

KIC 010000300

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})
010000300-01	OBS	No	570.252577	372.016595	390.3	6.150	7.9	7.6	0.88	5734	1.82	0.42

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
010000300-01	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_MARSHALL—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.

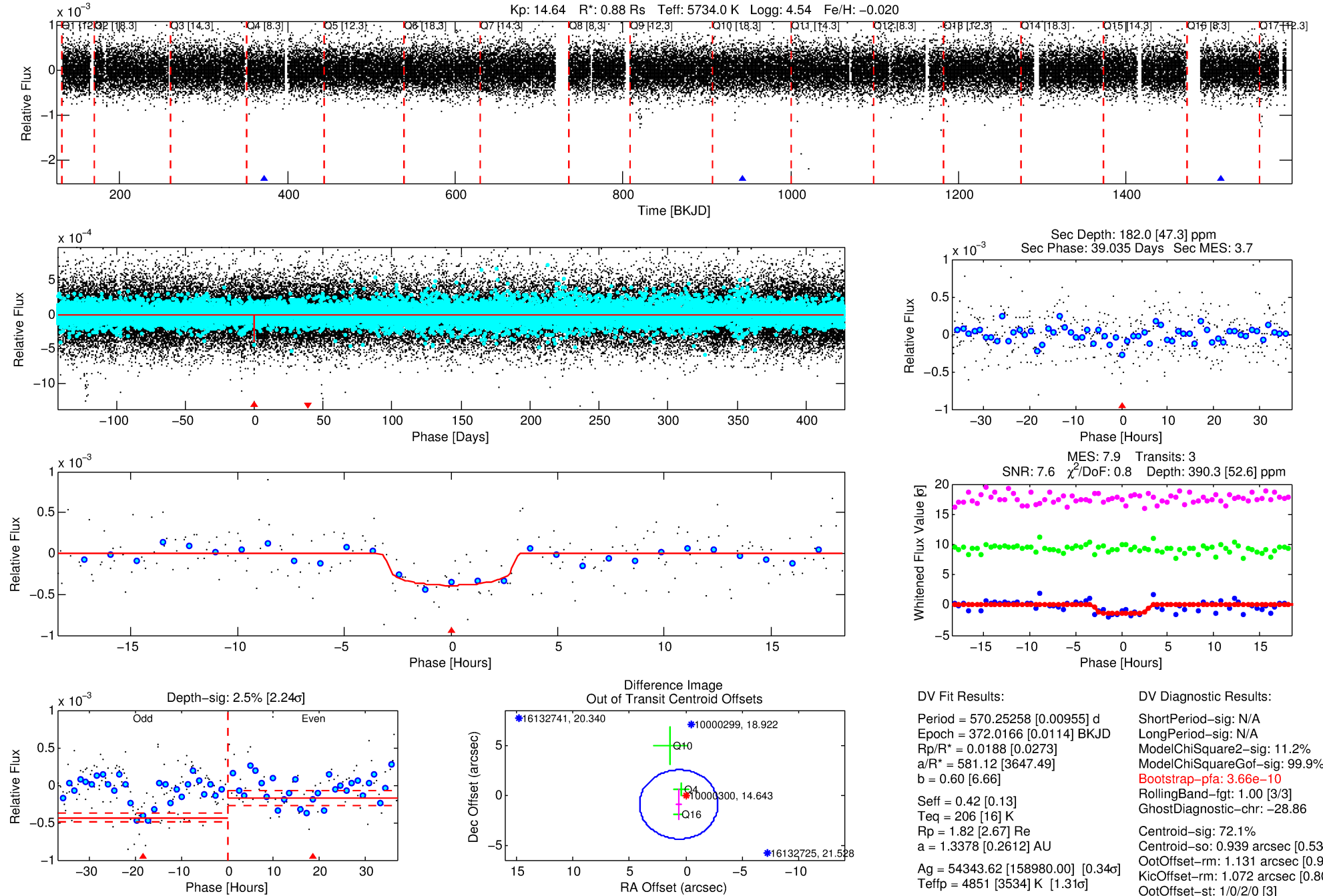
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 010000300-01

No Significant Match Found

DV One-Page Summary

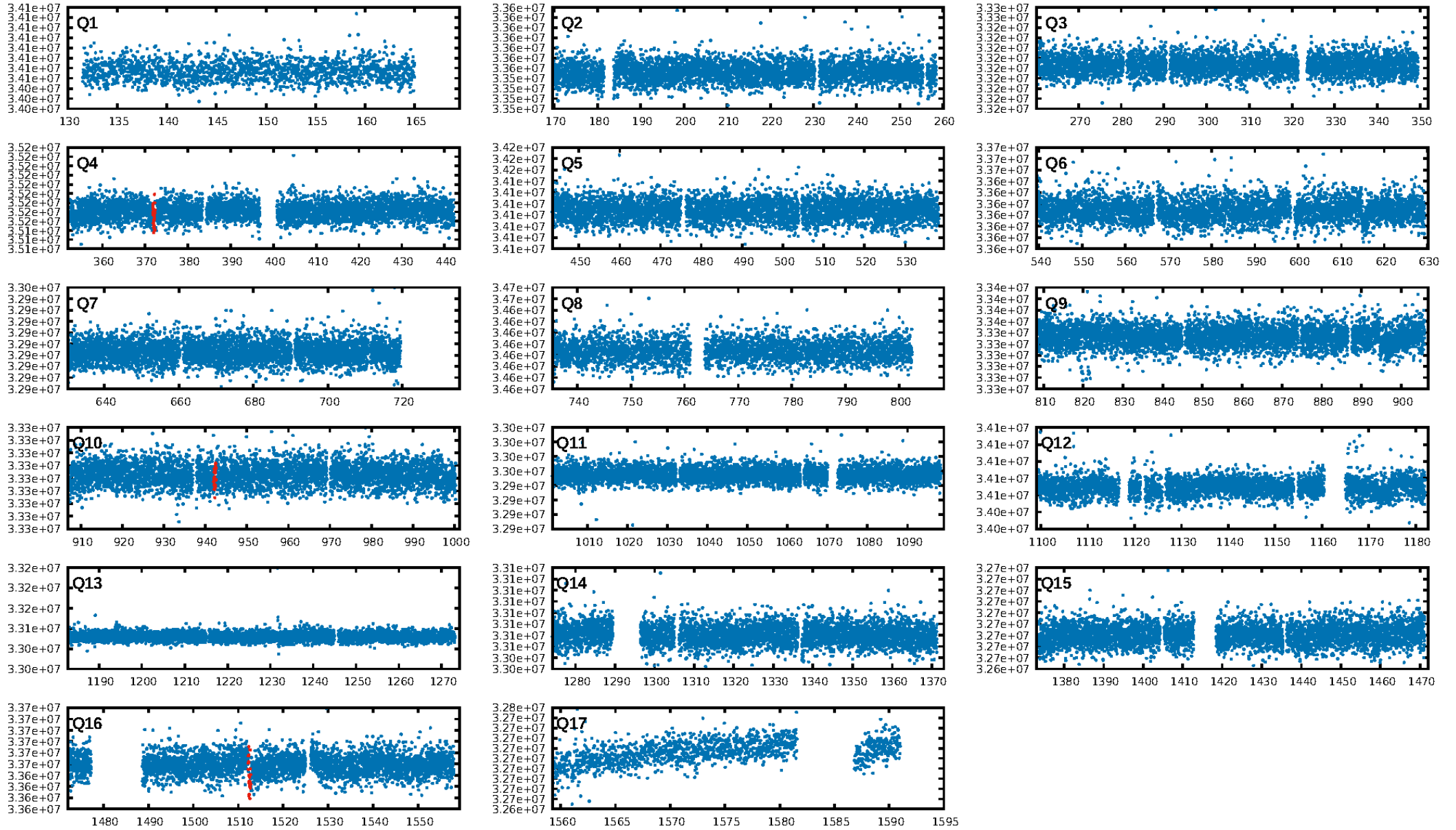
KIC: 10000300 Candidate: 1 of 1 Period: 570.253 d



