

KIC 008226795

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})
008226795-01	OBS	No	693.498271	177.261659	531.2	16.570	8.4	7.7	0.73	4816	1.91	0.13

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
008226795-01	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_MARSHALL_SKYE—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.

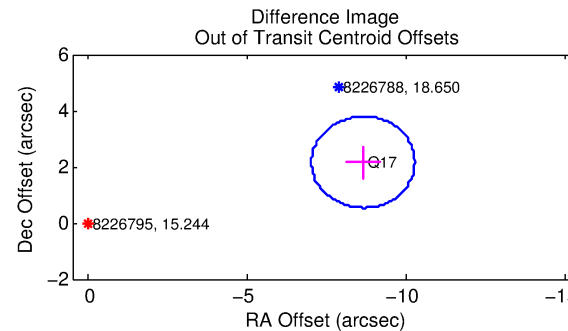
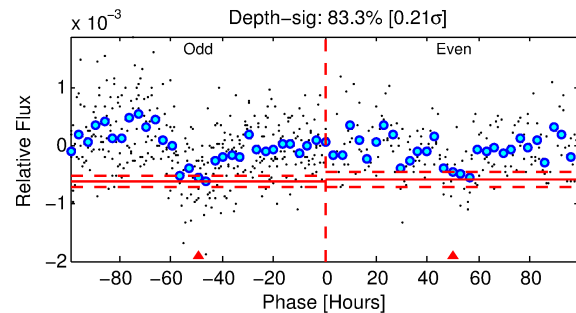
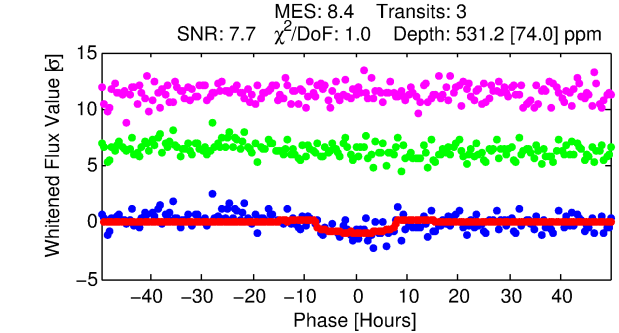
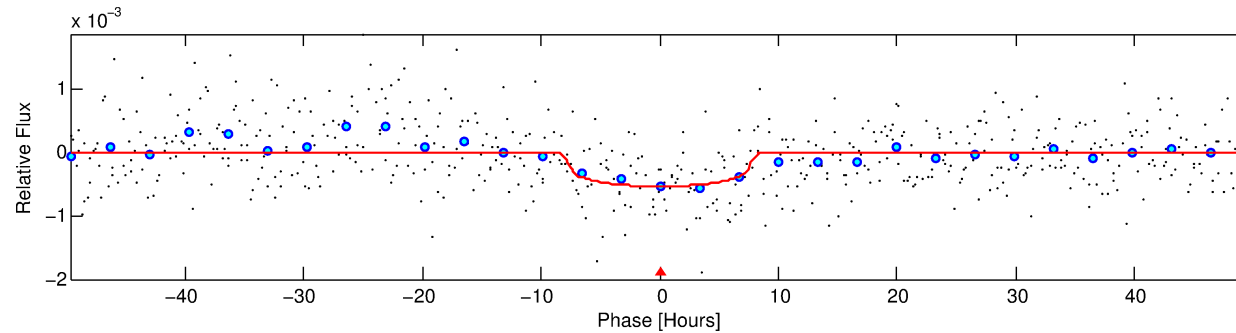
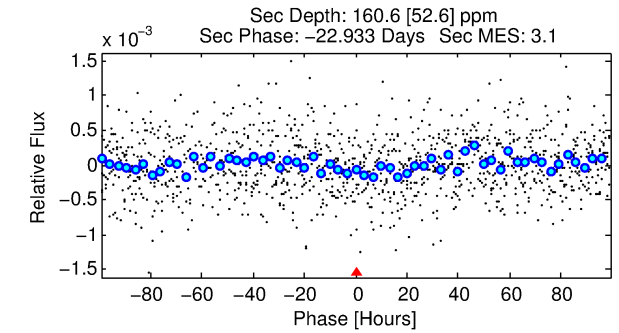
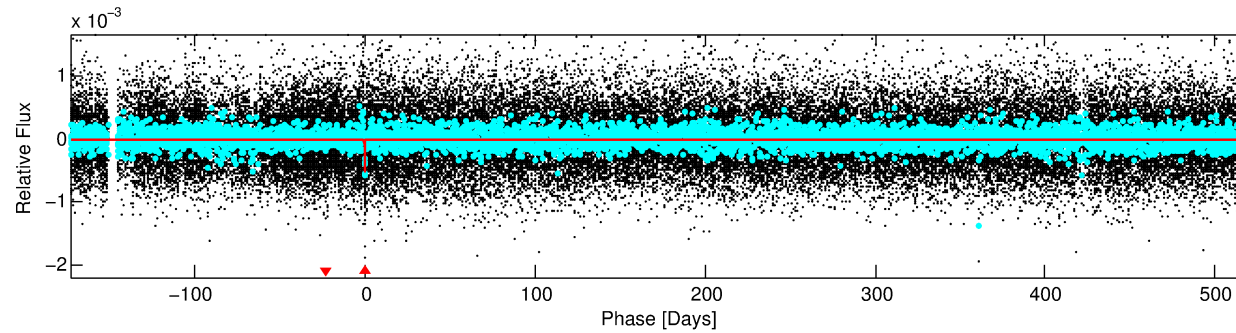
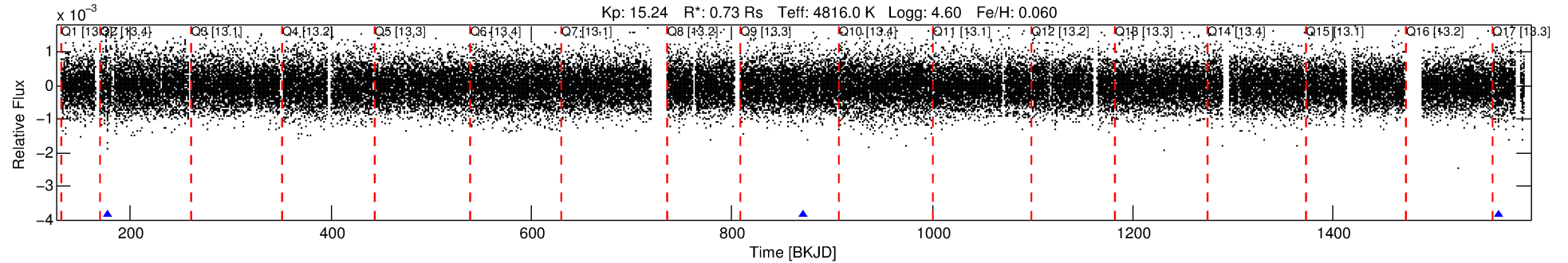
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 008226795-01

No Significant Match Found

DV One-Page Summary

KIC: 8226795 Candidate: 1 of 1 Period: 693.498 d



DV Fit Results:

Period = 693.49827 [0.02290] d
Epoch = 177.2617 [0.0300] BKJD
Rp/R* = 0.0238 [0.0076]
a/R* = 200.86 [219.92]
b = 0.81 [0.48]
Seff = 0.13 [0.02]
Teq = 153 [6] K
Rp = 1.91 [0.63] Re
a = 1.4075 [0.0937] AU
Ag = 48146.31 [34966.71] [1.38σ]
Teff = 3511 [641] K [5.24σ]

