

KIC 007943763

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})
007943763-01	OBS	No	488.257120	255.327418	607.9	5.279	7.7	7.3	0.78	5523	2.50	0.39

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
007943763-01	OBS	FP	0.00	1	0	0	0	INDIV_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.

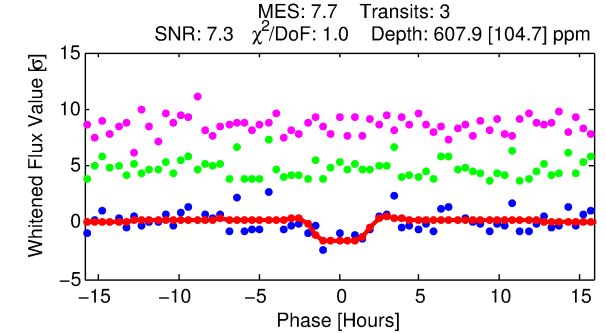
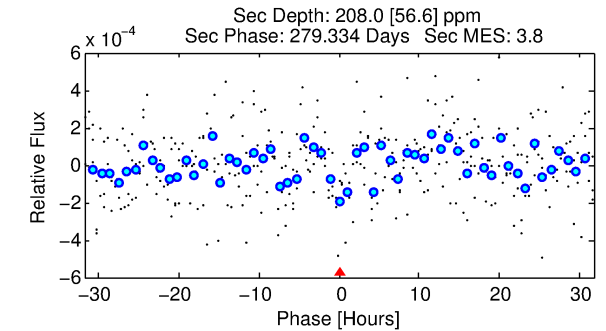
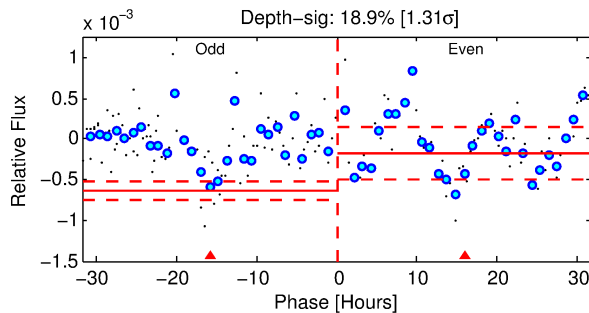
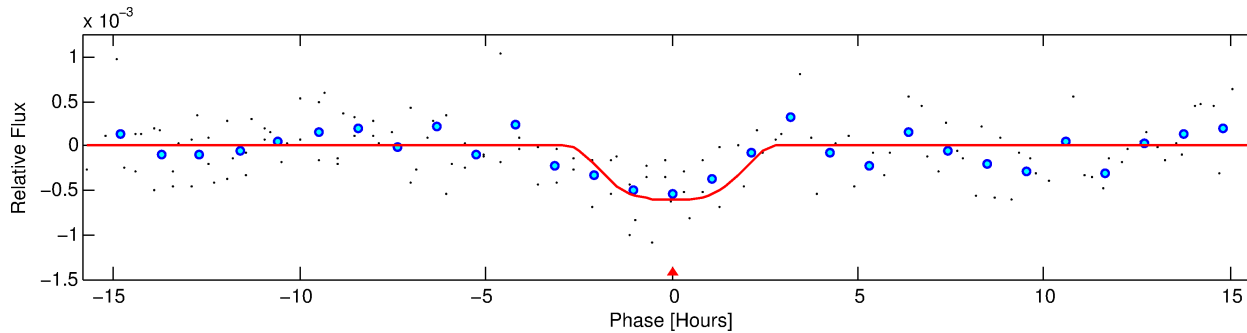
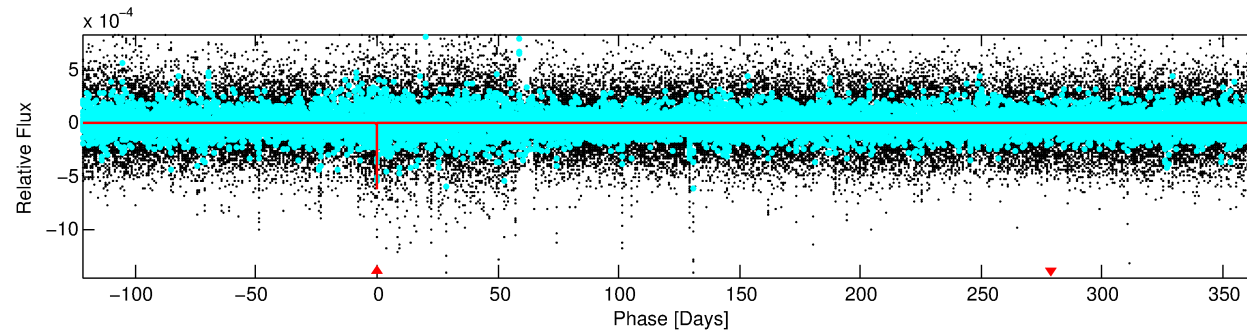
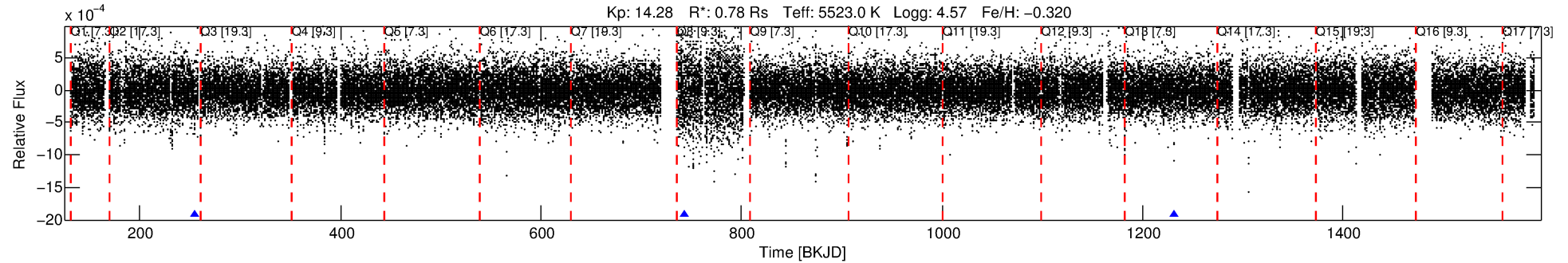
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 007943763-01

No Significant Match Found

DV One-Page Summary

KIC: 7943763 Candidate: 1 of 1 Period: 488.257 d



DV Fit Results:

Period = 488.25712 [0.01287] d
Epoch = 255.3274 [0.0185] BKJD
Rp/R* = 0.0295 [0.0038]
a/R* = 262.35 [92.91]
b = 0.96 [0.03]
Seff = 0.39 [0.10]
Teq = 201 [13] K
Rp = 2.51 [0.61] Re
a = 1.1378 [0.1919] AU
Ag = 23599.03 [10510.35] [2.25σ]
Teffp = 3858 [382] K [9.58σ]