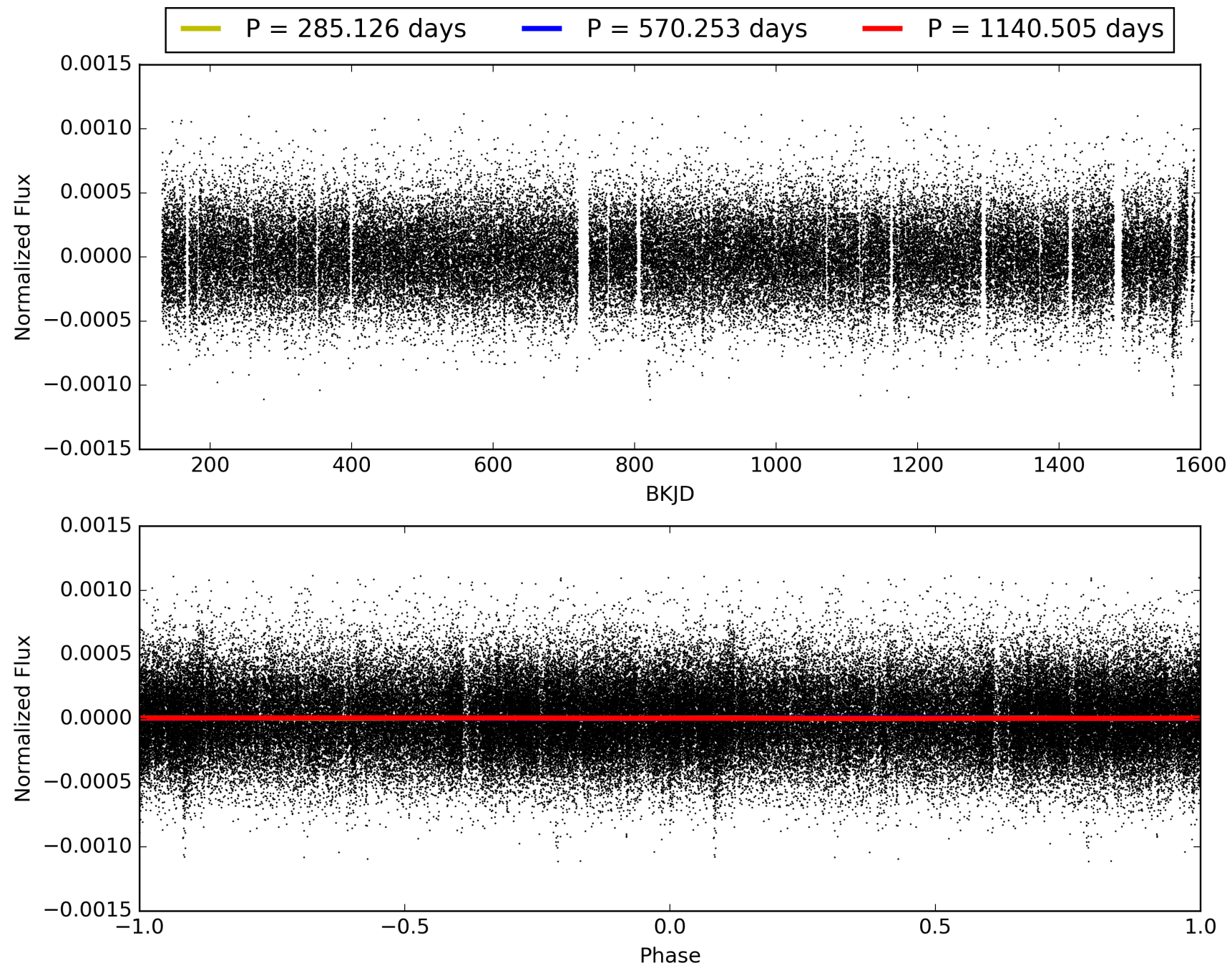
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 28-Jan-2016 20:36:57 Z

