

KIC 01182706

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})
01182706-01	OBS	8046.01	384.403929	309.156570	1277.9	12.517	8.6	7.3	12.02	4859	49.69	49.36

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
01182706-01	OBS	PC	0.53	0	0	0	0	NO_COMMENT

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

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

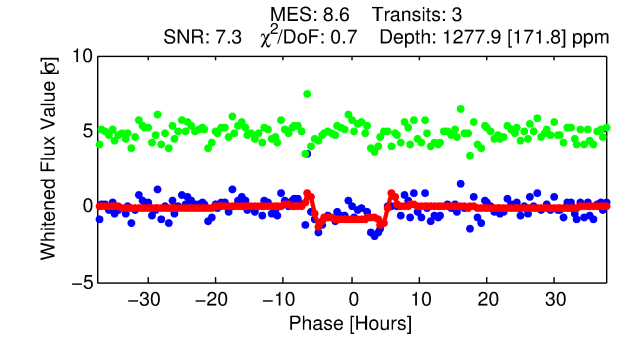
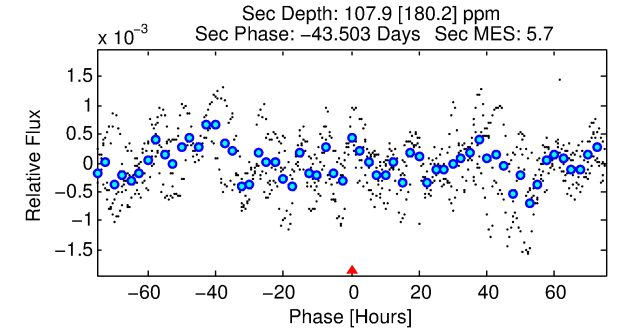
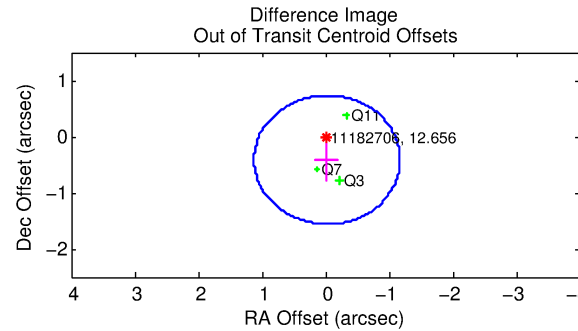
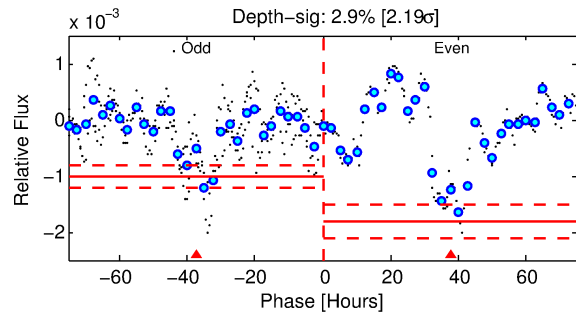
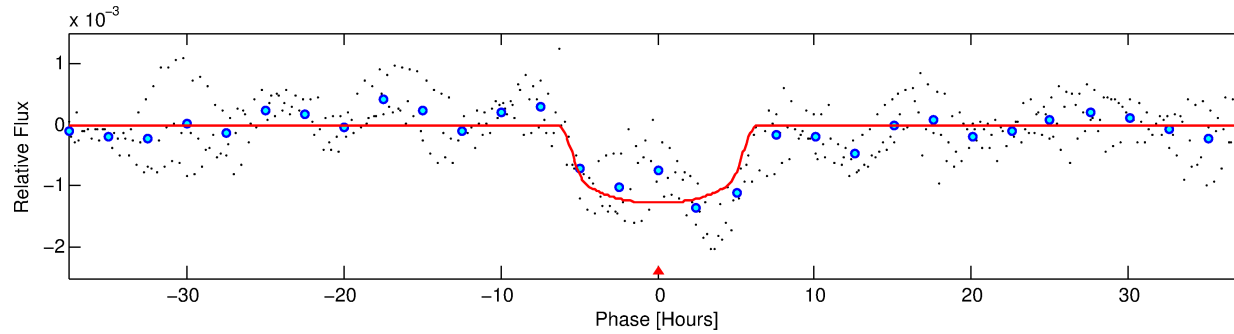
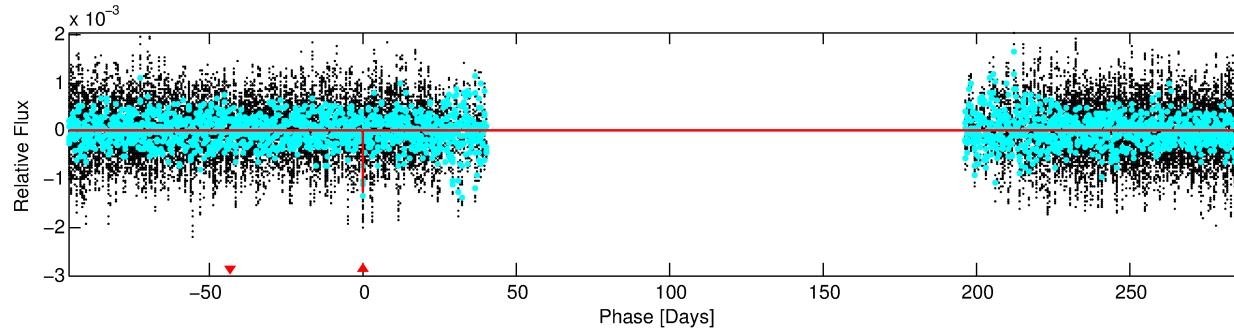
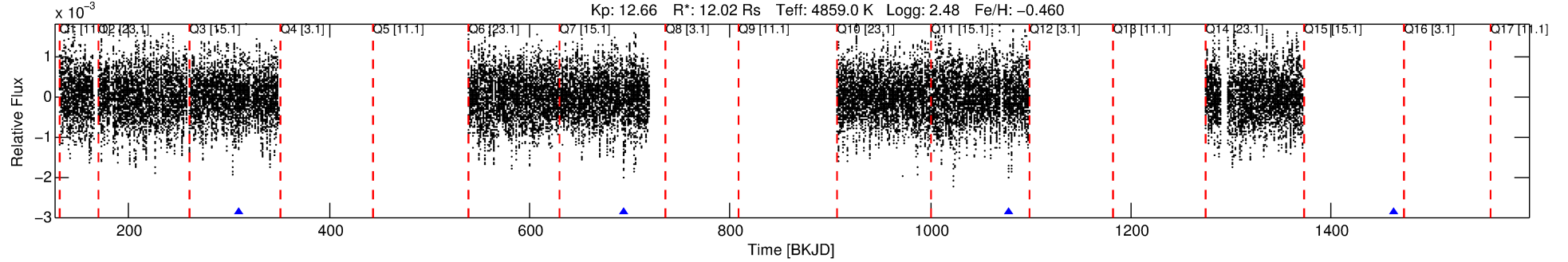
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 01182706-01

No Significant Match Found

DV One-Page Summary

KIC: 11182706 Candidate: 1 of 1 Period: 384.404 d



DV Fit Results:

Period = 384.40393 [0.00558] d
Epoch = 309.1566 [0.0077] BKJD
Rp/R* = 0.0379 [0.0027]
a/R* = 140.18 [12.20]
b = 0.85 [0.03]
Seff = 49.36 [7.46]
Teq = 676 [26] K
Rp = 49.69 [9.33] Re
a = 1.2094 [0.1431] AU
Ag = 35.16 [59.11] [0.58 σ]
Teffp = 2545 [1068] K [1.75 σ]

