

KIC 004448848

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})
004448848-01	OBS	No	5.663371	134.422128	32.2	14.372	7.5	6.7	1.18	6535	0.87	521.53

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
004448848-01	OBS	FP	0.00	1	0	0	0	LPP_DV—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT

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

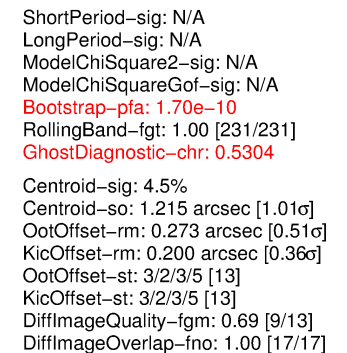
N = Not Transit-Like. S = Stellar Eclipse. C = Centroid Offset. E = Ephemeris Match.

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

Ephemeris Match Information For 004448848-01

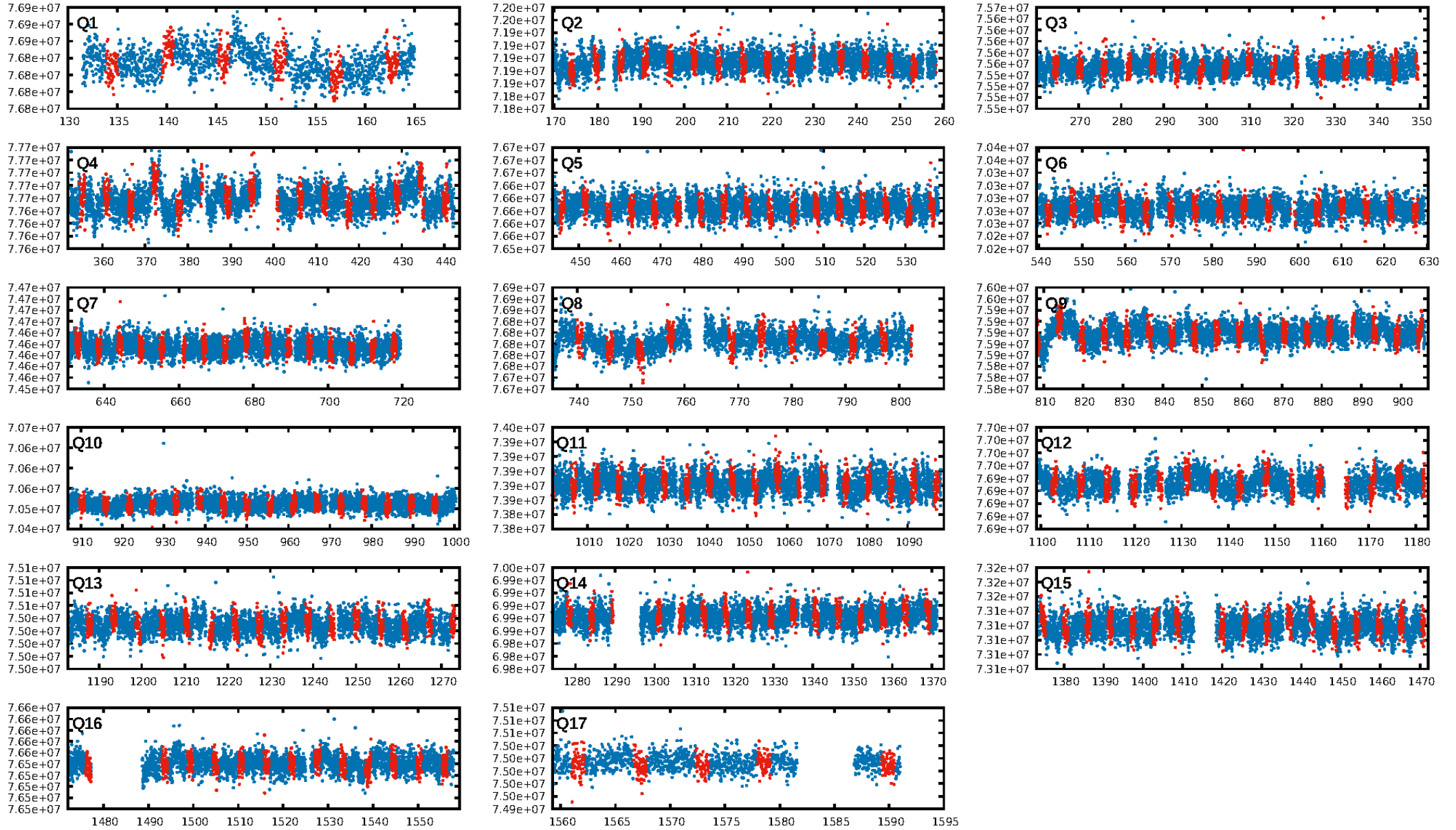
No Significant Match Found

KIC: 4448848 Candidate: 1 of 1 Period: 5.663 d

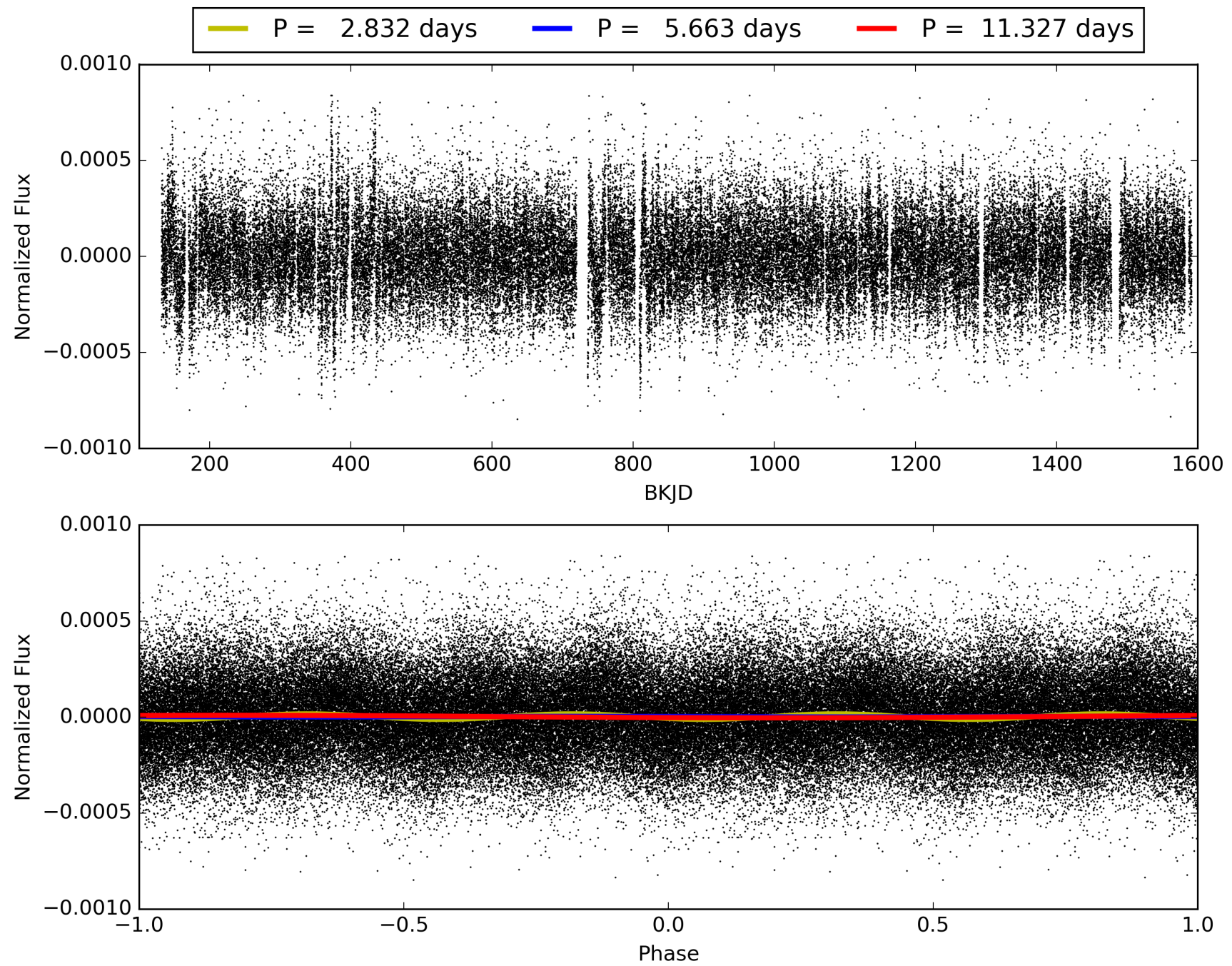


This Data Validation Report Summary was produced in the Kepler Science Operations Center Pipeline at NASA Ames Research Center