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

TCE 010000300-01, PDC Light Curves

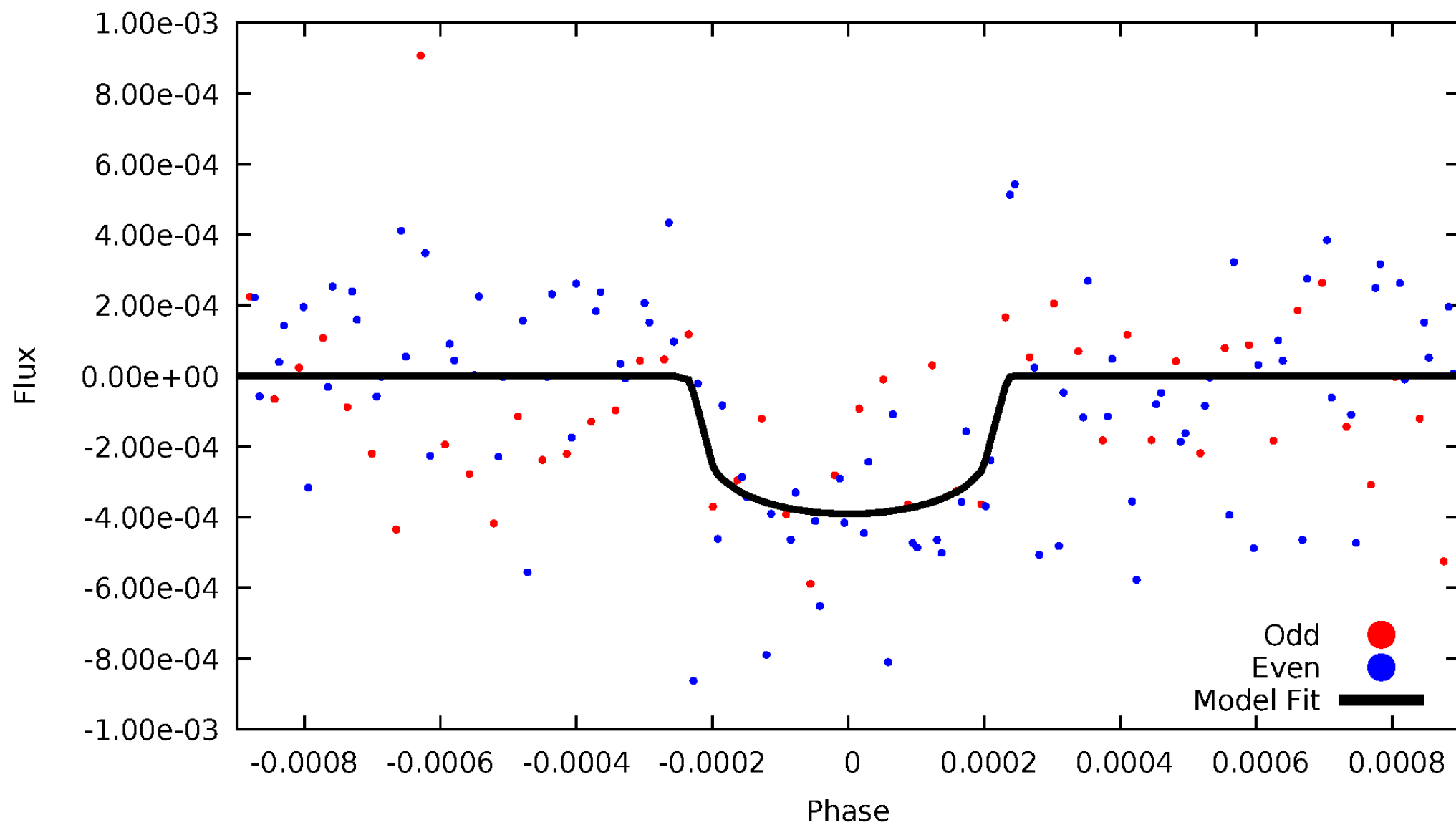


TCE 010000300-01



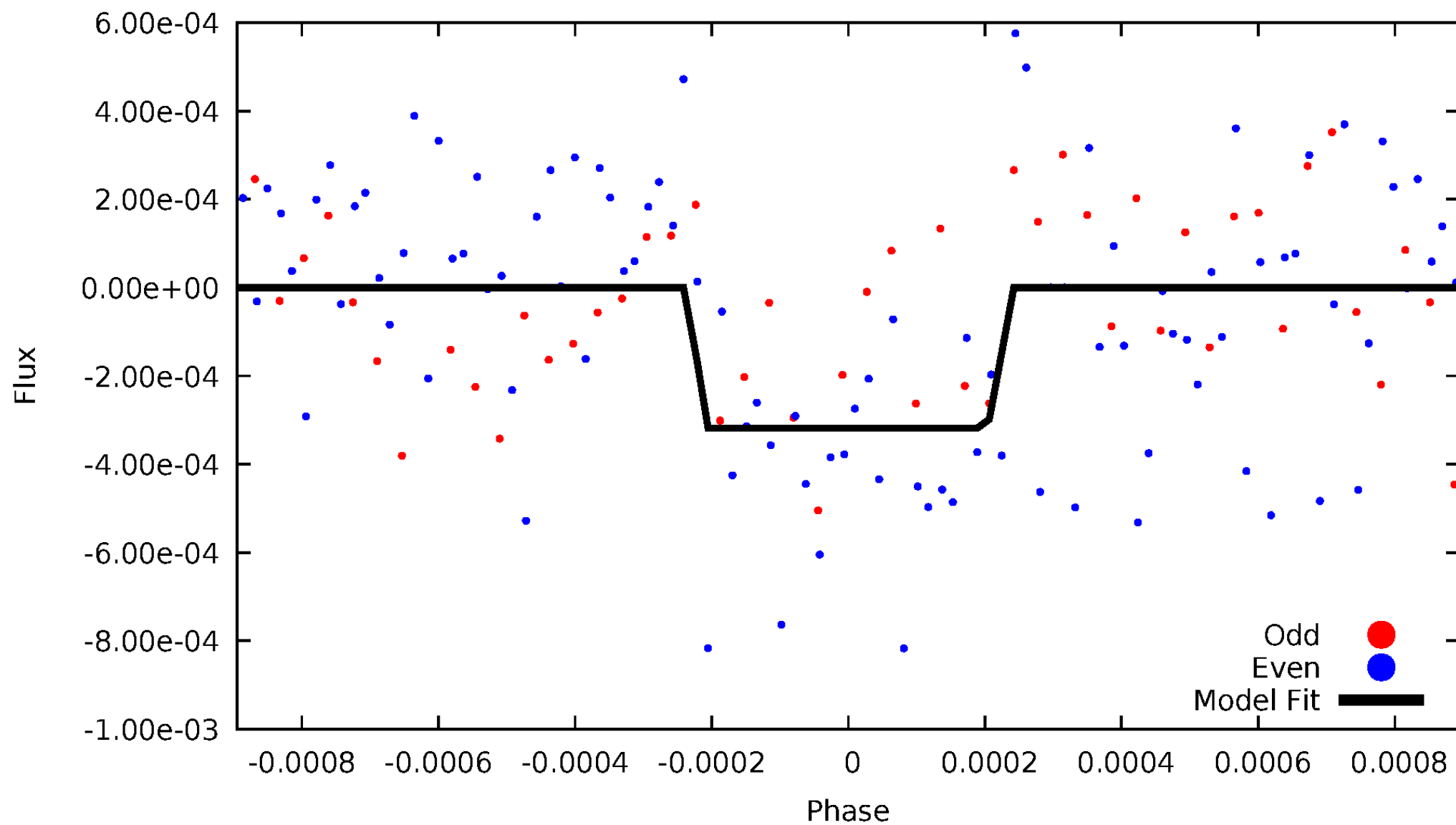
DV Odd/Even

TCE 010000300-01



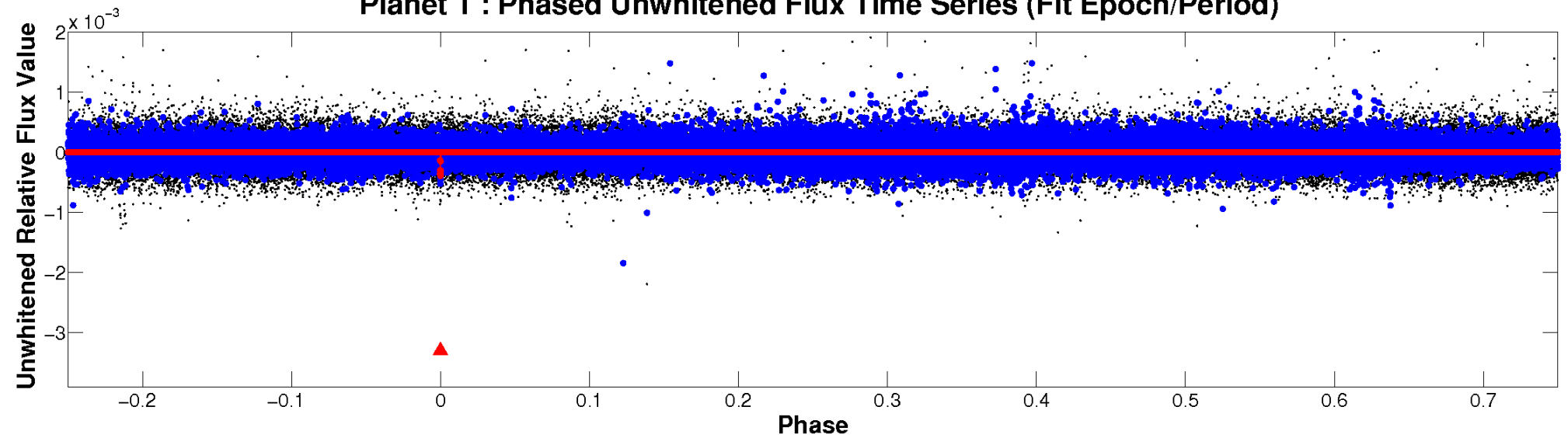
ALT Odd/Even

TCE 010000300-01

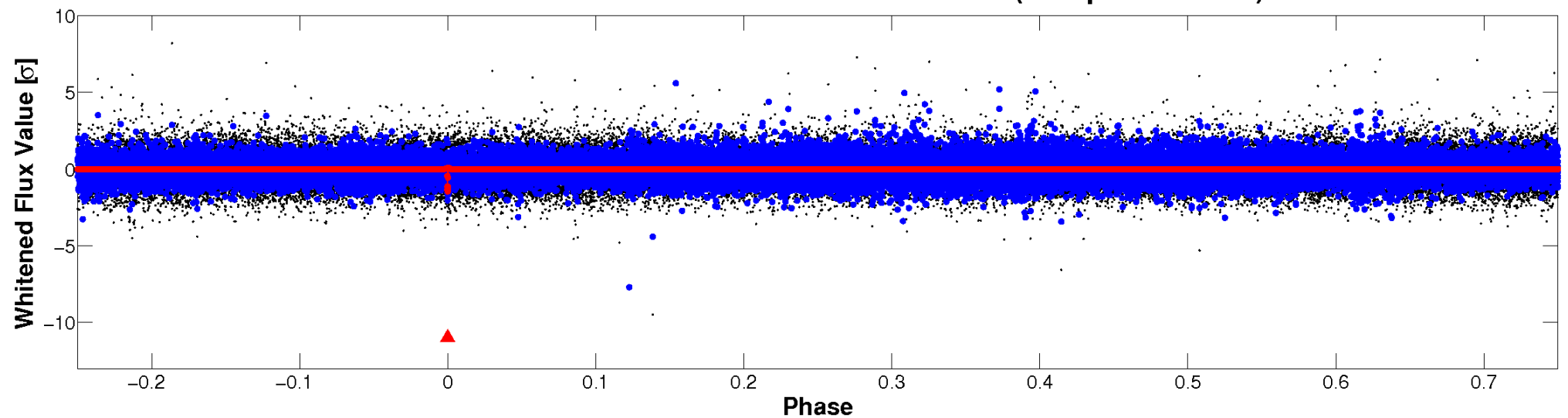


