

KIC 006187888

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})
006187888-01	OBS	7768.01	0.789181	132.119514	66.0	1.919	8.0	8.4	0.81	4776	0.66	1287.06

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
006187888-01	OBS	FP	0.00	0	0	1	1	HALO_GHOST—EPHEM_MATCH

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.

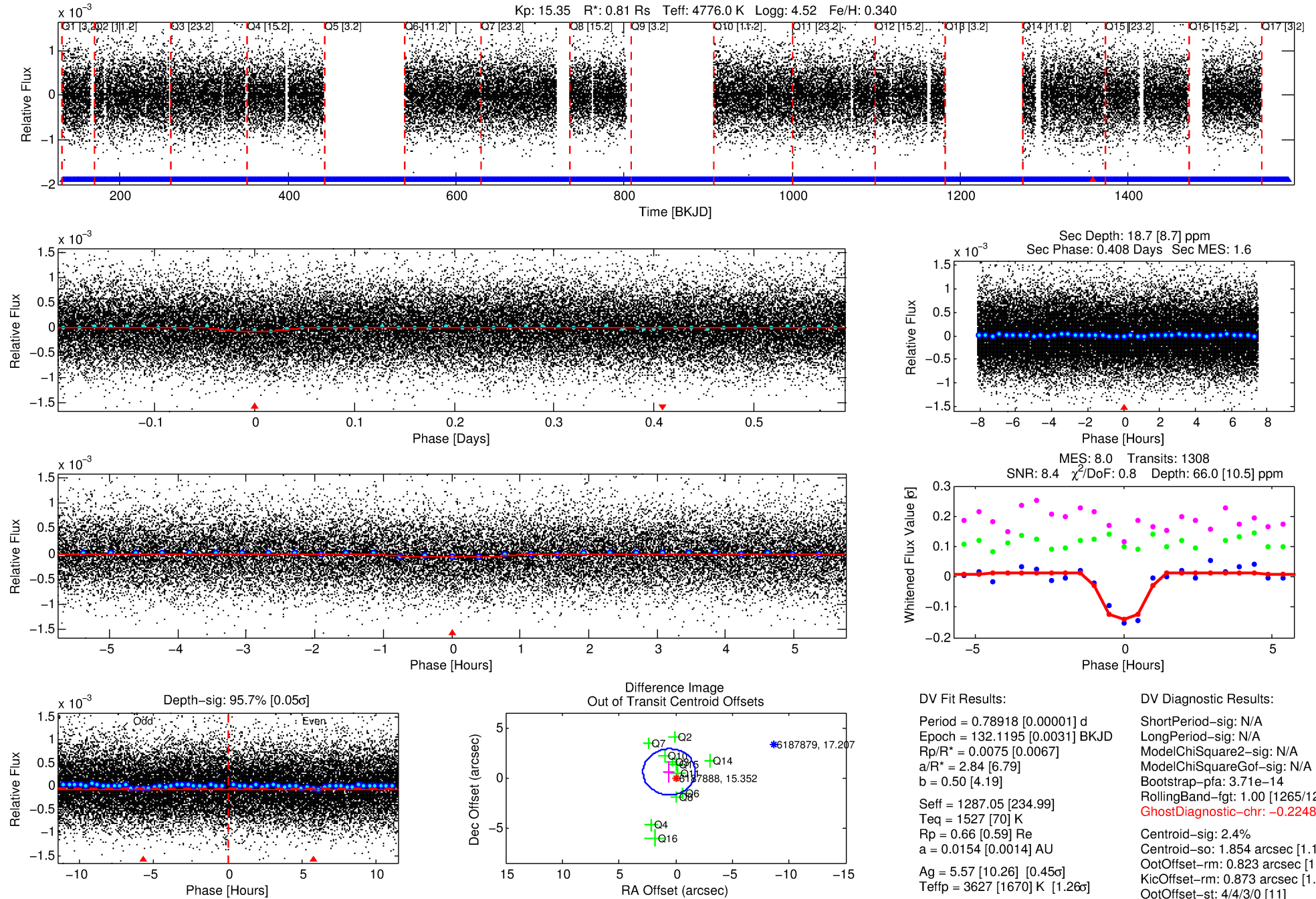
Ephemeris Match Information For 006187888-01

TCE (1)	KIC	Parent (2)	Parent KIC	$P_1:P_2$	Dist ($''$)	Δ Row	Δ Col	m_2	m_1	D_2/D_1	Mechanism	Flag	σ_P	σ_T
006187888-01	6187888	006187893-pri	6187893	1:1	57.2	10	-10	11.70	15.35	975.76	Direct-PRF	0	1.67	1.28

Notes: $P_1:P_2$ is the period ratio. Dist is the distance in arcseconds. Δ Row and Δ Col are the number of pixels apart in row and column. m_2 and m_1 are the magnitudes of the parent and child. D_2/D_1 is the parent's transit depth divided by the child's. σ_P and σ_T are the significance of the match in period and epoch. For a match to be considered significant $\sigma_P < 5.0$ and $\sigma_T < 5.0$. Matches which have σ_P and σ_T very close to this cutoff should receive extra scrutiny, especially if the period ratio is very large.

DV One-Page Summary

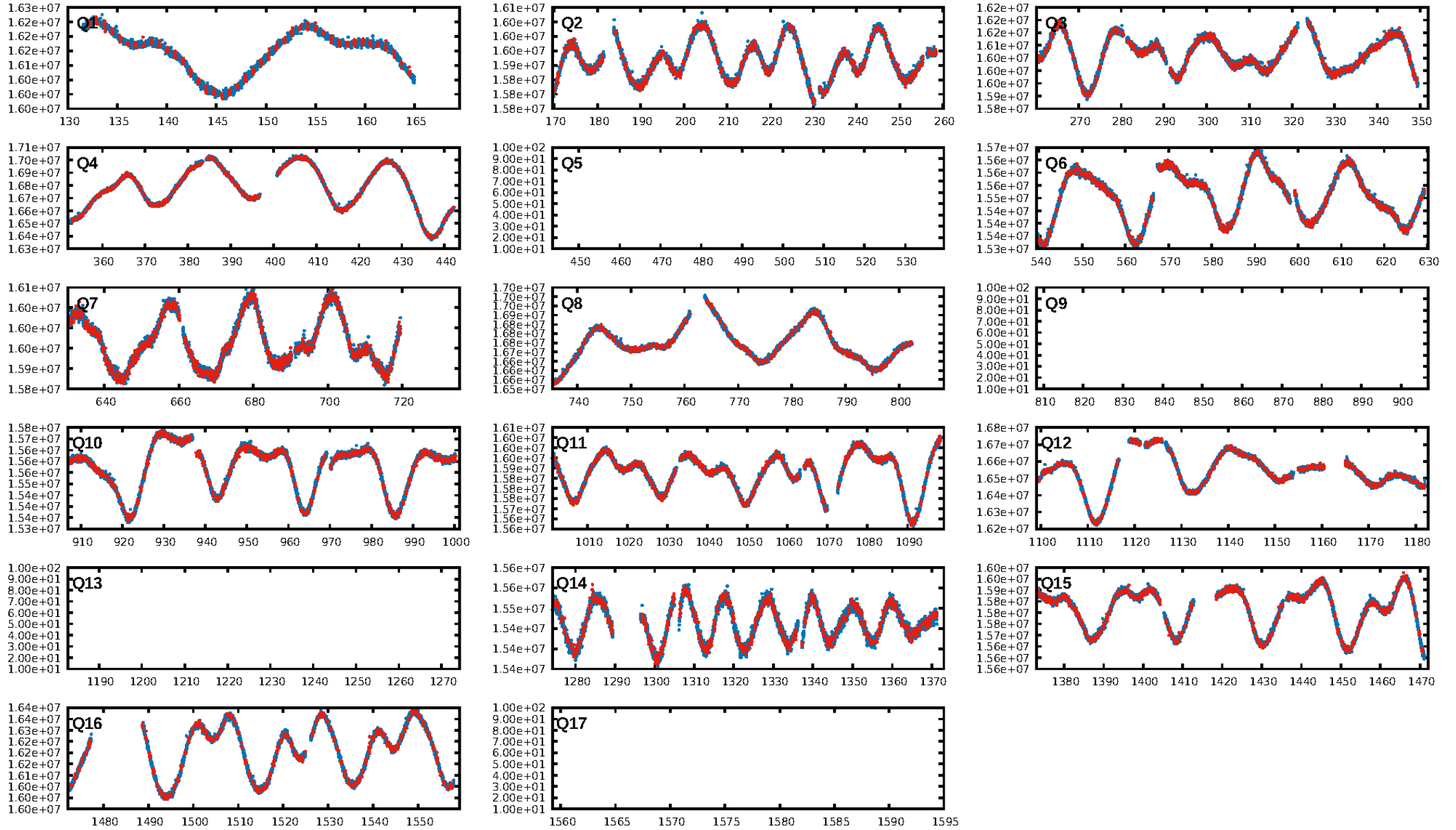
KIC: 6187888 Candidate: 1 of 1 Period: 0.789 d



