

KIC 008244755

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})
008244755-01	OBS	No	1.140766	132.476414	1291.5	1.686	7.2	6.3	0.81	5376	3.53	1235.56

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
008244755-01	OBS	FP	0.00	1	0	0	0	LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—CENT_KIC_POS

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

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

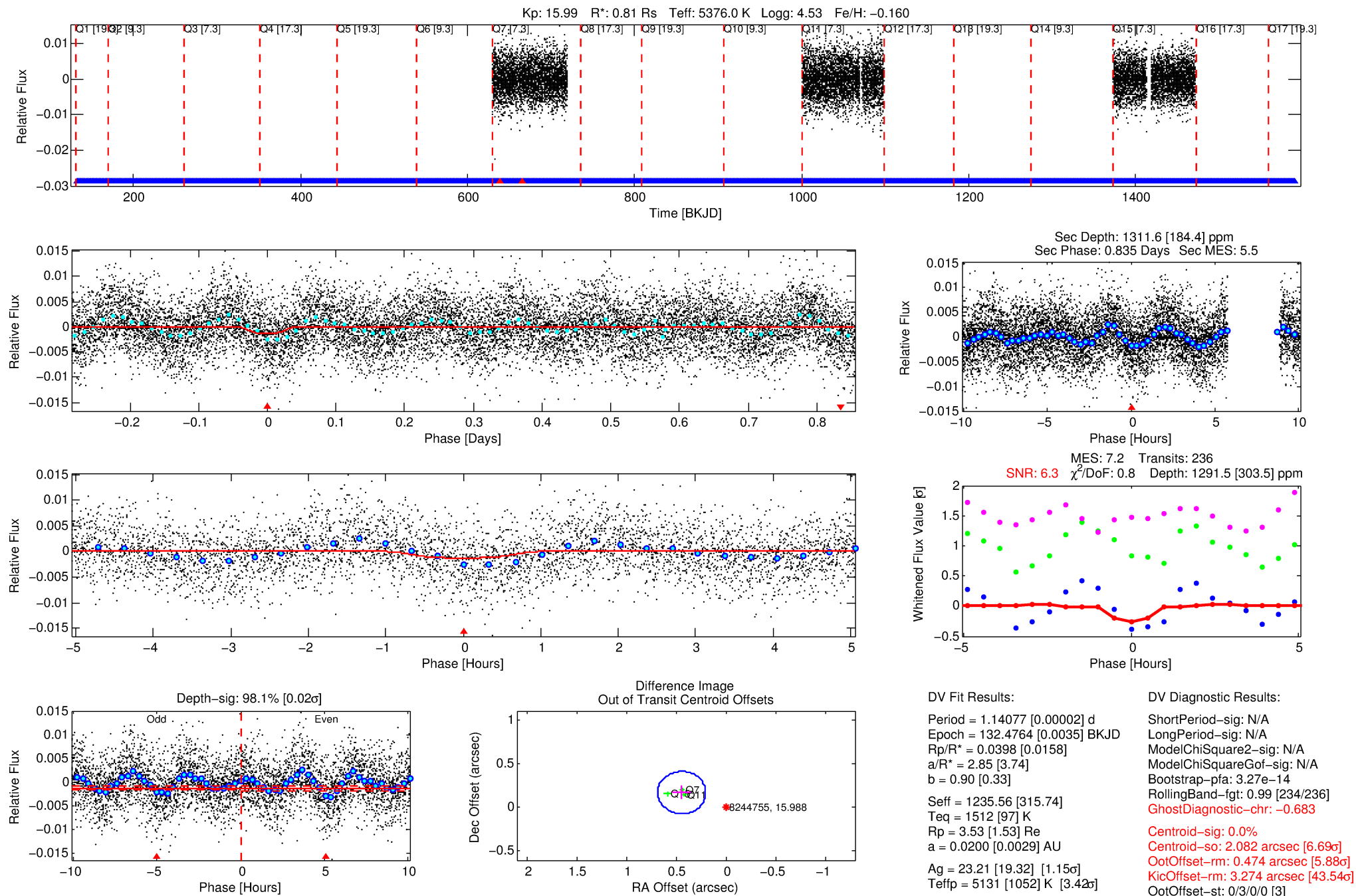
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 008244755-01

No Significant Match Found

DV One-Page Summary

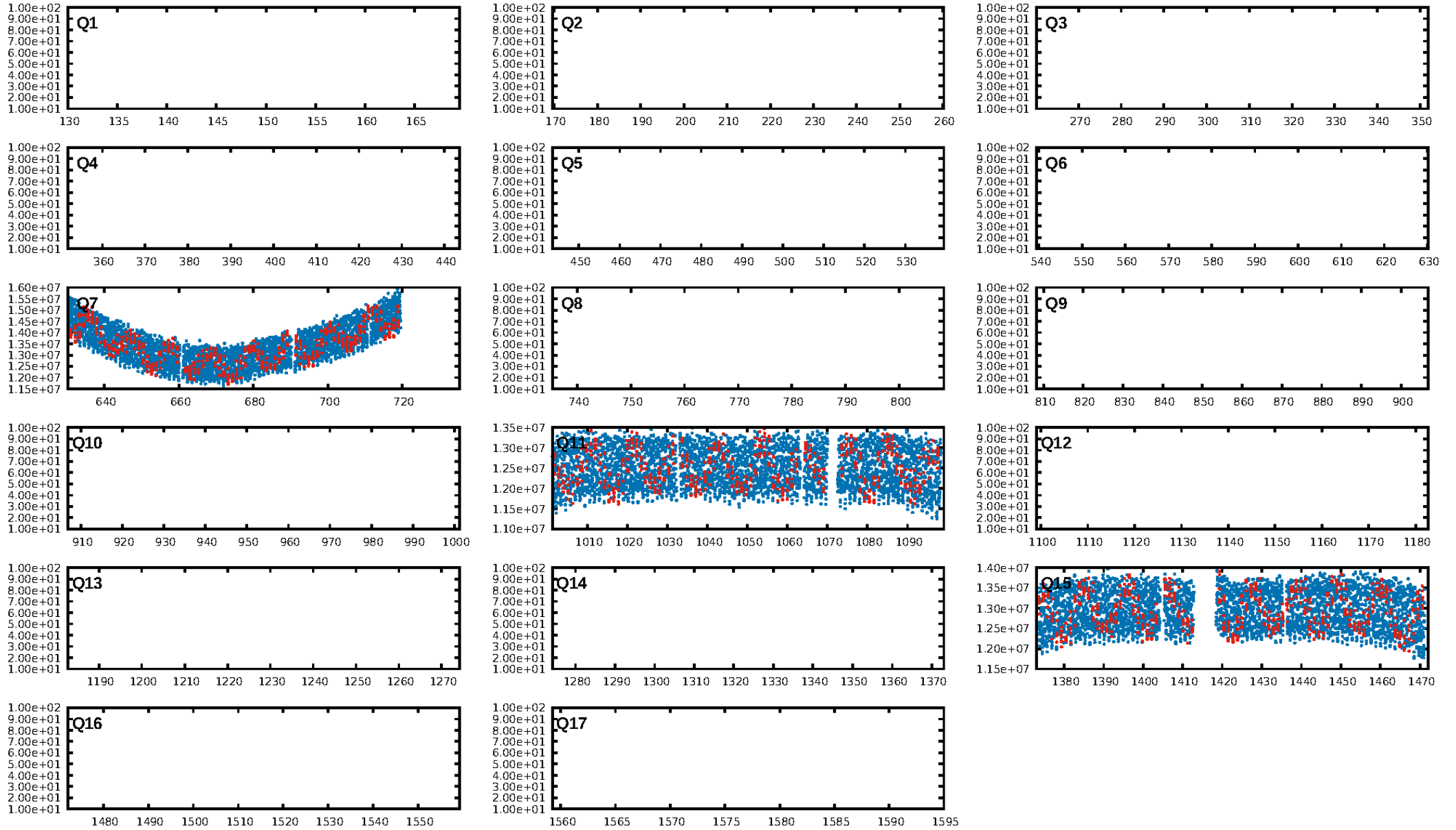
KIC: 8244755 Candidate: 1 of 1 Period: 1.141 d



