

KIC 006289344

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})
006289344-01	OBS	4319.01	320.824074	262.404062	2610.5	4.875	30.5	23.7	0.73	5269	4.50	0.50

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
006289344-01	OBS	FP	0.00	0	1	1	0	MOD_SEC_DV—CENT_RESOLVED_OFFSET—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.

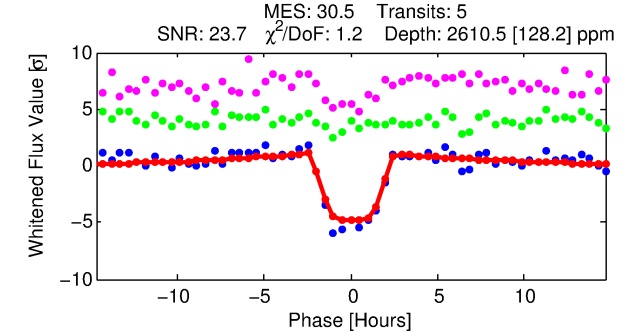
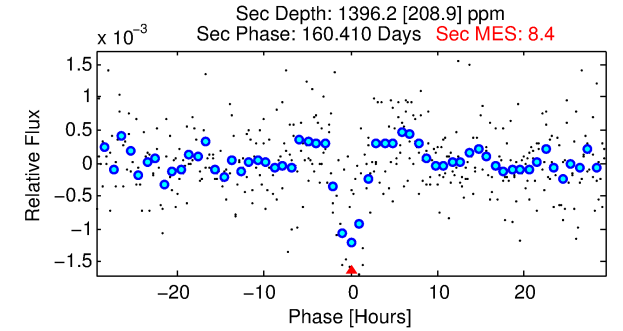
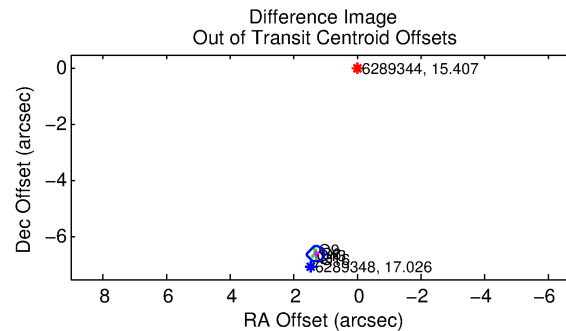
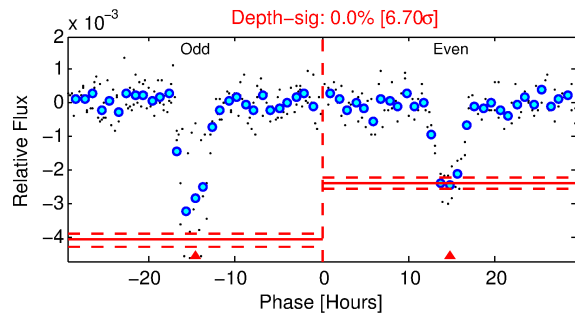
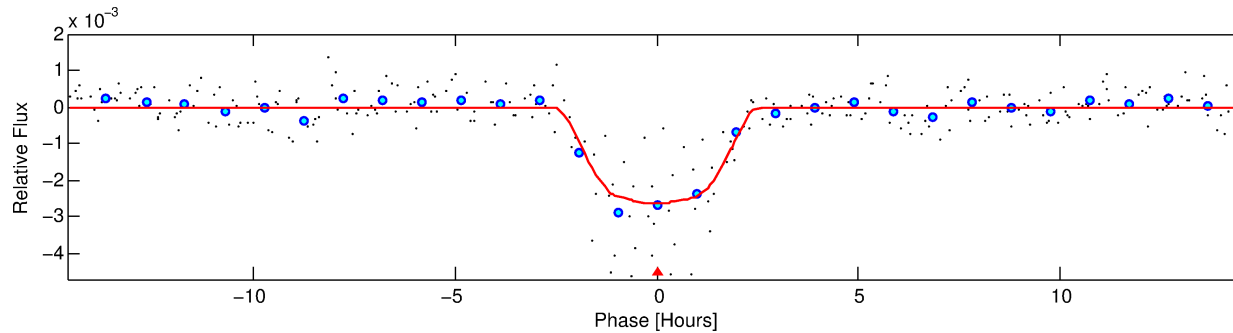
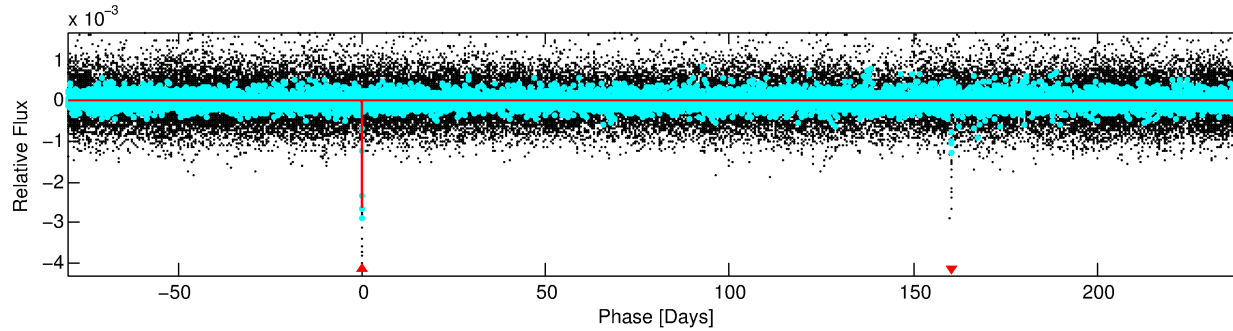
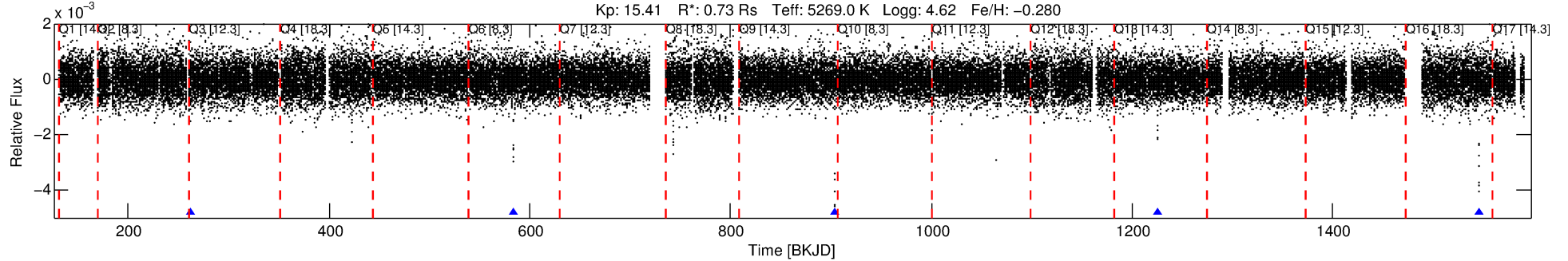
Ephemeris Match Information For 006289344-01

No Significant Match Found

DV One-Page Summary

KIC: 6289344 Candidate: 1 of 1 Period: 320.824 d
KOI: K04319 Corr: No Ephemeris Match

Kp: 15.41 R*: 0.73 Rs Teff: 5269.0 K Logg: 4.62 Fe/H: -0.280



DV Fit Results:

Period = 320.82407 [0.00175] d
Epoch = 262.4041 [0.0042] BKJD
Rp/R* = 0.0567 [0.0026]
a/R* = 276.35 [34.84]
b = 0.90 [0.03]
Seff = 0.50 [0.10]
Teq = 215 [11] K
Rp = 4.50 [0.71] Re
a = 0.8529 [0.1036] AU
Ag = 27644.51 [6776.36] [4.08σ]
Teff = 4278 [228] K [17.81σ]

