

KIC 007513529

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})
007513529-01	OBS	No	470.902336	446.172696	705.0	6.146	7.5	7.1	0.60	4414	1.97	0.12

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
007513529-01	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.

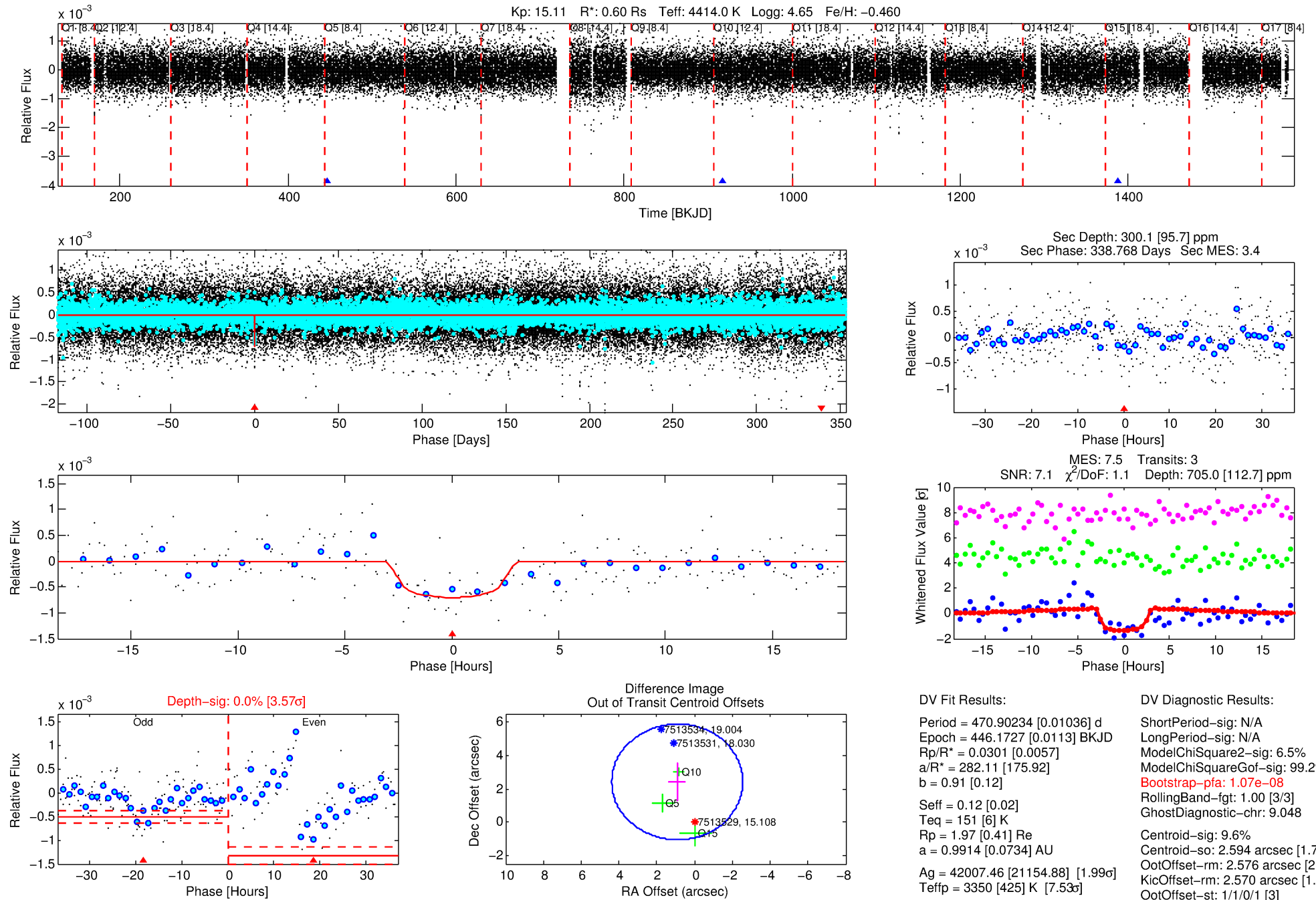
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 007513529-01

No Significant Match Found

DV One-Page Summary

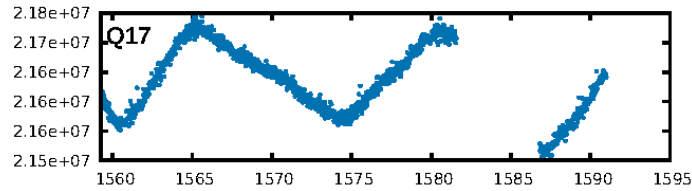
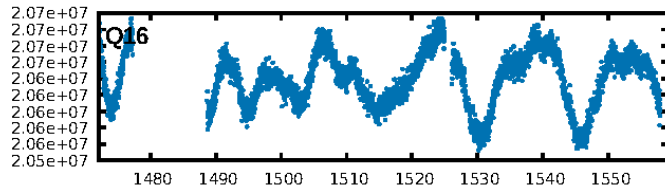
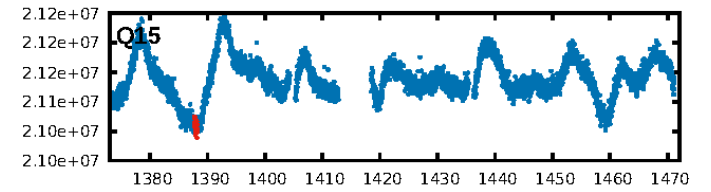
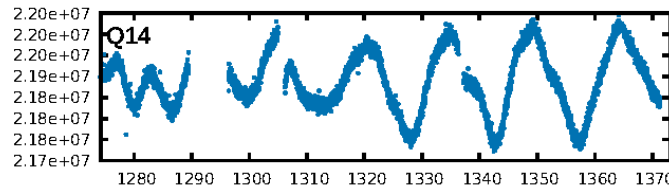
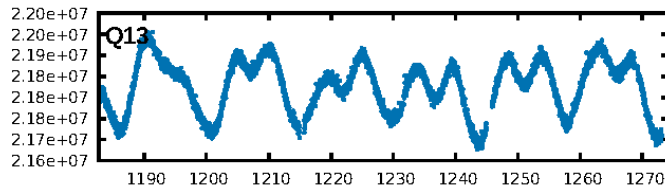
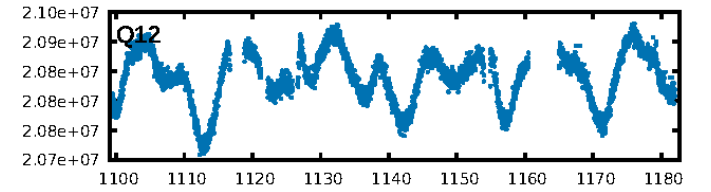
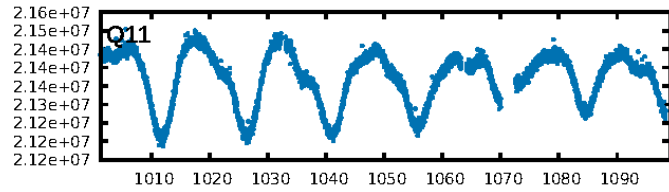
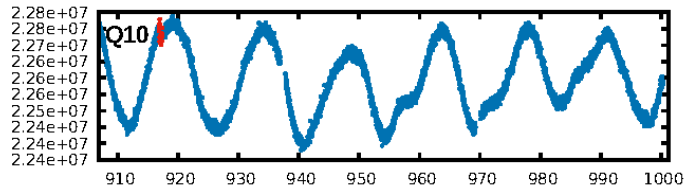
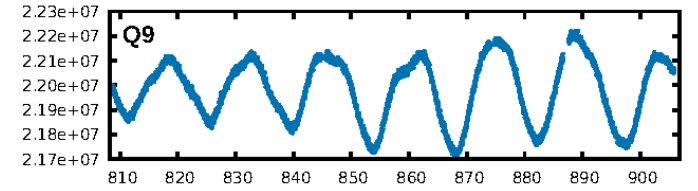
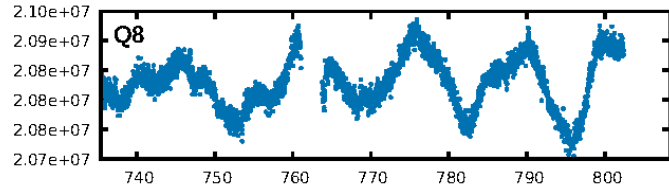
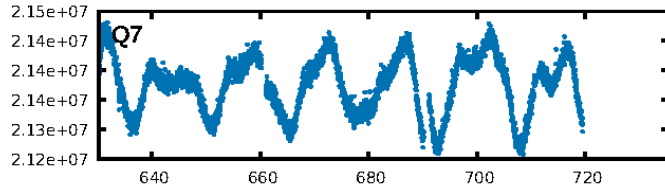
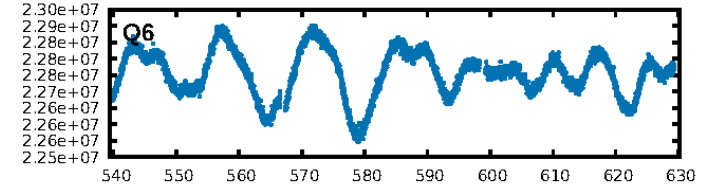
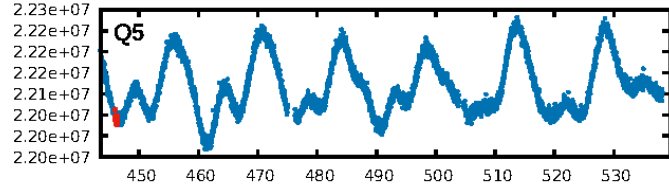
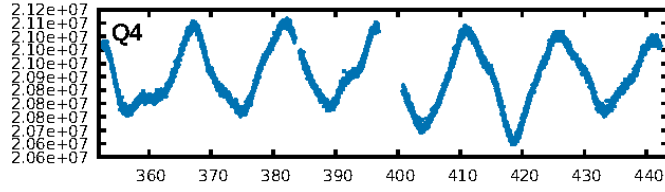
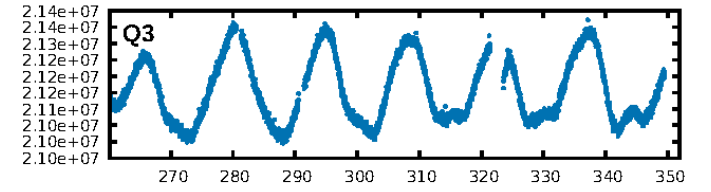
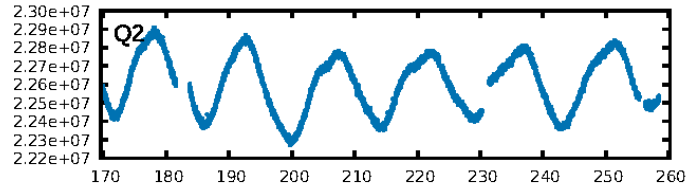
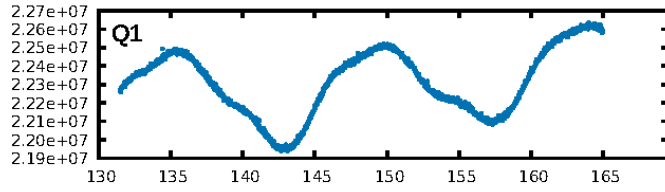
KIC: 7513529 Candidate: 1 of 1 Period: 470.902 d



