

KIC 001434976

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})
001434976-01	OBS	No	438.225083	308.755627	743.1	6.835	7.3	6.7	0.71	4613	1.96	0.19

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
001434976-01	OBS	FP	0.00	1	0	1	0	INDIV_TRANS_MARSHALL_SKYE—INCONSISTENT_TRANS—CENT_FEW_DIFFS—HALO_GHOST

Notes: OBS = Observed. INJ = Injected. INV = Inverted. SCR = Scrambled.

N = Not Transit-Like. S = Stellar Eclipse. C = Centroid Offset. E = Ephemeris Match.

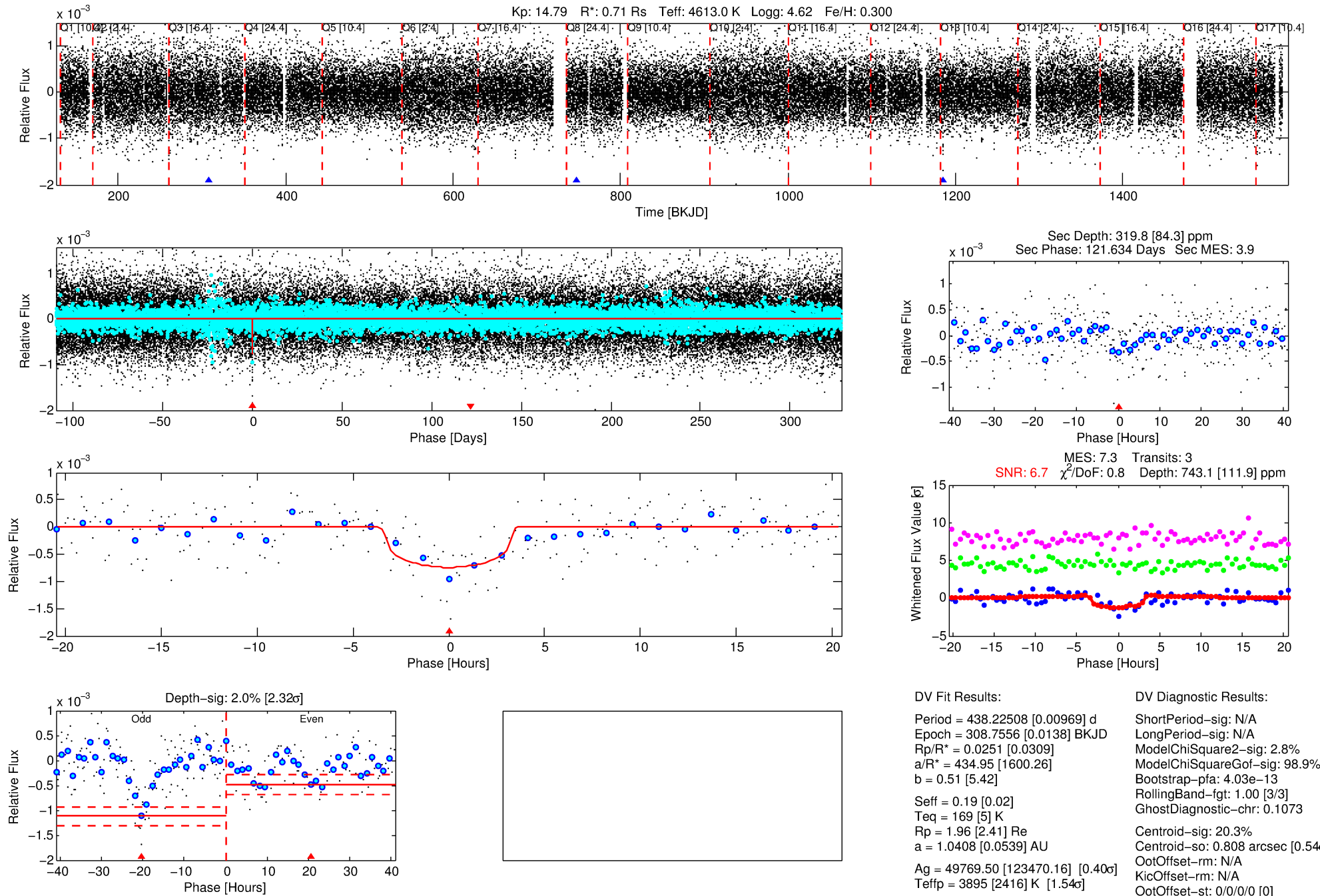
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 001434976-01

No Significant Match Found

DV One-Page Summary

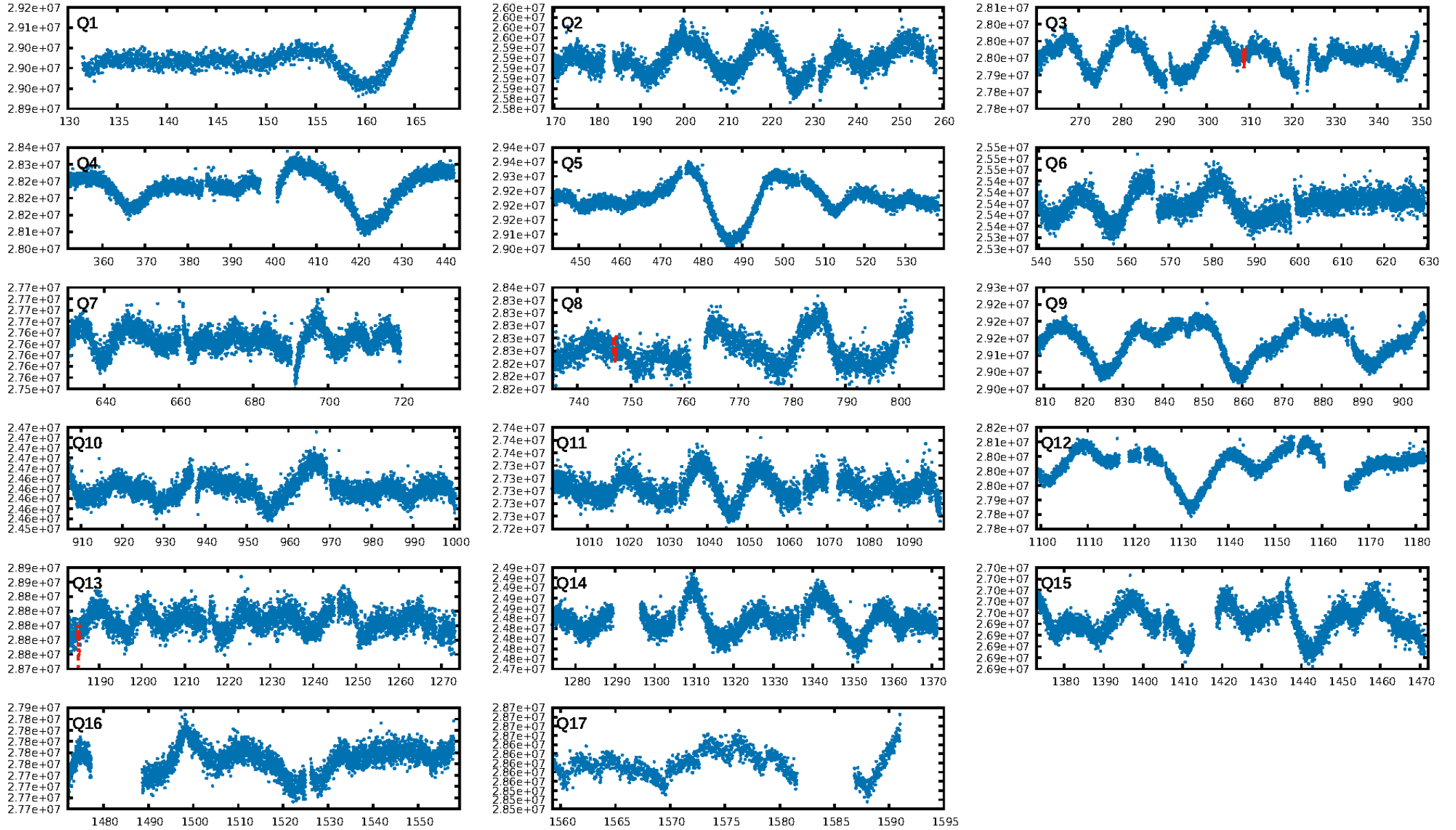
KIC: 1434976 Candidate: 1 of 1 Period: 438.225 d



