

KIC 005960274

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})
005960274-01	OBS	No	554.846938	200.902466	534.4	6.810	7.3	8.3	0.96	6067	2.46	0.64

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
005960274-01	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_CHASES_MARSHALL—ALL_TRANS_CHASES—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.

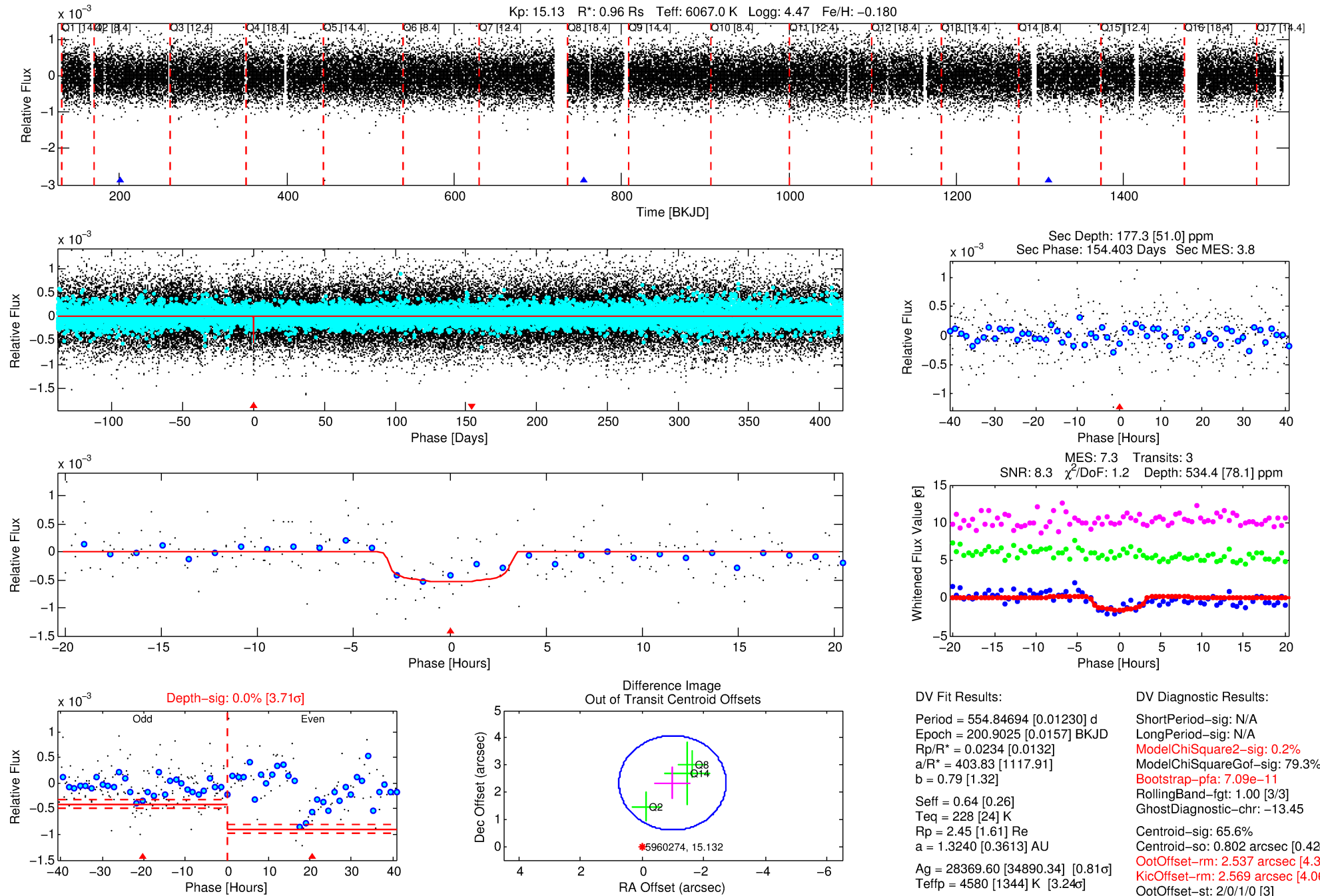
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 005960274-01

No Significant Match Found

DV One-Page Summary

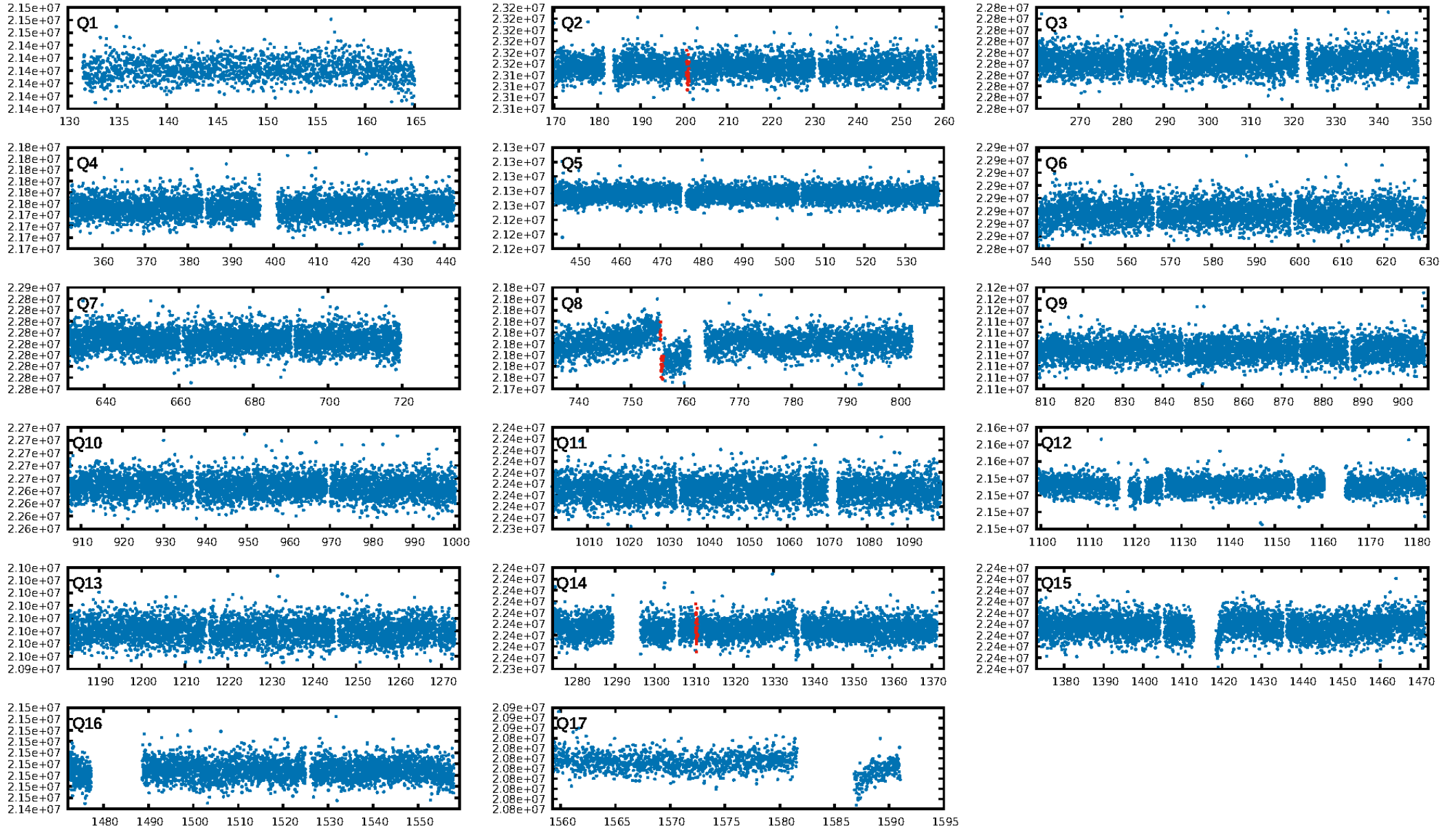
KIC: 5960274 Candidate: 1 of 1 Period: 554.847 d



