

KIC 008005439

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})
008005439-01	OBS	No	311.615900	370.687367	1086.1	5.129	8.7	8.6	0.84	5051	2.98	0.60

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
008005439-01	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_CHASES_MARSHALL—ALL_TRANS_CHASES—INCONSISTENT_TRANS—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.

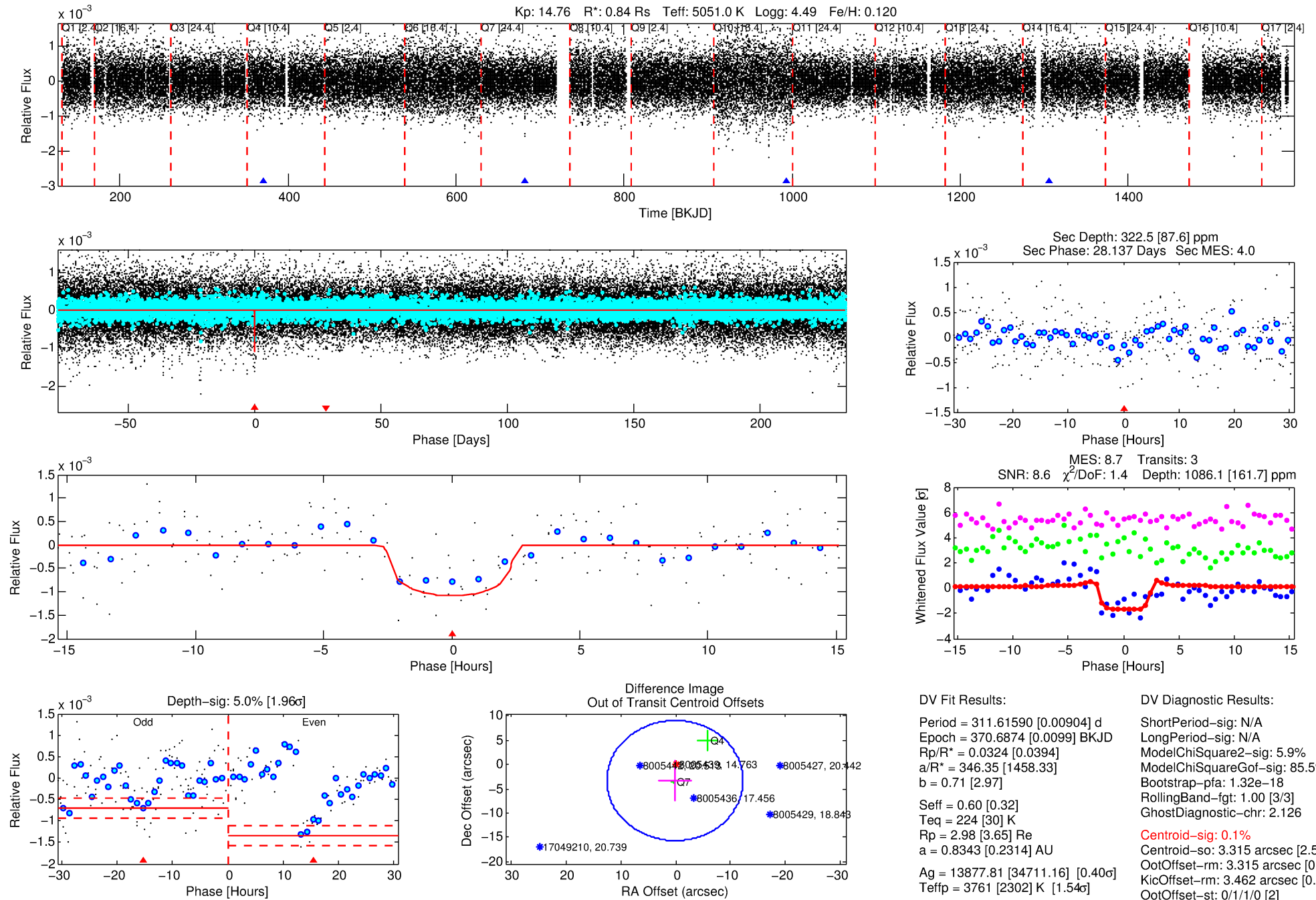
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 008005439-01

No Significant Match Found

DV One-Page Summary

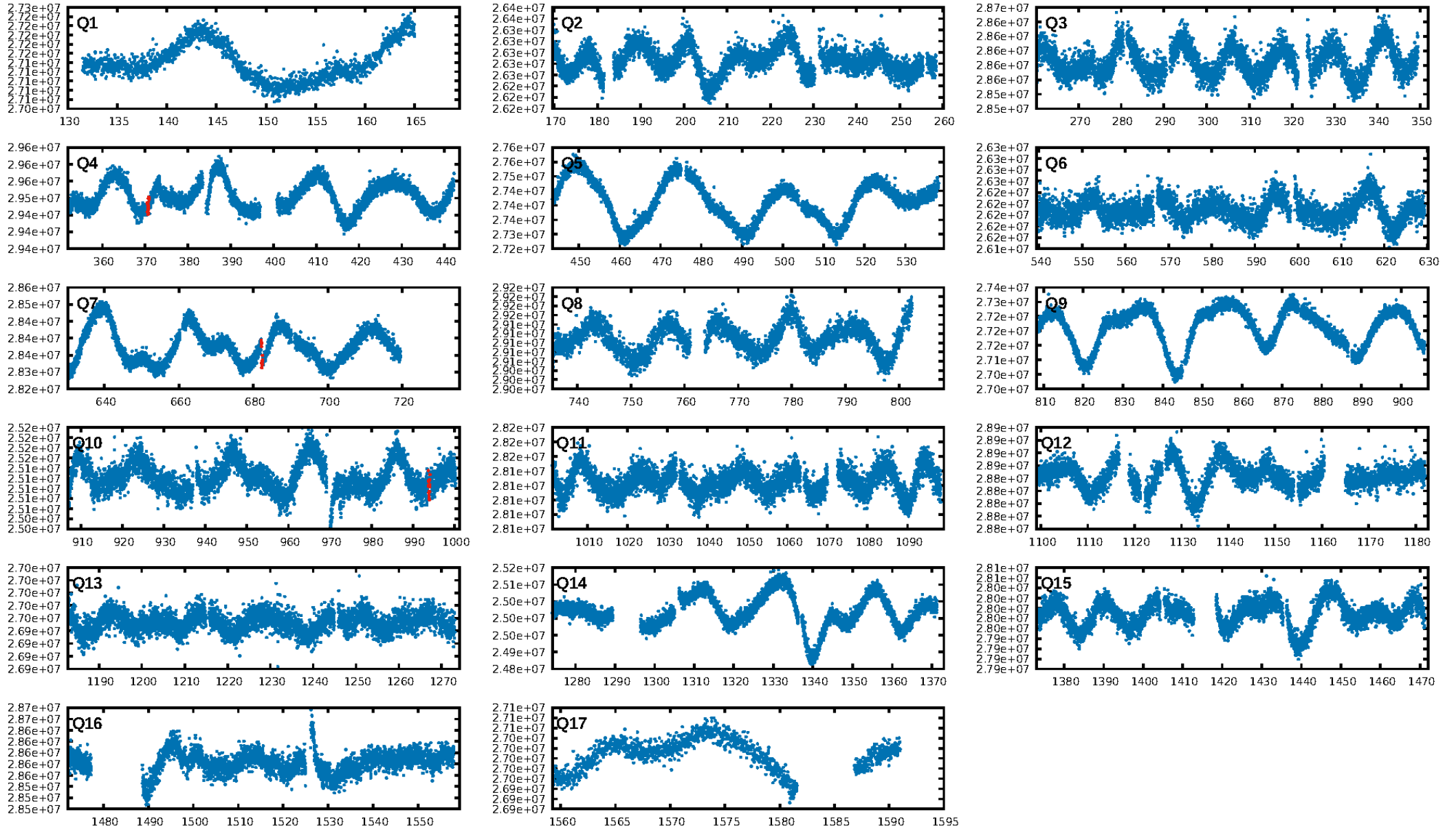
KIC: 8005439 Candidate: 1 of 1 Period: 311.616 d