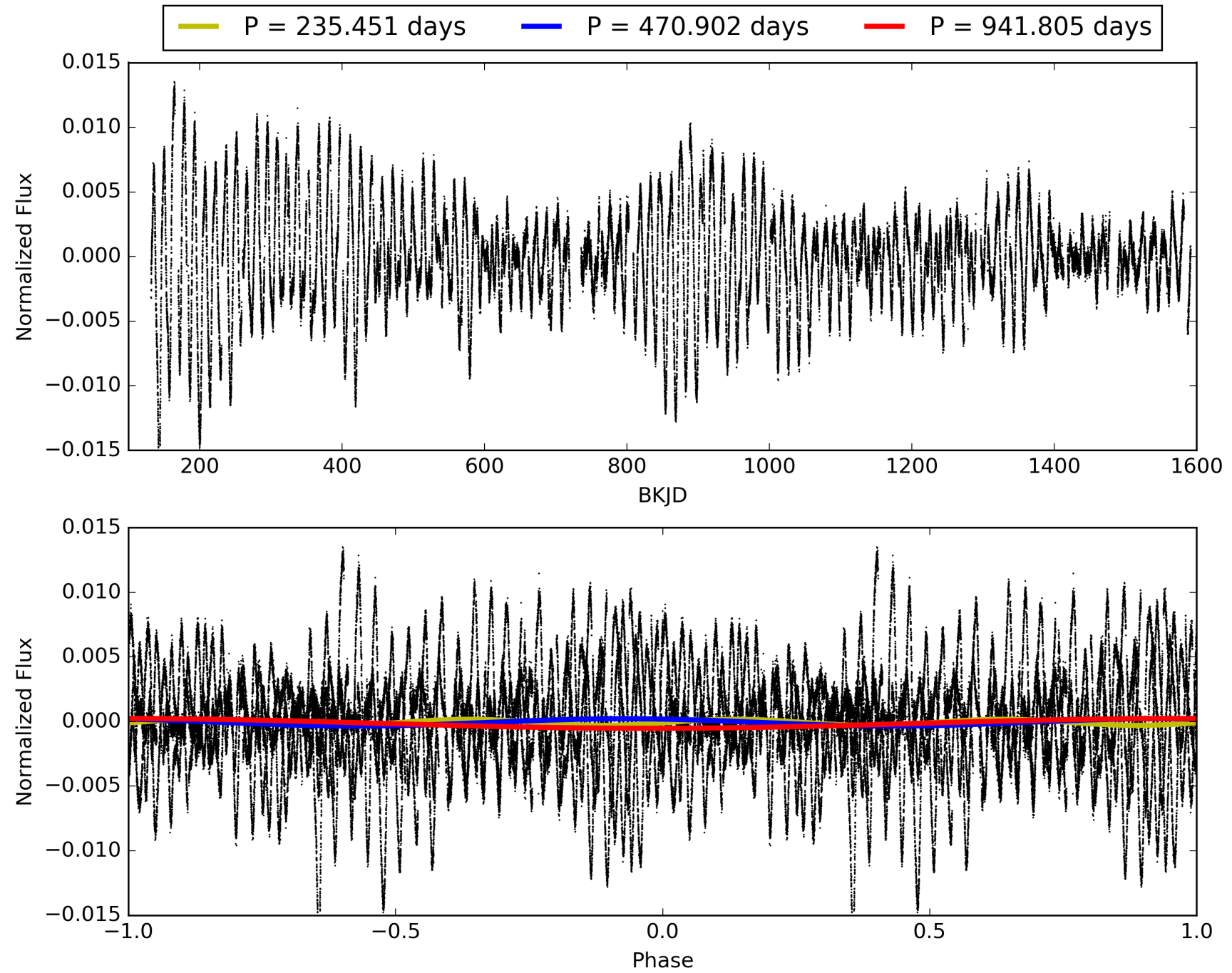
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 31-Jan-2016 21:53:48 Z

