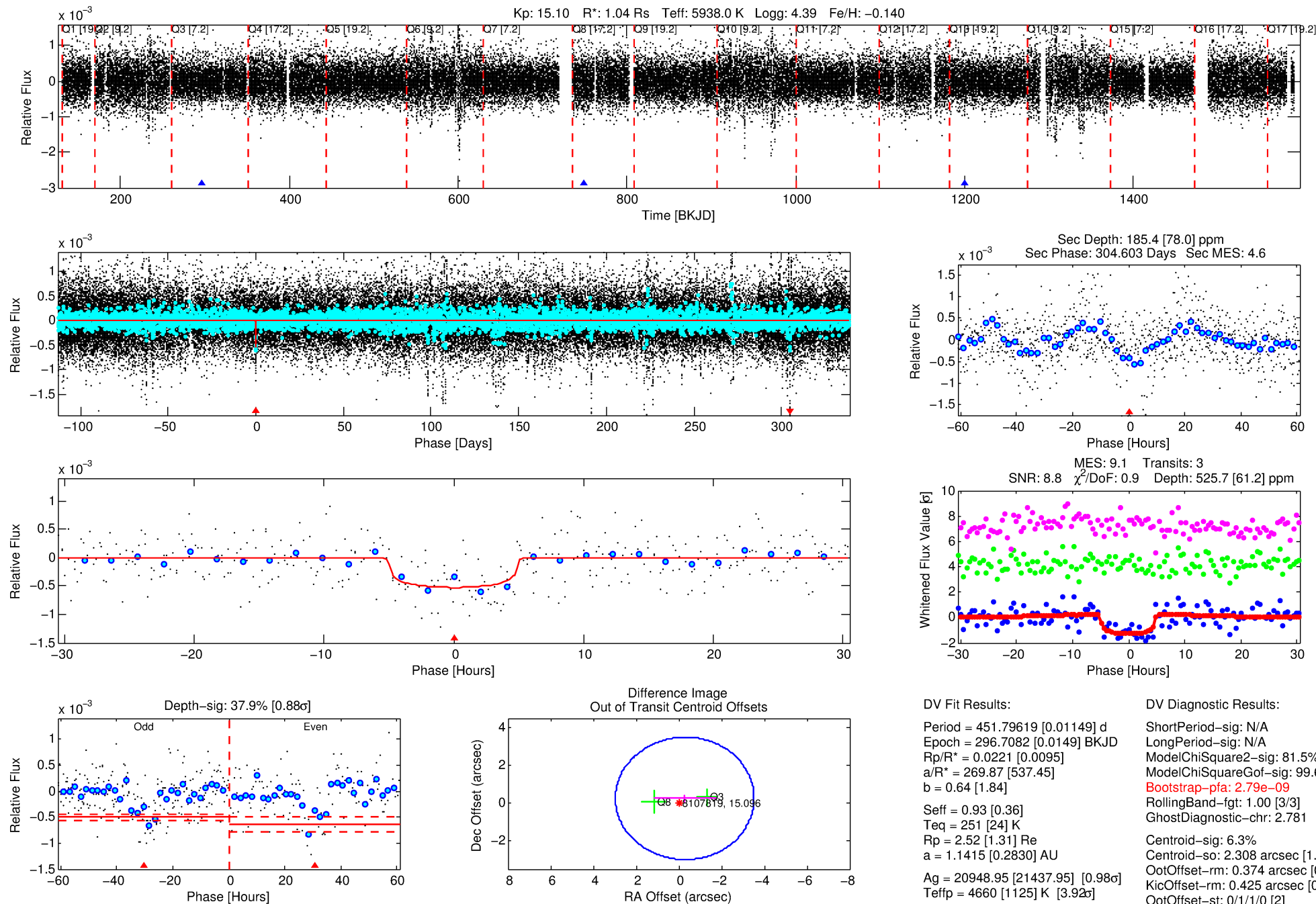


**WARNING: THIS DATA IS
SIMULATED, NOT OBSERVED**

DV One-Page Summary

KIC: 8107819 Candidate: 1 of 1 Period: 451.796 d

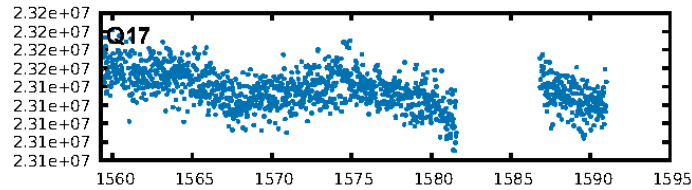
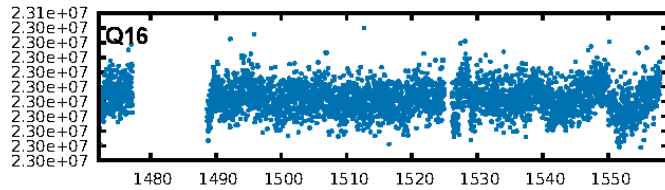
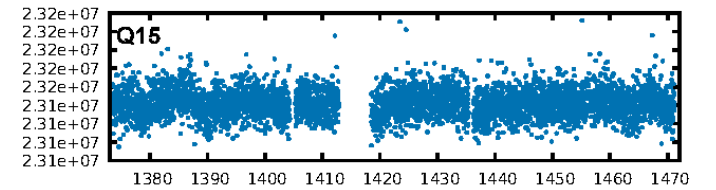
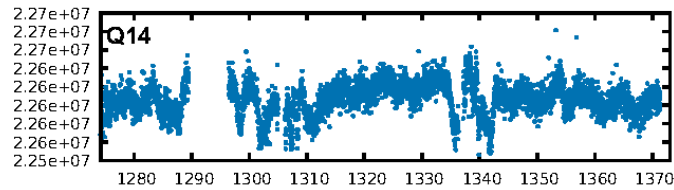
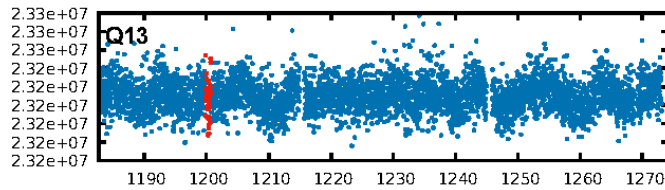
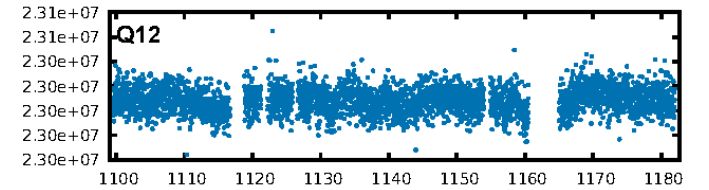
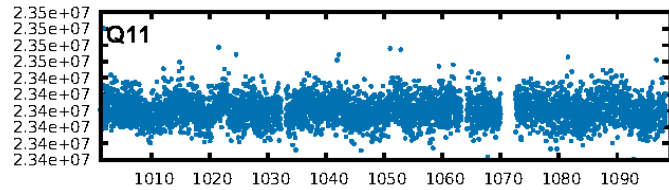
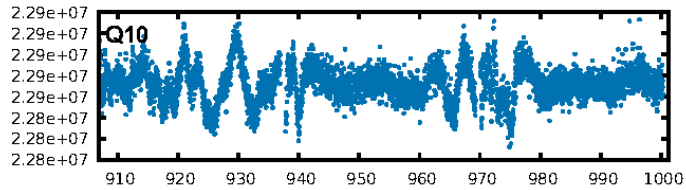
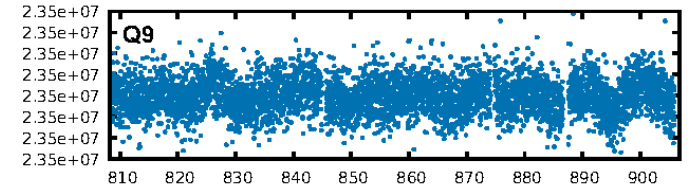
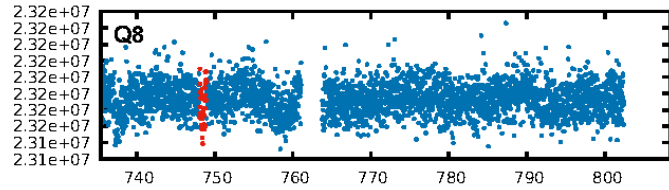
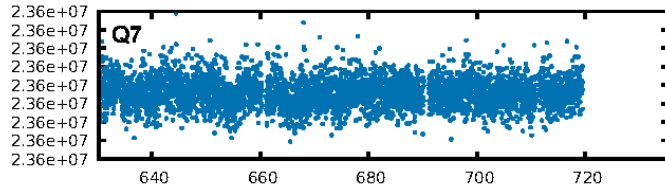
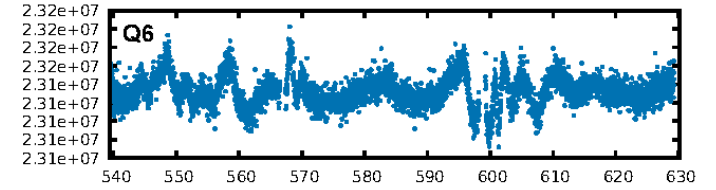
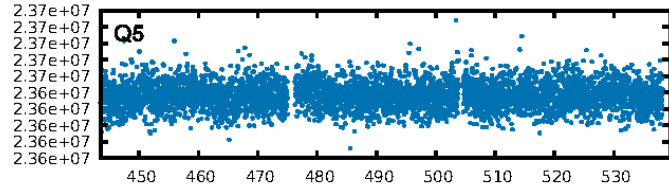
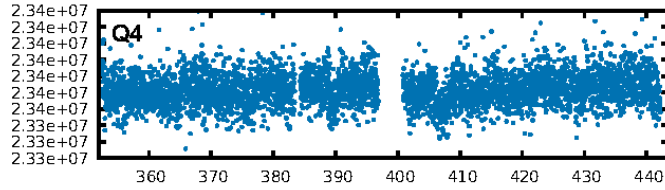
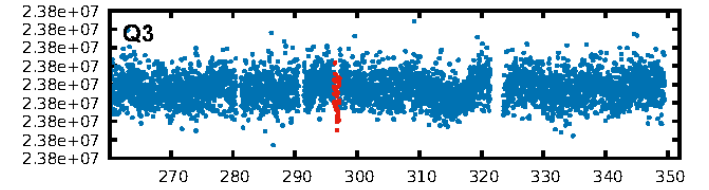
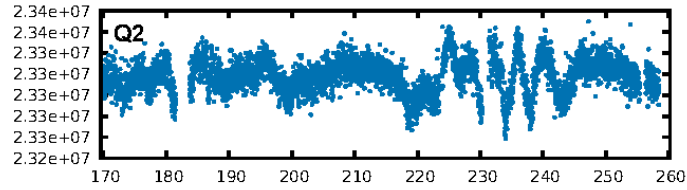
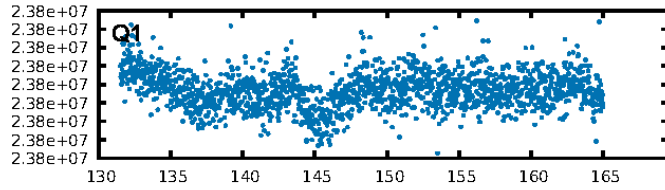
**WARNING: THIS DATA IS
SIMULATED, NOT OBSERVED**



