

KIC 011237410

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})
011237410-01	OBS	No	0.965287	131.849800	33.9	7.971	8.0	10.0	0.74	5596	0.43	1695.93

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
011237410-01	OBS	FP	0.00	1	0	0	0	LPP_DV

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

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

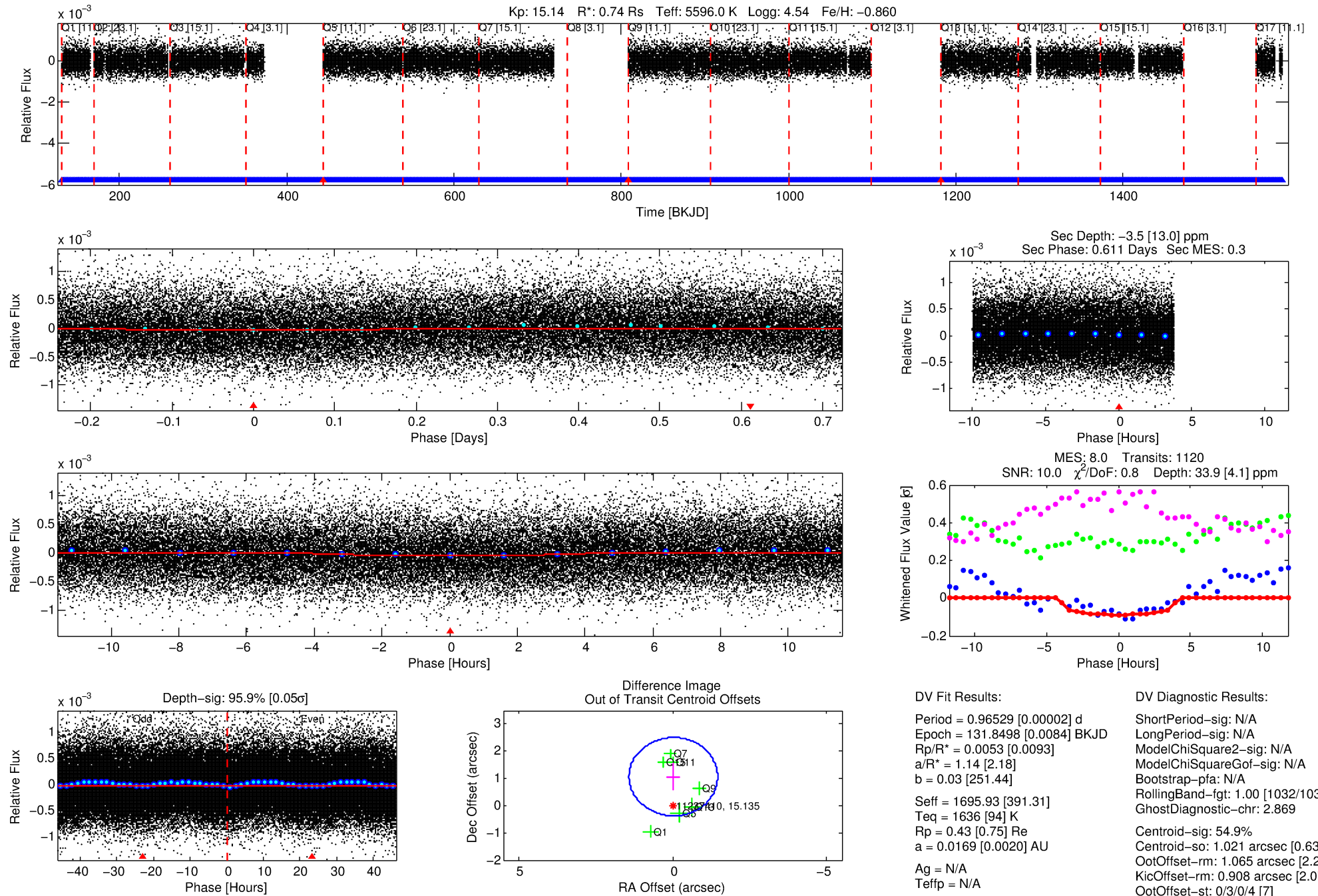
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 011237410-01

No Significant Match Found

DV One-Page Summary

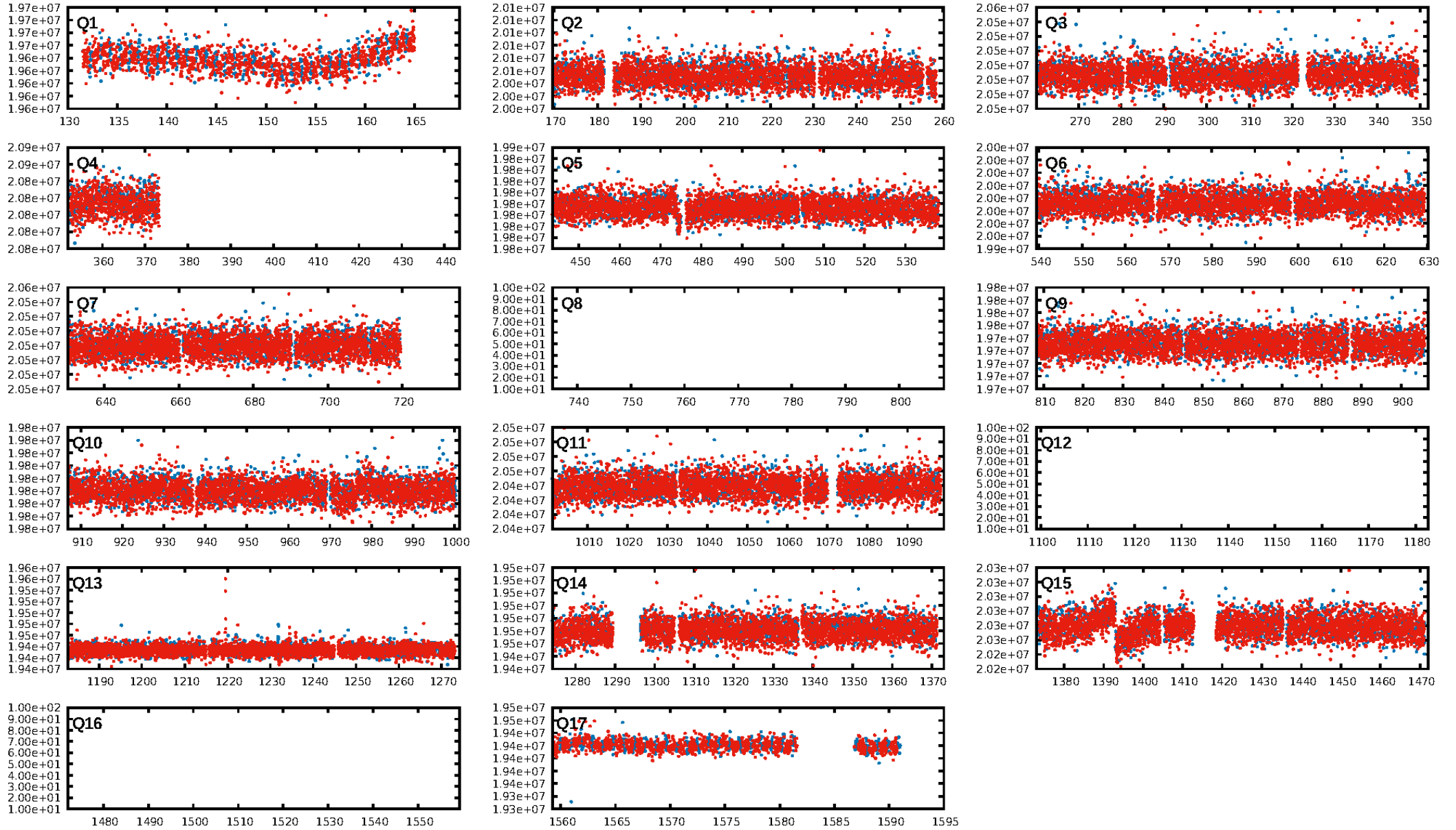
KIC: 11237410 Candidate: 1 of 1 Period: 0.965 d



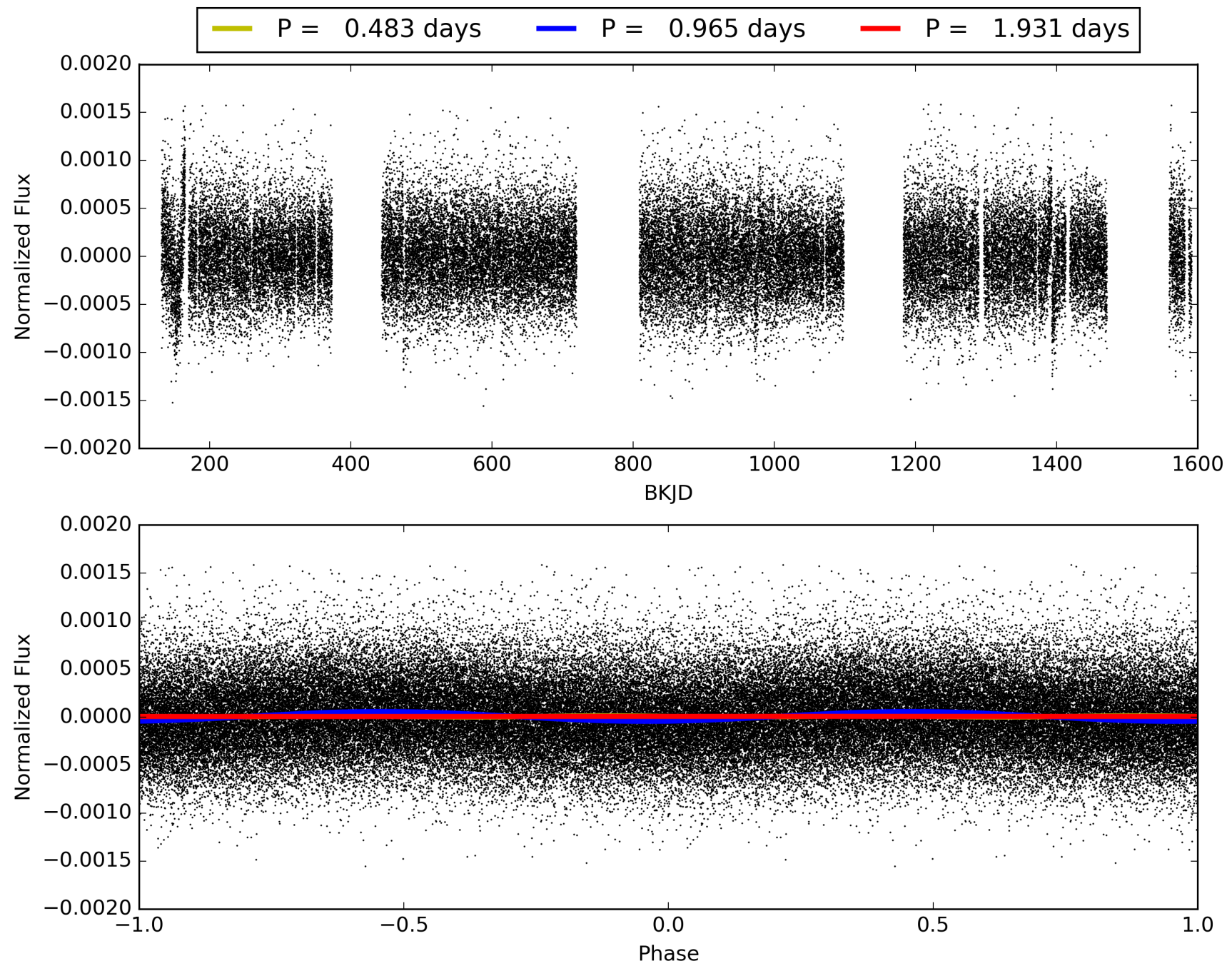
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 28-Jan-2016 22:45:58 Z

