

KIC 005723911

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})
005723911-01	OBS	No	486.491419	372.872657	400.3	16.745	7.3	6.9	0.87	5556	2.15	0.46

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
005723911-01	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_MARSHALL—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.

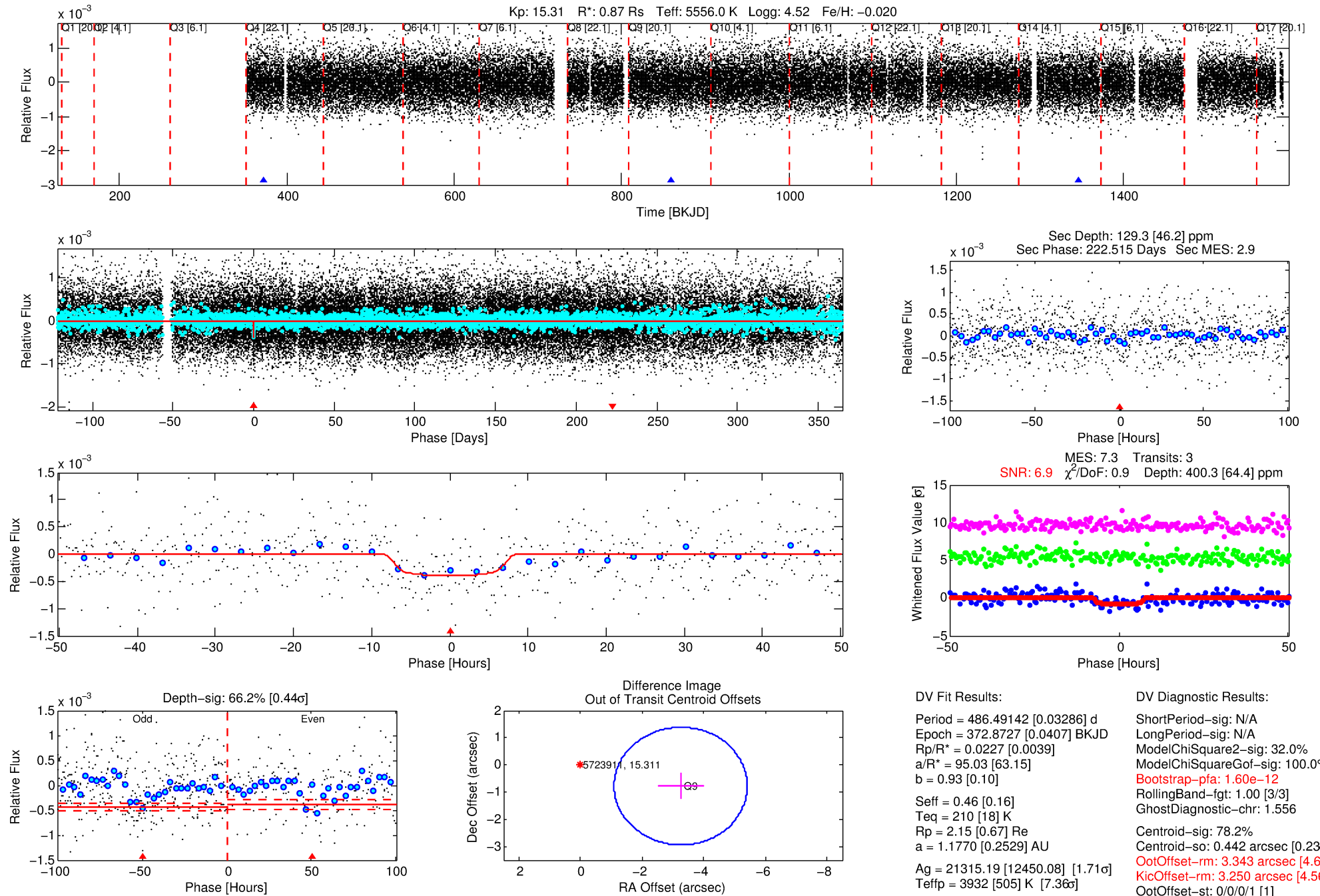
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 005723911-01

No Significant Match Found

DV One-Page Summary

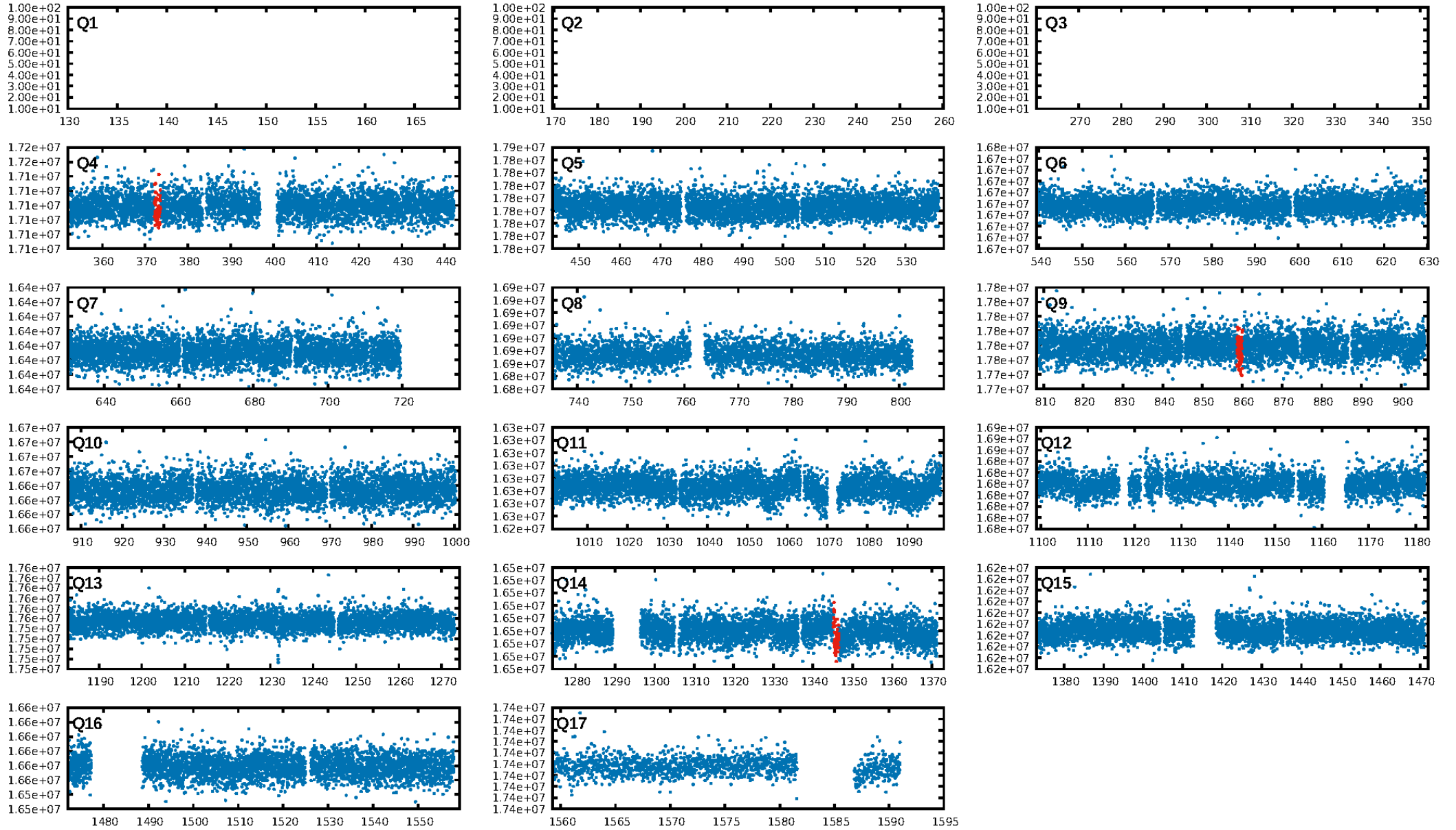
KIC: 5723911 Candidate: 1 of 1 Period: 486.491 d



