

KIC 008557193

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})
008557193-01	OBS	No	374.526394	134.570190	2487.3	80.784	19.3	28.0	0.72	5649	4.53	0.54

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
008557193-01	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_MARSHALL_SKYE—LPP_DV—ALL_TRANS_CHASES—CENT_FEW_DIFFS

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

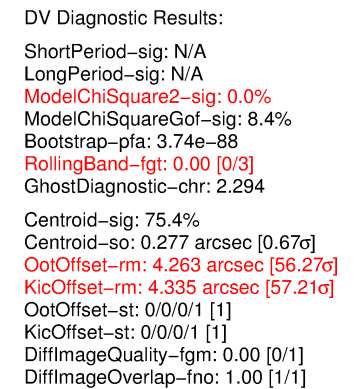
N = Not Transit-Like. S = Stellar Eclipse. C = Centroid Offset. E = Ephemeris Match.

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

Ephemeris Match Information For 008557193-01

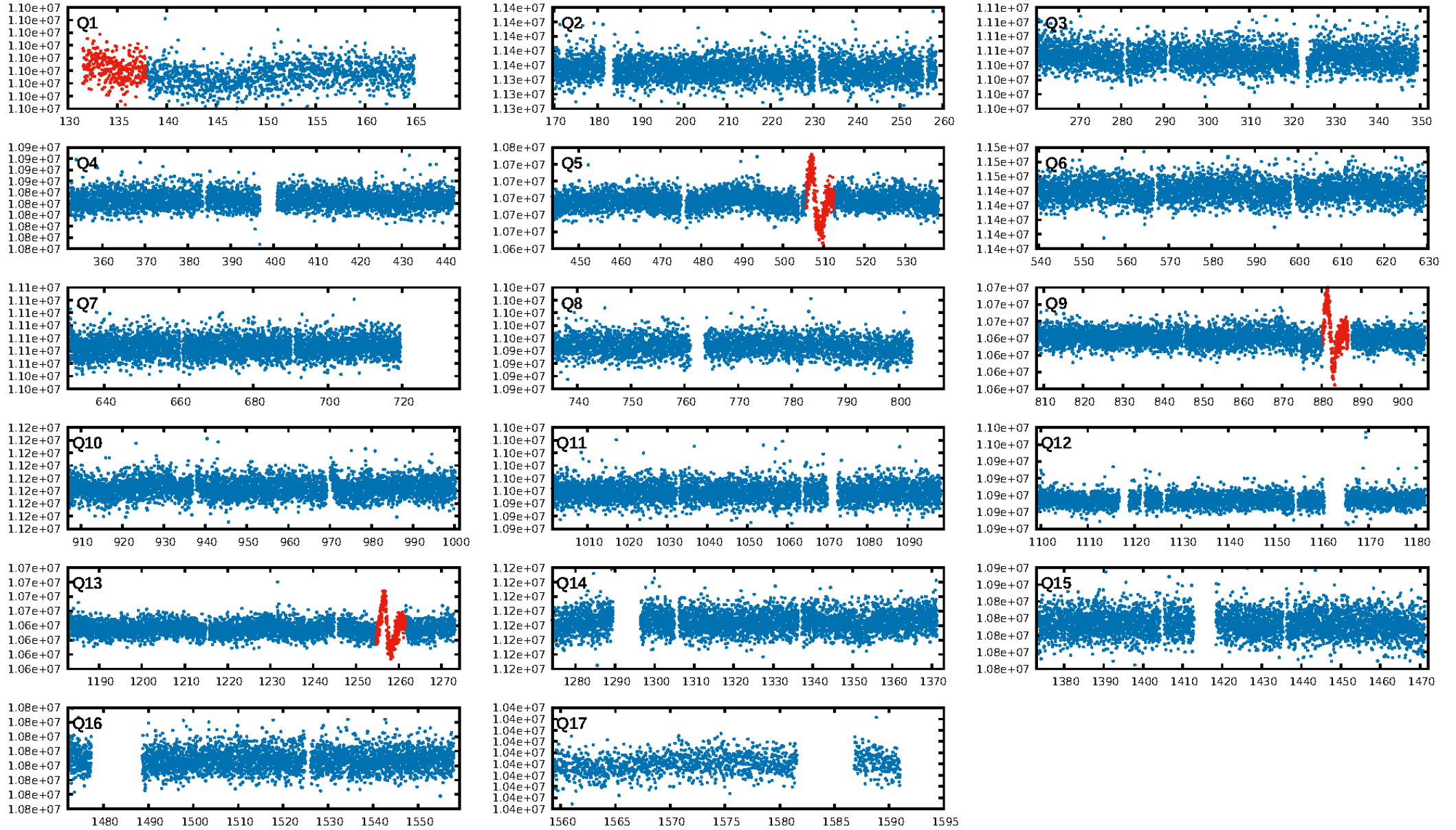
No Significant Match Found

KIC: 8557193 Candidate: 1 of 1 Period: 374.526 d

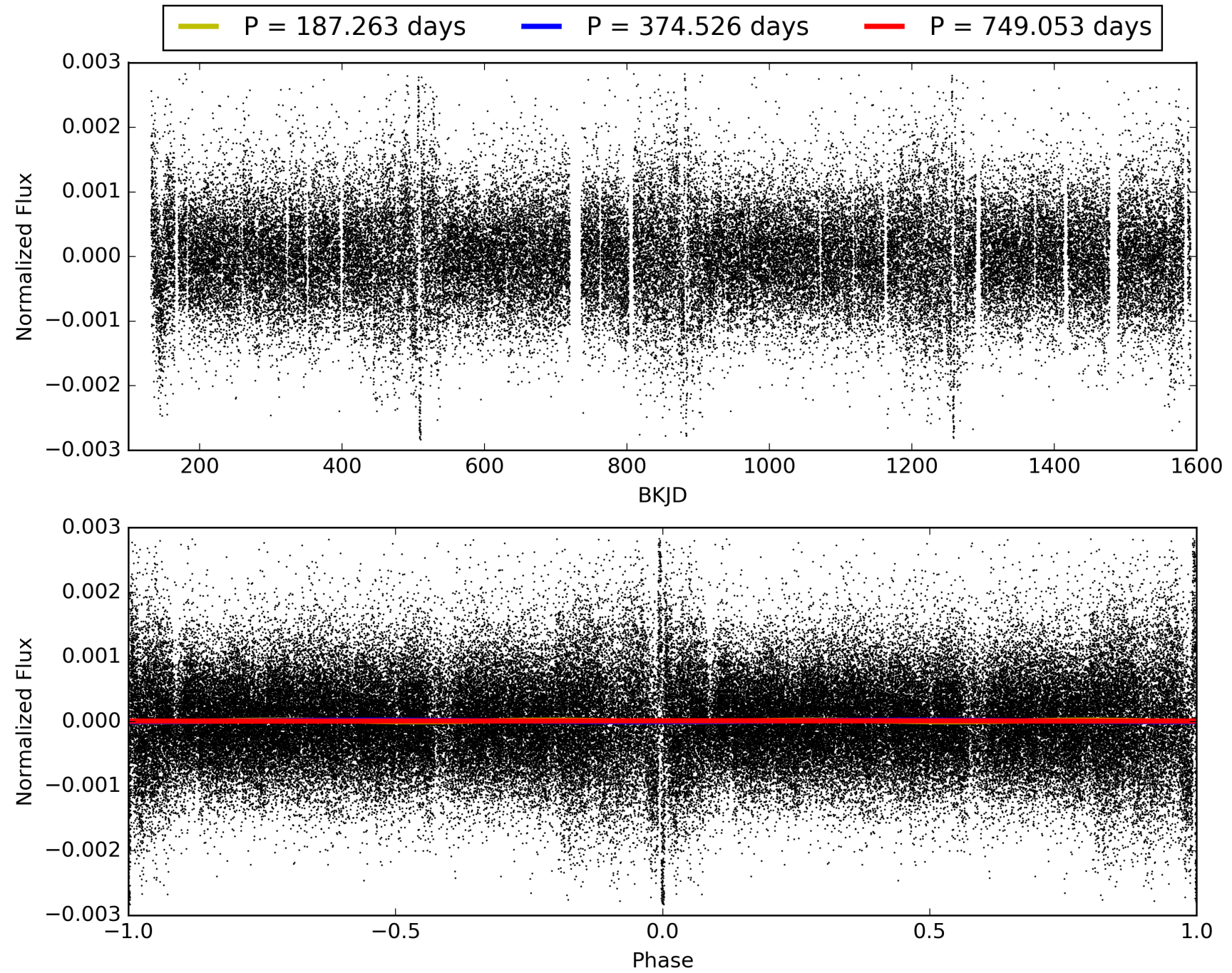


This Data Validation Report Summary was produced in the Kepler Science Operations Center Pipeline at NASA Ames Research Center