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

TCE 011237410-01, PDC Light Curves

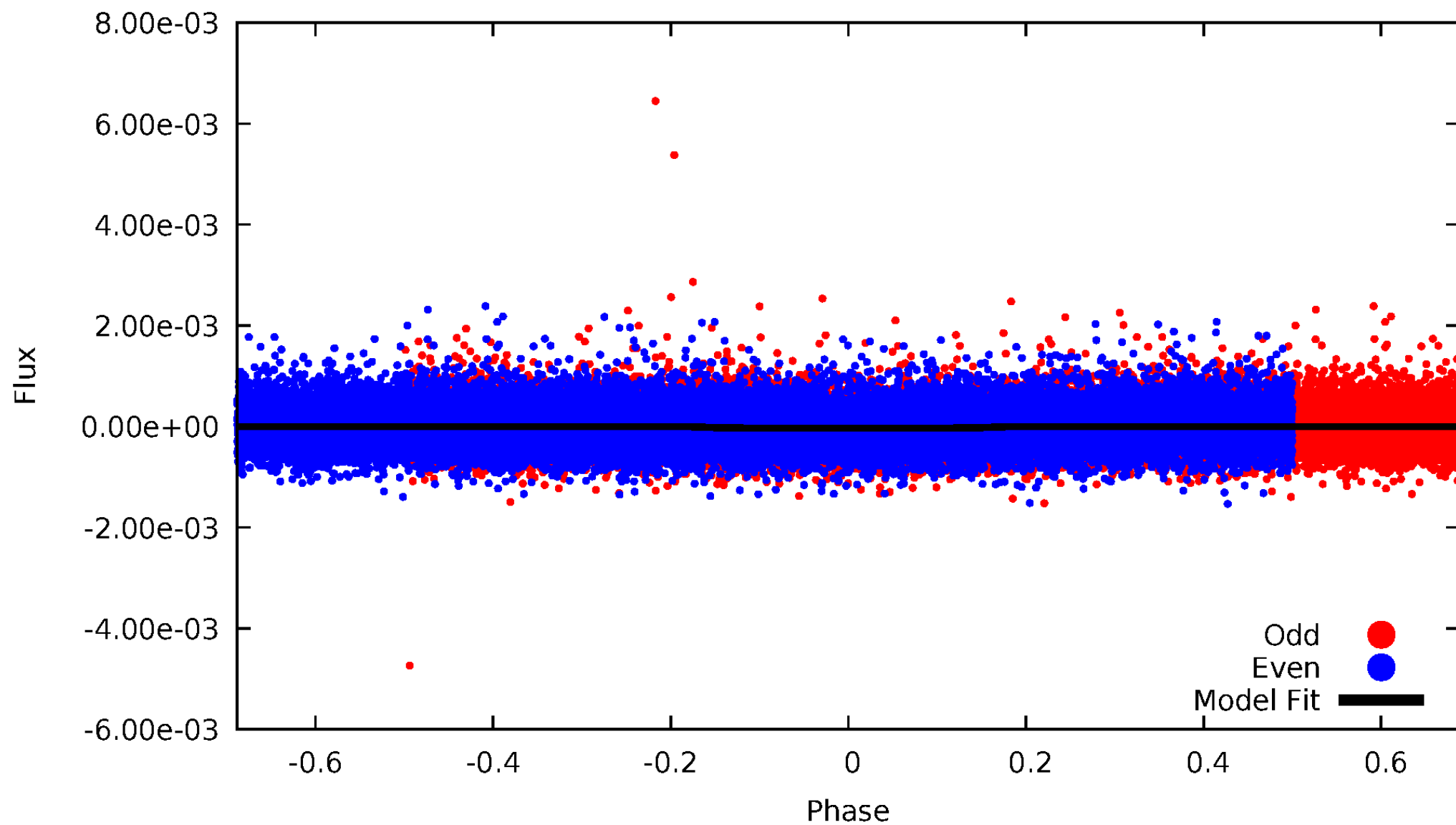


TCE 011237410-01



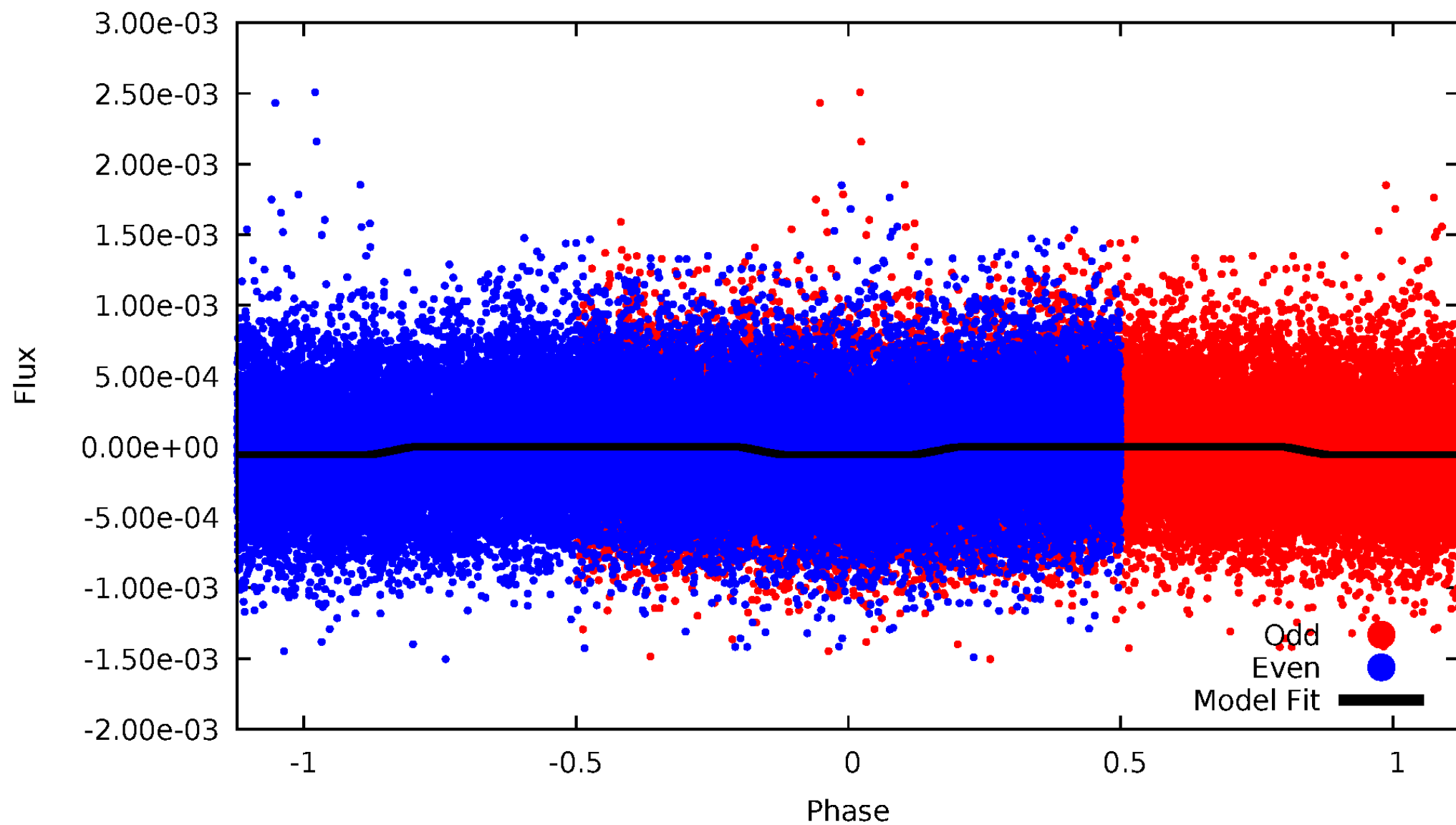
DV Odd/Even

TCE 011237410-01



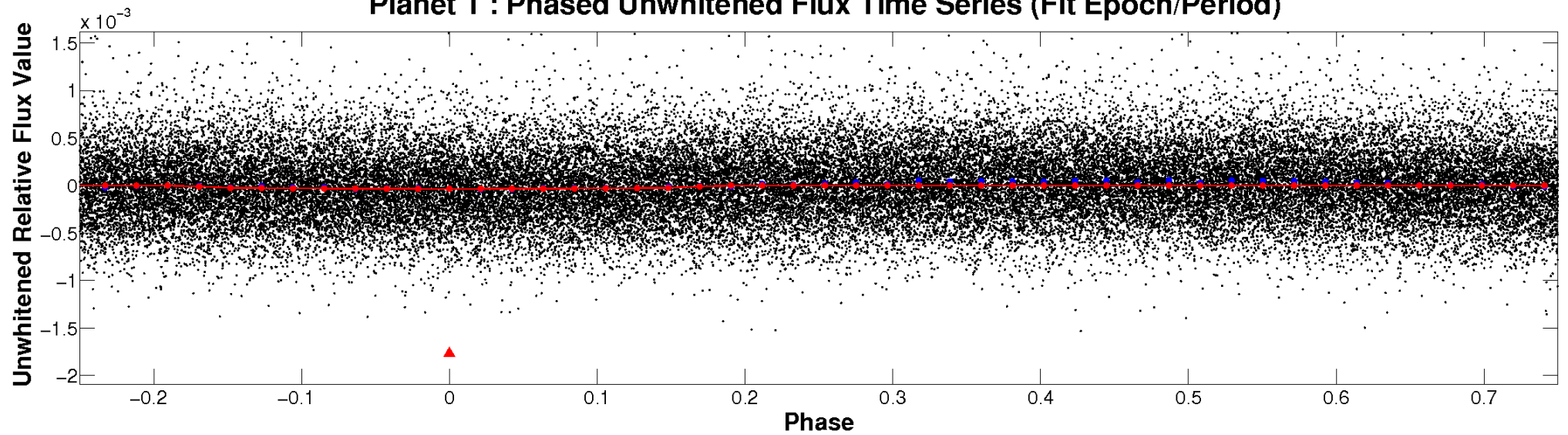
ALT Odd/Even

TCE 011237410-01

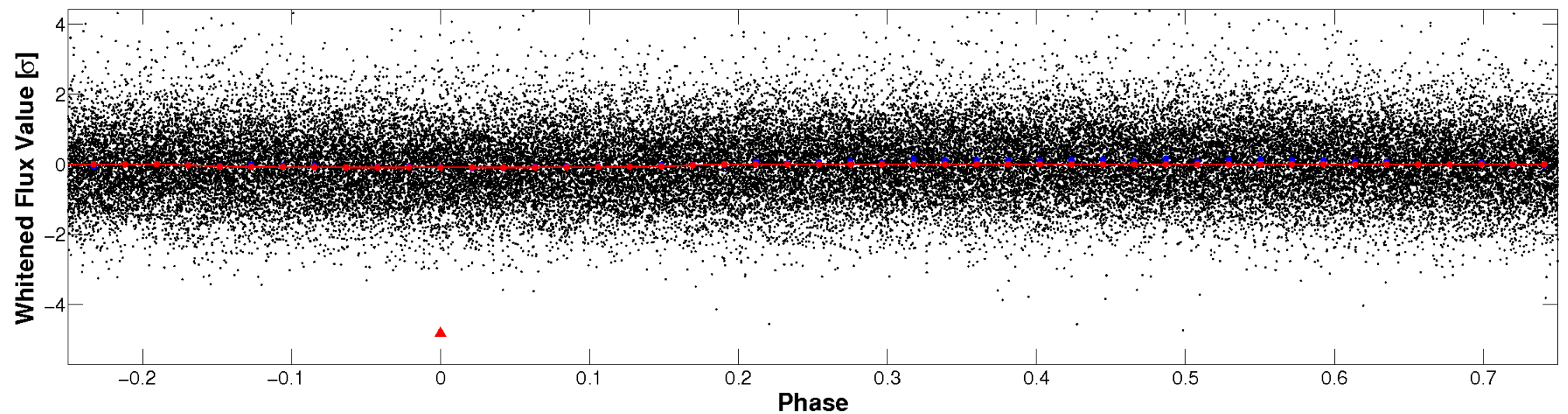