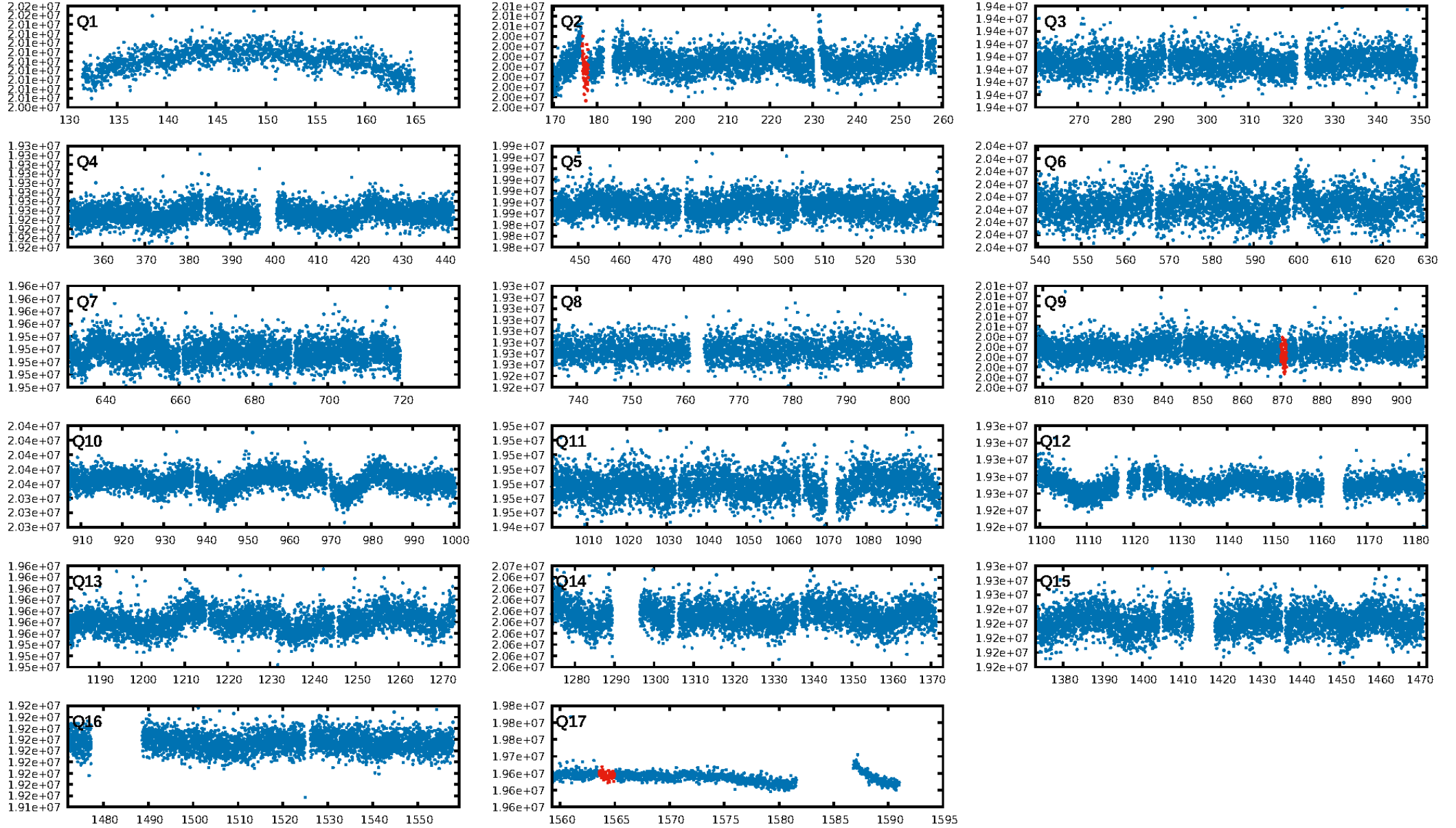
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: 8.9%
ModelChiSquareGof-sig: 99.9%
Bootstrap-pfa: 3.50e-11
RollingBand-fgt: 1.00 [2/2]
GhostDiagnostic-chr: -504.9
Centroid-sig: 0.0%
Centroid-so: 1.731 arcsec [1.72σ]
OotOffset-rm: 8.908 arcsec [16.43σ]
KicOffset-rm: 8.759 arcsec [16.15σ]
OotOffset-st: 0/0/0/1 [1]
KicOffset-st: 0/0/0/1 [1]
DiffImageQuality-fgm: 0.00 [0/1]
DiffImageOverlap-fno: 1.00 [3/3]

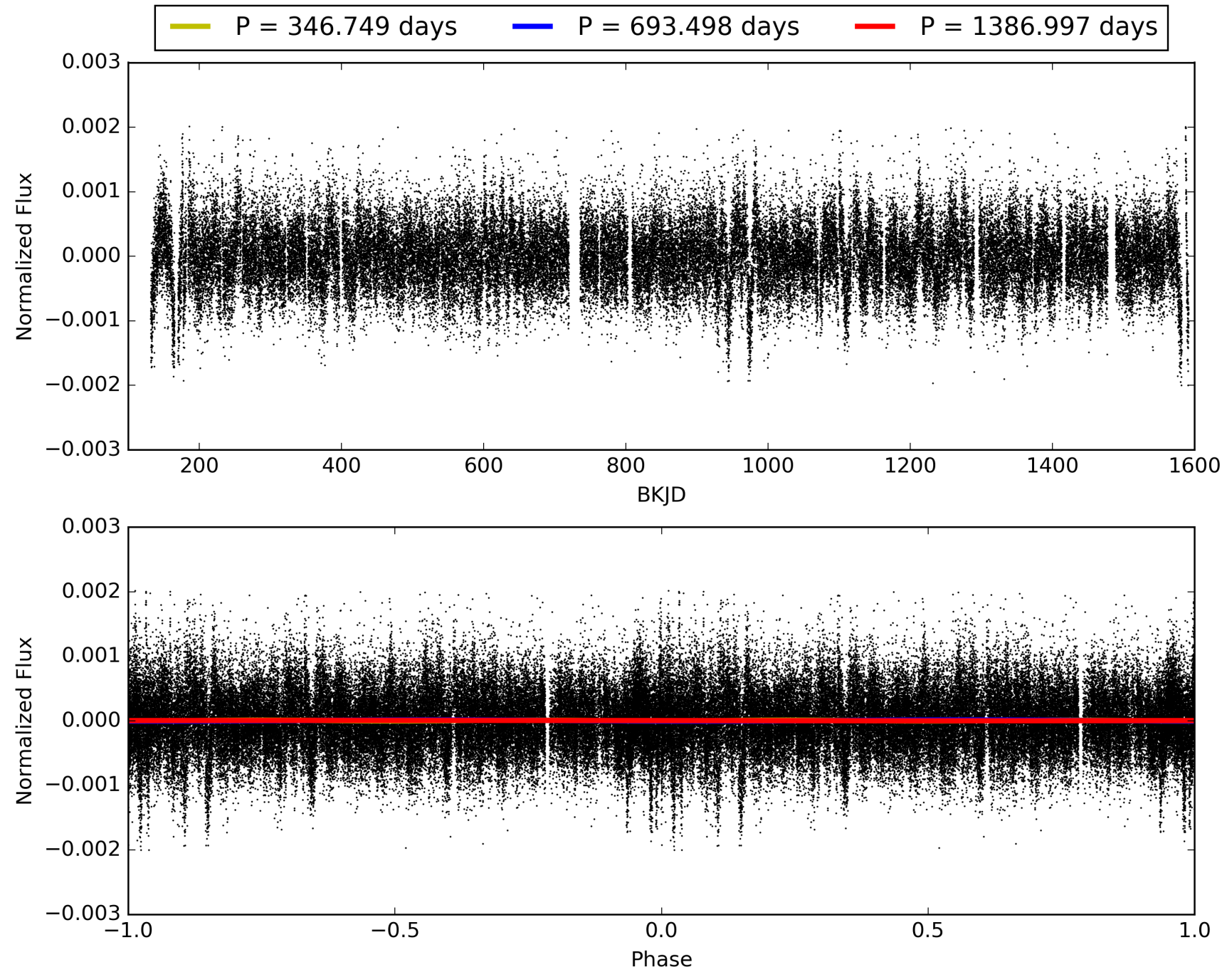
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 30-Jan-2016 14:28:06 Z

