

KIC 004171717

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})
004171717-01	OBS	No	0.572125	131.987613	46.1	4.614	7.8	9.3	1.80	4815	1.18	8873.94

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
004171717-01	OBS	FP	0.00	1	0	0	0	LPP_DV—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.

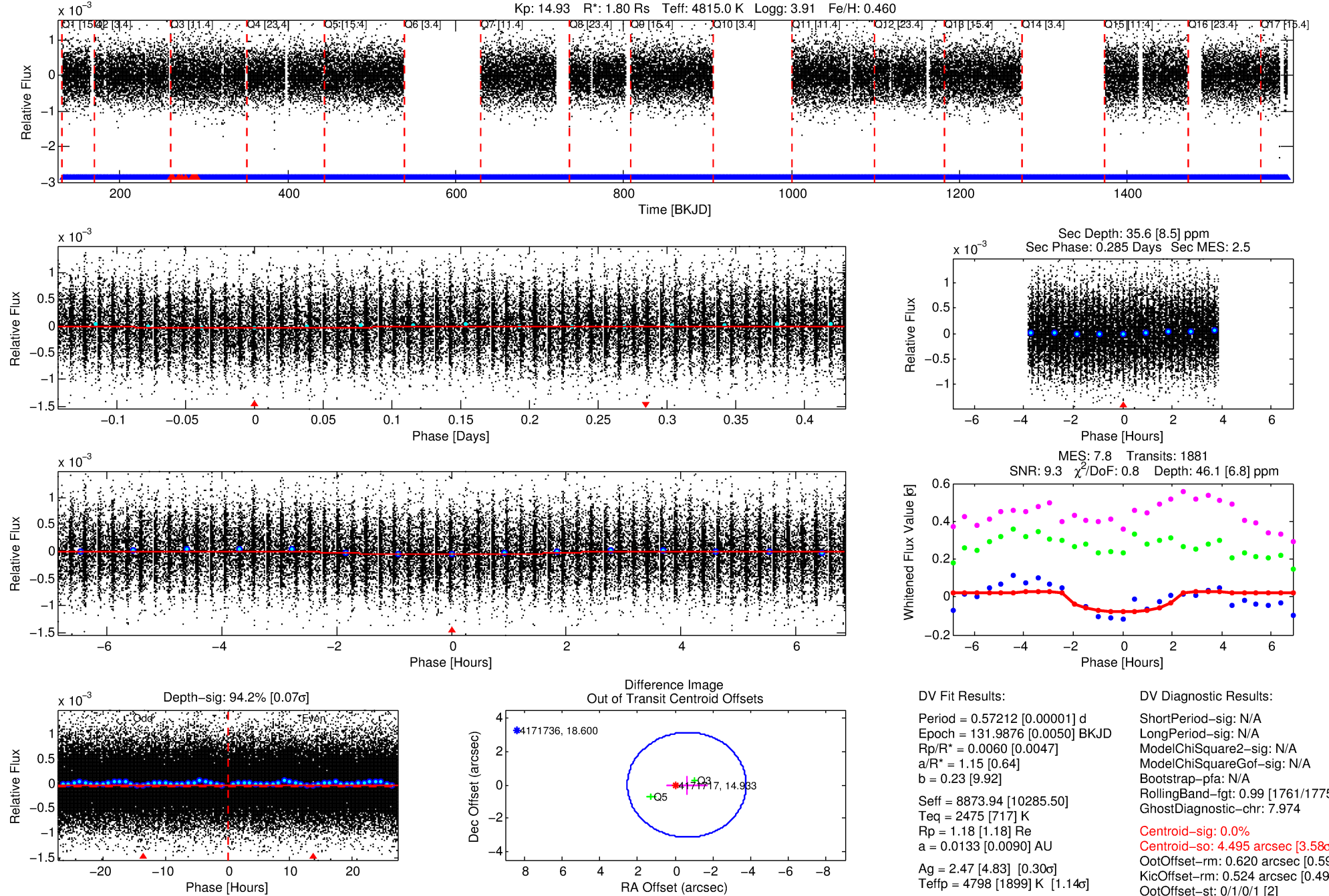
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 004171717-01

No Significant Match Found

DV One-Page Summary

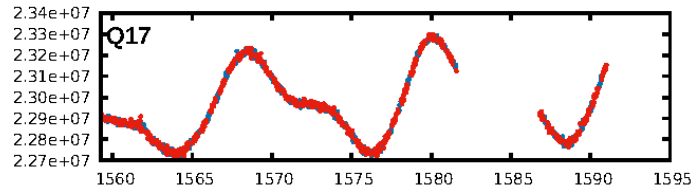
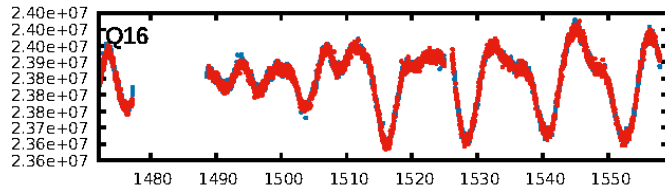
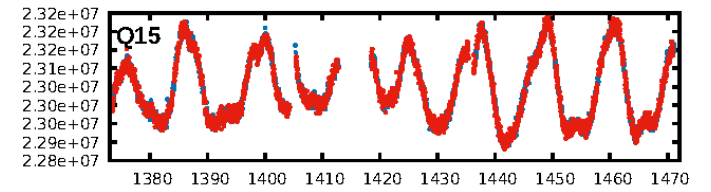
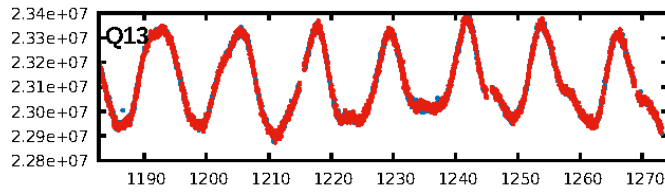
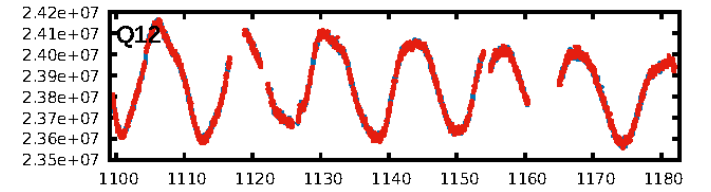
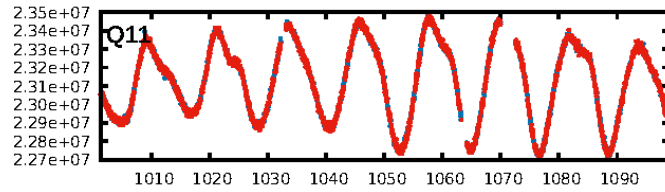
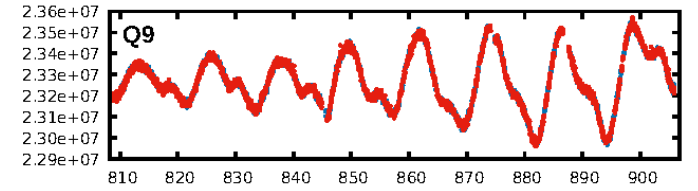
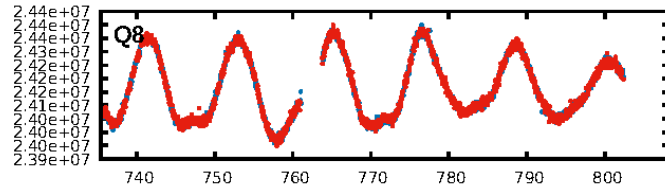
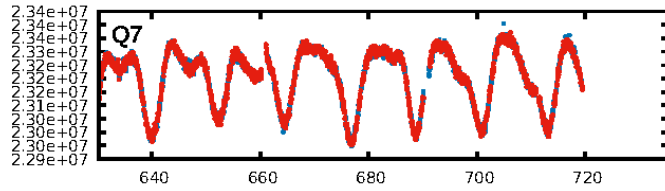
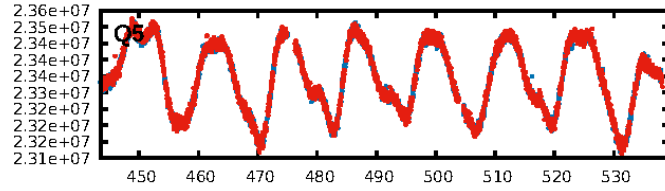
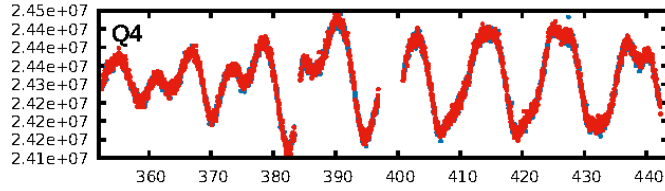
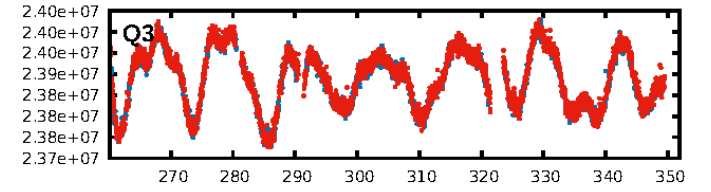
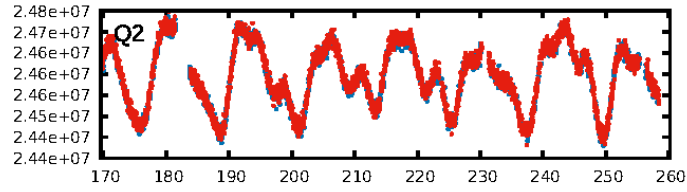
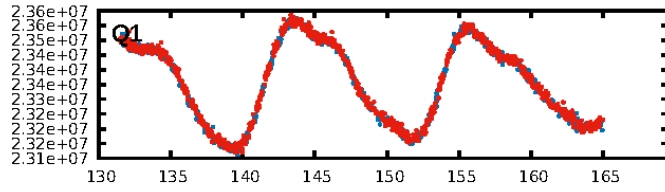
KIC: 4171717 Candidate: 1 of 1 Period: 0.572 d