Non-Whitened Vs. Whitened Light Curve

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

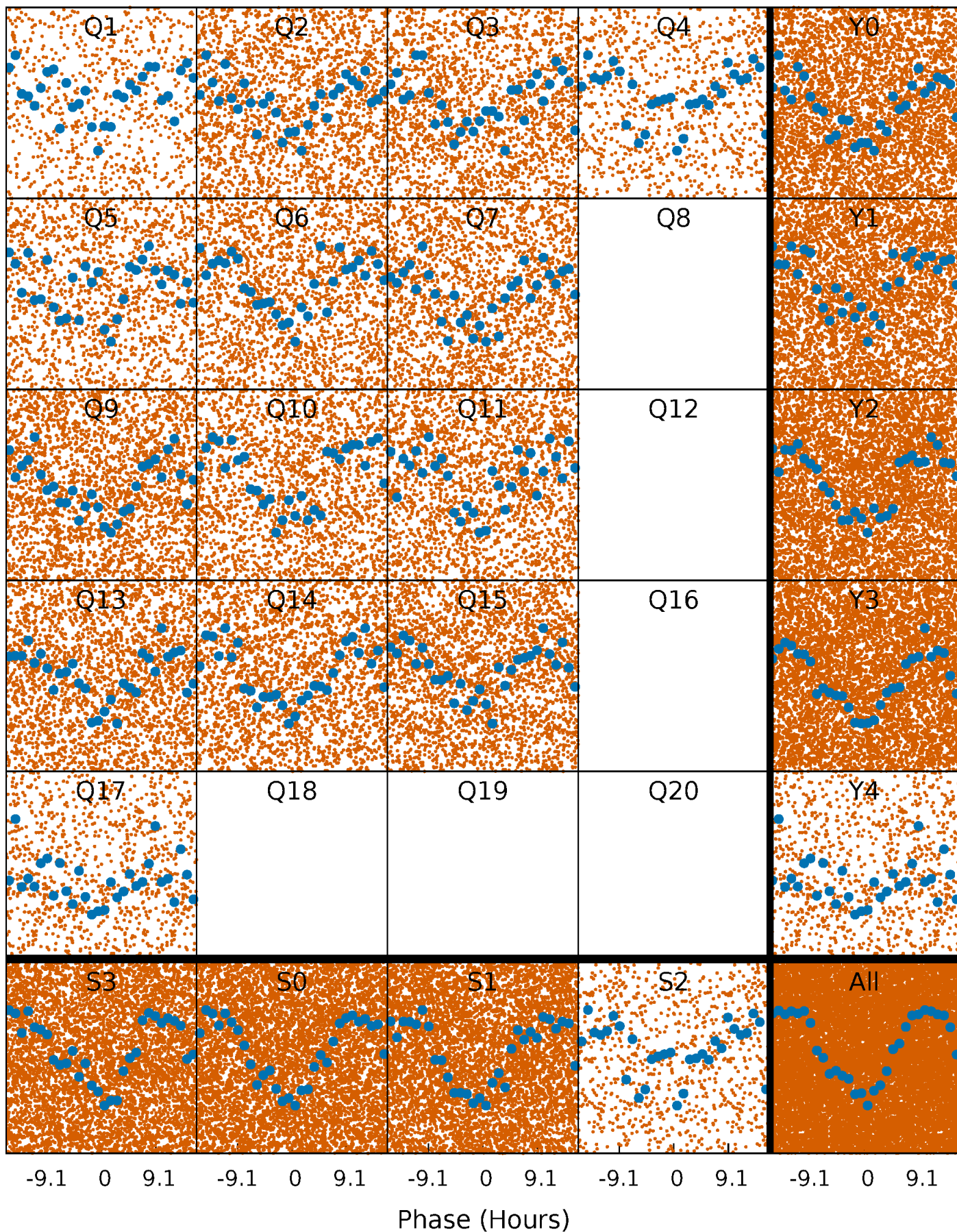


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



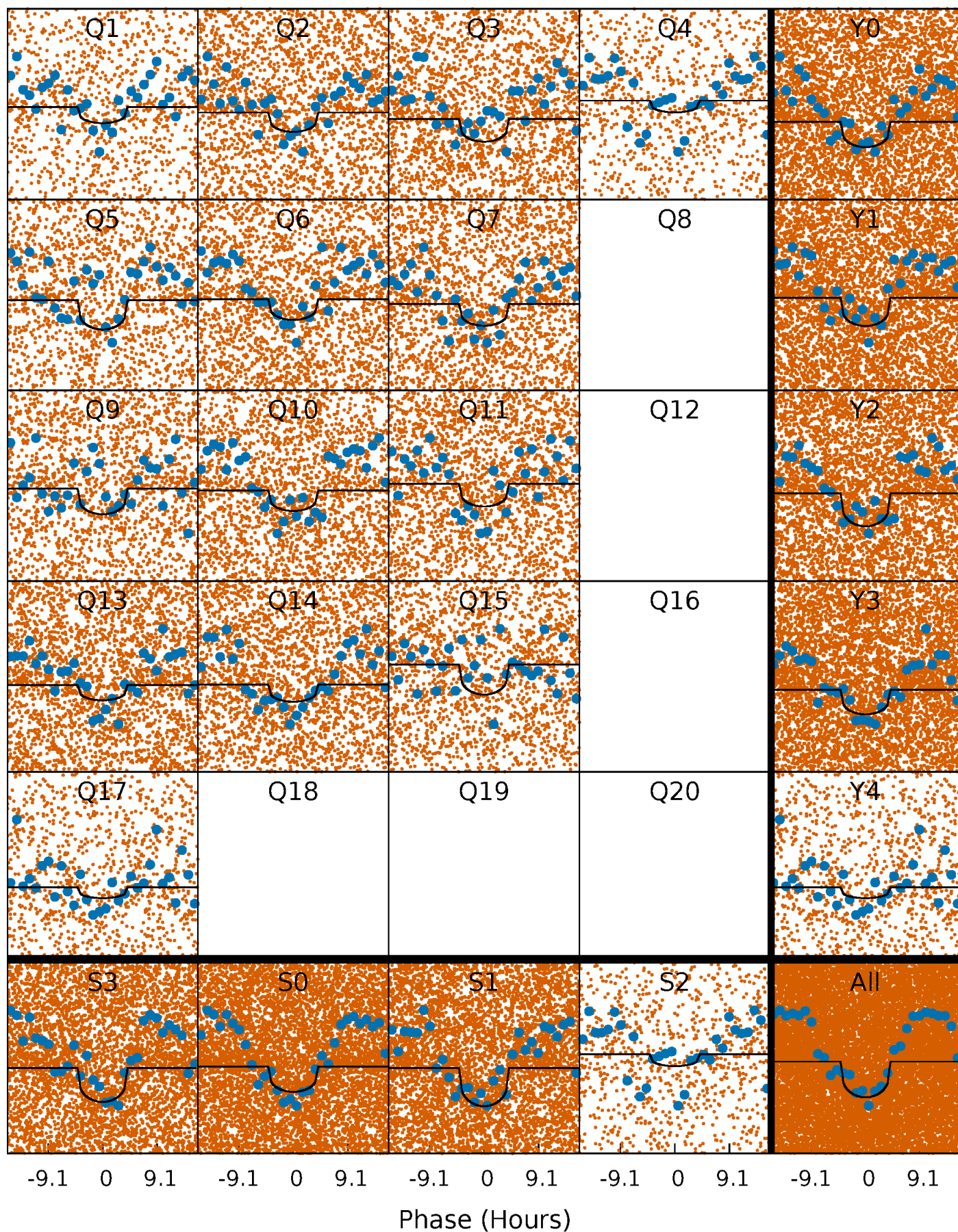
PDC Quarter-Phased Transit Curves

TCE 011237410-01 P= 0.965287 Days $T_0=131.849800$ (BKJD)



