

KIC 007765743

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})
007765743-01	OBS	No	368.296519	234.459431	295.8	19.385	7.4	7.3	1.23	6043	2.27	1.75

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
007765743-01	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_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.

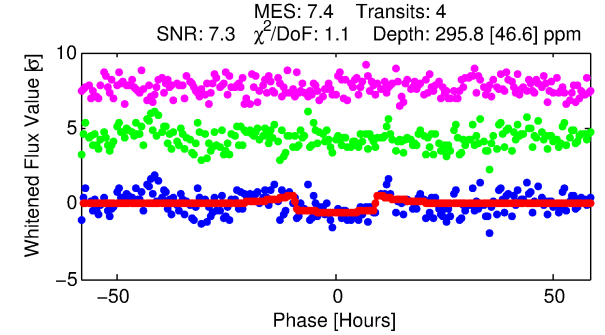
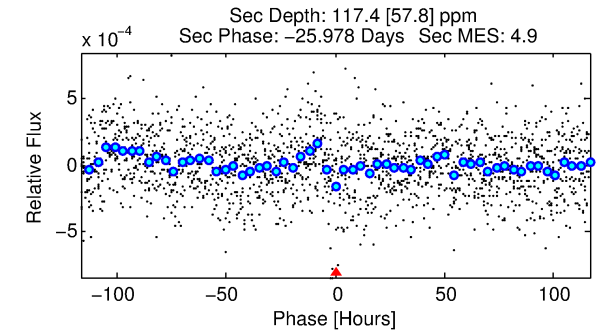
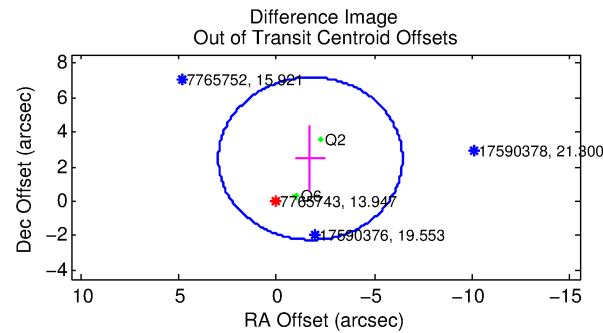
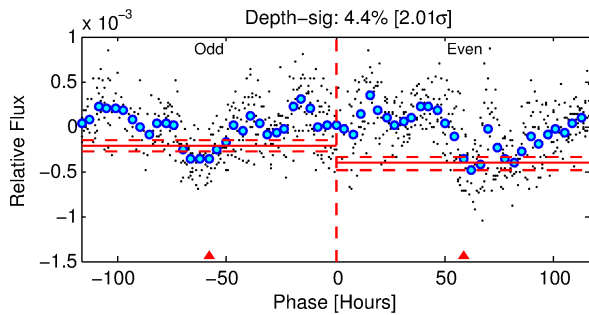
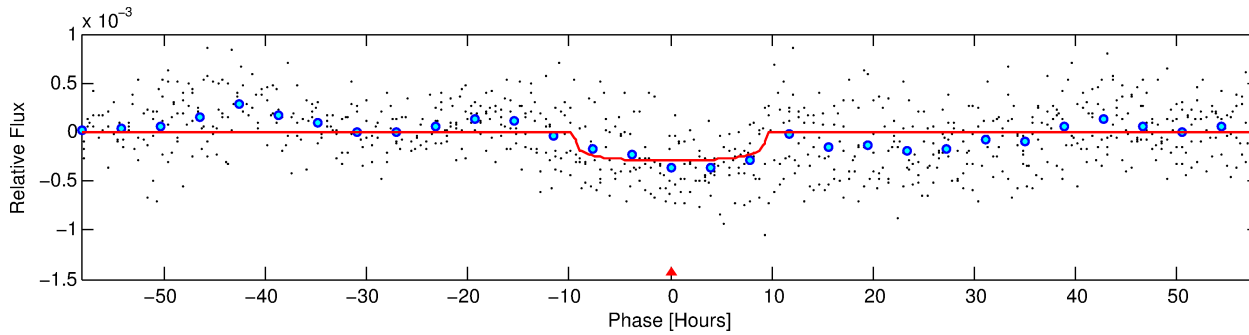
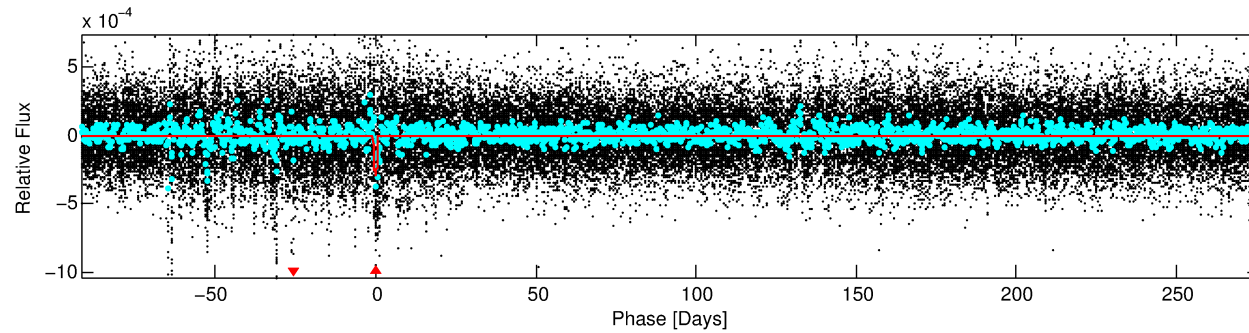
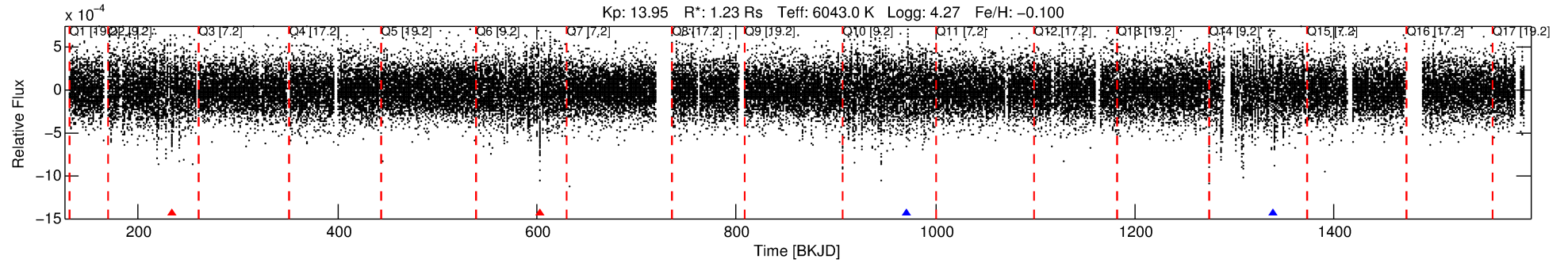
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 007765743-01

No Significant Match Found

DV One-Page Summary

KIC: 7765743 Candidate: 1 of 1 Period: 368.297 d



DV Fit Results:

Period = 368.29652 [0.00970] d
Epoch = 234.4594 [0.0179] BKJD
Rp/R* = 0.0169 [0.0050]
a/R* = 105.18 [144.55]
b = 0.71 [0.95]
Seff = 1.75 [0.64]
Teff = 293 [27] K
Rp = 2.27 [0.96] Re
a = 1.0146 [0.2483] AU
Ag = 12952.54 [10955.68] [1.18σ]
Teffp = 4838 [949] K [4.79σ]

