

KIC 007936194

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})
007936194-01	OBS	8149.01	536.541947	379.605980	284.9	4.659	7.5	7.6	1.79	5335	3.77	1.31

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
007936194-01	OBS	FP	0.22	1	0	0	0	INCONSISTENT_TRANS

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

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

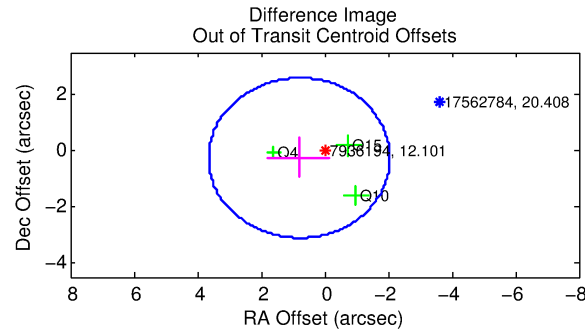
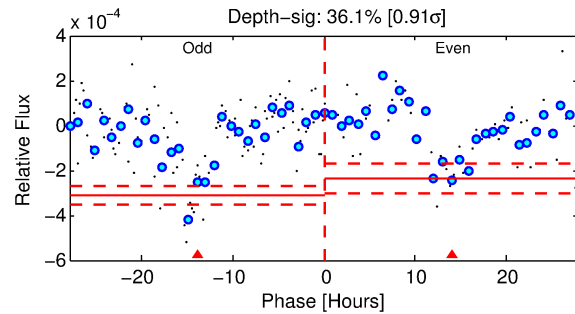
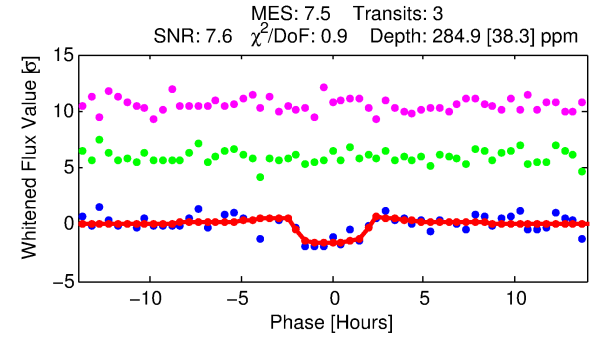
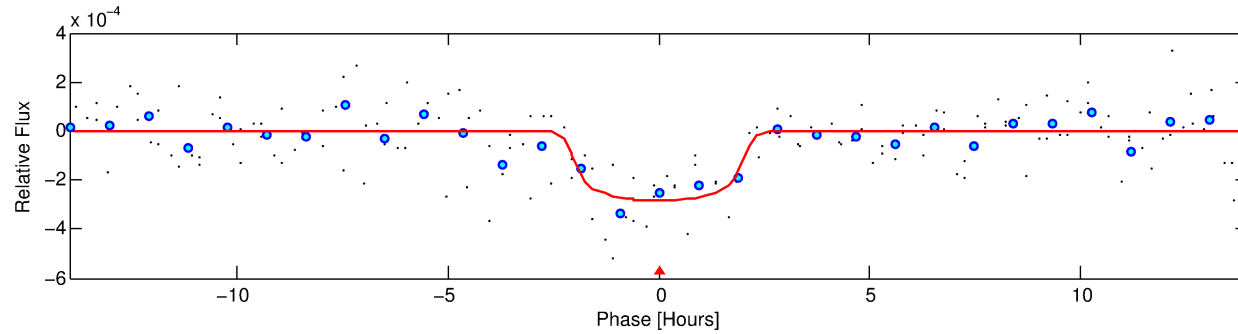
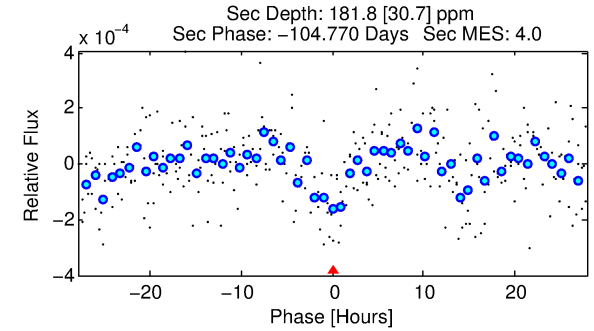
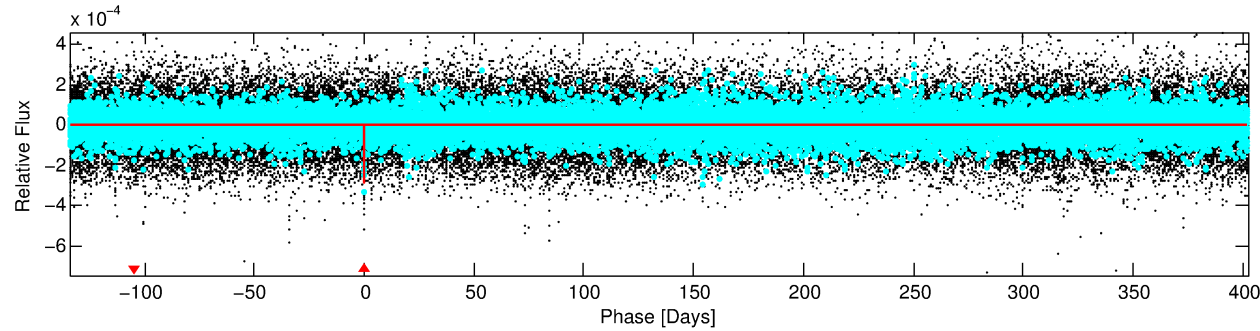
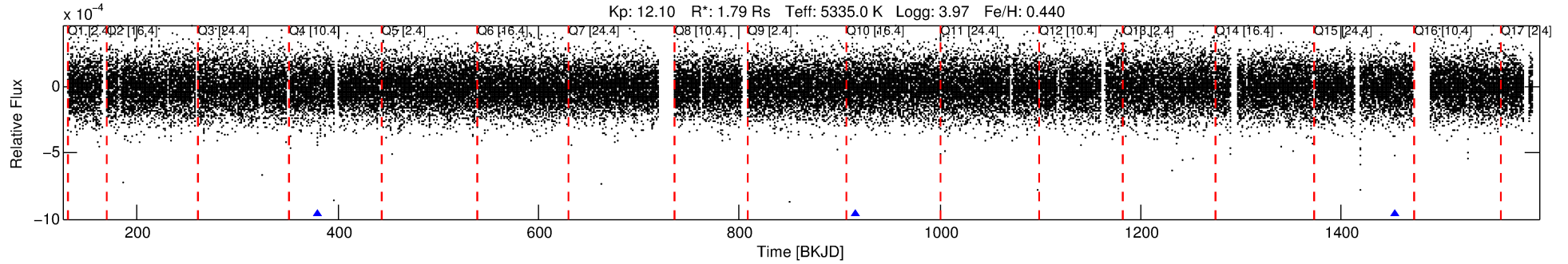
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 007936194-01

No Significant Match Found

DV One-Page Summary

KIC: 7936194 Candidate: 1 of 1 Period: 536.542 d



DV Fit Results:

Period = 536.54195 [0.00718] d
Epoch = 379.6060 [0.0078] BKJD
Rp/R* = 0.0193 [0.0048]
a/R* = 382.33 [374.52]
b = 0.92 [0.16]
Seff = 1.31 [1.08]
Teq = 273 [56] K
Rp = 3.77 [2.16] Re
a = 1.3355 [0.6719] AU
Ag = 12546.95 [12161.93] [1.03σ]
Teffp = 4464 [608] K [6.87σ]

