

KIC 003346028

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})
003346028-01	OBS	No	389.328894	259.902456	4613.5	12.465	8.1	7.9	2.05	6642	24.98	6.06

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
003346028-01	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_CHASES—LPP_DV—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—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.

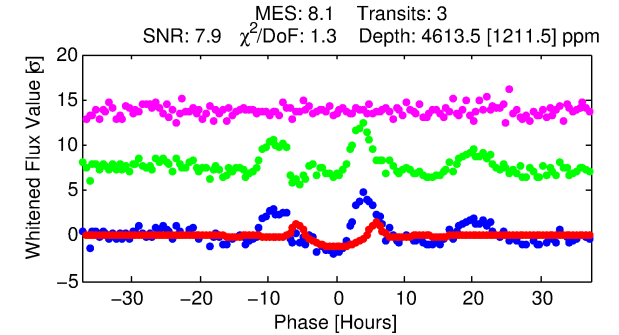
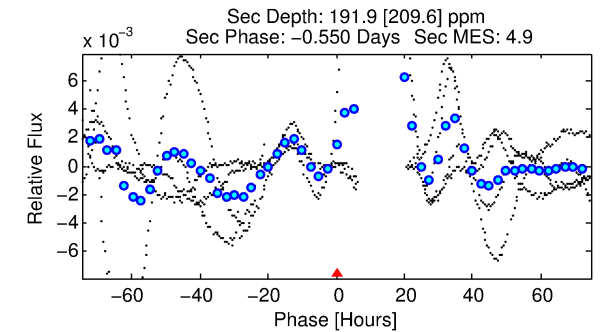
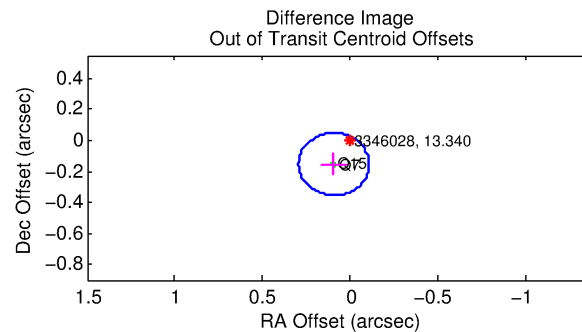
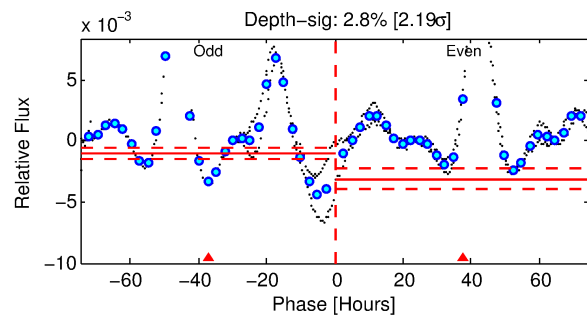
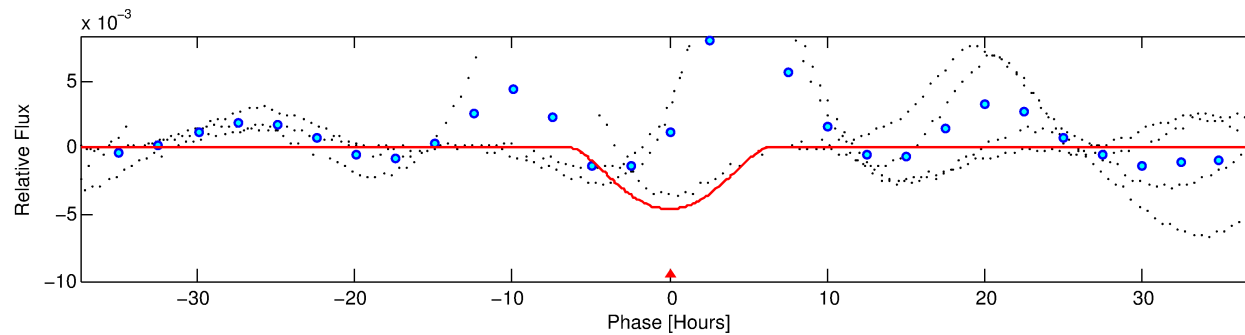
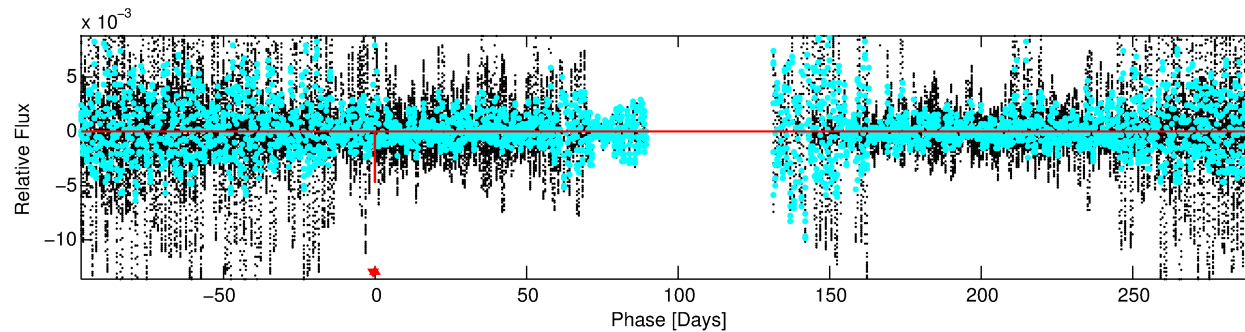
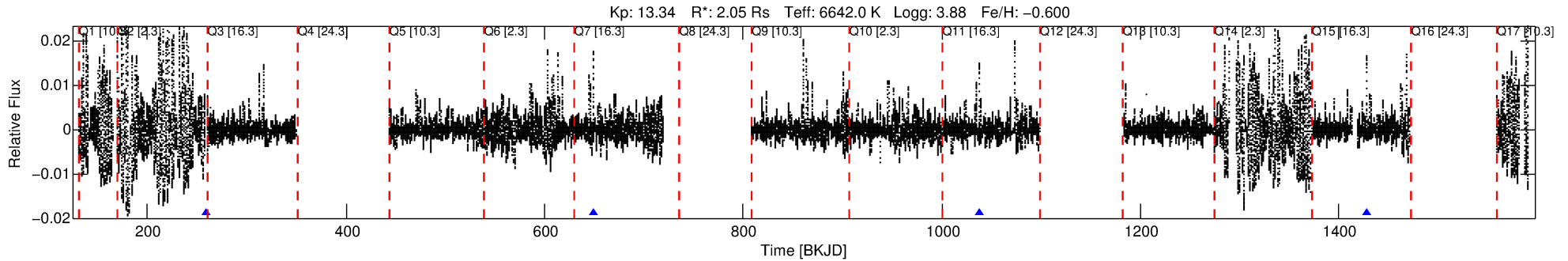
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 003346028-01

