

KIC 006621643

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})
006621643-01	OBS	No	0.926125	132.097182	19.6	3.749	8.2	5.7	1.52	6824	0.68	10632.21

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
006621643-01	OBS	FP	0.00	1	0	0	0	SWEET_NTL—LPP_DV—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.

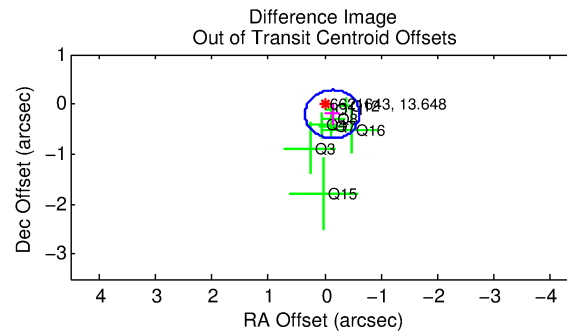
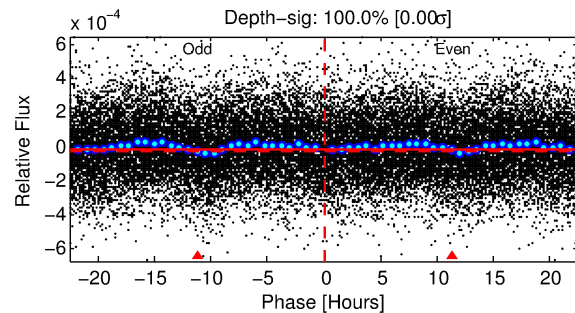
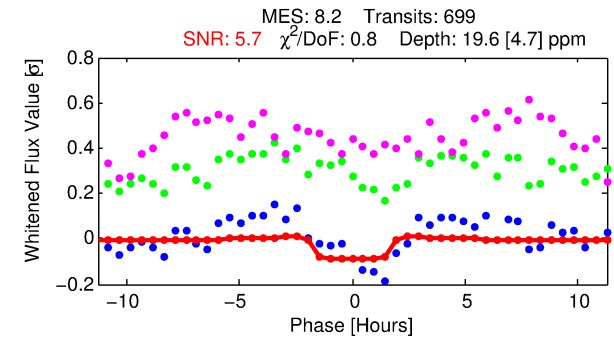
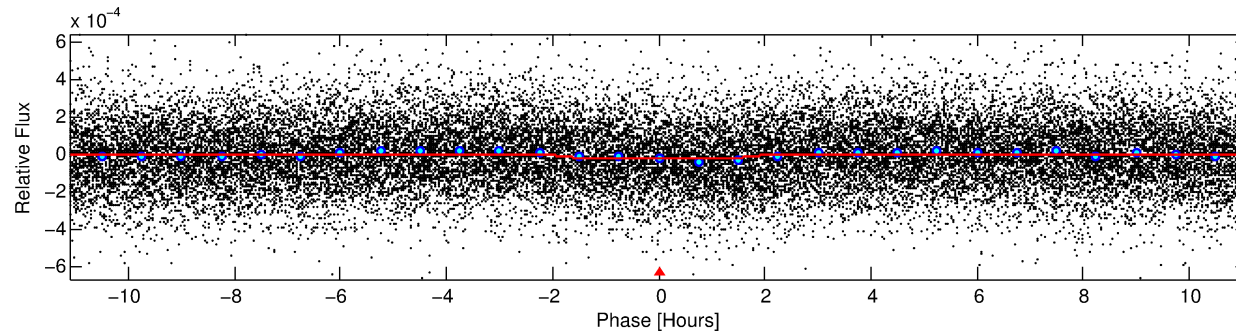
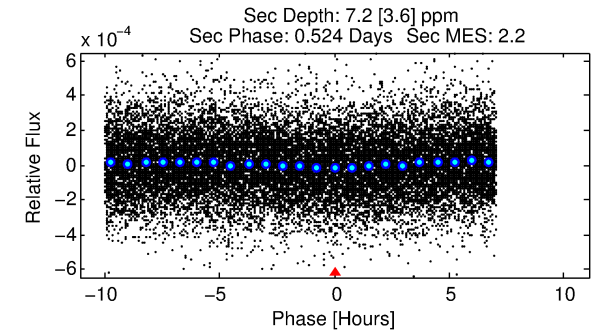
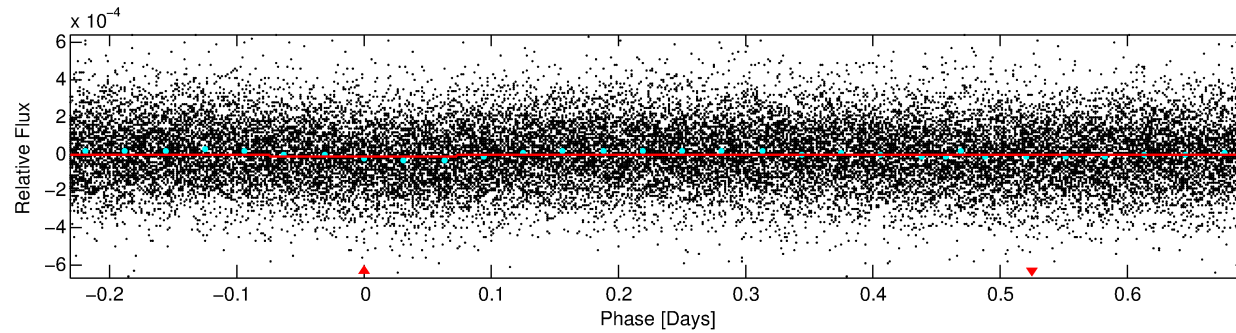
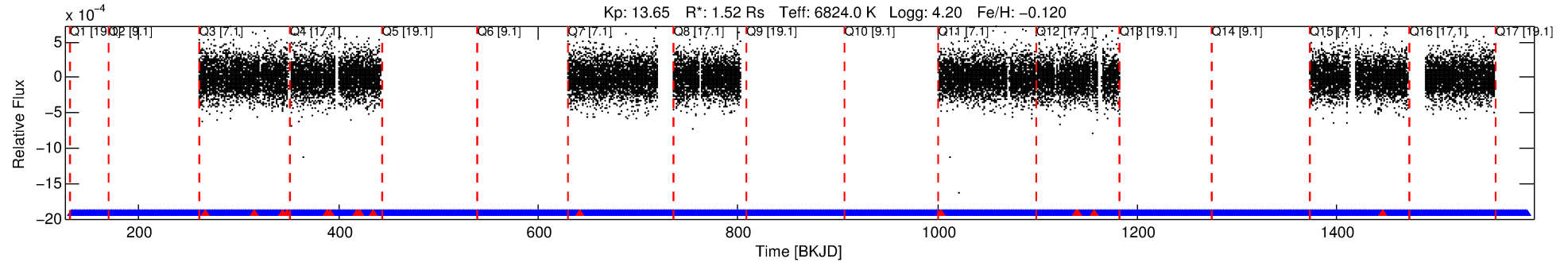
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 006621643-01

No Significant Match Found

DV One-Page Summary

KIC: 6621643 Candidate: 1 of 1 Period: 0.926 d



DV Fit Results:

Period = 0.92613 [0.00002] d
Epoch = 132.0972 [0.0063] BKJD
Rp/R* = 0.0041 [0.0069]
a/R* = 1.98 [13.85]
b = 0.10 [93.46]
Seff = 10632.21 [4226.44]
Teff = 2589 [257] K
Rp = 0.68 [1.16] Re
a = 0.0205 [0.0052] AU
Ag = 3.60 [12.37] [0.21σ]
Teffp = 5515 [4716] K [0.62σ]

