

KIC 005894547

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})
005894547-01	OBS	No	475.441838	394.069447	408.1	6.607	8.0	7.8	0.93	6168	1.98	0.79

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
005894547-01	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_CHASES_MARSHALL—ALL_TRANS_CHASES—MOD_NONUNIQ_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.

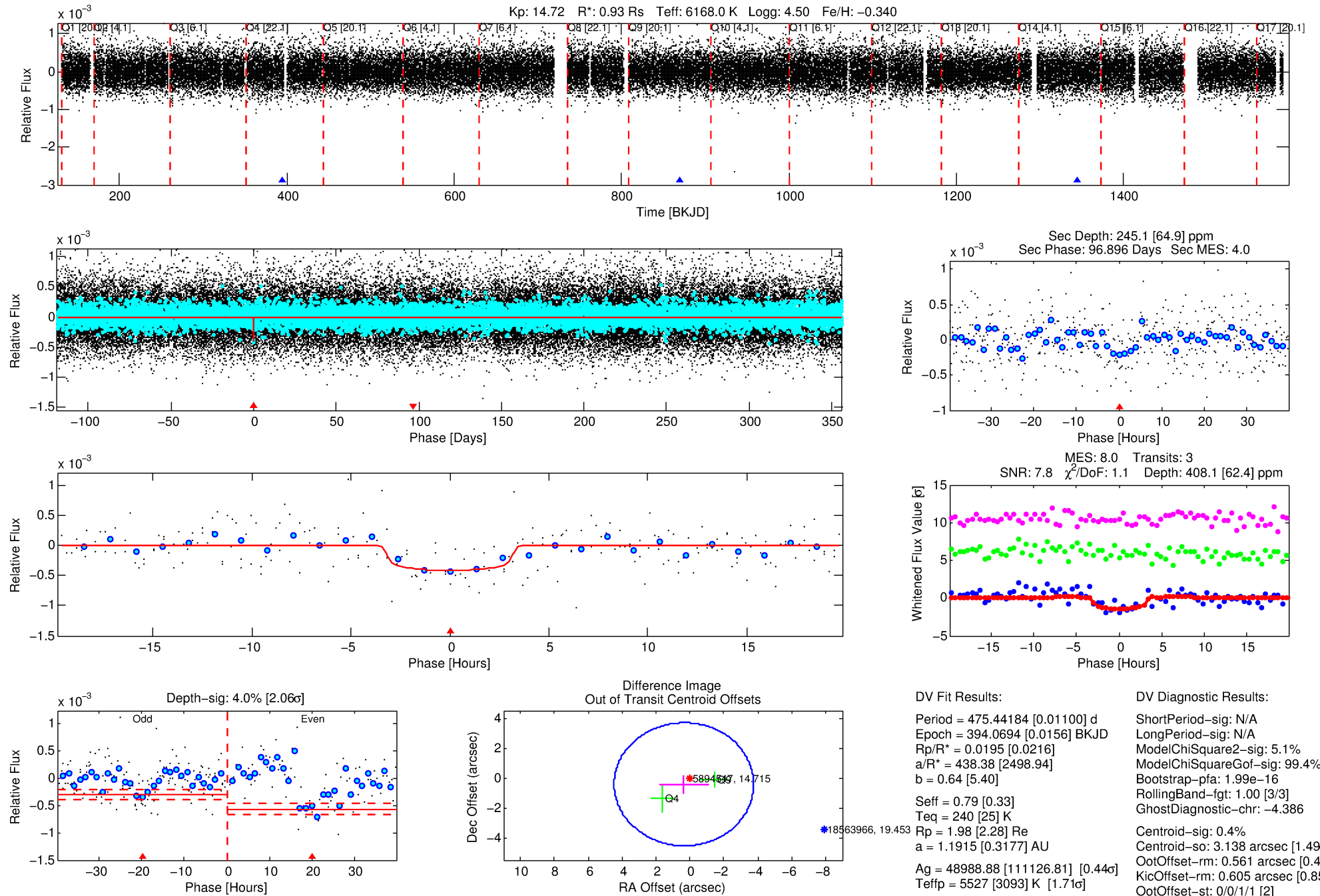
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 005894547-01

No Significant Match Found

DV One-Page Summary

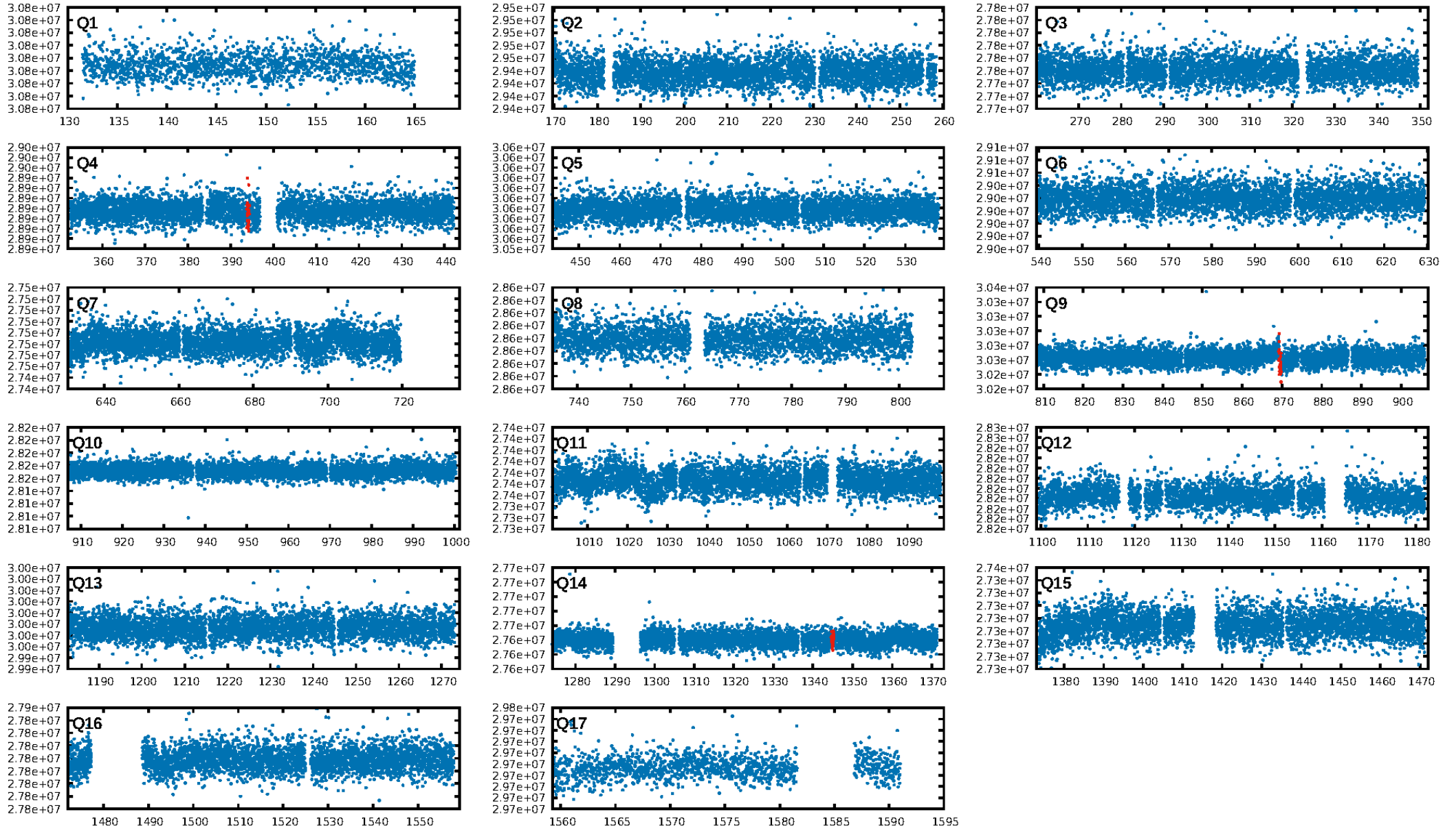
KIC: 5894547 Candidate: 1 of 1 Period: 475.442 d



