

KIC 010969691

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})
010969691-01	OBS	No	6.936221	137.337840	395.3	3.046	13.9	9.5	30.54	4312	75.56	0.00

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
010969691-01	OBS	FP	0.00	1	0	0	0	LPP_DV—CENT_SATURATED

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

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

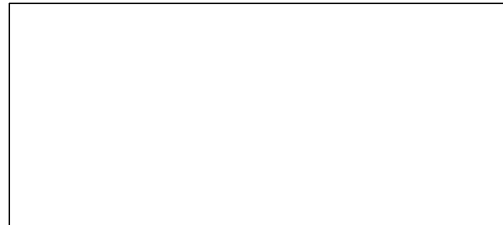
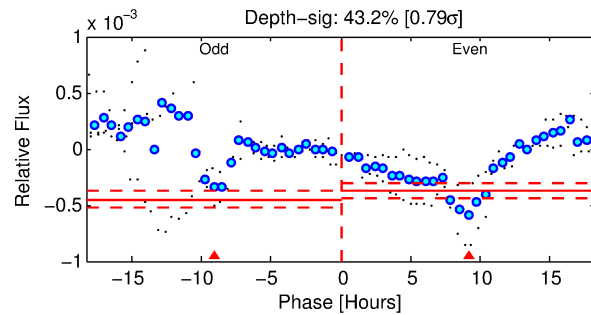
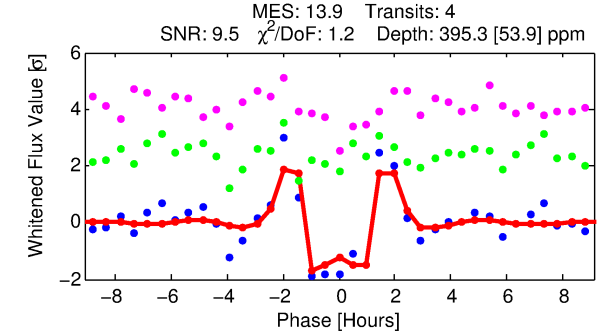
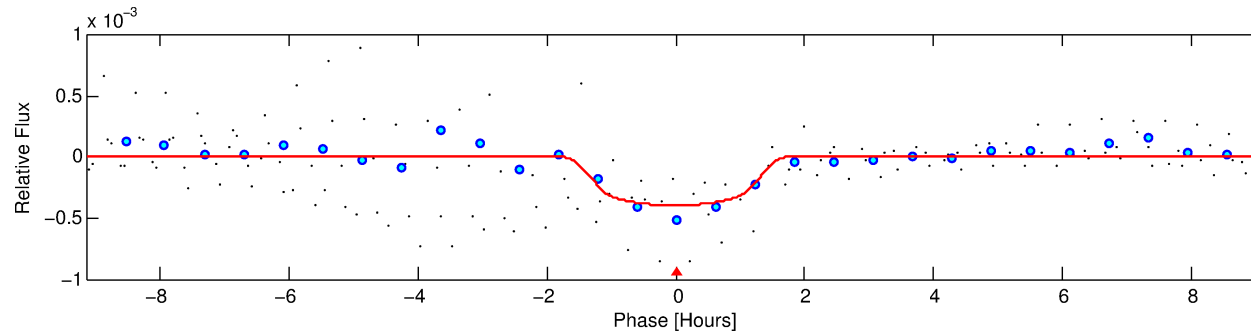
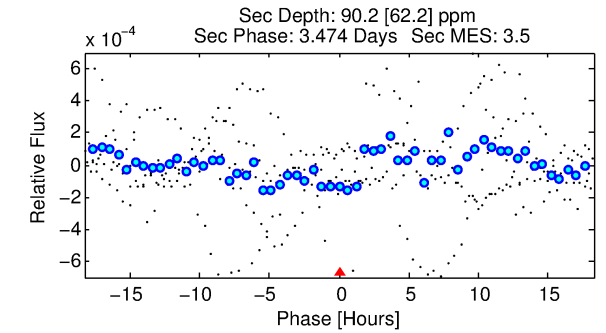
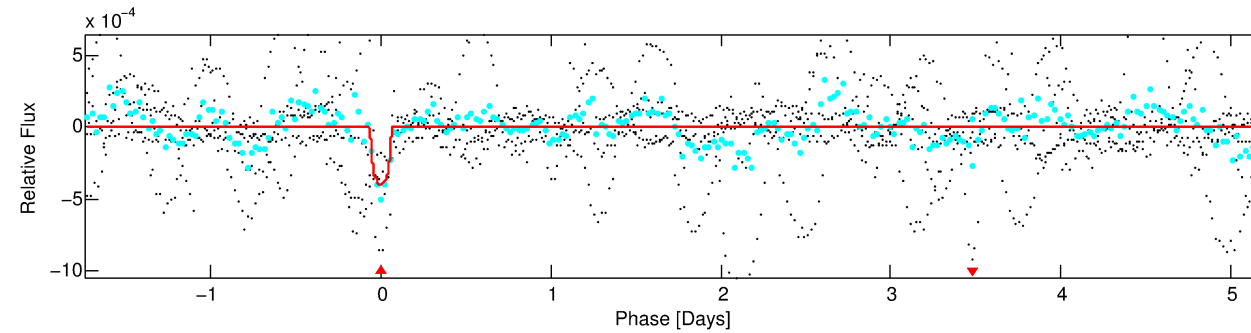
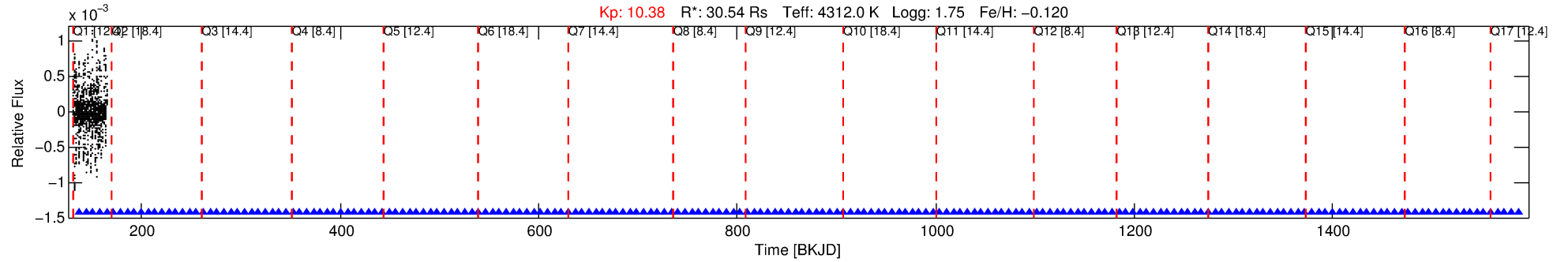
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 010969691-01

No Significant Match Found

DV One-Page Summary

KIC: 10969691 Candidate: 1 of 1 Period: 6.936 d



DV Fit Results:

Period = 6.93622 [0.00173] d
Epoch = 137.3378 [0.0034] BKJD
Rp/R* = 0.0227 [0.0080]
a/R* = 8.51 [9.38]
b = 0.90 [0.24]
Seff = N/A
Teq = N/A
Rp = 75.55 [32.40] Re
a = N/A
Ag = N/A
Teffp = N/A

