

KIC 012555688

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})
012555688-01	OBS	No	1.185475	132.694902	25.8	14.226	7.6	7.8	1.06	6214	0.54	3010.27

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
012555688-01	OBS	FP	0.00	1	0	0	0	LPP_DV—MOD_NONUNIQ_ALT—CENT_FEW_DIFFS

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

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

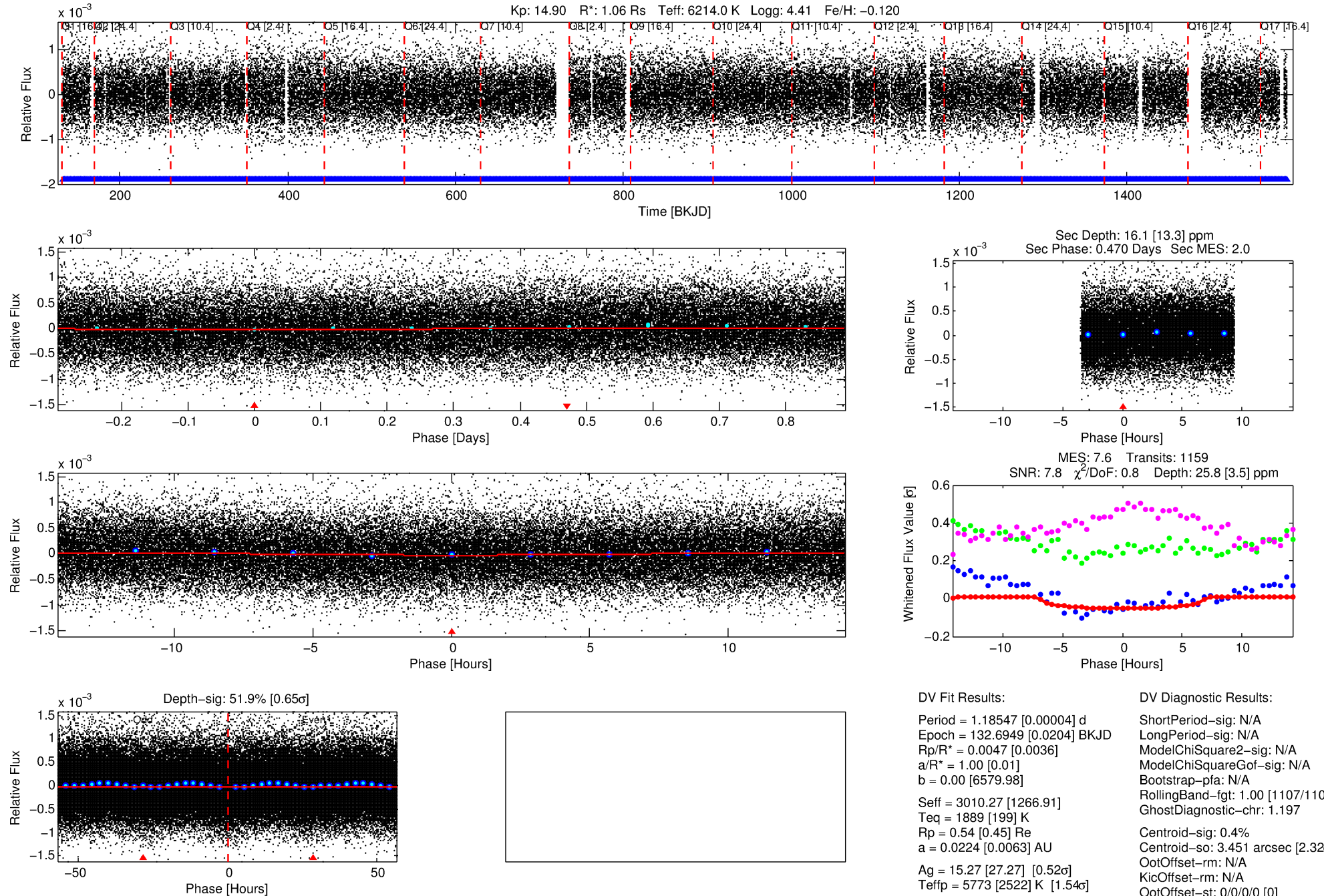
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 012555688-01

No Significant Match Found

DV One-Page Summary

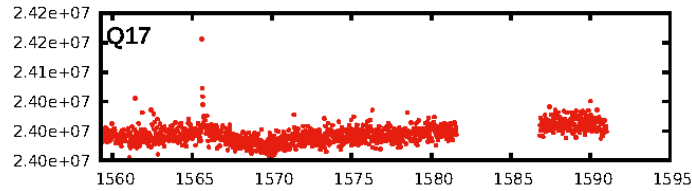
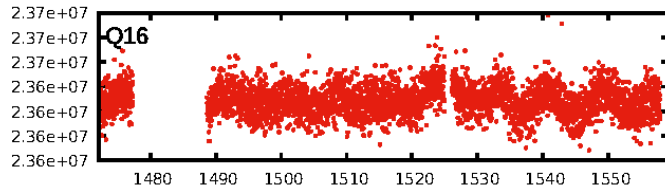
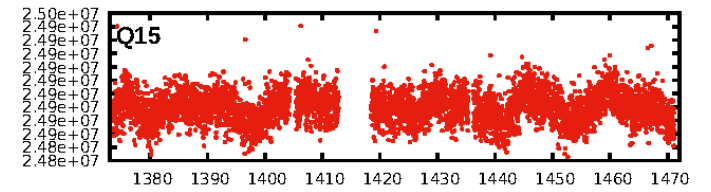
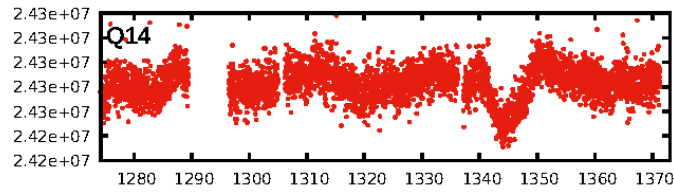
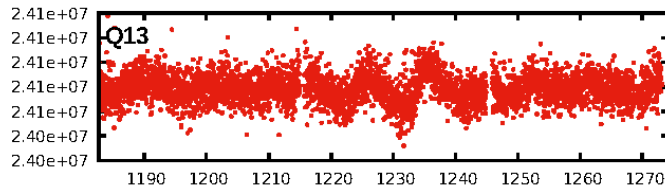
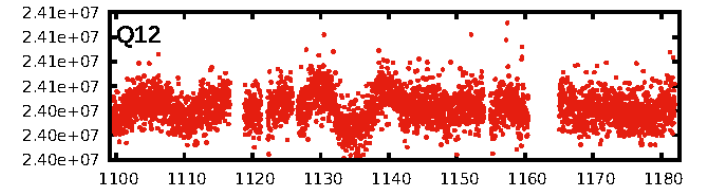
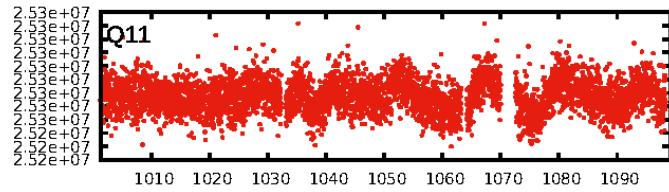
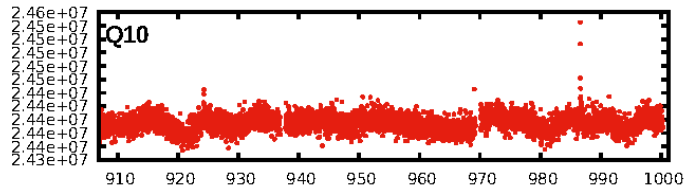
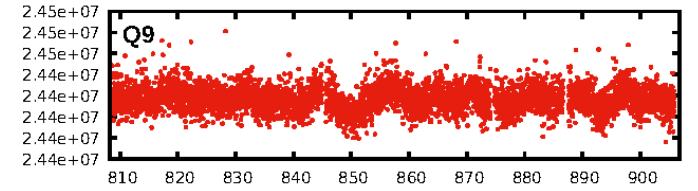
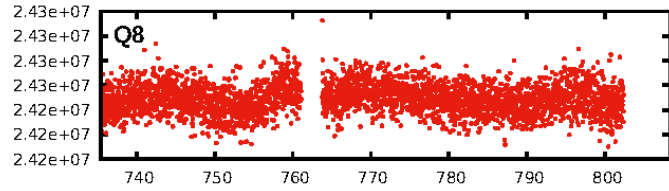
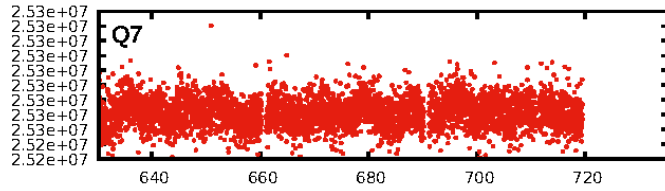
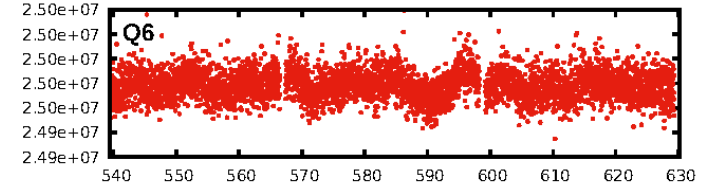
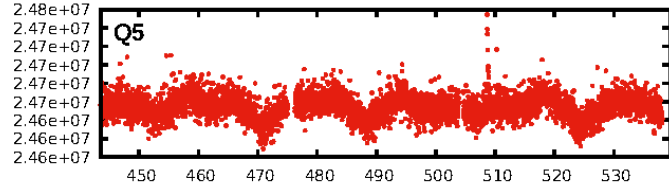
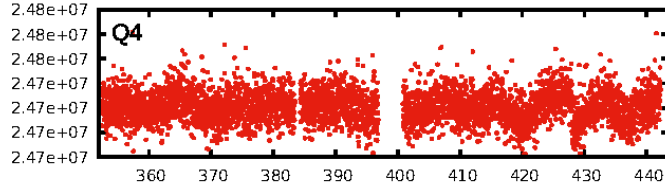
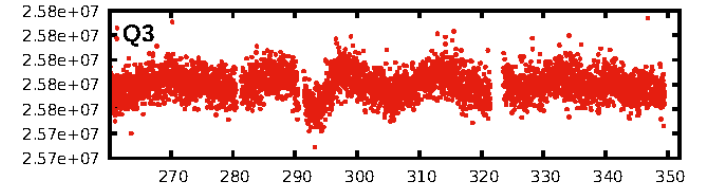
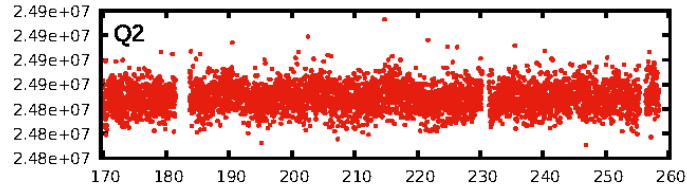
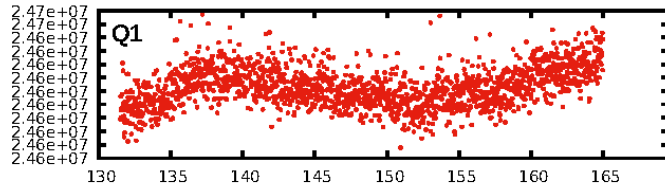
KIC: 12555688 Candidate: 1 of 1 Period: 1.185 d