No Significant Match Found

DV One-Page Summary

KIC: 3346028 Candidate: 1 of 1 Period: 389.329 d



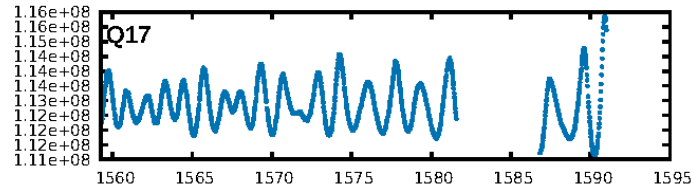
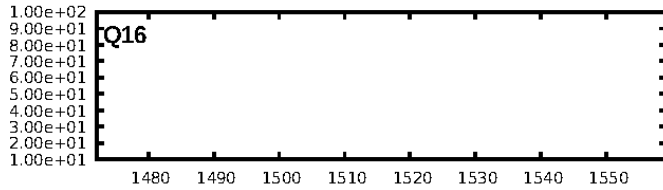
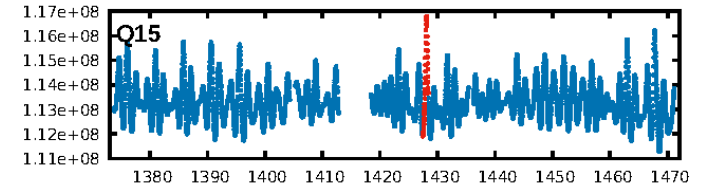
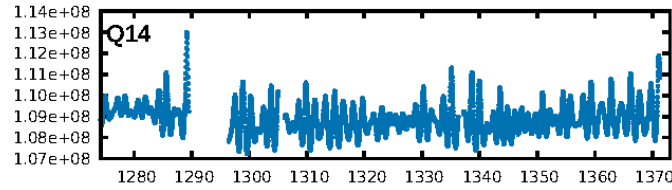
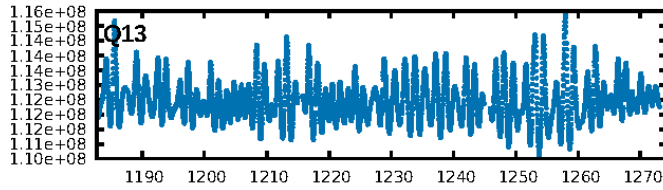
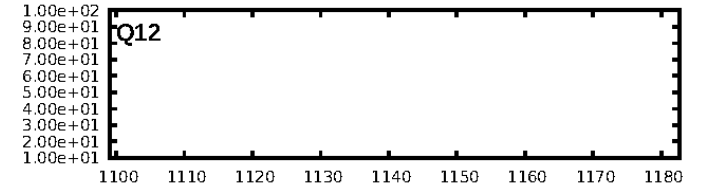
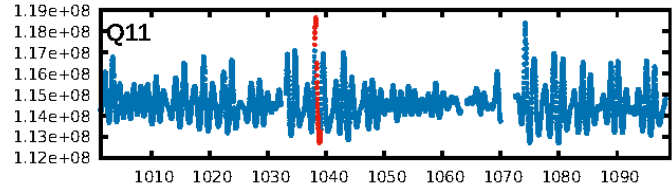
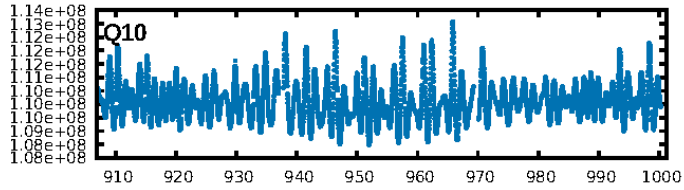
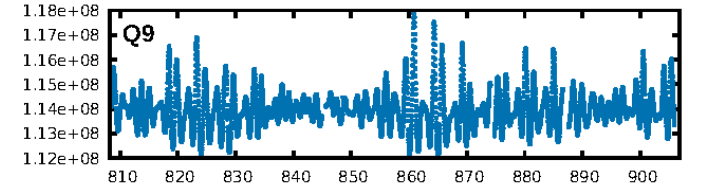
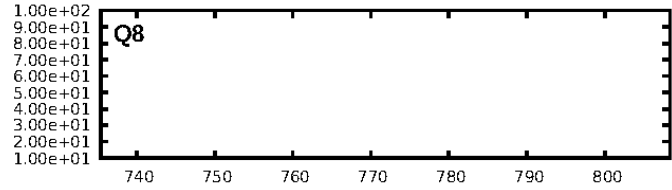
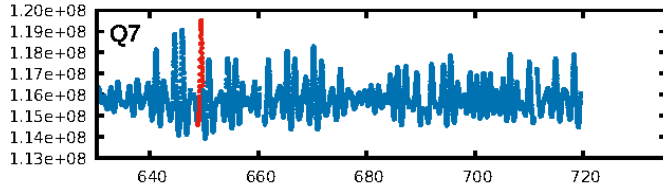
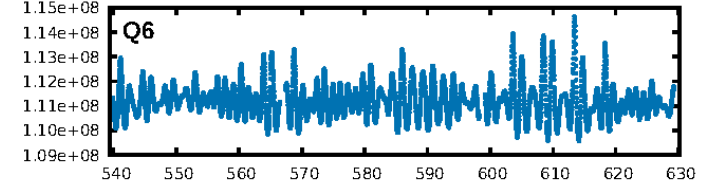
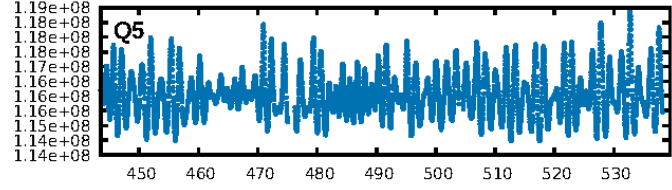
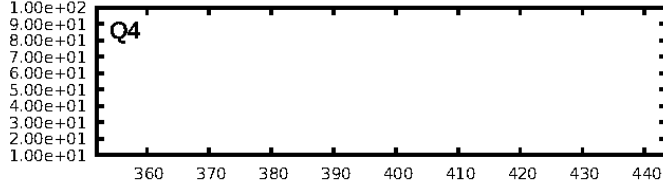
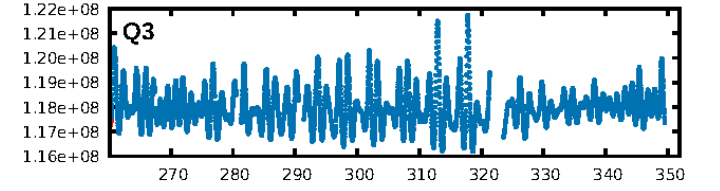
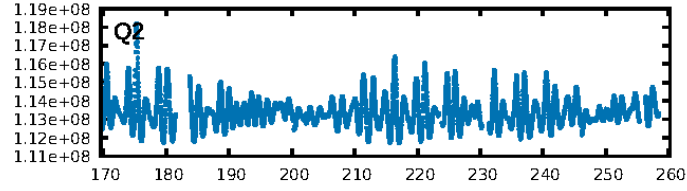
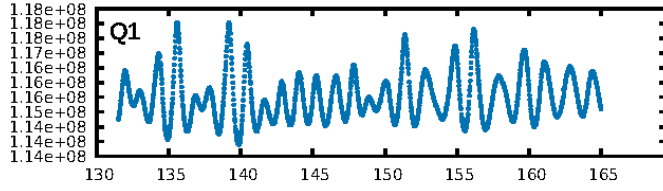
DV Fit Results:

Period = 389.32889 [0.00997] d
Epoch = 259.9025 [0.0227] BKJD
Rp/R* = 0.1118 [0.1001]
a/R* = 115.95 [17.98]
b = 1.00 [0.13]
Seff = 6.06 [4.80]
Teq = 400 [79] K
Rp = 24.98 [25.34] Re
a = 1.0985 [0.5238] AU
Ag = 204.23 [457.22] [0.44 σ]
Teffp = 2338 [1230] K [1.57 σ]

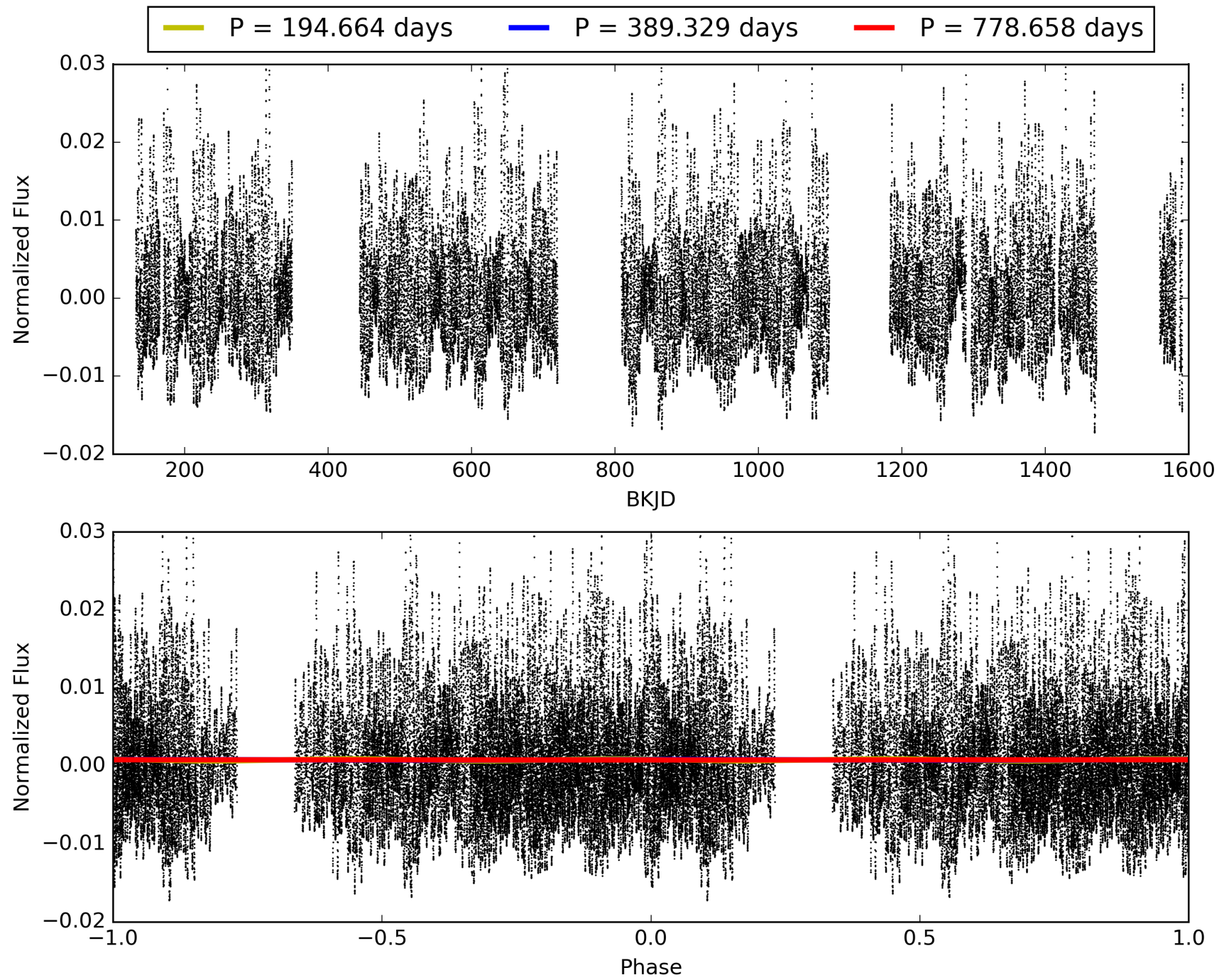
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: 45.1%
ModelChiSquareGof-sig: 49.3%
Bootstrap-pfa: 1.02e-07
RollingBand-fgt: 1.00 [3/3]
GhostDiagnostic-chr: 1.969
Centroid-sig: 22.8%
Centroid-so: 1.387 arcsec [3.12 σ]
OotOffset-rm: 0.179 arcsec [2.66 σ]
KicOffset-rm: 0.217 arcsec [2.70 σ]
OotOffset-st: 0/2/0/0 [2]
KicOffset-st: 0/2/0/0 [2]
DiffImageQuality-fgm: 0.00 [0/2]
DiffImageOverlap-fno: 1.00 [2/2]