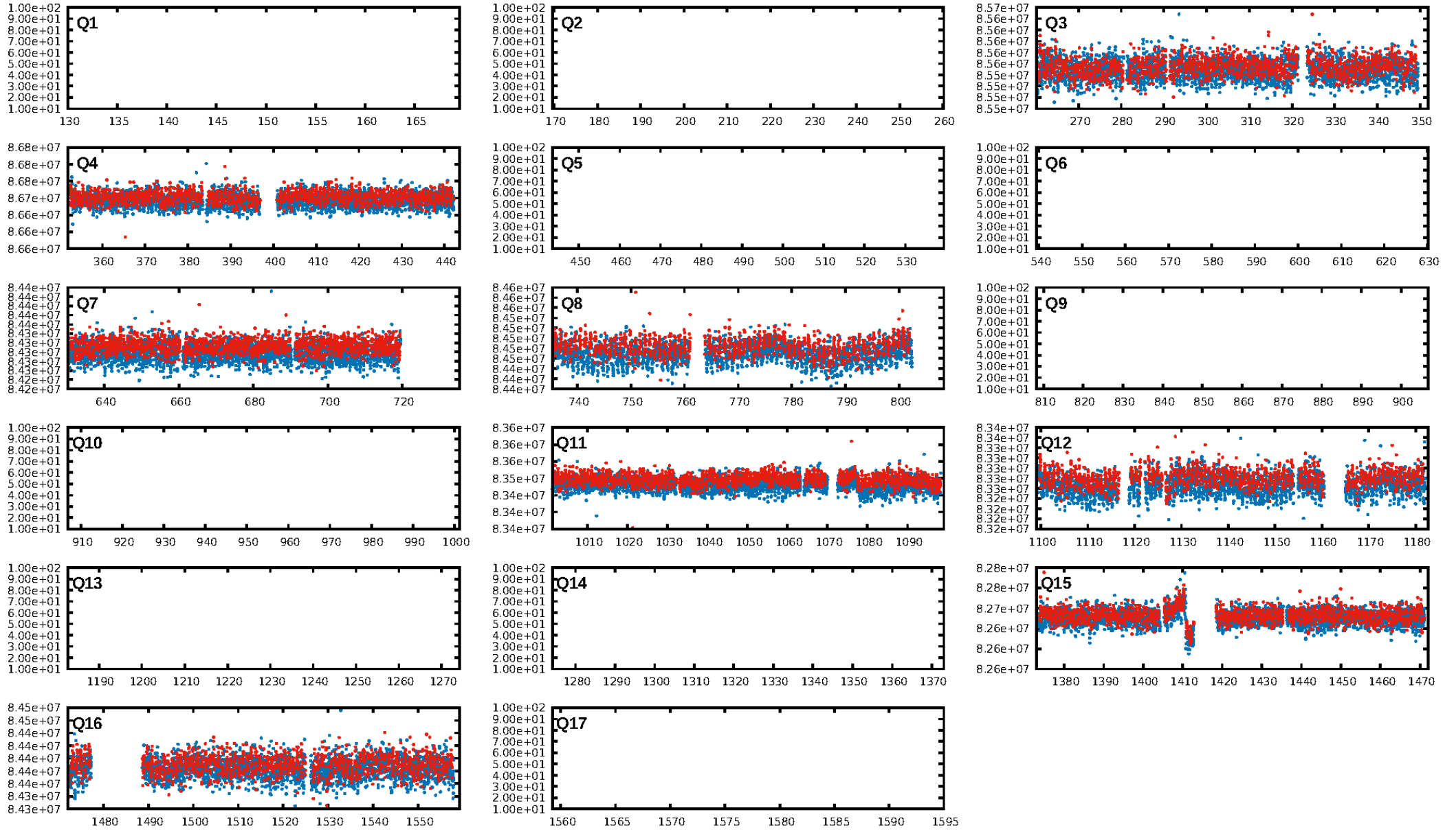
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: 5.11e-12
RollingBand-fgt: 0.98 [684/699]
GhostDiagnostic-chr: 32.25
Centroid-sig: 18.9%
Centroid-so: 2.110 arcsec [1.37σ]
OotOffset-rm: 0.237 arcsec [1.47σ]
OotOffset-st: 0/4/4/0 [8]
KicOffset-rm: 0.284 arcsec [1.45σ]
KicOffset-st: 0/4/4/0 [8]
DiffImageQuality-fgm: 0.00 [0/8]
DiffImageOverlap-fno: 1.00 [8/8]

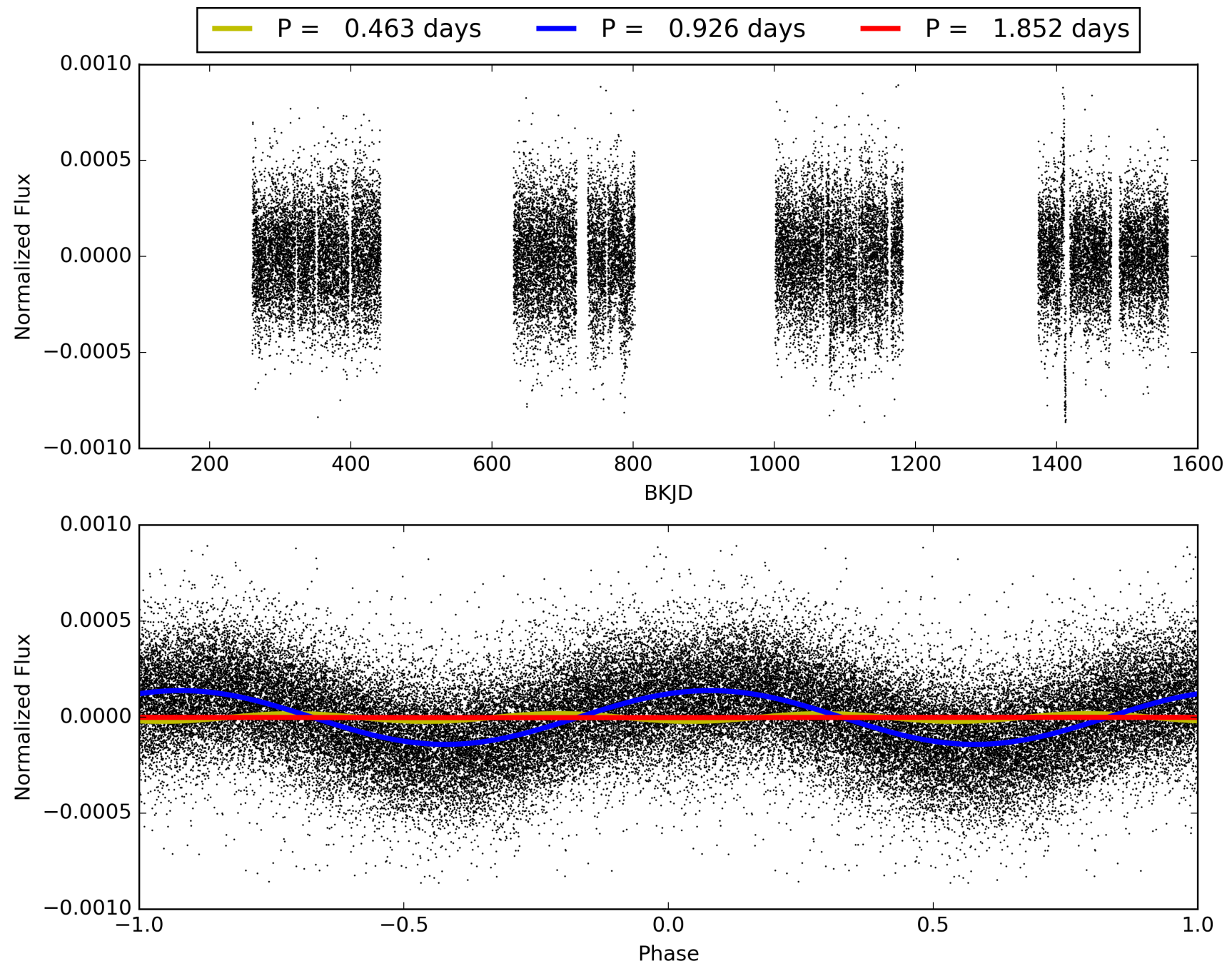
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 30-Jan-2016 16:36:21 Z