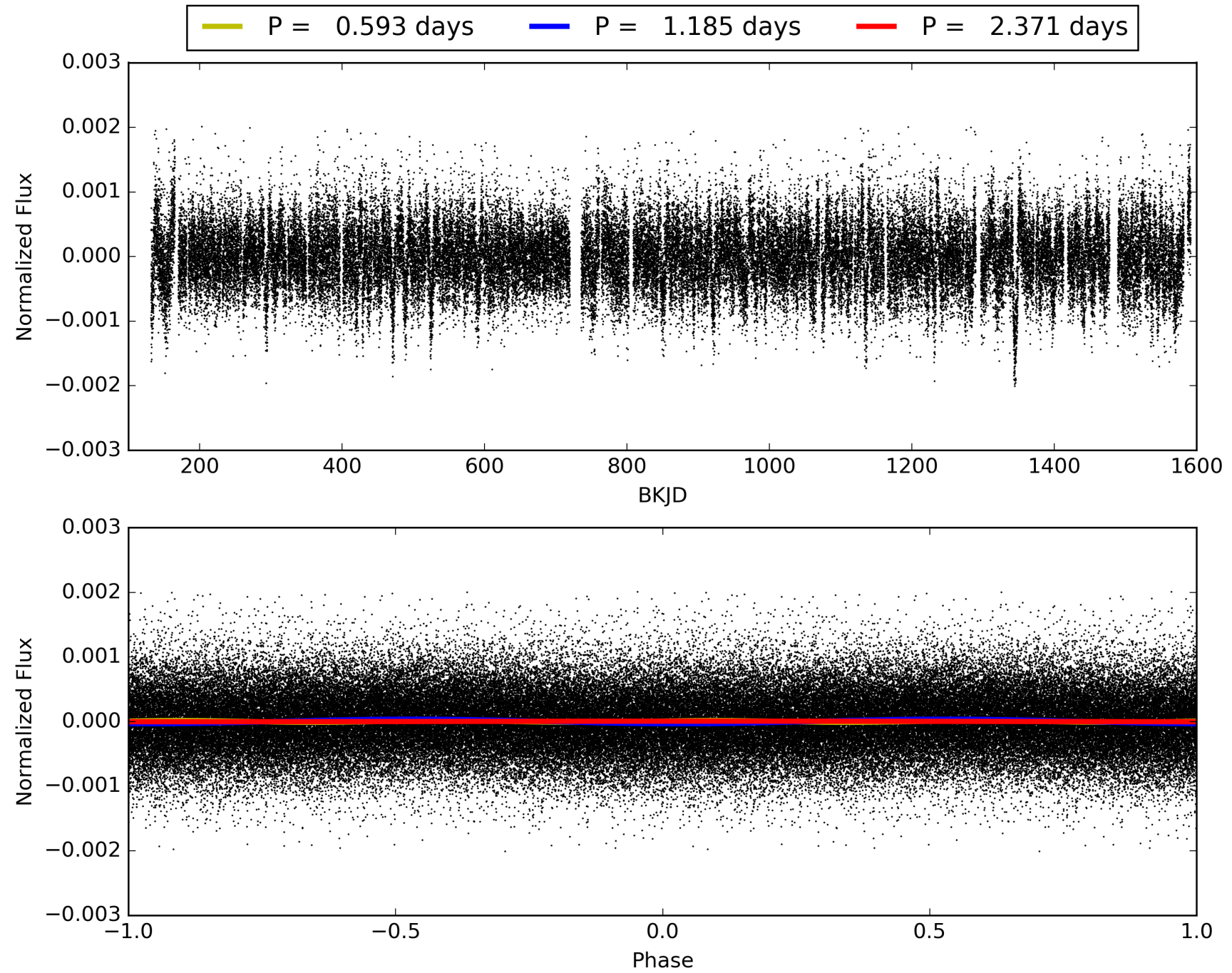
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 28-Jan-2016 21:18:31 Z