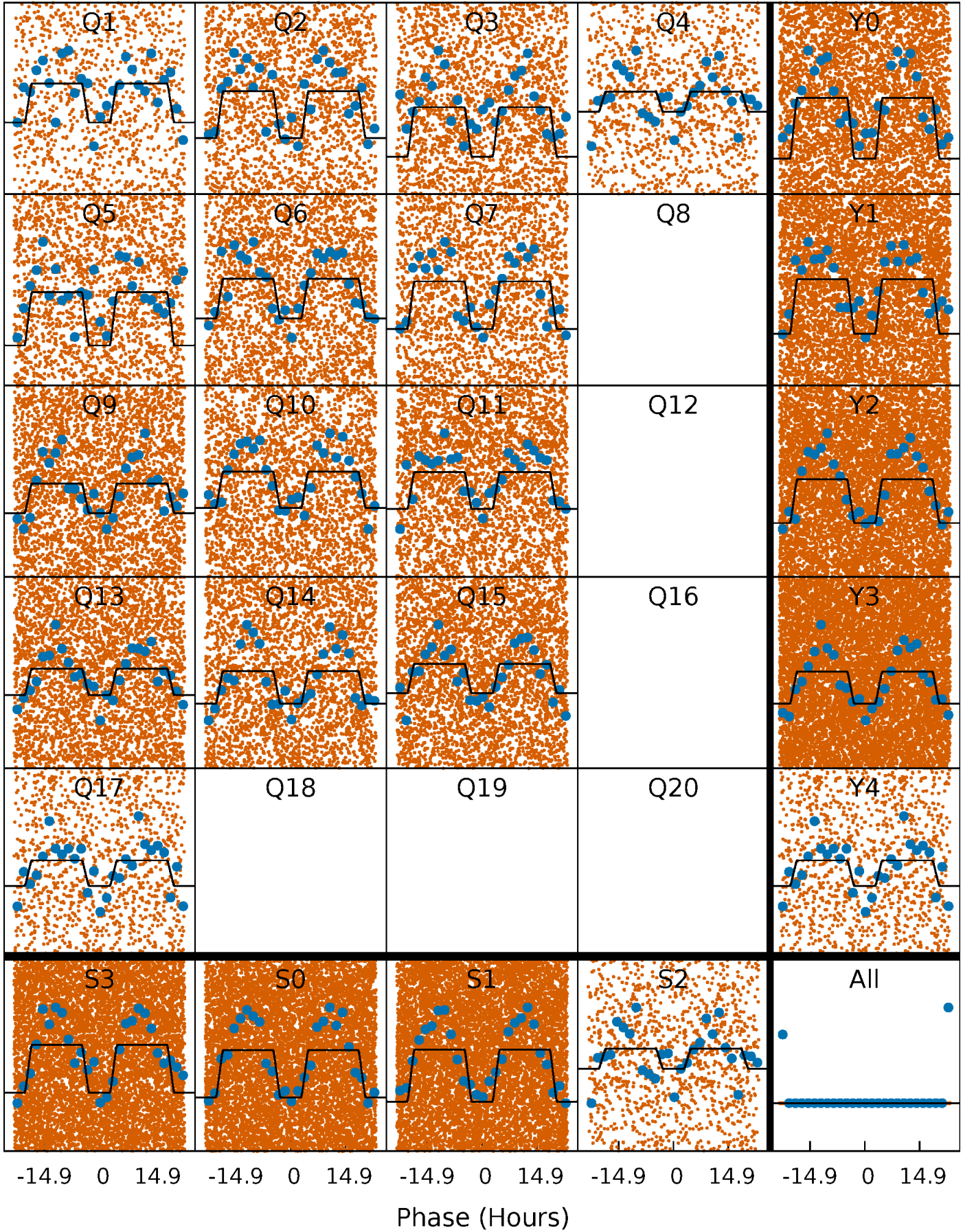
DV Quarter-Phased Transit Curves

TCE 011237410-01 P= 0.965287 Days $T_0=131.849800$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

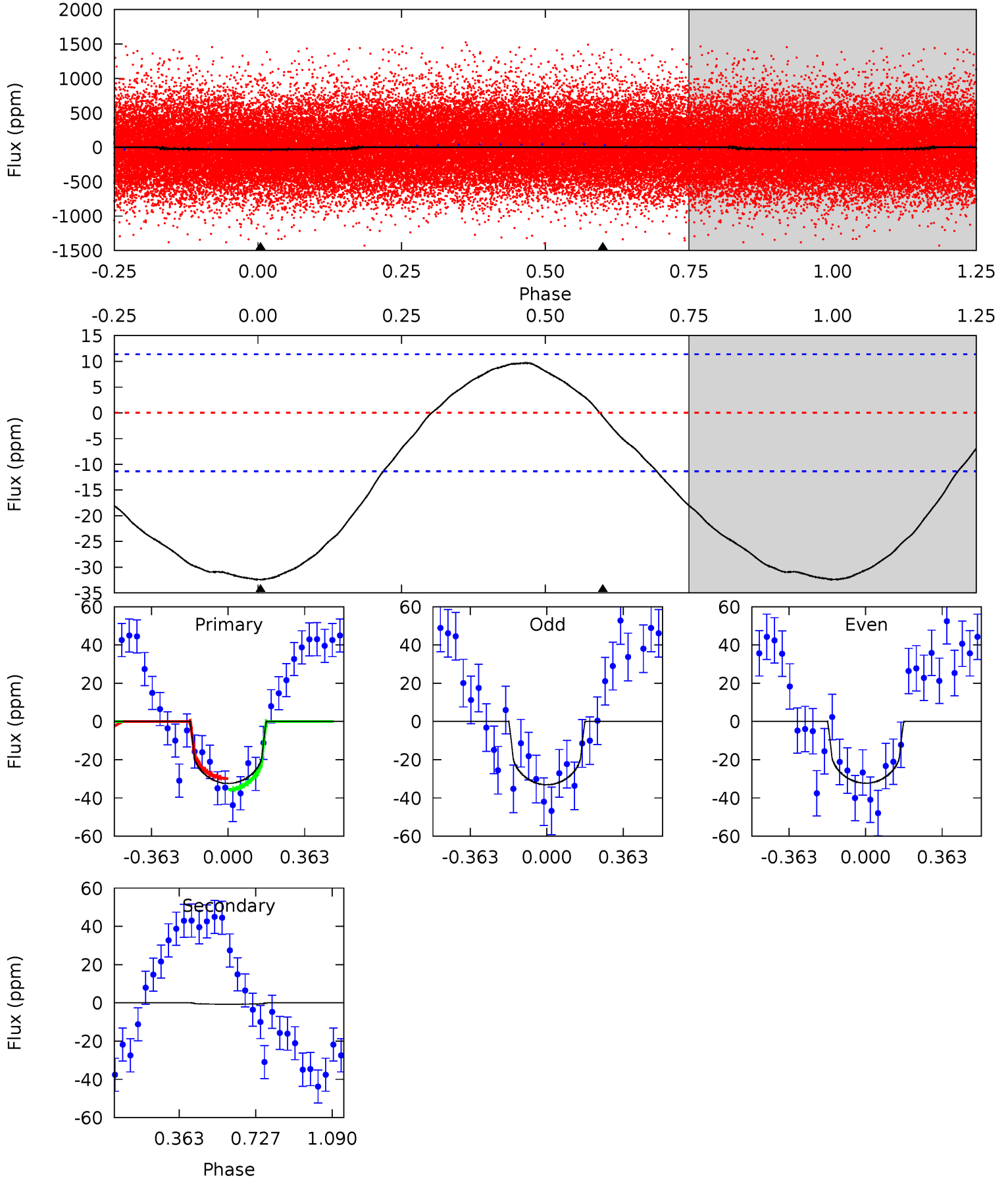
TCE 011237410-01 P= 0.965225 Days $T_0=131.880045$ (BKJD)



DV Model-Shift Uniqueness Test

011237410-01, P = 0.965287 Days, E = 130.884513 Days

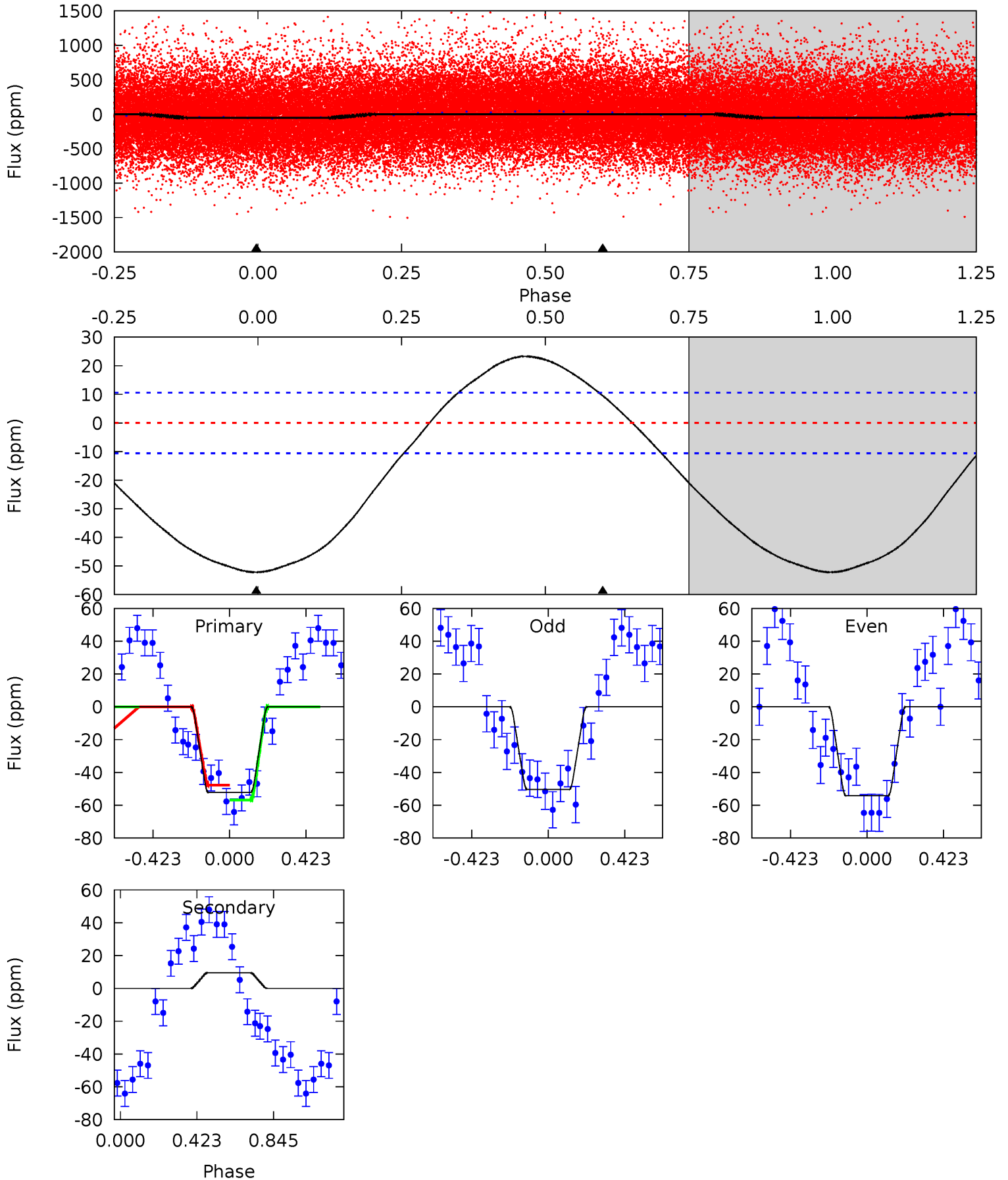
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
12.2	0.26	0	0	4.29	0.91	1.28	12.2	12.2	0.26	0.26	0.15	0.89	0.23	1.07



