

KIC 007762654

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})
007762654-01	OBS	No	370.439236	231.140618	1503.9	20.178	10.7	10.1	0.99	6014	4.53	1.06

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
007762654-01	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.

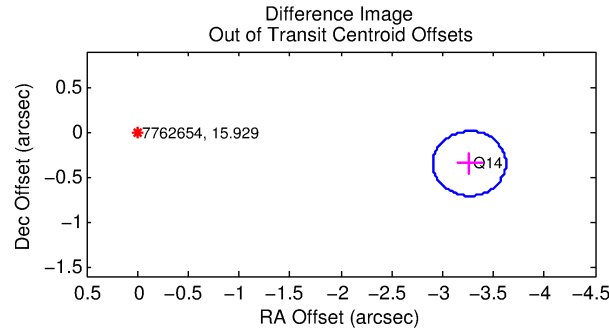
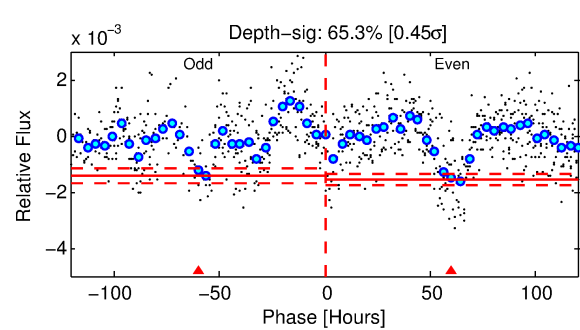
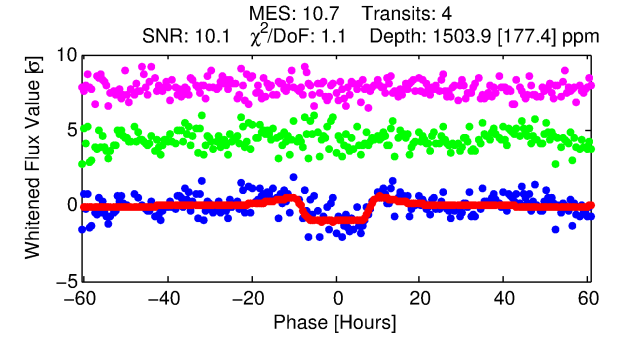
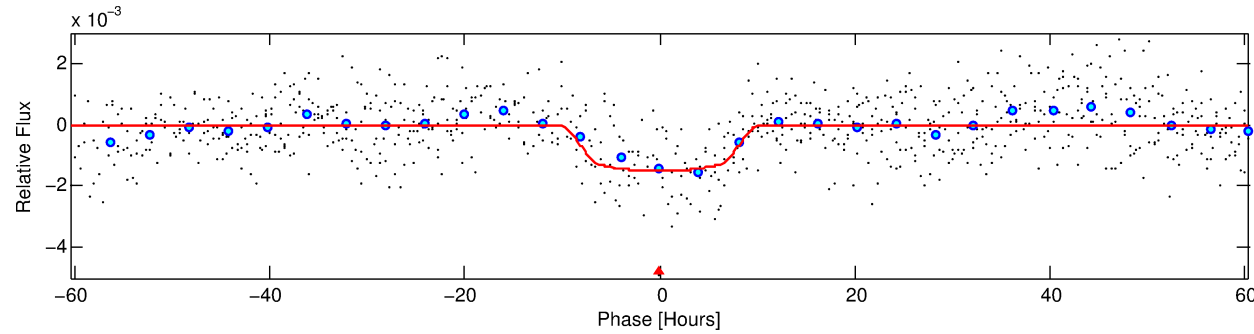
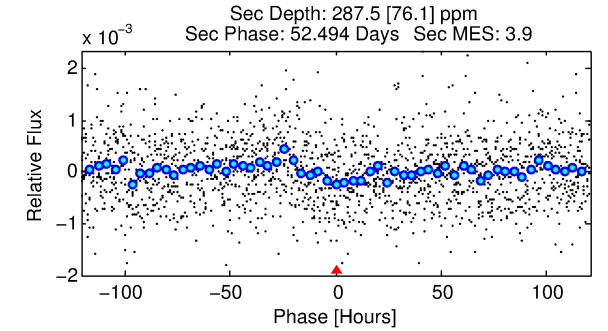
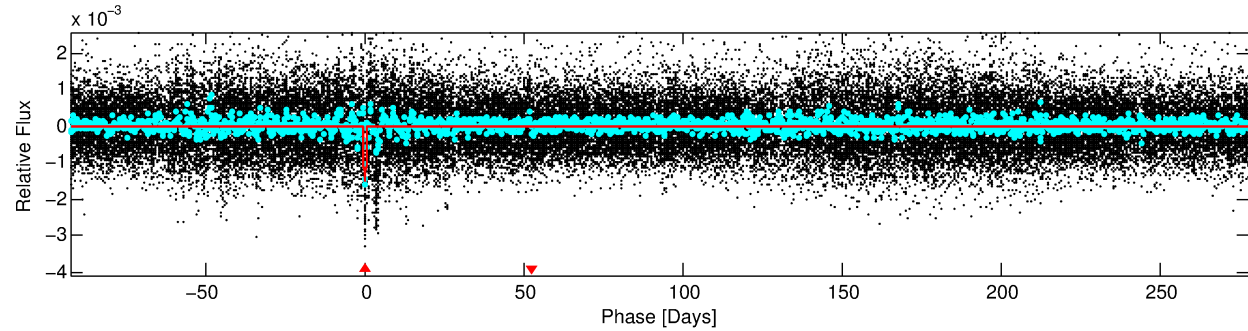
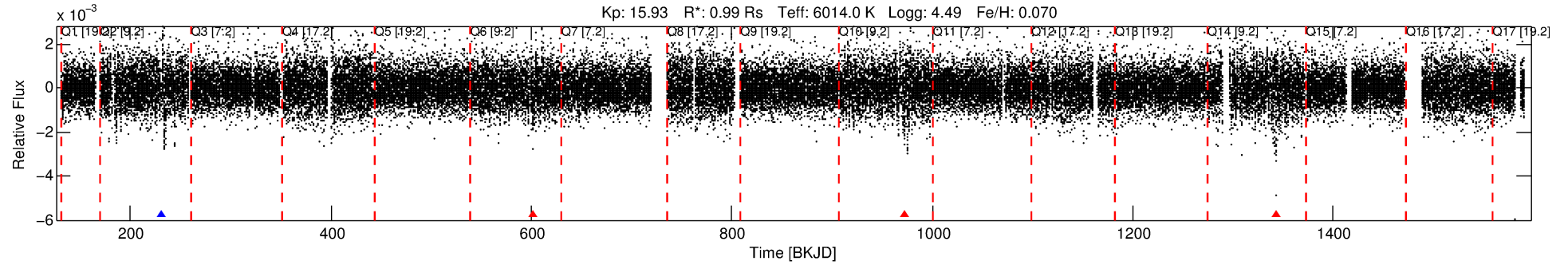
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 007762654-01

No Significant Match Found

DV One-Page Summary

KIC: 7762654 Candidate: 1 of 1 Period: 370.439 d



DV Fit Results:

Period = 370.43924 [0.01564] d
Epoch = 231.1406 [0.0309] BKJD
Rp/R* = 0.0418 [0.0035]
a/R* = 75.24 [17.76]
b = 0.89 [0.05]
Seff = 1.06 [0.38]
Teq = 259 [23] K
Rp = 4.53 [1.21] Re
a = 1.0427 [0.2298] AU
Ag = 8379.56 [3813.52] [2.20σ]
Teffp = 3830 [326] K [10.91σ]