TCE 008557193-01, PDC Light Curves

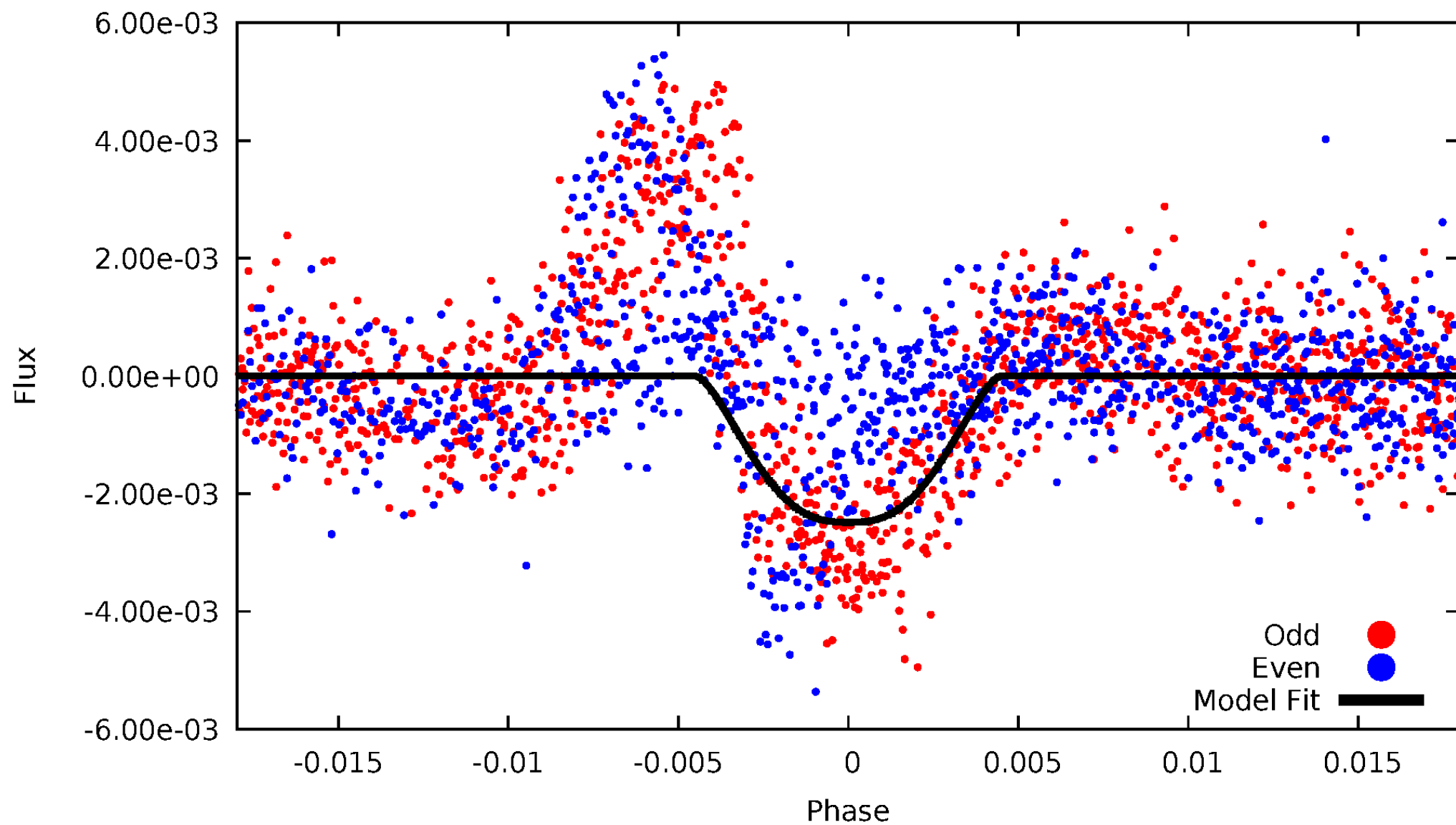


TCE 008557193-01



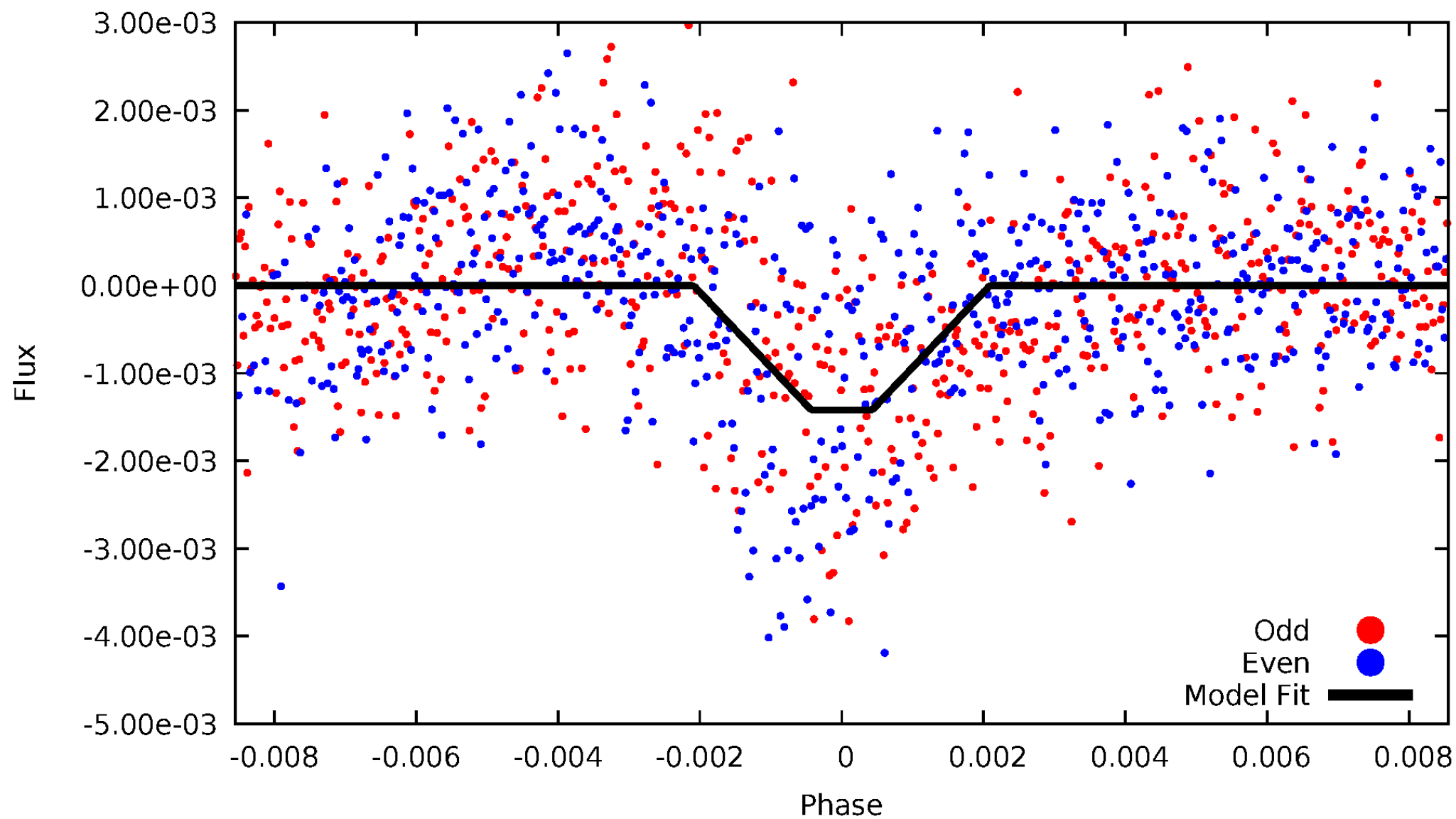
