

KIC 010810140

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})
010810140-01	OBS	No	0.673579	131.880771	3.7	4.635	9.9	8.0	3.22	8319	0.72	121658.15

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
010810140-01	OBS	FP	0.00	1	0	0	0	LPP_DV—CENT_SATURATED

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

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

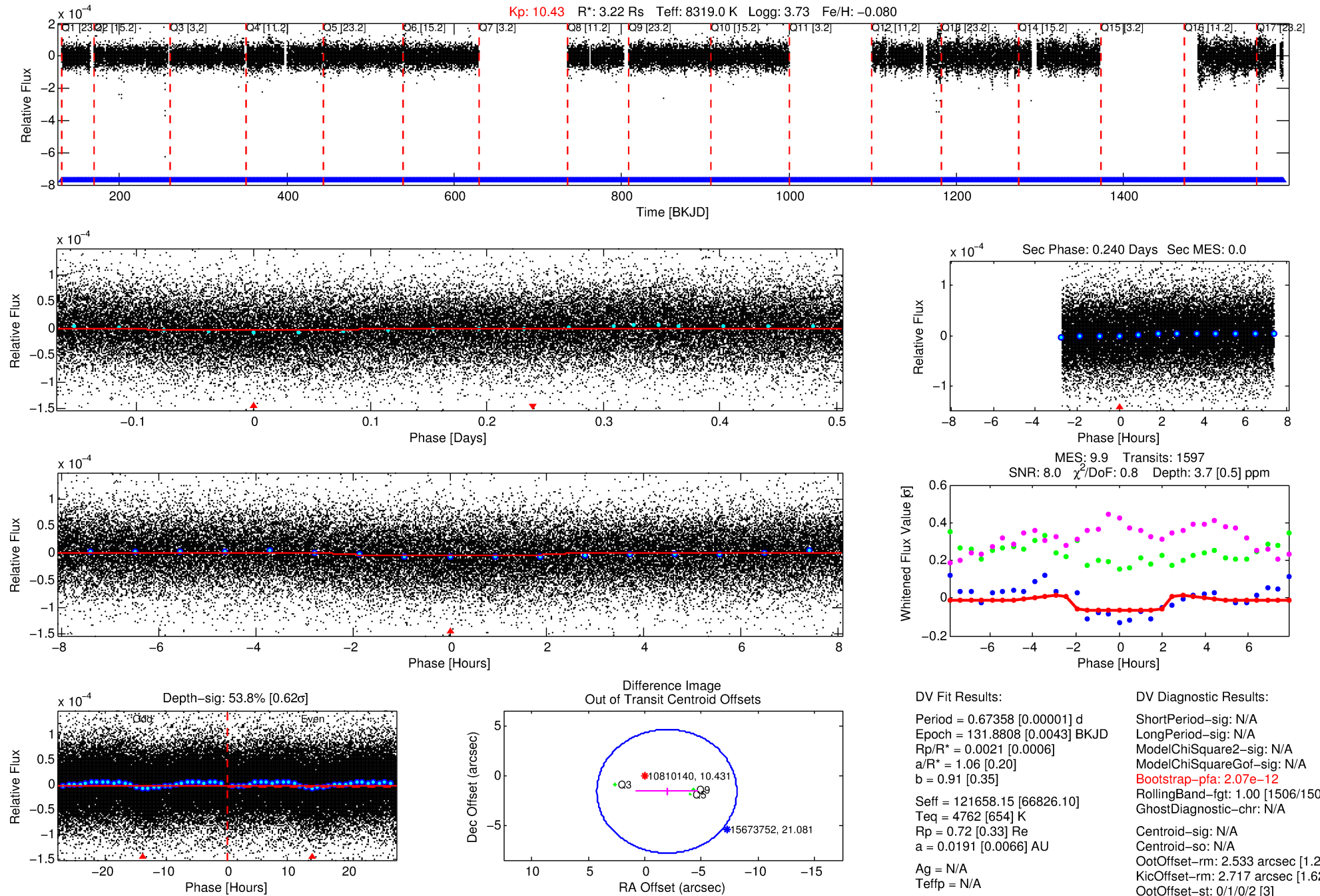
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 010810140-01

No Significant Match Found

DV One-Page Summary

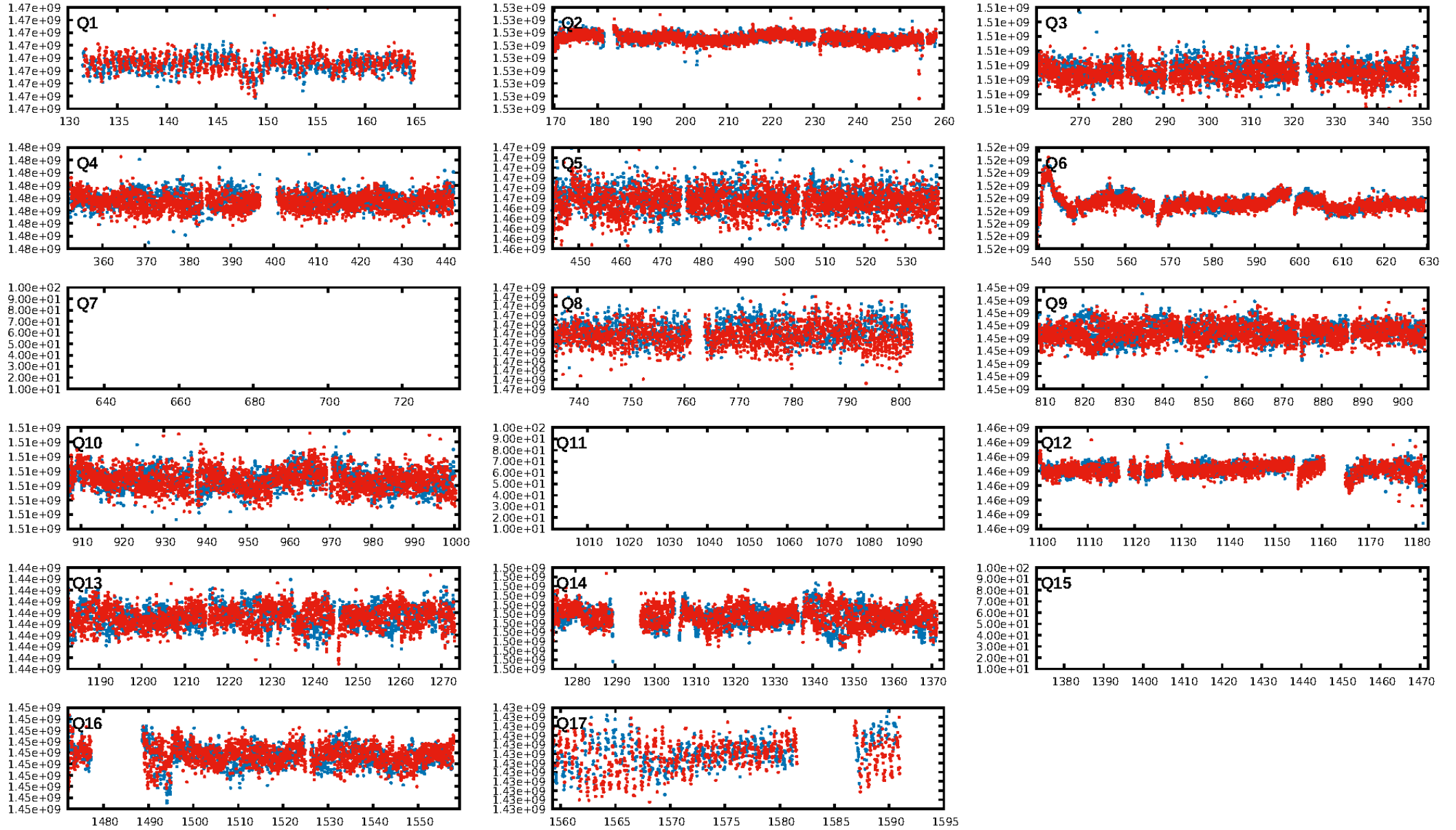
KIC: 10810140 Candidate: 1 of 1 Period: 0.674 d



