

KIC 003248696

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})
003248696-01	OBS	7651.01	383.430499	483.256695	1237.4	12.510	7.9	8.3	0.73	5576	3.00	0.50

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
003248696-01	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_SKYE—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.

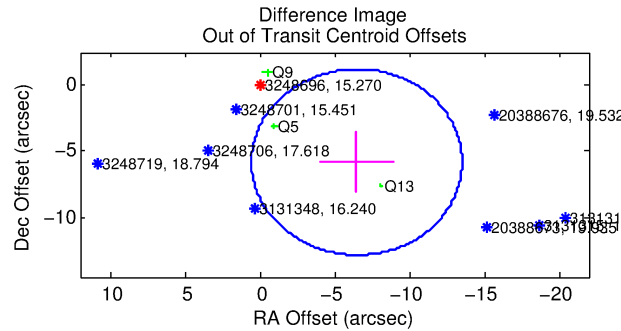
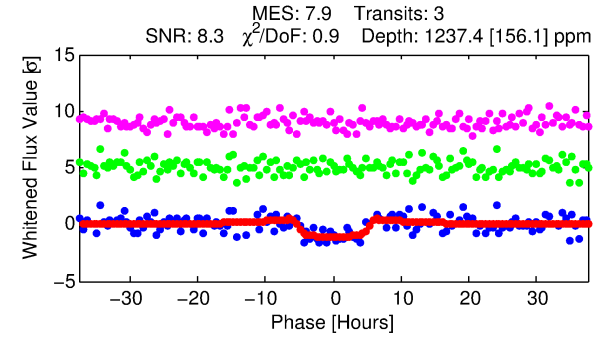
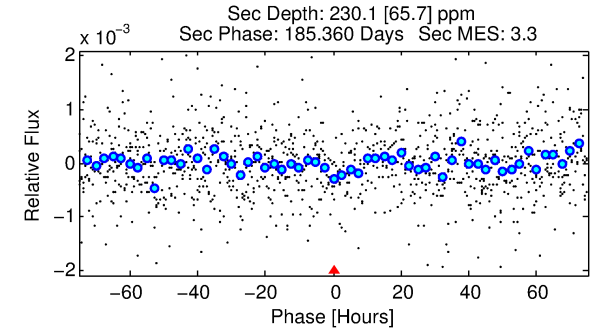
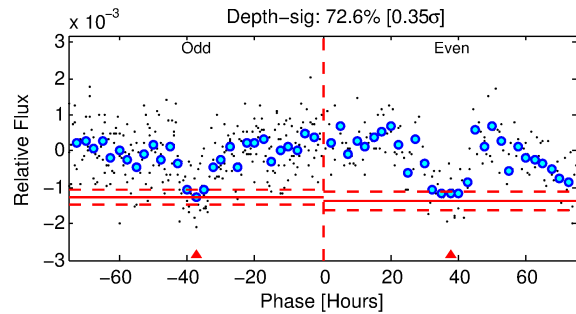
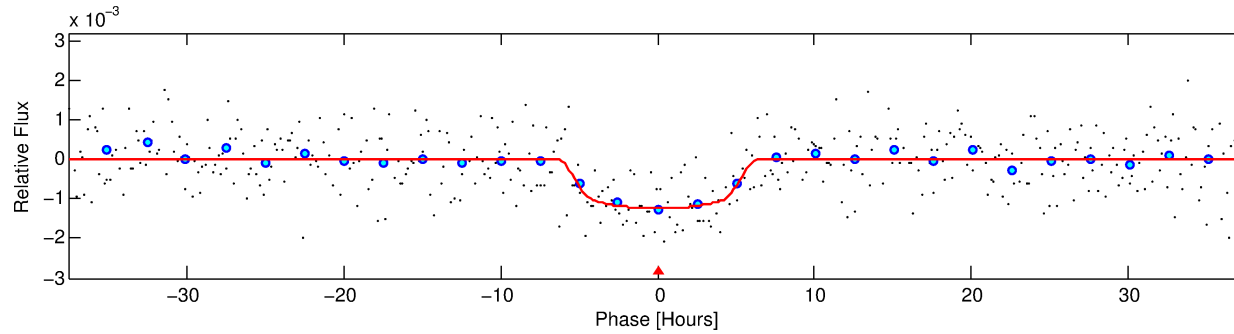
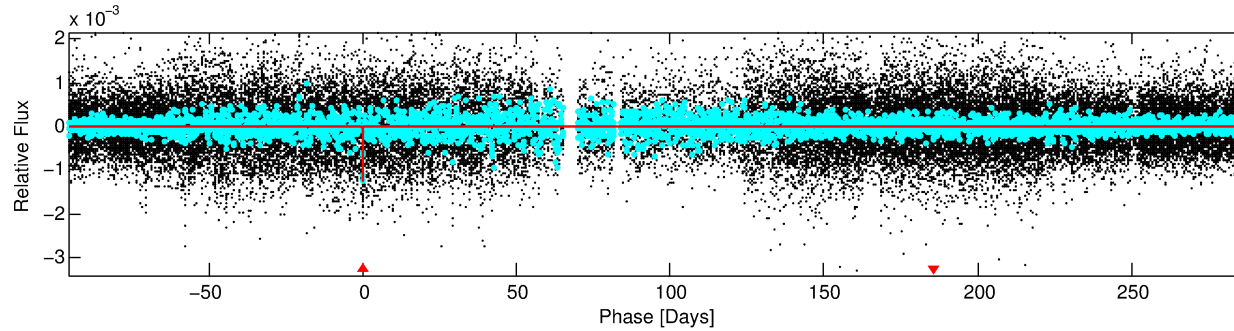
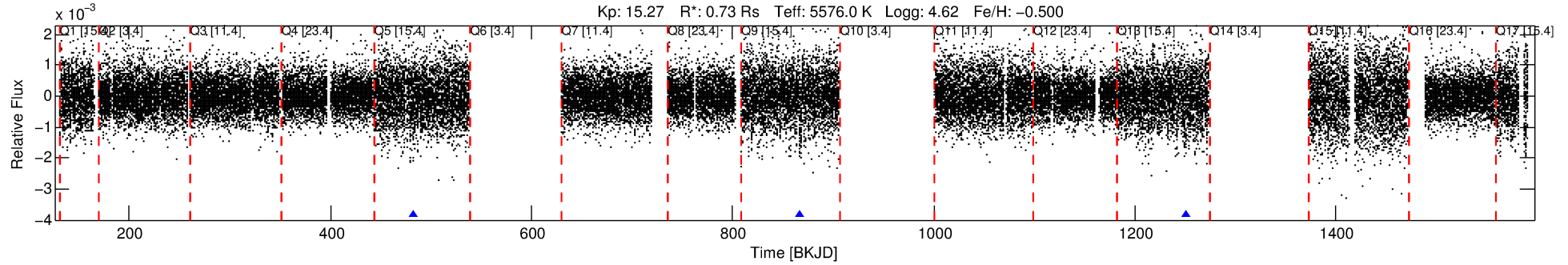
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 003248696-01