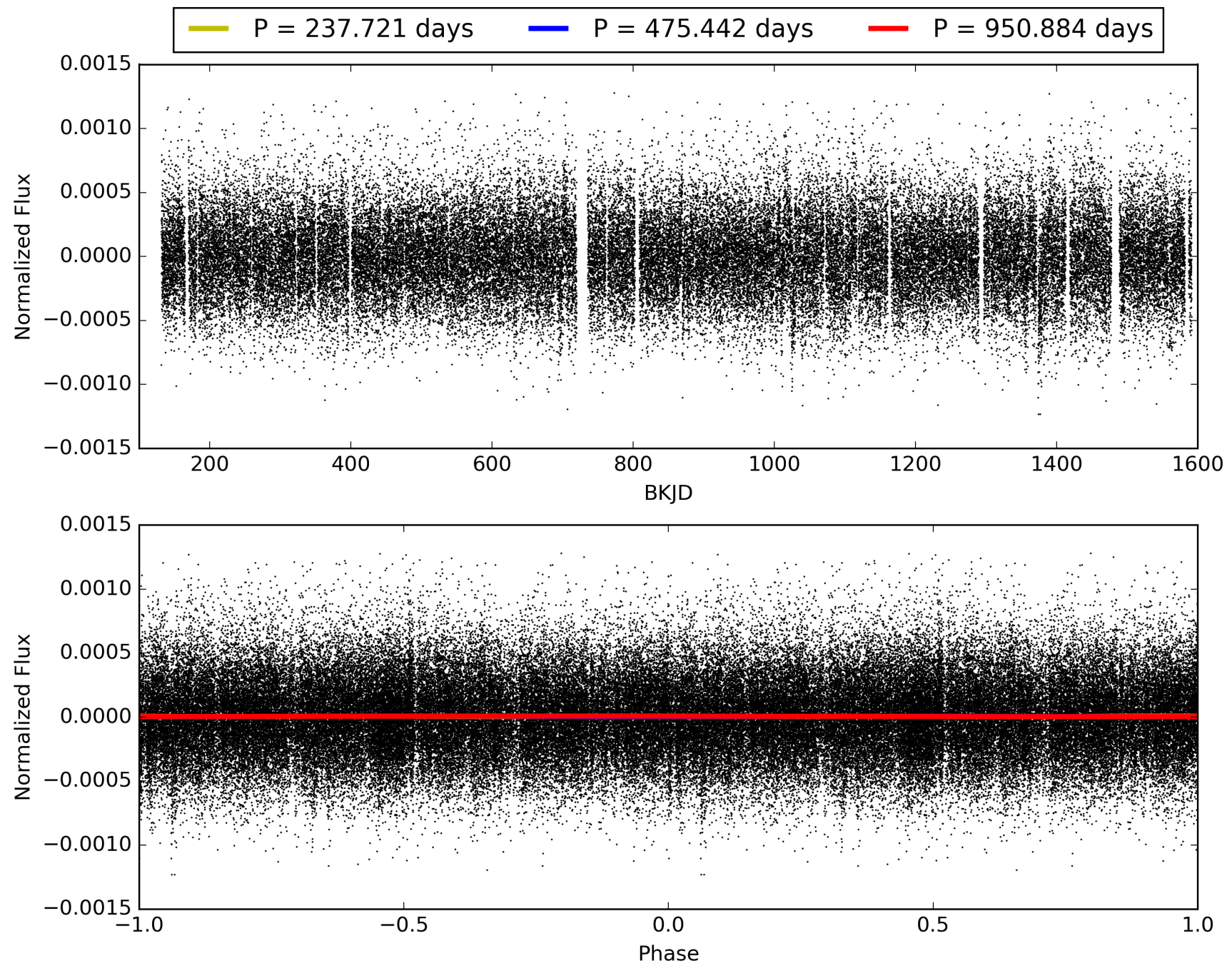
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 30-Jan-2016 10:50:35 Z