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

TCE 007513529-01, PDC Light Curves

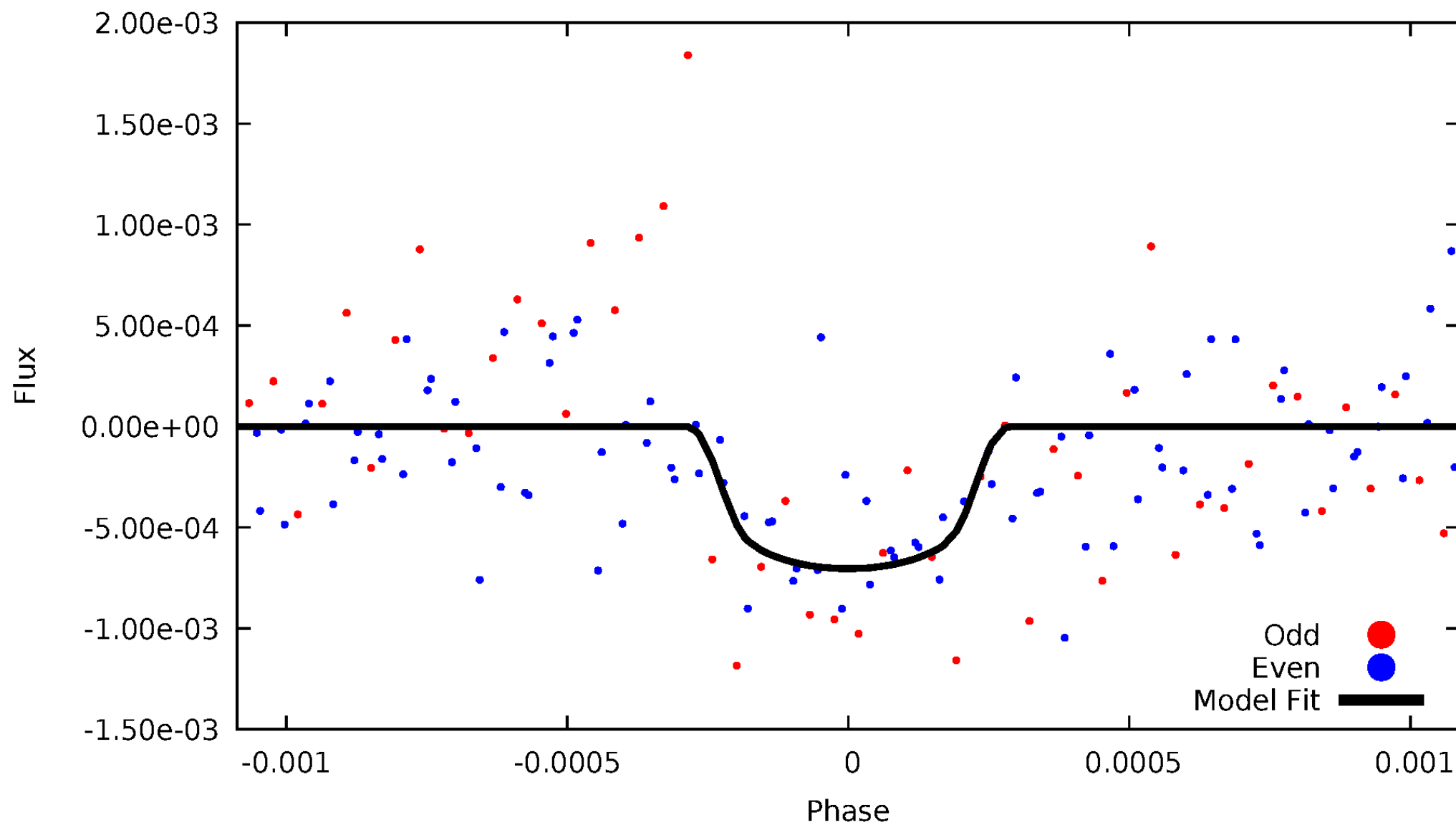


TCE 007513529-01



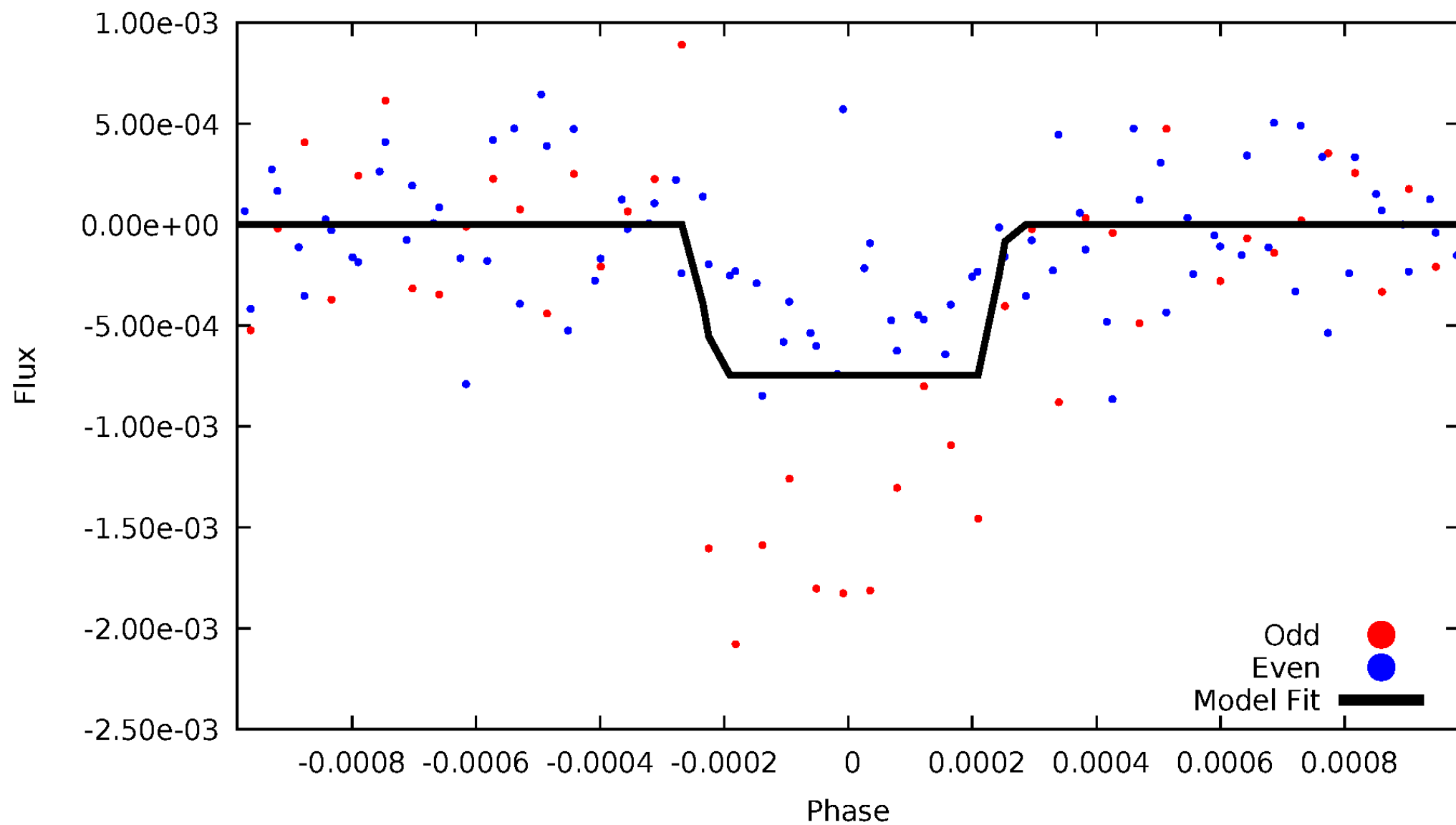
DV Odd/Even

TCE 007513529-01



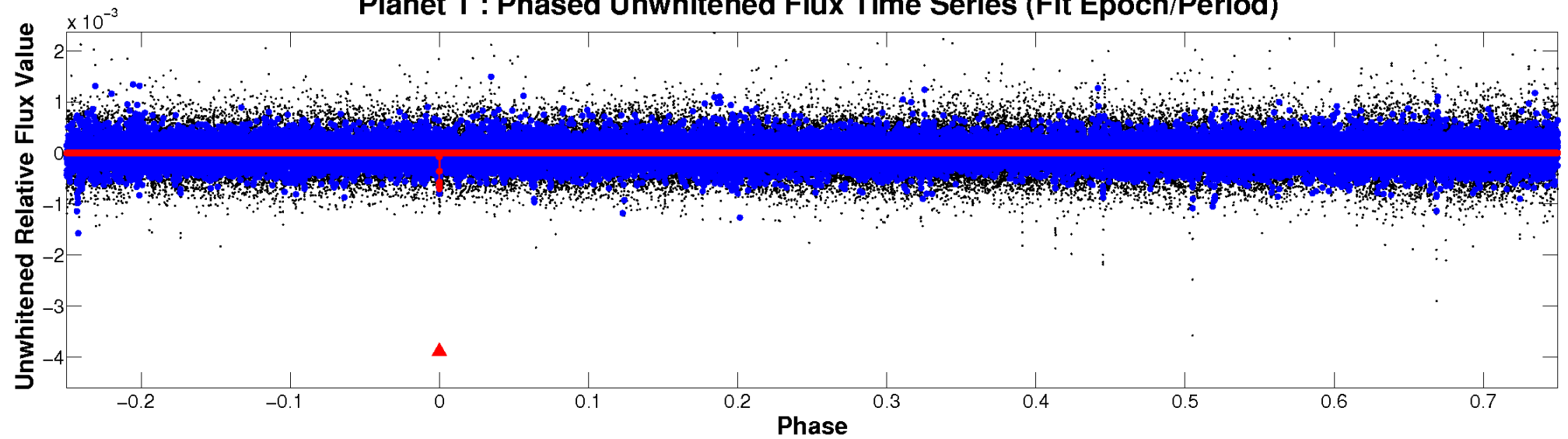
ALT Odd/Even

TCE 007513529-01

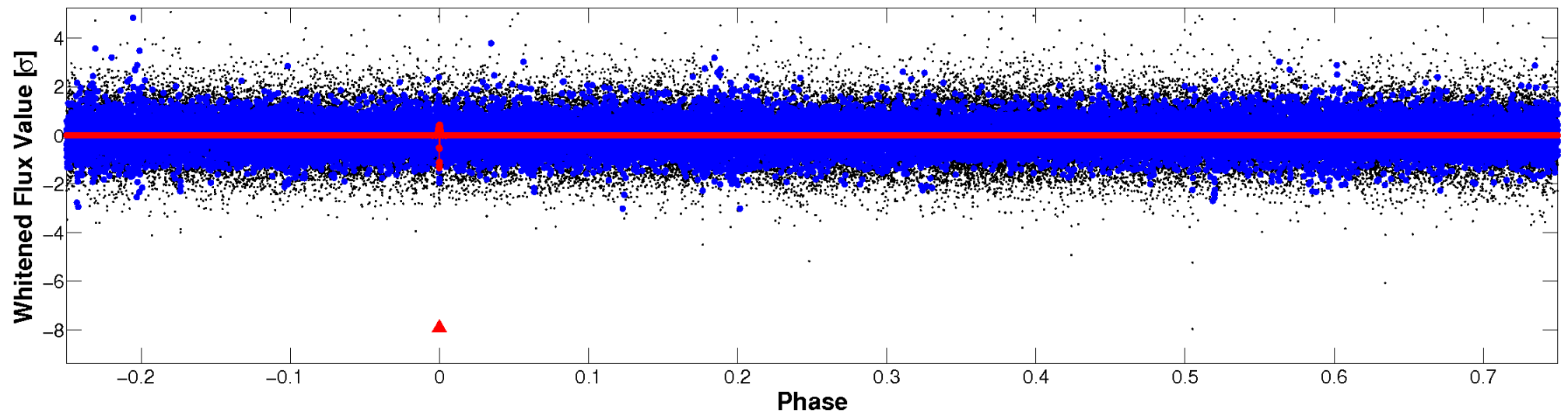


