

KIC 007364706

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})
007364706-01	OBS	No	461.924657	226.091376	2076.1	6.643	8.4	10.0	16.03	5130	102.34	61.47

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
007364706-01	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_CHASES—INCONSISTENT_TRANS

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

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

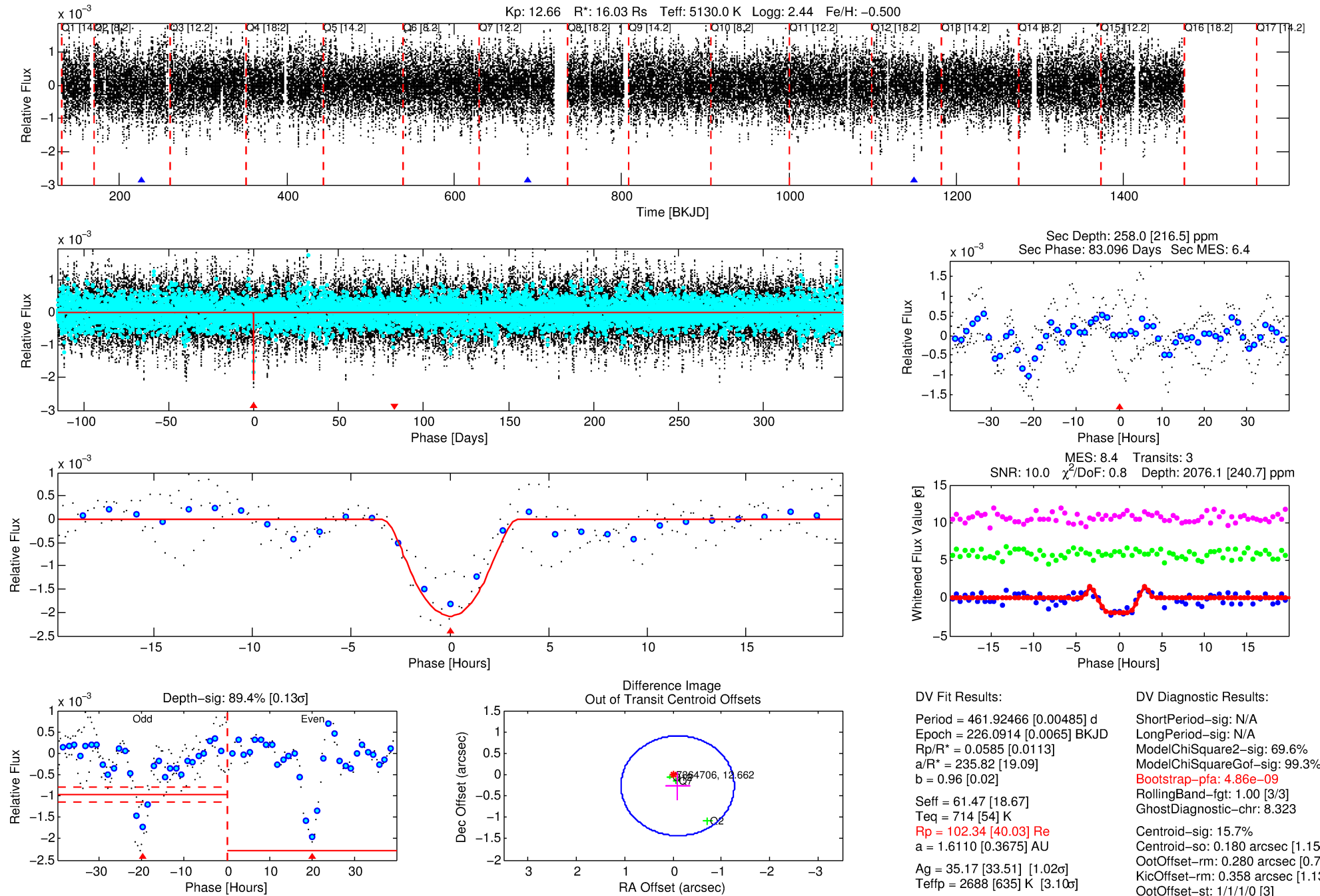
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 007364706-01

No Significant Match Found

DV One-Page Summary

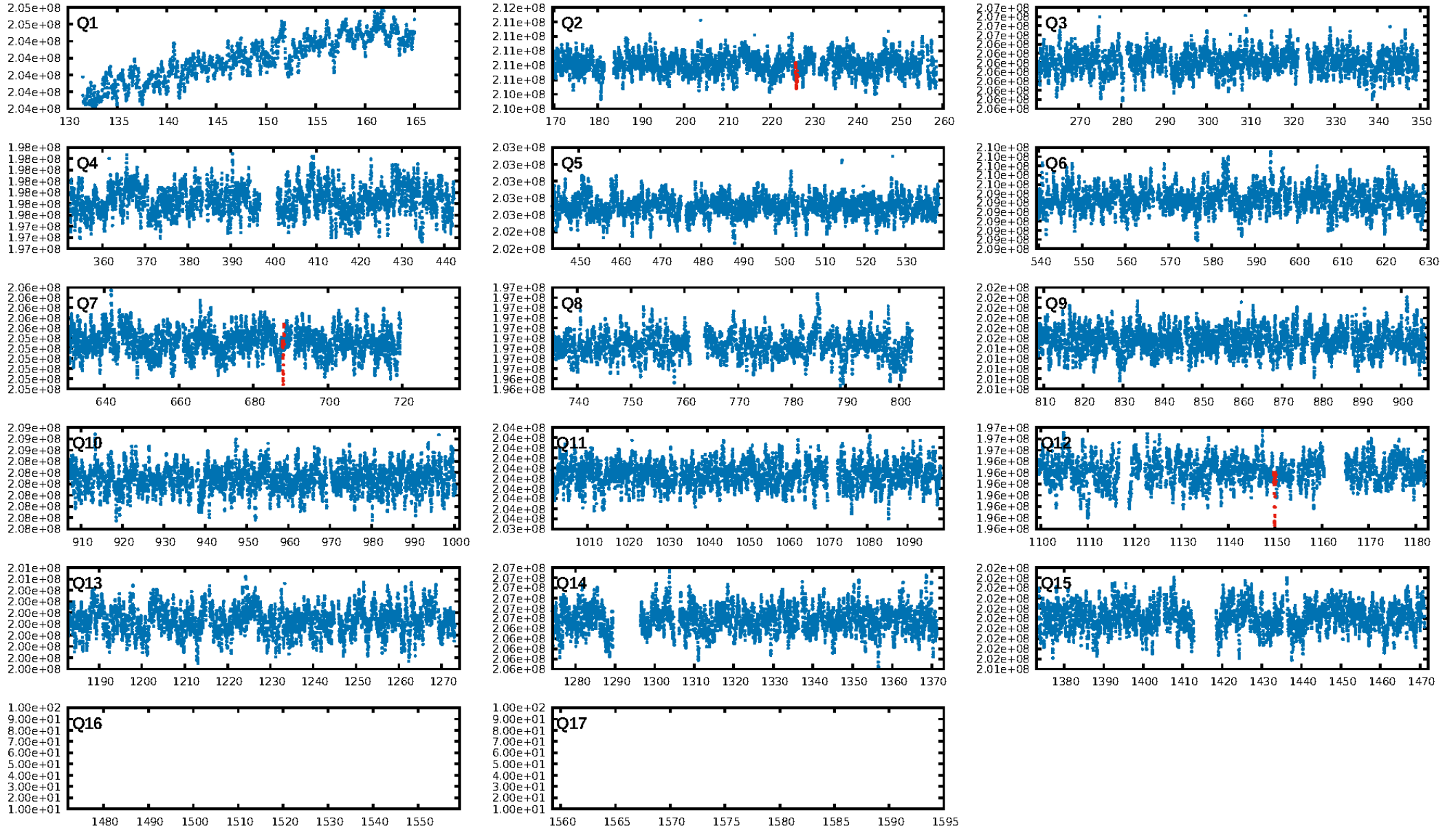
KIC: 7364706 Candidate: 1 of 1 Period: 461.925 d