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

TCE 012555688-01, PDC Light Curves

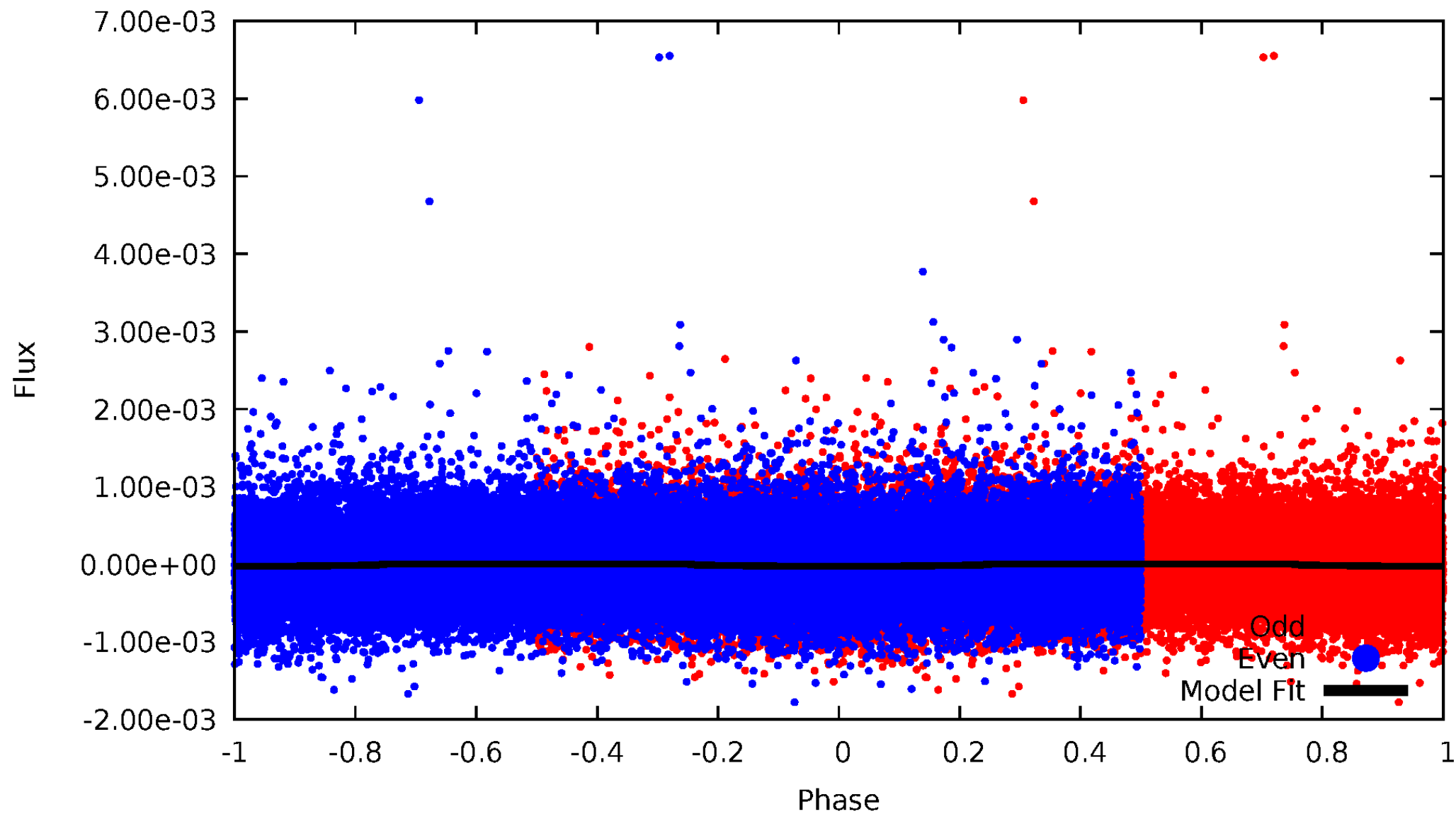


TCE 012555688-01



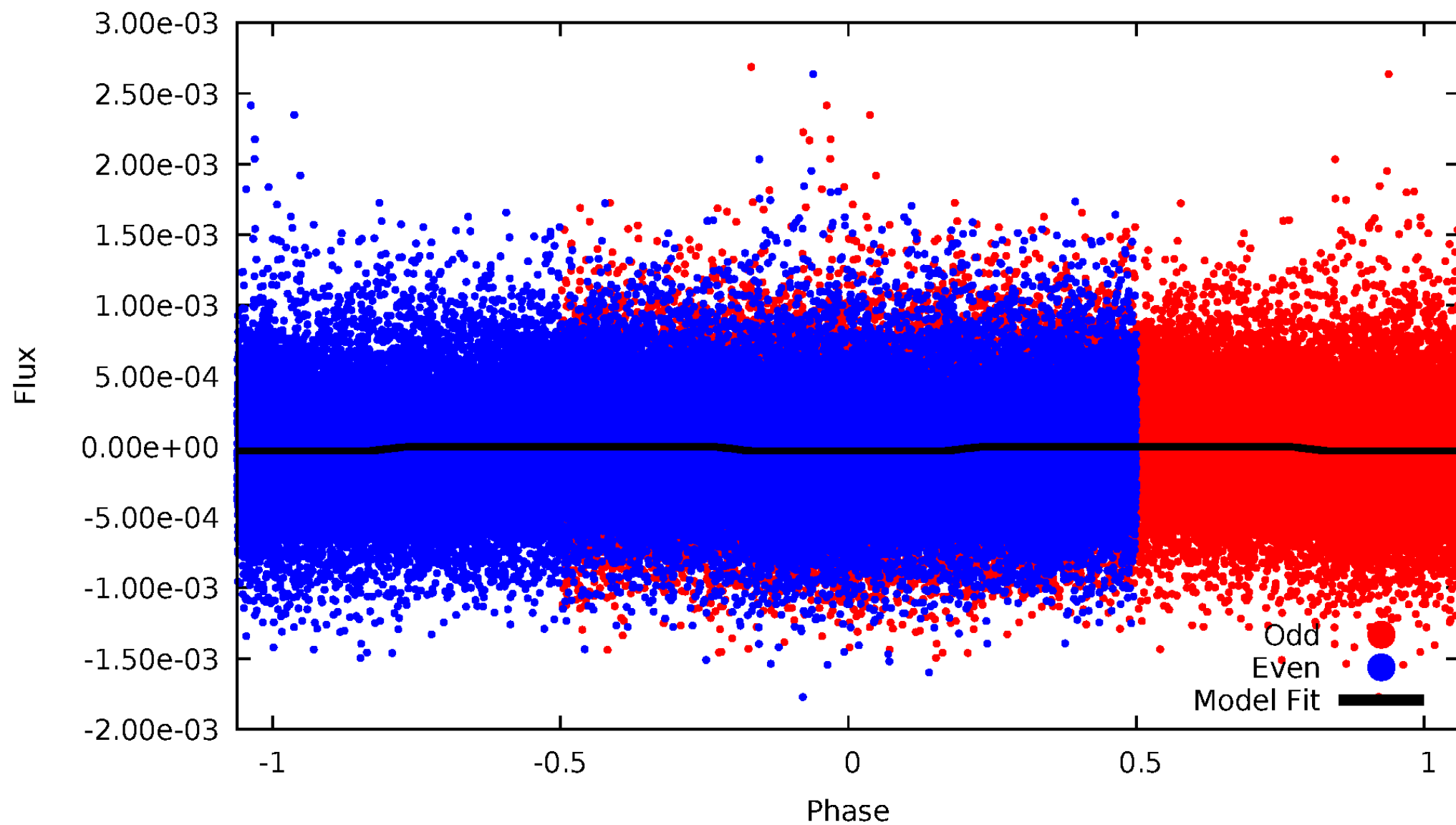
DV Odd/Even

TCE 012555688-01



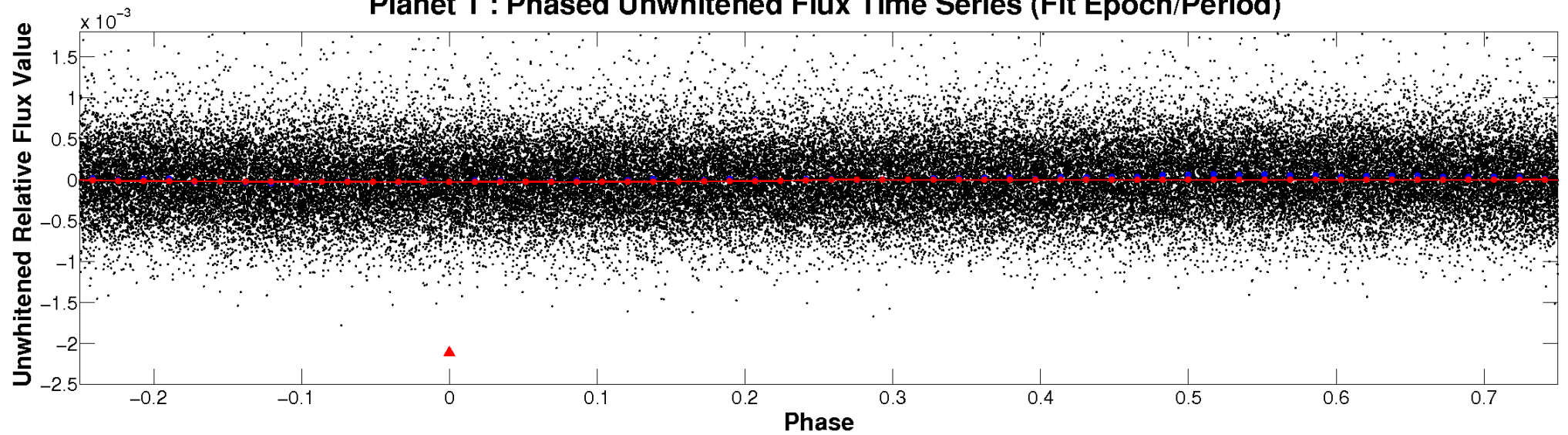
ALT Odd/Even

TCE 012555688-01

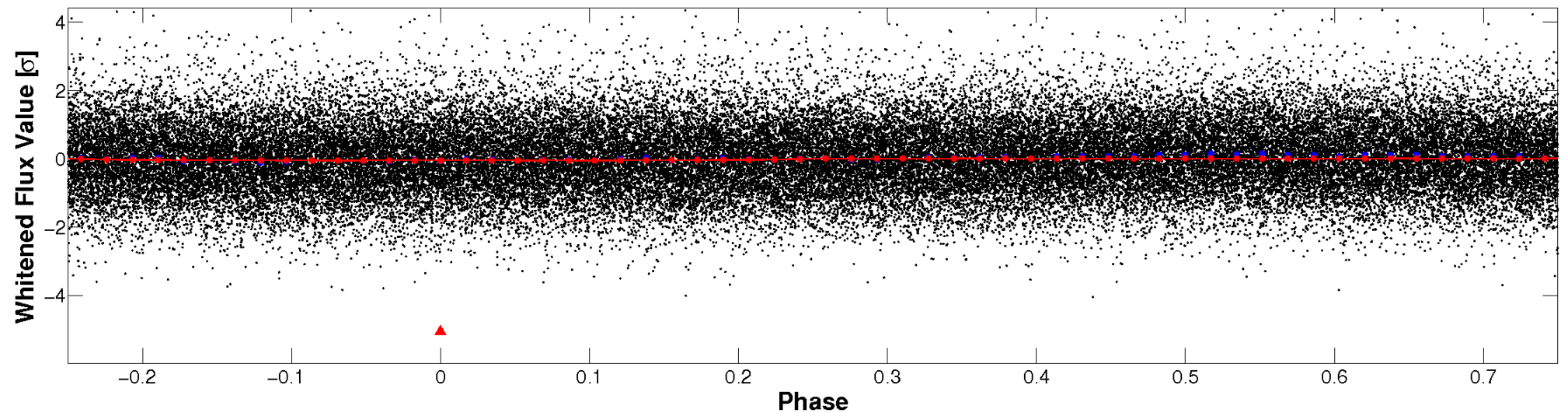


Non-Whitened Vs. Whitened Light Curve

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

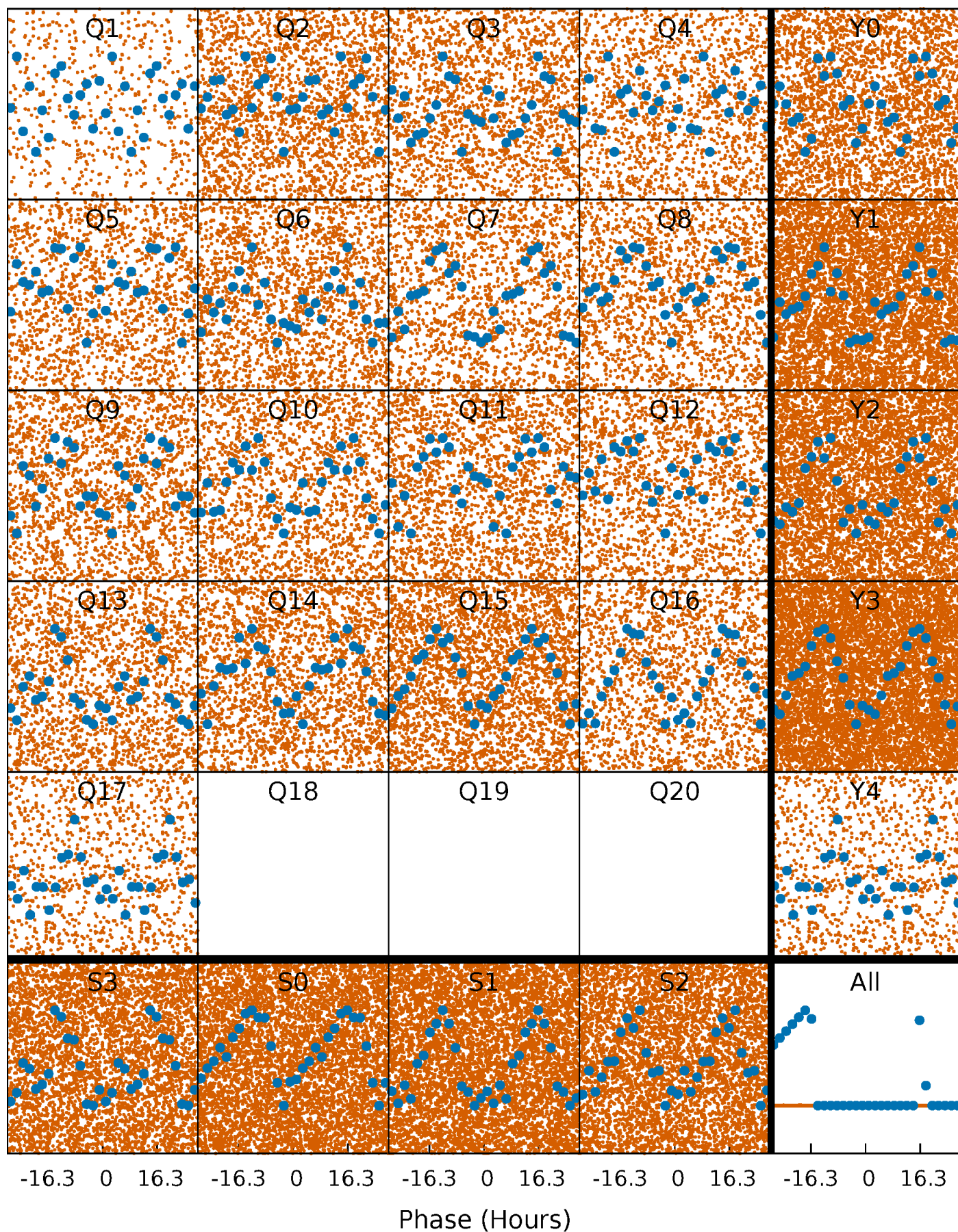