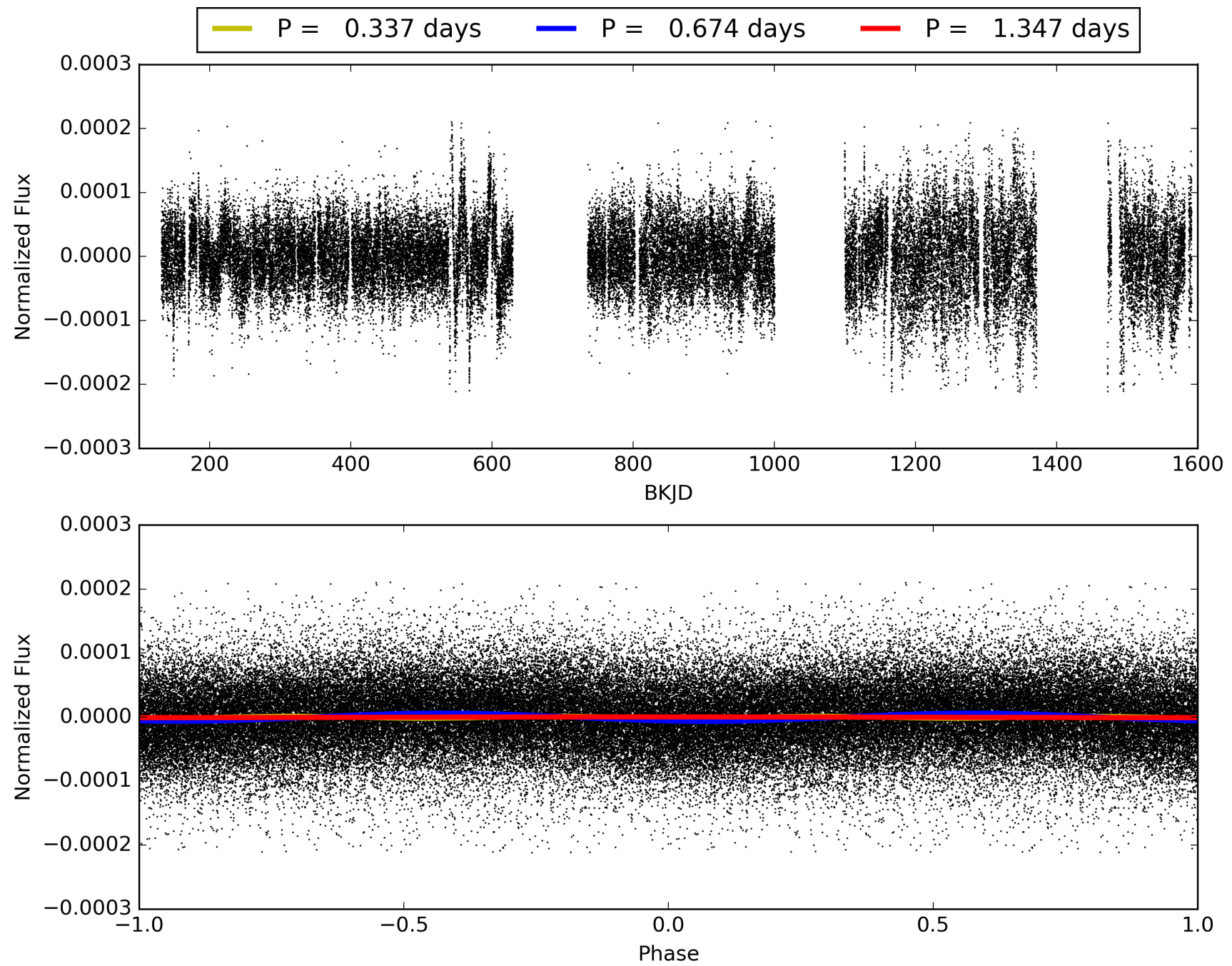
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 29-Jan-2016 05:07:44 Z