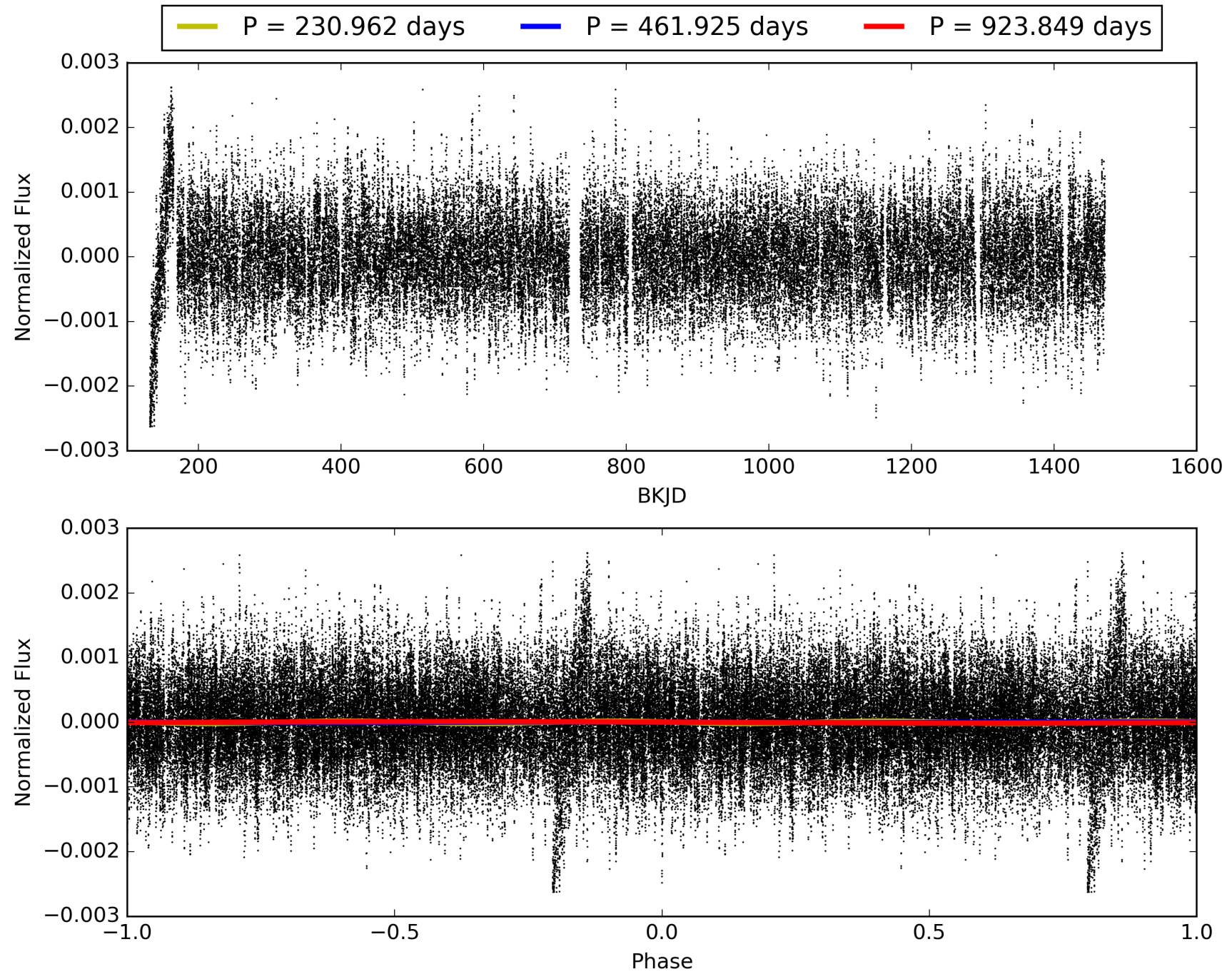
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 31-Jan-2016 04:18:30 Z