TCE 004448848-01, PDC Light Curves

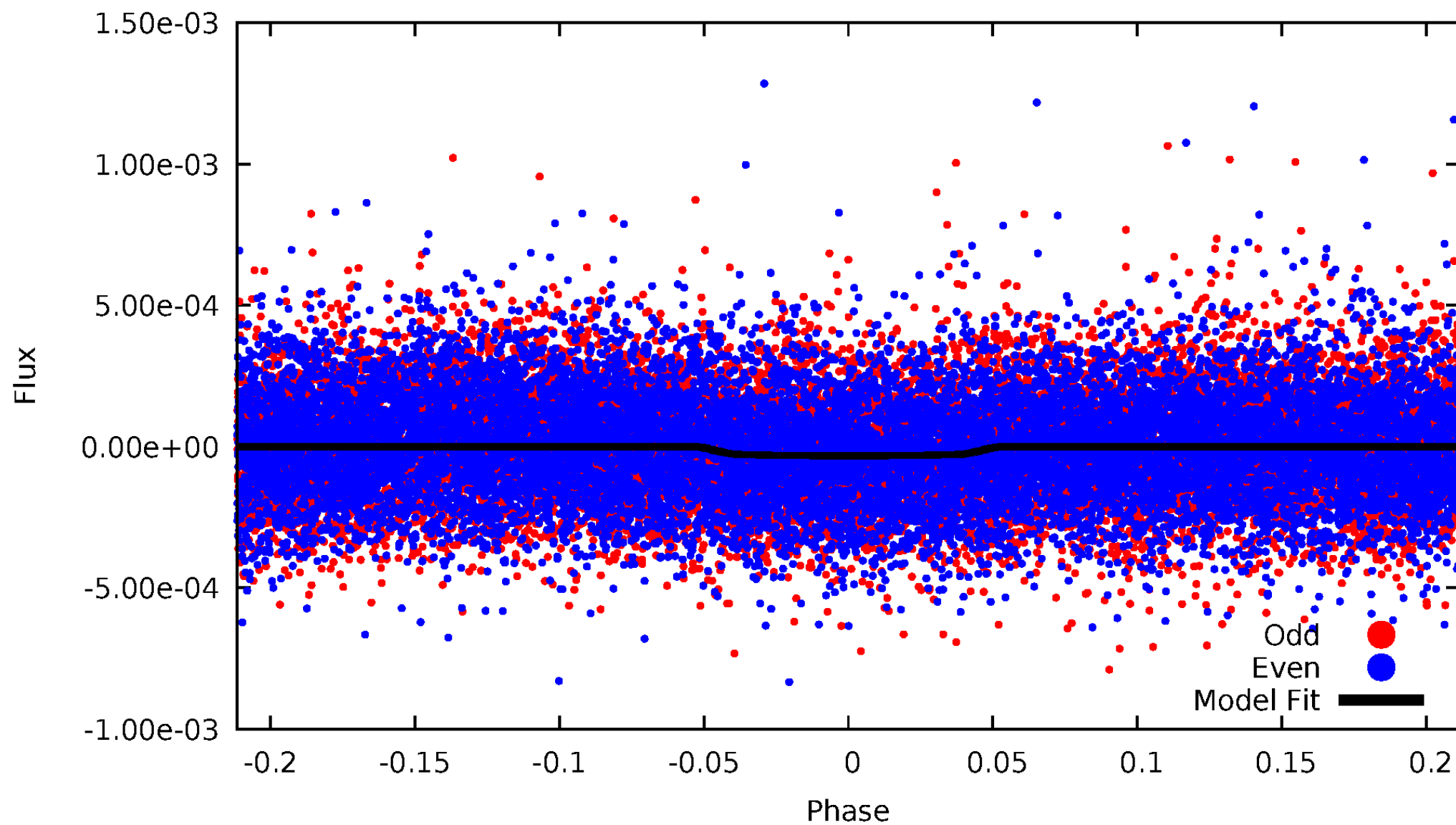


TCE 004448848-01



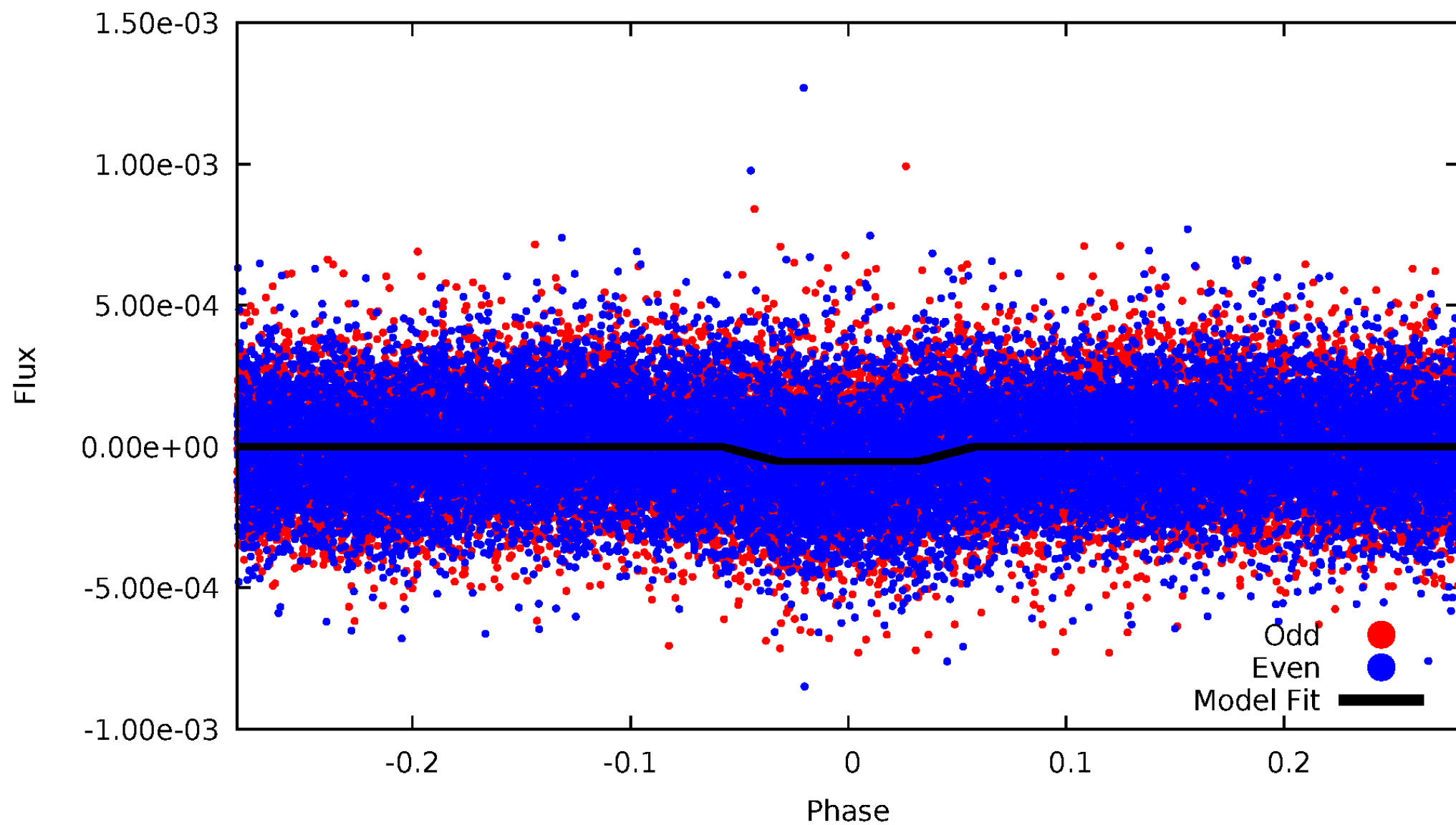
DV Odd/Even

TCE 004448848-01

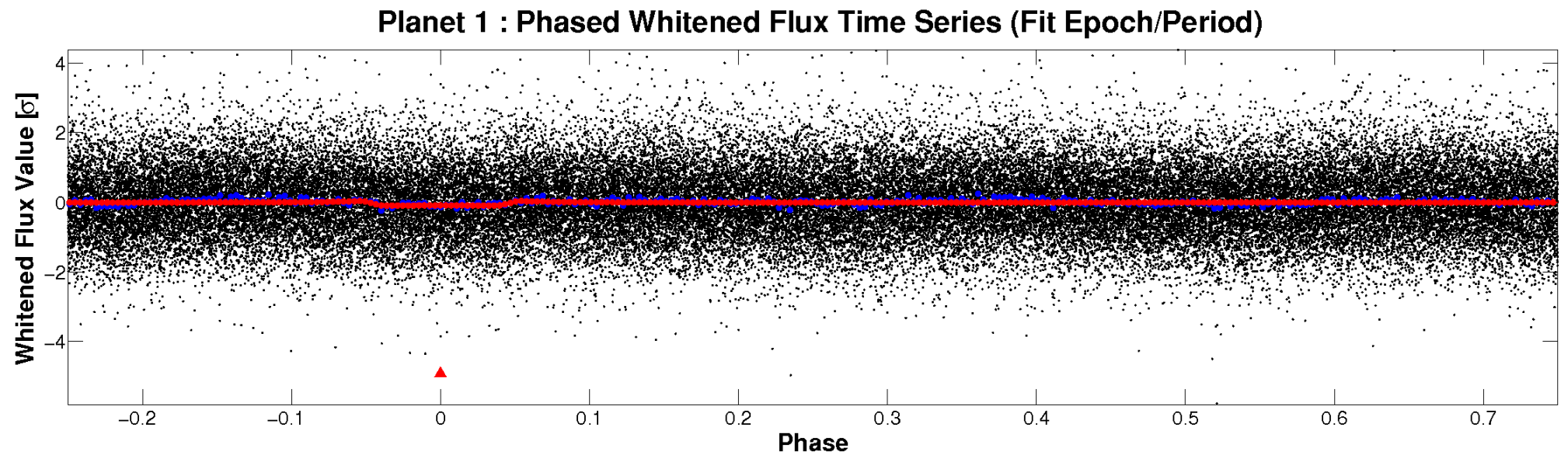
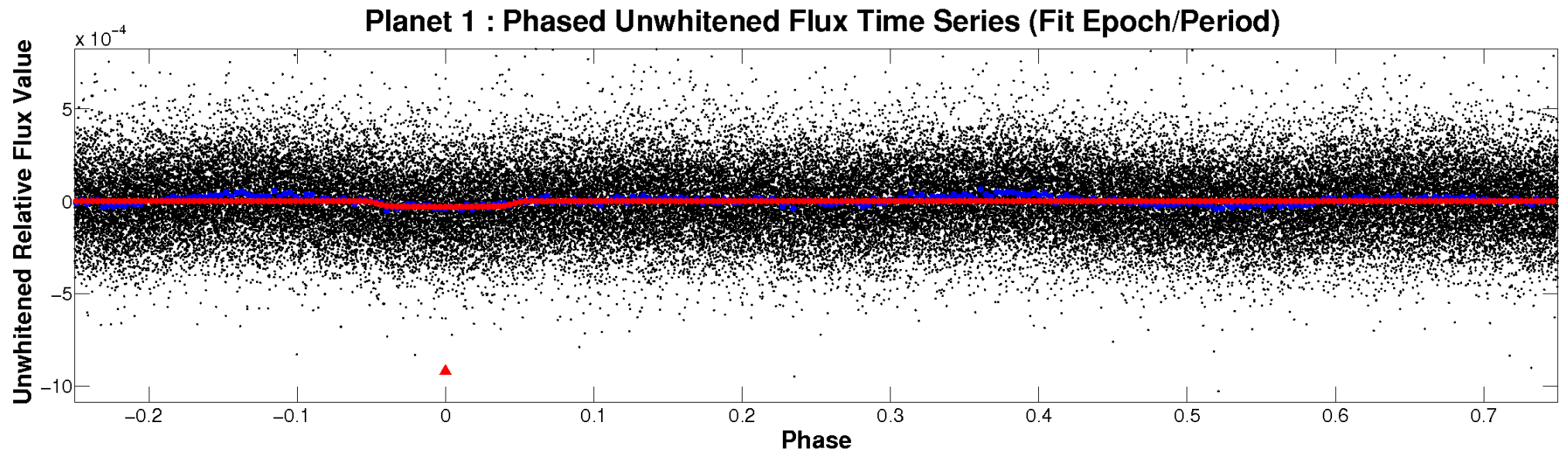