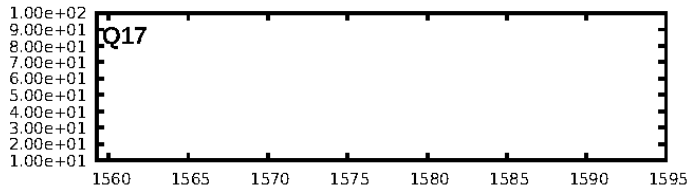
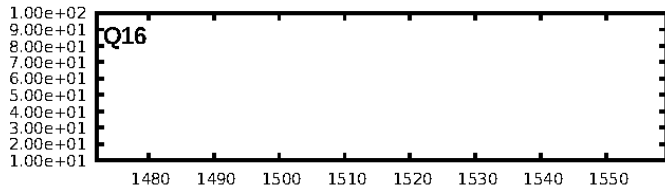
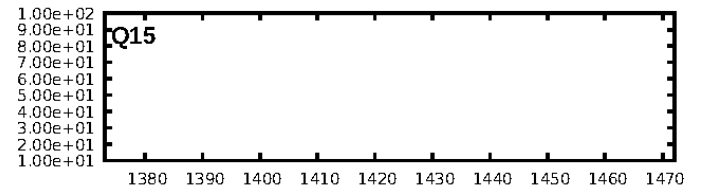
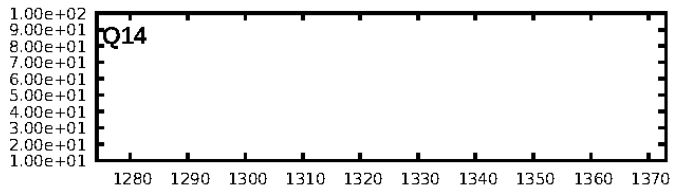
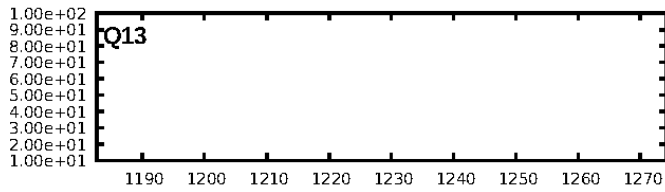
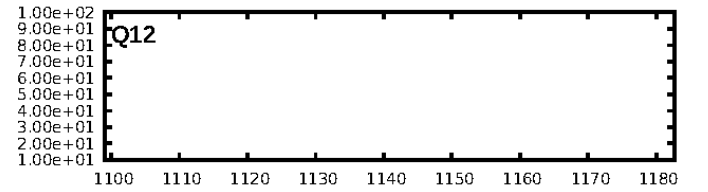
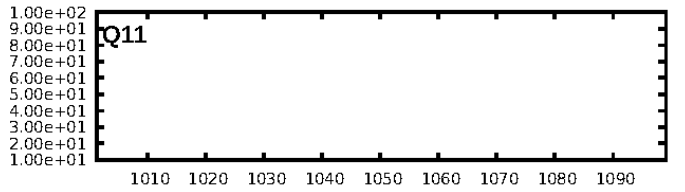
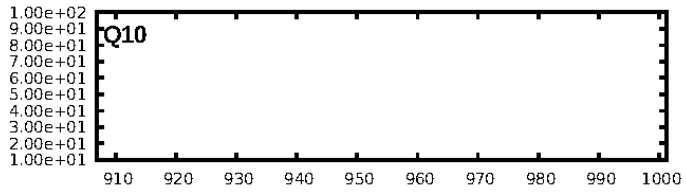
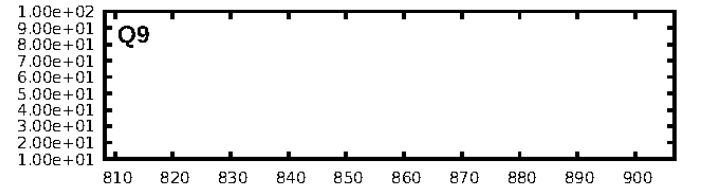
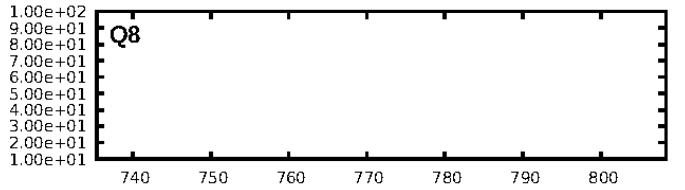
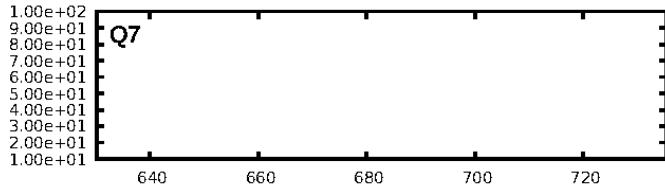
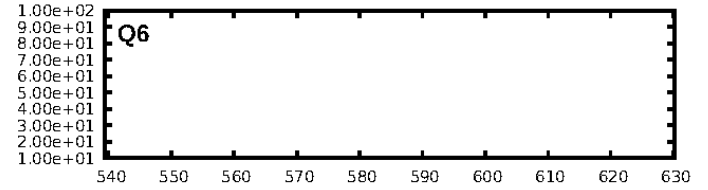
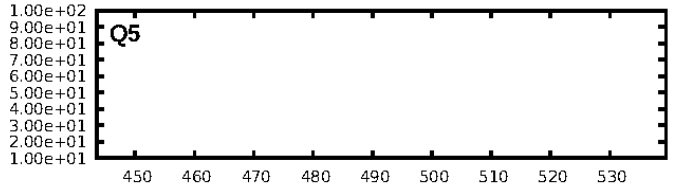
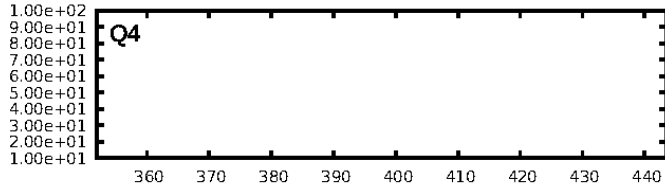
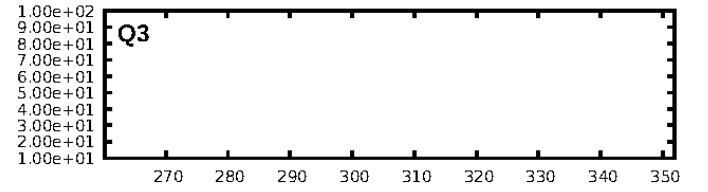
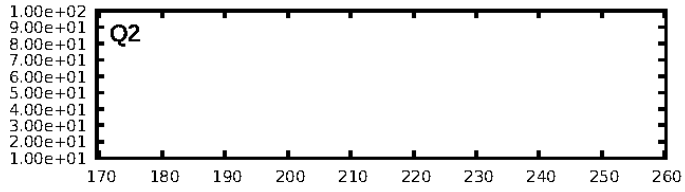
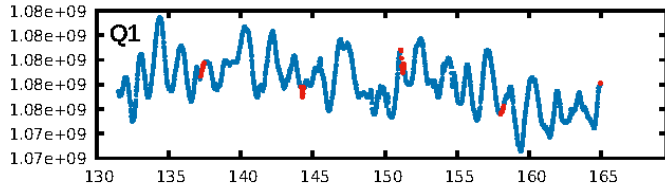
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: 0.0%
ModelChiSquareGof-sig: 16.3%
Bootstrap-pfa: 9.04e-31
RollingBand-fgt: N/A
GhostDiagnostic-chr: -0.5439
Centroid-sig: 81.1%
Centroid-so: 0.742 arcsec [0.98σ]
OotOffset-rm: N/A
KicOffset-rm: N/A
OotOffset-st: 0/0/0 [0]
KicOffset-st: 0/0/0 [0]
DiffImageQuality-fgm: N/A
DiffImageOverlap-fno: 1.00 [1/1]