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

TCE 007364706-01, PDC Light Curves

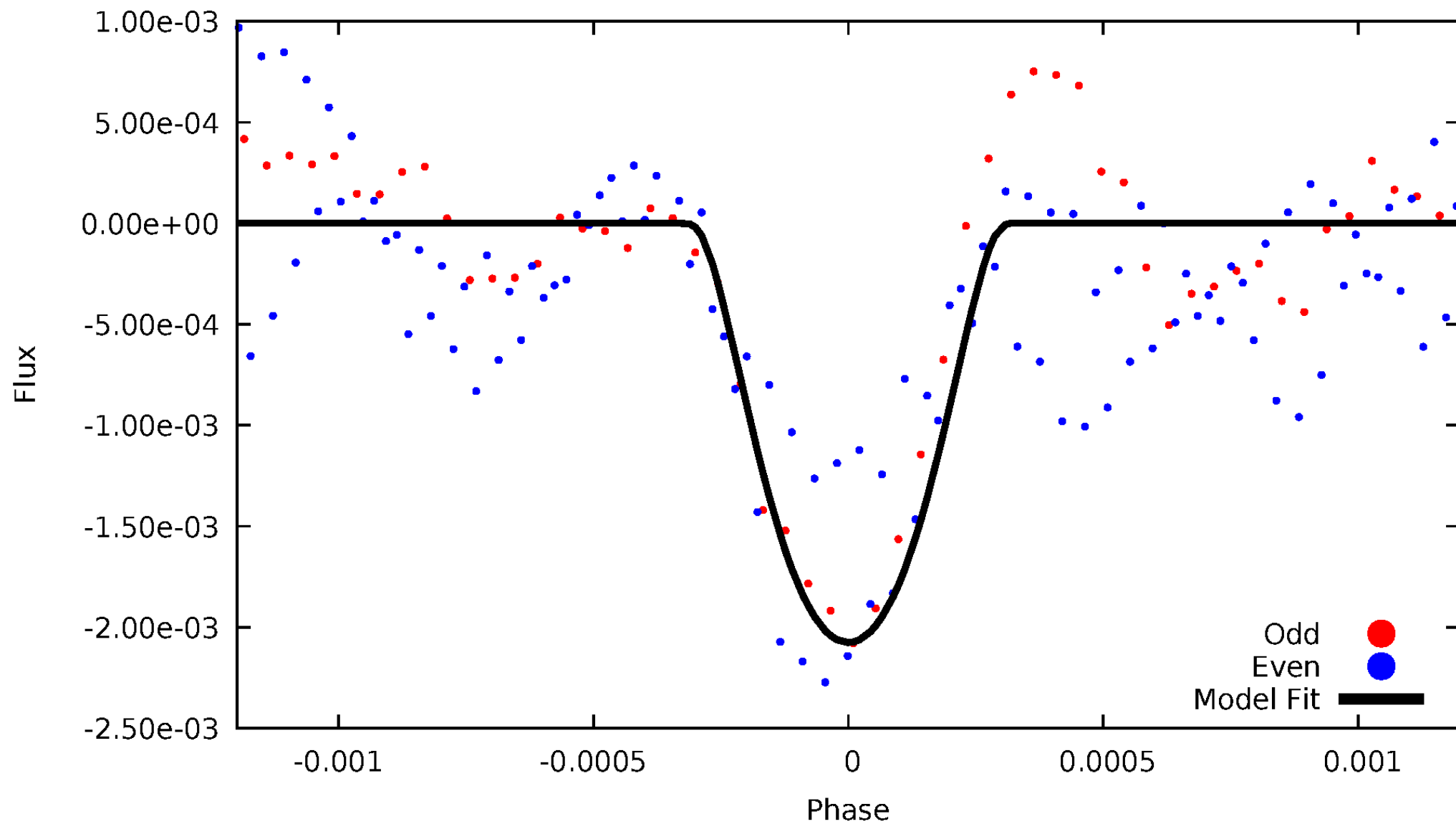


TCE 007364706-01



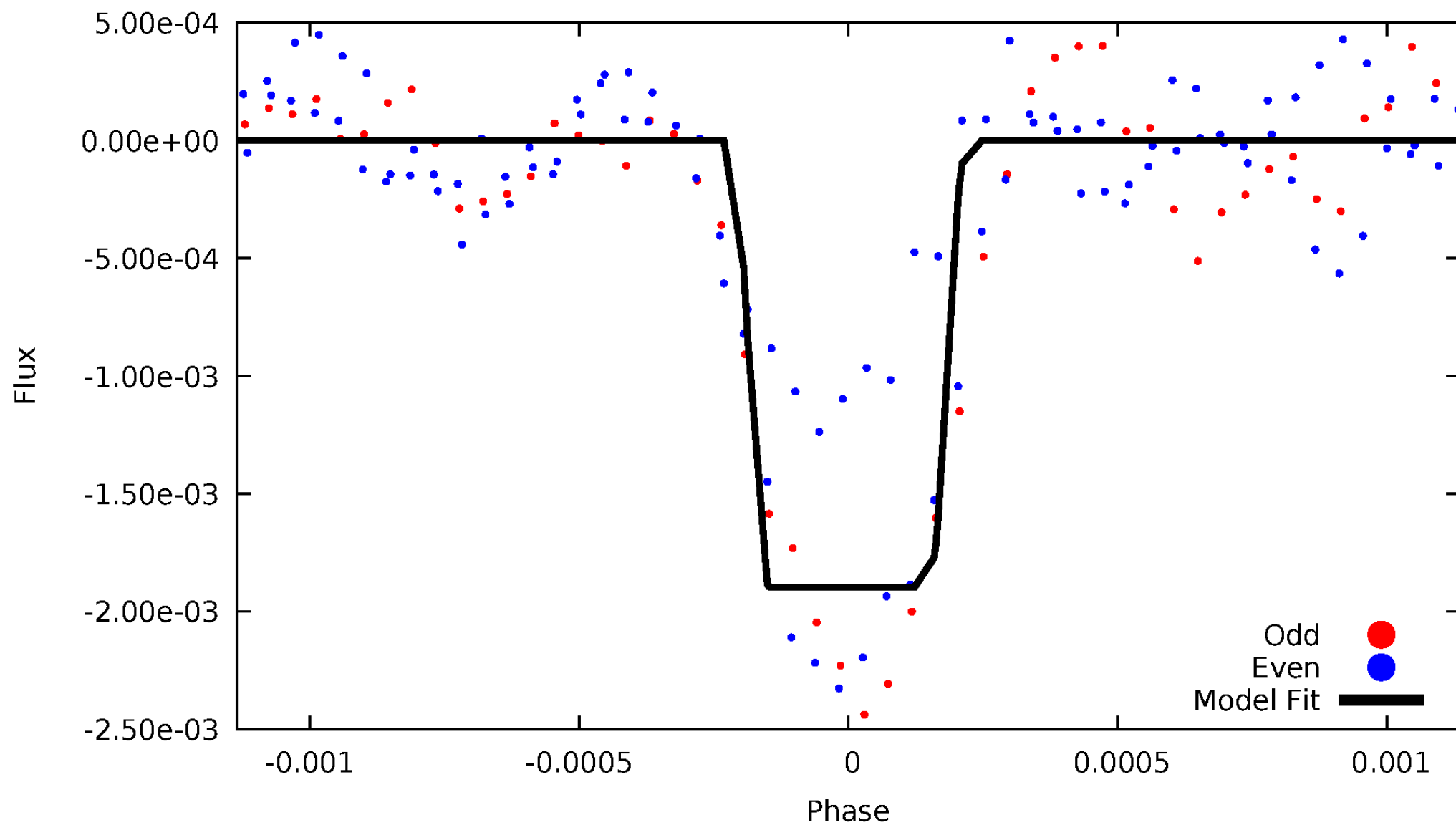
DV Odd/Even

TCE 007364706-01



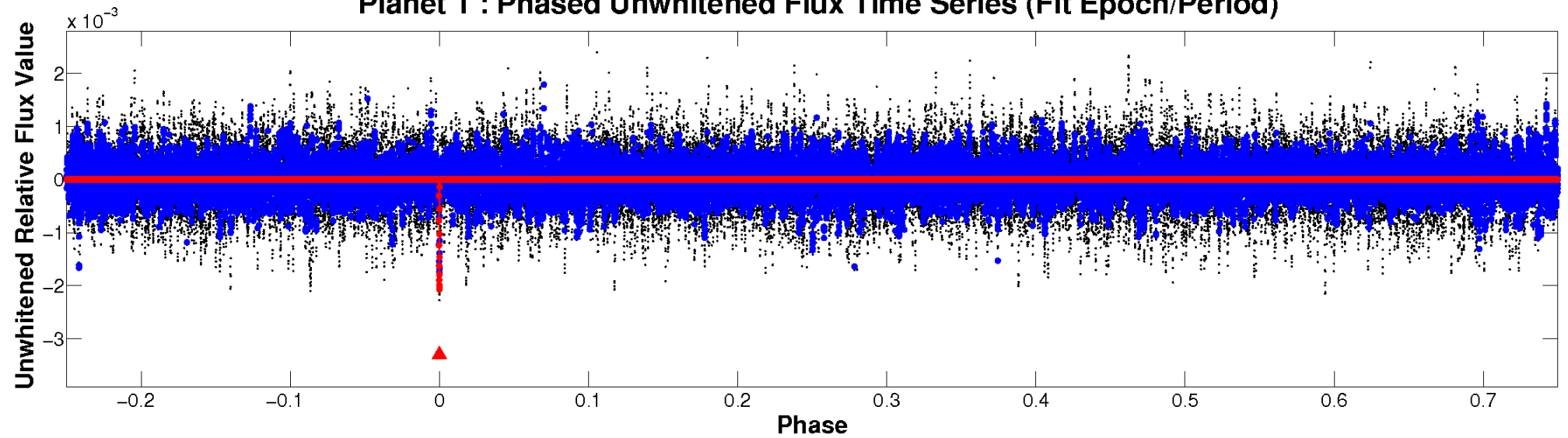
ALT Odd/Even

TCE 007364706-01

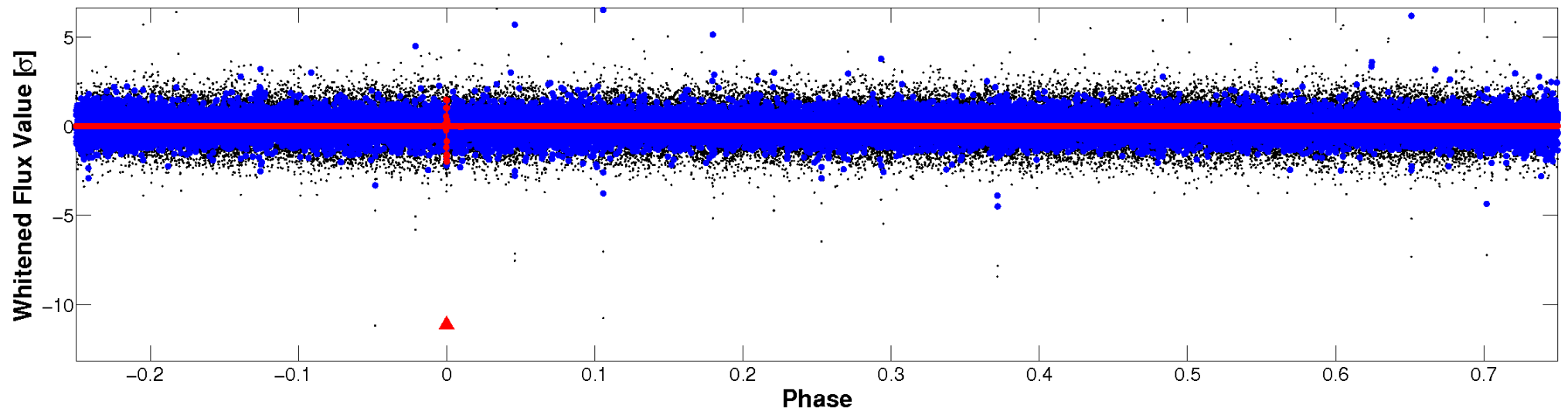


