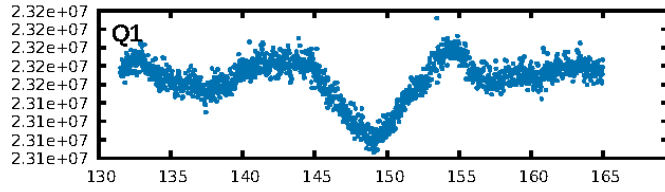
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: 0.0%
ModelChiSquareGoF-sig: 98.8%
Bootstrap-pfa: 4.29e-10
RollingBand-fgt: 0.00 [0/4]
GhostDiagnostic-chr: -4.068
Centroid-sig: 2.5%
Centroid-so: 1.365 arcsec [1.40σ]
OotOffset-rm: 6.681 arcsec [55.95σ]
KicOffset-rm: 6.721 arcsec [56.23σ]
OotOffset-st: 1/0/0/0 [1]
KicOffset-st: 1/0/0/0 [1]
DiffImageQuality-fgm: 0.00 [0/1]
DiffImageOverlap-fno: 1.00 [1/1]

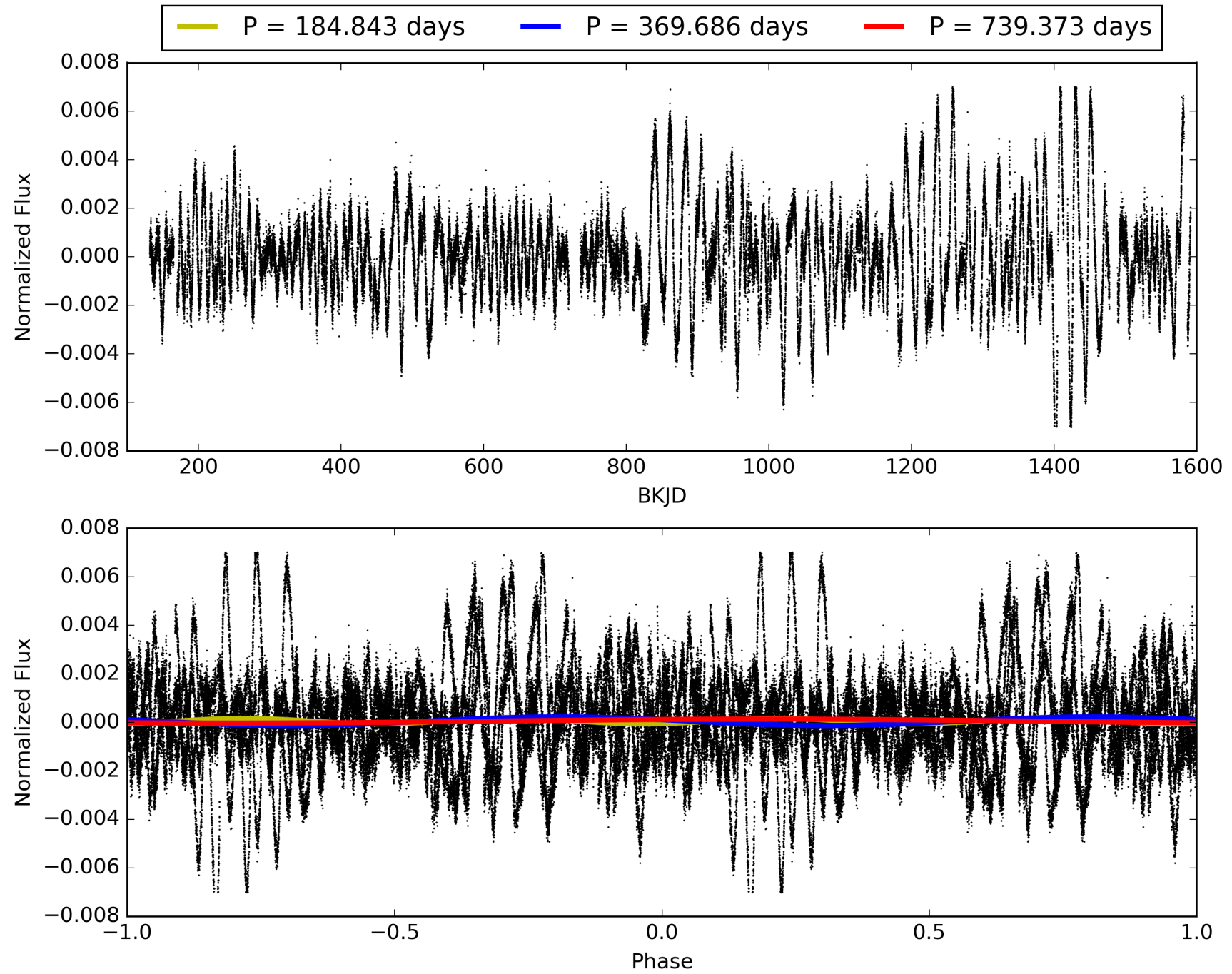
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 29-Jan-2016 01:22:15 Z

