

KIC 011091337

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})
011091337-01	OBS	No	369.191398	339.662568	324.1	3.283	7.2	8.2	0.78	5388	1.63	0.52

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
011091337-01	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_CHASES_MARSHALL

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

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

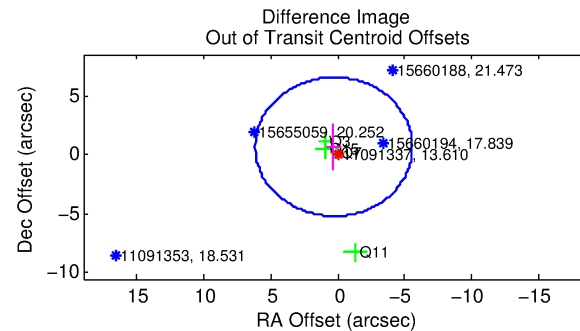
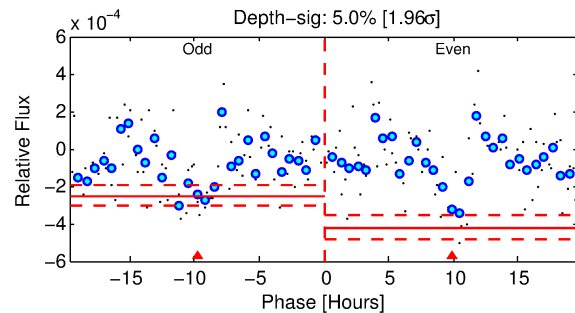
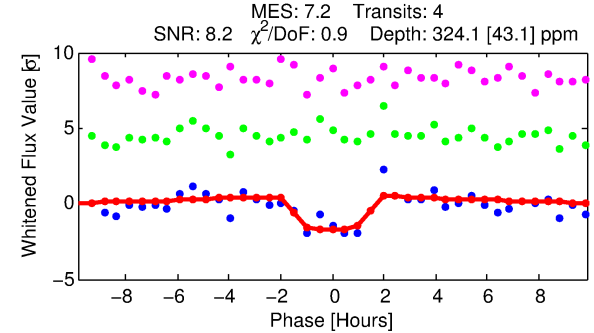
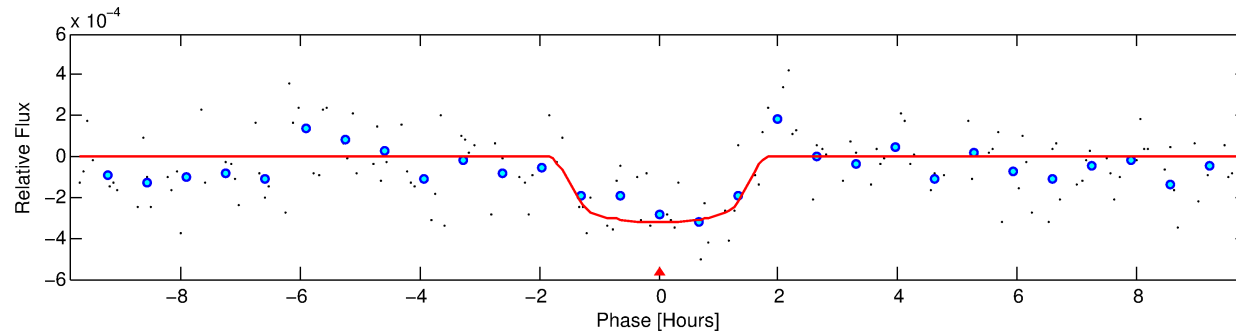
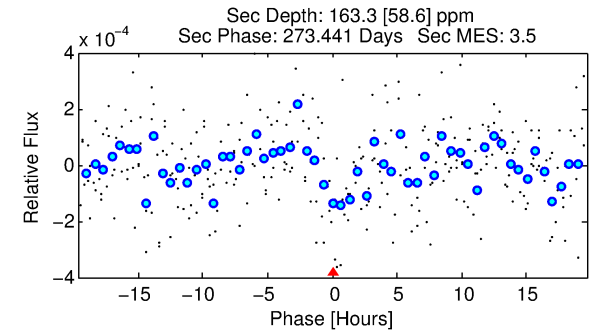
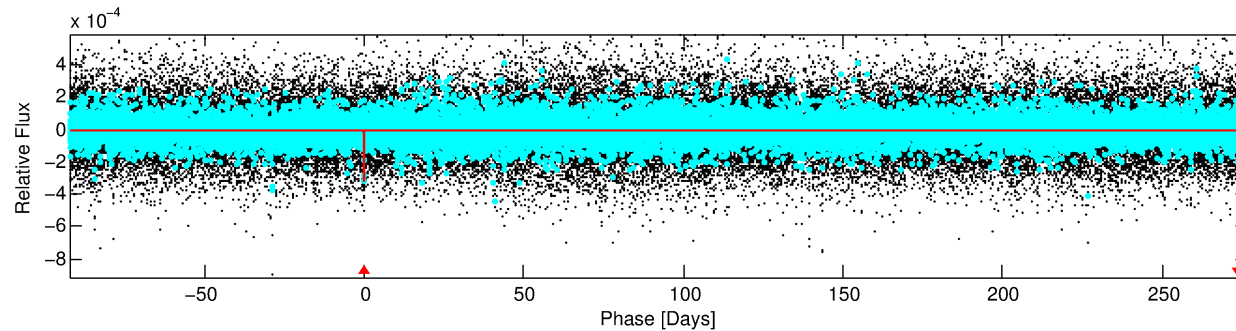
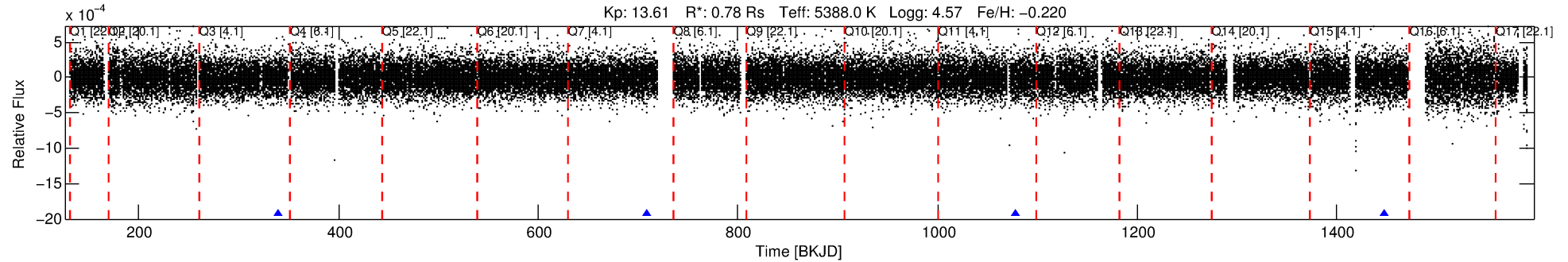
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 011091337-01

No Significant Match Found

DV One-Page Summary

KIC: 11091337 Candidate: 1 of 1 Period: 369.191 d



DV Fit Results:

Period = 369.19140 [0.00442] d
Epoch = 339.6626 [0.0068] BKJD
Rp/R* = 0.0192 [0.0148]
a/R* = 464.72 [1519.07]
b = 0.86 [0.98]
Seff = 0.52 [0.12]
Teq = 216 [12] K
Rp = 1.63 [1.29] Re
a = 0.9425 [0.1306] AU
Ag = 29911.83 [47732.92] [0.63σ]
Teffp = 4399 [1746] K [2.40σ]

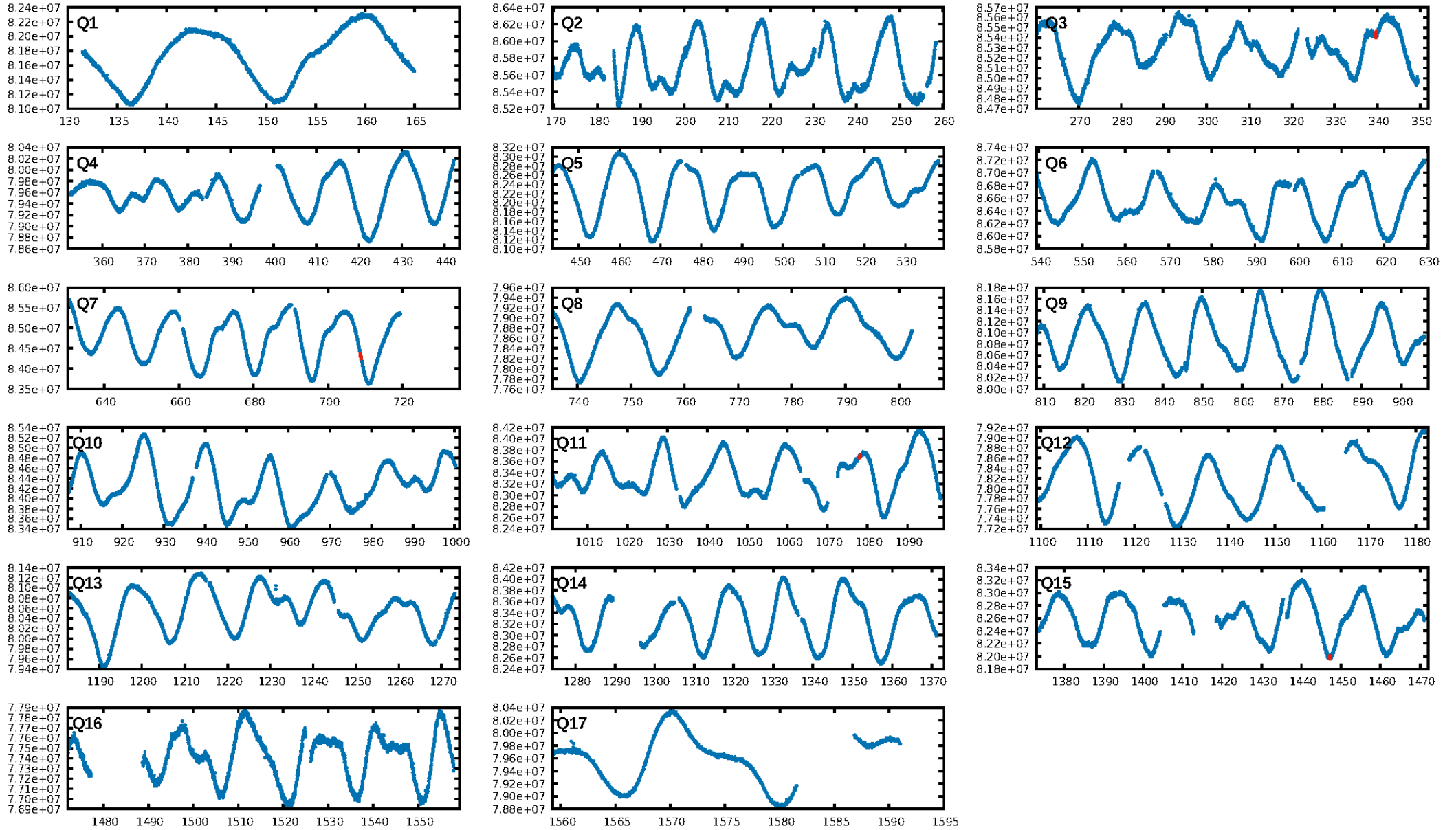
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: 54.9%
ModelChiSquareGof-sig: 98.2%
Bootstrap-pfa: 1.04e-08
RollingBand-fgt: 1.00 [4/4]
GhostDiagnostic-chr: 2.546
Centroid-sig: 84.4%
Centroid-so: 0.570 arcsec [0.41σ]
OotOffset-rm: 0.737 arcsec [0.38σ]
KicOffset-rm: 1.021 arcsec [0.51σ]
OotOffset-st: 0/4/0/0 [4]
KicOffset-st: 0/4/0/0 [4]
DiffImageQuality-fgm: 0.75 [3/4]
DiffImageOverlap-fno: 1.00 [4/4]