DV Odd/Even

TCE 008557193-01

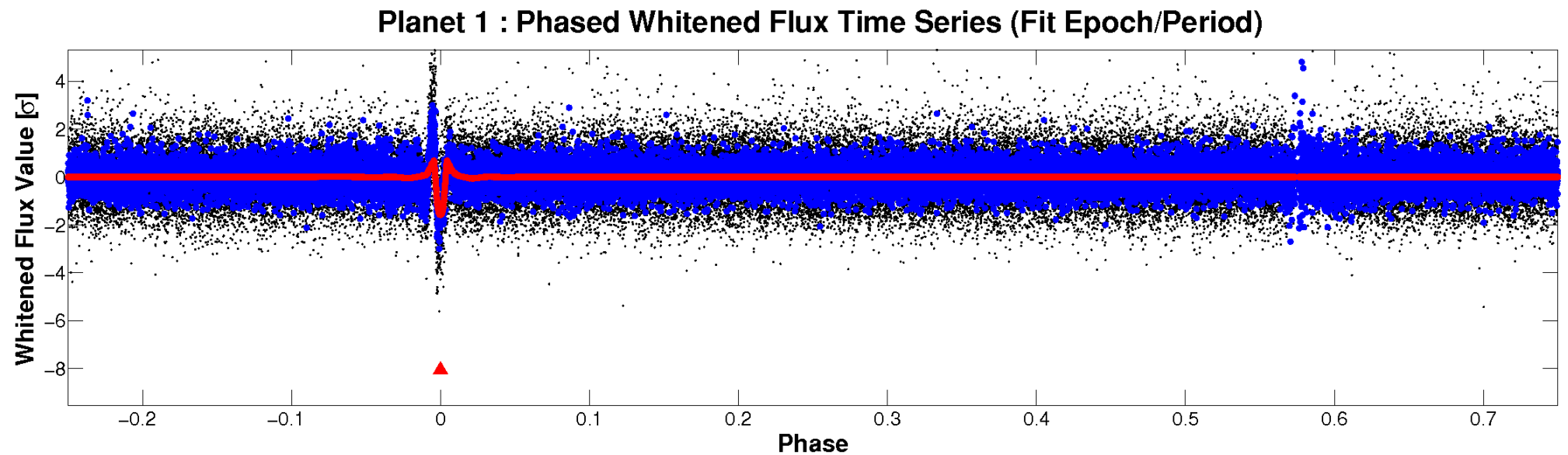
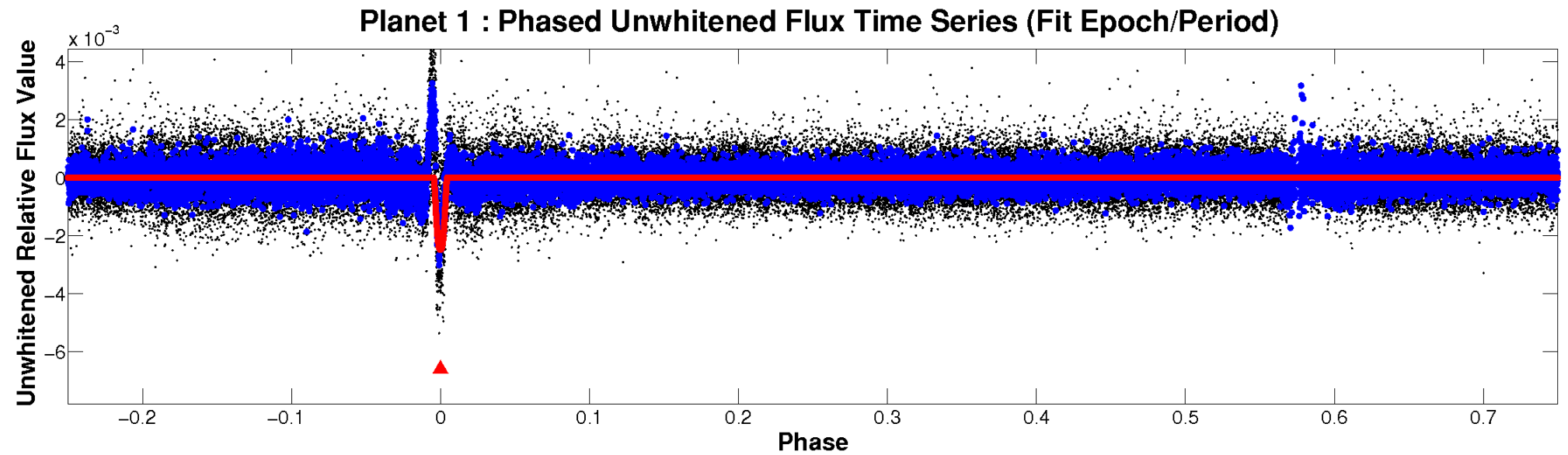


