

KIC 010795103

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})
010795103-01	OBS	3683.01	214.312068	336.330241	4560.3	16.241	221.8	277.1	1.36	6471	9.19	4.94

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
010795103-01	OBS	PC	1.00	0	0	0	0	NO_COMMENT

Notes: OBS = Observed. INJ = Injected. INV = Inverted. SCR = Scrambled.

N = Not Transit-Like. S = Stellar Eclipse. C = Centroid Offset. E = Ephemeris Match.

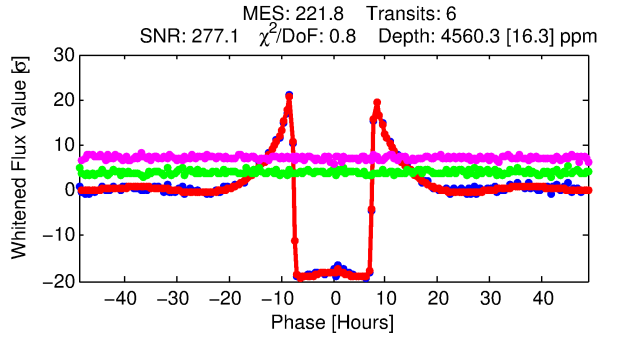
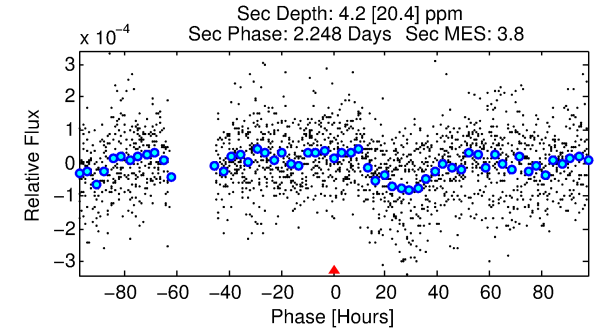
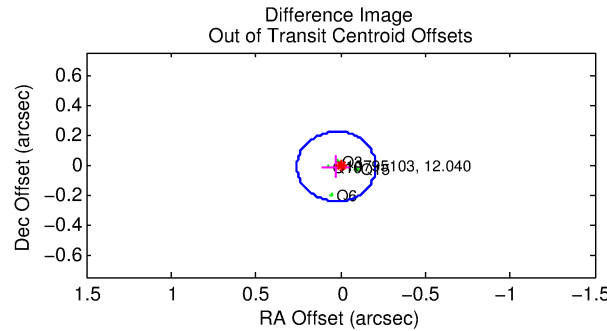
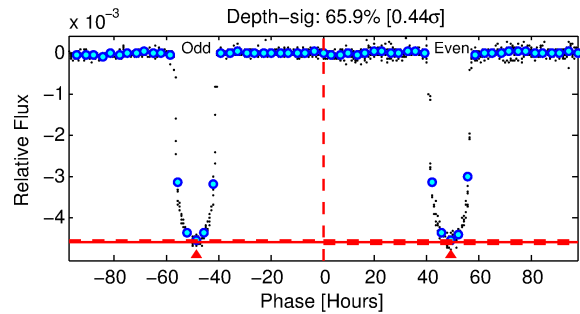
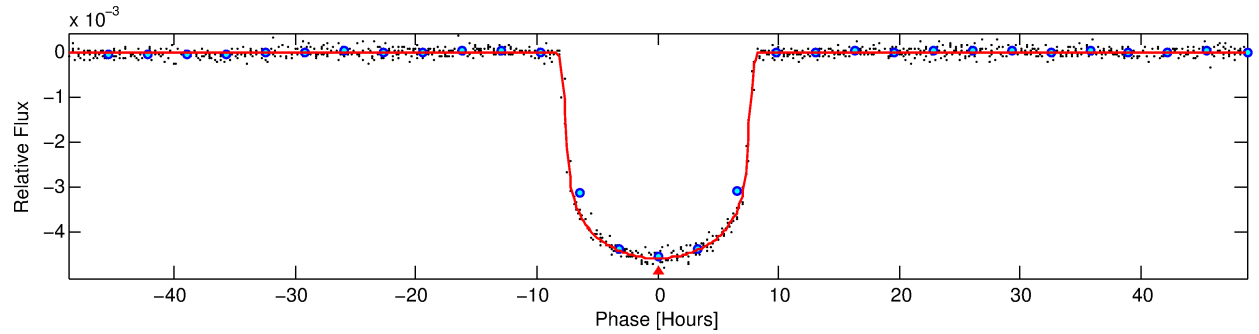
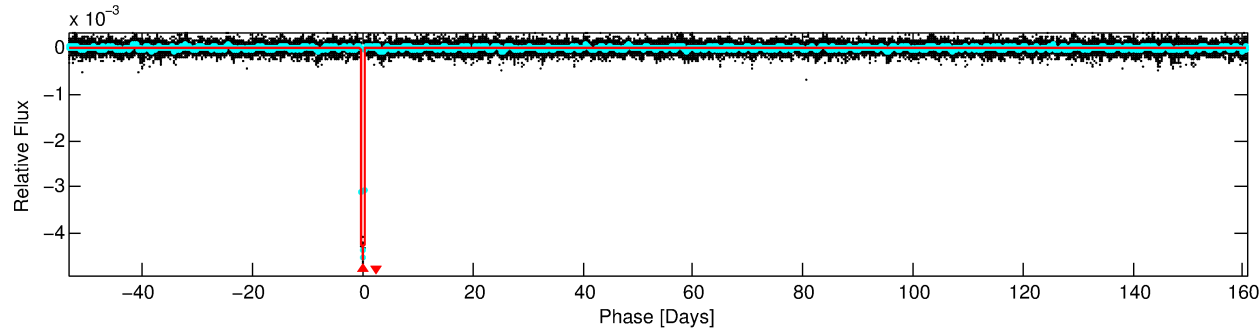
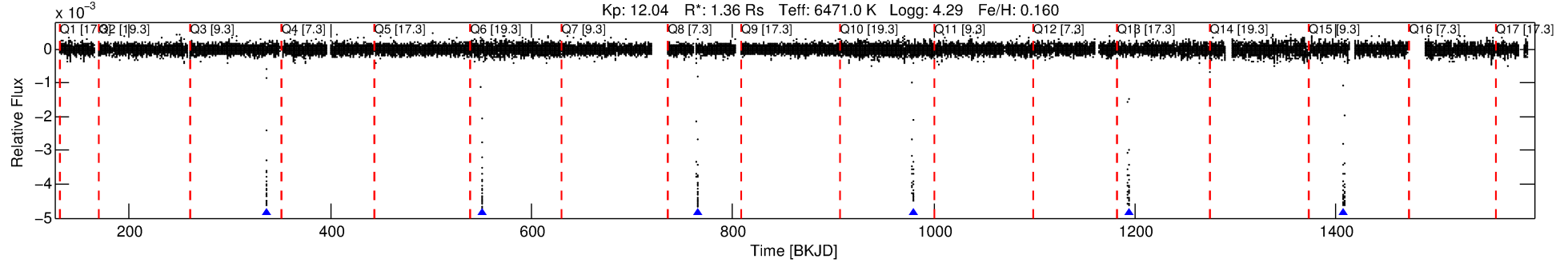
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 010795103-01

