

KIC 008636046

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})
008636046-01	OBS	No	1.222841	132.085368	20.6	3.280	7.4	7.0	2.89	6603	1.44	21491.42

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
008636046-01	OBS	FP	0.00	1	0	0	0	LPP_DV—LPP_ALT—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT

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

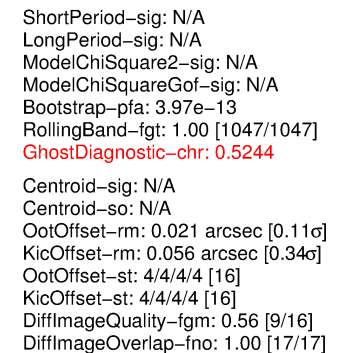
N = Not Transit-Like. S = Stellar Eclipse. C = Centroid Offset. E = Ephemeris Match.

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

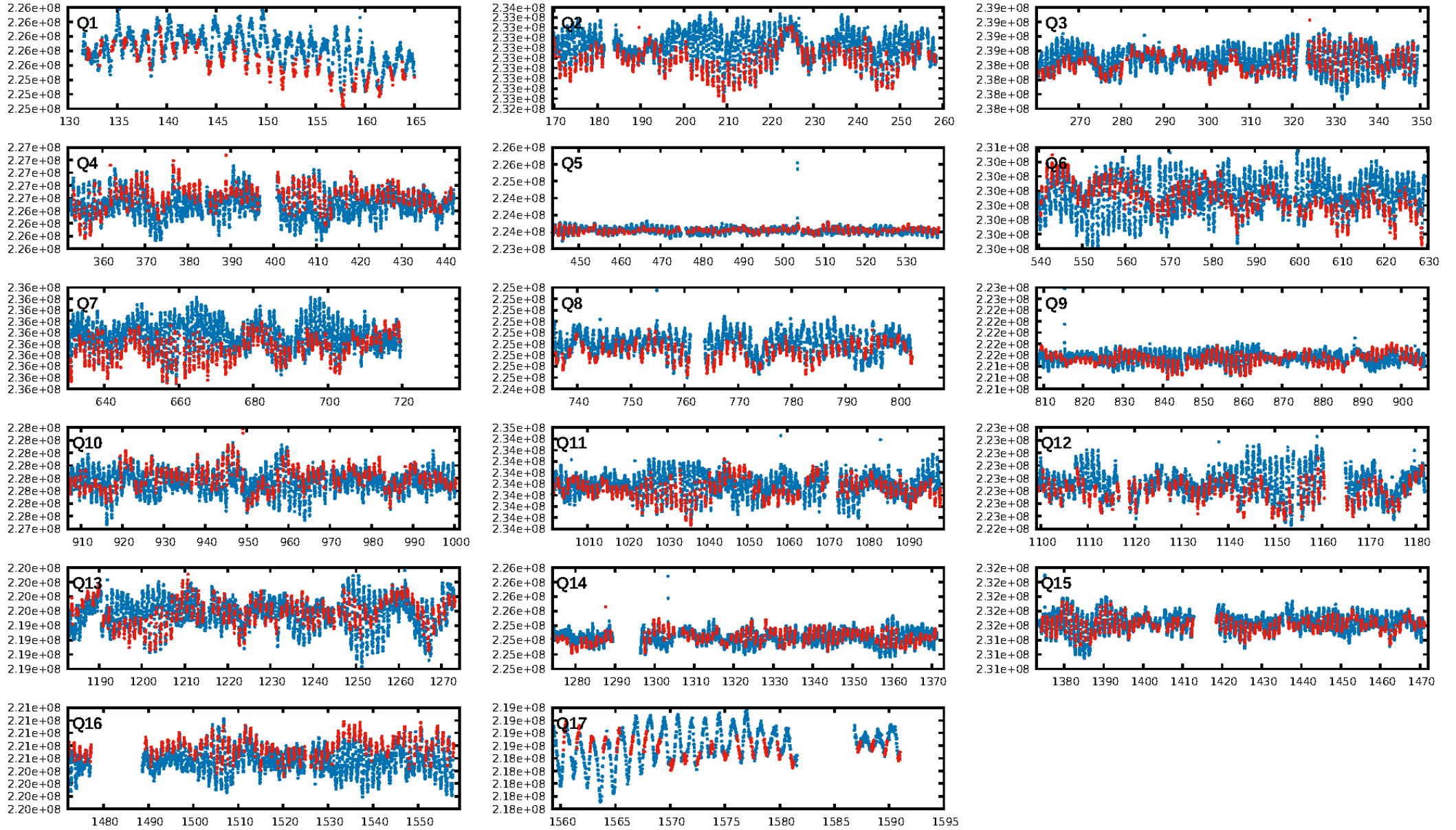
Ephemeris Match Information For 008636046-01

No Significant Match Found

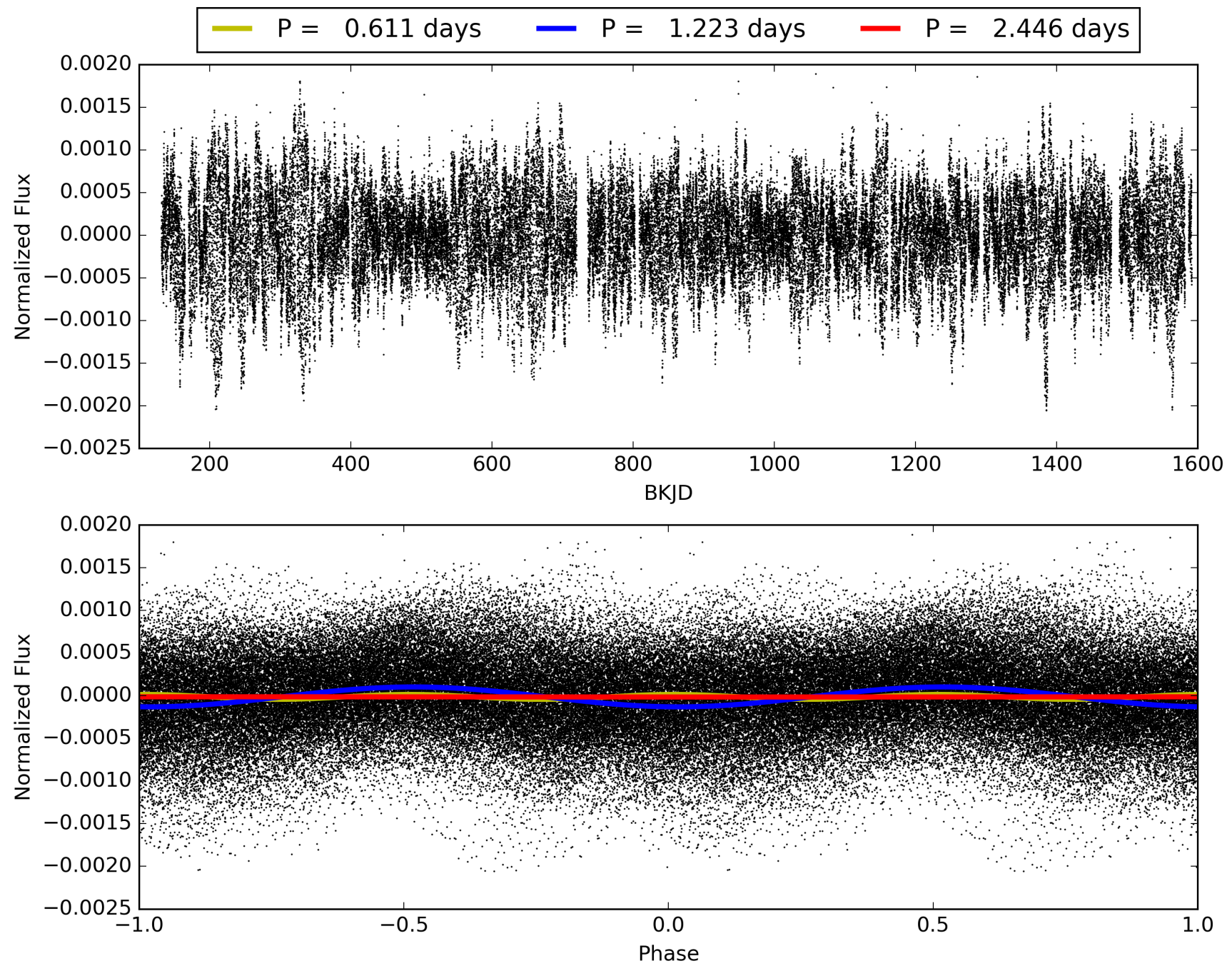
KIC: 8636046 Candidate: 1 of 1 Period: 1.223 d