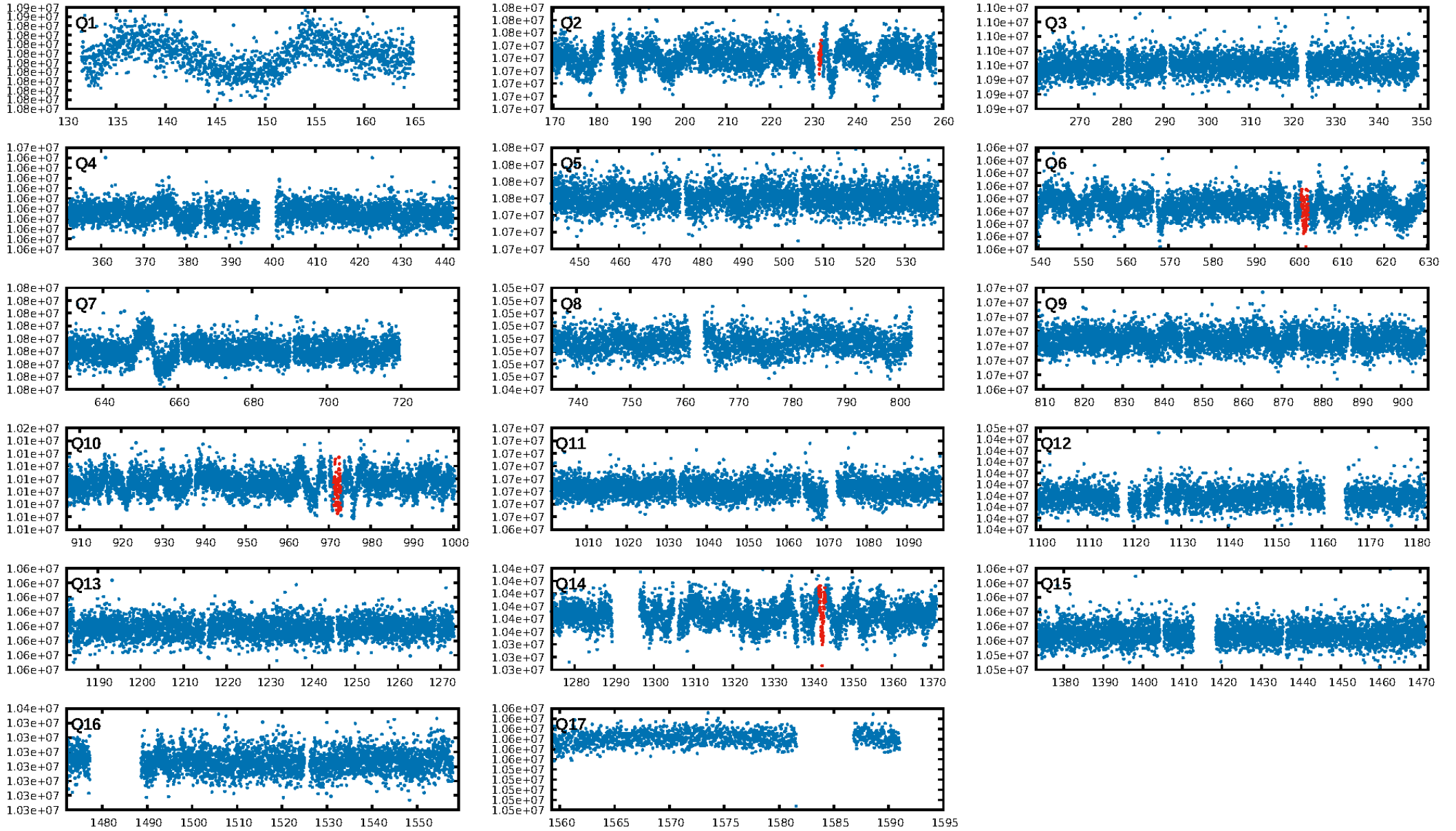
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: 14.7%
ModelChiSquareGoF-sig: 99.9%
Bootstrap-pfa: 4.93e-20
RollingBand-fgt: 0.25 [1/4]
GhostDiagnostic-chr: 0.4166
Centroid-sig: 0.0%
Centroid-so: 10.131 arcsec [4.90σ]
OotOffset-rm: 3.282 arcsec [27.44σ]
KicOffset-rm: 3.293 arcsec [27.51σ]
OotOffset-st: 1/0/0/0 [1]
KicOffset-st: 1/0/0/0 [1]
DiffImageQuality-fgm: 0.00 [0/1]
DiffImageOverlap-fno: 1.00 [2/2]

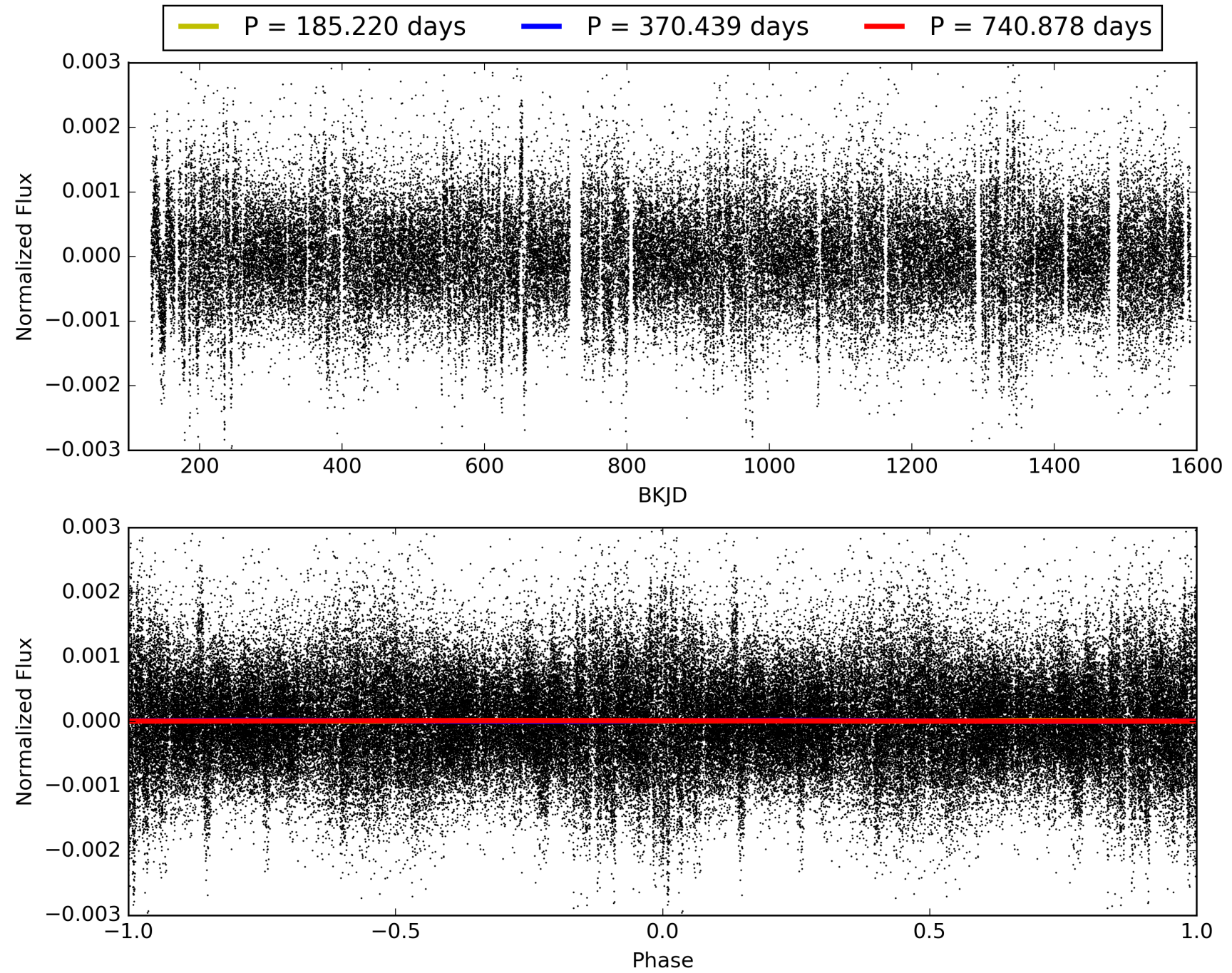
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 28-Jan-2016 23:36:40 Z