Alt Model-Shift Uniqueness Test

011237410-01, P = 0.965225 Days, E = 130.914820 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
21.0	-3.82	0	0	4.25	0.80	2.67	21.0	21.0	-3.82	-3.82	0.77	0.99	0.31	1.85



Stellar Parameters For KIC 011237410

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	$M(M_{\odot})$	p_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	5596^{+183}_{-166}	$4.535^{+0.110}_{-0.090}$	$-0.860^{+0.350}_{-0.300}$	$0.741^{+0.097}_{-0.088}$	$0.686^{+0.081}_{-0.029}$	$2.380^{+1.050}_{-0.614}$
	+3%/-3%	+2%/-2%	+41%/-35%	+13%/-12%	+12%/-4%	+44%/-26%
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 011237410-01 / KOI

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	-1 ± 3	$0.68^{+0.60}_{-0.46}$	2286^{+116}_{-110}	-2409^{+6020}_{-800}	$0.167^{+2.382}_{-0.962}$
Alt.	10 ± 2	$0.77^{+0.75}_{-0.51}$	2285^{+107}_{-120}	-3662^{+558}_{-1849}	$-2.510^{+1.874}_{-19.350}$

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

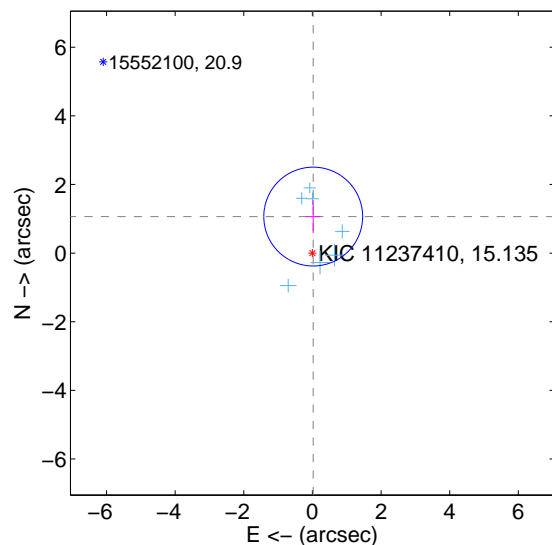
Supplemental centroid analysis for 011237410-01. Kepler magnitude: 15.13. Transit SNR 10.01

There are 7 quarters with good PRF difference image offsets

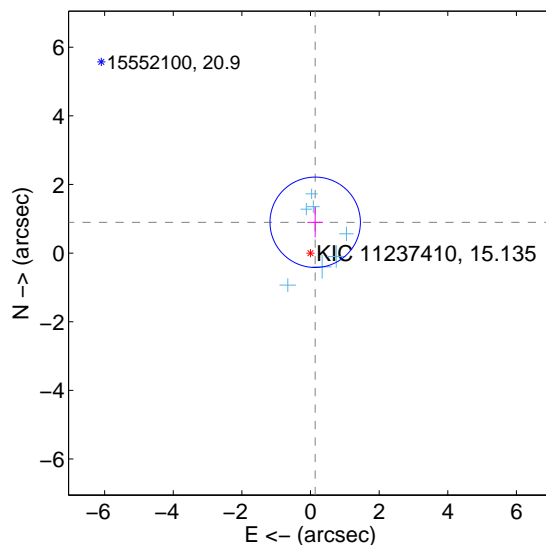
The direct PRF centroid is offset from the target star catalog position by about 0.37 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	1.065 ± 0.480	2.22	-0.023 ± 0.213	1.064 ± 0.480
PRF-fit source offset from KIC position	0.908 ± 0.439	2.07	-0.136 ± 0.227	0.898 ± 0.443
photometric centroid source offset	1.02 ± 1.62	0.63	0.80 ± 1.68	0.64 ± 1.52

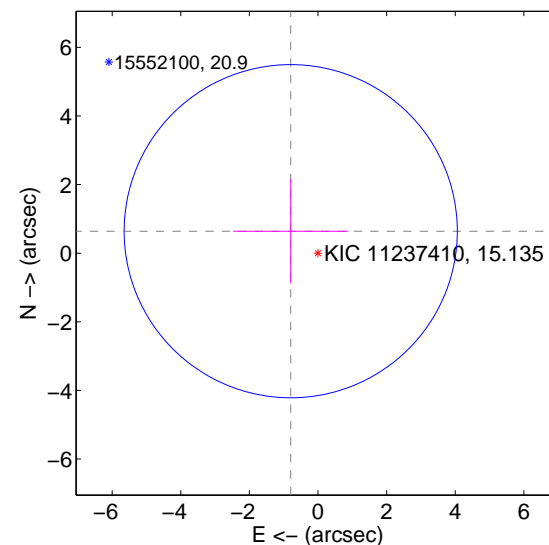
offset from difference PRF-fit to OOT PRF-fit



