

KIC 005857836

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})
005857836-01	OBS	No	0.513306	131.763150	0.0	4.084	8.0	0.0	5.19	6504	0.04	0.00

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
005857836-01	OBS	FP	0.00	1	0	0	0	LPP_DV—LPP_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.

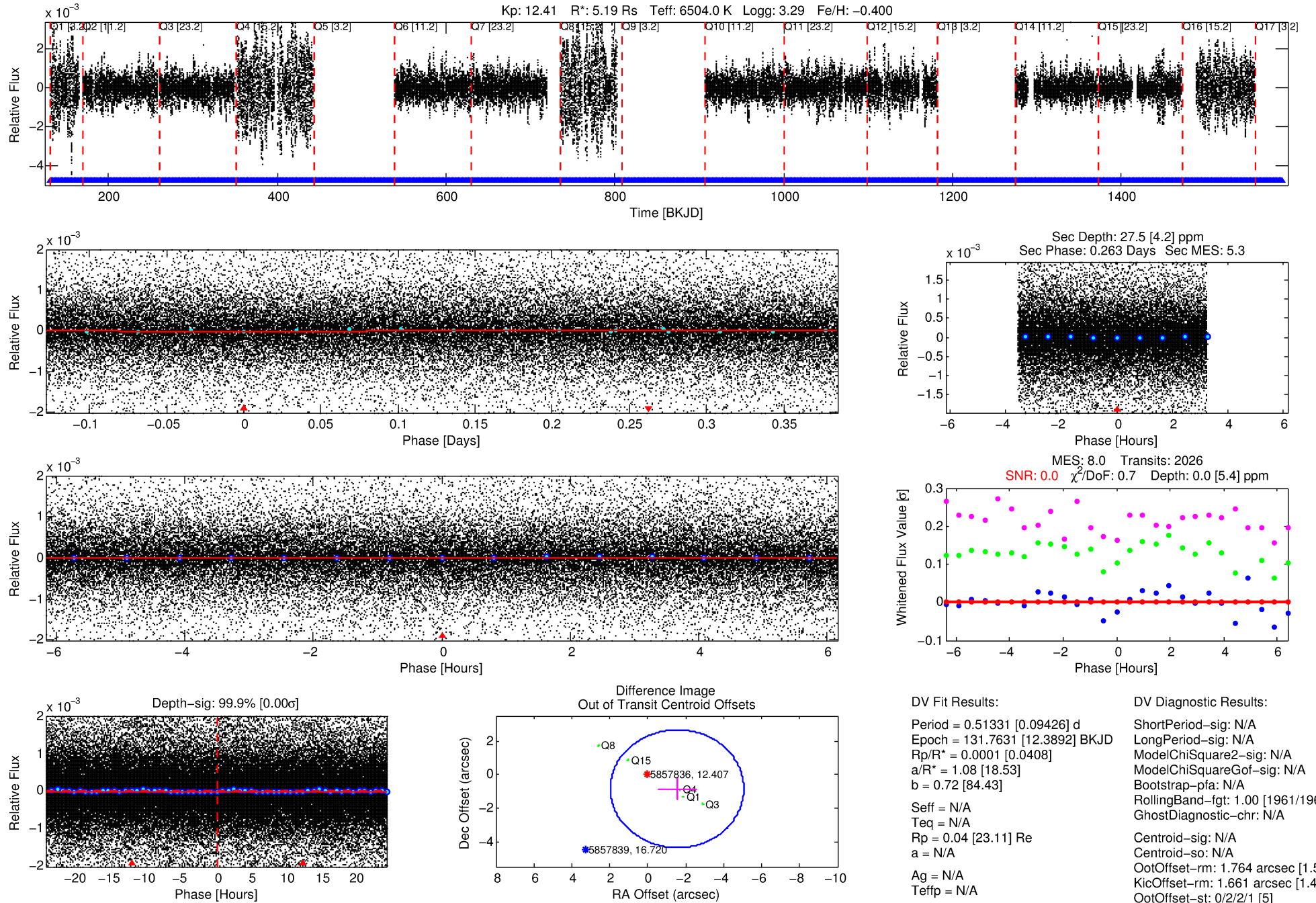
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 005857836-01

No Significant Match Found

DV One-Page Summary

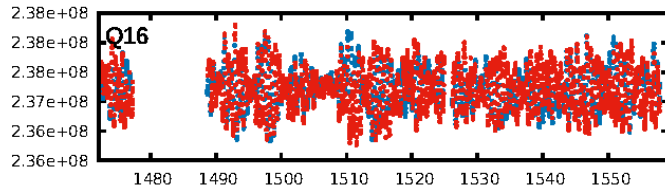
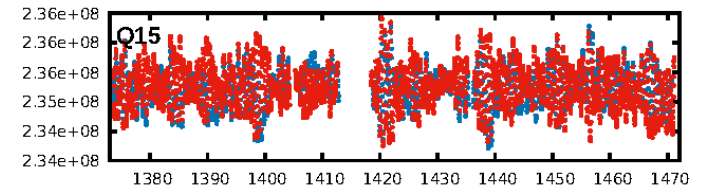
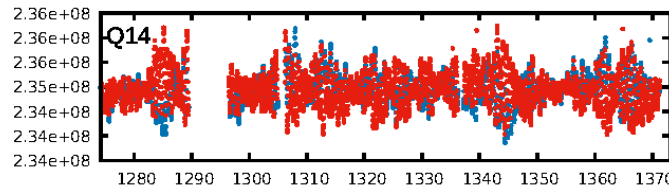
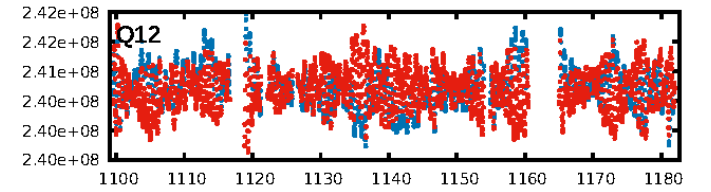
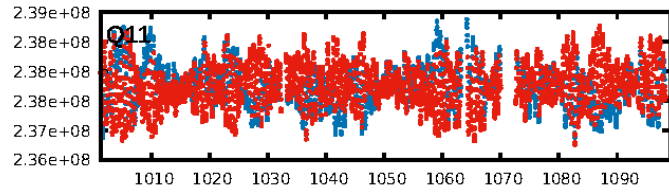
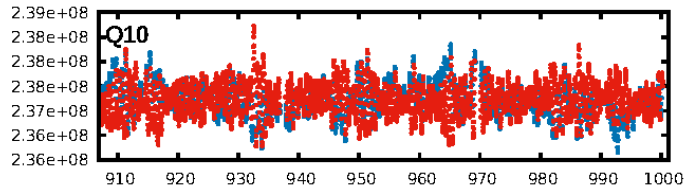
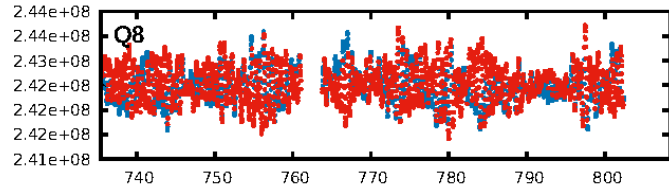
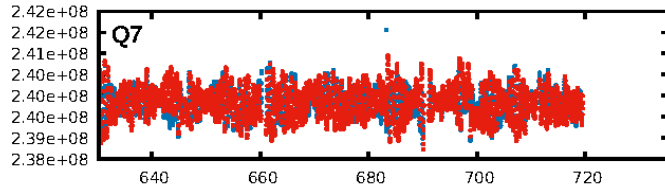
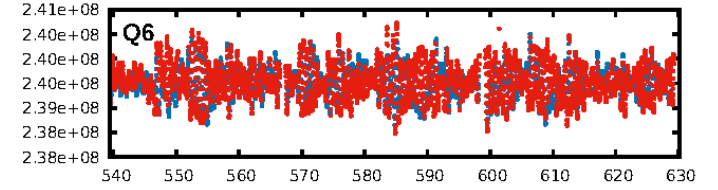
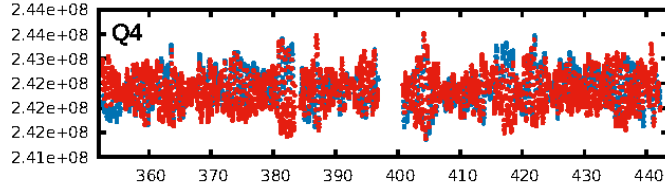
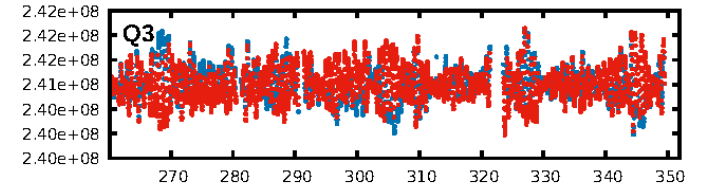
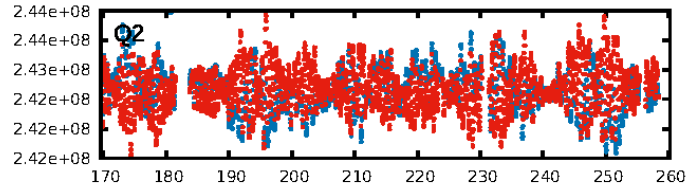
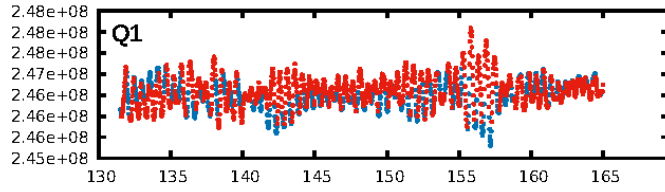
KIC: 5857836 Candidate: 1 of 1 Period: 0.513 d