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



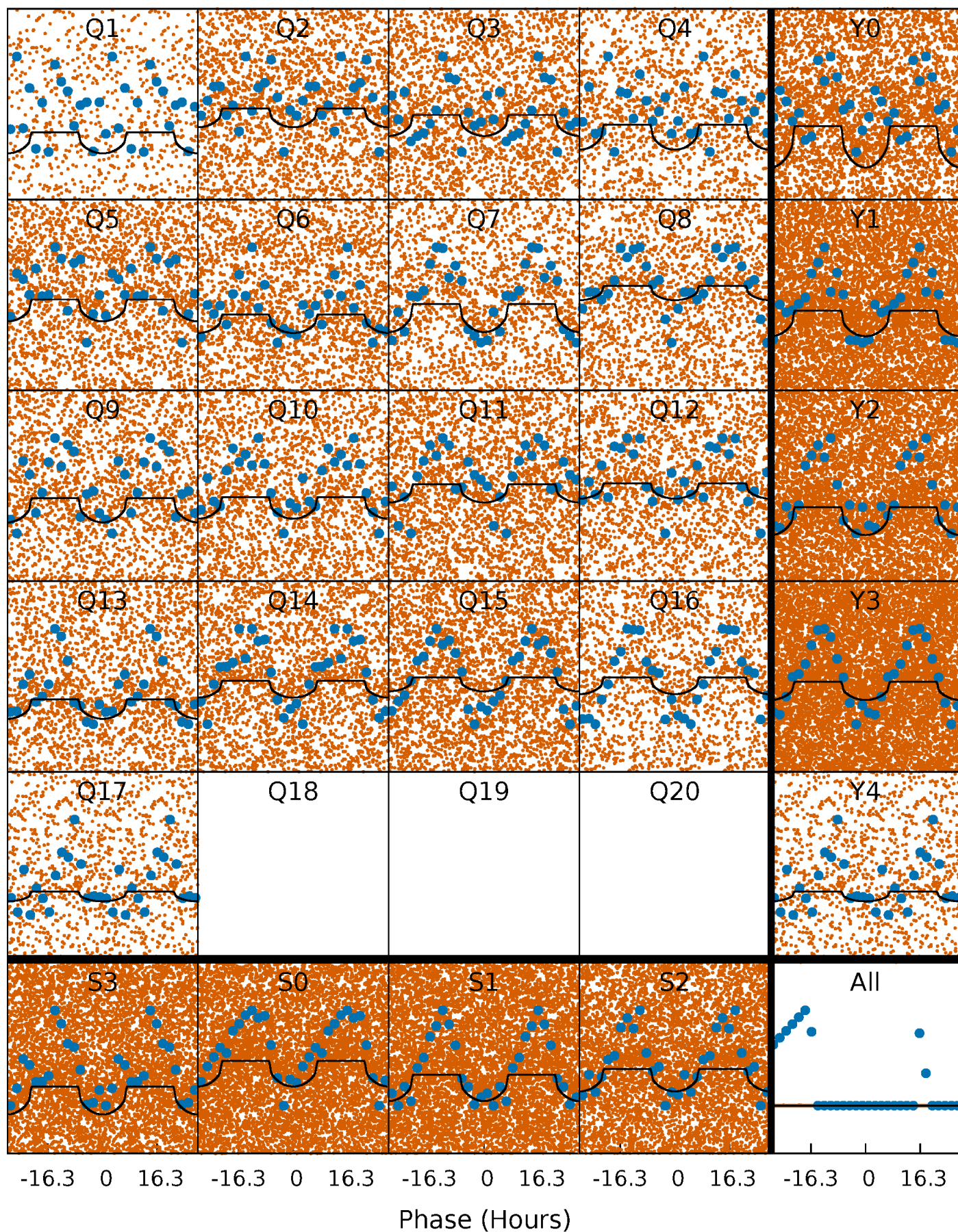
PDC Quarter-Phased Transit Curves

TCE 012555688-01 P= 1.185475 Days $T_0=132.694902$ (BKJD)



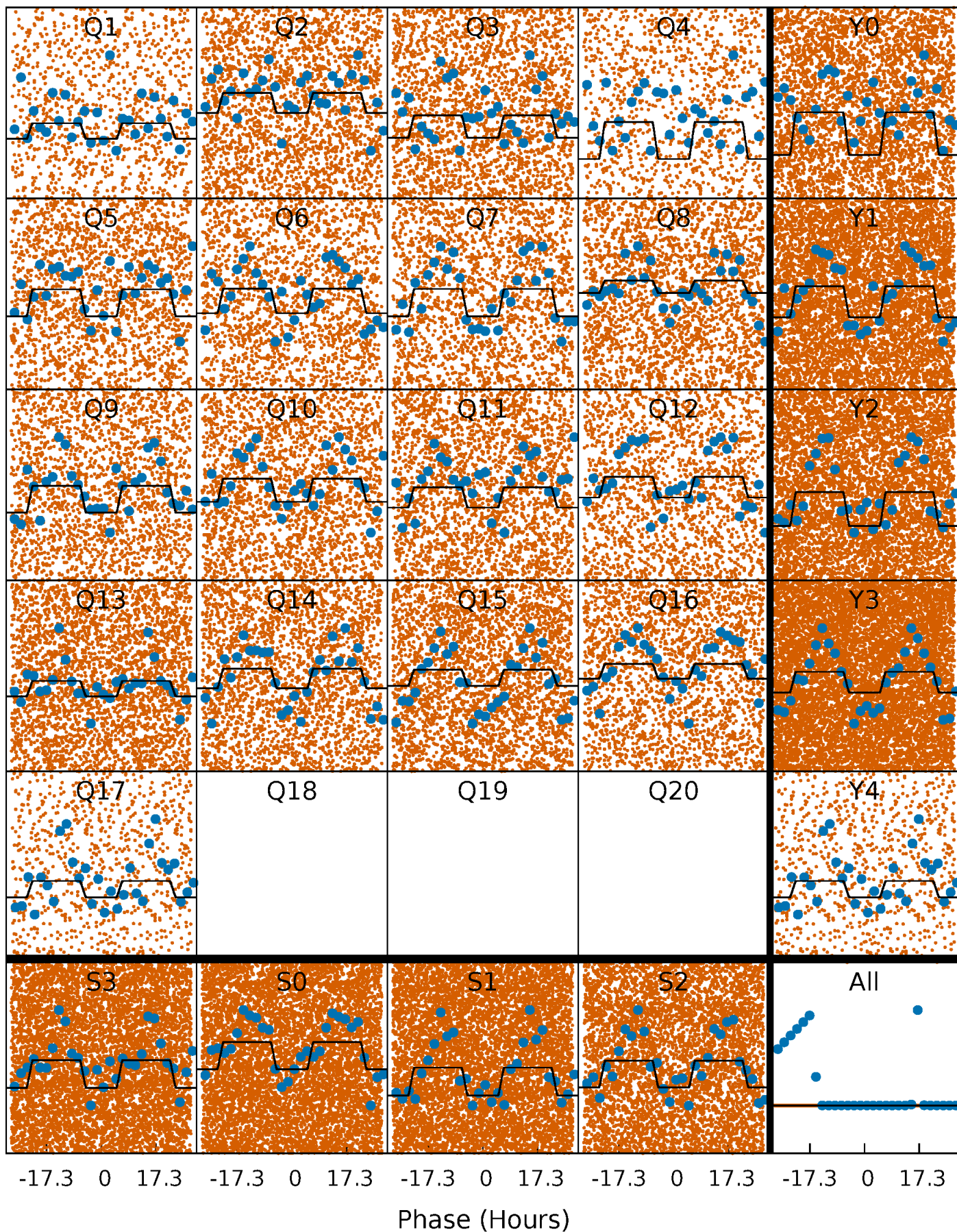
DV Quarter-Phased Transit Curves

TCE 012555688-01 P= 1.185475 Days $T_0=132.694902$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

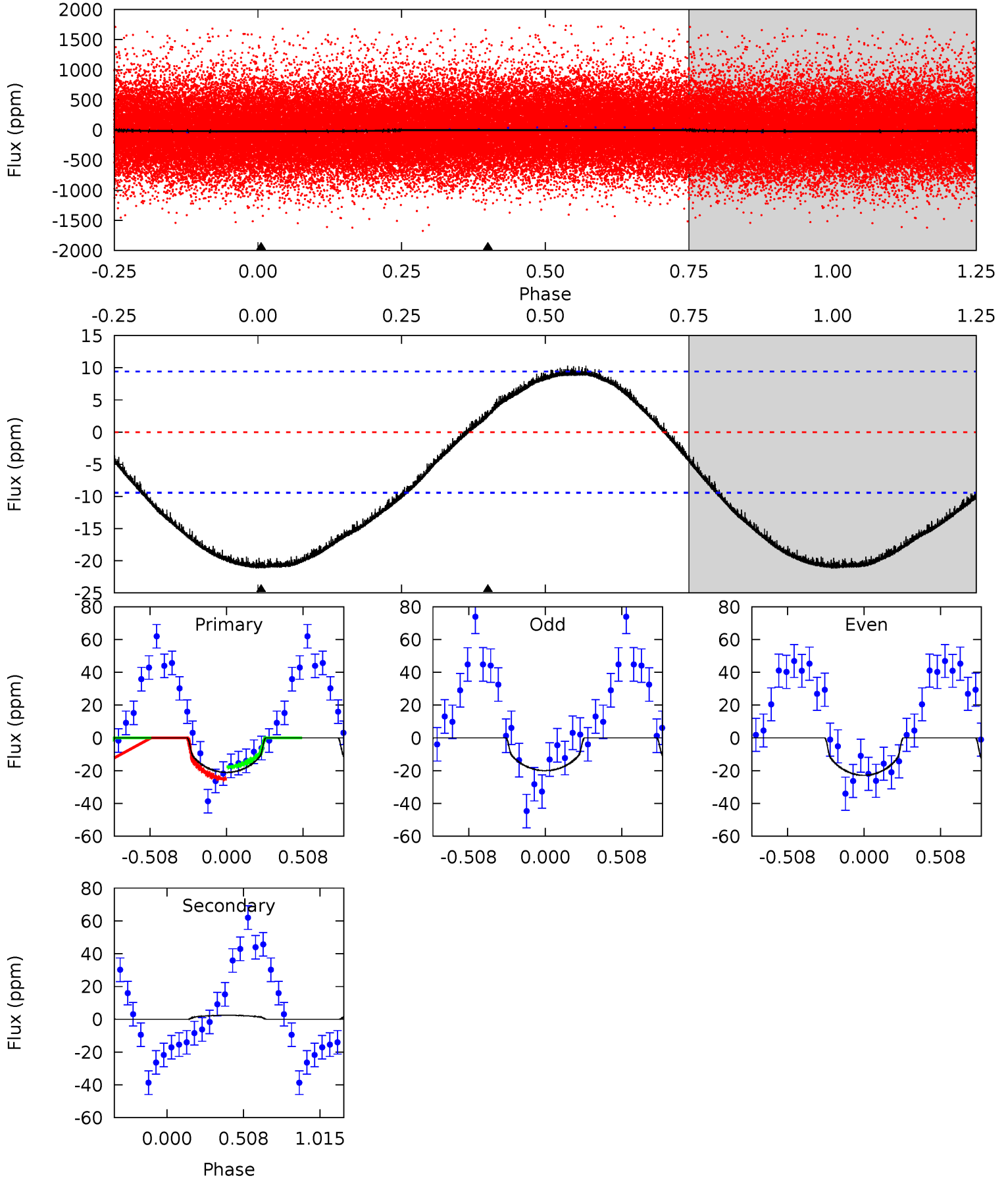
TCE 012555688-01 P= 1.185436 Days $T_0=132.717121$ (BKJD)