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

TCE 005894547-01, PDC Light Curves

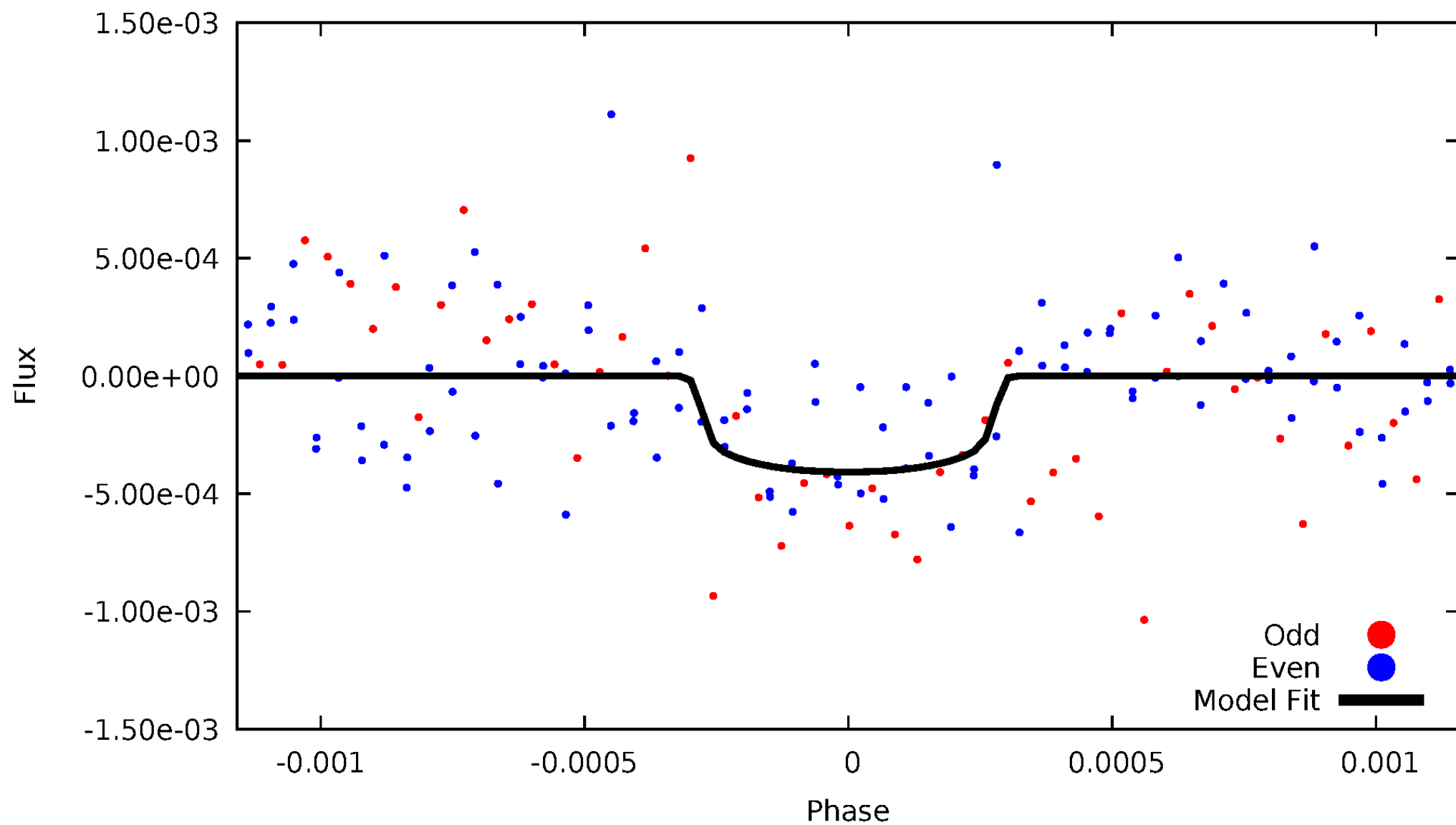


TCE 005894547-01



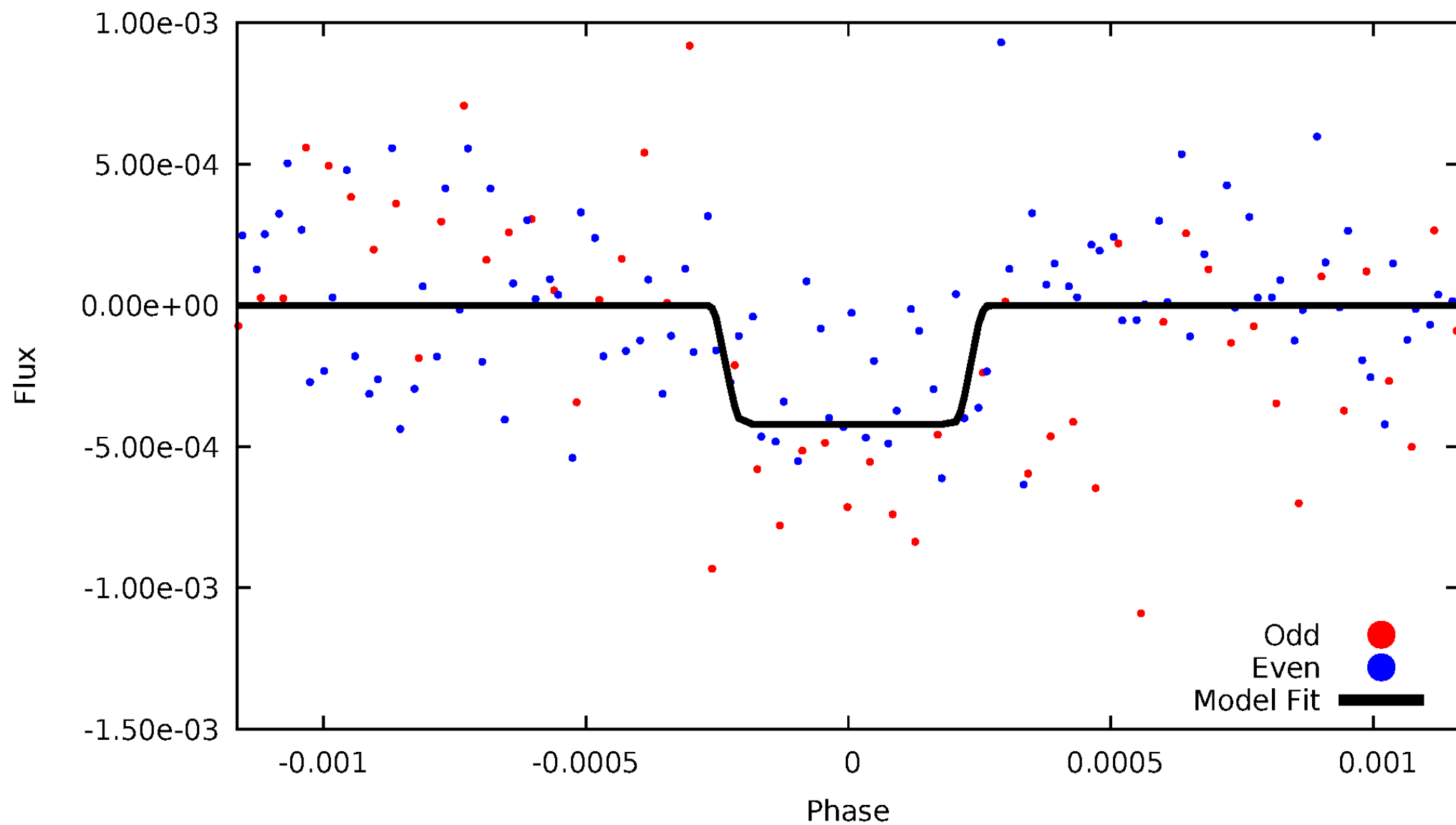
DV Odd/Even

TCE 005894547-01



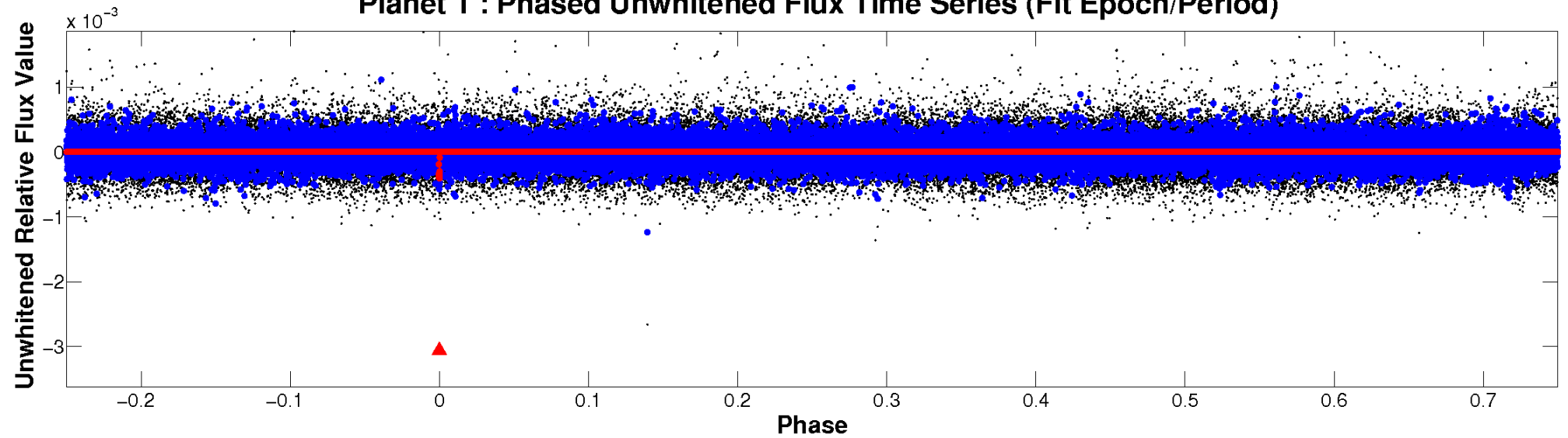
ALT Odd/Even

TCE 005894547-01

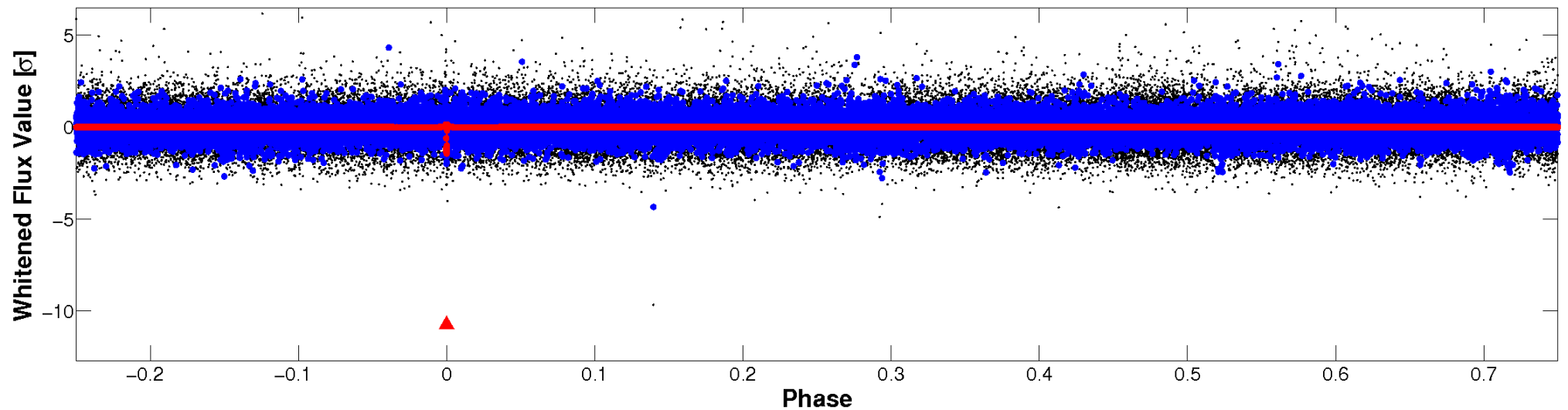


Non-Whitened Vs. Whitened Light Curve

