

KIC 009396925

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})
009396925-01	OBS	No	265.778163	182.582039	133.9	3.000	13.0	-1.0	59.07	4056	64.44	901.22

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
009396925-01	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_CHASES_MARSHALL_ZUMA—LPP_DV—ALL_TRANS_CHASES—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—INCONSISTENT_TRANS—CENT_SATURATED

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

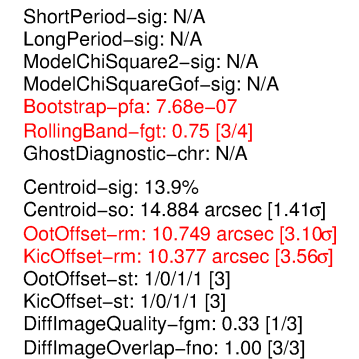
N = Not Transit-Like. S = Stellar Eclipse. C = Centroid Offset. E = Ephemeris Match.

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

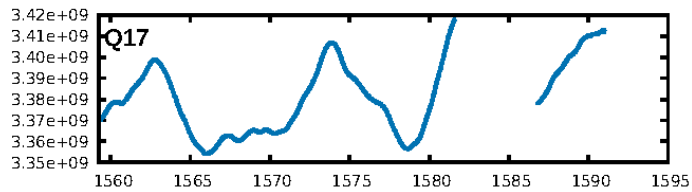
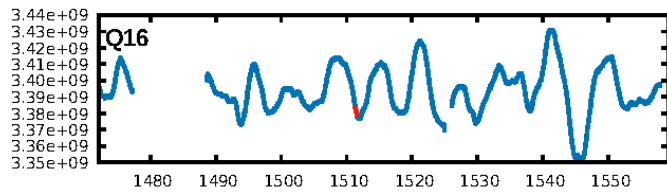
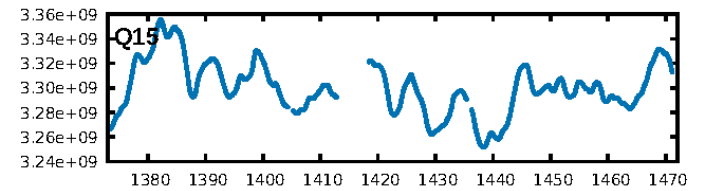
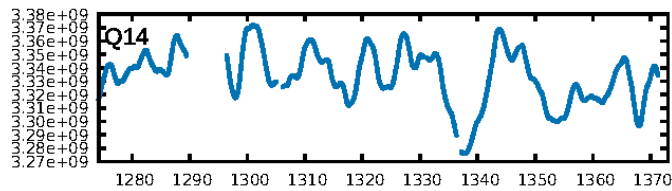
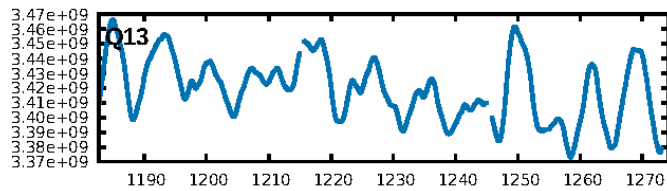
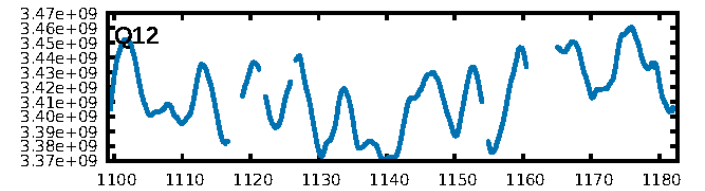
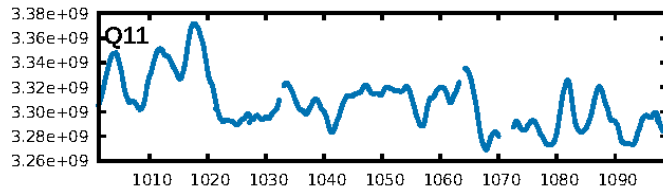
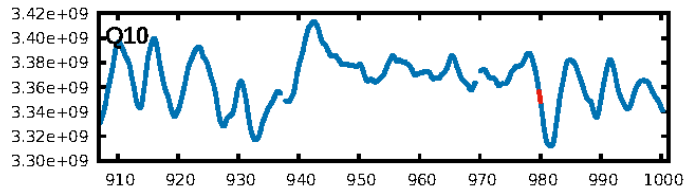
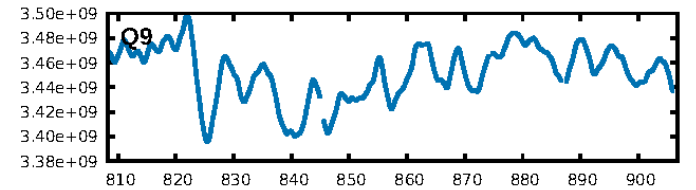
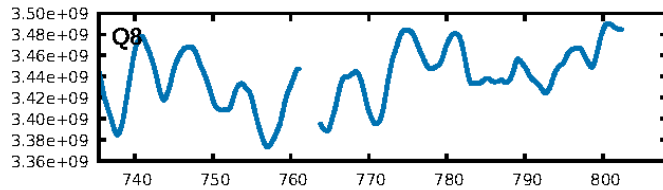
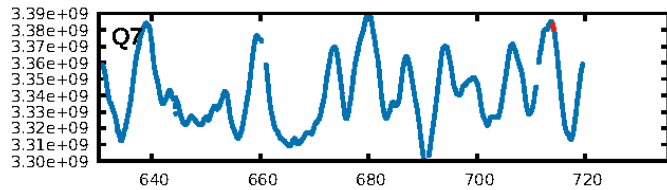
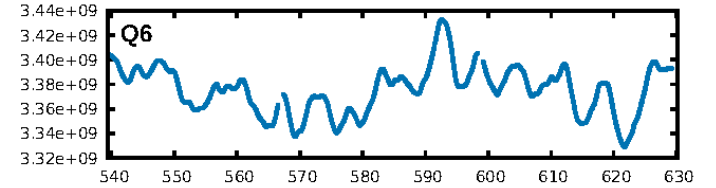
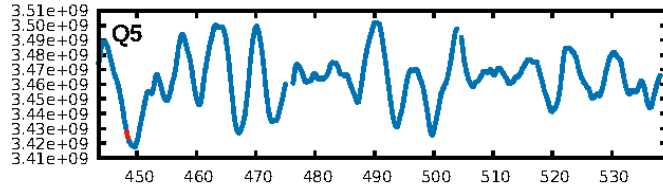
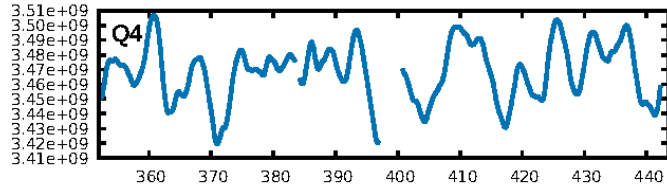
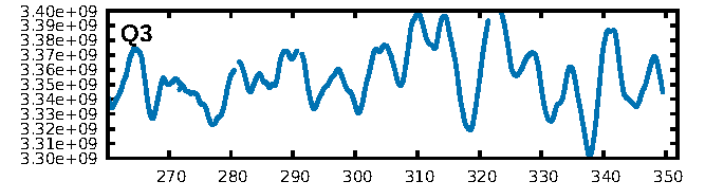
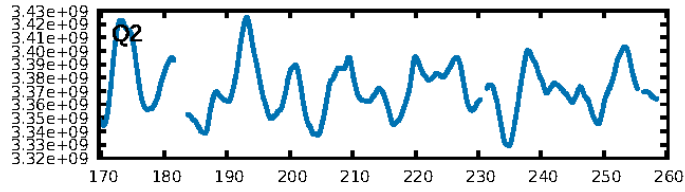
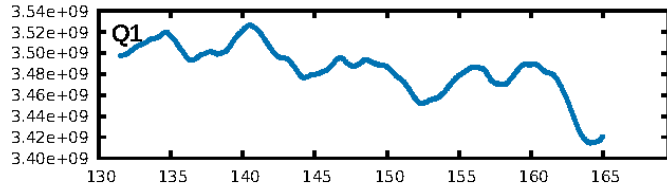
Ephemeris Match Information For 009396925-01