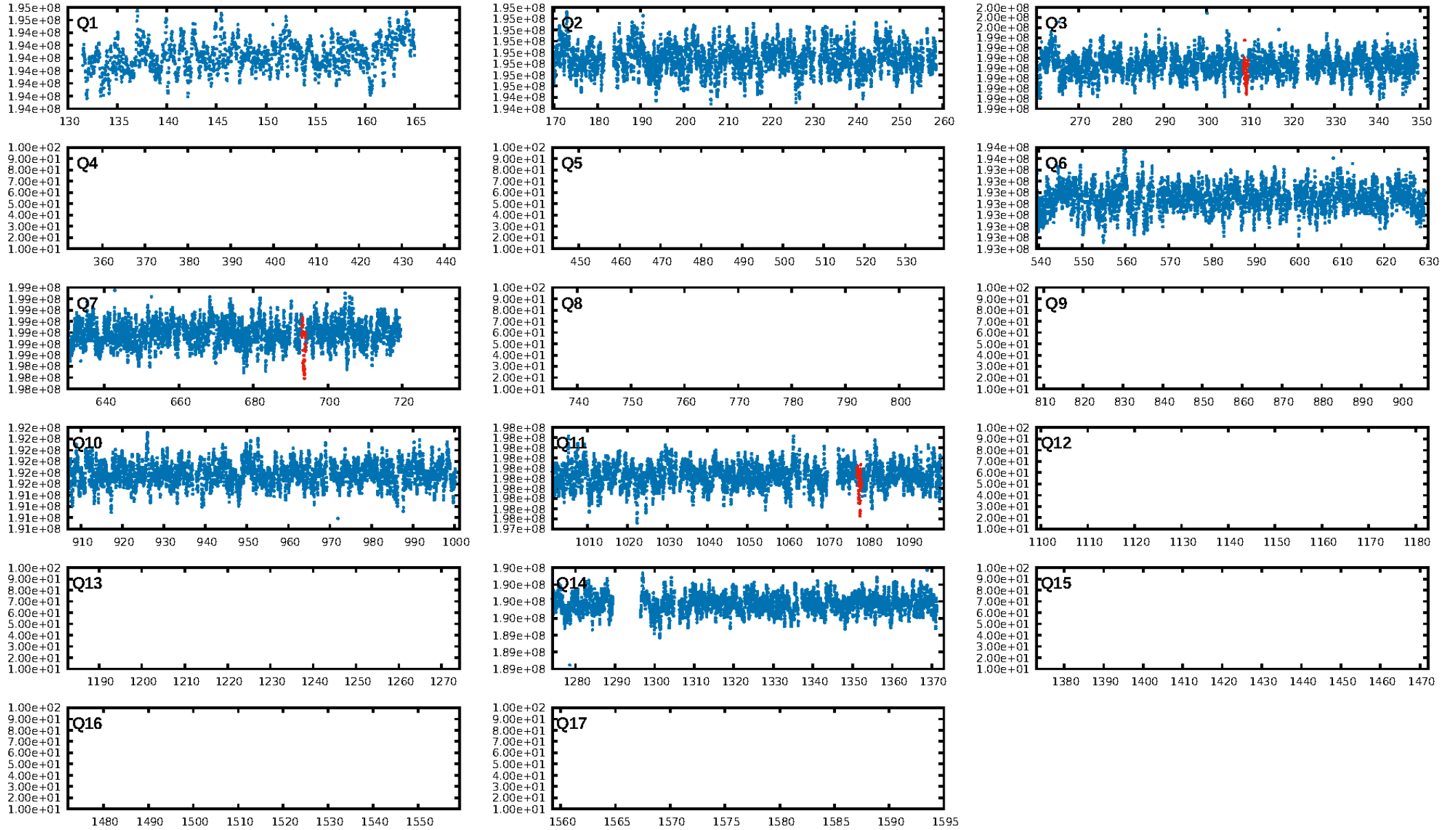
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: 16.9%
ModelChiSquareGof-sig: 100.0%
Bootstrap-pfa: 2.37e-10
RollingBand-fgt: 1.00 [3/3]
GhostDiagnostic-chr: 1.483
Centroid-sig: 28.6%
Centroid-so: 0.119 arcsec [0.82 σ]
OotOffset-rm: 0.416 arcsec [1.09 σ]
OotOffset-st: 0/3/0/0 [3]
KicOffset-rm: 0.258 arcsec [0.67 σ]
KicOffset-st: 0/3/0/0 [3]
DiffImageQuality-fgm: 1.00 [3/3]
DiffImageOverlap-fno: 1.00 [3/3]

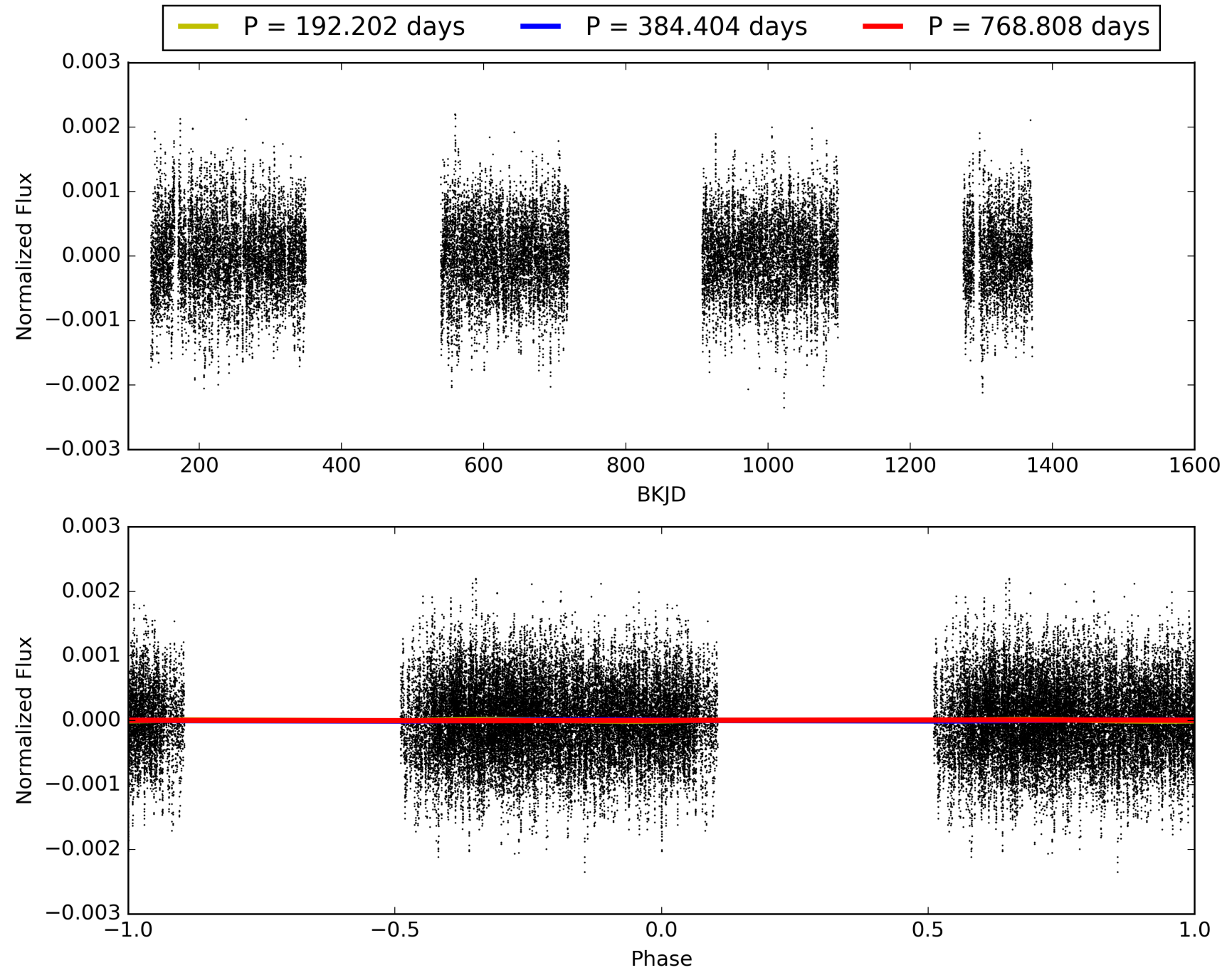
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 28-Jan-2016 20:39:26 Z

