

KIC 010252382

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})
010252382-01	OBS	No	503.960752	248.527822	861.3	7.929	9.4	8.3	0.81	5467	2.35	0.41

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
010252382-01	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_CHASES_MARSHALL_SKYE—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.

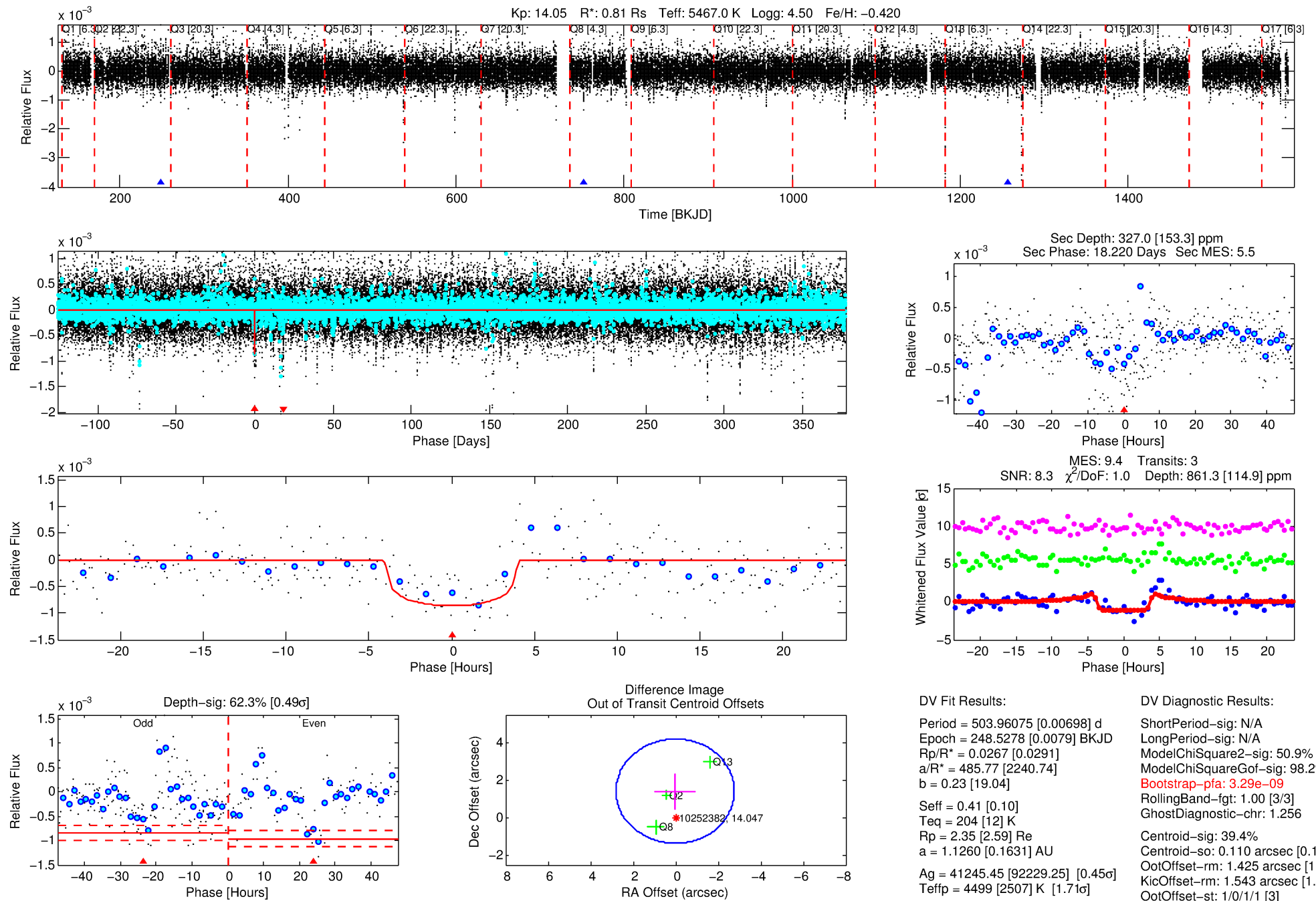
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 010252382-01

No Significant Match Found

DV One-Page Summary

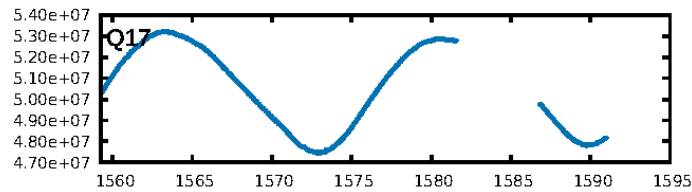
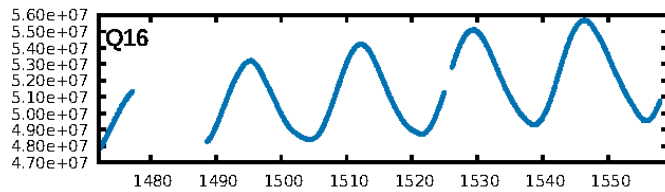
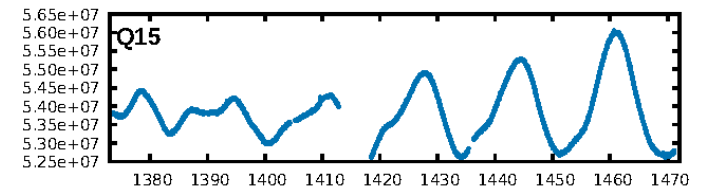
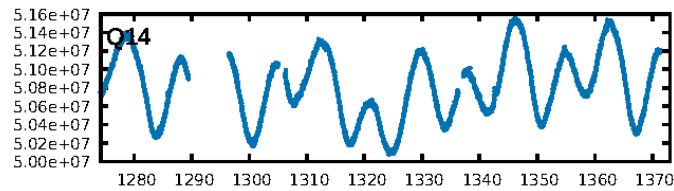
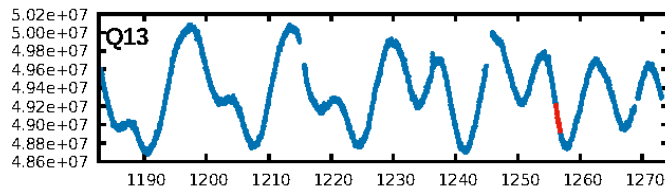
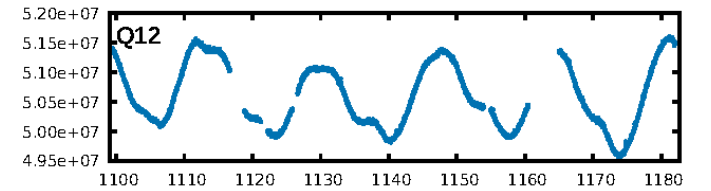
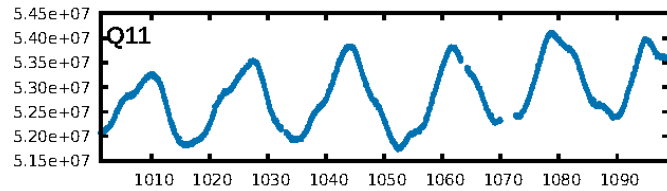
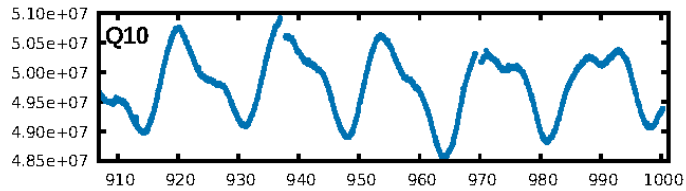
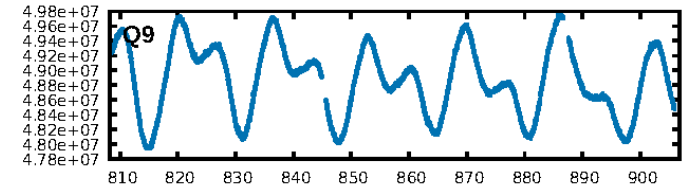
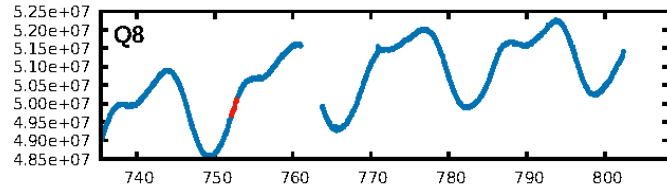
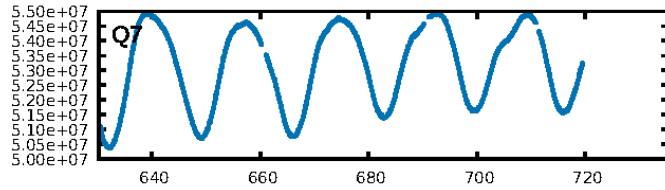
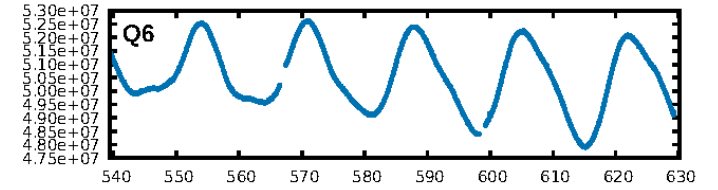
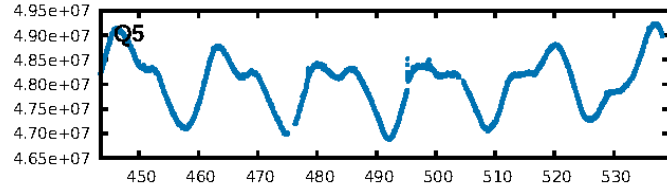
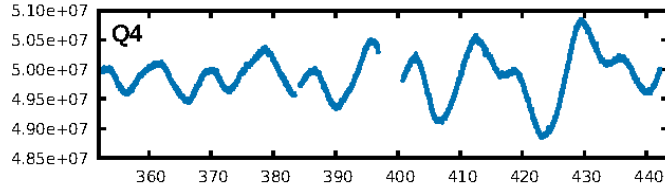
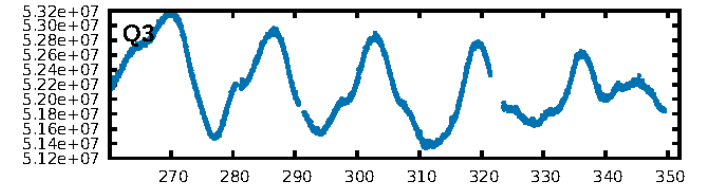
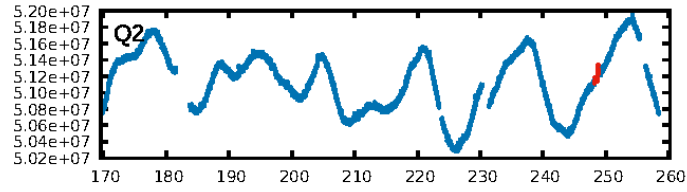
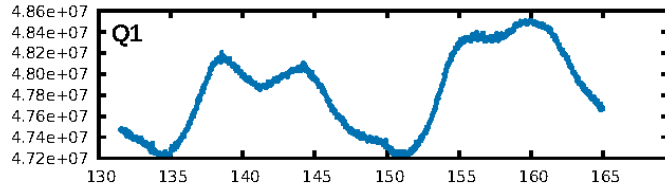
KIC: 10252382 Candidate: 1 of 1 Period: 503.961 d