No Significant Match Found

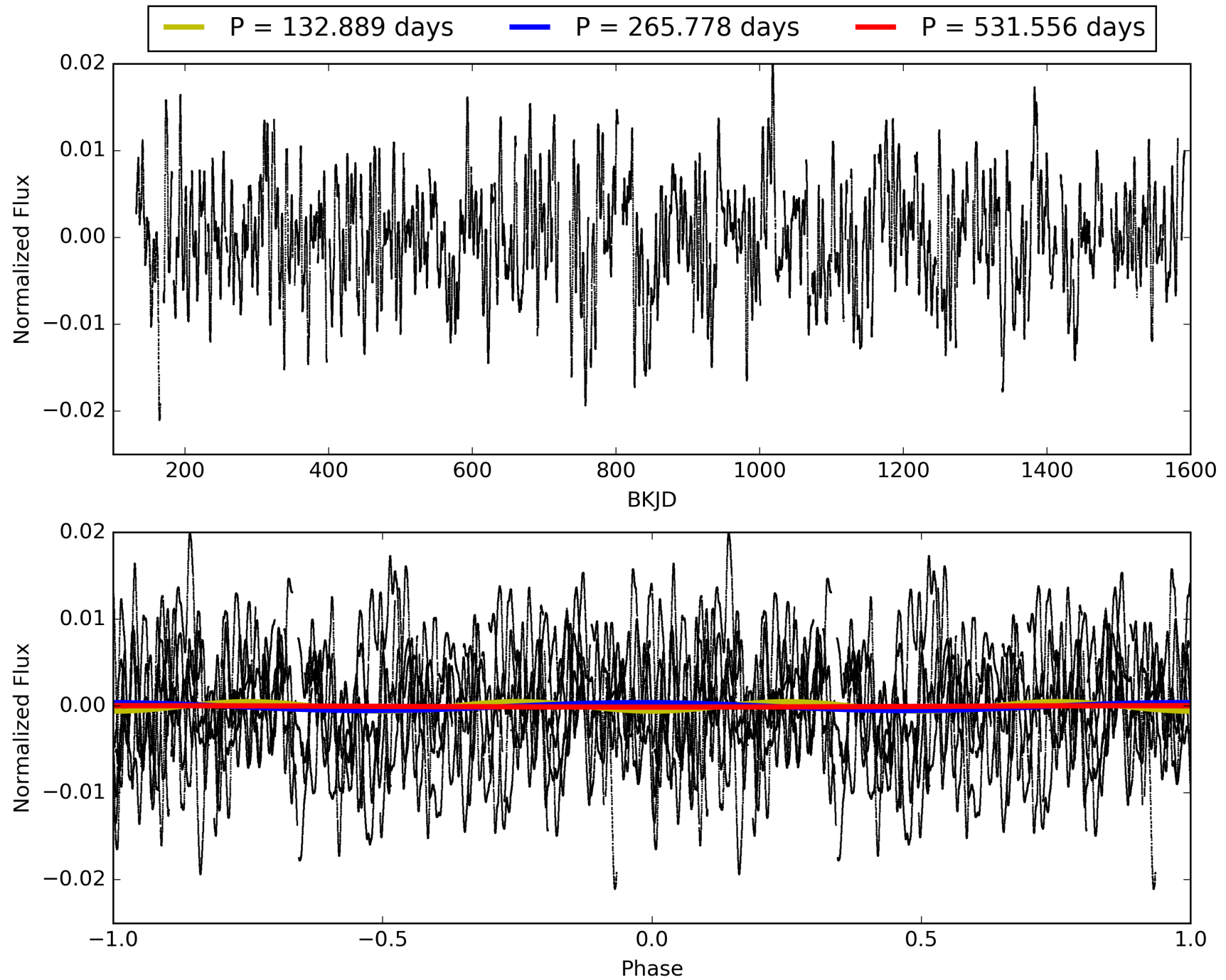
KIC: 9396925 Candidate: 1 of 1 Period: 265.778 d



