

KIC 004585946

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})
004585946-01	OBS	No	369.523726	138.814071	395.2	70.197	52.0	6.4	0.93	5814	1.95	0.92

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
004585946-01	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_SKYE—LPP_DV—LPP_ALT—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_POS_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—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.

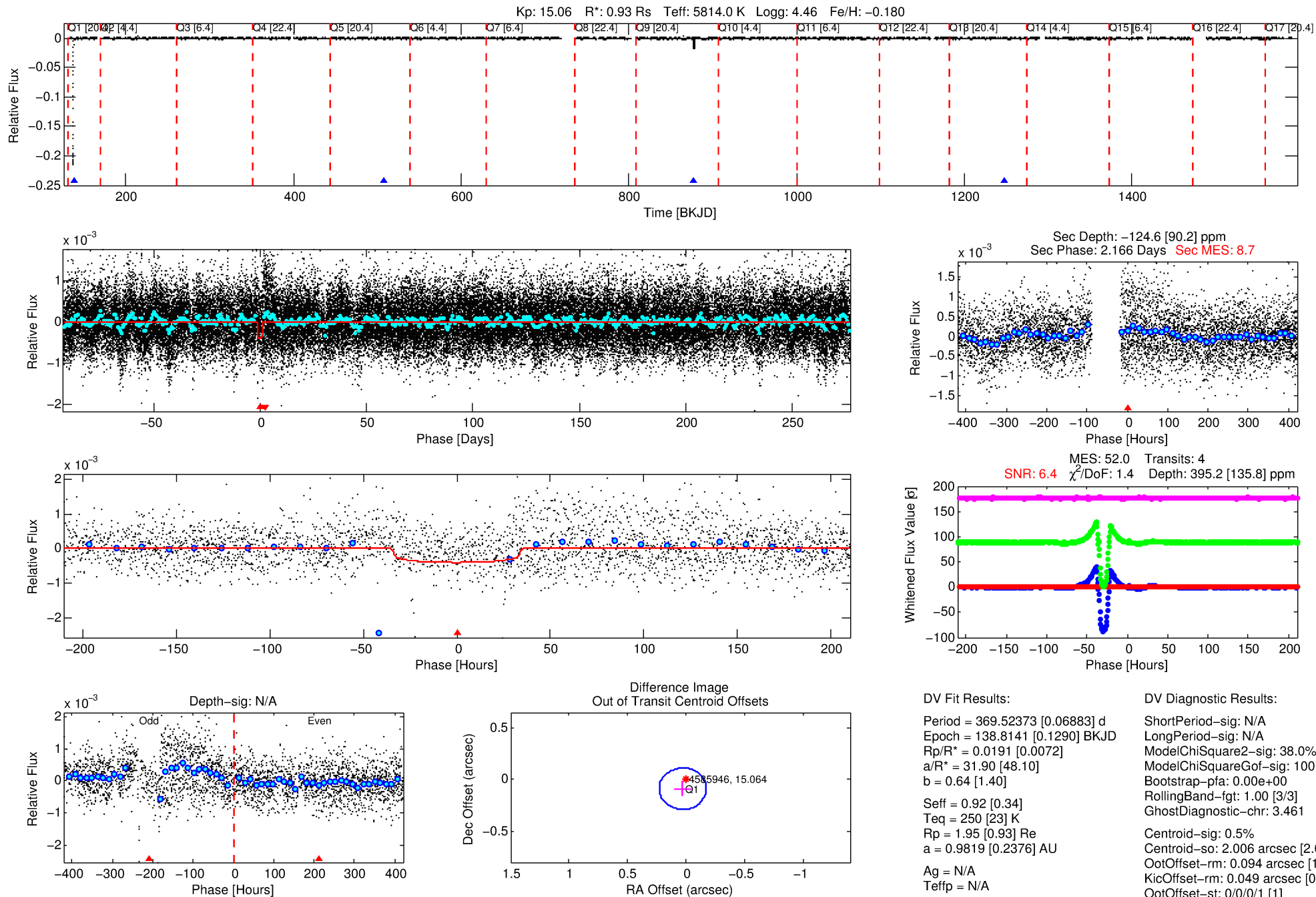
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 004585946-01

No Significant Match Found

DV One-Page Summary

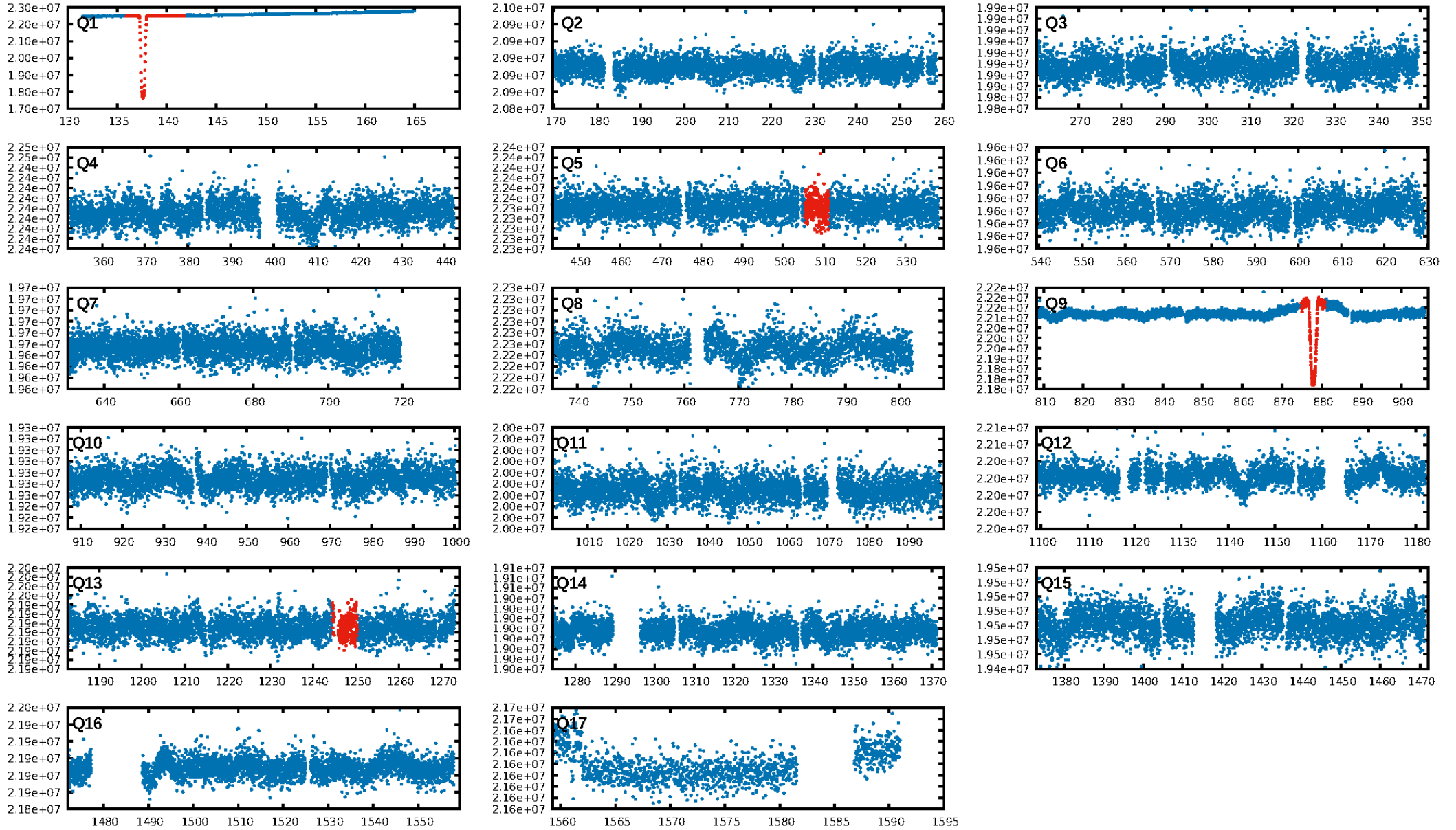
KIC: 4585946 Candidate: 1 of 1 Period: 369.524 d



