

KIC 007764465

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})
007764465-01	OBS	No	369.676046	233.353230	857.5	19.514	8.2	9.1	0.73	5503	2.14	0.50

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
007764465-01	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_CHASES_MARSHALL_SKYE—ALL_TRANS_CHASES—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.

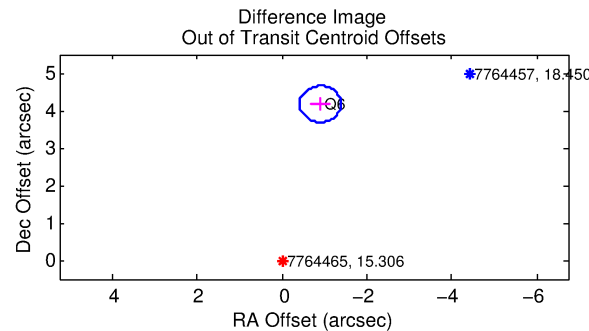
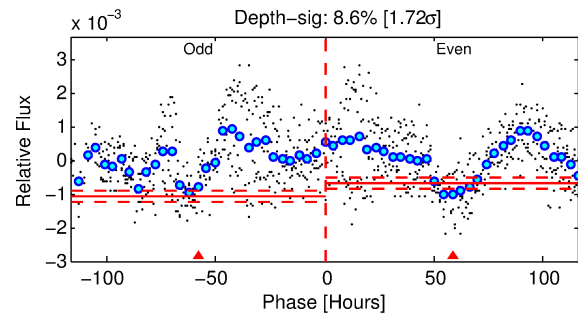
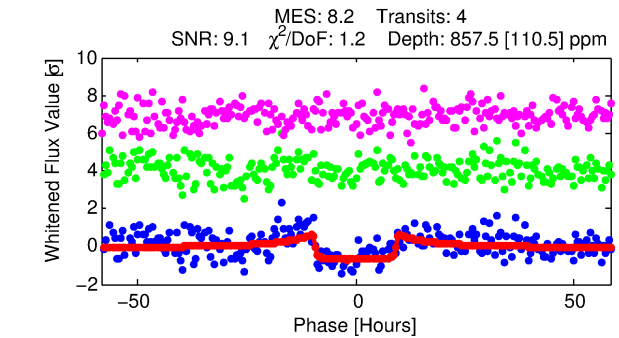
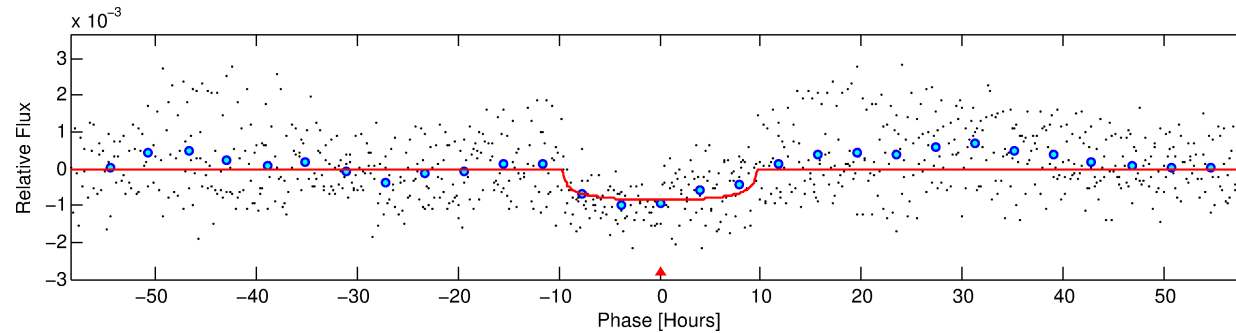
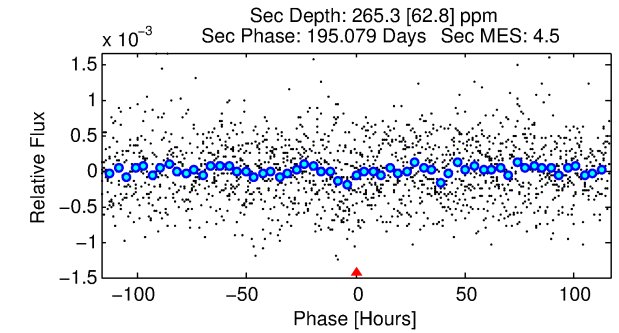
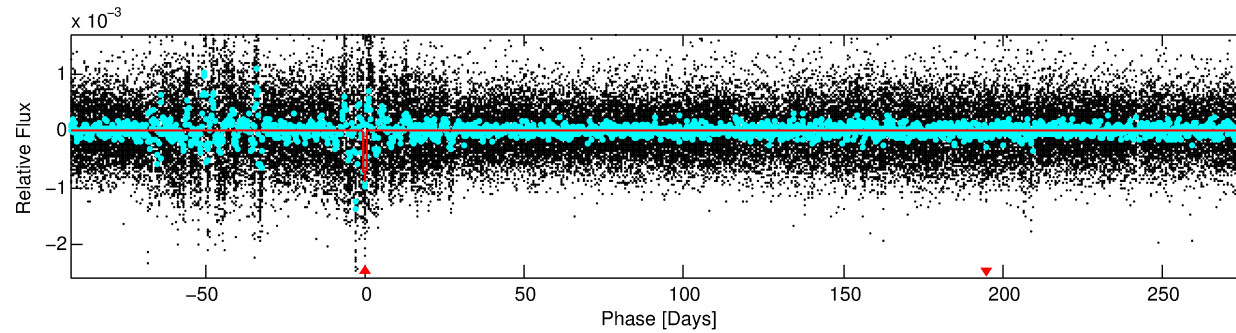
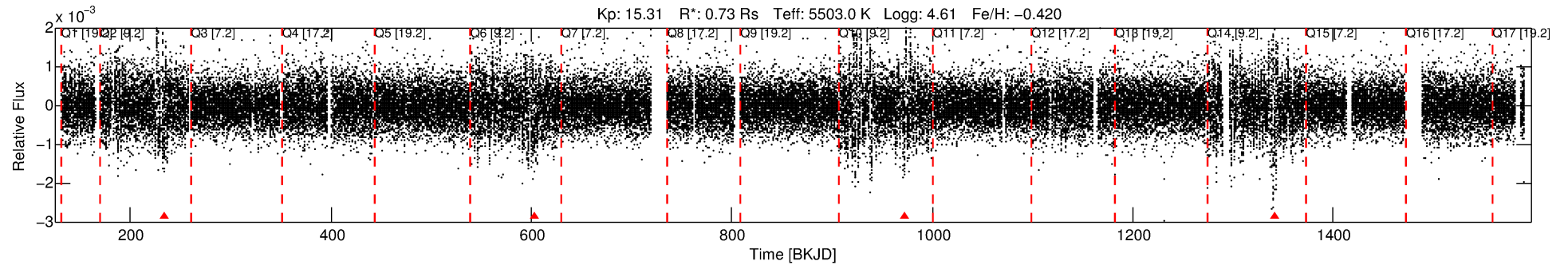
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 007764465-01

No Significant Match Found

DV One-Page Summary

KIC: 7764465 Candidate: 1 of 1 Period: 369.676 d



DV Fit Results:

Period = 369.67605 [0.00954] d
Epoch = 233.3532 [0.0178] BKJD
Rp/R* = 0.0267 [0.0128]
a/R* = 143.38 [291.37]
b = 0.27 [7.03]
Seff = 0.50 [0.12]
Teq = 215 [13] K
Rp = 2.14 [1.10] Re
a = 0.9385 [0.1425] AU
Ag = 27966.23 [28220.80] [0.99σ]
Teff = 4296 [1067] K [3.82σ]

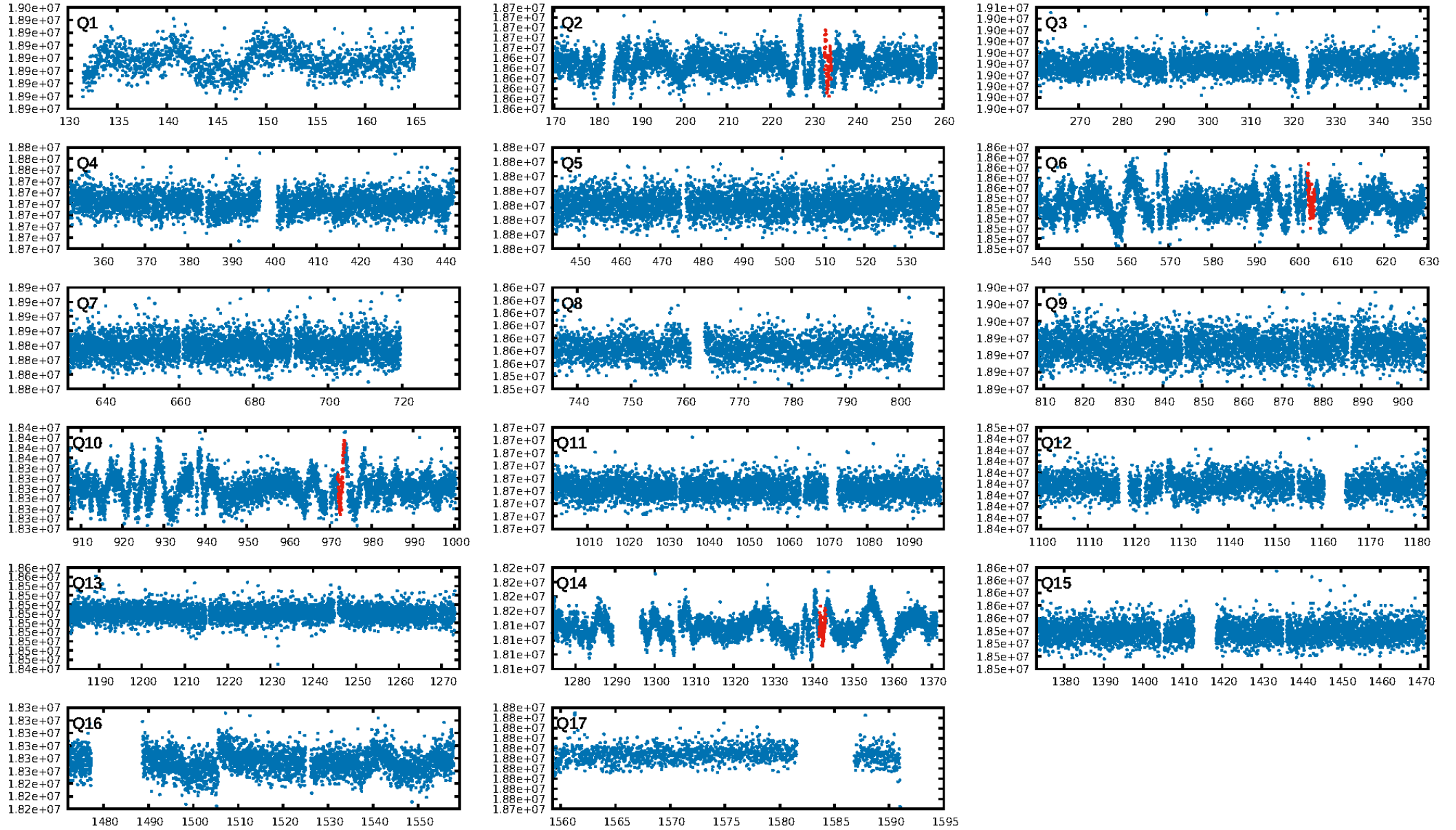
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: 73.8%
ModelChiSquareGoF-sig: 99.7%
Bootstrap-pfa: 6.05e-11
RollingBand-fgt: 0.00 [0/4]
GhostDiagnostic-chr: -41.68
Centroid-sig: 20.7%
Centroid-so: 3.124 arcsec [1.45σ]
OotOffset-rm: 4.269 arcsec [26.38σ]
KicOffset-rm: 4.328 arcsec [26.76σ]
OotOffset-st: 1/0/0/0 [1]
KicOffset-st: 1/0/0/0 [1]
DiffImageQuality-fgm: 0.00 [0/1]
DiffImageOverlap-fno: 1.00 [3/3]