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

TCE 007694634-01, PDC Light Curves

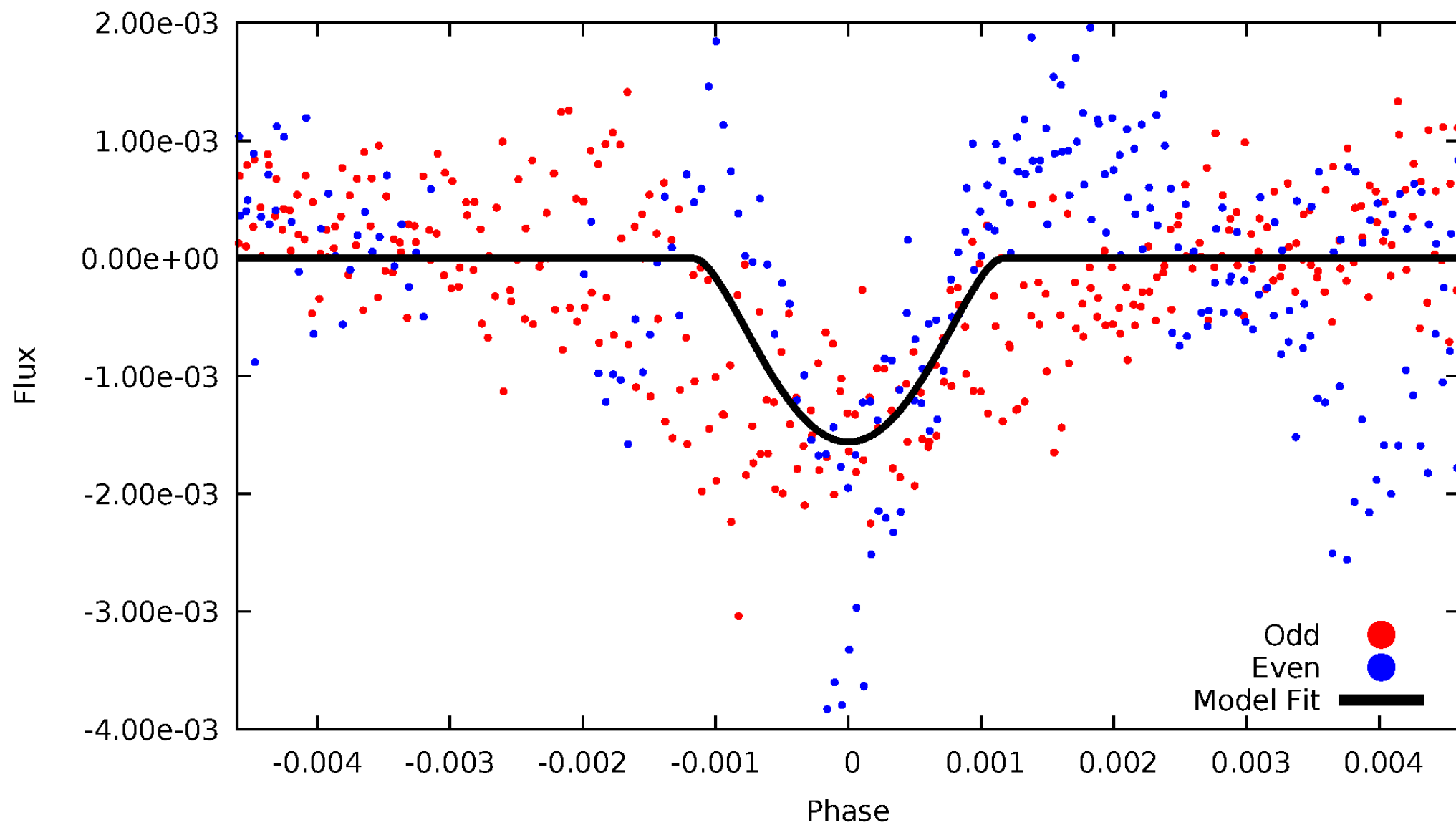


TCE 007694634-01



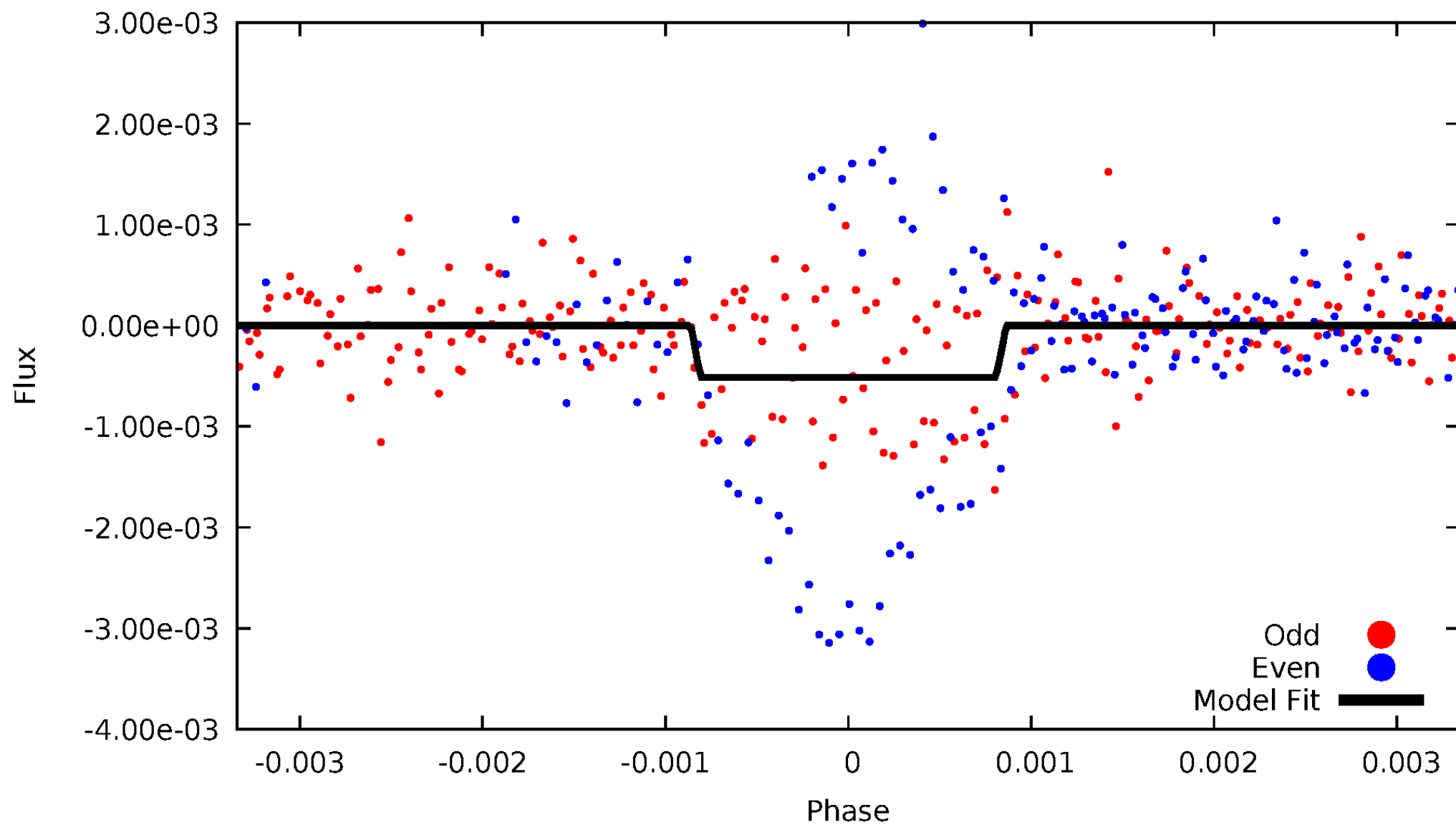
DV Odd/Even

TCE 007694634-01



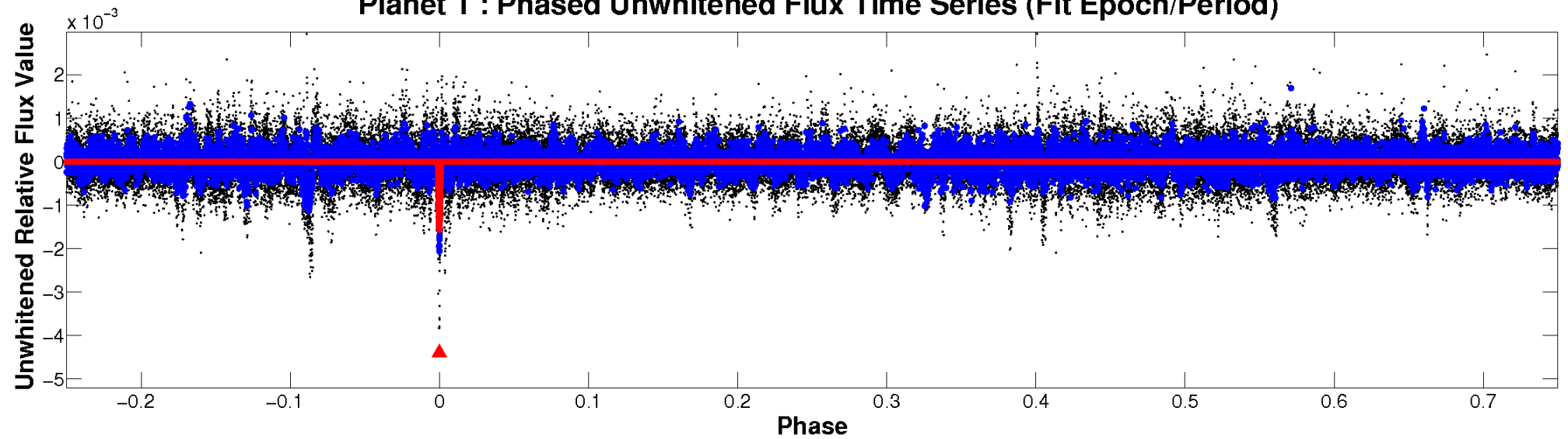
ALT Odd/Even