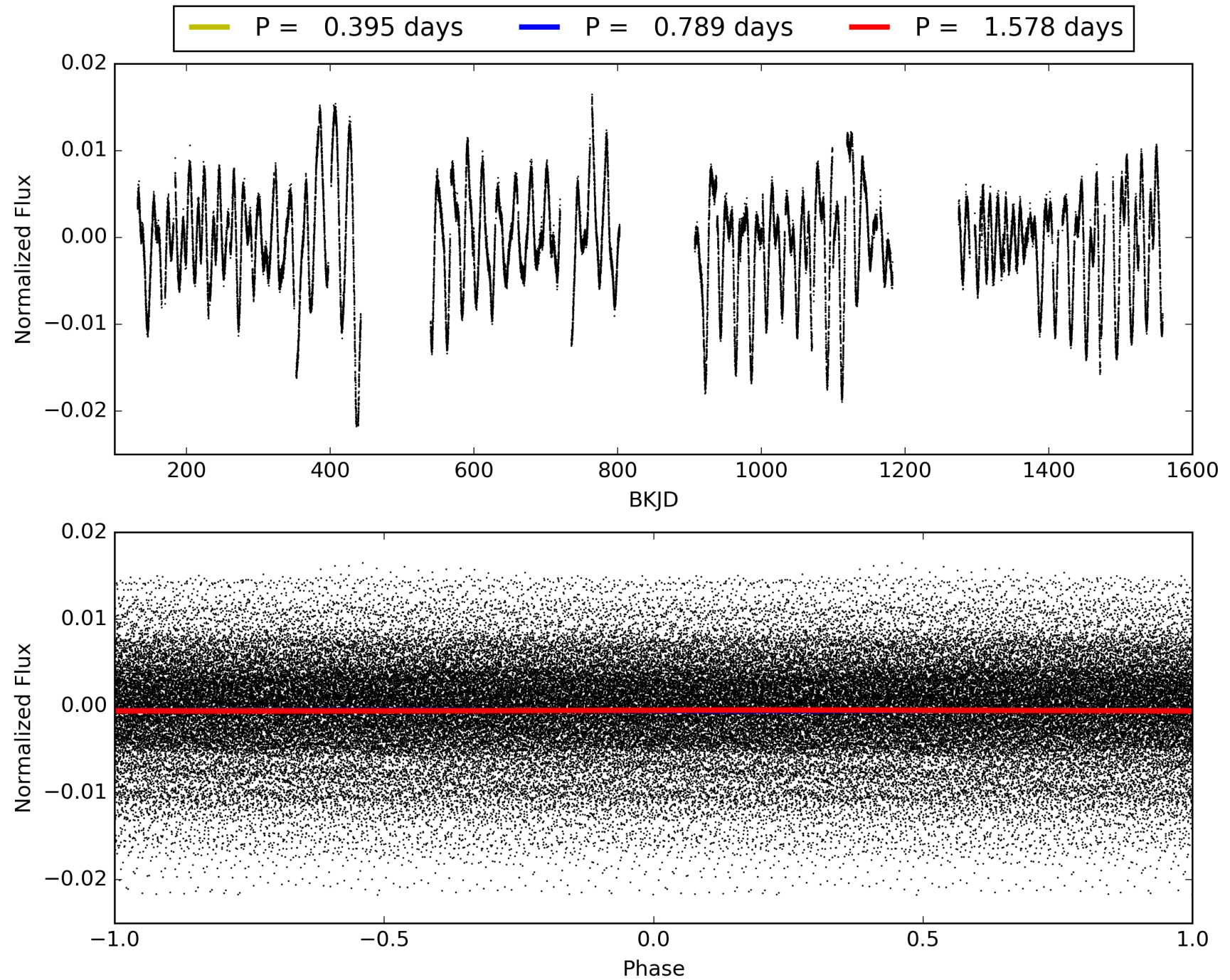
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 01-Feb-2016 01:04:53 Z

