

KIC 003344427

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})
003344427-01	OBS	3764.01	0.651778	131.814935	306886.6	2.078	2483.3	1643.7	3.58	4884	254.70	0.00

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
003344427-01	OBS	FP	0.00	1	0	0	0	LPP_DV

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.

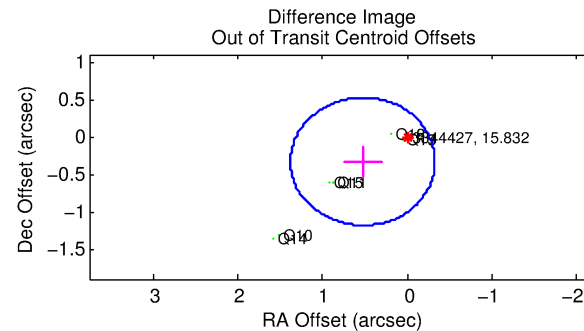
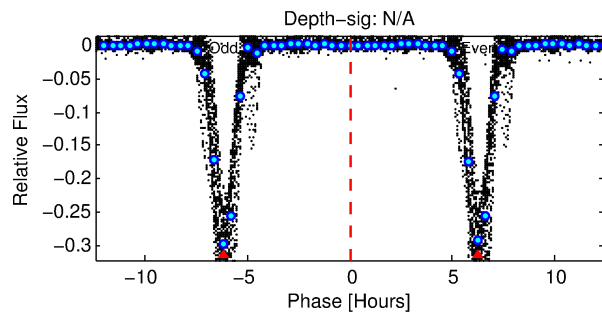
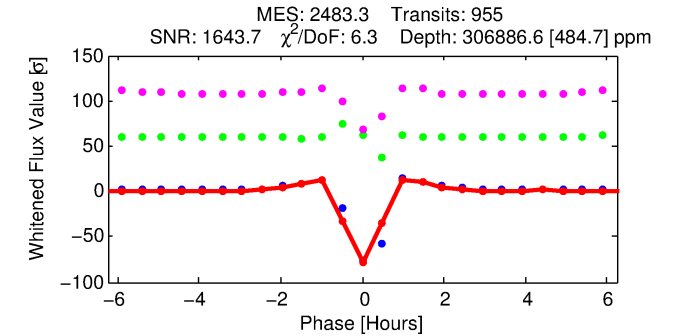
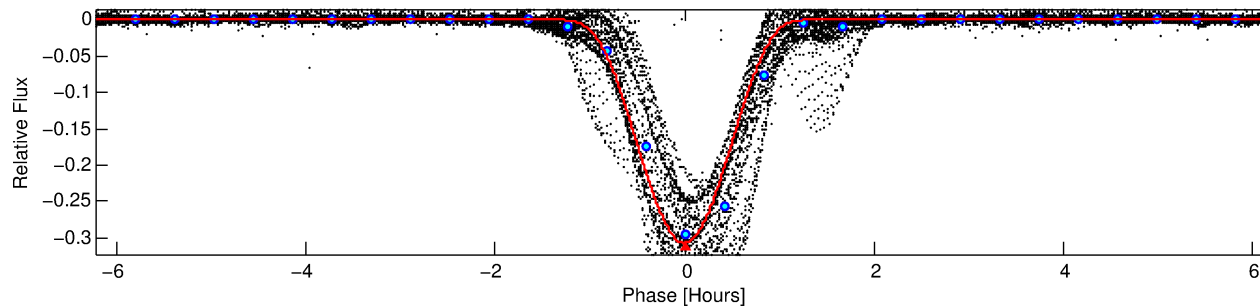
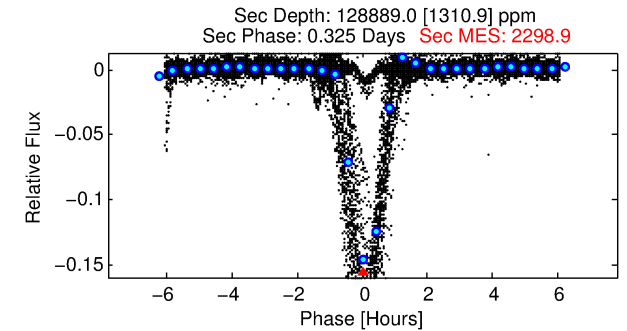
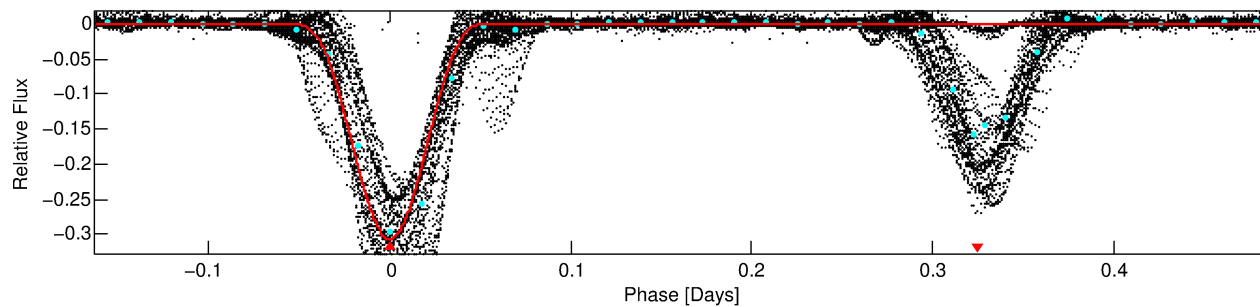
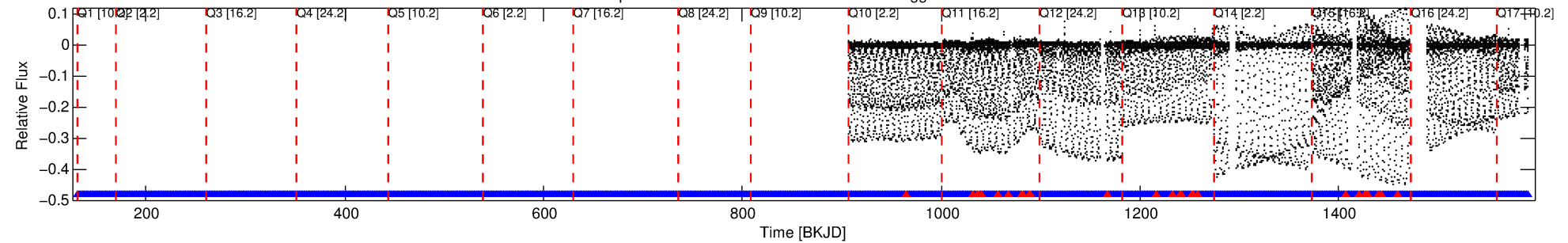
Ephemeris Match Information For 003344427-01

No Significant Match Found

DV One-Page Summary

KIC: 3344427 Candidate: 1 of 1 Period: 0.652 d
KOI: K03764 Corr: No Ephemeris Match

