

KIC 008884526

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})
008884526-01	OBS	No	375.674259	139.366375	3193.6	87.439	14.3	24.1	0.93	6060	9.45	0.99

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
008884526-01	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_MARSHALL_SKYE—LPP_DV—ALL_TRANS_CHASES—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.

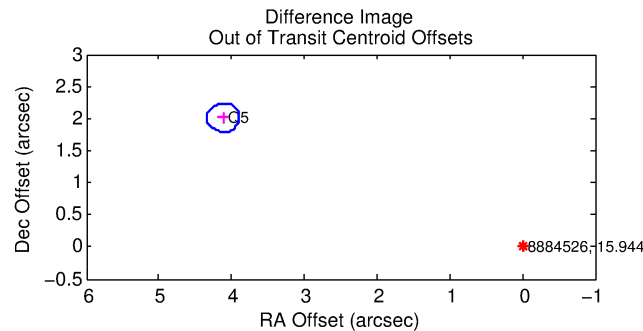
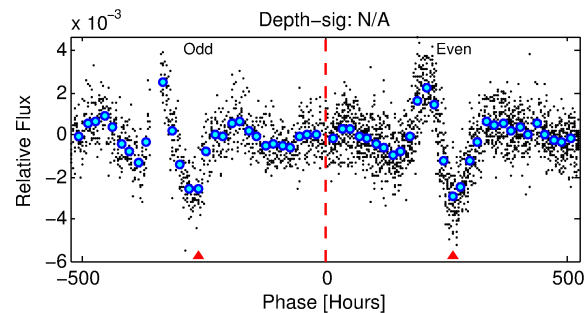
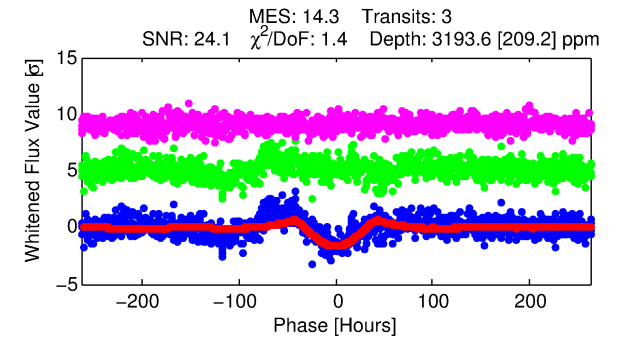
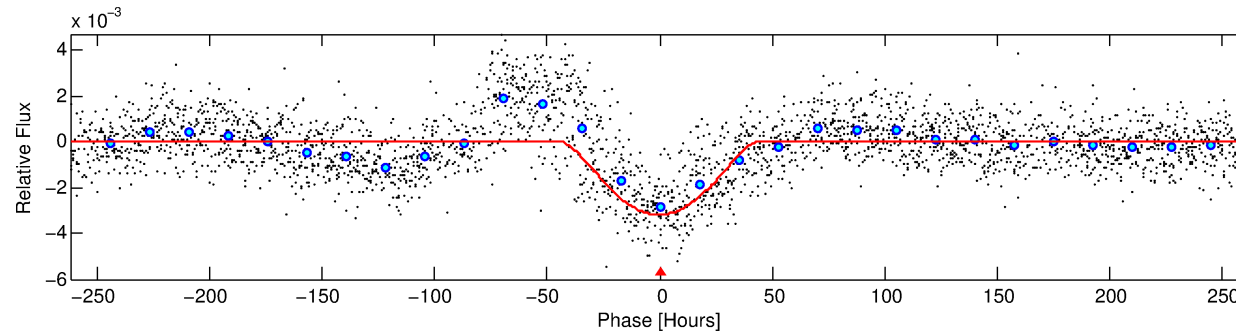
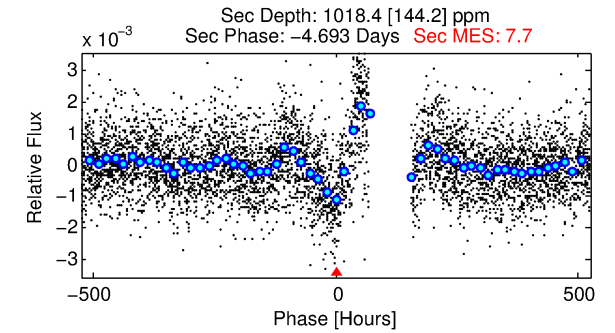
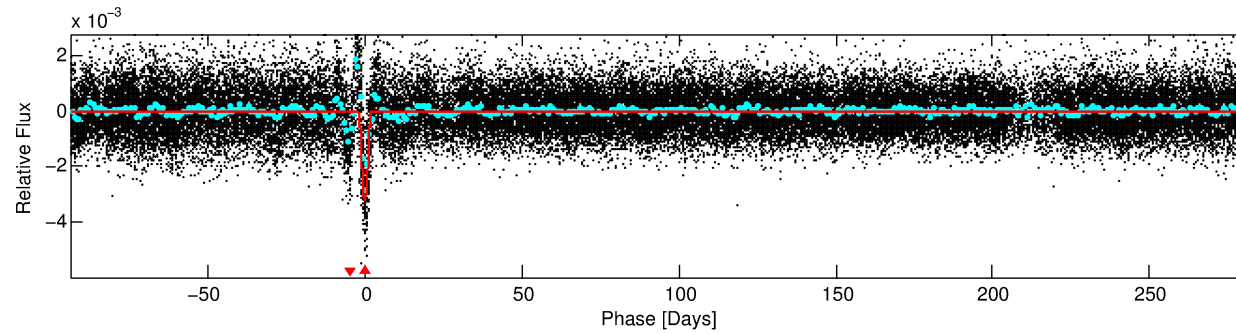
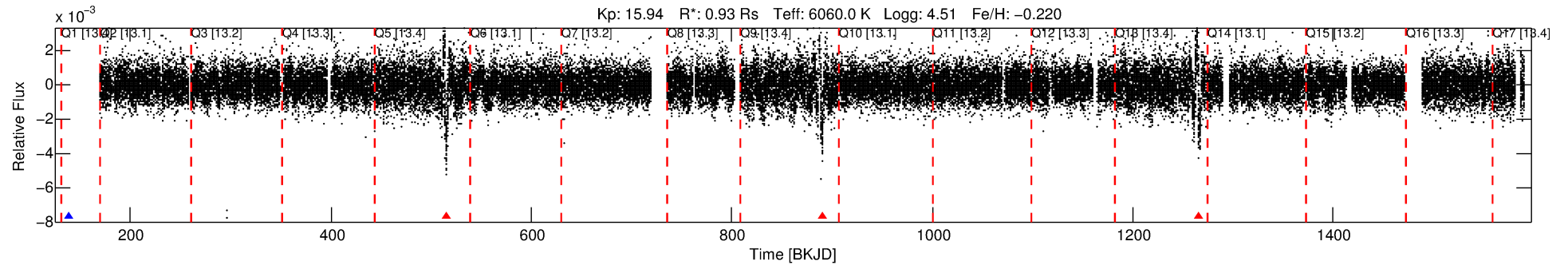
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 008884526-01

No Significant Match Found

DV One-Page Summary

KIC: 8884526 Candidate: 1 of 1 Period: 375.674 d



DV Fit Results:

Period = 375.67426 [0.04795] d
Epoch = 139.3664 [0.1045] BKJD
Rp/R* = 0.0936 [0.1086]
a/R* = 14.78 [3.57]
b = 1.00 [0.16]
Seff = 0.99 [0.39]
Teq = 254 [25] K
Rp = 9.45 [11.32] Re
a = 1.0217 [0.2567] AU
Ag = 6546.25 [15397.49] [0.43σ]
Teff = 3538 [2059] K [1.59σ]