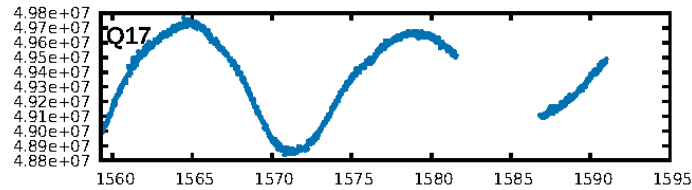
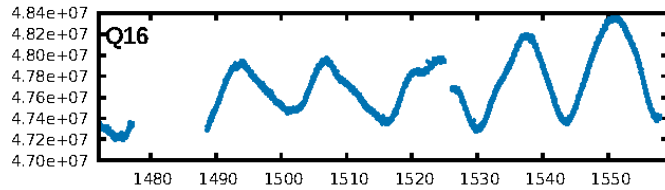
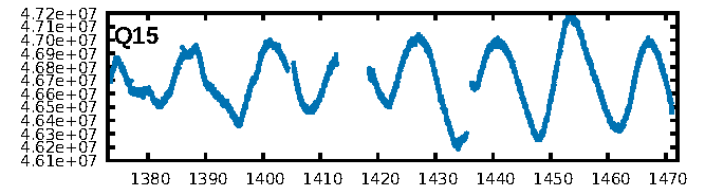
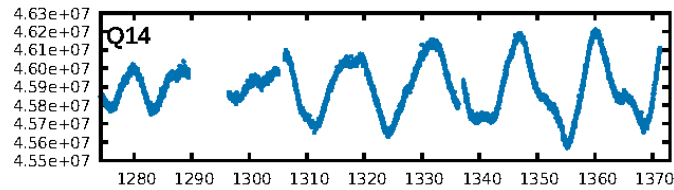
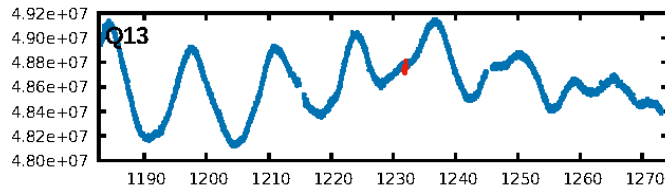
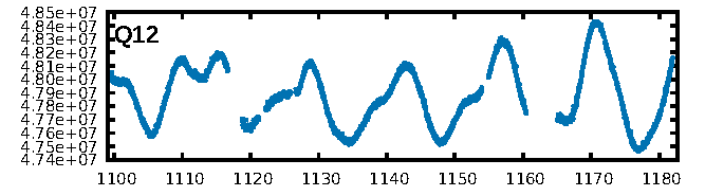
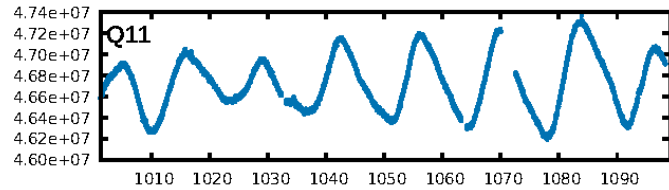
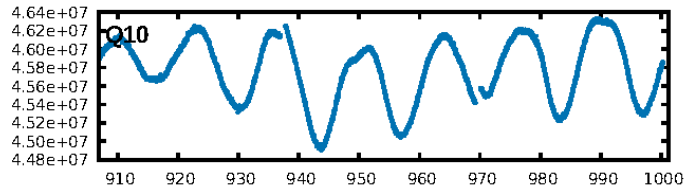
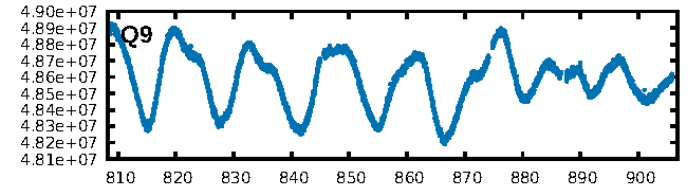
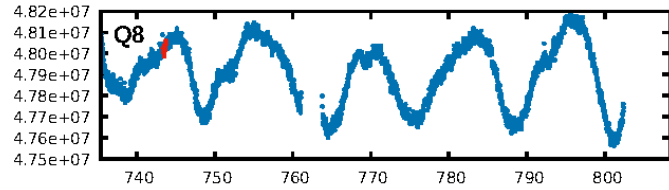
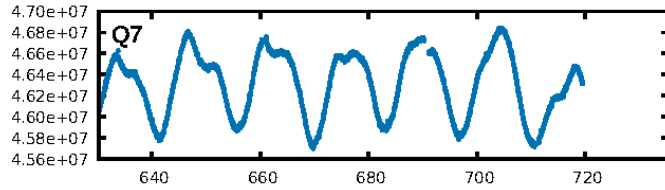
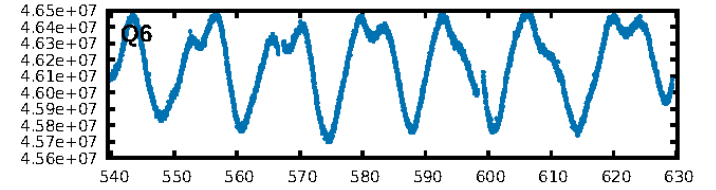
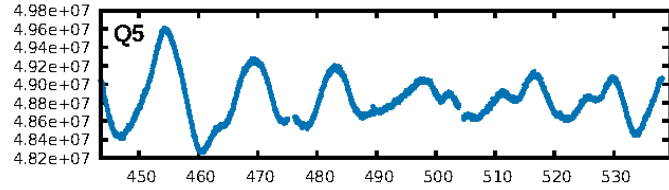
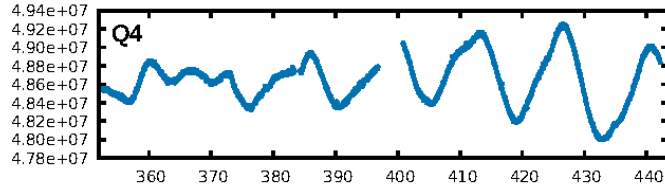
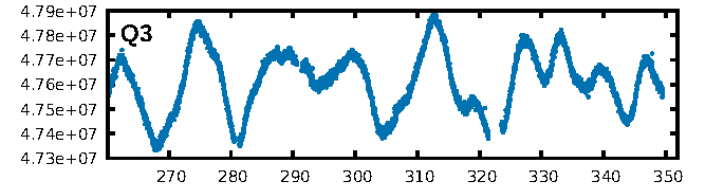
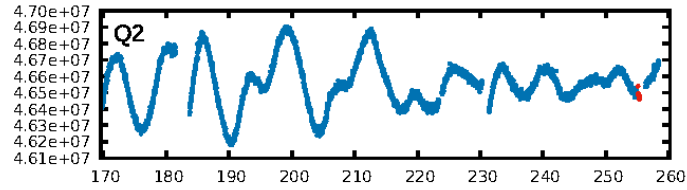
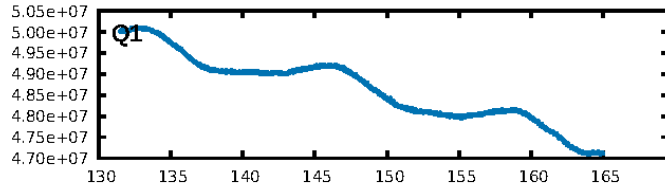
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: 12.5%
ModelChiSquareGof-sig: 97.5%
Bootstrap-pfa: 2.35e-08
RollingBand-fgt: 1.00 [3/3]
GhostDiagnostic-chr: 0.4067
Centroid-sig: 84.5%
Centroid-so: 0.228 arcsec [0.19σ]
OotOffset-rm: N/A
KicOffset-rm: N/A
OotOffset-st: 0/0/0/0 [0]
KicOffset-st: 0/0/0/0 [0]
DiffImageQuality-fgm: N/A
DiffImageOverlap-fno: 1.00 [1/1]

