

KIC 007693796

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})
007693796-01	OBS	No	366.175075	240.237574	862.3	19.276	8.2	8.7	0.87	5845	3.10	0.81

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
007693796-01	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_MARSHALL_SKYE—LPP_DV—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.

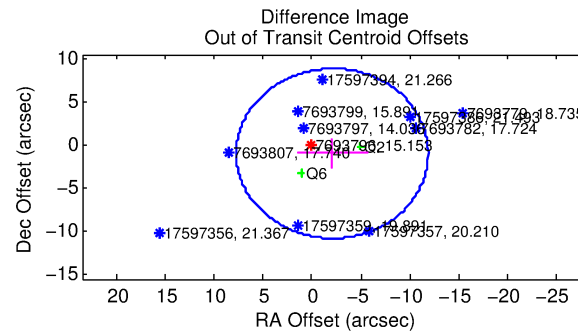
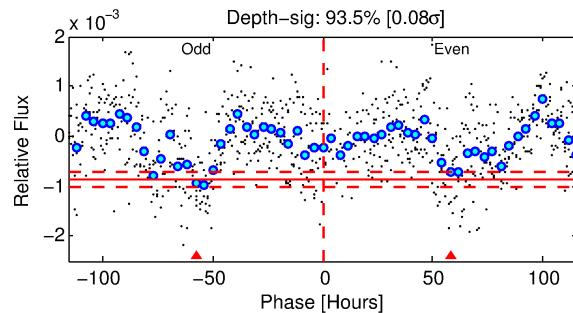
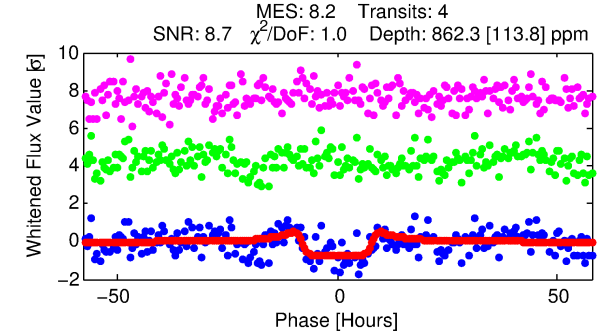
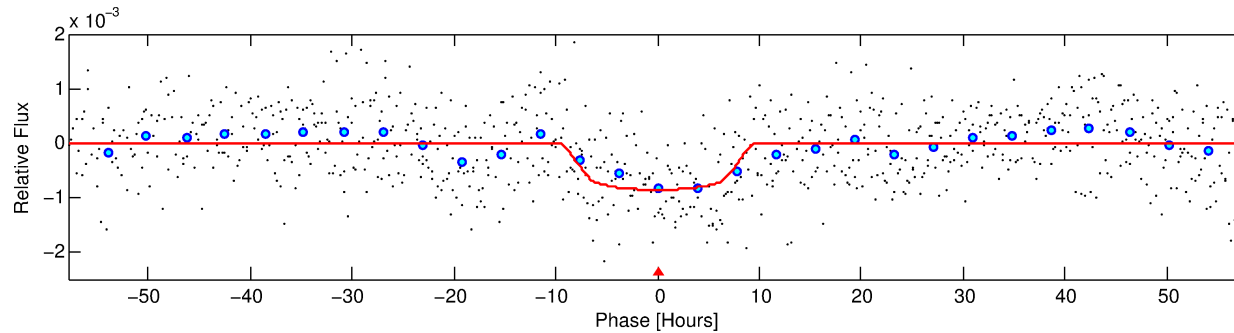
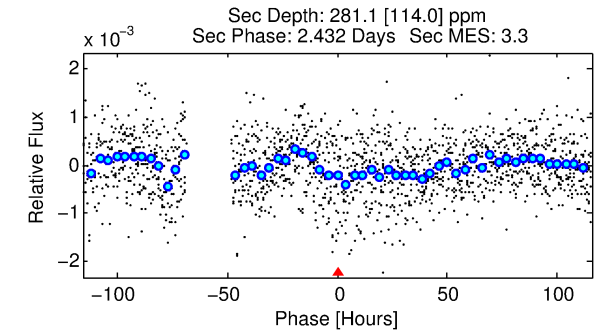
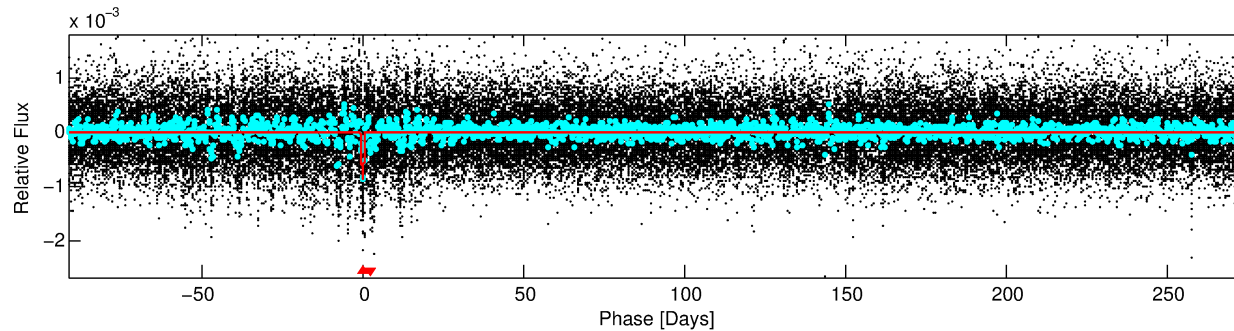
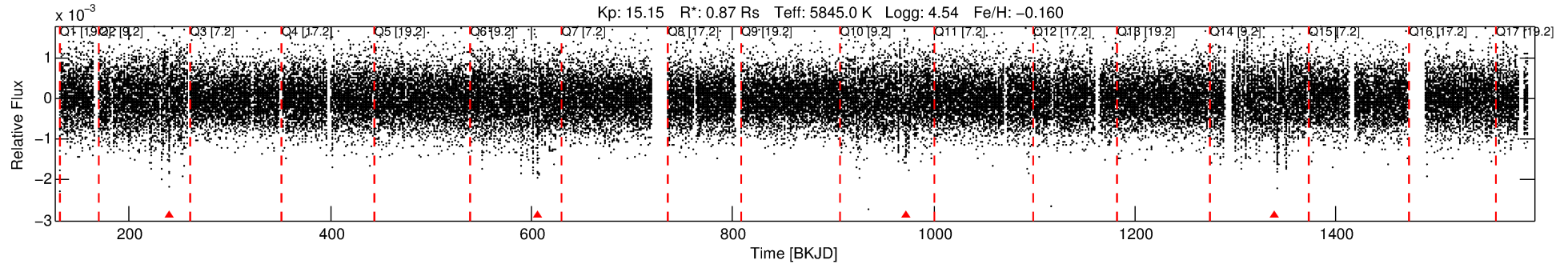
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 007693796-01

No Significant Match Found

DV One-Page Summary

KIC: 7693796 Candidate: 1 of 1 Period: 366.175 d



DV Fit Results:

Period = 366.17507 [0.01469] d
Epoch = 240.2376 [0.0282] BKJD
Rp/R* = 0.0325 [0.0029]
a/R* = 68.55 [16.13]
b = 0.92 [0.04]
Seff = 0.81 [0.33]
Teq = 242 [25] K
Rp = 3.10 [1.01] Re
a = 0.9912 [0.2631] AU
Ag = 15818.83 [9300.62] [1.70σ]
Teff = 4198 [485] K [8.15σ]