DV Model-Shift Uniqueness Test

012555688-01, P = 1.185475 Days, E = 131.509427 Days

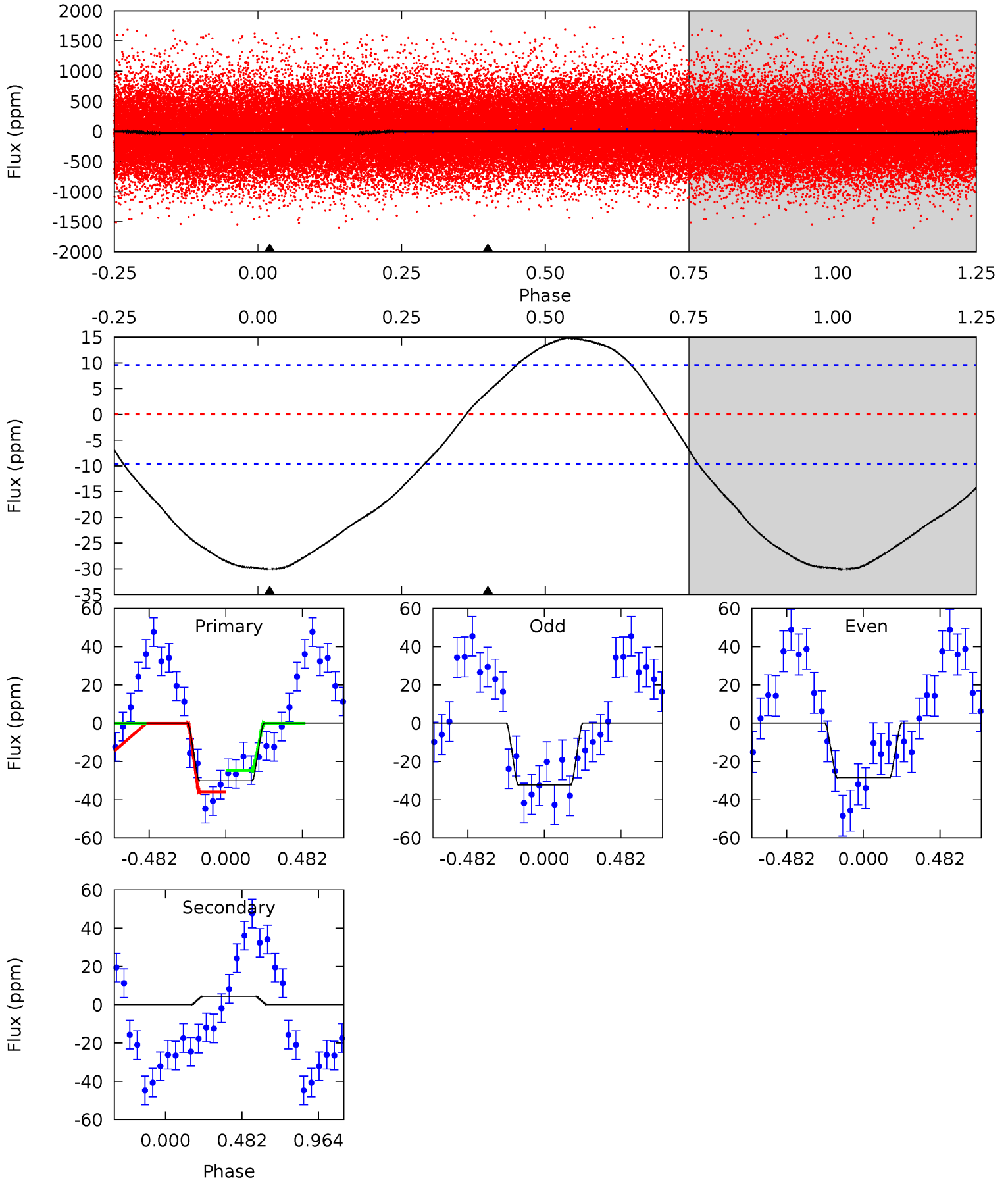
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
9.42	-1.09	0	0	4.21	0.66	1.31	9.42	9.42	-1.09	-1.09	0.63	0.87	0.33	1.63



Alt Model-Shift Uniqueness Test

012555688-01, P = 1.185436 Days, E = 130.346249 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
13.2	-1.93	0	0	4.22	0.70	2.16	13.2	13.2	-1.93	-1.93	0.86	0.94	0.33	2.47



Stellar Parameters For KIC 012555688

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	$M(M_{\odot})$	p_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	6214^{+166}_{-222}	$4.412^{+0.070}_{-0.210}$	$-0.120^{+0.250}_{-0.300}$	$1.062^{+0.366}_{-0.122}$	$1.058^{+0.169}_{-0.127}$	$1.244^{+0.458}_{-0.641}$
	+3%/-4%	+2%/-5%	+208%/-250%	+34%/-11%	+16%/-12%	+37%/-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 012555688-01 / KOI

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	2 ± 2	$0.61^{+0.43}_{-0.35}$	2682^{+205}_{-145}	-3866^{+767}_{-1431}	$-1.639^{+1.513}_{-7.680}$
Alt.	4 ± 2	$0.66^{+0.44}_{-0.37}$	2677^{+213}_{-137}	-4133^{+635}_{-1603}	$-2.487^{+1.746}_{-11.480}$

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

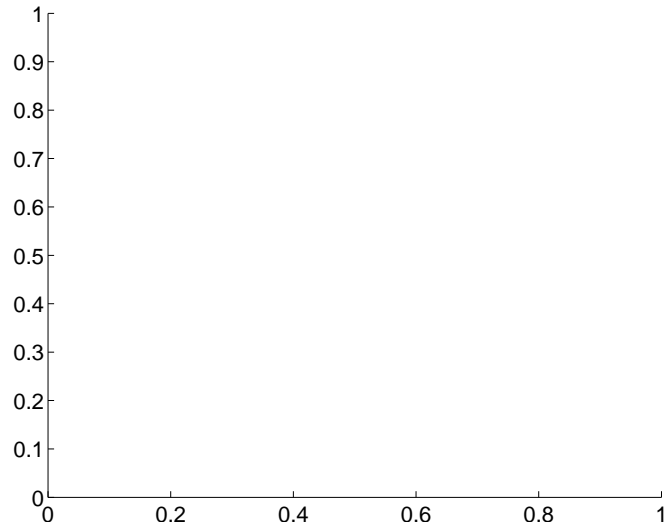
Supplemental centroid analysis for 012555688-01. Kepler magnitude: 14.90. Transit SNR 7.84

There are 0 quarters with good PRF difference image offsets

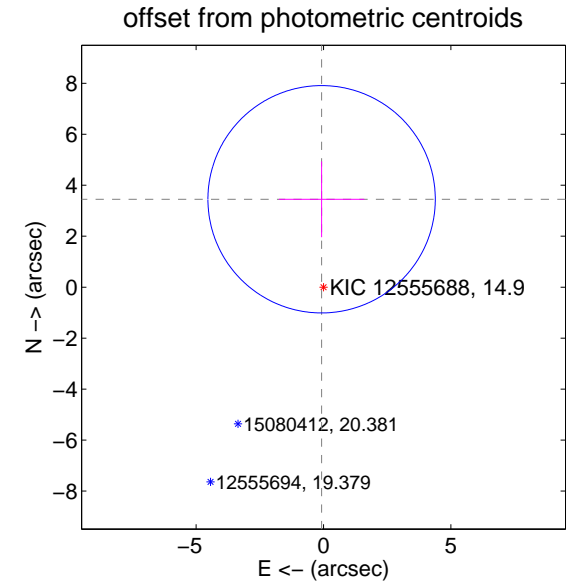
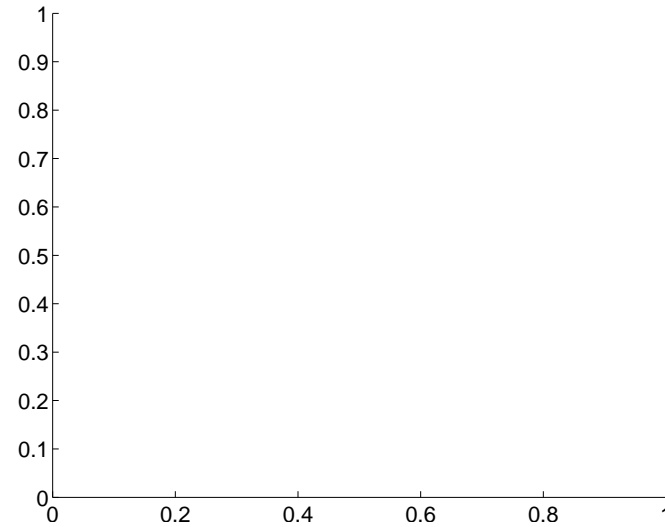
The direct PRF centroid is offset from the target star catalog position by about NaN arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	—	—	—	—
PRF-fit source offset from KIC position	—	—	—	—
photometric centroid source offset	3.45 ± 1.49	2.32	0.07 ± 1.68	3.45 ± 1.49