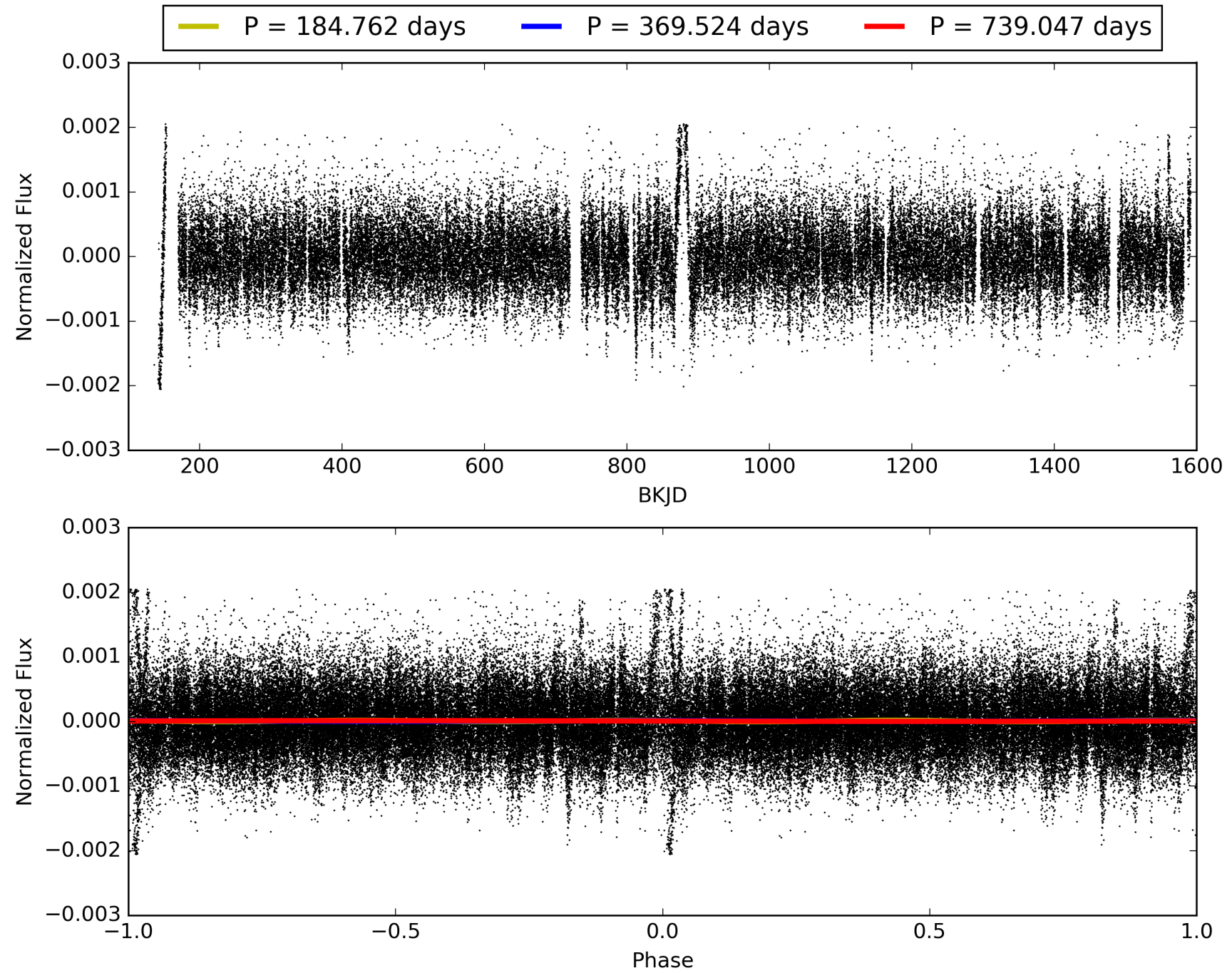
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 29-Jan-2016 08:34:00 Z