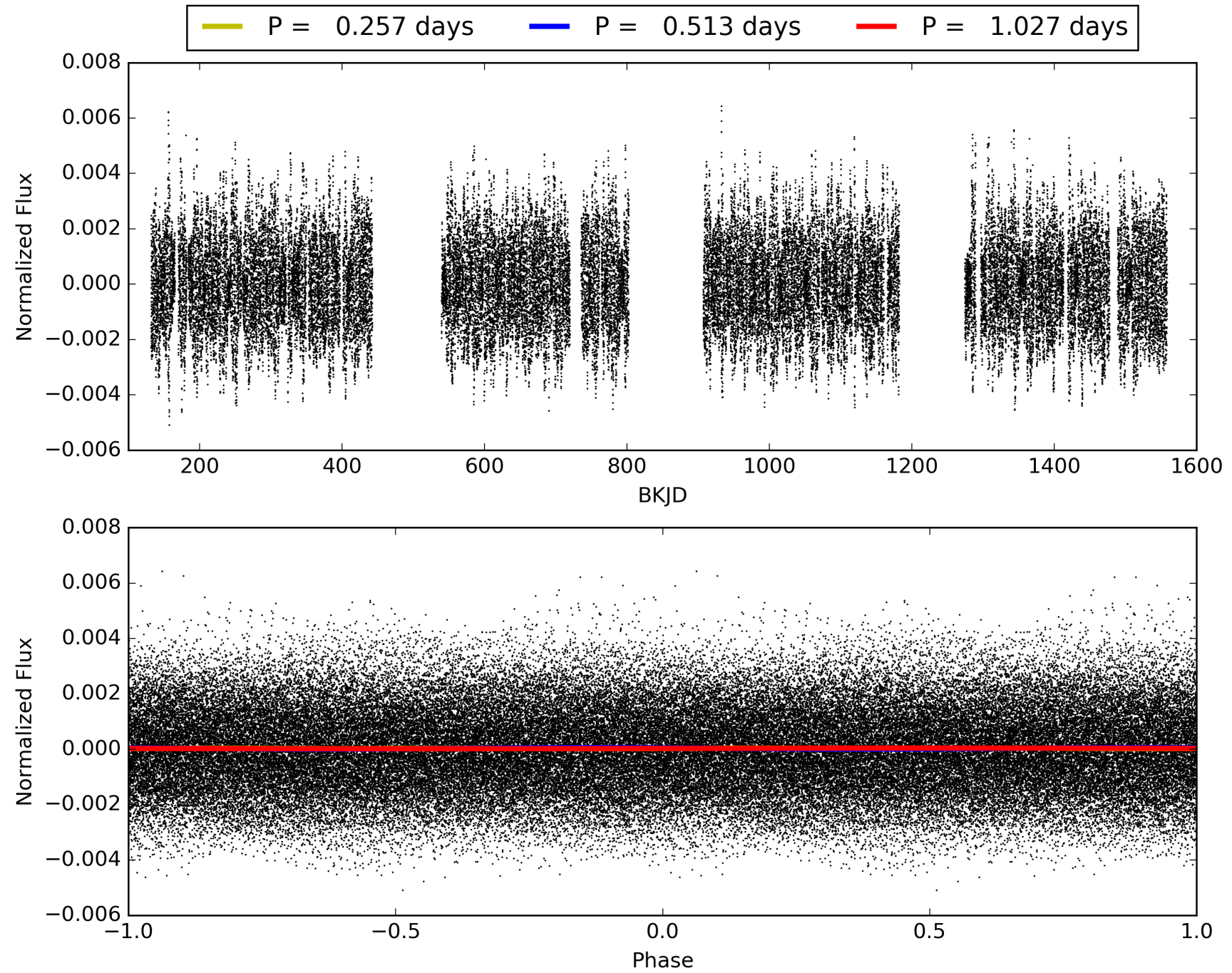
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 01-Feb-2016 02:00:33 Z

