

KIC 011465012

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})
011465012-01	OBS	No	343.153883	436.428354	275.7	12.674	15.6	5.7	0.78	4620	1.39	0.32

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
011465012-01	OBS	FP	0.00	1	0	1	0	INDIV_TRANS_MARSHALL—LPP_DV—MOD_NONUNIQ_DV—INCONSISTENT_TRANS—CENT_FEW_DIFFS—HALO_GHOST

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

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

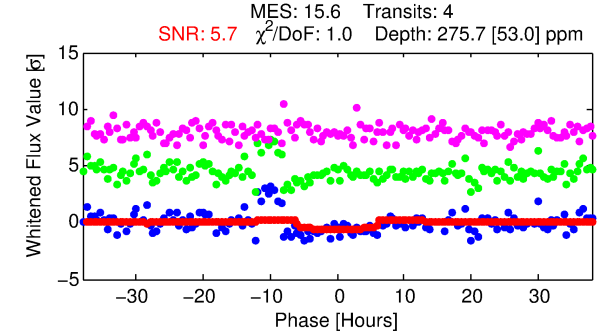
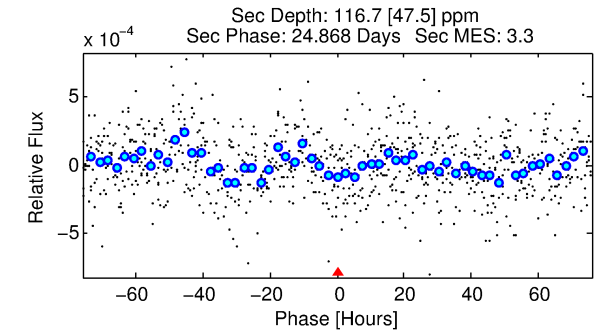
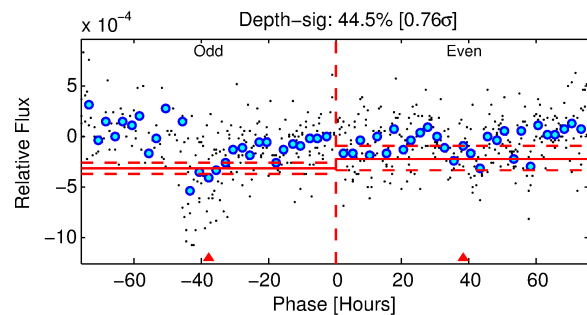
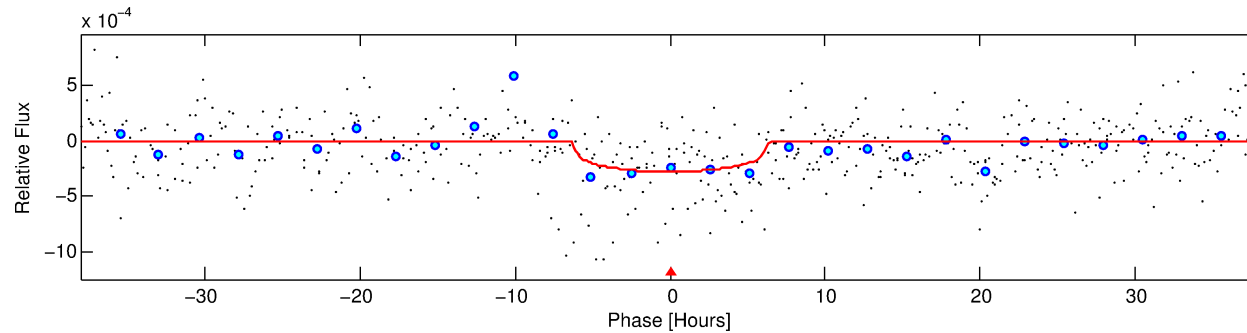
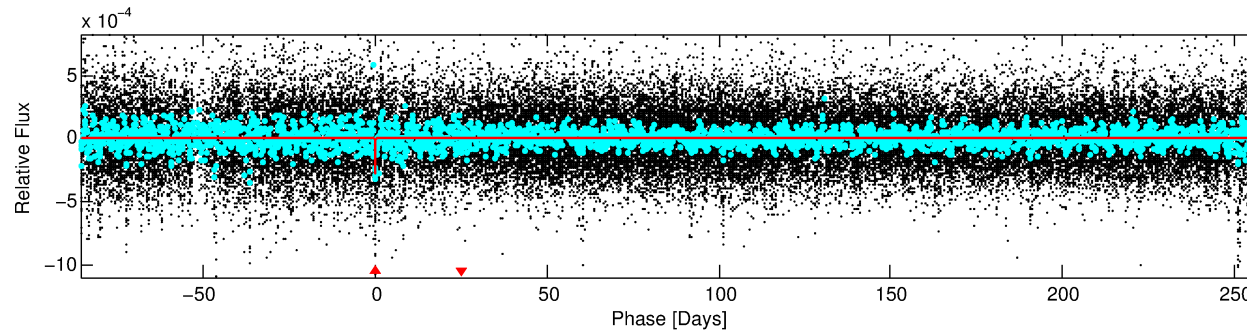
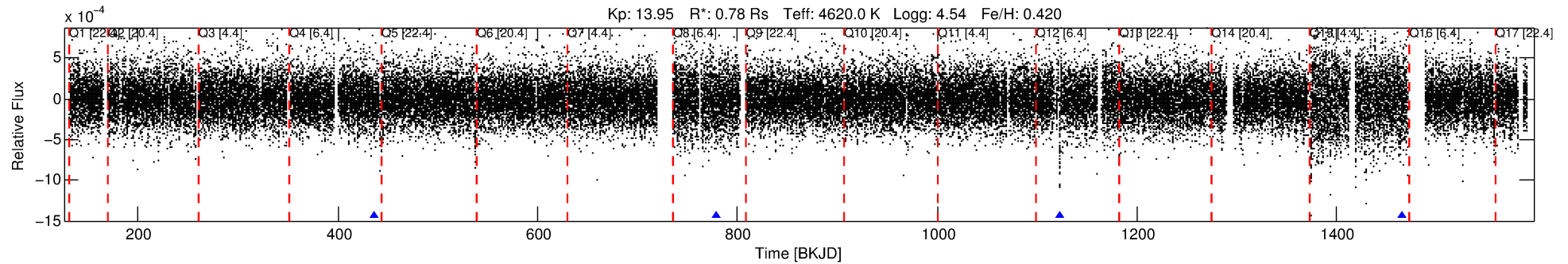
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 011465012-01

No Significant Match Found

DV One-Page Summary

KIC: 11465012 Candidate: 1 of 1 Period: 343.154 d



DV Fit Results:

Period = 343.15388 [0.01163] d
Epoch = 436.4284 [0.0195] BKJD
Rp/R* = 0.0163 [0.0119]
a/R* = 150.41 [346.96]
b = 0.71 [1.63]
Seff = 0.32 [0.05]
Teq = 192 [8] K
Rp = 1.39 [1.02] Re
a = 0.8780 [0.0670] AU
Ag = 25578.28 [38971.98] [0.66σ]
Teffp = 3761 [1433] K [2.49σ]

