

KIC 008248103

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})
008248103-01	OBS	7002.01	4.830045	134.660537	231.2	0.657	8.8	11.3	0.94	5693	1.80	275.91

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
008248103-01	OBS	PC	0.78	0	0	0	0	NO_COMMENT

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

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

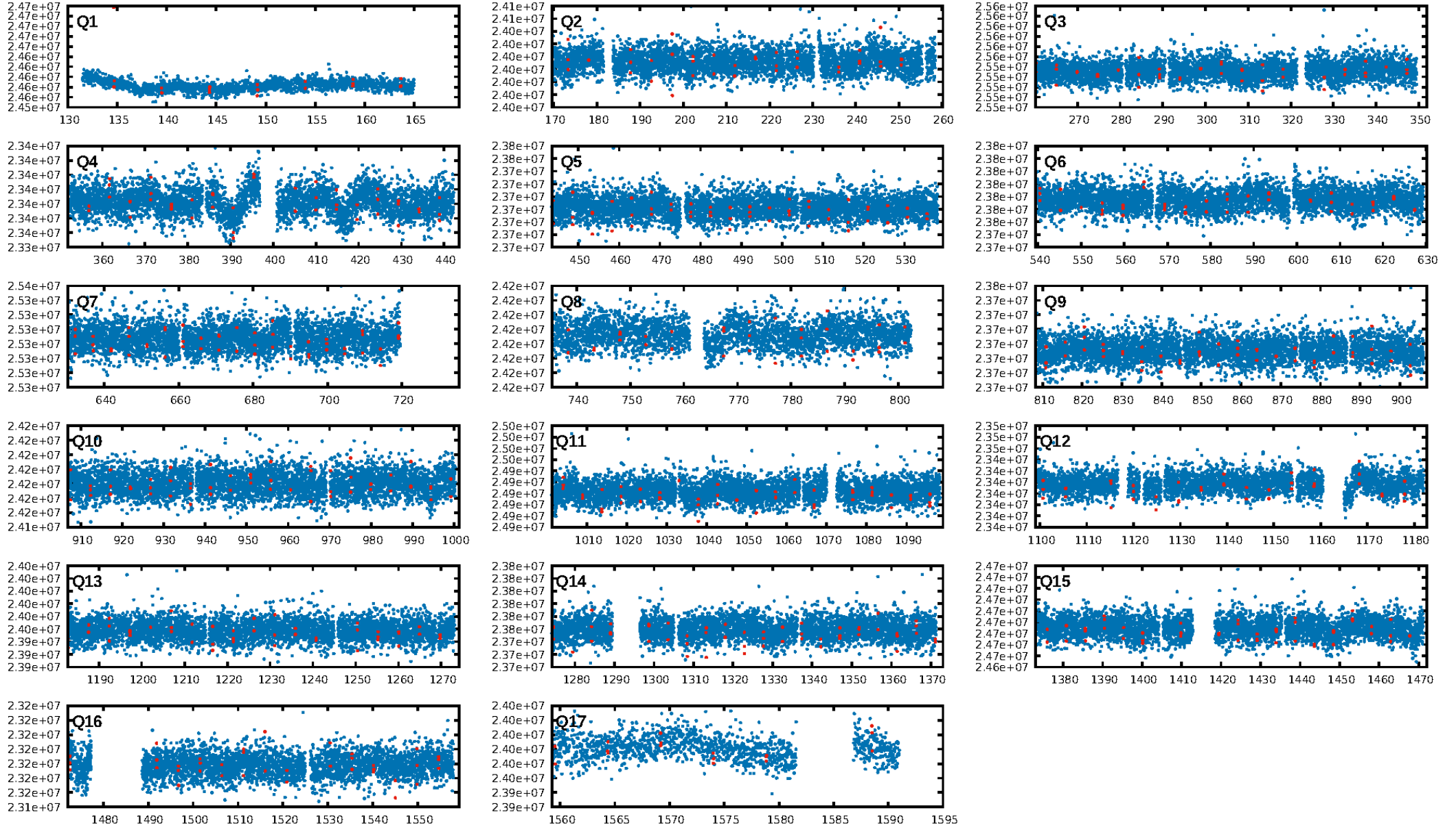
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 008248103-01