TCE 007694634-01

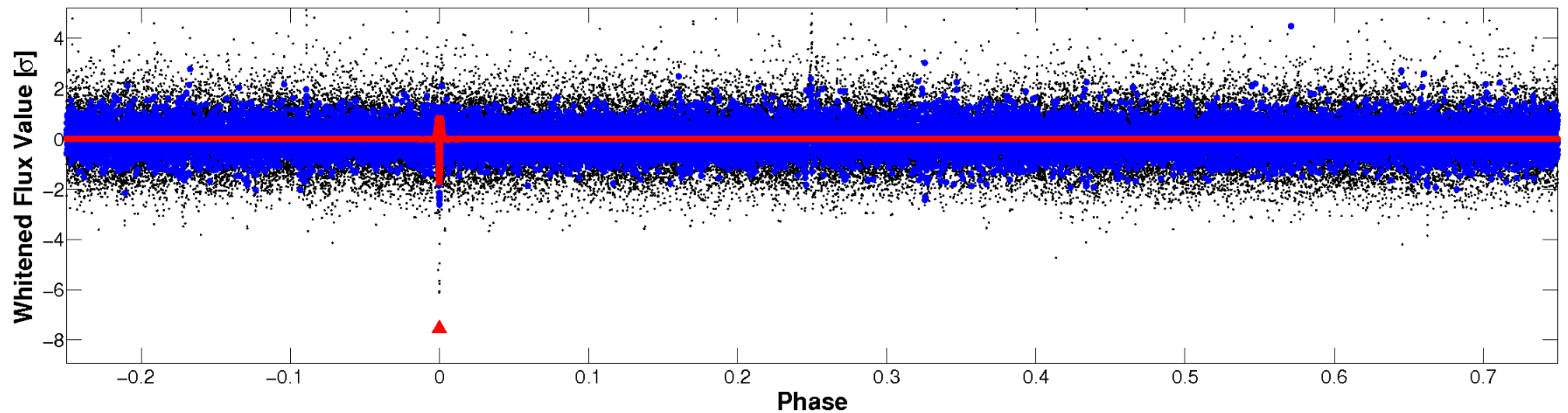


Non-Whitened Vs. Whitened Light Curve

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

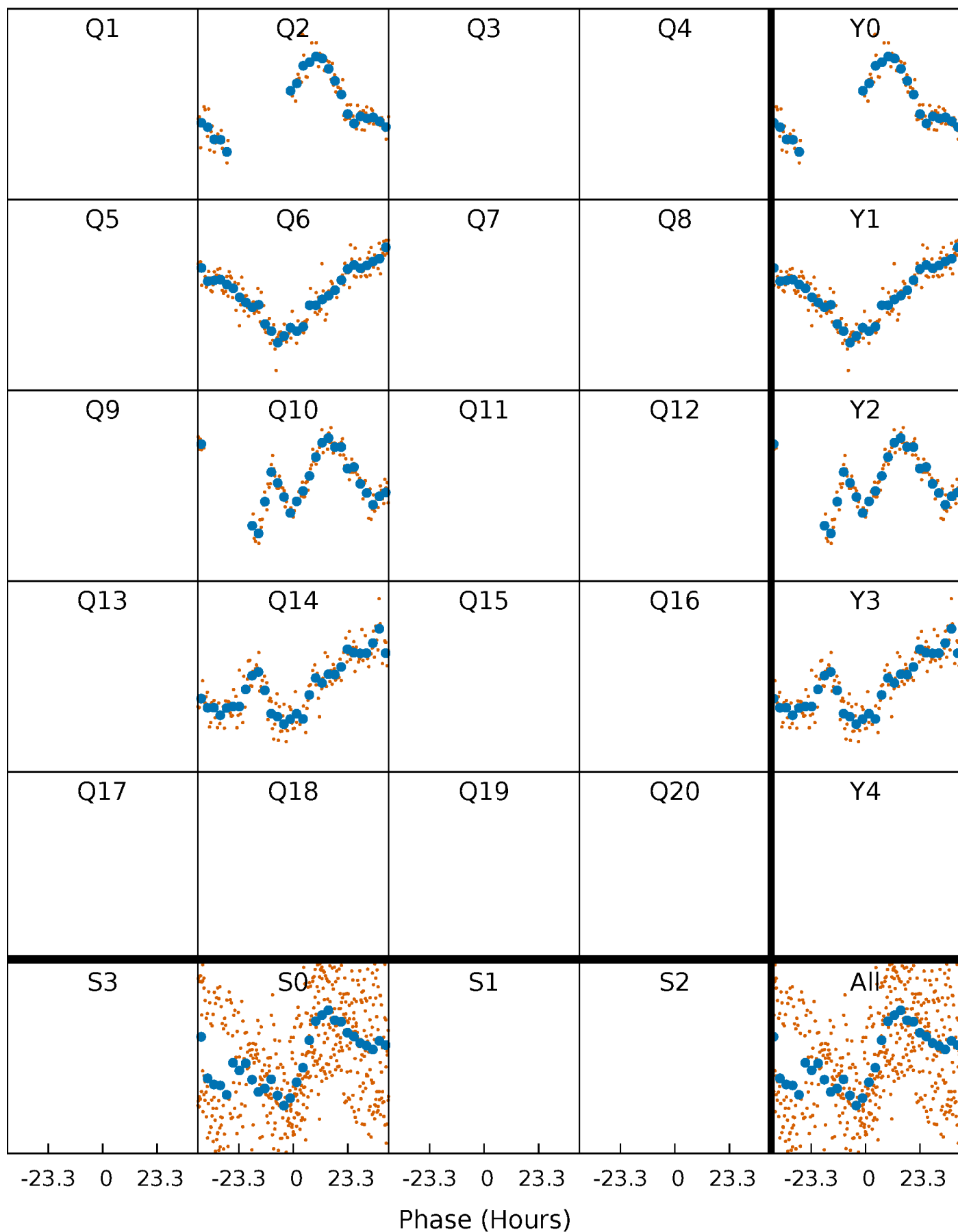


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



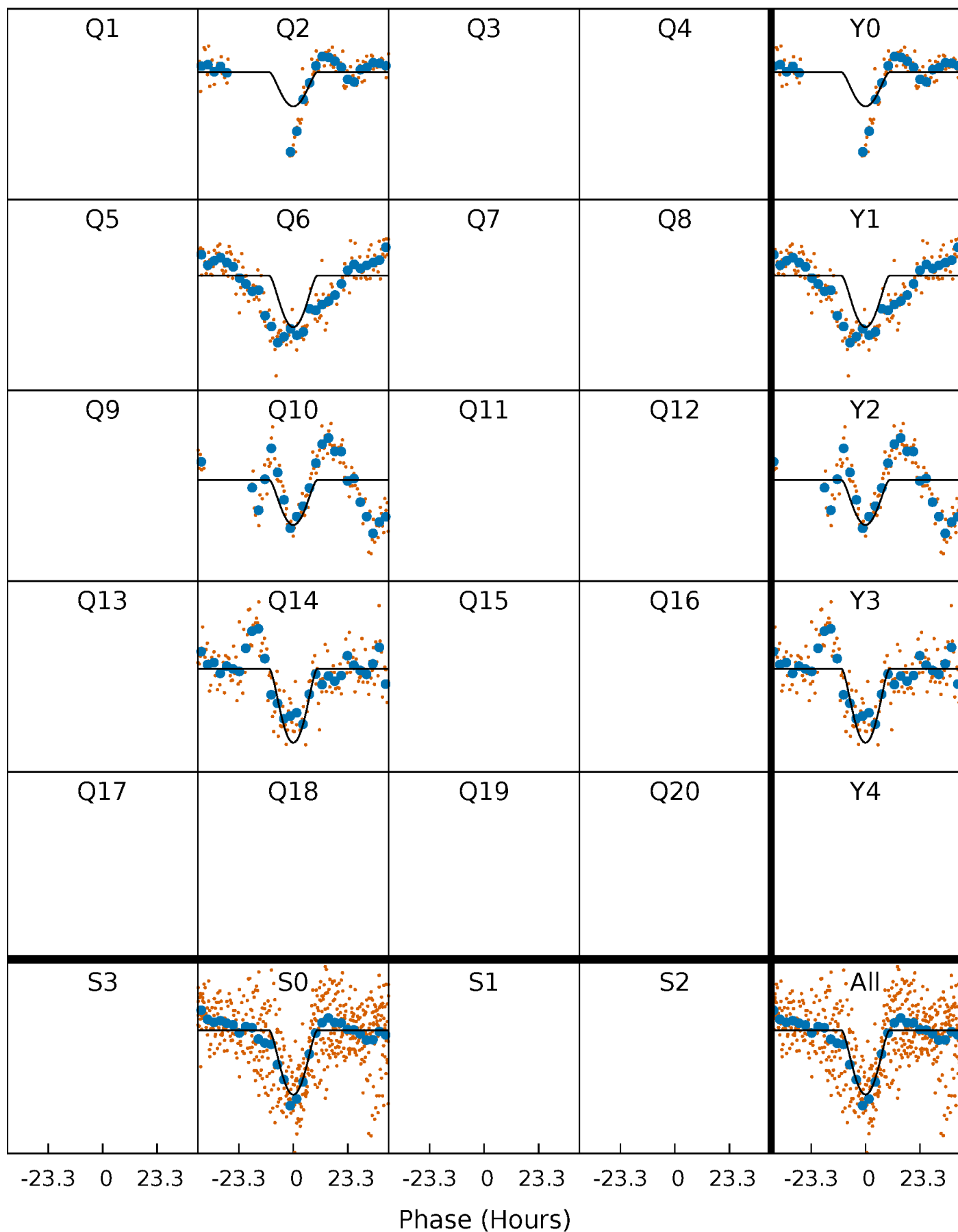
