

KIC 005179232

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})
005179232-01	OBS	No	246.583120	364.907190	570.3	3.337	7.4	7.6	0.91	5246	2.62	1.08

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
005179232-01	OBS	FP	0.04	1	0	0	0	INDIV_TRANS_CHASES—ALL_TRANS_CHASES—MOD_NONUNIQ_ALT—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.

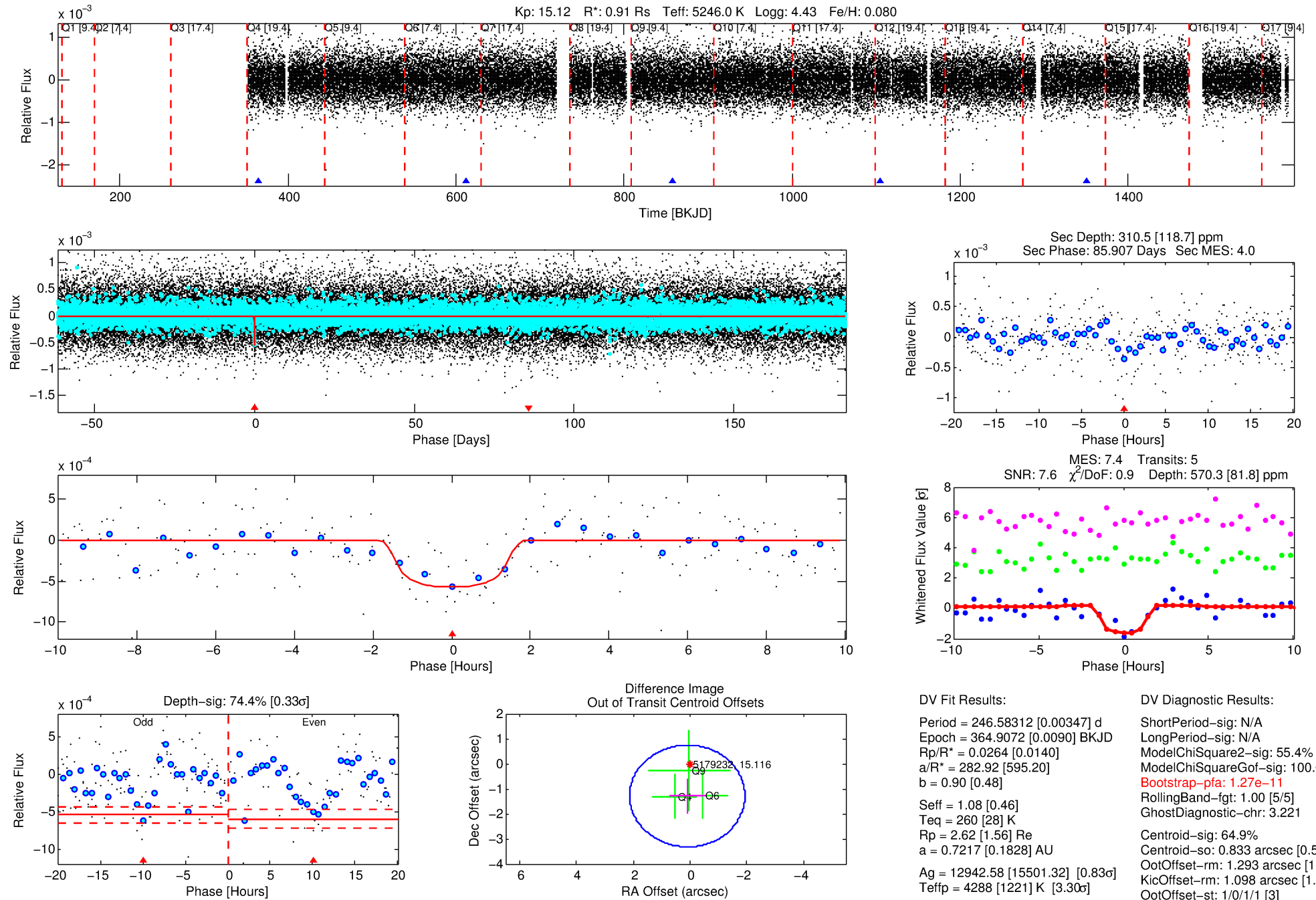
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 005179232-01

No Significant Match Found

DV One-Page Summary

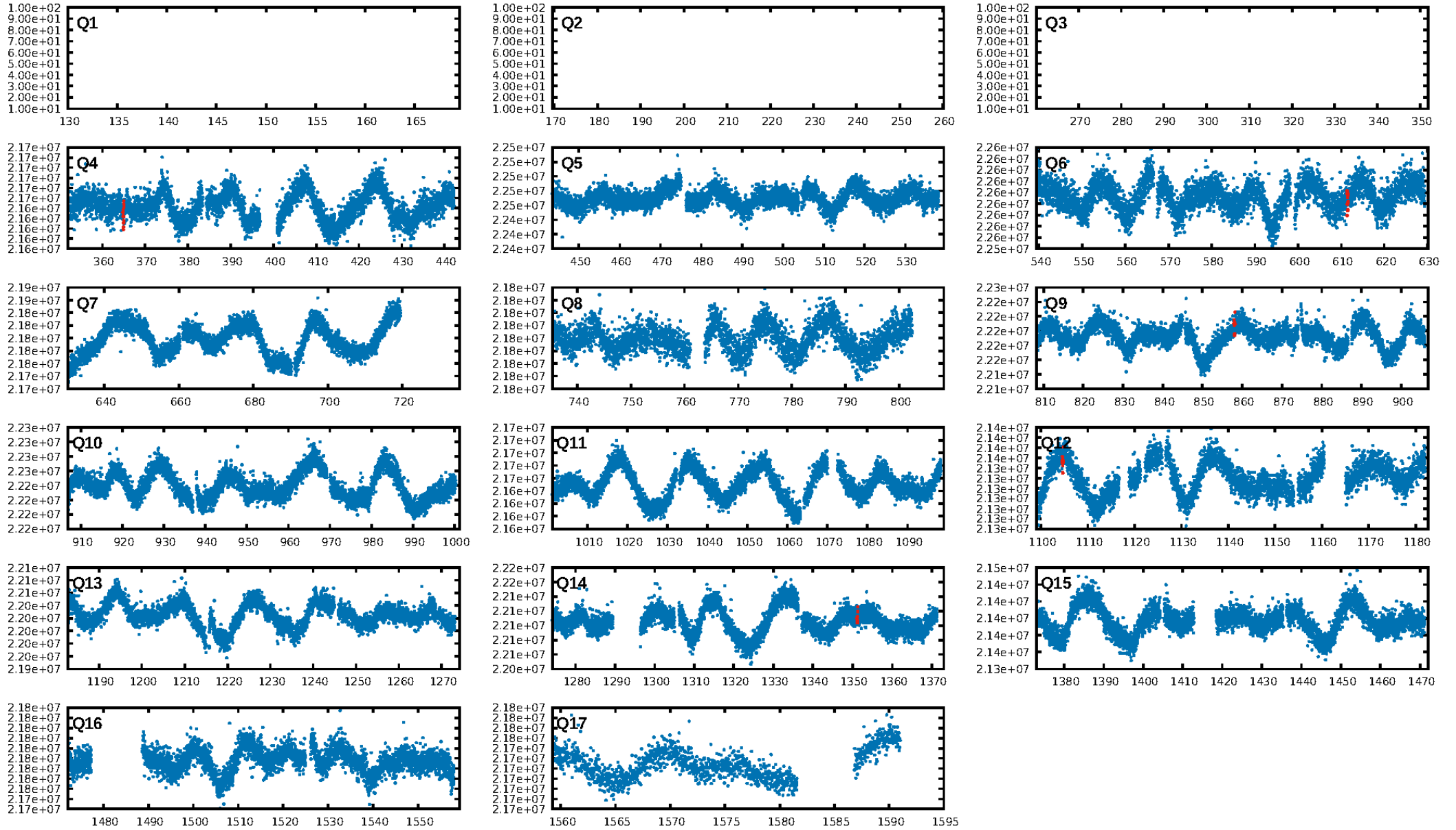
KIC: 5179232 Candidate: 1 of 1 Period: 246.583 d