There is no PRF-fit offset from OOT-fit

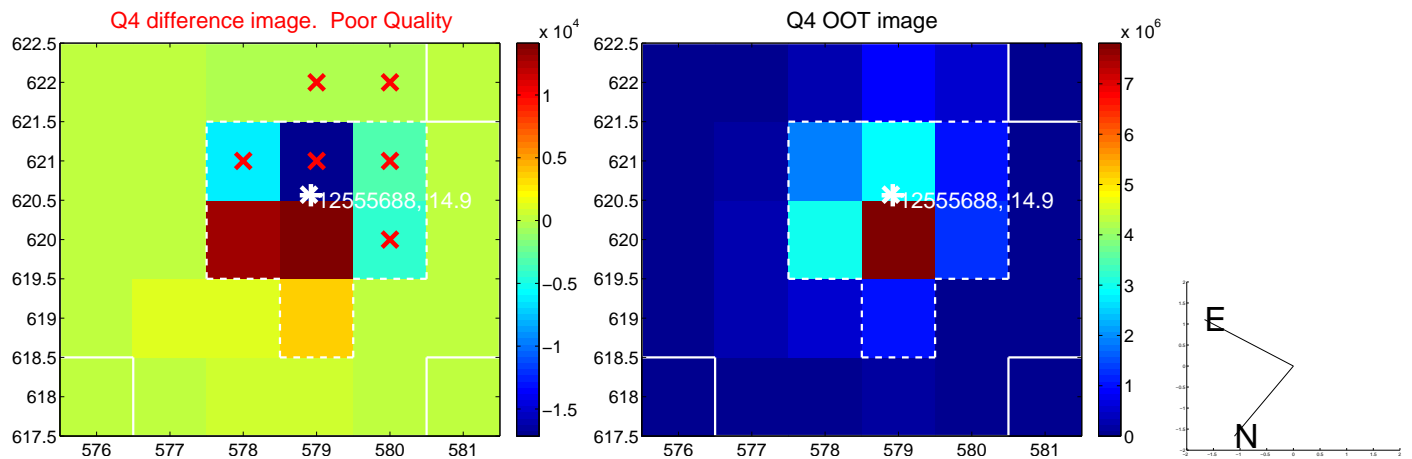
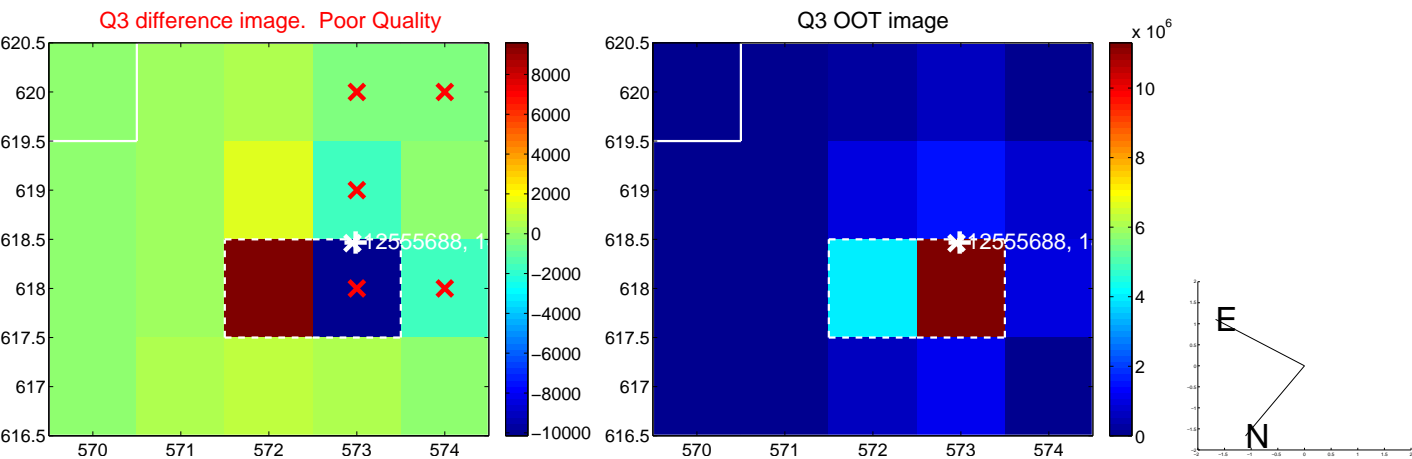
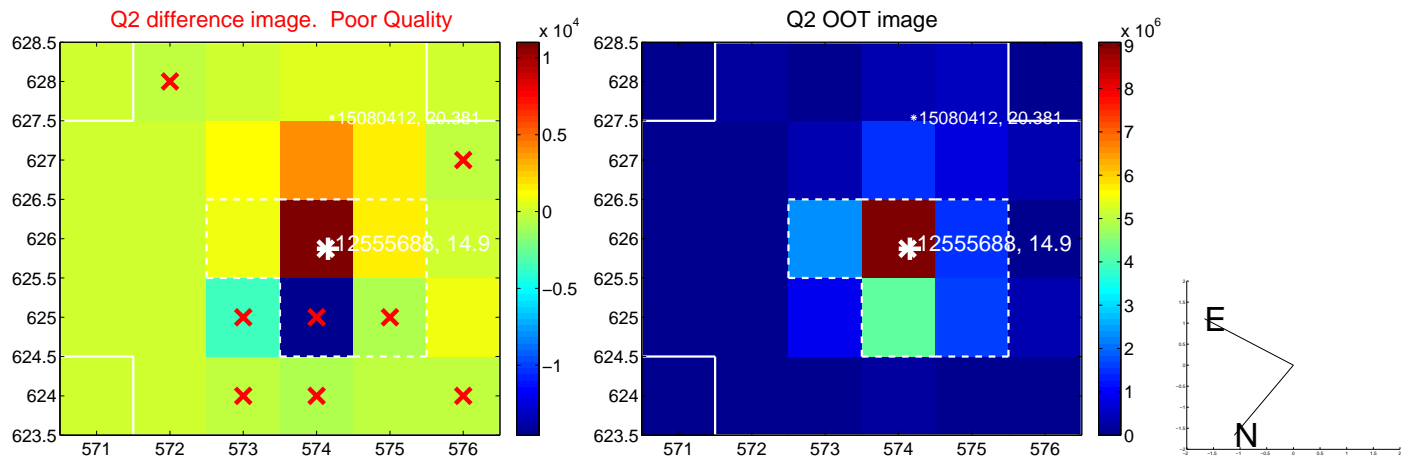
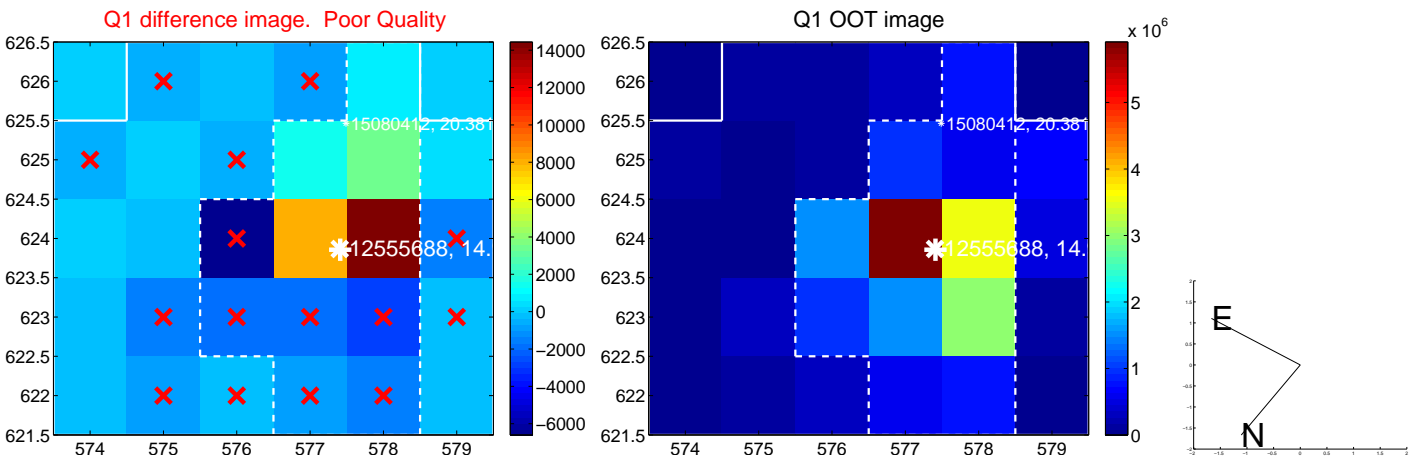