PDC Quarter-Phased Transit Curves

TCE 007694634-01 P=369.686250 Days $T_0=231.452609$ (BKJD)



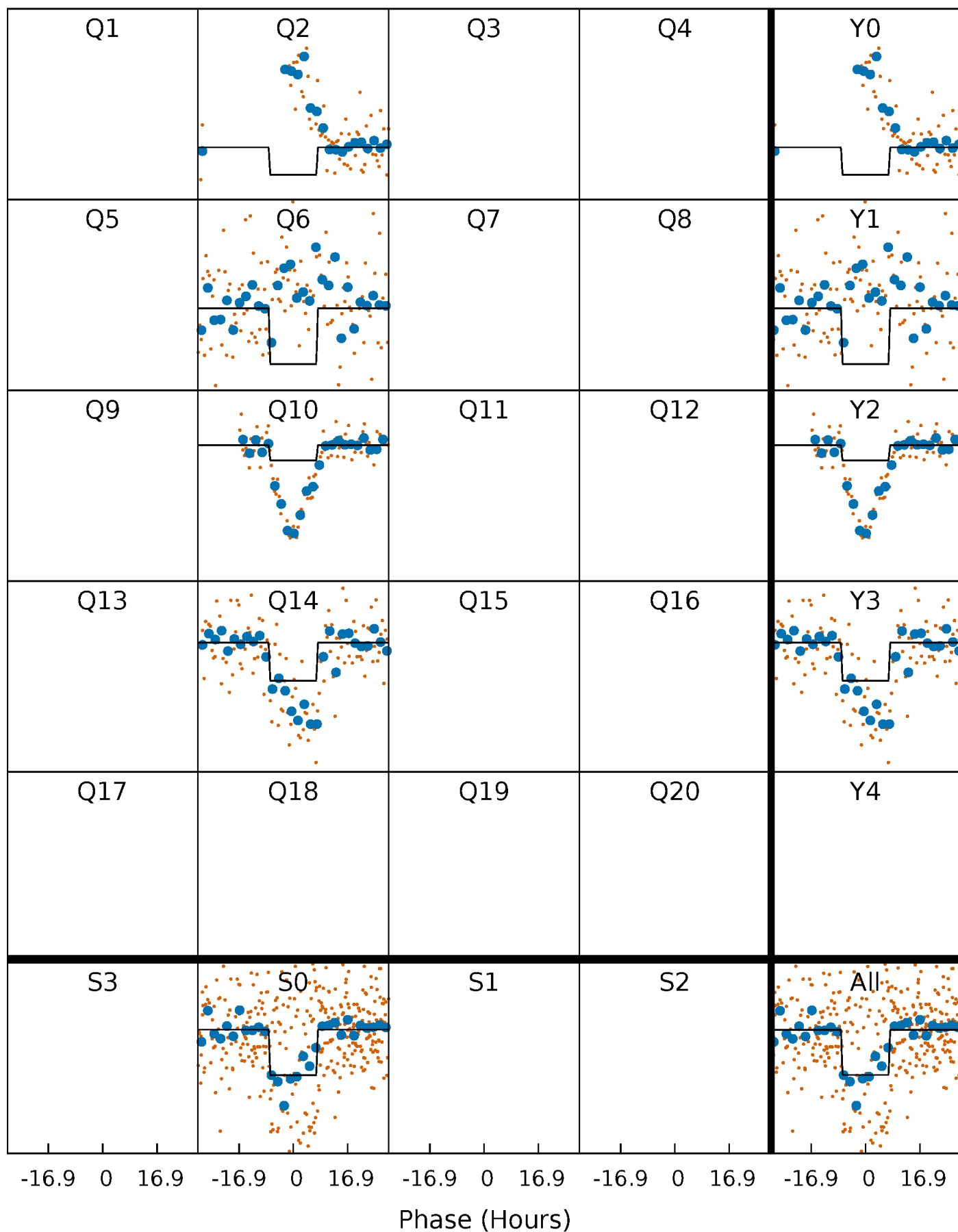
DV Quarter-Phased Transit Curves

TCE 007694634-01 P=369.686250 Days $T_0=231.452609$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