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

TCE 008226795-01, PDC Light Curves

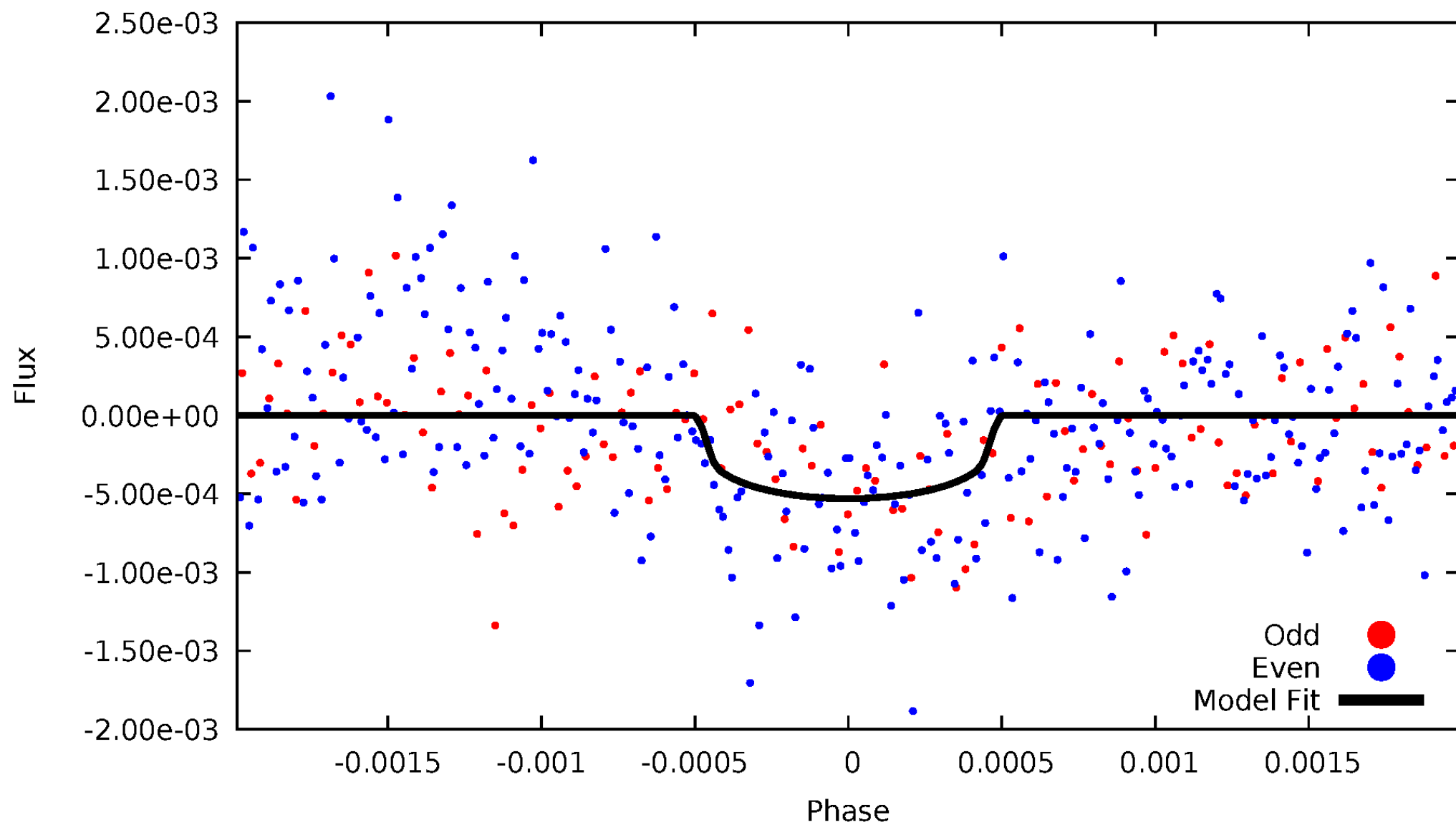


TCE 008226795-01



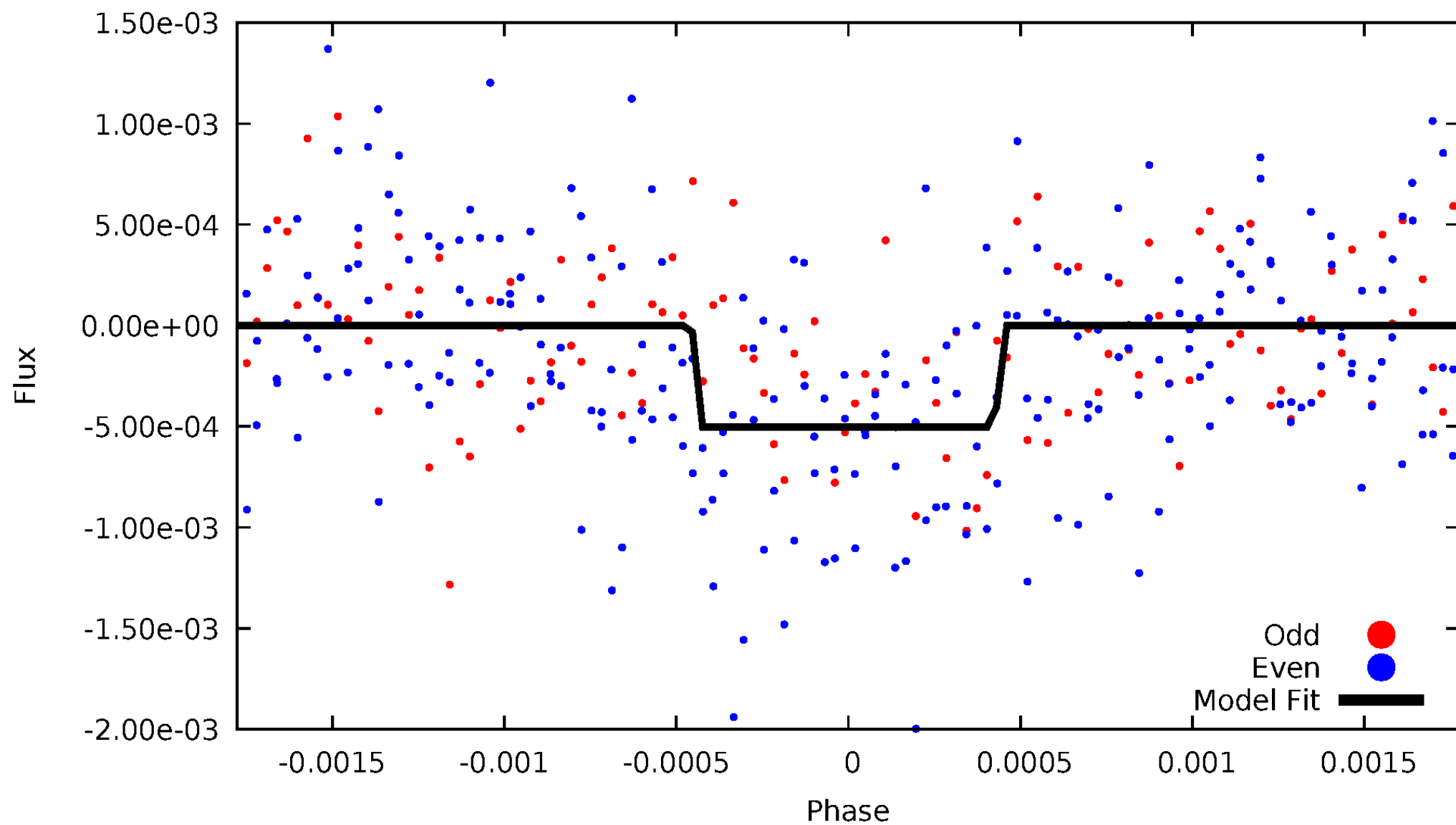
DV Odd/Even

TCE 008226795-01



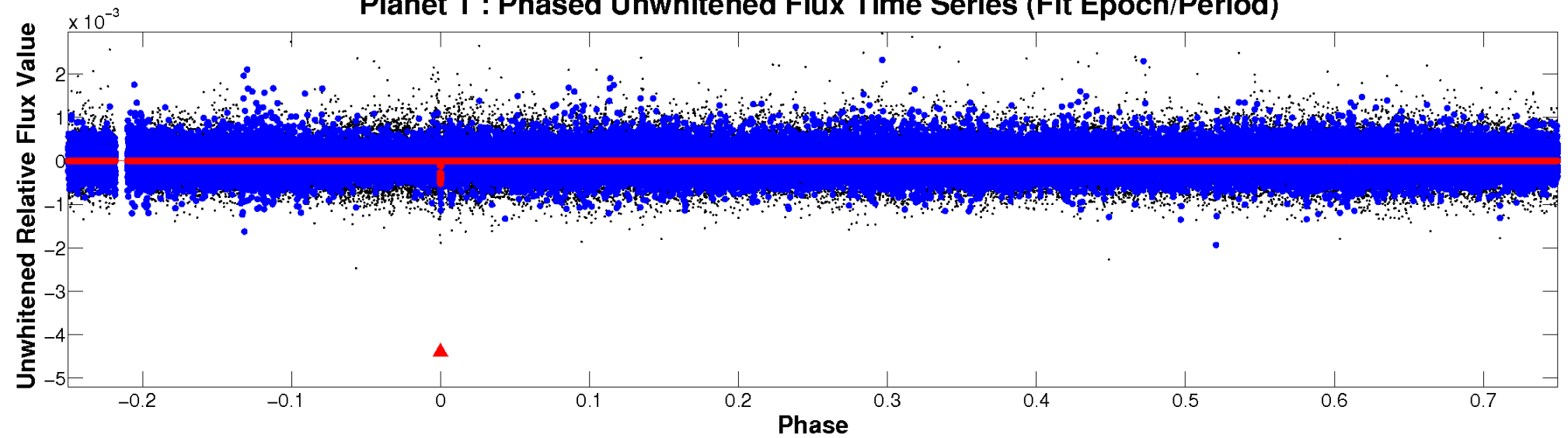
ALT Odd/Even

TCE 008226795-01

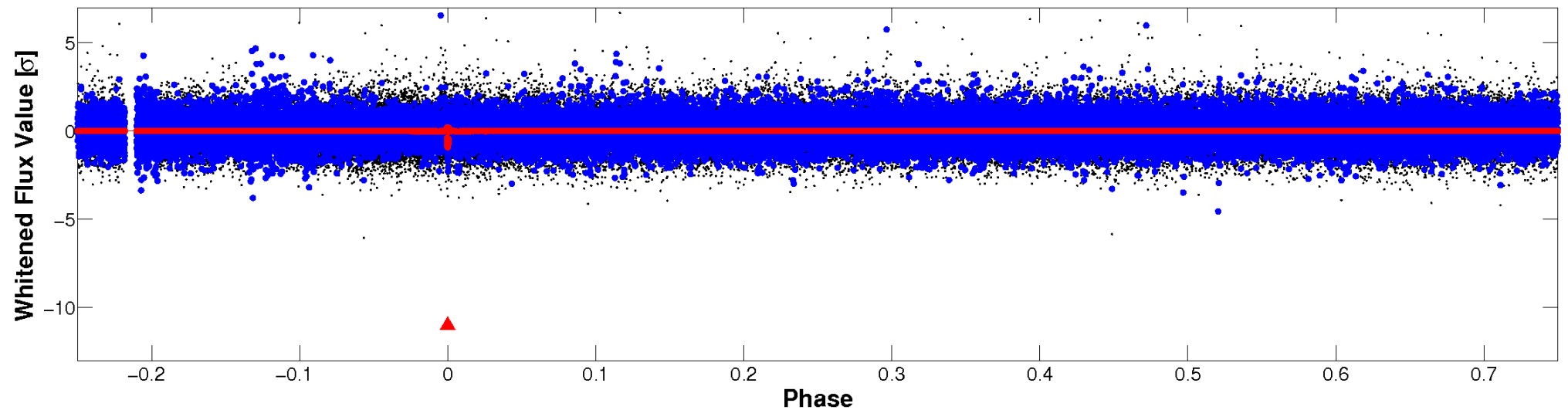