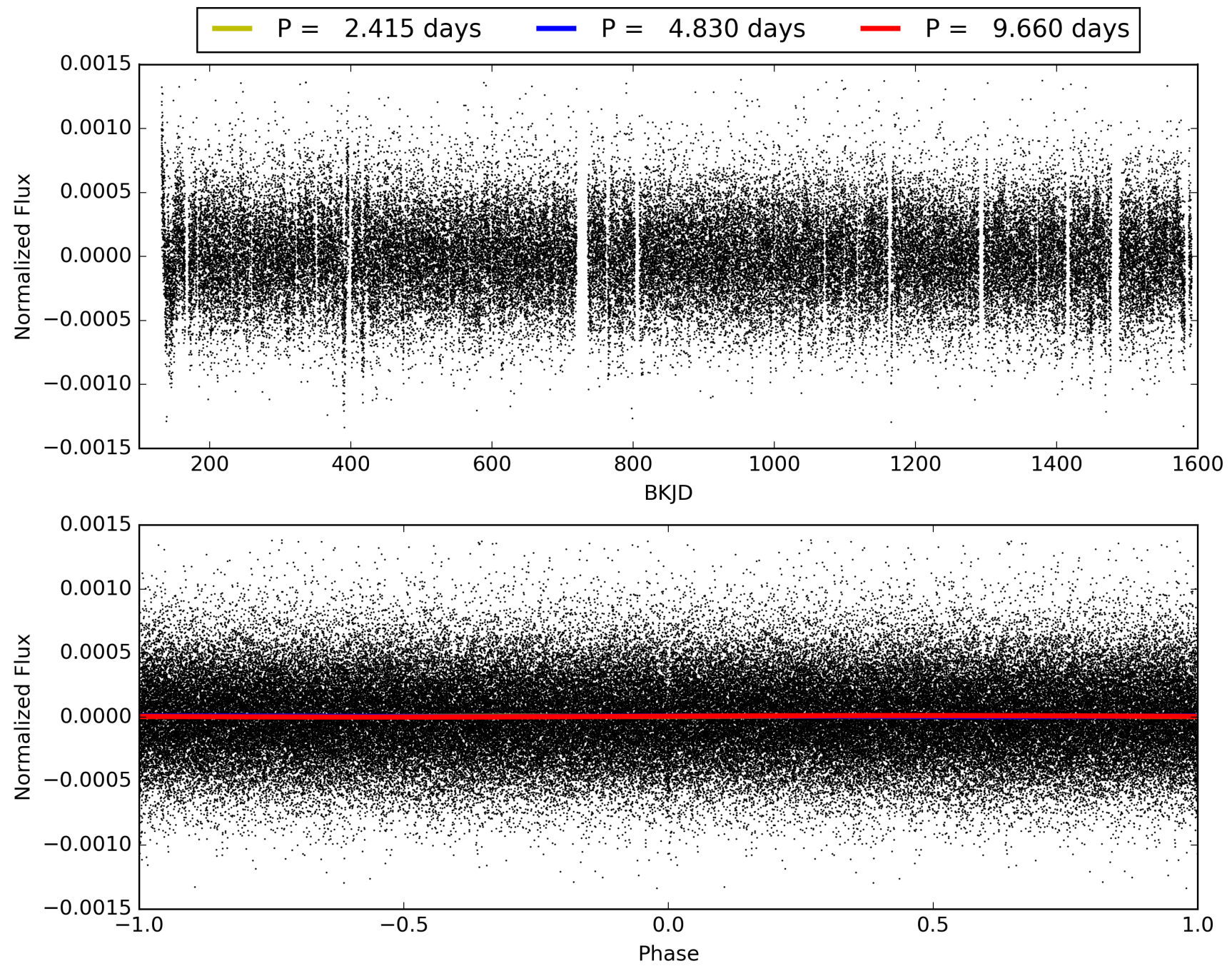
No Significant Match Found

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

TCE 008248103-01, PDC Light Curves

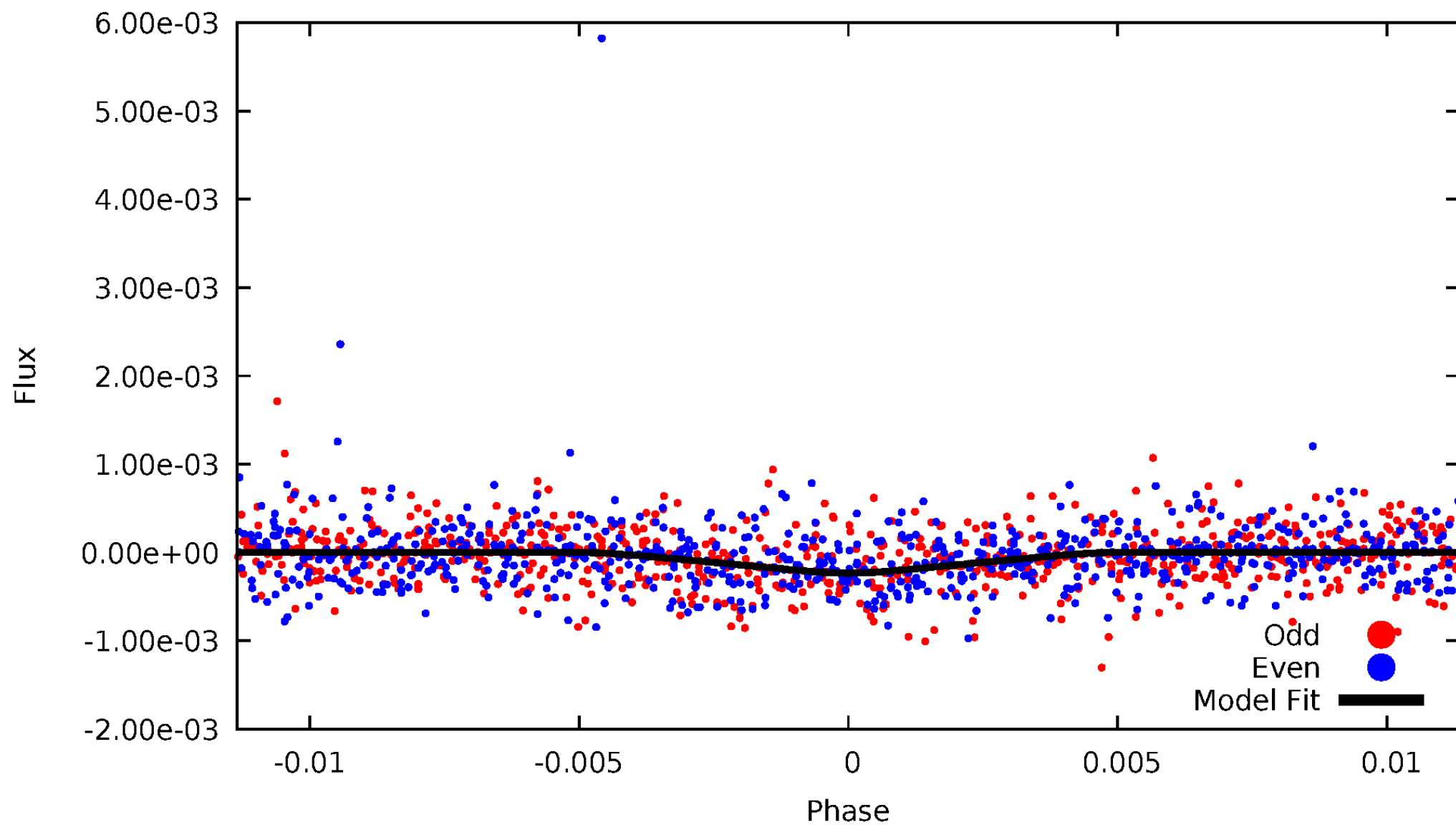


TCE 008248103-01



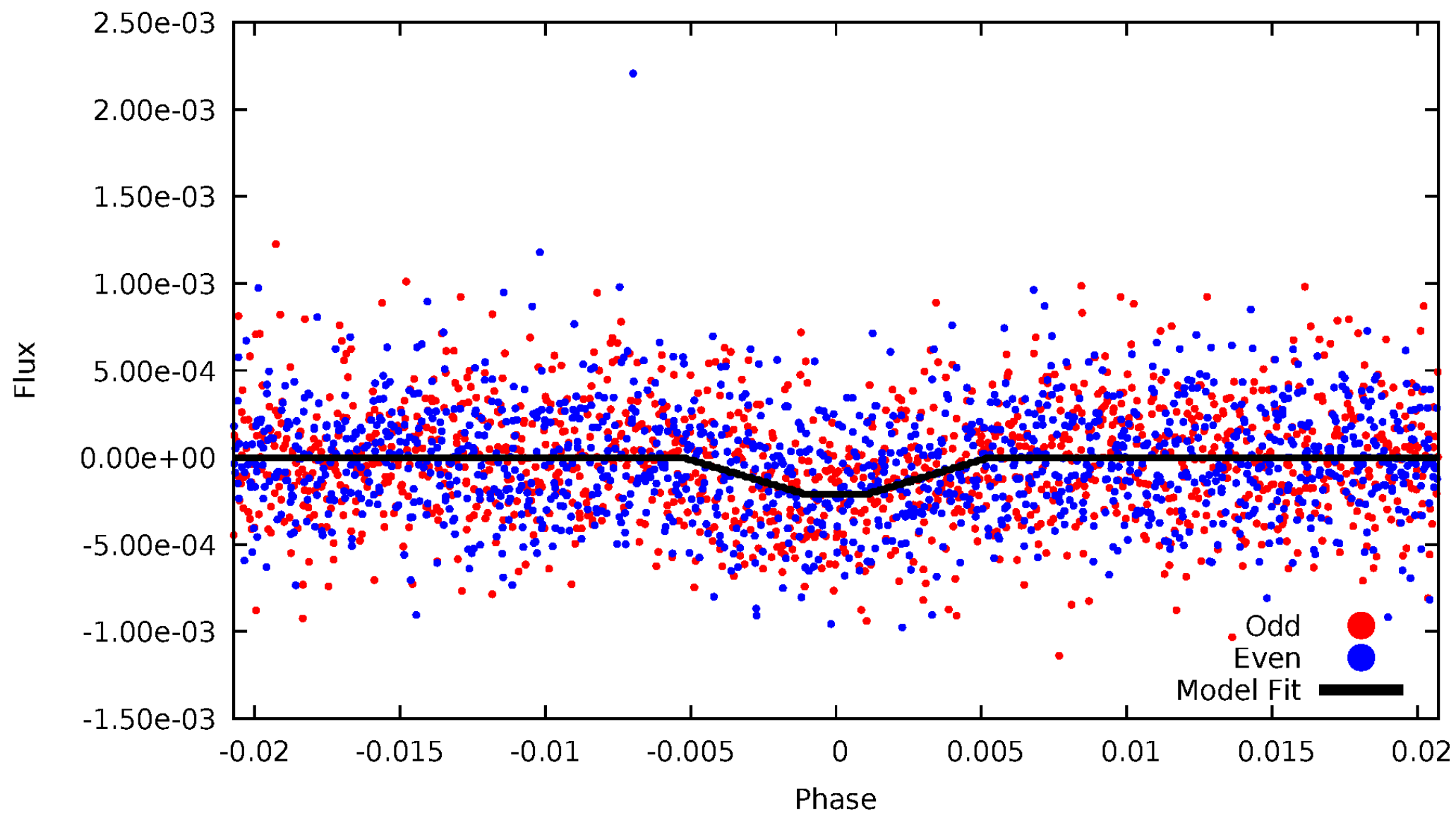
DV Odd/Even

TCE 008248103-01

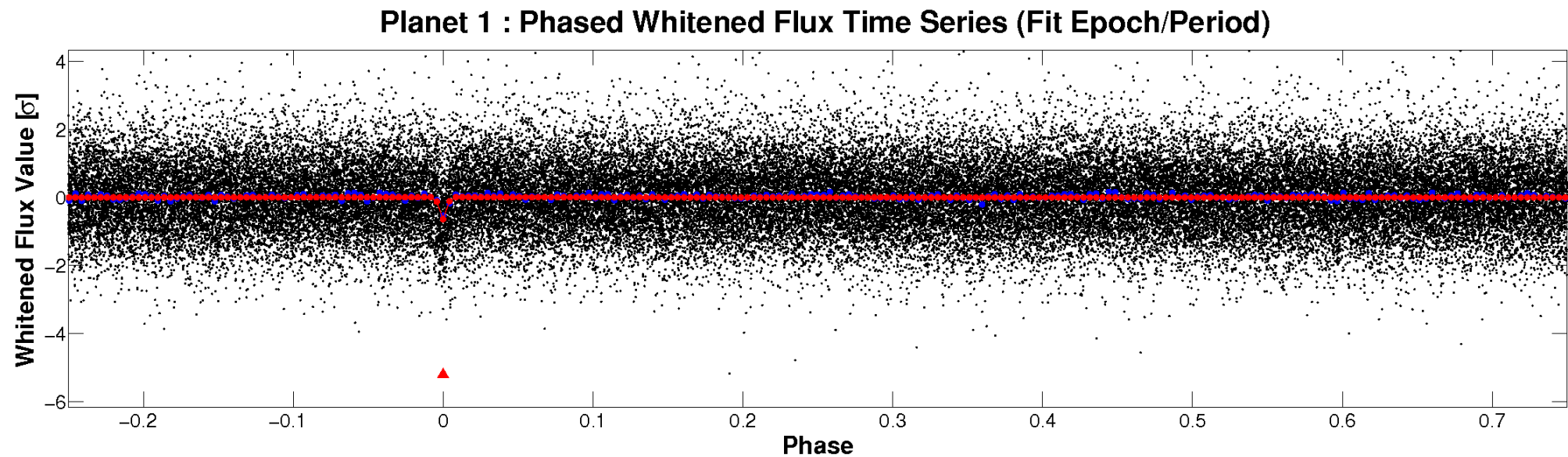
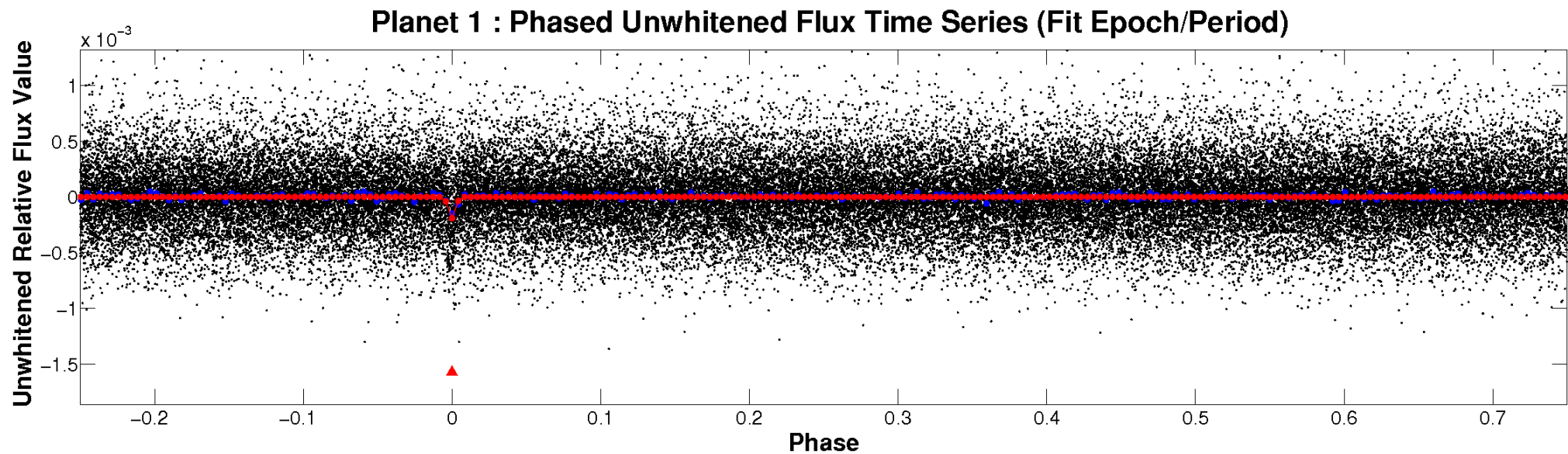


