

KIC 006290636

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})
006290636-01	OBS	No	330.996776	168.923336	240.9	4.036	7.2	7.4	1.78	6215	3.23	4.73

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
006290636-01	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_CHASES—ALL_TRANS_CHASES—MOD_NONUNIQ_ALT—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.

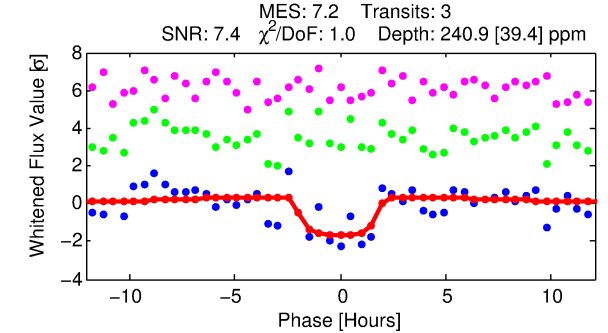
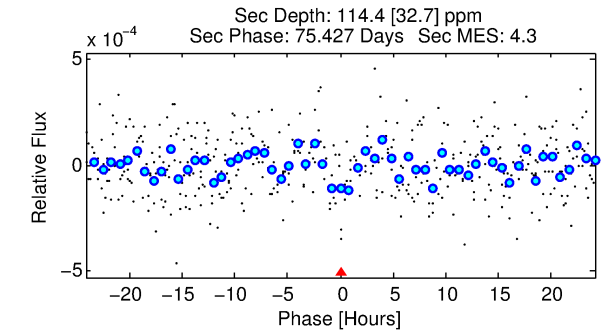
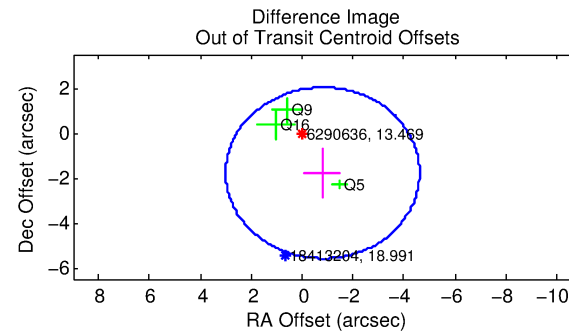
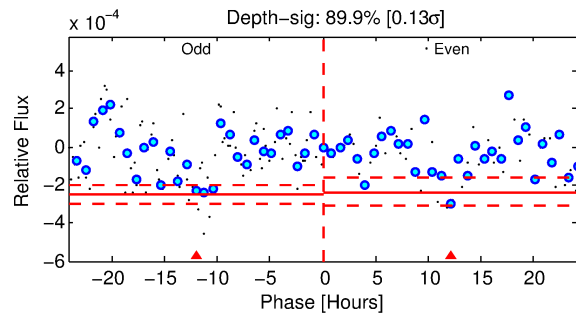
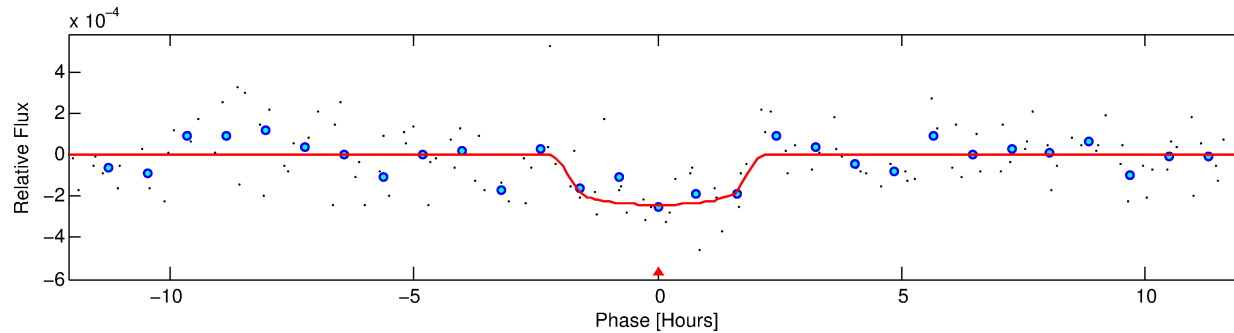
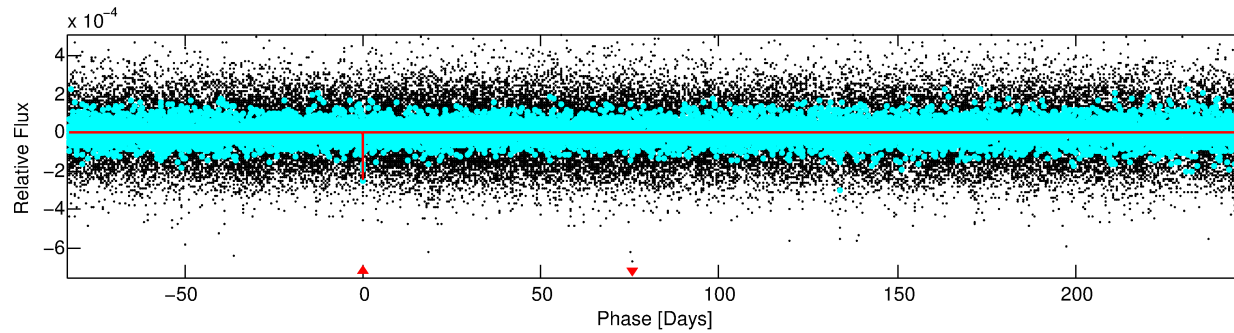
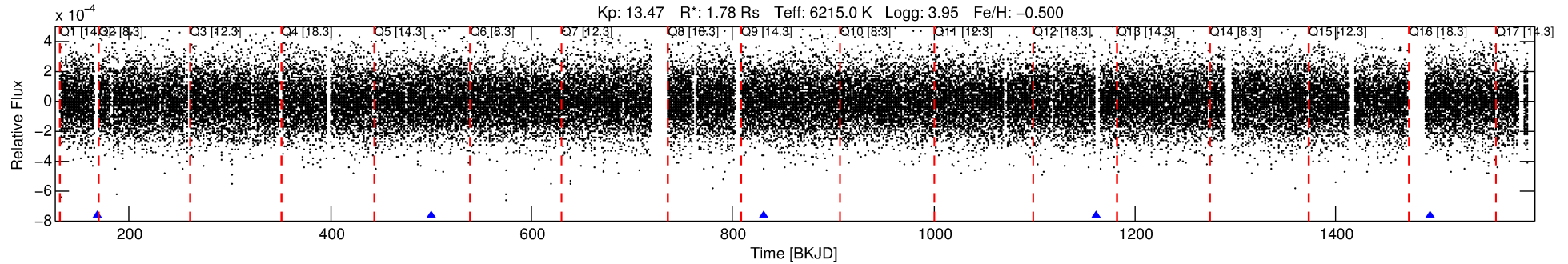
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 006290636-01

No Significant Match Found

DV One-Page Summary

KIC: 6290636 Candidate: 1 of 1 Period: 330.997 d



DV Fit Results:

Period = 330.99678 [0.00512] d
Epoch = 168.9233 [0.0137] BKJD
Rp/R* = 0.0167 [0.0092]
a/R* = 296.29 [913.26]
b = 0.90 [0.66]
Seff = 4.73 [2.36]
Teq = 376 [47] K
Rp = 3.23 [2.05] Re
a = 0.9456 [0.2843] AU
Ag = 5385.98 [6706.09] [0.80 σ]
Teffp = 4981 [1434] K [3.21 σ]