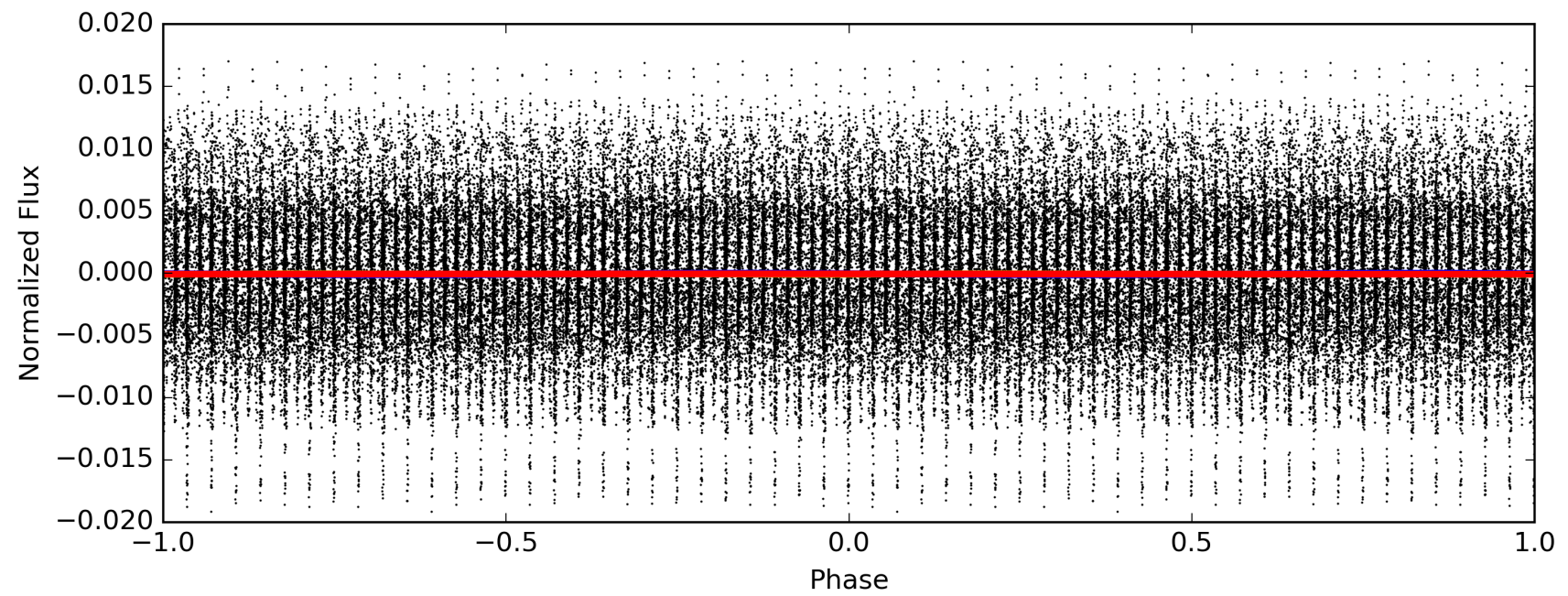
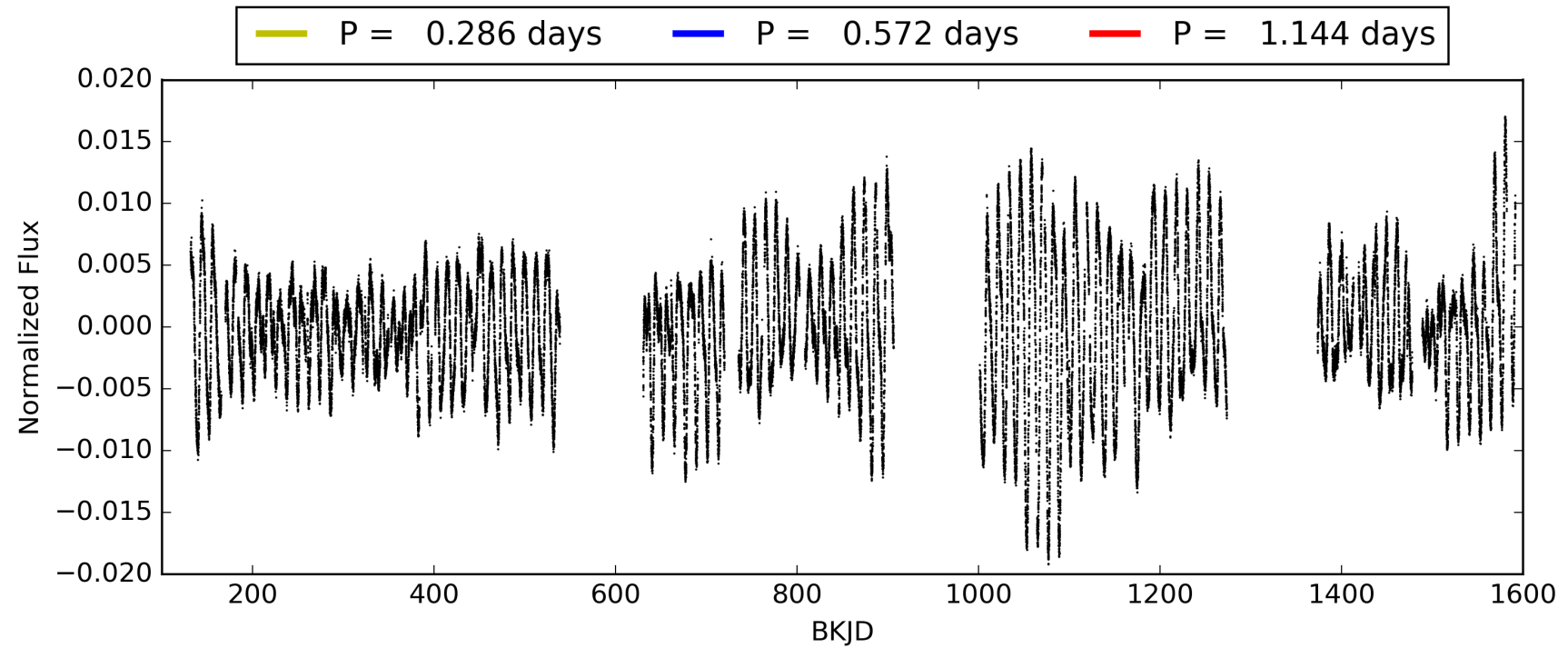
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 30-Jan-2016 15:47:00 Z