offset from difference PRF-fit to KIC position

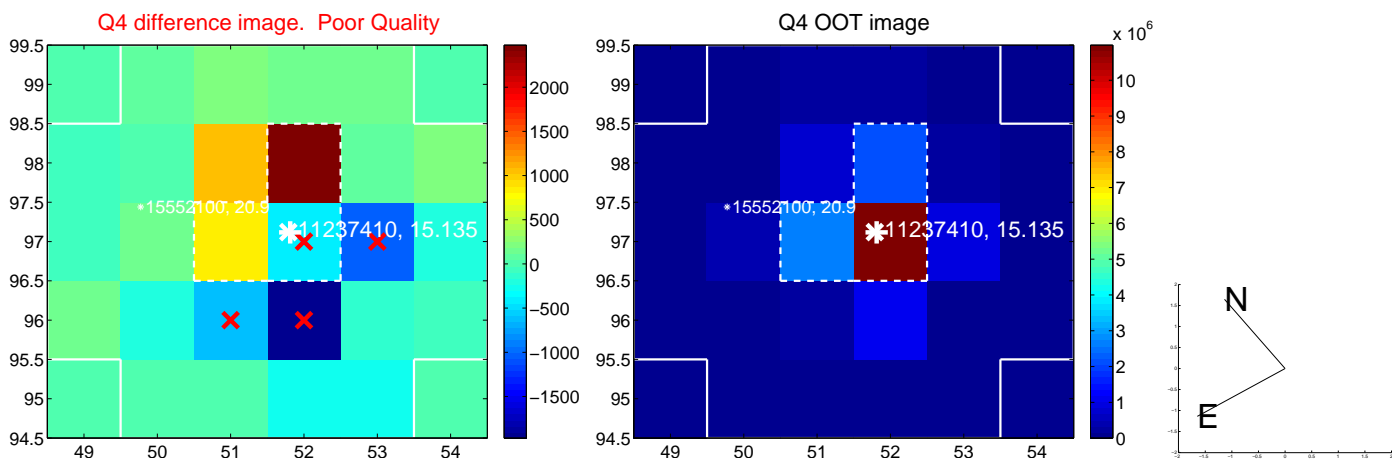
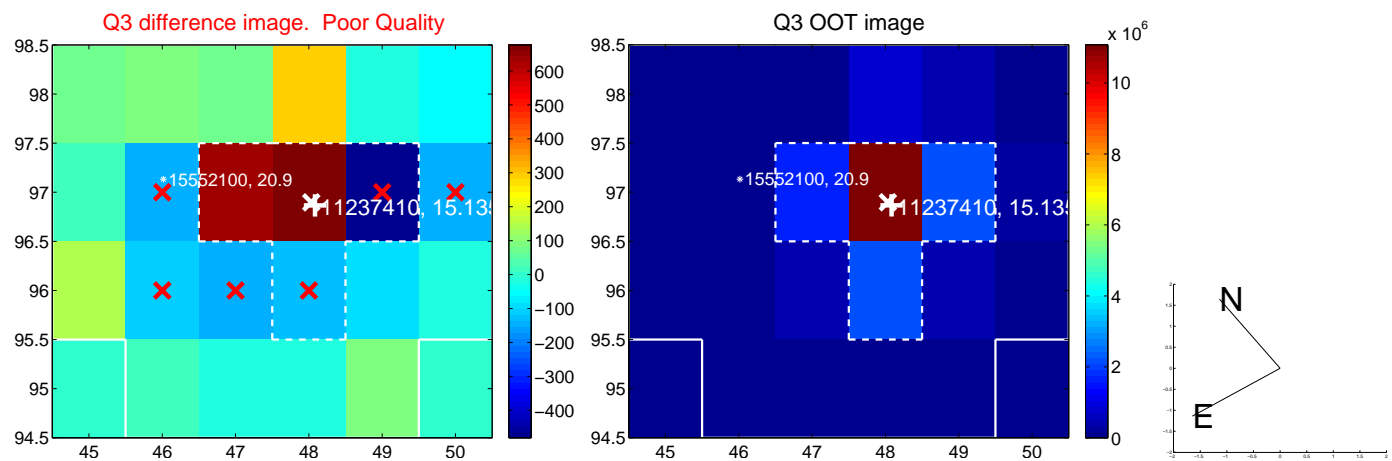
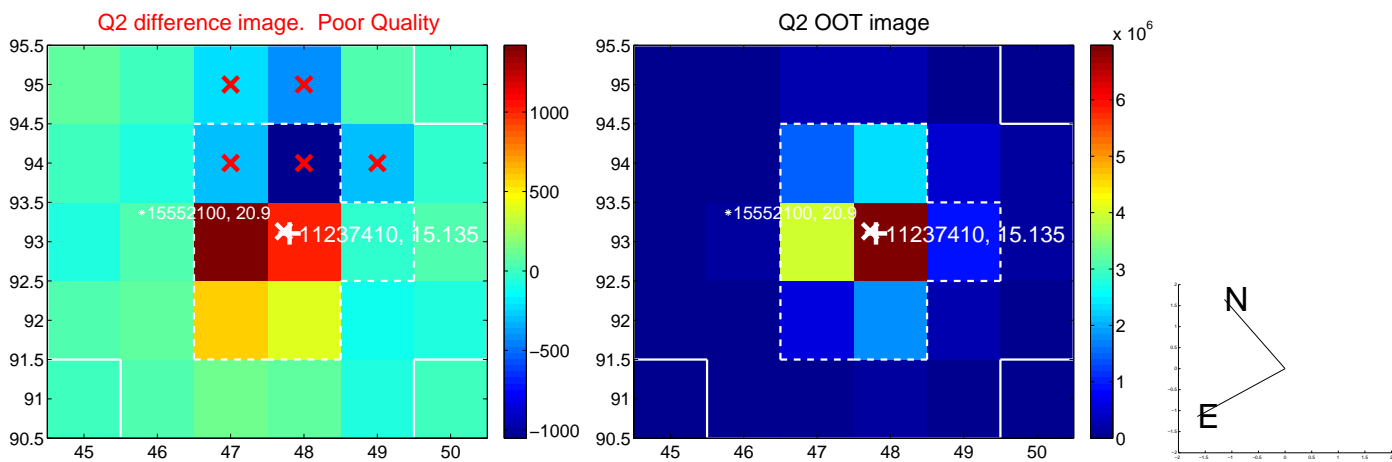
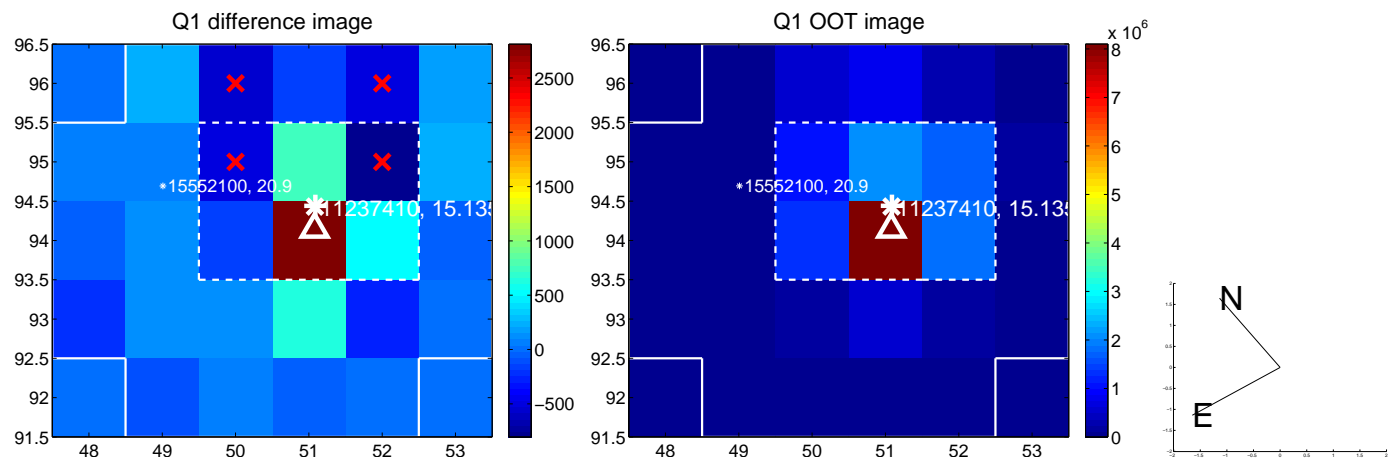


offset from photometric centroids

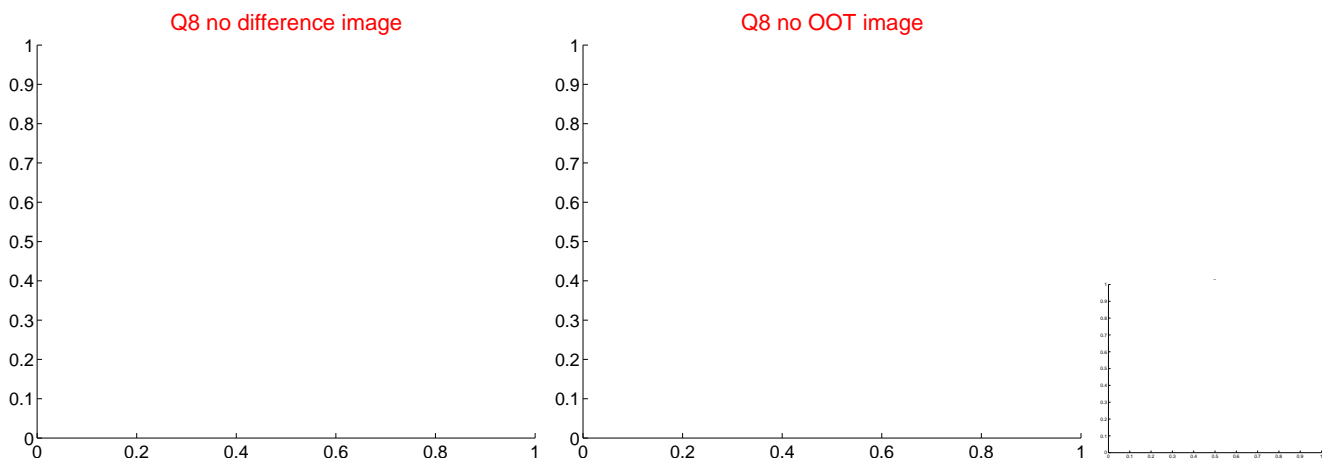
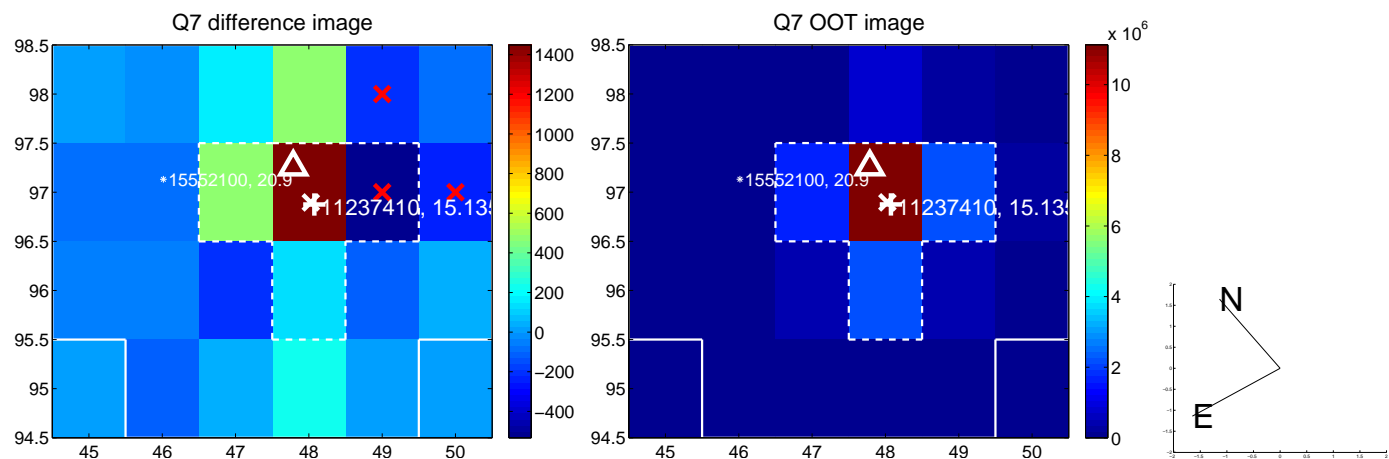
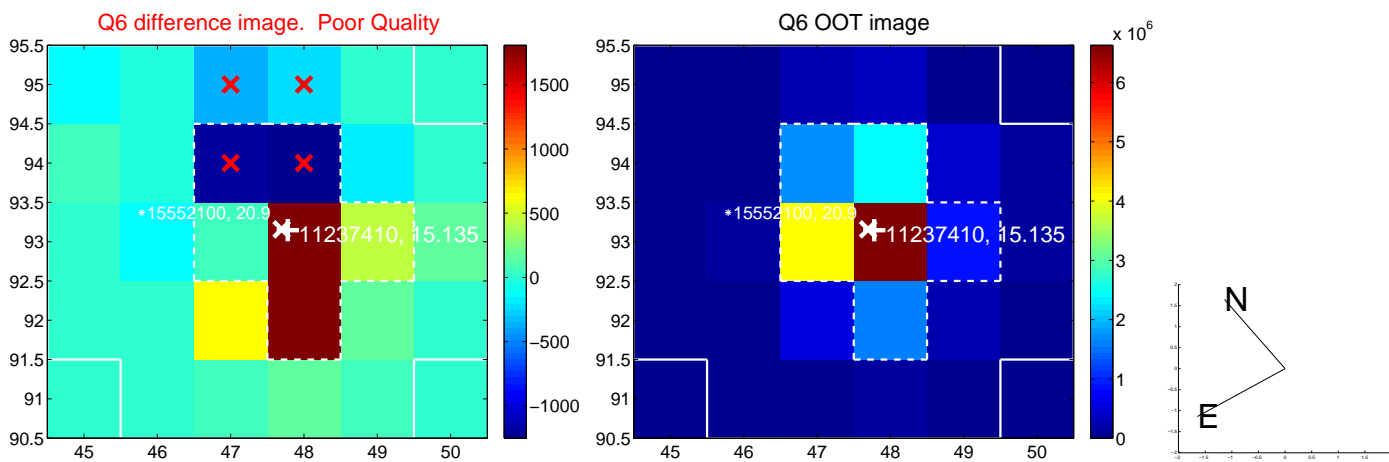
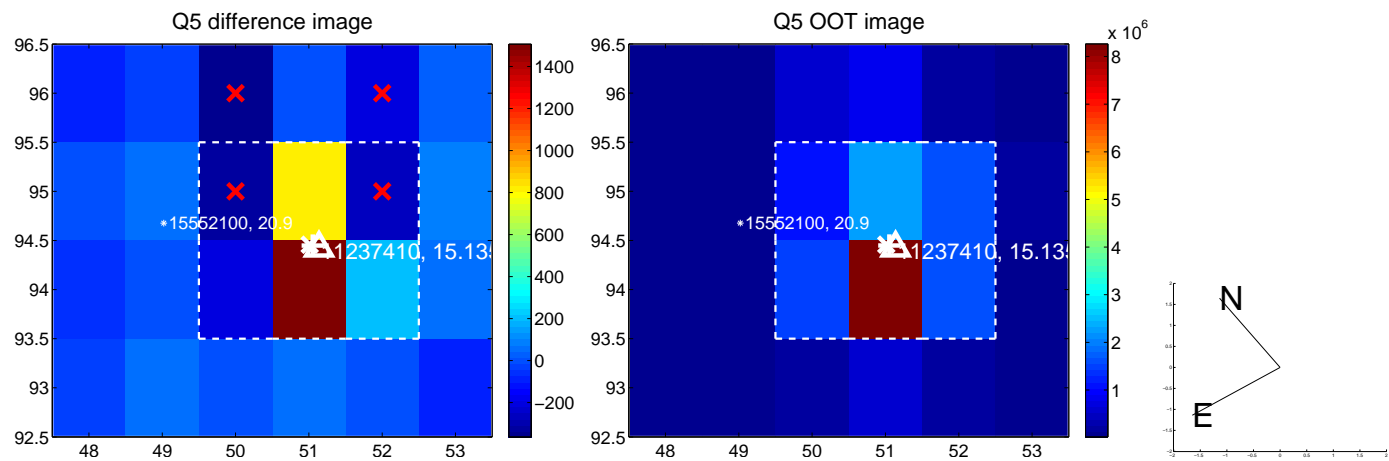