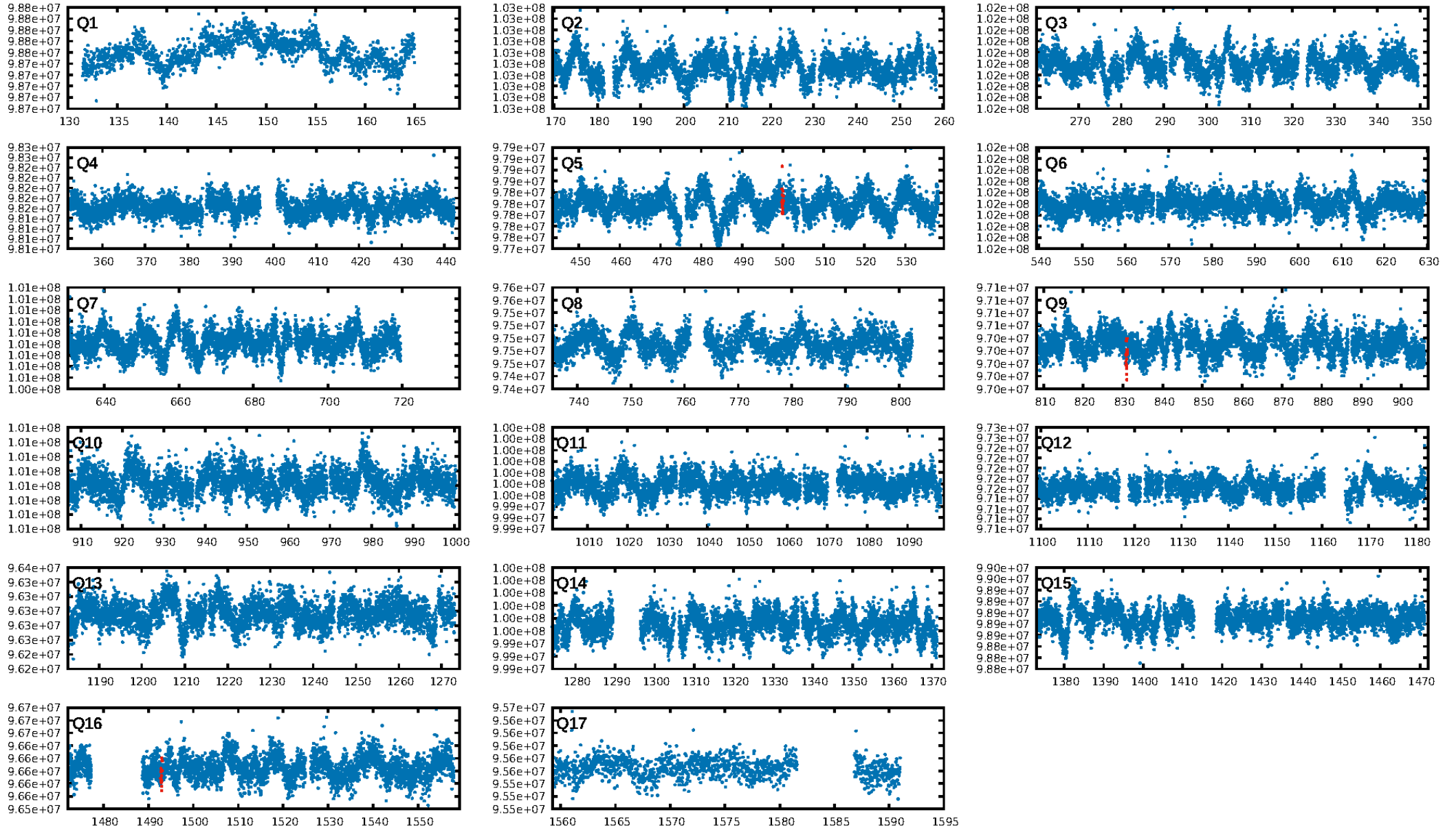
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: 49.6%
ModelChiSquareGof-sig: 95.7%
Bootstrap-pfa: 1.41e-10
RollingBand-fgt: 1.00 [3/3]
GhostDiagnostic-chr: -18.99
Centroid-sig: 8.3%
Centroid-so: 2.617 arcsec [1.52 σ]
OotOffset-rm: 1.955 arcsec [1.54 σ]
KicOffset-rm: 1.917 arcsec [2.13 σ]
OotOffset-st: 0/0/1/2 [3]
KicOffset-st: 0/0/1/2 [3]
DiffImageQuality-fgm: 1.00 [3/3]
DiffImageOverlap-fno: 1.00 [3/3]

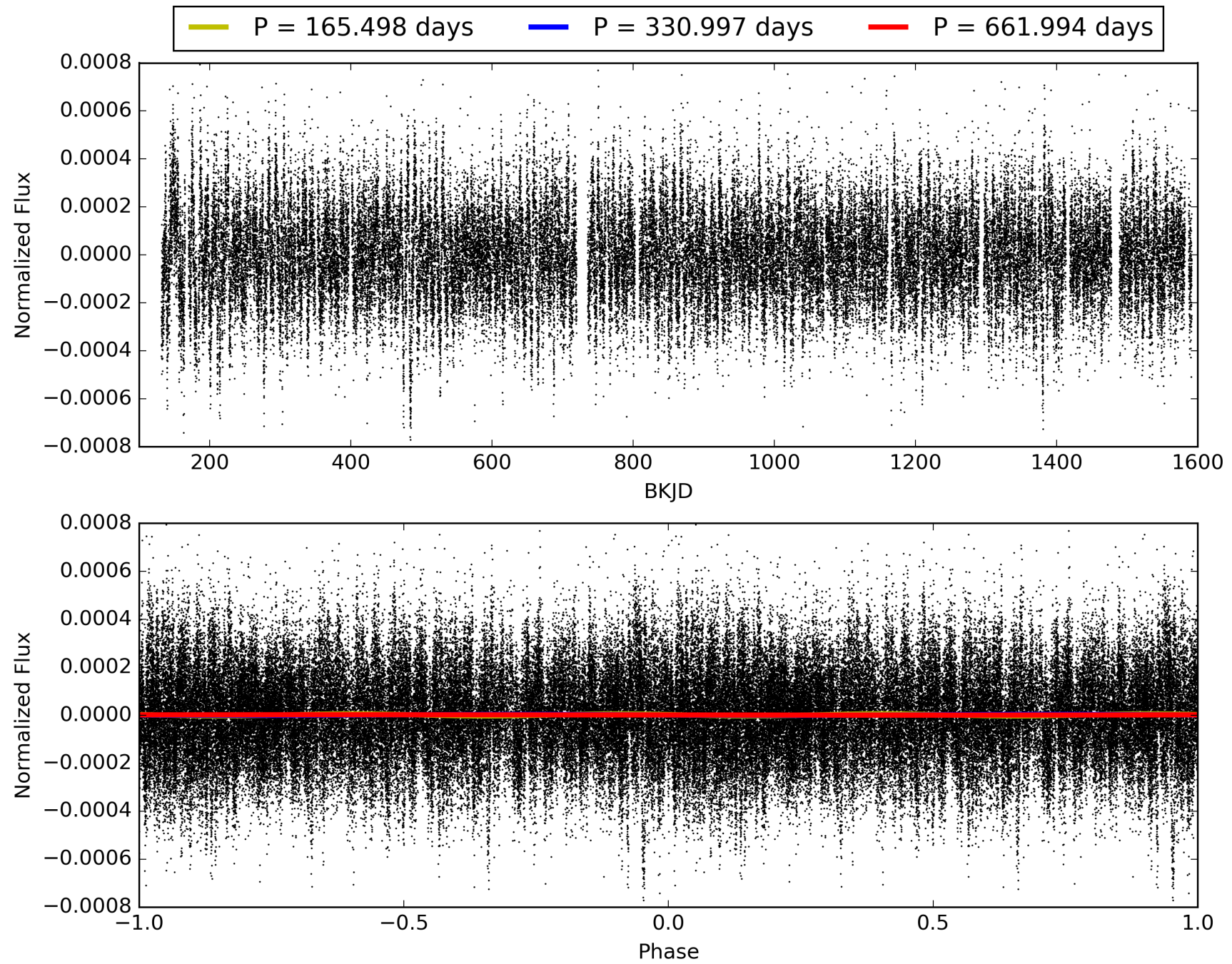
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 30-Jan-2016 14:19:25 Z