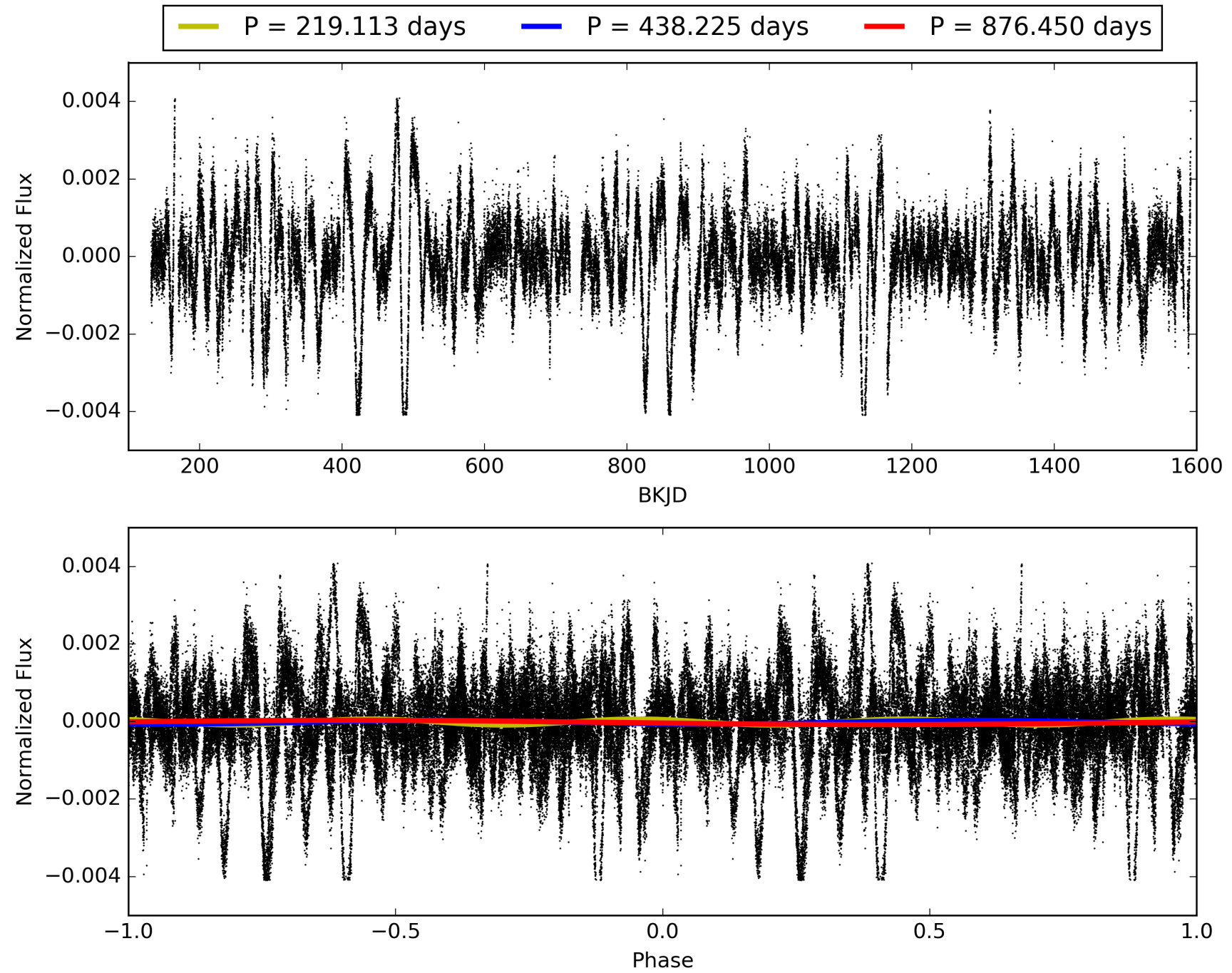
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 31-Jan-2016 14:23:41 Z