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

TCE 006187888-01, PDC Light Curves

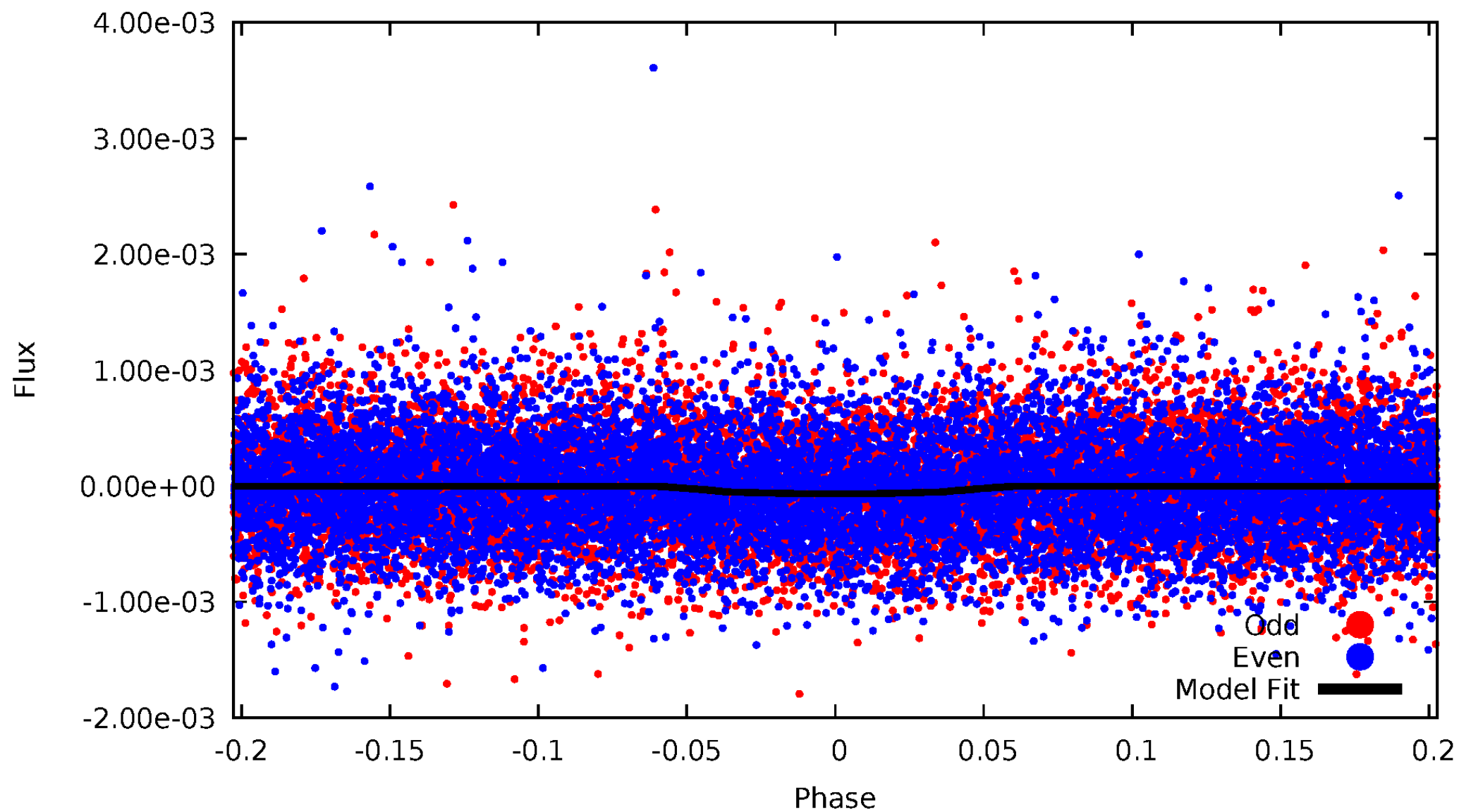


TCE 006187888-01



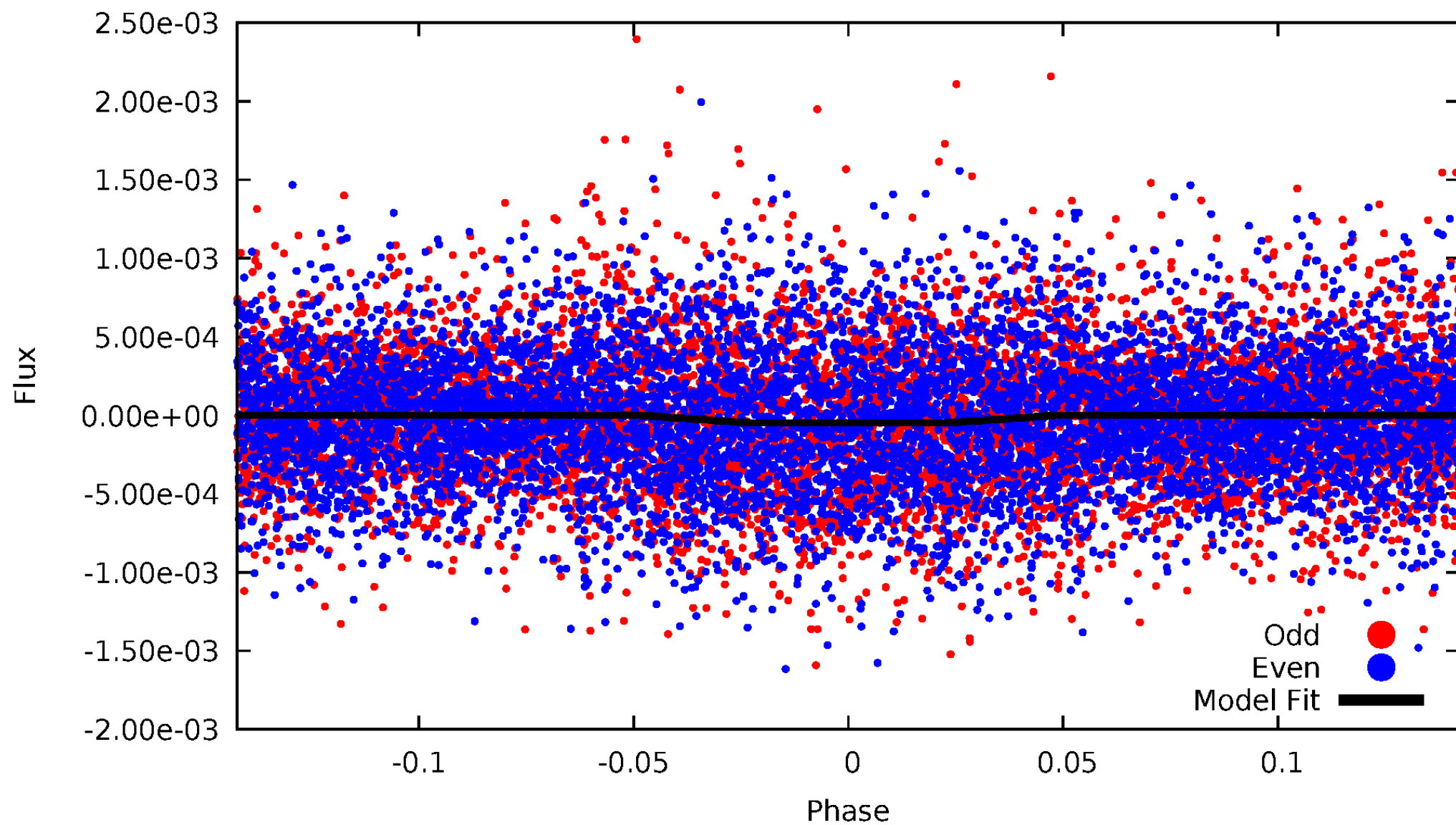
DV Odd/Even

TCE 006187888-01

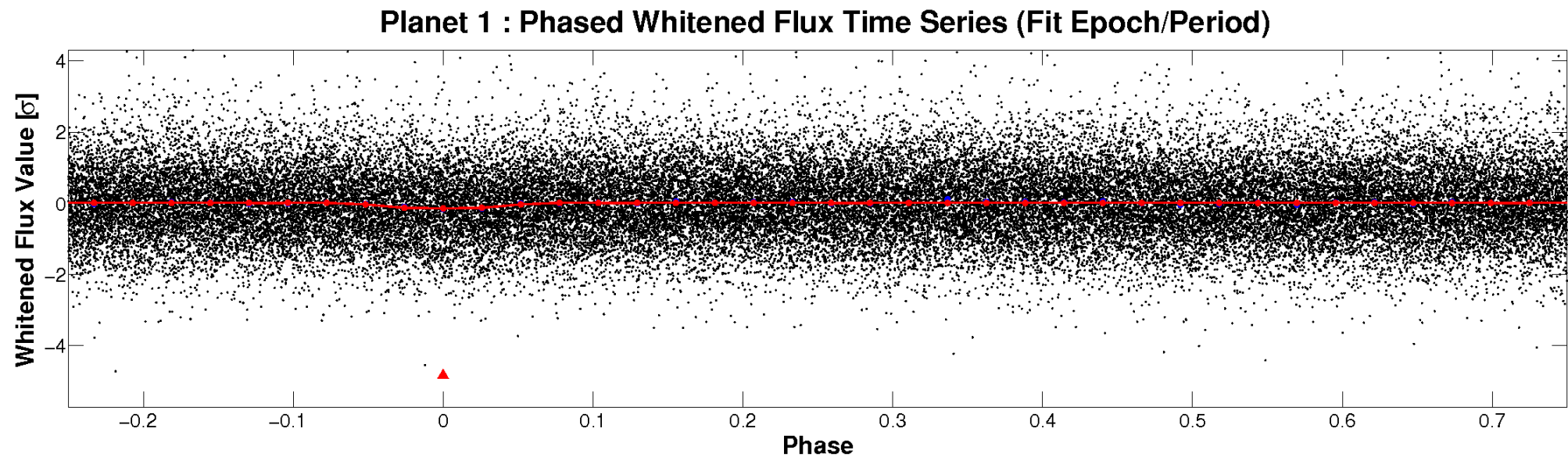
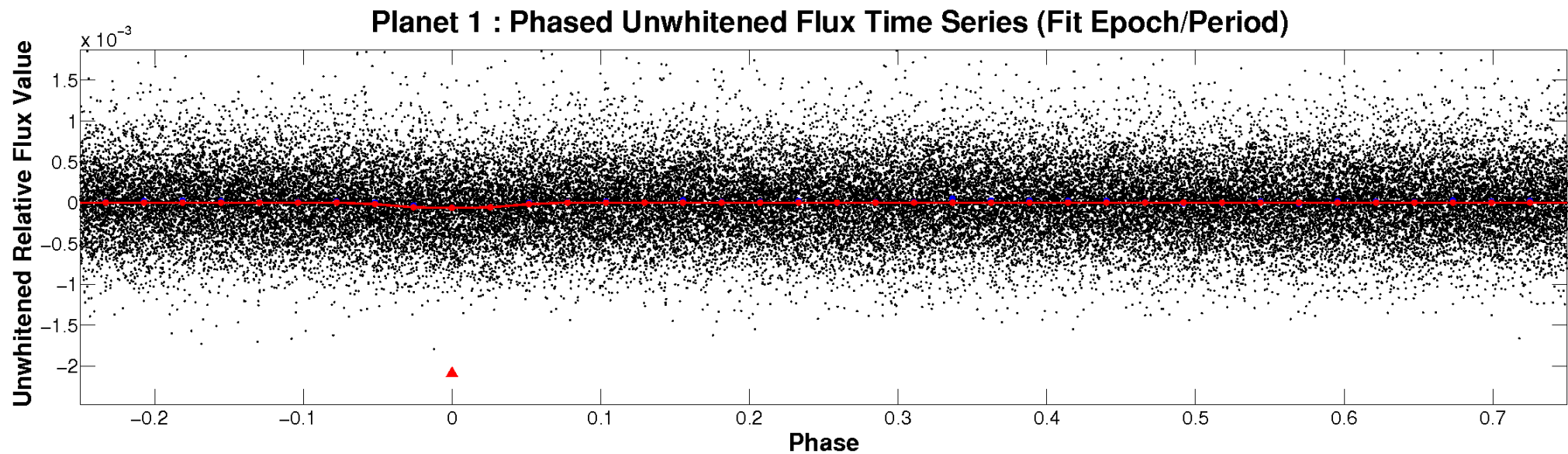