No Significant Match Found

DV One-Page Summary

KIC: 10795103 Candidate: 1 of 1 Period: 214.312 d
KOI: K03683.01 Corr: 0.998



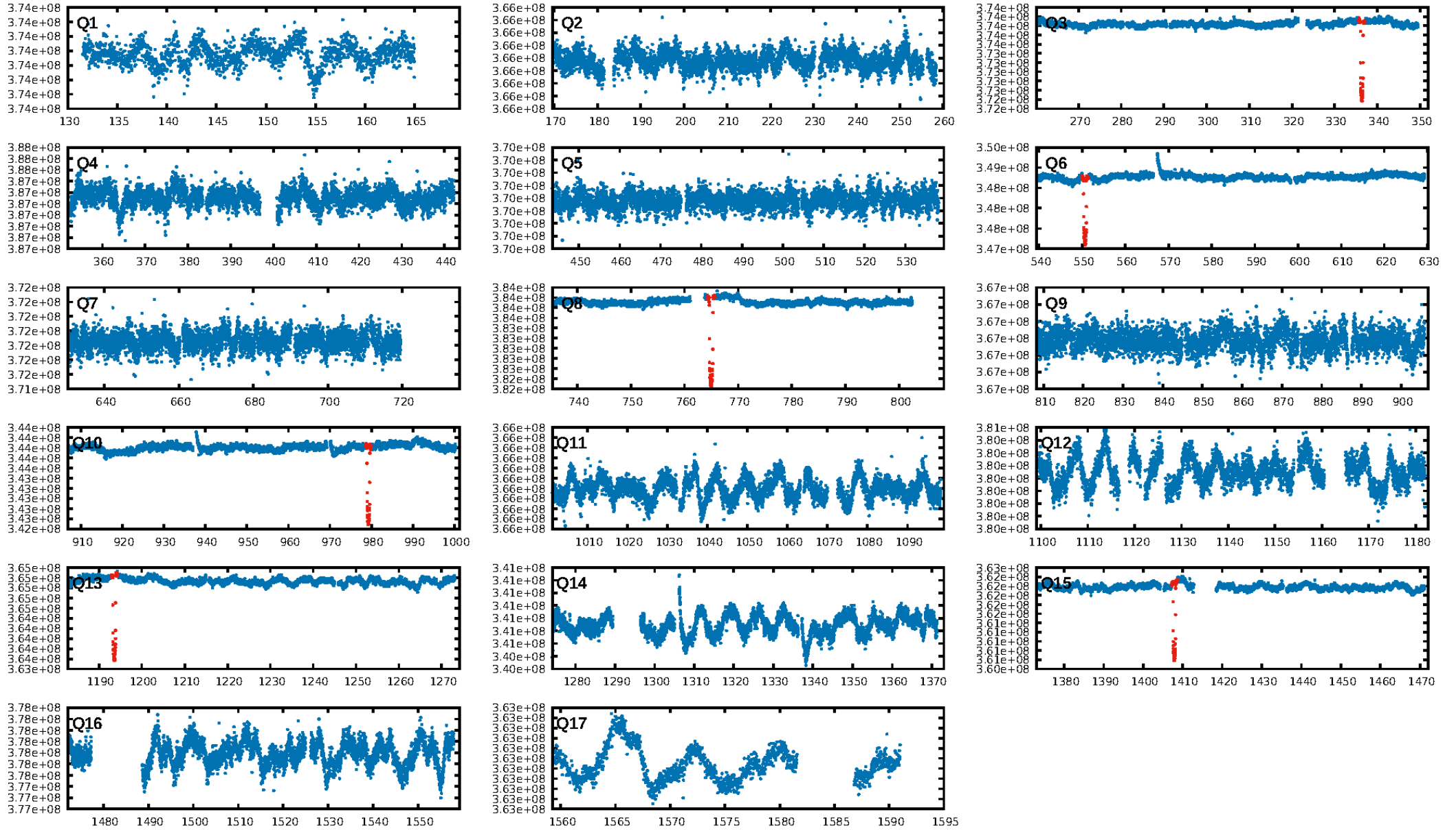
DV Fit Results:

Period = 214.31207 [0.00012] d
Epoch = 336.3302 [0.0004] BKJD
Rp/R* = 0.0620 [0.0002]
a/R* = 106.94 [1.76]
b = 0.05 [0.32]
Seff = 4.94 [1.15]
Teq = 380 [22] K
Rp = 9.19 [1.64] Re
a = 0.7652 [0.1140] AU
Ag = 16.01 [77.89] [0.19 σ]
Teffp = 1176 [1429] K [0.56 σ]

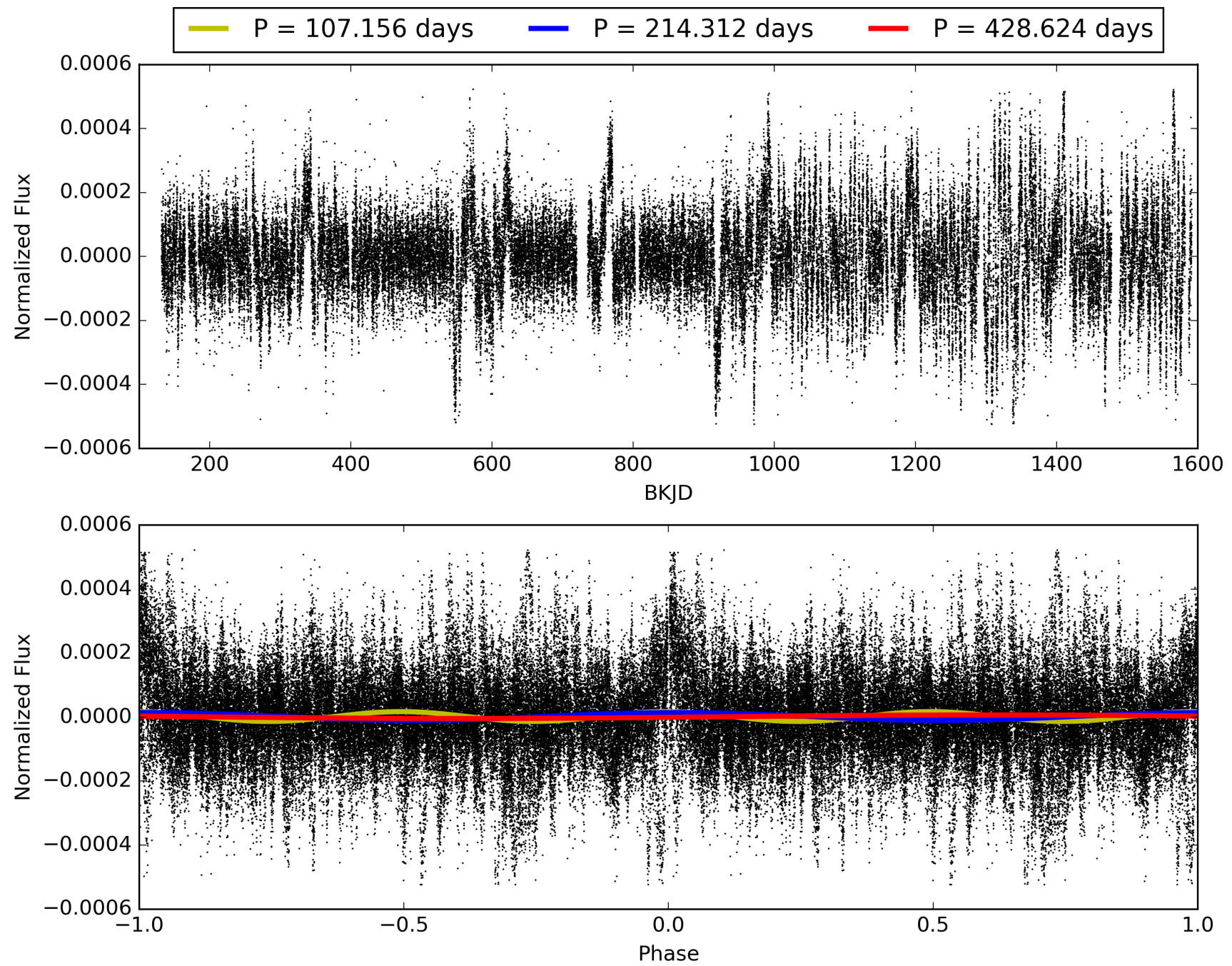
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: 33.3%
ModelChiSquareGof-sig: 100.0%
Bootstrap-pfa: 0.00e+00
RollingBand-fgt: 1.00 [6/6]
GhostDiagnostic-chr: 4.921
Centroid-sig: 36.3%
Centroid-so: 0.180 arcsec [11.71 σ]
OotOffset-rm: 0.028 arcsec [0.36 σ]
KicOffset-rm: 0.258 arcsec [2.82 σ]
OotOffset-st: 2/2/0/0 [4]
KicOffset-st: 2/2/0/0 [4]
DiffImageQuality-fgm: 1.00 [4/4]
DiffImageOverlap-fno: 1.00 [4/4]