Kp: 15.83 R*: 3.58 Rs Teff: 4884.0 K Logg: 3.28 Fe/H: -0.200



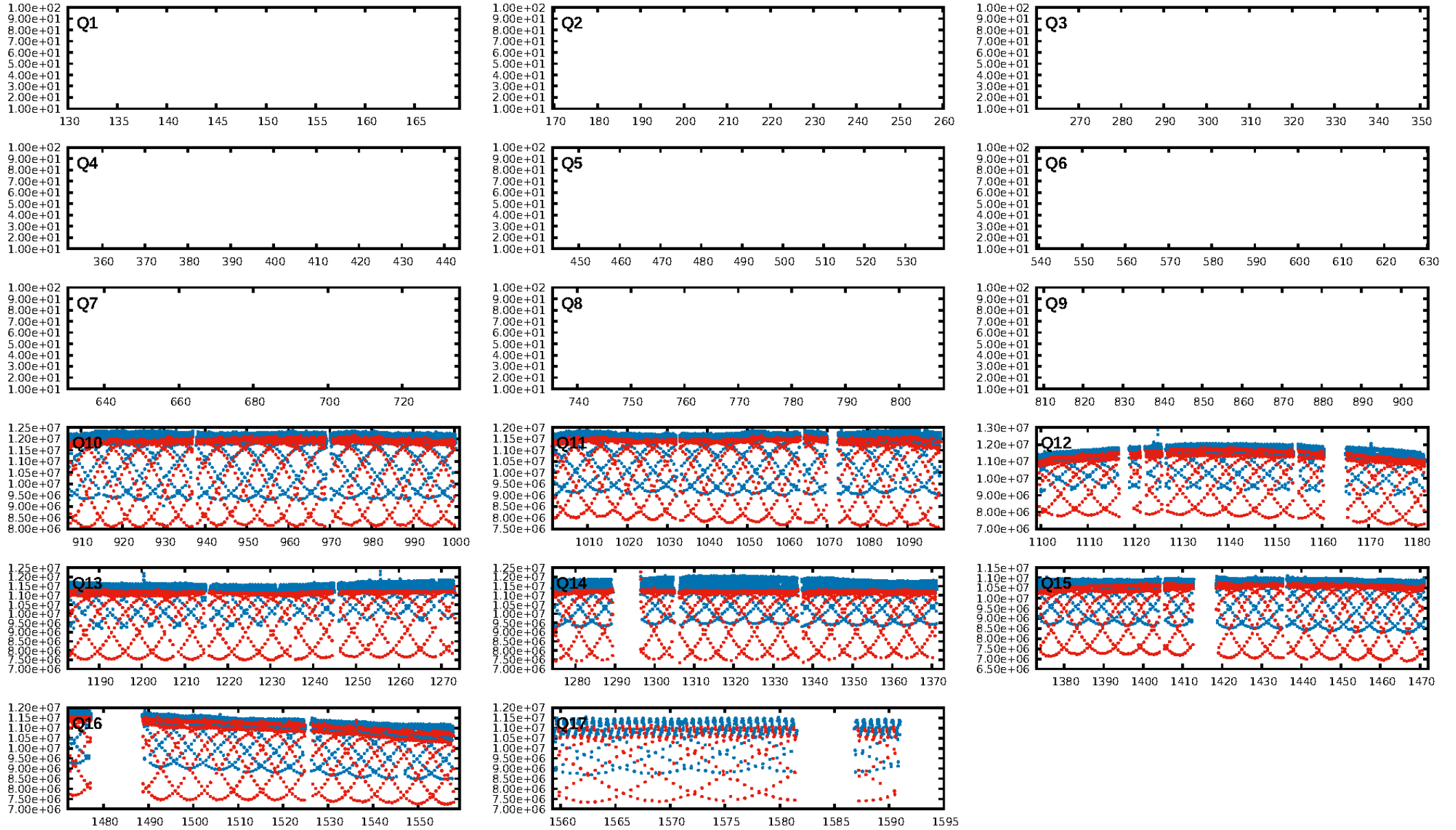
DV Fit Results:

Period = 0.65178 [0.00000] d
Epoch = 131.8149 [0.0000] BKJD
Rp/R* = 0.6512 [0.0310]
a/R* = 3.77 [0.05]
b = 0.68 [0.05]
Seff = N/A
Teq = N/A
Rp = 254.70 [141.87] Re
a = N/A
Ag = N/A
Teffp = N/A

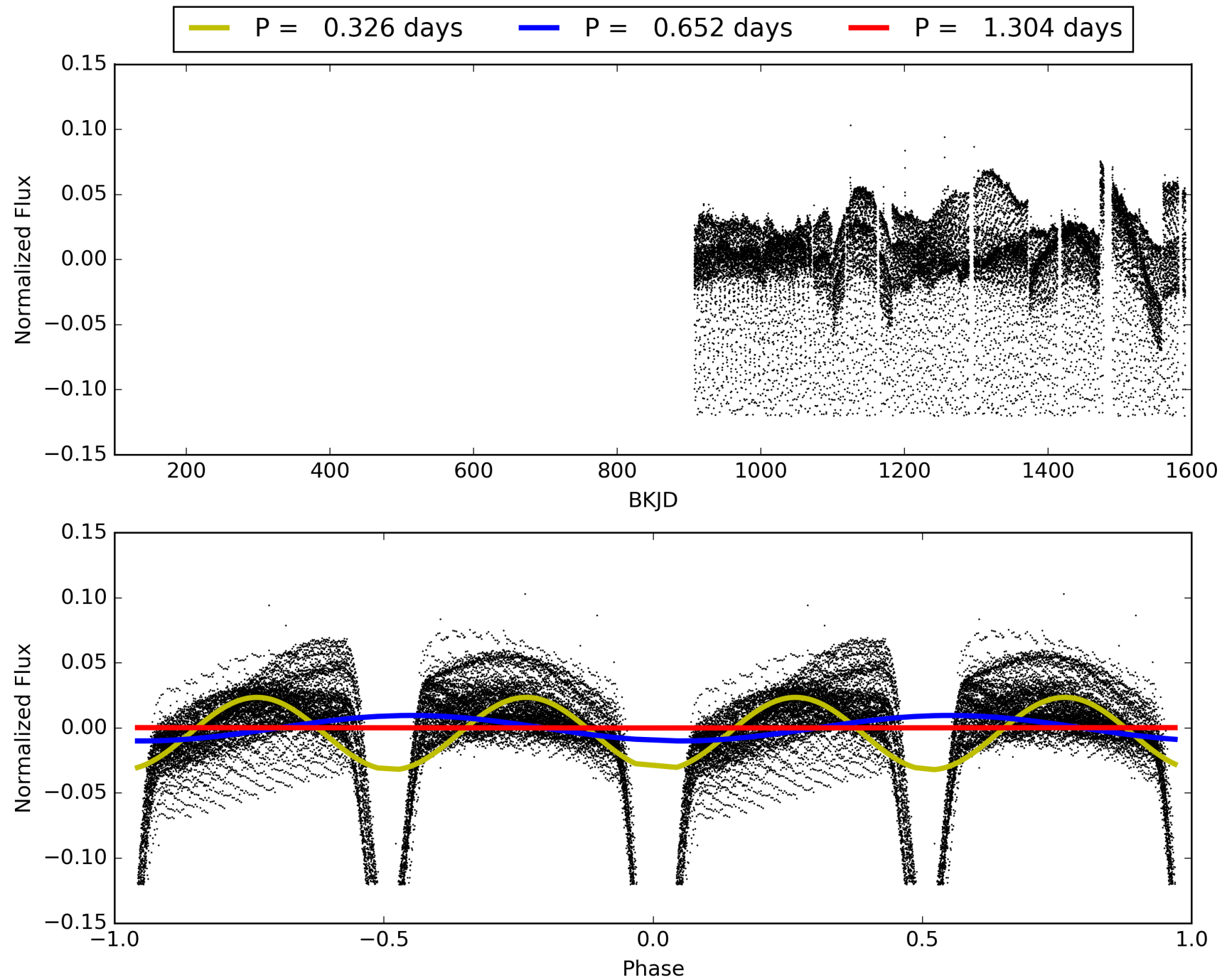
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: N/A
RollingBand-fgt: 0.97 [886/914]
GhostDiagnostic-chr: 0.9939
Centroid-sig: N/A
Centroid-so: N/A
OotOffset-rm: 0.619 arcsec [2.18 σ]
KicOffset-rm: 0.281 arcsec [3.41 σ]
OotOffset-st: 2/2/2/2 [8]
KicOffset-st: 2/2/2/2 [8]
DiffImageQuality-fgm: 1.00 [8/8]
DiffImageOverlap-fno: 1.00 [8/8]