ALT Odd/Even

TCE 008248103-01

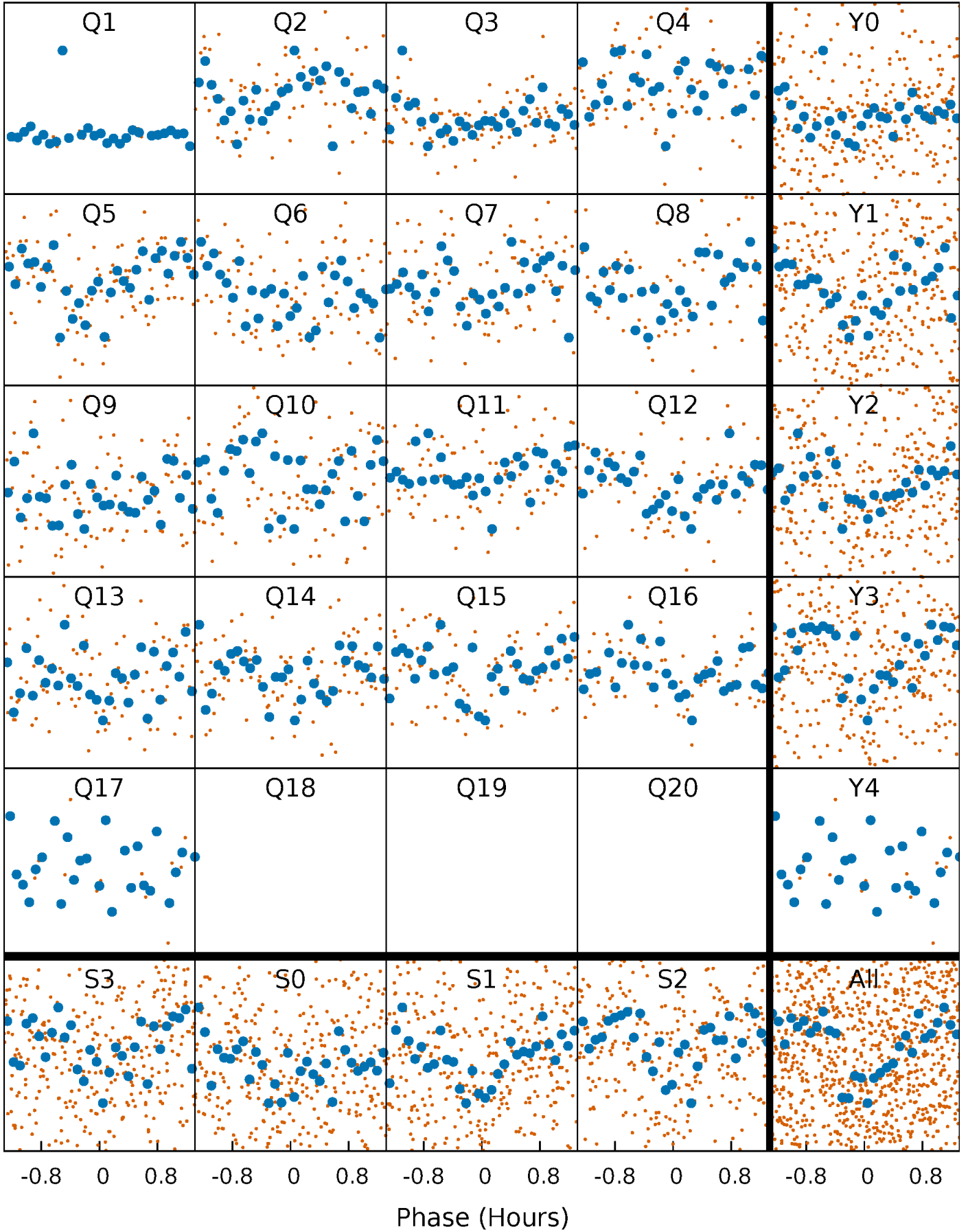


Non-Whitened Vs. Whitened Light Curve



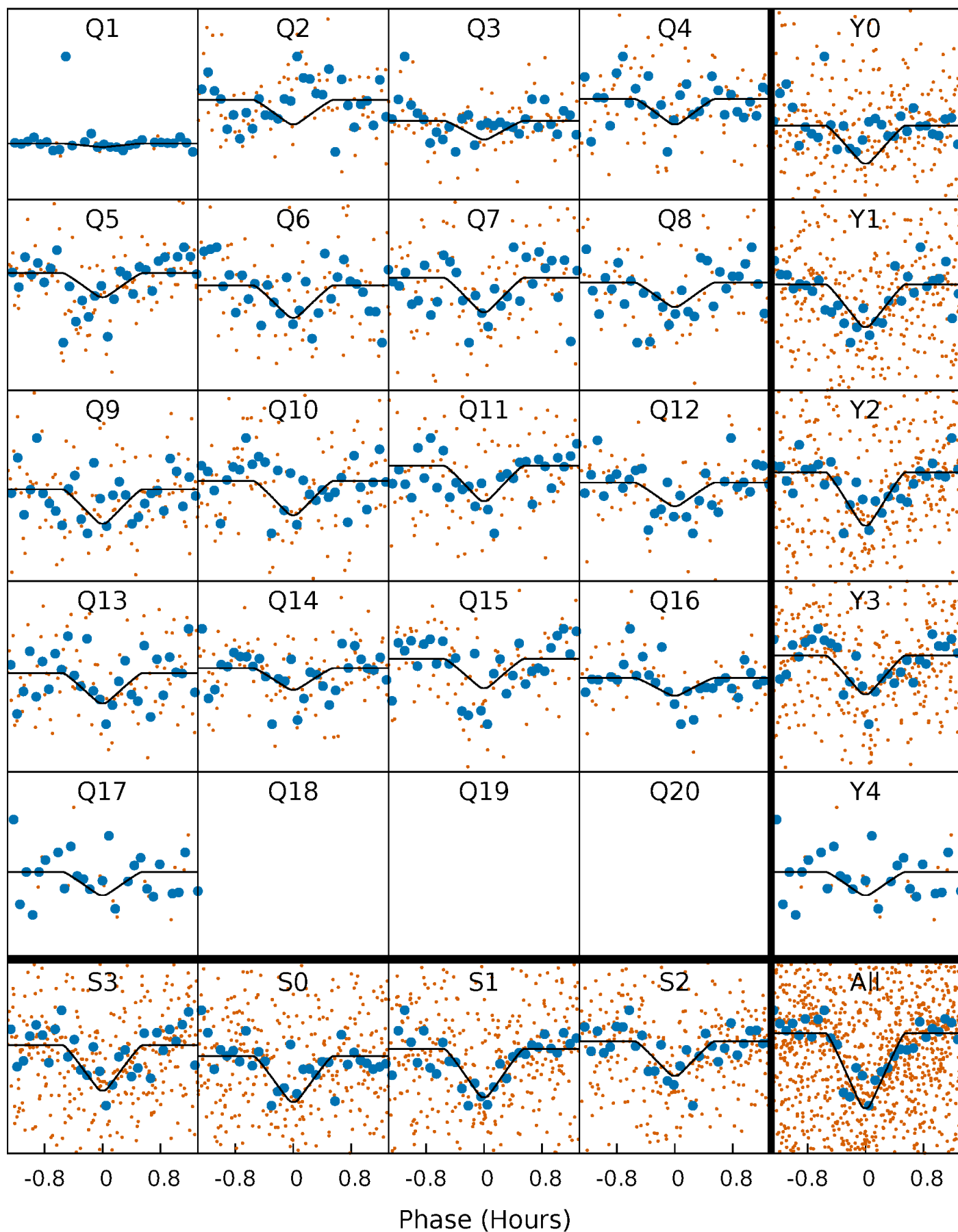
PDC Quarter-Phased Transit Curves

TCE 008248103-01 P= 4.830045 Days $T_0=134.660537$ (BKJD)



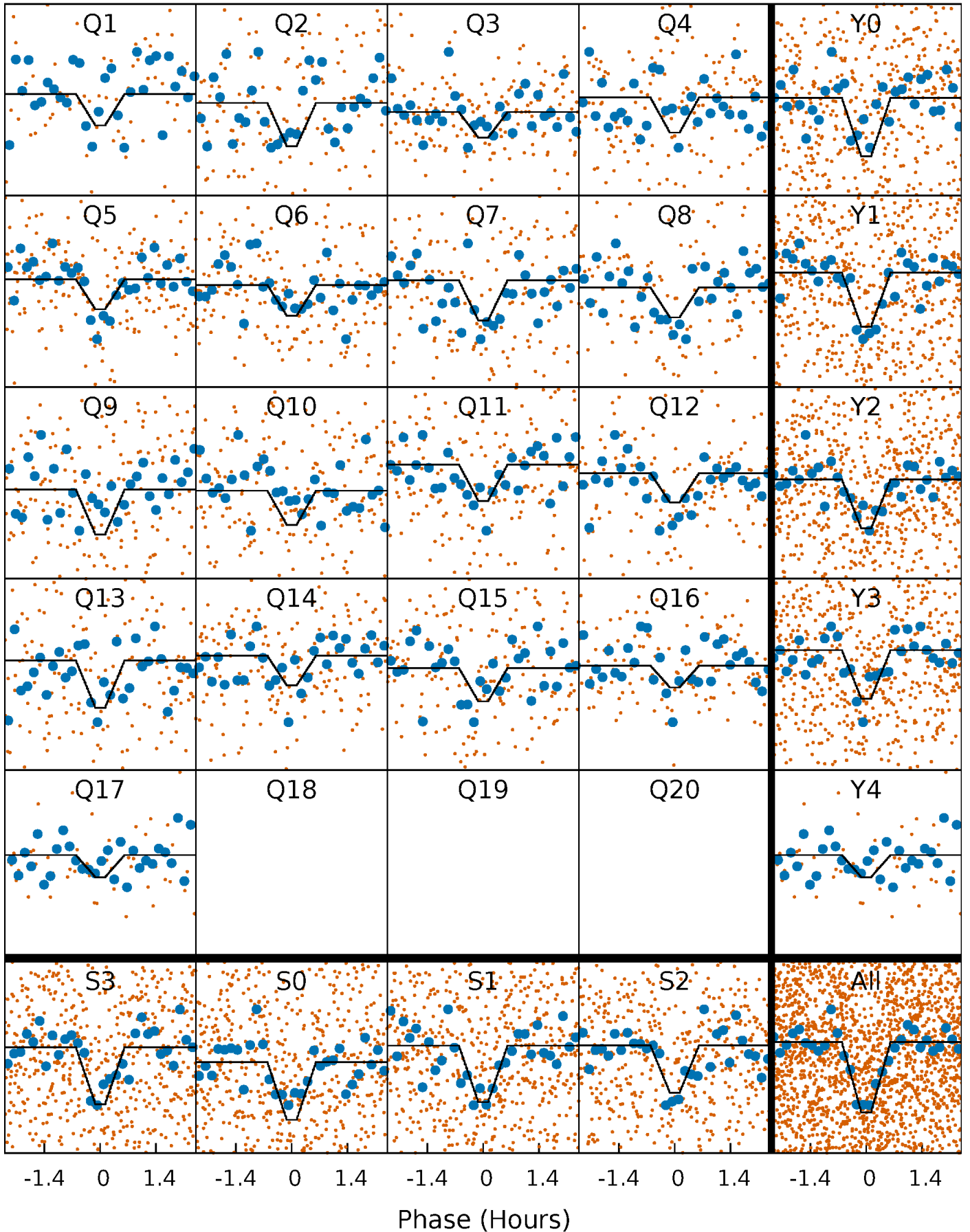
DV Quarter-Phased Transit Curves

TCE 008248103-01 P= 4.830045 Days $T_0=134.660537$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