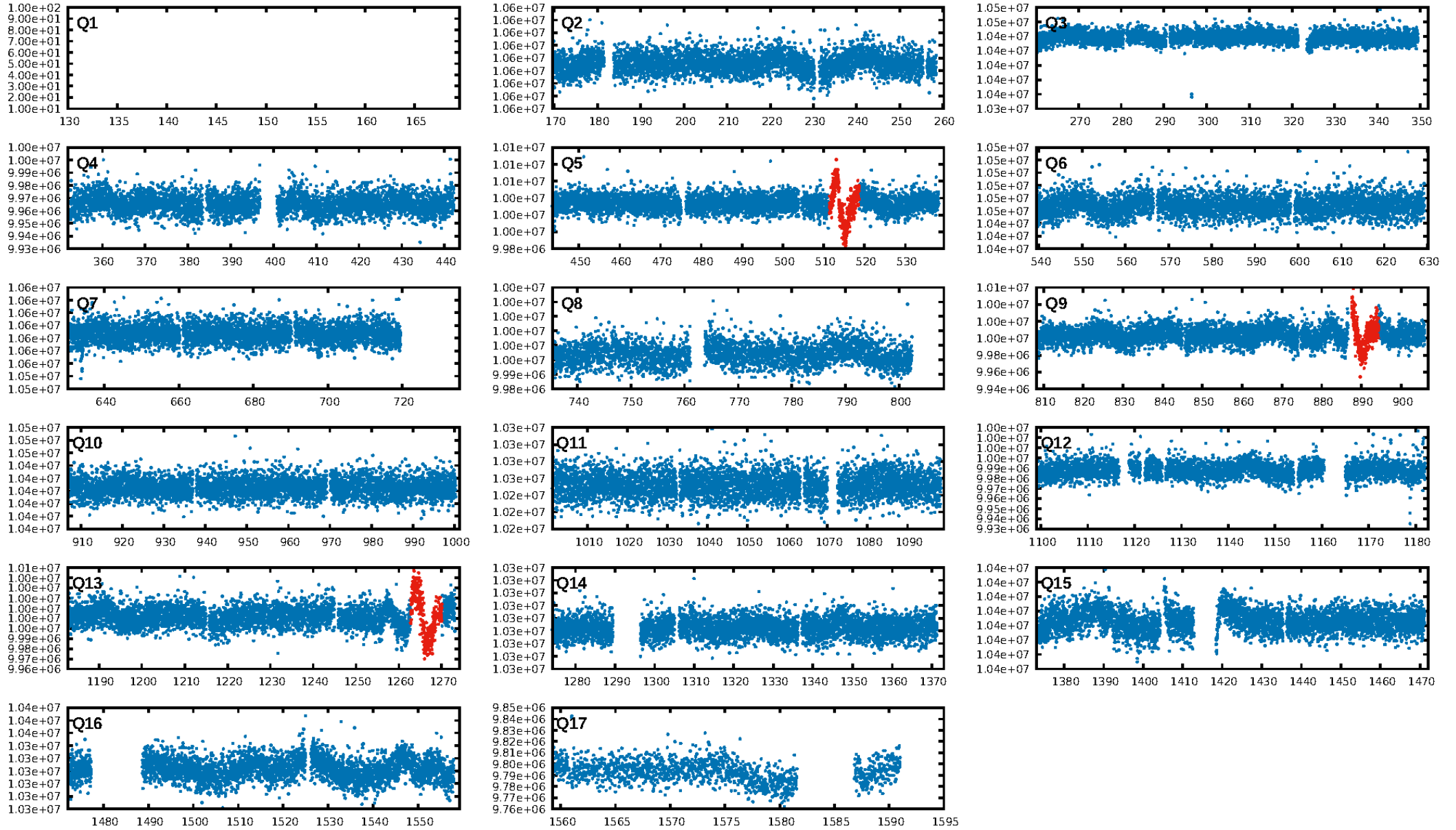
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: 0.0%
ModelChiSquareGoF-sig: 31.5%
Bootstrap-pfa: 4.20e-38
RollingBand-fgt: 0.00 [0/3]
GhostDiagnostic-chr: 1.011
Centroid-sig: 30.4%
Centroid-so: 0.996 arcsec [1.15σ]
OotOffset-rm: 4.585 arcsec [61.62σ]
KicOffset-rm: 4.620 arcsec [62.07σ]
OotOffset-st: 0/0/0/1 [1]
KicOffset-st: 0/0/0/1 [1]
DiffImageQuality-fgm: 0.00 [0/1]
DiffImageOverlap-fno: 1.00 [1/1]

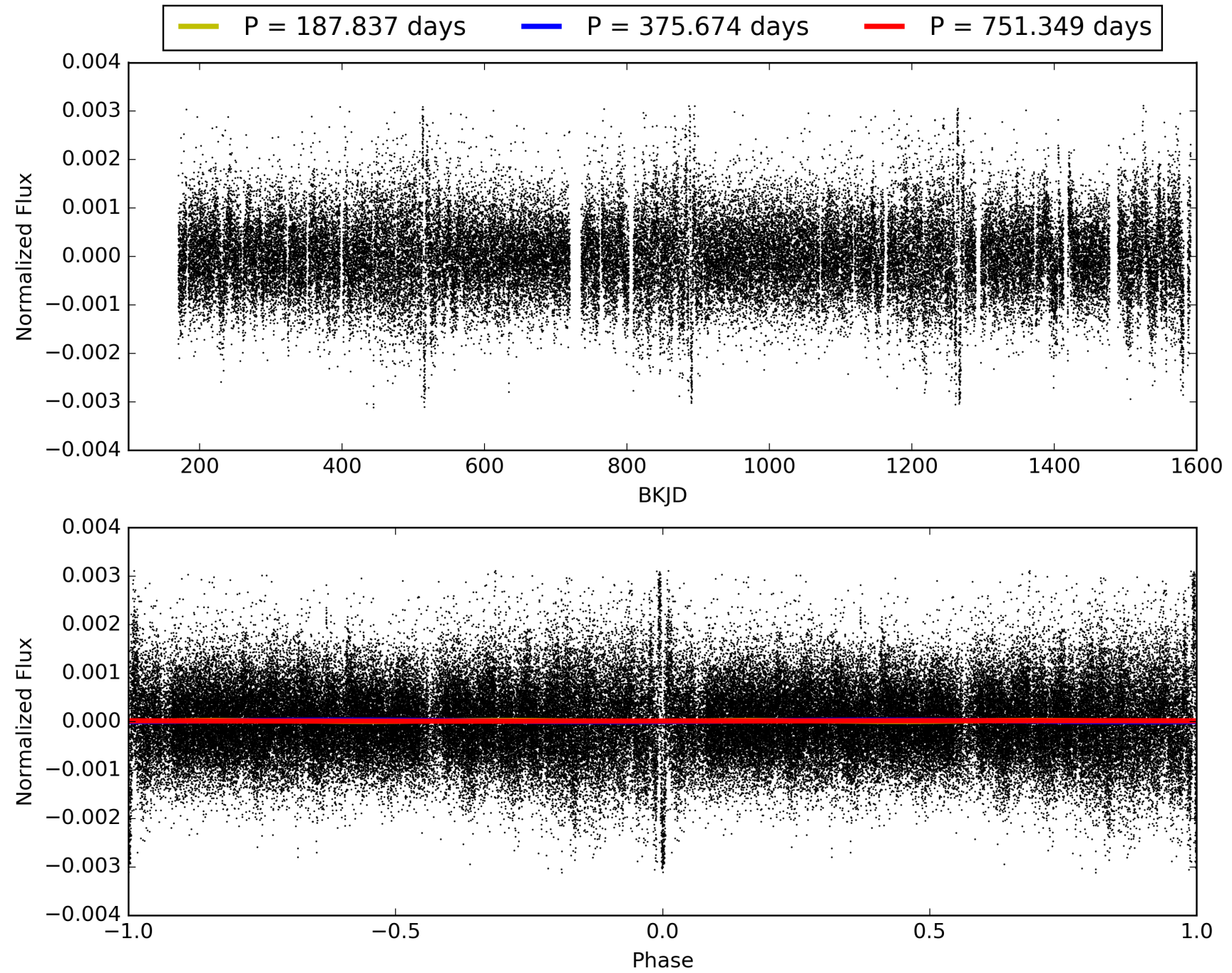
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 30-Jan-2016 18:44:24 Z