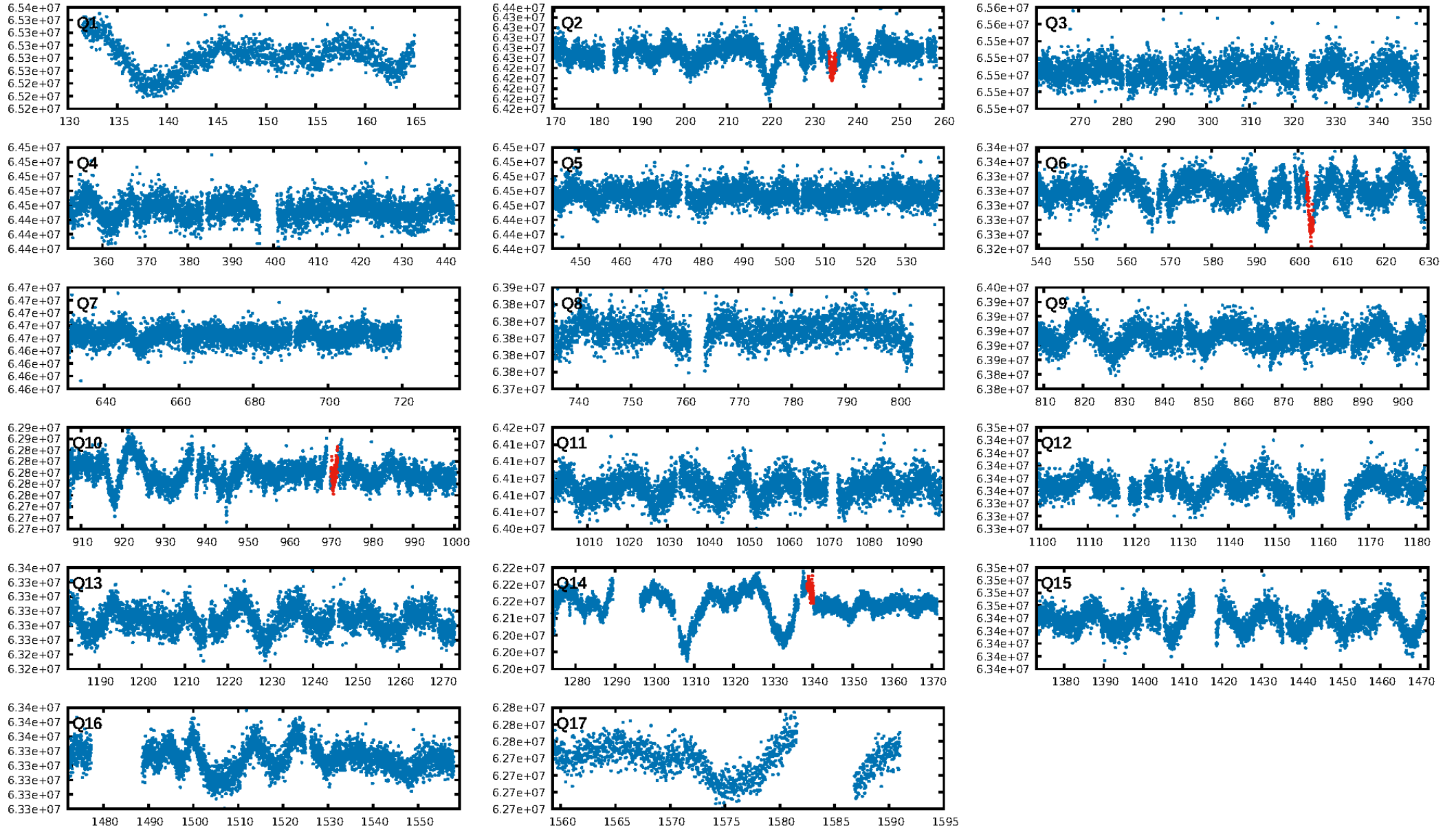
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: 72.3%
ModelChiSquareGof-sig: 99.0%
Bootstrap-pfa: 2.33e-09
RollingBand-fgt: 0.50 [2/4]
GhostDiagnostic-chr: -5.184
Centroid-sig: 11.2%
Centroid-so: 2.674 arcsec [1.42σ]
OotOffset-rm: 3.011 arcsec [1.92σ]
OotOffset-st: 2/0/0/0 [2]
KicOffset-rm: 3.096 arcsec [1.96σ]
KicOffset-st: 2/0/0/0 [2]
DiffImageQuality-fgm: 0.50 [1/2]
DiffImageOverlap-fno: 1.00 [2/2]

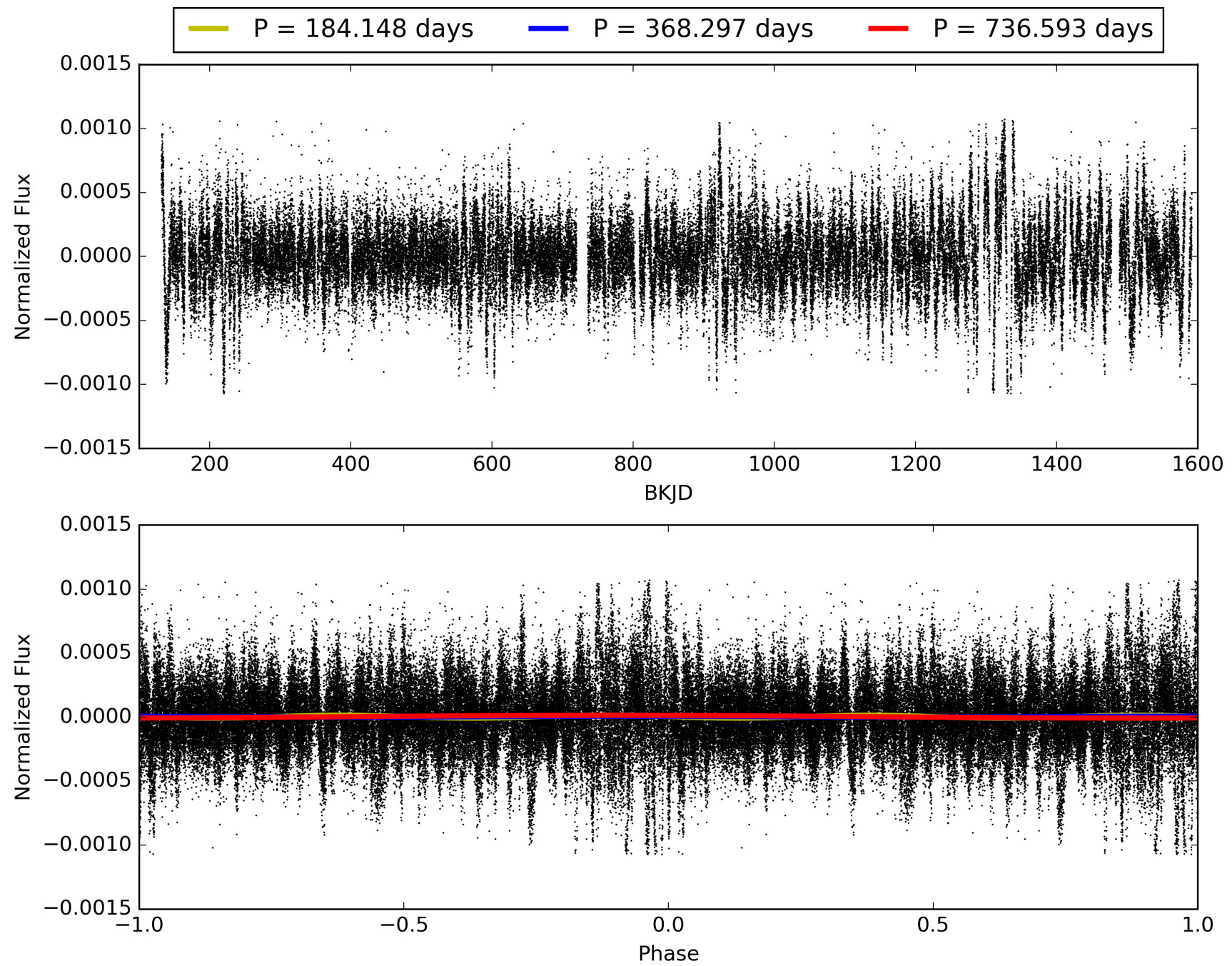
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 29-Jan-2016 00:38:52 Z

