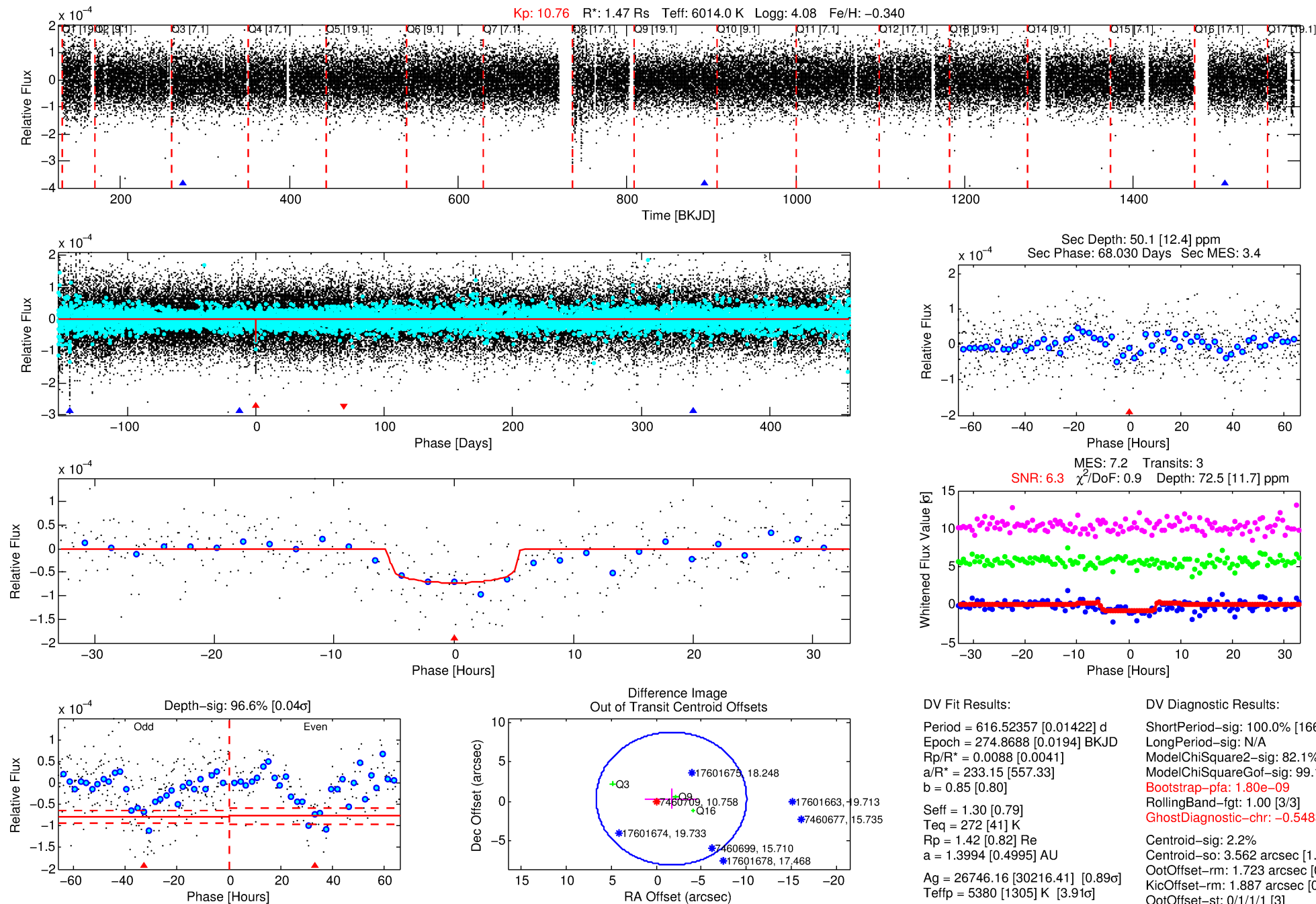


**WARNING: THIS DATA IS
SIMULATED, NOT OBSERVED**

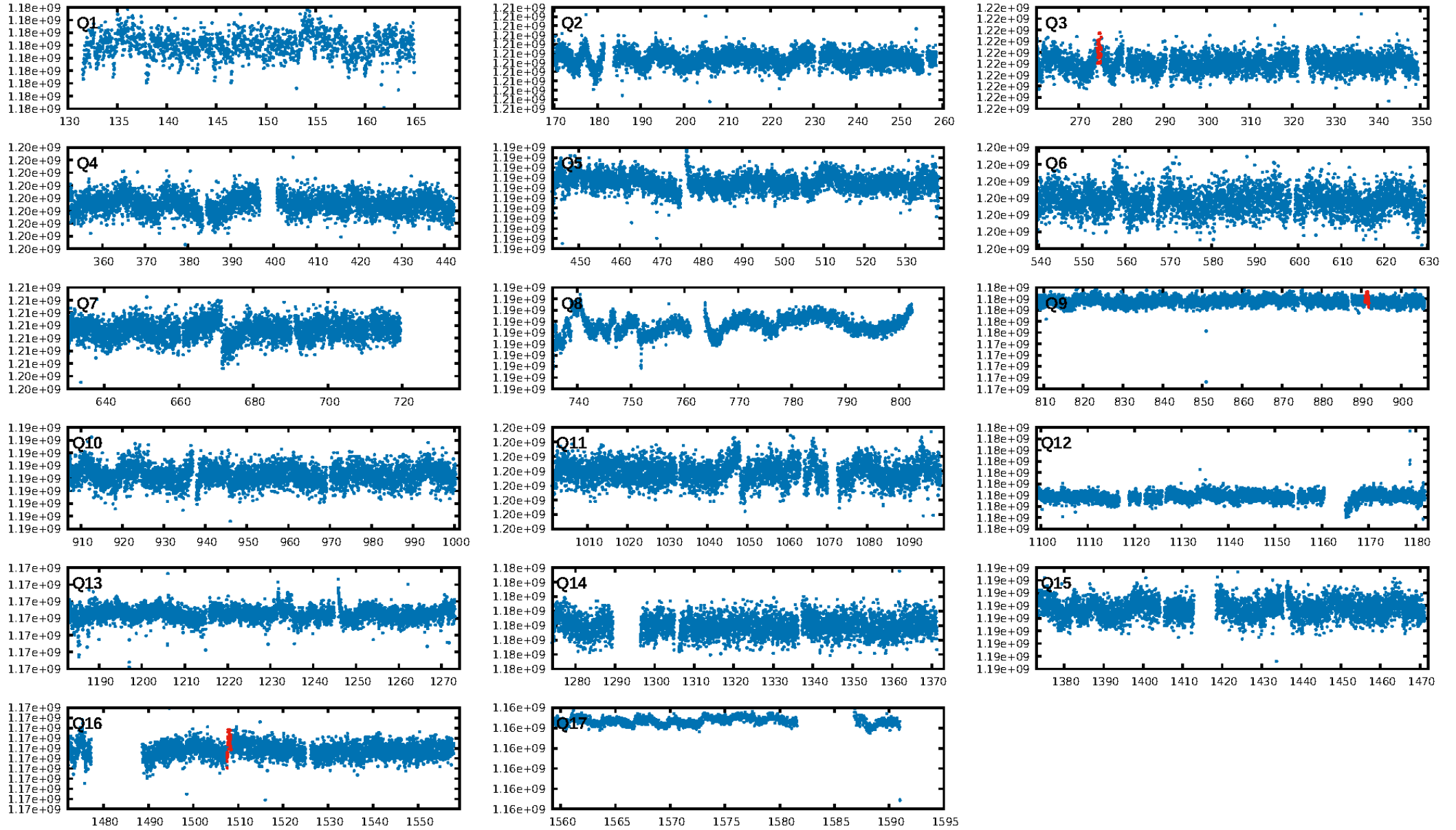
DV One-Page Summary

KIC: 7460709 Candidate: 1 of 2 Period: 616.524 d

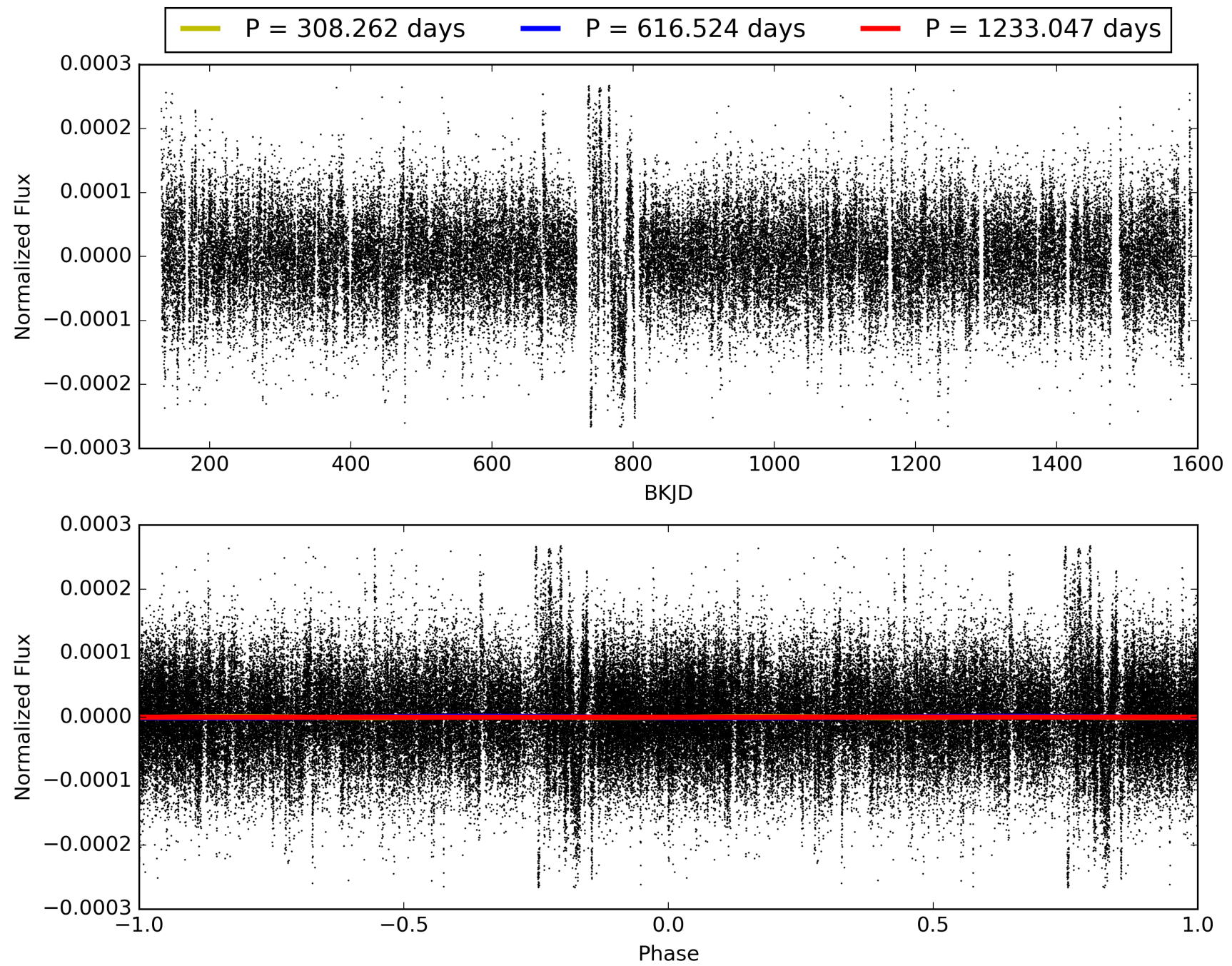
**WARNING: THIS DATA IS
SIMULATED, NOT OBSERVED**