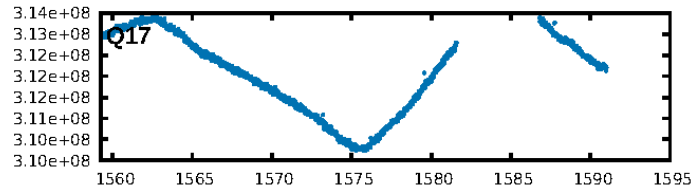
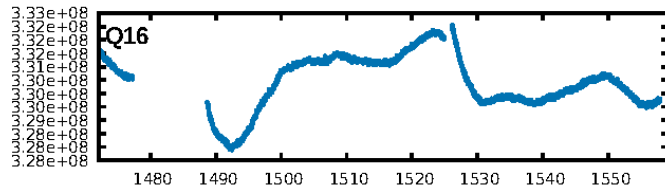
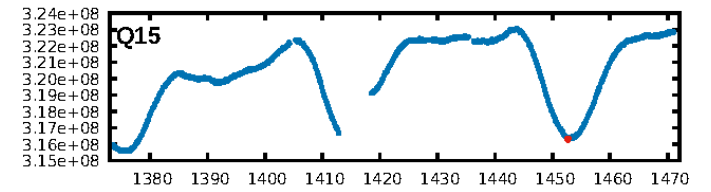
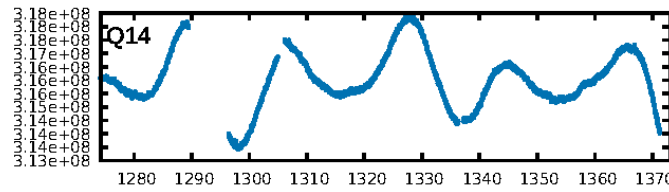
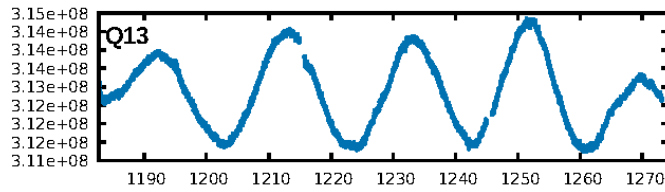
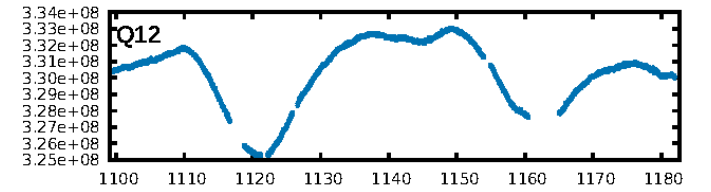
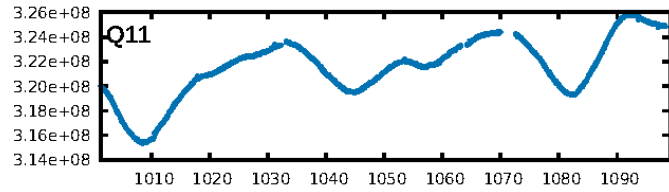
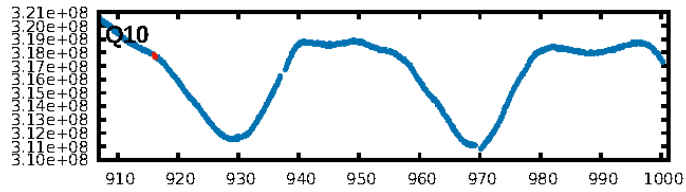
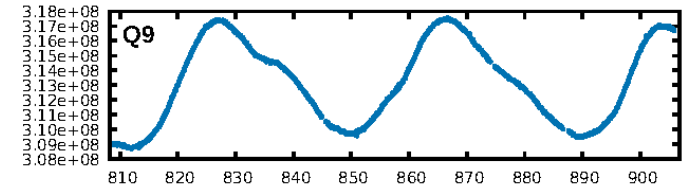
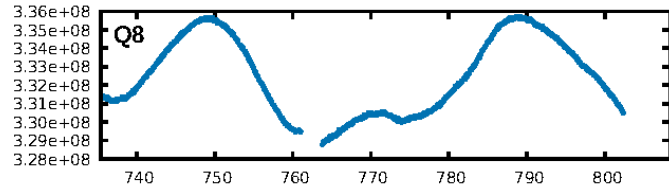
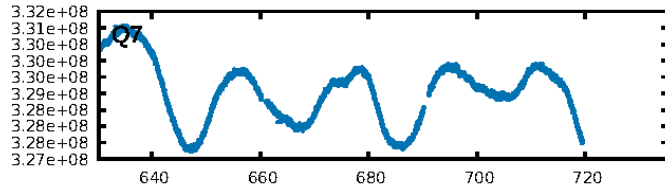
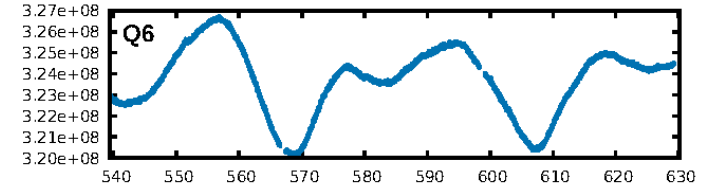
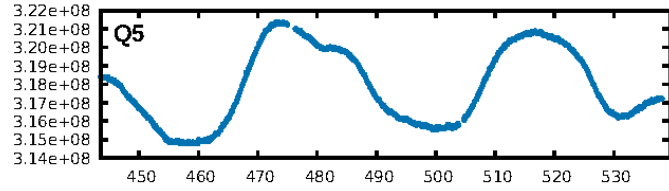
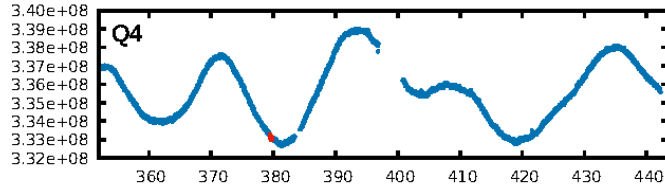
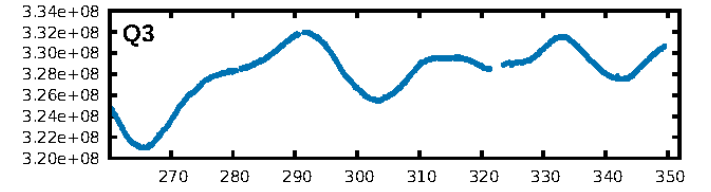
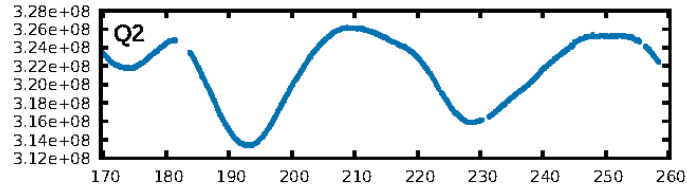
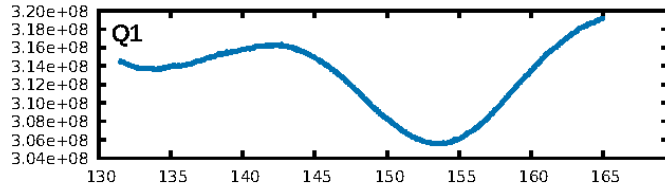
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: 39.5%
ModelChiSquareGof-sig: 92.7%
Bootstrap-pfa: 5.38e-11
RollingBand-fgt: 1.00 [3/3]
GhostDiagnostic-chr: 7.286
Centroid-sig: 59.0%
Centroid-so: 0.959 arcsec [0.63σ]
OotOffset-rm: 0.839 arcsec [0.88σ]
OotOffset-st: 1/1/1/0 [3]
KicOffset-rm: 1.059 arcsec [1.14σ]
KicOffset-st: 1/1/1/0 [3]
DiffImageQuality-fgm: 0.67 [2/3]
DiffImageOverlap-fno: 1.00 [3/3]

