

KIC 007465054

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})
007465054-01	OBS	No	397.676001	389.897393	682.6	12.518	7.2	7.8	0.89	5868	2.44	0.76

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
007465054-01	OBS	FP	0.00	1	0	0	0	ALL_TRANS_CHASES—MOD_NONUNIQ_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.

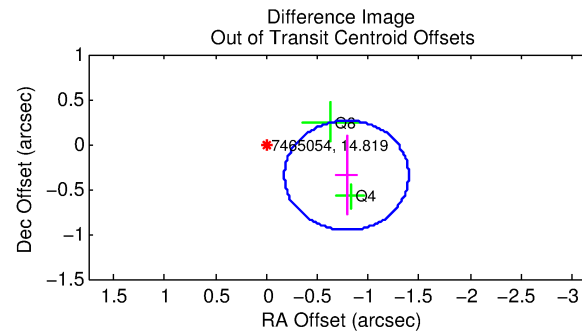
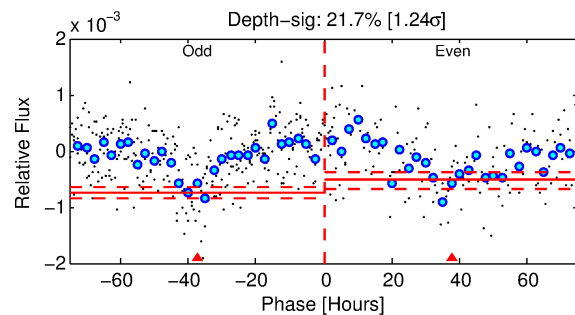
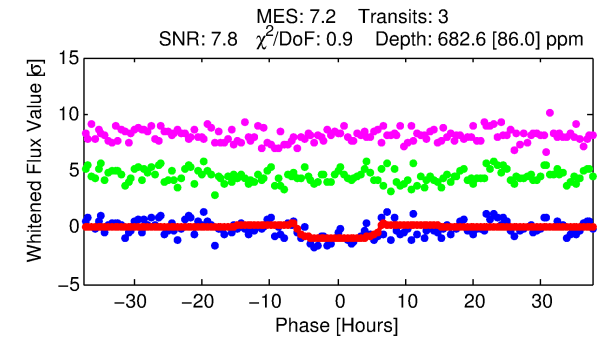
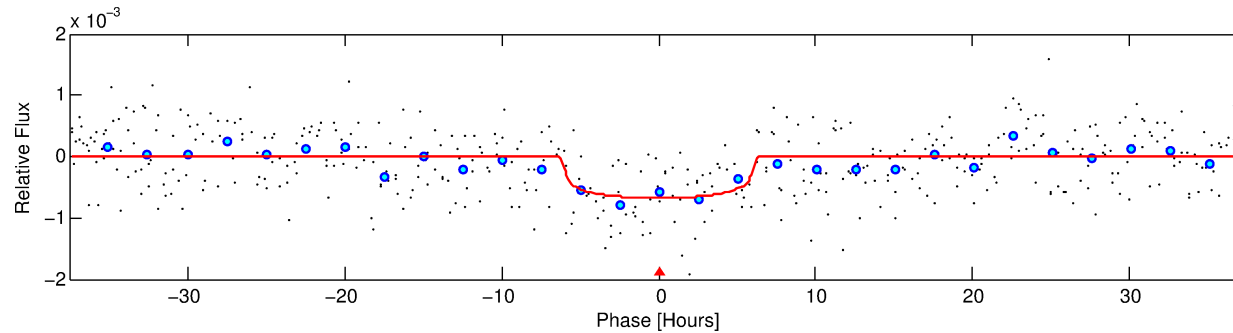
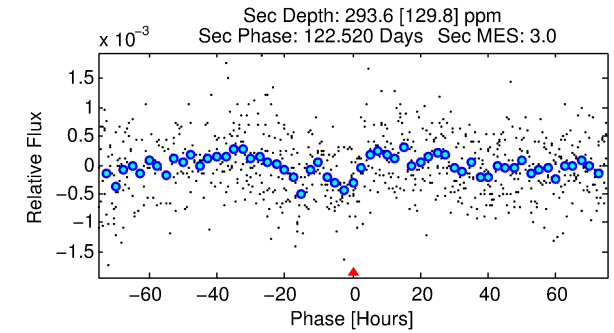
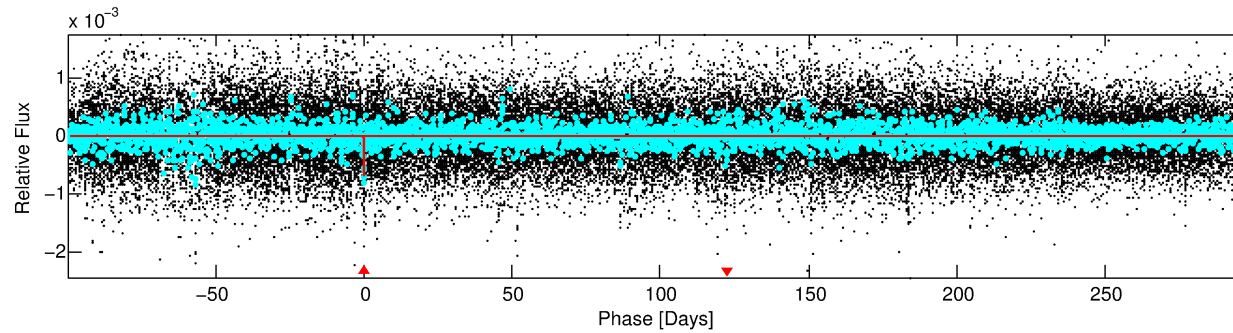
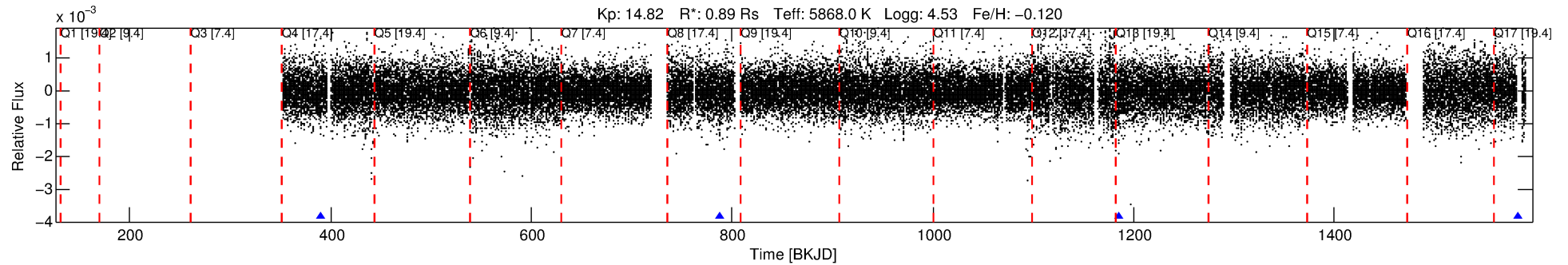
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 007465054-01