TCE 007460709-01, PDC Light Curves

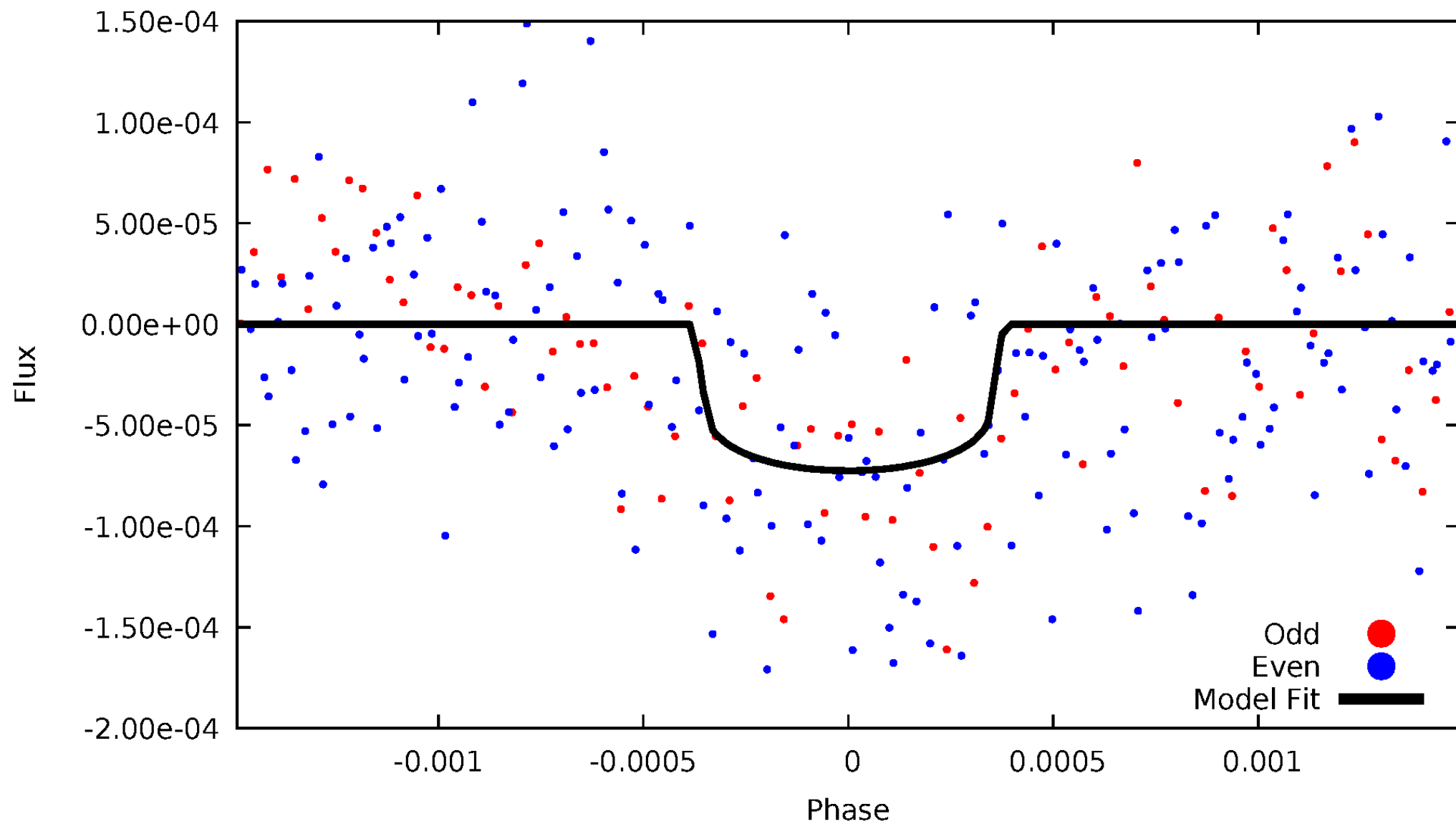


TCE 007460709-01



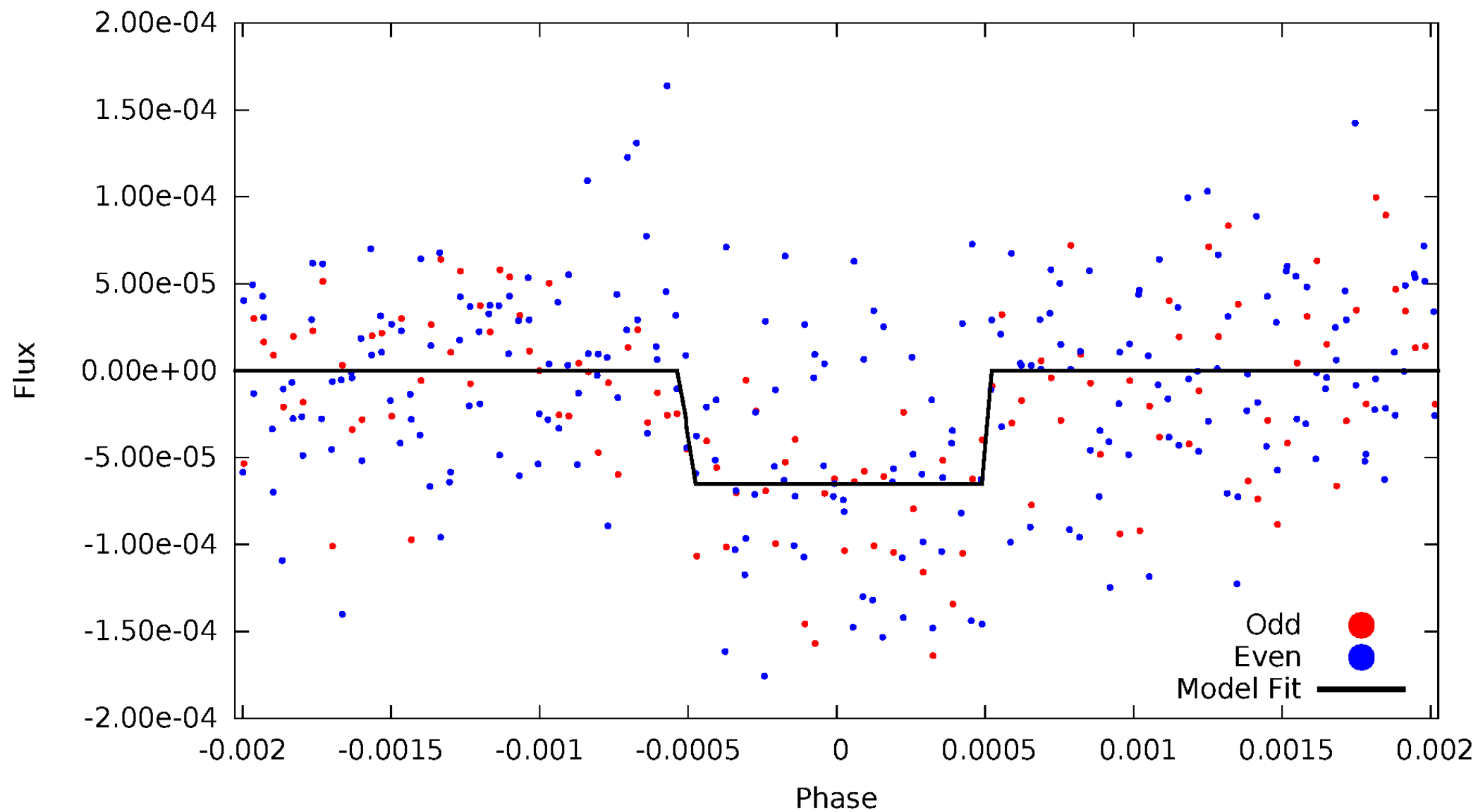
DV Odd/Even

TCE 007460709-01



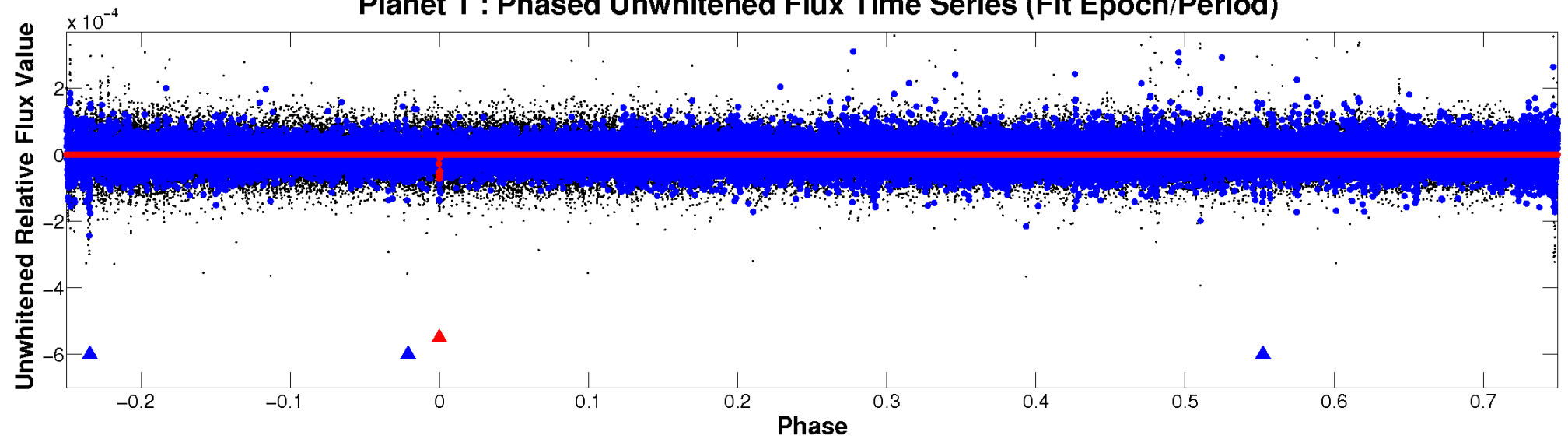
ALT Odd/Even

TCE 007460709-01

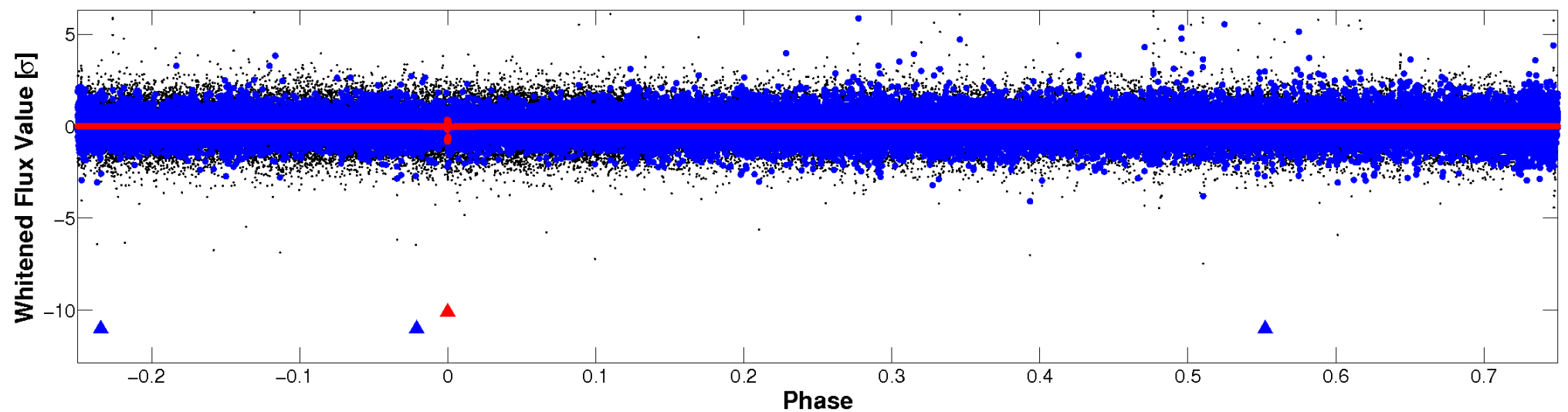