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

TCE 001434976-01, PDC Light Curves

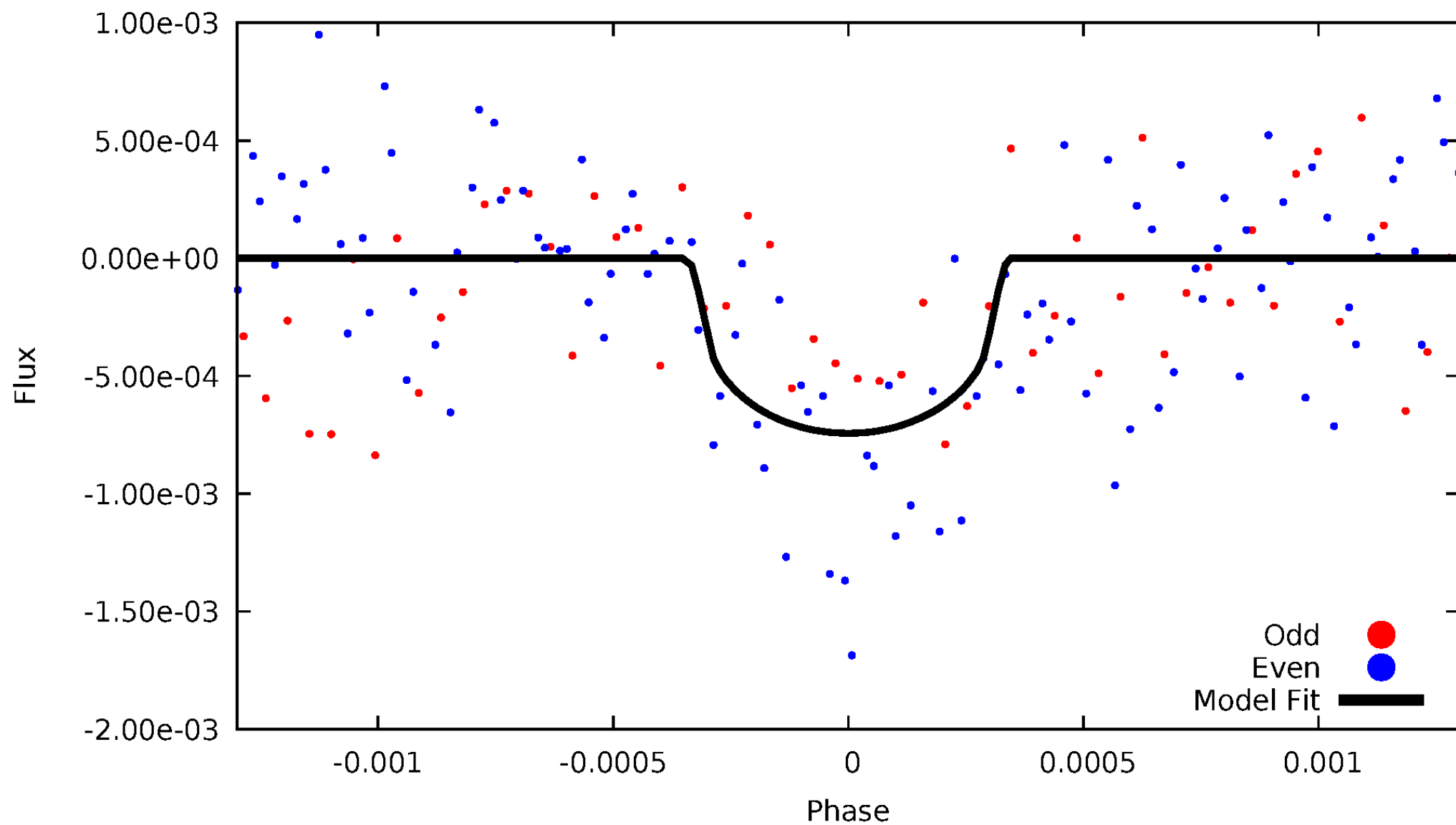


TCE 001434976-01