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

TCE 007762654-01, PDC Light Curves

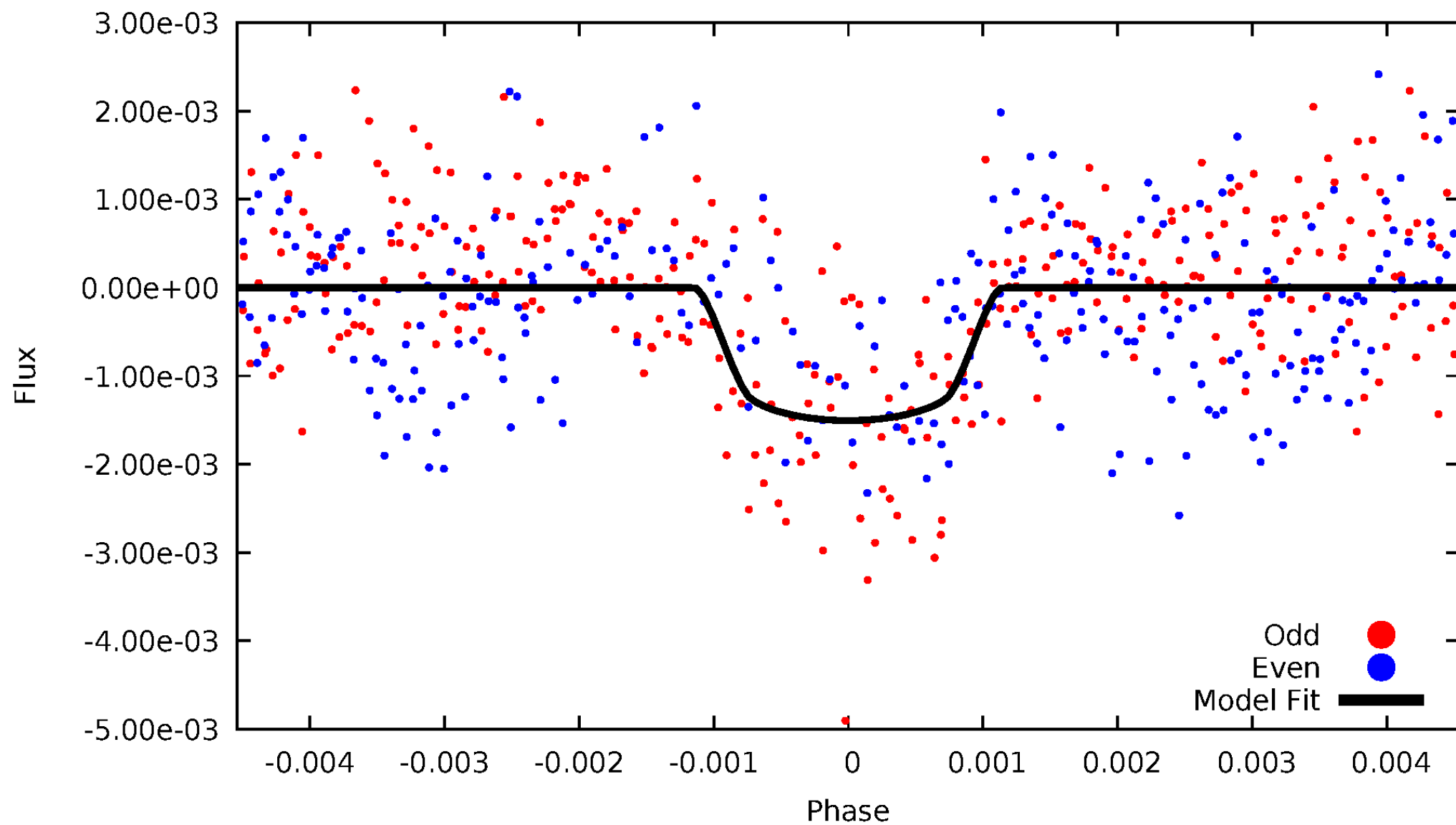


TCE 007762654-01



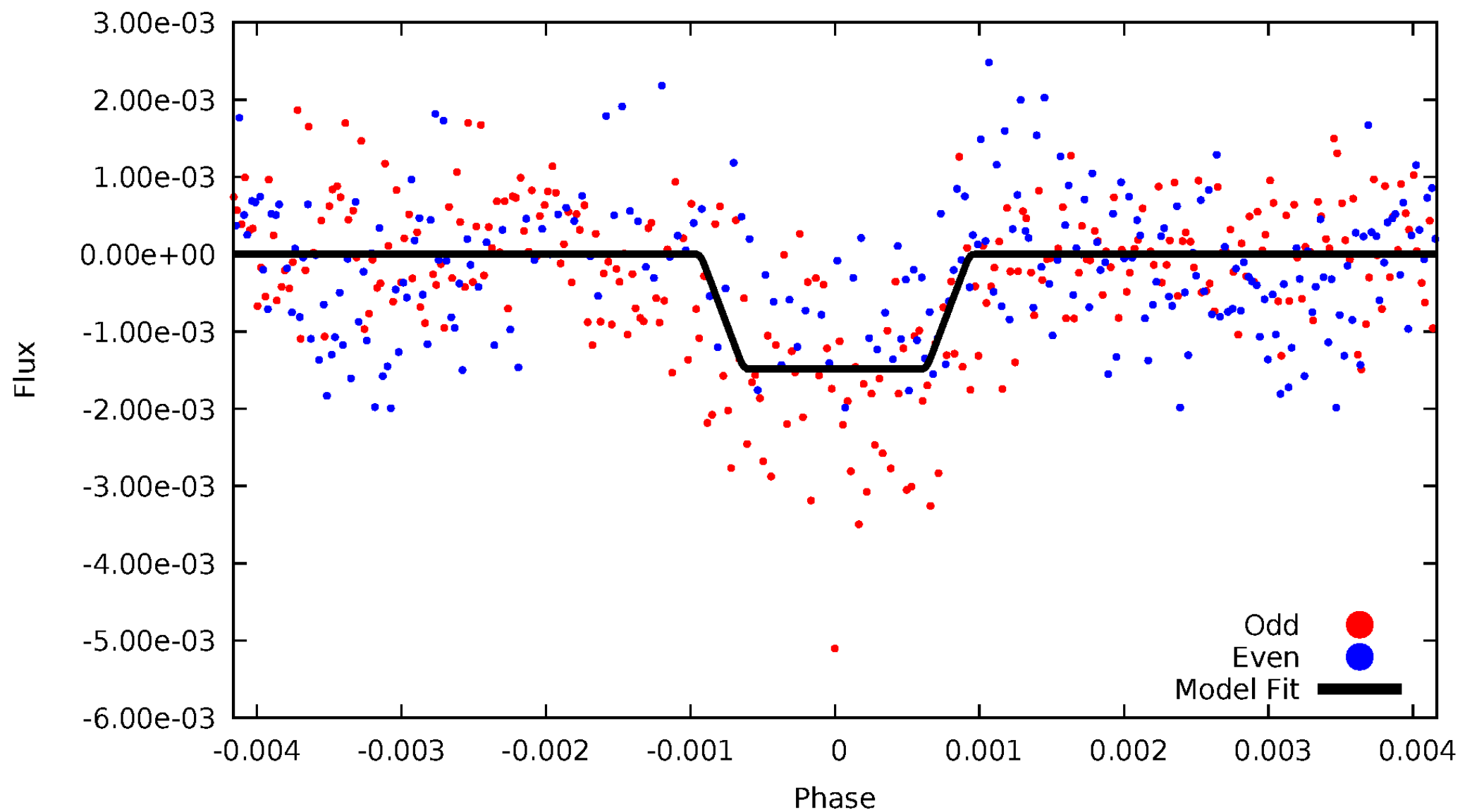
DV Odd/Even

TCE 007762654-01



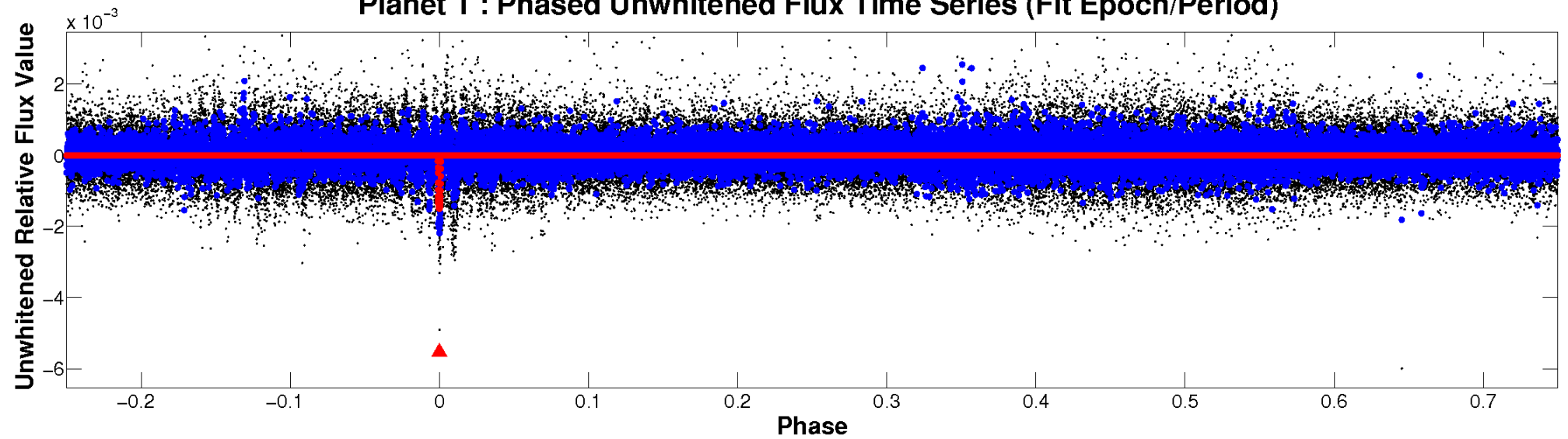
ALT Odd/Even

TCE 007762654-01

