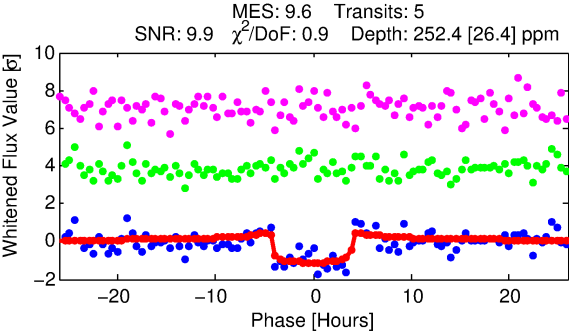
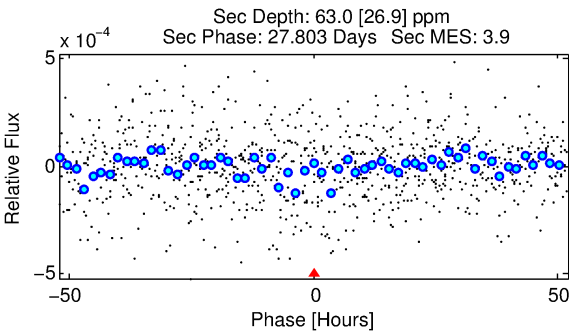
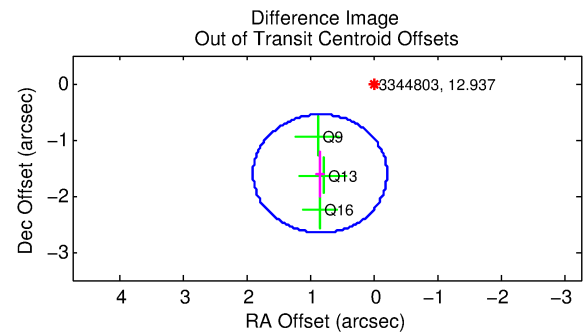
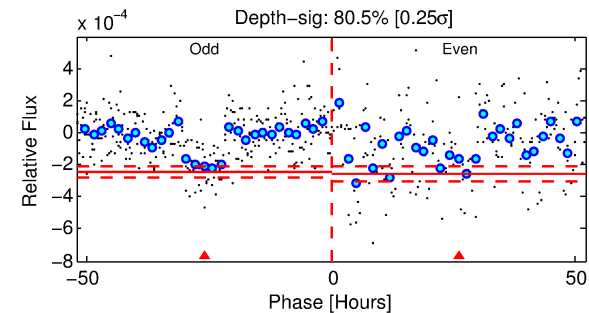
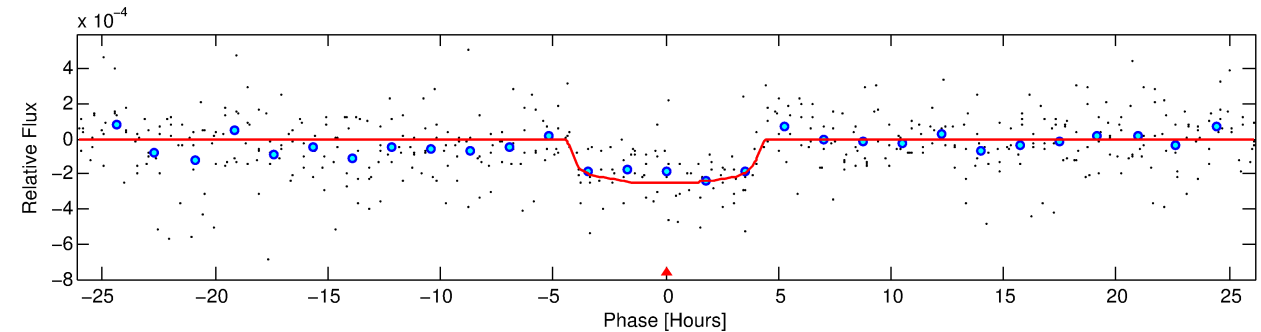
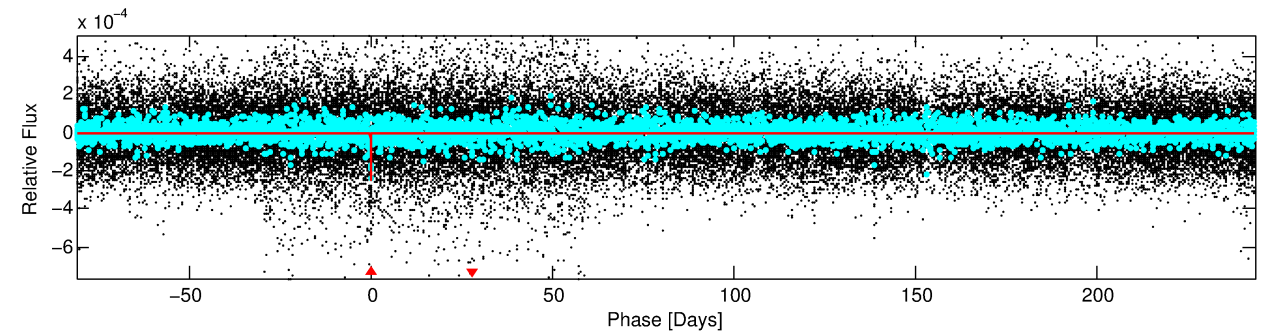
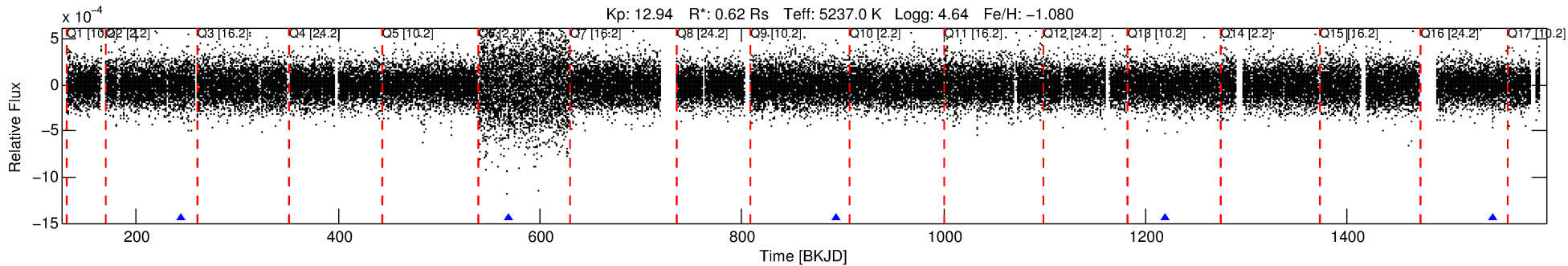


**WARNING: THIS DATA IS  
SIMULATED, NOT OBSERVED**

# DV One-Page Summary

KIC: 3344803 Candidate: 1 of 1 Period: 325.075 d

**WARNING: THIS DATA IS  
SIMULATED, NOT OBSERVED**



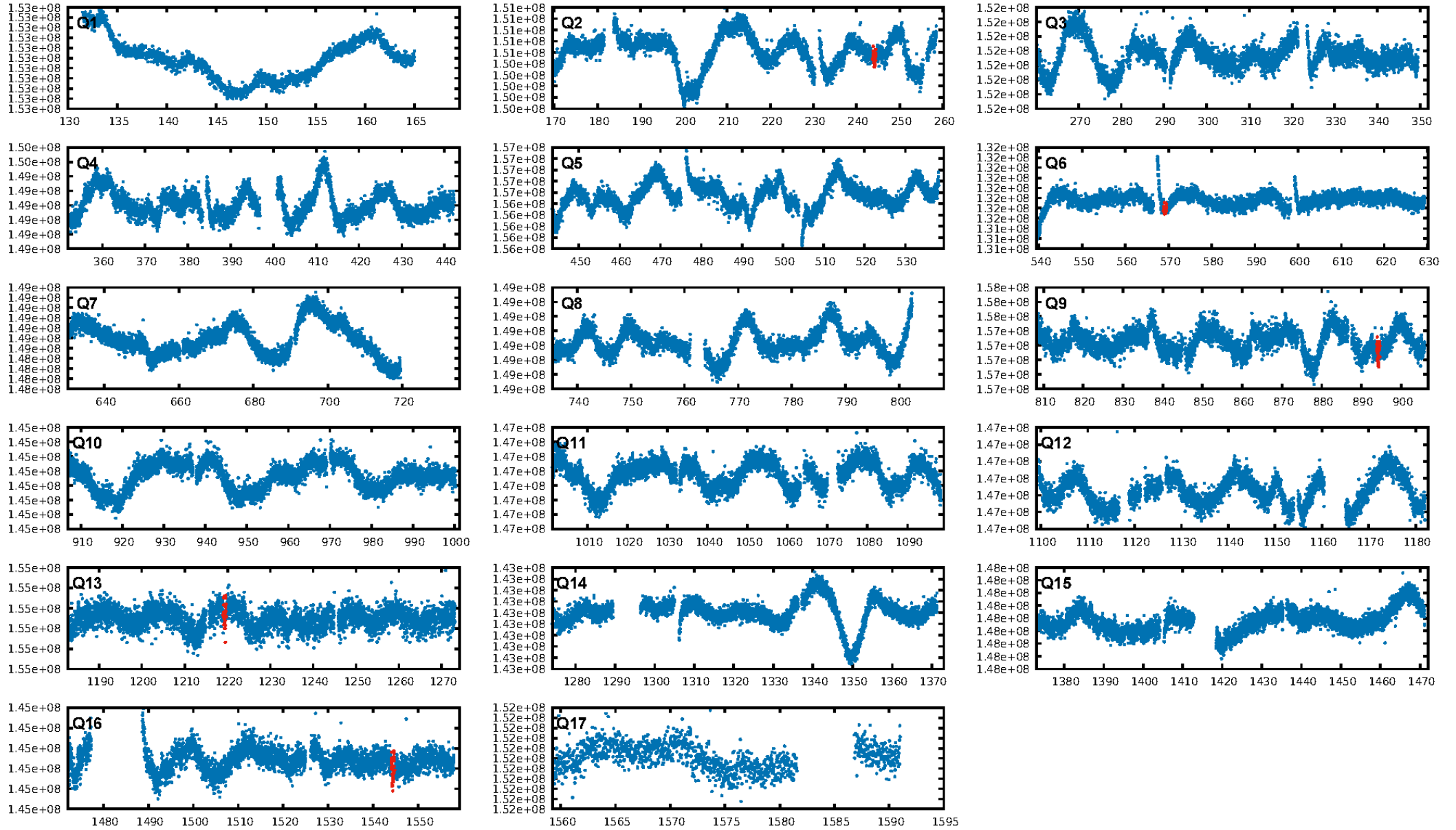
## DV Fit Results:

Period = 325.07517 [0.00447] d  
Epoch = 244.1047 [0.0132] BKJD  
Rp/R\* = 0.0162 [0.0049]  
a/R\* = 174.18 [235.78]  
b = 0.81 [0.57]  
Seff = 0.42 [0.07]  
Teq = 206 [8] K  
Rp = 1.11 [0.35] Re  
a = 0.7879 [0.0564] AU  
Ag = 17627.25 [13216.12] [1.33 $\sigma$ ]  
Teffp = 3663 [688] K [5.03 $\sigma$ ]

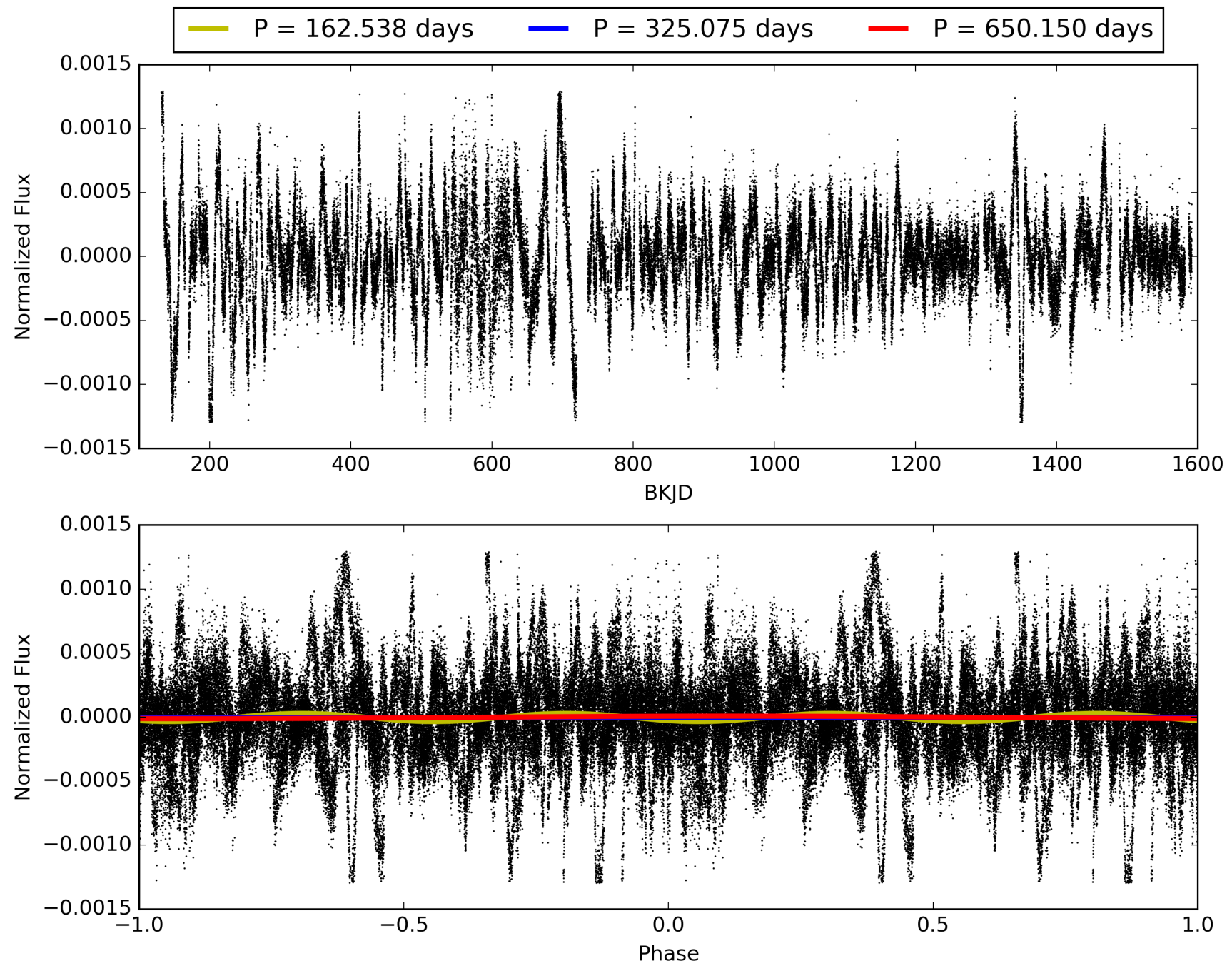
## DV Diagnostic Results:

ShortPeriod-sig: N/A  
LongPeriod-sig: N/A  
ModelChiSquare2-sig: 81.3%  
ModelChiSquareGof-sig: 100.0%  
Bootstrap-pfa: 1.80e-14  
RollingBand-fgt: 1.00 [5/5]  
GhostDiagnostic-chr: 4.076  
Centroid-sig: 76.2%  
Centroid-so: 0.493 arcsec [0.48 $\sigma$ ]  
OotOffset-rm: 1.821 arcsec [5.18 $\sigma$ ]  
KicOffset-rm: 2.047 arcsec [4.15 $\sigma$ ]  
OotOffset-st: 0/0/1/2 [3]  
KicOffset-st: 0/0/1/2 [3]  
DiffImageQuality-fgm: 1.00 [3/3]  
DiffImageOverlap-fno: 1.00 [5/5]