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

TCE 008884526-01, PDC Light Curves

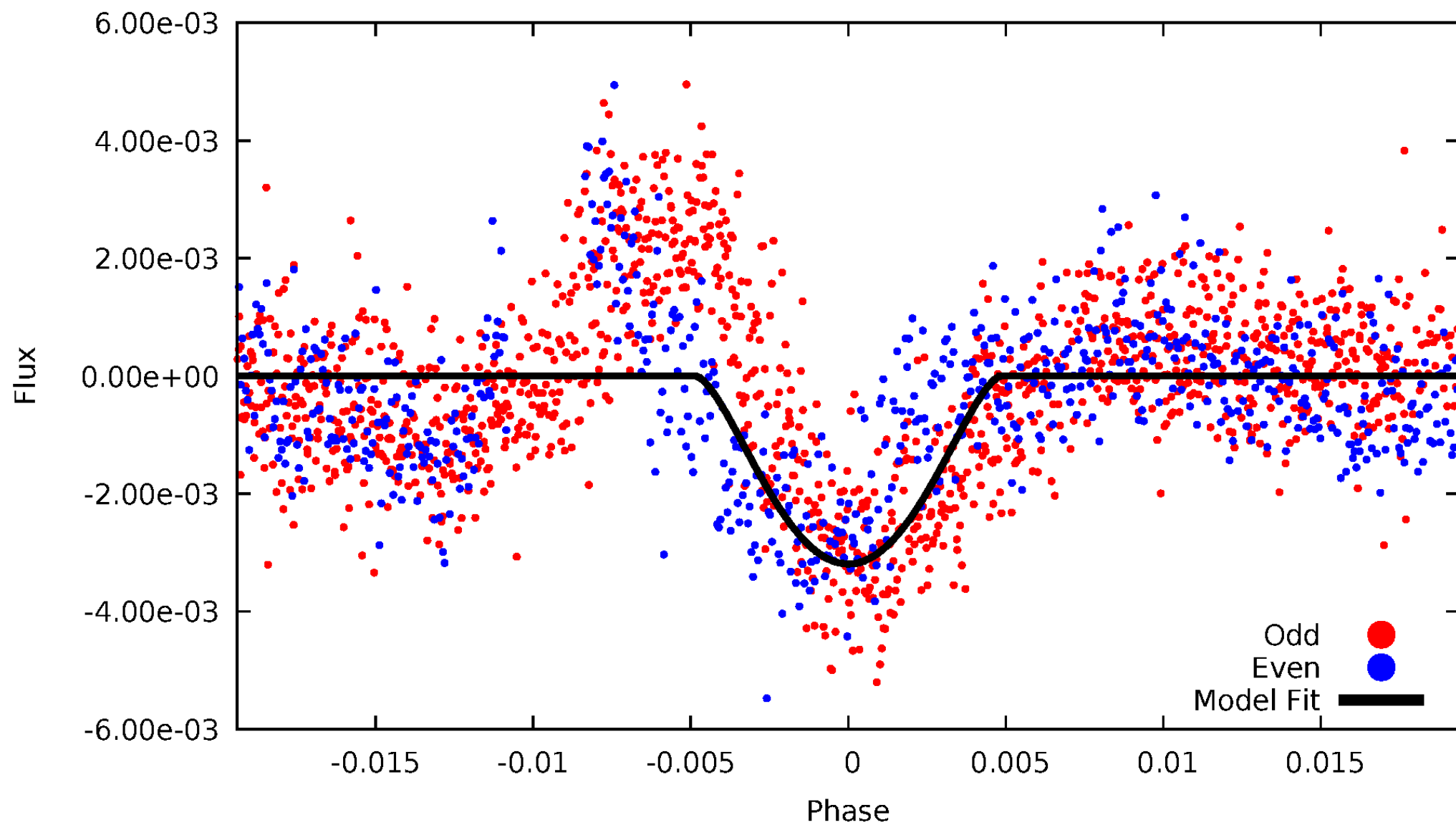


TCE 008884526-01