TCE 010795103-01, PDC Light Curves

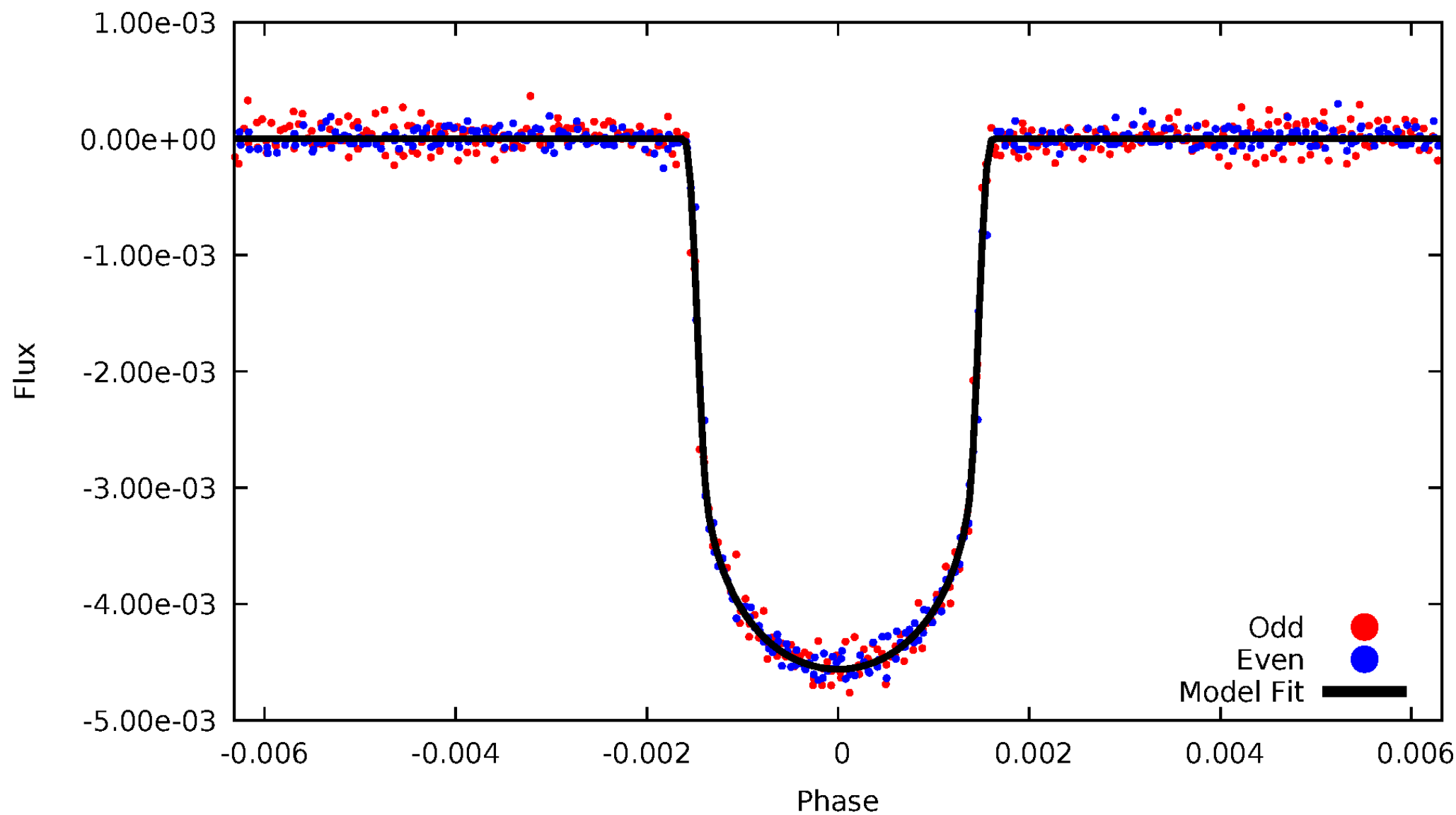


TCE 010795103-01



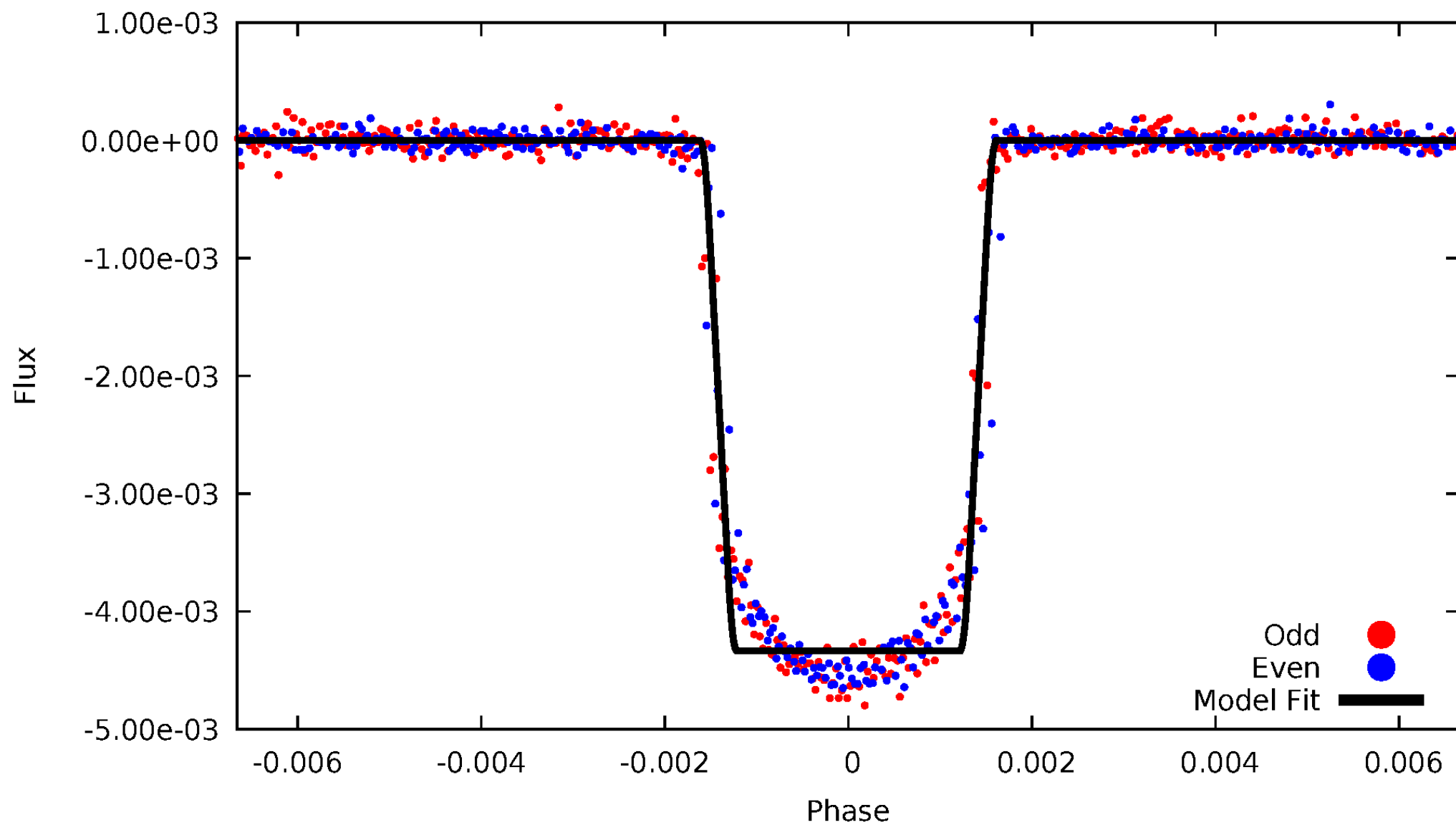
DV Odd/Even

TCE 010795103-01



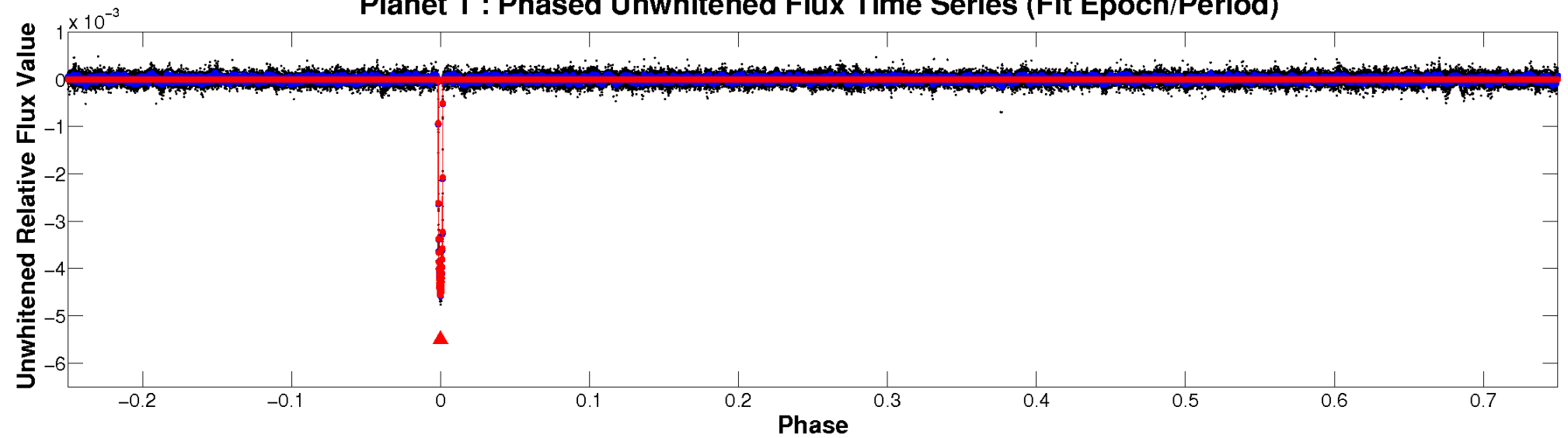
ALT Odd/Even

TCE 010795103-01

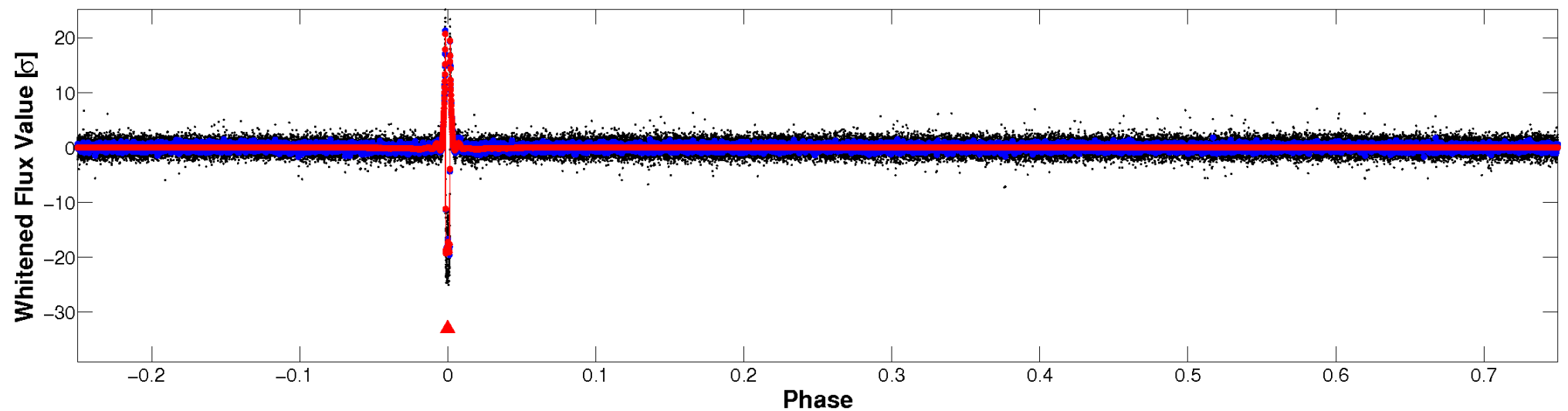