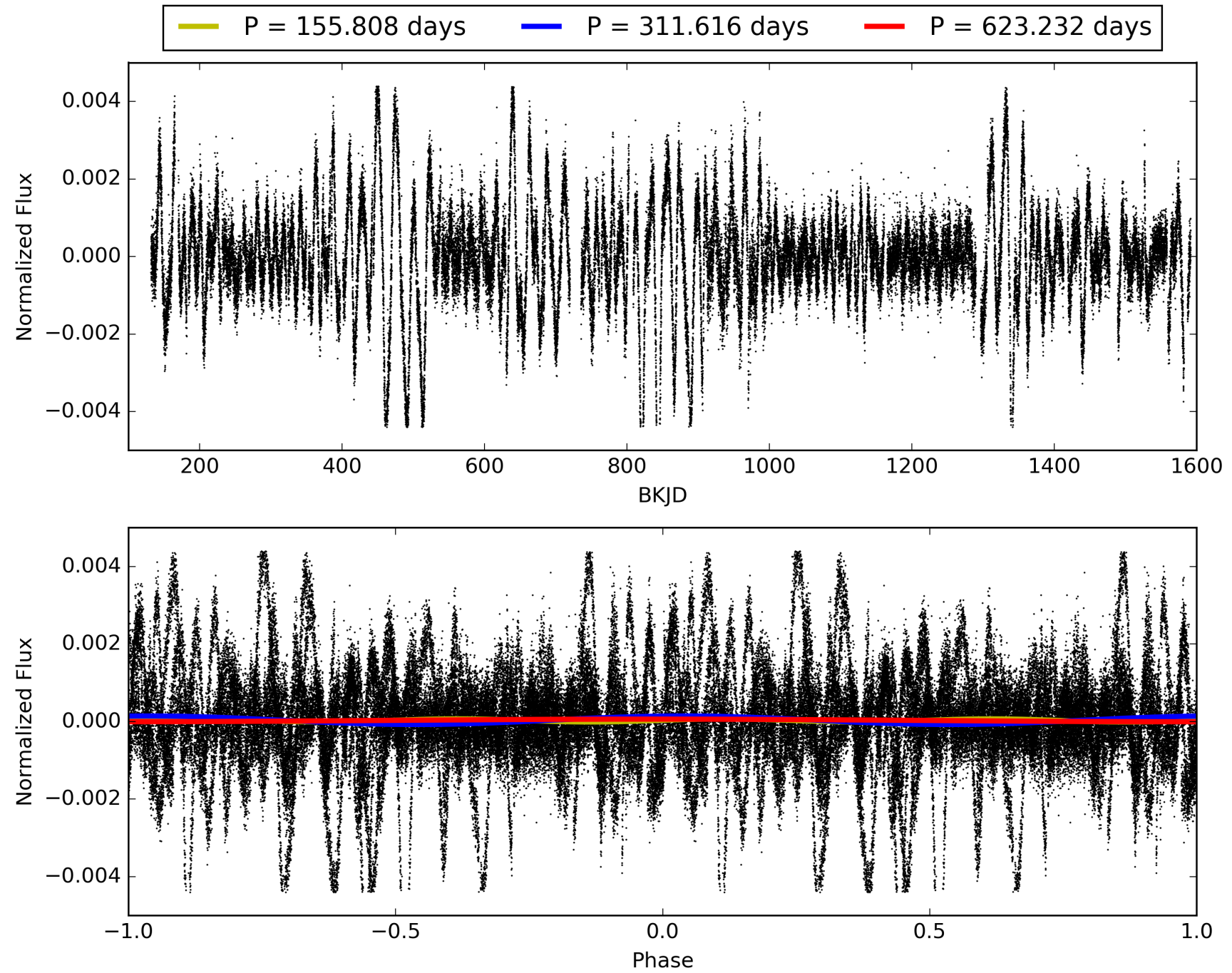
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 01-Feb-2016 04:33:34 Z