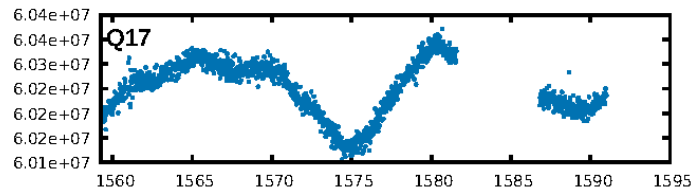
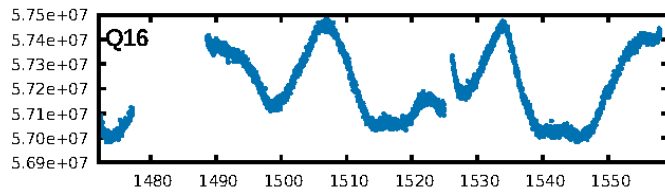
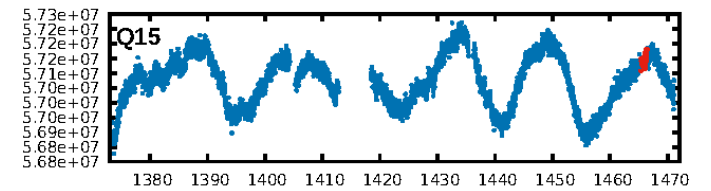
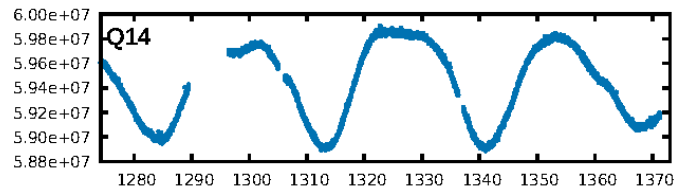
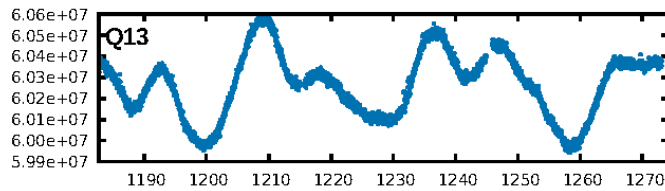
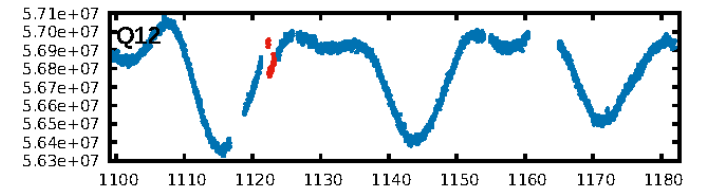
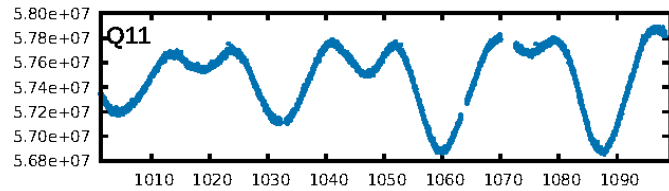
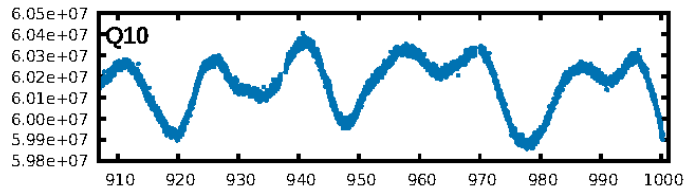
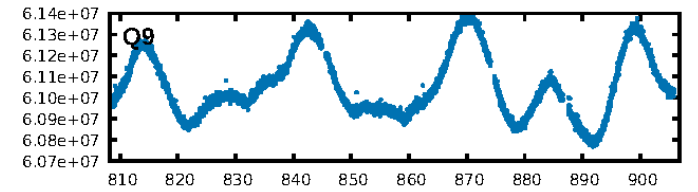
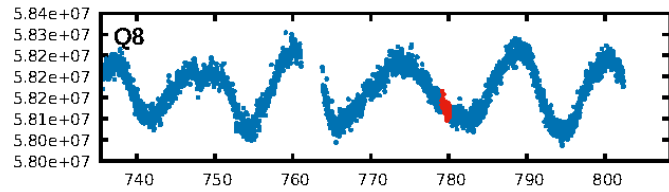
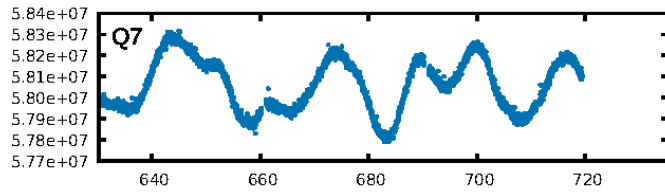
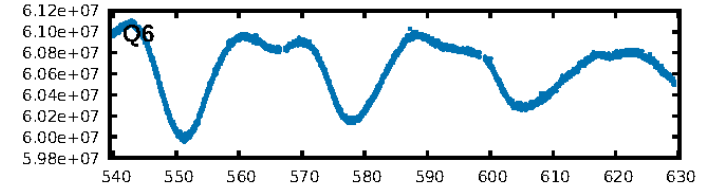
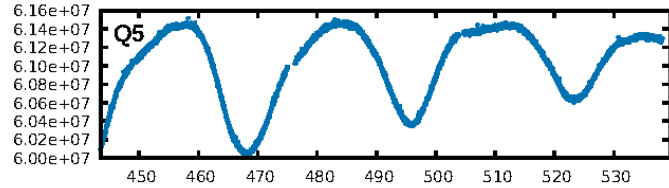
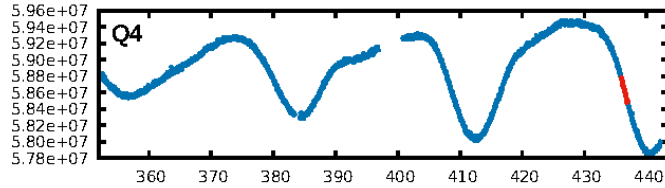
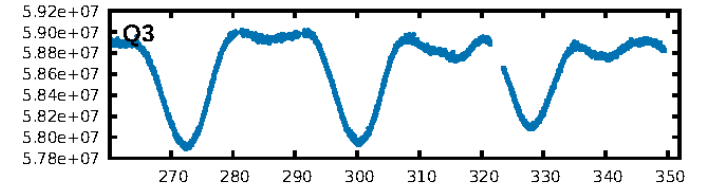
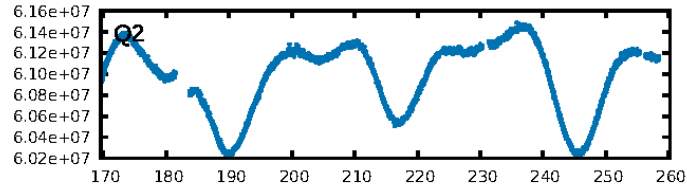
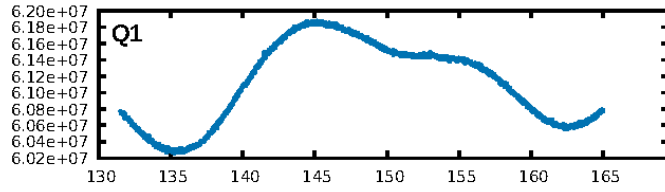
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: 0.0%
Bootstrap-pfa: 1.39e-26
RollingBand-fgt: 1.00 [4/4]
GhostDiagnostic-chr: 0.1975
Centroid-sig: 17.1%
Centroid-so: 1.634 arcsec [1.14σ]
OotOffset-rm: N/A
KicOffset-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 [2/2]

