

KIC 006672652

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})
006672652-01	OBS	No	349.658338	429.335860	339.1	4.395	8.3	6.8	0.62	5068	1.34	0.33

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
006672652-01	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_CHASES_MARSHALL_SKYE—ALL_TRANS_CHASES—MOD_POS_DV—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.

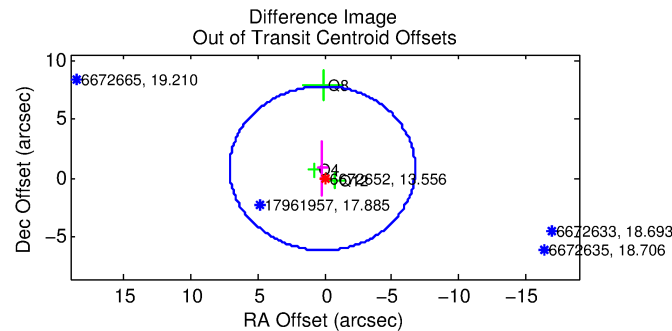
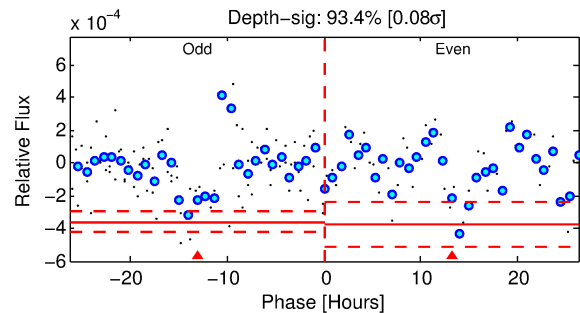
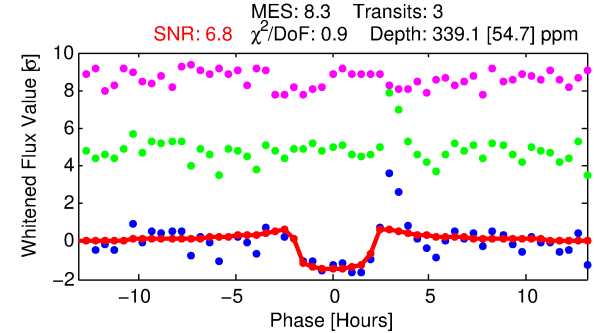
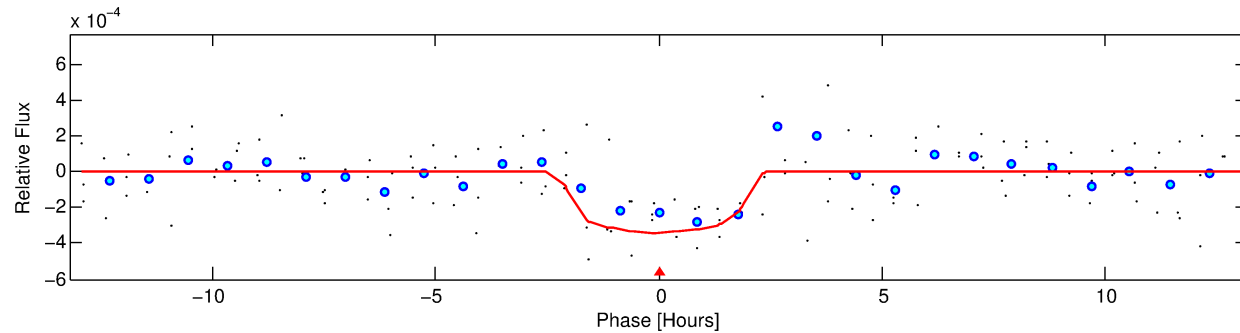
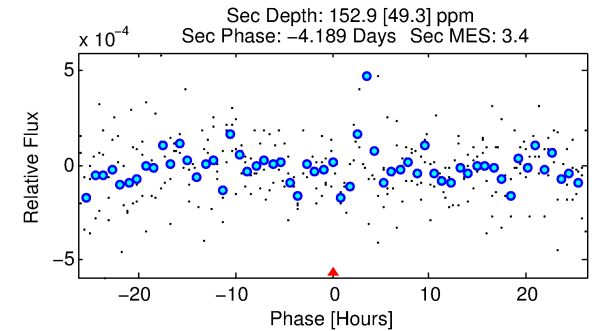
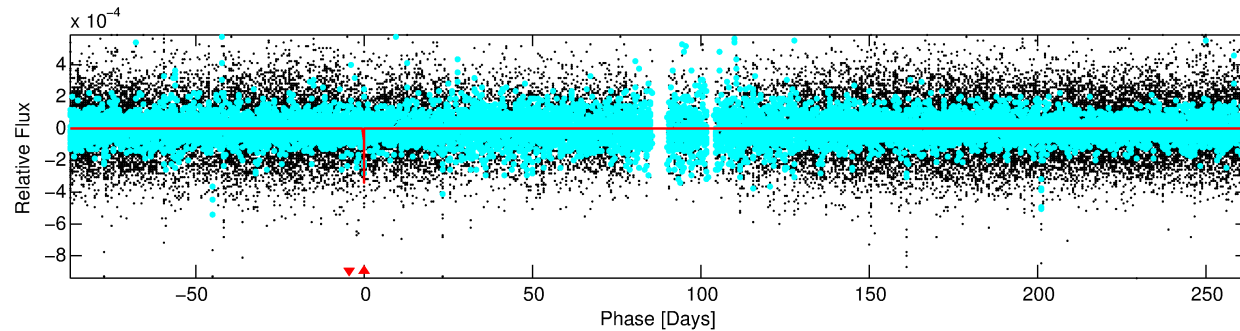
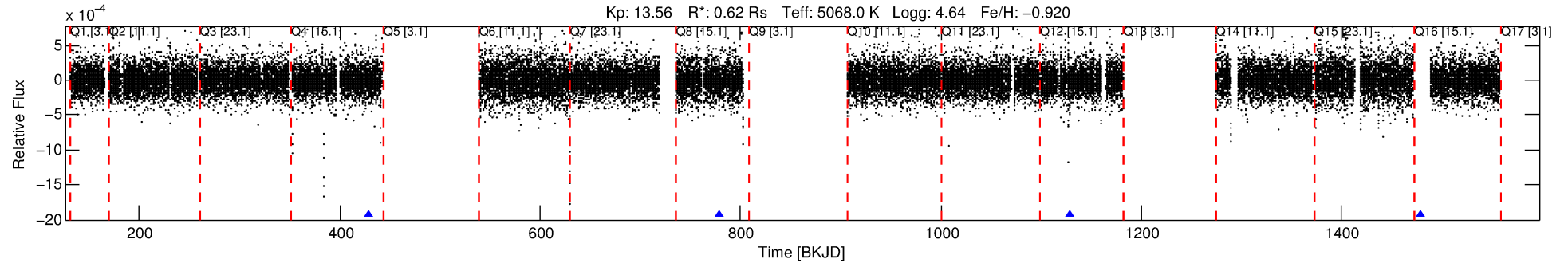
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 006672652-01

No Significant Match Found

DV One-Page Summary

KIC: 6672652 Candidate: 1 of 1 Period: 349.658 d



DV Fit Results:

Period = 349.65834 [0.00685] d
Epoch = 429.3359 [0.0093] BKJD
Rp/R* = 0.0199 [0.0113]
a/R* = 310.00 [740.13]
b = 0.88 [0.60]
Seff = 0.33 [0.05]
Teq = 194 [8] K
Rp = 1.34 [0.77] Re
a = 0.8244 [0.0582] AU
Ag = 31775.59 [37703.17] [0.84σ]
Teffp = 3996 [1187] K [3.20σ]