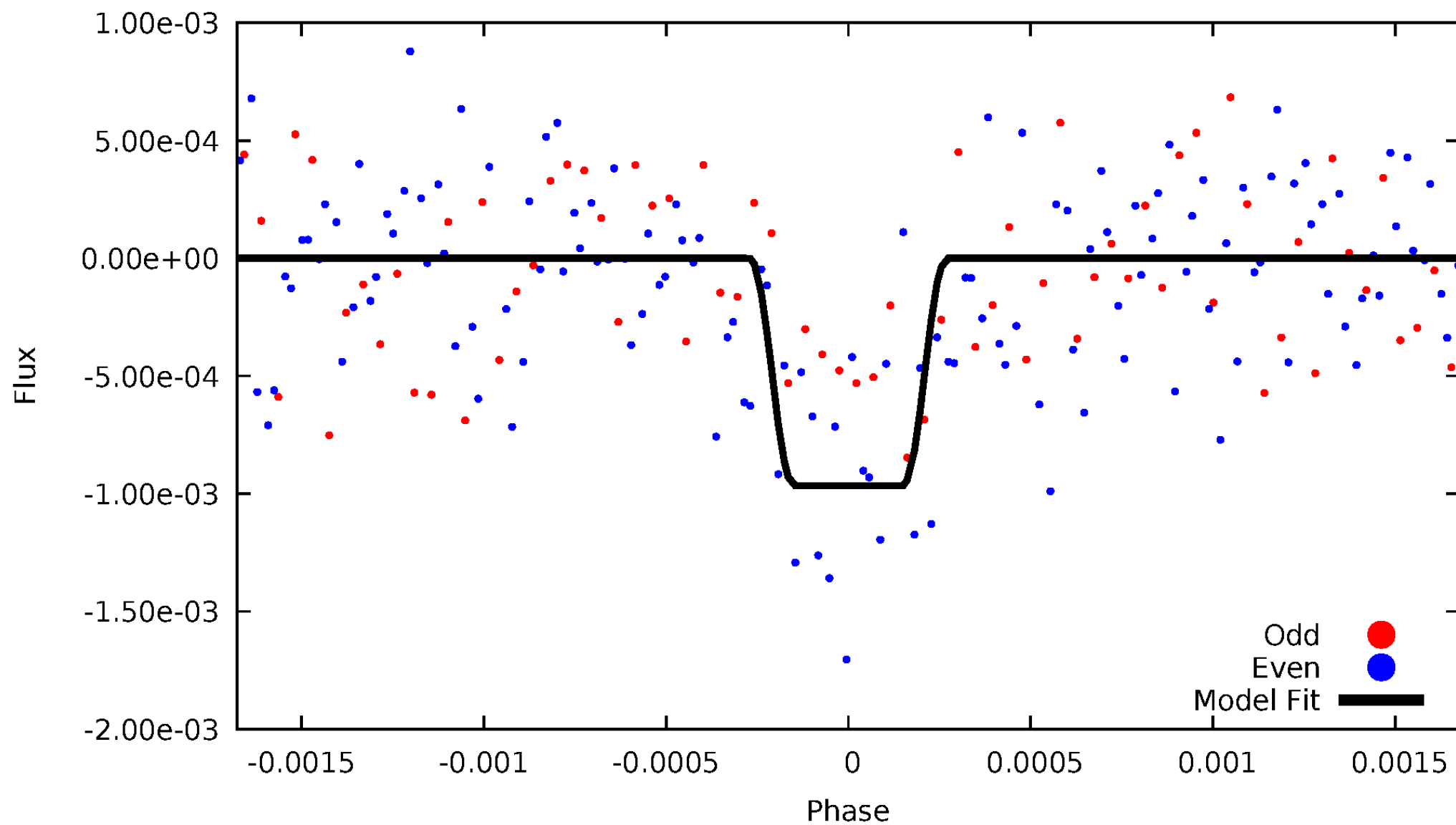
DV Odd/Even

TCE 001434976-01

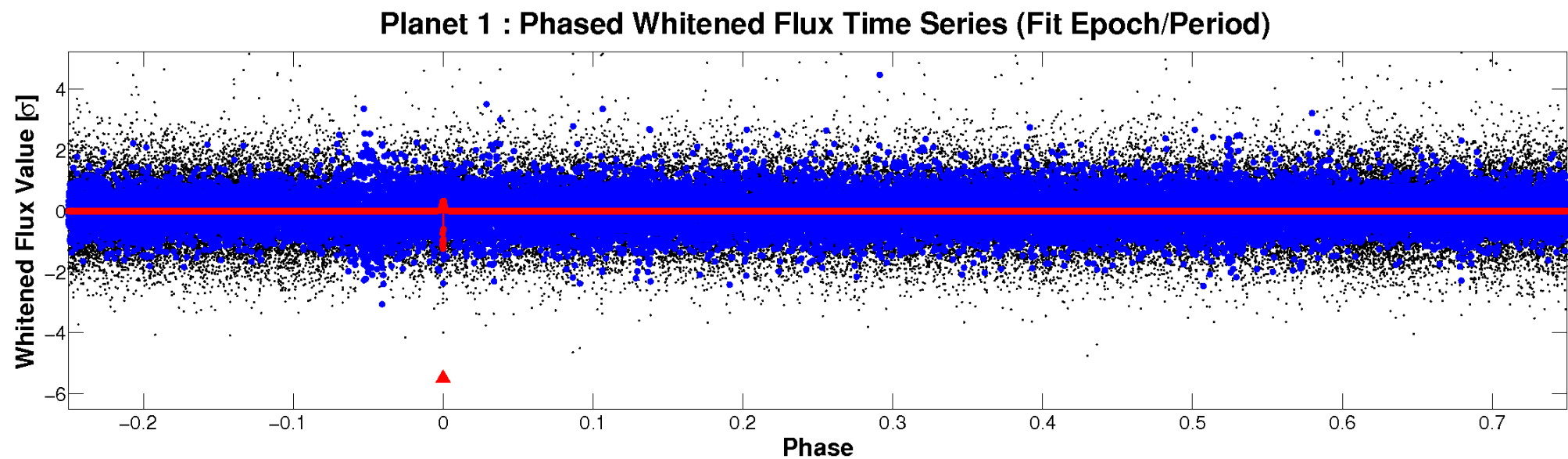
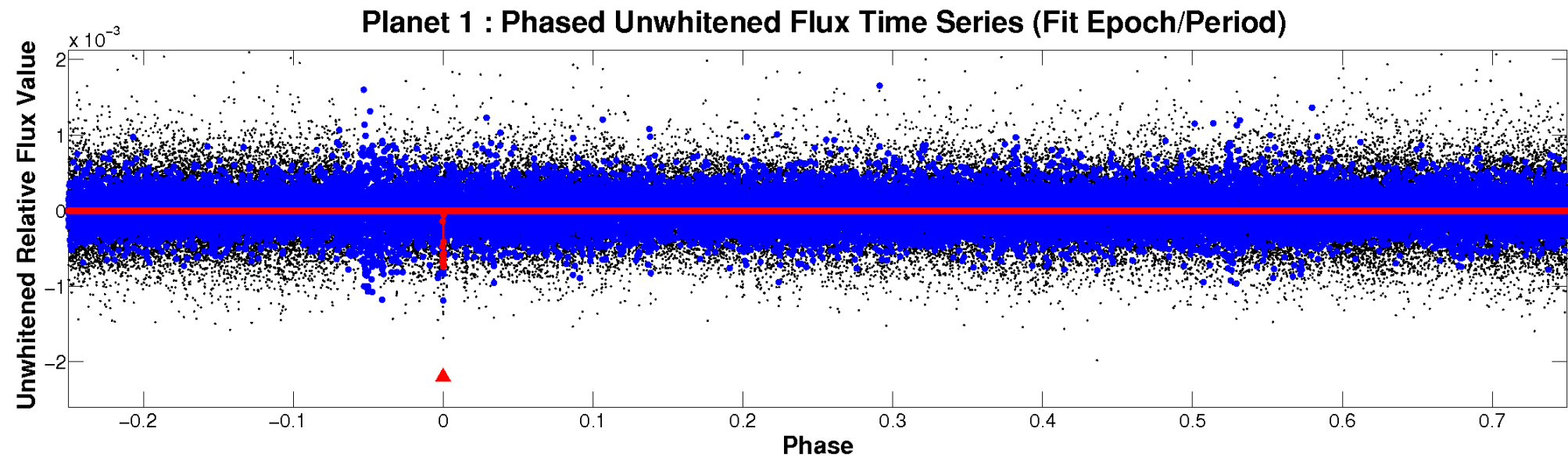


