

KIC 009944208

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})
009944208-01	OBS	No	0.933595	132.458306	50.3	7.255	9.0	3.6	1.36	7280	0.98	10815.54

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
009944208-01	OBS	FP	0.00	1	0	0	0	SWEET_NTL—LPP_DV

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

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

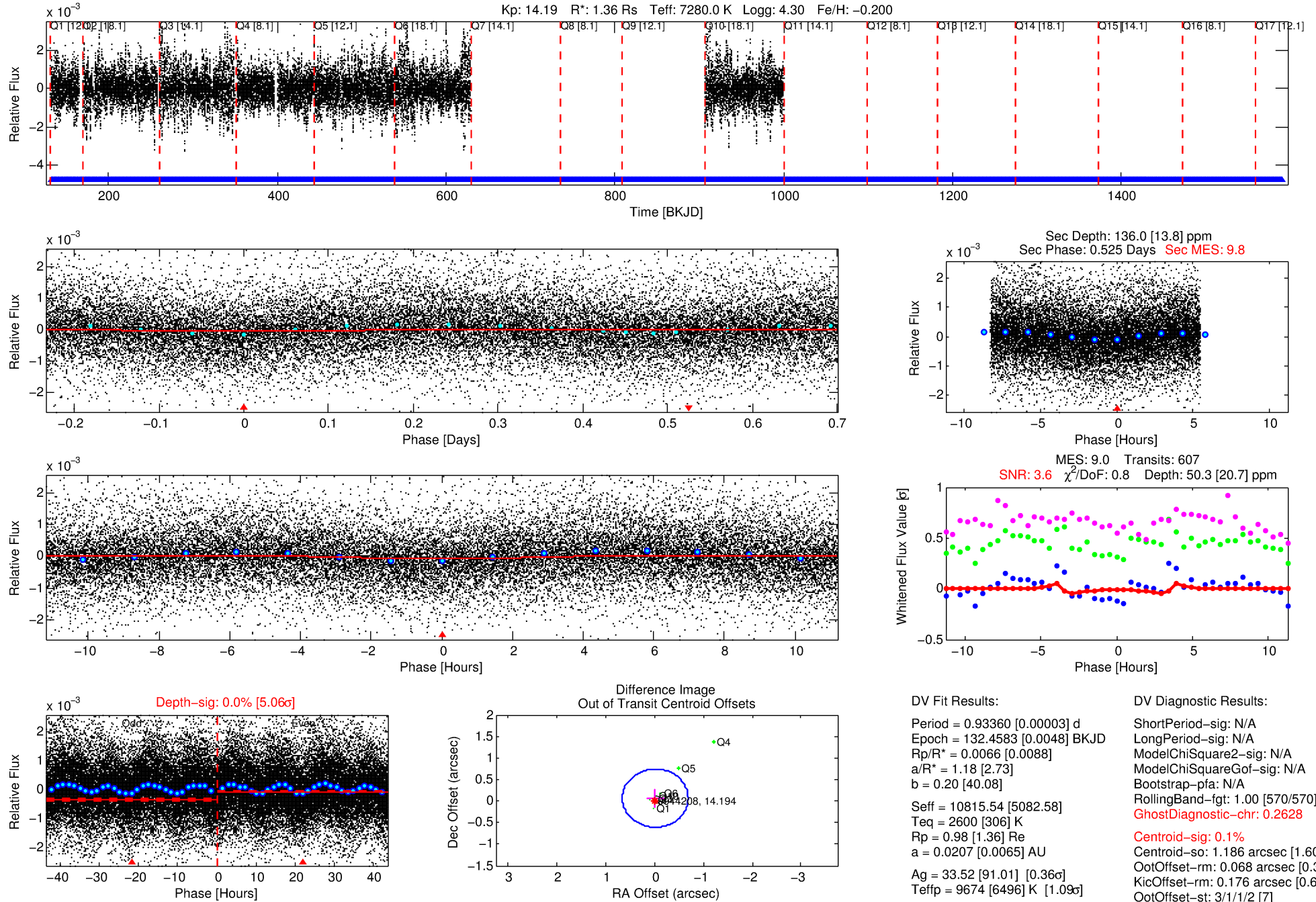
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 009944208-01

No Significant Match Found

DV One-Page Summary

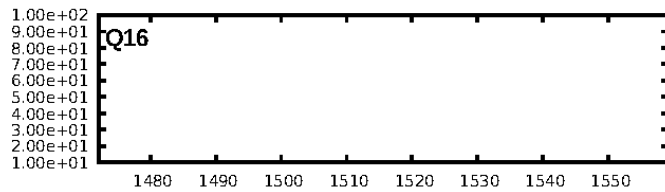
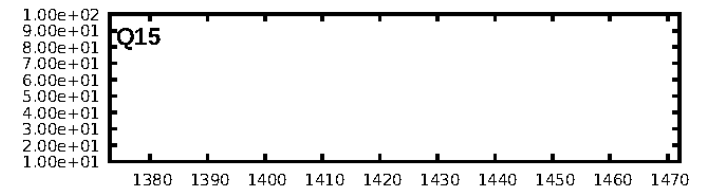
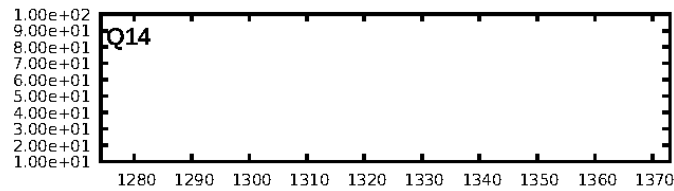
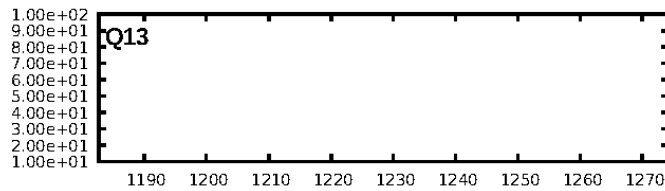
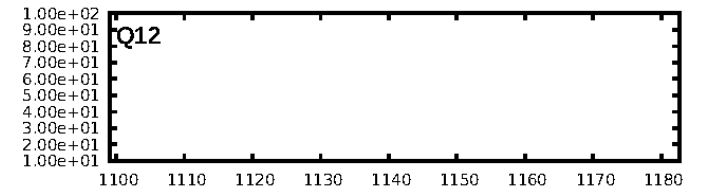
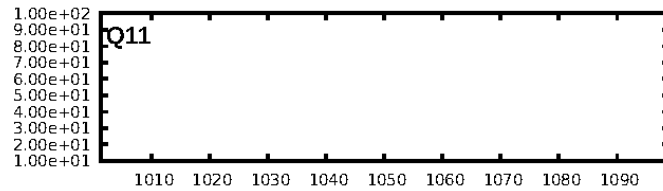
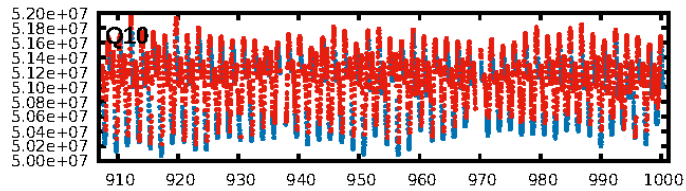
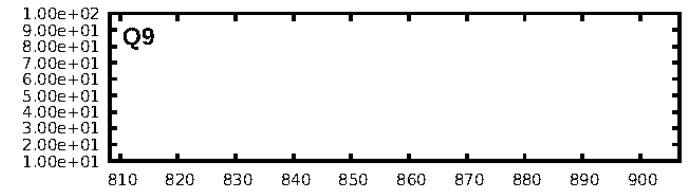
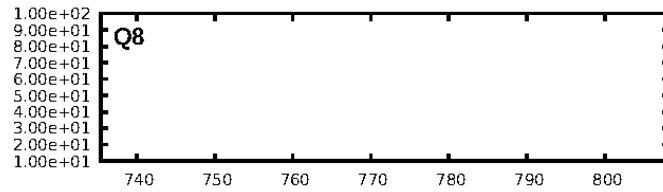
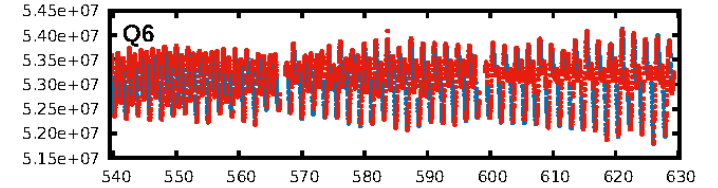
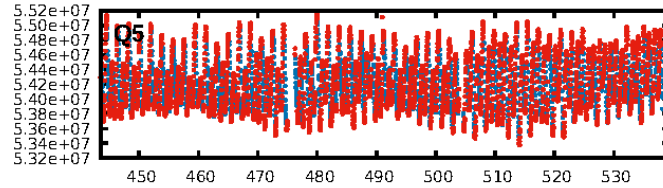
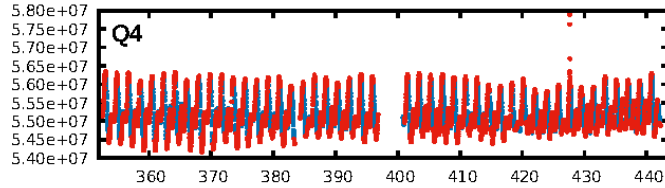
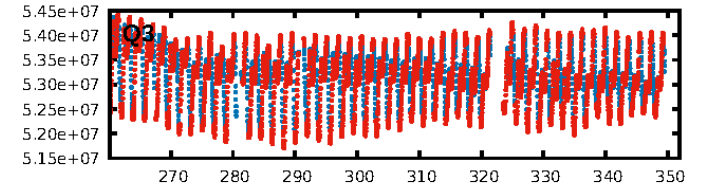
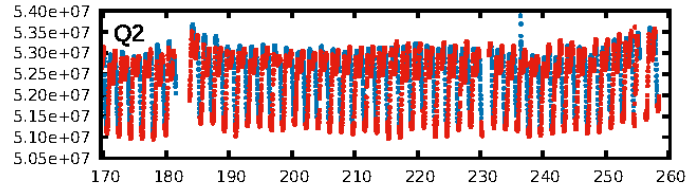
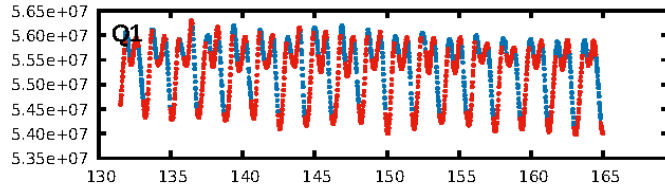
KIC: 9944208 Candidate: 1 of 1 Period: 0.934 d