No Significant Match Found

DV One-Page Summary

KIC: 3248696 Candidate: 1 of 1 Period: 383.430 d



DV Fit Results:

Period = 383.43050 [0.01492] d
Epoch = 483.2567 [0.0191] BKJD
Rp/R* = 0.0378 [0.0040]
a/R* = 126.79 [44.53]
b = 0.89 [0.09]
Seff = 0.50 [0.13]
Teq = 215 [14] K
Rp = 3.00 [0.68] Re
a = 0.9586 [0.1596] AU
Ag = 12885.99 [5514.72] [2.34 σ]
Teff = 3534 [331] K [10.01 σ]

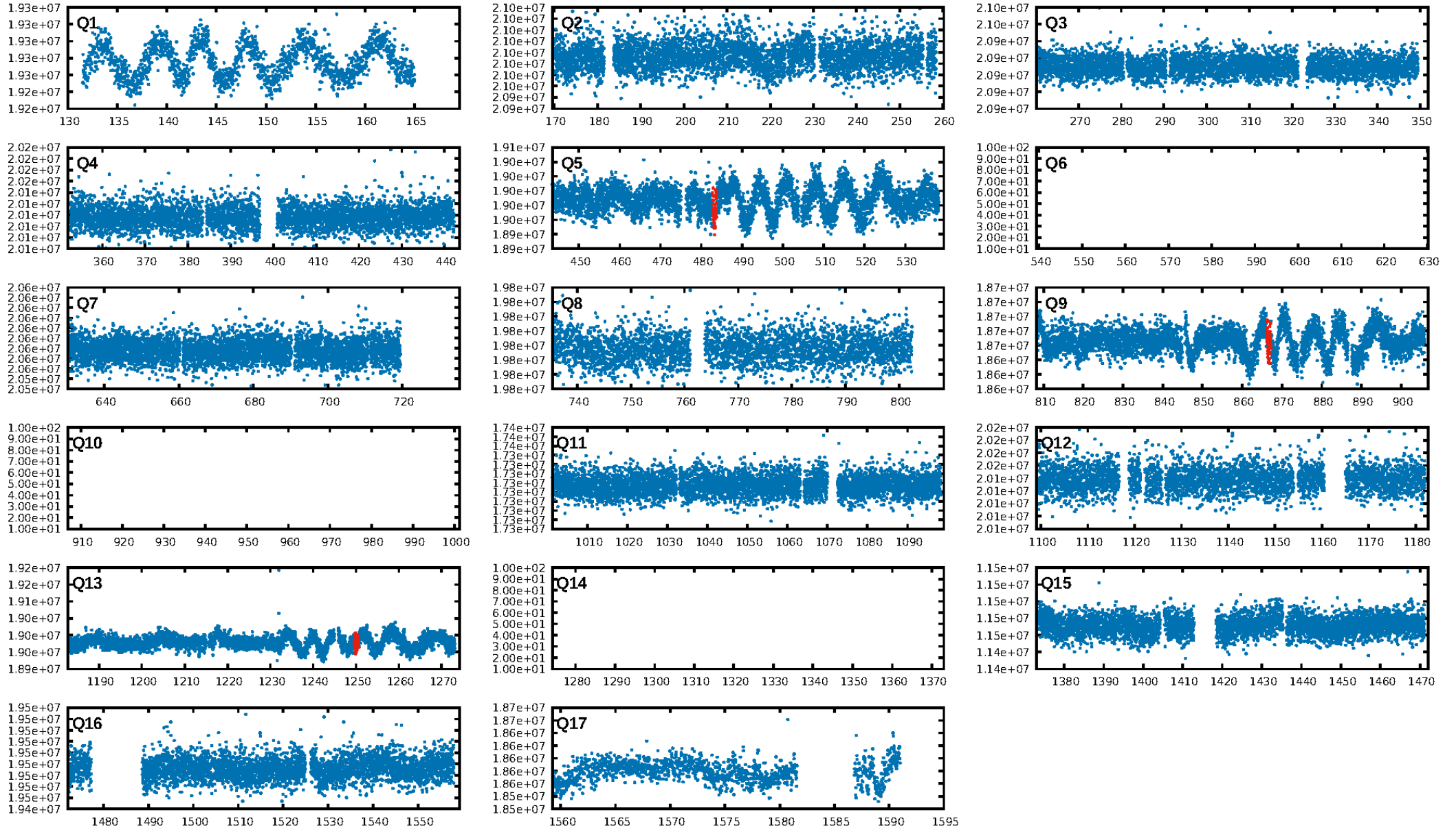
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: 87.4%
ModelChiSquareGof-sig: 100.0%
Bootstrap-pfa: 2.80e-14
RollingBand-fgt: 1.00 [3/3]
GhostDiagnostic-chr: -2.357
Centroid-sig: 2.8%
Centroid-so: 3.608 arcsec [2.42 σ]
OotOffset-rm: 8.709 arcsec [3.72 σ]
KicOffset-rm: 8.045 arcsec [2.84 σ]
OotOffset-st: 0/0/0/3 [3]
KicOffset-st: 0/0/0/3 [3]
DiffImageQuality-fgm: 0.00 [0/3]
DiffImageOverlap-fno: 1.00 [3/3]