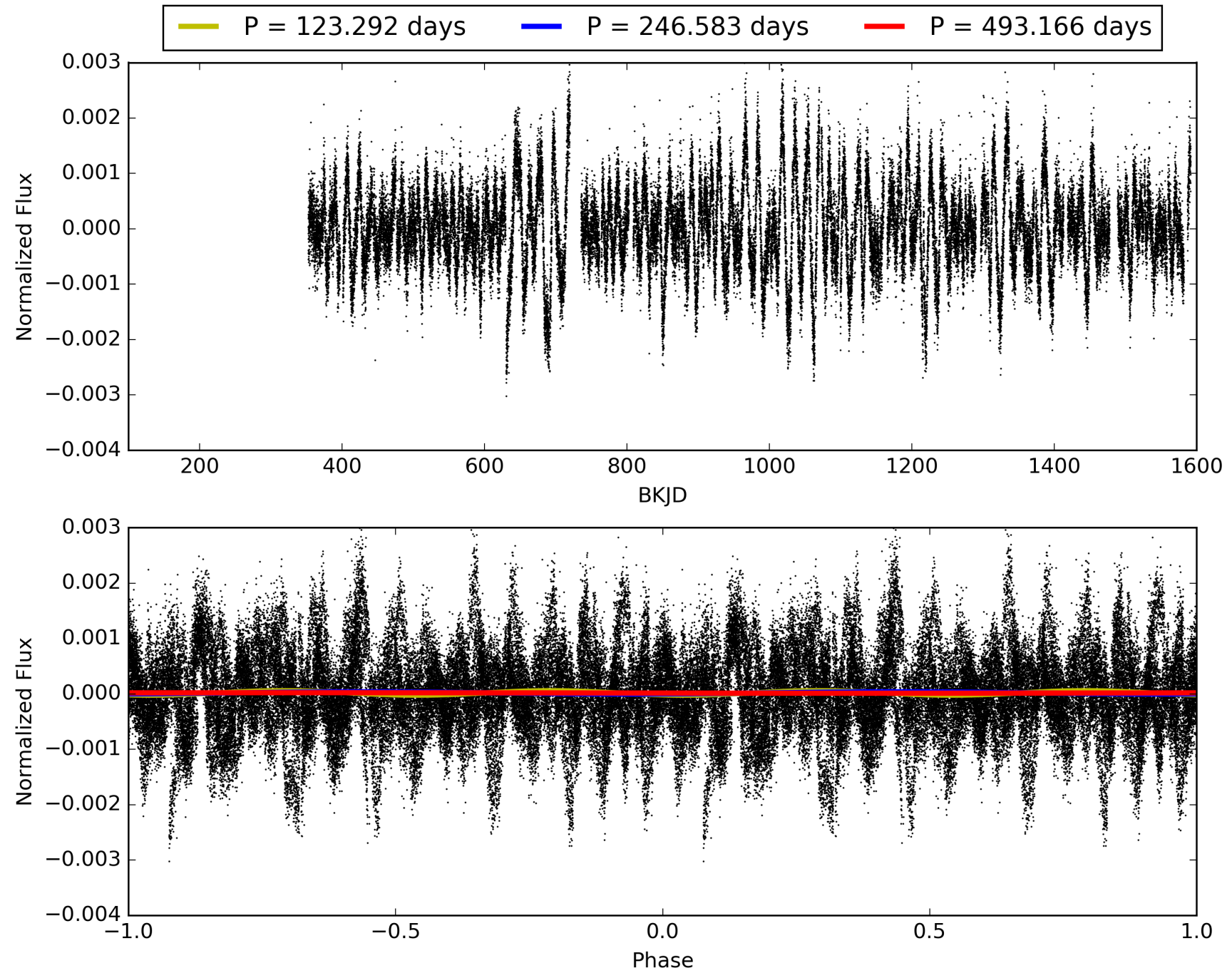
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 31-Jan-2016 13:53:28 Z