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

TCE 007765743-01, PDC Light Curves

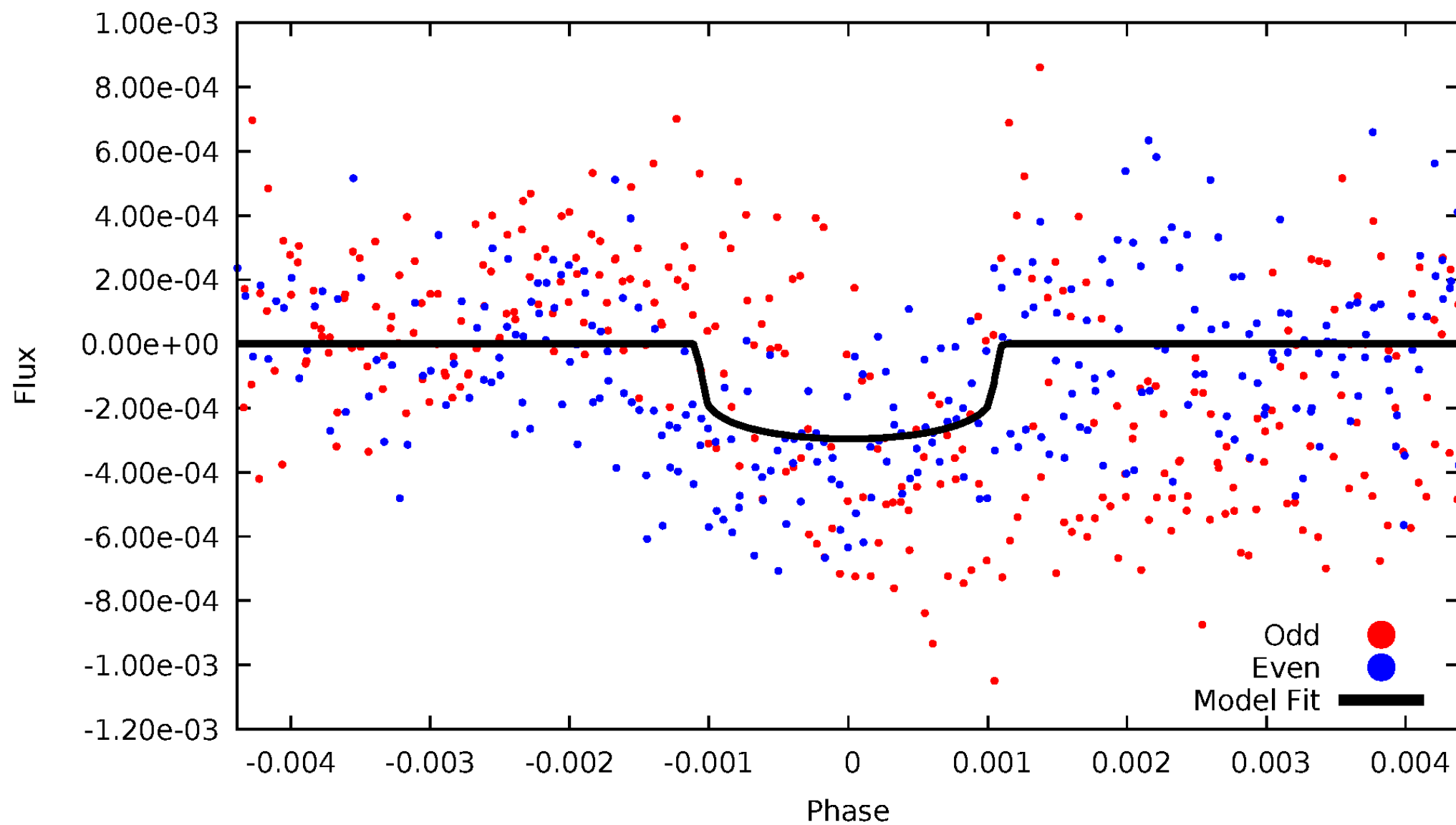


TCE 007765743-01



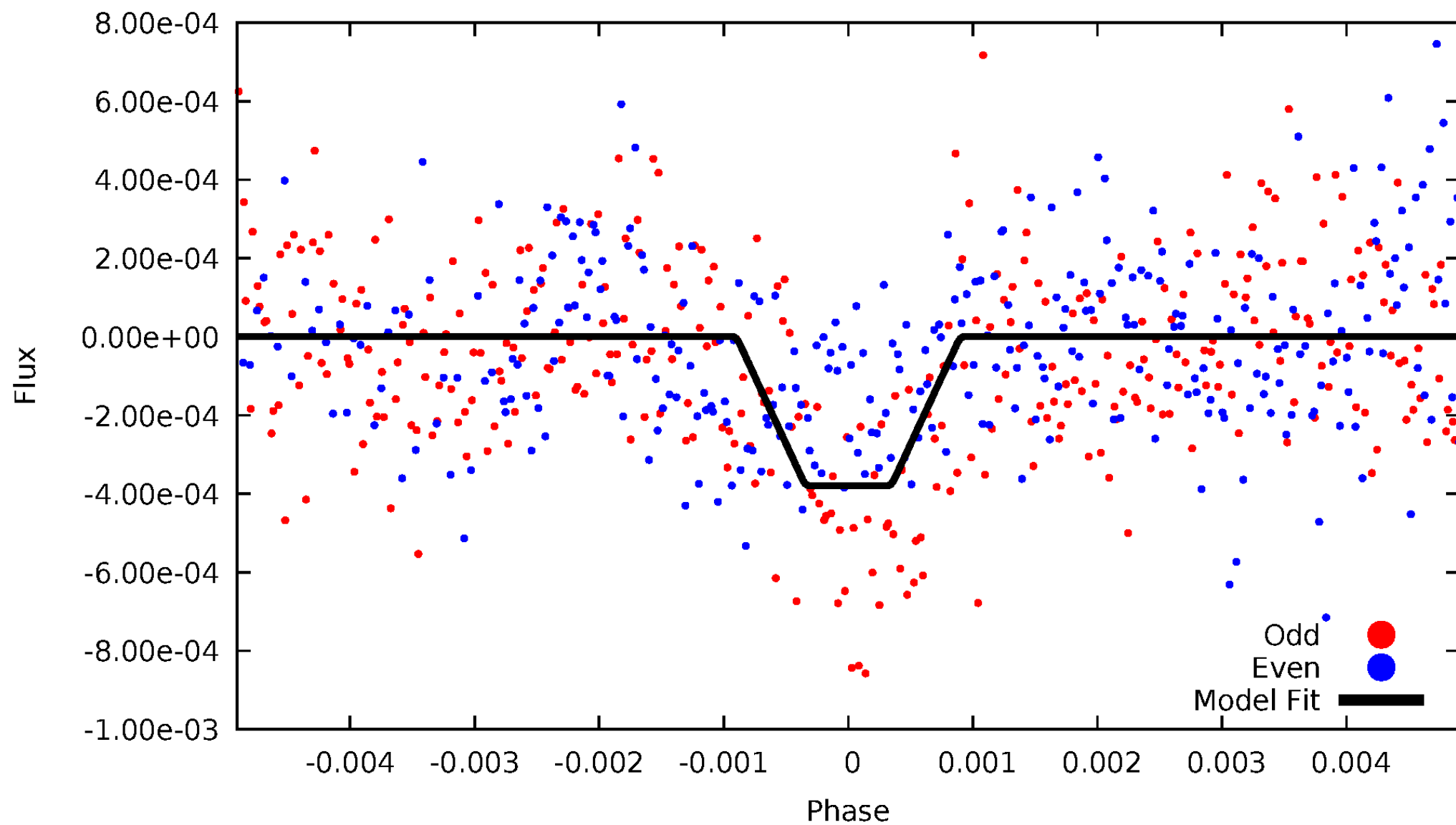
DV Odd/Even

TCE 007765743-01

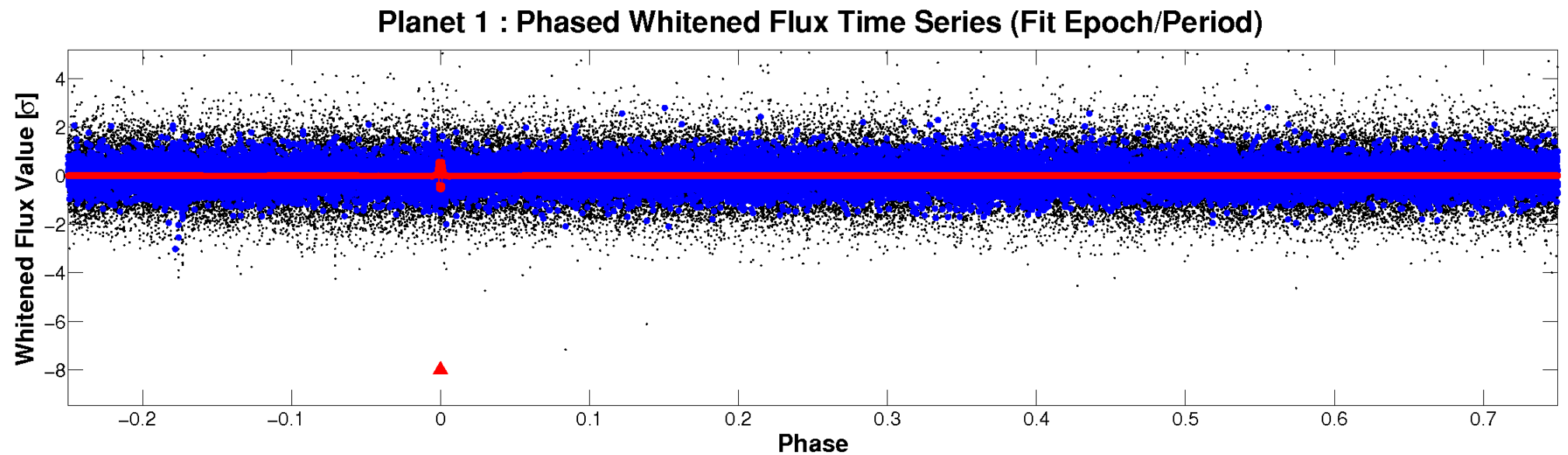
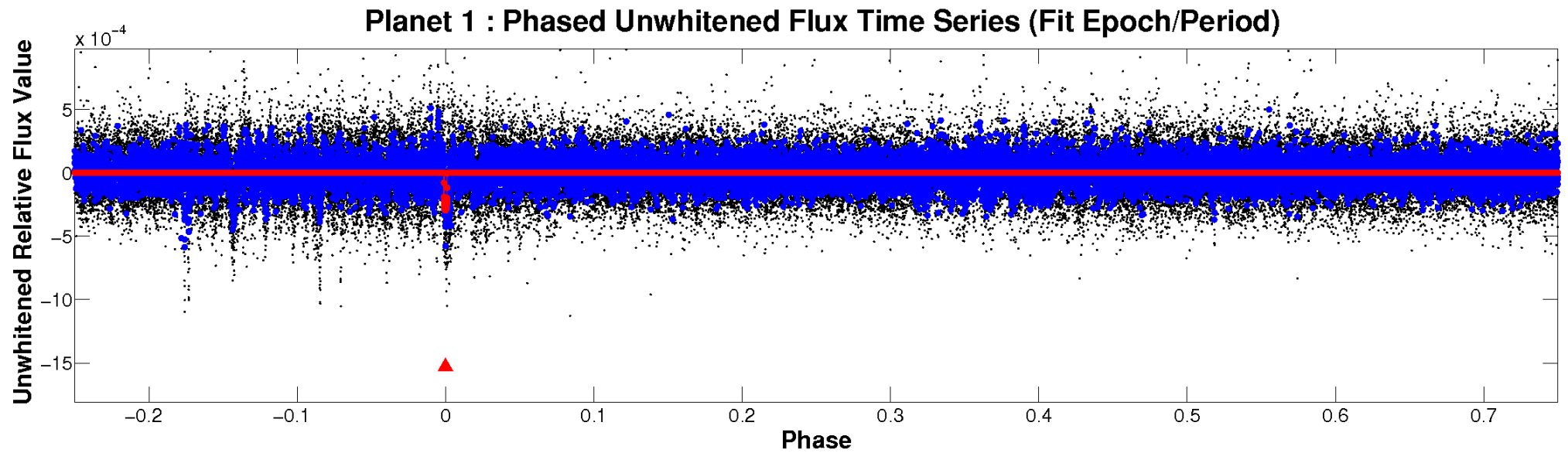