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

TCE 011182706-01, PDC Light Curves

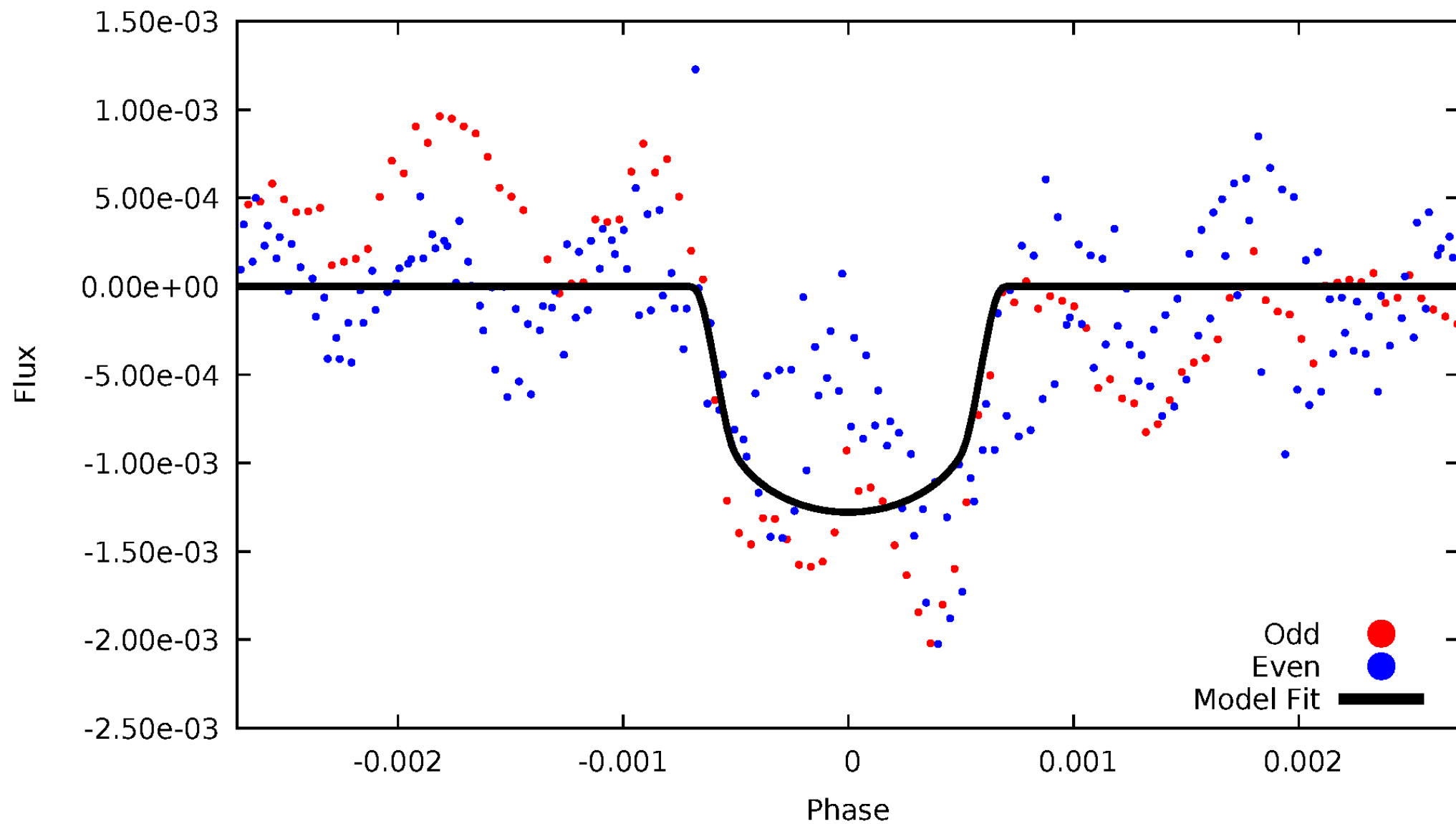


TCE 011182706-01



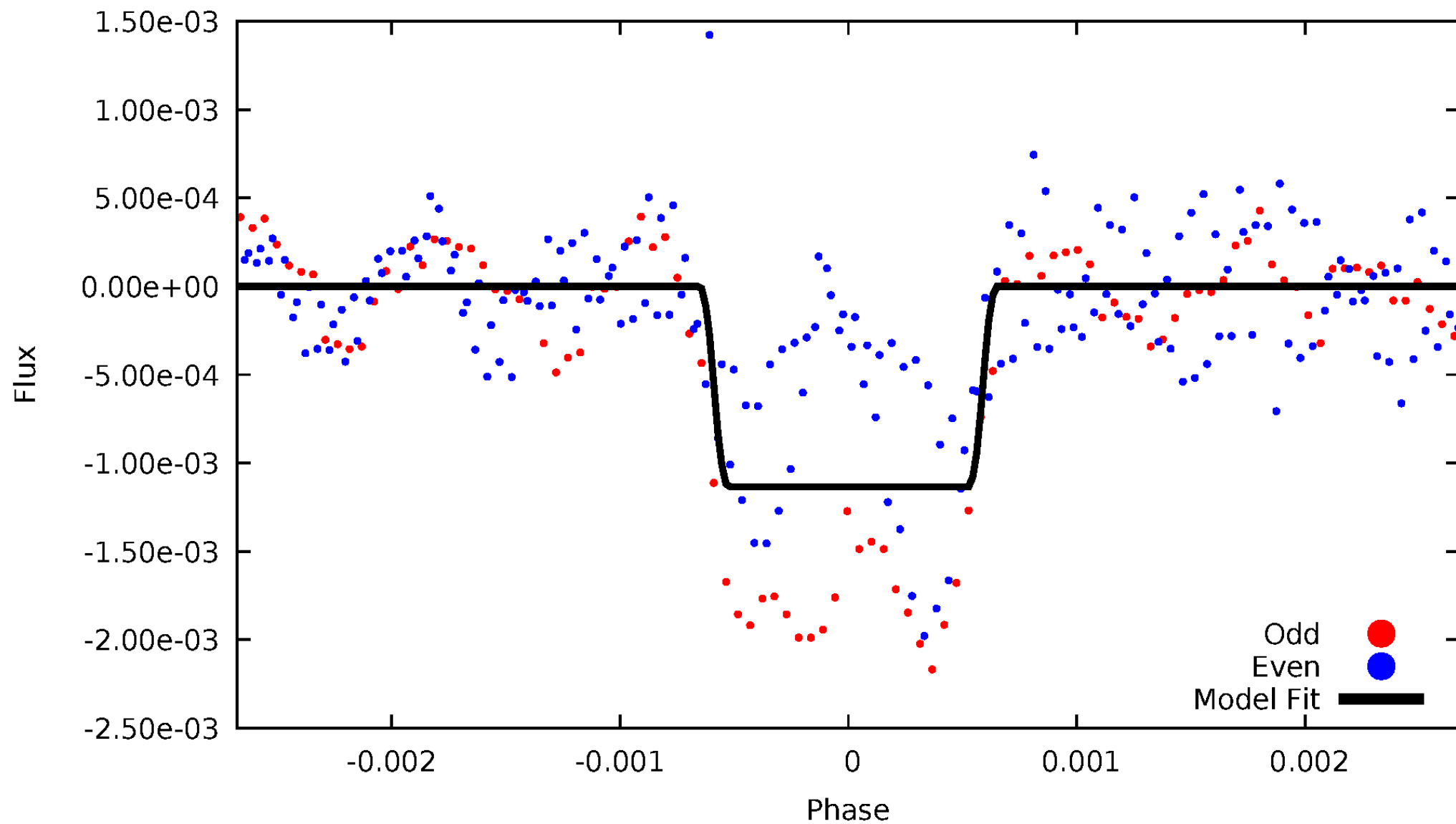
DV Odd/Even

TCE 011182706-01



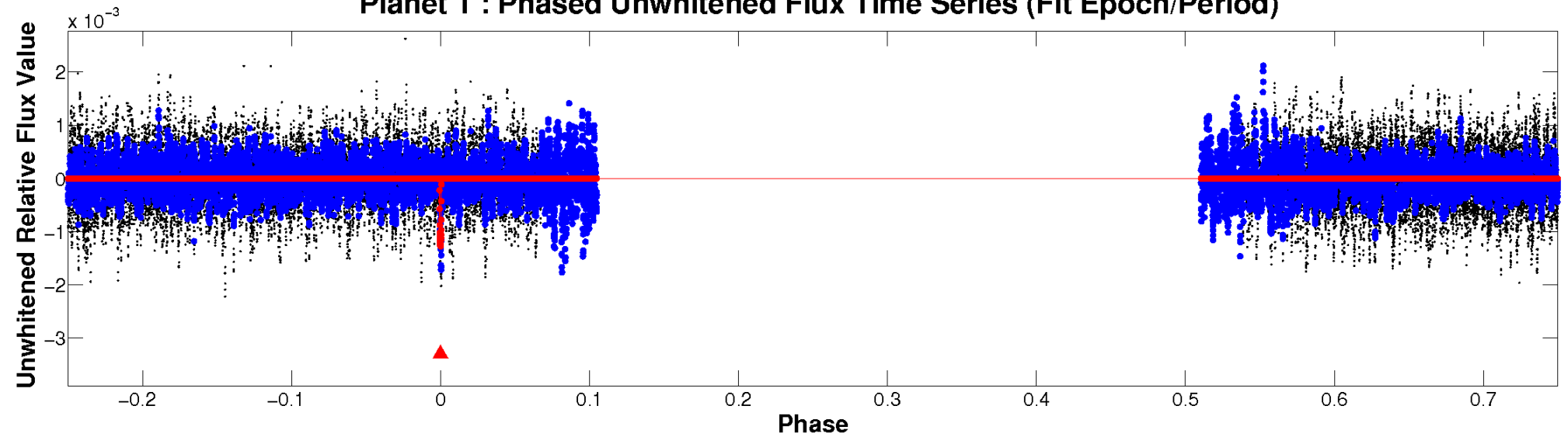
ALT Odd/Even