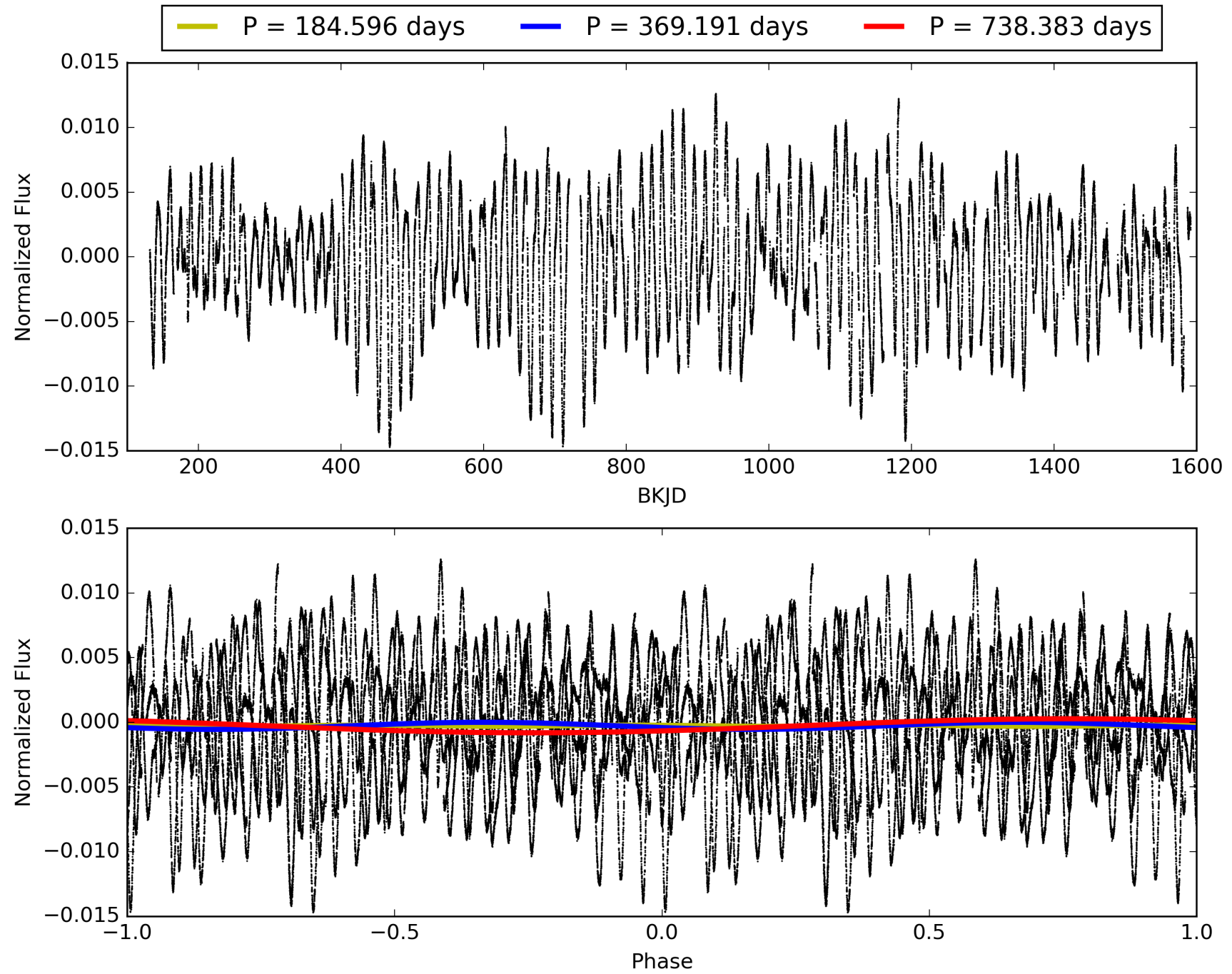
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 28-Jan-2016 18:51:37 Z