TCE 008636046-01, PDC Light Curves

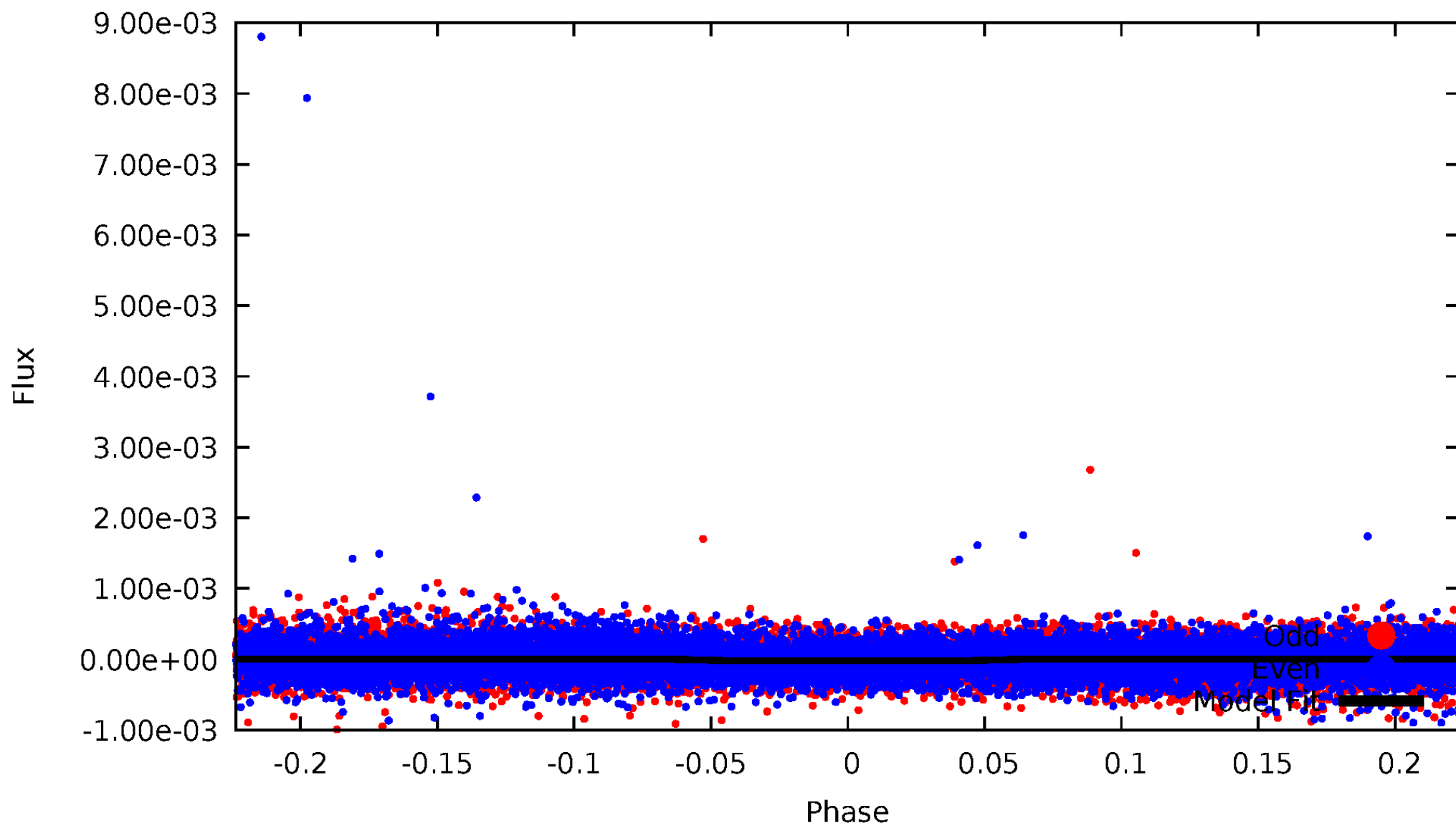


TCE 008636046-01



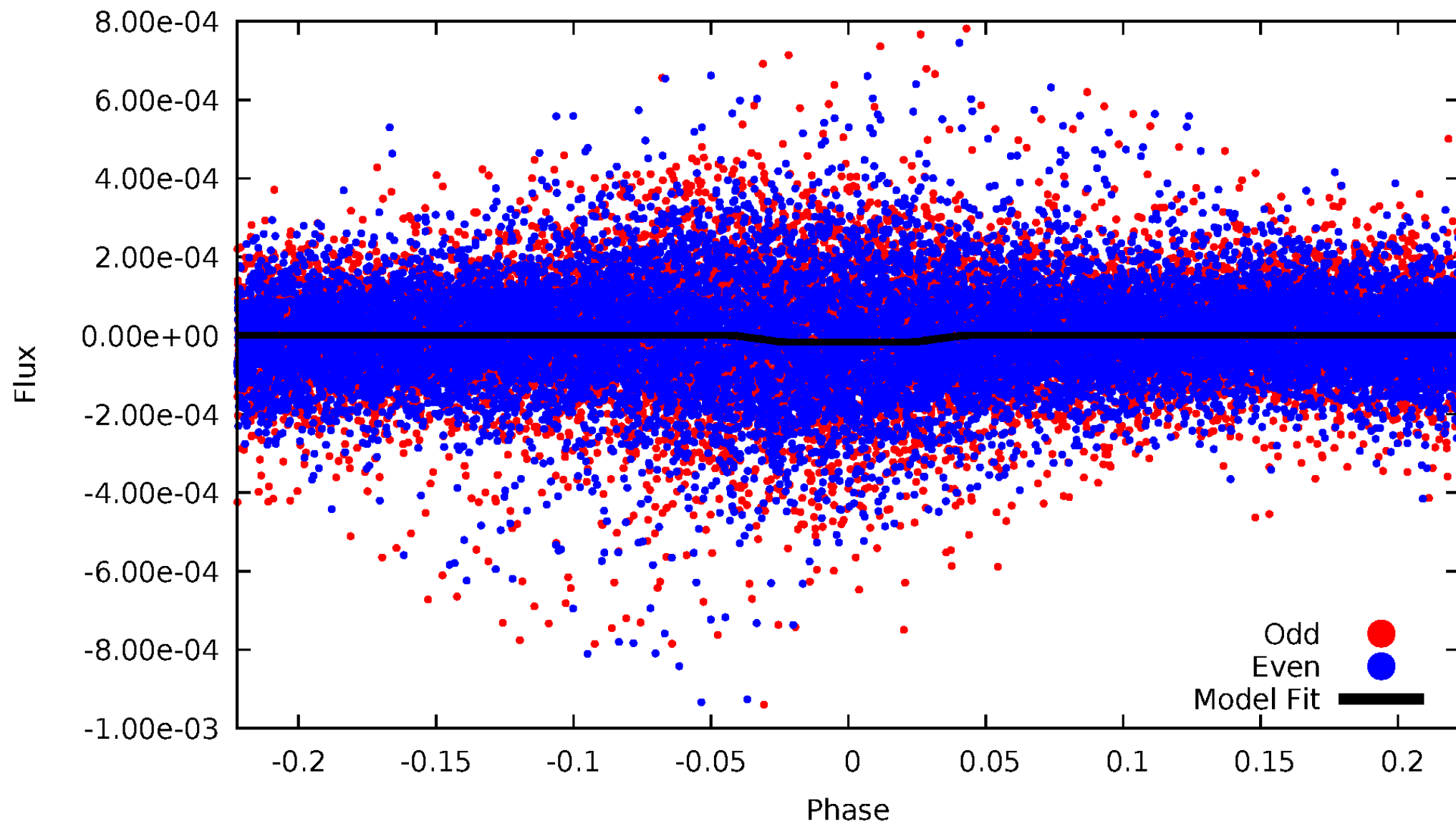
DV Odd/Even

TCE 008636046-01

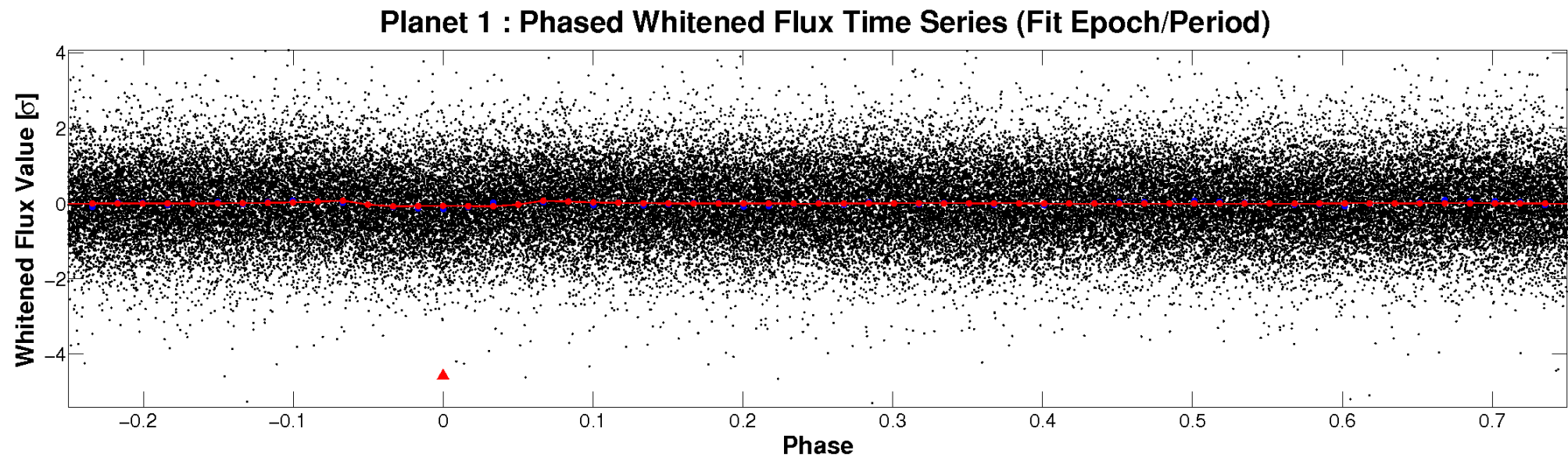
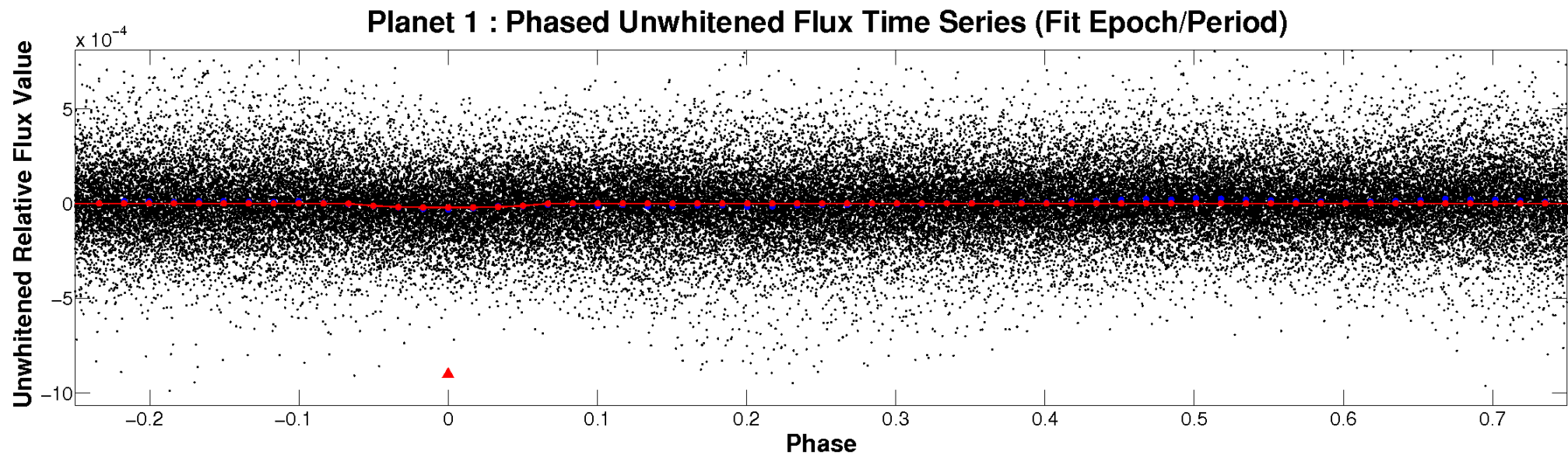