ALT Odd/Even

TCE 004448848-01

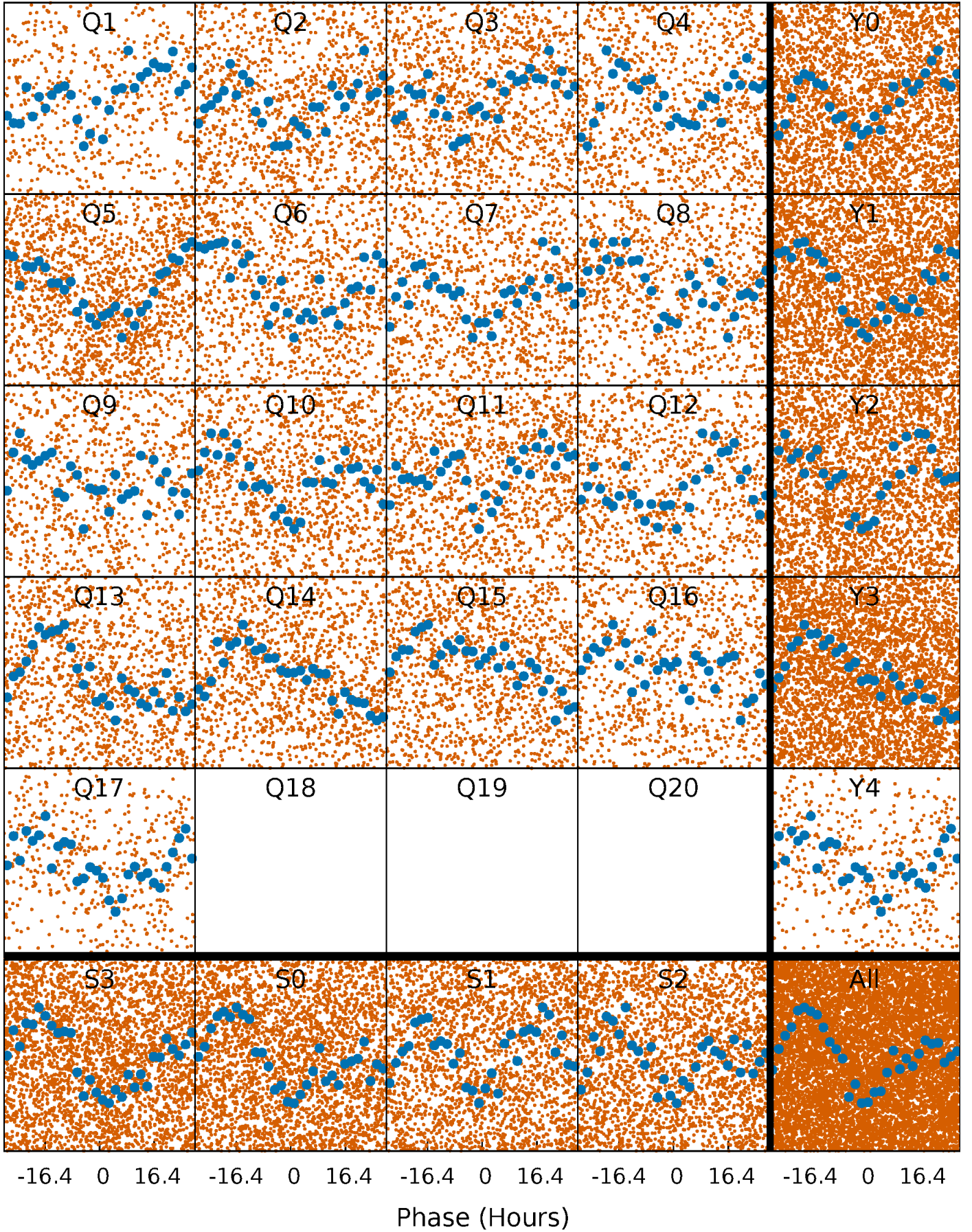


Non-Whitened Vs. Whitened Light Curve



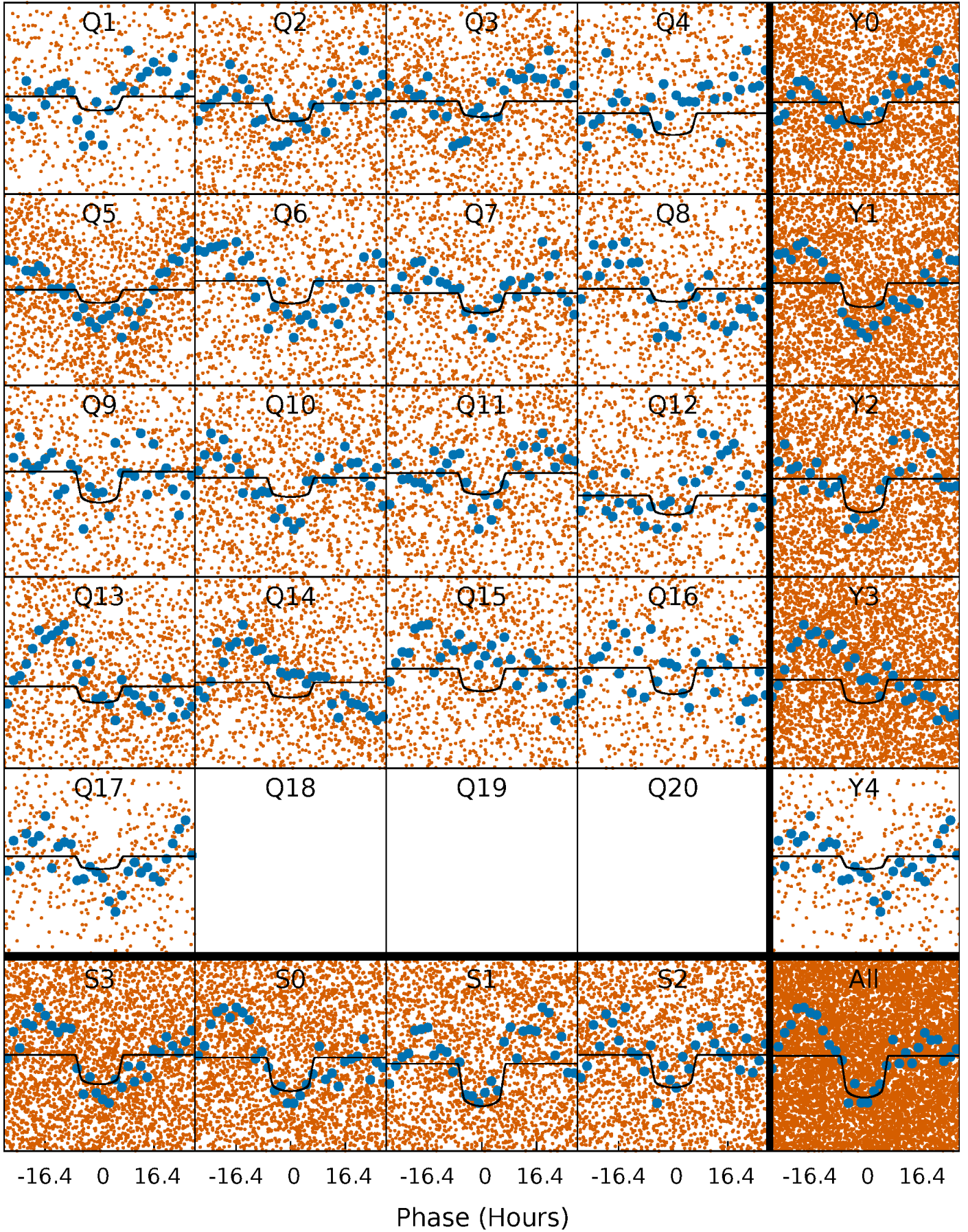
PDC Quarter-Phased Transit Curves

TCE 004448848-01 P= 5.663371 Days $T_0=134.422128$ (BKJD)



