

KIC 006308036

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})
006308036-01	OBS	No	426.456226	269.389977	204.8	7.111	7.3	7.6	0.91	5522	1.44	0.57

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
006308036-01	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_CHASES_MARSHALL—ALL_TRANS_CHASES—MOD_NONUNIQ_ALT—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.

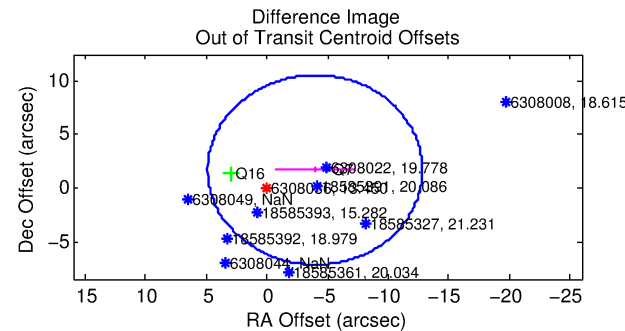
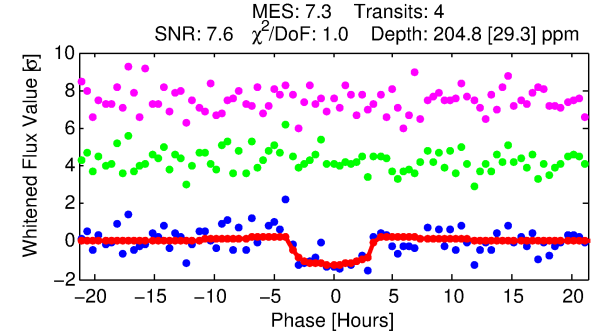
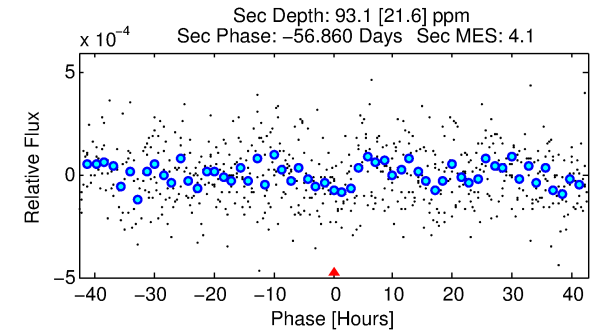
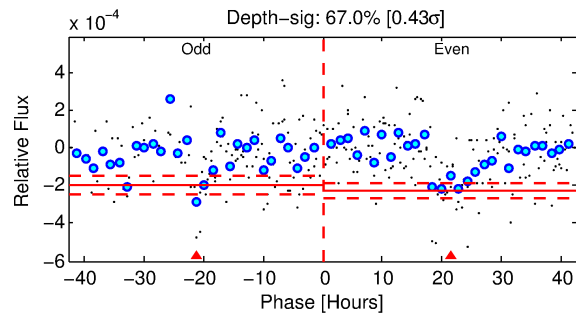
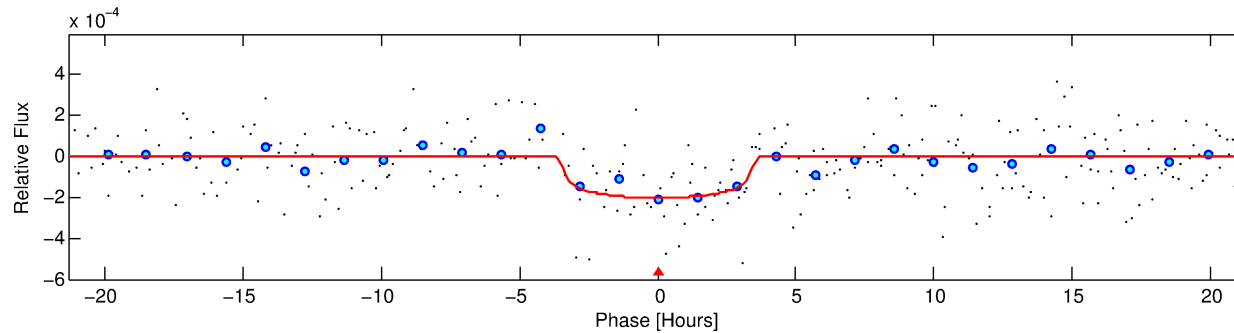
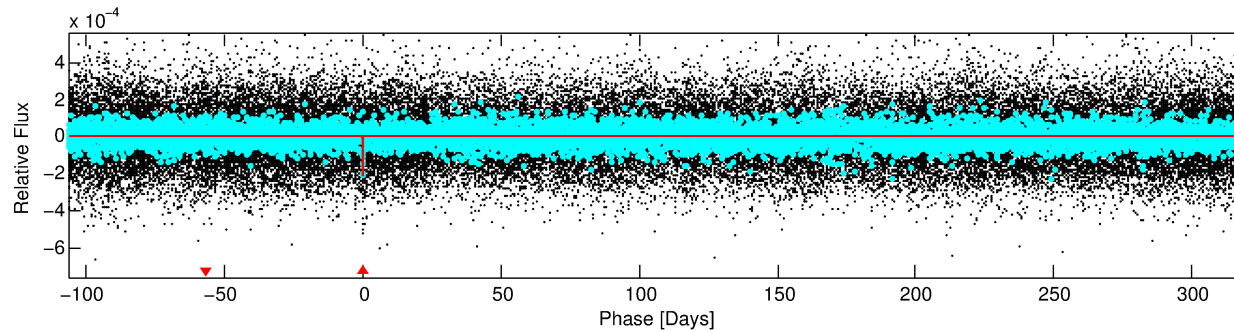
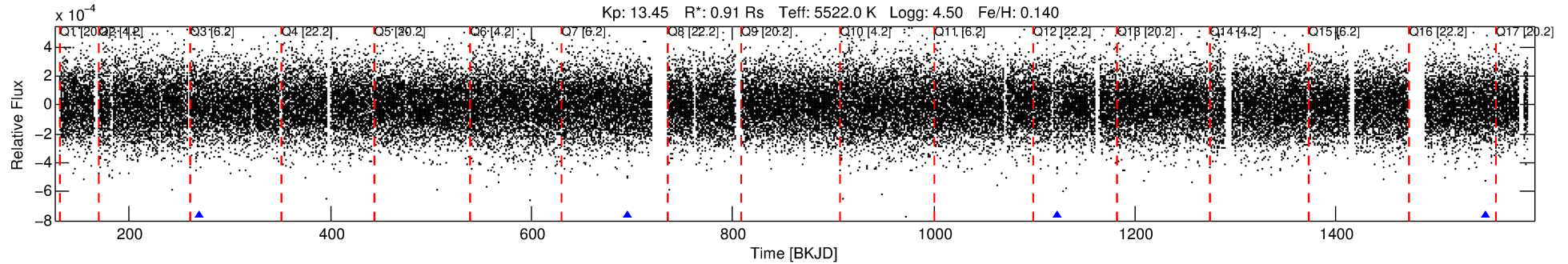
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 006308036-01

No Significant Match Found

DV One-Page Summary

KIC: 6308036 Candidate: 1 of 1 Period: 426.456 d



DV Fit Results:

Period = 426.45623 [0.00756] d
Epoch = 269.3900 [0.0148] BKJD
Rp/R* = 0.0146 [0.0108]
a/R* = 288.61 [887.30]
b = 0.80 [1.44]
Seff = 0.57 [0.19]
Teq = 222 [19] K
Rp = 1.44 [1.13] Re
a = 1.0924 [0.2396] AU
Ag = 29538.07 [45442.71] [0.65σ]
Teffp = 4494 [1697] K [2.52σ]