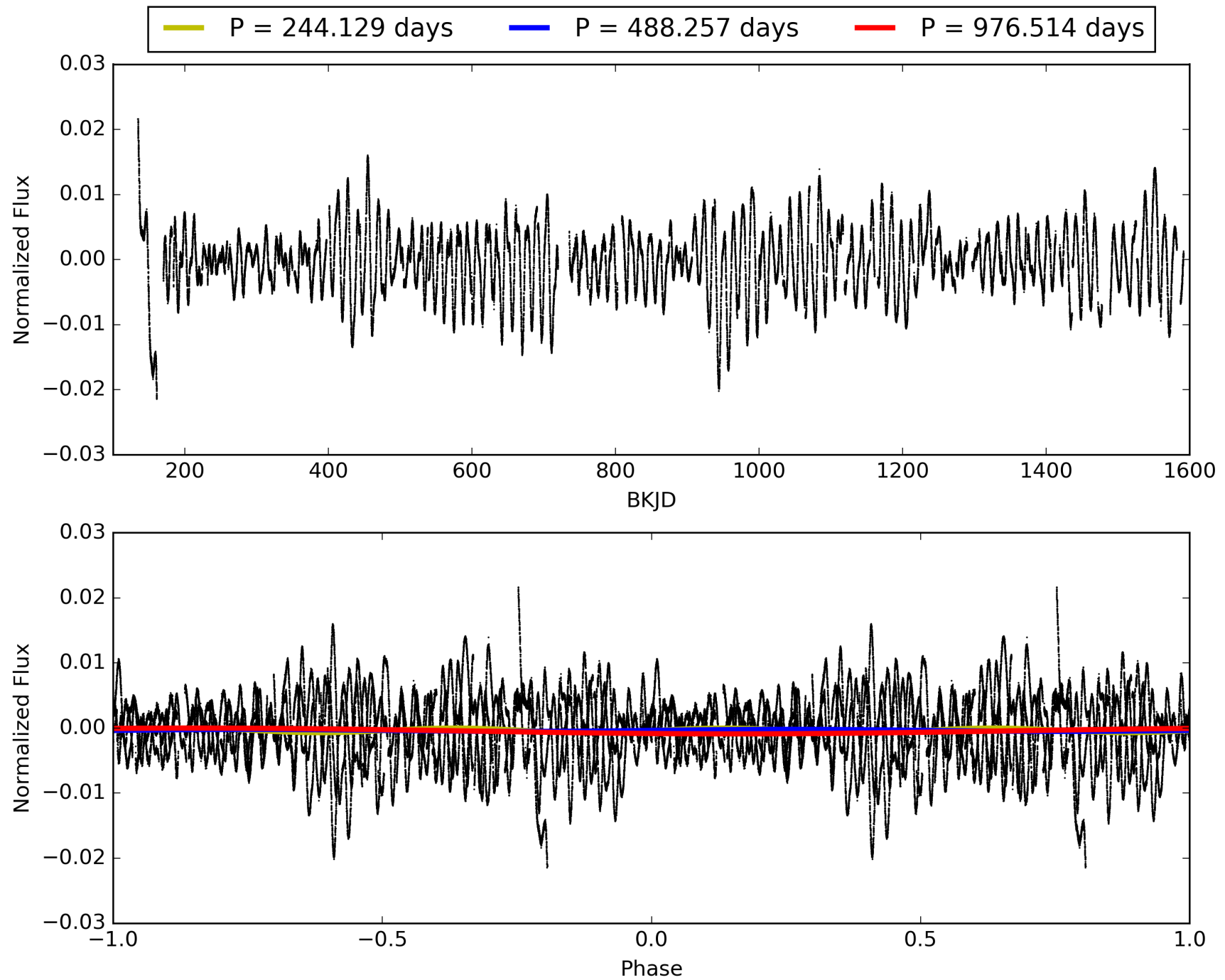
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 31-Jan-2016 23:31:44 Z