There is no PRF-fit offset from KIC

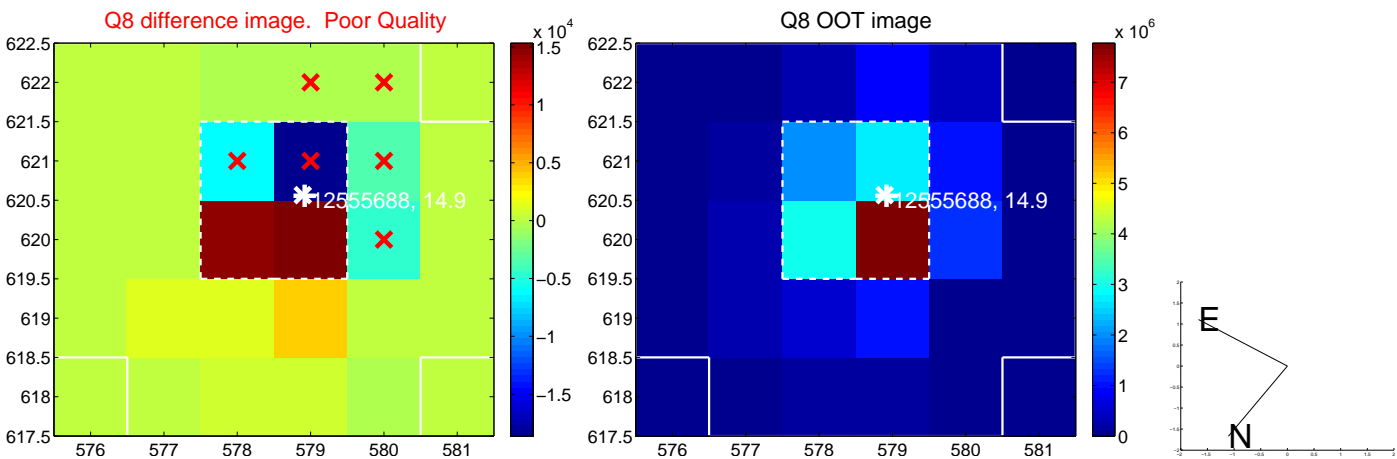
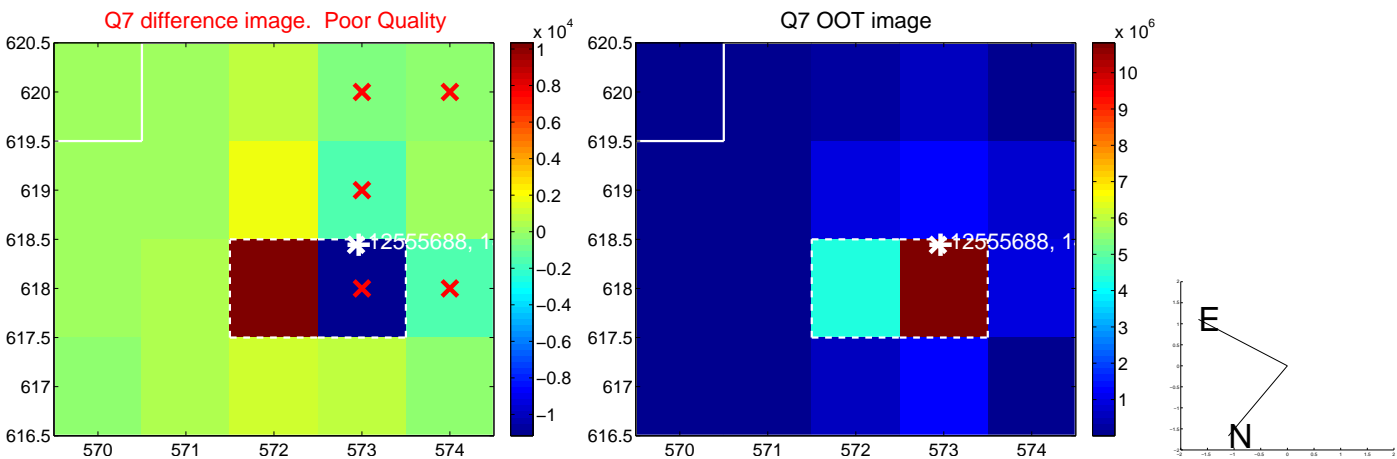
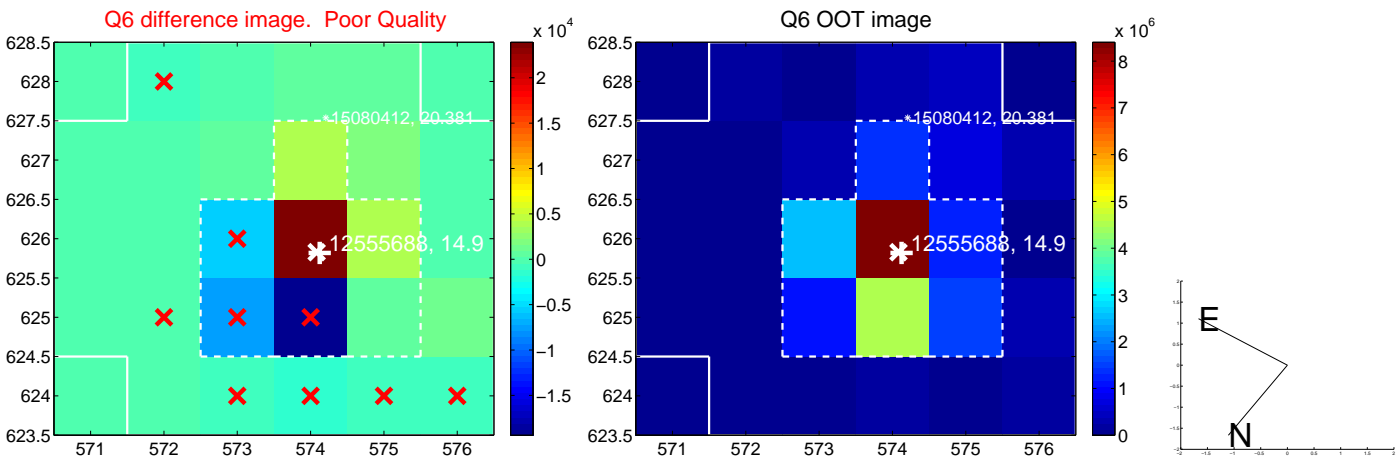
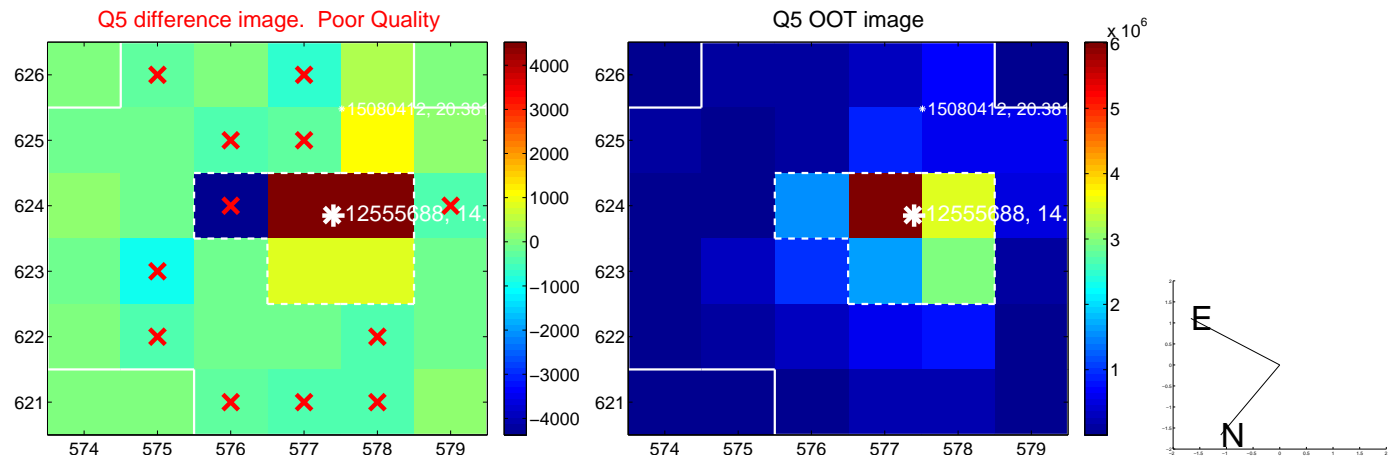


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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

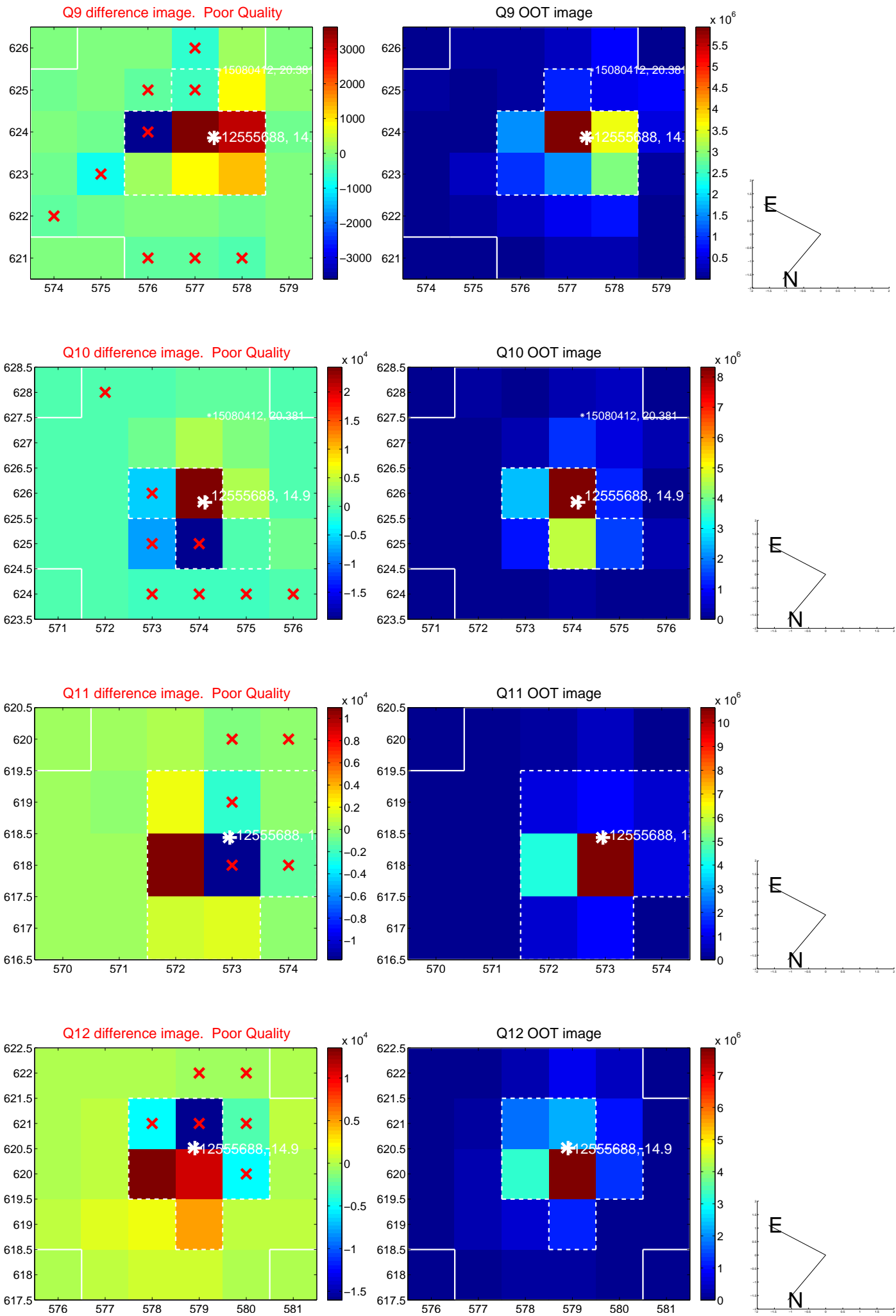
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