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

TCE 006621643-01, PDC Light Curves

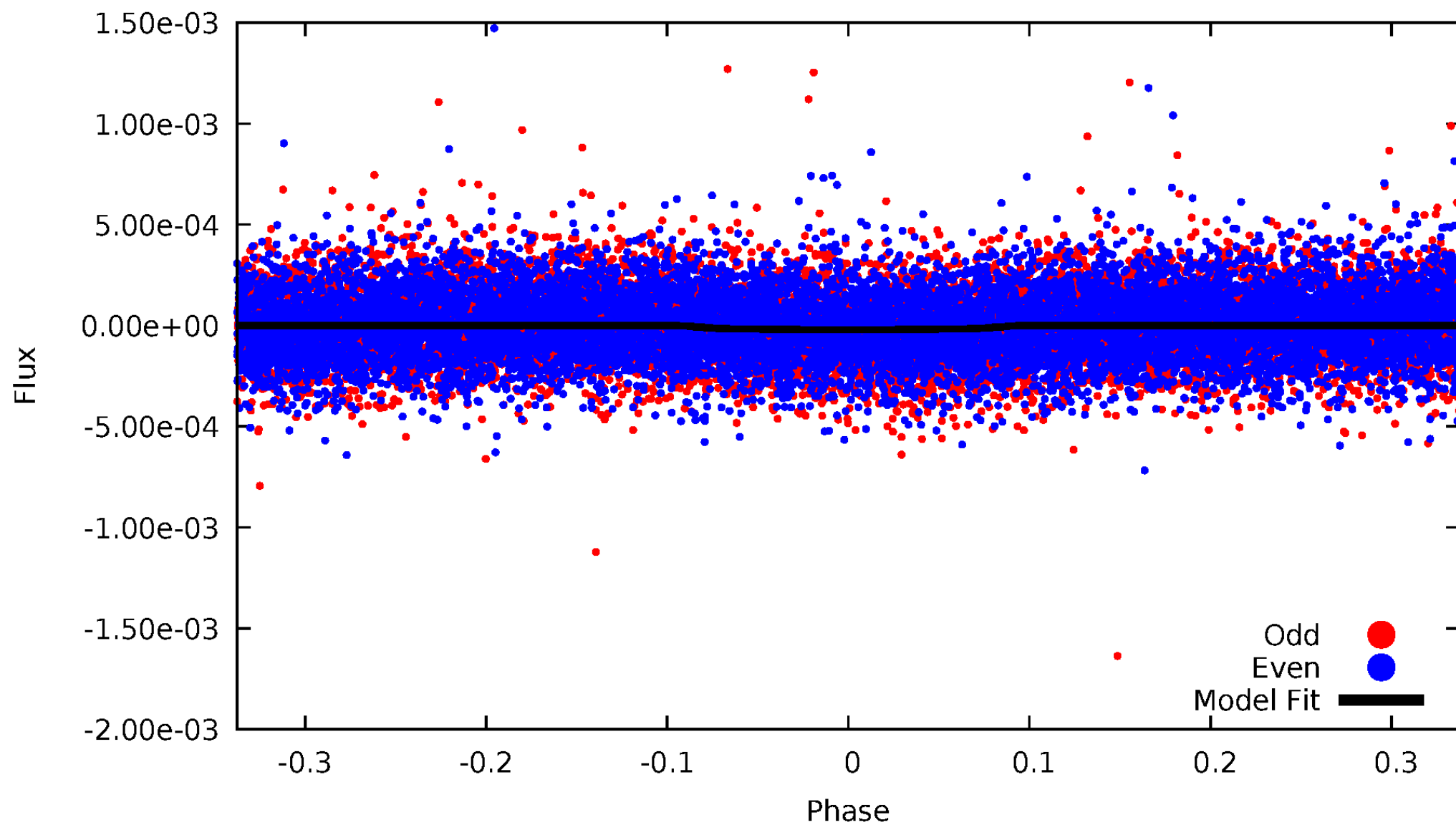


TCE 006621643-01



DV Odd/Even

TCE 006621643-01

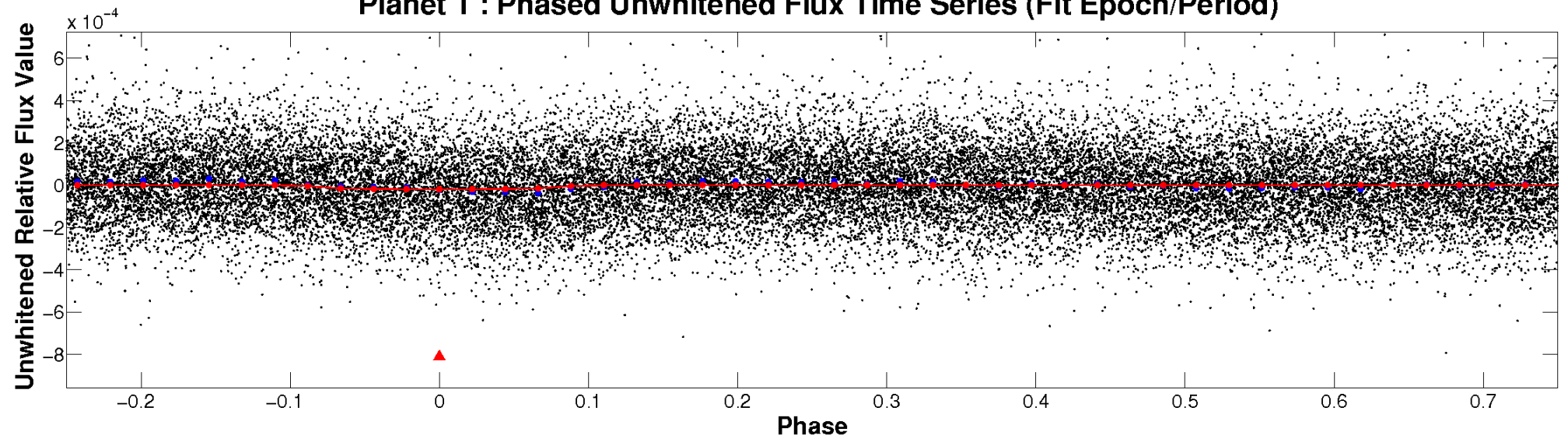


ALT Odd/Even

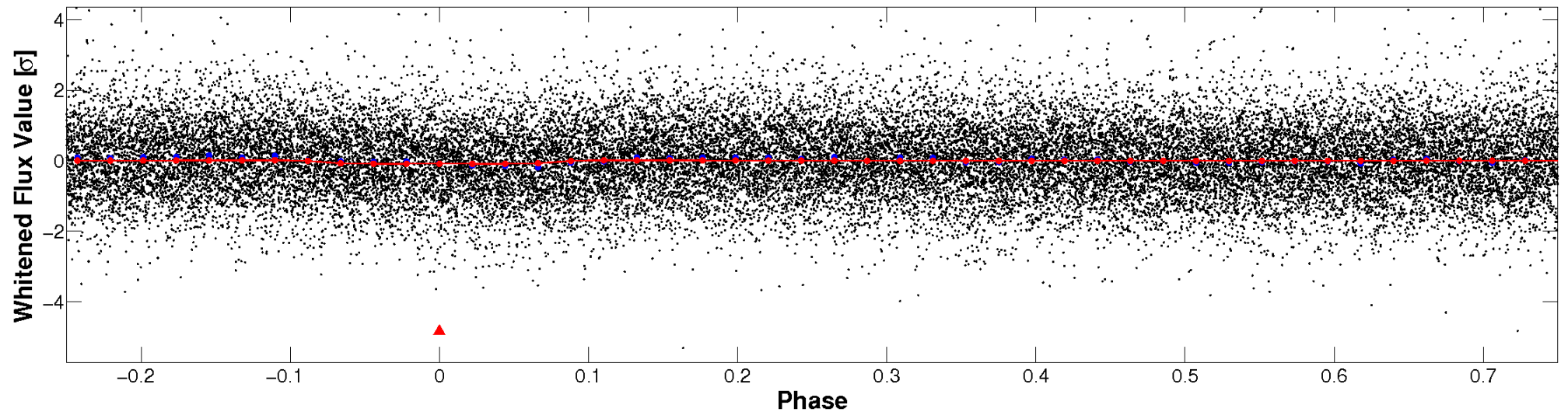
This plot does not exist for this TCE.