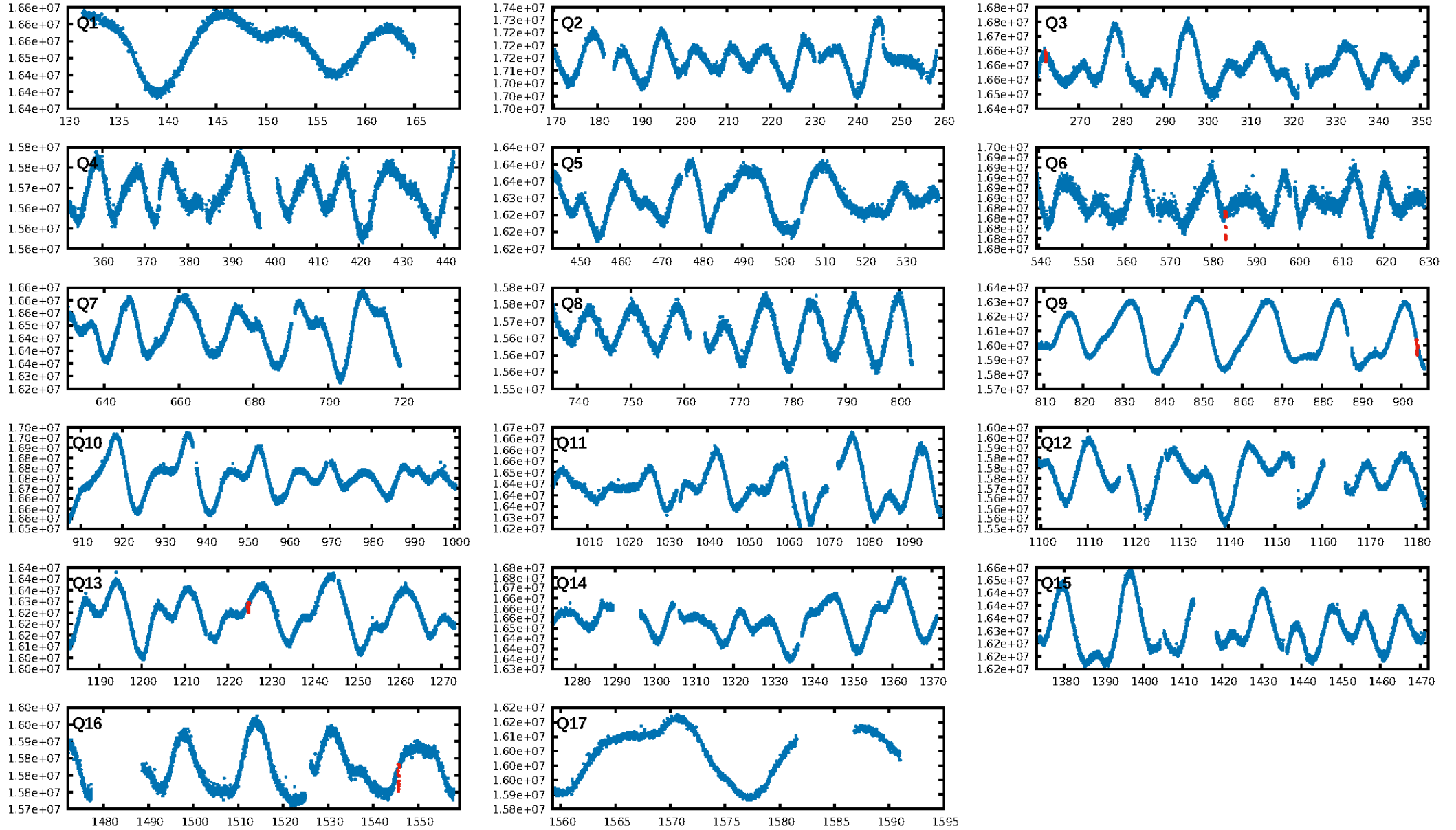
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: 0.0%
ModelChiSquareGoF-sig: 66.1%
Bootstrap-pfa: 3.69e-89
RollingBand-fgt: 1.00 [5/5]
GhostDiagnostic-chr: -0.2042
Centroid-sig: 0.0%
Centroid-so: 35.088 arcsec [73.47σ]
OotOffset-rm: 6.736 arcsec [77.06σ]
KicOffset-rm: 7.096 arcsec [86.61σ]
OotOffset-st: 1/0/1/2 [4]
KicOffset-st: 1/0/1/2 [4]
DiffImageQuality-fgm: 1.00 [4/4]
DiffImageOverlap-fno: 1.00 [5/5]

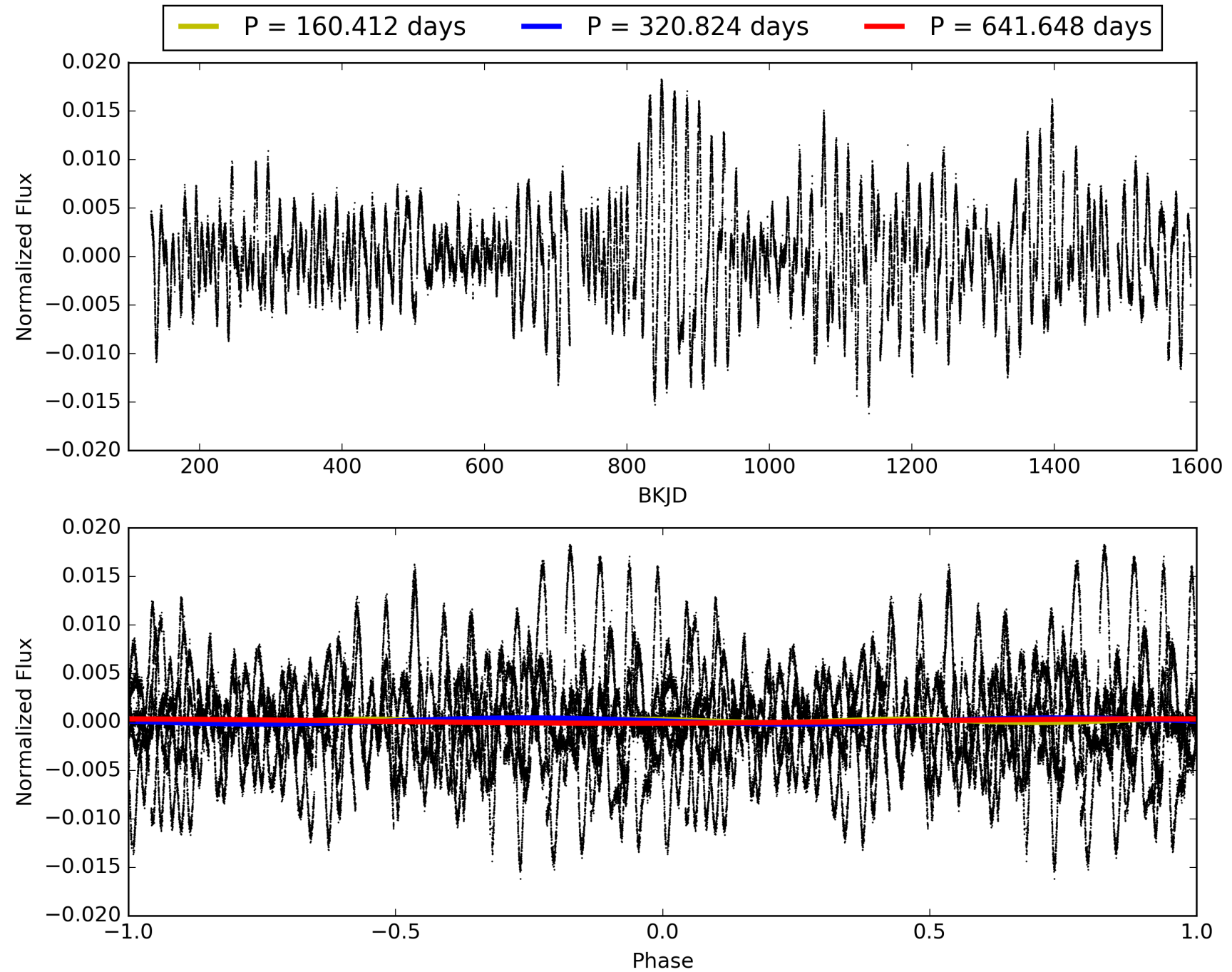
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 30-Jan-2016 15:36:09 Z