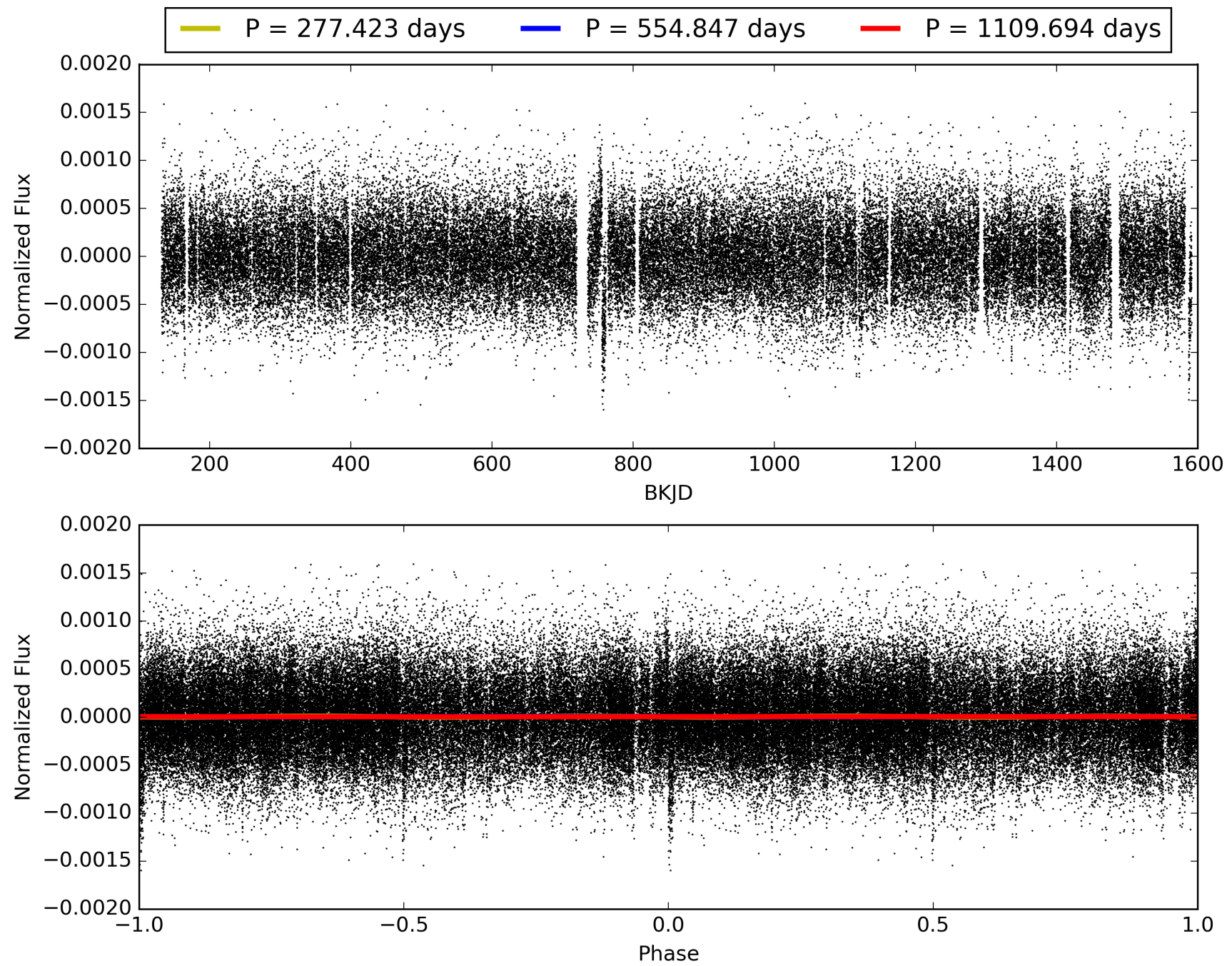
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 30-Jan-2016 19:00:22 Z