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

TCE 010810140-01, PDC Light Curves

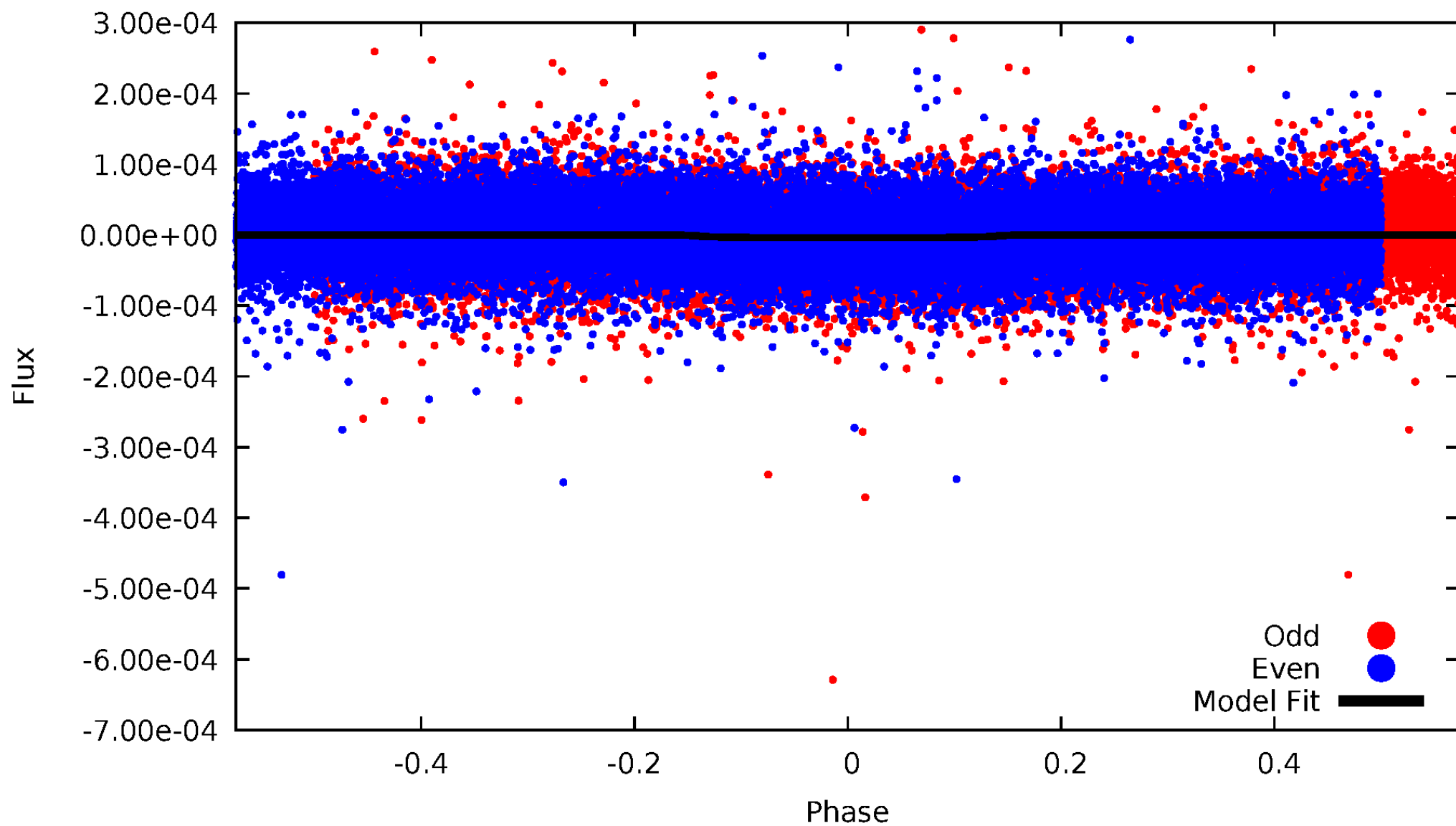


TCE 010810140-01



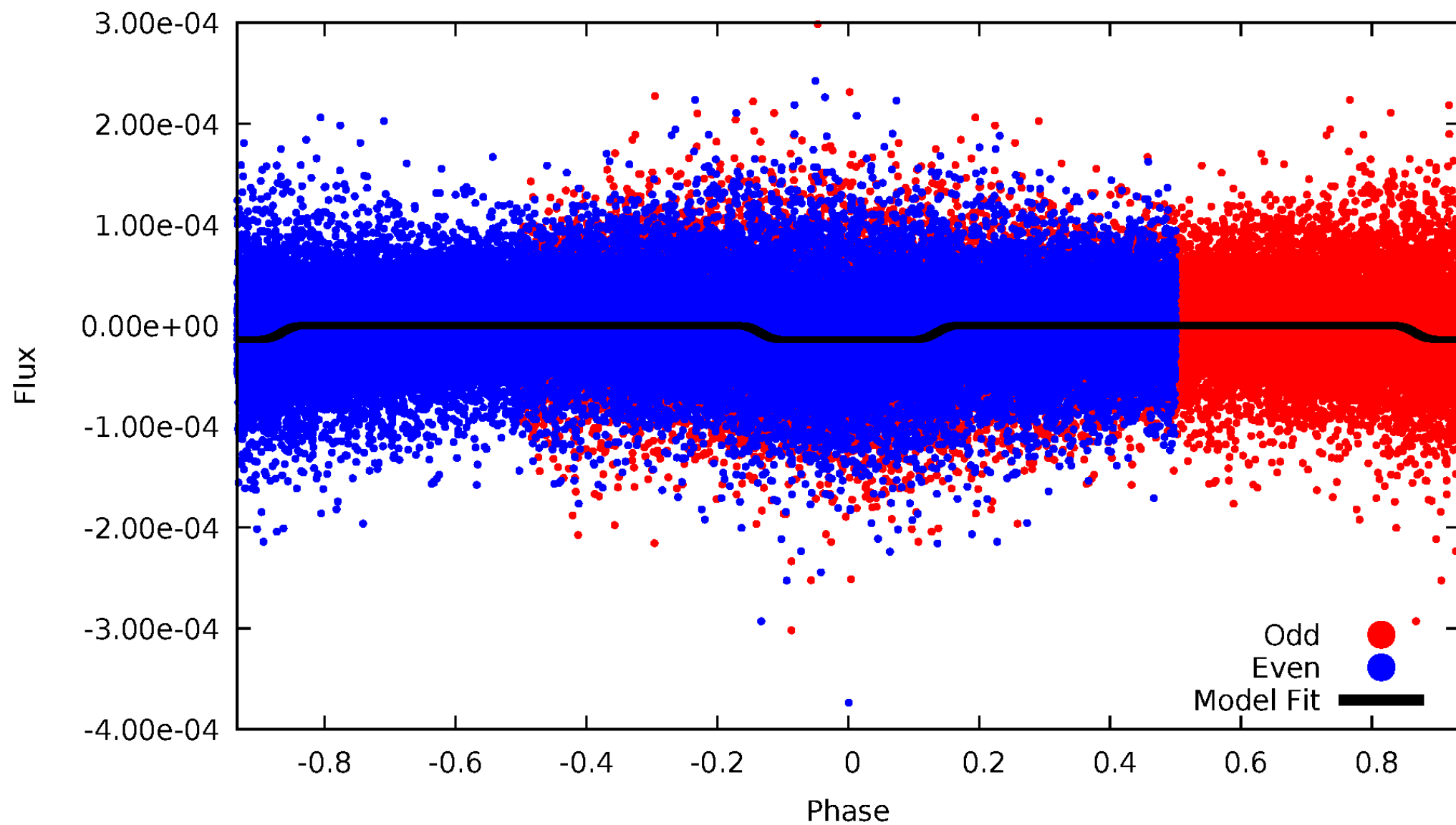
DV Odd/Even

TCE 010810140-01



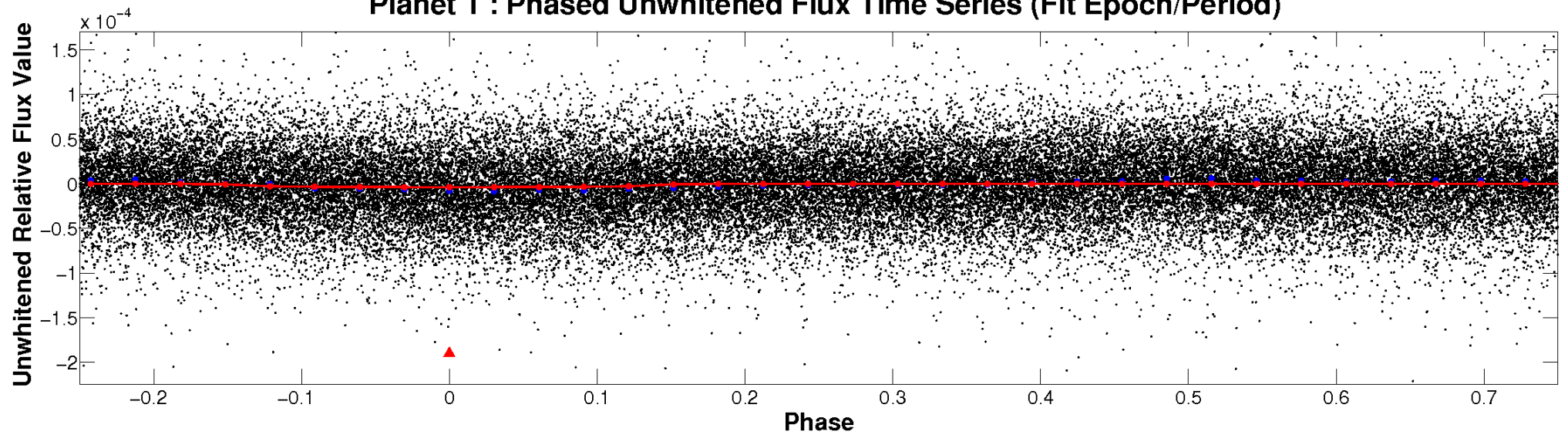
ALT Odd/Even

TCE 010810140-01

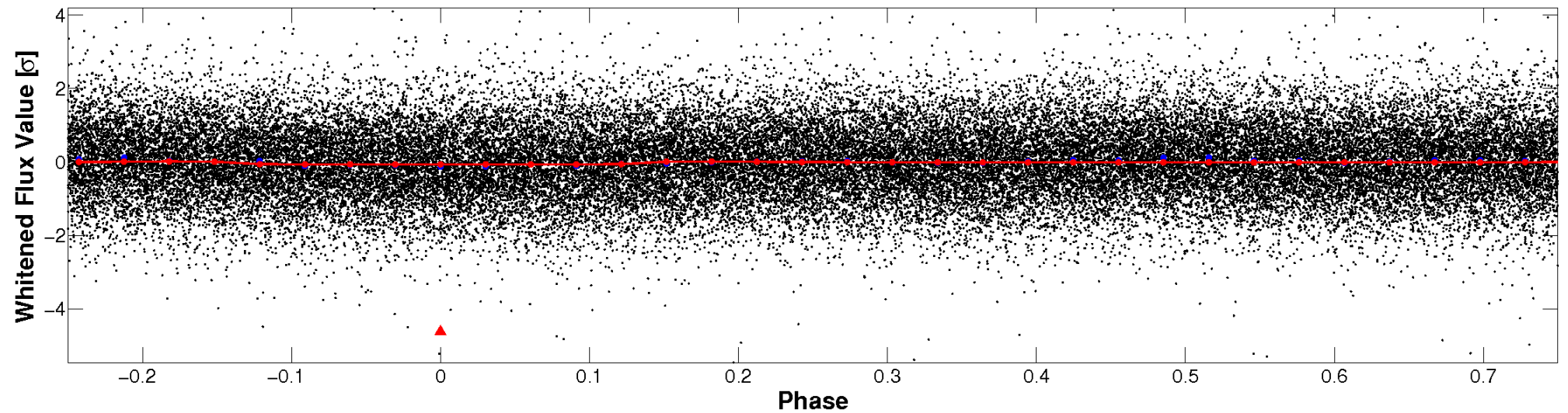