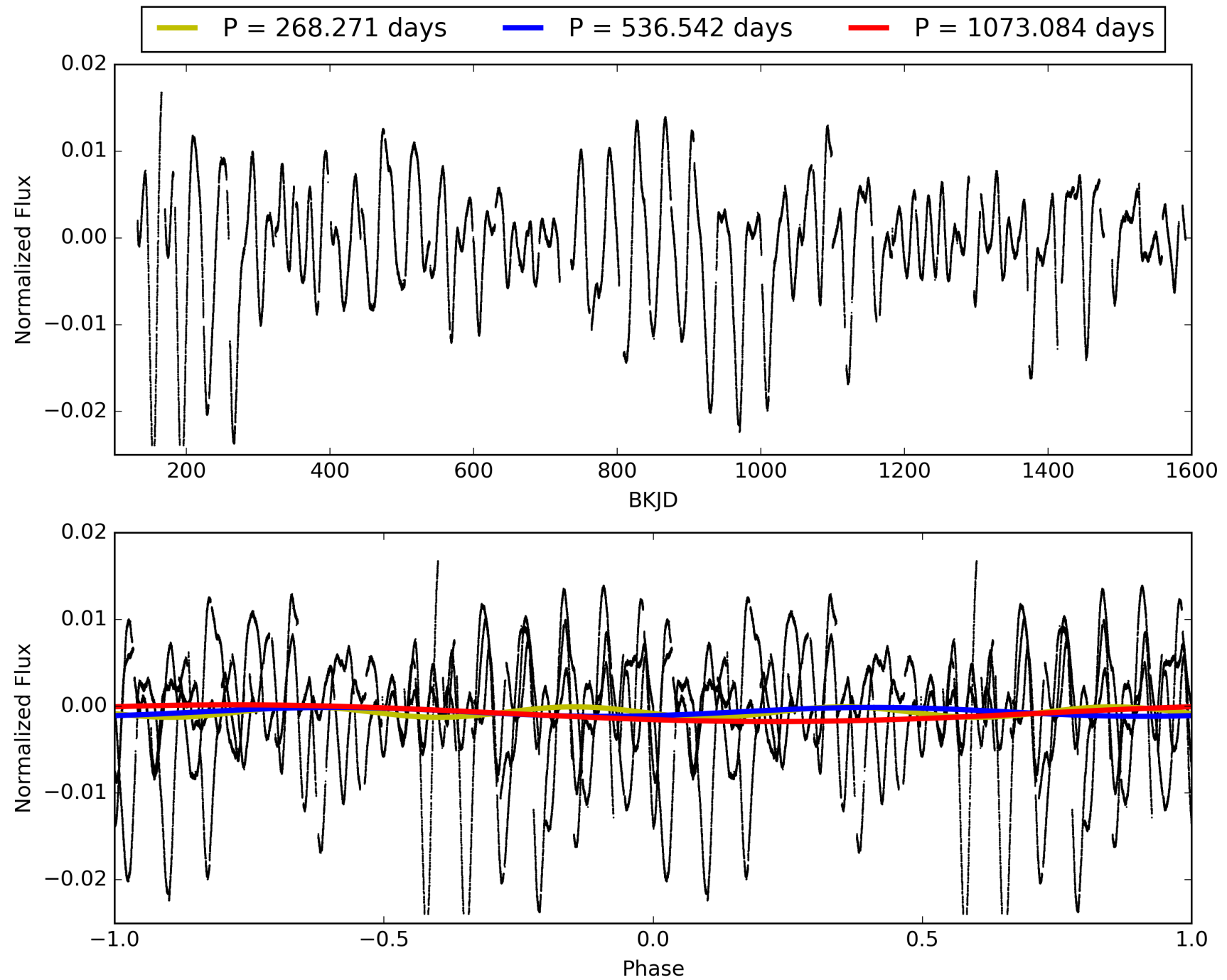
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 01-Feb-2016 06:09:58 Z