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

TCE 005960274-01, PDC Light Curves

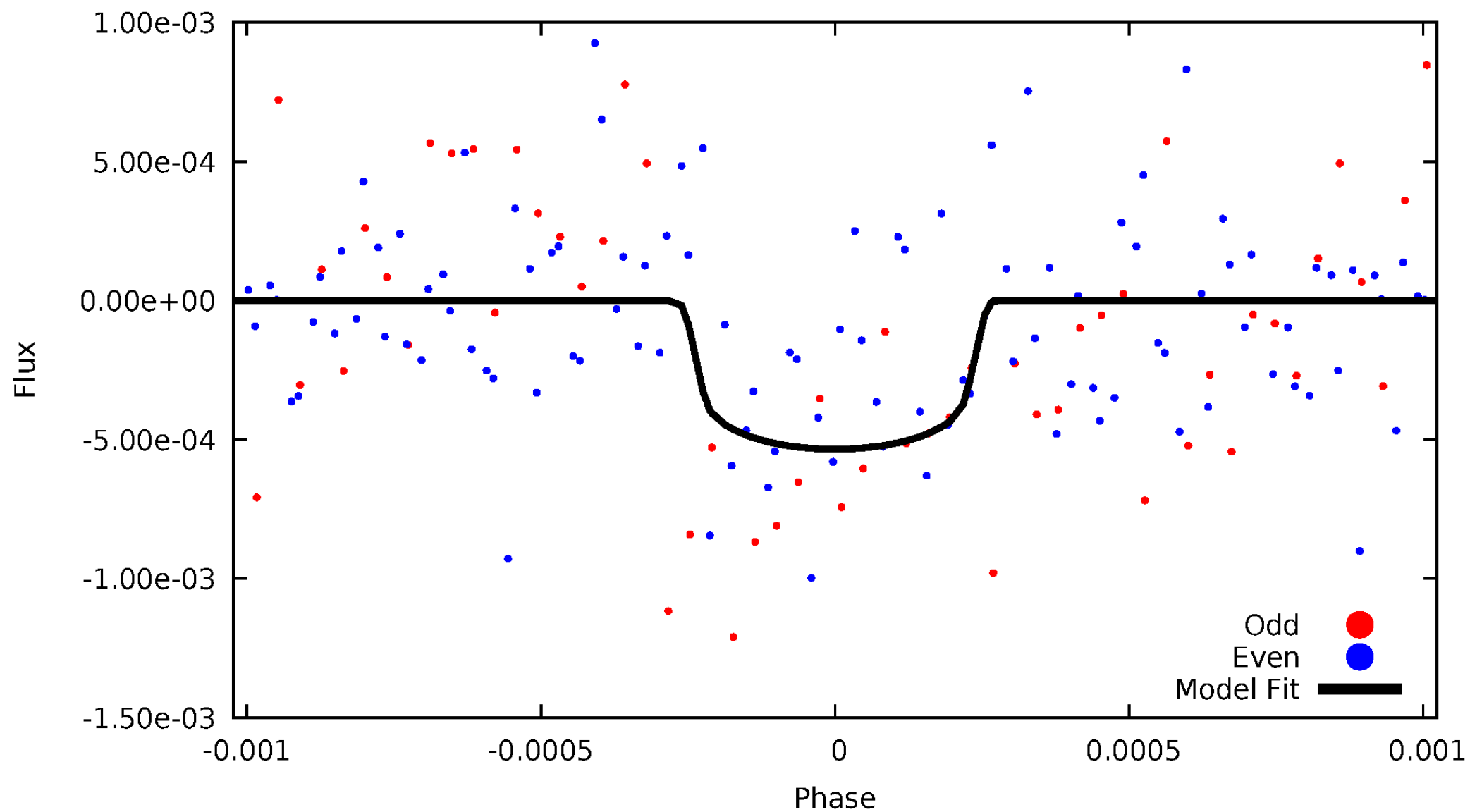


TCE 005960274-01



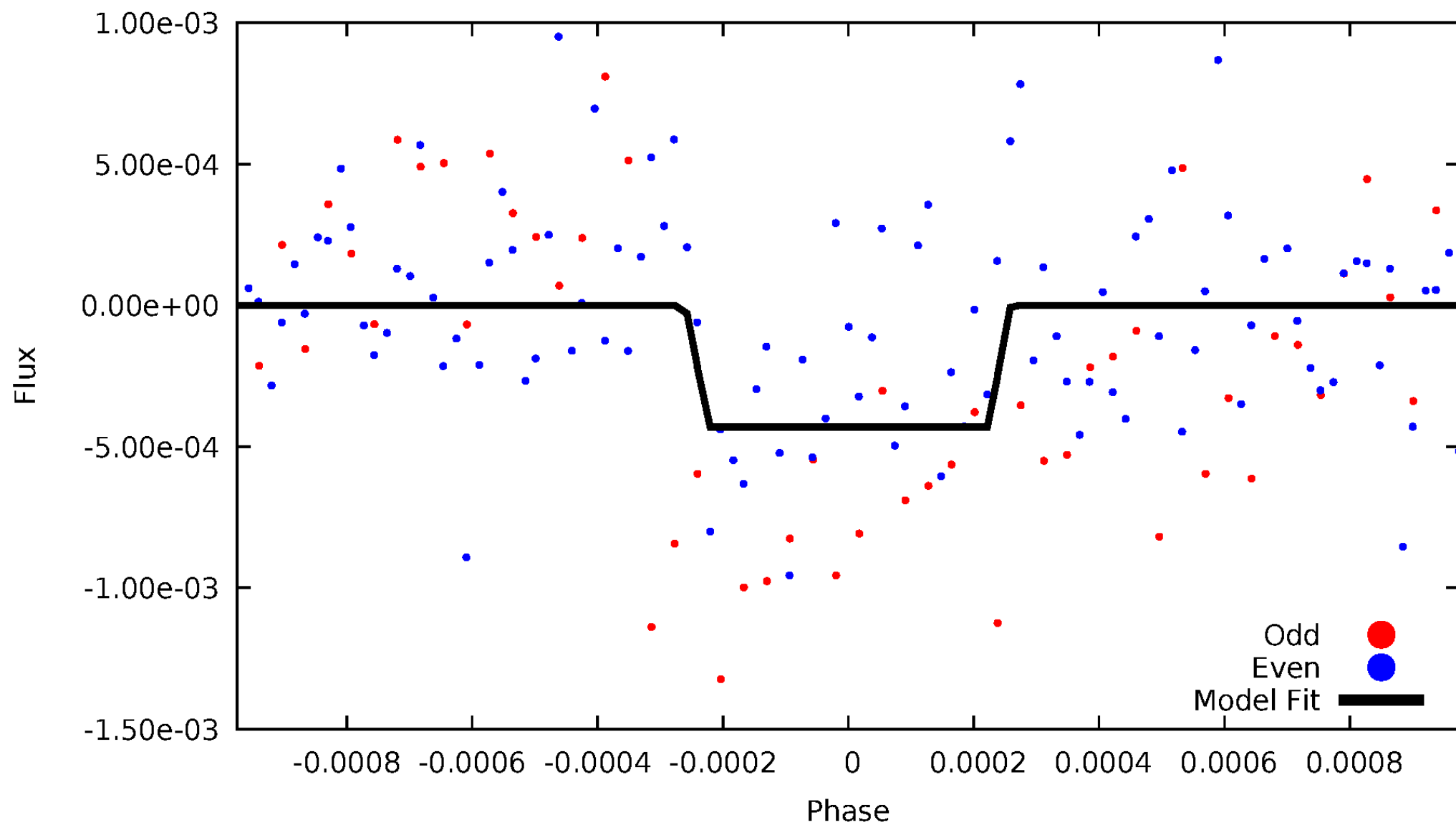
DV Odd/Even

TCE 005960274-01



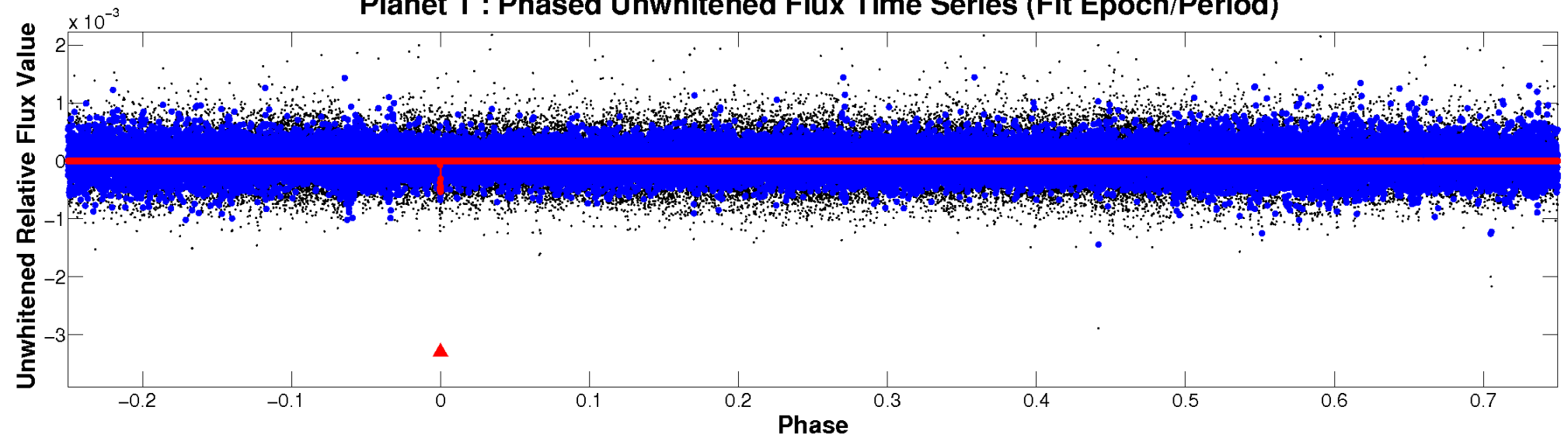
ALT Odd/Even

TCE 005960274-01

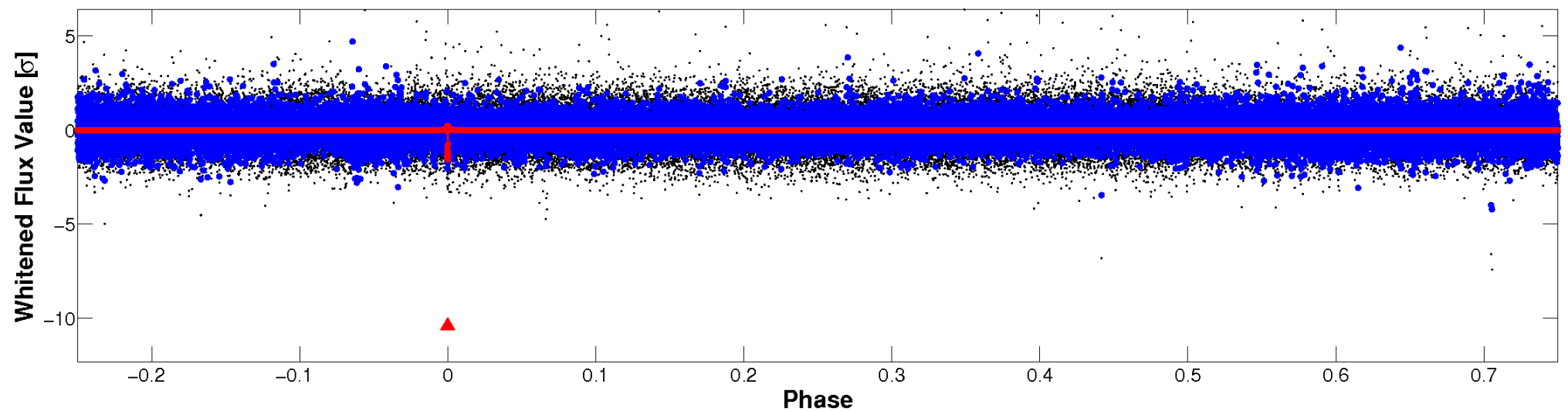