TCE 011182706-01

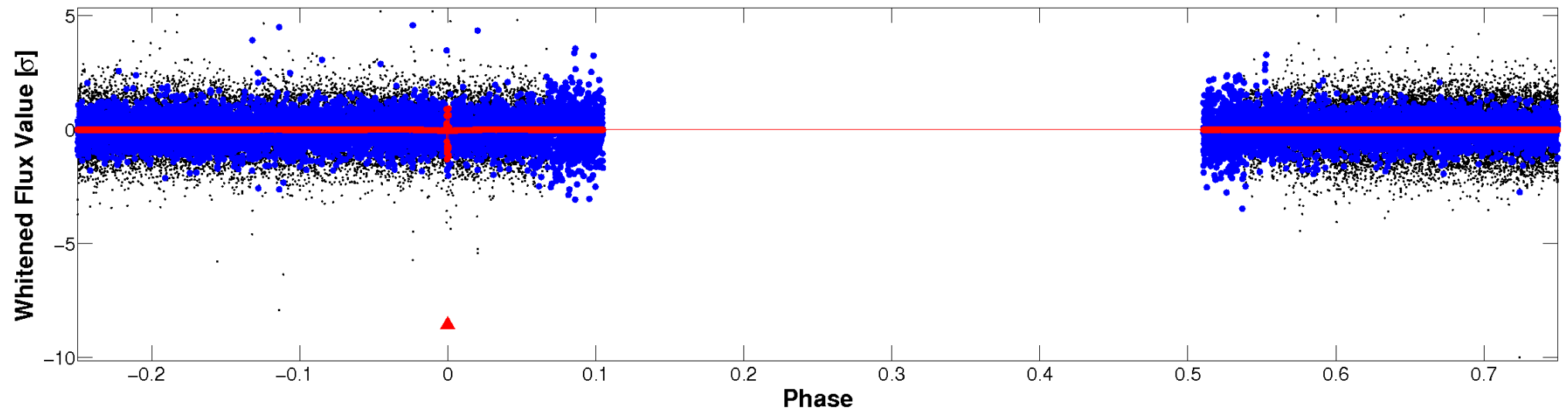


Non-Whitened Vs. Whitened Light Curve

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

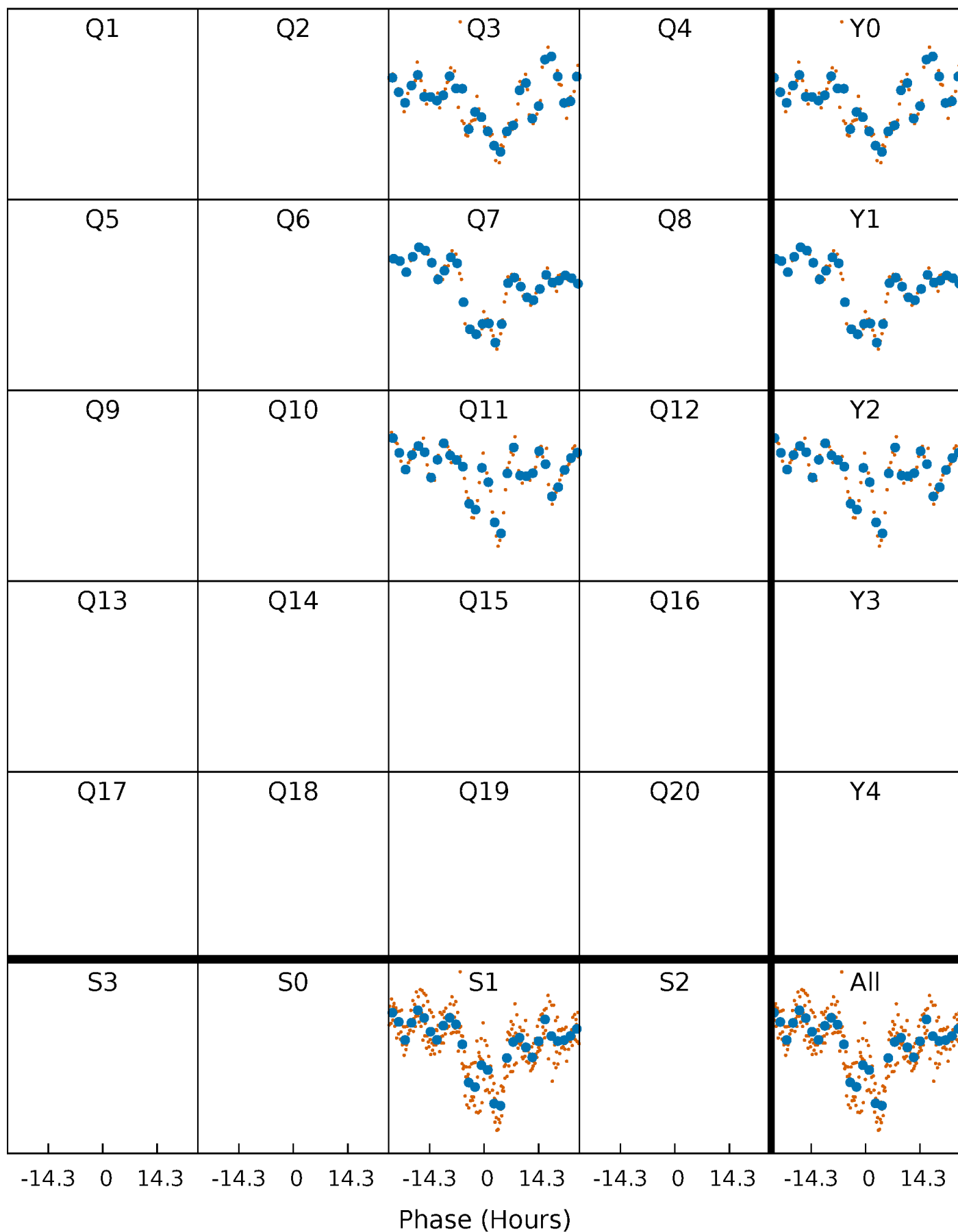


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



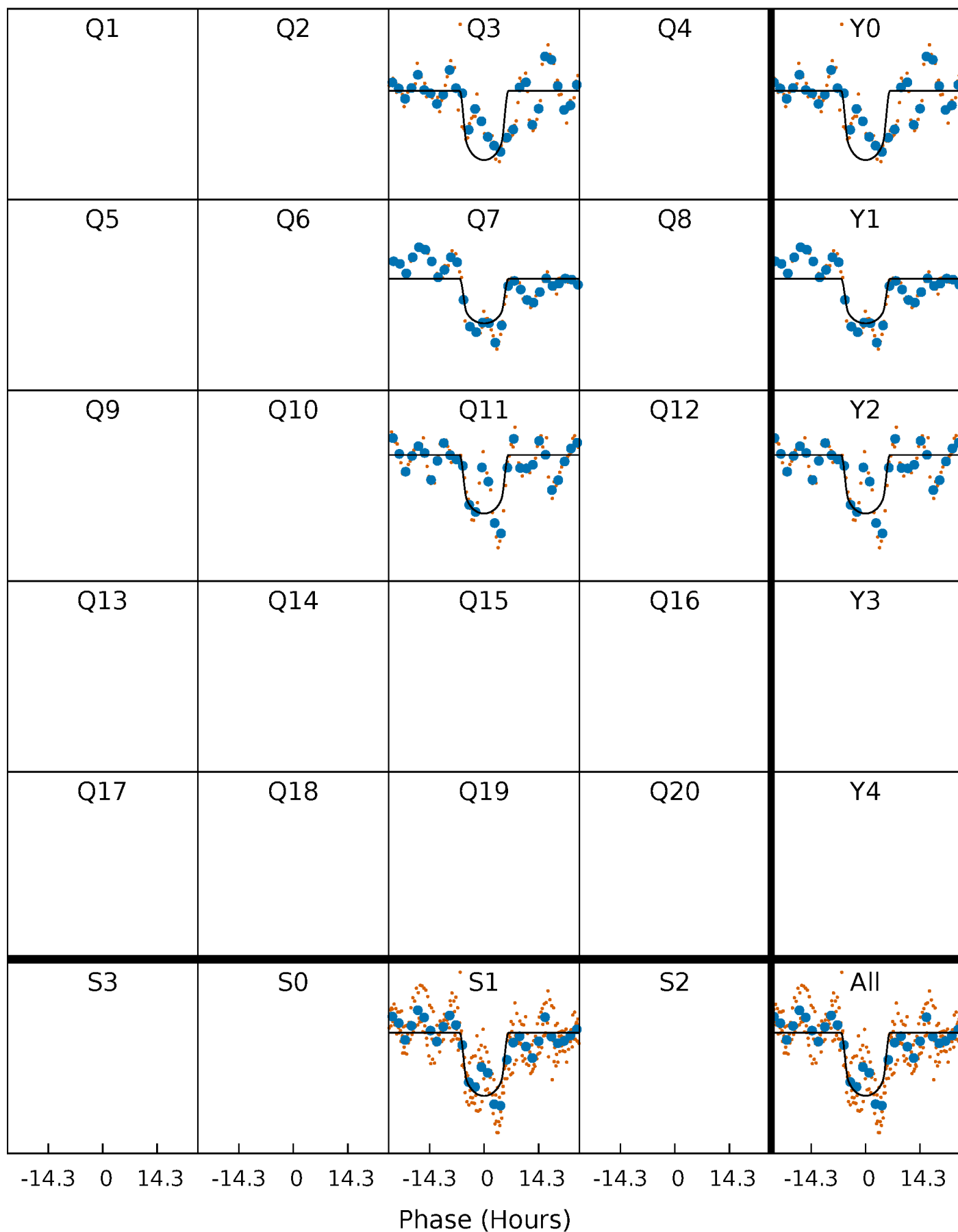