Non-Whitened Vs. Whitened Light Curve

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

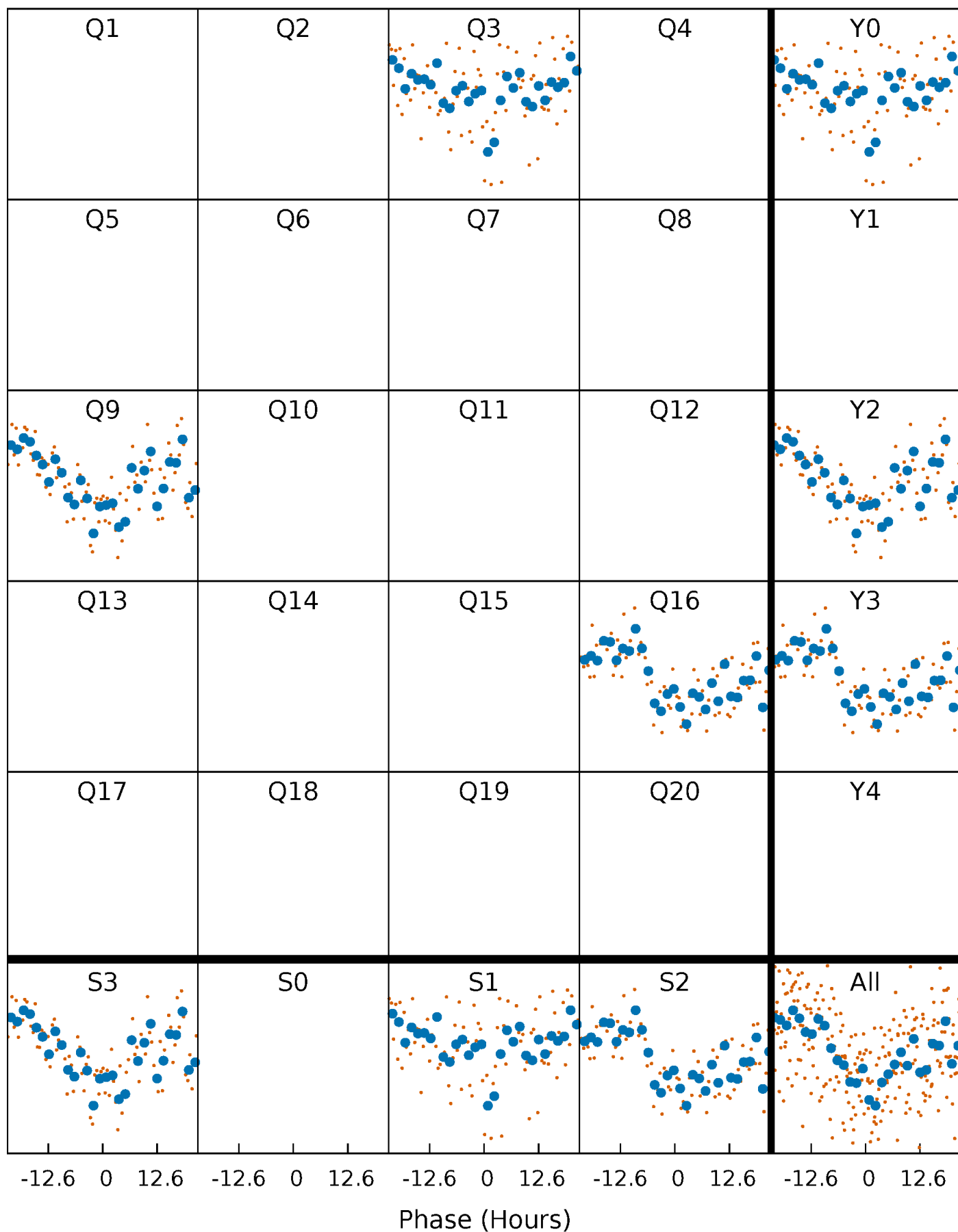


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



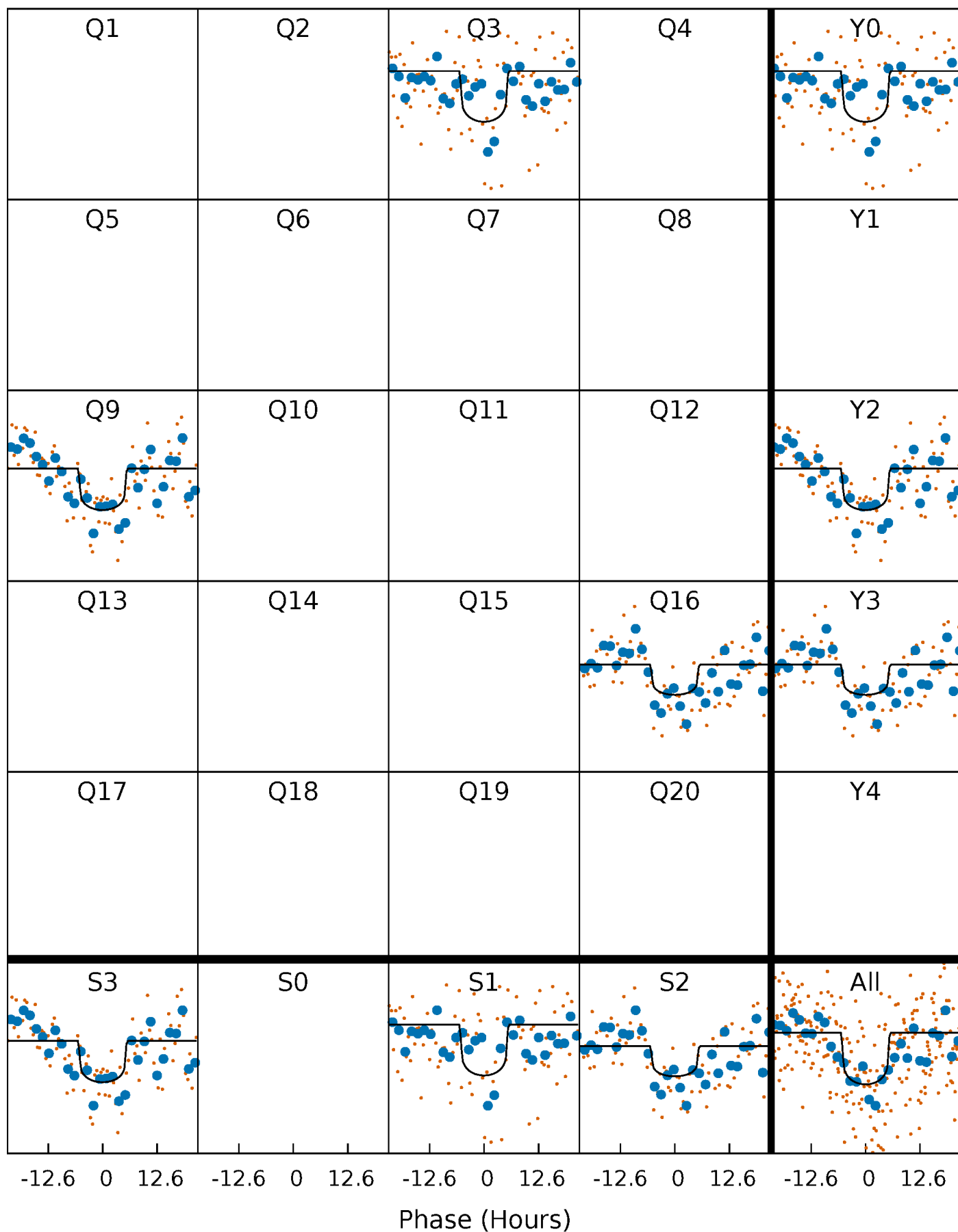
PDC Quarter-Phased Transit Curves

TCE 007460709-01 P=616.523574 Days $T_0=274.868800$ (BKJD)