Non-Whitened Vs. Whitened Light Curve

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

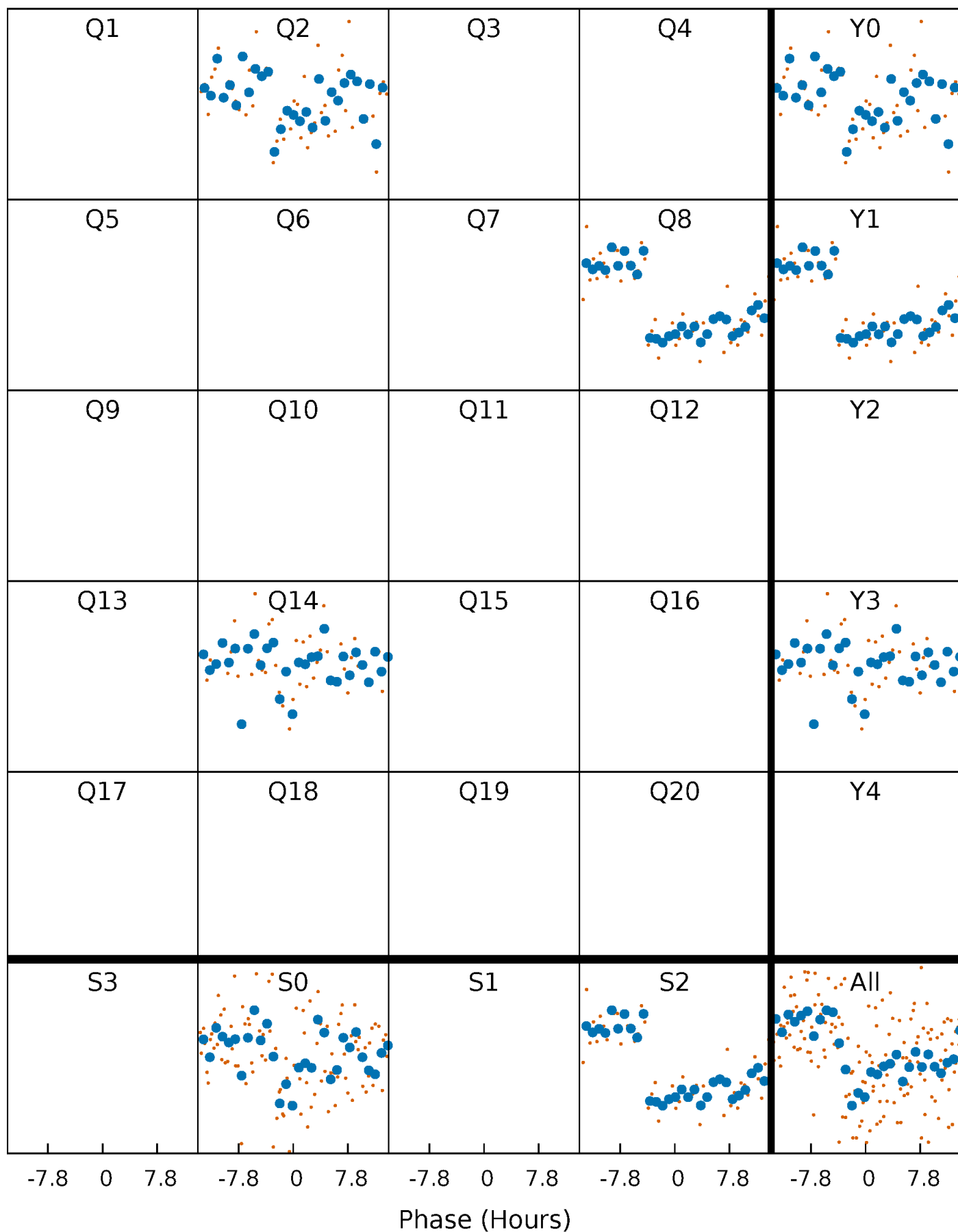


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



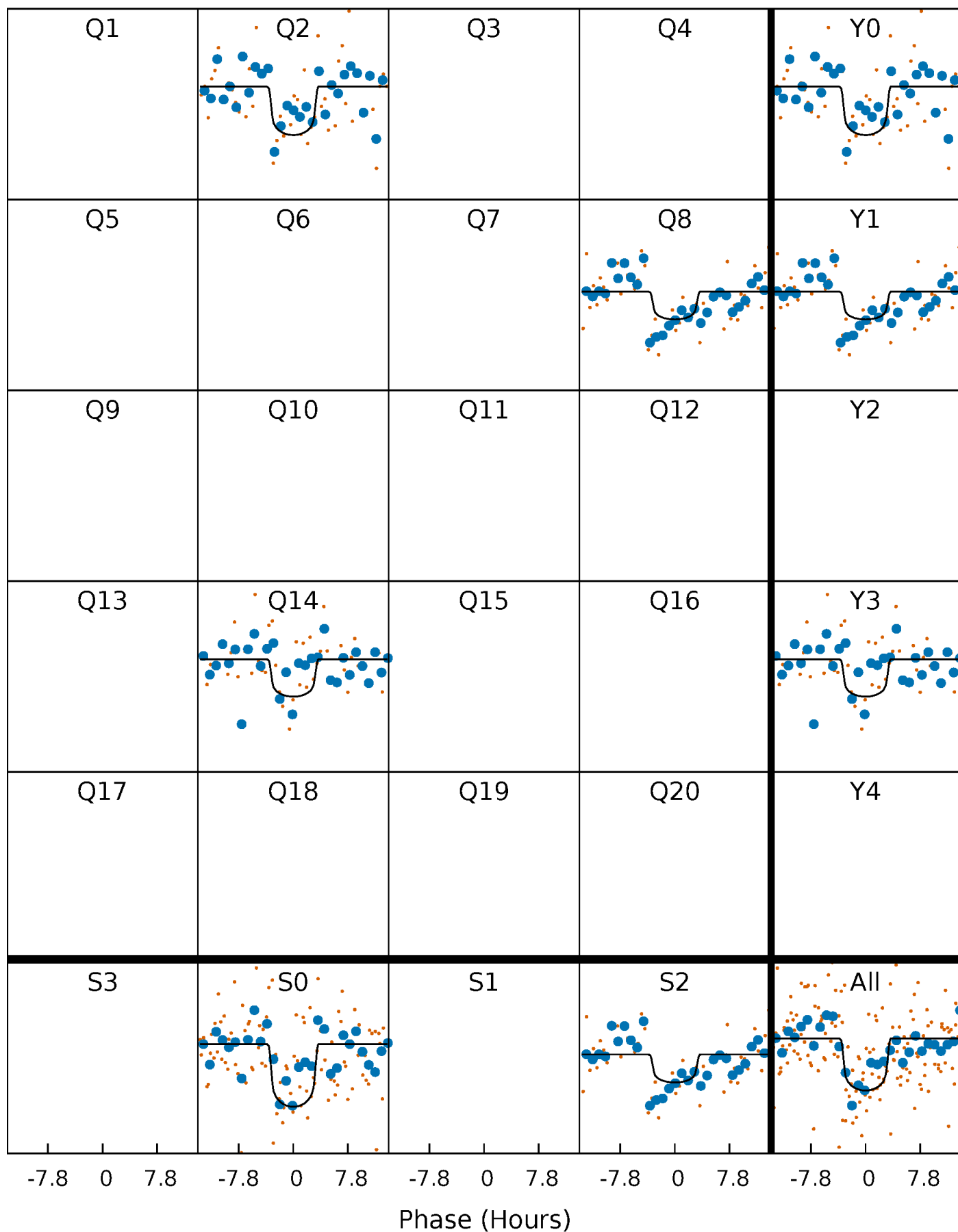
PDC Quarter-Phased Transit Curves

TCE 005960274-01 P=554.846938 Days $T_0=200.902466$ (BKJD)