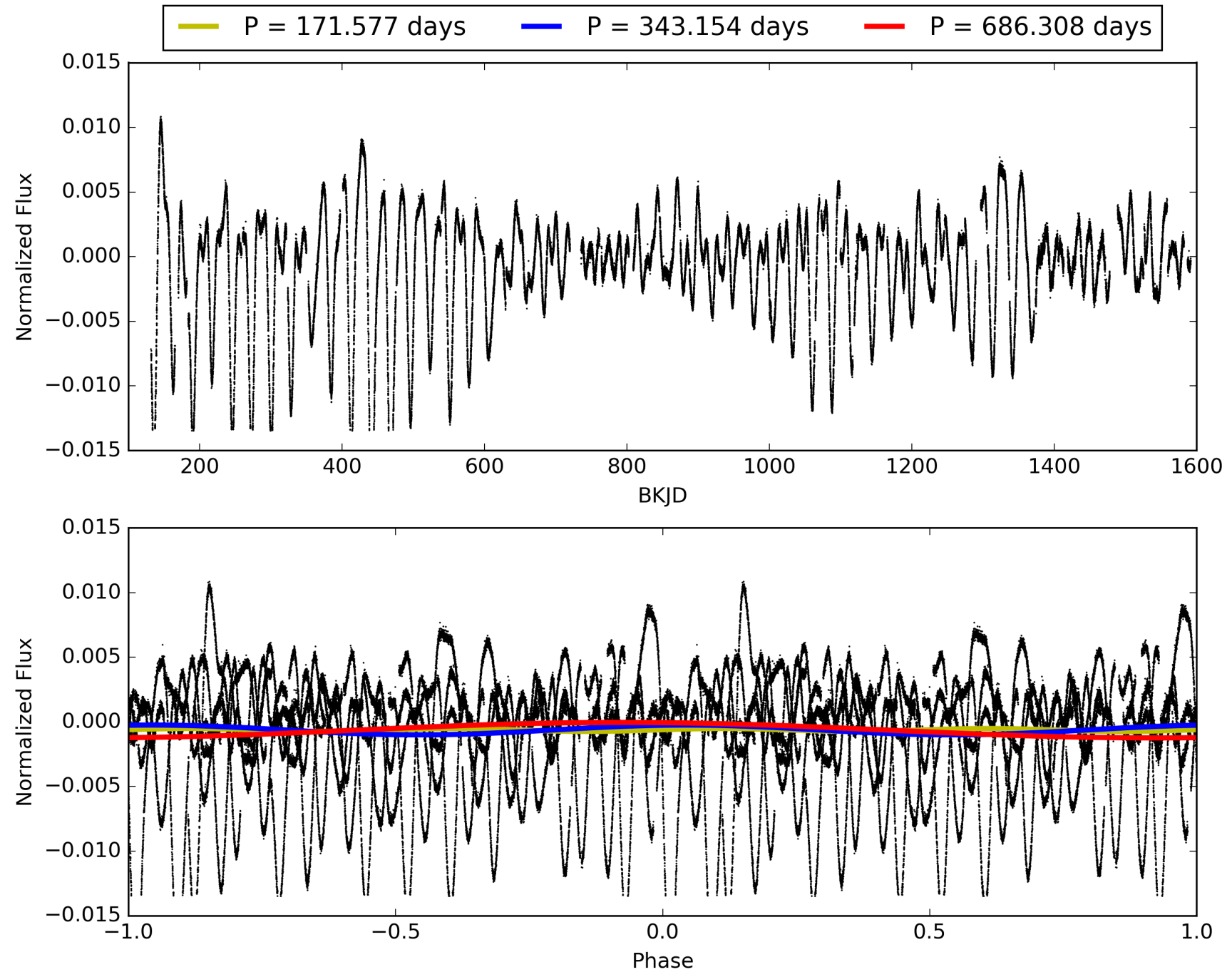
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 28-Jan-2016 21:12:31 Z