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

TCE 011091337-01, PDC Light Curves

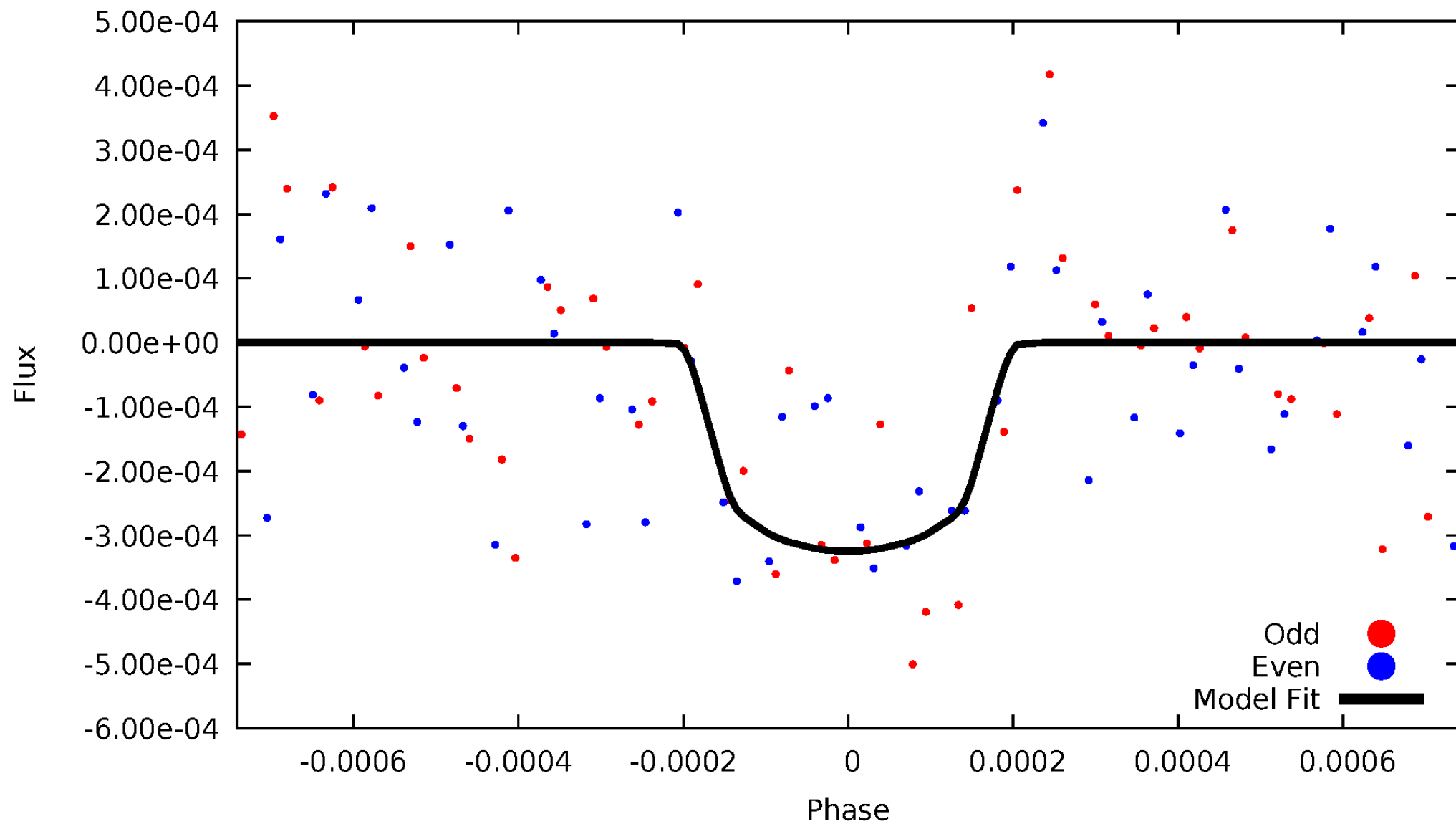


TCE 011091337-01



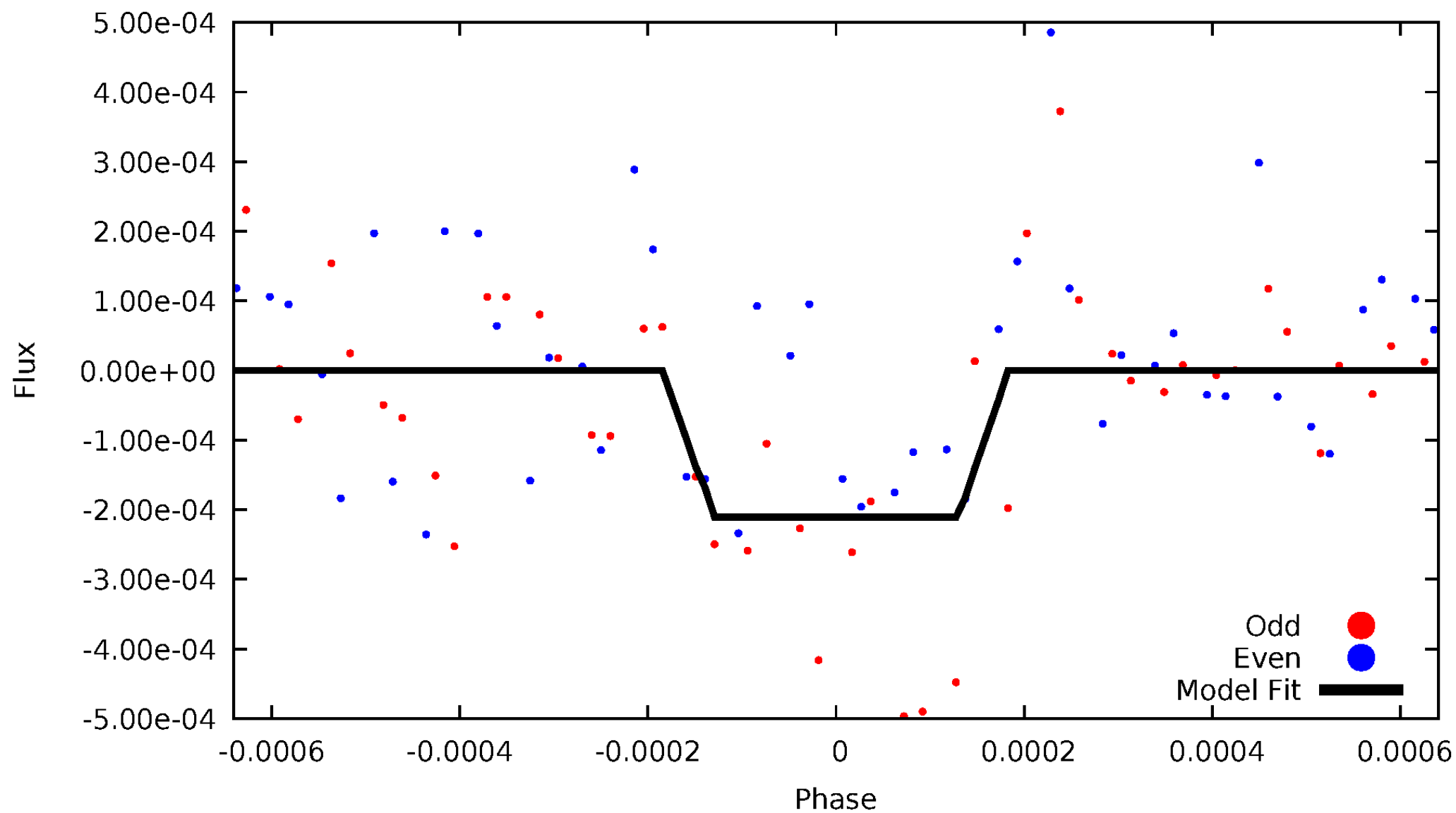
DV Odd/Even

TCE 011091337-01

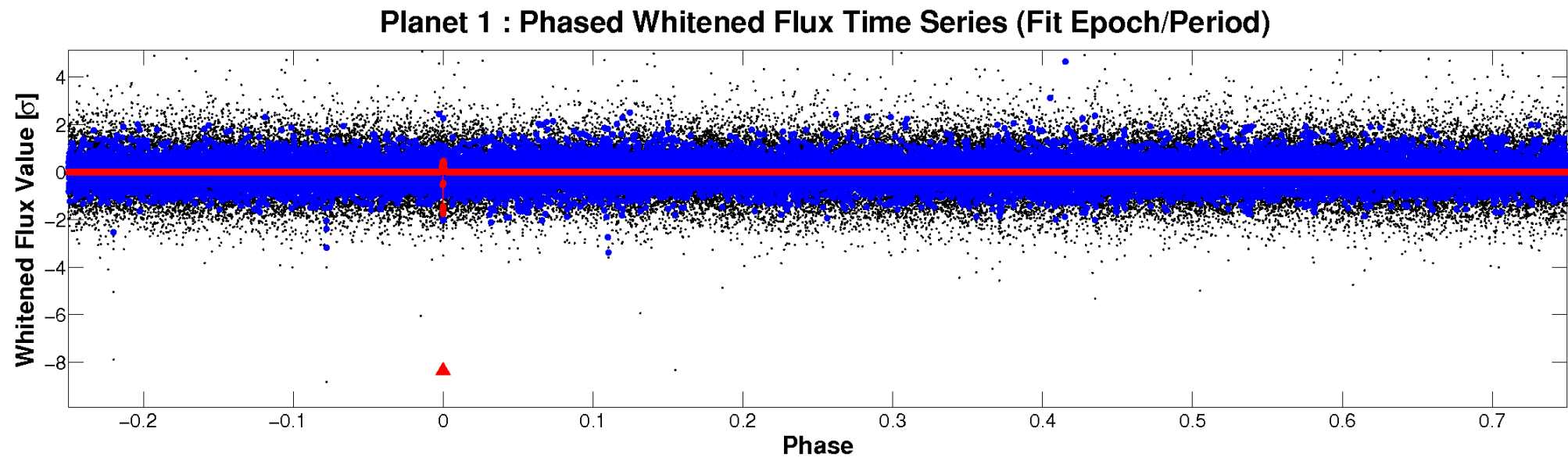
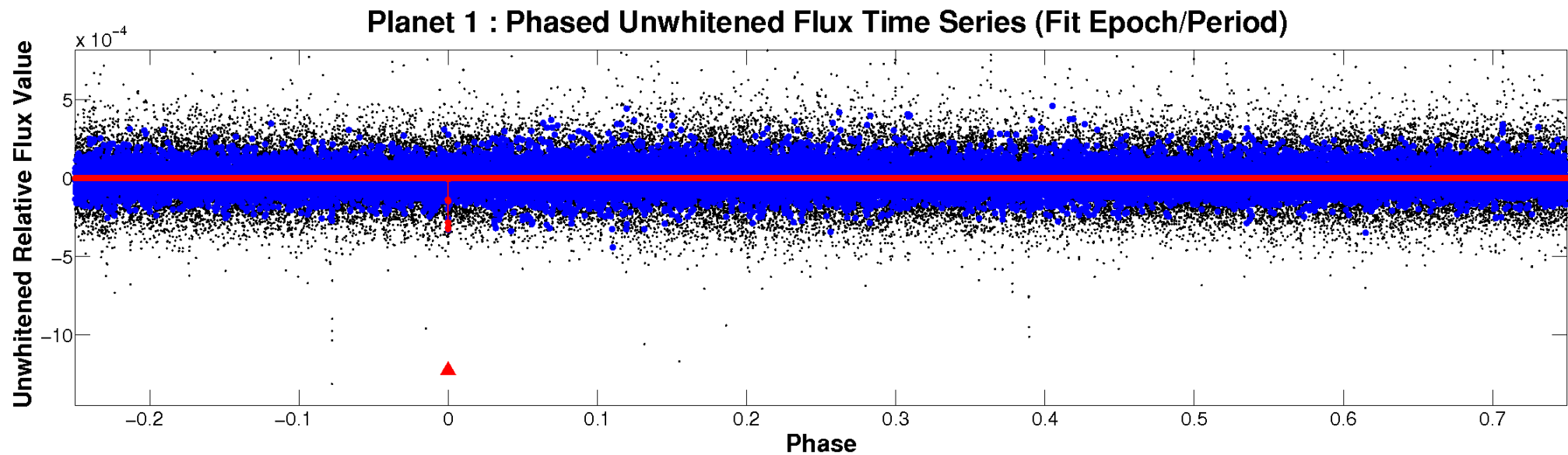