ALT Odd/Even

TCE 008636046-01

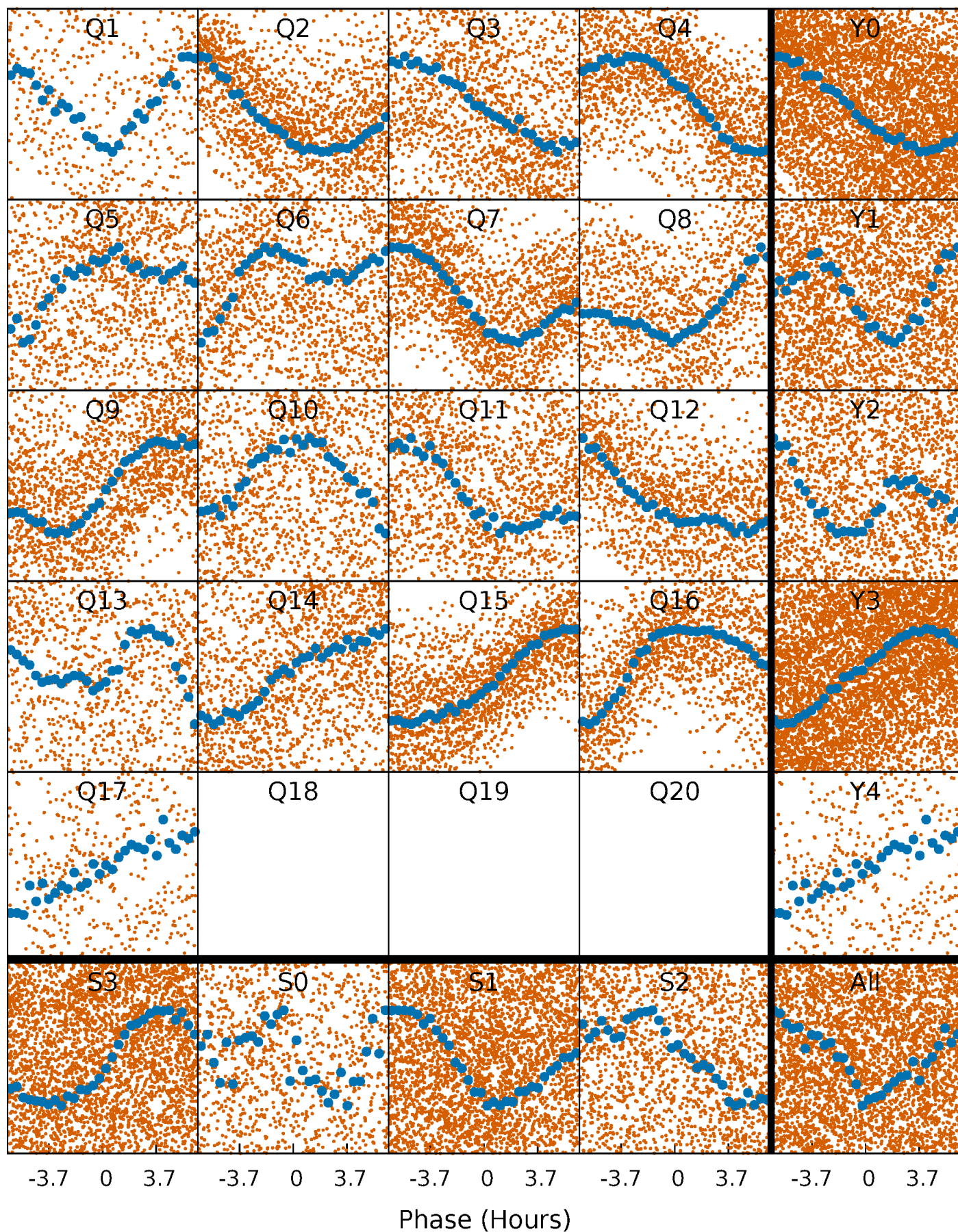


Non-Whitened Vs. Whitened Light Curve



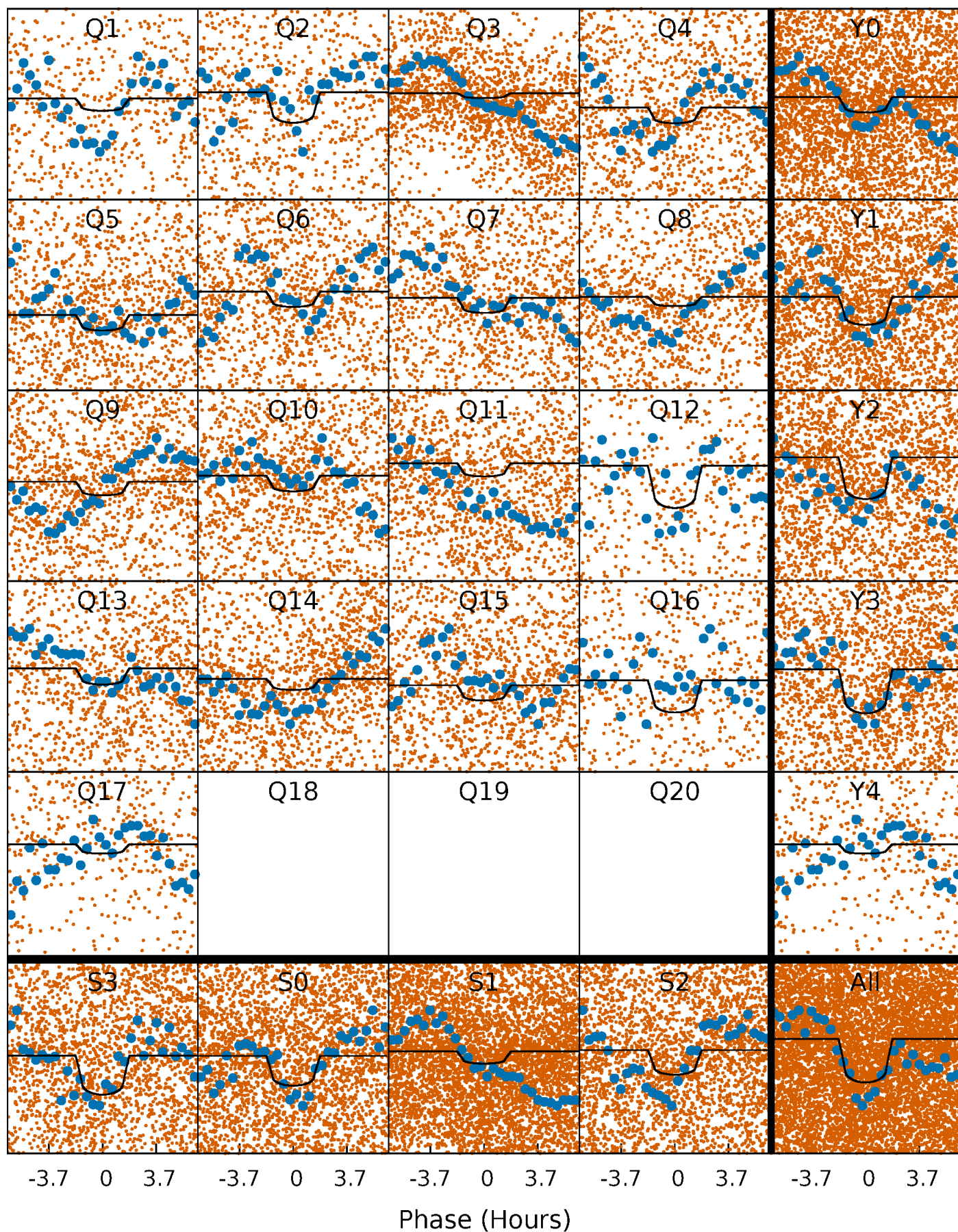
PDC Quarter-Phased Transit Curves

TCE 008636046-01 P= 1.222841 Days $T_0=132.085368$ (BKJD)