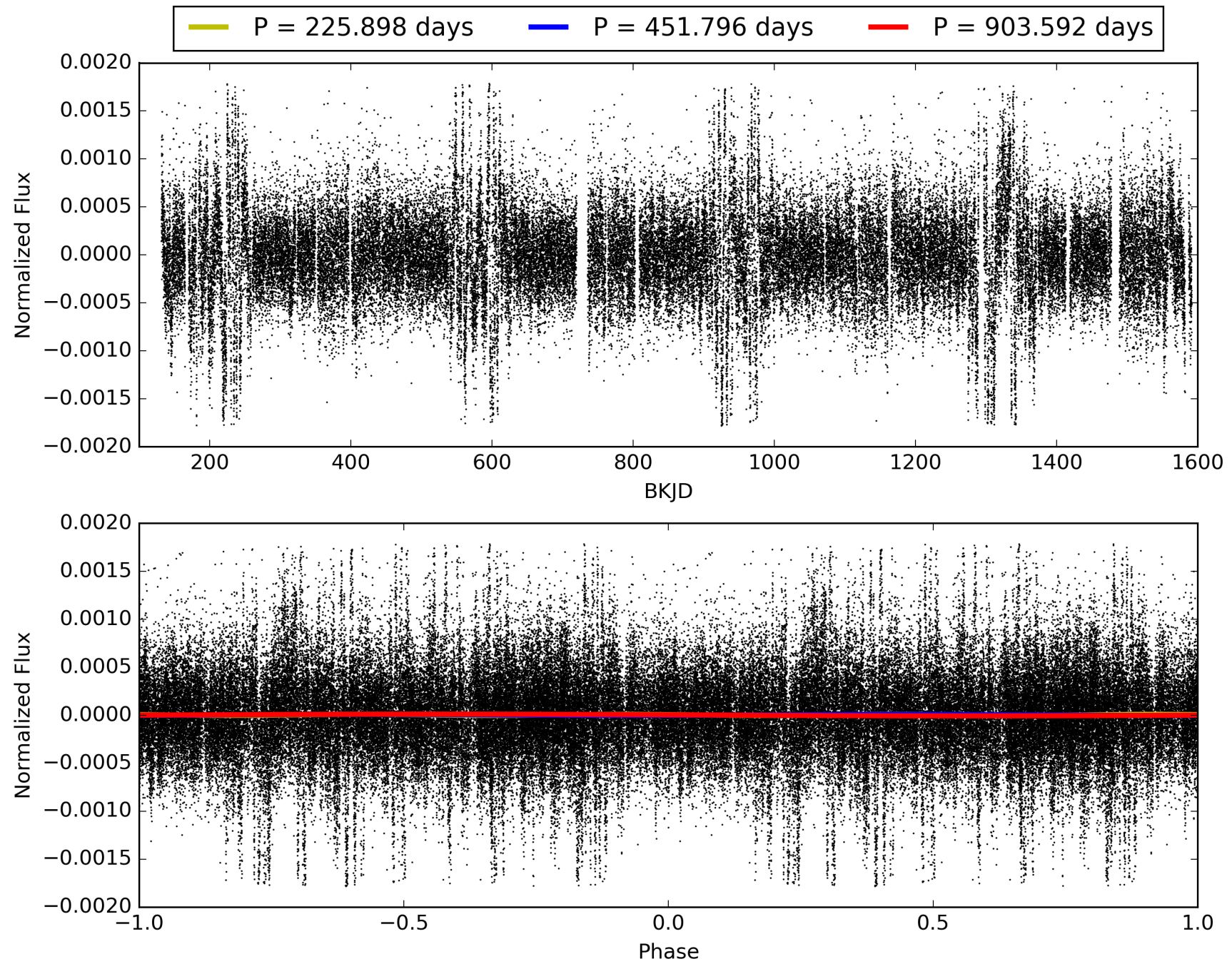
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This Data Validation Report Summary was produced in the Kepler Science Operations Center Pipeline at NASA Ames Research Center