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets**; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

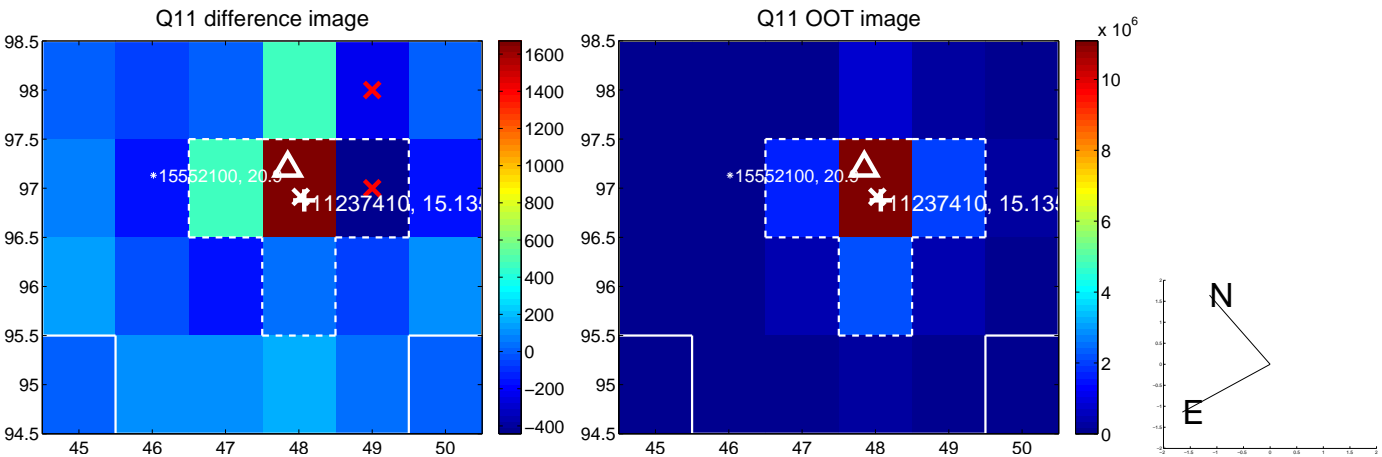
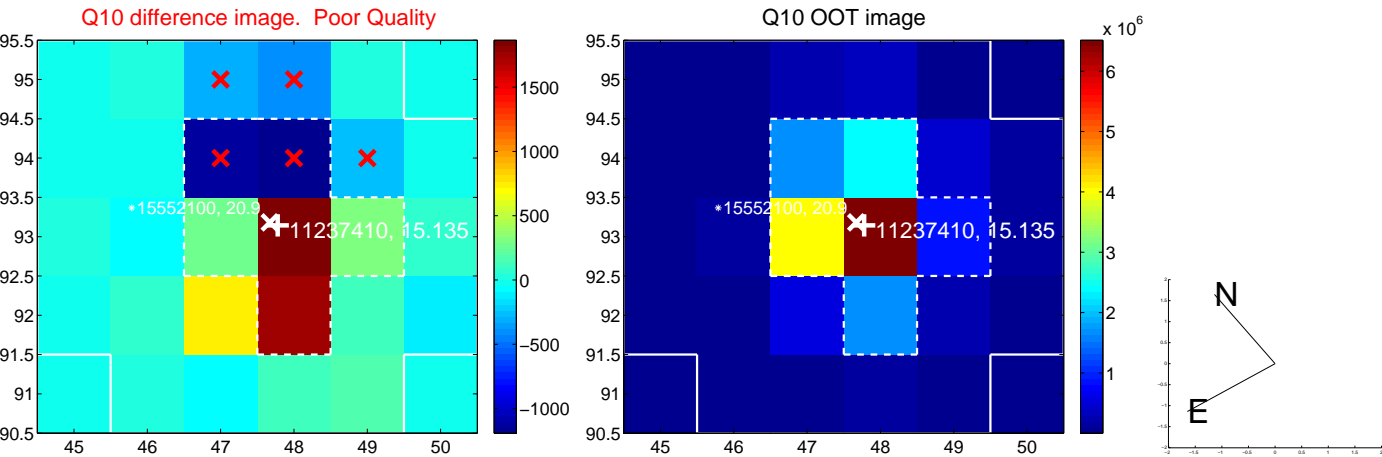
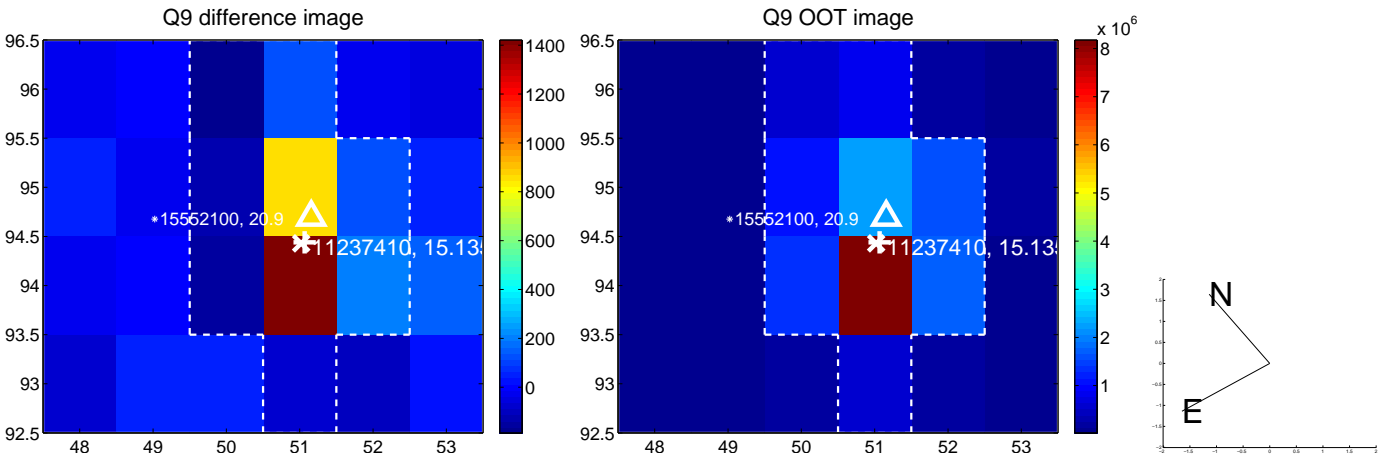
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



