

KIC 011567018

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})
011567018-01	OBS	No	367.324547	374.323197	277.6	60.708	7.9	10.3	1.61	5666	3.71	2.41

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
011567018-01	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_MARSHALL—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.

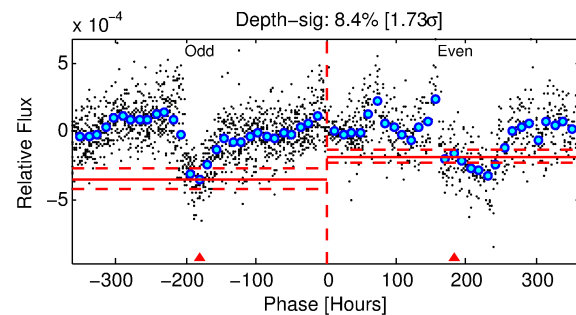
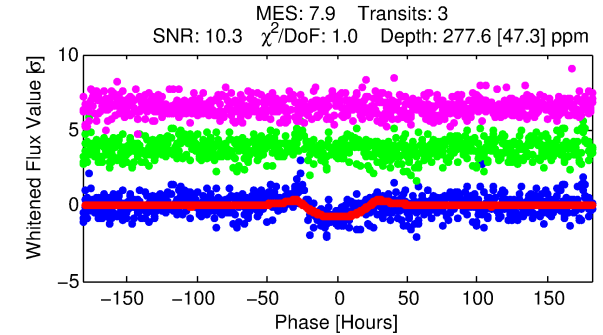
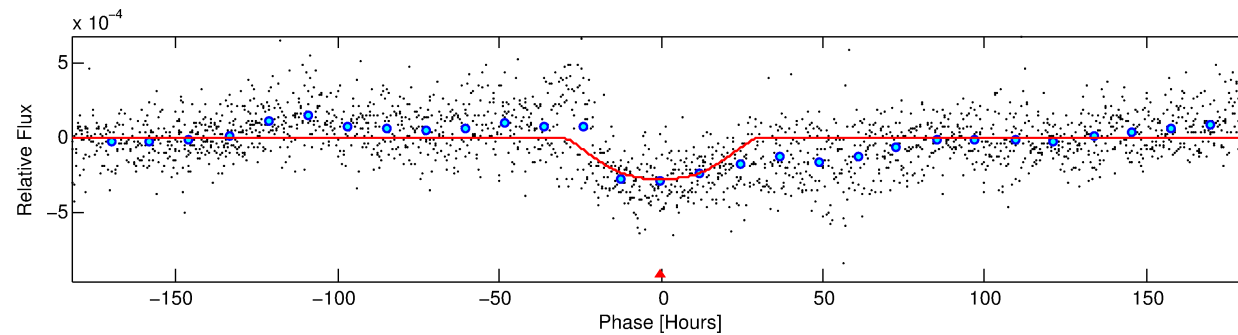
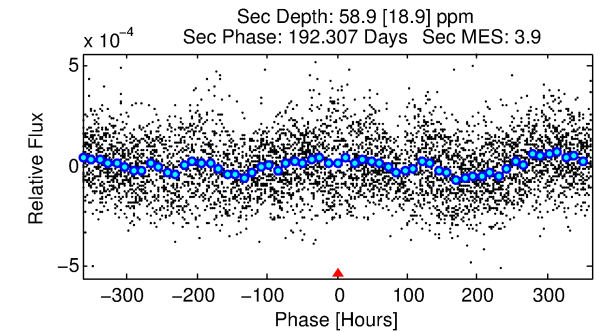
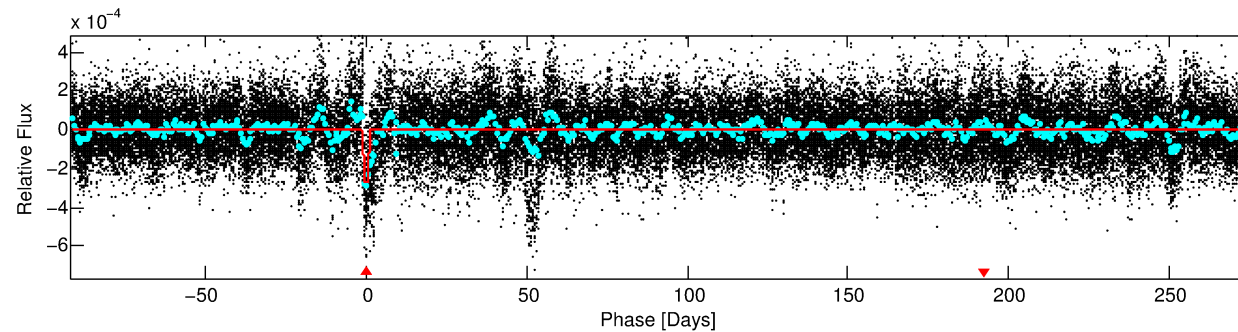
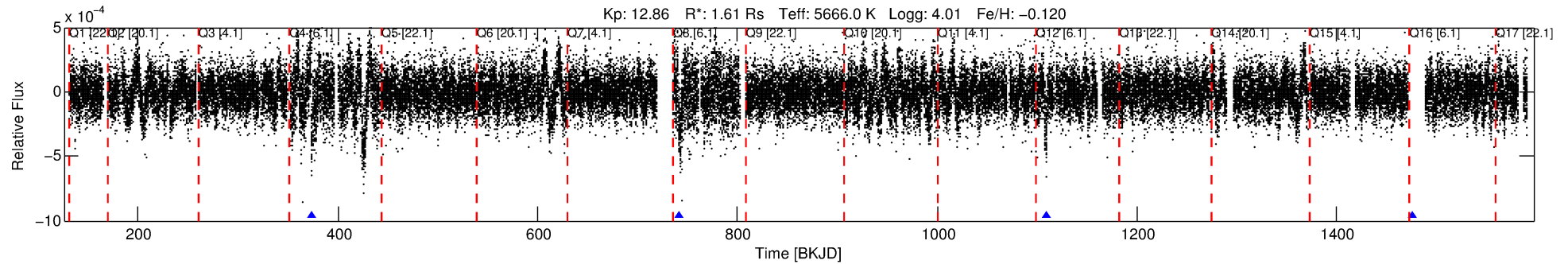
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 011567018-01

No Significant Match Found

DV One-Page Summary

KIC: 11567018 Candidate: 1 of 1 Period: 367.325 d



DV Fit Results:

Period = 367.32455 [0.06628] d
Epoch = 374.3232 [0.1007] BKJD
Rp/R* = 0.0211 [0.0026]
a/R* = 13.40 [1.76]
b = 0.98 [0.01]
Seff = 2.41 [1.25]
Teq = 318 [41] K
Rp = 3.70 [1.25] Re
a = 0.9960 [0.3111] AU
Ag = 2341.68 [1521.88] [1.54σ]
Teffp = 3416 [359] K [8.57σ]