ALT Odd/Even

TCE 006187888-01

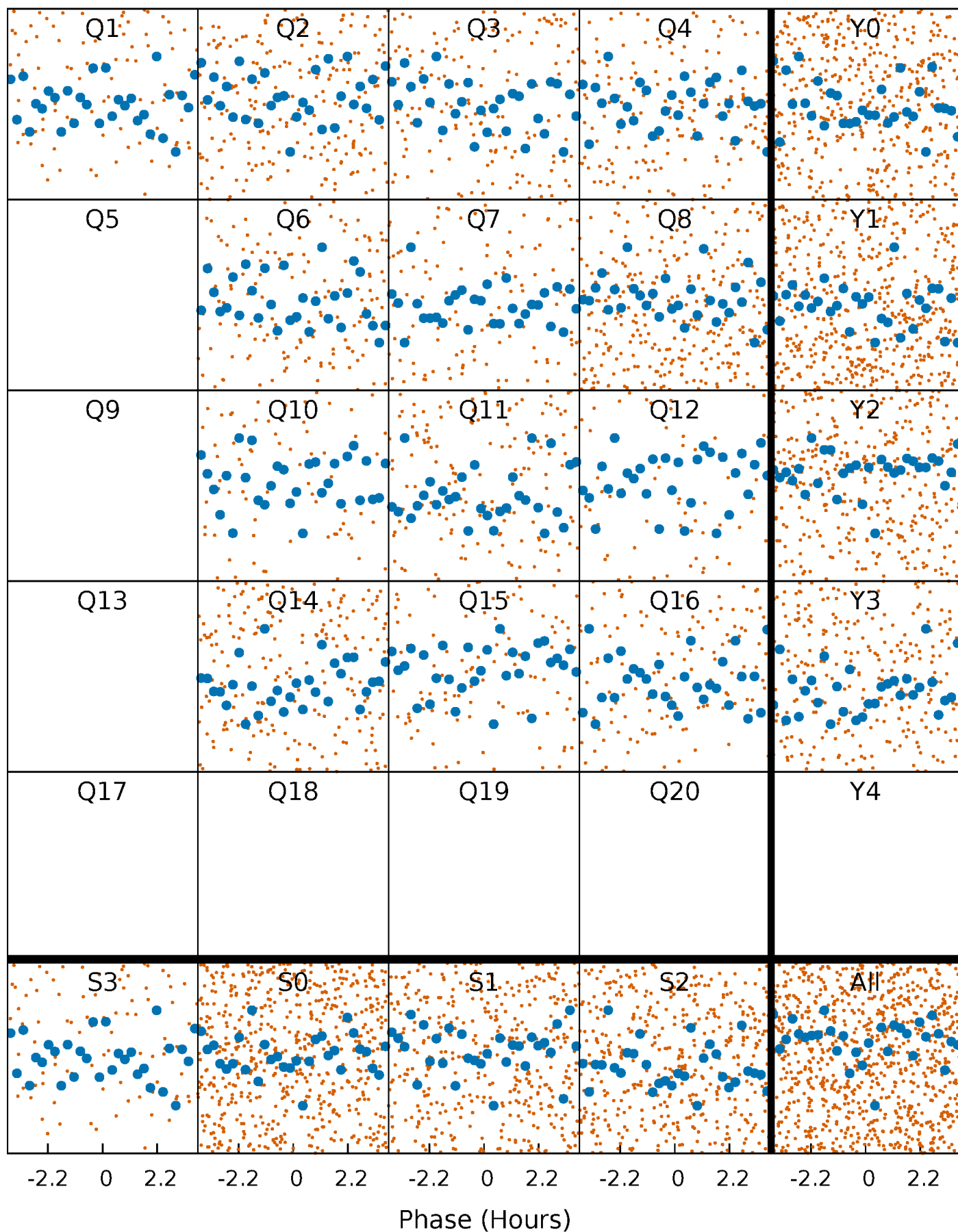


Non-Whitened Vs. Whitened Light Curve



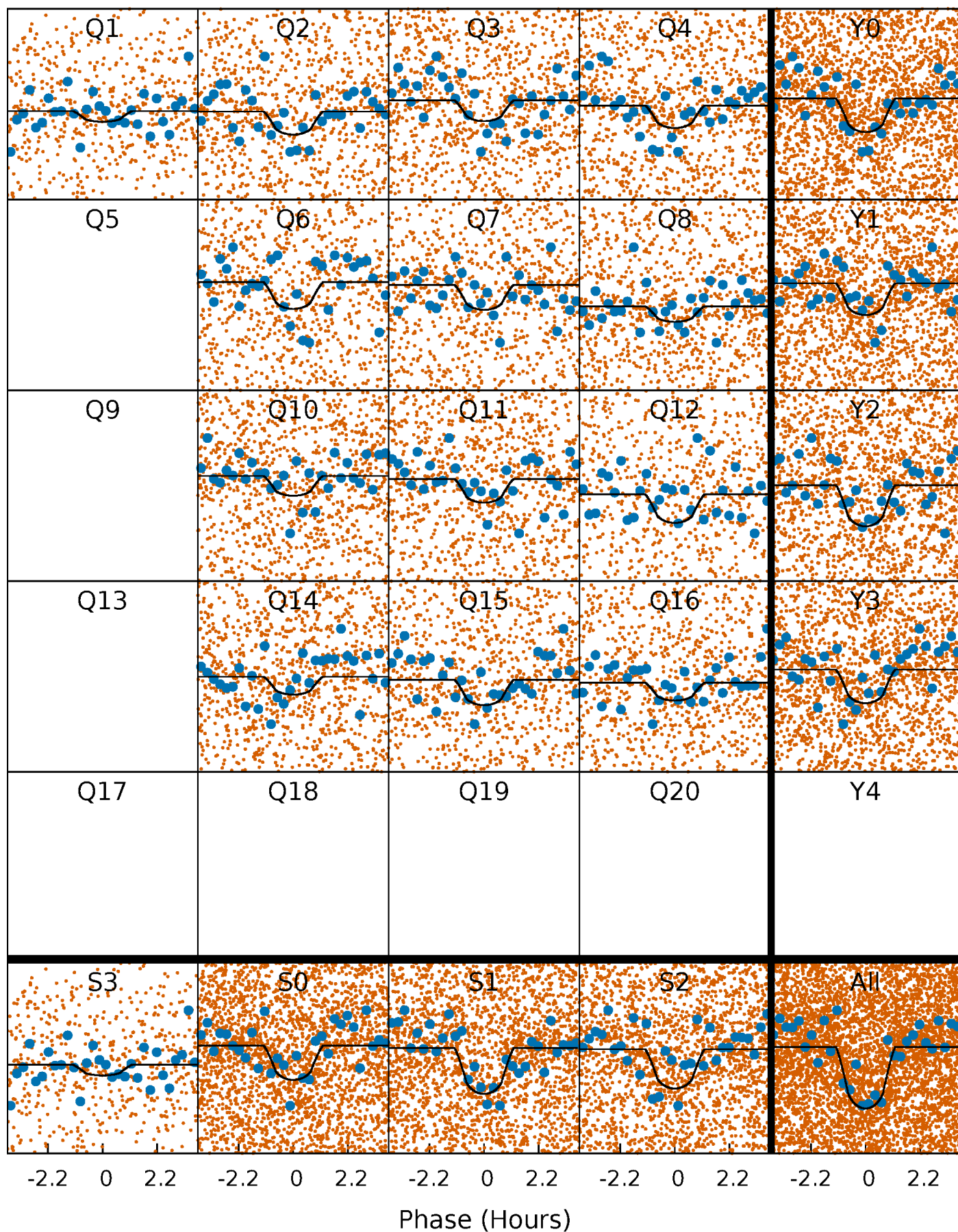
PDC Quarter-Phased Transit Curves

TCE 006187888-01 P= 0.789181 Days $T_0=132.119514$ (BKJD)



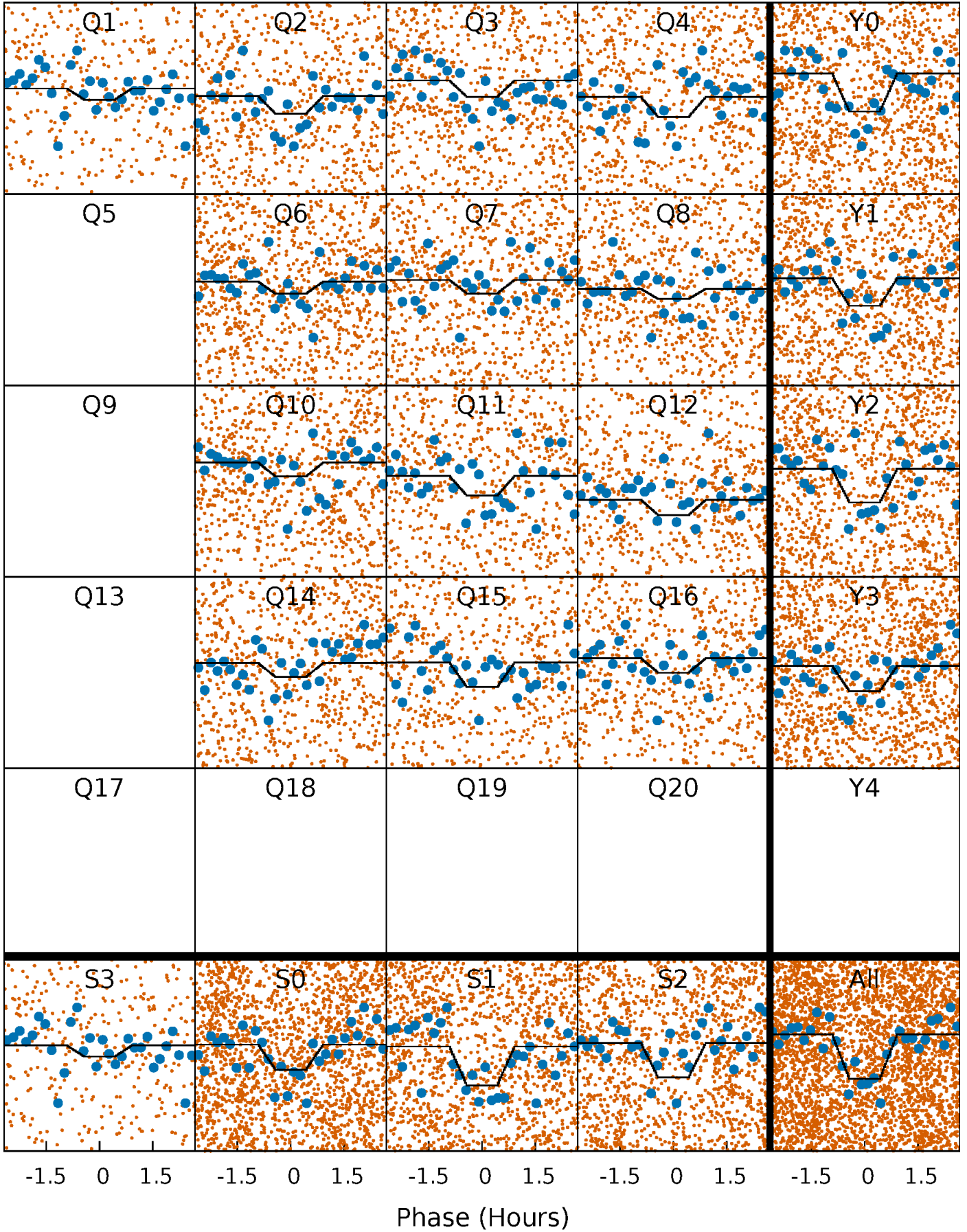
DV Quarter-Phased Transit Curves

TCE 006187888-01 P= 0.789181 Days $T_0=132.119514$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

