

KIC 009591480

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})
009591480-01	OBS	No	1.142725	132.422548	31.9	5.322	8.8	8.3	0.97	6089	0.64	2521.16

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
009591480-01	OBS	FP	0.00	1	0	0	0	LPP_DV—LPP_ALT

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

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

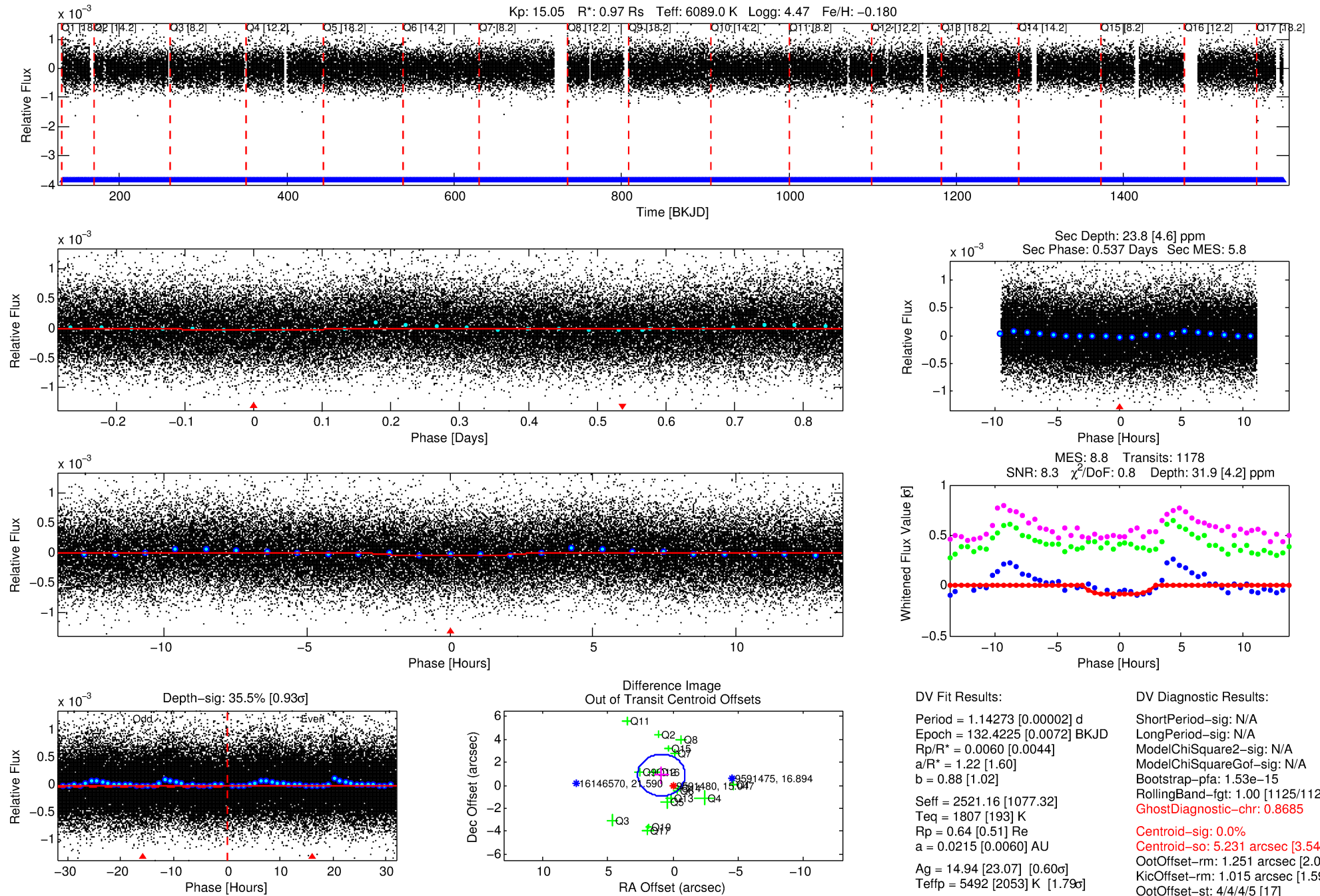
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 009591480-01

No Significant Match Found

DV One-Page Summary

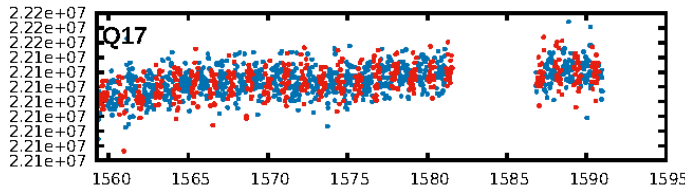
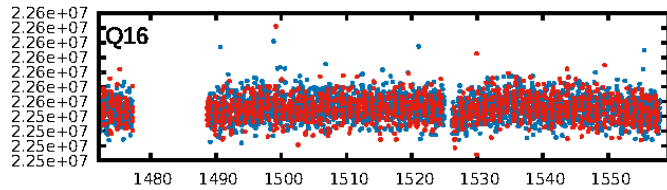
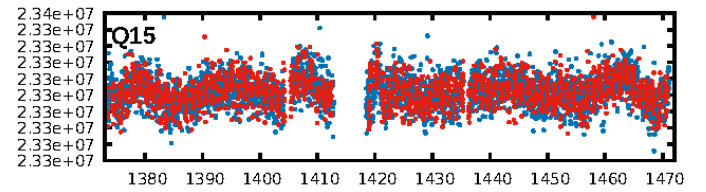
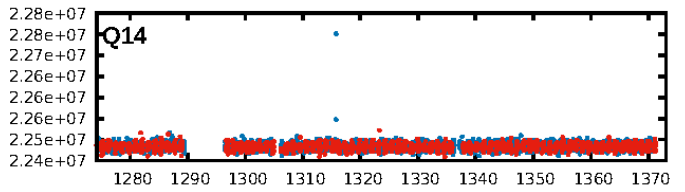
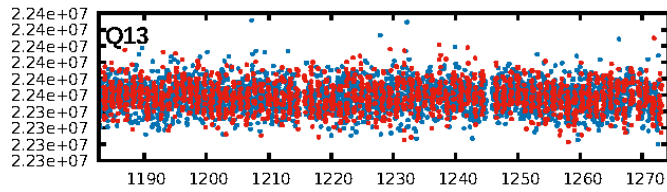
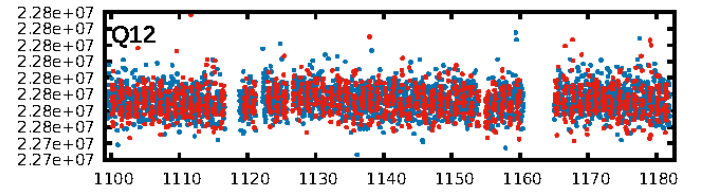
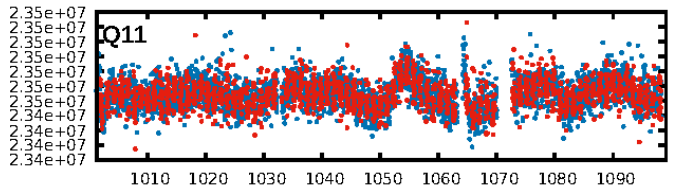
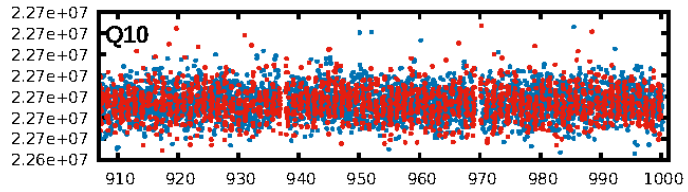
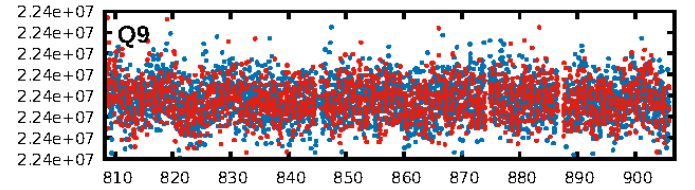
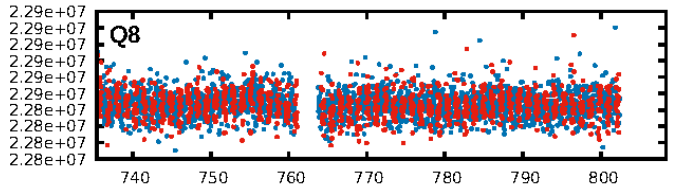
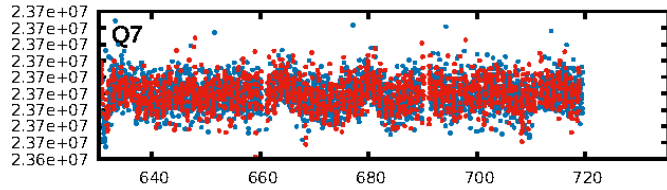
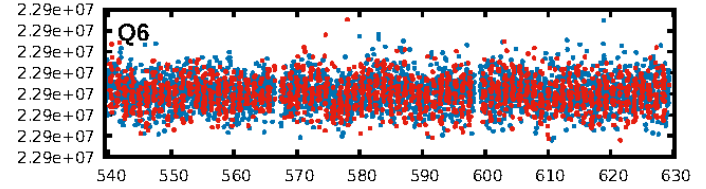
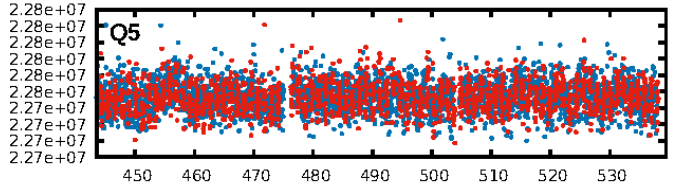
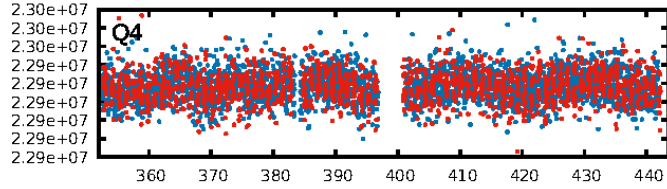
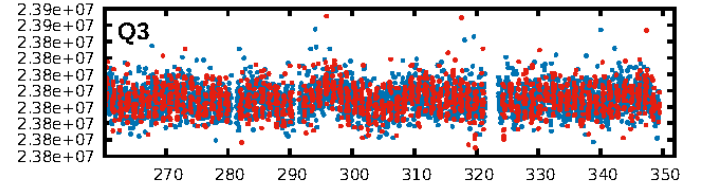
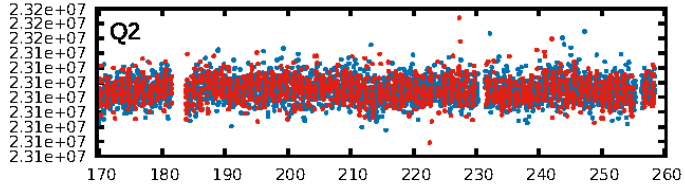
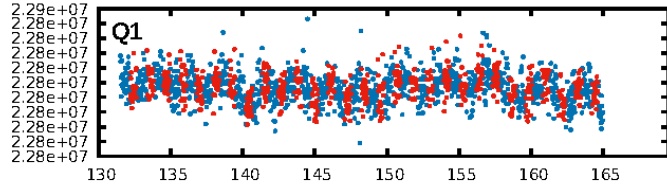
KIC: 9591480 Candidate: 1 of 1 Period: 1.143 d