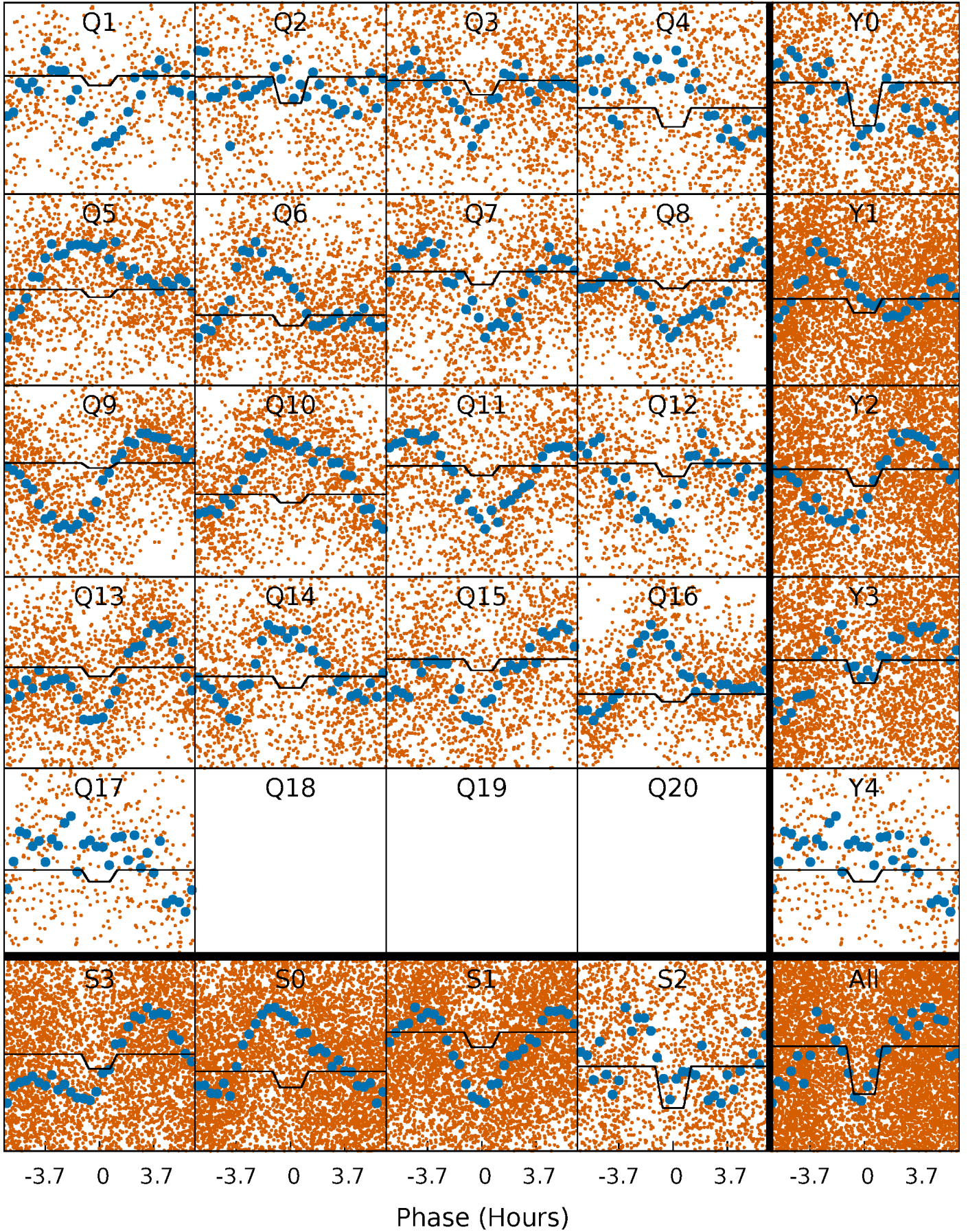
DV Quarter-Phased Transit Curves

TCE 008636046-01 P= 1.222841 Days $T_0=132.085368$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

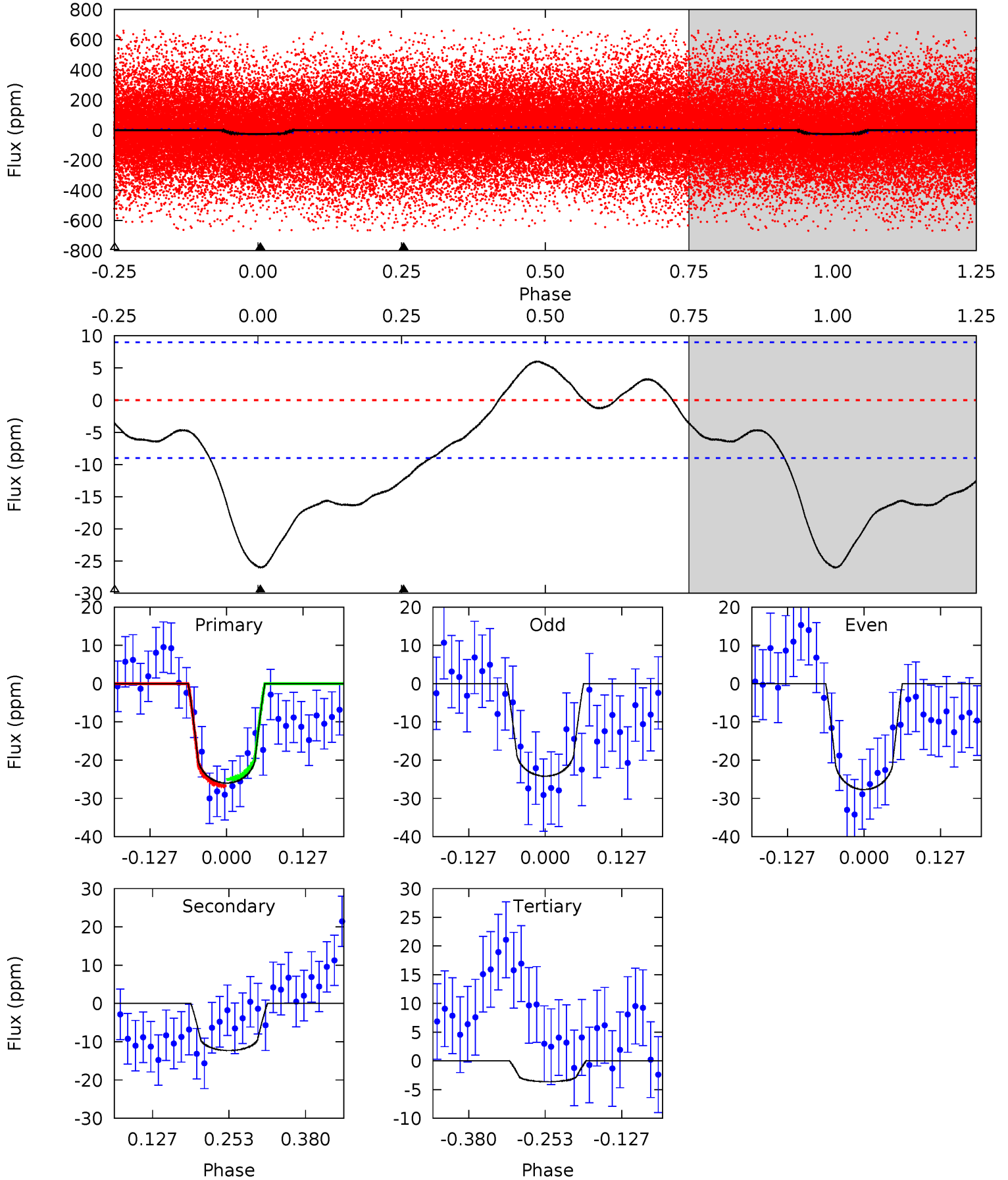
TCE 008636046-01 P= 1.222847 Days $T_0=132.085791$ (BKJD)



DV Model-Shift Uniqueness Test

008636046-01, P = 1.222841 Days, E = 130.862527 Days

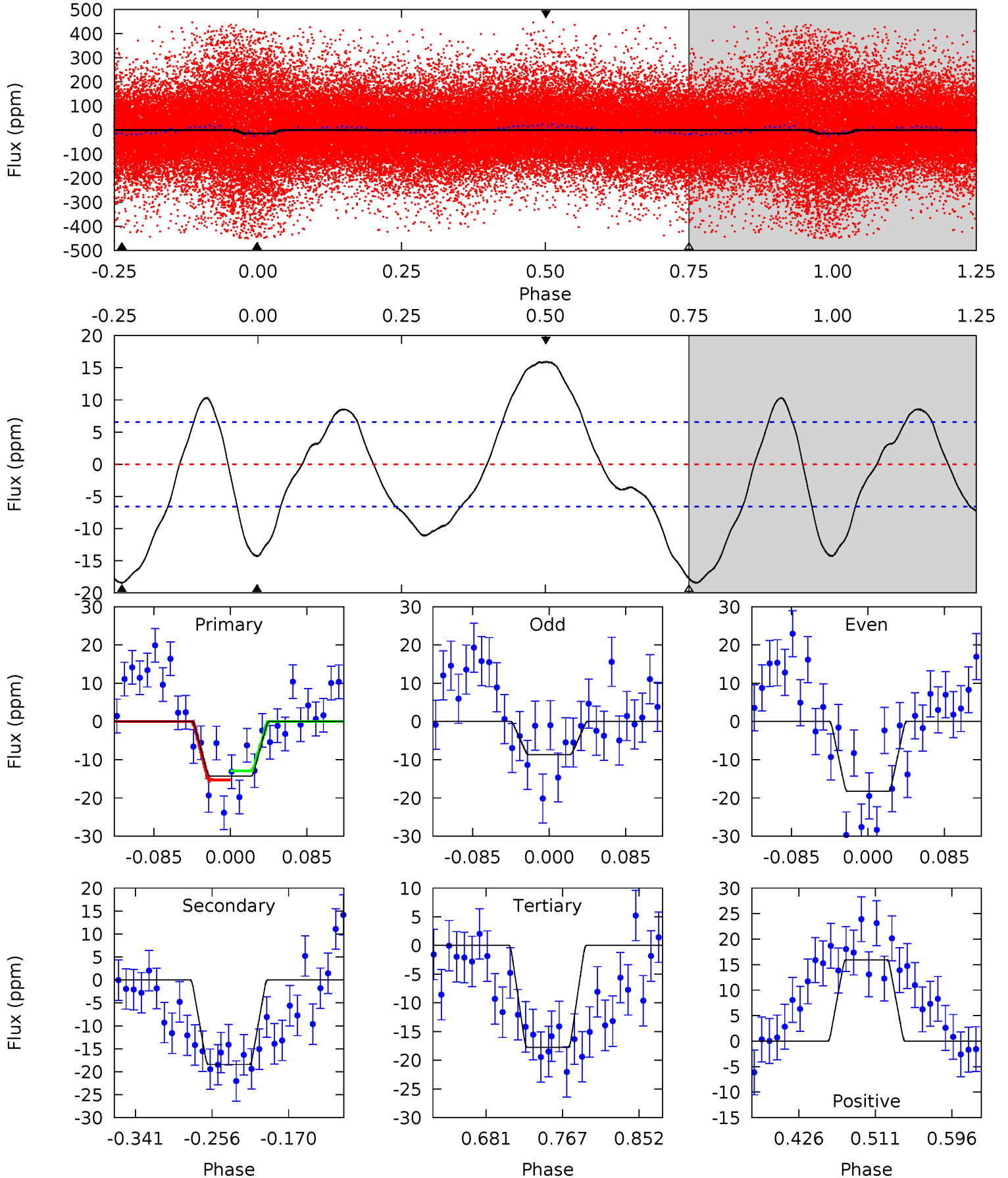
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
13.0	6.17	1.82	0	4.51	1.53	1.91	11.2	13.0	4.34	6.17	0.88	0.98	0.19	0.40