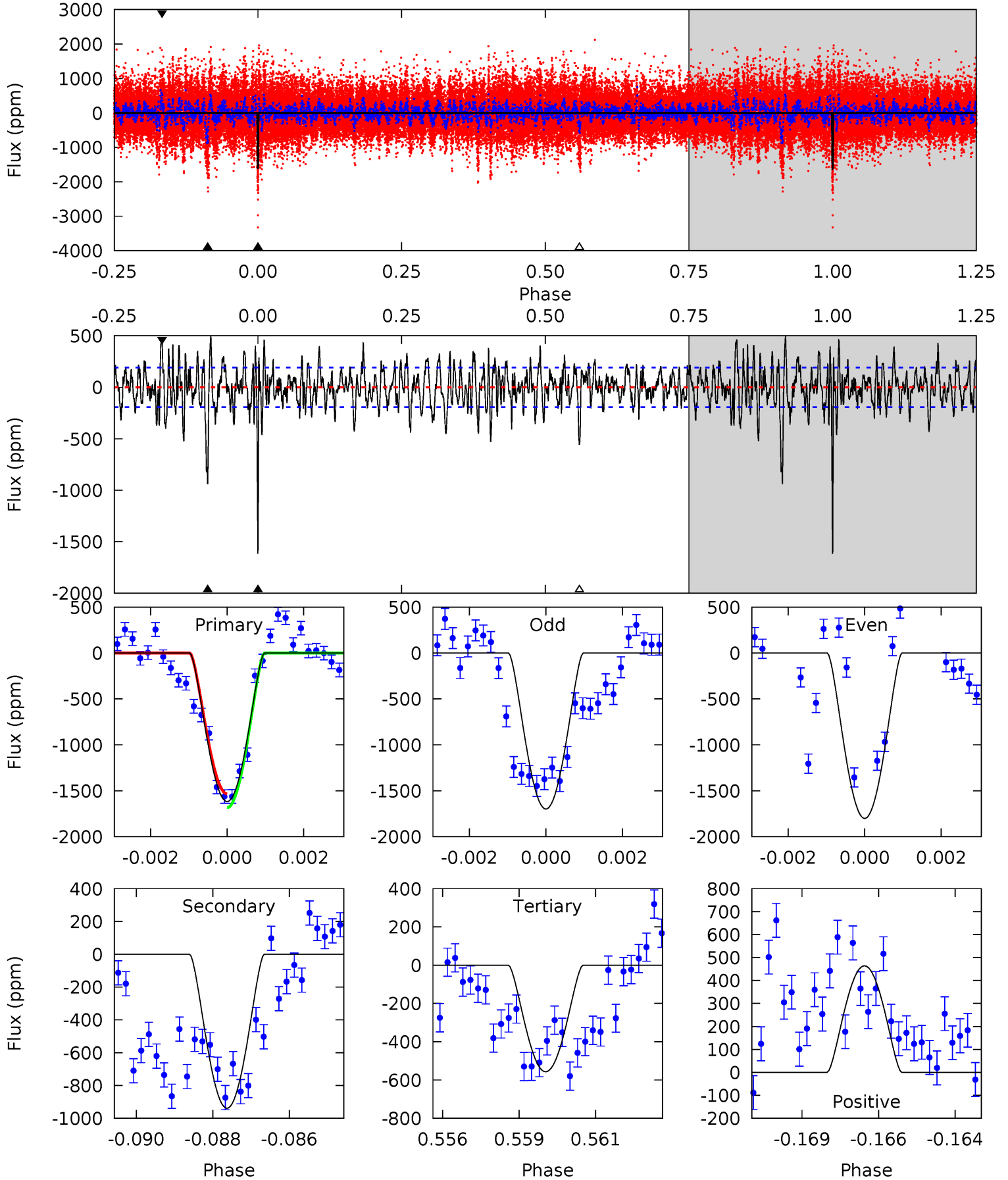
TCE 007694634-01 P=369.656723 Days $T_0=231.467955$ (BKJD)