TCE 003346028-01, PDC Light Curves

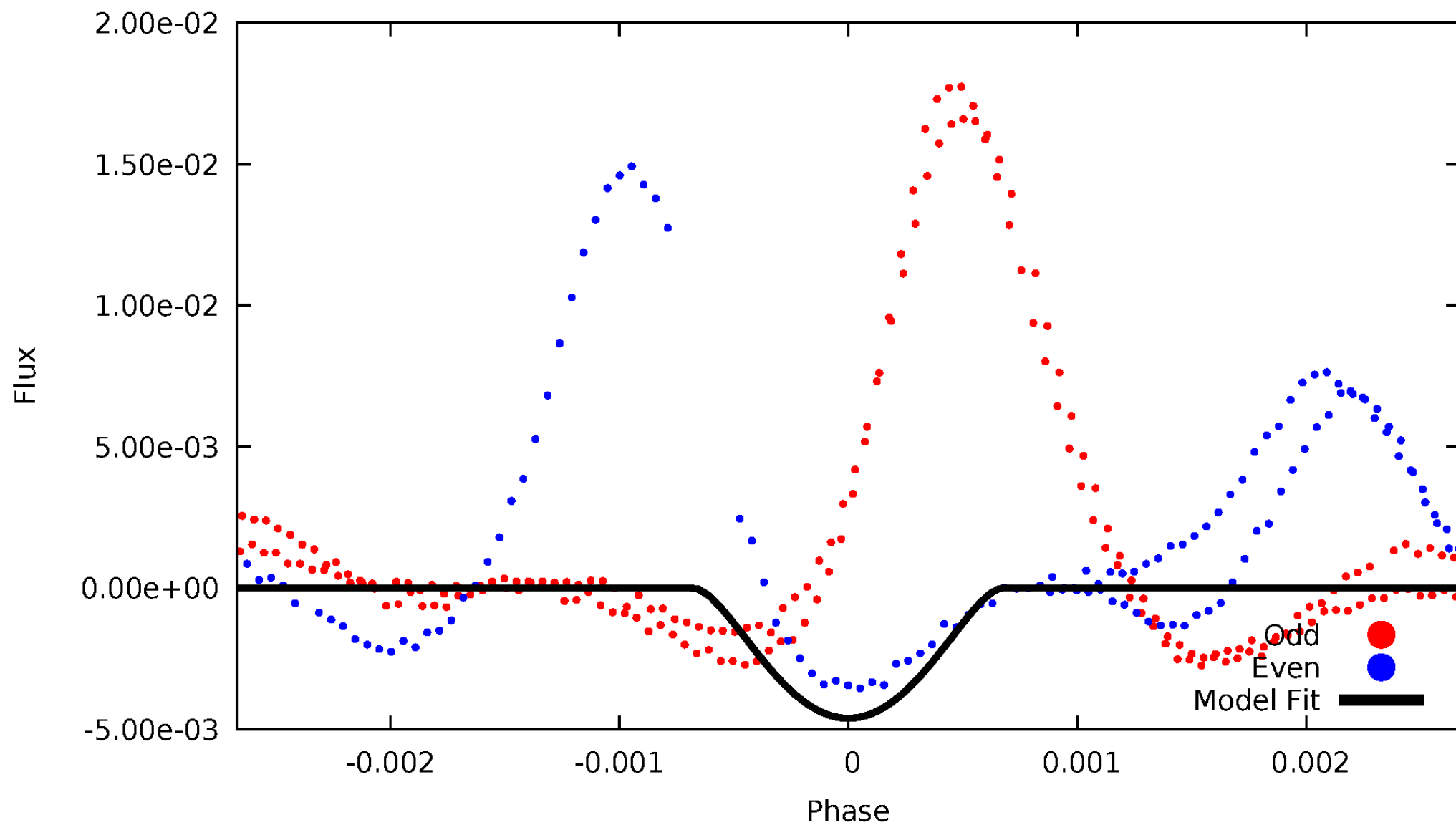


TCE 003346028-01



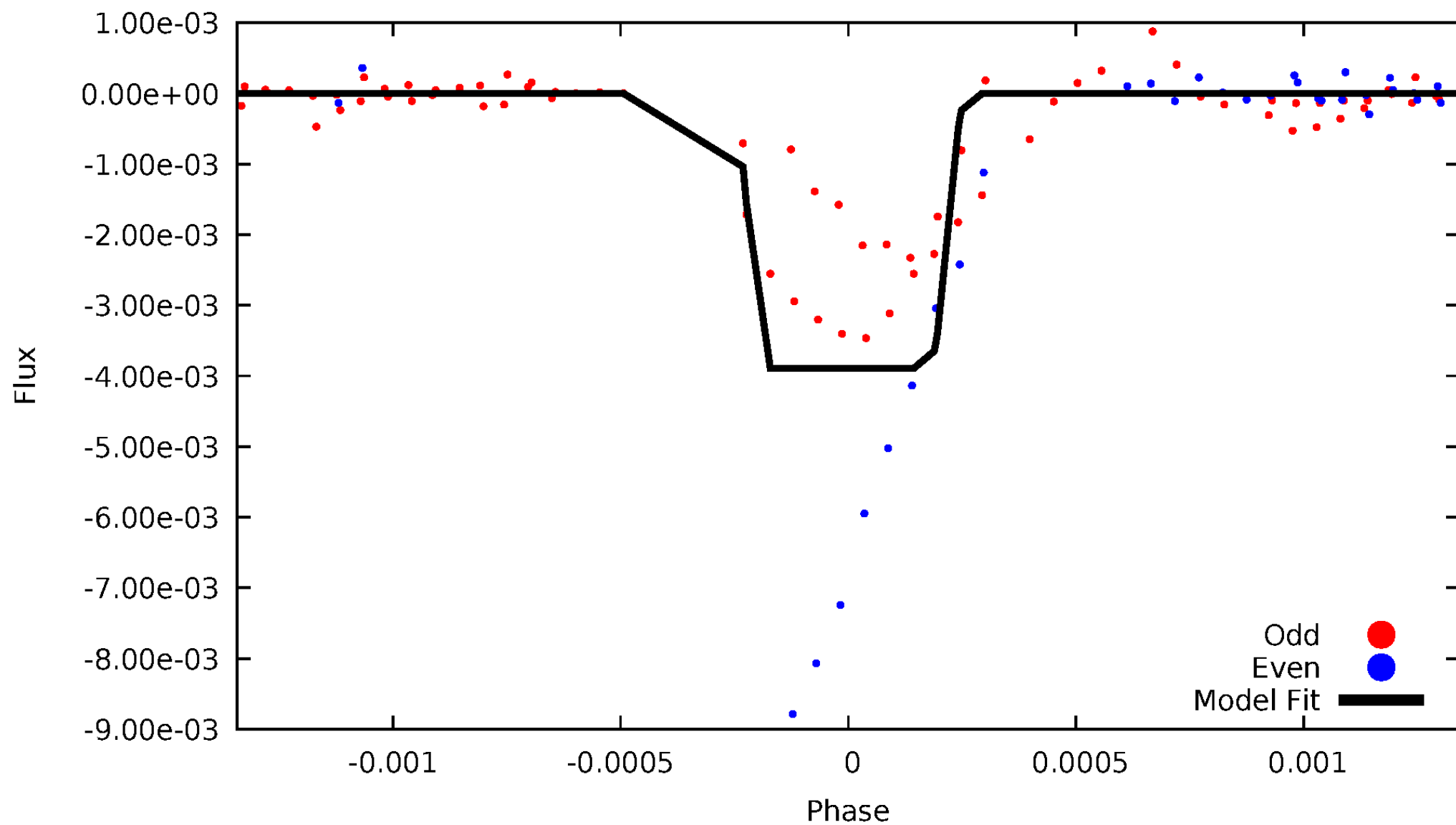
DV Odd/Even

TCE 003346028-01



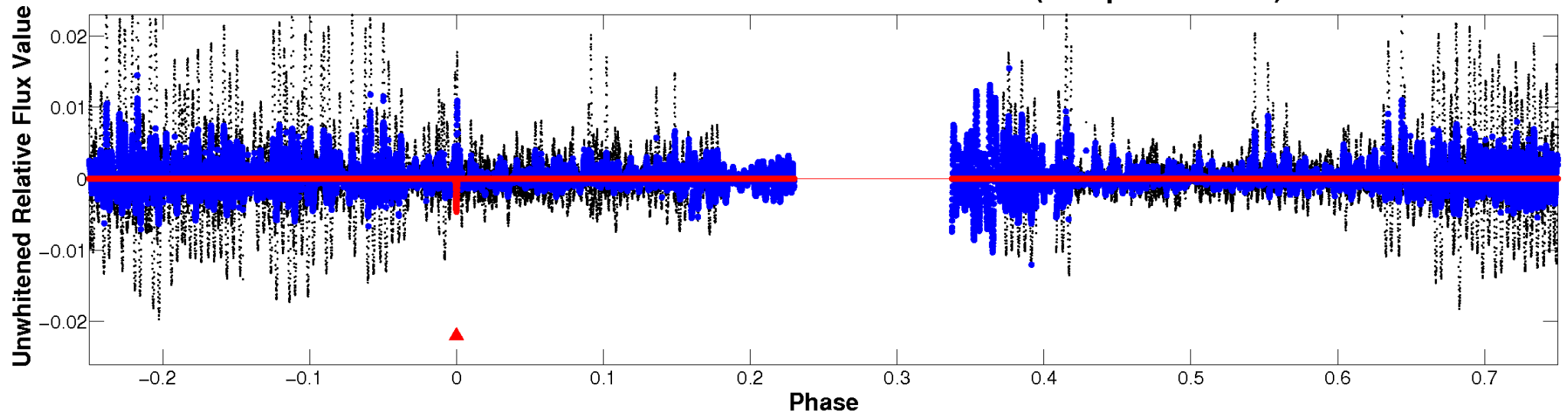
ALT Odd/Even

TCE 003346028-01

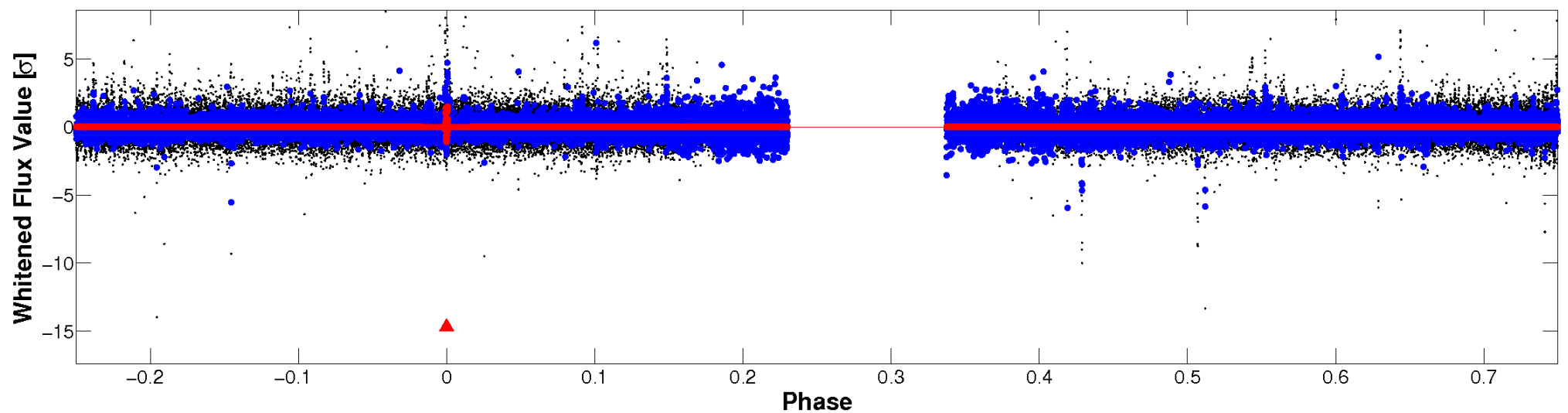


Non-Whitened Vs. Whitened Light Curve