Non-Whitened Vs. Whitened Light Curve

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

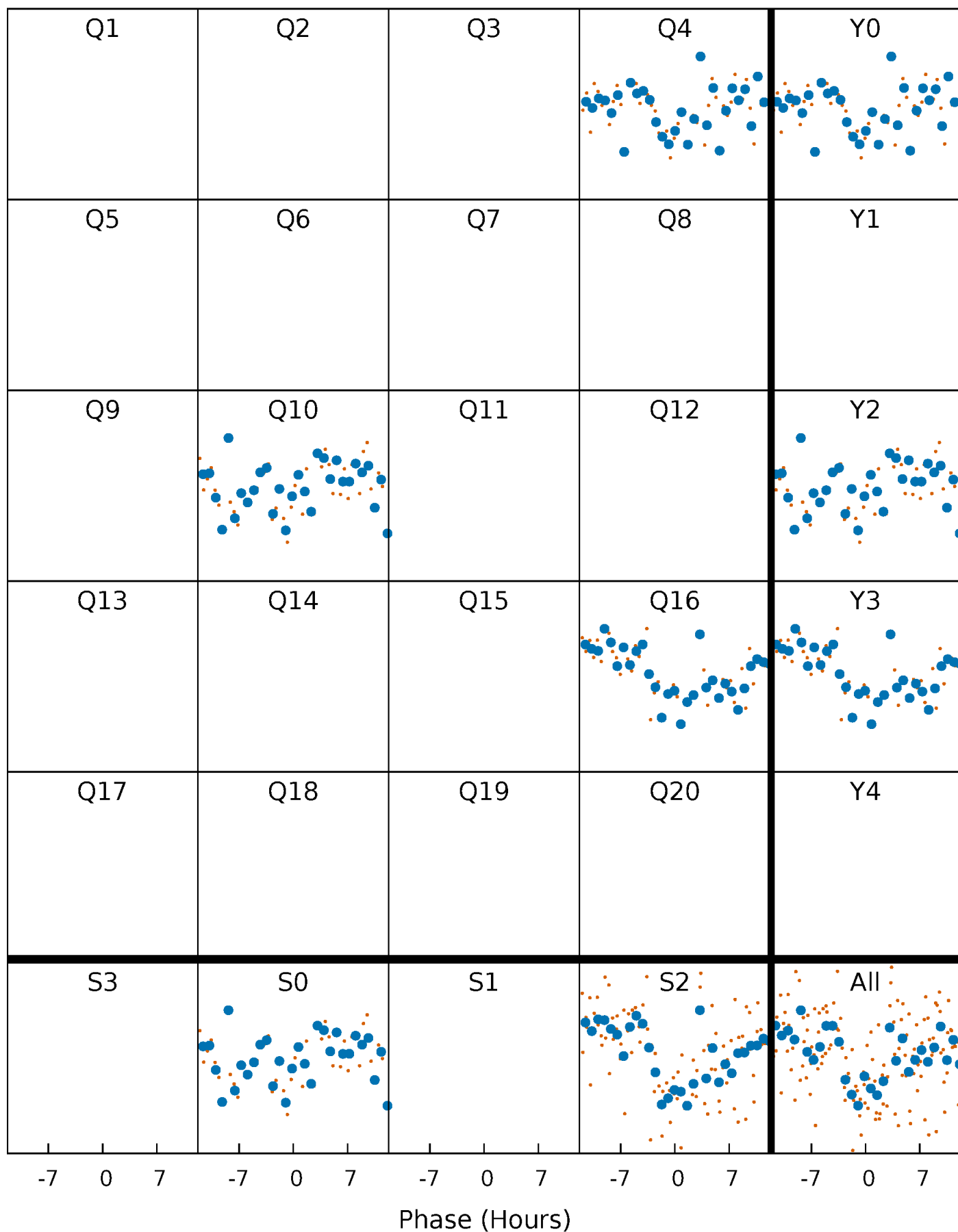


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



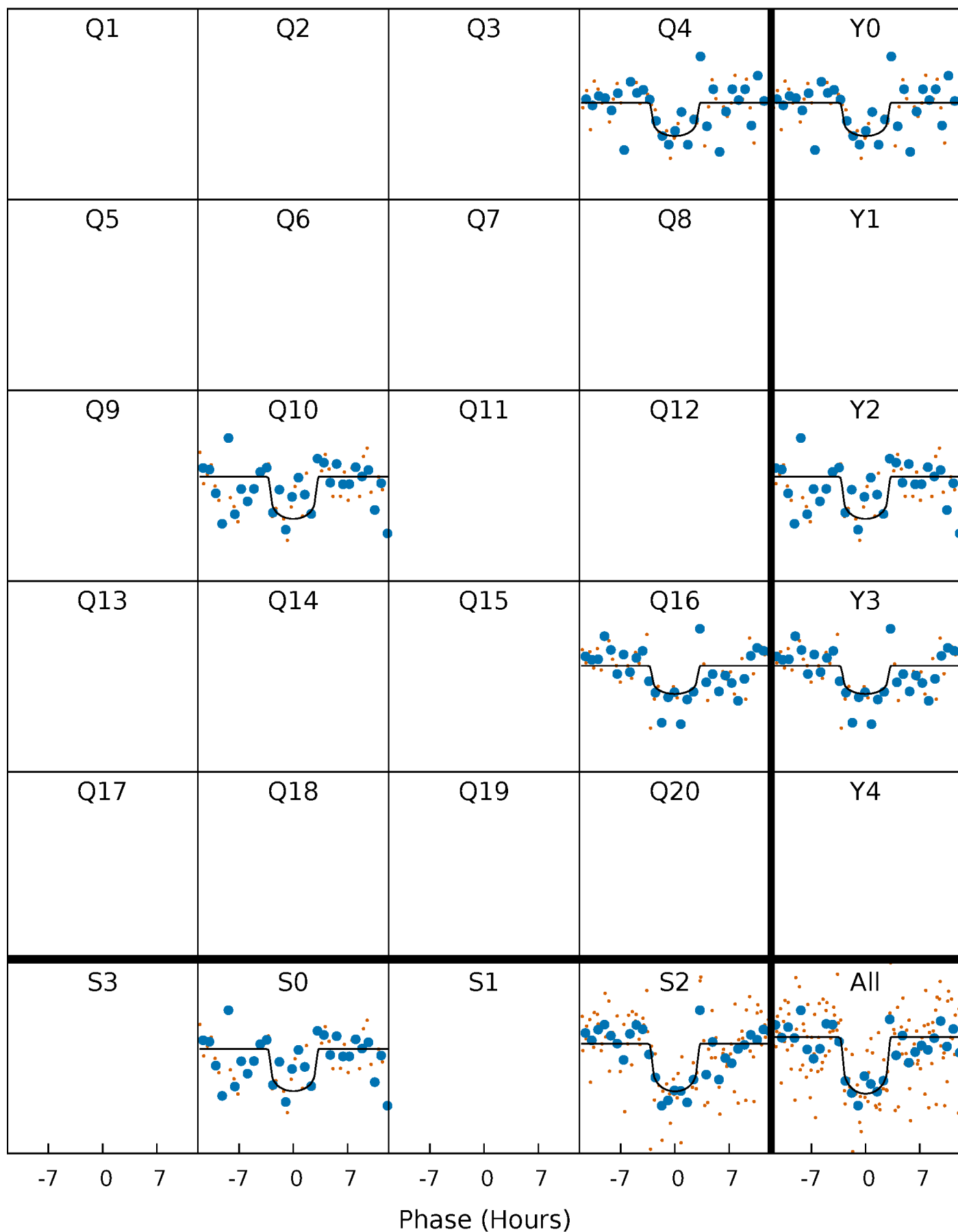
PDC Quarter-Phased Transit Curves

TCE 010000300-01 P=570.252577 Days $T_0=372.016595$ (BKJD)