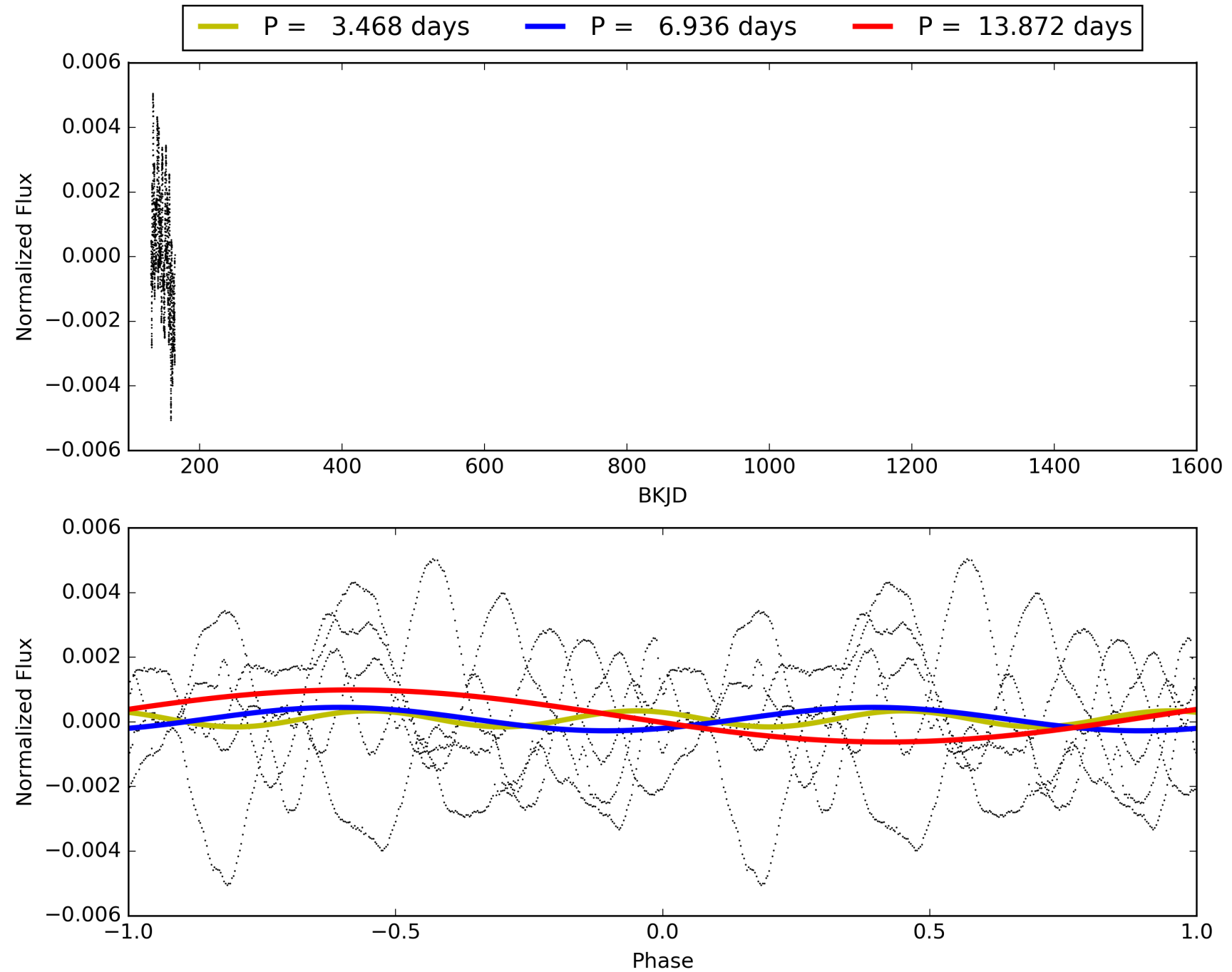
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 29-Jan-2016 03:46:24 Z