ALT Odd/Even

TCE 011091337-01

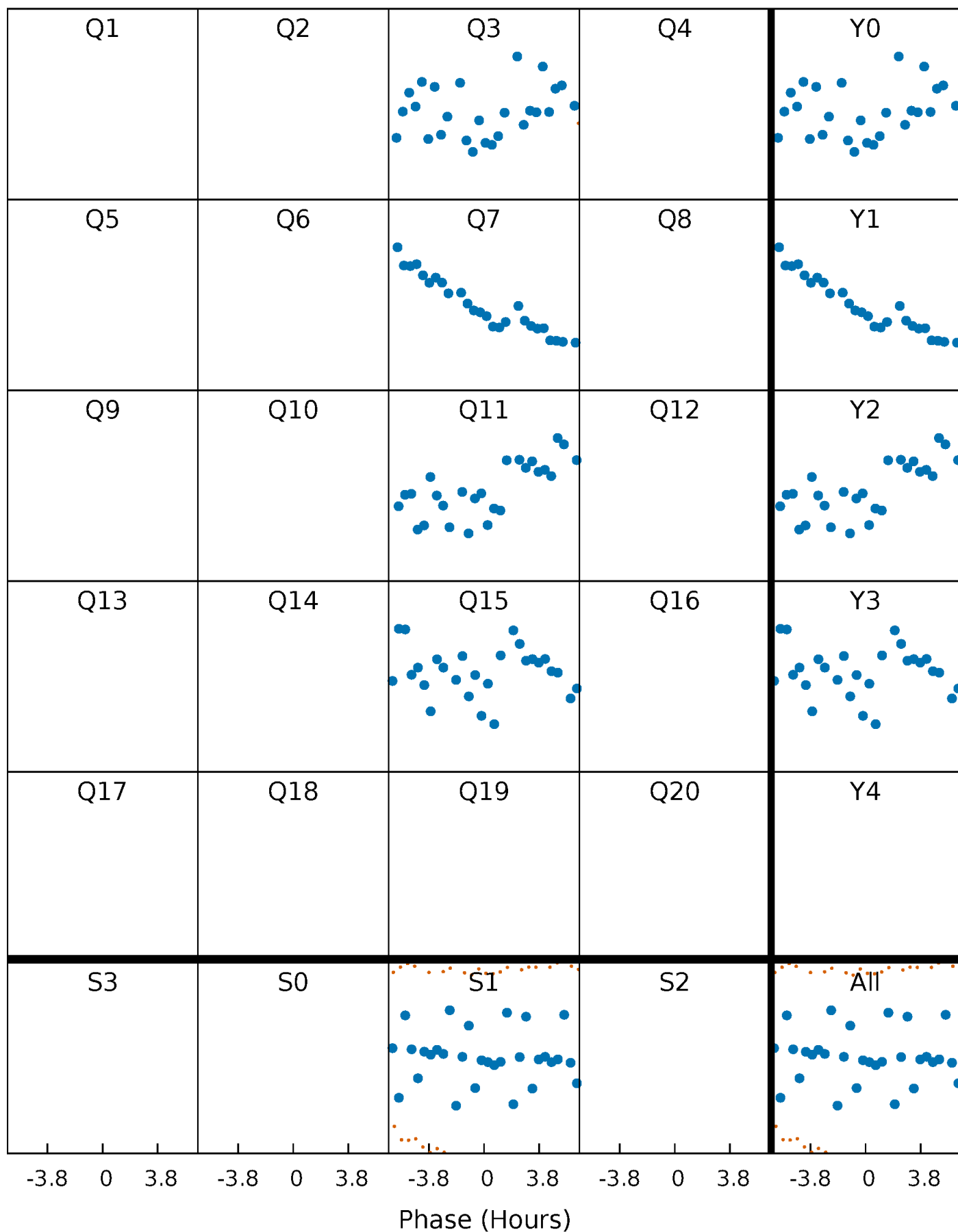


Non-Whitened Vs. Whitened Light Curve



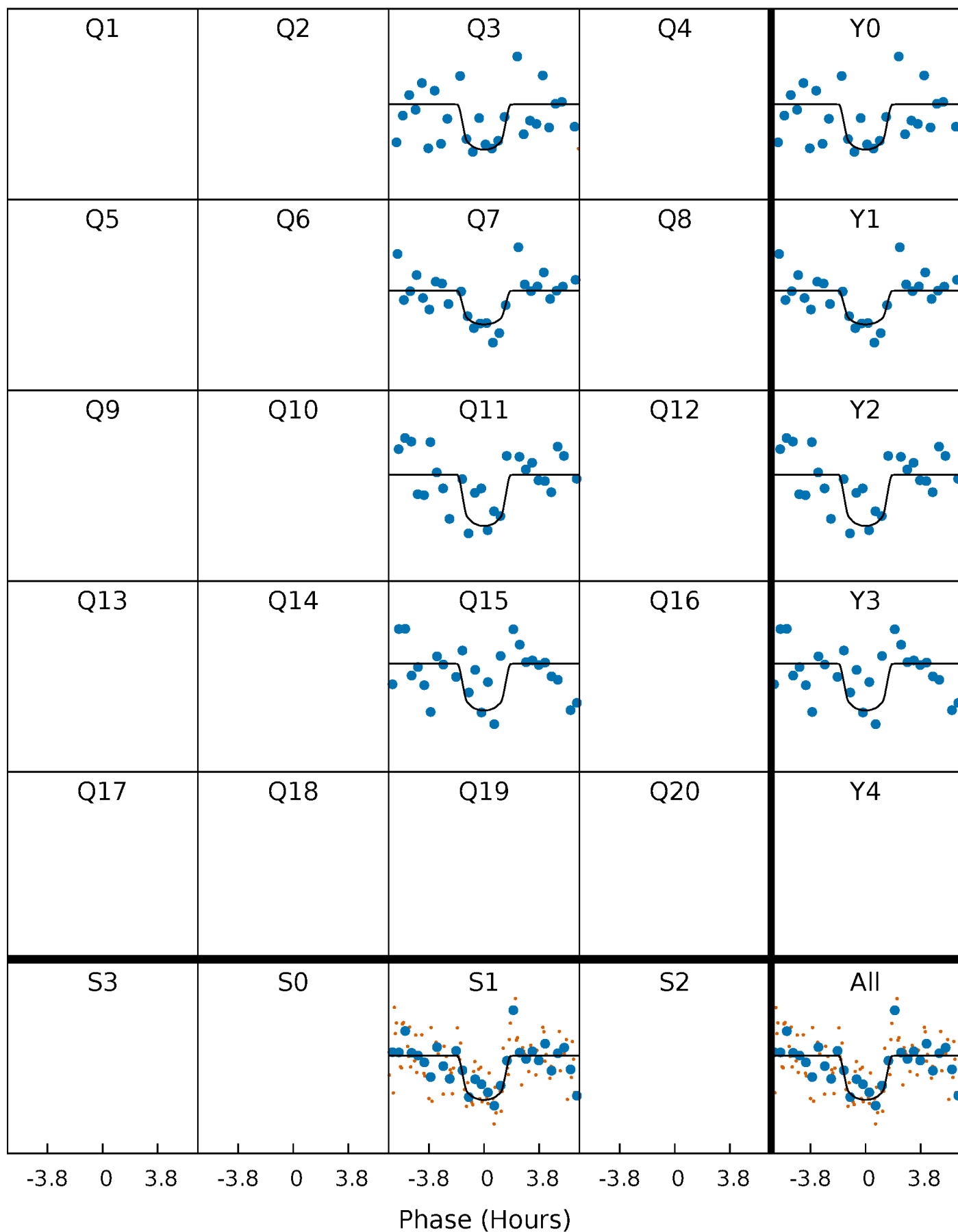
PDC Quarter-Phased Transit Curves

TCE 011091337-01 P=369.191398 Days $T_0=339.662568$ (BKJD)



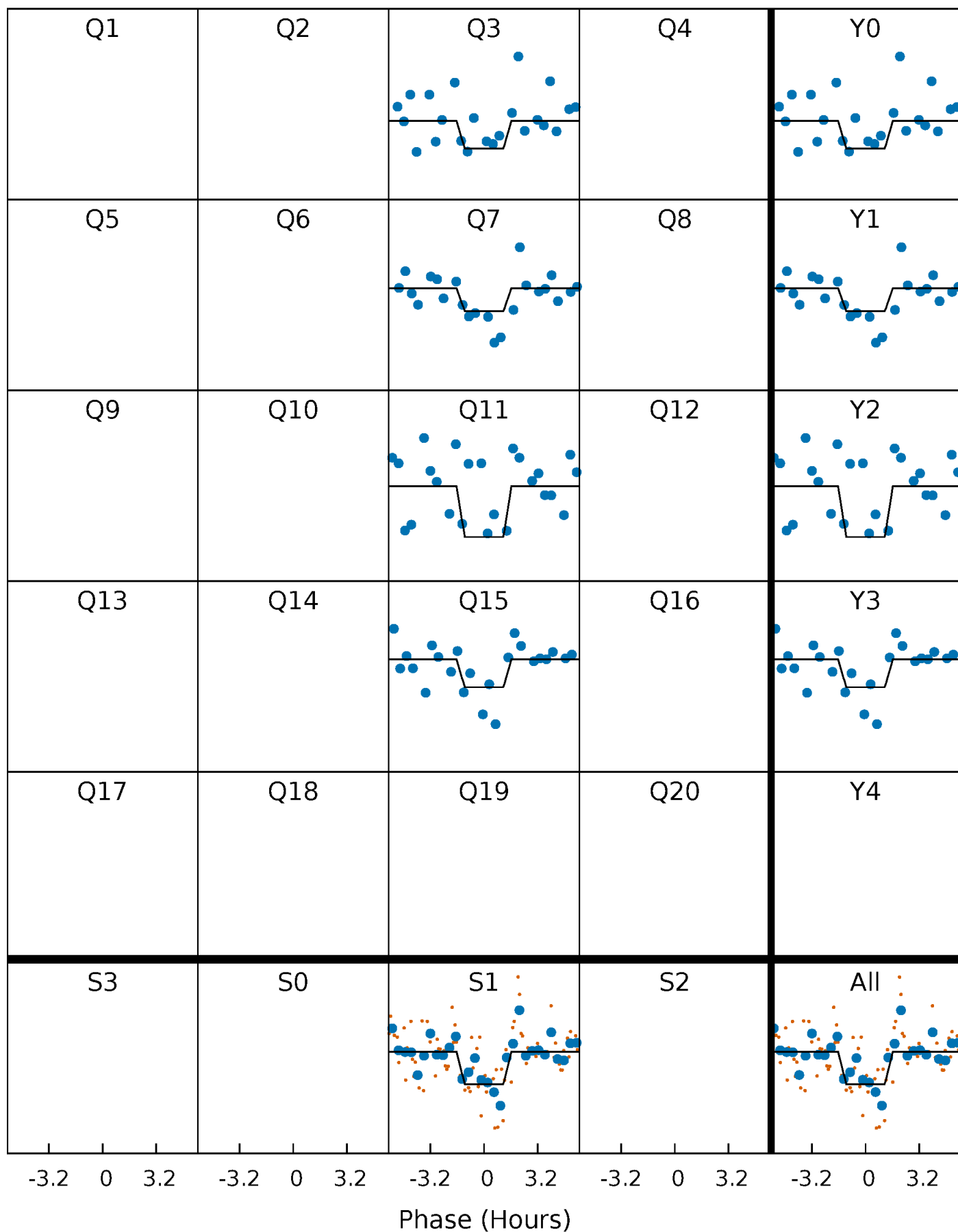
DV Quarter-Phased Transit Curves

TCE 011091337-01 P=369.191398 Days $T_0=339.662568$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