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

TCE 008005439-01, PDC Light Curves

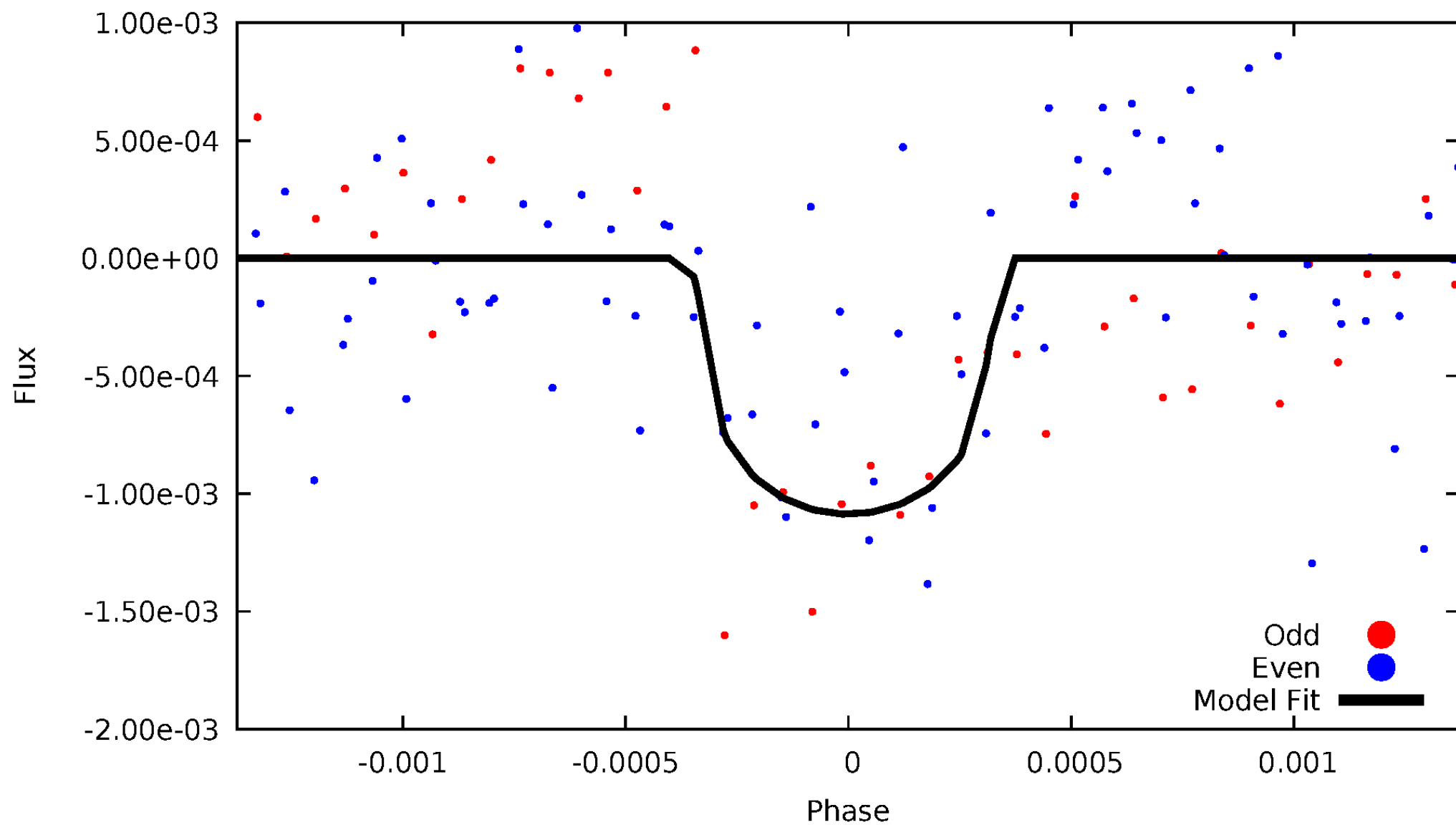


TCE 008005439-01



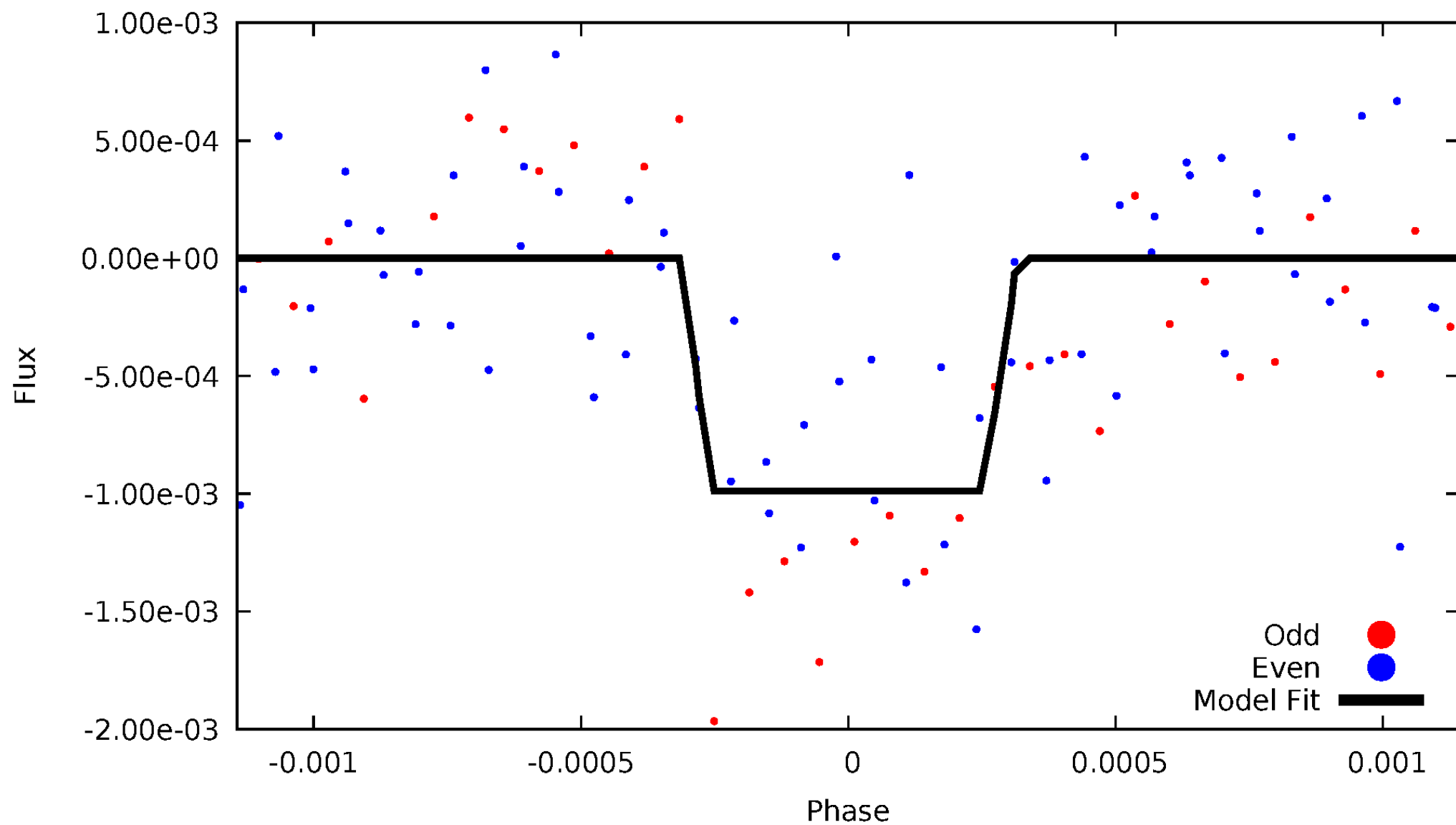
DV Odd/Even

TCE 008005439-01



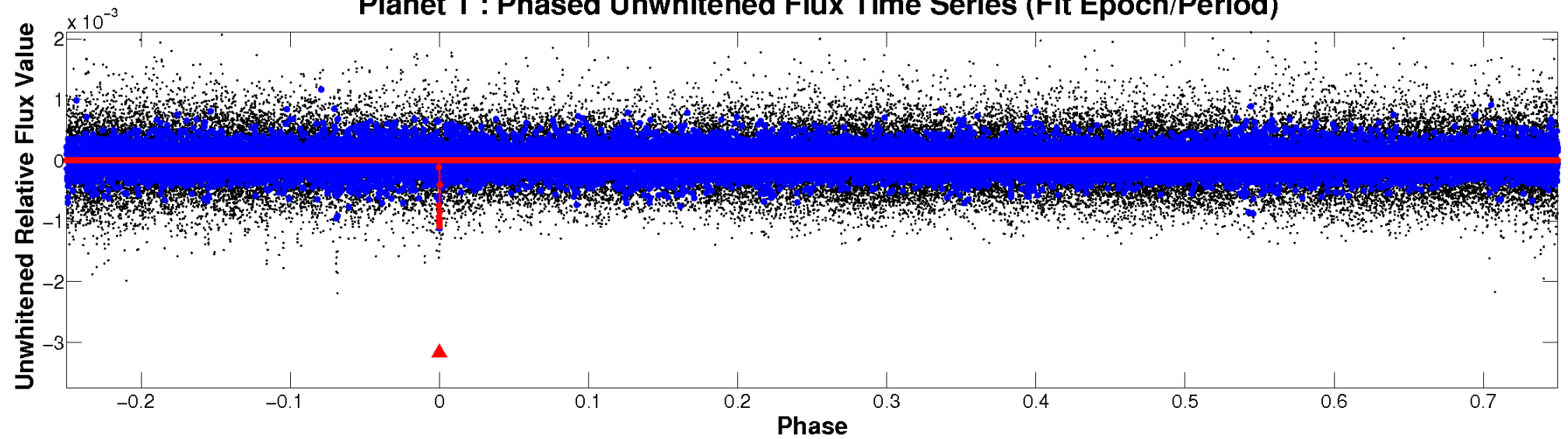
ALT Odd/Even

TCE 008005439-01

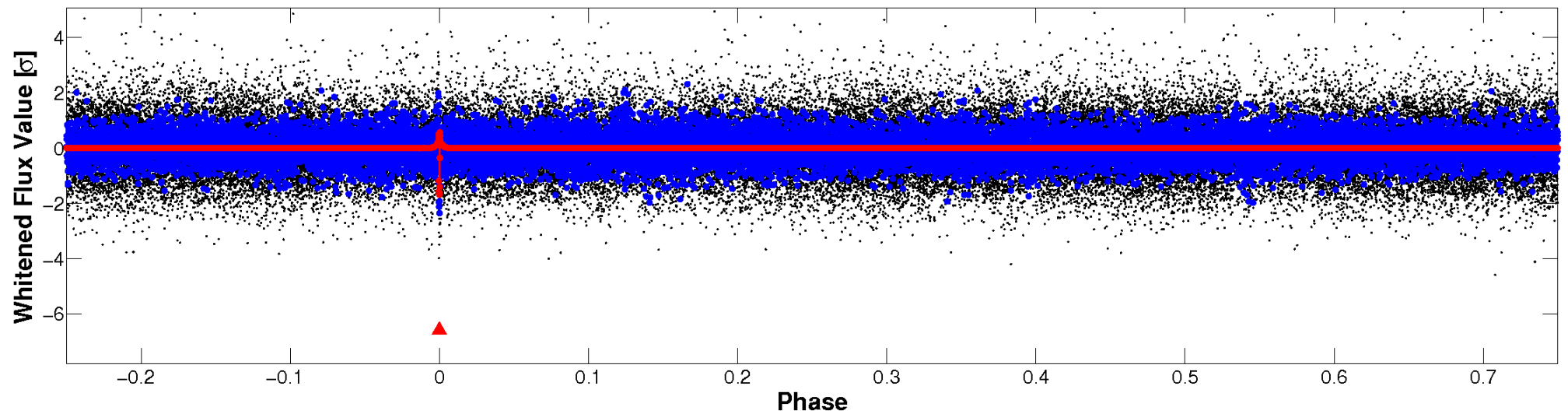