Non-Whitened Vs. Whitened Light Curve

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

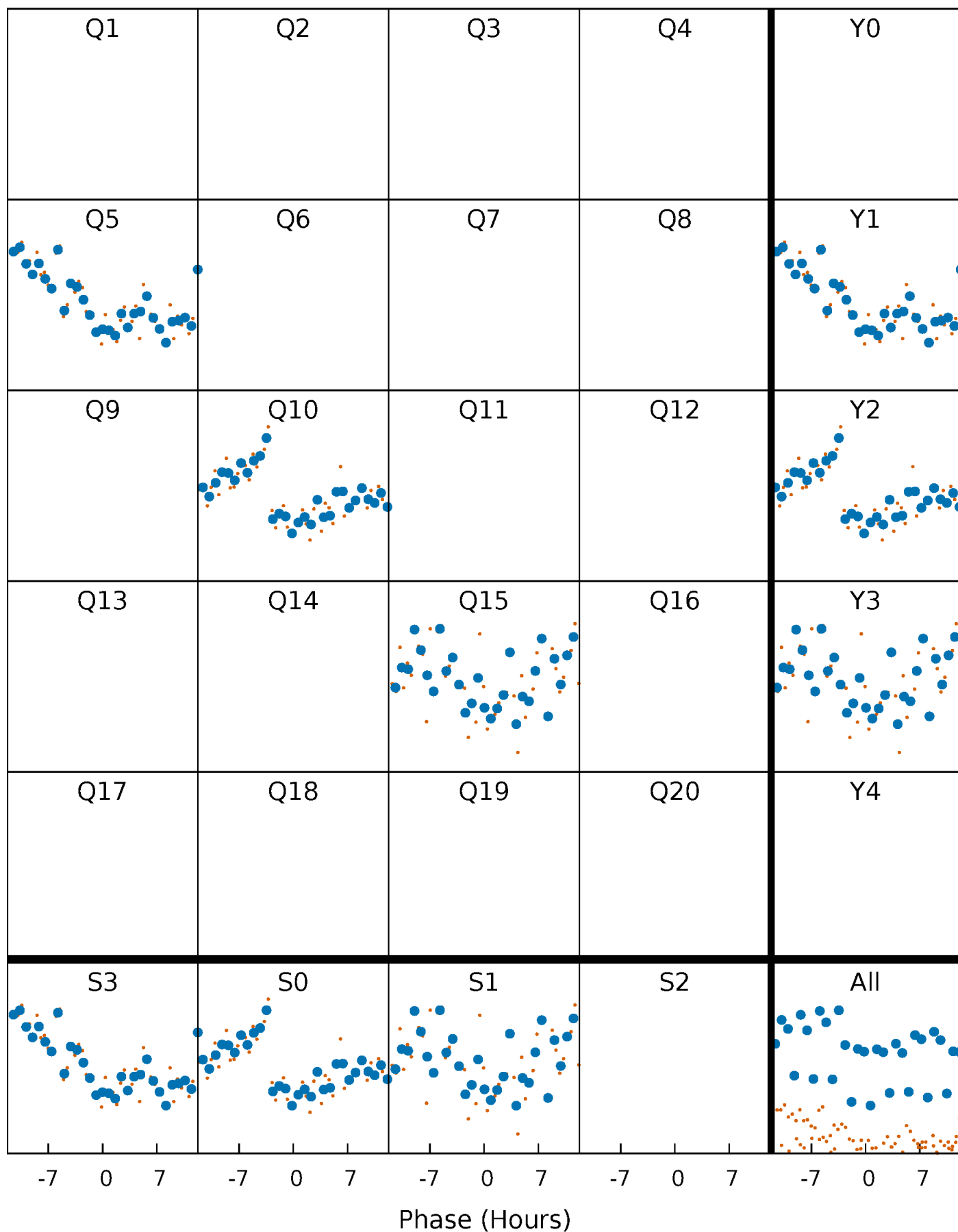


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



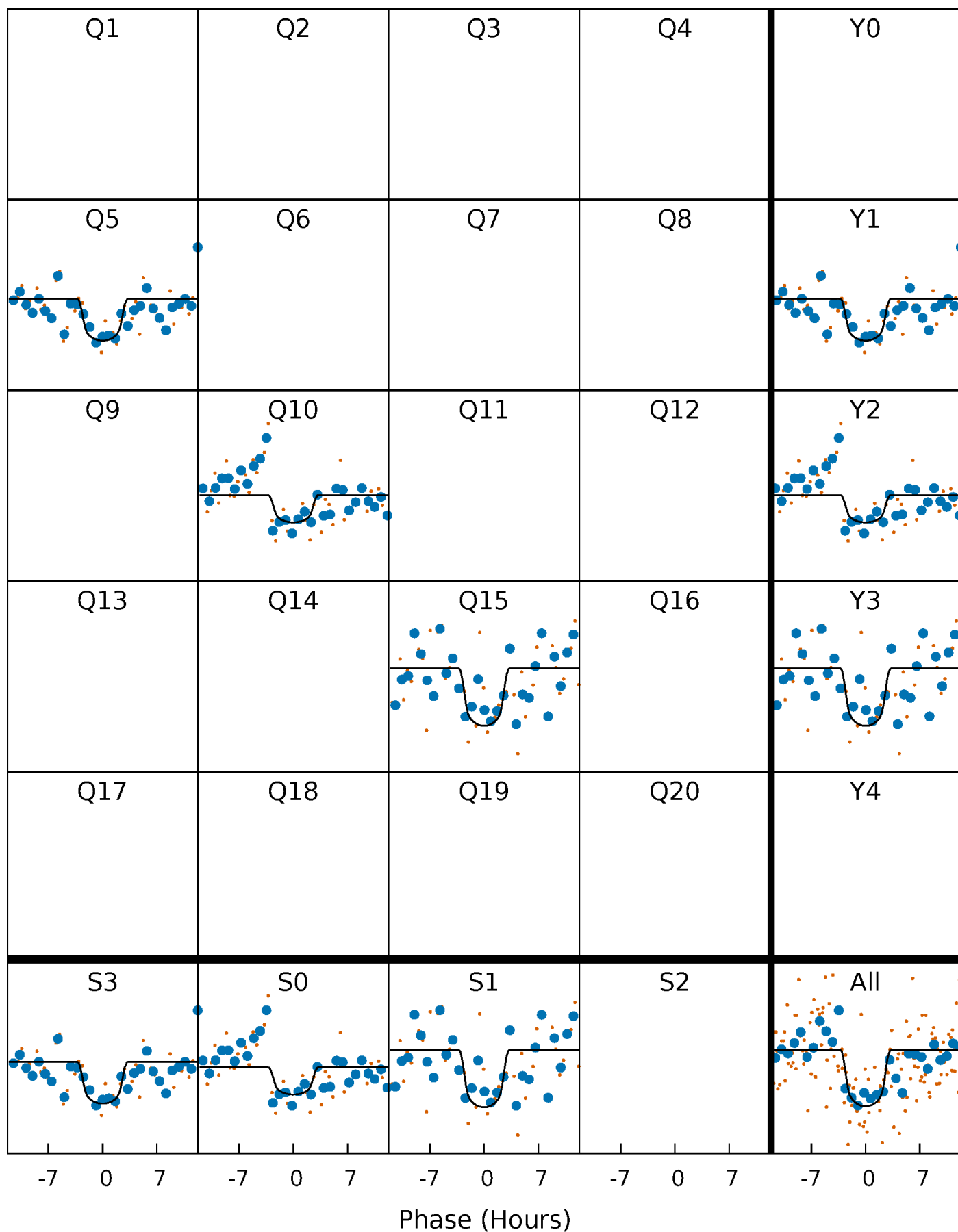
PDC Quarter-Phased Transit Curves

TCE 007513529-01 P=470.902335 Days $T_0=446.172696$ (BKJD)