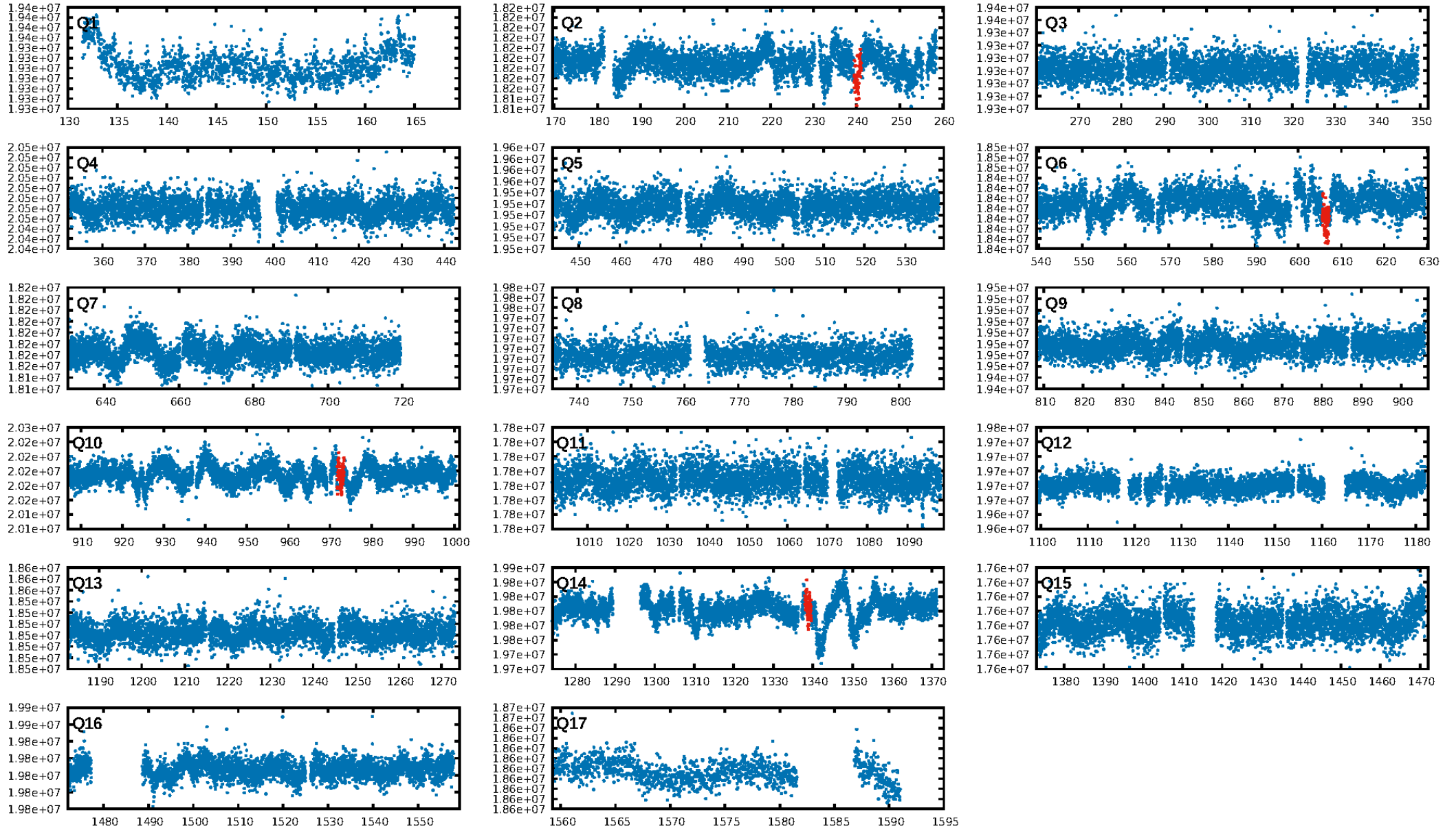
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: 96.2%
ModelChiSquareGof-sig: 99.0%
Bootstrap-pfa: 3.27e-10
RollingBand-fgt: 0.00 [0/4]
GhostDiagnostic-chr: 1.771
Centroid-sig: 0.0%
Centroid-so: 4.973 arcsec [3.77σ]
OotOffset-rm: 2.284 arcsec [0.70σ]
OotOffset-st: 2/0/0/0 [2]
KicOffset-rm: 1.995 arcsec [0.57σ]
KicOffset-st: 2/0/0/0 [2]
DiffImageQuality-fgm: 0.50 [1/2]
DiffImageOverlap-fno: 1.00 [3/3]

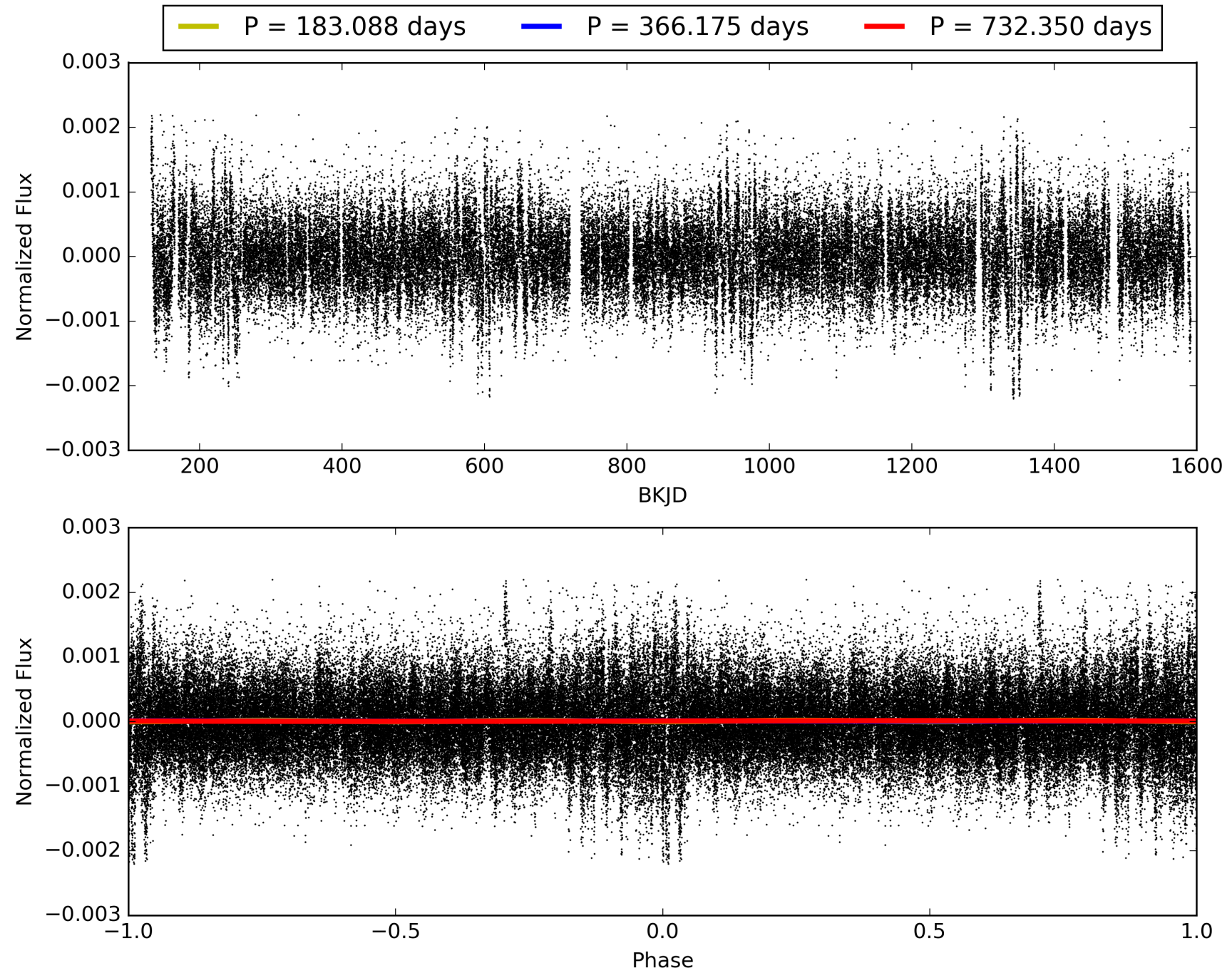
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 28-Jan-2016 23:52:42 Z