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

TCE 004585946-01, PDC Light Curves

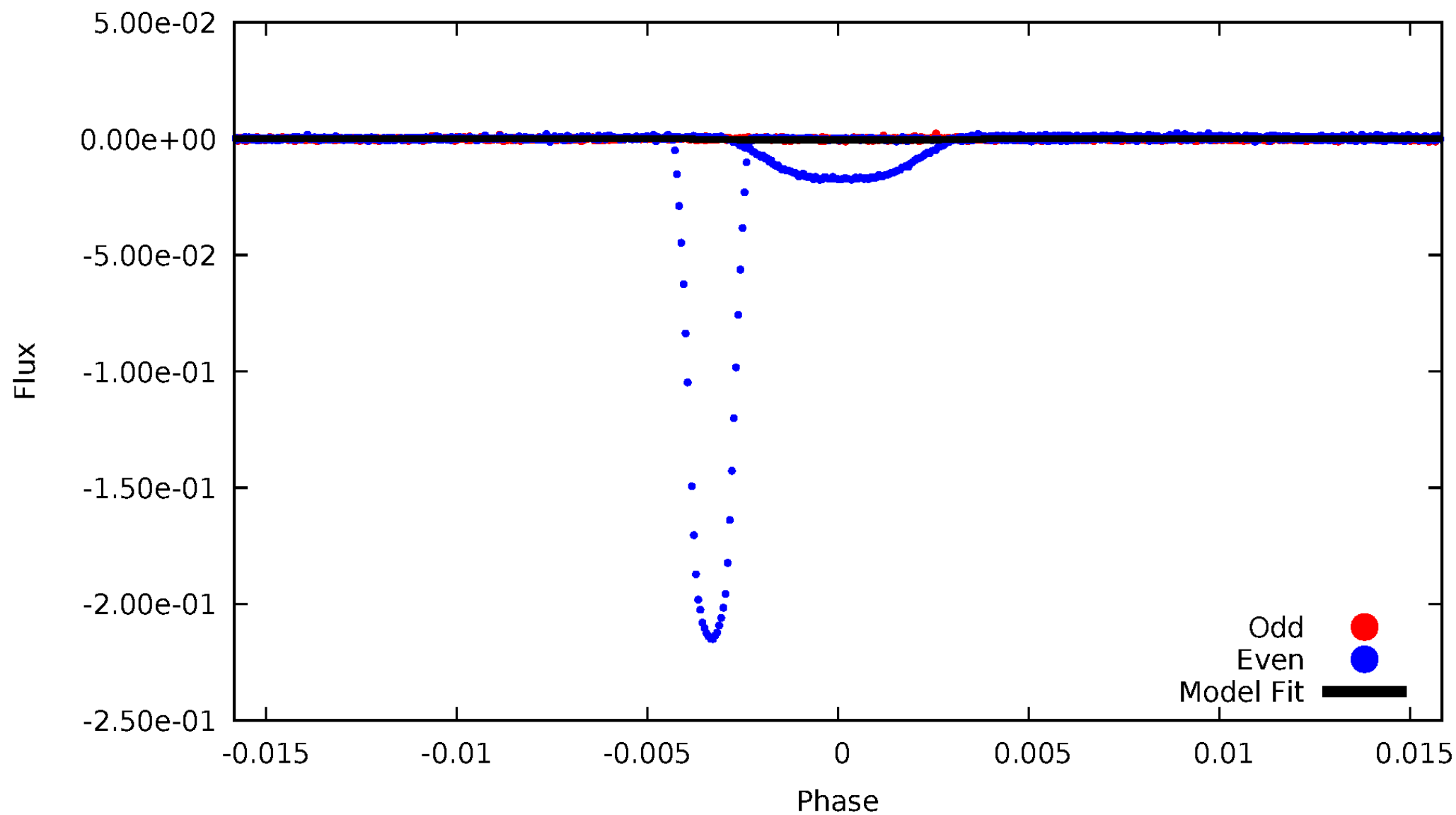


TCE 004585946-01



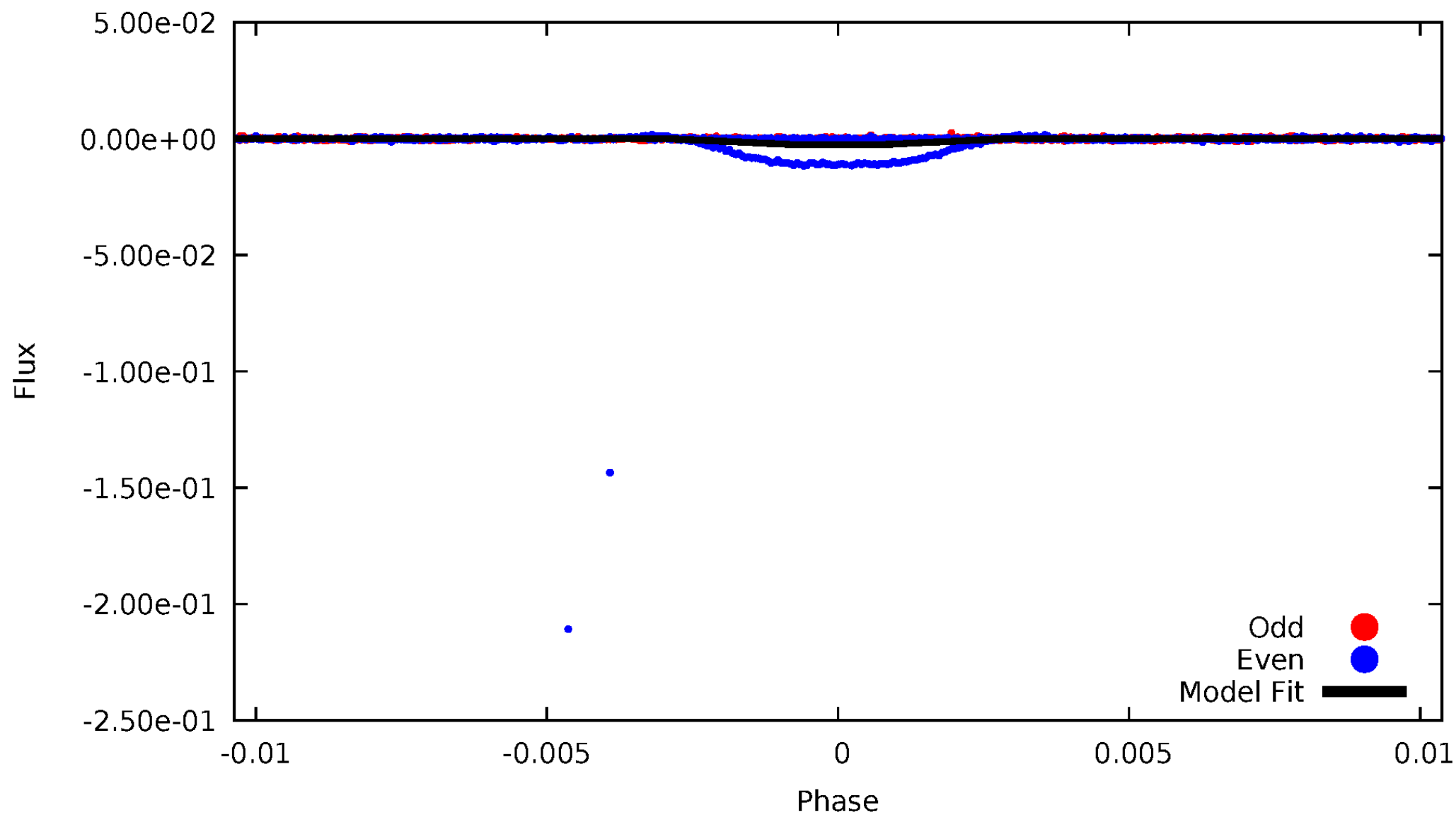
DV Odd/Even

TCE 004585946-01



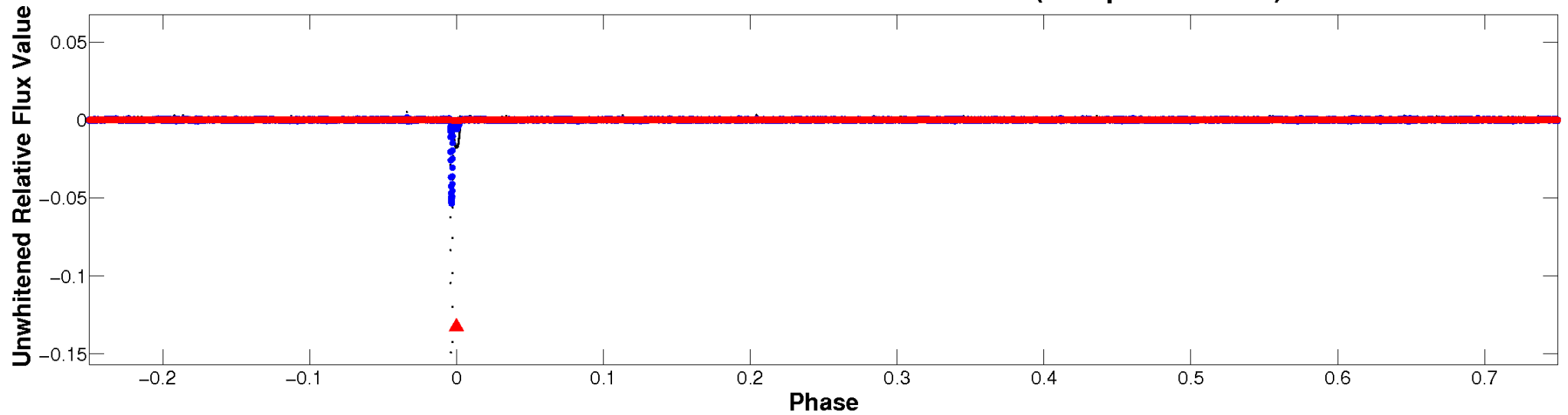
ALT Odd/Even