Non-Whitened Vs. Whitened Light Curve

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

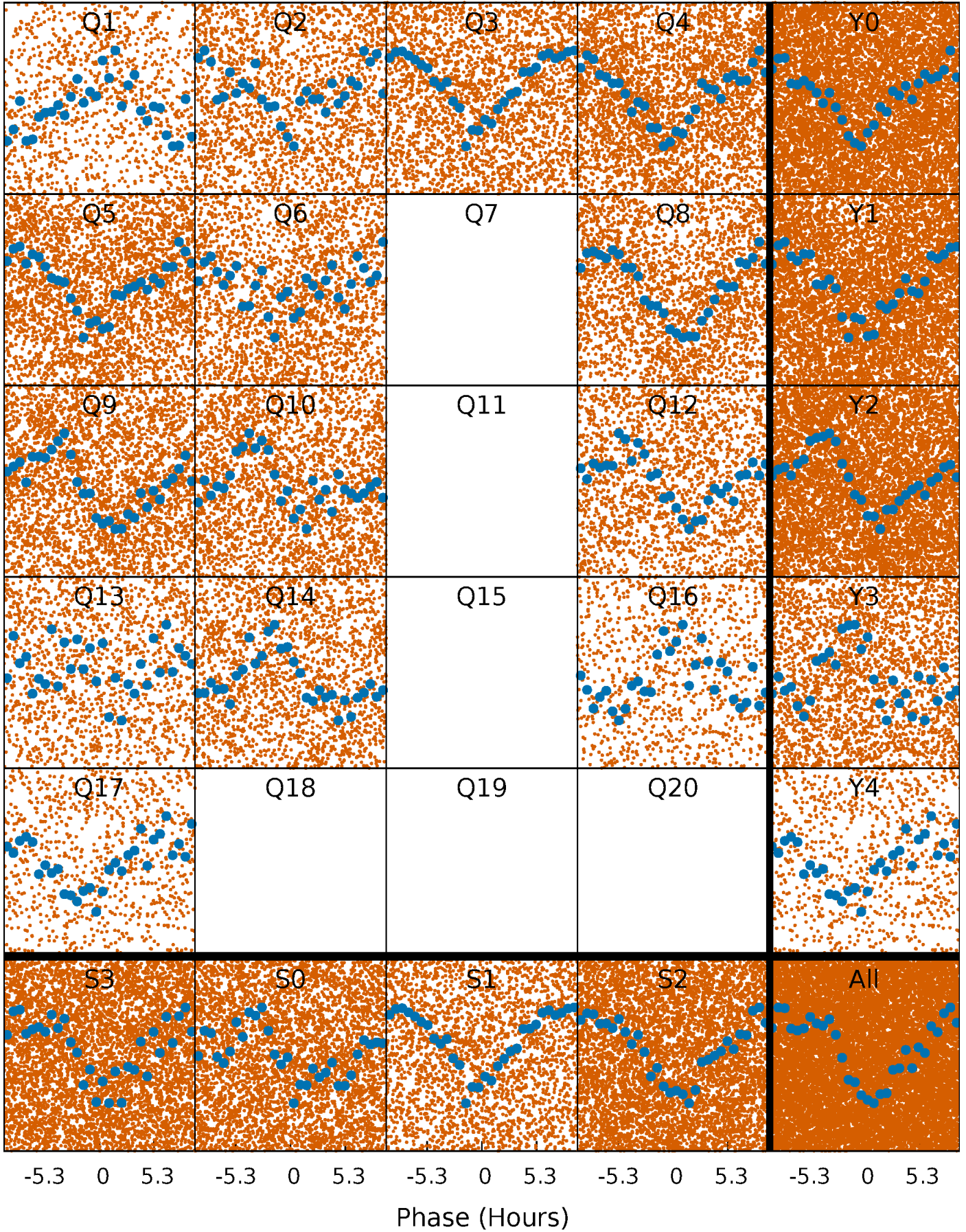


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



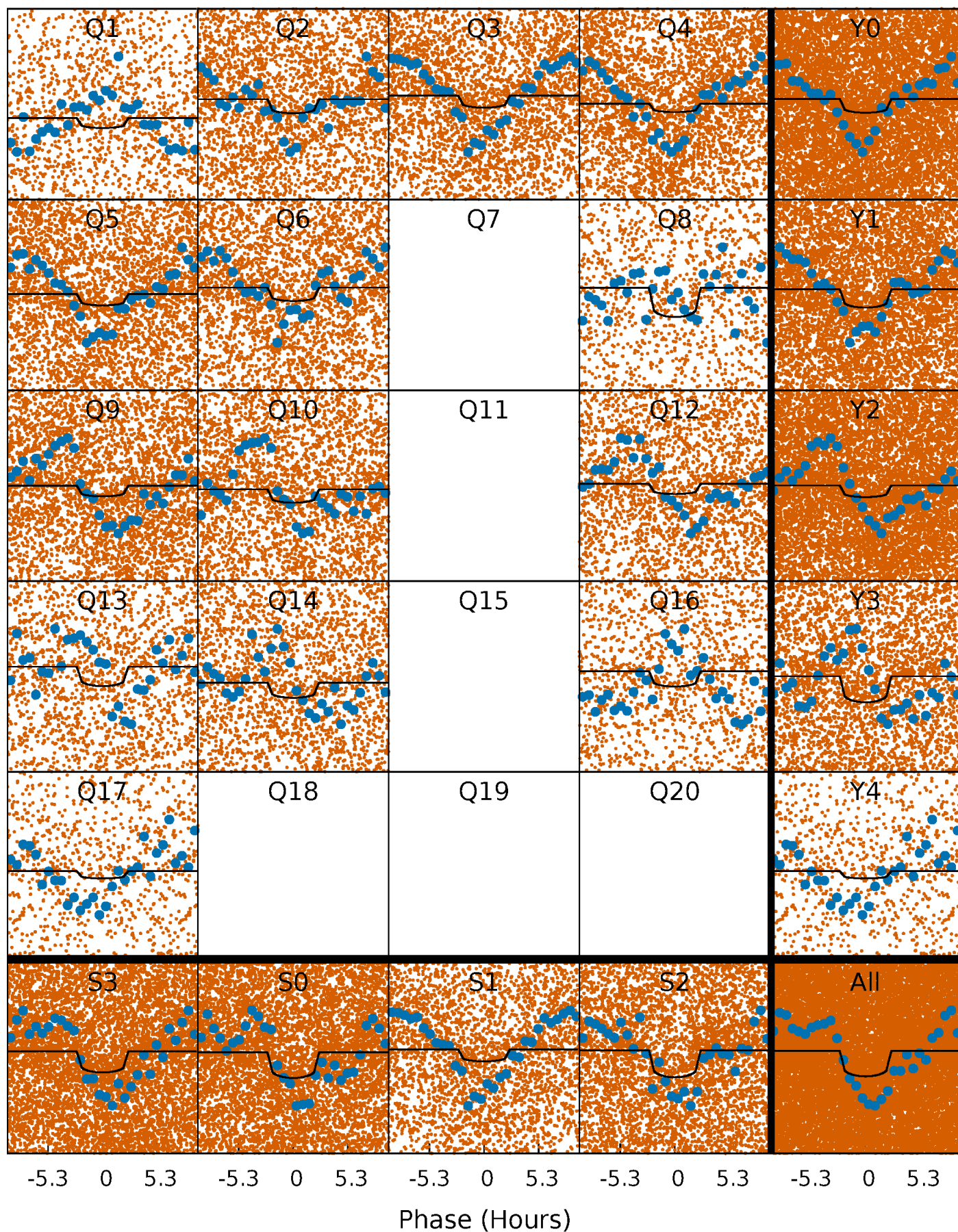
PDC Quarter-Phased Transit Curves

TCE 010810140-01 P= 0.673579 Days $T_0=131.880771$ (BKJD)