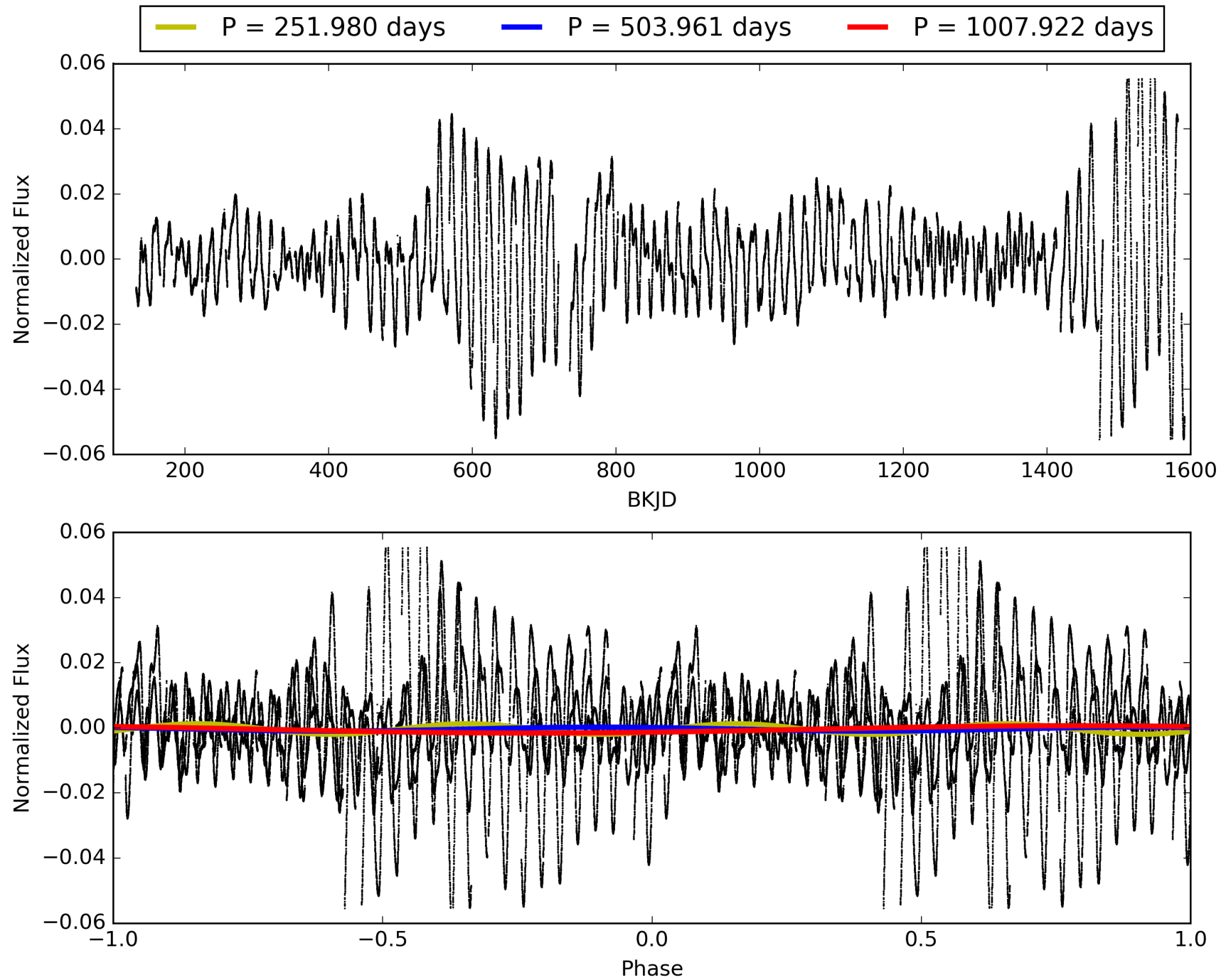
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 30-Jan-2016 19:42:49 Z