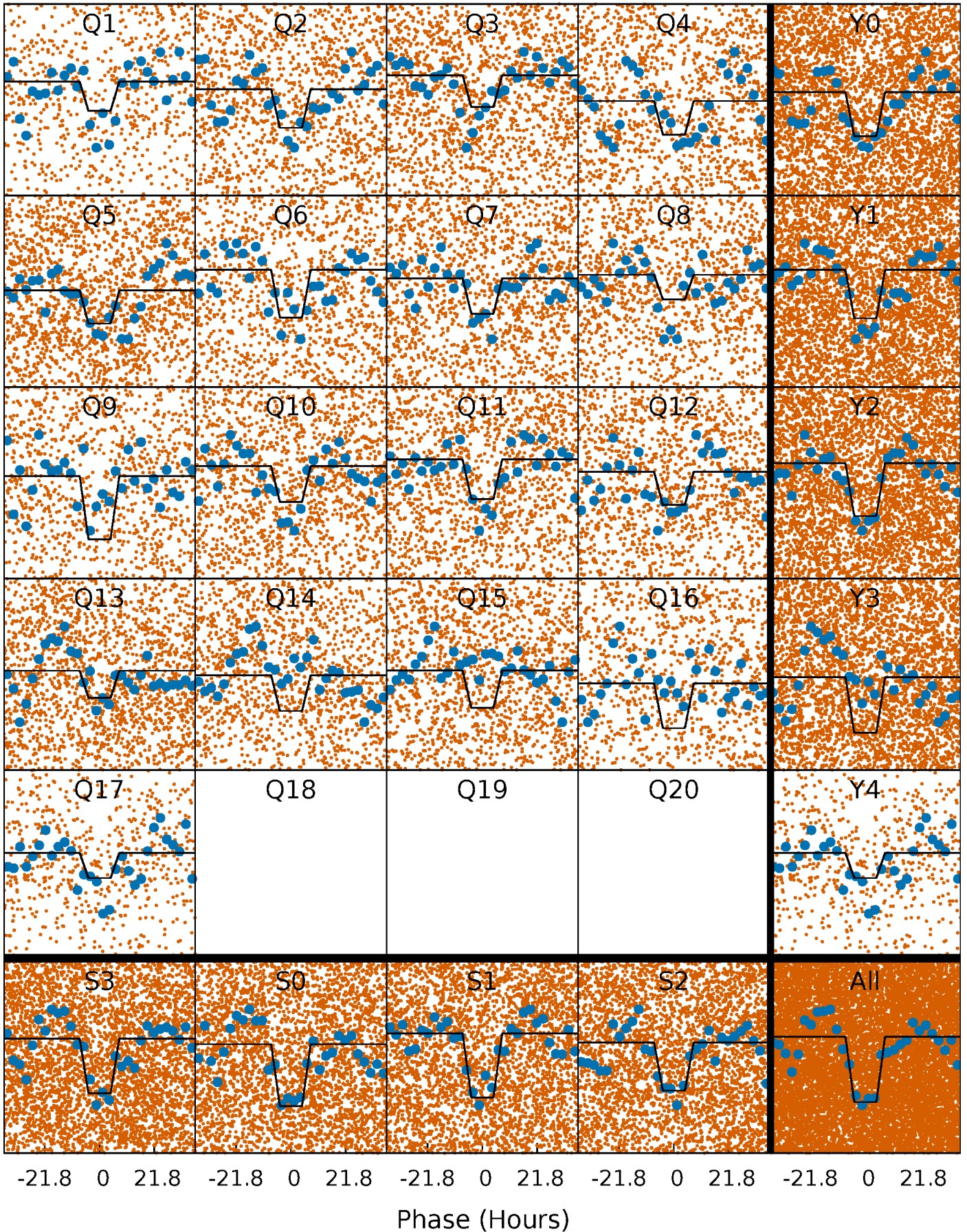
DV Quarter-Phased Transit Curves

TCE 004448848-01 P= 5.663371 Days $T_0=134.422128$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

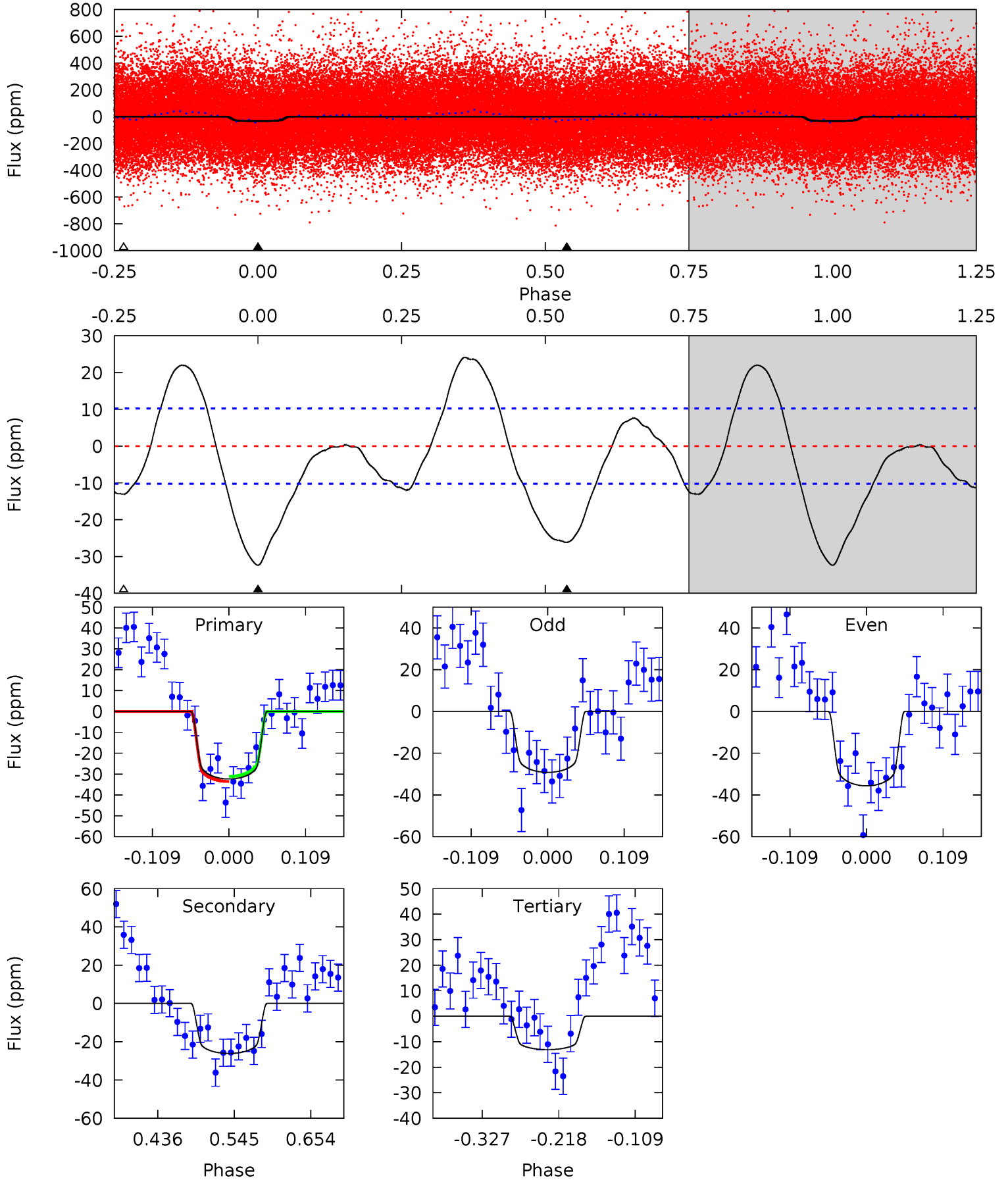
TCE 004448848-01 P= 5.664152 Days $T_0=134.310716$ (BKJD)



DV Model-Shift Uniqueness Test

004448848-01, P = 5.663371 Days, E = 128.758757 Days

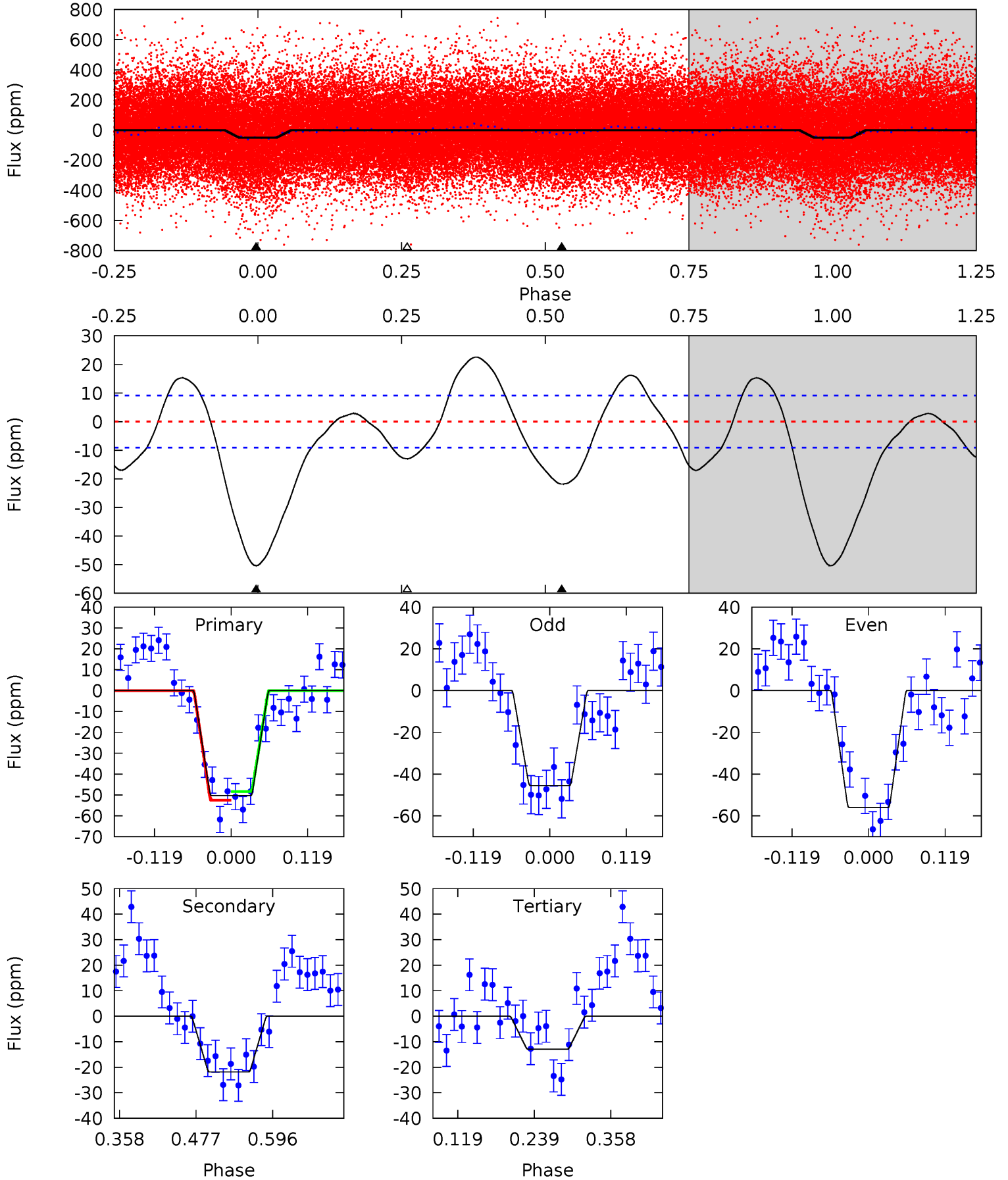
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
14.4	11.6	5.82	0	4.55	1.60	5.15	8.58	14.4	5.81	11.6	1.44	0.78	0.43	0.55