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

TCE 005857836-01, PDC Light Curves

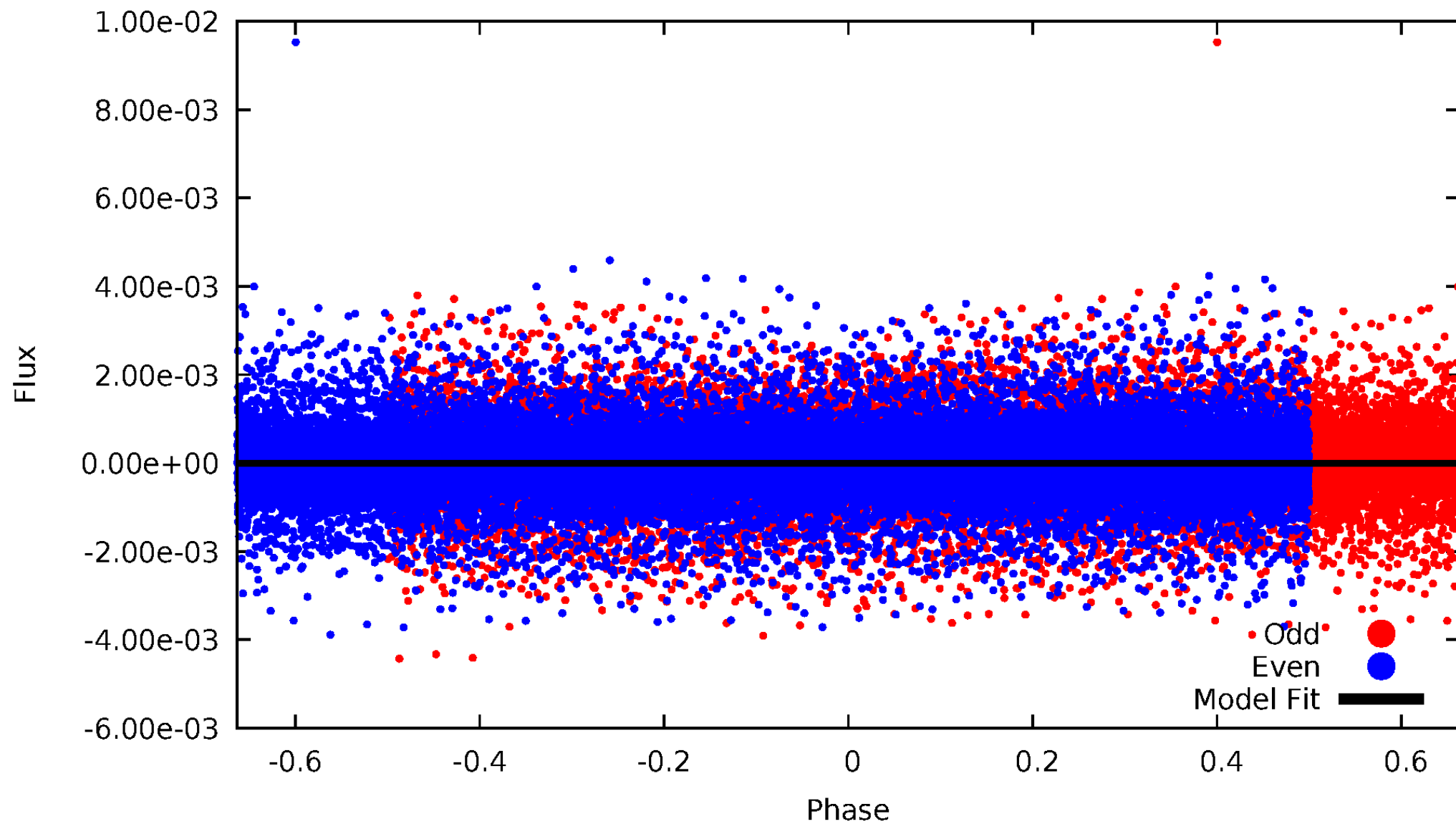


TCE 005857836-01



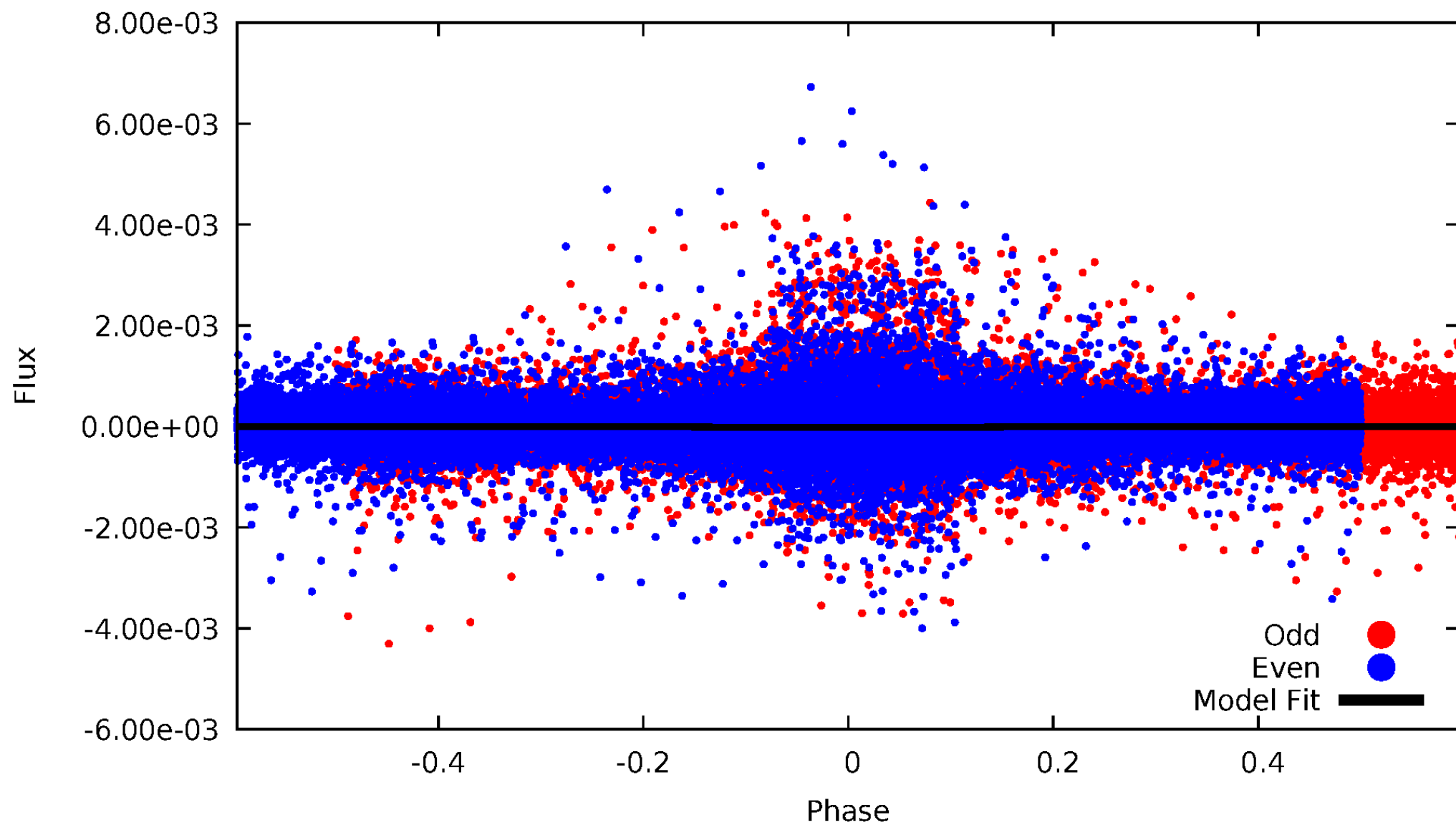
DV Odd/Even

TCE 005857836-01



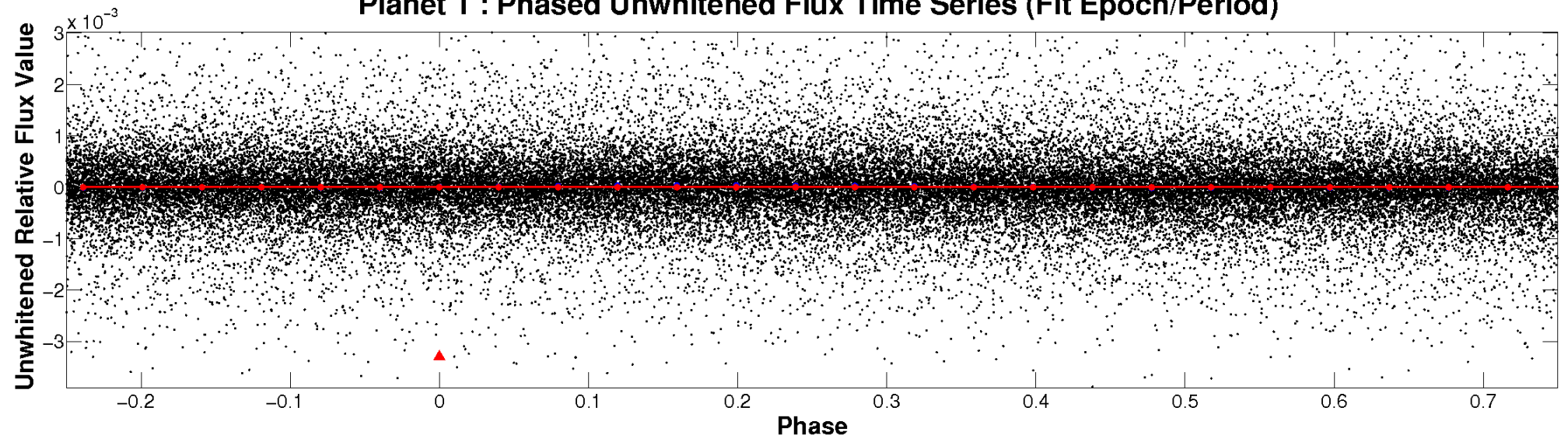
ALT Odd/Even

TCE 005857836-01

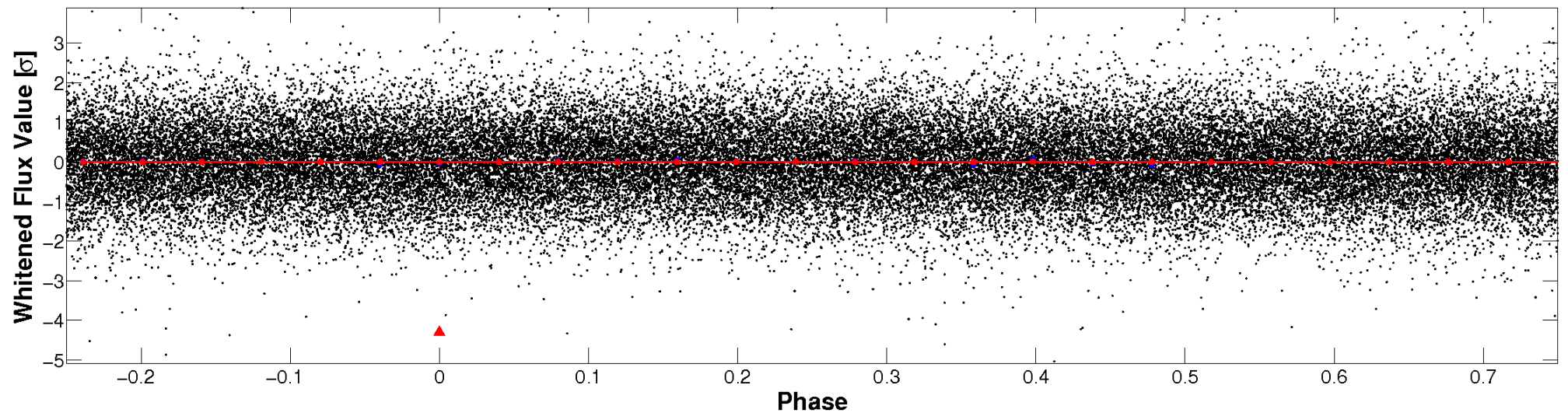