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

TCE 007943763-01, PDC Light Curves

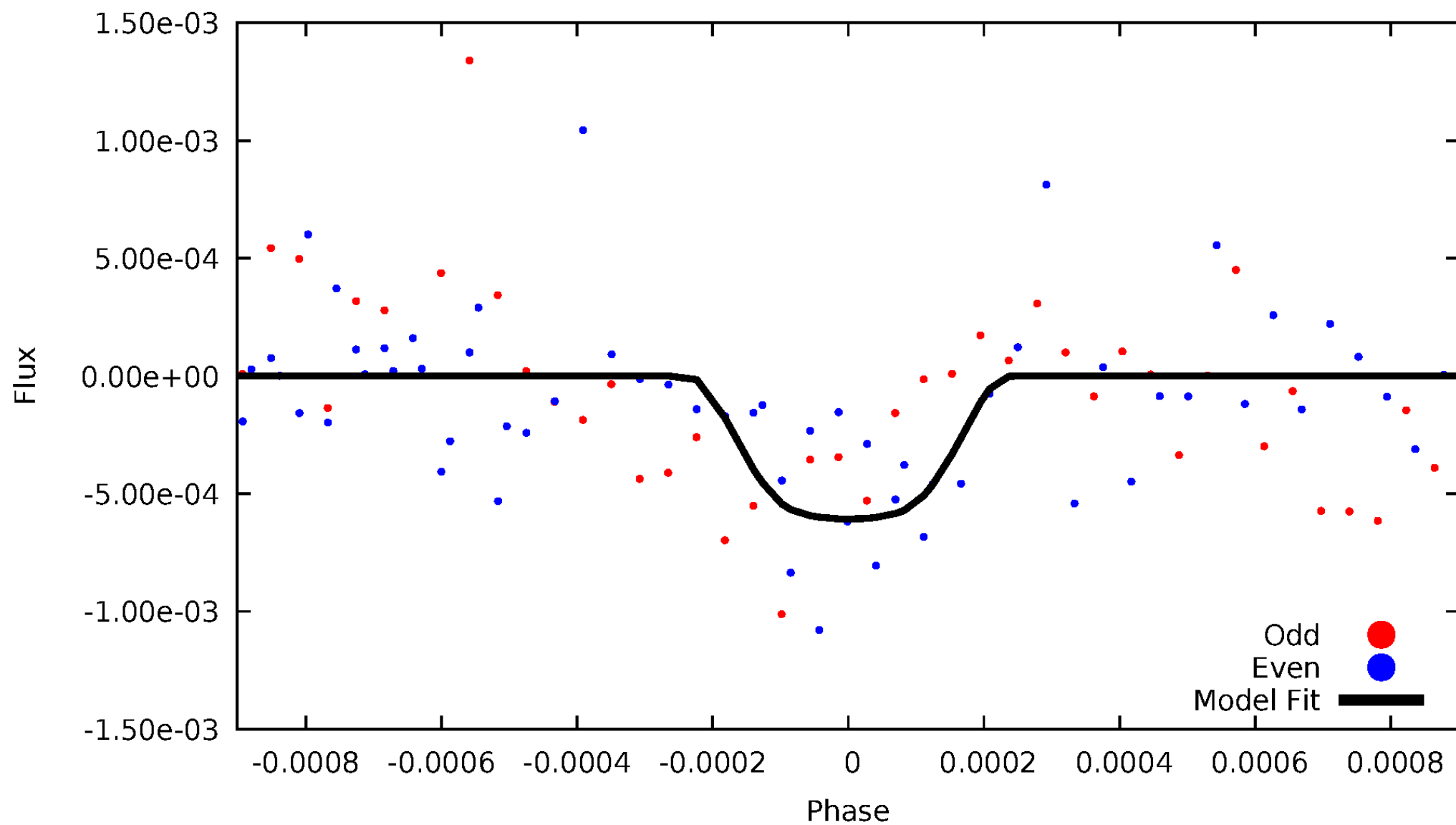


TCE 007943763-01



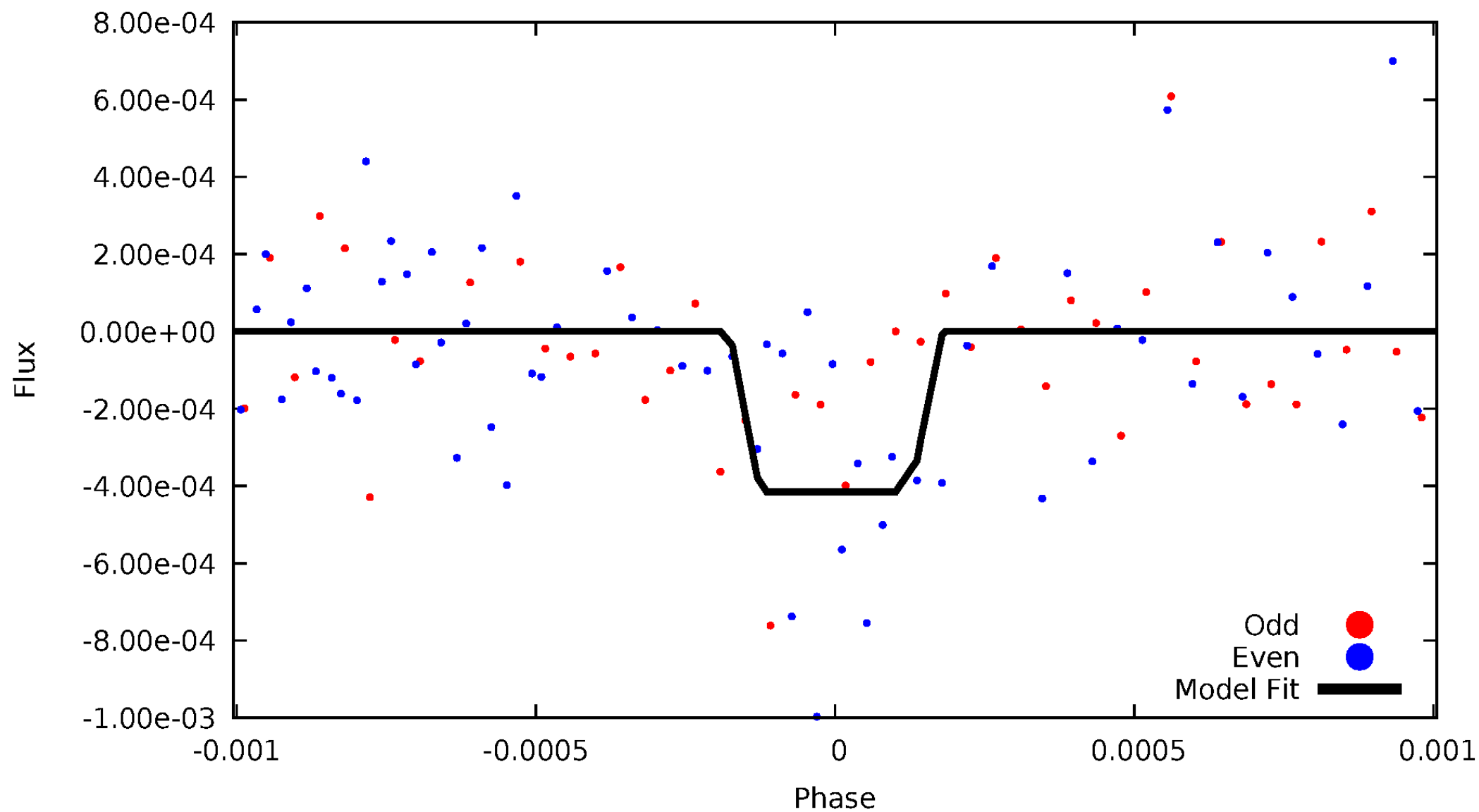
DV Odd/Even

TCE 007943763-01



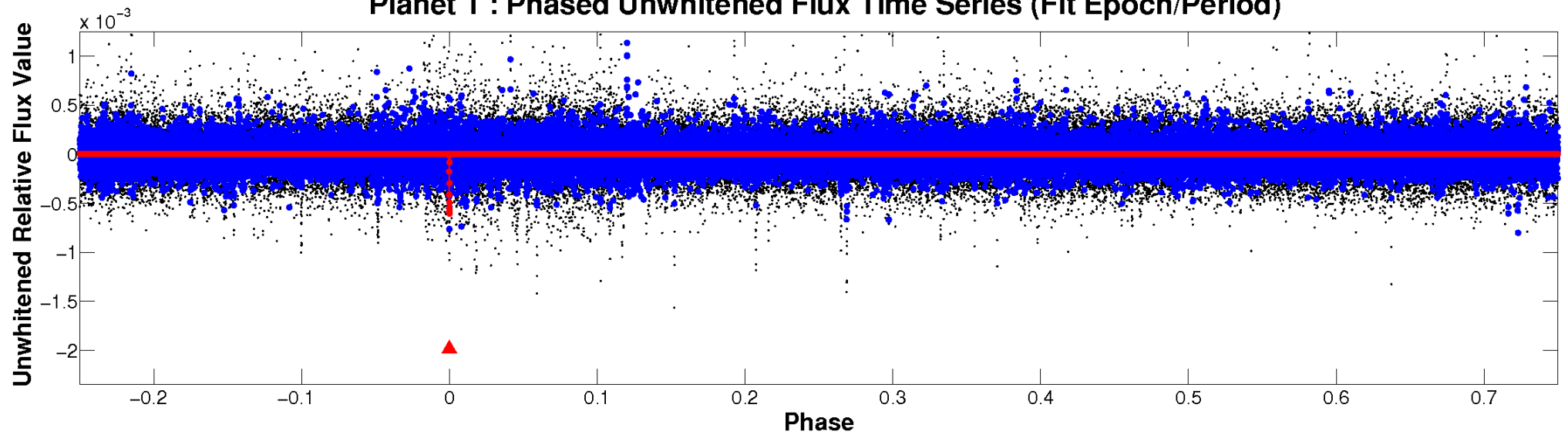
ALT Odd/Even