TCE 008107819-01, PDC Light Curves

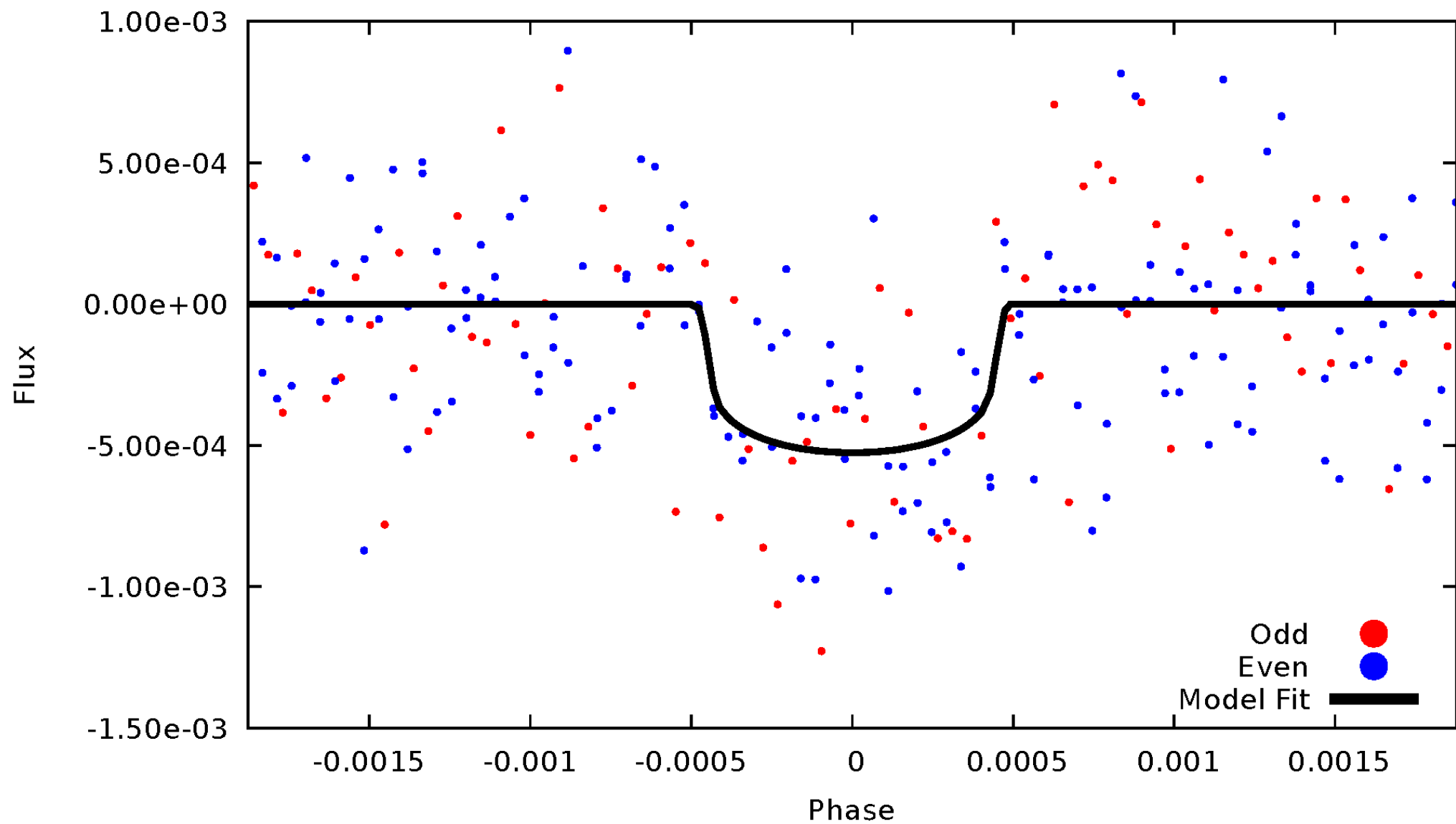


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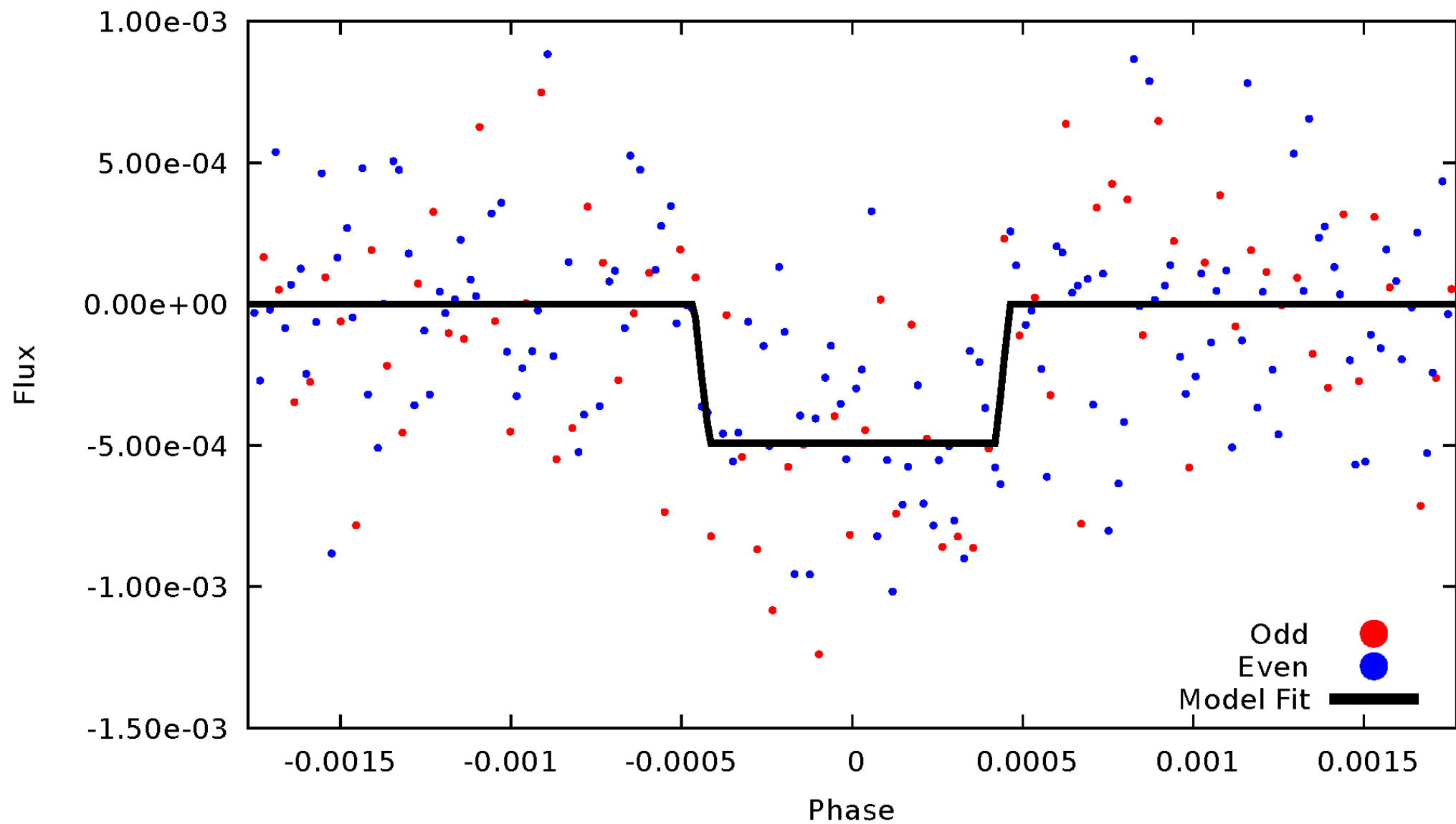
DV Odd/Even