Non-Whitened Vs. Whitened Light Curve

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

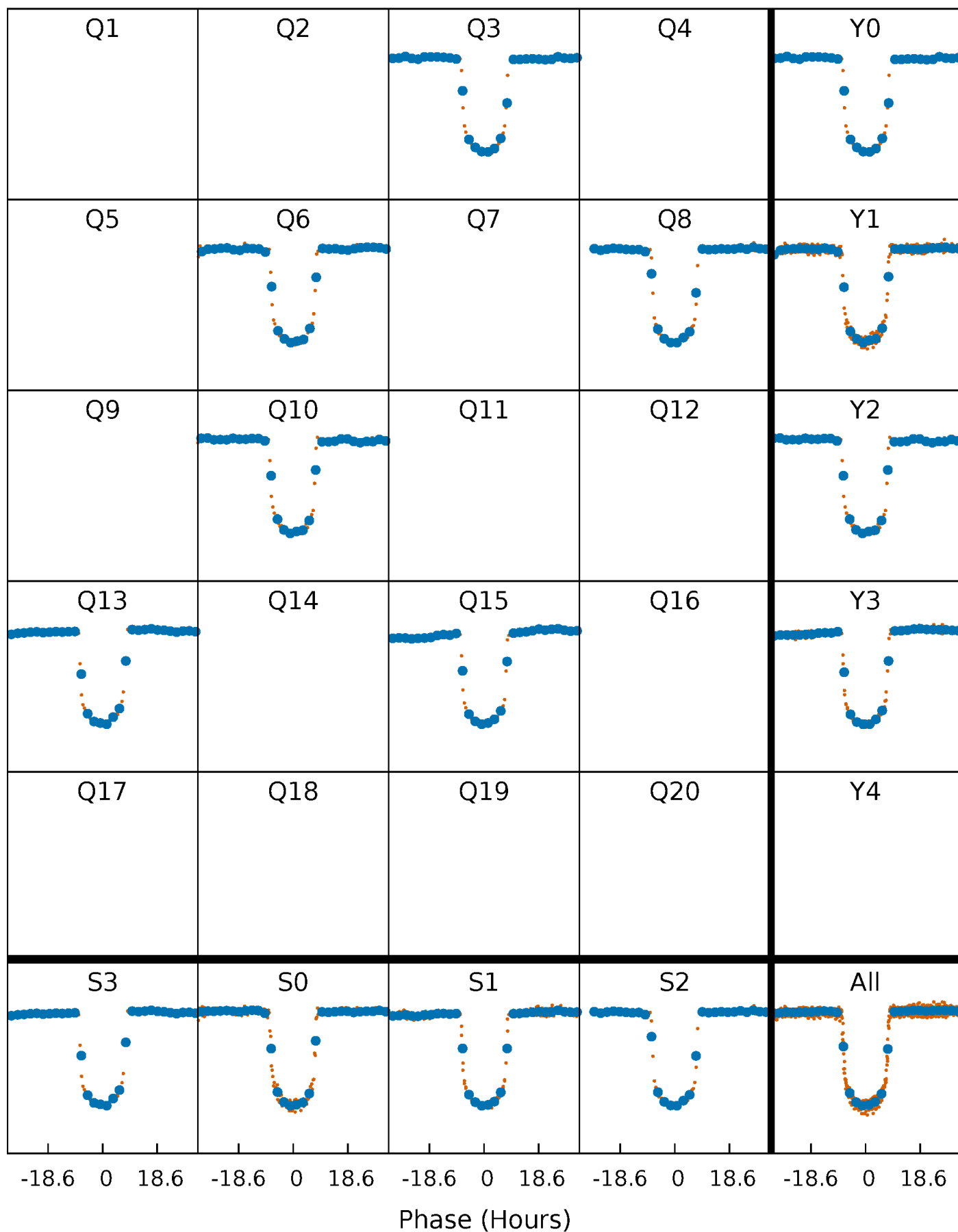


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



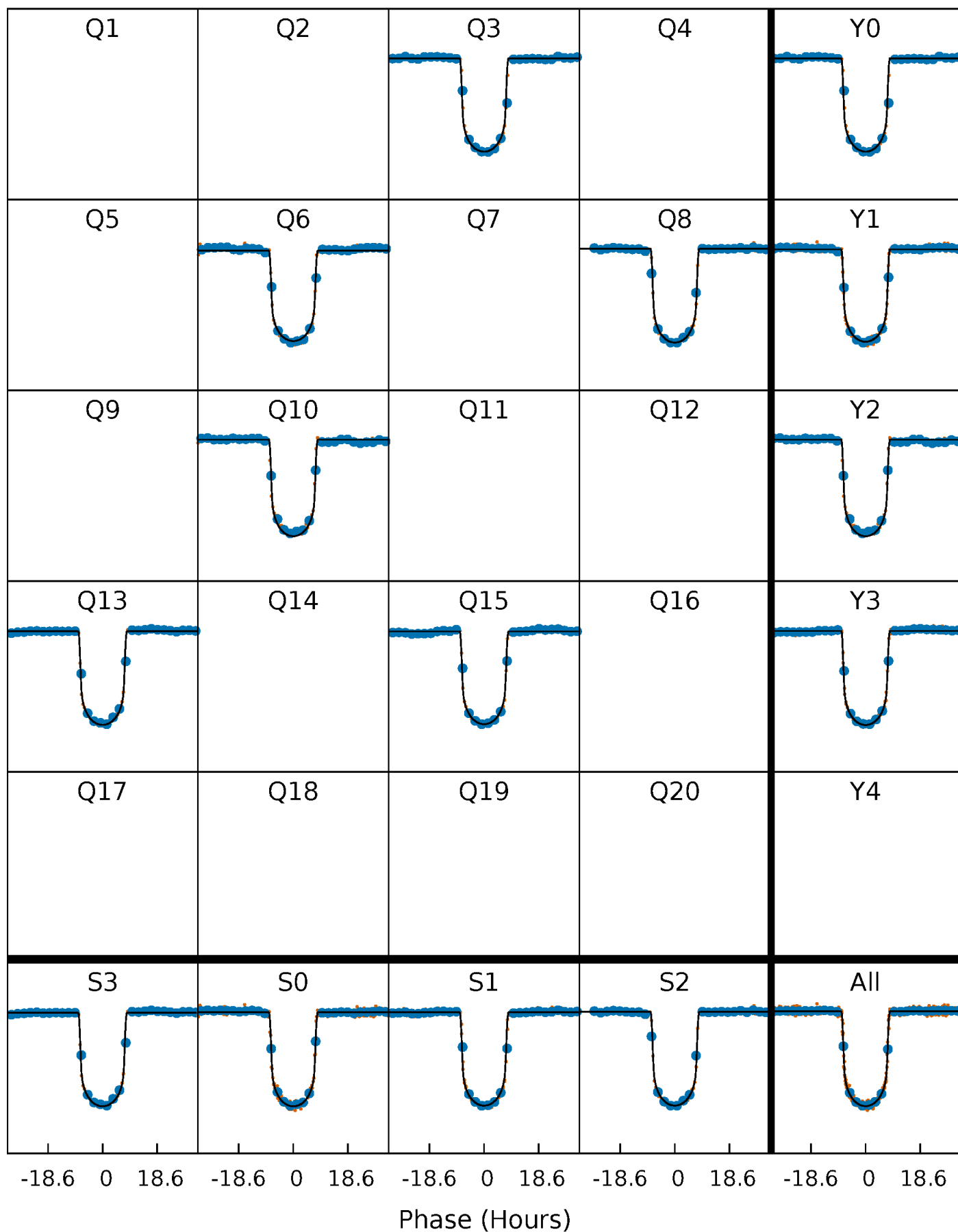
PDC Quarter-Phased Transit Curves

TCE 010795103-01 P=214.312068 Days $T_0=336.330241$ (BKJD)