Non-Whitened Vs. Whitened Light Curve

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

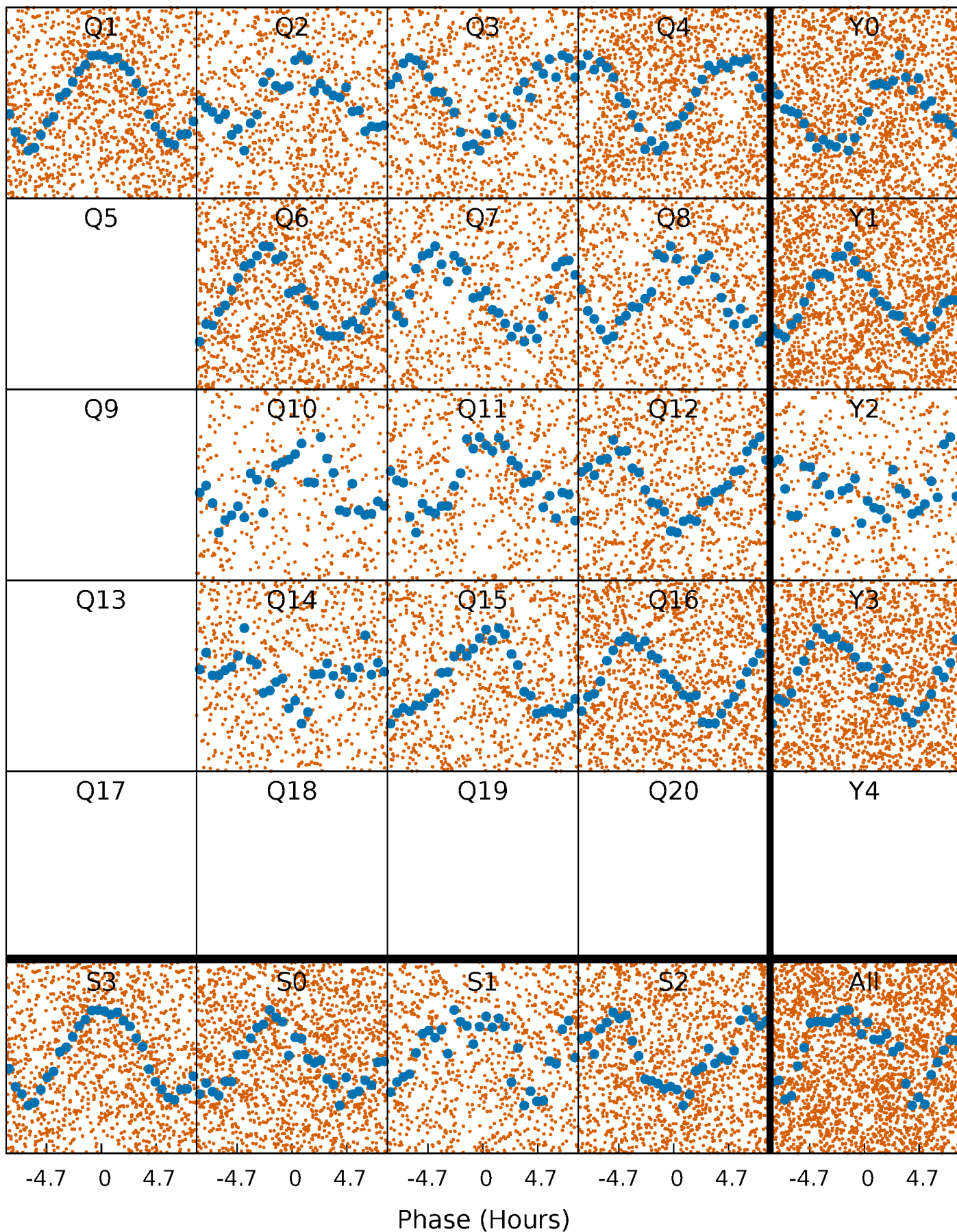


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



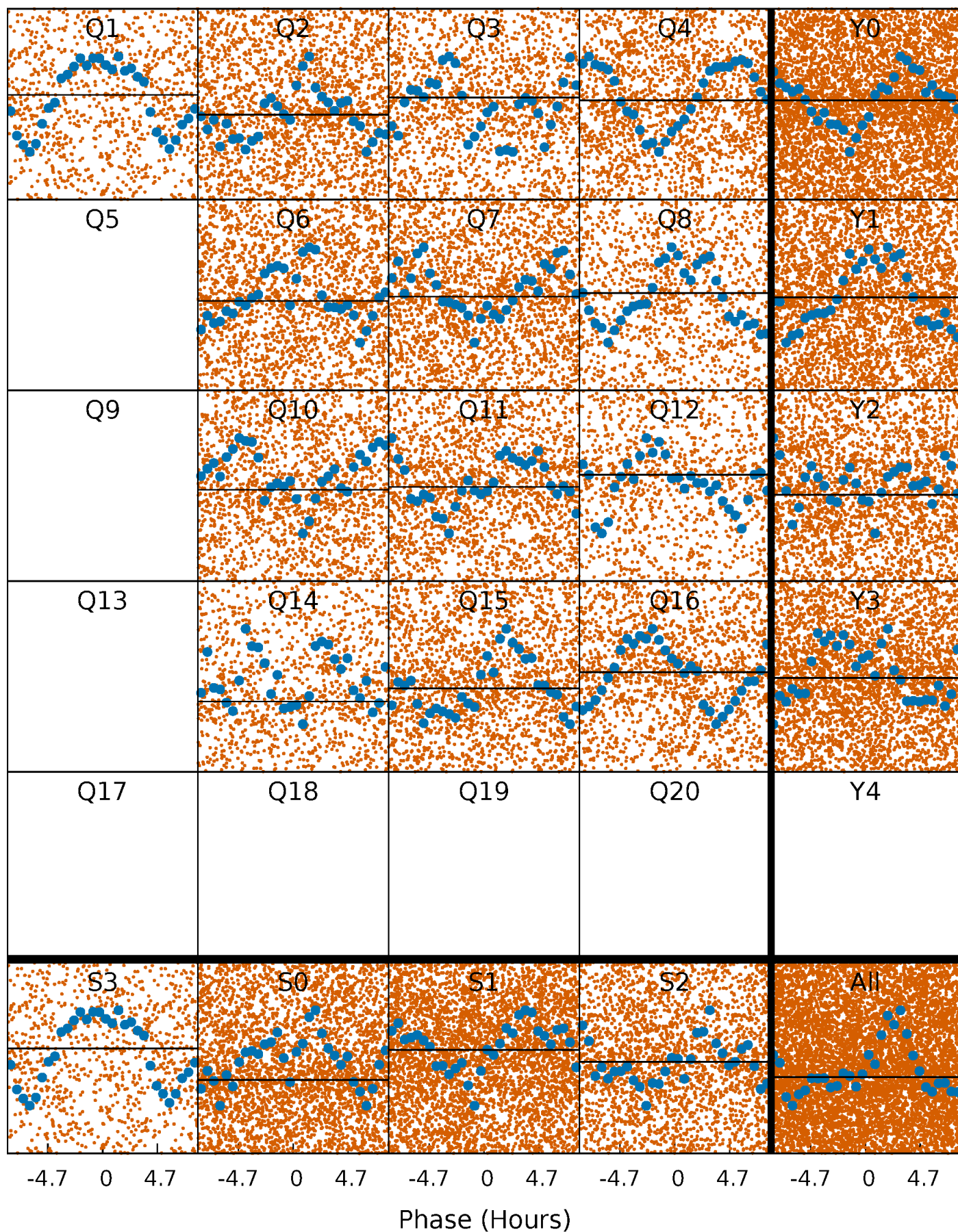
PDC Quarter-Phased Transit Curves

TCE 005857836-01 P= 0.513306 Days $T_0=131.763150$ (BKJD)