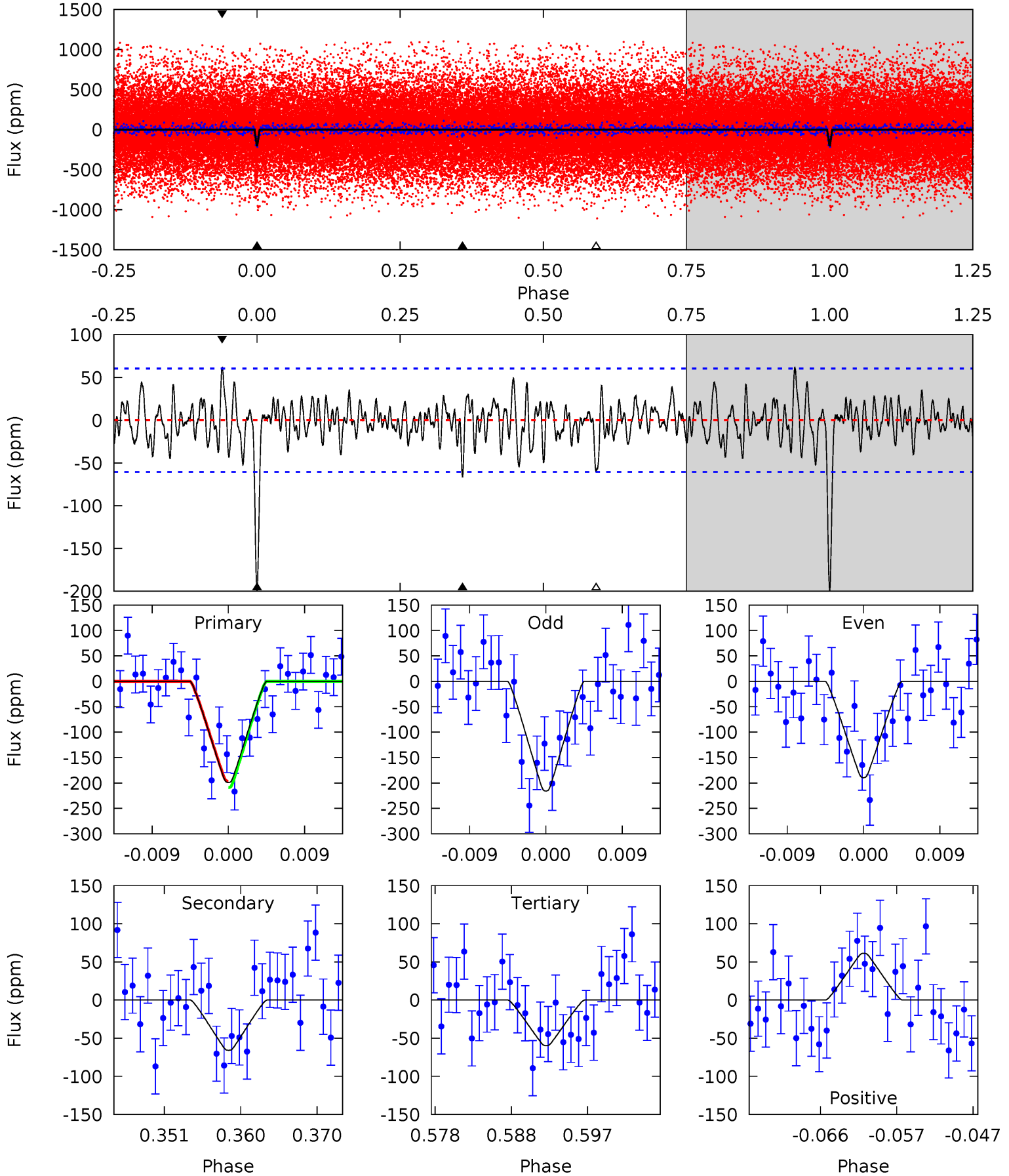
TCE 008248103-01 P= 4.830138 Days $T_0=134.644965$ (BKJD)



DV Model-Shift Uniqueness Test

008248103-01, P = 4.830045 Days, E = 129.830492 Days

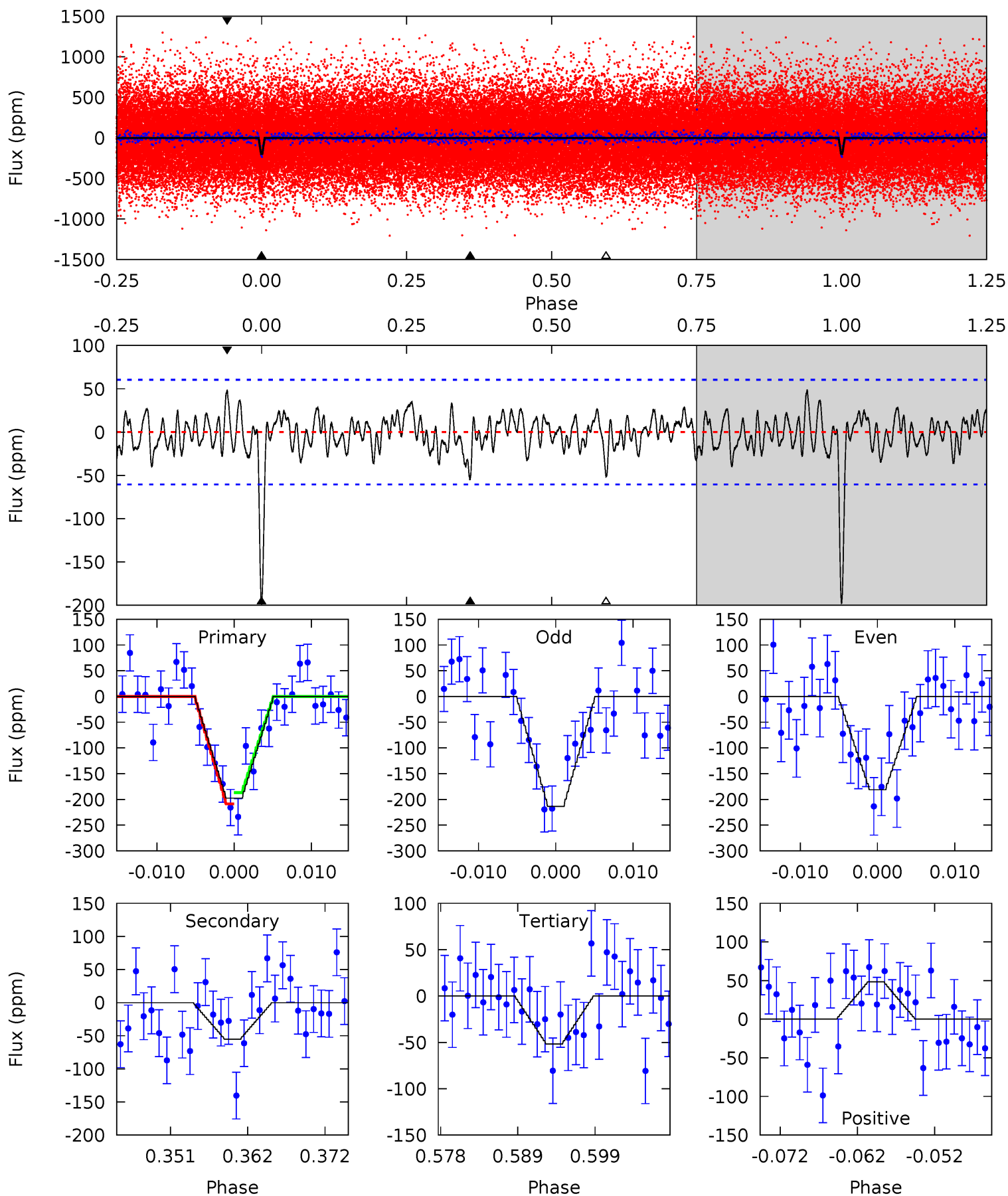
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
16.6	5.49	4.97	5.10	5.04	2.59	1.54	11.6	11.5	0.51	0.38	1.09	0.88	0.24	0.52



Alt Model-Shift Uniqueness Test

008248103-01, P = 4.830138 Days, E = 129.814827 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
16.4	4.57	4.30	4.02	5.02	2.56	1.34	12.1	12.4	0.27	0.56	1.34	1.02	0.20	0.90



Stellar Parameters For KIC 008248103

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	$M(M_{\odot})$	p_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	5693^{+152}_{-169}	$4.467^{+0.078}_{-0.182}$	$-0.020^{+0.250}_{-0.300}$	$0.939^{+0.254}_{-0.109}$	$0.943^{+0.115}_{-0.094}$	$1.602^{+0.516}_{-0.762}$
	+3%/-3%	+2%/-4%	+1250%/-1500%	+27%/-12%	+12%/-10%	+32%/-48%
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 008248103-01 / KOI 7002.01

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	-66 ± 12	$1.90^{+1.41}_{-1.12}$	1467^{+96}_{-70}	4063^{+1782}_{-671}	29^{+136}_{-19}
Alt.	-55 ± 12	$1.73^{+1.37}_{-1.09}$	1469^{+100}_{-71}	4083^{+2129}_{-749}	29^{+186}_{-21}