Non-Whitened Vs. Whitened Light Curve

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

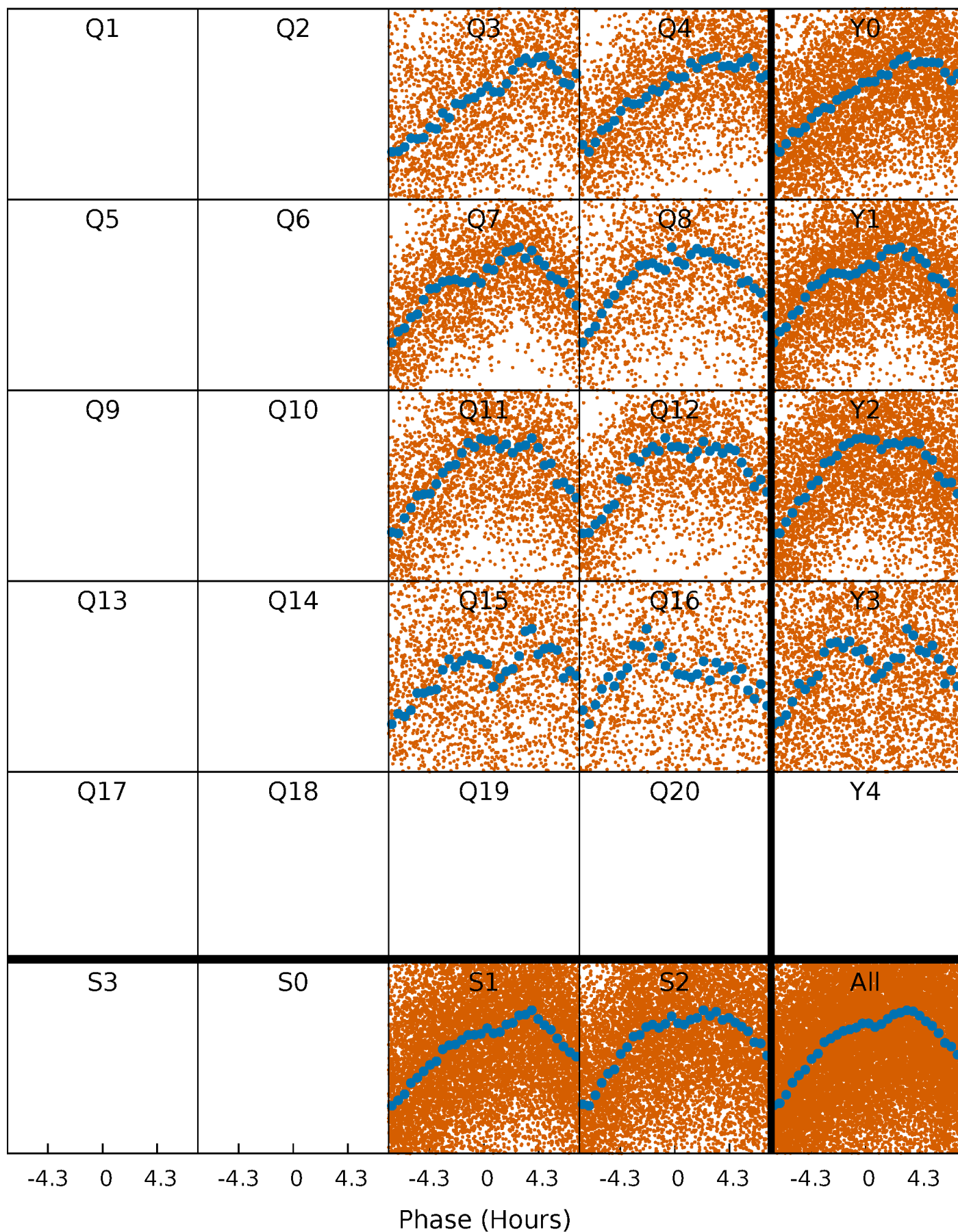


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



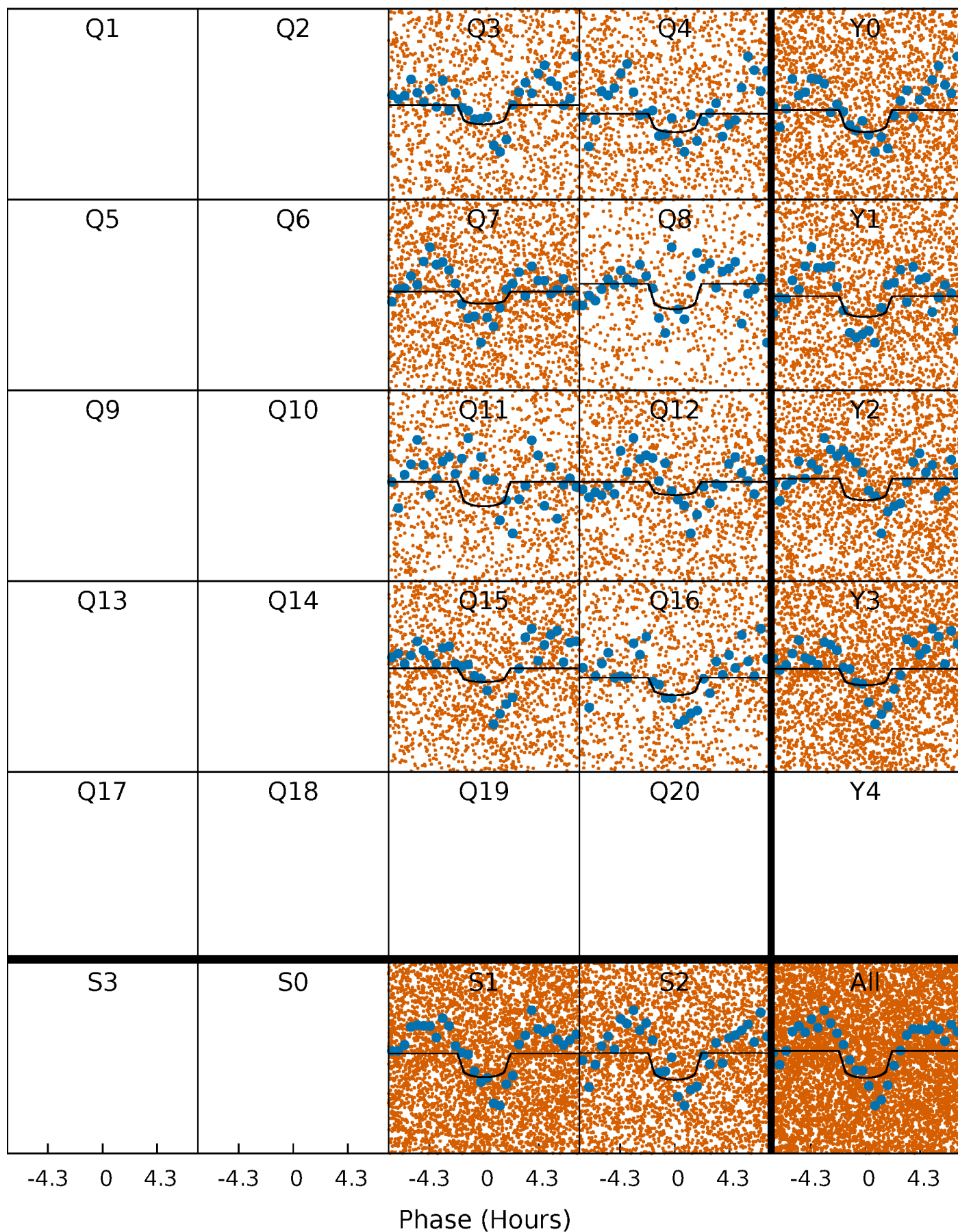
PDC Quarter-Phased Transit Curves

TCE 006621643-01 P= 0.926125 Days $T_0=132.097182$ (BKJD)



DV Quarter-Phased Transit Curves

TCE 006621643-01 P= 0.926125 Days $T_0=132.097182$ (BKJD)