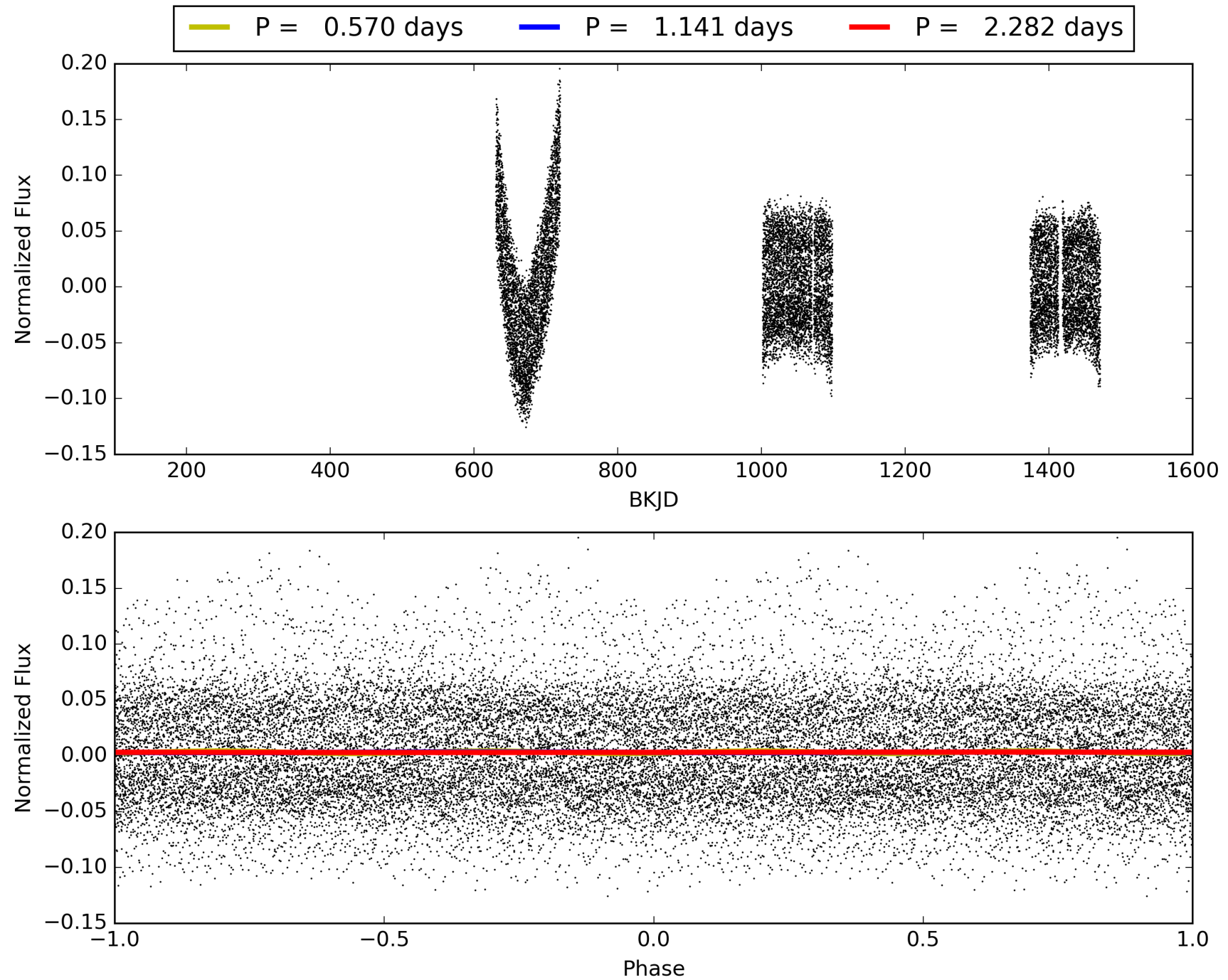
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 30-Jan-2016 17:52:36 Z