No Significant Match Found

DV One-Page Summary

KIC: 7465054 Candidate: 1 of 1 Period: 397.676 d



DV Fit Results:

Period = 397.67600 [0.01276] d
Epoch = 389.8974 [0.0170] BKJD
Rp/R* = 0.0250 [0.0123]
a/R* = 200.27 [447.31]
b = 0.61 [2.33]
Seff = 0.76 [0.31]
Teq = 238 [24] K
Rp = 2.44 [1.41] Re
a = 1.0542 [0.2760] AU
Ag = 30213.40 [34600.35] [0.87σ]
Teff = 4859 [1321] K [3.50σ]

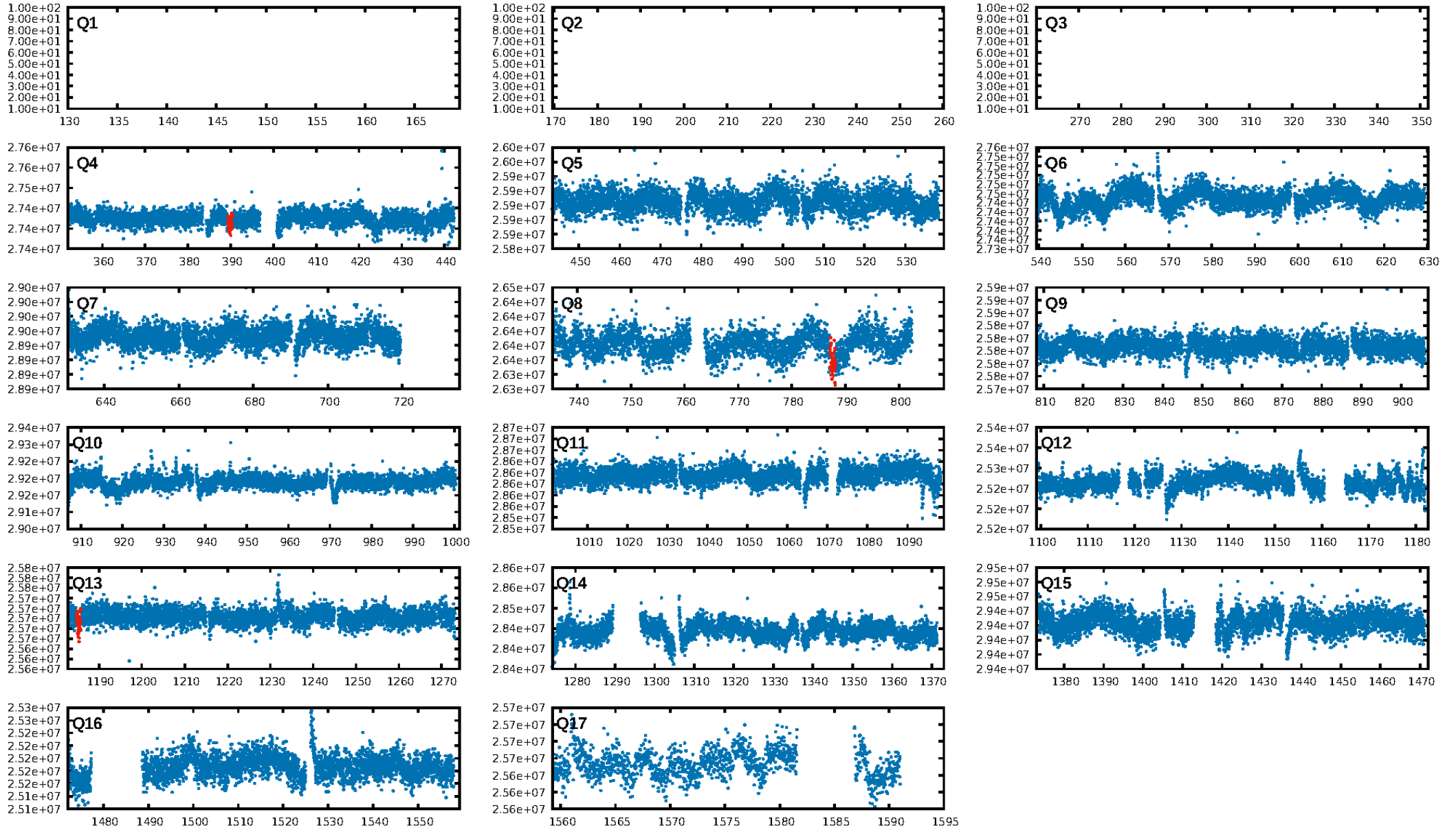
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: 12.7%
ModelChiSquareGof-sig: 99.9%
Bootstrap-pfa: 5.27e-09
RollingBand-fgt: 1.00 [3/3]
GhostDiagnostic-chr: 0.5251
Centroid-sig: 40.9%
Centroid-so: 3.004 arcsec [8.89σ]
OotOffset-rm: 0.861 arcsec [4.23σ]
KicOffset-rm: 4.980 arcsec [12.62σ]
OotOffset-st: 0/0/2/0 [2]
KicOffset-st: 0/0/2/0 [2]
DiffImageQuality-fgm: 1.00 [2/2]
DiffImageOverlap-fno: 1.00 [2/2]