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

TCE 006289344-01, PDC Light Curves

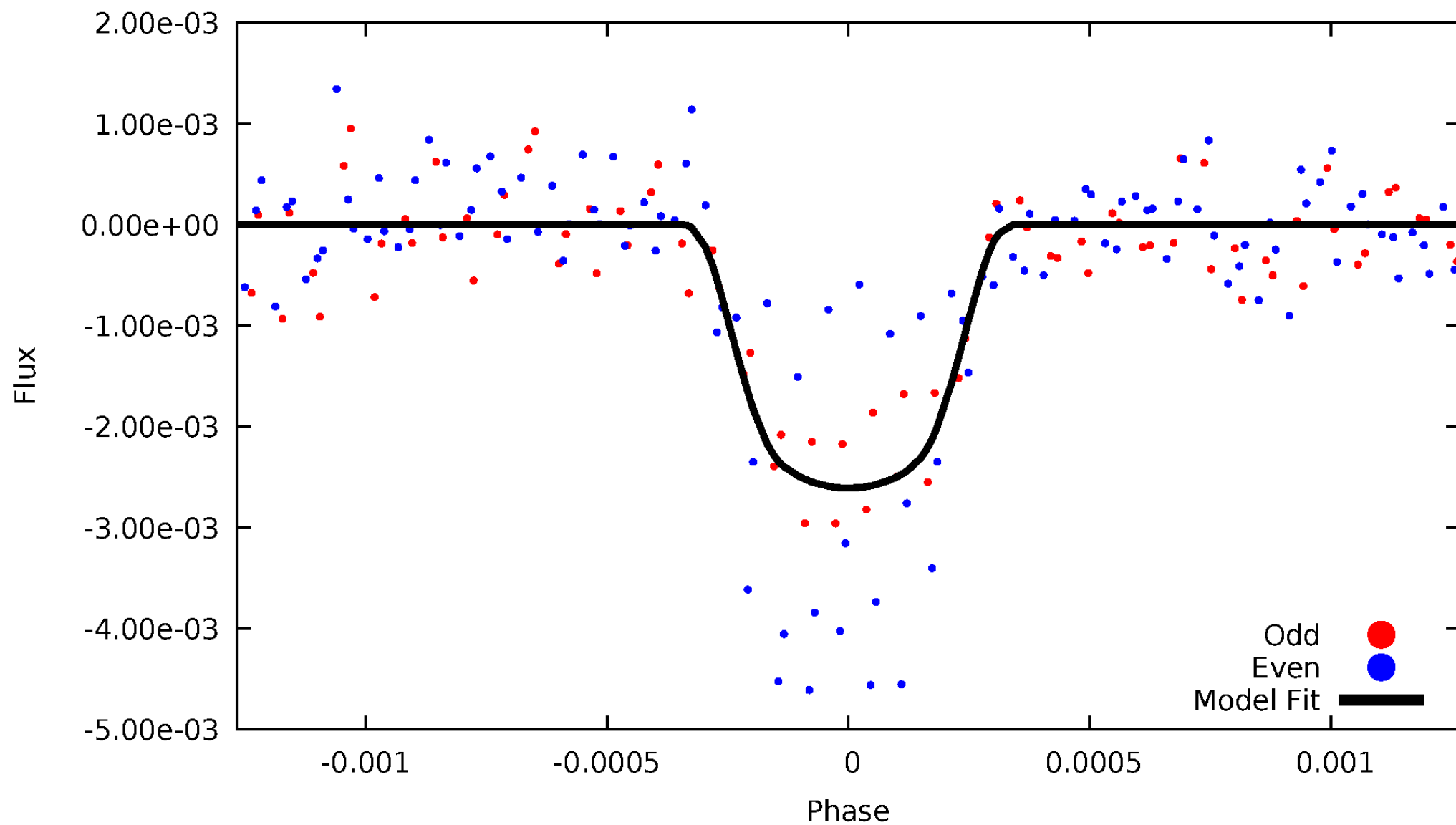


TCE 006289344-01



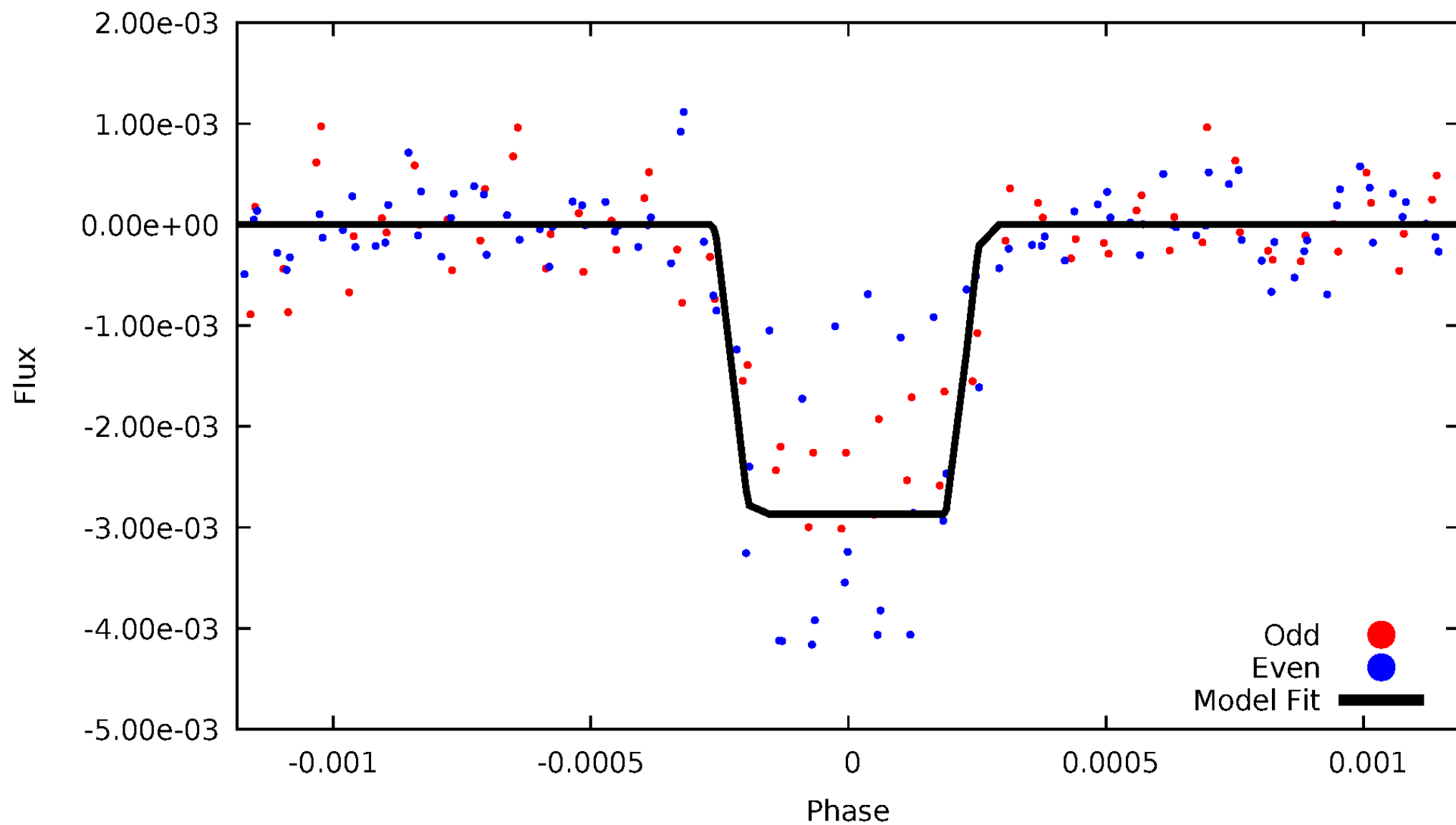
DV Odd/Even

TCE 006289344-01



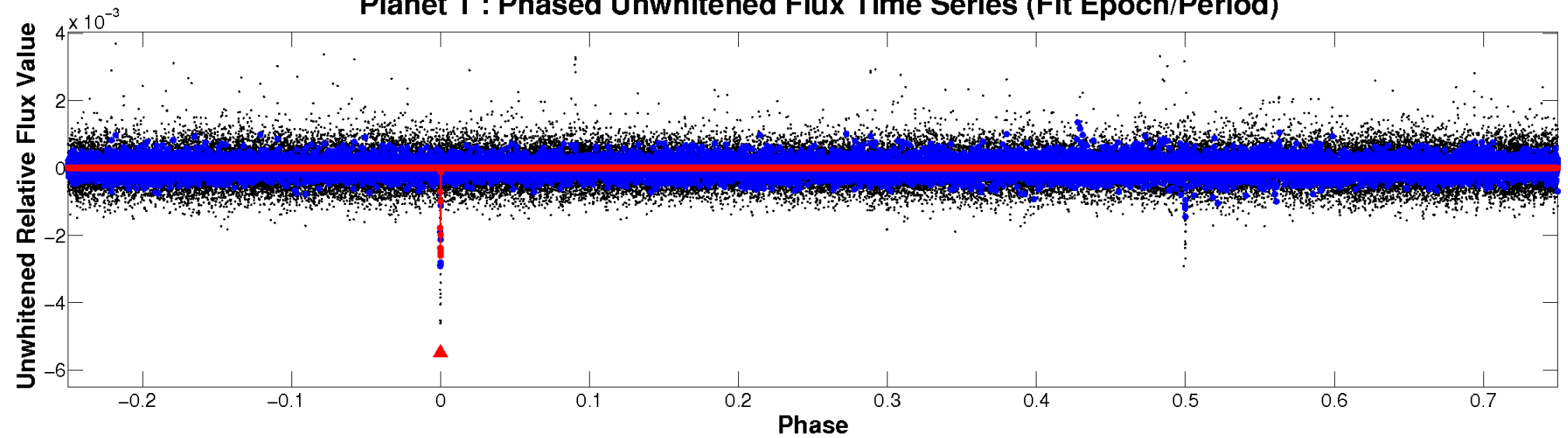
ALT Odd/Even

TCE 006289344-01

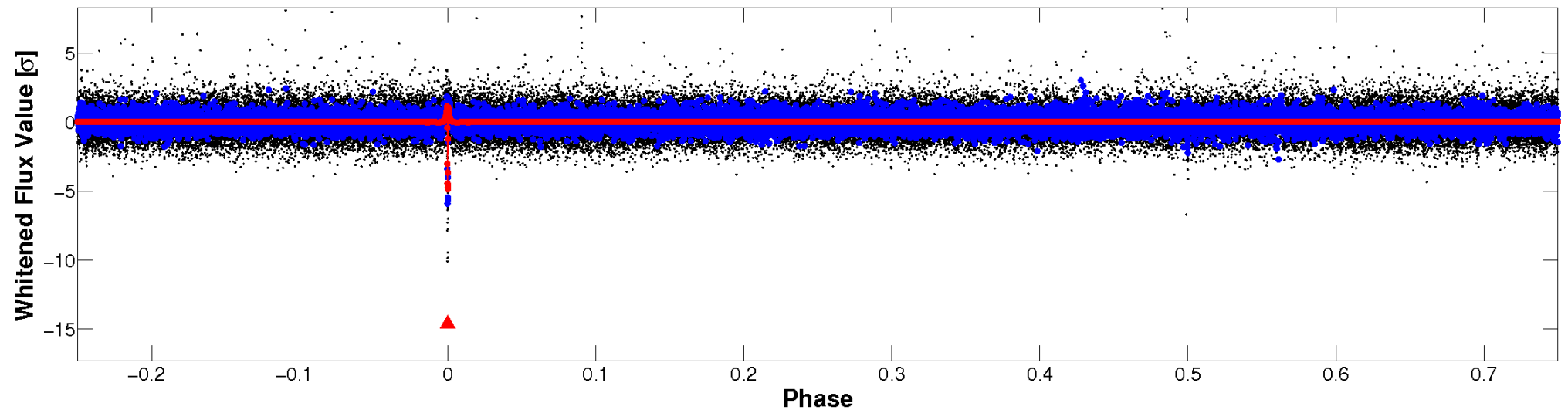