DV Model-Shift Uniqueness Test

007694634-01, P = 369.686250 Days, E = 231.452609 Days

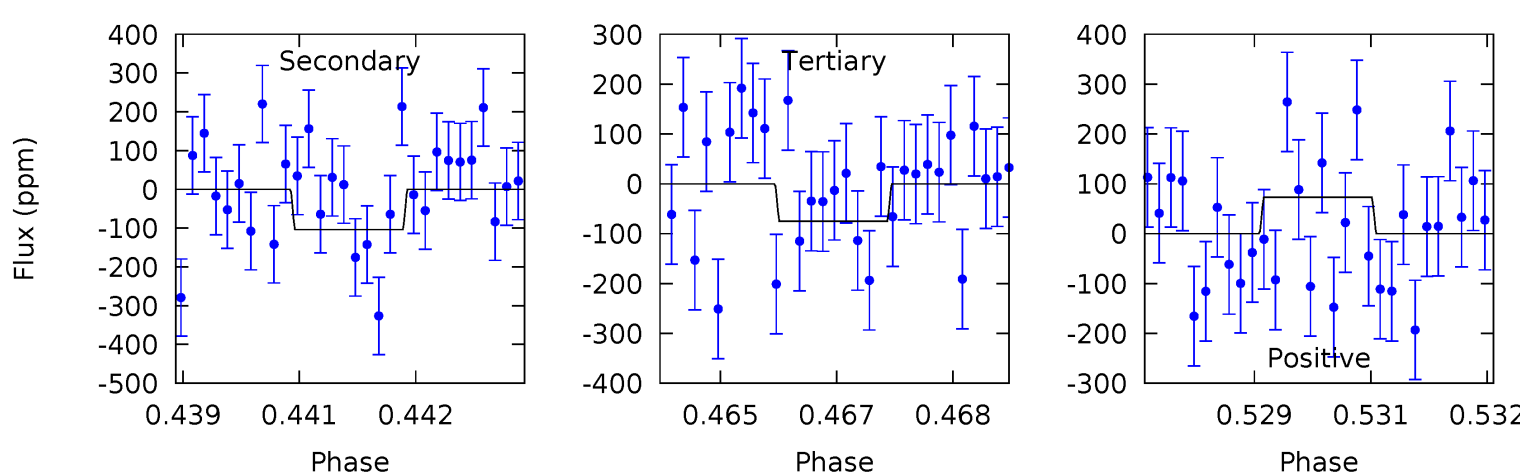
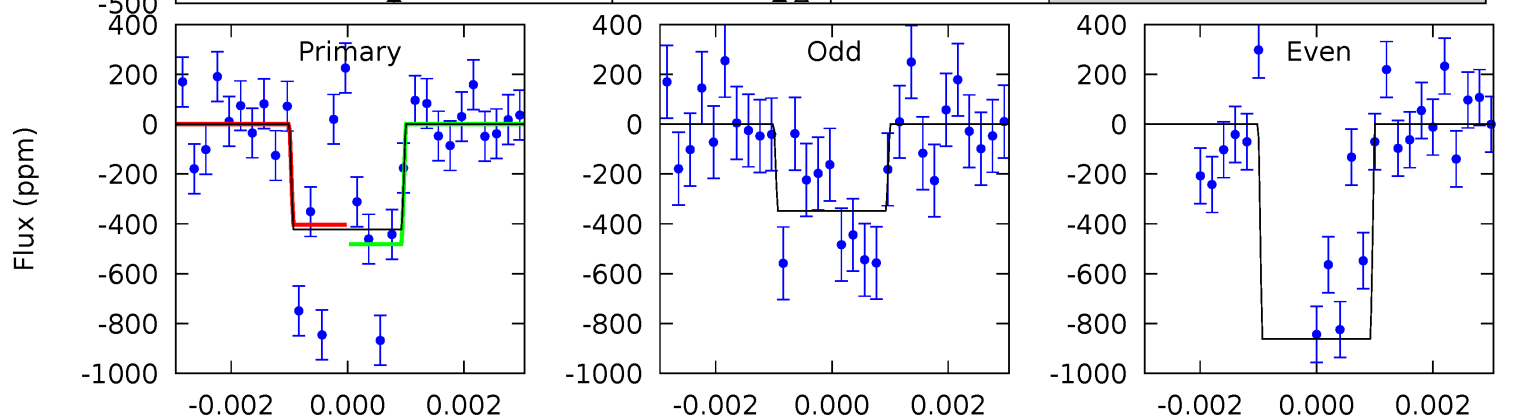
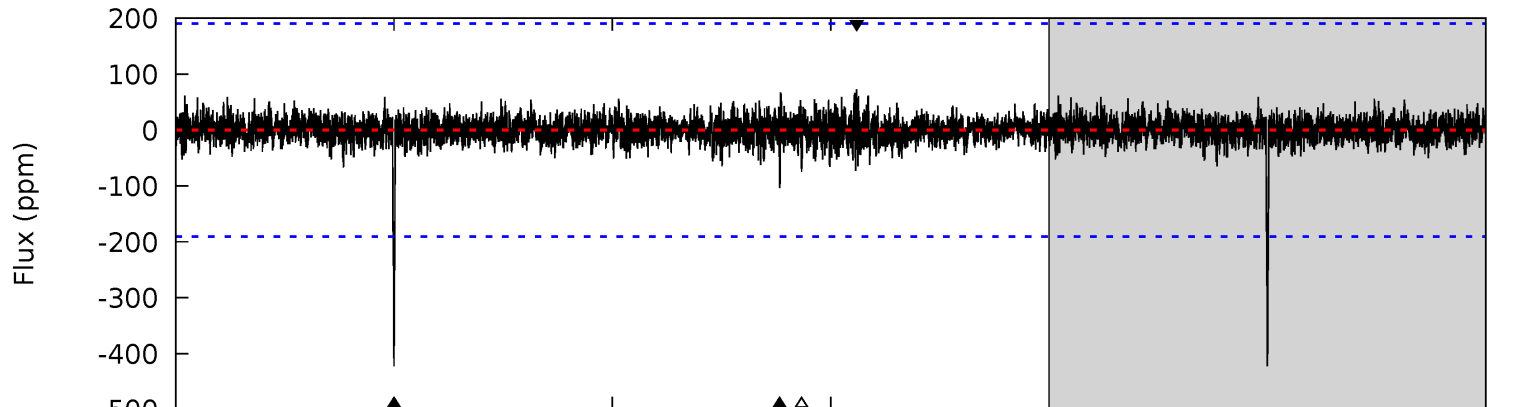
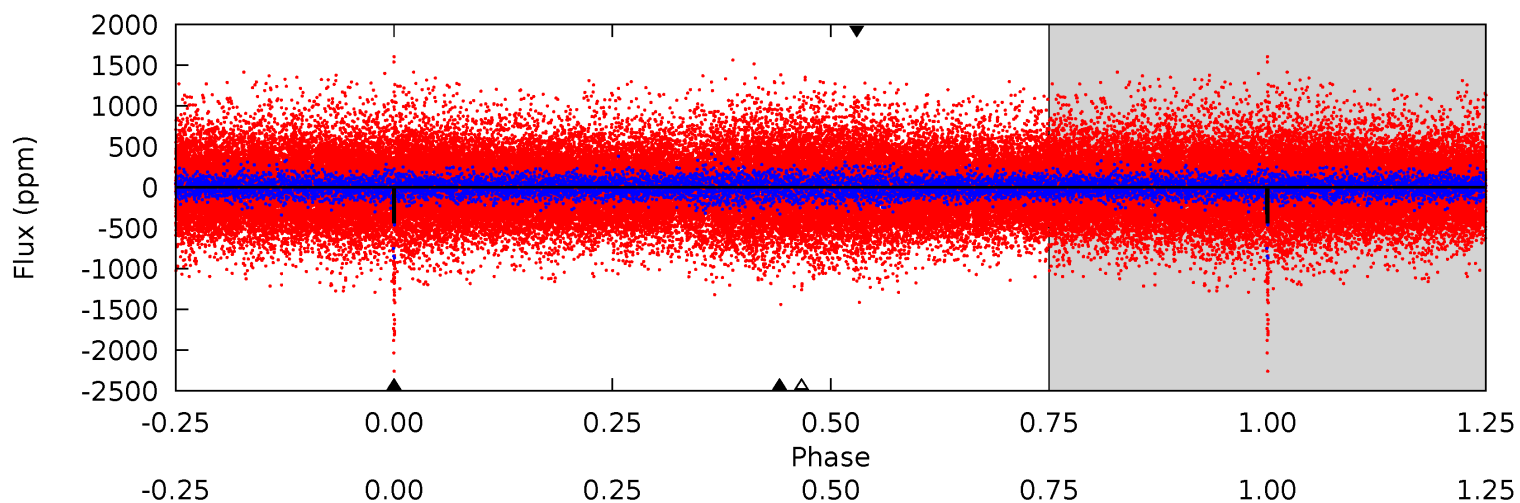
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
44.7	25.9	15.4	12.8	5.30	3.04	4.44	29.3	31.9	10.6	13.1	1.43	1.07	0.24	2.04



Alt Model-Shift Uniqueness Test

007694634-01, P = 369.656723 Days, E = 231.467955 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
11.9	2.92	2.10	2.05	5.35	3.13	0.46	9.77	9.82	0.82	0.87	7.90	1.05	0.15	1.10



Stellar Parameters For KIC 007694634

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	$M(M_{\odot})$	p_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	4388^{+131}_{-131}	$4.643^{+0.048}_{-0.028}$	$-0.360^{+0.300}_{-0.300}$	$0.612^{+0.045}_{-0.056}$	$0.600^{+0.070}_{-0.047}$	$3.692^{+0.854}_{-0.479}$
	+3%/-3%	+1%/-1%	+83%/-83%	+7%/-9%	+12%/-8%	+23%/-13%
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 007694634-01 / KOI

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	-939 ± 36	$9.06^{+8.46}_{-5.99}$	228^{+8}_{-7}	2746^{+1058}_{-414}	4785^{+34910}_{-3561}
Alt.	-104 ± 36	$7.52^{+8.13}_{-5.44}$	229^{+8}_{-8}	2193^{+824}_{-304}	701^{+8102}_{-541}

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

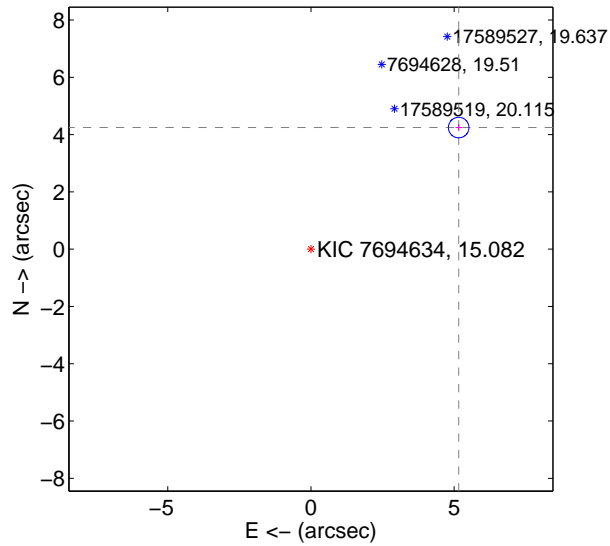
Supplemental centroid analysis for 007694634-01. Kepler magnitude: 15.08. Transit SNR 13.56