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

TCE 008244755-01, PDC Light Curves

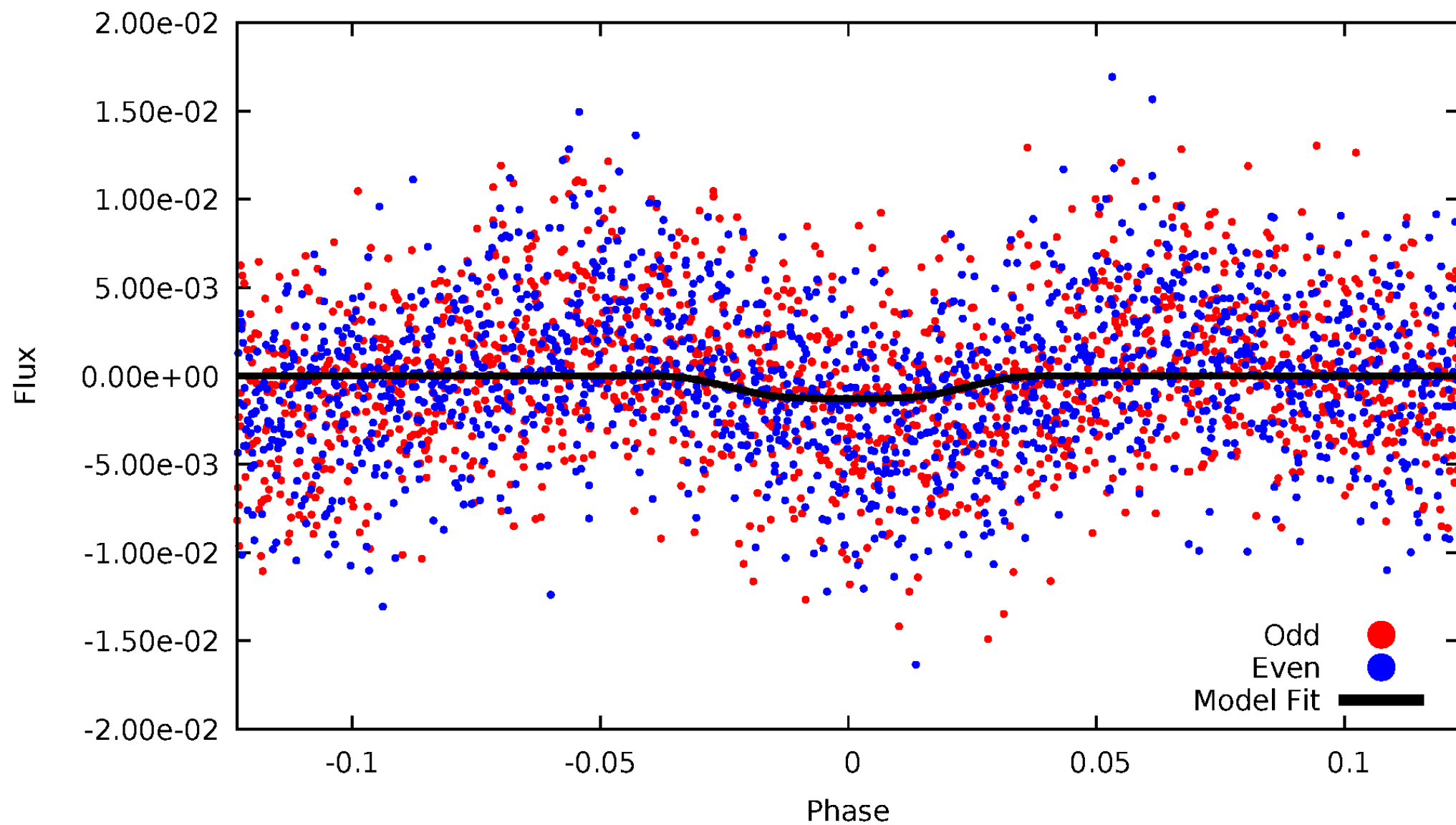


TCE 008244755-01



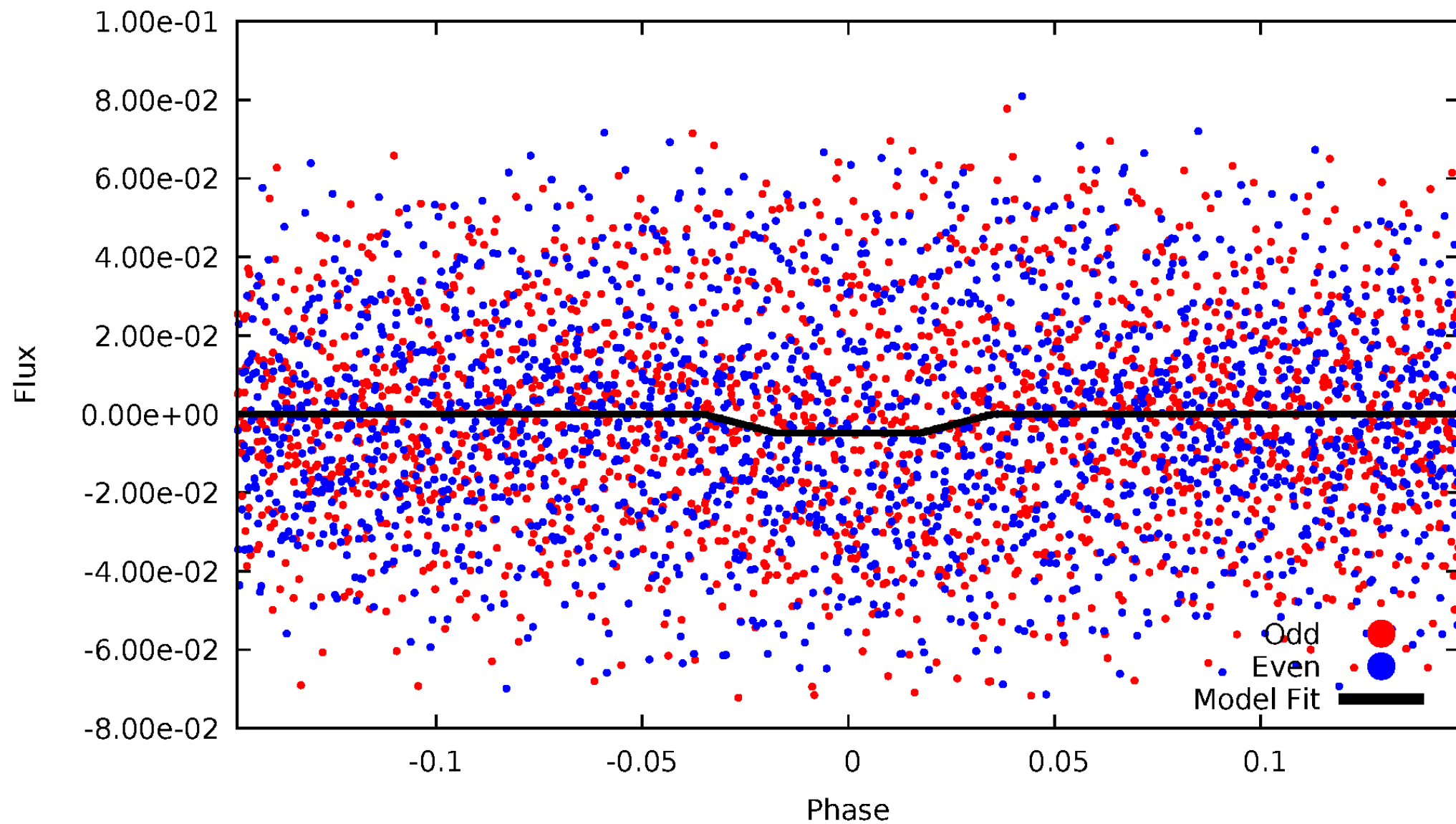
DV Odd/Even

TCE 008244755-01



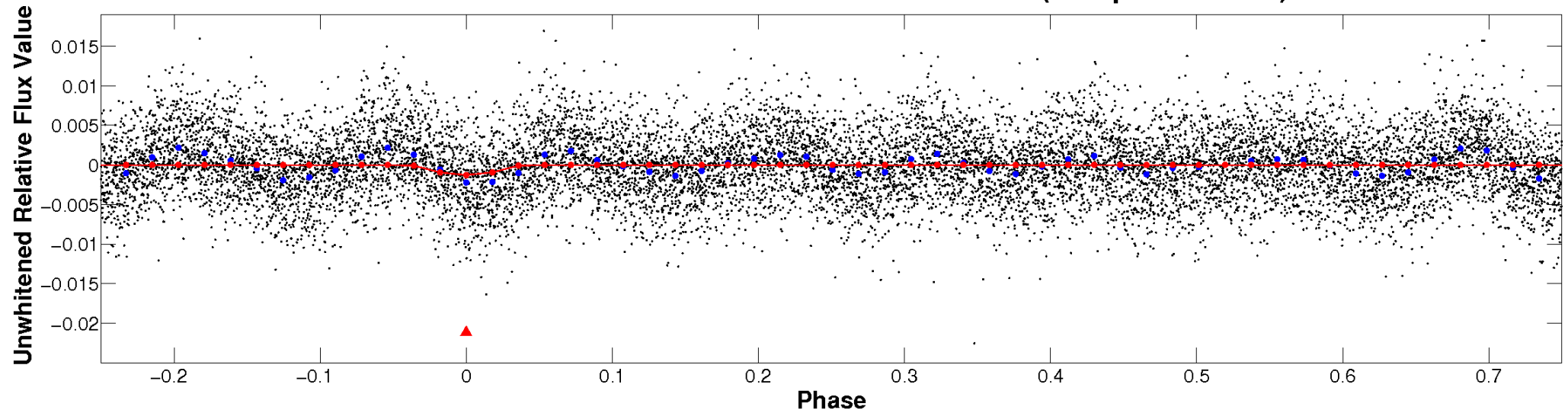
ALT Odd/Even

TCE 008244755-01

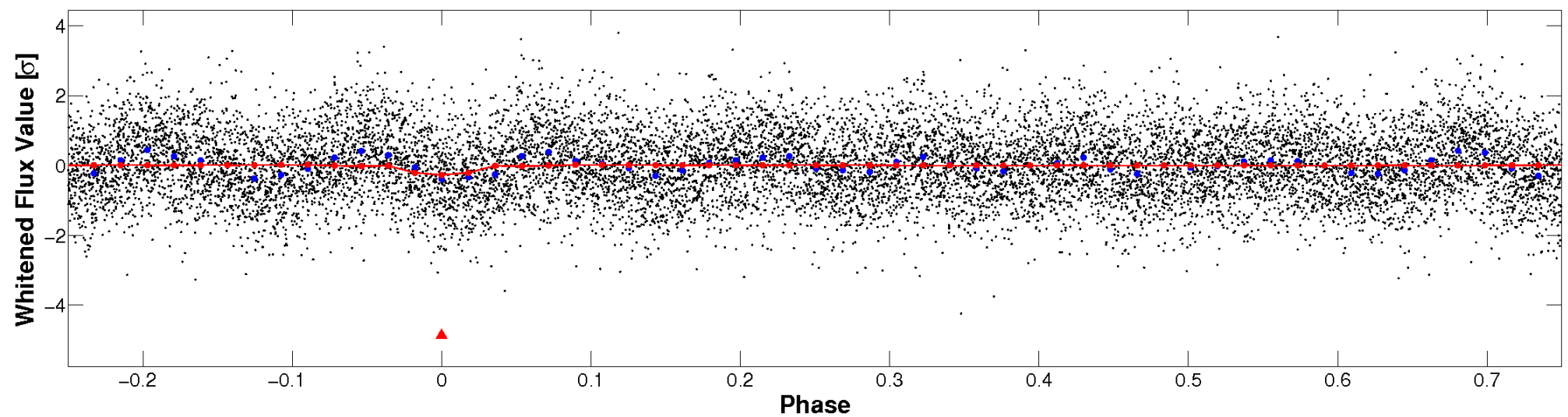