TCE 009396925-01, PDC Light Curves

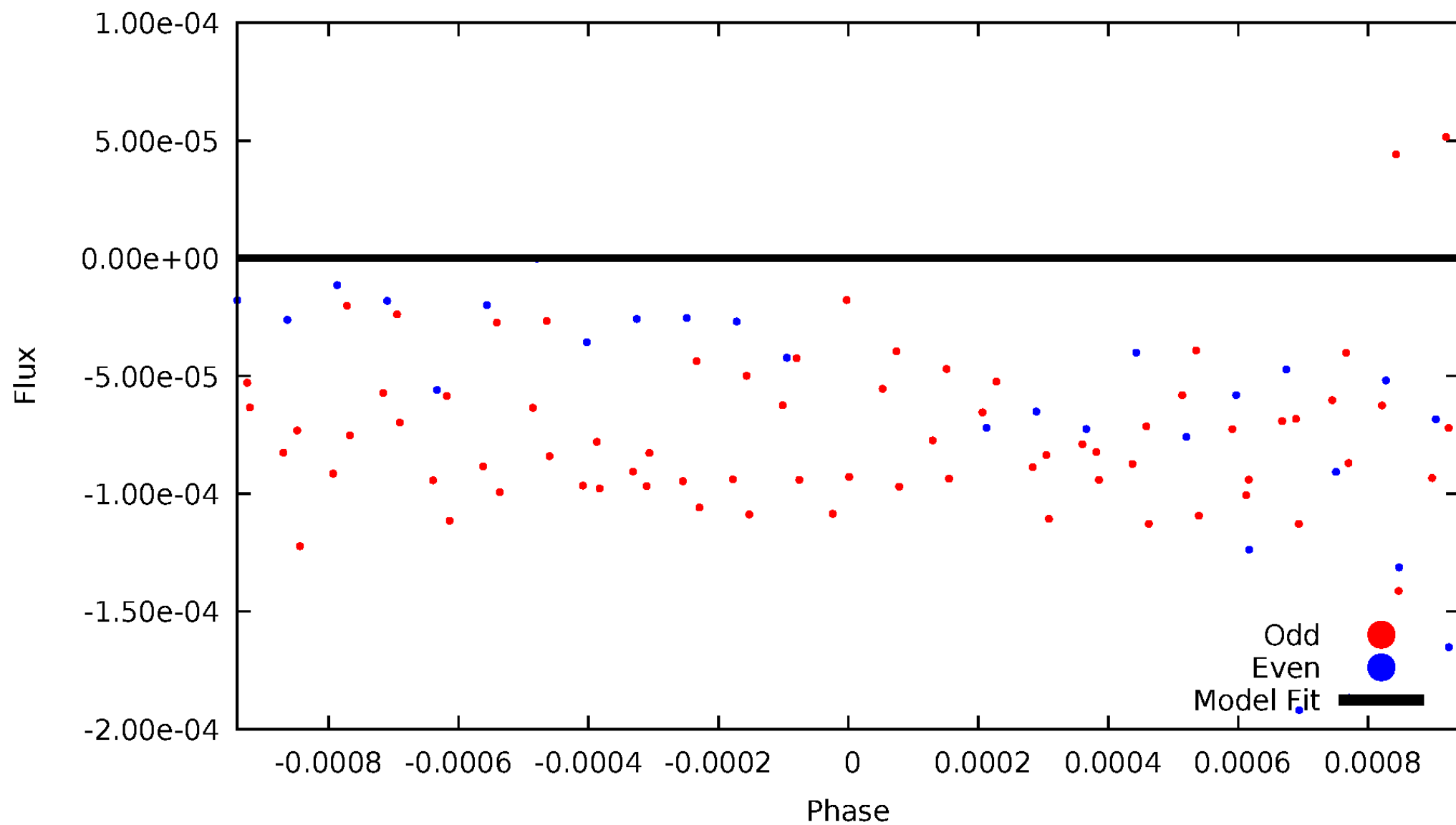


TCE 009396925-01



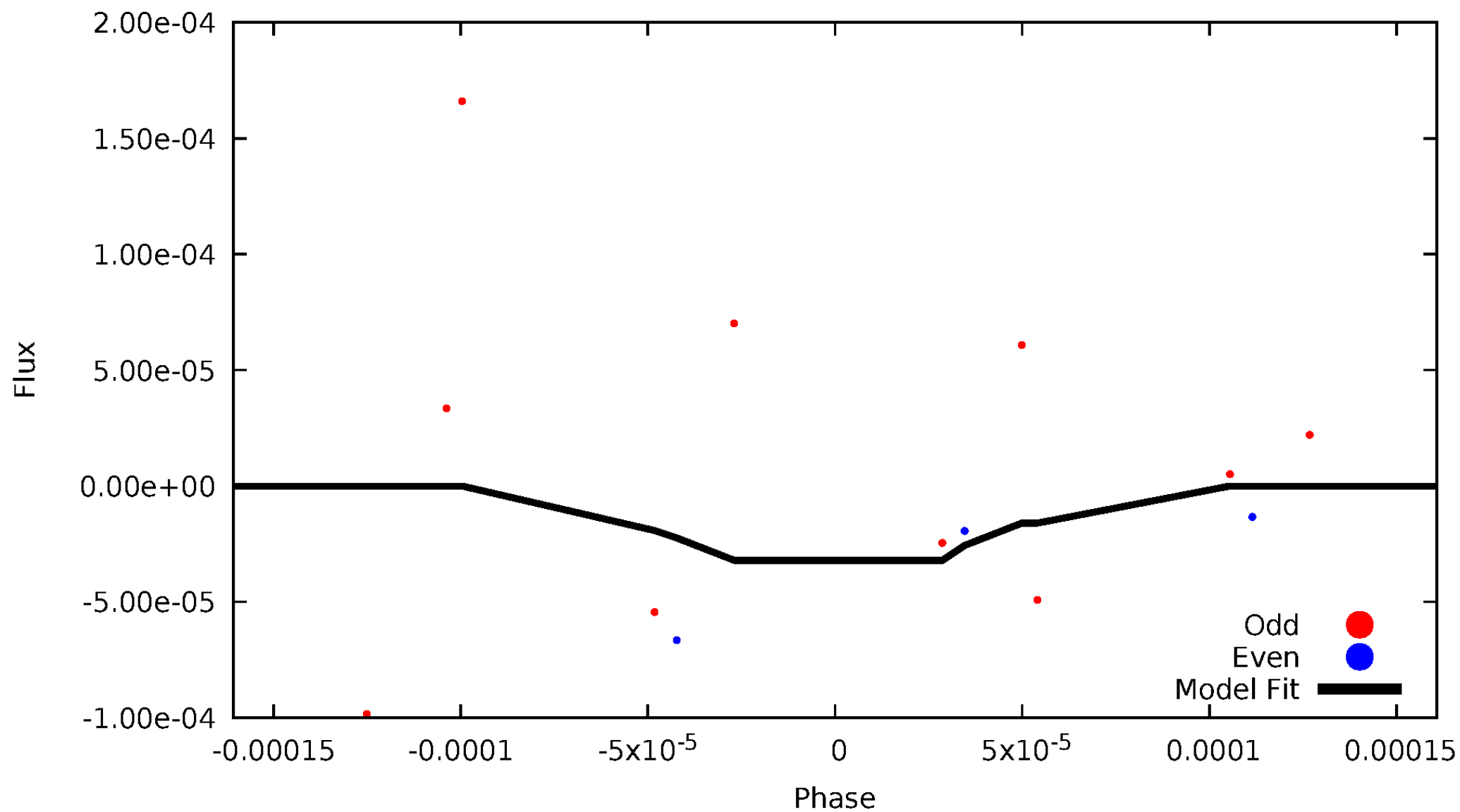
DV Odd/Even

TCE 009396925-01

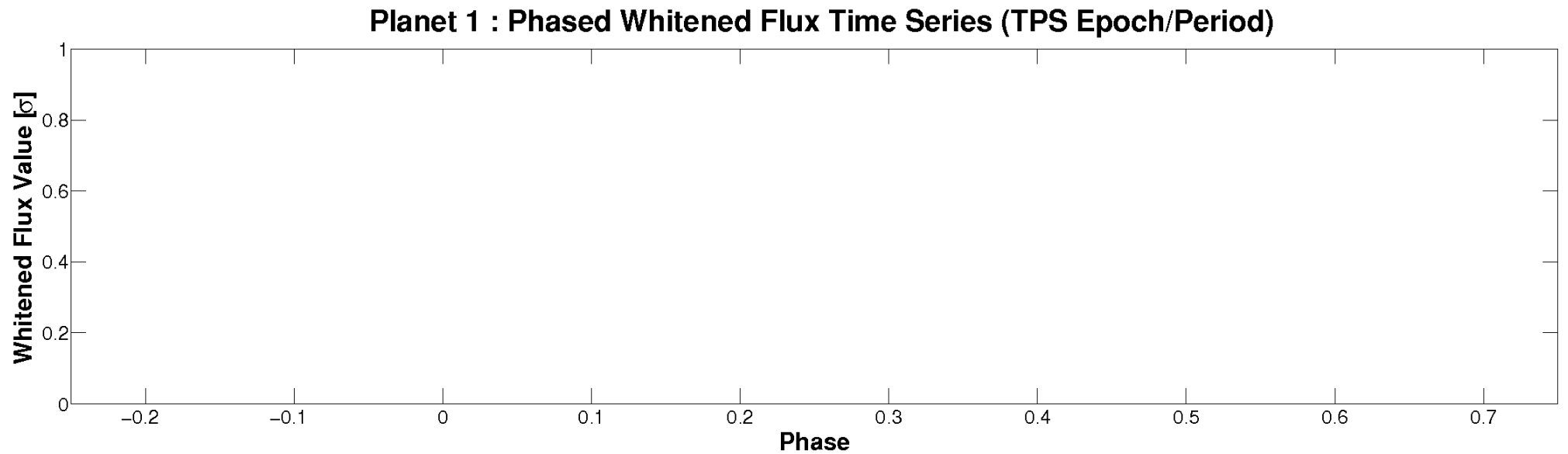
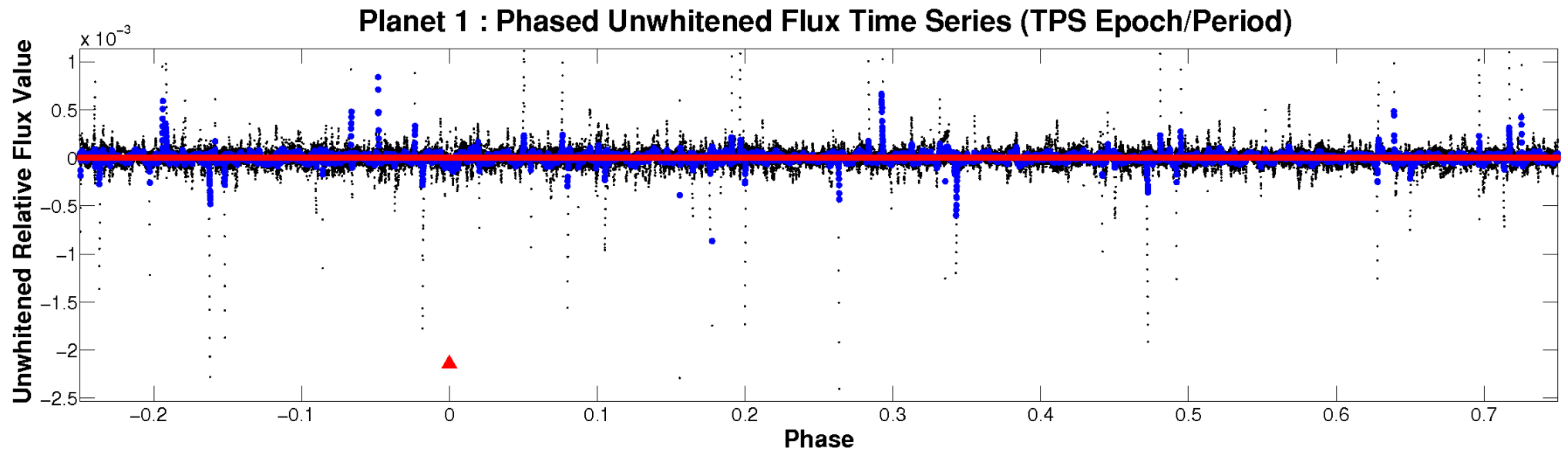