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

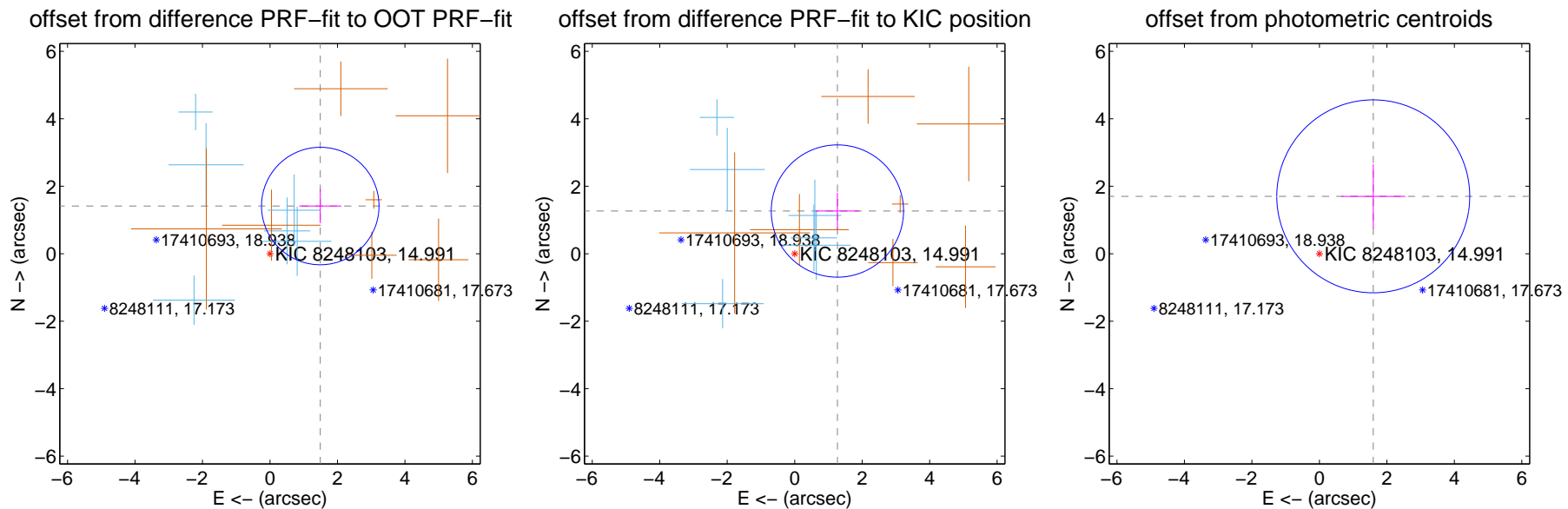
DV Centroid Data

Supplemental centroid analysis for 008248103-01. Kepler magnitude: 14.99. Transit SNR 11.25

There are 6 quarters with good PRF difference image offsets

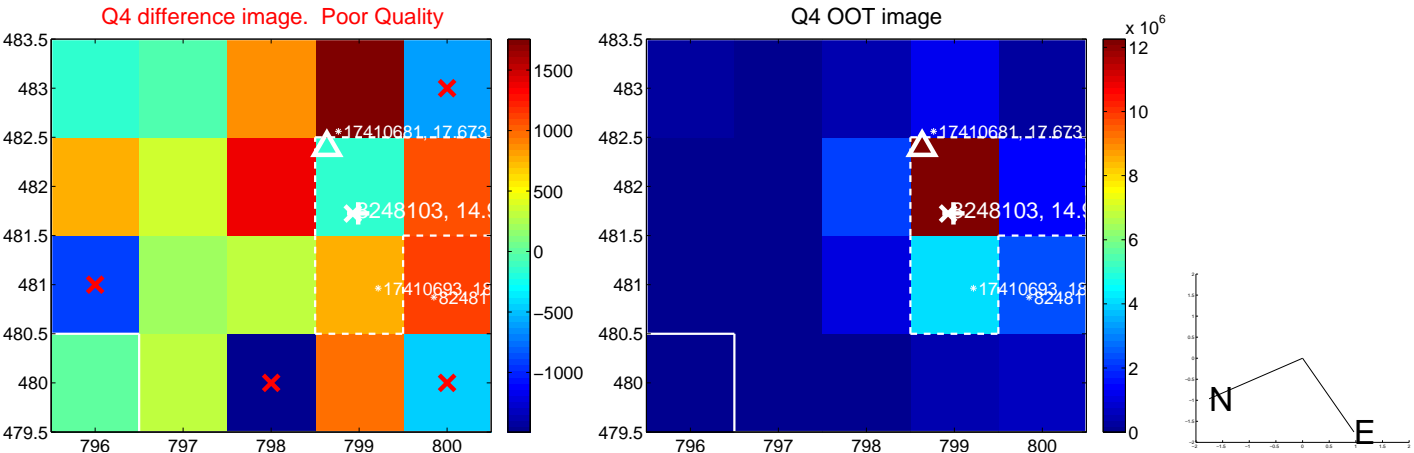
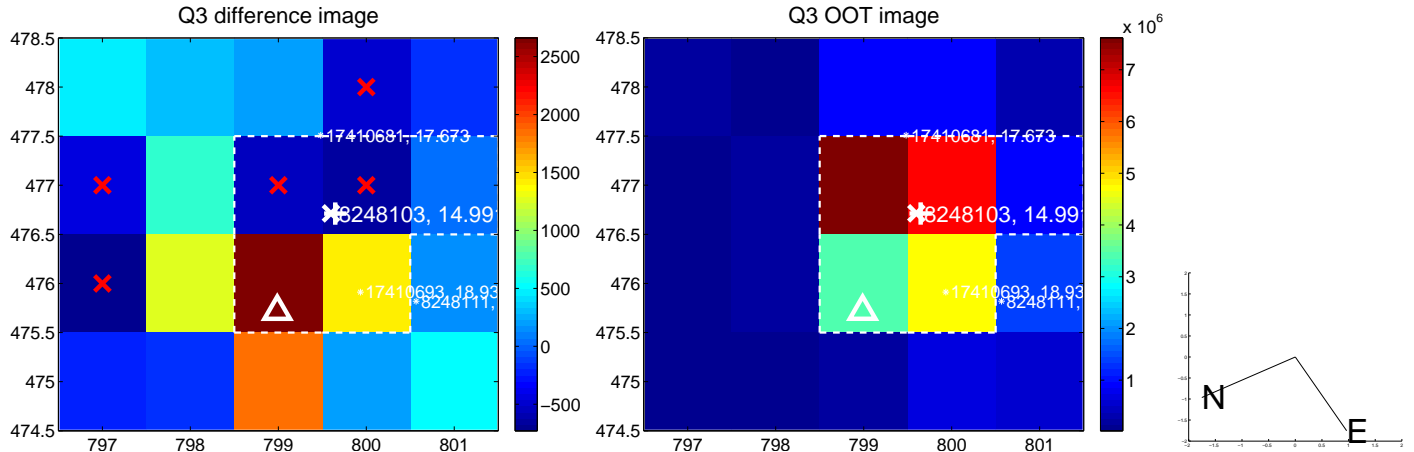
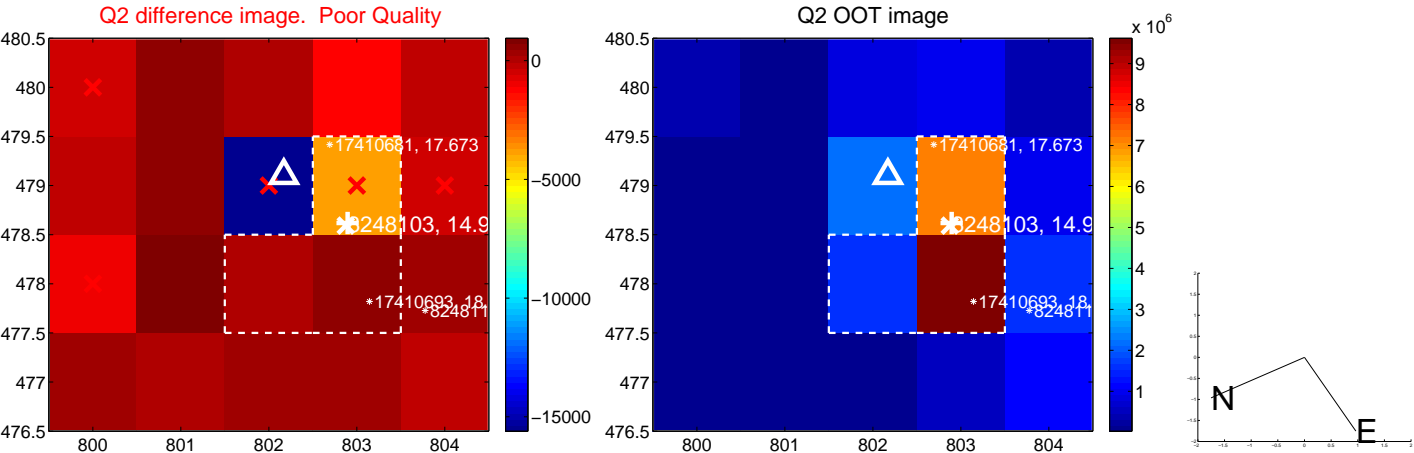
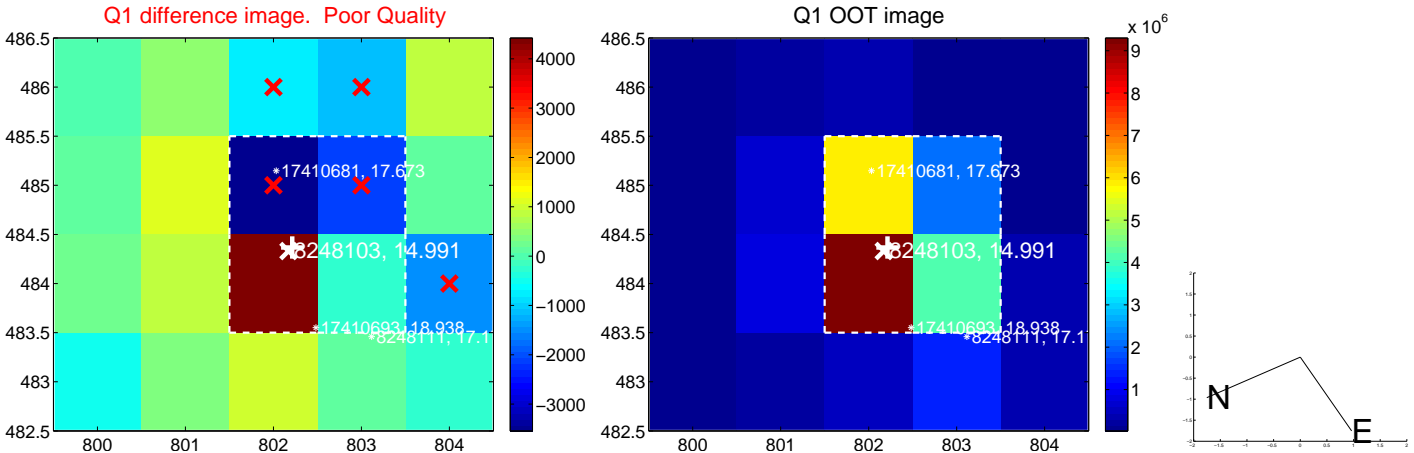
The direct PRF centroid is offset from the target star catalog position by about 0.22 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	2.055 ± 0.581	3.54	-1.491 ± 0.625	1.414 ± 0.509
PRF-fit source offset from KIC position	1.790 ± 0.654	2.74	-1.266 ± 0.646	1.266 ± 0.542
photometric centroid source offset	2.33 ± 0.95	2.45	-1.60 ± 0.95	1.70 ± 0.95