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

TCE 010969691-01, PDC Light Curves

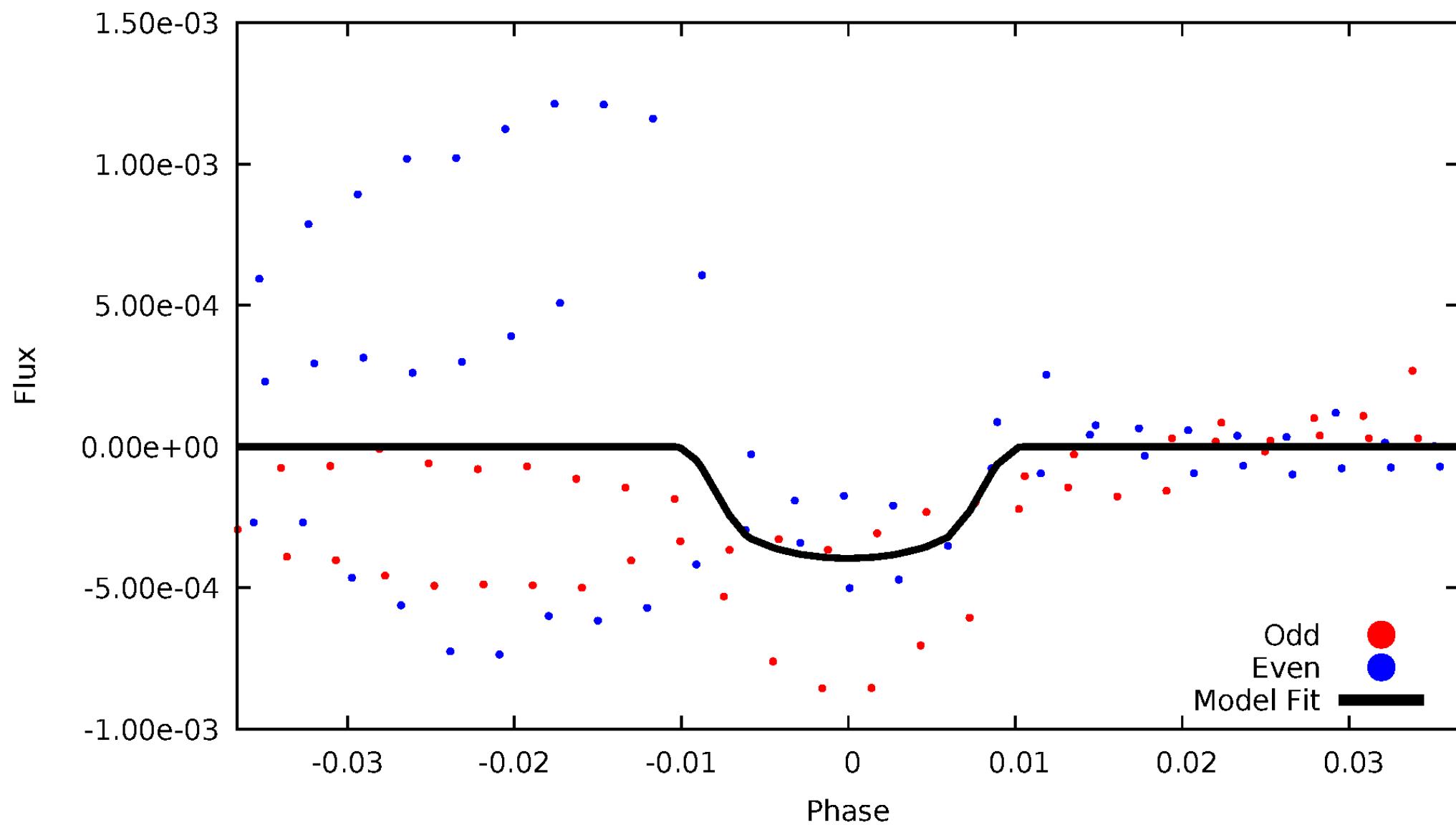


TCE 010969691-01



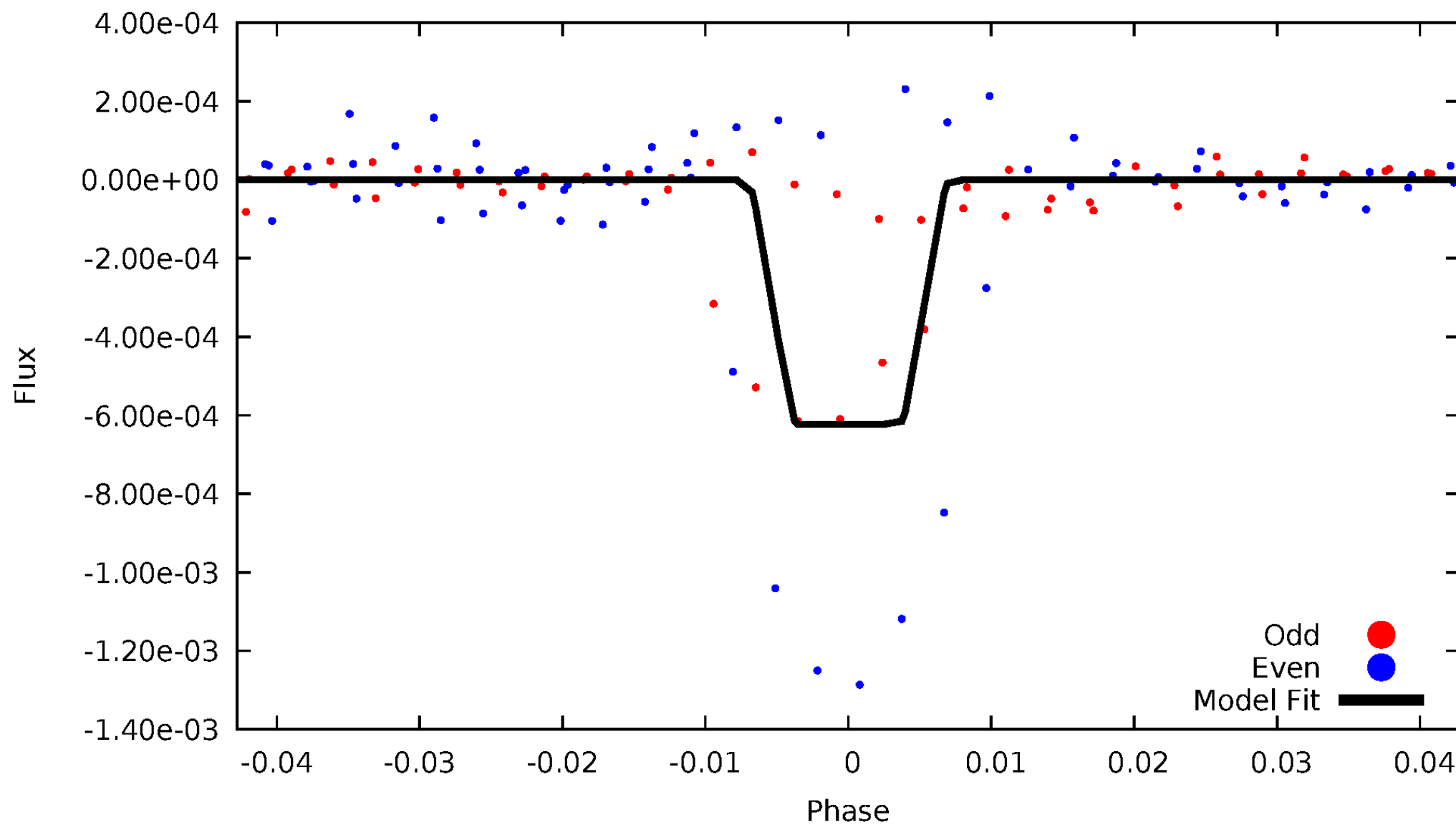
DV Odd/Even

TCE 010969691-01



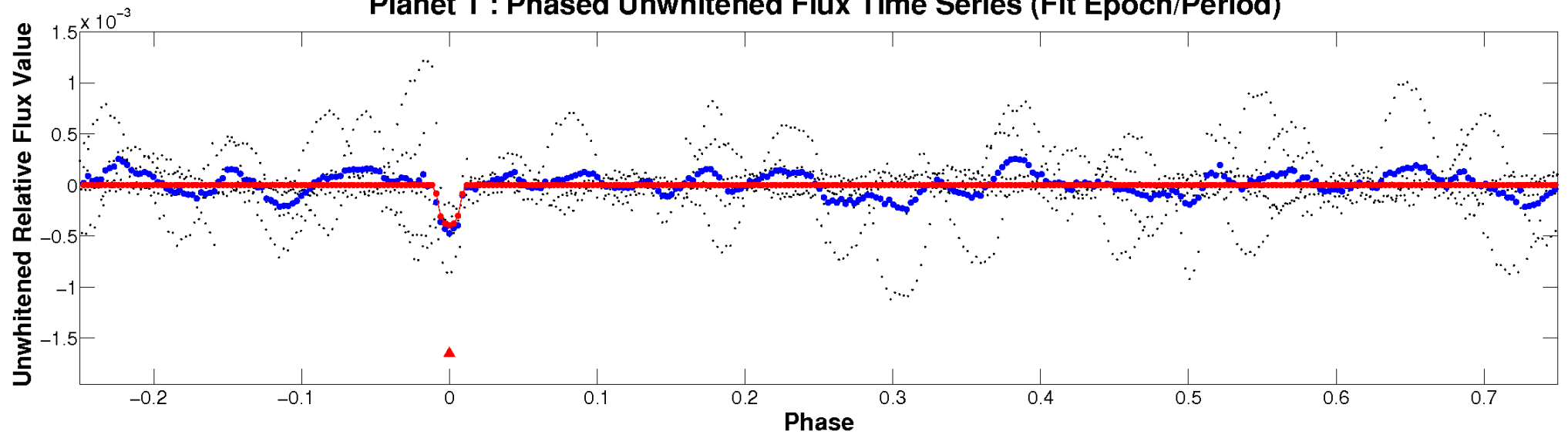
ALT Odd/Even

TCE 010969691-01

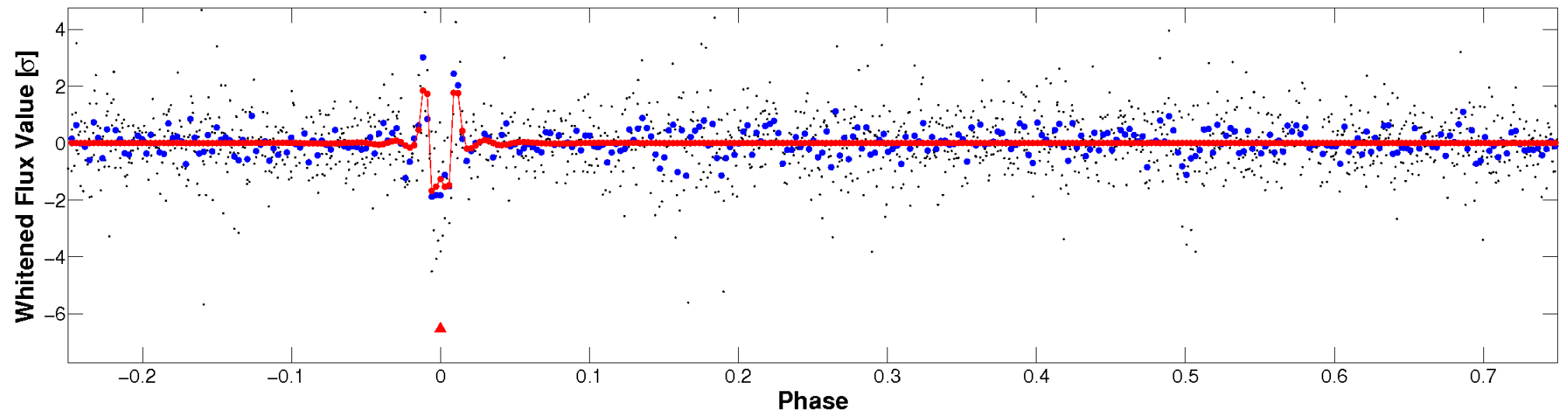


Non-Whitened Vs. Whitened Light Curve

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