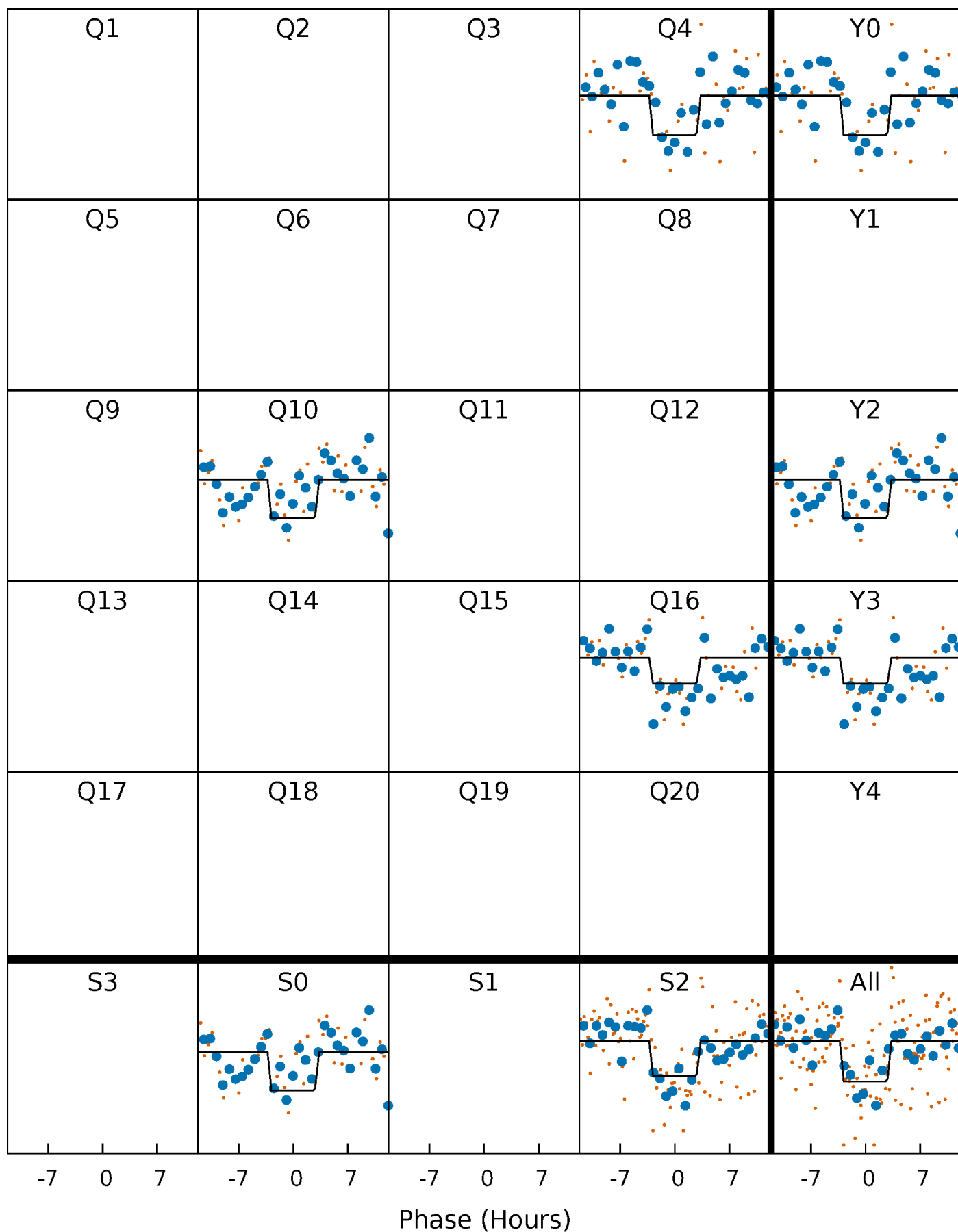
DV Quarter-Phased Transit Curves

TCE 010000300-01 P=570.252577 Days $T_0=372.016595$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

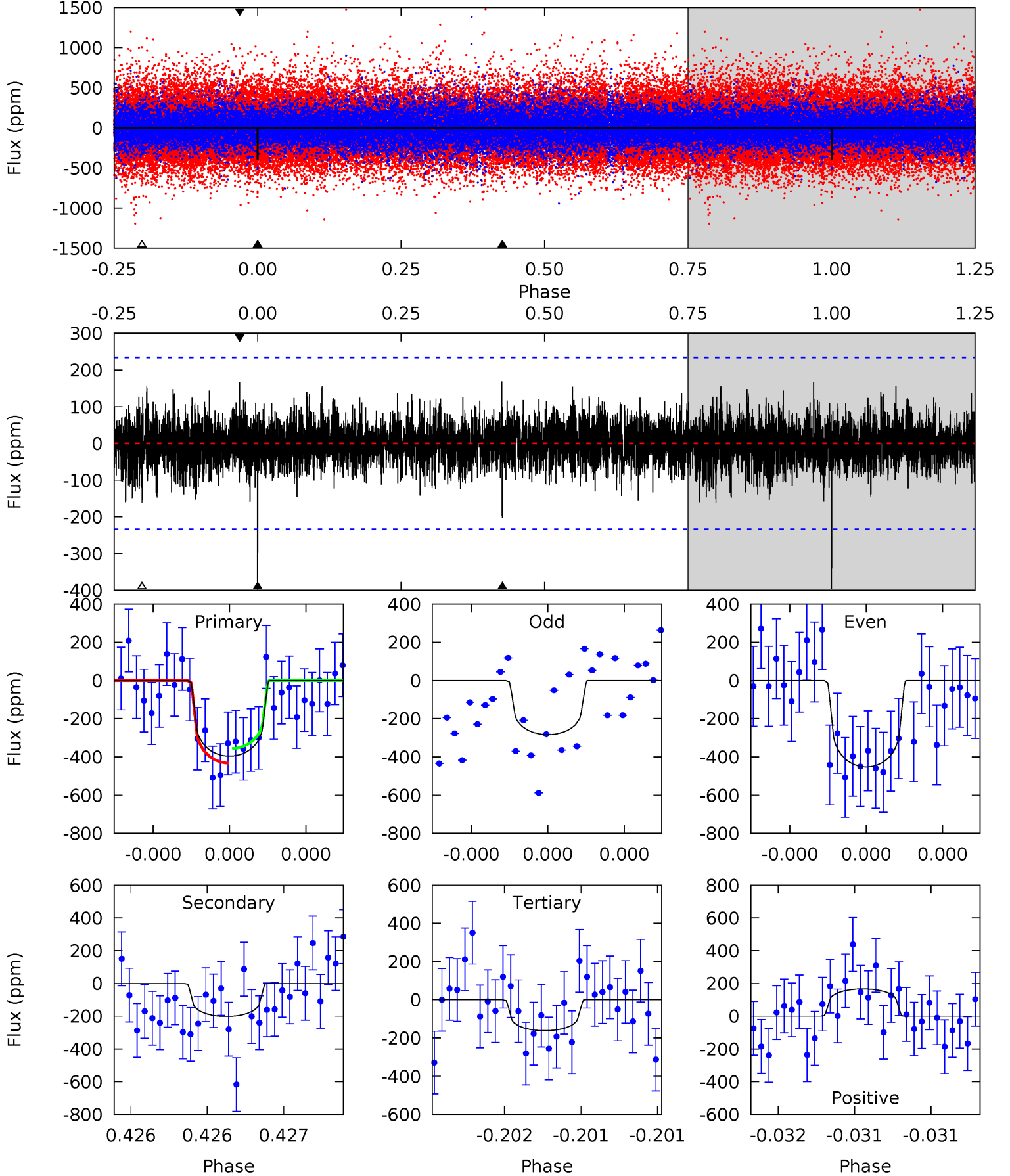
TCE 010000300-01 P=570.246170 Days $T_0=372.016590$ (BKJD)