Alt Model-Shift Uniqueness Test

008636046-01, P = 1.222847 Days, E = 130.862944 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
10.00	12.9	12.4	11.2	4.60	1.72	6.09	-2.43	-1.17	0.49	1.75	3.35	0.94	0.46	0.82



Stellar Parameters For KIC 008636046

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	6603^{+178}_{-178}	$3.698^{+0.300}_{-0.080}$	$-0.200^{+0.300}_{-0.250}$	$2.893^{+0.467}_{-1.011}$	$1.523^{+0.241}_{-0.294}$	$0.089^{+0.209}_{-0.023}$
	+3%/-3%	+8%/-2%	+150%/-125%	+16%/-35%	+16%/-19%	+236%/-26%
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 008636046-01 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	A_{obs}
DV	-12 ± 2	$1.35^{+0.30}_{-0.30}$	4225^{+242}_{-356}	5634^{+629}_{-471}	$2.464^{+1.590}_{-0.804}$
Alt.	-18 ± 1	$1.20^{+0.28}_{-0.26}$	4222^{+262}_{-352}	6711^{+845}_{-611}	$4.773^{+2.798}_{-1.611}$

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

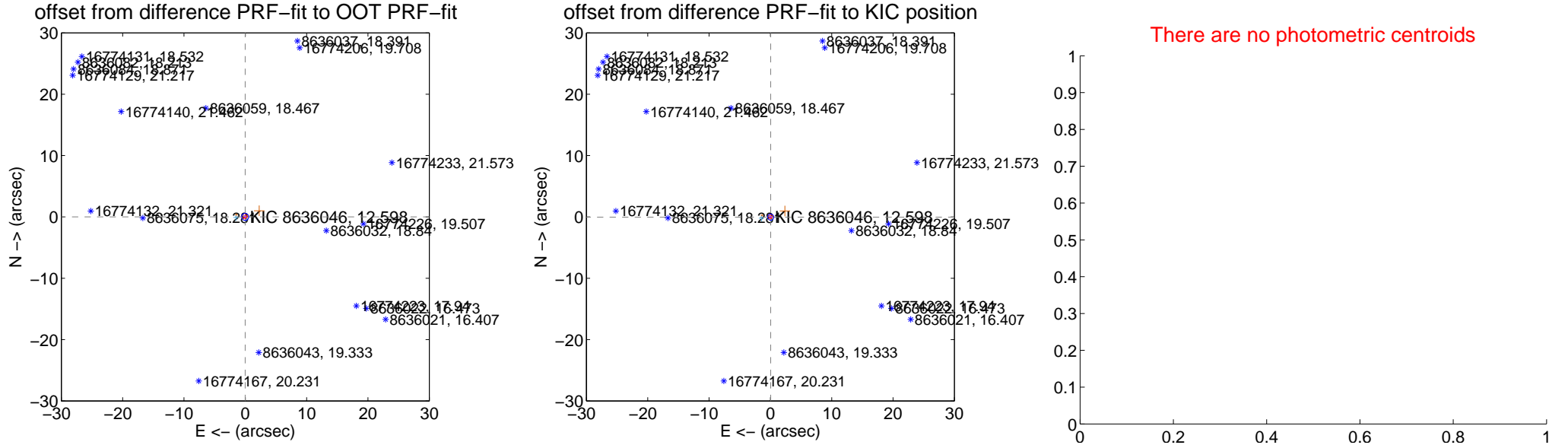
DV Centroid Data

Supplemental centroid analysis for 008636046-01. Kepler magnitude: 12.60. Transit SNR 7.02

There are 9 quarters with good PRF difference image offsets

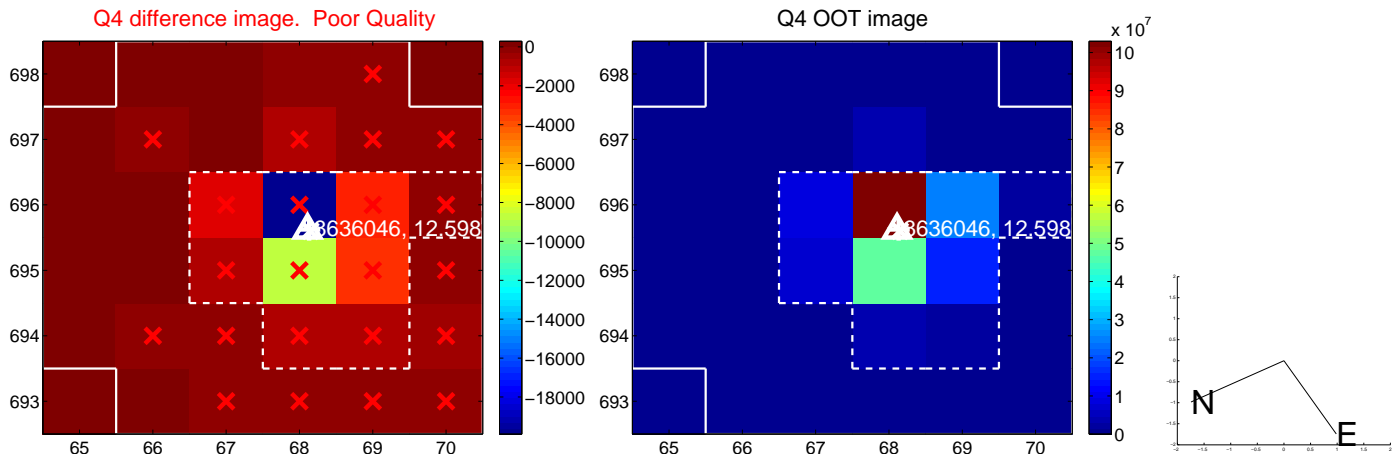
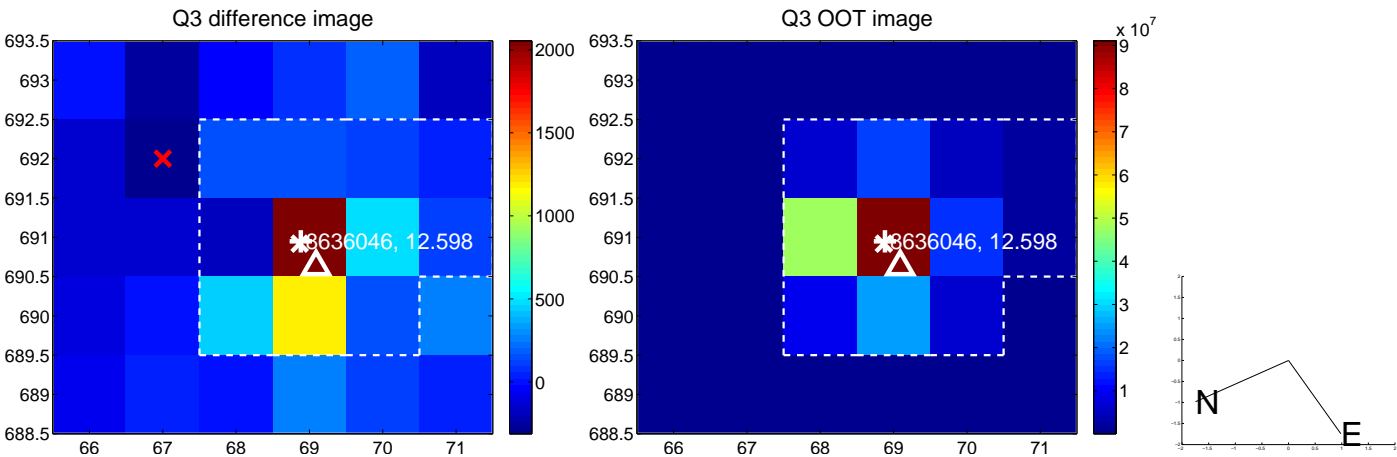
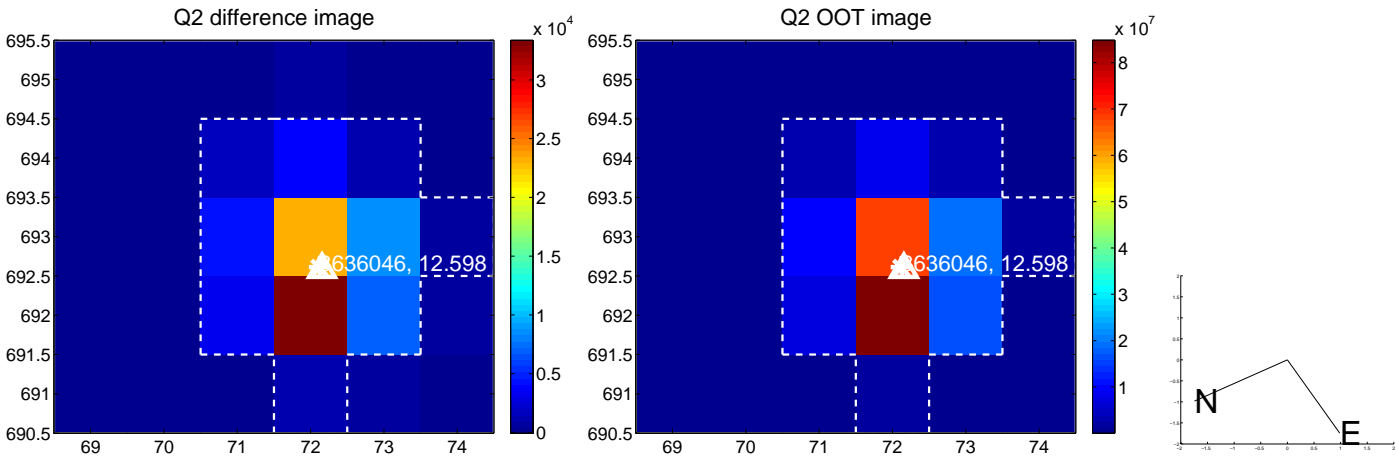
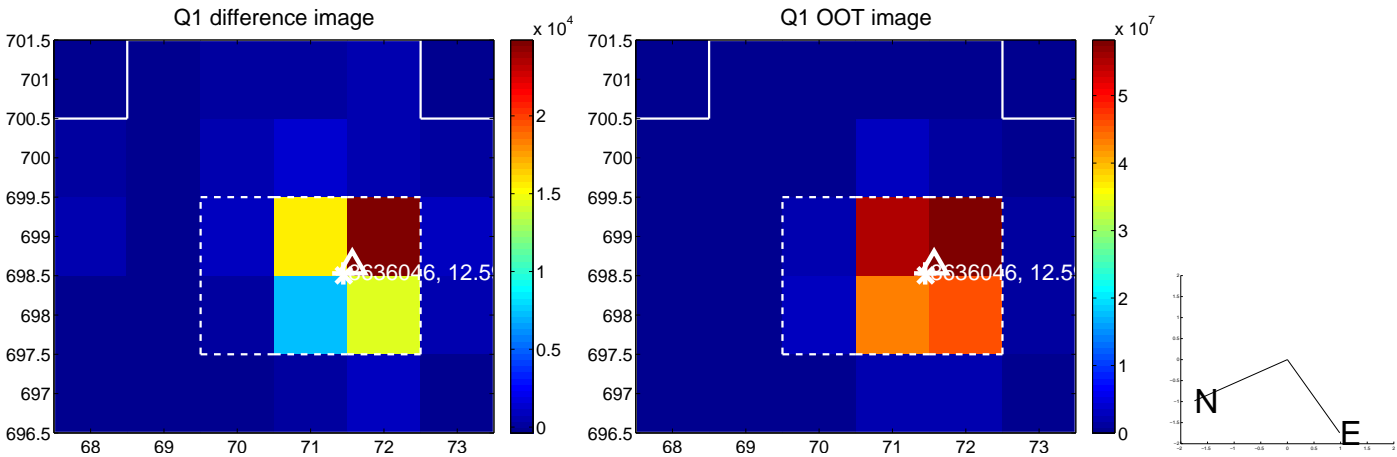
The direct PRF centroid is offset from the target star catalog position by about 0.12 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.021 ± 0.192	0.11	0.020 ± 0.205	0.005 ± 0.109
PRF-fit source offset from KIC position	0.056 ± 0.167	0.34	-0.047 ± 0.208	-0.031 ± 0.106
photometric centroid source offset	—	—	—	—