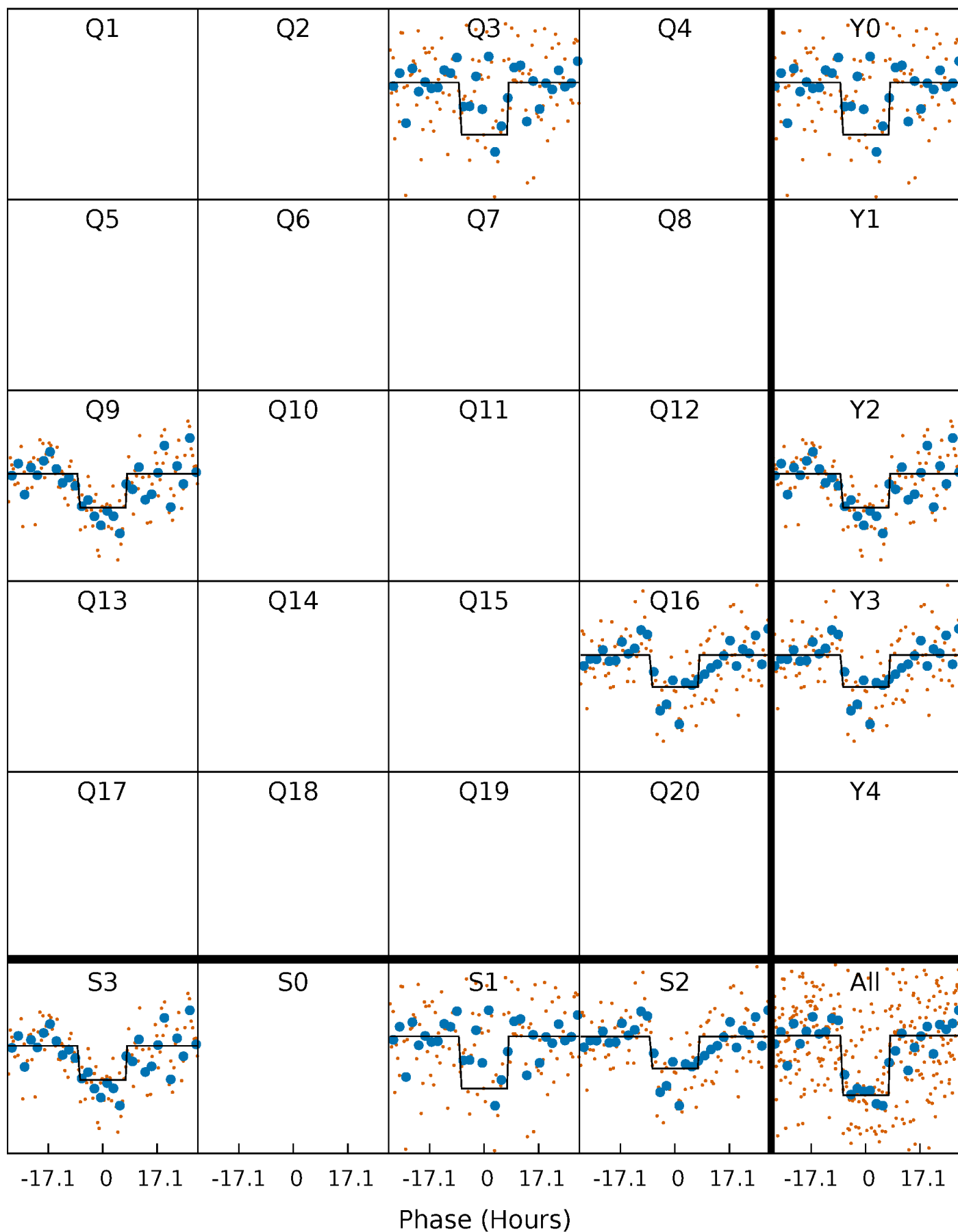
DV Quarter-Phased Transit Curves

TCE 007460709-01 P=616.523574 Days $T_0=274.868800$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

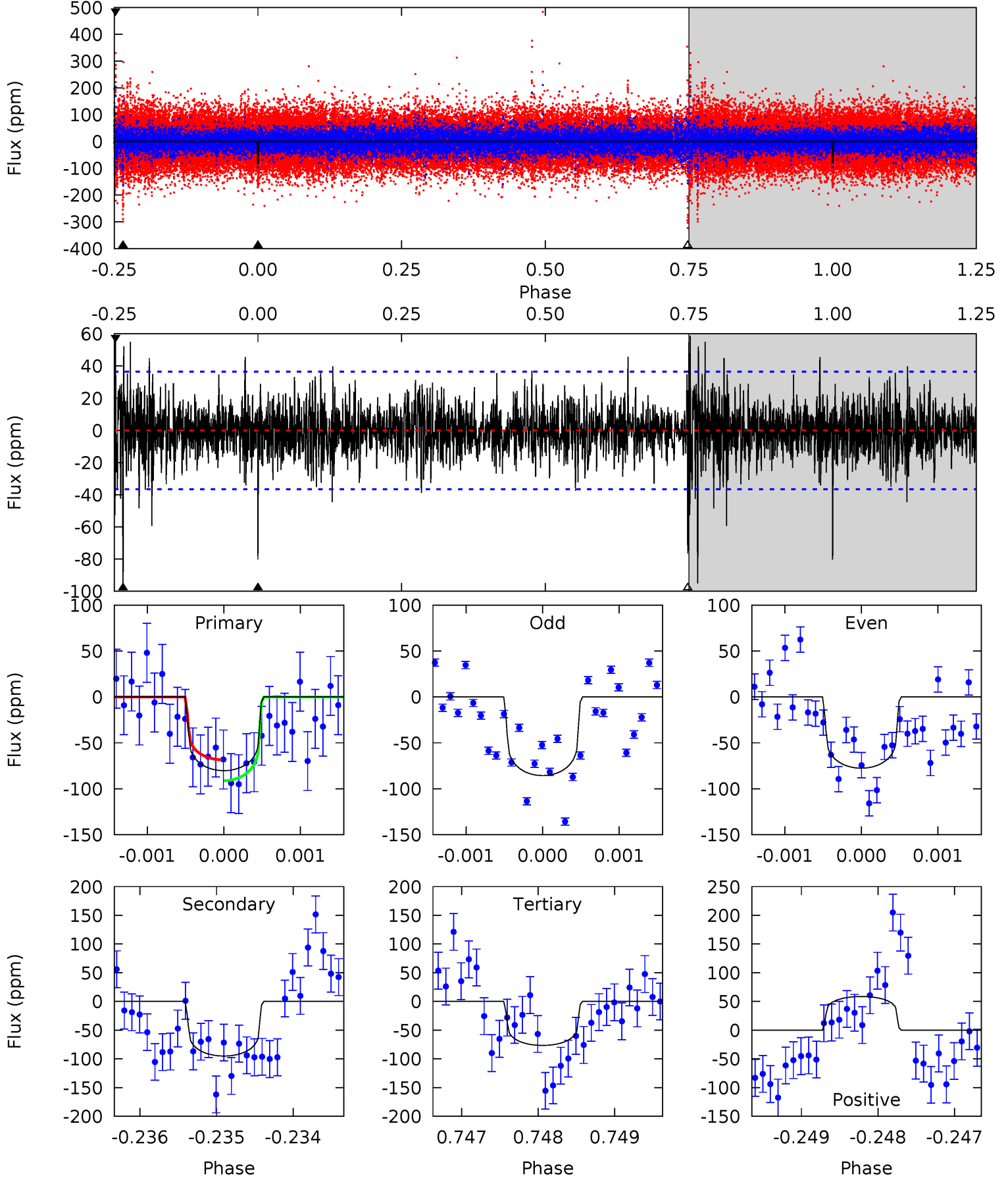
TCE 007460709-01 P=616.603106 Days $T_0=274.737367$ (BKJD)



