

KIC 006345835

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})
006345835-01	OBS	No	330.254184	135.910136	118.5	4.079	8.4	6.7	0.50	3703	0.65	0.07

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
006345835-01	OBS	FP	0.00	1	0	1	0	LPP_DV—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_POS_DV—CENT_FEW_DIFFS—HALO_GHOST

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

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

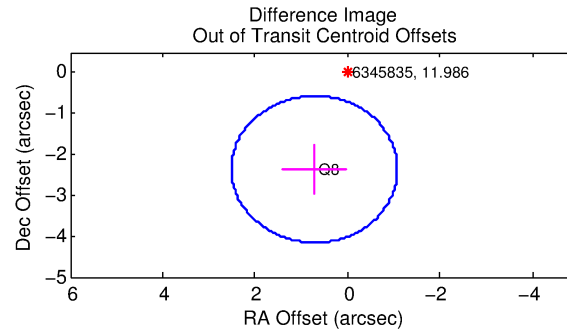
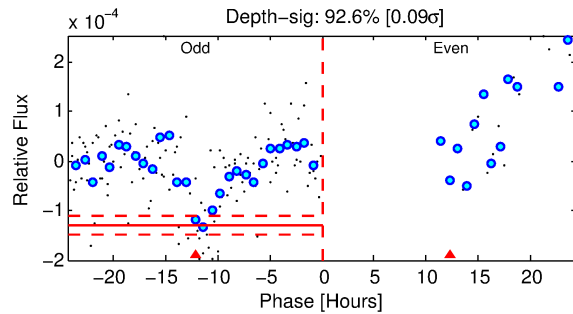
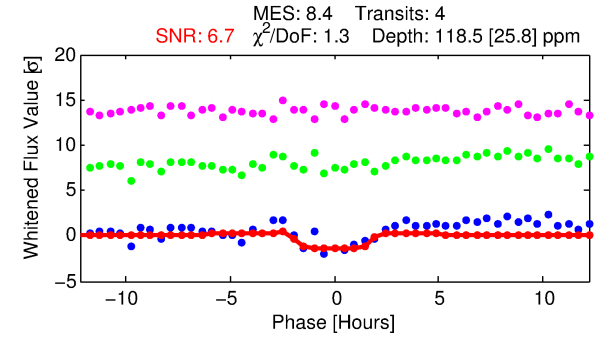
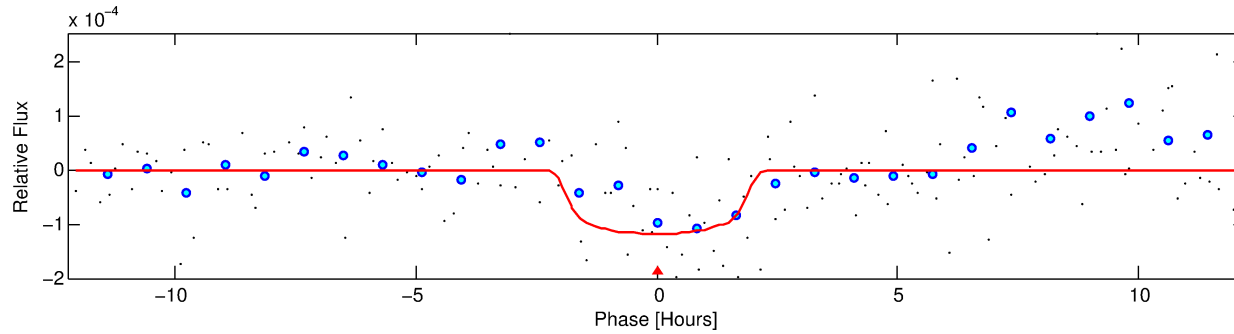
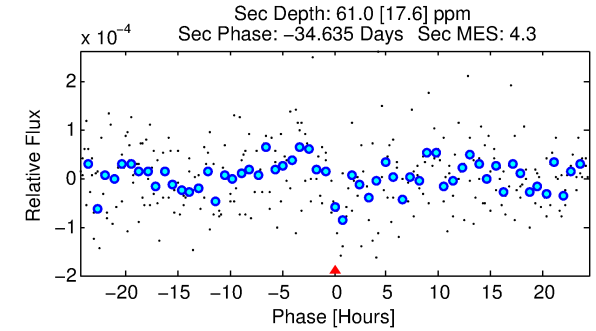
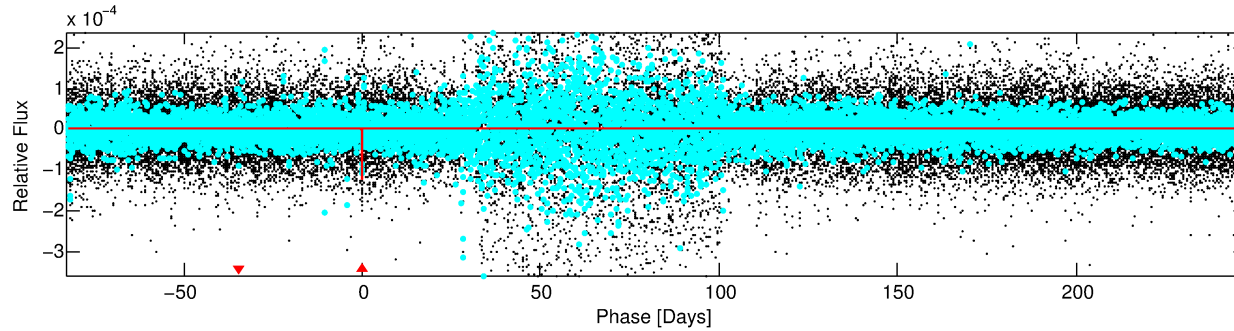
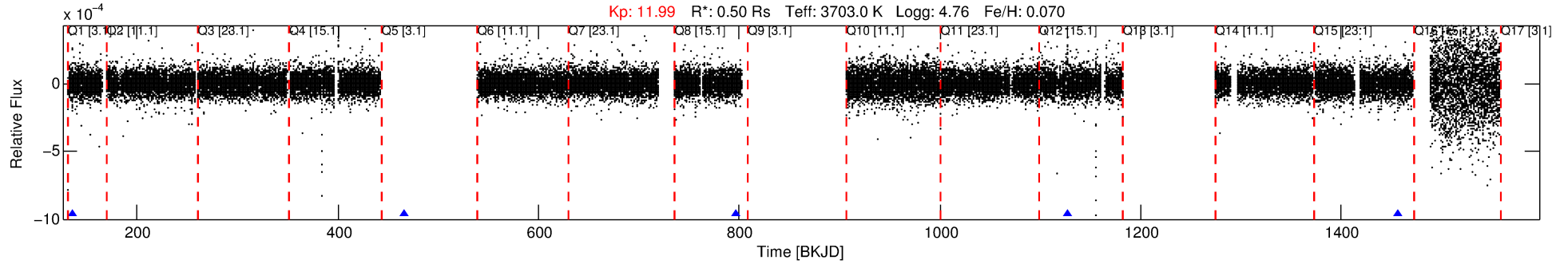
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 006345835-01

No Significant Match Found

DV One-Page Summary

KIC: 6345835 Candidate: 1 of 1 Period: 330.254 d



DV Fit Results:

Period = 330.25418 [0.00504] d
Epoch = 135.9101 [0.0131] BKJD
Rp/R* = 0.0119 [0.0118]
a/R* = 287.21 [1242.54]
b = 0.90 [0.93]
Seff = 0.07 [0.02]
Teq = 133 [9] K
Rp = 0.65 [0.66] Re
a = 0.7525 [0.1199] AU
Ag = 45555.25 [91818.08] [0.50σ]
Teffp = 2999 [1508] K [1.90σ]