DV Model-Shift Uniqueness Test

010000300-01, P = 570.252577 Days, E = 372.016595 Days

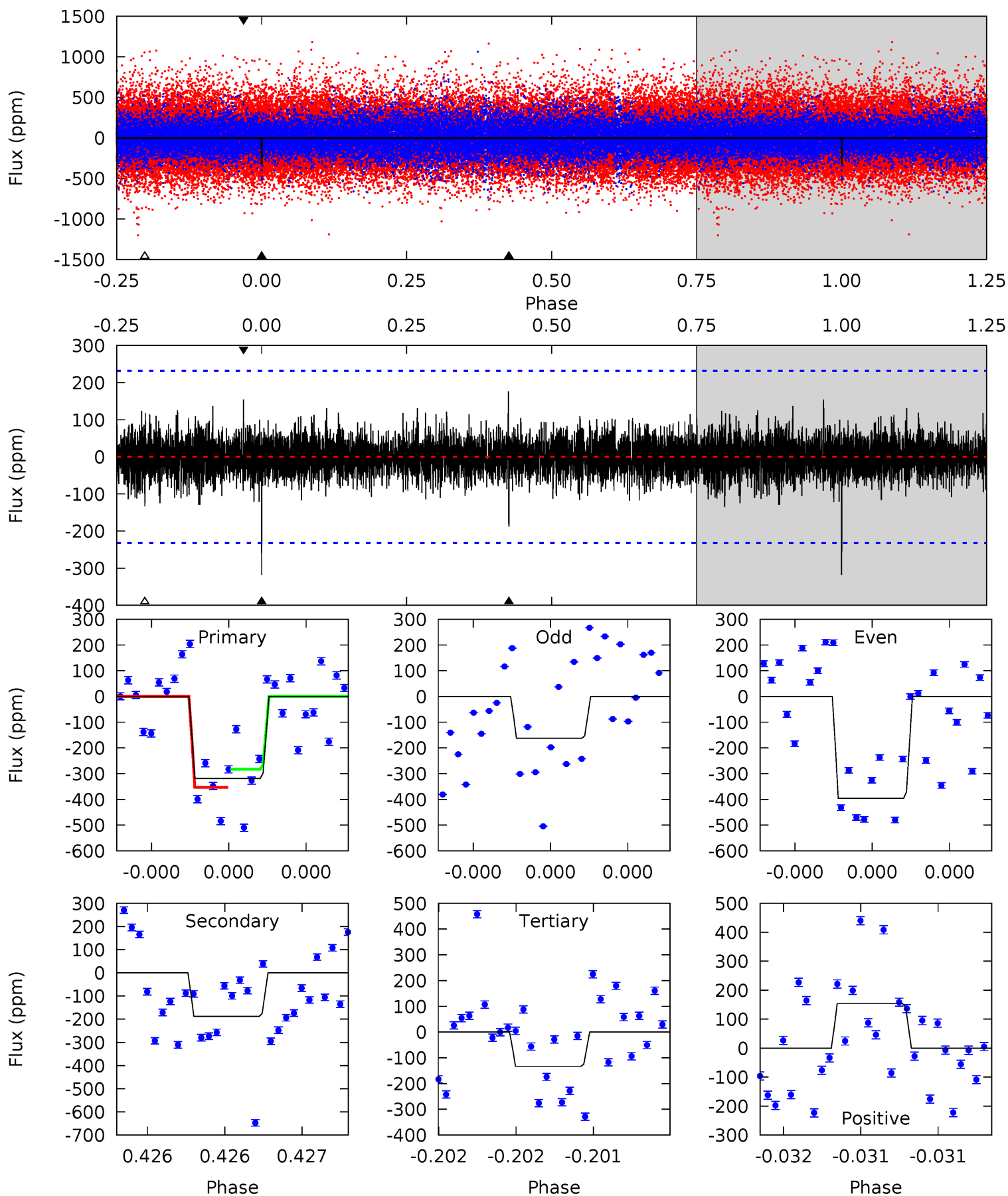
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
9.46	4.82	3.86	3.97	5.59	3.50	1.06	5.60	5.49	0.96	0.85	1.91	1.06	0.30	0.91



Alt Model-Shift Uniqueness Test

010000300-01, P = 570.246170 Days, E = 372.016590 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
7.68	4.53	3.22	3.71	5.59	3.50	0.89	4.47	3.97	1.31	0.82	2.62	1.11	0.36	0.85



Stellar Parameters For KIC 010000300

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	5734^{+138}_{-173}	$4.538^{+0.040}_{-0.160}$	$-0.020^{+0.250}_{-0.300}$	$0.883^{+0.201}_{-0.086}$	$0.982^{+0.093}_{-0.124}$	$2.009^{+0.427}_{-0.886}$
	+2%/-3%	+1%/-4%	+1250%/-1500%	+23%/-10%	+9%/-13%	+21%/-44%
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 010000300-01 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	-202 ± 42	$2.68^{+2.57}_{-1.77}$	293^{+15}_{-13}	4374^{+2779}_{-917}	$27791^{+195142}_{-20987}$
Alt.	-188 ± 41	$2.68^{+2.42}_{-1.77}$	293^{+16}_{-11}	4323^{+2747}_{-873}	$25627^{+187600}_{-18843}$

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 $A_{obs} \gg 1.0$

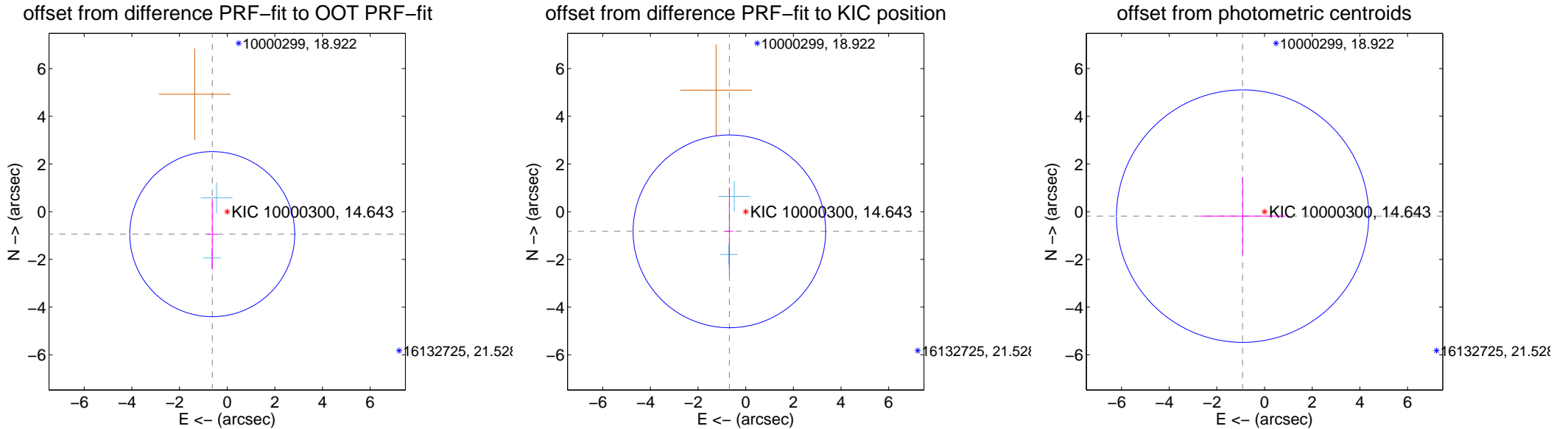
DV Centroid Data

Supplemental centroid analysis for 010000300-01. Kepler magnitude: 14.64. Transit SNR 7.62