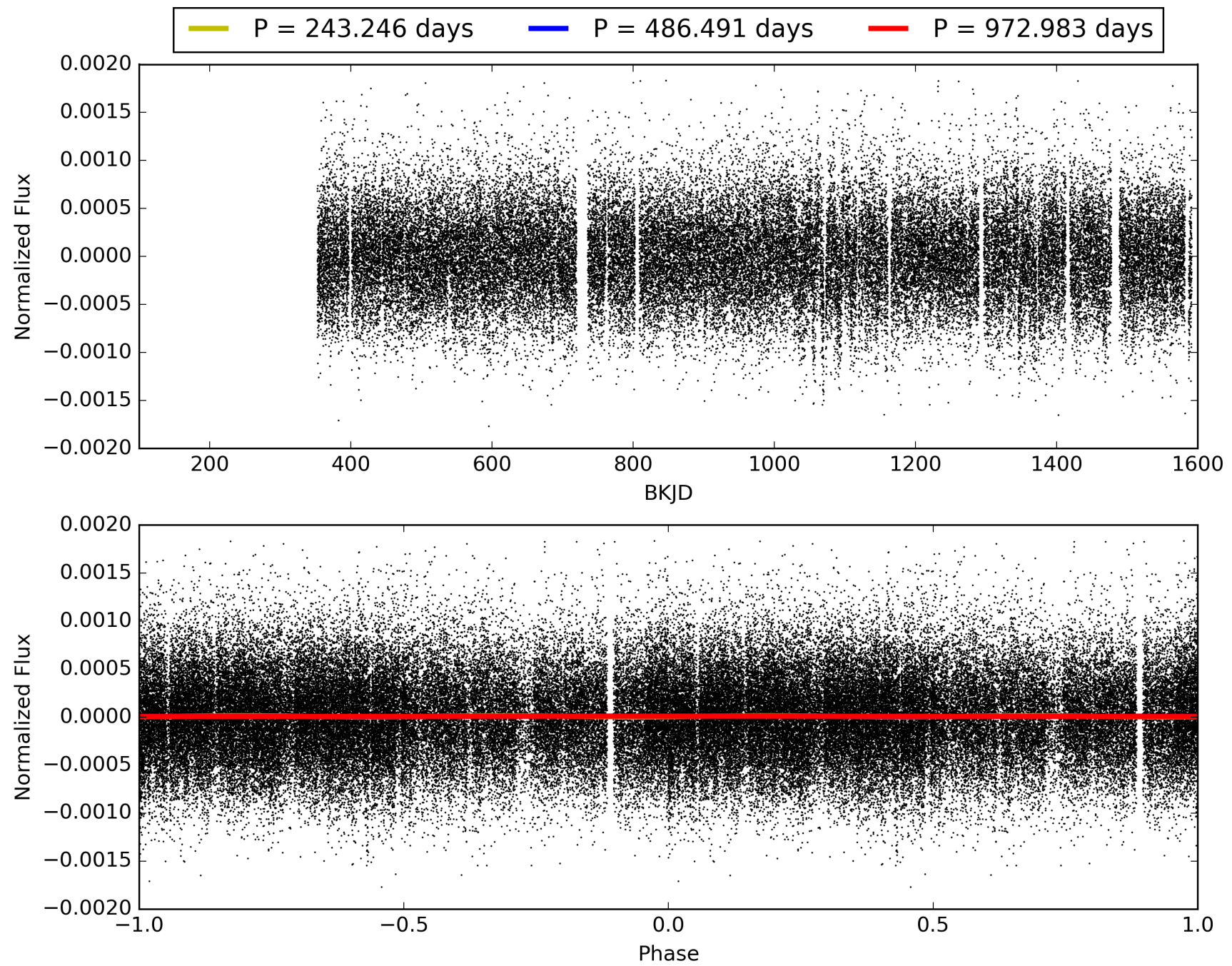
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 30-Jan-2016 11:22:28 Z