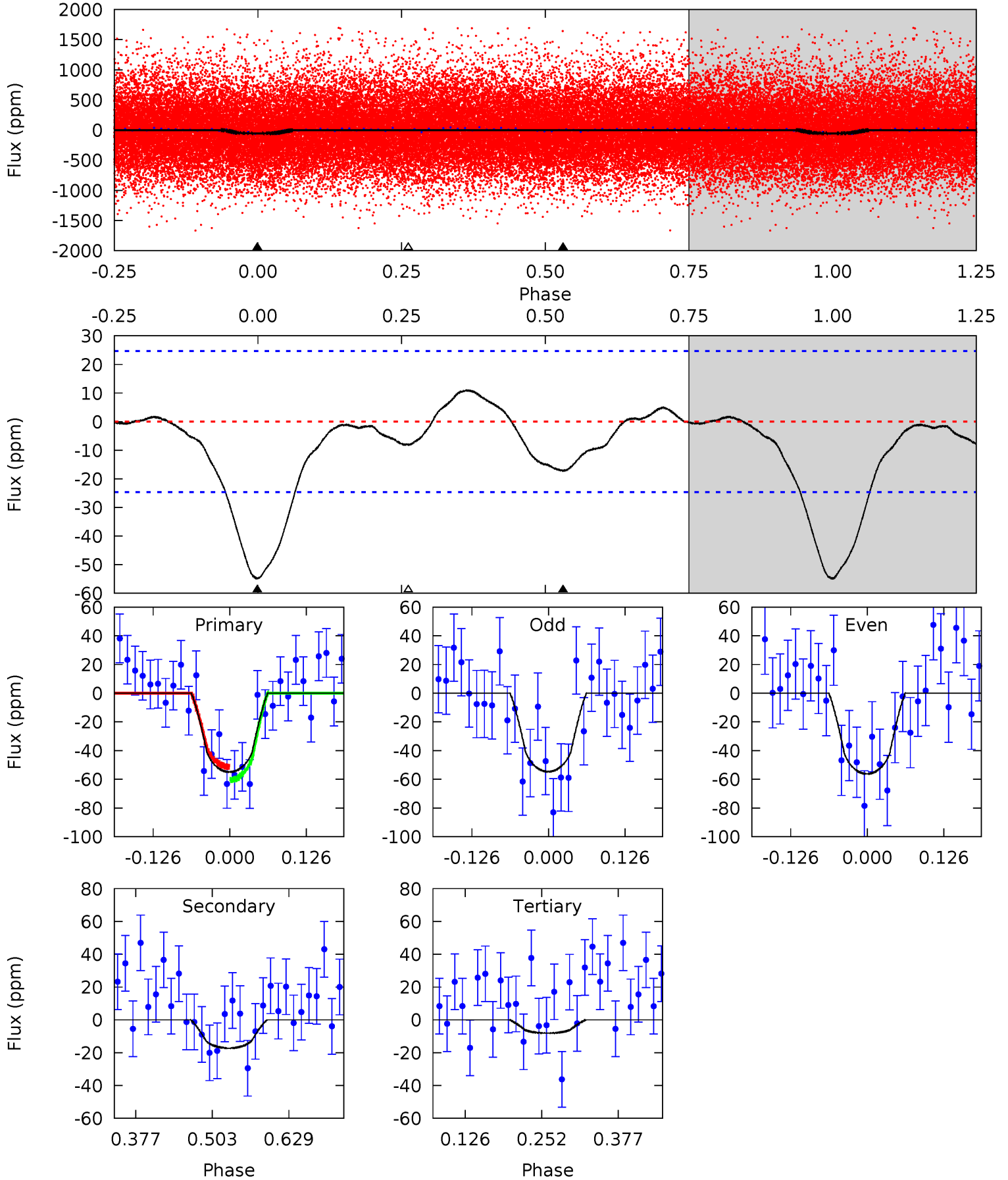
TCE 006187888-01 P= 0.789168 Days $T_0=132.128718$ (BKJD)



DV Model-Shift Uniqueness Test

006187888-01, P = 0.789181 Days, E = 131.330333 Days

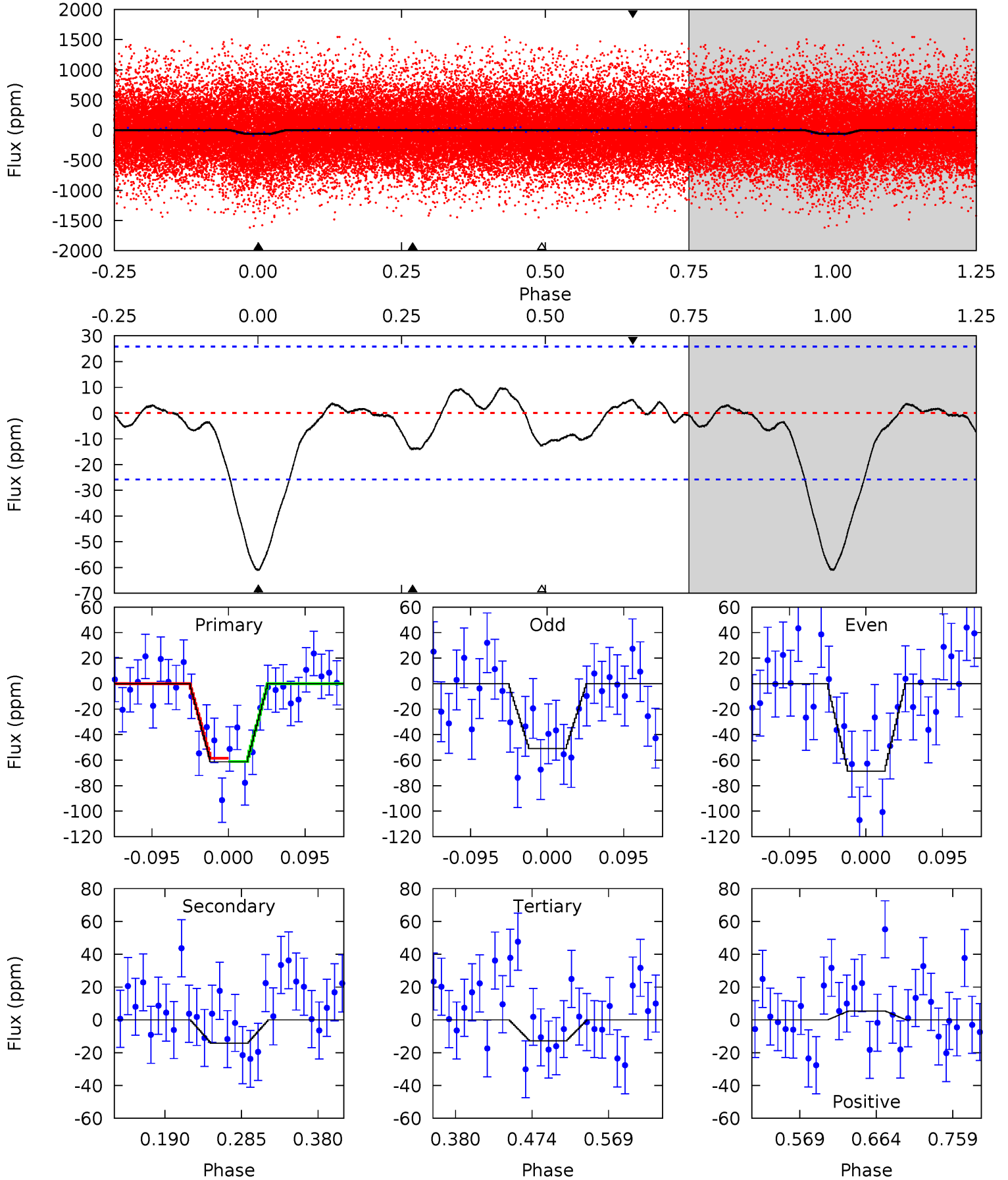
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
10.1	3.17	1.49	0	4.52	1.53	0.88	8.58	10.1	1.67	3.17	0.14	0.90	0.17	0.84



Alt Model-Shift Uniqueness Test

006187888-01, P = 0.789168 Days, E = 131.339550 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	2.53	2.28	0.96	4.58	1.67	0.95	8.59	9.90	0.25	1.57	1.57	0.86	0.14	0.23



Stellar Parameters For KIC 006187888

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	$M(M_{\odot})$	p_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	4776^{+129}_{-143}	$4.516^{+0.078}_{-0.045}$	$0.340^{+0.100}_{-0.300}$	$0.811^{+0.048}_{-0.083}$	$0.788^{+0.051}_{-0.051}$	$2.078^{+0.640}_{-0.327}$
	+3%/-3%	+2%/-1%	+29%/-88%	+6%/-10%	+6%/-6%	+31%/-16%
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 006187888-01 / KOI 7768.01