# TCE 003344803-01, PDC Light Curves

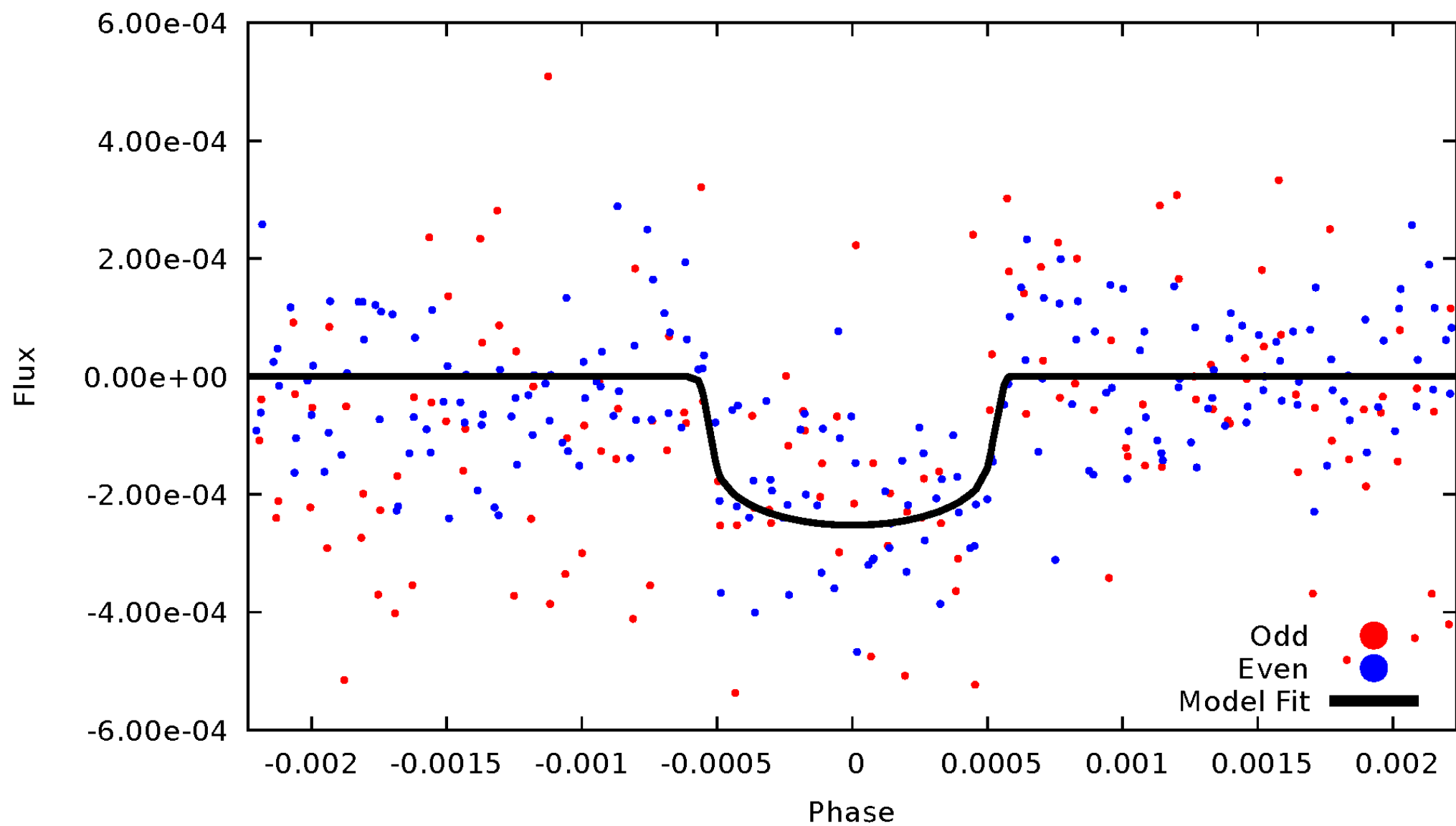


TCE 003344803-01



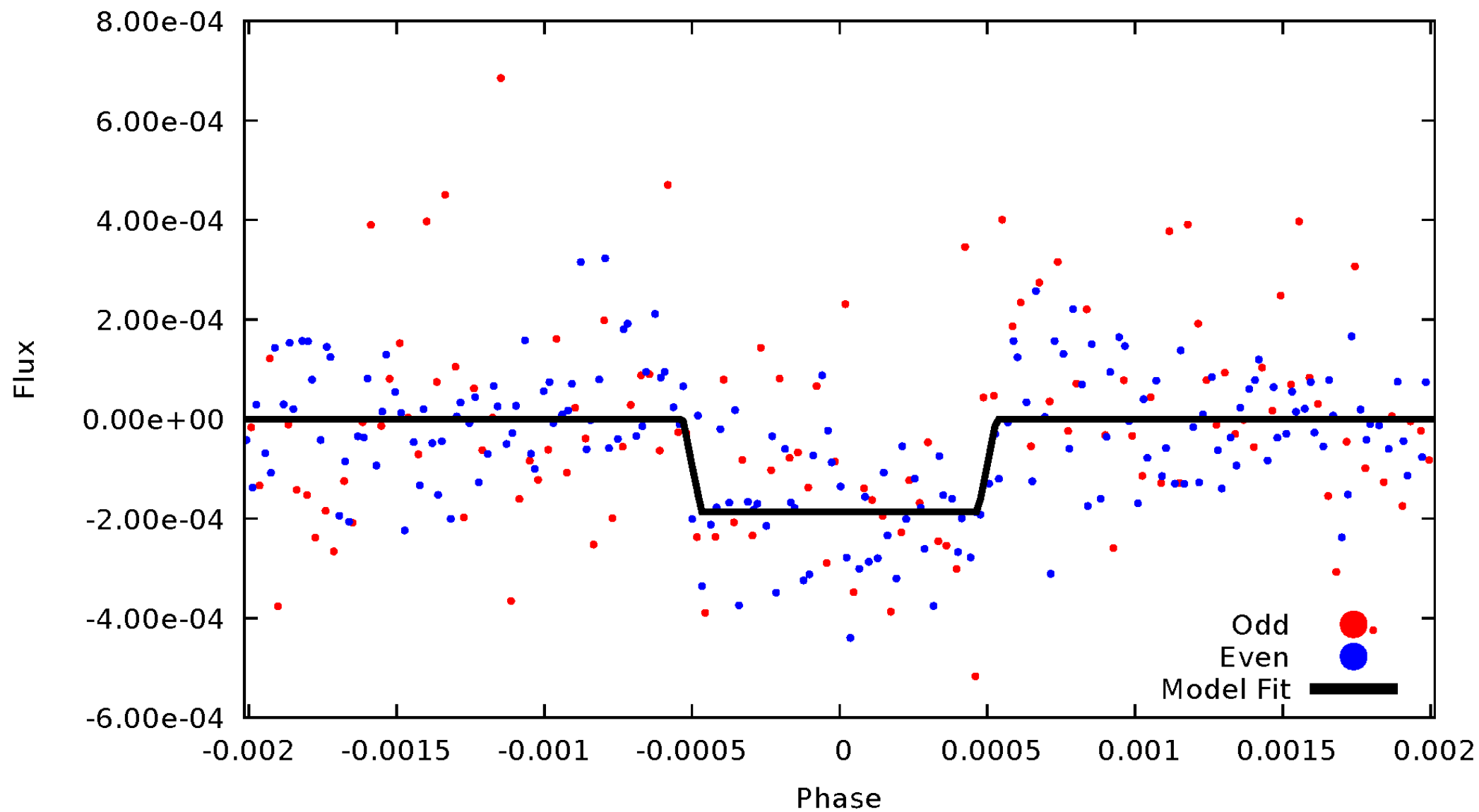
DV Odd/Even

TCE 003344803-01

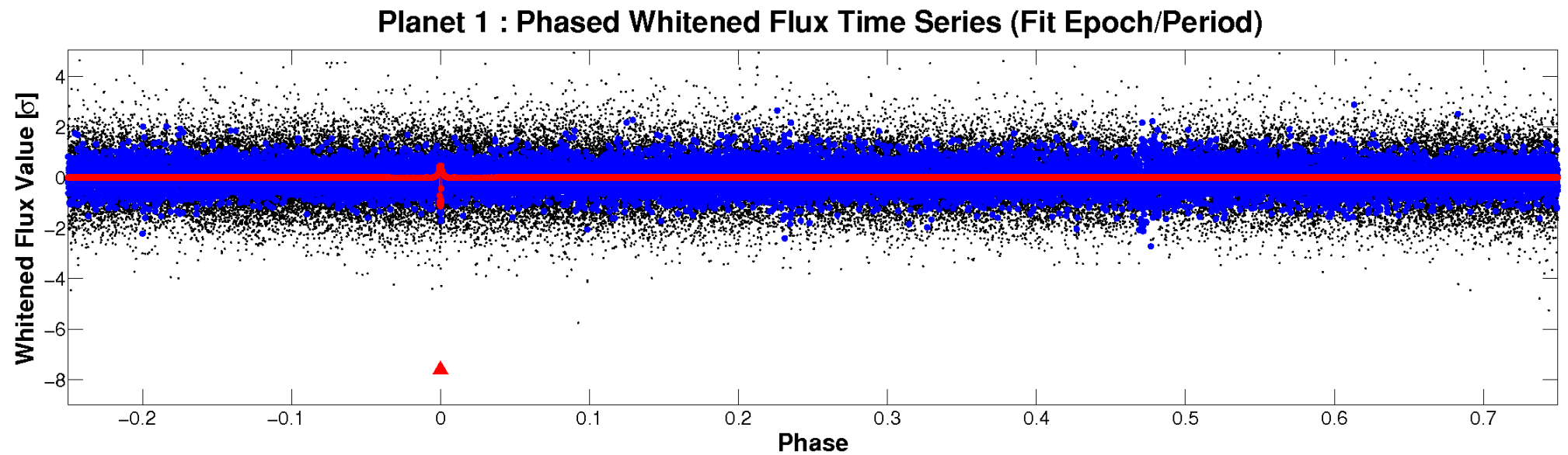
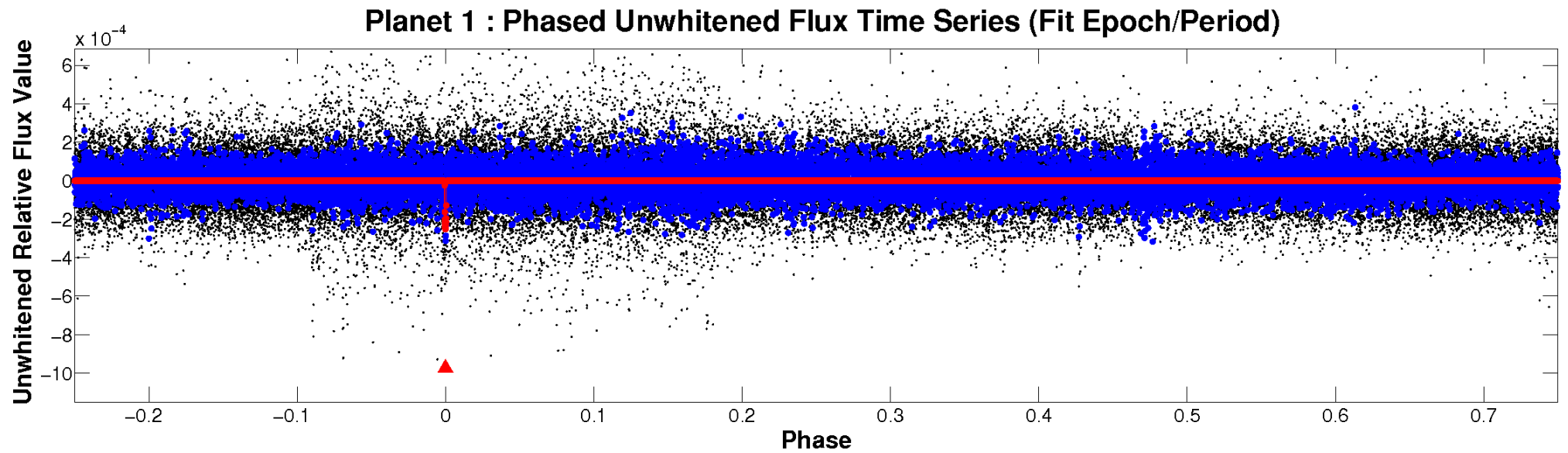