Non-Whitened Vs. Whitened Light Curve

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

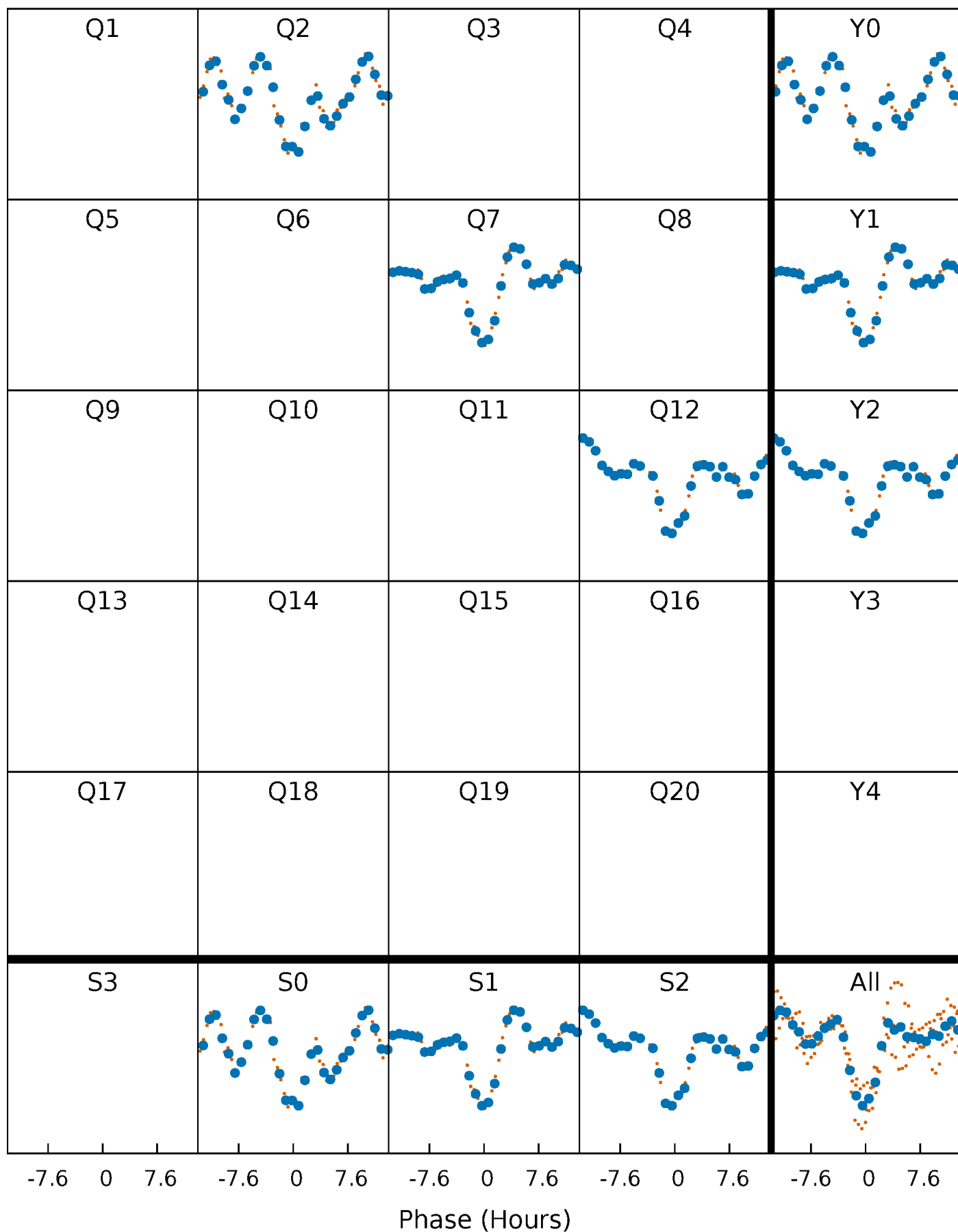


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



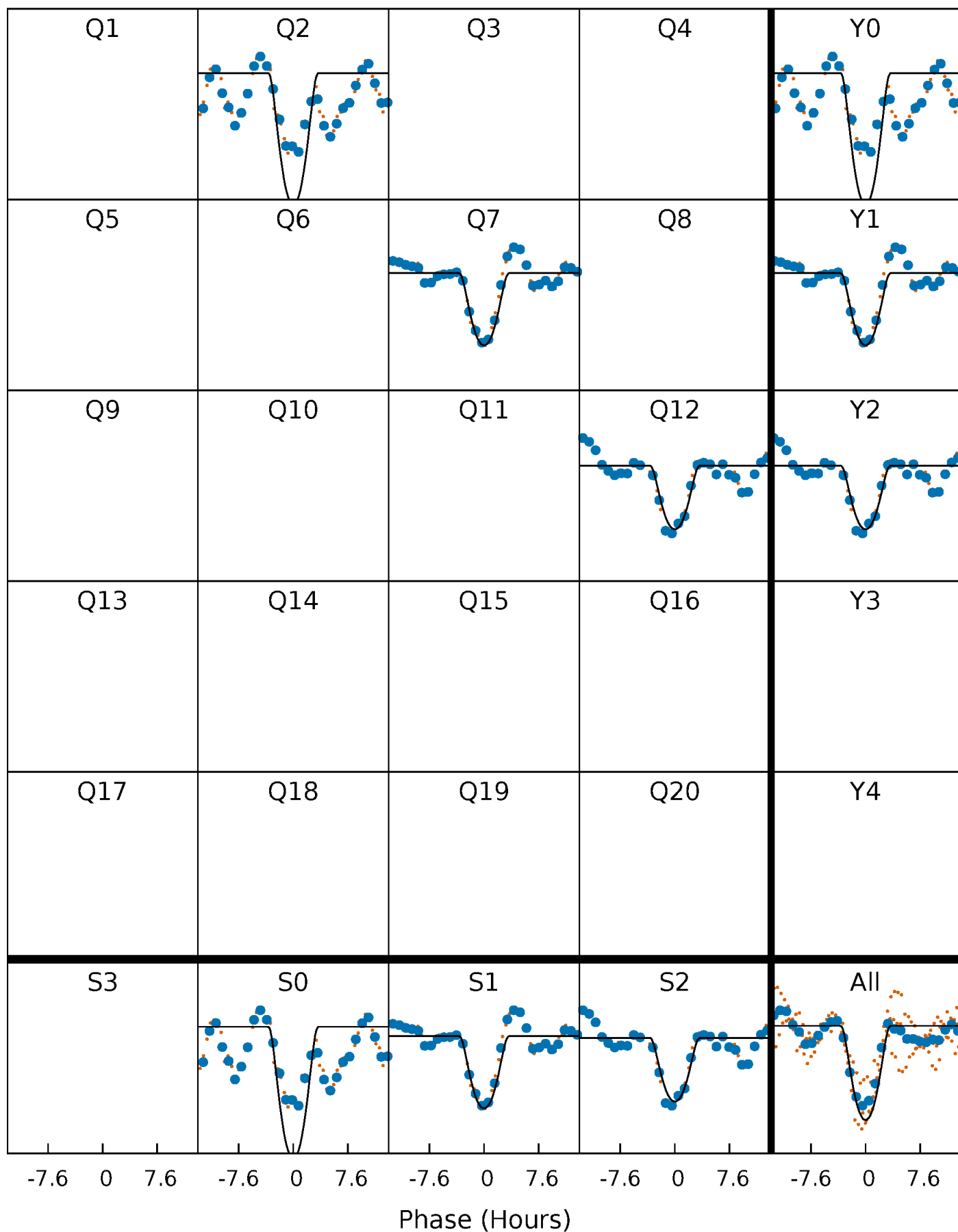
PDC Quarter-Phased Transit Curves

TCE 007364706-01 P=461.924657 Days $T_0=226.091376$ (BKJD)