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

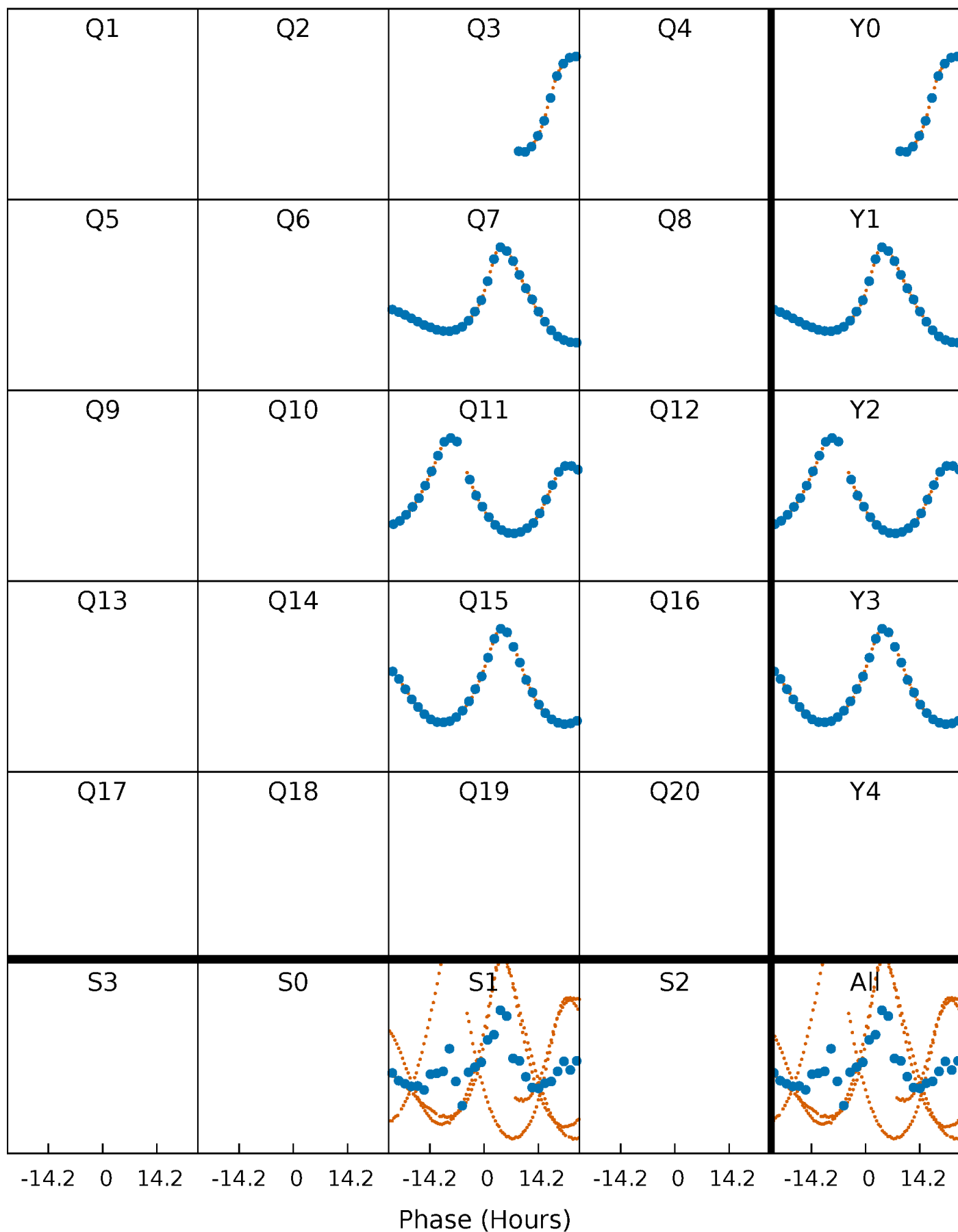


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



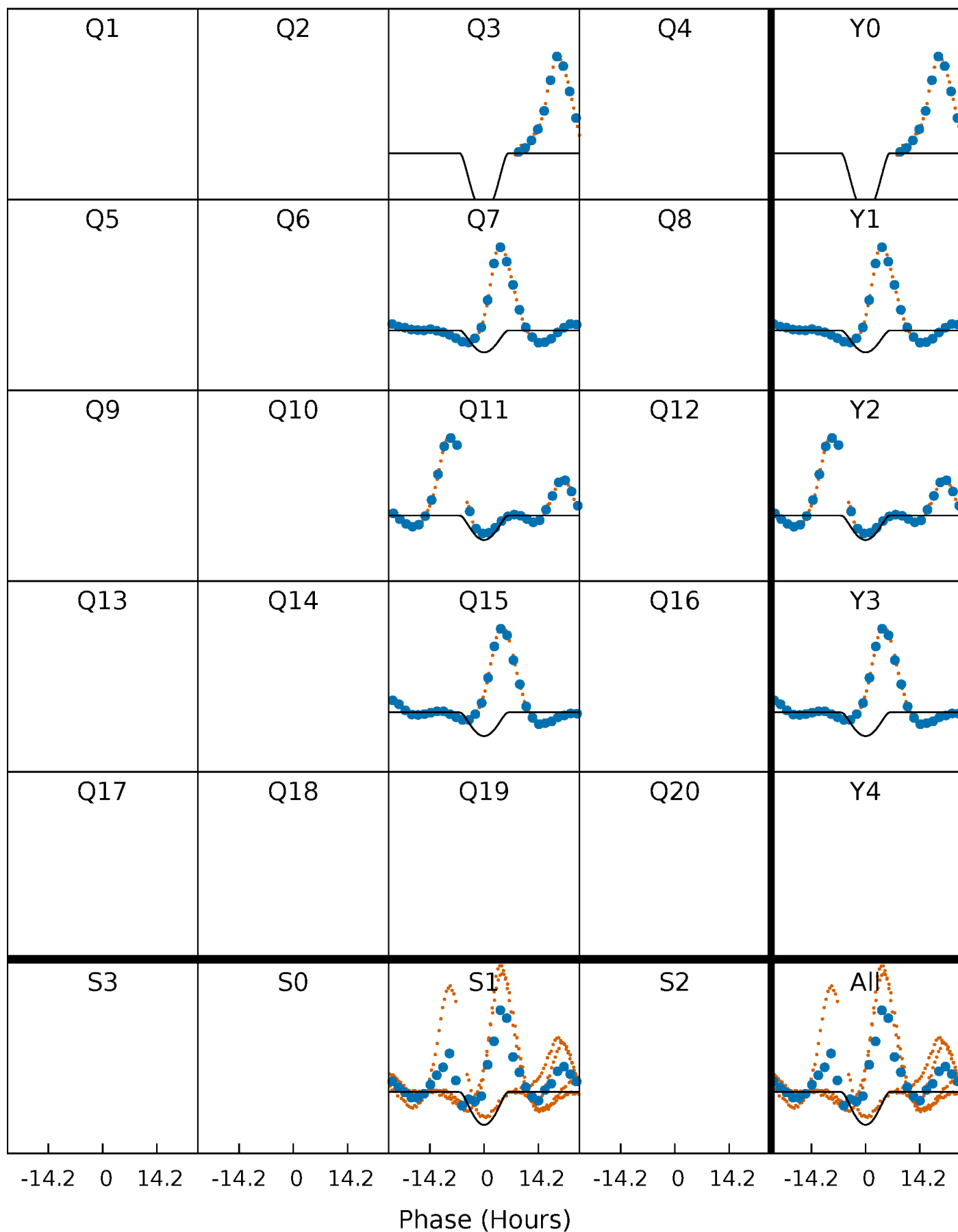
PDC Quarter-Phased Transit Curves

TCE 003346028-01 P=389.328894 Days $T_0=259.902456$ (BKJD)