ALT Odd/Even

TCE 009396925-01

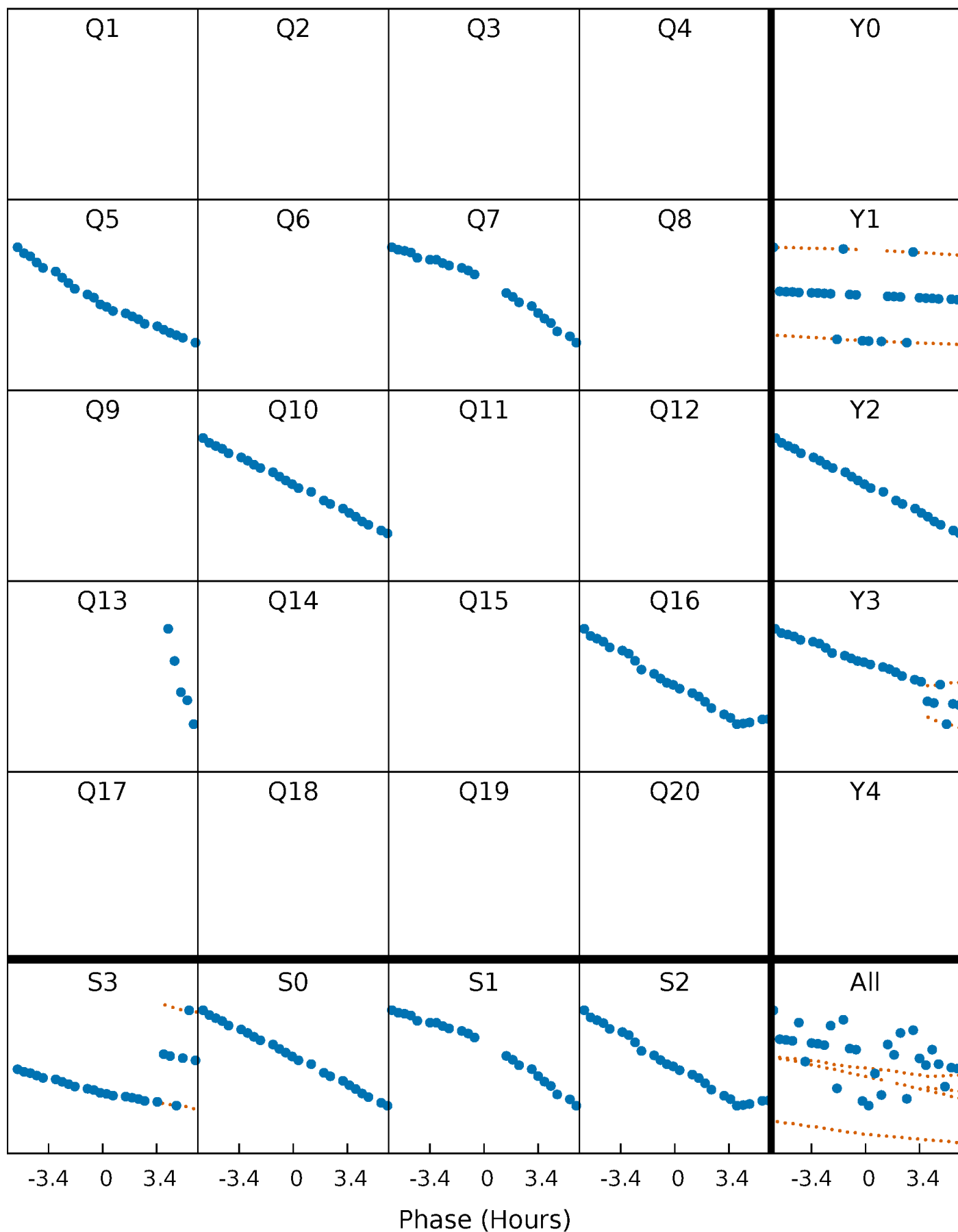


Non-Whitened Vs. Whitened Light Curve



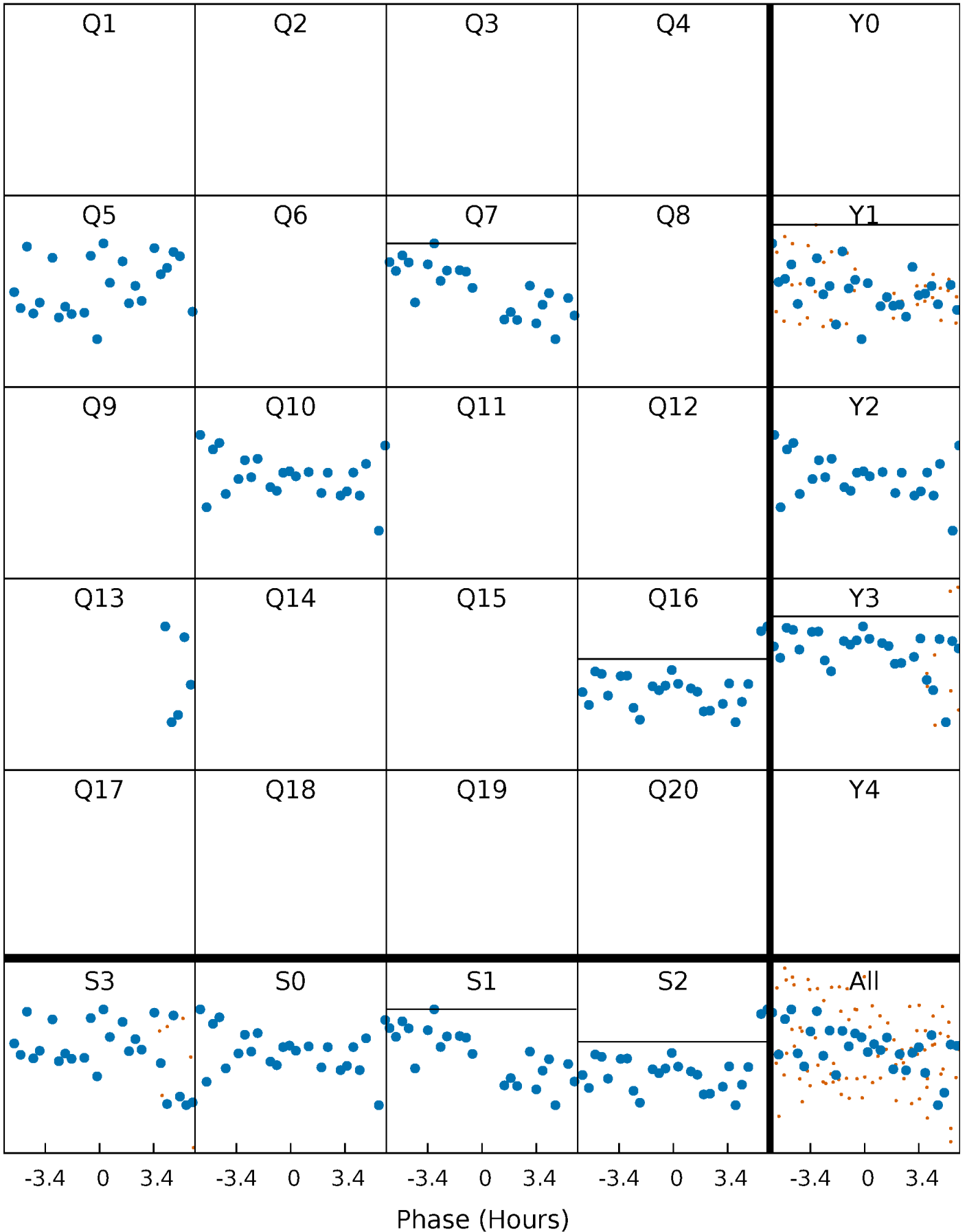
PDC Quarter-Phased Transit Curves

TCE 009396925-01 P=265.778163 Days $T_0=182.582039$ (BKJD)



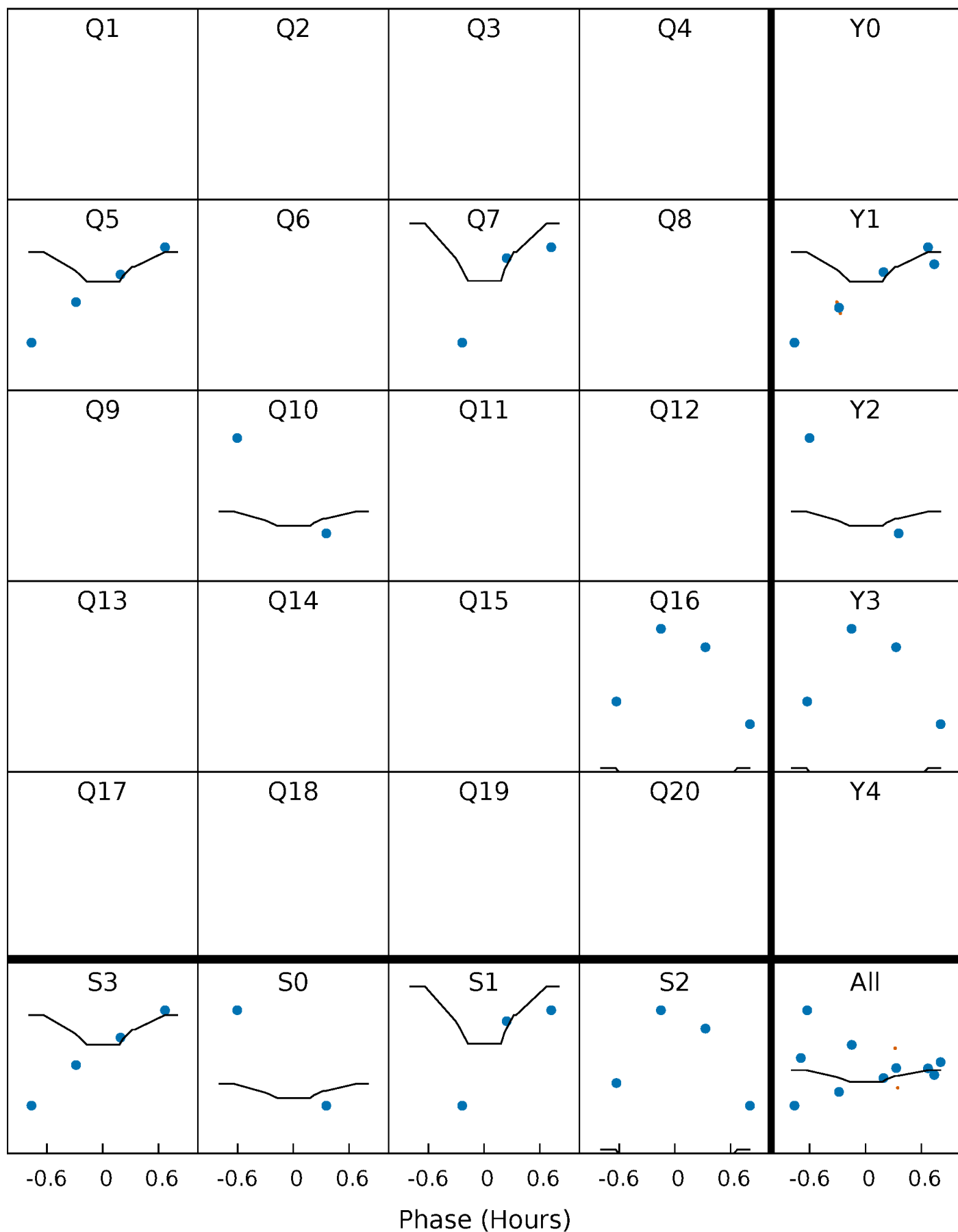
DV Quarter-Phased Transit Curves

TCE 009396925-01 $P=265.778163$ Days $T_0=182.582039$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