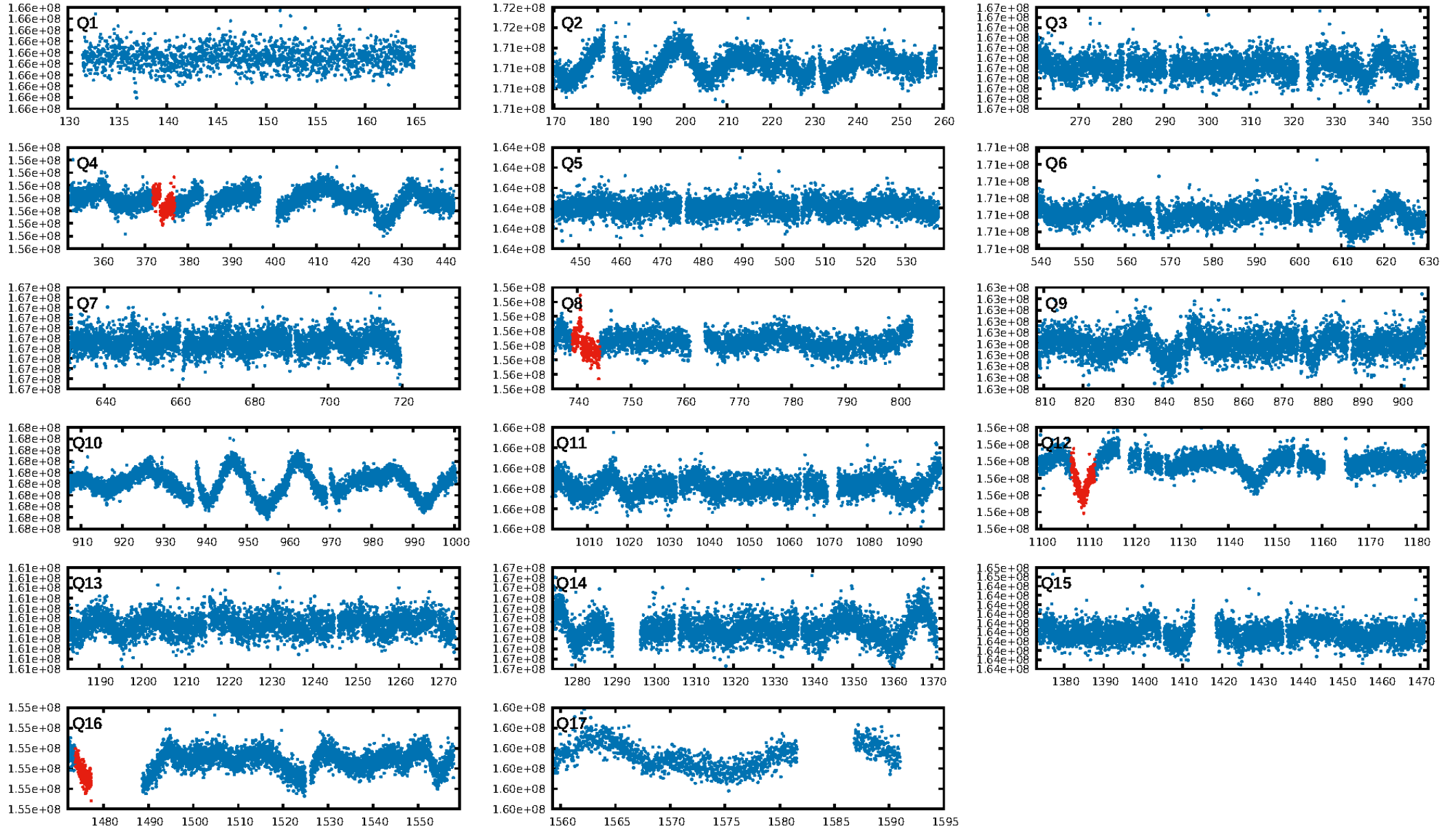
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: 2.3%
ModelChiSquareGof-sig: 100.0%
Bootstrap-pfa: 9.30e-11
RollingBand-fgt: 1.00 [3/3]
GhostDiagnostic-chr: 1.345
Centroid-sig: 53.1%
Centroid-so: 0.756 arcsec [1.60σ]
OotOffset-rm: N/A
OotOffset-st: 0/0/0/0 [0]
KicOffset-st: 0/0/0/0 [0]
DiffImageQuality-fgm: N/A
DiffImageOverlap-fno: 1.00 [1/1]

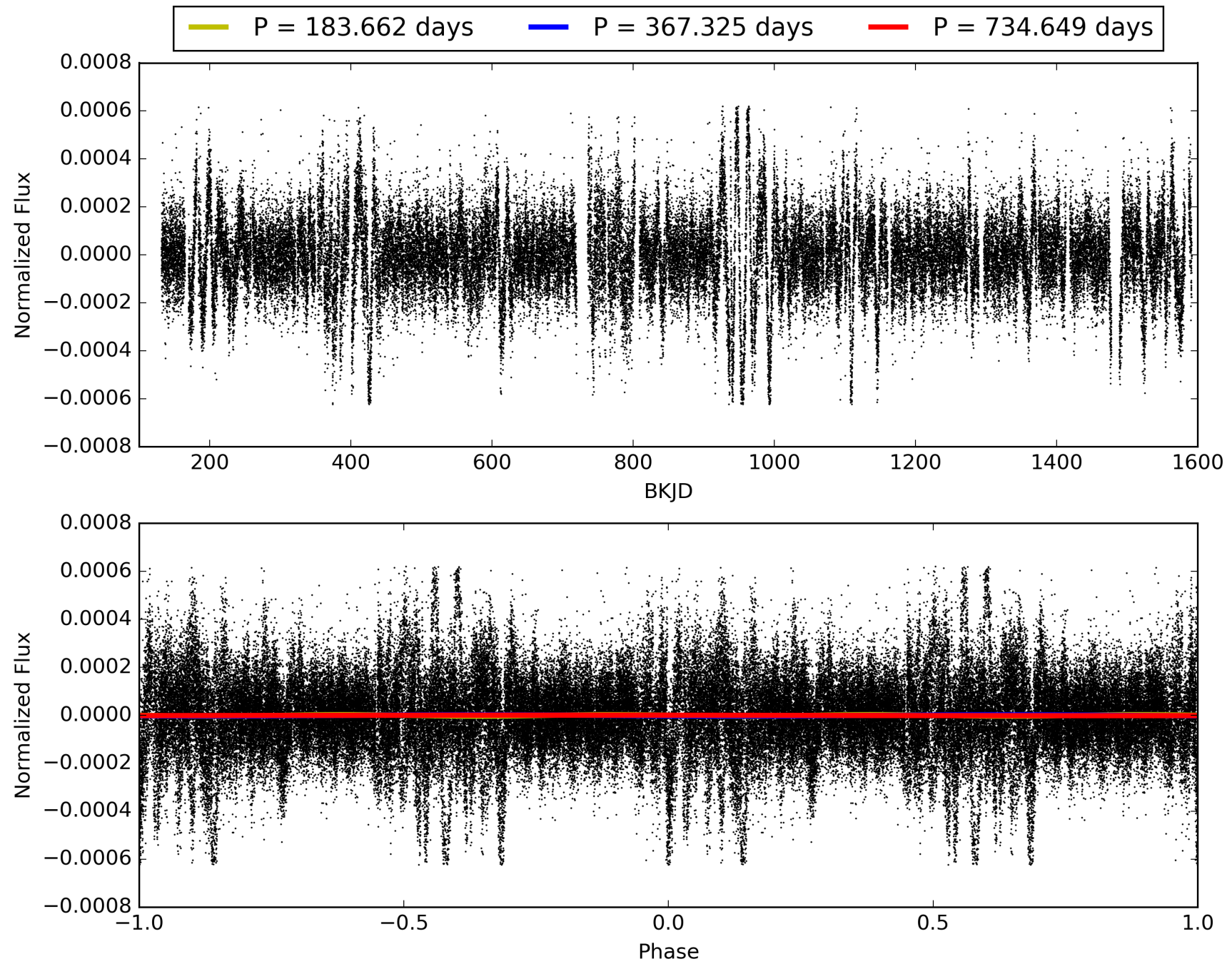
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 28-Jan-2016 20:59:30 Z