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

TCE 004171717-01, PDC Light Curves

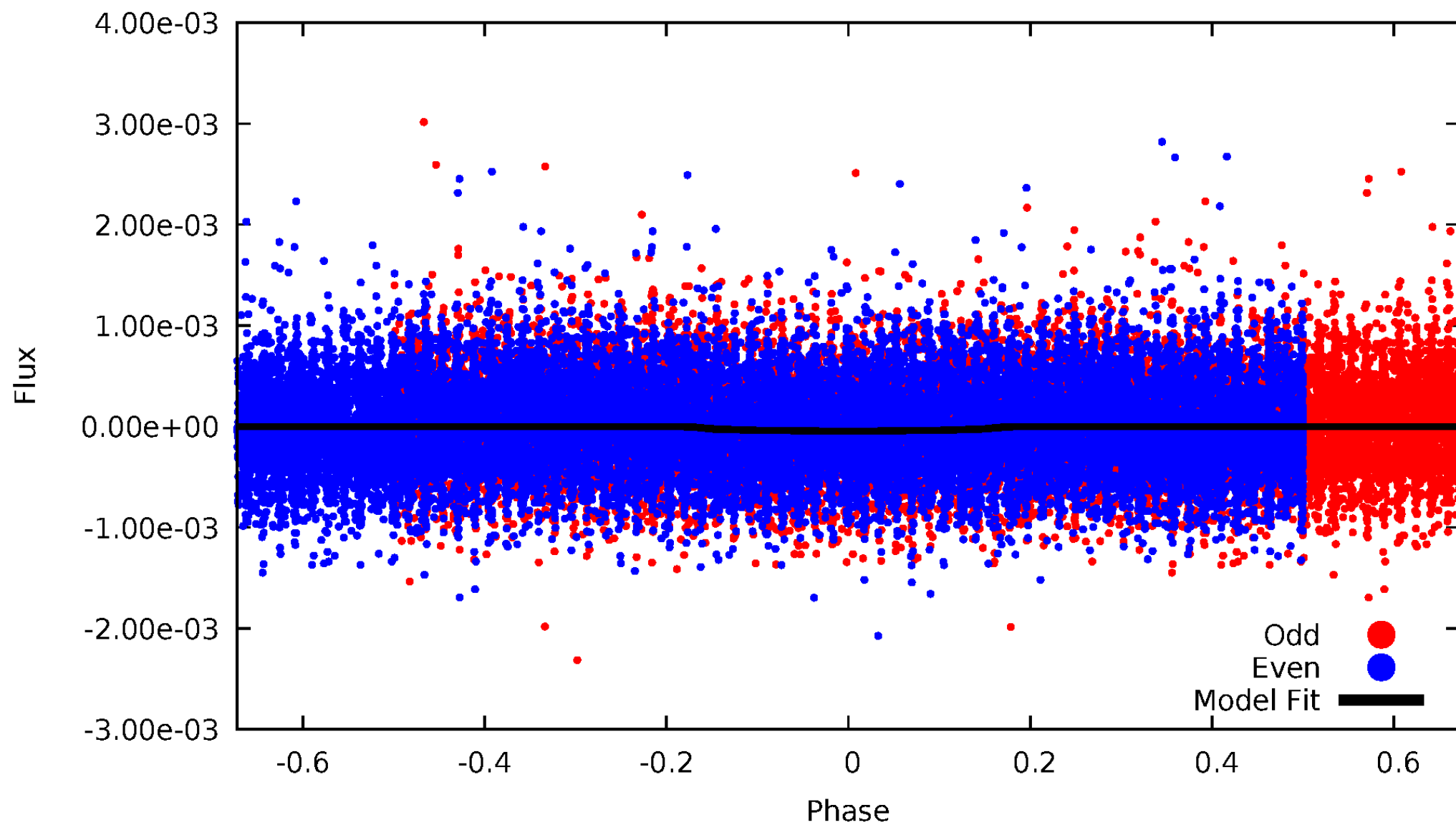


TCE 004171717-01



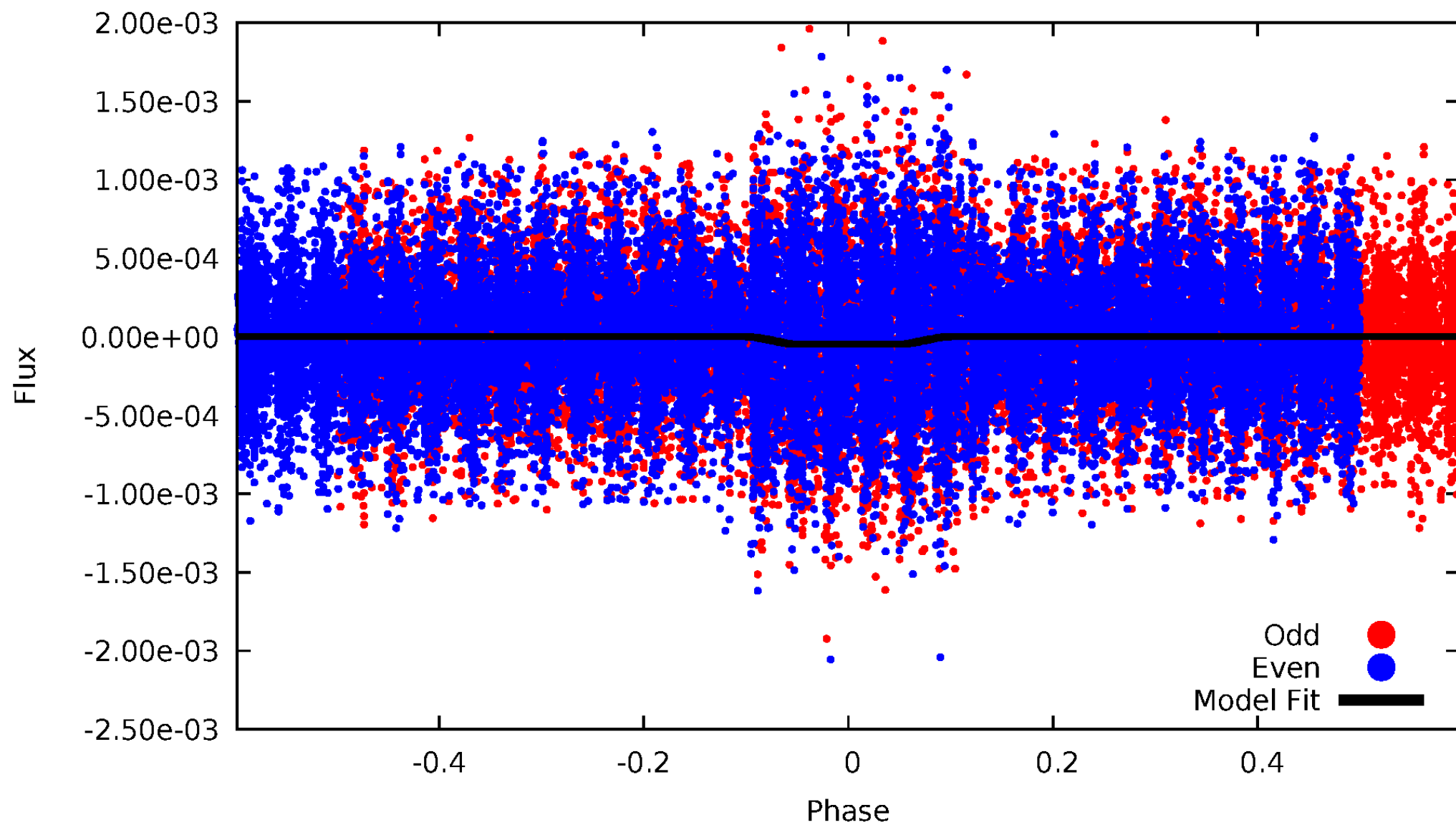
DV Odd/Even

TCE 004171717-01



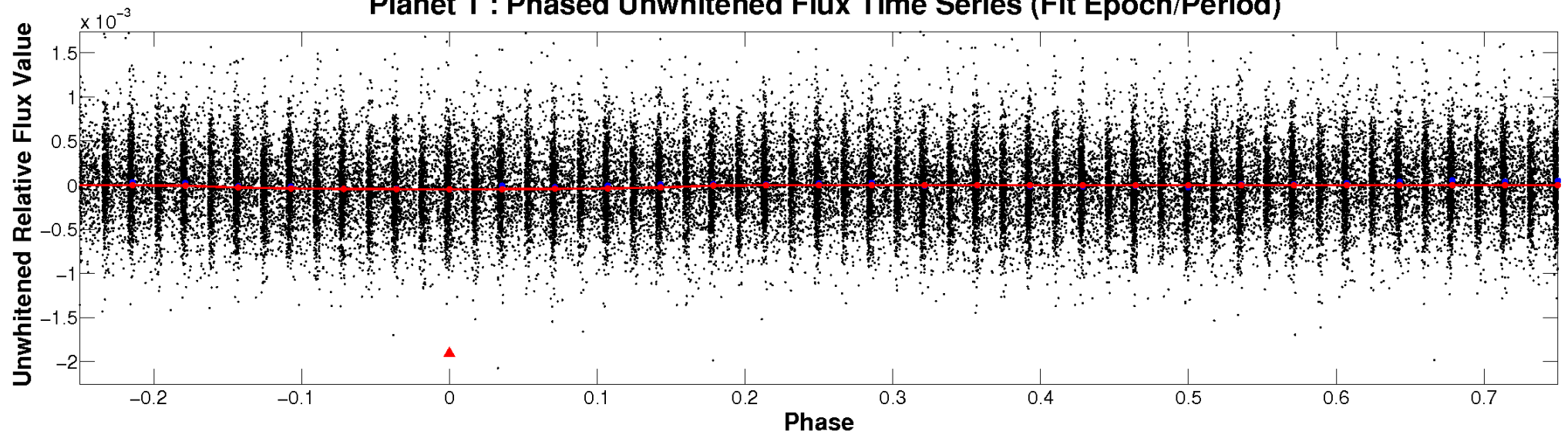
ALT Odd/Even

TCE 004171717-01

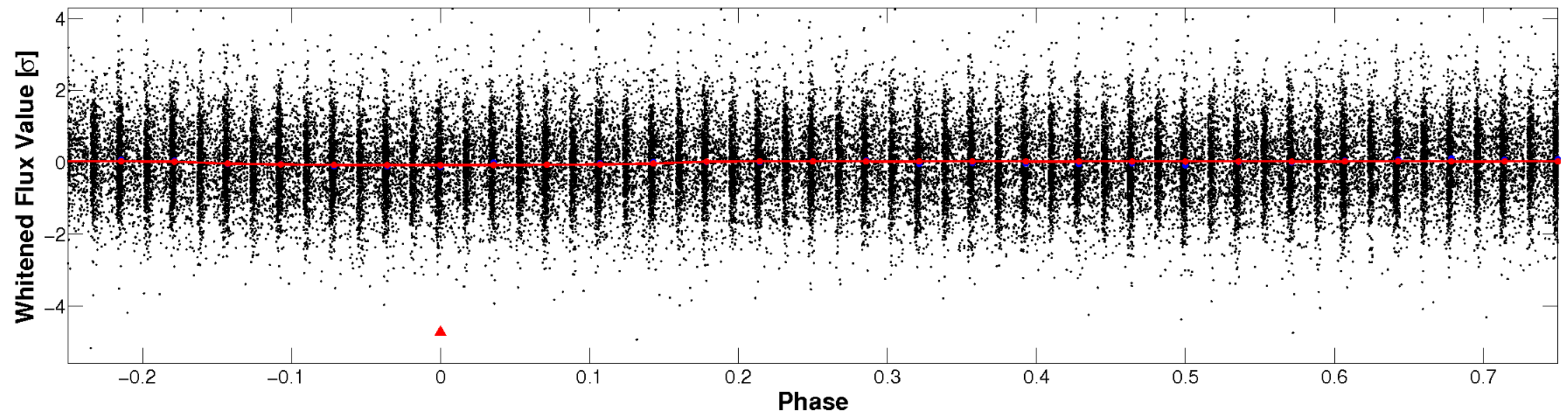


Non-Whitened Vs. Whitened Light Curve

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

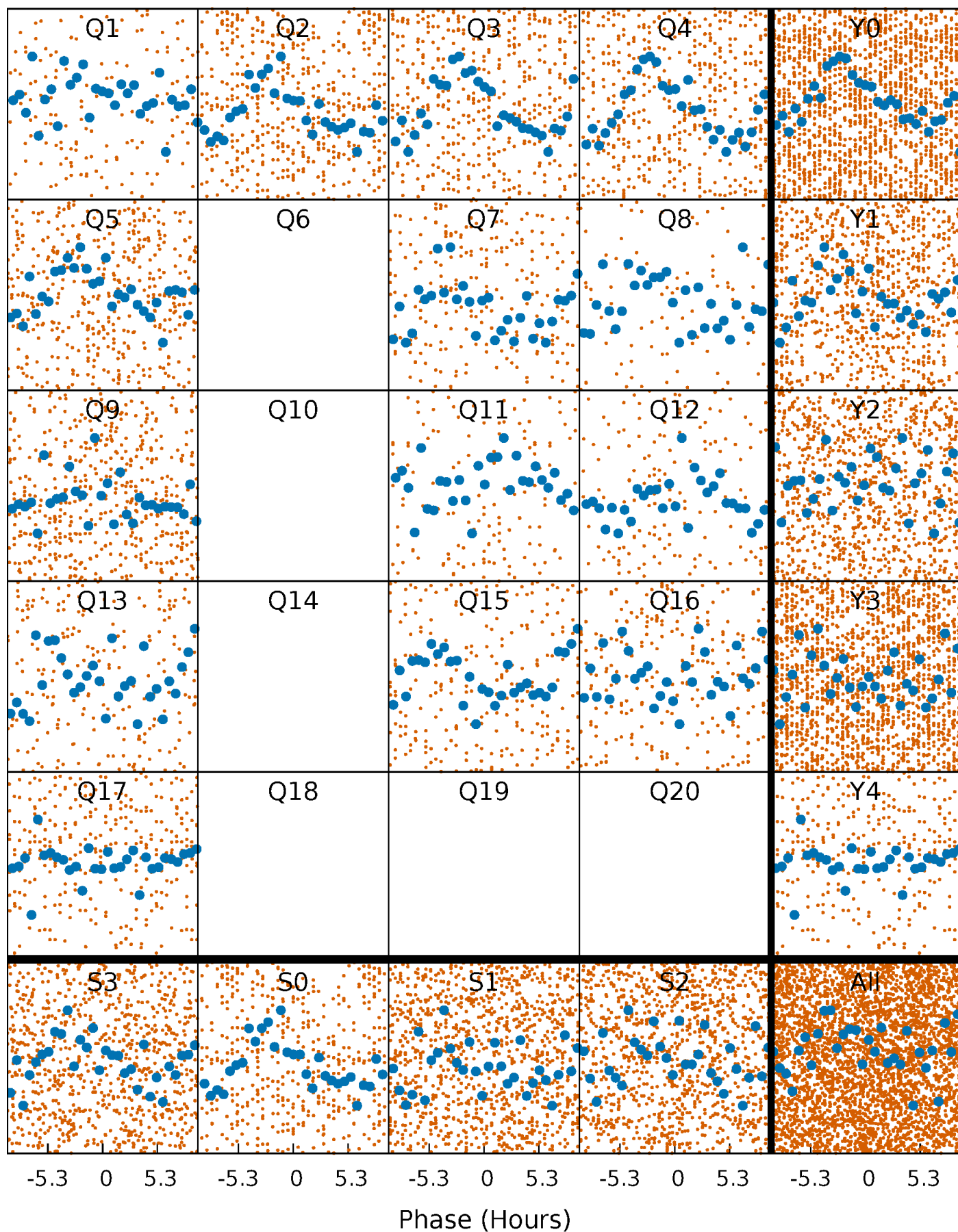