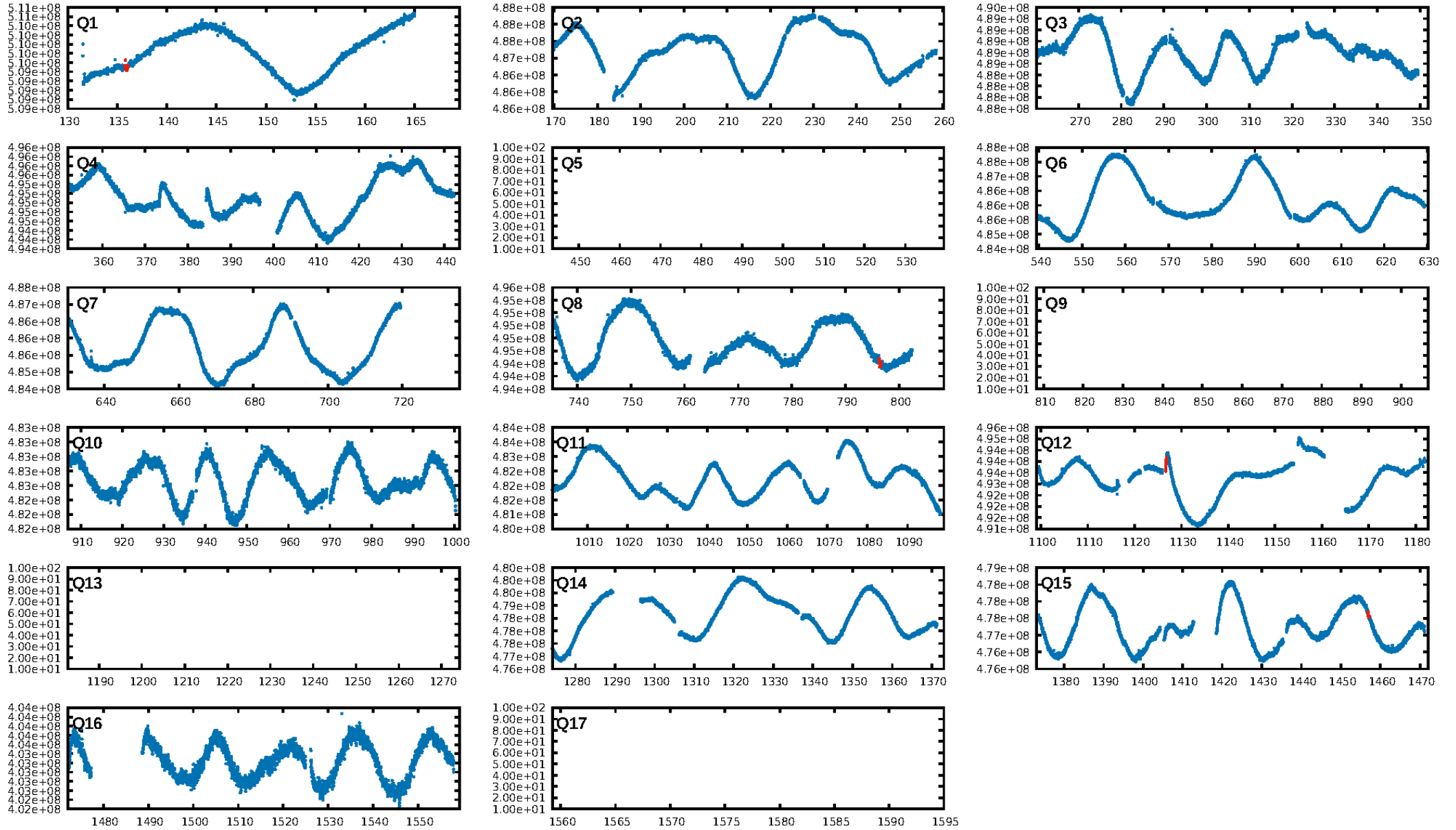
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: 11.0%
ModelChiSquareGof-sig: 53.3%
Bootstrap-pfa: 2.21e-09
RollingBand-fgt: 1.00 [3/3]
GhostDiagnostic-chr: -0.2366
Centroid-sig: 11.0%
Centroid-so: 0.437 arcsec [0.34σ]
OotOffset-rm: 2.470 arcsec [4.13σ]
KicOffset-rm: 4.039 arcsec [6.84σ]
OotOffset-st: 0/0/1/0 [1]
KicOffset-st: 0/0/1/0 [1]
DiffImageQuality-fgm: 0.00 [0/1]
DiffImageOverlap-fno: 1.00 [3/3]

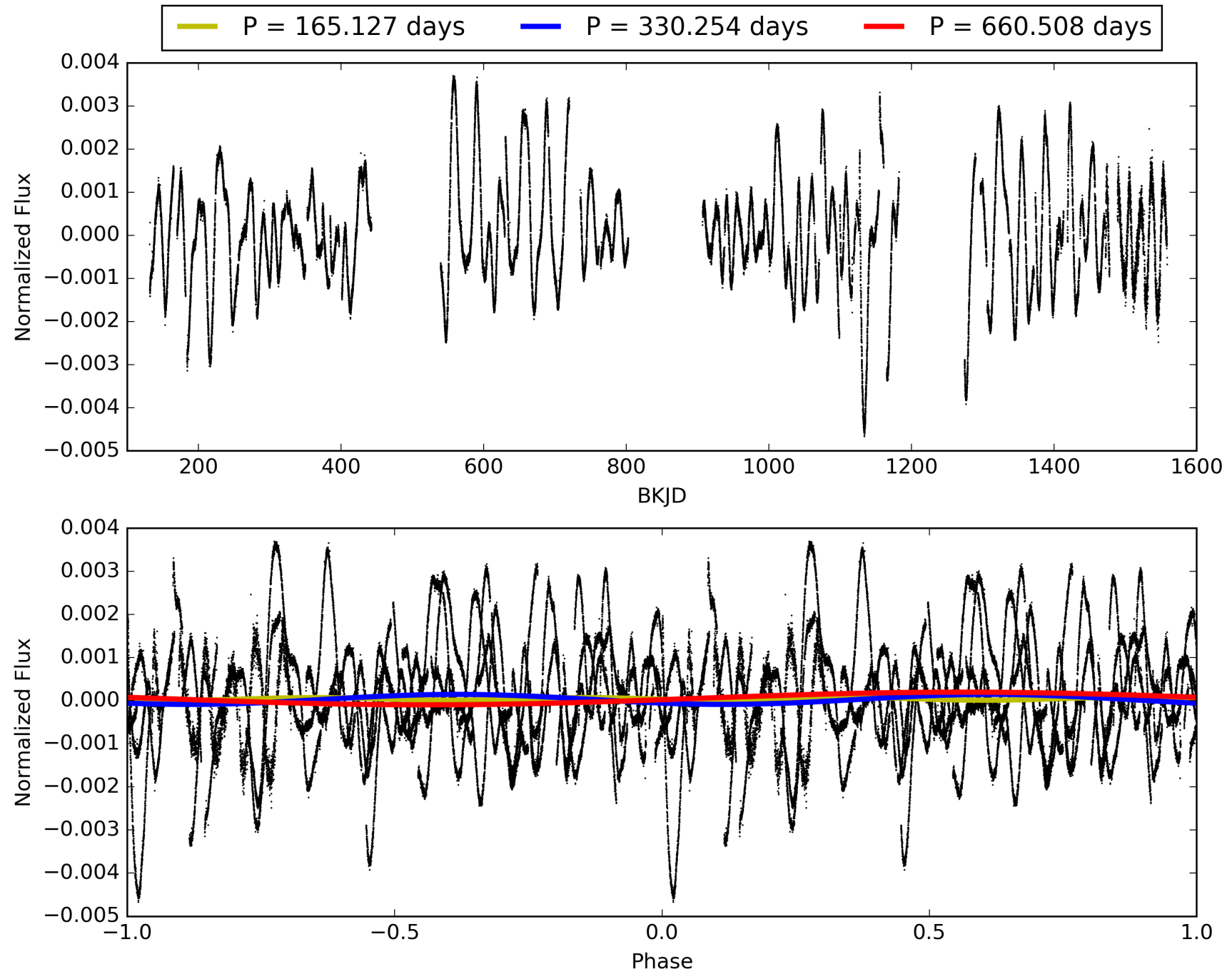
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 31-Jan-2016 22:17:51 Z