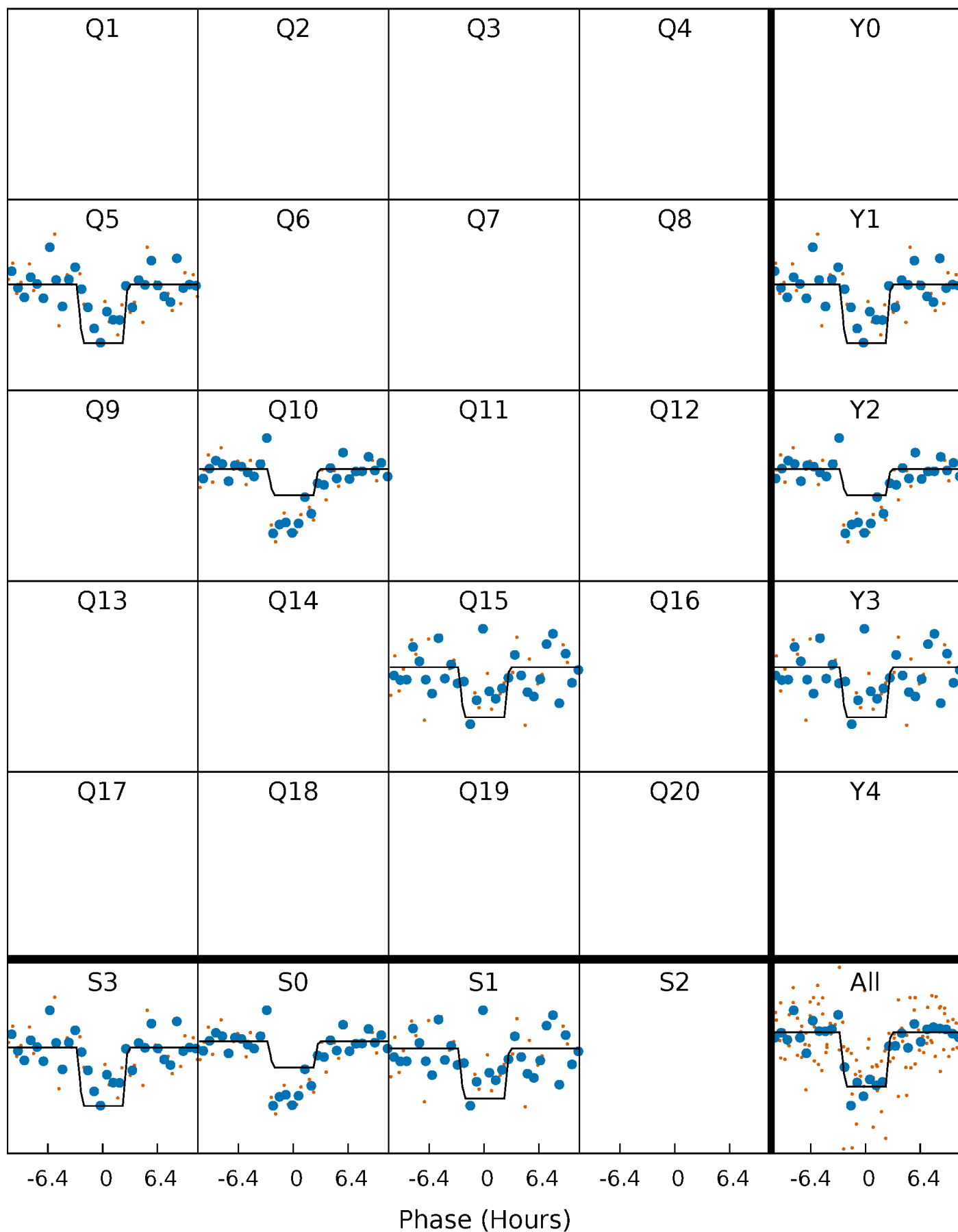
DV Quarter-Phased Transit Curves

TCE 007513529-01 P=470.902335 Days $T_0=446.172696$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

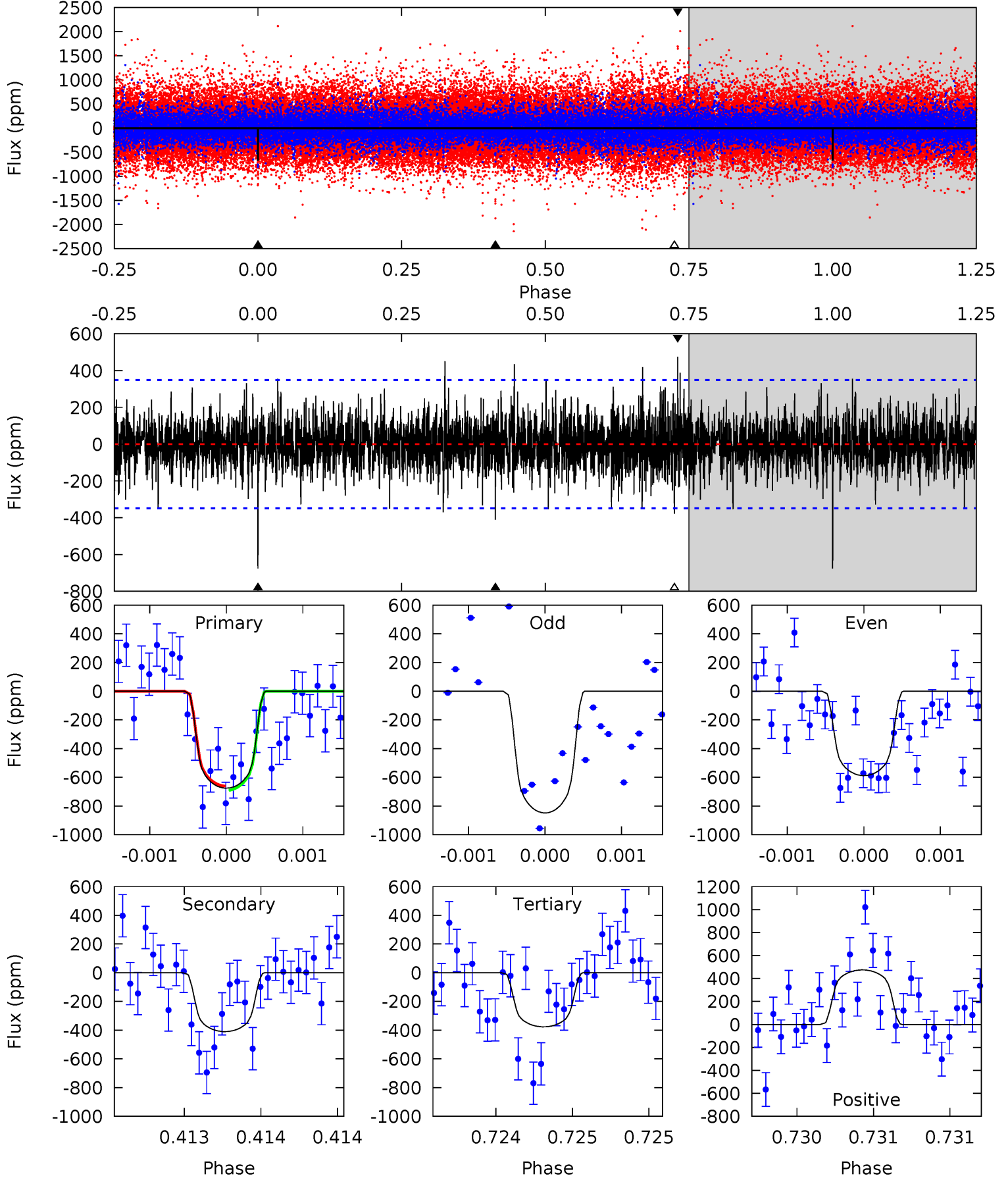
TCE 007513529-01 P=470.891390 Days $T_0=446.175655$ (BKJD)