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

TCE 010252382-01, PDC Light Curves

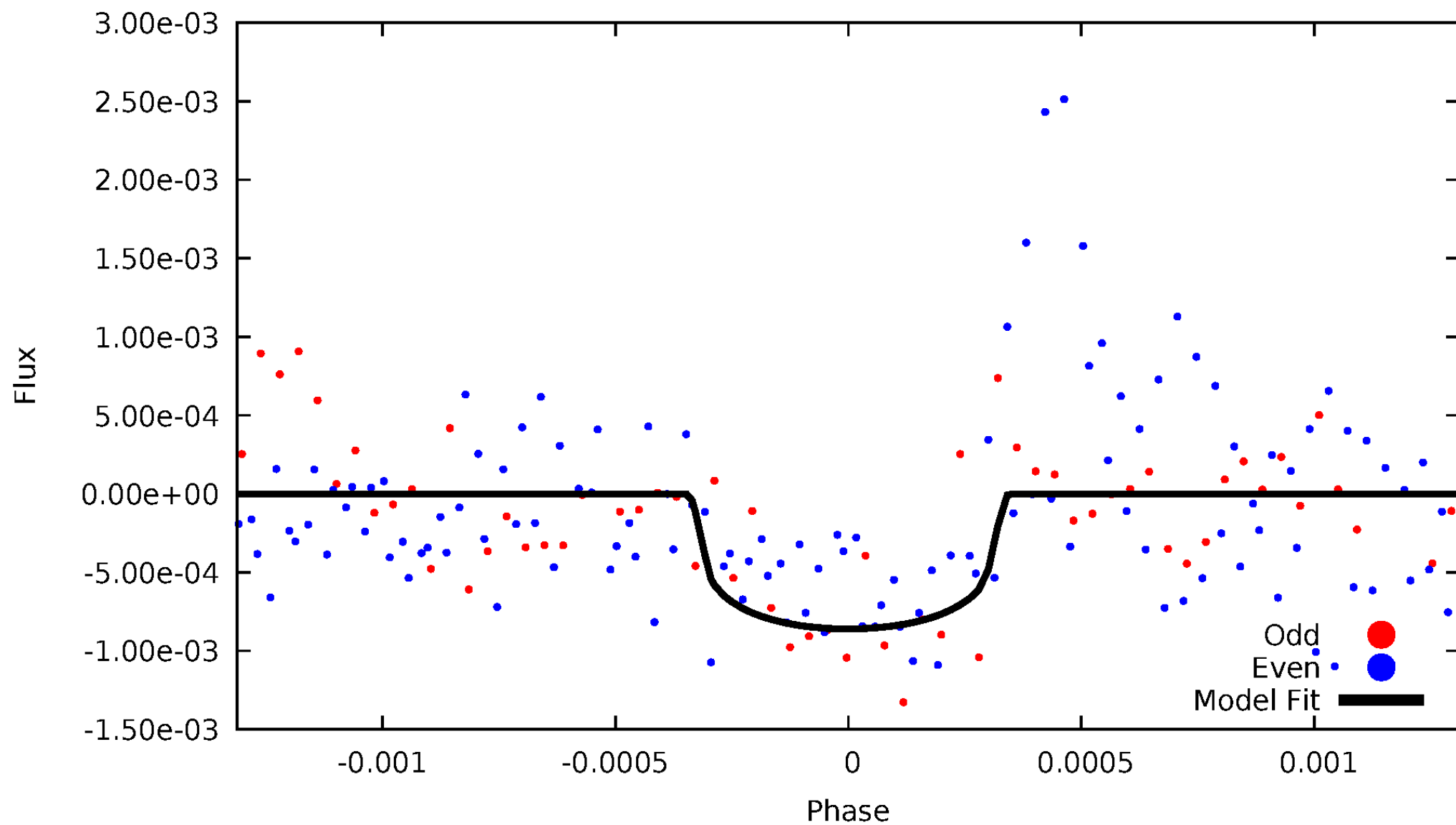


TCE 010252382-01



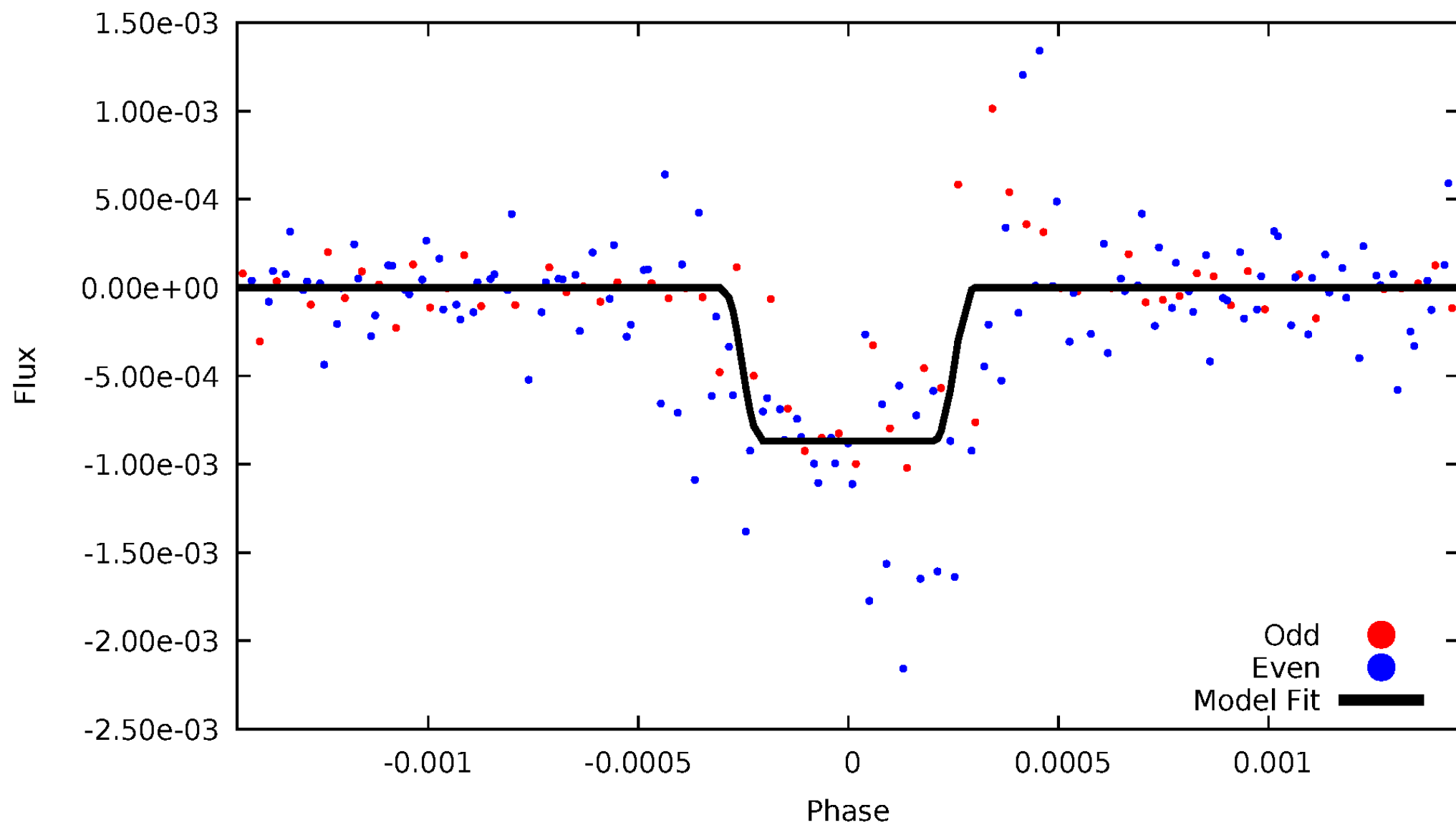
DV Odd/Even

TCE 010252382-01



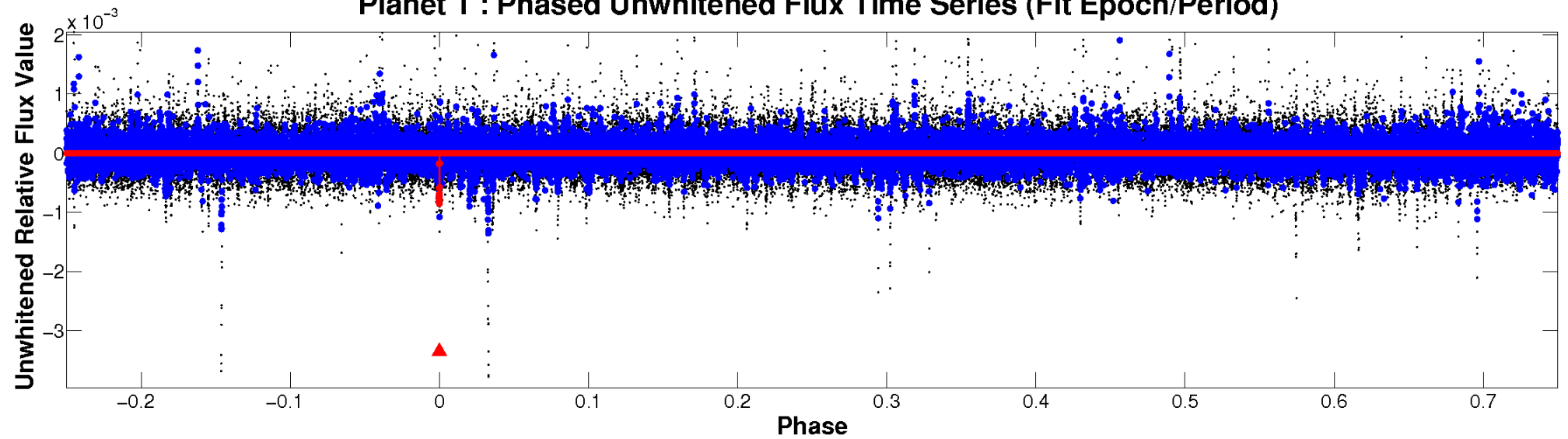
ALT Odd/Even

TCE 010252382-01

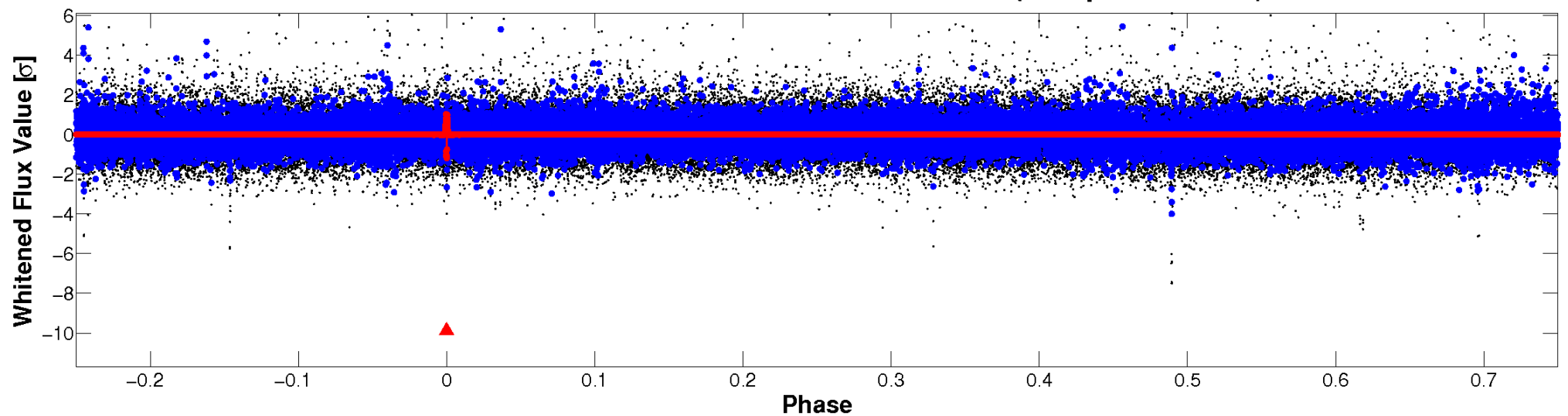