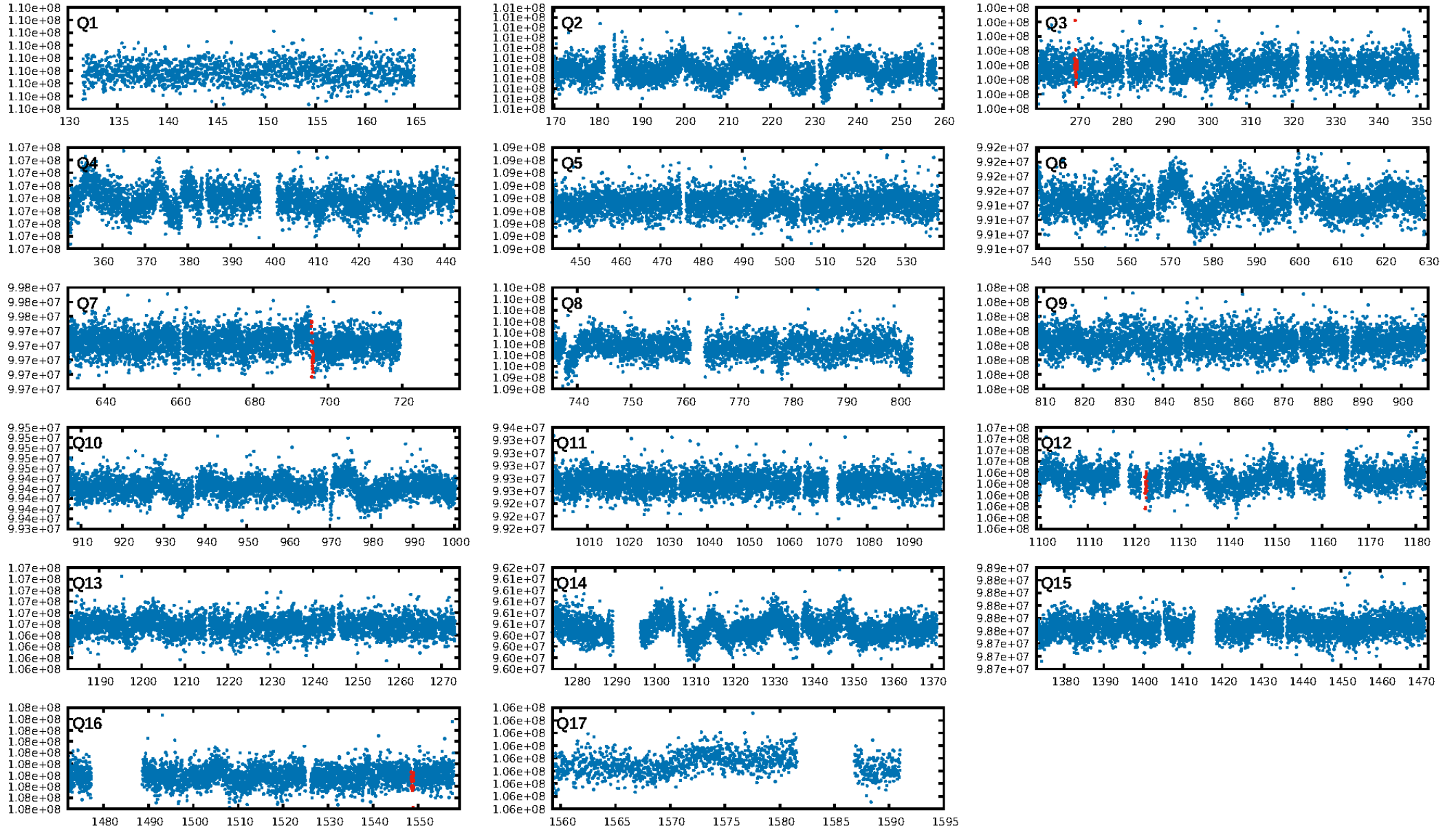
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: 38.7%
ModelChiSquareGof-sig: 100.0%
Bootstrap-pfa: 8.78e-11
RollingBand-fgt: 1.00 [4/4]
GhostDiagnostic-chr: 8.259
Centroid-sig: 36.7%
Centroid-so: 1.775 arcsec [1.06σ]
OotOffset-rm: 4.320 arcsec [1.46σ]
OotOffset-st: 0/1/1/0 [2]
KicOffset-rm: 4.110 arcsec [1.35σ]
KicOffset-st: 0/1/1/0 [2]
DiffImageQuality-fgm: 0.50 [1/2]
DiffImageOverlap-fno: 1.00 [3/3]

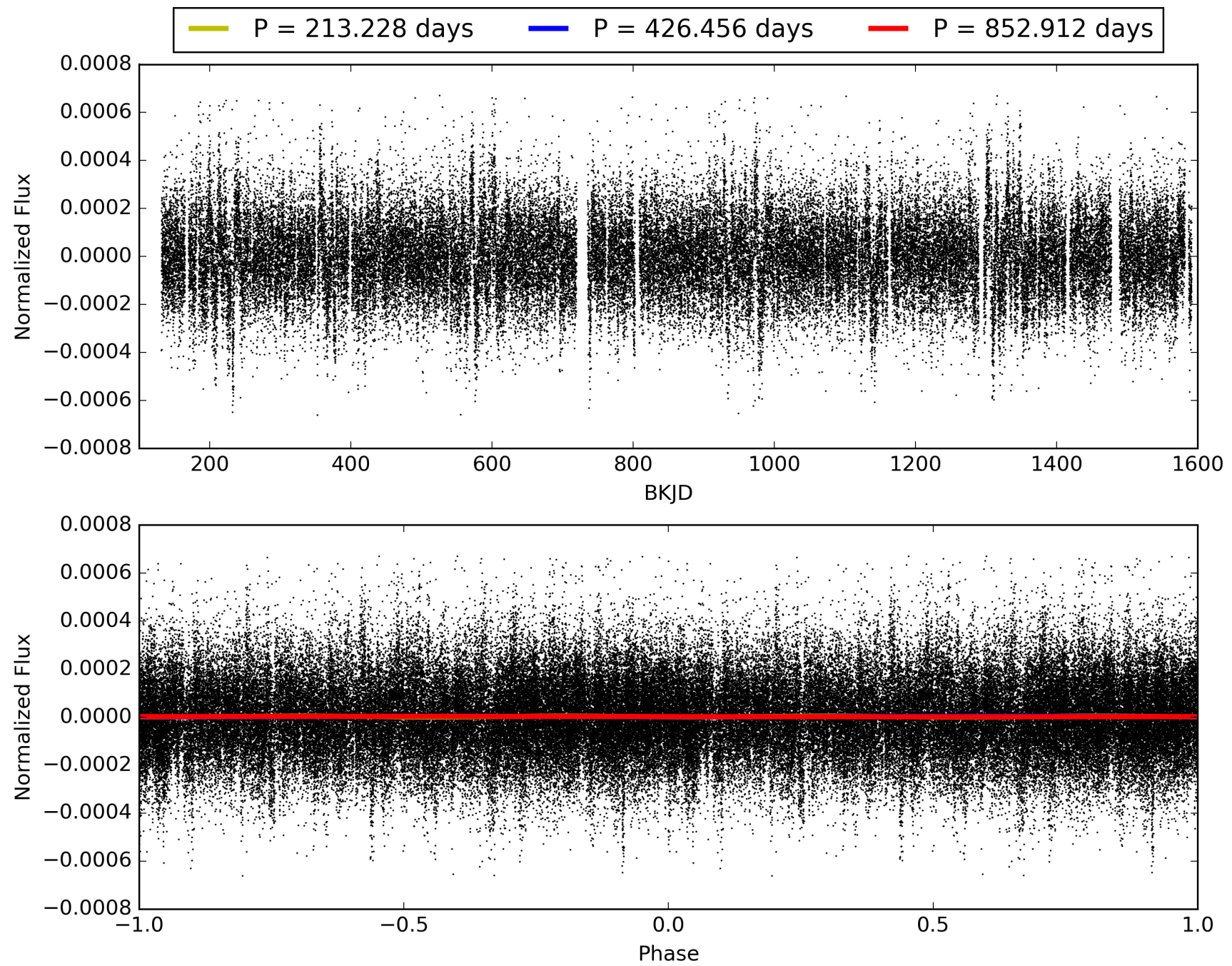
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 29-Jan-2016 19:49:31 Z