Non-Whitened Vs. Whitened Light Curve

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

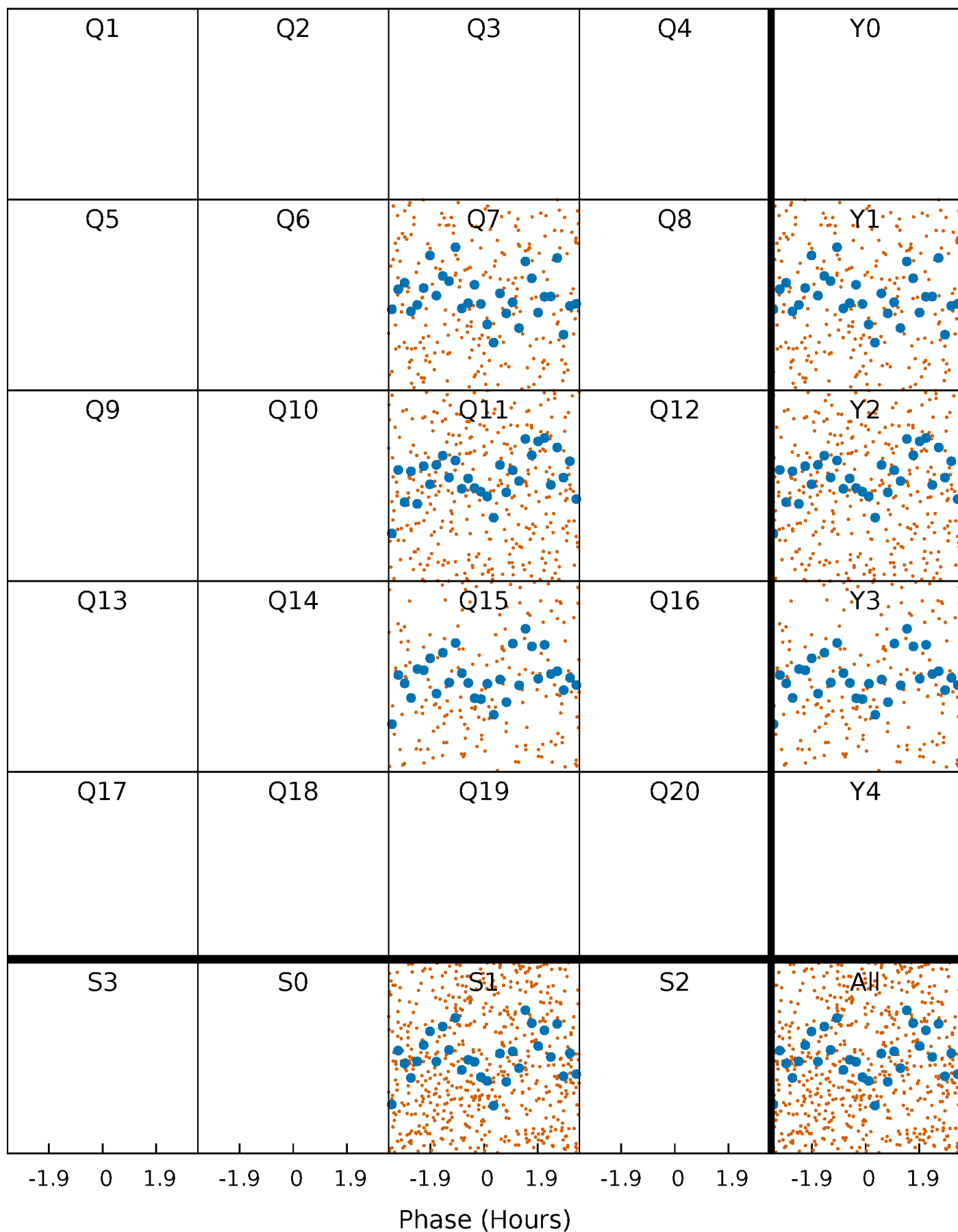


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



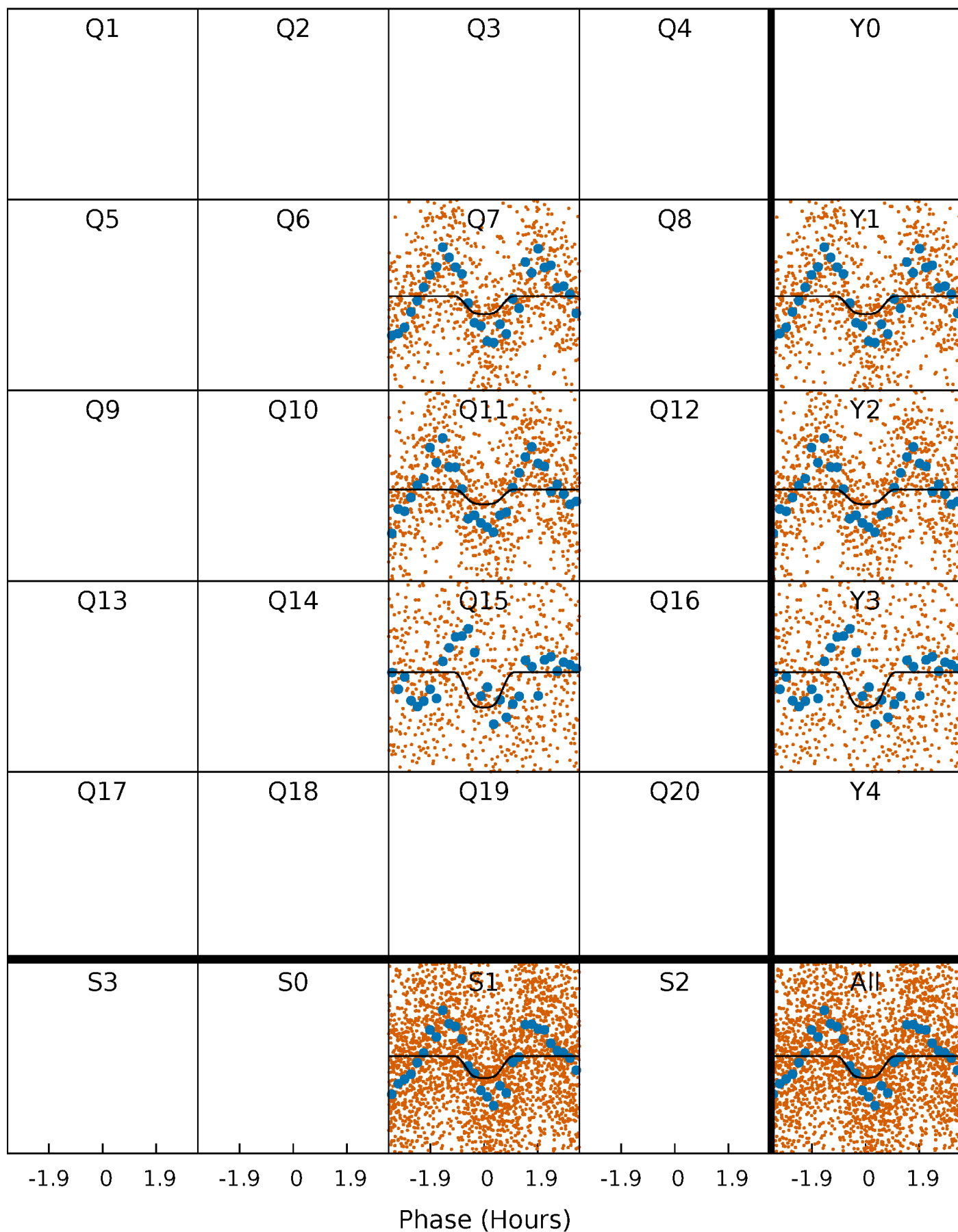
PDC Quarter-Phased Transit Curves

TCE 008244755-01 P= 1.140766 Days $T_0=132.476414$ (BKJD)