Non-Whitened Vs. Whitened Light Curve

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

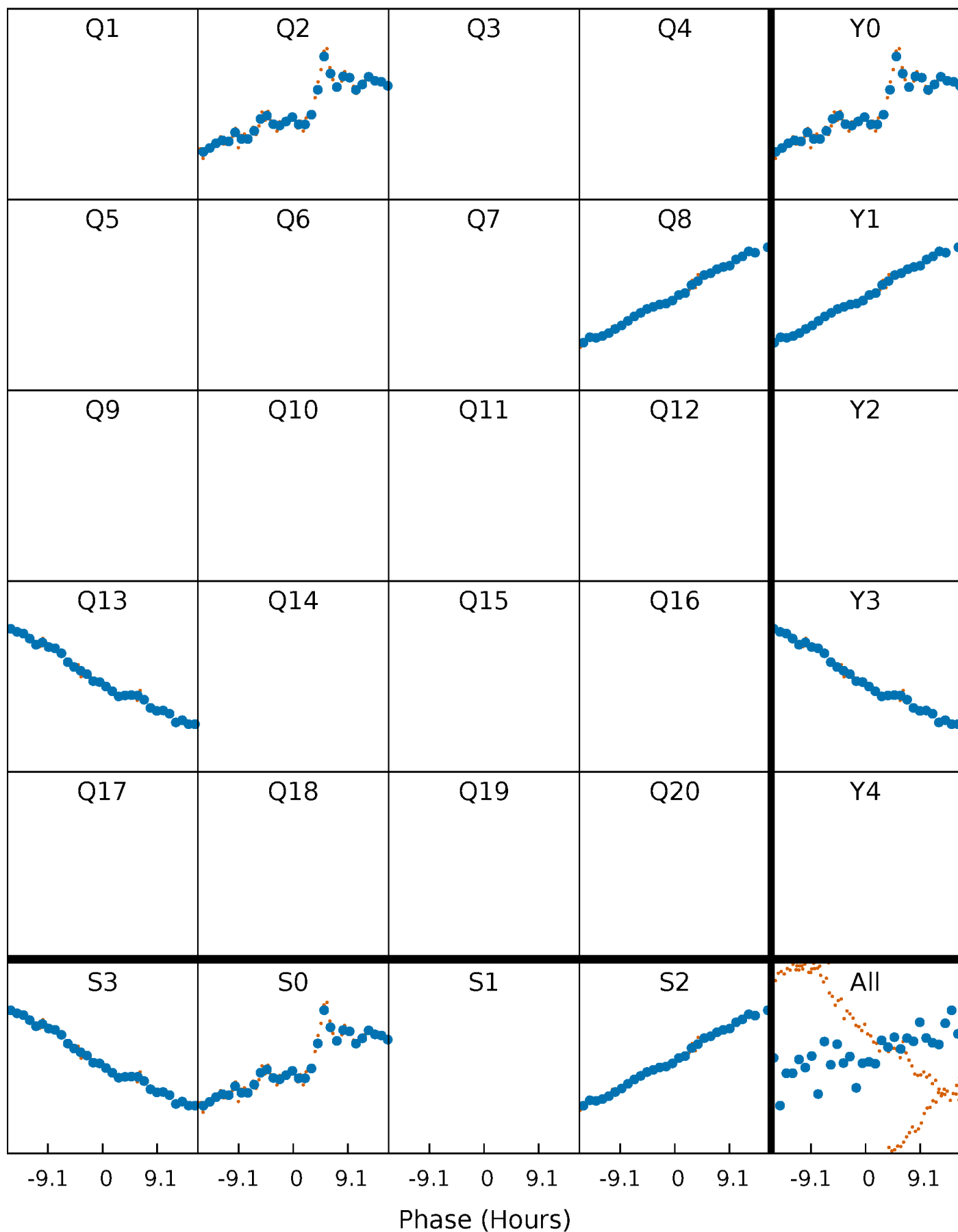


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



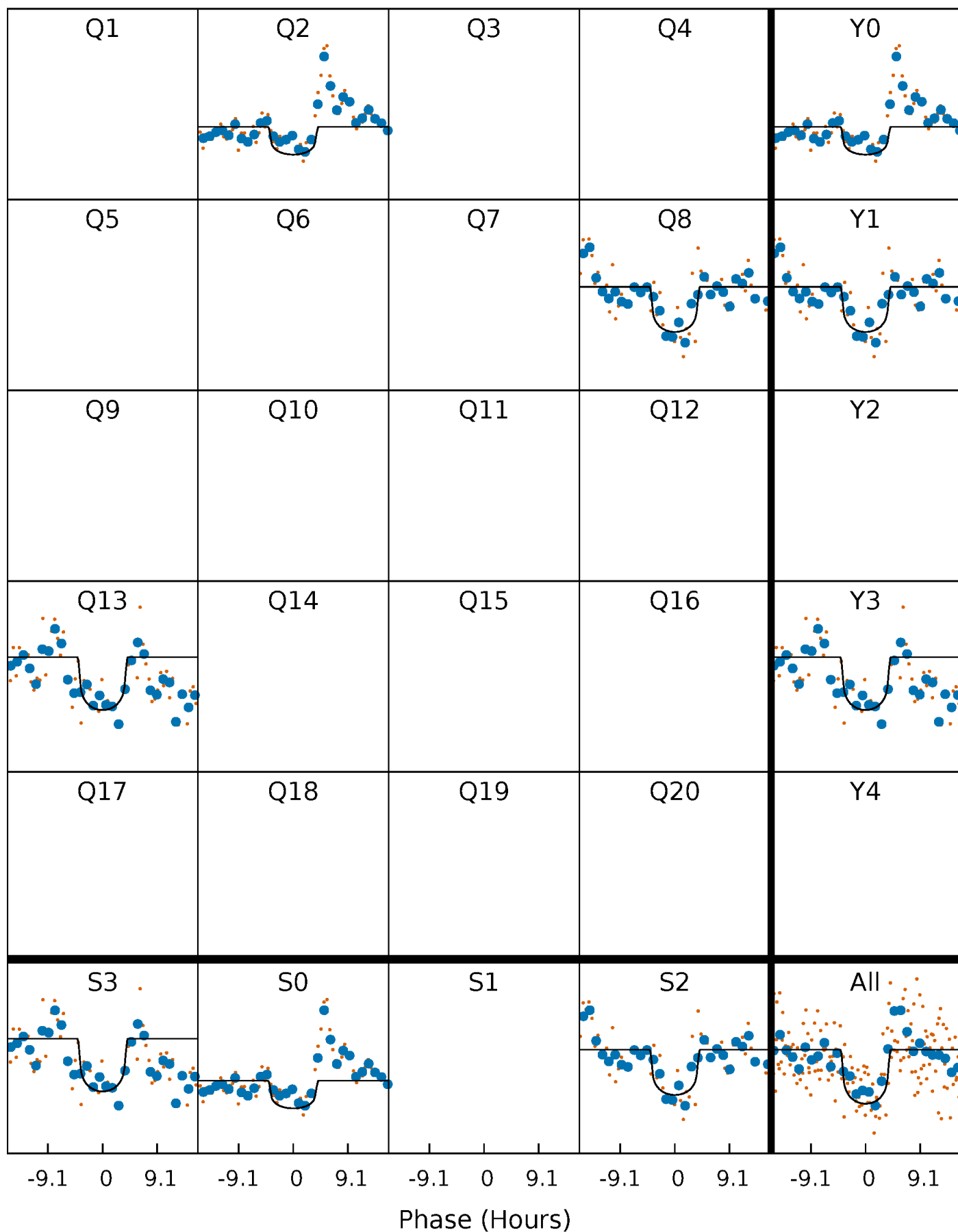
PDC Quarter-Phased Transit Curves

TCE 010252382-01 $P=503.960752$ Days $T_0=248.527822$ (BKJD)