TCE 003344427-01, PDC Light Curves

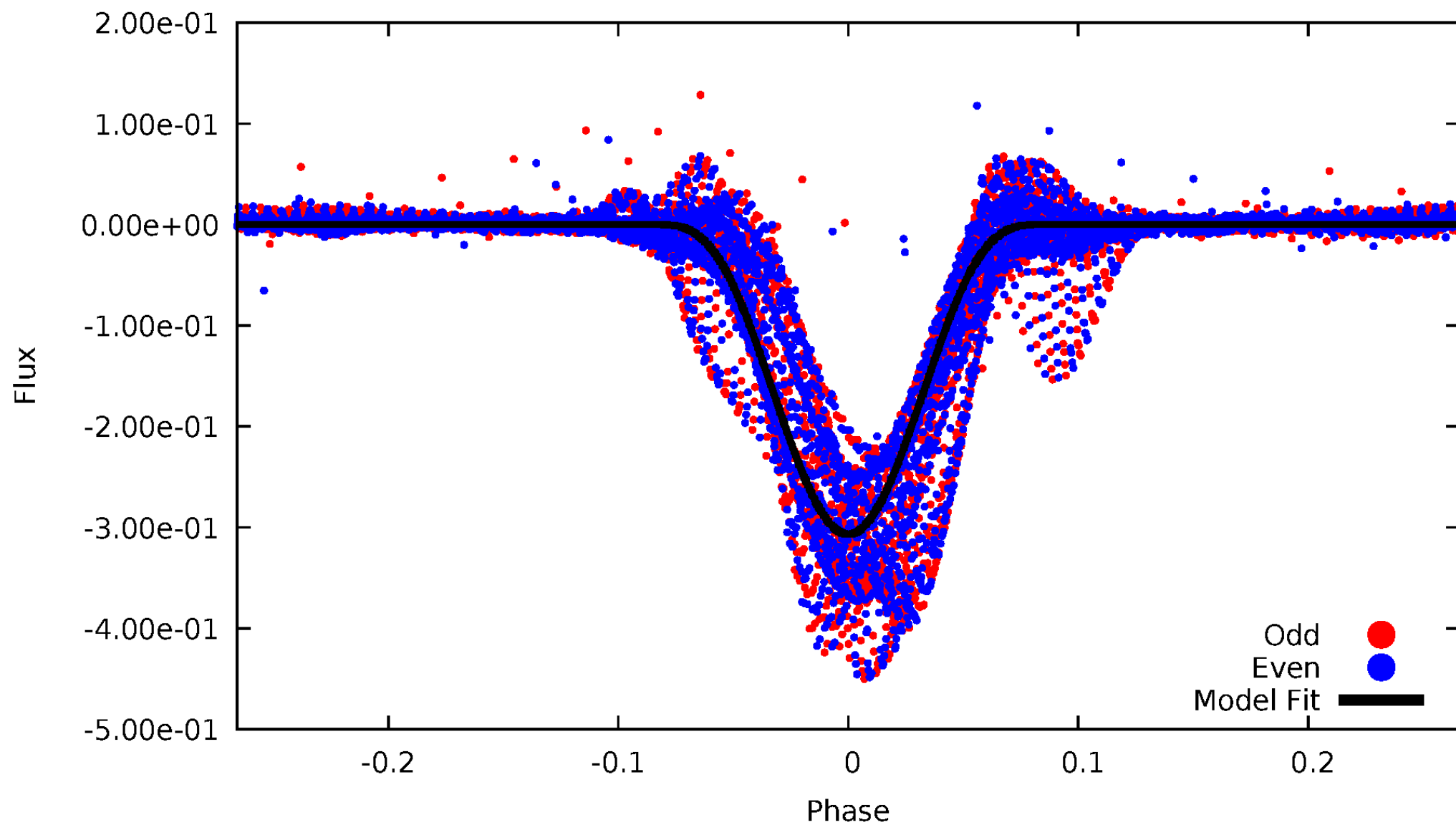


TCE 003344427-01



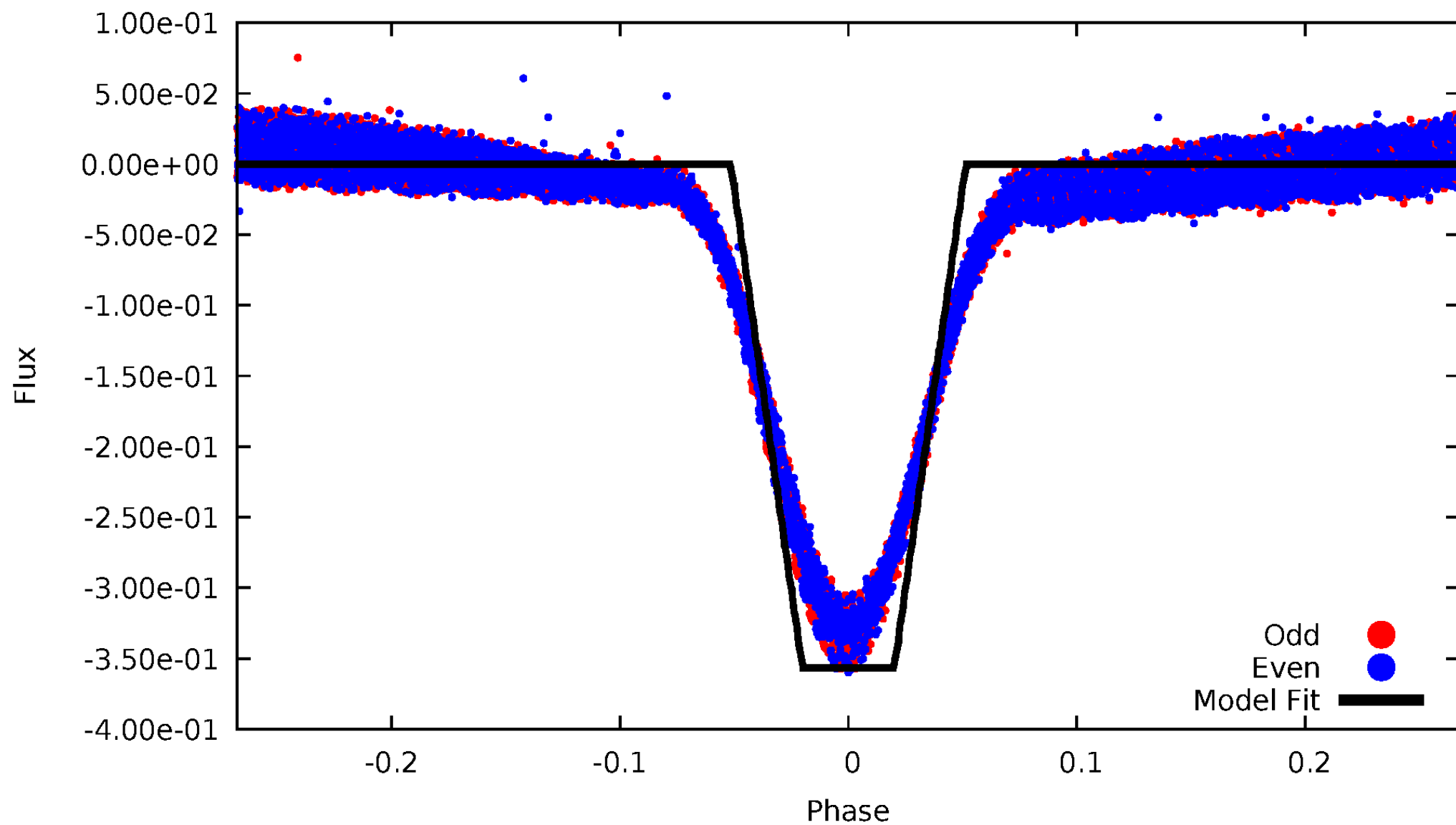
DV Odd/Even

TCE 003344427-01



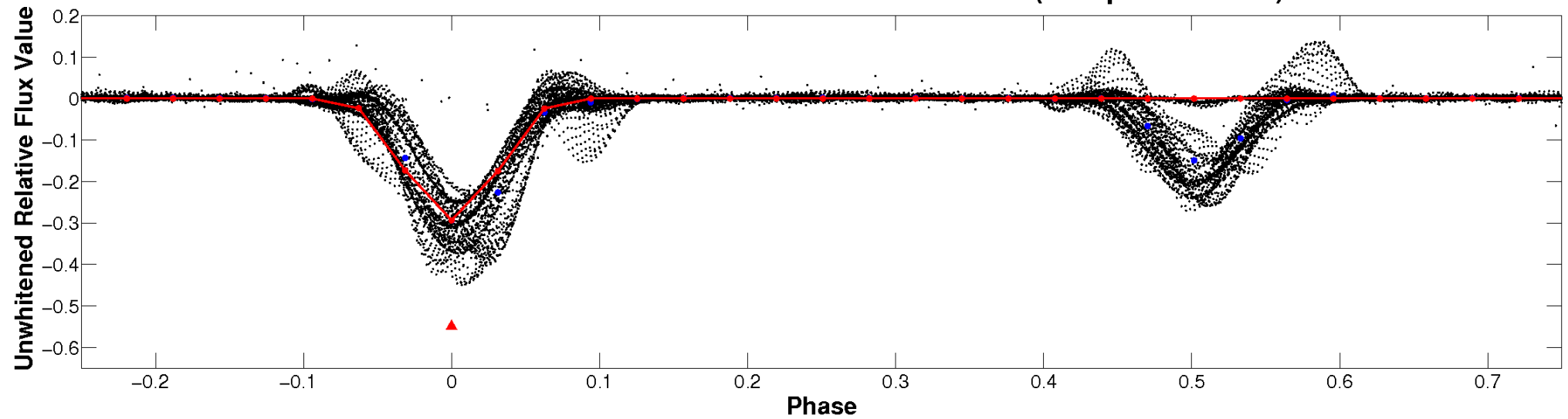
ALT Odd/Even

TCE 003344427-01

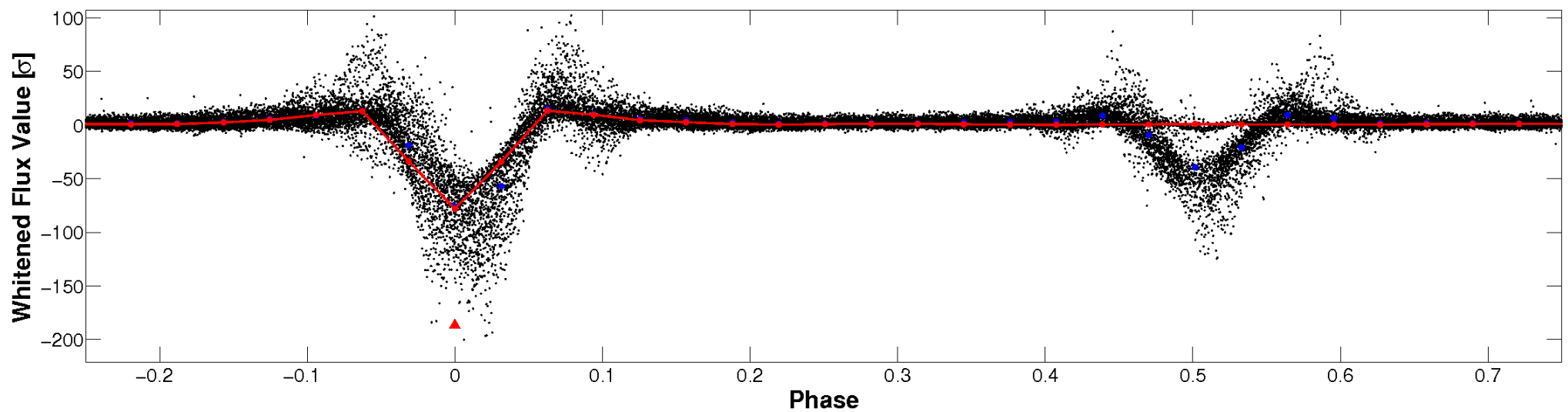


Non-Whitened Vs. Whitened Light Curve