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

TCE 007936194-01, PDC Light Curves

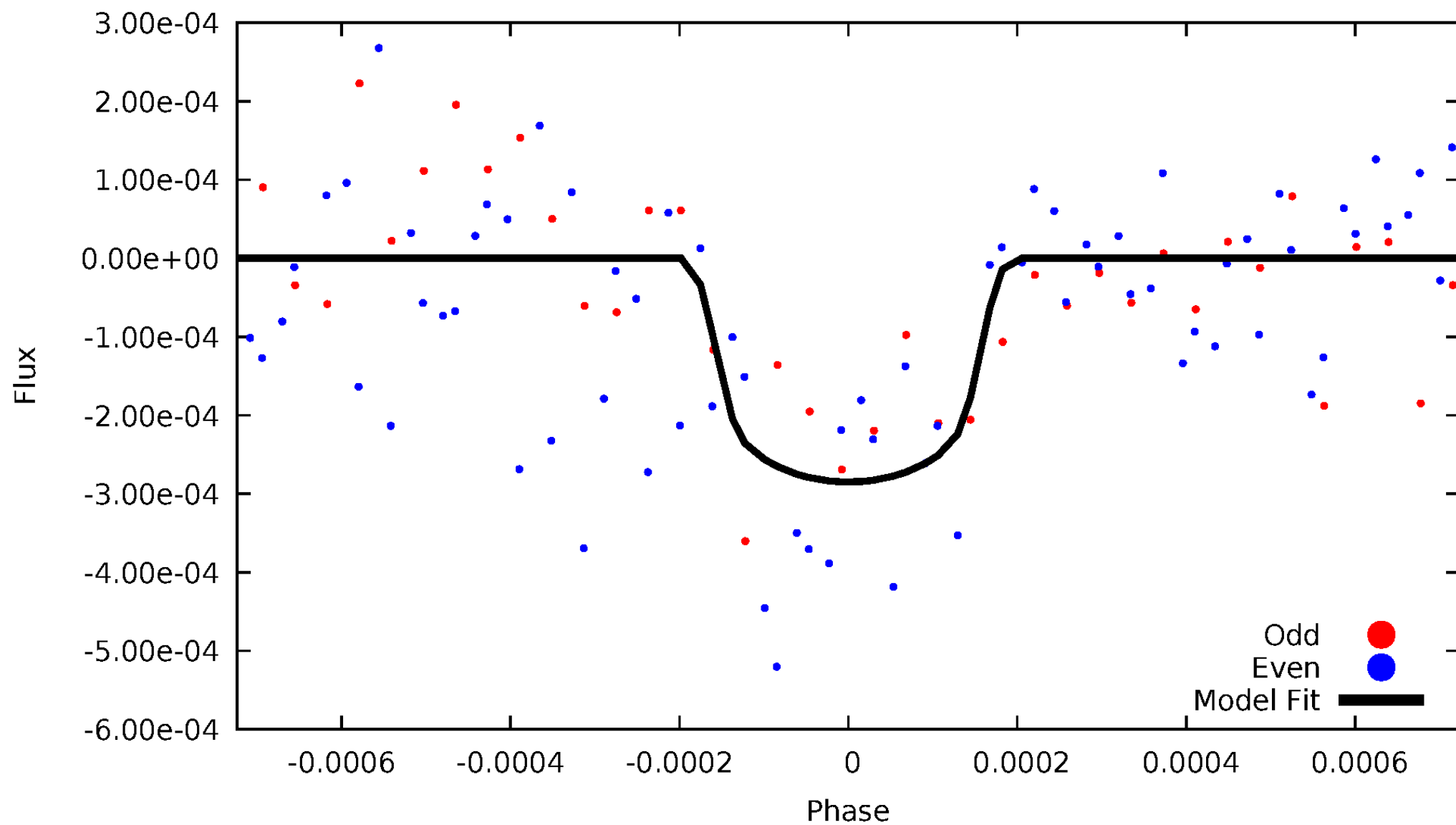


TCE 007936194-01



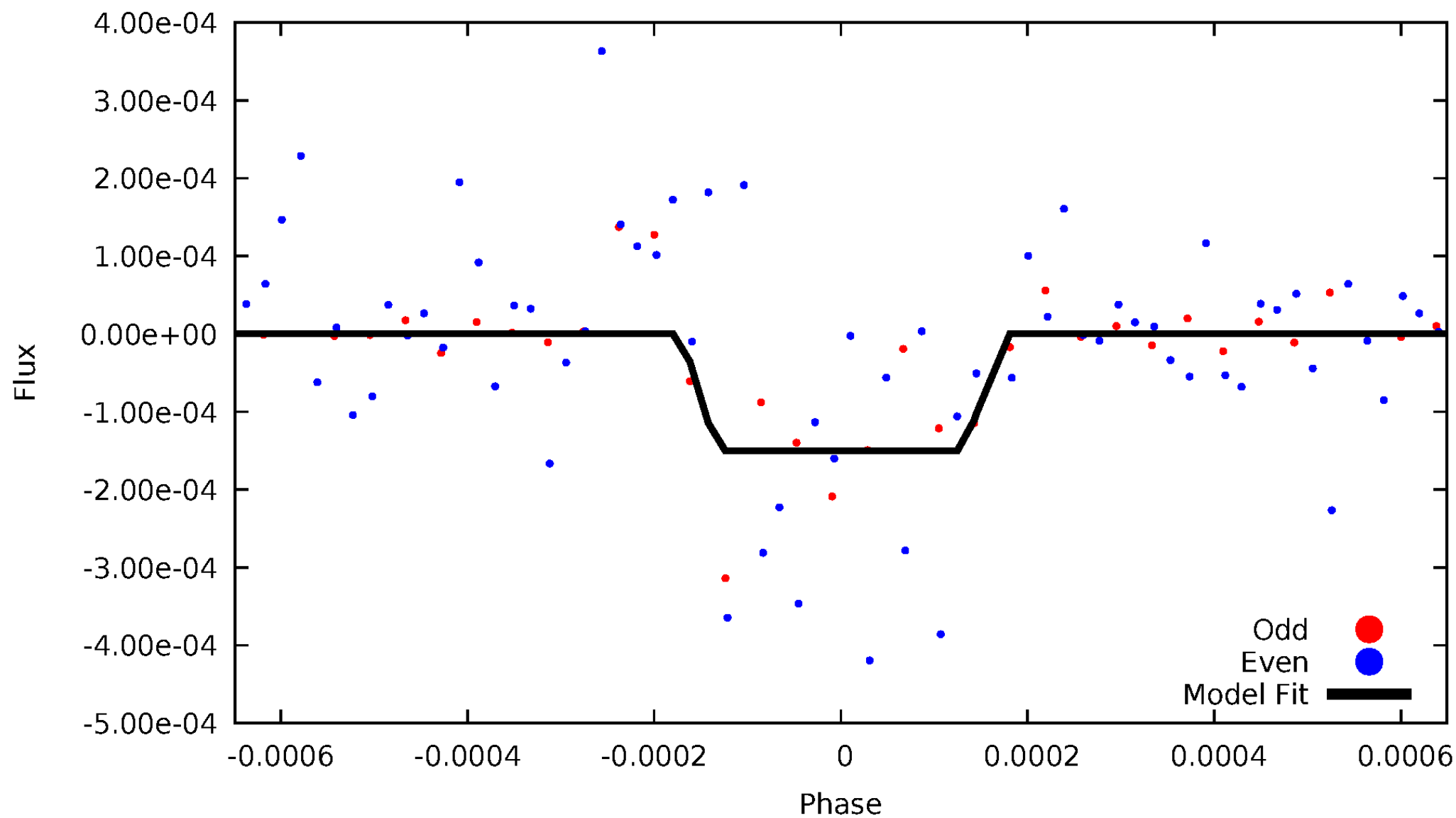
DV Odd/Even

TCE 007936194-01



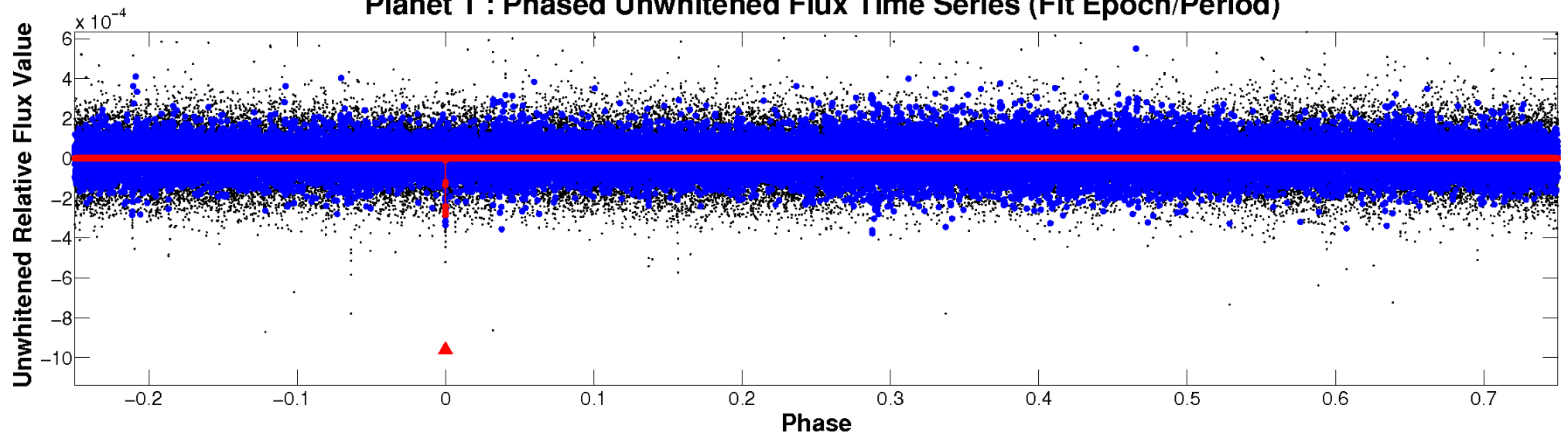
ALT Odd/Even

TCE 007936194-01

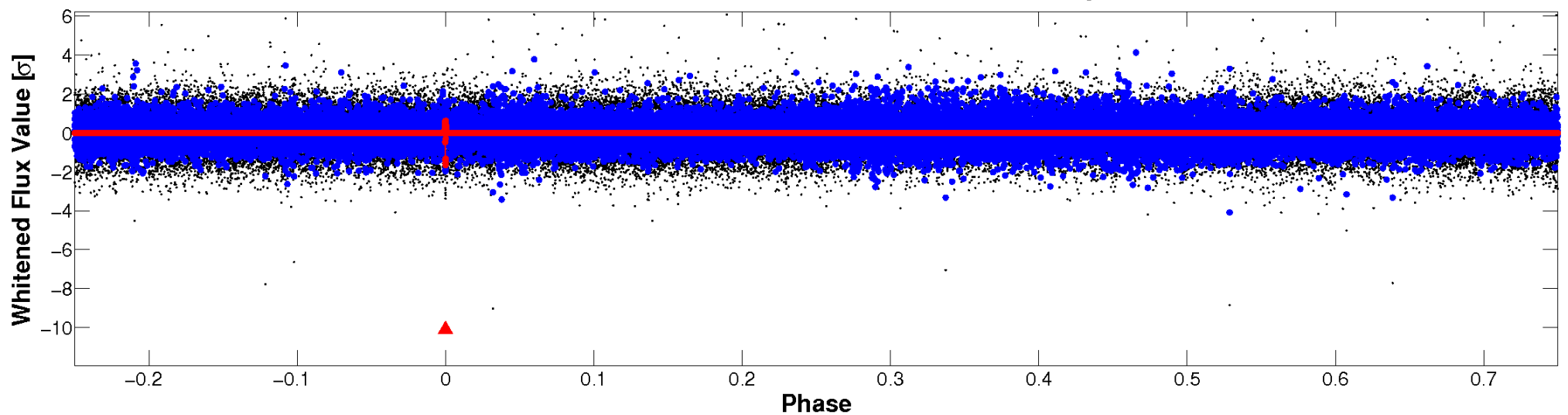


Non-Whitened Vs. Whitened Light Curve

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