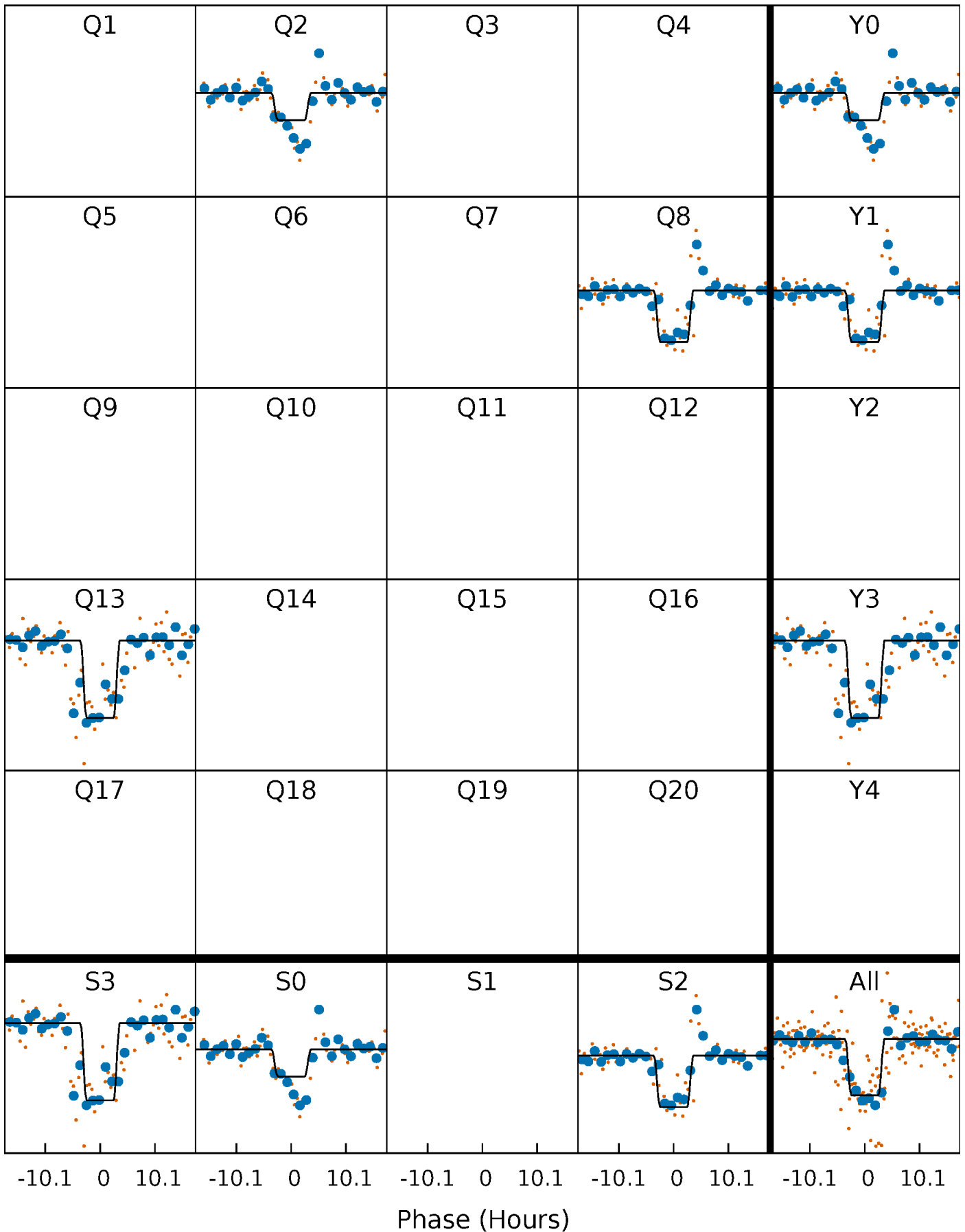
DV Quarter-Phased Transit Curves

TCE 010252382-01 P=503.960752 Days $T_0=248.527822$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

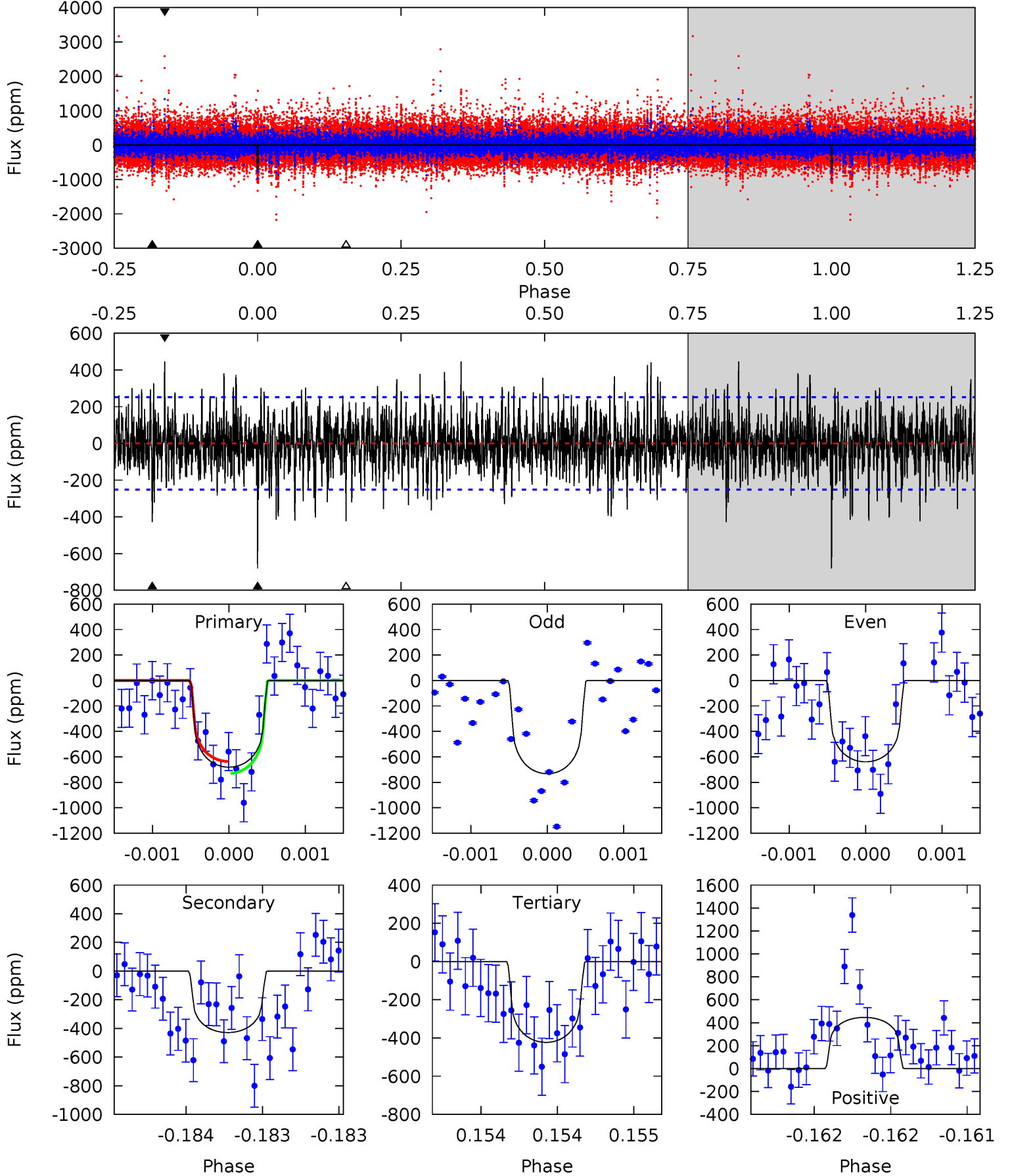
TCE 010252382-01 $P=503.946079$ Days $T_0=248.531570$ (BKJD)