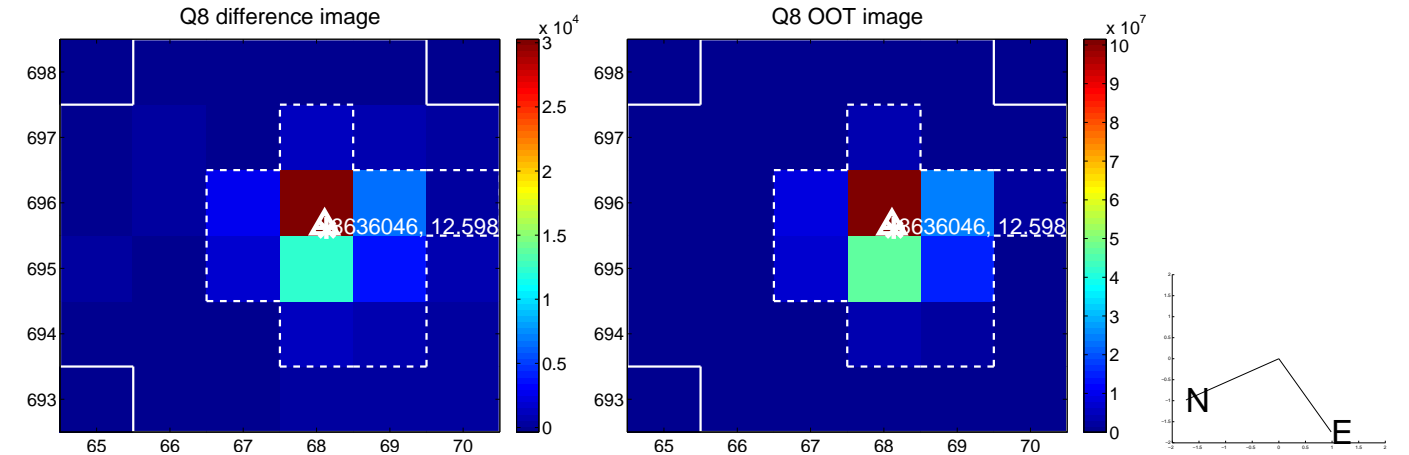
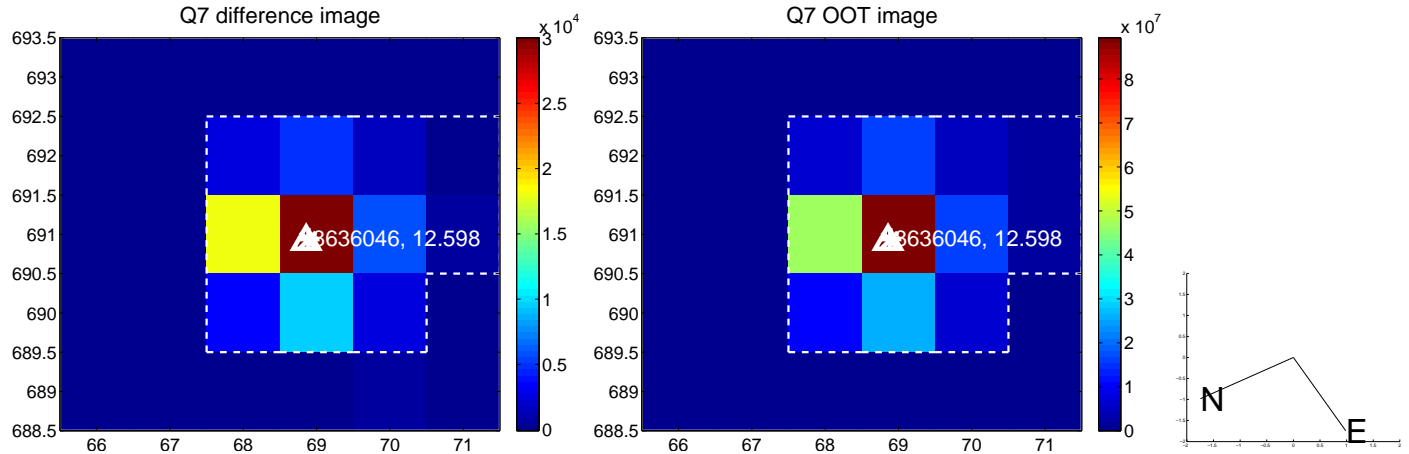
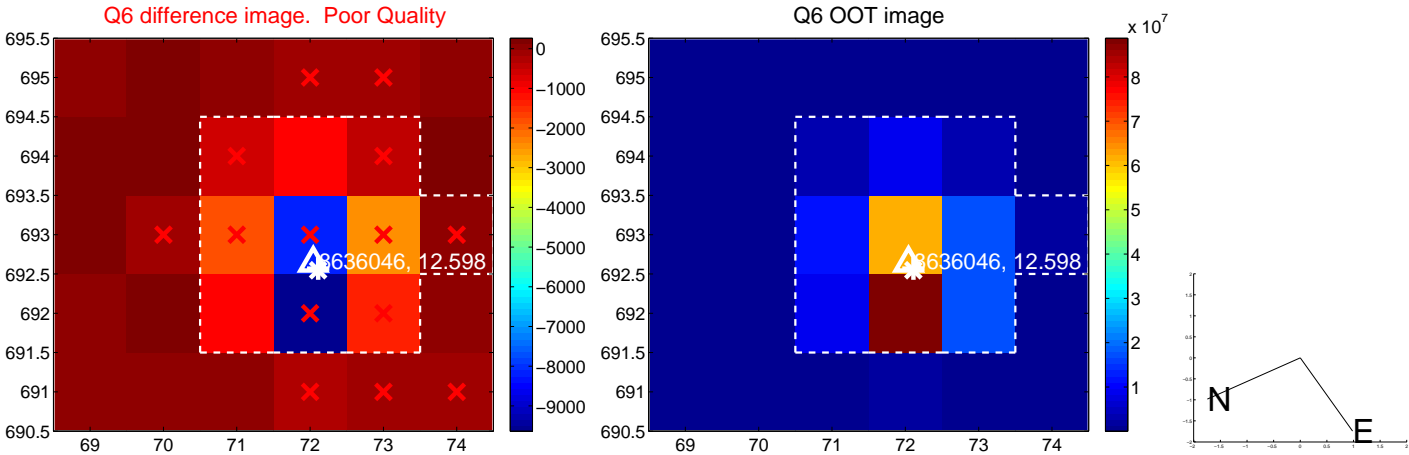
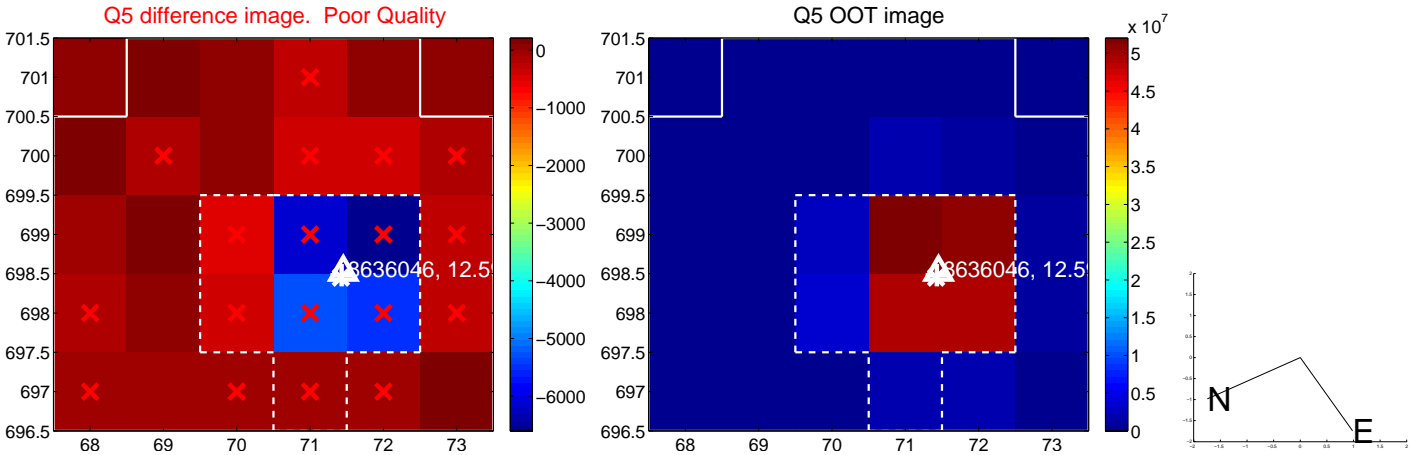