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

TCE 011465012-01, PDC Light Curves

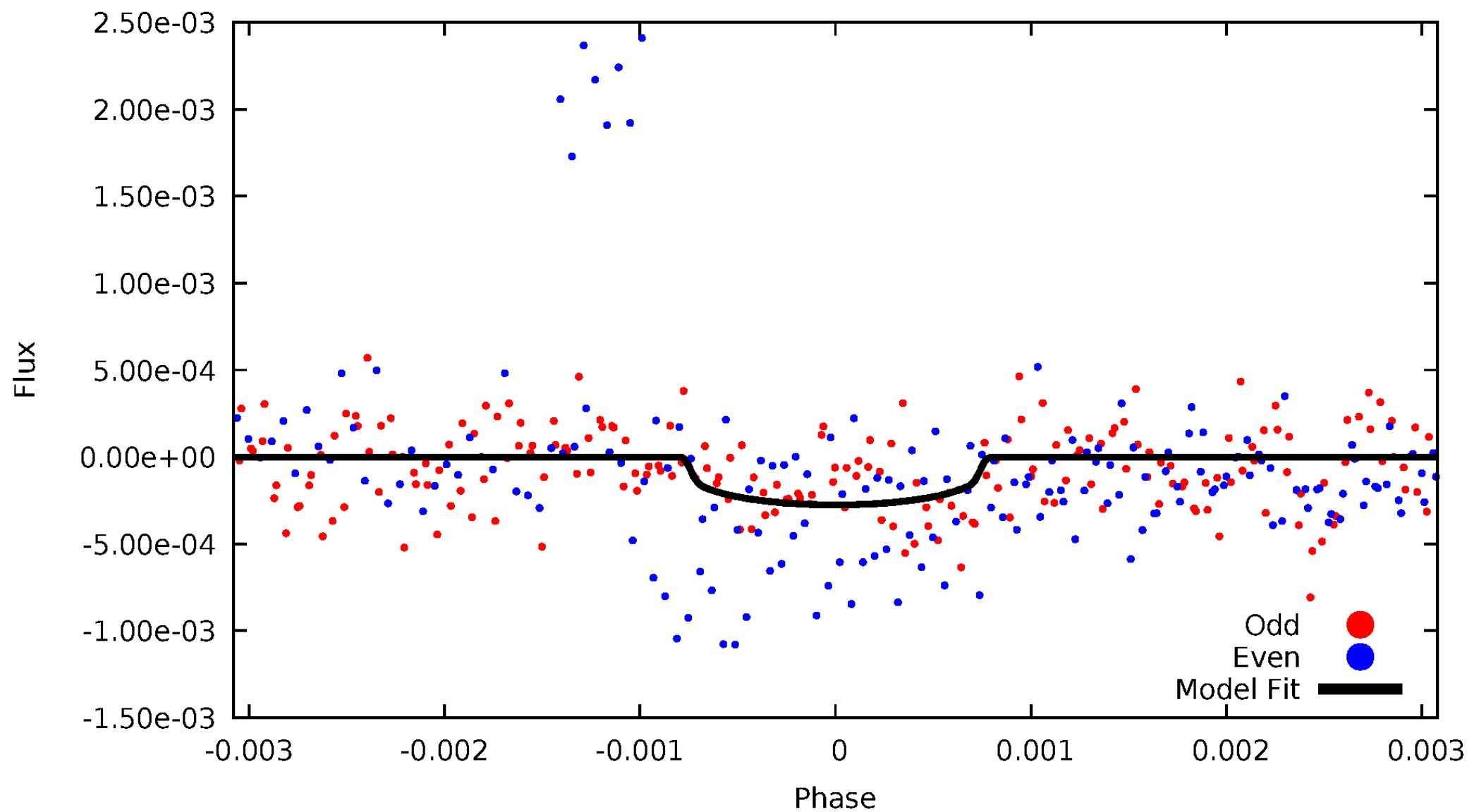


TCE 011465012-01



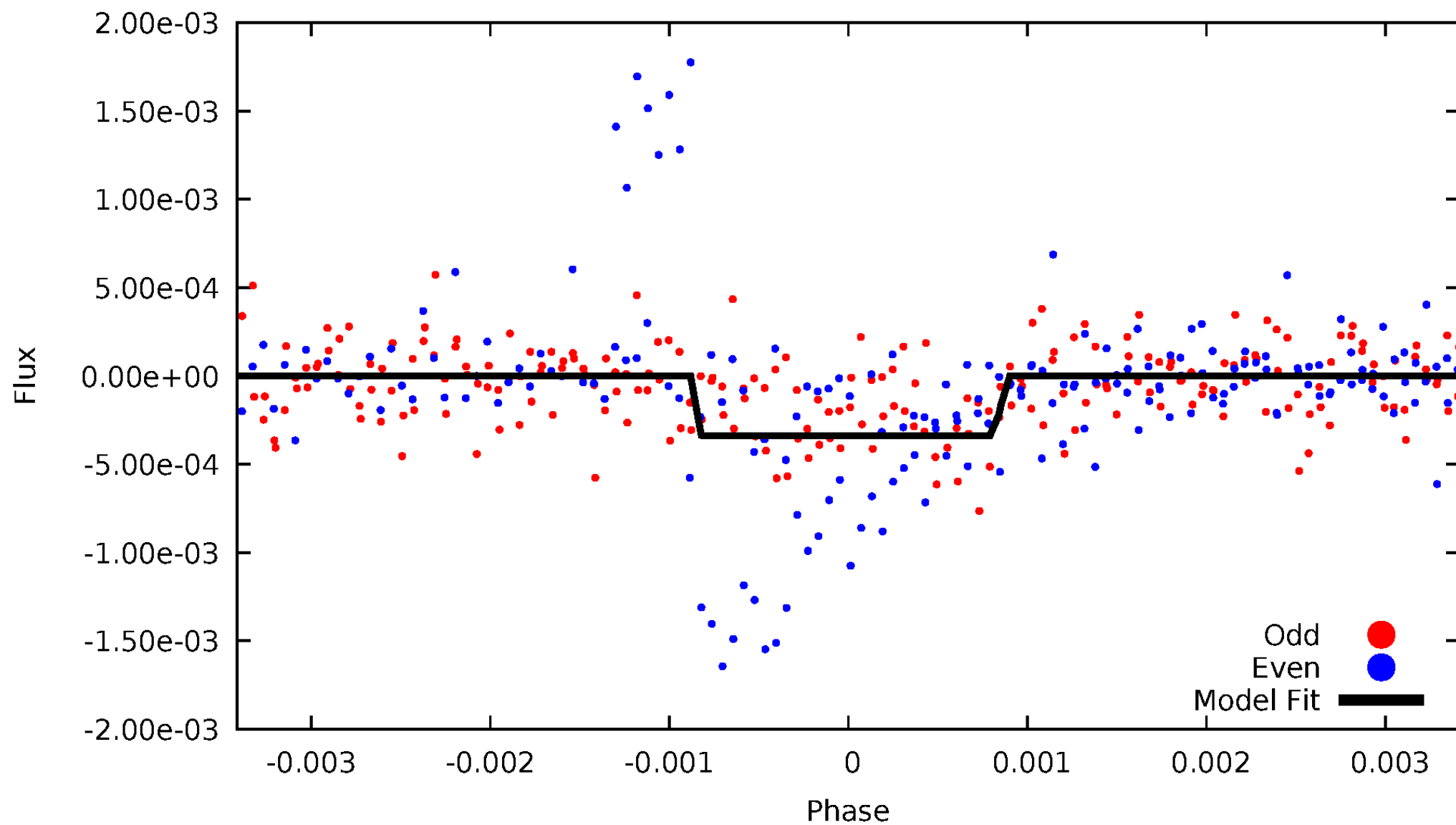
DV Odd/Even

TCE 011465012-01



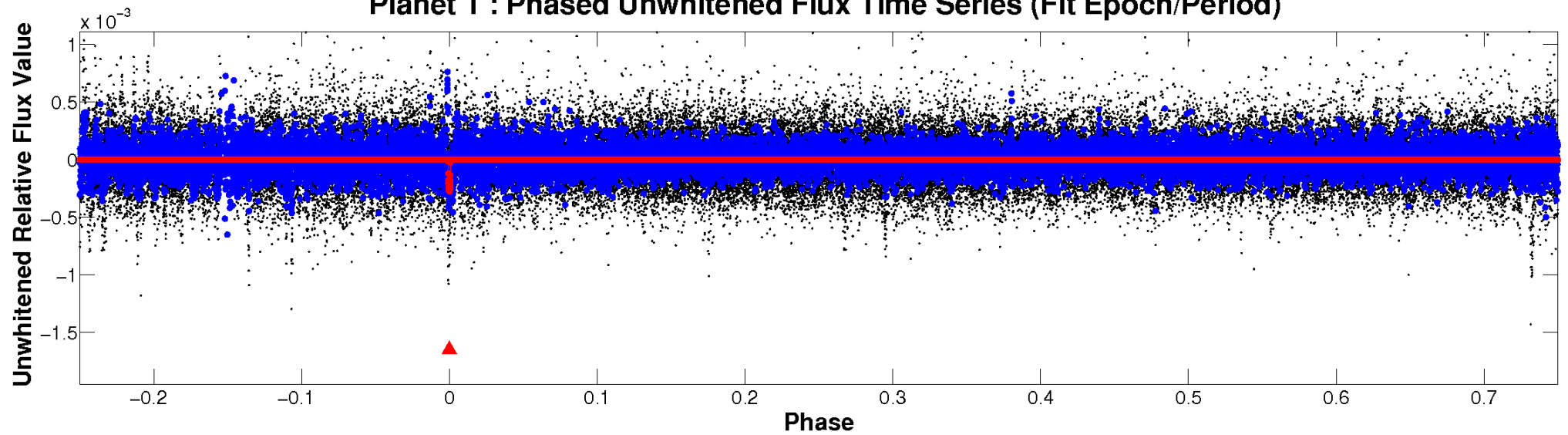
ALT Odd/Even

TCE 011465012-01

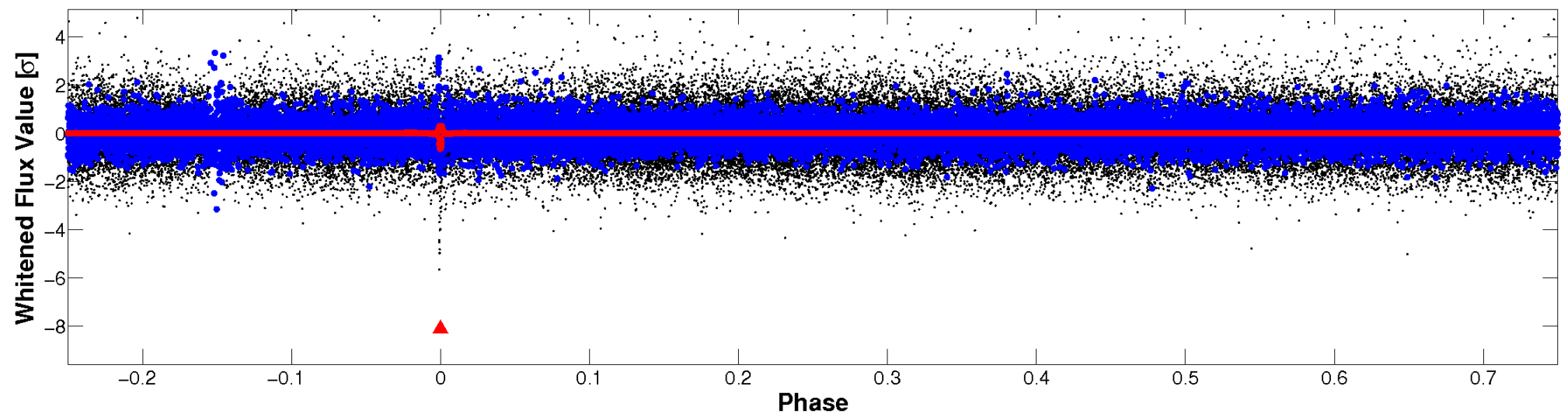