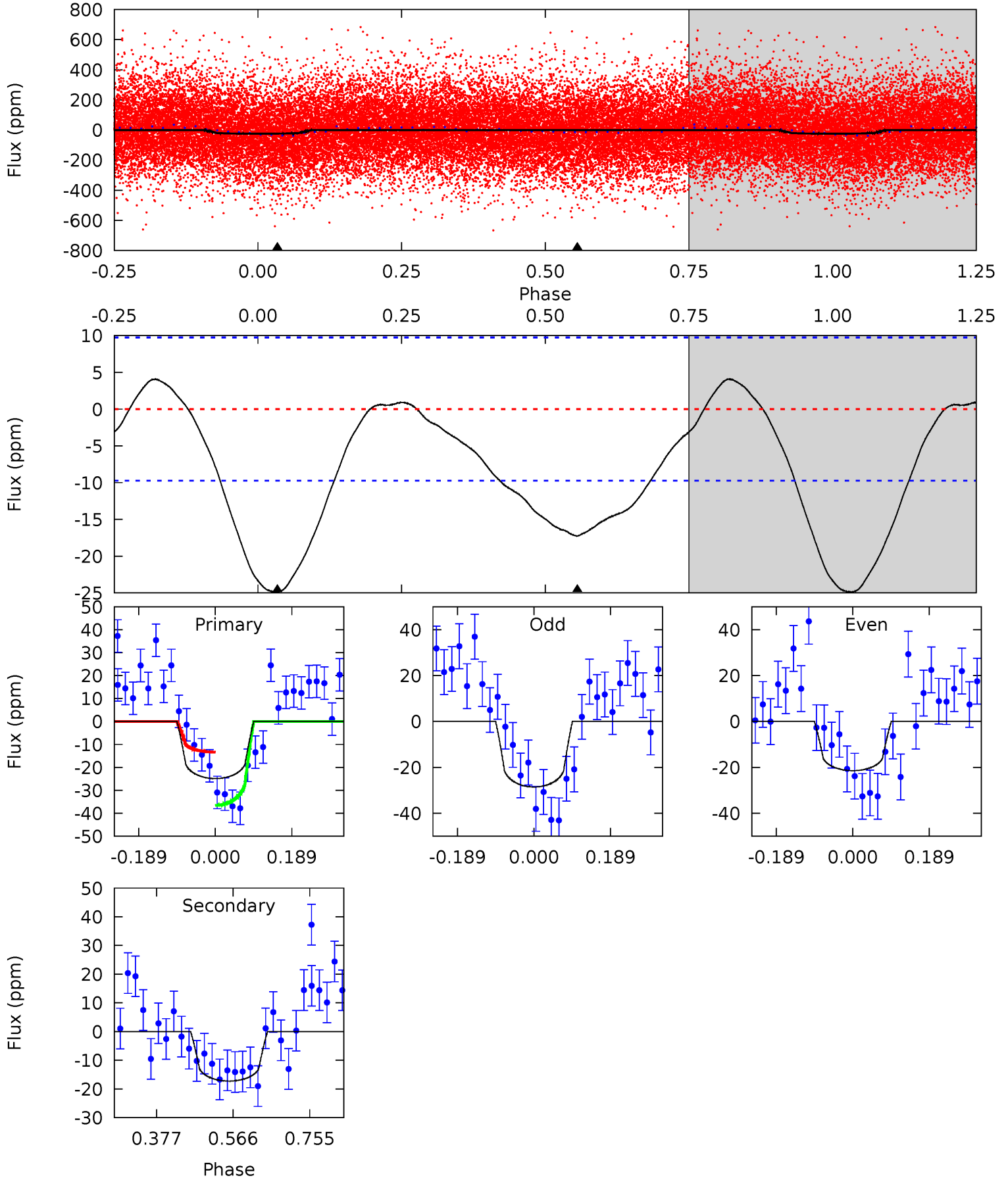


This plot does not exist for this TCE.

DV Model-Shift Uniqueness Test

006621643-01, P = 0.926125 Days, E = 132.097182 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
11.3	7.85	0	0	4.43	1.31	1.20	11.3	11.3	7.85	7.85	1.63	0.96	0.14	5.34



Alt Model-Shift Uniqueness Test

This plot does not exist for this TCE.

Stellar Parameters For KIC 006621643

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	6824^{+189}_{-283}	$4.203^{+0.128}_{-0.192}$	$-0.120^{+0.250}_{-0.300}$	$1.516^{+0.475}_{-0.317}$	$1.345^{+0.204}_{-0.224}$	$0.544^{+0.403}_{-0.266}$
	+3%/-4%	+3%/-5%	+208%/-250%	+31%/-21%	+15%/-17%	+74%/-49%
Source	KIC0	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 006621643-01 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	-17 ± 2	$1.04^{+1.08}_{-0.70}$	3632^{+291}_{-233}	5493^{+5330}_{-1648}	$3.602^{+31.338}_{-2.729}$
Alt.	N/A	N/A	N/A	N/A	N/A

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 $A_{obs} \gg 1.0$

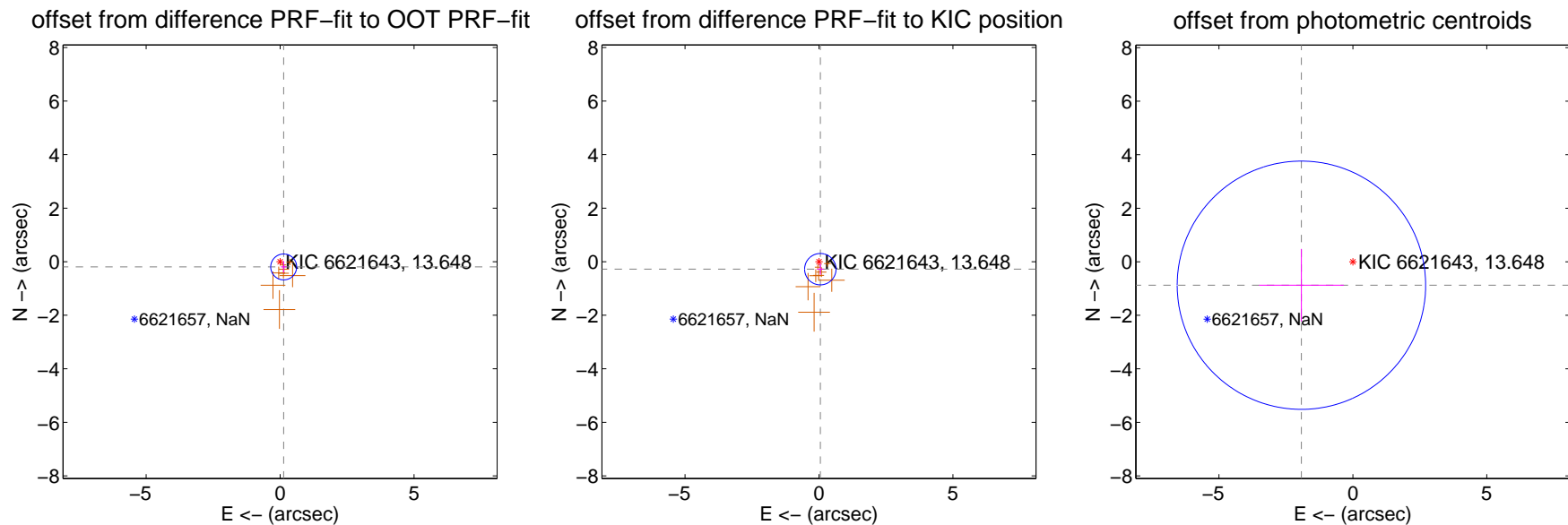
DV Centroid Data

Supplemental centroid analysis for 006621643-01. Kepler magnitude: 13.65. Transit SNR 5.75

There are 0 quarters with good PRF difference image offsets

The direct PRF centroid is offset from the target star catalog position by about 0.17 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.237 ± 0.161	1.47	-0.133 ± 0.107	-0.195 ± 0.213
PRF-fit source offset from KIC position	0.284 ± 0.195	1.45	-0.050 ± 0.120	-0.279 ± 0.207
photometric centroid source offset	2.11 ± 1.55	1.37	1.92 ± 1.58	-0.88 ± 1.36