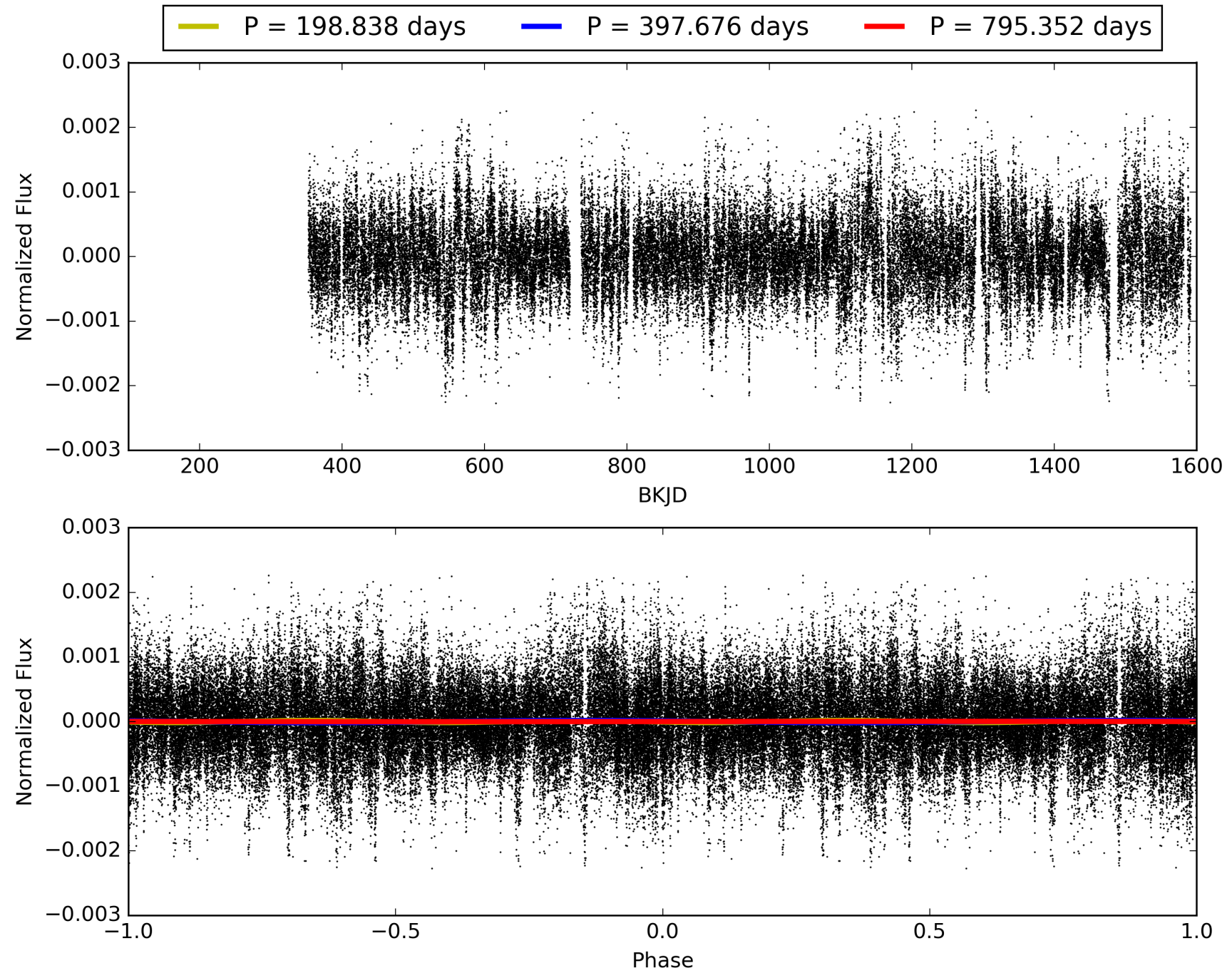
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 30-Jan-2016 20:51:19 Z