TCE 008107819-01



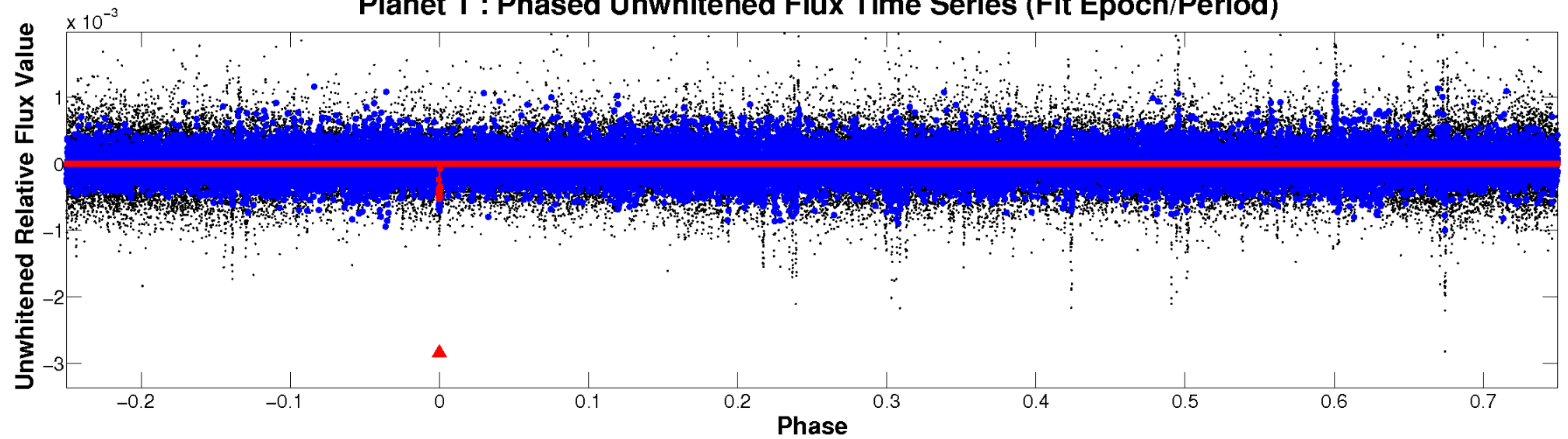
ALT Odd/Even

TCE 008107819-01

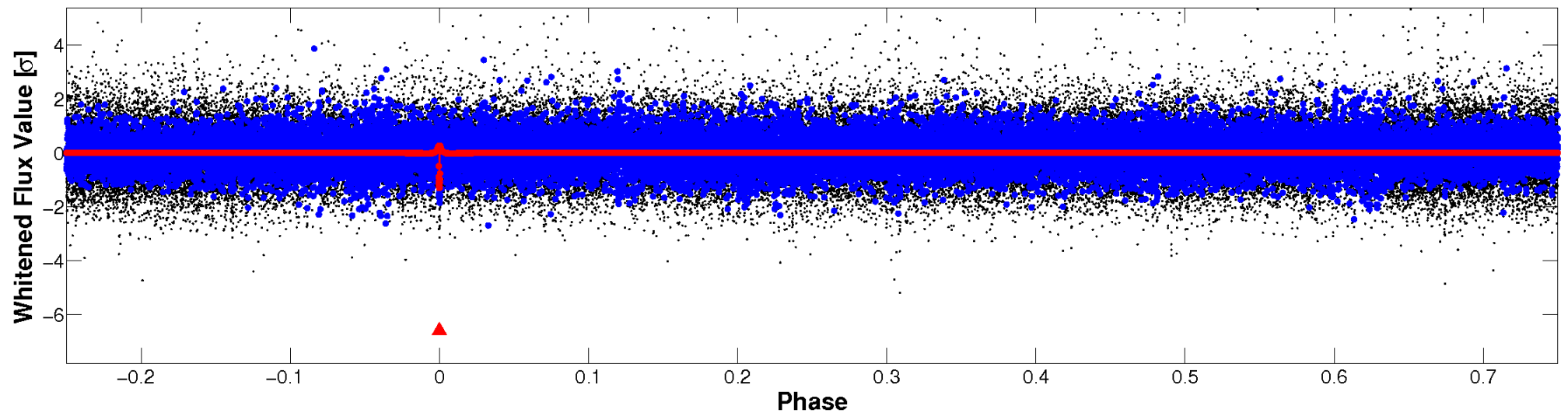


Non-Whitened Vs. Whitened Light Curve

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



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



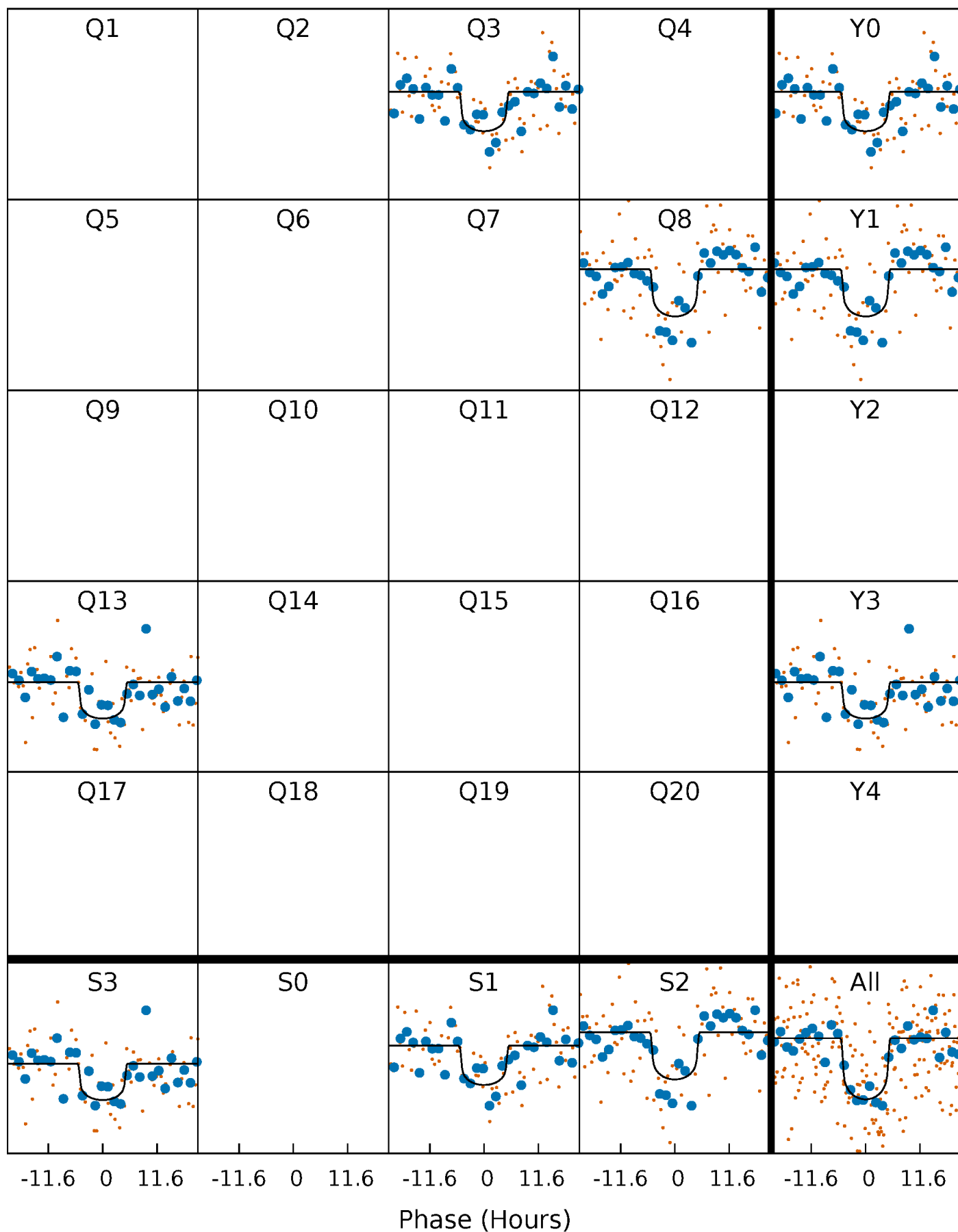
PDC Quarter-Phased Transit Curves

TCE 008107819-01 P=451.796188 Days $T_0=296.708207$ (BKJD)



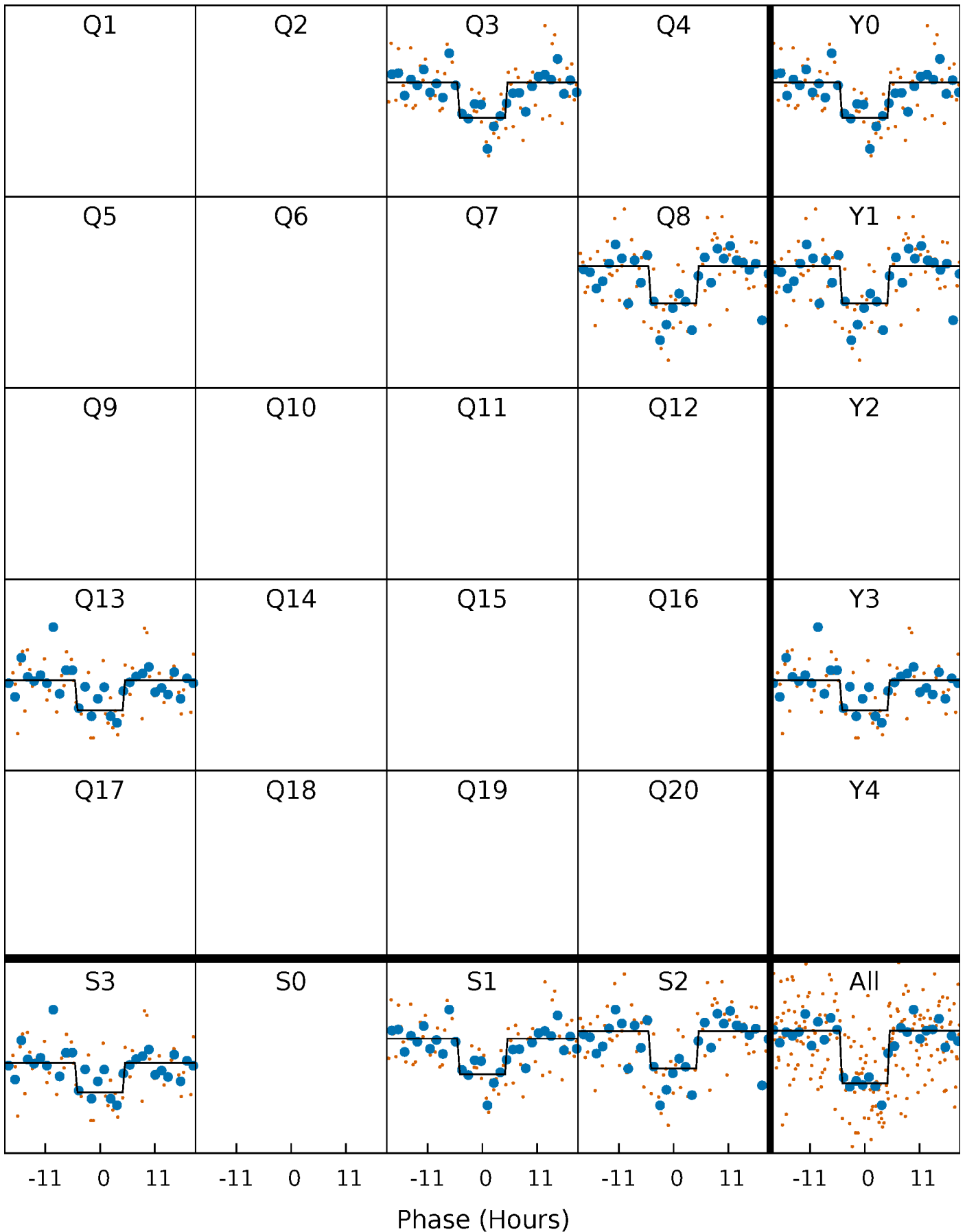
DV Quarter-Phased Transit Curves

TCE 008107819-01 P=451.796188 Days $T_0=296.708207$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

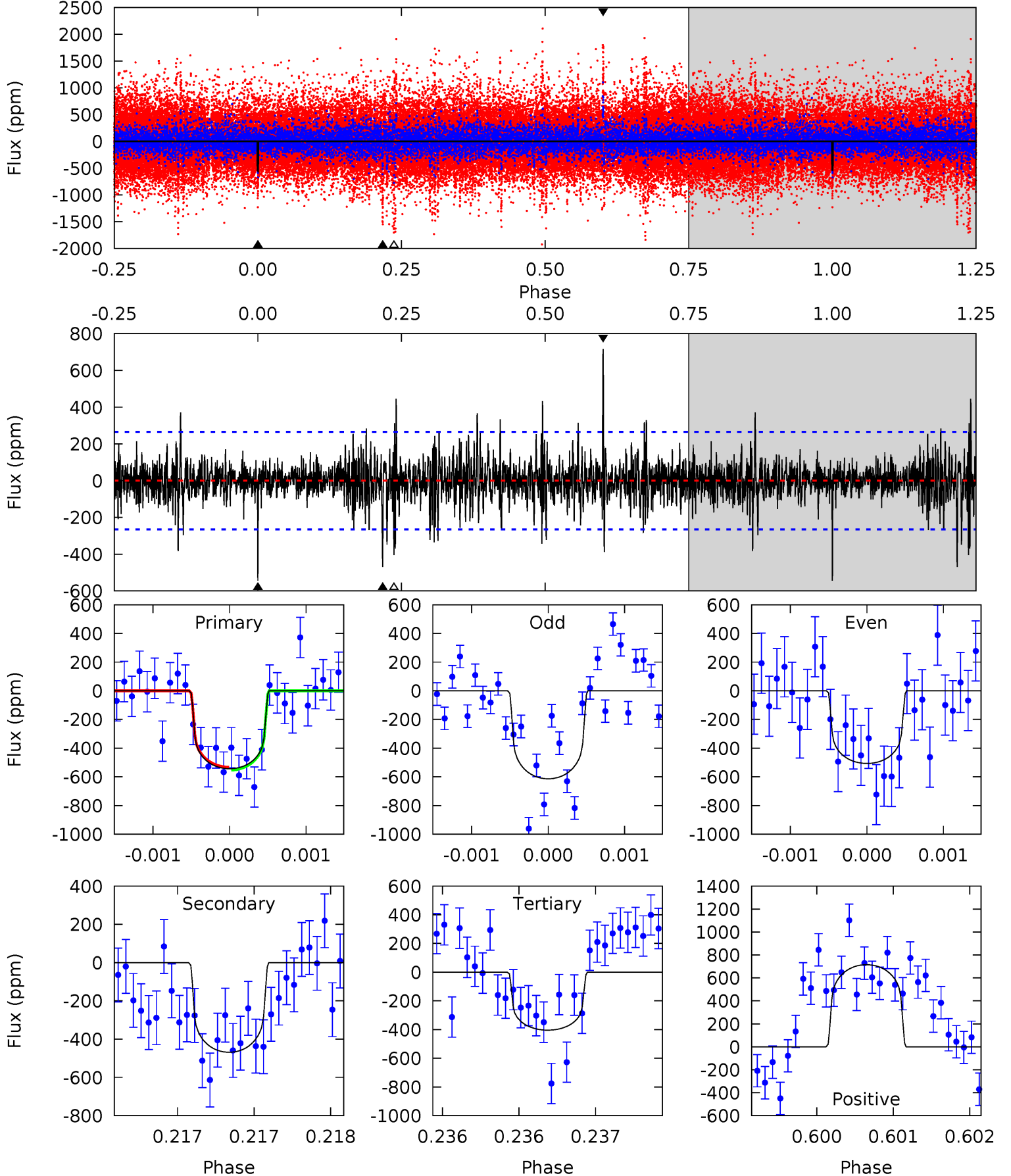
TCE 008107819-01 P=451.799634 Days $T_0=296.705540$ (BKJD)