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



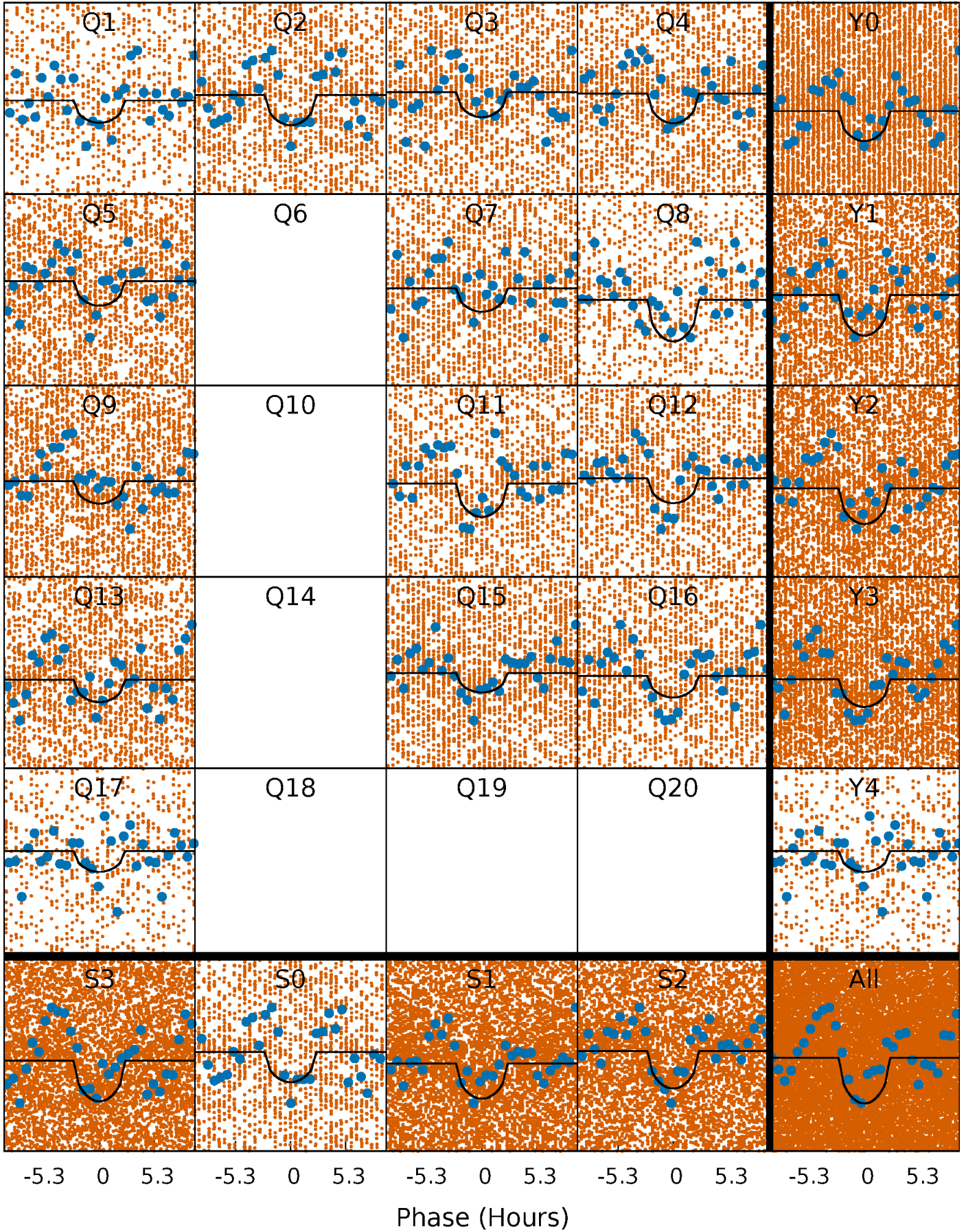
PDC Quarter-Phased Transit Curves

TCE 004171717-01 P= 0.572125 Days $T_0=131.987613$ (BKJD)



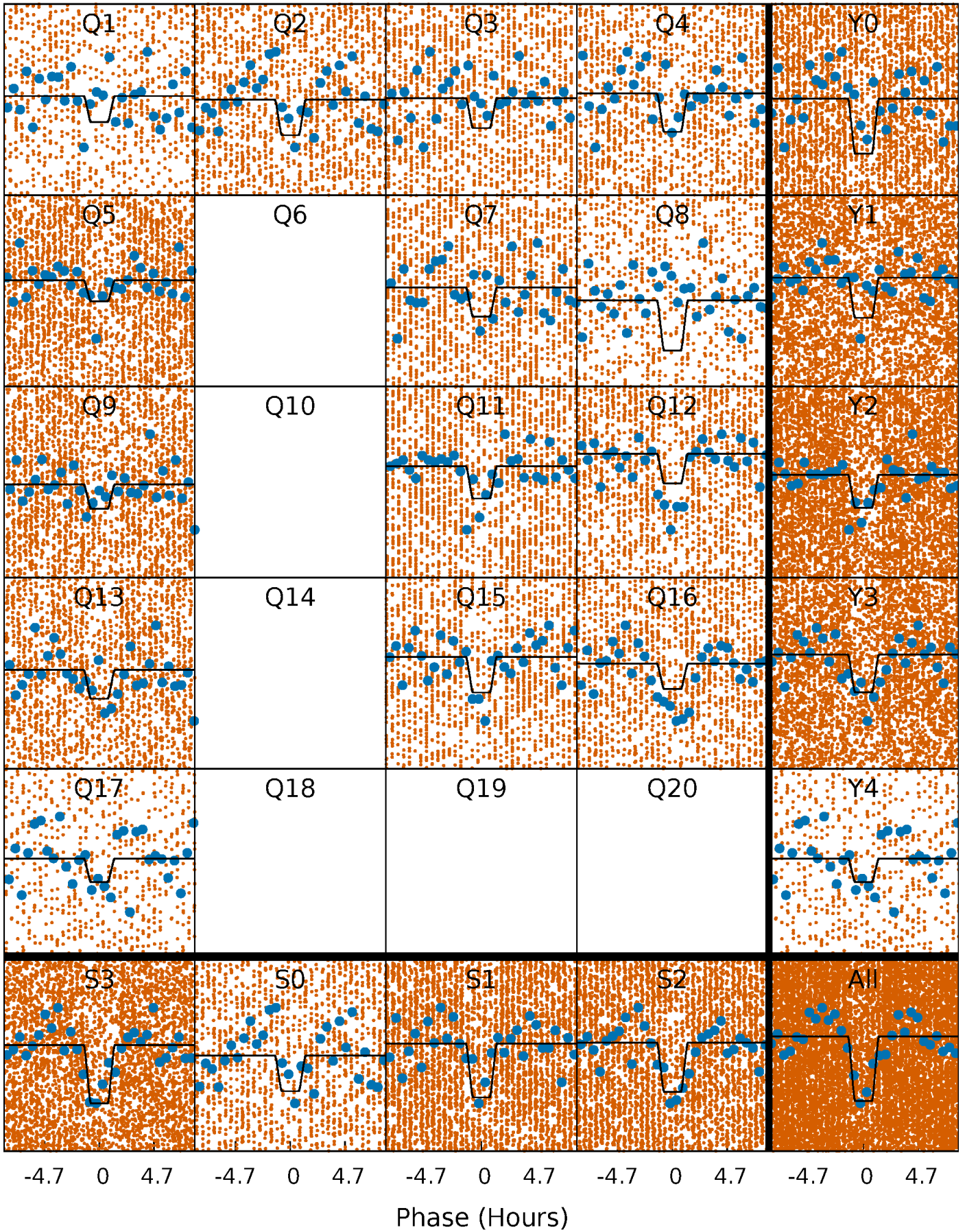
DV Quarter-Phased Transit Curves

TCE 004171717-01 P= 0.572125 Days $T_0=131.987613$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

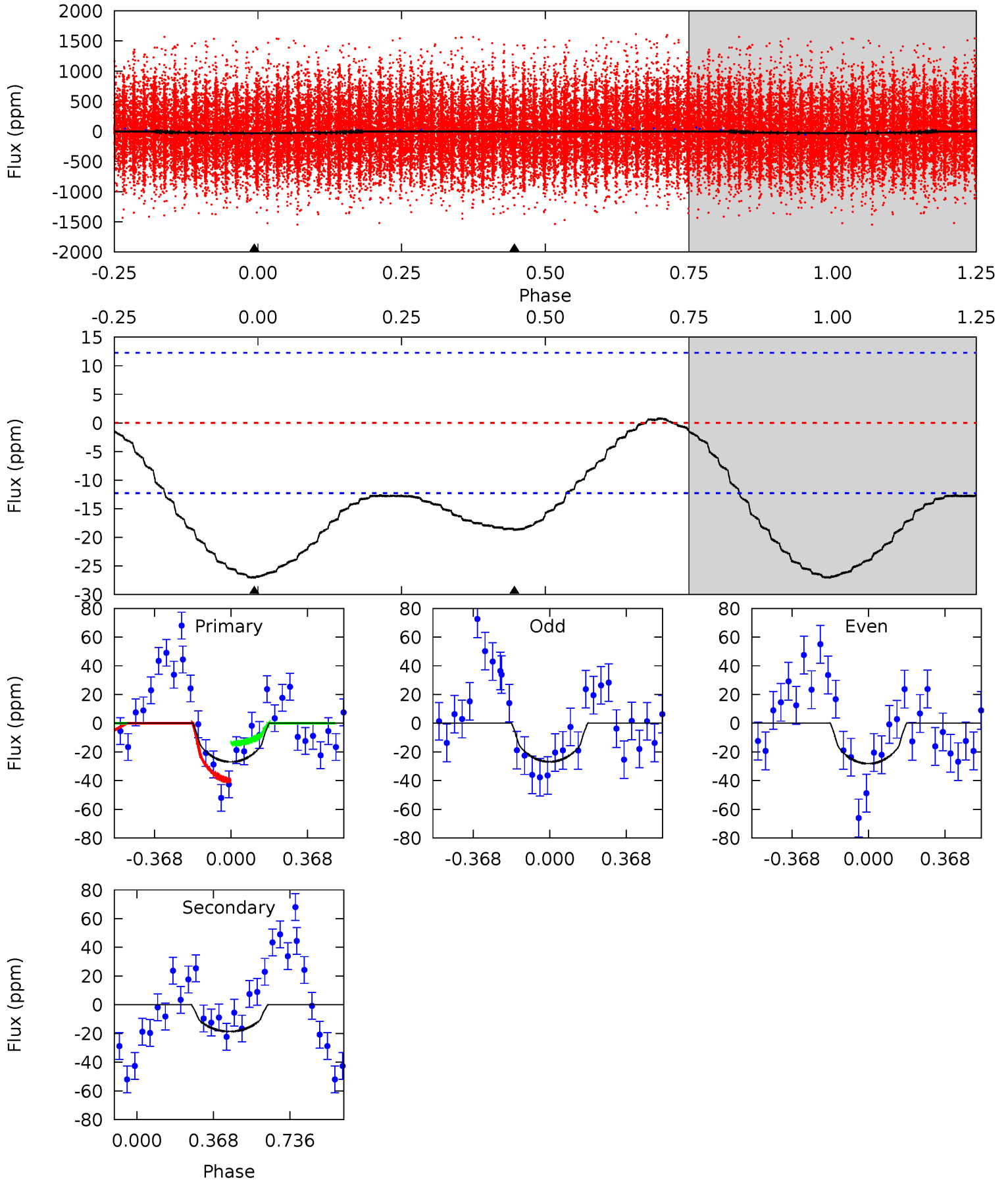
TCE 004171717-01 P= 0.572113 Days $T_0=131.975094$ (BKJD)