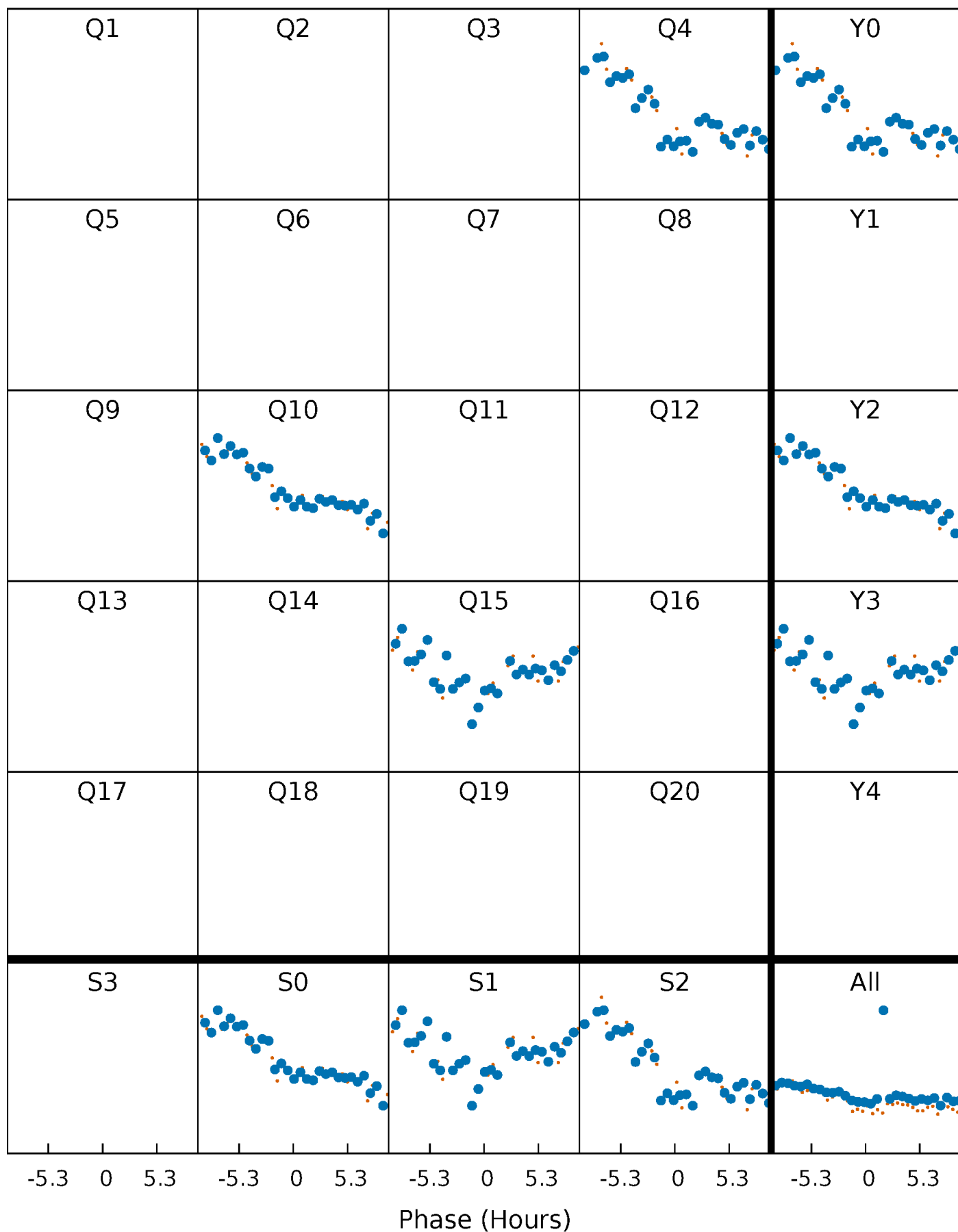


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



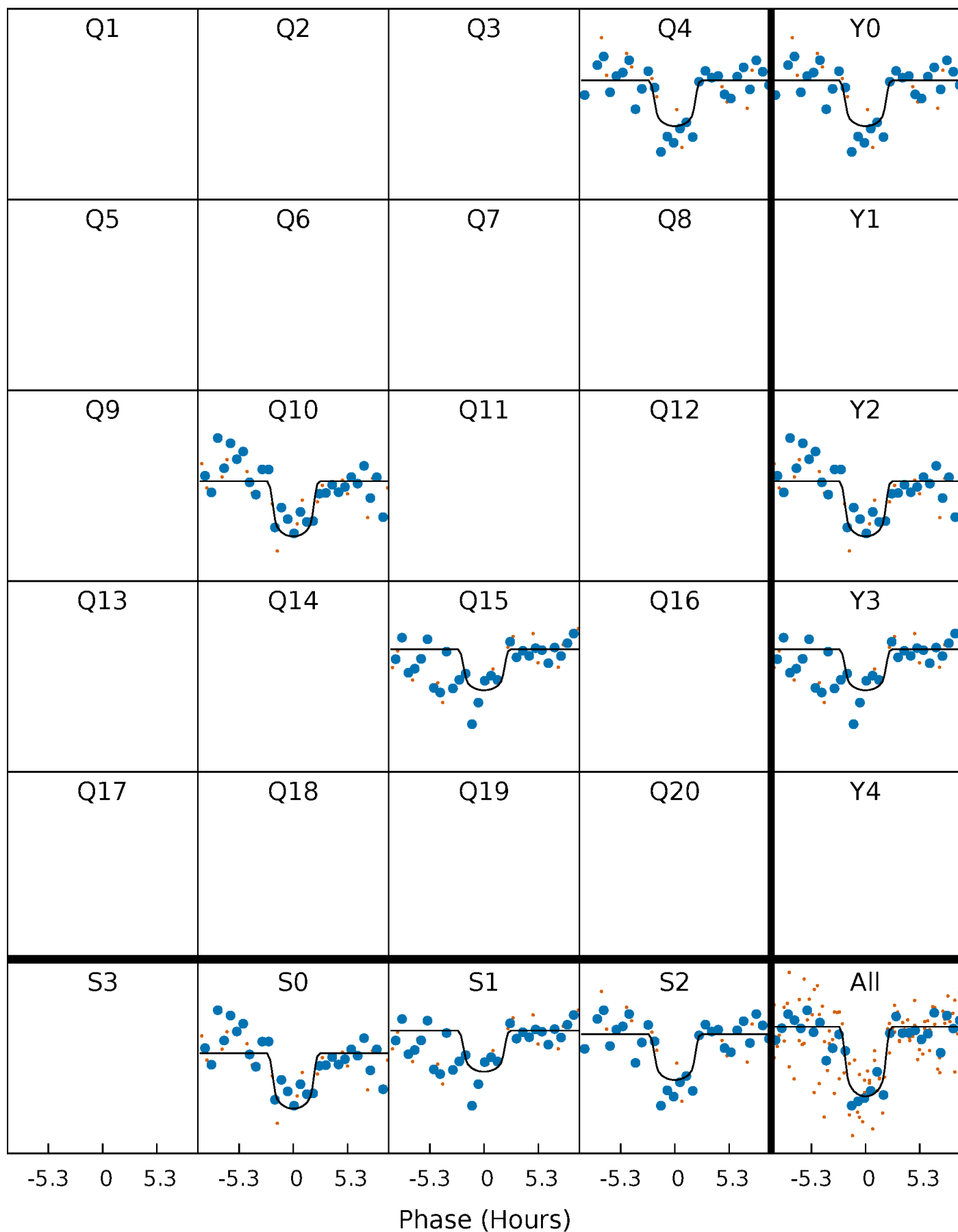
PDC Quarter-Phased Transit Curves

TCE 007936194-01 P=536.541947 Days $T_0=379.605980$ (BKJD)



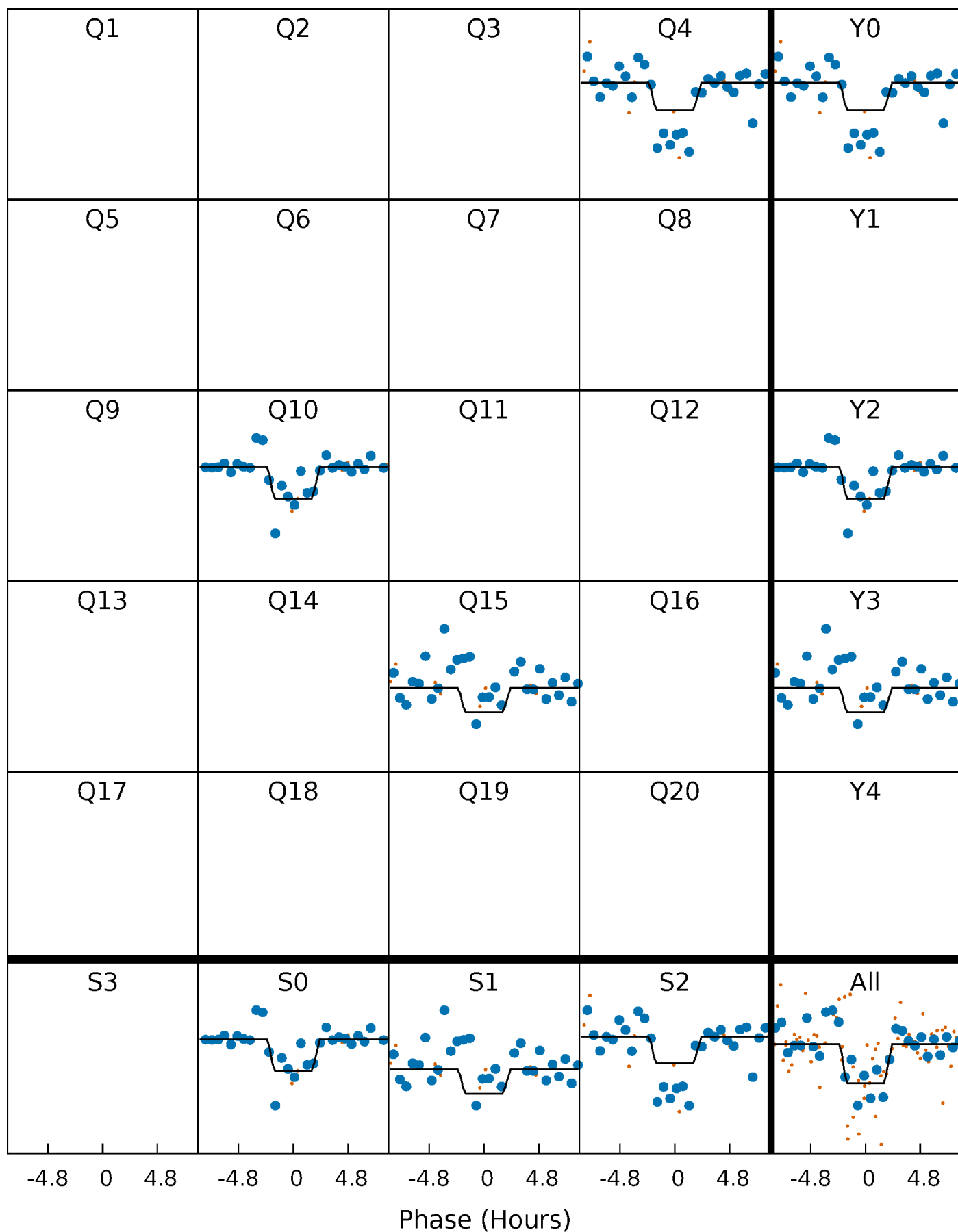
DV Quarter-Phased Transit Curves

TCE 007936194-01 P=536.541947 Days $T_0=379.605980$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