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

TCE 006290636-01, PDC Light Curves

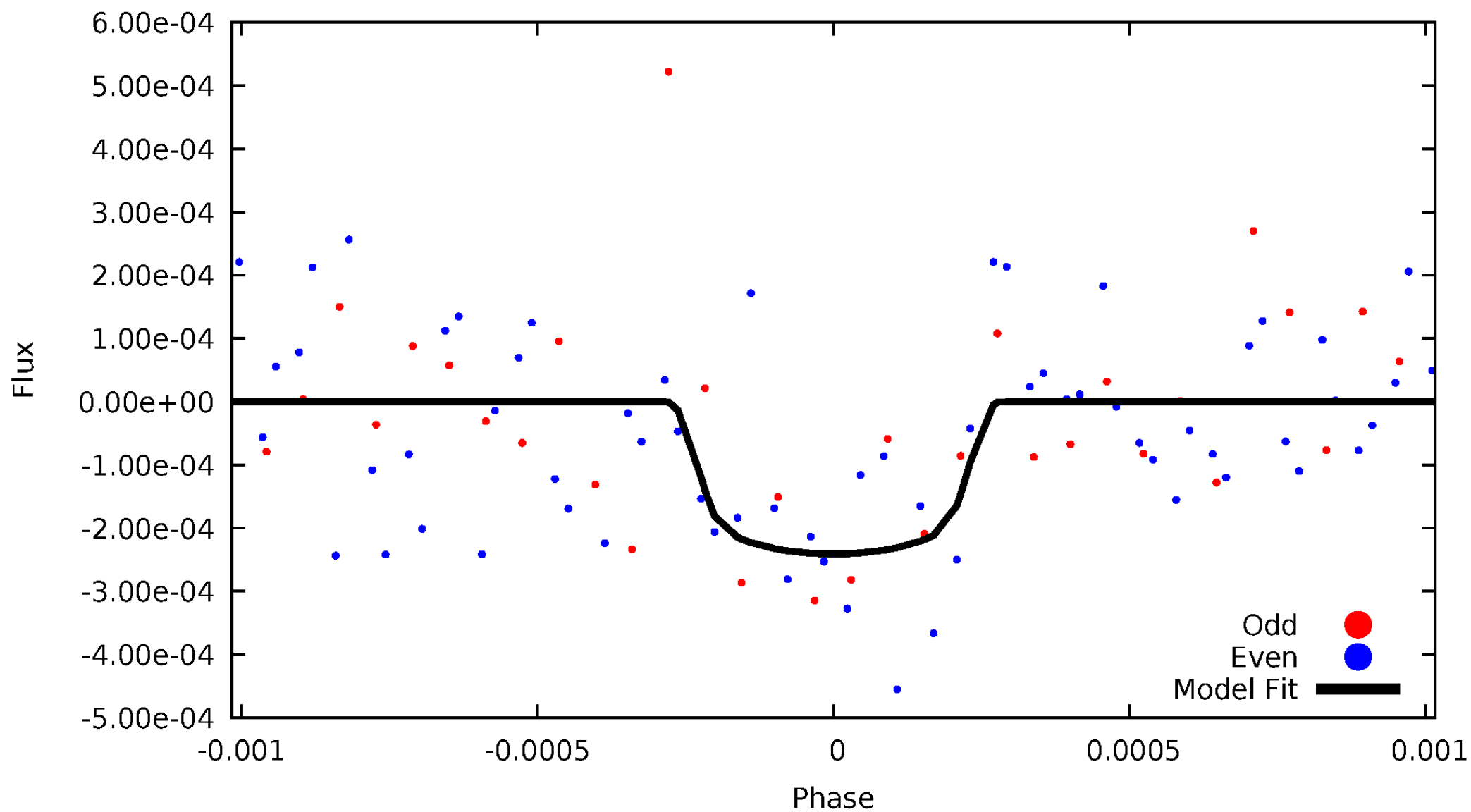


TCE 006290636-01



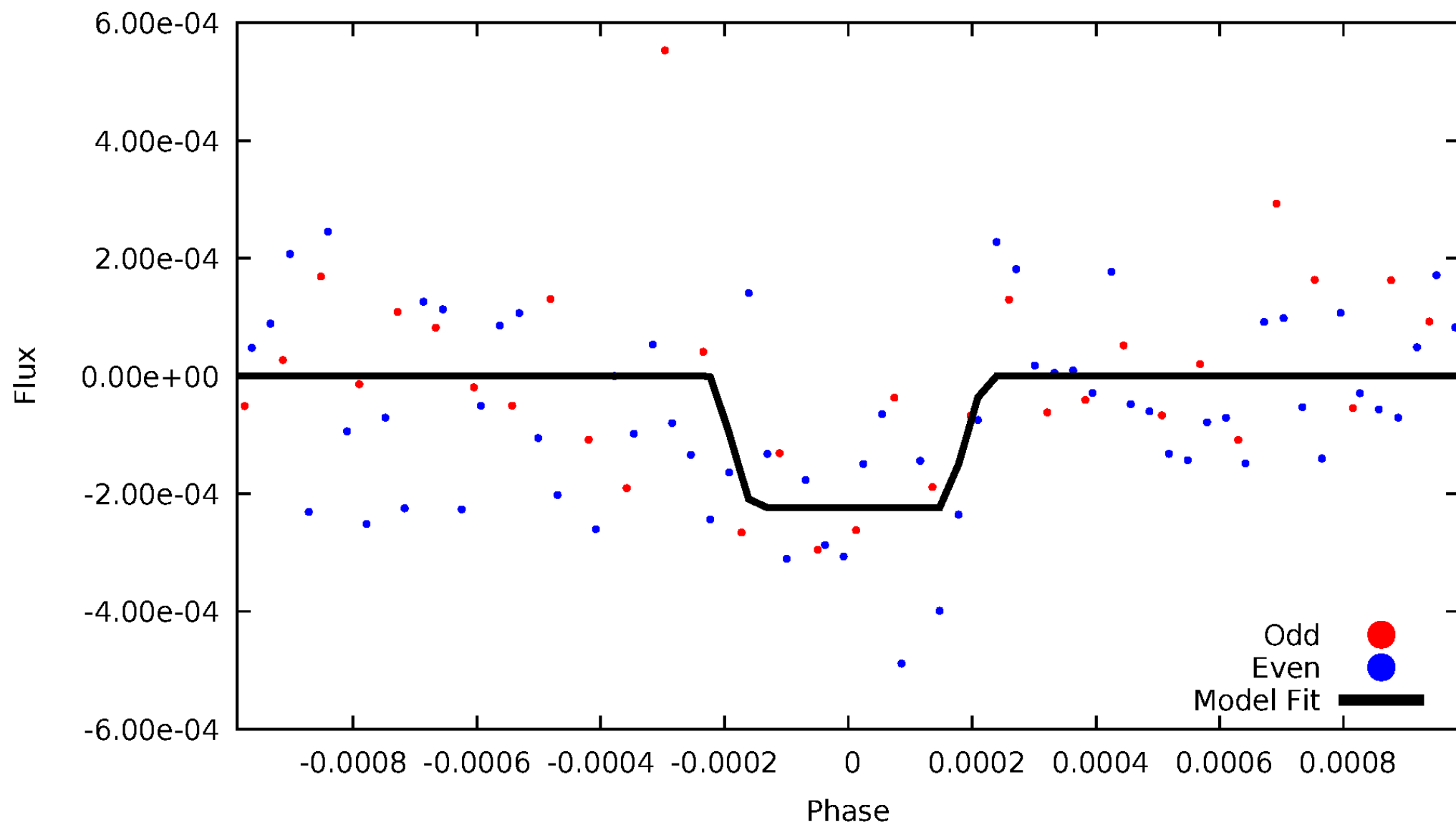
DV Odd/Even

TCE 006290636-01



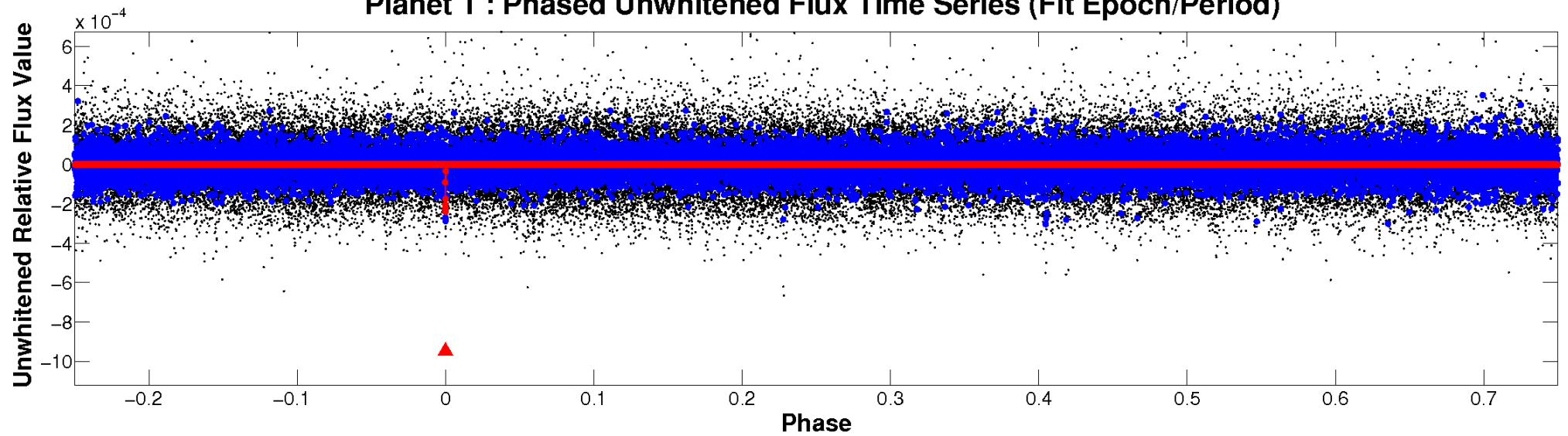
ALT Odd/Even