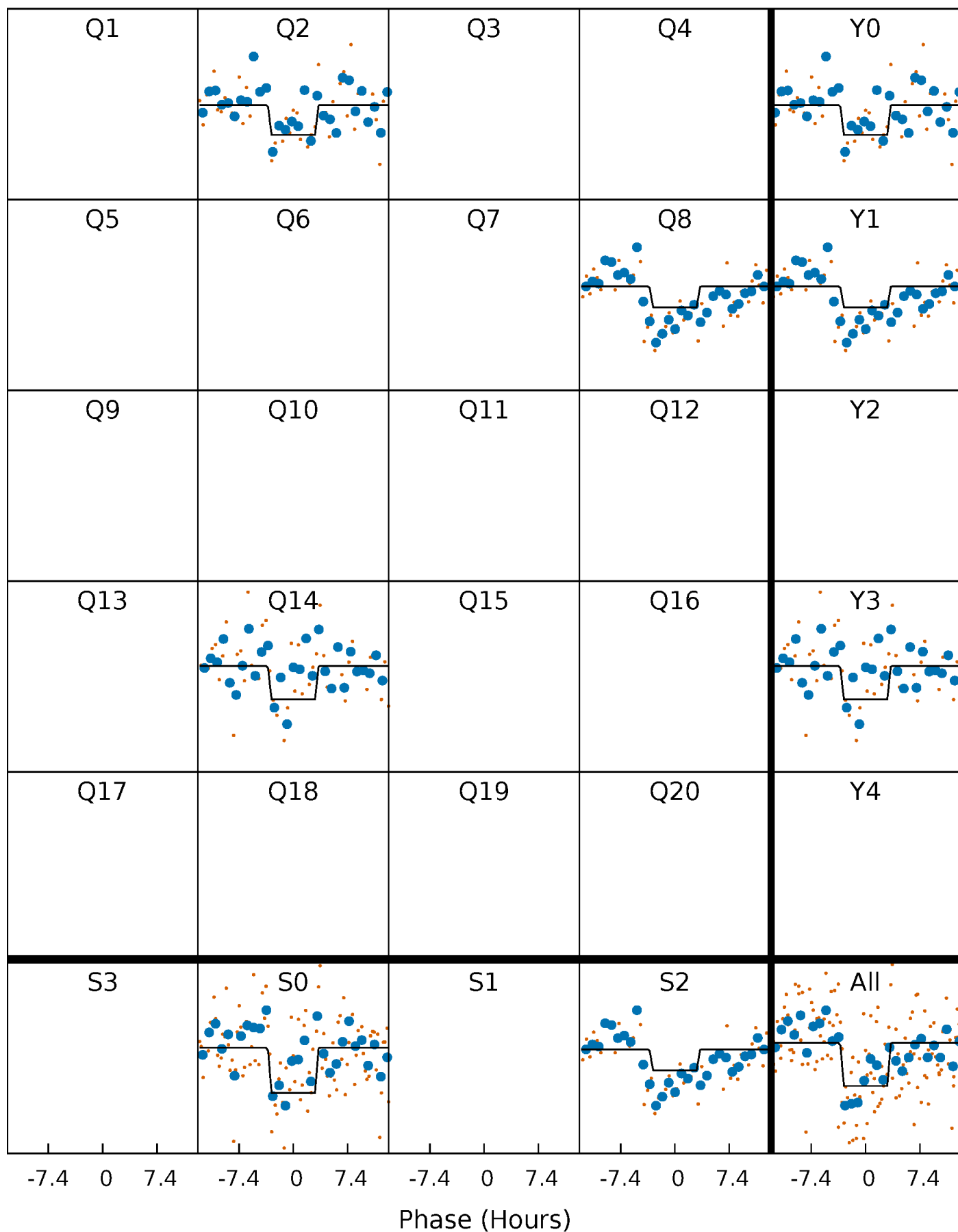
DV Quarter-Phased Transit Curves

TCE 005960274-01 P=554.846938 Days $T_0=200.902466$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

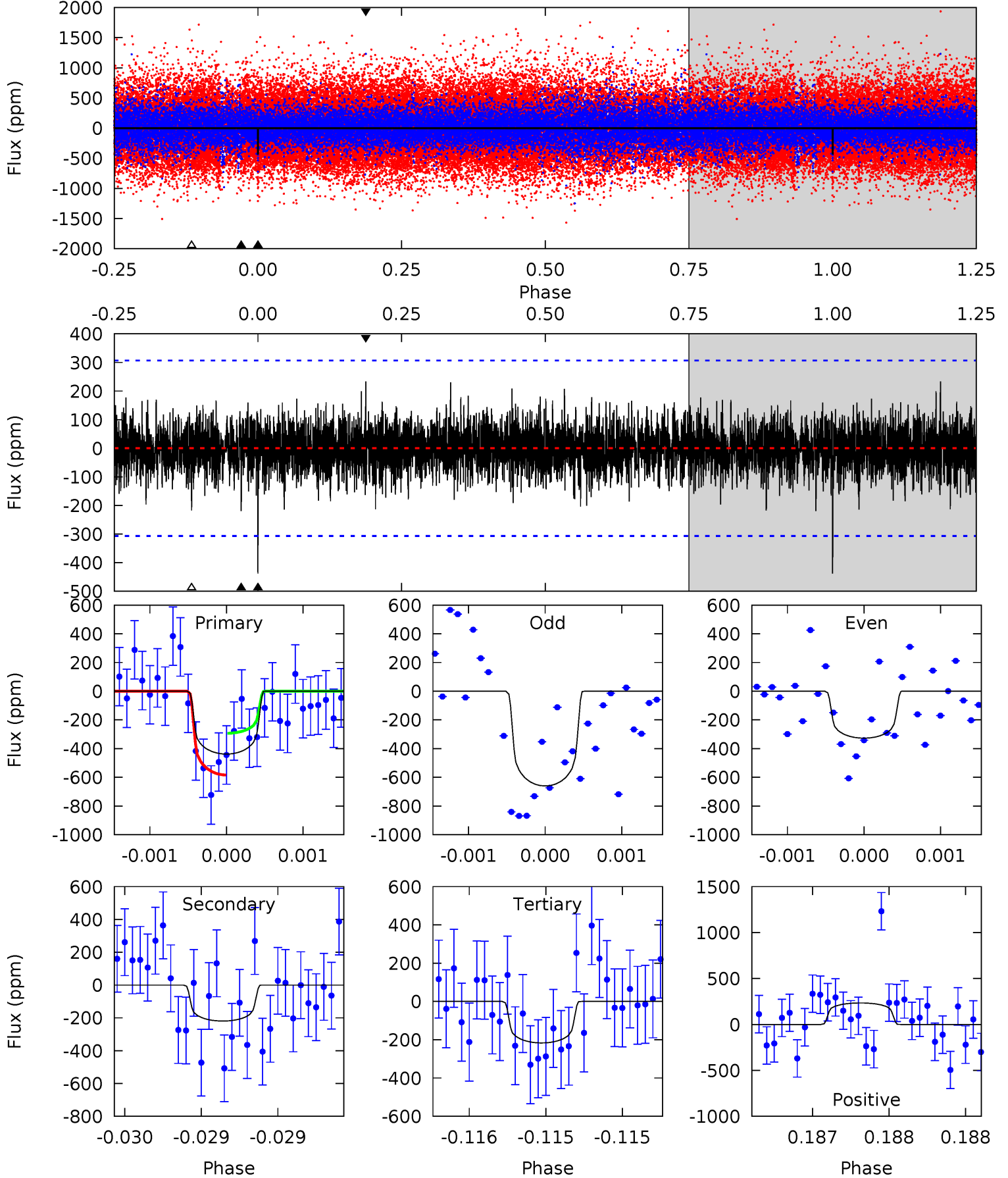
TCE 005960274-01 P=554.859699 Days $T_0=200.906625$ (BKJD)



DV Model-Shift Uniqueness Test

005960274-01, P = 554.846938 Days, E = 200.902466 Days

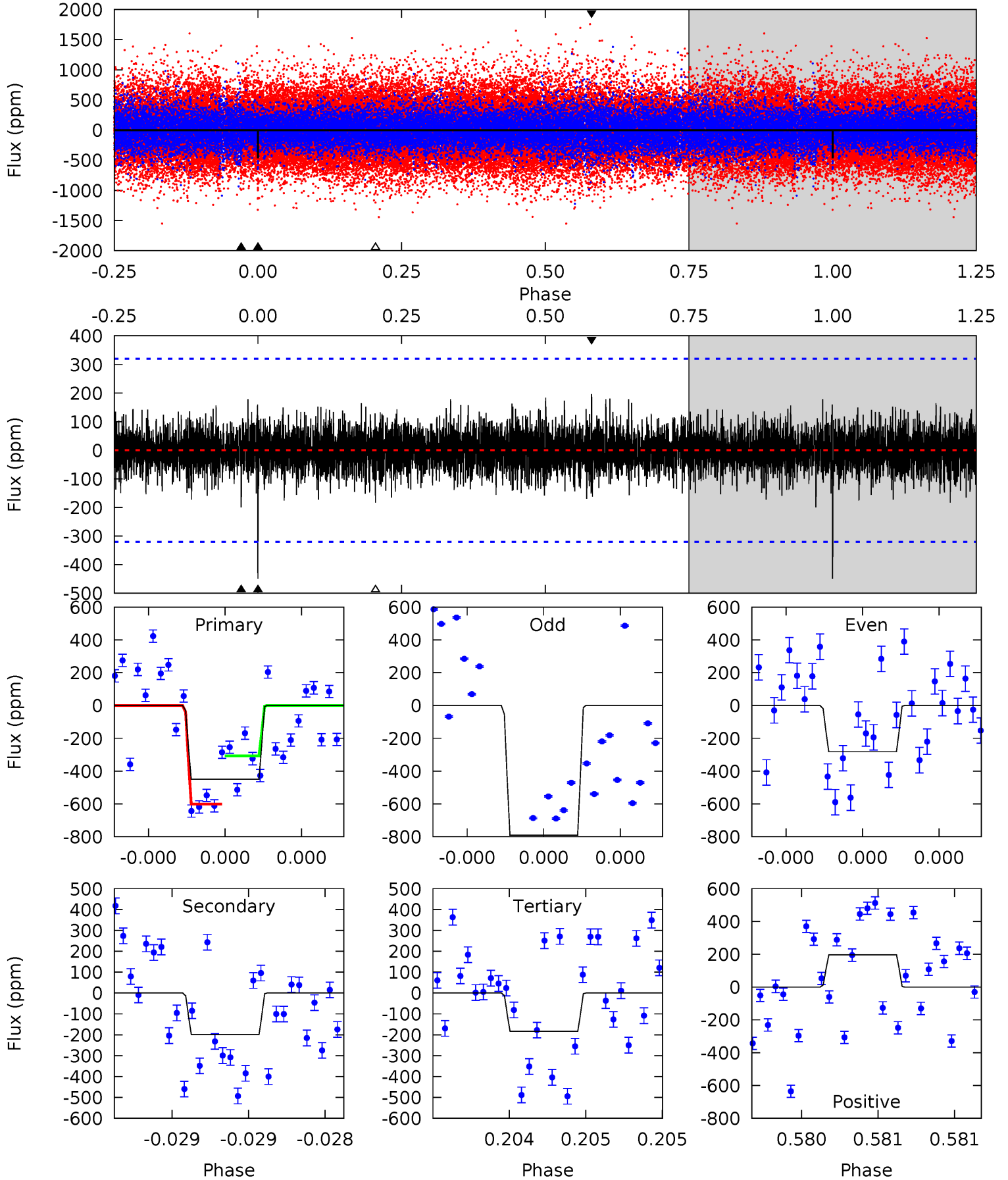
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
7.94	3.97	3.93	4.23	5.56	3.45	1.07	4.01	3.71	0.05	-0.26	2.87	1.10	0.35	2.63