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

TCE 006308036-01, PDC Light Curves

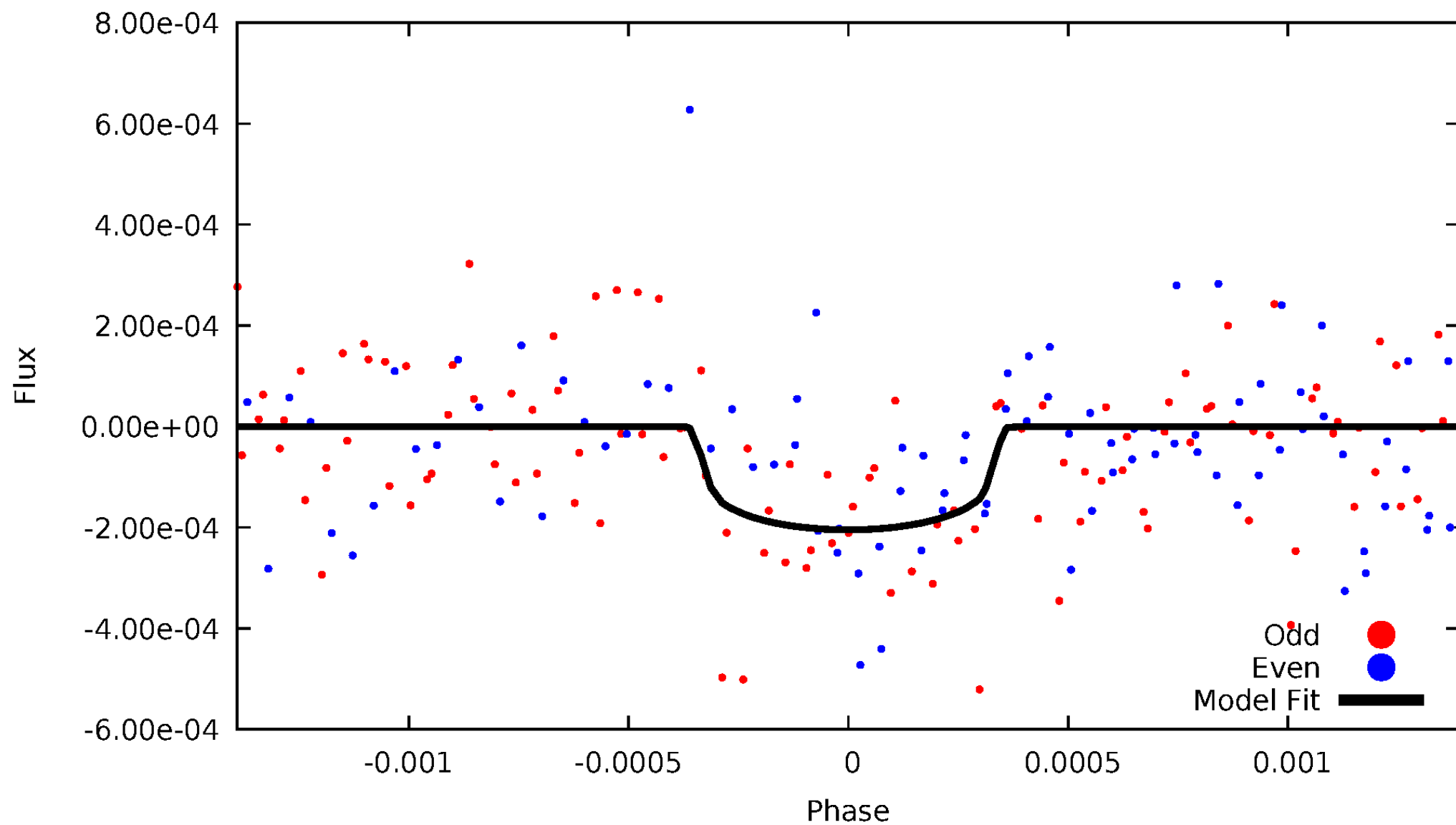


TCE 006308036-01



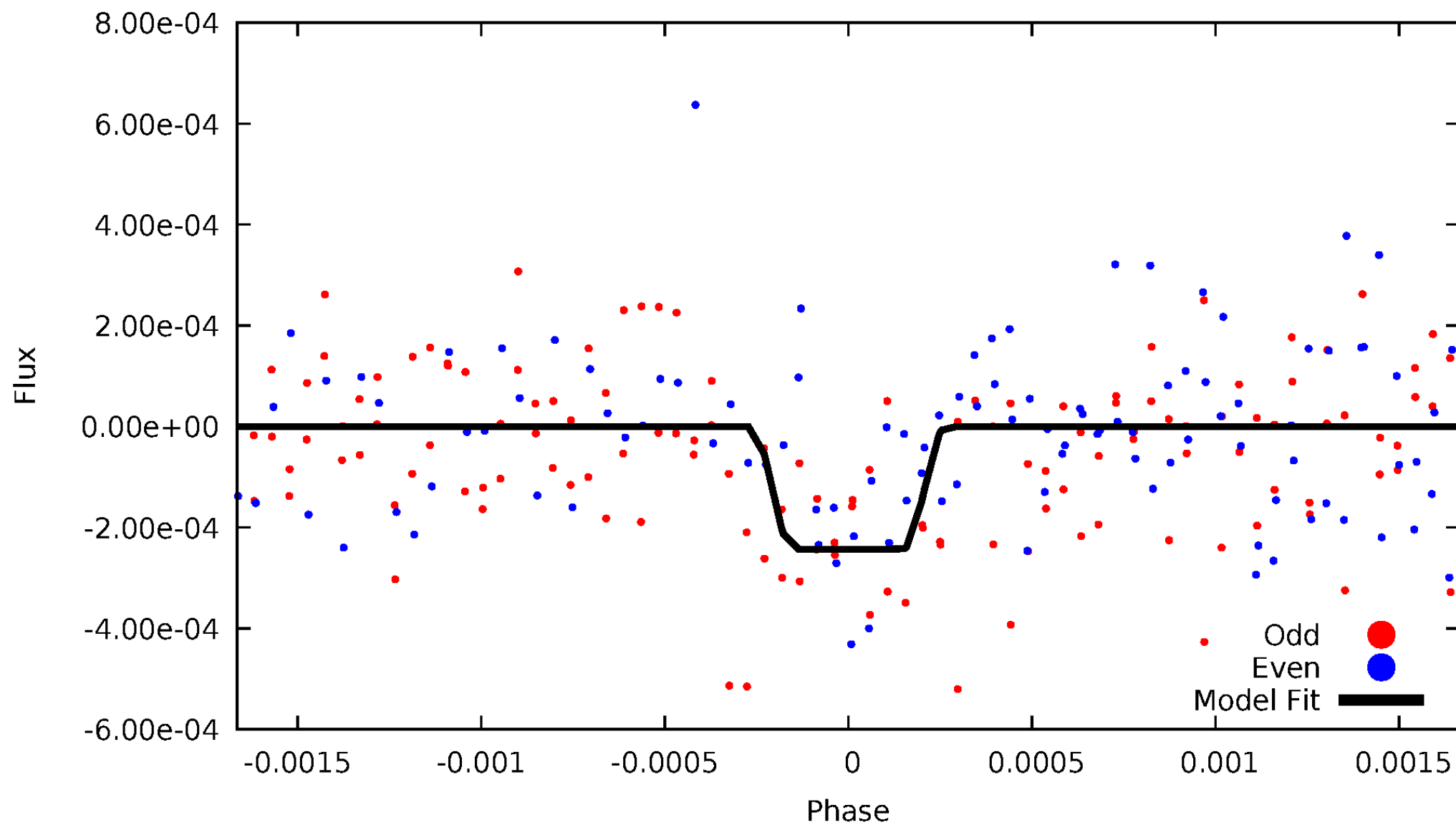
DV Odd/Even

TCE 006308036-01



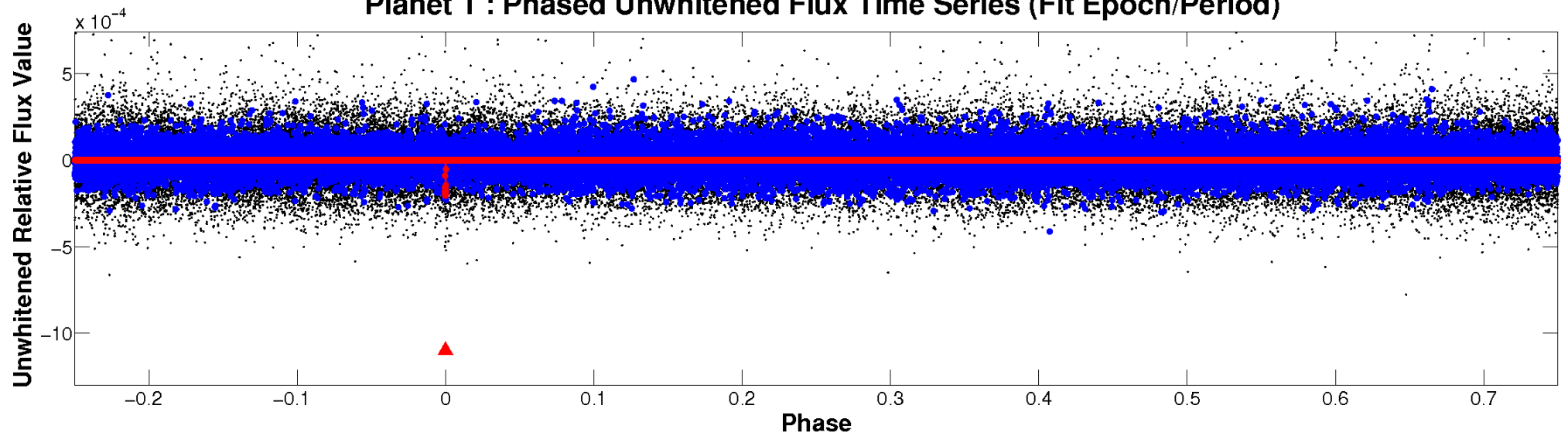
ALT Odd/Even

TCE 006308036-01