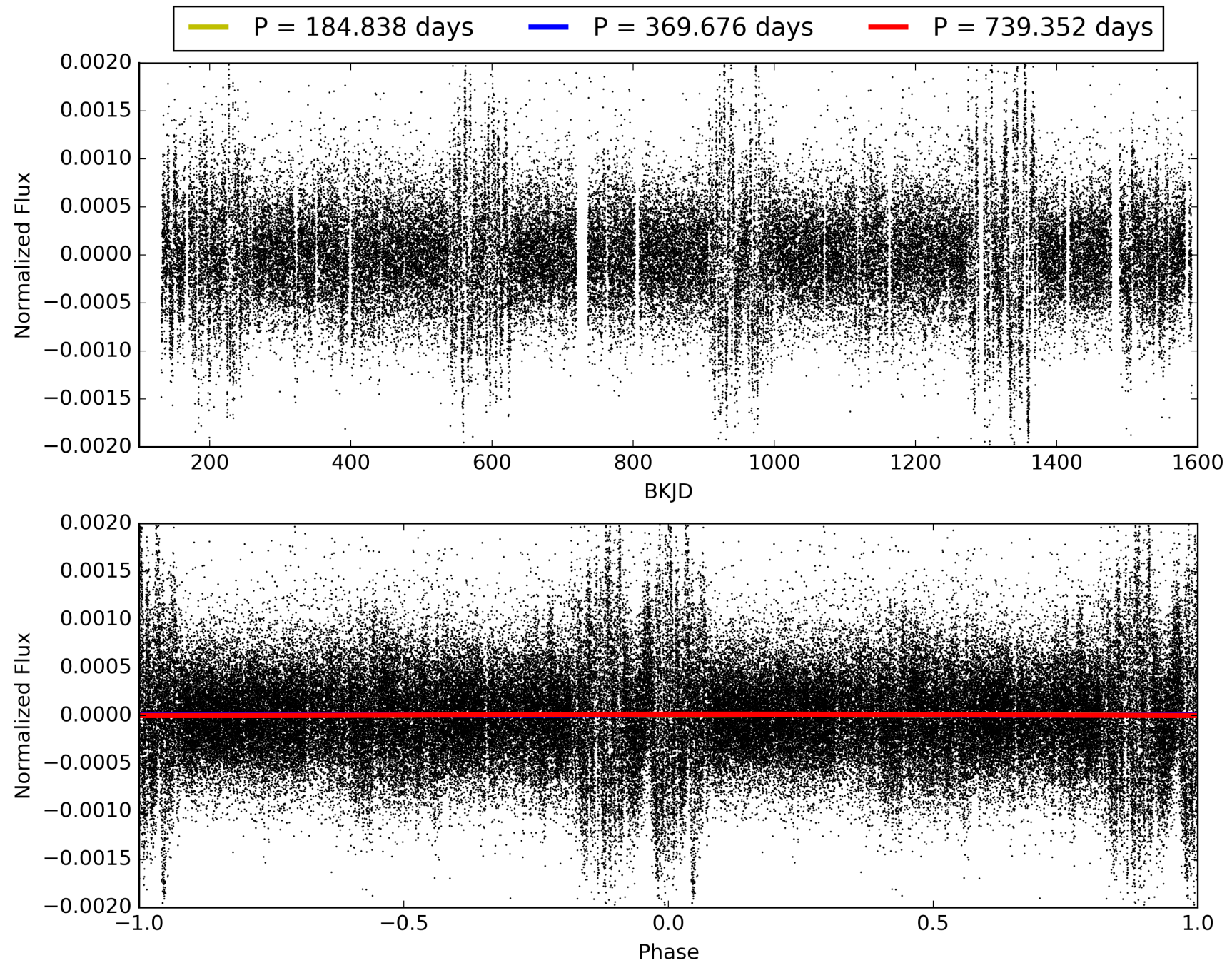
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 29-Jan-2016 01:10:49 Z