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

TCE 005179232-01, PDC Light Curves

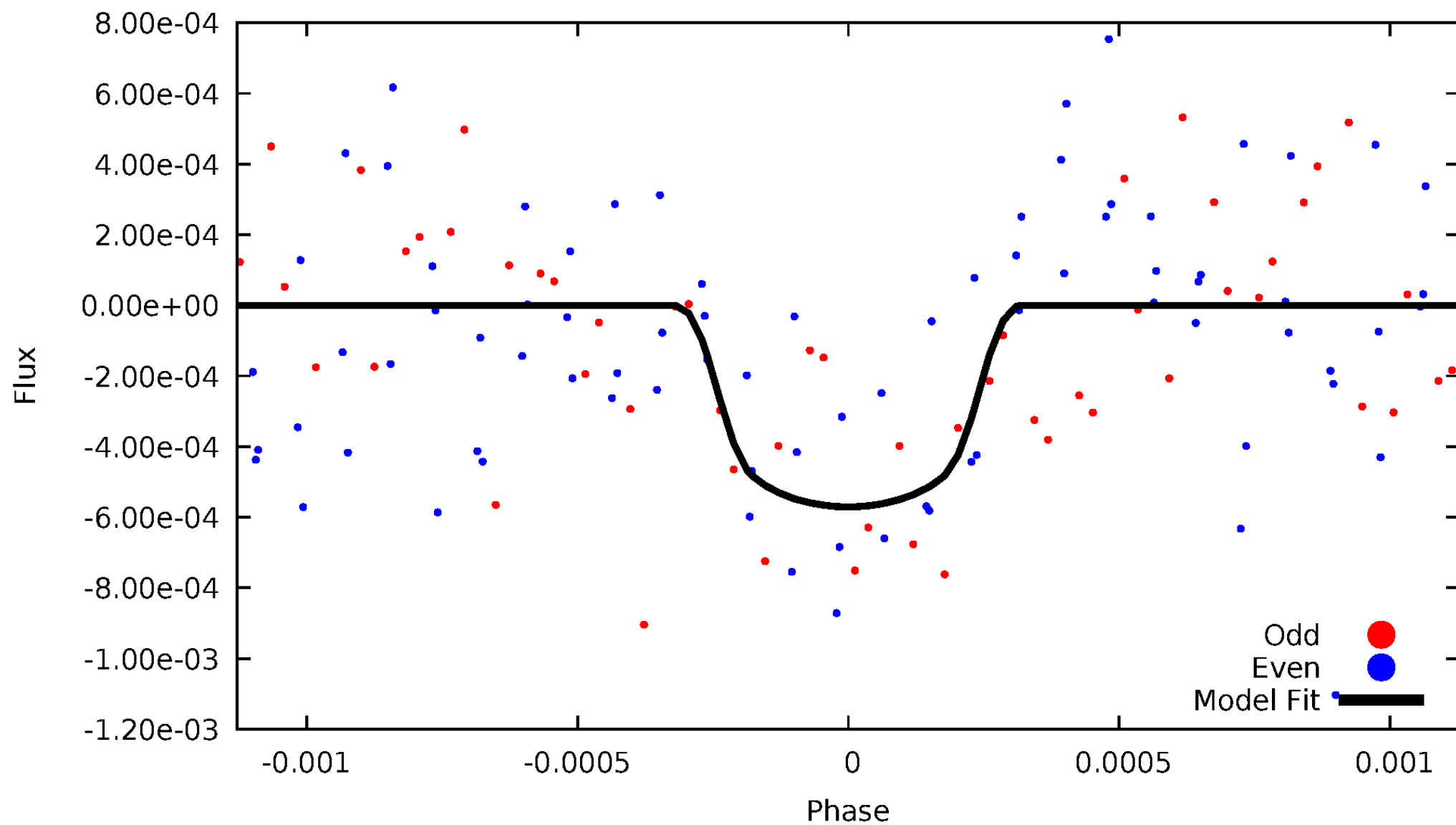


TCE 005179232-01



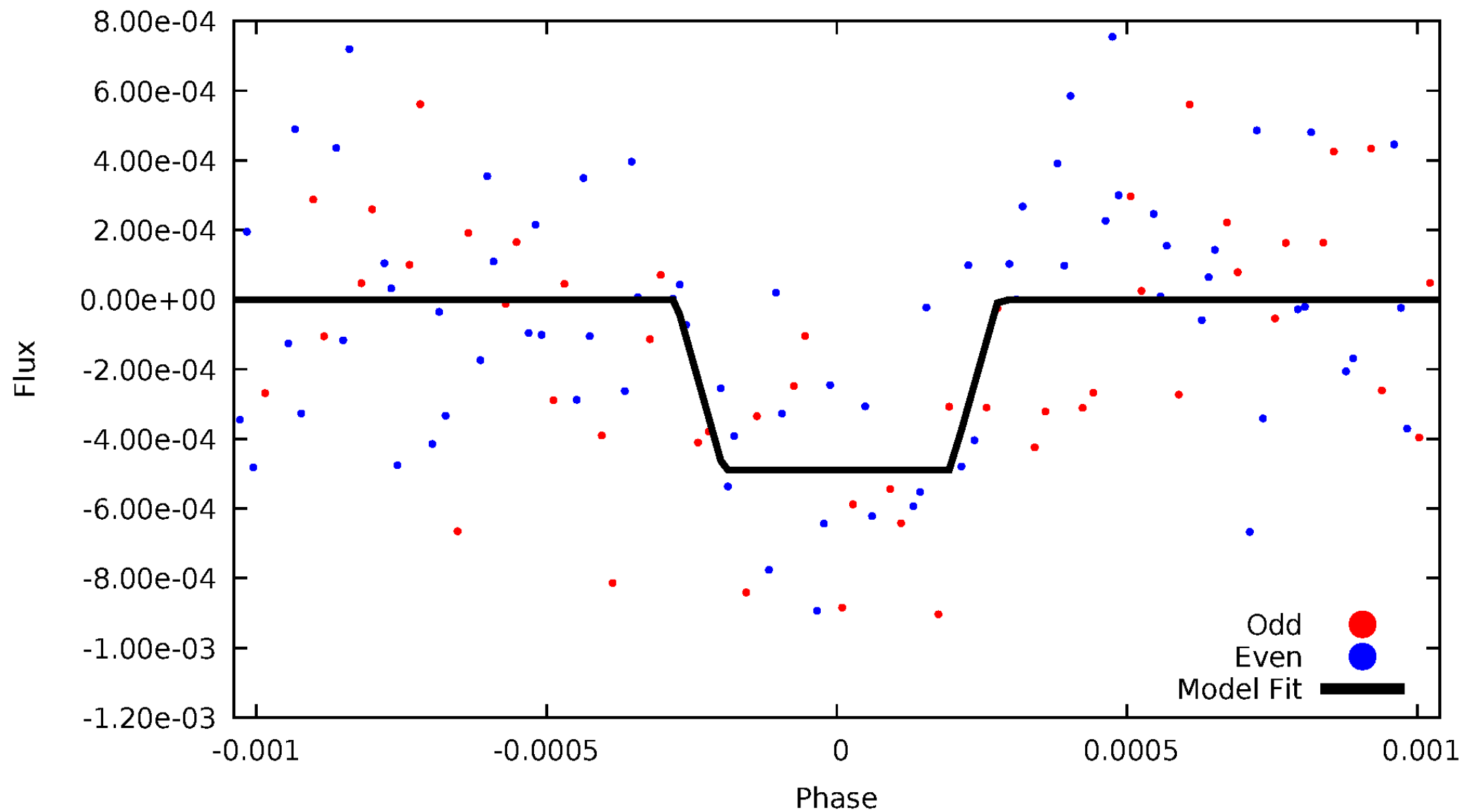
DV Odd/Even

TCE 005179232-01



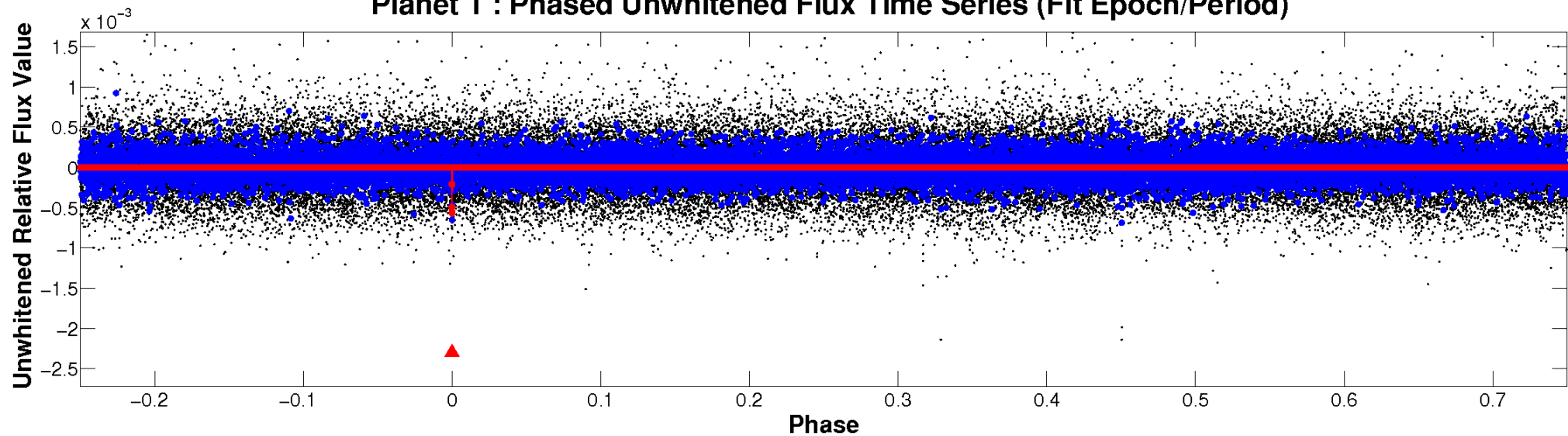
ALT Odd/Even

TCE 005179232-01

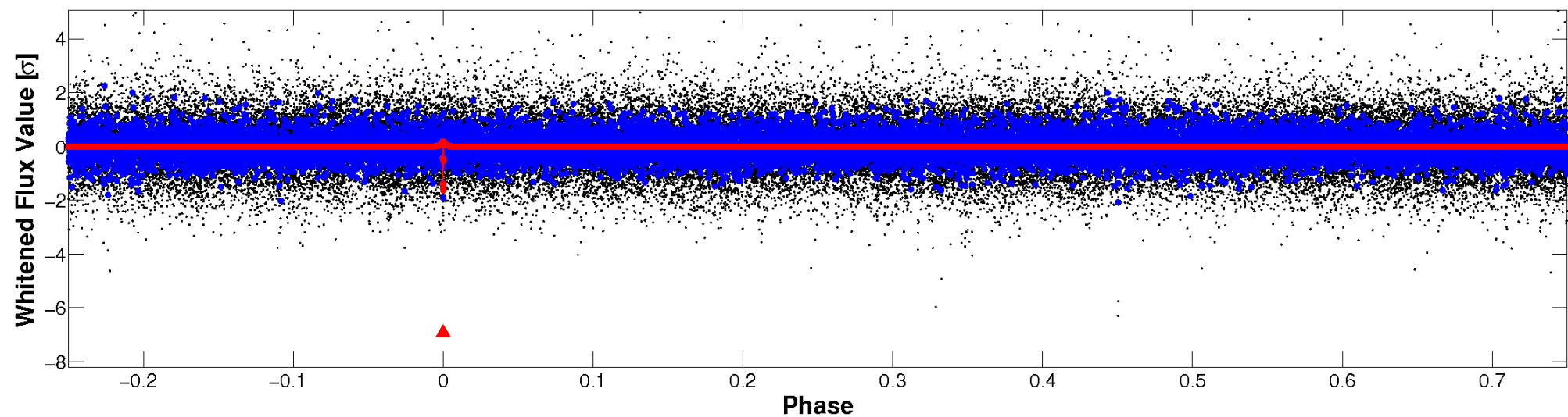


Non-Whitened Vs. Whitened Light Curve

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