ALT Odd/Even

TCE 007765743-01

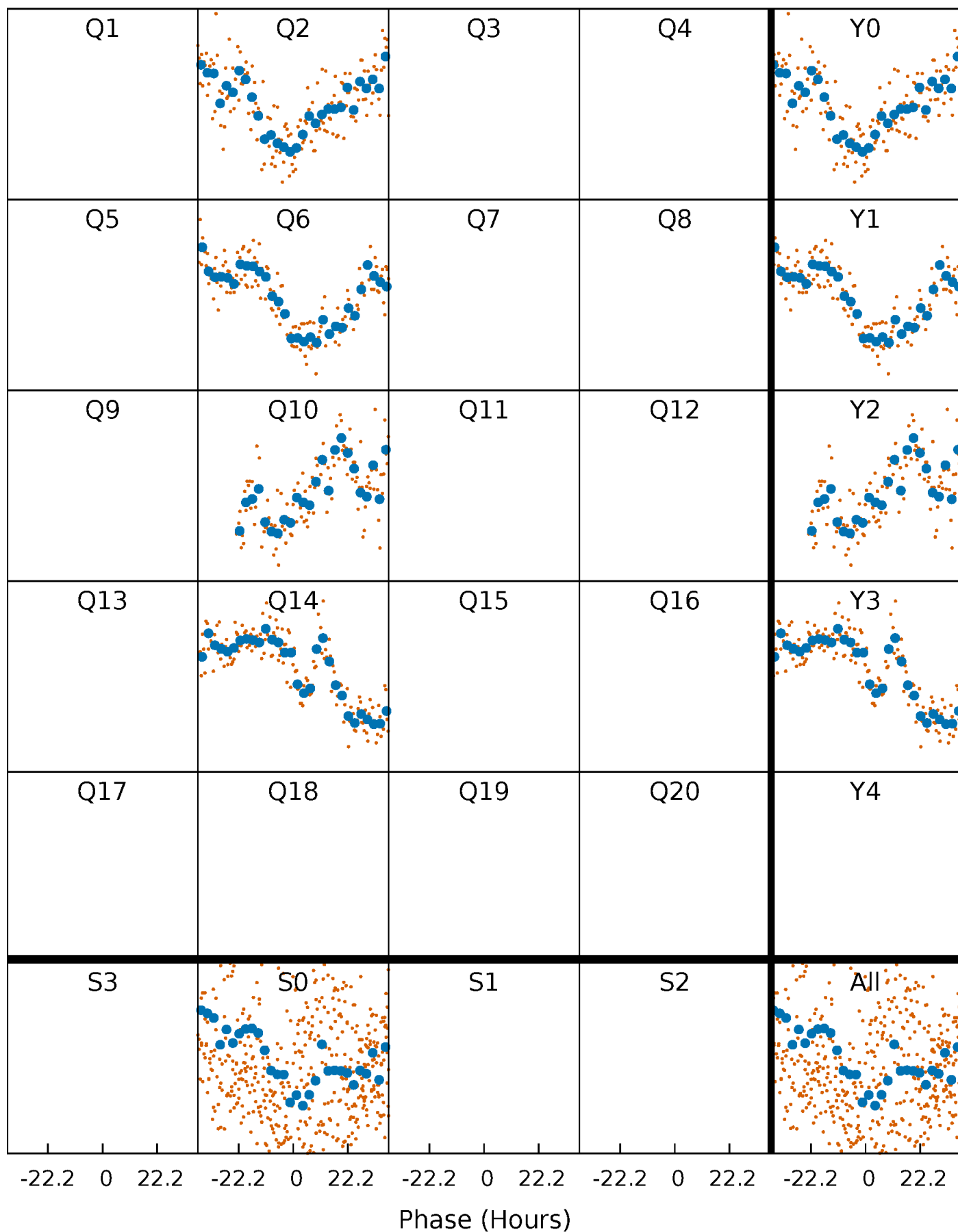


Non-Whitened Vs. Whitened Light Curve



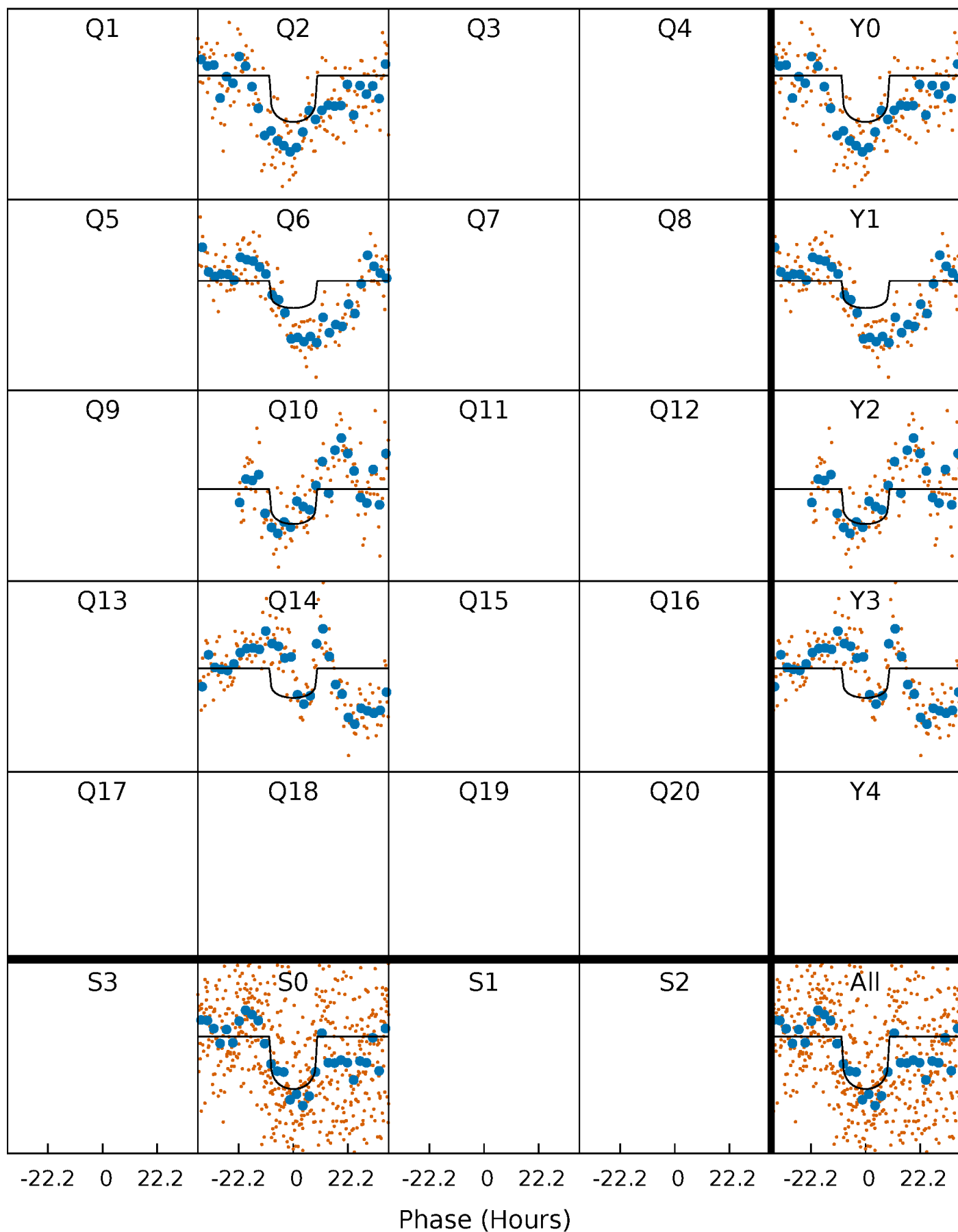
PDC Quarter-Phased Transit Curves

TCE 007765743-01 P=368.296519 Days $T_0=234.459431$ (BKJD)