ALT Odd/Even

TCE 008557193-01

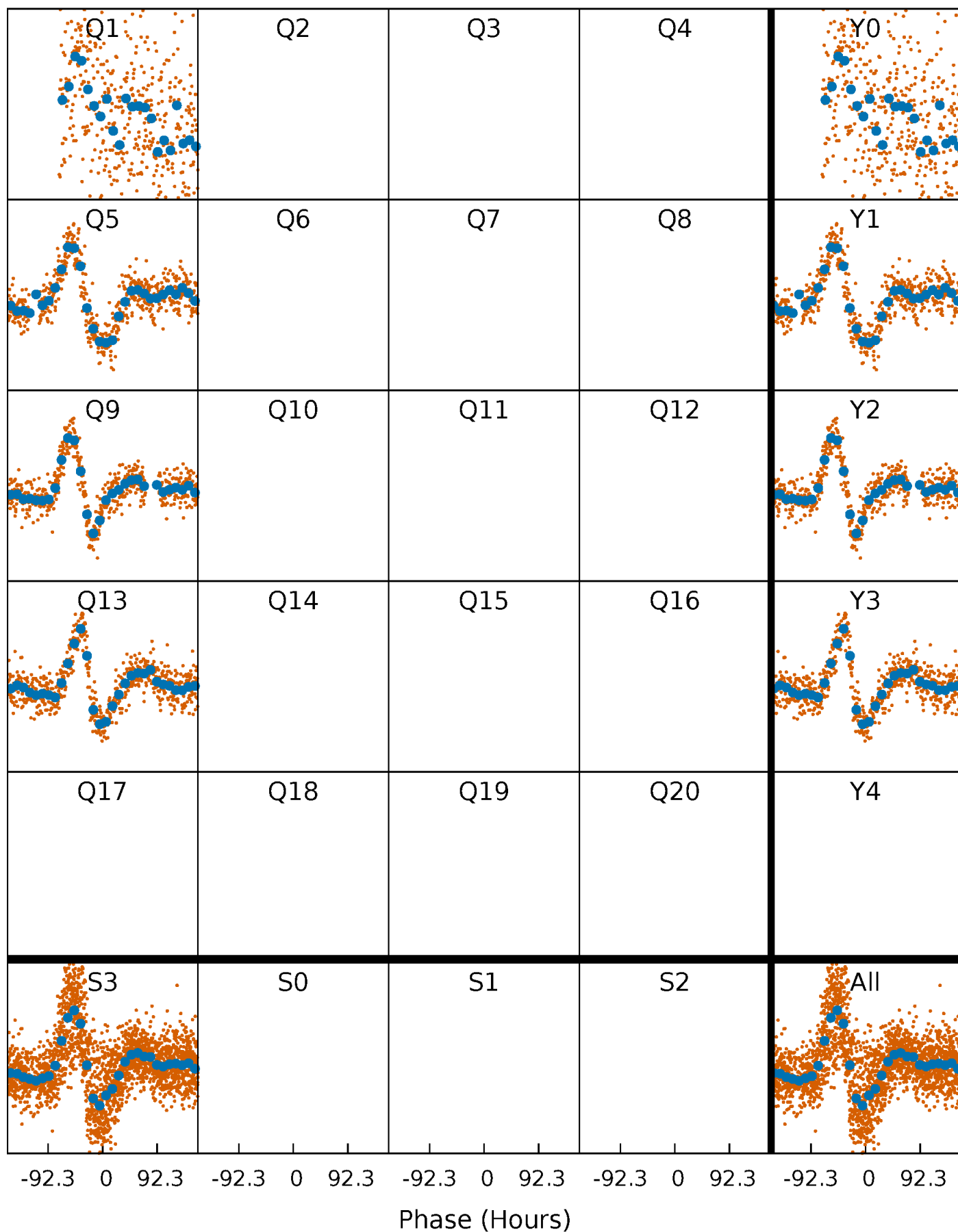


Non-Whitened Vs. Whitened Light Curve



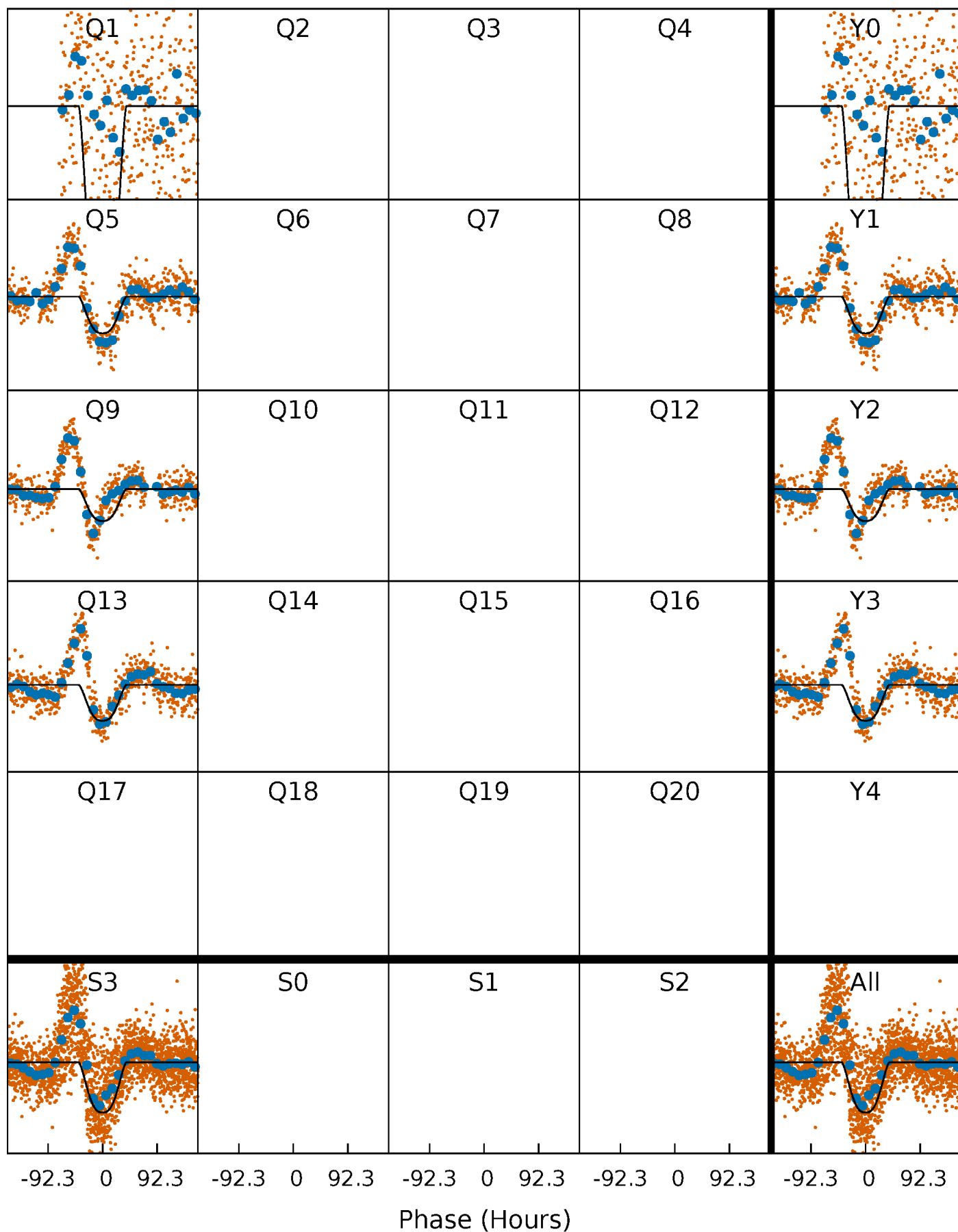
PDC Quarter-Phased Transit Curves

TCE 008557193-01 P=374.526394 Days $T_0=134.570190$ (BKJD)