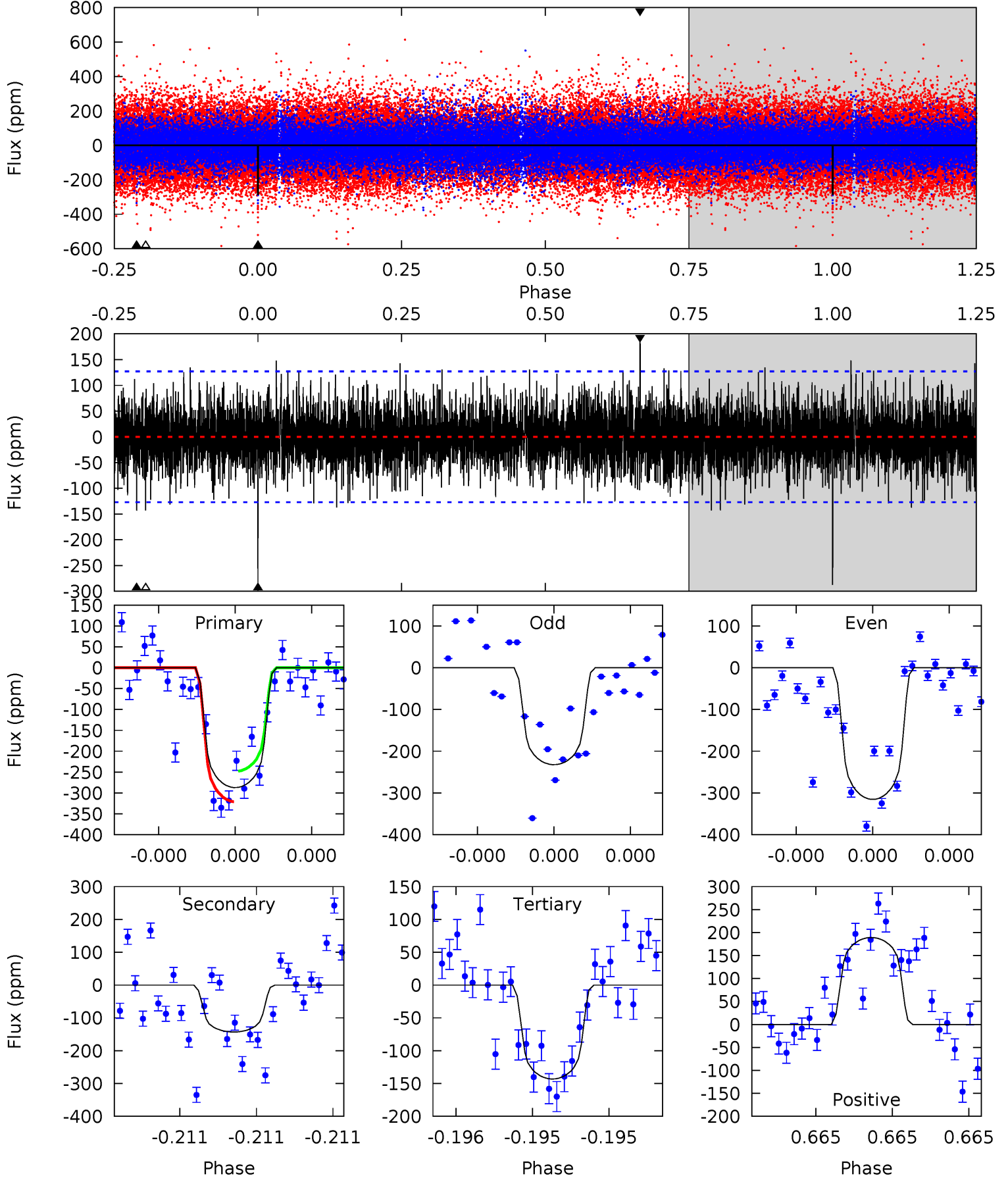
TCE 007936194-01 P=536.530796 Days $T_0=379.618039$ (BKJD)



DV Model-Shift Uniqueness Test

007936194-01, P = 536.541947 Days, E = 379.605980 Days

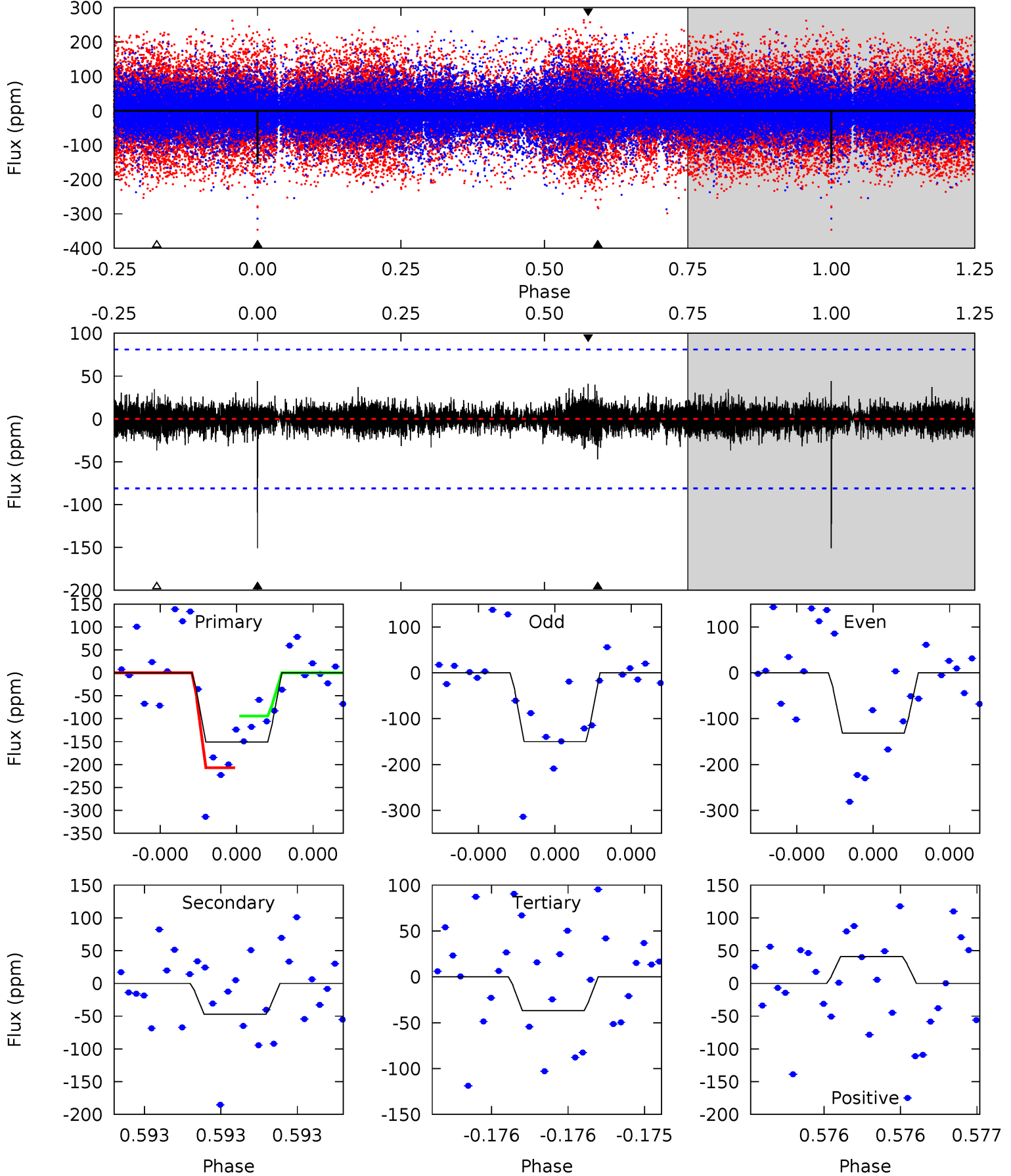
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
12.7	6.34	6.34	8.37	5.62	3.55	1.73	6.37	4.34	0.00	-2.04	1.72	1.00	0.40	1.61



Alt Model-Shift Uniqueness Test

007936194-01, P = 536.530796 Days, E = 379.618039 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
10.5	3.29	2.57	2.86	5.66	3.61	0.54	7.97	7.68	0.72	0.43	0.71	1.05	0.23	4.02



Stellar Parameters For KIC 007936194

	$T_{\text{eff}} (K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M (M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	5335^{+176}_{-128}	$3.973^{+0.480}_{-0.160}$	$0.440^{+0.050}_{-0.250}$	$1.794^{+0.461}_{-0.922}$	$1.104^{+0.142}_{-0.189}$	$0.269^{+1.456}_{-0.115}$
	+3%/-2%	+12%/-4%	+11%/-57%	+26%/-51%	+13%/-17%	+541%/-43%
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 007936194-01 / KOI 8149.01