TCE 006290636-01

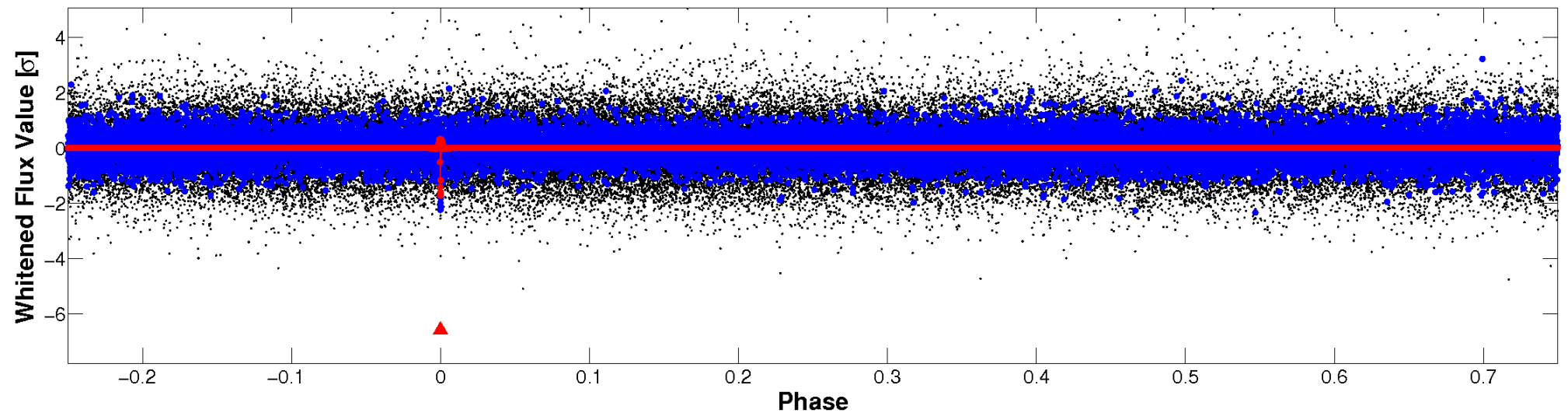


Non-Whitened Vs. Whitened Light Curve

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

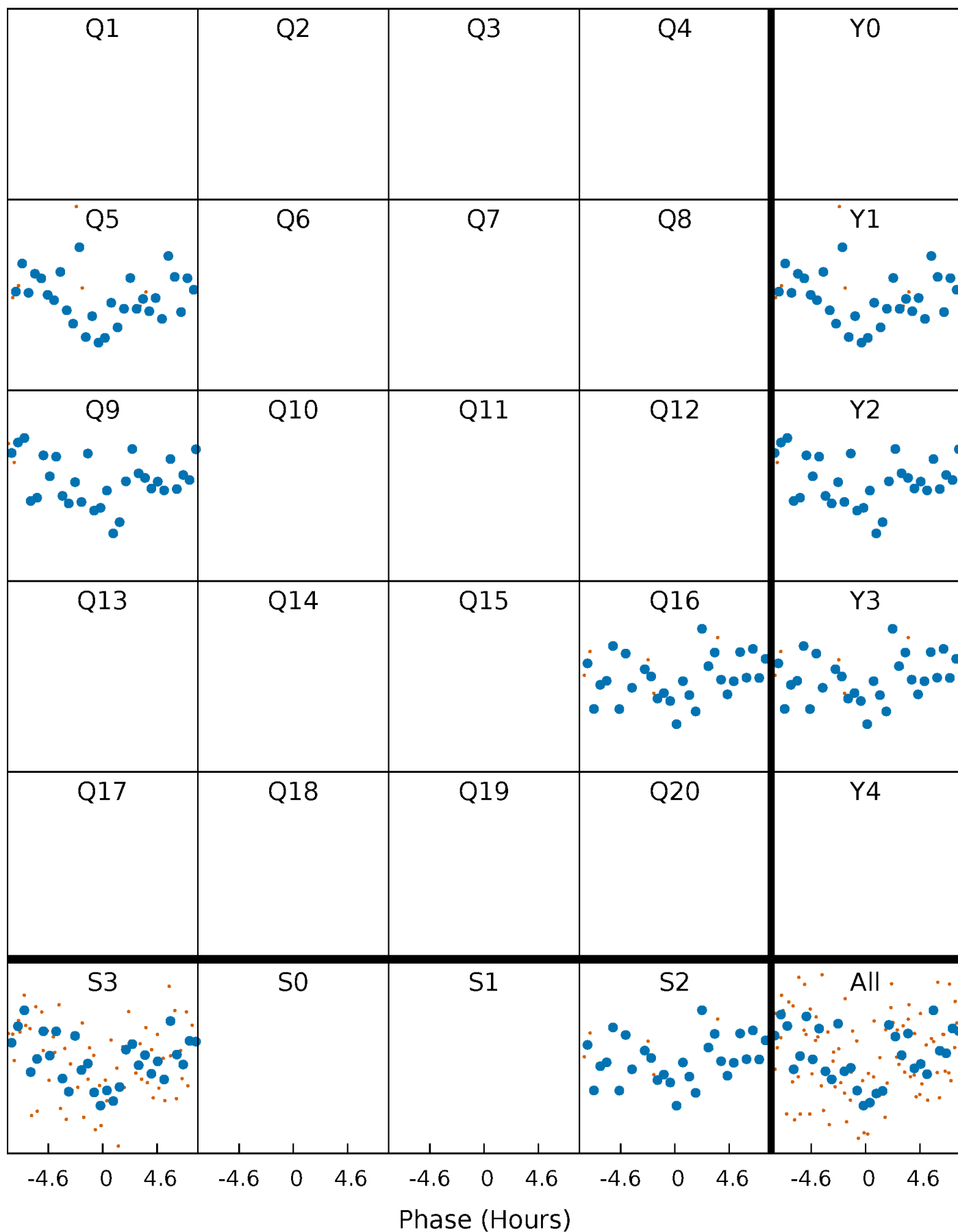


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



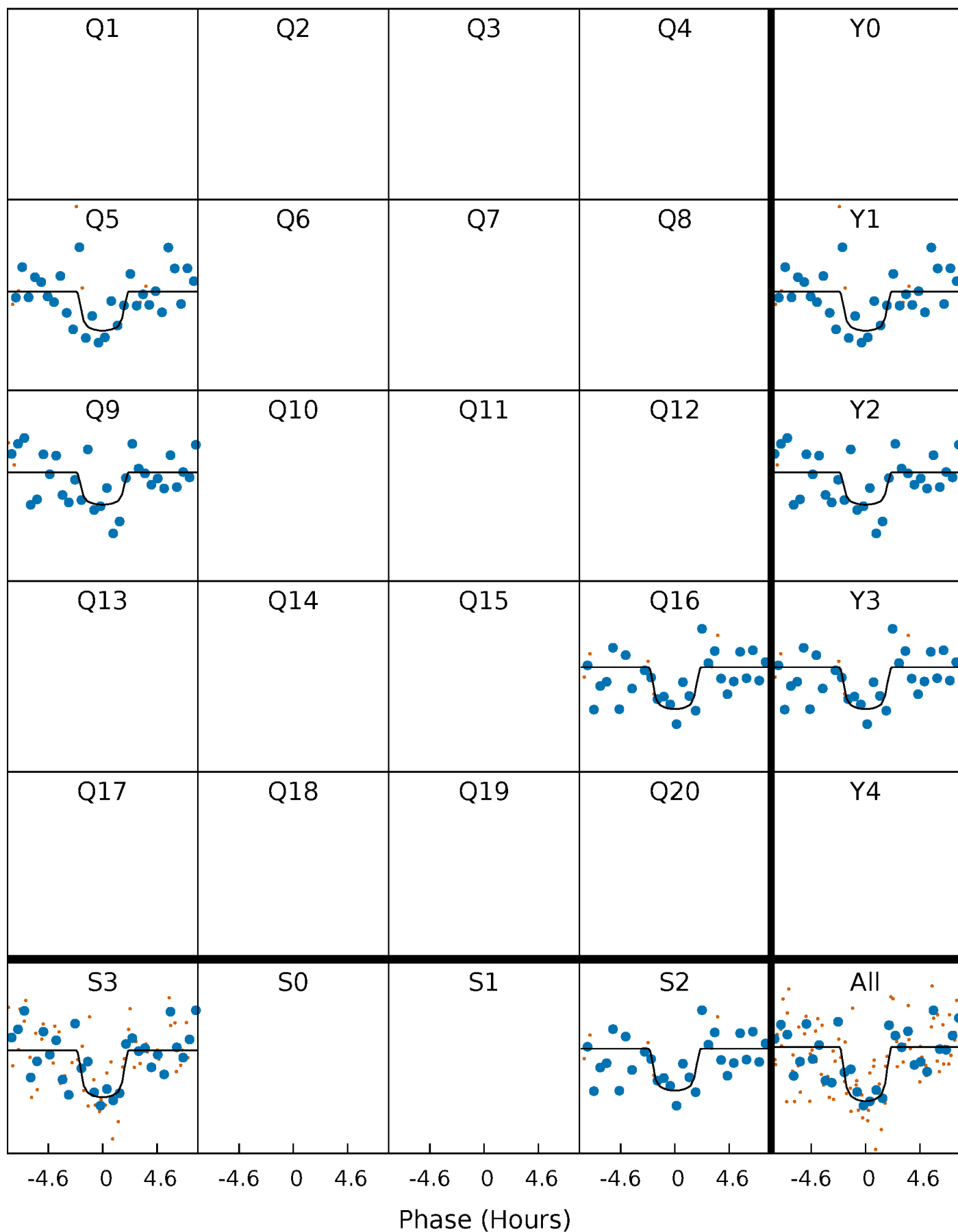