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	-17 ± 5	$0.75^{+0.55}_{-0.43}$	2127^{+76}_{-82}	3605^{+1423}_{-673}	$3.914^{+17.537}_{-2.703}$
Alt.	-14 ± 6	$0.71^{+0.56}_{-0.45}$	2129^{+72}_{-83}	3542^{+1582}_{-715}	$3.581^{+19.798}_{-2.571}$

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

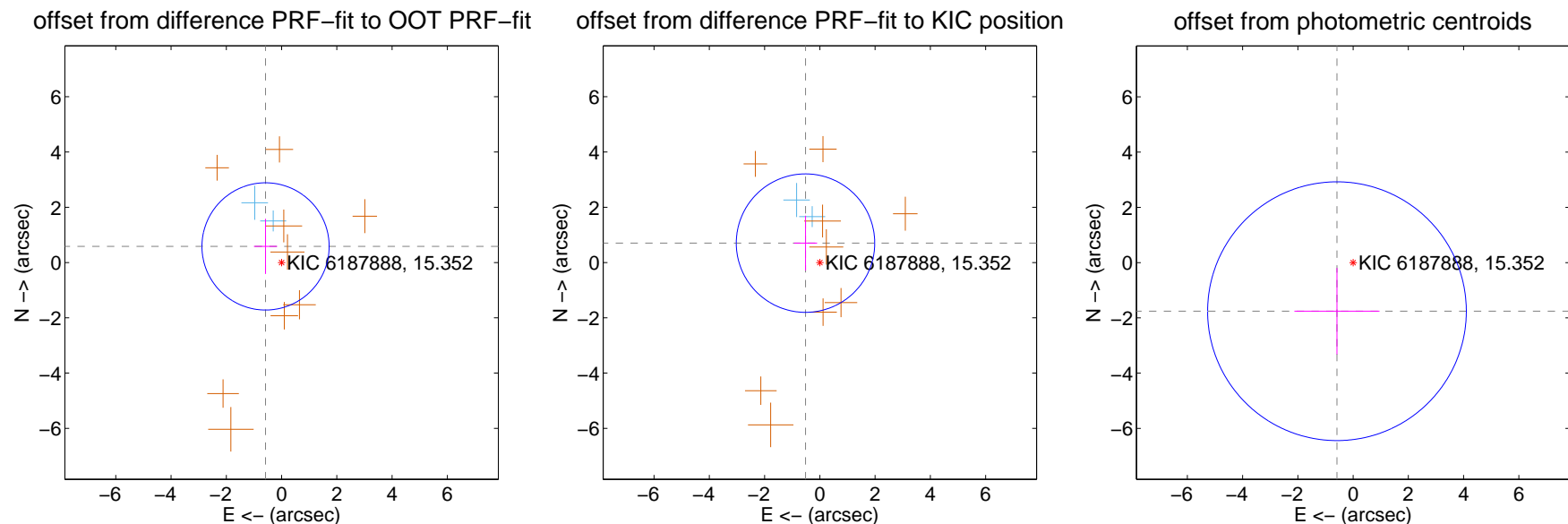
DV Centroid Data

Supplemental centroid analysis for 006187888-01. Kepler magnitude: 15.35. Transit SNR 8.35

There are 2 quarters with good PRF difference image offsets

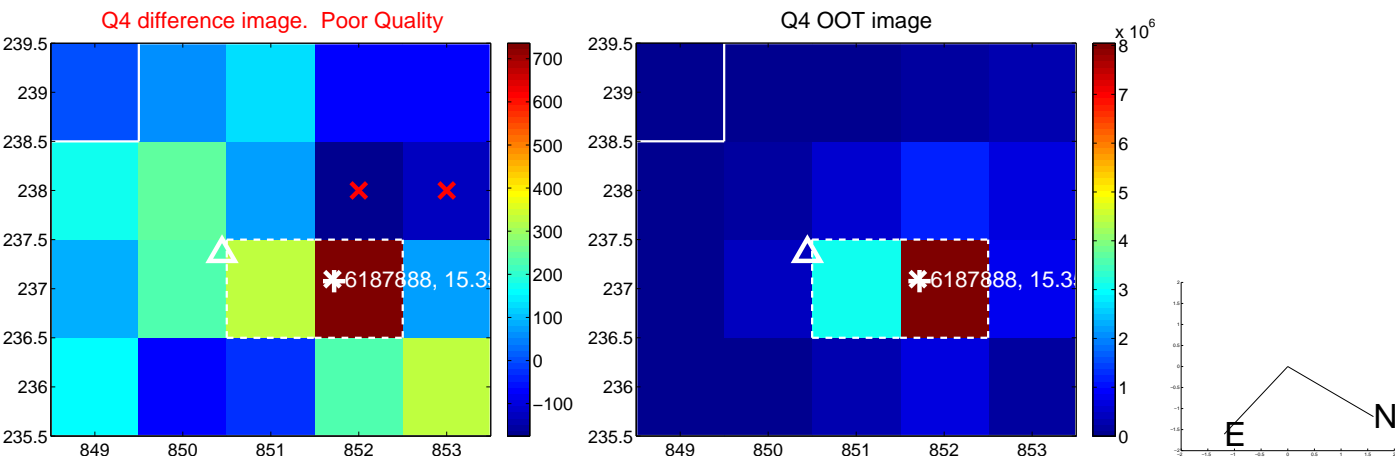
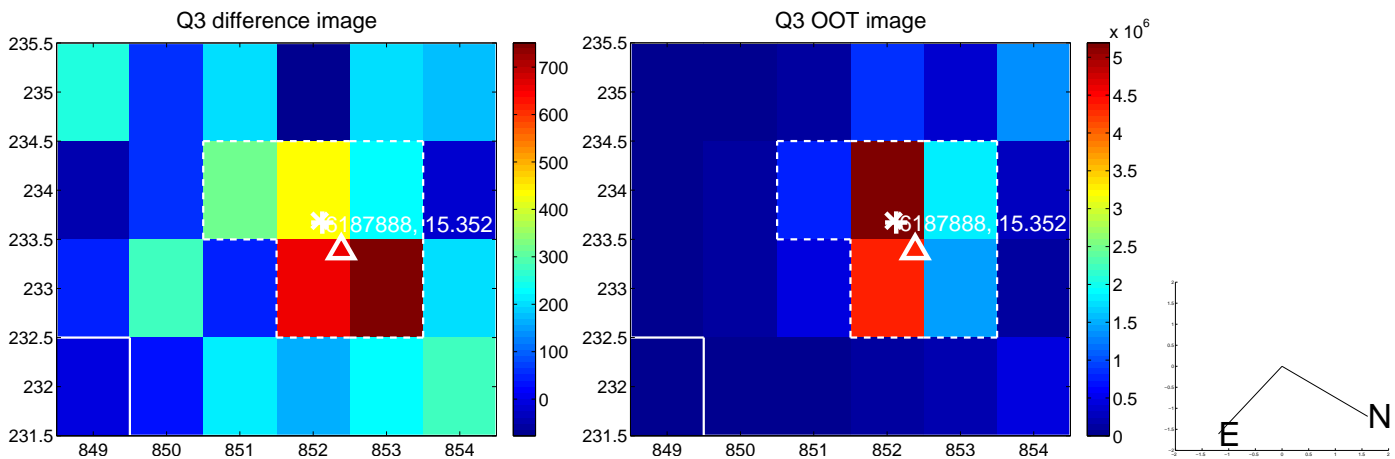
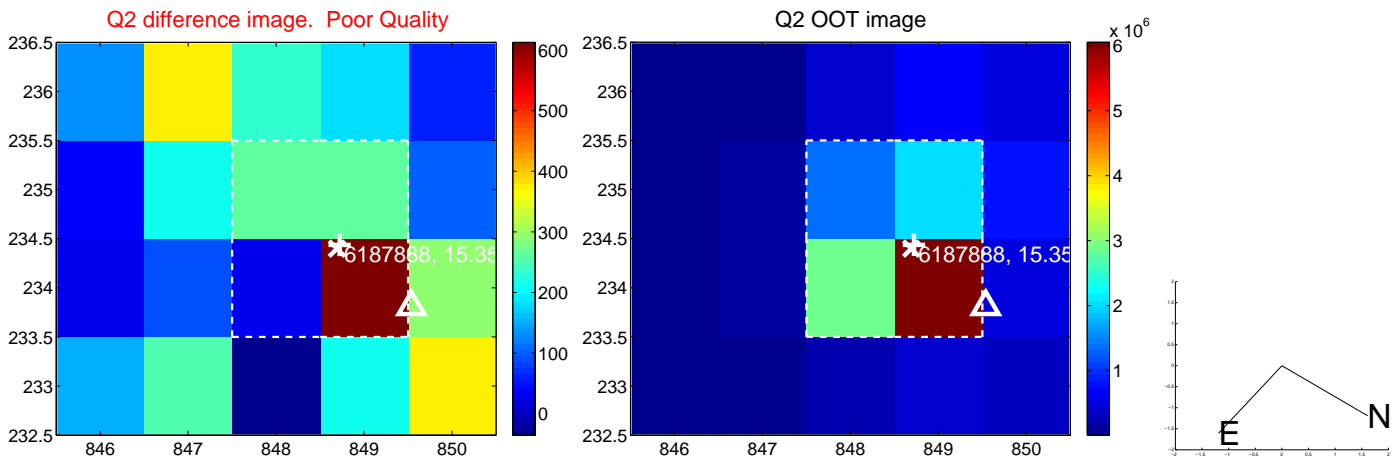
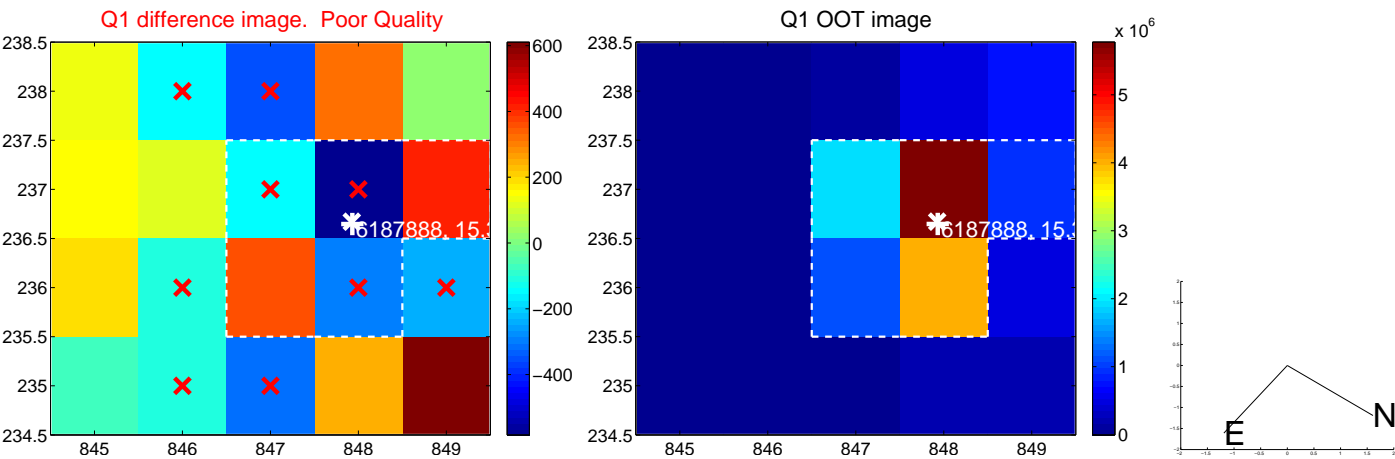
The direct PRF centroid is offset from the target star catalog position by about 0.17 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.823 ± 0.767	1.07	0.580 ± 0.419	0.584 ± 0.999
PRF-fit source offset from KIC position	0.873 ± 0.835	1.05	0.519 ± 0.420	0.702 ± 0.991
photometric centroid source offset	1.85 ± 1.56	1.19	0.58 ± 1.54	-1.76 ± 1.56