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

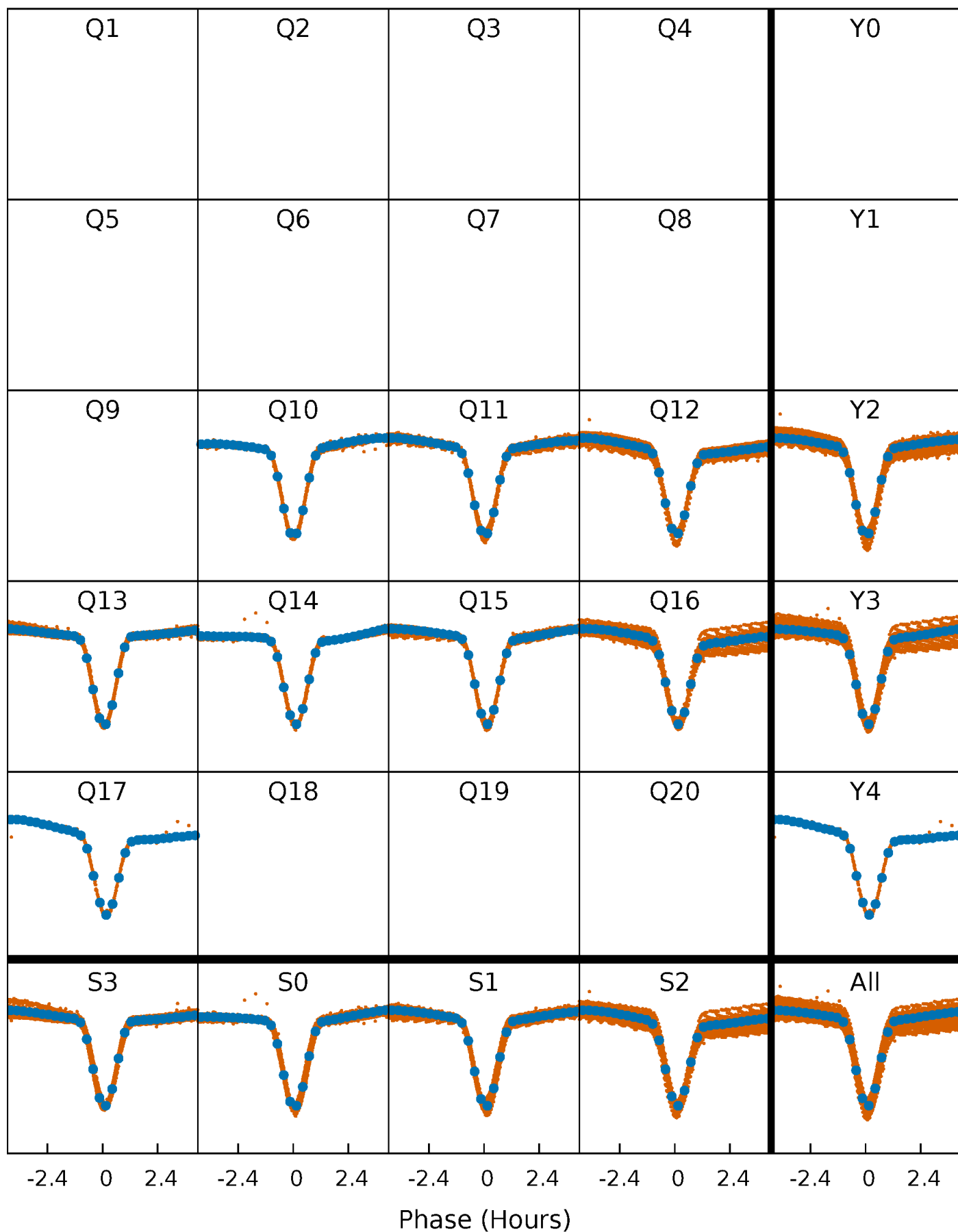


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



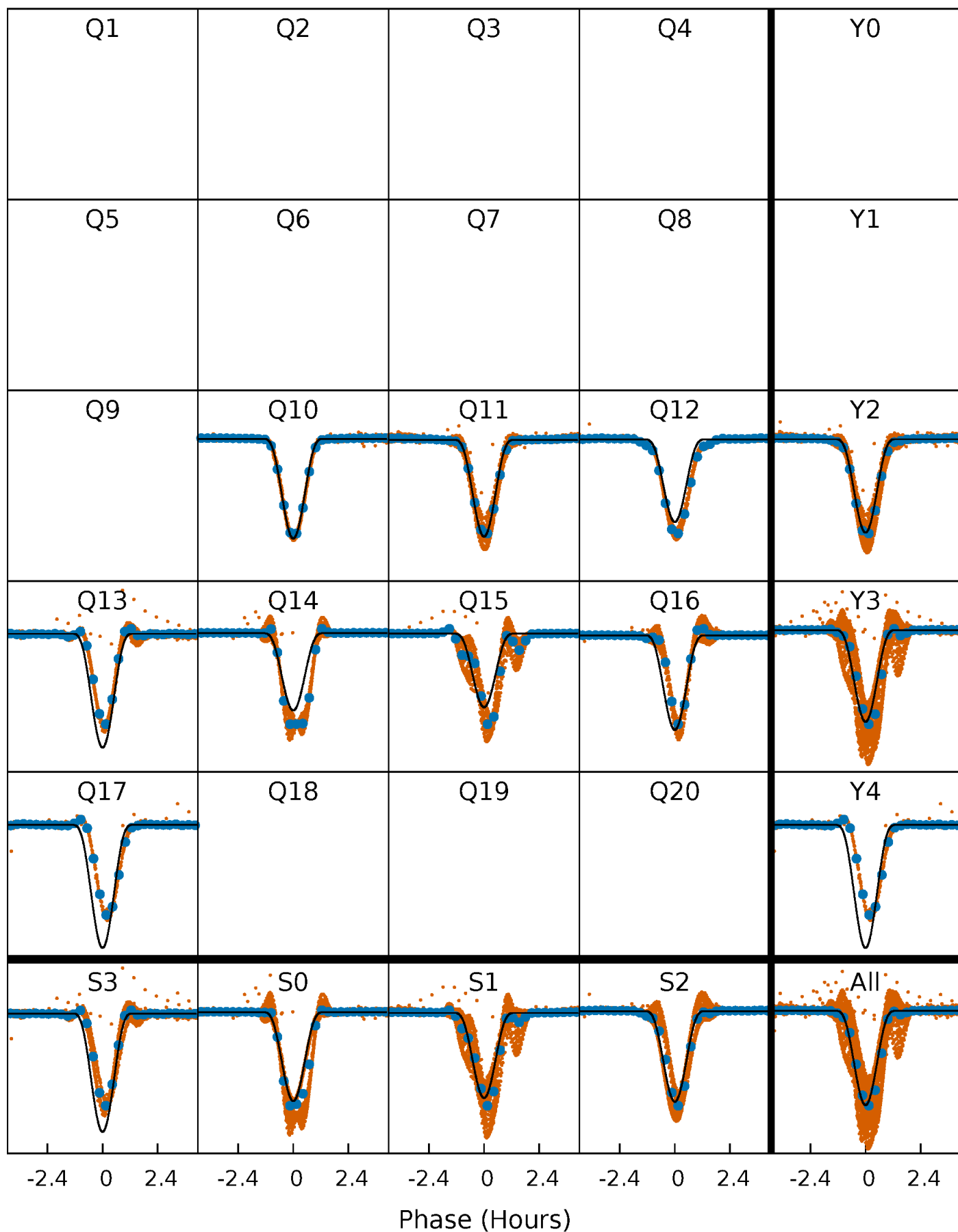
PDC Quarter-Phased Transit Curves

TCE 003344427-01 P= 0.651778 Days $T_0=131.814935$ (BKJD)