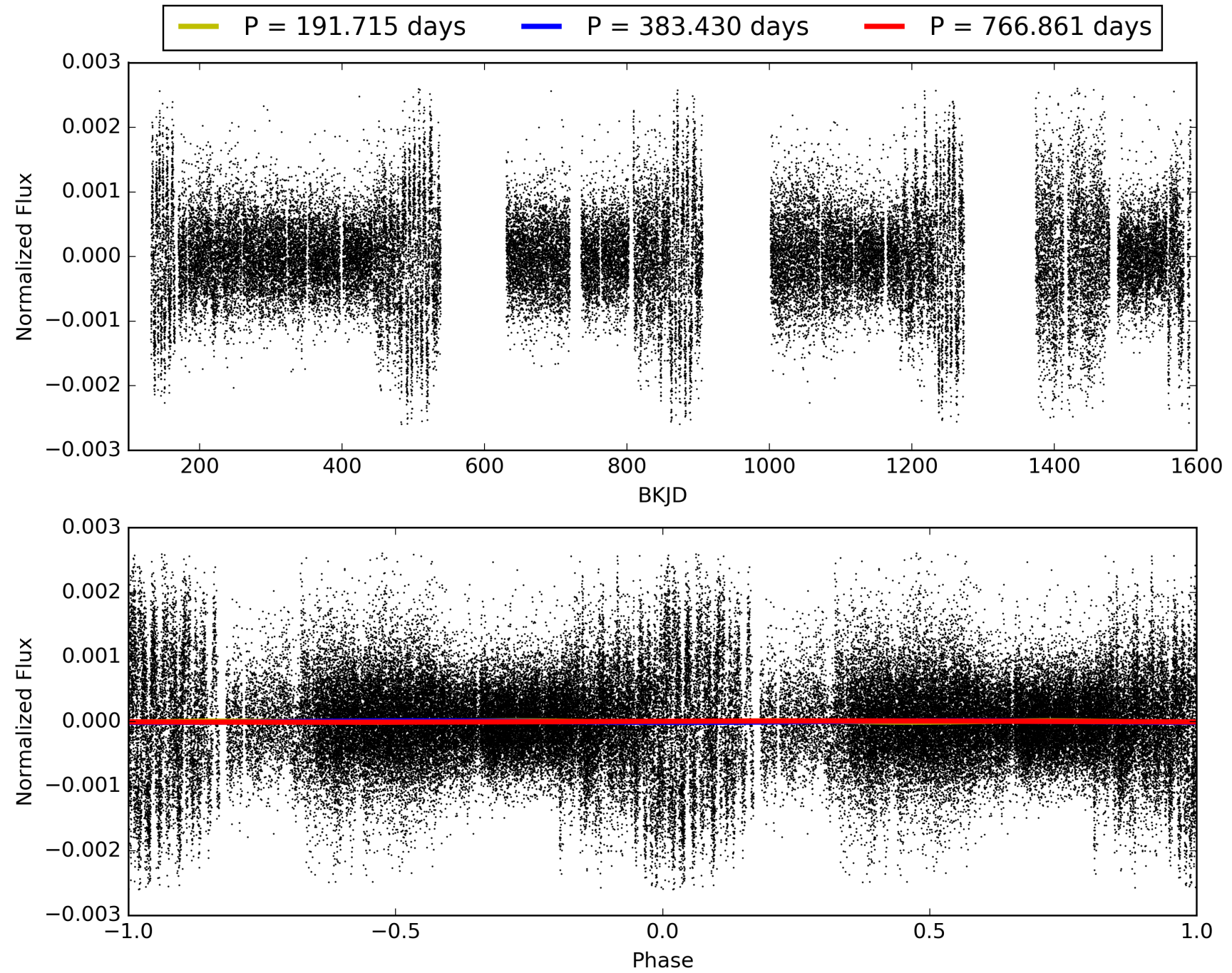
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 30-Jan-2016 11:48:28 Z