TCE 004585946-01

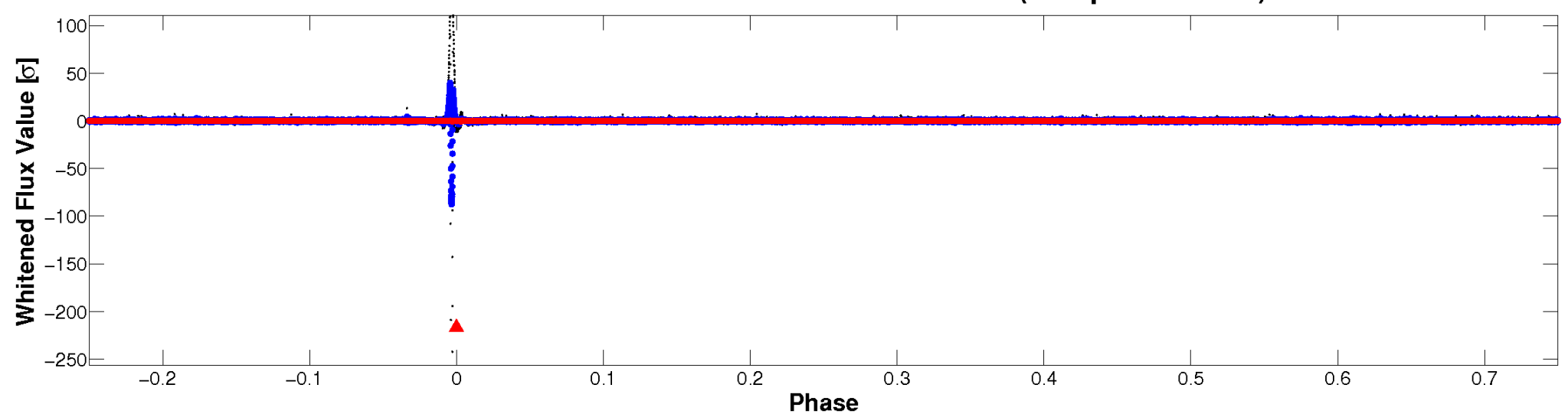


Non-Whitened Vs. Whitened Light Curve

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

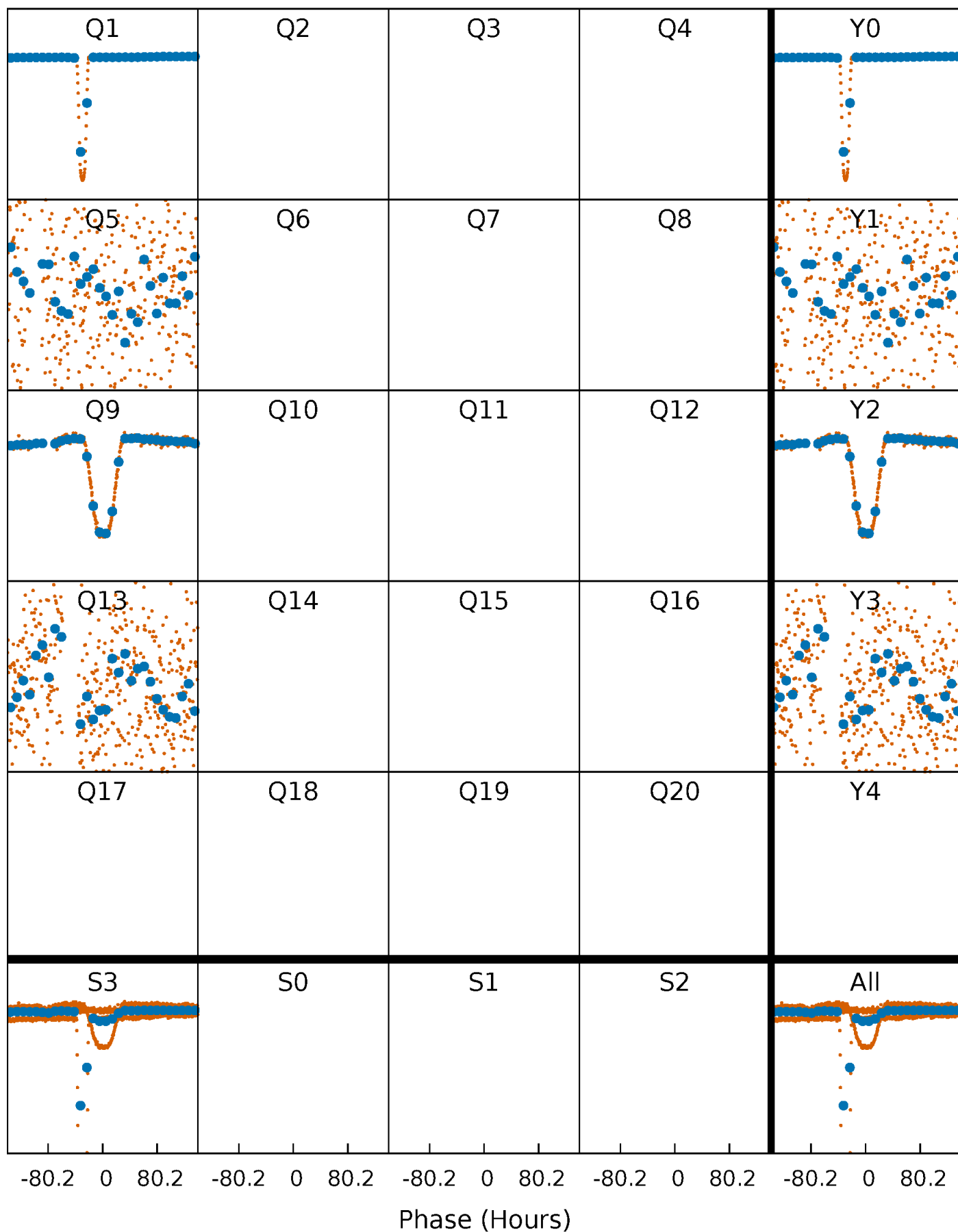


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



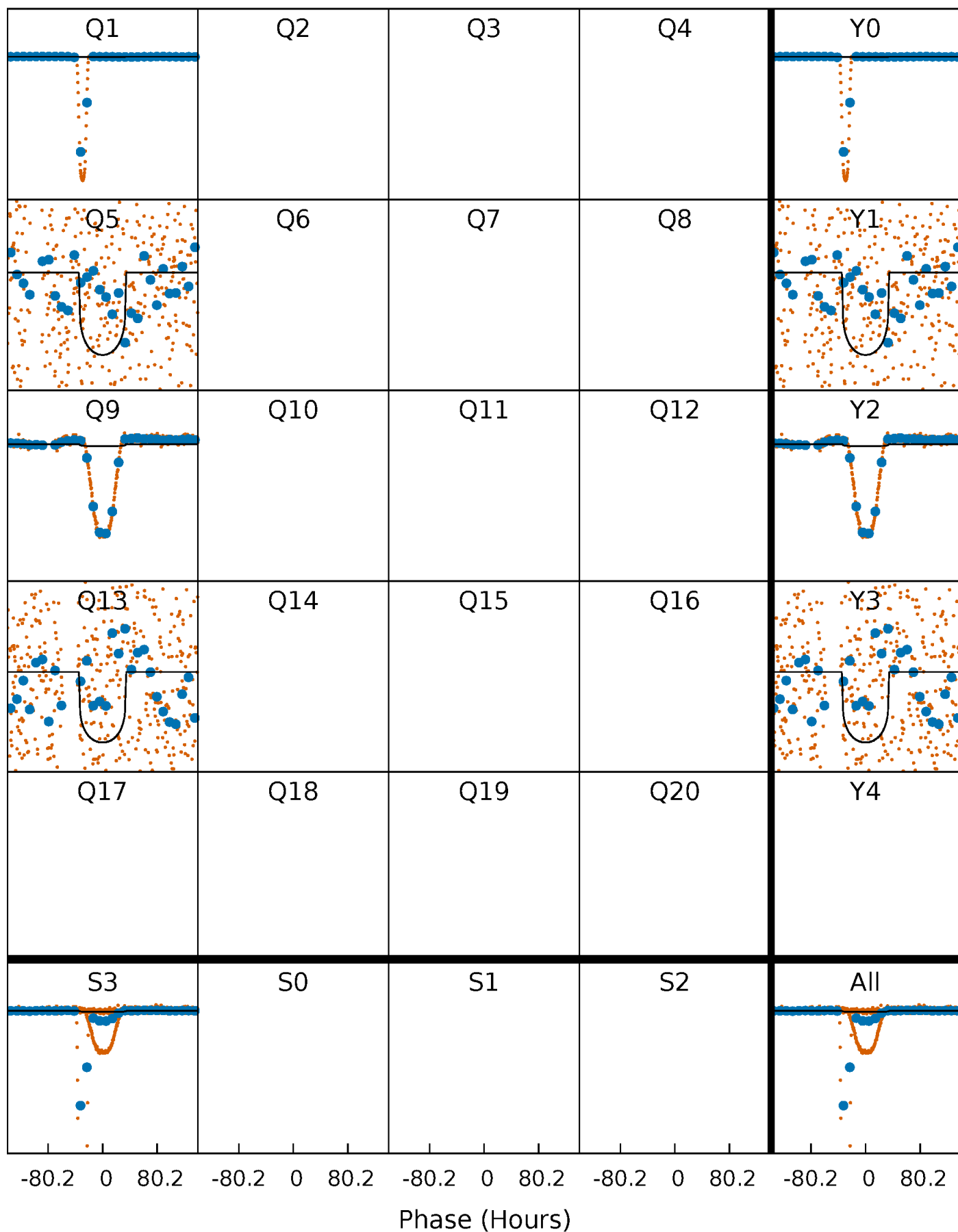