DV Model-Shift Uniqueness Test

007460709-01, P = 616.523574 Days, E = 274.868800 Days

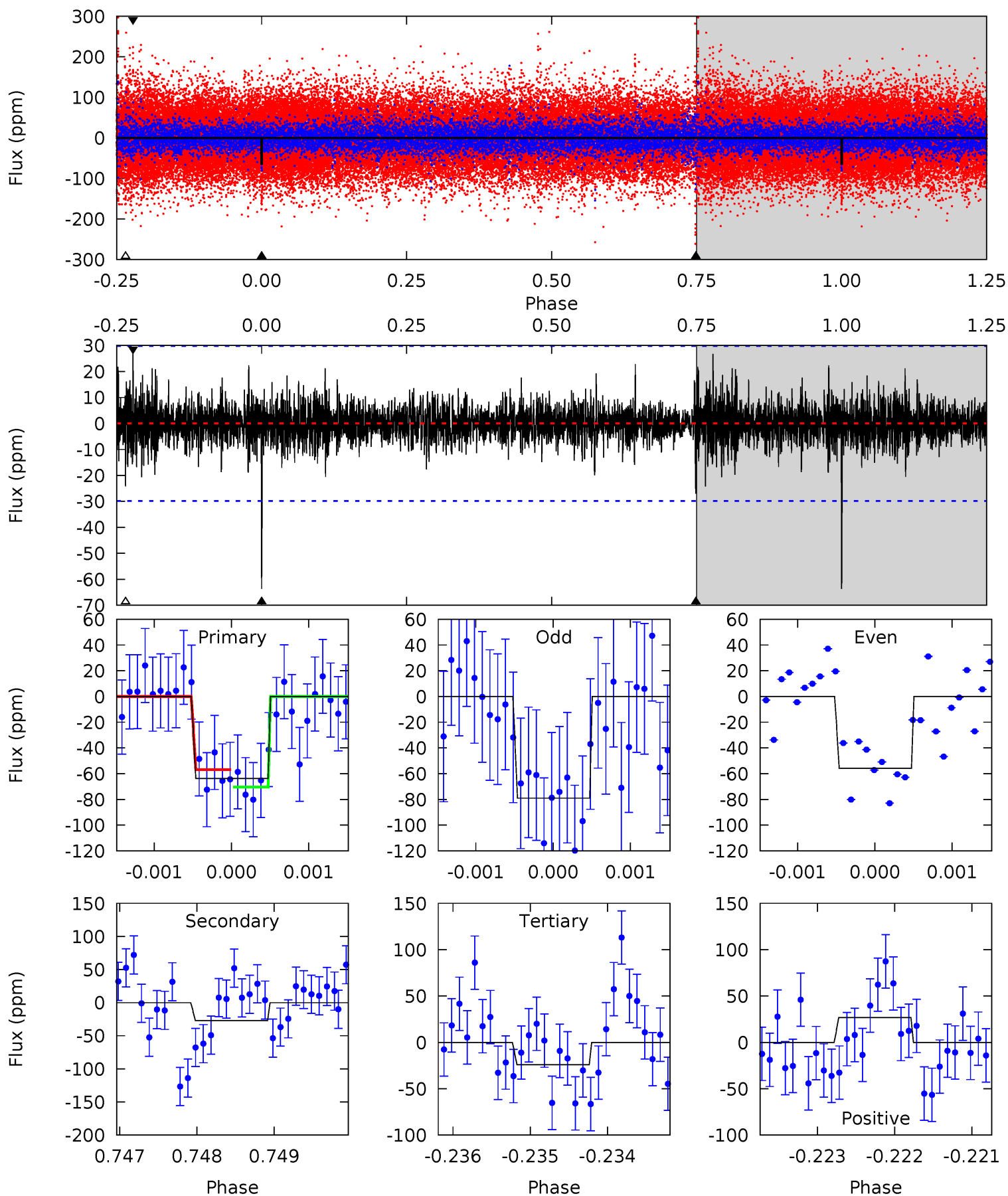
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
12.1	14.3	11.5	8.84	5.50	3.37	1.85	0.56	3.25	2.78	5.48	0.57	0.94	0.38	1.71



Alt Model-Shift Uniqueness Test

007460709-01, P = 616.603106 Days, E = 274.737367 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	4.93	4.42	4.87	5.45	3.28	0.99	7.20	6.75	0.52	0.07	2.00	0.81	0.30	1.23



Stellar Parameters For KIC 007460709

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	6014^{+200}_{-200}	$4.085^{+0.357}_{-0.153}$	$-0.340^{+0.300}_{-0.300}$	$1.472^{+0.413}_{-0.505}$	$0.961^{+0.142}_{-0.116}$	$0.424^{+1.107}_{-0.176}$
	+3%/-3%	+9%/-4%	+88%/-88%	+28%/-34%	+15%/-12%	+261%/-42%
Source	PHO54	PHO54	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 007460709-01 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	-95 ± 7	$1.36^{+0.71}_{-0.62}$	375^{+31}_{-39}	6229^{+2550}_{-1024}	$54995^{+128991}_{-31299}$
Alt.	-27 ± 5	$1.20^{+0.72}_{-0.58}$	375^{+30}_{-38}	4929^{+1830}_{-754}	19670^{+54412}_{-11873}

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 $A_{obs} \gg 1.0$

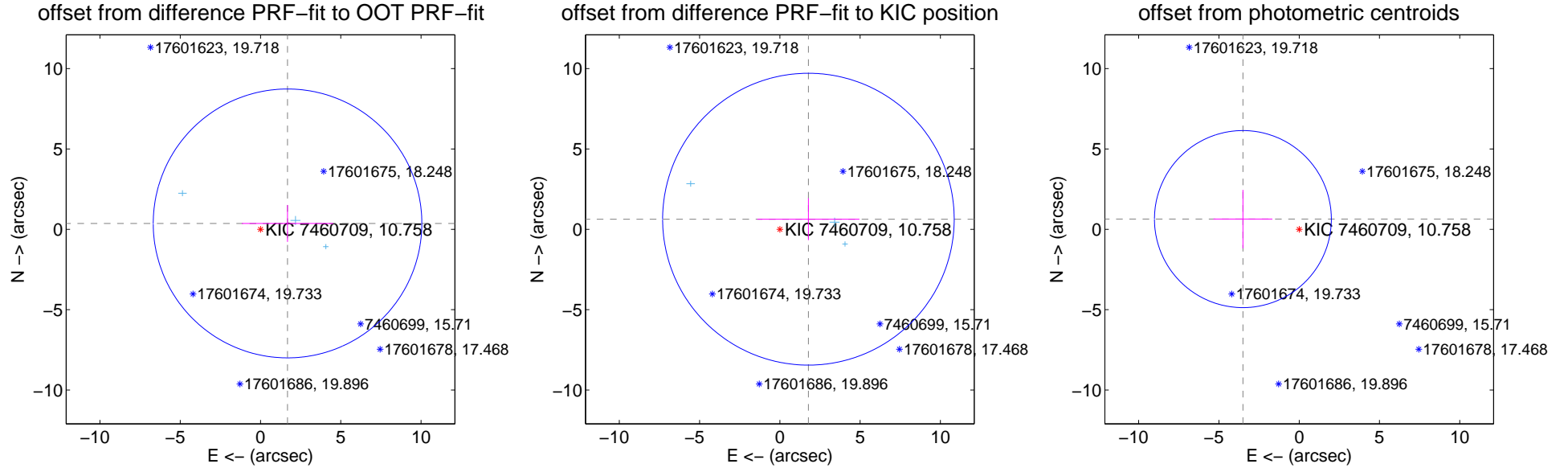
DV Centroid Data

Supplemental centroid analysis for 007460709-01. **Kepler magnitude: 10.76.** Transit SNR 6.28