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

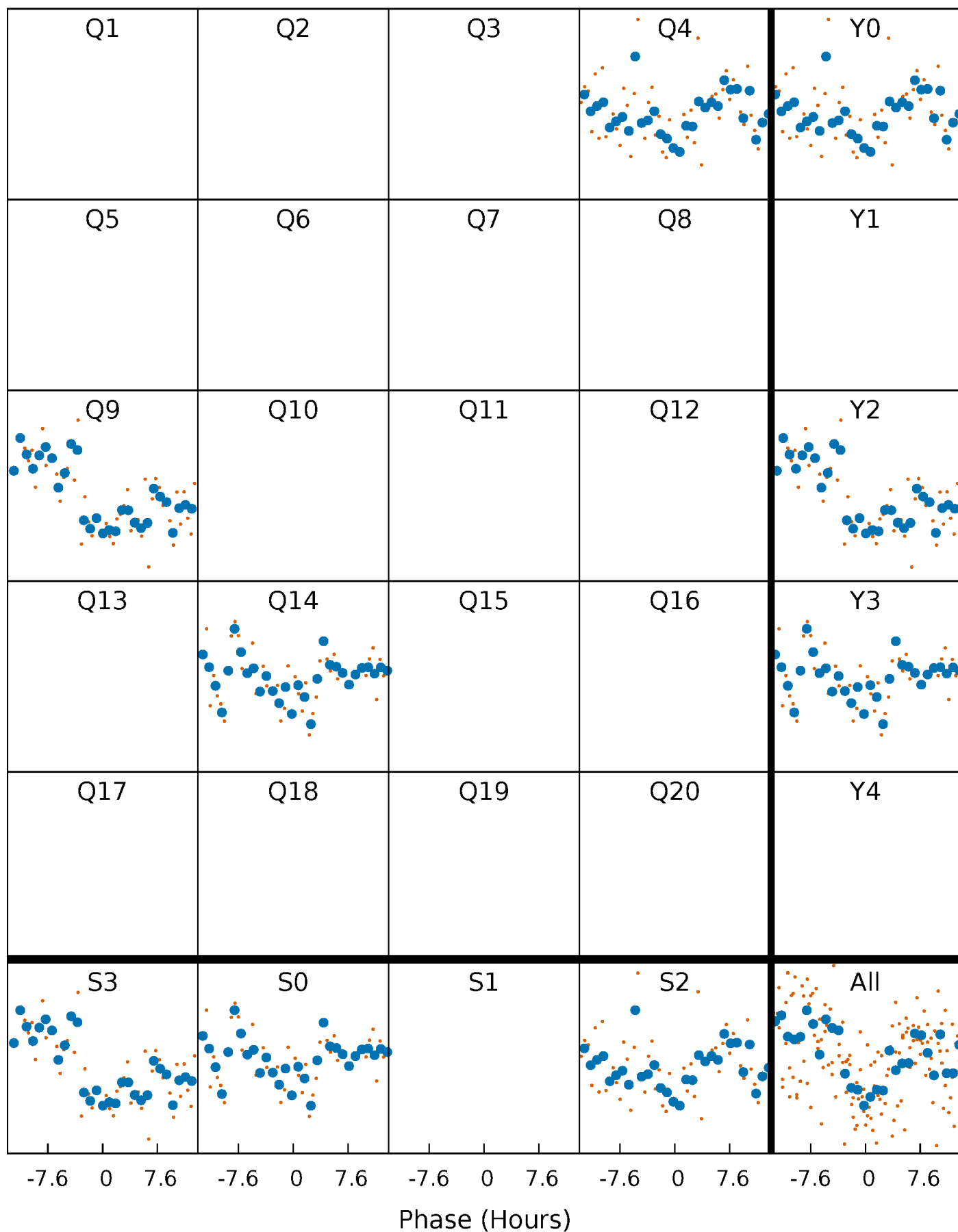


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



PDC Quarter-Phased Transit Curves

TCE 005894547-01 P=475.441838 Days $T_0=394.069447$ (BKJD)



DV Quarter-Phased Transit Curves

TCE 005894547-01 P=475.441838 Days $T_0=394.069447$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