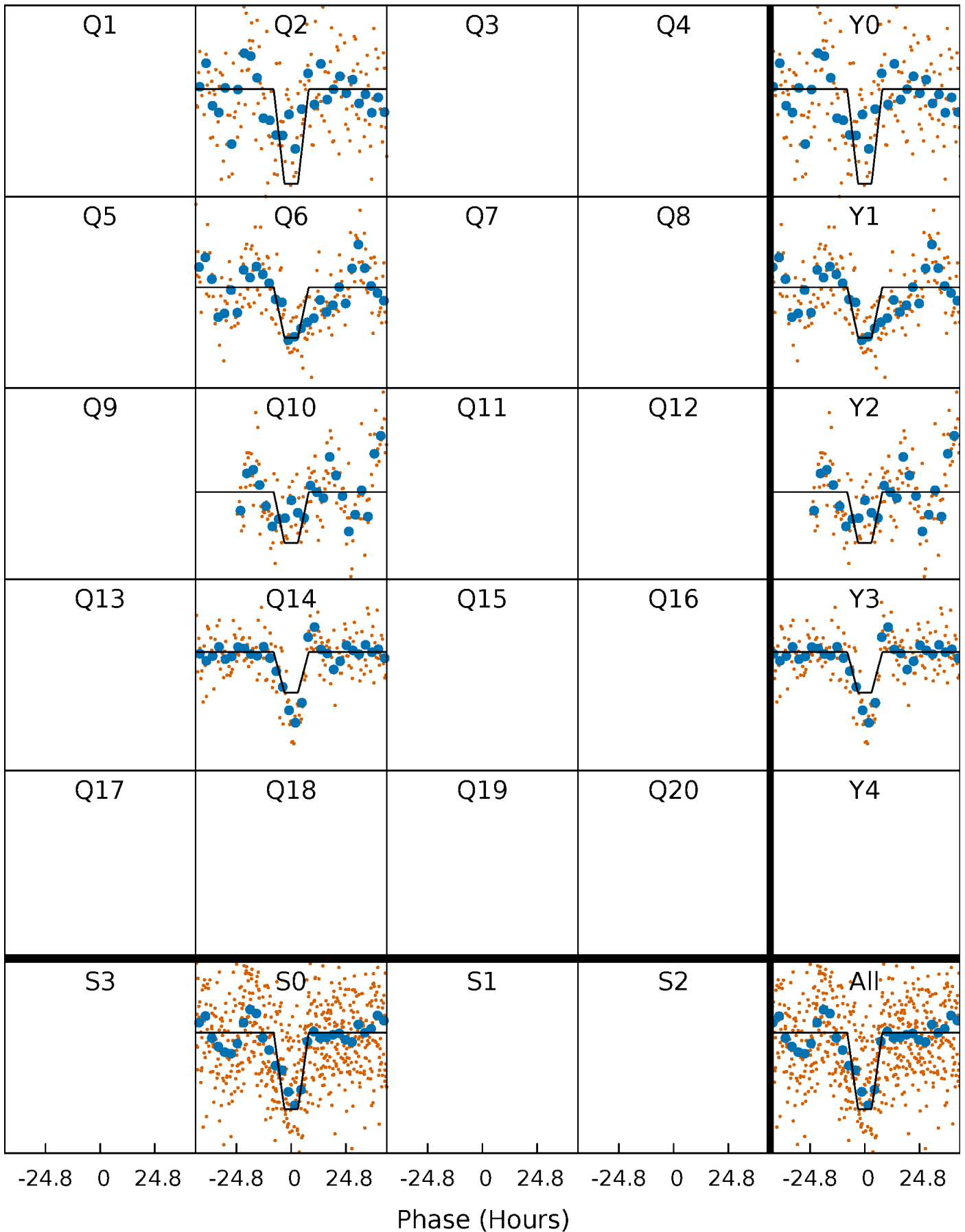
DV Quarter-Phased Transit Curves

TCE 007765743-01 P=368.296519 Days $T_0=234.459431$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

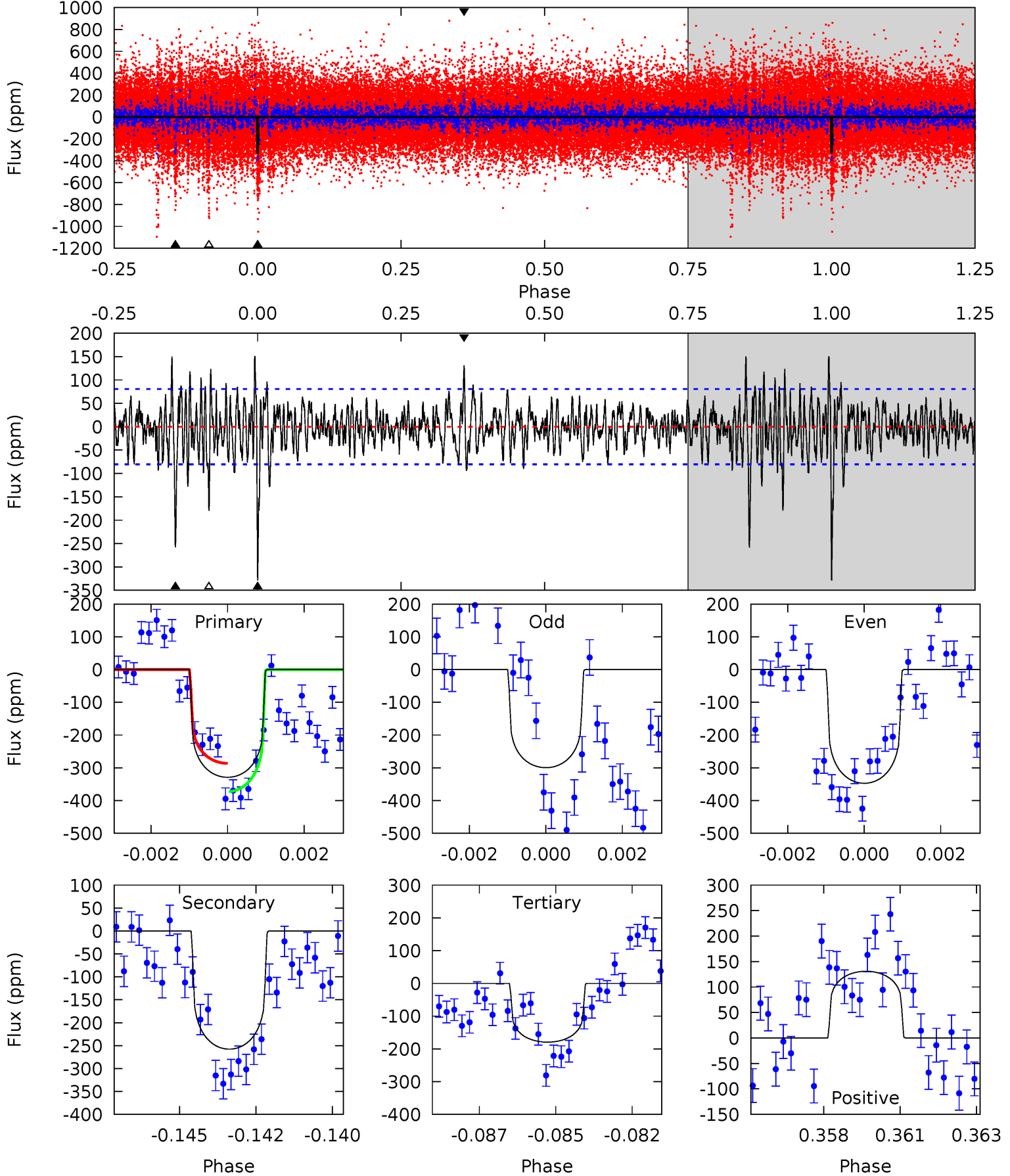
TCE 007765743-01 P=368.348975 Days $T_0=234.409728$ (BKJD)