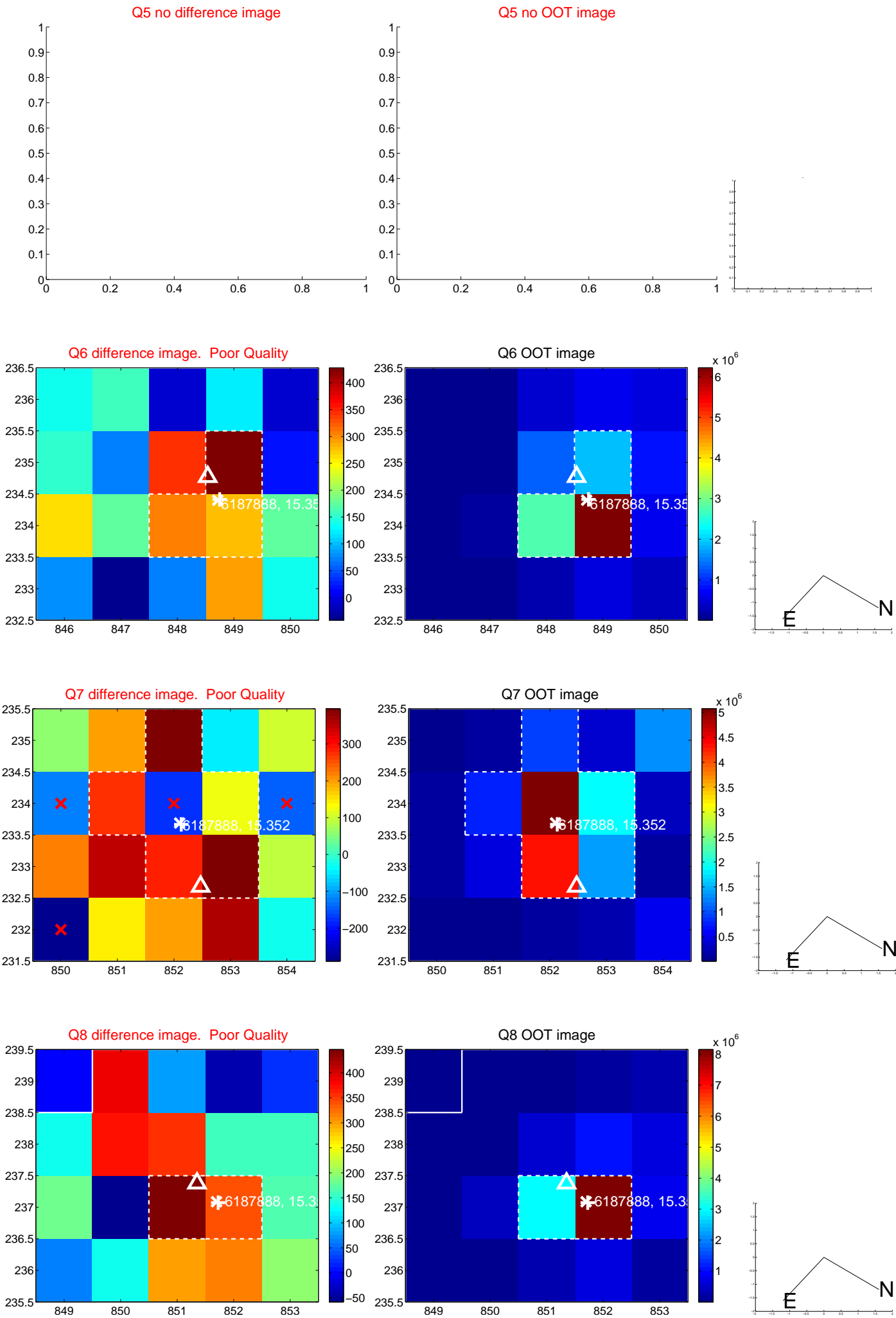


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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

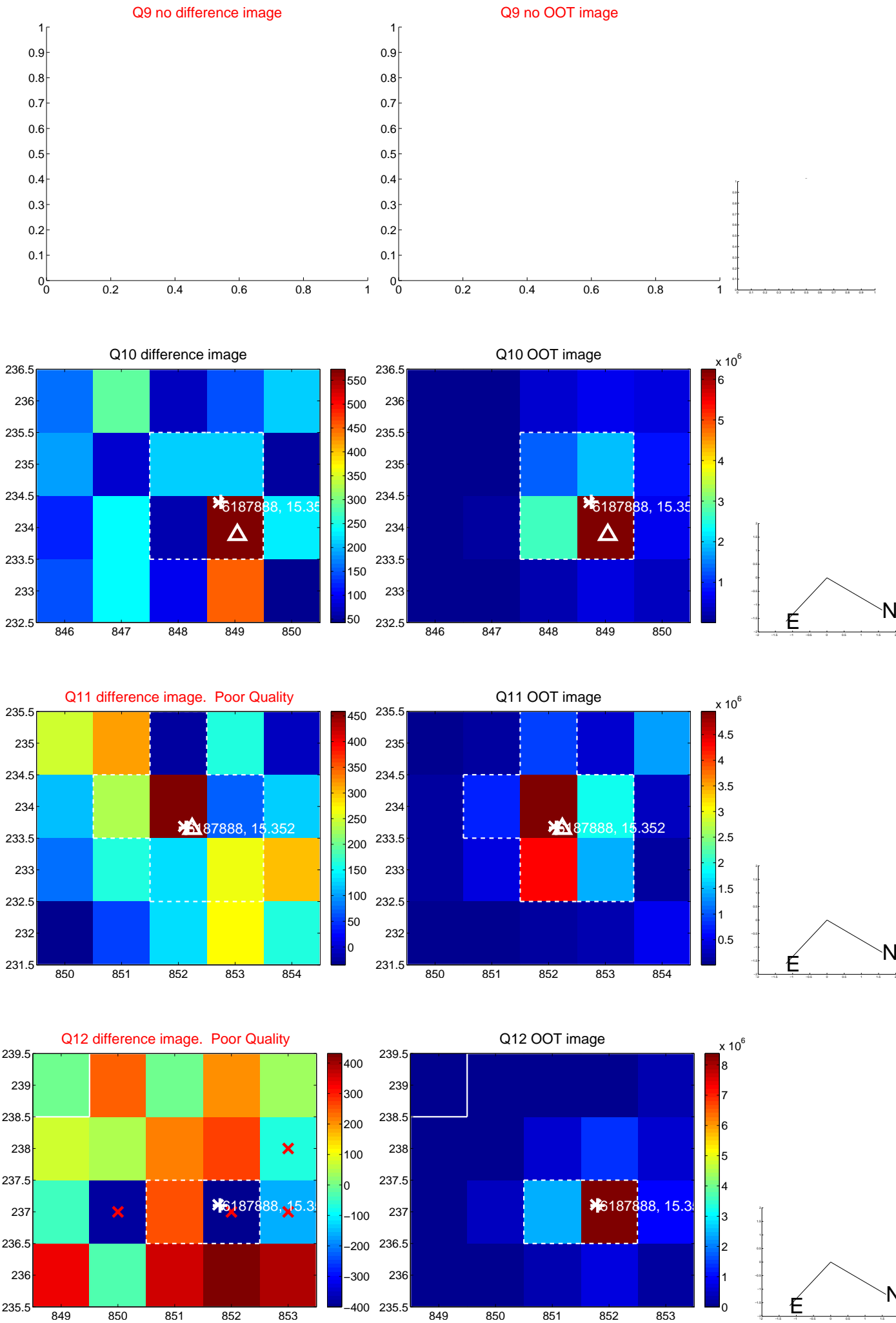
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