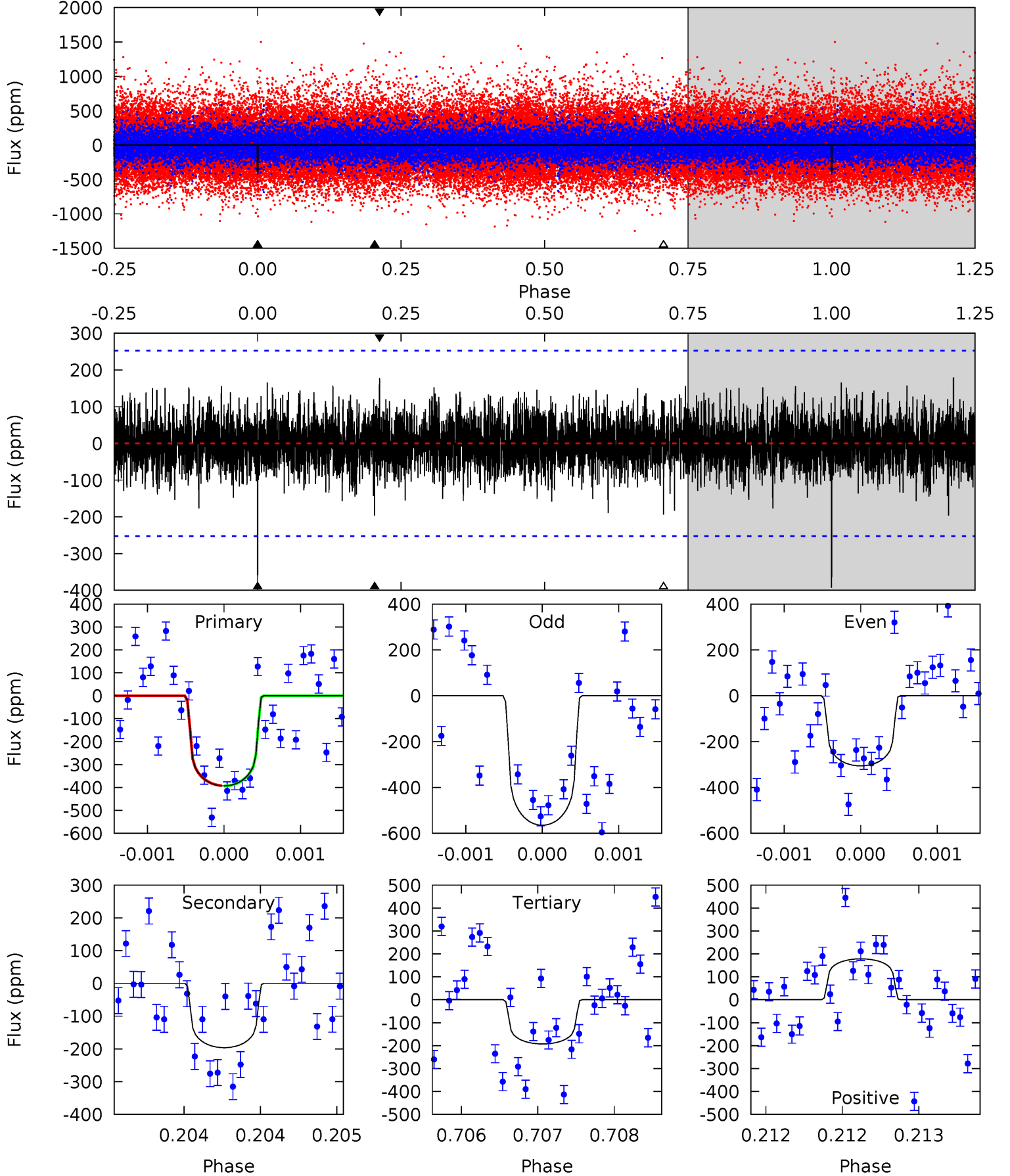
TCE 005894547-01 P=475.448074 Days $T_0=394.064872$ (BKJD)



DV Model-Shift Uniqueness Test

005894547-01, P = 475.441838 Days, E = 394.069447 Days

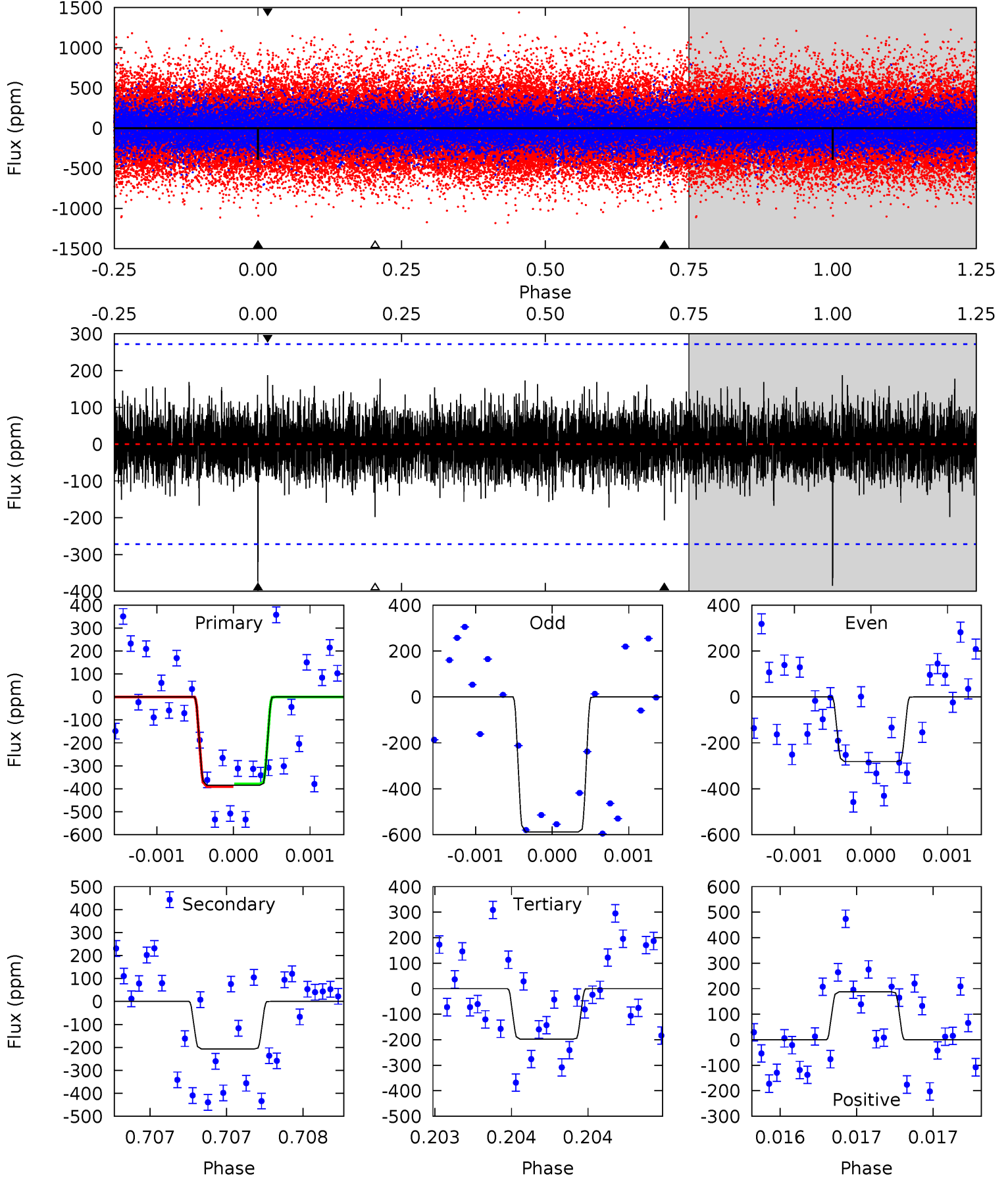
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
8.62	4.30	4.23	3.91	5.53	3.42	1.10	4.39	4.70	0.08	0.39	2.66	1.28	0.31	0.02