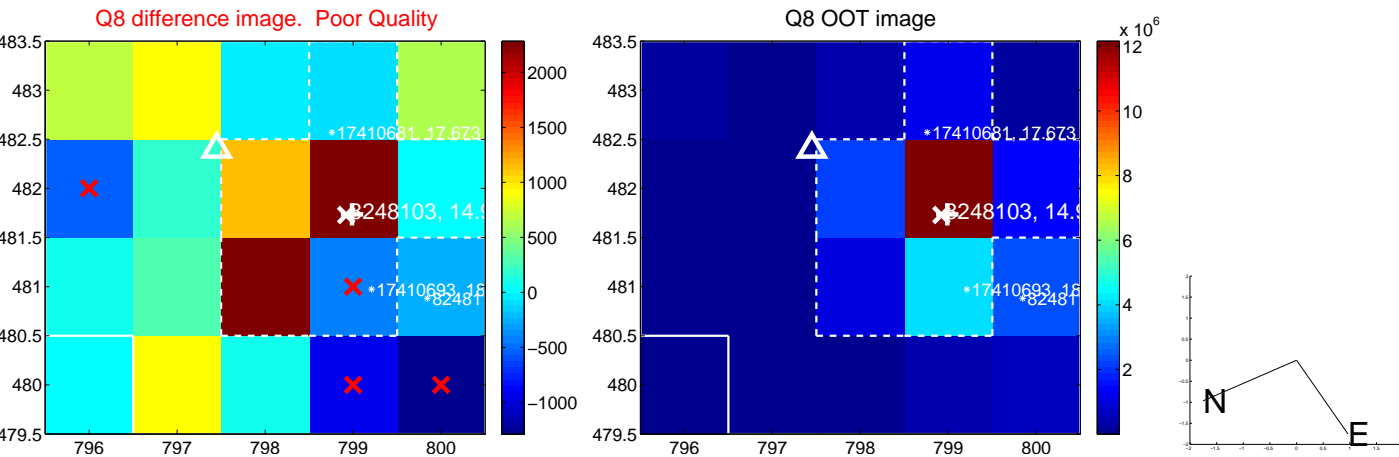
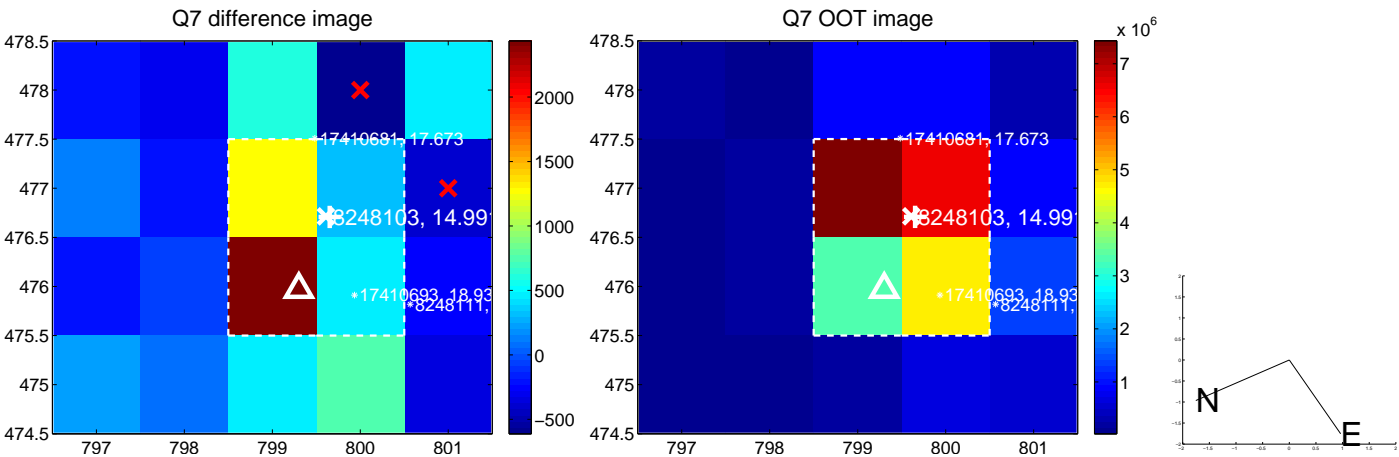
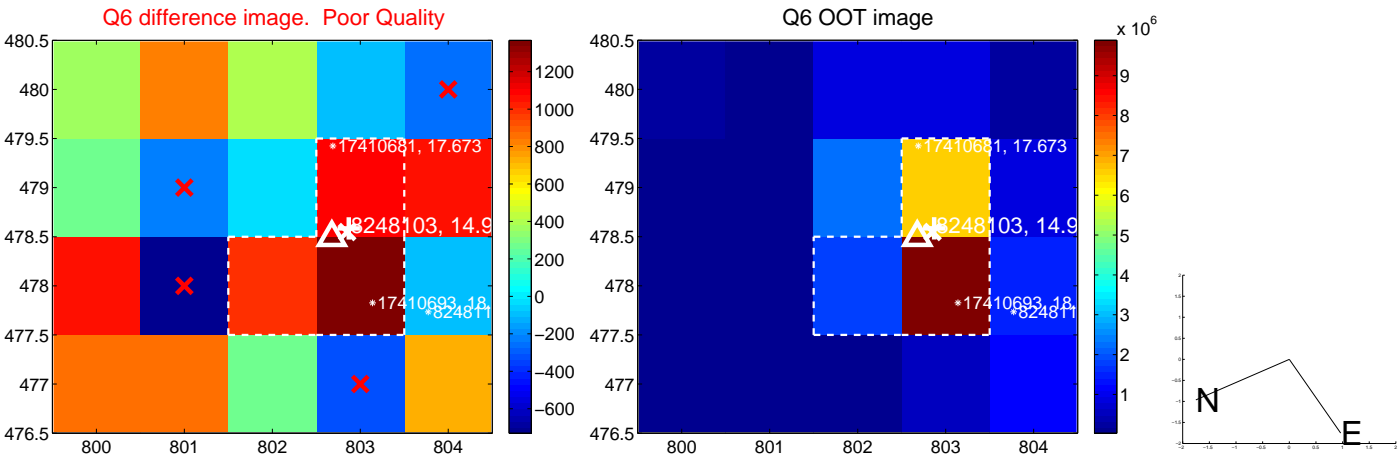
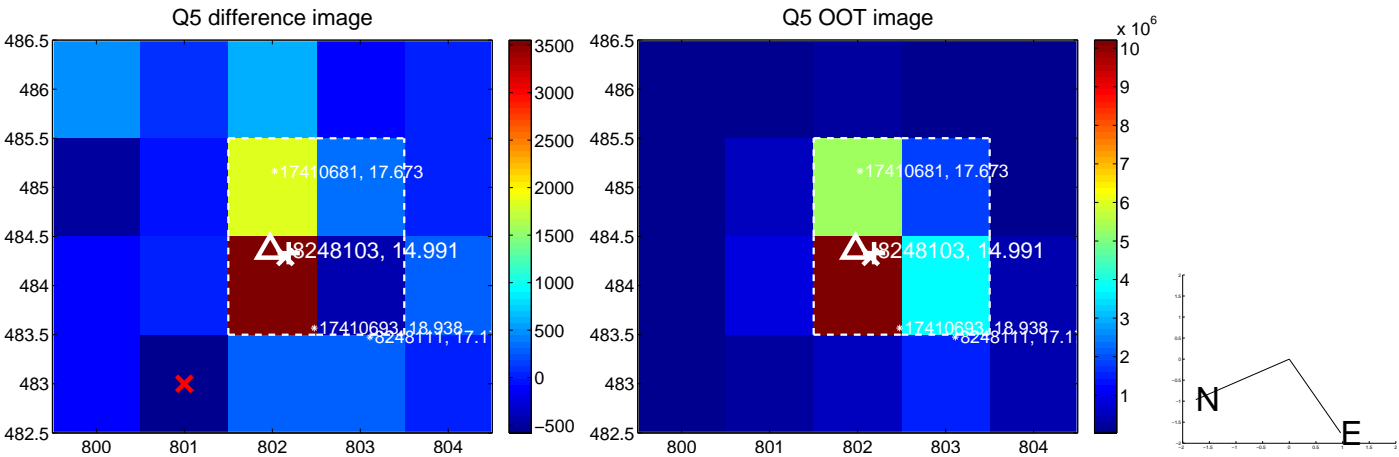


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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