DV Model-Shift Uniqueness Test

007765743-01, P = 368.296519 Days, E = 234.459431 Days

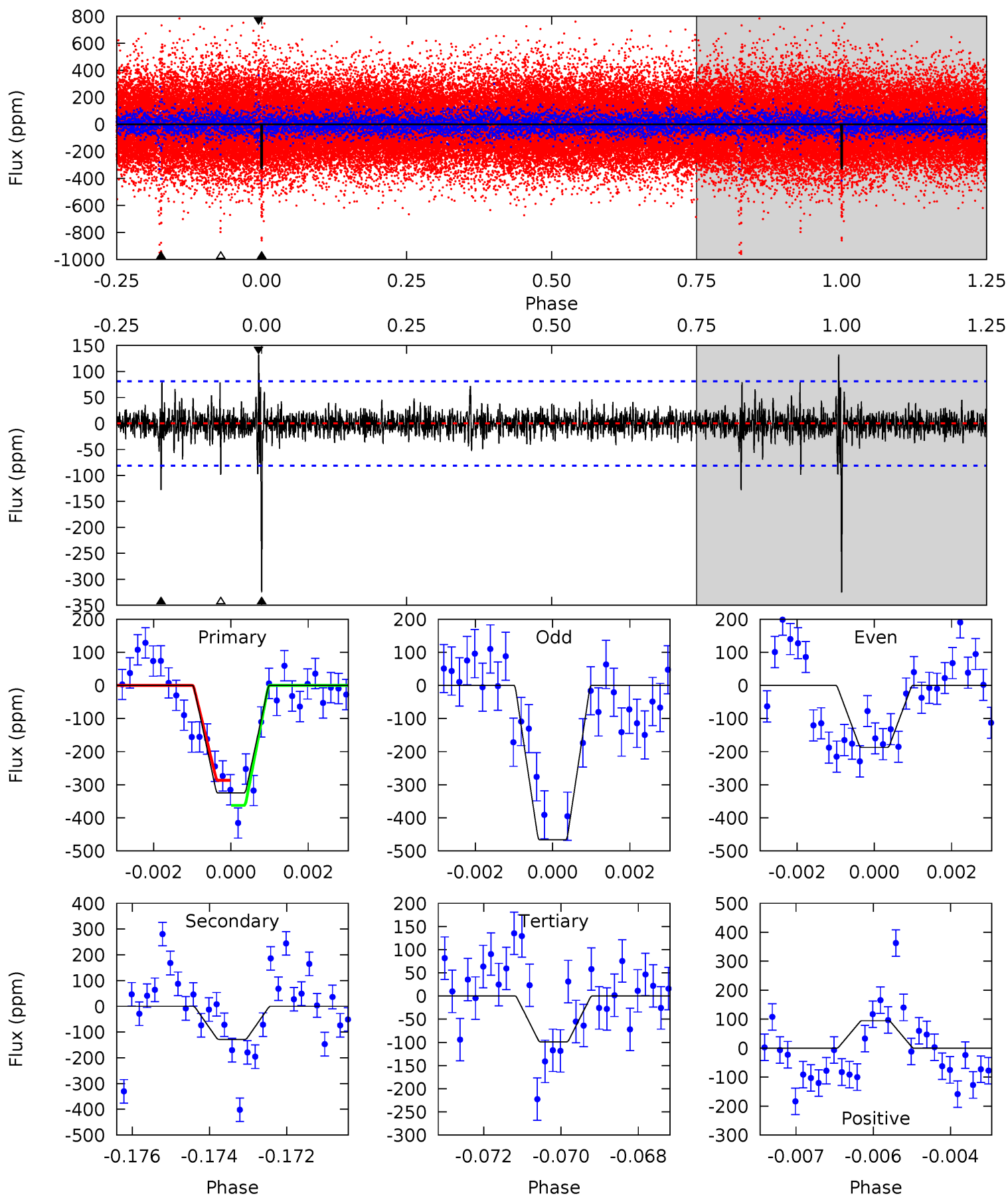
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
21.7	17.0	11.8	8.62	5.31	3.06	2.49	9.85	13.0	5.15	8.35	1.58	0.93	0.31	2.84



Alt Model-Shift Uniqueness Test

007765743-01, P = 368.348975 Days, E = 234.409728 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
21.3	8.43	6.49	6.23	5.34	3.11	1.11	14.9	15.1	1.94	2.20	9.20	1.22	0.29	2.47



Stellar Parameters For KIC 007765743

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$\rho_{\star} (\text{g}\cdot\text{cm}^{-3})$
	6043^{+180}_{-198}	$4.271^{+0.180}_{-0.180}$	$-0.100^{+0.300}_{-0.300}$	$1.228^{+0.372}_{-0.248}$	$1.025^{+0.165}_{-0.120}$	$0.780^{+0.725}_{-0.372}$
	+3%/-3%	+4%/-4%	+300%/-300%	+30%/-20%	+16%/-12%	+93%/-48%
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 007765743-01 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	A_{obs}
DV	-258 ± 15	$2.27^{+0.84}_{-0.73}$	411^{+28}_{-28}	5859^{+1121}_{-656}	29047^{+31224}_{-13721}
Alt.	-128 ± 15	$2.66^{+0.78}_{-0.77}$	411^{+33}_{-28}	4724^{+637}_{-414}	10358^{+10017}_{-4203}

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

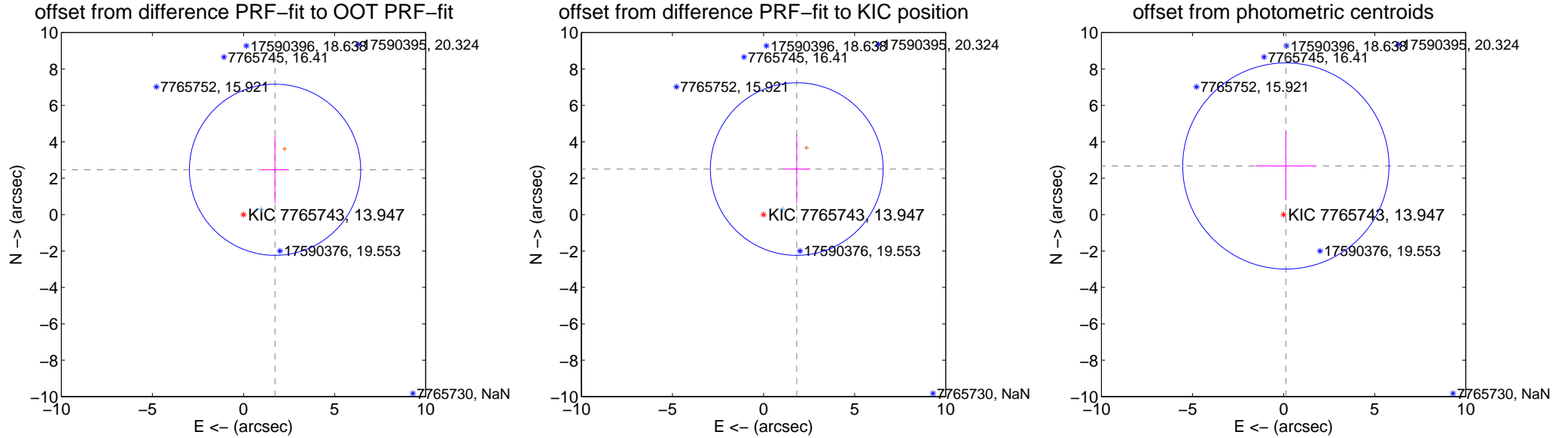
DV Centroid Data

Supplemental centroid analysis for 007765743-01. Kepler magnitude: 13.95. Transit SNR 7.33