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

TCE 011567018-01, PDC Light Curves

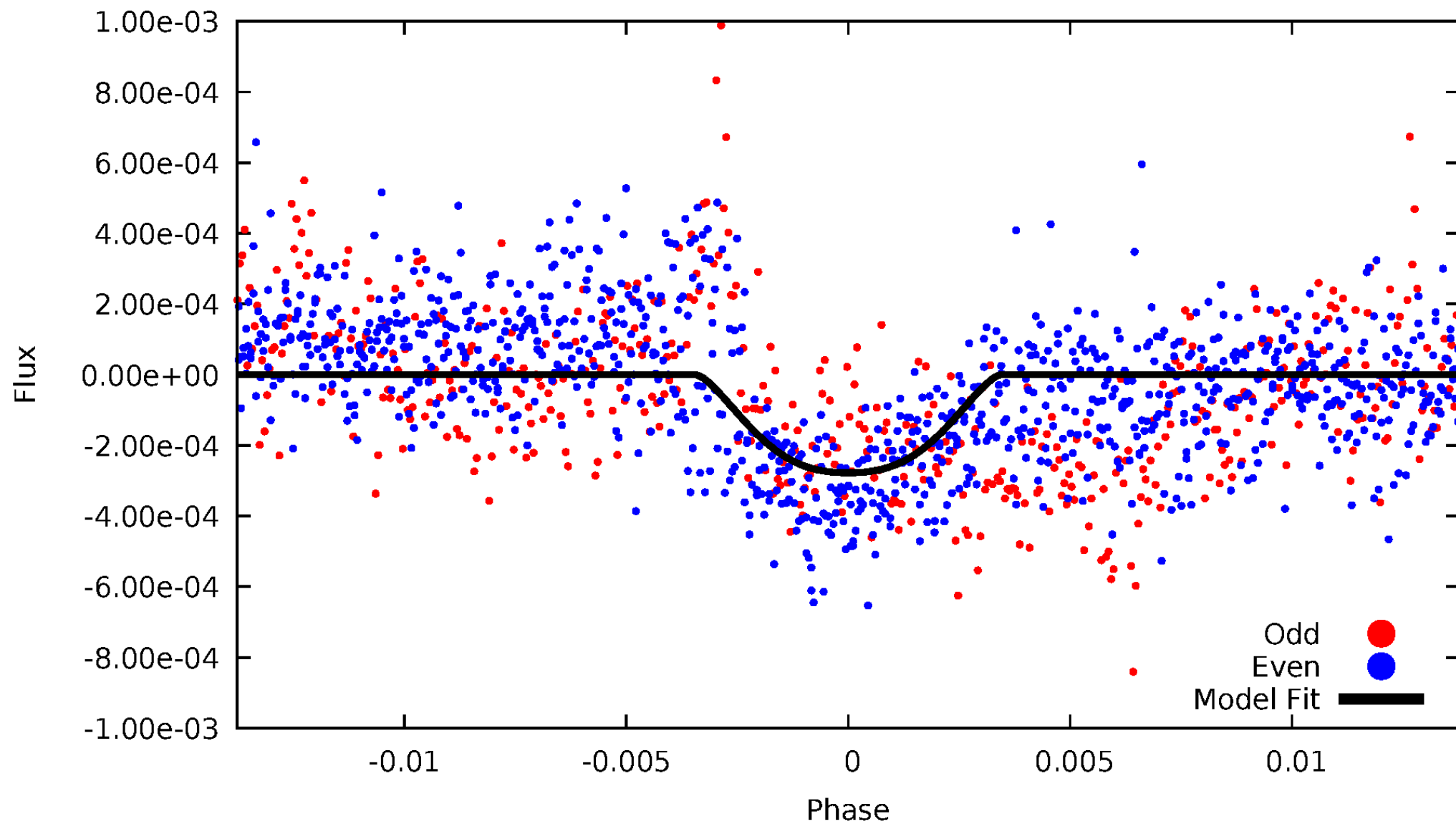


TCE 011567018-01



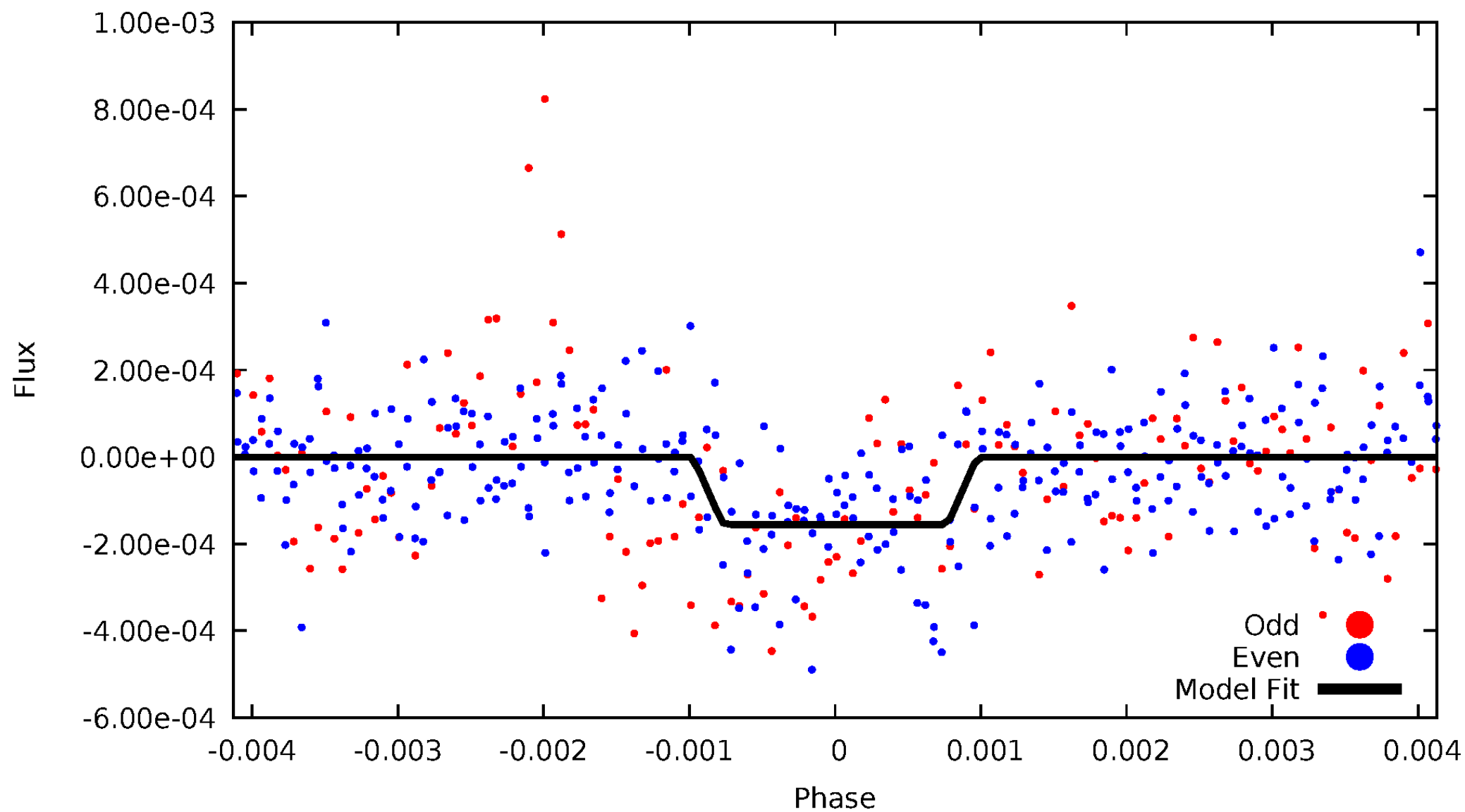
DV Odd/Even

TCE 011567018-01



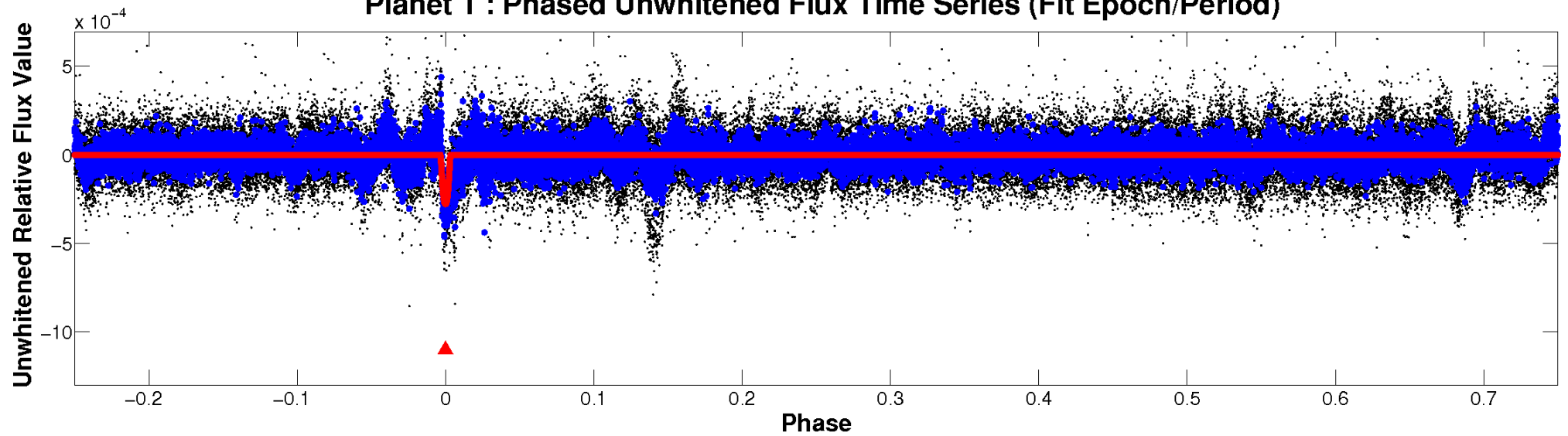
ALT Odd/Even

TCE 011567018-01