ALT Odd/Even

TCE 001434976-01

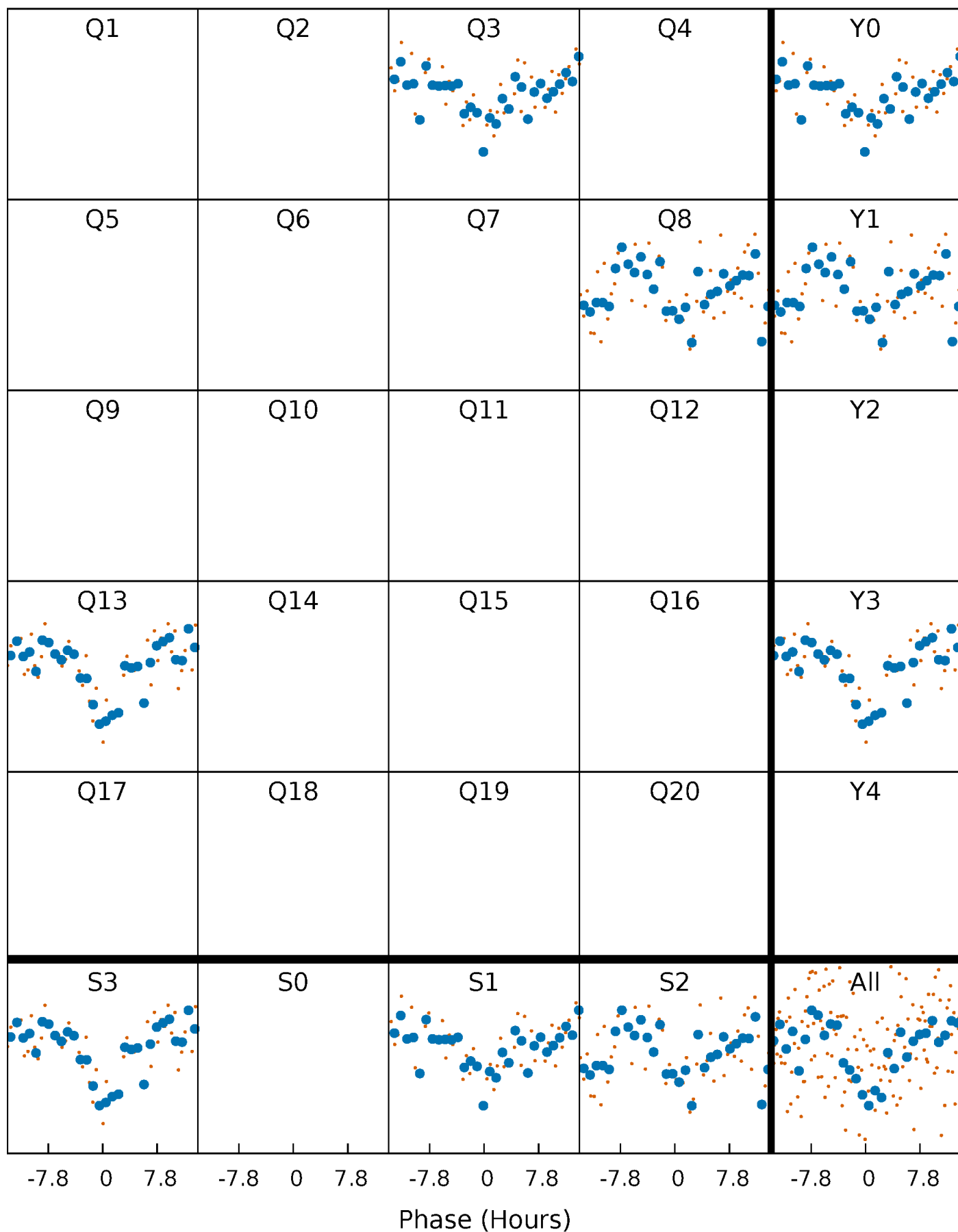


Non-Whitened Vs. Whitened Light Curve



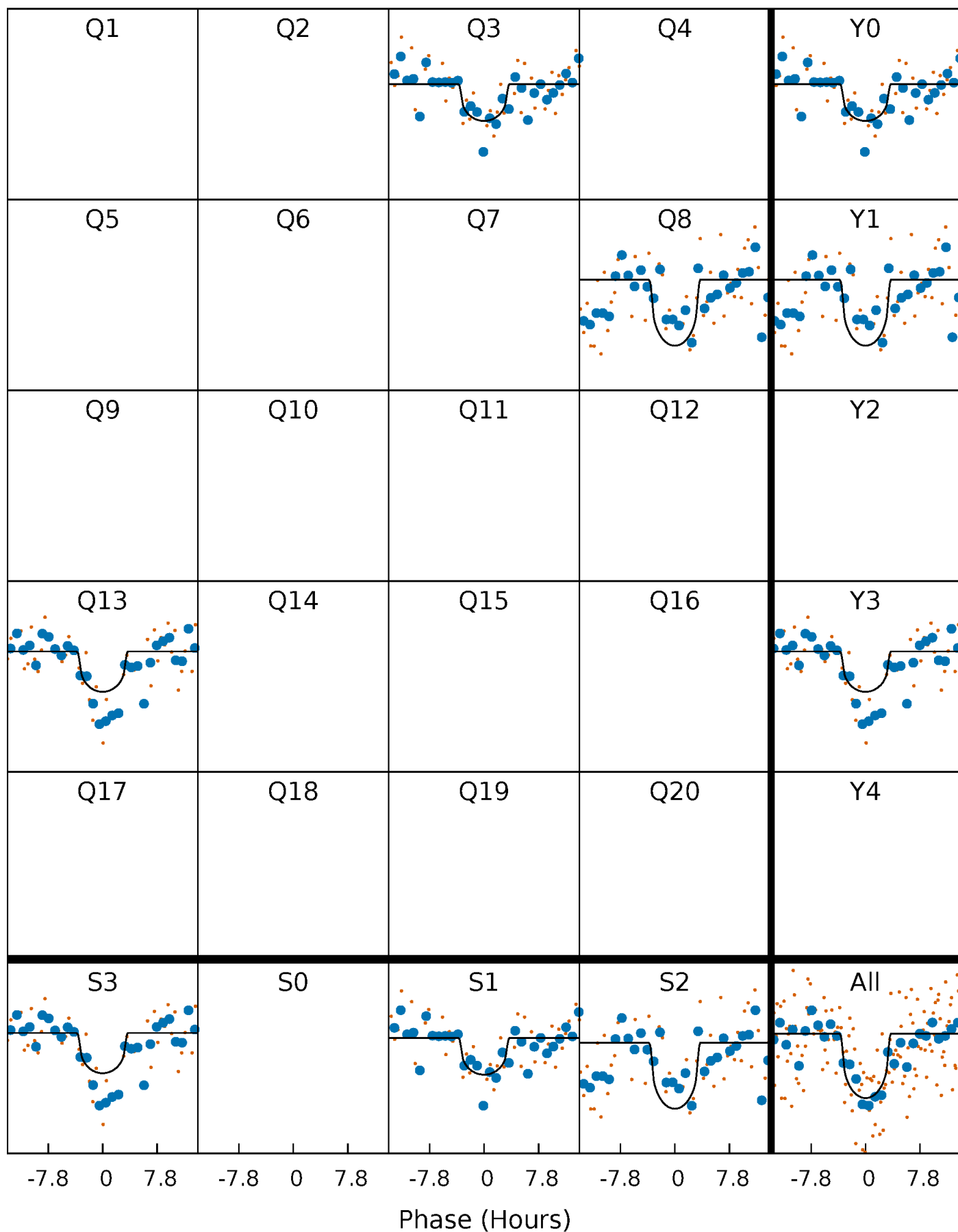
PDC Quarter-Phased Transit Curves

TCE 001434976-01 $P=438.225083$ Days $T_0=308.755627$ (BKJD)