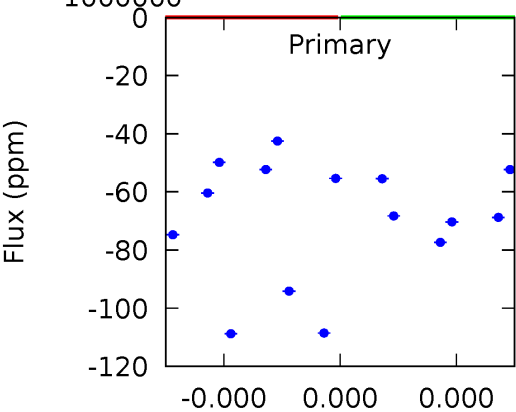
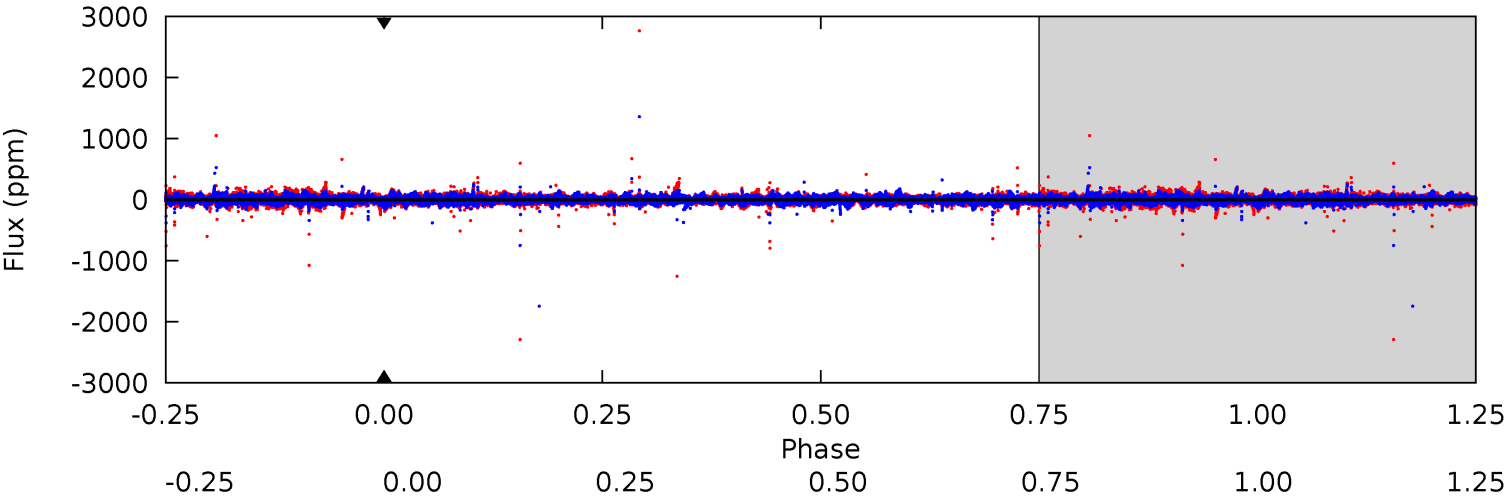
TCE 009396925-01 P=265.778163 Days $T_0=182.649768$ (BKJD)



DV Model-Shift Uniqueness Test

009396925-01, P = 265.778163 Days, E = 182.582039 Days

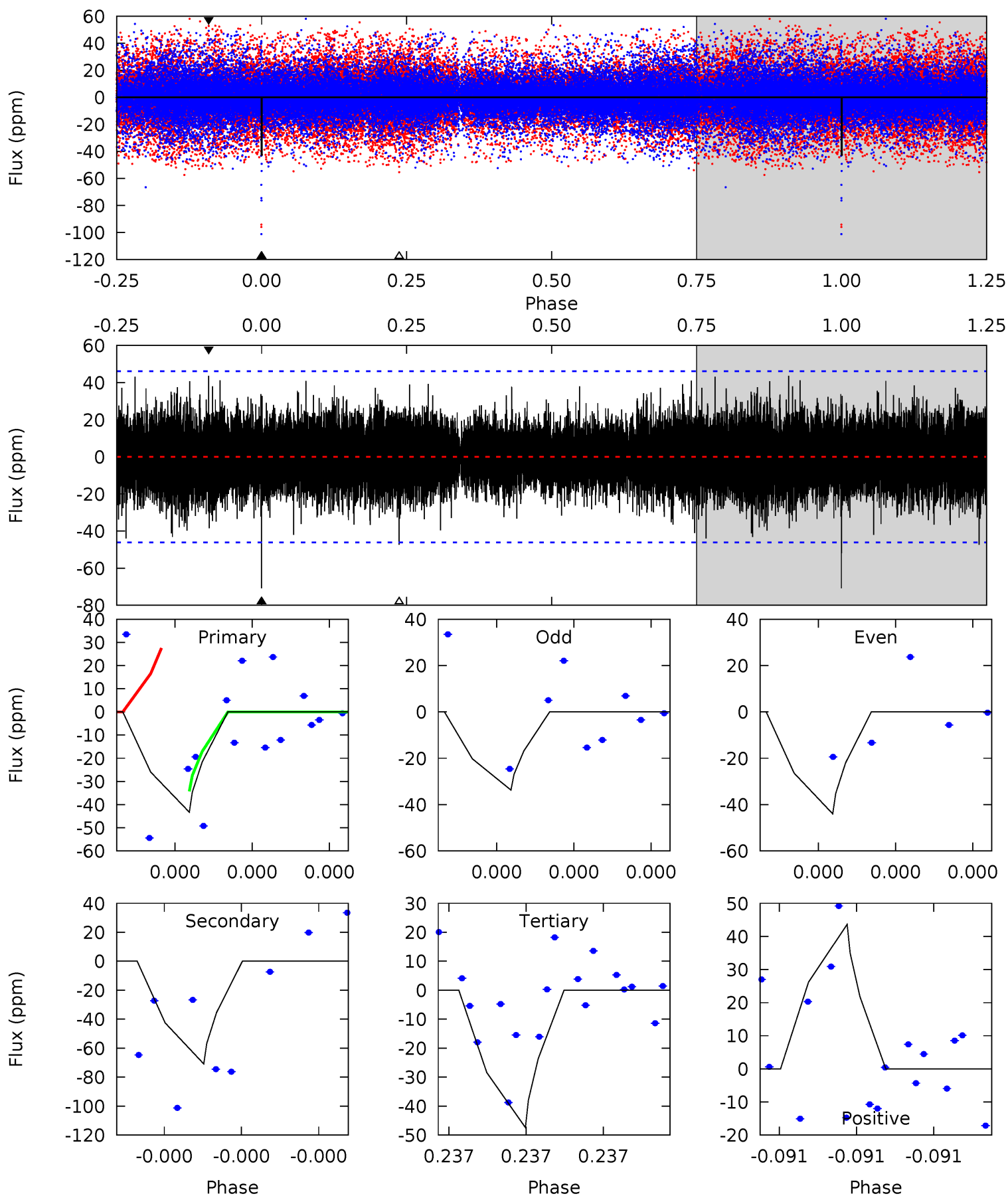
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
0	0	0	0	1.00	1.00	1.00	0	0	0	0	0	0	0	0



Alt Model-Shift Uniqueness Test

009396925-01, P = 265.778163 Days, E = 182.649768 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
5.42	8.88	5.94	5.47	5.78	3.78	1.16	-0.51	-0.05	2.94	3.41	0.82	0.13	0.38	0.42