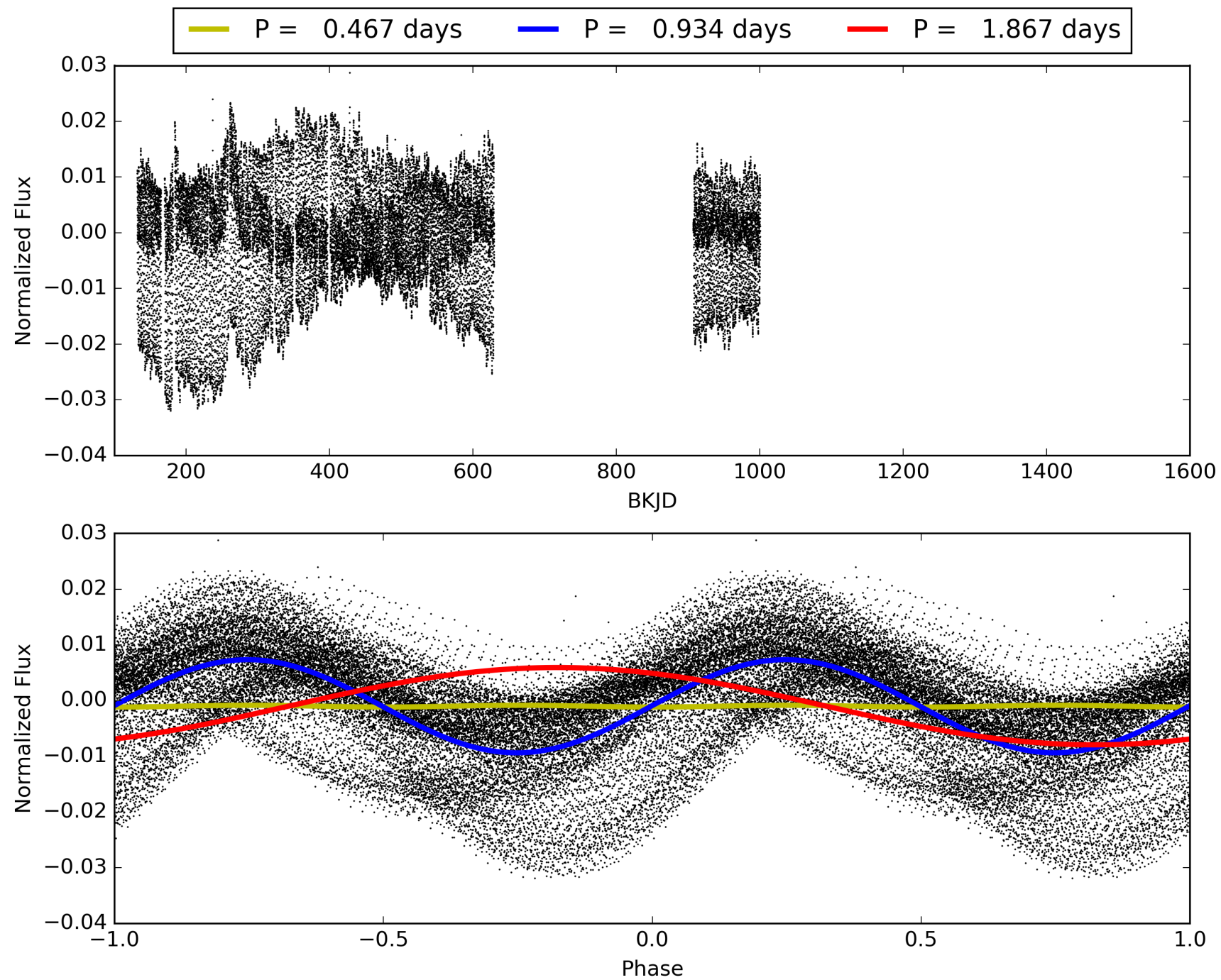
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 29-Jan-2016 14:53:05 Z