DV Model-Shift Uniqueness Test

010252382-01, P = 503.960752 Days, E = 248.527822 Days

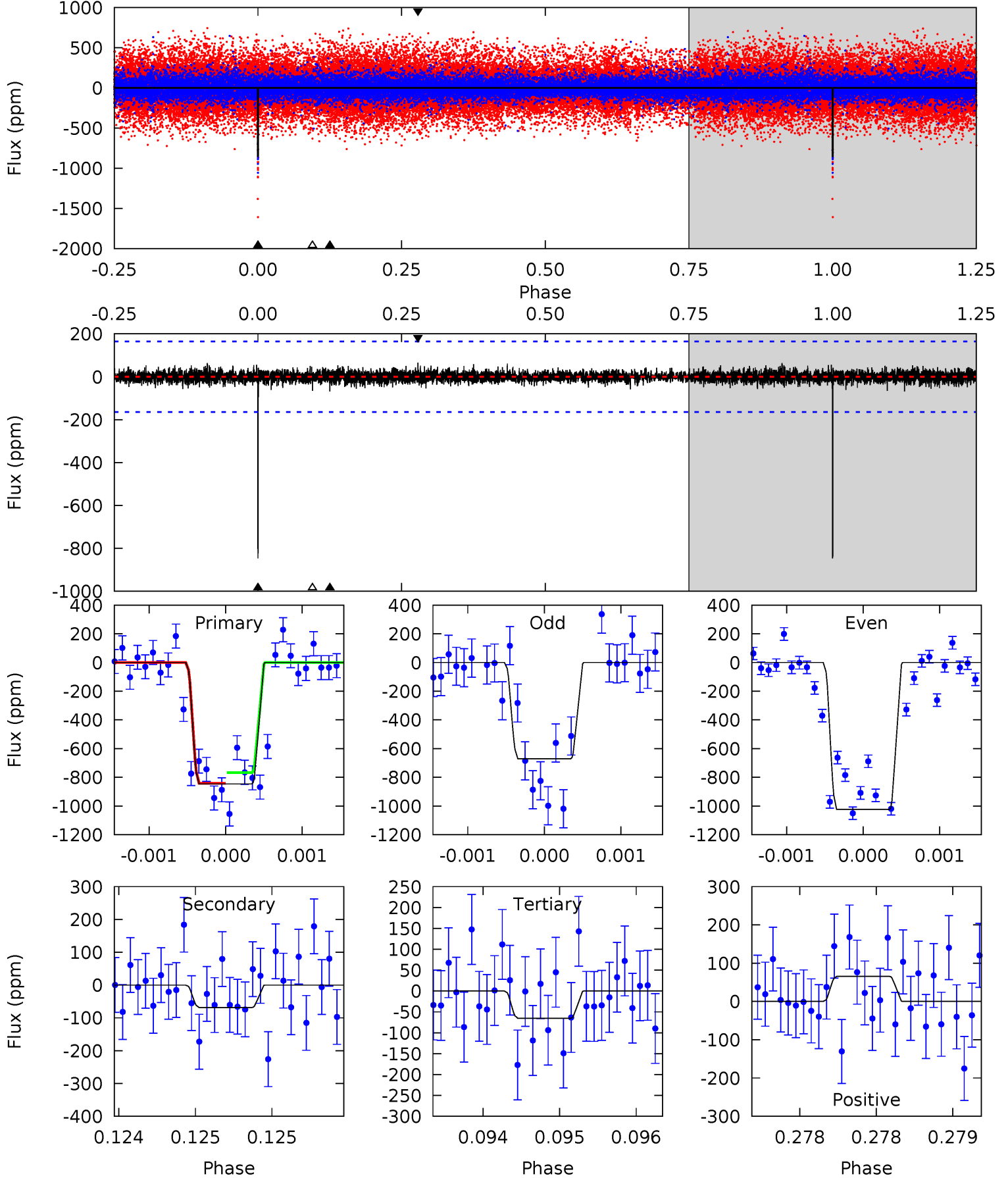
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
14.9	9.40	9.27	9.78	5.52	3.40	2.46	5.65	5.14	0.13	-0.38	0.94	0.90	0.40	1.03



Alt Model-Shift Uniqueness Test

010252382-01, P = 503.946079 Days, E = 248.531570 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
28.6	2.30	2.20	2.21	5.55	3.44	0.48	26.3	26.3	0.10	0.09	6.37	1.19	0.07	1.25



Stellar Parameters For KIC 010252382

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	$M(M_{\odot})$	p_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	5467^{+162}_{-146}	$4.499^{+0.105}_{-0.115}$	$-0.420^{+0.350}_{-0.300}$	$0.807^{+0.139}_{-0.104}$	$0.750^{+0.114}_{-0.045}$	$2.008^{+0.926}_{-0.684}$
	+3%/-3%	+2%/-3%	+83%/-71%	+17%/-13%	+15%/-6%	+46%/-34%
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 010252382-01 / KOI

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	-429 ± 46	$3.01^{+2.52}_{-1.99}$	287^{+13}_{-13}	4449^{+2930}_{-834}	$32908^{+252529}_{-22599}$
Alt.	-68 ± 30	$3.14^{+2.26}_{-1.91}$	287^{+14}_{-15}	3183^{+1187}_{-483}	4617^{+24044}_{-3262}

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

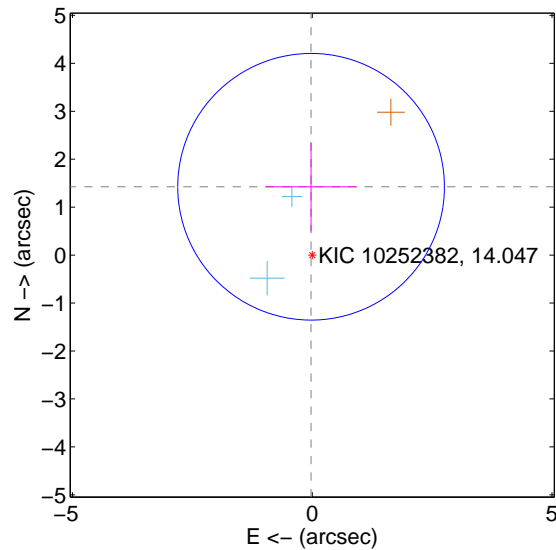
Supplemental centroid analysis for 010252382-01. Kepler magnitude: 14.05. Transit SNR 8.30

There are 2 quarters with good PRF difference image offsets

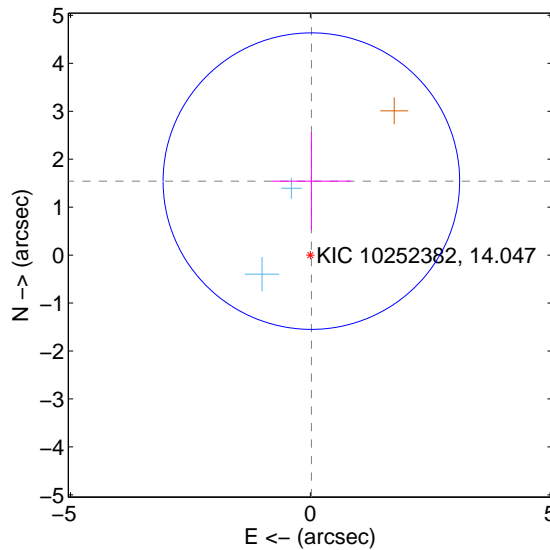
The direct PRF centroid is offset from the target star catalog position by about 0.11 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	1.425 ± 0.927	1.54	0.024 ± 0.954	1.425 ± 0.927
PRF-fit source offset from KIC position	1.543 ± 1.031	1.50	-0.022 ± 0.825	1.543 ± 1.020
photometric centroid source offset	0.11 ± 0.78	0.14	0.10 ± 0.79	0.04 ± 0.68

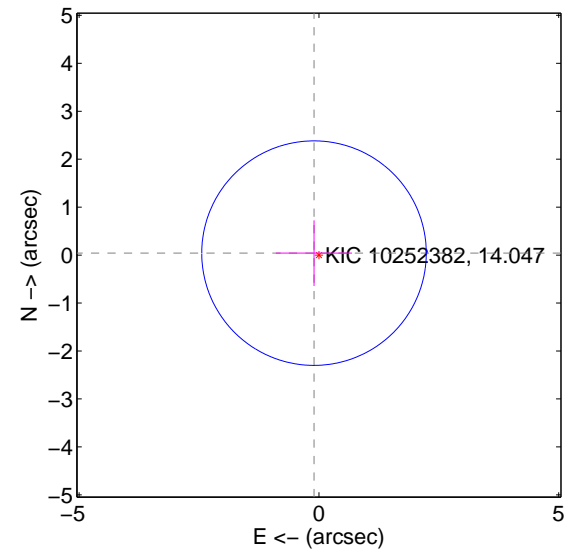
offset from difference PRF-fit to OOT PRF-fit