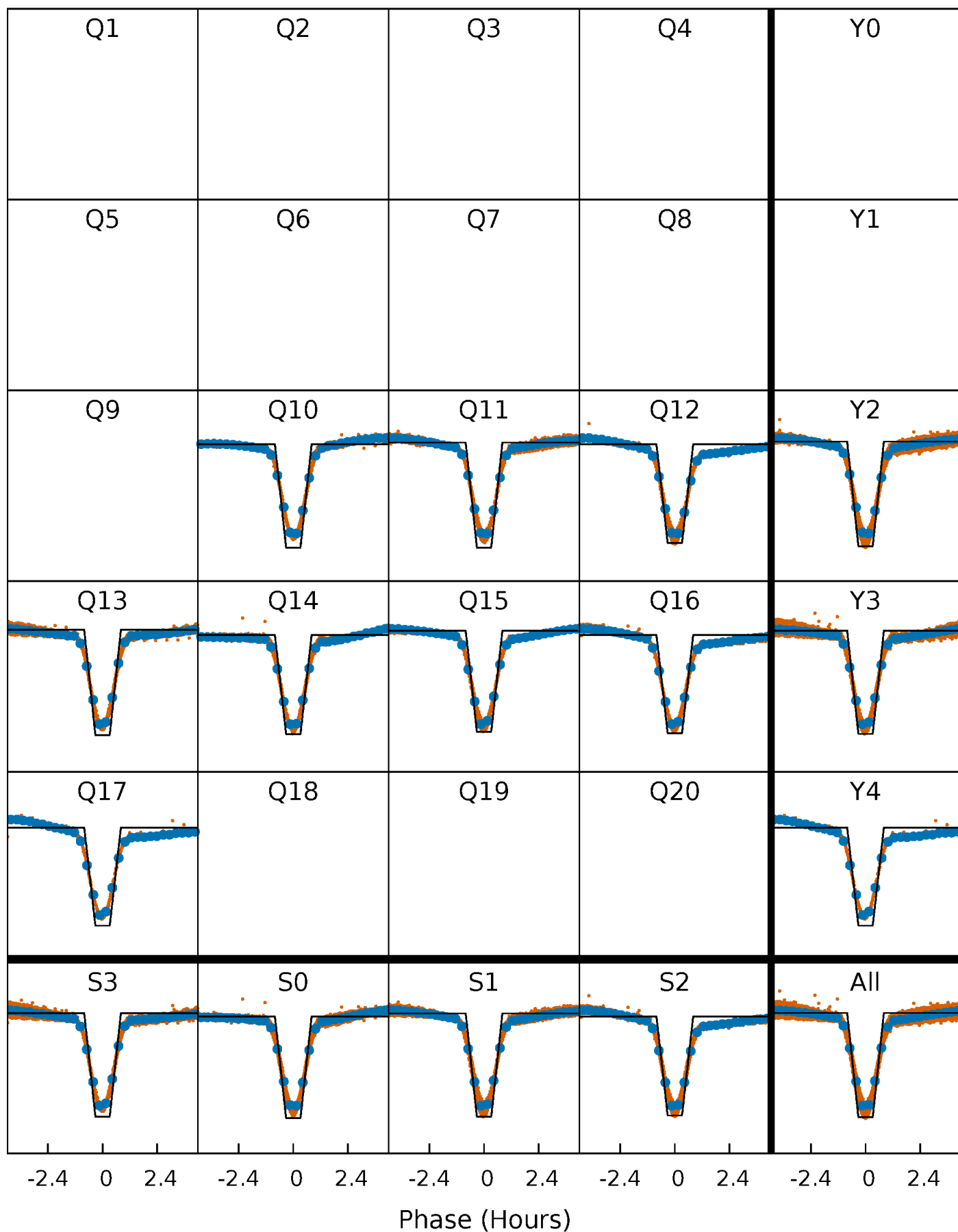
DV Quarter-Phased Transit Curves

TCE 003344427-01 P= 0.651778 Days $T_0=131.814935$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

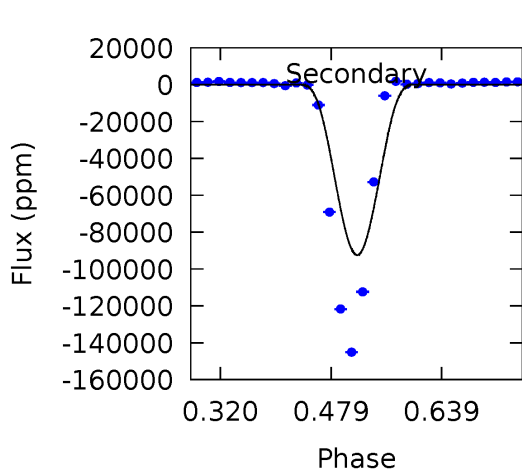
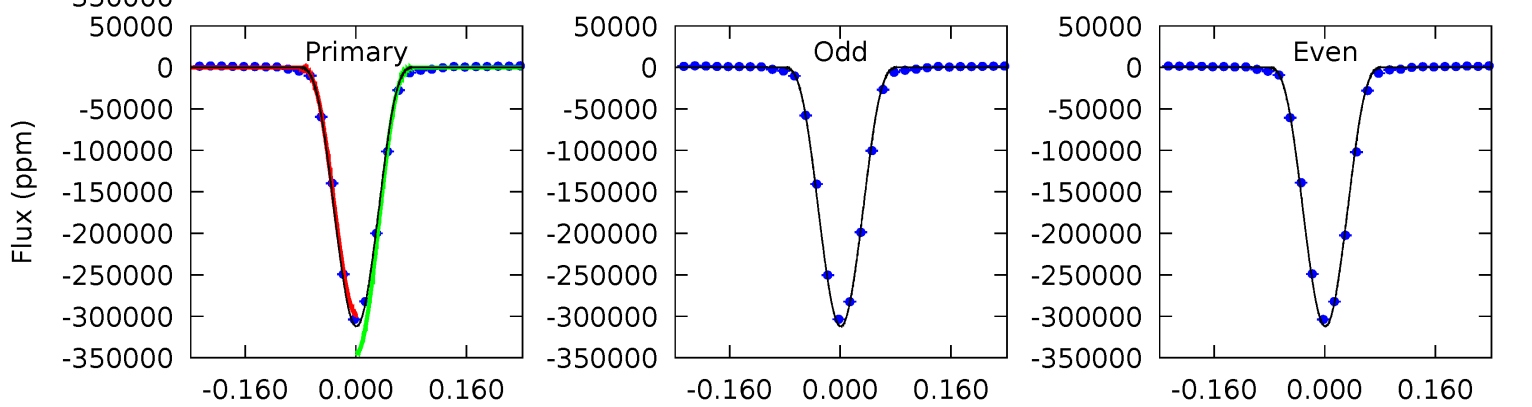
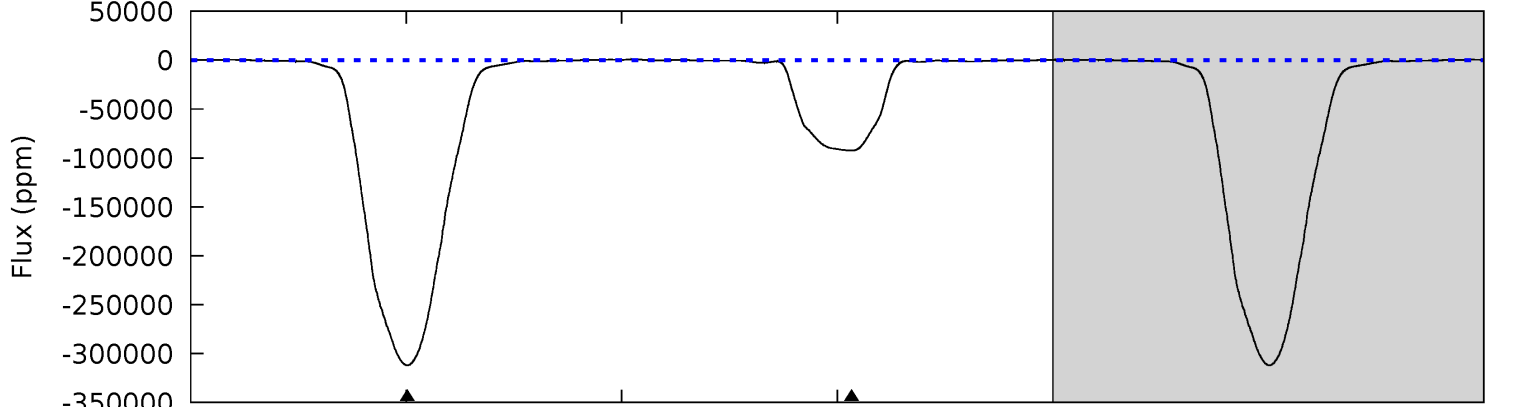
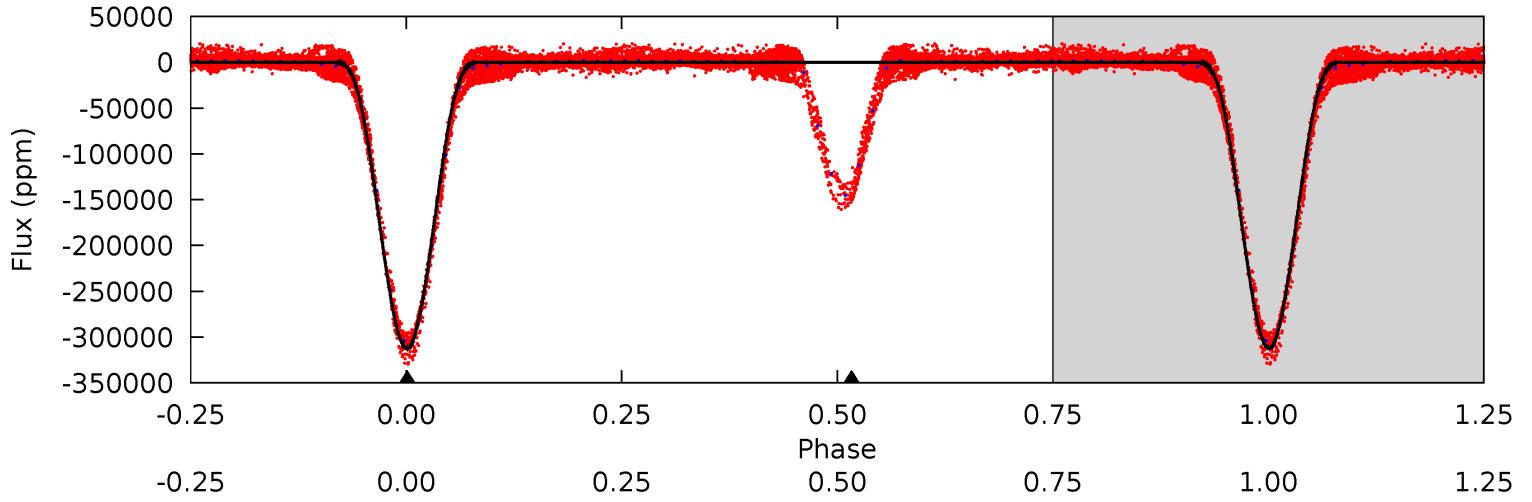
TCE 003344427-01 P= 0.651787 Days $T_0=131.803905$ (BKJD)