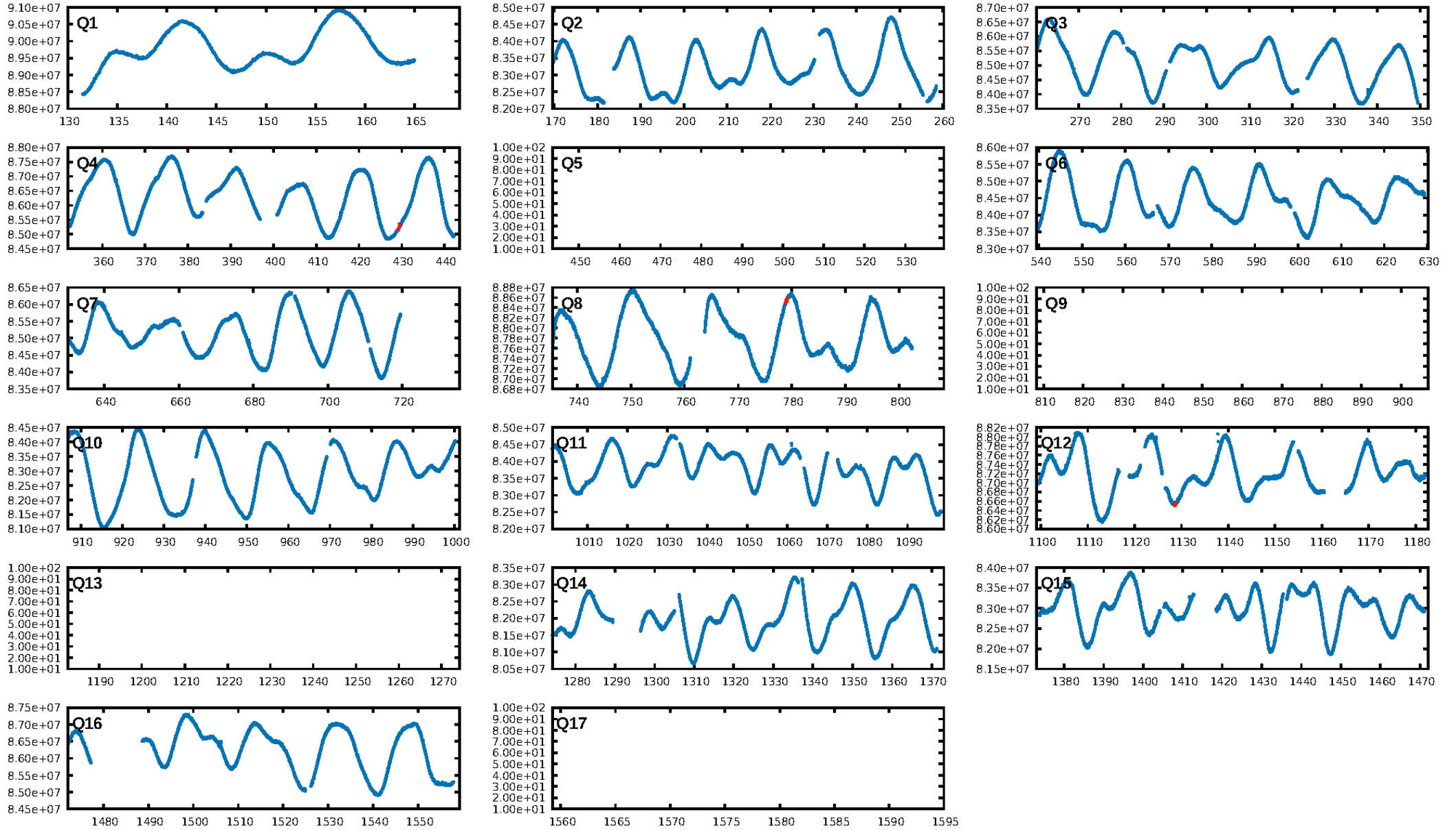
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: 14.7%
ModelChiSquareGof-sig: 95.4%
Bootstrap-pfa: 2.23e-09
RollingBand-fgt: 1.00 [3/3]
GhostDiagnostic-chr: 1.26
Centroid-sig: 59.8%
Centroid-so: 1.148 arcsec [0.81σ]
OotOffset-rm: 0.877 arcsec [0.38σ]
OotOffset-st: 0/0/3/0 [3]
KicOffset-rm: 1.107 arcsec [0.53σ]
KicOffset-st: 0/0/3/0 [3]
DiffImageQuality-fgm: 0.67 [2/3]
DiffImageOverlap-fno: 1.00 [3/3]

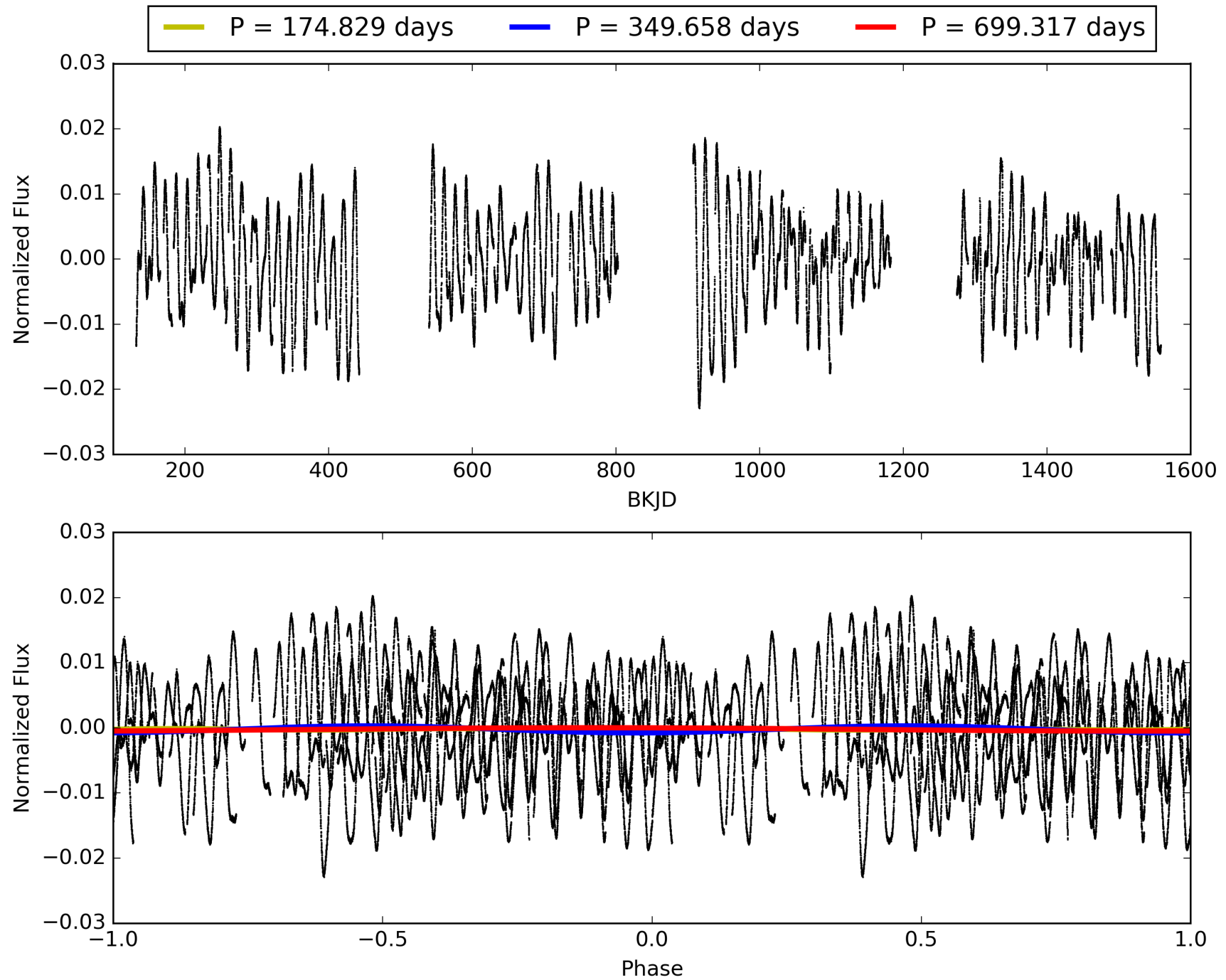
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 31-Jan-2016 22:36:54 Z