# ALT Odd/Even

TCE 003344803-01

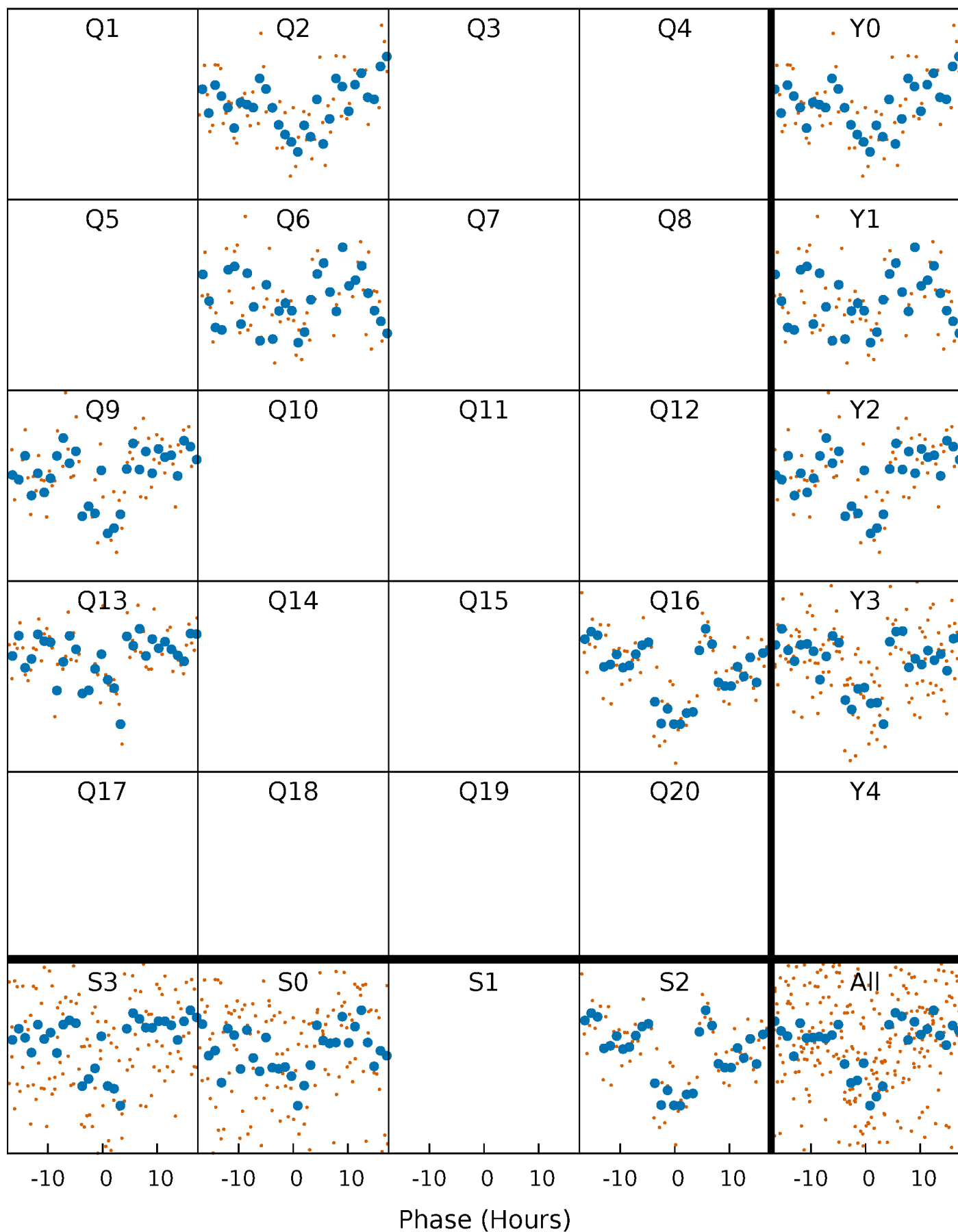


# Non-Whitened Vs. Whitened Light Curve



# PDC Quarter-Phased Transit Curves

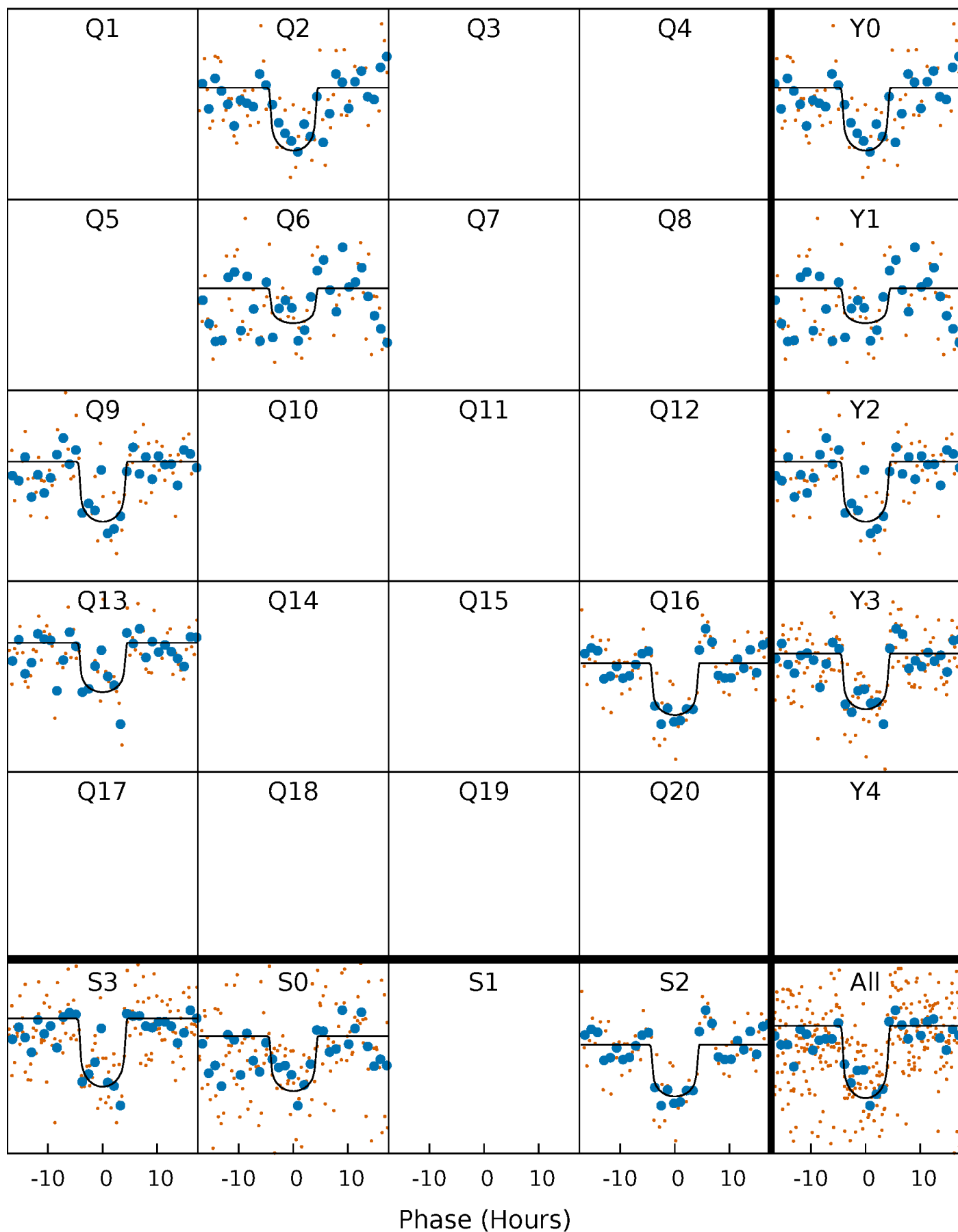
TCE 003344803-01 P=325.075168 Days  $T_0=244.104666$  (BKJD)





# DV Quarter-Phased Transit Curves

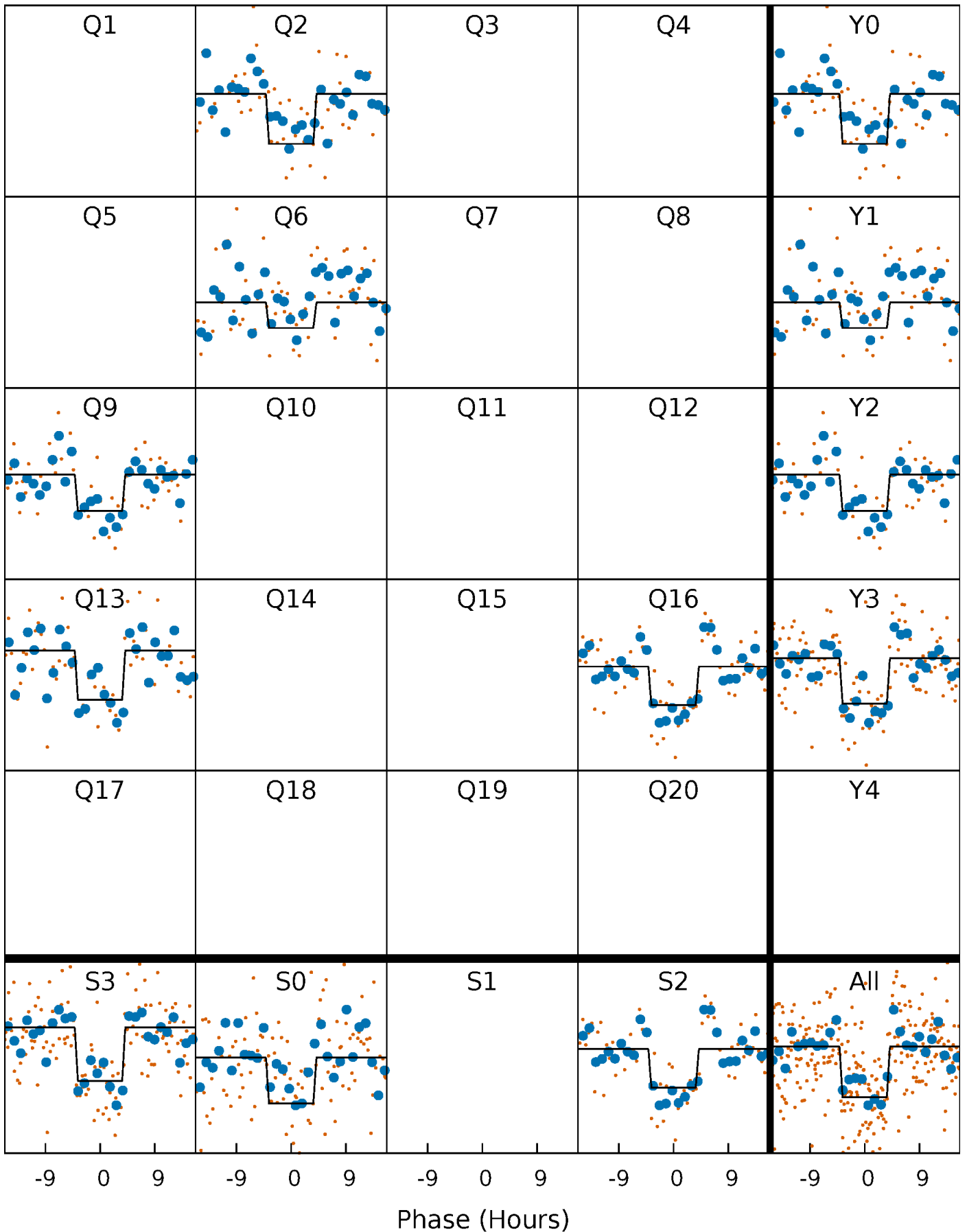
TCE 003344803-01 P=325.075168 Days  $T_0=244.104666$  (BKJD)





# Alt. Detrend Quarter-Phased Transit Curves

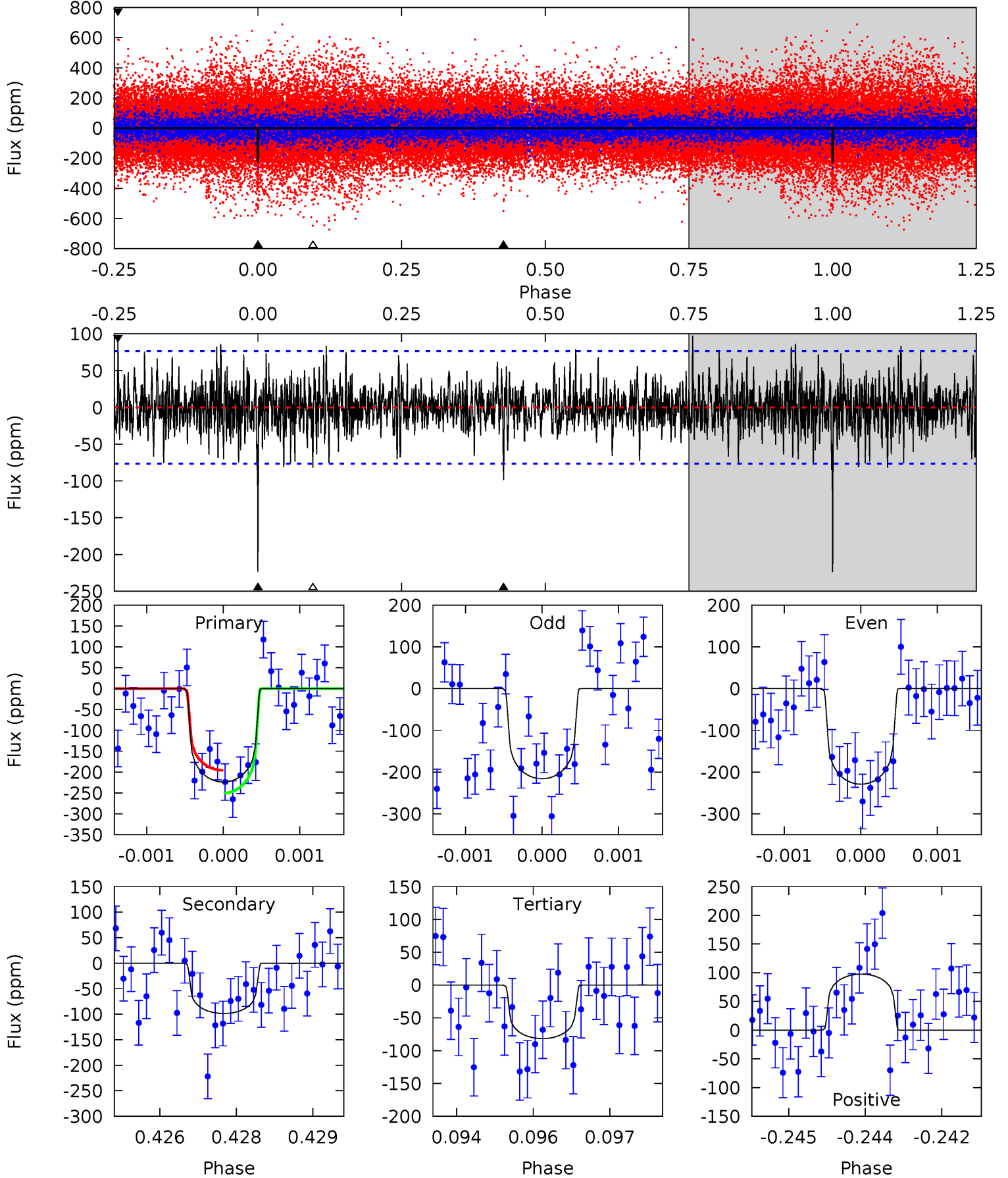
TCE 003344803-01 P=325.070695 Days  $T_0=244.116385$  (BKJD)