DV Model-Shift Uniqueness Test

003344427-01, P = 0.651778 Days, E = 131.814935 Days

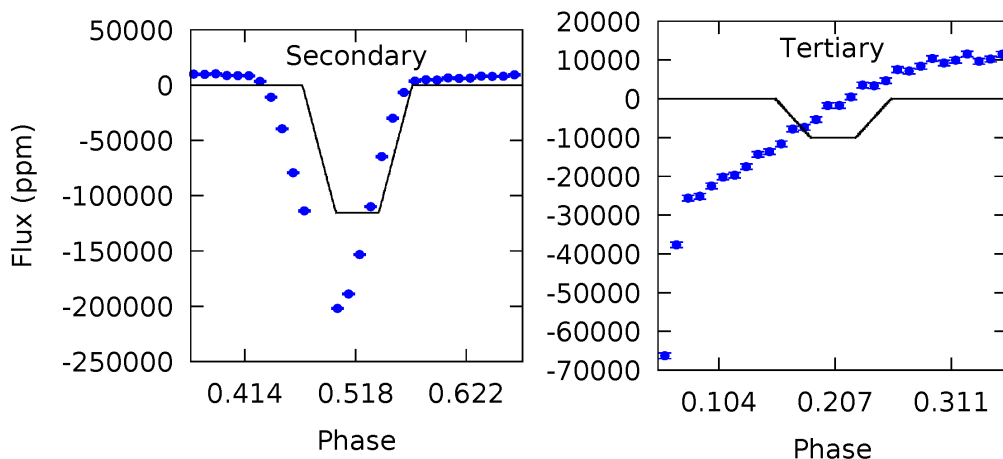
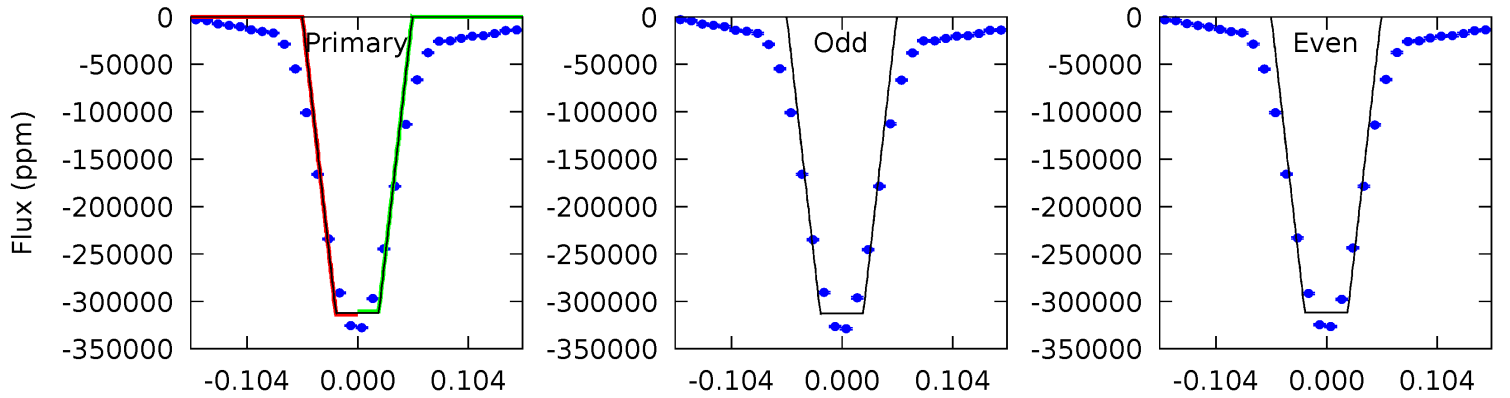
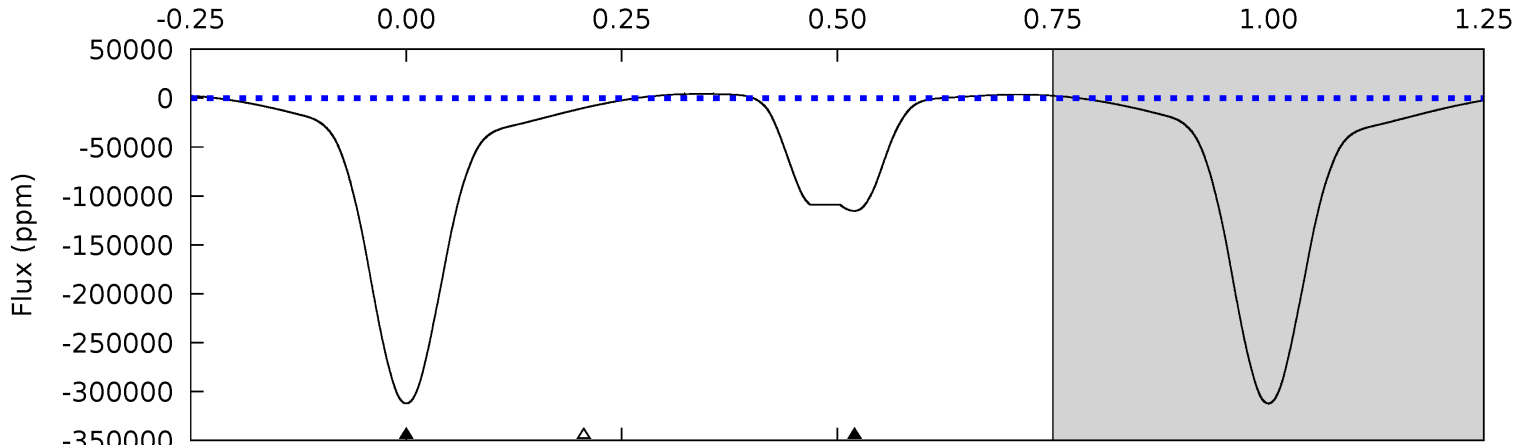
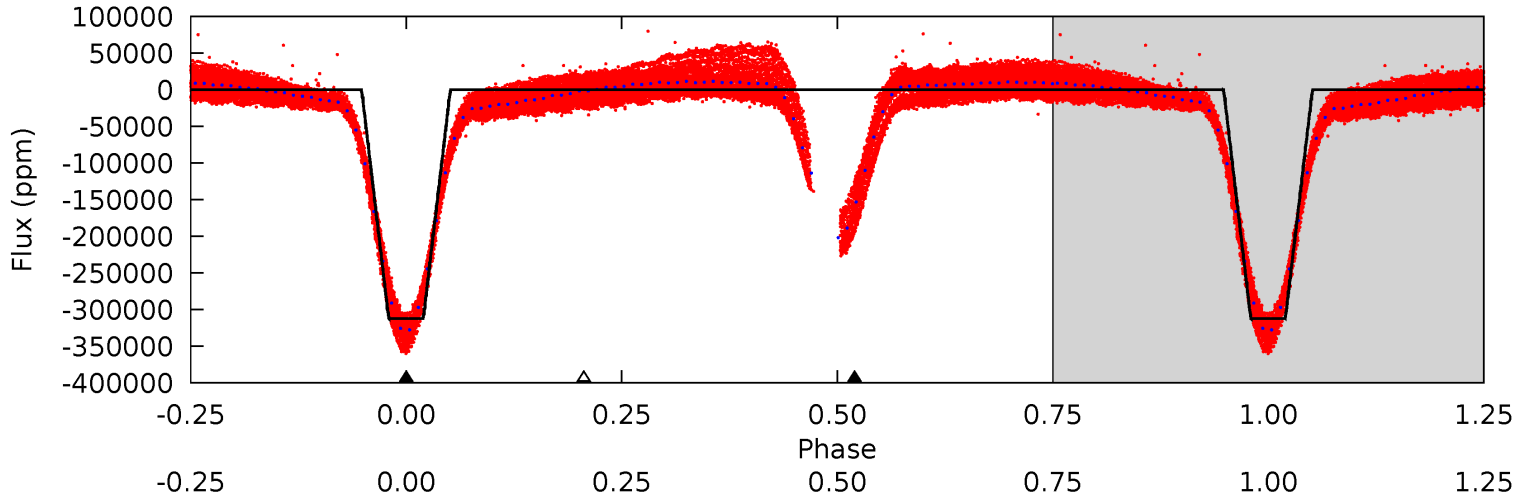
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
3424	1014	0	0	4.47	1.41	3.91	3424	3424	1014	1014	1.23	1.00	0.00	0