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	-143 ± 23	$3.56^{+1.18}_{-1.19}$	376^{+30}_{-52}	4387^{+579}_{-383}	11322^{+13723}_{-5235}
Alt.	-47 ± 14	$2.17^{+1.15}_{-0.90}$	378^{+30}_{-46}	4215^{+1035}_{-525}	9387^{+19826}_{-5759}

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 $A_{obs} \gg 1.0$

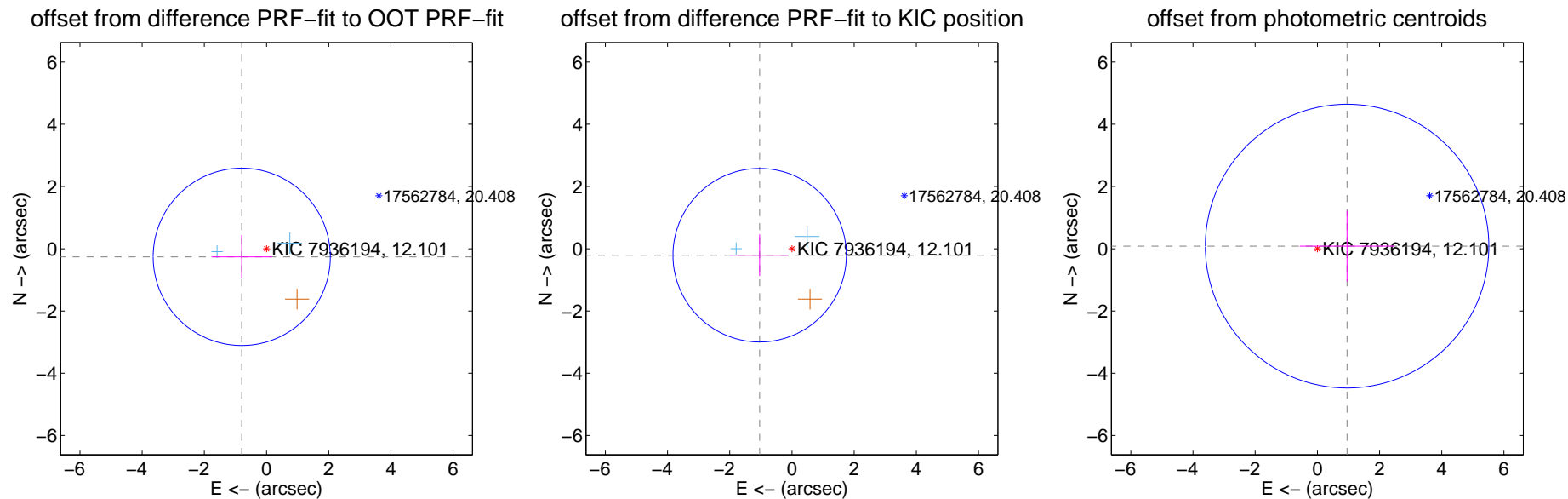
DV Centroid Data

Supplemental centroid analysis for 007936194-01. Kepler magnitude: 12.10. Transit SNR 7.58

There are 2 quarters with good PRF difference image offsets

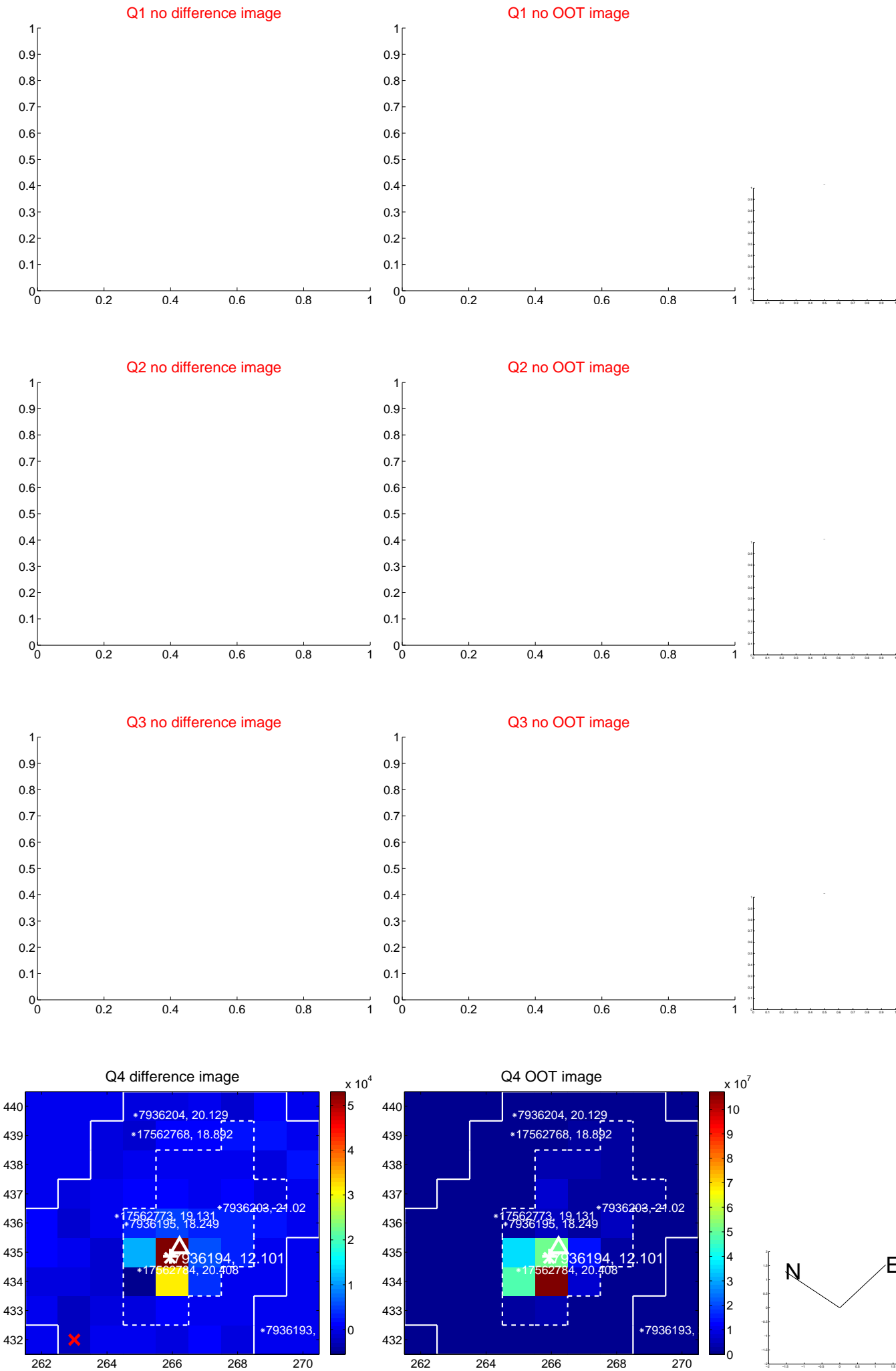
The direct PRF centroid is offset from the target star catalog position by about 0.34 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.839 ± 0.949	0.88	0.797 ± 0.972	-0.261 ± 0.703
PRF-fit source offset from KIC position	1.059 ± 0.929	1.14	1.038 ± 0.938	-0.208 ± 0.670
photometric centroid source offset	0.96 ± 1.52	0.63	-0.96 ± 1.52	0.08 ± 1.13



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.