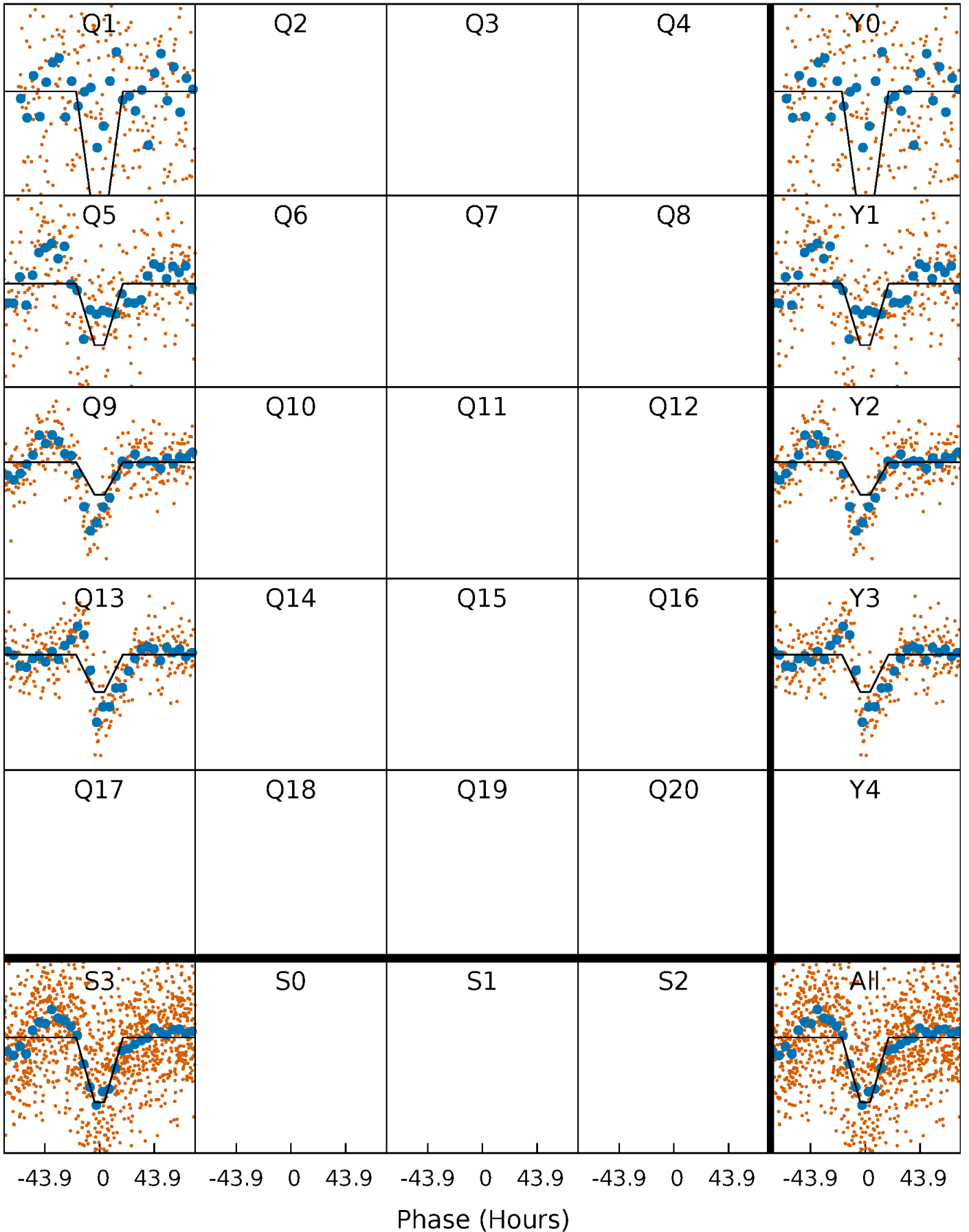
DV Quarter-Phased Transit Curves

TCE 008557193-01 P=374.526394 Days $T_0=134.570190$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

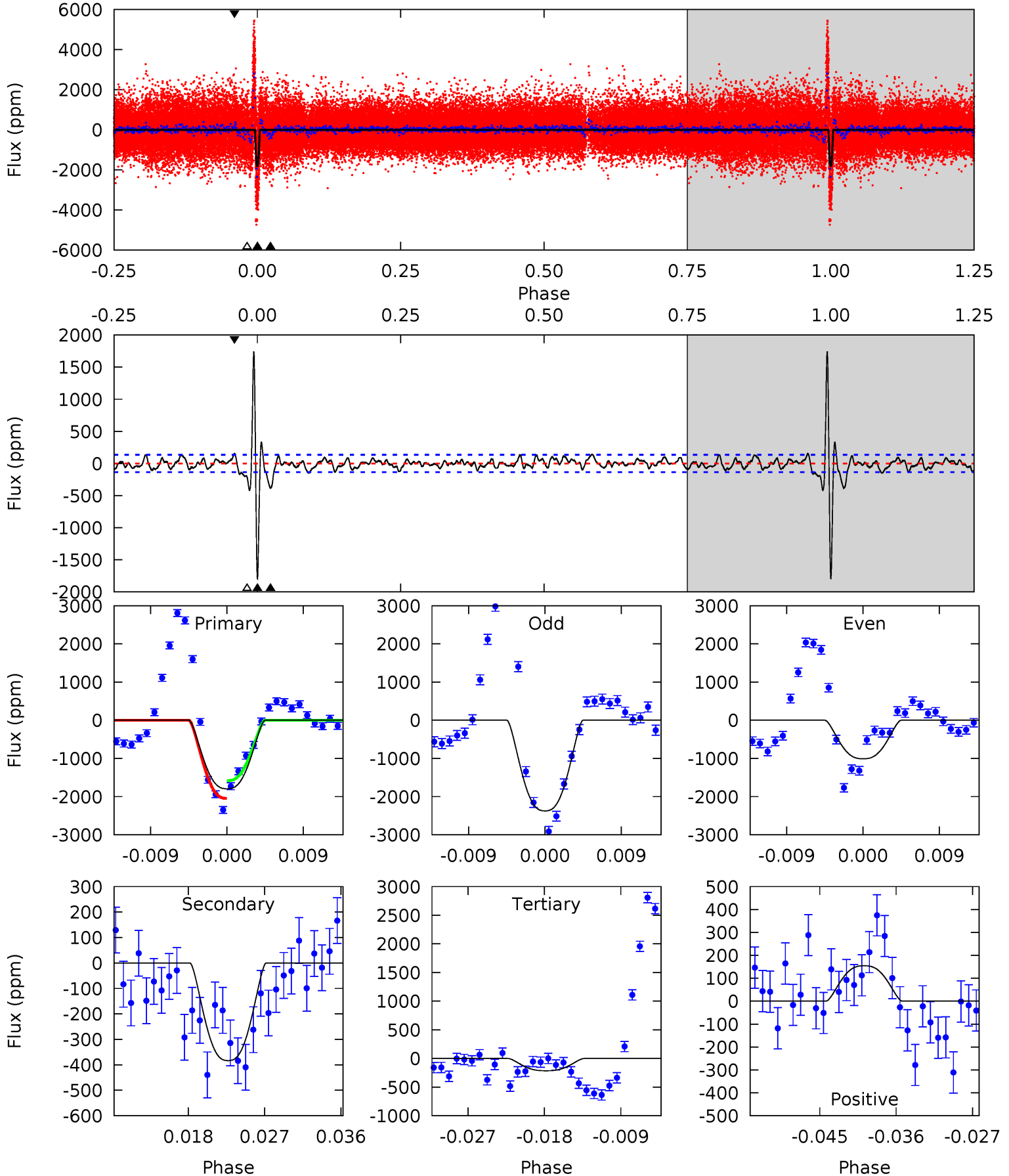
TCE 008557193-01 P=374.390497 Days $T_0=134.256358$ (BKJD)