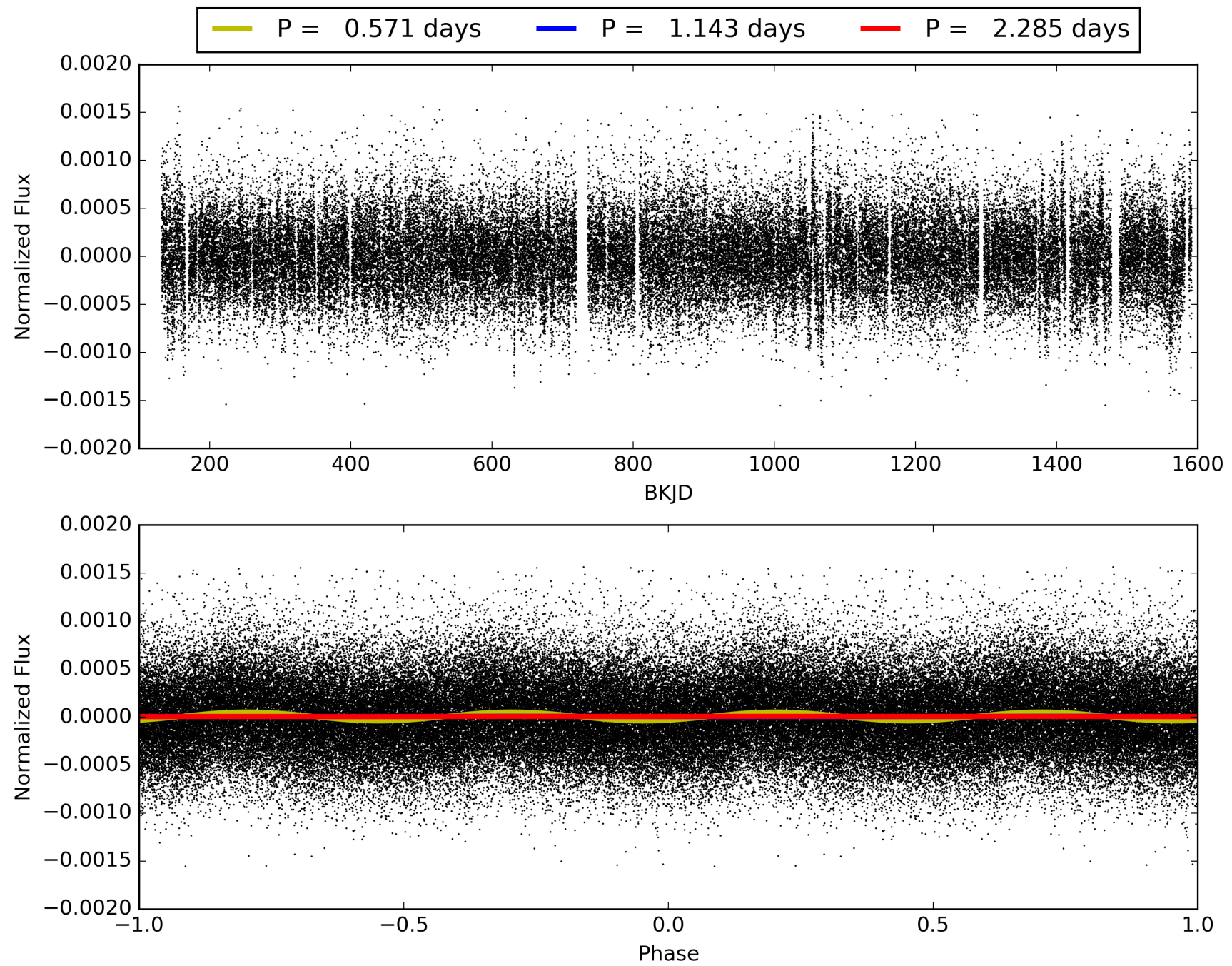
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 30-Jan-2016 16:07:27 Z