TCE 007943763-01

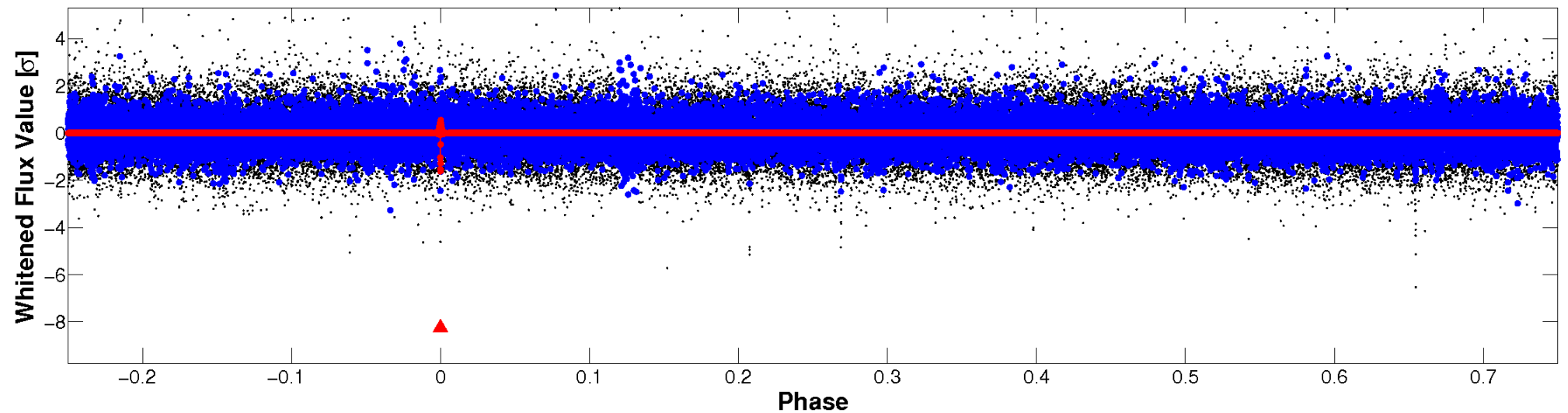


Non-Whitened Vs. Whitened Light Curve

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

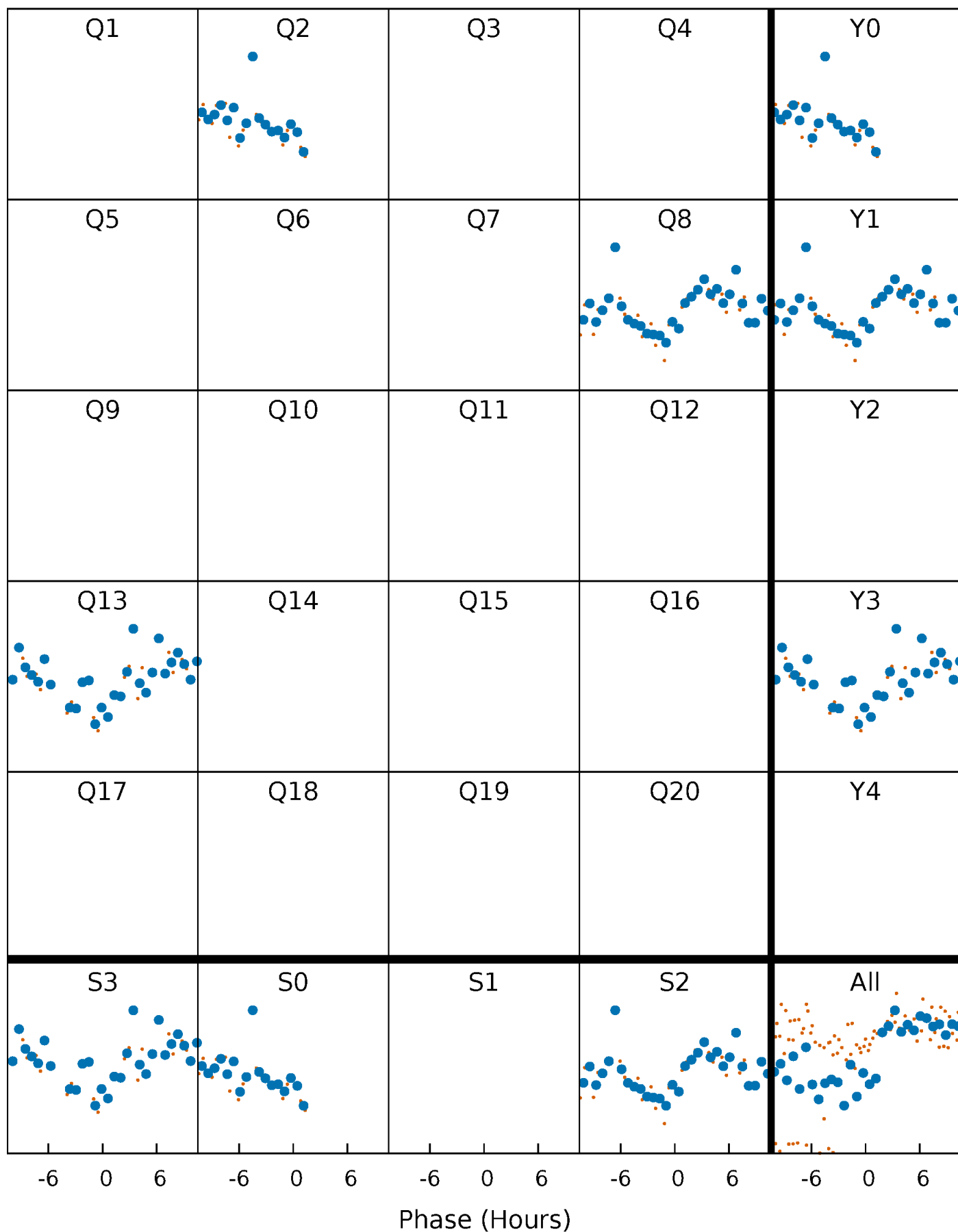


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



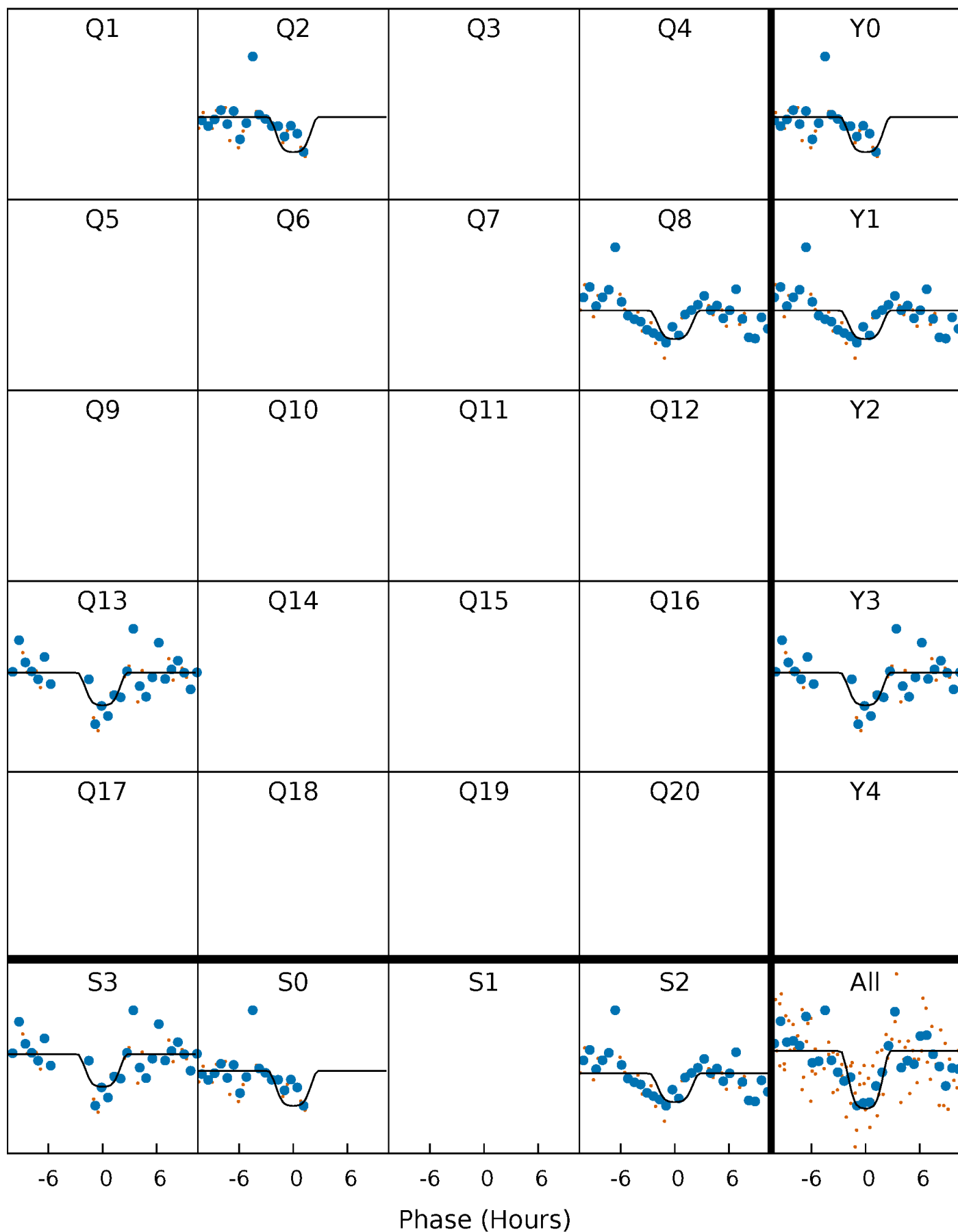