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

TCE 007465054-01, PDC Light Curves

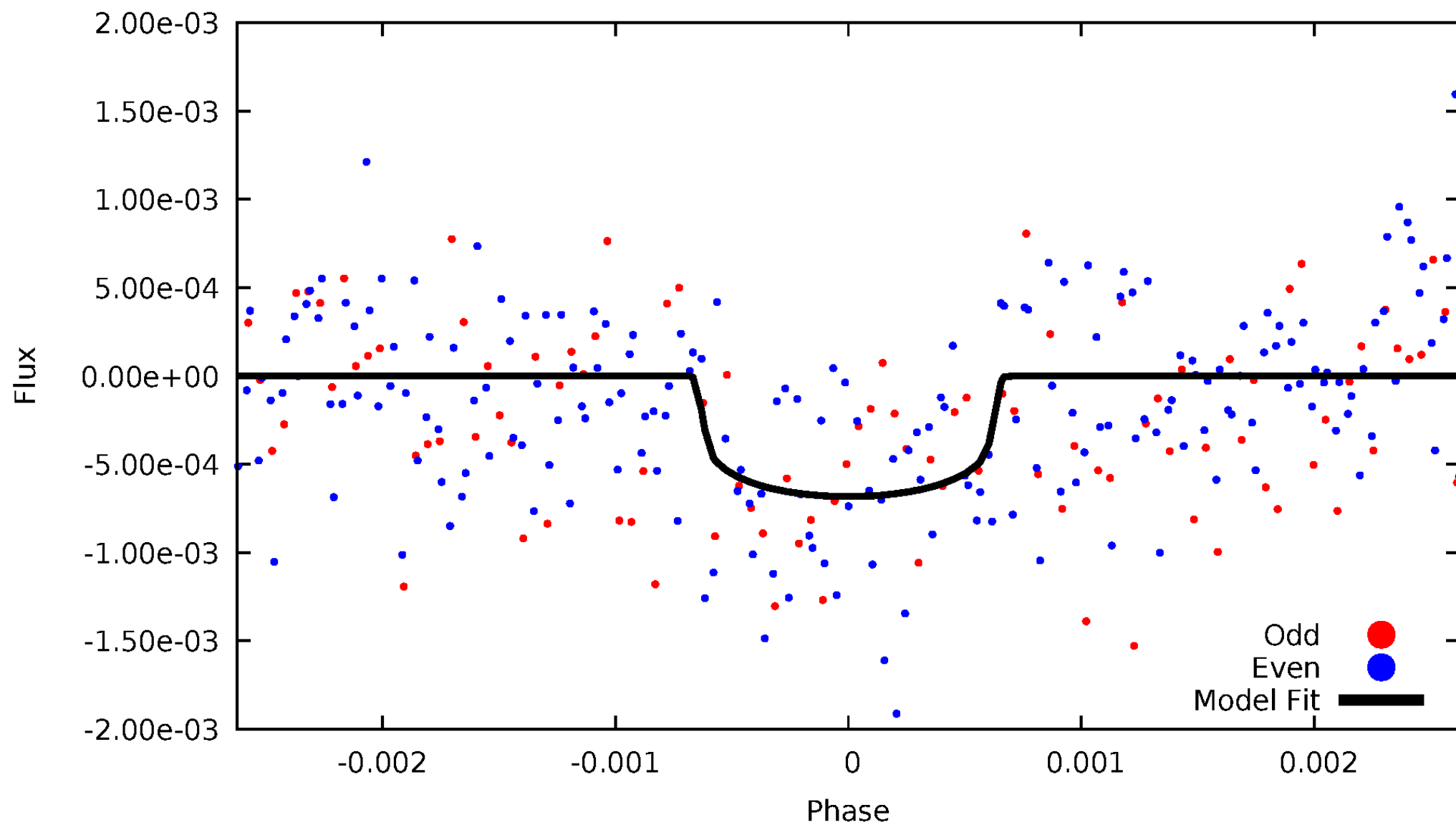


TCE 007465054-01



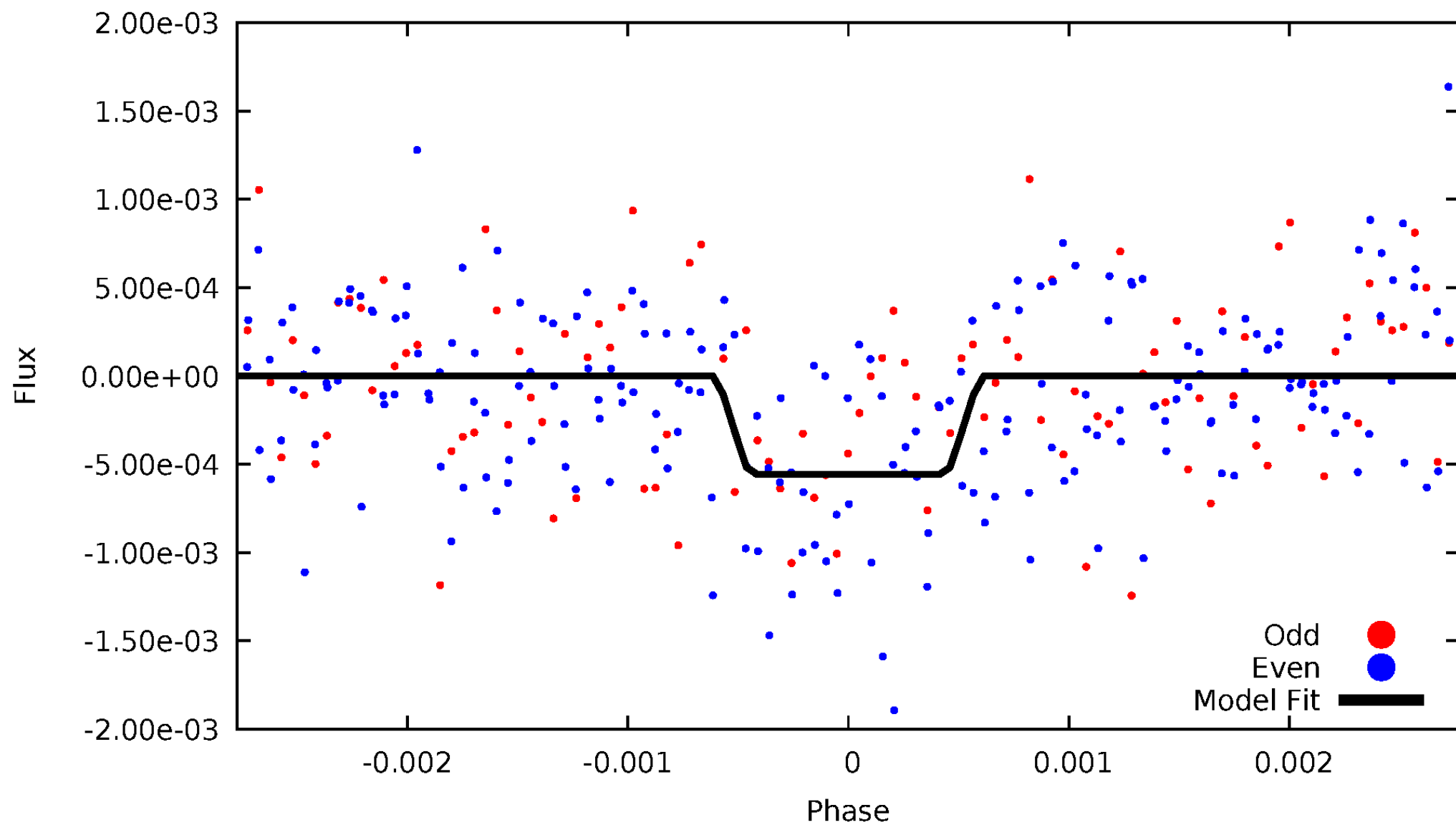
DV Odd/Even

TCE 007465054-01



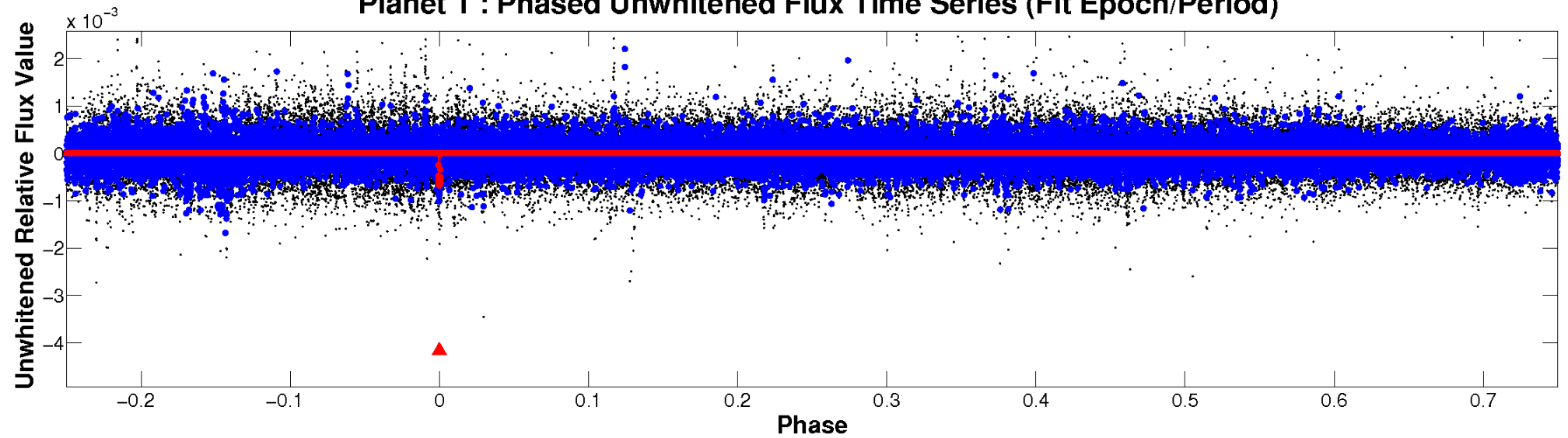
ALT Odd/Even

TCE 007465054-01

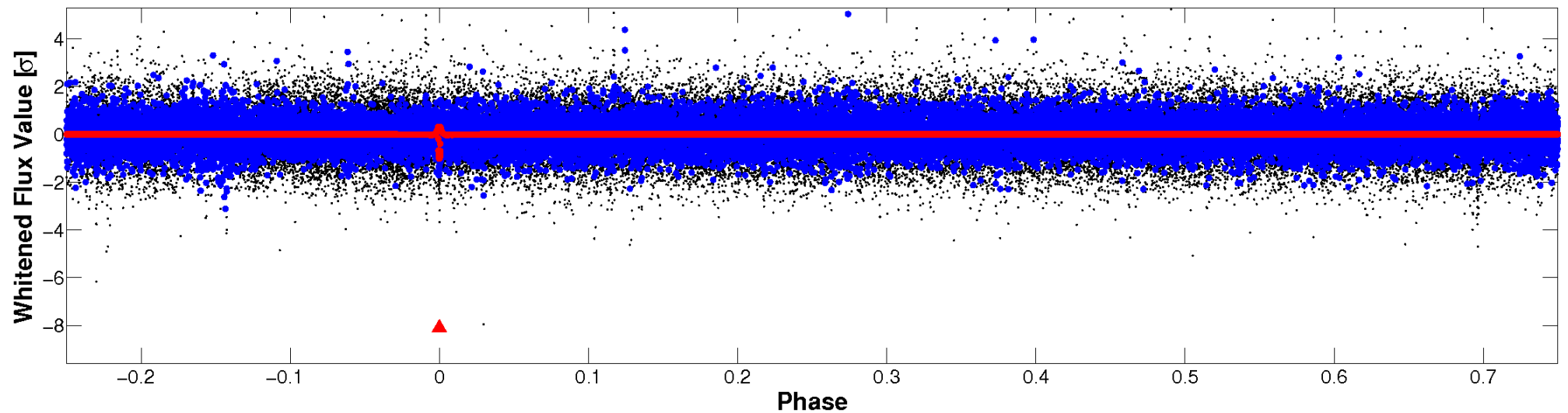