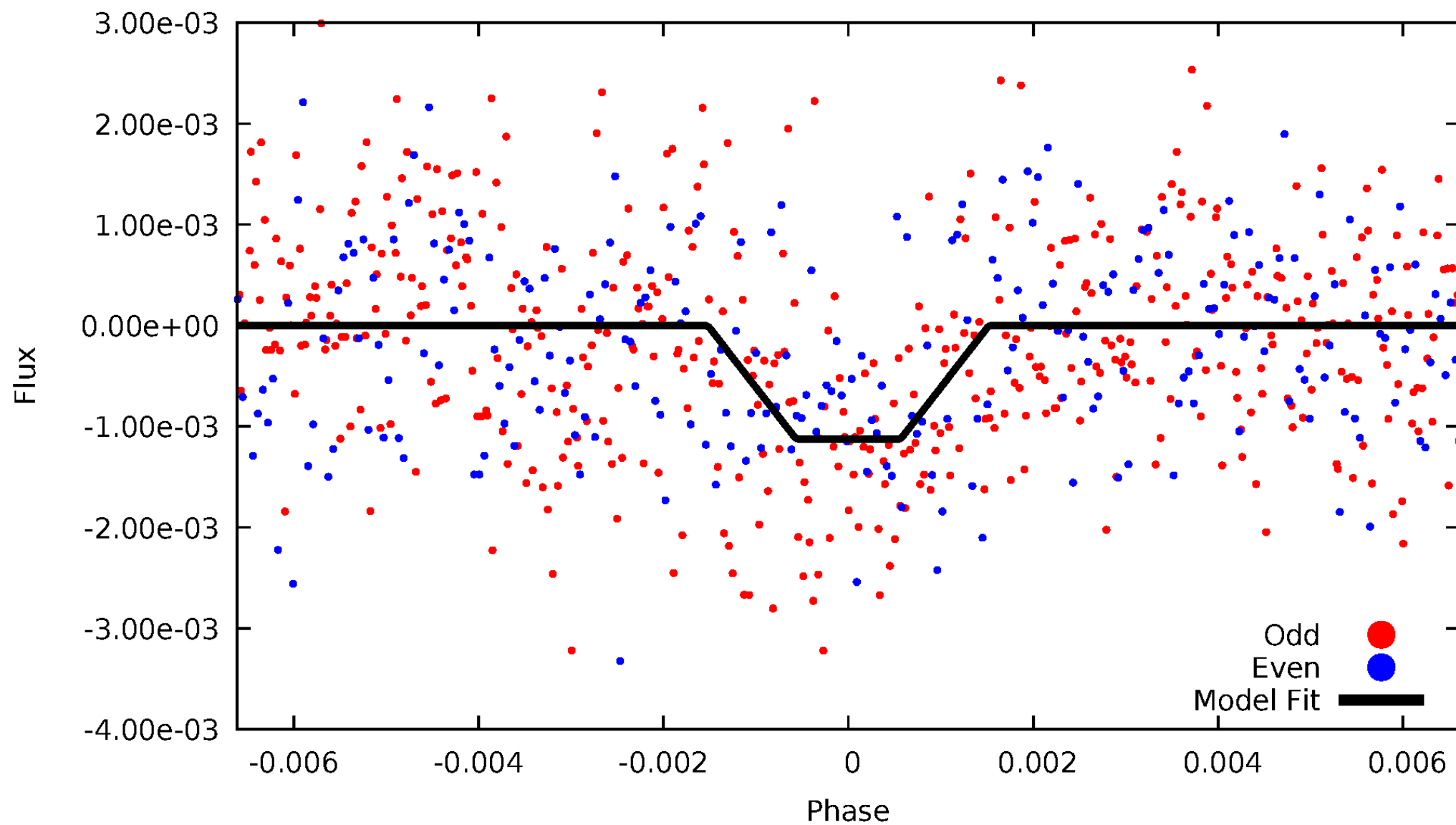
DV Odd/Even

TCE 008884526-01

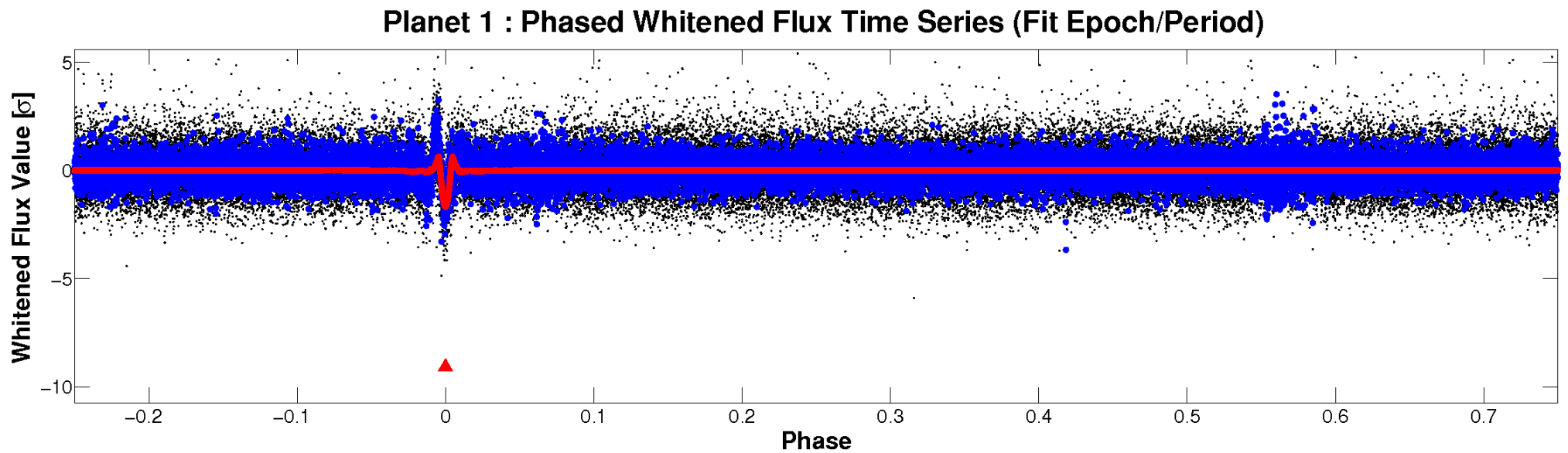
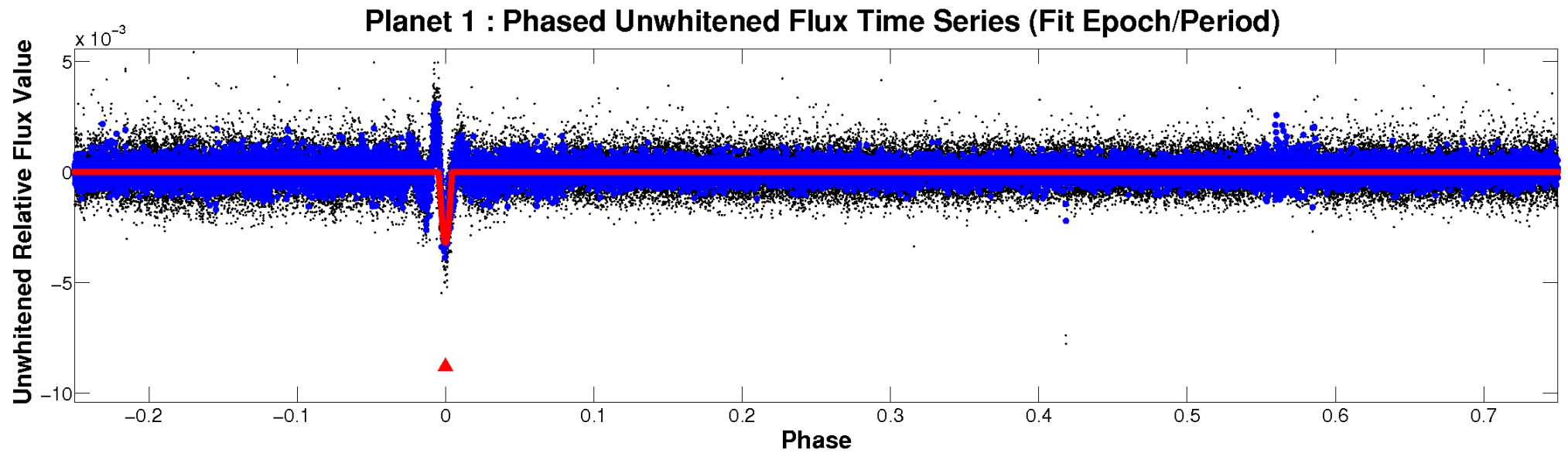