Non-Whitened Vs. Whitened Light Curve

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

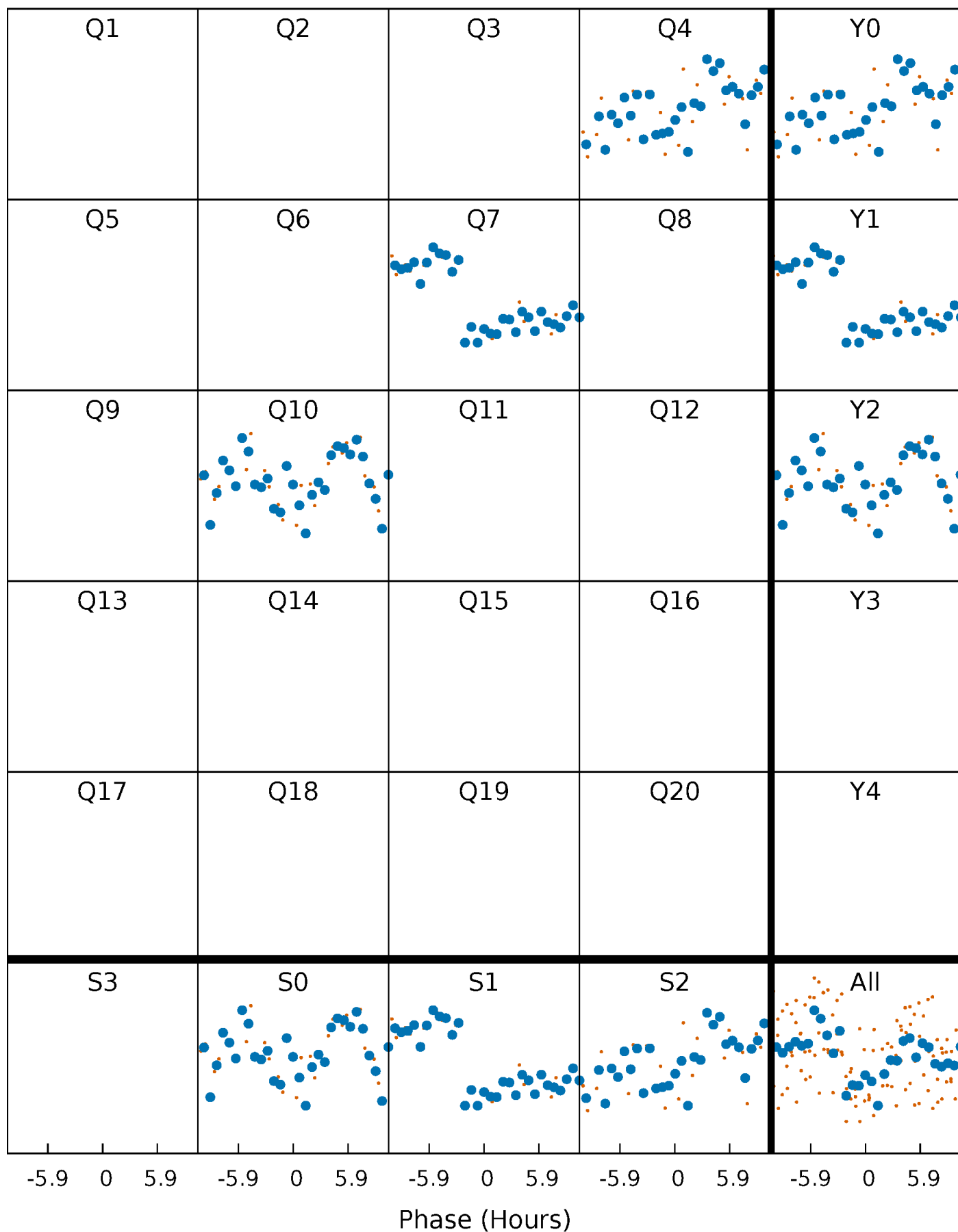


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



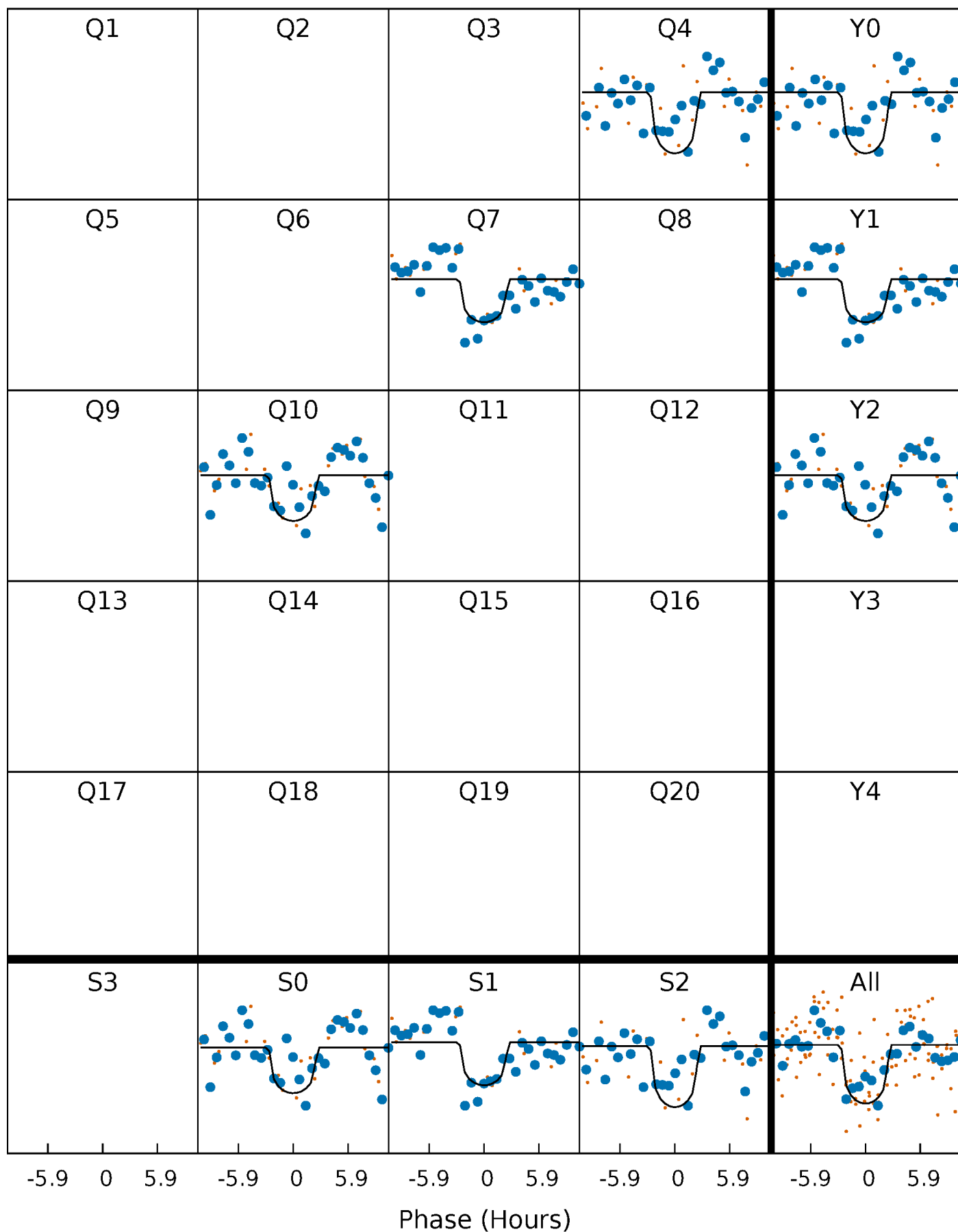
PDC Quarter-Phased Transit Curves

TCE 008005439-01 P=311.615900 Days $T_0=370.687367$ (BKJD)