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

TCE 009944208-01, PDC Light Curves

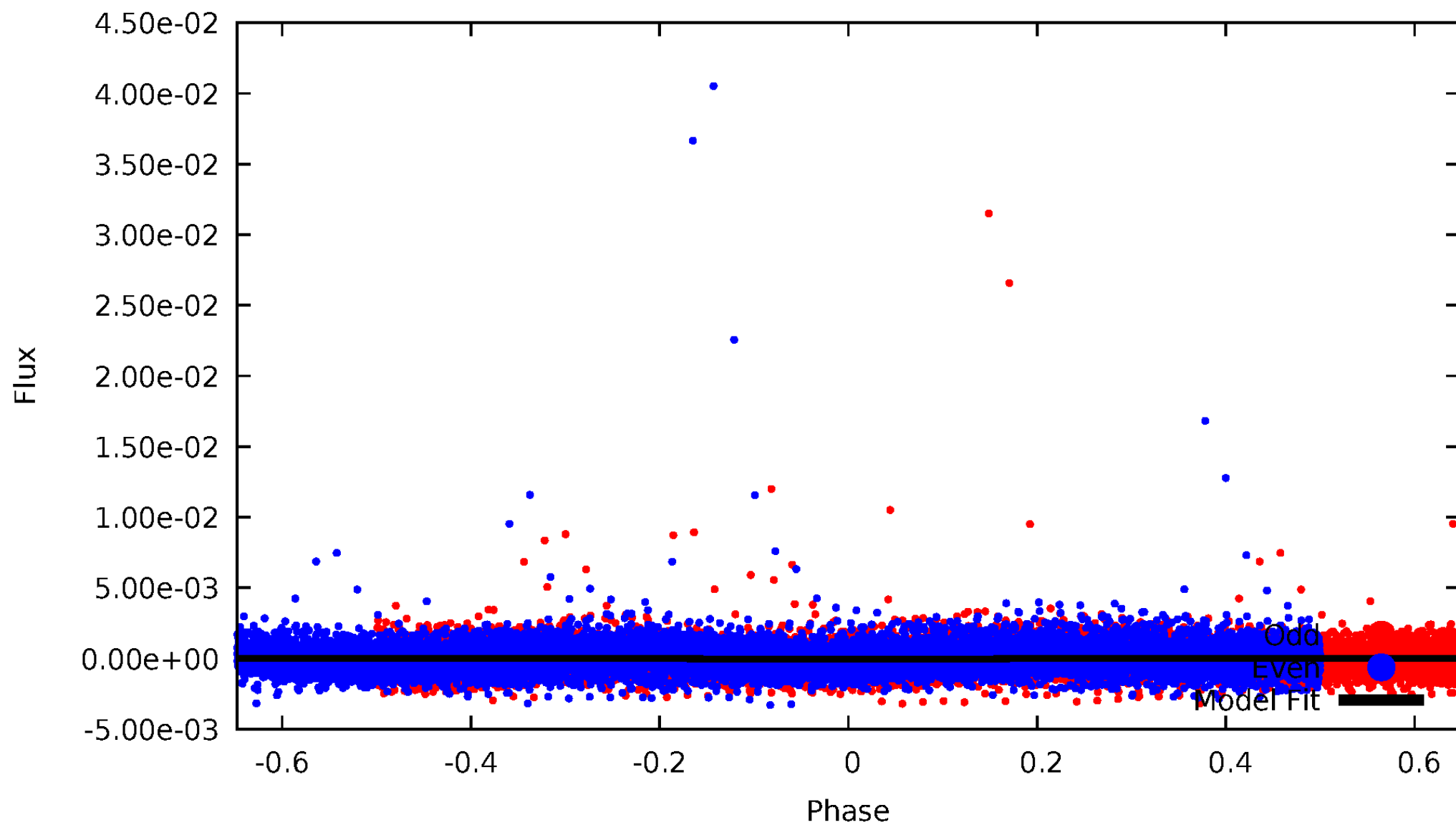


TCE 009944208-01



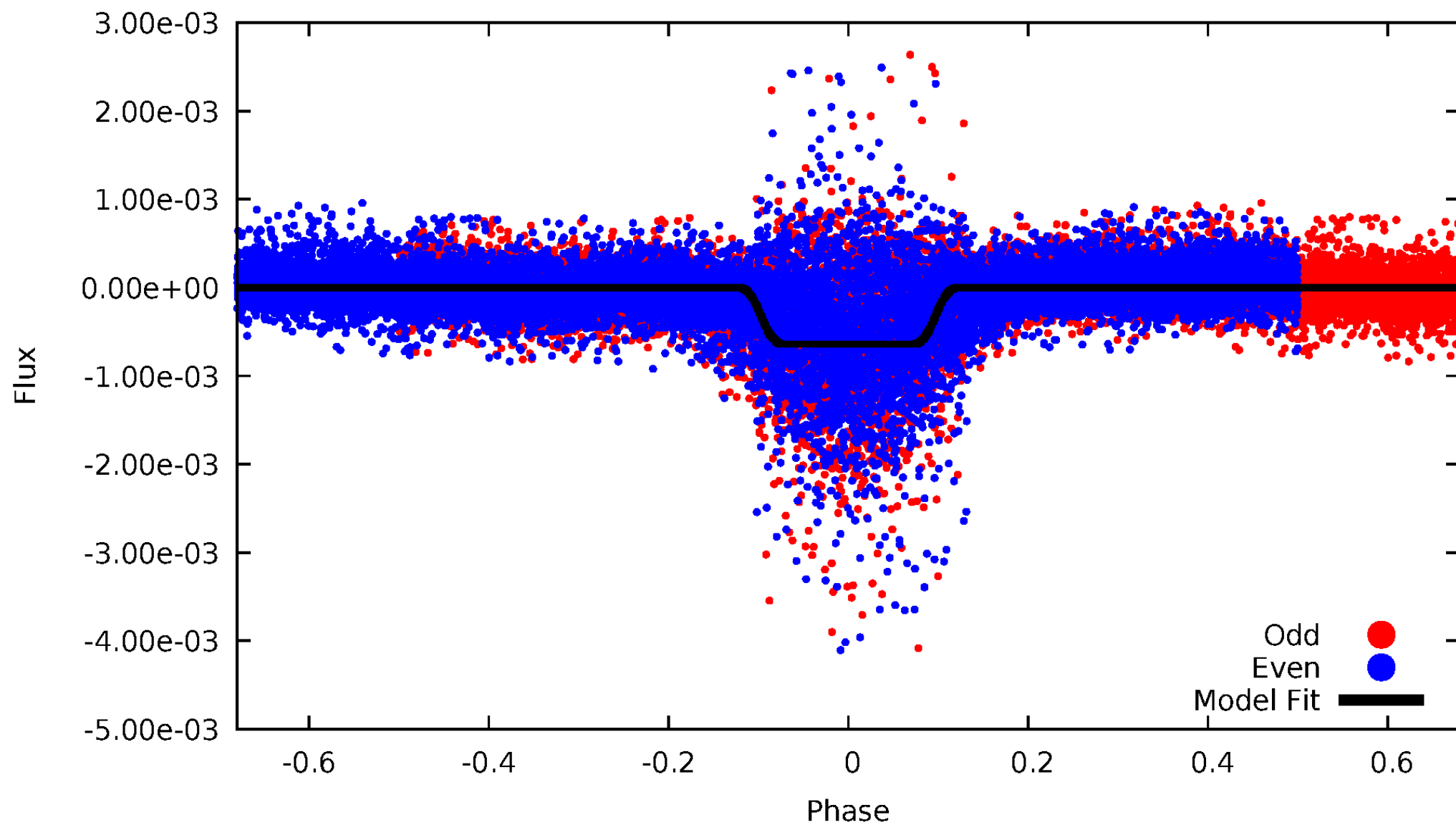
DV Odd/Even

TCE 009944208-01



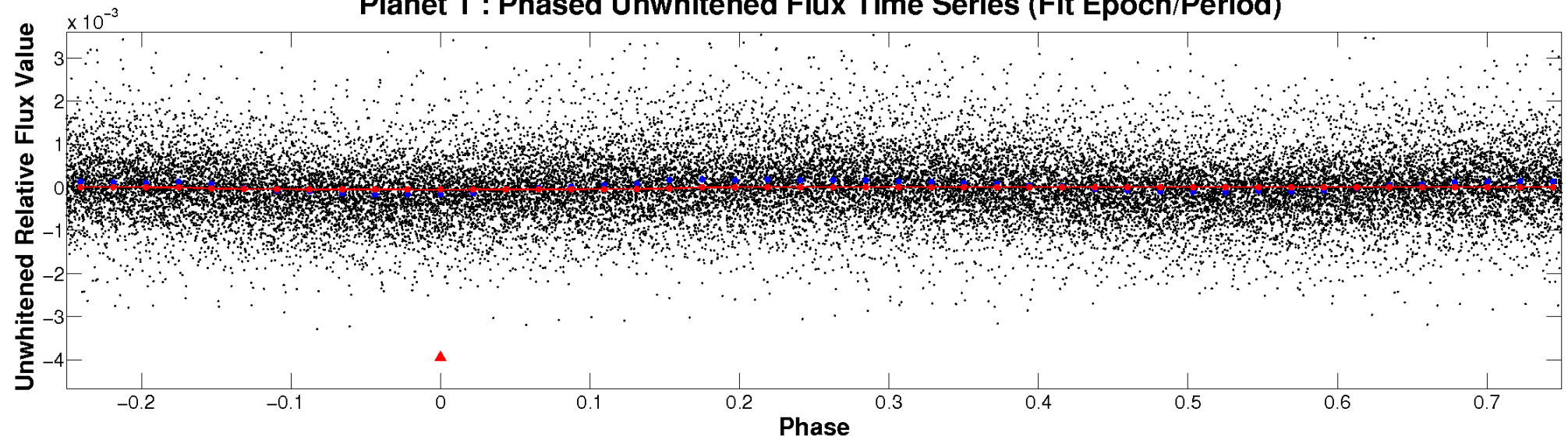
ALT Odd/Even

TCE 009944208-01

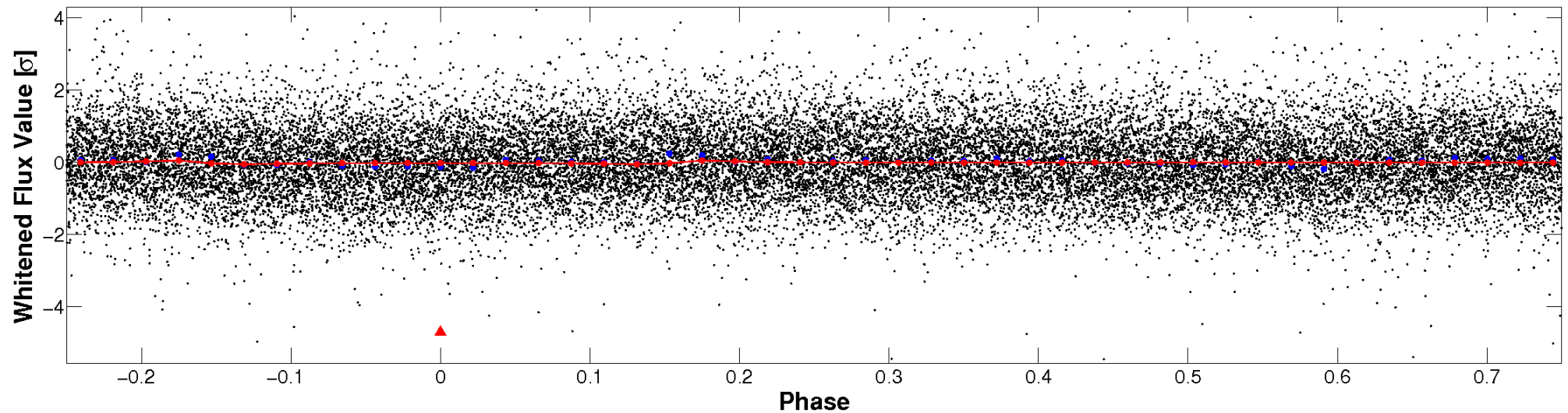