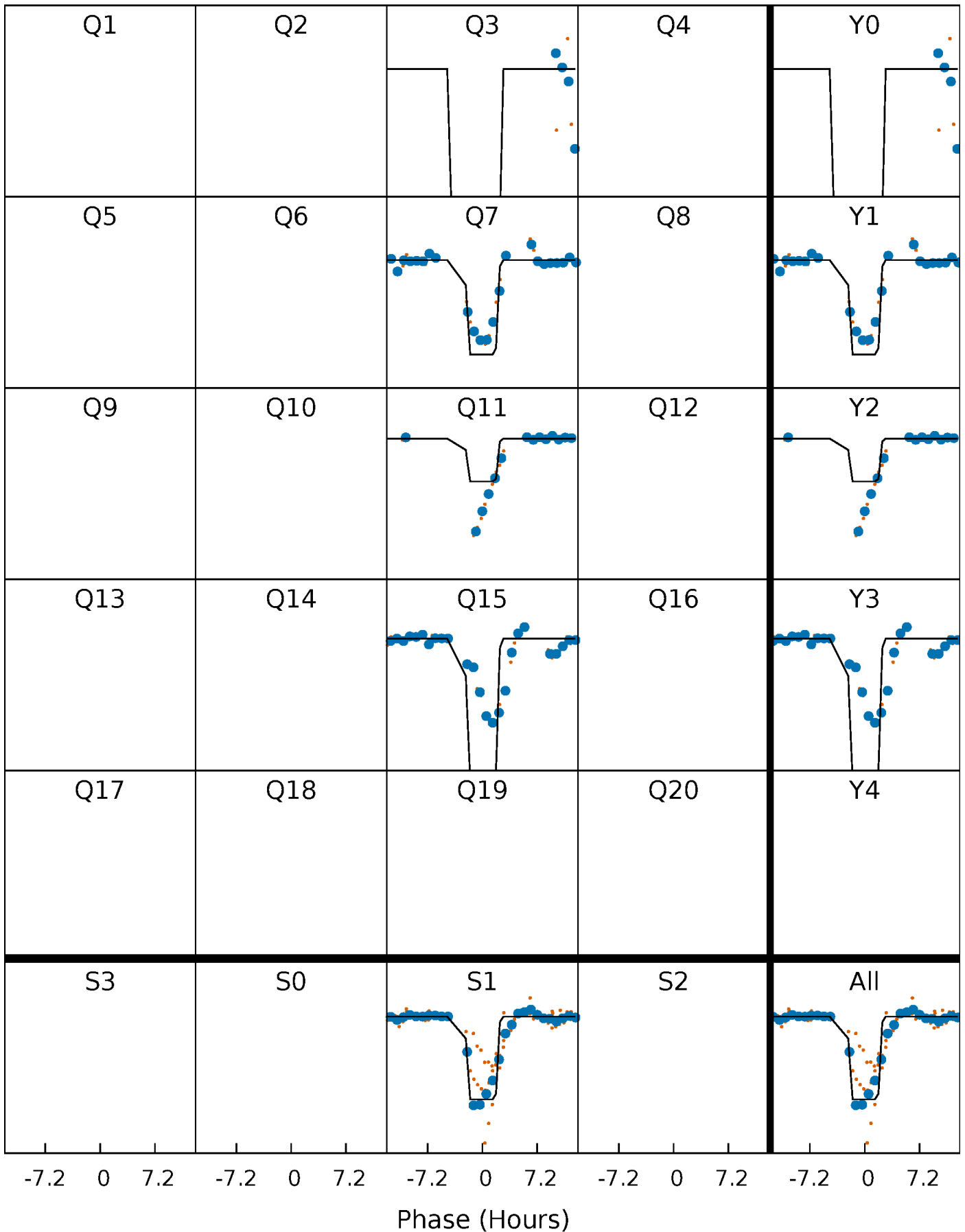
DV Quarter-Phased Transit Curves

TCE 003346028-01 P=389.328894 Days $T_0=259.902456$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

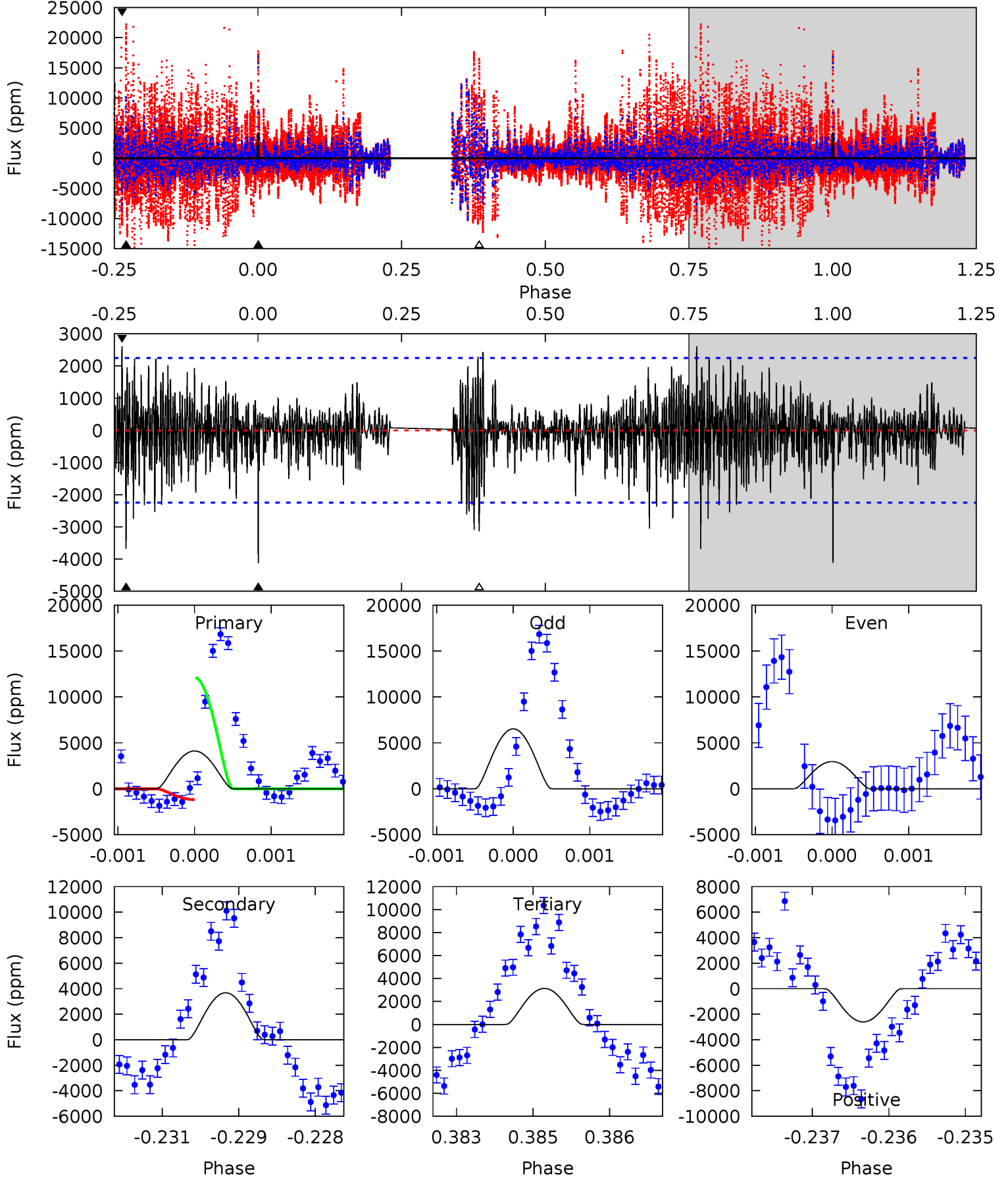
TCE 003346028-01 P=389.321943 Days $T_0=259.881828$ (BKJD)



DV Model-Shift Uniqueness Test

003346028-01, P = 389.328894 Days, E = 259.902456 Days

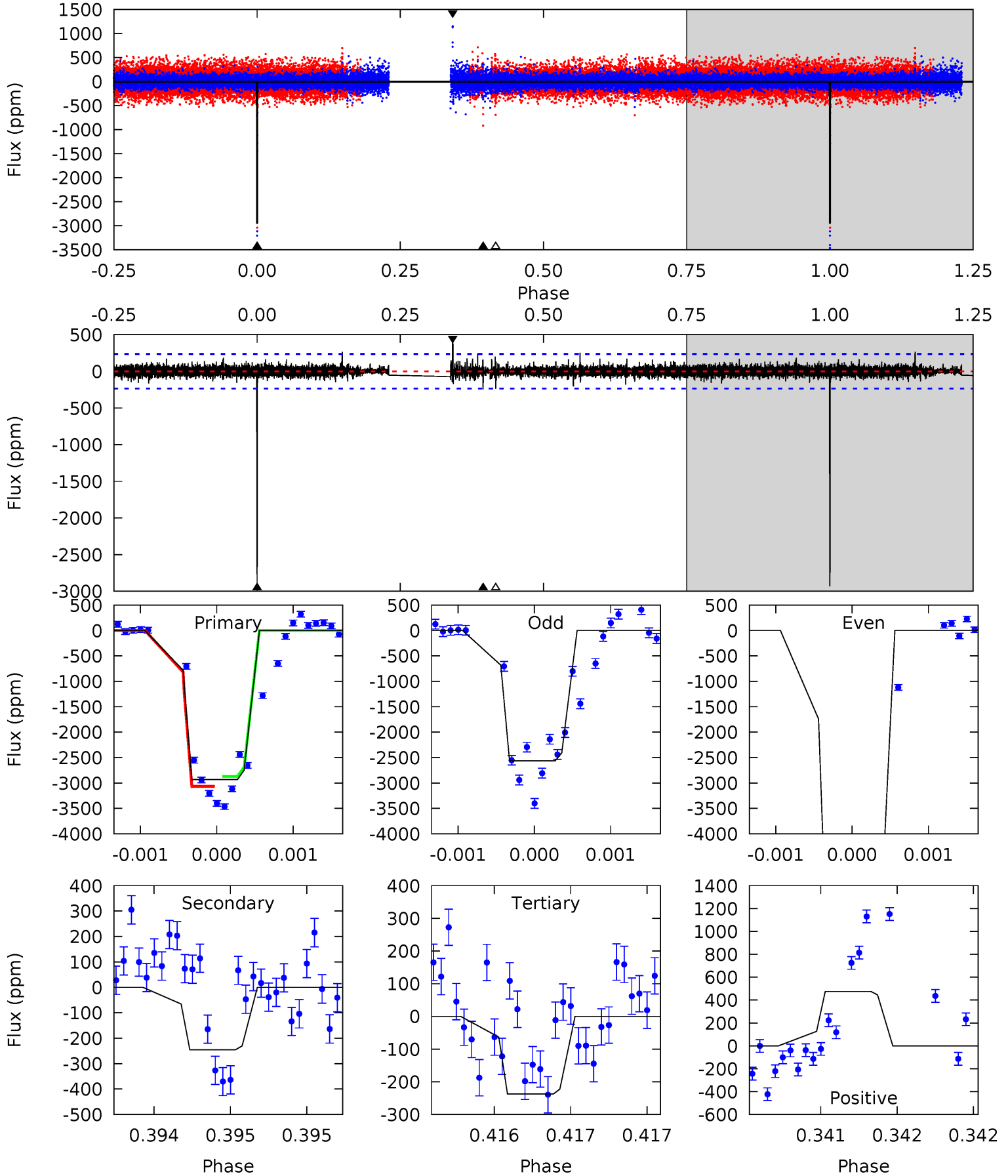
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
9.89	8.84	7.53	6.26	5.40	3.20	1.73	2.36	3.63	1.31	2.58	3.24	0.53	0.39	13.3