DV Model-Shift Uniqueness Test

008557193-01, $P = 374.526394$ Days, $E = 134.570190$ Days

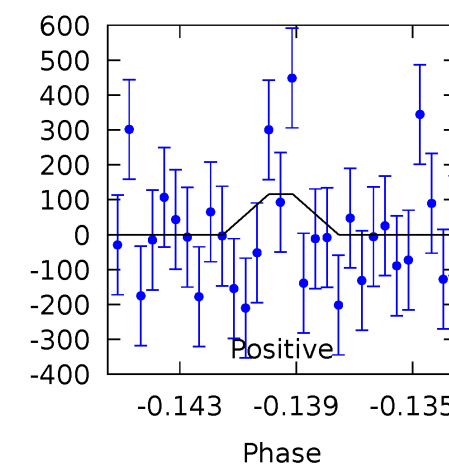
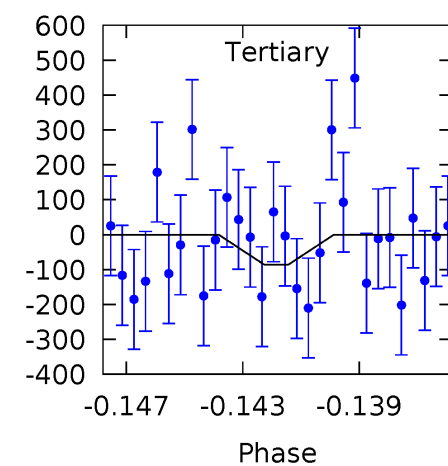
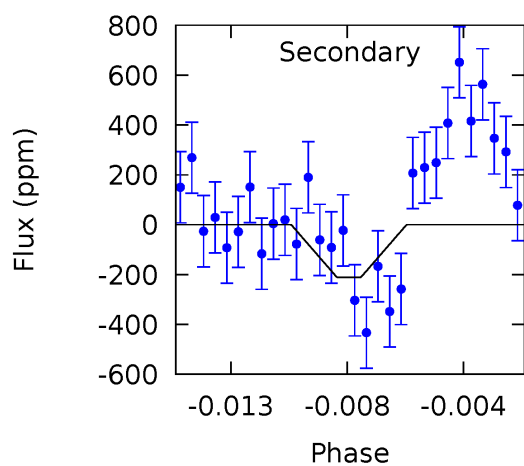
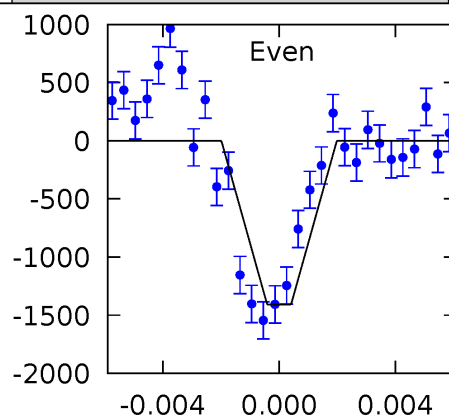
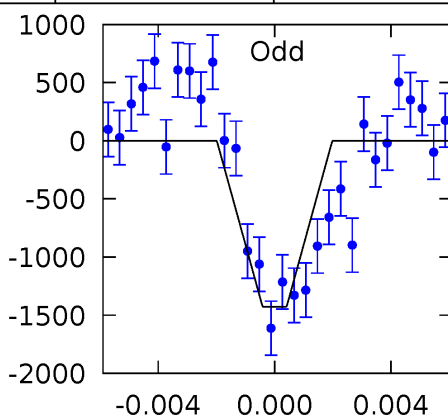
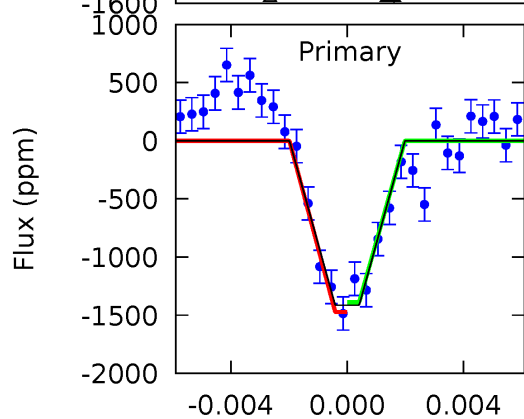
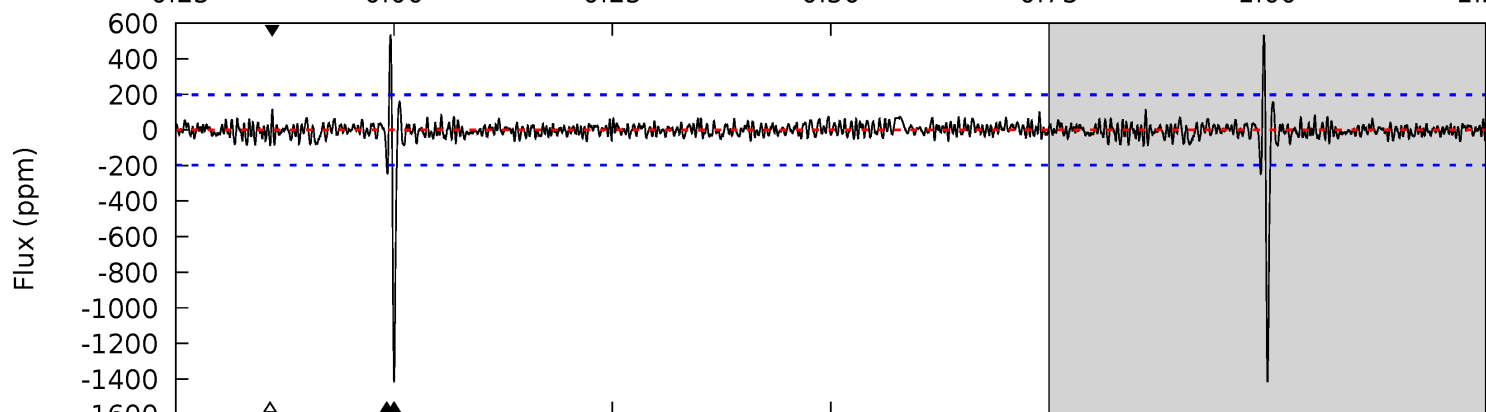
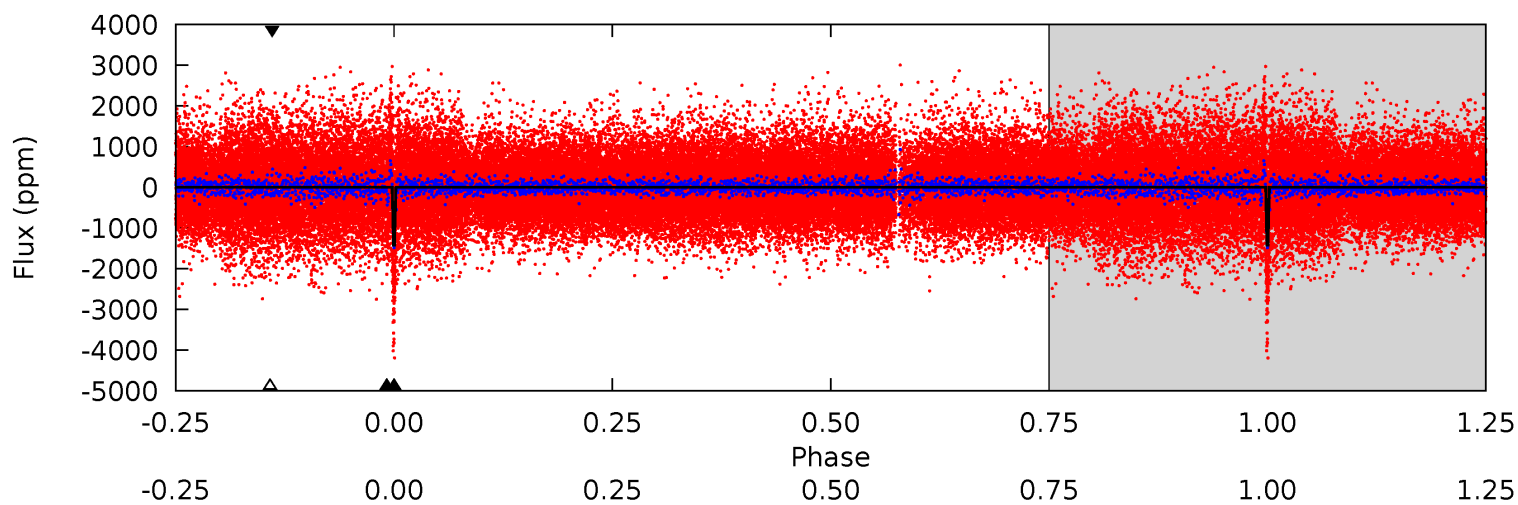
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
67.0	14.3	8.02	5.77	5.05	2.61	2.33	59.0	61.3	6.30	8.55	26.1	0.91	0.49	8.57