PDC Quarter-Phased Transit Curves

TCE 006290636-01 P=330.996776 Days $T_0=168.923336$ (BKJD)



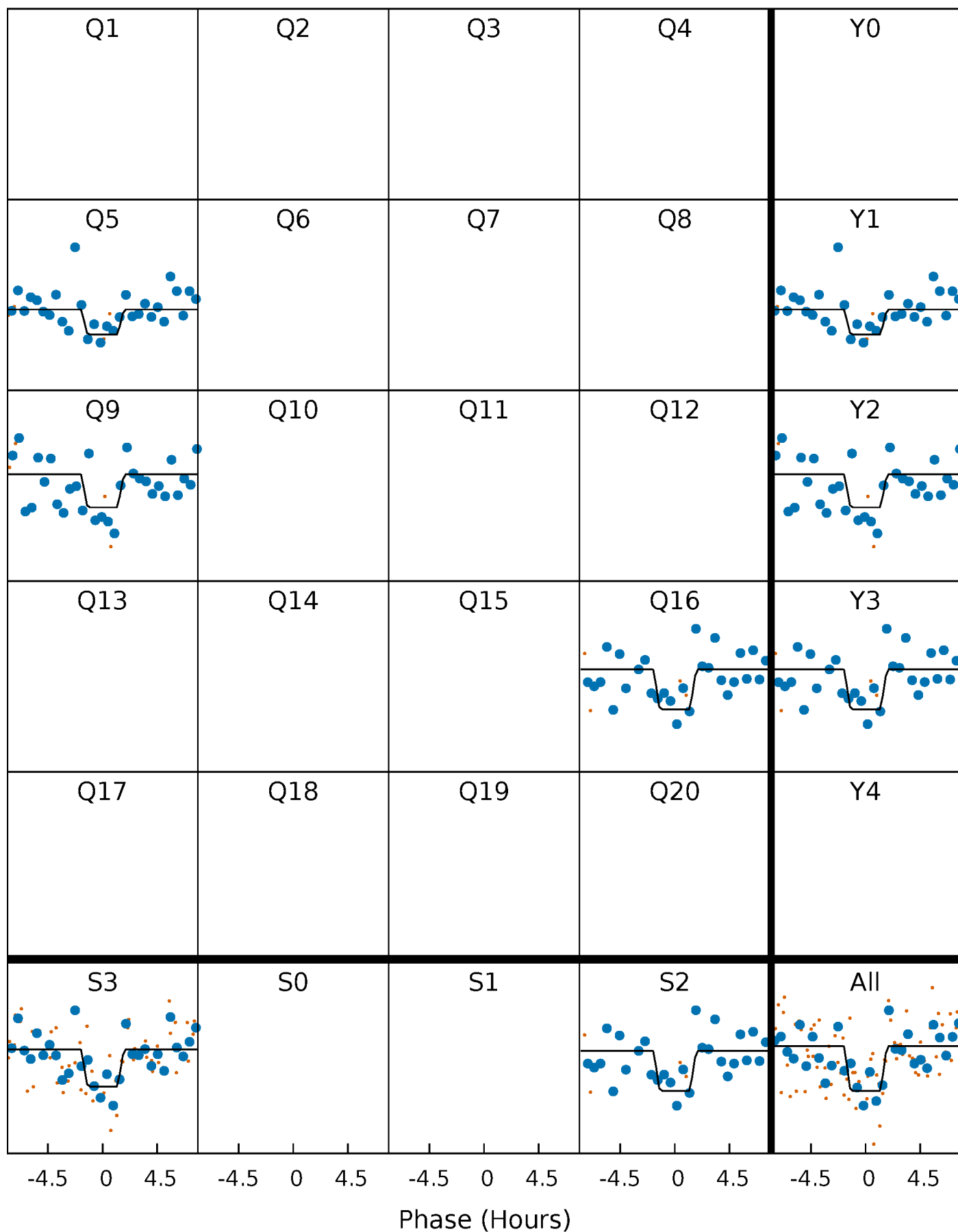
DV Quarter-Phased Transit Curves

TCE 006290636-01 P=330.996776 Days $T_0=168.923336$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