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

TCE 006672652-01, PDC Light Curves

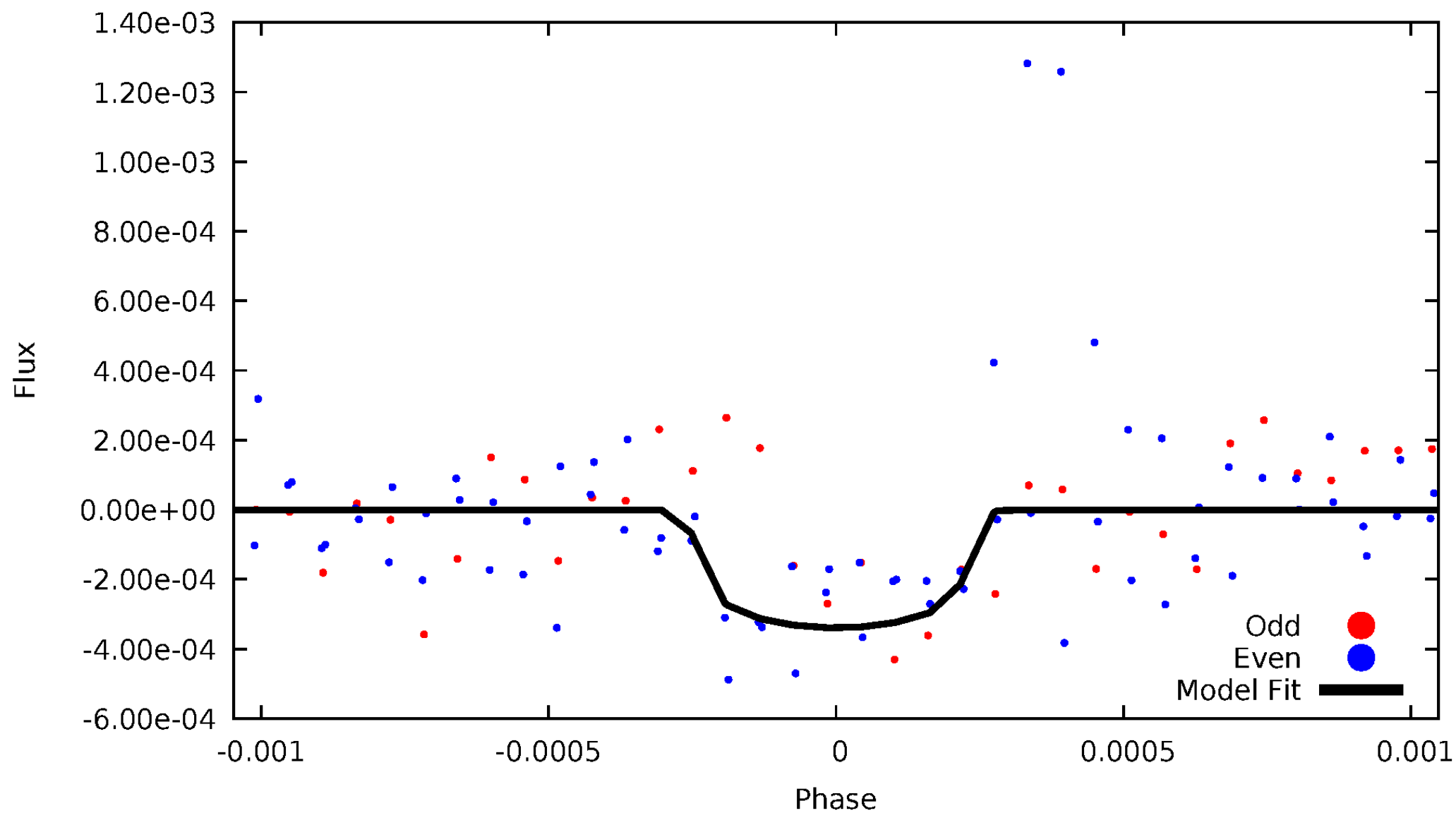


TCE 006672652-01



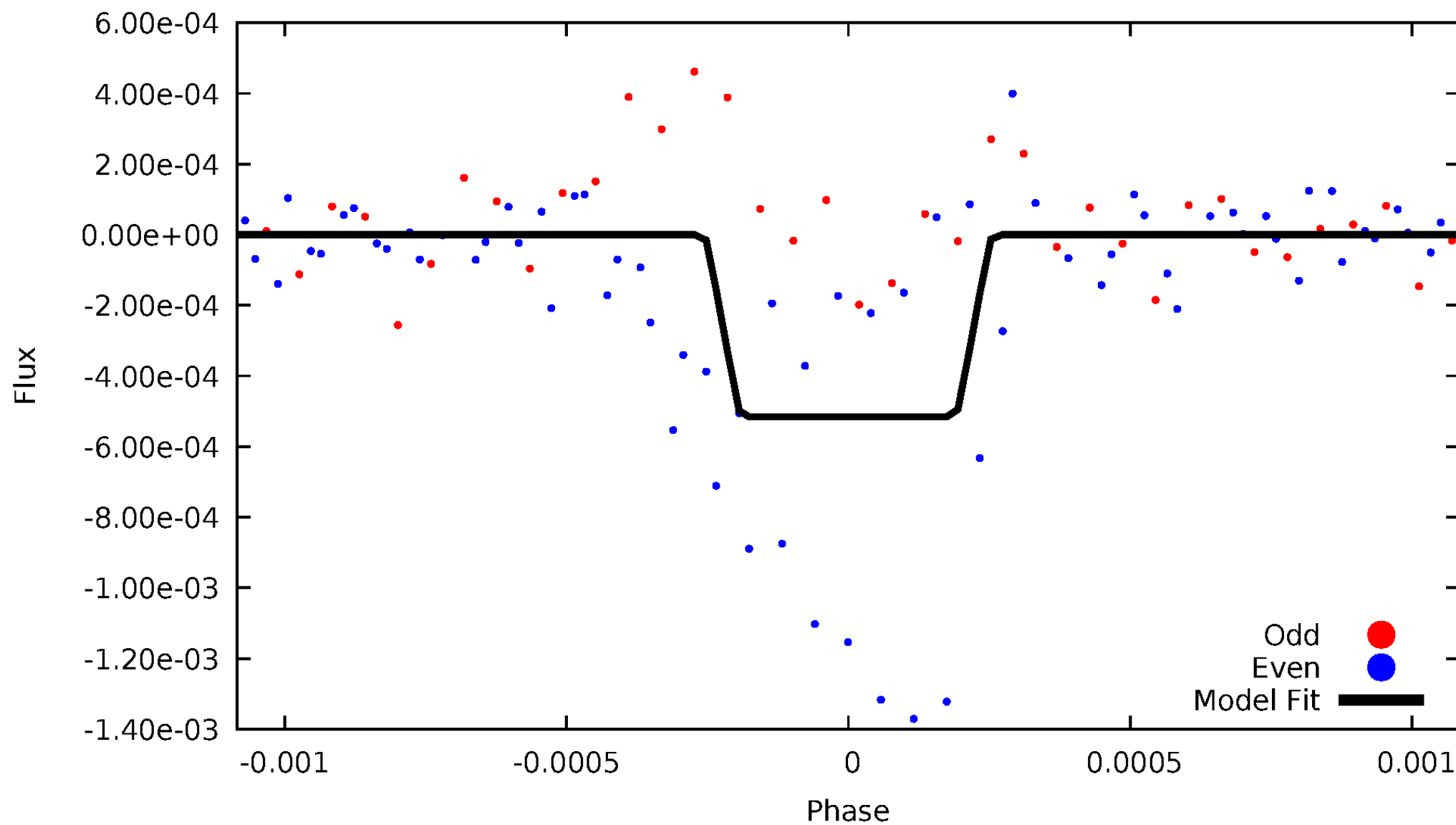
DV Odd/Even

TCE 006672652-01



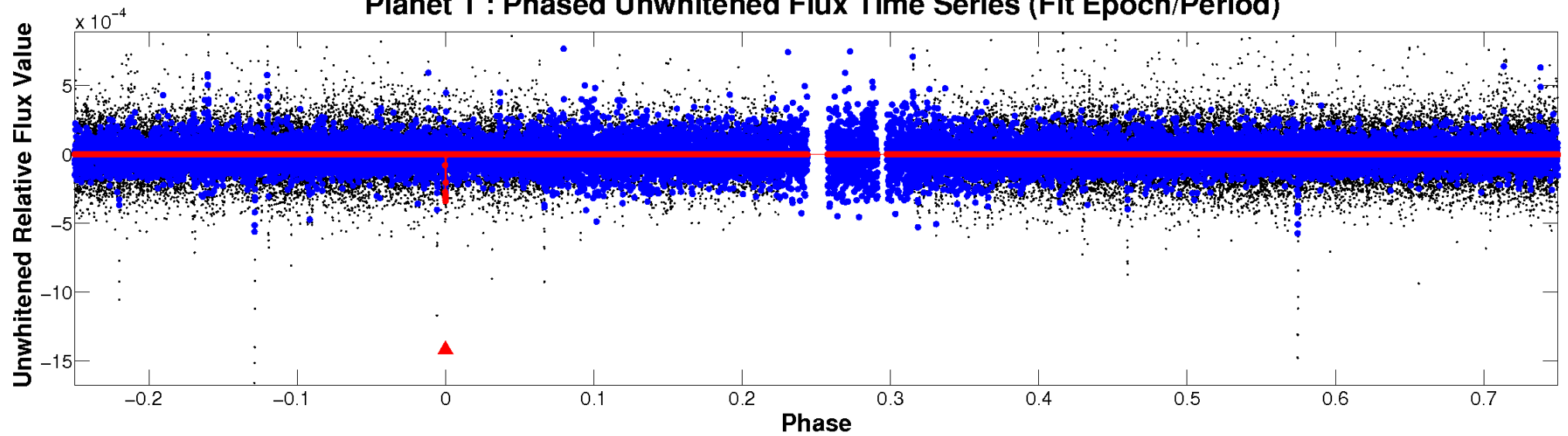
ALT Odd/Even