DV Model-Shift Uniqueness Test

004171717-01, P = 0.572125 Days, E = 131.415488 Days

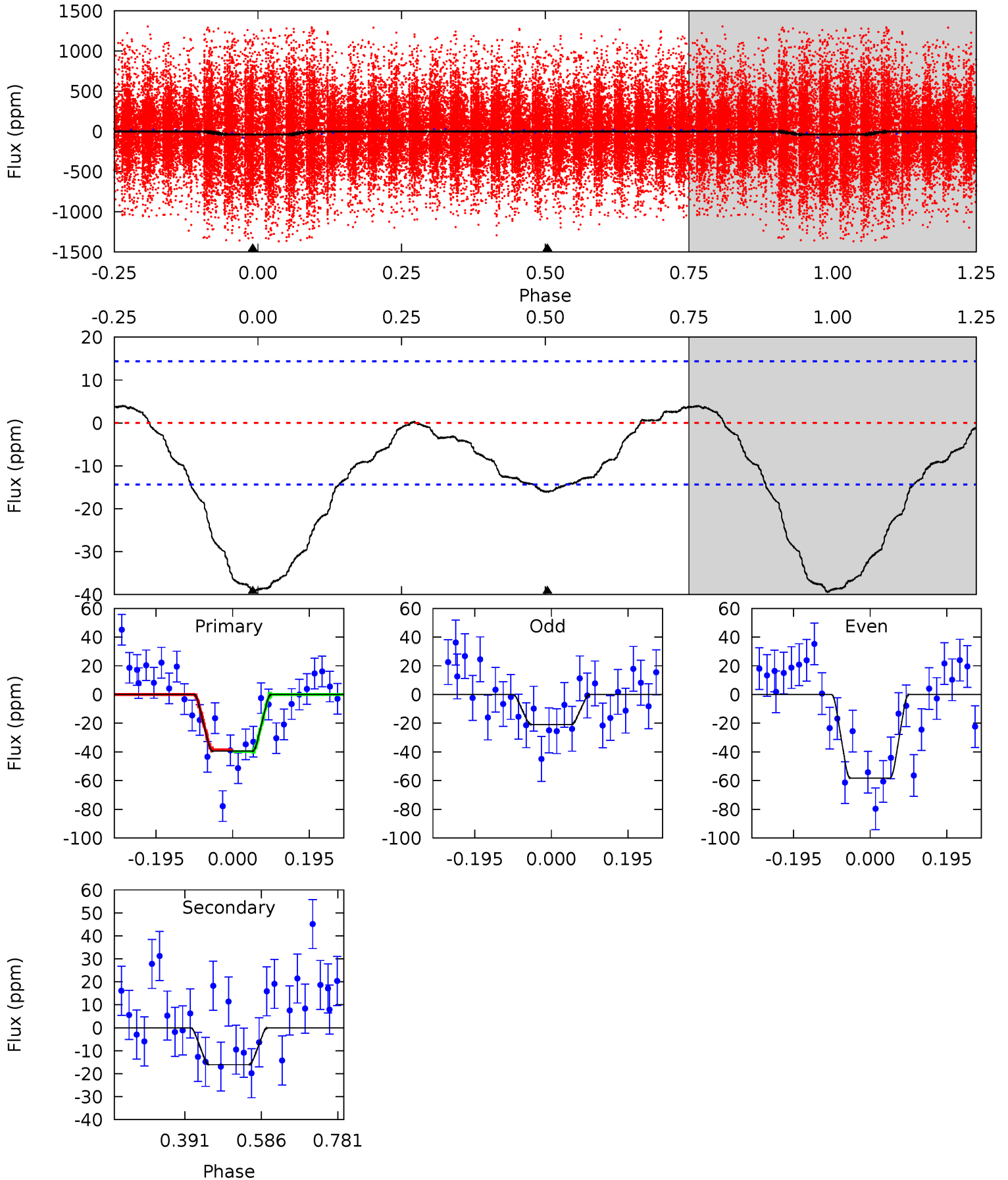
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
9.43	6.51	0	0	4.28	0.90	0.66	9.43	9.43	6.51	6.51	0.24	0.95	0.03	4.55



Alt Model-Shift Uniqueness Test

004171717-01, P = 0.572113 Days, E = 131.402981 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
12.1	4.94	0	0	4.42	1.29	1.24	12.1	12.1	4.94	4.94	5.76	1.28	0.09	0.18



Stellar Parameters For KIC 004171717

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	$M(M_{\odot})$	p_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	4815^{+129}_{-143}	$3.906^{+0.700}_{-0.300}$	$0.460^{+0.050}_{-0.250}$	$1.804^{+0.926}_{-1.131}$	$0.955^{+0.196}_{-0.160}$	$0.229^{+2.360}_{-0.179}$
	+3%/-3%	+18%/-8%	+11%/-54%	+51%/-63%	+21%/-17%	+1029%/-78%
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 004171717-01 / KOI

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	-19 ± 3	$1.18^{+0.99}_{-0.73}$	3424^{+482}_{-586}	3896^{+2036}_{-1079}	$1.330^{+7.405}_{-0.931}$
Alt.	-16 ± 3	$1.38^{+0.89}_{-0.83}$	3403^{+469}_{-574}	3515^{+1621}_{-5804}	$0.826^{+4.530}_{-0.545}$

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 $A_{obs} \gg 1.0$

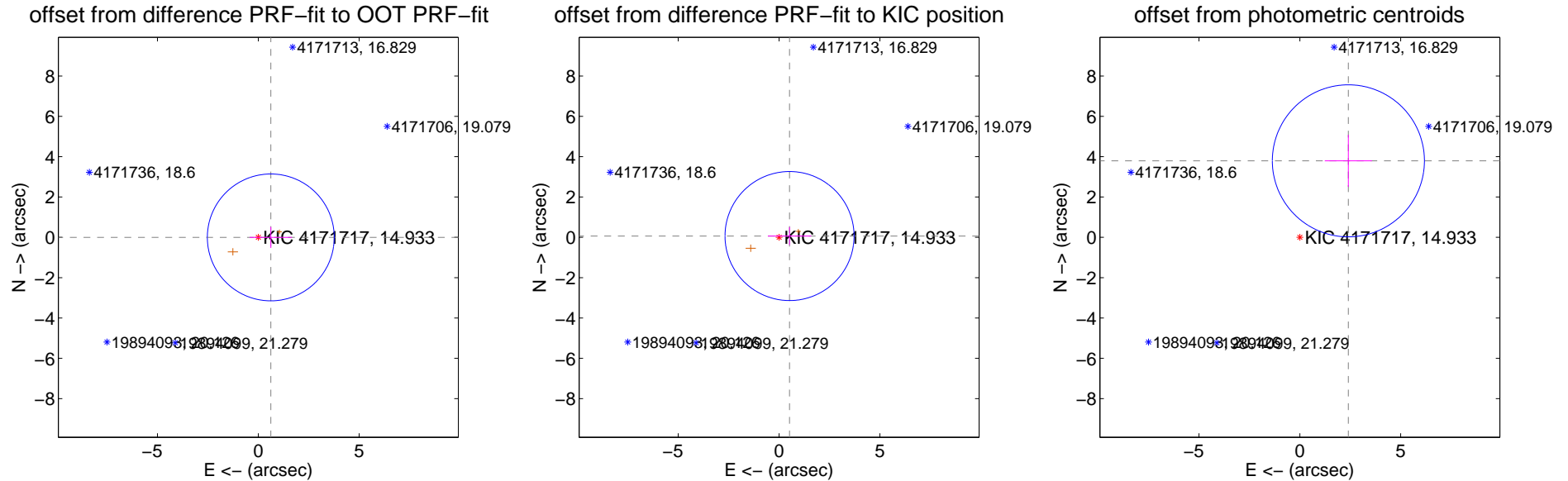
DV Centroid Data

Supplemental centroid analysis for 004171717-01. Kepler magnitude: 14.93. Transit SNR 9.26