PDC Quarter-Phased Transit Curves

TCE 004585946-01 P=369.523727 Days $T_0=138.814071$ (BKJD)



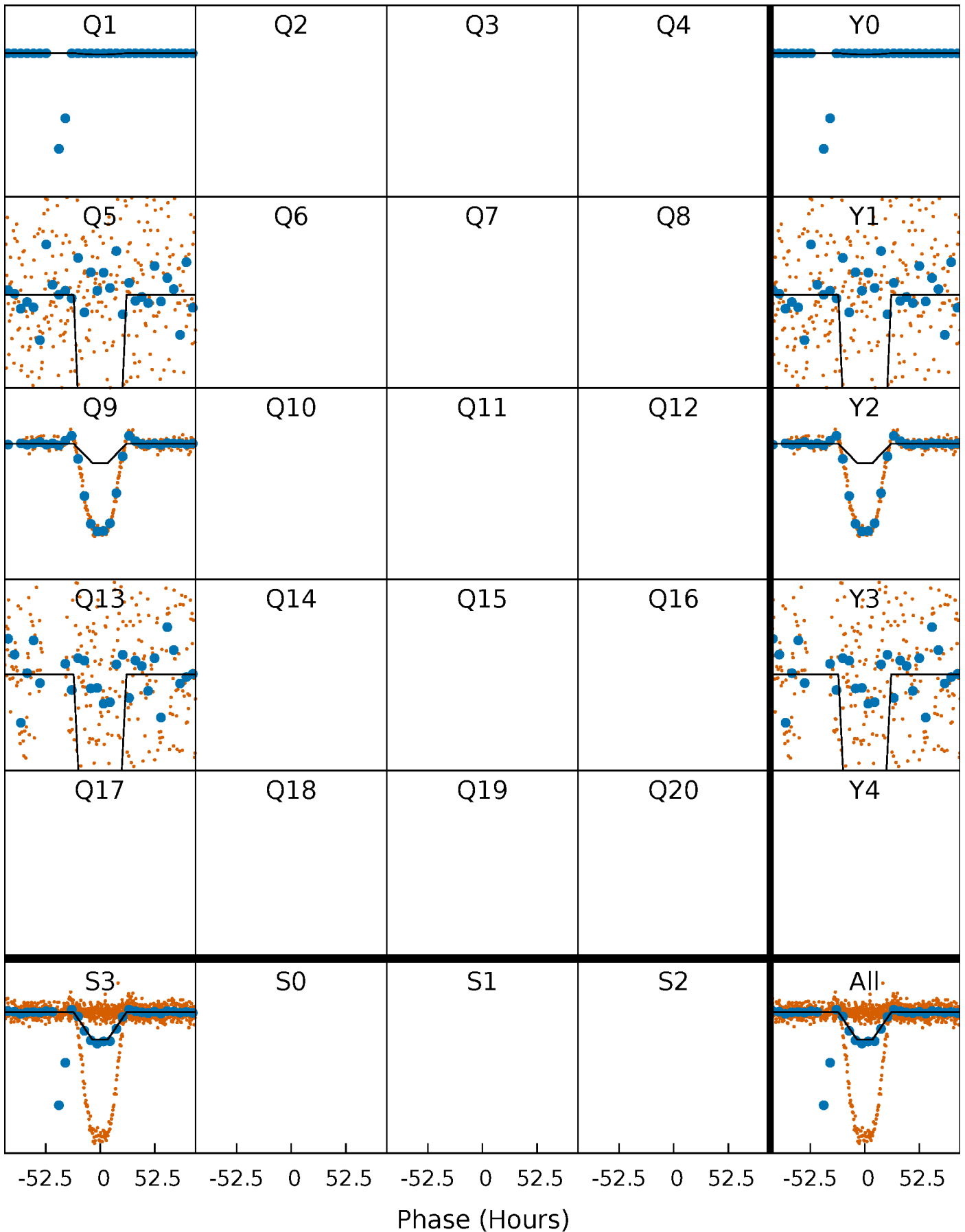
DV Quarter-Phased Transit Curves

TCE 004585946-01 P=369.523727 Days $T_0=138.814071$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