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

TCE 007764465-01, PDC Light Curves

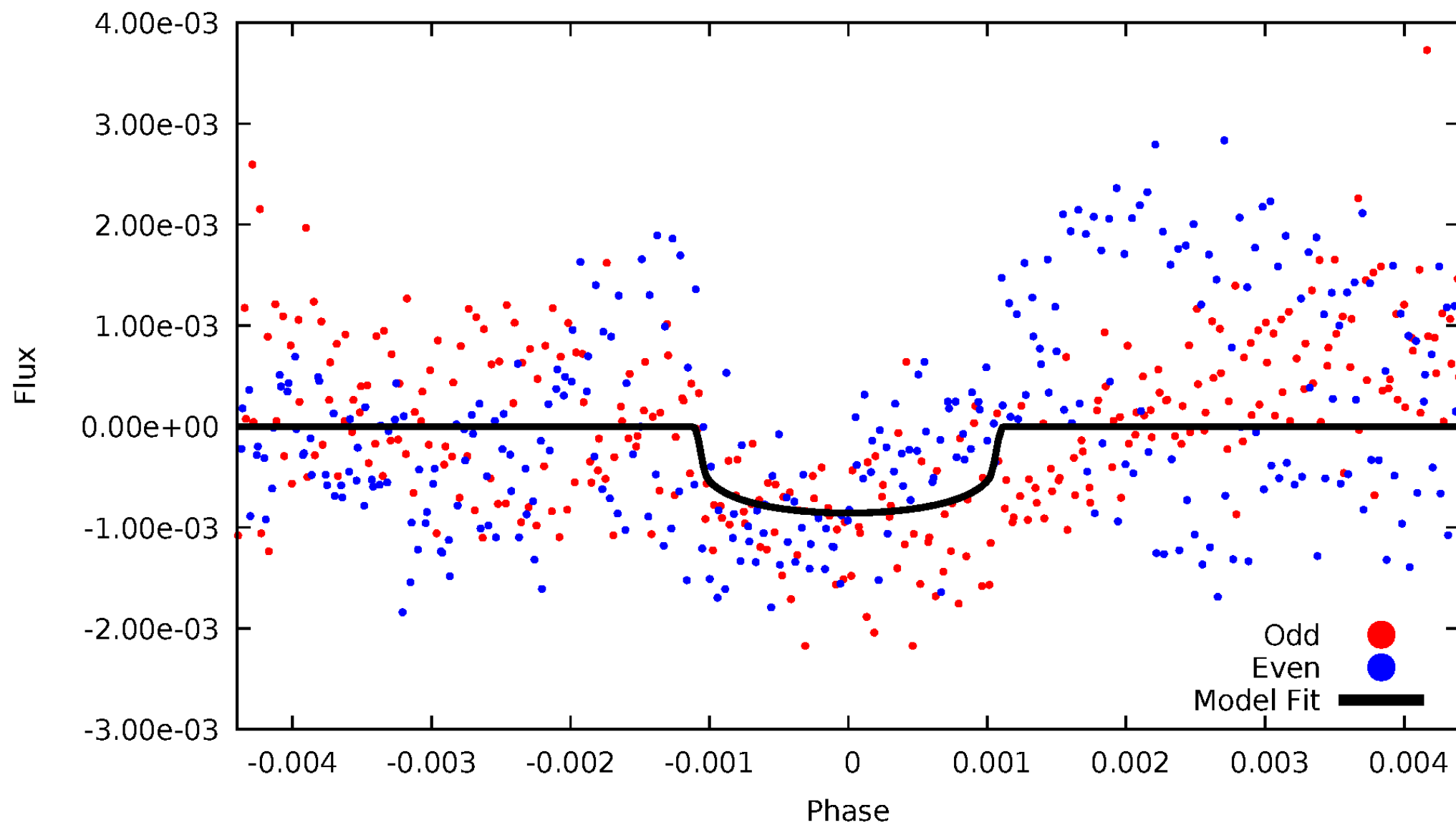


TCE 007764465-01



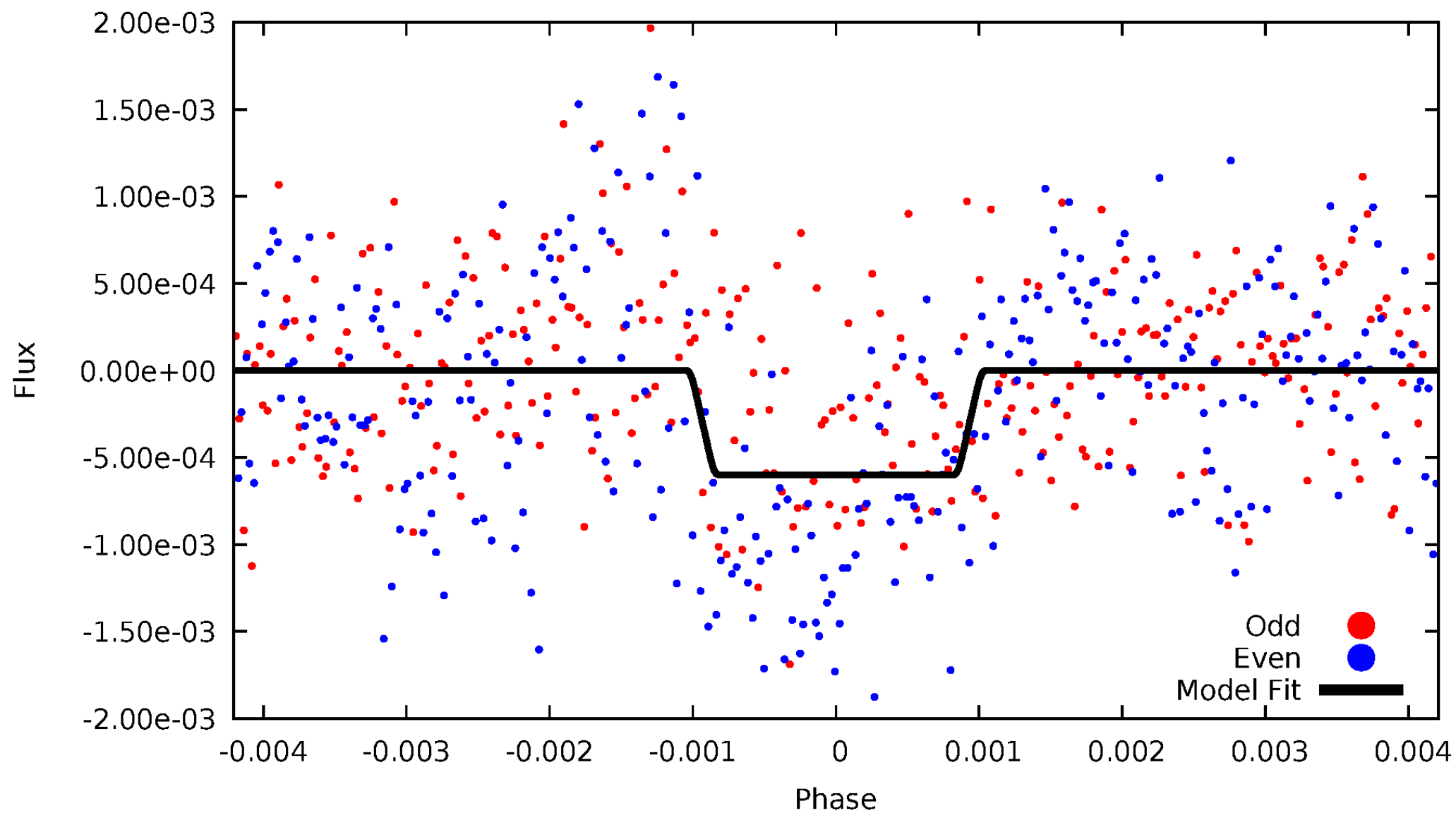
DV Odd/Even

TCE 007764465-01



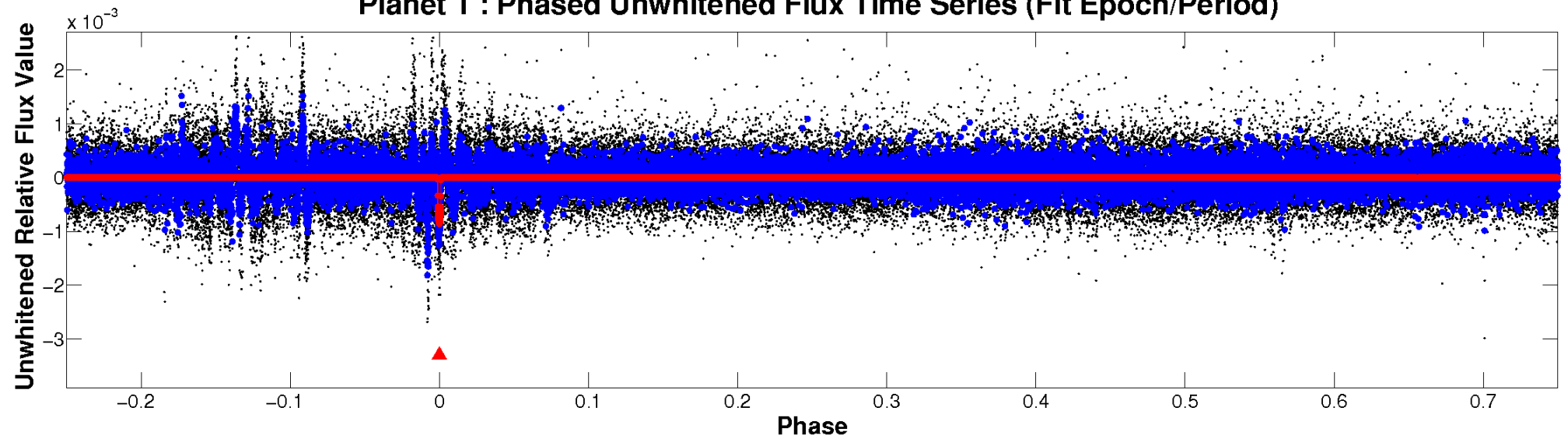
ALT Odd/Even

TCE 007764465-01

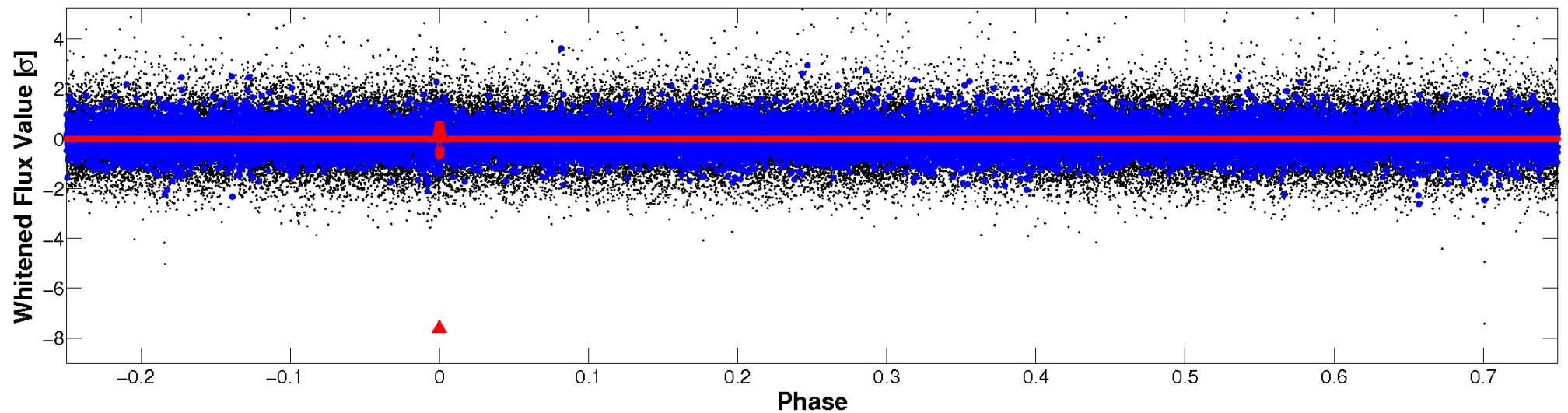


Non-Whitened Vs. Whitened Light Curve

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