# DV Model-Shift Uniqueness Test

003344803-01, P = 325.075168 Days, E = 244.104666 Days

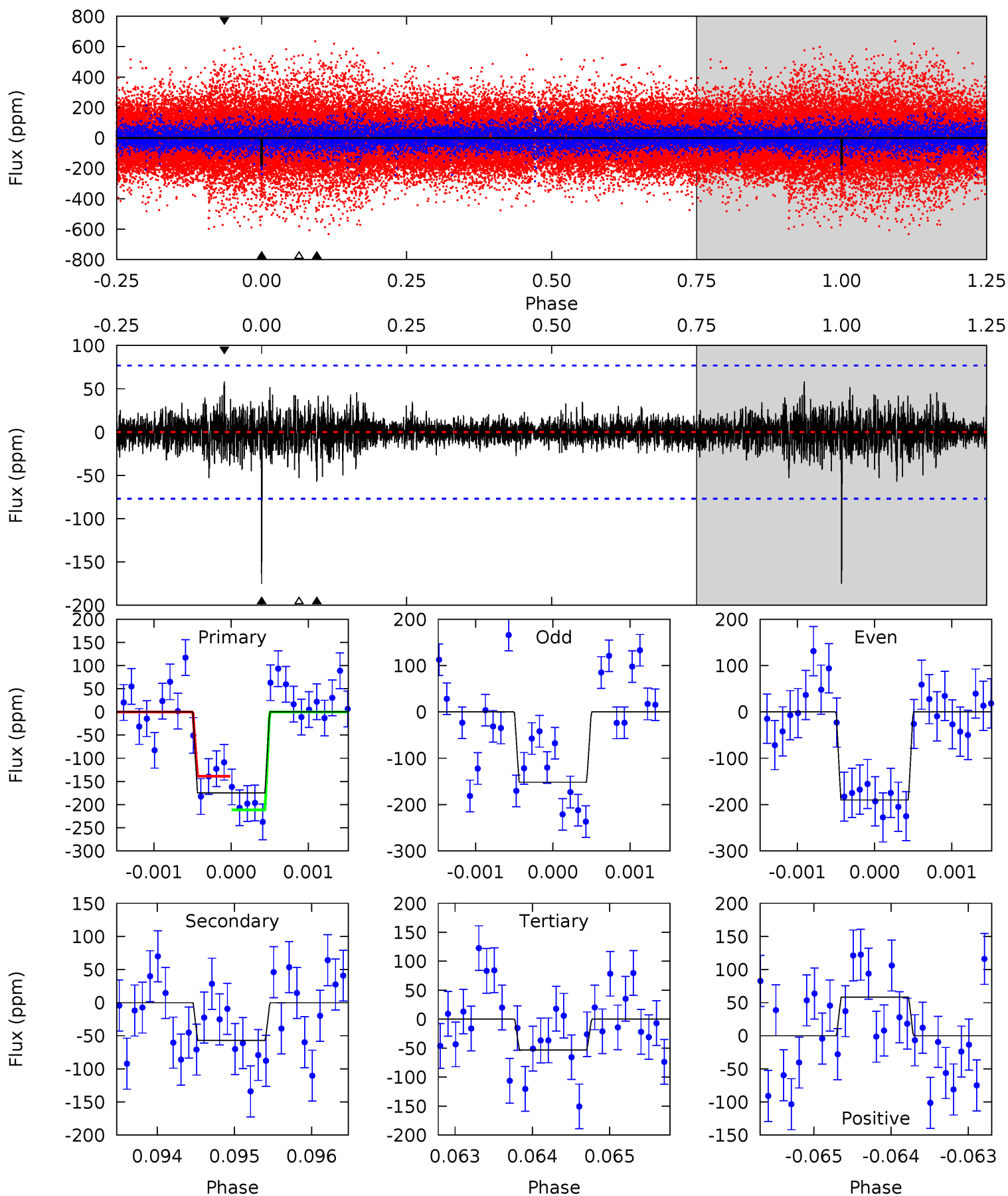
Pri	Sec	Ter	Pos	FA <sub>1</sub>	FA <sub>2</sub>	F <sub>Red</sub>	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
15.9	6.99	5.78	6.92	5.42	3.24	1.63	10.1	8.93	1.21	0.07	0.44	0.99	0.30	1.95



# Alt Model-Shift Uniqueness Test

003344803-01, P = 325.070695 Days, E = 244.116385 Days

Pri	Sec	Ter	Pos	FA <sub>1</sub>	FA <sub>2</sub>	F <sub>Red</sub>	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
12.4	4.04	3.75	4.13	5.44	3.27	0.82	8.63	8.26	0.29	-0.08	1.26	0.87	0.25	2.57



### Stellar Parameters For KIC 003344803

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R$ ( $R_{\odot}$ )	$M(M_{\odot})$	$p_{\star}$ ( $\text{g}\cdot\text{cm}^{-3}$ )
	$5237^{+156}_{-141}$	$4.638^{+0.065}_{-0.040}$	$-1.080^{+0.300}_{-0.300}$	$0.624^{+0.048}_{-0.043}$	$0.617^{+0.053}_{-0.022}$	$3.580^{+0.884}_{-0.546}$
	+3%/-3%	+1%/-1%	+28%/-28%	+8%/-7%	+9%/-4%	+25%/-15%
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 003344803-01 / KOI

Detrend	Depth (ppm)	$R_p$ ( $R_{\oplus}$ )	$T_{\text{max}}$ (K)	$T_{\text{obs}}$ (K)	$A_{\text{obs}}$
DV	$-99 \pm 14$	$1.10^{+0.35}_{-0.34}$	$285^{+10}_{-9}$	$4272^{+664}_{-401}$	$27766^{+31198}_{-12187}$
Alt.	$-57 \pm 14$	$0.92^{+0.34}_{-0.36}$	$286^{+11}_{-10}$	$4146^{+912}_{-464}$	$23136^{+37849}_{-11713}$

$T_{\text{max}}$  = Theoretical Maximum Planetary Temperature

$T_{\text{obs}}$  = Observed Planetary Temperature (Assuming  $A=0.3$ )

$A_{\text{obs}}$  = 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

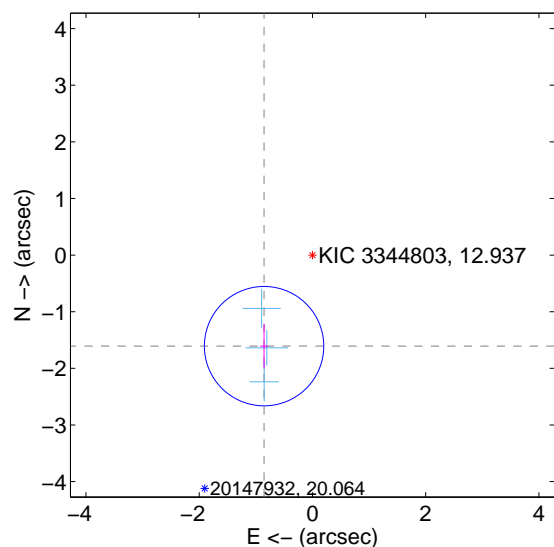
Supplemental centroid analysis for 003344803-01. Kepler magnitude: 12.94. Transit SNR 9.90

There are 3 quarters with good PRF difference image offsets

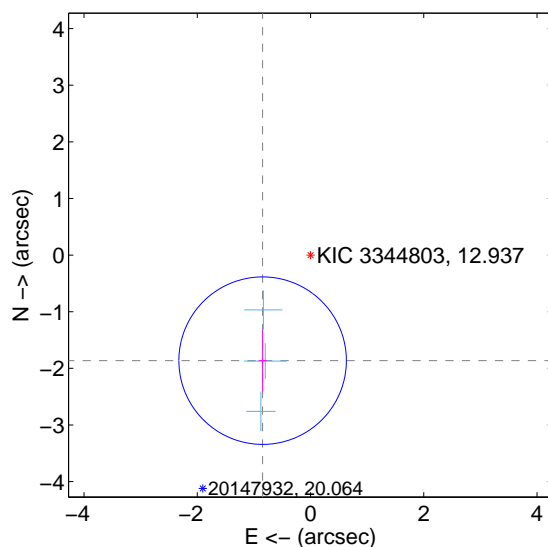
The direct PRF centroid is offset from the target star catalog position by about 0.52 arcsec

	Distance in arcsec	Distance / $\sigma$	$\Delta$ RA	$\Delta$ Dec
PRF-fit source offset from OOT	$1.821 \pm 0.351$	5.18	$0.854 \pm 0.071$	$-1.608 \pm 0.396$
PRF-fit source offset from KIC position	$2.047 \pm 0.493$	4.15	$0.846 \pm 0.071$	$-1.864 \pm 0.540$
photometric centroid source offset	$0.49 \pm 1.02$	0.48	$0.23 \pm 0.80$	$0.43 \pm 1.08$