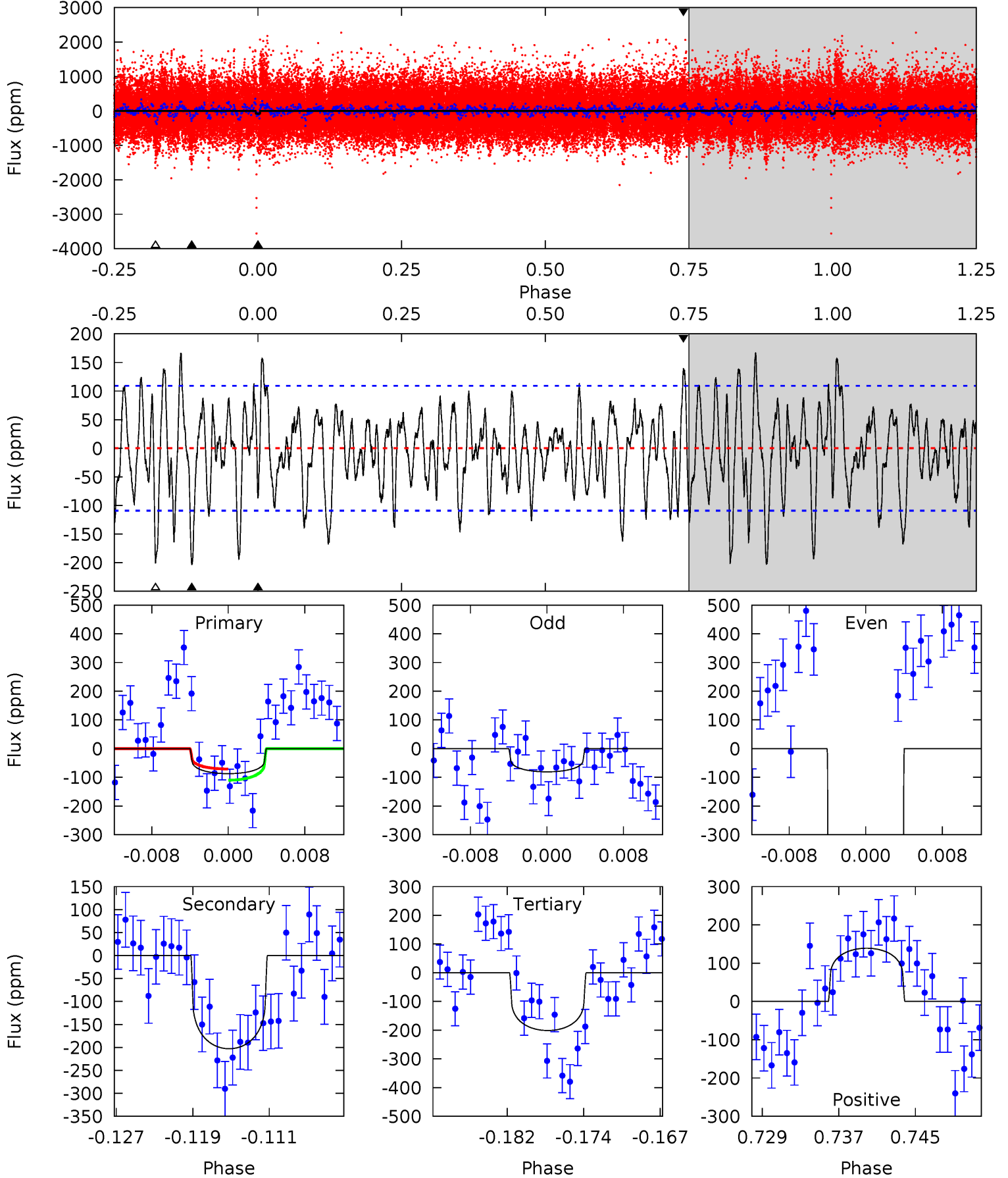
TCE 004585946-01 P=369.336597 Days $T_0=139.232210$ (BKJD)



DV Model-Shift Uniqueness Test

004585946-01, P = 369.523727 Days, E = 138.814071 Days

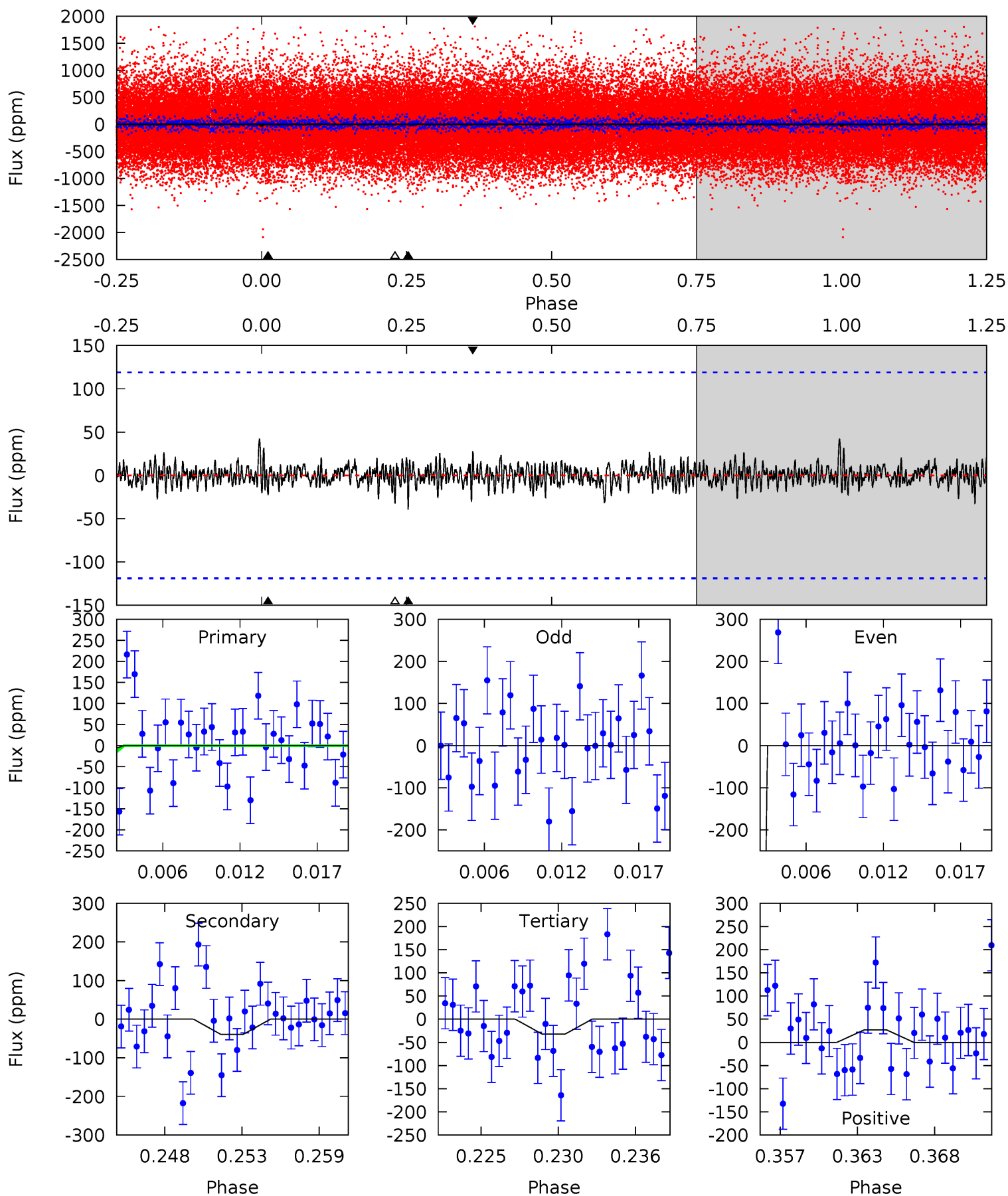
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
4.05	9.41	9.33	6.45	5.07	2.66	2.82	-5.28	-2.40	0.08	2.96	235.5	1.83	0.45	0.90



Alt Model-Shift Uniqueness Test

004585946-01, P = 369.336597 Days, E = 139.232210 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
0.98	1.70	1.40	1.16	5.13	2.76	0.41	-0.42	-0.18	0.30	0.54	129.4	58.7	0.52	0.98



Stellar Parameters For KIC 004585946

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	5814^{+156}_{-174}	$4.464^{+0.081}_{-0.189}$	$-0.180^{+0.300}_{-0.300}$	$0.933^{+0.271}_{-0.116}$	$0.925^{+0.121}_{-0.099}$	$1.604^{+0.582}_{-0.833}$
	+3%/-3%	+2%/-4%	+167%/-167%	+29%/-12%	+13%/-11%	+36%/-52%
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 004585946-01 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	-203 ± 22	$2.01^{+0.84}_{-0.73}$	354^{+25}_{-19}	5079^{+1211}_{-641}	26245^{+39853}_{-13156}
Alt.	-39 ± 23	$5.16^{+1.05}_{-0.89}$	354^{+25}_{-17}	2803^{+246}_{-307}	756^{+673}_{-460}