Non-Whitened Vs. Whitened Light Curve

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

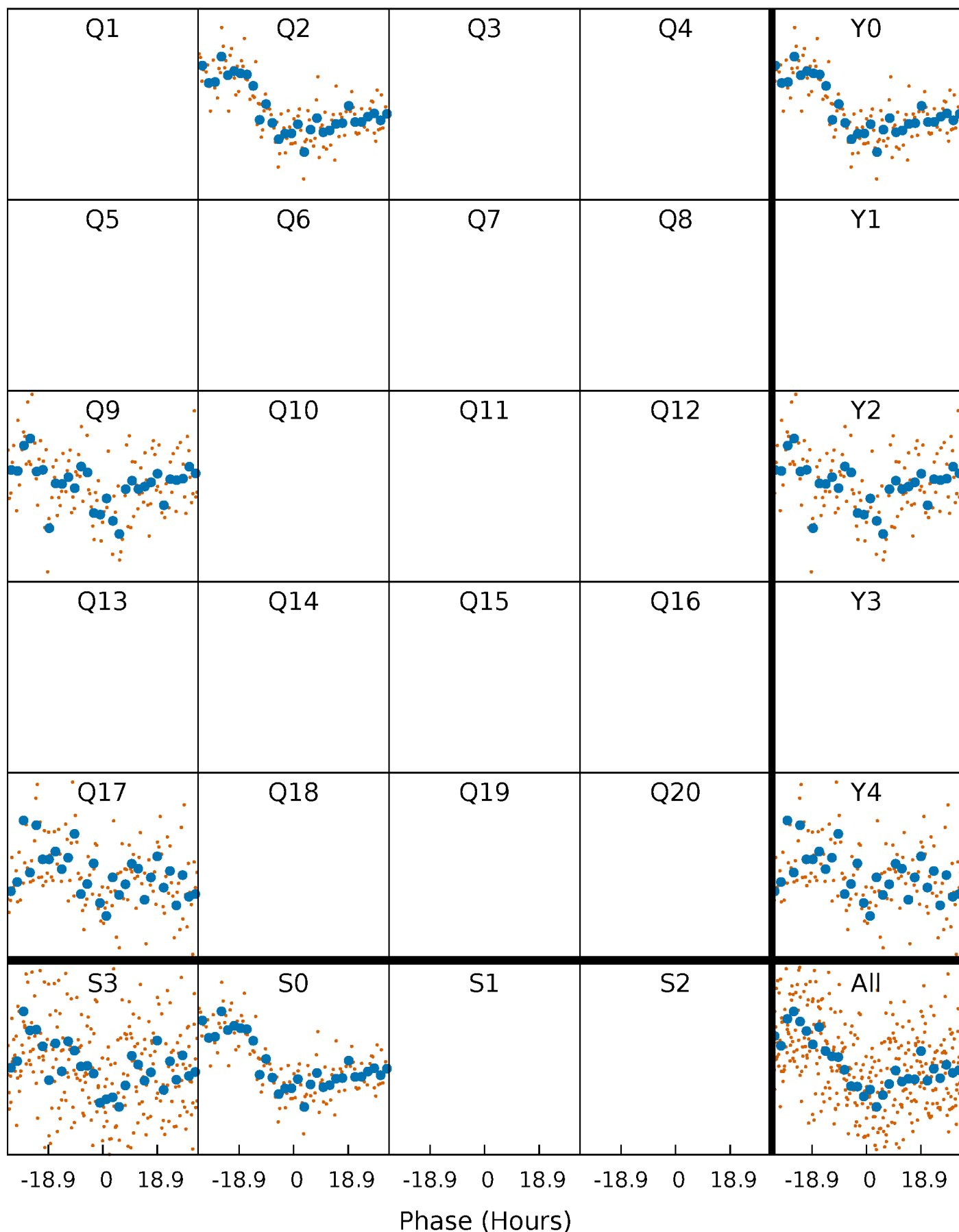


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



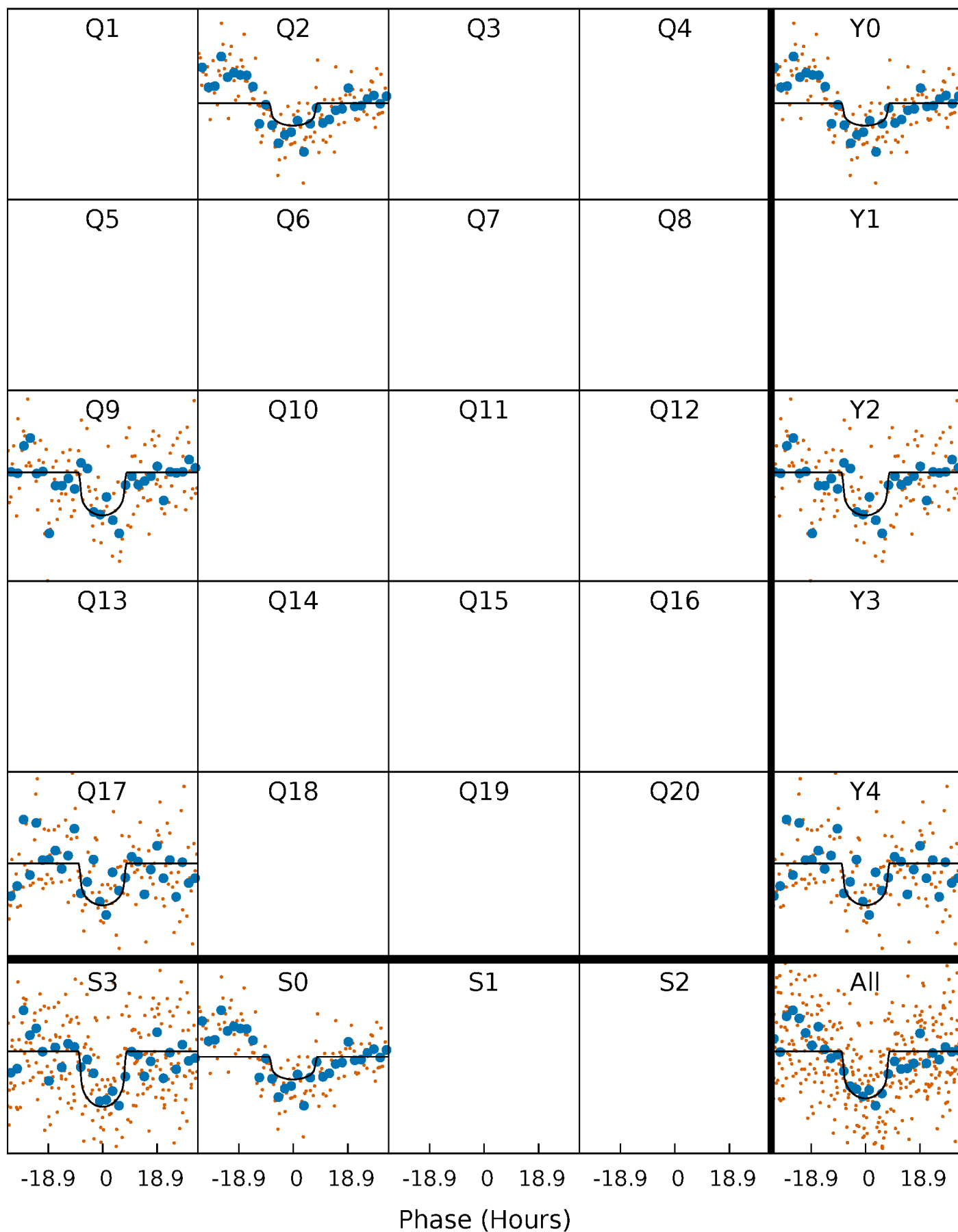
PDC Quarter-Phased Transit Curves

TCE 008226795-01 P=693.498270 Days $T_0=177.261659$ (BKJD)