PDC Quarter-Phased Transit Curves

TCE 007943763-01 P=488.257120 Days $T_0=255.327418$ (BKJD)



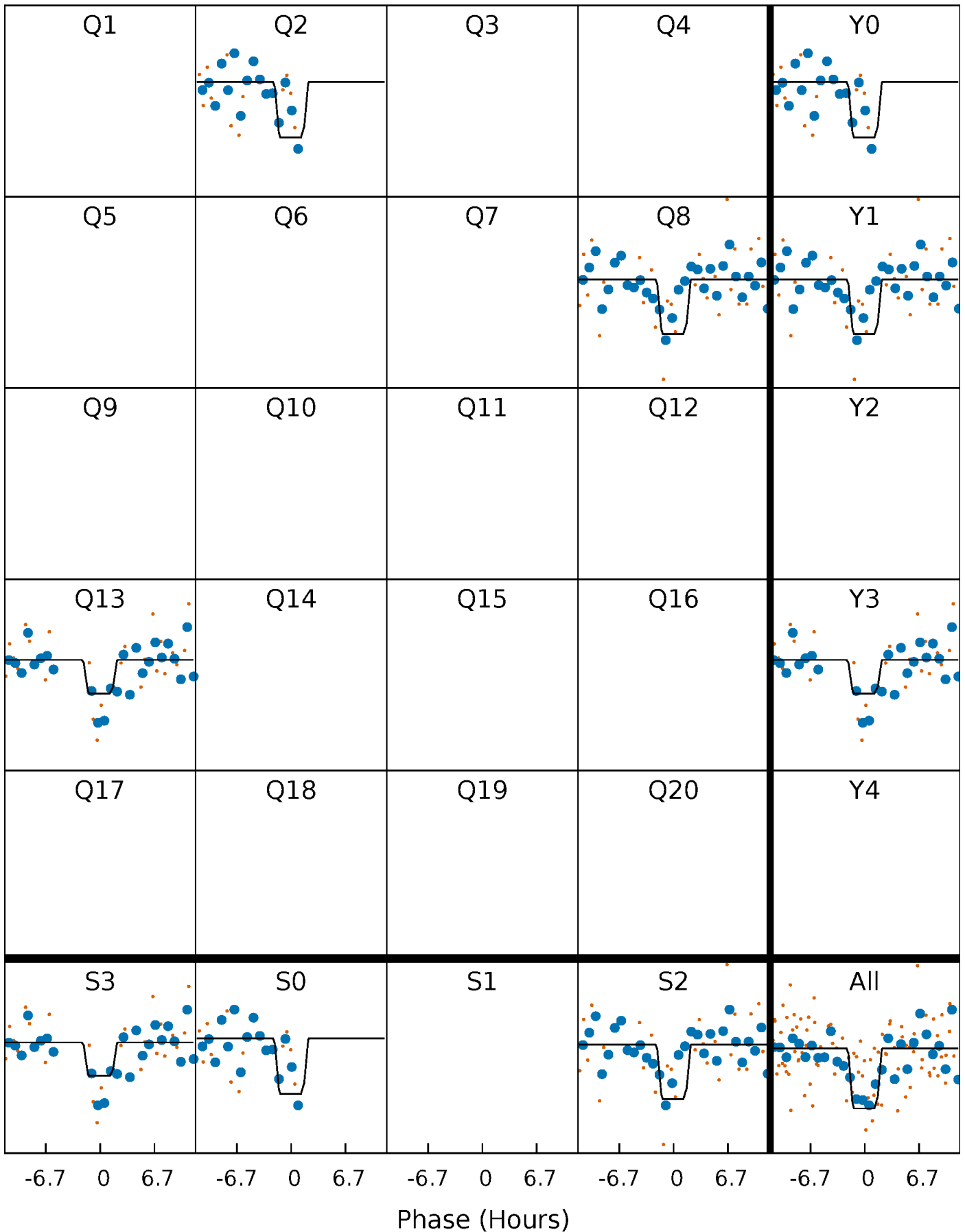
DV Quarter-Phased Transit Curves

TCE 007943763-01 P=488.257120 Days $T_0=255.327418$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