Non-Whitened Vs. Whitened Light Curve

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

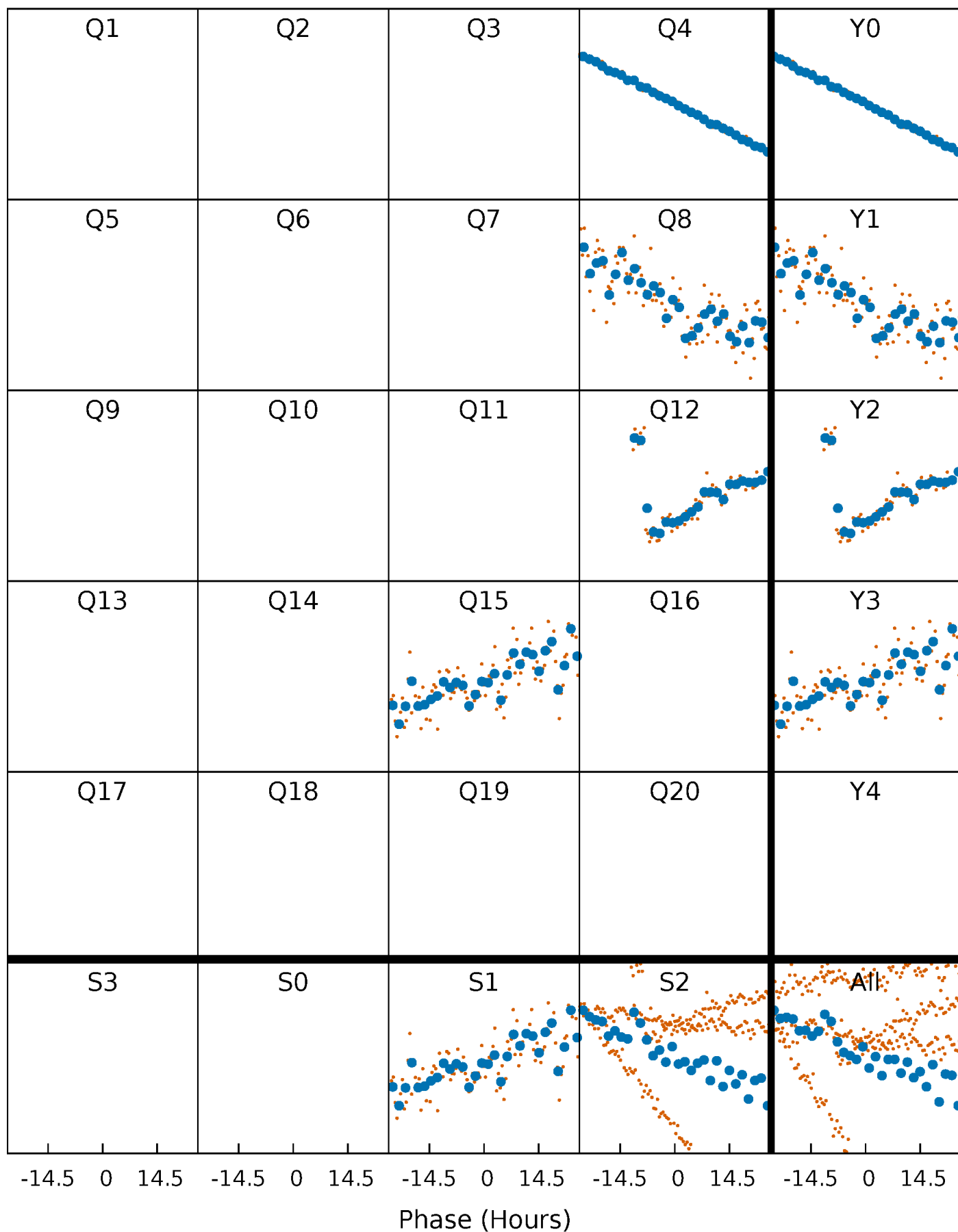


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



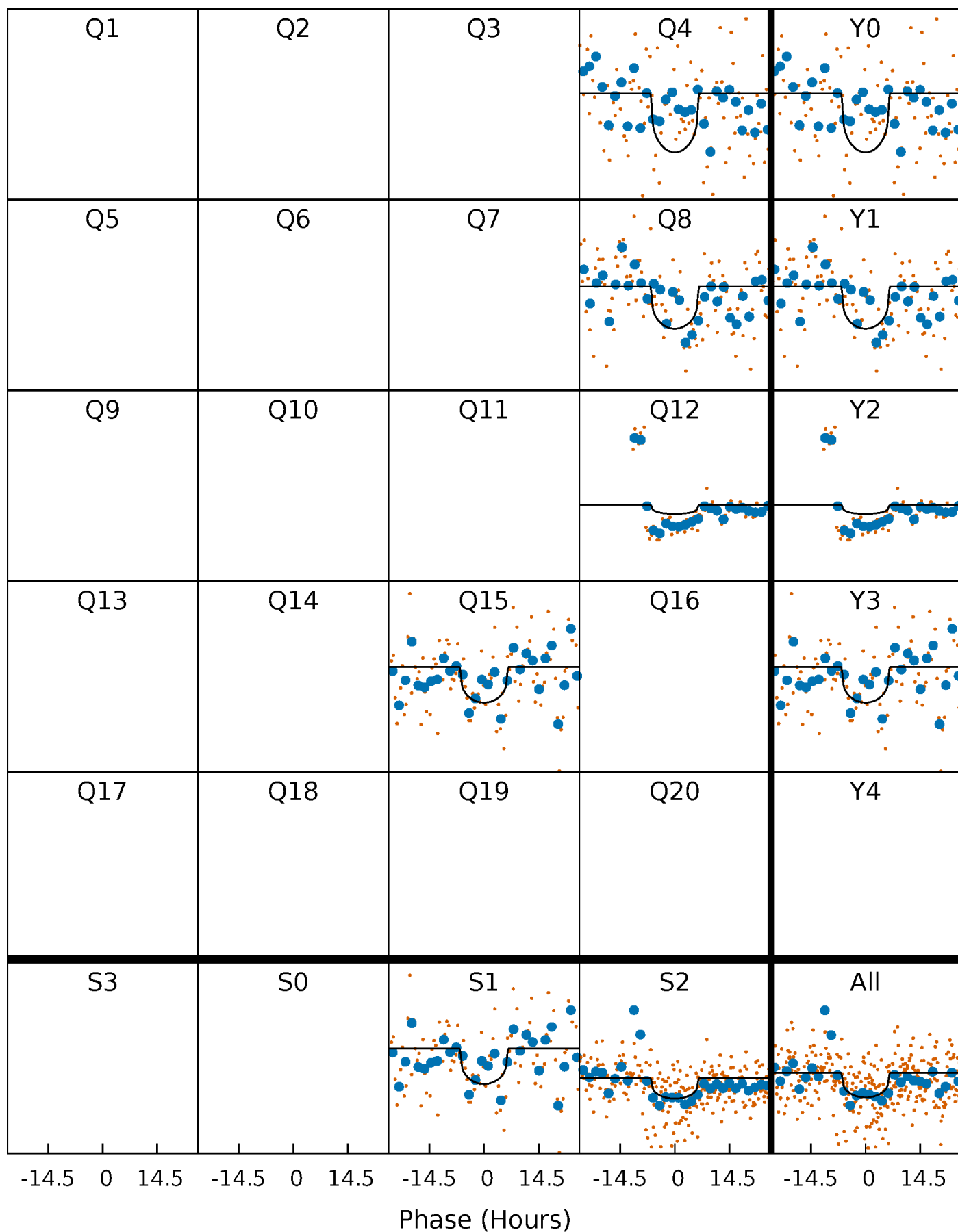
PDC Quarter-Phased Transit Curves

TCE 011465012-01 P=343.153883 Days $T_0=436.428354$ (BKJD)