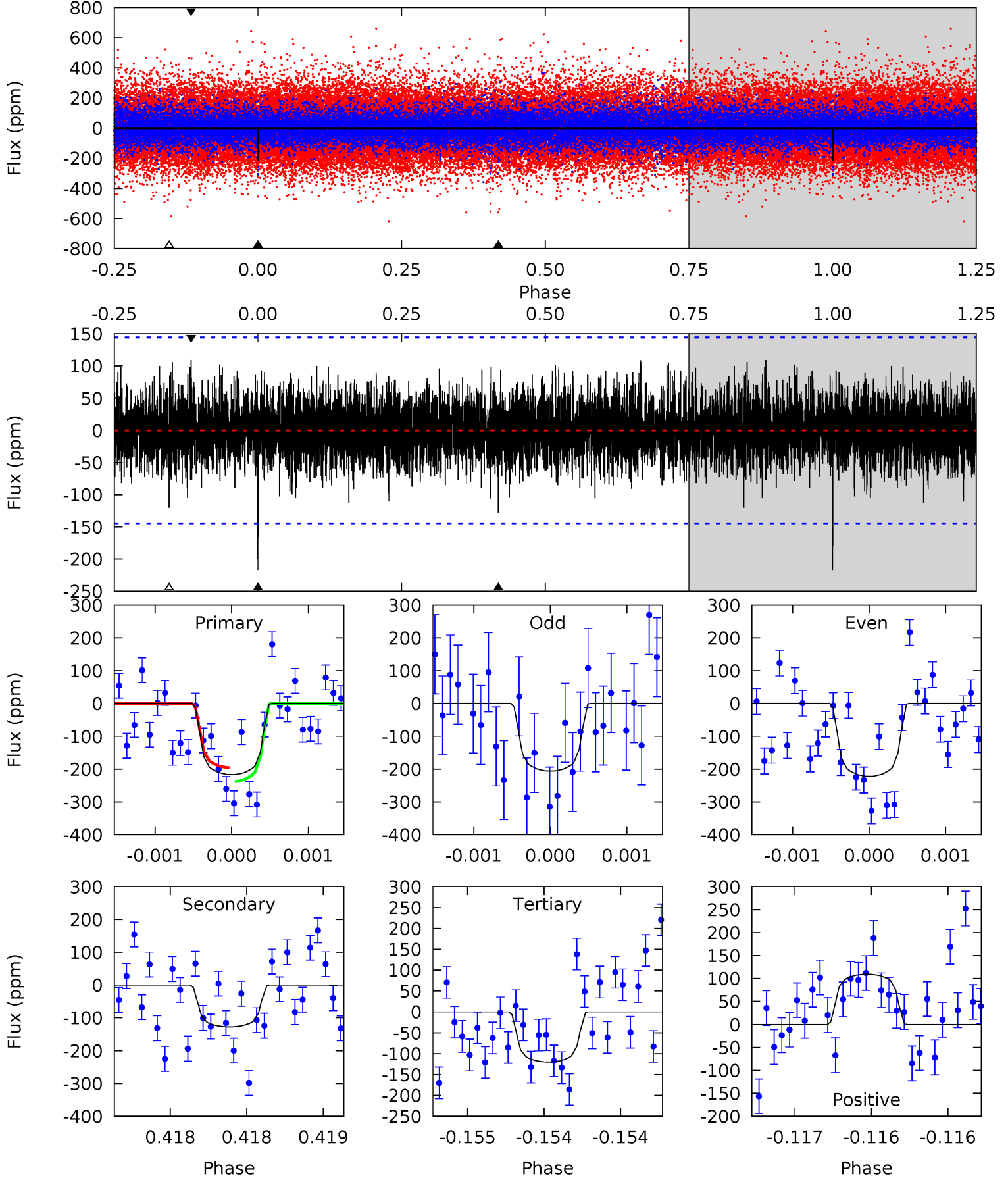
TCE 006290636-01 P=330.998239 Days $T_0=168.927620$ (BKJD)



DV Model-Shift Uniqueness Test

006290636-01, P = 330.996776 Days, E = 168.923336 Days

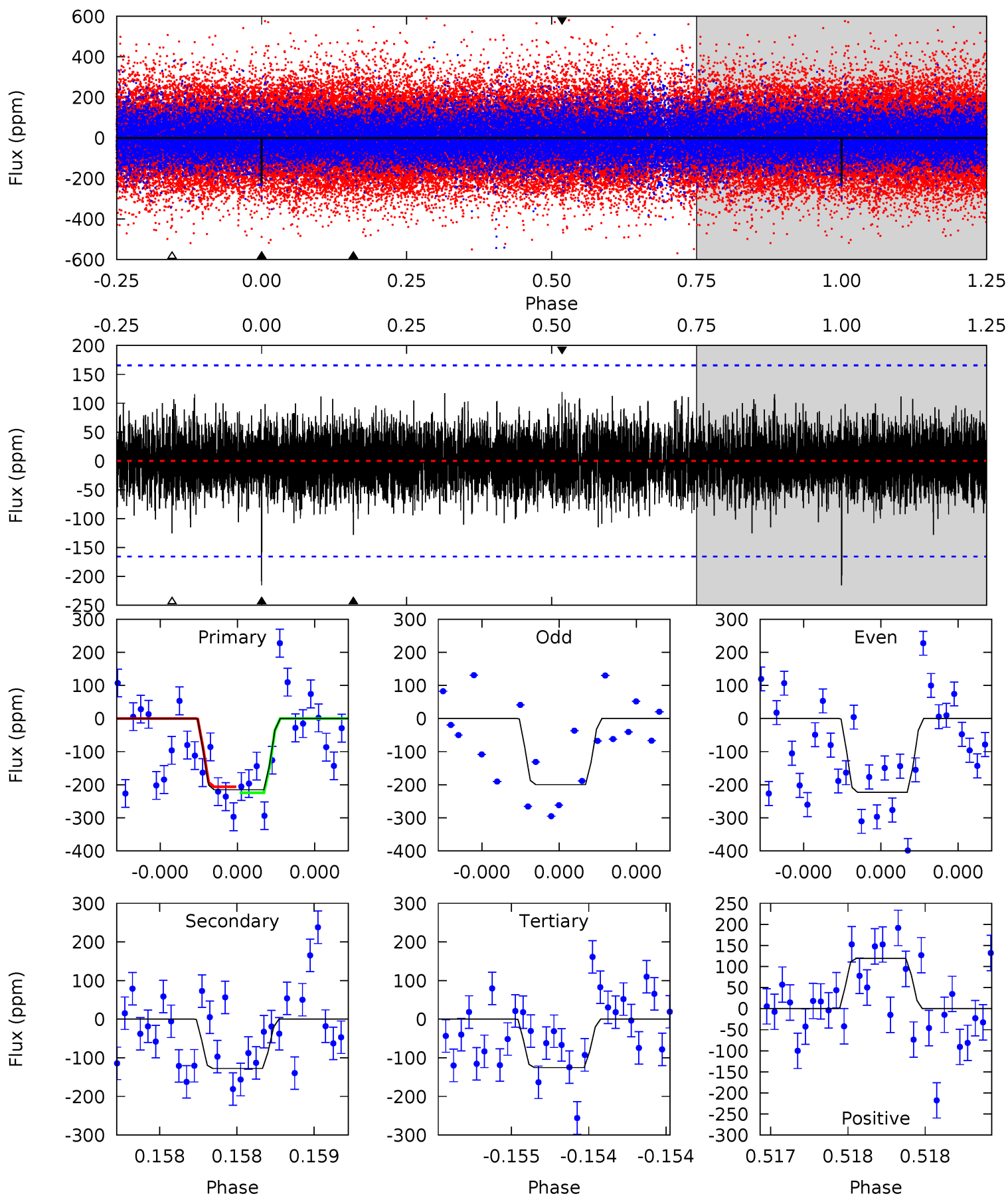
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
8.34	4.90	4.61	4.20	5.55	3.45	1.20	3.72	4.13	0.29	0.69	0.28	1.00	0.34	0.81



Alt Model-Shift Uniqueness Test

006290636-01, P = 330.998239 Days, E = 168.927620 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
7.28	4.32	4.24	4.03	5.60	3.52	1.10	3.05	3.25	0.09	0.29	0.37	1.07	0.36	0.30