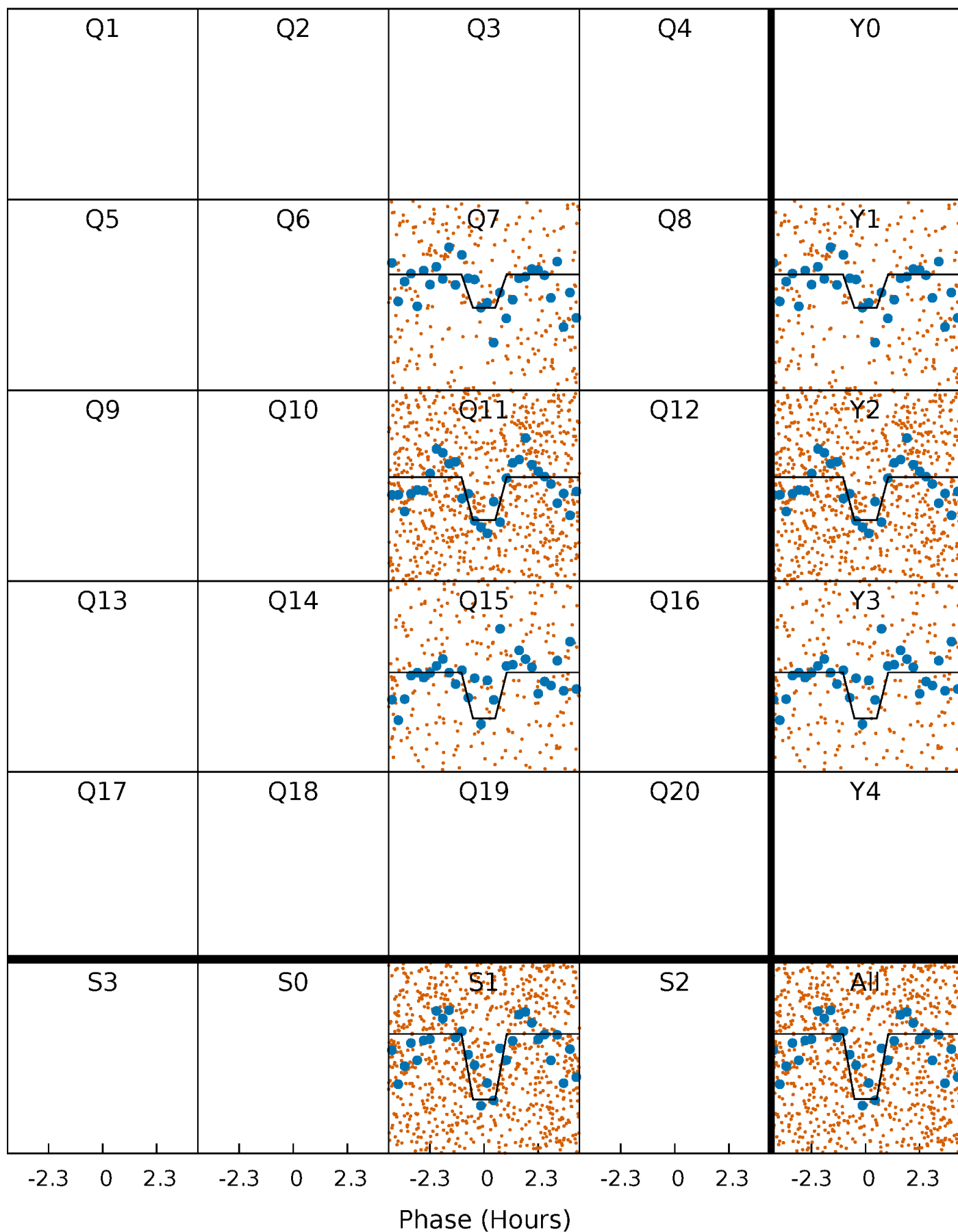
DV Quarter-Phased Transit Curves

TCE 008244755-01 P= 1.140766 Days $T_0=132.476414$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

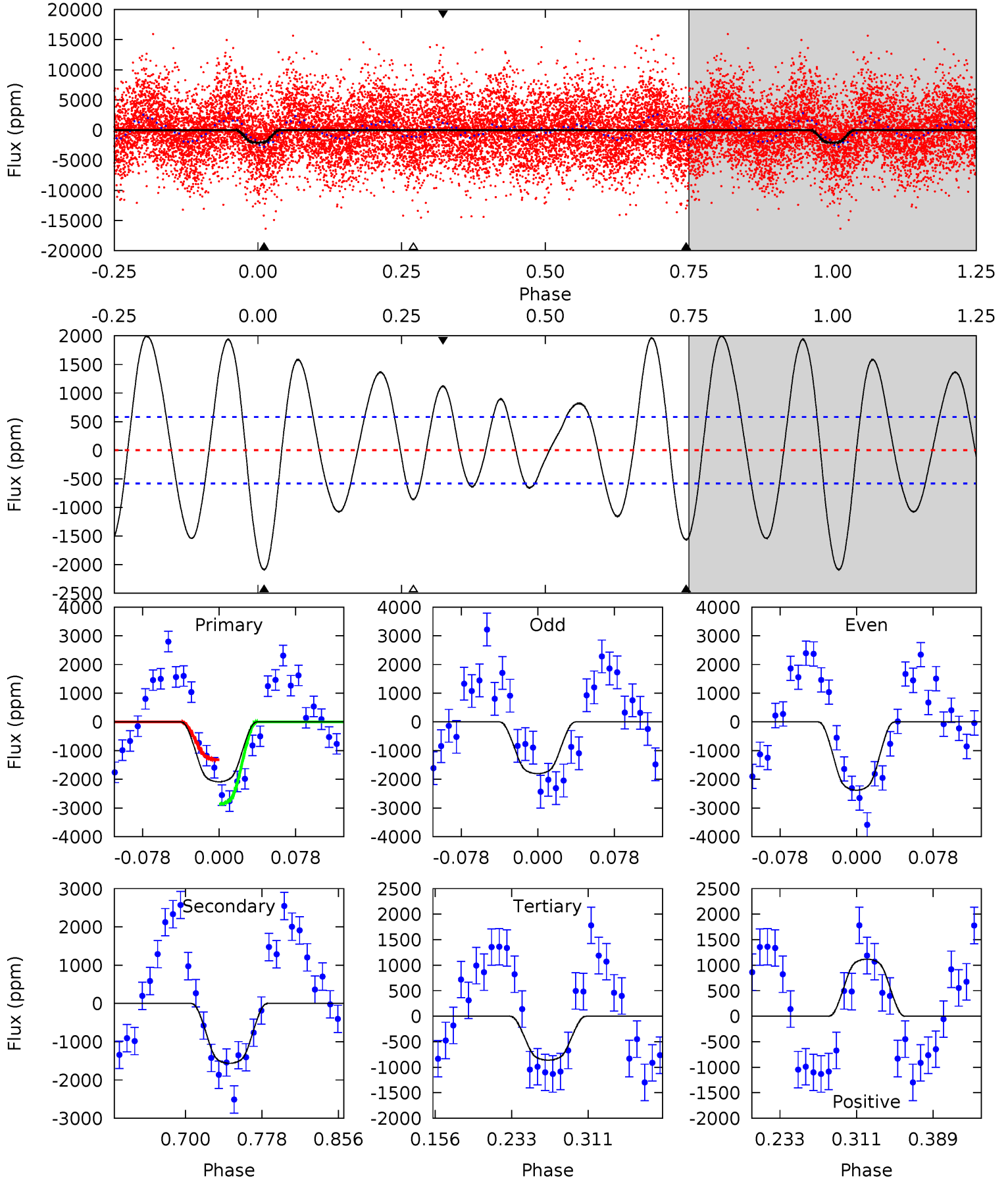
TCE 008244755-01 P= 1.140798 Days $T_0=132.457622$ (BKJD)