Alt Model-Shift Uniqueness Test

004448848-01, P = 5.664152 Days, E = 128.646564 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
25.0	10.9	6.43	0	4.53	1.56	5.65	18.6	25.0	4.43	10.9	2.60	0.99	0.31	1.03



Stellar Parameters For KIC 004448848

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	6535^{+145}_{-210}	$4.373^{+0.067}_{-0.216}$	$-0.100^{+0.250}_{-0.300}$	$1.181^{+0.405}_{-0.135}$	$1.202^{+0.173}_{-0.173}$	$1.029^{+0.306}_{-0.559}$
	+2%/-3%	+2%/-5%	+250%/-300%	+34%/-11%	+14%/-14%	+30%/-54%
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 004448848-01 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	-26 ± 2	$0.91^{+0.17}_{-0.13}$	1732^{+139}_{-86}	5659^{+333}_{-295}	75^{+26}_{-21}
Alt.	-22 ± 2	$0.97^{+0.19}_{-0.13}$	1729^{+134}_{-85}	5272^{+304}_{-260}	55^{+20}_{-16}

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 $T_{obs} \gg T_{max}$ AND $A_{obs} \gg 1.0$

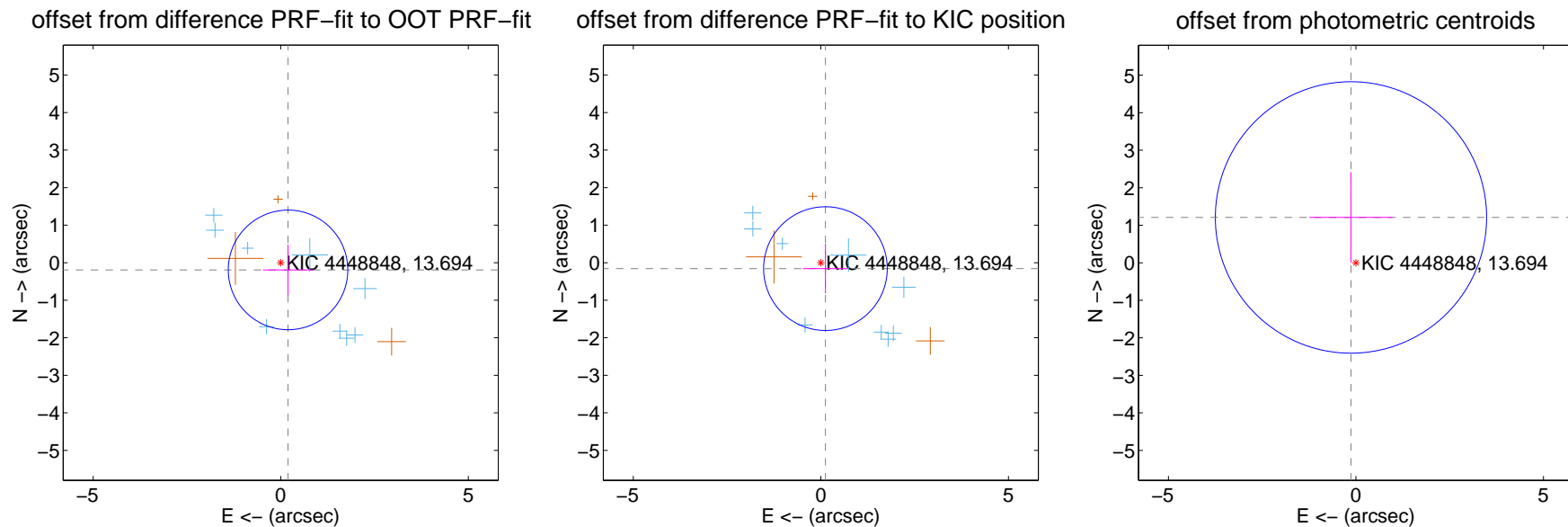
DV Centroid Data

Supplemental centroid analysis for 004448848-01. Kepler magnitude: 13.69. Transit SNR 6.66

There are 9 quarters with good PRF difference image offsets

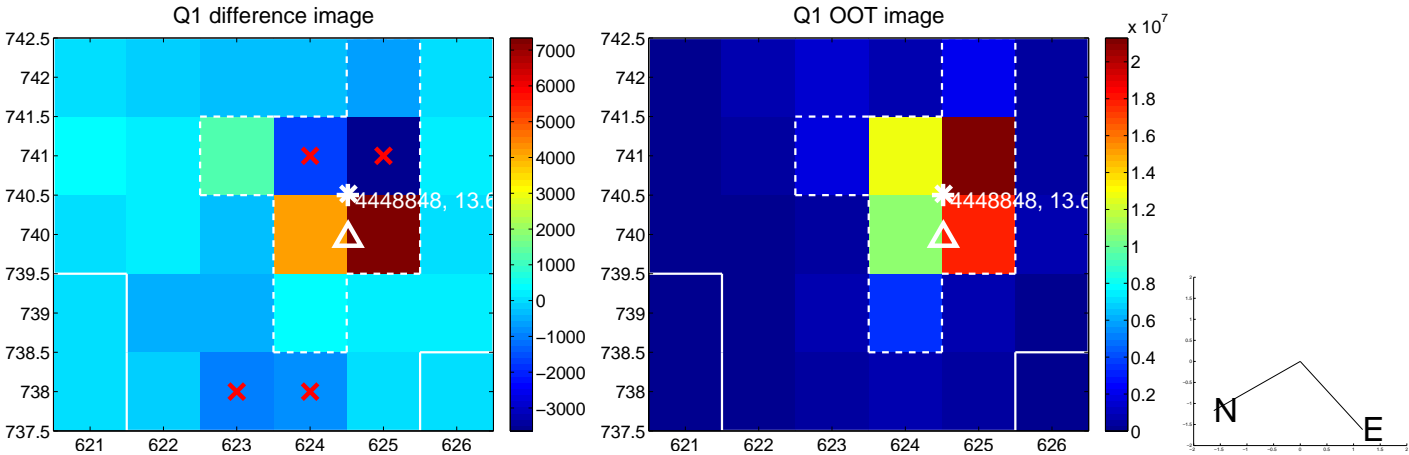
The direct PRF centroid is offset from the target star catalog position by about 0.07 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.273 ± 0.531	0.51	-0.194 ± 0.668	-0.192 ± 0.676
PRF-fit source offset from KIC position	0.200 ± 0.549	0.36	-0.122 ± 0.607	-0.158 ± 0.661
photometric centroid source offset	1.21 ± 1.21	1.01	0.13 ± 1.10	1.21 ± 1.21