There are 1 quarters with good PRF difference image offsets

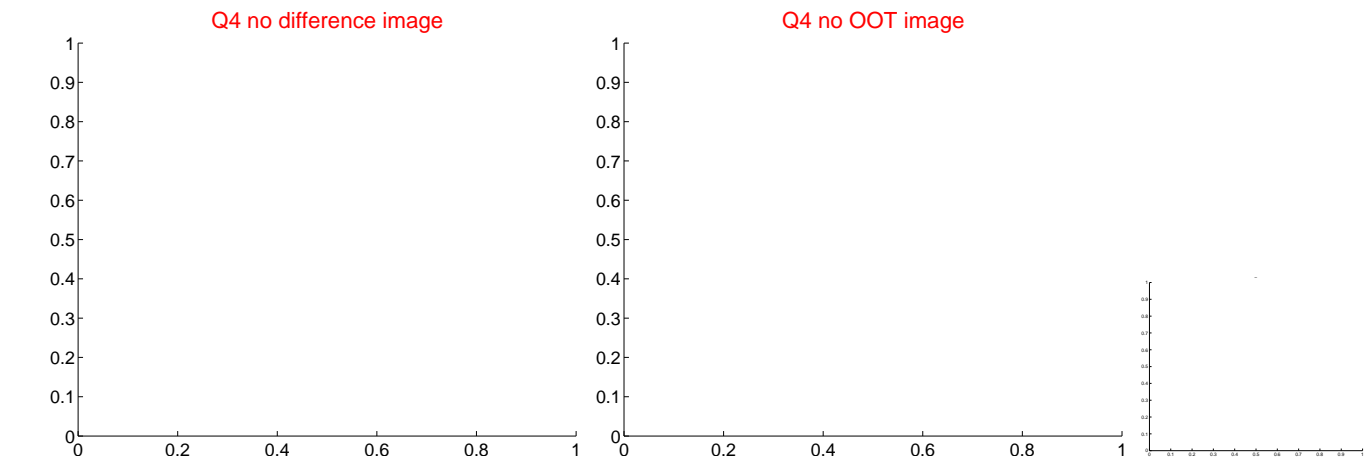
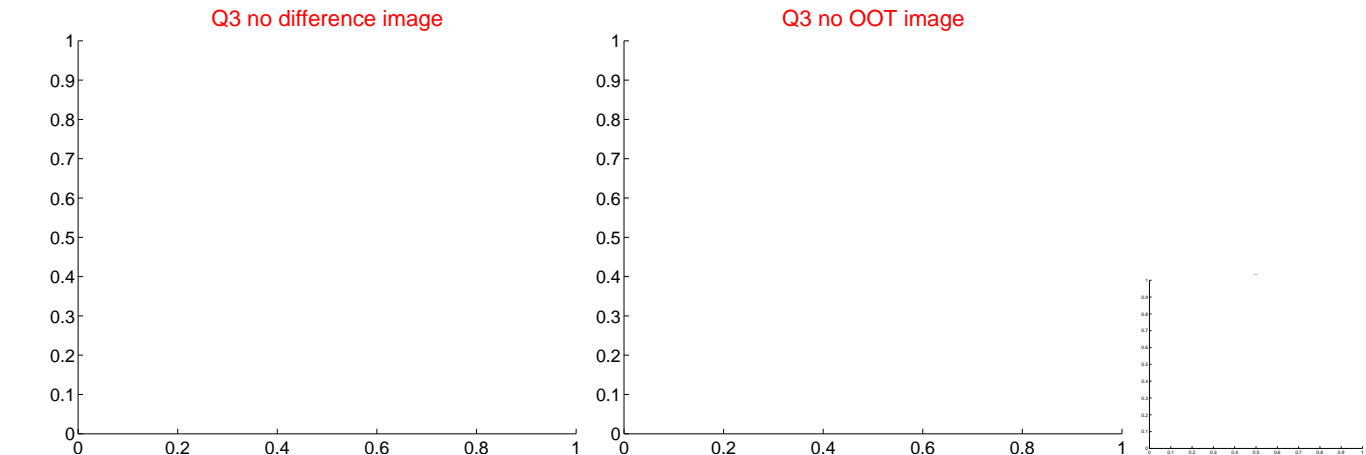
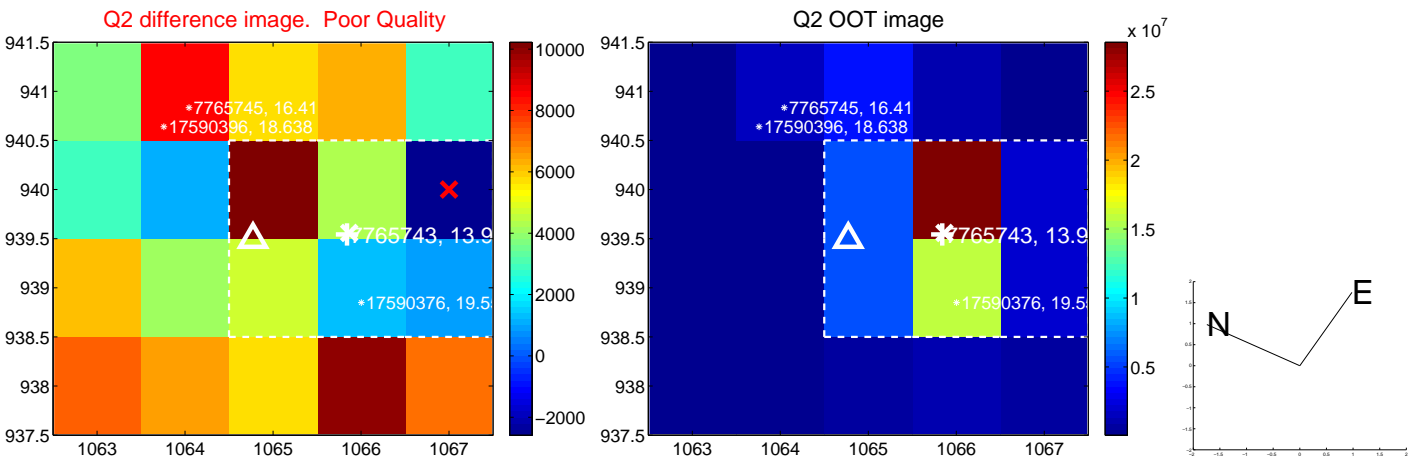
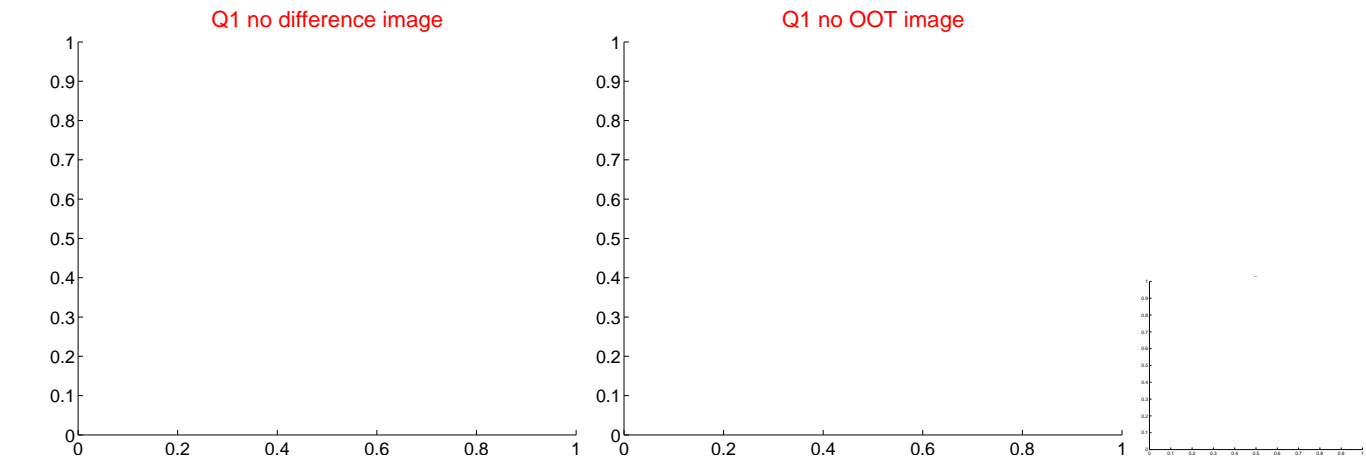
The direct PRF centroid is offset from the target star catalog position by about 0.07 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	3.011 ± 1.567	1.92	-1.731 ± 0.734	2.464 ± 1.845
PRF-fit source offset from KIC position	3.096 ± 1.581	1.96	-1.822 ± 0.751	2.503 ± 1.877
photometric centroid source offset	2.67 ± 1.89	1.42	-0.12 ± 1.66	2.67 ± 1.89