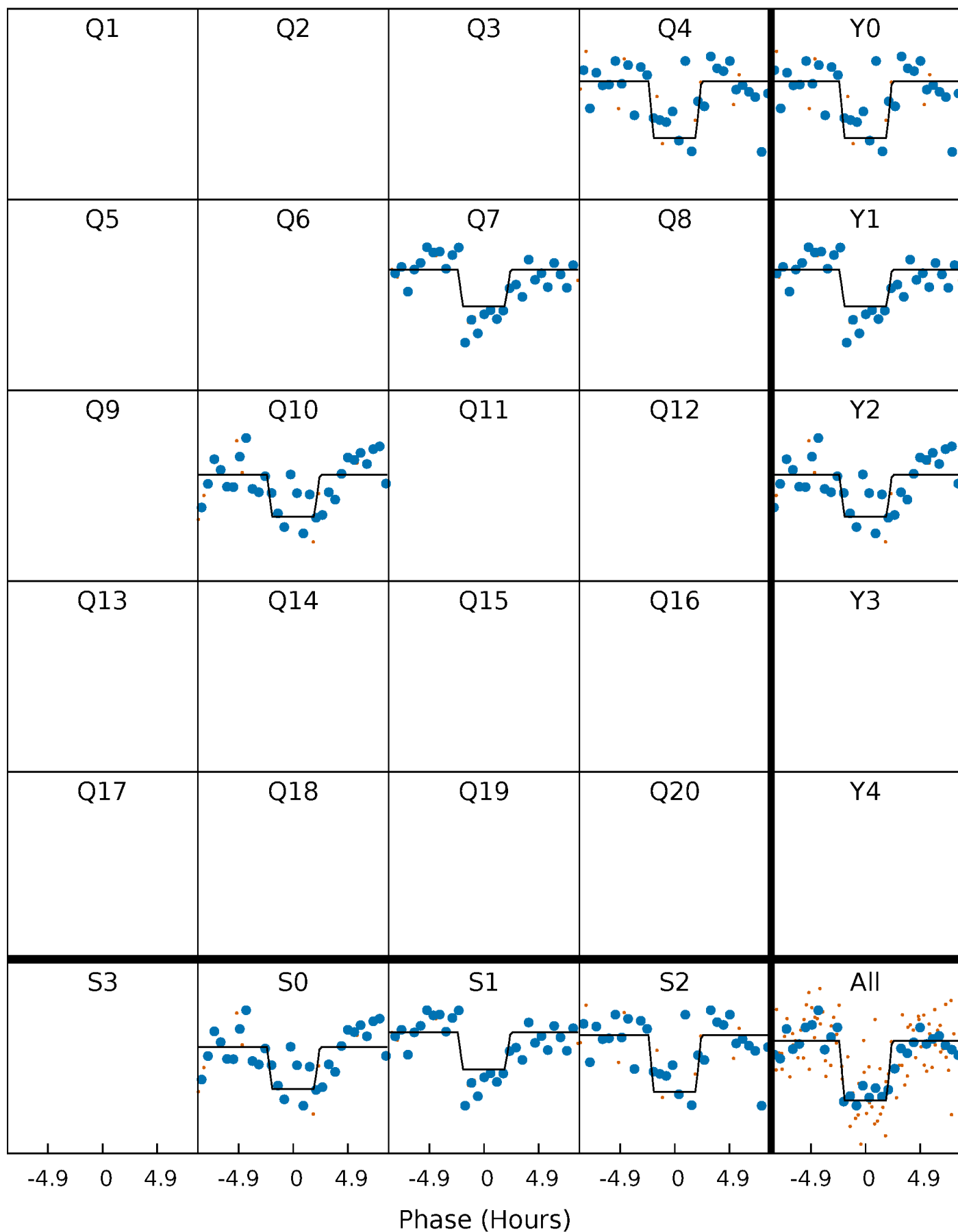
DV Quarter-Phased Transit Curves

TCE 008005439-01 P=311.615900 Days $T_0=370.687367$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

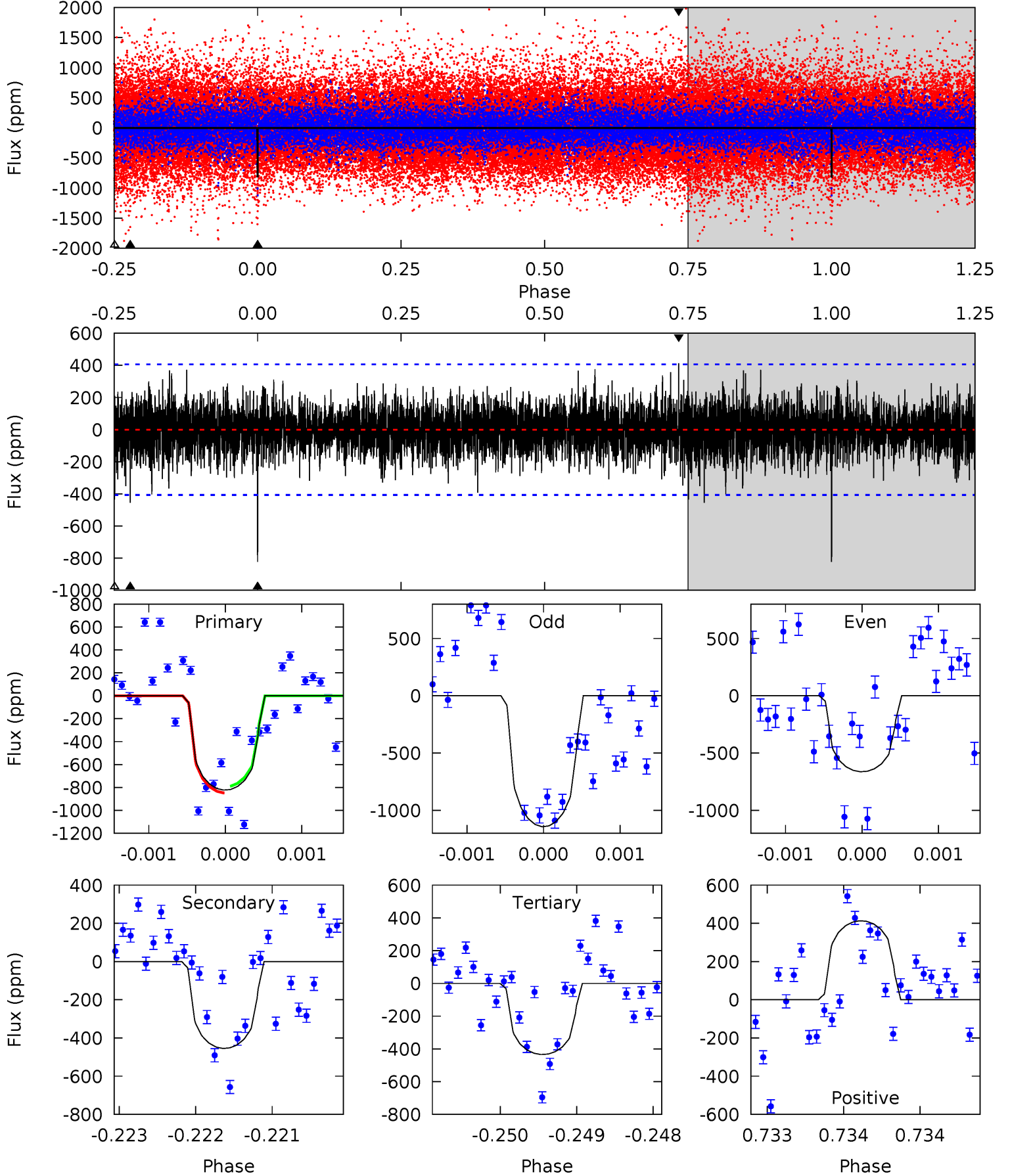
TCE 008005439-01 P=311.604979 Days $T_0=370.690007$ (BKJD)



DV Model-Shift Uniqueness Test

008005439-01, P = 311.615900 Days, E = 59.071467 Days

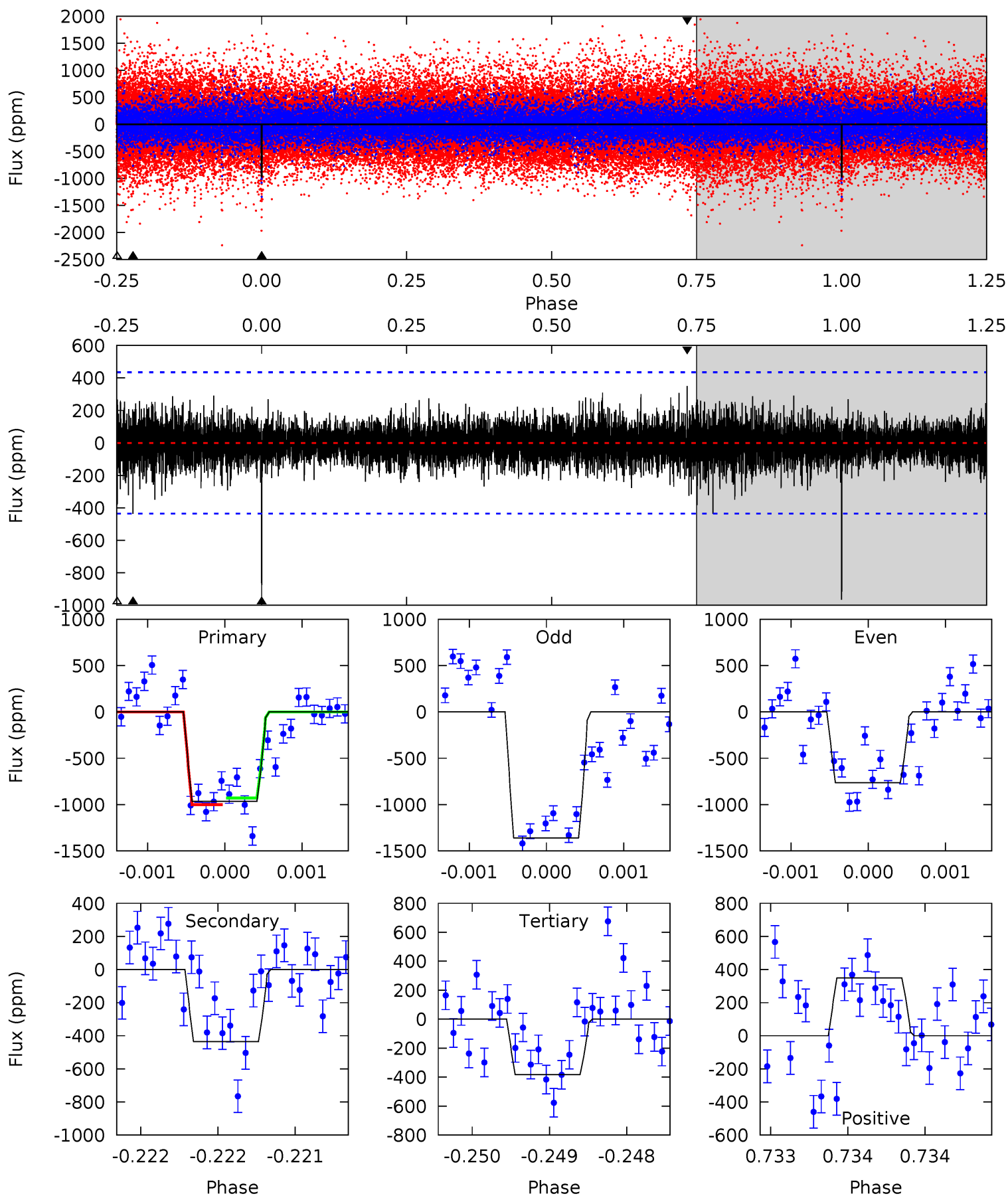
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
11.2	6.16	5.89	5.60	5.51	3.38	1.39	5.27	5.55	0.28	0.56	3.08	1.17	0.33	0.39