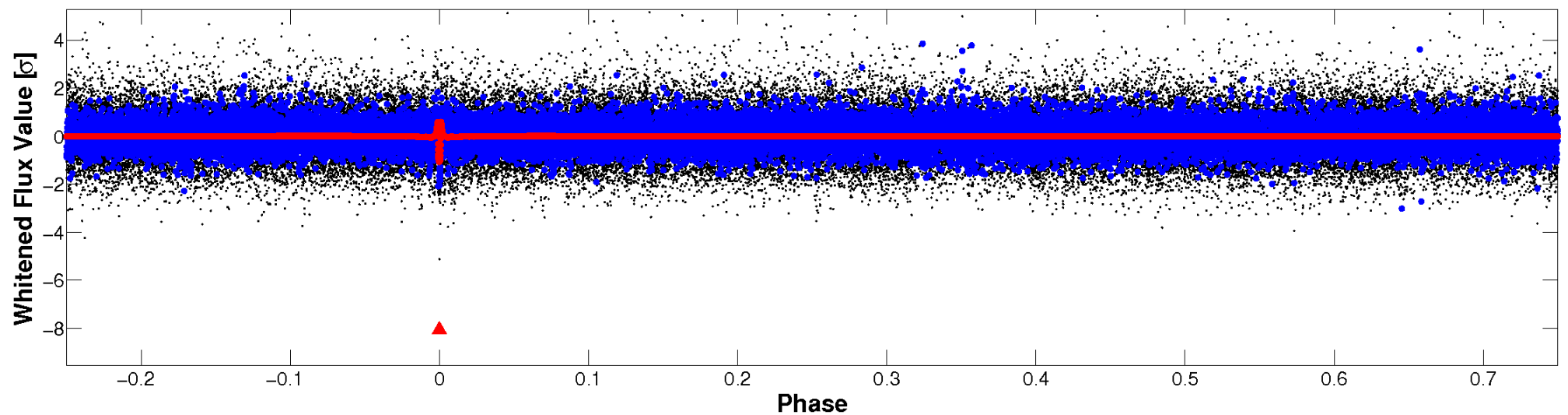


Non-Whitened Vs. Whitened Light Curve

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

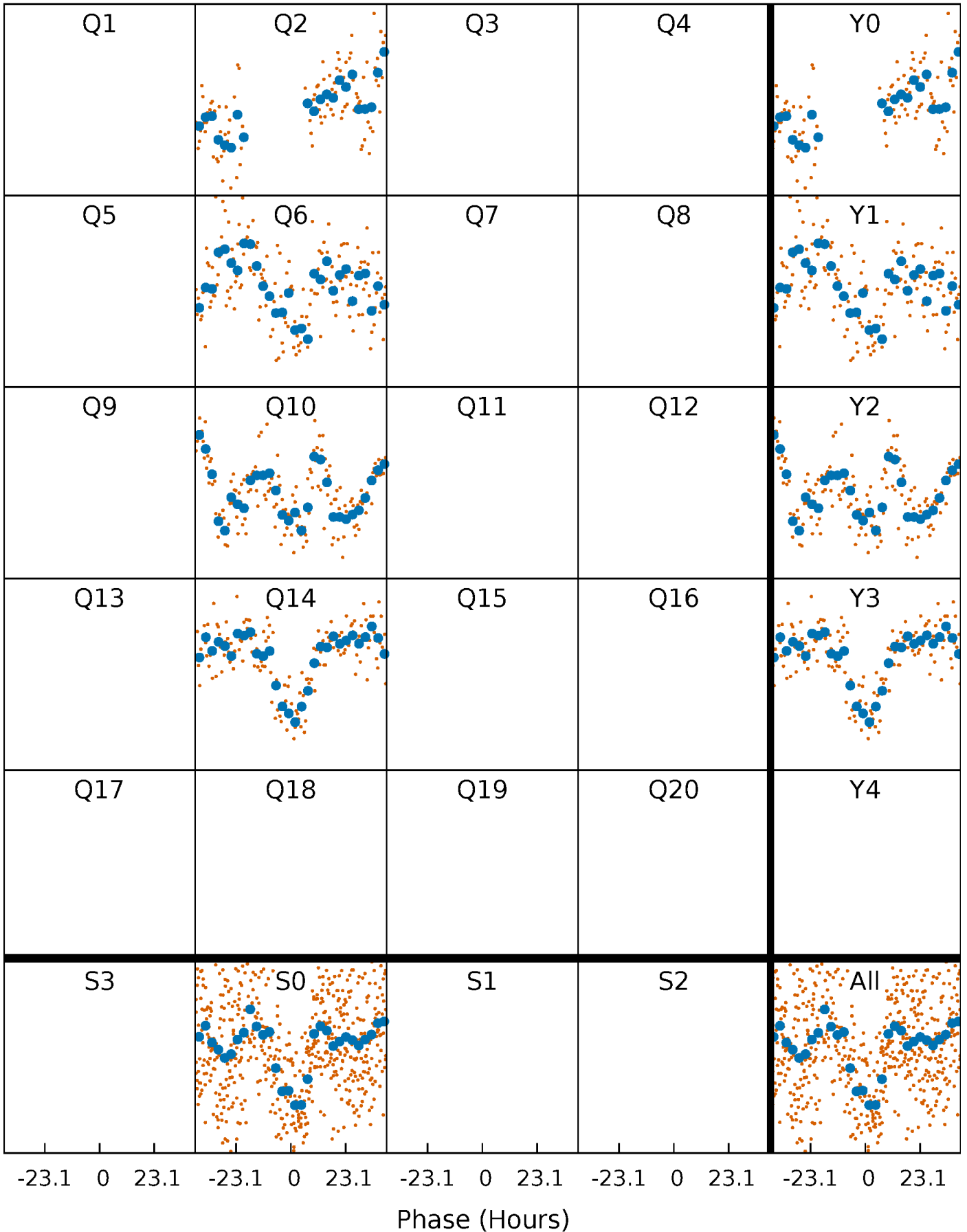


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



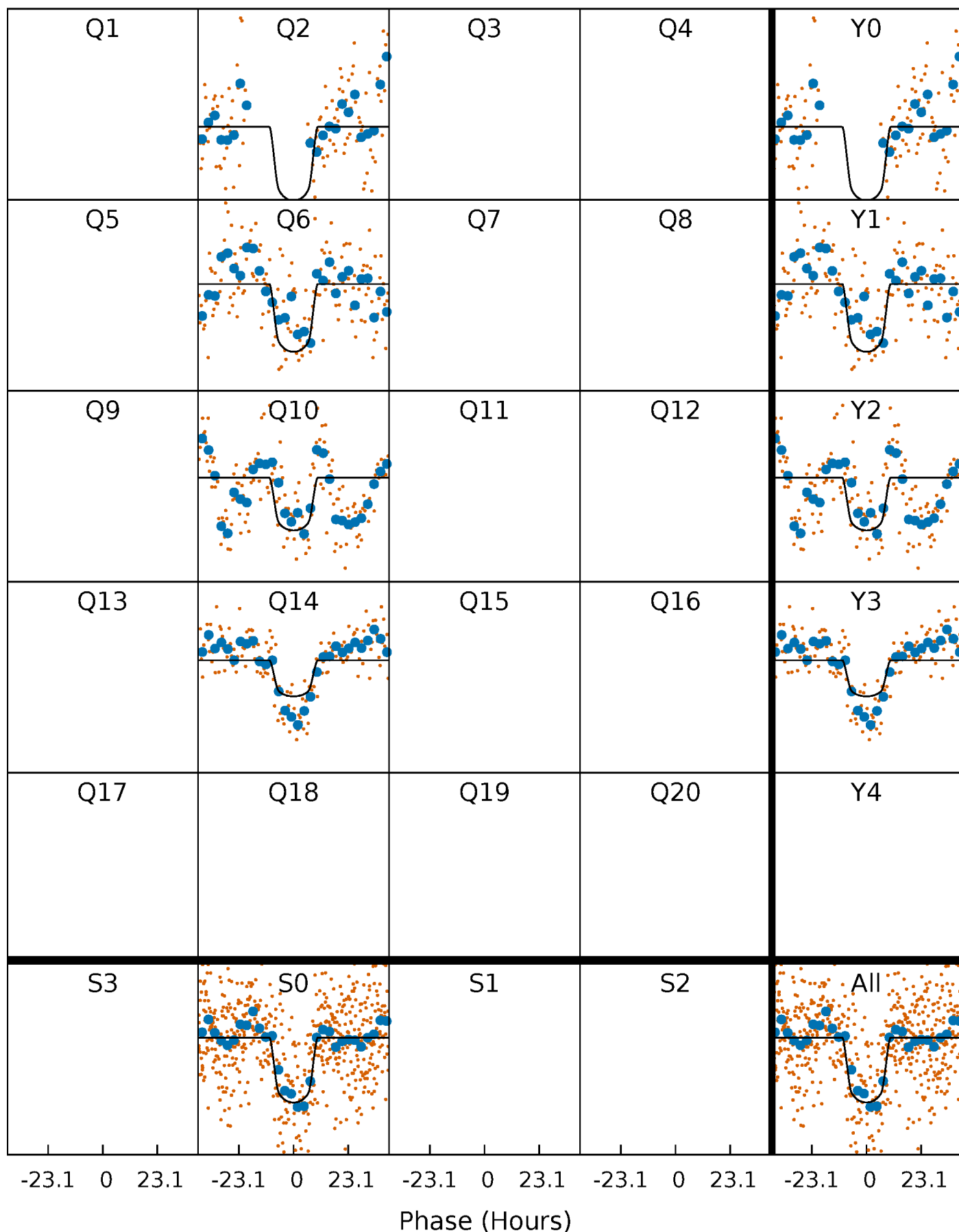
PDC Quarter-Phased Transit Curves