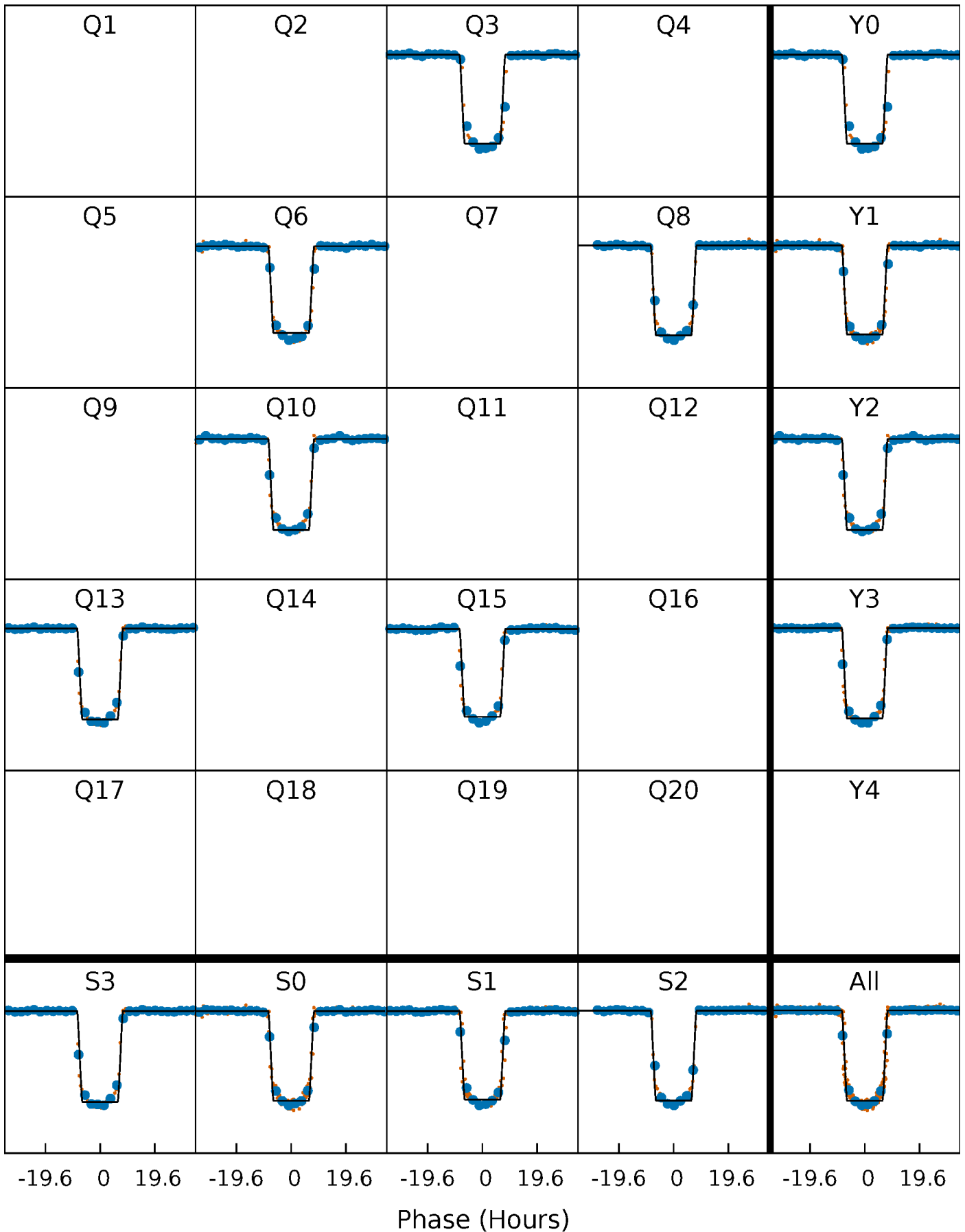
DV Quarter-Phased Transit Curves

TCE 010795103-01 P=214.312068 Days $T_0=336.330241$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

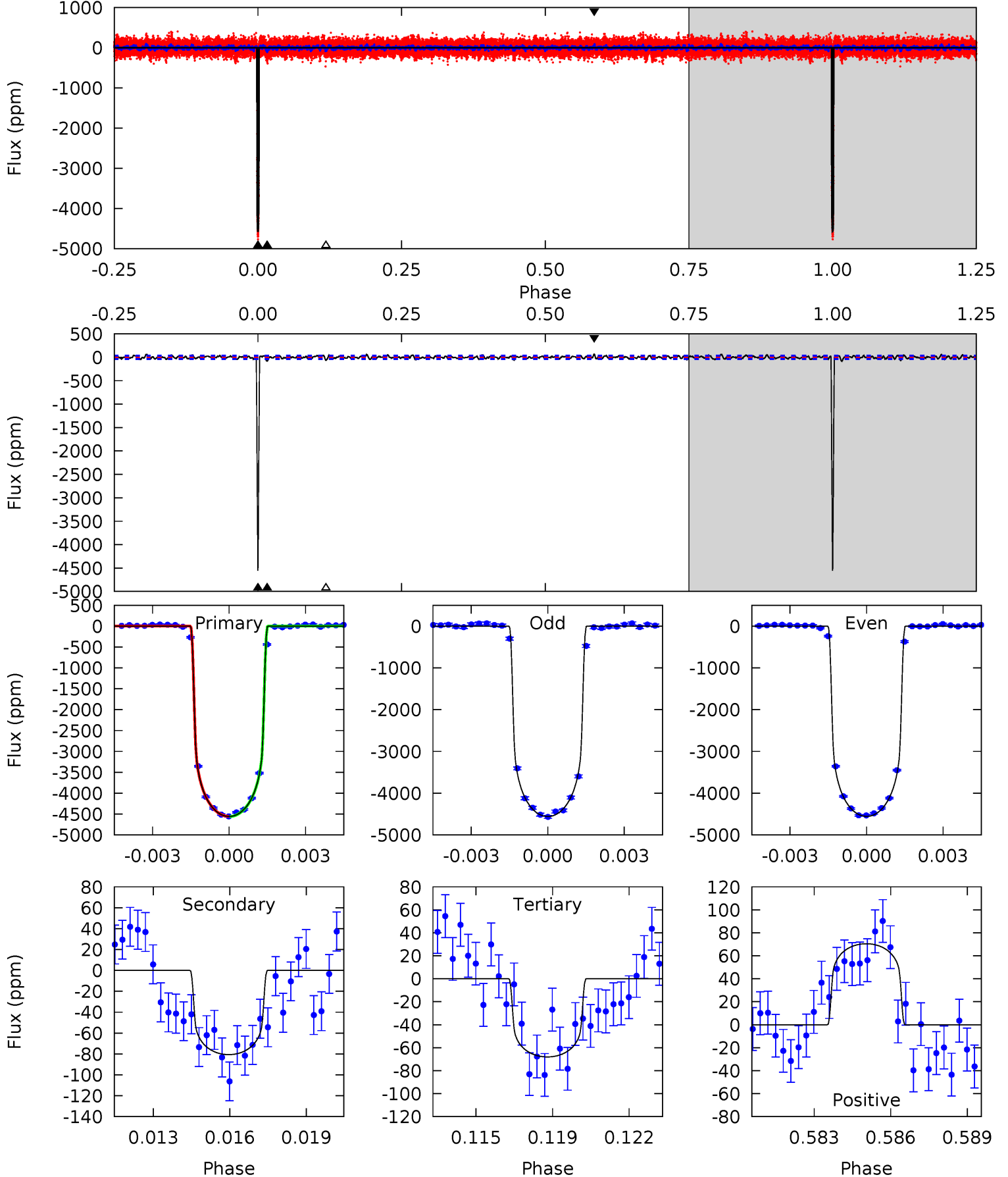
TCE 010795103-01 P=214.320800 Days $T_0=336.308586$ (BKJD)