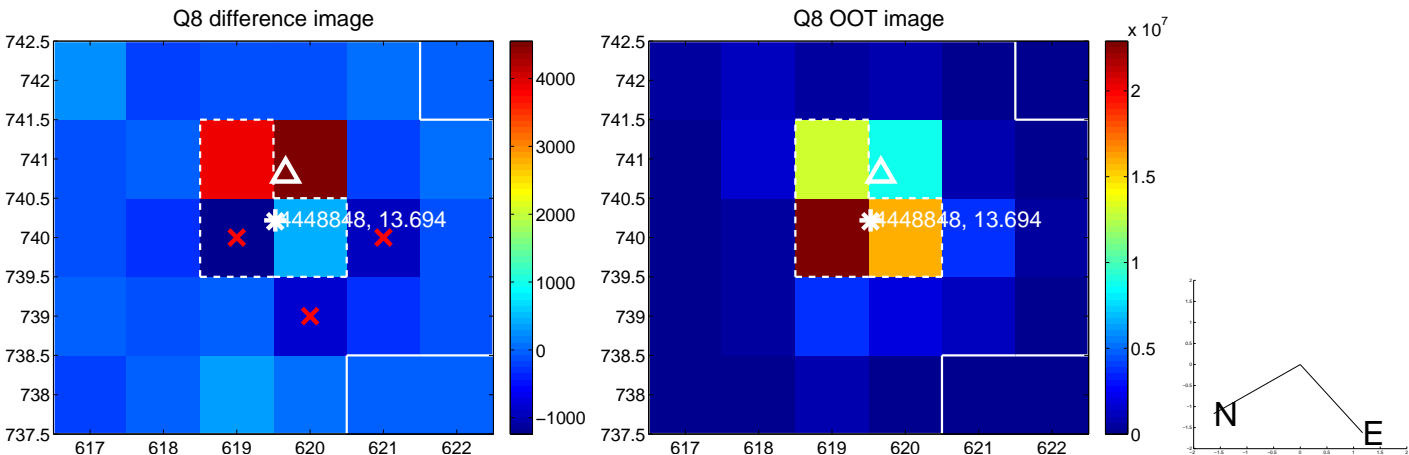
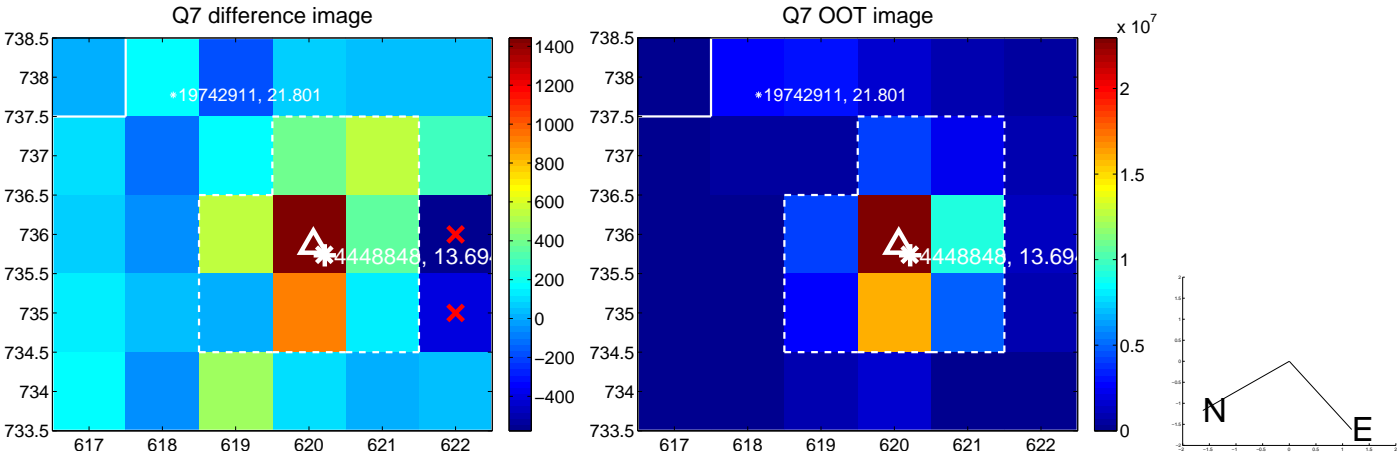
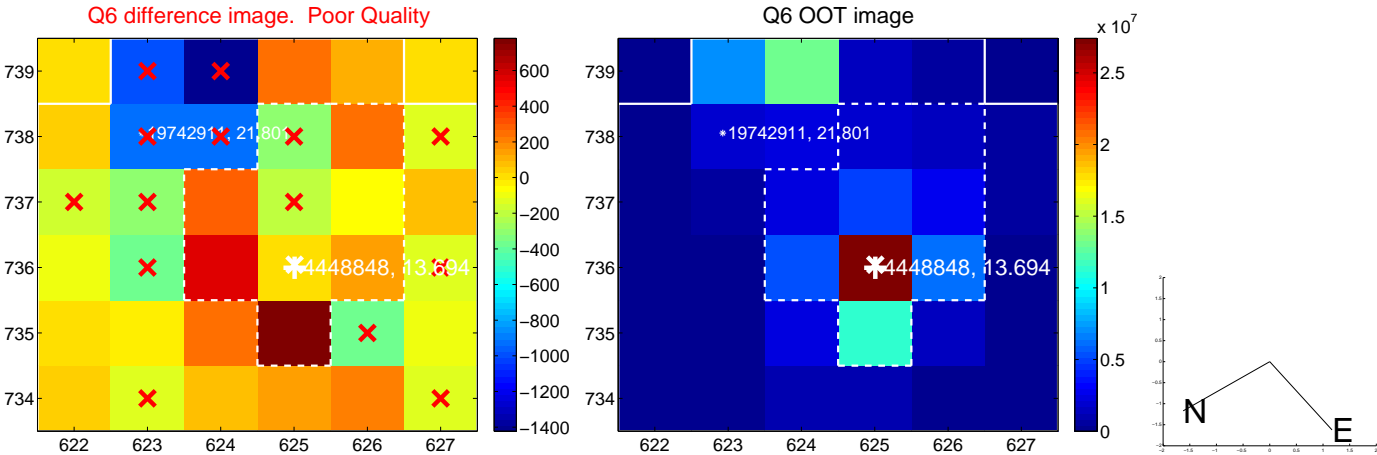
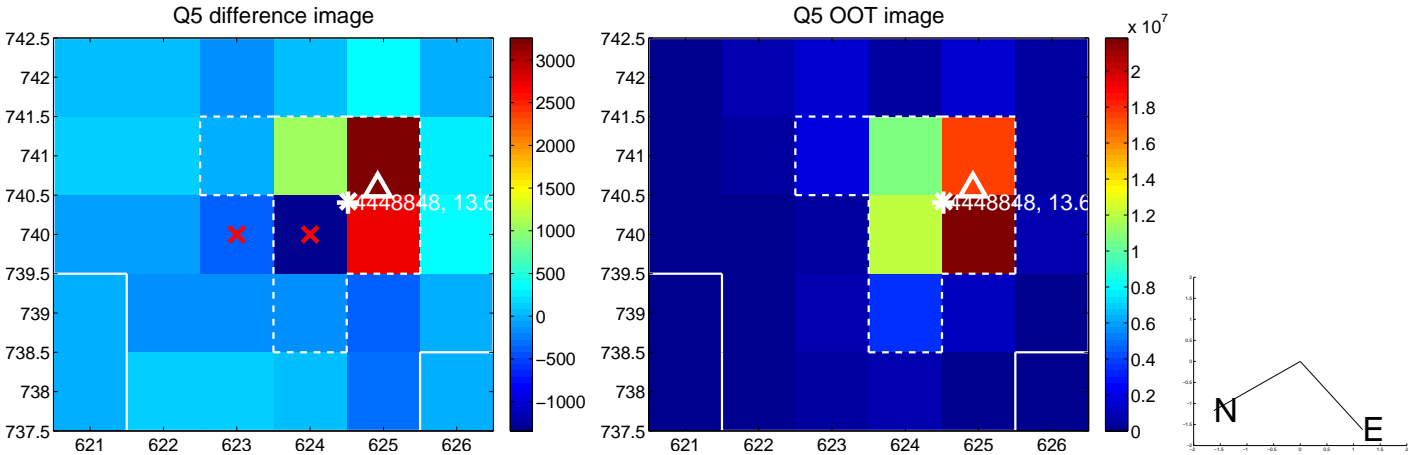


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses:** good quarterly centroid offsets; **Vermillion crosses:** bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