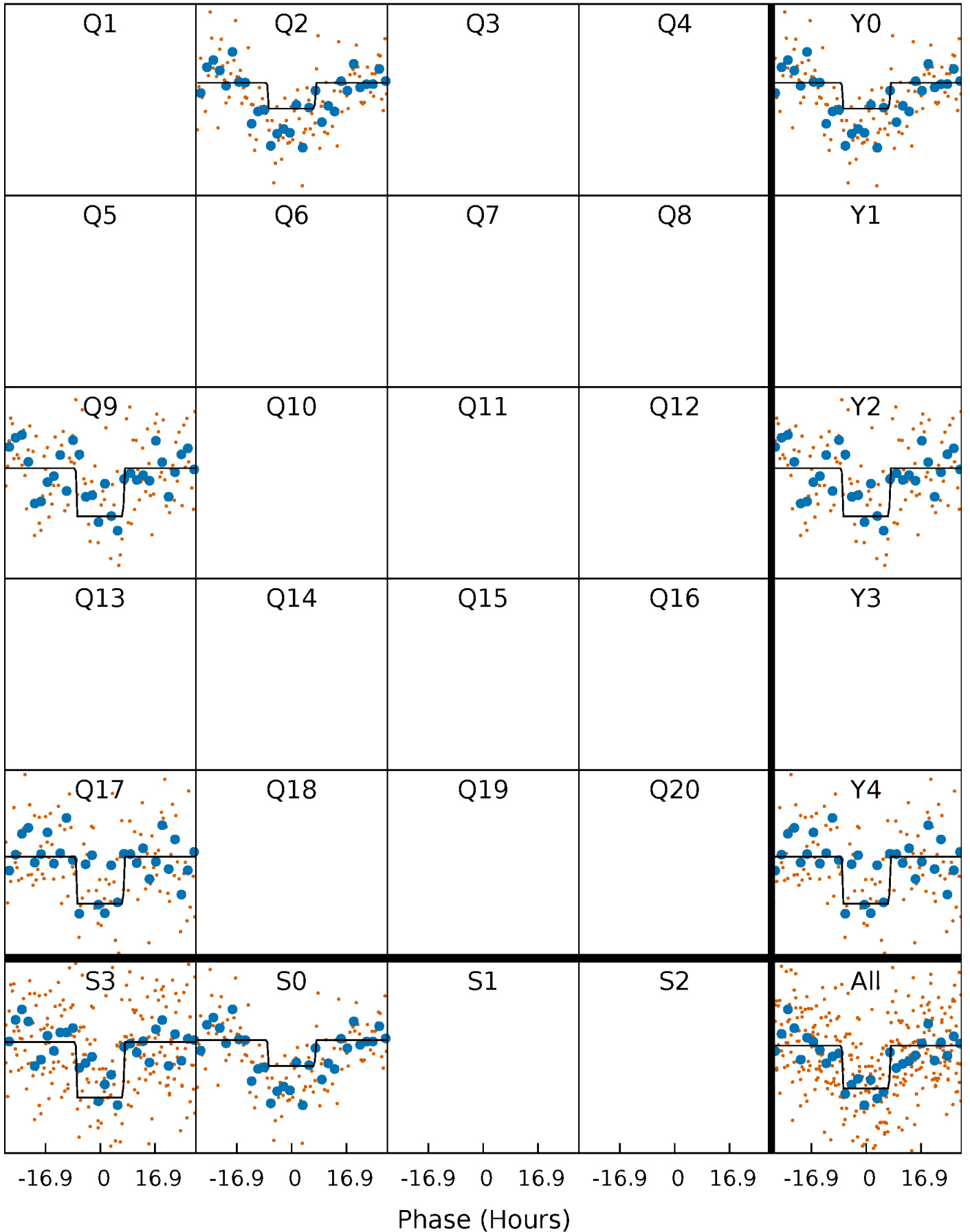
DV Quarter-Phased Transit Curves

TCE 008226795-01 P=693.498270 Days $T_0=177.261659$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

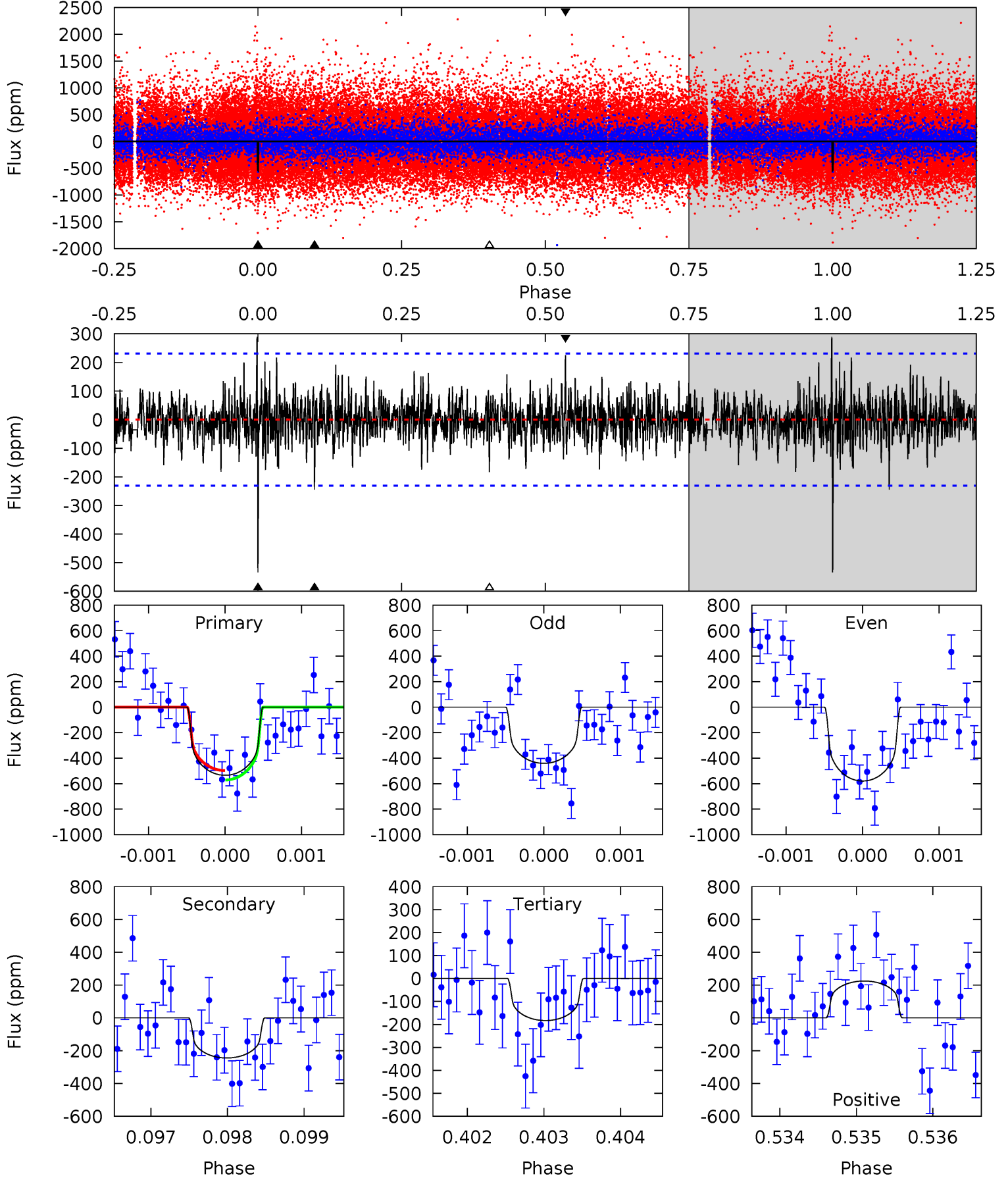
TCE 008226795-01 P=693.494593 Days $T_0=177.271309$ (BKJD)



DV Model-Shift Uniqueness Test

008226795-01, P = 693.498270 Days, E = 177.261659 Days

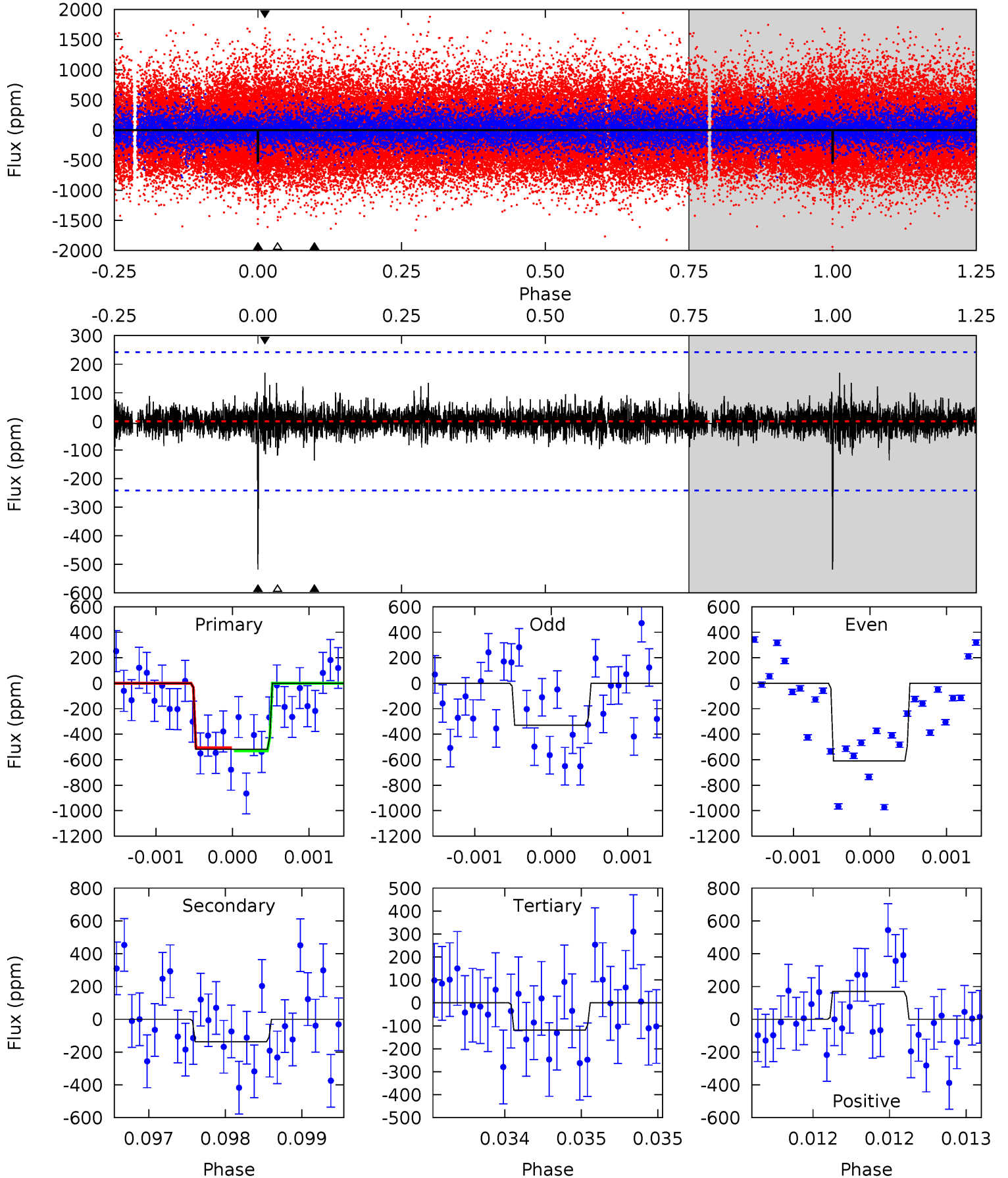
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
12.6	5.77	4.32	5.30	5.45	3.28	1.33	8.28	7.30	1.45	0.47	1.53	1.21	0.35	0.87