Non-Whitened Vs. Whitened Light Curve

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

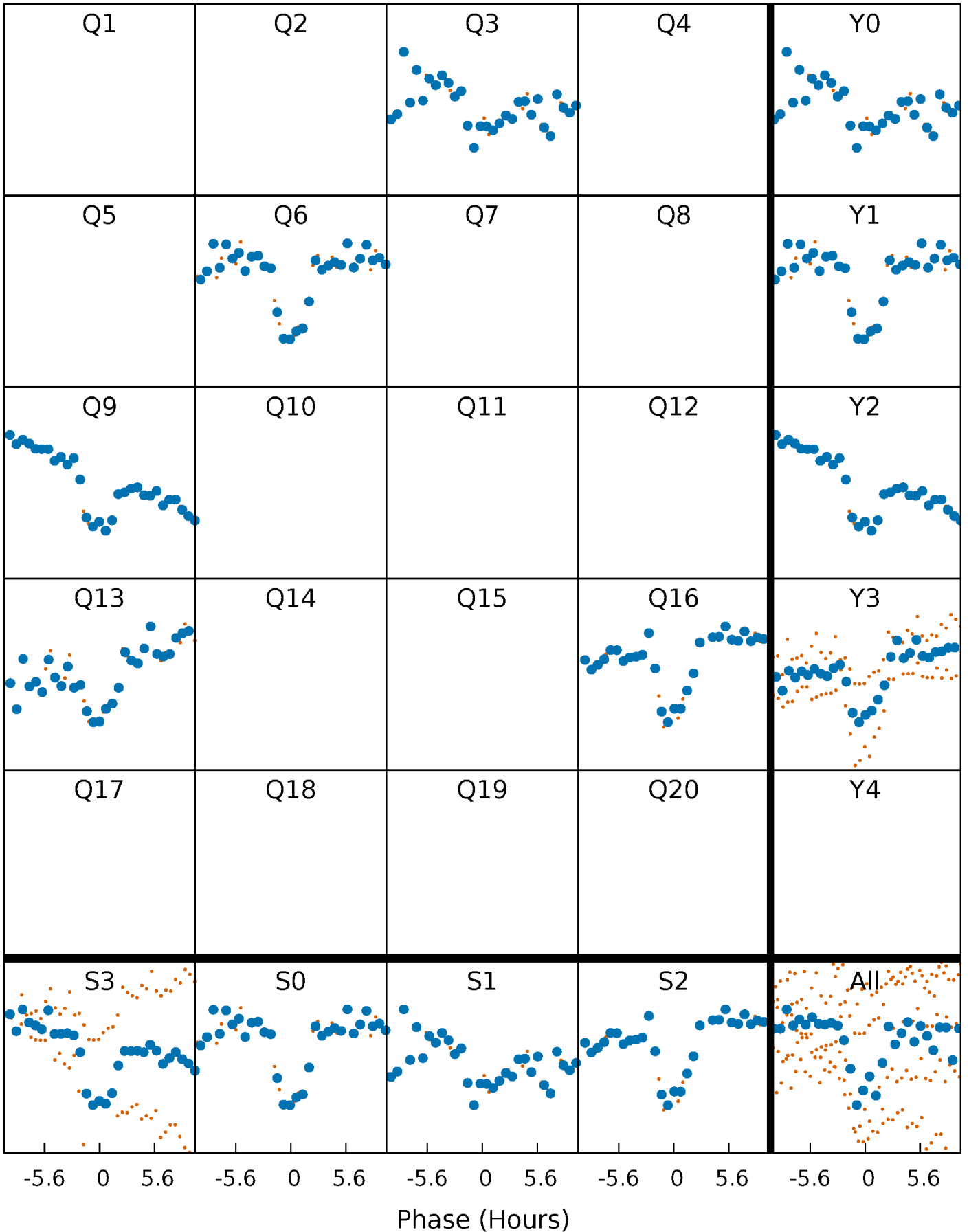


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



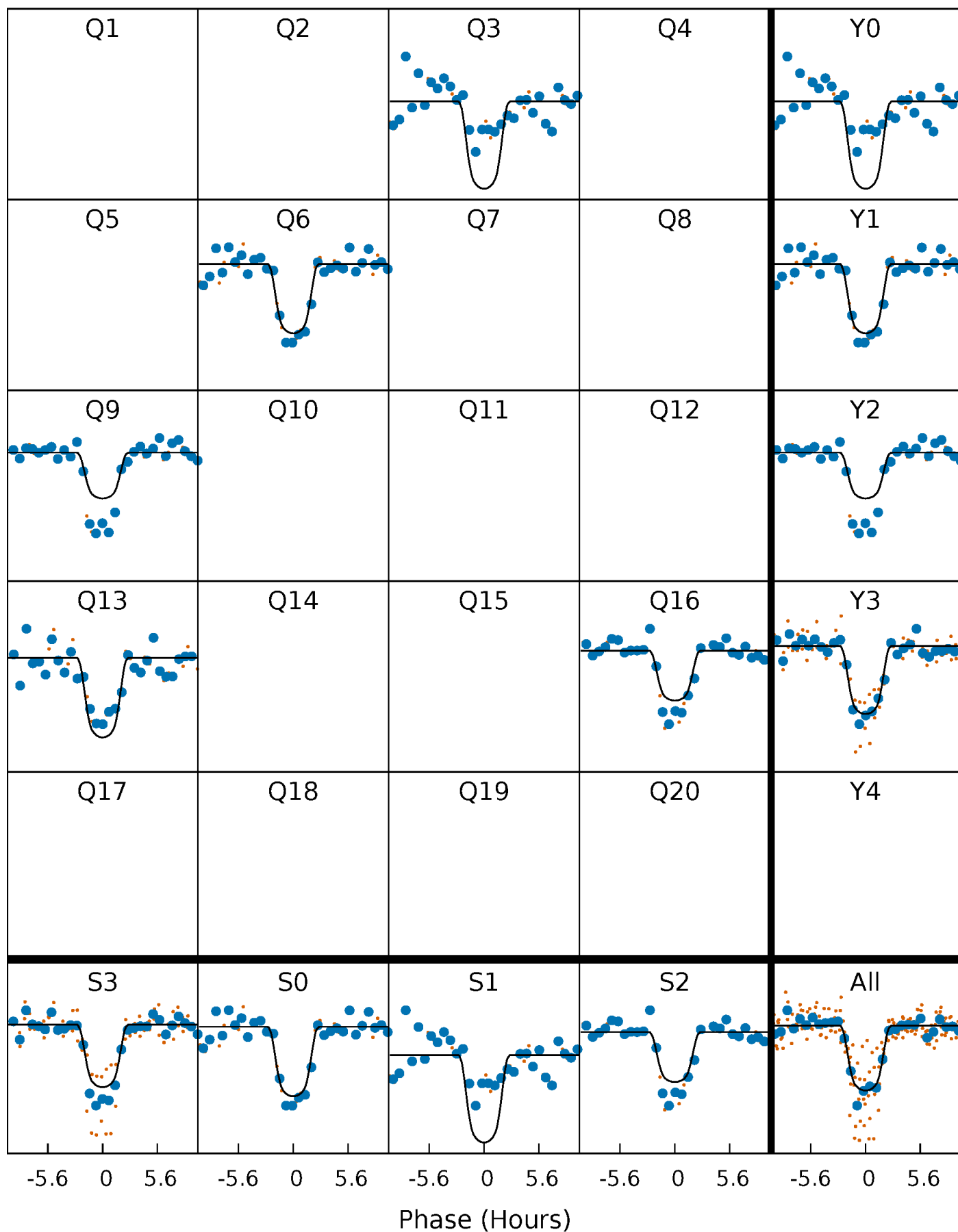
PDC Quarter-Phased Transit Curves

TCE 006289344-01 P=320.824074 Days $T_0=262.404062$ (BKJD)