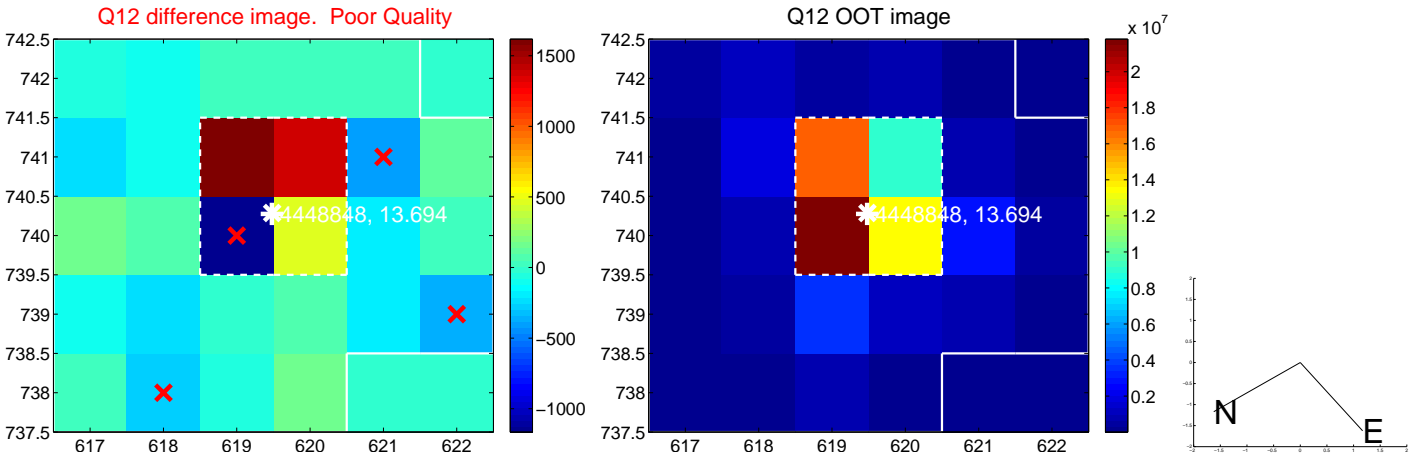
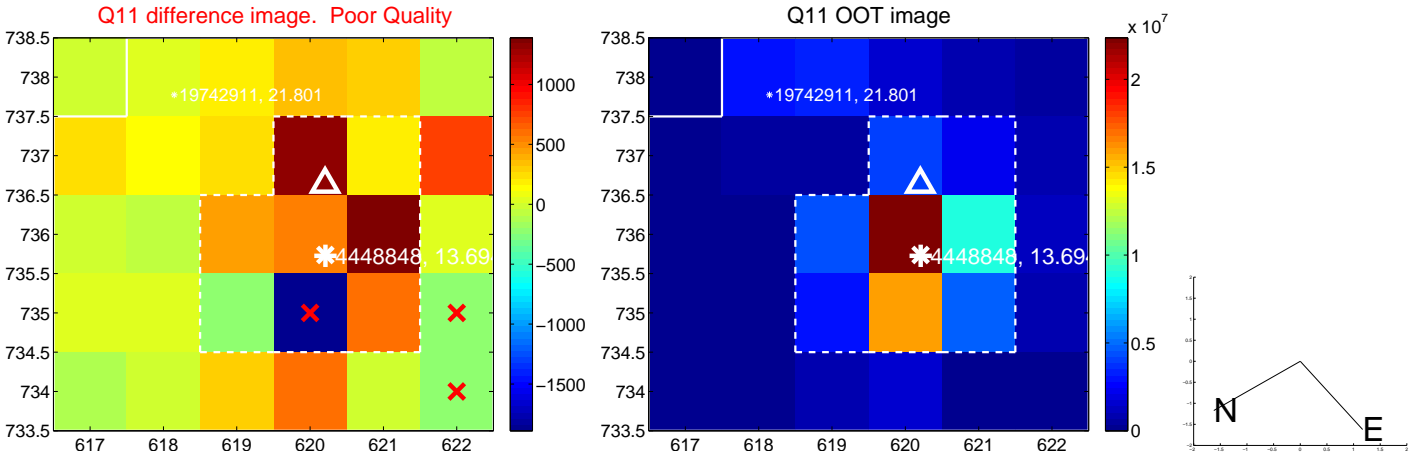
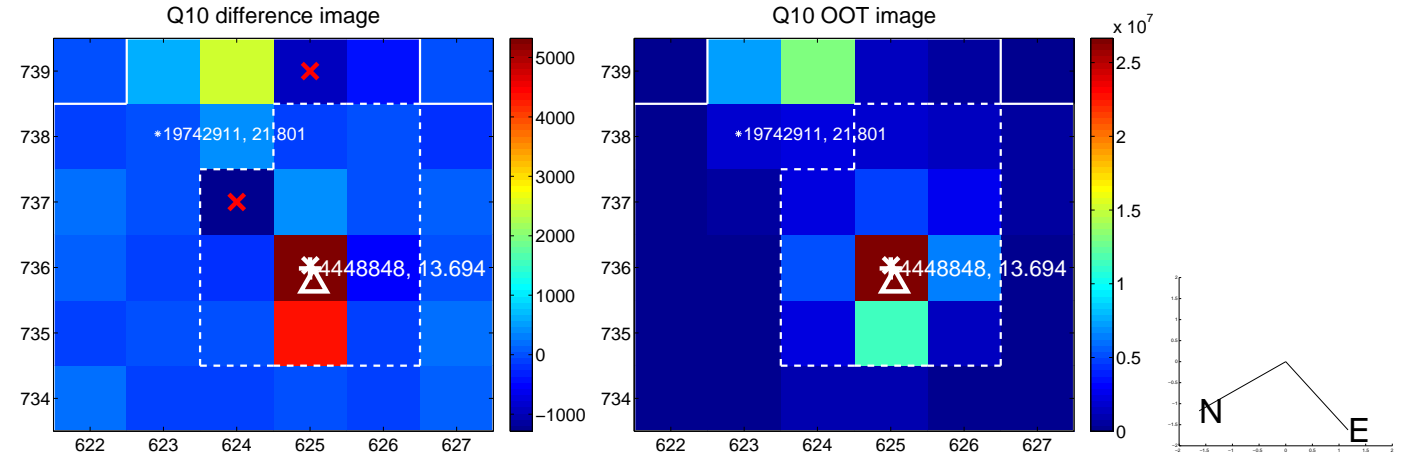
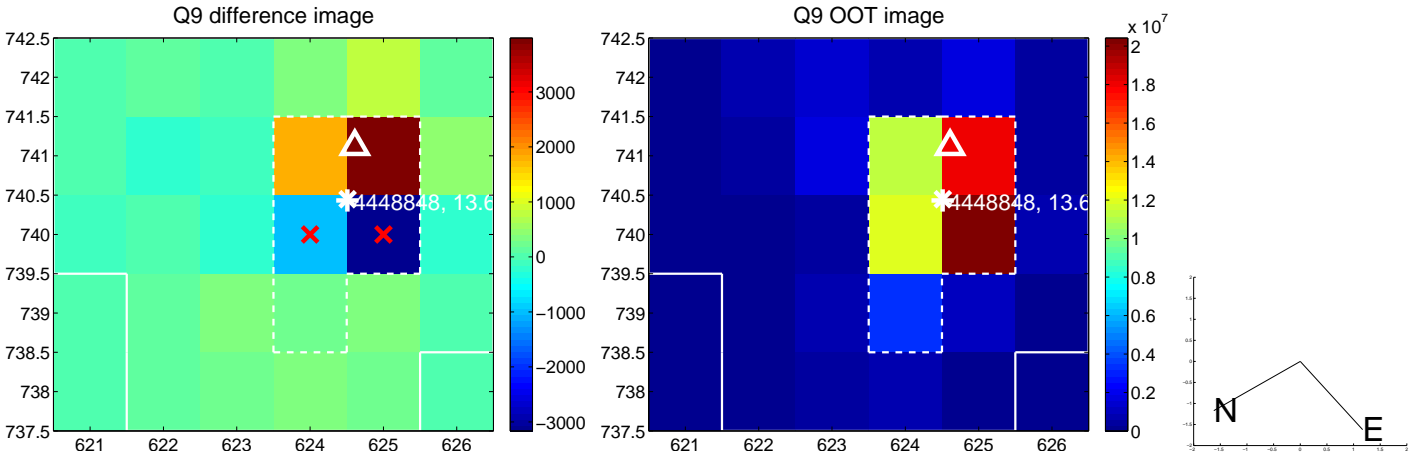
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