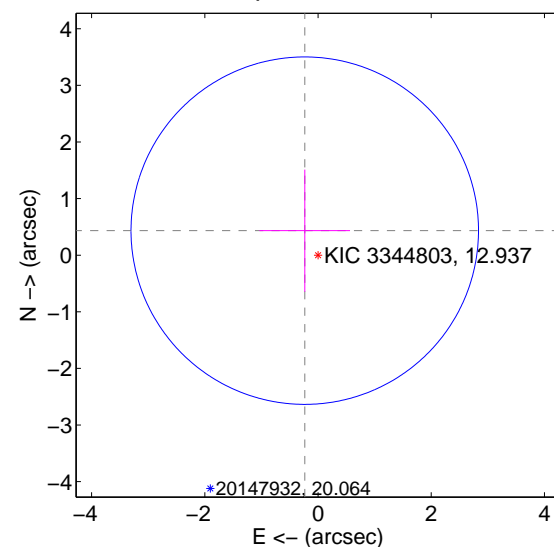
offset from difference PRF-fit to OOT PRF-fit



offset from difference PRF-fit to KIC position

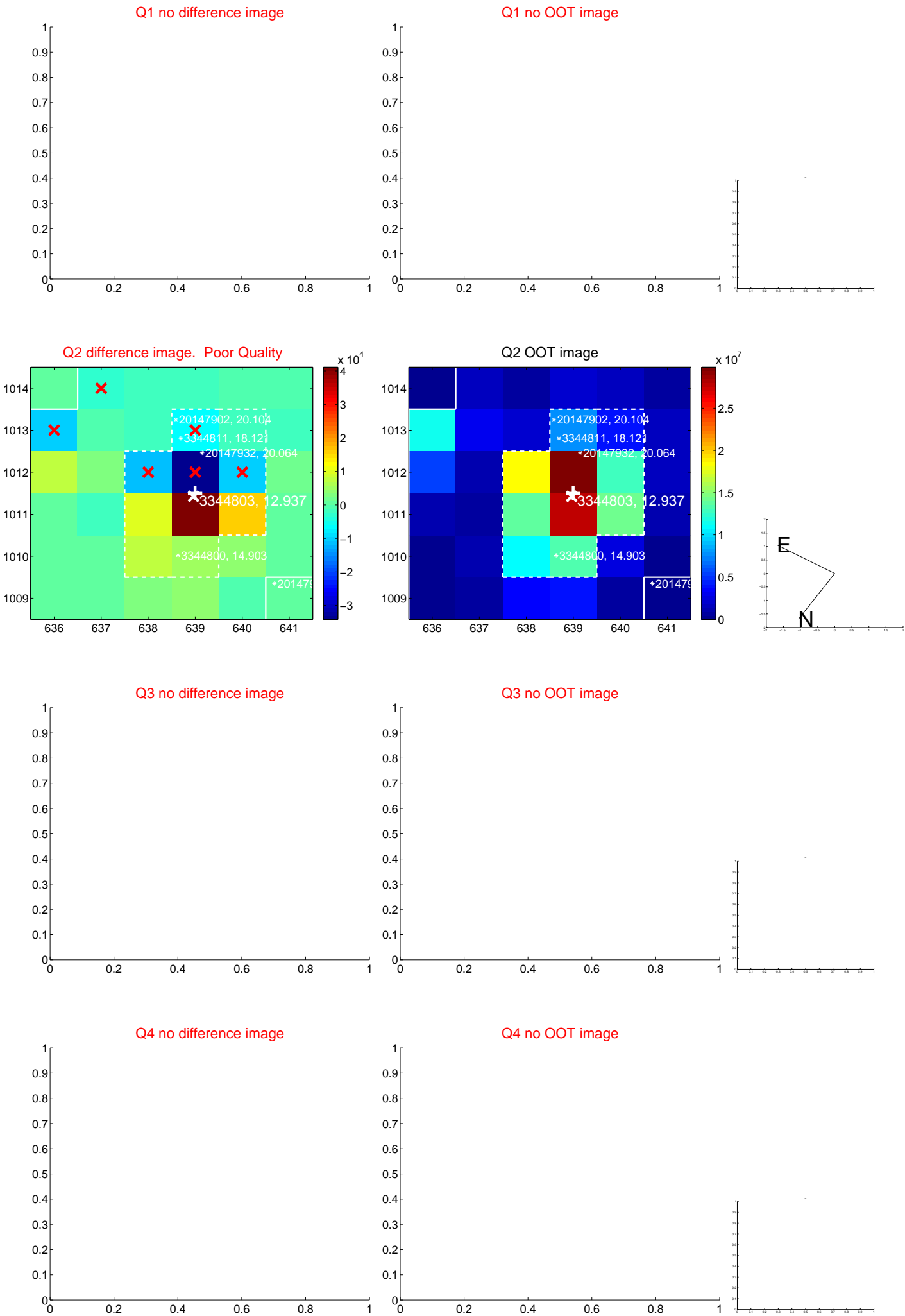


offset from photometric centroids



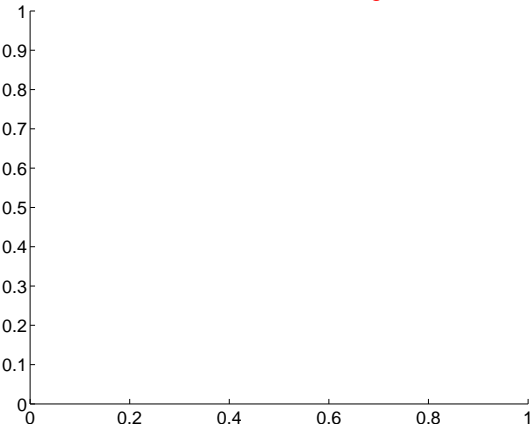
Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- $\sigma$  uncertainty. Blue circle: three-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

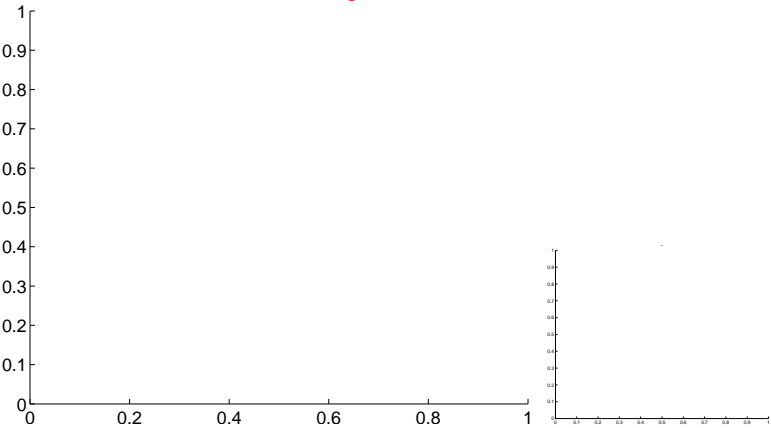


white  $\times$ : KIC target position;  $+$ : OOT centroid;  $\triangle$ : difference centroid. red  $\times$ : large negative pixel value.

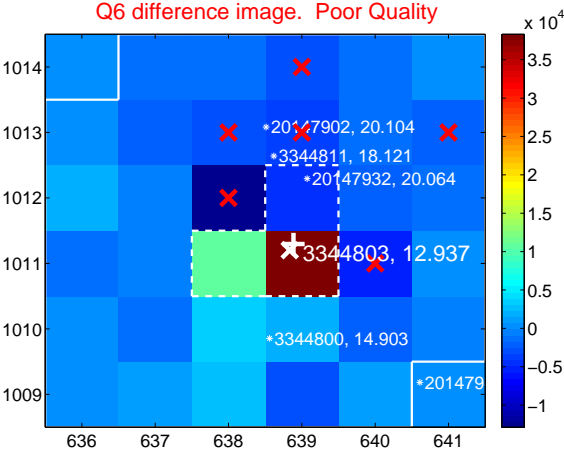
Q5 no difference image



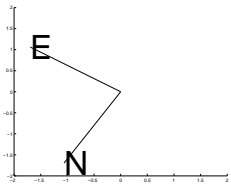
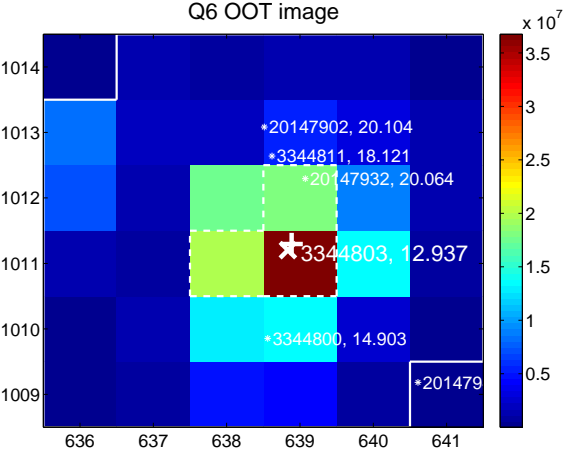
Q5 no OOT image