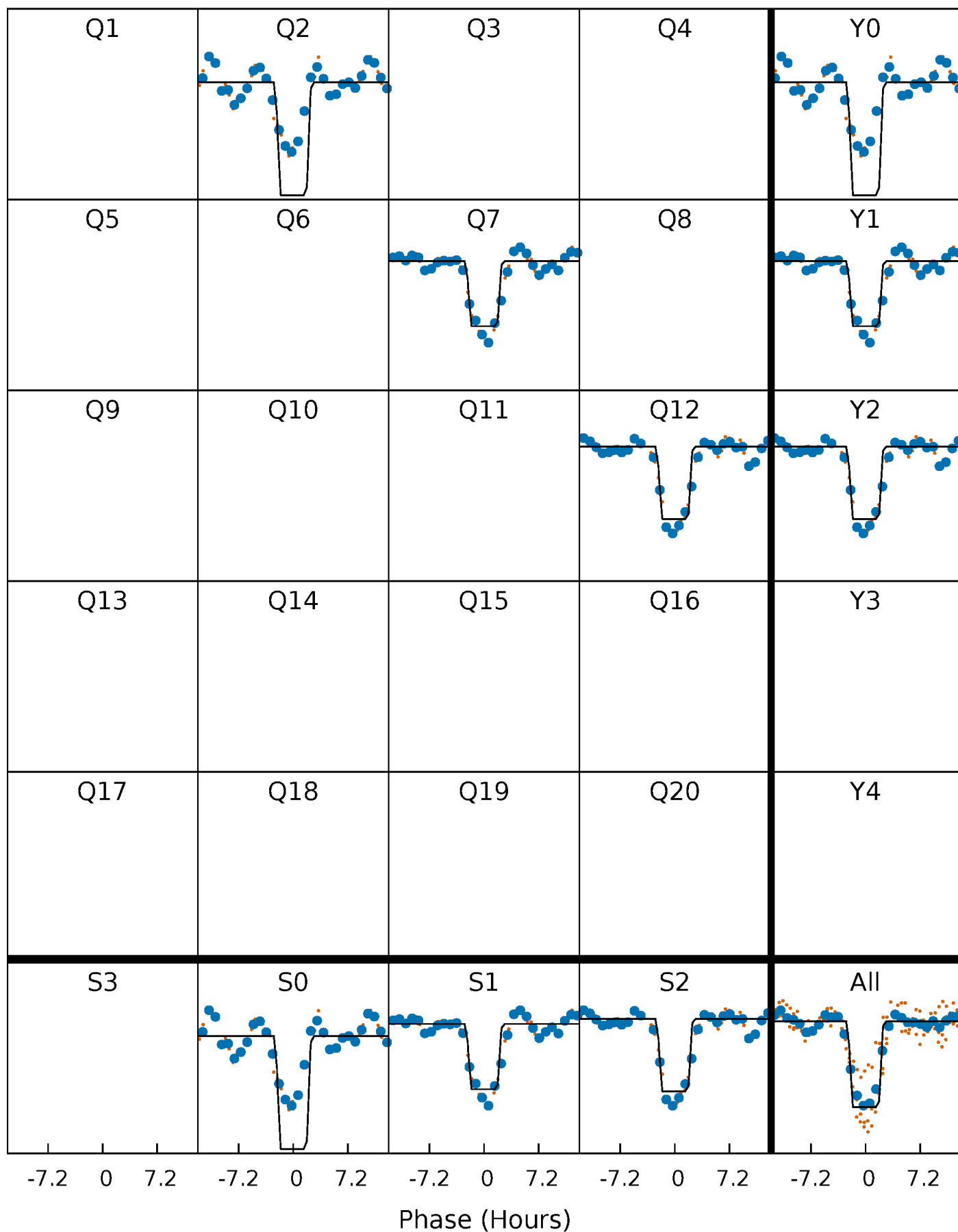
DV Quarter-Phased Transit Curves

TCE 007364706-01 P=461.924657 Days $T_0=226.091376$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

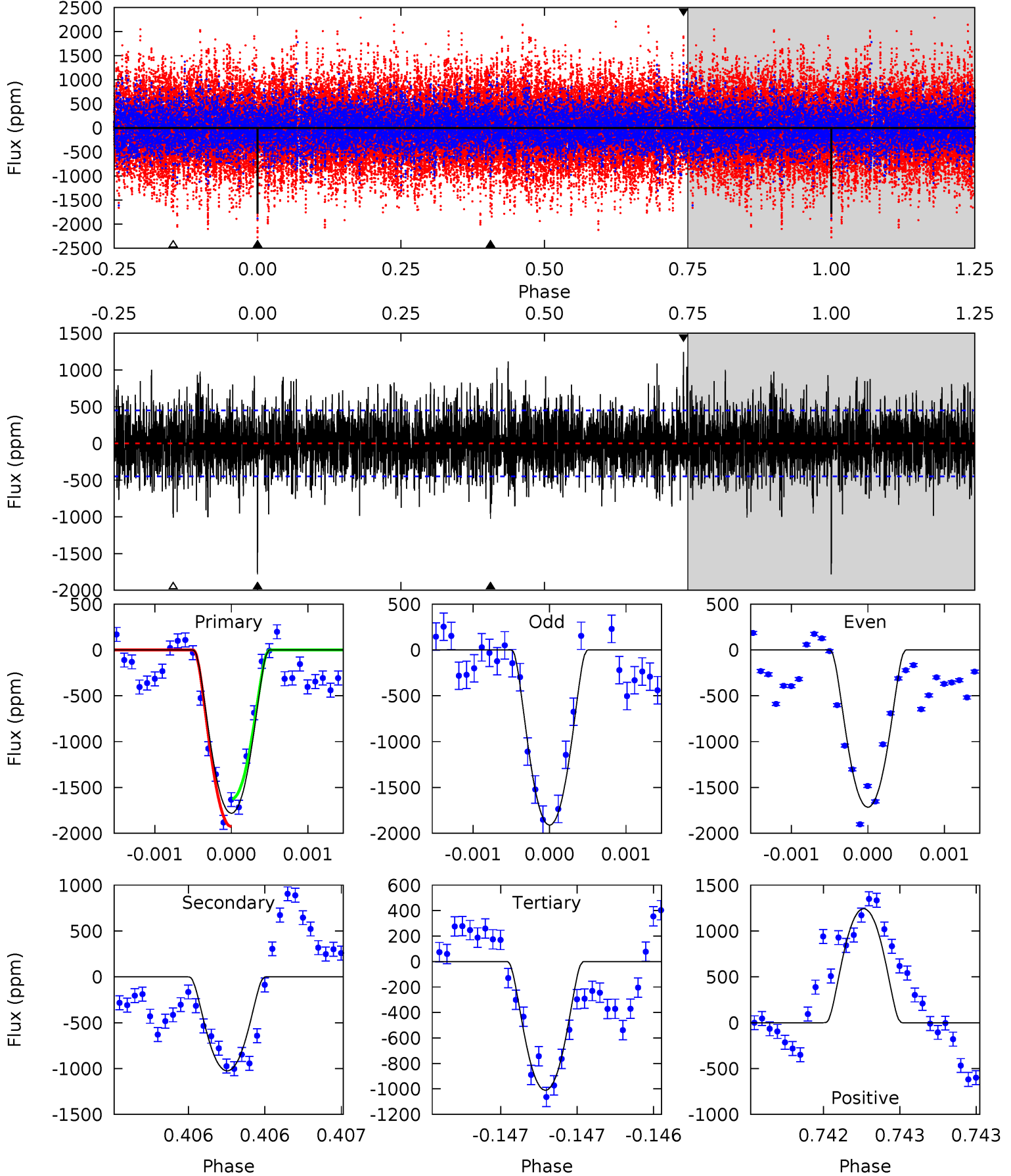
TCE 007364706-01 P=461.921057 Days $T_0=226.085704$ (BKJD)