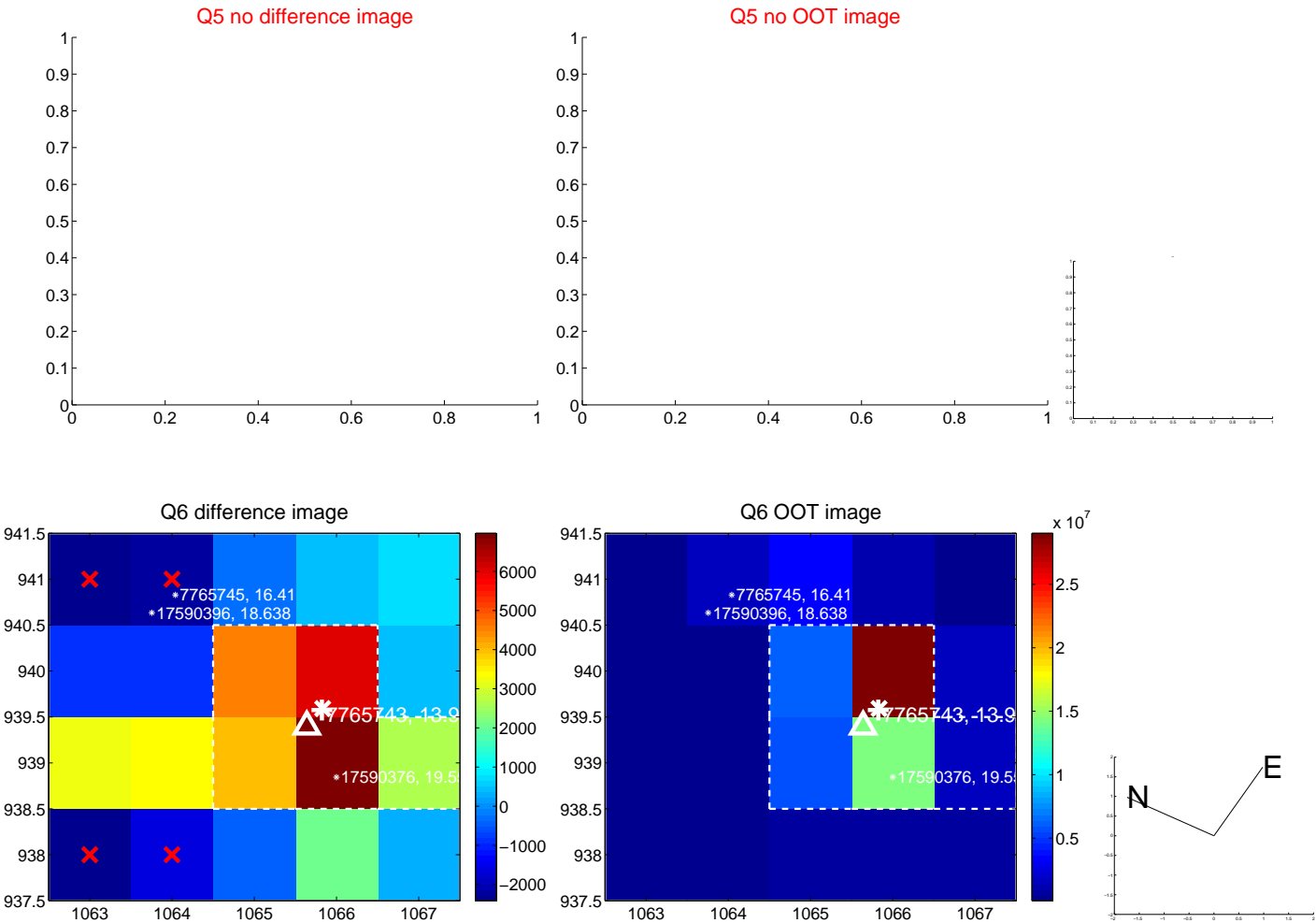


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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



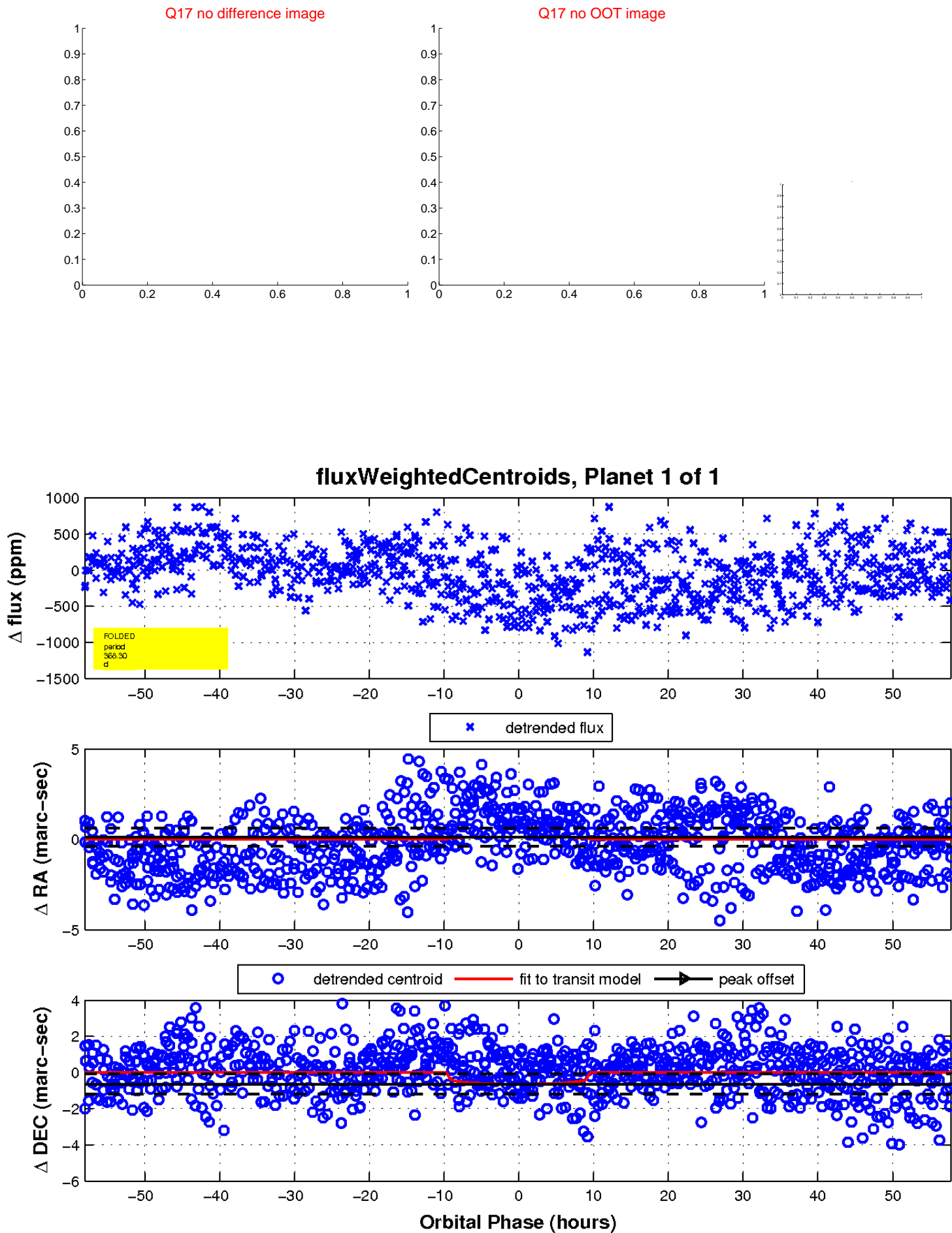
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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



UKIRT Image

Declination