There are 2 quarters with good PRF difference image offsets

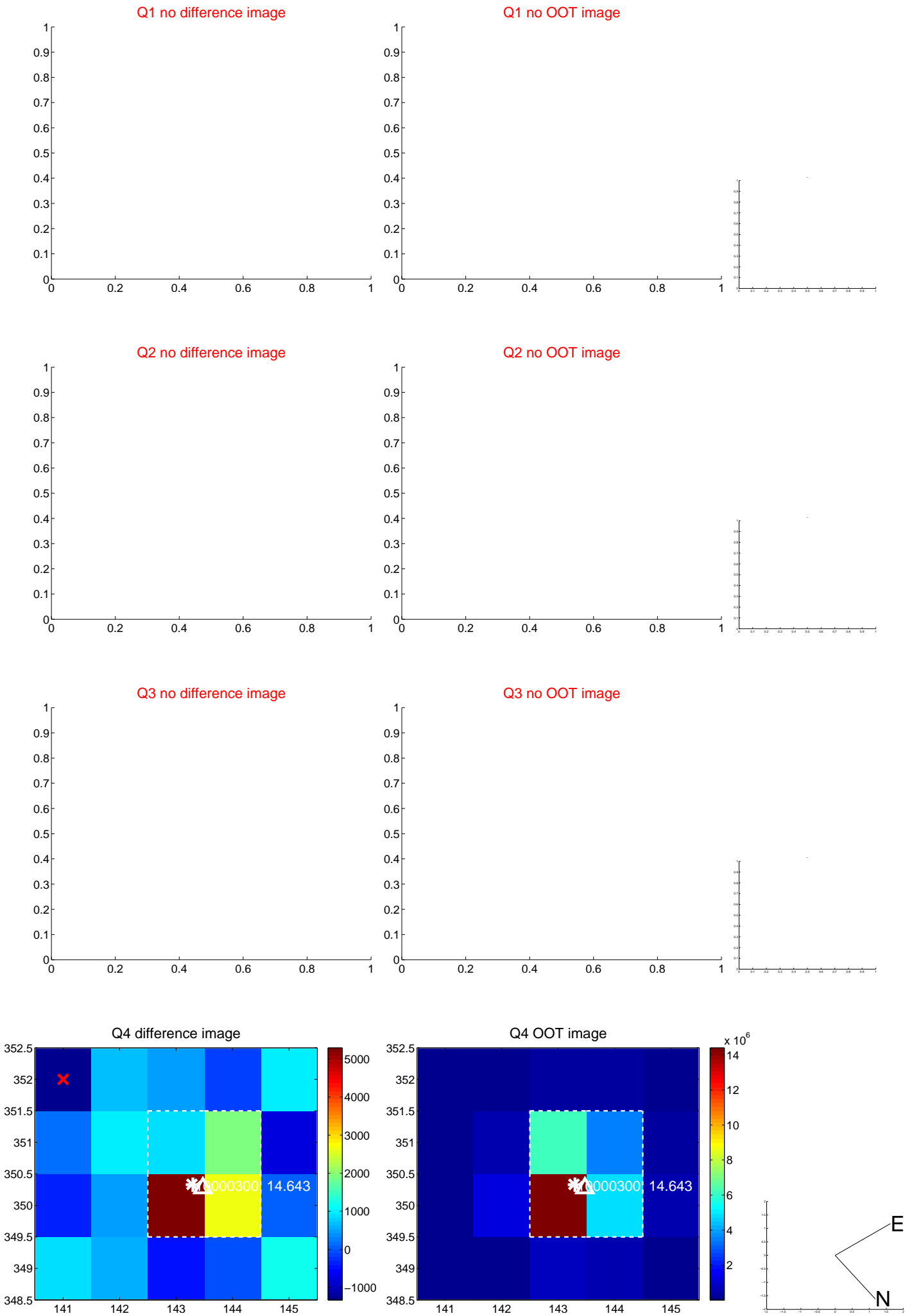
The direct PRF centroid is offset from the target star catalog position by about 0.16 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	1.131 ± 1.153	0.98	0.626 ± 0.211	-0.942 ± 1.480
PRF-fit source offset from KIC position	1.072 ± 1.347	0.80	0.686 ± 0.165	-0.824 ± 1.849
photometric centroid source offset	0.94 ± 1.76	0.53	0.92 ± 1.77	-0.19 ± 1.63



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.

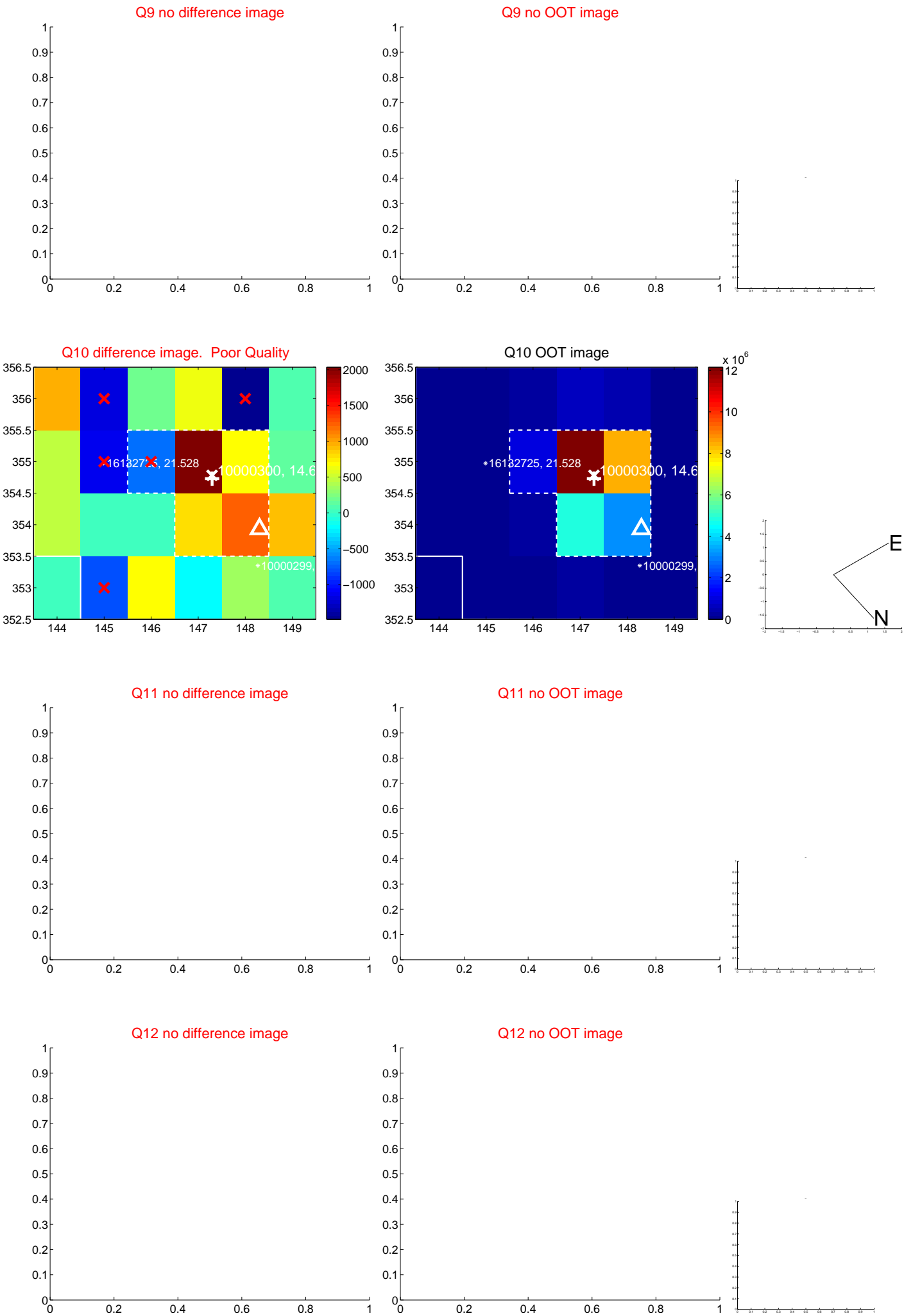
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