Alt Model-Shift Uniqueness Test

008557193-01, P = 374.390497 Days, E = 134.256358 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
37.1	5.55	2.26	3.04	5.19	2.86	0.79	34.9	34.1	3.29	2.50	0.27	1.01	0.27	1.09



Stellar Parameters For KIC 008557193

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	M (M_{\odot})	p_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	5649^{+169}_{-169}	$4.619^{+0.032}_{-0.128}$	$-0.600^{+0.300}_{-0.300}$	$0.725^{+0.135}_{-0.054}$	$0.805^{+0.078}_{-0.086}$	$2.979^{+0.495}_{-1.098}$
	+3%/-3%	+1%/-3%	+50%/-50%	+19%/-7%	+10%/-11%	+17%/-37%
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 008557193-01 / KOI

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	-384 ± 27	$4.64^{+0.47}_{-0.36}$	310^{+14}_{-12}	3706^{+110}_{-94}	8580^{+1600}_{-1444}
Alt.	-211 ± 38	$3.09^{+0.34}_{-0.29}$	311^{+16}_{-12}	3868^{+172}_{-176}	10739^{+3078}_{-2614}

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 $A_{obs} \gg 1.0$

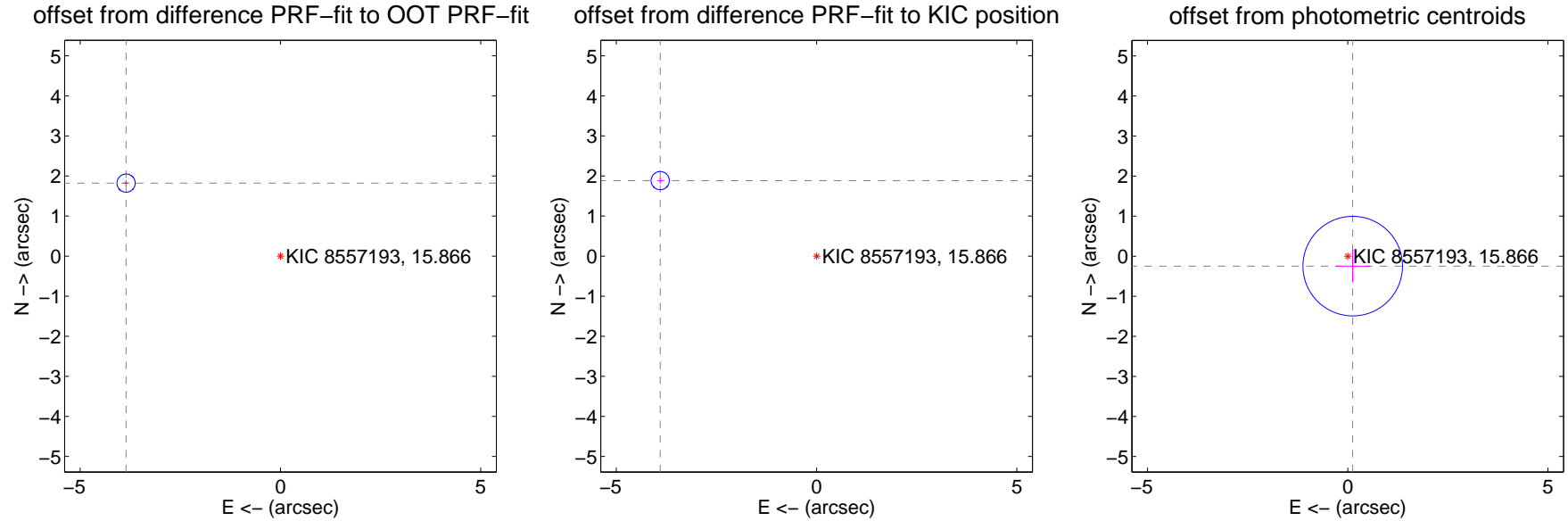
DV Centroid Data

Supplemental centroid analysis for 008557193-01. Kepler magnitude: 15.87. Transit SNR 28.00