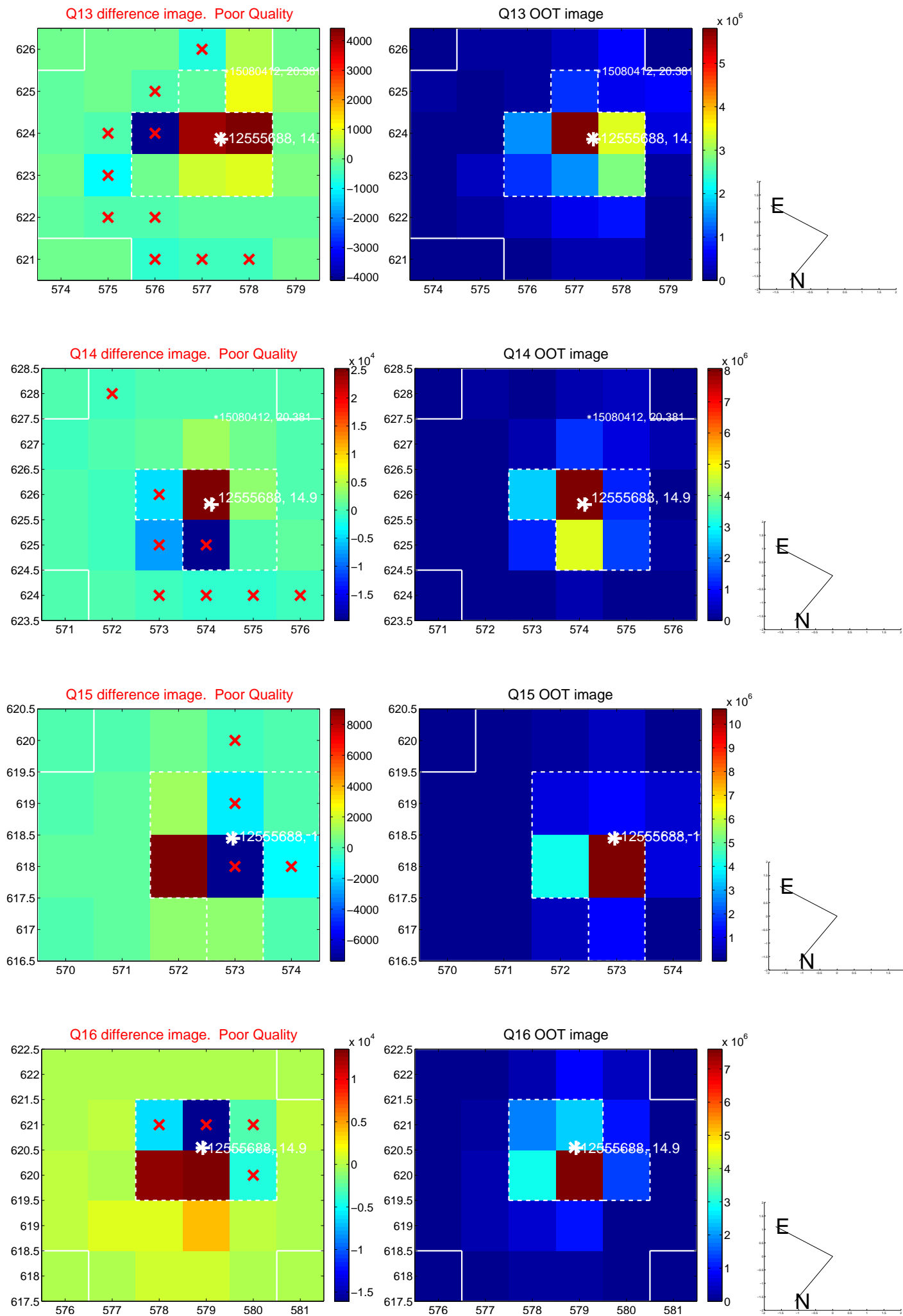
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



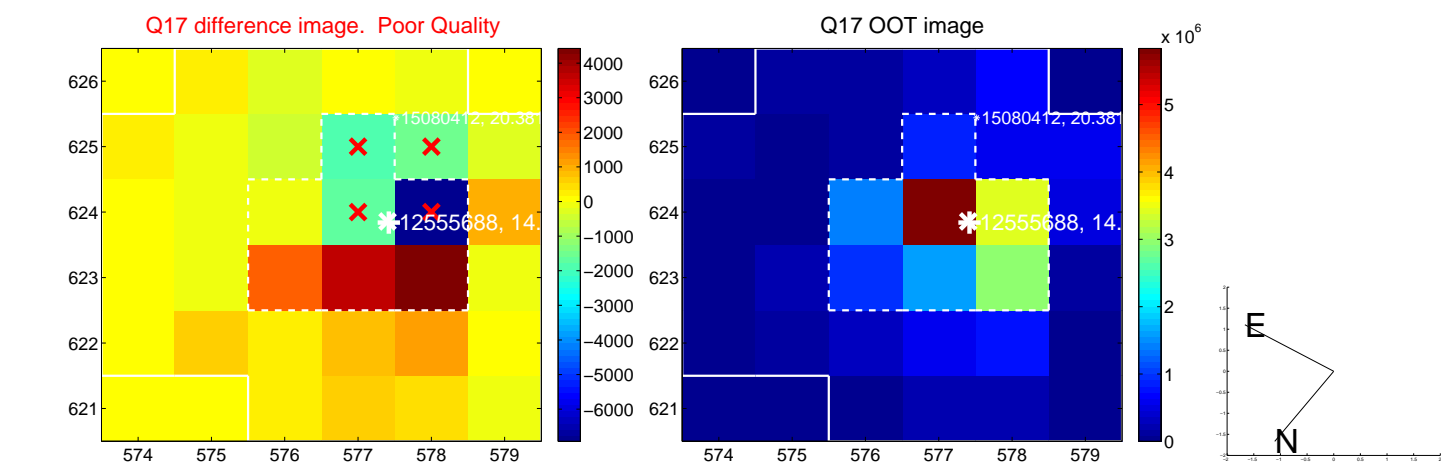
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



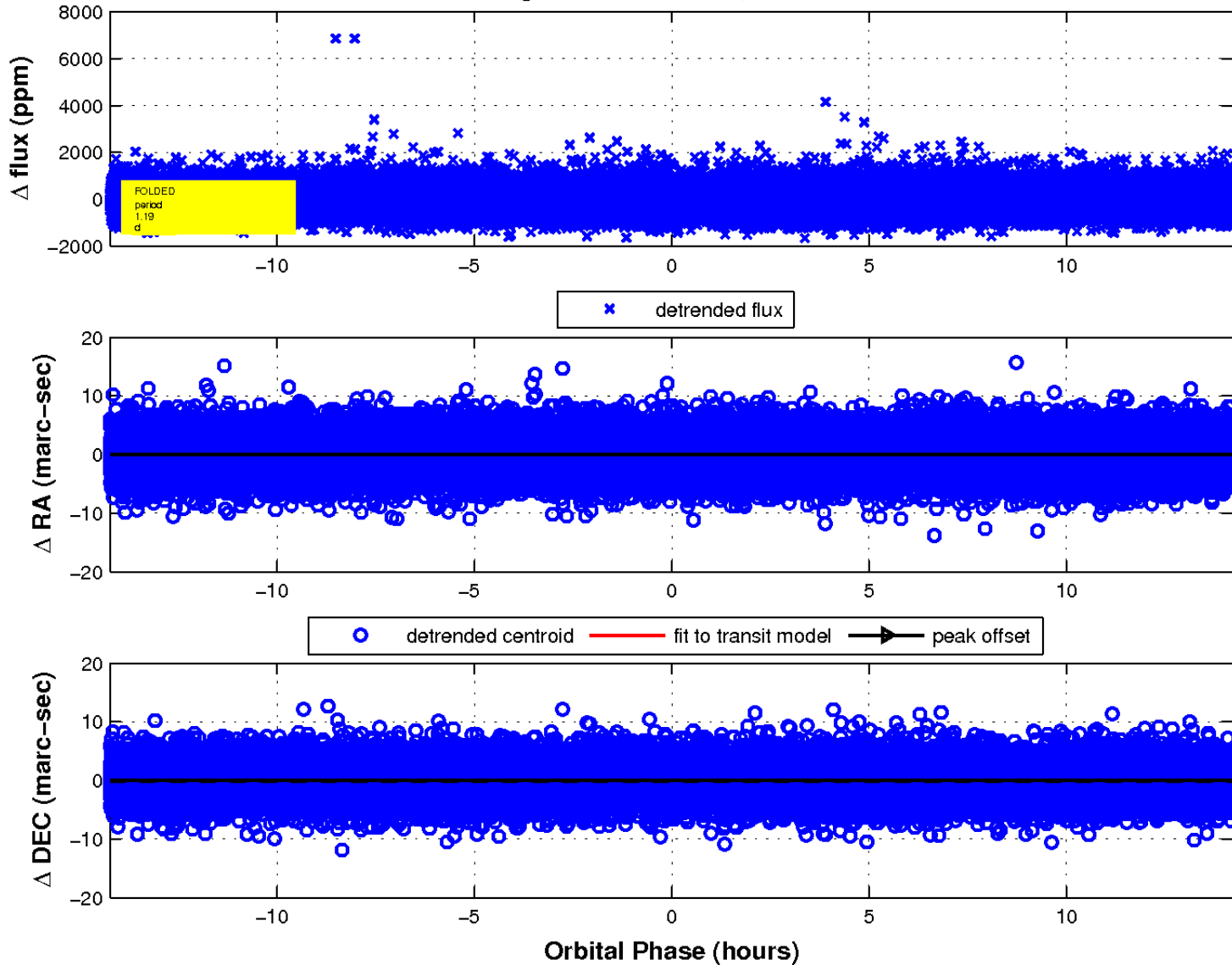
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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



fluxWeightedCentroids, Planet 1 of 1



UKIRT Image

Declination

