

KIC 011348997

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})
011348997-01	OBS	2090.01	5.132461	132.164269	857.9	1.637	30.2	35.0	0.58	3879	2.07	27.45

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
011348997-01	OBS	PC	1.00	0	0	0	0	CENT_KIC_POS

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 011348997-01

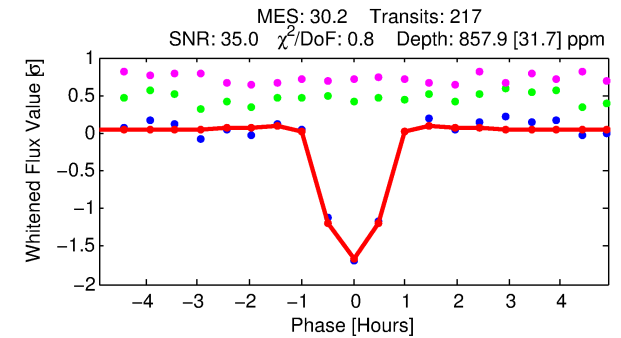
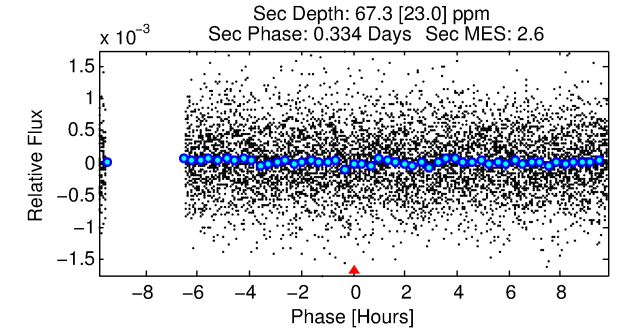
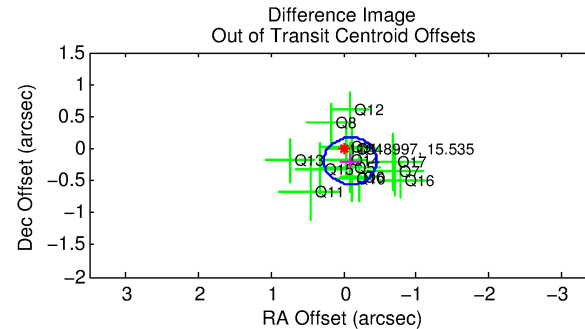
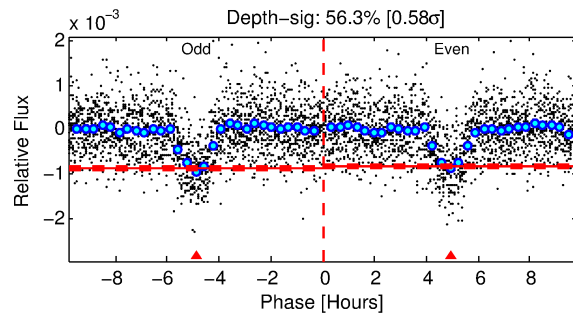
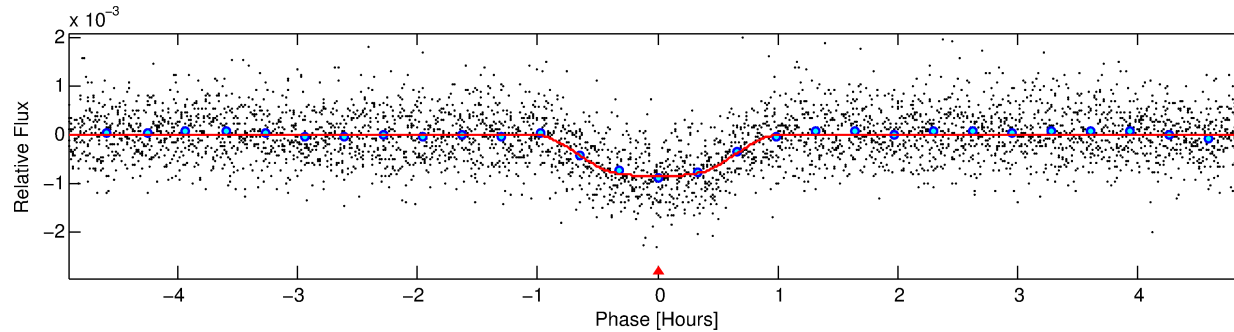