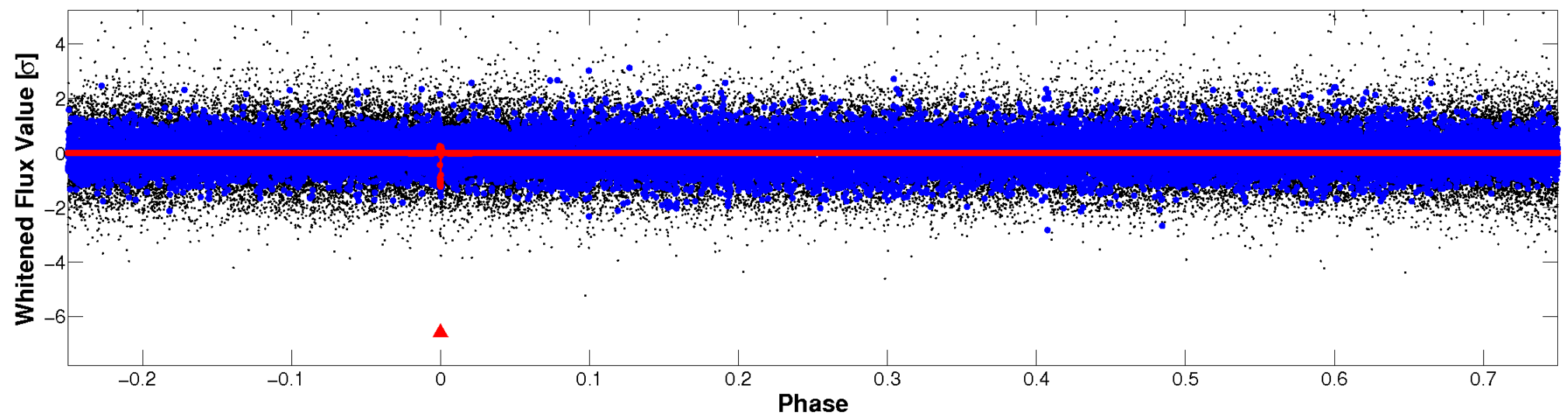


Non-Whitened Vs. Whitened Light Curve

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

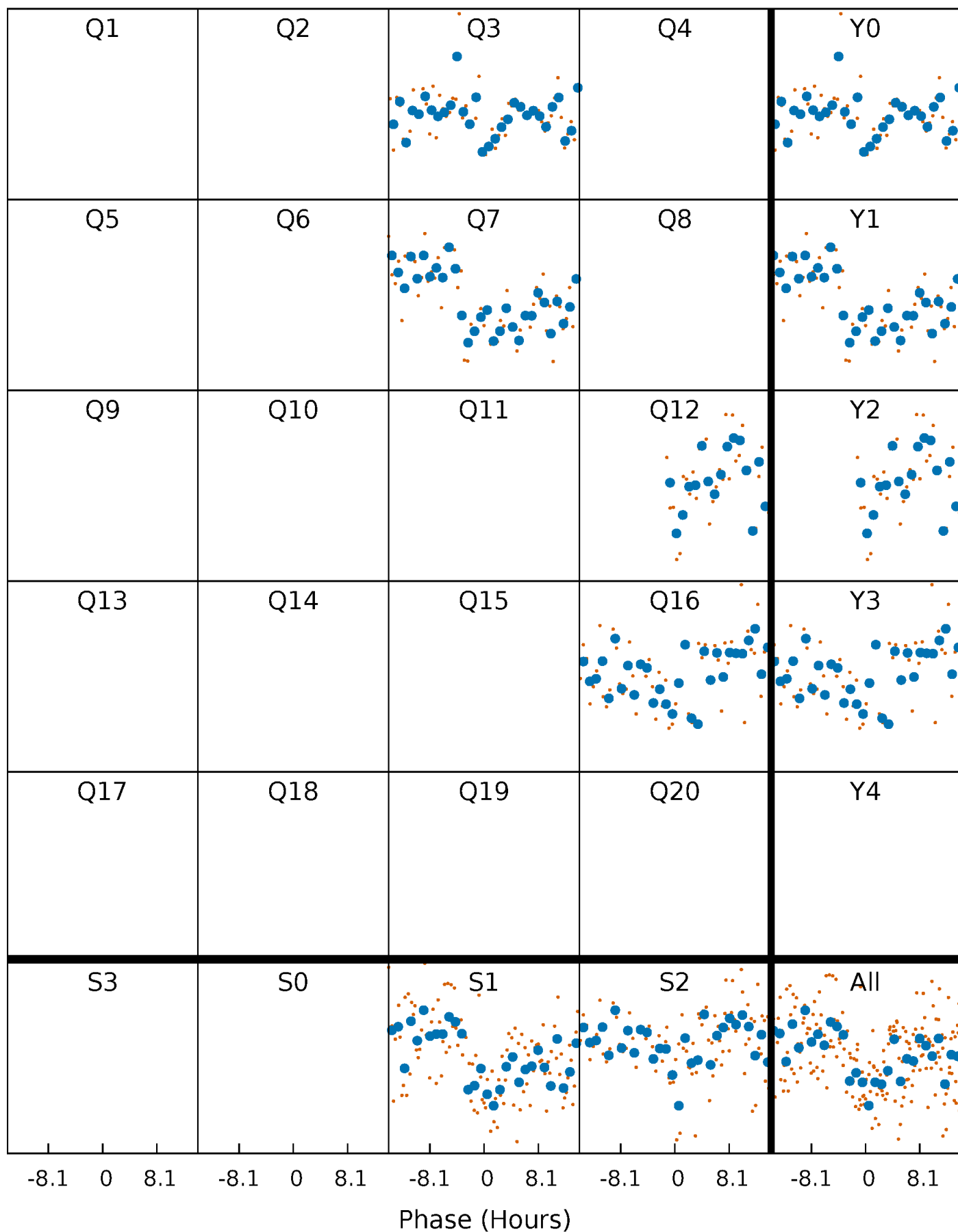


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



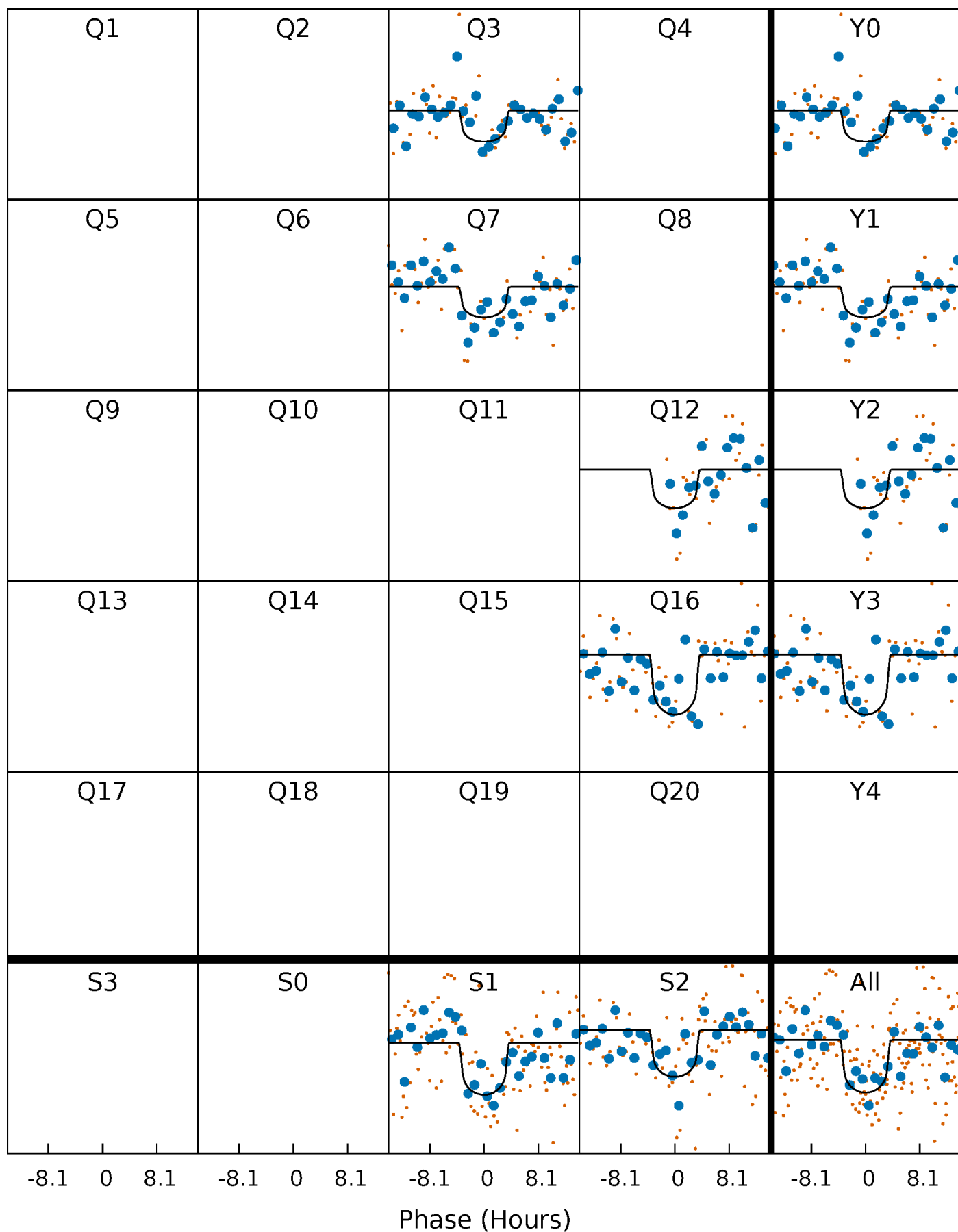
PDC Quarter-Phased Transit Curves