Non-Whitened Vs. Whitened Light Curve

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 007465054-01 P=397.676001 Days $T_0=389.897393$ (BKJD)



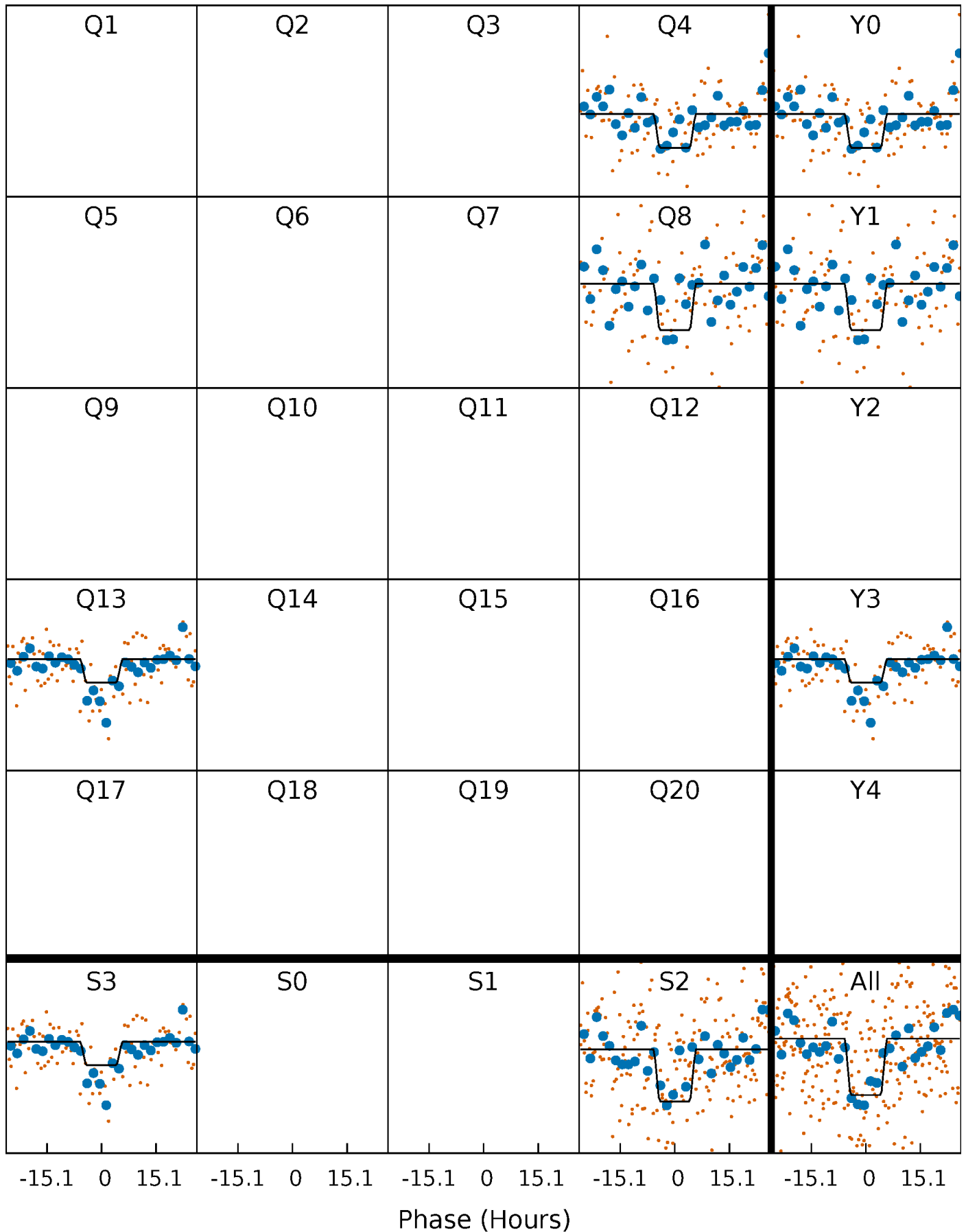
DV Quarter-Phased Transit Curves

TCE 007465054-01 P=397.676001 Days $T_0=389.897393$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