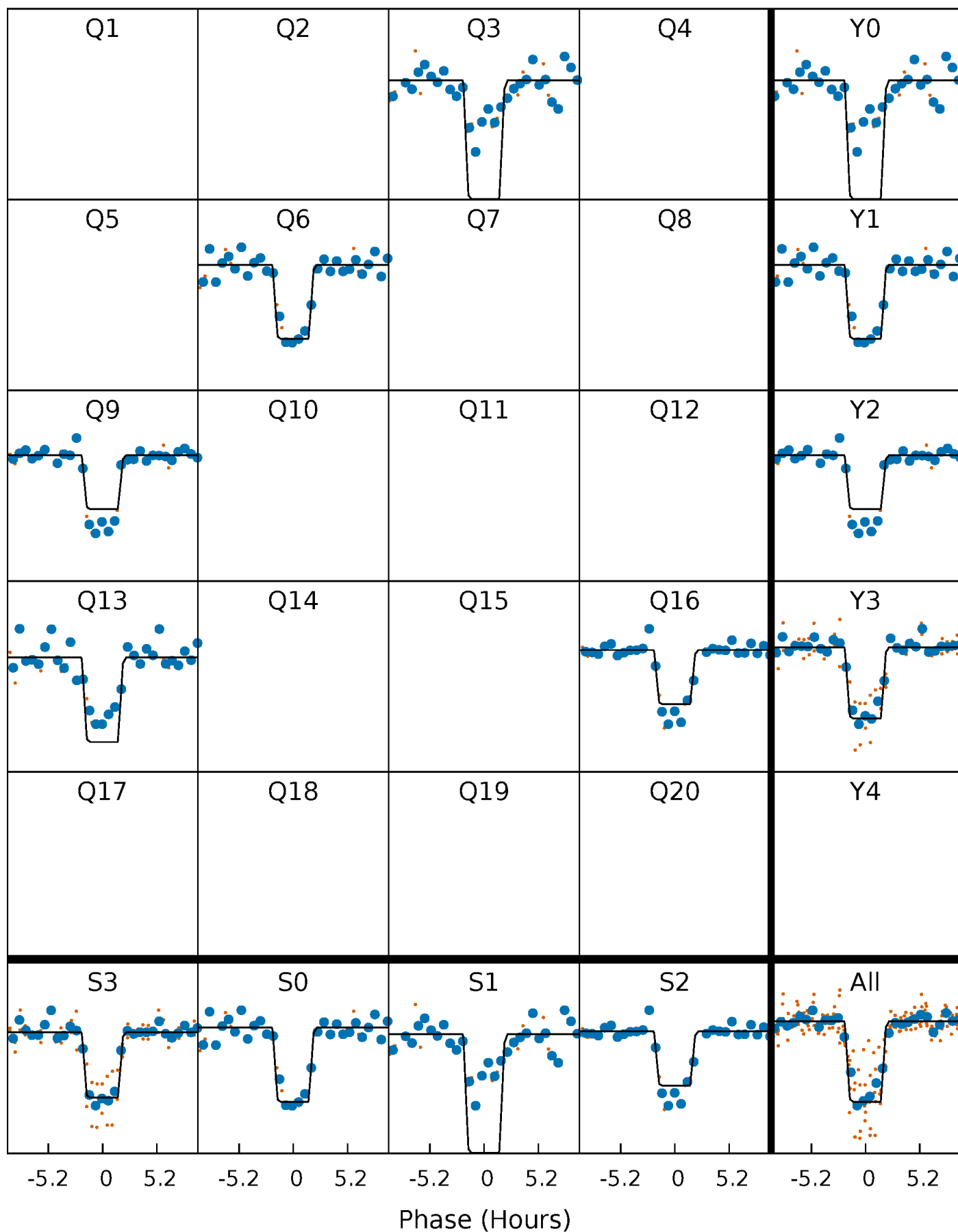
DV Quarter-Phased Transit Curves

TCE 006289344-01 P=320.824074 Days $T_0=262.404062$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

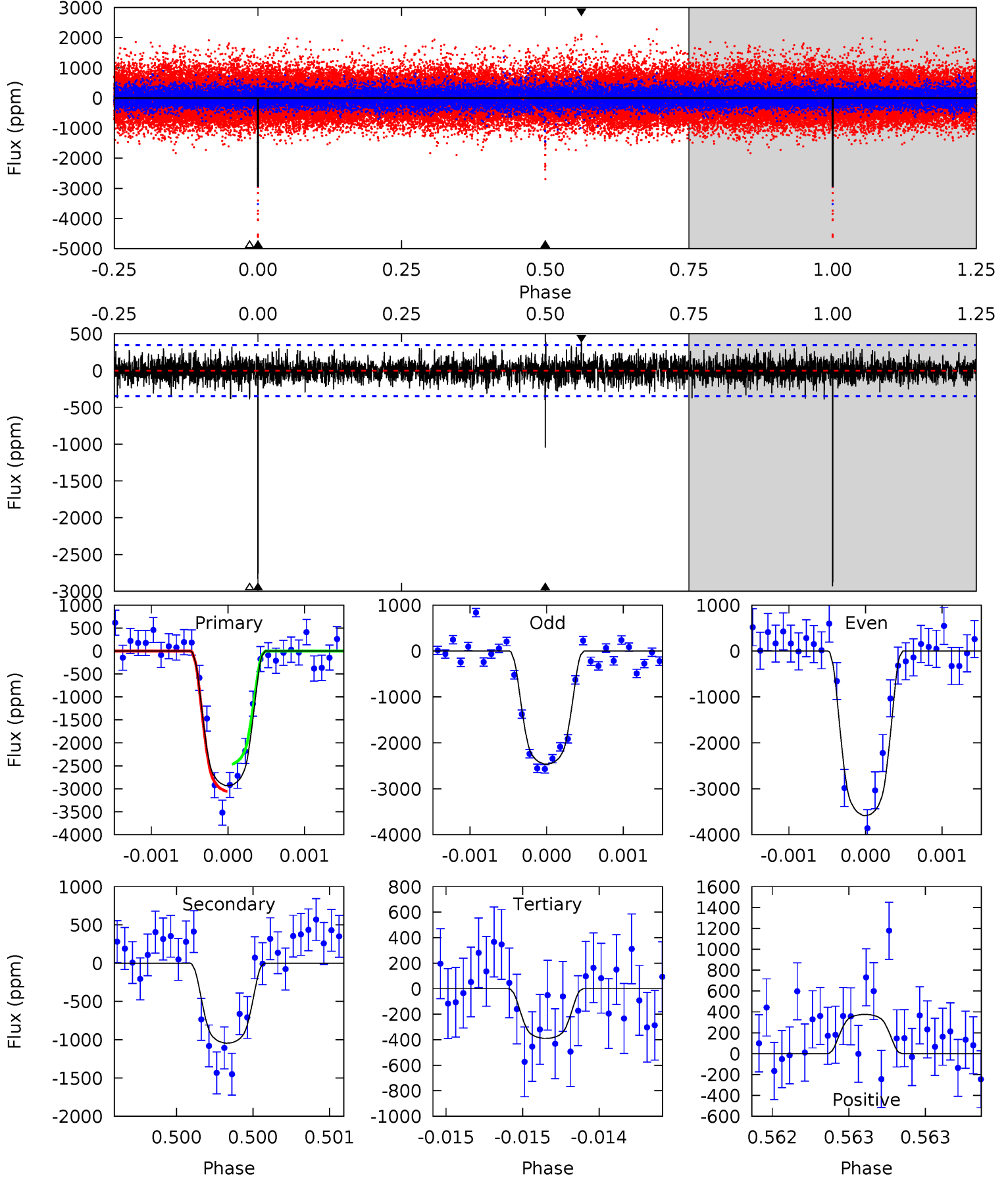
TCE 006289344-01 P=320.824903 Days $T_0=262.399114$ (BKJD)