Alt Model-Shift Uniqueness Test

003344427-01, P = 0.651787 Days, E = 131.803905 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
1074	396.6	34.4	0	4.56	1.63	34.2	1039	1074	362.2	396.6	1.97	1.00	0.01	6.48



Stellar Parameters For KIC 003344427

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	M (M_{\odot})	p_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	4884^{+148}_{-111}	$3.279^{+0.320}_{-0.320}$	$-0.200^{+0.300}_{-0.200}$	$3.584^{+1.989}_{-1.071}$	$0.891^{+0.309}_{-0.132}$	$0.027^{+0.050}_{-0.020}$
	+3%/-2%	+10%/-10%	+150%/-100%	+55%/-30%	+35%/-15%	+184%/-74%
Source	KIC0	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 003344427-01 / KOI 3764.01

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	-92422 ± 91	$256.79^{+87.12}_{-48.04}$	4796^{+656}_{-492}	-3534^{+762}_{-661}	$0.177^{+0.088}_{-0.075}$
Alt.	-115320 ± 291	$234.01^{+79.17}_{-45.69}$	4774^{+692}_{-482}	-2884^{+6136}_{-1074}	$0.268^{+0.140}_{-0.106}$

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 $A_{obs} \gg 1.0$

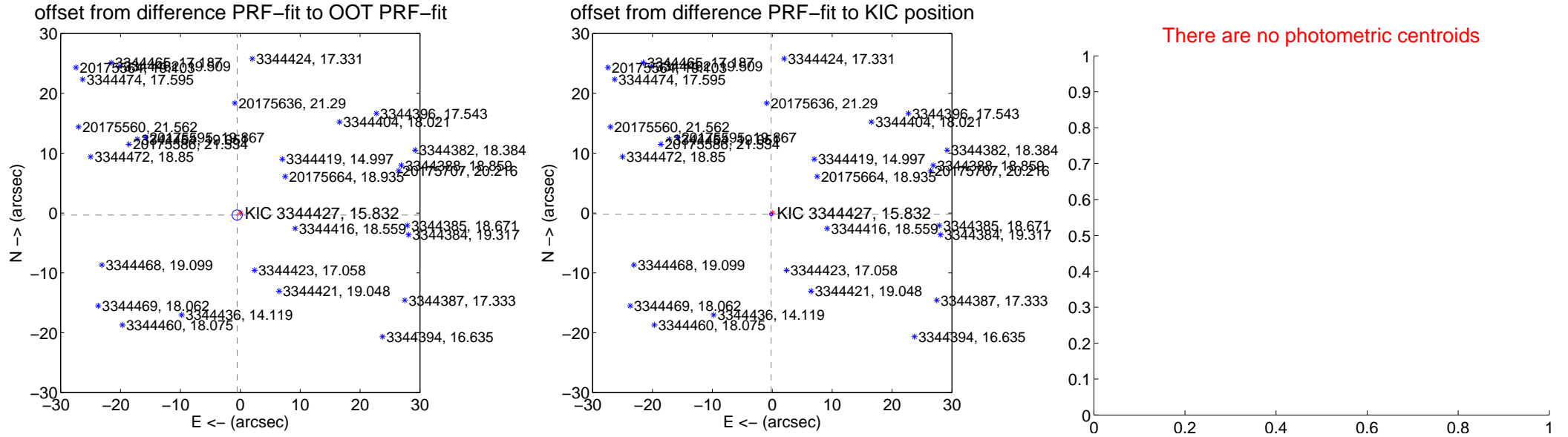
DV Centroid Data

Supplemental centroid analysis for 003344427-01. Kepler magnitude: 15.83. Transit SNR 1643.70

There are 8 quarters with good PRF difference image offsets

The direct PRF centroid is offset from the target star catalog position by about 0.17 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.619 ± 0.284	2.18	0.523 ± 0.220	-0.331 ± 0.199
PRF-fit source offset from KIC position	0.281 ± 0.082	3.41	0.185 ± 0.069	-0.212 ± 0.091
photometric centroid source offset	—	—	—	—



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.