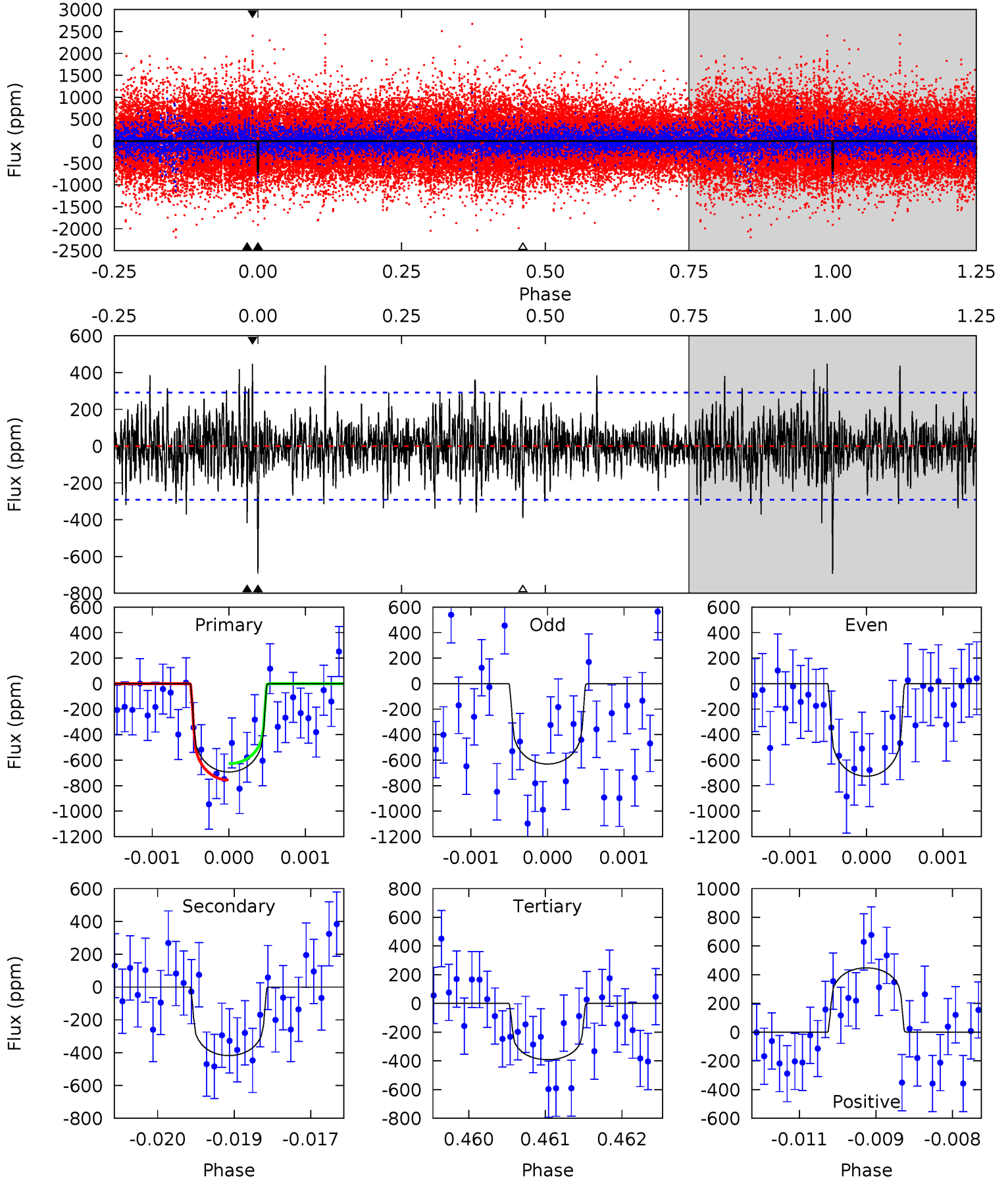
TCE 007465054-01 $P=397.698378$ Days $T_0=389.852096$ (BKJD)



DV Model-Shift Uniqueness Test

007465054-01, P = 397.676001 Days, E = 389.897393 Days

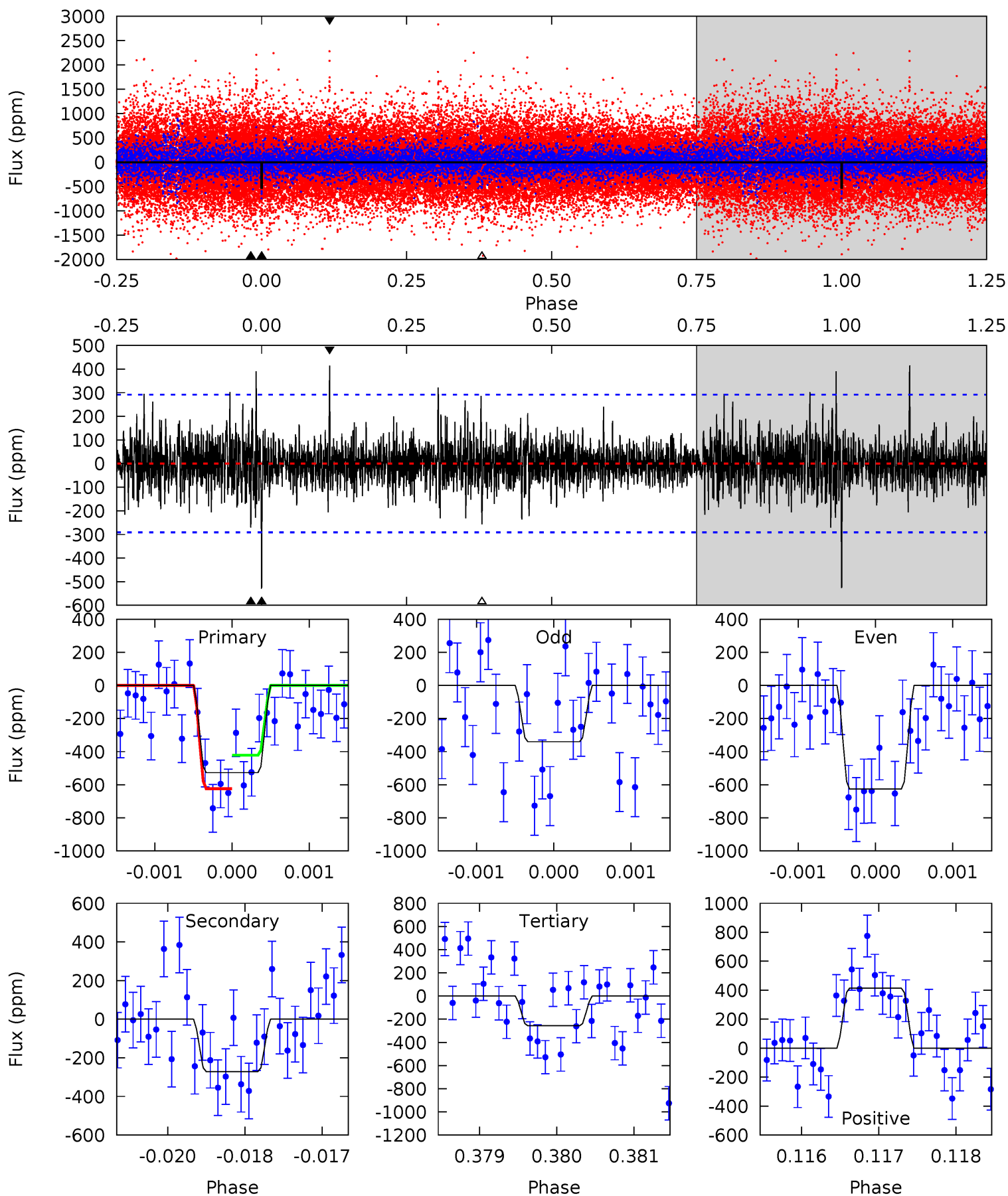
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
12.9	7.75	7.27	8.31	5.40	3.21	1.89	5.59	4.54	0.48	-0.57	0.86	1.12	0.39	1.19



Alt Model-Shift Uniqueness Test

007465054-01, P = 397.698378 Days, E = 389.852096 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
9.79	5.04	4.77	7.70	5.41	3.23	1.29	5.02	2.10	0.27	-2.66	2.57	1.48	0.44	1.88