DV Model-Shift Uniqueness Test

006289344-01, P = 320.824074 Days, E = 262.404062 Days

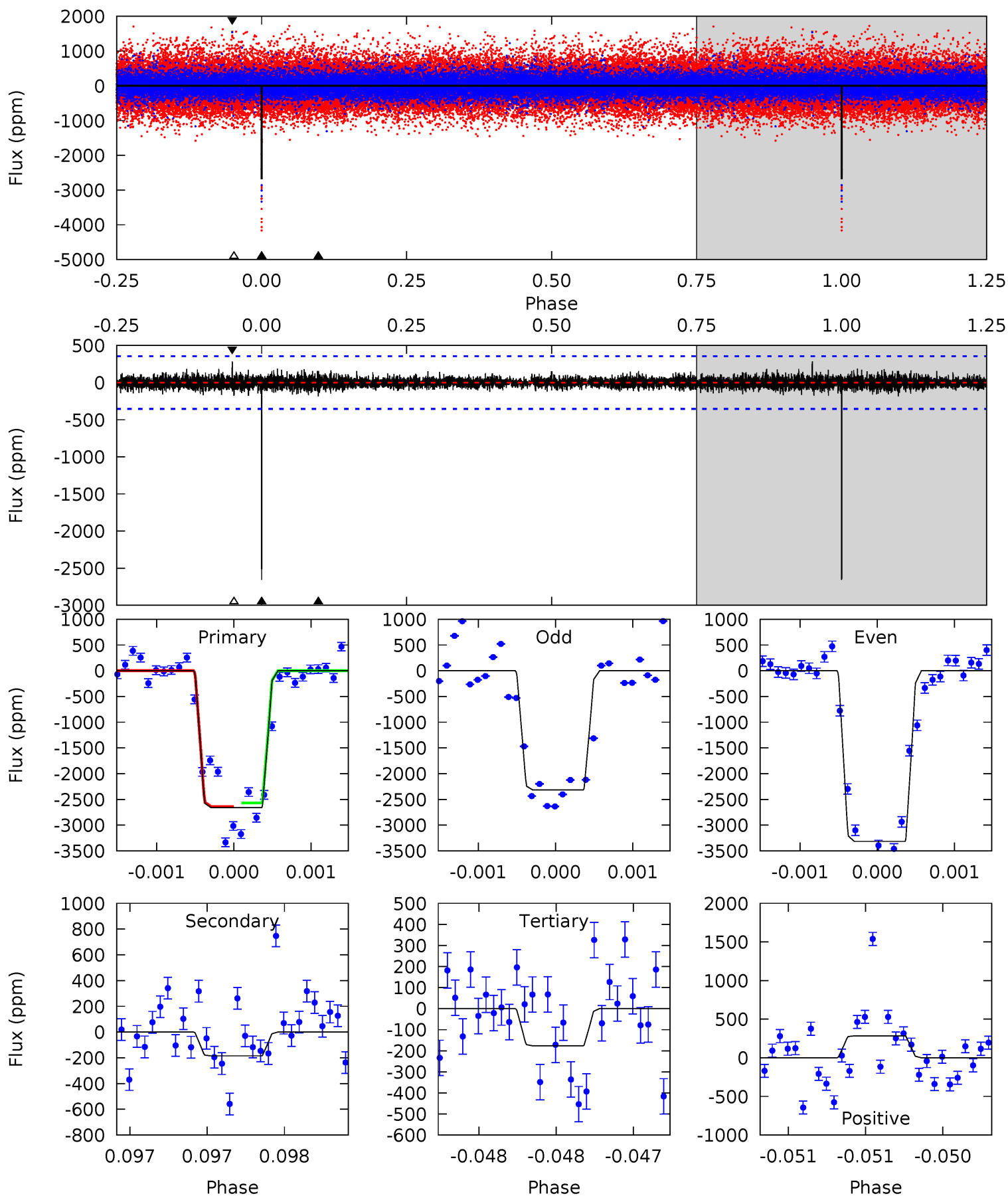
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
46.8	16.7	6.22	6.00	5.51	3.39	1.58	40.6	40.8	10.5	10.7	8.79	0.99	0.12	4.61



Alt Model-Shift Uniqueness Test

006289344-01, P = 320.824903 Days, E = 262.399114 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
41.6	2.90	2.76	4.44	5.57	3.47	0.67	38.9	37.2	0.14	-1.55	7.81	0.96	0.10	0.53



Stellar Parameters For KIC 006289344

	$T_{\text{eff}} (K)$	$\log(g)$	$[\text{Fe}/\text{H}]$	$R (R_{\odot})$	$M (M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	5269^{+158}_{-142}	$4.620^{+0.030}_{-0.090}$	$-0.280^{+0.350}_{-0.250}$	$0.727^{+0.109}_{-0.055}$	$0.812^{+0.078}_{-0.085}$	$2.982^{+0.494}_{-0.899}$
	+3%/-3%	+1%/-2%	+125%/-89%	+15%/-8%	+10%/-10%	+17%/-30%
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 006289344-01 / KOI 4319.01

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	A_{obs}
DV	-1046 ± 63	$4.59^{+0.41}_{-0.33}$	304^{+12}_{-11}	4198^{+146}_{-115}	19772^{+2896}_{-3003}
Alt.	-185 ± 64	$4.36^{+0.39}_{-0.31}$	305^{+12}_{-11}	3220^{+175}_{-187}	3898^{+1617}_{-1416}

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

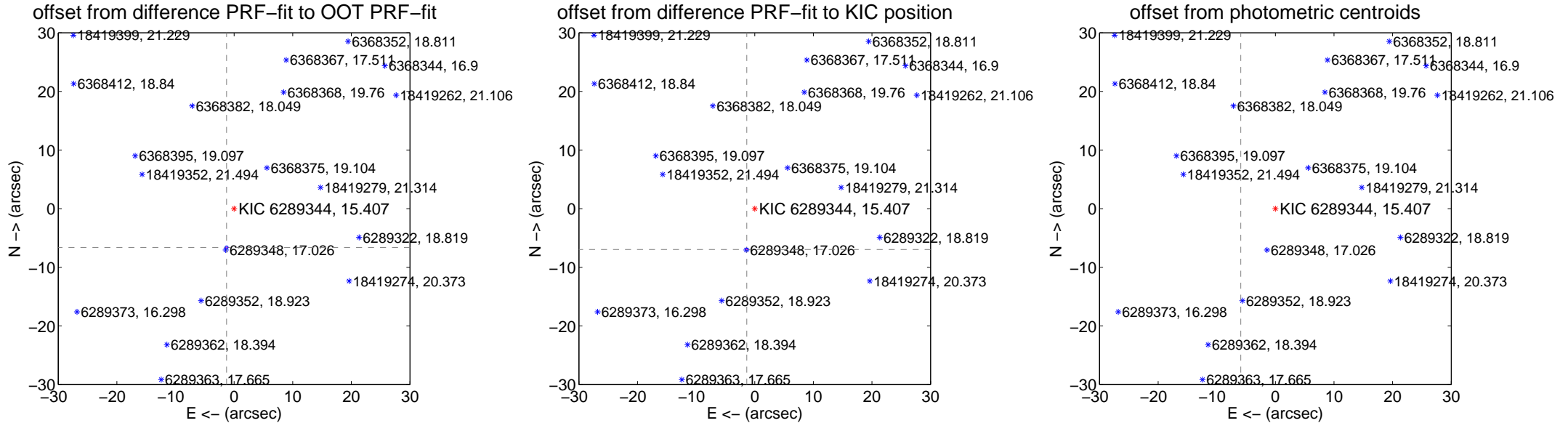
DV Centroid Data

Supplemental centroid analysis for 006289344-01. Kepler magnitude: 15.41. Transit SNR 23.74