TCE 007762654-01 P=370.439236 Days $T_0=231.140618$ (BKJD)



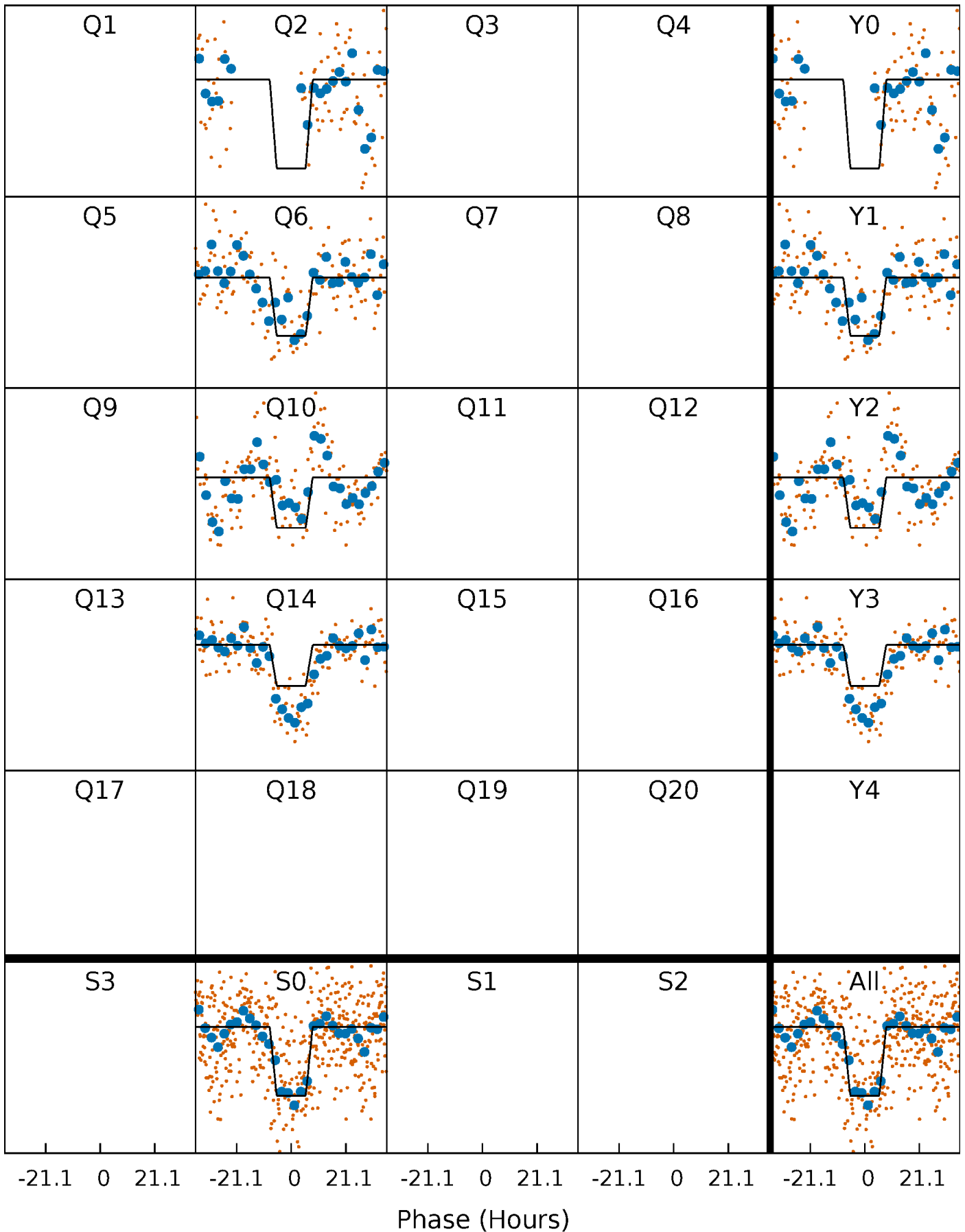
DV Quarter-Phased Transit Curves

TCE 007762654-01 P=370.439236 Days $T_0=231.140618$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

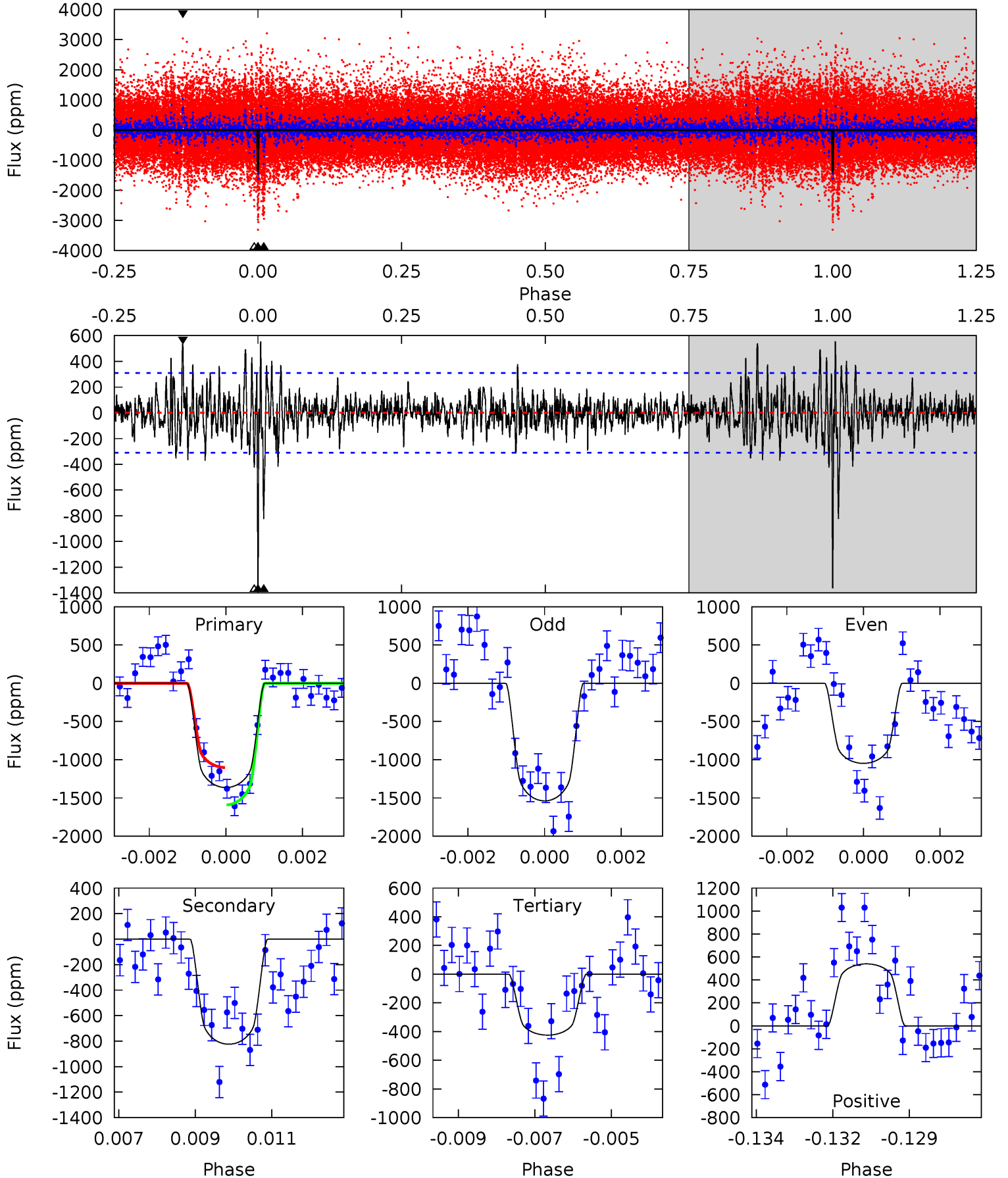
TCE 007762654-01 P=370.405953 Days $T_0=231.232906$ (BKJD)