There are 3 quarters with good PRF difference image offsets

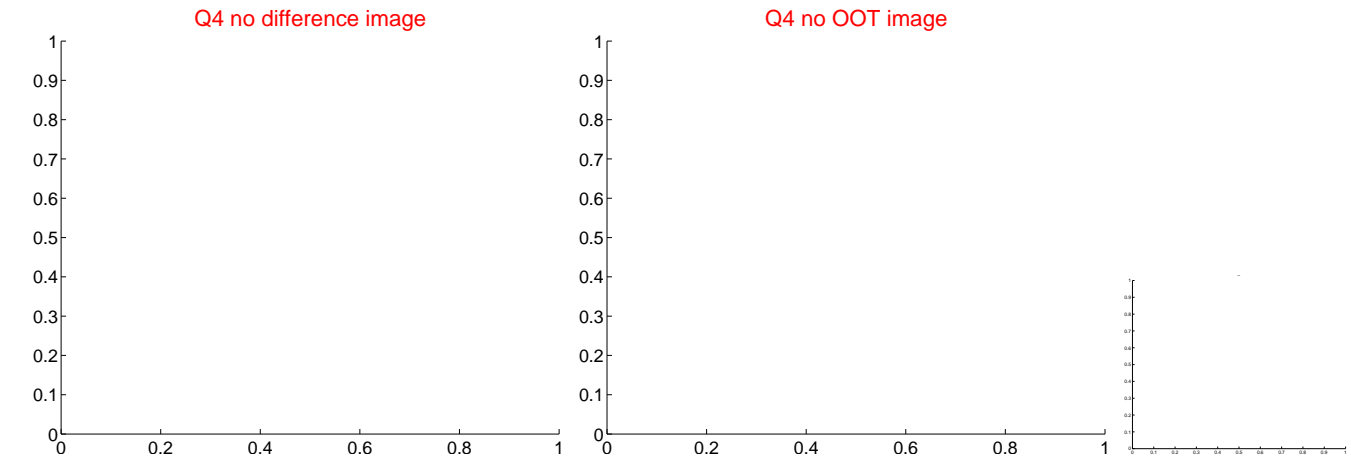
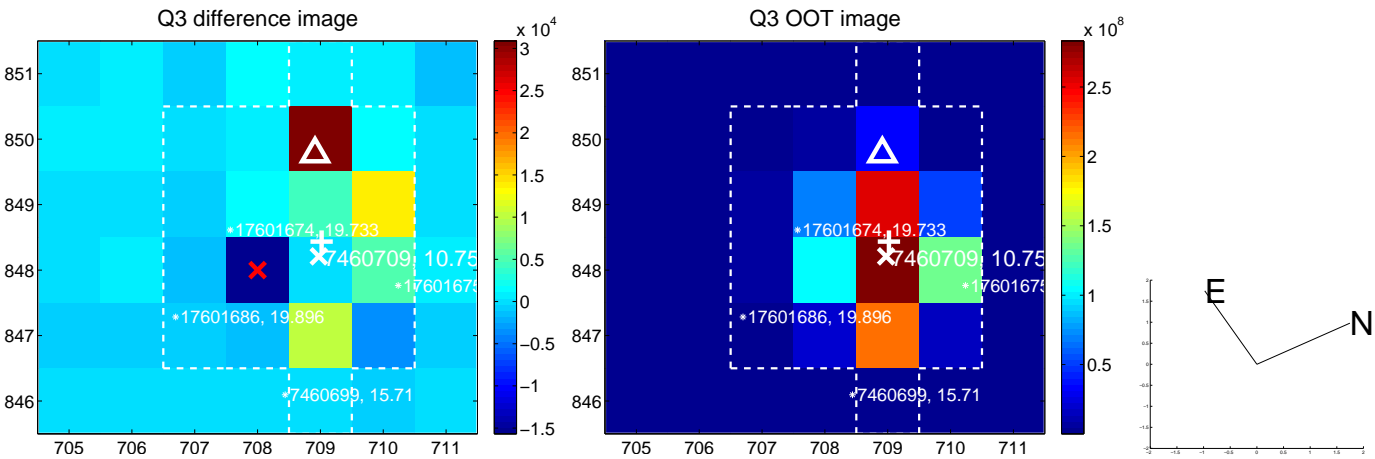
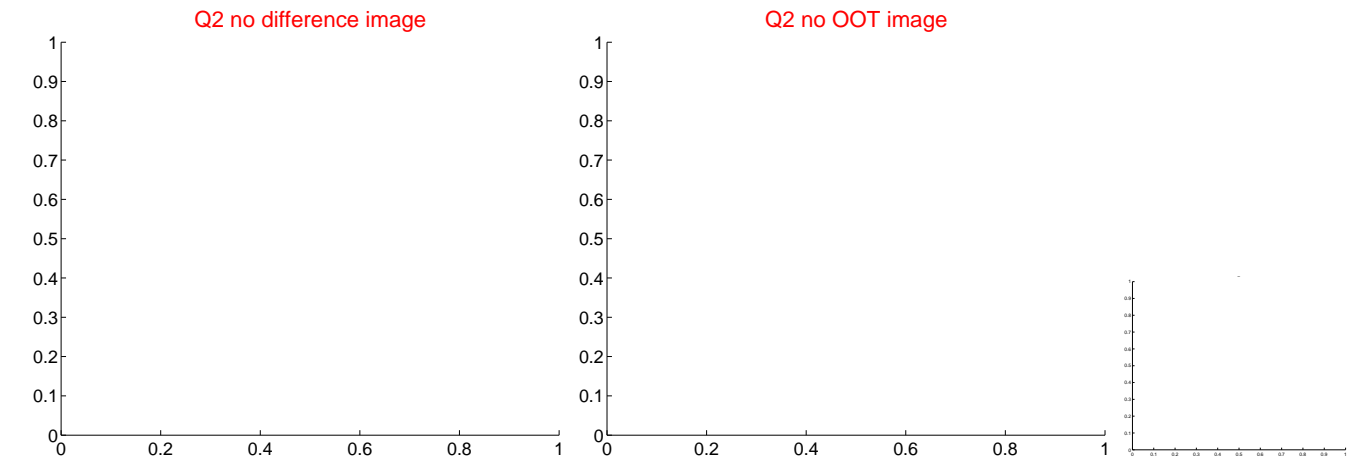
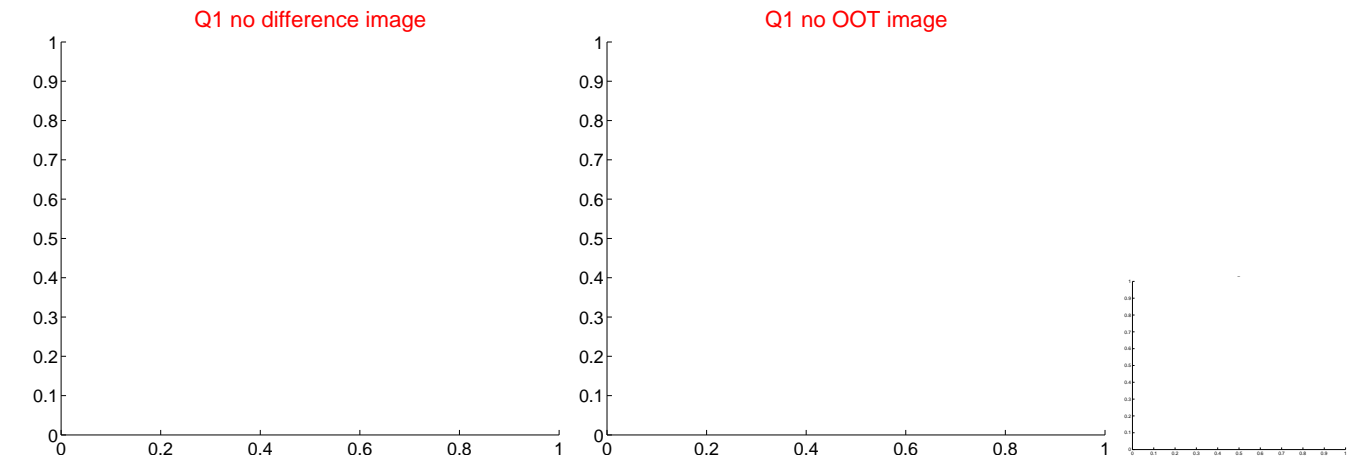
The direct PRF centroid is offset from the target star catalog position by about 0.16 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	1.723 ± 2.787	0.62	-1.683 ± 2.842	0.366 ± 1.147
PRF-fit source offset from KIC position	1.887 ± 3.026	0.62	-1.778 ± 3.177	0.630 ± 1.303
photometric centroid source offset	3.56 ± 1.84	1.94	3.51 ± 1.84	0.64 ± 1.82