There are 4 quarters with good PRF difference image offsets

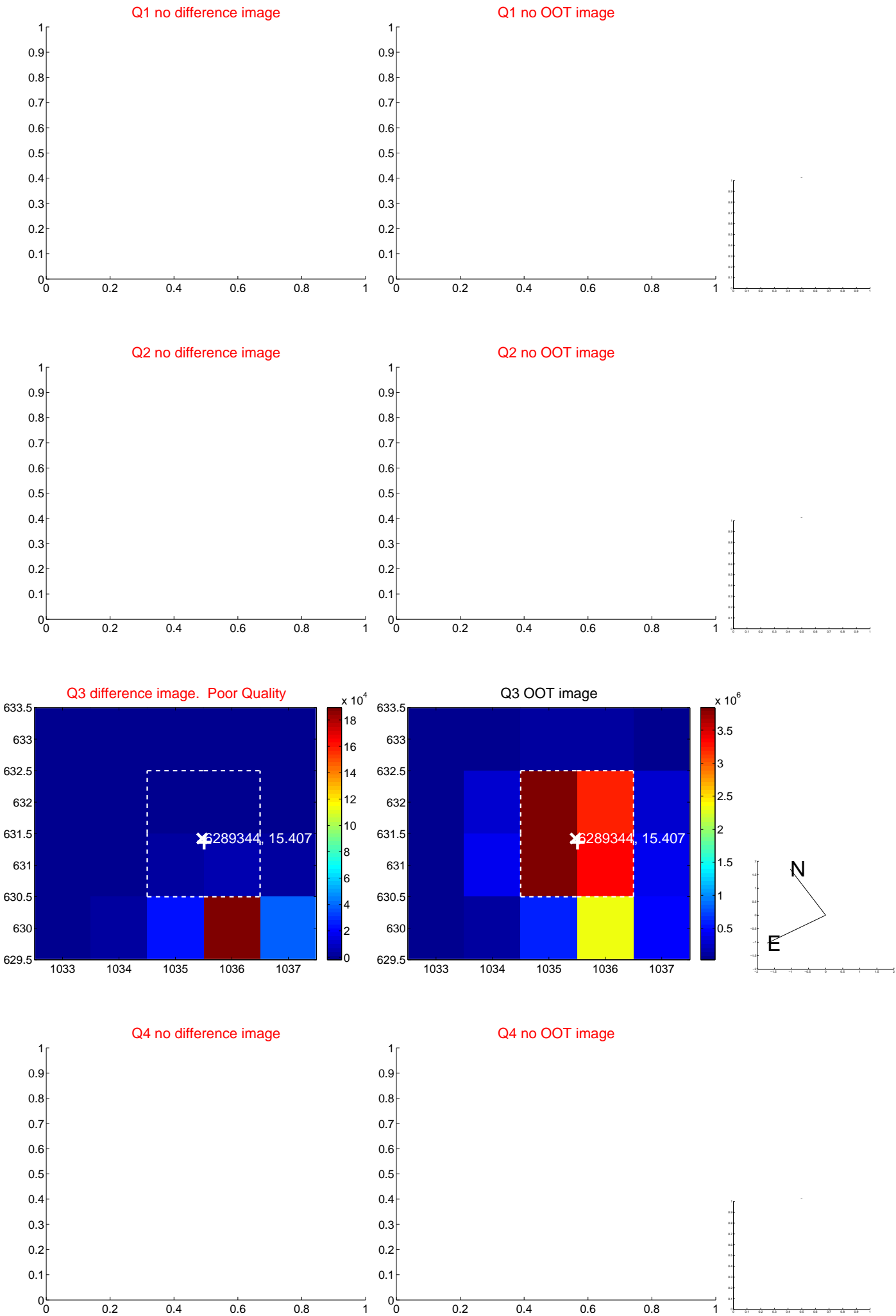
The direct PRF centroid is offset from the target star catalog position by about 0.32 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	6.736 \pm 0.087	77.06	1.279 \pm 0.070	-6.613 \pm 0.088
PRF-fit source offset from KIC position	7.096 \pm 0.082	86.61	1.353 \pm 0.075	-6.965 \pm 0.085
photometric centroid source offset	35.09 \pm 0.48	73.47	5.90 \pm 0.47	-34.59 \pm 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.



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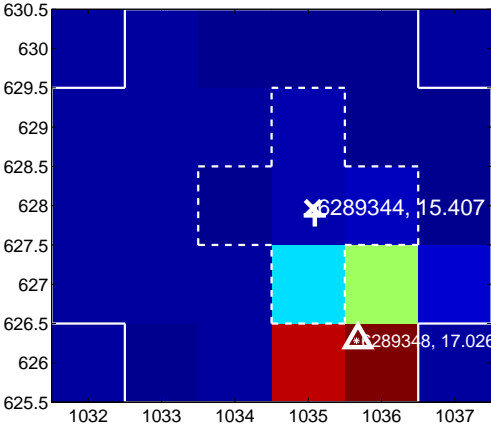
Q5 no difference image



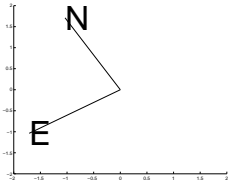
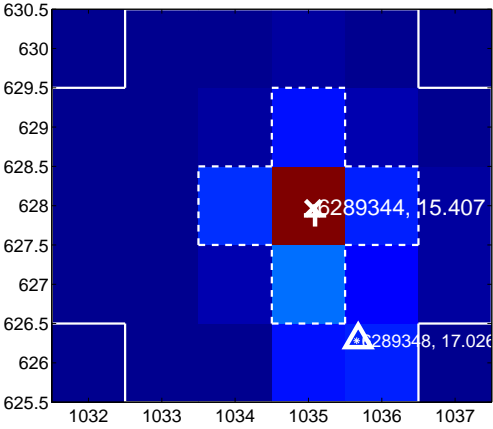
Q5 no OOT image