There are 0 quarters with good PRF difference image offsets

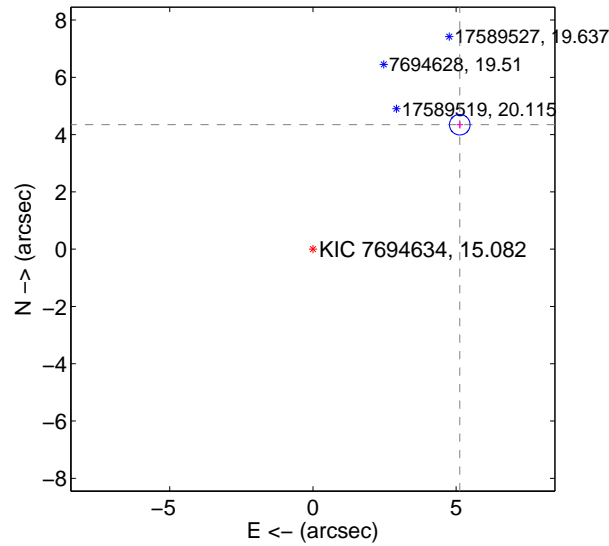
The direct PRF centroid is offset from the target star catalog position by about 0.10 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	6.681 \pm 0.119	55.95	-5.158 \pm 0.116	4.246 \pm 0.124
PRF-fit source offset from KIC position	6.721 \pm 0.120	56.23	-5.127 \pm 0.116	4.346 \pm 0.124
photometric centroid source offset	1.37 \pm 0.98	1.40	0.76 \pm 0.94	-1.13 \pm 1.00

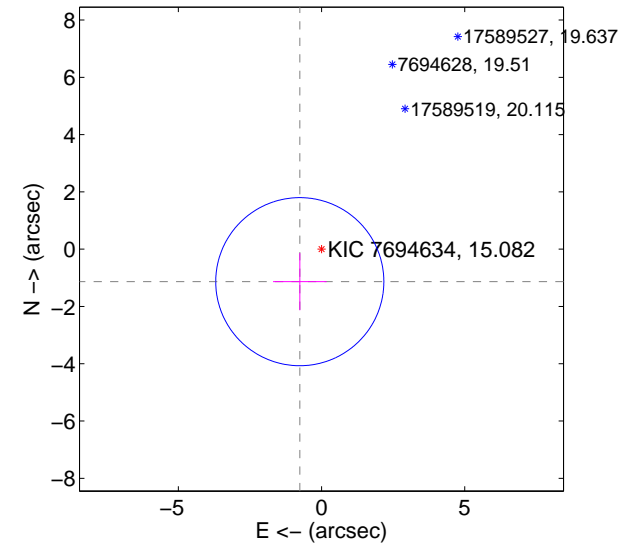
offset from difference PRF-fit to OOT PRF-fit



offset from difference PRF-fit to KIC position



offset from photometric centroids



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.



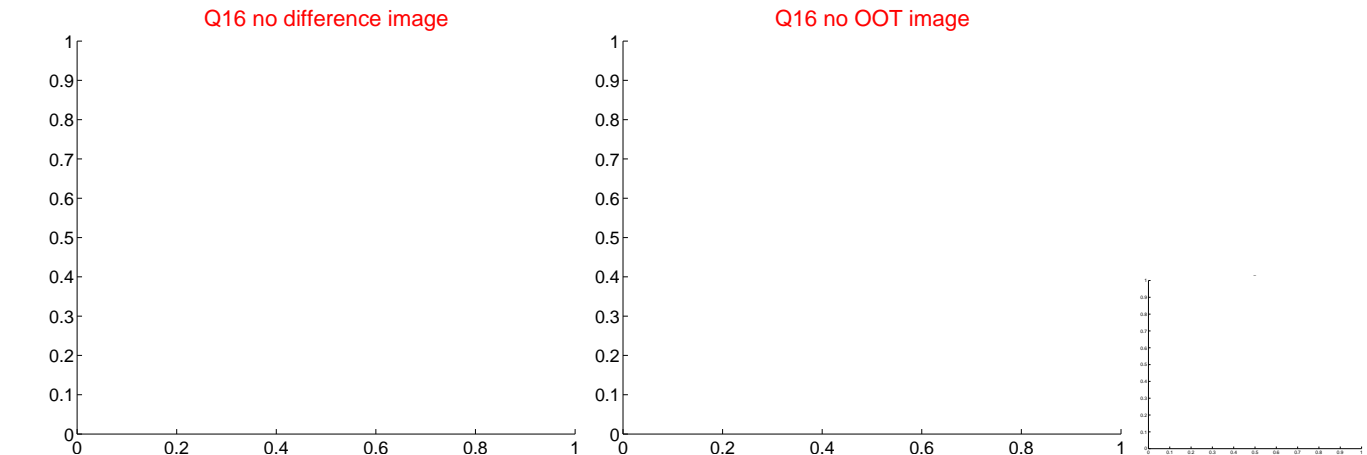
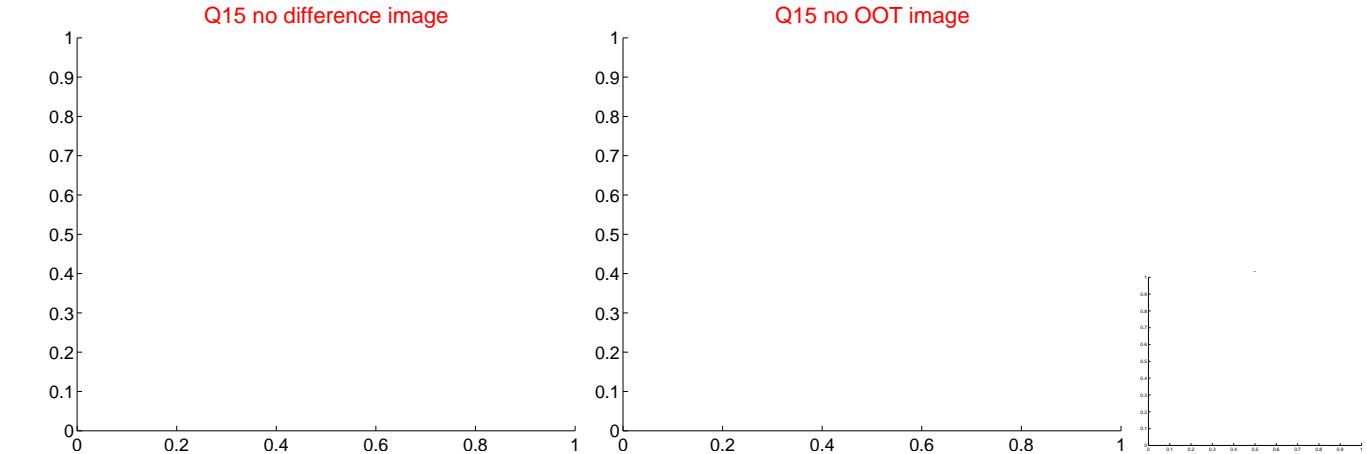
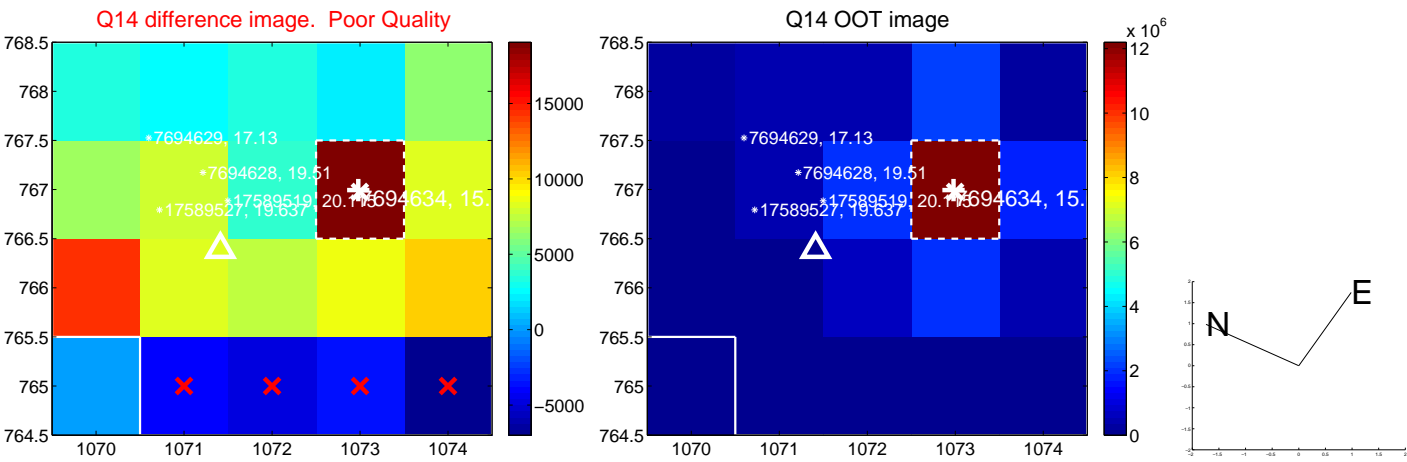
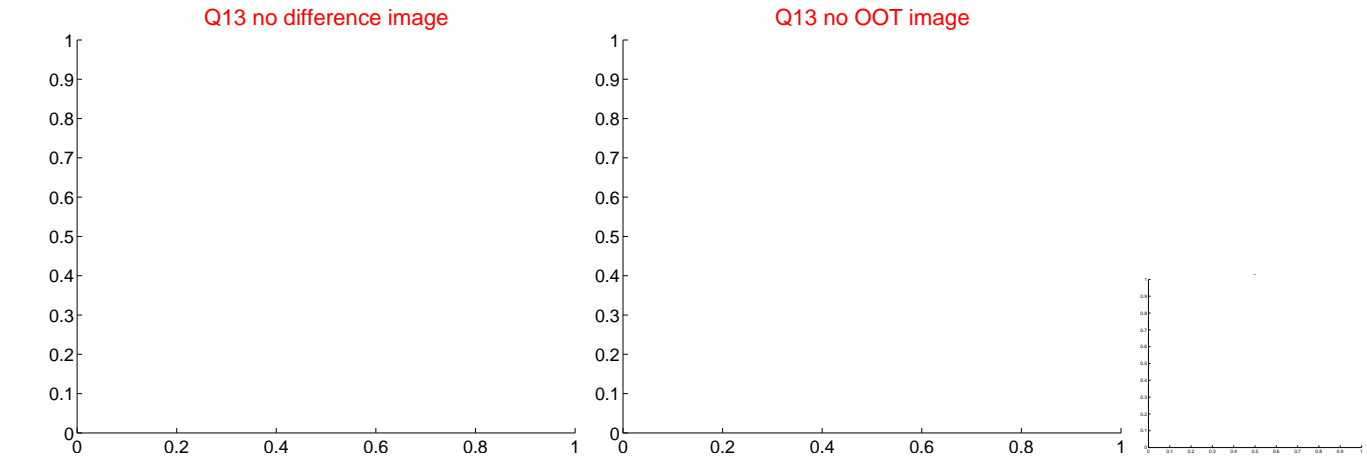
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