Alt Model-Shift Uniqueness Test

005894547-01, P = 475.448074 Days, E = 394.064872 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
7.88	4.24	4.05	3.84	5.57	3.47	0.99	3.83	4.04	0.19	0.40	2.95	1.31	0.33	0.12



Stellar Parameters For KIC 005894547

	$T_{\text{eff}} (K)$	$\log(g)$	$[\text{Fe}/\text{H}]$	$R (R_{\odot})$	$M (M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	6168^{+188}_{-206}	$4.501^{+0.054}_{-0.216}$	$-0.340^{+0.300}_{-0.300}$	$0.929^{+0.291}_{-0.097}$	$0.997^{+0.134}_{-0.134}$	$1.752^{+0.483}_{-0.901}$
	+3%/-3%	+1%/-5%	+88%/-88%	+31%/-10%	+13%/-13%	+28%/-51%
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 005894547-01 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	-196 ± 46	$2.52^{+2.09}_{-1.62}$	343^{+26}_{-17}	4841^{+3141}_{-977}	$22924^{+156987}_{-16214}$
Alt.	-207 ± 49	$2.73^{+2.01}_{-1.73}$	343^{+26}_{-17}	4706^{+3163}_{-861}	$20572^{+142080}_{-13774}$

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 $A_{obs} \gg 1.0$

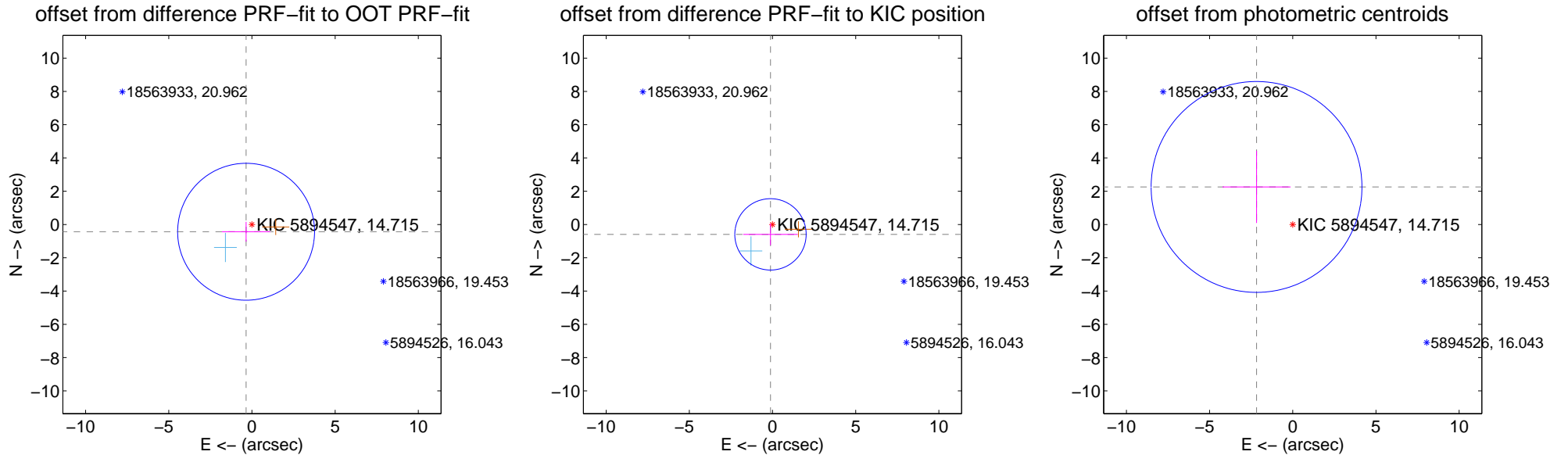
DV Centroid Data

Supplemental centroid analysis for 005894547-01. Kepler magnitude: 14.71. Transit SNR 7.76

There are 1 quarters with good PRF difference image offsets

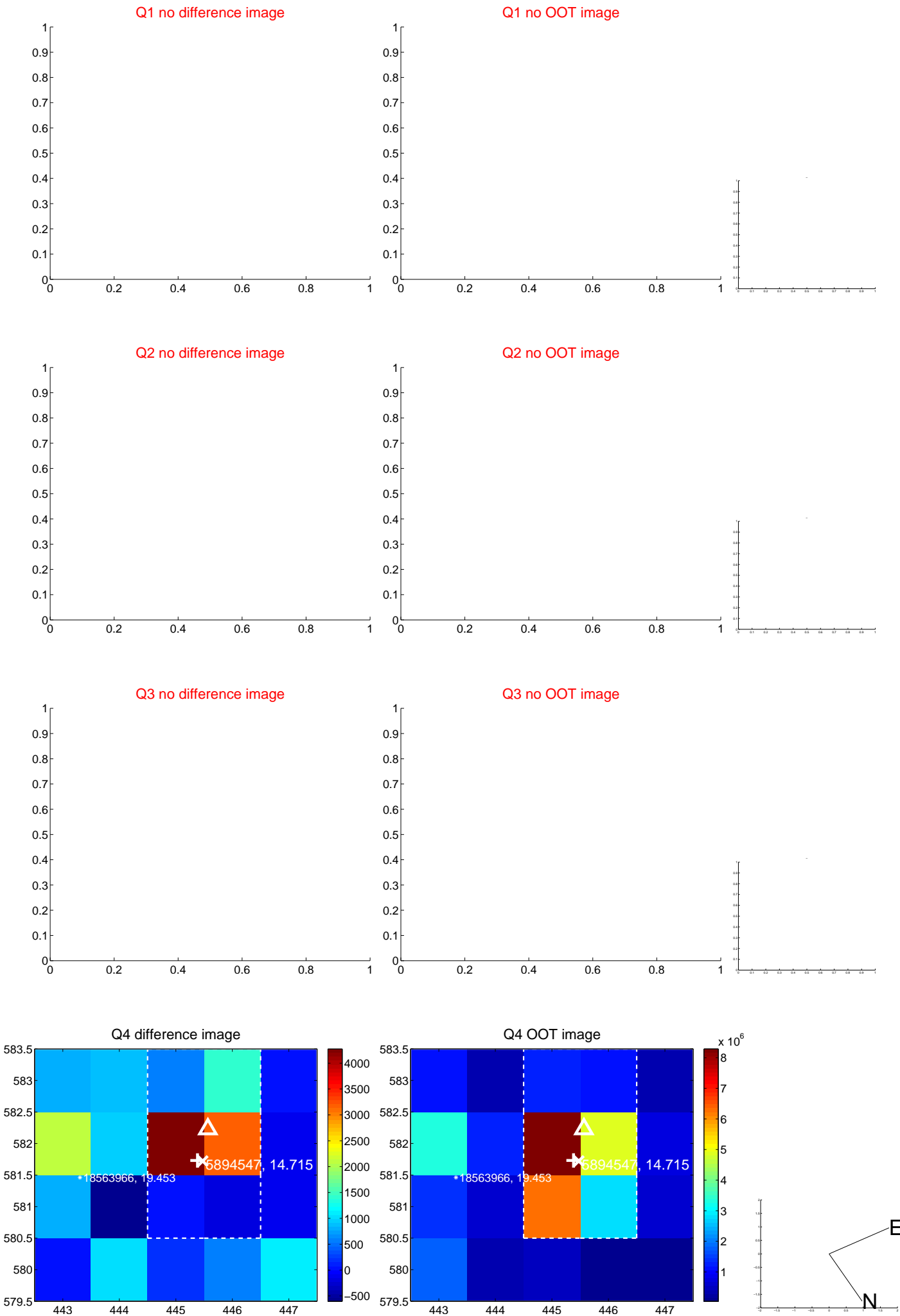
The direct PRF centroid is offset from the target star catalog position by about 0.19 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.561 ± 1.372	0.41	0.353 ± 1.450	-0.436 ± 0.594
PRF-fit source offset from KIC position	0.605 ± 0.715	0.85	0.123 ± 1.642	-0.593 ± 0.646
photometric centroid source offset	3.14 ± 2.11	1.49	2.18 ± 2.05	2.26 ± 2.17