Non-Whitened Vs. Whitened Light Curve

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

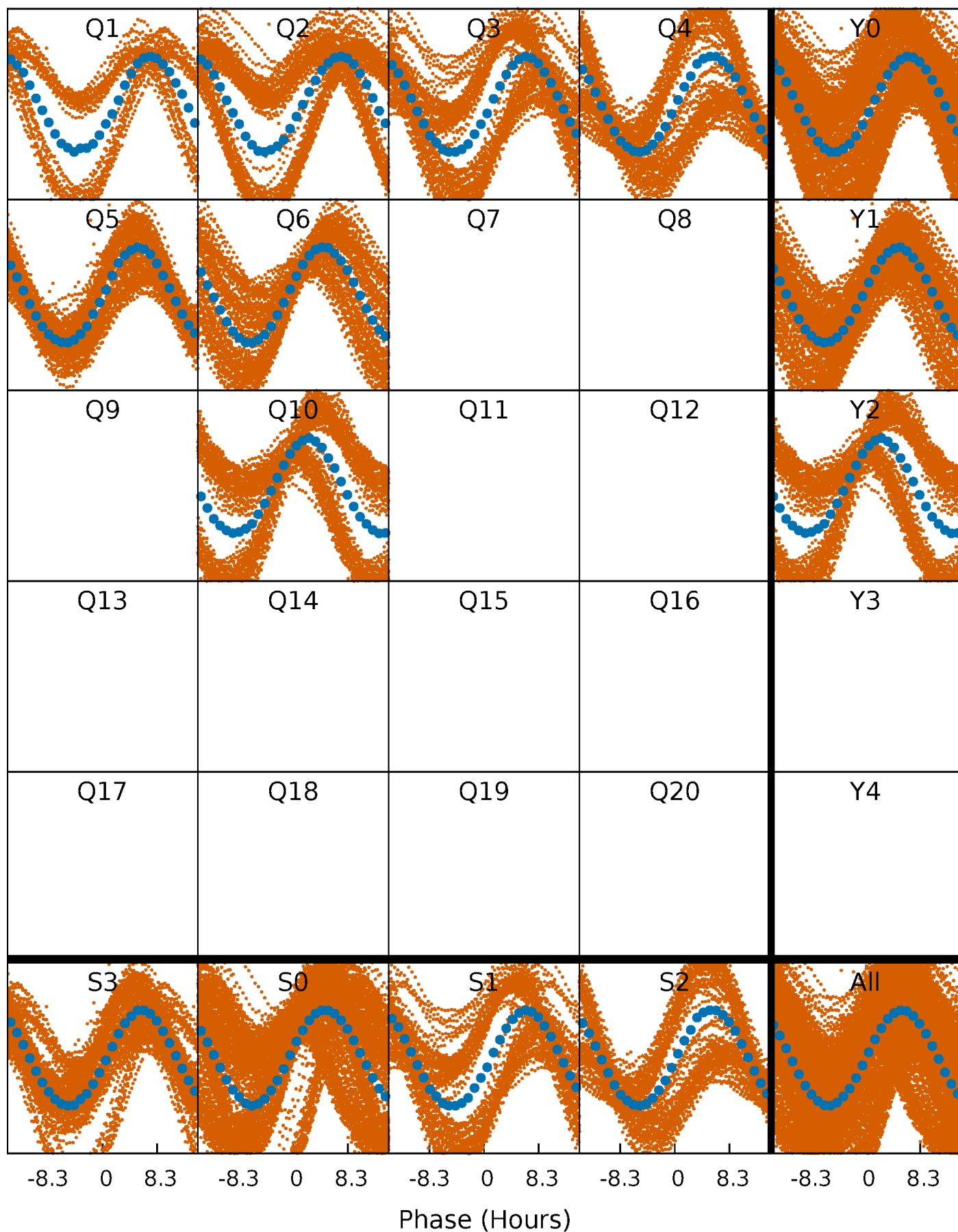


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



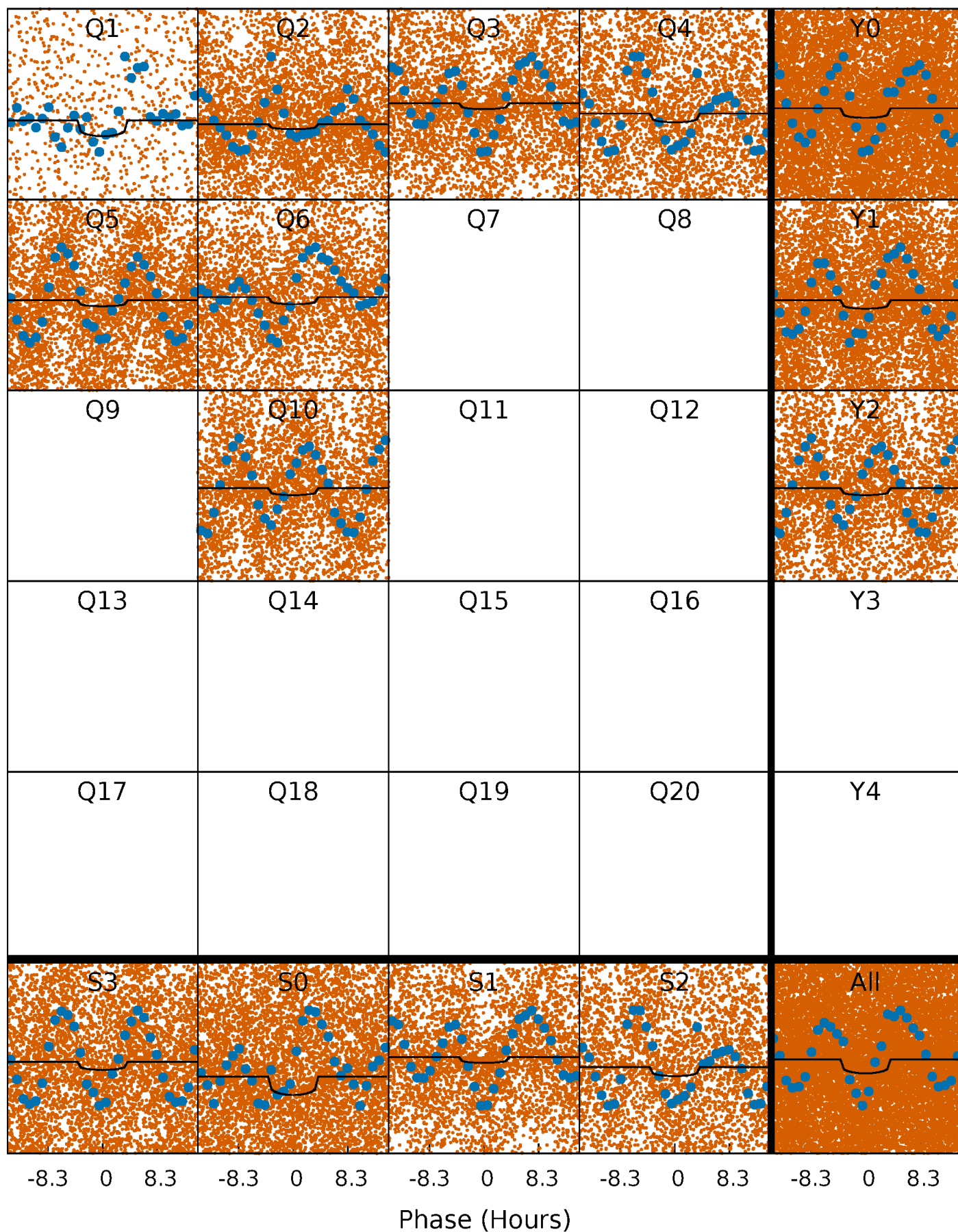
PDC Quarter-Phased Transit Curves

TCE 009944208-01 P= 0.933595 Days $T_0=132.458305$ (BKJD)