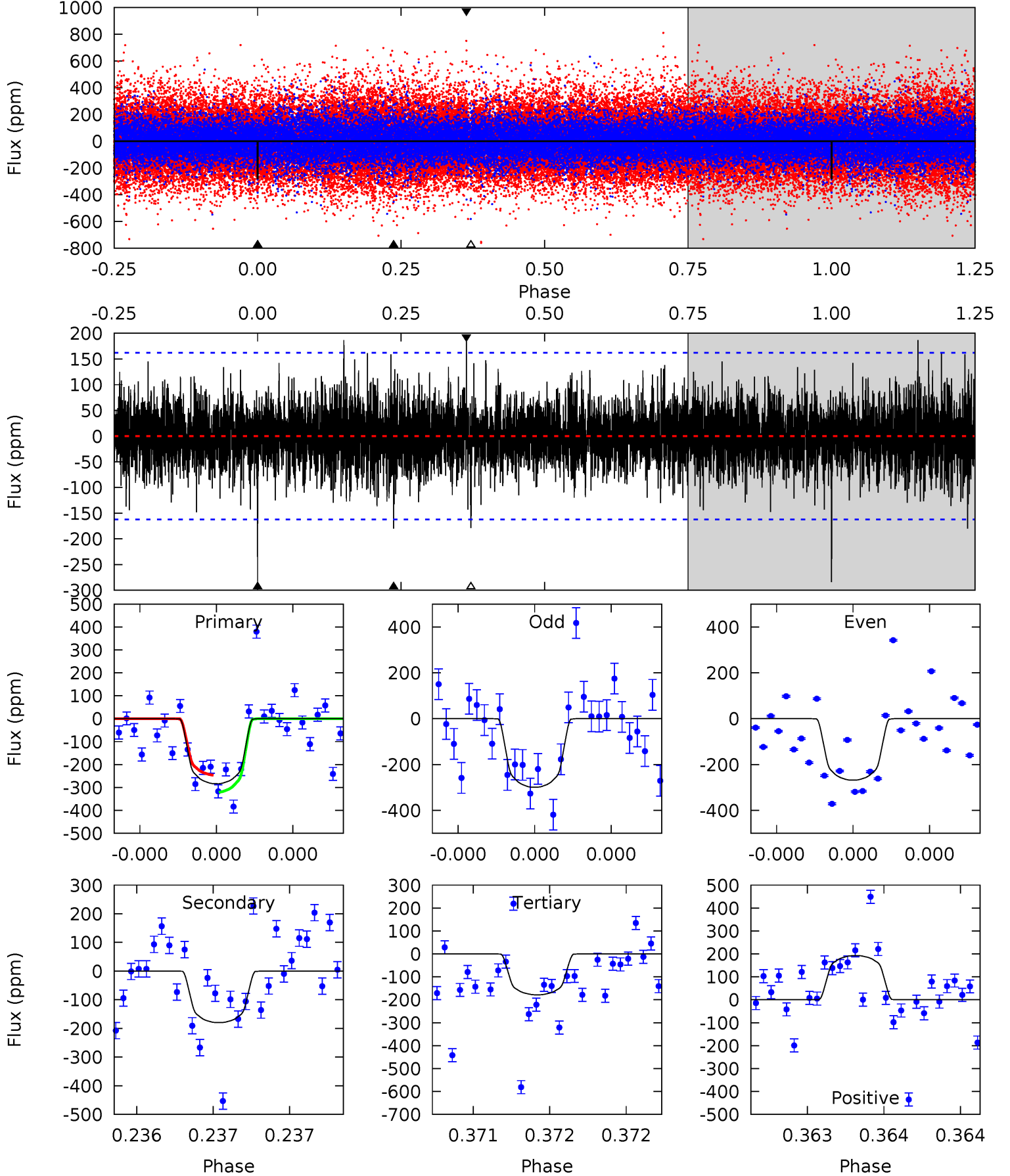
TCE 011091337-01 P=369.190688 Days $T_0=339.665409$ (BKJD)



DV Model-Shift Uniqueness Test

011091337-01, P = 369.191398 Days, E = 339.662568 Days

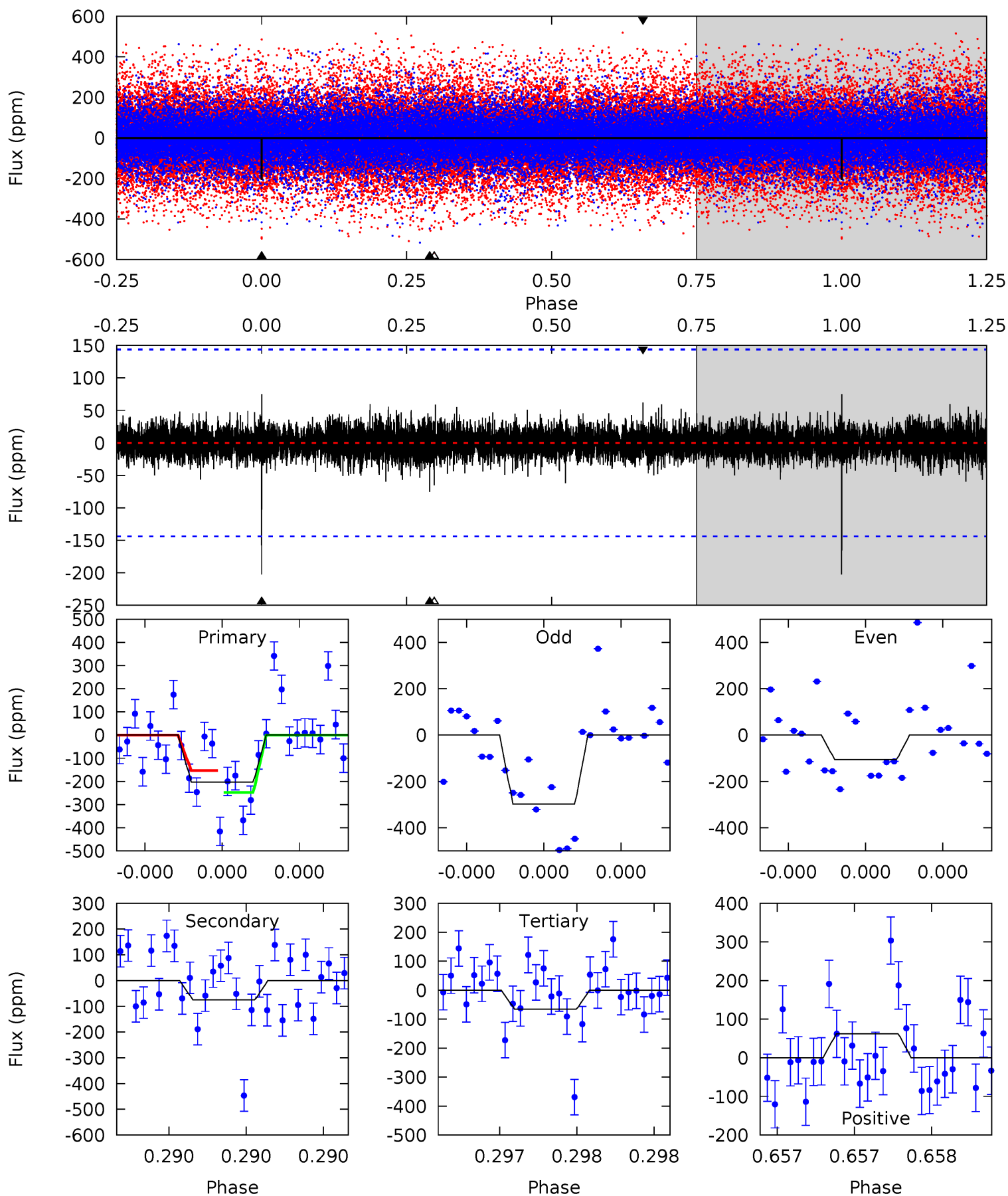
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
9.79	6.20	6.16	6.65	5.60	3.52	1.42	3.64	3.15	0.05	-0.44	0.54	1.06	0.40	1.28



Alt Model-Shift Uniqueness Test

011091337-01, P = 369.190688 Days, E = 339.665409 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
7.94	2.94	2.56	2.44	5.65	3.60	0.54	5.38	5.50	0.38	0.50	3.85	1.01	0.27	1.85



Stellar Parameters For KIC 011091337

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	M (M_{\odot})	p_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	5388^{+143}_{-143}	$4.566^{+0.045}_{-0.105}$	$-0.220^{+0.300}_{-0.300}$	$0.781^{+0.132}_{-0.066}$	$0.819^{+0.087}_{-0.078}$	$2.422^{+0.572}_{-0.790}$
	+3%/-3%	+1%/-2%	+136%/-136%	+17%/-8%	+11%/-10%	+24%/-33%
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 011091337-01 / KOI

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	-180 ± 29	$1.81^{+1.27}_{-1.07}$	305^{+14}_{-11}	4483^{+2394}_{-787}	$26756^{+141445}_{-17779}$
Alt.	-75 ± 25	$1.56^{+1.11}_{-1.02}$	304^{+13}_{-11}	4031^{+2105}_{-699}	$15160^{+101723}_{-10509}$

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

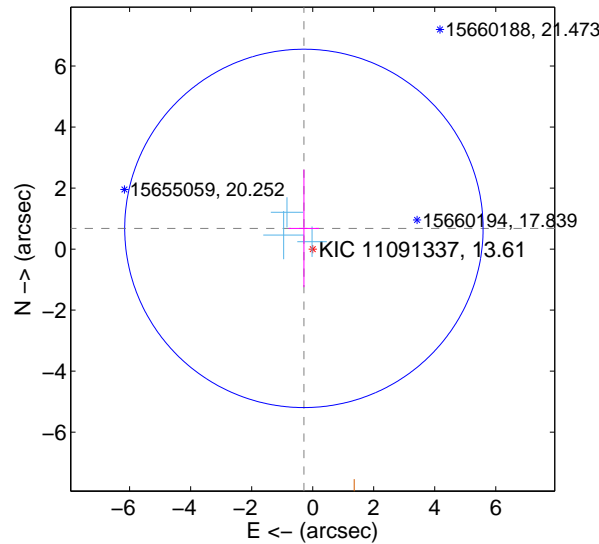
Supplemental centroid analysis for 011091337-01. Kepler magnitude: 13.61. Transit SNR 8.15