DV Model-Shift Uniqueness Test

007364706-01, P = 461.924657 Days, E = 226.091376 Days

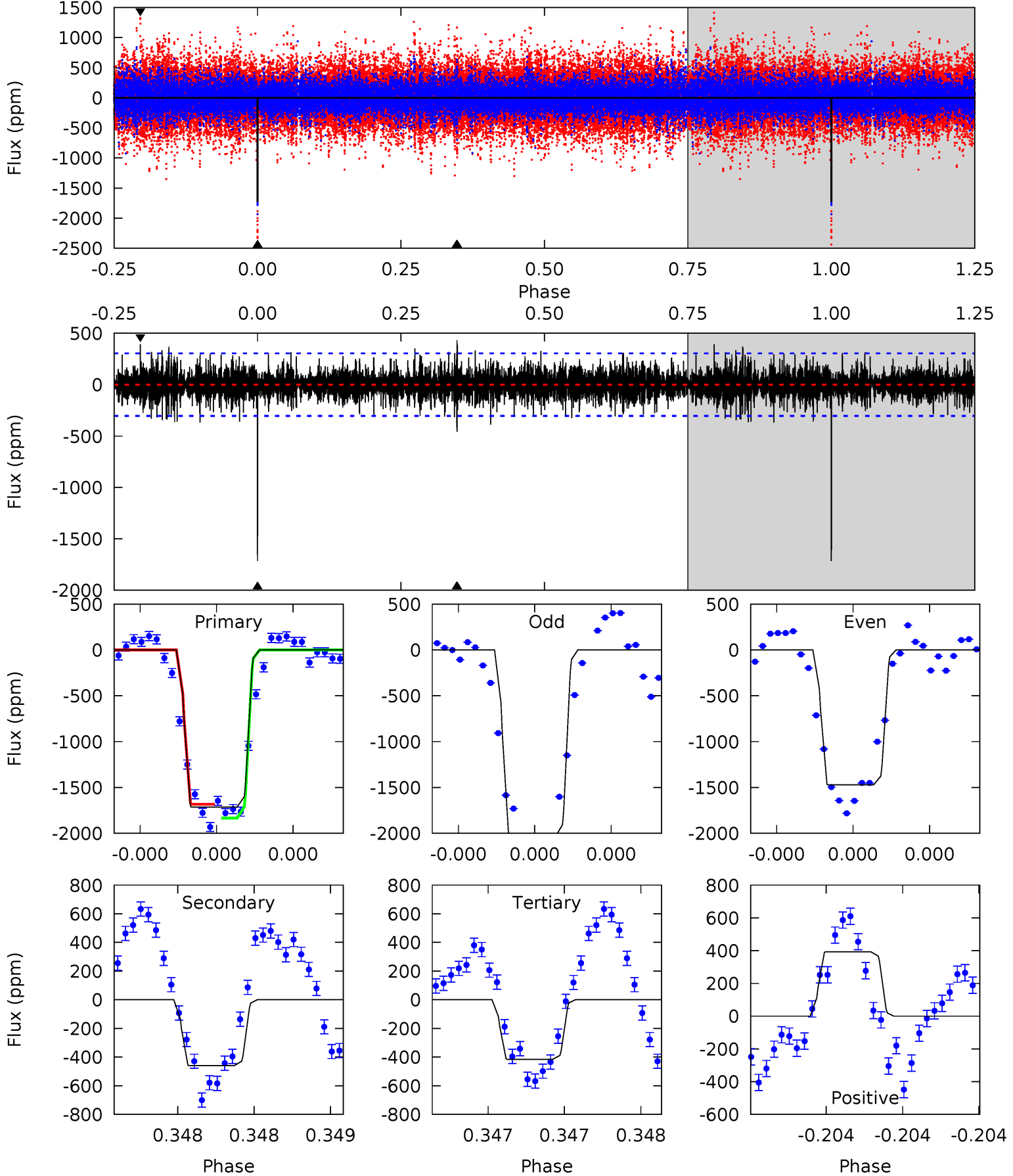
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
21.9	12.6	12.4	15.3	5.53	3.42	3.64	9.50	6.64	0.18	-2.67	1.14	0.93	0.41	1.85



Alt Model-Shift Uniqueness Test

007364706-01, P = 461.921057 Days, E = 226.085704 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
31.5	8.44	7.64	7.21	5.60	3.52	1.70	23.9	24.3	0.80	1.23	4.88	0.83	0.20	1.37



Stellar Parameters For KIC 007364706

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (g \cdot \text{cm}^{-3})$
	5130^{+89}_{-251}	$2.445^{+0.033}_{-0.027}$	$-0.500^{+0.100}_{-0.350}$	$16.034^{+0.962}_{-5.452}$	$2.608^{+0.250}_{-1.419}$	$0.001^{+0.000}_{-0.000}$
	+2%/-5%	+1%/-1%	+20%/-70%	+6%/-34%	+10%/-54%	+53%/-10%
Source	PHO1	AST9	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 007364706-01 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	A_{obs}
DV	-1026 ± 81	$103.31^{+21.01}_{-23.56}$	997^{+26}_{-52}	4013^{+370}_{-250}	140^{+83}_{-43}
Alt.	-459 ± 54	$76.43^{+21.76}_{-20.18}$	995^{+25}_{-49}	3875^{+398}_{-313}	116^{+86}_{-46}

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

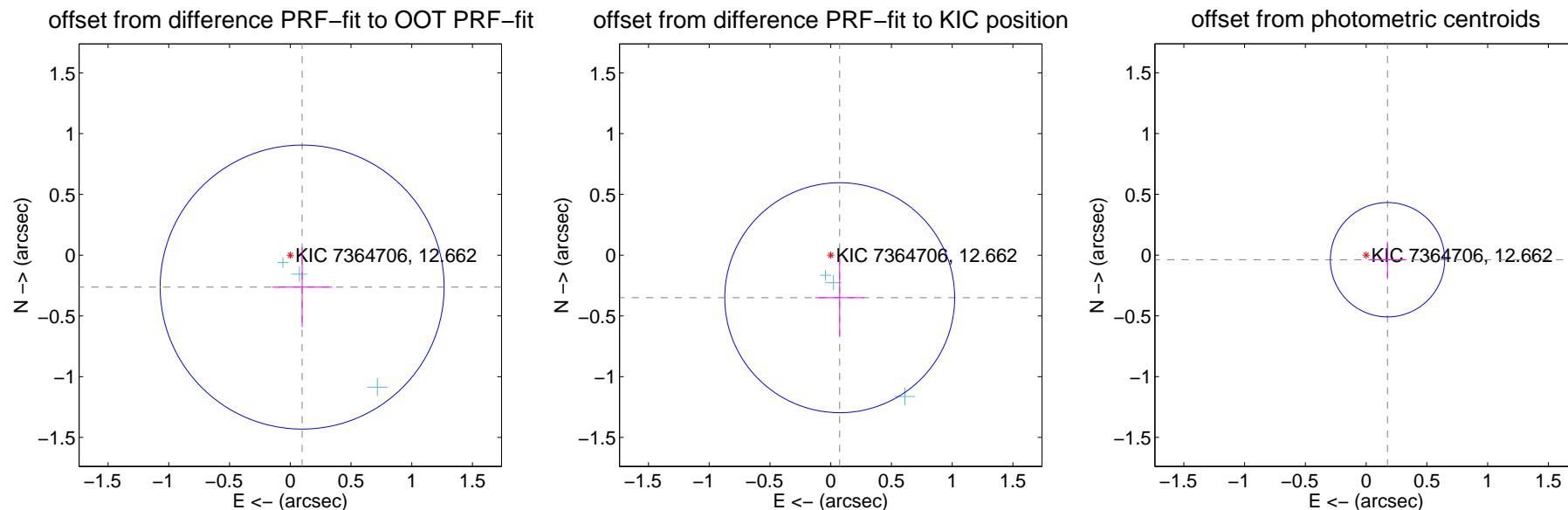
DV Centroid Data

Supplemental centroid analysis for 007364706-01. Kepler magnitude: 12.66. Transit SNR 10.02