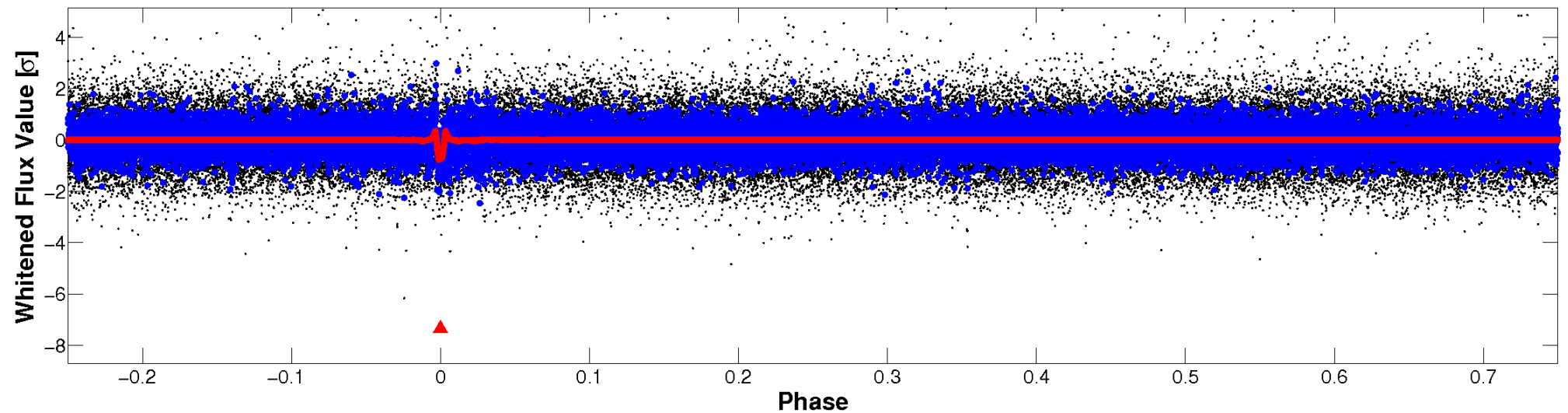


Non-Whitened Vs. Whitened Light Curve

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

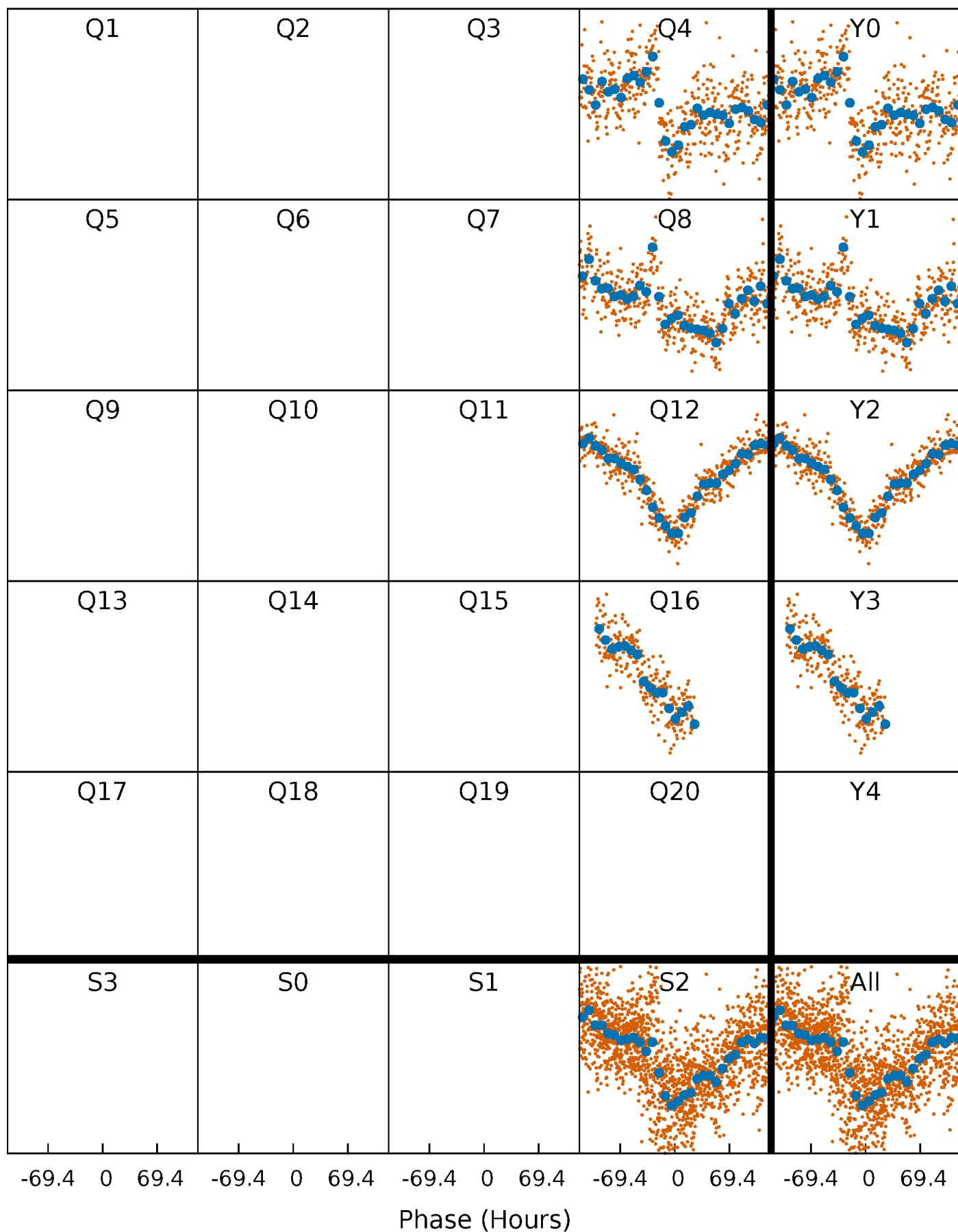


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



PDC Quarter-Phased Transit Curves