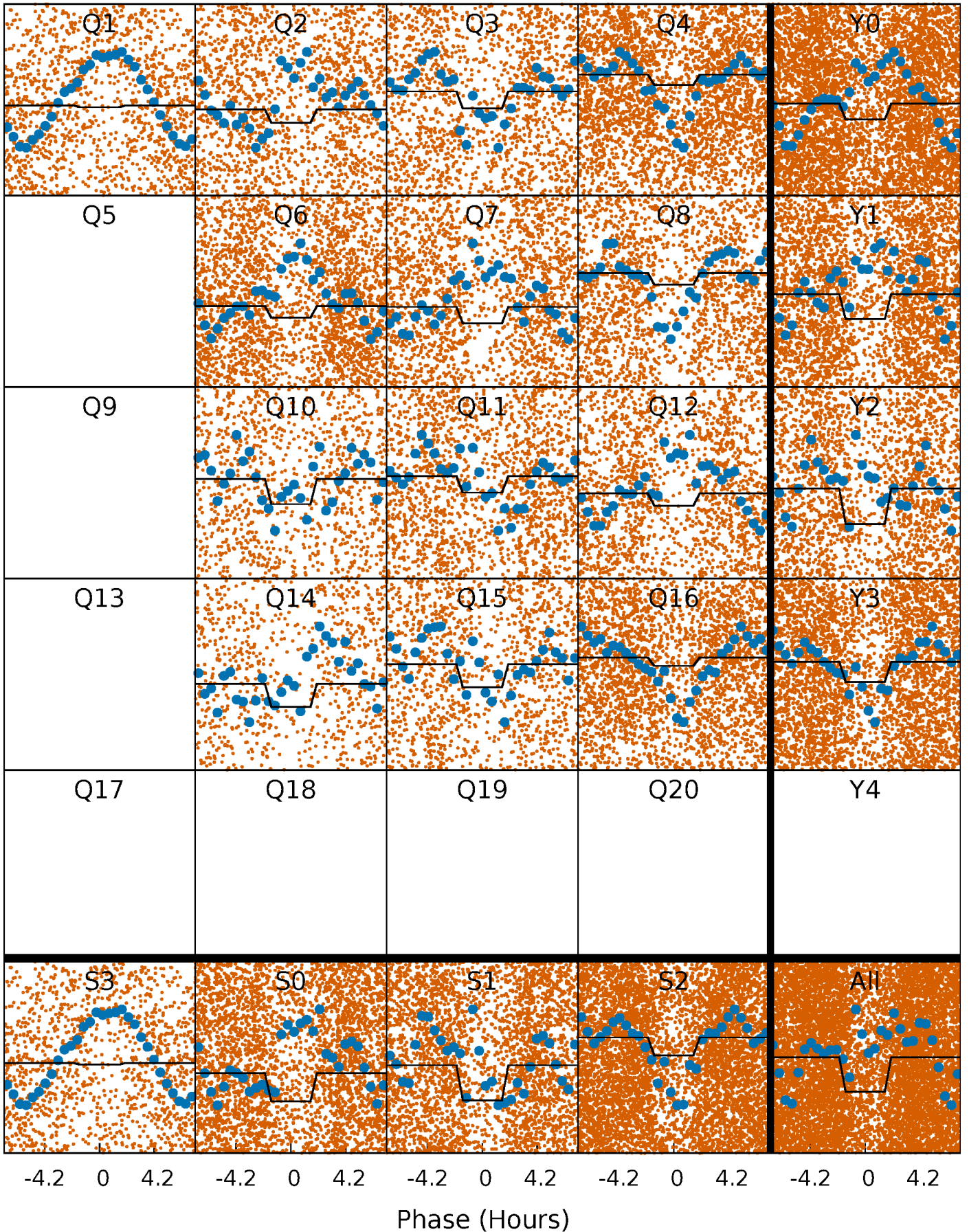
DV Quarter-Phased Transit Curves

TCE 005857836-01 P= 0.513306 Days $T_0=131.763150$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

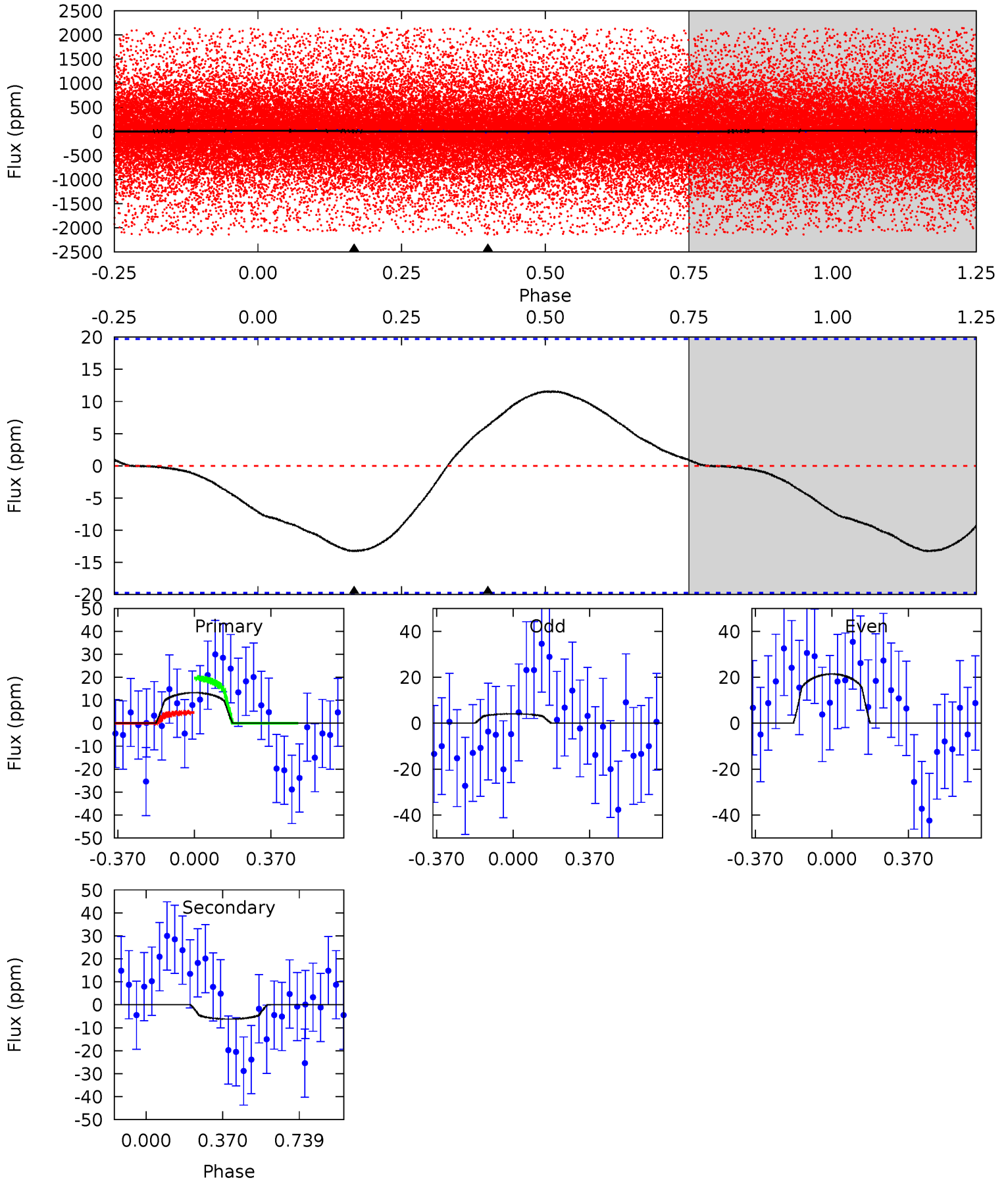
TCE 005857836-01 P= 0.513165 Days $T_0=131.750162$ (BKJD)