There are 3 quarters with good PRF difference image offsets

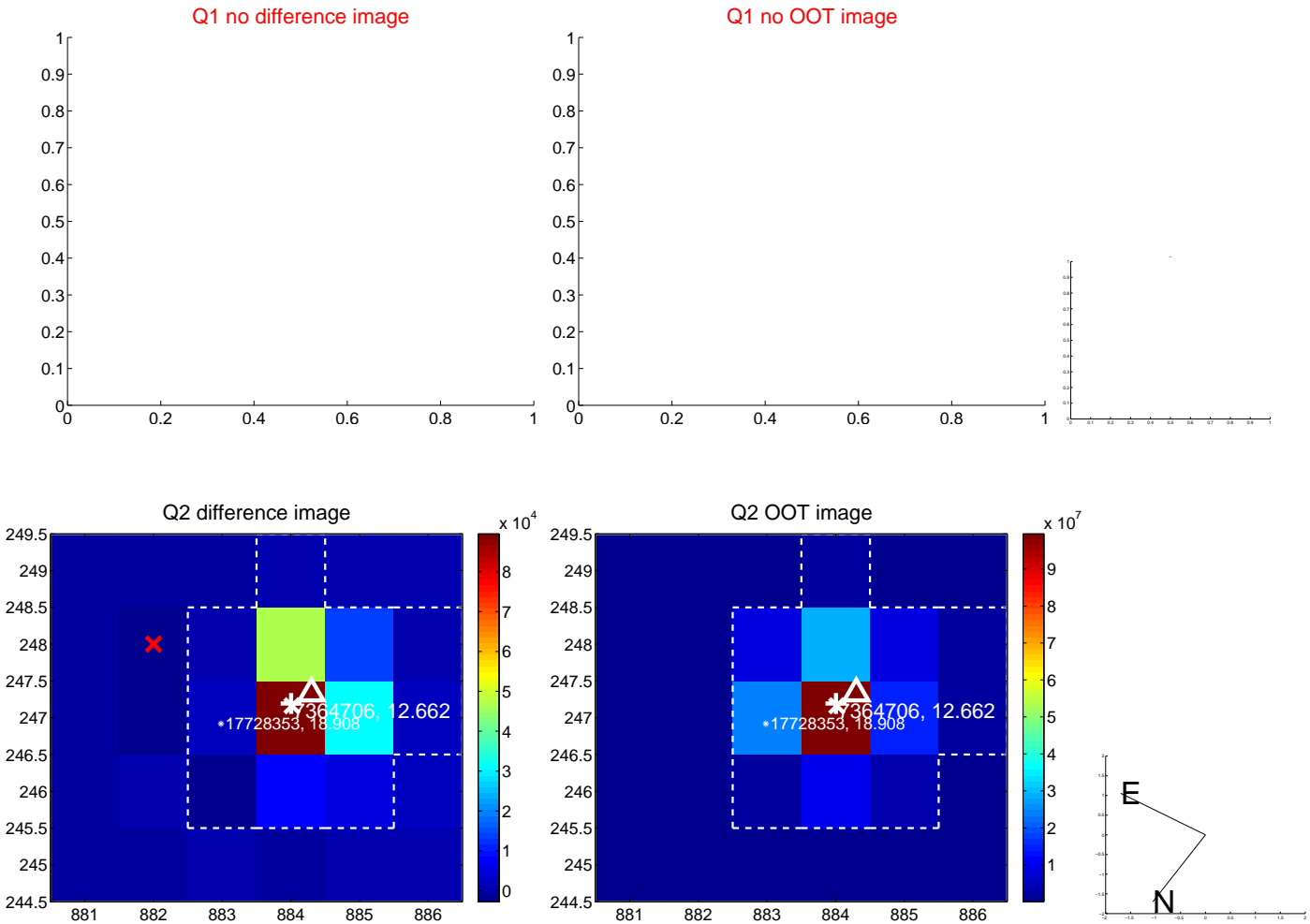
The direct PRF centroid is offset from the target star catalog position by about 0.11 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.280 ± 0.390	0.72	-0.098 ± 0.246	-0.263 ± 0.328
PRF-fit source offset from KIC position	0.358 ± 0.315	1.13	-0.074 ± 0.201	-0.350 ± 0.320
photometric centroid source offset	0.18 ± 0.16	1.15	-0.18 ± 0.16	-0.04 ± 0.15

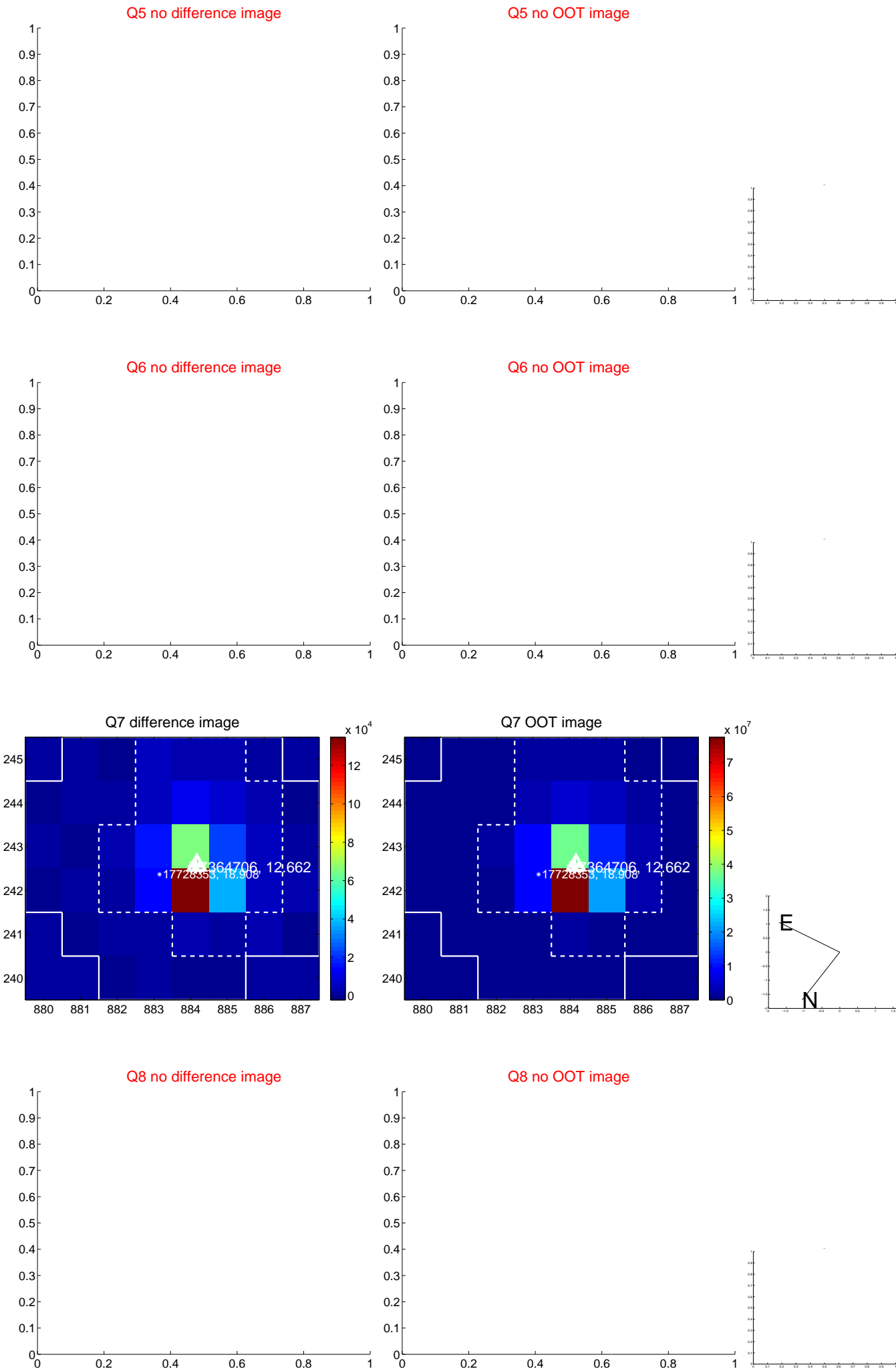


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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