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

TCE 007693796-01, PDC Light Curves

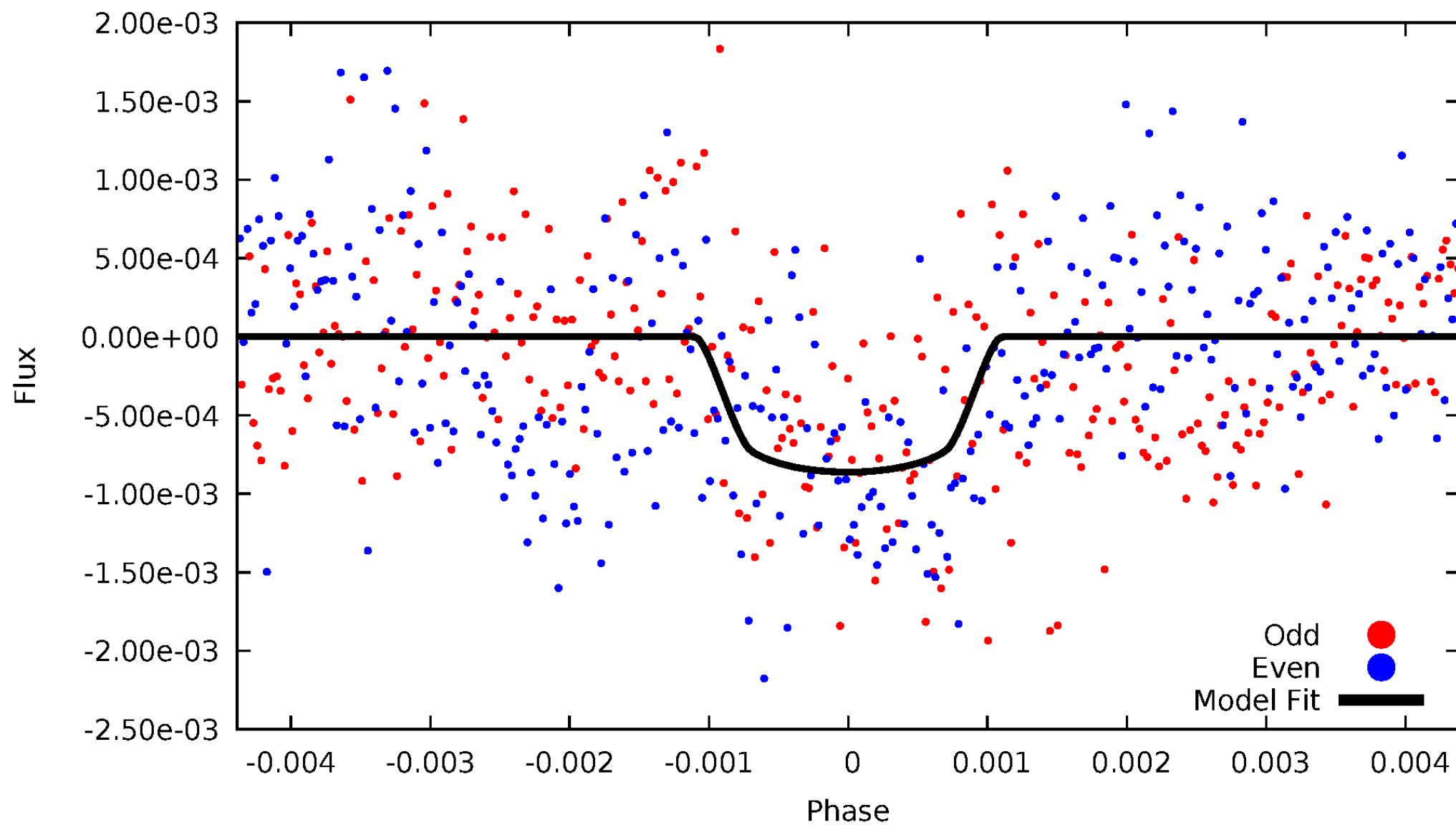


TCE 007693796-01



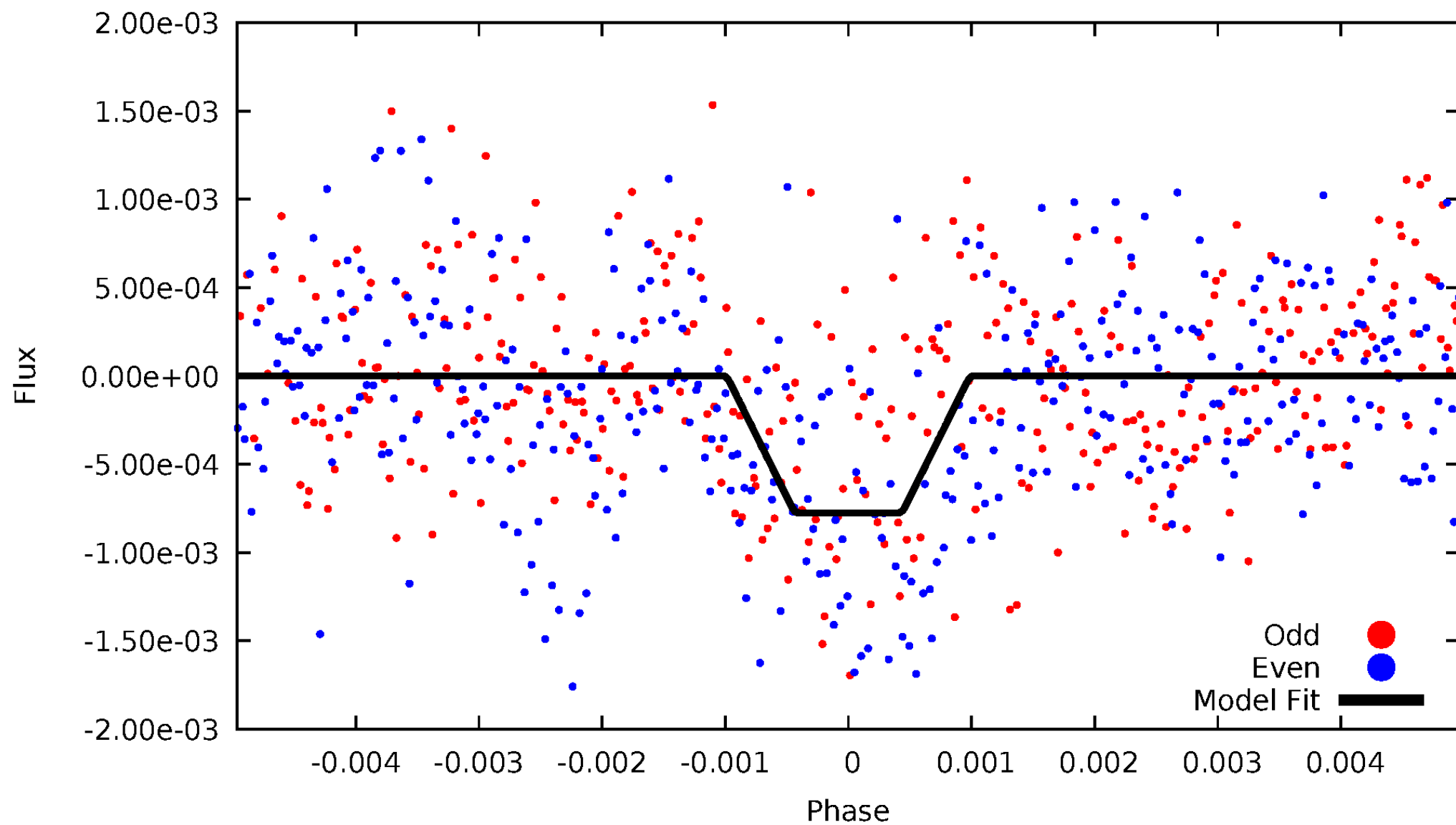
DV Odd/Even

TCE 007693796-01