TCE 011567018-01 P=367.324547 Days $T_0=374.323197$ (BKJD)



DV Quarter-Phased Transit Curves

TCE 011567018-01 P=367.324547 Days $T_0=374.323197$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

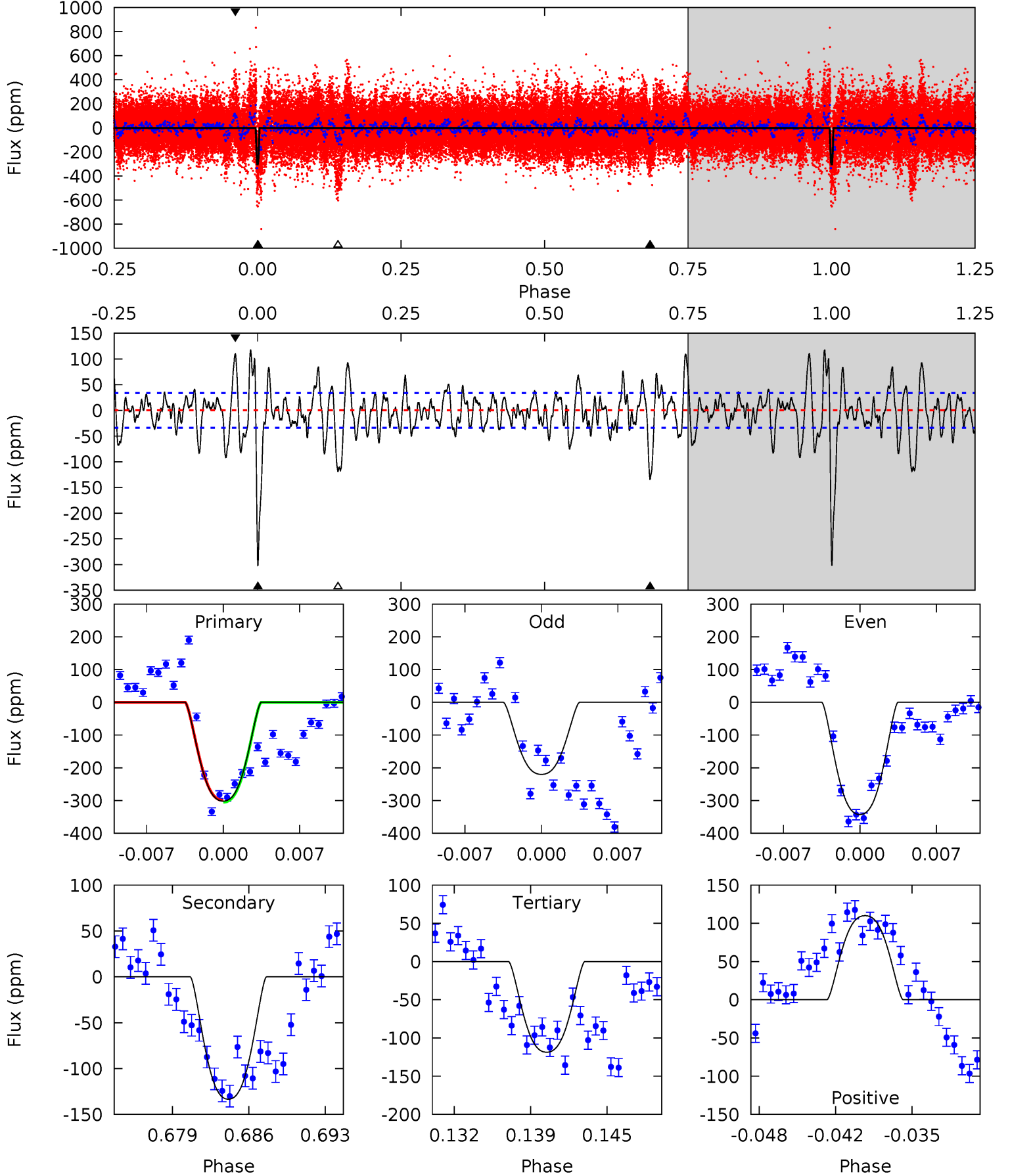
TCE 011567018-01 P=367.558877 Days $T_0=373.767726$ (BKJD)