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

TCE 005723911-01, PDC Light Curves

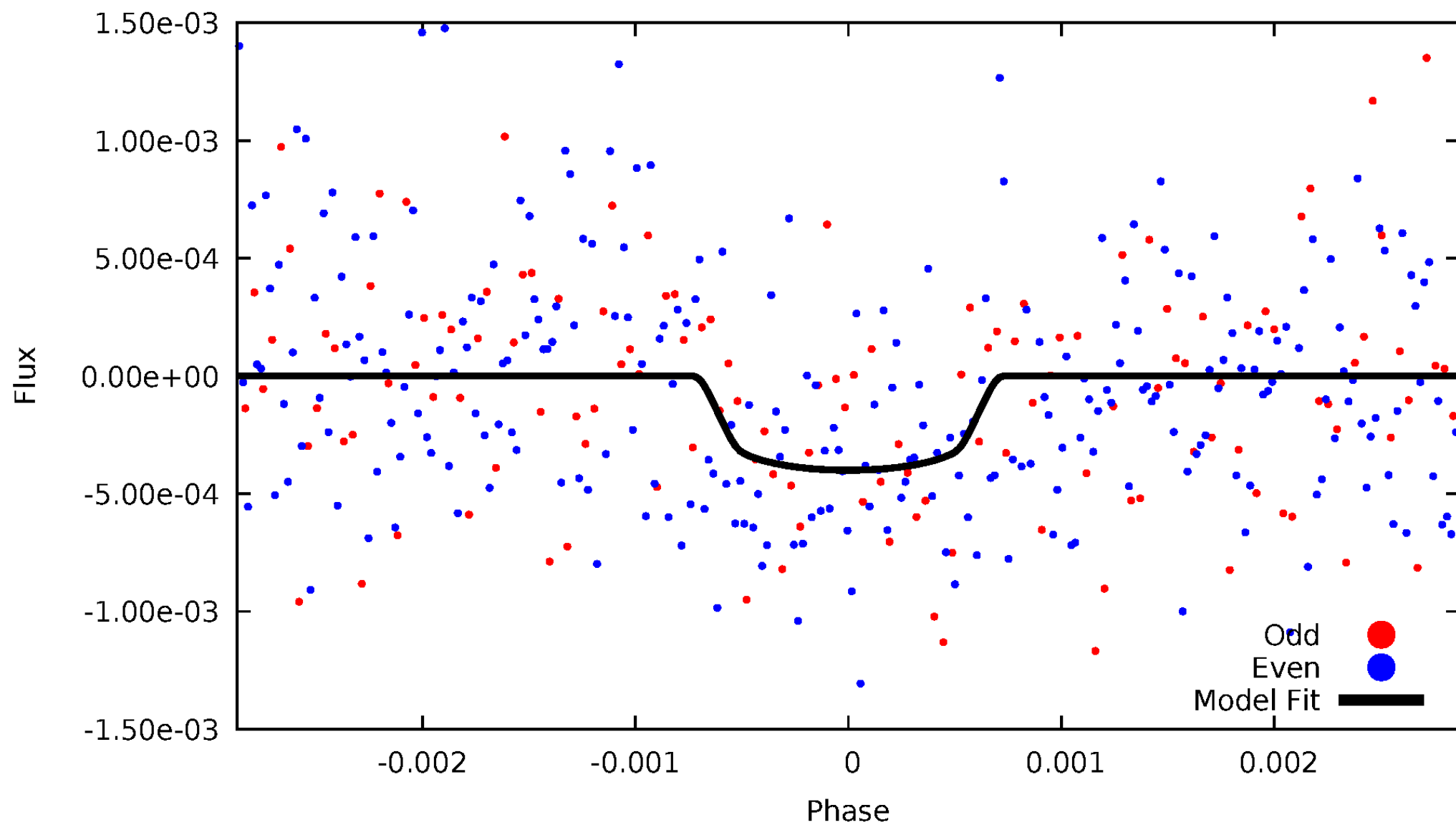


TCE 005723911-01



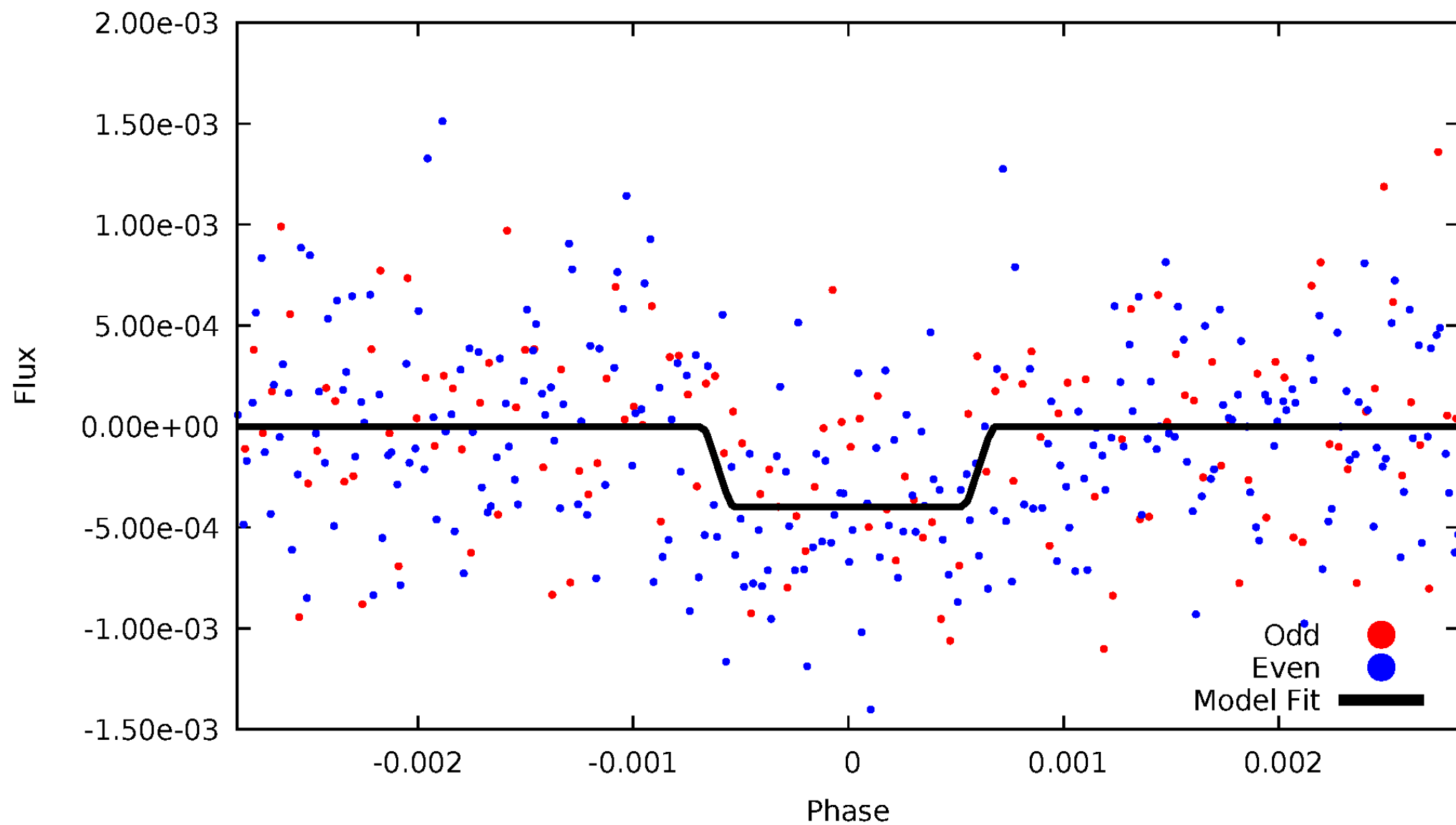
DV Odd/Even

TCE 005723911-01



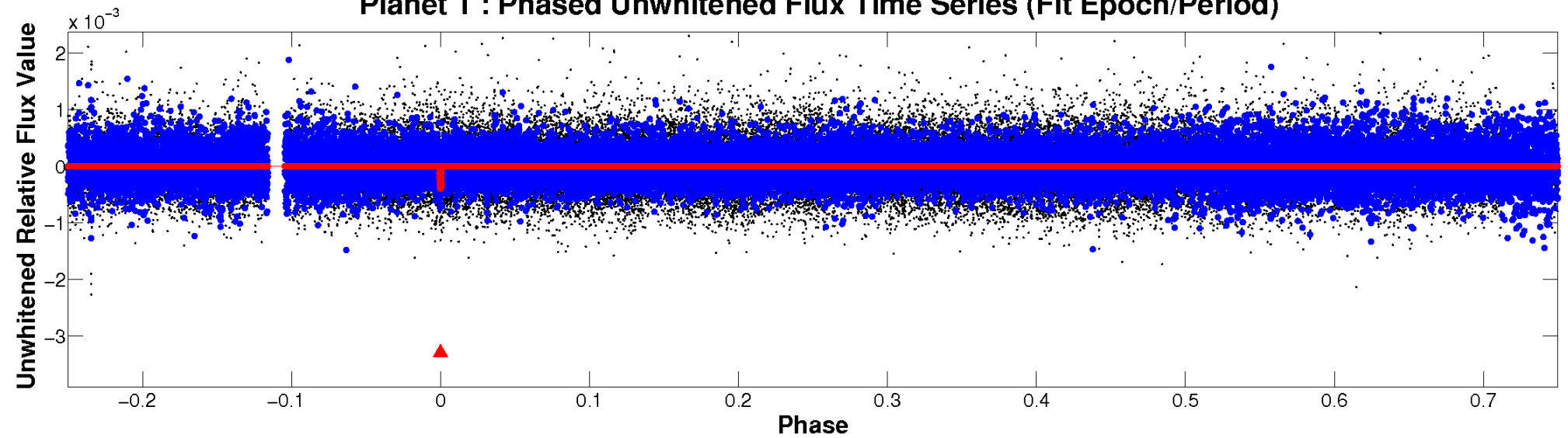
ALT Odd/Even

TCE 005723911-01

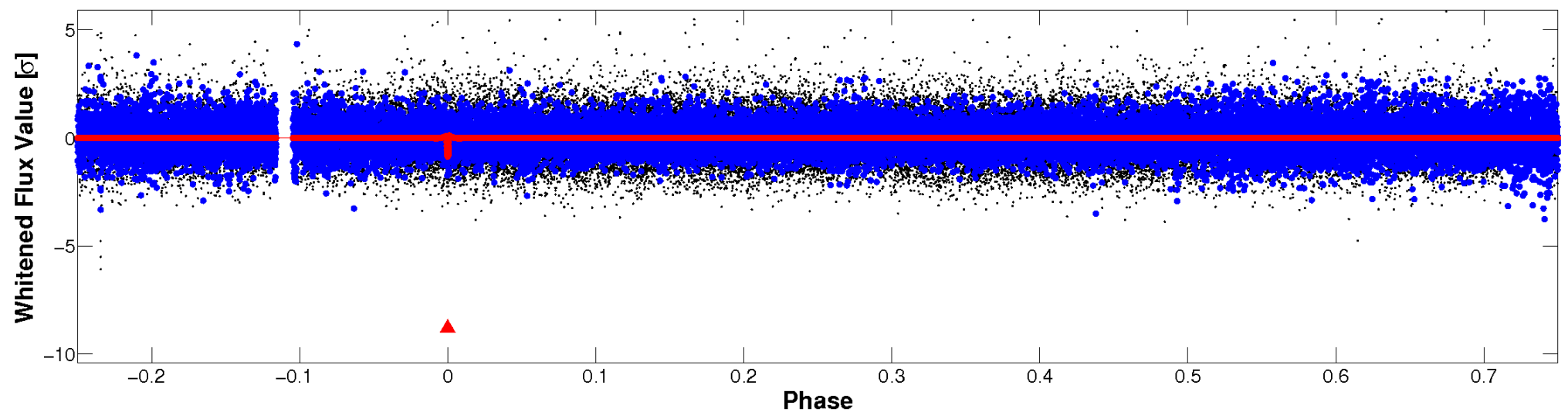


Non-Whitened Vs. Whitened Light Curve