DV Model-Shift Uniqueness Test

010795103-01, P = 214.312068 Days, E = 122.018173 Days

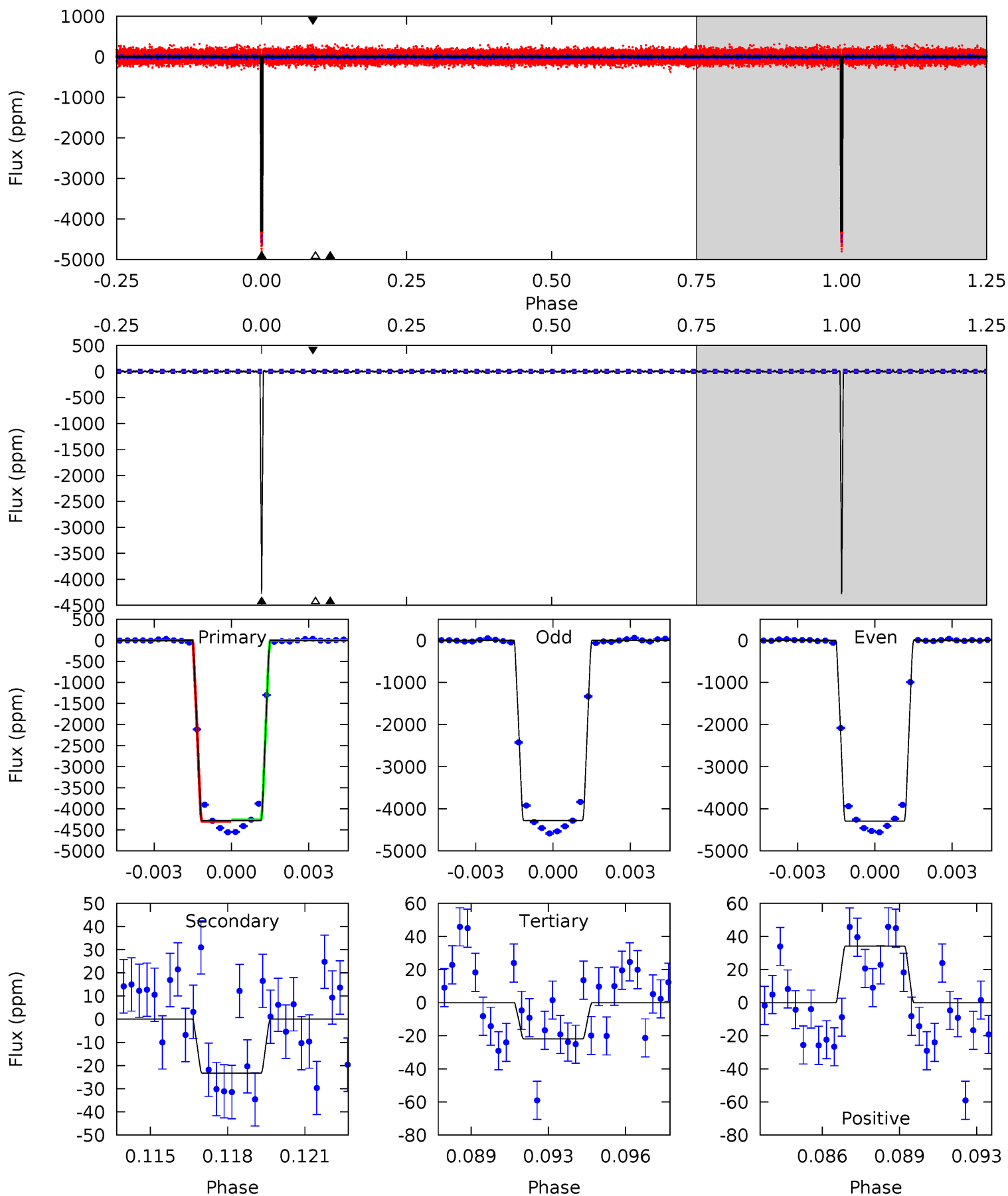
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
701.5	12.4	10.5	10.8	5.24	2.95	3.13	691.0	690.6	1.94	1.56	0.30	1.00	0.02	0.32



Alt Model-Shift Uniqueness Test

010795103-01, P = 214.320800 Days, E = 121.987786 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
766.9	4.17	3.93	6.12	5.24	2.95	1.13	762.9	760.7	0.24	-1.95	1.50	1.00	0.01	2.84



Stellar Parameters For KIC 010795103

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	$M(M_{\odot})$	p_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	6471^{+116}_{-141}	$4.287^{+0.063}_{-0.117}$	$0.160^{+0.150}_{-0.200}$	$1.357^{+0.242}_{-0.138}$	$1.303^{+0.095}_{-0.105}$	$0.734^{+0.193}_{-0.258}$
	+2%/-2%	+1%/-3%	+94%/-125%	+18%/-10%	+7%/-8%	+26%/-35%
Source	SPE59	SPE59	SPE59	DSEP		

KIC = Kepler Input Catalog; PHO = Photometry; SPE = Spectroscopy; AST = Asteroseismology
 TRA = Transits; DESP = Dartmouth Models; MULT = Multiple Models

Secondary Eclipse Parameters for KIC 010795103-01 / KOI 3683.01

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	-81 ± 6	$9.25^{+0.91}_{-0.54}$	534^{+25}_{-20}	3091^{+49}_{-50}	297^{+47}_{-49}
Alt.	-23 ± 6	$9.84^{+0.88}_{-0.60}$	534^{+25}_{-19}	2574^{+78}_{-85}	76^{+21}_{-21}

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

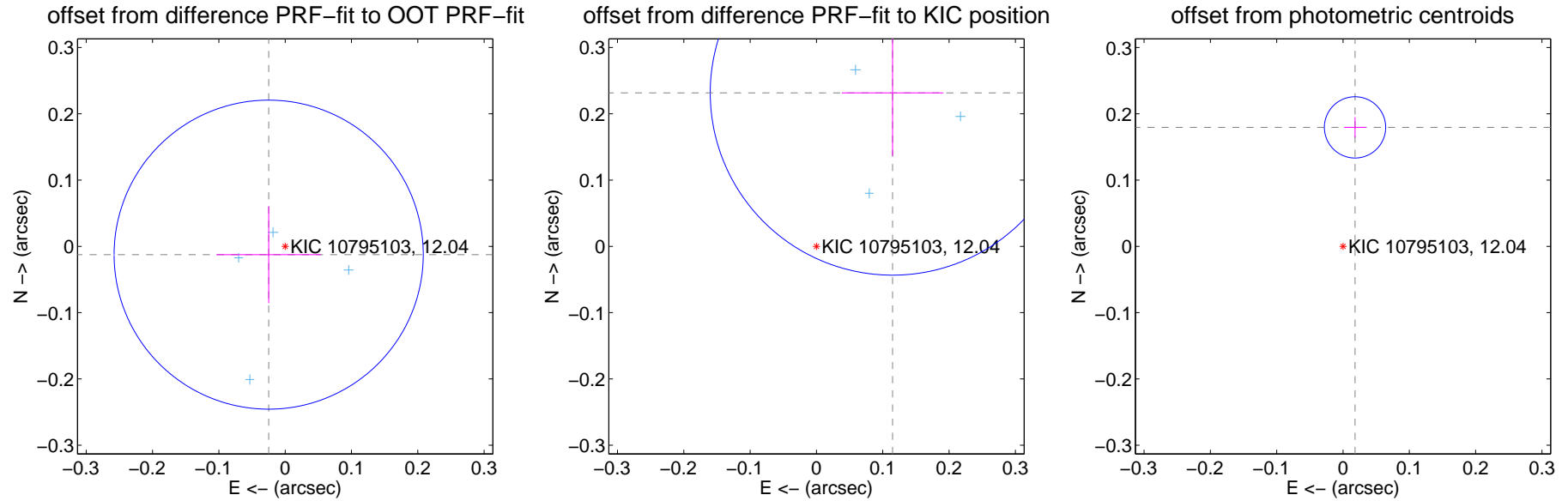
DV Centroid Data

Supplemental centroid analysis for 010795103-01. Kepler magnitude: 12.04. Transit SNR 277.06