Alt Model-Shift Uniqueness Test

003346028-01, $P = 389.321943$ Days, $E = 259.881828$ Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
69.3	5.80	5.61	11.2	5.56	3.47	0.94	63.7	58.1	0.19	-5.42	59.9	1.24	0.14	2.44



Stellar Parameters For KIC 003346028

	$T_{\text{eff}} (K)$	$\log(g)$	$[\text{Fe}/\text{H}]$	$R (R_{\odot})$	$M (M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	6642^{+190}_{-238}	$3.882^{+0.464}_{-0.116}$	$-0.600^{+0.300}_{-0.300}$	$2.048^{+0.417}_{-0.974}$	$1.167^{+0.170}_{-0.227}$	$0.191^{+0.811}_{-0.063}$
	+3%/-4%	+12%/-3%	+50%/-50%	+20%/-48%	+15%/-19%	+424%/-33%
Source	PHO54	PHO54	PHO54	DSEP		

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

Secondary Eclipse Parameters for KIC 003346028-01 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	A_{obs}
DV	-3680 ± 416	$25.48^{+22.18}_{-14.51}$	541^{+45}_{-65}	4665^{+2380}_{-858}	3586^{+16909}_{-2483}
Alt.	-245 ± 42	$20.40^{+18.93}_{-13.61}$	546^{+39}_{-67}	3205^{+1382}_{-548}	394^{+3040}_{-292}

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

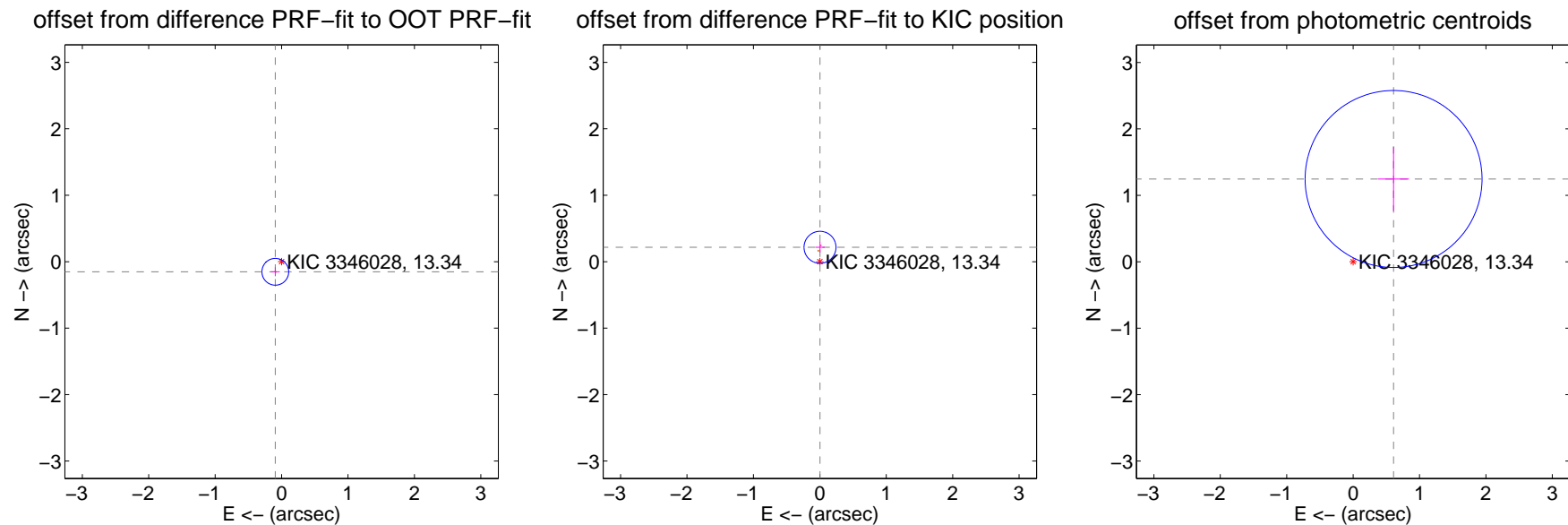
DV Centroid Data

Supplemental centroid analysis for 003346028-01. Kepler magnitude: 13.34. Transit SNR 7.92

There are 0 quarters with good PRF difference image offsets

The direct PRF centroid is offset from the target star catalog position by about 0.41 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.179 ± 0.067	2.66	0.094 ± 0.067	-0.152 ± 0.067
PRF-fit source offset from KIC position	0.217 ± 0.080	2.70	-0.003 ± 0.070	0.217 ± 0.080
photometric centroid source offset	1.39 ± 0.44	3.12	-0.61 ± 0.23	1.25 ± 0.48

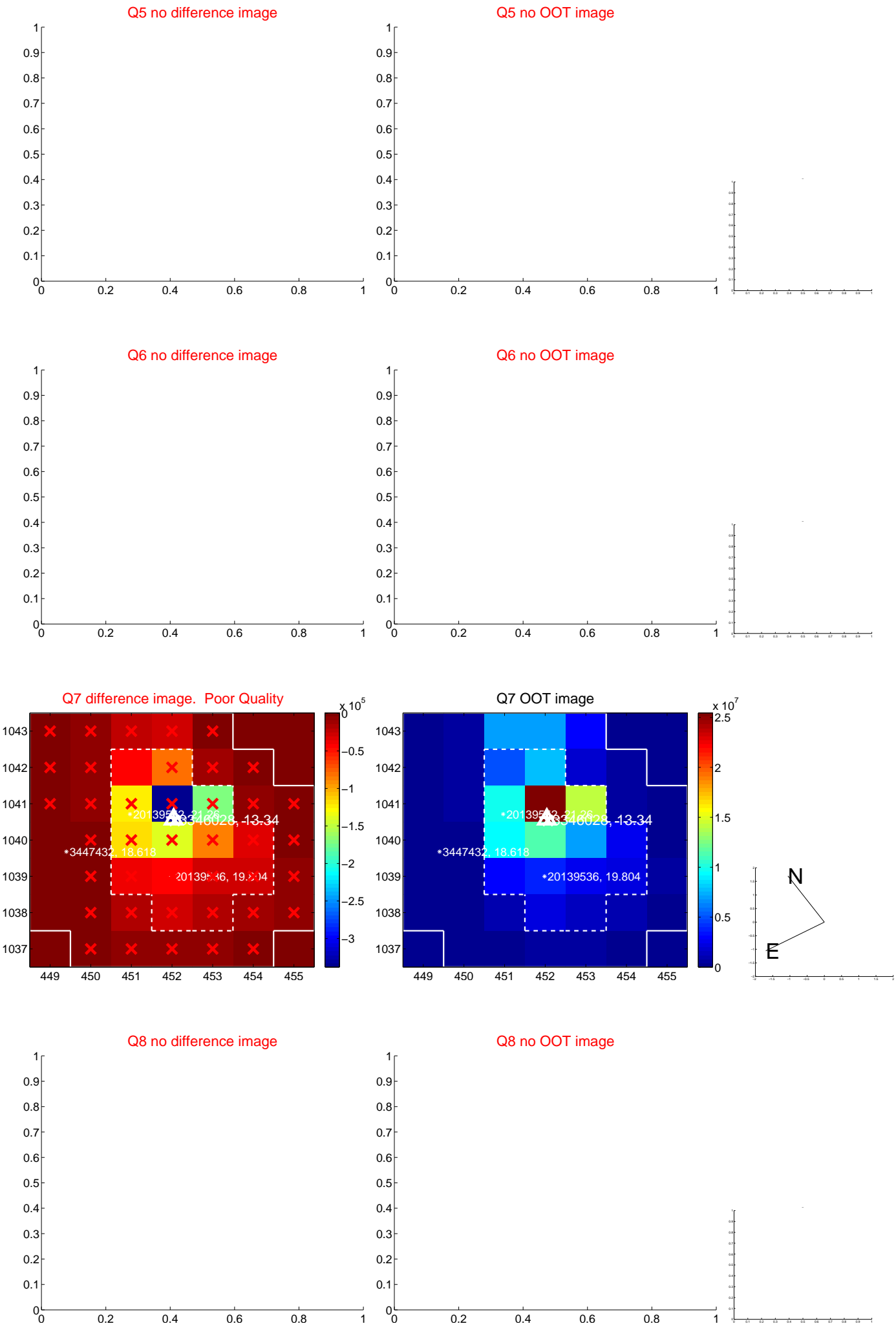


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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