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



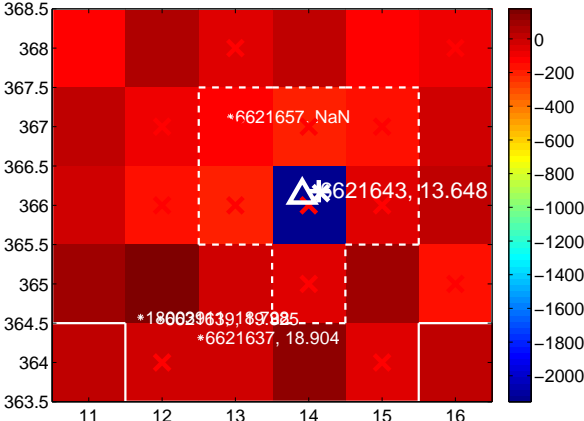
Q2 no difference image



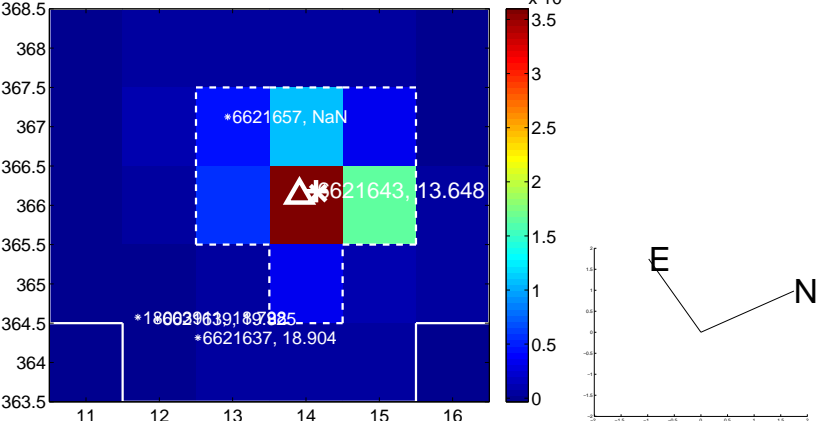
Q2 no OOT image



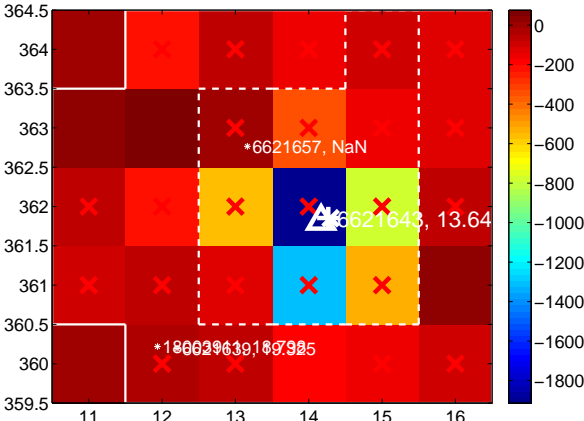
Q3 difference image. Poor Quality



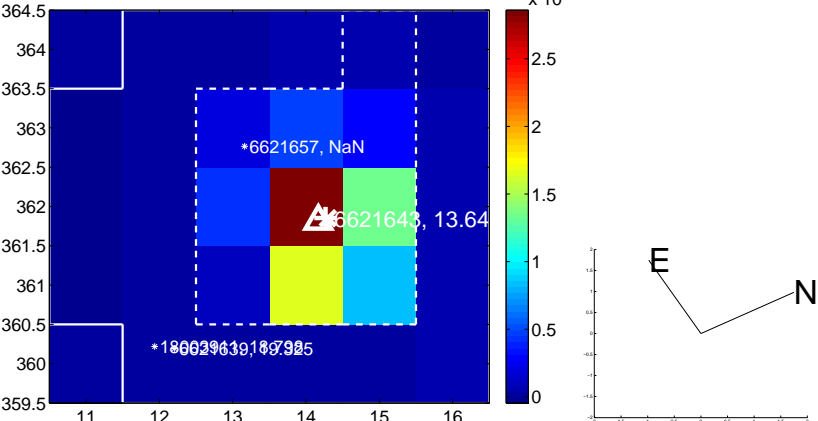
Q3 OOT image



Q4 difference image. Poor Quality



Q4 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



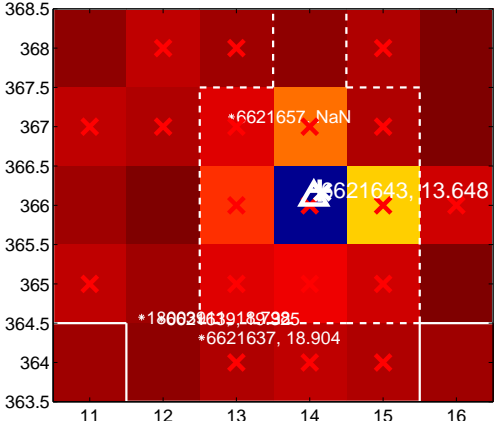
Q6 no difference image



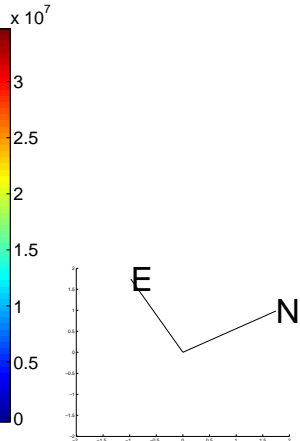
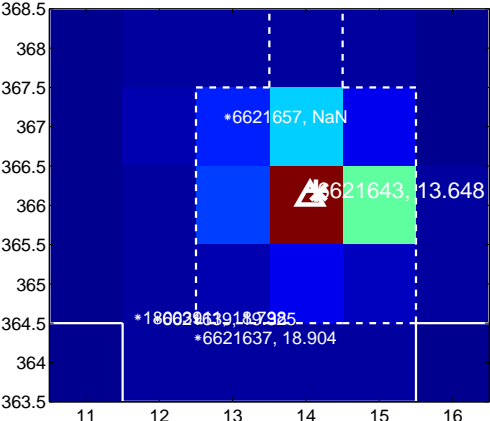
Q6 no OOT image



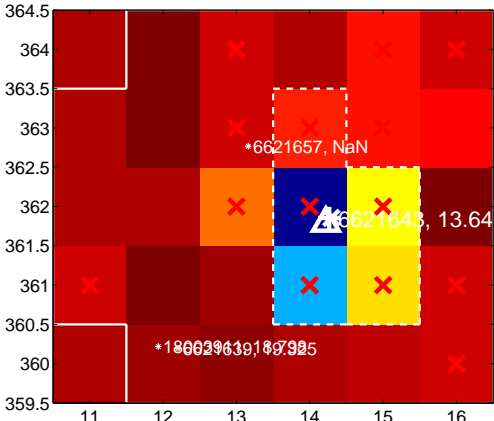
Q7 difference image. Poor Quality



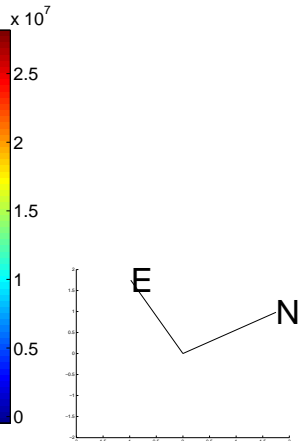
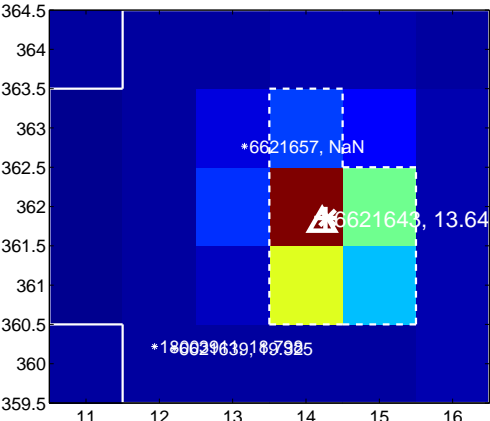
Q7 OOT image