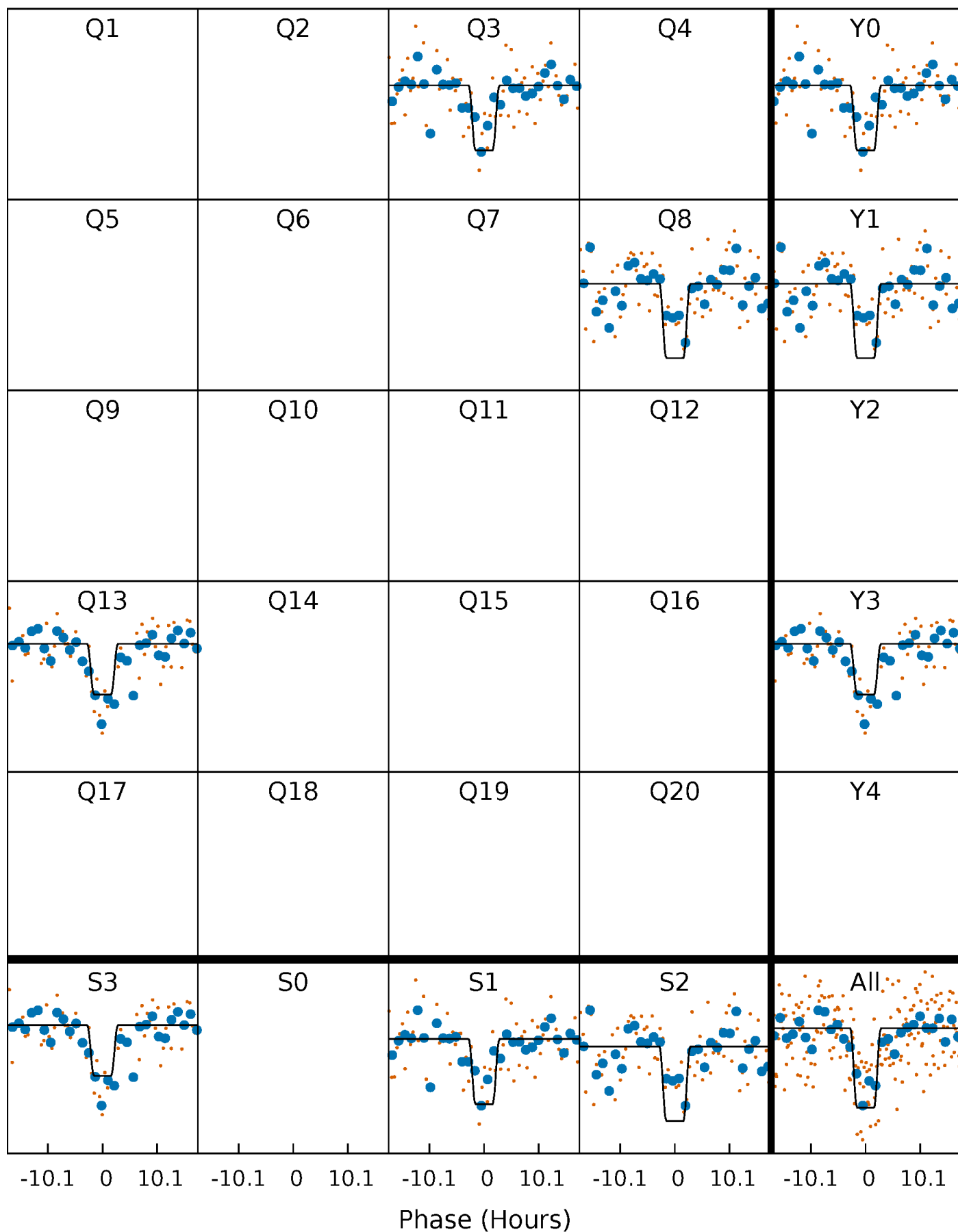
DV Quarter-Phased Transit Curves

TCE 001434976-01 $P=438.225083$ Days $T_0=308.755627$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

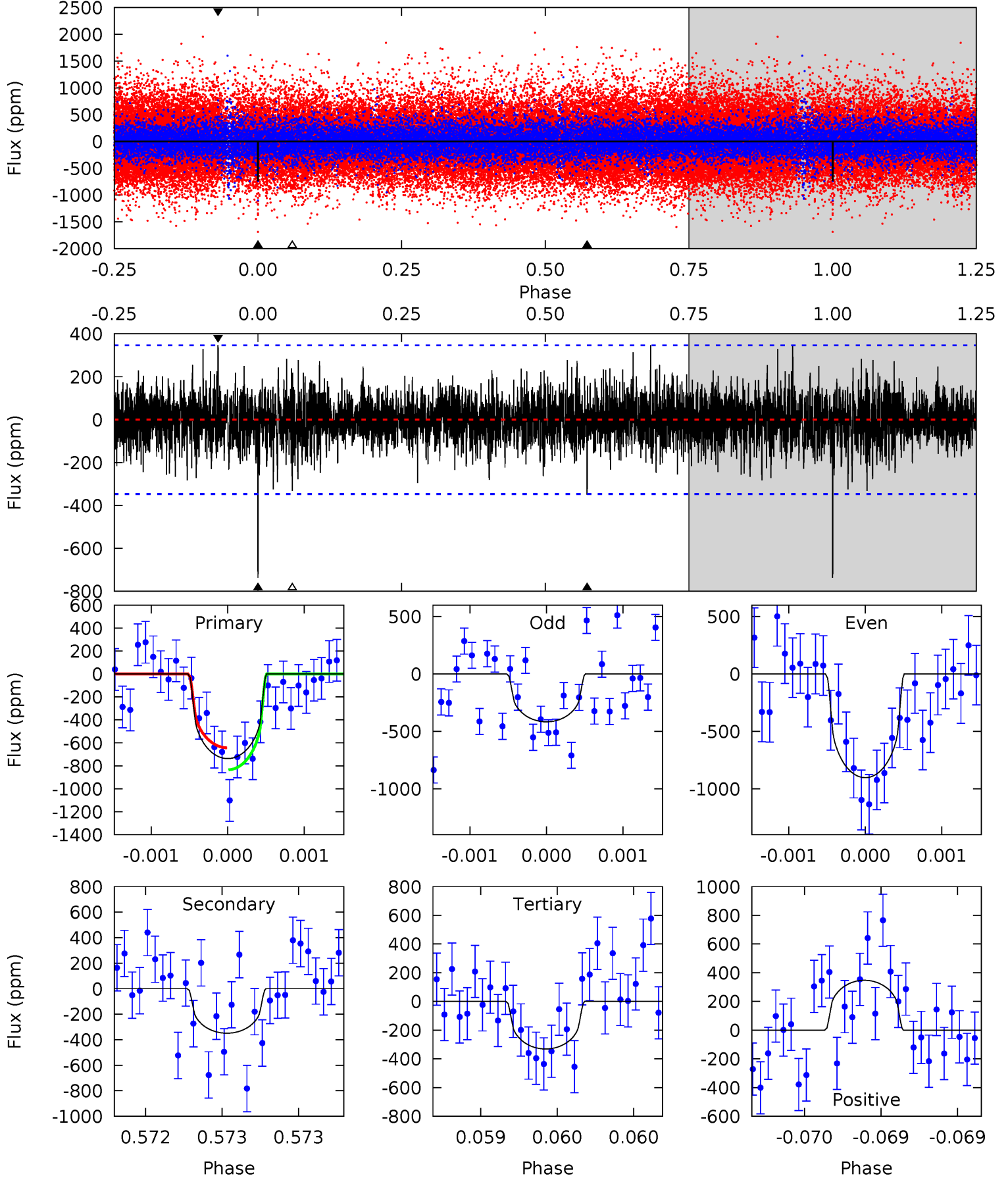
TCE 001434976-01 P=438.211317 Days $T_0=308.788811$ (BKJD)