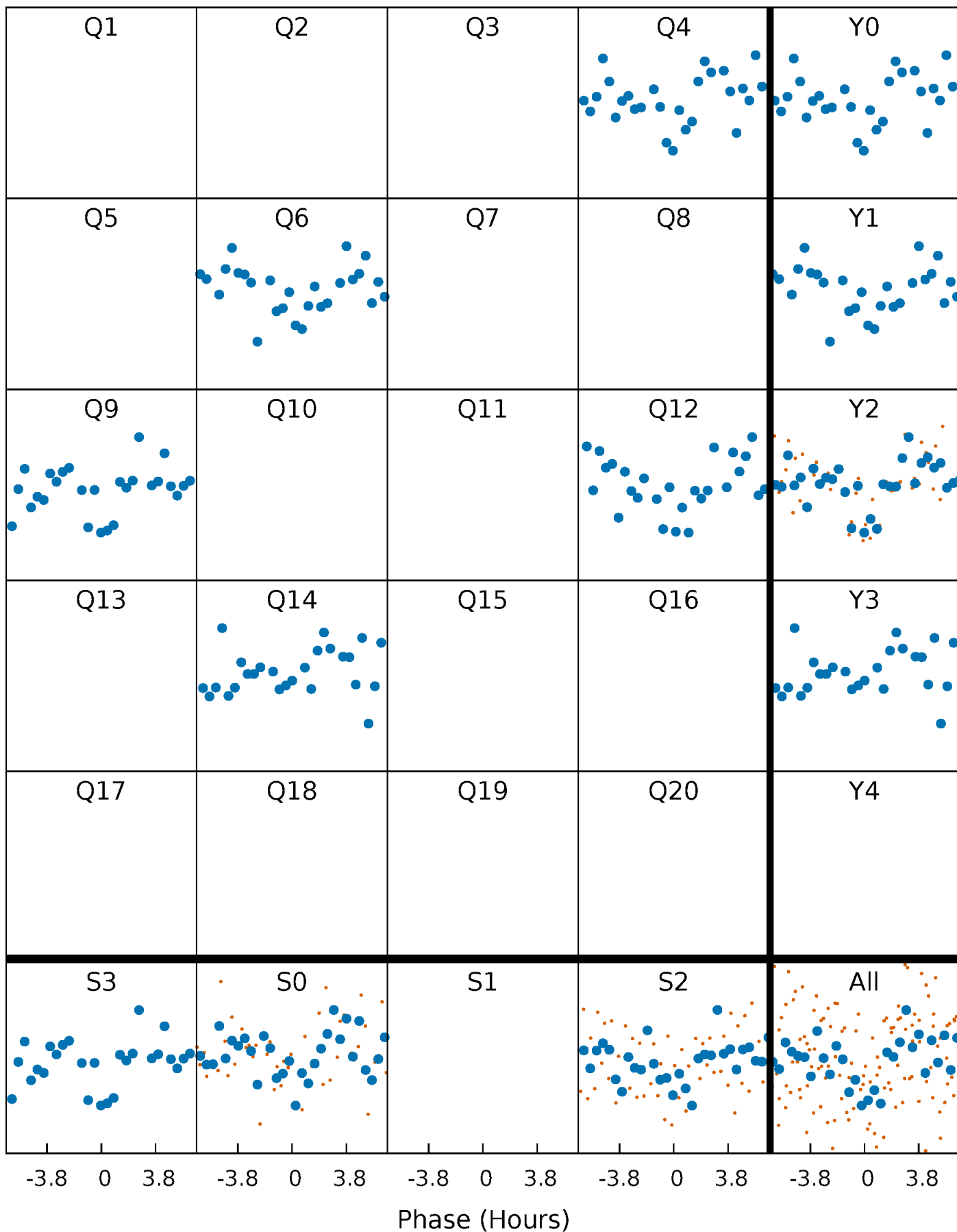


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



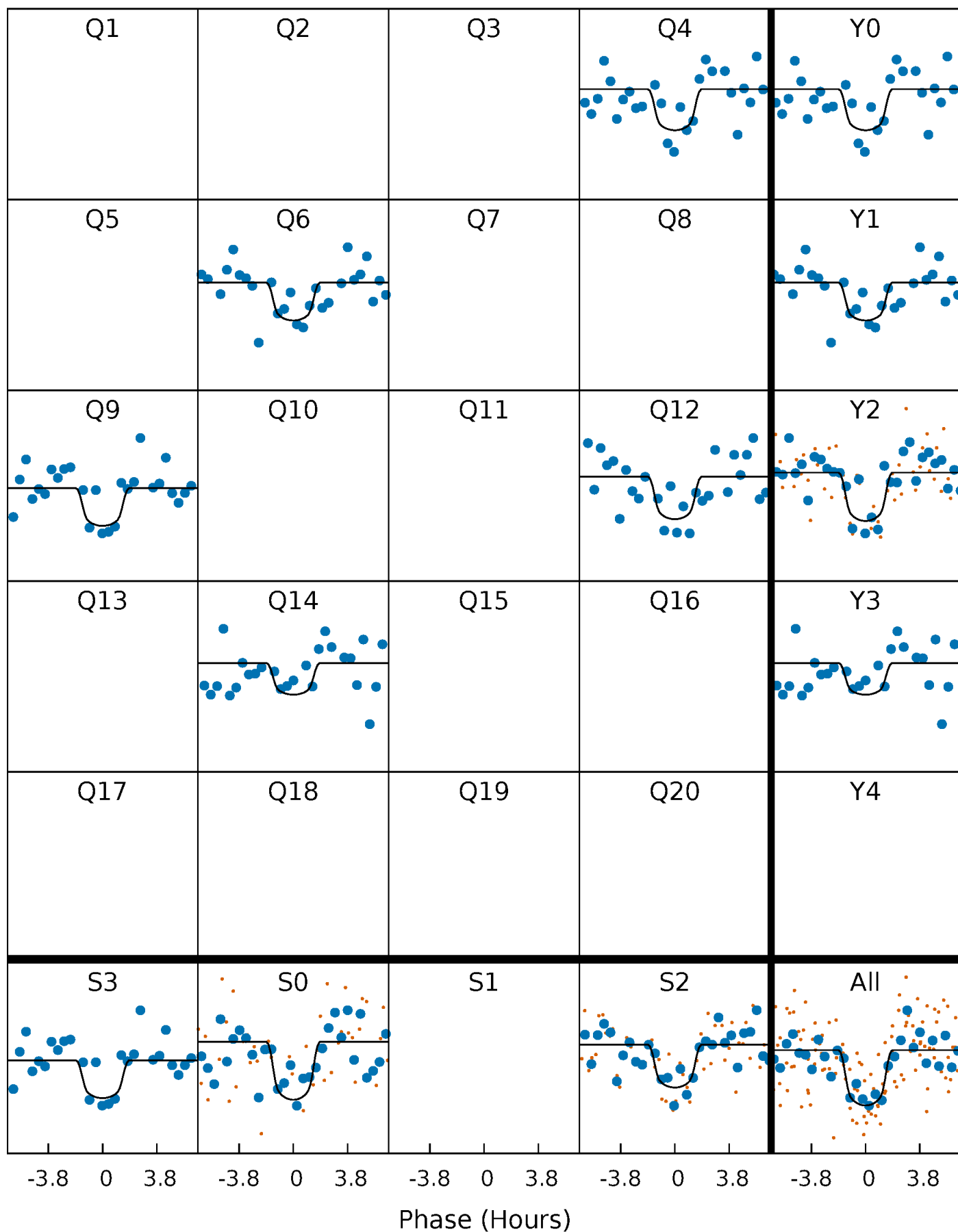
PDC Quarter-Phased Transit Curves

TCE 005179232-01 P=246.583120 Days $T_0=364.907190$ (BKJD)



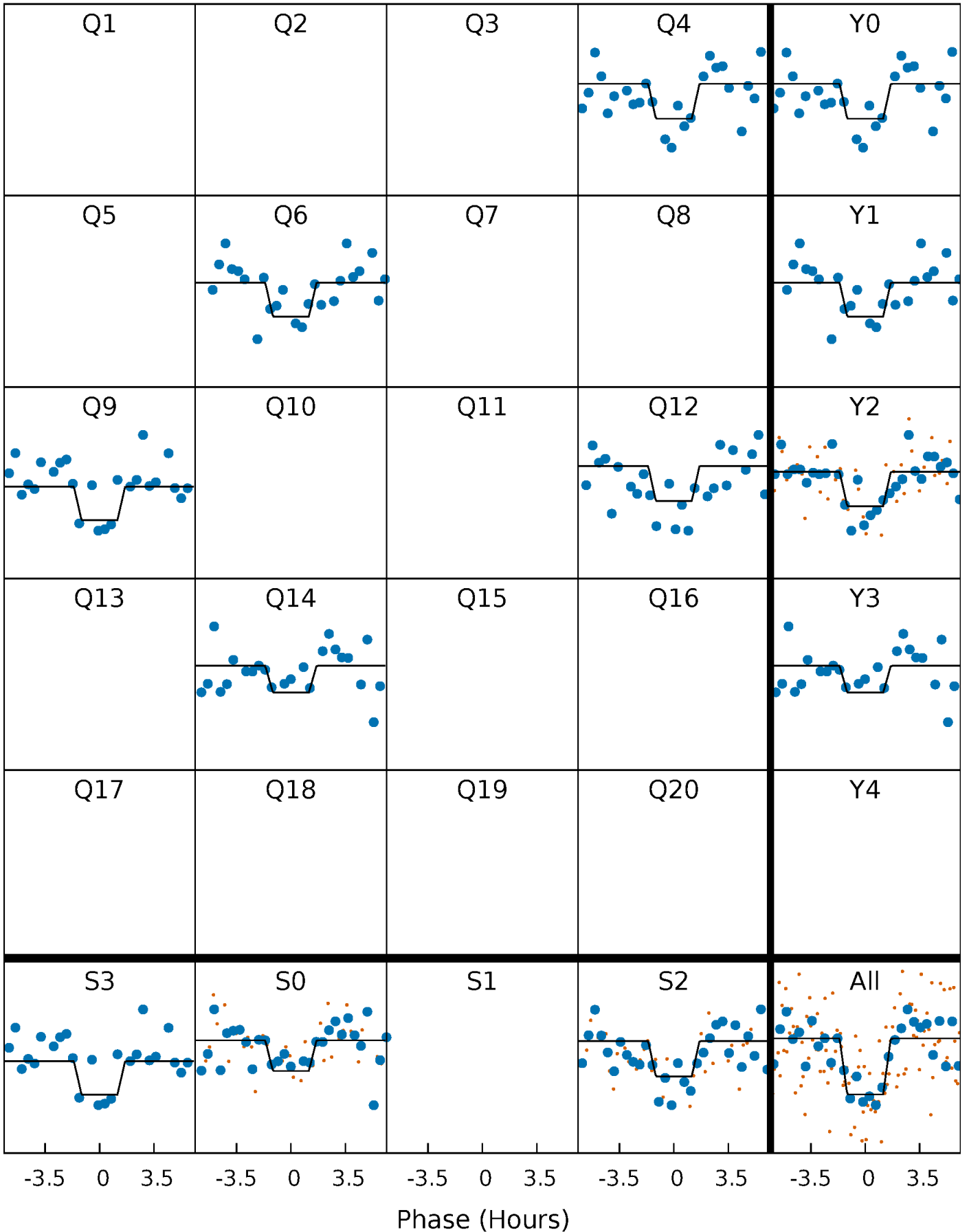
DV Quarter-Phased Transit Curves

TCE 005179232-01 P=246.583120 Days $T_0=364.907190$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