DV Model-Shift Uniqueness Test

007762654-01, P = 370.439236 Days, E = 231.140618 Days

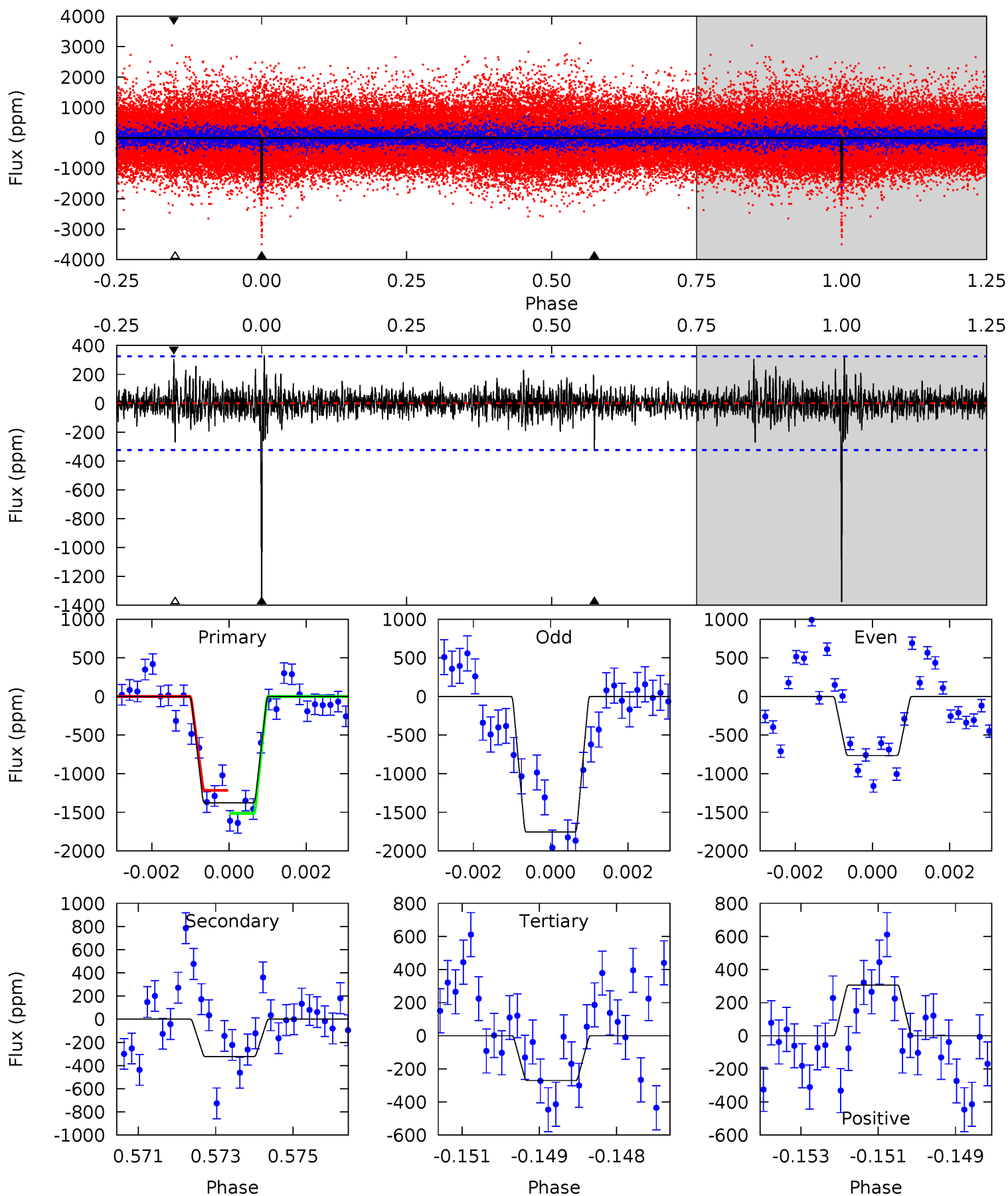
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
23.3	14.1	7.27	9.24	5.30	3.05	1.88	16.1	14.1	6.83	4.87	4.09	1.21	0.29	0



Alt Model-Shift Uniqueness Test

007762654-01, $P = 370.405953$ Days, $E = 231.232906$ Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
22.6	5.30	4.45	5.02	5.34	3.11	1.02	18.2	17.6	0.85	0.29	7.96	1.28	0.19	0



Stellar Parameters For KIC 007762654

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	6014^{+181}_{-199}	$4.486^{+0.046}_{-0.184}$	$0.070^{+0.250}_{-0.350}$	$0.993^{+0.252}_{-0.108}$	$1.101^{+0.107}_{-0.160}$	$1.584^{+0.375}_{-0.746}$
	+3%/-3%	+1%/-4%	+357%/-500%	+25%/-11%	+10%/-15%	+24%/-47%
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 007762654-01 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	-824±58	$4.68^{+0.68}_{-0.58}$	370^{+22}_{-18}	5058^{+252}_{-226}	21648^{+6593}_{-4859}
Alt.	-323±61	$4.27^{+0.69}_{-0.47}$	369^{+24}_{-17}	4326^{+254}_{-233}	10100^{+3548}_{-3016}

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 $A_{obs} \gg 1.0$

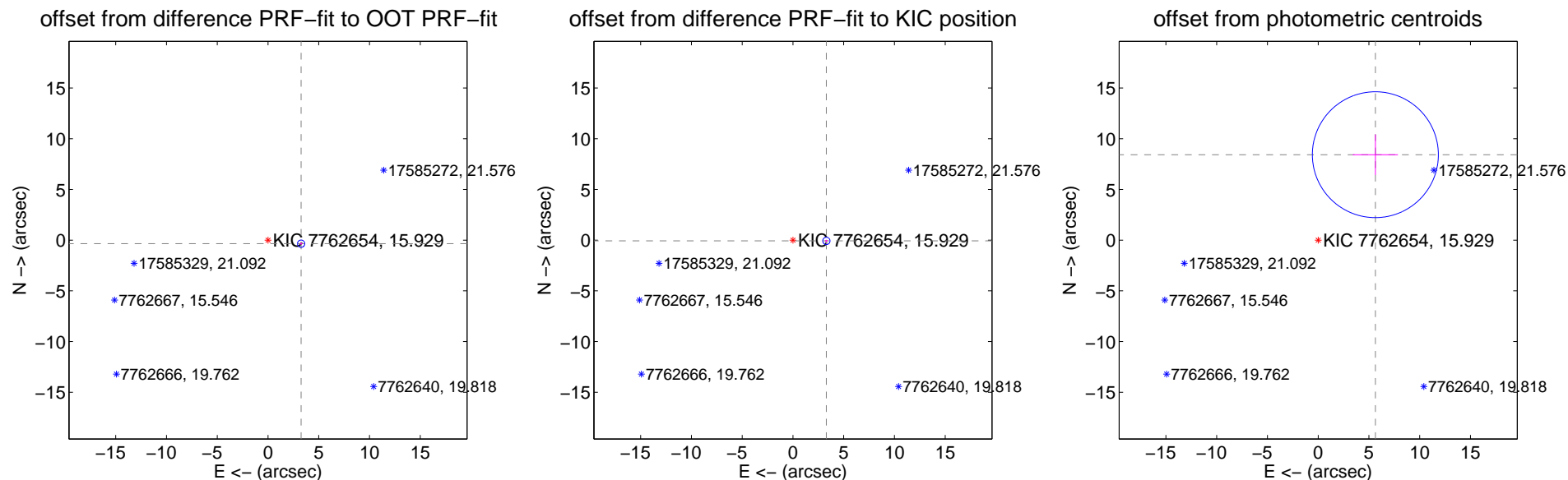
DV Centroid Data

Supplemental centroid analysis for 007762654-01. Kepler magnitude: 15.93. Transit SNR 10.05