TCE 006672652-01

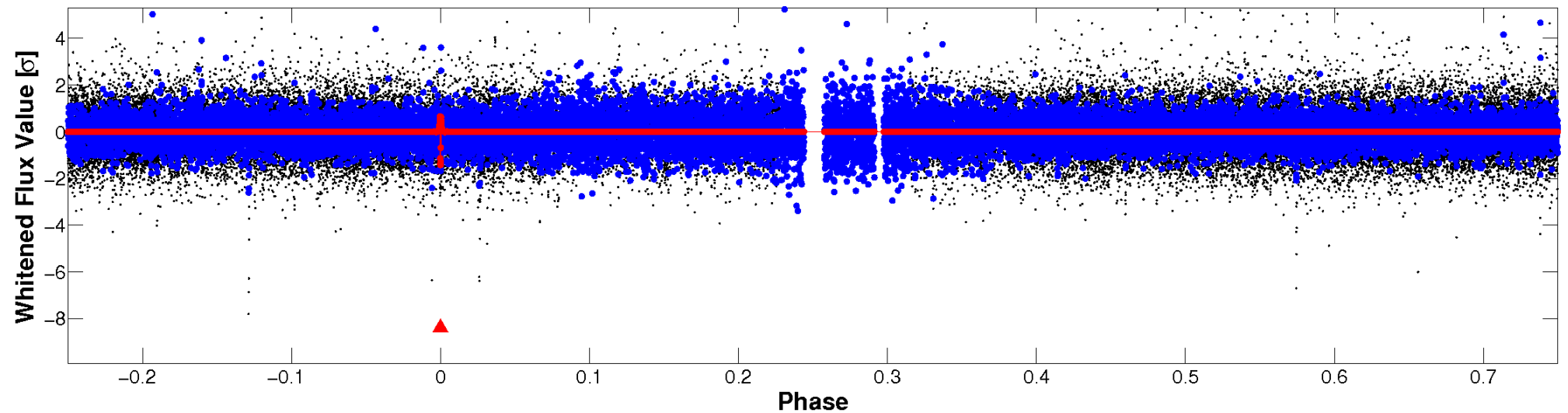


Non-Whitened Vs. Whitened Light Curve

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

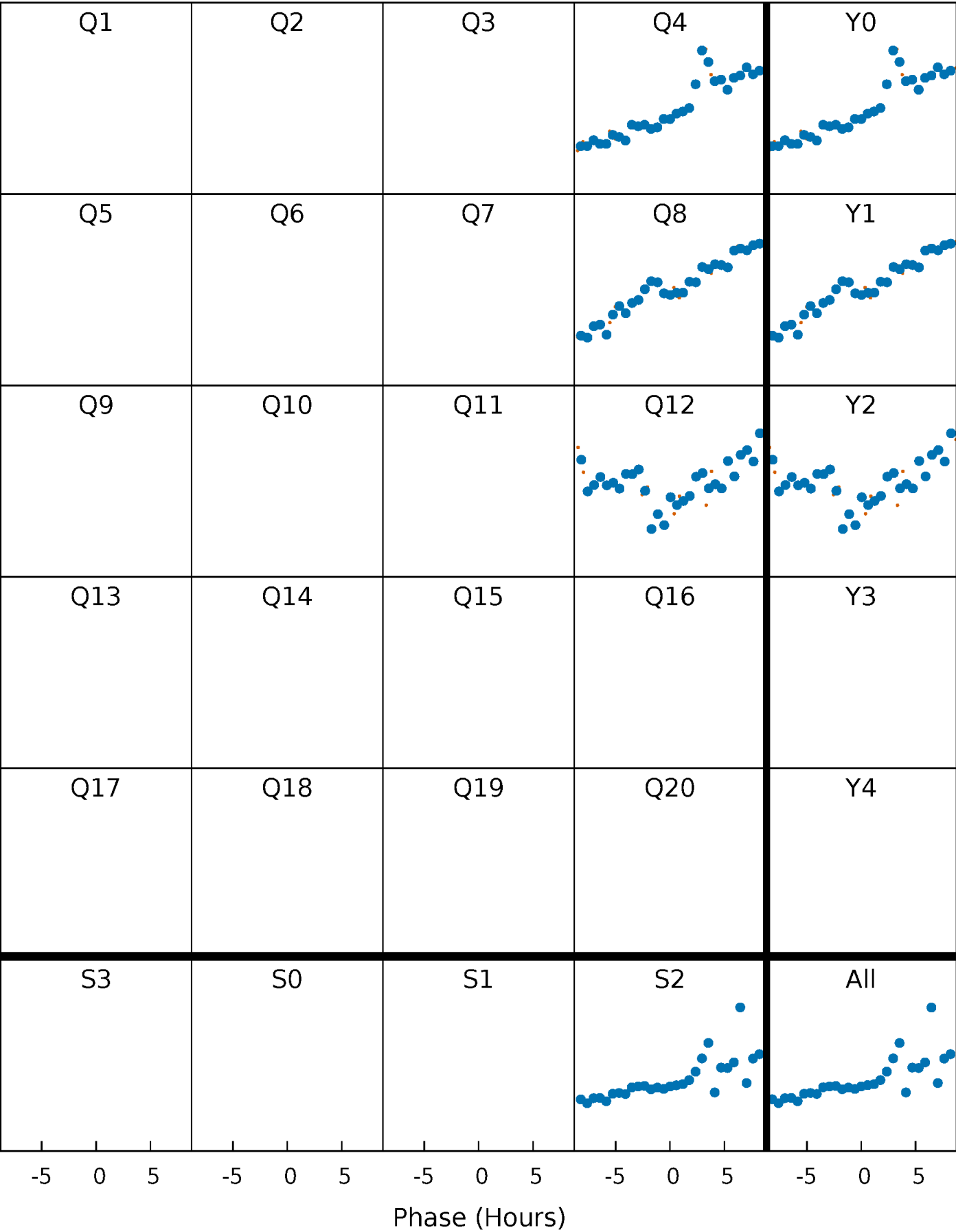


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



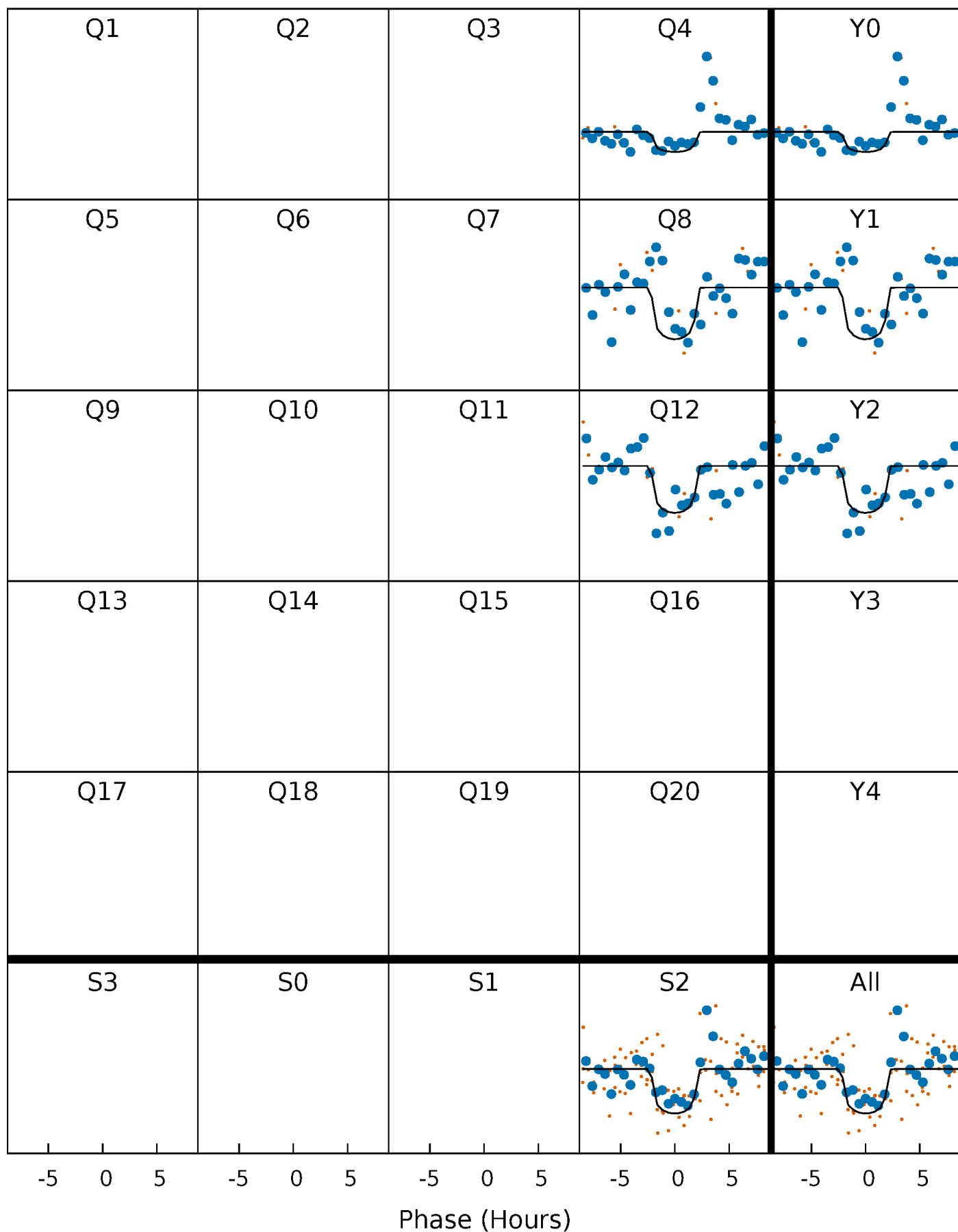