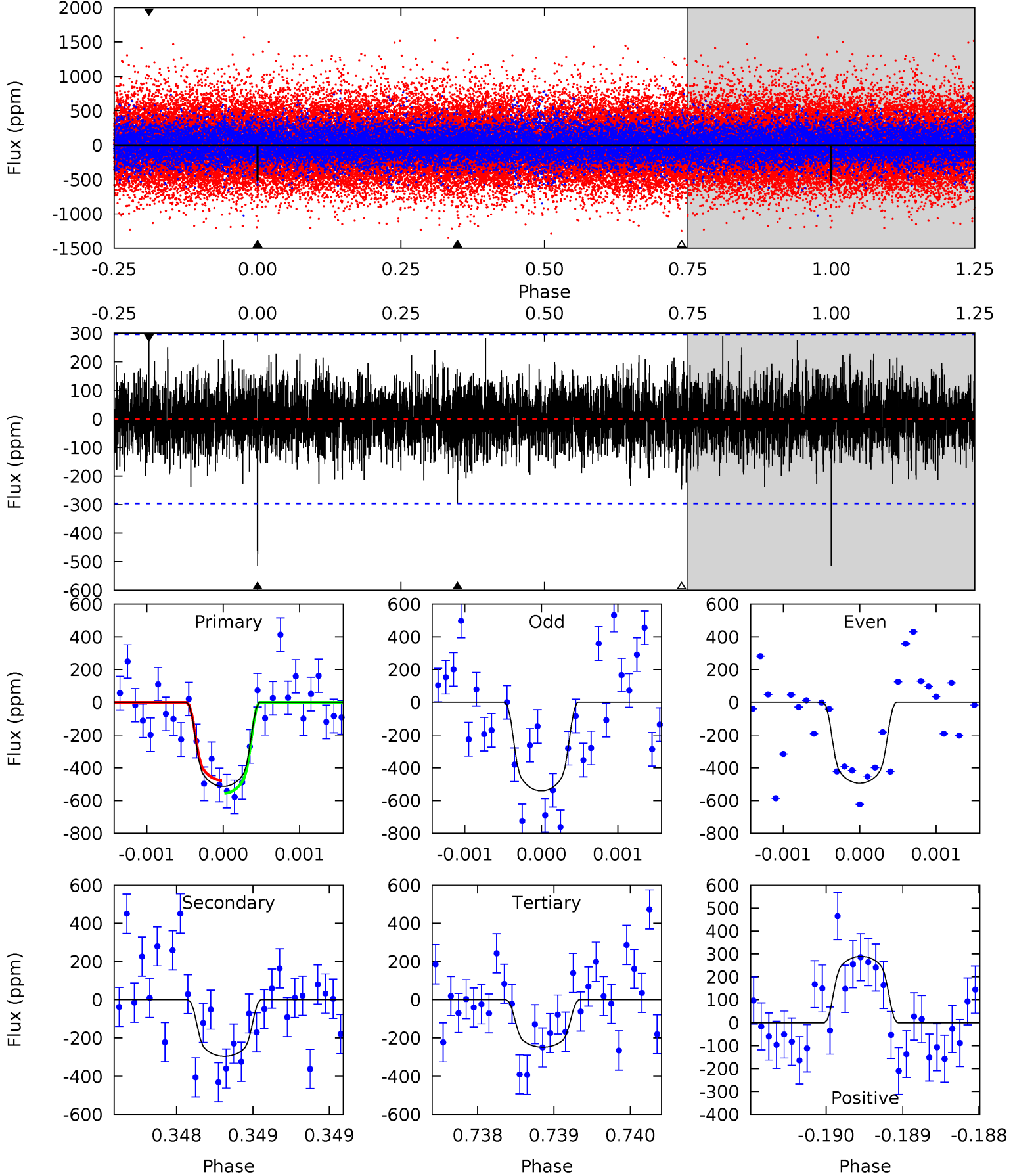
TCE 005179232-01 P=246.582325 Days $T_0=364.910209$ (BKJD)



DV Model-Shift Uniqueness Test

005179232-01, P = 246.583120 Days, E = 118.324070 Days

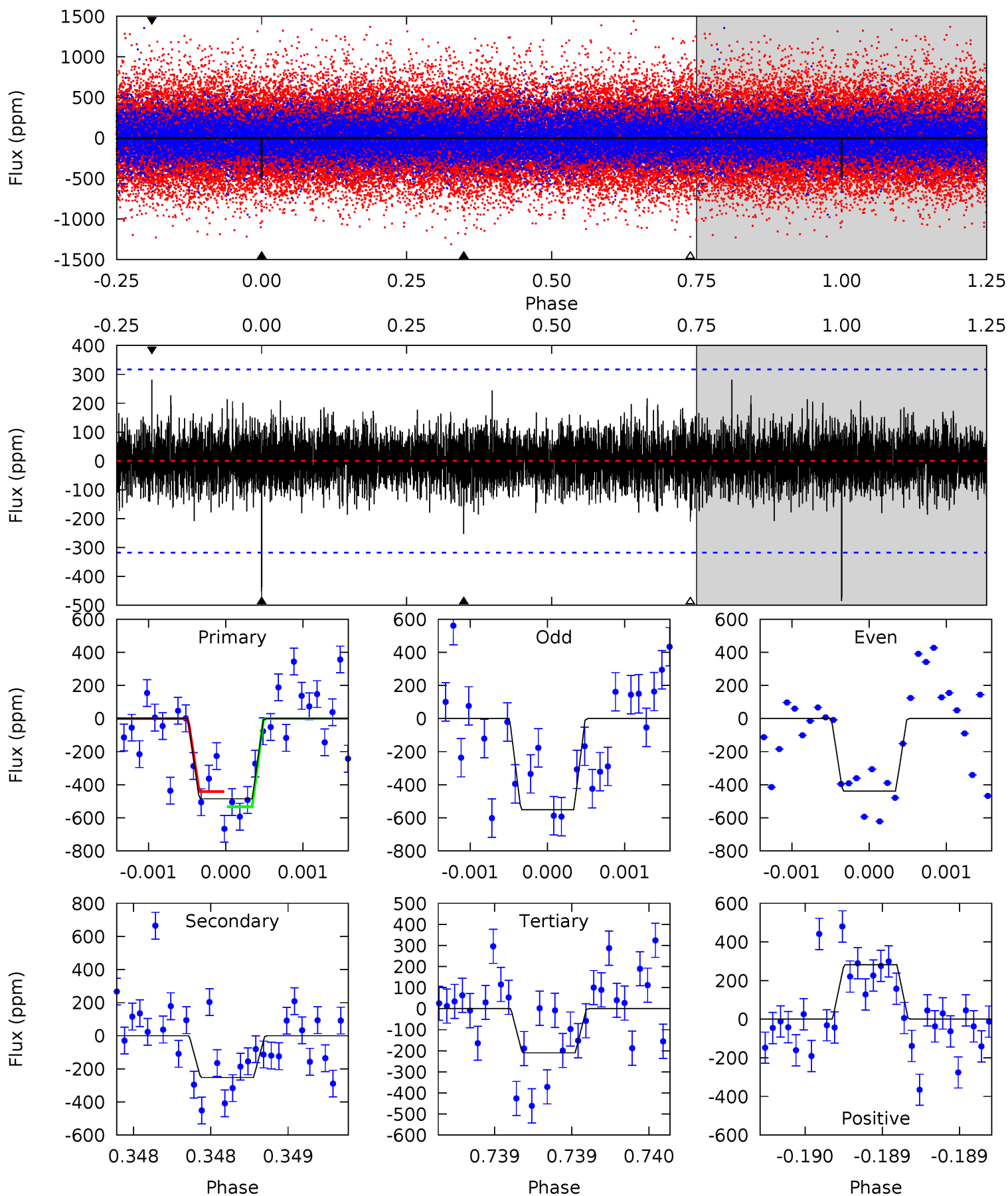
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
9.59	5.53	4.63	5.40	5.52	3.40	1.33	4.96	4.19	0.90	0.13	0.43	1.01	0.36	0.74



Alt Model-Shift Uniqueness Test

005179232-01, P = 246.582325 Days, E = 118.327884 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
8.48	4.41	3.67	4.93	5.55	3.45	1.05	4.81	3.56	0.74	-0.51	1.00	1.14	0.37	0.80



Stellar Parameters For KIC 005179232

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	5246^{+203}_{-184}	$4.435^{+0.126}_{-0.234}$	$0.080^{+0.250}_{-0.250}$	$0.911^{+0.244}_{-0.131}$	$0.824^{+0.098}_{-0.066}$	$1.533^{+0.795}_{-0.791}$
	+4%/-4%	+3%/-5%	+312%/-312%	+27%/-14%	+12%/-8%	+52%/-52%
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 005179232-01 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	-296 ± 54	$2.66^{+1.44}_{-1.34}$	368^{+32}_{-23}	4447^{+1558}_{-638}	12300^{+35998}_{-7245}
Alt.	-252 ± 57	$2.41^{+1.49}_{-1.37}$	368^{+31}_{-22}	4468^{+2090}_{-729}	12251^{+56470}_{-7712}

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

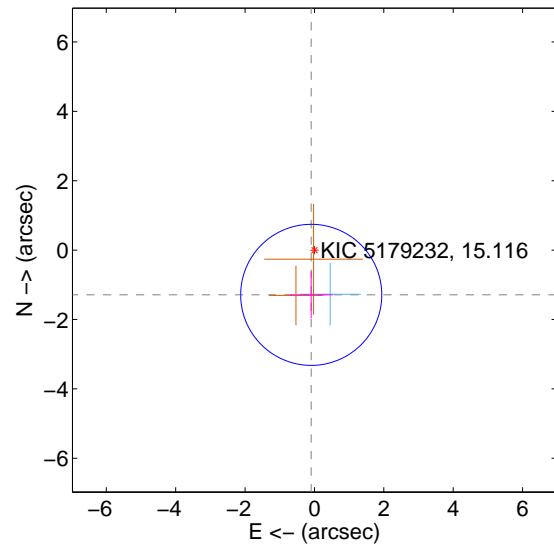
Supplemental centroid analysis for 005179232-01. Kepler magnitude: 15.12. Transit SNR 7.65