DV Model-Shift Uniqueness Test

008244755-01, P = 1.140766 Days, E = 132.476414 Days

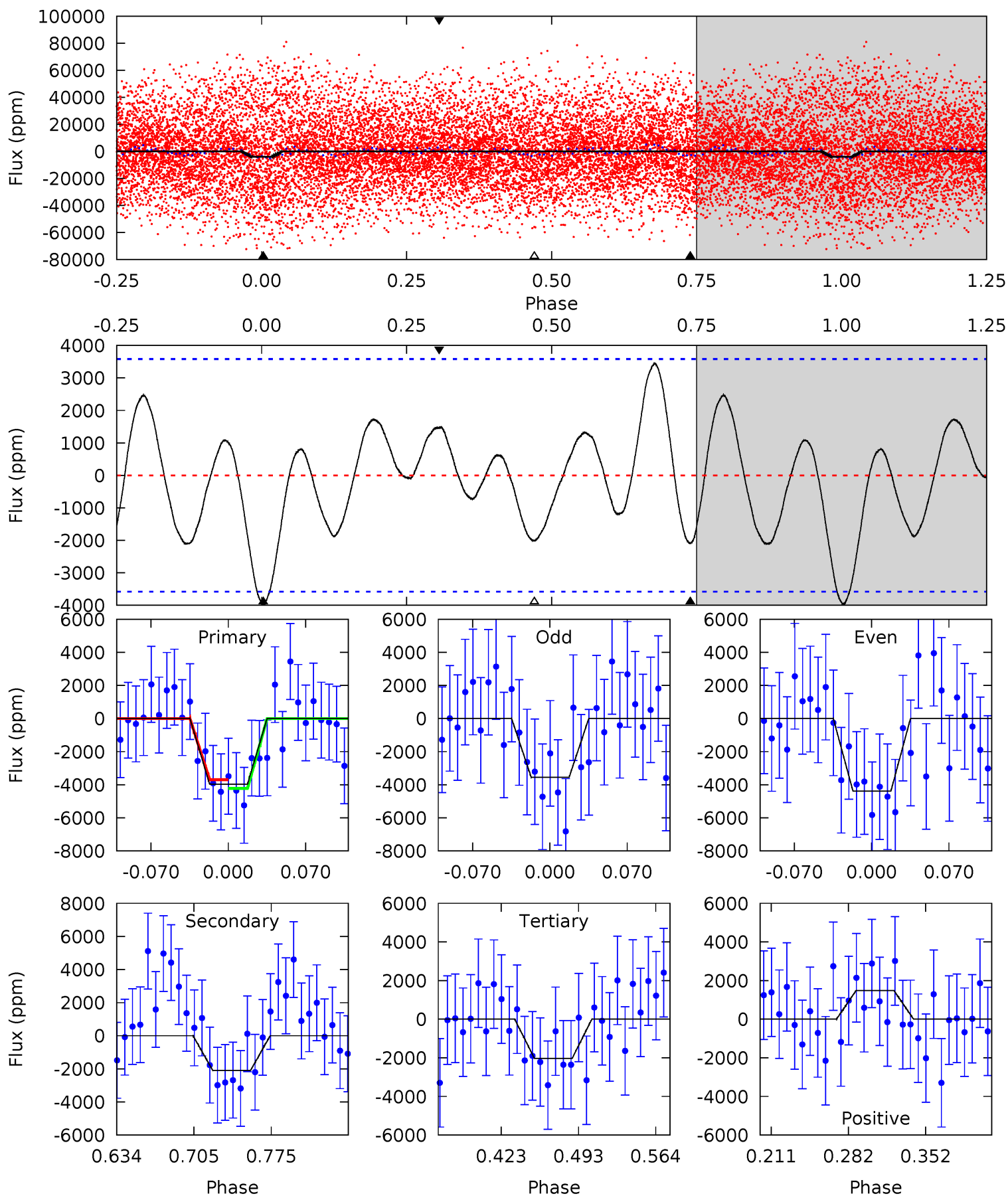
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
16.6	12.4	6.83	8.88	4.62	1.76	6.00	9.75	7.70	5.59	3.55	2.29	1.04	0.49	6.15



Alt Model-Shift Uniqueness Test

008244755-01, P = 1.140798 Days, E = 132.457622 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
5.14	2.71	2.62	1.92	4.64	1.81	1.48	2.51	3.21	0.09	0.79	0.55	0.61	0.46	0.34



Stellar Parameters For KIC 008244755

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	5376^{+204}_{-185}	$4.532^{+0.059}_{-0.110}$	$-0.160^{+0.300}_{-0.300}$	$0.813^{+0.143}_{-0.088}$	$0.821^{+0.096}_{-0.078}$	$2.151^{+0.649}_{-0.746}$
	+4%/-3%	+1%/-2%	+188%/-188%	+18%/-11%	+12%/-10%	+30%/-35%
Source	KIC0	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 008244755-01 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	A_{obs}
DV	-1565 ± 126	$3.58^{+1.57}_{-1.43}$	2138^{+111}_{-101}	5385^{+1655}_{-797}	27^{+49}_{-14}
Alt.	-2090 ± 772	$6.37^{+1.51}_{-1.56}$	2129^{+120}_{-92}	4439^{+680}_{-486}	11^{+9}_{-5}

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

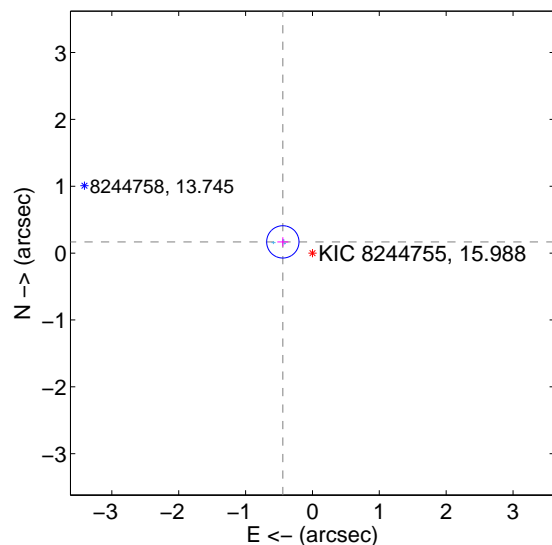
Supplemental centroid analysis for 008244755-01. Kepler magnitude: 15.99. Transit SNR 6.27

There are 3 quarters with good PRF difference image offsets

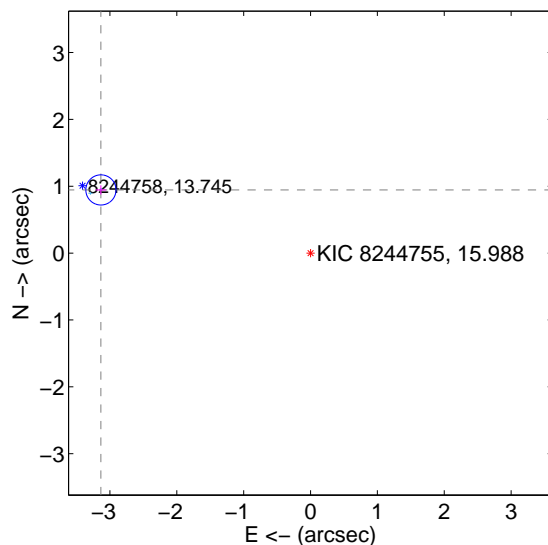
The OOT PRF centroid is offset from the target star catalog position by about 2.81 arcsec so the offset from difference PRF-fit to OOT-fit may be invalid.