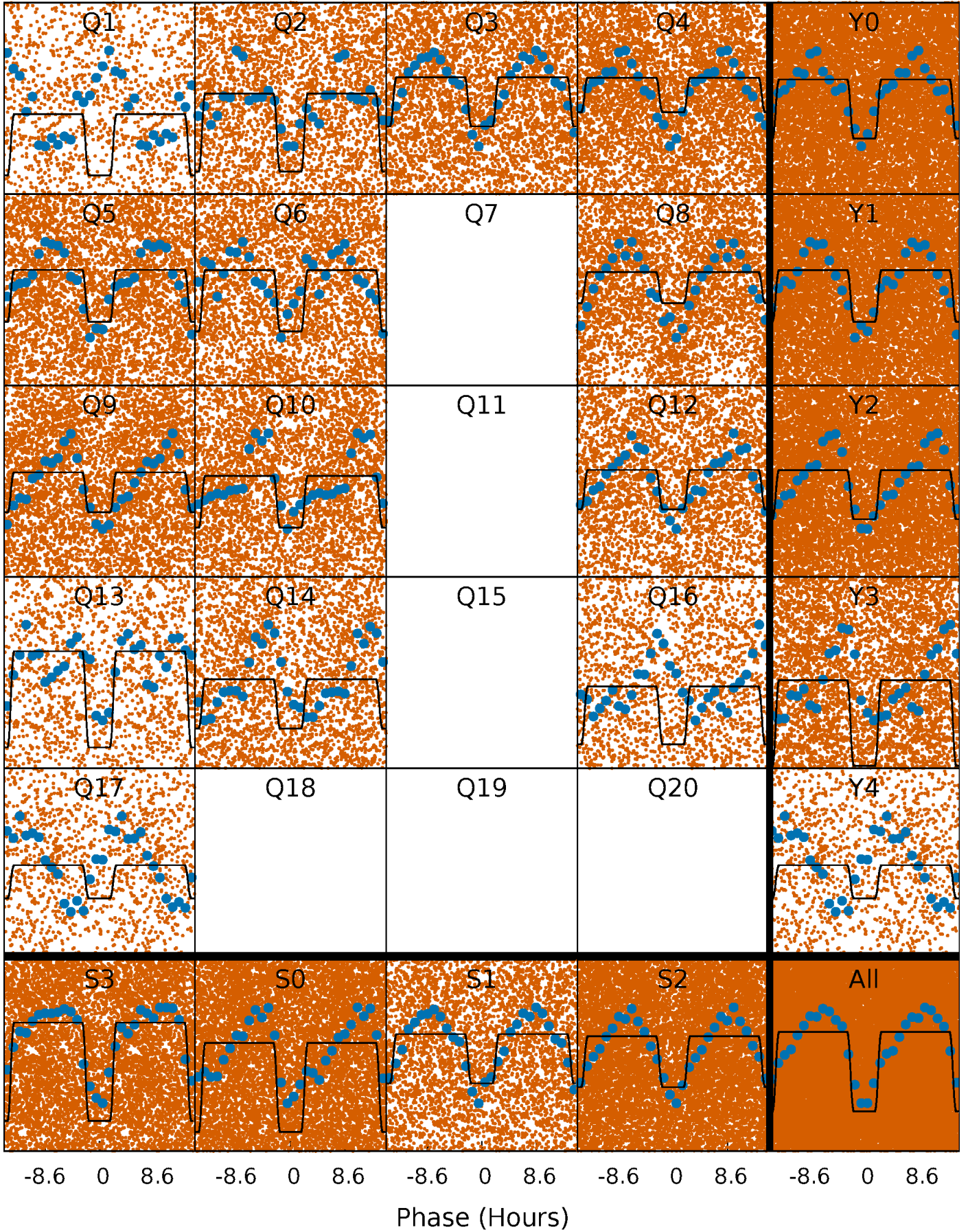
DV Quarter-Phased Transit Curves

TCE 010810140-01 P= 0.673579 Days $T_0=131.880771$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

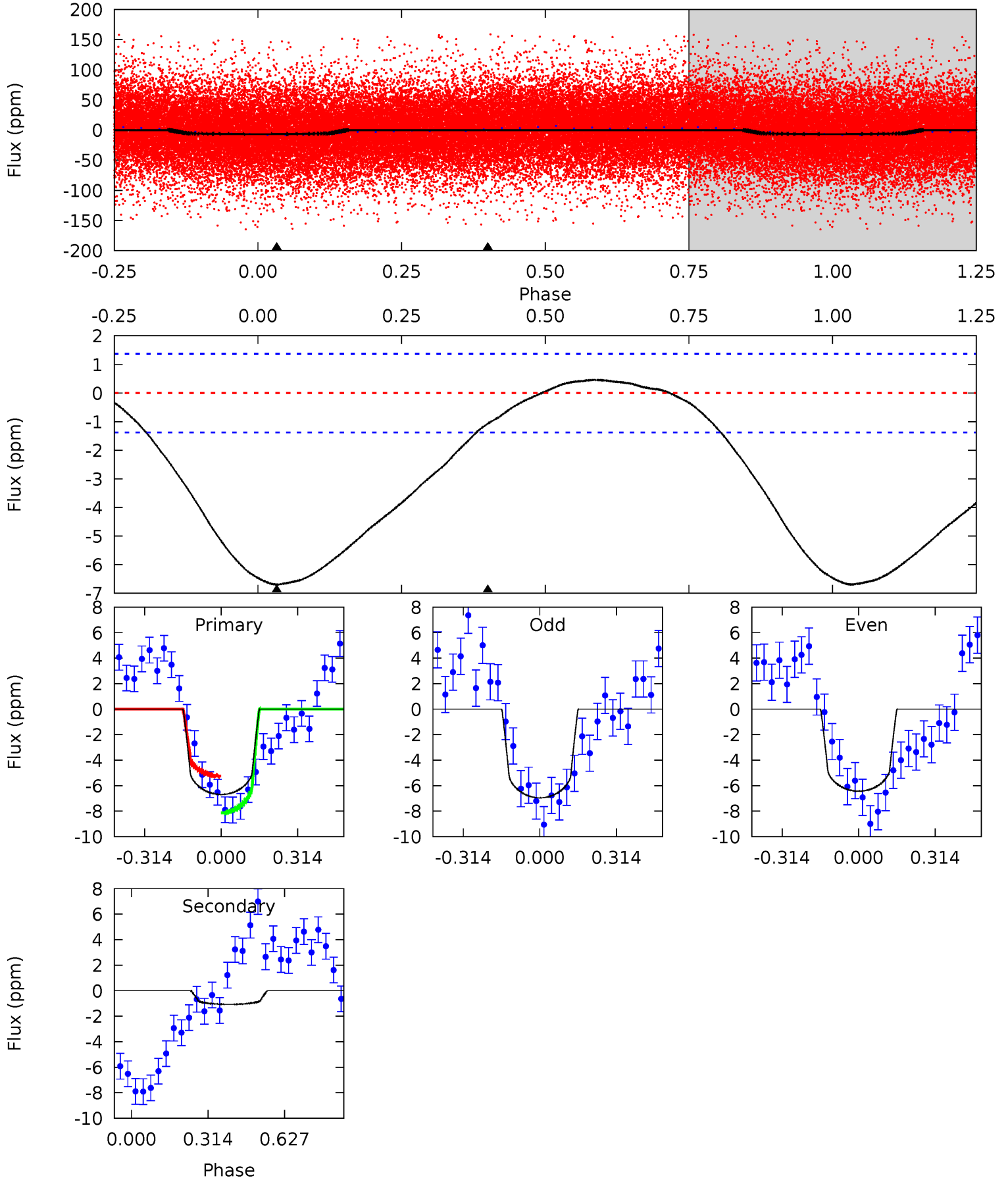
TCE 010810140-01 P= 0.673640 Days $T_0=131.854874$ (BKJD)