ALT Odd/Even

TCE 008884526-01

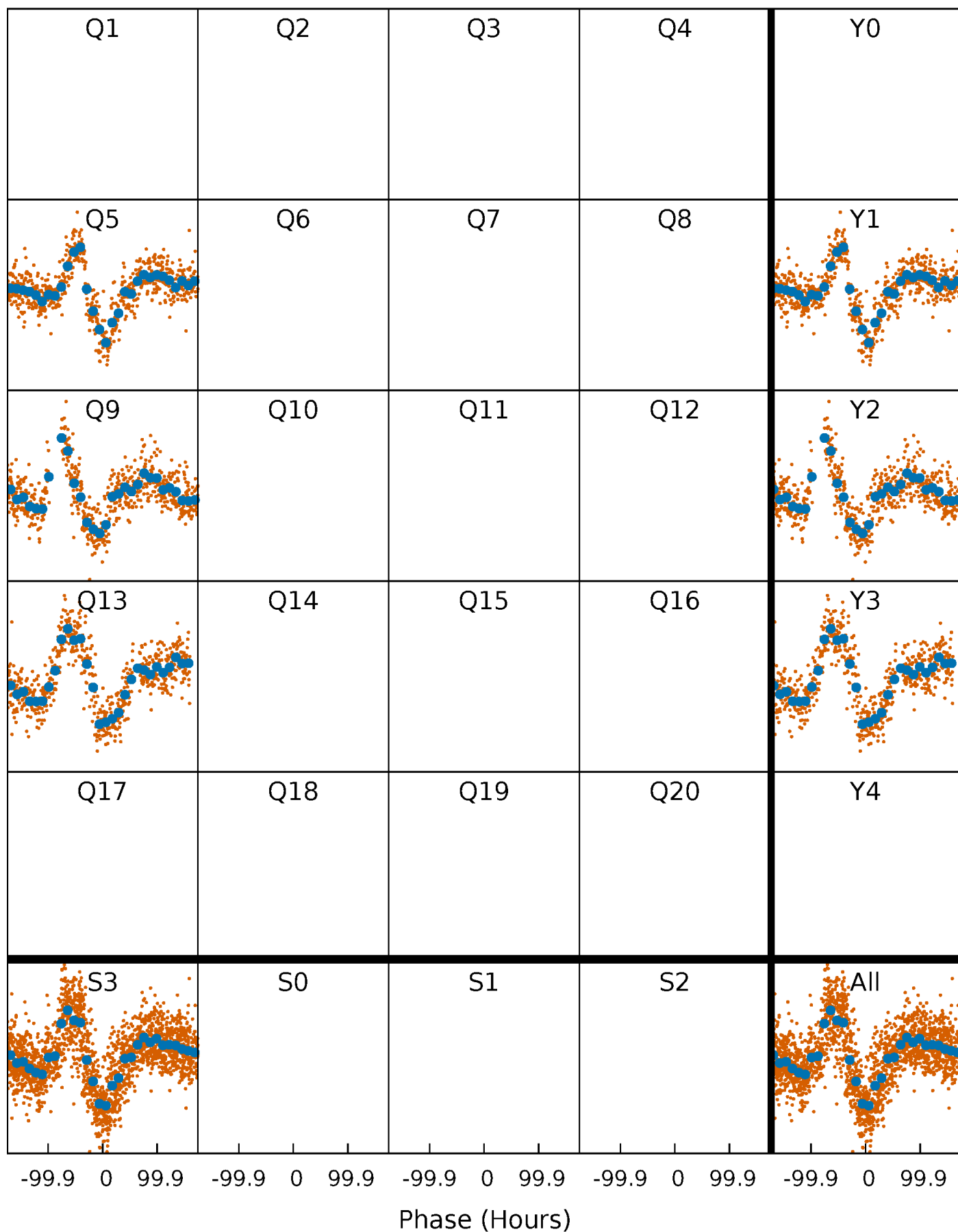


Non-Whitened Vs. Whitened Light Curve



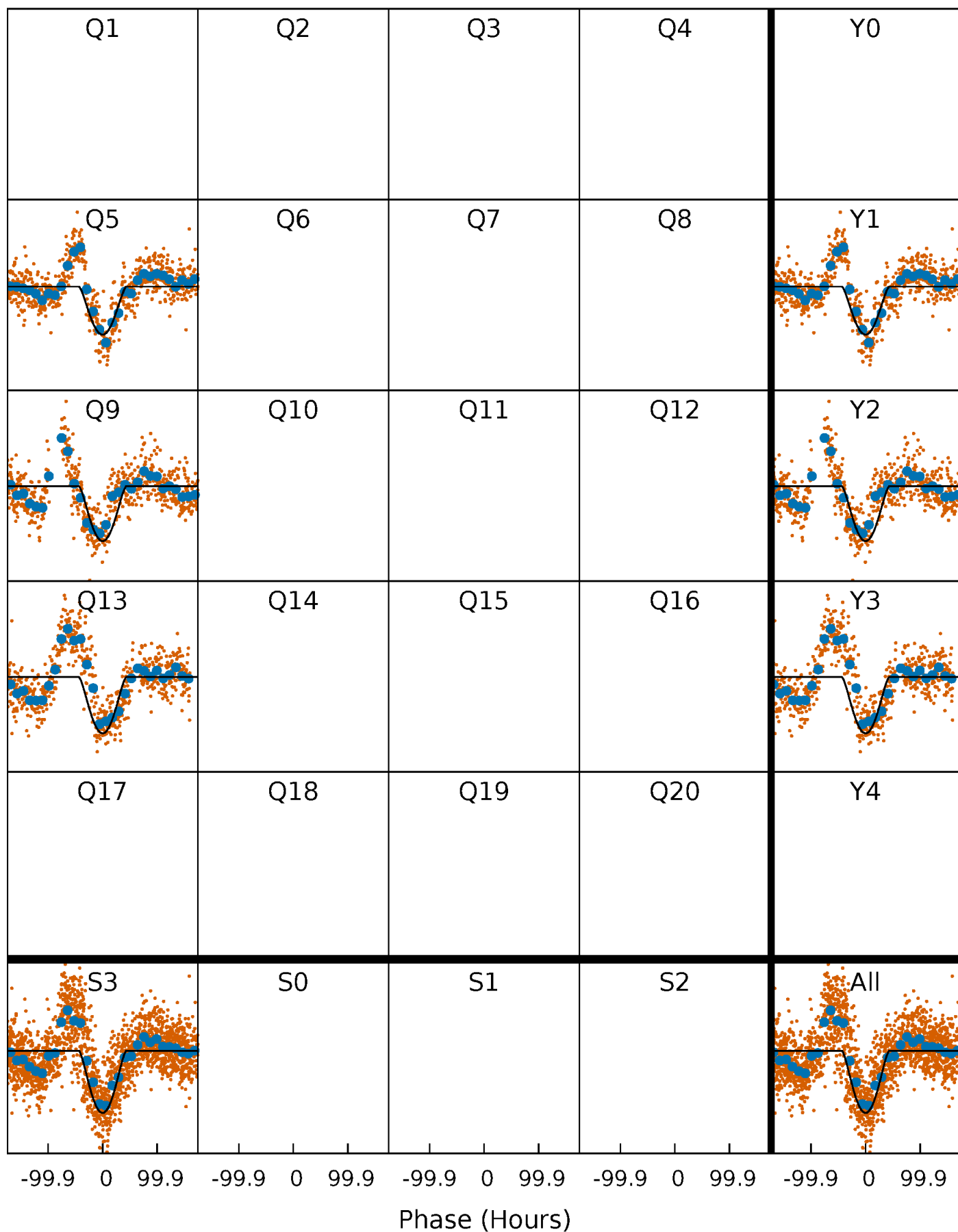
PDC Quarter-Phased Transit Curves

TCE 008884526-01 P=375.674259 Days $T_0=139.366375$ (BKJD)



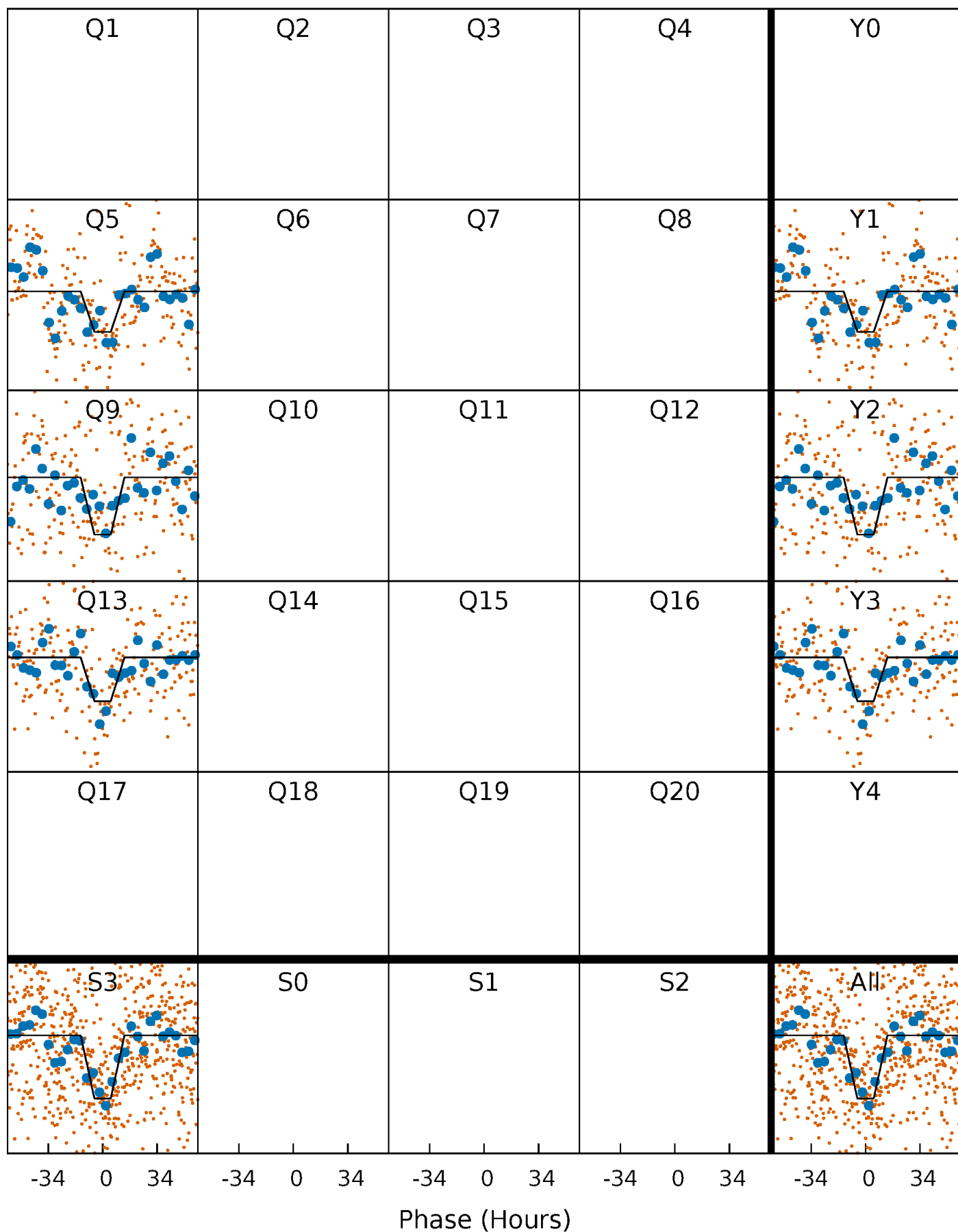
DV Quarter-Phased Transit Curves

TCE 008884526-01 $P=375.674259$ Days $T_0=139.366375$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