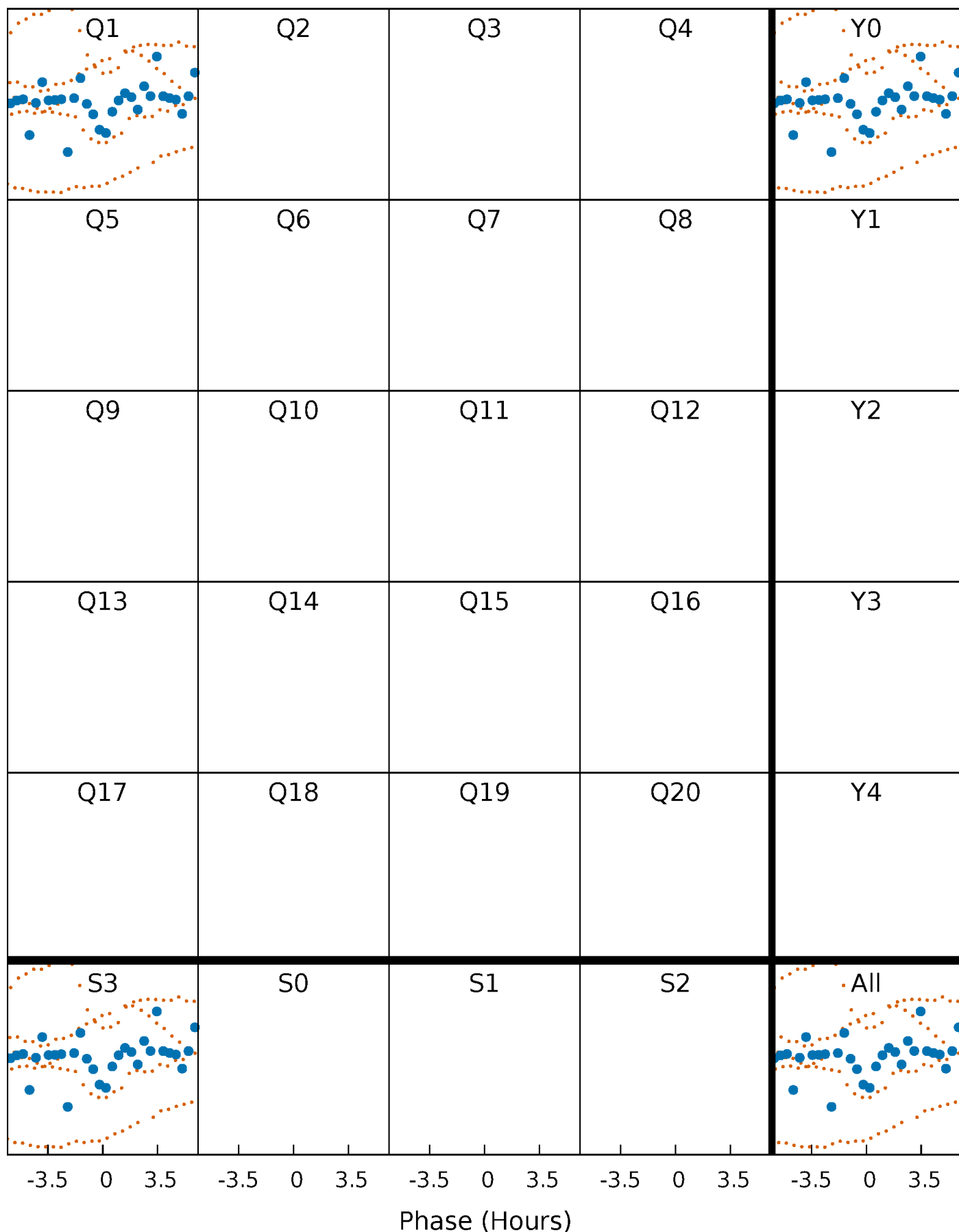


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



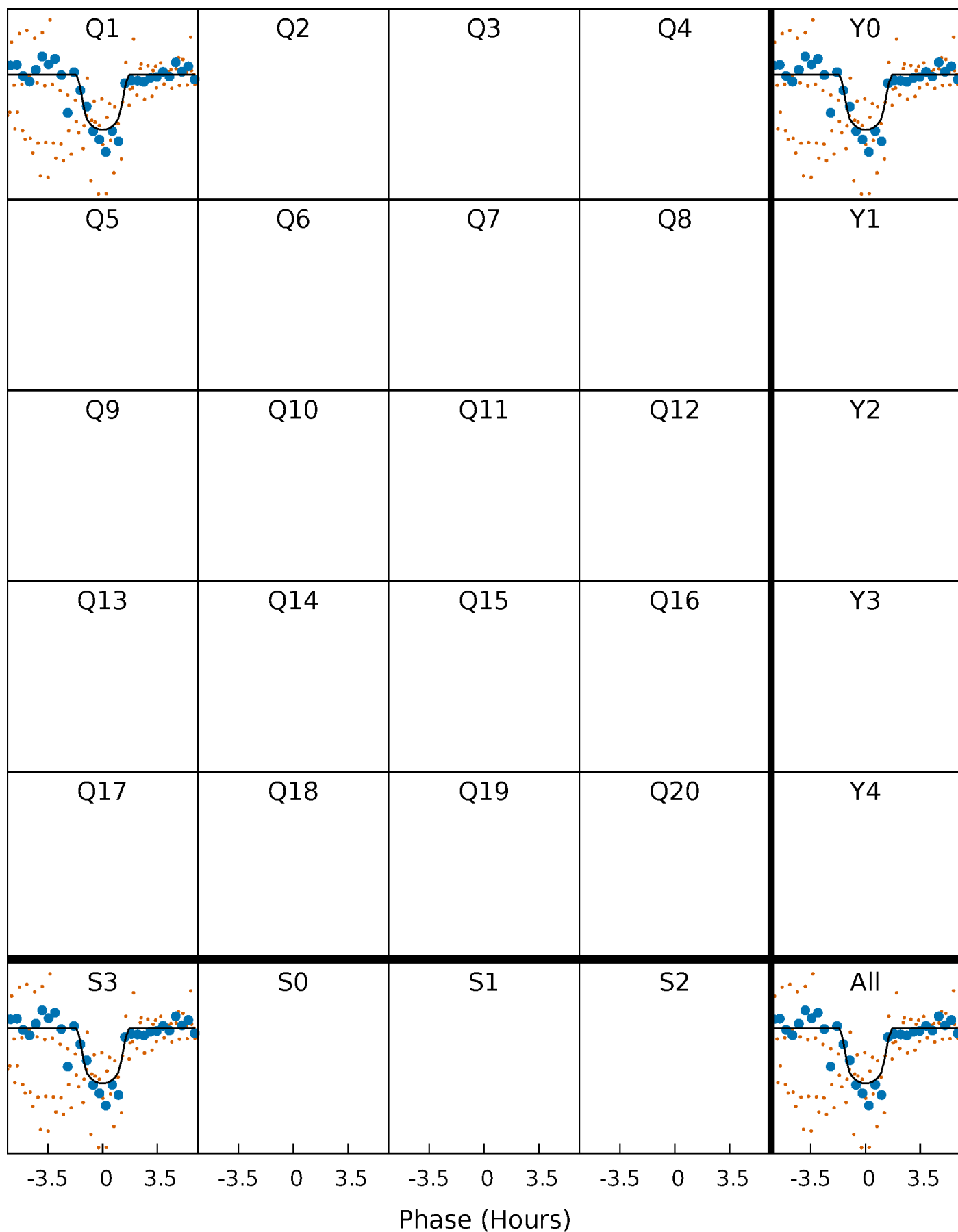
PDC Quarter-Phased Transit Curves

TCE 010969691-01 P= 6.936221 Days $T_0=137.337840$ (BKJD)



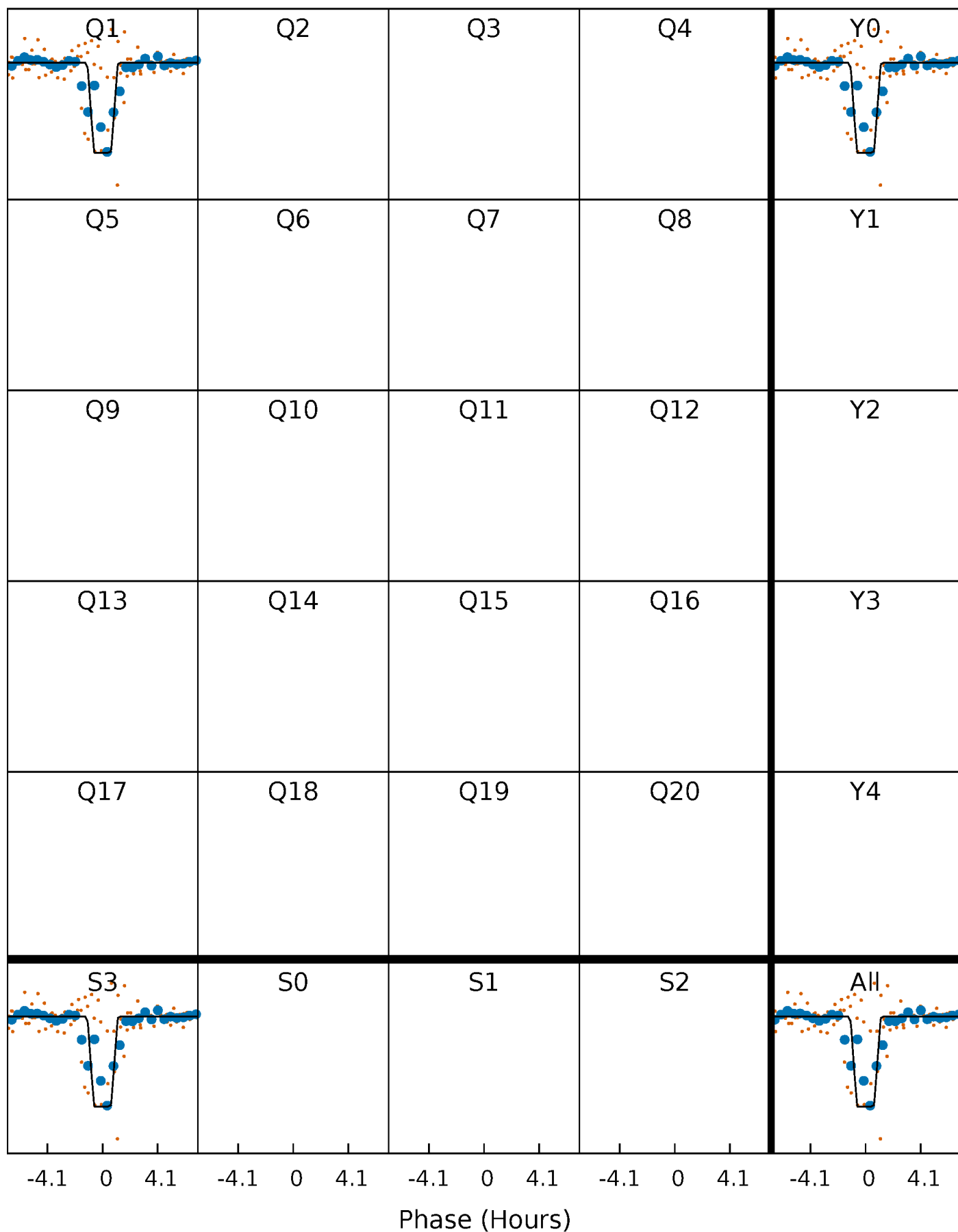
DV Quarter-Phased Transit Curves

TCE 010969691-01 P= 6.936221 Days $T_0=137.337840$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