DV Model-Shift Uniqueness Test

011567018-01, P = 367.324547 Days, E = 6.998650 Days

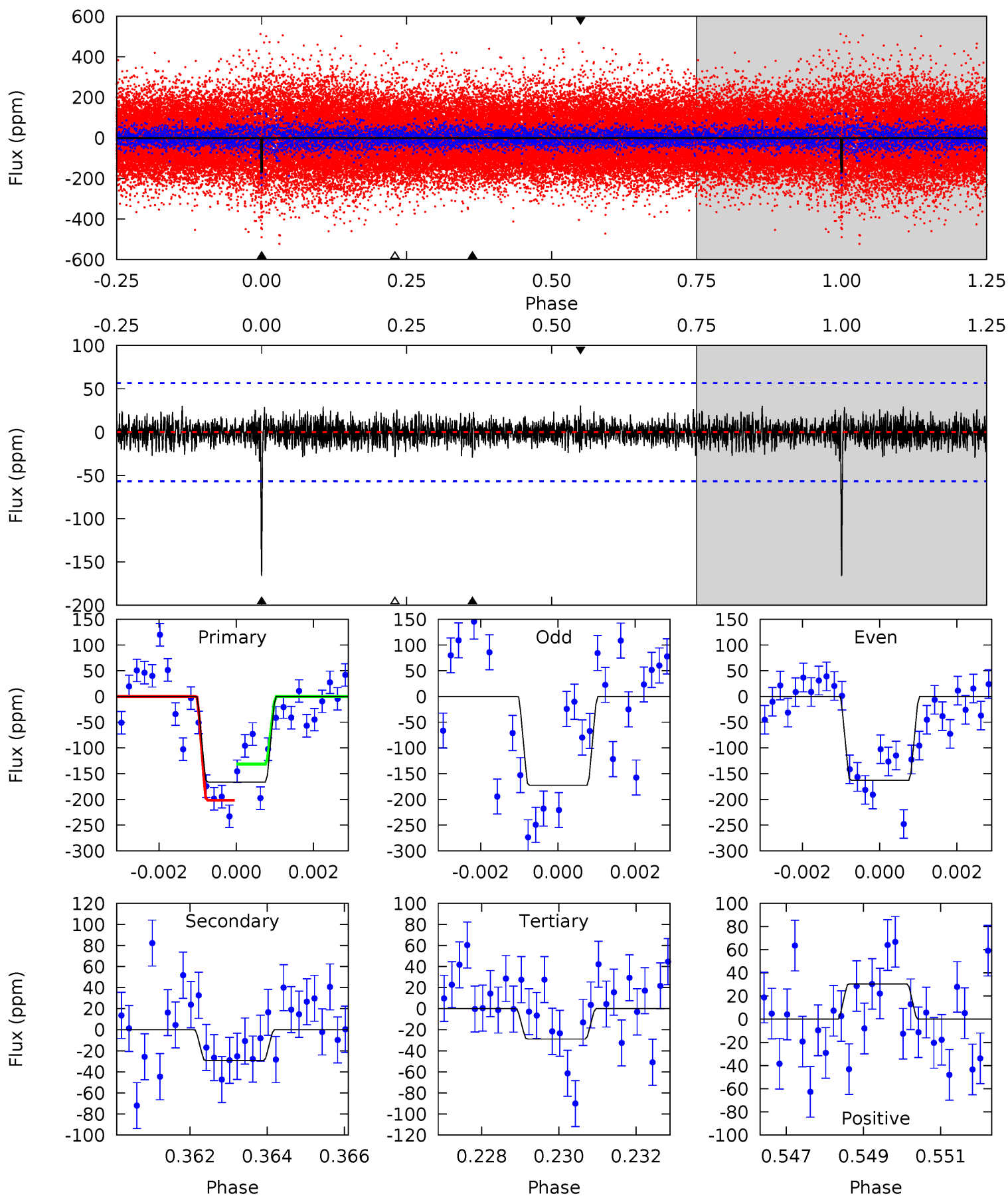
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
45.5	20.1	17.9	16.6	5.10	2.70	5.27	27.6	28.9	2.23	3.53	8.89	0.94	0.28	0.42



Alt Model-Shift Uniqueness Test

011567018-01, P = 367.558877 Days, E = 6.208849 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
15.6	2.75	2.70	2.85	5.33	3.10	0.82	12.9	12.7	0.05	-0.10	0.43	0.97	0.15	3.31



Stellar Parameters For KIC 011567018

	$T_{\text{eff}} (K)$	$\log(g)$	$[\text{Fe}/\text{H}]$	$R (R_{\odot})$	$M (M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	5666^{+156}_{-128}	$4.015^{+0.301}_{-0.108}$	$-0.120^{+0.350}_{-0.200}$	$1.608^{+0.338}_{-0.507}$	$0.976^{+0.132}_{-0.110}$	$0.331^{+0.622}_{-0.120}$
	+3%/-2%	+7%/-3%	+292%/-167%	+21%/-32%	+14%/-11%	+188%/-36%
Source	PHO1	FLK73	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 011567018-01 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	A_{obs}
DV	-133 ± 7	$3.59^{+0.67}_{-0.75}$	438^{+29}_{-36}	4393^{+259}_{-201}	5736^{+3238}_{-1727}
Alt.	-29 ± 11	$2.06^{+0.56}_{-0.53}$	437^{+25}_{-40}	4033^{+479}_{-399}	3715^{+3449}_{-1804}