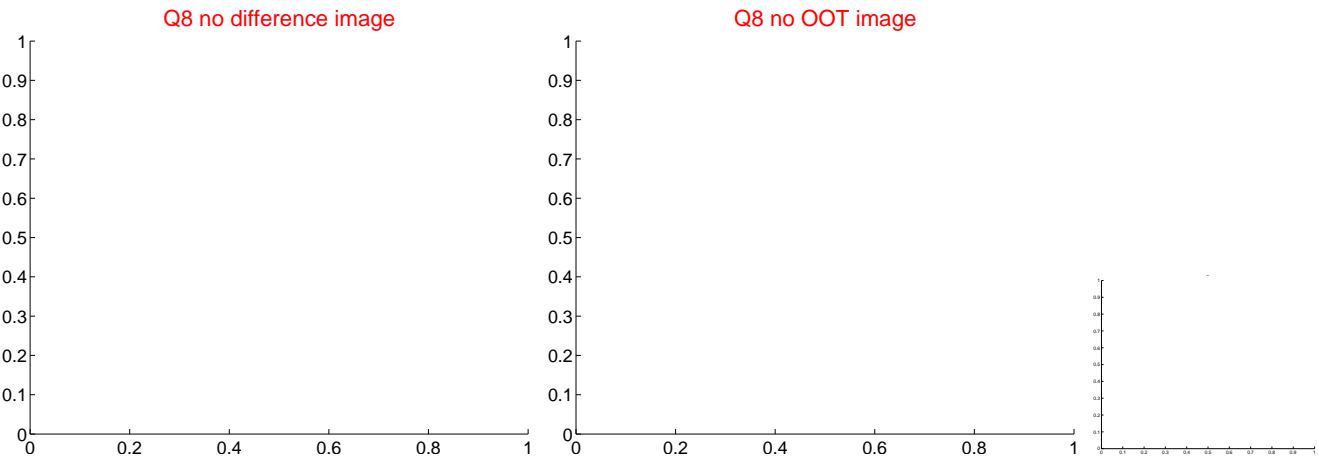
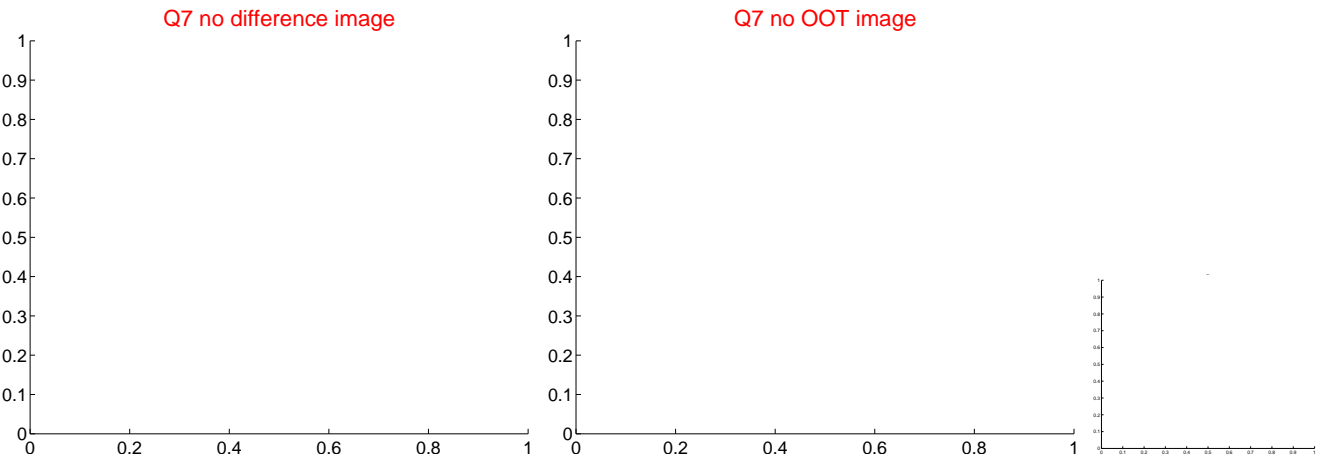
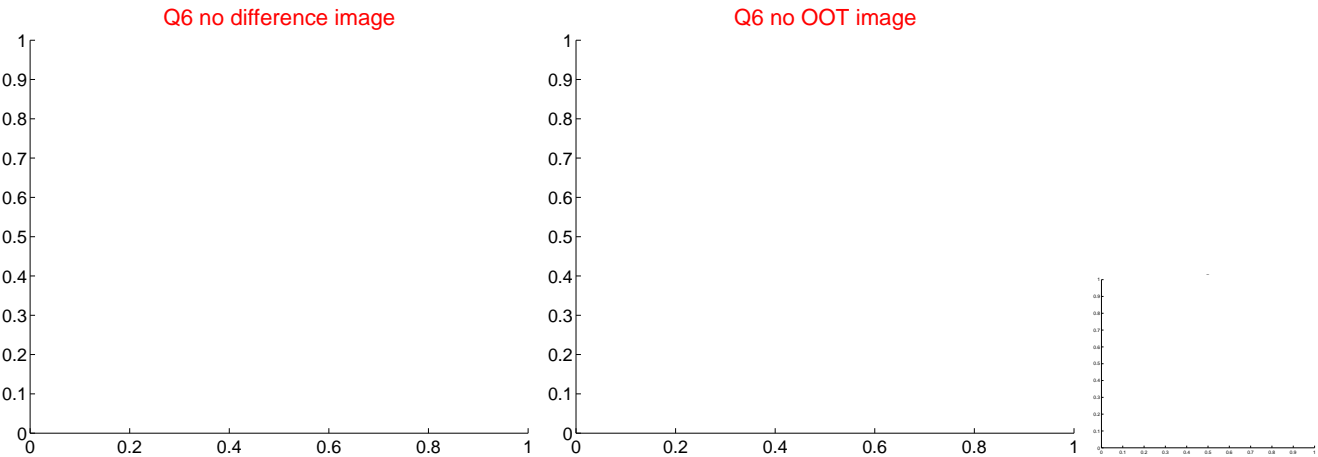
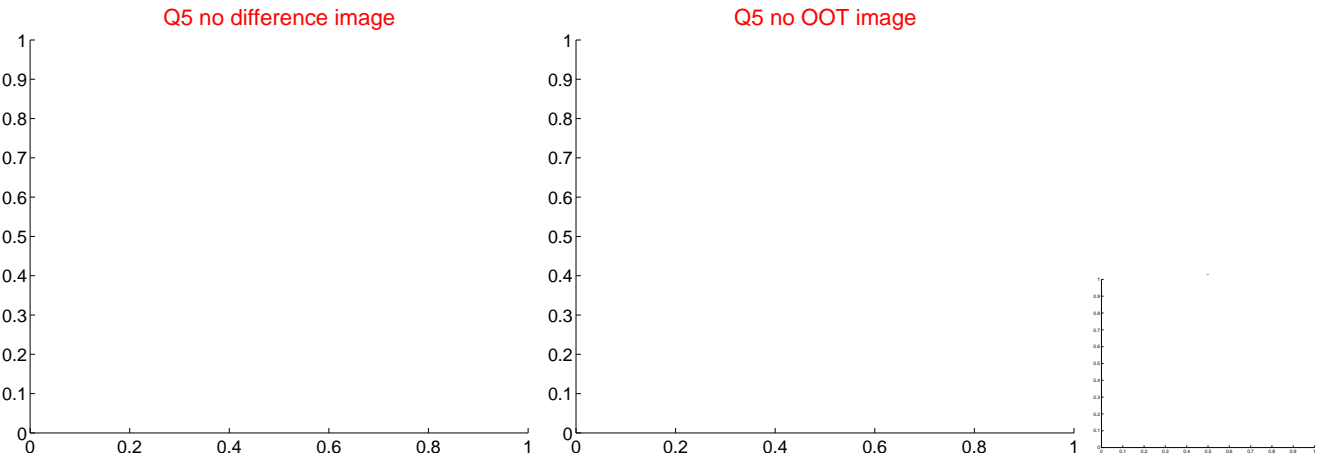


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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

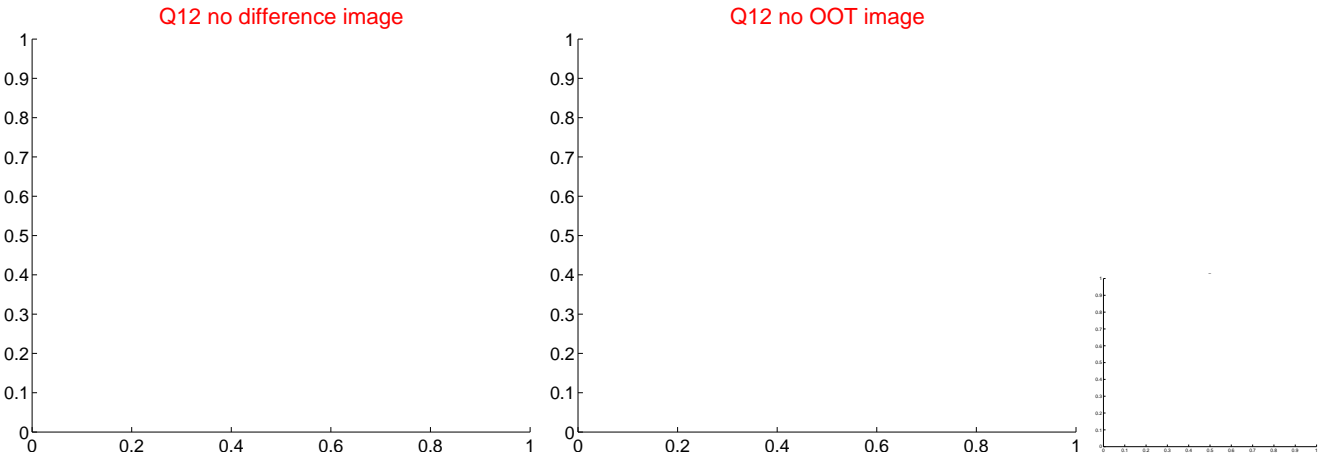
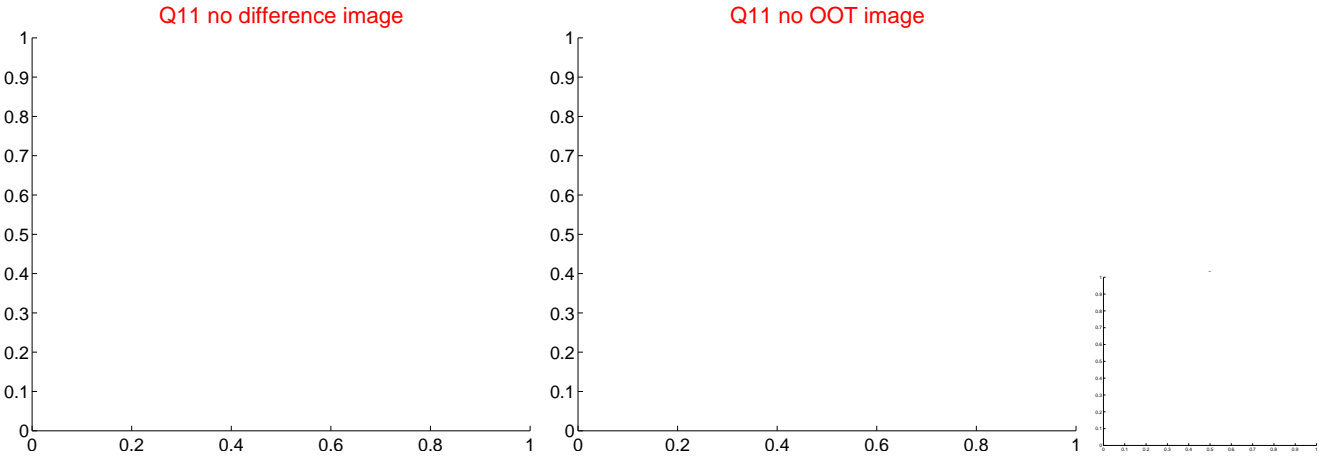
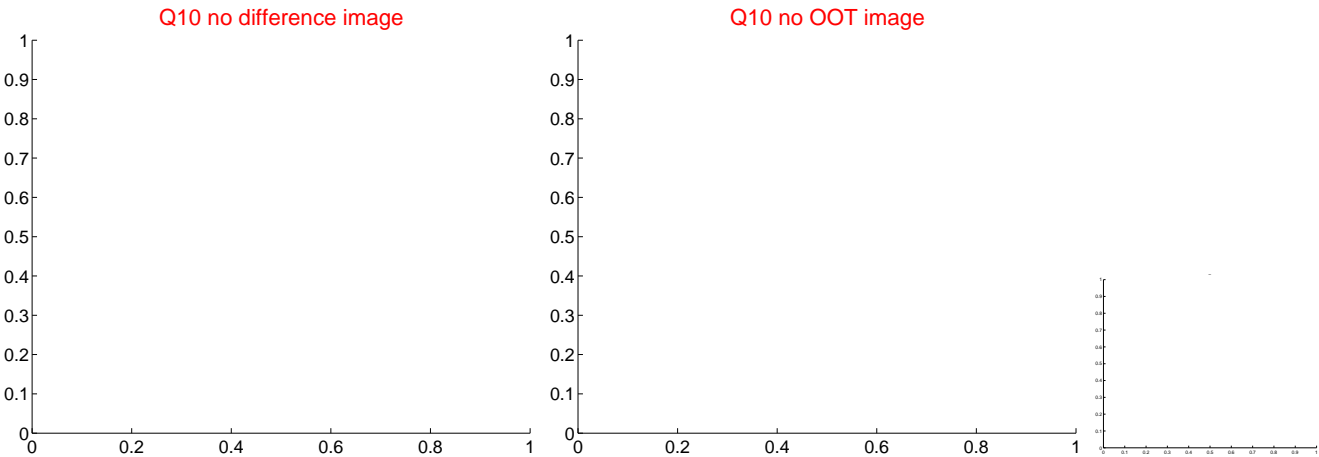
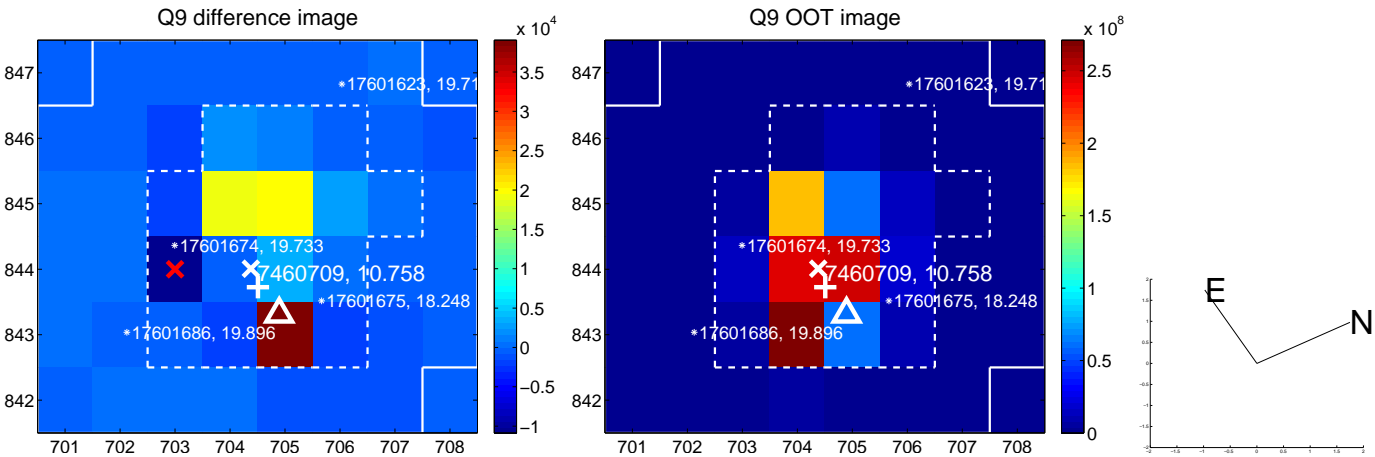
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