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.474 ± 0.081	5.88	0.443 ± 0.082	0.168 ± 0.069
PRF-fit source offset from KIC position	3.274 ± 0.075	43.54	3.135 ± 0.078	0.945 ± 0.069
photometric centroid source offset	2.08 ± 0.31	6.69	1.91 ± 0.34	0.83 ± 0.09

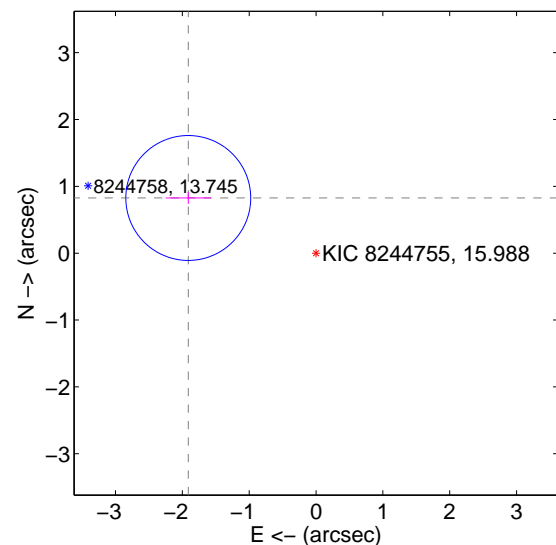
offset from difference PRF-fit to OOT PRF-fit



offset from difference PRF-fit to KIC position



offset from photometric centroids

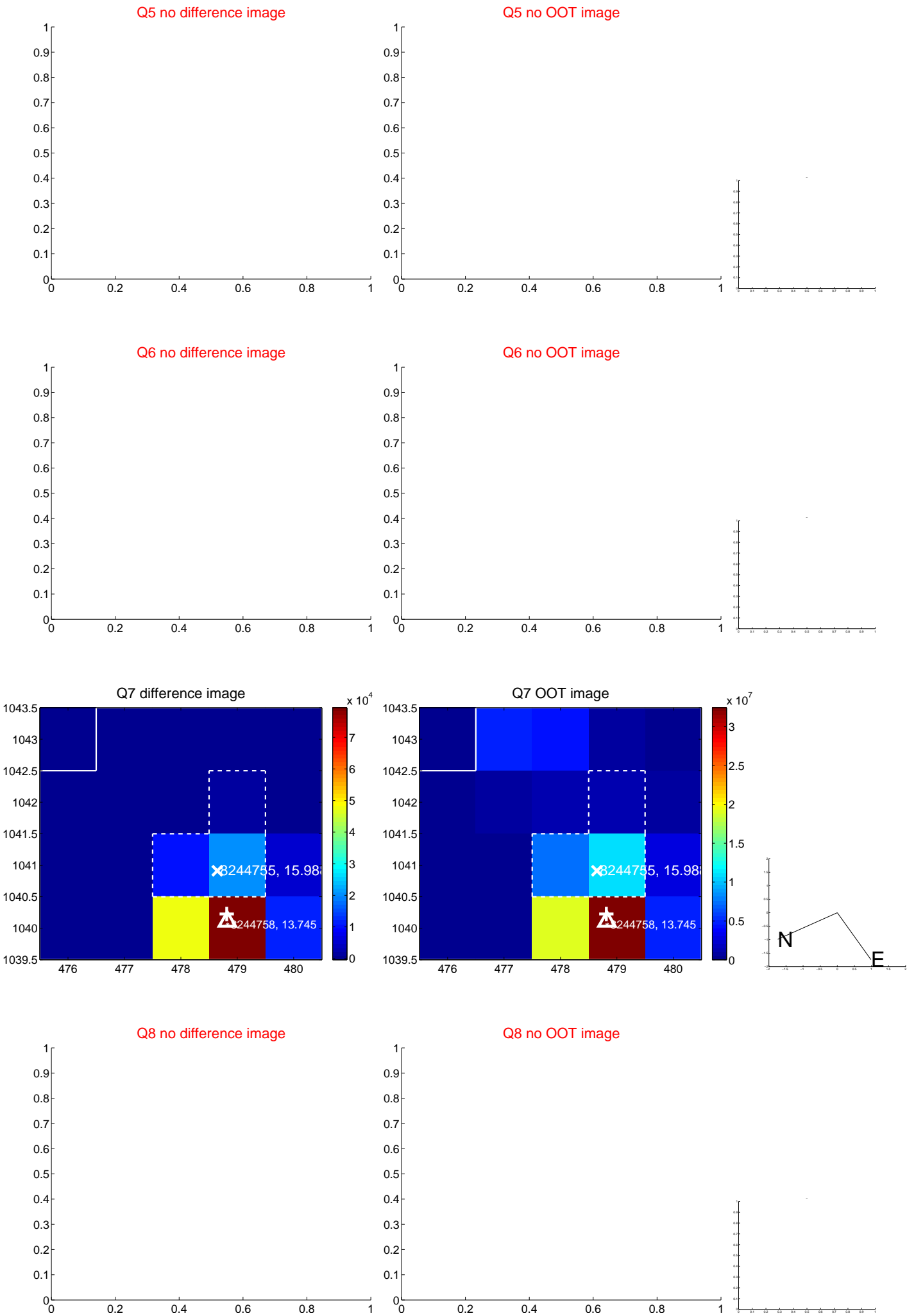


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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

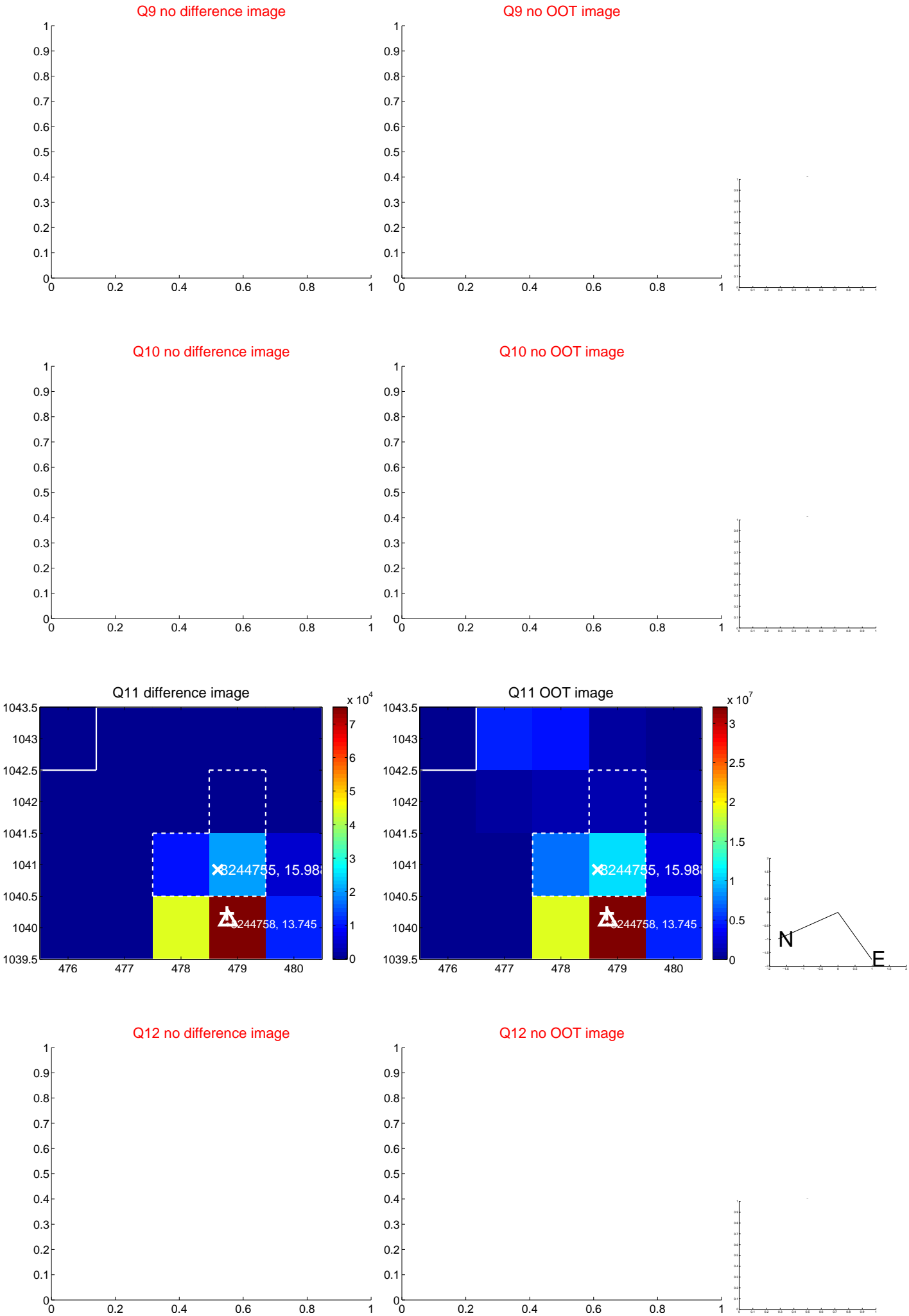
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