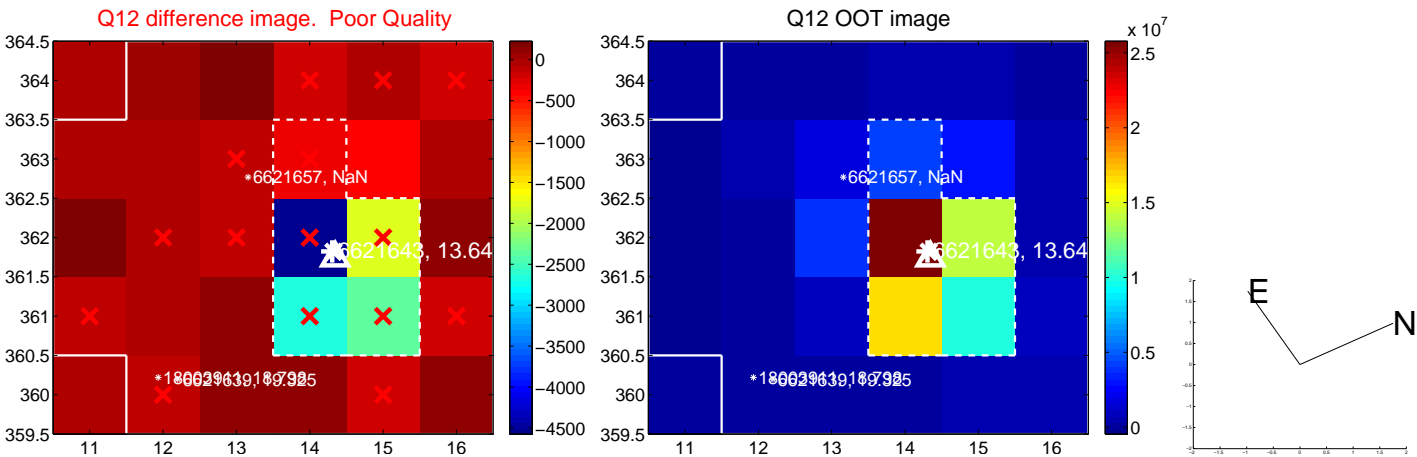
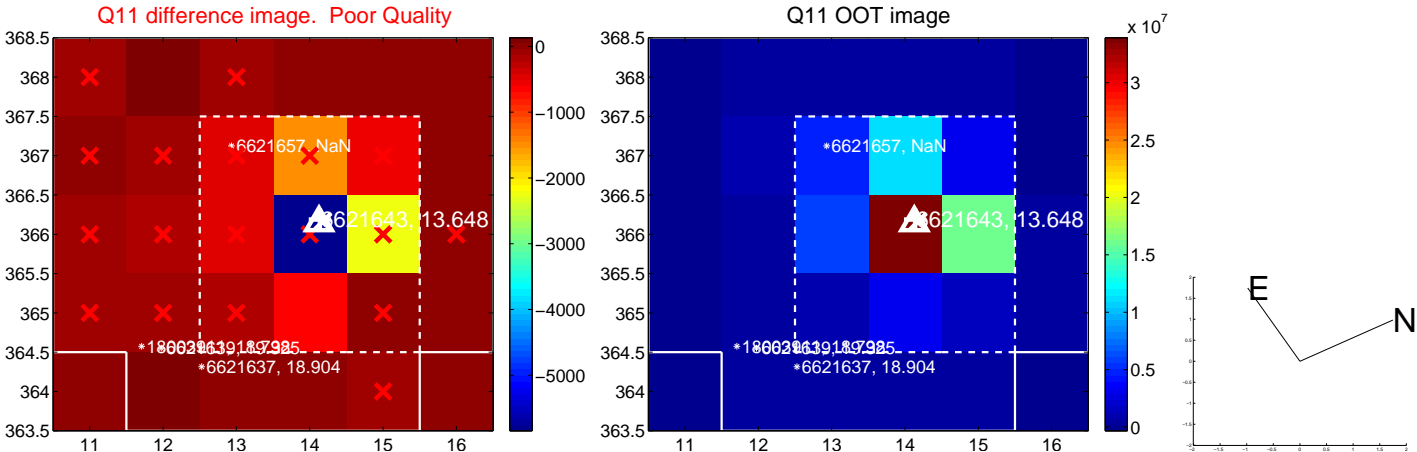
Q8 difference image. Poor Quality