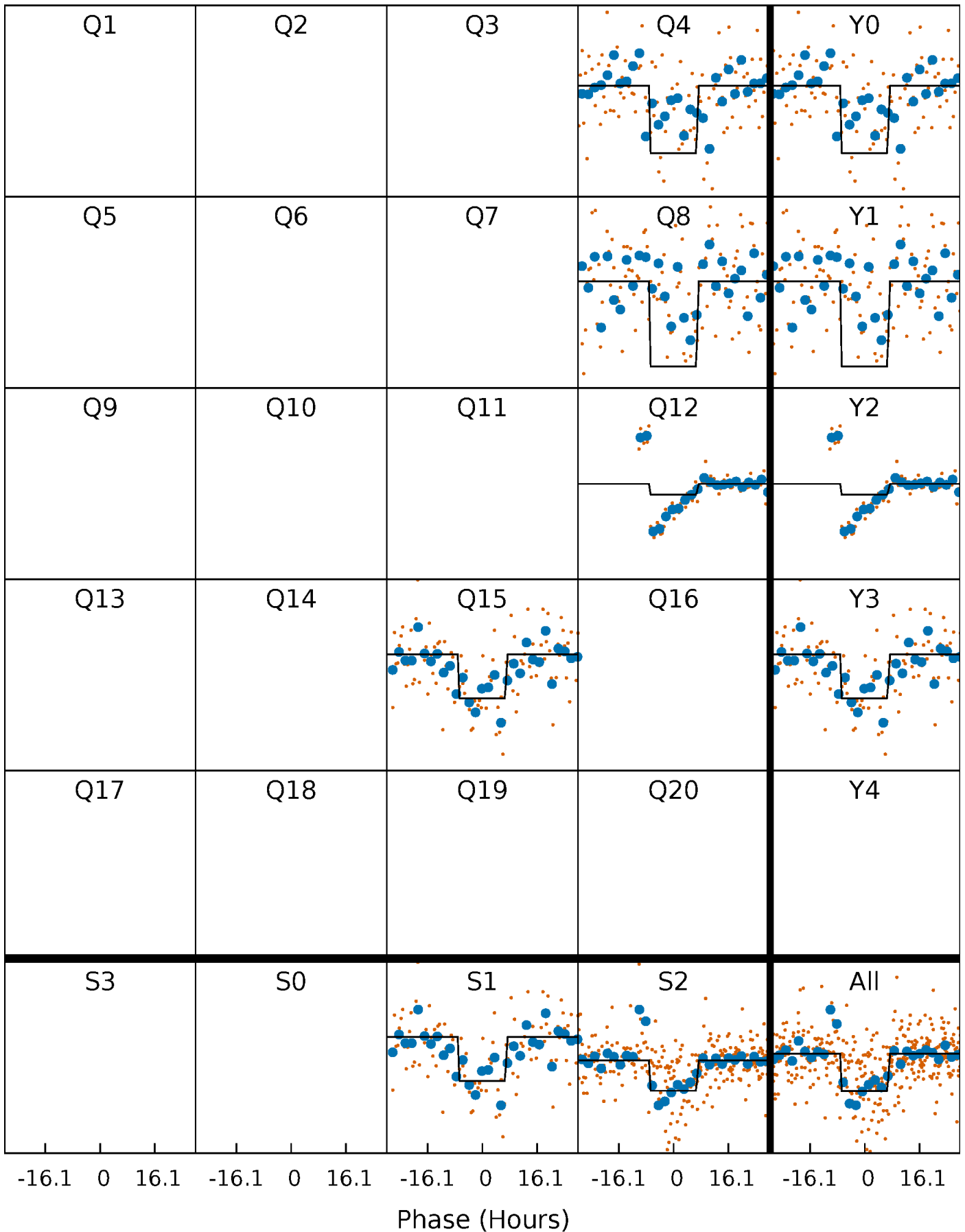
DV Quarter-Phased Transit Curves

TCE 011465012-01 P=343.153883 Days $T_0=436.428354$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

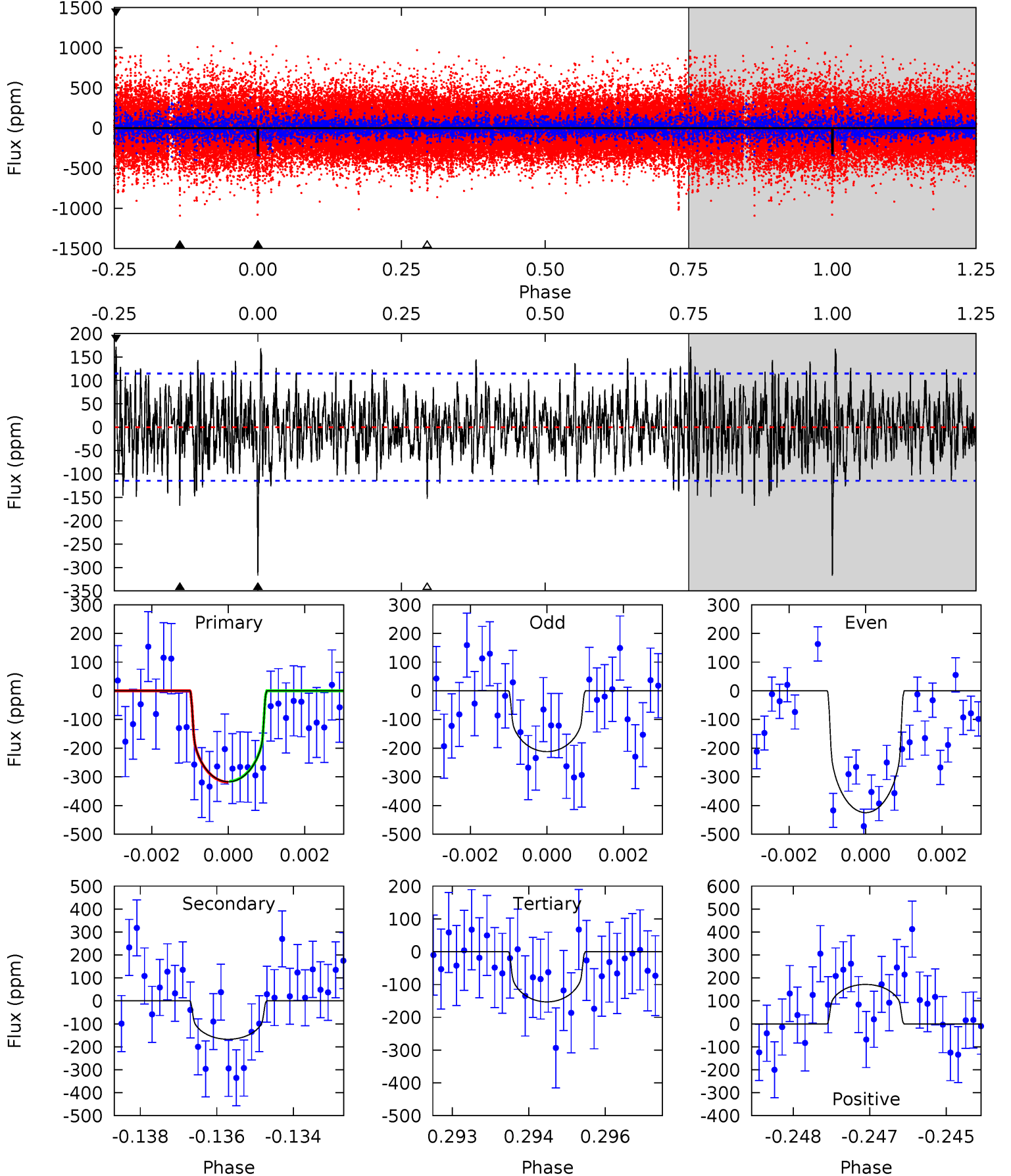
TCE 011465012-01 P=343.161207 Days $T_0=436.376214$ (BKJD)