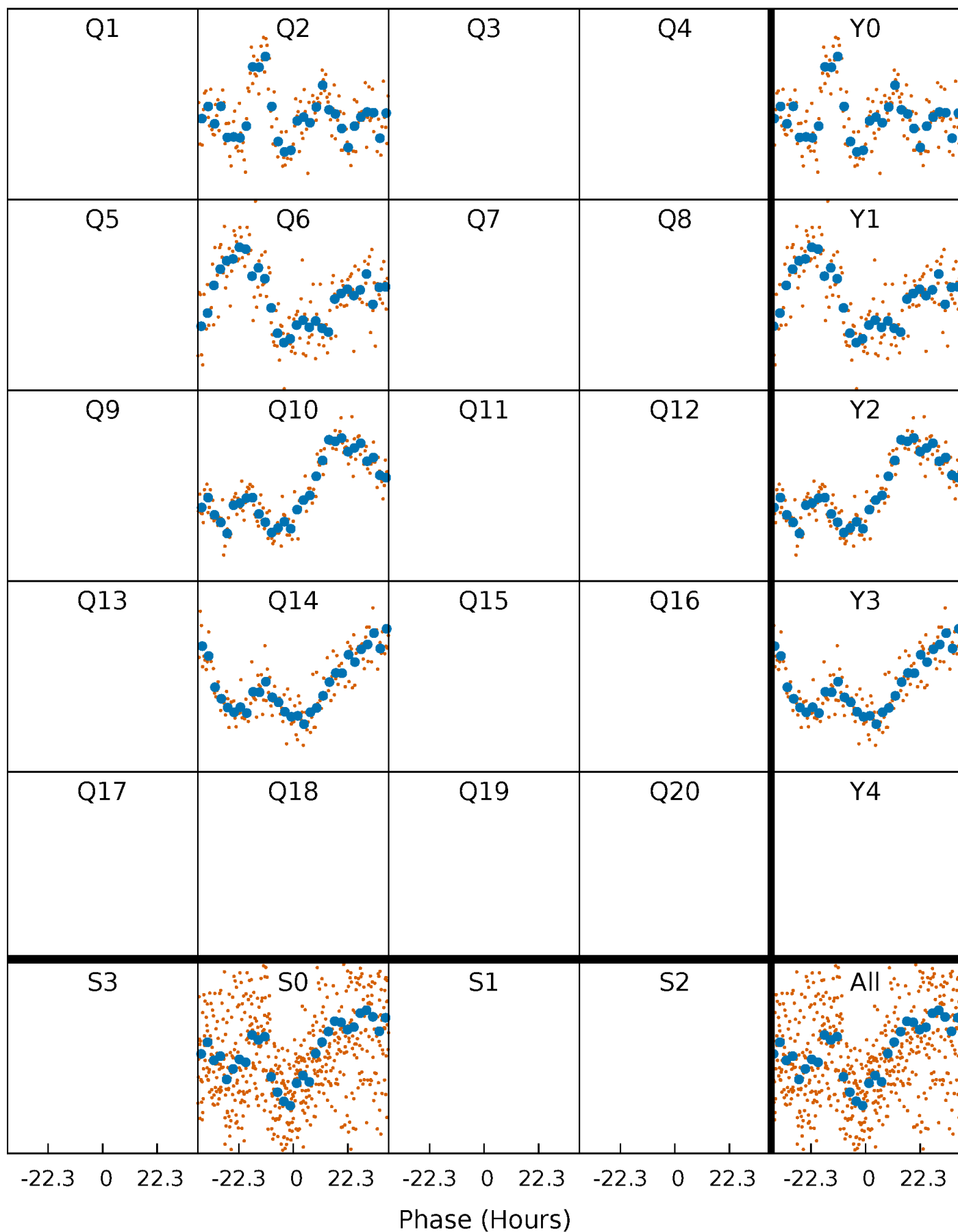


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



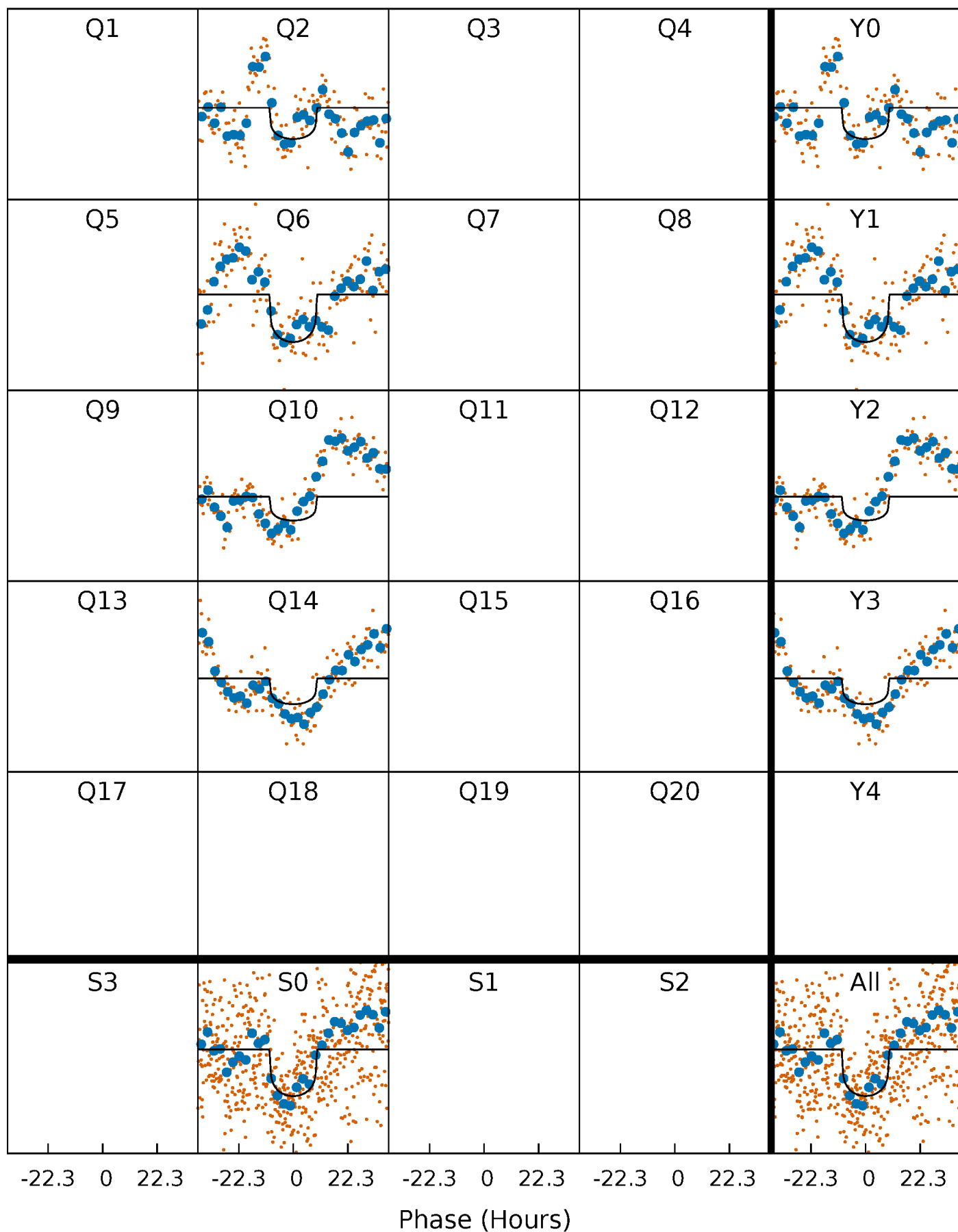
PDC Quarter-Phased Transit Curves

TCE 007764465-01 P=369.676046 Days $T_0=233.353230$ (BKJD)



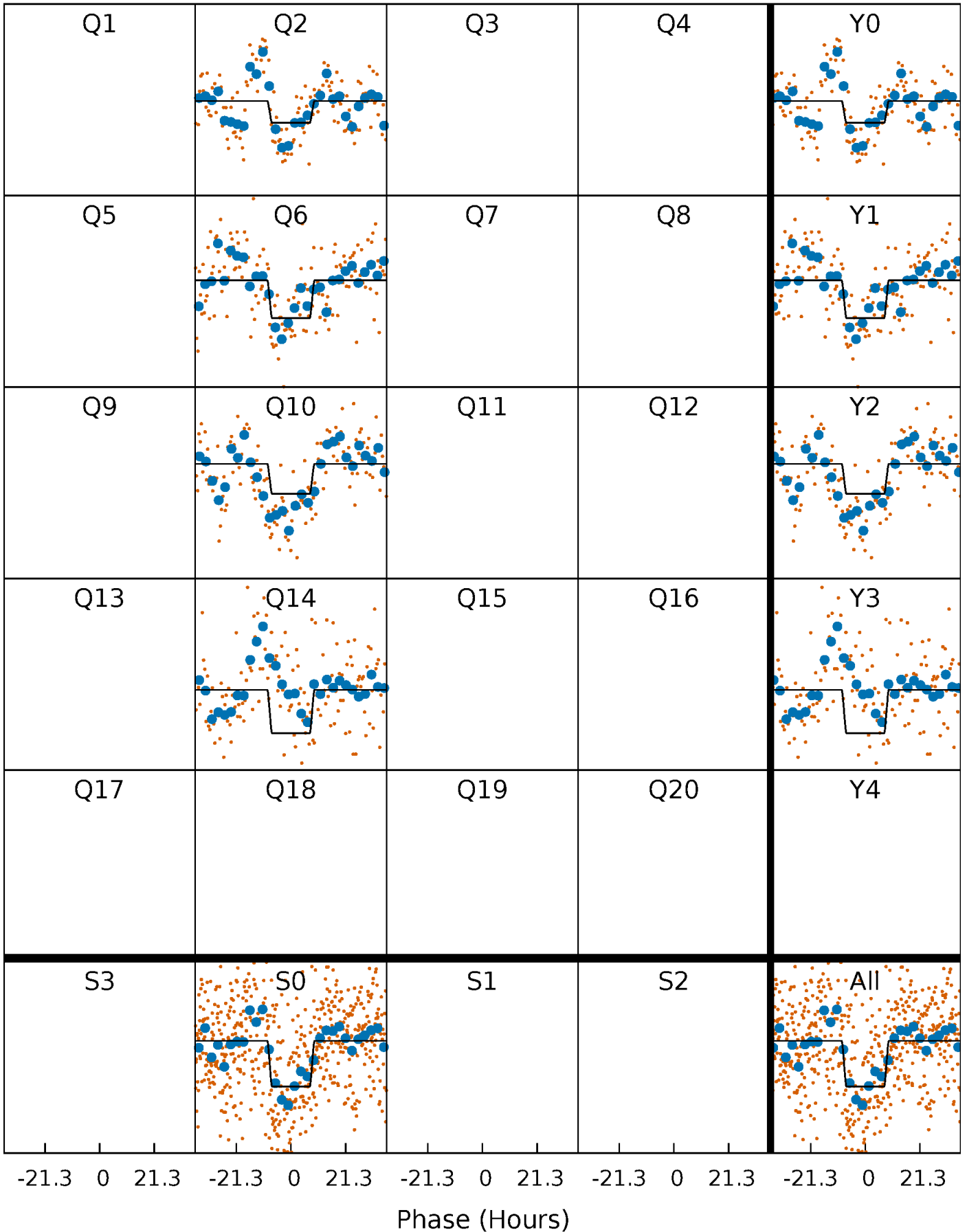
DV Quarter-Phased Transit Curves

TCE 007764465-01 P=369.676046 Days $T_0=233.353230$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