There are 4 quarters with good PRF difference image offsets

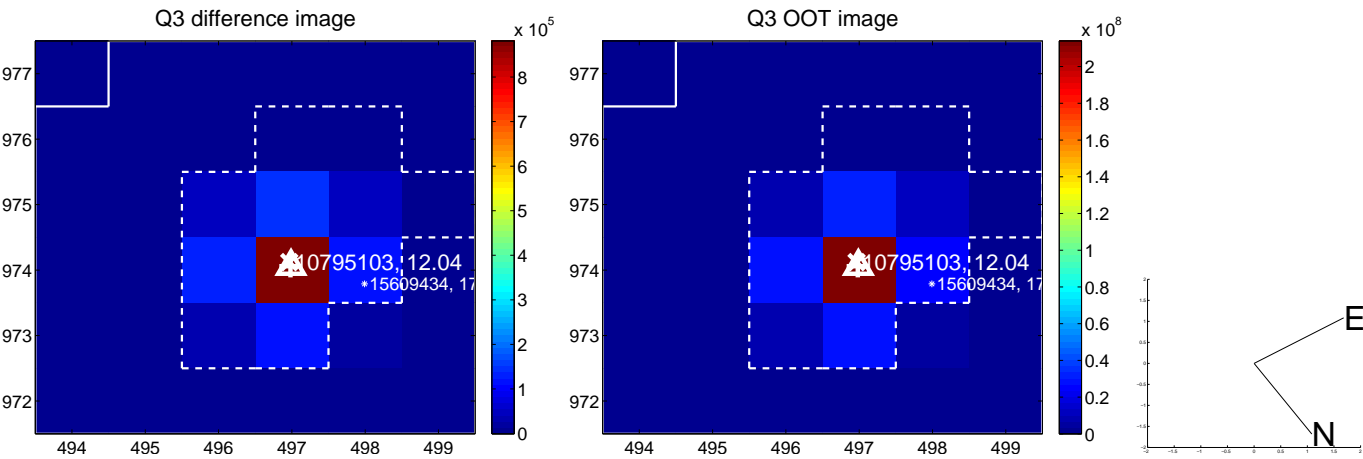
The direct PRF centroid is offset from the target star catalog position by about 0.26 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.028 ± 0.078	0.36	0.025 ± 0.079	-0.013 ± 0.073
PRF-fit source offset from KIC position	0.258 ± 0.092	2.82	-0.115 ± 0.077	0.232 ± 0.095
photometric centroid source offset	0.18 ± 0.02	11.71	-0.02 ± 0.02	0.18 ± 0.02

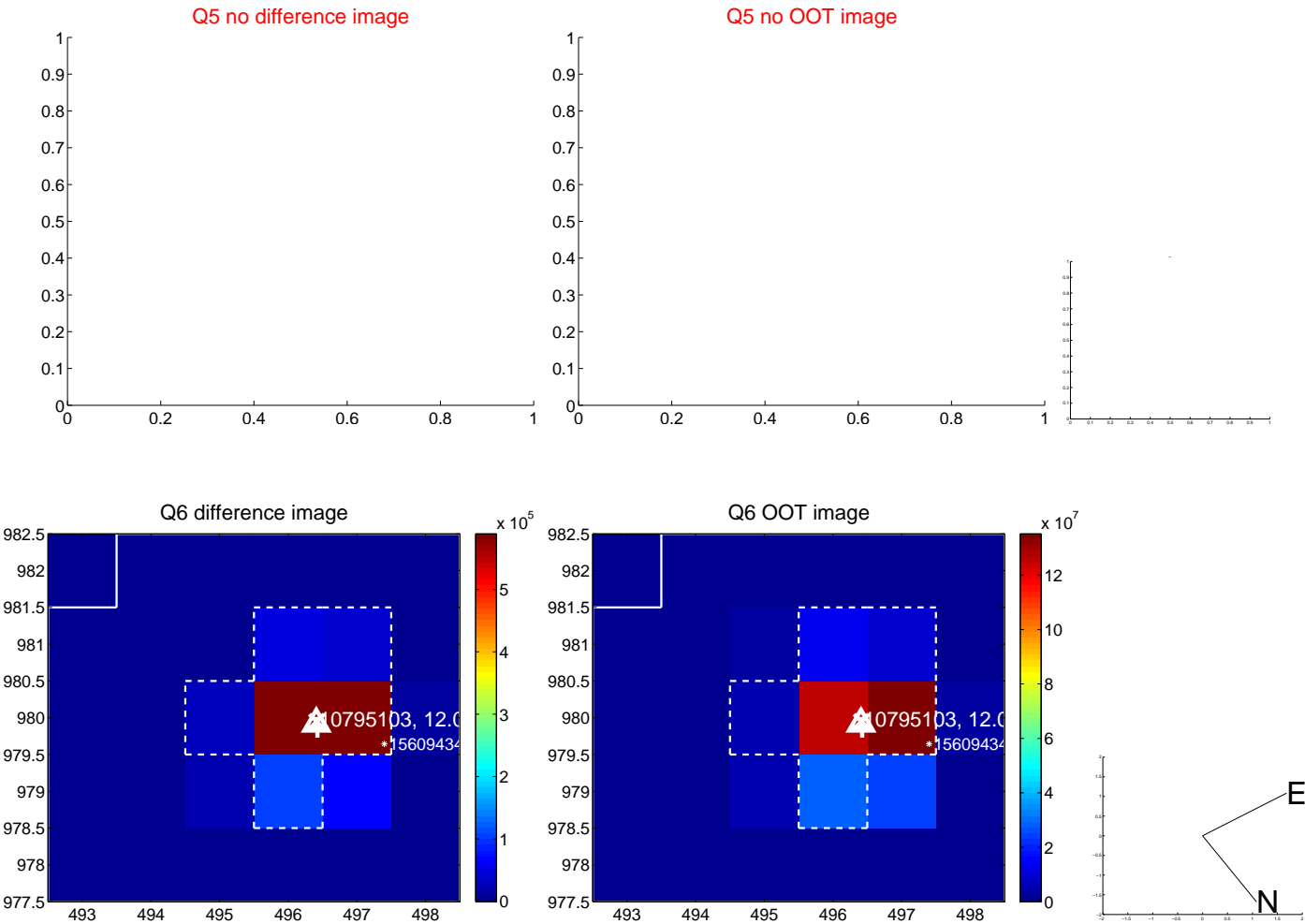


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses:** good quarterly centroid offsets; **Vermillion crosses:** bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