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 $A_{obs} \gg 1.0$

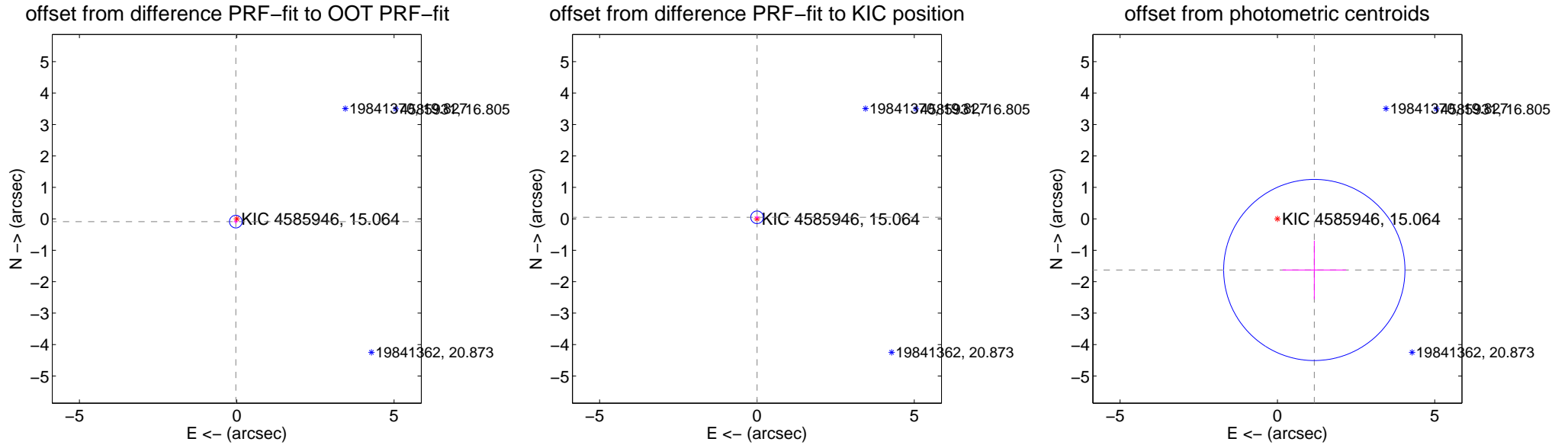
DV Centroid Data

Supplemental centroid analysis for 004585946-01. Kepler magnitude: 15.06. Transit SNR 6.41

There are 1 quarters with good PRF difference image offsets

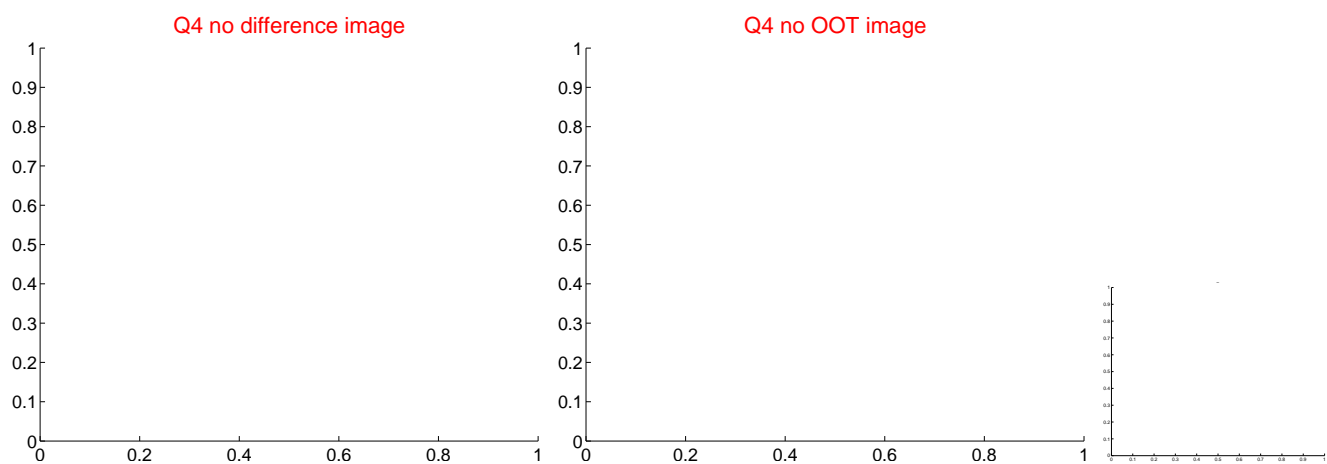
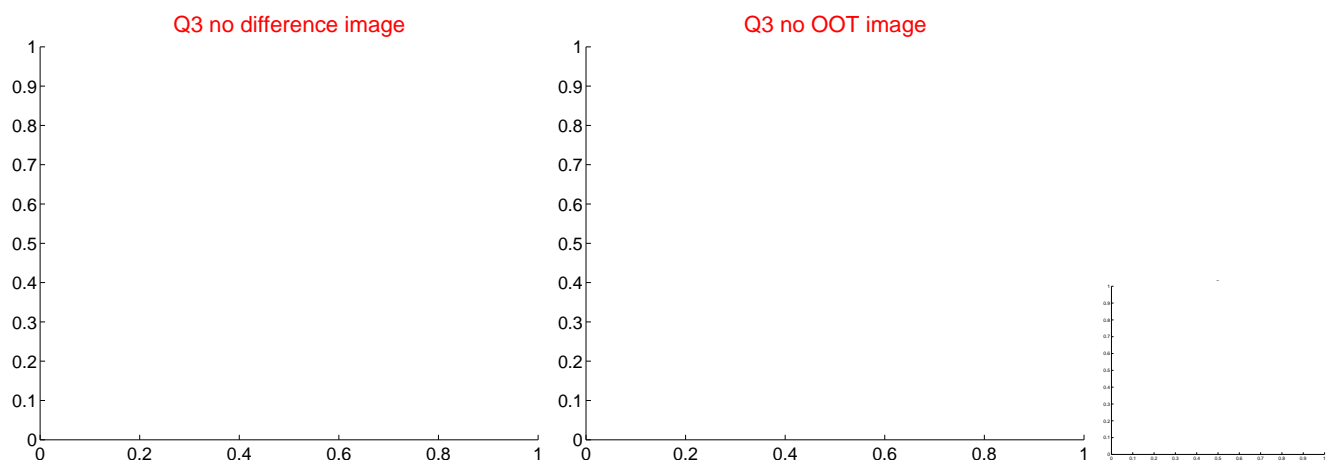
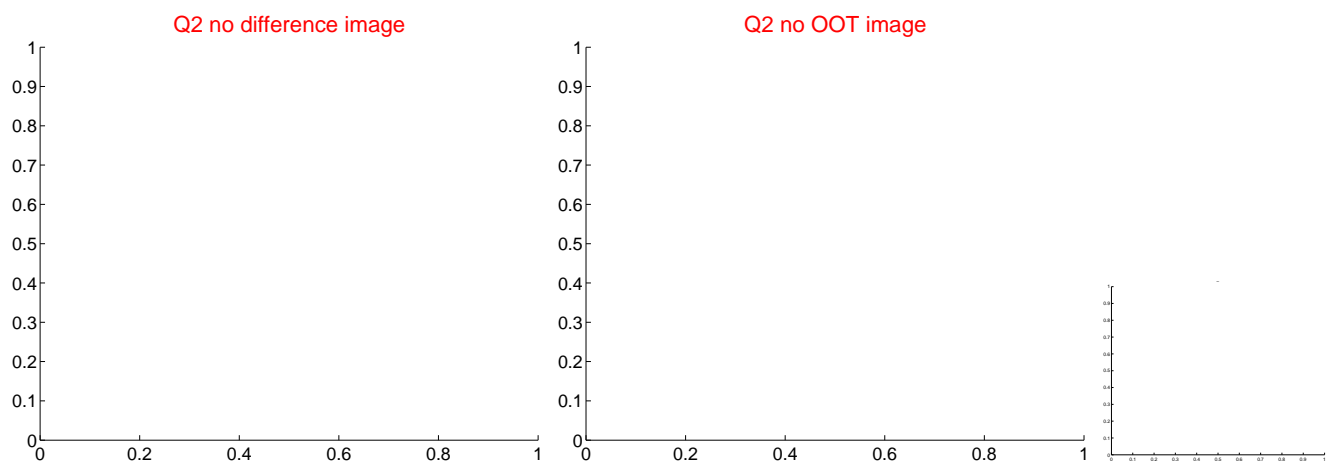
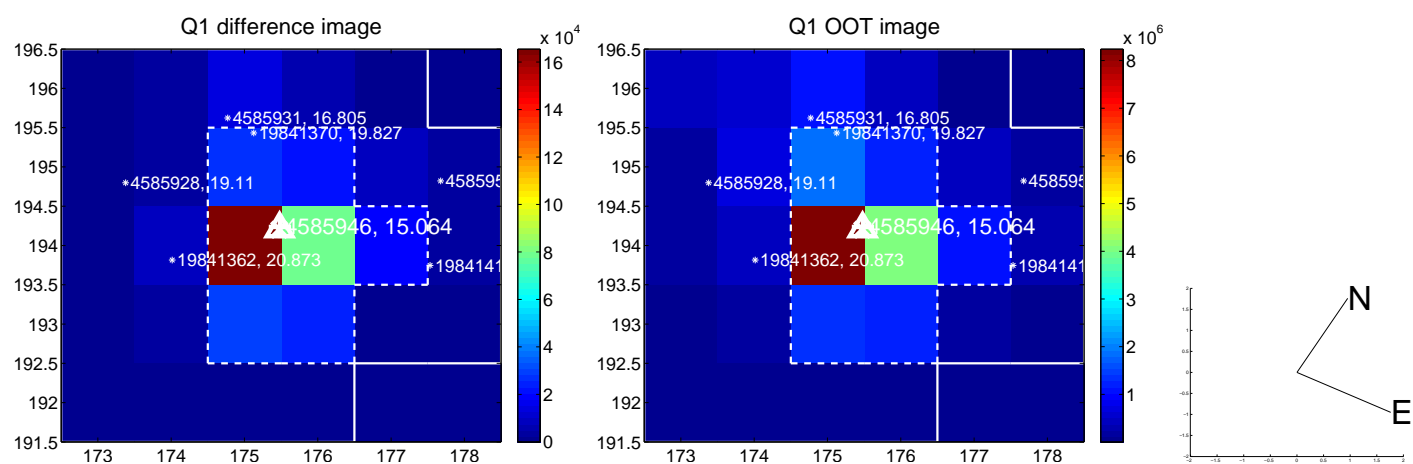
The direct PRF centroid is offset from the target star catalog position by about 0.14 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.094 ± 0.067	1.40	0.030 ± 0.067	-0.089 ± 0.067
PRF-fit source offset from KIC position	0.049 ± 0.067	0.73	-0.004 ± 0.067	0.048 ± 0.067
photometric centroid source offset	2.01 ± 0.96	2.09	-1.17 ± 1.01	-1.63 ± 0.93