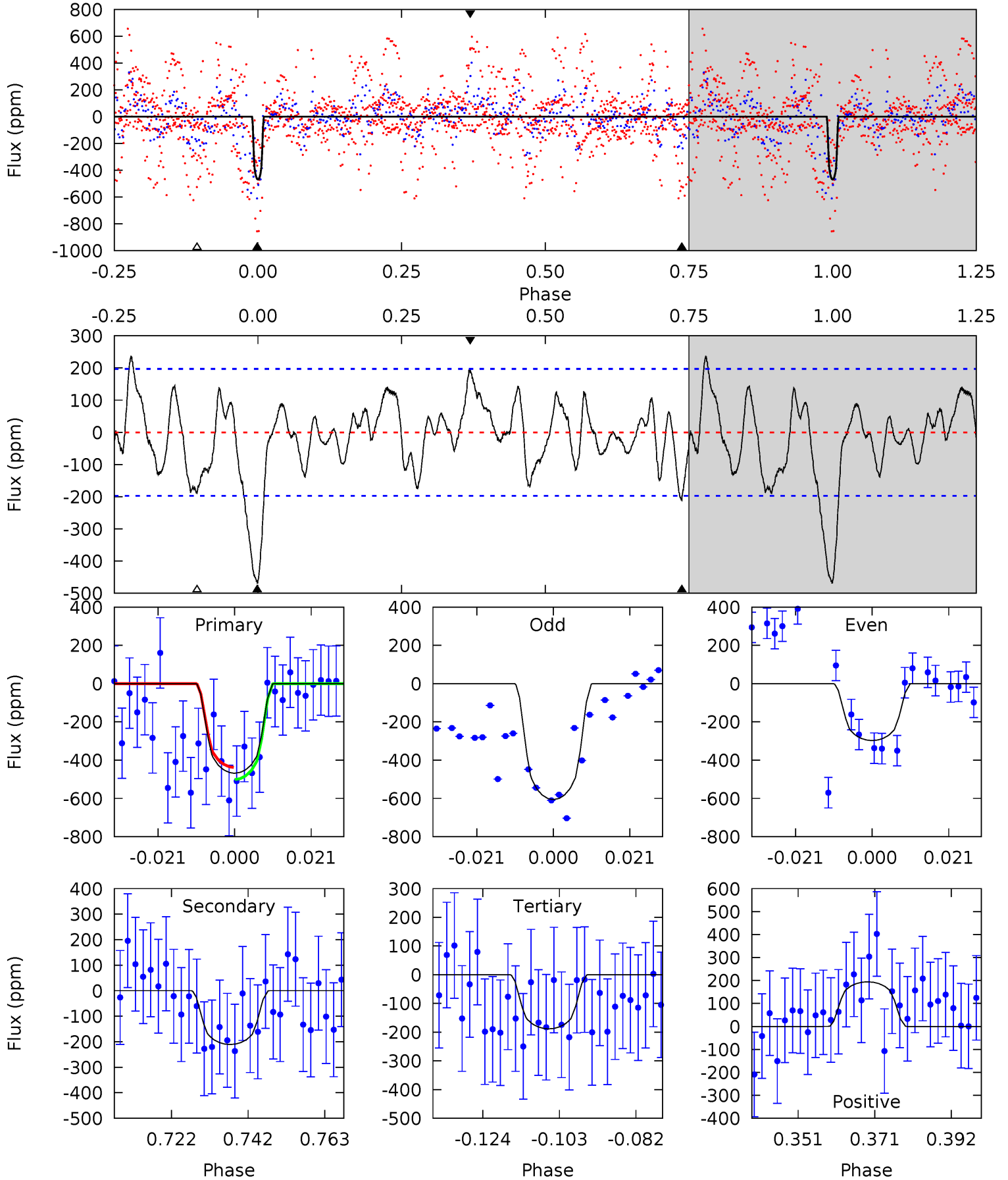
TCE 010969691-01 P= 6.917813 Days $T_0=137.369758$ (BKJD)



DV Model-Shift Uniqueness Test

010969691-01, P = 6.936221 Days, E = 130.401619 Days

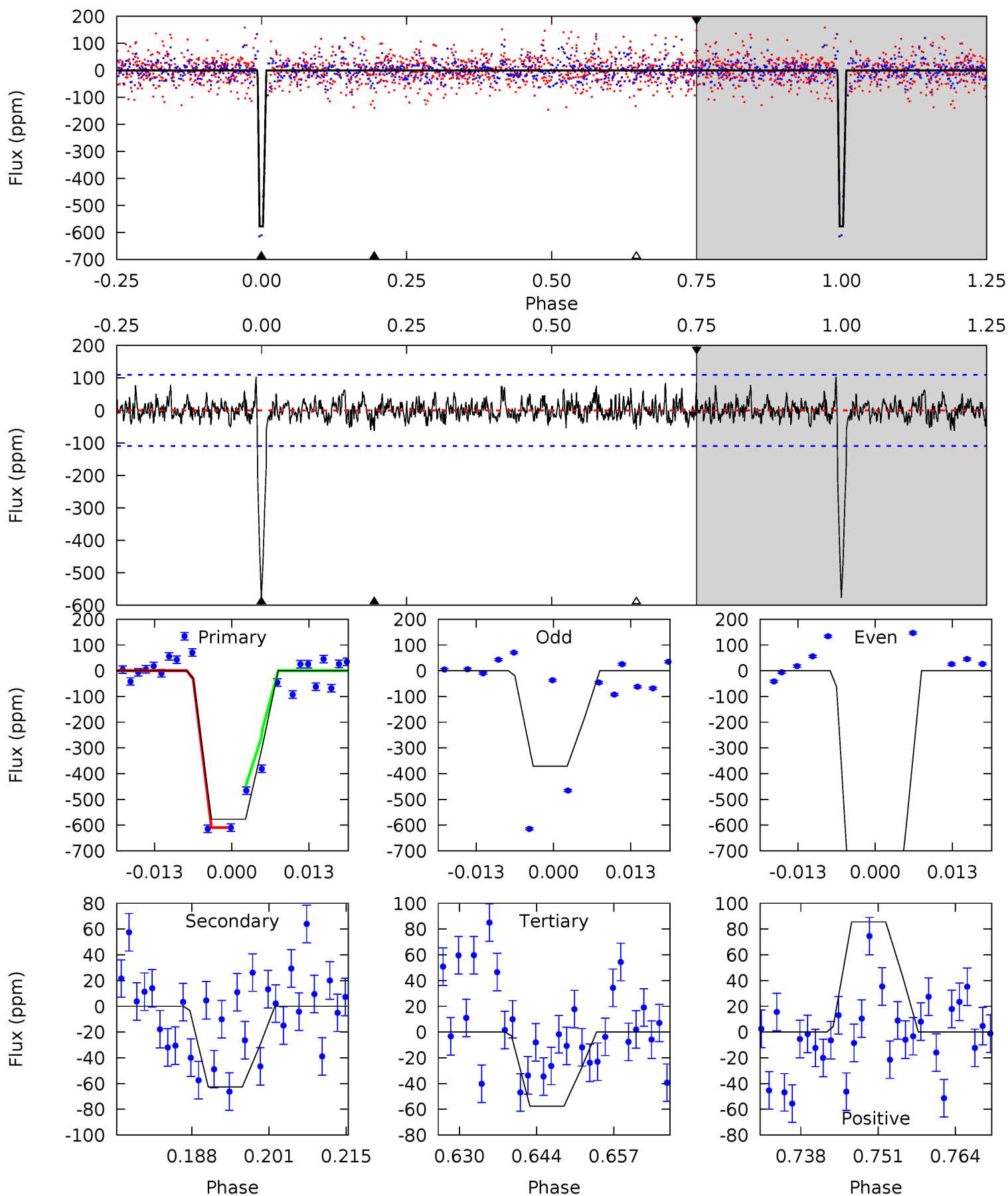
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
11.6	5.22	4.67	4.81	4.89	2.31	2.14	6.93	6.79	0.56	0.41	3.18	1.29	0.34	0.78