There are 0 quarters with good PRF difference image offsets

The direct PRF centroid is offset from the target star catalog position by about 0.08 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	4.263 \pm 0.076	56.27	3.854 \pm 0.076	1.822 \pm 0.077
PRF-fit source offset from KIC position	4.335 \pm 0.076	57.21	3.904 \pm 0.076	1.884 \pm 0.077
photometric centroid source offset	0.28 \pm 0.41	0.67	-0.12 \pm 0.44	-0.25 \pm 0.41



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.



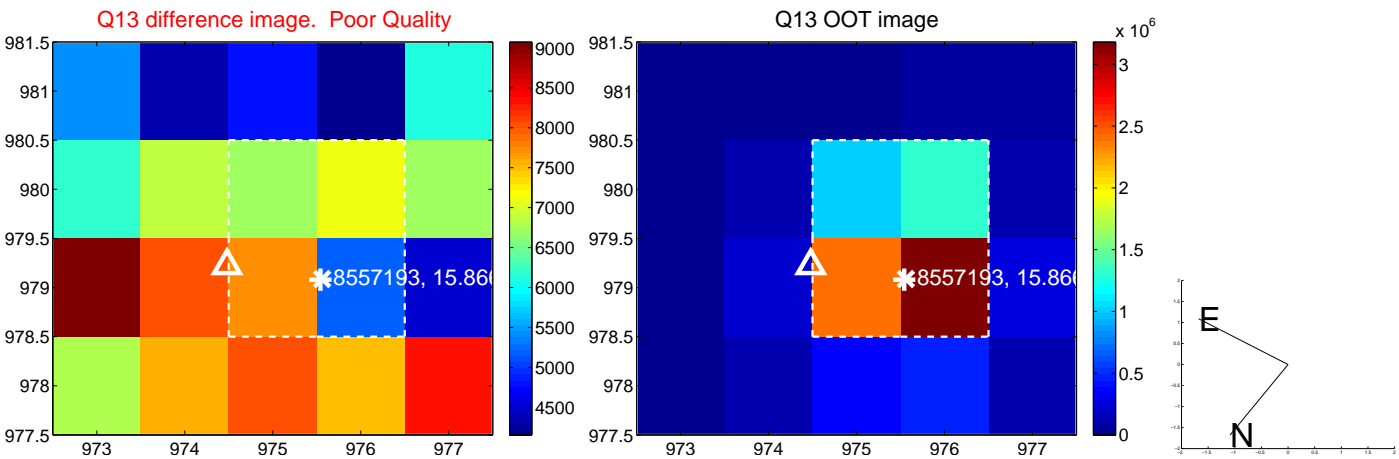
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



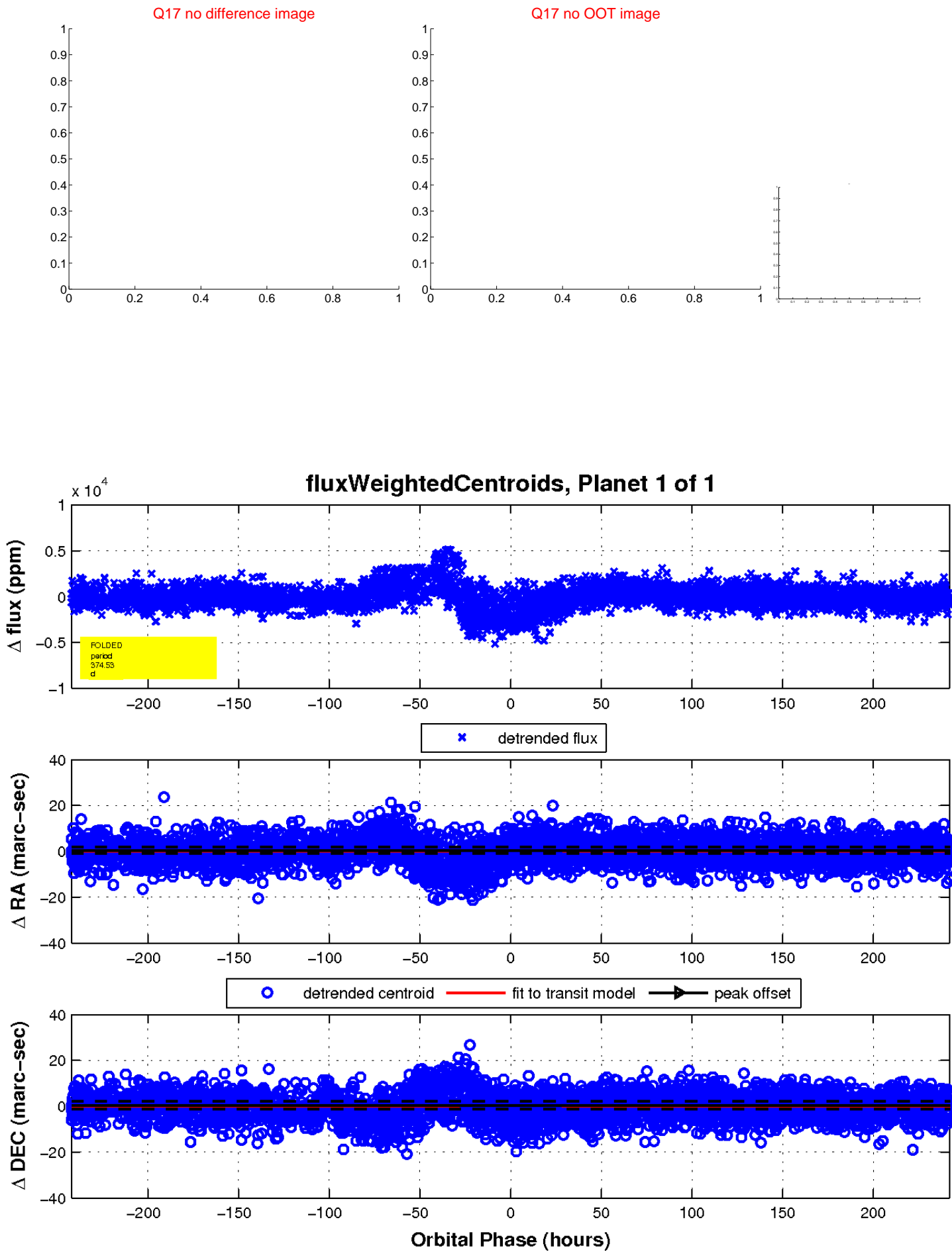
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



white ×: 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