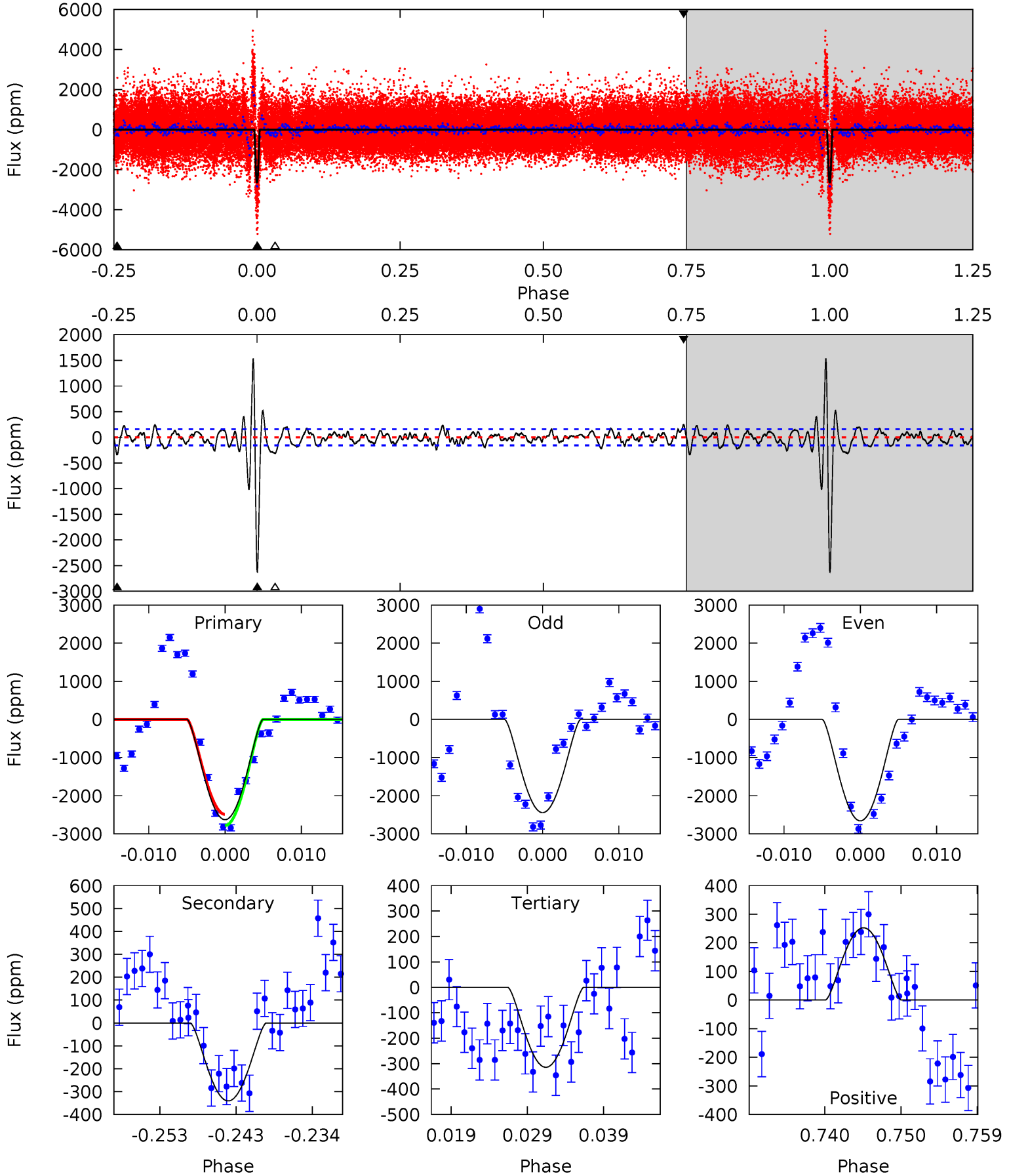
TCE 008884526-01 P=375.418987 Days $T_0=139.830912$ (BKJD)



DV Model-Shift Uniqueness Test

008884526-01, P = 375.674259 Days, E = 139.366375 Days

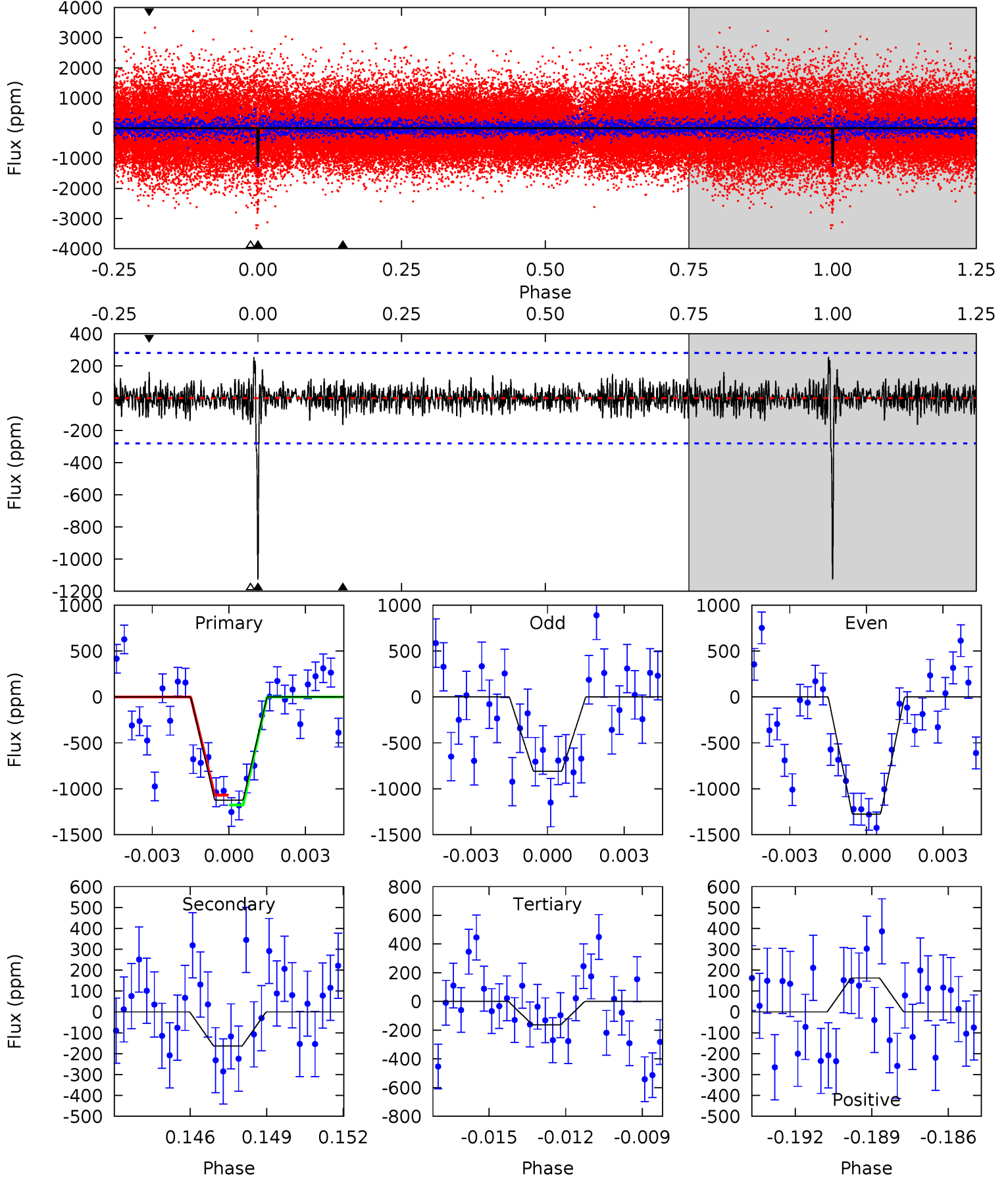
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
83.8	10.9	10.0	8.05	5.03	2.59	3.81	73.8	75.7	0.84	2.81	3.30	1.05	0.37	4.64