DV Model-Shift Uniqueness Test

011465012-01, $P = 343.153883$ Days, $E = 93.274471$ Days

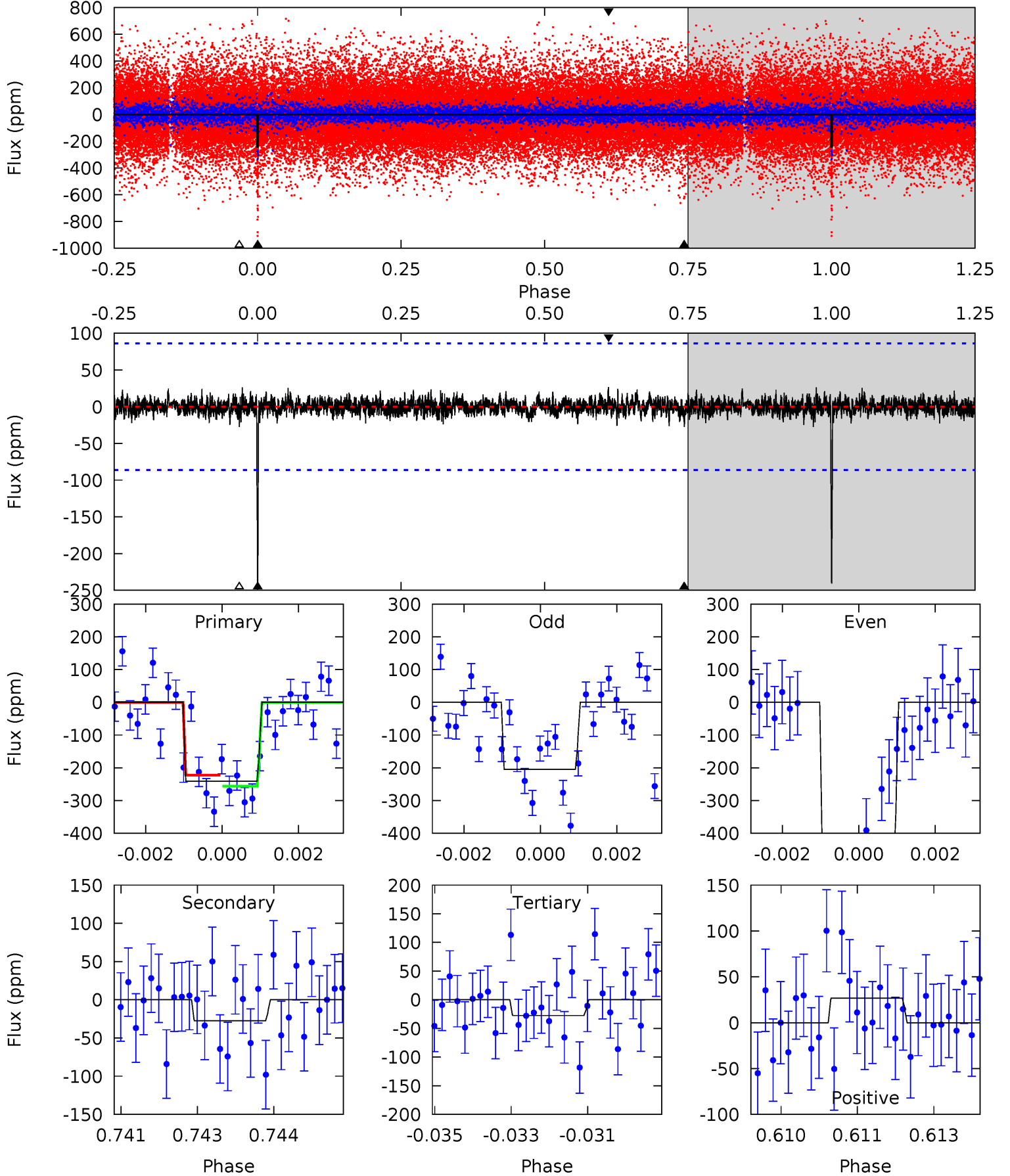
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
14.9	7.84	7.17	8.04	5.37	3.16	2.30	7.68	6.81	0.67	-0.20	5.00	1.48	0.35	0.06



Alt Model-Shift Uniqueness Test

011465012-01, $P = 343.161207$ Days, $E = 93.215007$ Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
14.9	1.71	1.70	1.66	5.35	3.13	0.42	13.2	13.3	0.00	0.04	9.72	1.51	0.10	1.05



Stellar Parameters For KIC 011465012

	$T_{\text{eff}} (K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M (M_{\odot})$	$p_{\star} (g \cdot \text{cm}^{-3})$
	4620^{+138}_{-124}	$4.536^{+0.066}_{-0.039}$	$0.420^{+0.050}_{-0.300}$	$0.782^{+0.036}_{-0.067}$	$0.765^{+0.044}_{-0.044}$	$2.256^{+0.648}_{-0.286}$
	+3%/-3%	+1%/-1%	+12%/-71%	+5%/-9%	+6%/-6%	+29%/-13%
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 011465012-01 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	-167 ± 21	$1.53^{+0.94}_{-0.86}$	268^{+9}_{-9}	4067^{+1599}_{-623}	$30159^{+119111}_{-18848}$
Alt.	-28 ± 16	$1.62^{+0.87}_{-0.90}$	268^{+9}_{-9}	2967^{+928}_{-482}	4076^{+17974}_{-3037}

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 011465012-01. Kepler magnitude: 13.95. Transit SNR 5.72

There are 0 quarters with good PRF difference image offsets

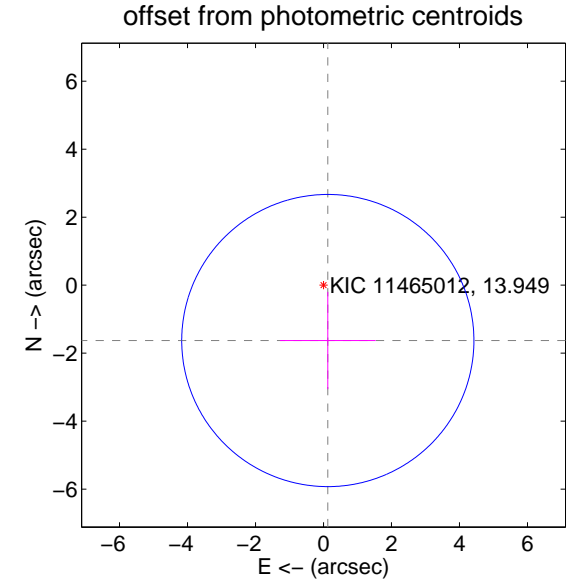
The direct PRF centroid is offset from the target star catalog position by about NaN arcsec

	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	1.63 ± 1.43	1.14	-0.13 ± 1.41	-1.63 ± 1.43