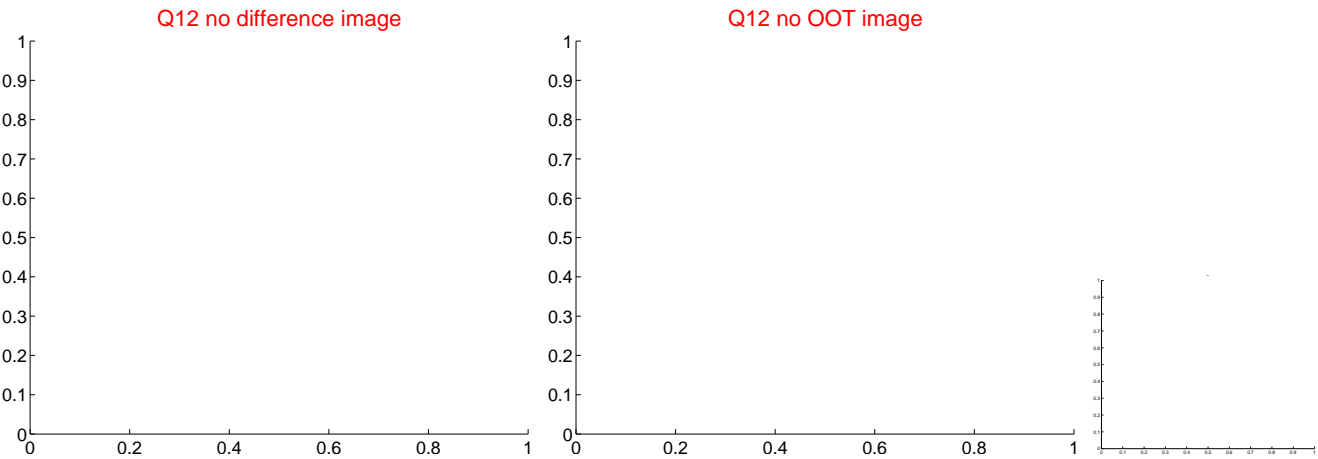
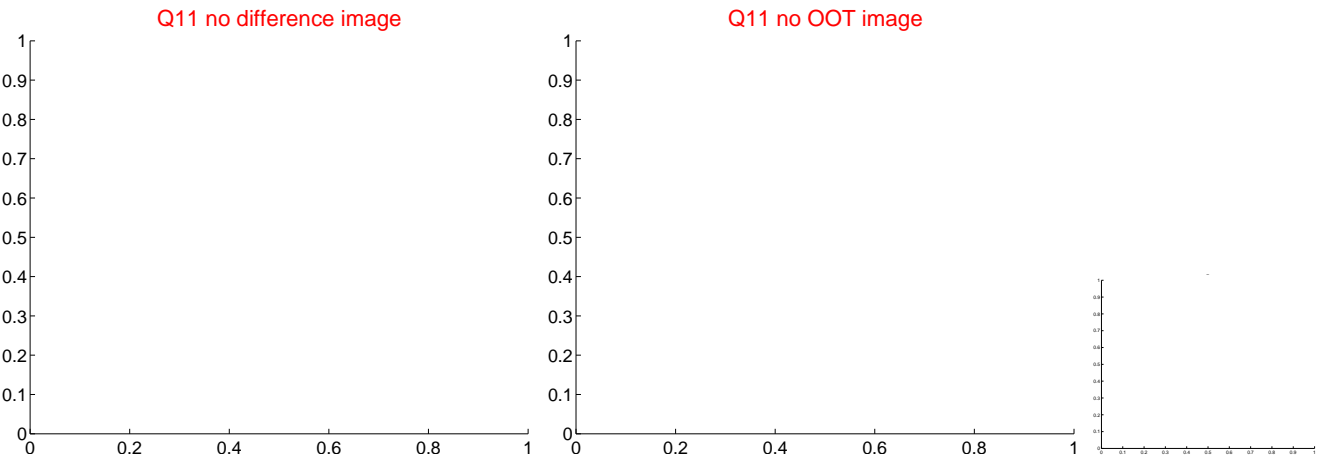
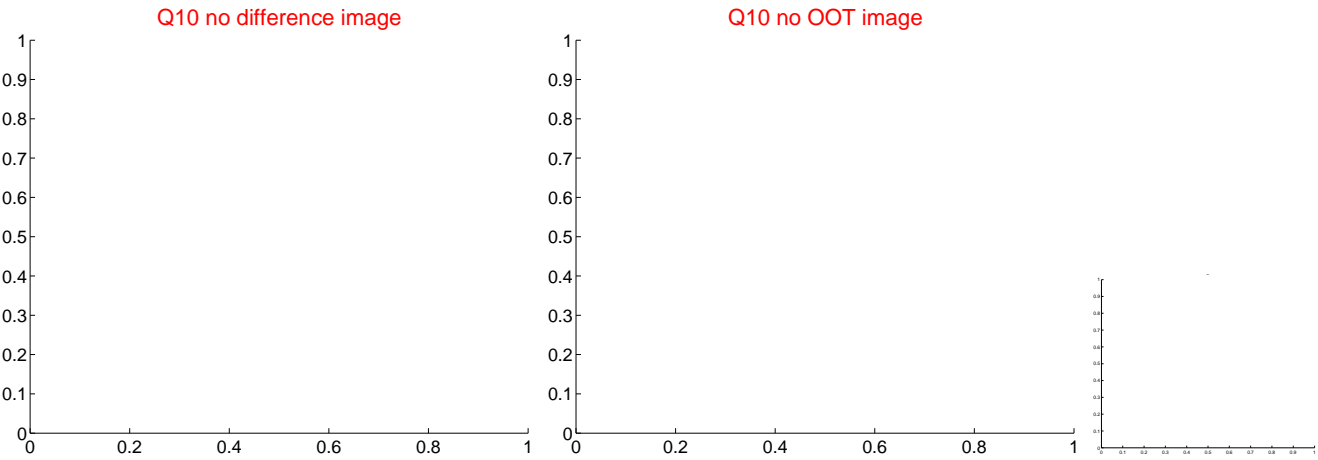
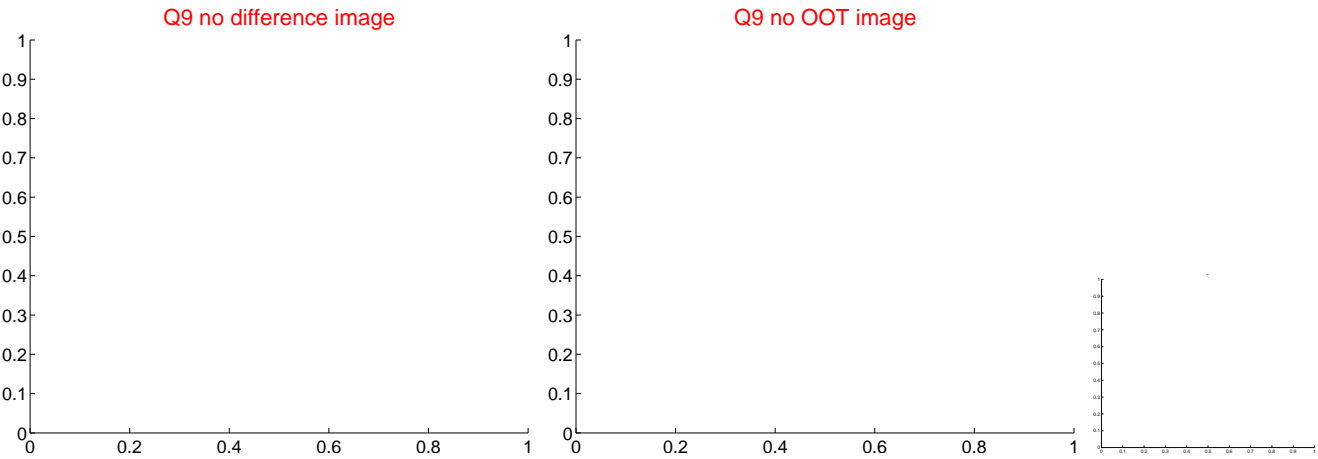
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