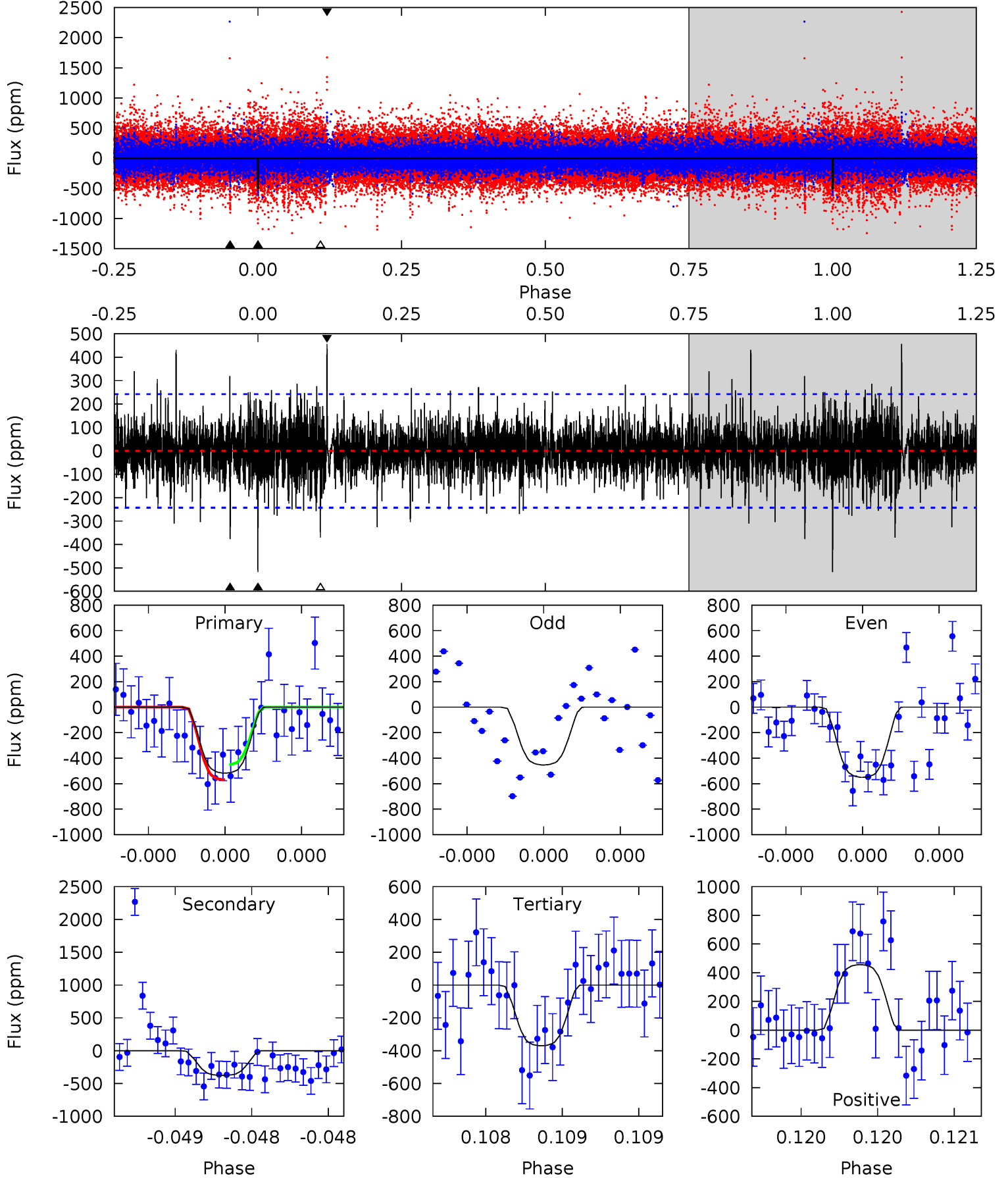
TCE 007943763-01 P=488.246294 Days $T_0=255.342947$ (BKJD)



DV Model-Shift Uniqueness Test

007943763-01, P = 488.257120 Days, E = 255.327418 Days

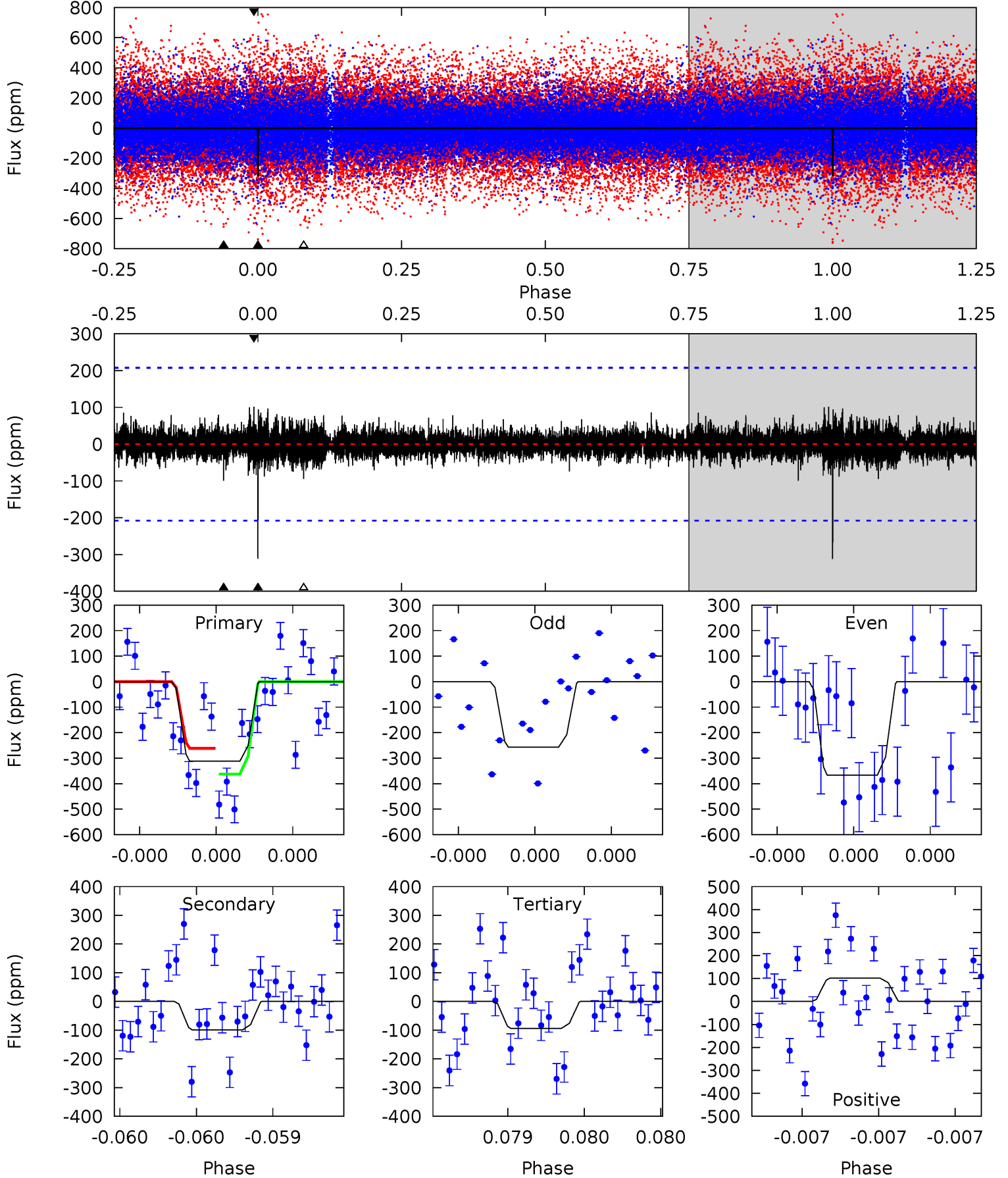
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
11.9	8.67	8.52	10.5	5.58	3.50	1.67	3.39	1.40	0.15	-1.84	1.07	1.14	0.47	1.37



Alt Model-Shift Uniqueness Test

007943763-01, P = 488.246294 Days, E = 255.342947 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
8.48	2.70	2.56	2.76	5.65	3.59	0.53	5.92	5.72	0.14	-0.06	1.44	1.33	0.25	1.38



Stellar Parameters For KIC 007943763

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	5523^{+167}_{-150}	$4.573^{+0.045}_{-0.126}$	$-0.320^{+0.300}_{-0.300}$	$0.777^{+0.161}_{-0.069}$	$0.826^{+0.098}_{-0.082}$	$2.477^{+0.554}_{-0.933}$
	+3%/-3%	+1%/-3%	+94%/-94%	+21%/-9%	+12%/-10%	+22%/-38%
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 007943763-01 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	A_{obs}
DV	-377 ± 43	$2.56^{+0.41}_{-0.36}$	285^{+15}_{-10}	4615^{+319}_{-254}	39904^{+16467}_{-10695}
Alt.	-99 ± 37	$1.79^{+0.39}_{-0.34}$	286^{+14}_{-11}	4109^{+422}_{-372}	21711^{+14187}_{-9595}

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 007943763-01. Kepler magnitude: 14.28. Transit SNR 7.32