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

TCE 006345835-01, PDC Light Curves

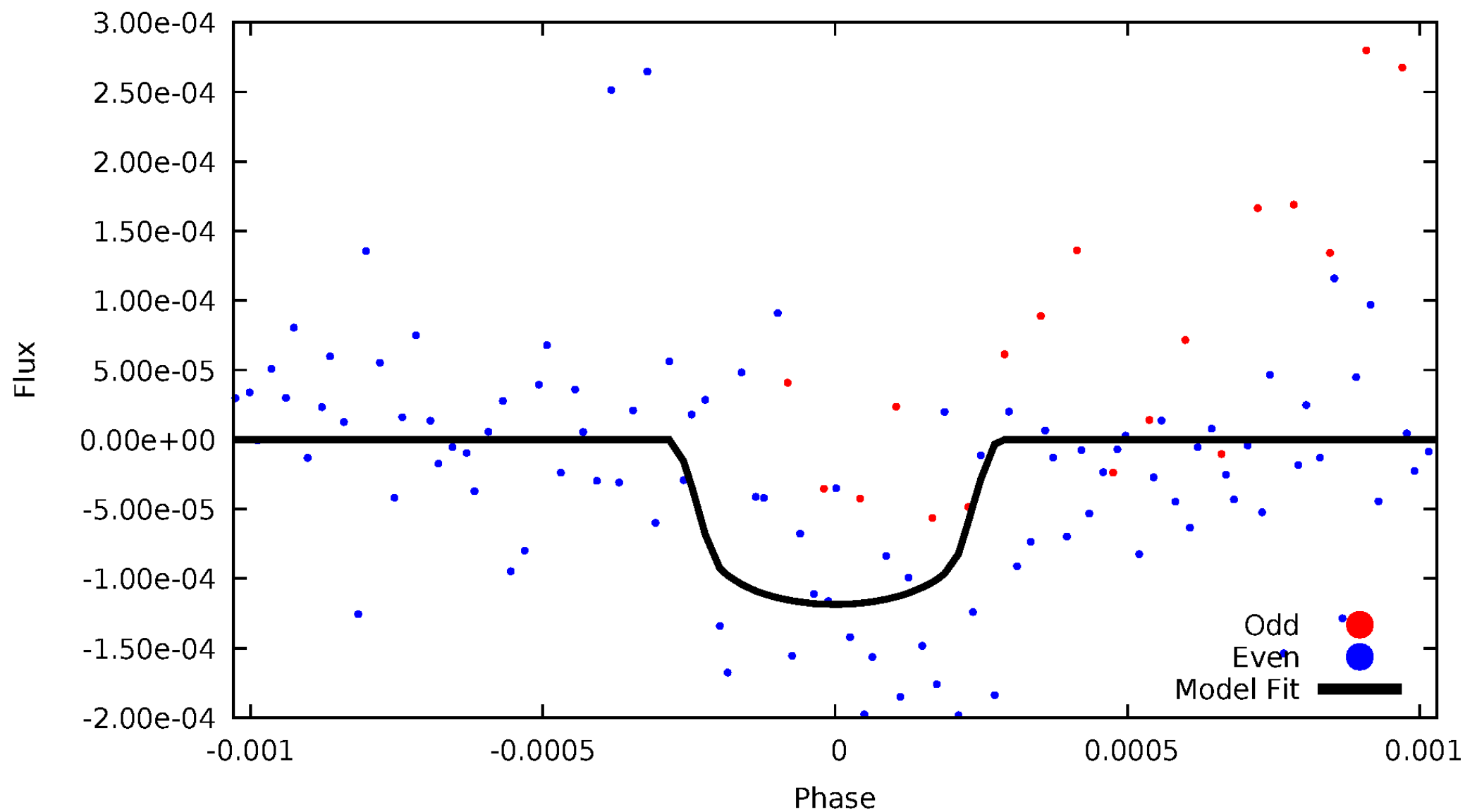


TCE 006345835-01



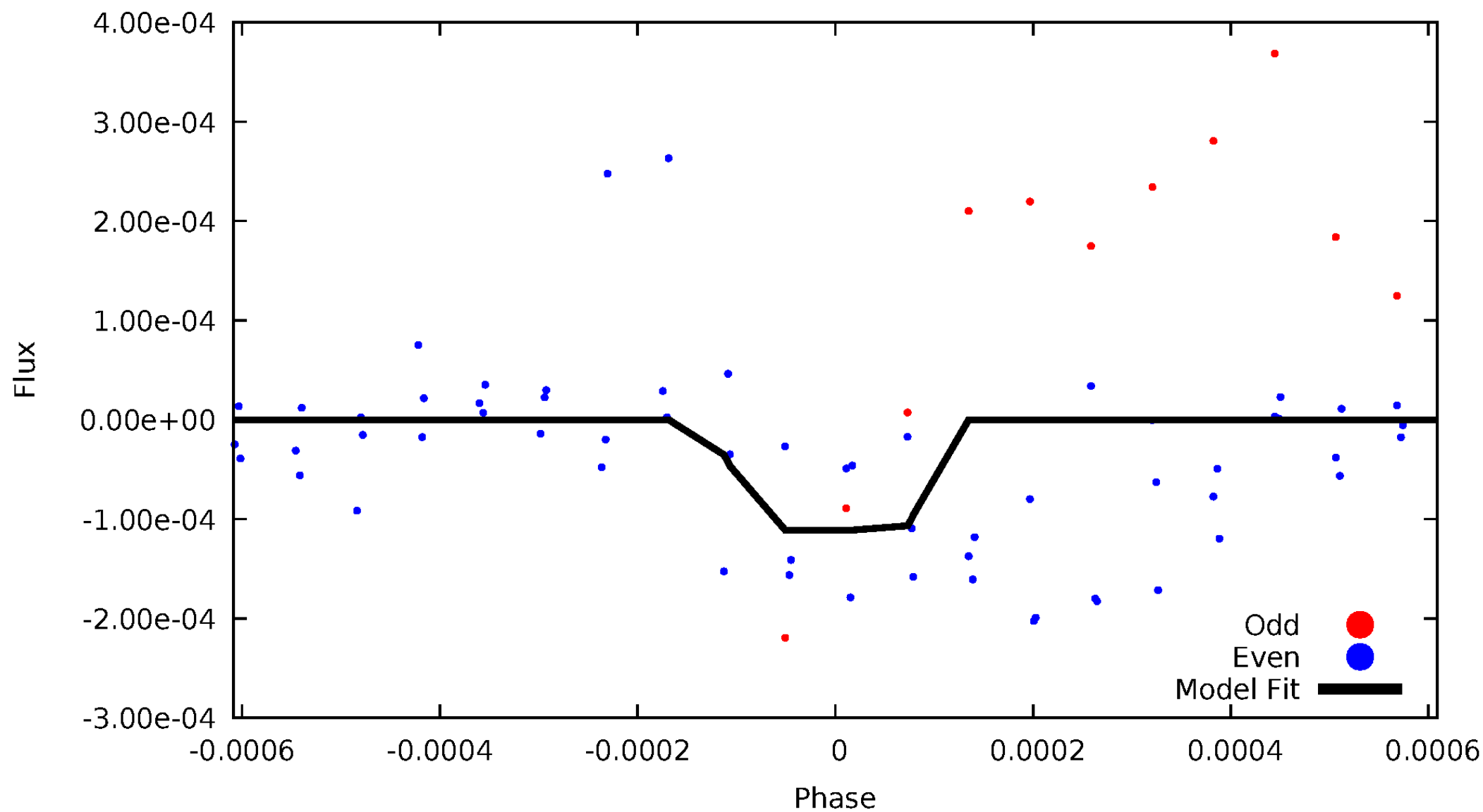
DV Odd/Even

TCE 006345835-01



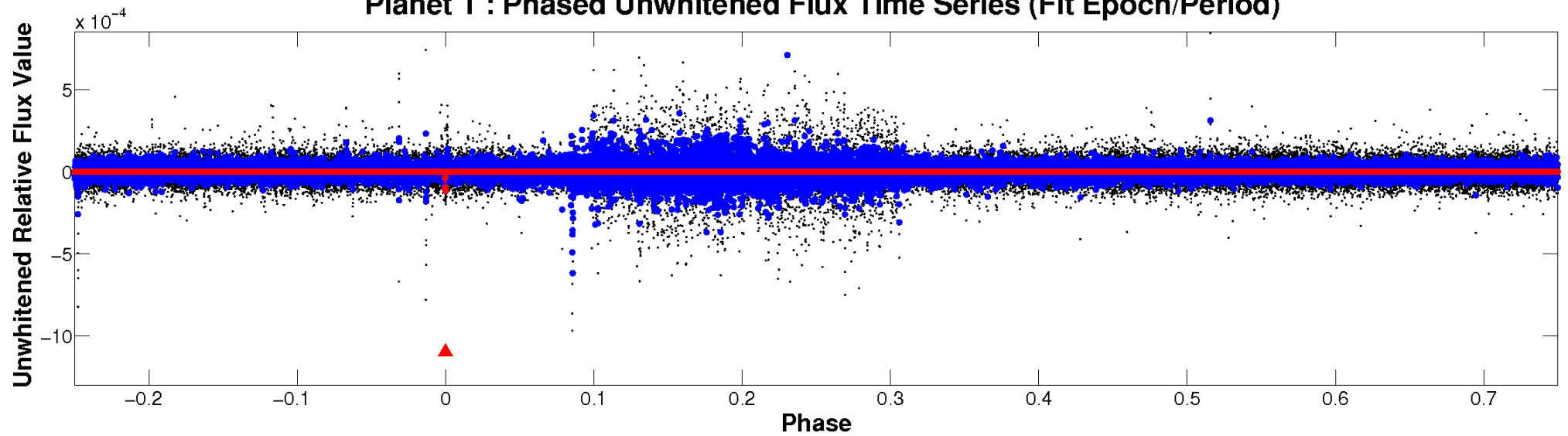
ALT Odd/Even

TCE 006345835-01

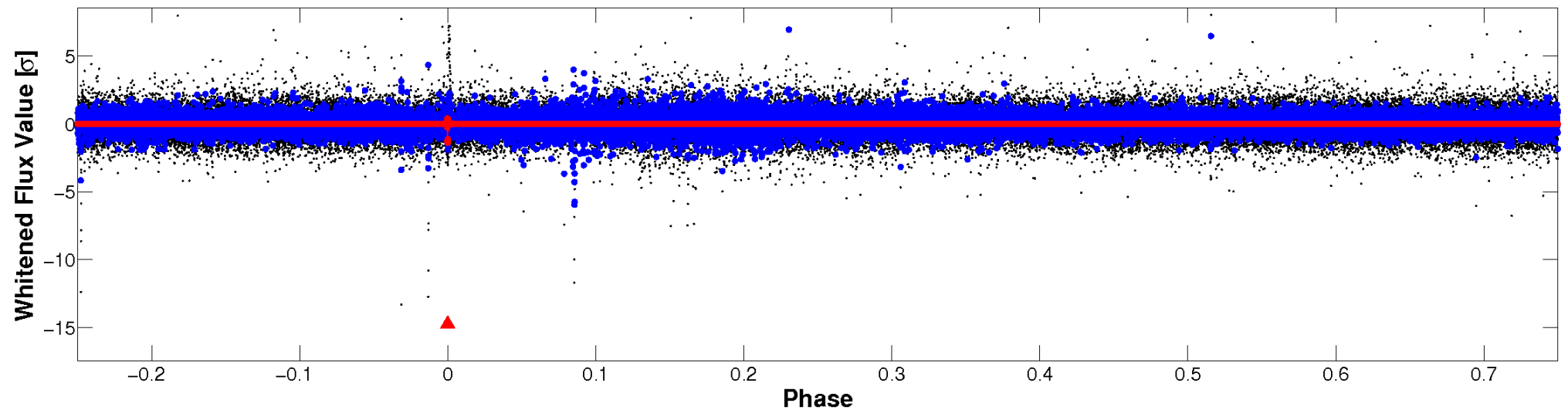