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

TCE 009591480-01, PDC Light Curves

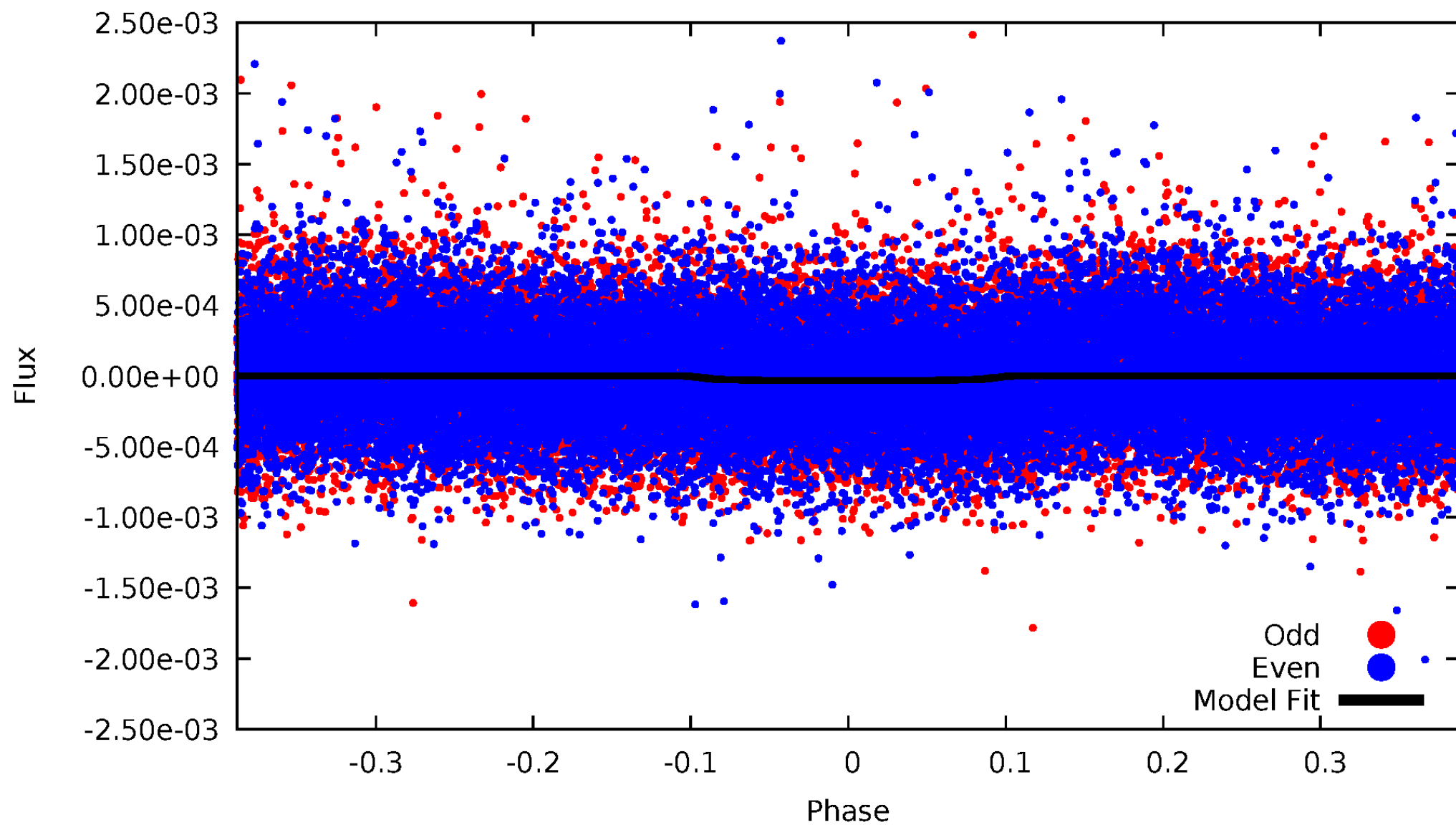


TCE 009591480-01



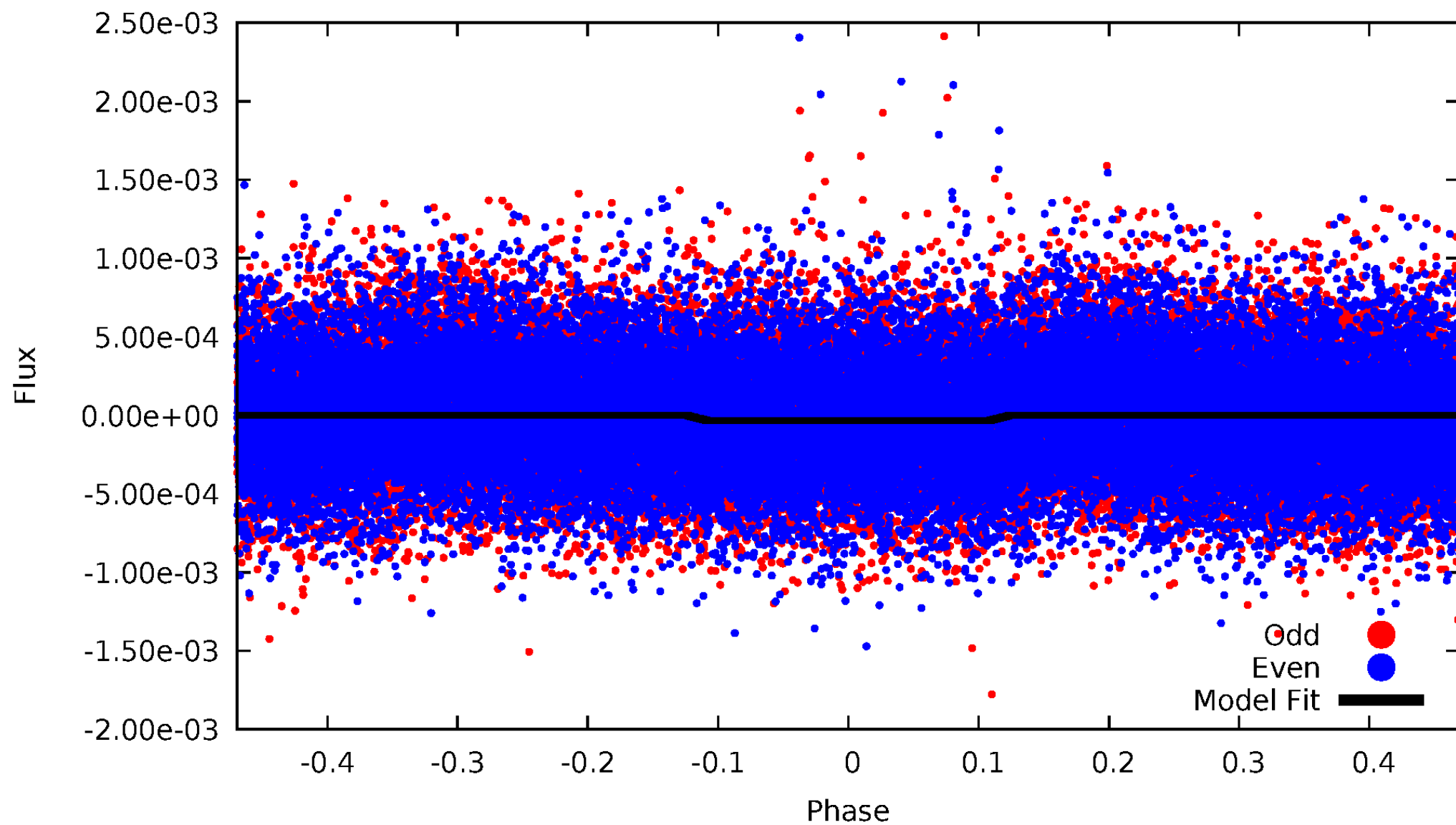
DV Odd/Even

TCE 009591480-01



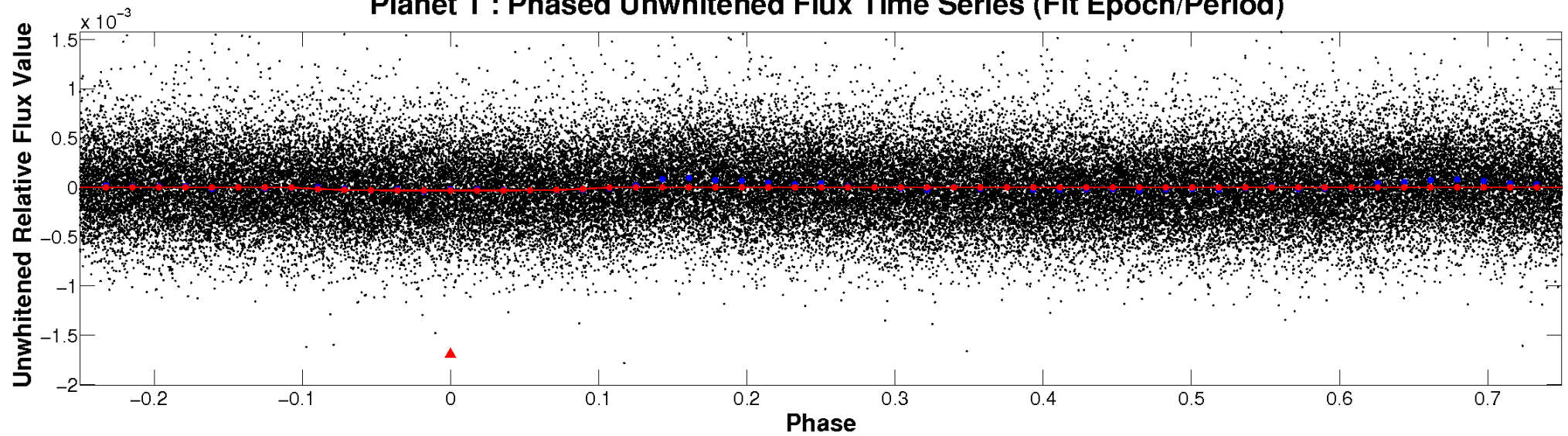
ALT Odd/Even

TCE 009591480-01

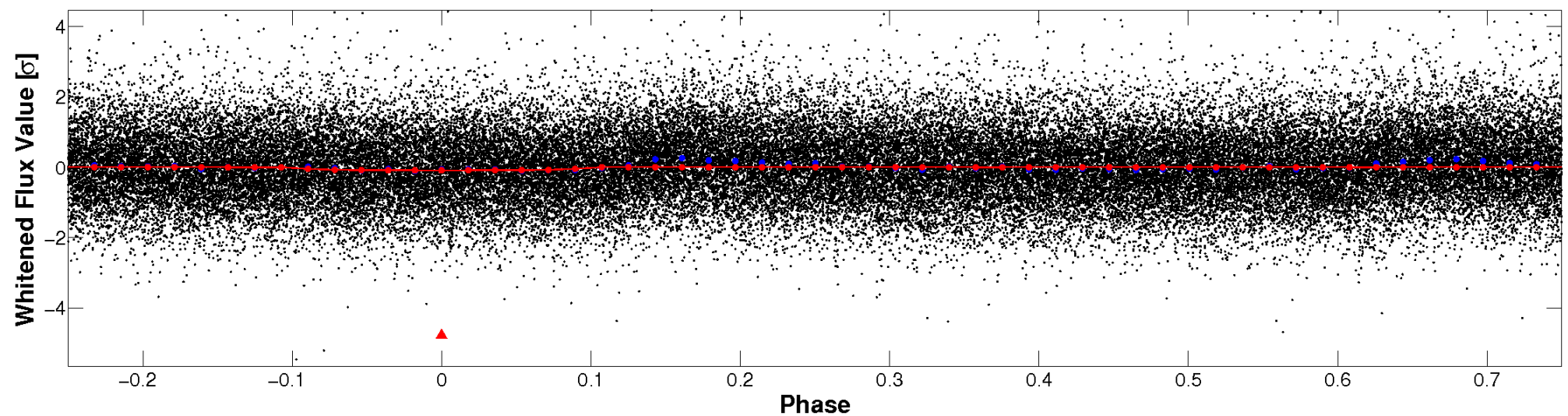


Non-Whitened Vs. Whitened Light Curve

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

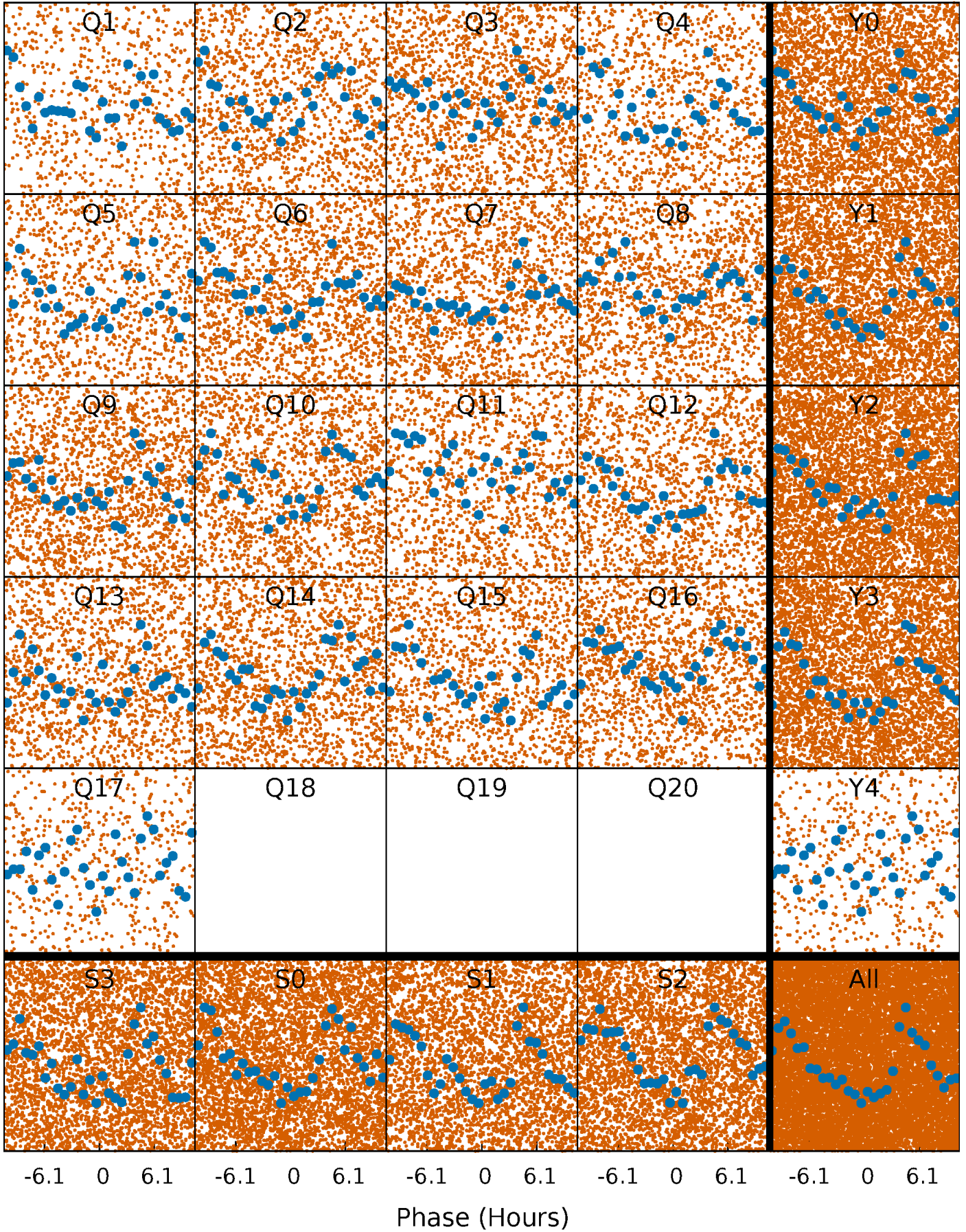