Alt Model-Shift Uniqueness Test

008005439-01, P = 311.604979 Days, E = 59.085028 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
12.3	5.55	4.88	4.45	5.54	3.44	1.04	7.42	7.84	0.68	1.10	3.61	1.11	0.27	0.45



Stellar Parameters For KIC 008005439

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	M (M_{\odot})	p_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	5051^{+149}_{-149}	$4.487^{+0.084}_{-0.336}$	$0.120^{+0.250}_{-0.250}$	$0.844^{+0.129}_{-0.090}$	$0.796^{+0.092}_{-0.056}$	$1.868^{+0.755}_{-0.921}$
	+3%/-3%	+2%/-7%	+208%/-208%	+15%/-11%	+12%/-7%	+40%/-49%
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 008005439-01 / KOI

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	-455 ± 74	$4.24^{+3.28}_{-2.76}$	320^{+20}_{-15}	3849^{+1930}_{-648}	9675^{+67413}_{-6603}
Alt.	-436 ± 78	$4.07^{+3.42}_{-2.58}$	319^{+19}_{-16}	3868^{+1795}_{-684}	10041^{+64415}_{-7130}

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

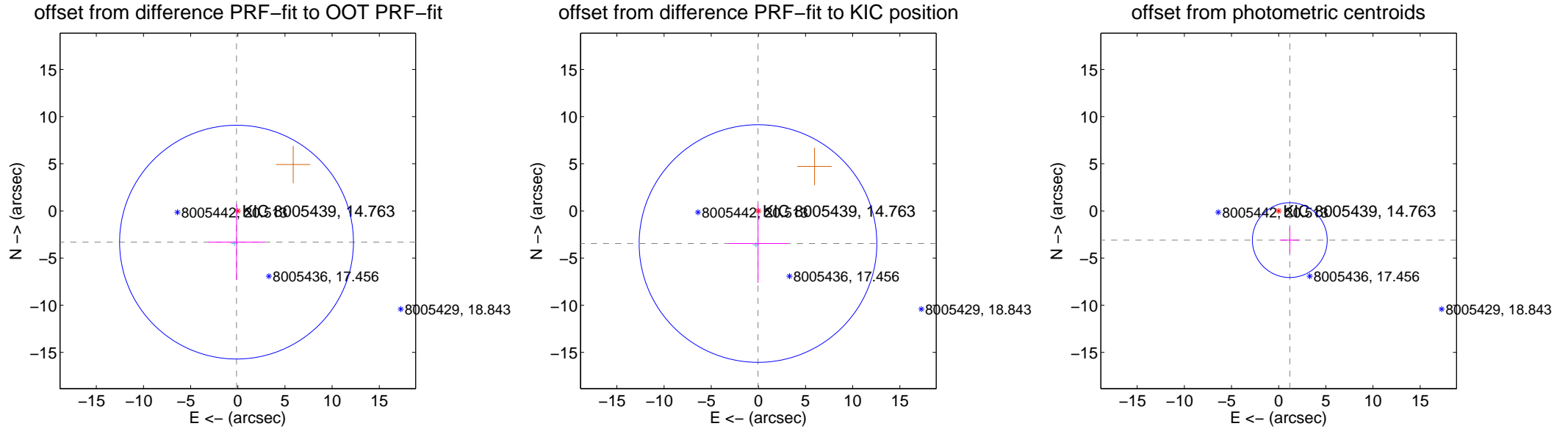
DV Centroid Data

Supplemental centroid analysis for 008005439-01. Kepler magnitude: 14.76. Transit SNR 8.61

There are 1 quarters with good PRF difference image offsets

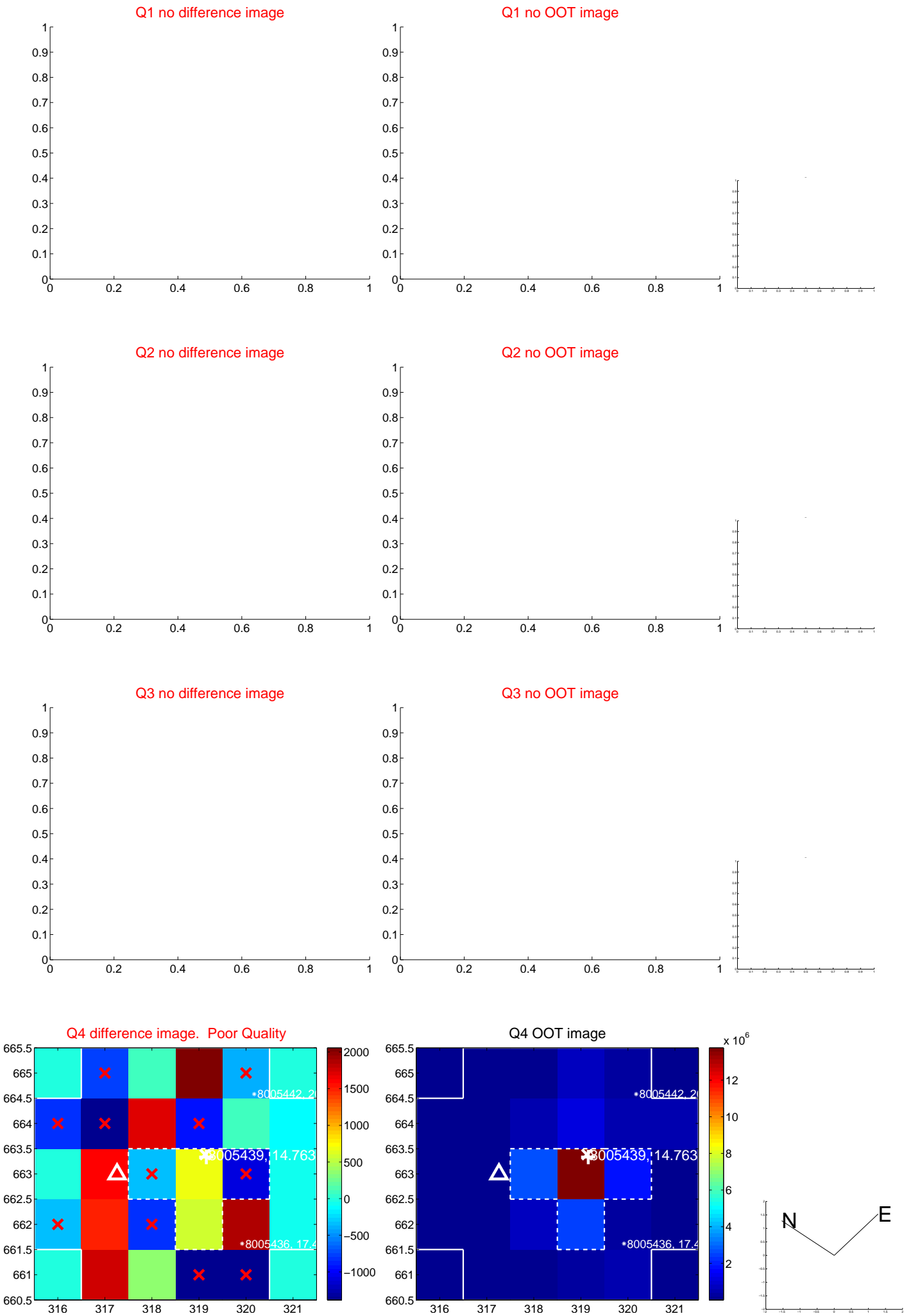
The direct PRF centroid is offset from the target star catalog position by about 0.18 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	3.315 ± 4.132	0.80	0.136 ± 2.982	-3.312 ± 4.013
PRF-fit source offset from KIC position	3.462 ± 4.200	0.82	0.041 ± 3.107	-3.462 ± 4.164
photometric centroid source offset	3.32 ± 1.32	2.51	-1.18 ± 1.07	-3.10 ± 1.36