Non-Whitened Vs. Whitened Light Curve

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

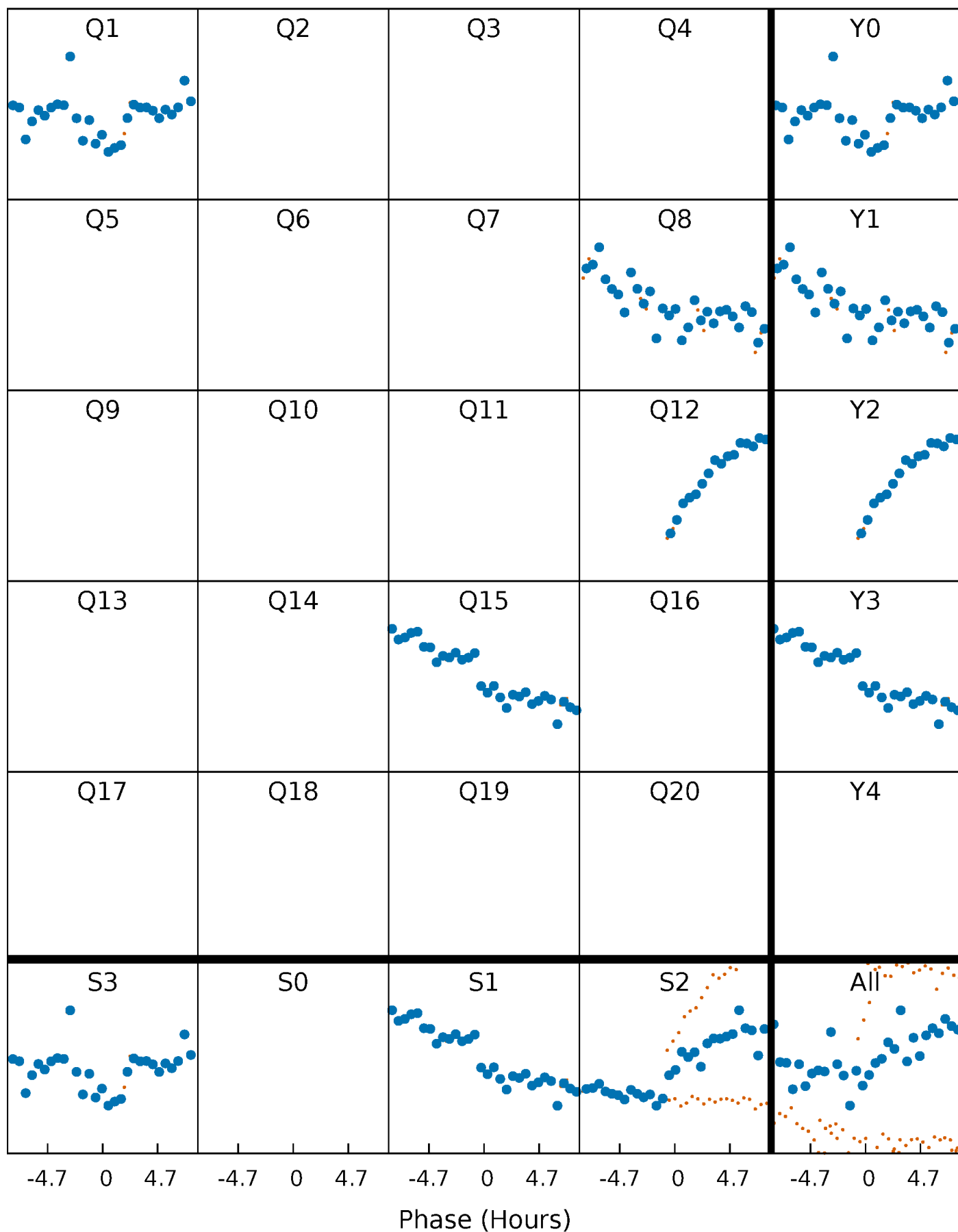


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



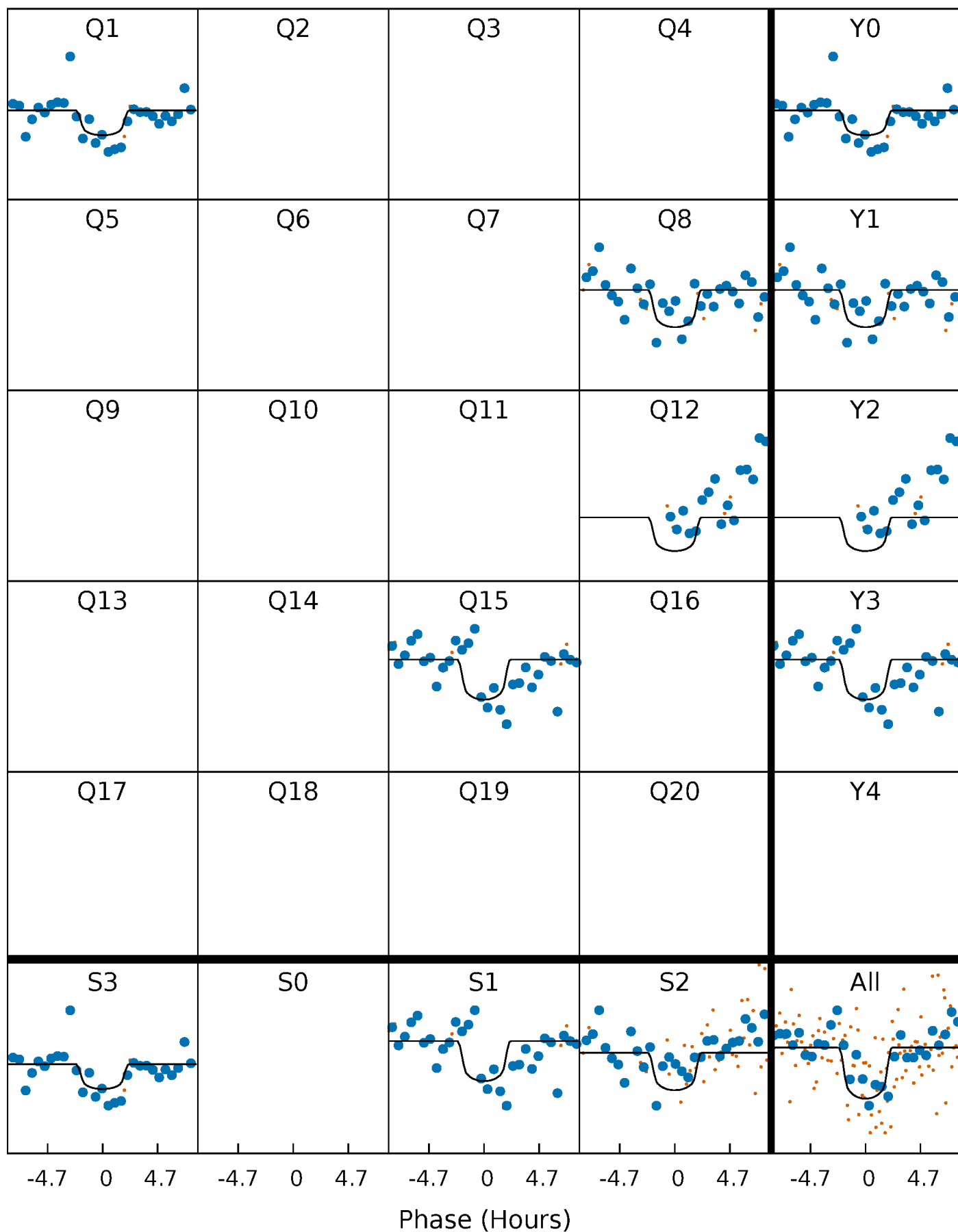
PDC Quarter-Phased Transit Curves

TCE 006345835-01 P=330.254184 Days $T_0=135.910136$ (BKJD)