There is no PRF-fit offset from OOT-fit



There is no PRF-fit offset from KIC

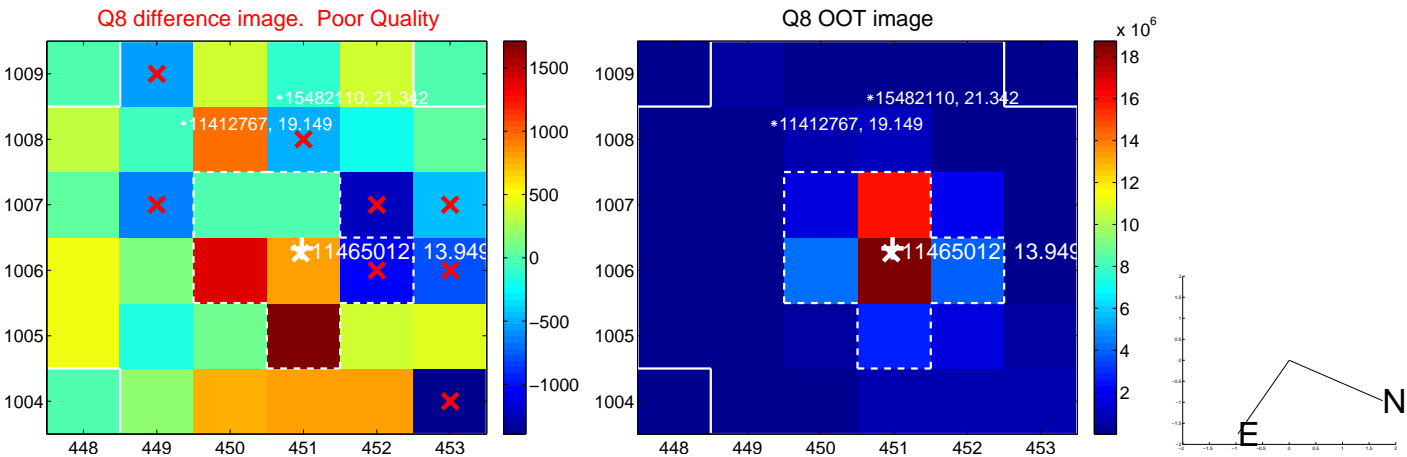


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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

Q13 no difference image



Q13 no OOT image



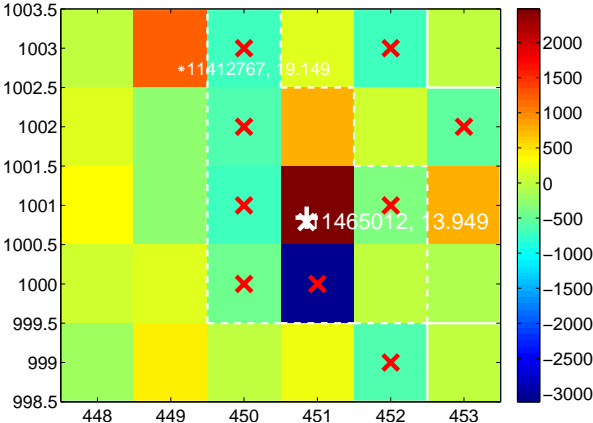
Q14 no difference image



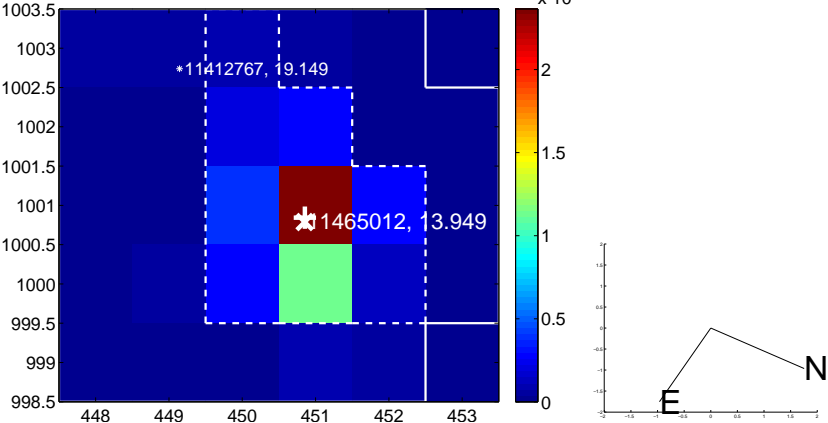
Q14 no OOT image



Q15 difference image. Poor Quality



Q15 OOT image



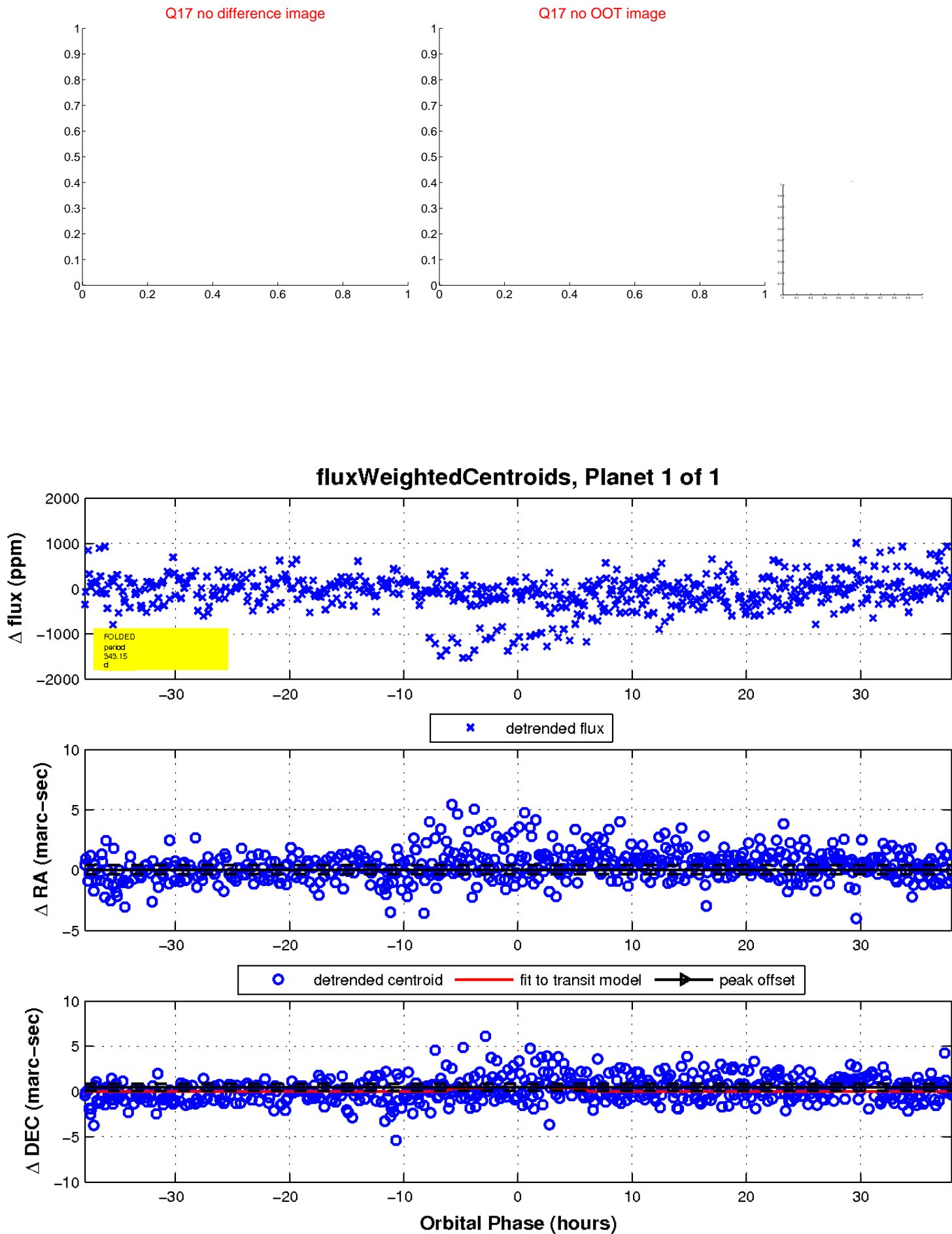
Q16 no difference image



Q16 no OOT image



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



UKIRT Image

Declination