There are 1 quarters with good PRF difference image offsets

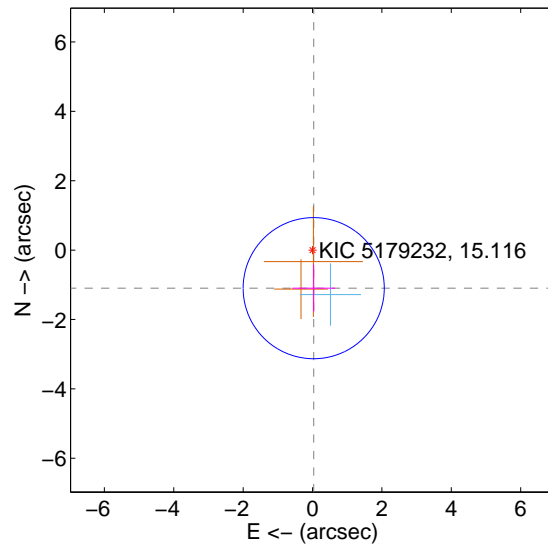
The direct PRF centroid is offset from the target star catalog position by about 0.08 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	1.293 ± 0.678	1.91	0.093 ± 0.619	-1.290 ± 0.678
PRF-fit source offset from KIC position	1.098 ± 0.678	1.62	-0.034 ± 0.619	-1.097 ± 0.678
photometric centroid source offset	0.83 ± 1.66	0.50	0.75 ± 1.65	0.35 ± 1.69

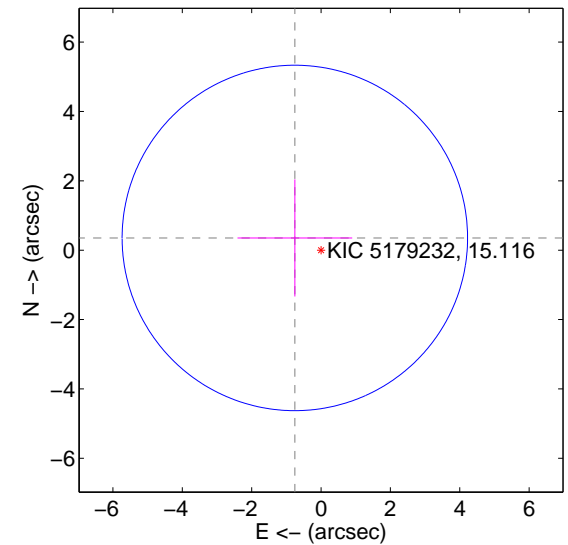
offset from difference PRF-fit to OOT PRF-fit



offset from difference PRF-fit to KIC position

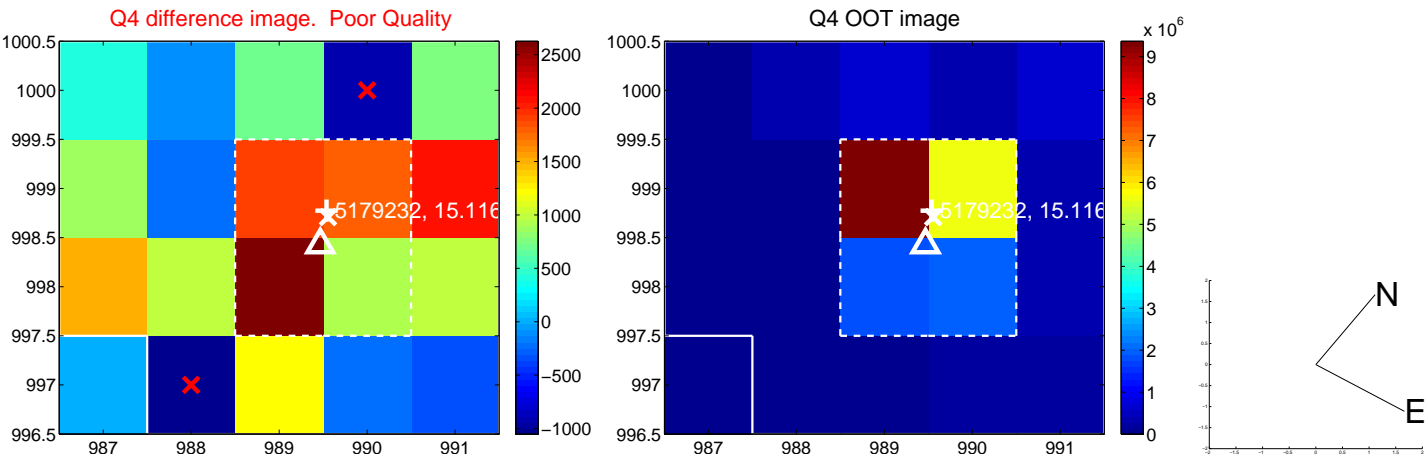


offset from photometric centroids



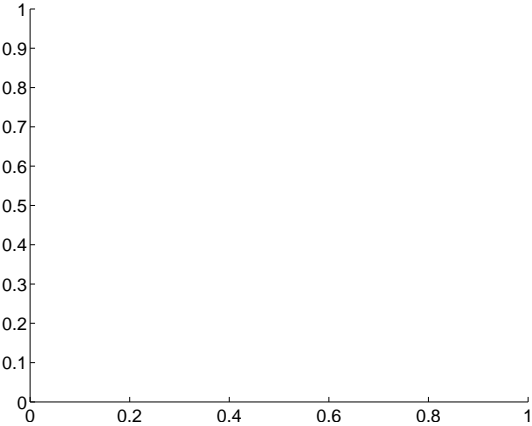
Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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

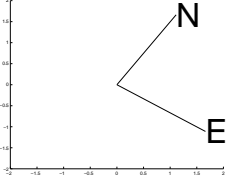
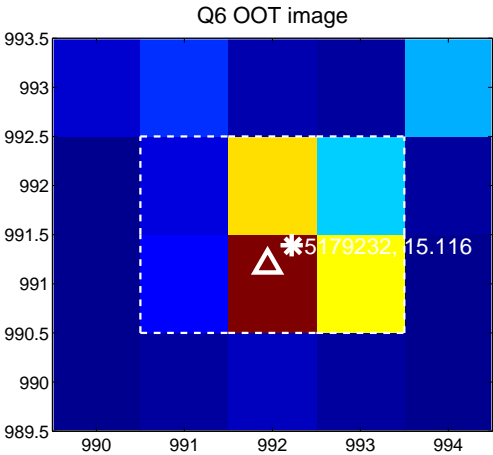
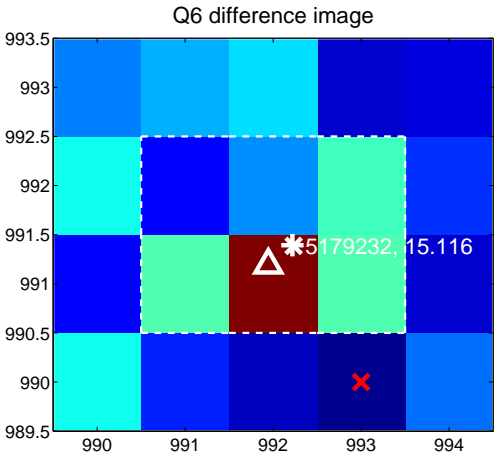
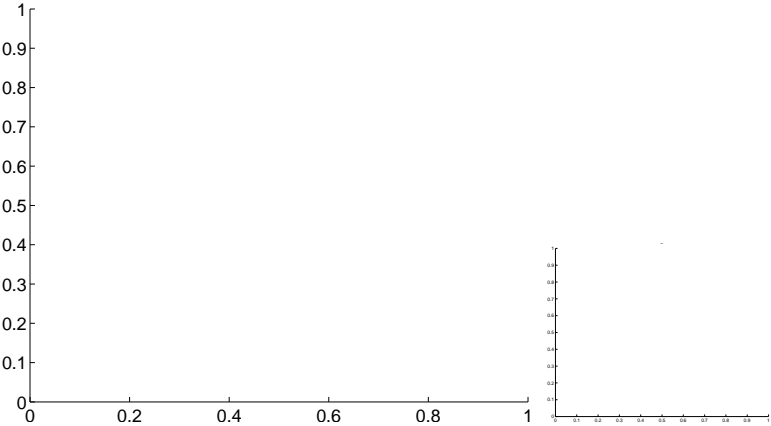


white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.