Alt Model-Shift Uniqueness Test

008226795-01, P = 693.494593 Days, E = 177.271309 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
11.7	3.09	2.70	3.84	5.47	3.32	0.65	9.02	7.88	0.39	-0.75	2.97	1.56	0.25	0.26



Stellar Parameters For KIC 008226795

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	4816^{+129}_{-143}	$4.596^{+0.032}_{-0.048}$	$0.060^{+0.250}_{-0.300}$	$0.733^{+0.061}_{-0.055}$	$0.772^{+0.053}_{-0.071}$	$2.767^{+0.517}_{-0.435}$
	+3%/-3%	+1%/-1%	+417%/-500%	+8%/-8%	+7%/-9%	+19%/-16%
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 008226795-01 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	-245 ± 42	$1.89^{+0.65}_{-0.61}$	215^{+7}_{-7}	4114^{+704}_{-428}	74284^{+92555}_{-35041}
Alt.	-137 ± 44	$1.79^{+0.62}_{-0.63}$	215^{+7}_{-8}	3788^{+656}_{-436}	46591^{+65841}_{-24548}

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 $A_{obs} \gg 1.0$

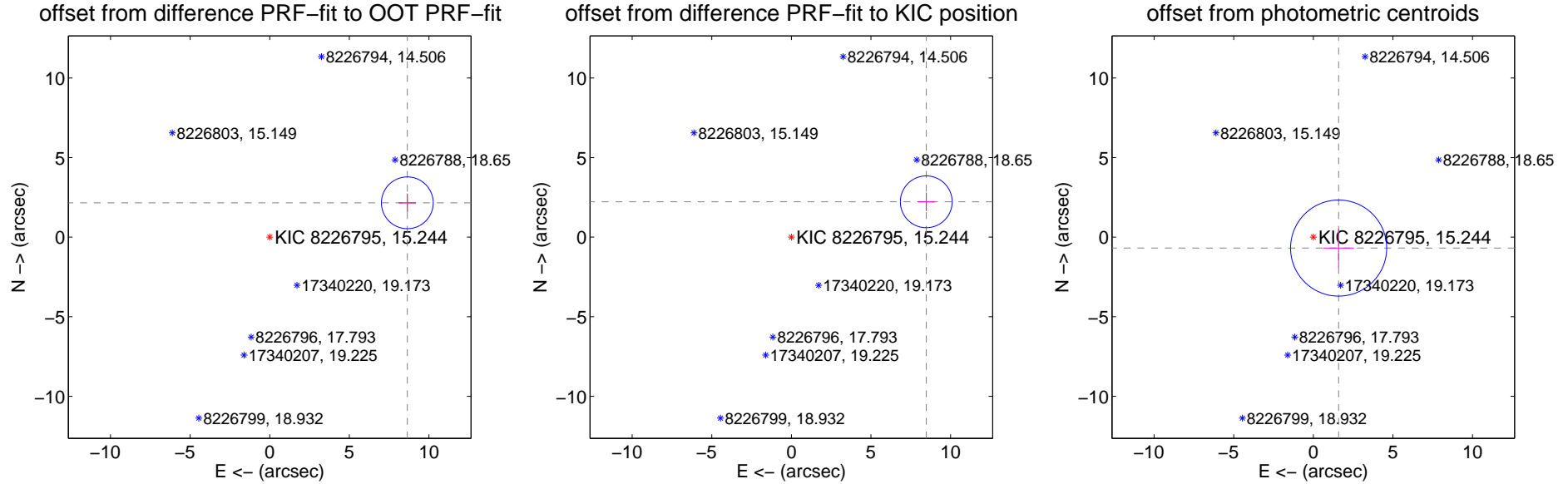
DV Centroid Data

Supplemental centroid analysis for 008226795-01. Kepler magnitude: 15.24. Transit SNR 7.67