Alt Model-Shift Uniqueness Test

008884526-01, $P = 375.418987$ Days, $E = 139.830912$ Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
21.0	3.06	3.03	3.03	5.25	2.96	0.93	18.0	18.0	0.03	0.03	4.13	0.89	0.19	1.01



Stellar Parameters For KIC 008884526

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	6060^{+169}_{-211}	$4.509^{+0.050}_{-0.200}$	$-0.220^{+0.300}_{-0.300}$	$0.925^{+0.276}_{-0.092}$	$1.008^{+0.130}_{-0.143}$	$1.795^{+0.463}_{-0.931}$
	+3%/-3%	+1%/-4%	+136%/-136%	+30%/-10%	+13%/-14%	+26%/-52%
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 008884526-01 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	-341 ± 31	$12.41^{+10.50}_{-7.42}$	362^{+26}_{-17}	3038^{+1111}_{-437}	1241^{+6723}_{-885}
Alt.	-164 ± 54	$8.97^{+9.45}_{-6.20}$	363^{+25}_{-18}	2991^{+1442}_{-524}	1067^{+11017}_{-825}

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 $A_{obs} \gg 1.0$

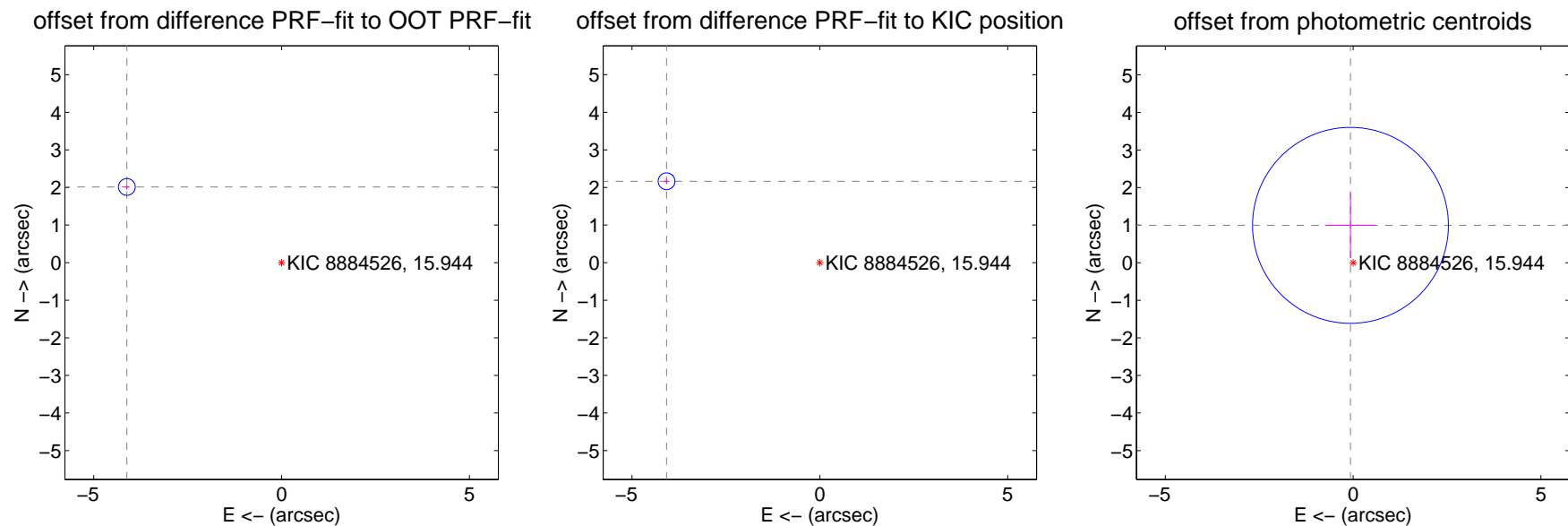
DV Centroid Data

Supplemental centroid analysis for 008884526-01. Kepler magnitude: 15.94. Transit SNR 24.14

There are 0 quarters with good PRF difference image offsets

The direct PRF centroid is offset from the target star catalog position by about 0.15 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	4.585 ± 0.074	61.62	4.119 ± 0.074	2.014 ± 0.075
PRF-fit source offset from KIC position	4.620 ± 0.074	62.07	4.081 ± 0.074	2.165 ± 0.075
photometric centroid source offset	1.00 ± 0.87	1.15	0.07 ± 0.67	0.99 ± 0.87