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



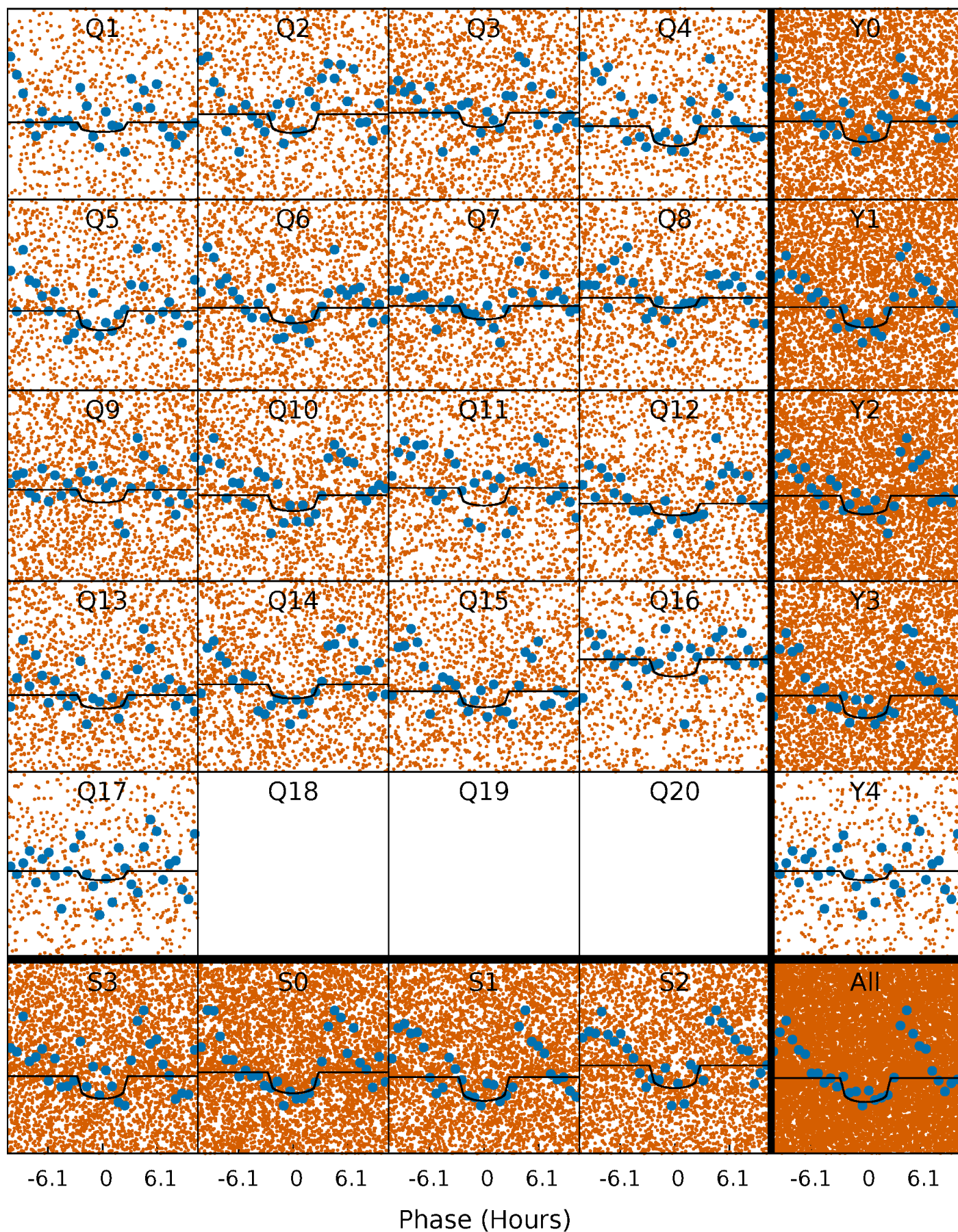
PDC Quarter-Phased Transit Curves

TCE 009591480-01 P= 1.142725 Days $T_0=132.422548$ (BKJD)



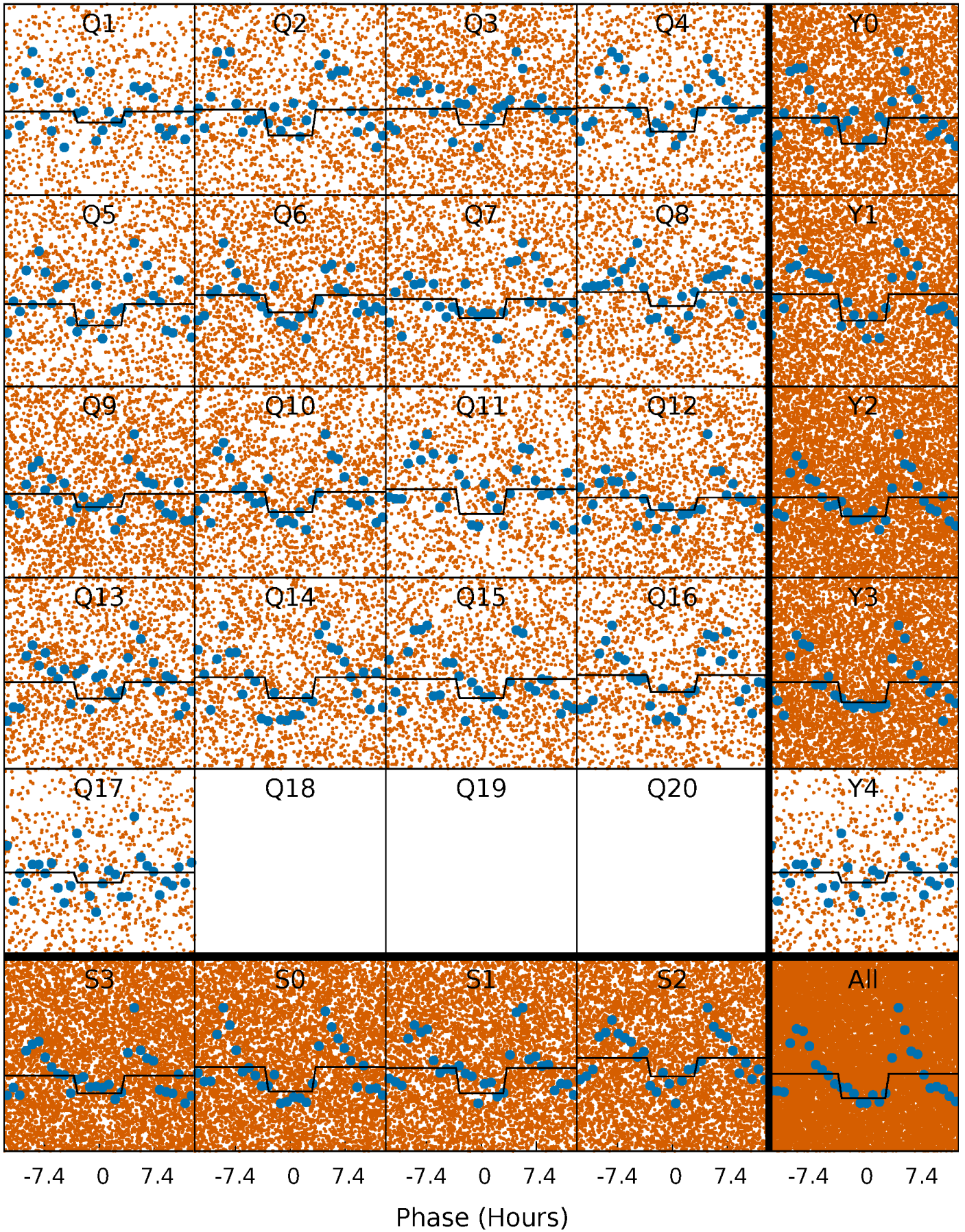
DV Quarter-Phased Transit Curves

TCE 009591480-01 P= 1.142725 Days $T_0=132.422548$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

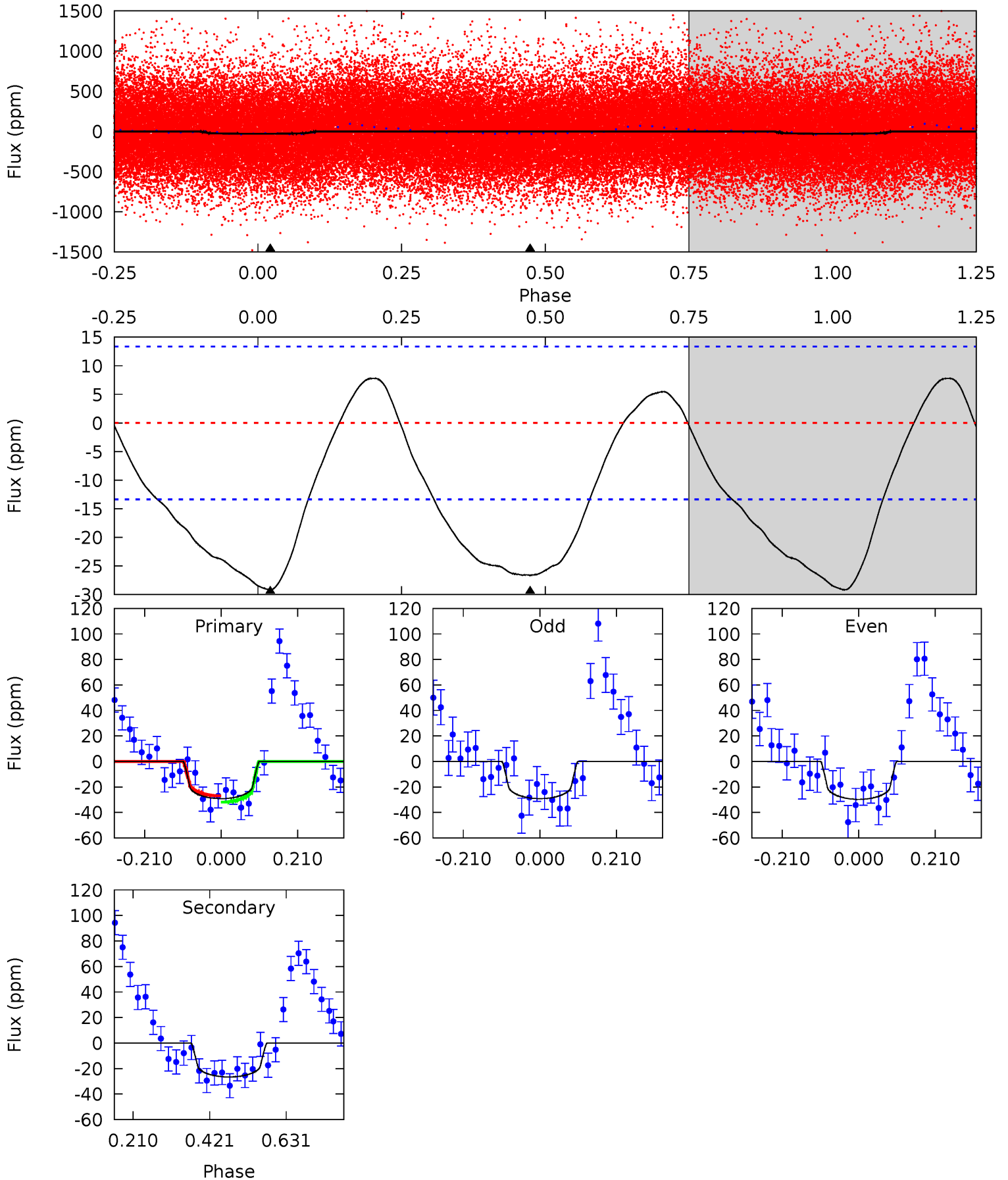
TCE 009591480-01 P= 1.142761 Days $T_0=132.386150$ (BKJD)