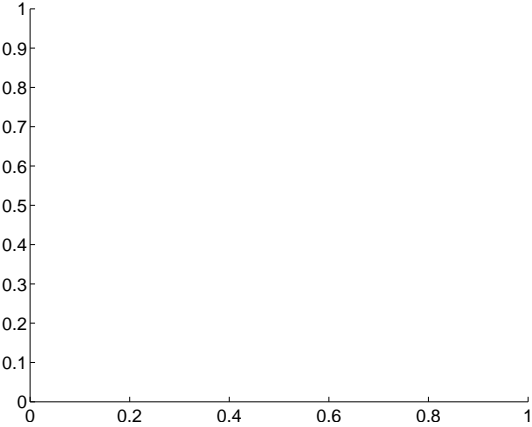
Q6 difference image. Poor Quality



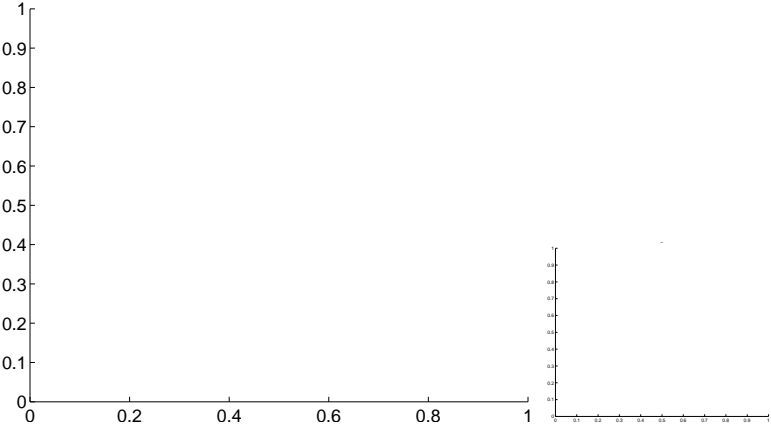
Q6 OOT image



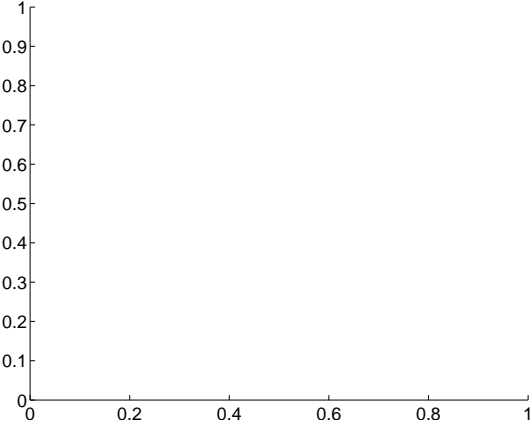
Q7 no difference image



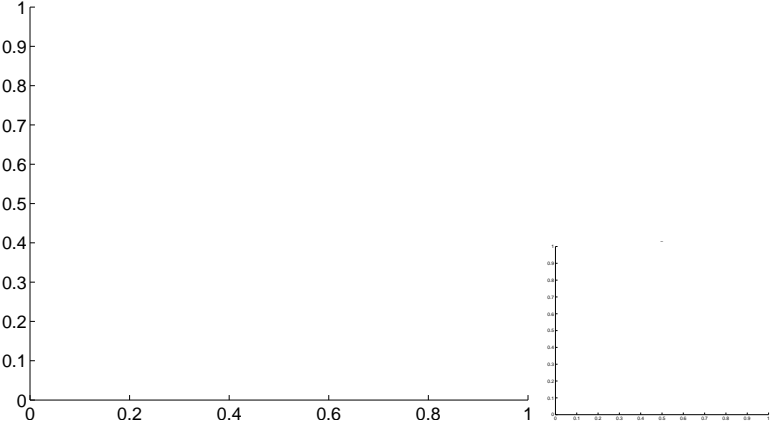
Q7 no OOT image



Q8 no difference image

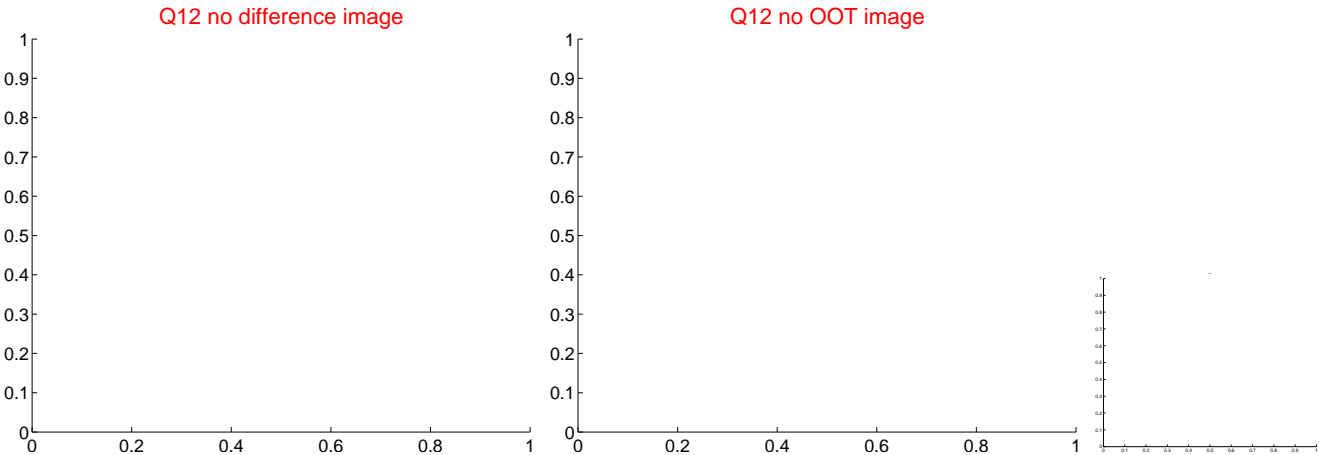
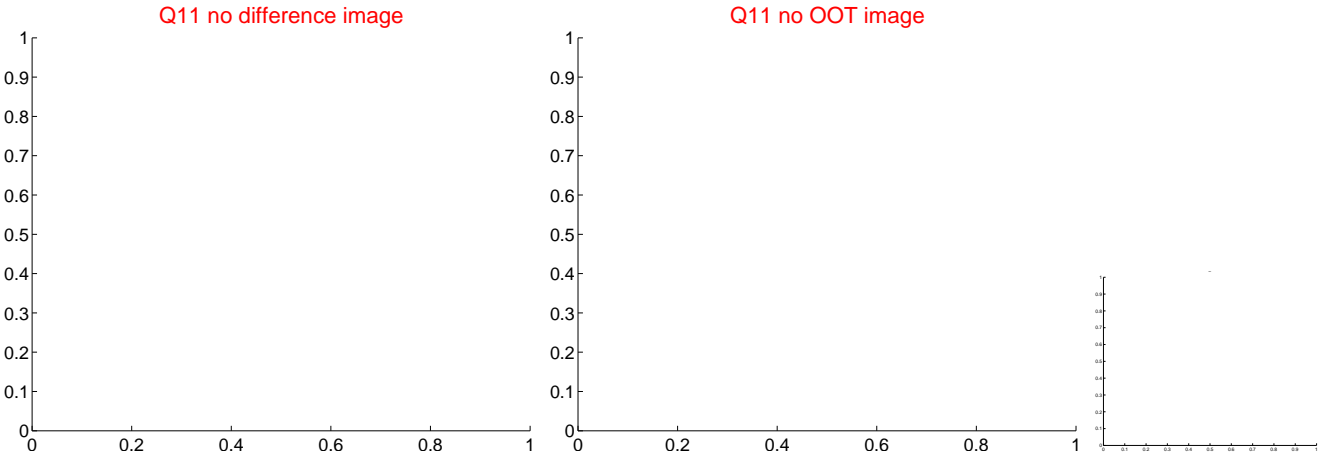
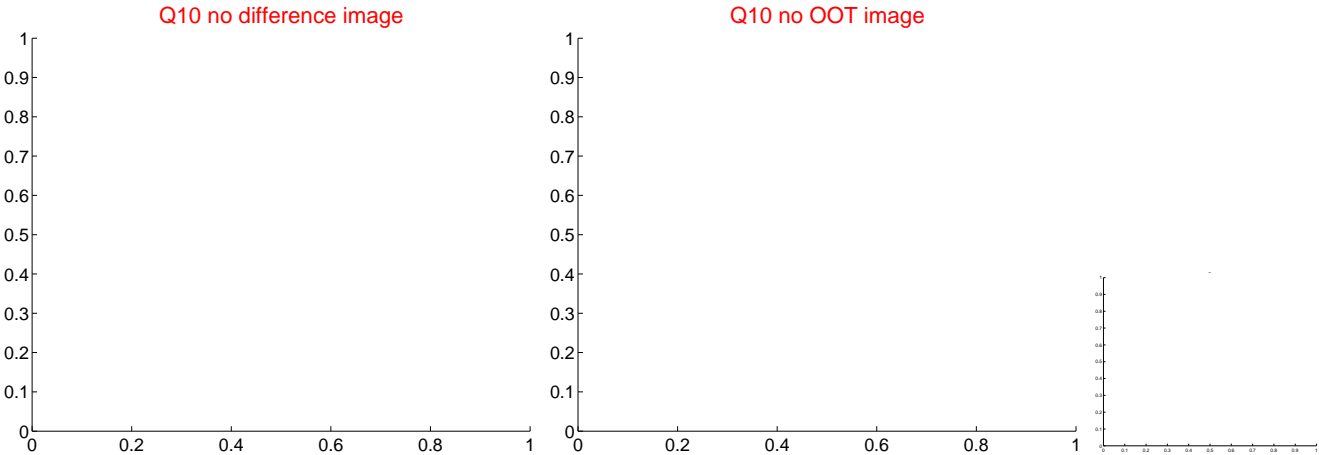
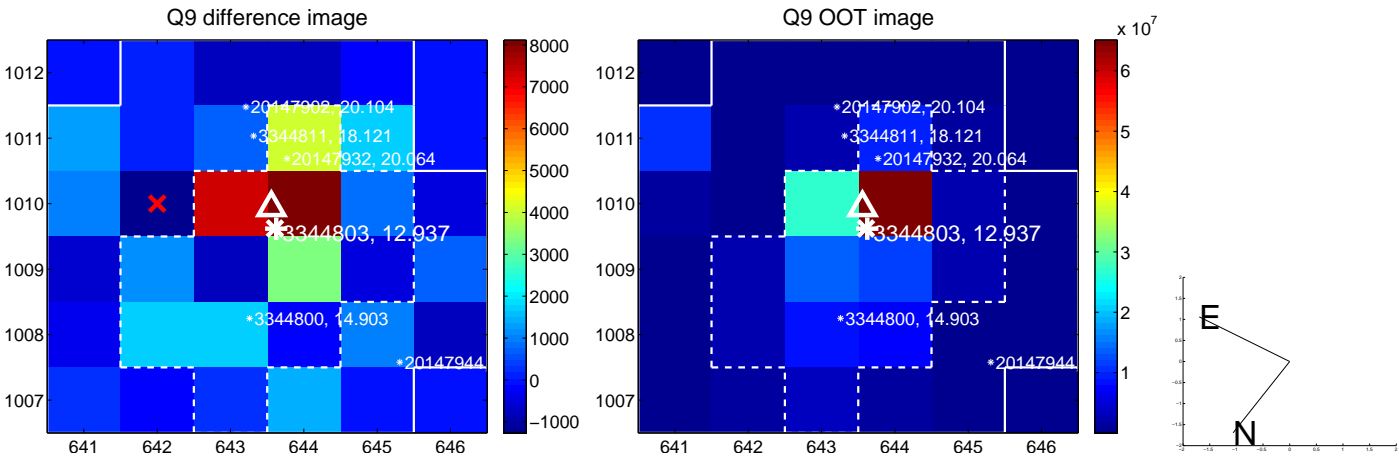