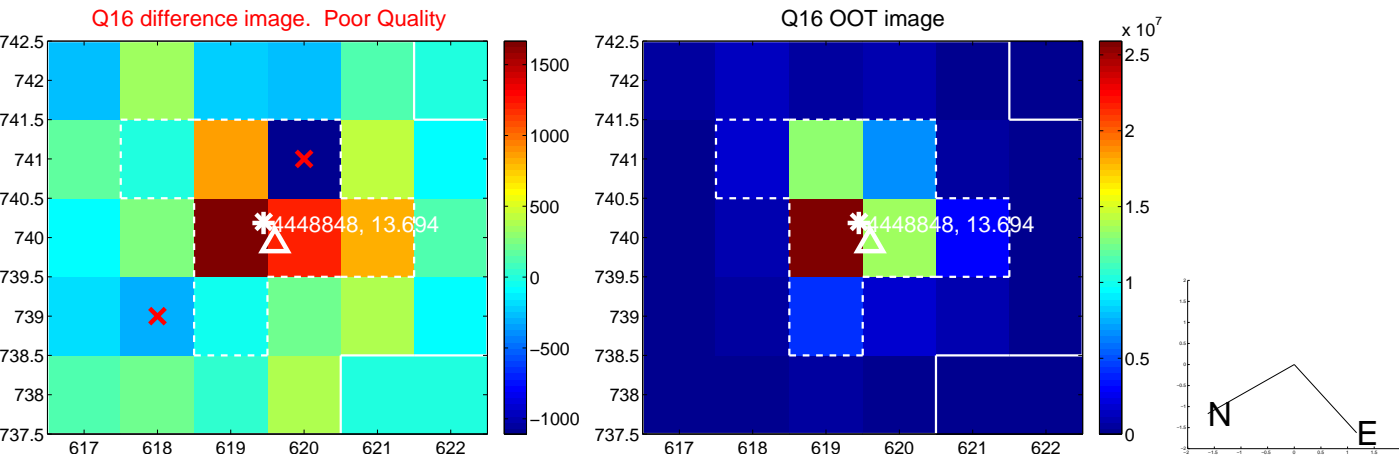
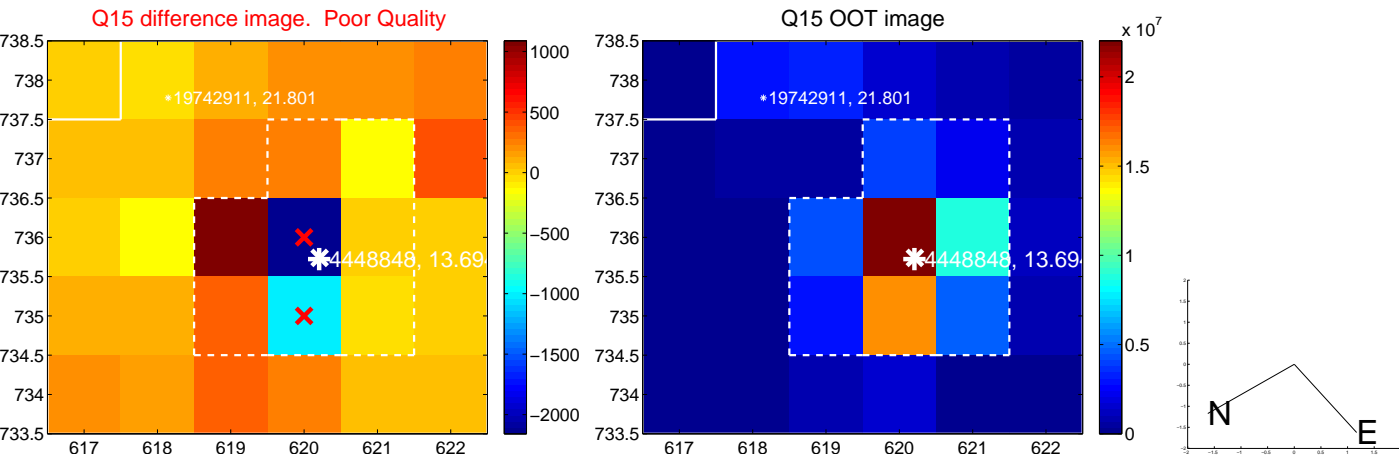
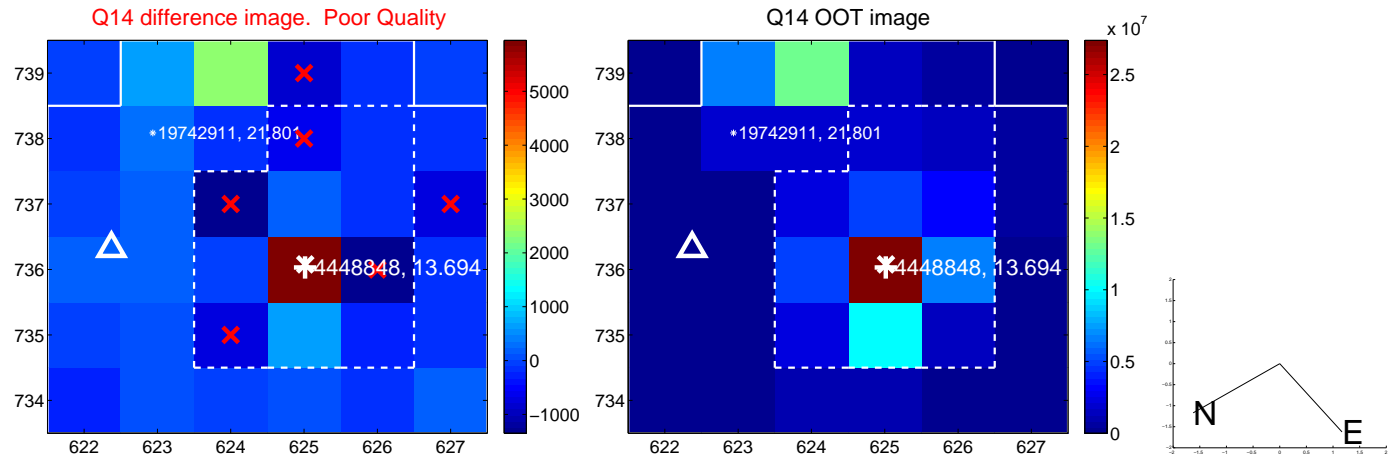
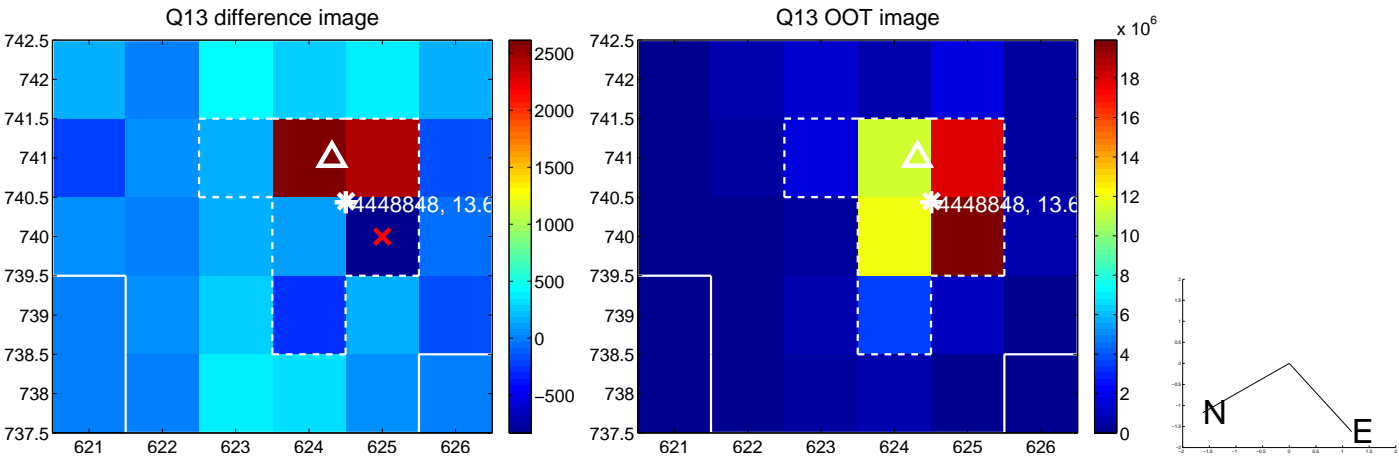
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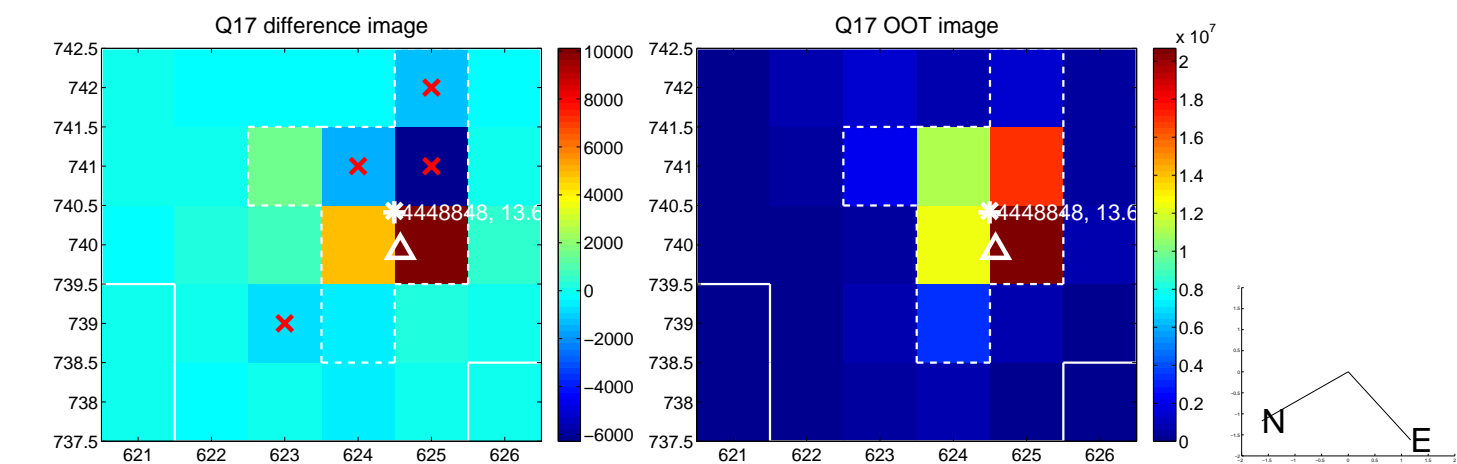
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



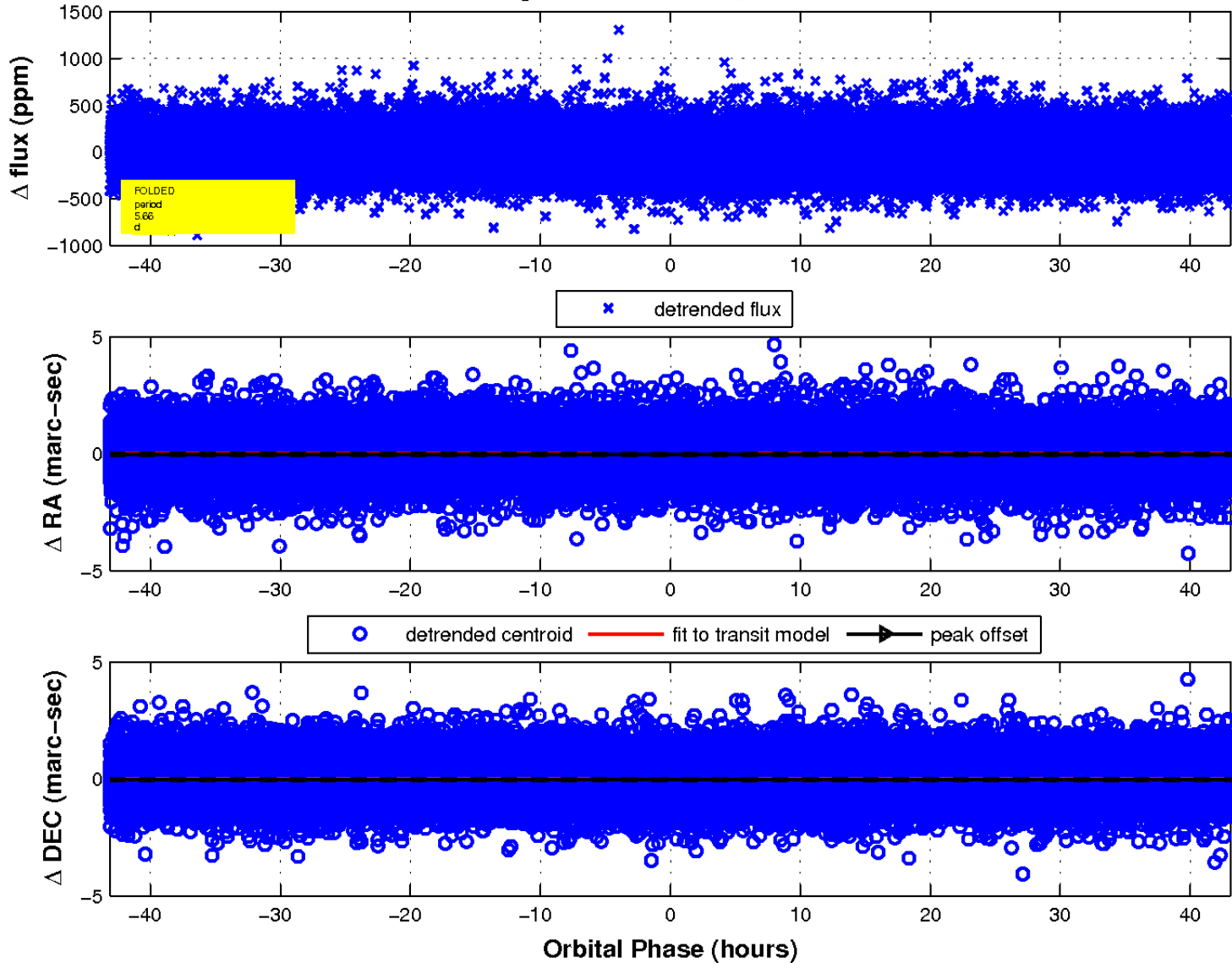
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fluxWeightedCentroids, Planet 1 of 1



UKIRT Image

Declination