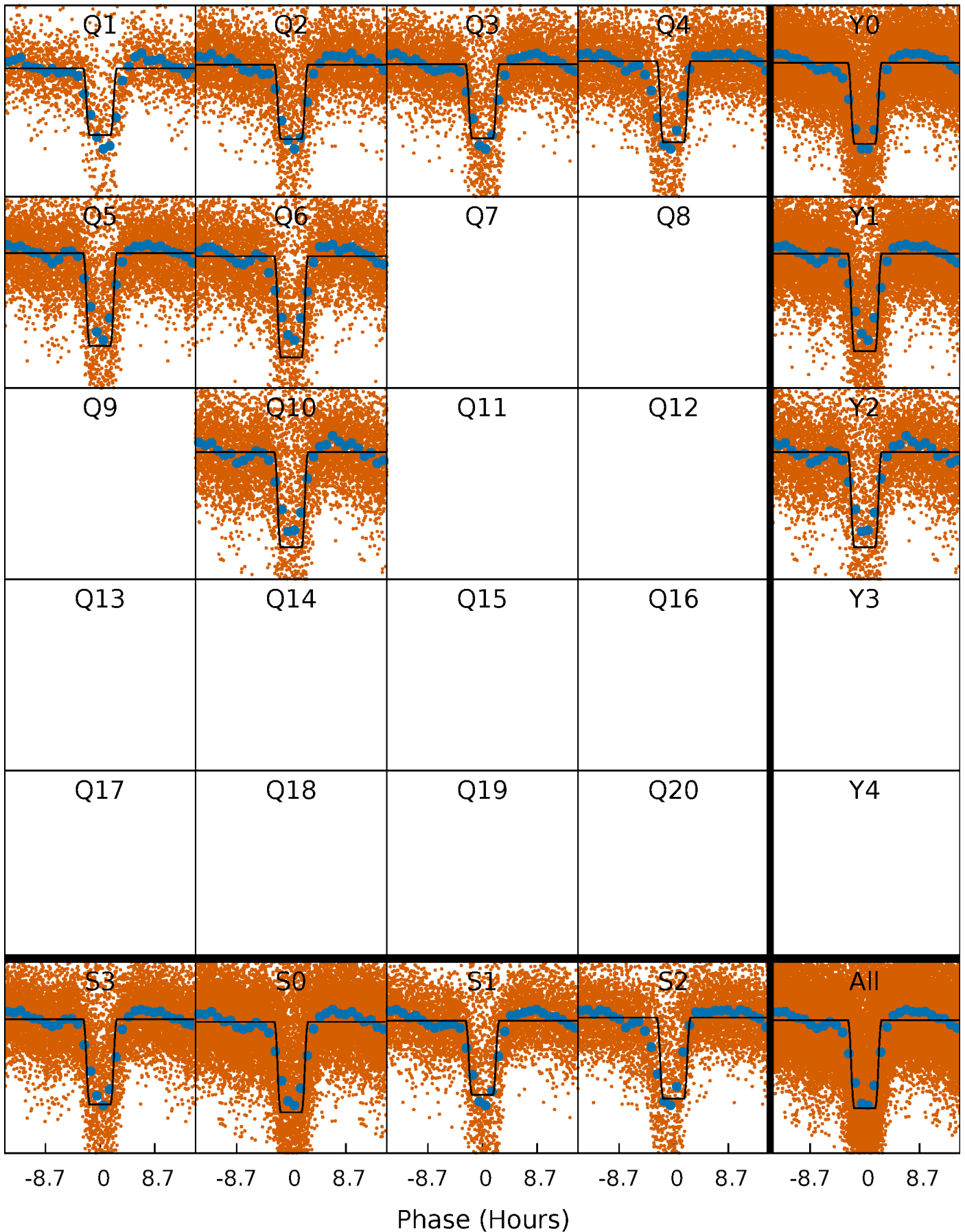
DV Quarter-Phased Transit Curves

TCE 009944208-01 P= 0.933595 Days $T_0=132.458305$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

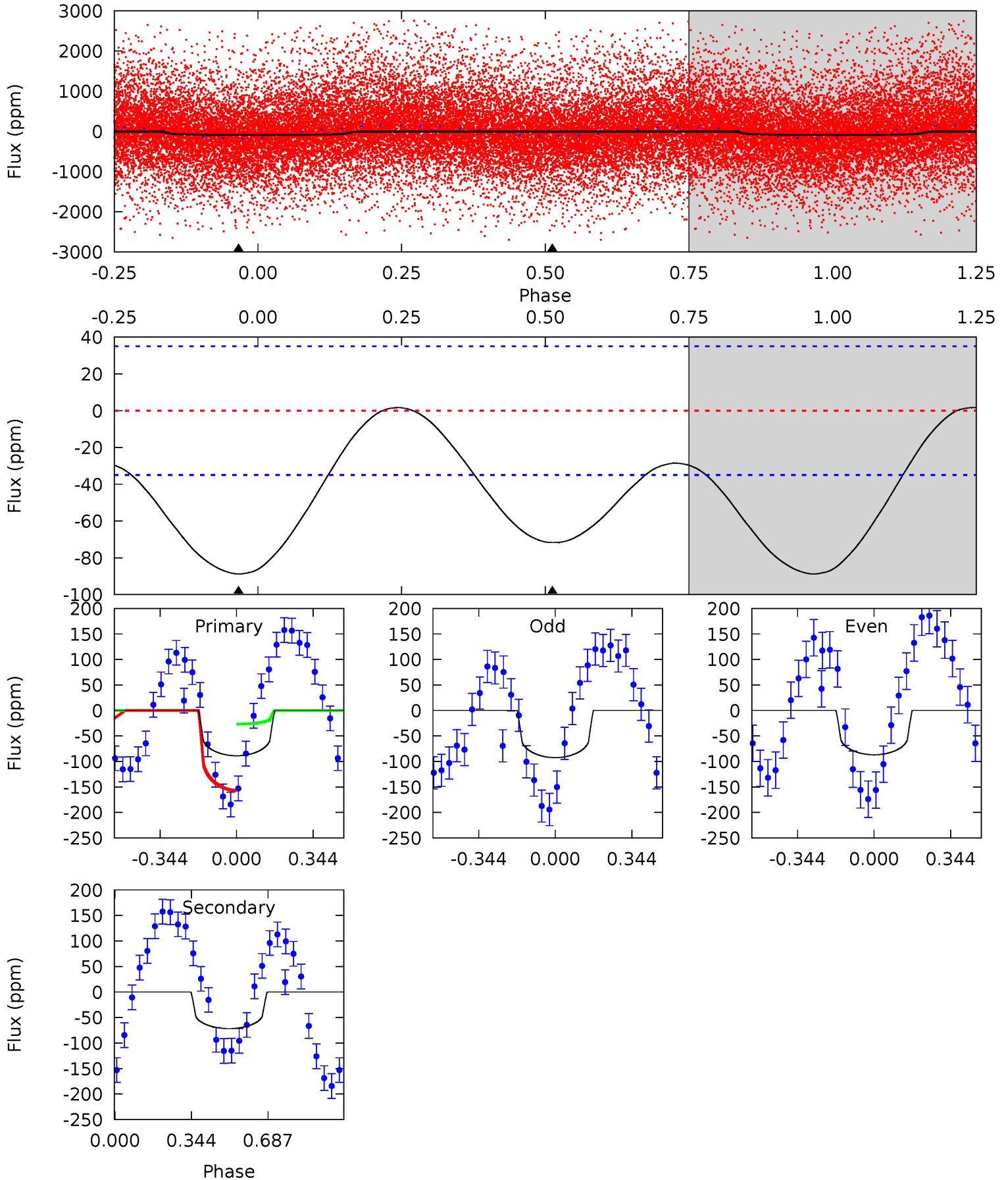
TCE 009944208-01 P= 0.933405 Days $T_0=132.437915$ (BKJD)



DV Model-Shift Uniqueness Test

009944208-01, P = 0.933595 Days, E = 130.591115 Days

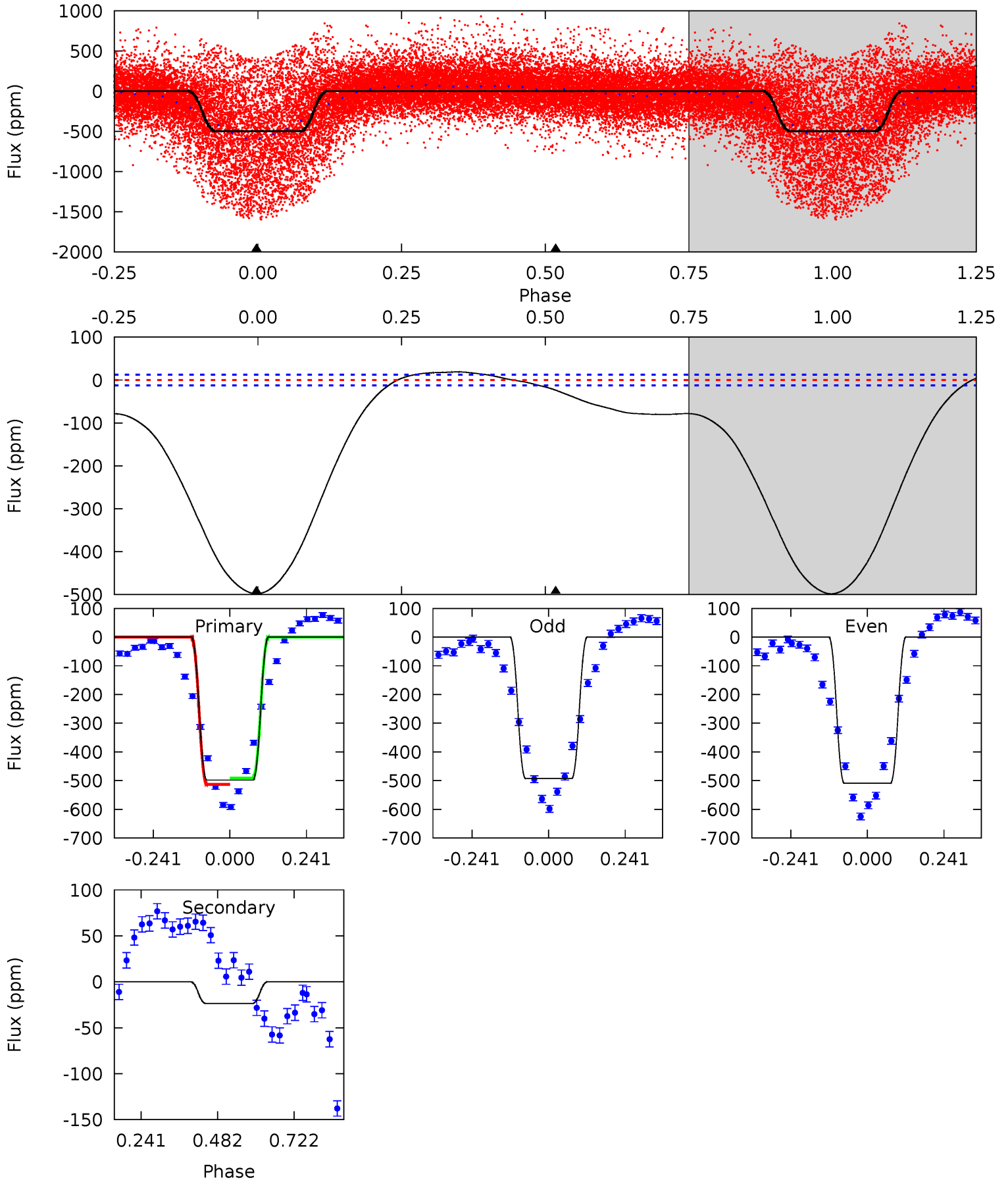
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
10.9	8.81	0	0	4.30	0.95	0.91	10.9	10.9	8.81	8.81	0.35	0.67	0.02	8.77