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

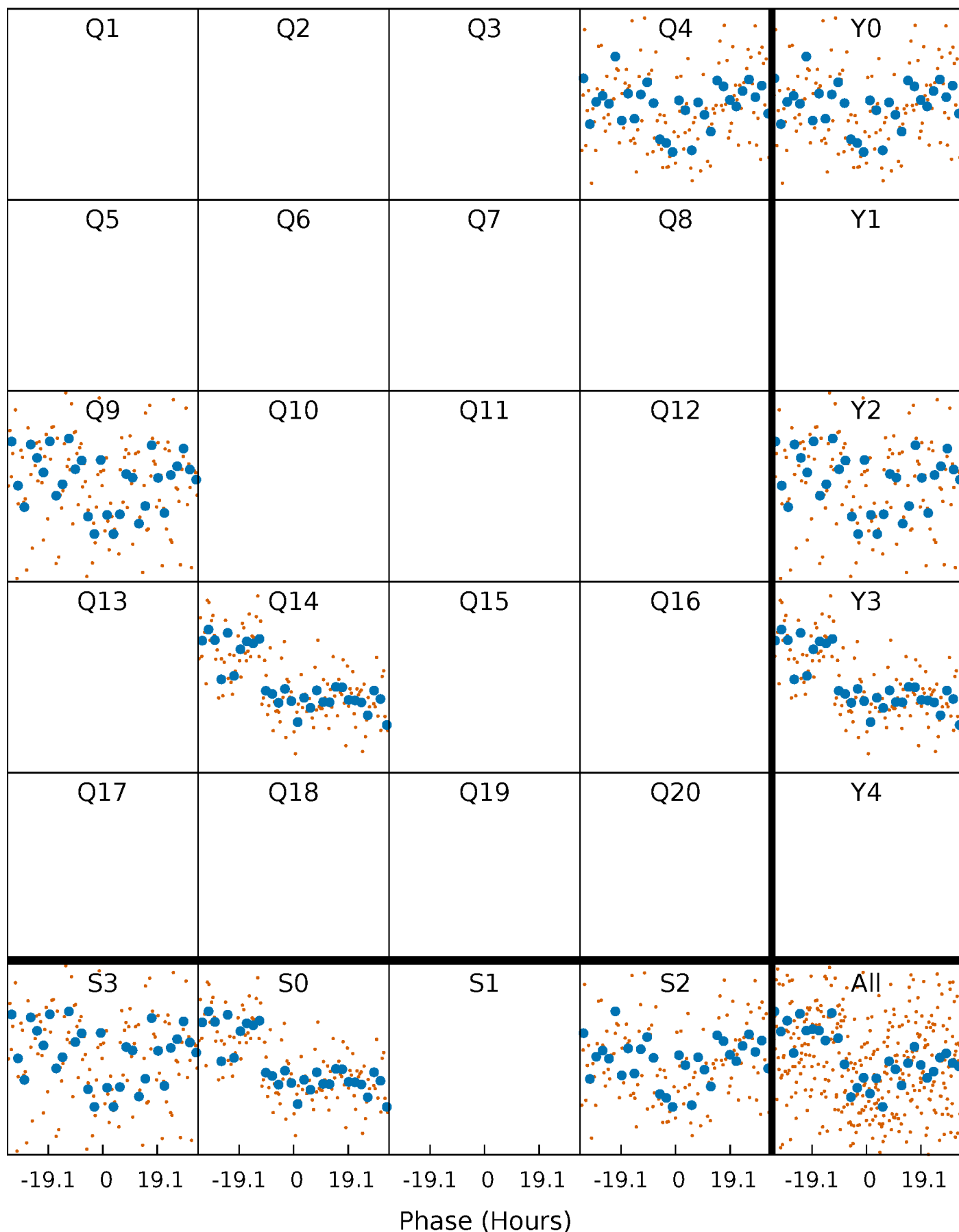


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



PDC Quarter-Phased Transit Curves

TCE 005723911-01 P=486.491419 Days $T_0=372.872657$ (BKJD)



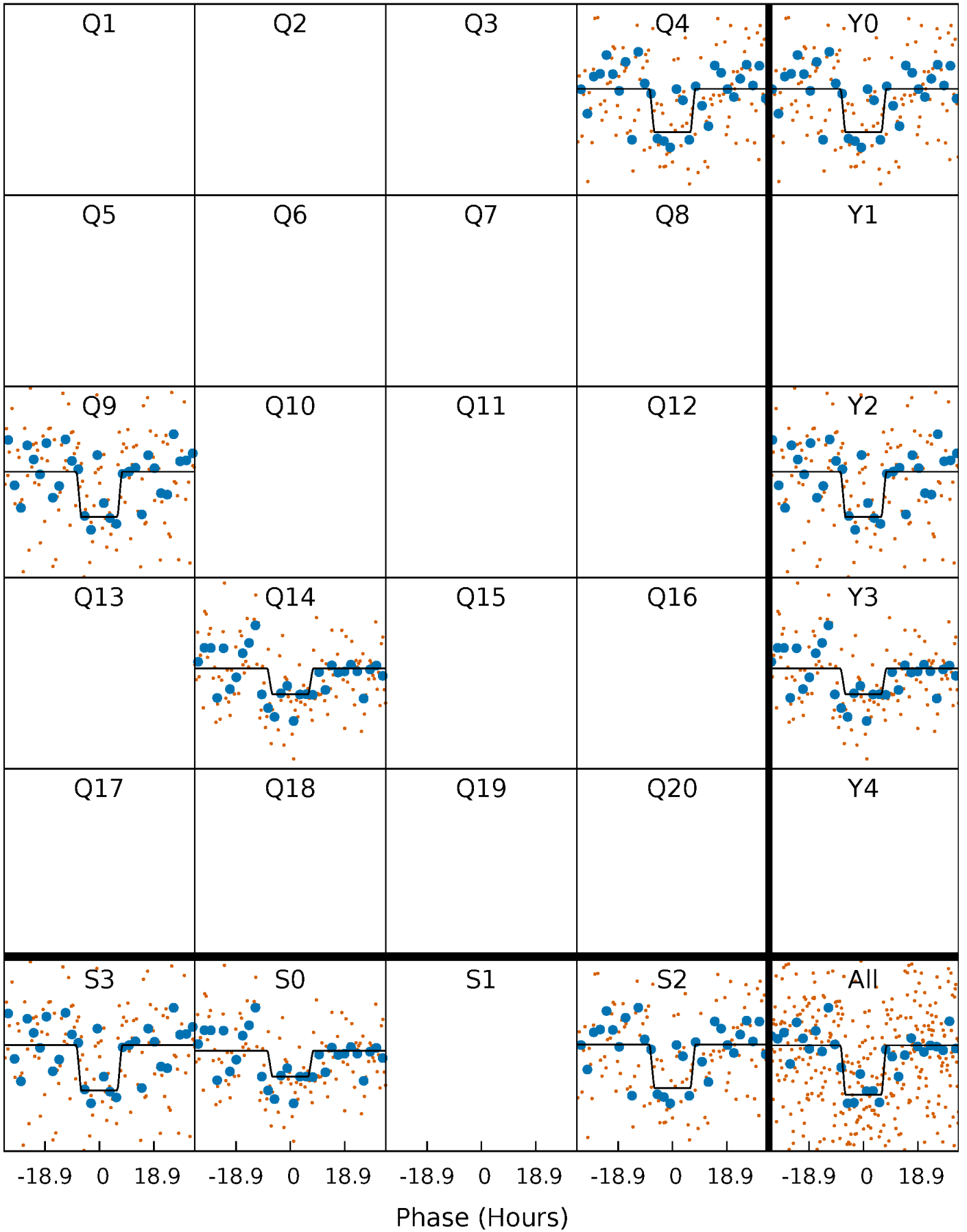
DV Quarter-Phased Transit Curves

TCE 005723911-01 P=486.491419 Days $T_0=372.872657$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