PDC Quarter-Phased Transit Curves

TCE 011182706-01 P=384.403929 Days $T_0=309.156570$ (BKJD)



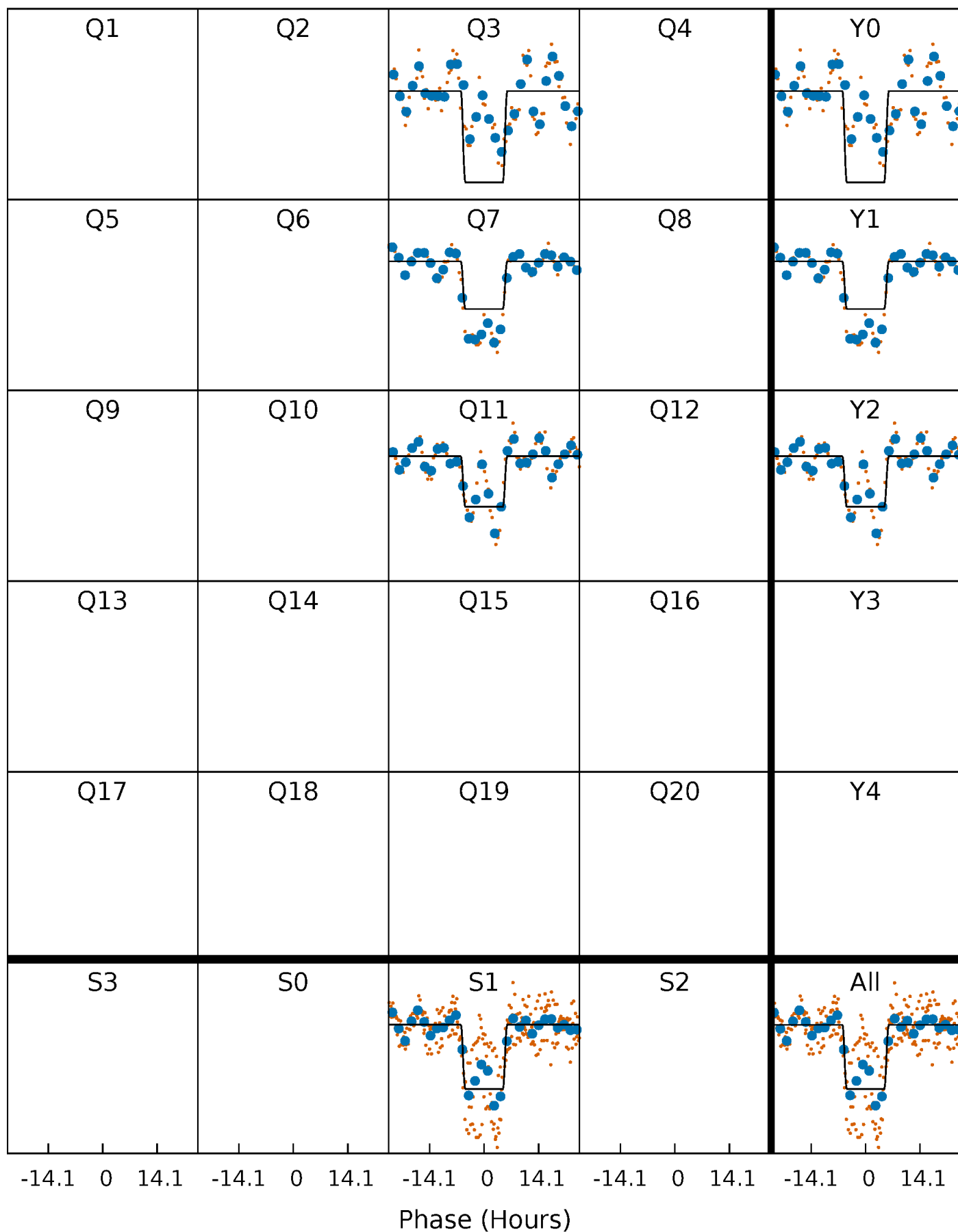
DV Quarter-Phased Transit Curves

TCE 011182706-01 $P=384.403929$ Days $T_0=309.156570$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