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

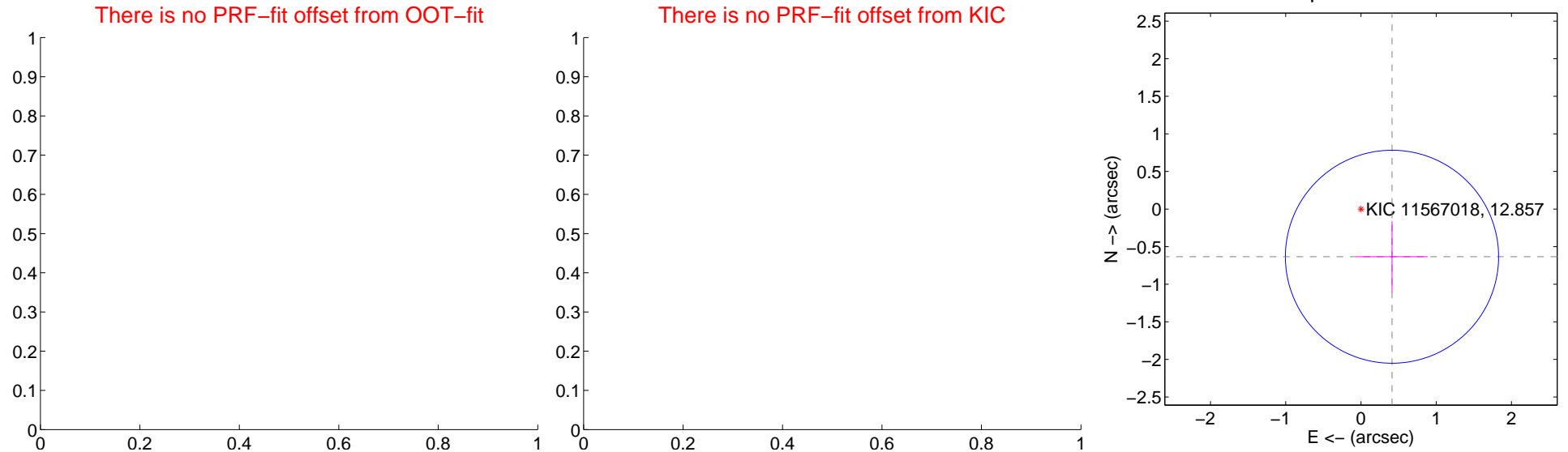
DV Centroid Data

Supplemental centroid analysis for 011567018-01. Kepler magnitude: 12.86. Transit SNR 10.29

There are 0 quarters with good PRF difference image offsets

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

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	—	—	—	—
PRF-fit source offset from KIC position	—	—	—	—
photometric centroid source offset	0.76 ± 0.47	1.60	-0.41 ± 0.47	-0.63 ± 0.47

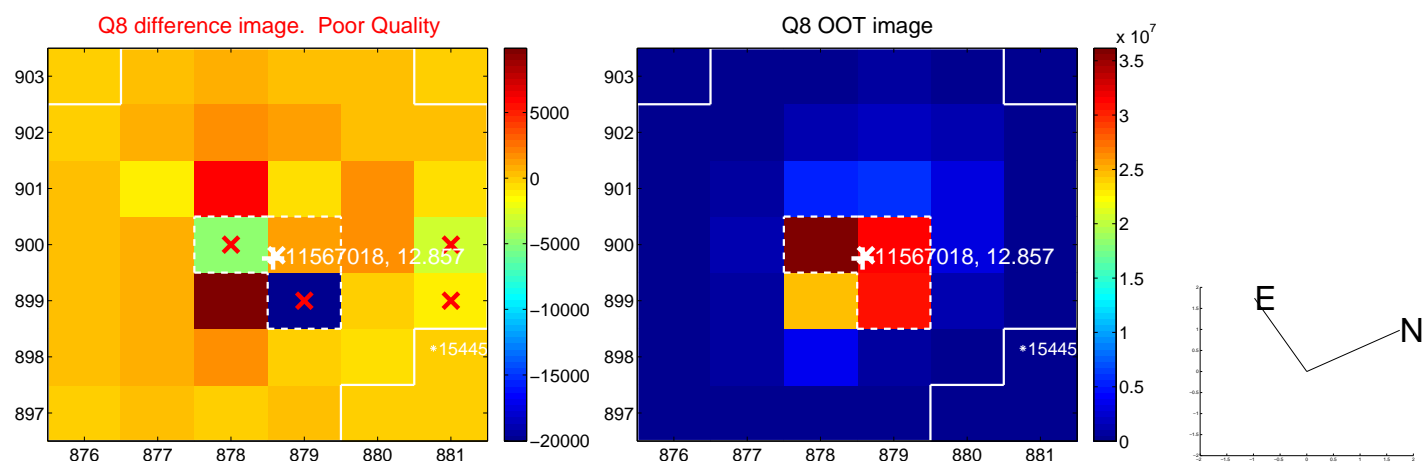
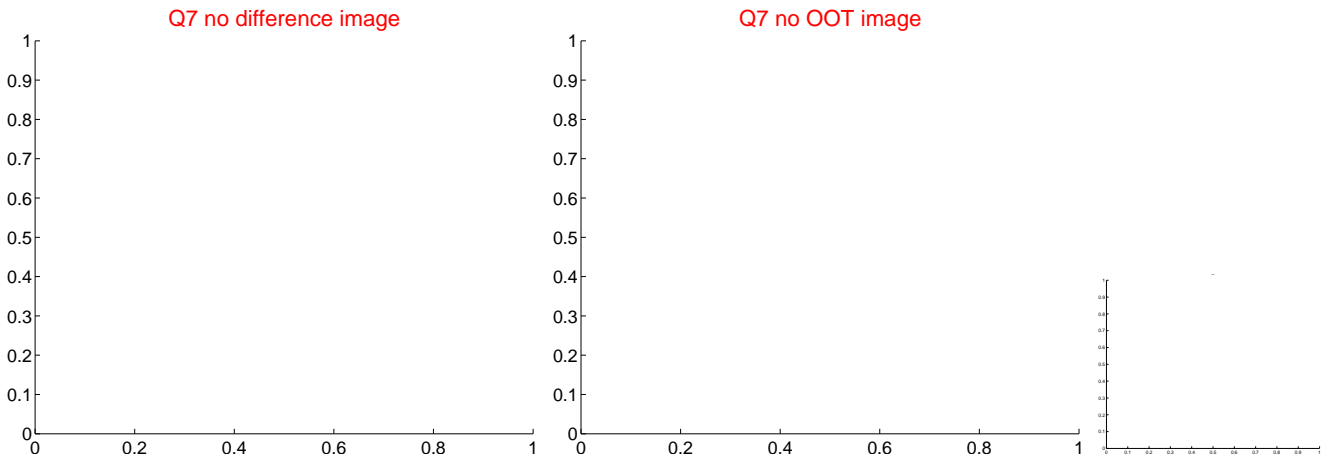
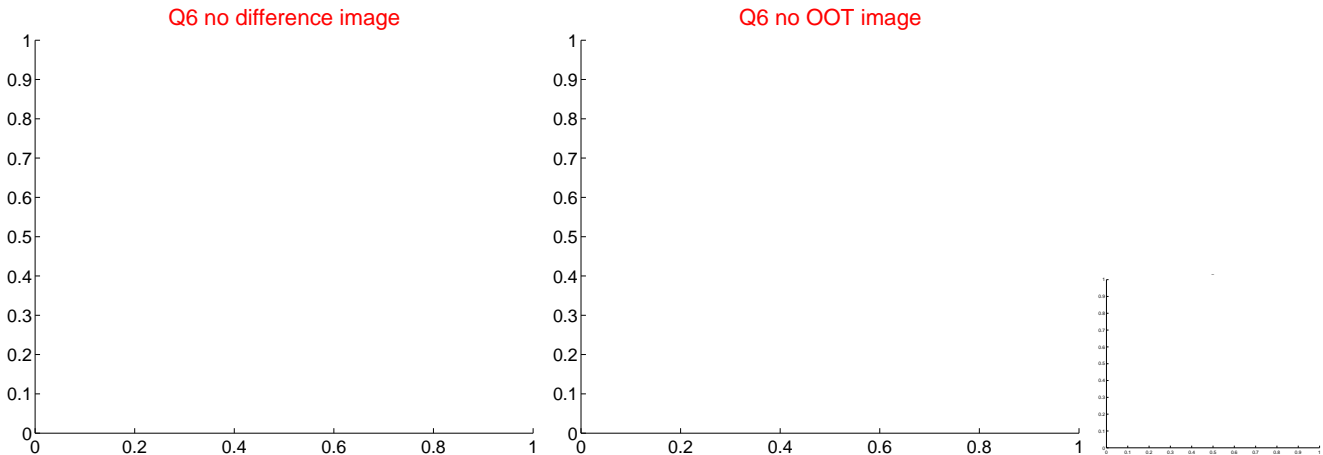
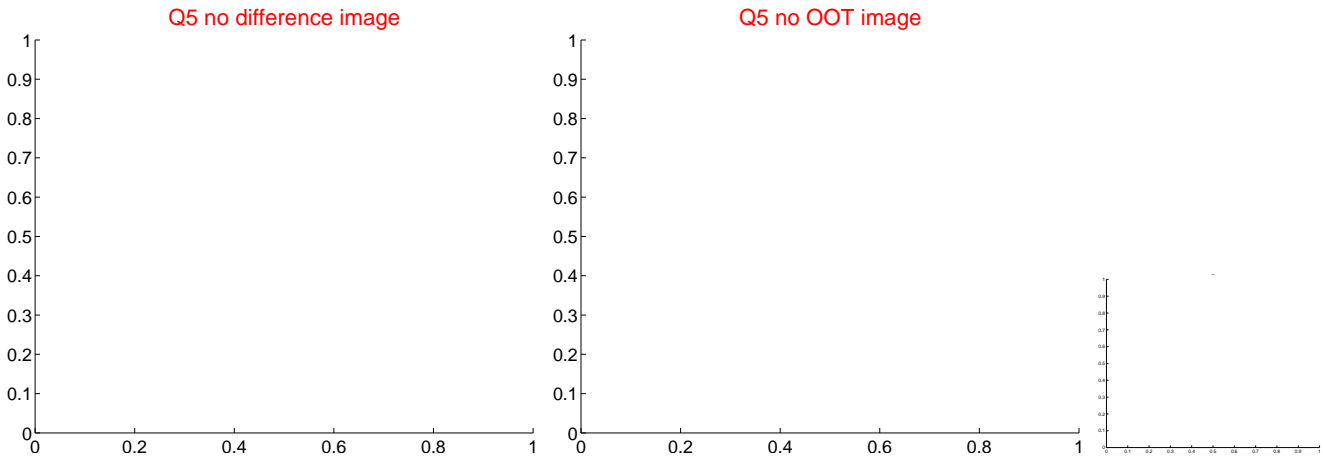