Alt Model-Shift Uniqueness Test

005960274-01, P = 554.859699 Days, E = 200.906625 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
7.83	3.47	3.19	3.41	5.57	3.48	0.88	4.64	4.41	0.28	0.05	4.30	1.29	0.30	2.56



Stellar Parameters For KIC 005960274

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	6067^{+181}_{-199}	$4.473^{+0.056}_{-0.210}$	$-0.180^{+0.250}_{-0.300}$	$0.963^{+0.318}_{-0.106}$	$1.000^{+0.143}_{-0.117}$	$1.579^{+0.454}_{-0.837}$
	+3%/-3%	+1%/-5%	+139%/-167%	+33%/-11%	+14%/-12%	+29%/-53%
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 005960274-01 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	-219 ± 55	$2.62^{+1.52}_{-1.35}$	326^{+24}_{-16}	4854^{+1926}_{-731}	29207^{+94435}_{-17276}
Alt.	-199 ± 57	$2.29^{+1.38}_{-1.20}$	326^{+24}_{-16}	5083^{+2373}_{-943}	$35438^{+131512}_{-22781}$

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

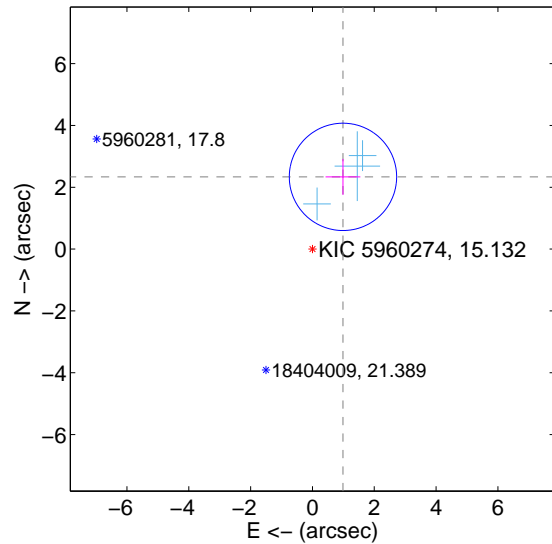
Supplemental centroid analysis for 005960274-01. Kepler magnitude: 15.13. Transit SNR 8.32

There are 3 quarters with good PRF difference image offsets

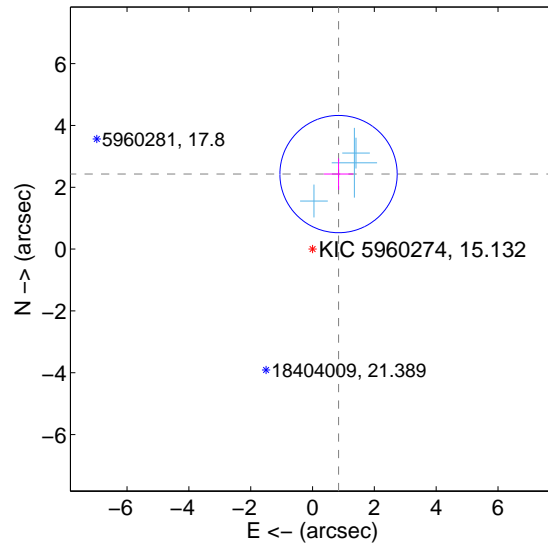
The direct PRF centroid is offset from the target star catalog position by about 0.15 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	2.537 ± 0.579	4.38	-0.988 ± 0.562	2.337 ± 0.582
PRF-fit source offset from KIC position	2.569 ± 0.632	4.06	-0.842 ± 0.475	2.428 ± 0.507
photometric centroid source offset	0.80 ± 1.91	0.42	-0.79 ± 1.92	0.16 ± 1.47

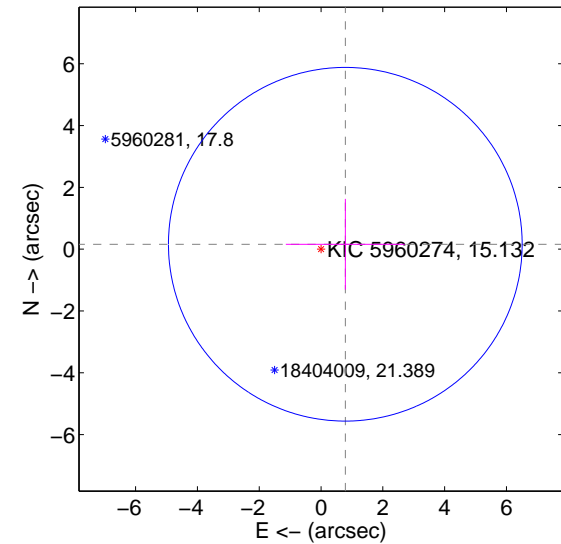
offset from difference PRF-fit to OOT PRF-fit