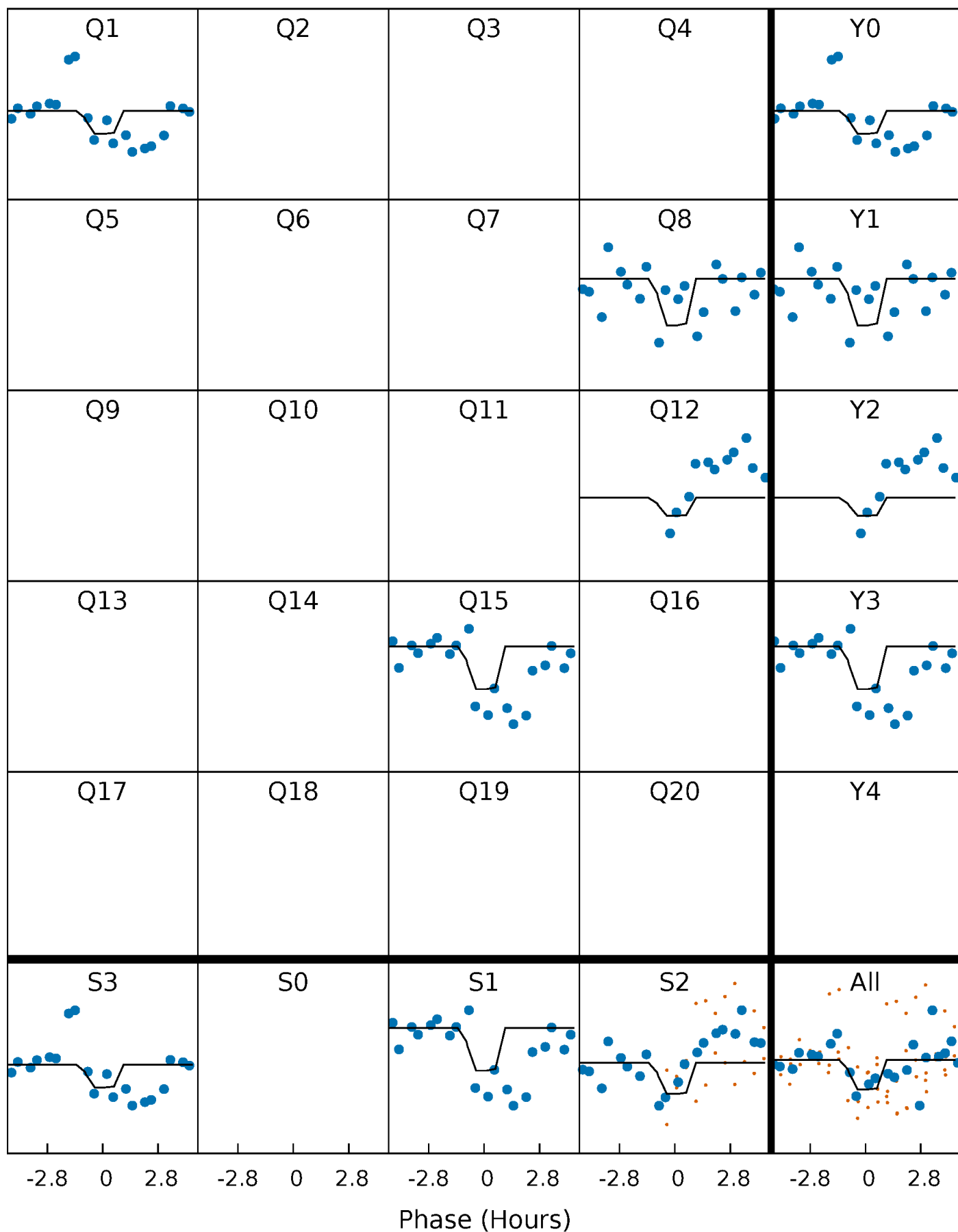
DV Quarter-Phased Transit Curves

TCE 006345835-01 P=330.254184 Days $T_0=135.910136$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

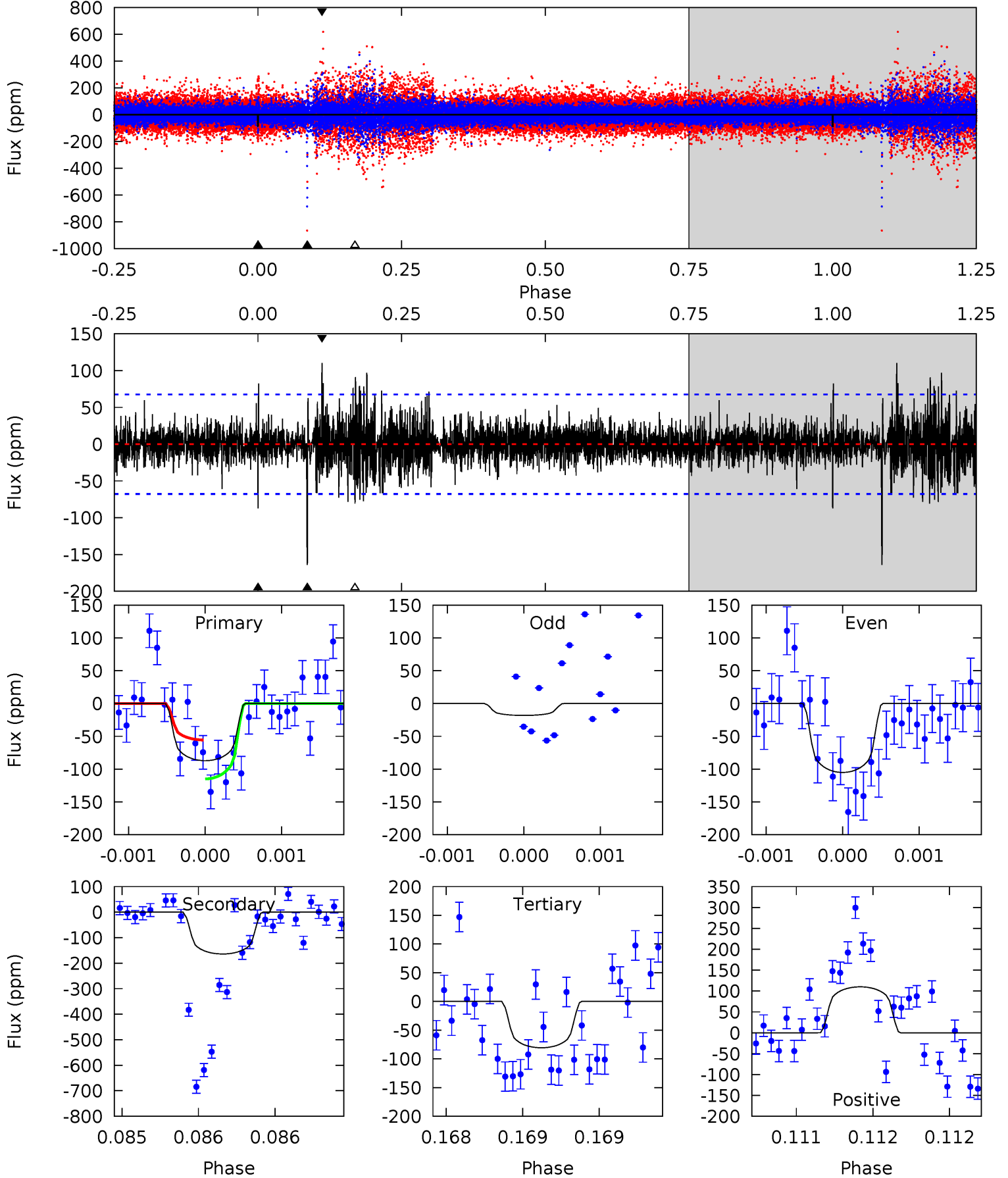
TCE 006345835-01 P=330.267630 Days $T_0=135.859732$ (BKJD)