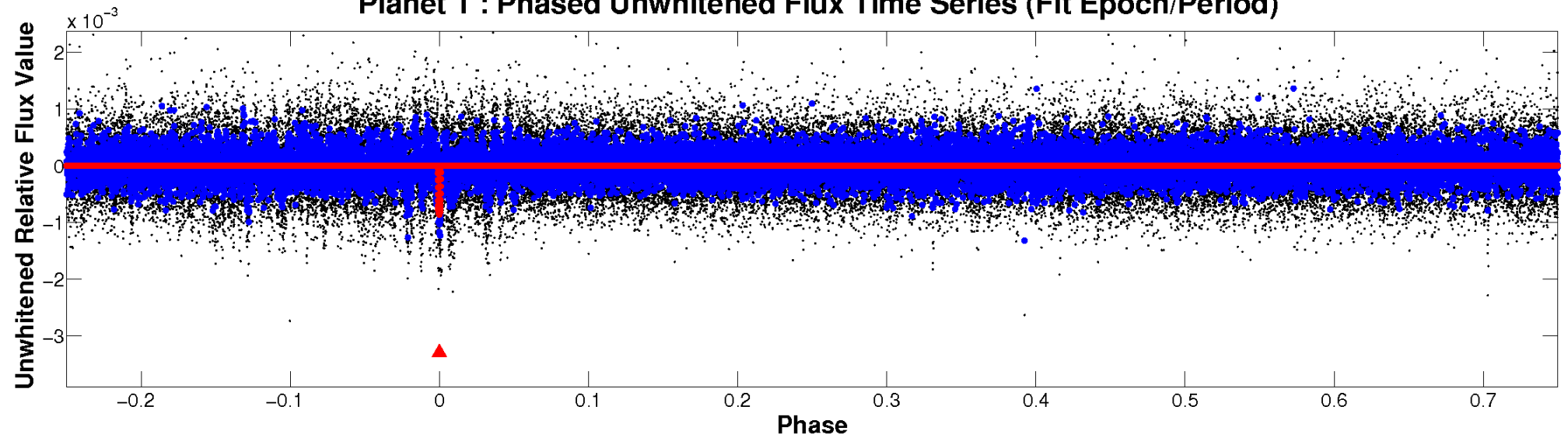
ALT Odd/Even

TCE 007693796-01

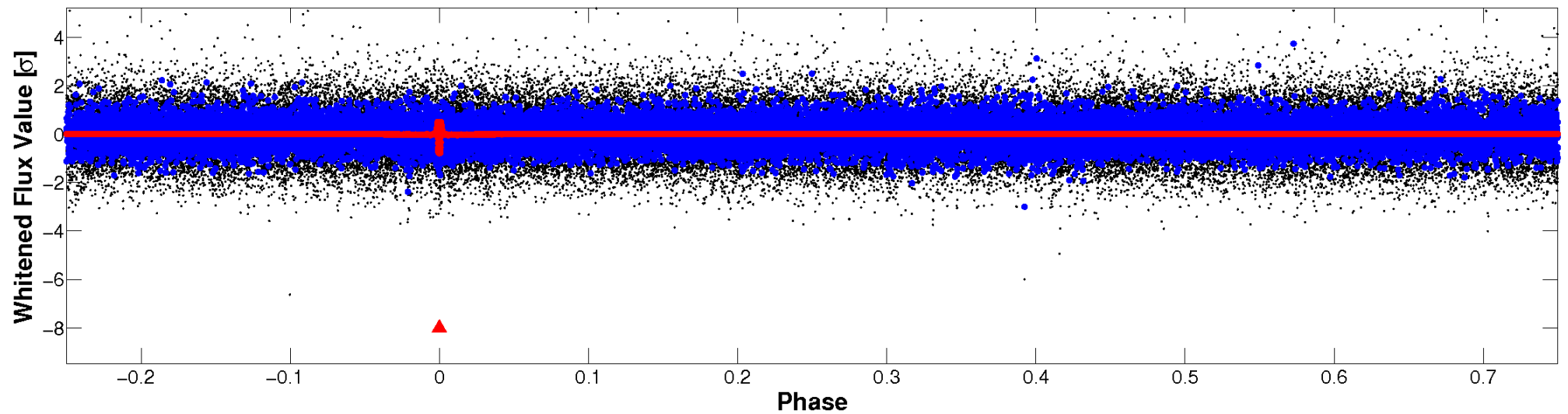


Non-Whitened Vs. Whitened Light Curve

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 007693796-01 $P=366.175075$ Days $T_0=240.237574$ (BKJD)