DV Model-Shift Uniqueness Test

010810140-01, P = 0.673579 Days, E = 131.207192 Days

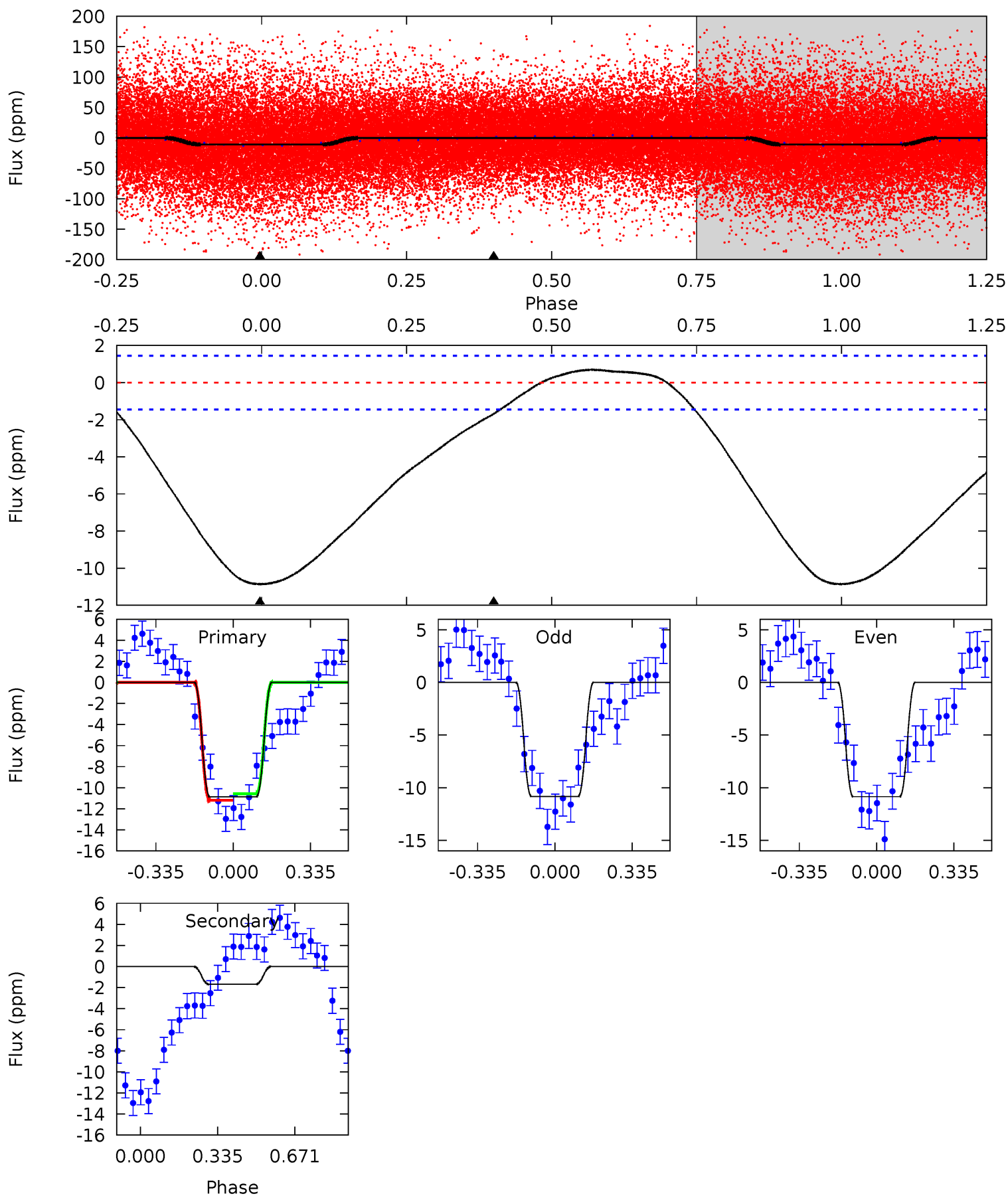
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
21.0	3.37	0	0	4.32	1.01	0.75	21.0	21.0	3.37	3.37	0.82	0.94	0.06	4.63



Alt Model-Shift Uniqueness Test

010810140-01, P = 0.673640 Days, E = 131.181234 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
32.2	5.00	0	0	4.30	0.96	1.84	32.2	32.2	5.00	5.00	0.03	1.17	0.06	0.84



Stellar Parameters For KIC 010810140

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	M (M_{\odot})	p_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	8319^{+74}_{-91}	$3.735^{+0.320}_{-0.100}$	$-0.080^{+0.150}_{-0.200}$	$3.219^{+0.584}_{-1.168}$	$2.053^{+0.274}_{-0.274}$	$0.087^{+0.194}_{-0.026}$
	+1%/-1%	+9%/-3%	+188%/-250%	+18%/-36%	+13%/-13%	+224%/-30%
Source	SPE68	SPE68	SPE68	DSEP		

KIC = Kepler Input Catalog; PHO = Photometry; SPE = Spectroscopy; AST = Asteroseismology
 TRA = Transits; DESP = Dartmouth Models; MULT = Multiple Models

Secondary Eclipse Parameters for KIC 010810140-01 / KOI

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	-1 ± 0	$0.67^{+0.25}_{-0.21}$	6542^{+375}_{-609}	4649^{+1528}_{-8535}	$0.483^{+0.533}_{-0.246}$
Alt.	-2 ± 0	$1.26^{+0.27}_{-0.28}$	6581^{+341}_{-530}	-4102^{+7738}_{-669}	$0.210^{+0.147}_{-0.074}$

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

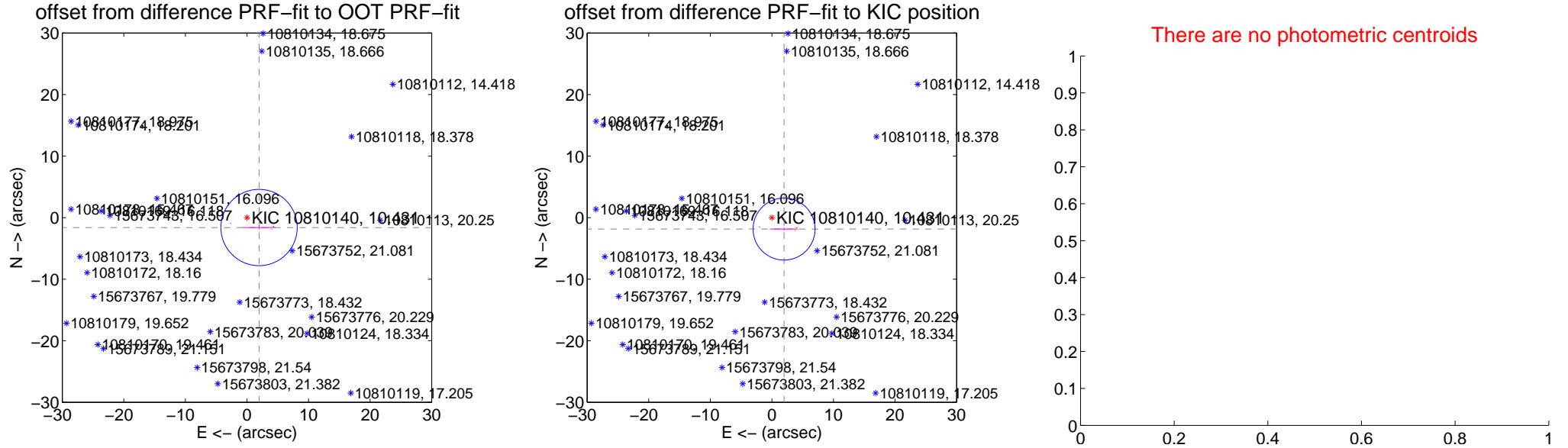
DV Centroid Data

Supplemental centroid analysis for 010810140-01. **Kepler magnitude: 10.43.** Transit SNR 8.00