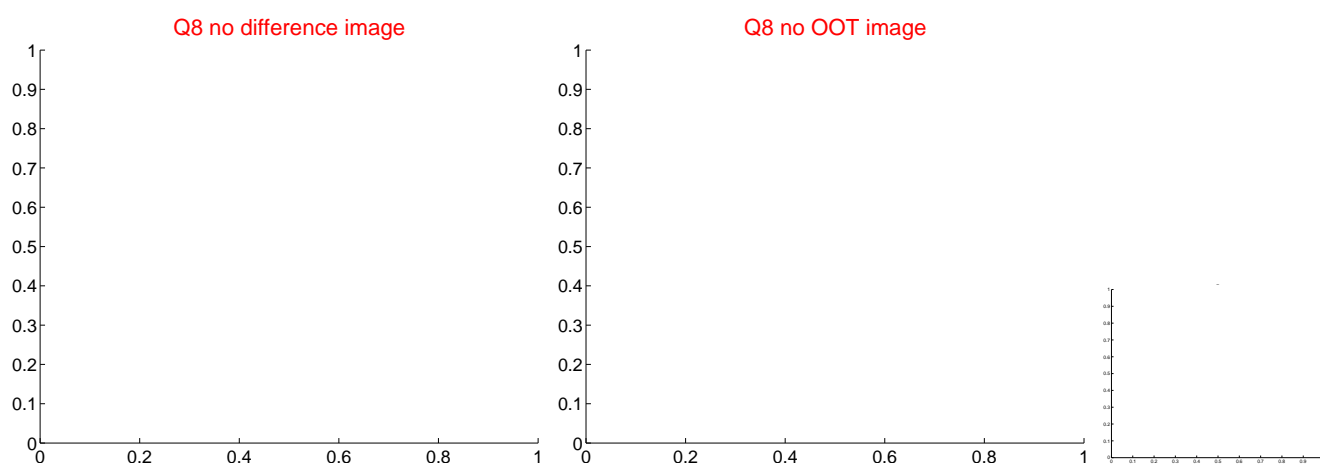
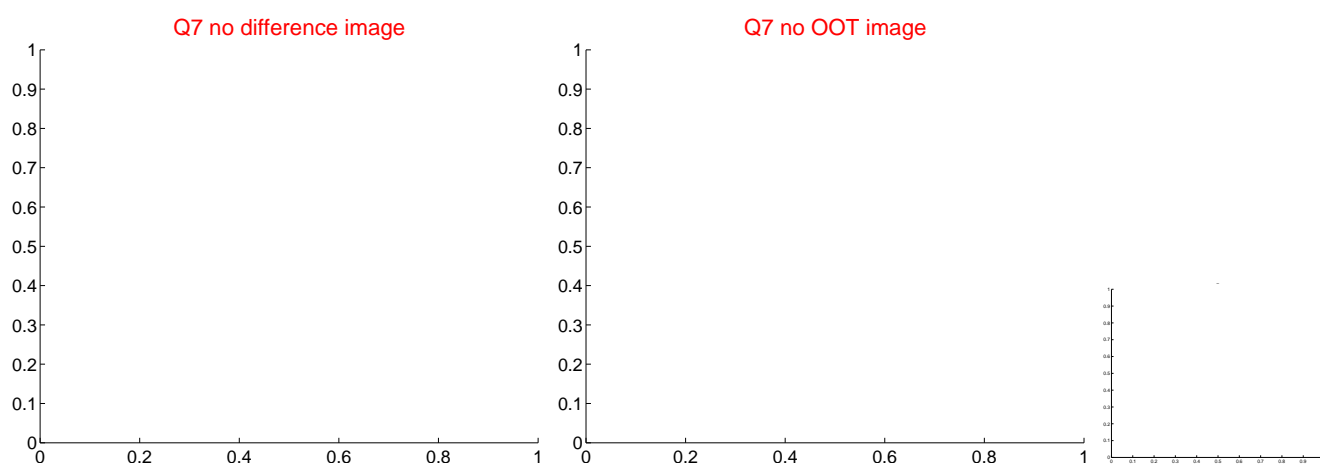
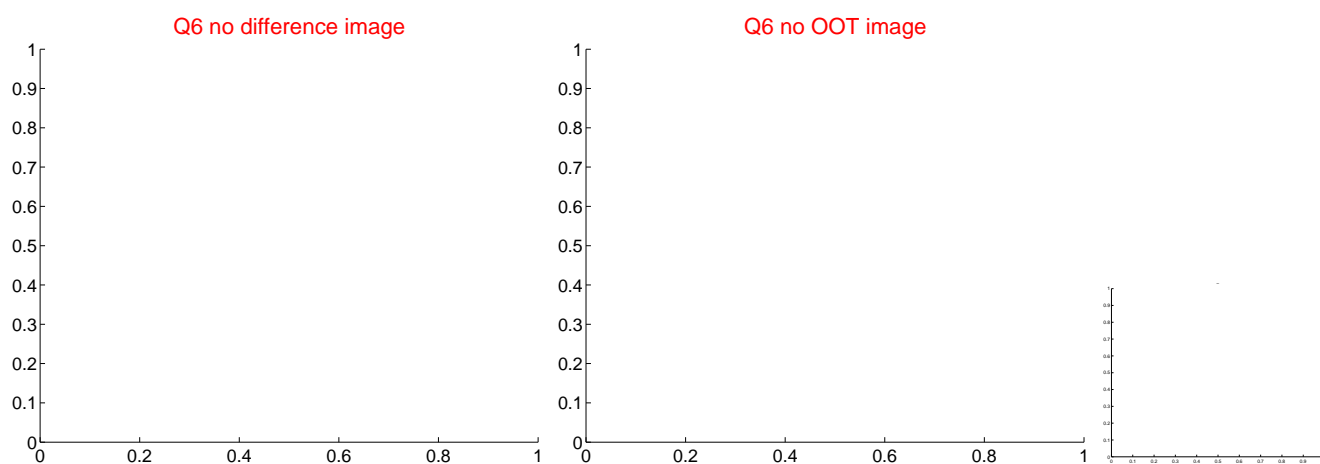
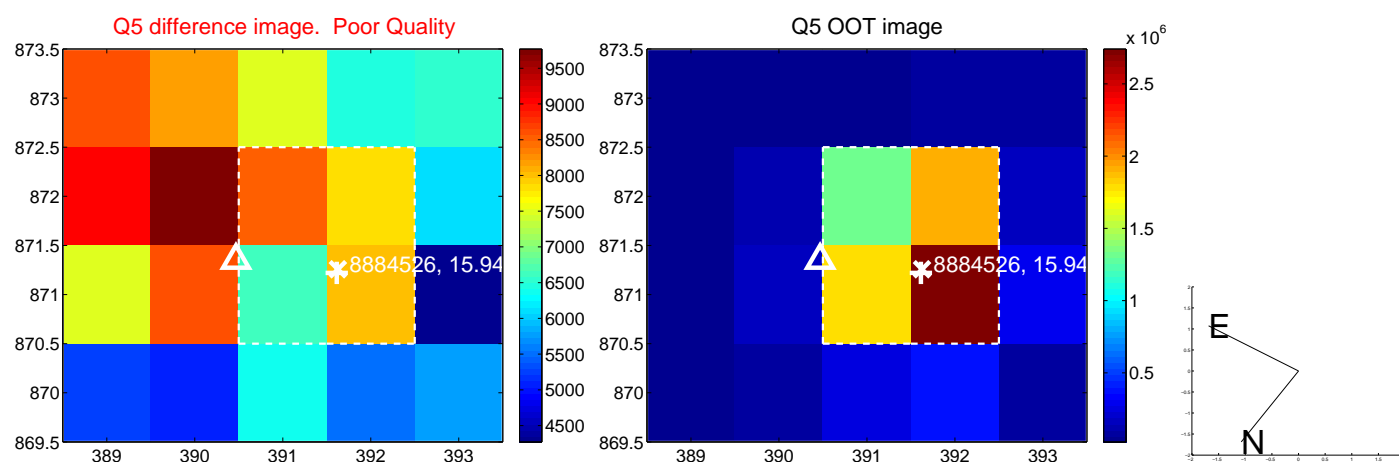


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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



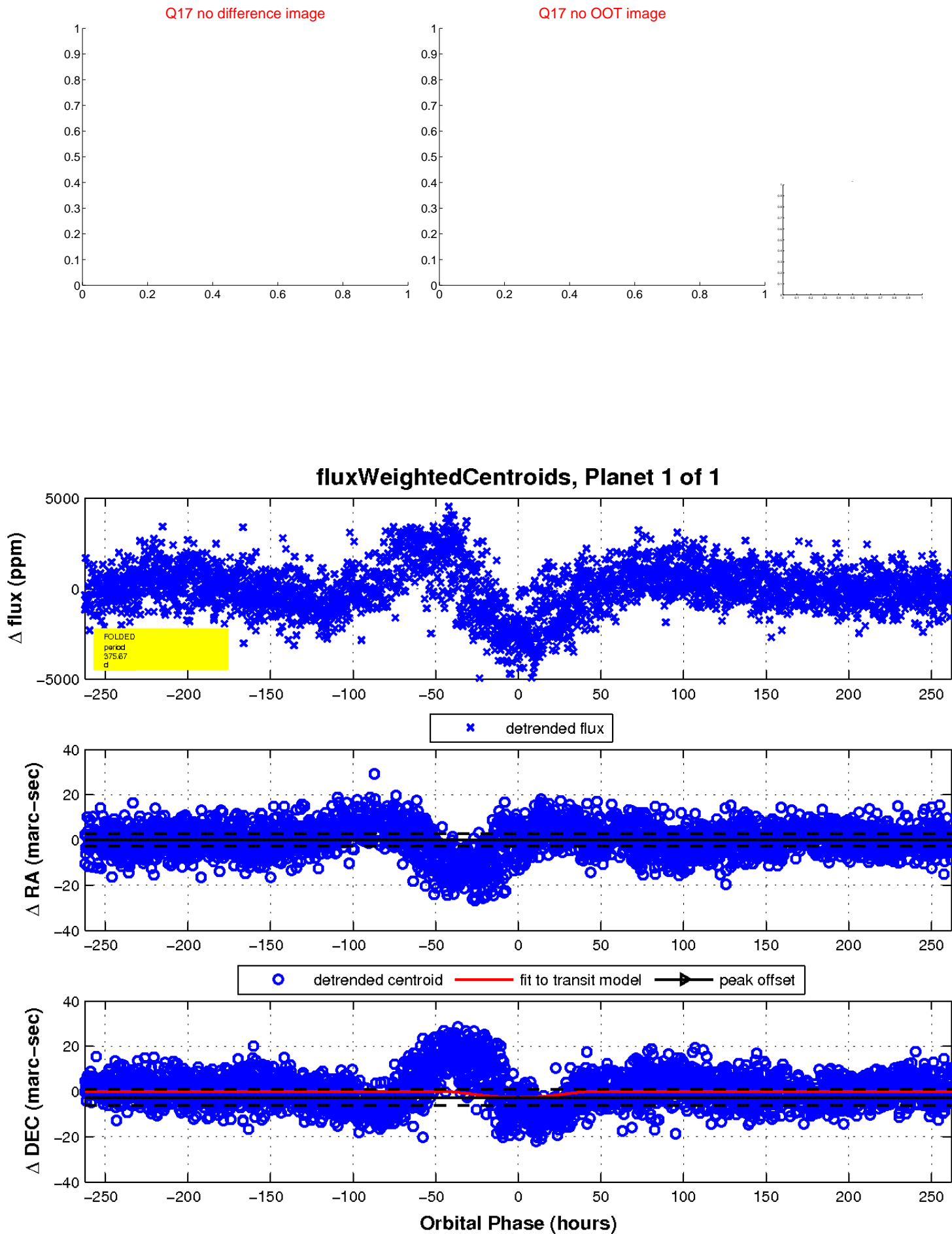
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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