DV Model-Shift Uniqueness Test

005857836-01, P = 0.513306 Days, E = 131.249844 Days

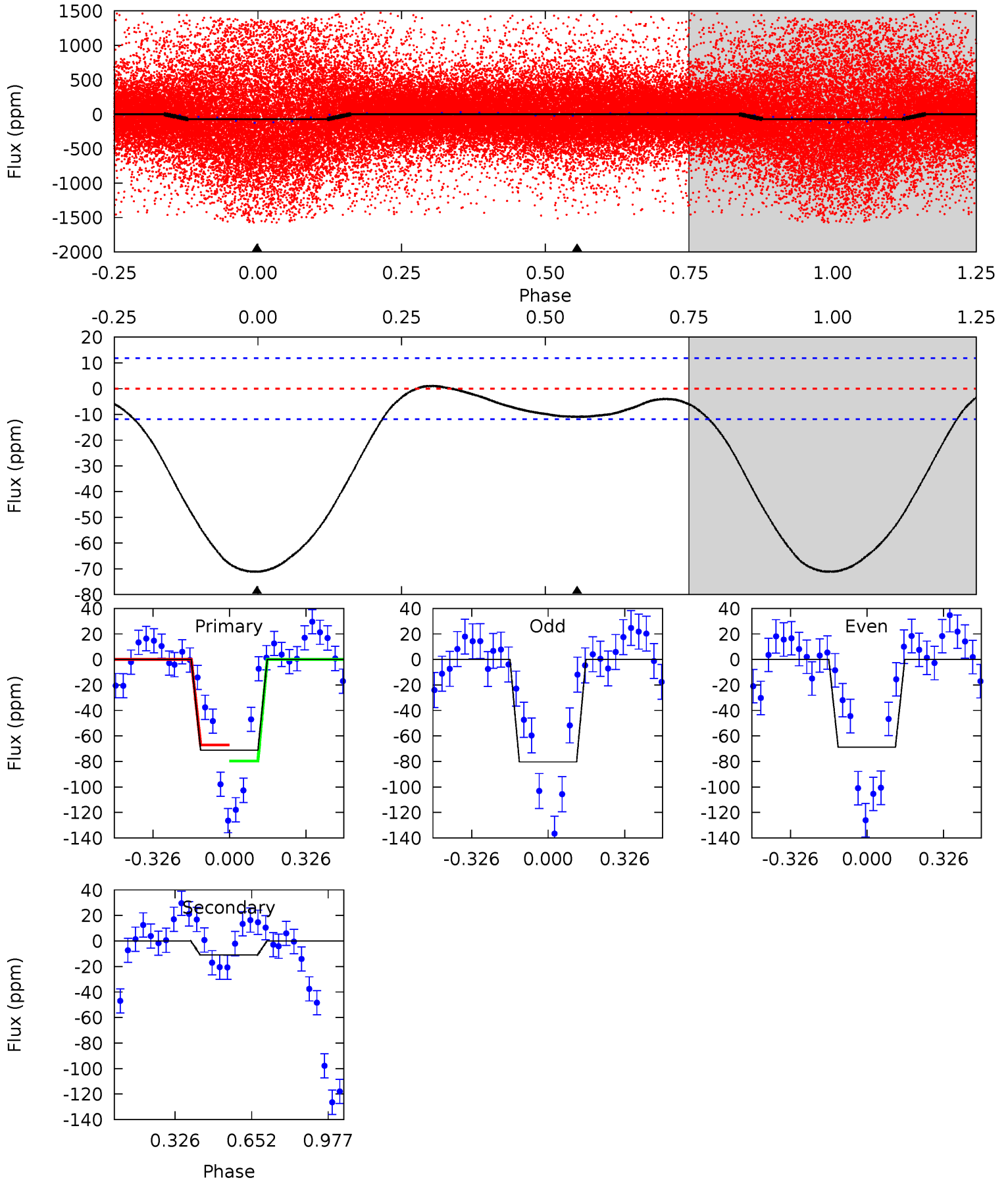
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
2.89	-1.35	0	0	4.28	0.90	0.11	2.89	2.89	-1.35	-1.35	1.84	0.36	0.47	1.59



Alt Model-Shift Uniqueness Test

005857836-01, P = 0.513165 Days, E = 131.236997 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
25.9	3.99	0	0	4.31	0.98	0.97	25.9	25.9	3.99	3.99	2.17	-0.35	0.01	1.40



Stellar Parameters For KIC 005857836

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	$M(M_{\odot})$	p_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	6504^{+156}_{-195}	$3.295^{+0.459}_{-0.051}$	$-0.400^{+0.400}_{-0.300}$	$5.189^{+0.279}_{-2.510}$	$1.939^{+0.108}_{-0.540}$	$0.020^{+0.093}_{-0.003}$
	+2%/-3%	+14%/-2%	+100%/-75%	+5%/-48%	+6%/-28%	+474%/-17%
Source	PHO1	FLK73	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 005857836-01 / KOI

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	6 ± 5	$14.81^{+15.64}_{-10.43}$	7081^{+670}_{-805}	-5870^{+612}_{-621}	$-0.003^{+0.003}_{-0.031}$
Alt.	-11 ± 3	$15.02^{+14.69}_{-11.05}$	7067^{+596}_{-860}	-5610^{+914}_{-567}	$0.006^{+0.082}_{-0.005}$

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

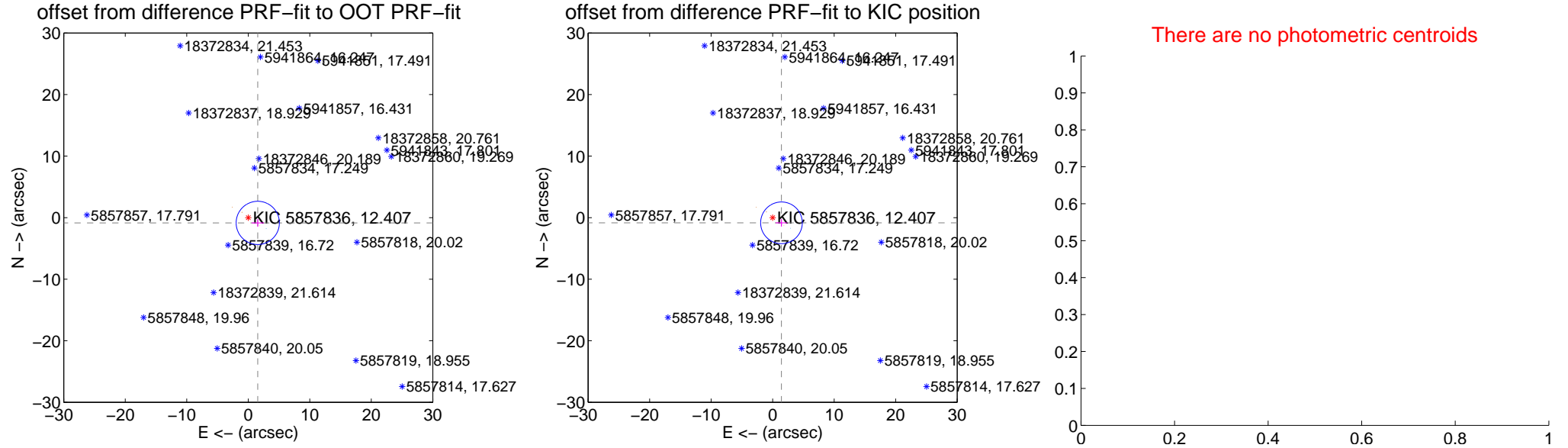
DV Centroid Data

Supplemental centroid analysis for 005857836-01. Kepler magnitude: 12.41. Transit SNR 0.00