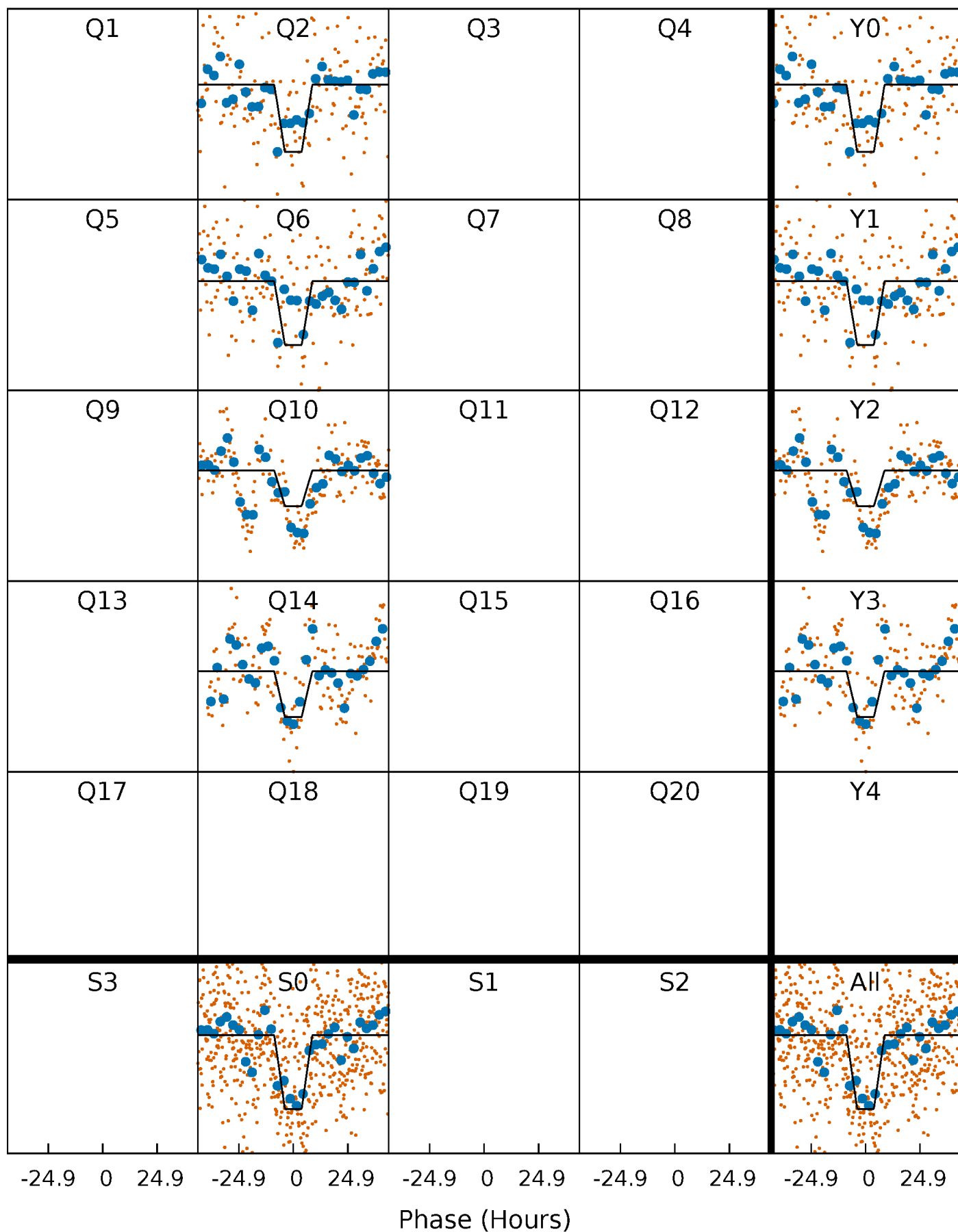
DV Quarter-Phased Transit Curves

TCE 007693796-01 P=366.175075 Days $T_0=240.237574$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

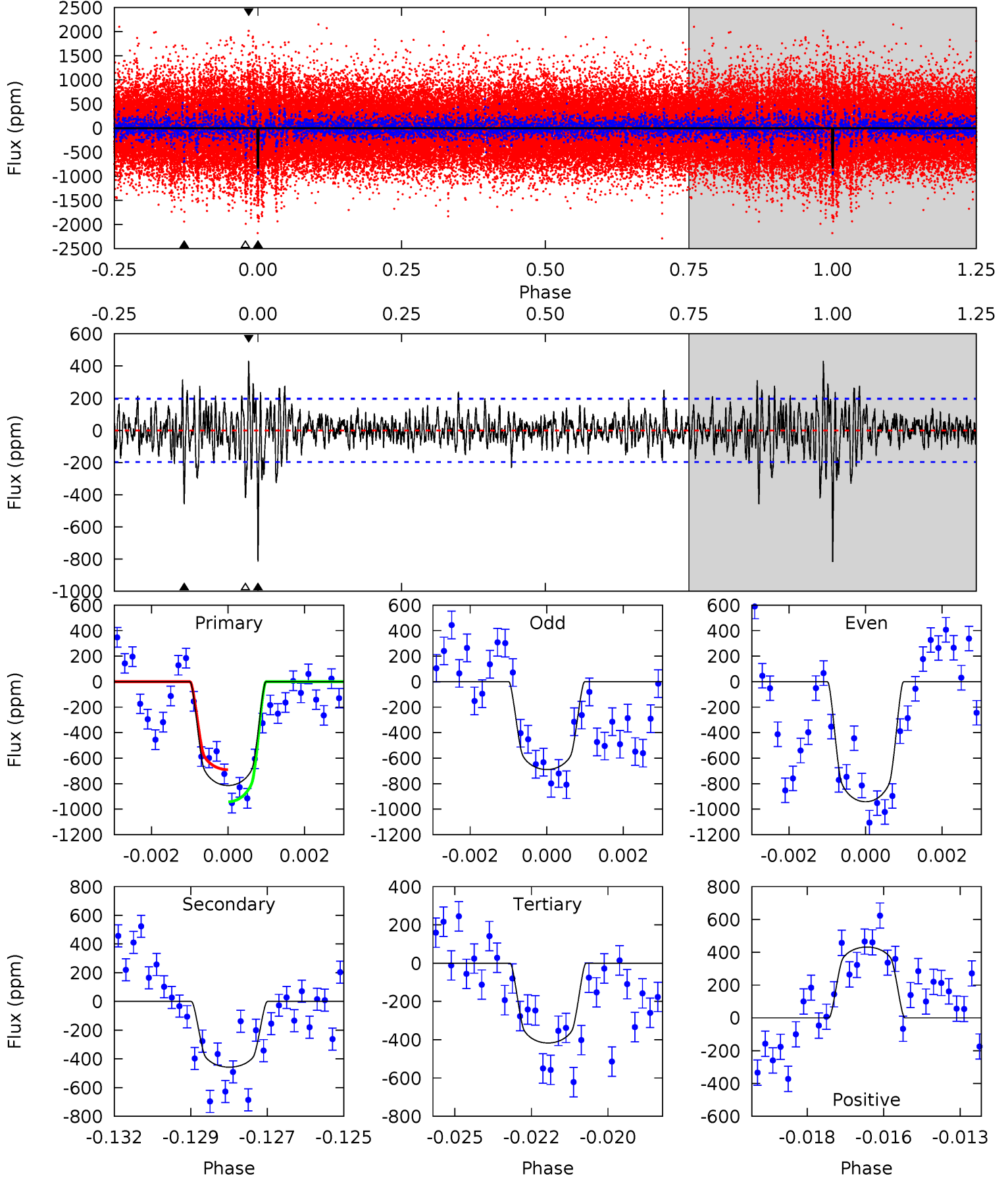
TCE 007693796-01 P=366.183018 Days $T_0=240.279493$ (BKJD)