There are 0 quarters with good PRF difference image offsets

The direct PRF centroid is offset from the target star catalog position by about 0.28 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	3.282 ± 0.120	27.44	-3.263 ± 0.120	-0.349 ± 0.108
PRF-fit source offset from KIC position	3.293 ± 0.120	27.51	-3.293 ± 0.120	-0.074 ± 0.108
photometric centroid source offset	10.13 ± 2.07	4.90	-5.63 ± 2.22	8.42 ± 2.00

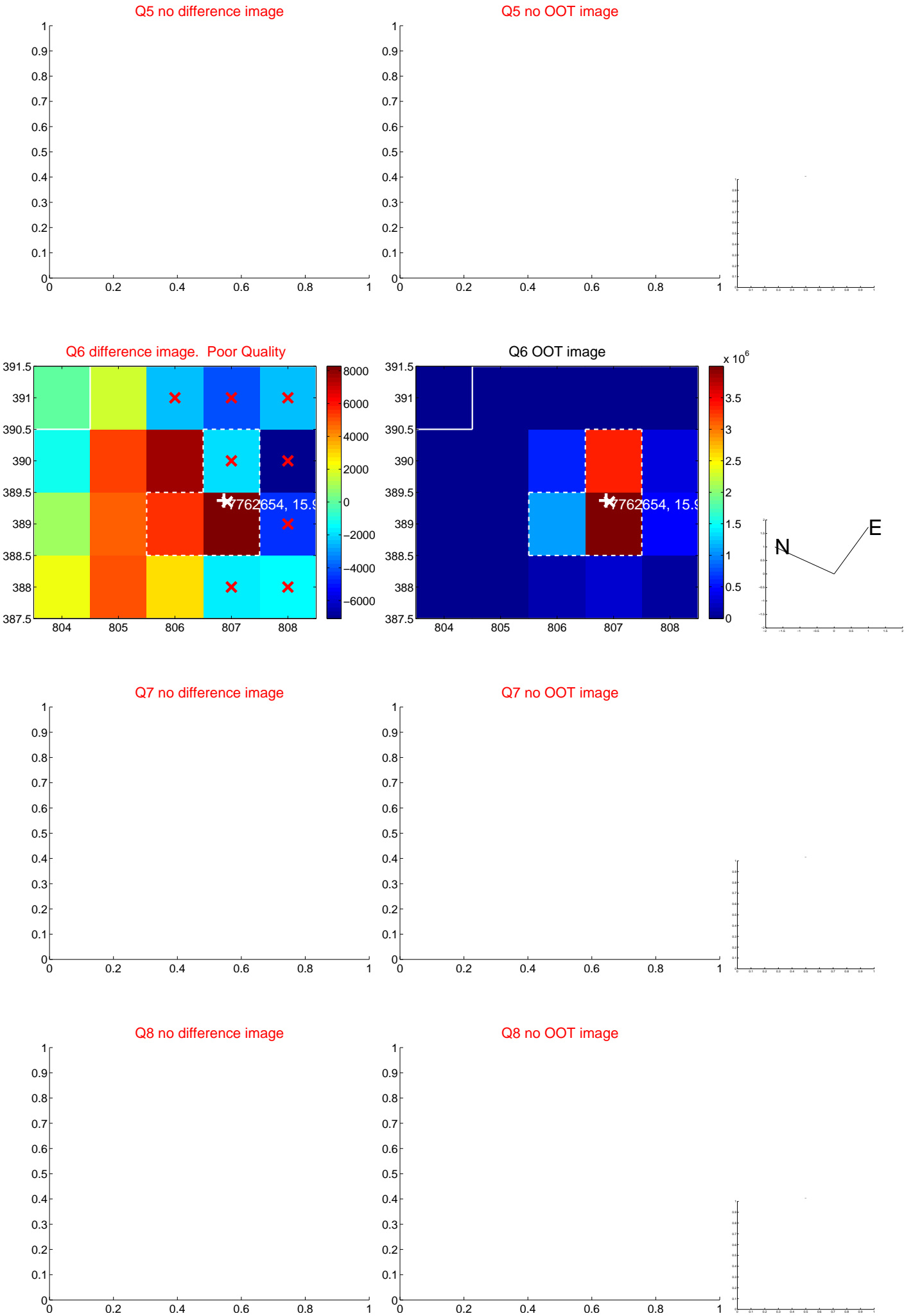


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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