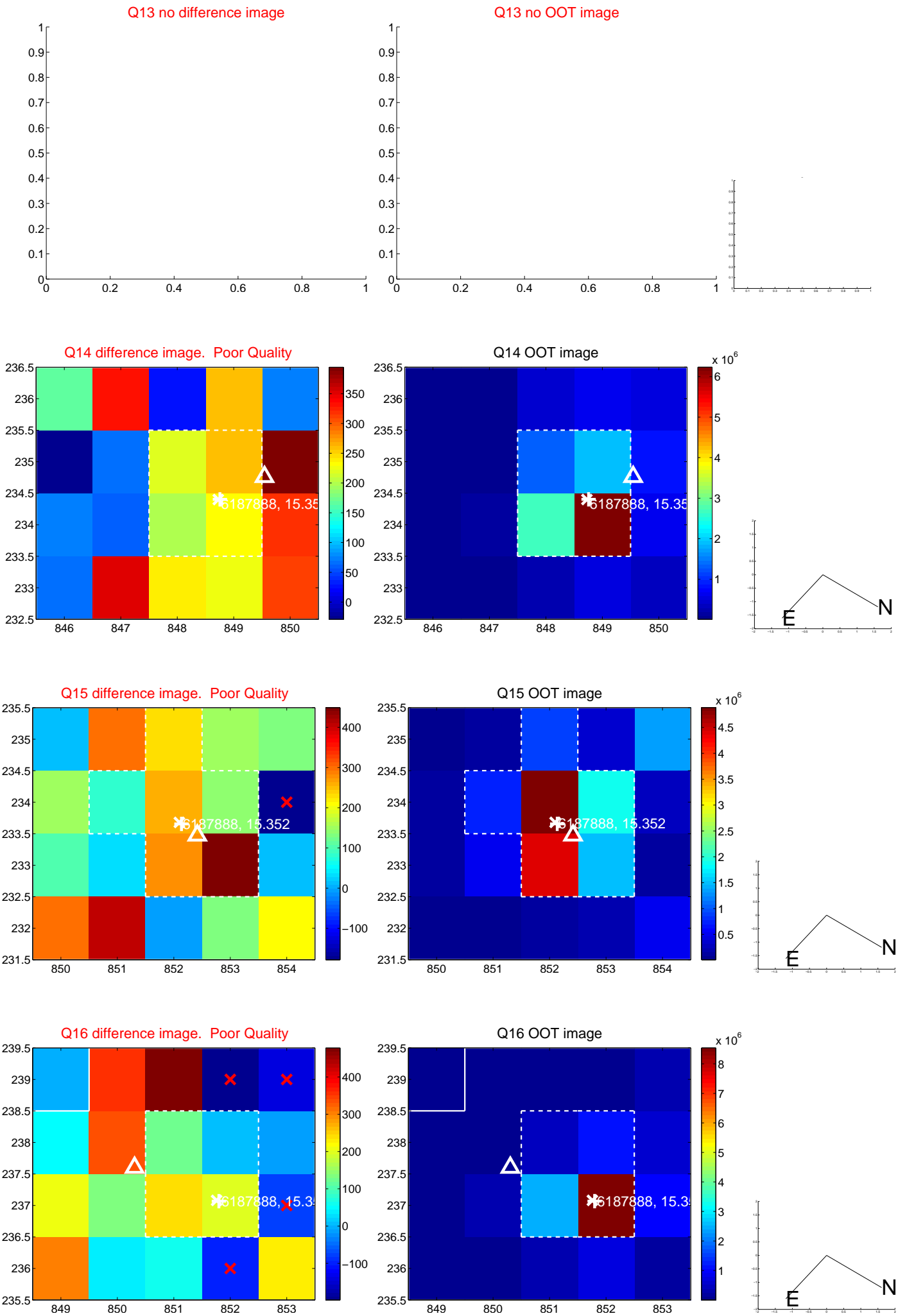
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



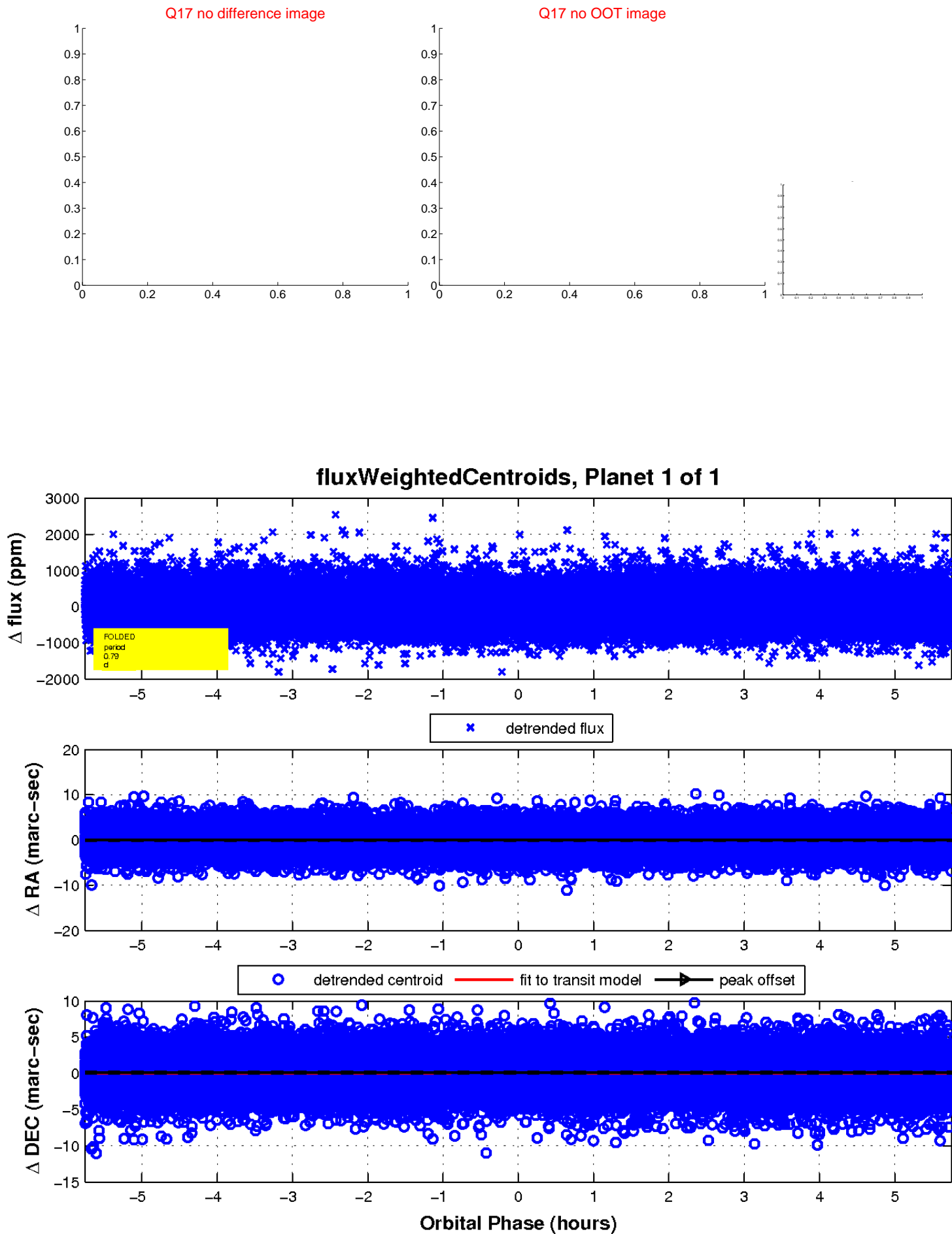
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white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



UKIRT Image

Declination