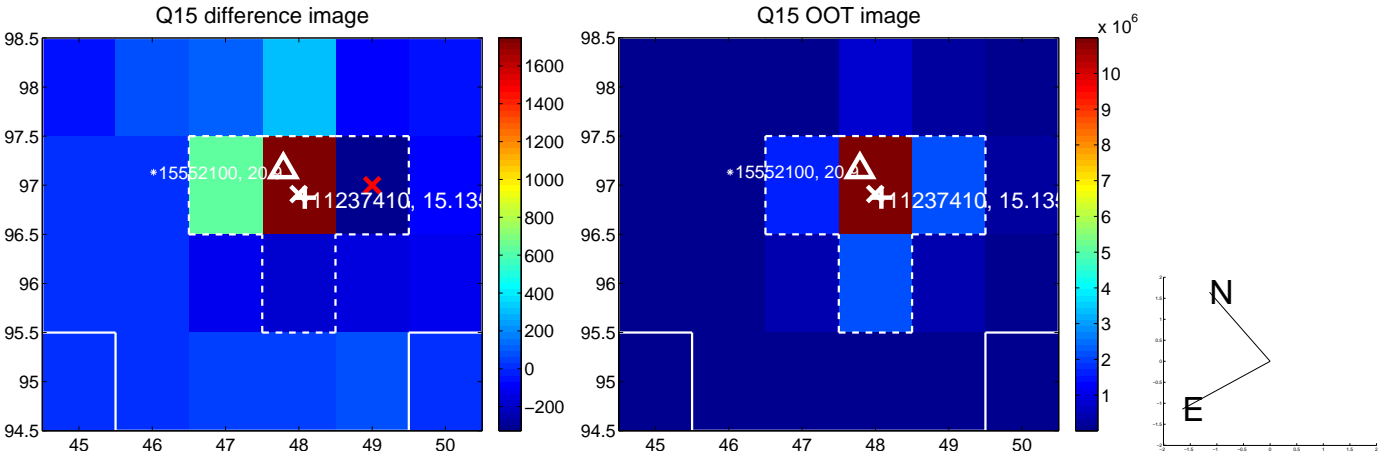
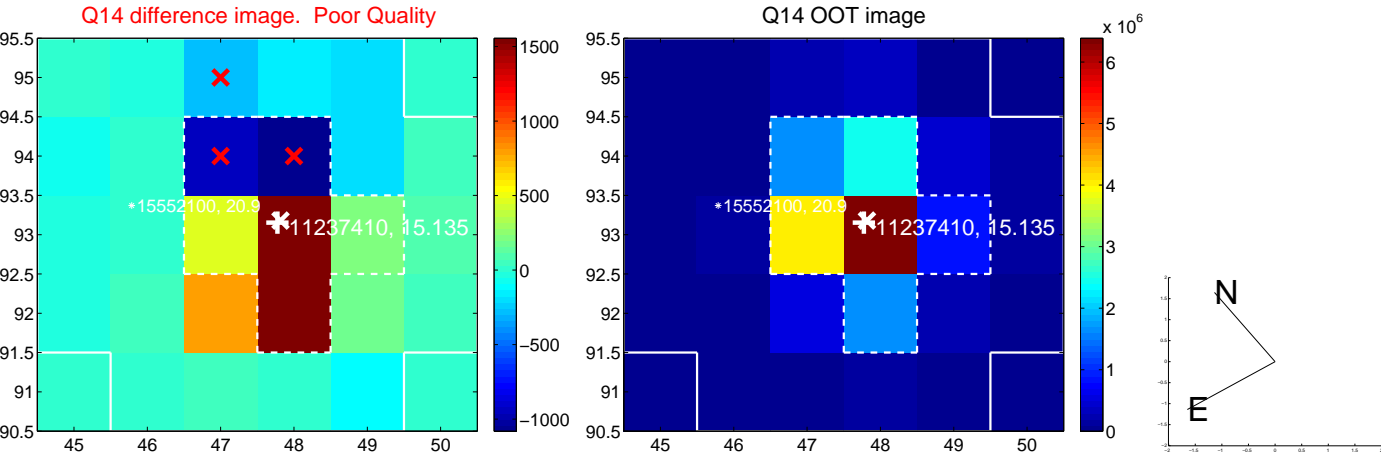
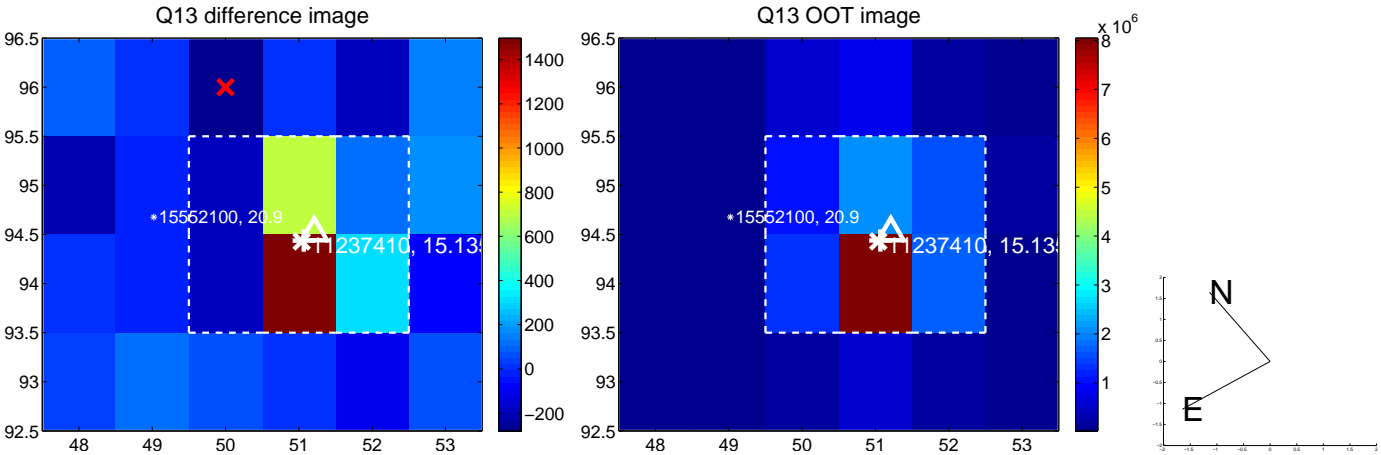
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



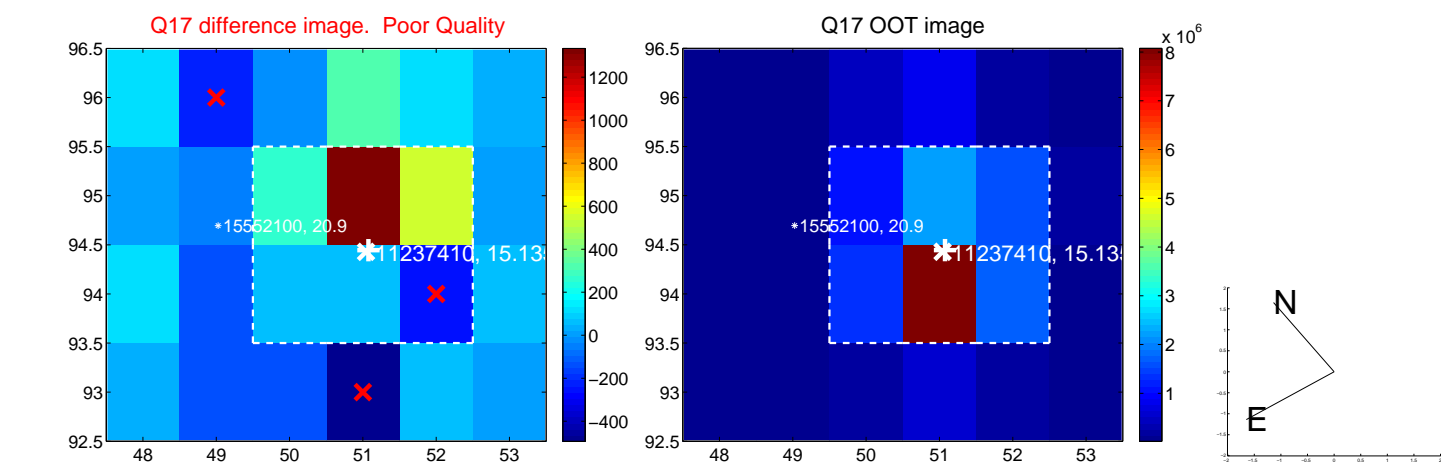
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



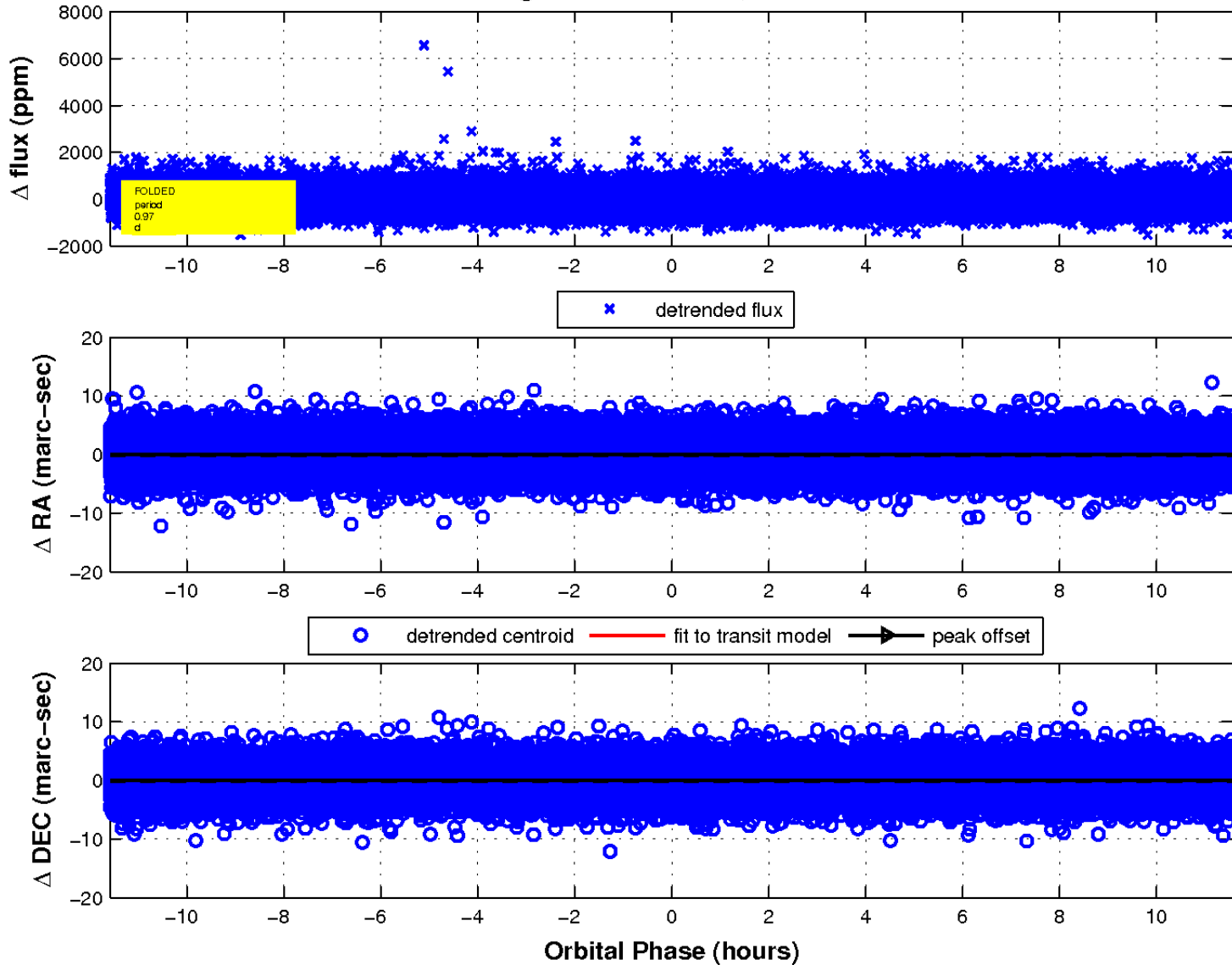
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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



fluxWeightedCentroids, Planet 1 of 1



UKIRT Image