Alt Model-Shift Uniqueness Test

010969691-01, P = 6.917813 Days, E = 130.451945 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
26.2	2.84	2.61	3.88	4.97	2.47	1.08	23.6	22.3	0.23	-1.04	25.7	1.34	0.15	4.01



Stellar Parameters For KIC 010969691

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	M (M_{\odot})	p_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	4312^{+85}_{-118}	$1.749^{+0.033}_{-0.027}$	$-0.120^{+0.200}_{-0.250}$	$30.535^{+5.621}_{-7.495}$	$1.909^{+0.898}_{-0.698}$	$0.000^{+0.000}_{-0.000}$
	+2%/-3%	+2%/-2%	+167%/-208%	+18%/-25%	+47%/-37%	+32%/-9%
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 010969691-01 / KOI

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	-211 ± 40	$76.26^{+31.59}_{-27.41}$	4947^{+156}_{-182}	-3573^{+6833}_{-345}	$0.156^{+0.214}_{-0.075}$
Alt.	-63 ± 22	$84.69^{+31.54}_{-29.01}$	4932^{+170}_{-178}	-3984^{+195}_{-145}	$0.037^{+0.049}_{-0.017}$

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

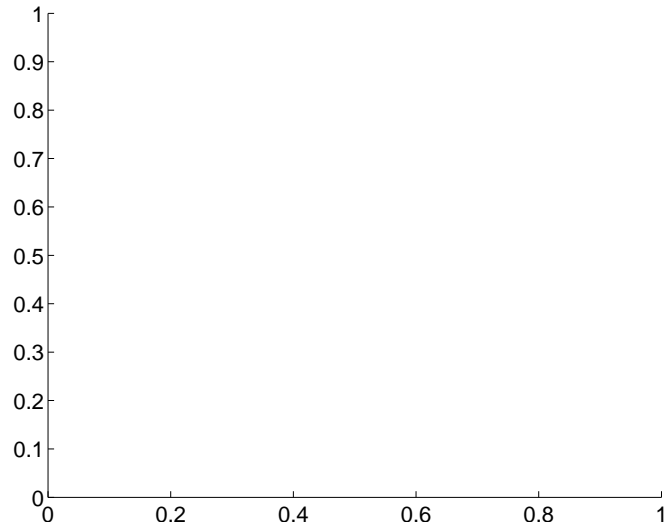
Supplemental centroid analysis for 010969691-01. **Kepler magnitude: 10.38.** Transit SNR 9.46

There are 0 quarters with good PRF difference image offsets

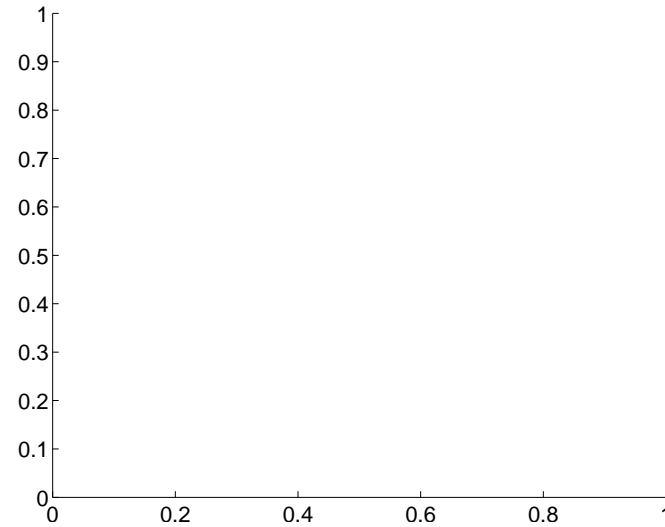
The direct PRF centroid is offset from the target star catalog position by about NaN arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	—	—	—	—
PRF-fit source offset from KIC position	—	—	—	—
photometric centroid source offset	0.74 ± 0.76	0.98	-0.65 ± 0.50	-0.36 ± 1.26