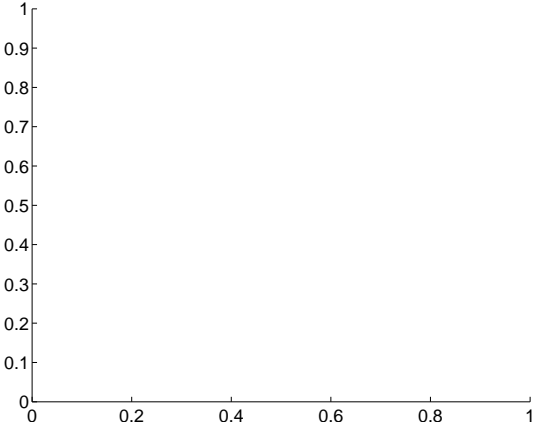
Q6 difference image



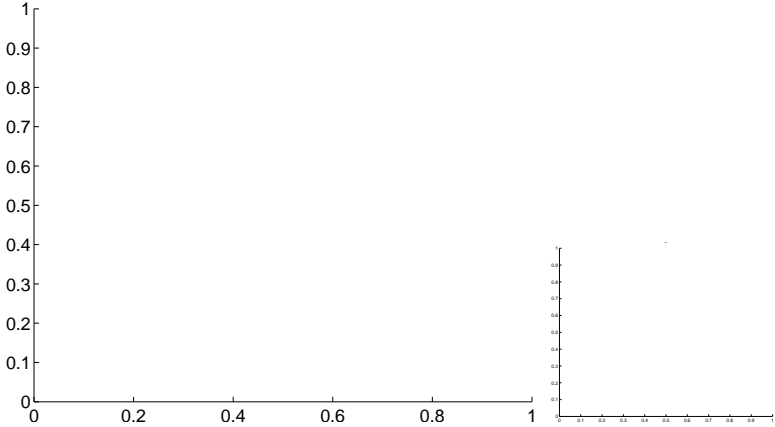
Q6 OOT image



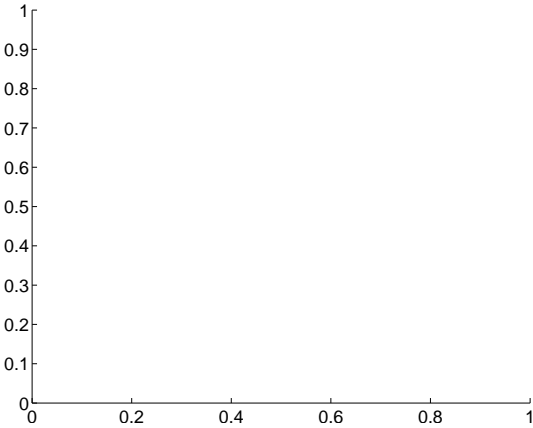
Q7 no difference image



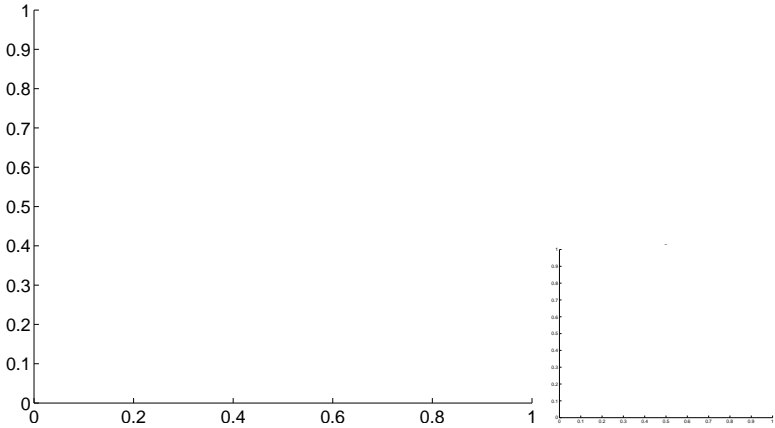
Q7 no OOT image



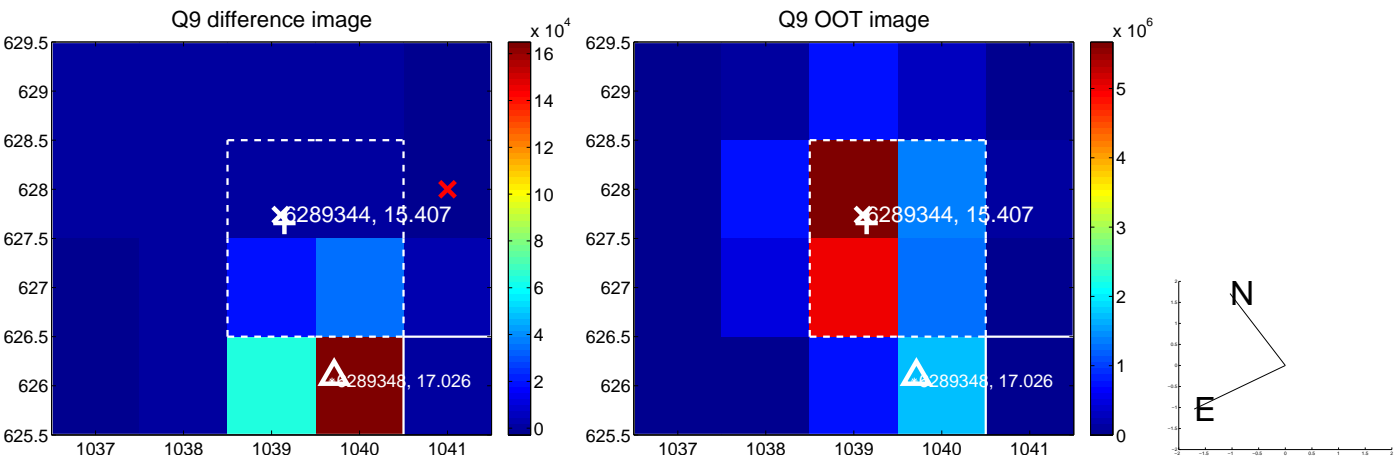
Q8 no difference image



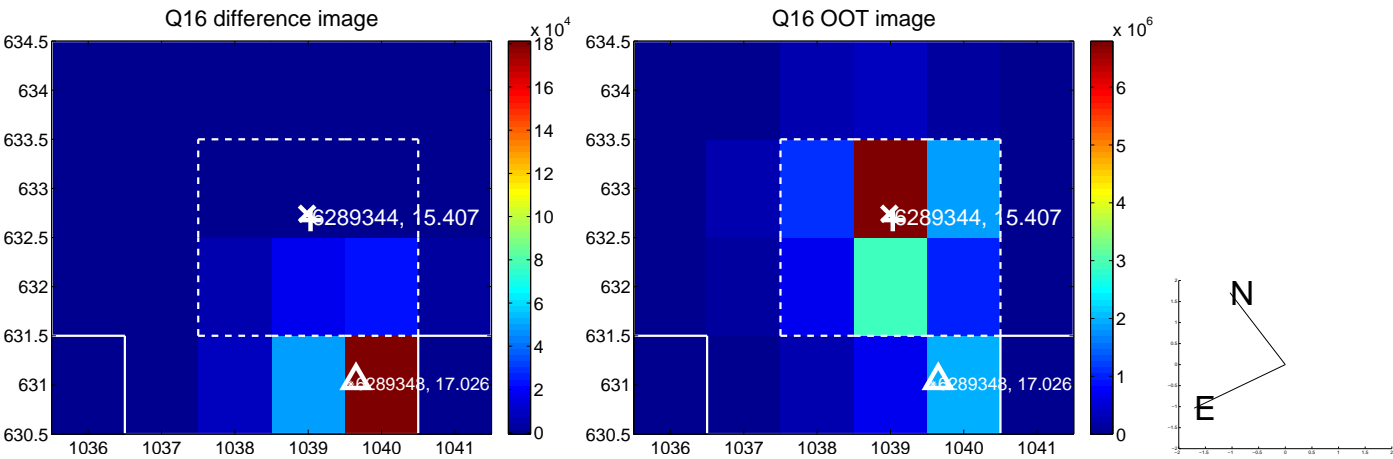
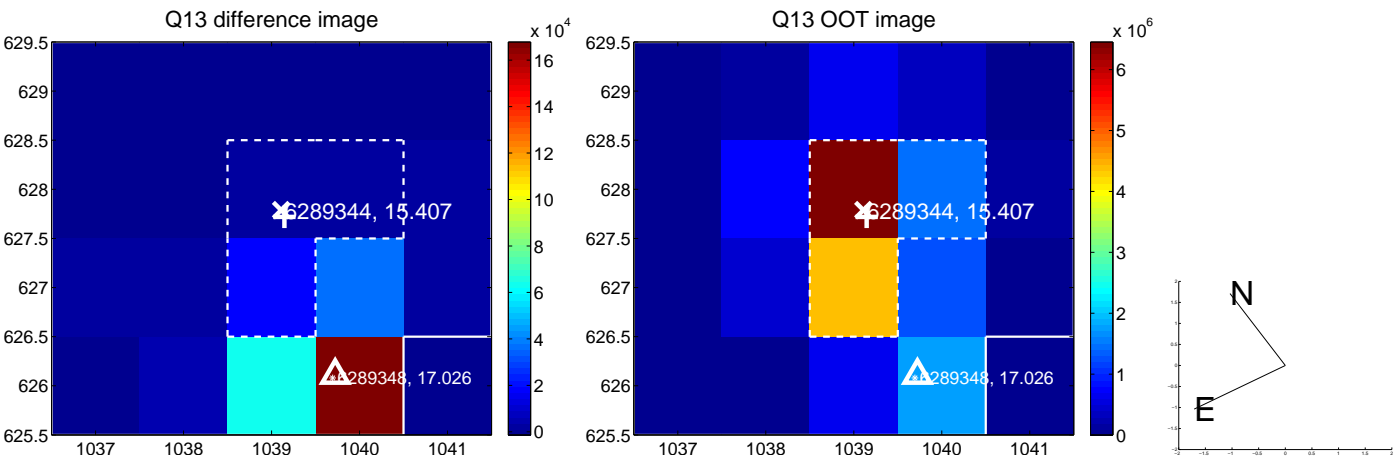
Q8 no OOT image



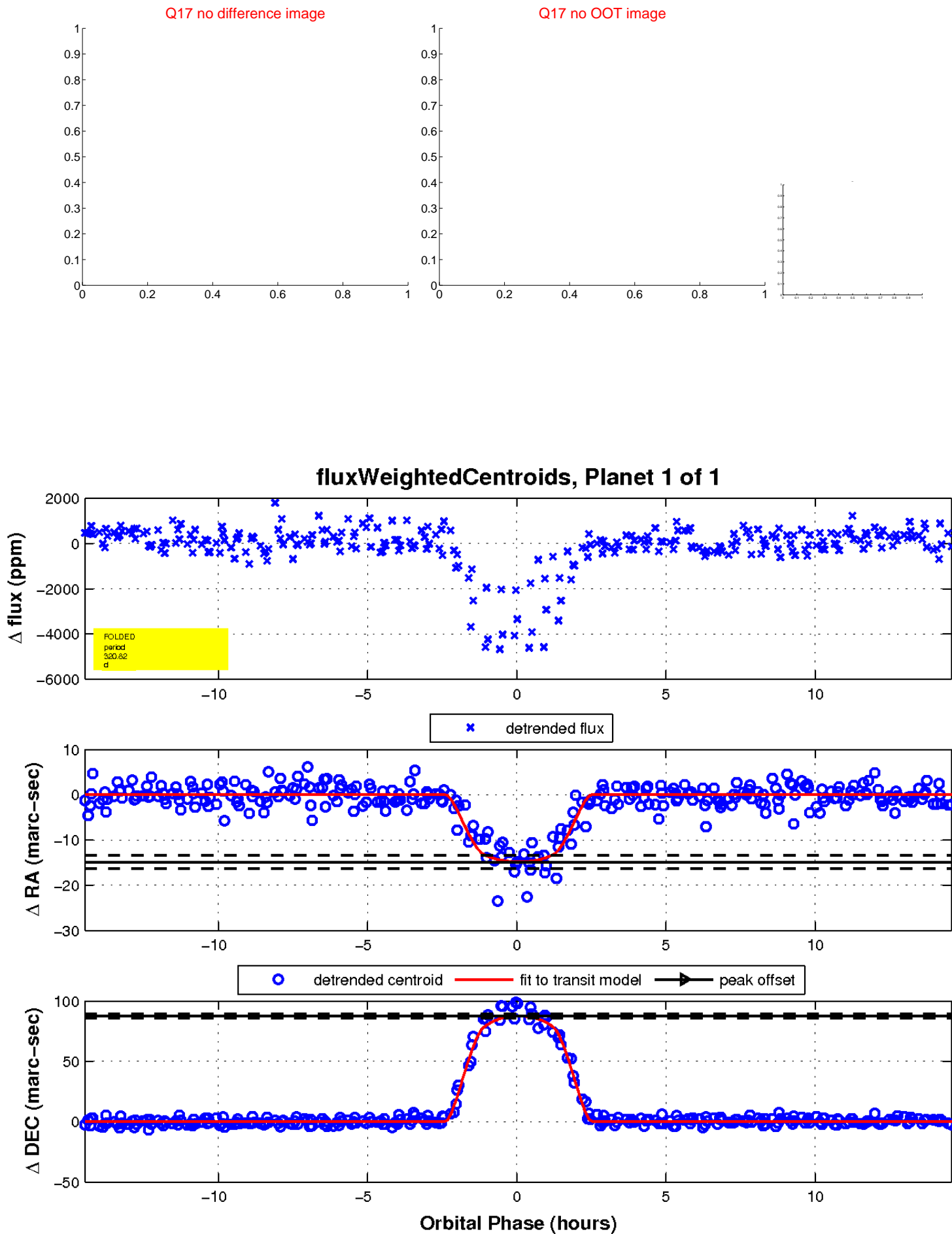
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UKIRT Image

Declination