Stellar Parameters For KIC 009396925

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	$M(M_{\odot})$	p_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	4056^{+91}_{-111}	$1.130^{+0.030}_{-0.030}$	$-0.380^{+0.200}_{-0.250}$	$59.068^{+2.304}_{-12.286}$	$1.718^{+0.072}_{-0.613}$	$0.000^{+0.000}_{-0.000}$
	+2%/-3%	+3%/-3%	+53%/-66%	+4%/-21%	+4%/-36%	+30%/-8%
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 009396925-01 / KOI

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	0 ± 1000000	$510.38^{+473.21}_{-365.06}$	1954^{+52}_{-51}	3298^{+6146}_{-12503}	$3.745^{+384.800}_{-380.175}$
Alt.	-71 ± 8	$467.03^{+456.73}_{-317.71}$	1951^{+52}_{-58}	-2161^{+5020}_{-169}	$0.164^{+1.509}_{-0.121}$

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 $A_{obs} \gg 1.0$

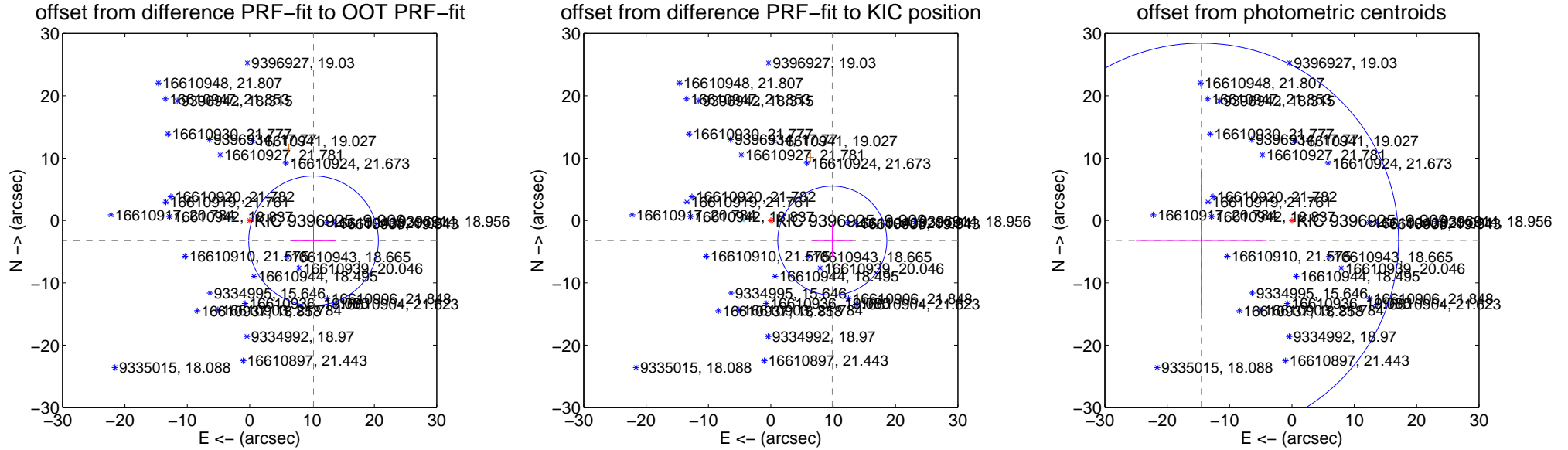
DV Centroid Data

Supplemental centroid analysis for 009396925-01. **Kepler magnitude: 9.91.** Transit SNR -1.00

There are 1 quarters with good PRF difference image offsets

The direct PRF centroid is offset from the target star catalog position by about 1.47 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	10.749 ± 3.465	3.10	-10.246 ± 3.597	-3.248 ± 3.033
PRF-fit source offset from KIC position	10.377 ± 2.915	3.56	-9.863 ± 3.221	-3.227 ± 2.664
photometric centroid source offset	14.88 ± 10.54	1.41	14.54 ± 10.49	-3.20 ± 11.56

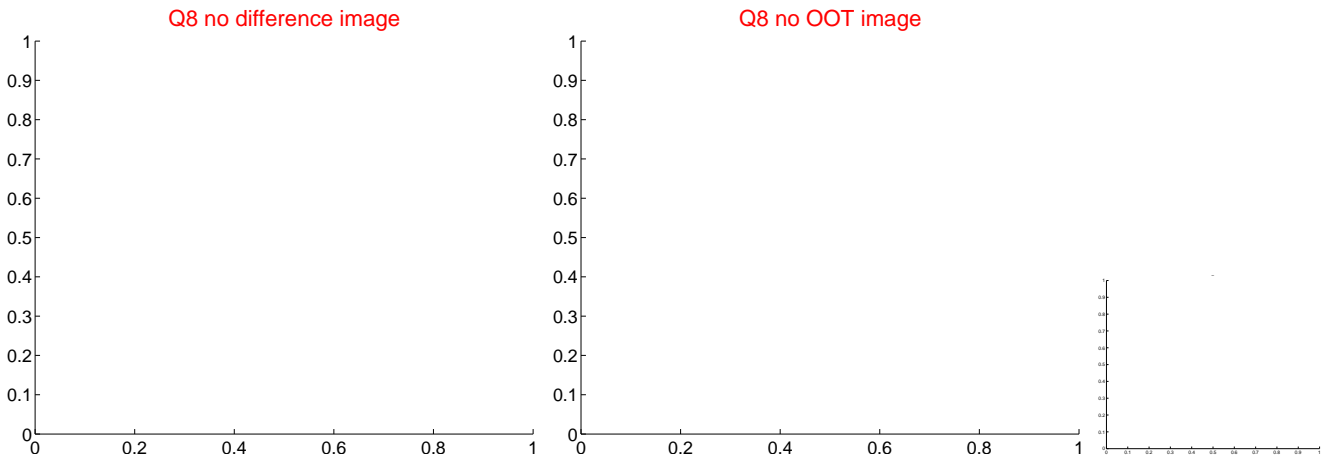
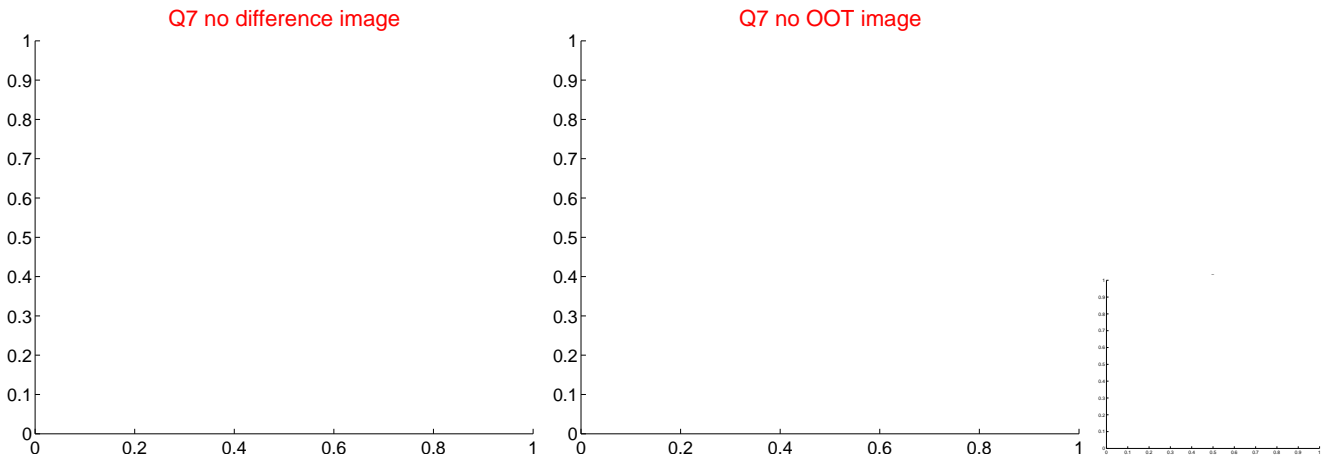
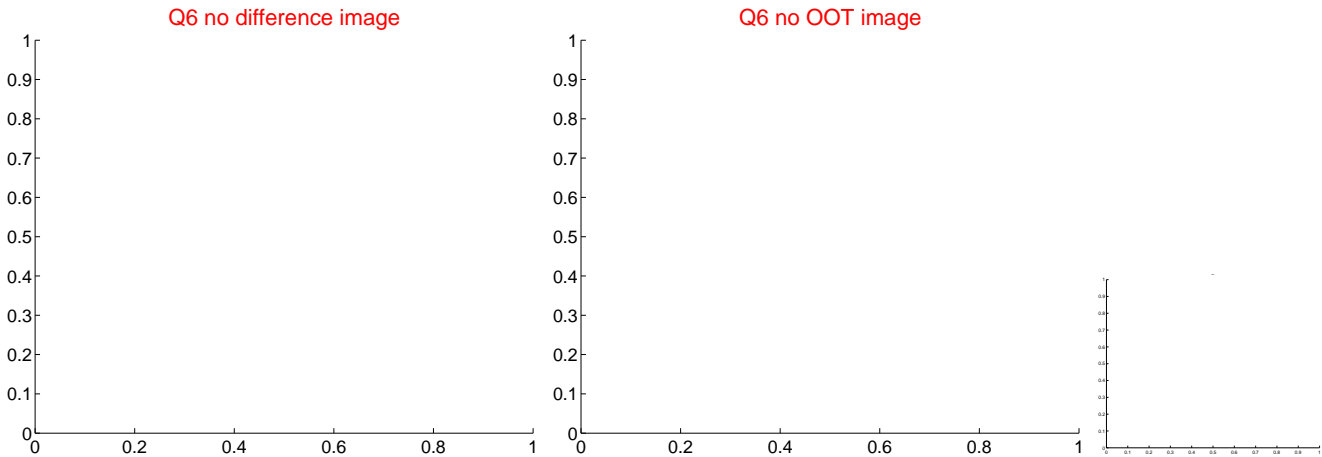
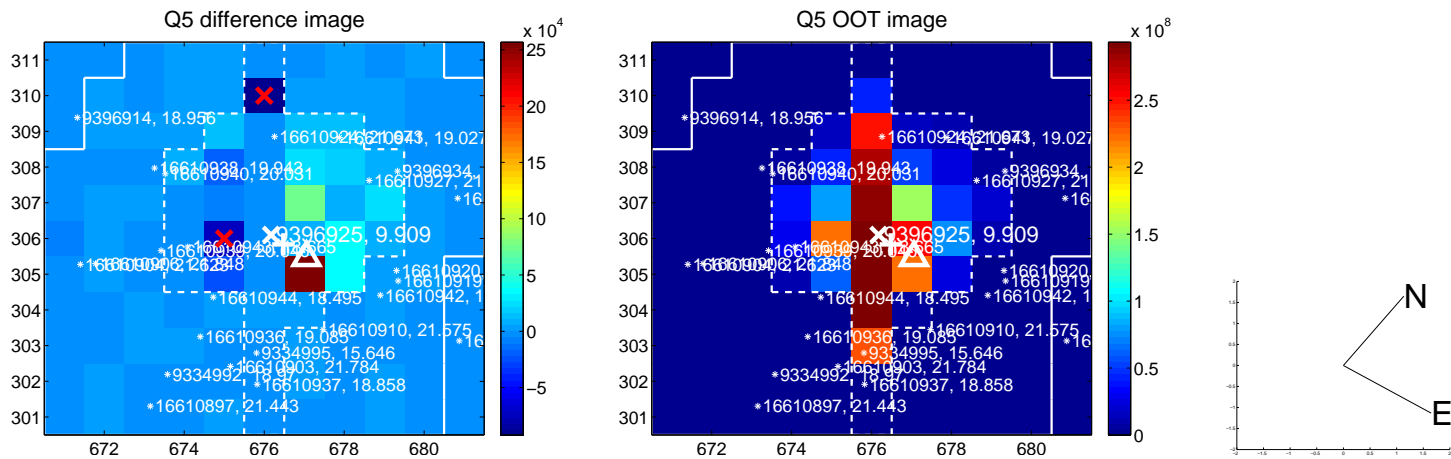