There are 2 quarters with good PRF difference image offsets

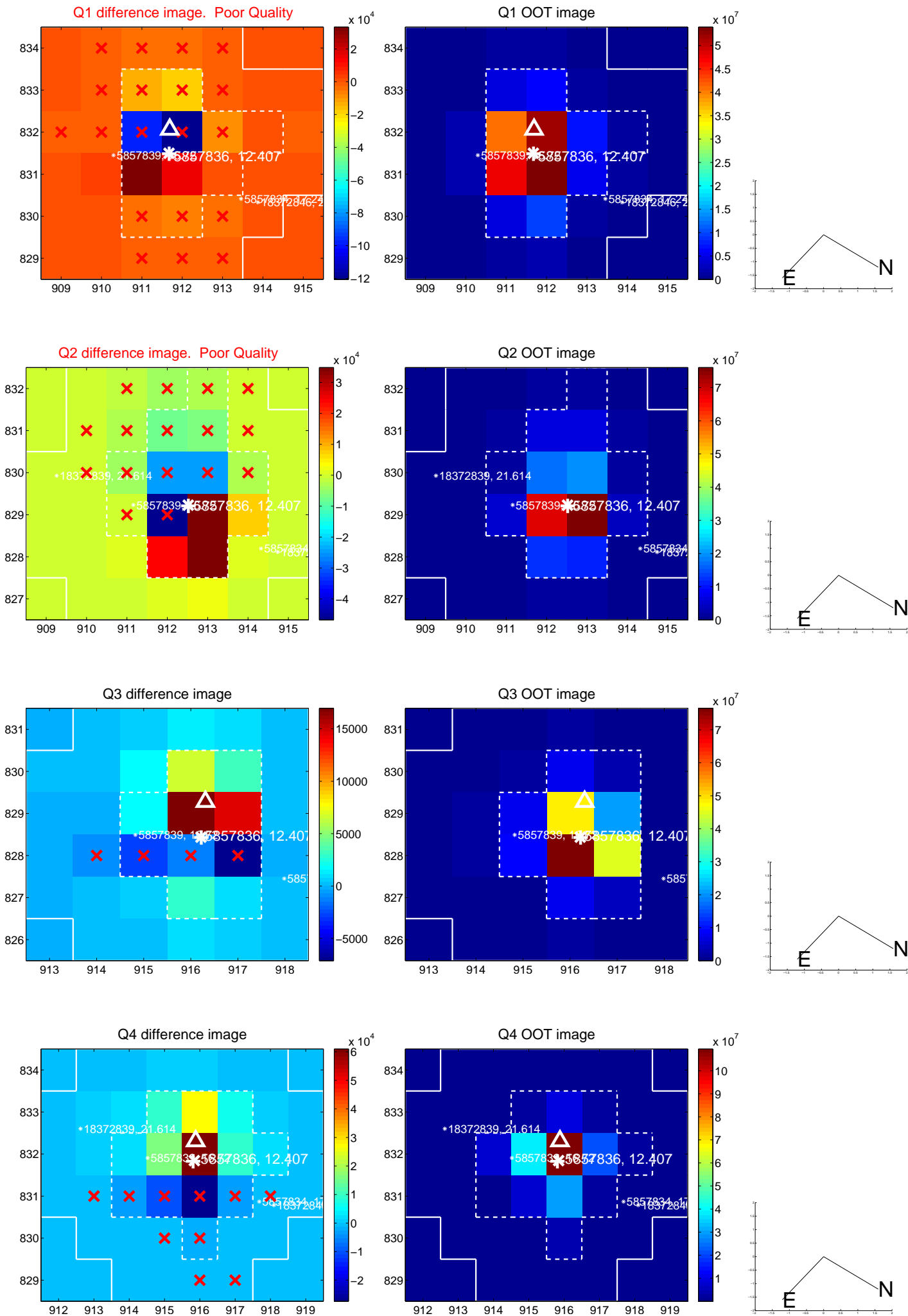
The direct PRF centroid is offset from the target star catalog position by about 0.06 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	1.764 ± 1.171	1.51	-1.544 ± 0.990	-0.853 ± 0.635
PRF-fit source offset from KIC position	1.661 ± 1.129	1.47	-1.433 ± 0.950	-0.840 ± 0.617
photometric centroid source offset	—	—	—	—

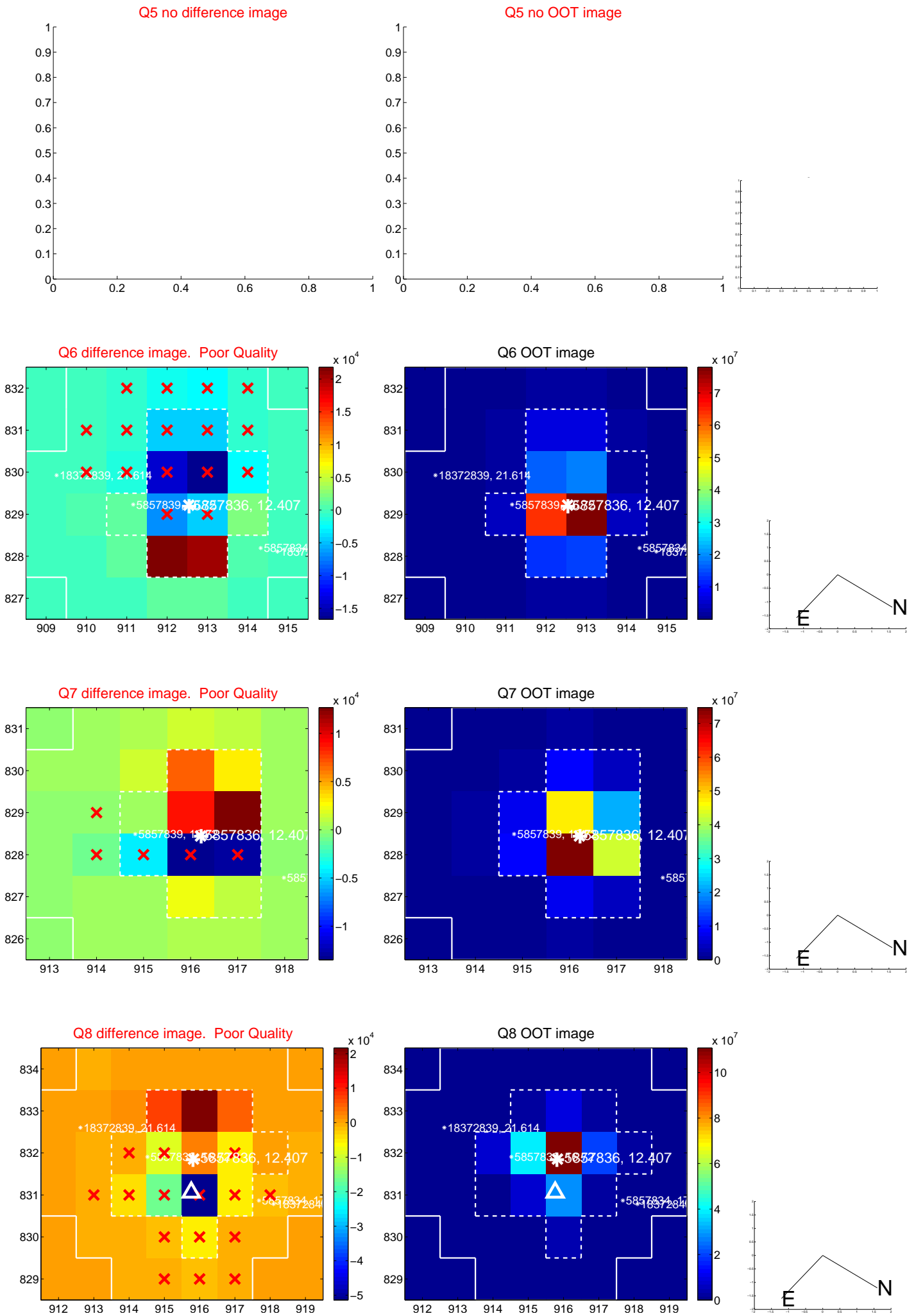


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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