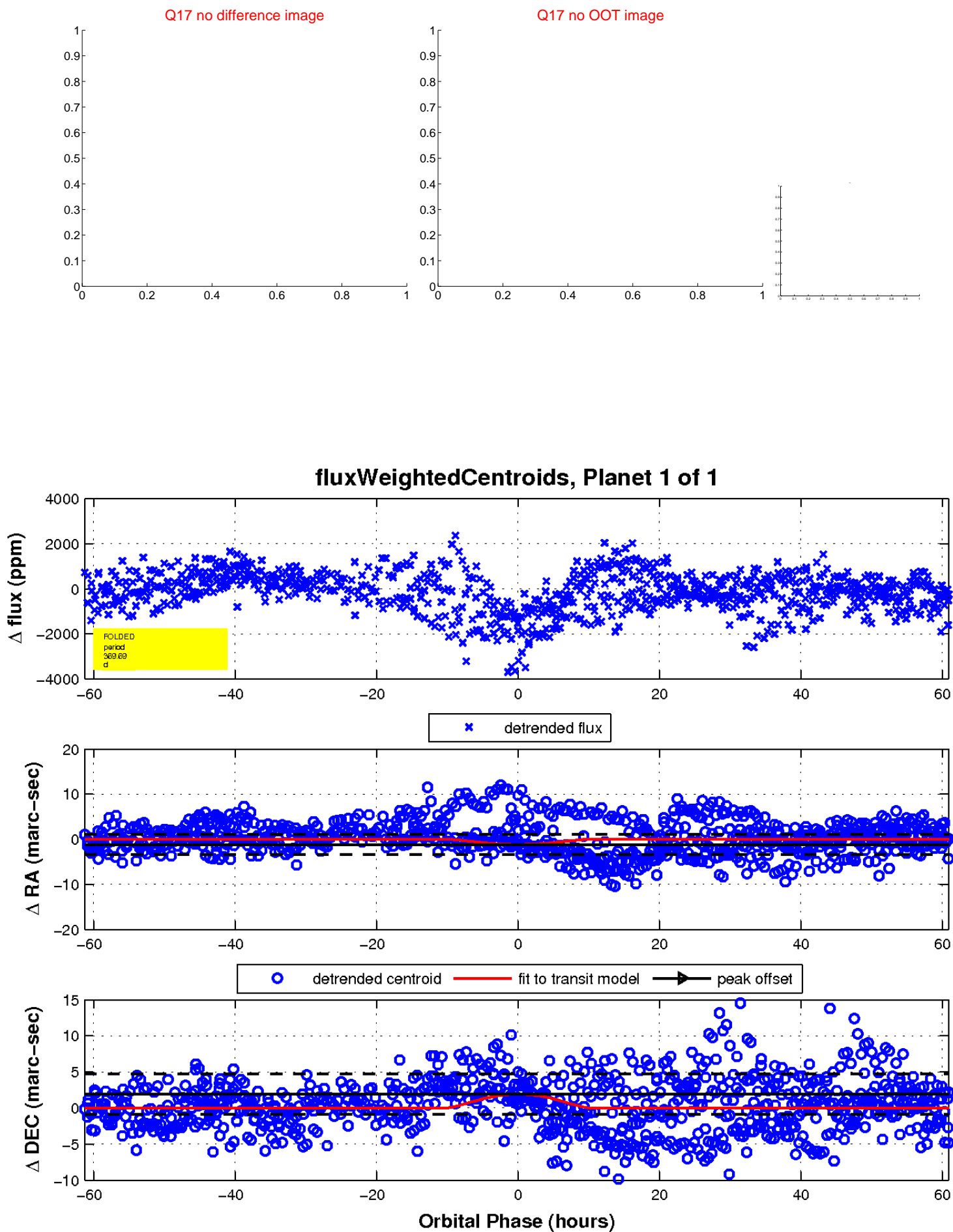
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white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



UKIRT Image

Declination