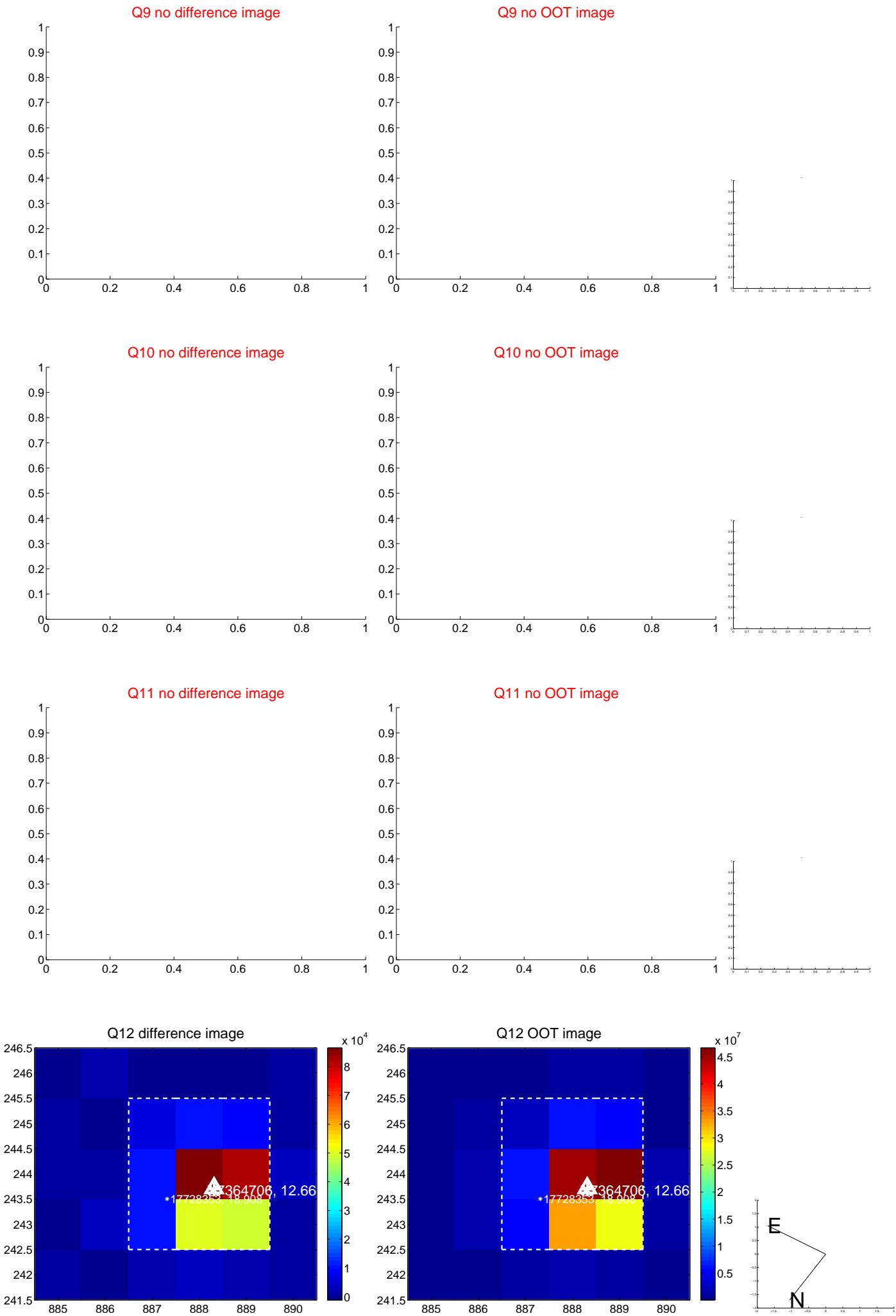
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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



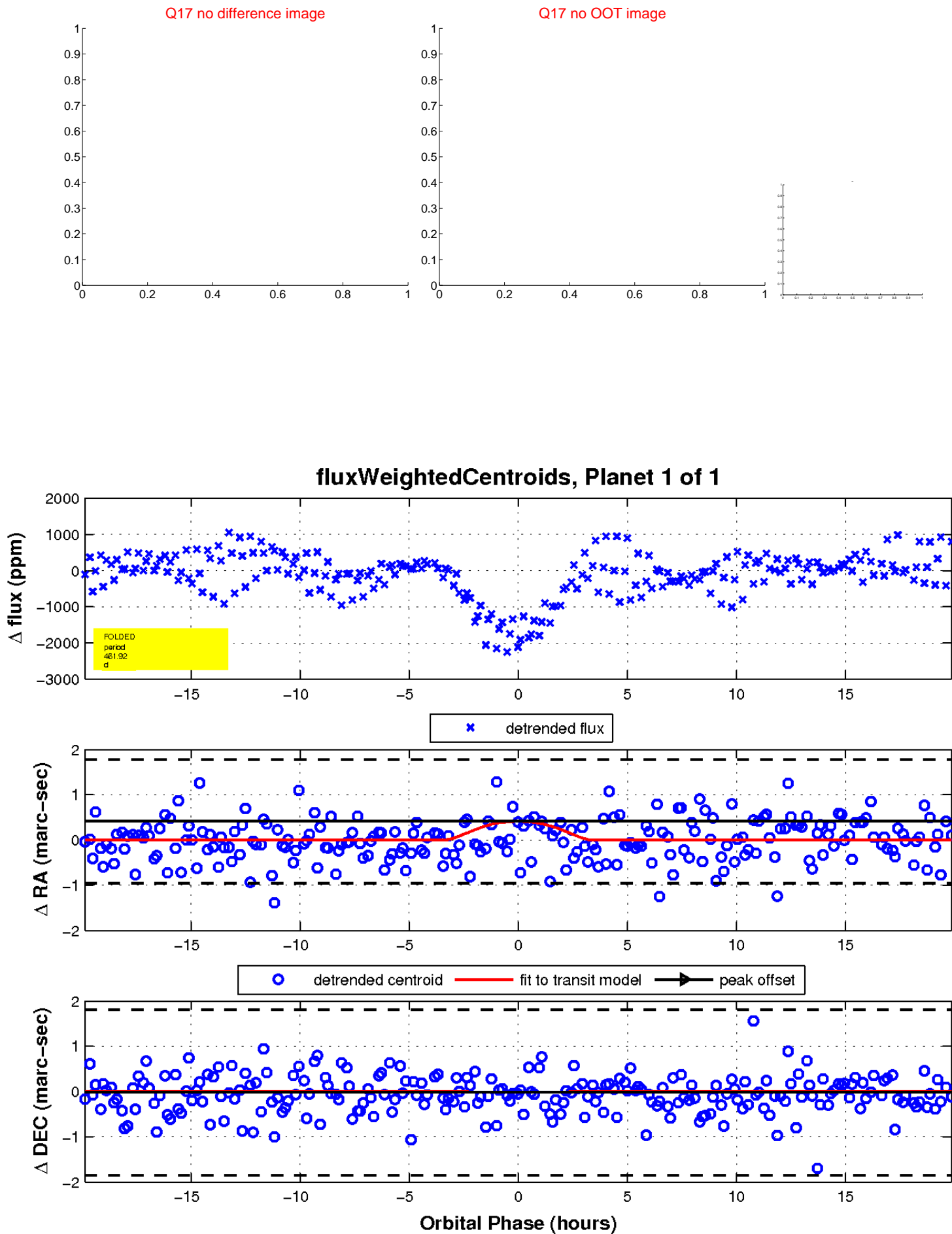
white ×: KIC target position; +: OOT centroid; △: difference centroid. red ✕: large negative pixel value.



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



UKIRT Image