DV Model-Shift Uniqueness Test

006345835-01, P = 330.254184 Days, E = 135.910136 Days

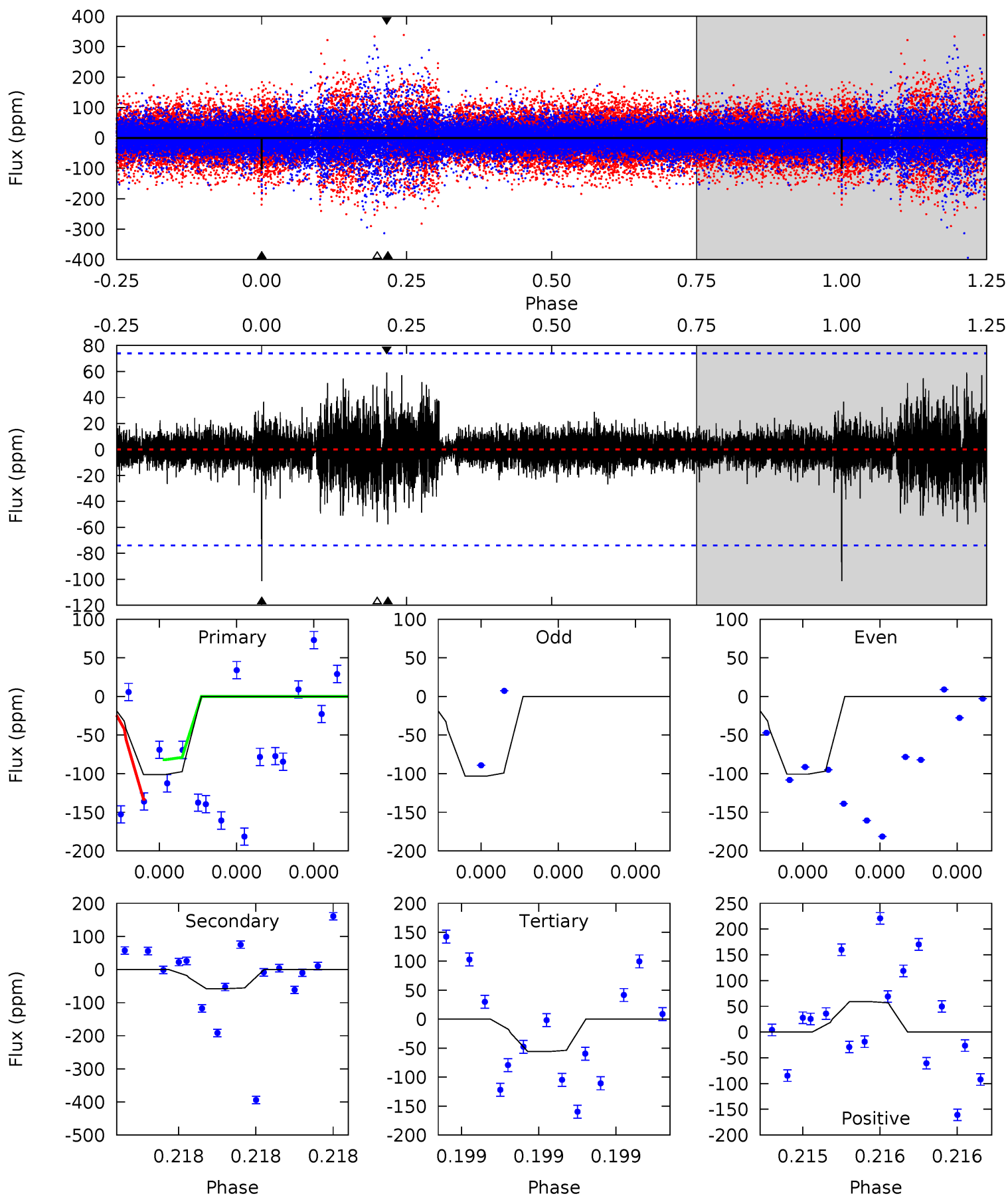
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
7.16	13.5	6.63	9.04	5.56	3.46	1.43	0.53	-1.88	6.85	4.43	2.98	1.07	0.40	2.40



Alt Model-Shift Uniqueness Test

006345835-01, P = 330.267630 Days, E = 135.859732 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
7.80	4.44	4.30	4.55	5.69	3.66	0.70	3.50	3.25	0.14	-0.11	0.09	0.93	0.37	1.94



Stellar Parameters For KIC 006345835

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (g \cdot \text{cm}^{-3})$
	3703^{+116}_{-155}	$4.762^{+0.097}_{-0.045}$	$0.070^{+0.250}_{-0.300}$	$0.497^{+0.052}_{-0.105}$	$0.520^{+0.048}_{-0.104}$	$5.969^{+3.605}_{-1.261}$
	+3%/-4%	+2%/-1%	+357%/-429%	+10%/-21%	+9%/-20%	+60%/-21%
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 006345835-01 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	-164 ± 12	$0.76^{+0.57}_{-0.45}$	183^{+8}_{-9}	3548^{+1455}_{-554}	$88456^{+434823}_{-59632}$
Alt.	-58 ± 13	$0.69^{+0.59}_{-0.42}$	183^{+7}_{-9}	3111^{+1152}_{-467}	$36230^{+216190}_{-25464}$

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

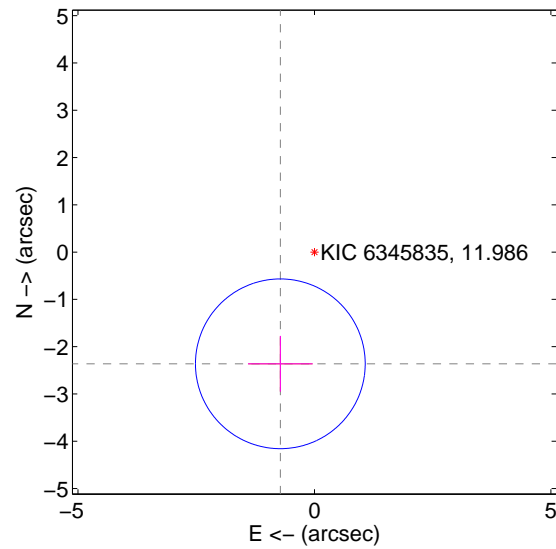
Supplemental centroid analysis for 006345835-01. **Kepler magnitude: 11.99.** Transit SNR 6.70

There are 0 quarters with good PRF difference image offsets

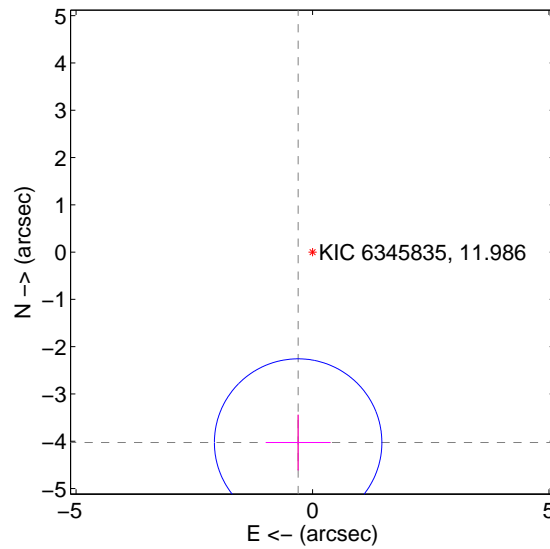
The direct PRF centroid is offset from the target star catalog position by about 1.72 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	2.470 ± 0.598	4.13	0.721 ± 0.684	-2.362 ± 0.590
PRF-fit source offset from KIC position	4.039 ± 0.590	6.84	0.304 ± 0.684	-4.027 ± 0.590
photometric centroid source offset	0.44 ± 1.27	0.34	-0.27 ± 1.25	-0.34 ± 1.29

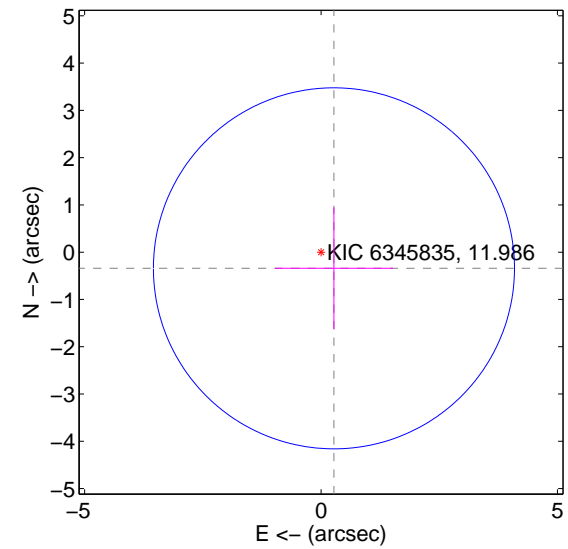
offset from difference PRF-fit to OOT PRF-fit