There are 2 quarters with good PRF difference image offsets

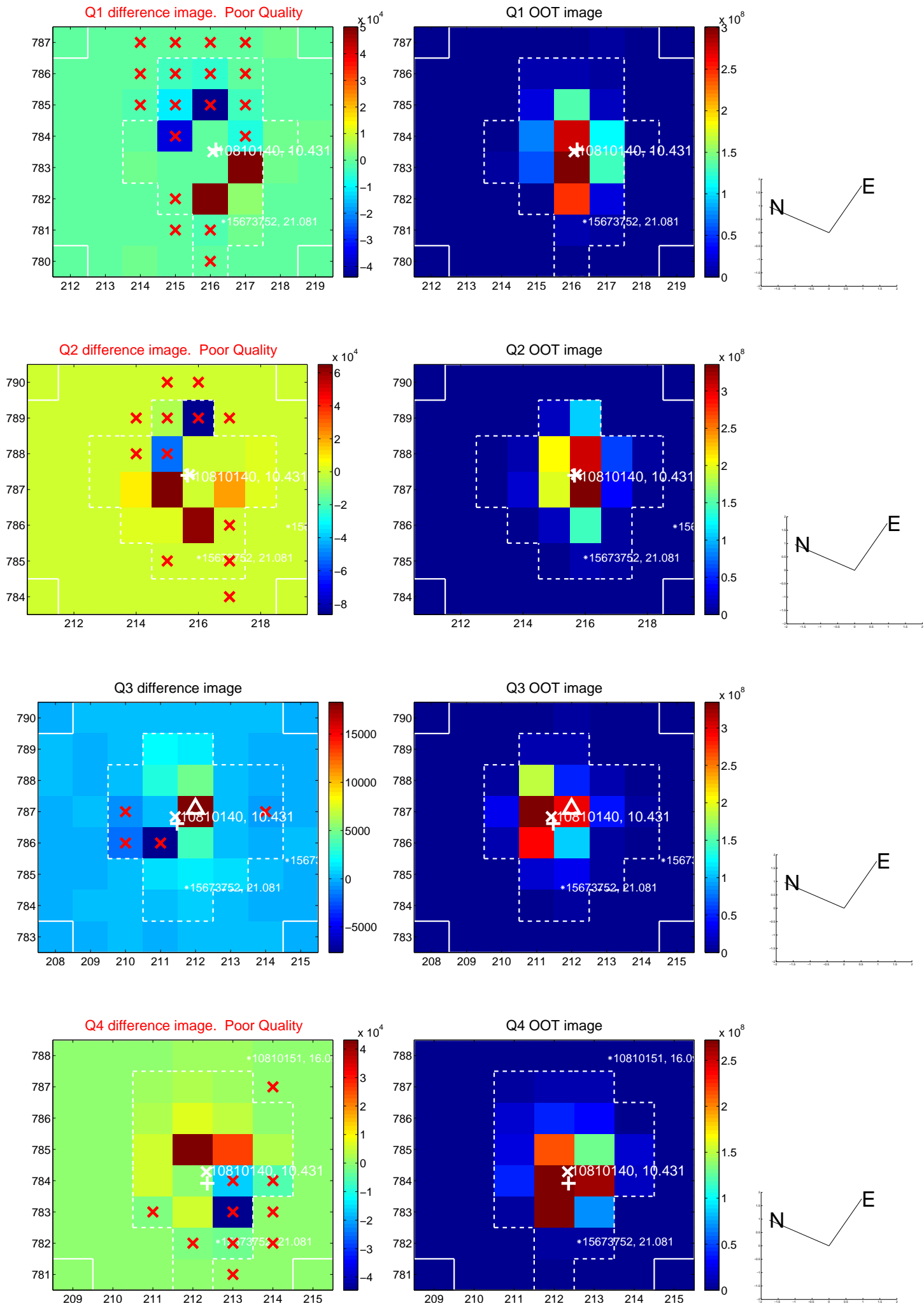
The direct PRF centroid is offset from the target star catalog position by about 0.37 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	2.533 ± 2.066	1.23	-1.960 ± 2.660	-1.605 ± 0.289
PRF-fit source offset from KIC position	2.717 ± 1.678	1.62	-1.983 ± 2.291	-1.858 ± 0.219
photometric centroid source offset	—	—	—	—

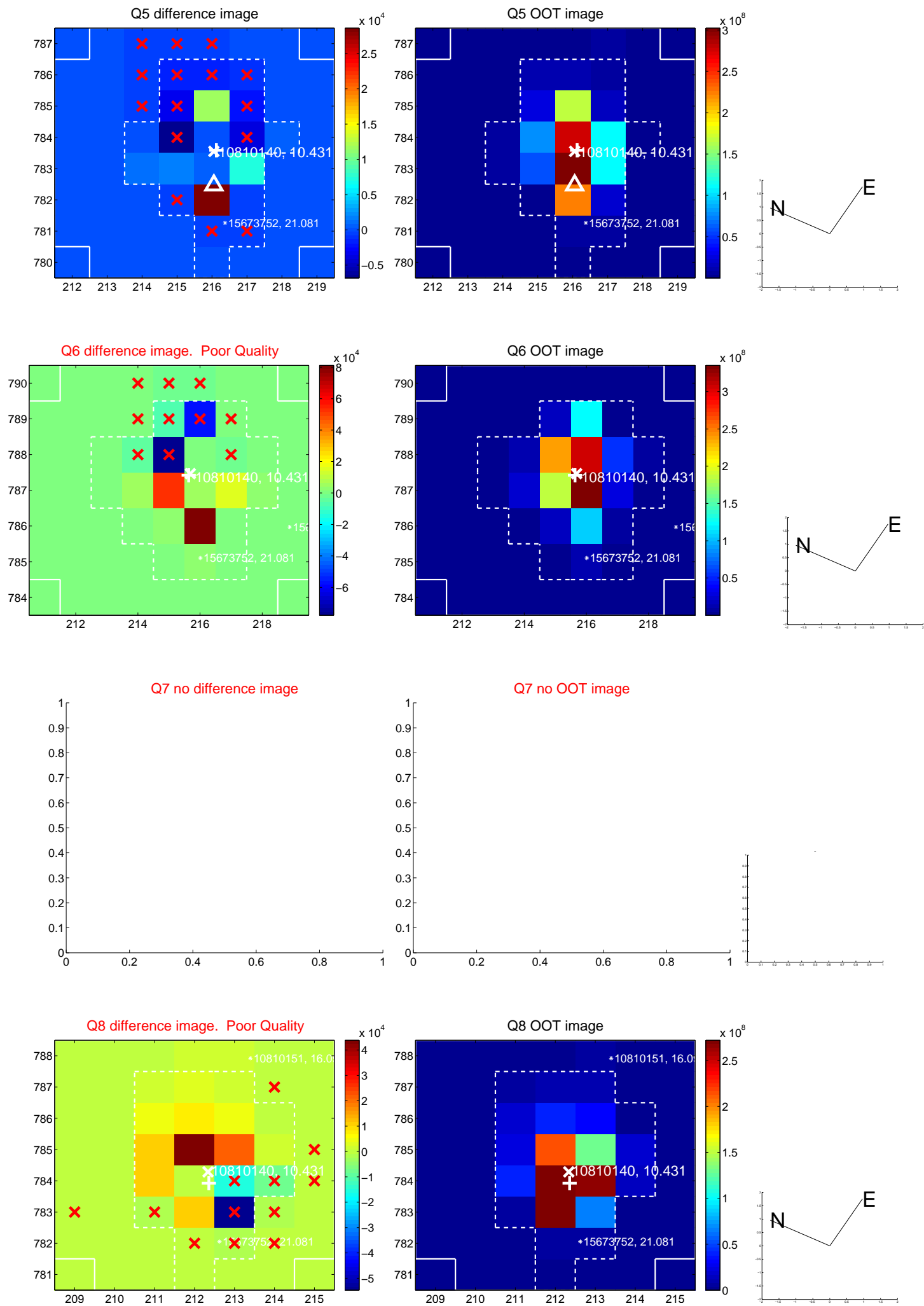


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets;** magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