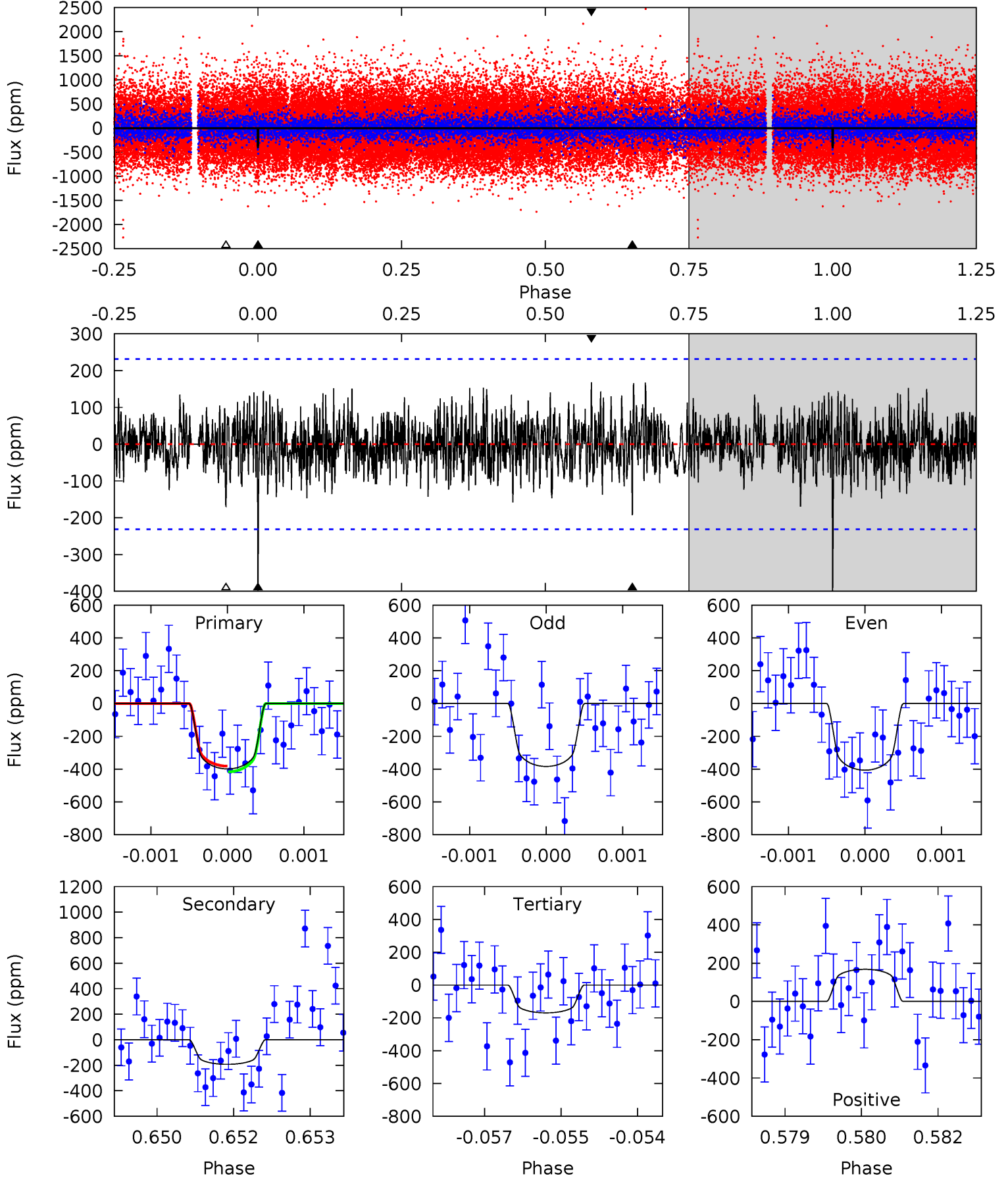
TCE 005723911-01 P=486.482196 Days $T_0=372.868868$ (BKJD)



DV Model-Shift Uniqueness Test

005723911-01, P = 486.491419 Days, E = 372.872657 Days

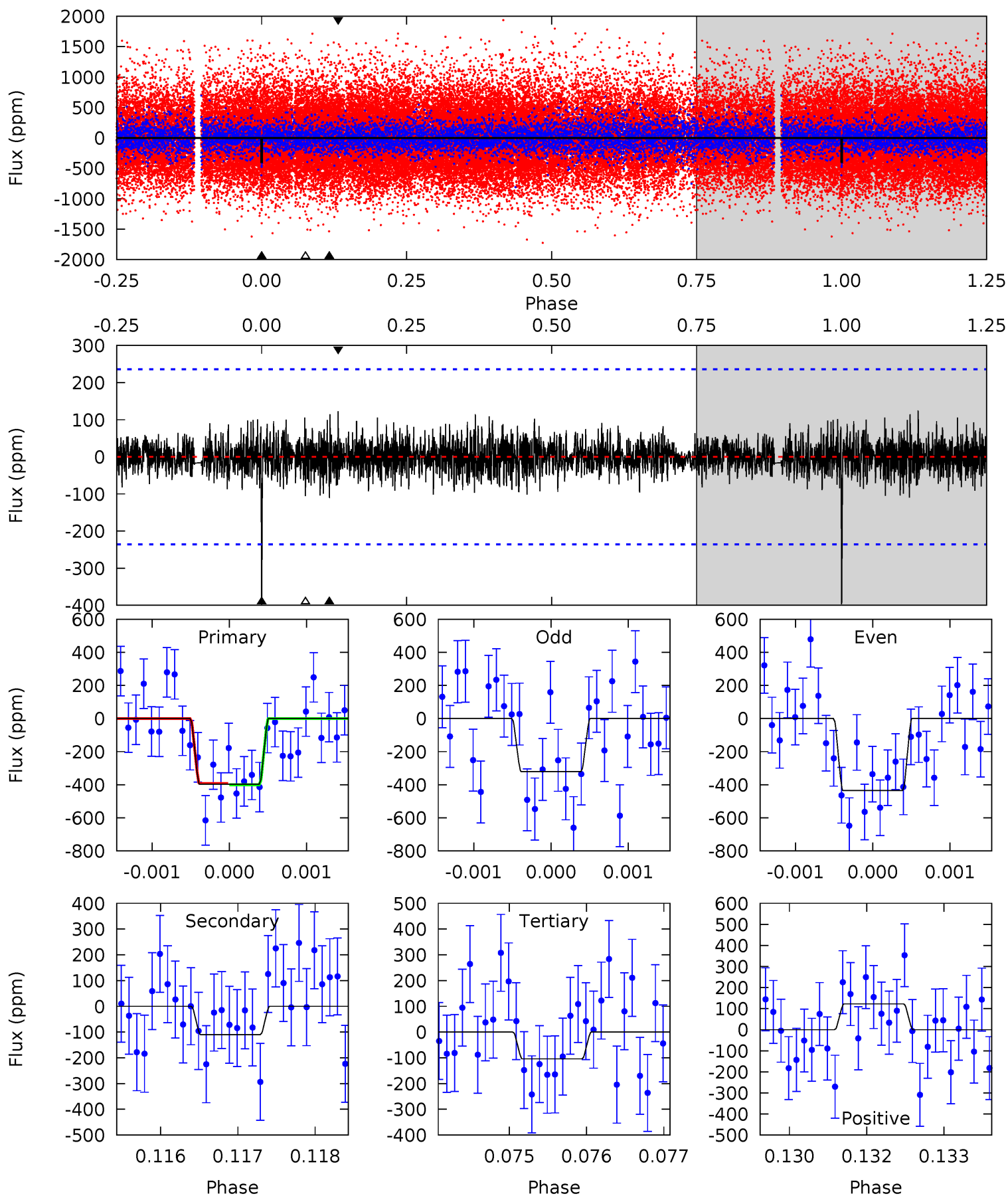
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
9.28	4.48	3.94	3.91	5.38	3.18	1.22	5.34	5.37	0.54	0.57	0.25	1.04	0.30	0.40



Alt Model-Shift Uniqueness Test

005723911-01, P = 486.482196 Days, E = 372.868868 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
9.08	2.52	2.39	2.80	5.40	3.20	0.74	6.69	6.27	0.13	-0.29	1.24	1.23	0.24	0.09



Stellar Parameters For KIC 005723911

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	$M(M_{\odot})$	p_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	5556^{+182}_{-182}	$4.524^{+0.055}_{-0.165}$	$-0.020^{+0.250}_{-0.300}$	$0.868^{+0.226}_{-0.090}$	$0.918^{+0.102}_{-0.092}$	$1.980^{+0.465}_{-0.935}$
	+3%/-3%	+1%/-4%	+1250%/-1500%	+26%/-10%	+11%/-10%	+23%/-47%
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 005723911-01 / KOI