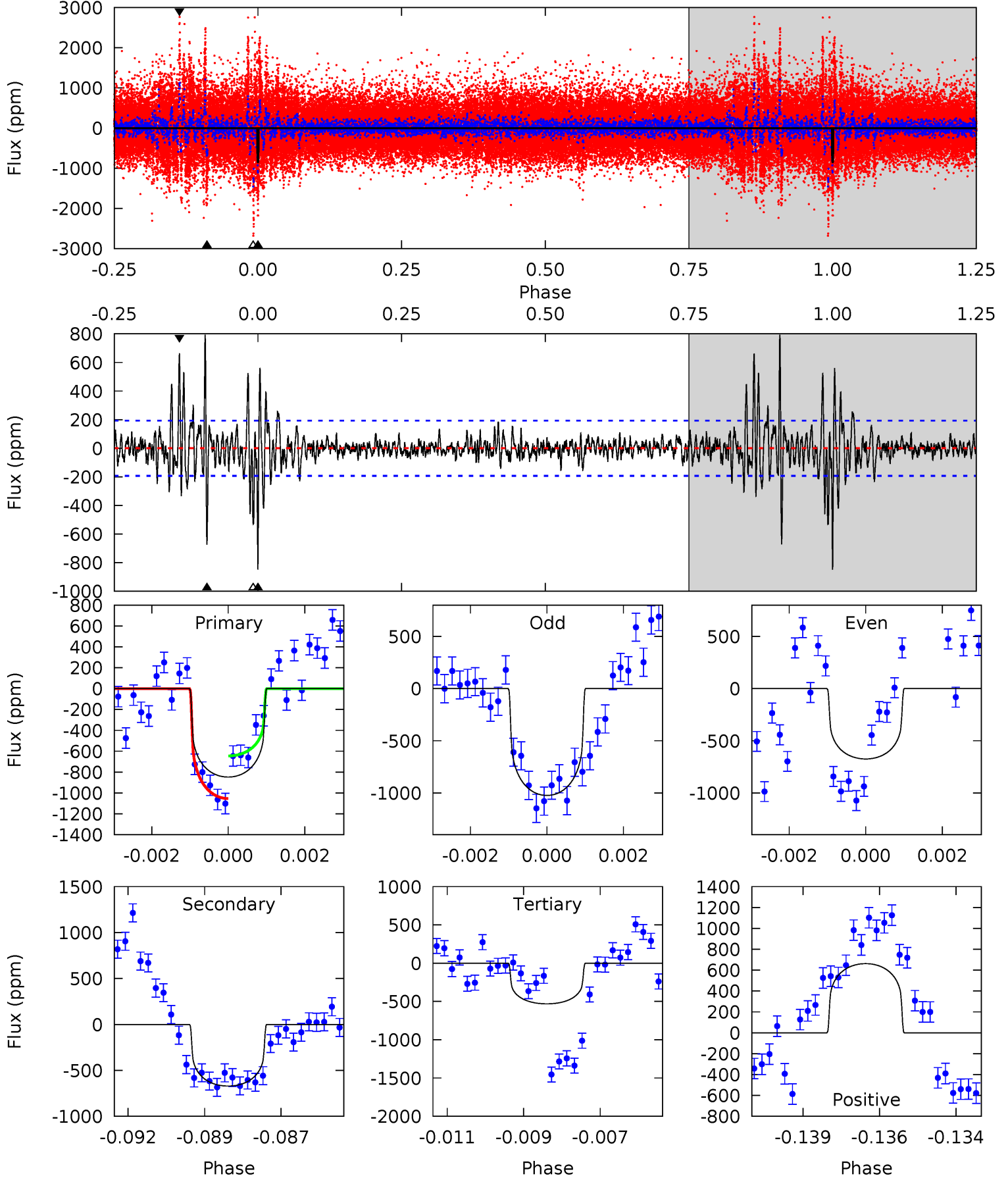
TCE 007764465-01 P=369.690779 Days $T_0=233.304971$ (BKJD)



DV Model-Shift Uniqueness Test

007764465-01, P = 369.676046 Days, E = 233.353230 Days

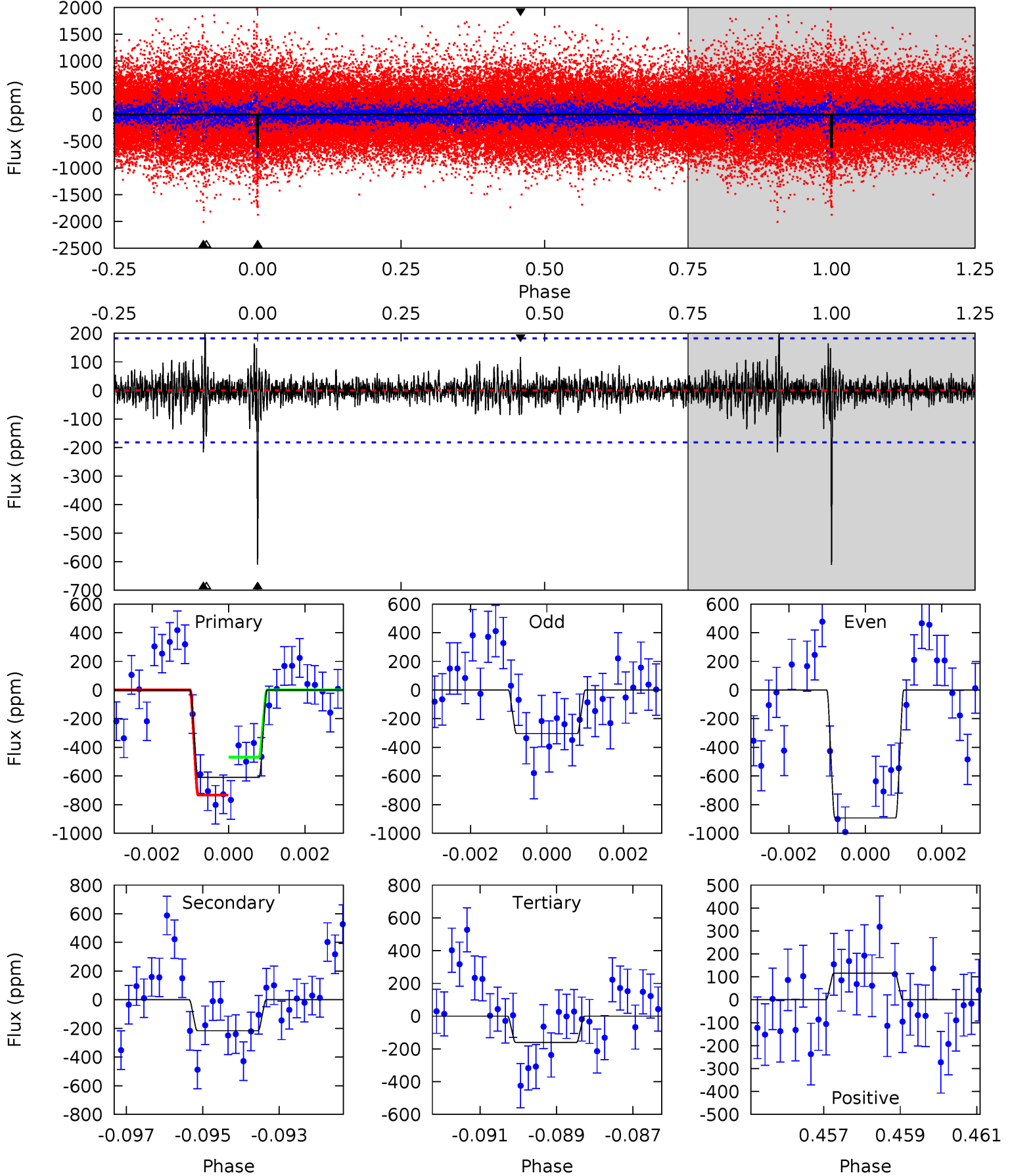
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
23.3	18.5	14.6	18.2	5.31	3.06	2.73	8.70	5.10	3.84	0.24	4.80	1.16	0.48	5.60



Alt Model-Shift Uniqueness Test

007764465-01, P = 369.690779 Days, E = 233.304971 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
17.8	6.32	4.70	3.40	5.32	3.08	0.89	13.2	14.4	1.62	2.92	8.67	0.87	0.25	3.85



Stellar Parameters For KIC 007764465

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	5503^{+165}_{-148}	$4.612^{+0.037}_{-0.112}$	$-0.420^{+0.300}_{-0.300}$	$0.735^{+0.138}_{-0.059}$	$0.822^{+0.079}_{-0.087}$	$2.917^{+0.456}_{-1.034}$
	+3%/-3%	+1%/-2%	+71%/-71%	+19%/-8%	+10%/-11%	+16%/-35%
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 007764465-01 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	-671 ± 36	$2.25^{+1.03}_{-1.05}$	305^{+14}_{-13}	5376^{+2059}_{-804}	$63597^{+159894}_{-33555}$
Alt.	-216 ± 34	$2.09^{+1.05}_{-1.03}$	305^{+14}_{-12}	4367^{+1491}_{-577}	23475^{+68201}_{-13029}

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 $A_{obs} \gg 1.0$

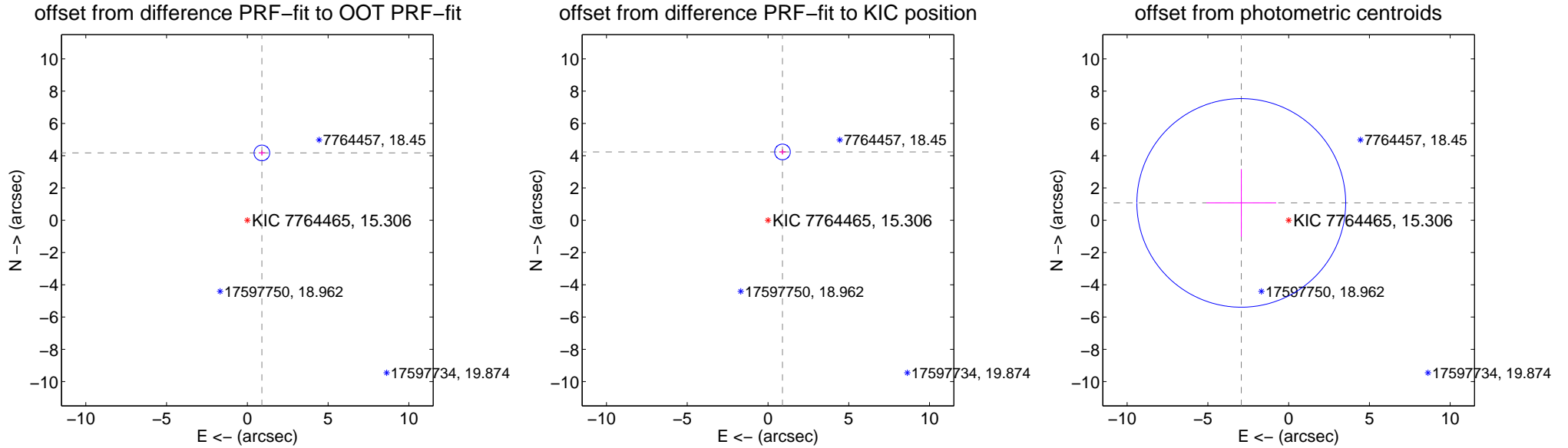
DV Centroid Data

Supplemental centroid analysis for 007764465-01. Kepler magnitude: 15.31. Transit SNR 9.09