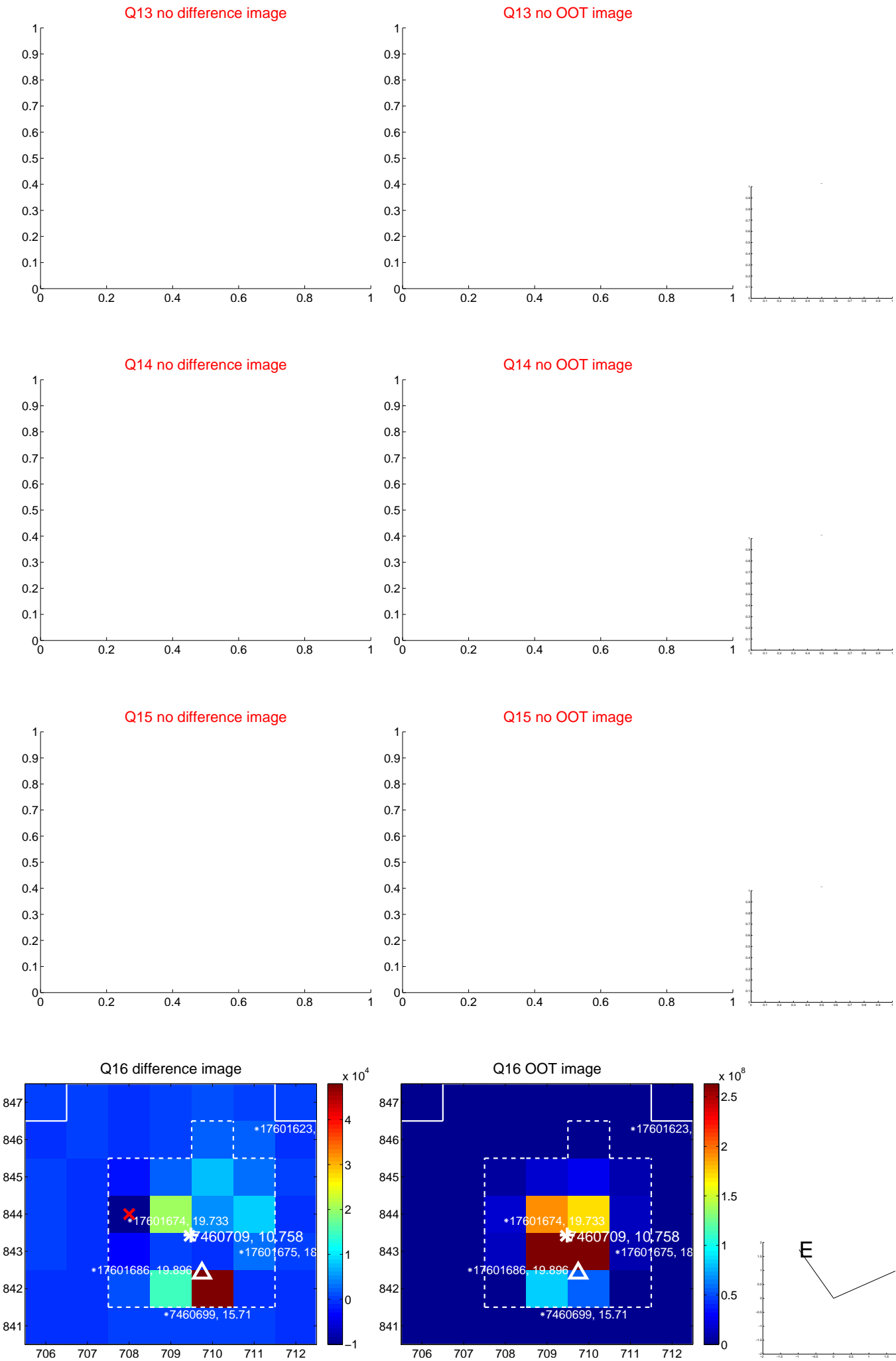
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



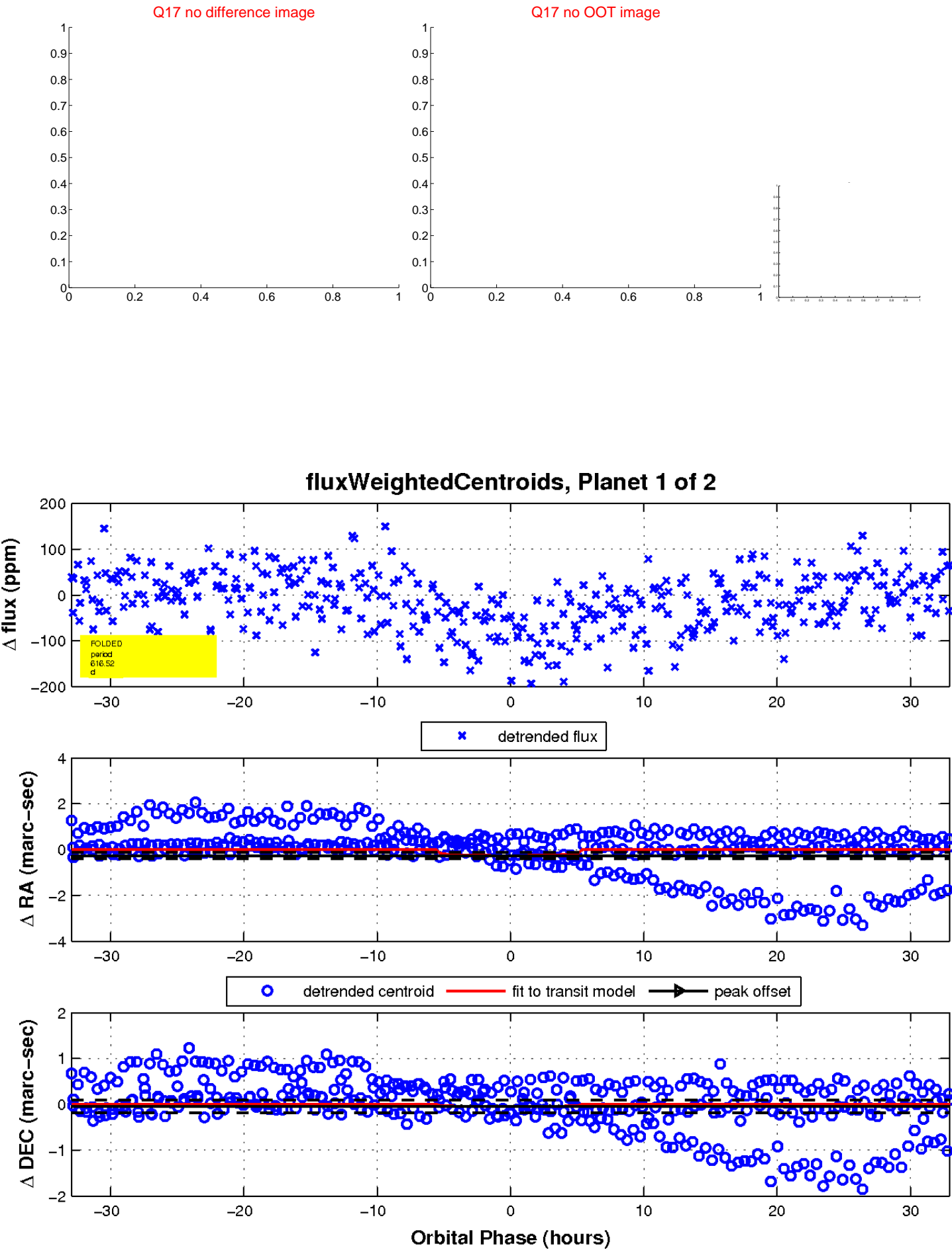
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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

Declination