There are 3 quarters with good PRF difference image offsets

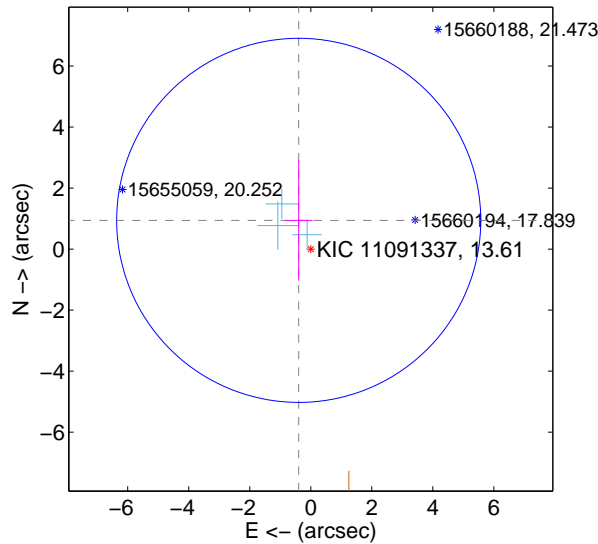
The direct PRF centroid is offset from the target star catalog position by about 0.34 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.737 ± 1.957	0.38	0.288 ± 0.497	0.678 ± 1.928
PRF-fit source offset from KIC position	1.021 ± 1.989	0.51	0.395 ± 0.455	0.942 ± 1.982
photometric centroid source offset	0.57 ± 1.39	0.41	-0.28 ± 1.38	0.49 ± 1.40

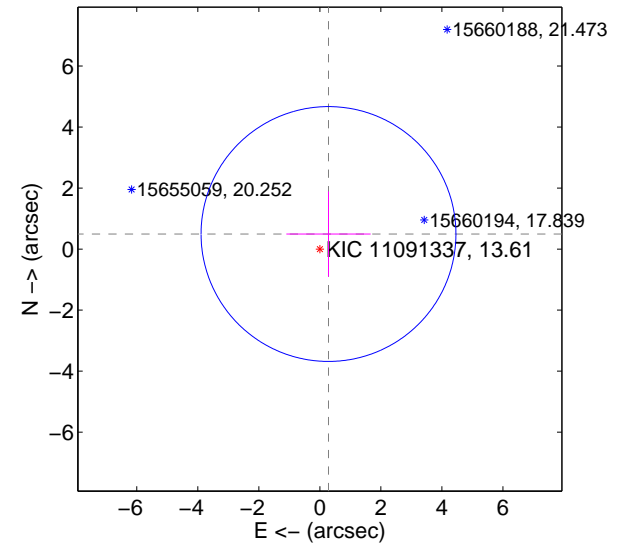
offset from difference PRF-fit to OOT PRF-fit



offset from difference PRF-fit to KIC position



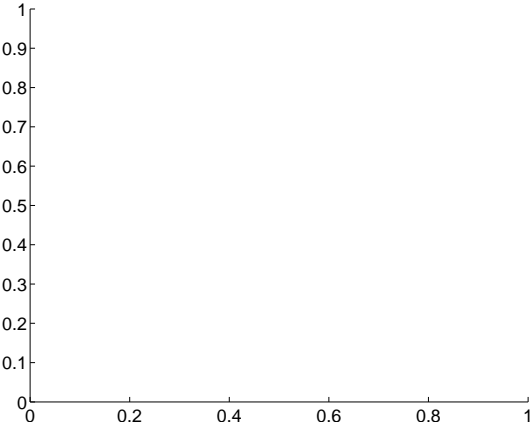
offset from photometric centroids



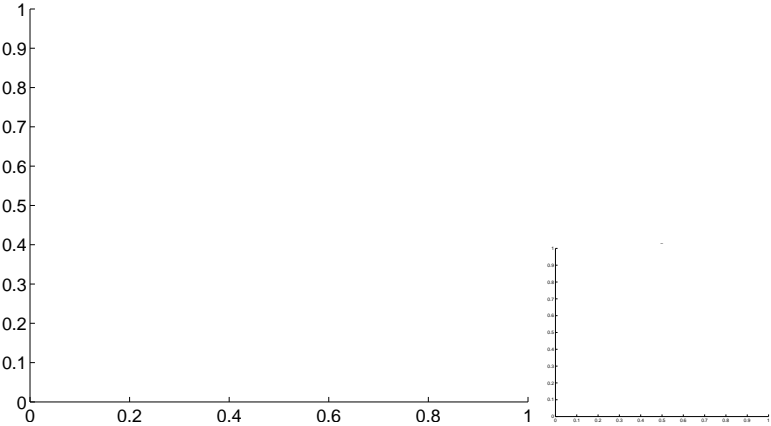
Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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

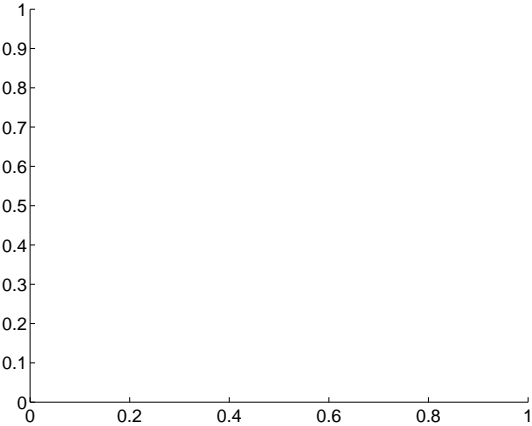
Q1 no difference image



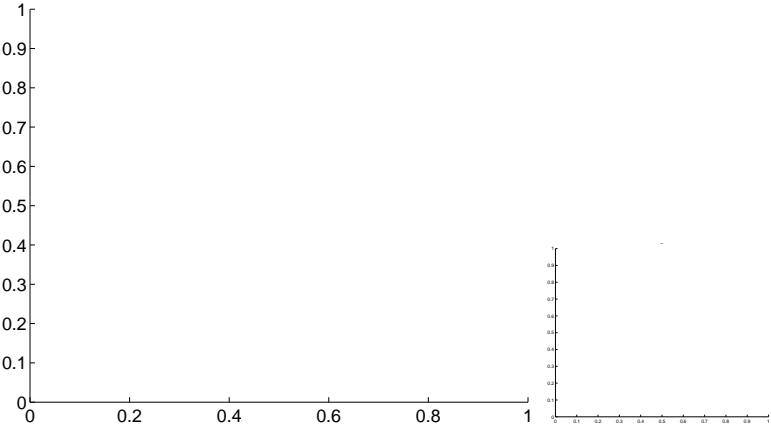
Q1 no OOT image



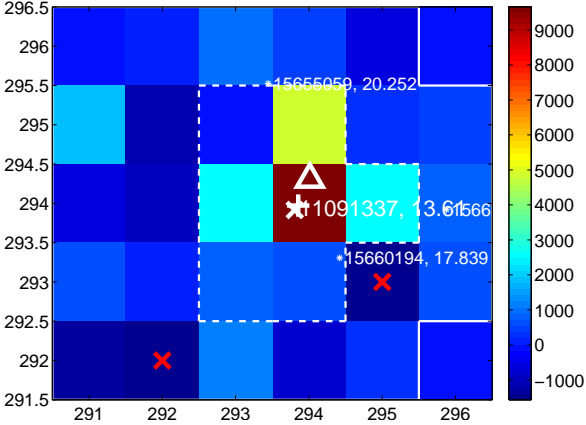
Q2 no difference image



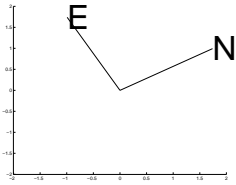
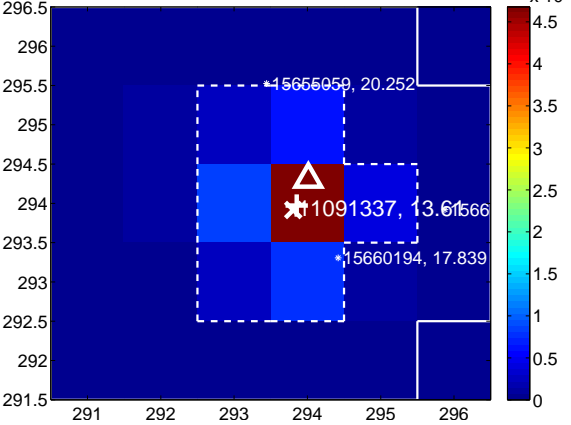
Q2 no OOT image