PDC Quarter-Phased Transit Curves

TCE 006672652-01 P=349.658338 Days T₀=429.335860 (BKJD)



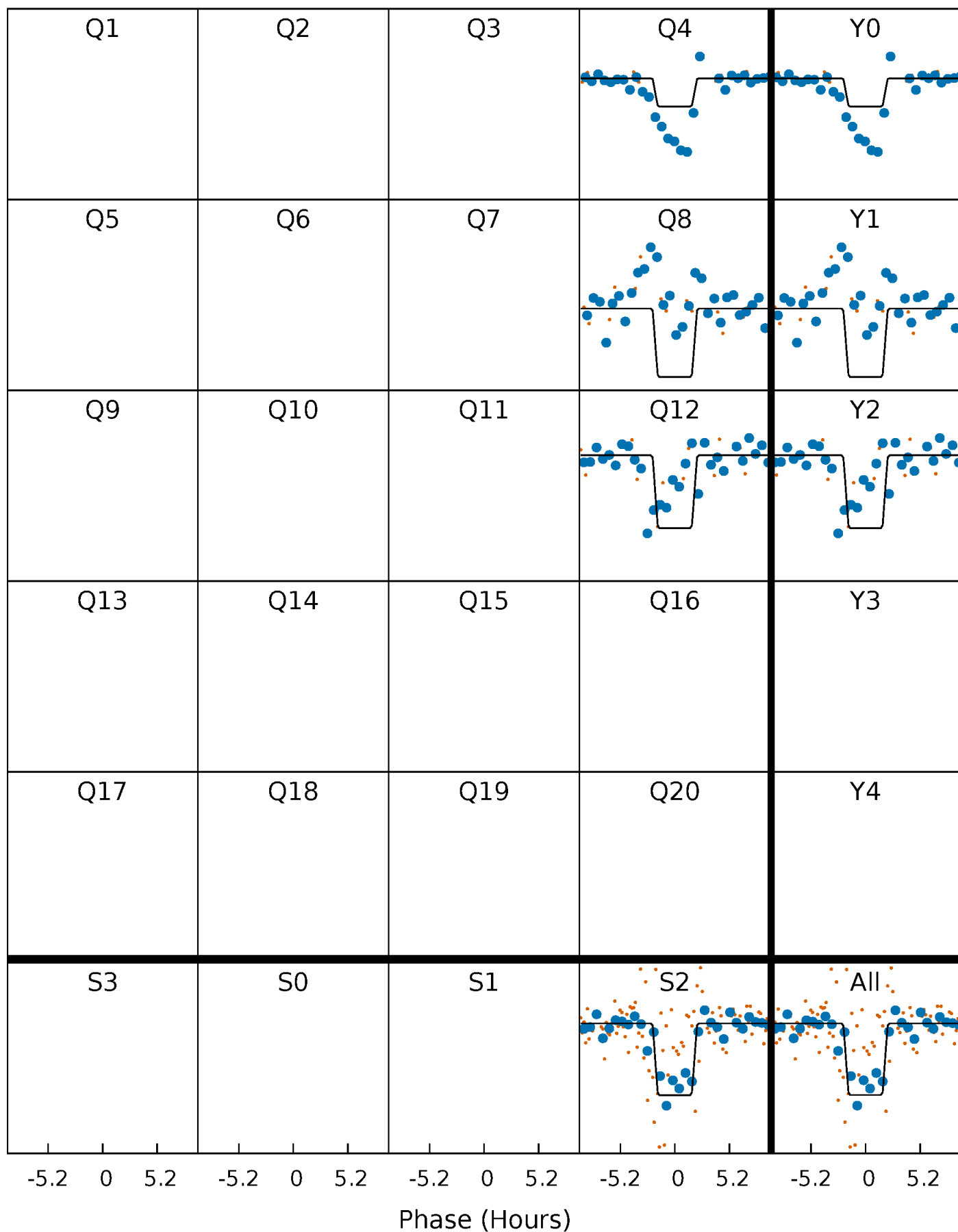
DV Quarter-Phased Transit Curves

TCE 006672652-01 P=349.658338 Days $T_0=429.335860$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