Alt Model-Shift Uniqueness Test

009944208-01, P = 0.933405 Days, E = 131.504510 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
178.0	8.47	0	0	4.38	1.17	14.1	178.0	178.0	8.47	8.47	2.91	1.09	0.04	4.09



Stellar Parameters For KIC 009944208

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$\rho_{\star} (\text{g}\cdot\text{cm}^{-3})$
	7280^{+228}_{-330}	$4.305^{+0.075}_{-0.225}$	$-0.200^{+0.250}_{-0.350}$	$1.356^{+0.533}_{-0.178}$	$1.365^{+0.219}_{-0.197}$	$0.771^{+0.258}_{-0.471}$
	+3%/-5%	+2%/-5%	+125%/-175%	+39%/-13%	+16%/-14%	+34%/-61%
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 009944208-01 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	A_{obs}
DV	-72 ± 8	$1.52^{+1.31}_{-0.99}$	3693^{+319}_{-234}	6641^{+7171}_{-1744}	$7.377^{+49.052}_{-5.199}$
Alt.	-24 ± 3	$4.06^{+1.48}_{-1.44}$	3693^{+313}_{-229}	2603^{+1143}_{-5657}	$0.338^{+0.435}_{-0.154}$

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

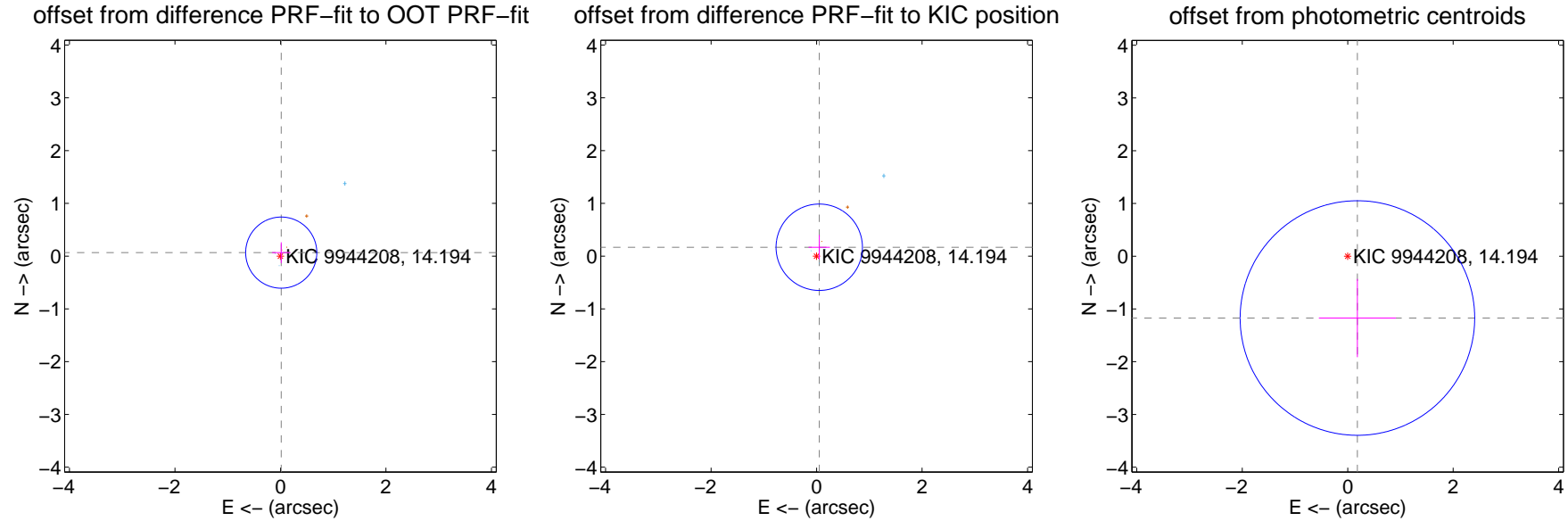
DV Centroid Data

Supplemental centroid analysis for 009944208-01. Kepler magnitude: 14.19. Transit SNR 3.56