DV Model-Shift Uniqueness Test

007513529-01, P = 470.902335 Days, E = 446.172696 Days

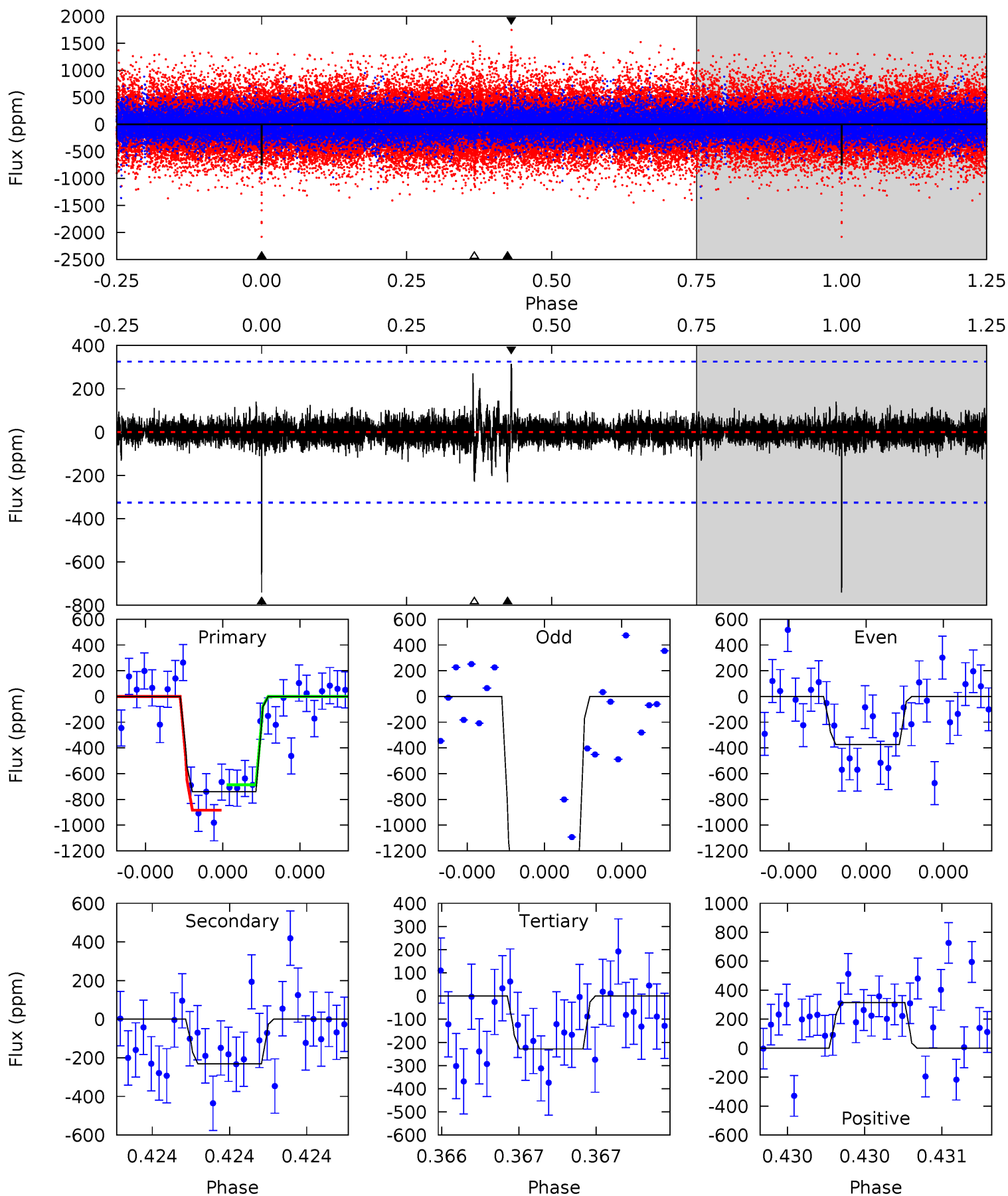
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
10.8	6.53	6.00	7.56	5.55	3.45	1.56	4.76	3.20	0.53	-1.03	1.94	1.03	0.41	0.23



Alt Model-Shift Uniqueness Test

007513529-01, P = 470.891390 Days, E = 446.175655 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
12.7	3.97	3.92	5.40	5.58	3.49	0.65	8.77	7.29	0.05	-1.42	9.56	1.81	0.30	1.67



Stellar Parameters For KIC 007513529

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	$M(M_{\odot})$	p_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	4414^{+131}_{-131}	$4.651^{+0.052}_{-0.028}$	$-0.460^{+0.300}_{-0.300}$	$0.599^{+0.050}_{-0.056}$	$0.586^{+0.070}_{-0.041}$	$3.835^{+0.882}_{-0.494}$
	+3%/-3%	+1%/-1%	+65%/-65%	+8%/-9%	+12%/-7%	+23%/-13%
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 007513529-01 / KOI

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	-410 ± 63	$1.96^{+0.40}_{-0.37}$	210^{+7}_{-7}	3818^{+327}_{-260}	57391^{+34567}_{-18327}
Alt.	-232 ± 58	$1.74^{+0.38}_{-0.36}$	210^{+7}_{-8}	3598^{+359}_{-267}	41545^{+28089}_{-15353}

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

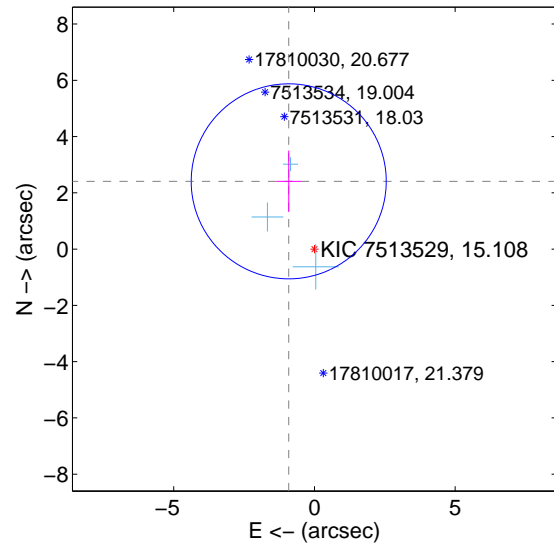
Supplemental centroid analysis for 007513529-01. Kepler magnitude: 15.11. Transit SNR 7.11

There are 3 quarters with good PRF difference image offsets

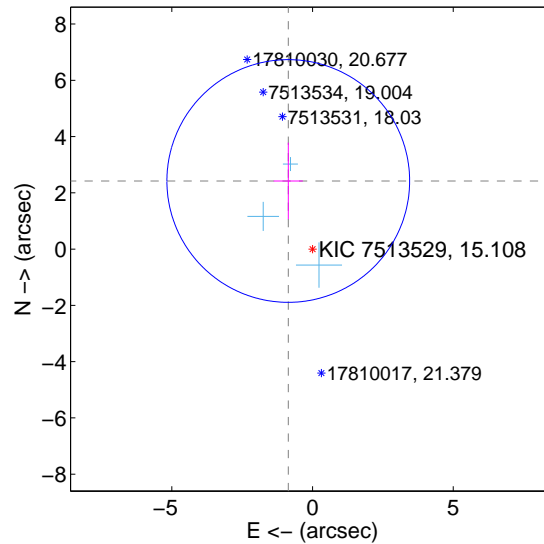
The direct PRF centroid is offset from the target star catalog position by about 0.19 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	2.576 ± 1.155	2.23	0.914 ± 0.441	2.409 ± 1.094
PRF-fit source offset from KIC position	2.570 ± 1.438	1.79	0.862 ± 0.518	2.421 ± 1.362
photometric centroid source offset	2.59 ± 1.52	1.70	2.33 ± 1.47	1.15 ± 1.73

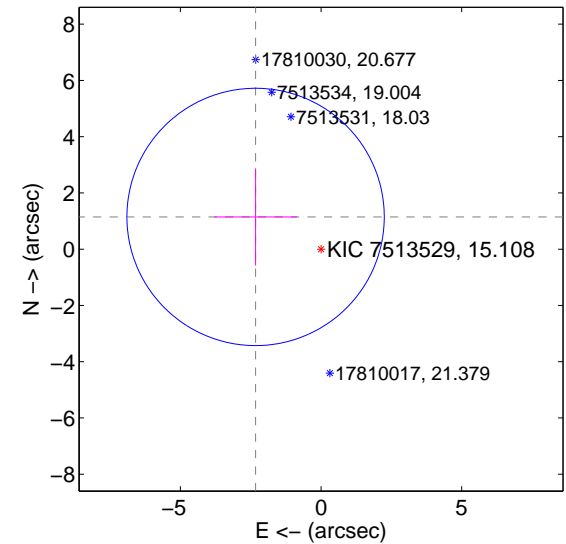
offset from difference PRF-fit to OOT PRF-fit