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets;** magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

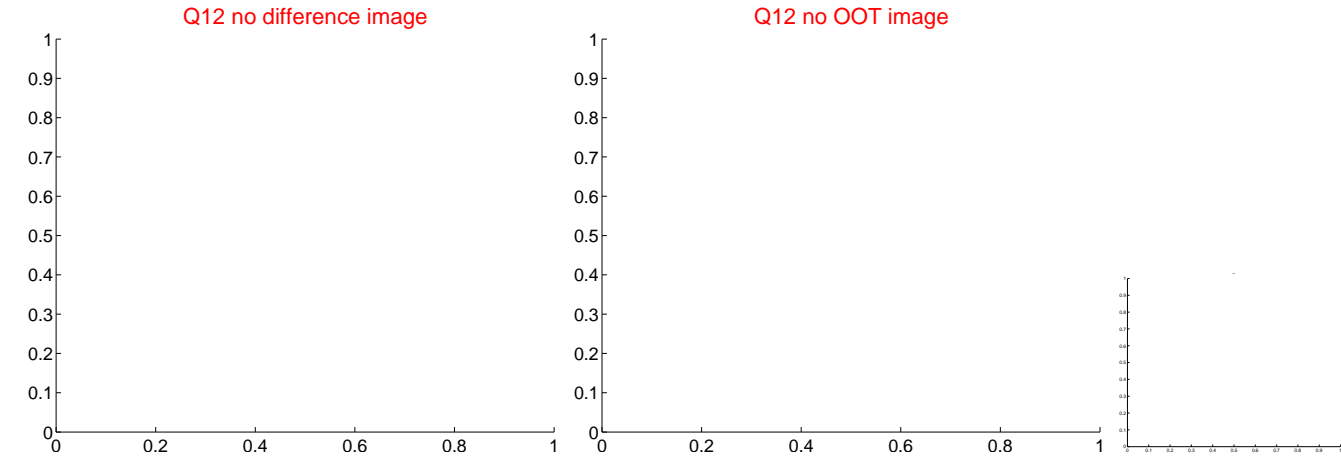
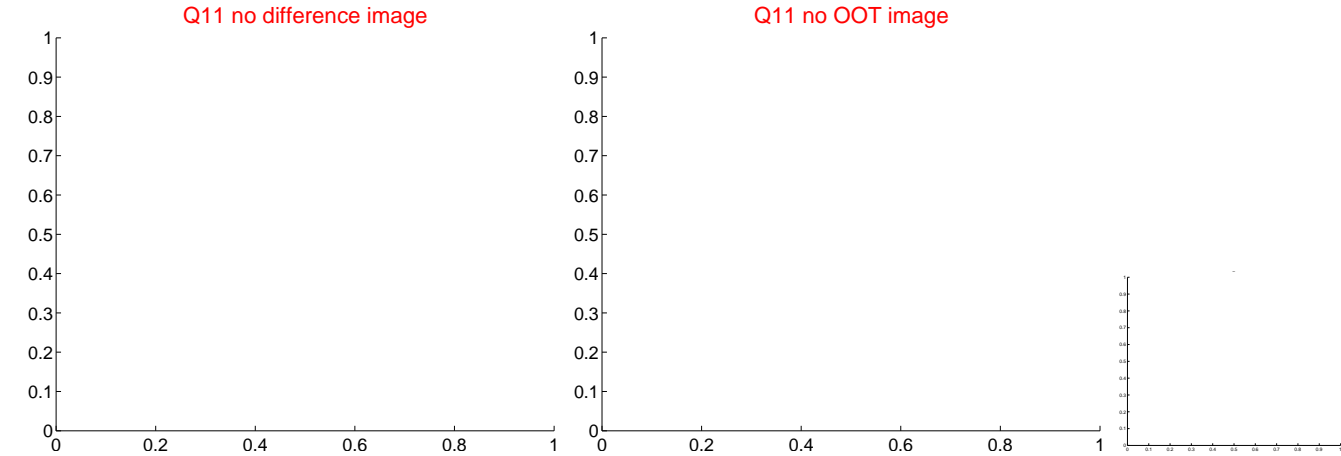
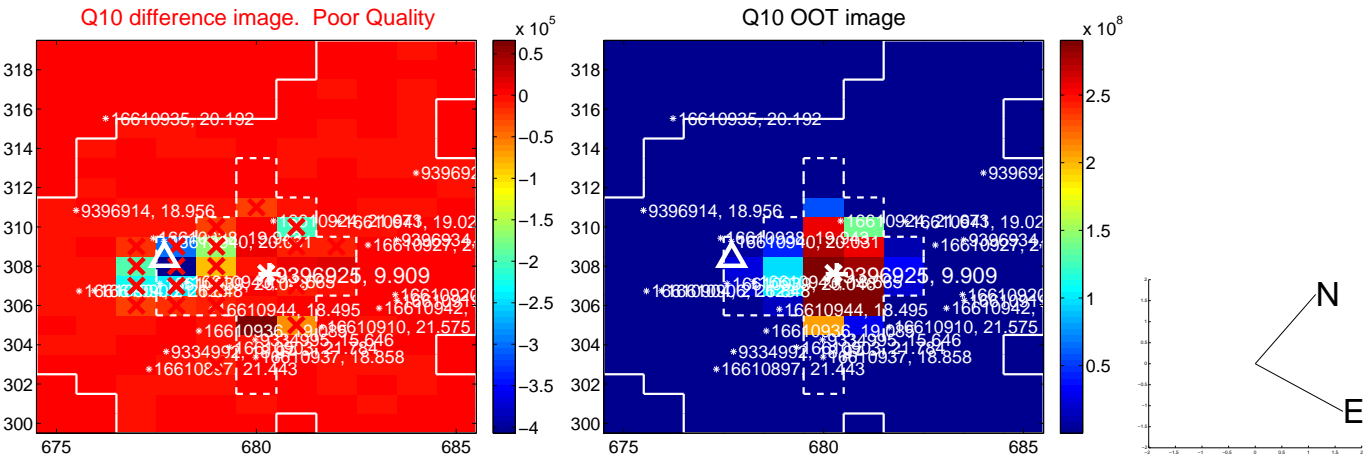
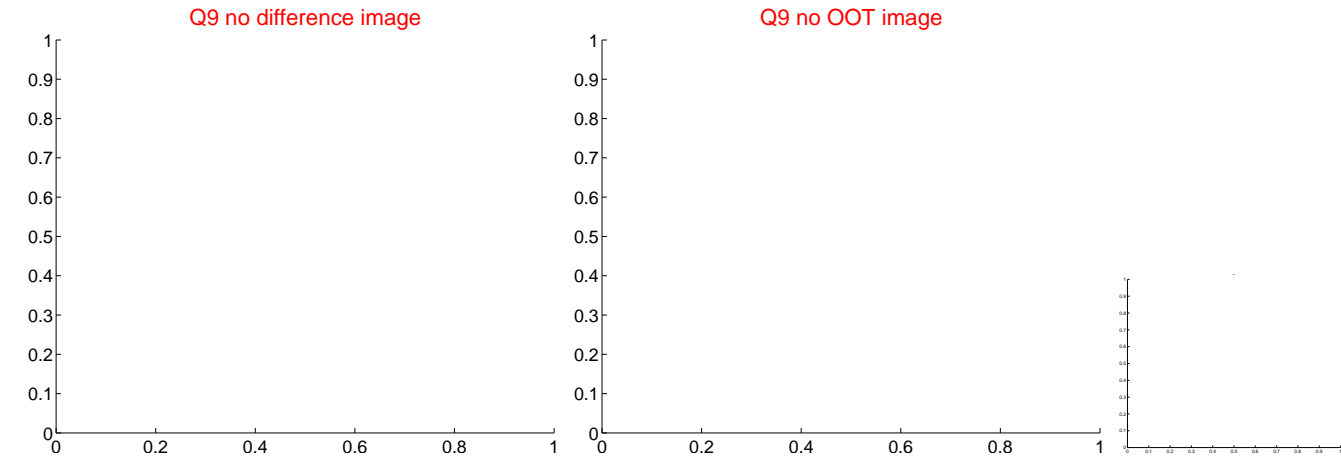
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