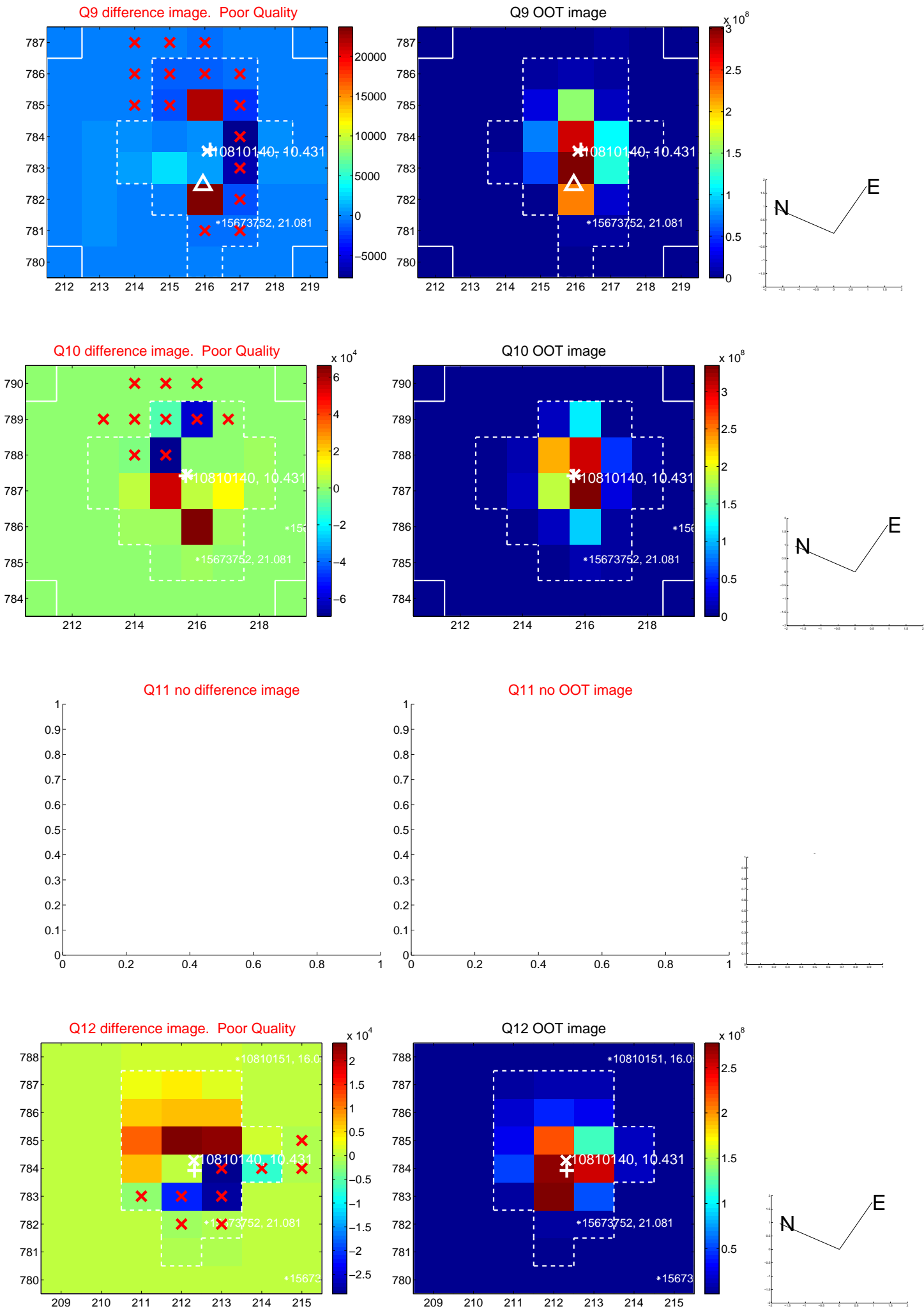
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



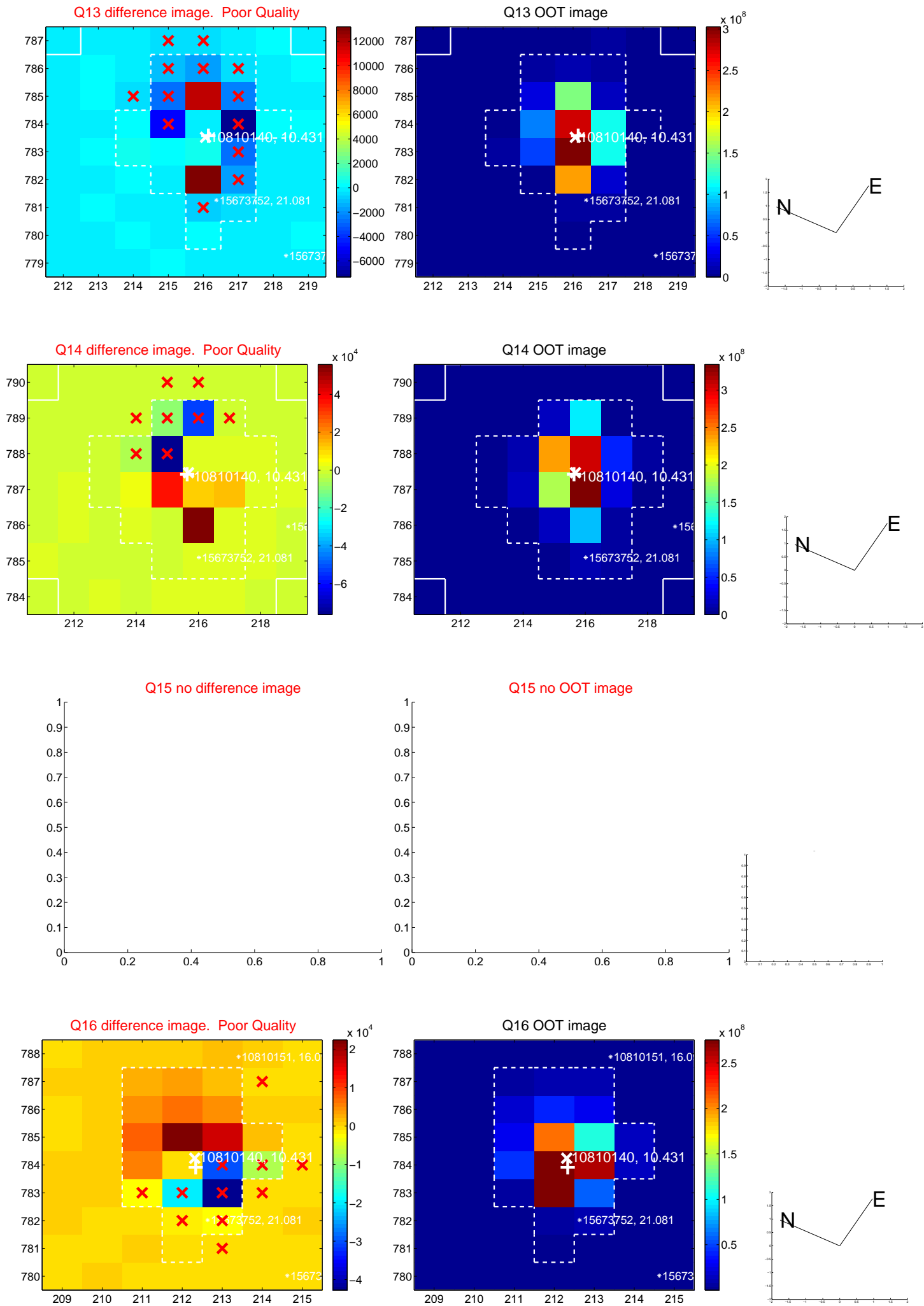
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



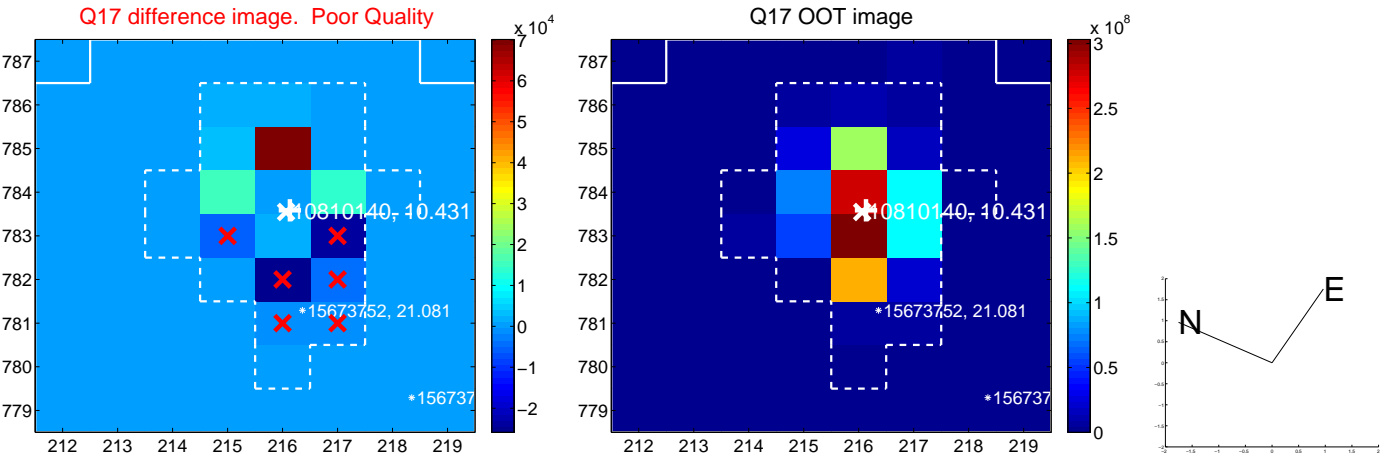
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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.



folded centroid time series figure for this object.

UKIRT Image