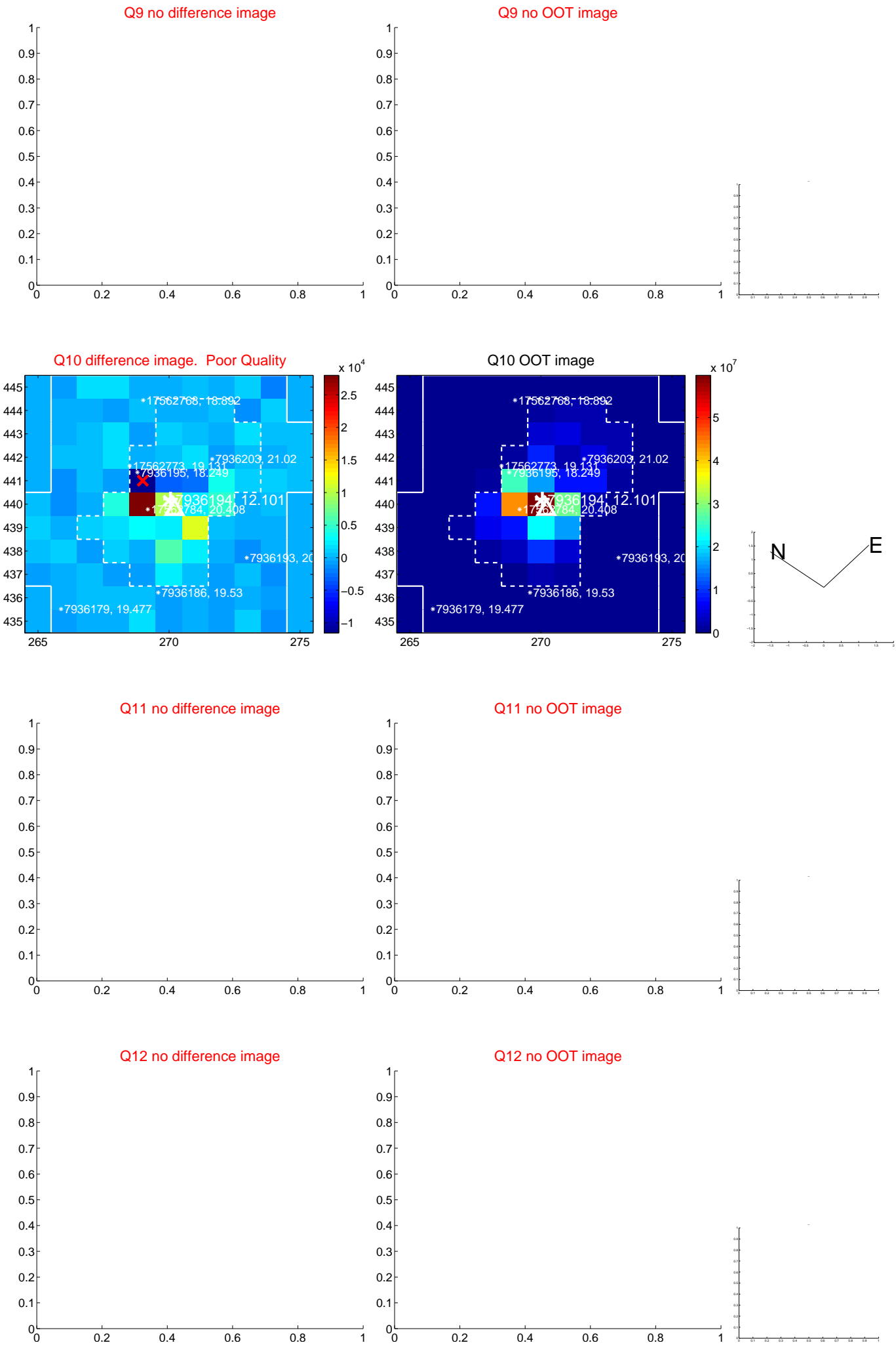
white ×: KIC target position; +: OOT centroid; △: difference centroid. red ✕: large negative pixel value.



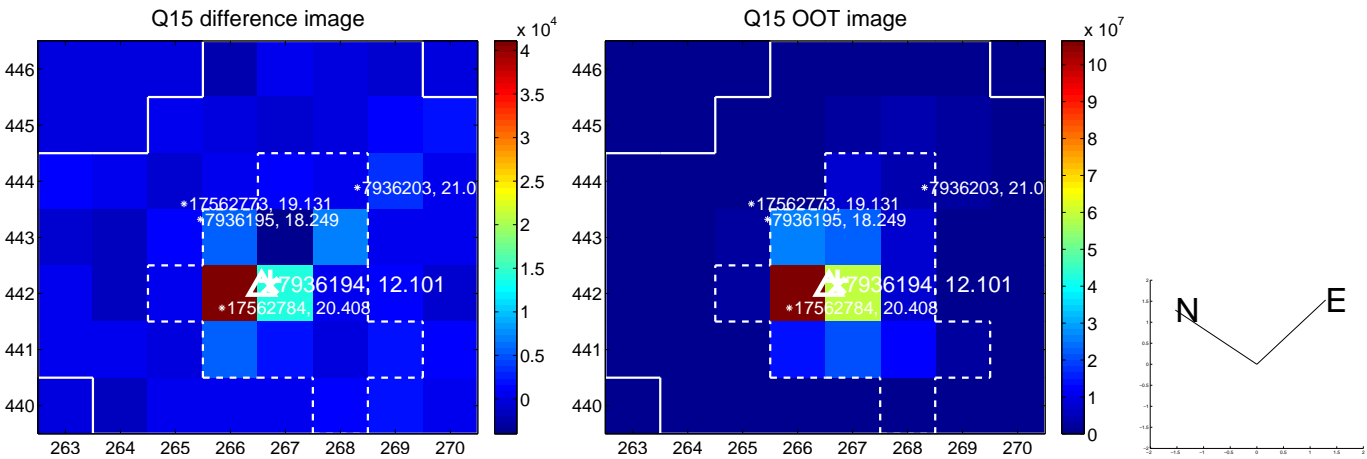
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



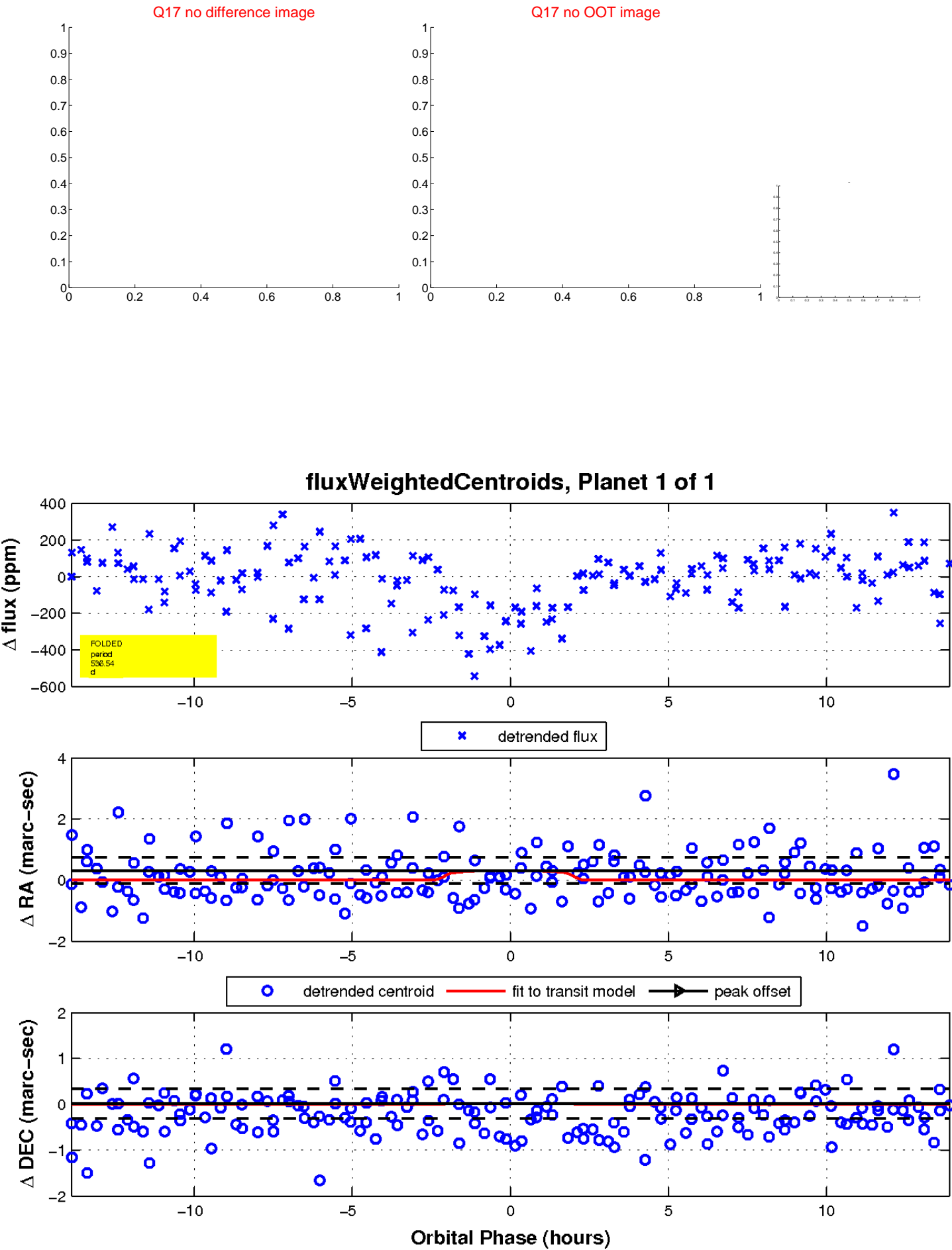
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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