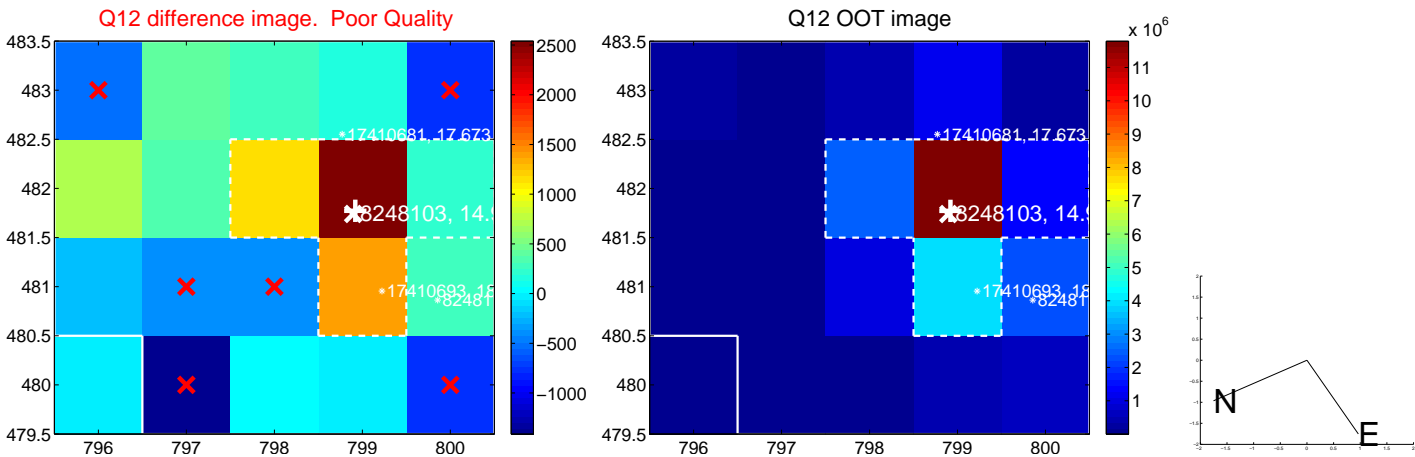
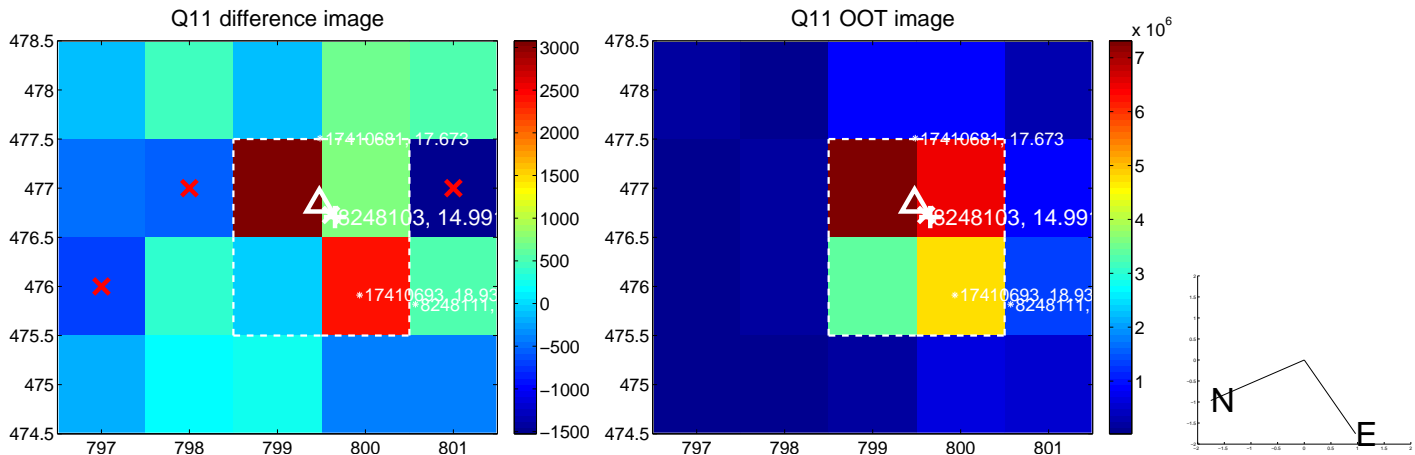
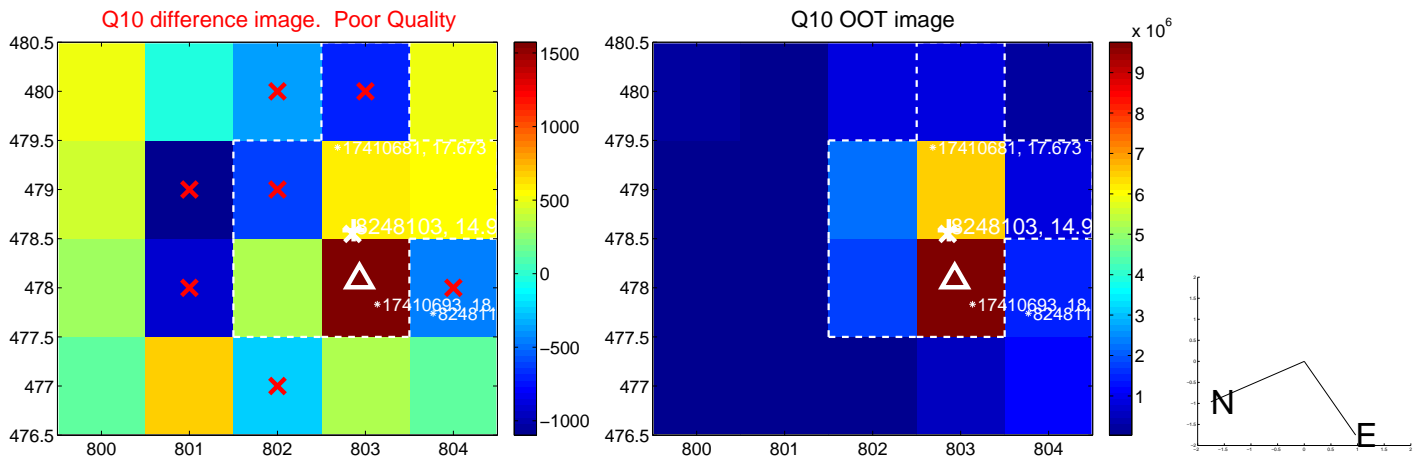
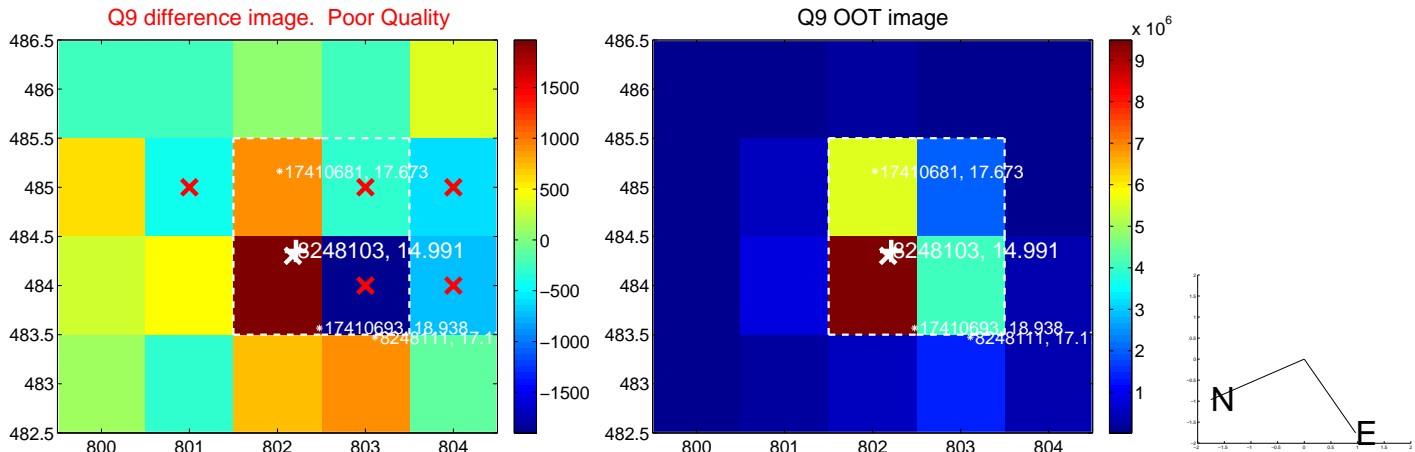
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