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	-193 ± 43	$2.23^{+0.49}_{-0.41}$	299^{+21}_{-14}	4483^{+409}_{-363}	28139^{+17515}_{-10299}
Alt.	-110 ± 44	$1.97^{+0.44}_{-0.42}$	299^{+20}_{-14}	4230^{+514}_{-414}	20571^{+17065}_{-8814}

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

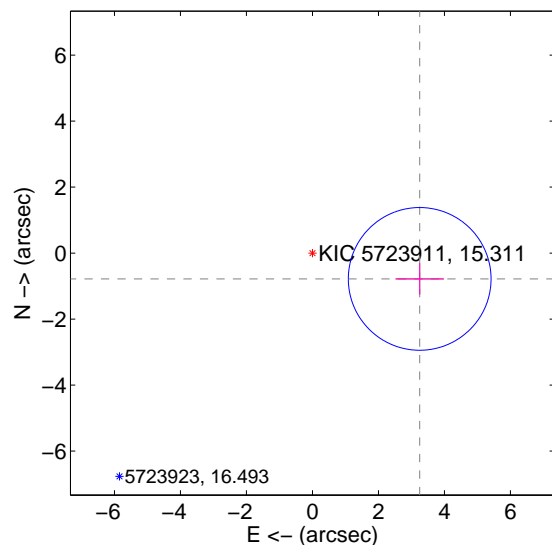
Supplemental centroid analysis for 005723911-01. Kepler magnitude: 15.31. Transit SNR 6.94

There are 0 quarters with good PRF difference image offsets

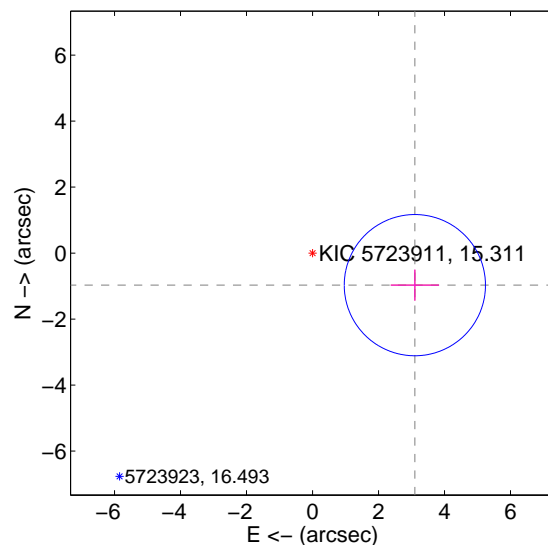
The direct PRF centroid is offset from the target star catalog position by about 0.24 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	3.343 ± 0.721	4.64	-3.250 ± 0.733	-0.782 ± 0.472
PRF-fit source offset from KIC position	3.250 ± 0.713	4.56	-3.101 ± 0.733	-0.972 ± 0.472
photometric centroid source offset	0.44 ± 1.89	0.23	0.33 ± 1.98	0.30 ± 1.77

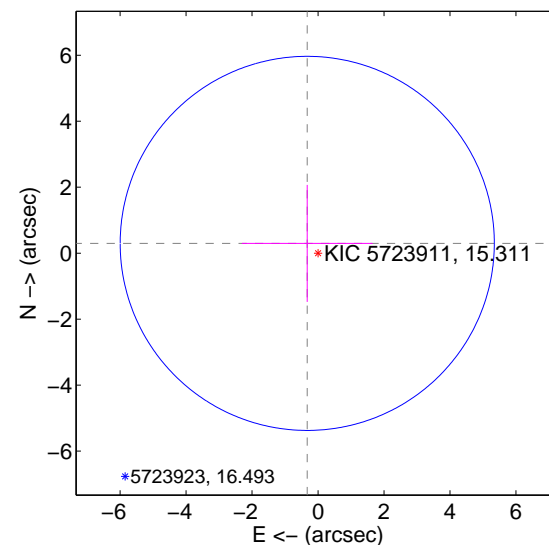
offset from difference PRF-fit to OOT PRF-fit



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.