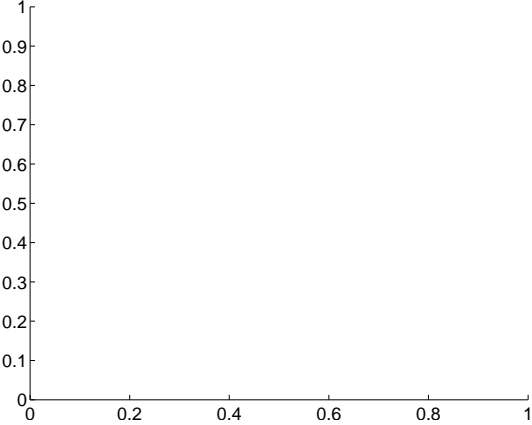
Q5 no difference image



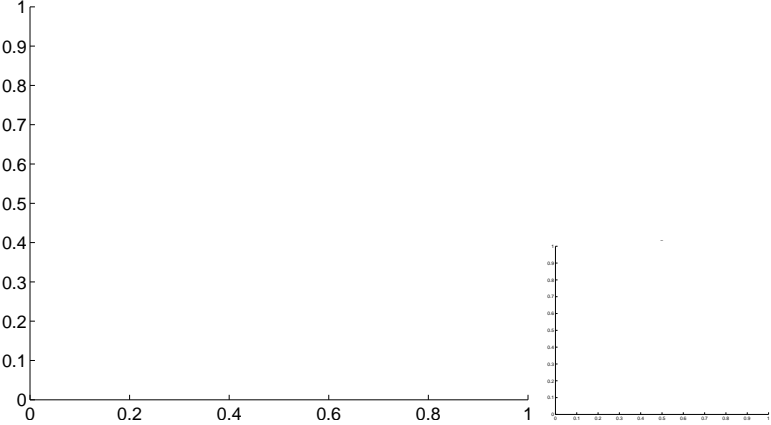
Q5 no OOT image



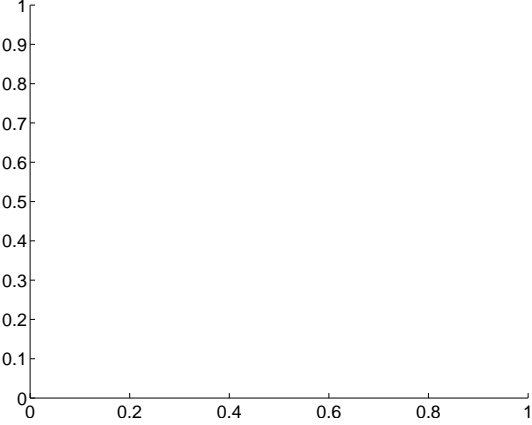
Q7 no difference image



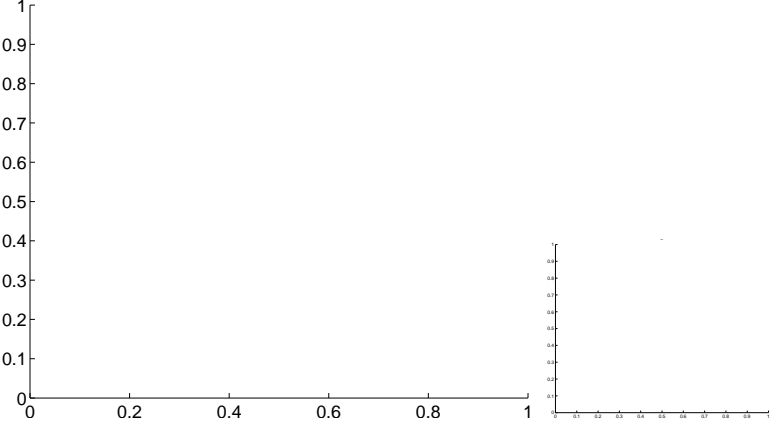
Q7 no OOT image



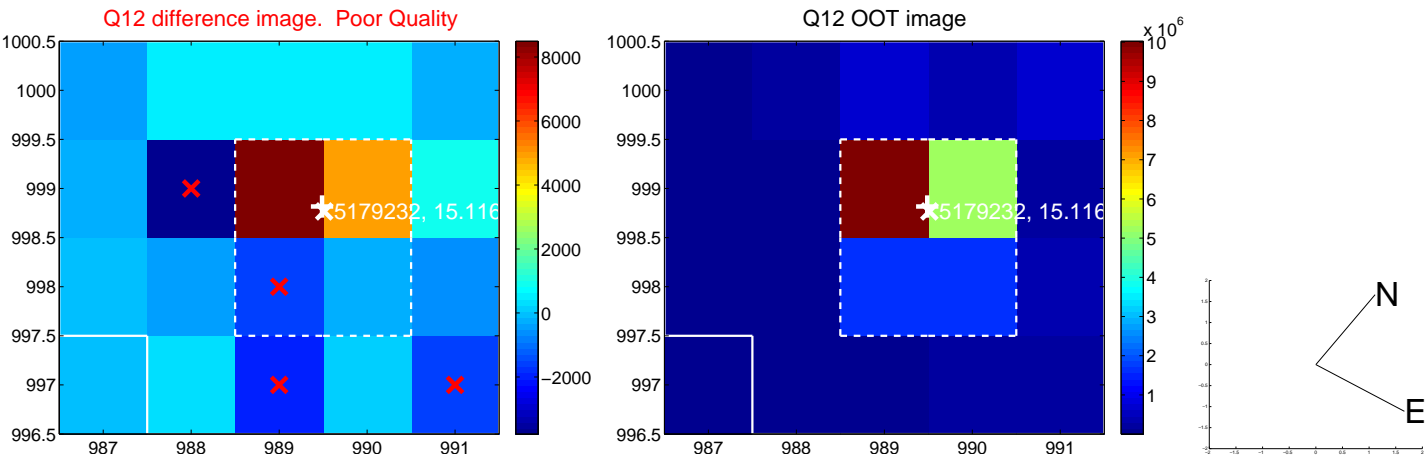
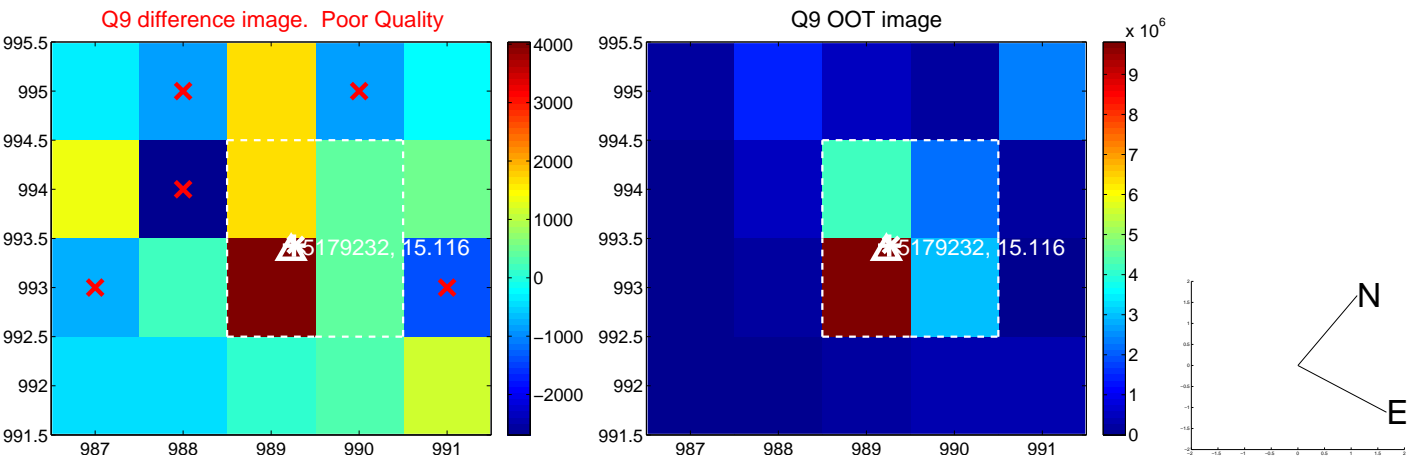
Q8 no difference image