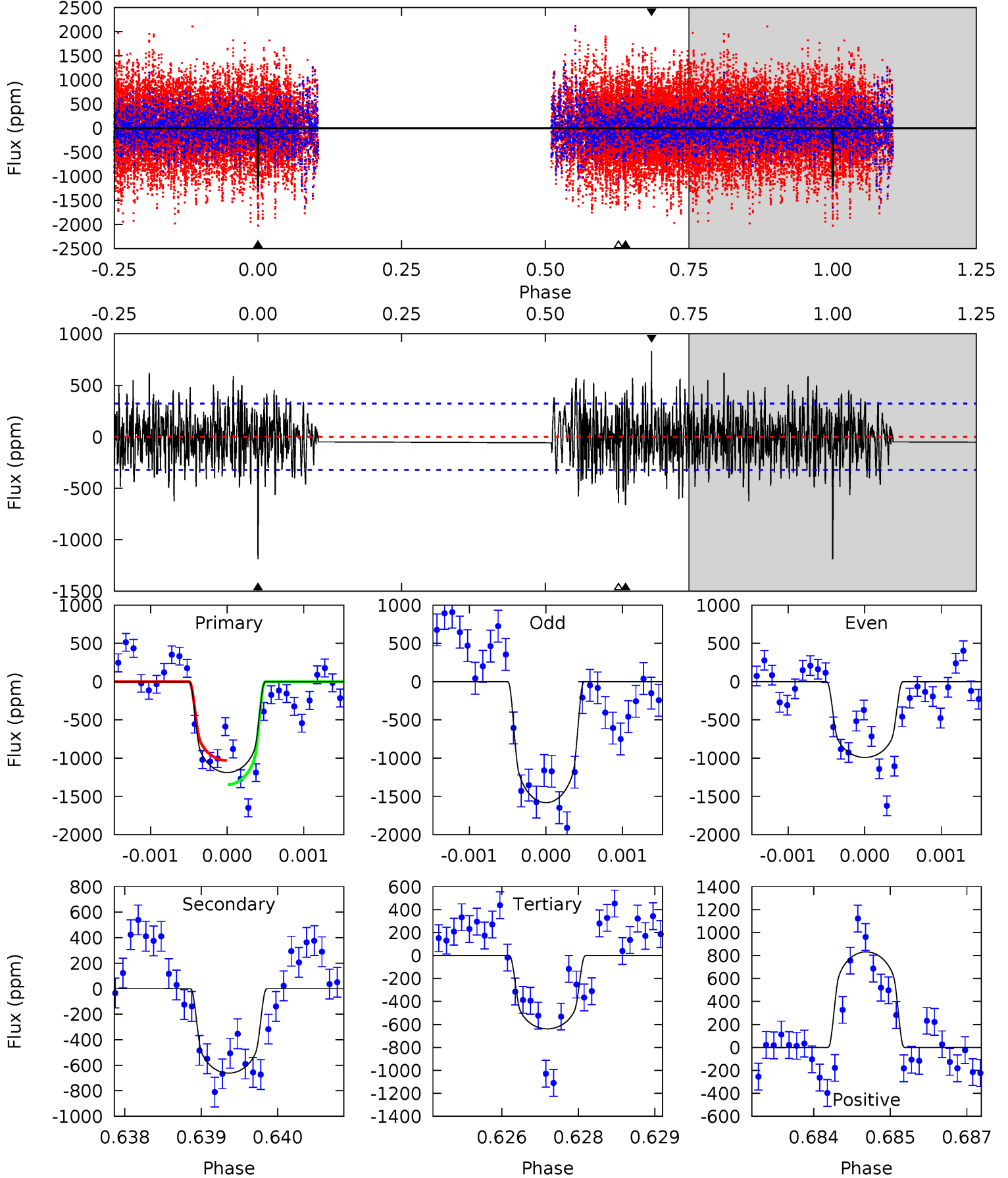
TCE 011182706-01 P=384.430187 Days $T_0=309.129402$ (BKJD)



DV Model-Shift Uniqueness Test

011182706-01, P = 384.403929 Days, E = 309.156570 Days

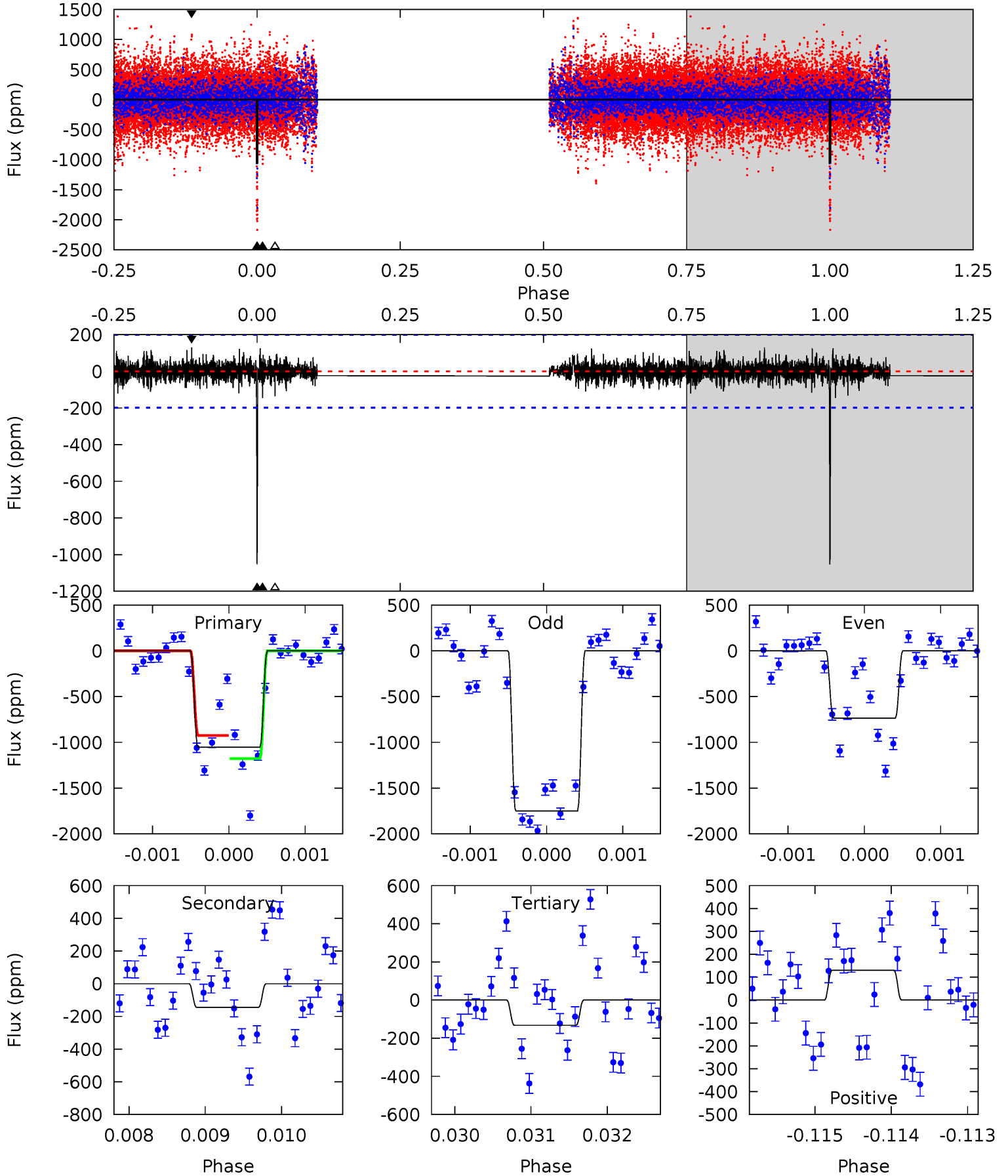
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
19.8	11.0	10.7	13.9	5.39	3.19	3.51	9.17	5.95	0.38	-2.84	4.67	1.06	0.41	2.65



Alt Model-Shift Uniqueness Test

011182706-01, P = 384.430187 Days, E = 309.129402 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
28.7	3.95	3.60	3.55	5.41	3.22	0.90	25.1	25.1	0.35	0.40	13.7	1.04	0.11	3.34