offset from difference PRF-fit to KIC position

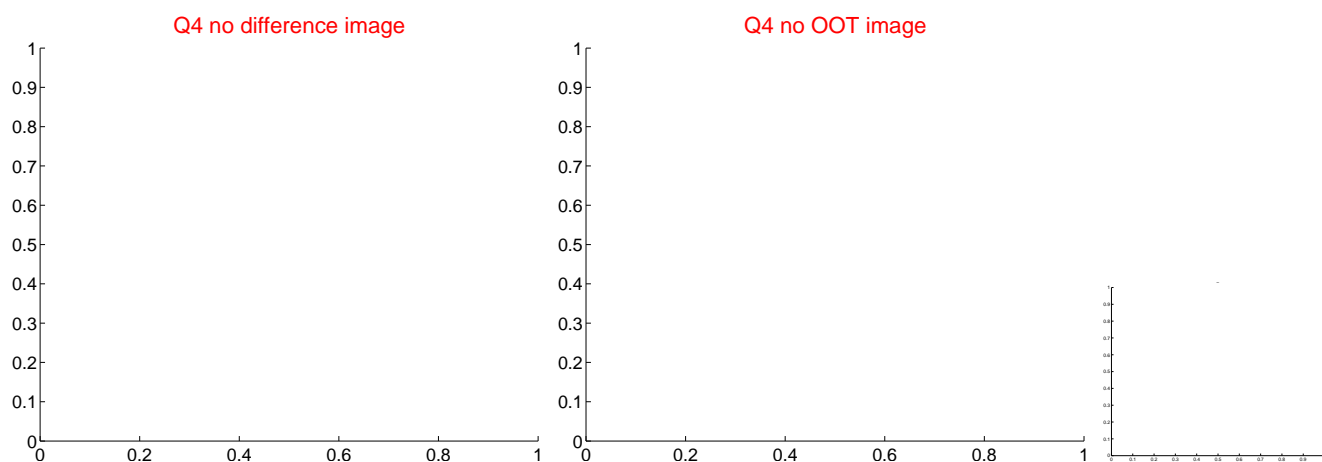
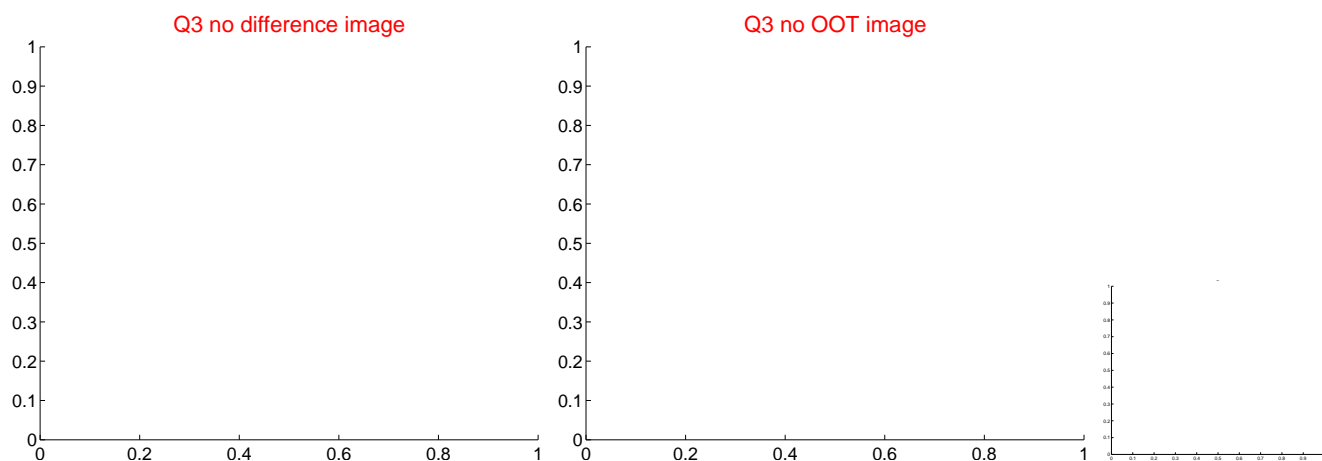
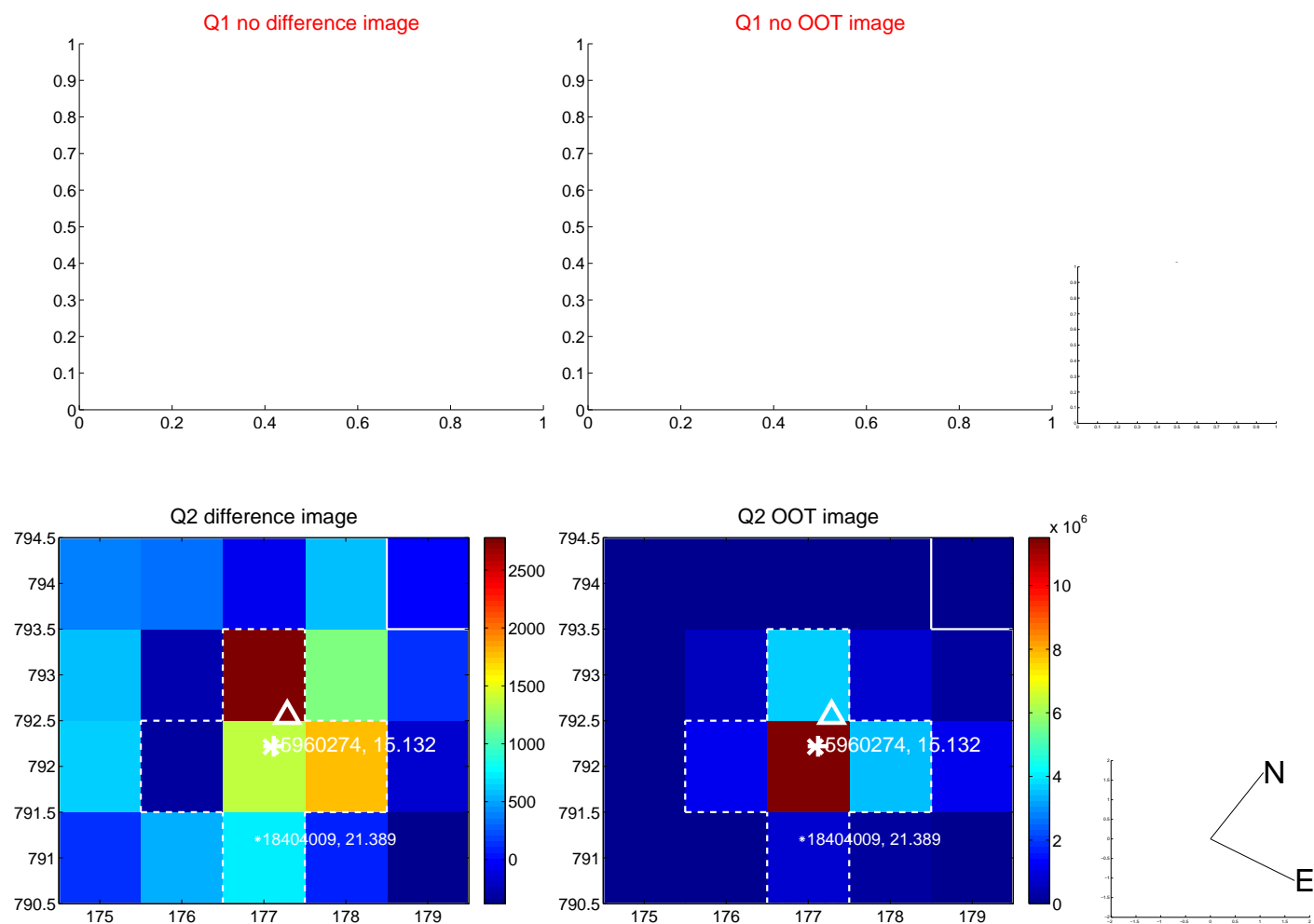


offset from photometric centroids

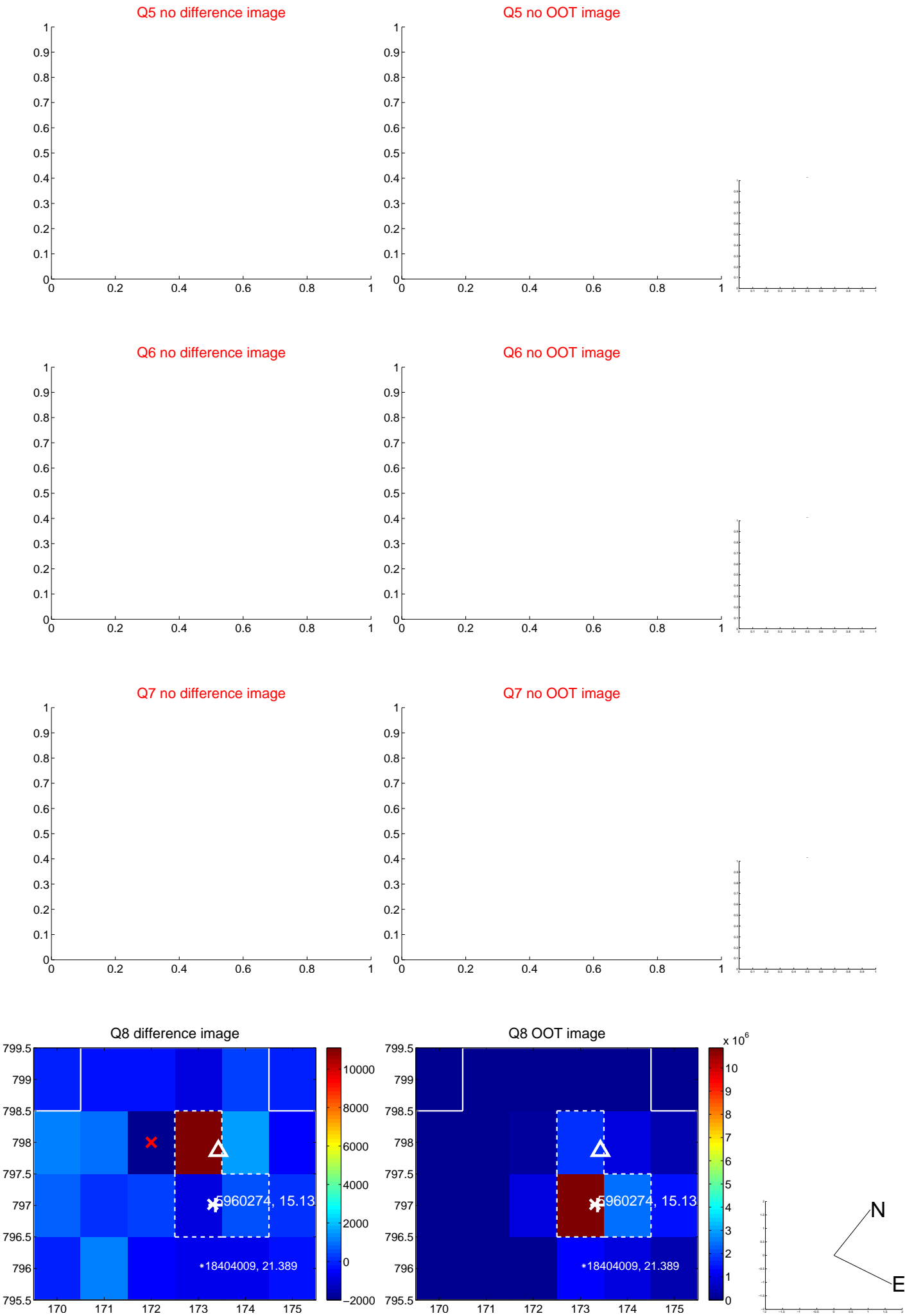


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ . Red *: target star. Blue *: Other stars. Text next to a star gives its KIC ID and kepmag. KIC IDs > 15,000 are from the UKIRT catalog.