DV Model-Shift Uniqueness Test

001434976-01, P = 438.225083 Days, E = 308.755627 Days

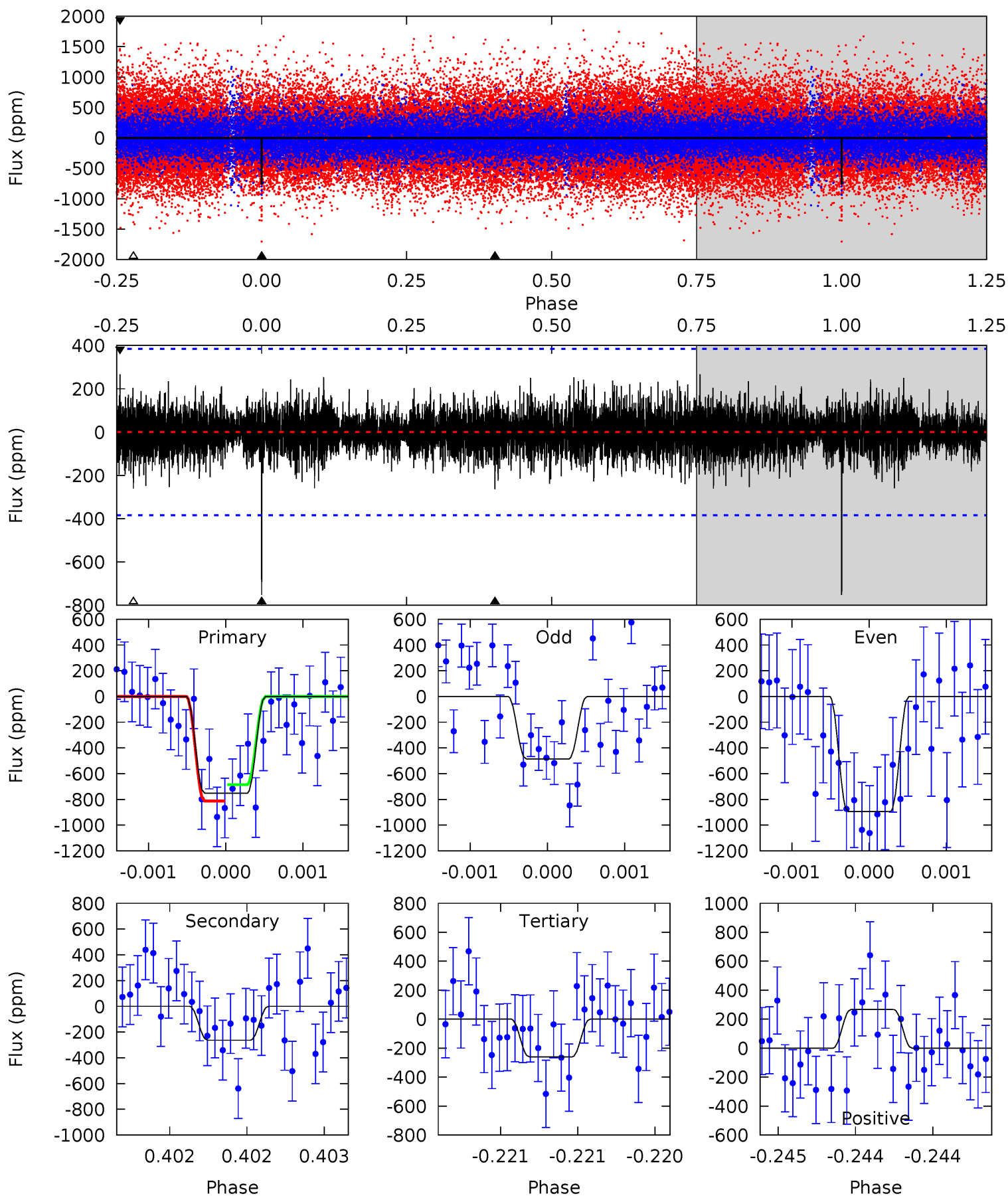
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
11.7	5.56	5.28	5.53	5.52	3.40	1.33	6.46	6.21	0.28	0.03	3.63	1.04	0.32	1.53



Alt Model-Shift Uniqueness Test

001434976-01, P = 438.211317 Days, E = 308.788811 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
10.9	3.81	3.77	3.86	5.56	3.46	1.01	7.11	7.02	0.04	-0.05	2.80	1.31	0.26	0.92



Stellar Parameters For KIC 001434976

	$T_{\text{eff}}(K)$	$\log(g)$	$[\text{Fe}/\text{H}]$	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	4613^{+83}_{-83}	$4.623^{+0.009}_{-0.048}$	$0.300^{+0.150}_{-0.150}$	$0.715^{+0.039}_{-0.018}$	$0.796^{+0.016}_{-0.042}$	$3.070^{+0.144}_{-0.485}$
	+2%/-2%	+0%/-1%	+50%/-50%	+5%/-3%	+2%/-5%	+5%/-16%
Source	SPE68	SPE68	SPE68	DSEP		

KIC = Kepler Input Catalog; PHO = Photometry; SPE = Spectroscopy; AST = Asteroseismology
 TRA = Transits; DESP = Dartmouth Models; MULT = Multiple Models

Secondary Eclipse Parameters for KIC 001434976-01 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	-349 ± 63	$2.62^{+2.20}_{-1.66}$	237^{+5}_{-5}	3742^{+1745}_{-666}	$30008^{+193216}_{-21468}$
Alt.	-263 ± 69	$2.96^{+2.41}_{-1.83}$	237^{+5}_{-5}	3439^{+1371}_{-573}	$17628^{+108018}_{-12398}$

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 001434976-01. Kepler magnitude: 14.79. Transit SNR 6.68

There are 0 quarters with good PRF difference image offsets

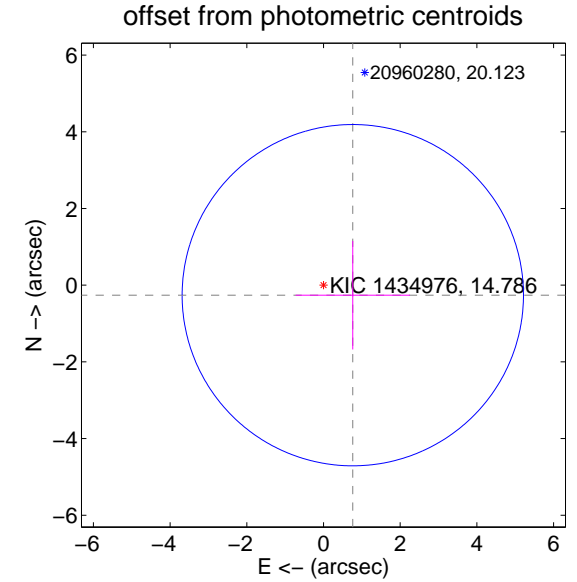
The direct PRF centroid is offset from the target star catalog position by about NaN arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	—	—	—	—
PRF-fit source offset from KIC position	—	—	—	—
photometric centroid source offset	0.81 ± 1.48	0.54	-0.76 ± 1.49	-0.26 ± 1.42

There is no PRF-fit offset from OOT-fit



There is no PRF-fit offset from KIC



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.