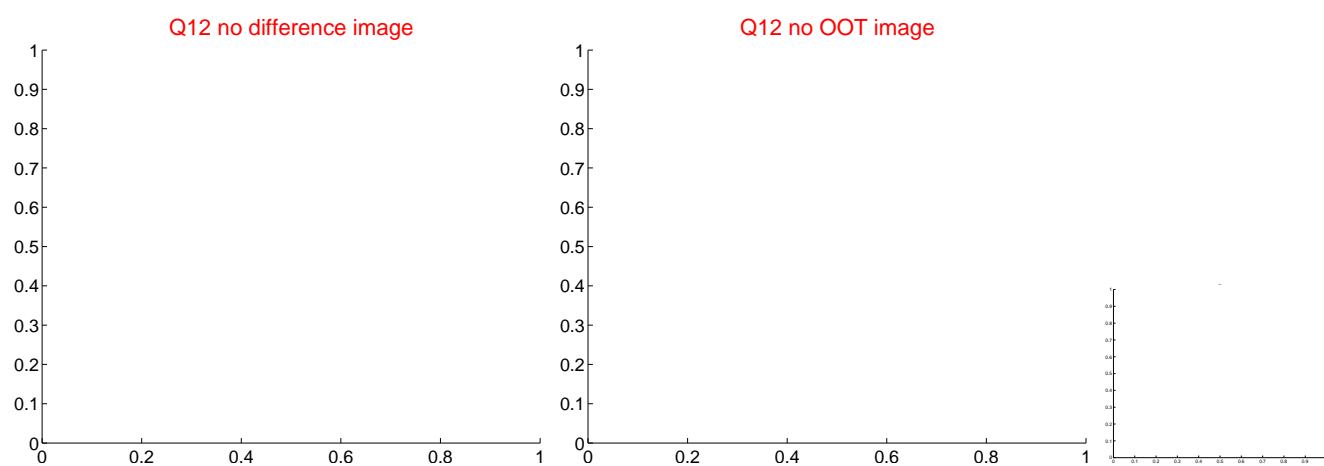
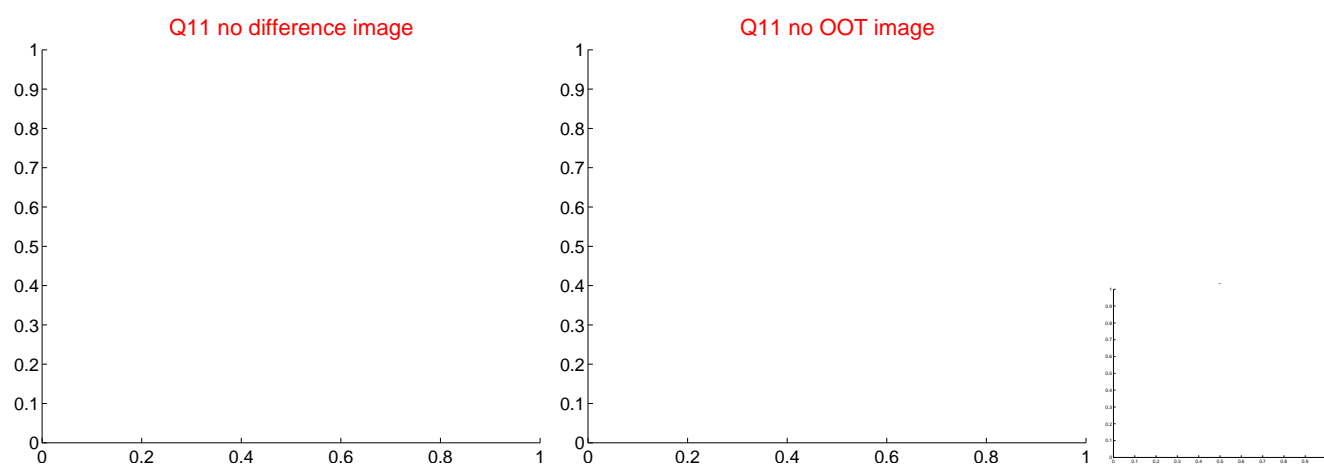
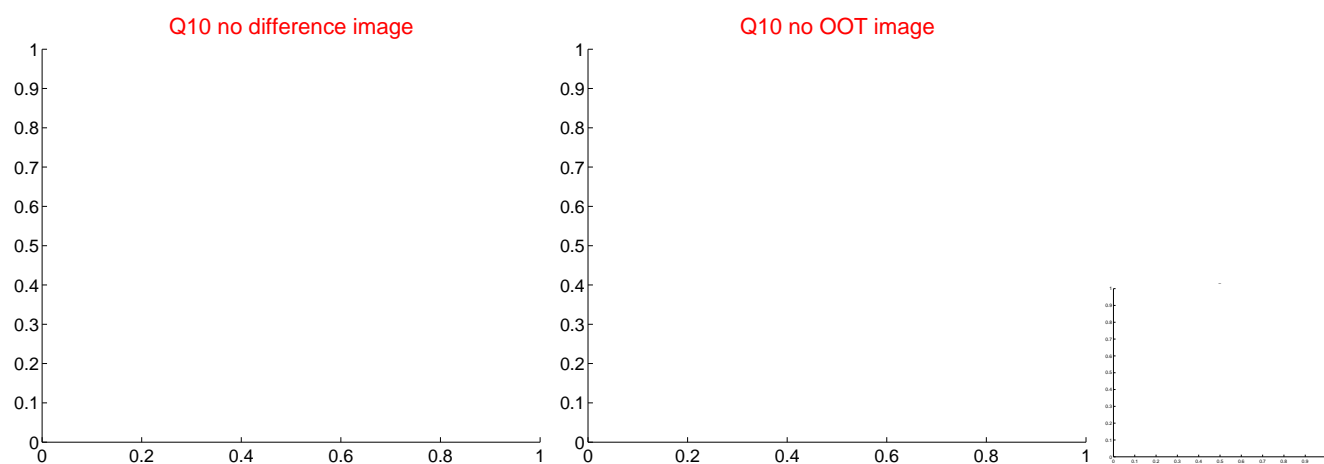
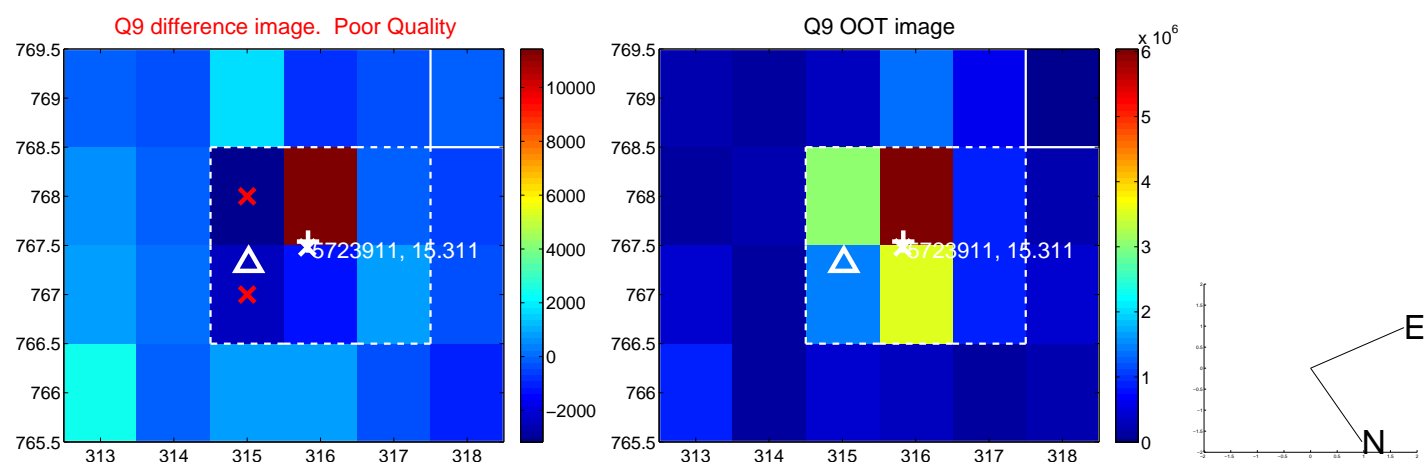
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