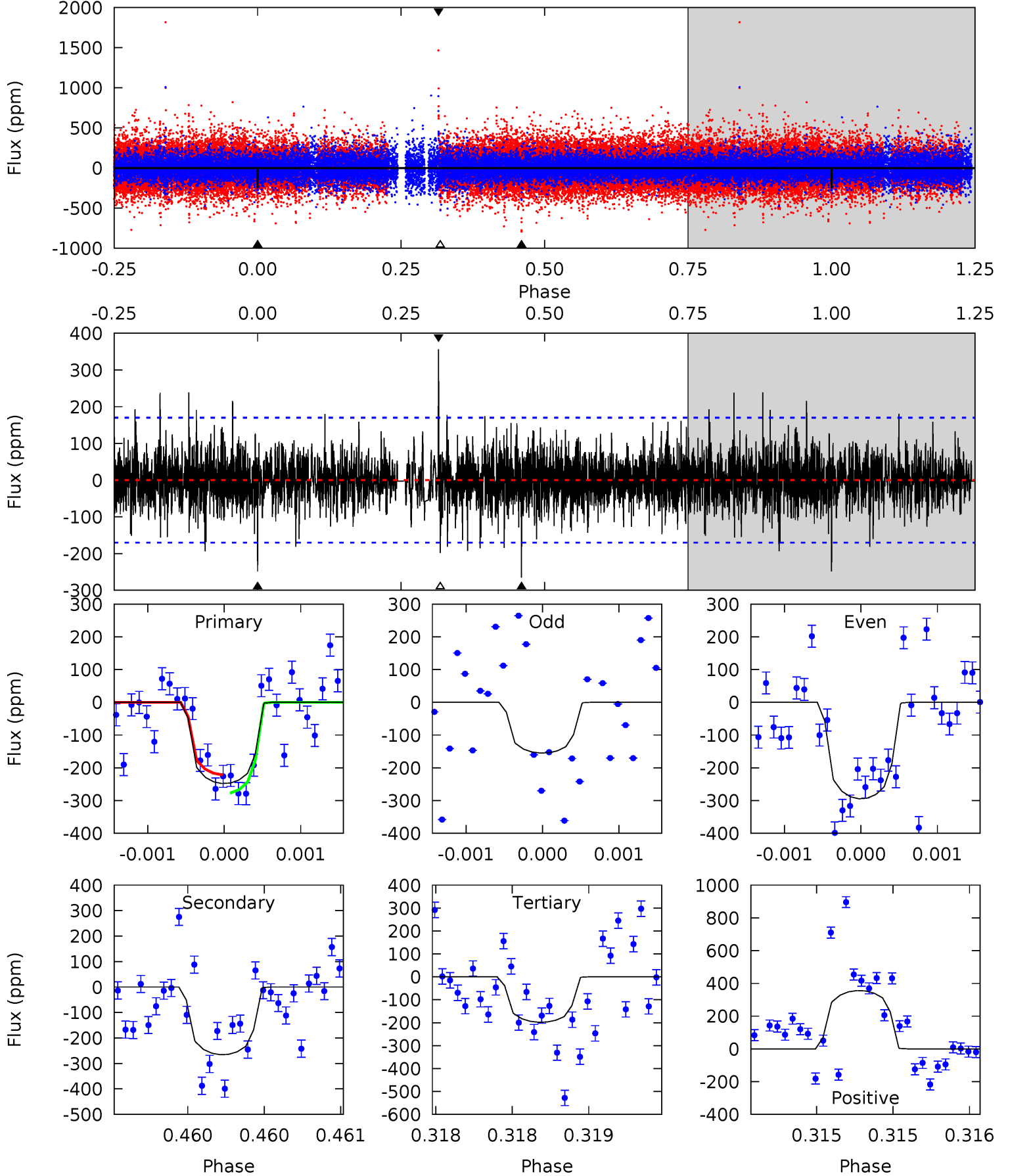
TCE 006672652-01 P=349.672701 Days $T_0=429.350322$ (BKJD)



DV Model-Shift Uniqueness Test

006672652-01, P = 349.658338 Days, E = 79.677522 Days

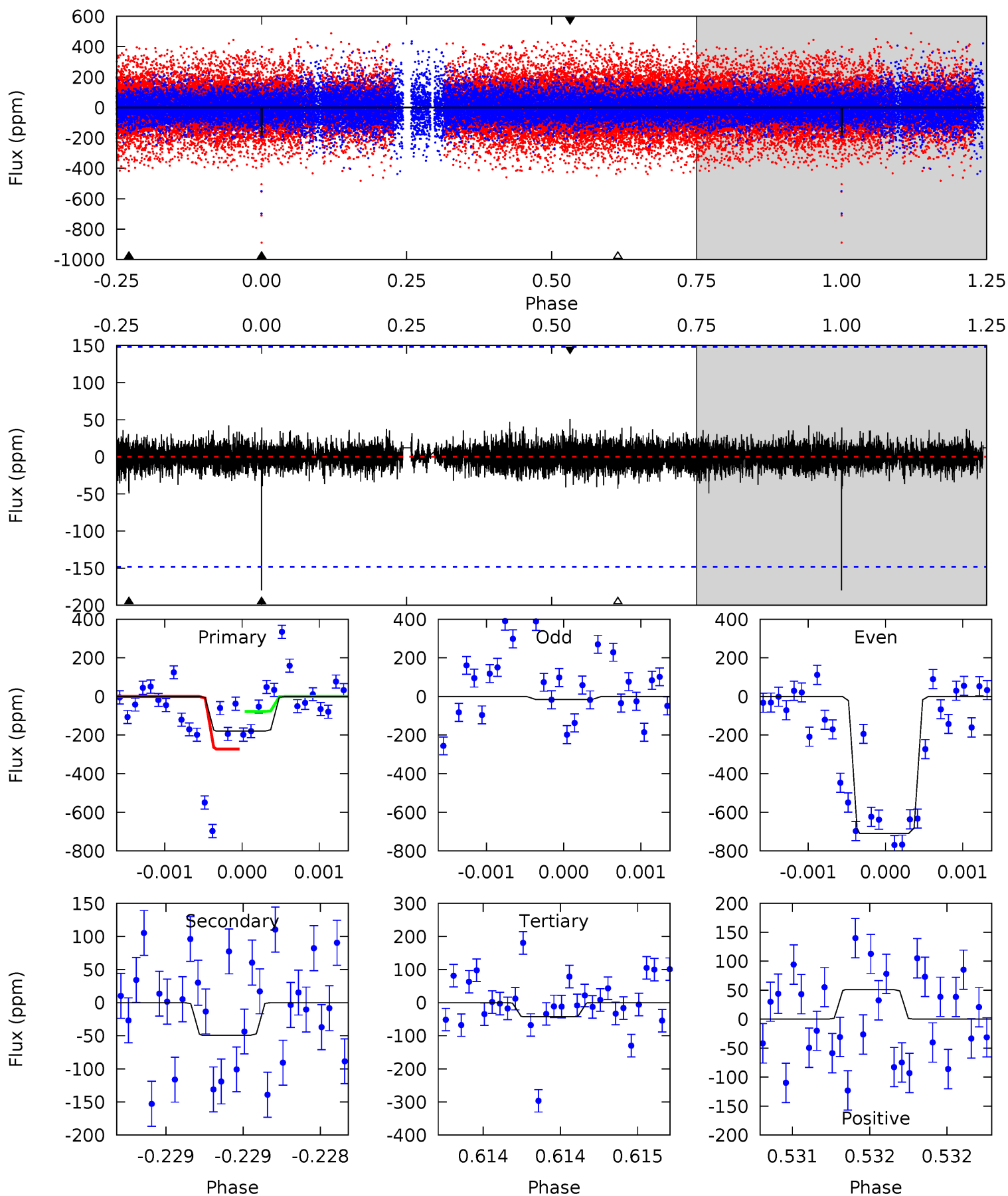
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
8.11	8.69	6.48	11.6	5.56	3.46	1.57	1.63	-3.53	2.21	-2.96	2.13	1.03	0.57	0.91