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

TCE 003248696-01, PDC Light Curves

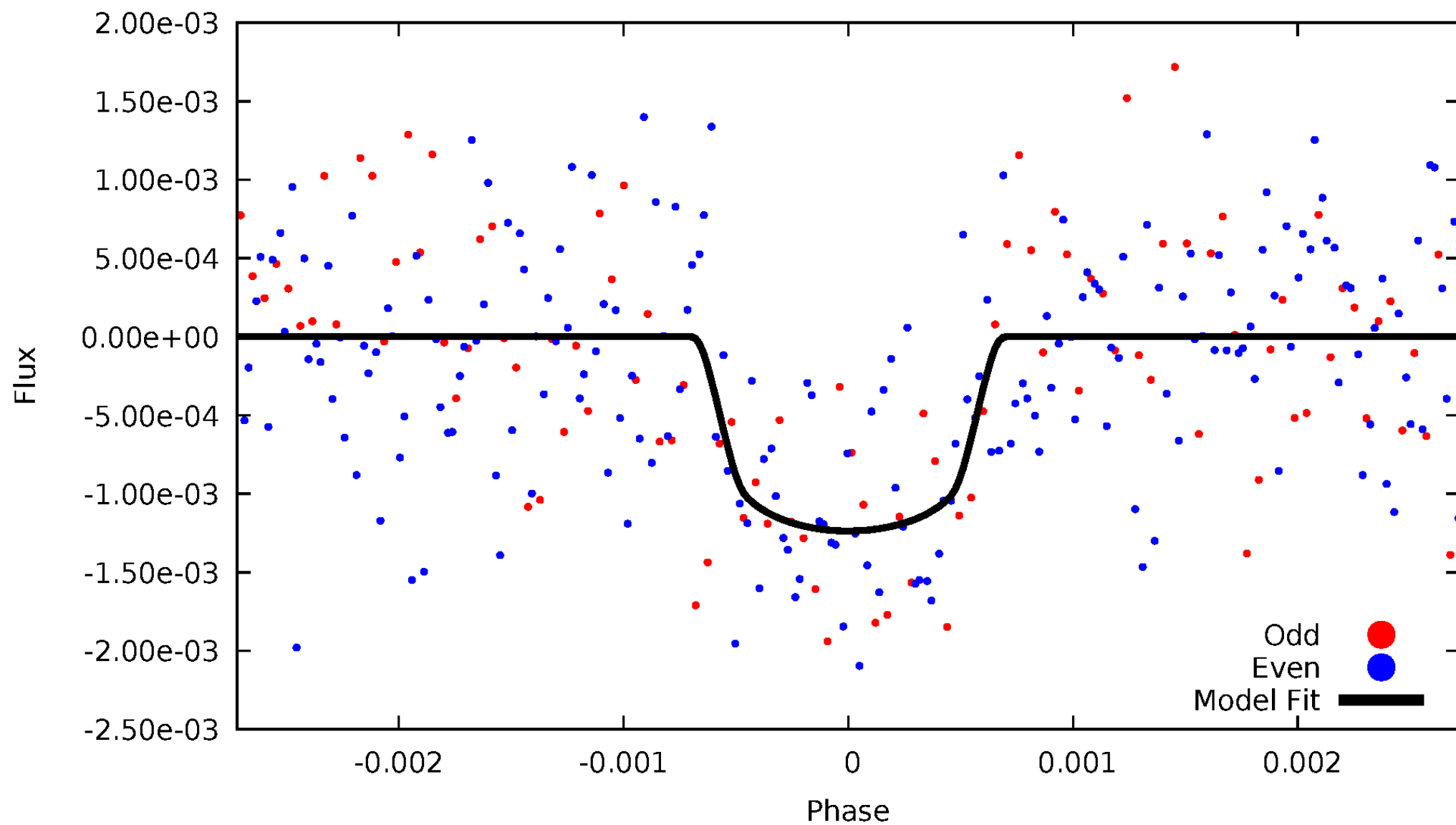


TCE 003248696-01



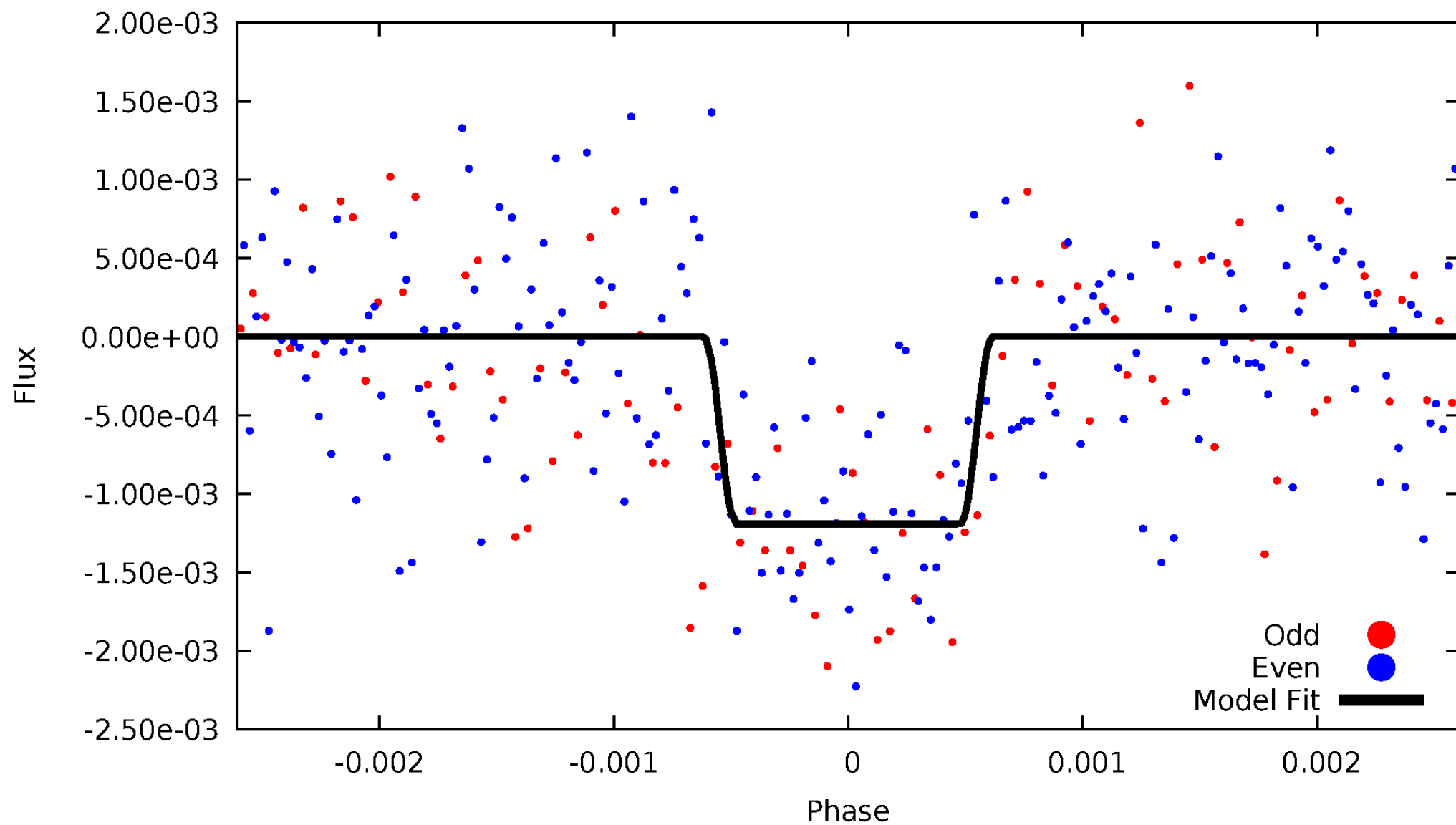
DV Odd/Even

TCE 003248696-01



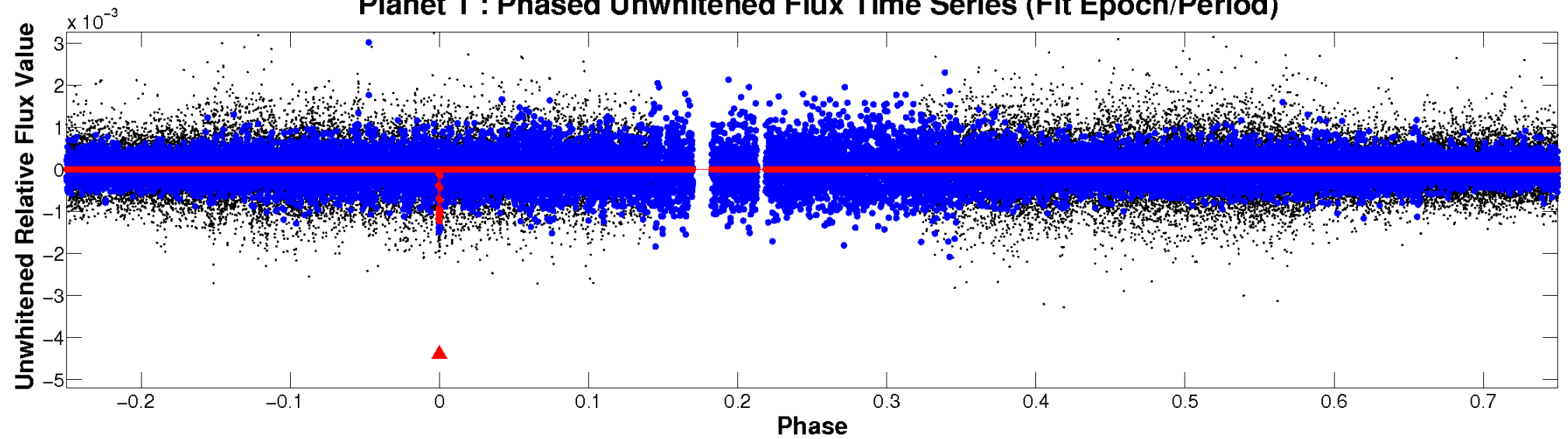
ALT Odd/Even

TCE 003248696-01

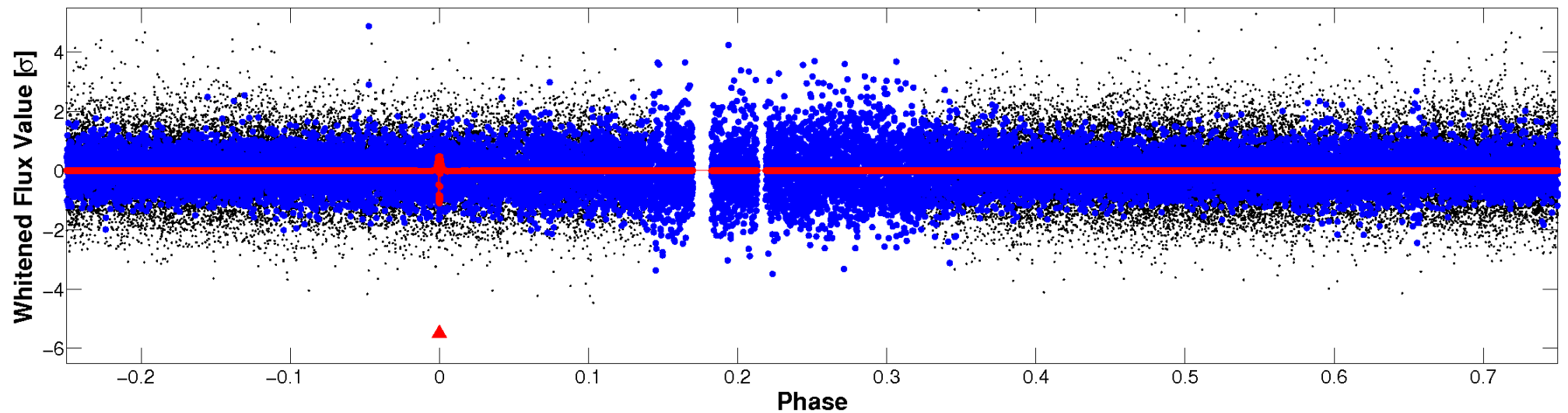