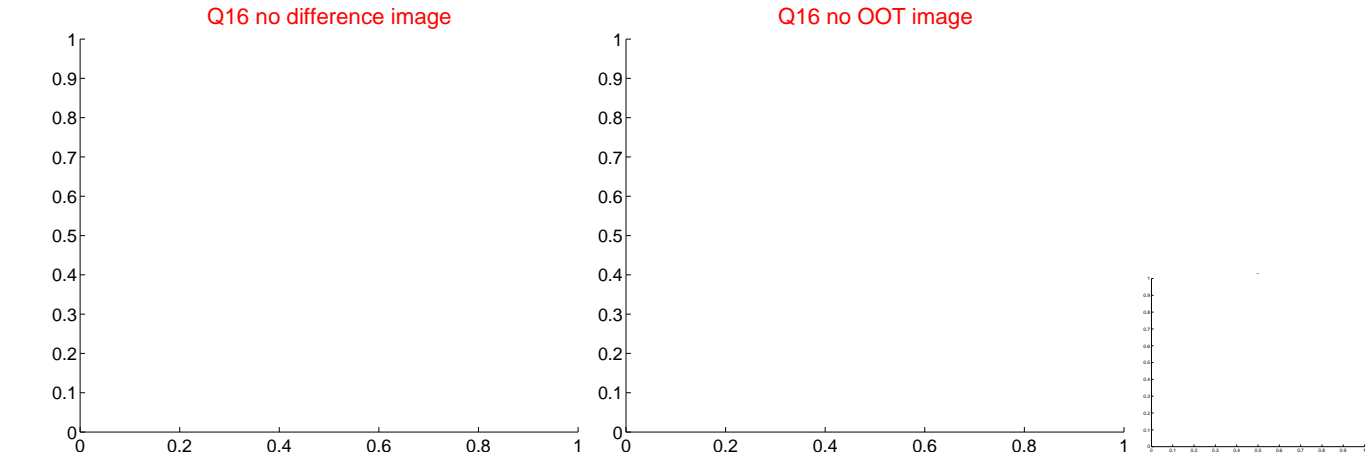
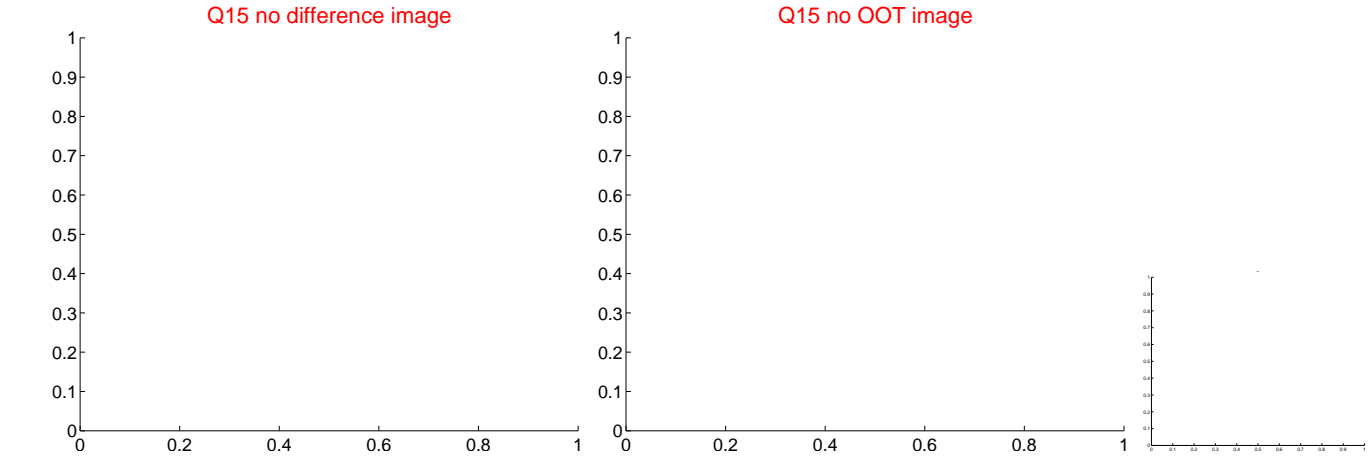
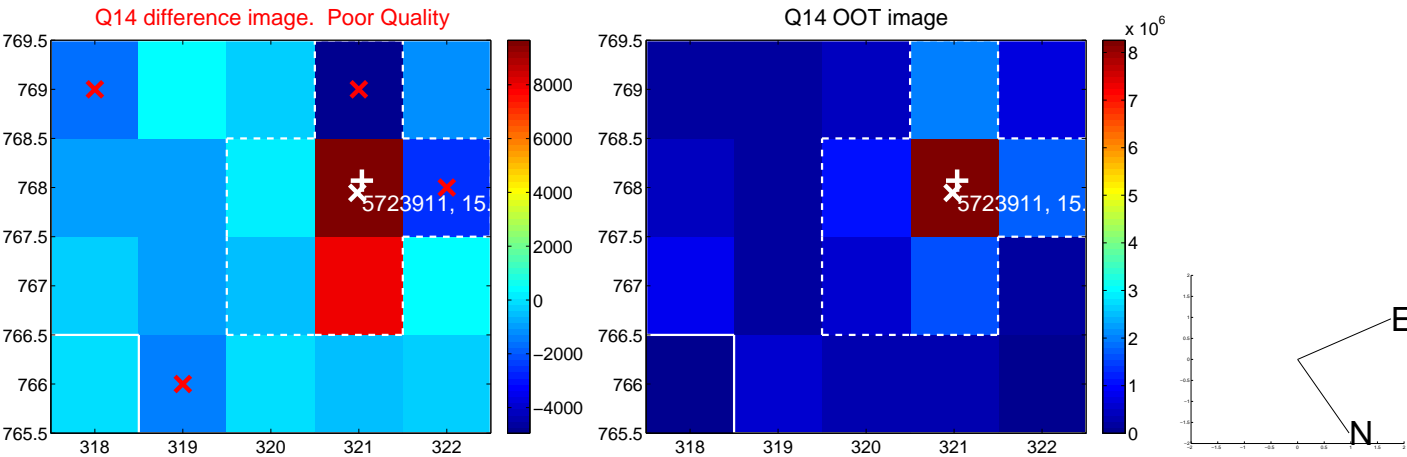
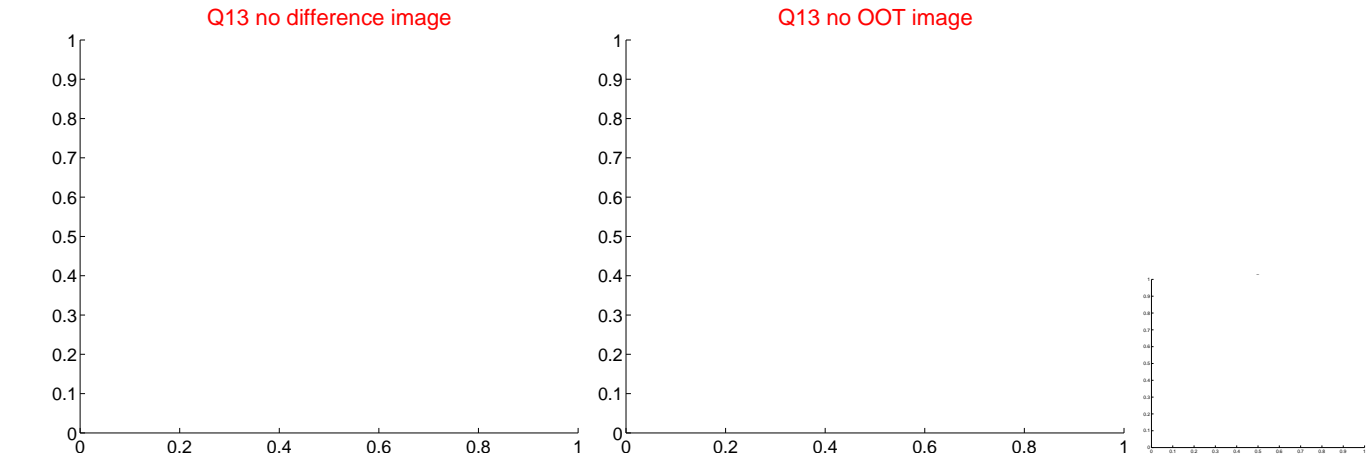
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



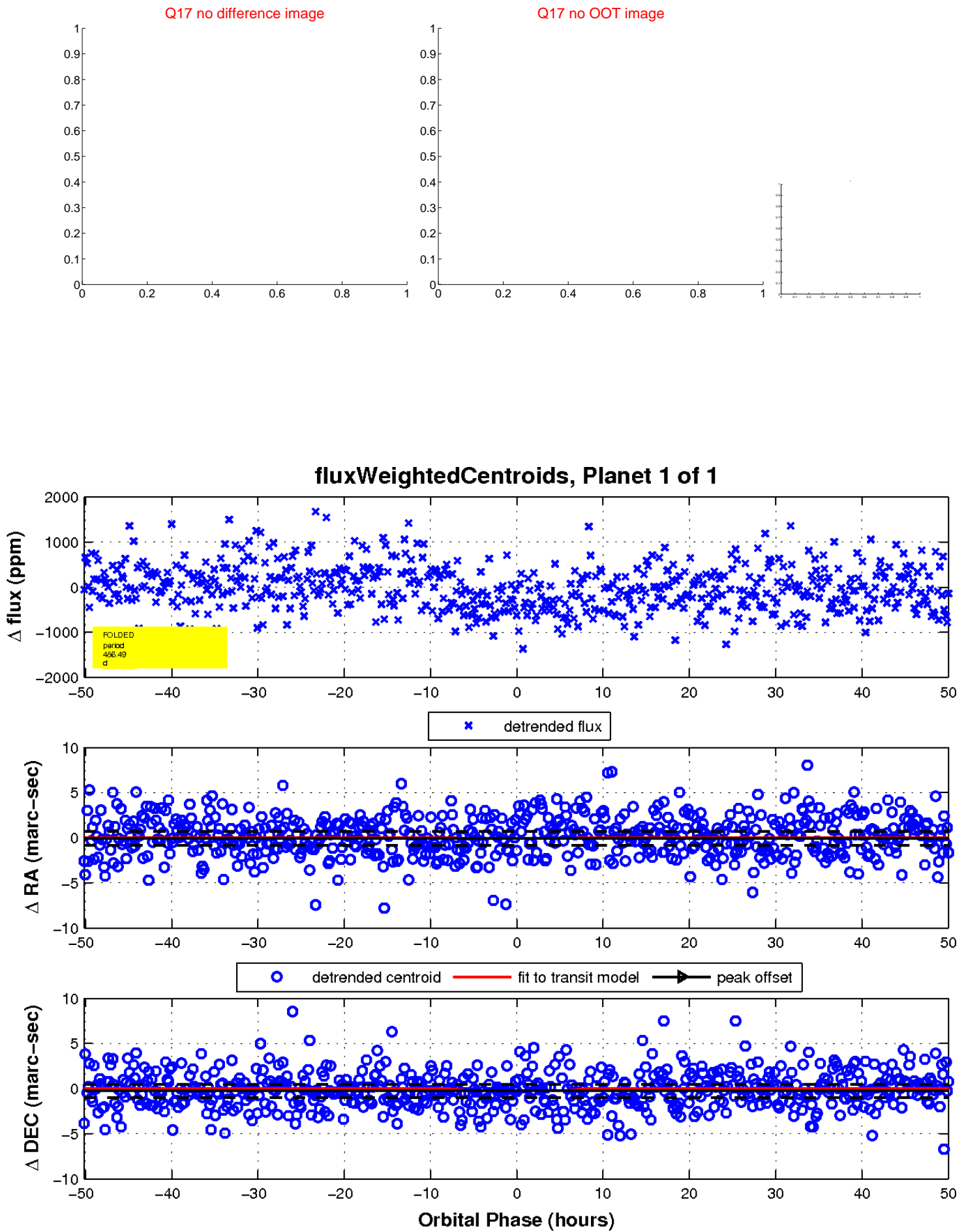
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value



white ×: 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