TCE 006308036-01 P=426.456226 Days $T_0=269.389977$ (BKJD)



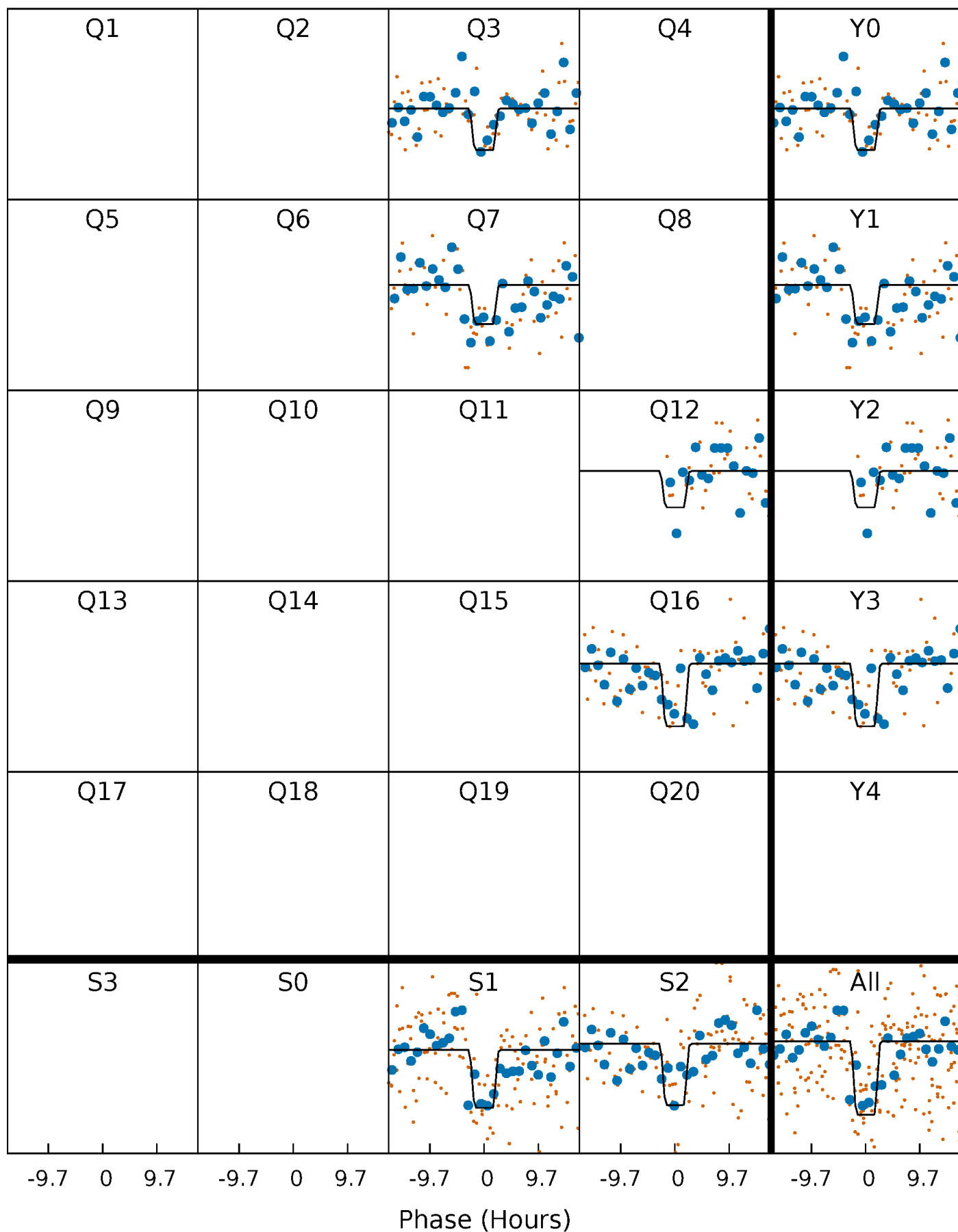
DV Quarter-Phased Transit Curves

TCE 006308036-01 P=426.456226 Days $T_0=269.389977$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

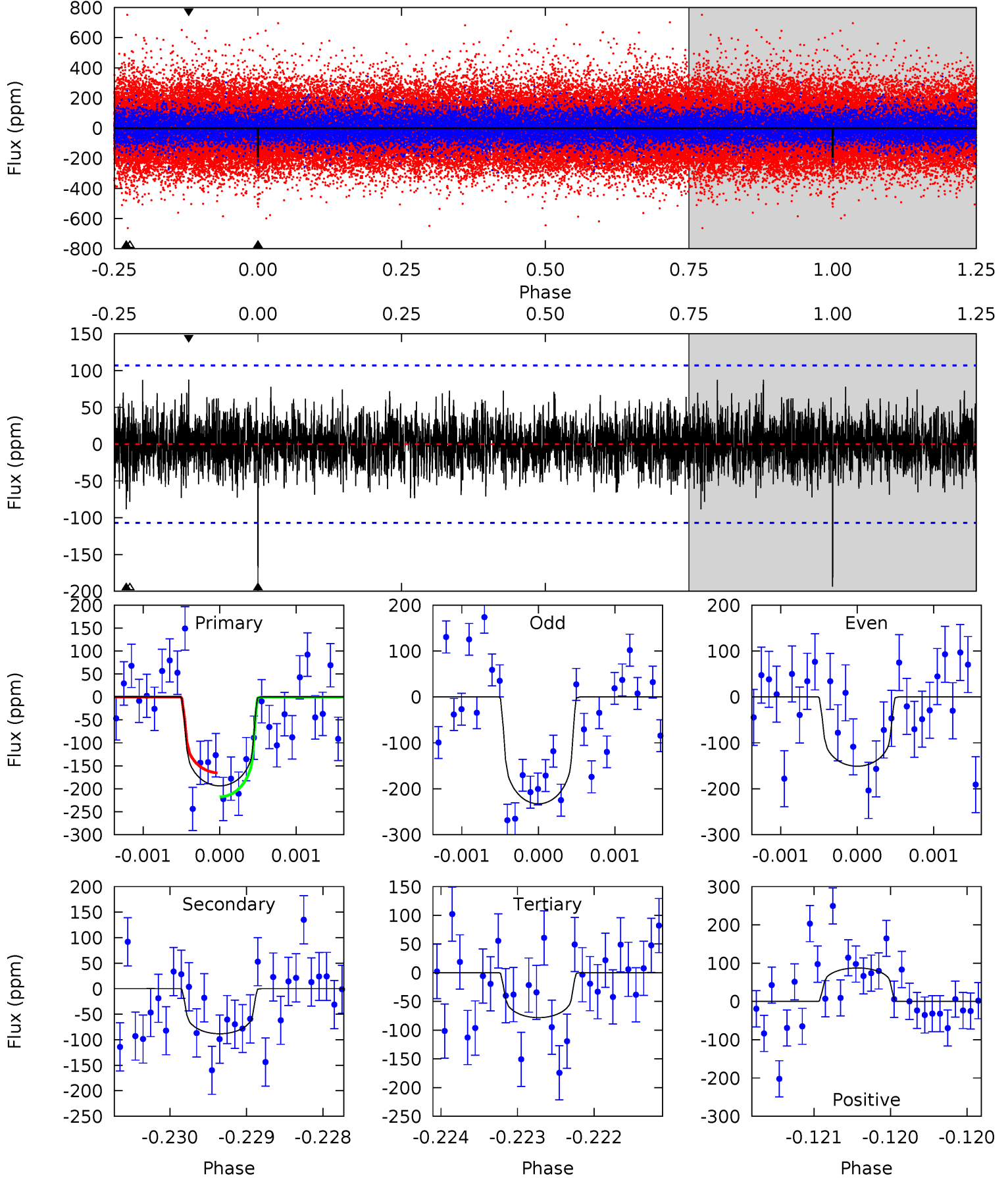
TCE 006308036-01 P=426.448397 Days $T_0=269.413701$ (BKJD)