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



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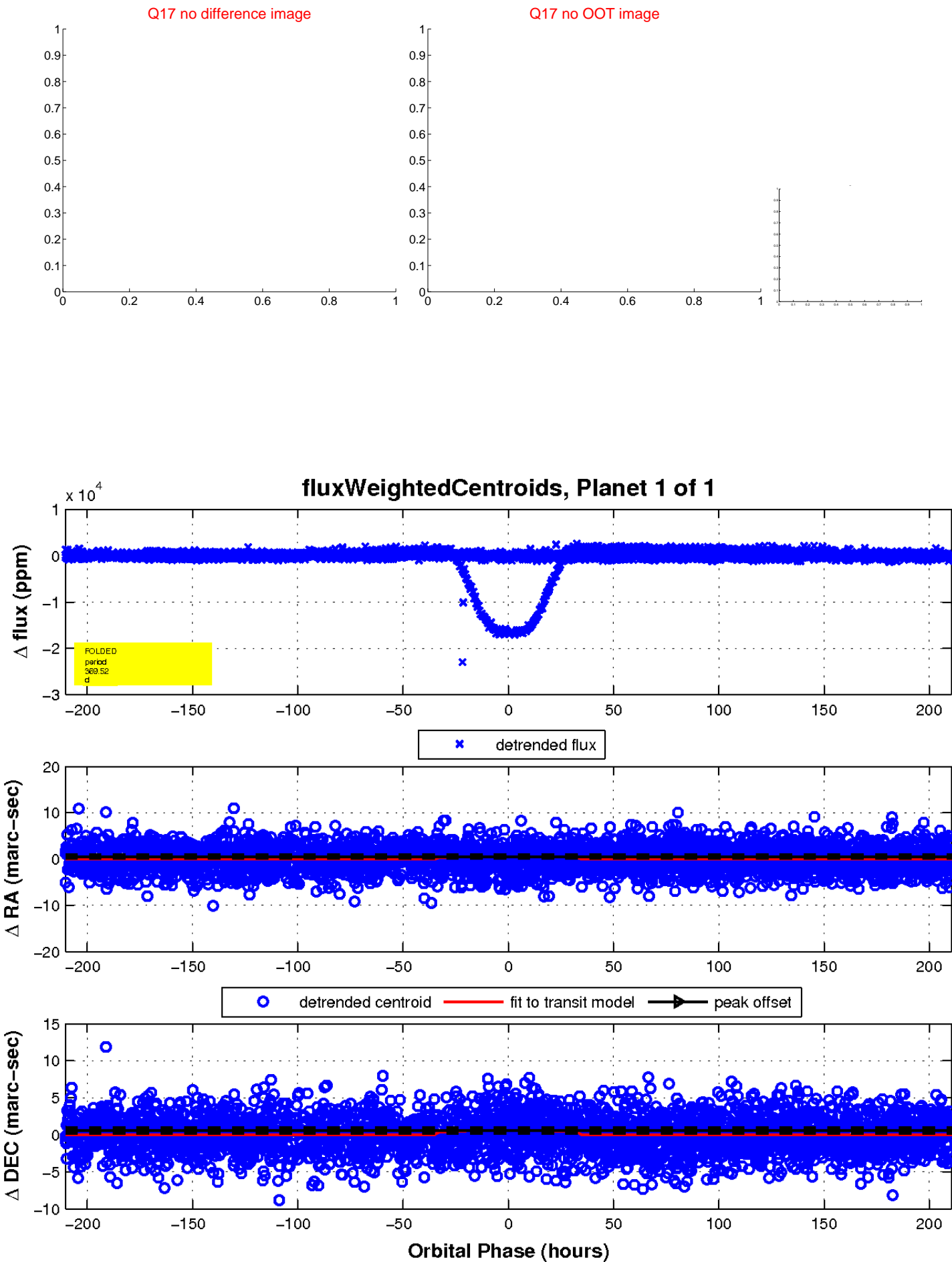
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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UKIRT Image

Declination