There are 0 quarters with good PRF difference image offsets

The direct PRF centroid is offset from the target star catalog position by about 0.06 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	4.269 ± 0.162	26.38	-0.901 ± 0.203	4.173 ± 0.160
PRF-fit source offset from KIC position	4.328 ± 0.162	26.76	-0.898 ± 0.203	4.234 ± 0.160
photometric centroid source offset	3.12 ± 2.15	1.45	2.93 ± 2.16	1.07 ± 2.10

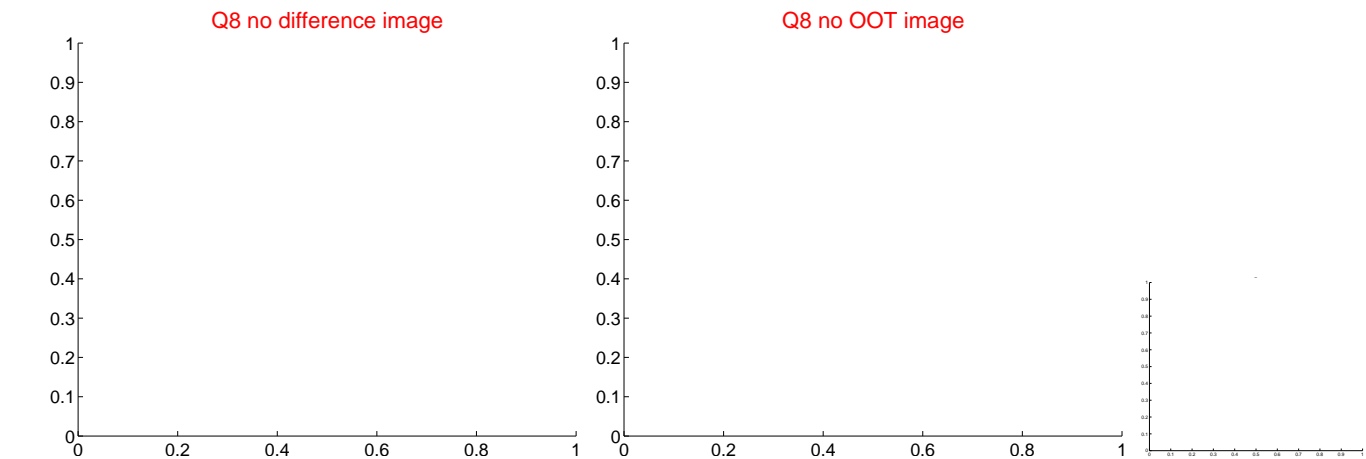
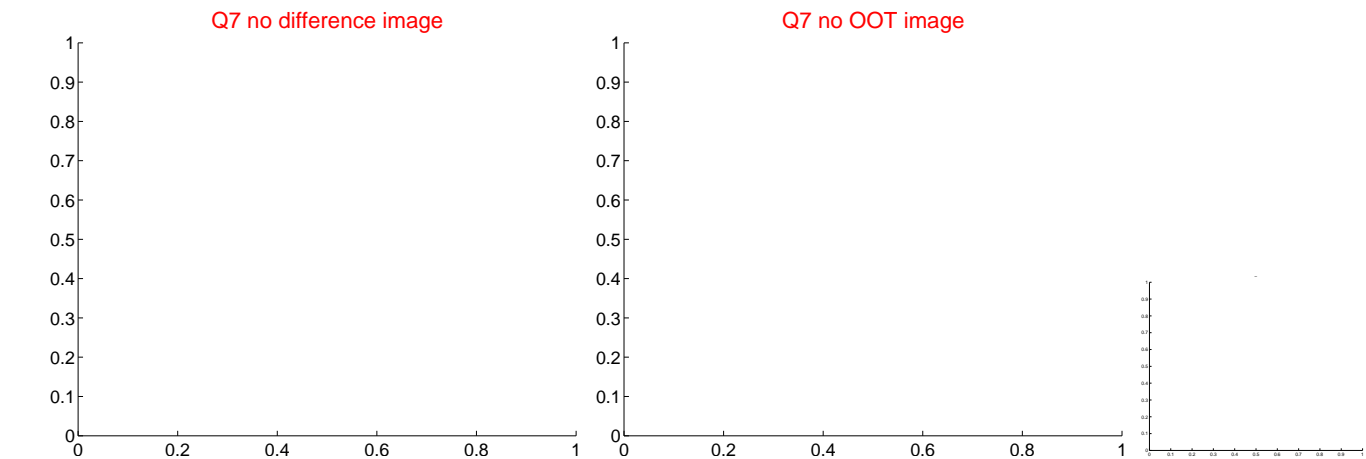
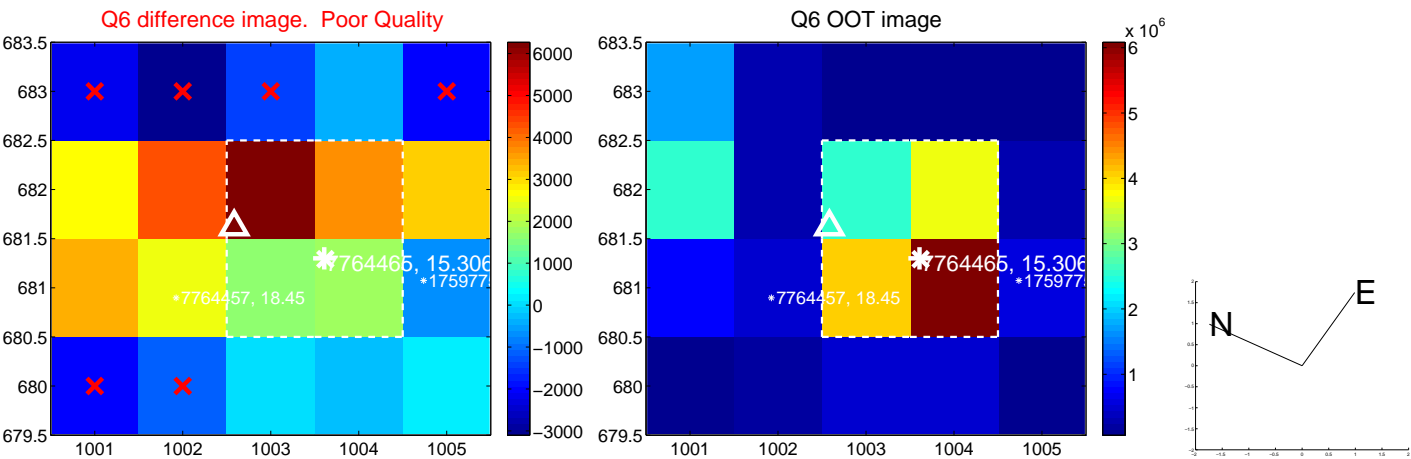
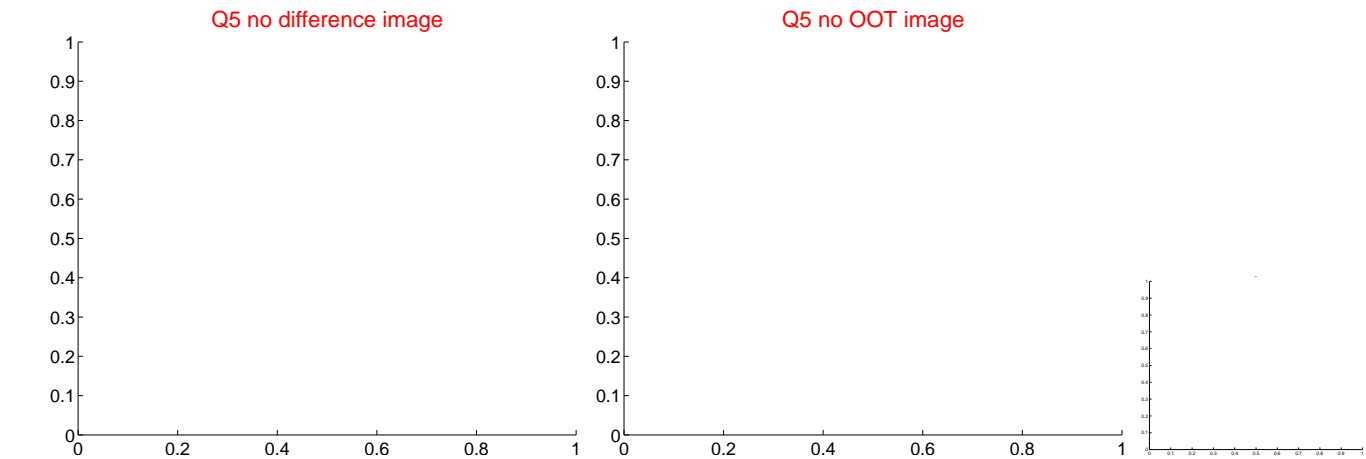


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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