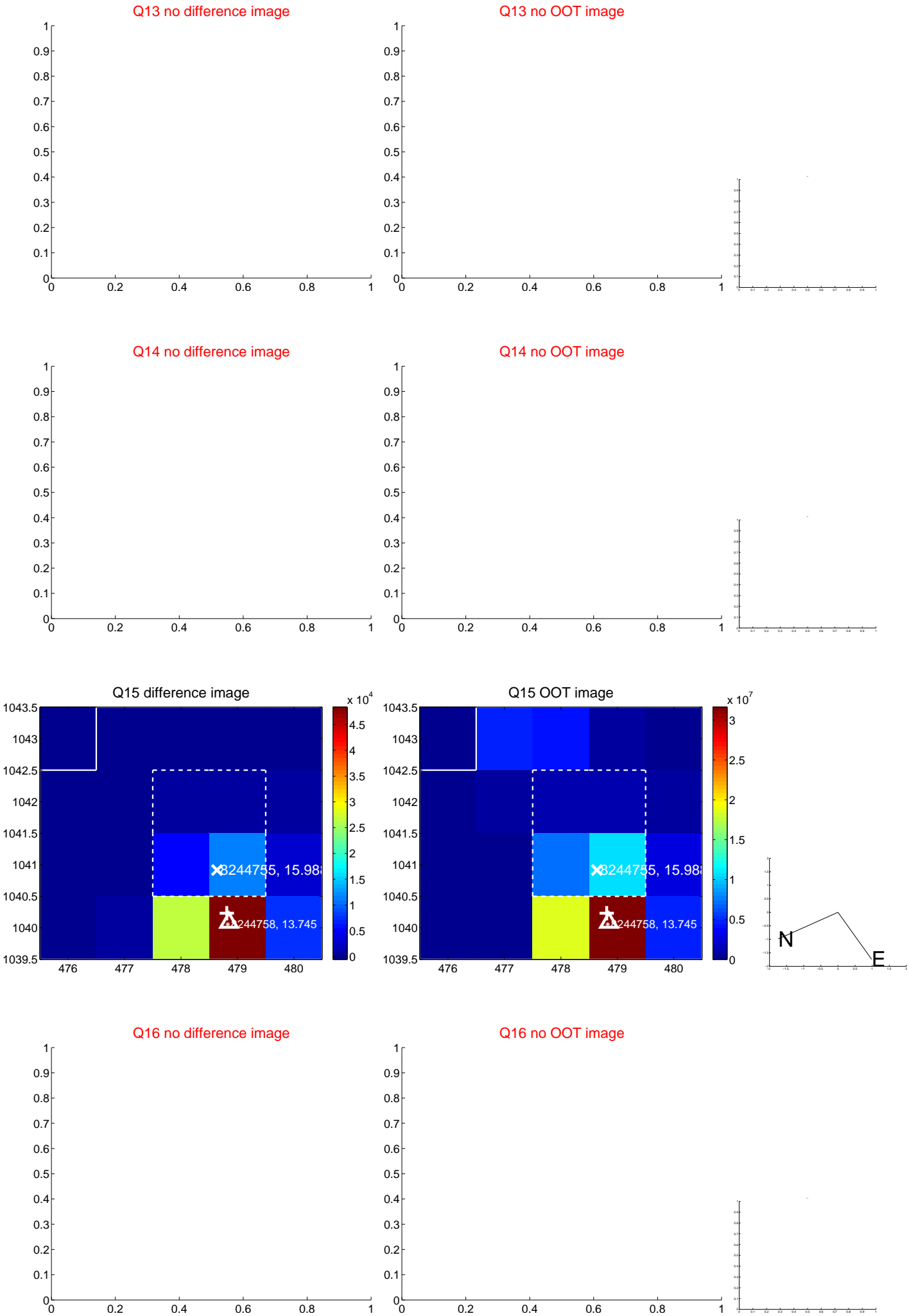
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



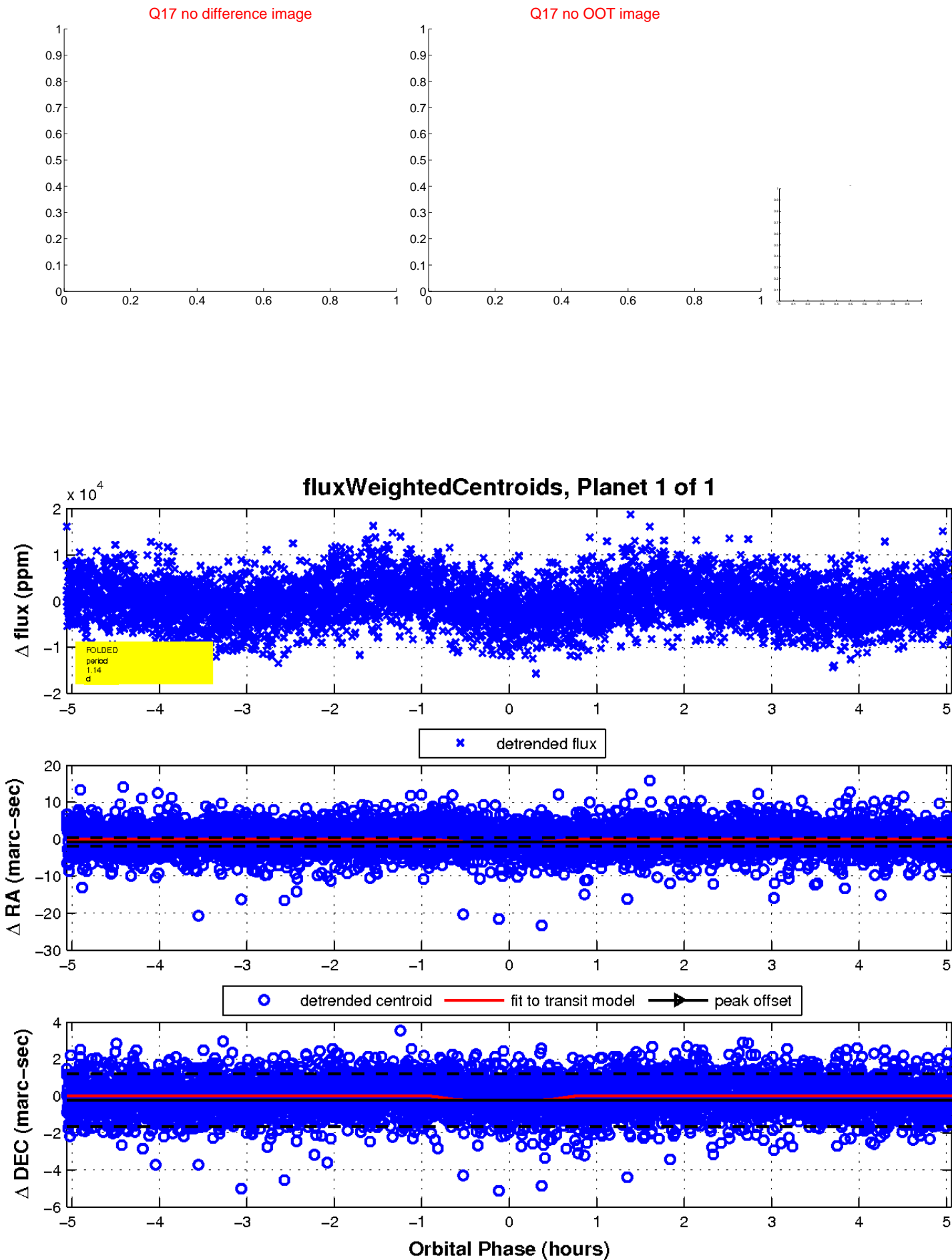
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



white \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