DV Model-Shift Uniqueness Test

007693796-01, P = 366.175075 Days, E = 240.237574 Days

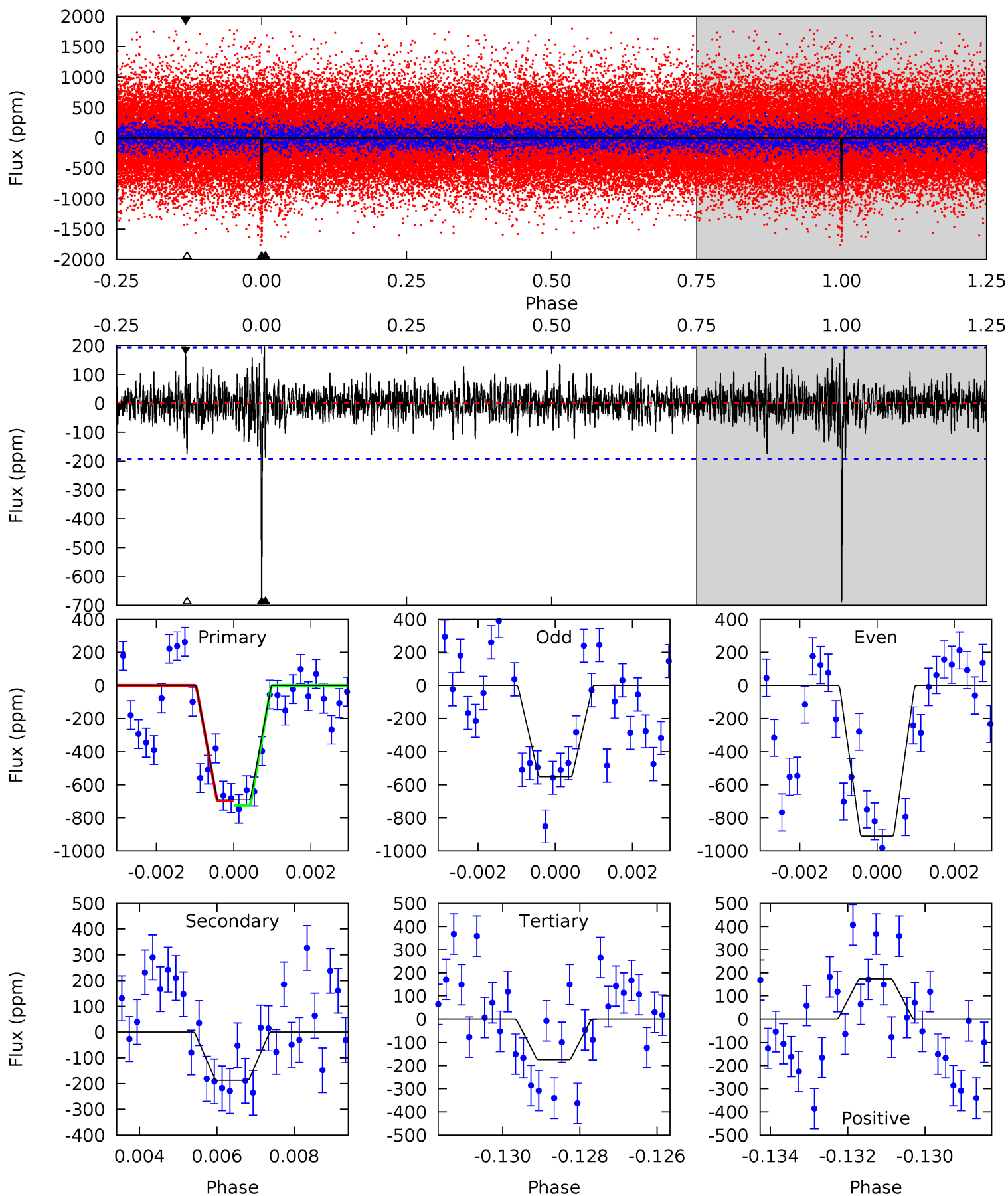
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
22.0	12.3	11.3	11.7	5.31	3.06	2.34	10.7	10.3	1.09	0.70	3.42	0.93	0.35	3.40



Alt Model-Shift Uniqueness Test

007693796-01, P = 366.183018 Days, E = 240.279493 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
19.0	5.15	4.79	4.78	5.32	3.09	1.12	14.2	14.2	0.35	0.36	4.91	1.15	0.22	0.38



Stellar Parameters For KIC 007693796

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	5845^{+158}_{-194}	$4.541^{+0.038}_{-0.212}$	$-0.160^{+0.300}_{-0.300}$	$0.874^{+0.275}_{-0.092}$	$0.968^{+0.108}_{-0.120}$	$2.042^{+0.420}_{-1.073}$
	+3%/-3%	+1%/-5%	+188%/-188%	+31%/-11%	+11%/-12%	+21%/-53%
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 007693796-01 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	A_{obs}
DV	-458 ± 37	$3.23^{+0.63}_{-0.41}$	347^{+24}_{-17}	4845^{+265}_{-216}	22970^{+6863}_{-5962}
Alt.	-187 ± 36	$2.79^{+0.48}_{-0.38}$	346^{+28}_{-18}	4314^{+249}_{-247}	12262^{+5629}_{-3638}

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 $A_{\text{obs}} \gg 1.0$

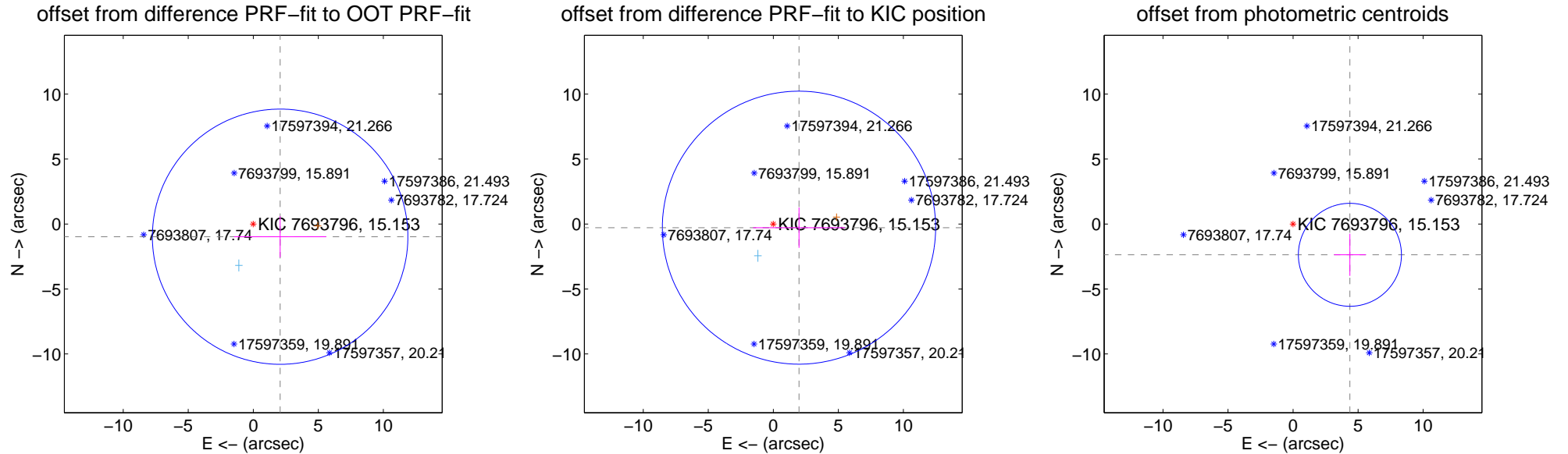
DV Centroid Data

Supplemental centroid analysis for 007693796-01. Kepler magnitude: 15.15. Transit SNR 8.66