offset from difference PRF-fit to KIC position



offset from photometric centroids

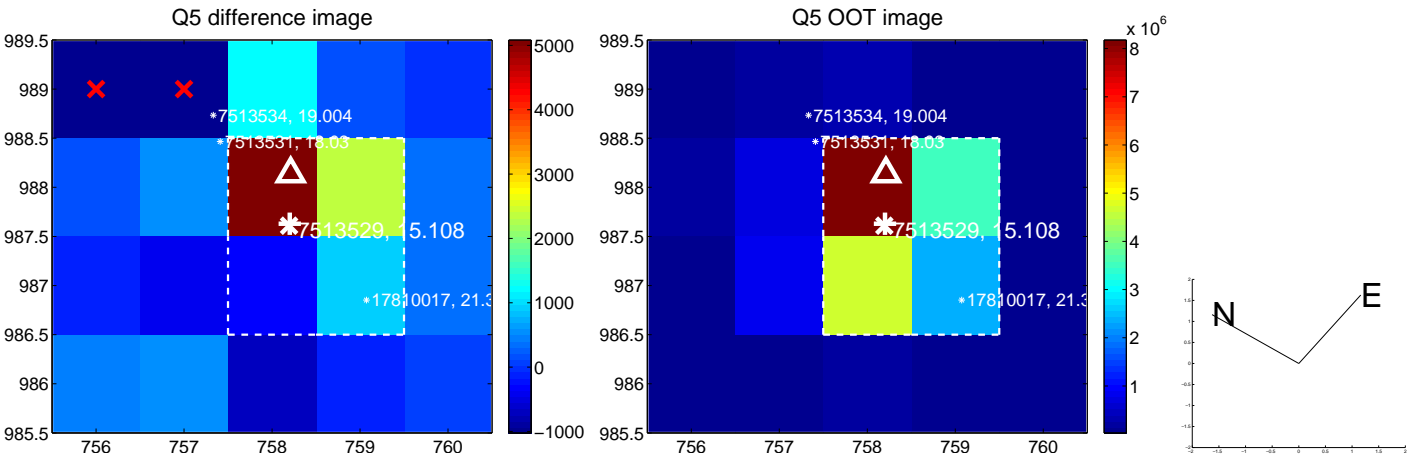


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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

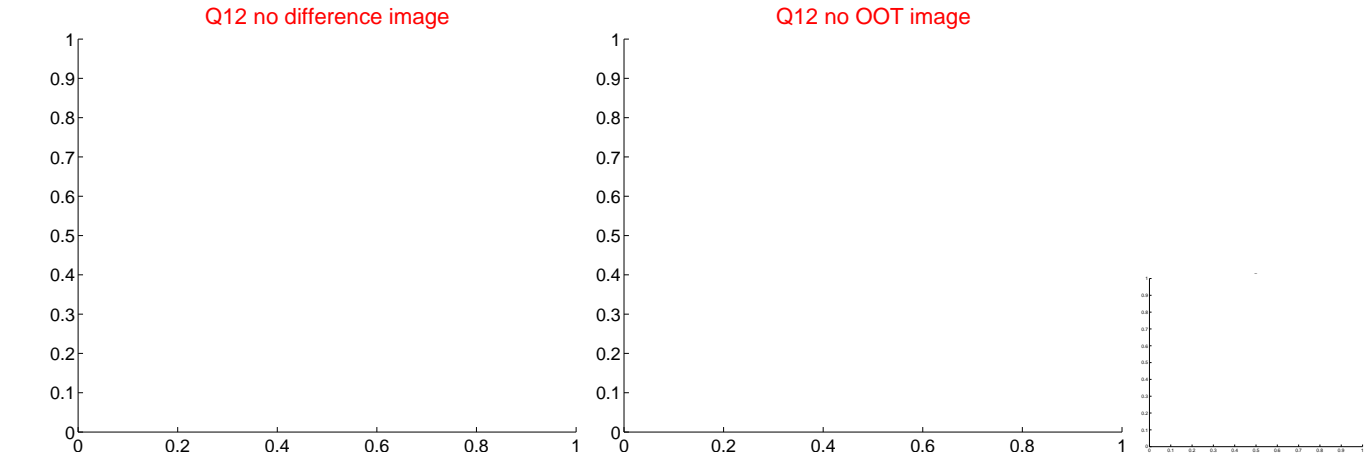
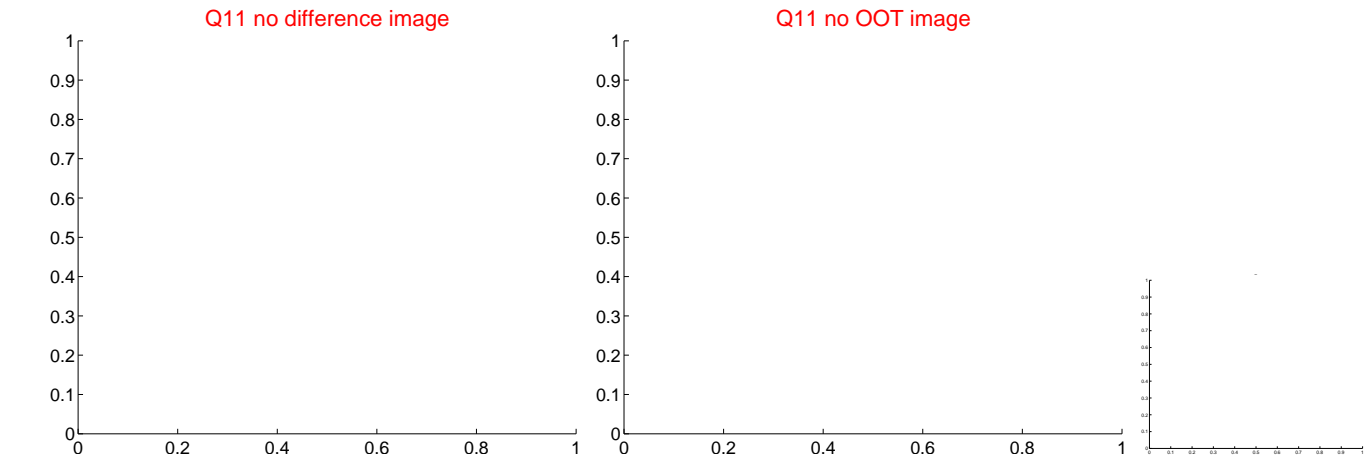
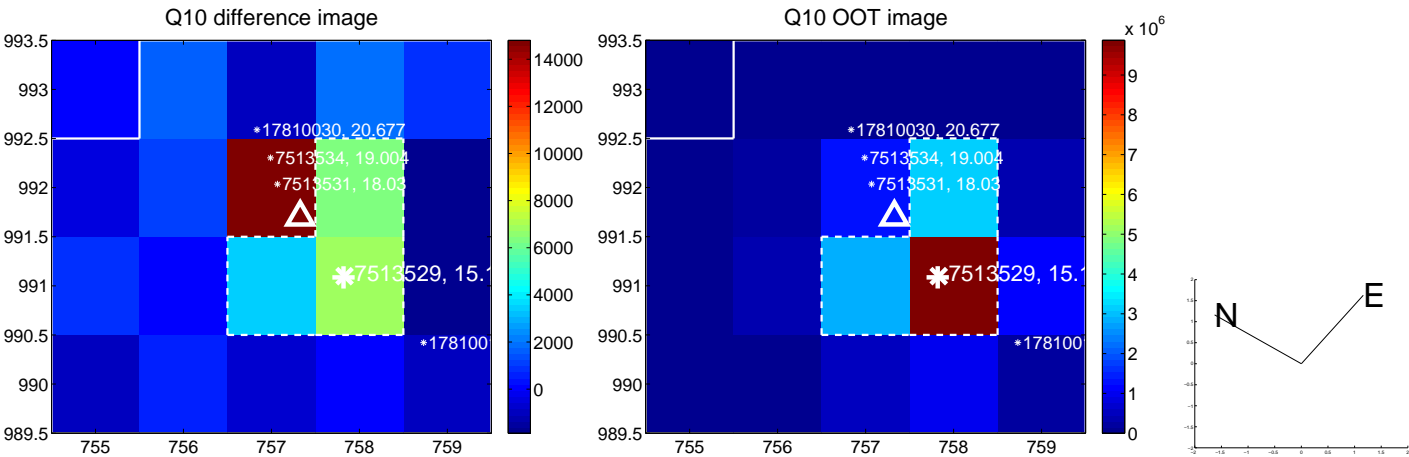
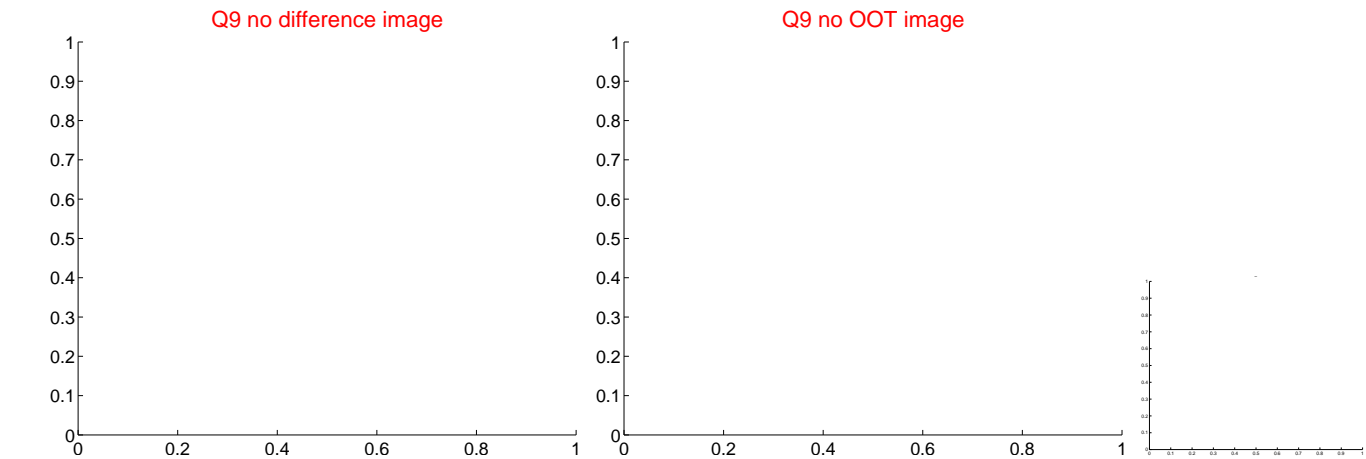
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