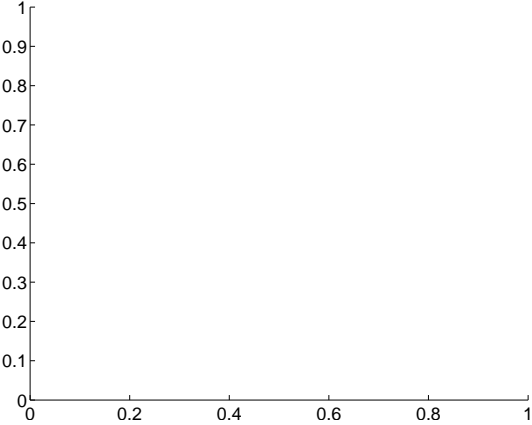
Q3 difference image



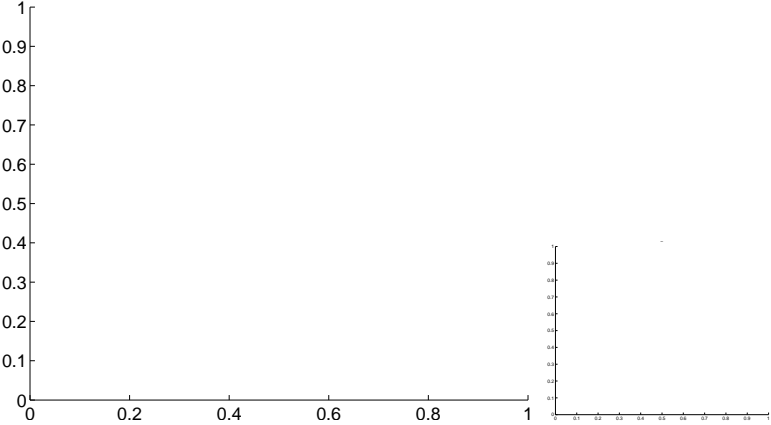
Q3 OOT image



Q4 no difference image



Q4 no OOT image

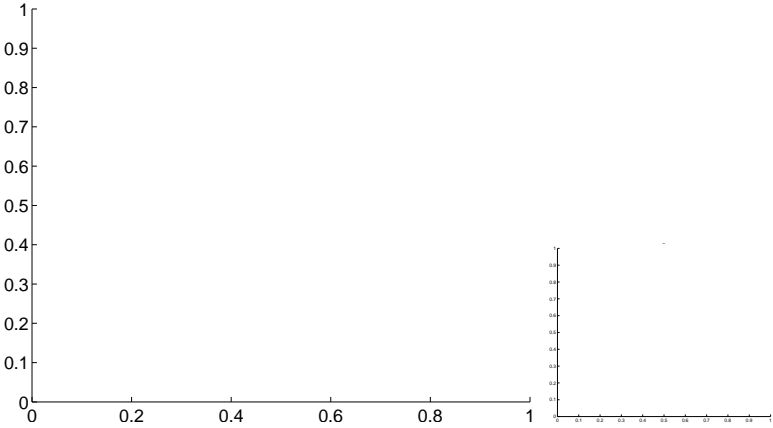


white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.

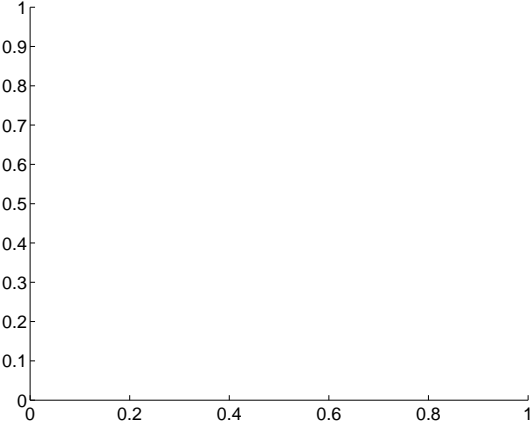
Q5 no difference image



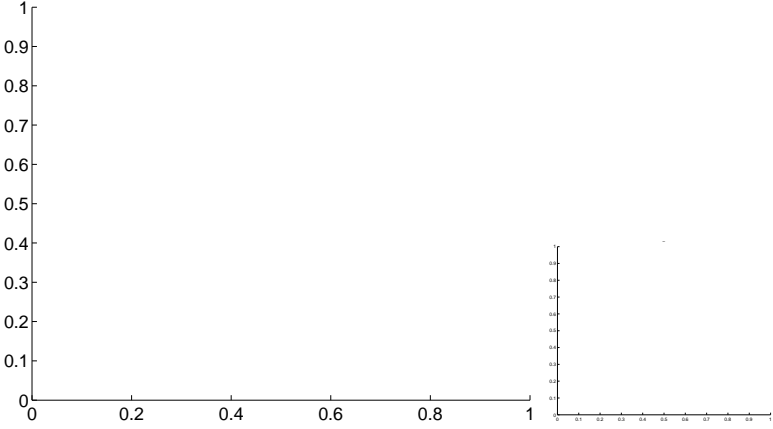
Q5 no OOT image



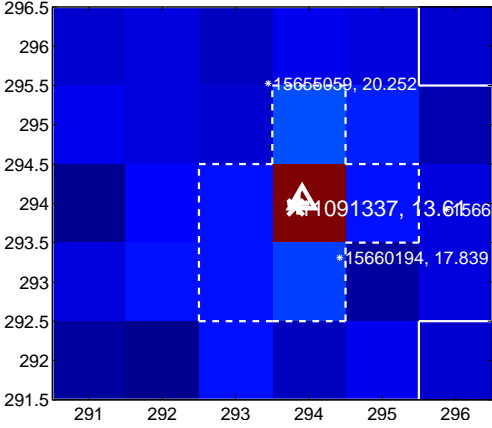
Q6 no difference image



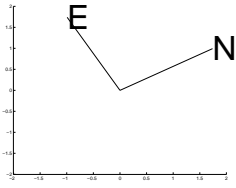
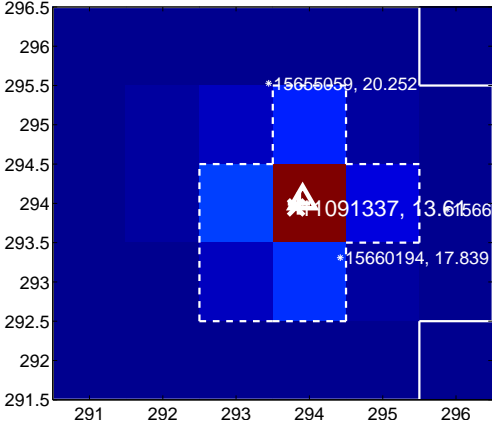
Q6 no OOT image



Q7 difference image



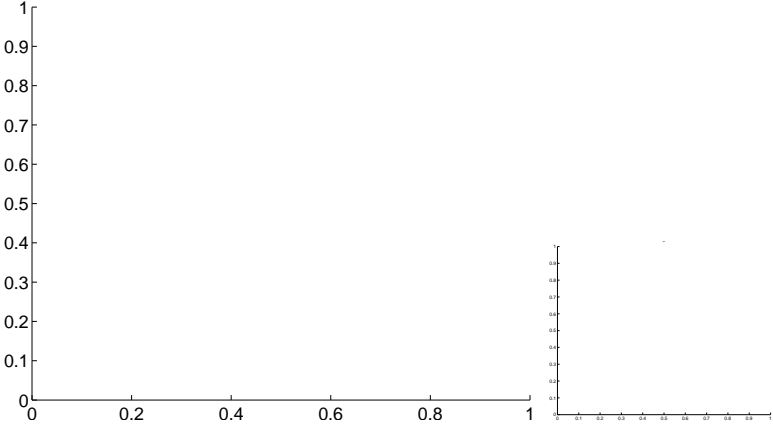
Q7 OOT image



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



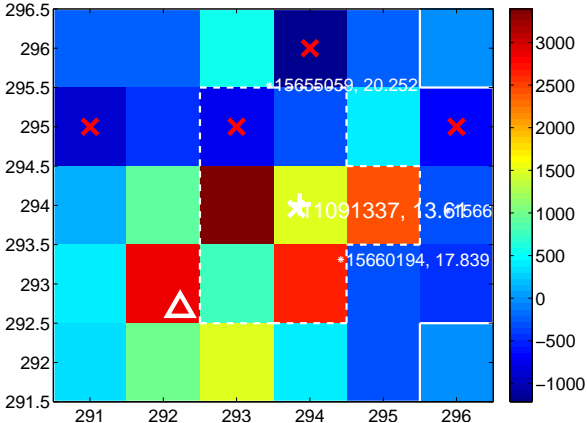
Q10 no difference image



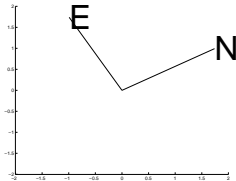
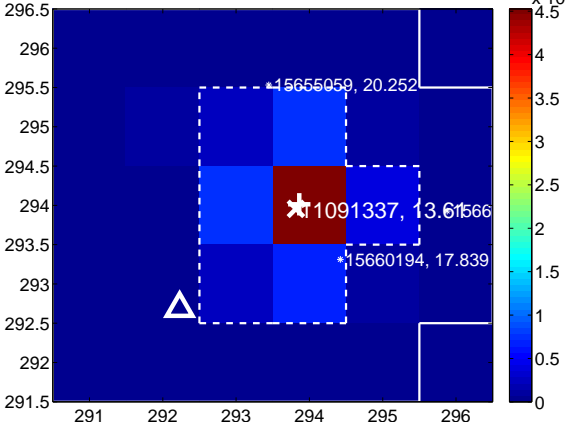
Q10 no OOT image



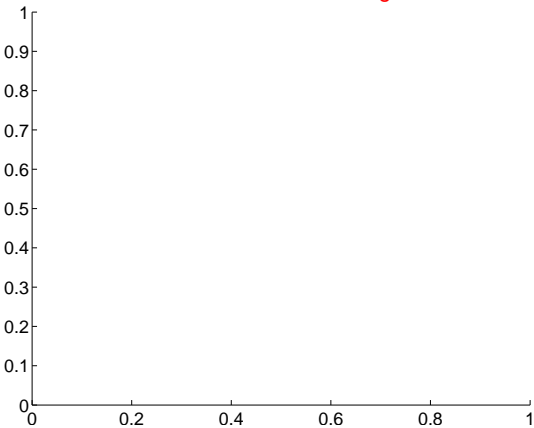
Q11 difference image. Poor Quality



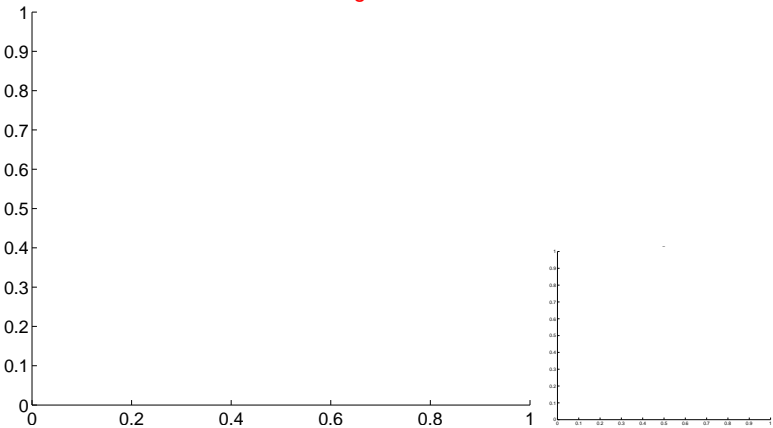
Q11 OOT image



Q12 no difference image



Q12 no OOT image

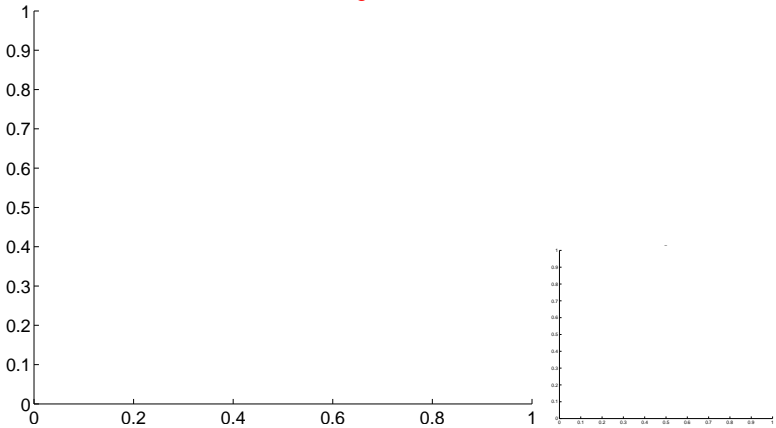


white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.