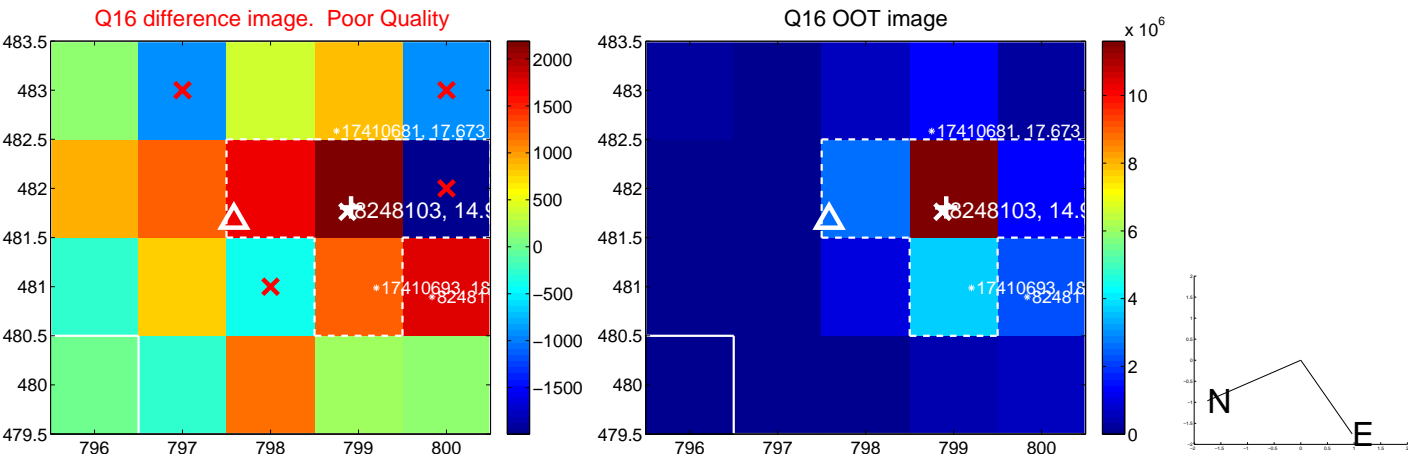
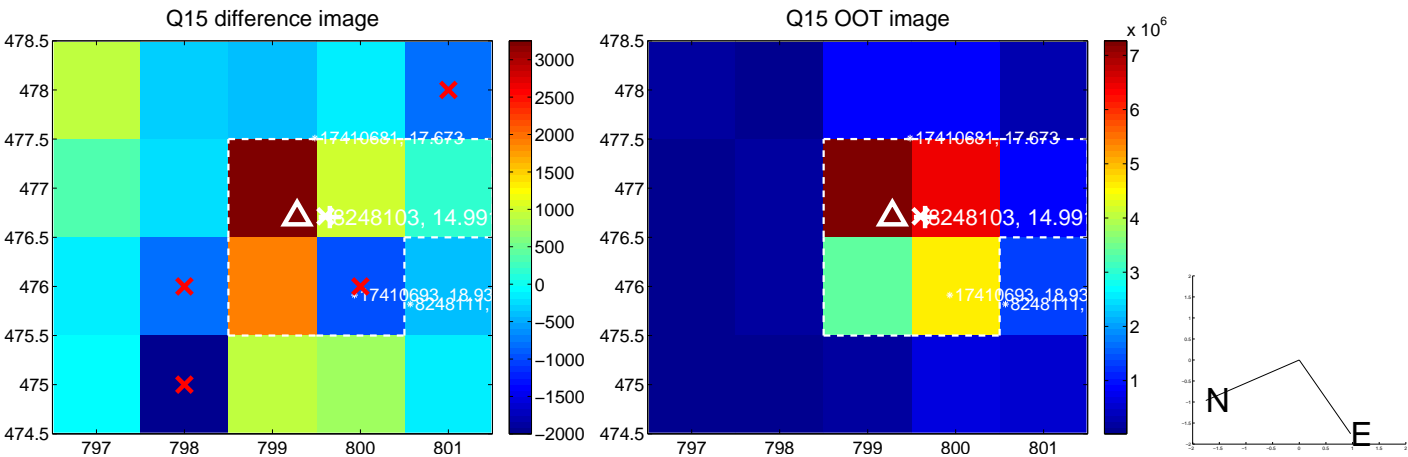
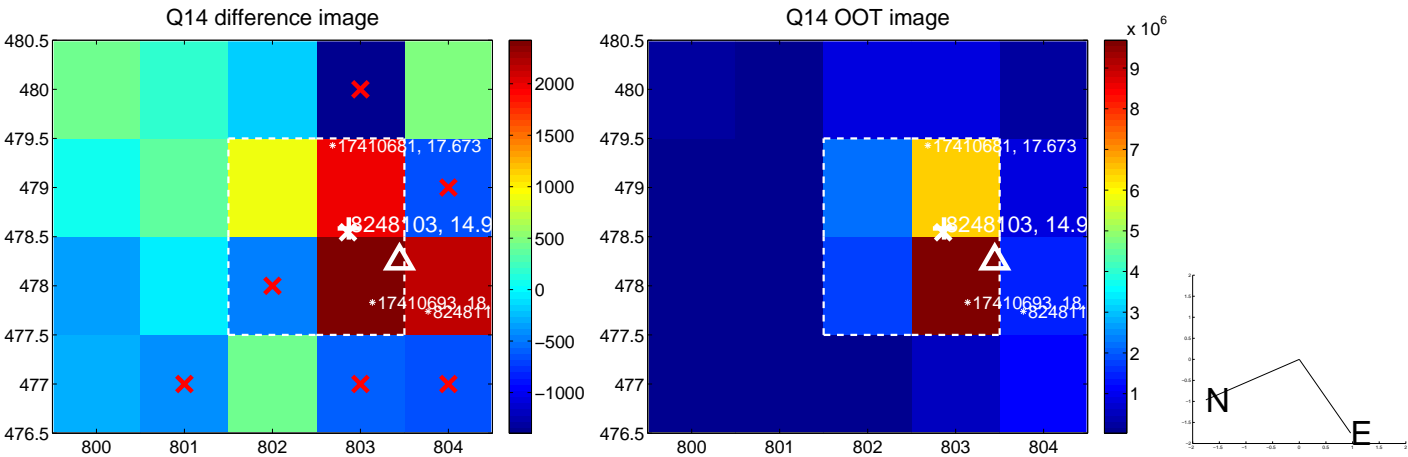
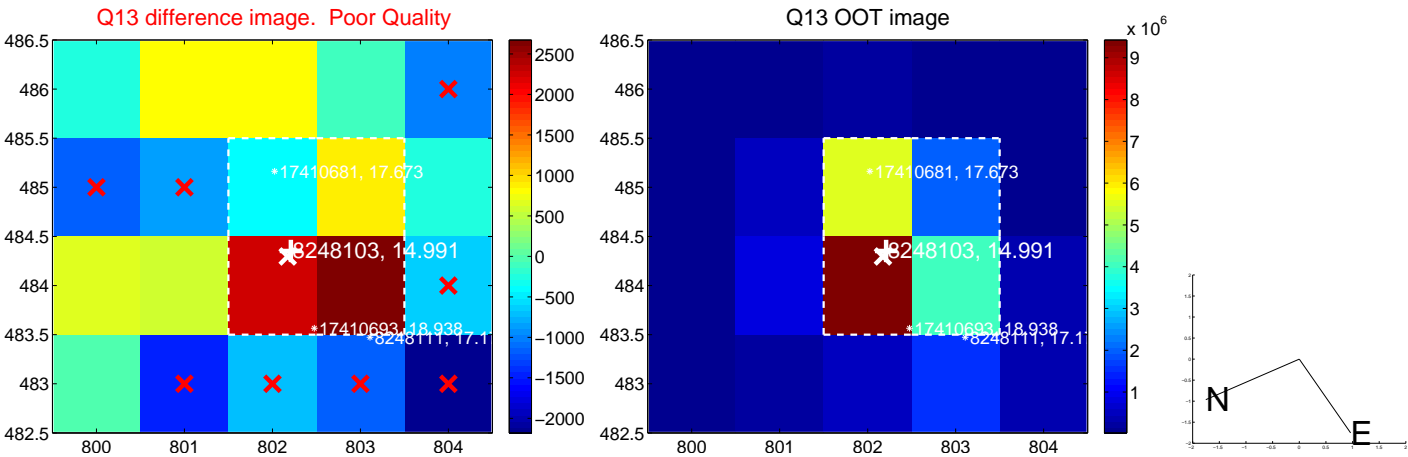
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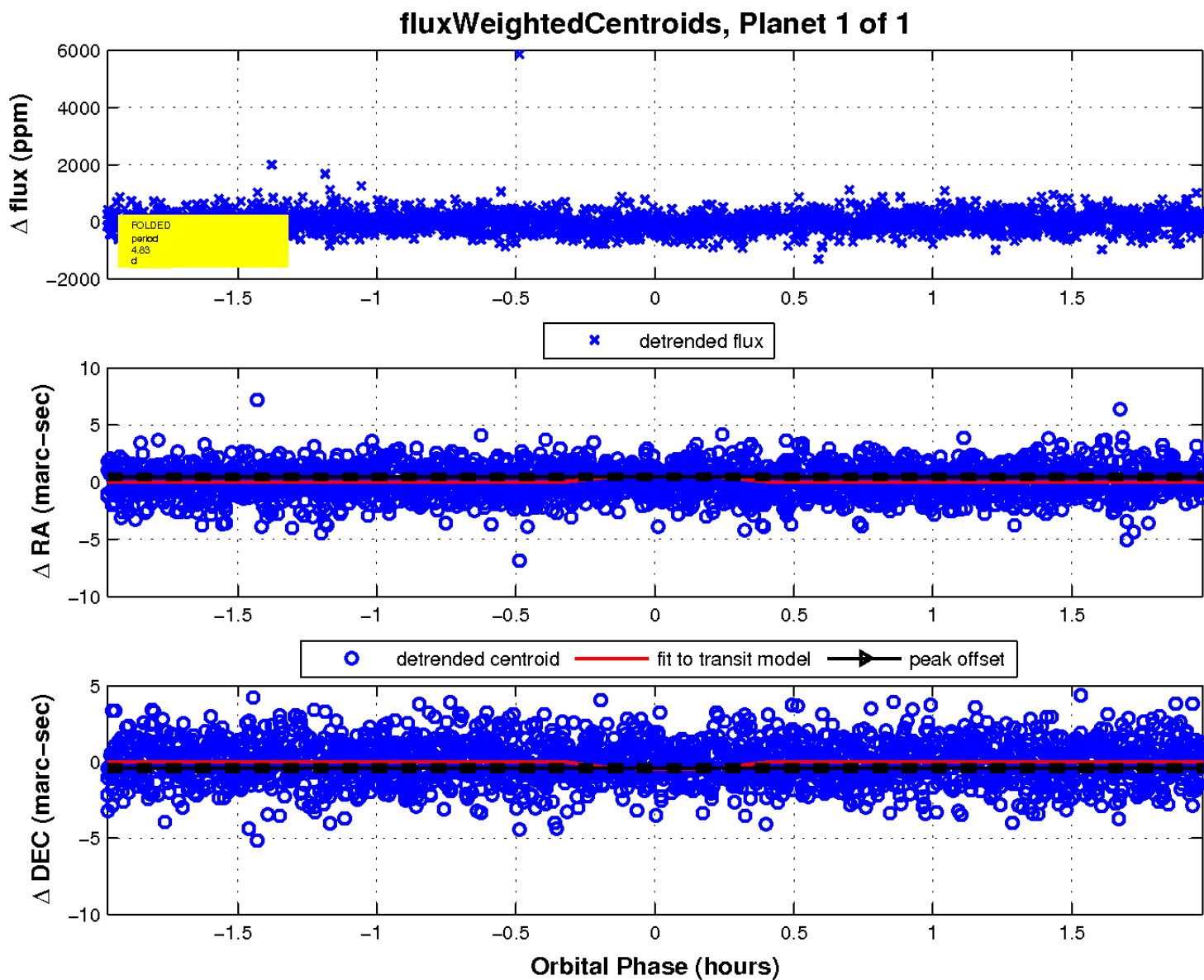
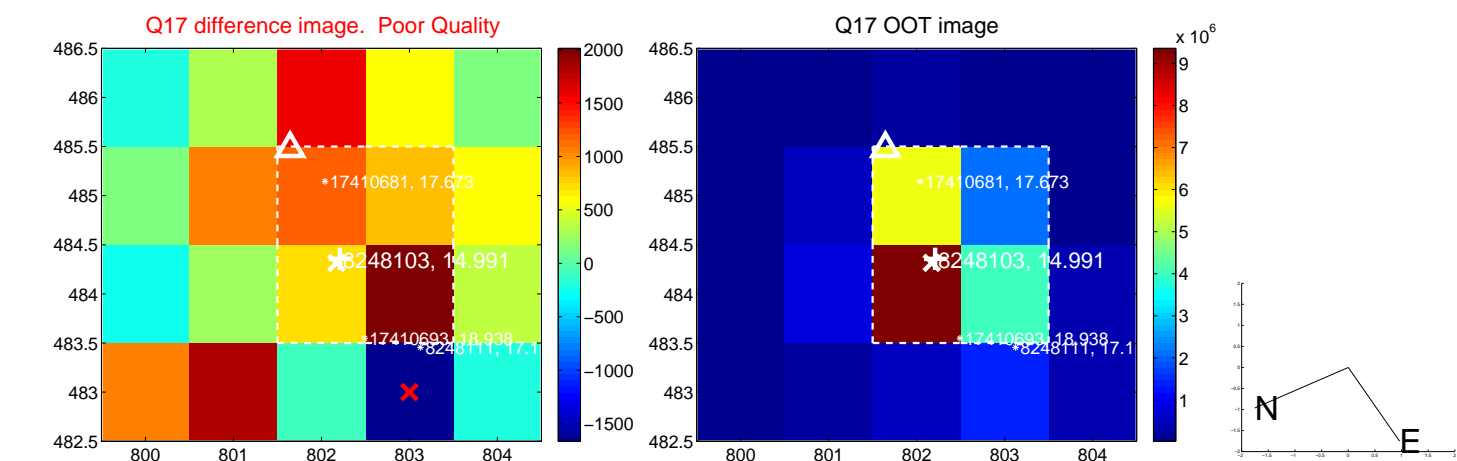
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UKIRT Image

Declination