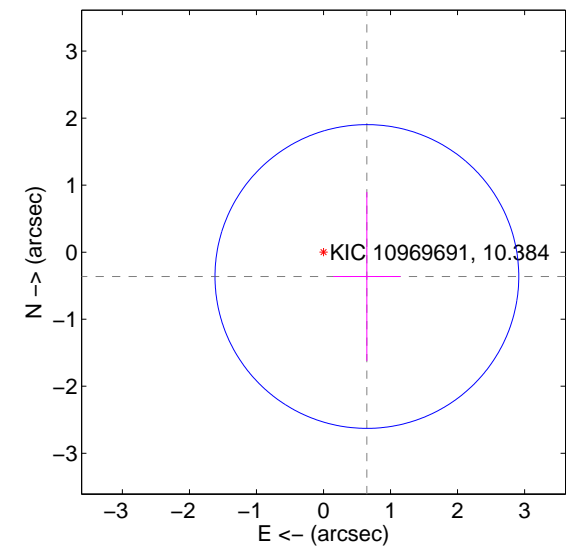
There is no PRF-fit offset from OOT-fit



There is no PRF-fit offset from KIC

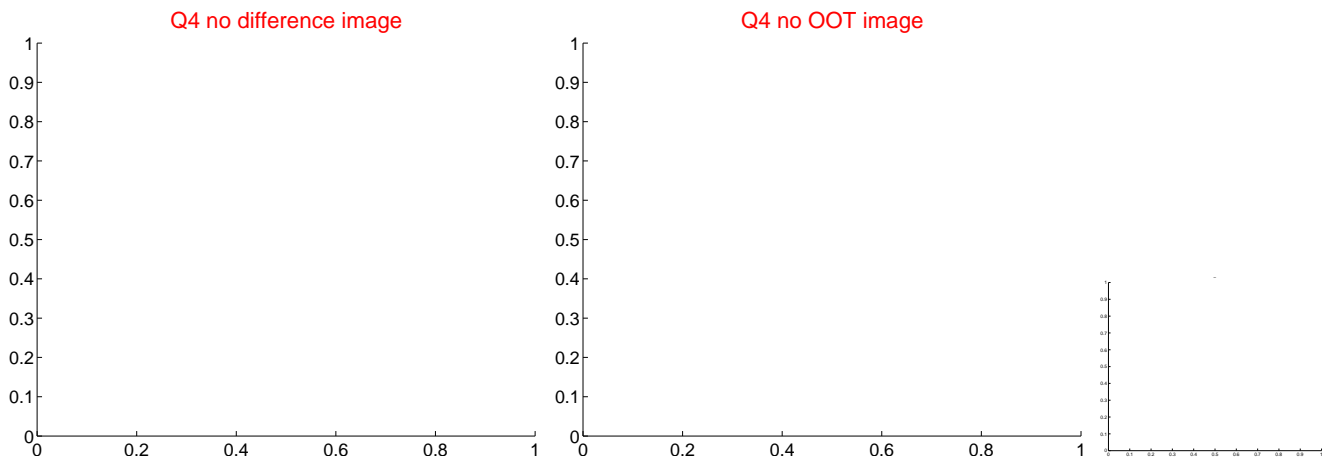
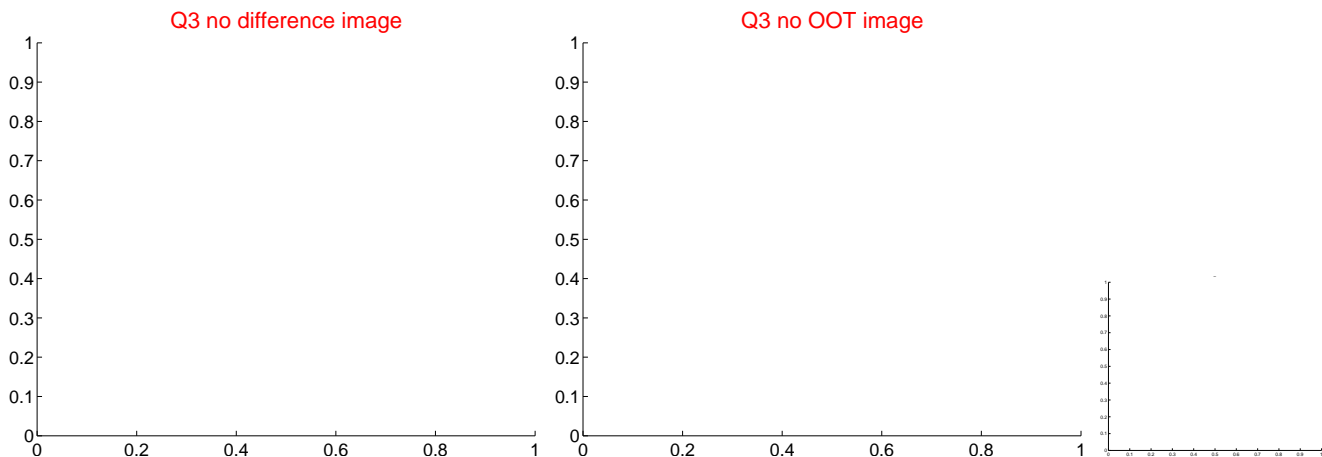
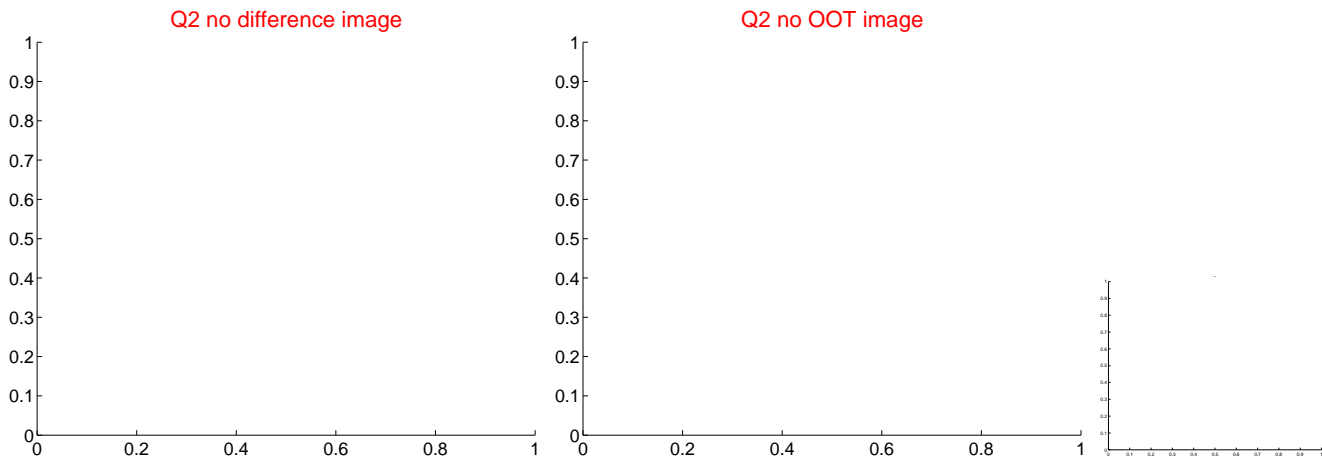
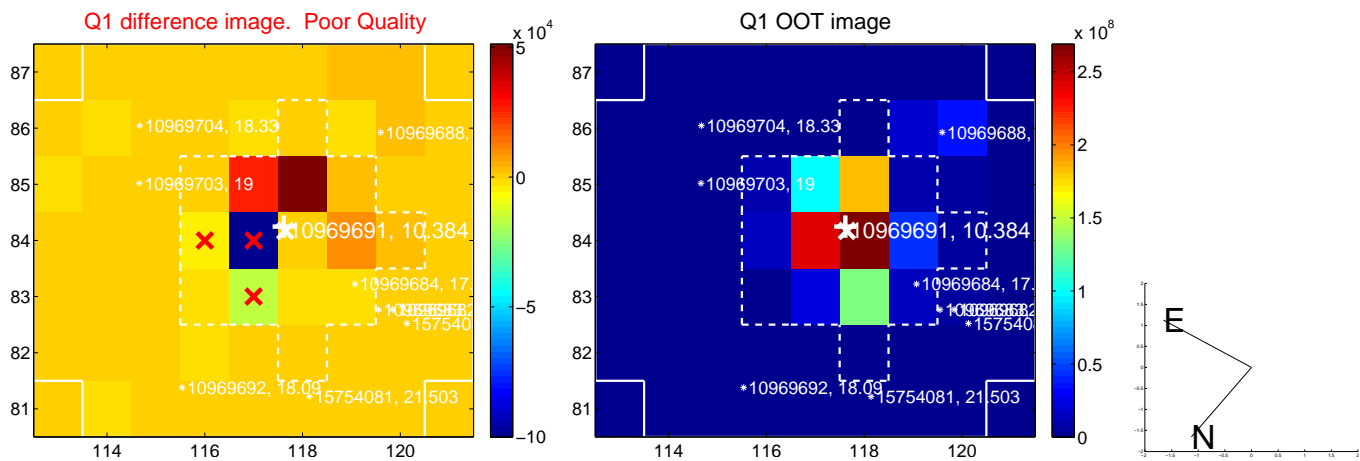


offset from photometric centroids



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.



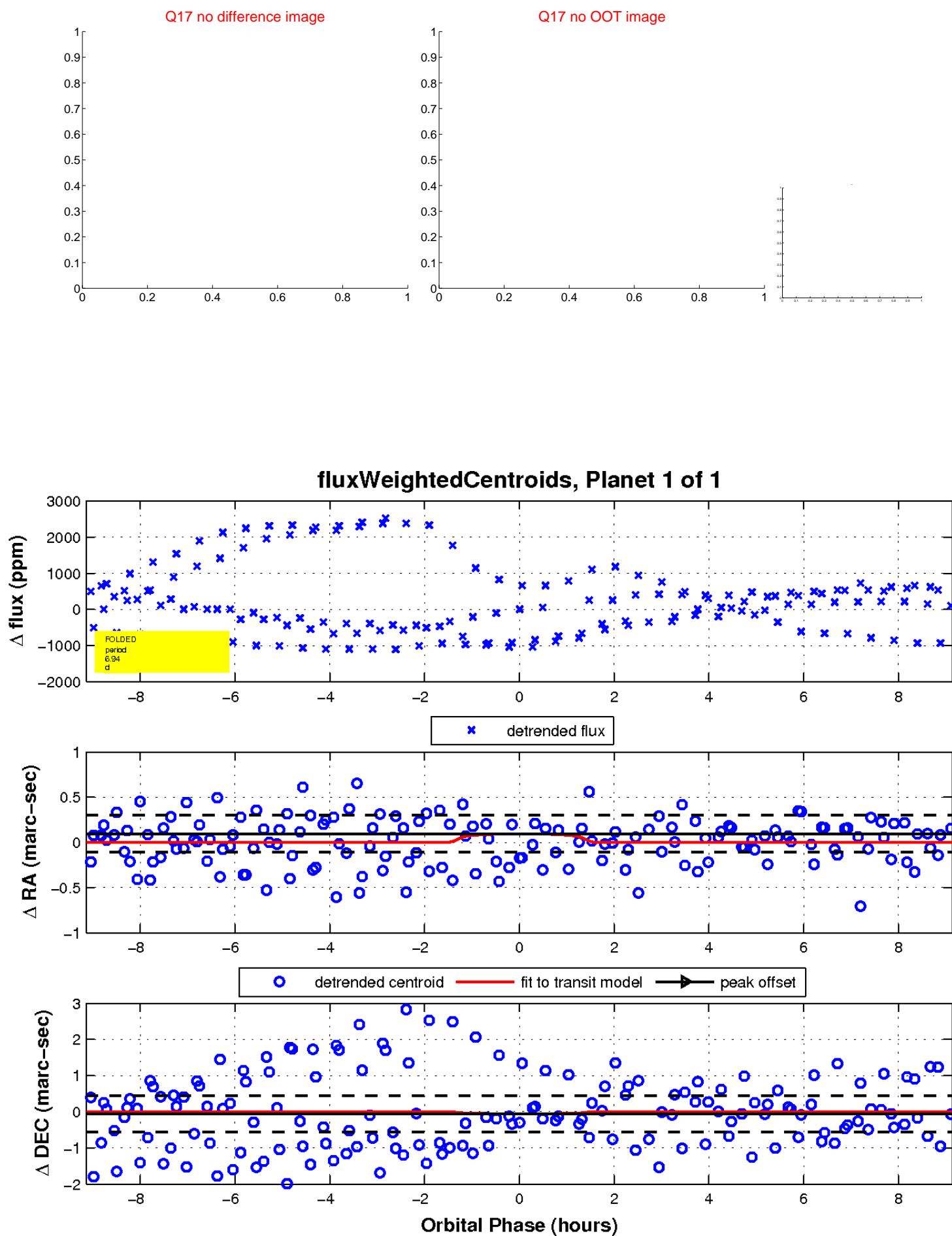
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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