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



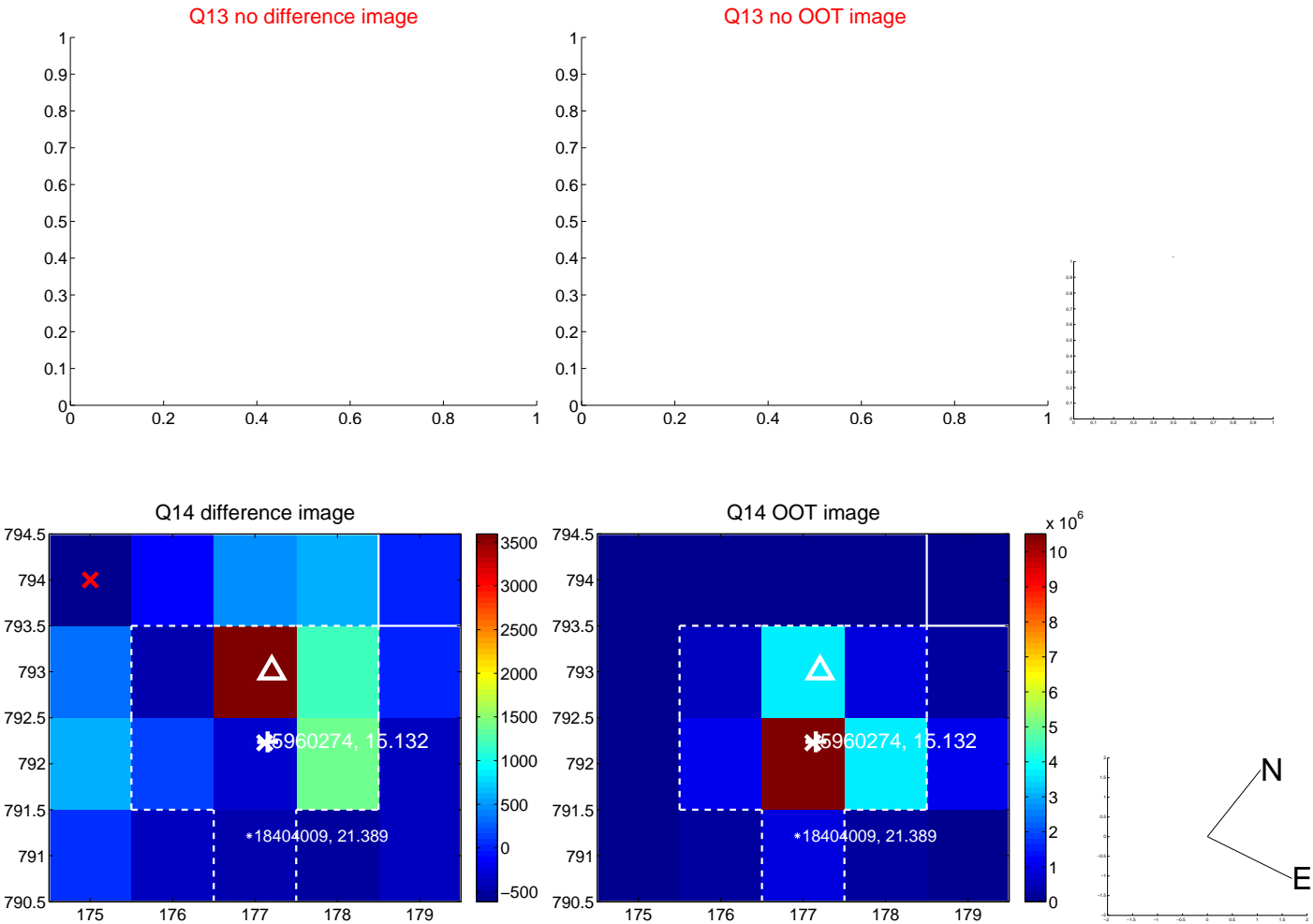
white ×: KIC target position; +: OOT centroid; △: difference centroid. red ✕: large negative pixel value.



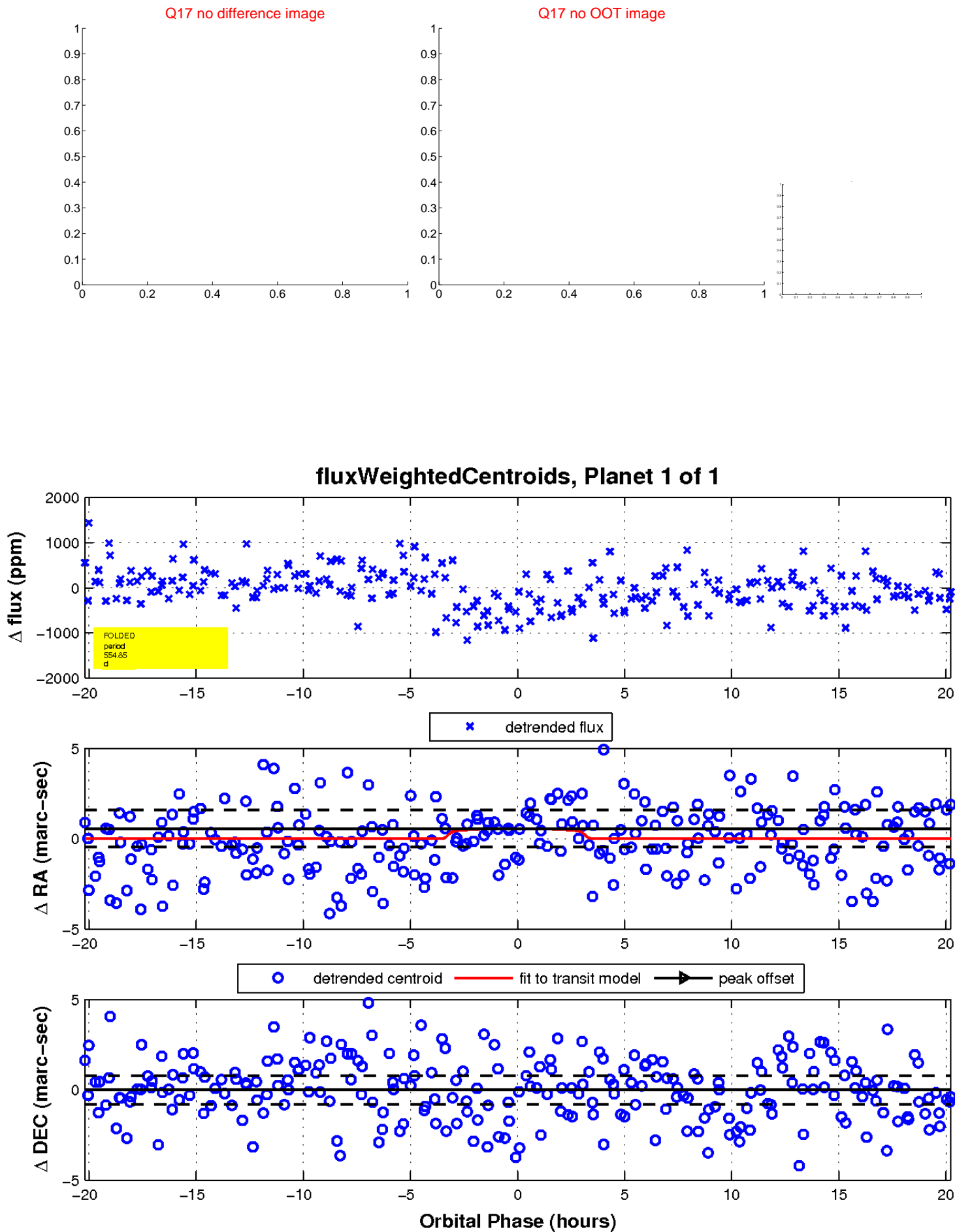
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



white ×: KIC target position; +: OOT centroid; △: difference centroid. red ✕: large negative pixel value.



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



UKIRT Image

Declination