There are 1 quarters with good PRF difference image offsets

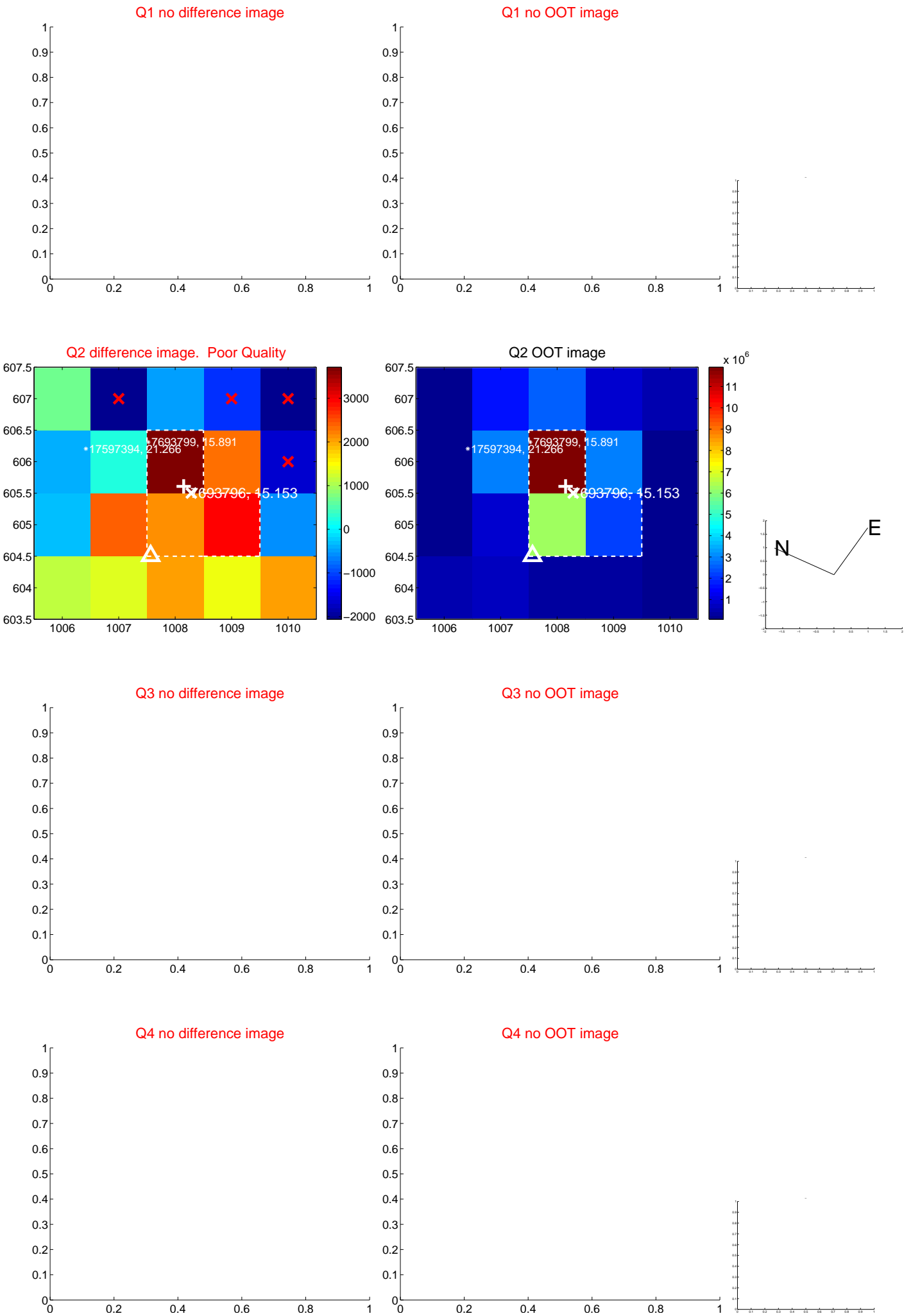
The direct PRF centroid is offset from the target star catalog position by about 0.74 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	2.284 ± 3.275	0.70	-2.064 ± 3.544	-0.977 ± 1.584
PRF-fit source offset from KIC position	1.995 ± 3.502	0.57	-1.975 ± 3.531	-0.282 ± 1.551
photometric centroid source offset	4.97 ± 1.32	3.77	-4.37 ± 1.22	-2.37 ± 1.62

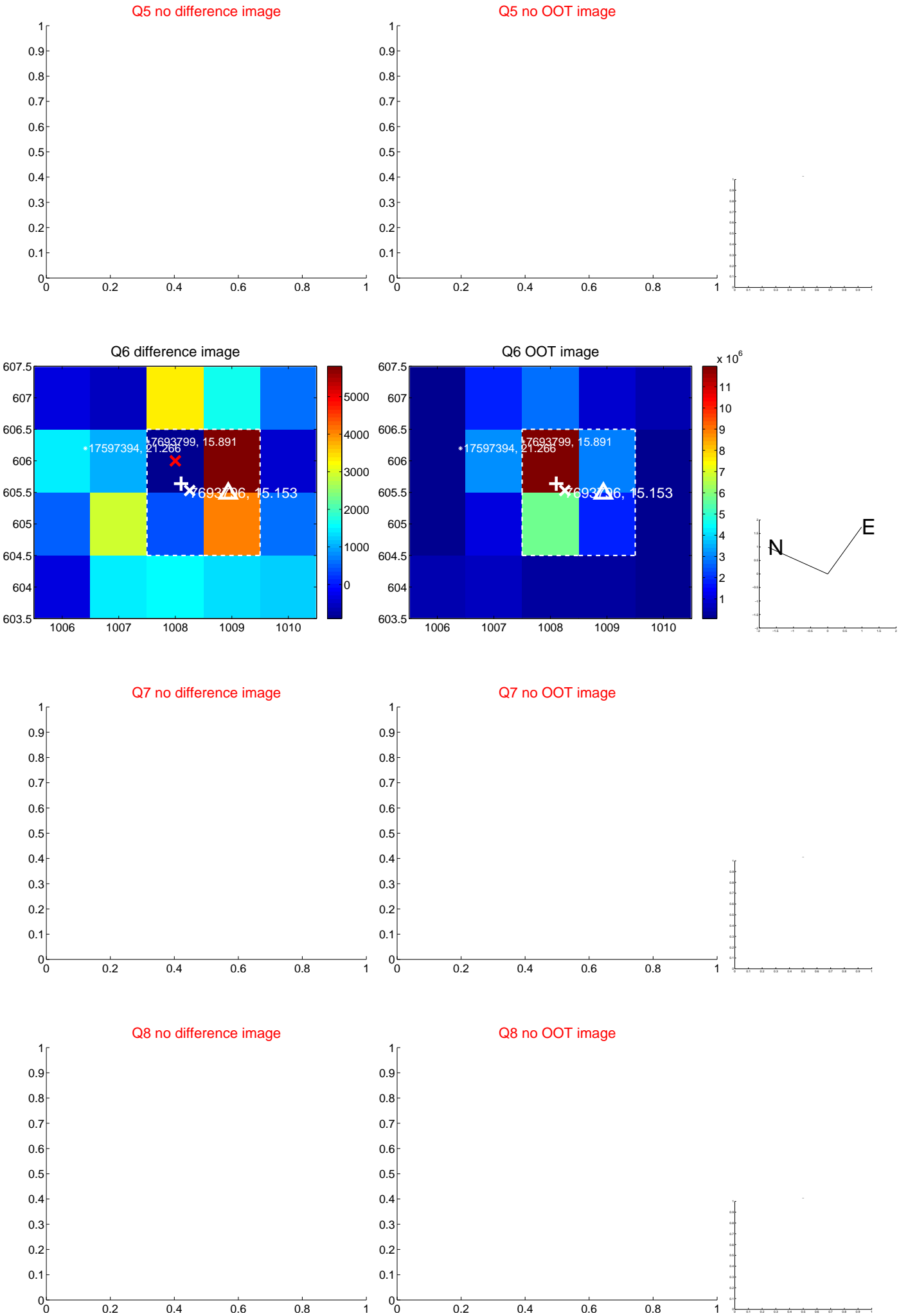


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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