There are 0 quarters with good PRF difference image offsets

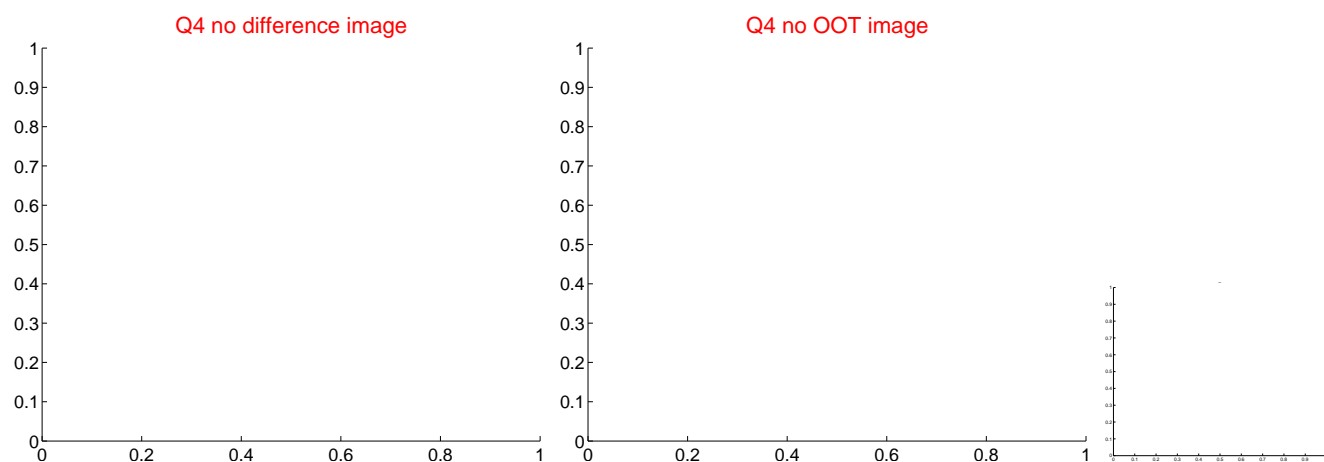
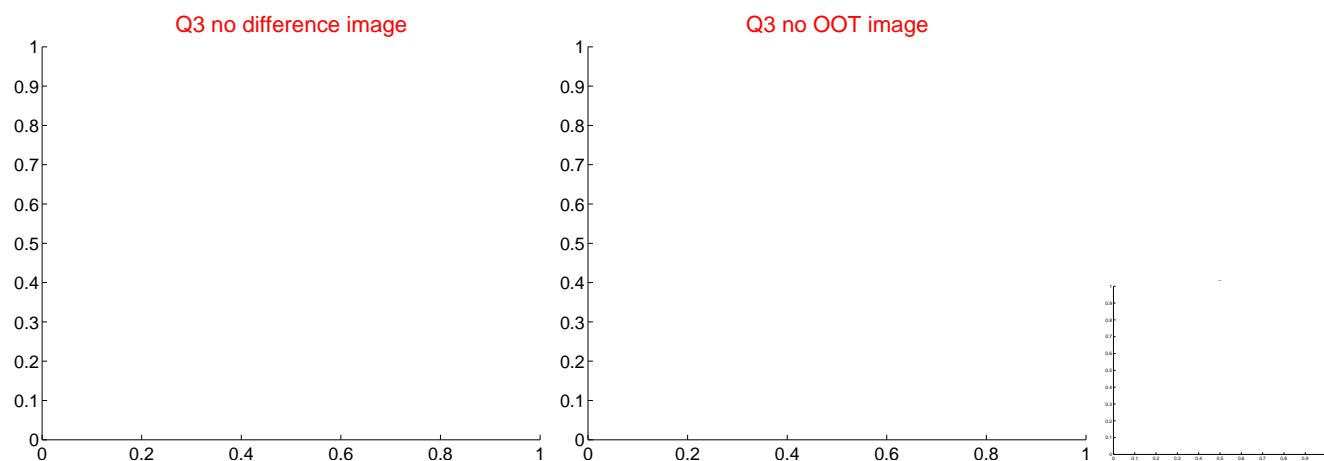
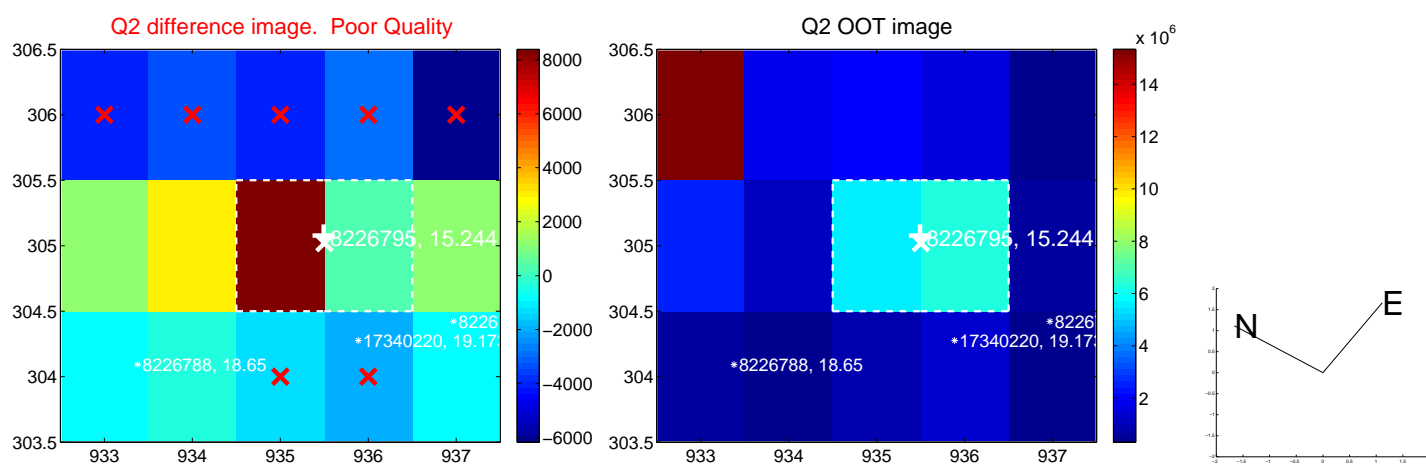
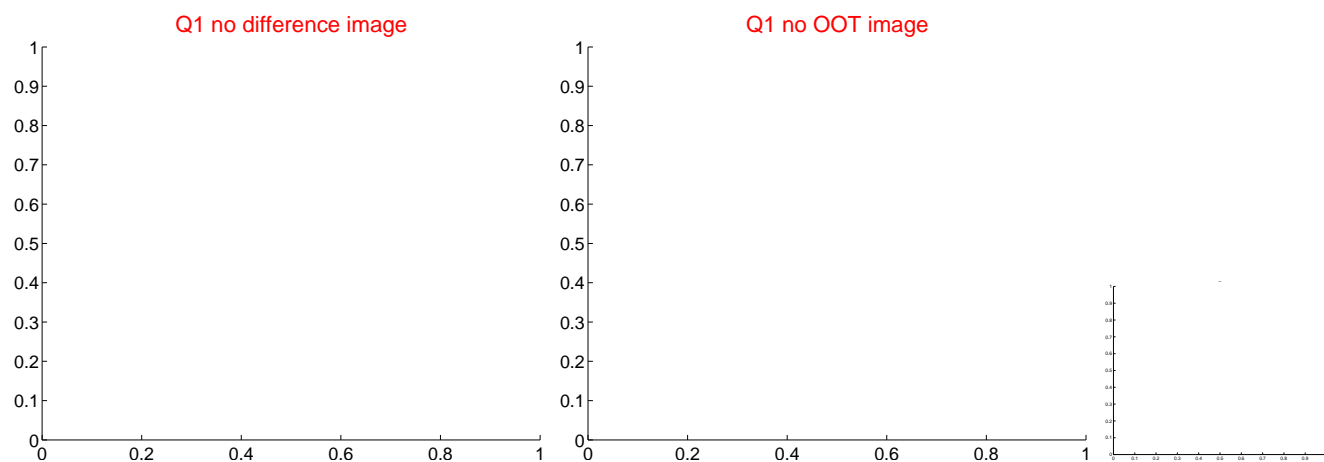
The direct PRF centroid is offset from the target star catalog position by about 0.18 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	8.908 ± 0.542	16.43	-8.643 ± 0.540	2.158 ± 0.573
PRF-fit source offset from KIC position	8.759 ± 0.542	16.15	-8.472 ± 0.540	2.221 ± 0.573
photometric centroid source offset	1.73 ± 1.01	1.72	-1.59 ± 0.96	-0.69 ± 1.22



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.

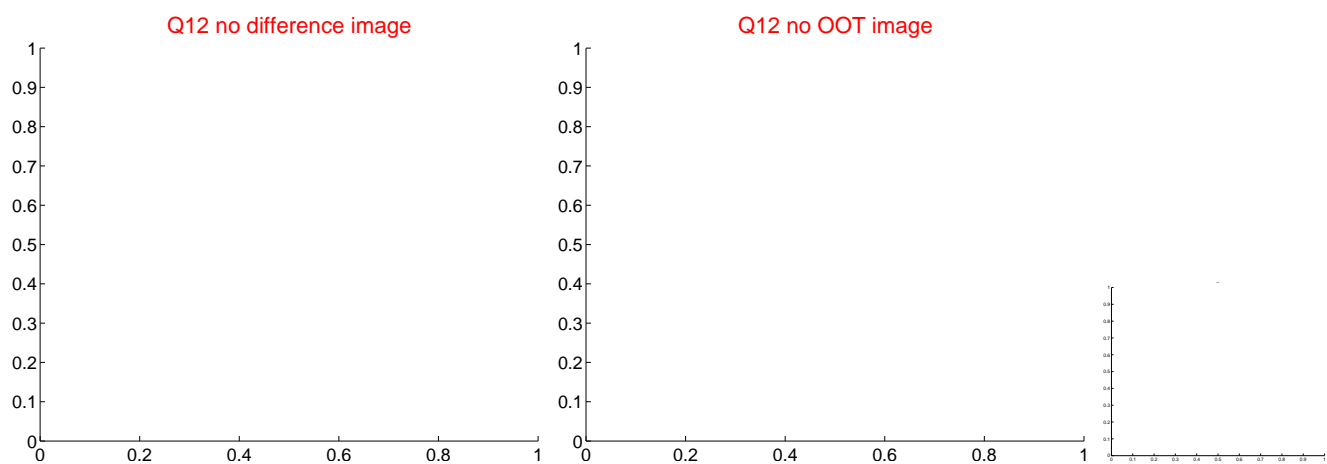
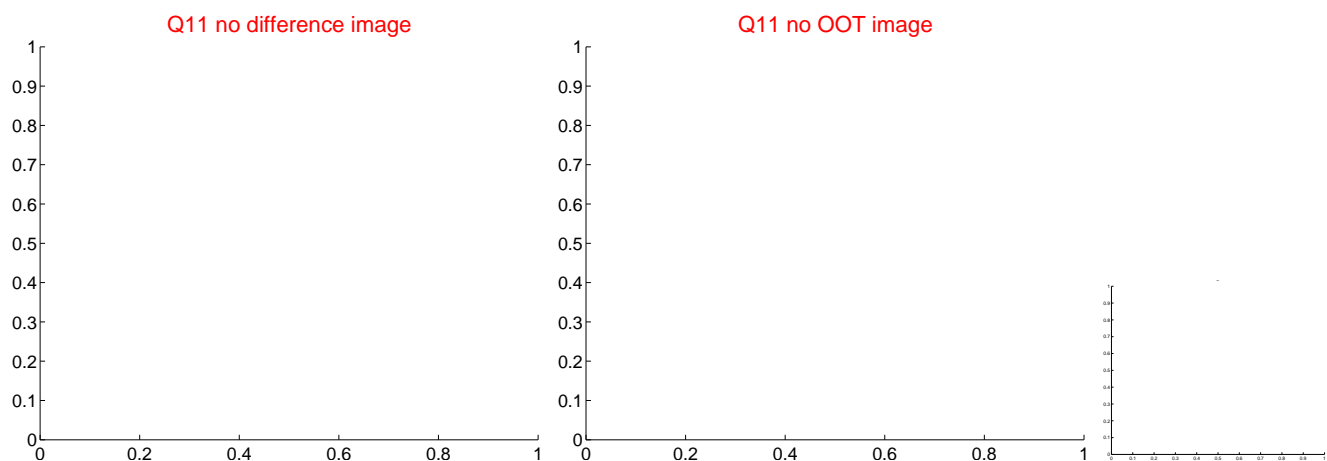
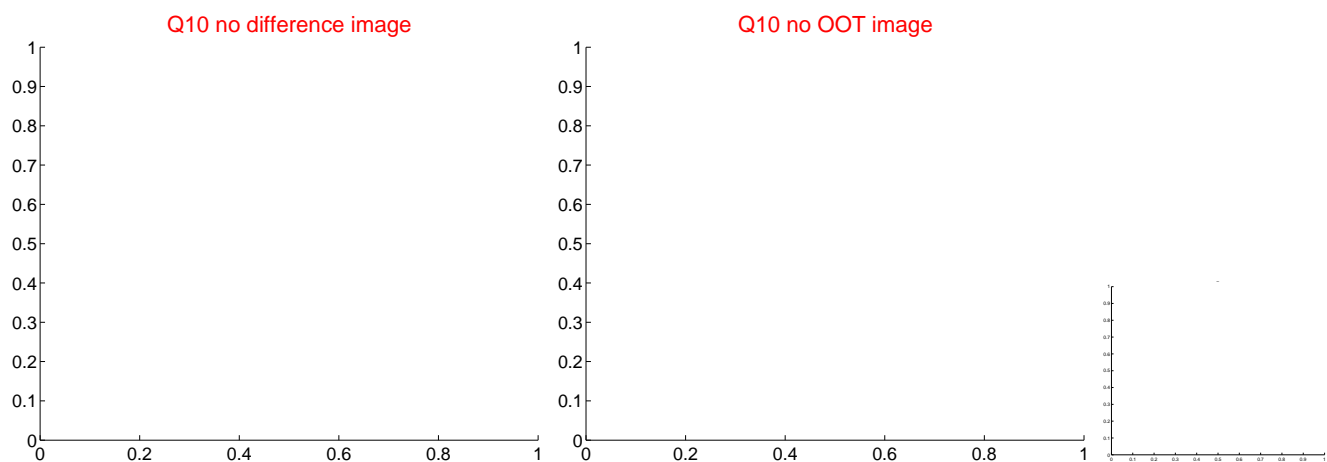
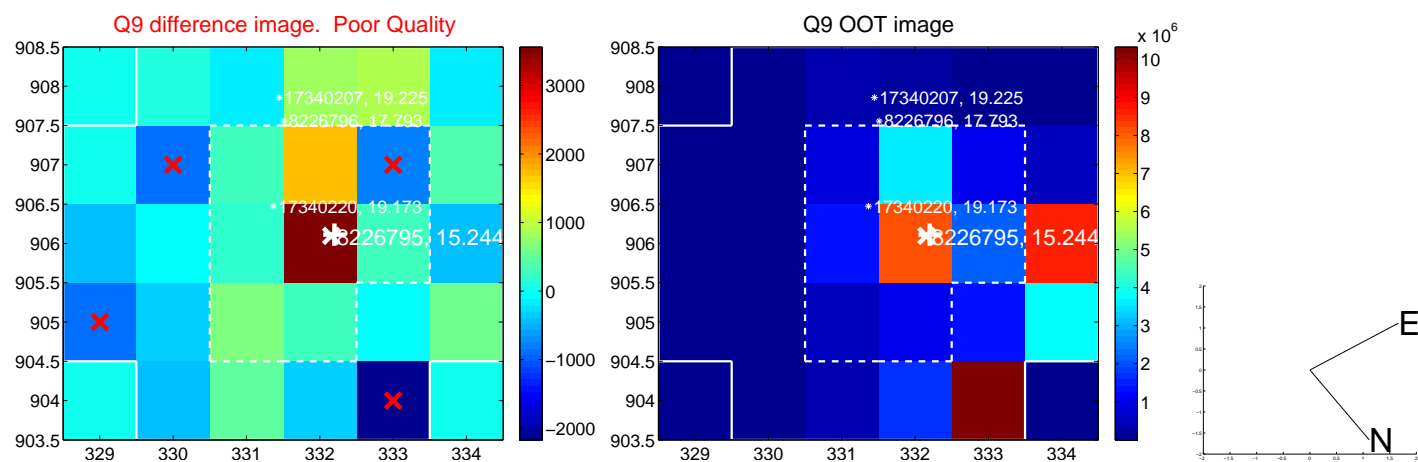
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value