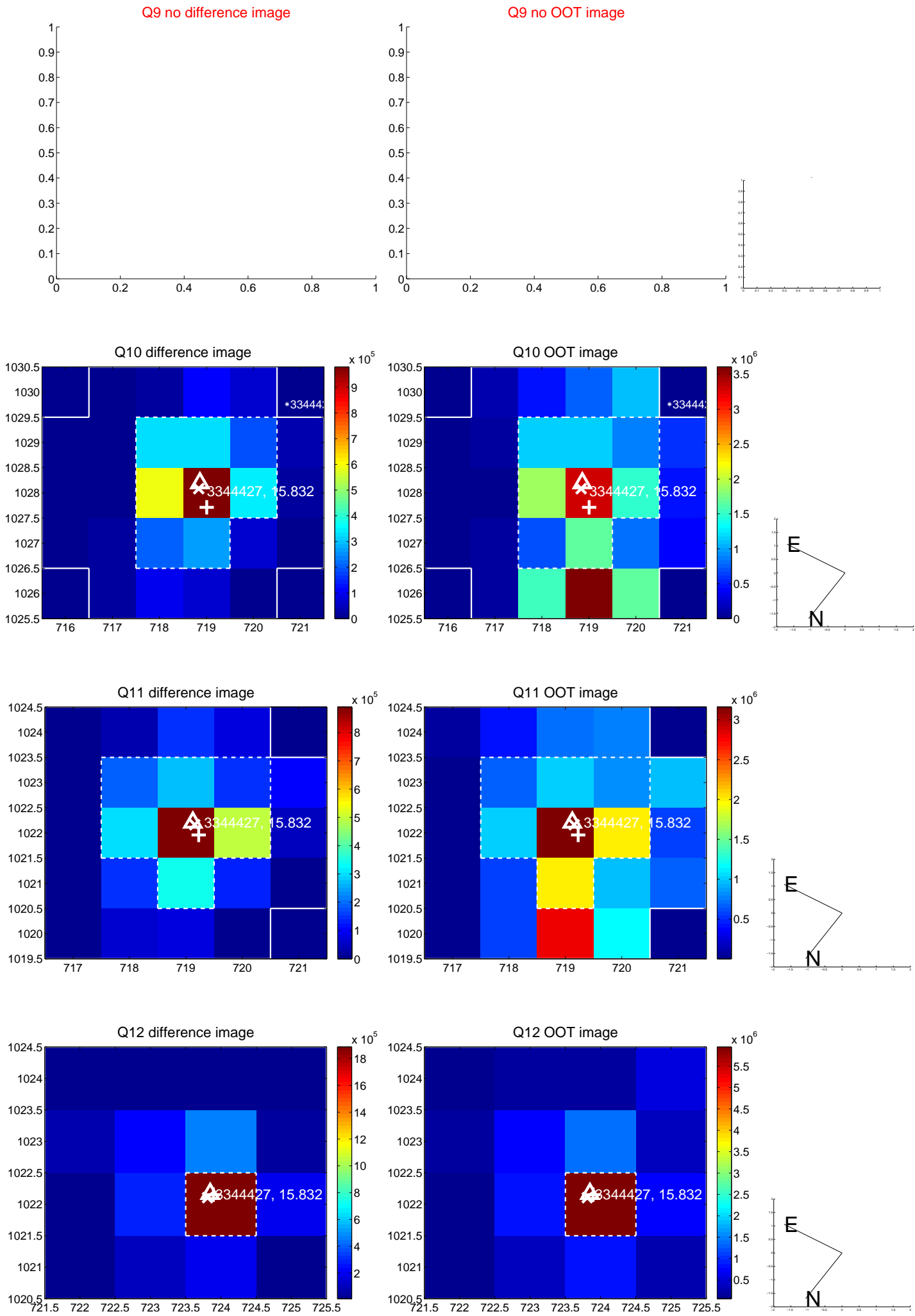
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



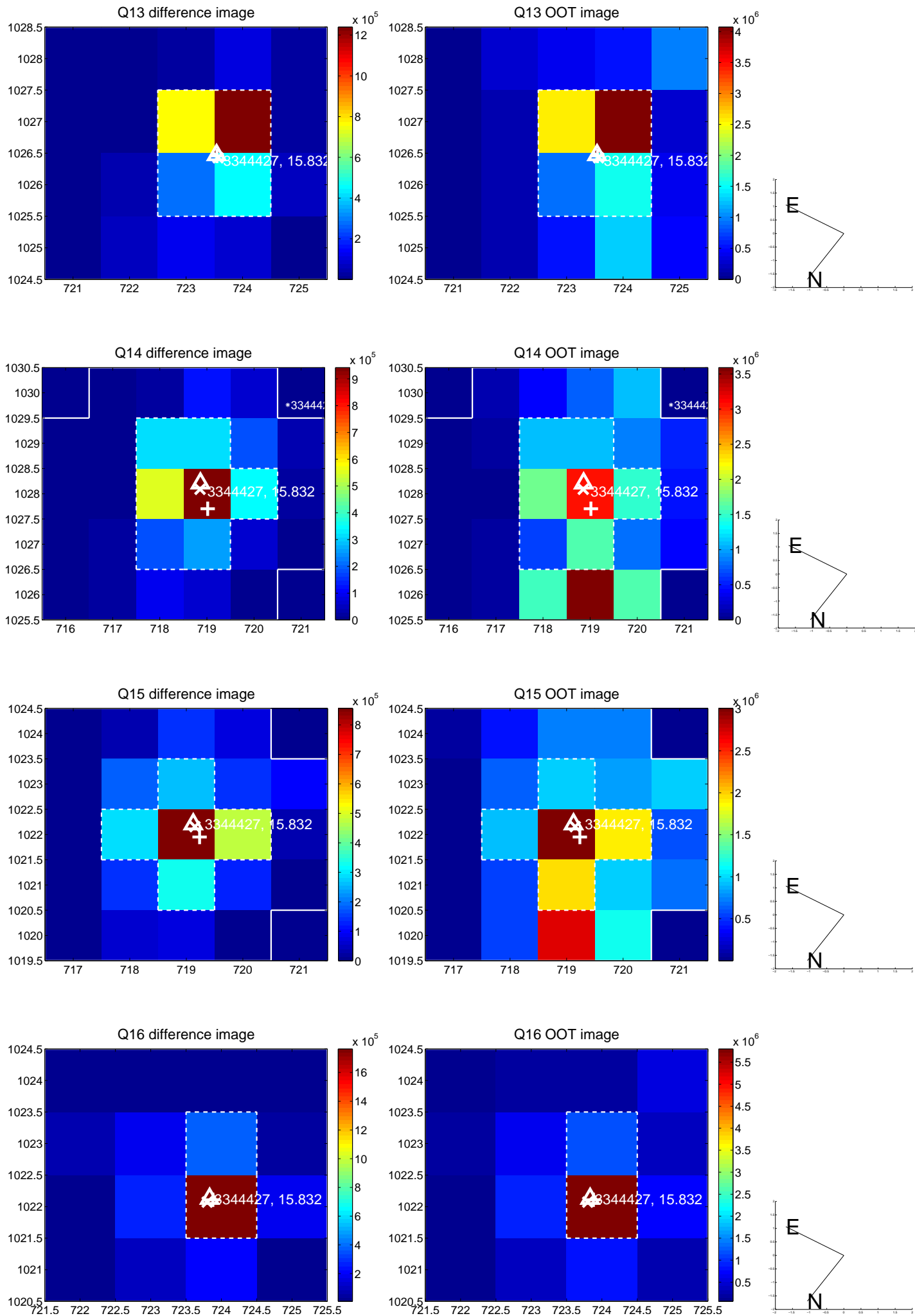
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



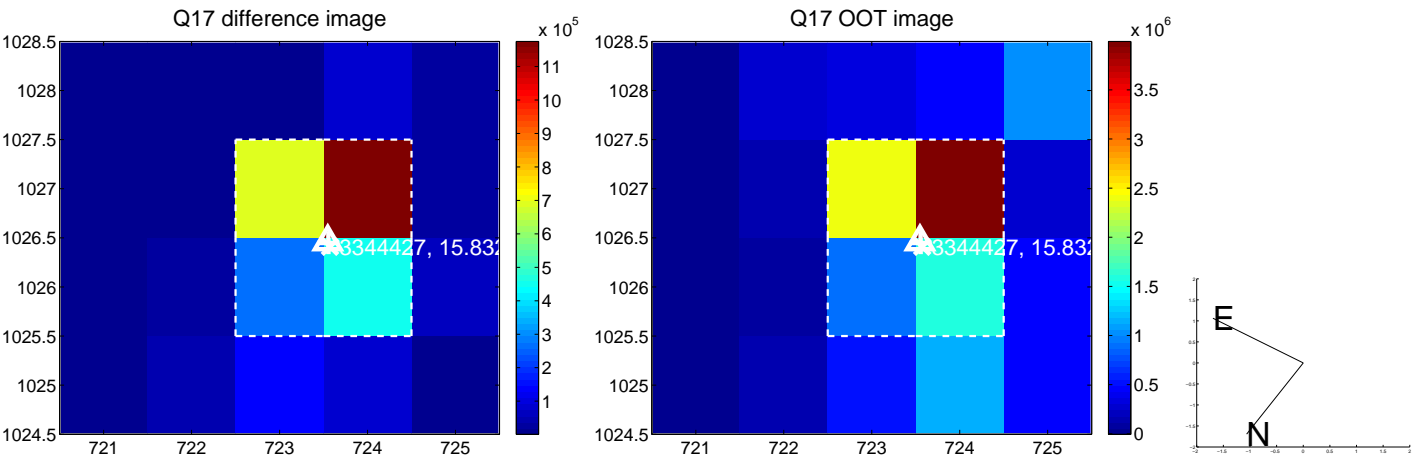
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white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



folded centroid time series figure for this object.

UKIRT Image

Declination