There are 0 quarters with good PRF difference image offsets

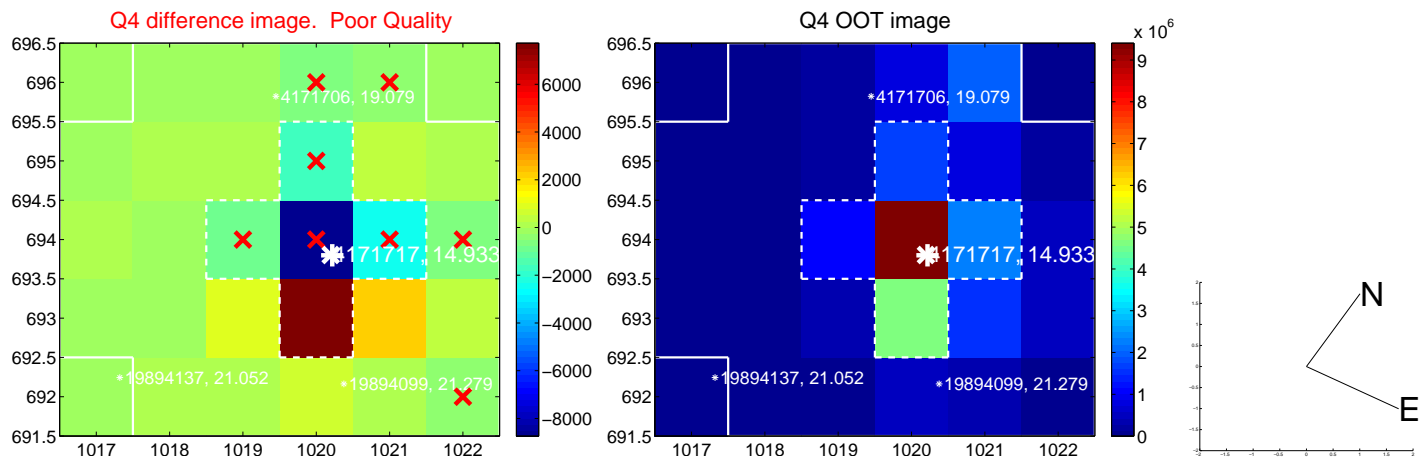
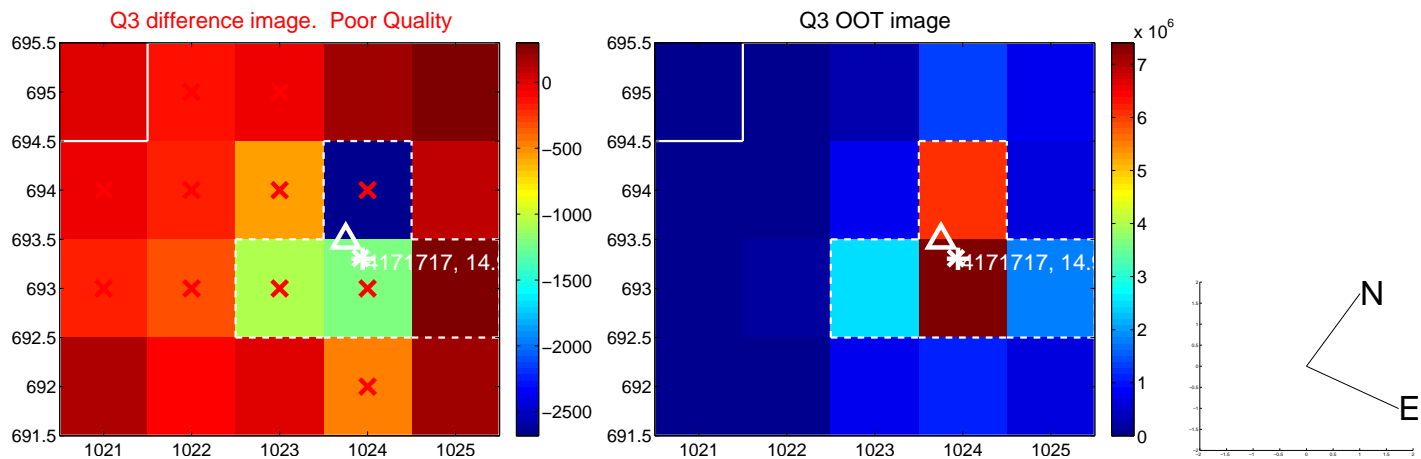
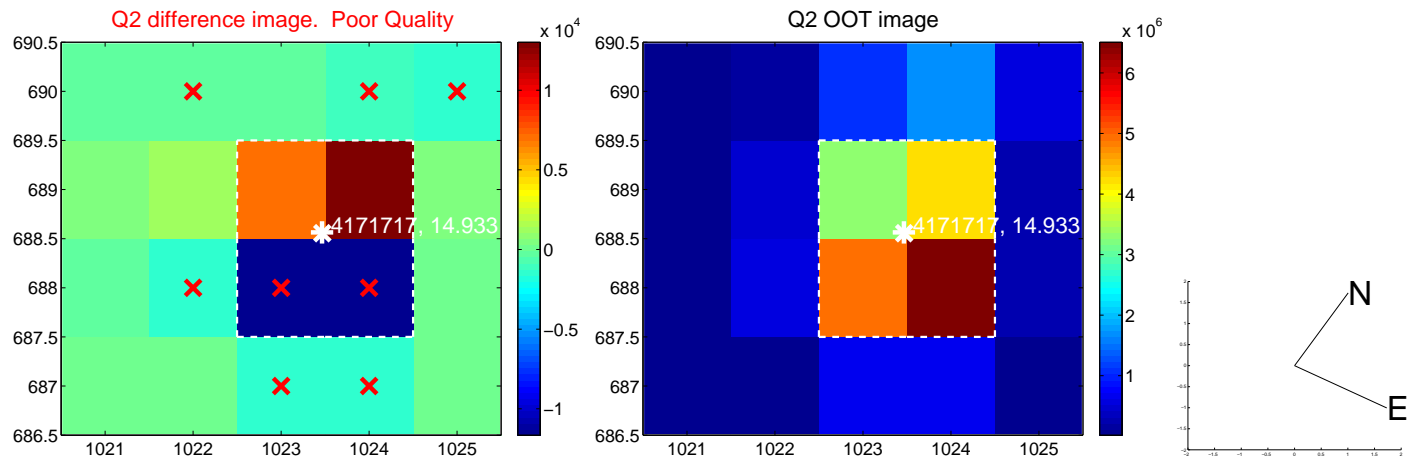
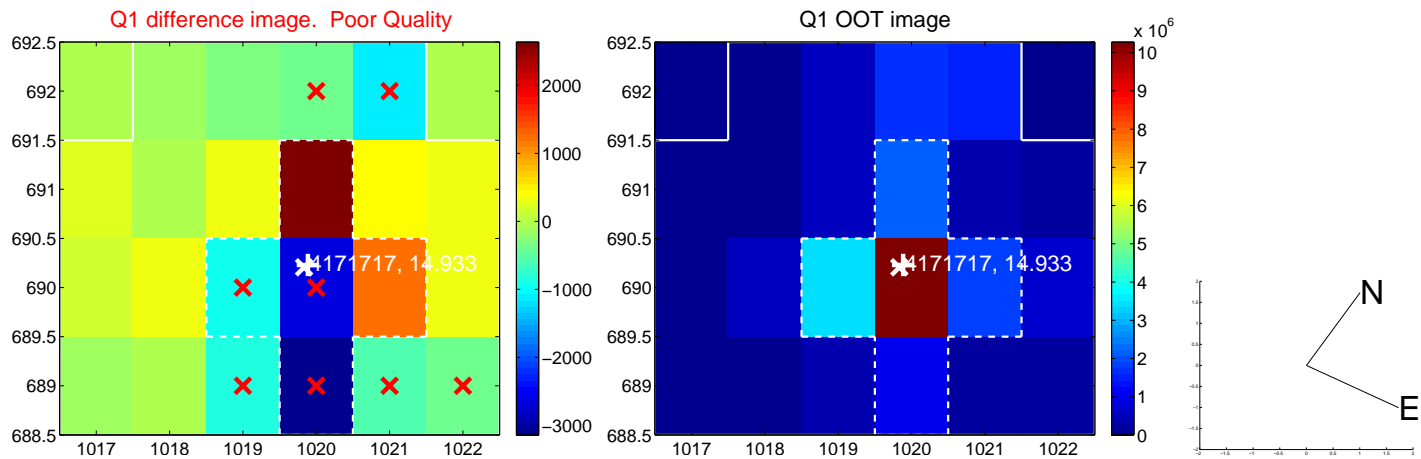
The direct PRF centroid is offset from the target star catalog position by about 0.23 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.620 ± 1.049	0.59	-0.620 ± 1.049	-0.003 ± 0.524
PRF-fit source offset from KIC position	0.524 ± 1.067	0.49	-0.520 ± 1.074	0.065 ± 0.444
photometric centroid source offset	4.49 ± 1.26	3.58	-2.41 ± 1.17	3.80 ± 1.29

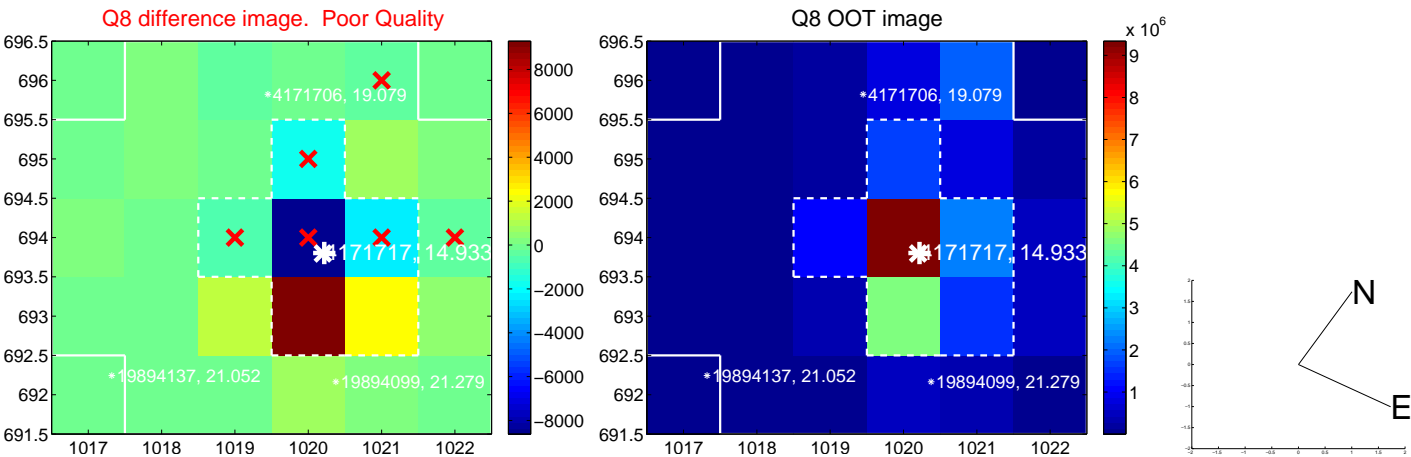
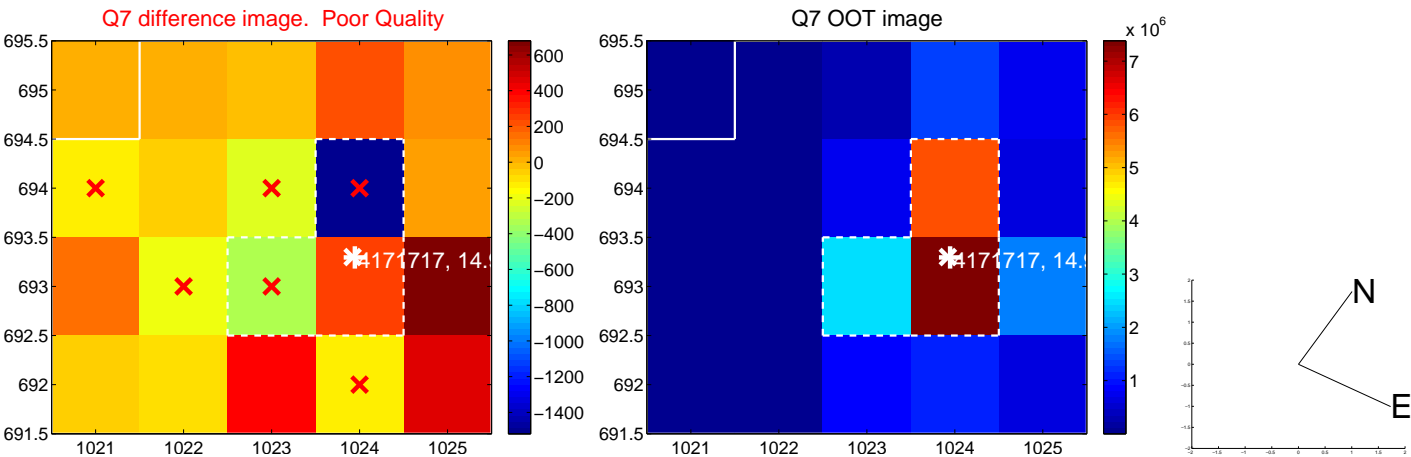
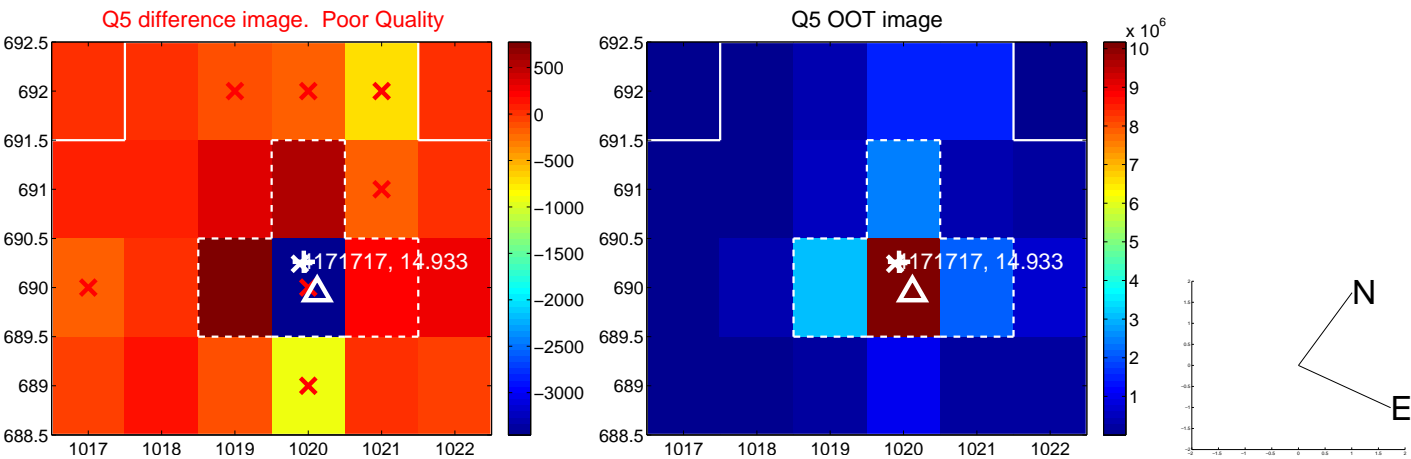


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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