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses:** good quarterly centroid offsets; **Vermillion crosses:** bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

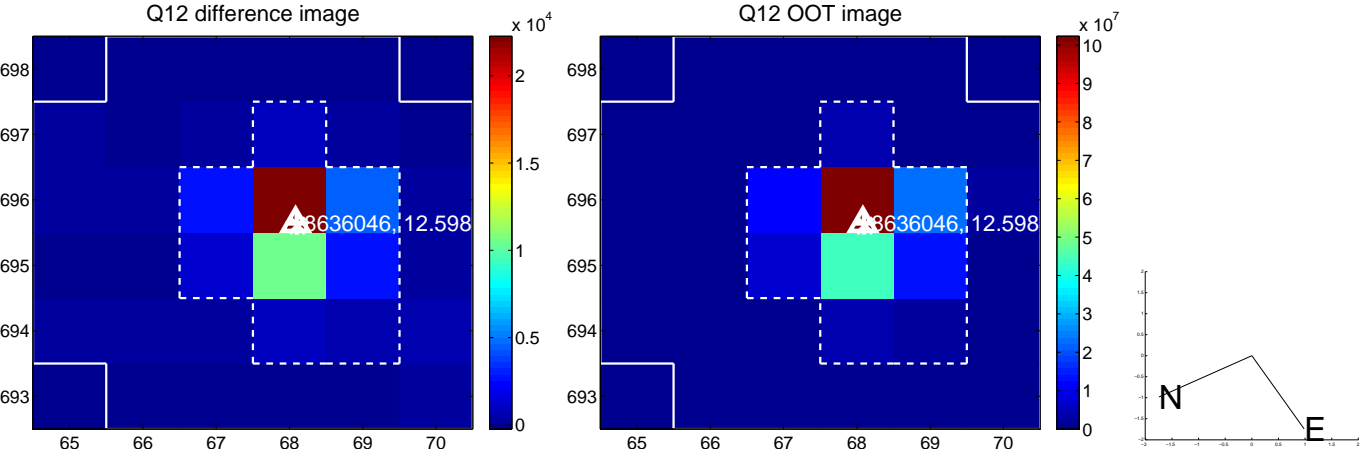
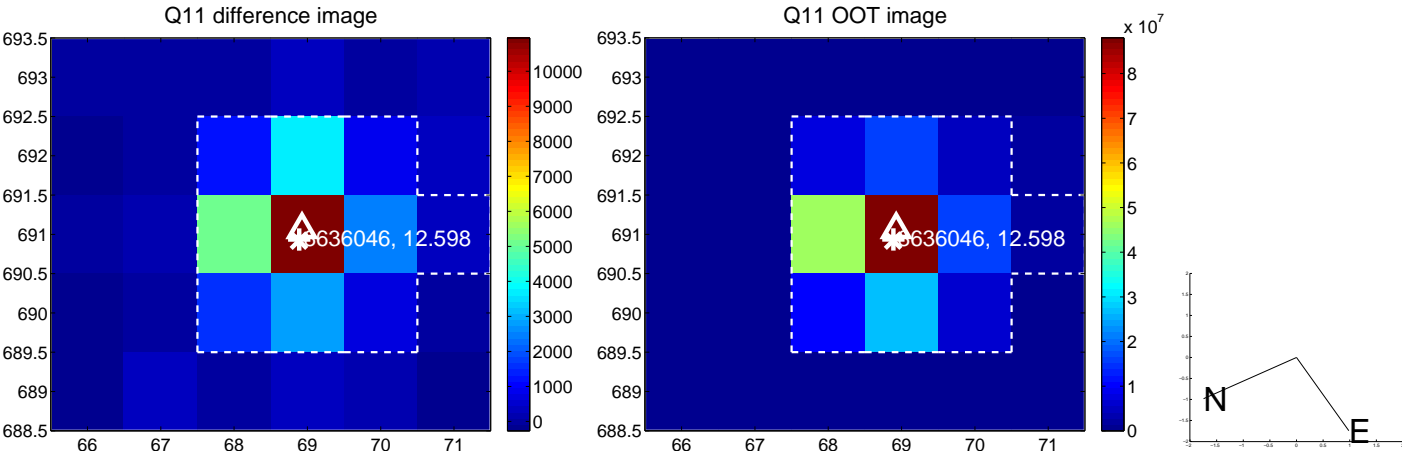
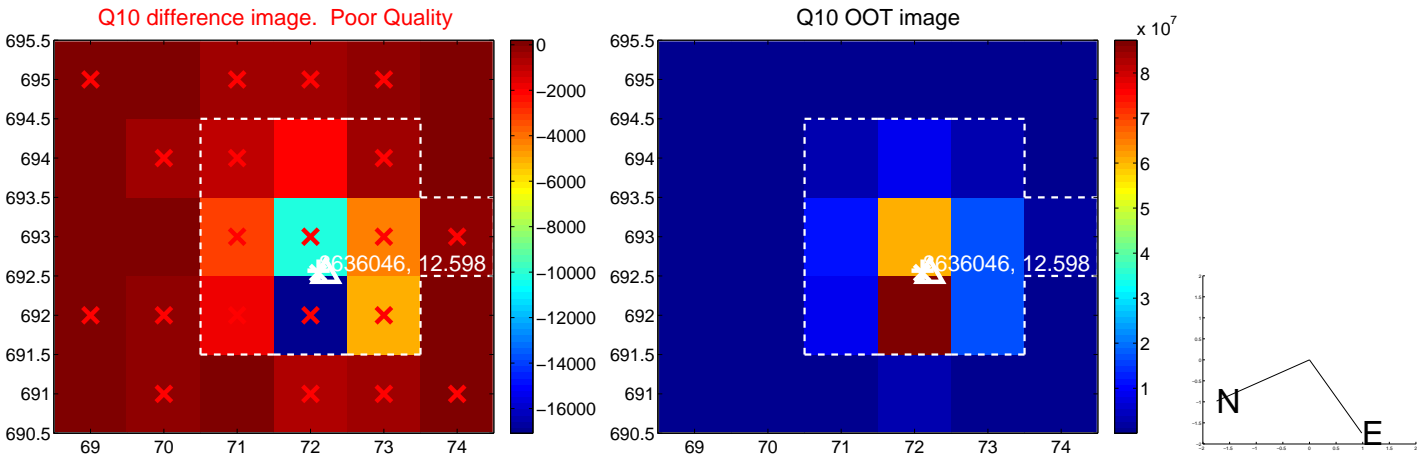
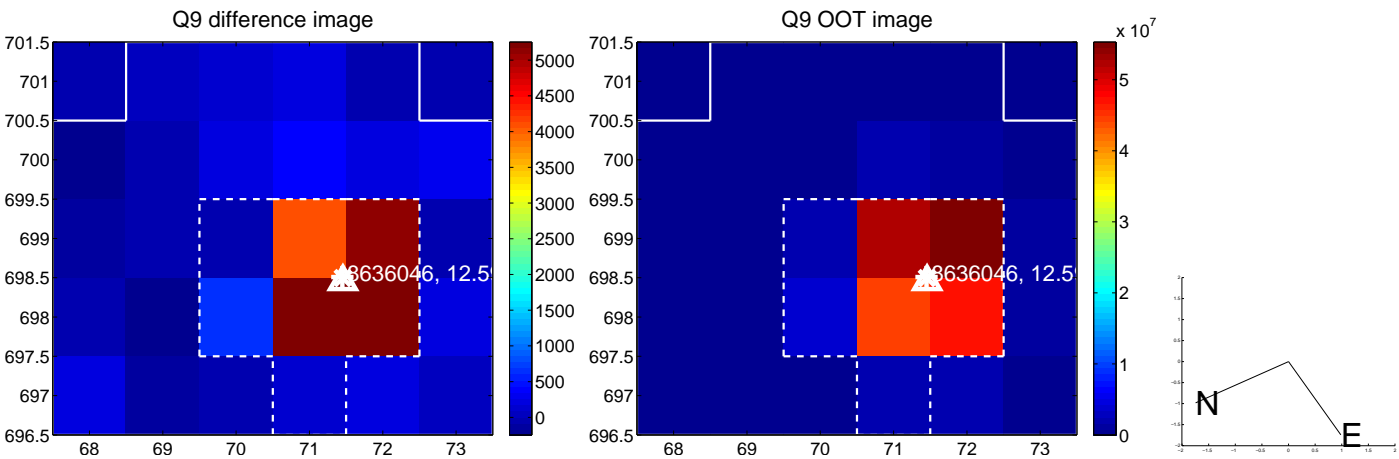
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