DV Model-Shift Uniqueness Test

006308036-01, P = 426.456226 Days, E = 269.389977 Days

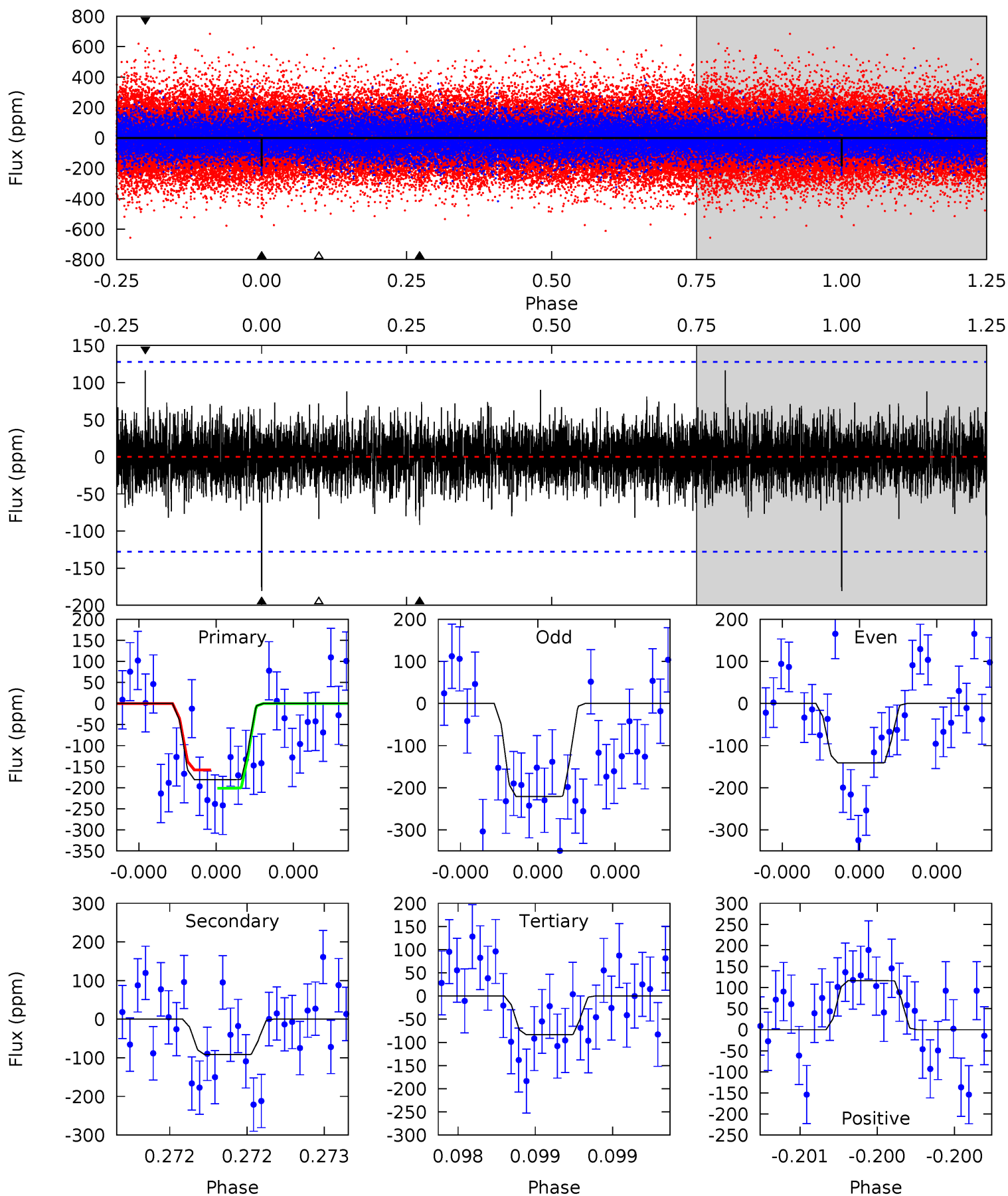
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
9.97	4.55	4.03	4.51	5.51	3.38	1.21	5.94	5.46	0.52	0.04	2.11	1.05	0.31	1.33



Alt Model-Shift Uniqueness Test

006308036-01, P = 426.448397 Days, E = 269.413701 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
7.89	3.99	3.65	5.08	5.58	3.49	1.02	4.25	2.81	0.34	-1.09	1.77	1.21	0.39	0.93



Stellar Parameters For KIC 006308036

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (g \cdot \text{cm}^{-3})$
	5522^{+166}_{-166}	$4.505^{+0.058}_{-0.173}$	$0.140^{+0.250}_{-0.300}$	$0.905^{+0.237}_{-0.095}$	$0.955^{+0.084}_{-0.092}$	$1.815^{+0.411}_{-0.827}$
	+3%/-3%	+1%/-4%	+179%/-214%	+26%/-10%	+9%/-10%	+23%/-46%
Source	PHO1	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 006308036-01 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	-88 ± 19	$1.59^{+1.07}_{-0.92}$	313^{+22}_{-15}	4493^{+2034}_{-804}	$22966^{+108233}_{-15206}$
Alt.	-91 ± 23	$1.79^{+0.98}_{-1.01}$	316^{+20}_{-16}	4296^{+1848}_{-646}	18679^{+73963}_{-11702}

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 $A_{obs} \gg 1.0$

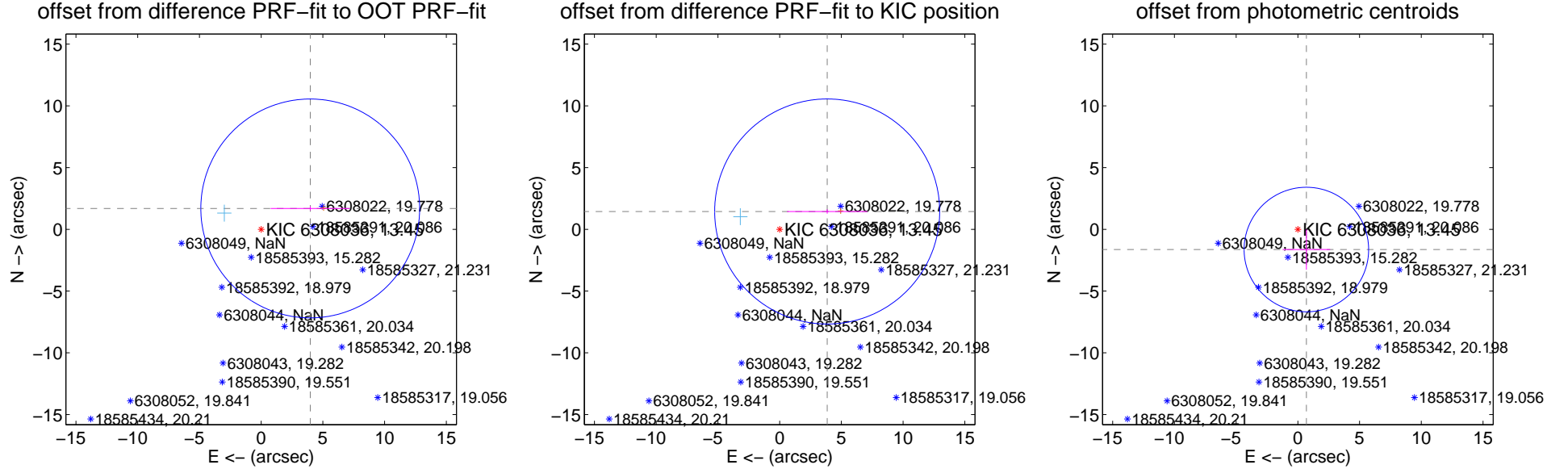
DV Centroid Data

Supplemental centroid analysis for 006308036-01. Kepler magnitude: 13.45. Transit SNR 7.56