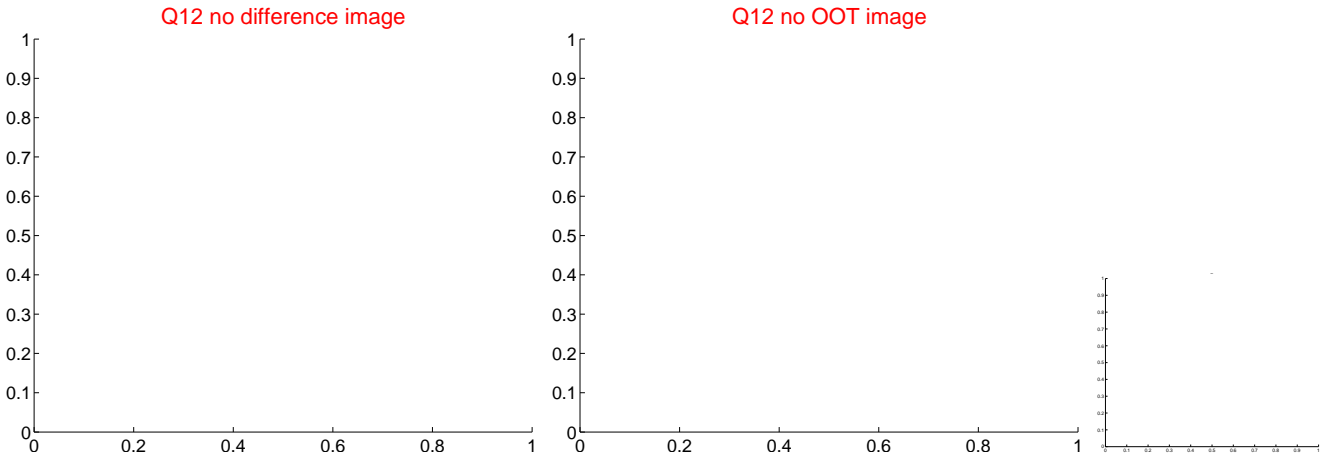
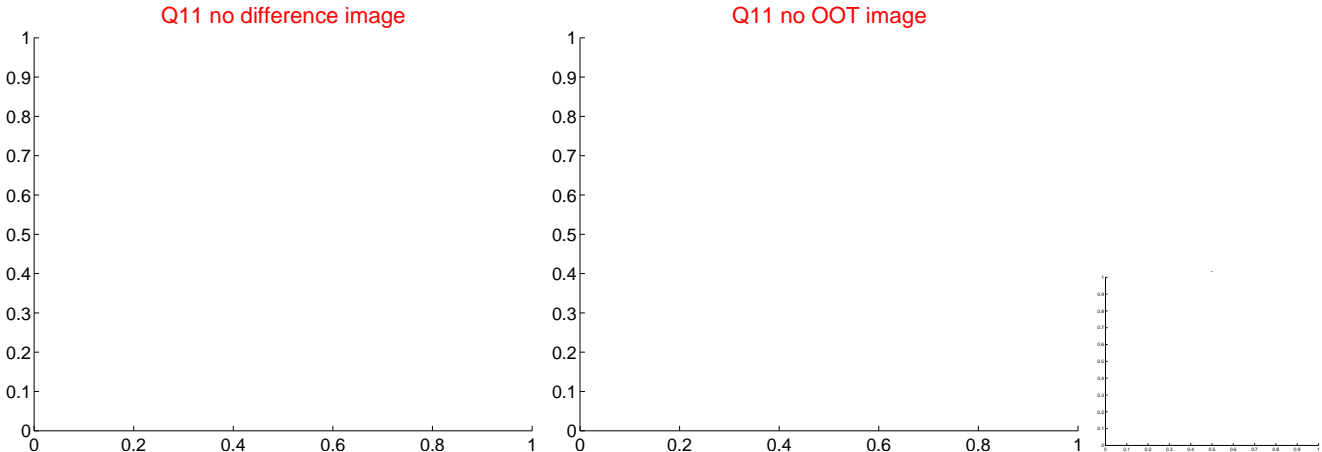
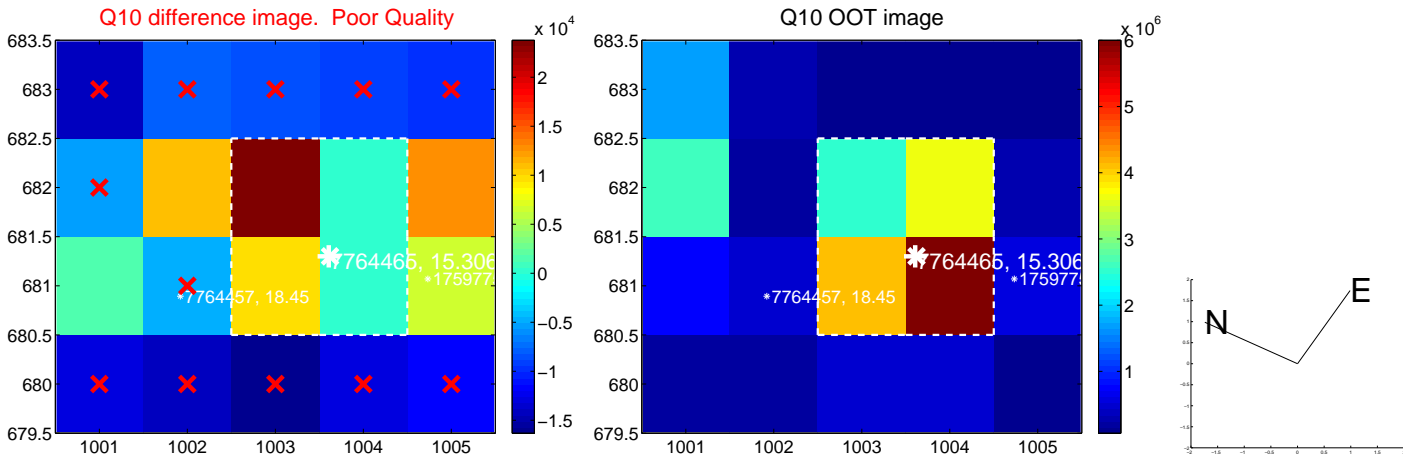
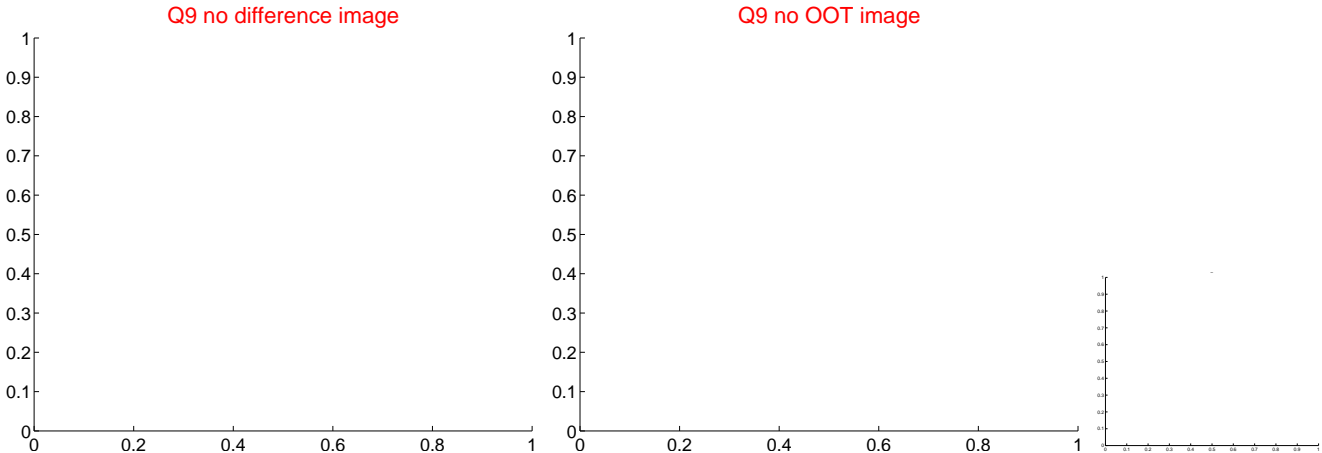
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