DV Model-Shift Uniqueness Test

008107819-01, P = 451.796188 Days, E = 296.708207 Days

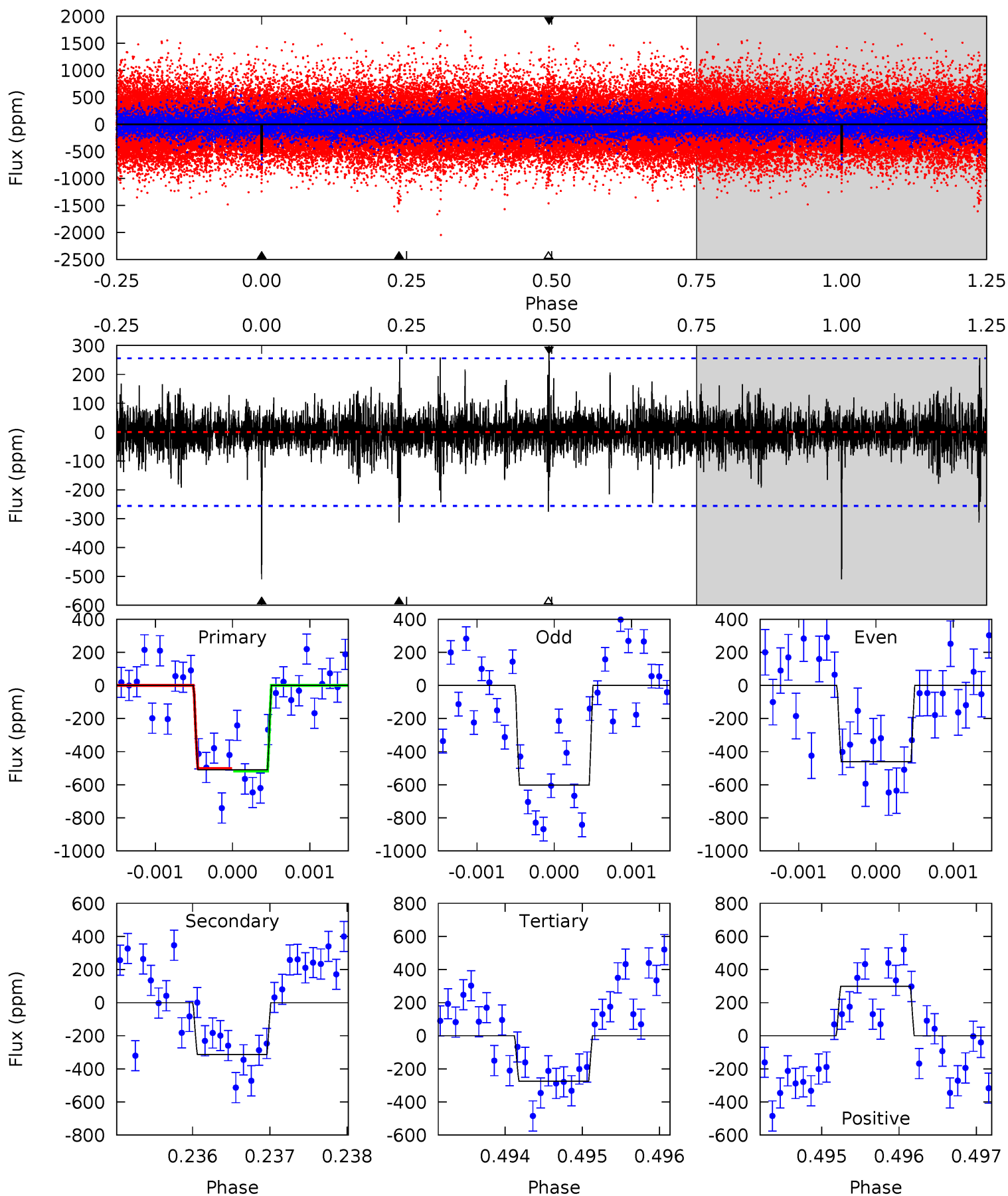
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
11.2	9.64	8.32	14.7	5.46	3.31	1.81	2.86	-3.54	1.33	-5.07	1.04	1.01	0.57	0.21



Alt Model-Shift Uniqueness Test

008107819-01, P = 451.799634 Days, E = 296.705540 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
10.9	6.68	5.88	6.38	5.47	3.31	1.04	5.01	4.51	0.80	0.30	1.44	1.03	0.37	0.17



Stellar Parameters For KIC 008107819

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	5938^{+160}_{-196}	$4.388^{+0.108}_{-0.201}$	$-0.140^{+0.300}_{-0.300}$	$1.044^{+0.304}_{-0.164}$	$0.972^{+0.135}_{-0.110}$	$1.204^{+0.582}_{-0.631}$
	+3%/-3%	+2%/-5%	+214%/-214%	+29%/-16%	+14%/-11%	+48%/-52%
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 008107819-01 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	A_{obs}
DV	-469 ± 49	$2.64^{+1.25}_{-1.11}$	354^{+26}_{-21}	5903^{+1888}_{-963}	48295^{+99282}_{-25330}
Alt.	-313 ± 47	$2.63^{+1.19}_{-1.09}$	354^{+27}_{-20}	5289^{+1587}_{-740}	32239^{+61296}_{-16879}

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 $A_{\text{obs}} \gg 1.0$

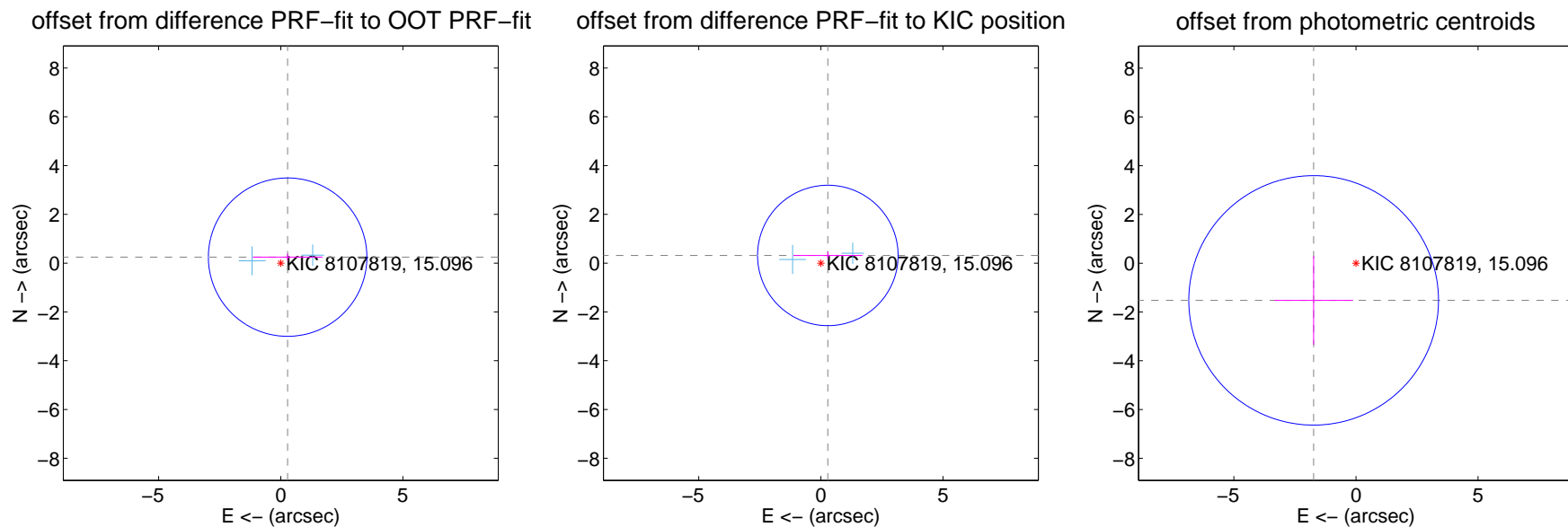
DV Centroid Data

Supplemental centroid analysis for 008107819-01. Kepler magnitude: 15.10. Transit SNR 8.81