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.

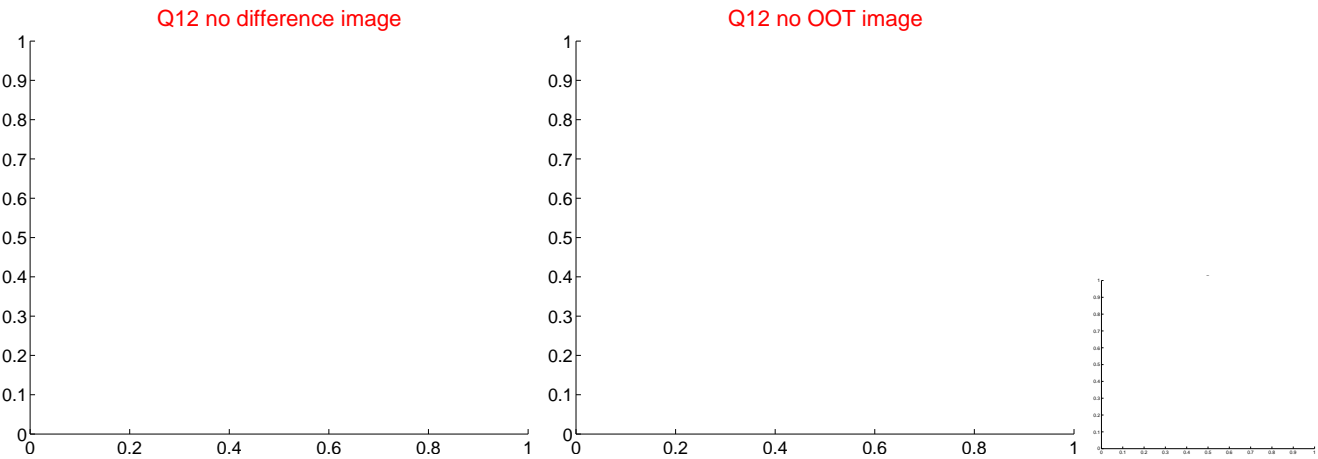
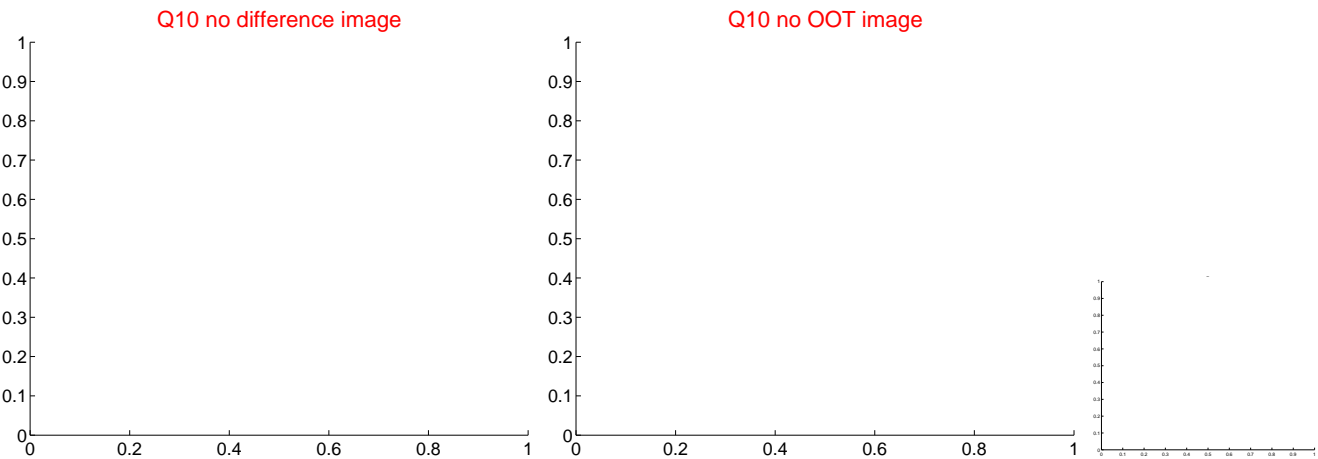
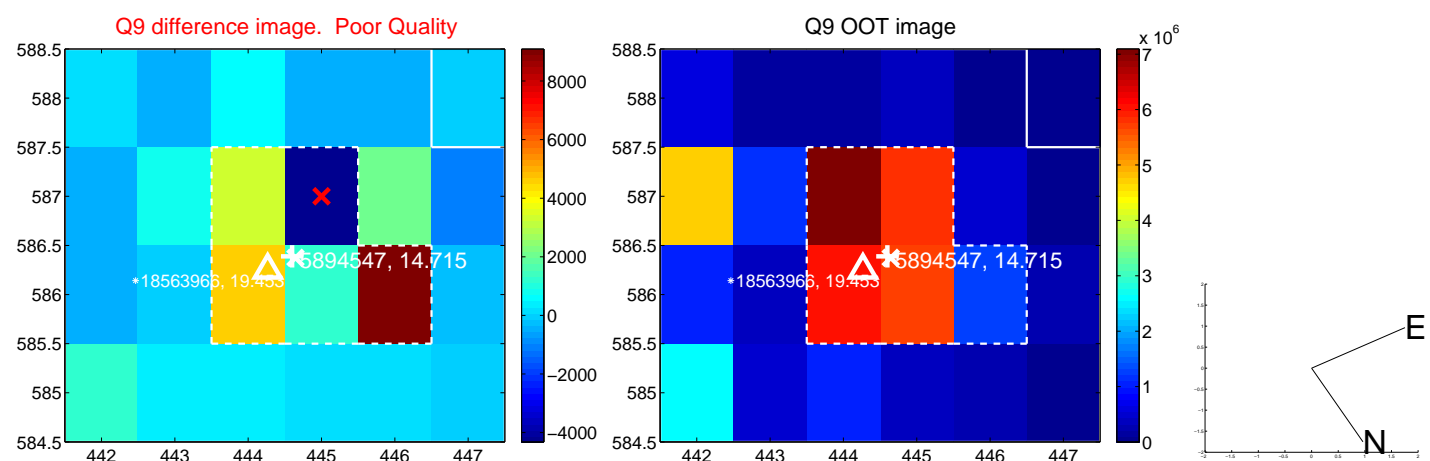
white ×: KIC target position; +: OOT centroid; △: difference centroid. red ✕: large negative pixel value.