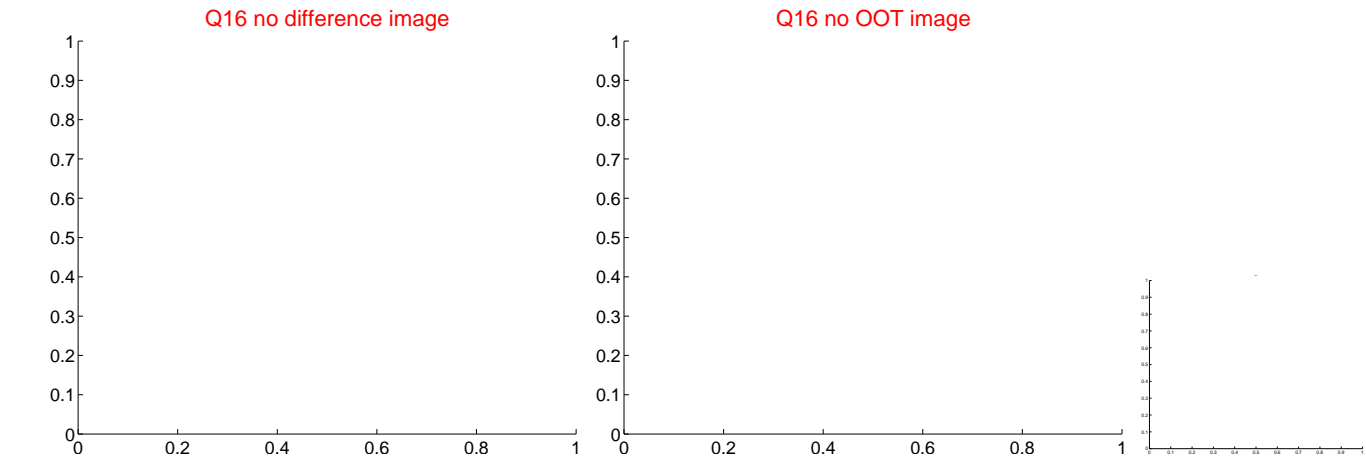
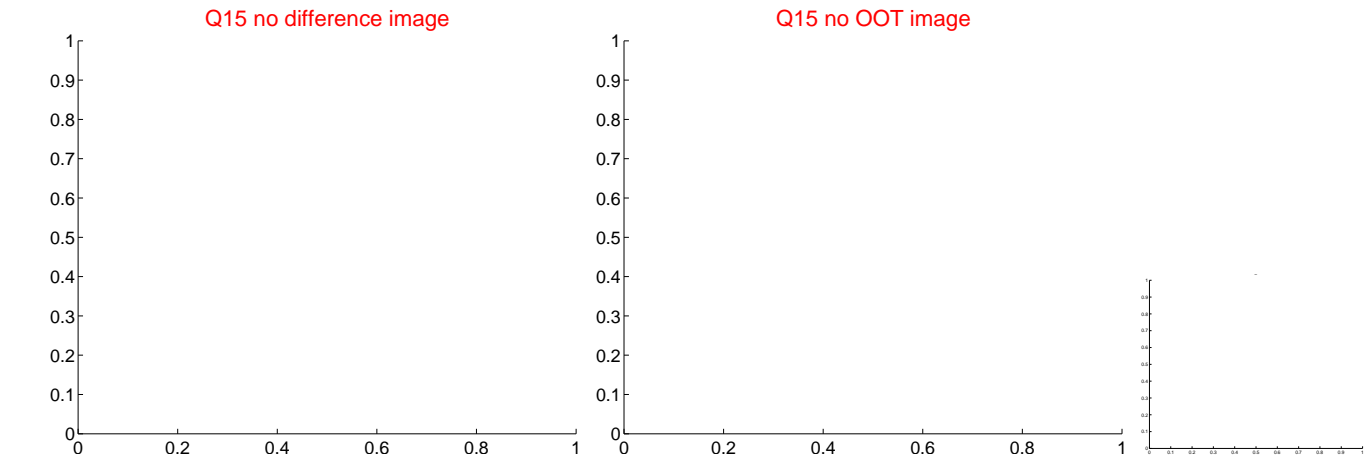
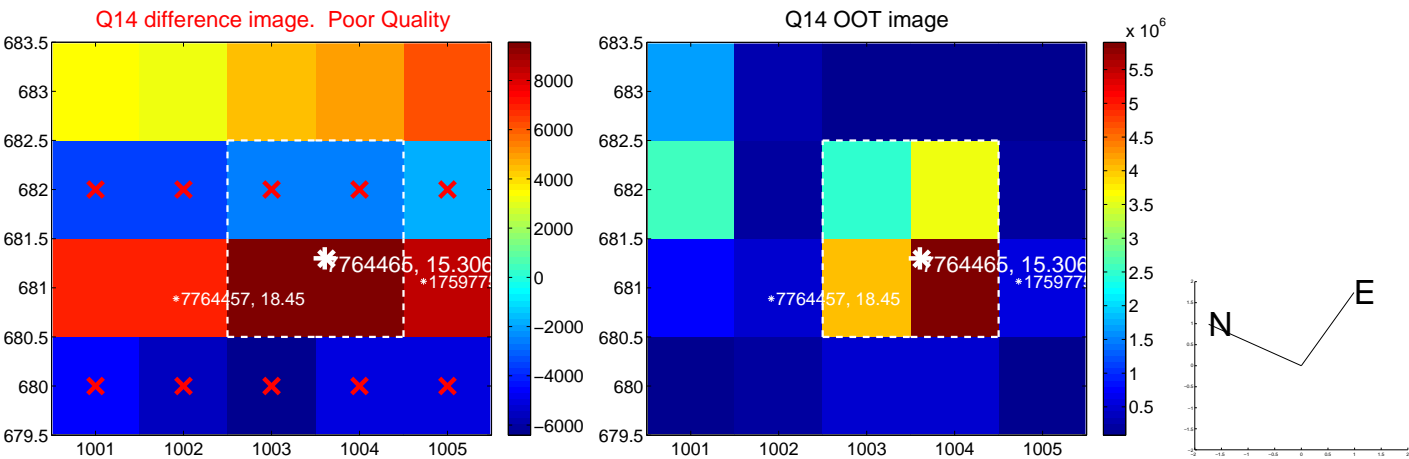
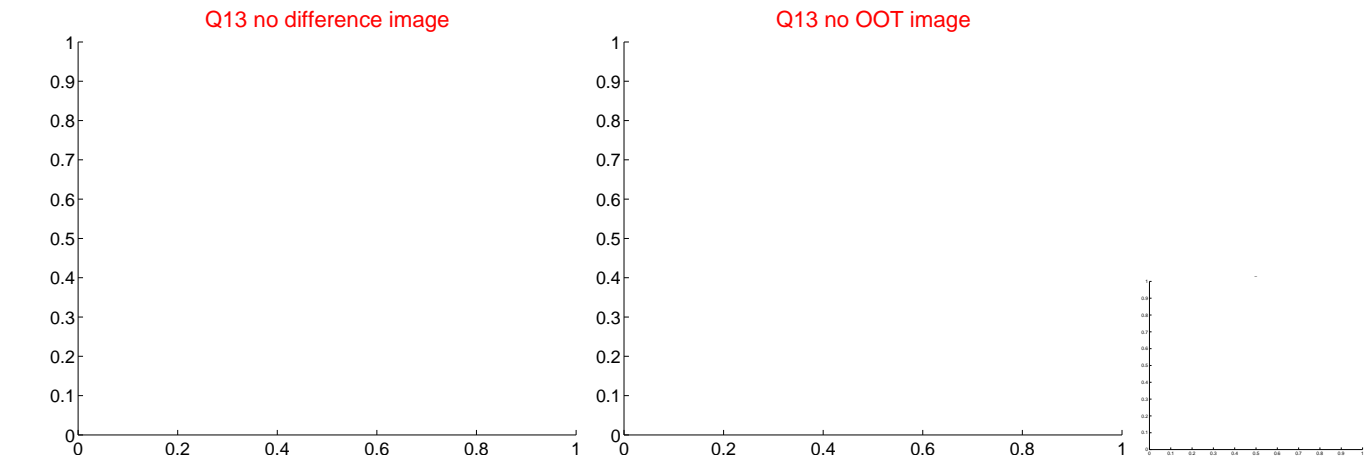
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



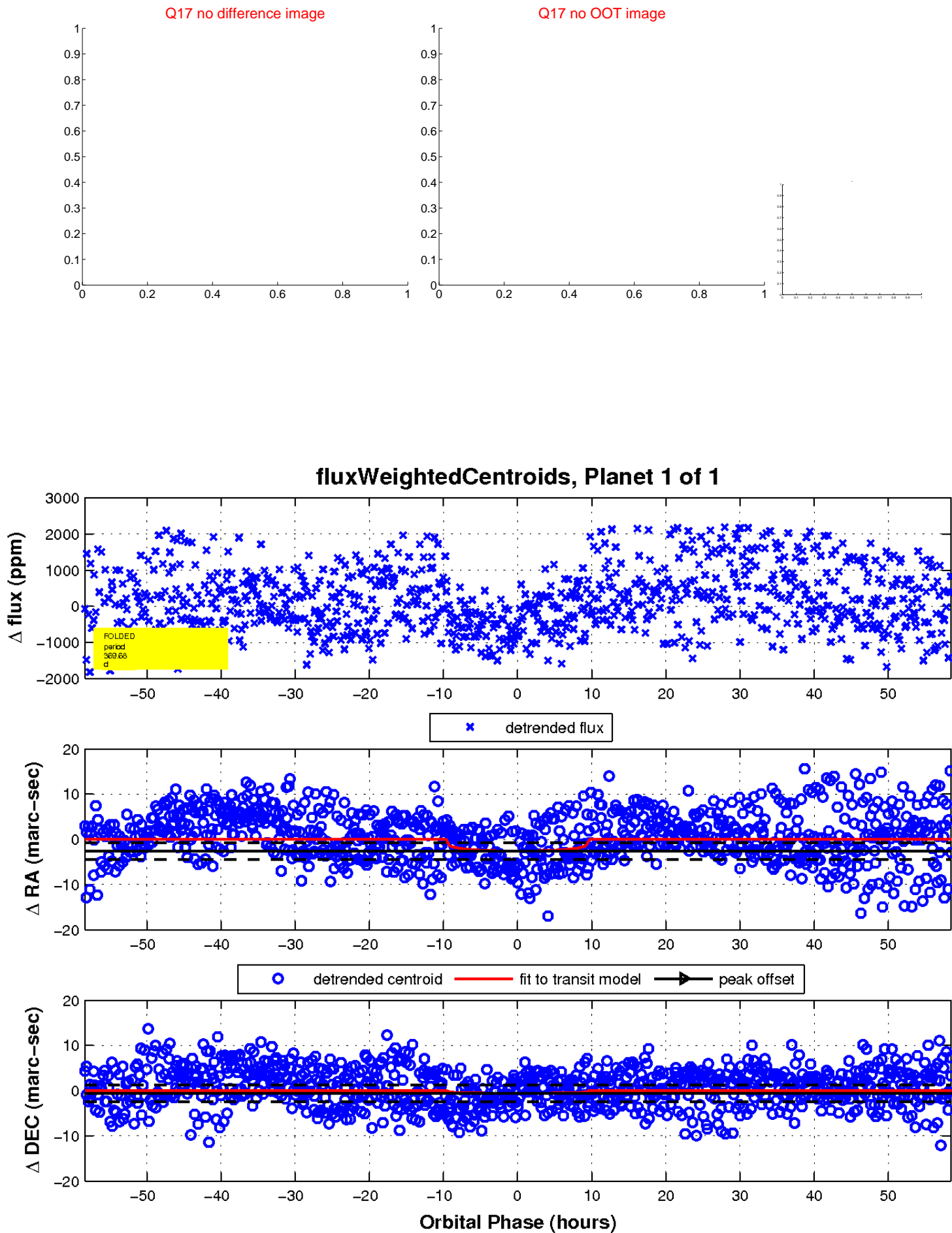
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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



UKIRT Image

Declination