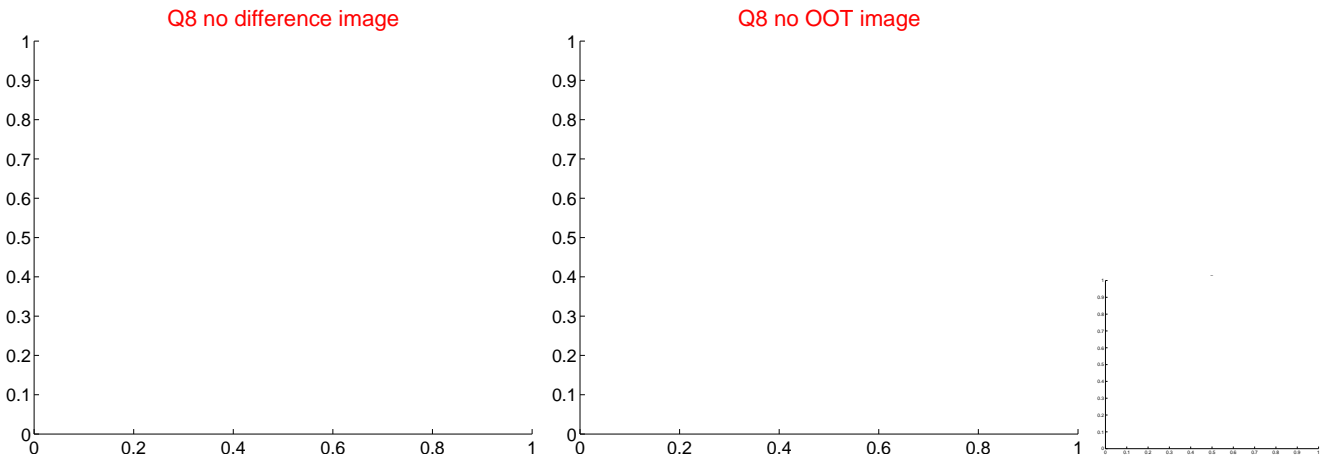
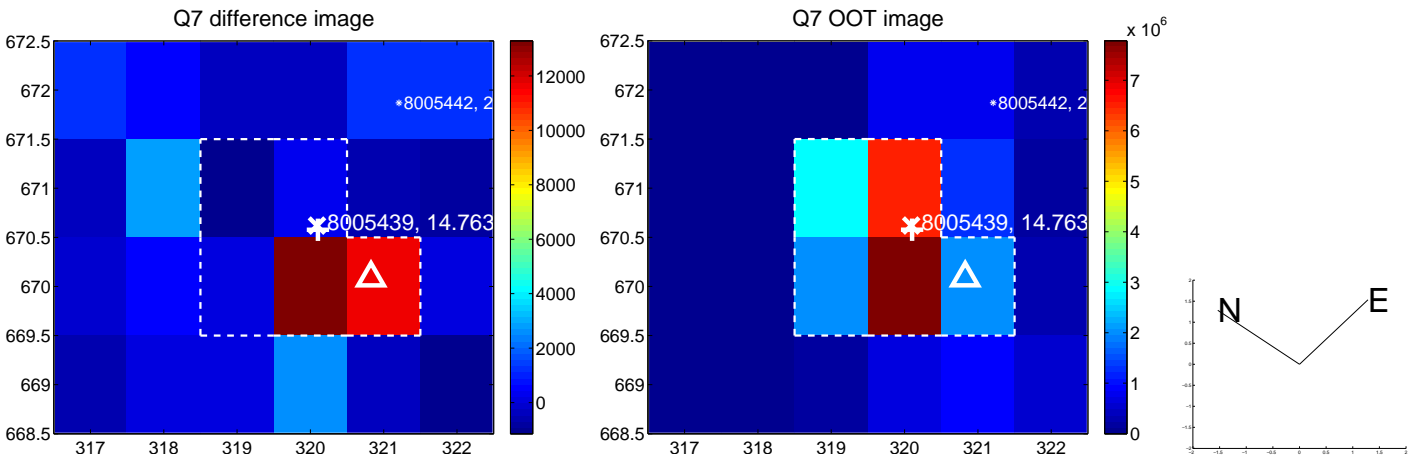
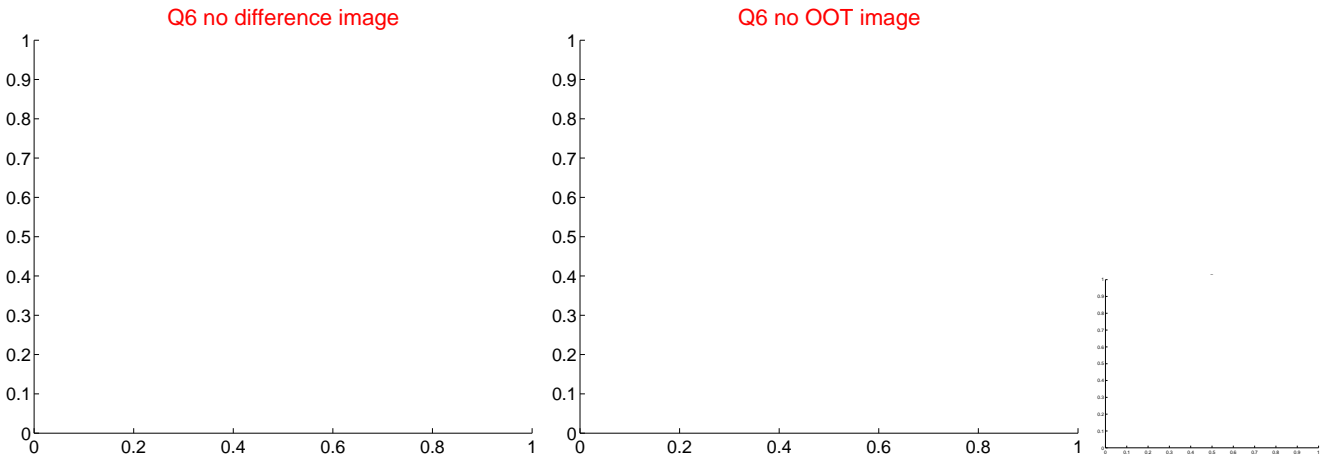
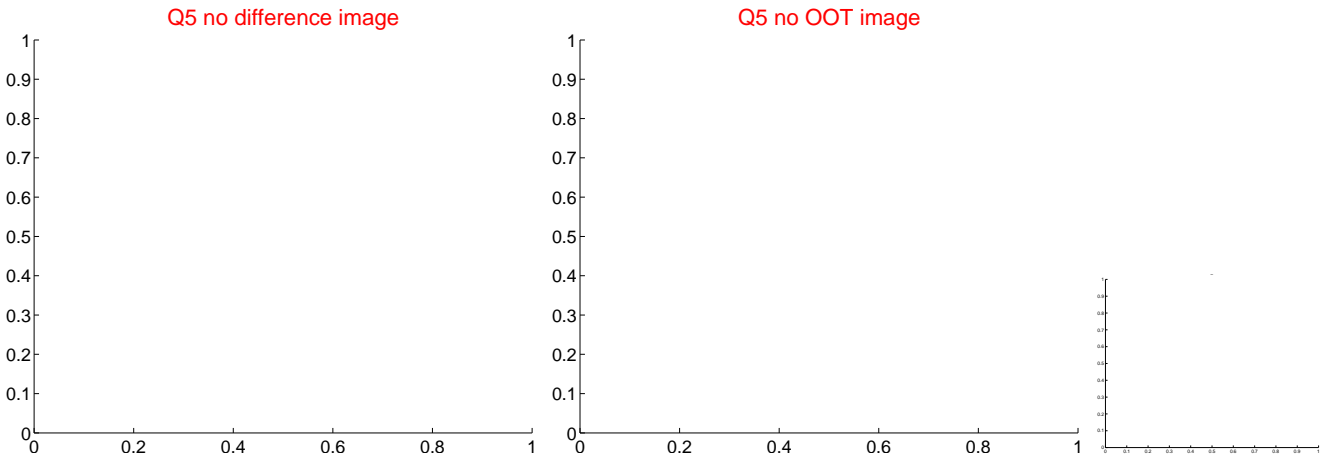