Alt Model-Shift Uniqueness Test

006672652-01, P = 349.672701 Days, E = 79.677621 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
6.75	1.85	1.60	1.91	5.56	3.47	0.37	5.14	4.84	0.24	-0.07	15.0	2.19	0.22	0



Stellar Parameters For KIC 006672652

	$T_{\text{eff}} (K)$	$\log(g)$	$[\text{Fe}/\text{H}]$	$R (R_{\odot})$	$M (M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	5068^{+152}_{-136}	$4.642^{+0.061}_{-0.039}$	$-0.920^{+0.350}_{-0.300}$	$0.618^{+0.049}_{-0.049}$	$0.611^{+0.057}_{-0.023}$	$3.644^{+0.824}_{-0.561}$
	+3%/-3%	+1%/-1%	+38%/-33%	+8%/-8%	+9%/-4%	+23%/-15%
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 006672652-01 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	A_{obs}
DV	-266 ± 31	$1.37^{+0.76}_{-0.73}$	270^{+9}_{-9}	4602^{+1882}_{-692}	$53571^{+183063}_{-31416}$
Alt.	-49 ± 27	$1.56^{+0.78}_{-0.71}$	270^{+9}_{-9}	3278^{+798}_{-516}	7184^{+20151}_{-4978}

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

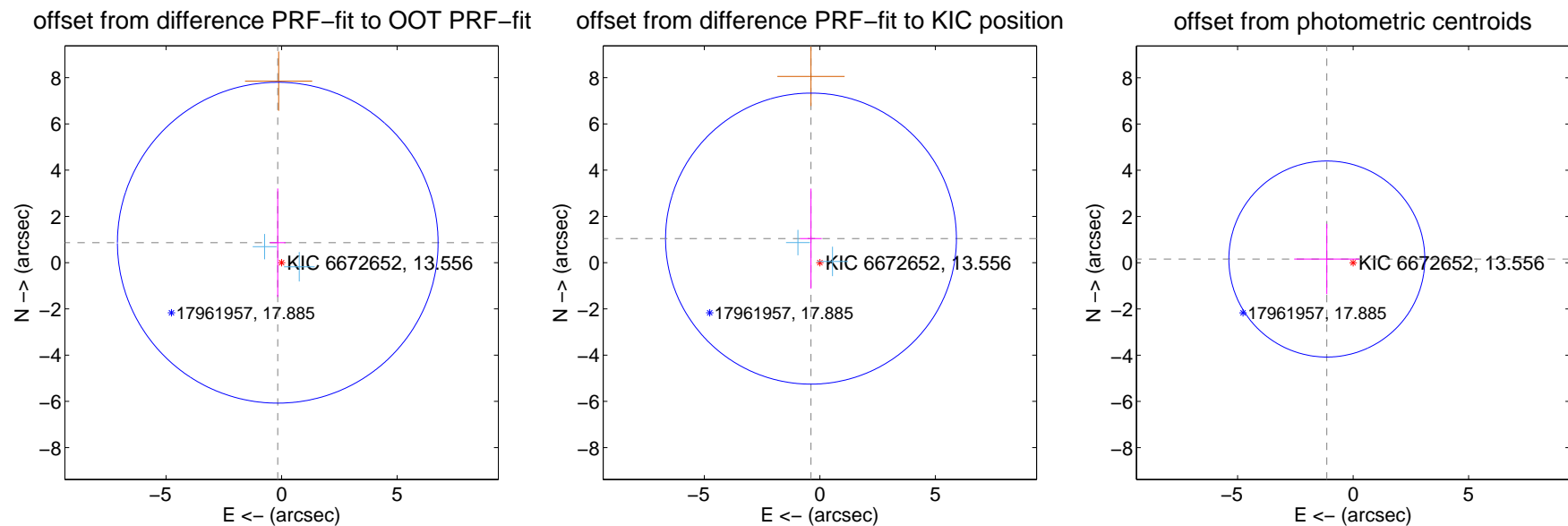
DV Centroid Data

Supplemental centroid analysis for 006672652-01. Kepler magnitude: 13.56. Transit SNR 6.84

There are 2 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	0.877 ± 2.313	0.38	0.165 ± 0.338	0.862 ± 2.344
PRF-fit source offset from KIC position	1.107 ± 2.098	0.53	0.383 ± 0.466	1.039 ± 2.165
photometric centroid source offset	1.15 ± 1.41	0.81	1.14 ± 1.41	0.16 ± 1.52