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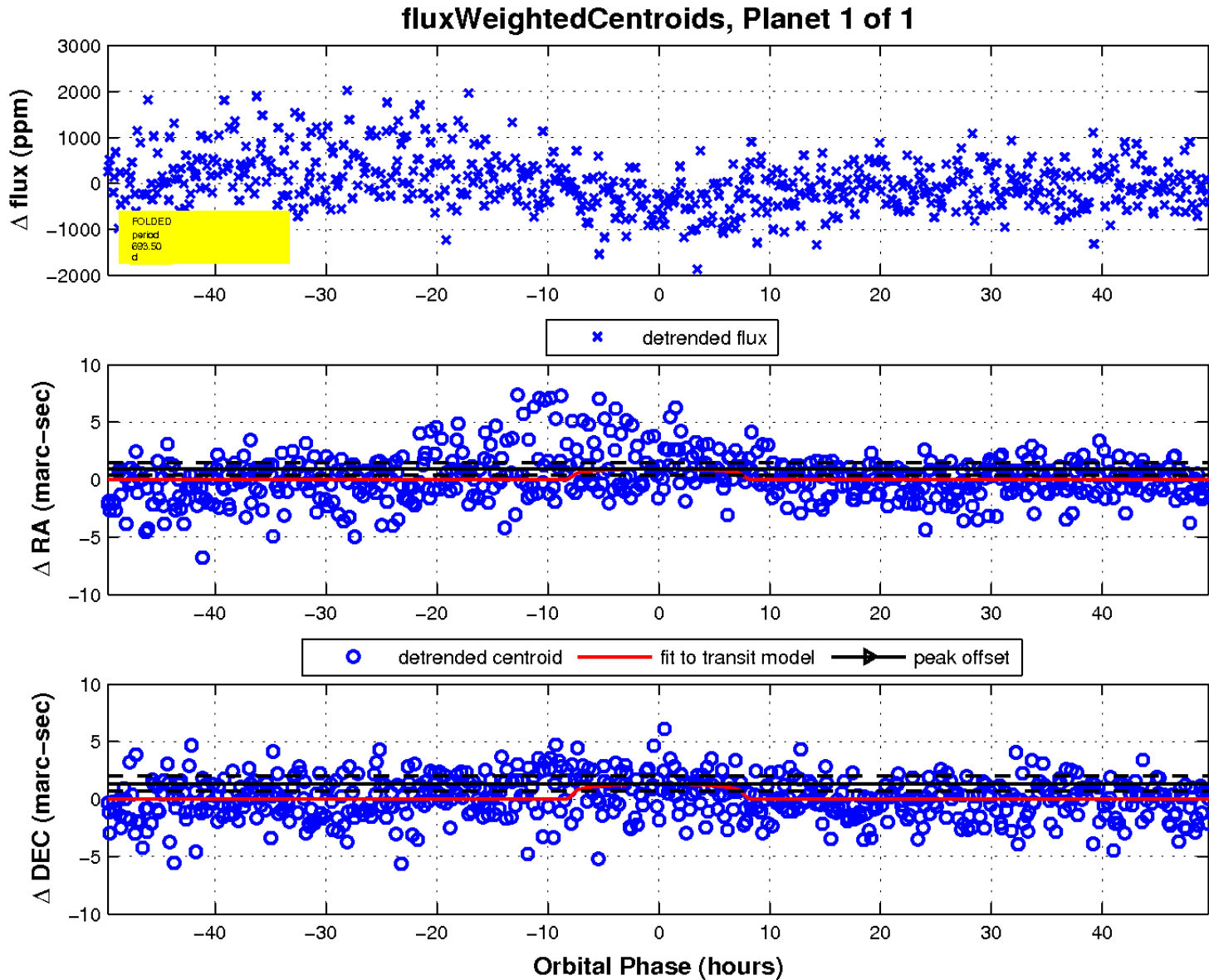
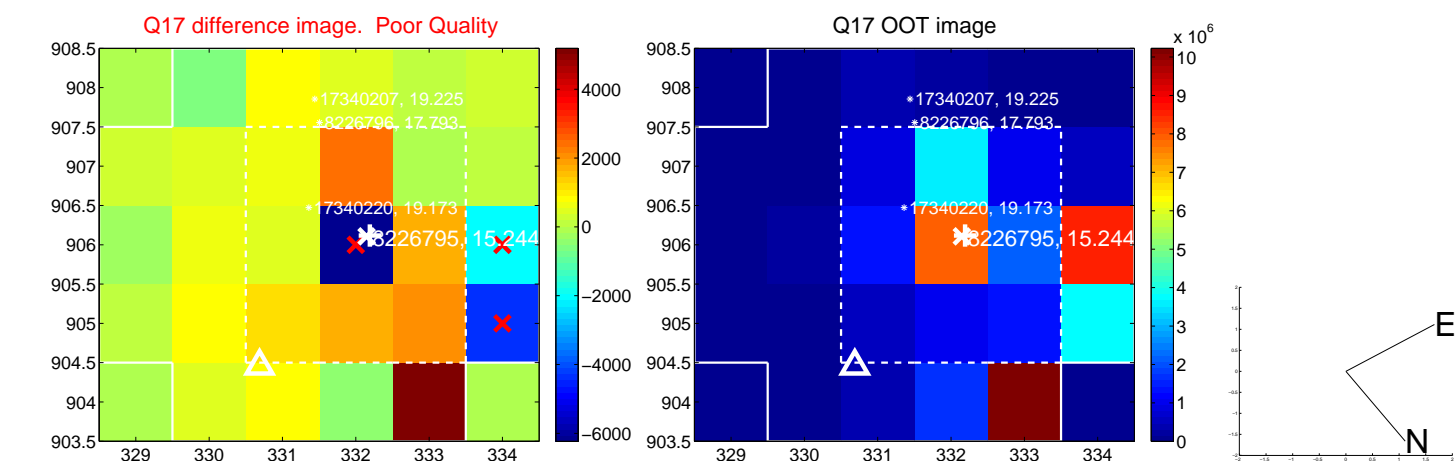
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value



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



UKIRT Image

Declination