There are 2 quarters with good PRF difference image offsets

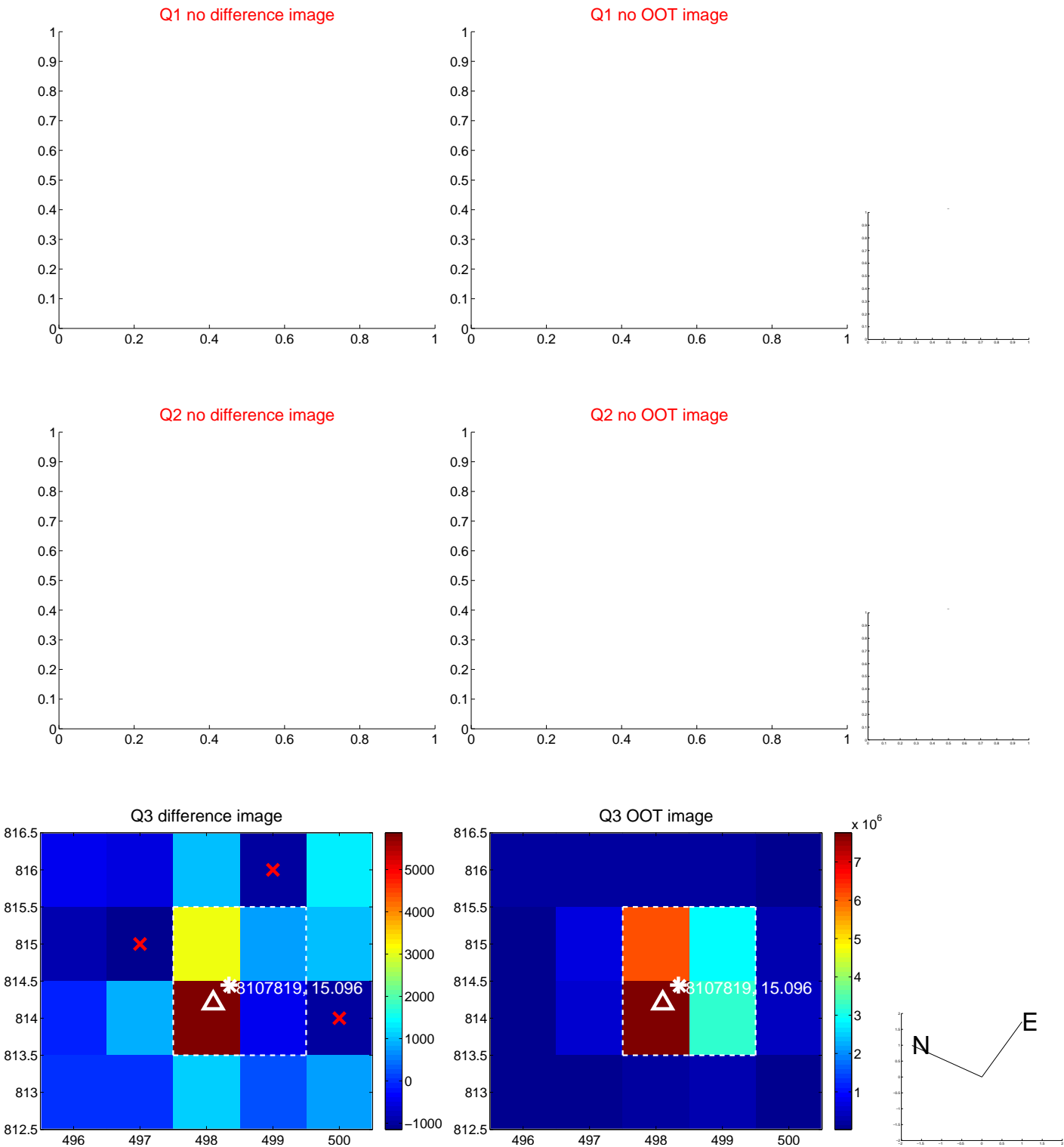
The direct PRF centroid is offset from the target star catalog position by about 0.06 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.374 ± 1.082	0.35	-0.282 ± 1.430	0.246 ± 0.147
PRF-fit source offset from KIC position	0.425 ± 0.959	0.44	-0.286 ± 1.419	0.315 ± 0.157
photometric centroid source offset	2.31 ± 1.70	1.35	1.73 ± 1.61	-1.52 ± 1.82

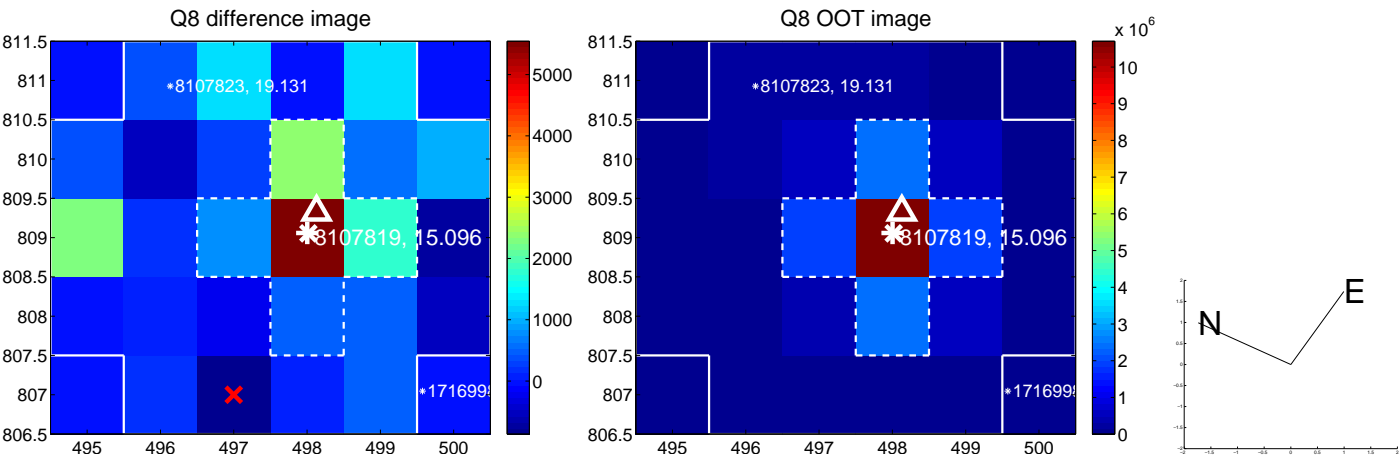
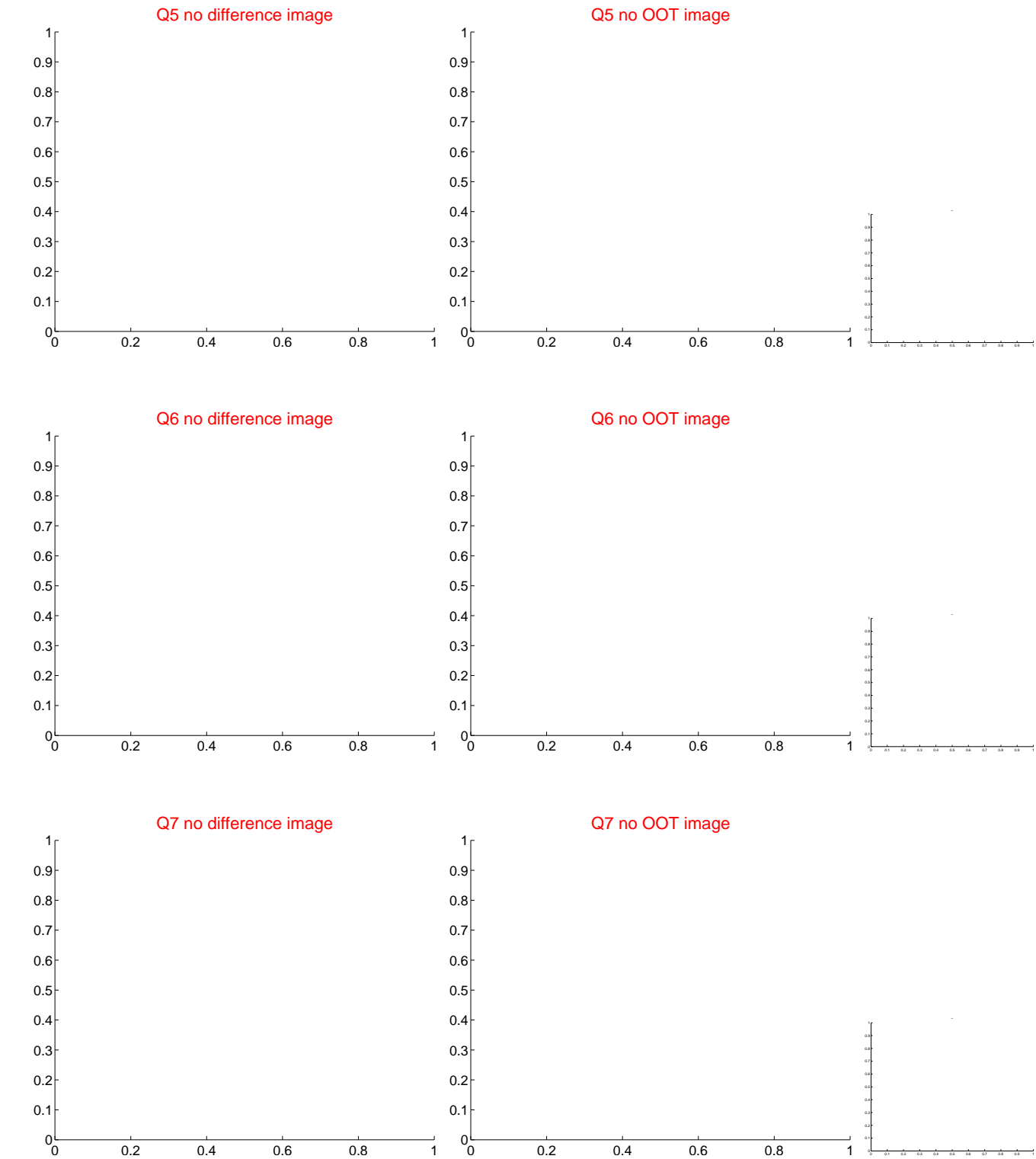


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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