DV Model-Shift Uniqueness Test

009591480-01, P = 1.142725 Days, E = 131.279823 Days

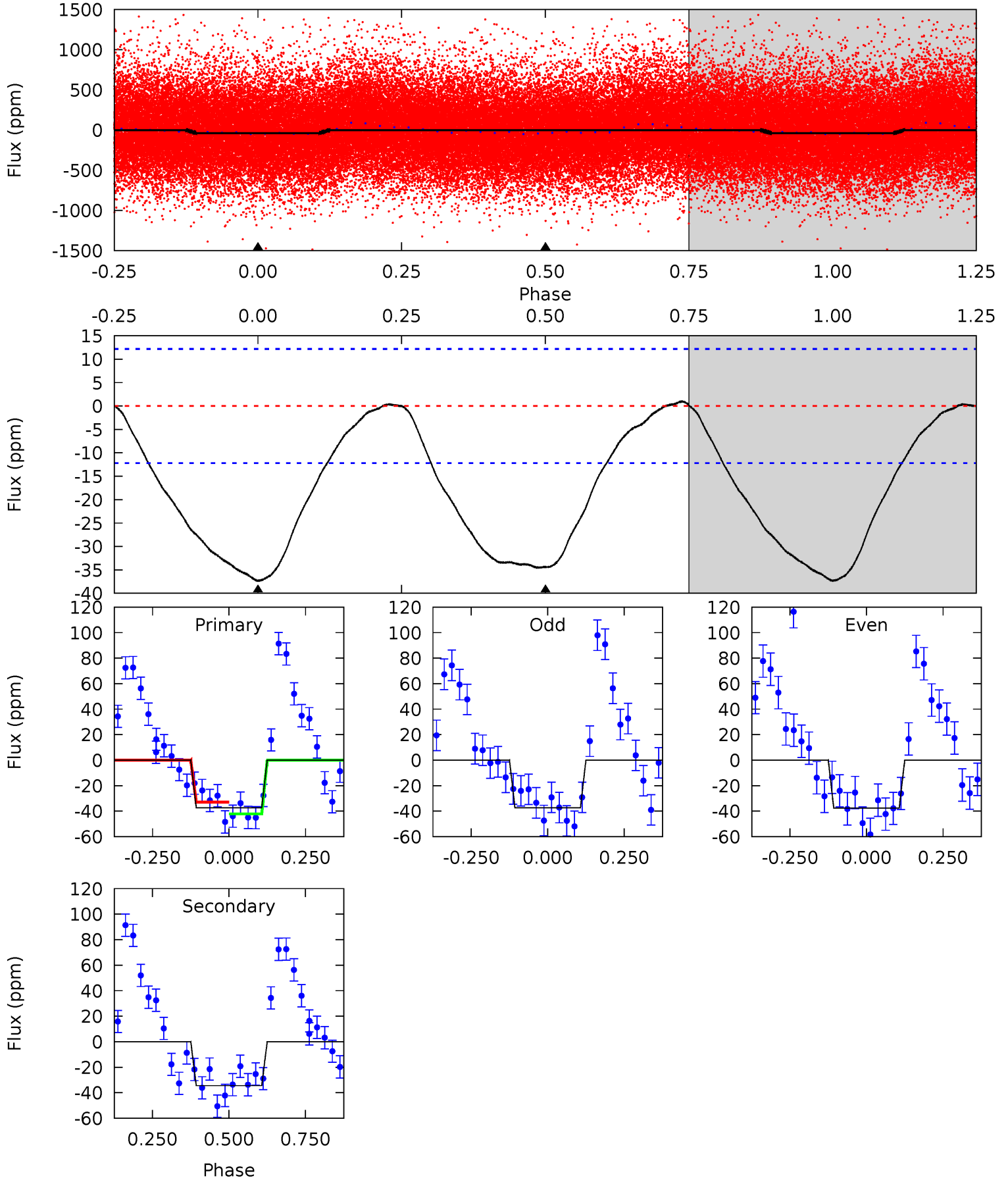
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
9.63	8.78	0	0	4.41	1.25	1.81	9.63	9.63	8.78	8.78	0.09	0.90	0.21	0.81



Alt Model-Shift Uniqueness Test

009591480-01, P = 1.142761 Days, E = 131.243389 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
13.4	12.3	0	0	4.37	1.15	0.50	13.4	13.4	12.3	12.3	0.03	0.95	0.03	1.65



Stellar Parameters For KIC 009591480

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$\rho_{\star} (\text{g}\cdot\text{cm}^{-3})$
	6089^{+181}_{-199}	$4.468^{+0.056}_{-0.224}$	$-0.180^{+0.300}_{-0.300}$	$0.972^{+0.317}_{-0.106}$	$1.006^{+0.156}_{-0.117}$	$1.543^{+0.453}_{-0.828}$
	+3%/-3%	+1%/-5%	+167%/-167%	+33%/-11%	+16%/-12%	+29%/-54%
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 009591480-01 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	-27 ± 3	$0.69^{+0.49}_{-0.41}$	2578^{+201}_{-131}	5477^{+3842}_{-1086}	13^{+73}_{-9}
Alt.	-34 ± 3	$0.74^{+0.46}_{-0.41}$	2586^{+193}_{-133}	5702^{+3549}_{-1105}	16^{+68}_{-10}

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 $A_{obs} \gg 1.0$

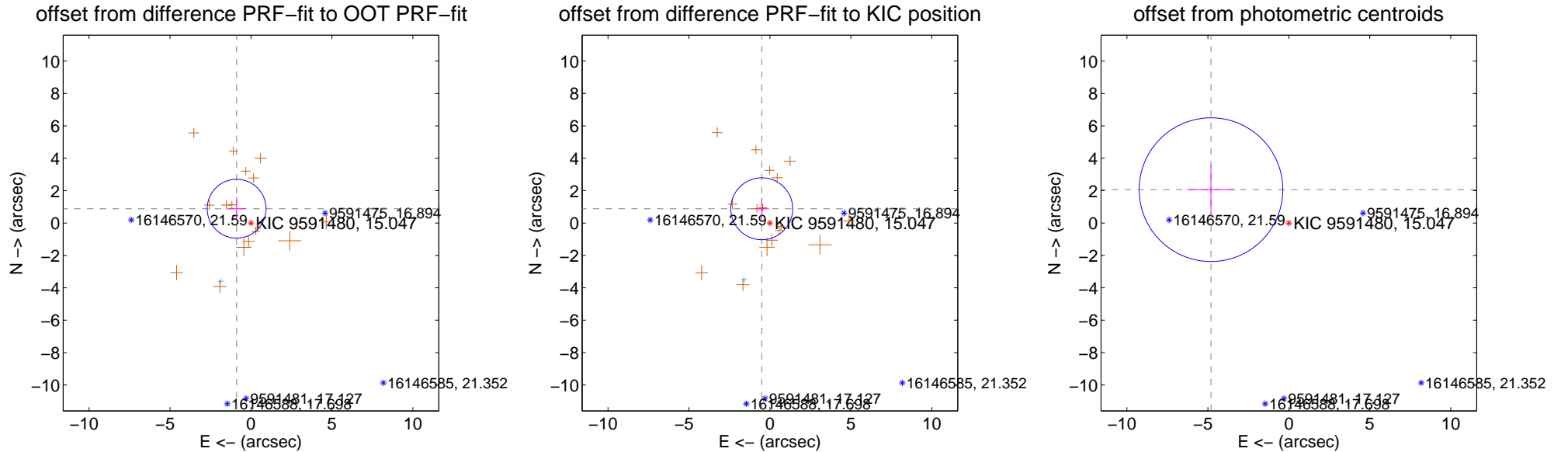
DV Centroid Data

Supplemental centroid analysis for 009591480-01. Kepler magnitude: 15.05. Transit SNR 8.33