Q8 no OOT image

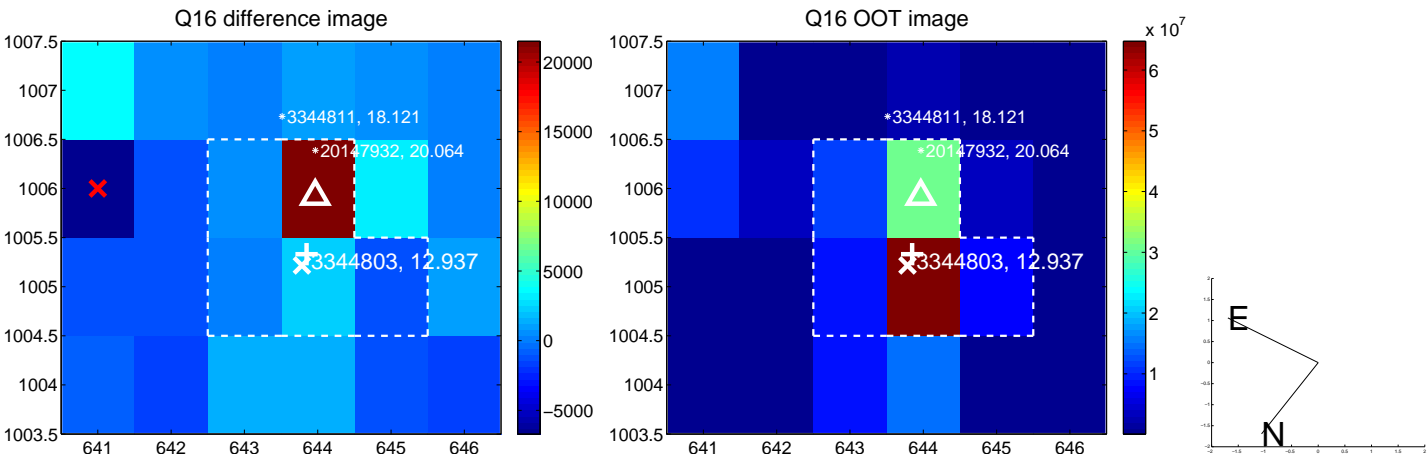
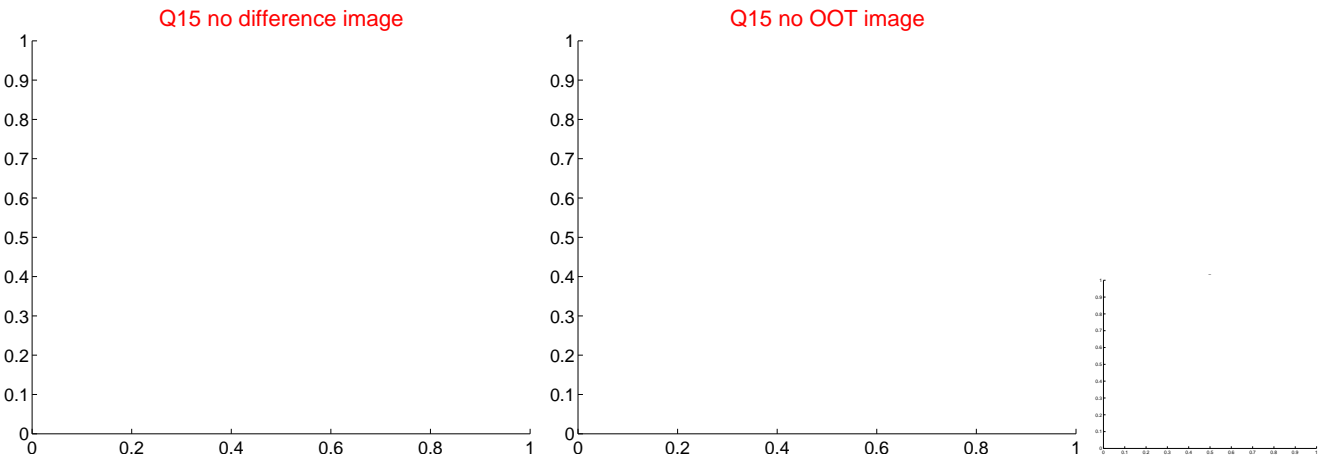
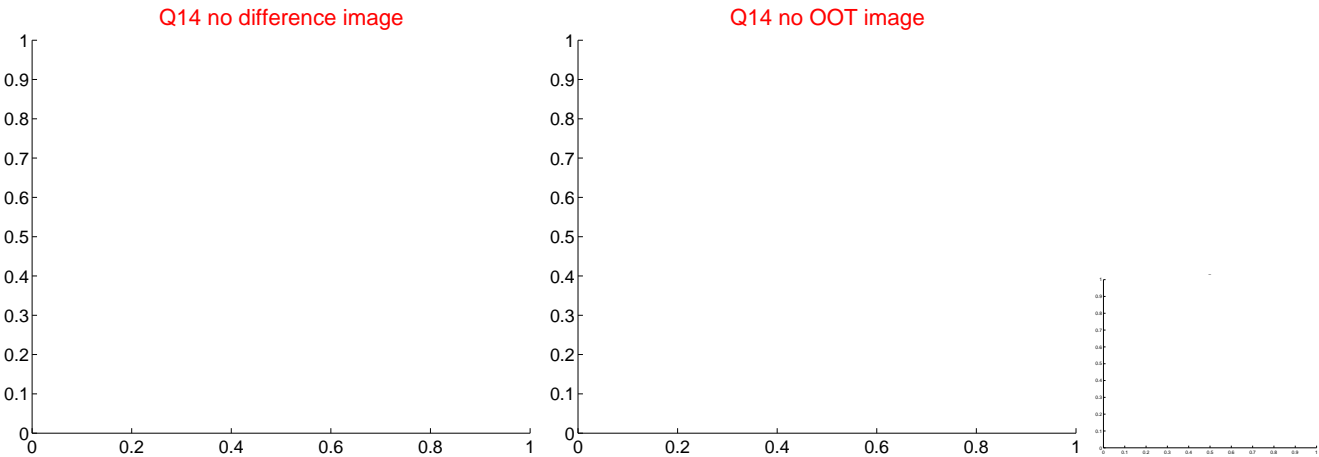
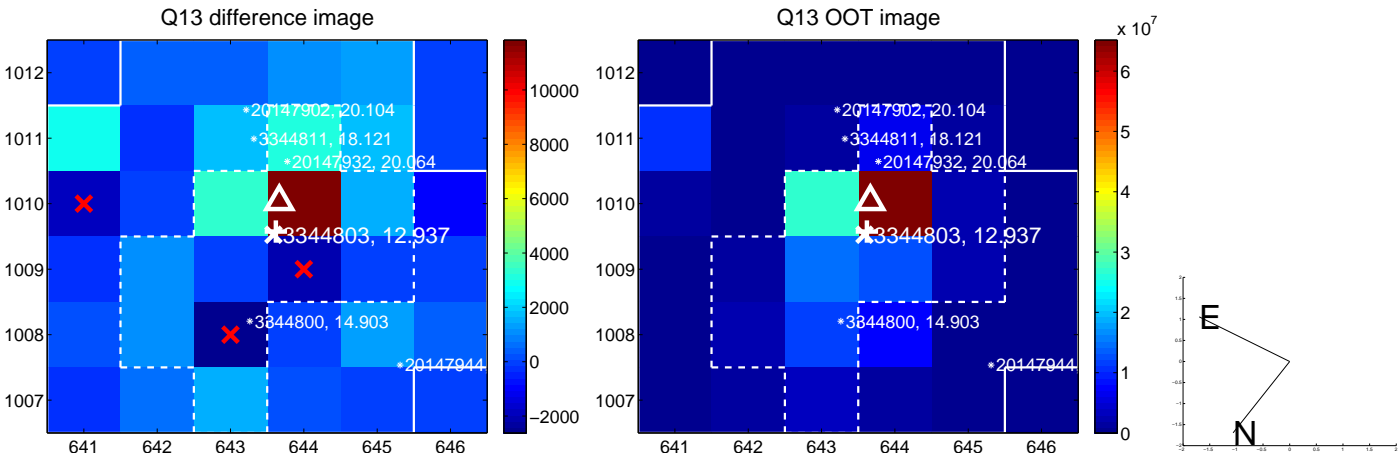




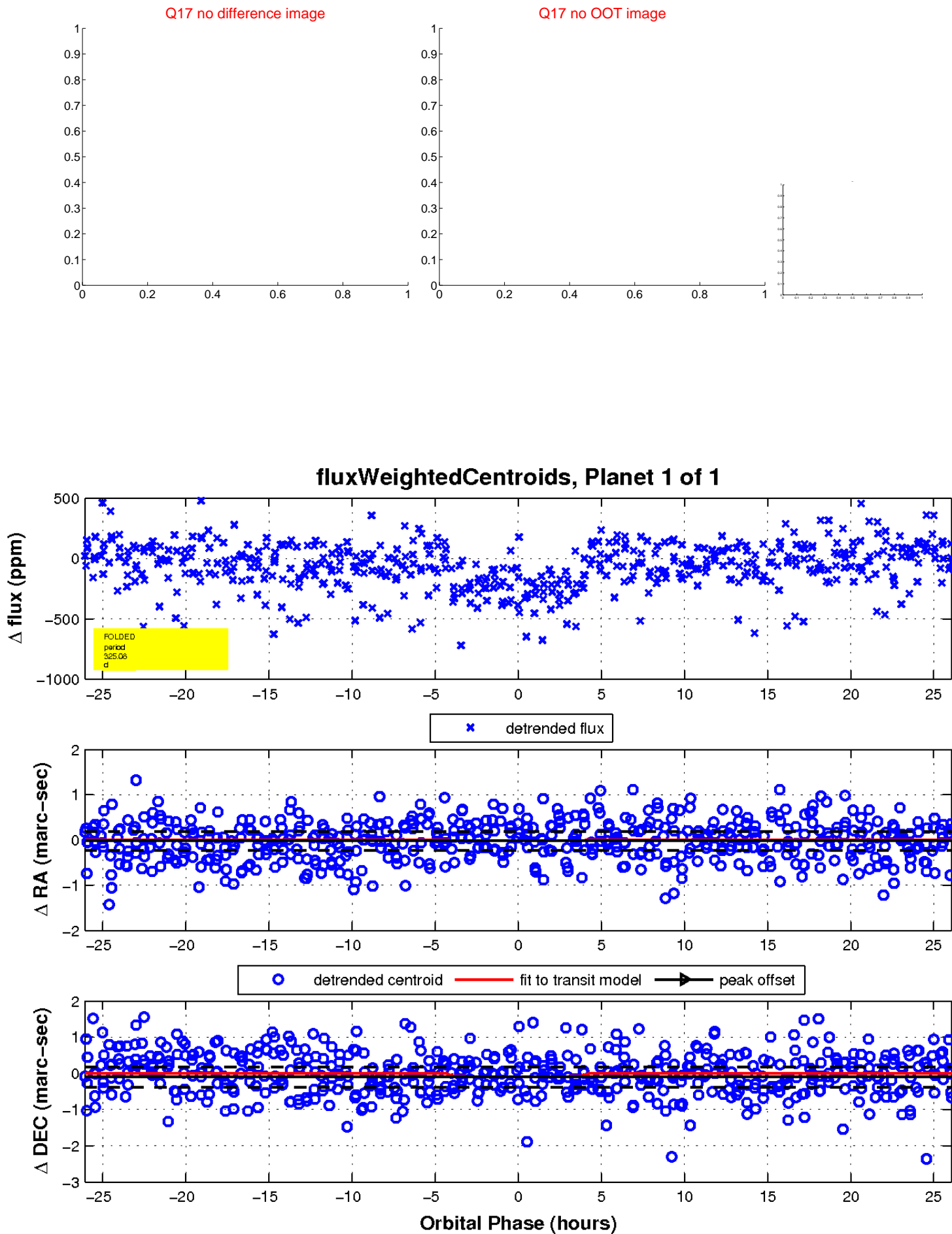
white  $\times$ : KIC target position; +: OOT centroid;  $\triangle$ : difference centroid. red  $\times$ : large negative pixel value.



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