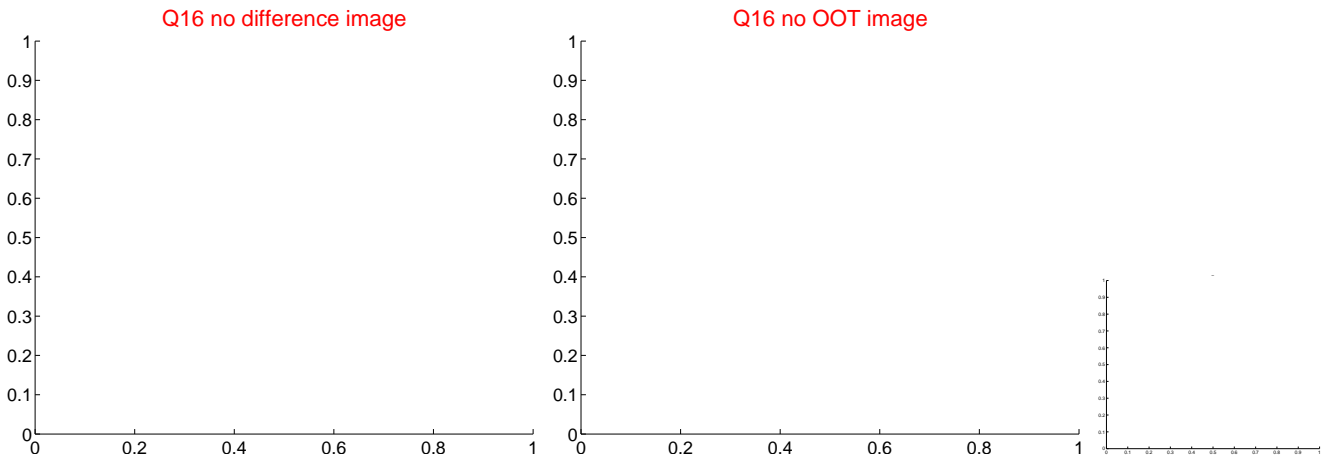
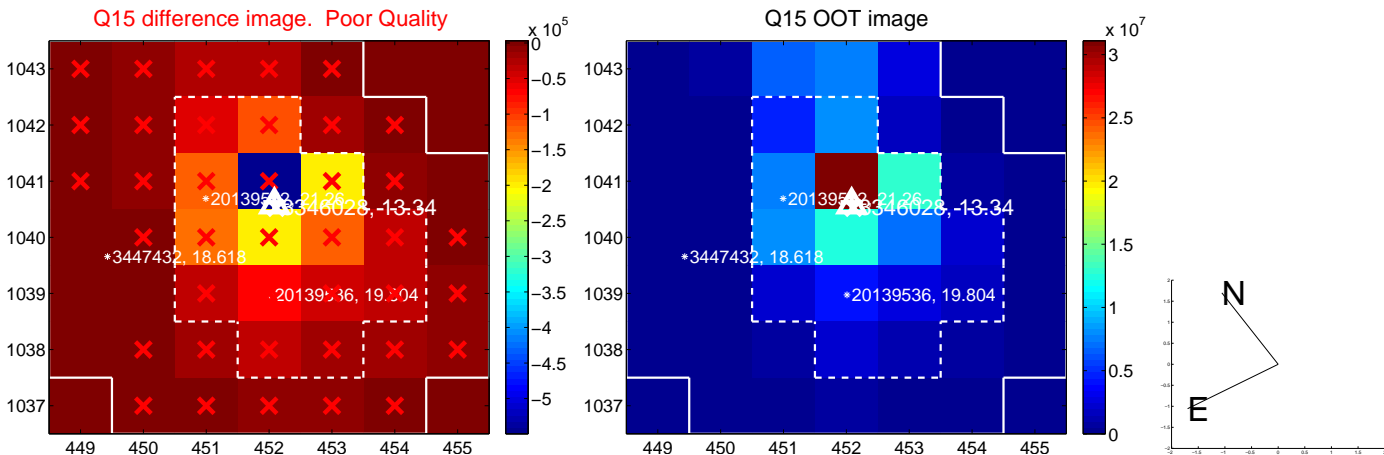
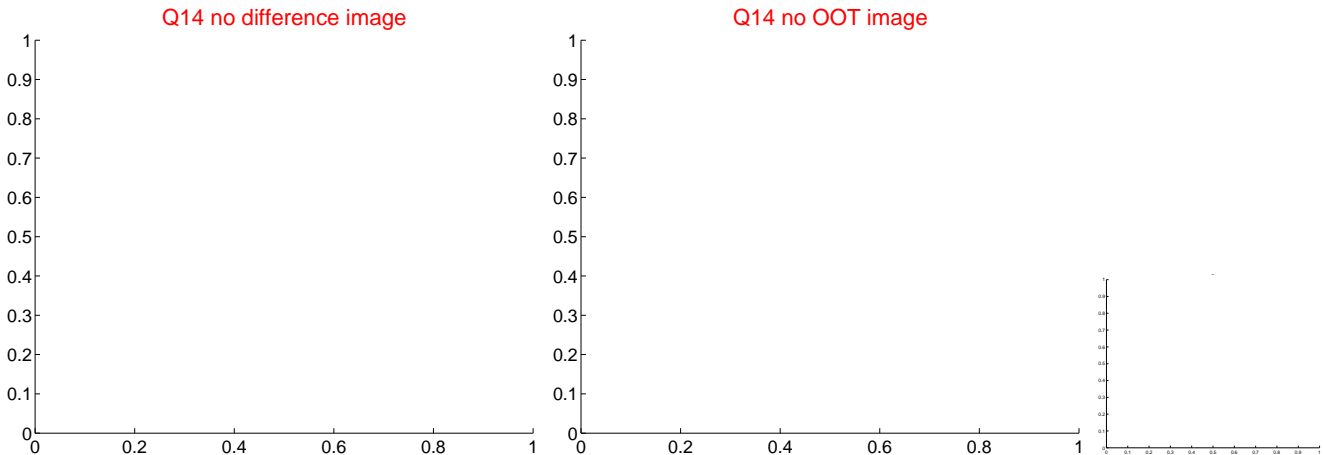
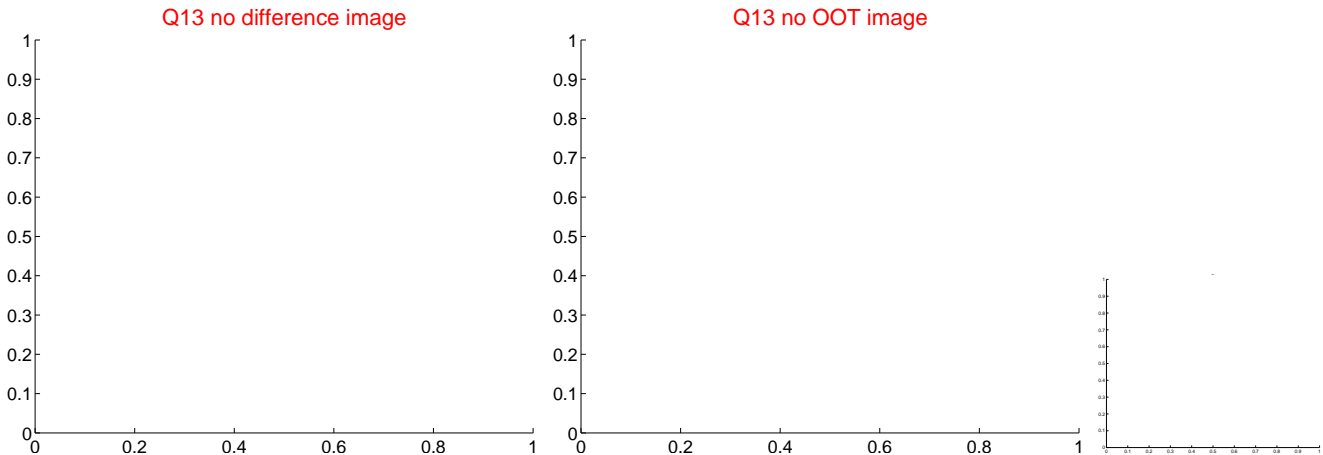
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



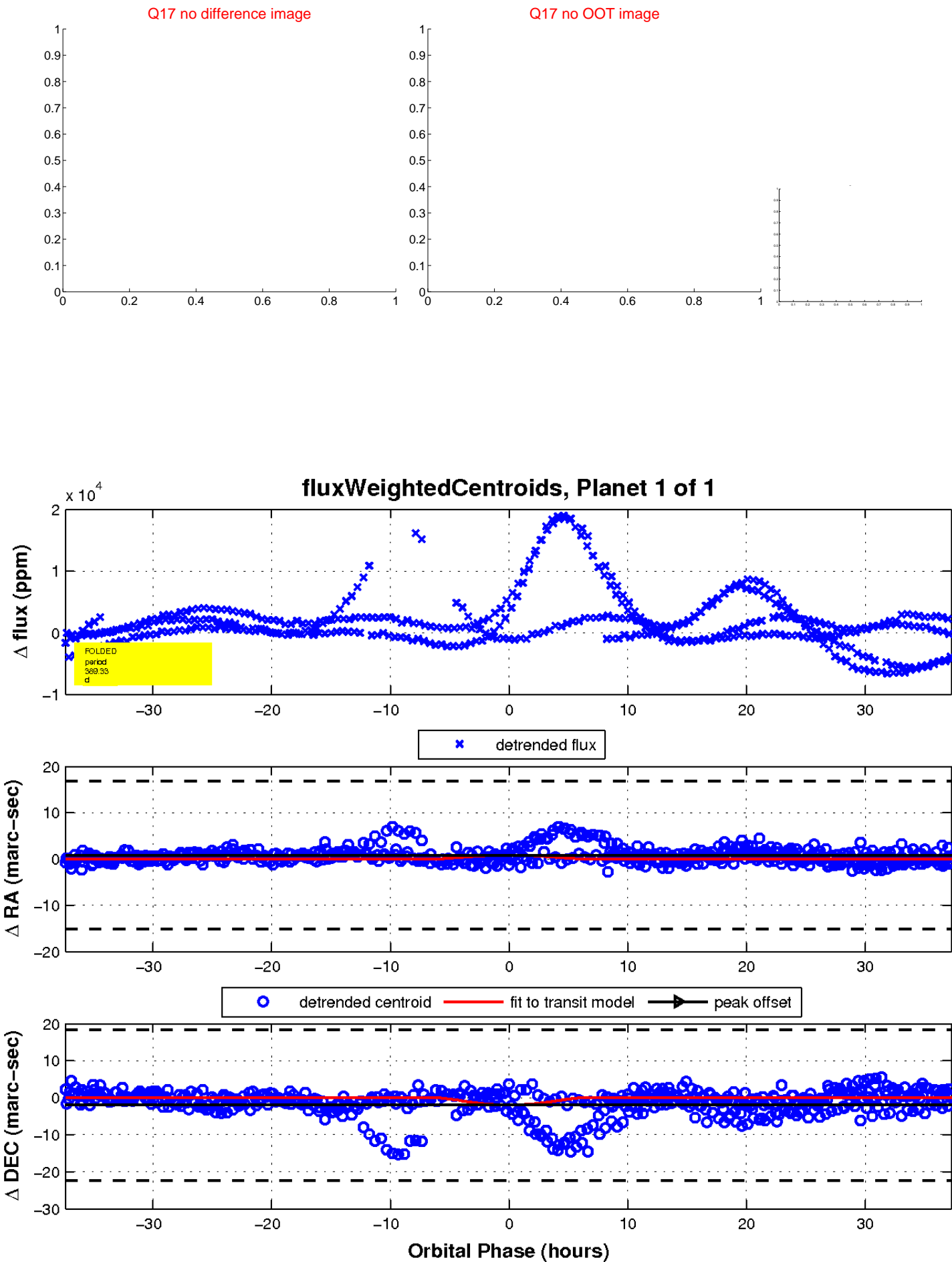
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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UKIRT Image

Declination