Non-Whitened Vs. Whitened Light Curve

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 003248696-01 P=383.430498 Days $T_0=483.256694$ (BKJD)



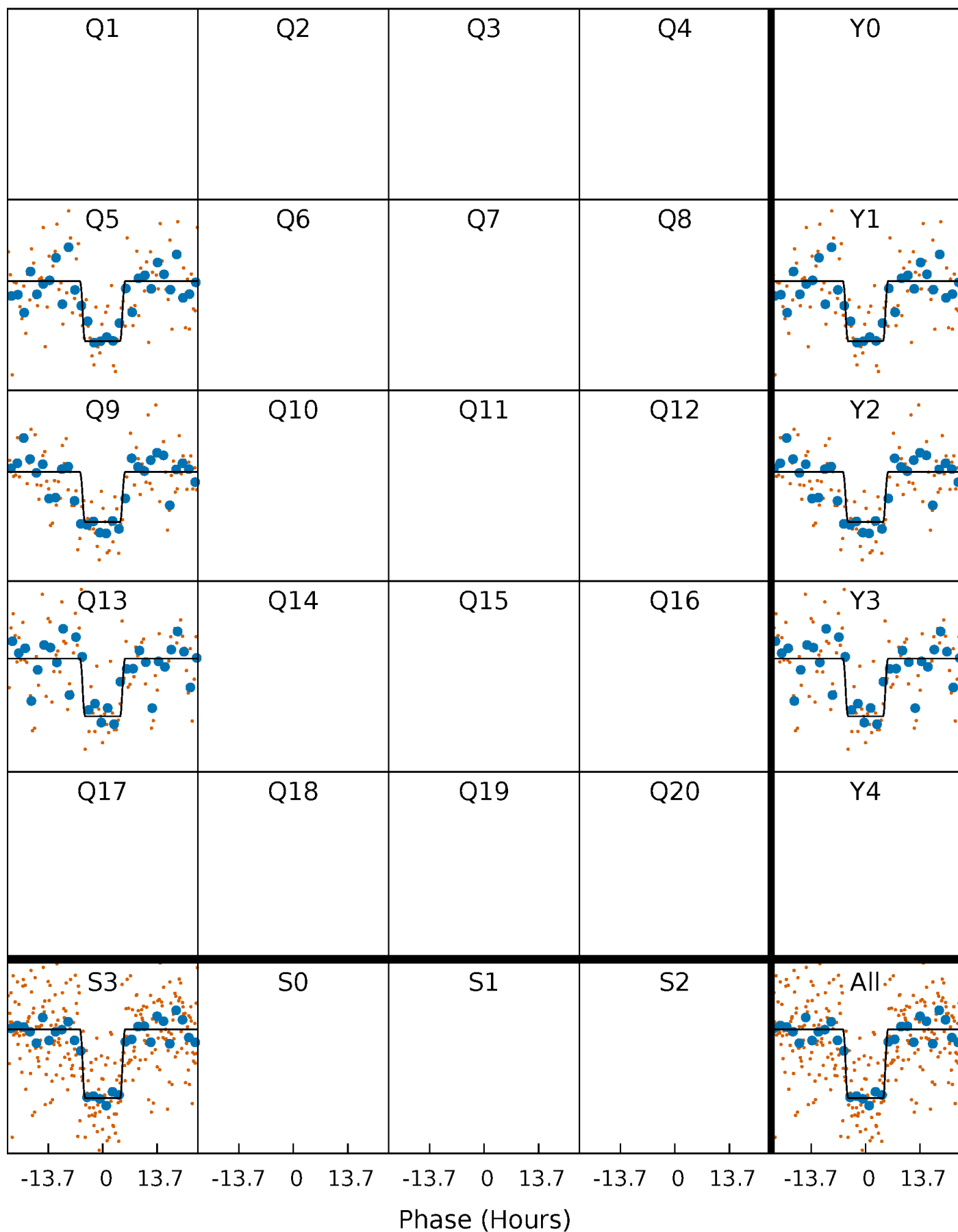
DV Quarter-Phased Transit Curves

TCE 003248696-01 $P=383.430498$ Days $T_0=483.256694$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