There are 1 quarters with good PRF difference image offsets

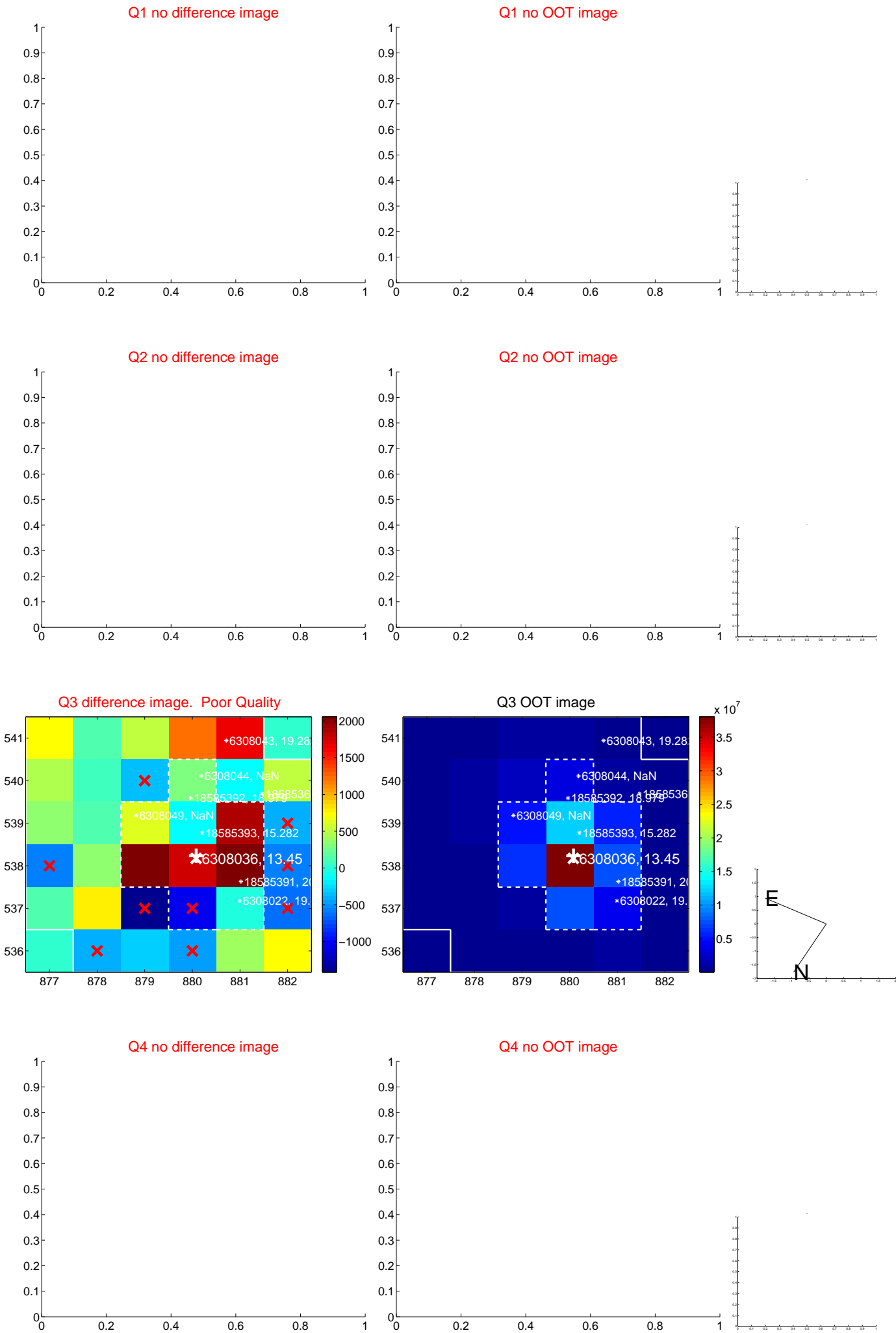
The direct PRF centroid is offset from the target star catalog position by about 0.35 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	4.320 ± 2.953	1.46	-3.975 ± 3.209	1.691 ± 0.164
PRF-fit source offset from KIC position	4.110 ± 3.037	1.35	-3.848 ± 3.243	1.444 ± 0.179
photometric centroid source offset	1.78 ± 1.68	1.06	-0.69 ± 1.92	-1.64 ± 1.63

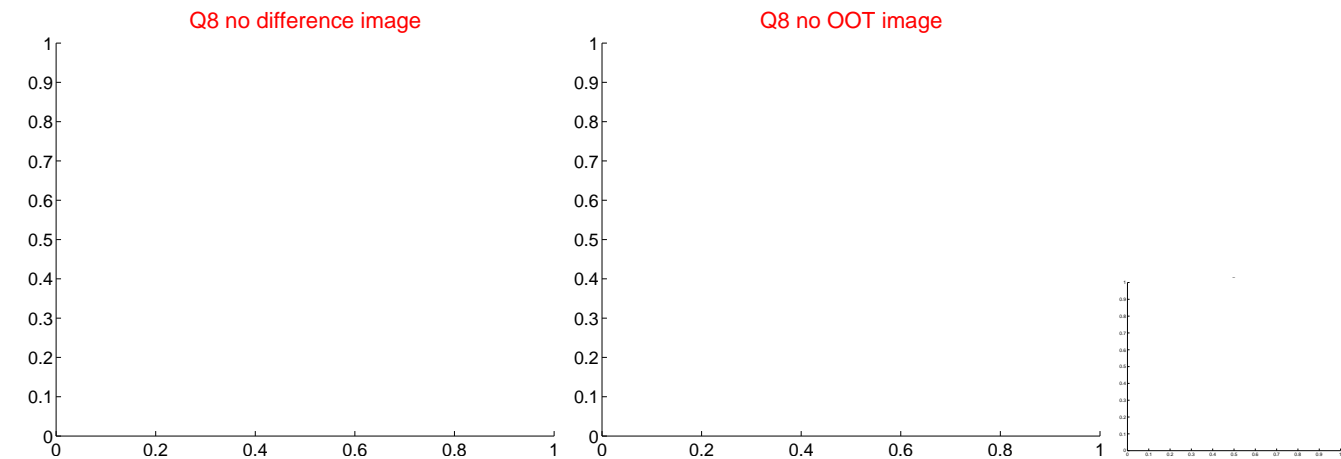
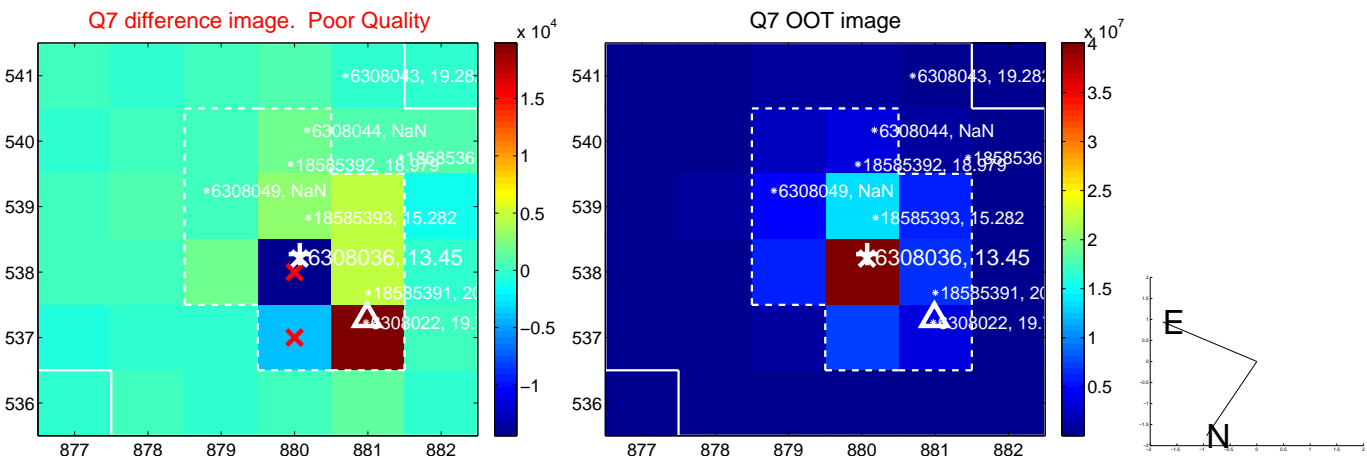