Q13 no difference image



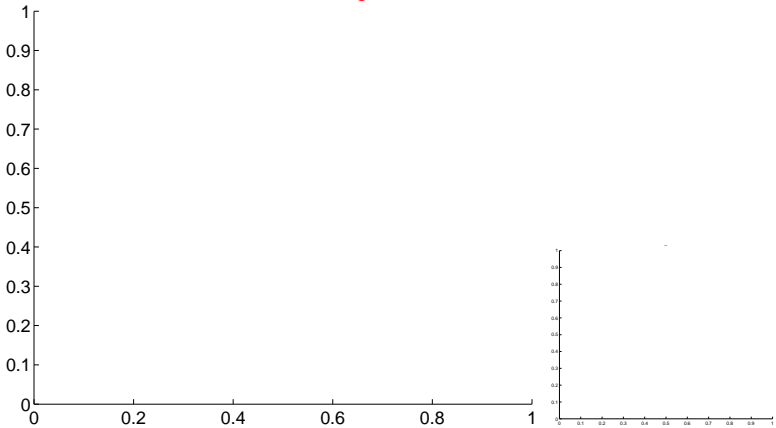
Q13 no OOT image



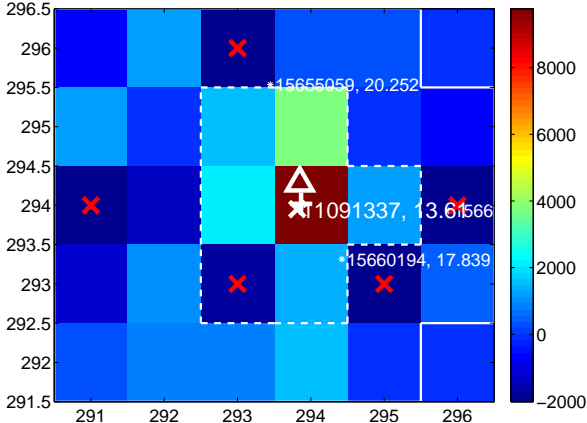
Q14 no difference image



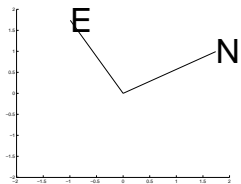
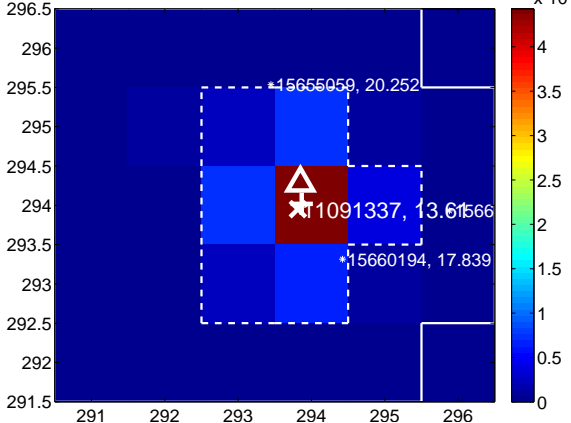
Q14 no OOT image



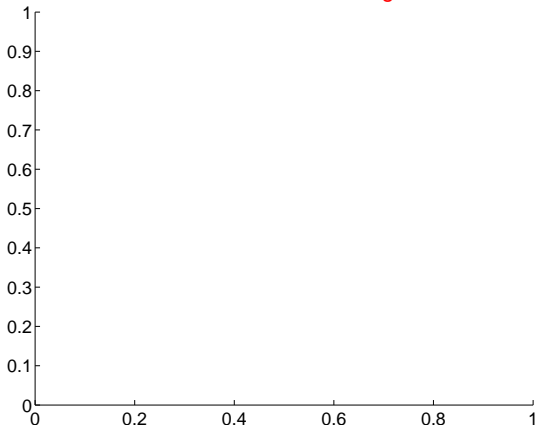
Q15 difference image



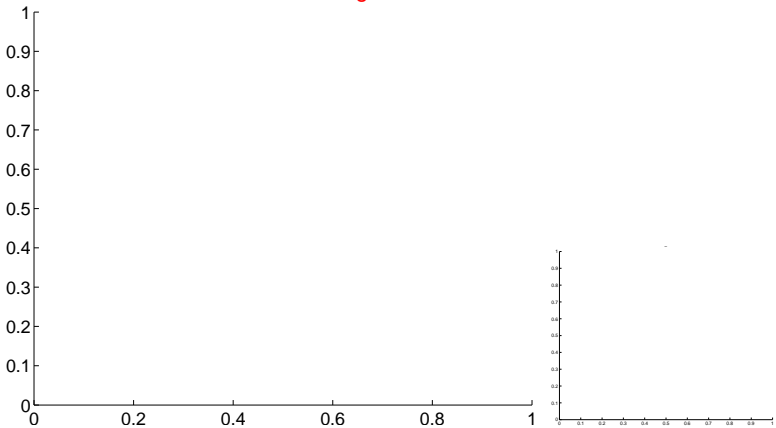
Q15 OOT image



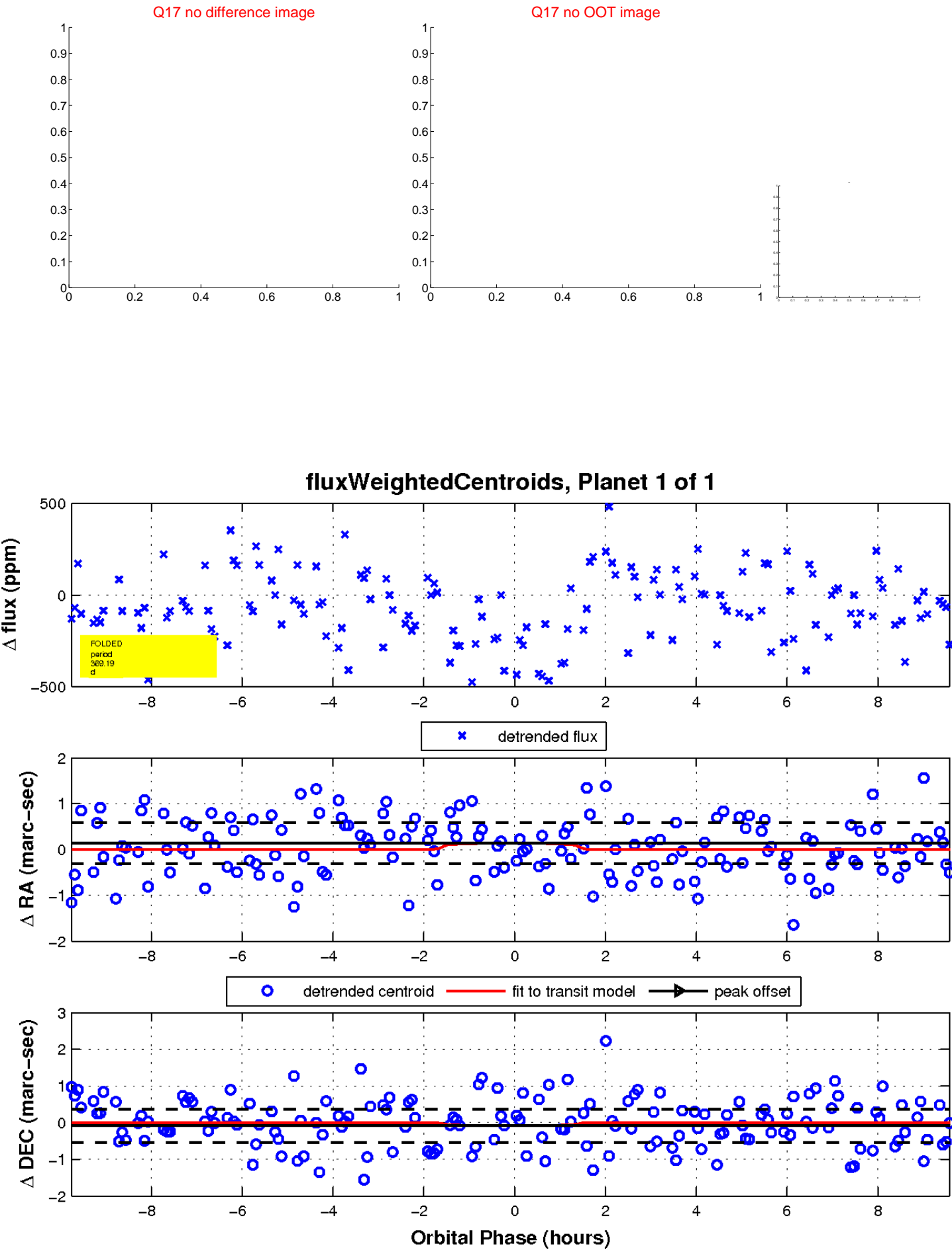
Q16 no difference image



Q16 no OOT image



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



UKIRT Image

Declination