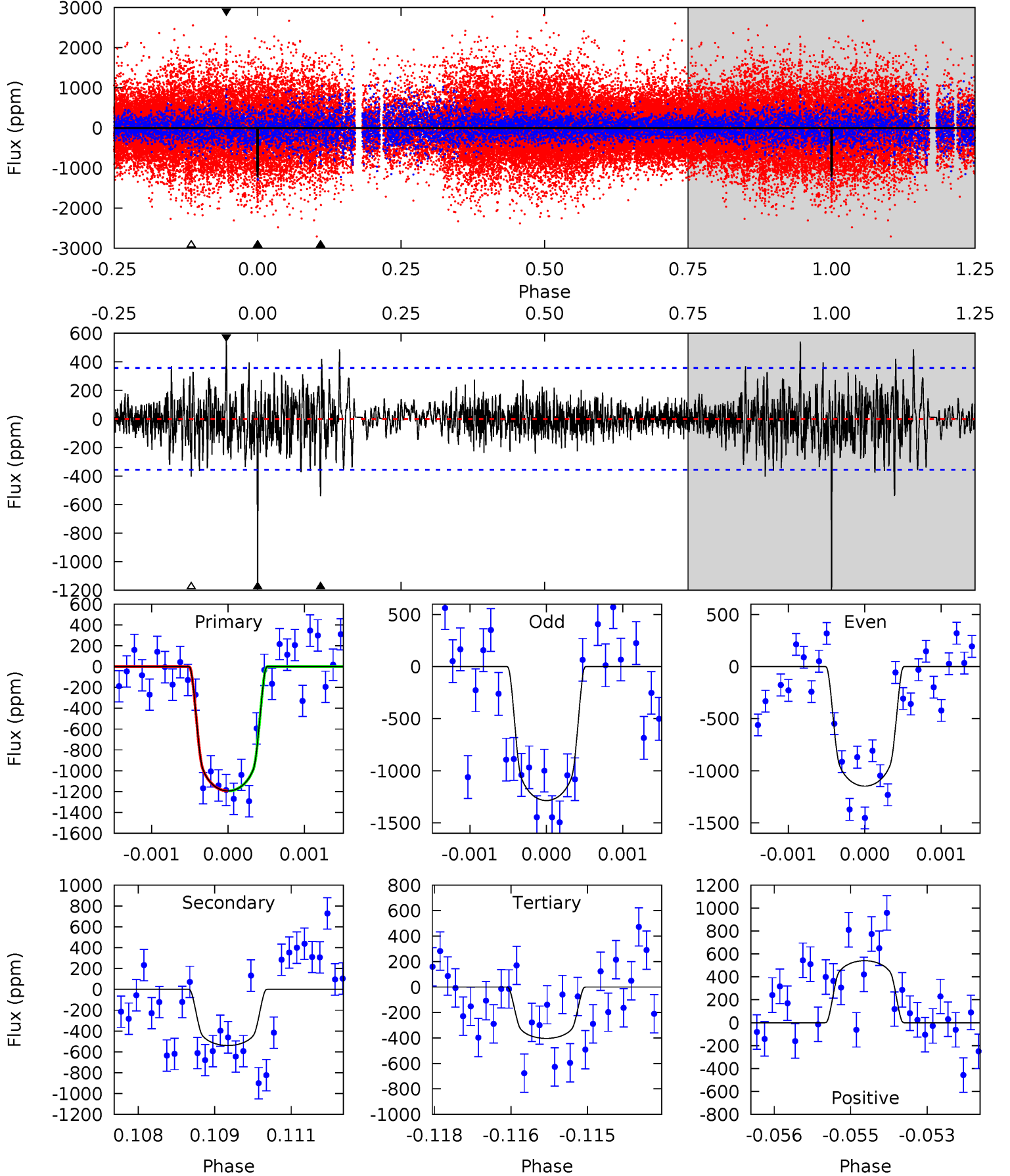
TCE 003248696-01 P=383.422131 Days $T_0=483.263528$ (BKJD)



DV Model-Shift Uniqueness Test

003248696-01, P = 383.430498 Days, E = 99.826196 Days

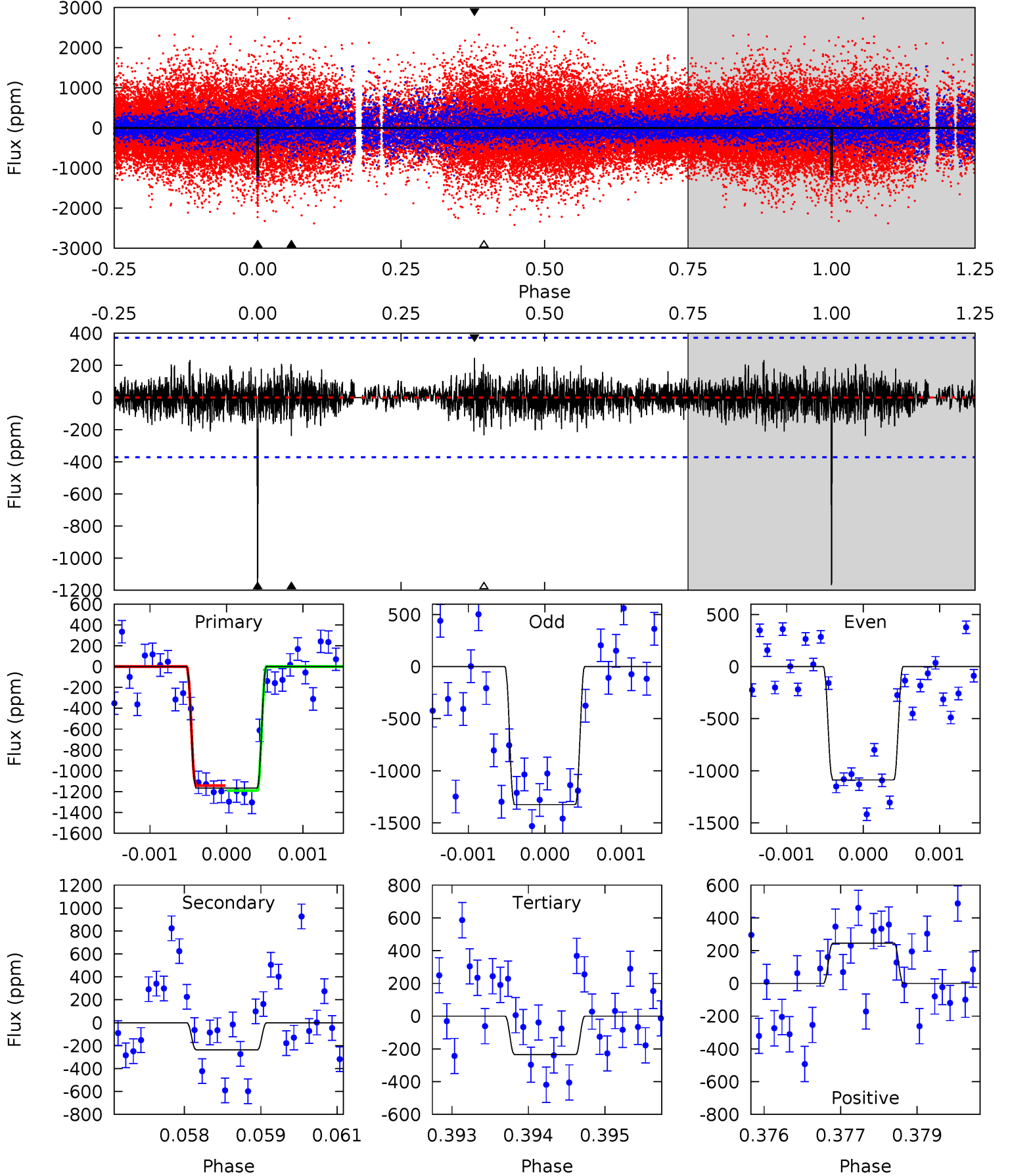
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
18.1	8.16	6.10	8.18	5.40	3.20	1.56	12.0	9.88	2.06	-0.02	0.99	0.95	0.31	0.00



Alt Model-Shift Uniqueness Test

003248696-01, $P = 383.422131$ Days, $E = 99.841397$ Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
17.0	3.46	3.42	3.58	5.42	3.24	0.91	13.6	13.4	0.04	-0.12	1.64	1.07	0.17	0.36



Stellar Parameters For KIC 003248696

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	M (M_{\odot})	p_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	5576^{+166}_{-166}	$4.615^{+0.032}_{-0.128}$	$-0.500^{+0.300}_{-0.300}$	$0.729^{+0.147}_{-0.053}$	$0.823^{+0.077}_{-0.095}$	$2.996^{+0.501}_{-1.168}$
	+3%/-3%	+1%/-3%	+60%/-60%	+20%/-7%	+9%/-12%	+17%/-39%
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 003248696-01 / KOI 7651.01