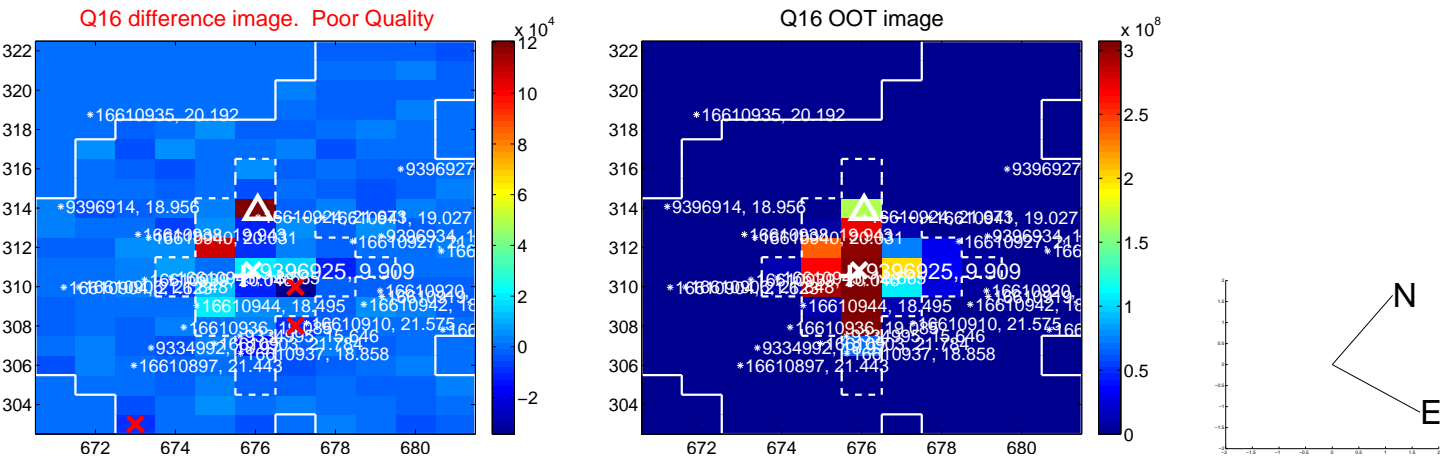
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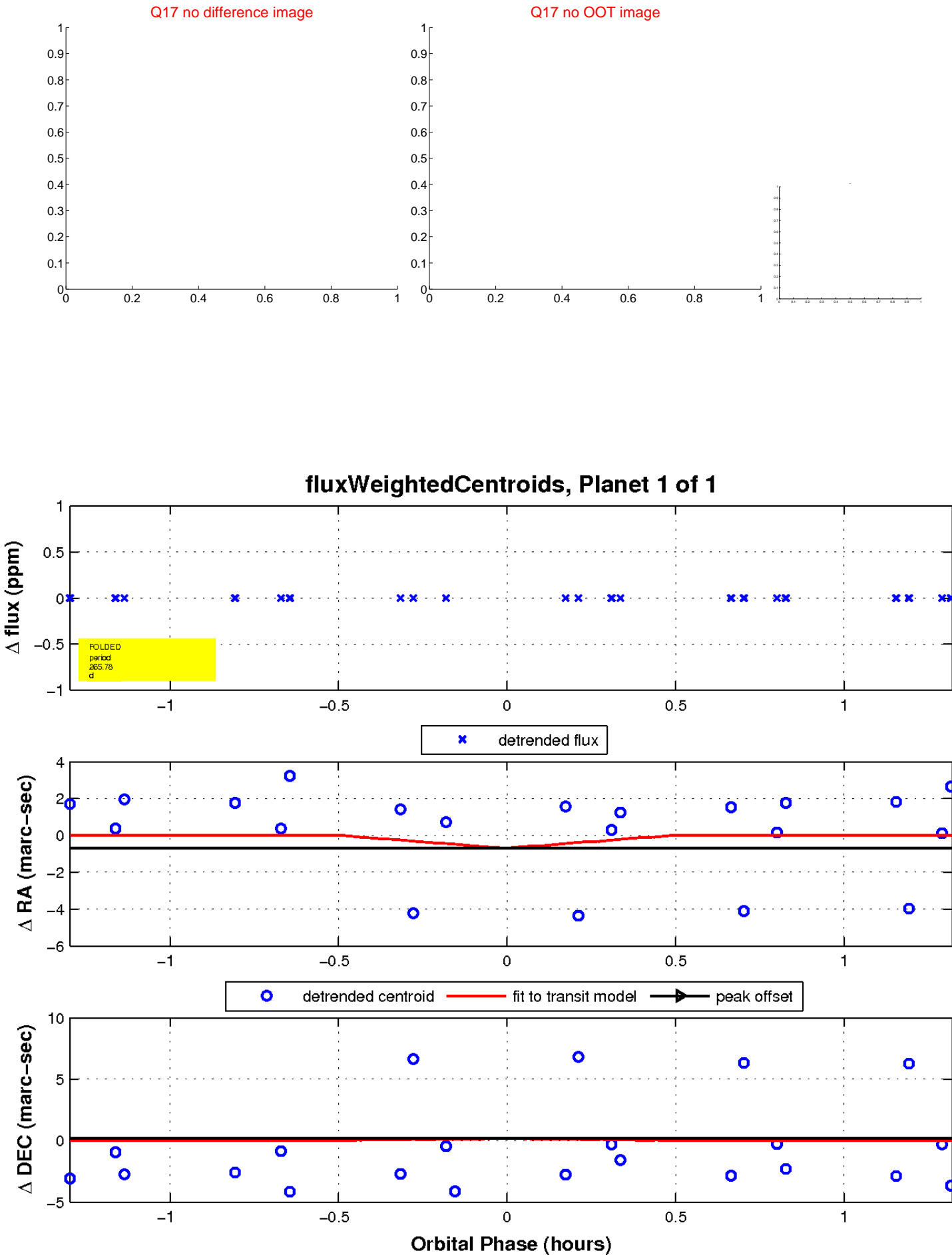
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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



UKIRT Image

Declination