There are 4 quarters with good PRF difference image offsets

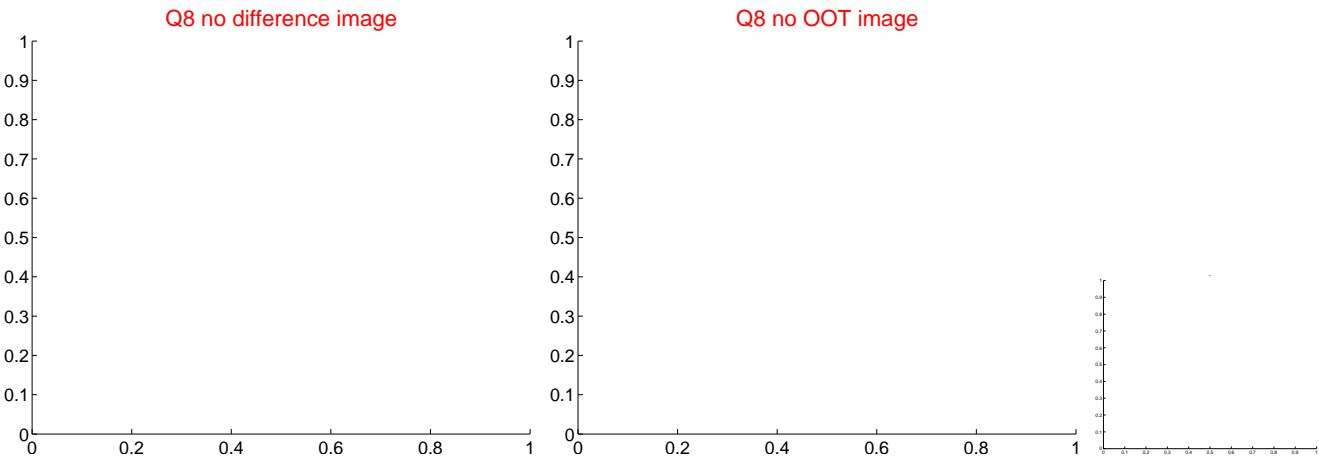
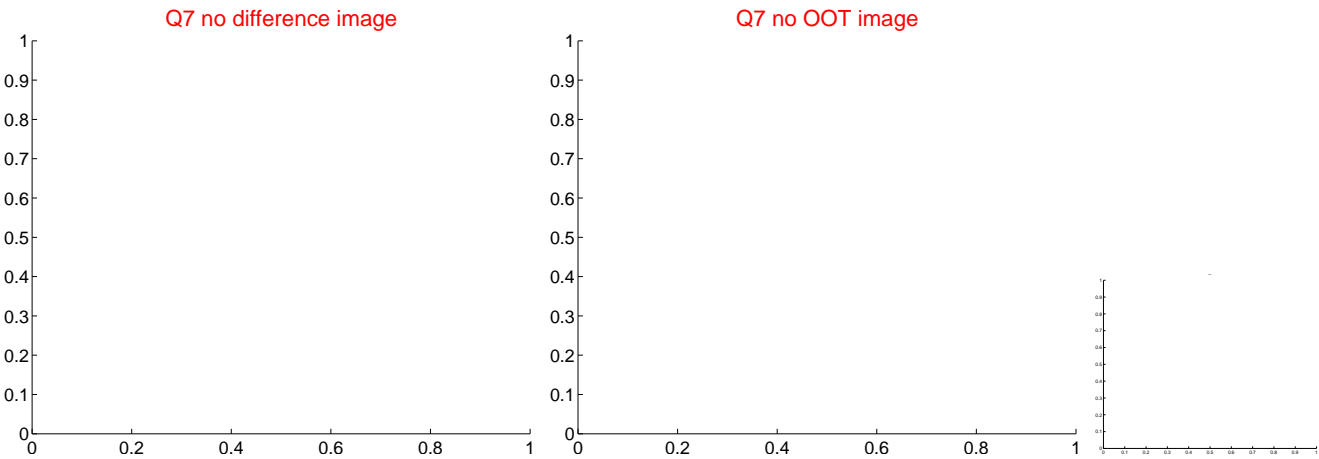
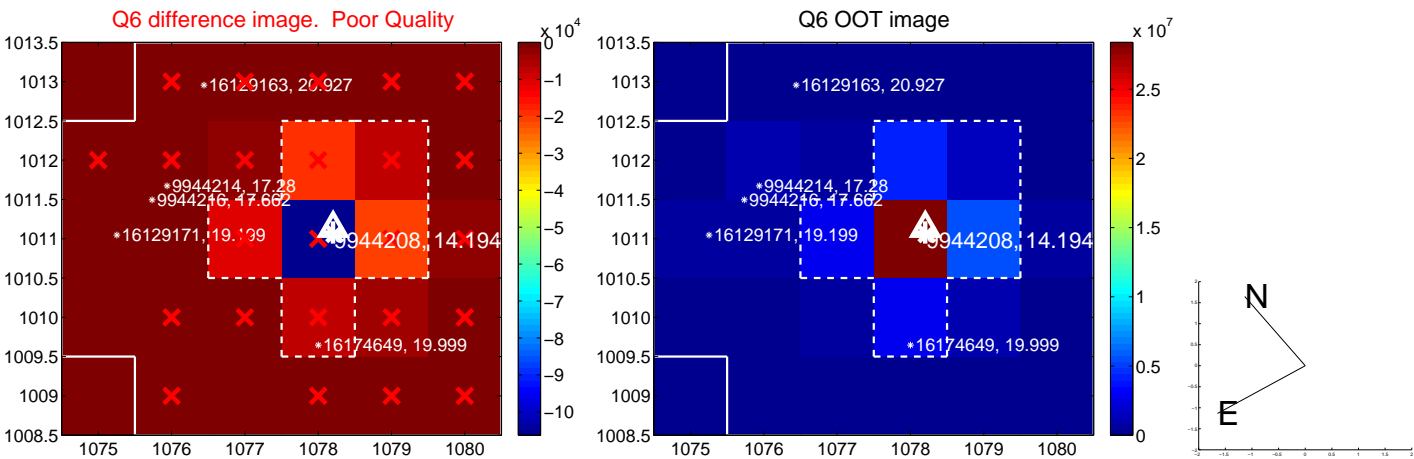
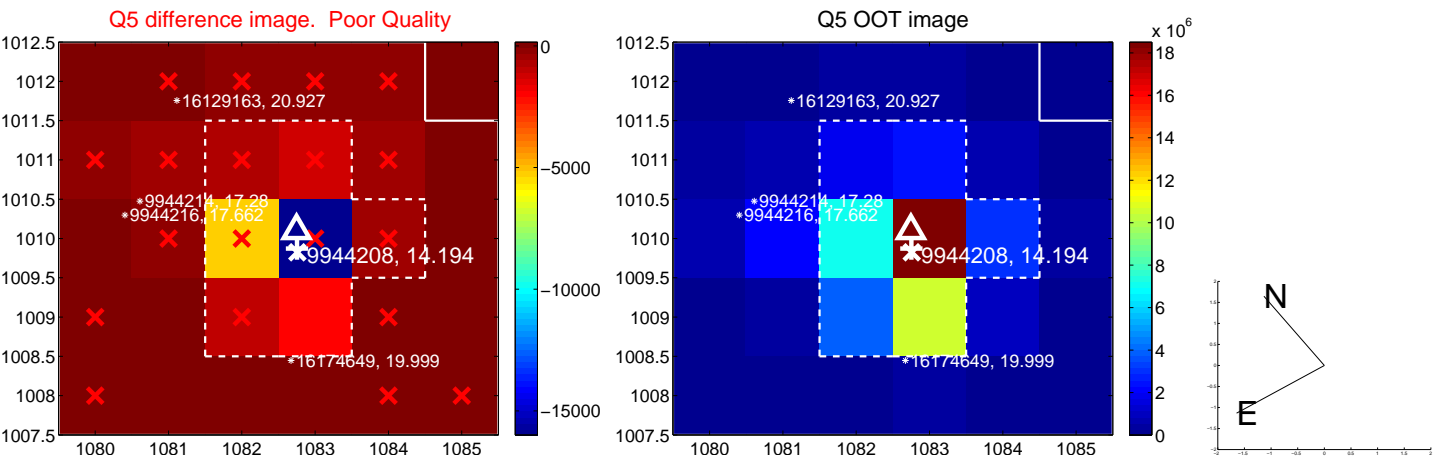
The direct PRF centroid is offset from the target star catalog position by about 0.15 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.068 ± 0.225	0.30	-0.015 ± 0.173	0.066 ± 0.197
PRF-fit source offset from KIC position	0.176 ± 0.273	0.64	-0.051 ± 0.202	0.168 ± 0.231
photometric centroid source offset	1.19 ± 0.74	1.60	-0.18 ± 0.73	-1.17 ± 0.74