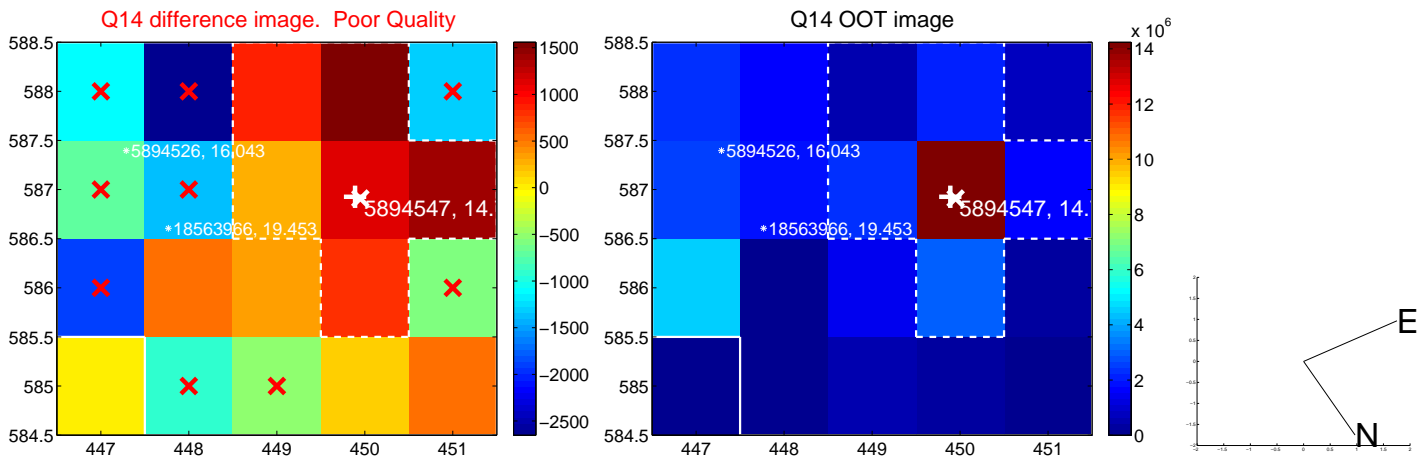
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



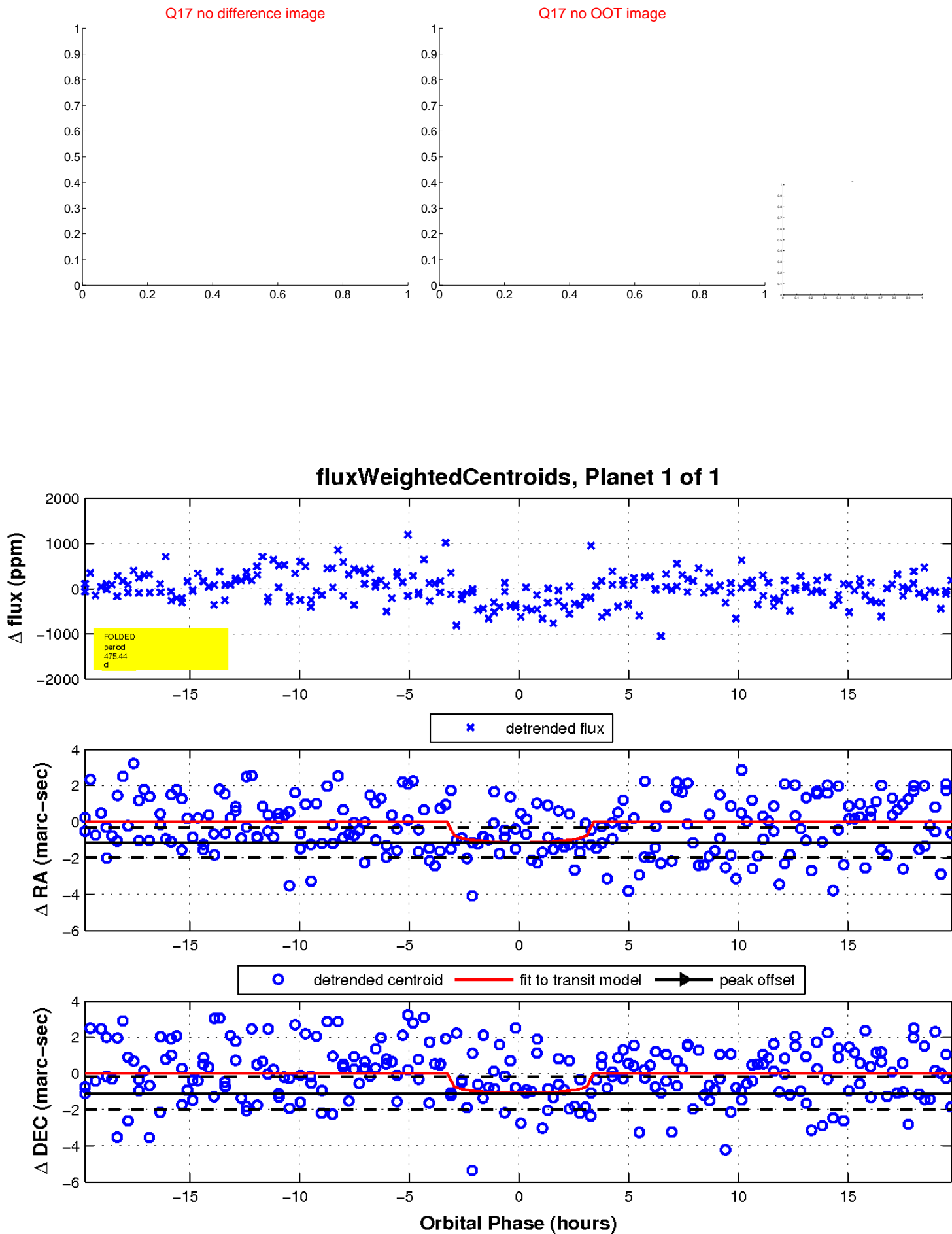
white ×: KIC target position; +: OOT centroid; △: difference centroid. red ×: large negative pixel value.



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.



UKIRT Image