Stellar Parameters For KIC 011182706

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	4859^{+58}_{-101}	$2.481^{+0.033}_{-0.027}$	$-0.460^{+0.150}_{-0.150}$	$12.023^{+0.744}_{-2.084}$	$1.594^{+0.213}_{-0.496}$	$0.001^{+0.000}_{-0.000}$
	+1%/-2%	+1%/-1%	+33%/-33%	+6%/-17%	+13%/-31%	+27%/-10%
Source	PHO55	AST55	SPE55	DSEP		

KIC = Kepler Input Catalog; PHO = Photometry; SPE = Spectroscopy; AST = Asteroseismology
 TRA = Transits; DESP = Dartmouth Models; MULT = Multiple Models

Secondary Eclipse Parameters for KIC 011182706-01 / KOI 8046.01

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	-662 ± 60	$50.36^{+4.57}_{-5.47}$	941^{+21}_{-22}	4163^{+153}_{-139}	215^{+50}_{-36}
Alt.	-145 ± 37	$44.58^{+4.42}_{-4.87}$	942^{+20}_{-27}	3357^{+156}_{-167}	60^{+19}_{-17}

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 $A_{obs} \gg 1.0$

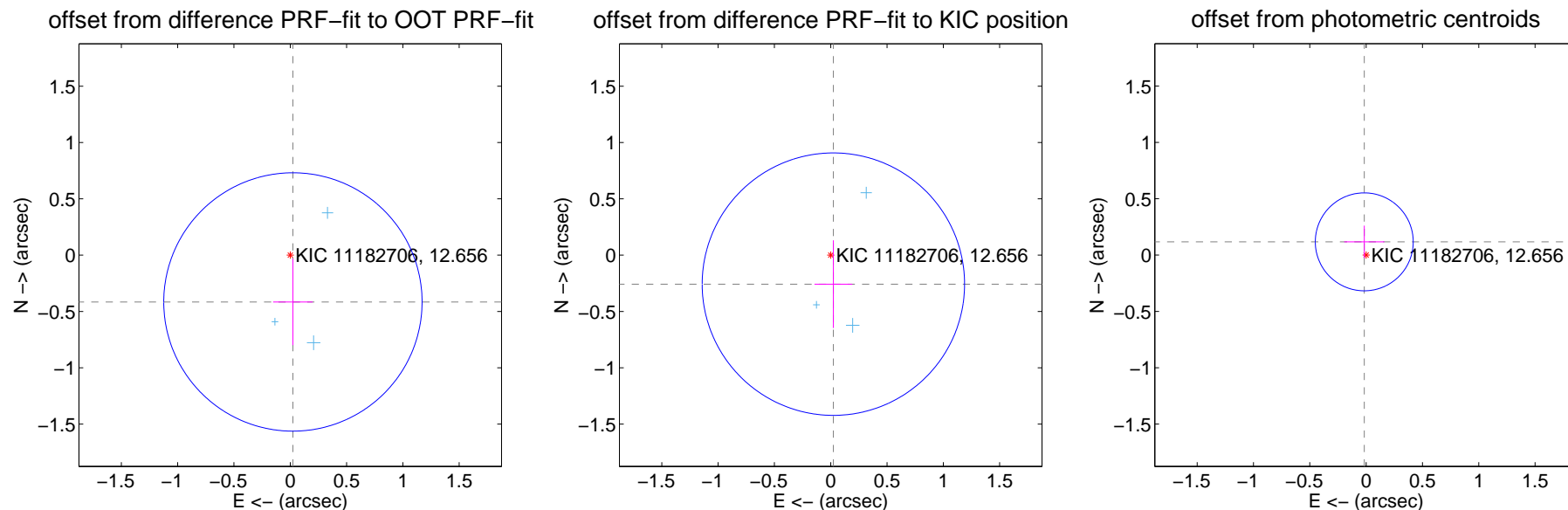
DV Centroid Data

Supplemental centroid analysis for 011182706-01. Kepler magnitude: 12.66. Transit SNR 7.29

There are 3 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	0.416 ± 0.382	1.09	-0.024 ± 0.176	-0.416 ± 0.383
PRF-fit source offset from KIC position	0.258 ± 0.388	0.67	-0.024 ± 0.167	-0.257 ± 0.390
photometric centroid source offset	0.12 ± 0.14	0.82	0.02 ± 0.18	0.12 ± 0.14



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.