There are 1 quarters with good PRF difference image offsets

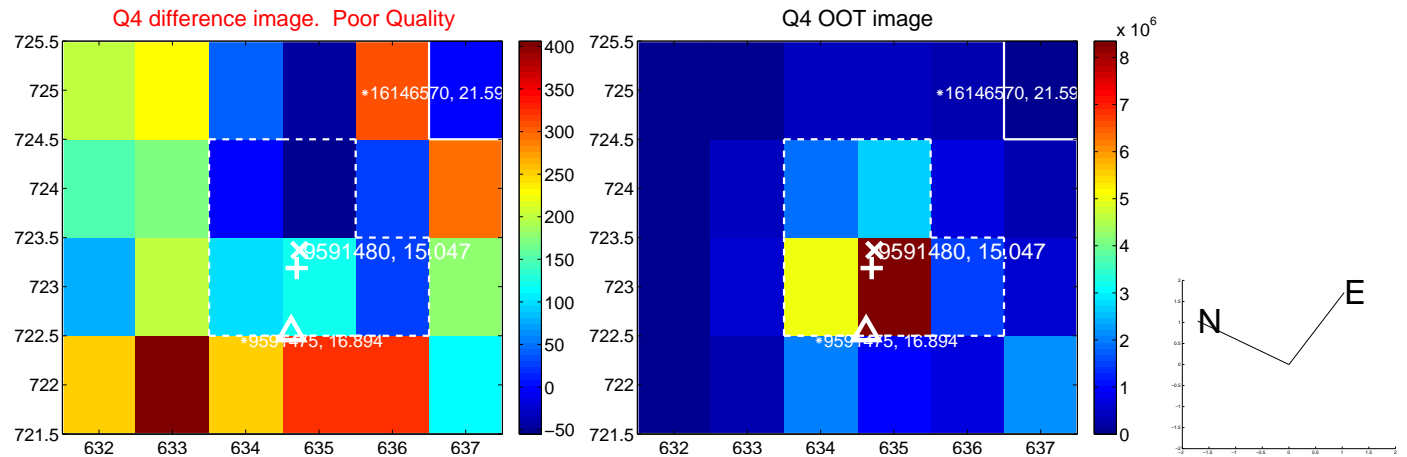
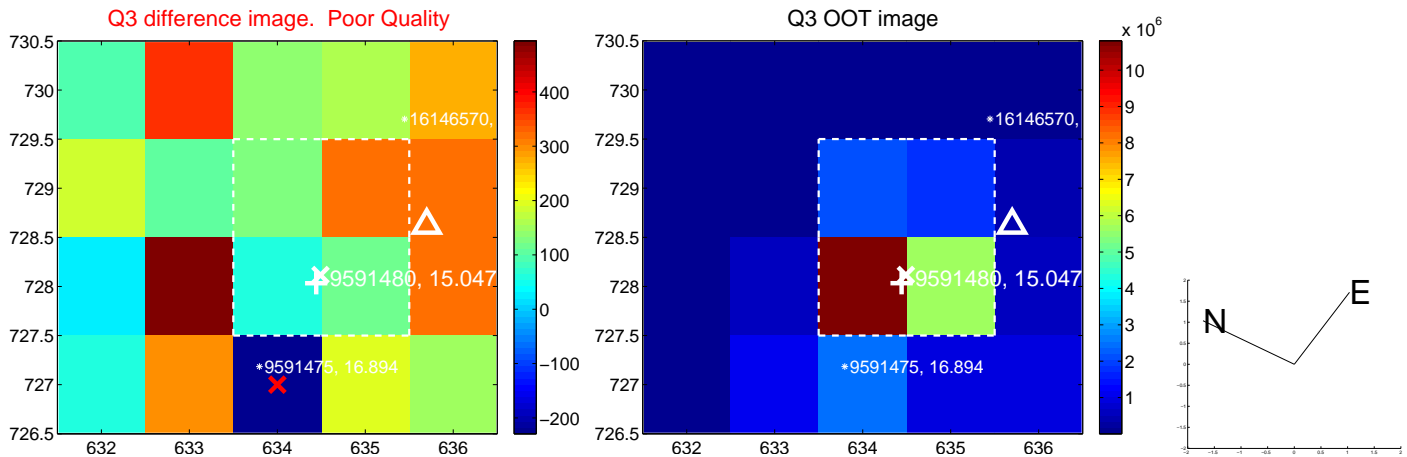
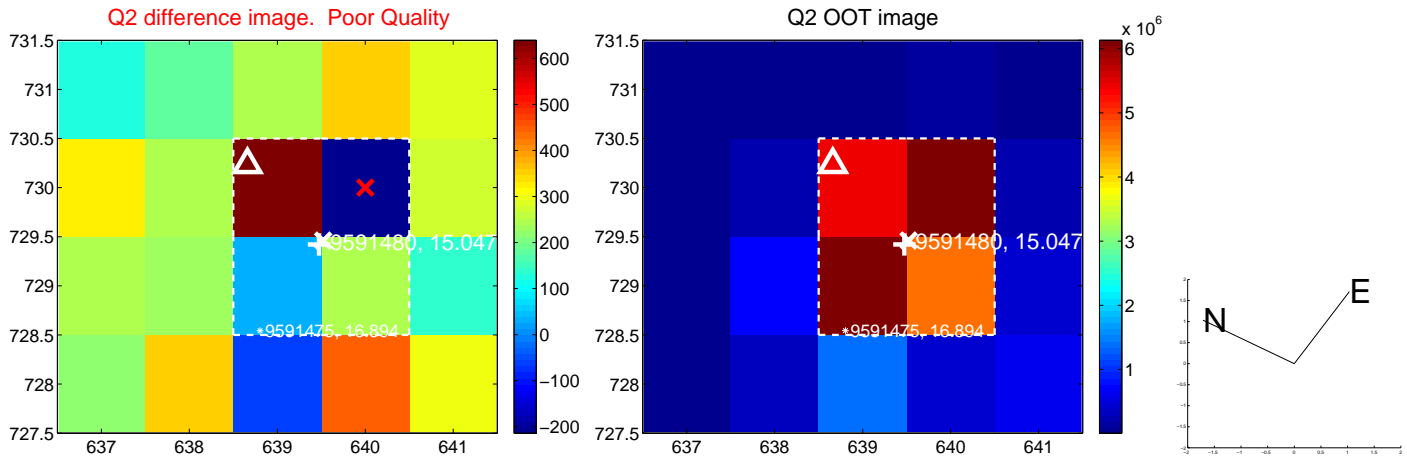
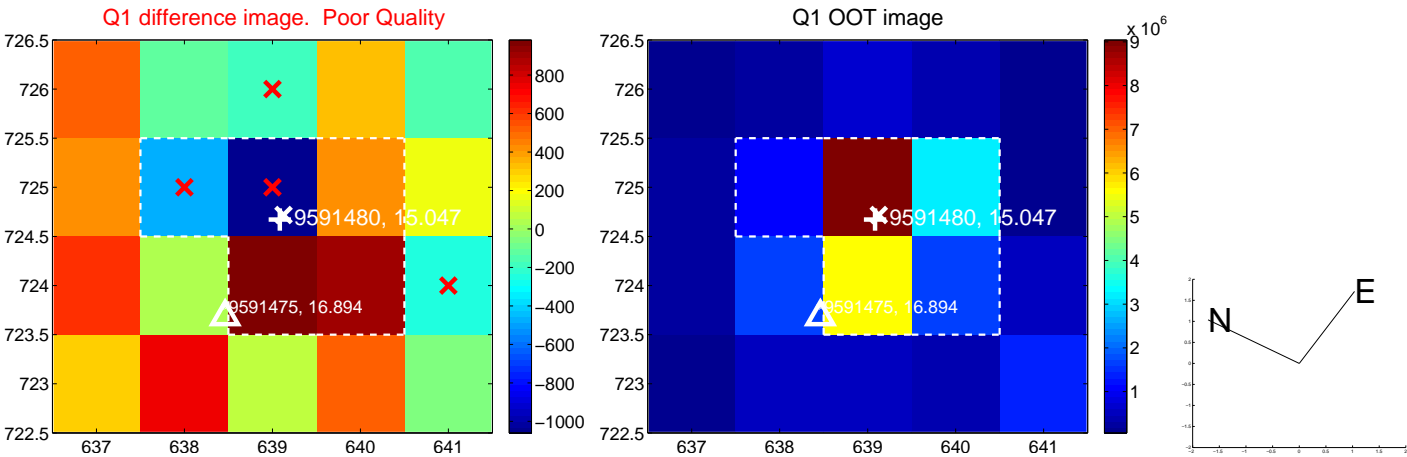
The direct PRF centroid is offset from the target star catalog position by about 0.27 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	1.251 ± 0.606	2.07	0.886 ± 0.513	0.883 ± 0.716
PRF-fit source offset from KIC position	1.015 ± 0.637	1.59	0.503 ± 0.446	0.882 ± 0.688
photometric centroid source offset	5.23 ± 1.48	3.54	4.81 ± 1.47	2.06 ± 1.52