Stellar Parameters For KIC 007465054

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	5868^{+164}_{-205}	$4.530^{+0.037}_{-0.212}$	$-0.120^{+0.300}_{-0.300}$	$0.894^{+0.275}_{-0.092}$	$0.987^{+0.120}_{-0.132}$	$1.946^{+0.413}_{-1.053}$
	+3%/-3%	+1%/-5%	+250%/-250%	+31%/-10%	+12%/-13%	+21%/-54%
Source	KIC0	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 007465054-01 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	-418 ± 54	$2.62^{+1.28}_{-1.23}$	341^{+24}_{-16}	5276^{+1980}_{-811}	36363^{+85936}_{-20689}
Alt.	-271 ± 54	$2.45^{+1.28}_{-1.26}$	341^{+24}_{-16}	5011^{+1985}_{-850}	26350^{+88471}_{-14962}

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 $A_{obs} \gg 1.0$

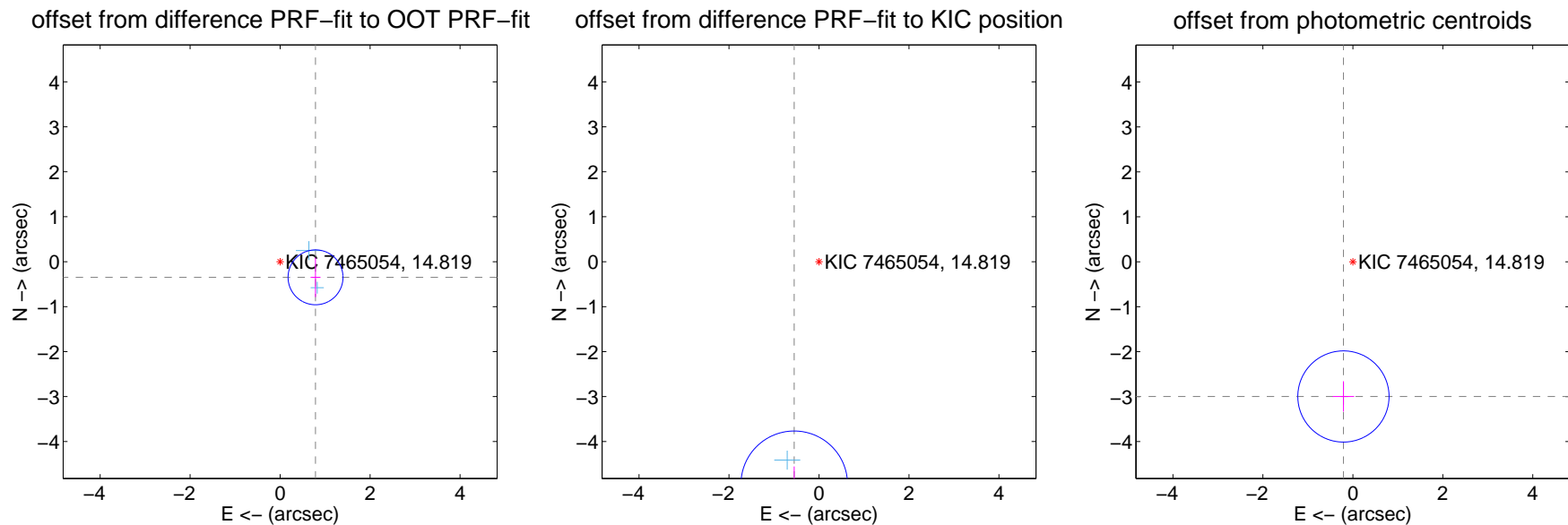
DV Centroid Data

Supplemental centroid analysis for 007465054-01. Kepler magnitude: 14.82. Transit SNR 7.80

There are 2 quarters with good PRF difference image offsets

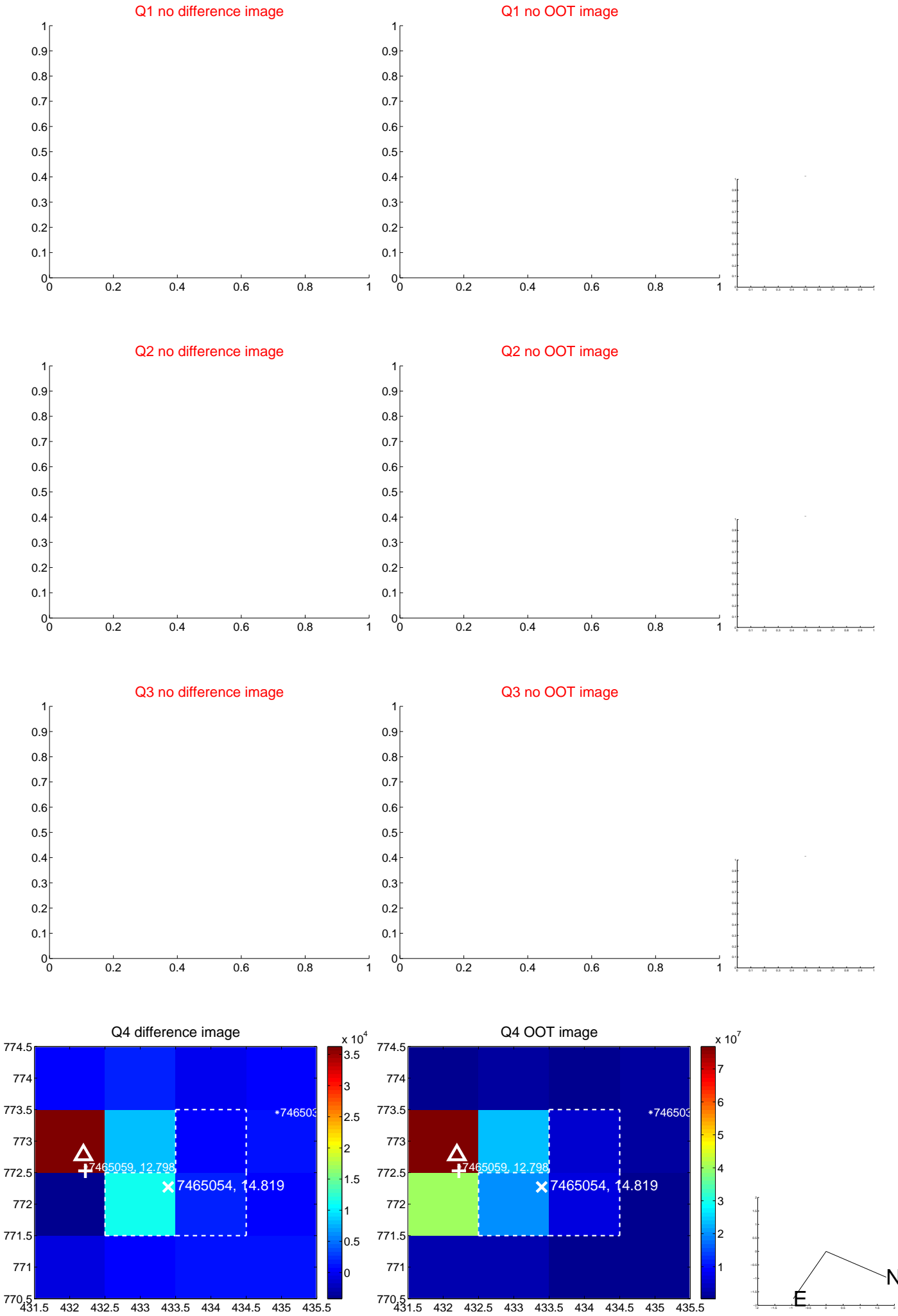
The OOT PRF centroid is offset from the target star catalog position by about 4.85 arcsec so the offset from difference PRF-fit to OOT-fit may be invalid.