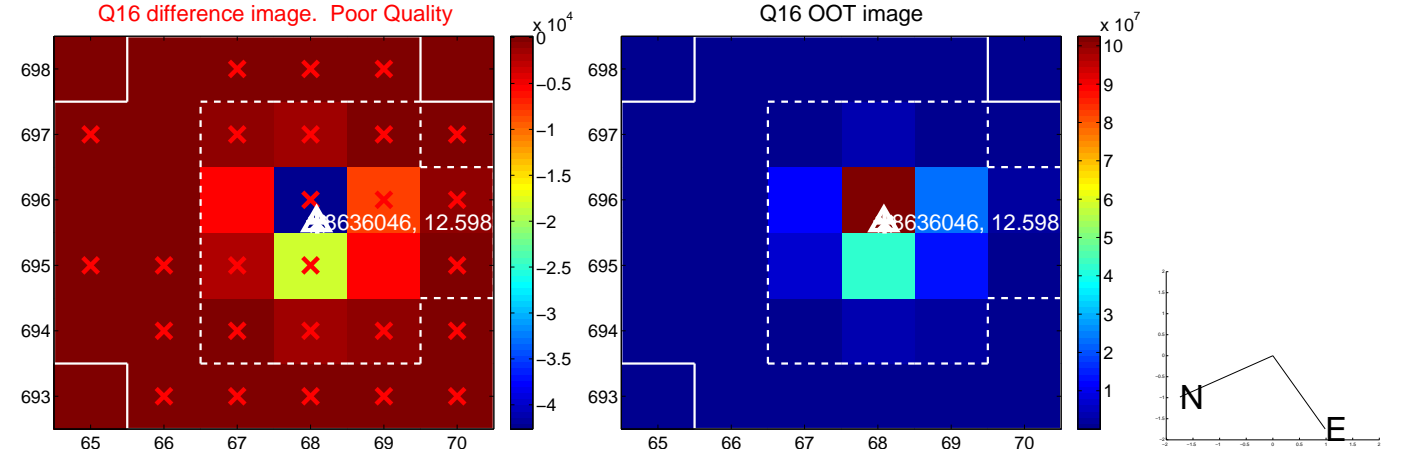
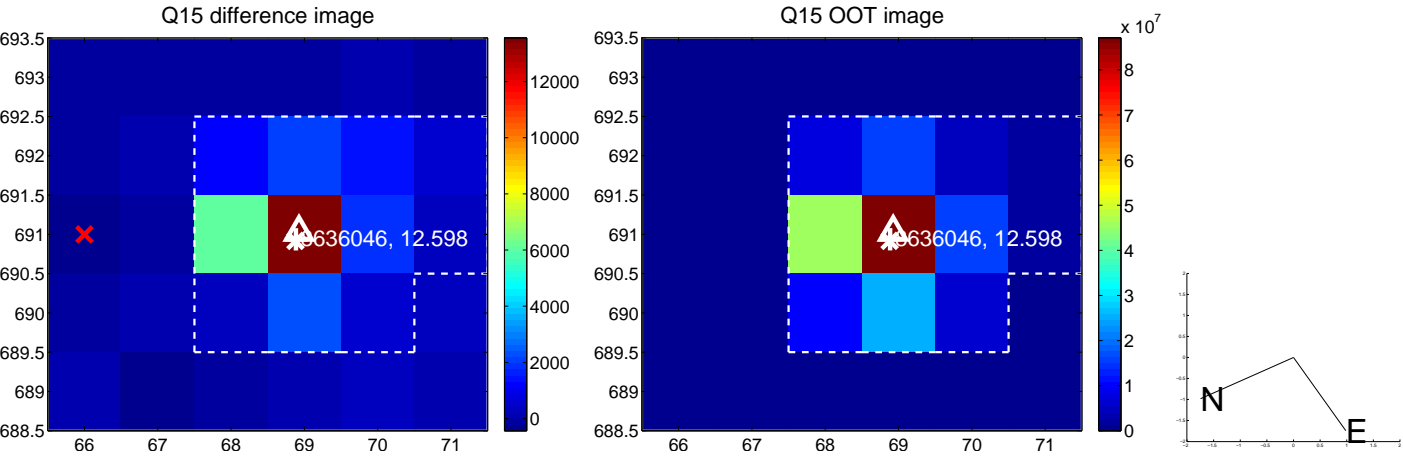
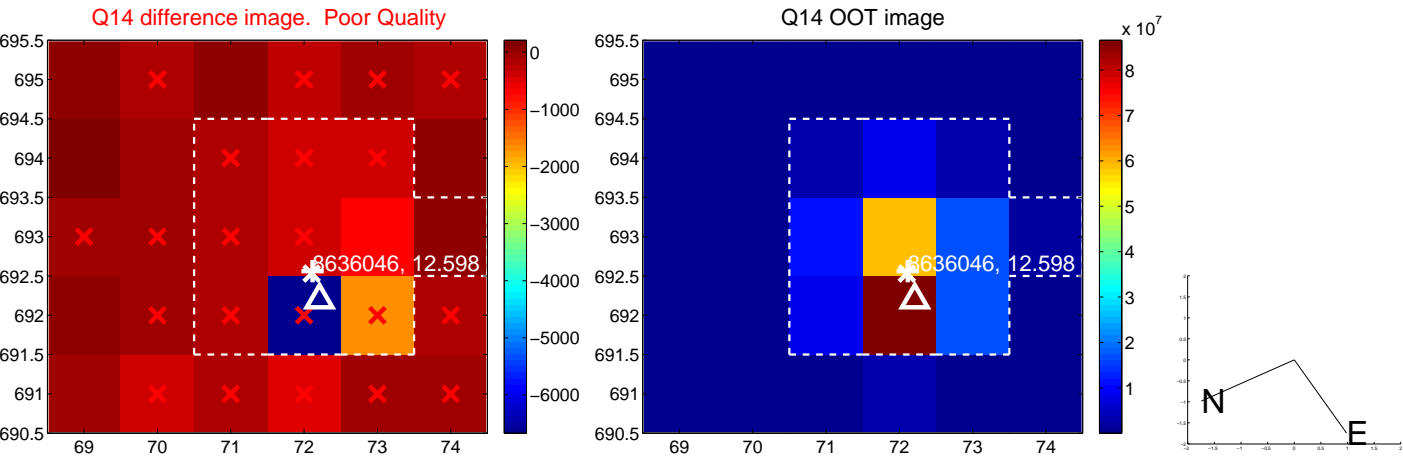
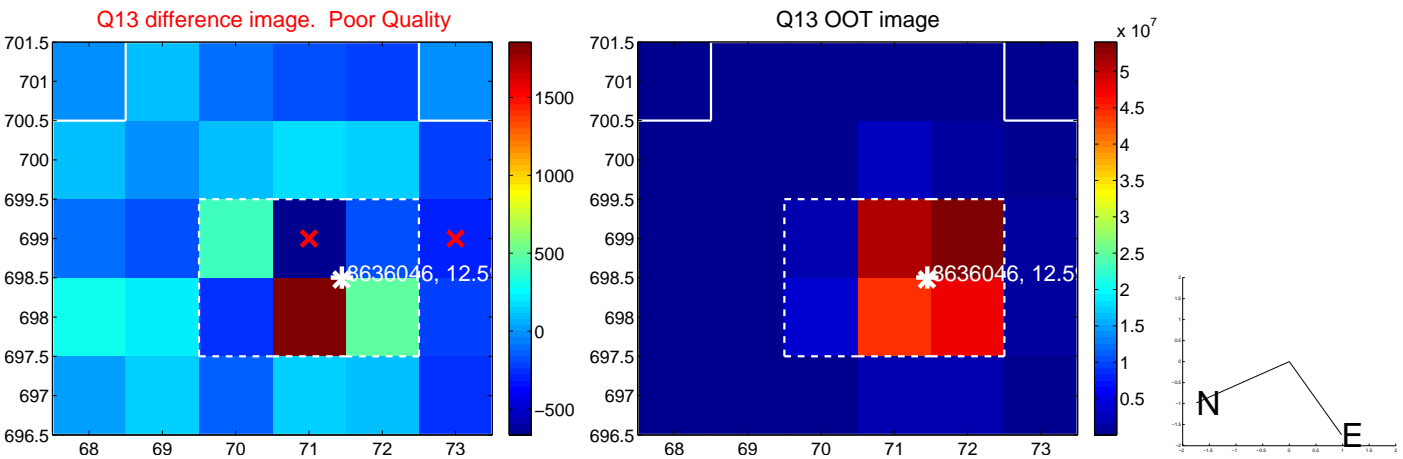
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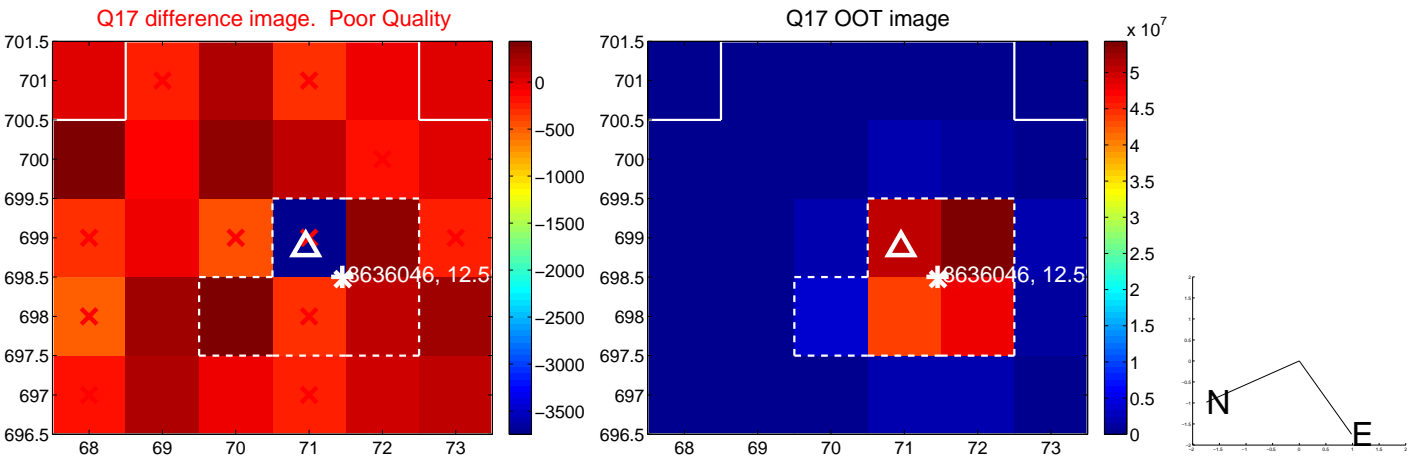
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folded centroid time series figure for this object.

UKIRT Image

Declination