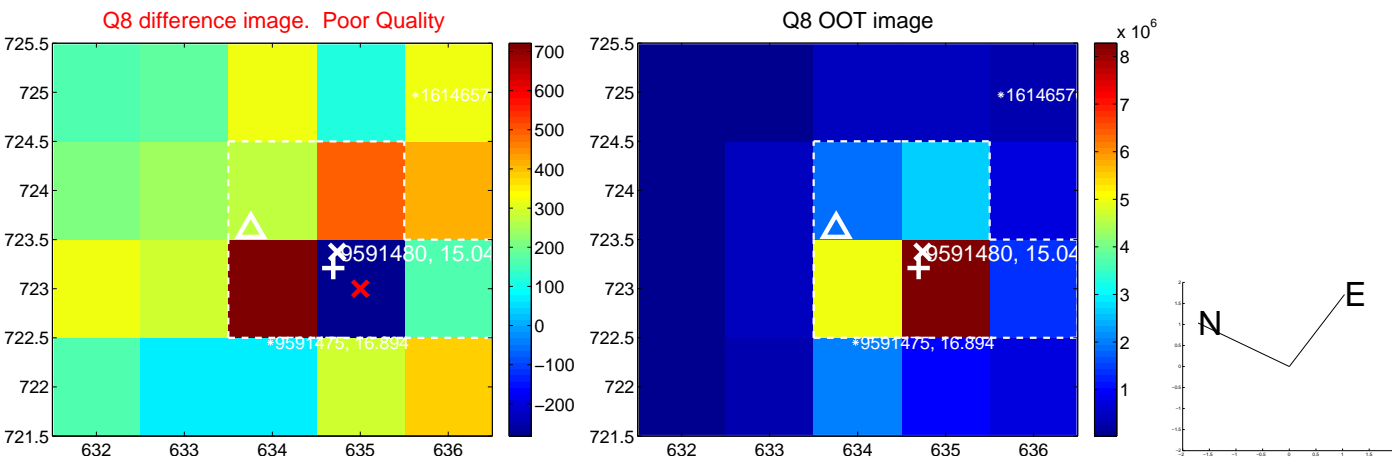
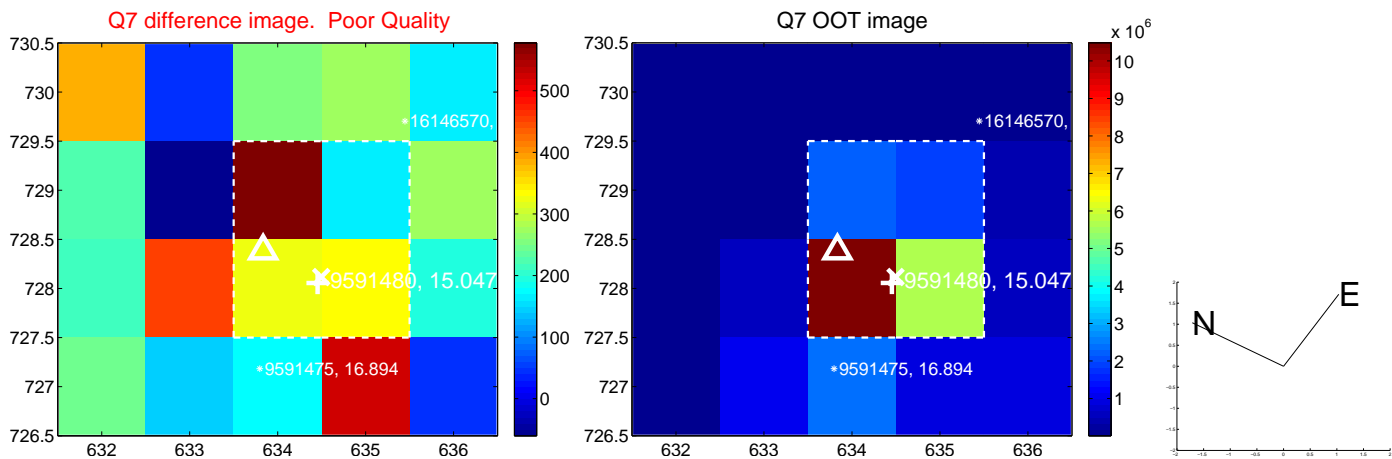
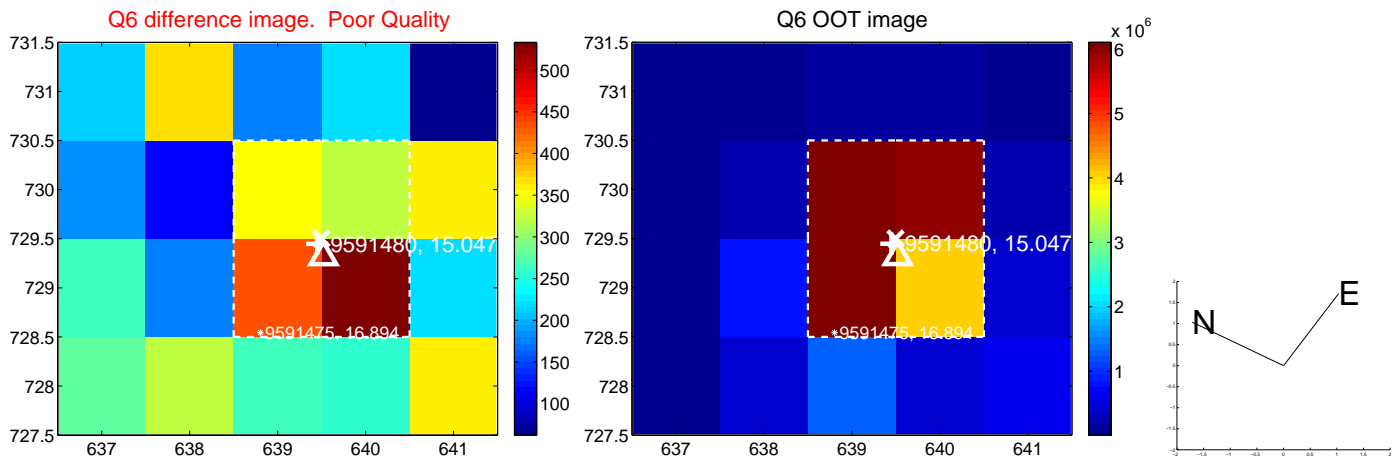
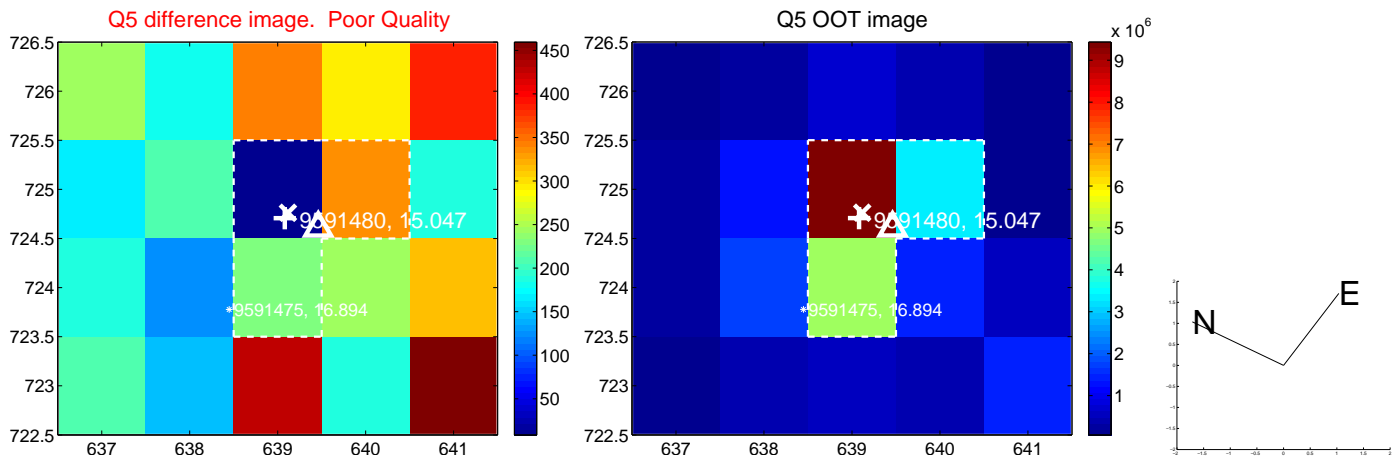


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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

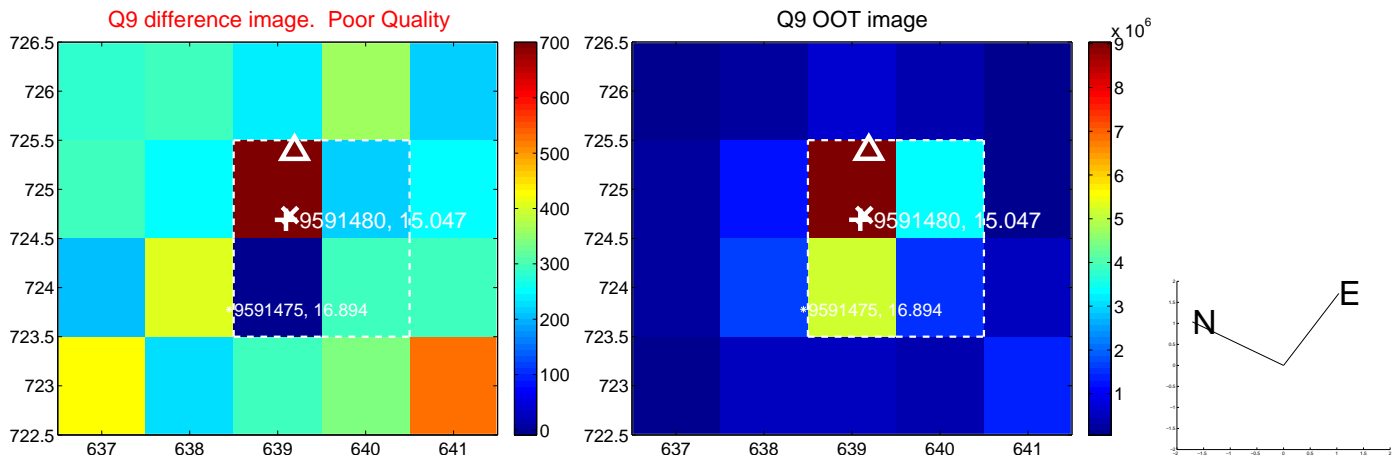
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