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.861 ± 0.203	4.23	-0.787 ± 0.110	-0.347 ± 0.439
PRF-fit source offset from KIC position	4.980 ± 0.395	12.62	0.550 ± 0.113	-4.950 ± 0.397
photometric centroid source offset	3.00 ± 0.34	8.89	0.21 ± 0.24	-3.00 ± 0.34

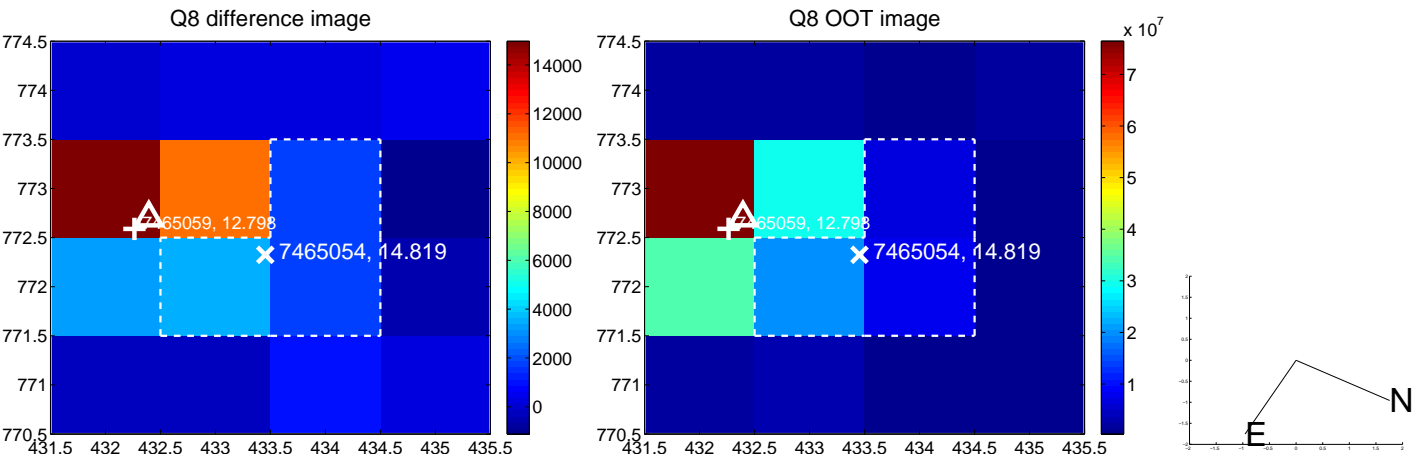


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ . 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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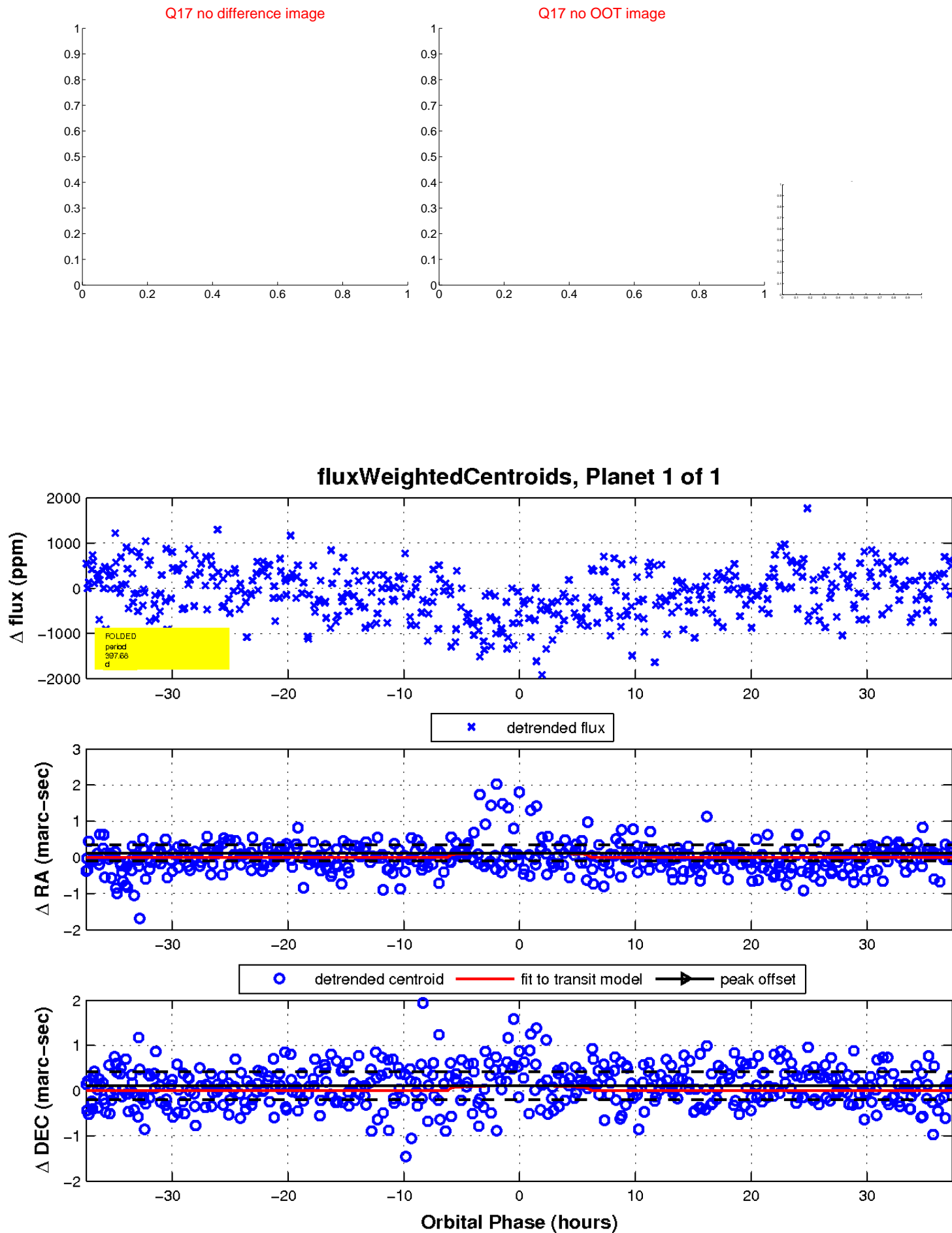
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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UKIRT Image

Declination