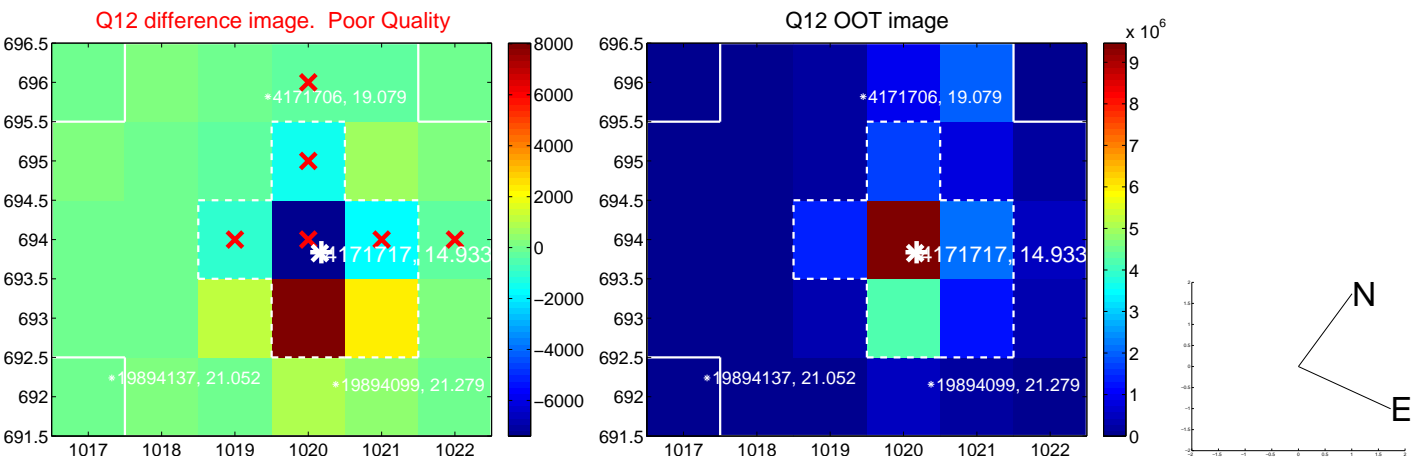
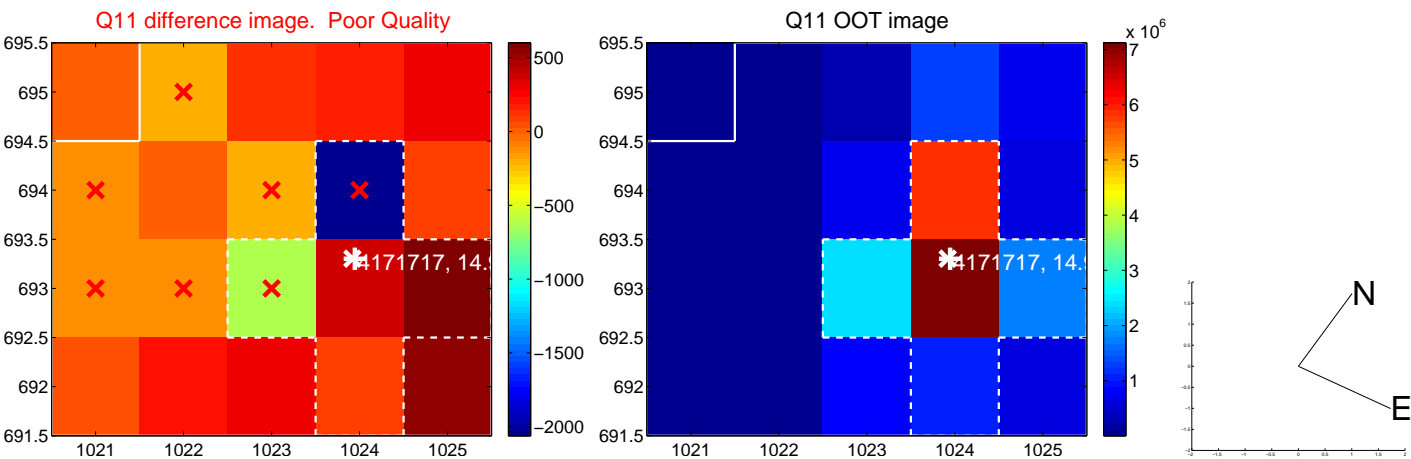
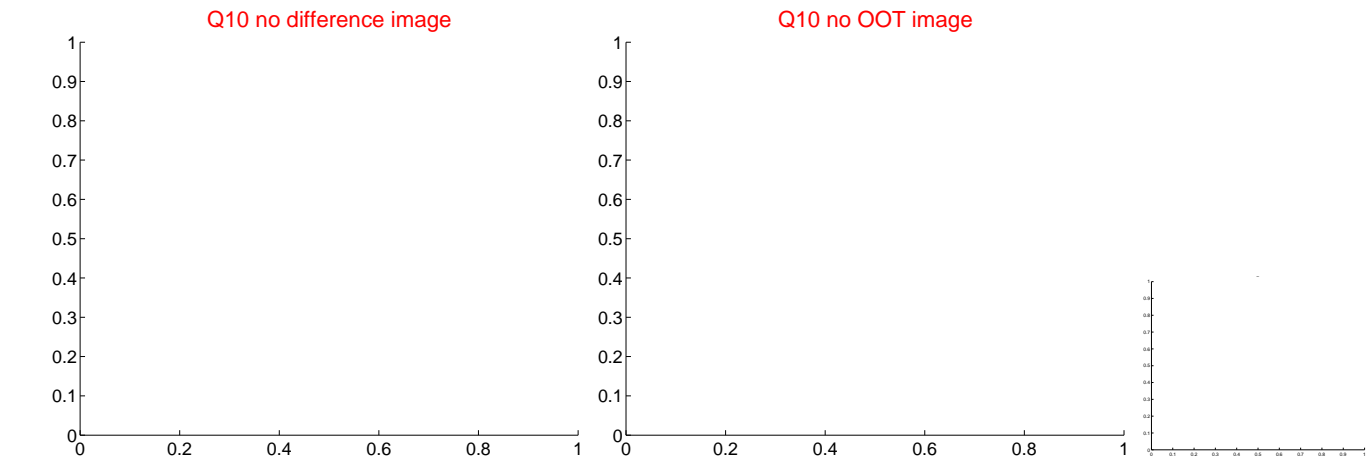
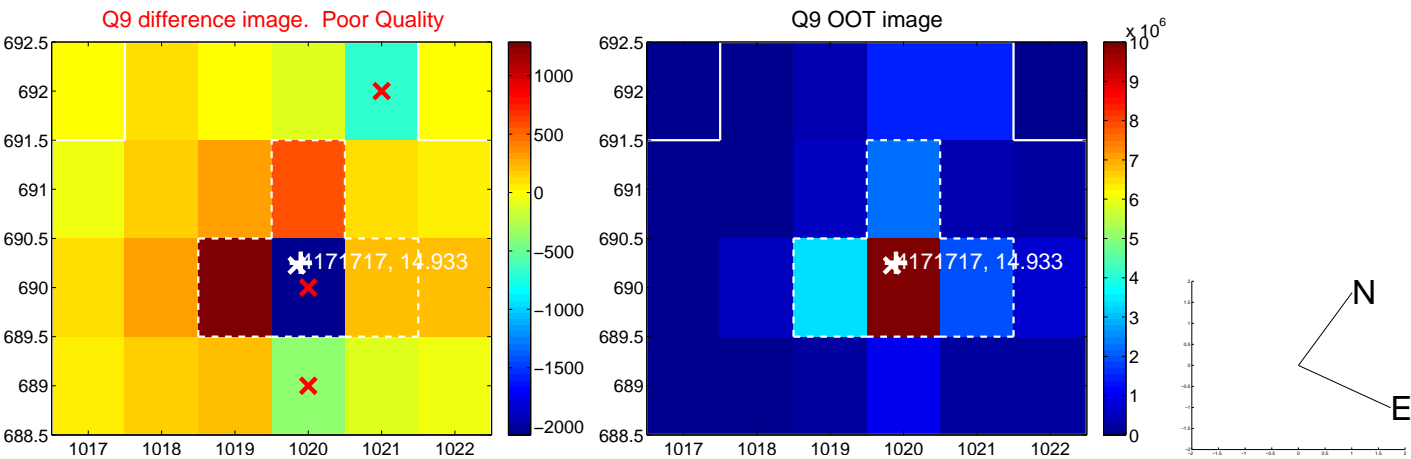
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