offset from difference PRF-fit to KIC position

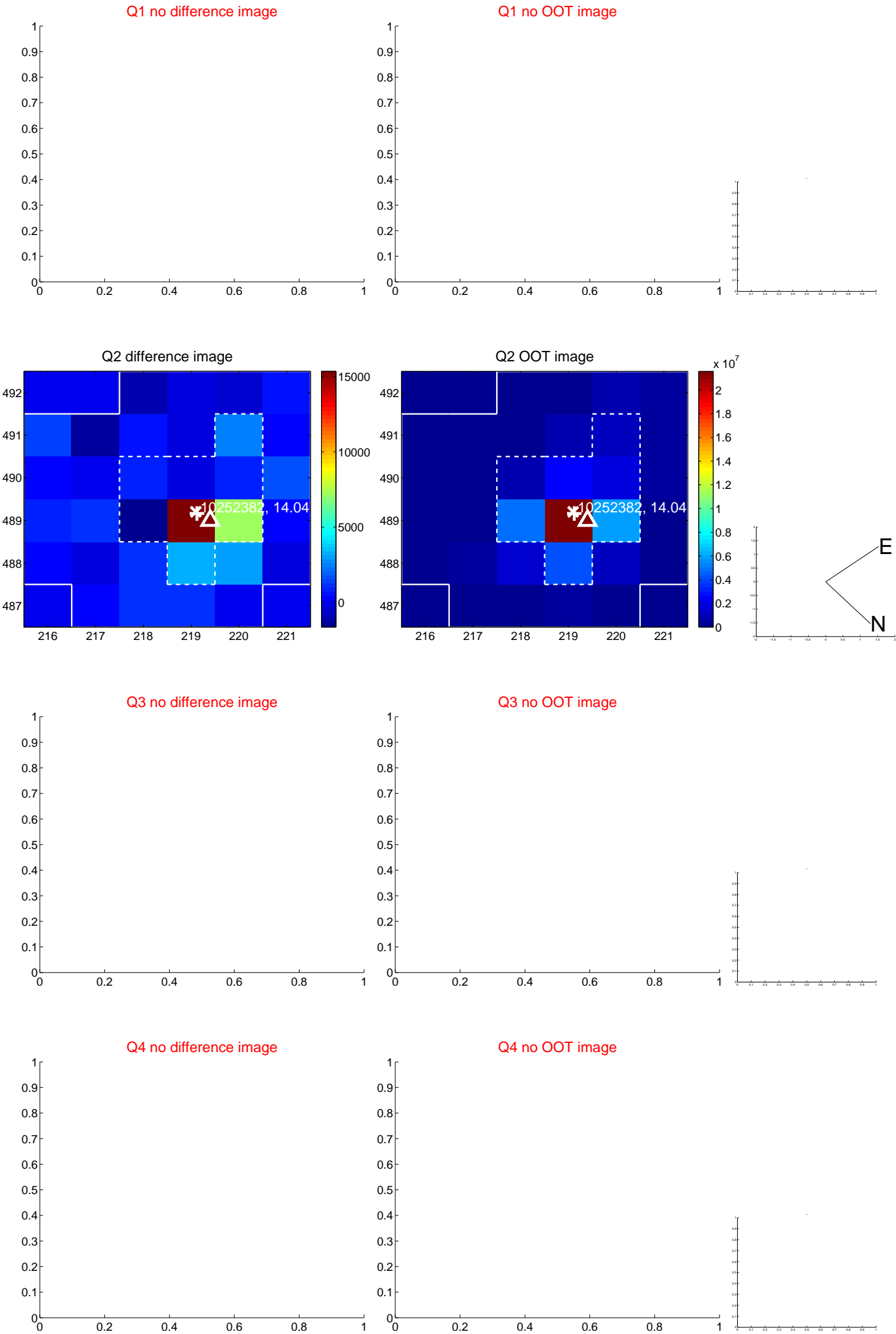


offset from photometric centroids

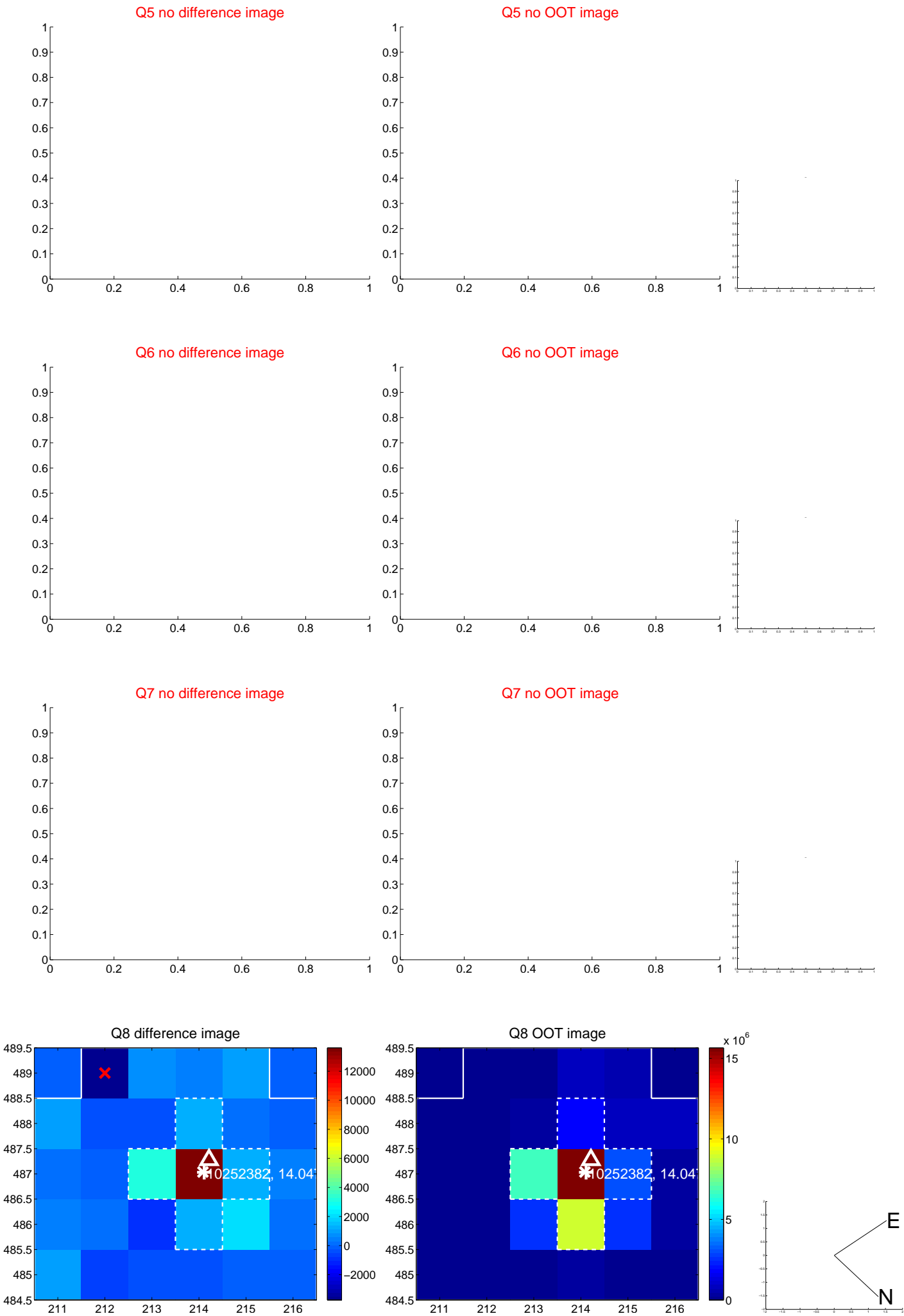


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ . 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 ×: KIC target position; +: OOT centroid; △: difference centroid. red ✕: large negative pixel value.