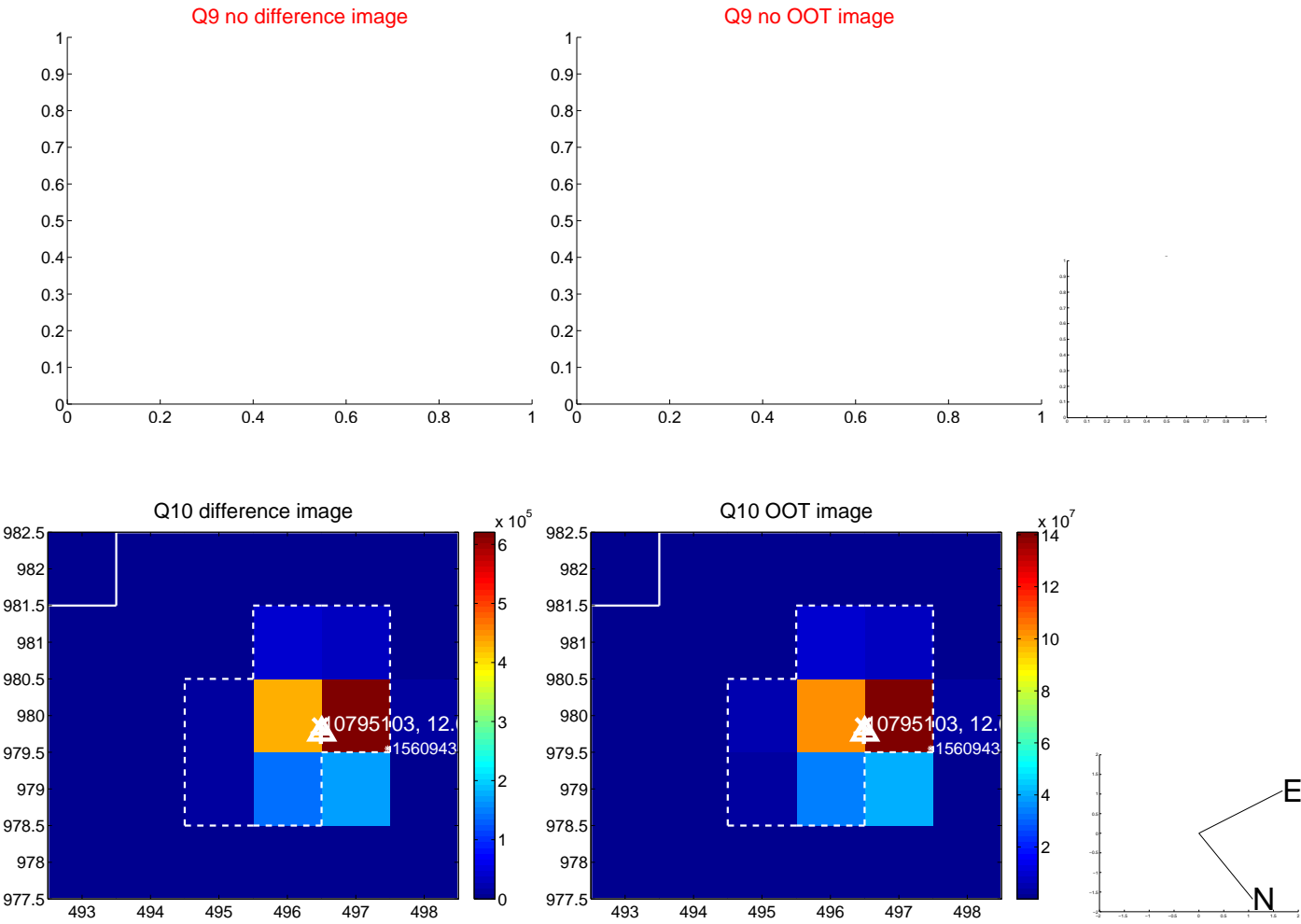
white ×: KIC target position; +: OOT centroid; △: difference centroid. red ✕: large negative pixel value.



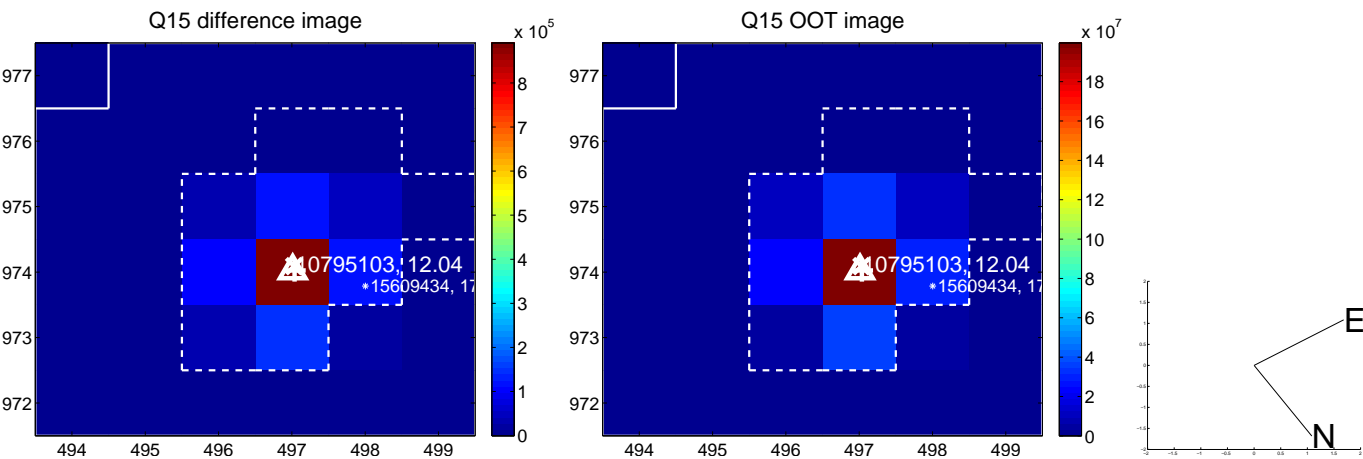
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



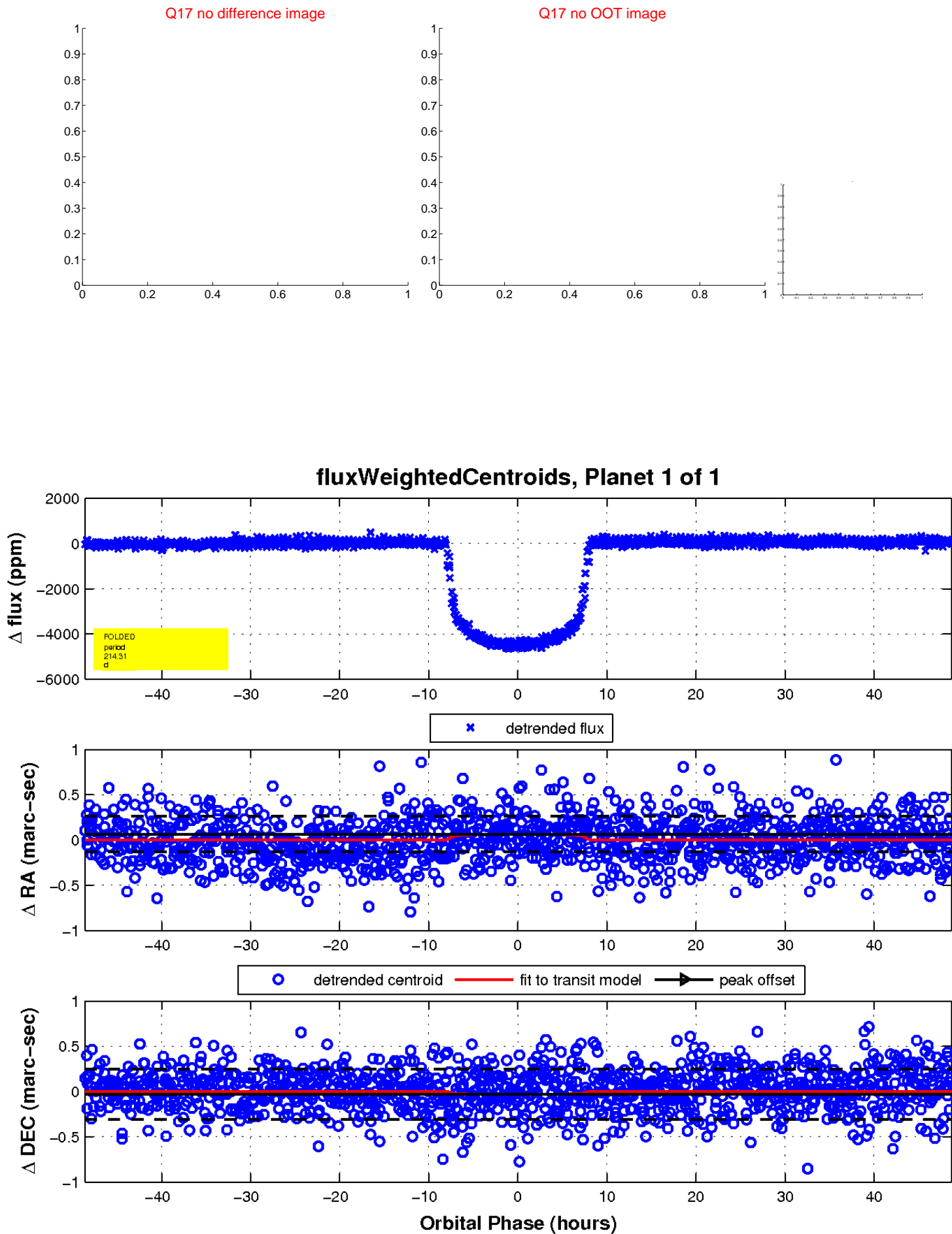
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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



UKIRT Image

Declination