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



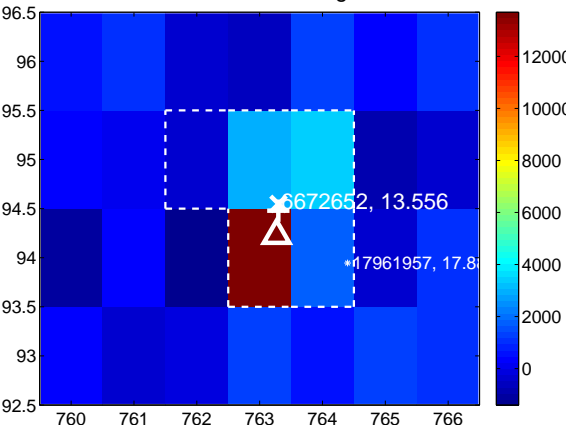
Q3 no difference image



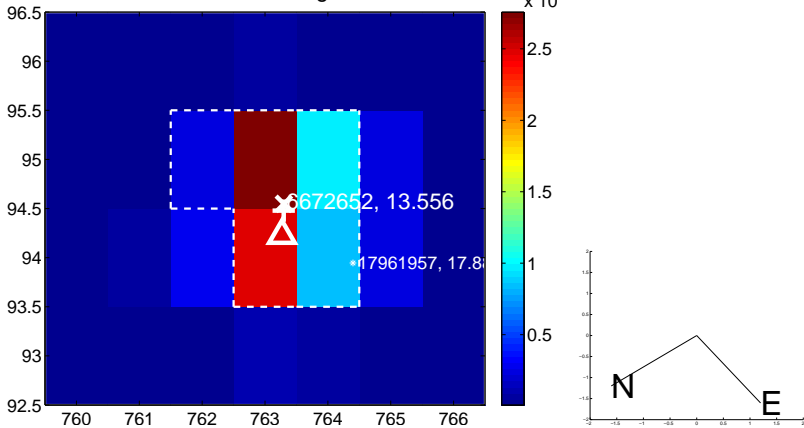
Q3 no OOT image



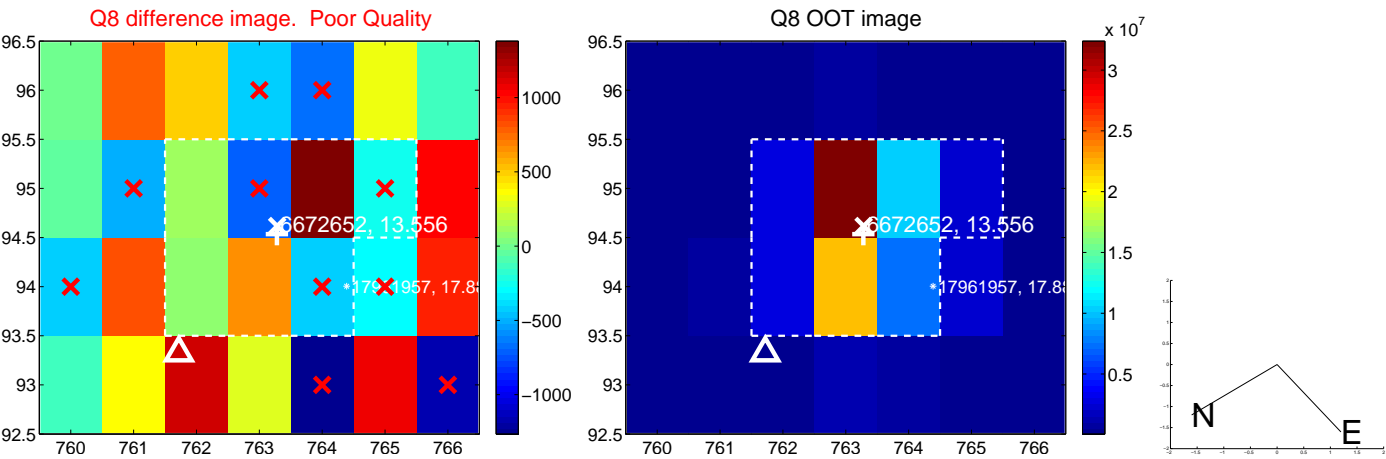
Q4 difference image



Q4 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.

Q9 no difference image



Q9 no OOT image



Q10 no difference image



Q10 no OOT image



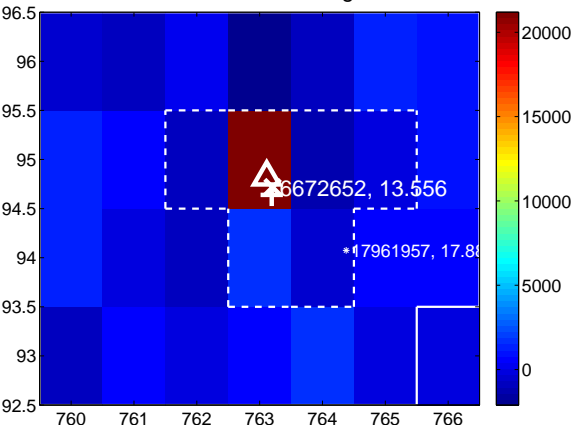
Q11 no difference image



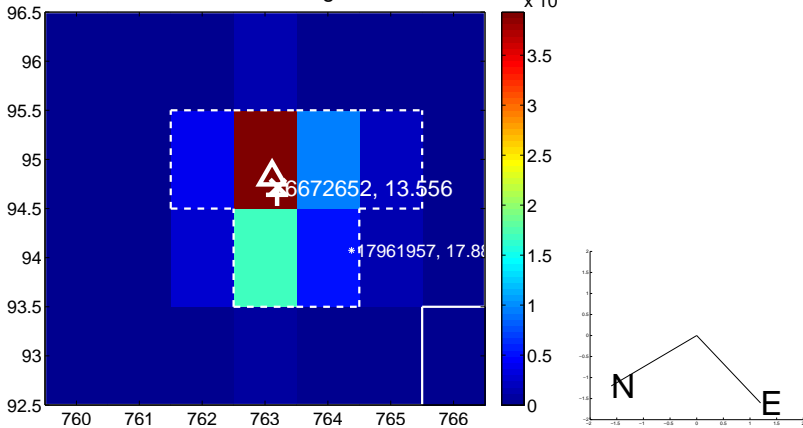
Q11 no OOT image



Q12 difference image



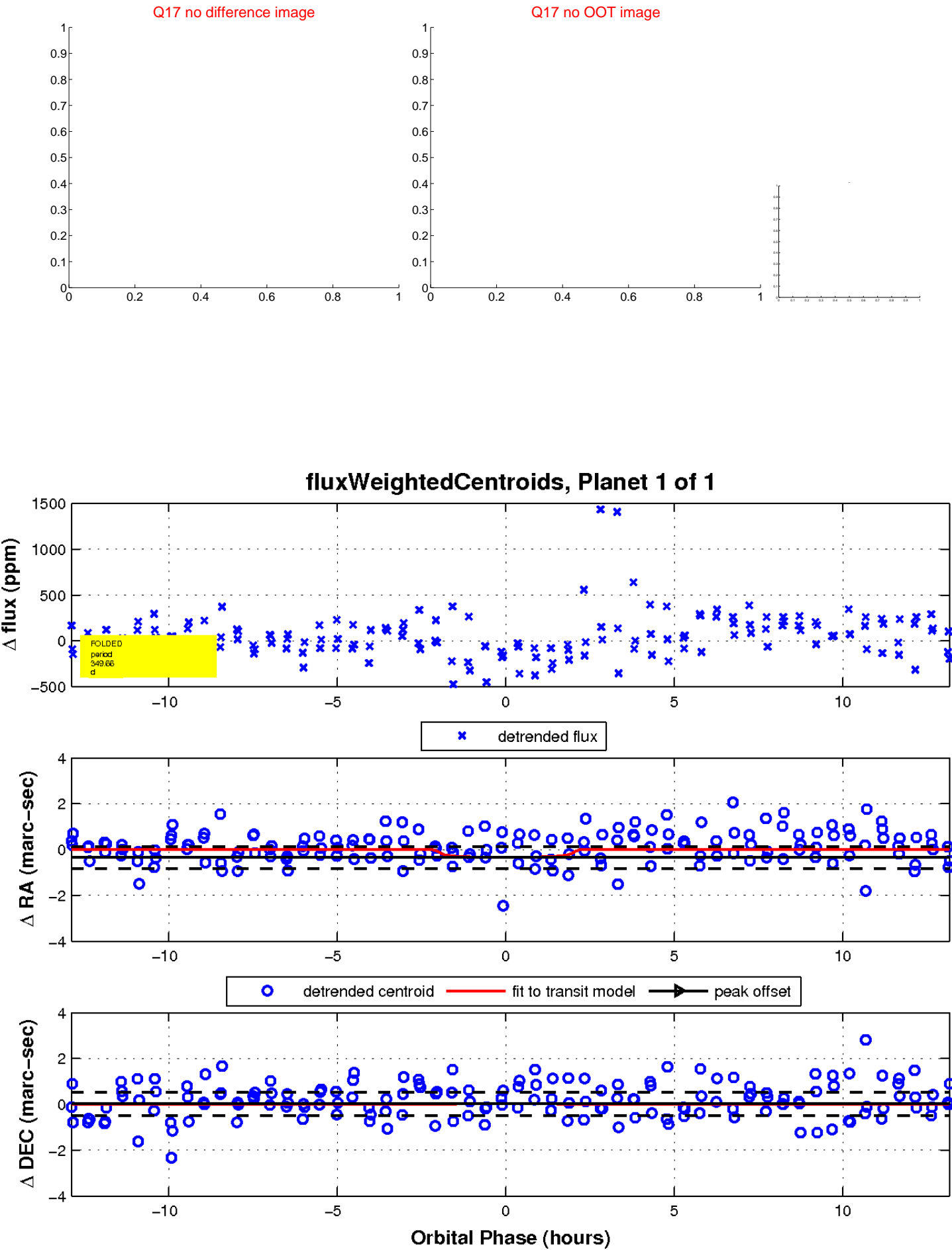
Q12 OOT image



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