Stellar Parameters For KIC 006290636

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	6215^{+172}_{-172}	$3.950^{+0.287}_{-0.123}$	$-0.500^{+0.350}_{-0.250}$	$1.779^{+0.364}_{-0.546}$	$1.029^{+0.179}_{-0.146}$	$0.257^{+0.474}_{-0.093}$
	+3%/-3%	+7%/-3%	+70%/-50%	+20%/-31%	+17%/-14%	+184%/-36%
Source	PHO1	FLK73	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 006290636-01 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	-127 ± 26	$3.18^{+1.78}_{-1.64}$	520^{+35}_{-42}	5124^{+2217}_{-848}	6321^{+19564}_{-3837}
Alt.	-128 ± 30	$2.98^{+1.64}_{-1.58}$	518^{+33}_{-45}	5312^{+2331}_{-954}	7235^{+23980}_{-4459}

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 $A_{obs} \gg 1.0$

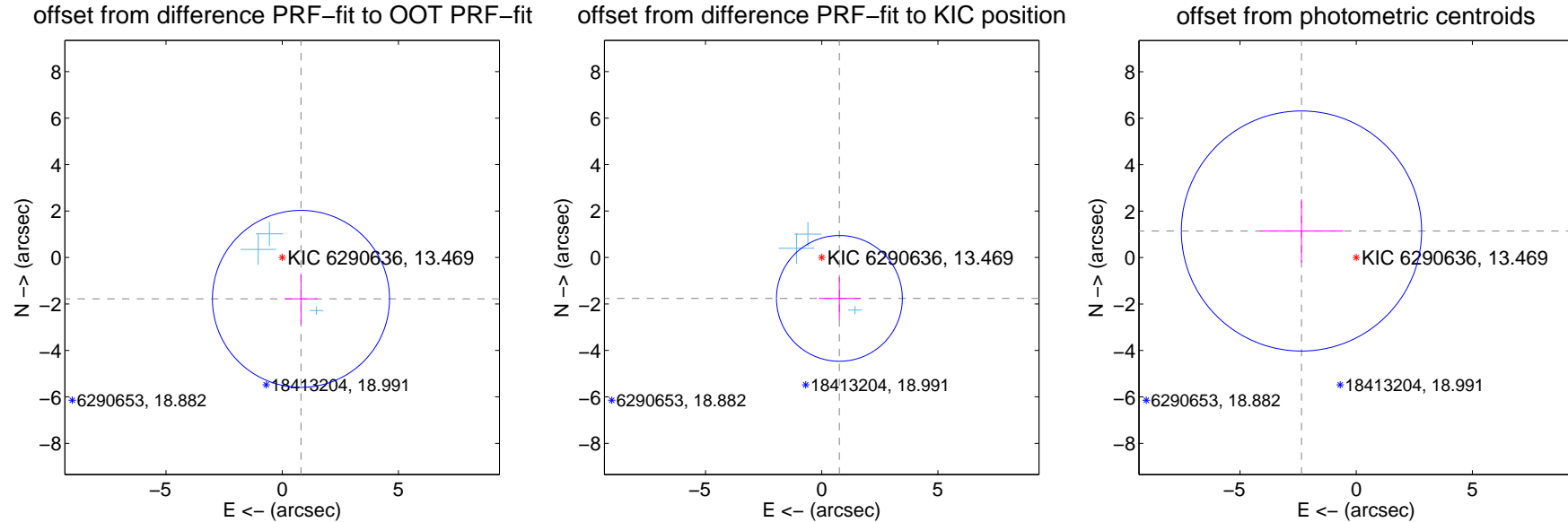
DV Centroid Data

Supplemental centroid analysis for 006290636-01. Kepler magnitude: 13.47. Transit SNR 7.35

There are 3 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	1.955 ± 1.270	1.54	-0.807 ± 0.708	-1.781 ± 1.086
PRF-fit source offset from KIC position	1.917 ± 0.902	2.13	-0.761 ± 0.890	-1.760 ± 0.904
photometric centroid source offset	2.62 ± 1.72	1.52	2.35 ± 1.80	1.14 ± 1.36

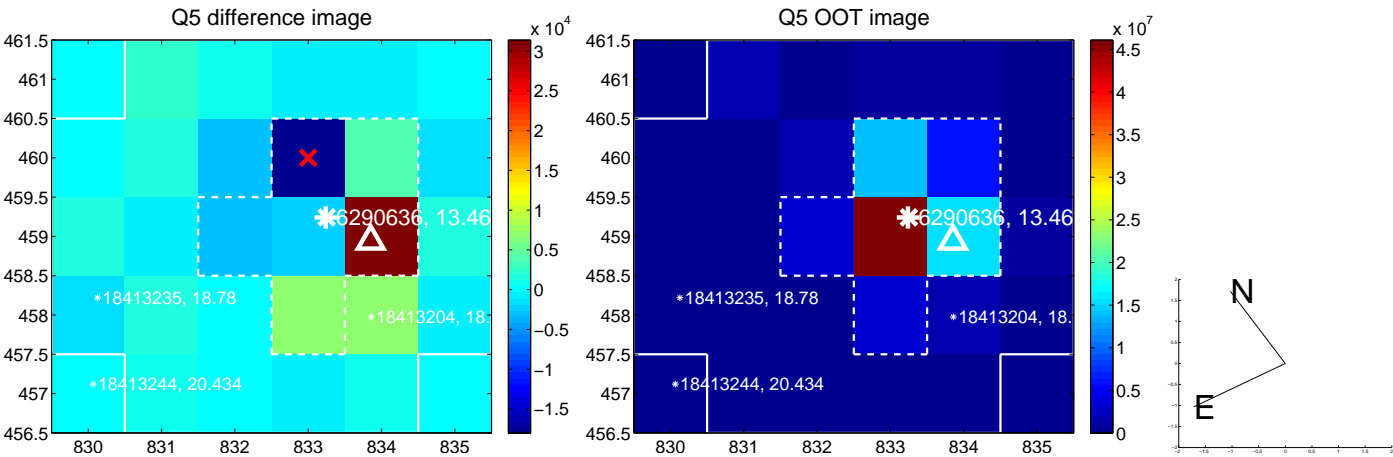


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ . Red *: target star. Blue *: Other stars. Text next to a star gives its KIC ID and kepmag. KIC IDs > 15, 000, are from the UKIRT catalog.

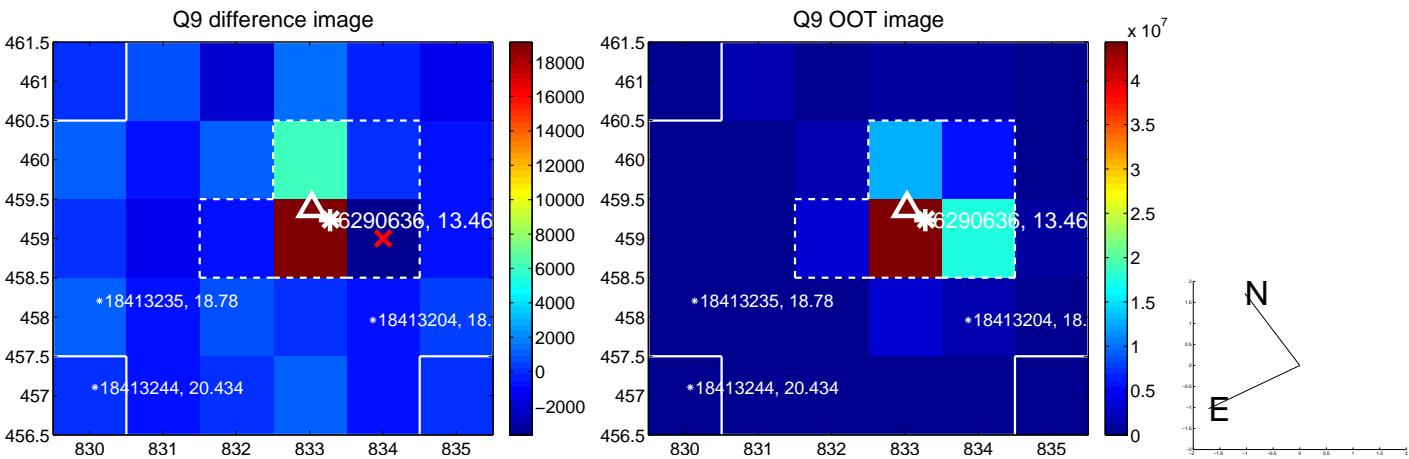
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