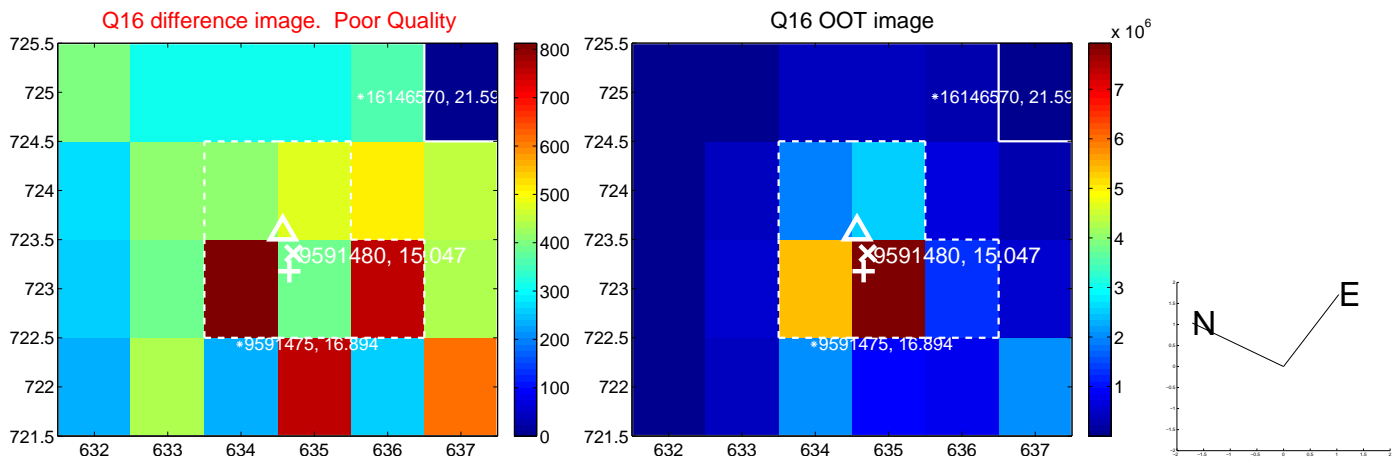
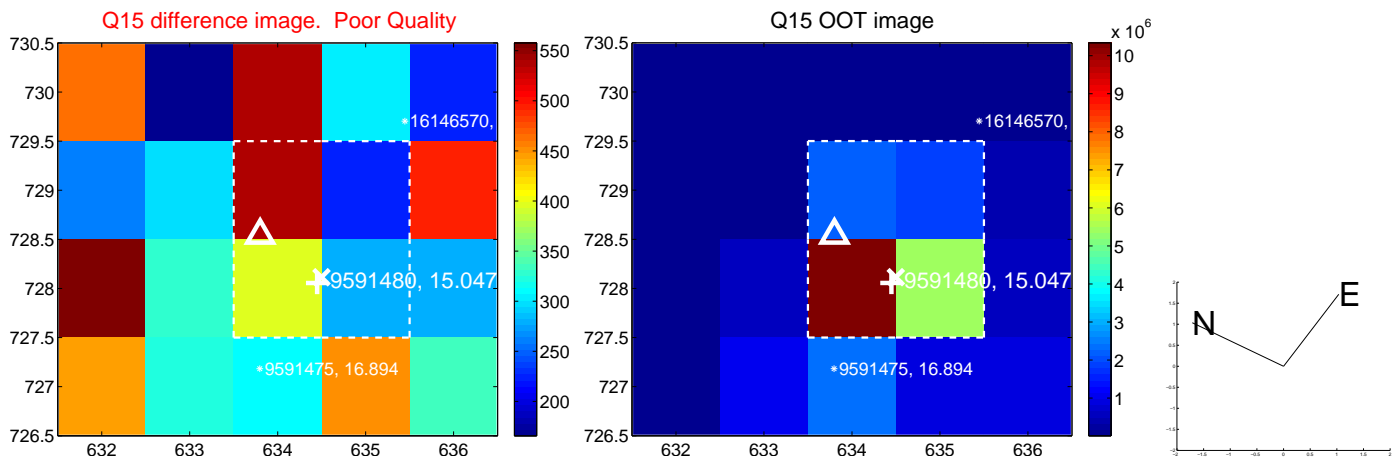
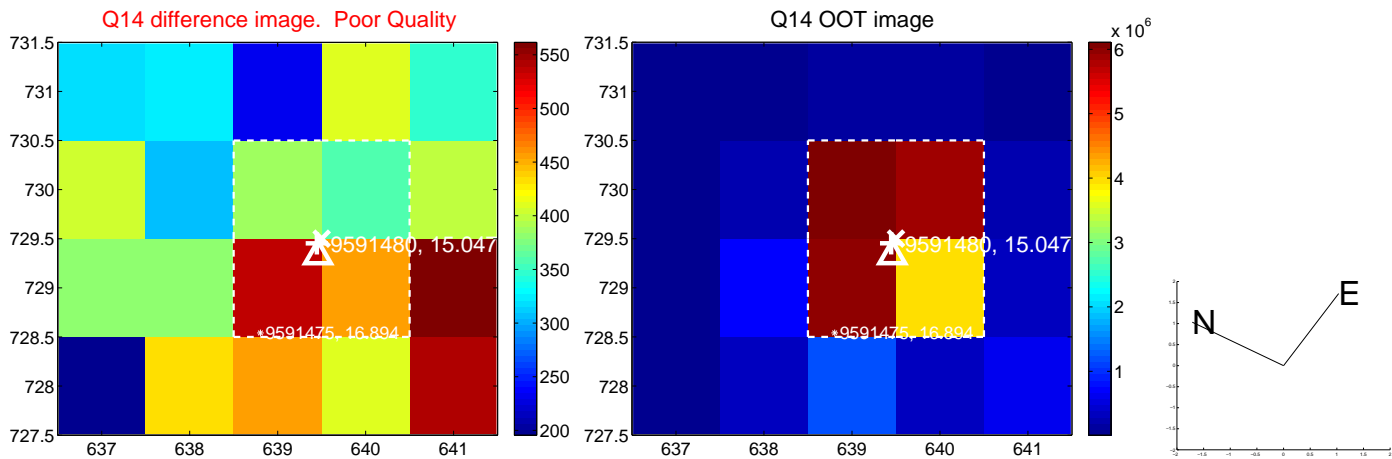
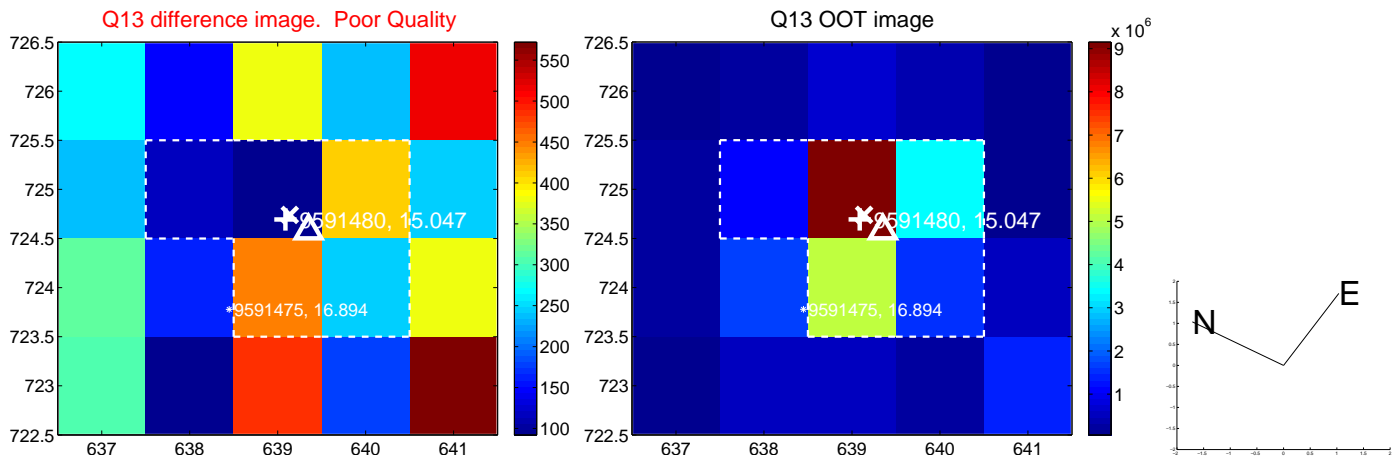
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



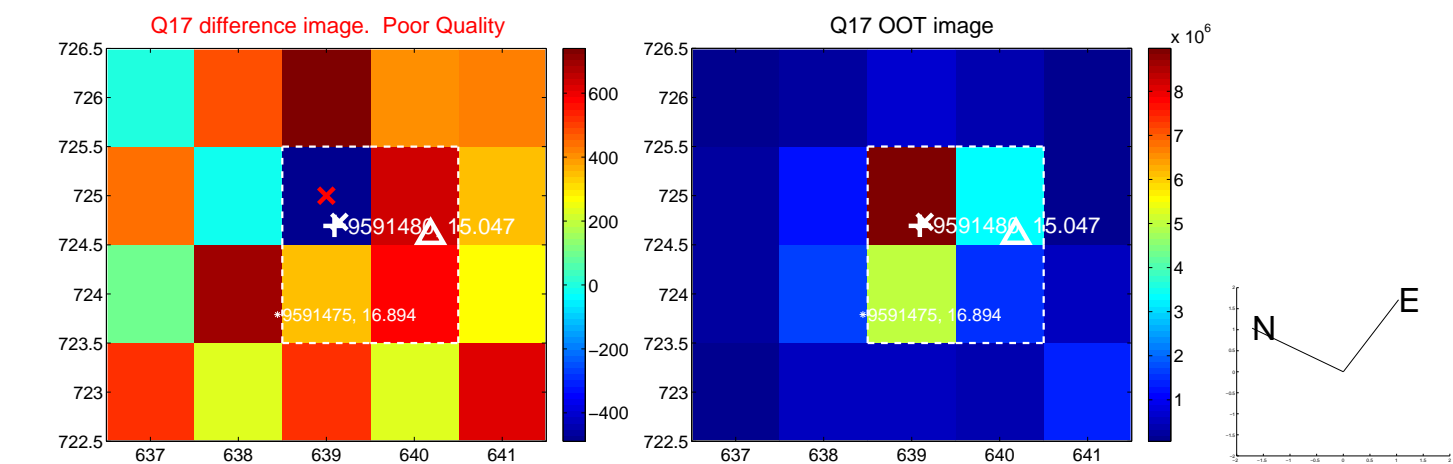
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



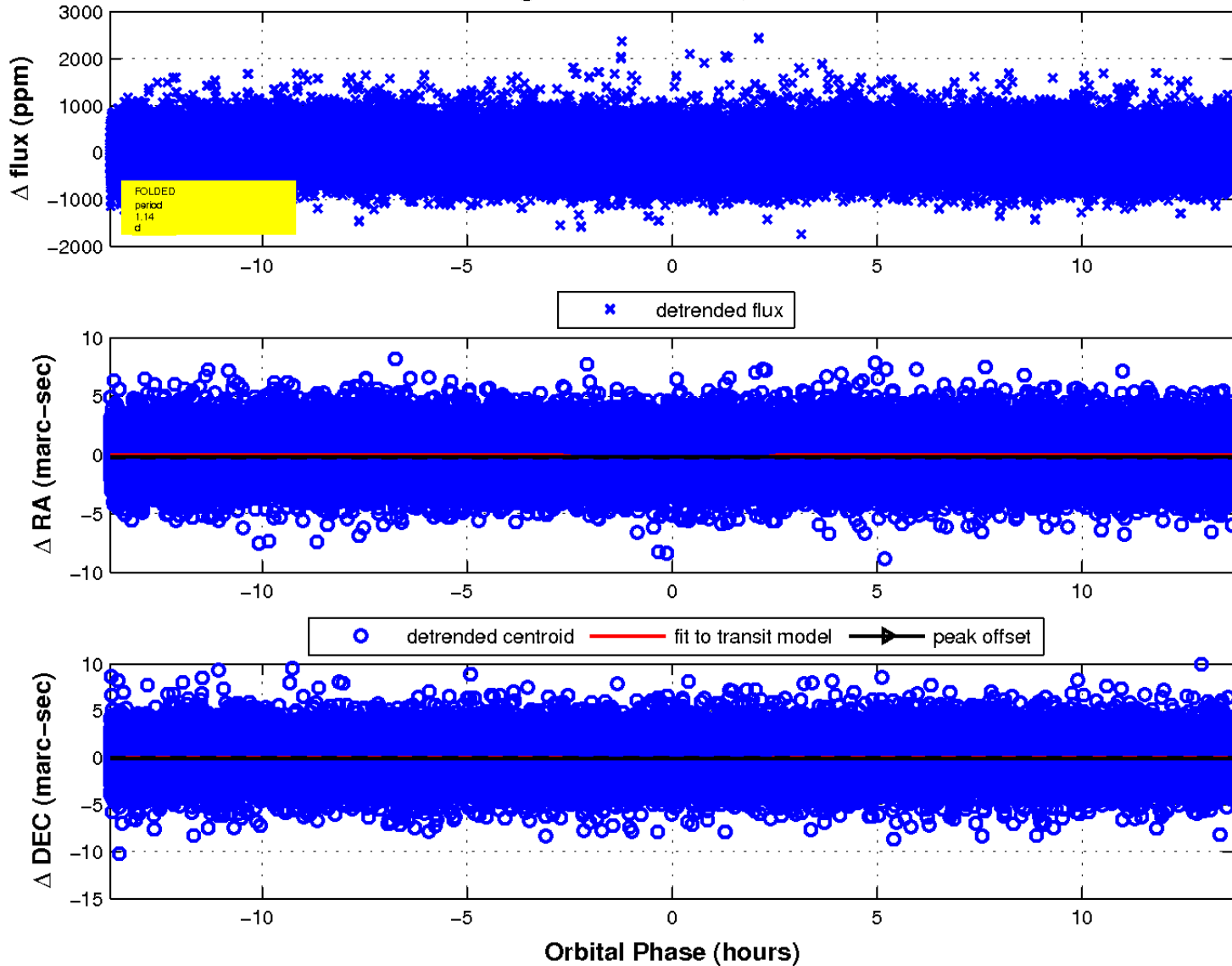
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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



fluxWeightedCentroids, Planet 1 of 1



UKIRT Image

Declination