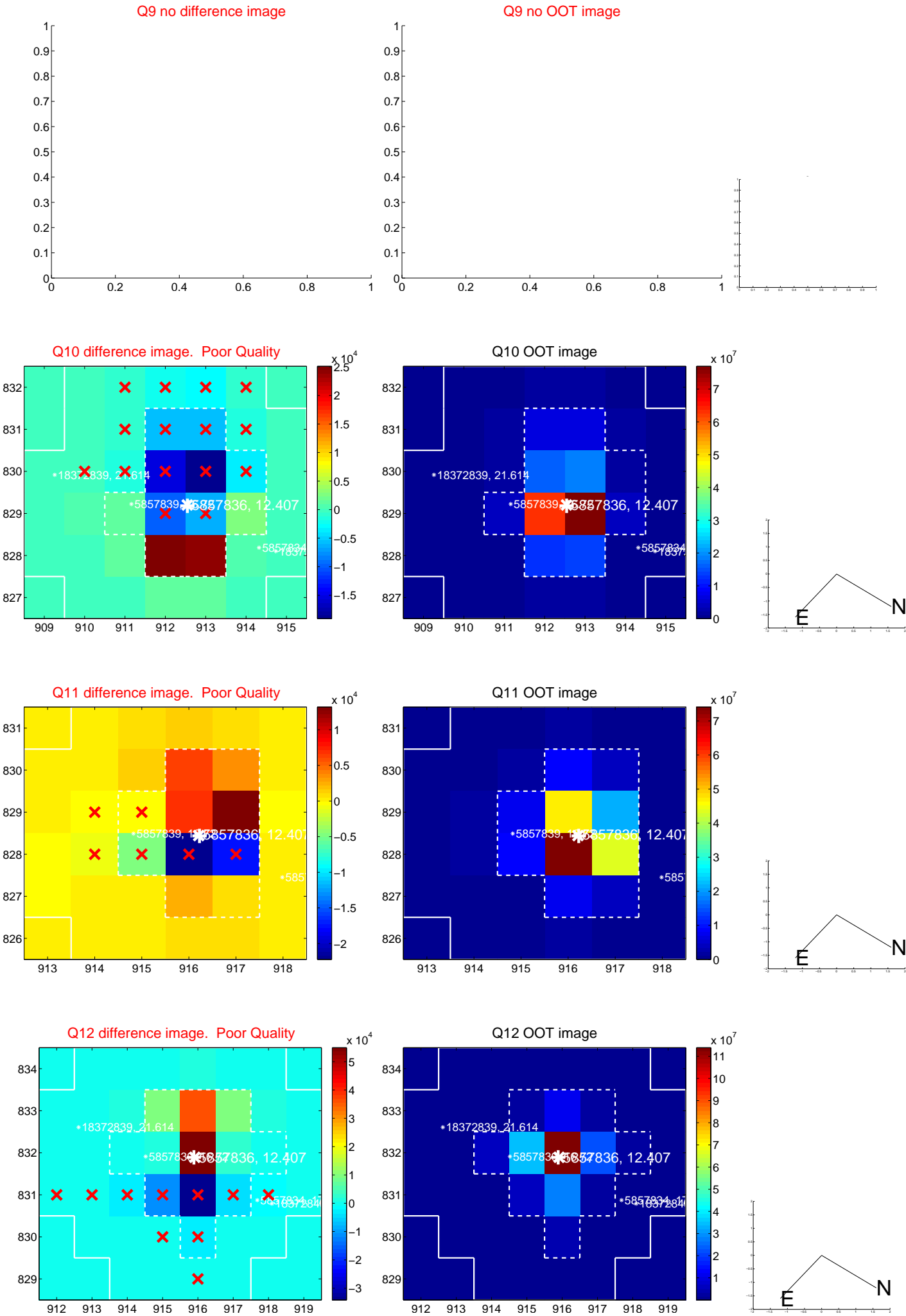
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



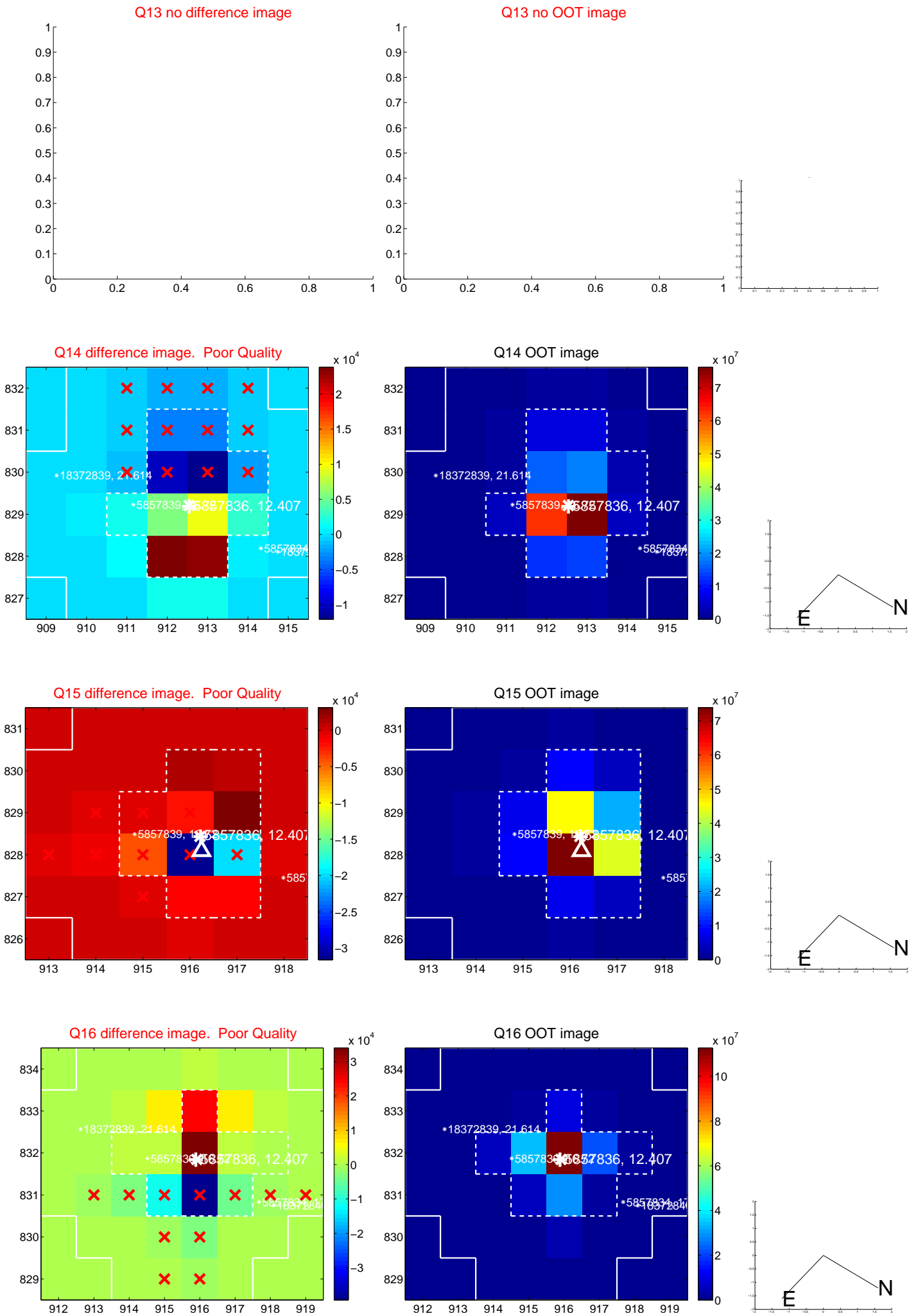
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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folded centroid time series figure for this object.

UKIRT Image

Declination