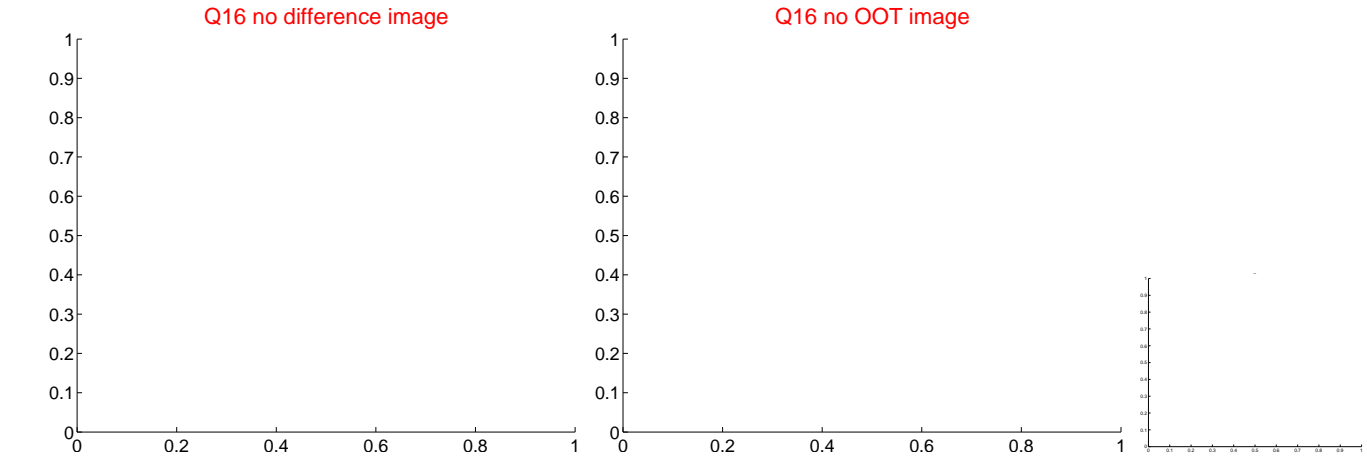
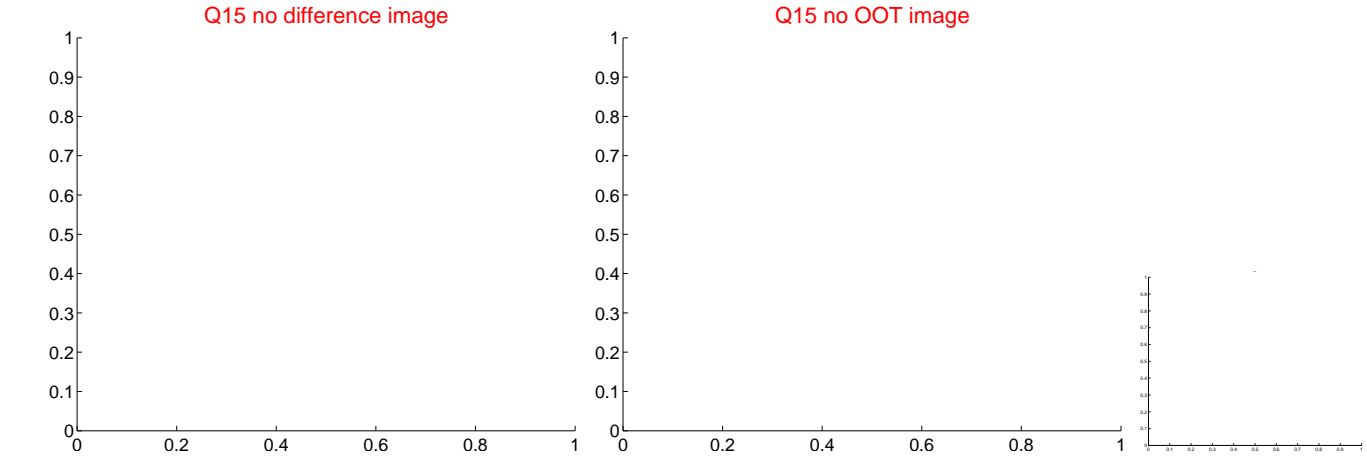
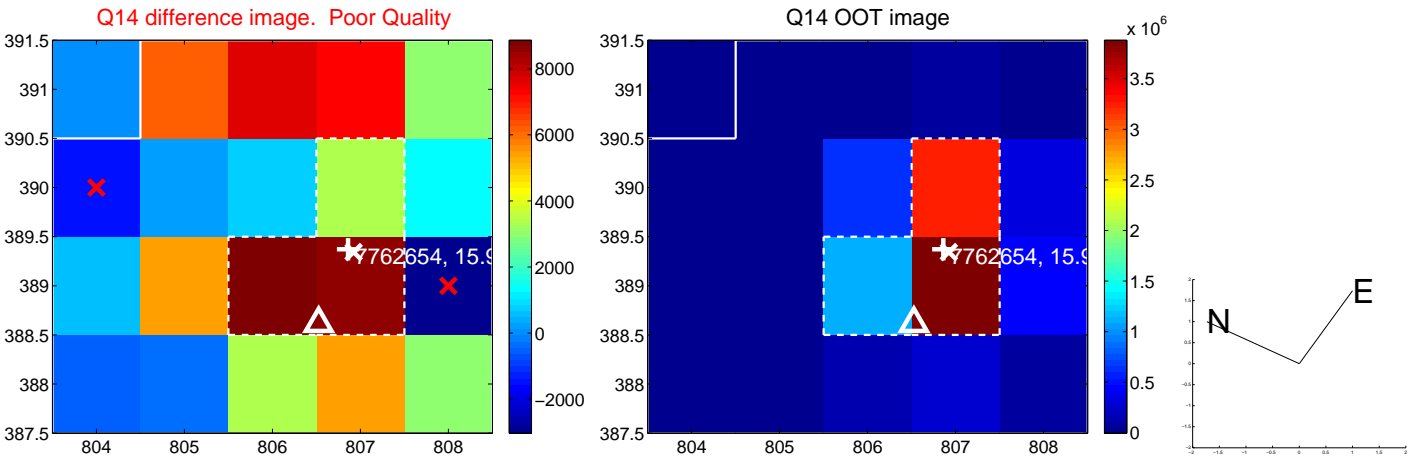
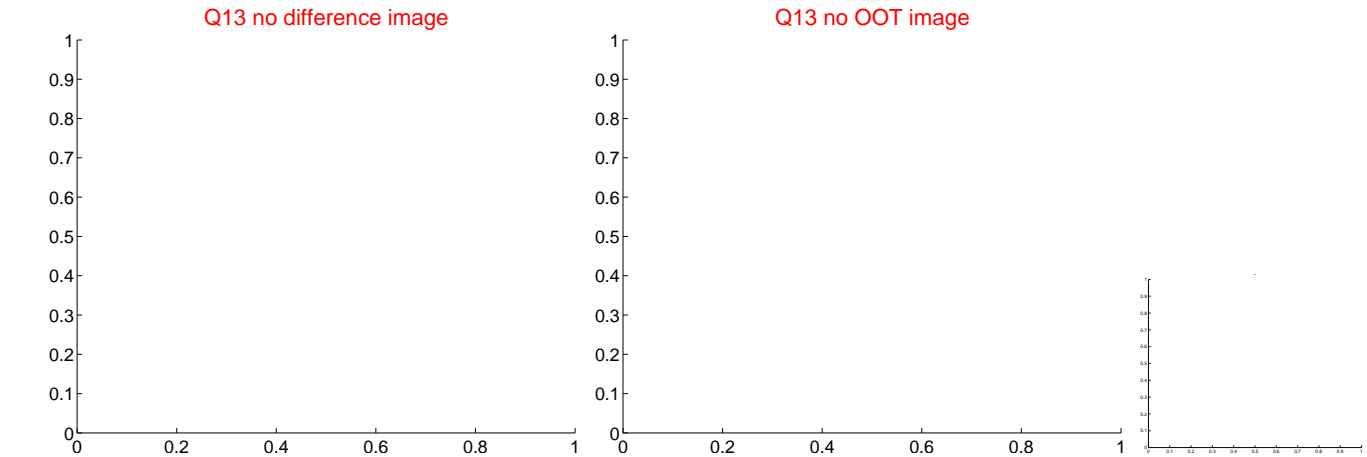
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



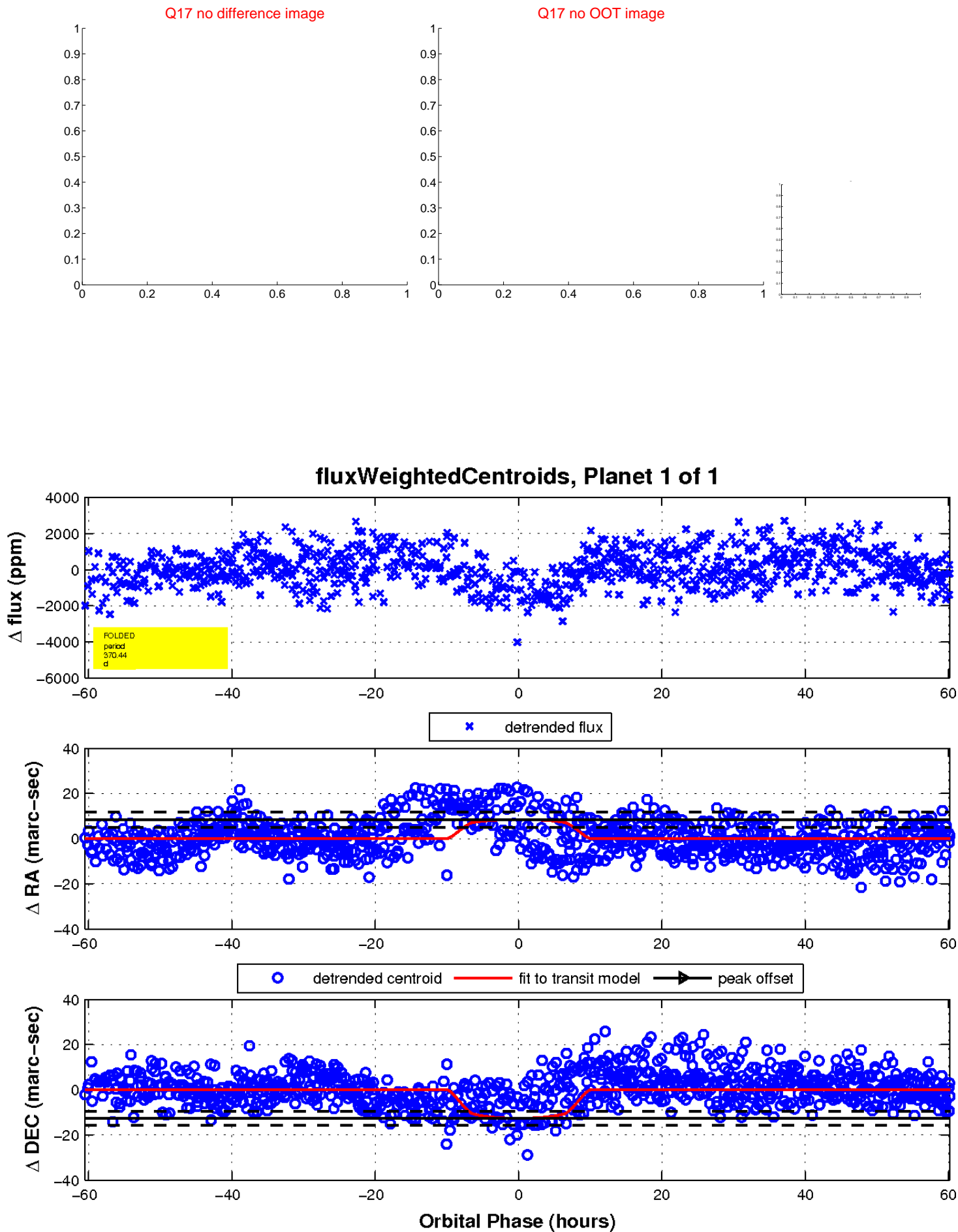
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UKIRT Image

Declination