Q1 no difference image



Q1 no OOT image



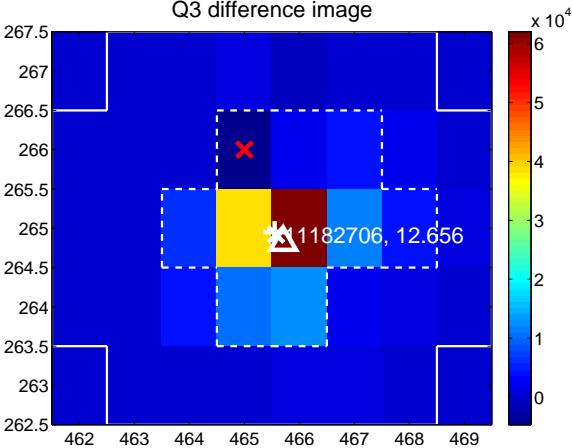
Q2 no difference image



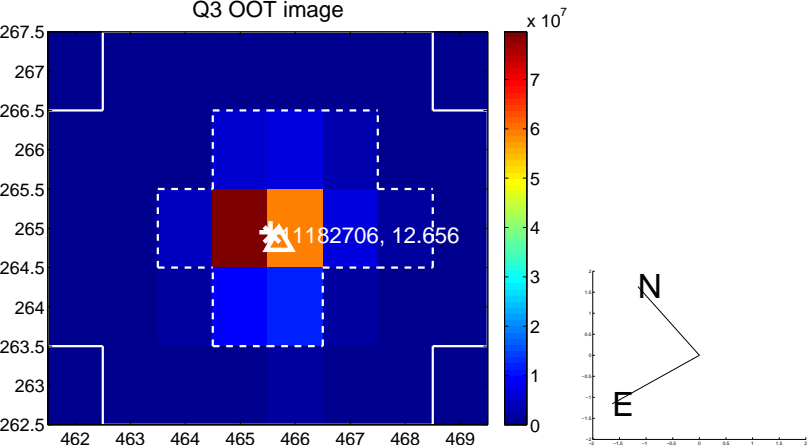
Q2 no OOT image



Q3 difference image



Q3 OOT image



Q4 no difference image



Q4 no OOT image



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

Q5 no difference image



Q5 no OOT image



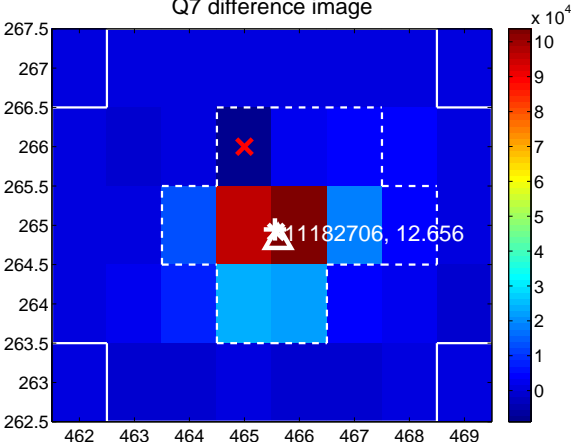
Q6 no difference image



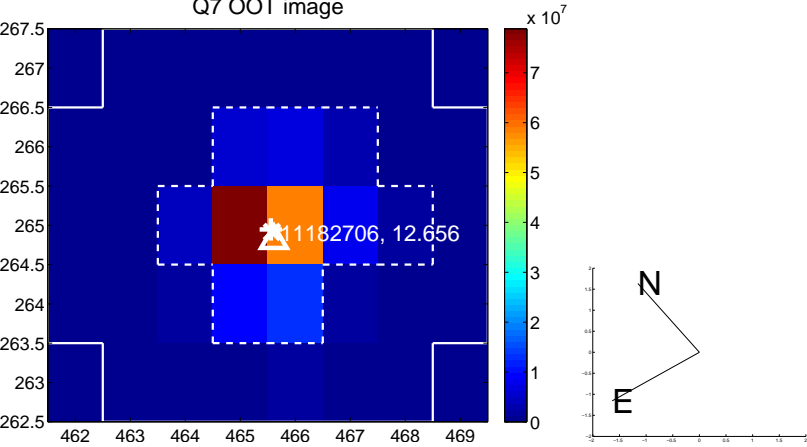
Q6 no OOT image



Q7 difference image



Q7 OOT image



Q8 no difference image



Q8 no OOT image



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

Q9 no difference image



Q9 no OOT image



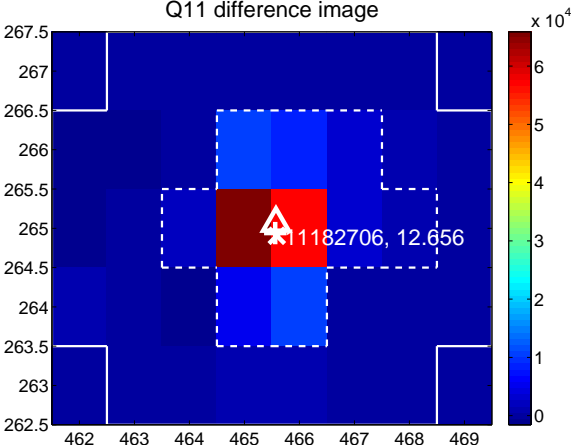
Q10 no difference image



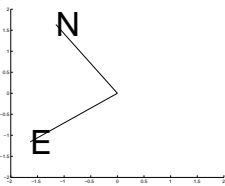
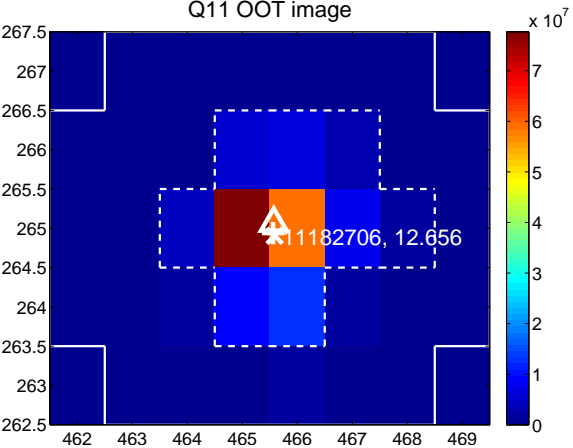
Q10 no OOT image



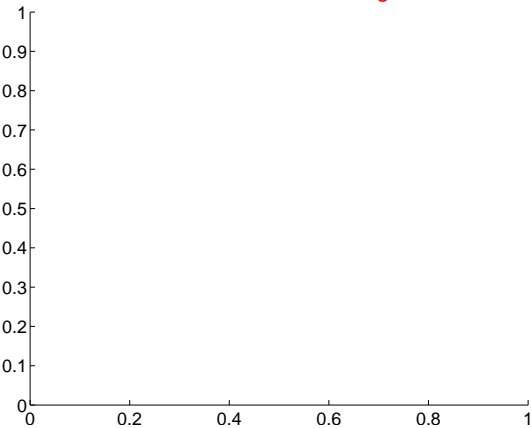
Q11 difference image



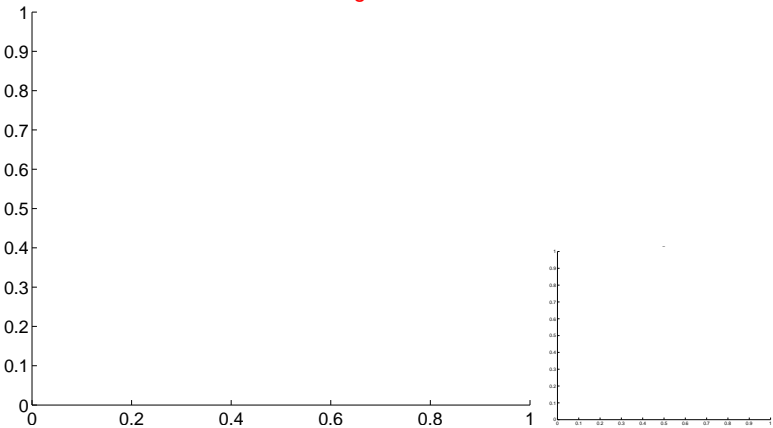
Q11 OOT image



Q12 no difference image



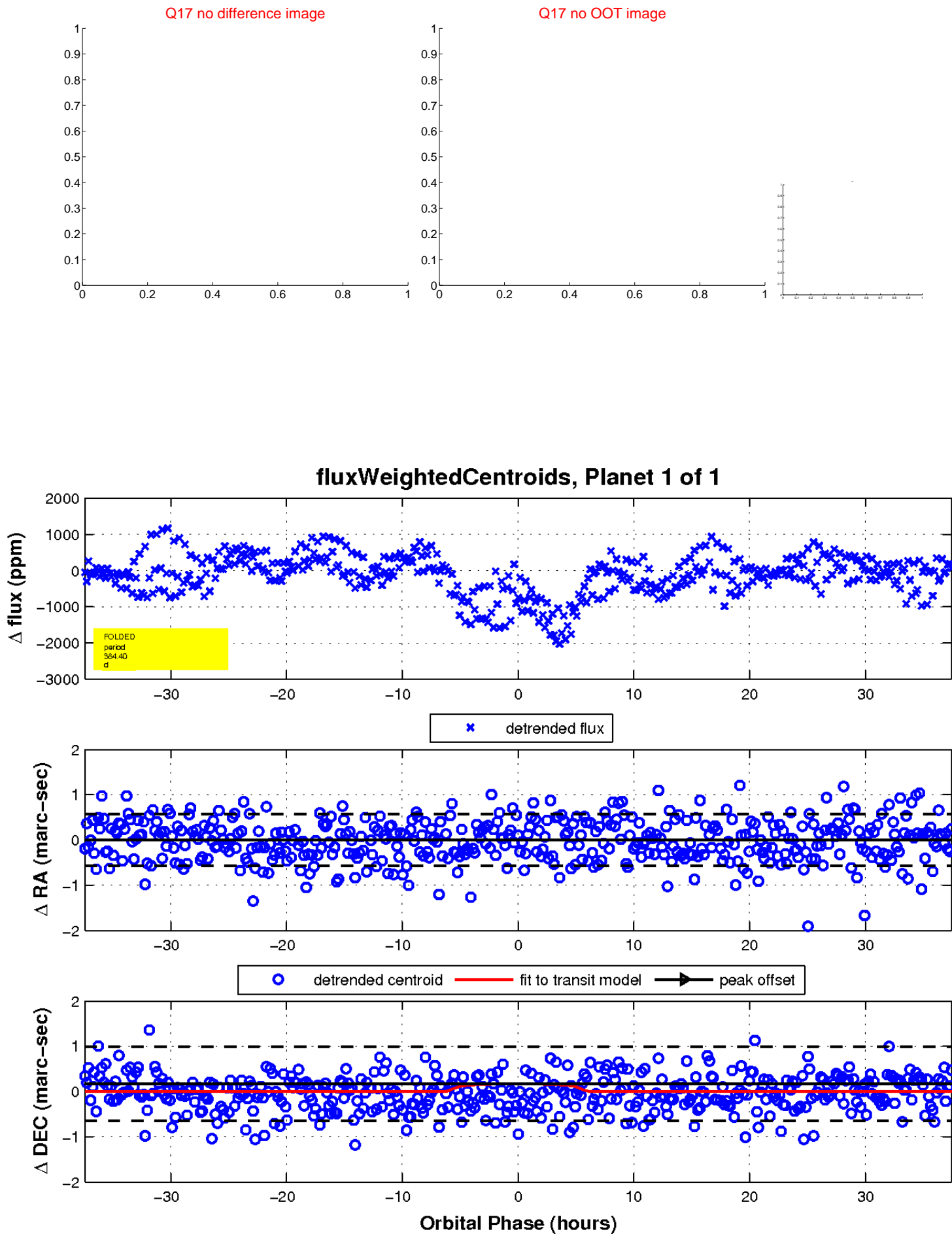
Q12 no OOT image



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