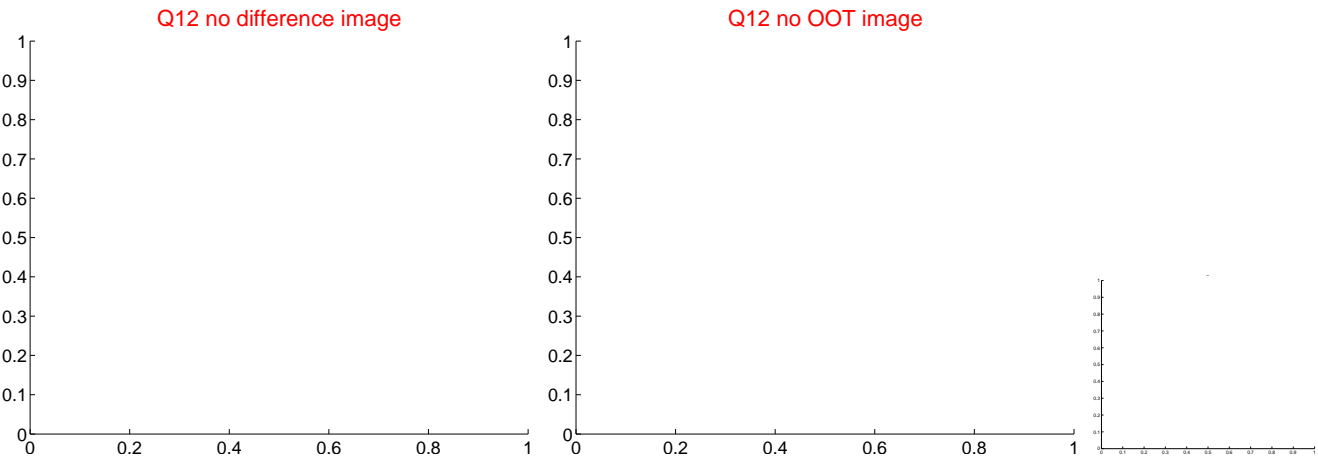
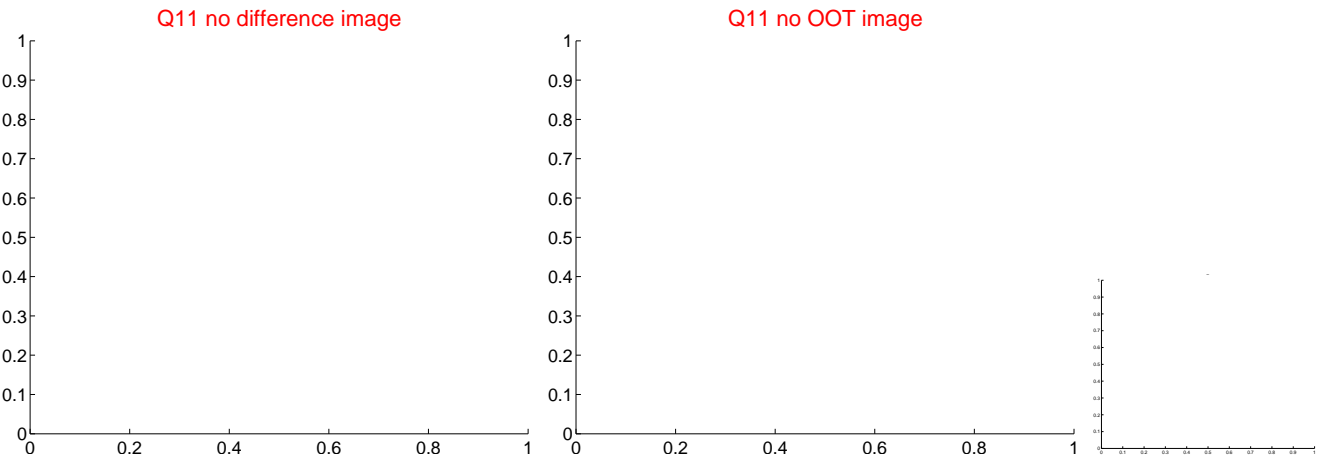
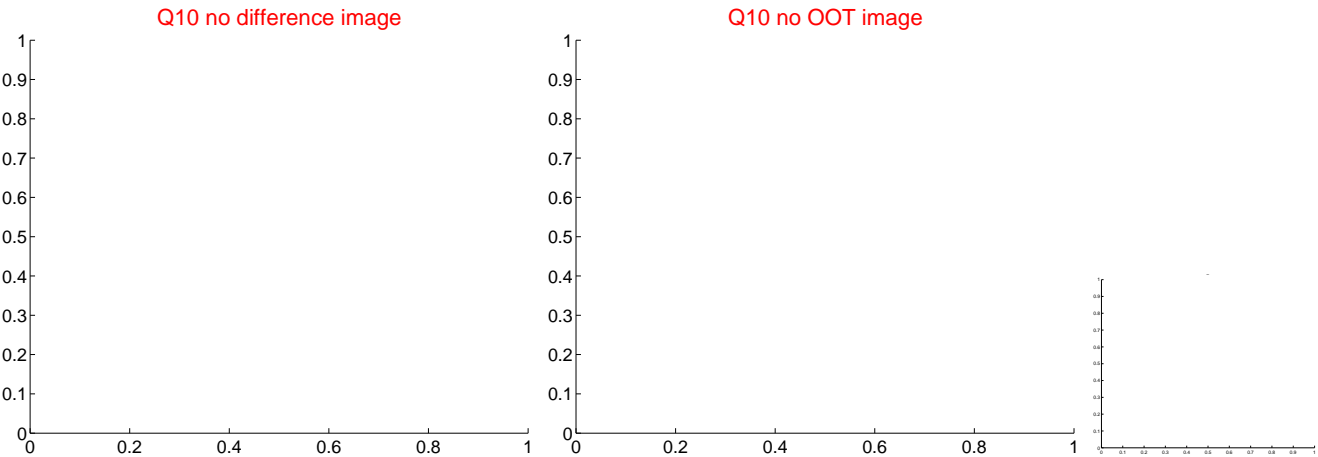
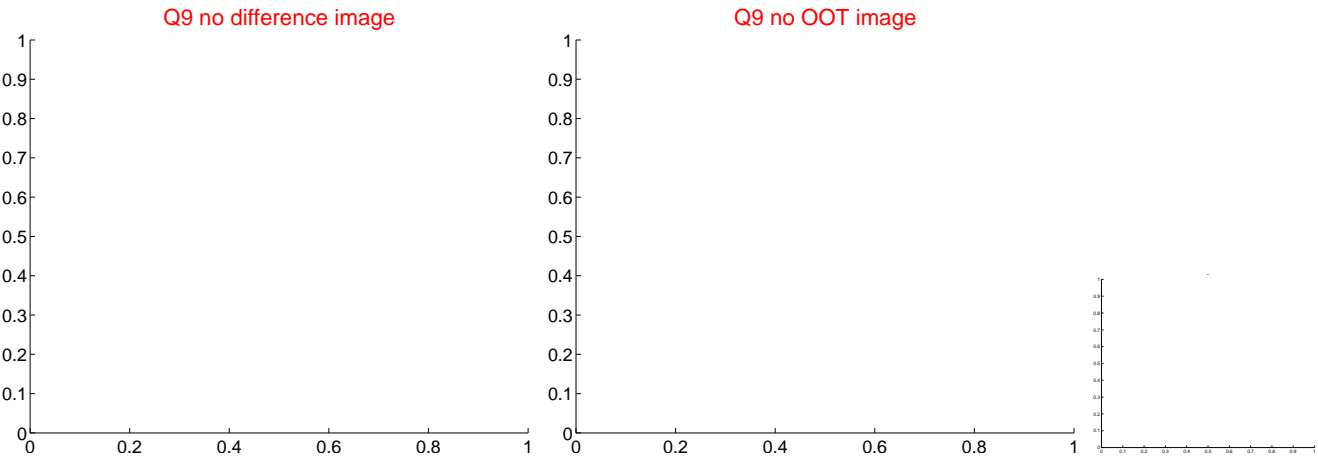
white \times : KIC target position; $+$: OOT centroid; Δ : difference centroid. red \times : large negative pixel value.