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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



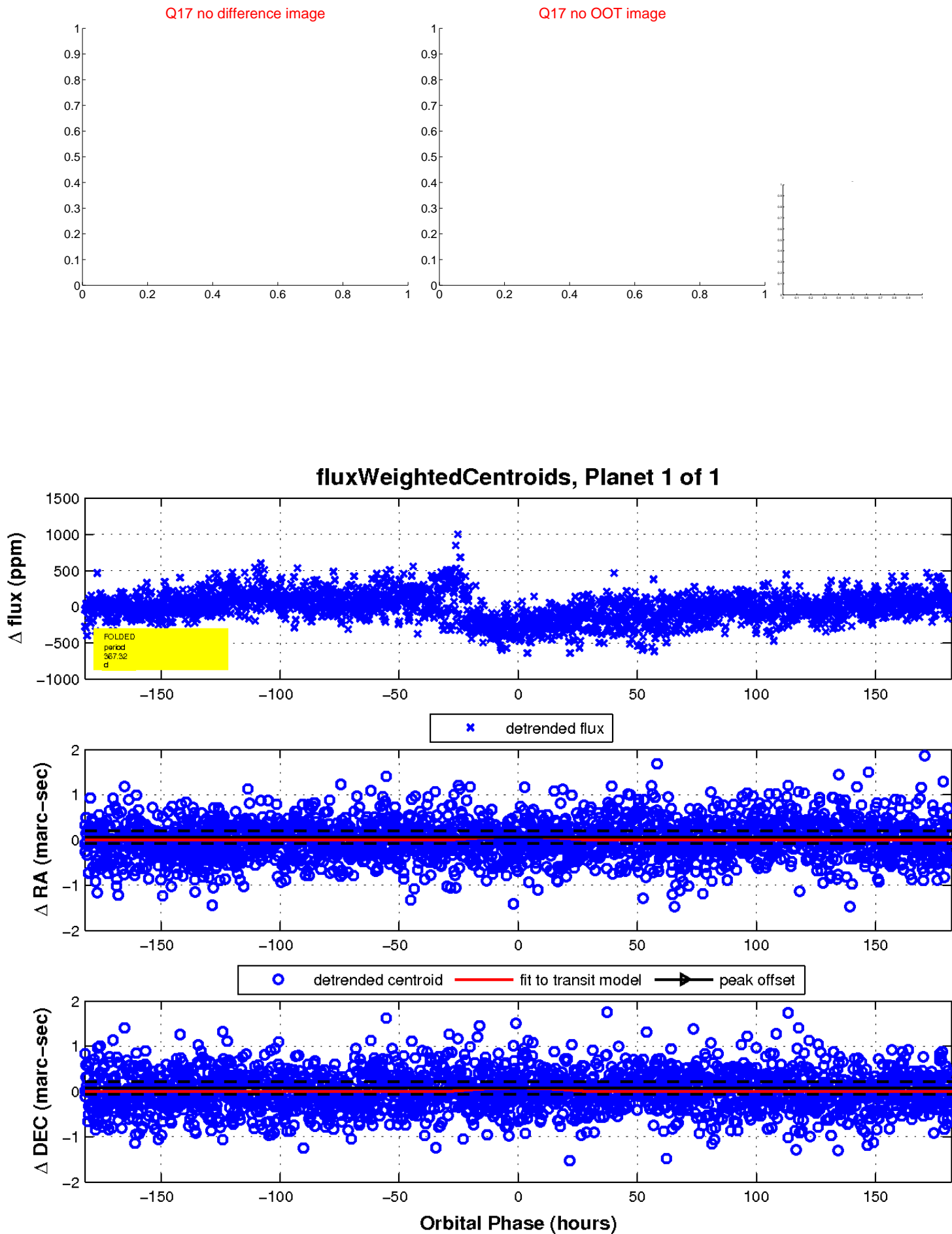
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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