offset from difference PRF-fit to KIC position

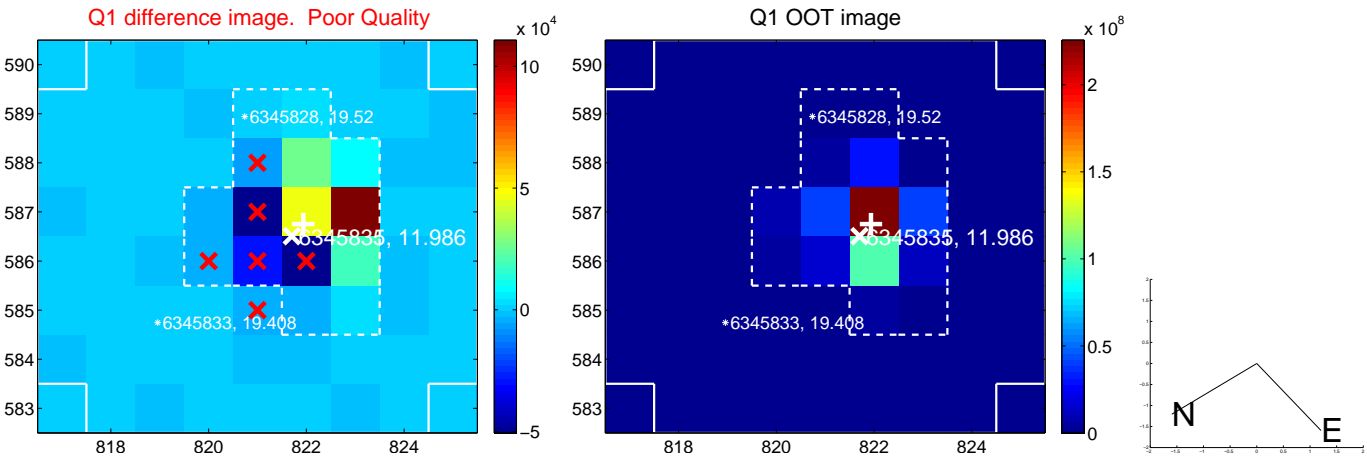


offset from photometric centroids

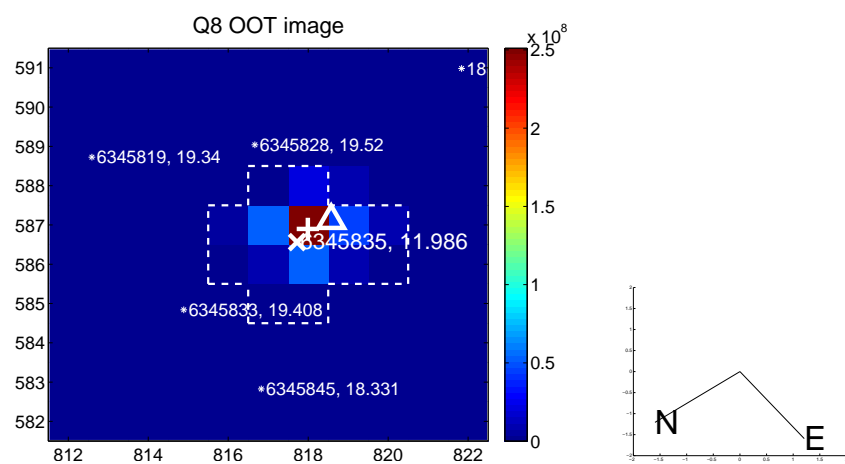
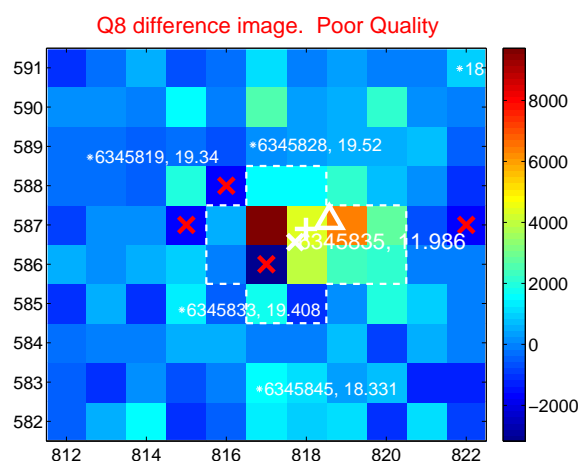
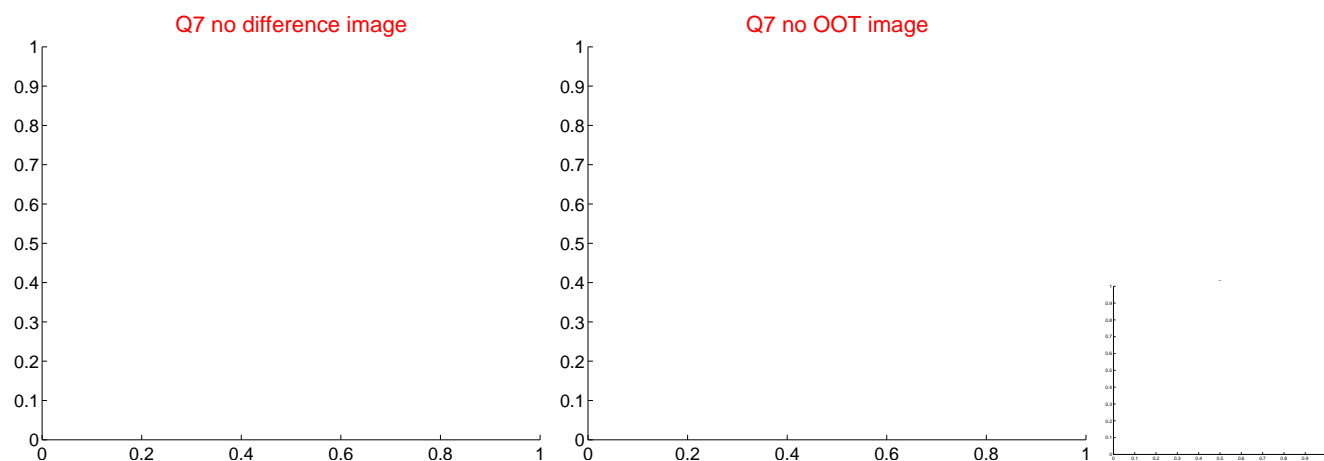
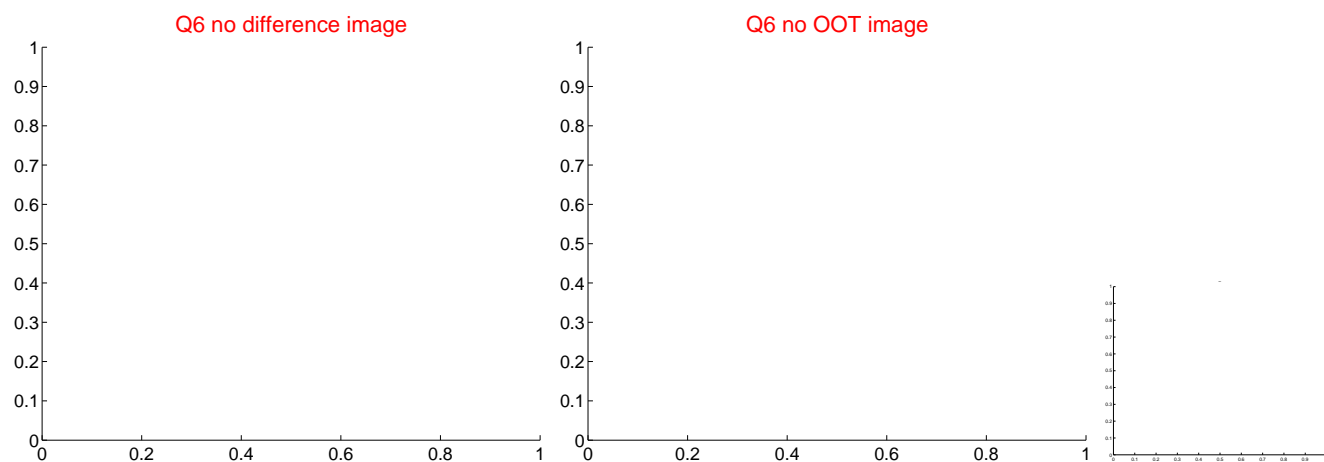
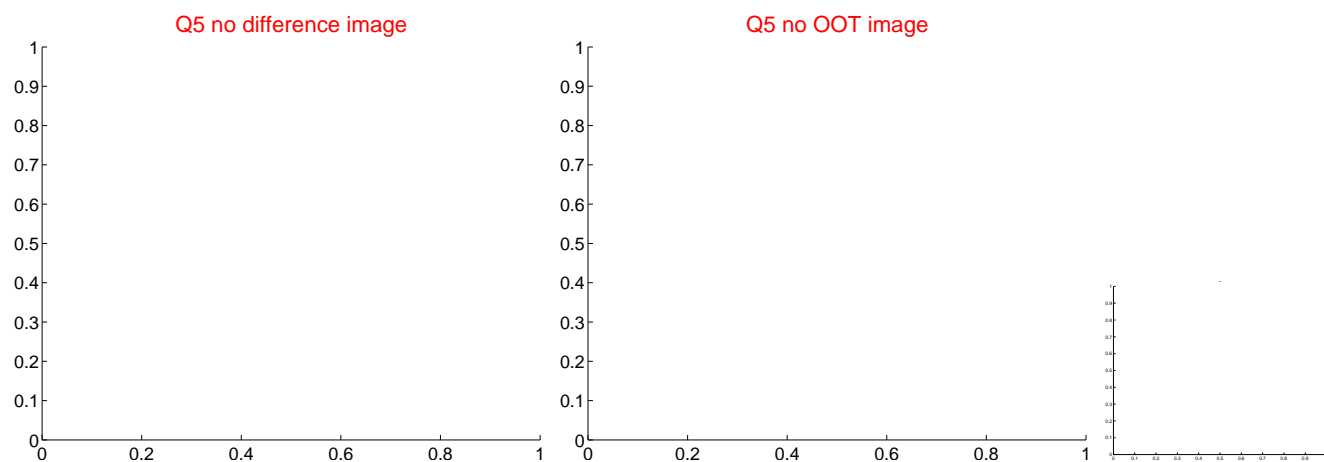