Q1 no difference image



Q1 no OOT image



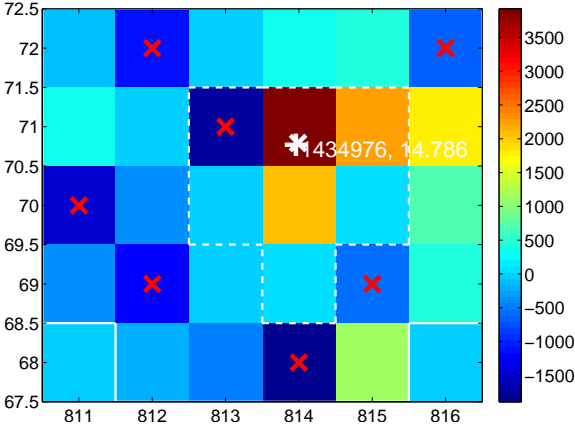
Q2 no difference image



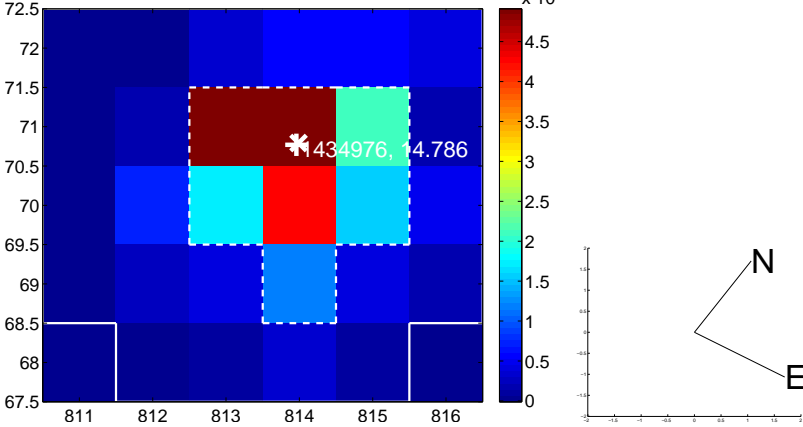
Q2 no OOT image



Q3 difference image. Poor Quality



Q3 OOT image



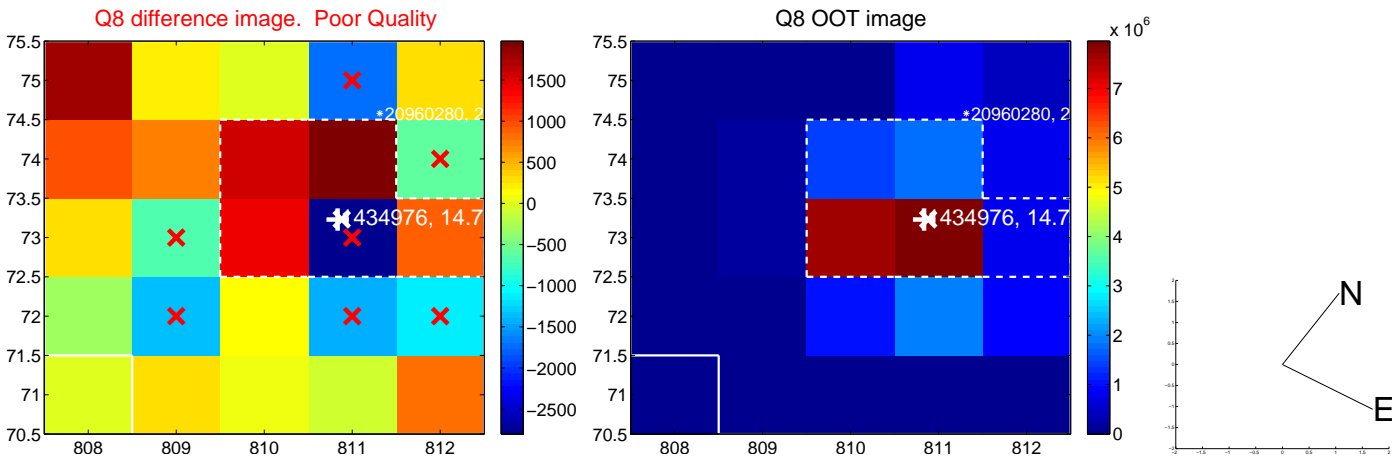
Q4 no difference image



Q4 no OOT image



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



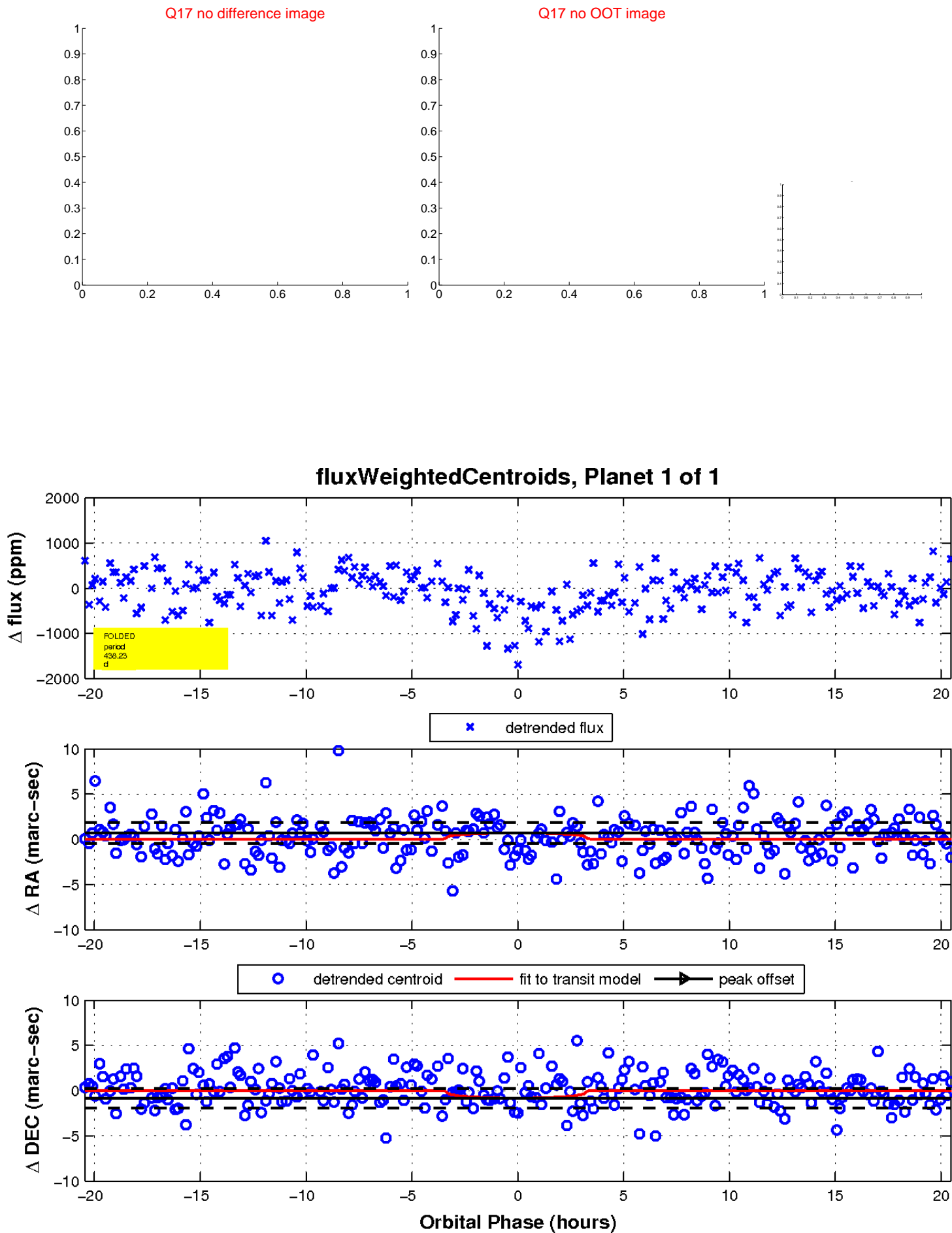
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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



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



UKIRT Image

Declination