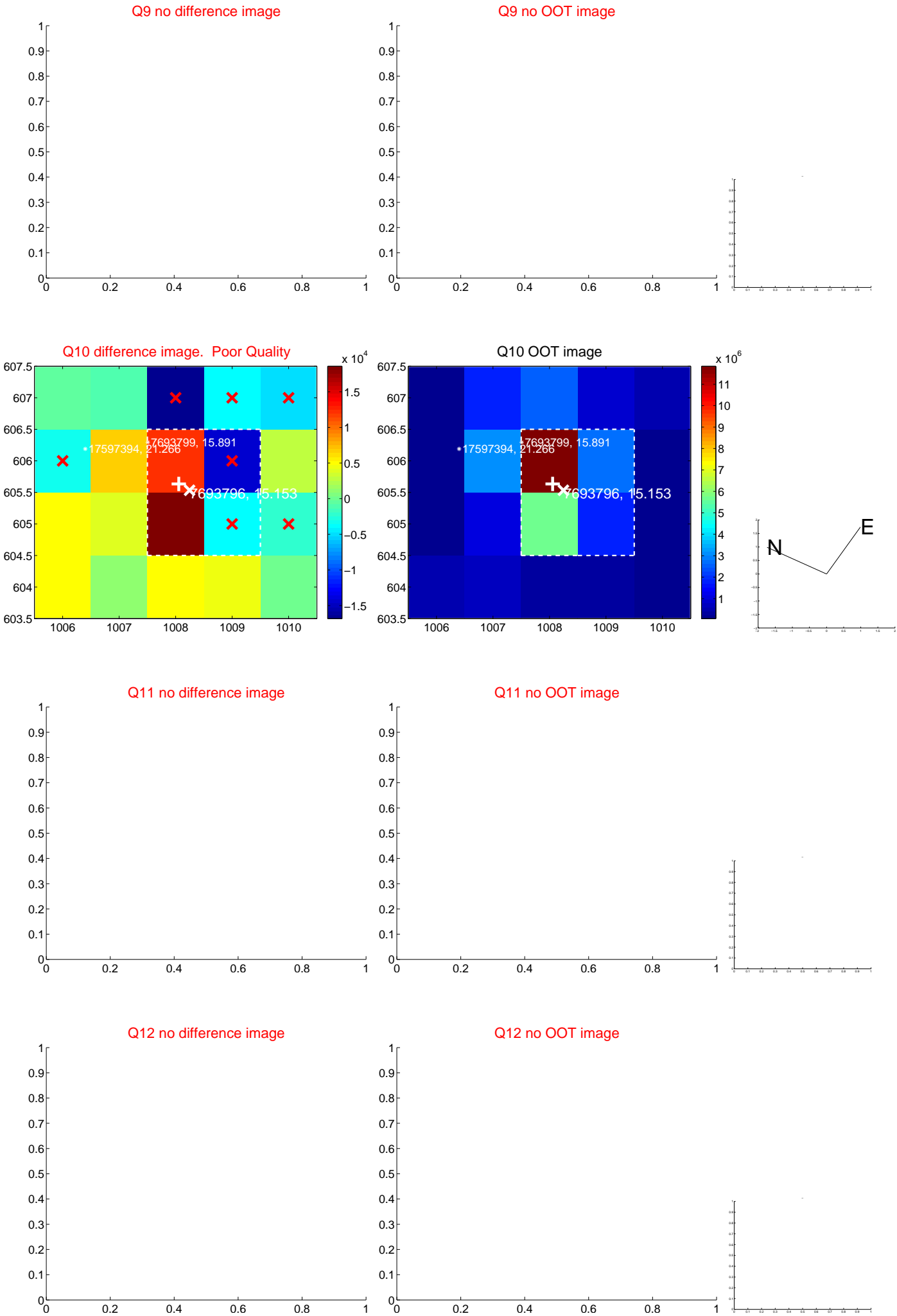
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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



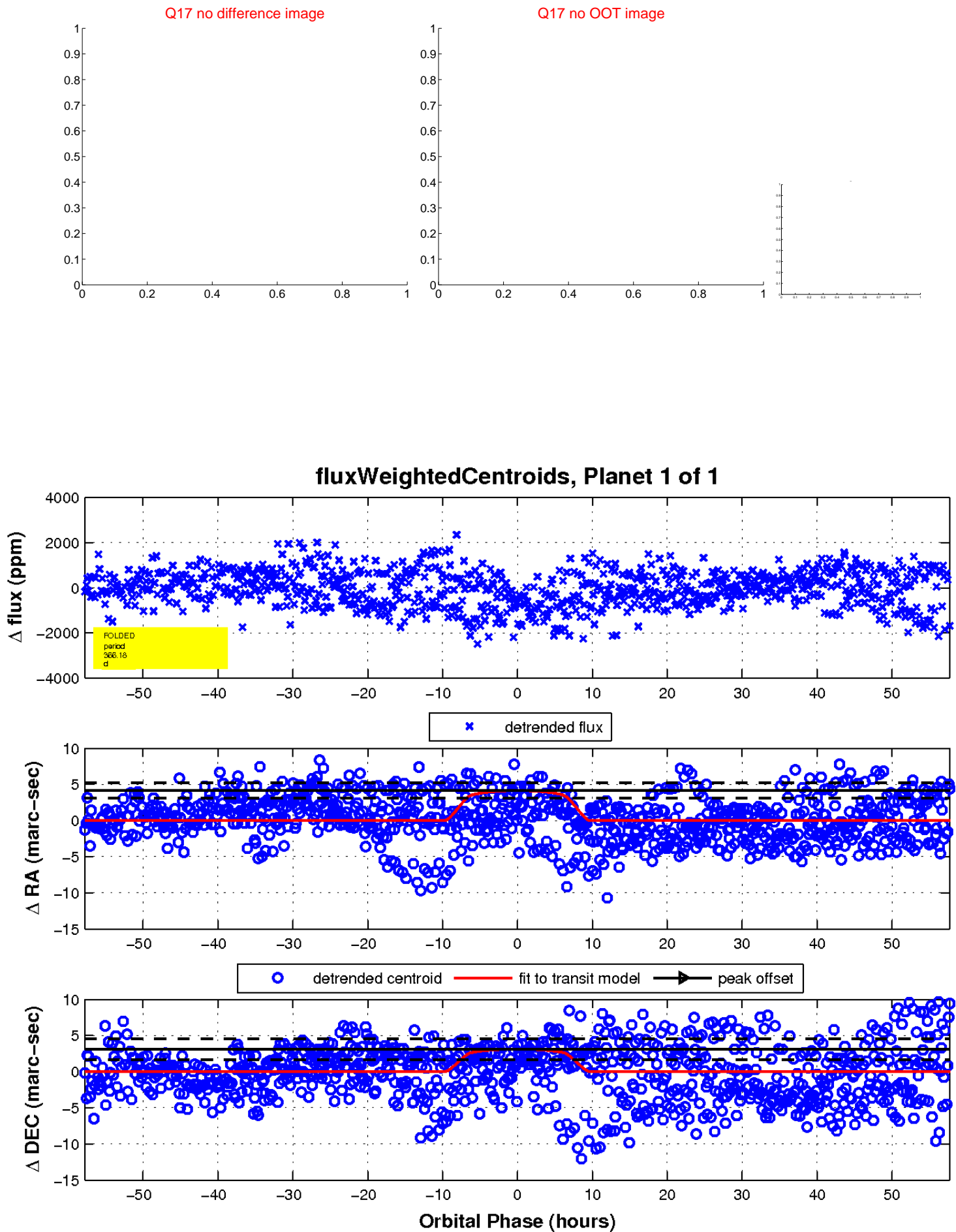
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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



UKIRT Image

Declination