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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



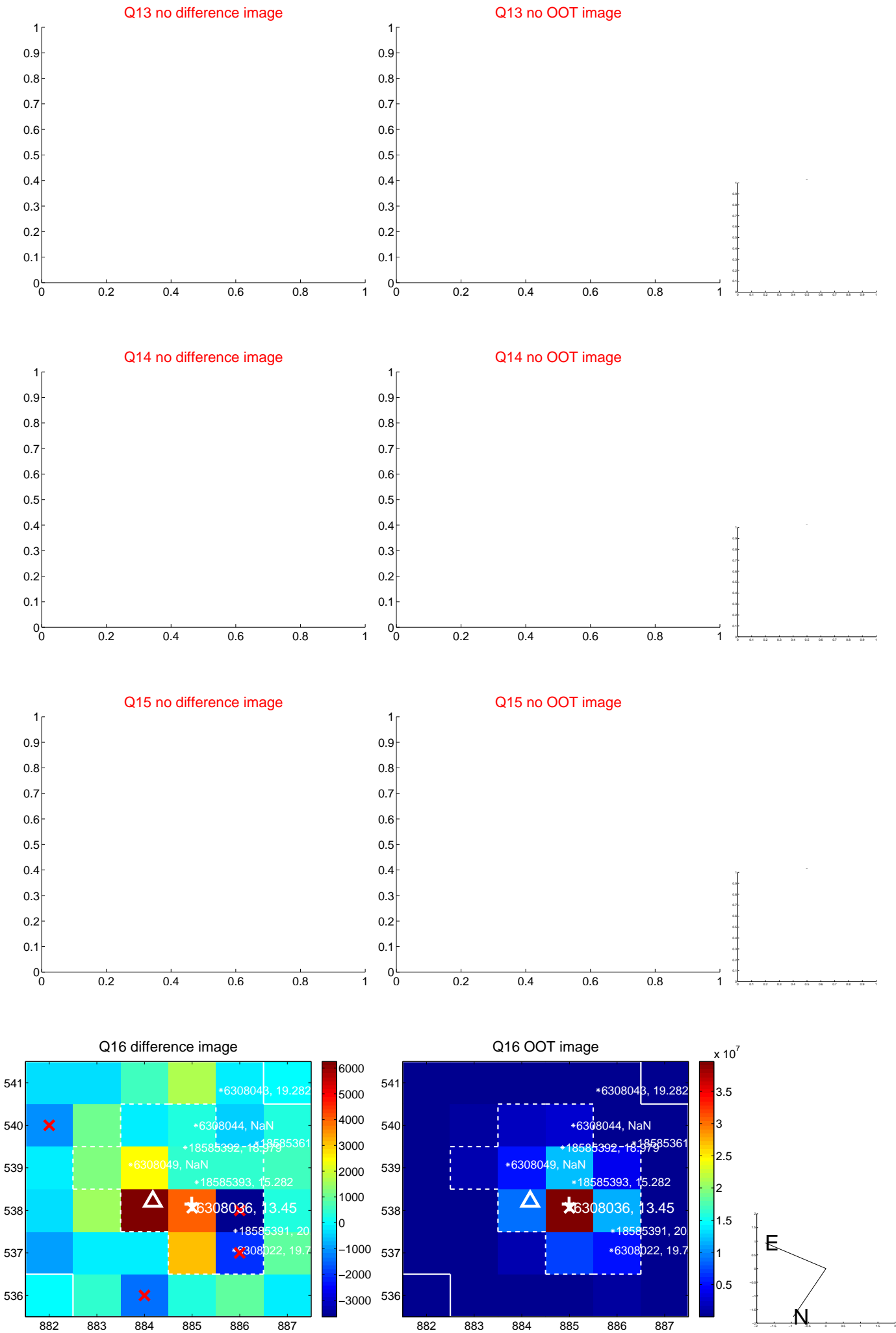
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



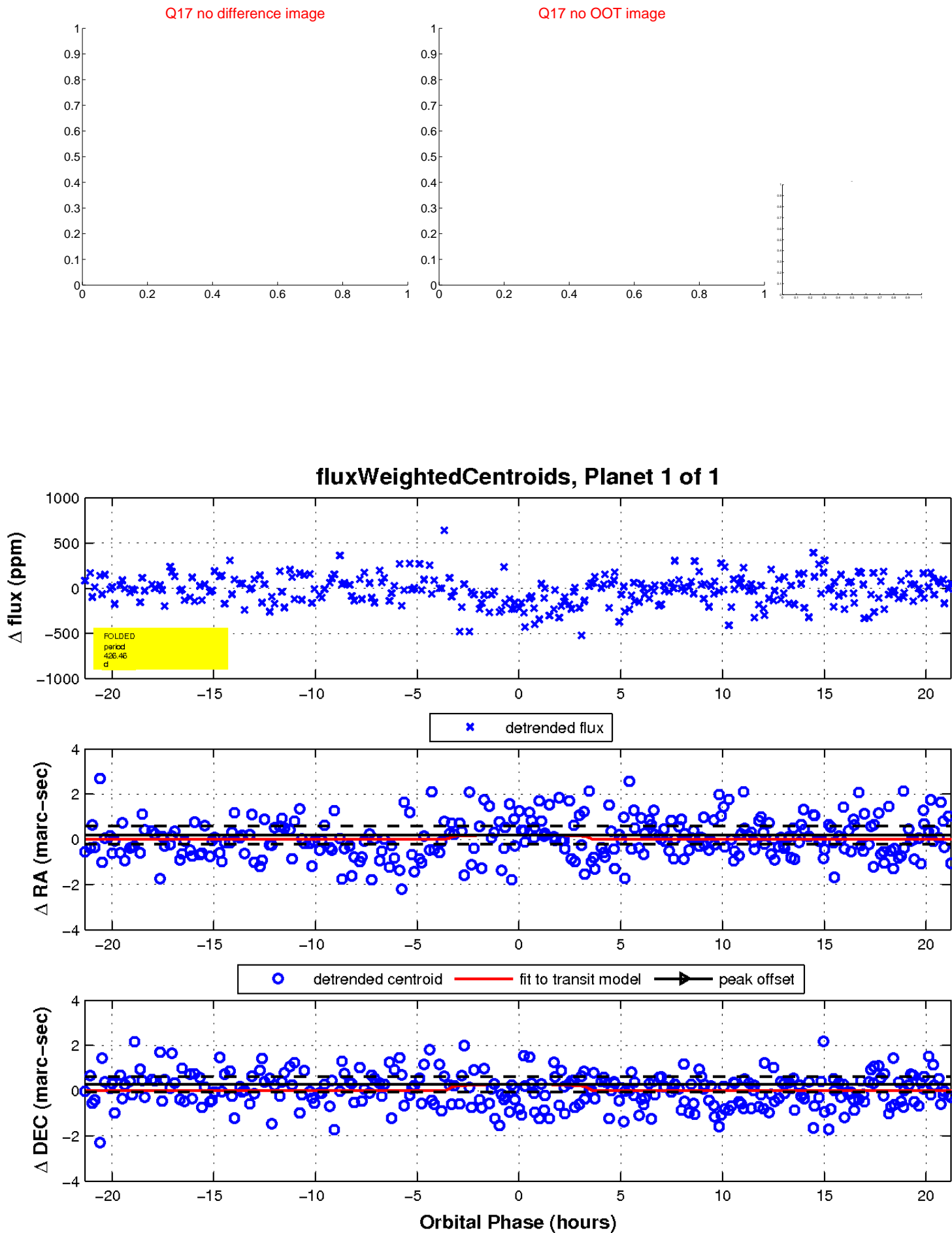
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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.



UKIRT Image

Declination