There are 0 quarters with good PRF difference image offsets

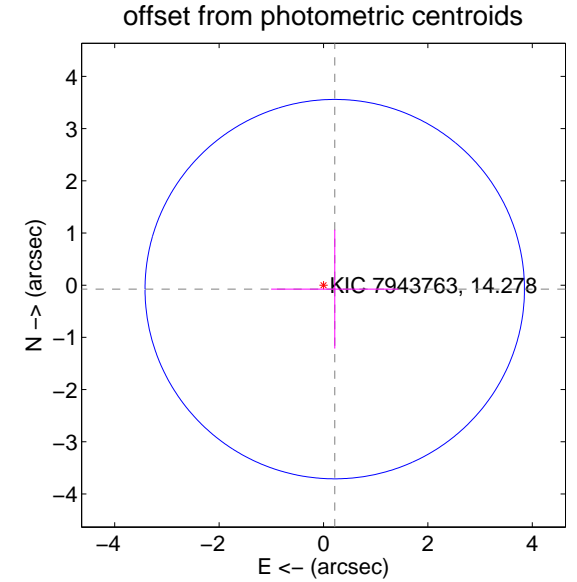
The direct PRF centroid is offset from the target star catalog position by about NaN arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	—	—	—	—
PRF-fit source offset from KIC position	—	—	—	—
photometric centroid source offset	0.23 ± 1.21	0.19	-0.22 ± 1.22	-0.08 ± 1.14

There is no PRF-fit offset from OOT-fit



There is no PRF-fit offset from KIC

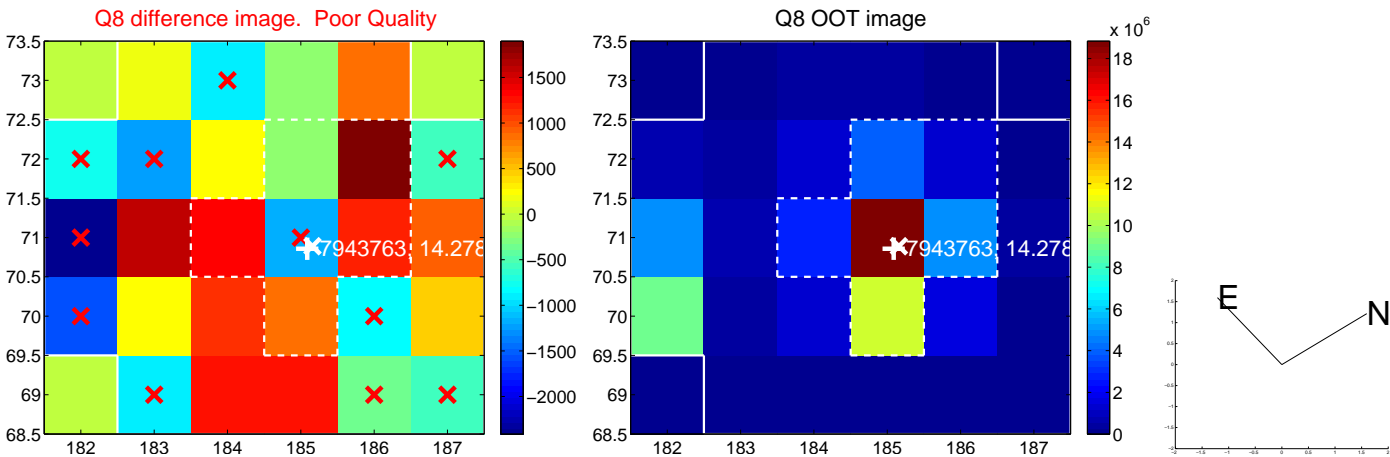


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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



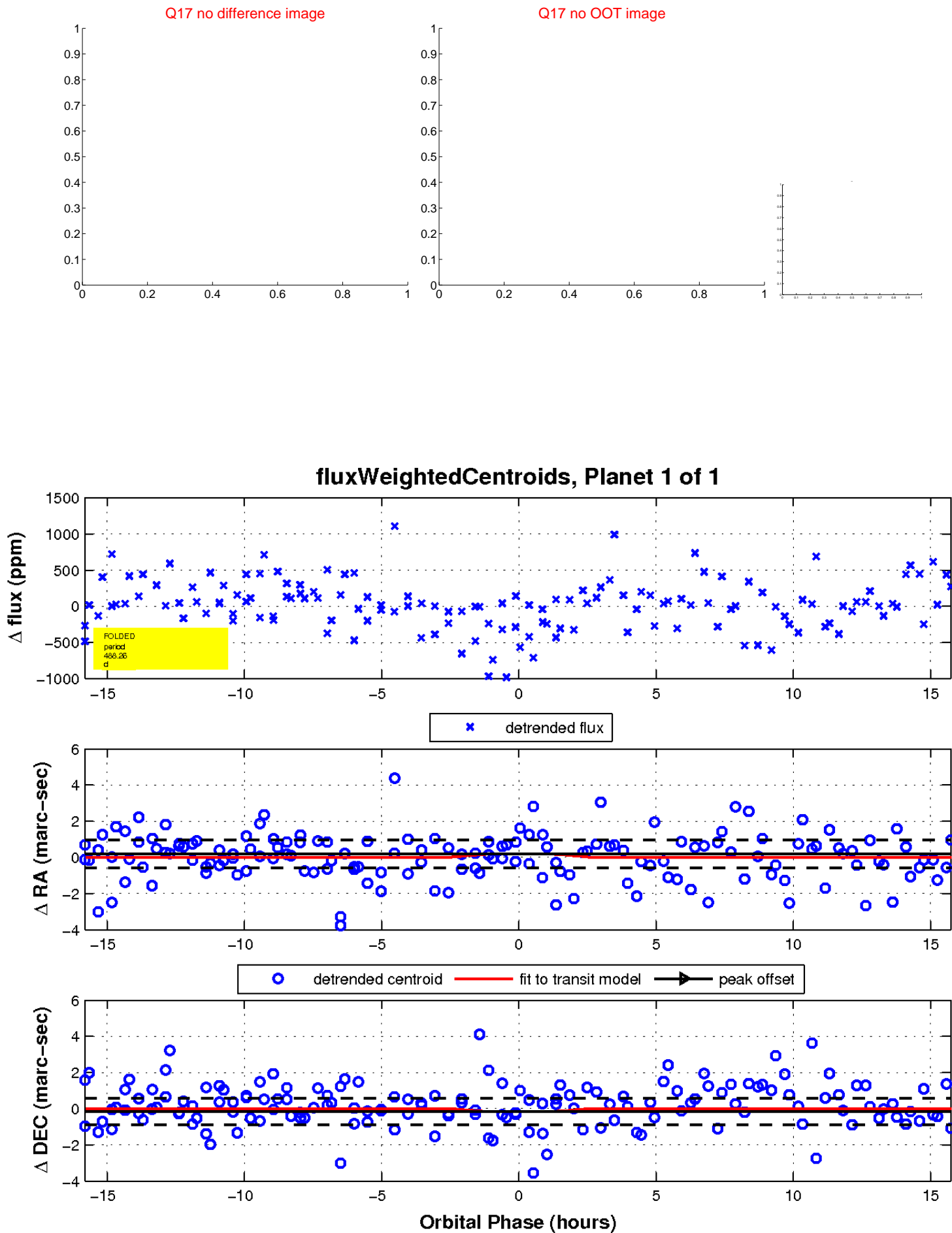
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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

Declination