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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

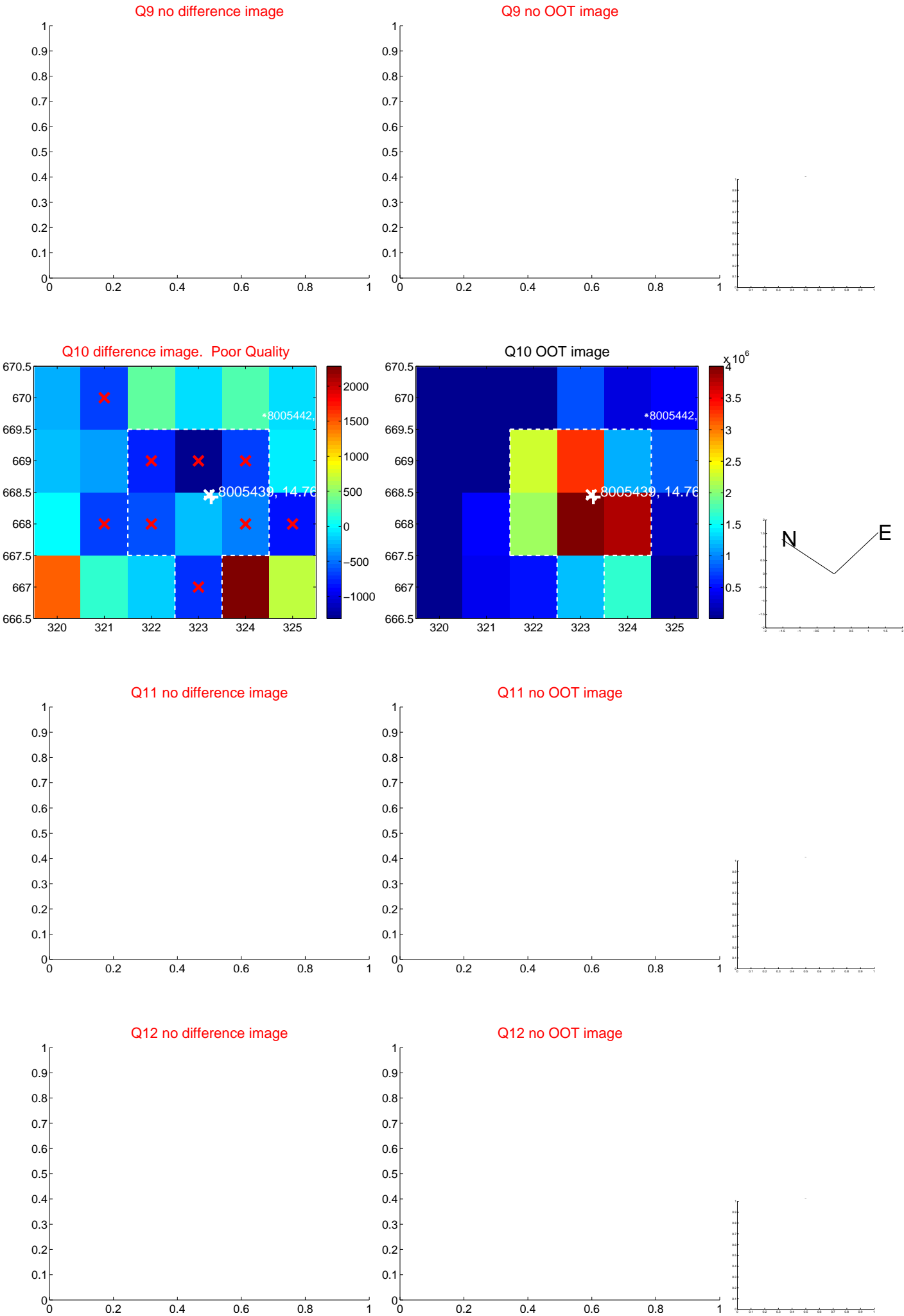
white ×: KIC target position; +: OOT centroid; △: difference centroid. red ✕: large negative pixel value.



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



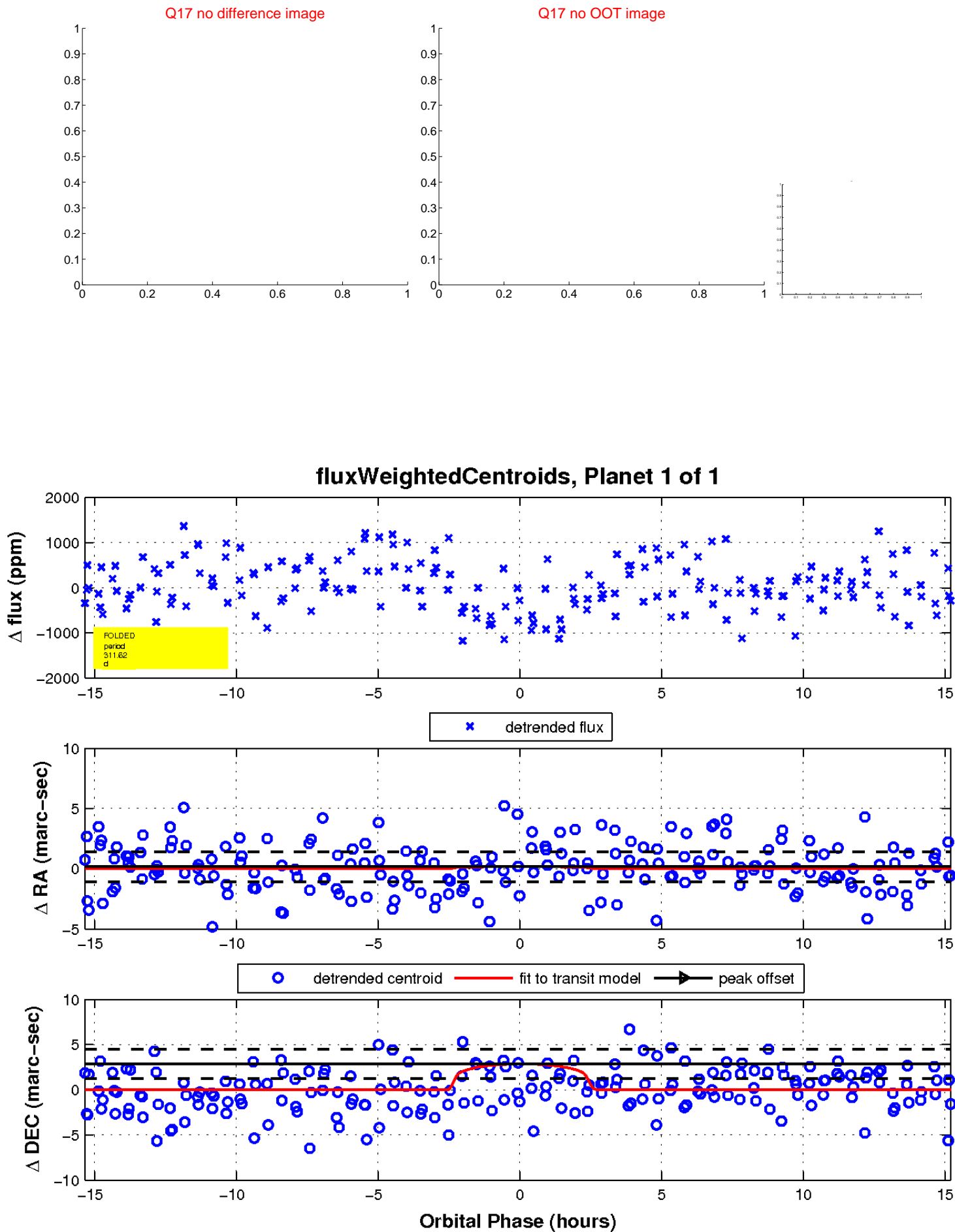
white ×: KIC target position; +: OOT centroid; △: difference centroid. red ✕: large negative pixel value.



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



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



UKIRT Image

Declination