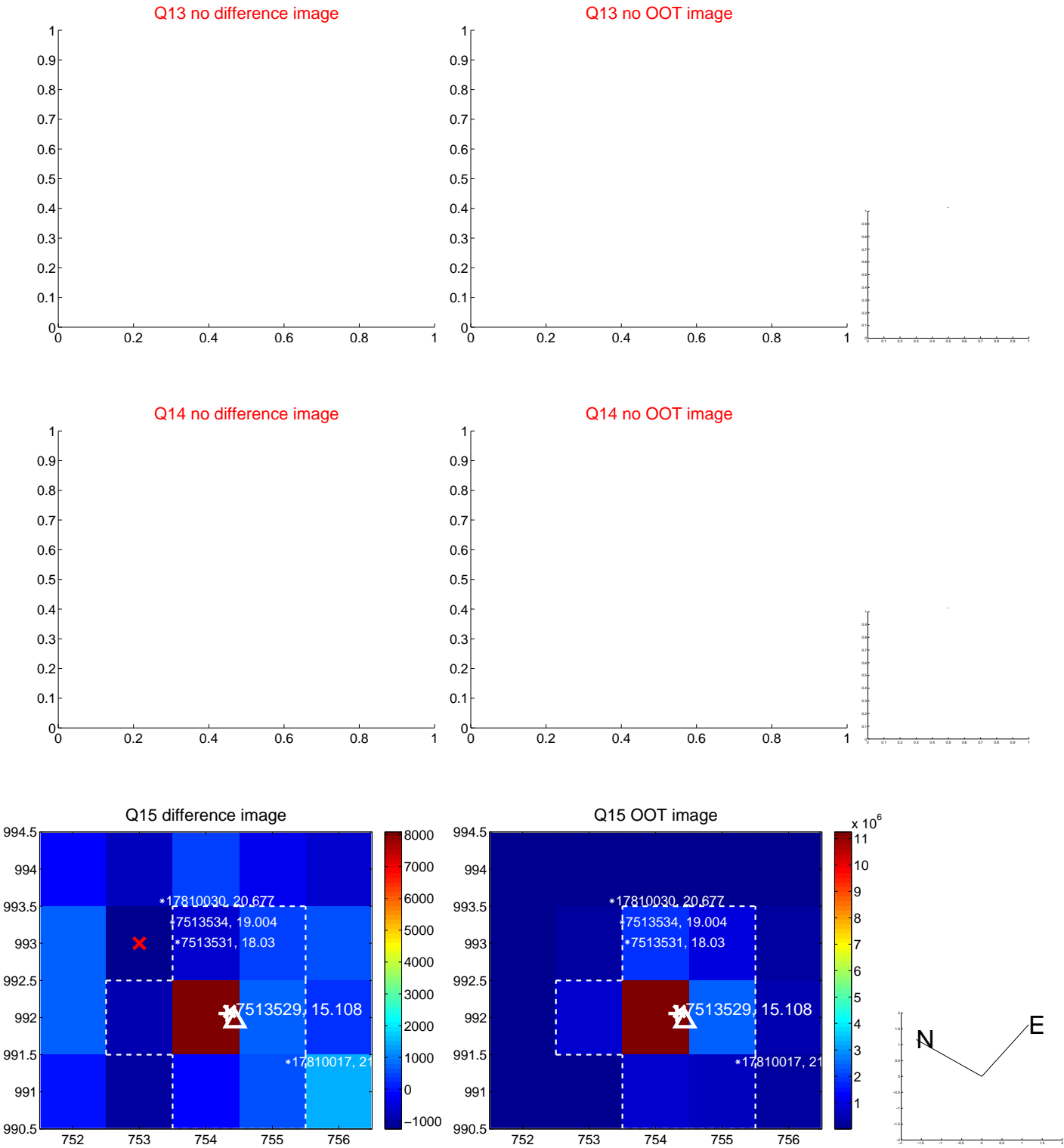
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



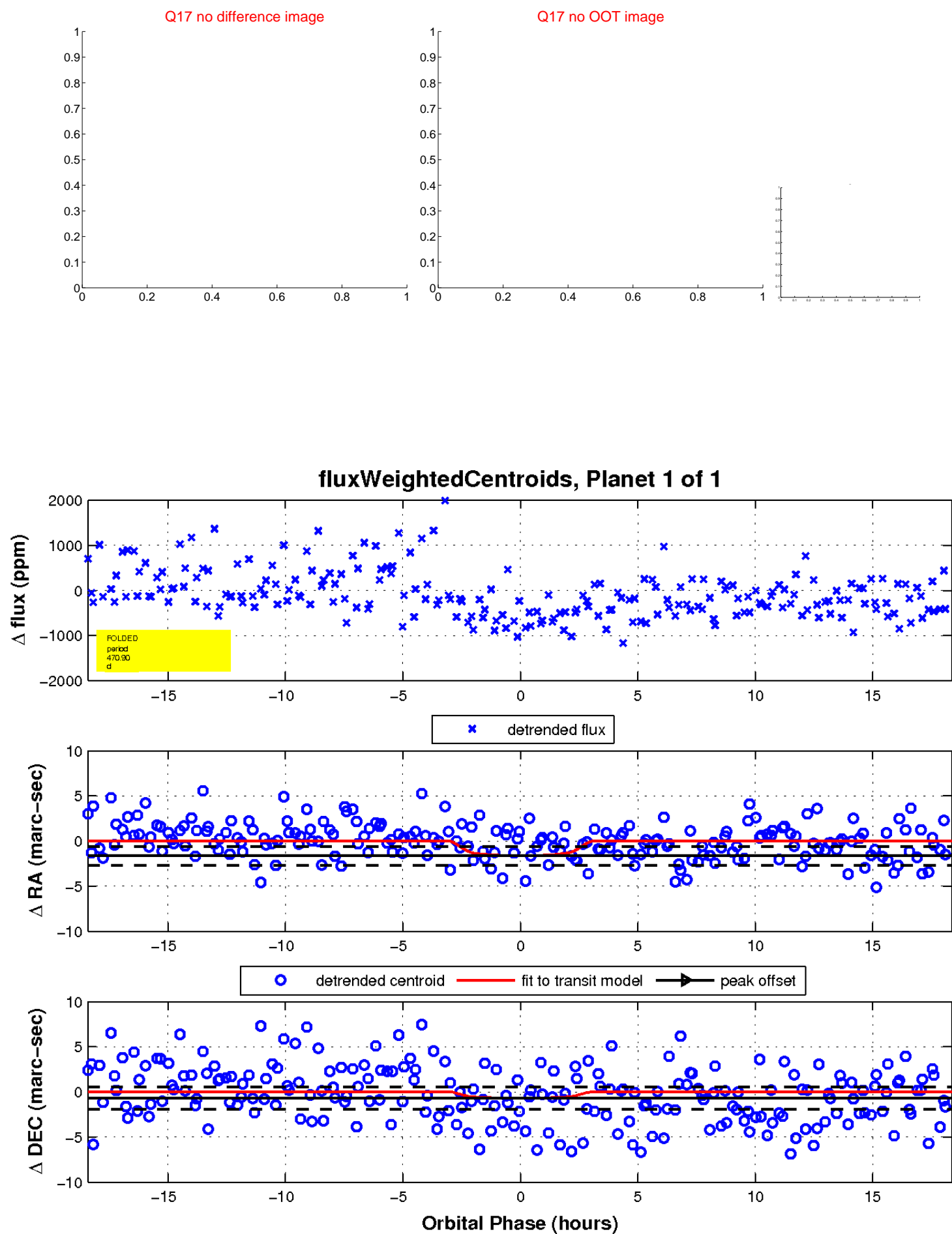
white ×: KIC target position; +: OOT centroid; △: difference centroid. red ✕: large negative pixel value.



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.



UKIRT Image