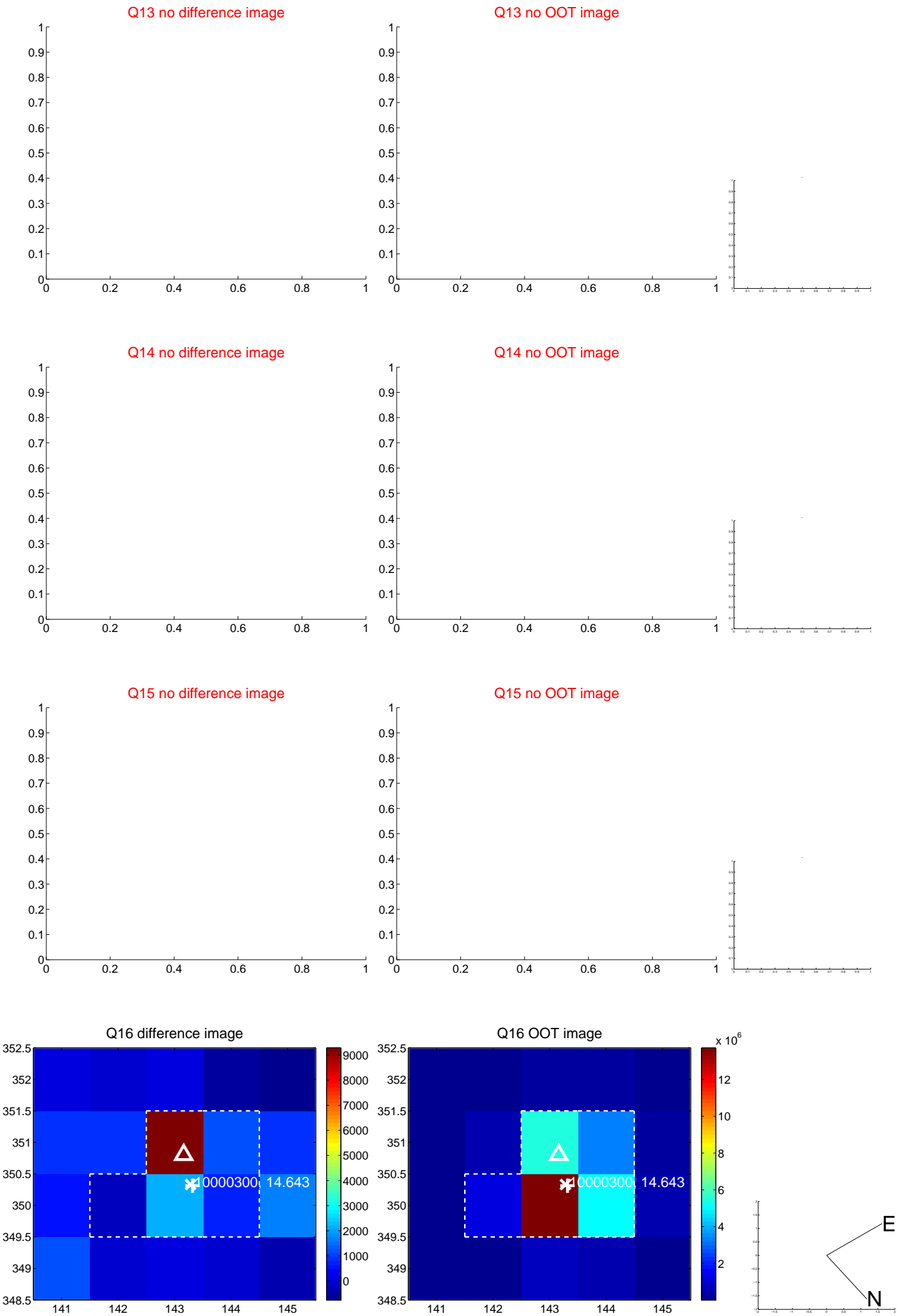
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



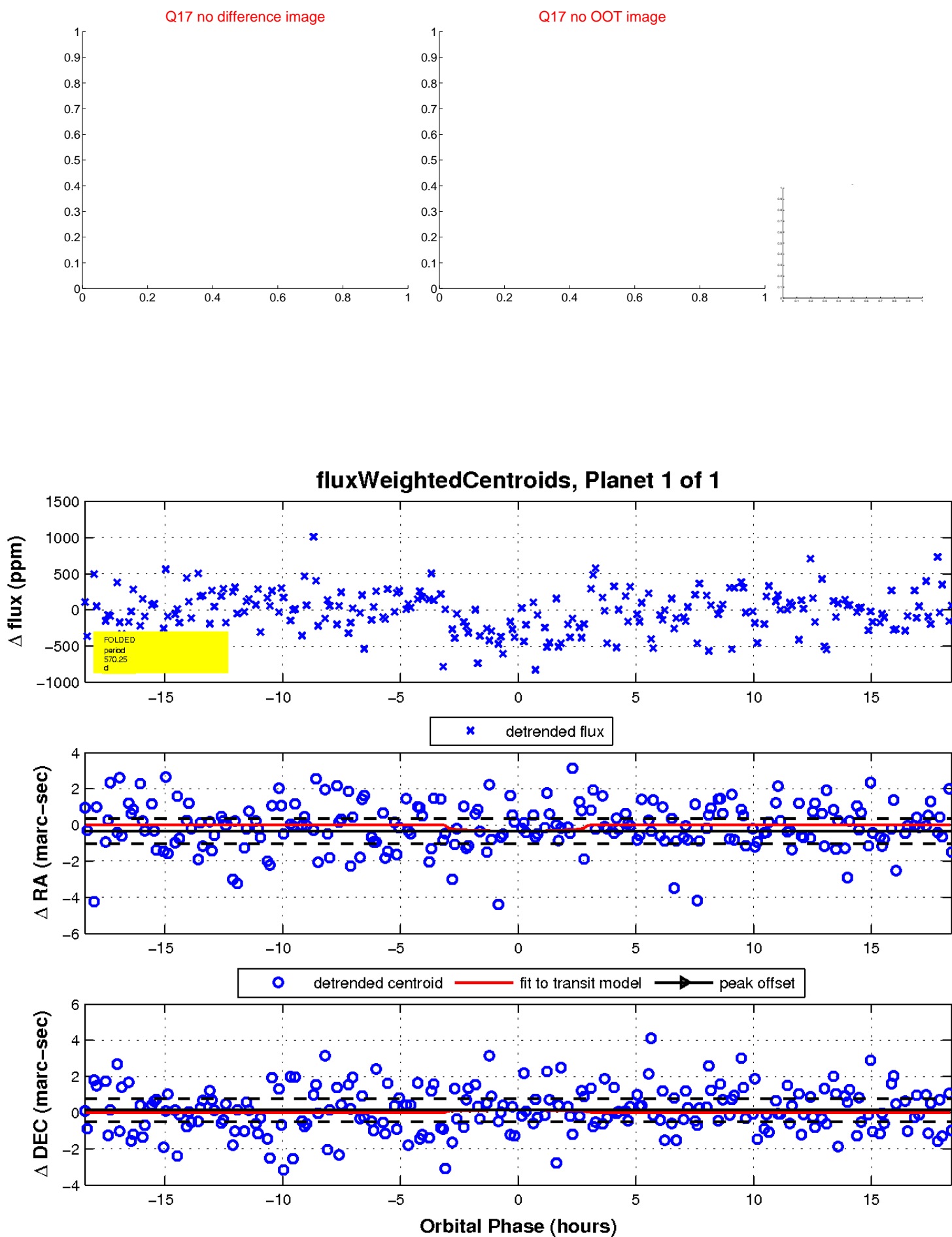
white ×: KIC target position; +: OOT centroid; △: difference centroid. red ✕: large negative pixel value.



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