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets;** magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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



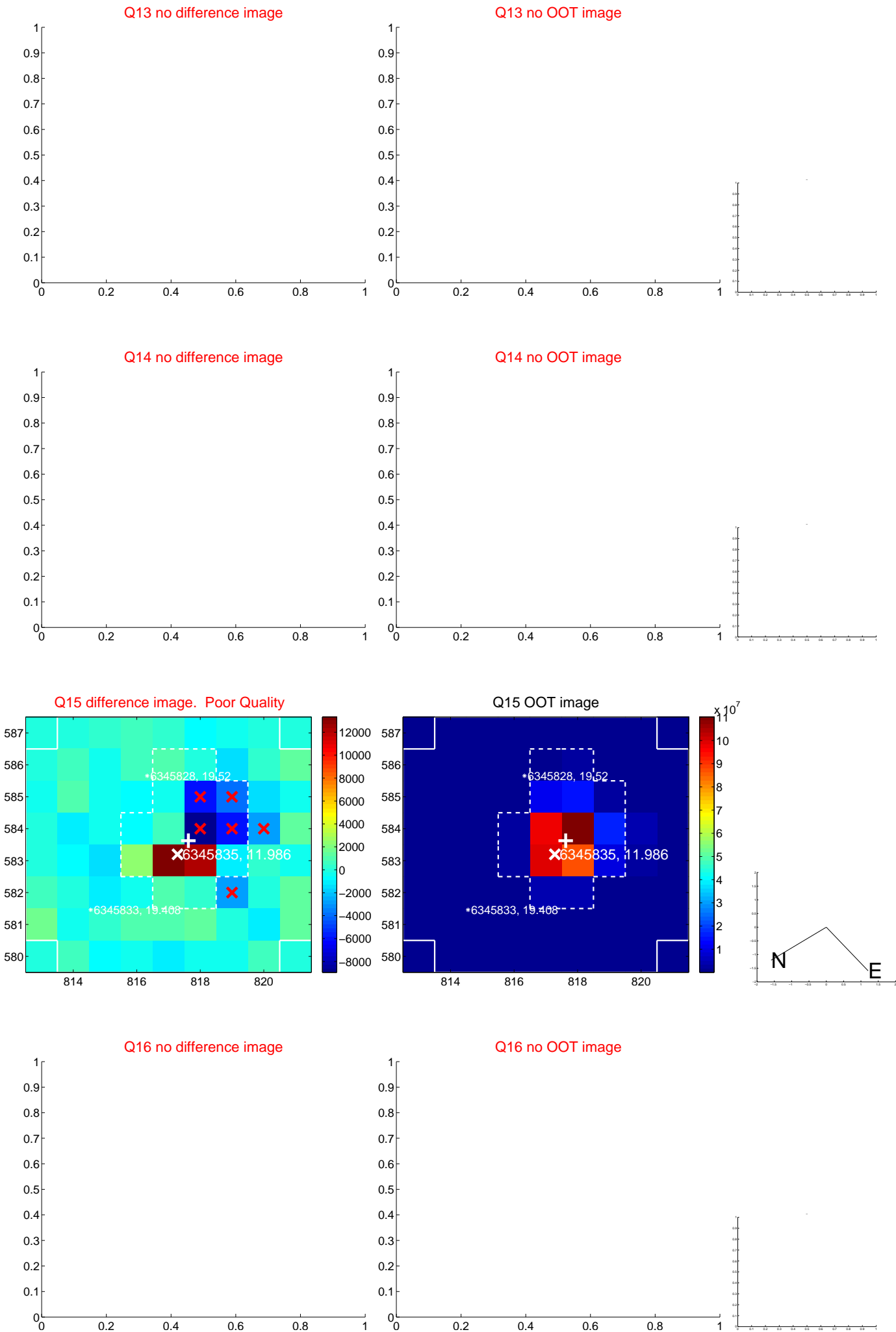
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value



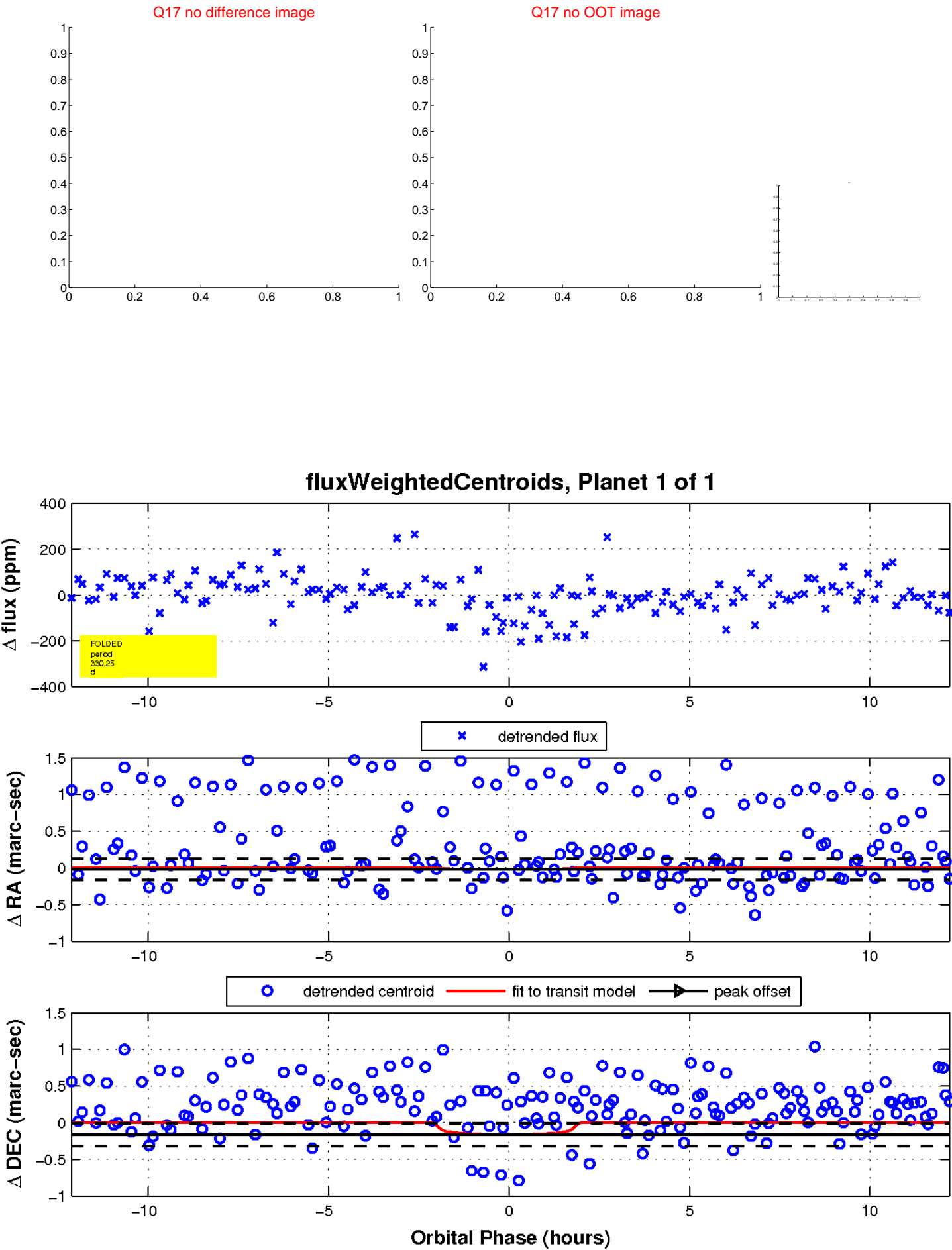
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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



UKIRT Image

Declination