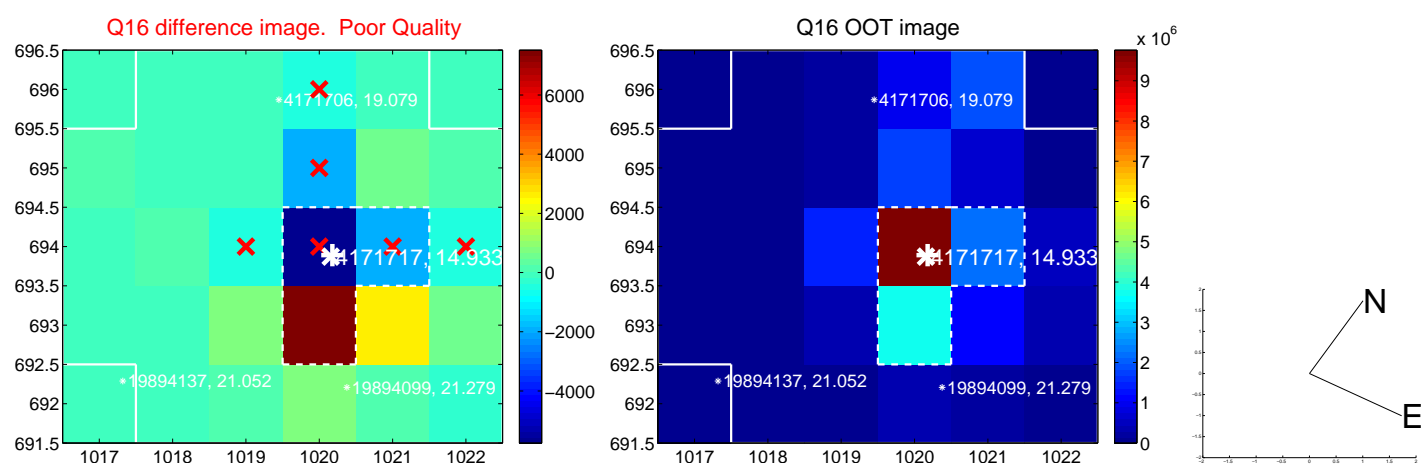
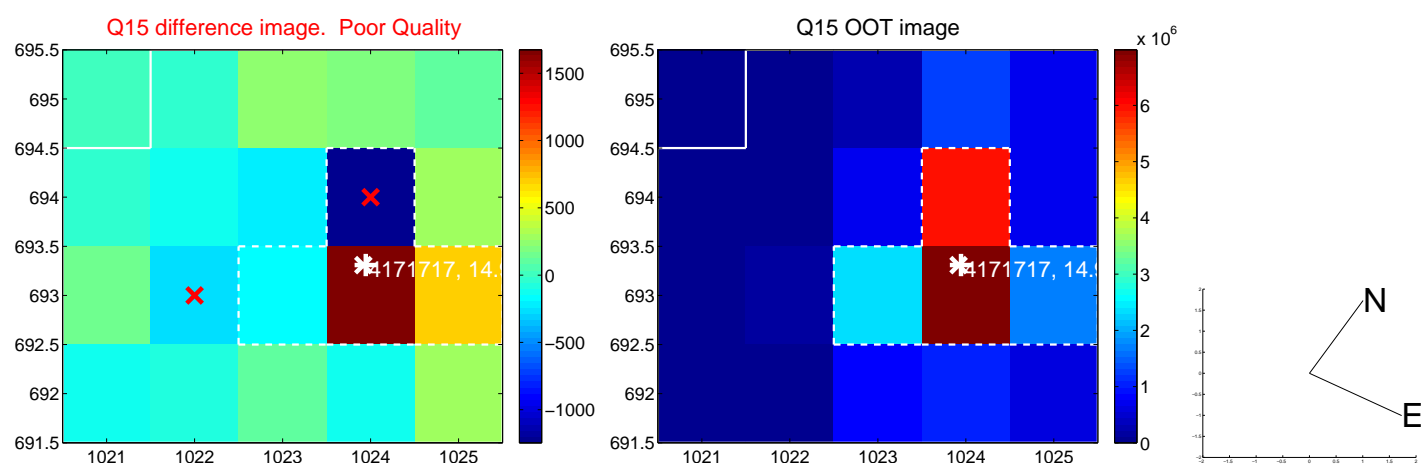
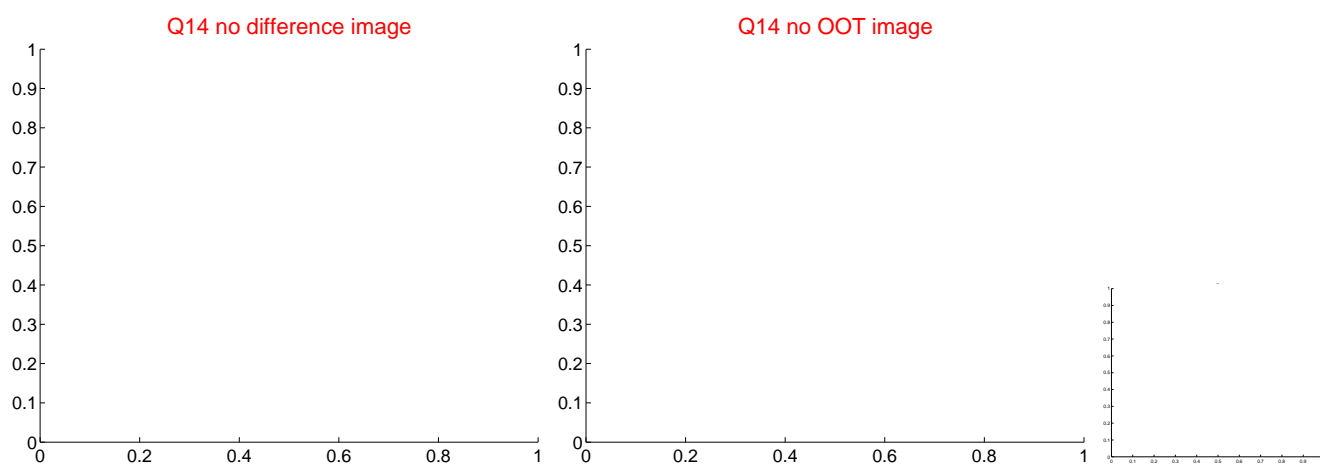
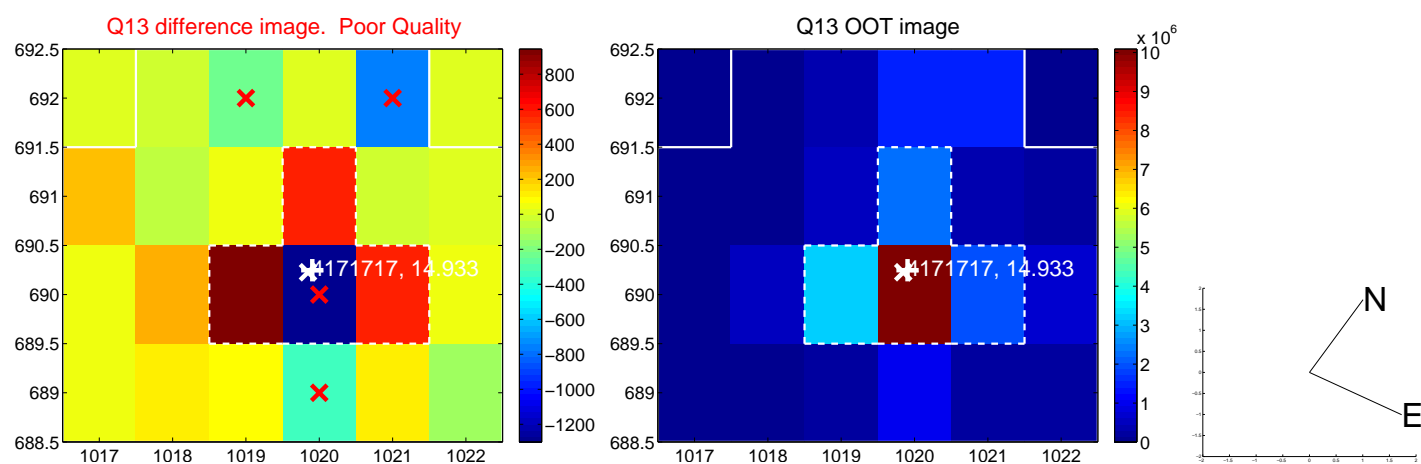
white ×: KIC target position; +: OOT centroid; △: difference centroid. red ×: large negative pixel value.



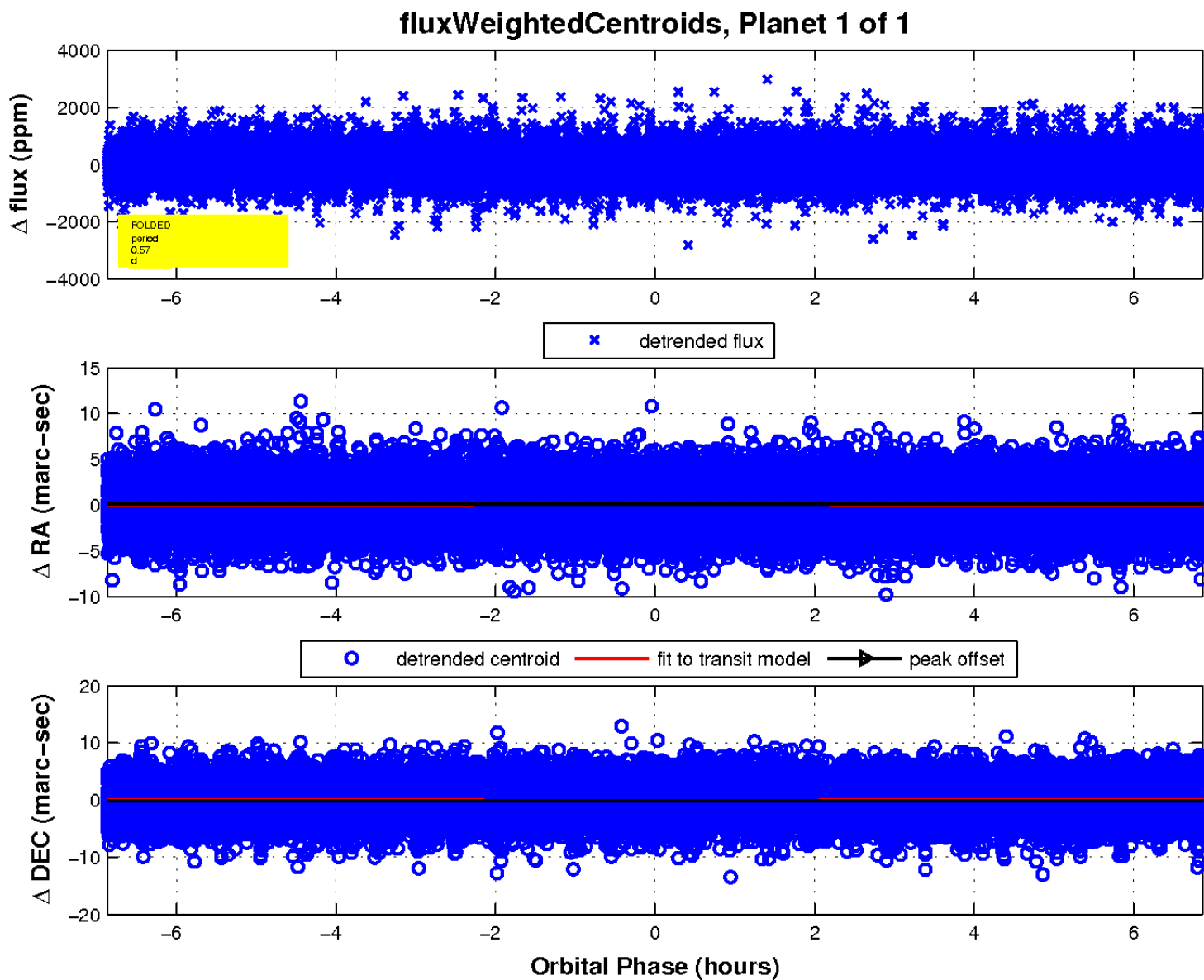
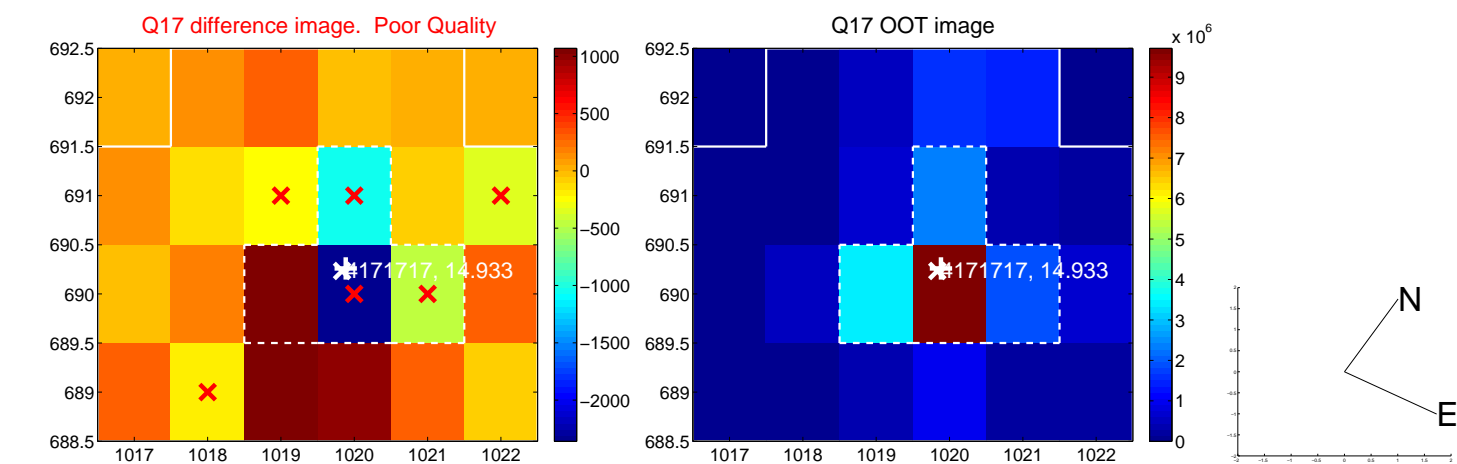
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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



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



UKIRT Image

Declination