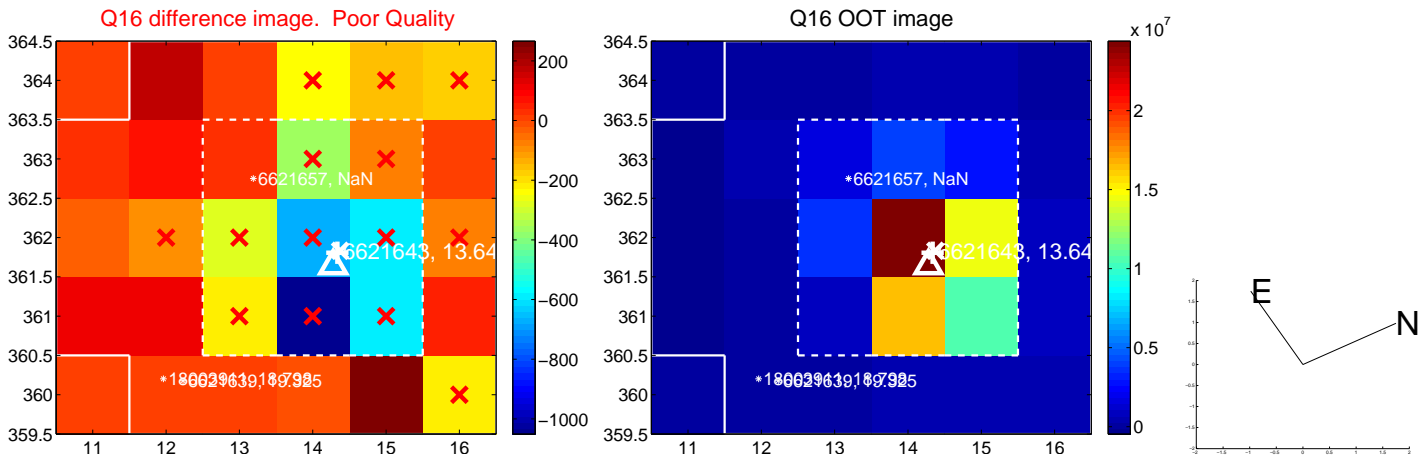
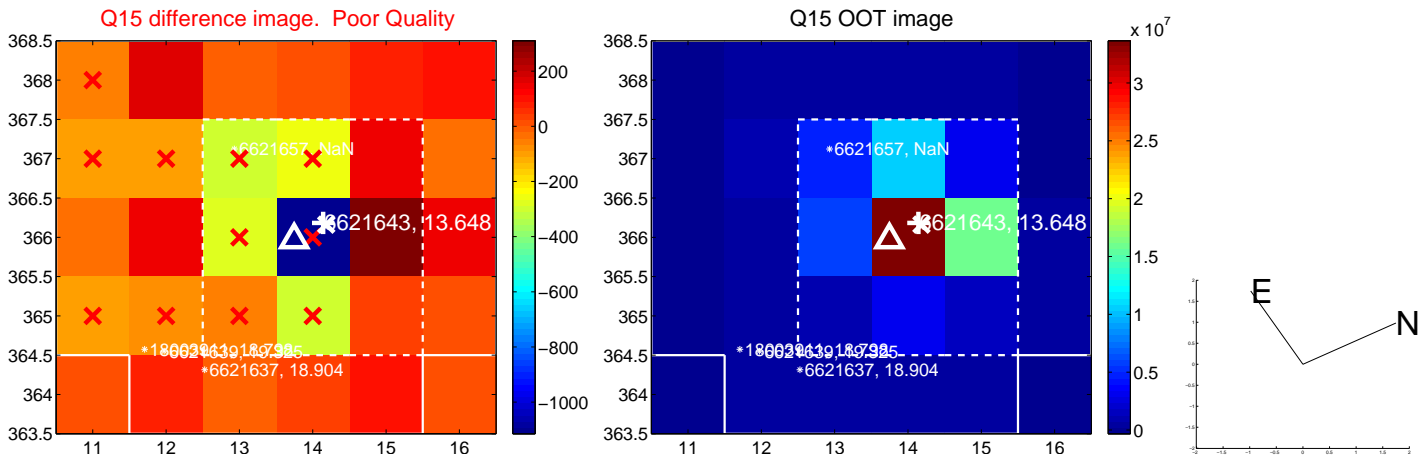
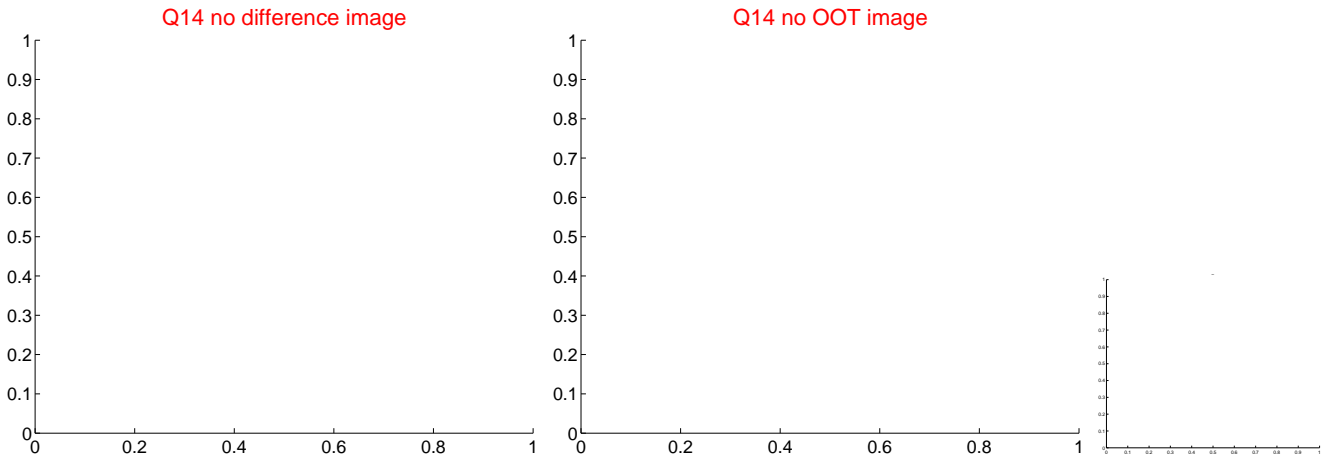
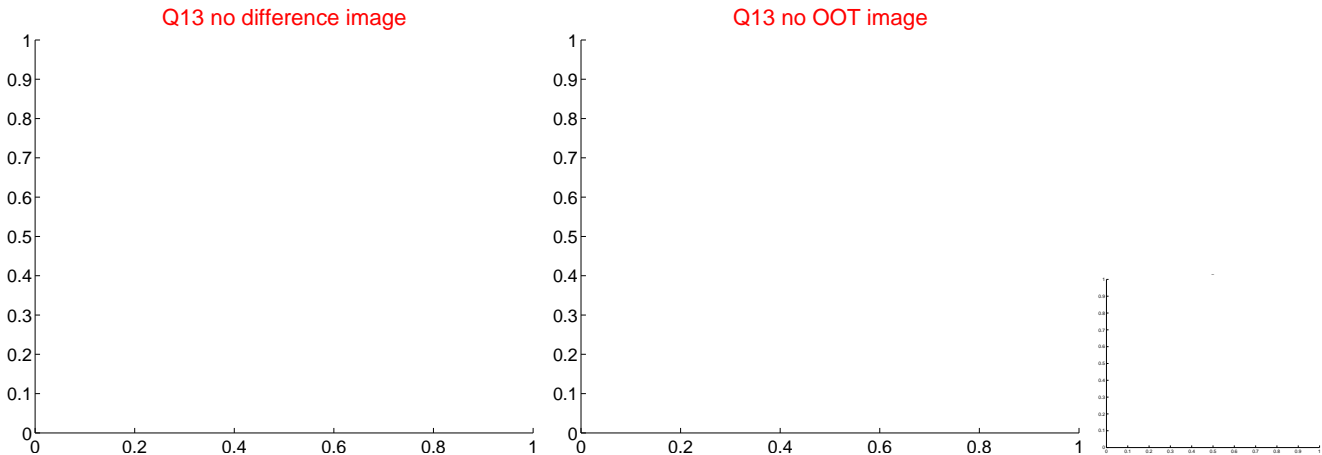
Q8 OOT image



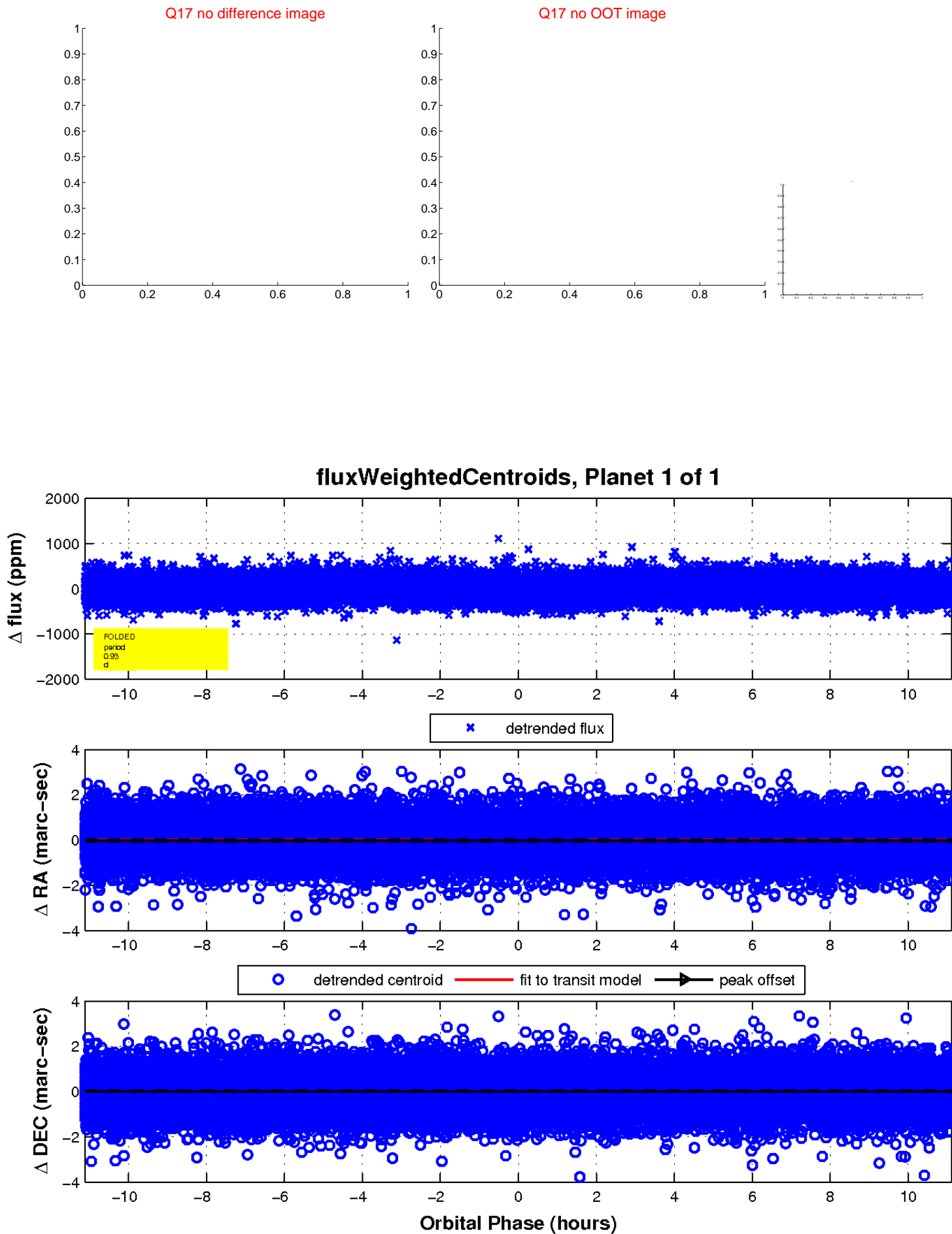
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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



UKIRT Image

Declination