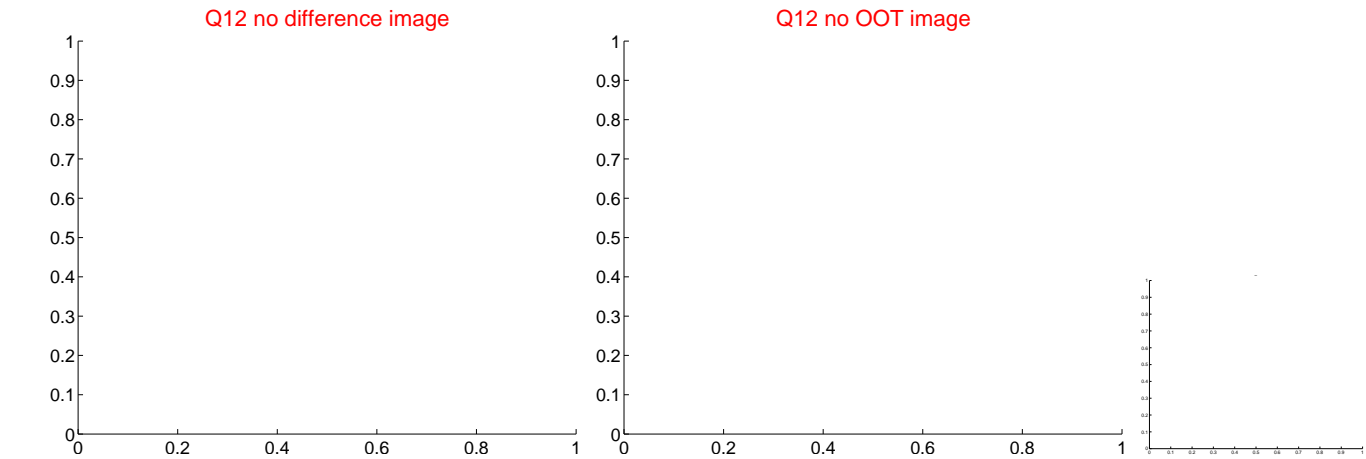
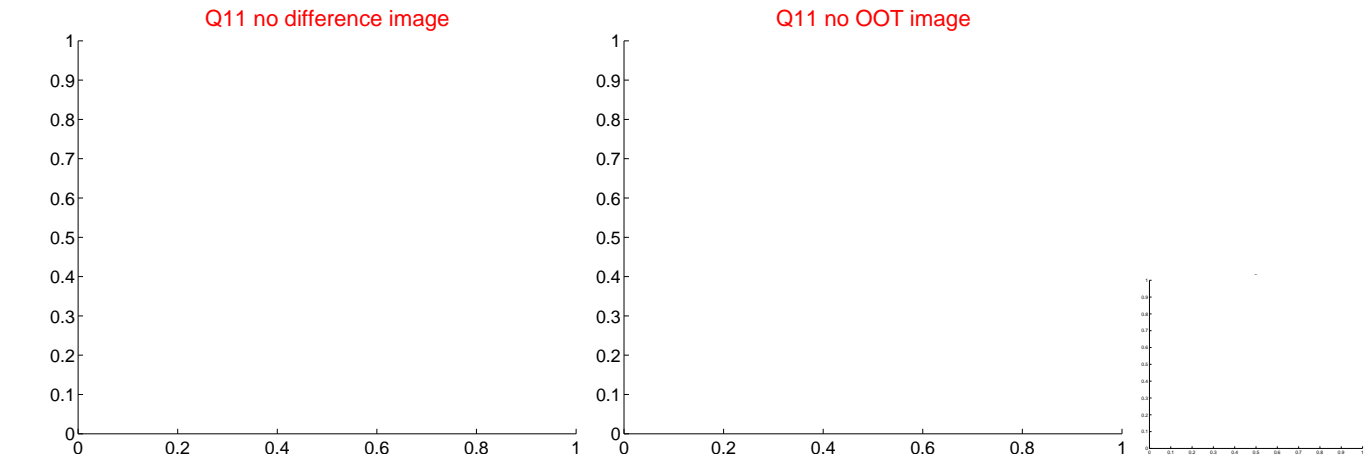
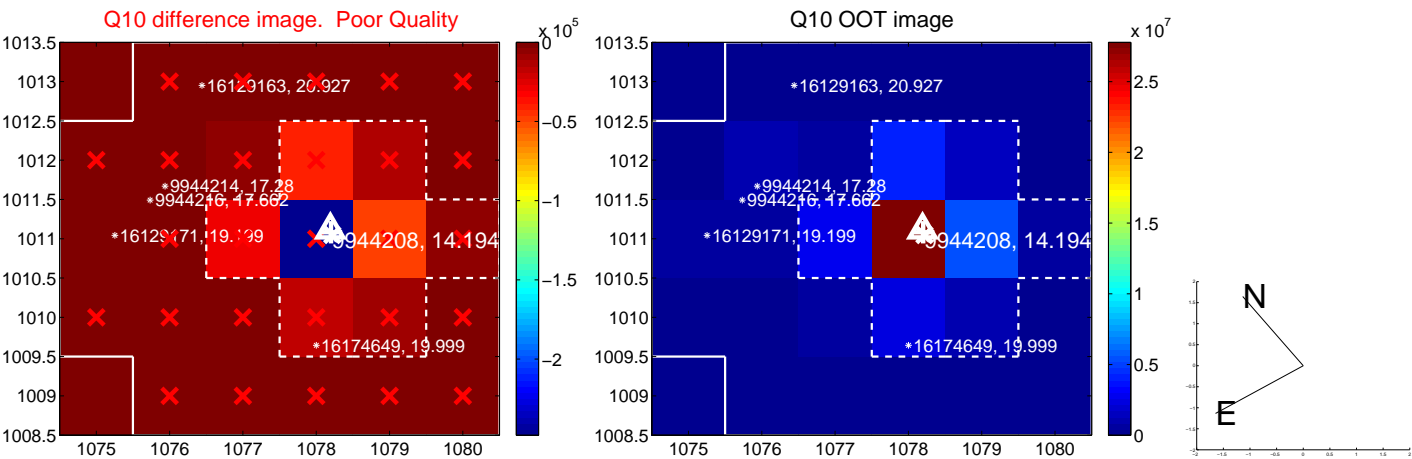
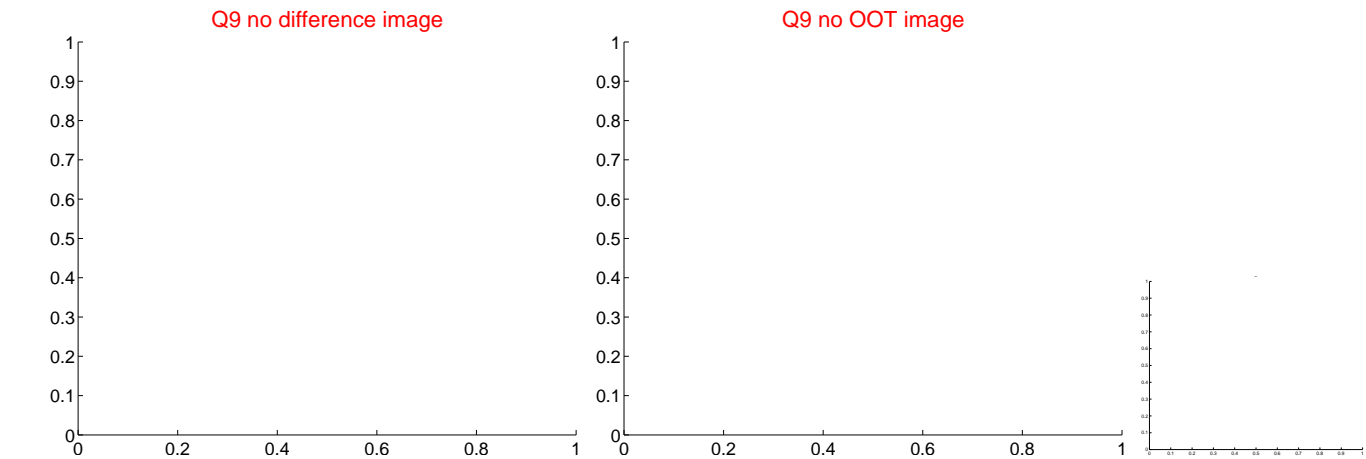


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets**; **Vermillion crosses: bad quarterly centroid offsets**; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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



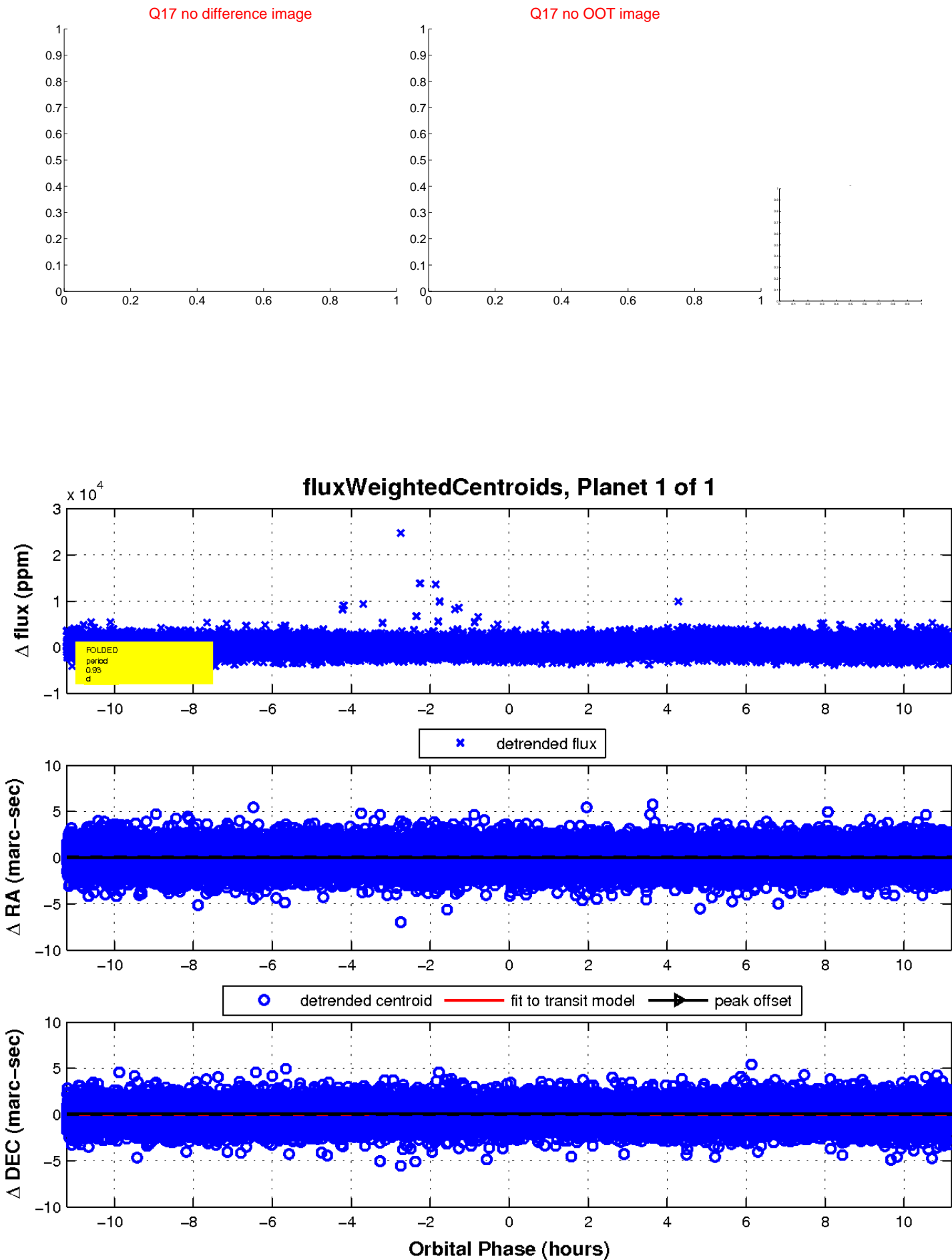
white ×: KIC target position; +: OOT centroid; △: difference centroid. red ×: large negative pixel value.



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.



UKIRT Image

Declination