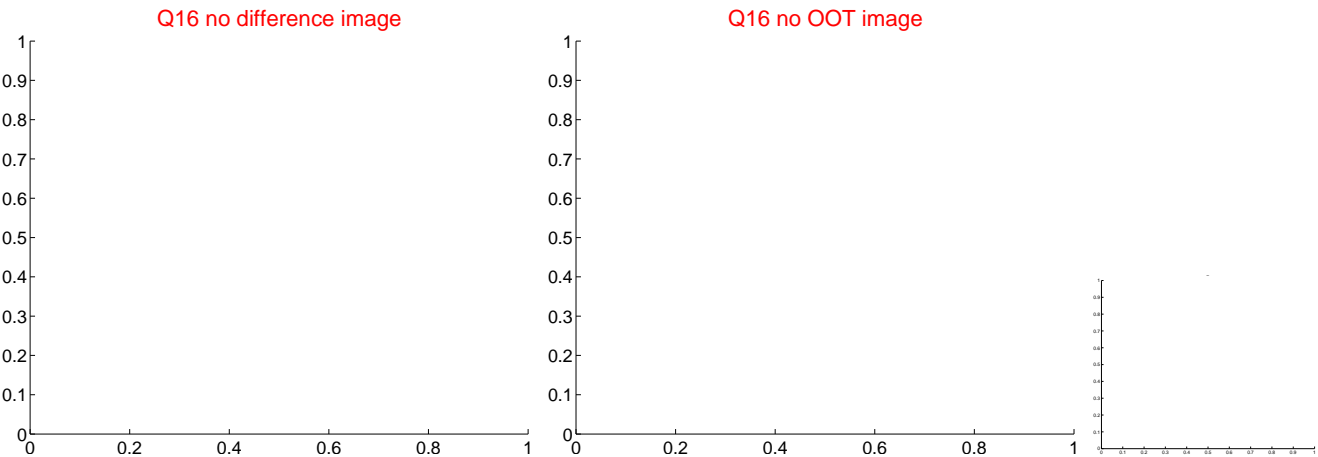
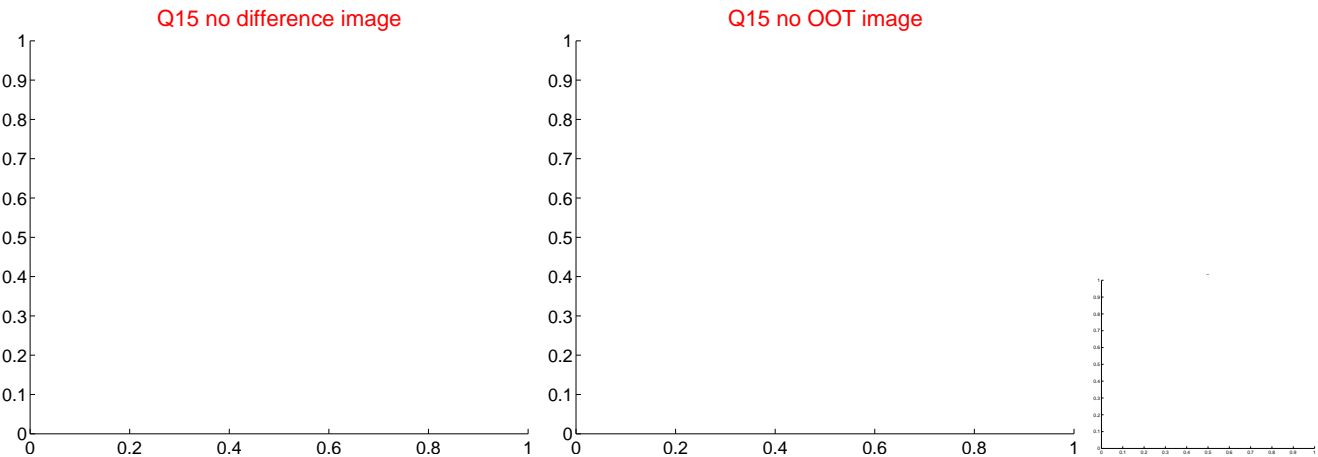
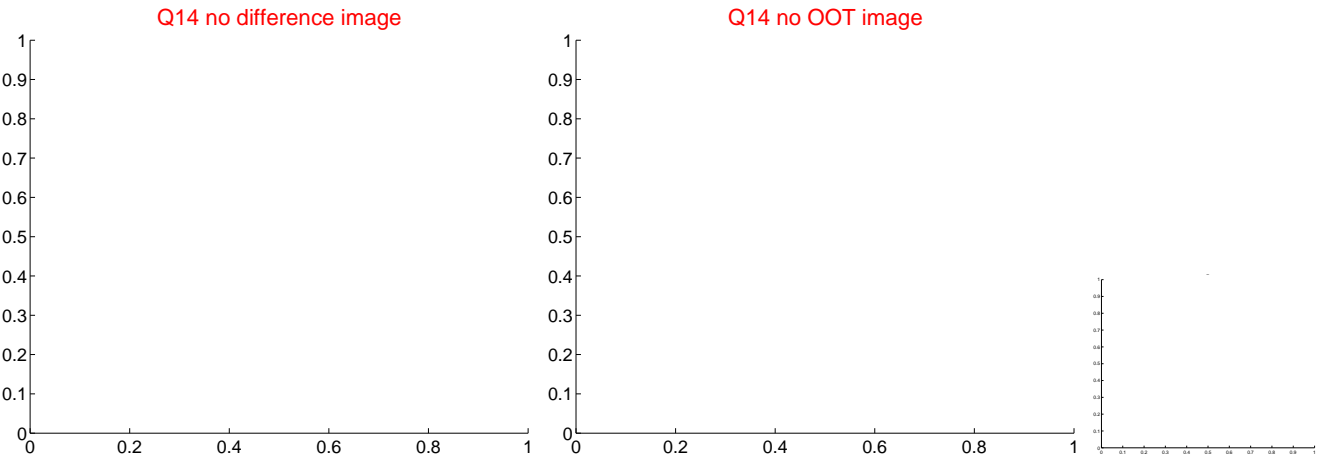
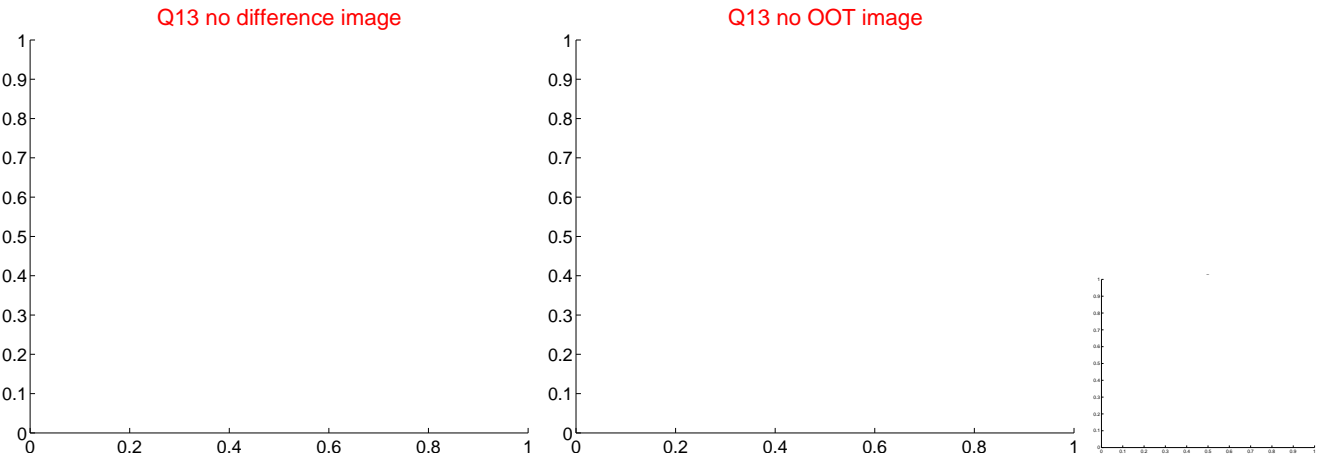
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



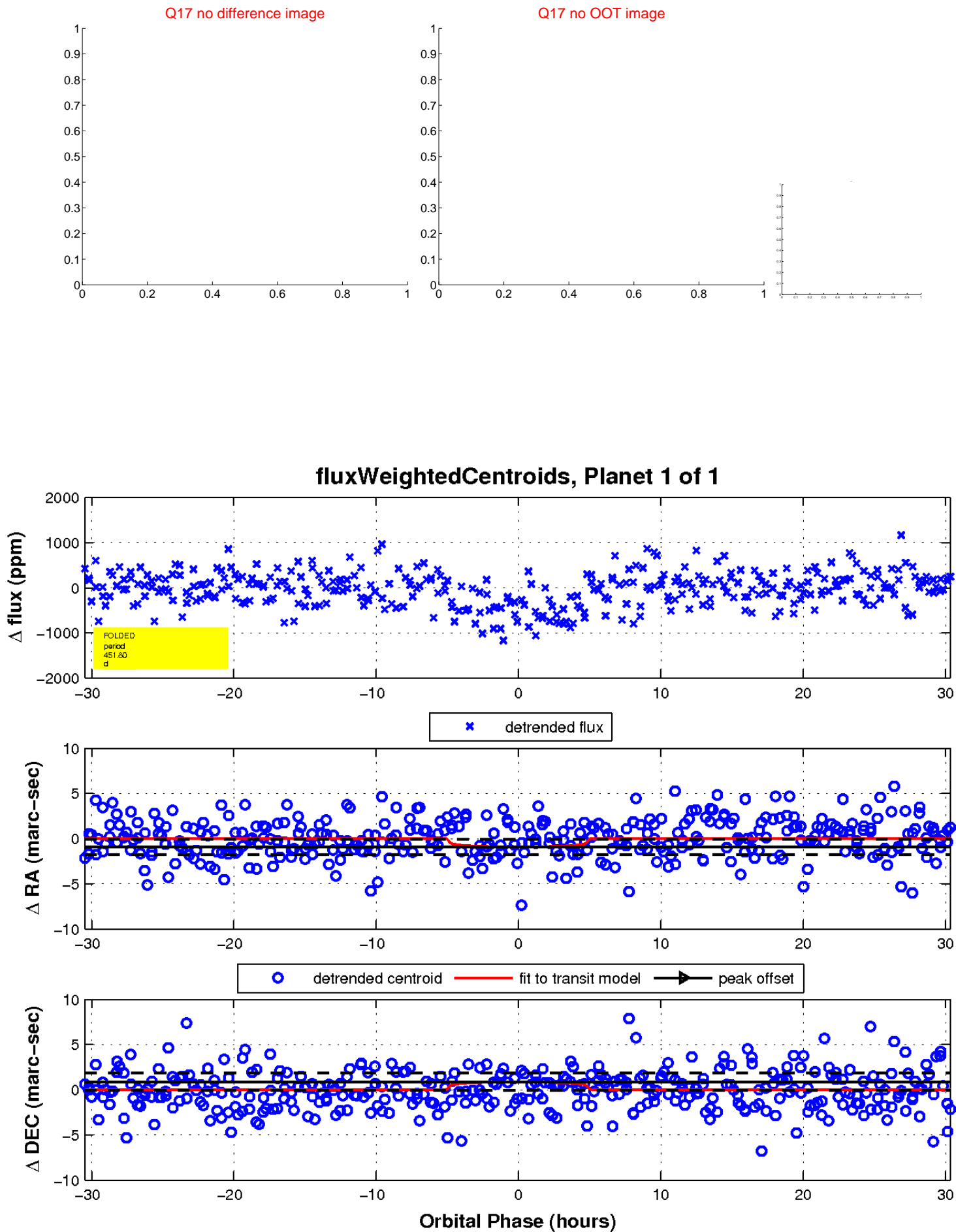
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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