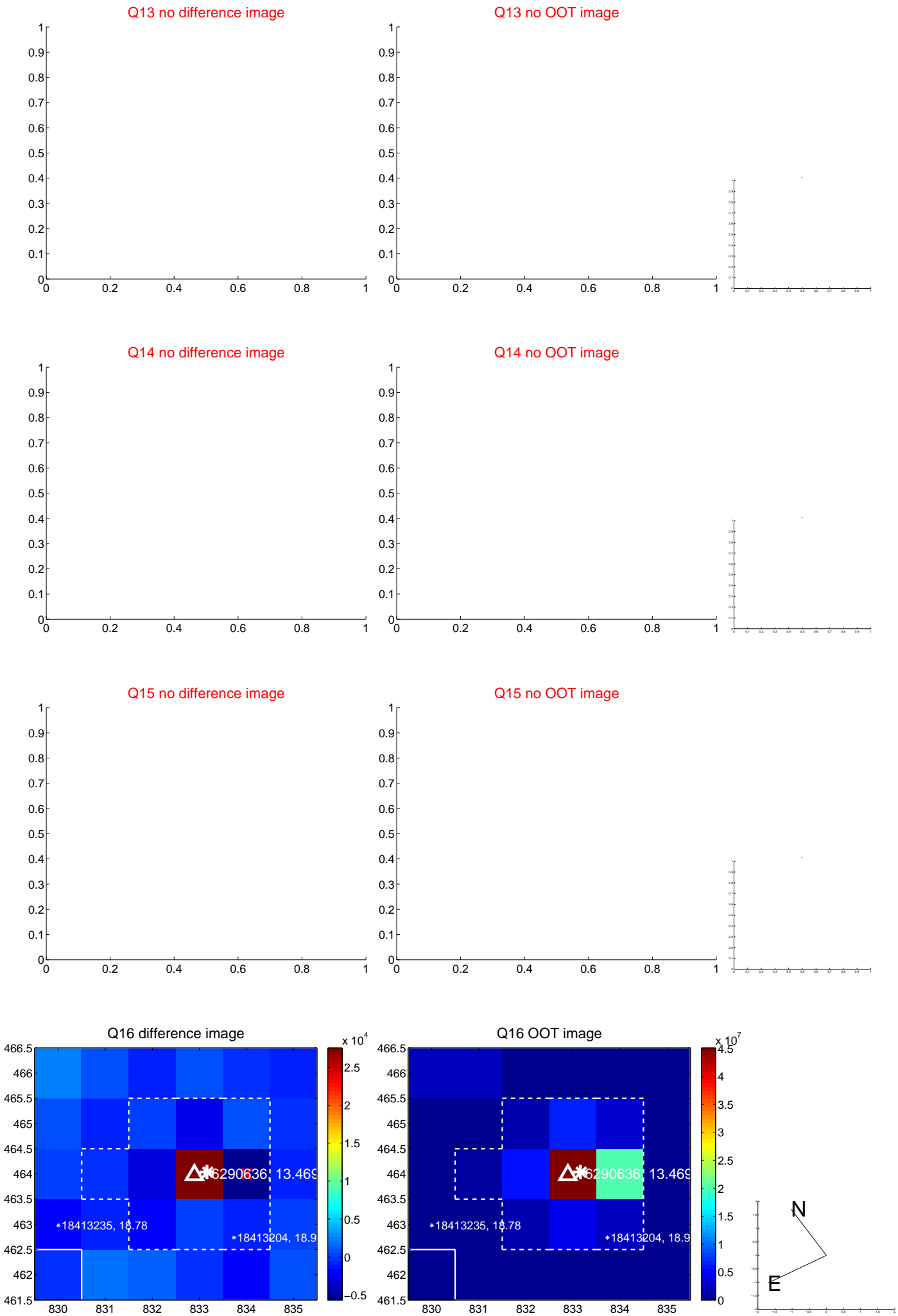
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



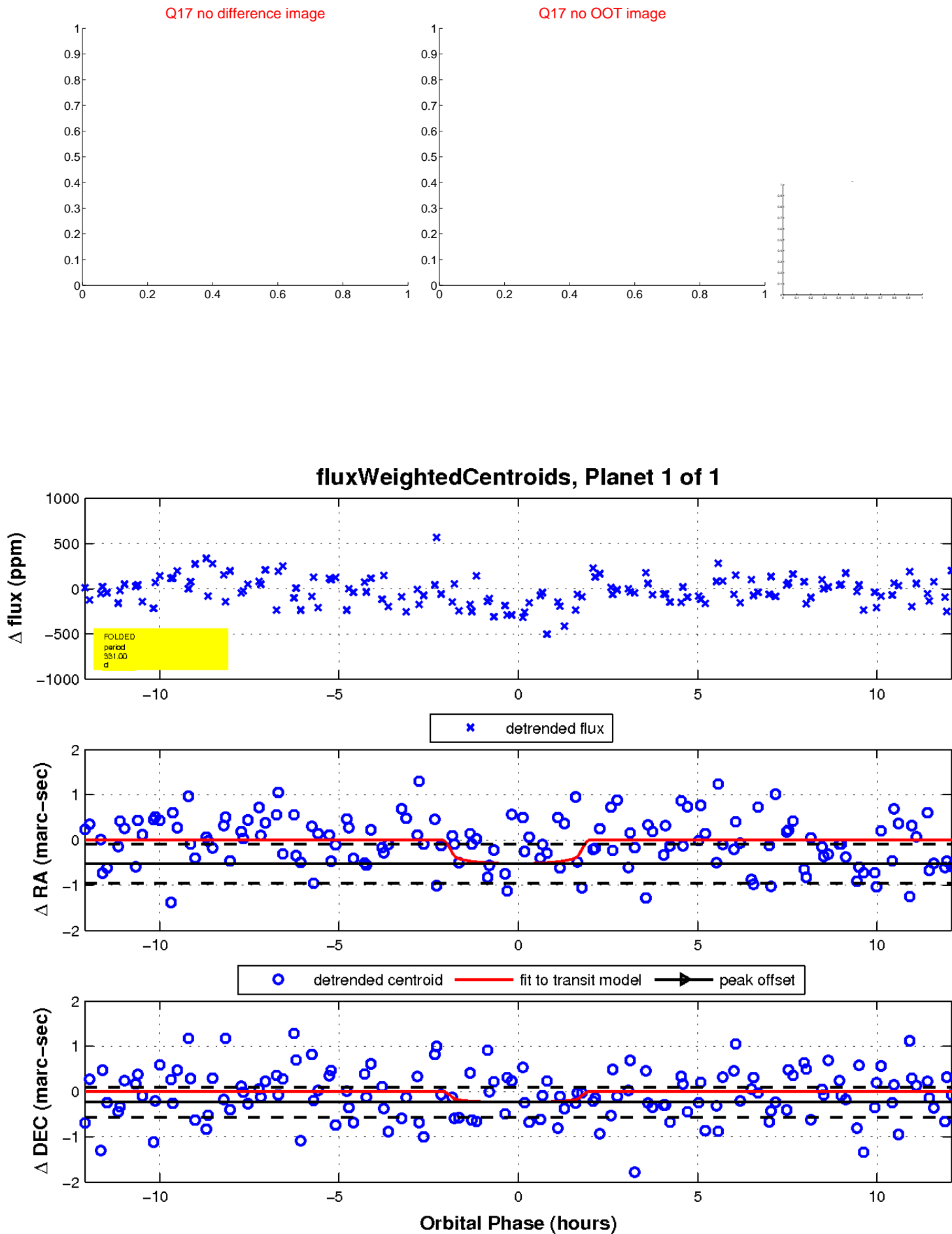
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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.



UKIRT Image