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	-539 ± 66	$3.11^{+0.45}_{-0.36}$	305^{+15}_{-12}	4543^{+263}_{-247}	28207^{+8844}_{-7287}
Alt.	-238 ± 69	$2.86^{+0.43}_{-0.39}$	306^{+14}_{-13}	4016^{+308}_{-274}	14619^{+6527}_{-5339}

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 $A_{obs} \gg 1.0$

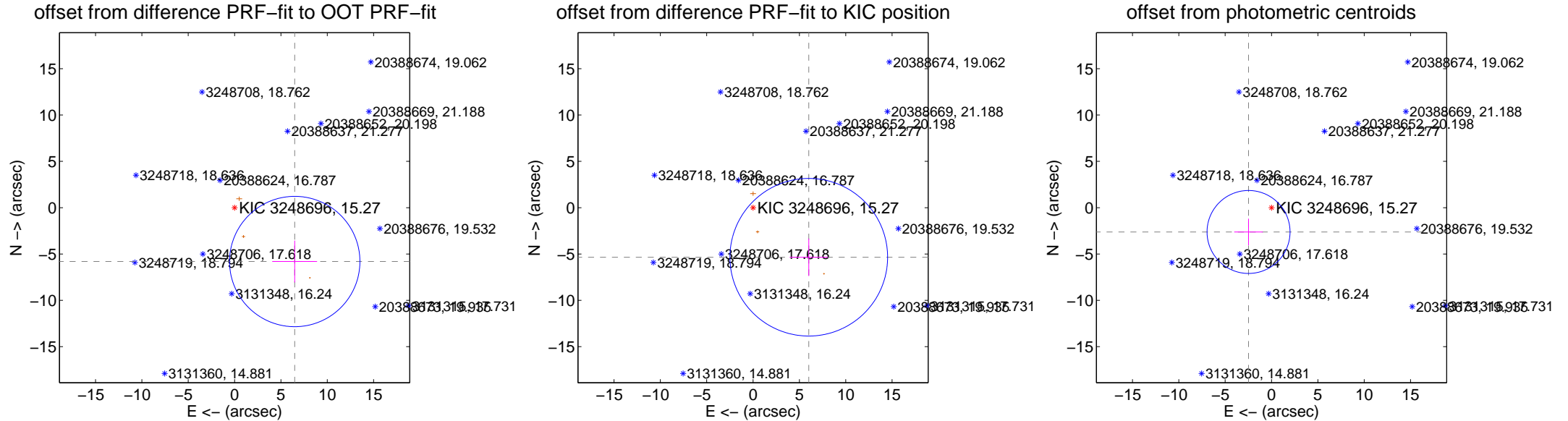
DV Centroid Data

Supplemental centroid analysis for 003248696-01. Kepler magnitude: 15.27. Transit SNR 8.26

There are 0 quarters with good PRF difference image offsets

The direct PRF centroid is offset from the target star catalog position by about 0.65 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	8.709 \pm 2.344	3.72	-6.488 \pm 2.414	-5.810 \pm 2.254
PRF-fit source offset from KIC position	8.045 \pm 2.835	2.84	-6.011 \pm 2.062	-5.347 \pm 2.019
photometric centroid source offset	3.61 \pm 1.49	2.42	2.48 \pm 1.55	-2.62 \pm 1.44

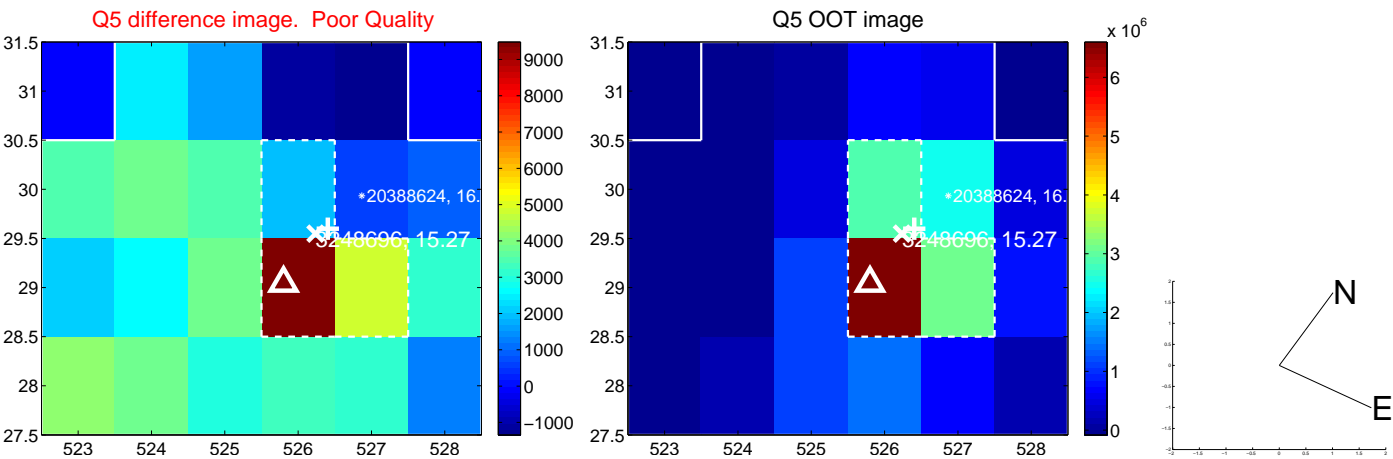


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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

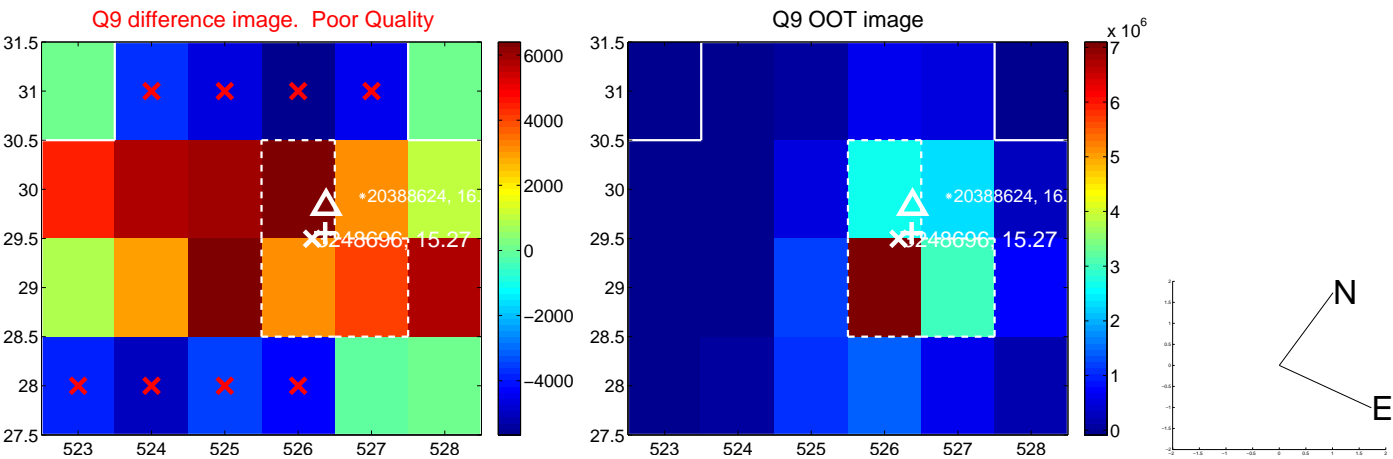
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