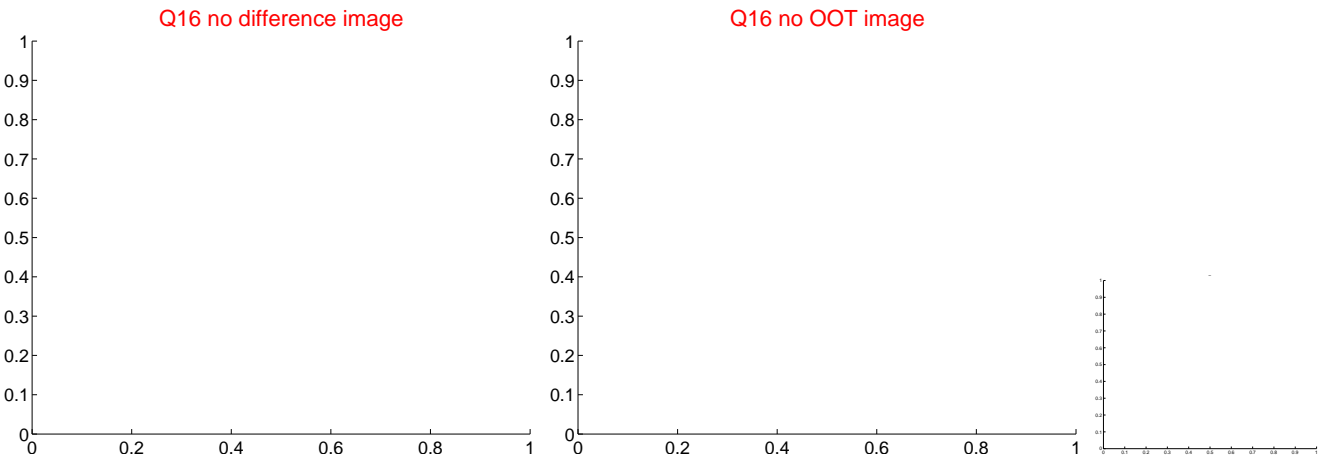
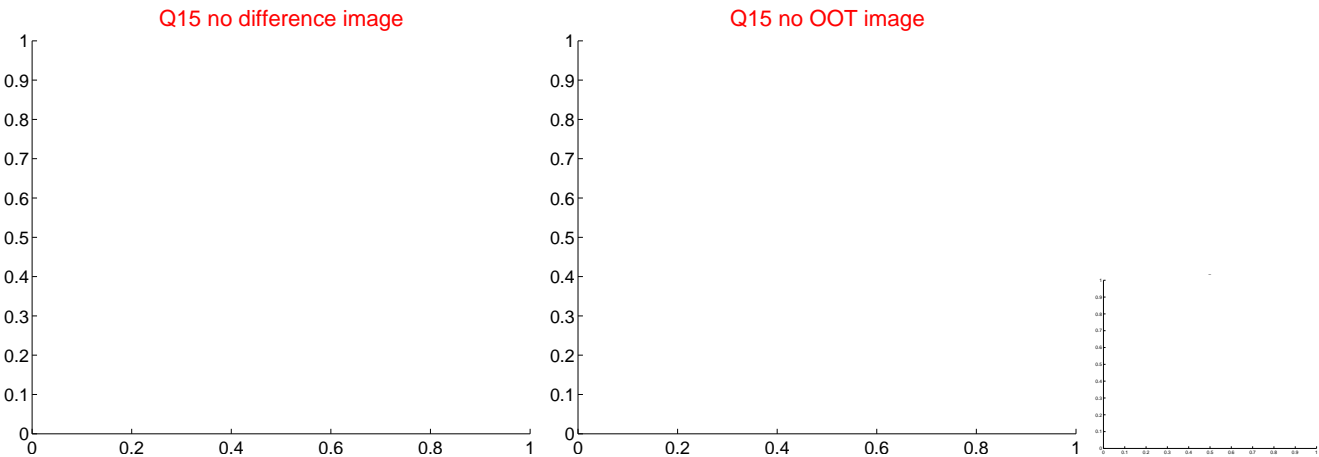
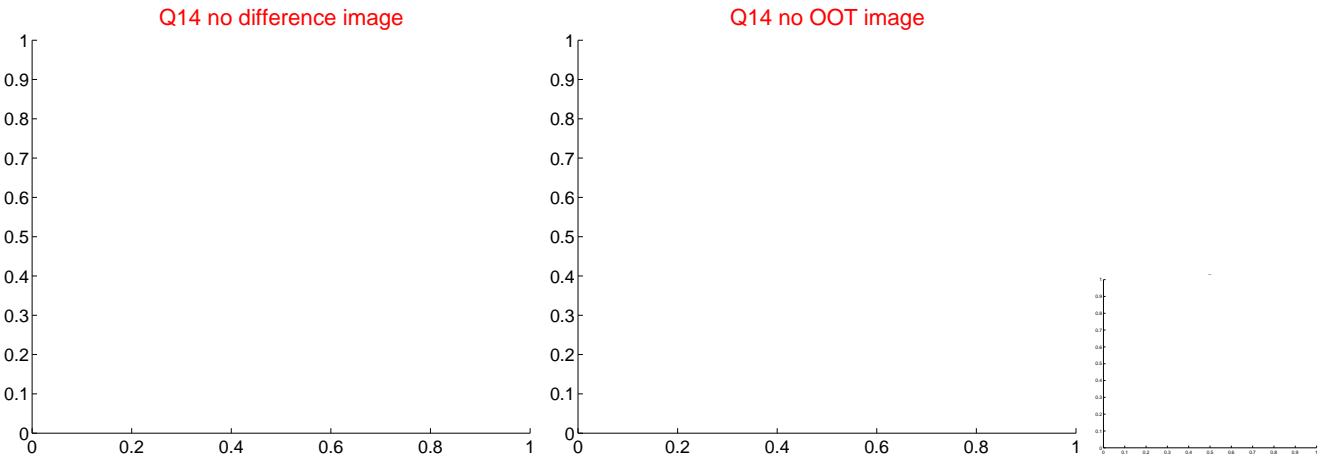
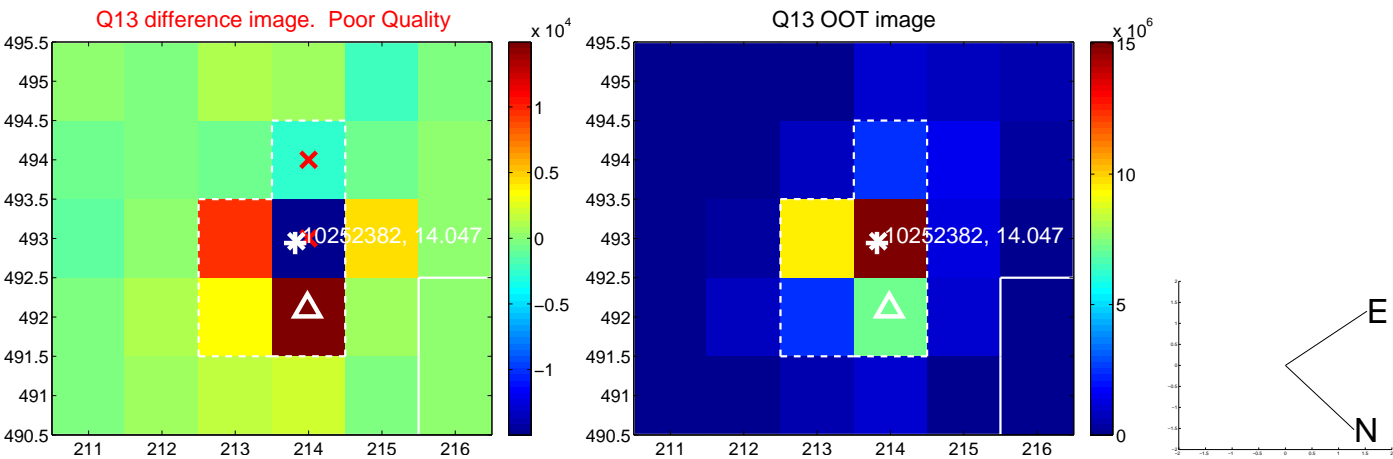
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



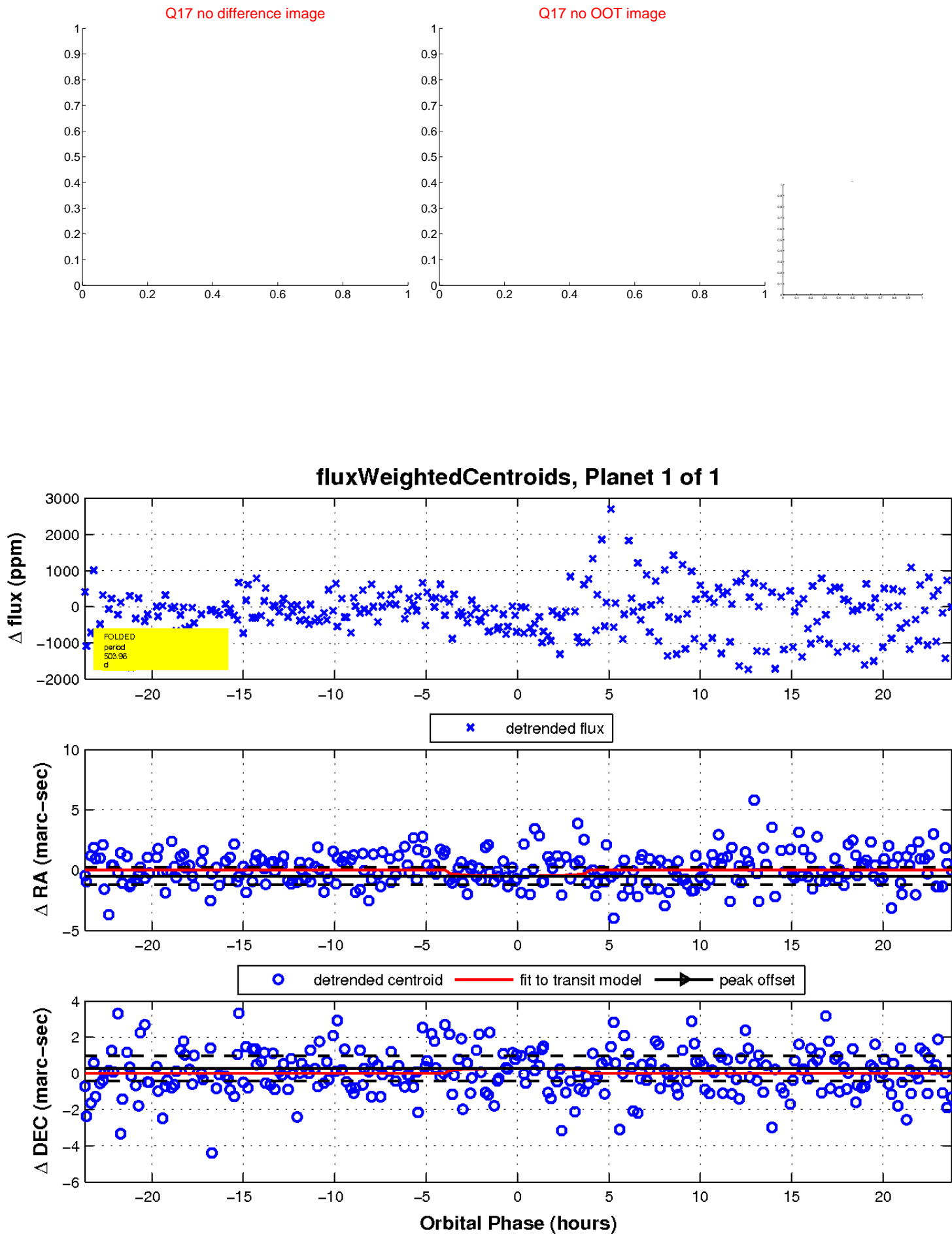
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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



UKIRT Image

Declination