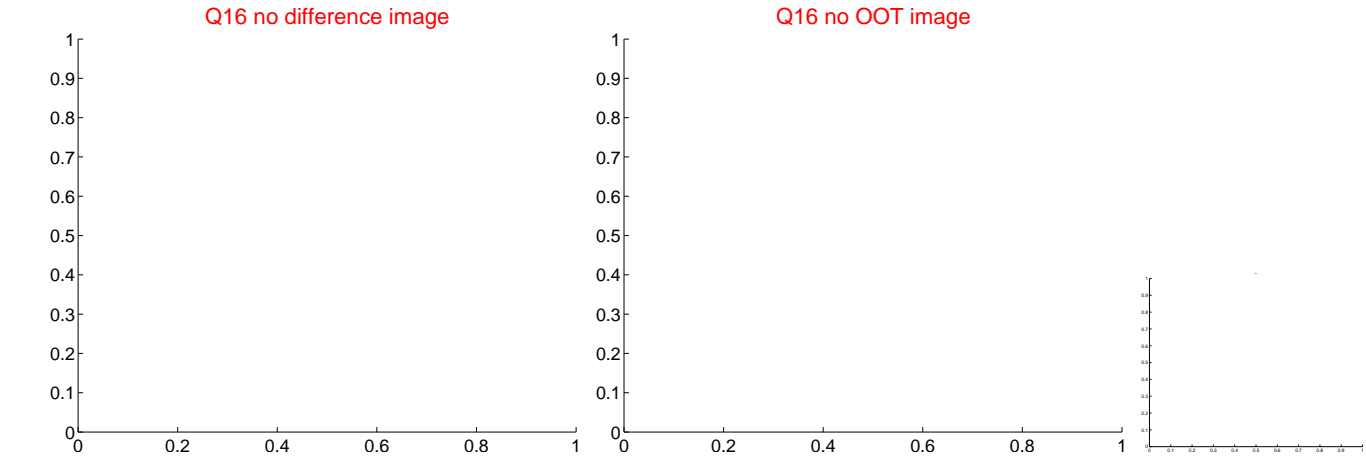
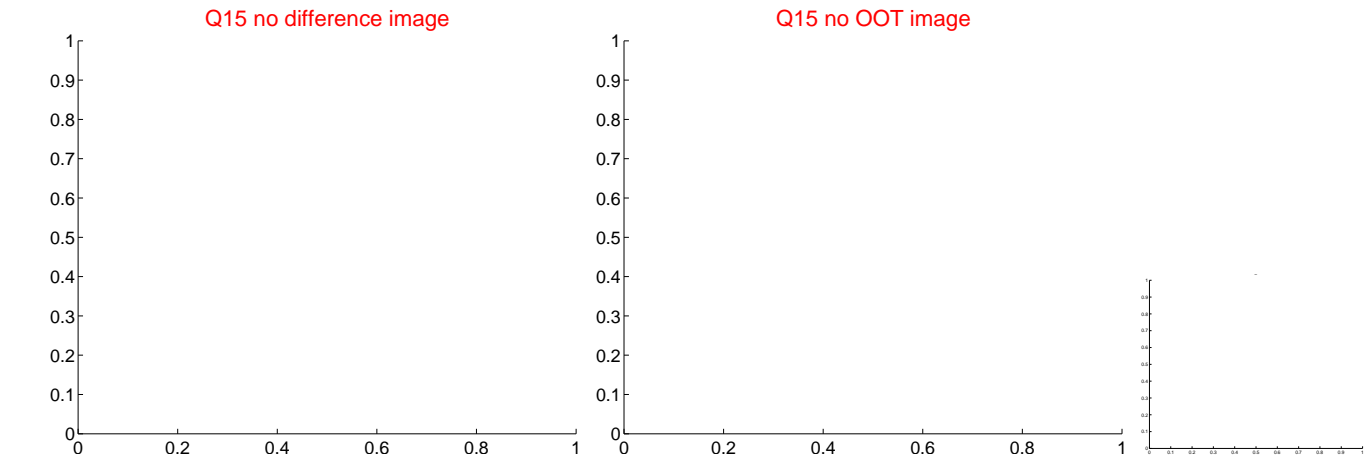
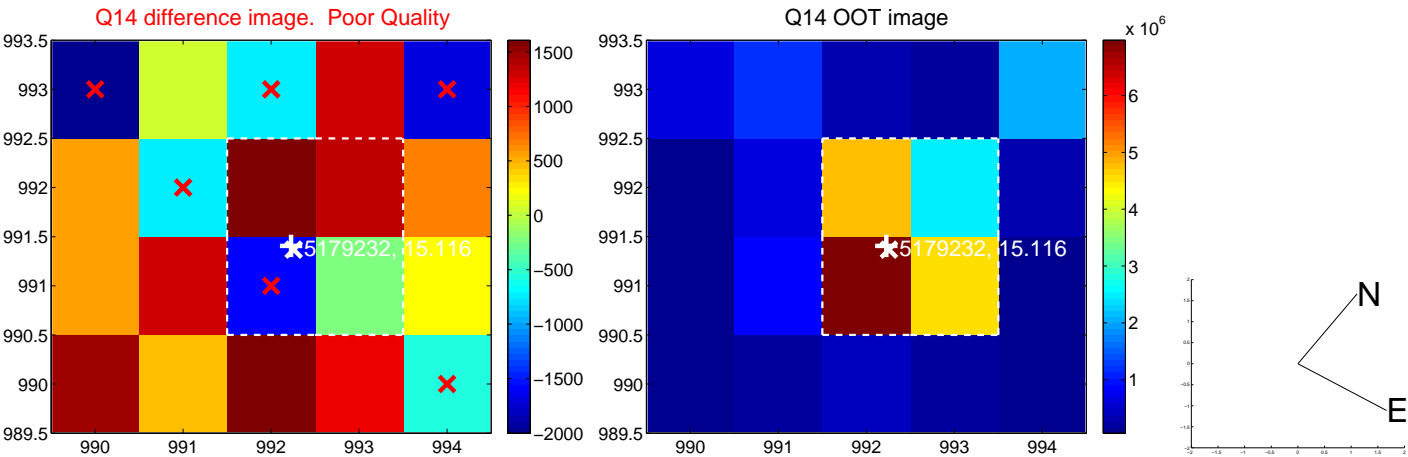
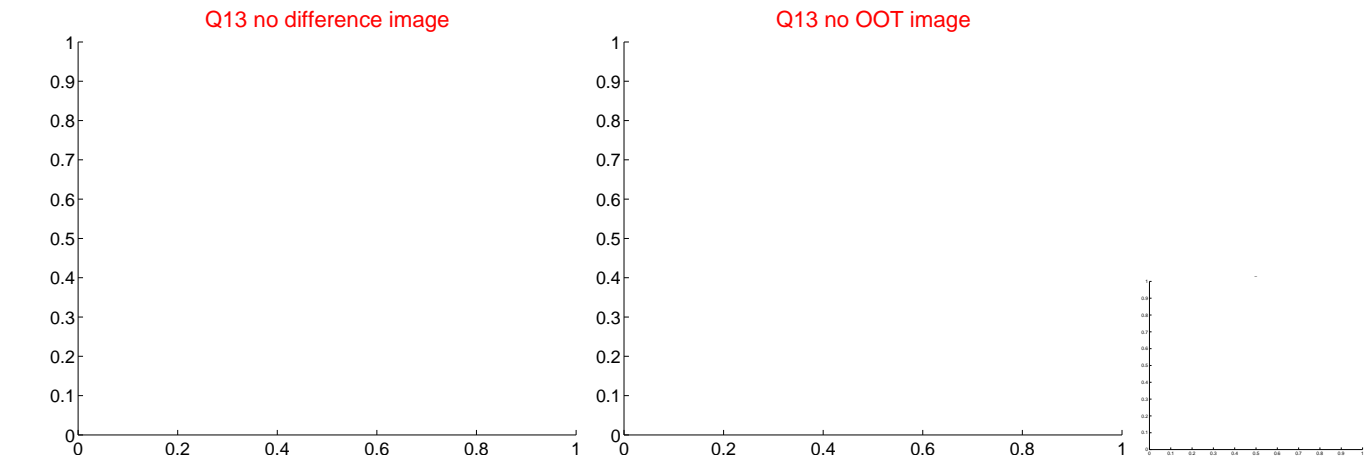
Q8 no OOT image



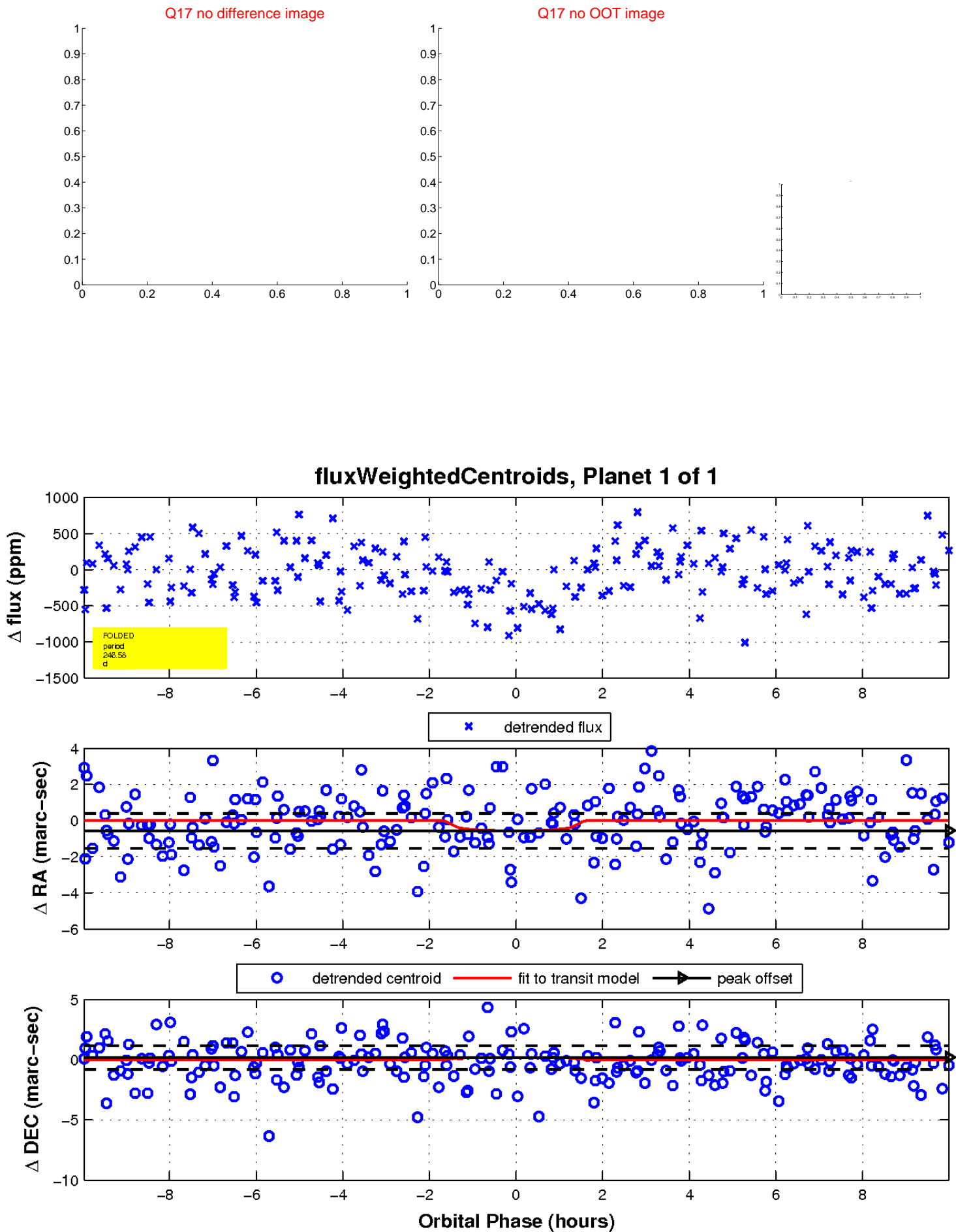
white ×: KIC target position; +: OOT centroid; △: difference centroid. red ✕: large negative pixel value.



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UKIRT Image

Declination