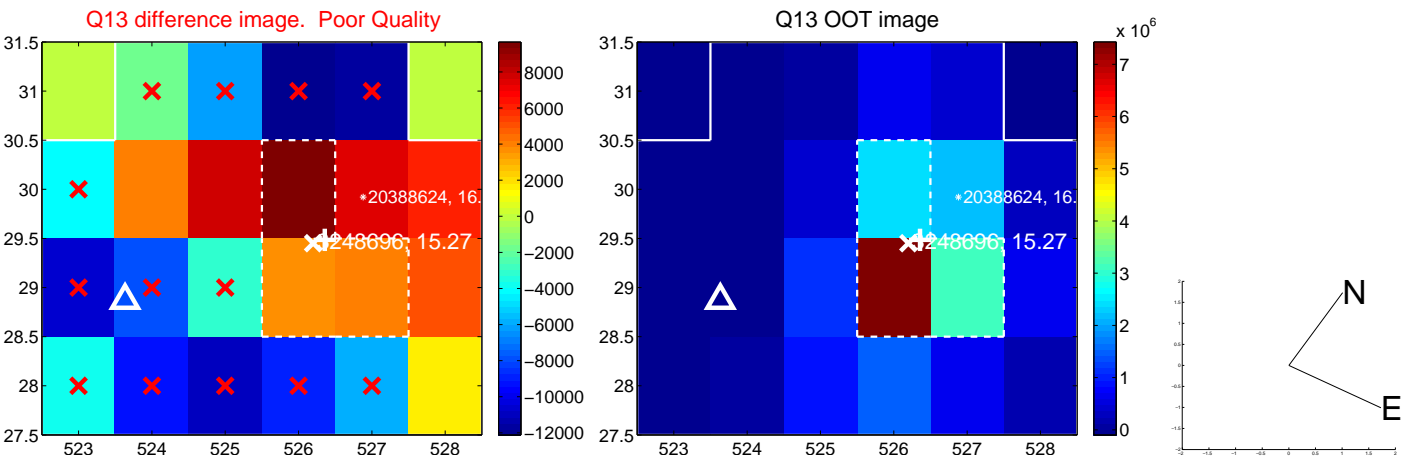
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



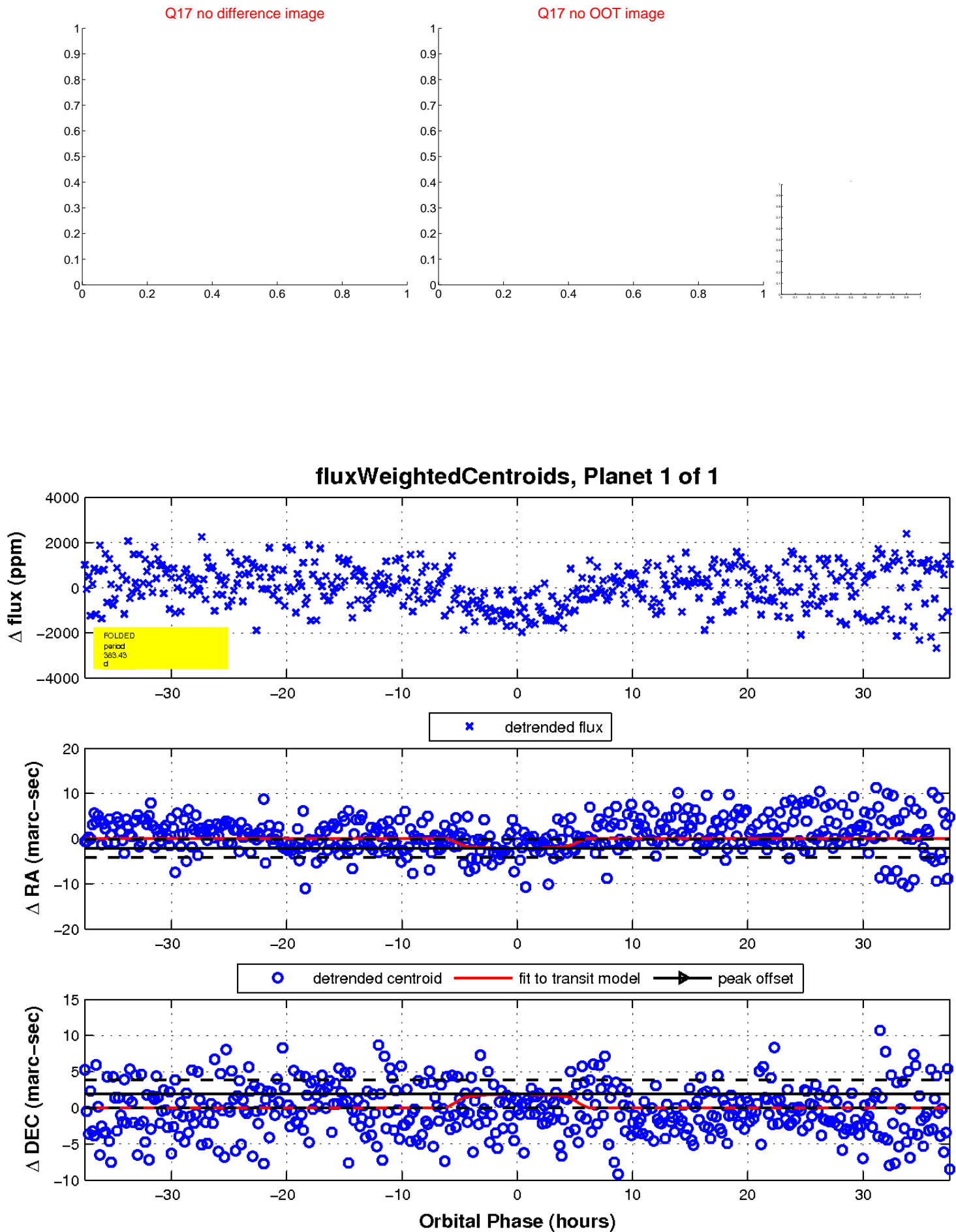
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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