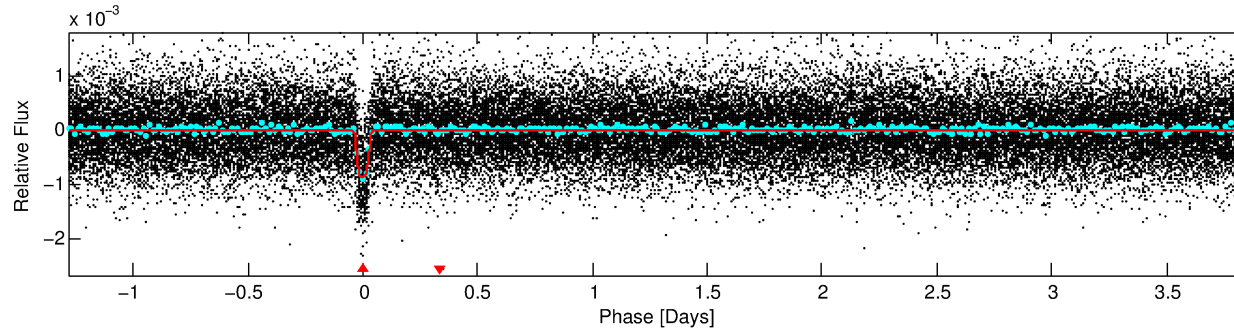
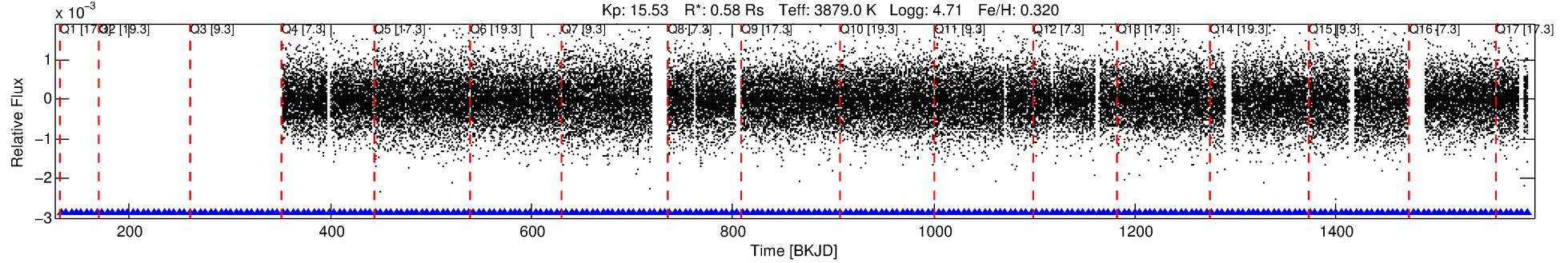
No Significant Match Found

DV One-Page Summary

KIC: 11348997 Candidate: 1 of 1 Period: 5.132 d

KOI: K02090.01 Corr: 0.970

Kp: 15.53 R*: 0.58 Rs Teff: 3879.0 K Logg: 4.71 Fe/H: 0.320



DV Fit Results:

Period = 5.13246 [0.00001] d
Epoch = 132.1643 [0.0010] BKJD
Rp/R* = 0.0329 [0.0046]
a/R* = 12.25 [6.23]
b = 0.90 [0.11]
Seff = 27.46 [2.84]
Teq = 584 [15] K
Rp = 2.07 [0.31] Re
a = 0.0497 [0.0023] AU
Ag = 21.25 [9.49] [2.13σ]
Teffp = 1938 [217] K [6.21σ]

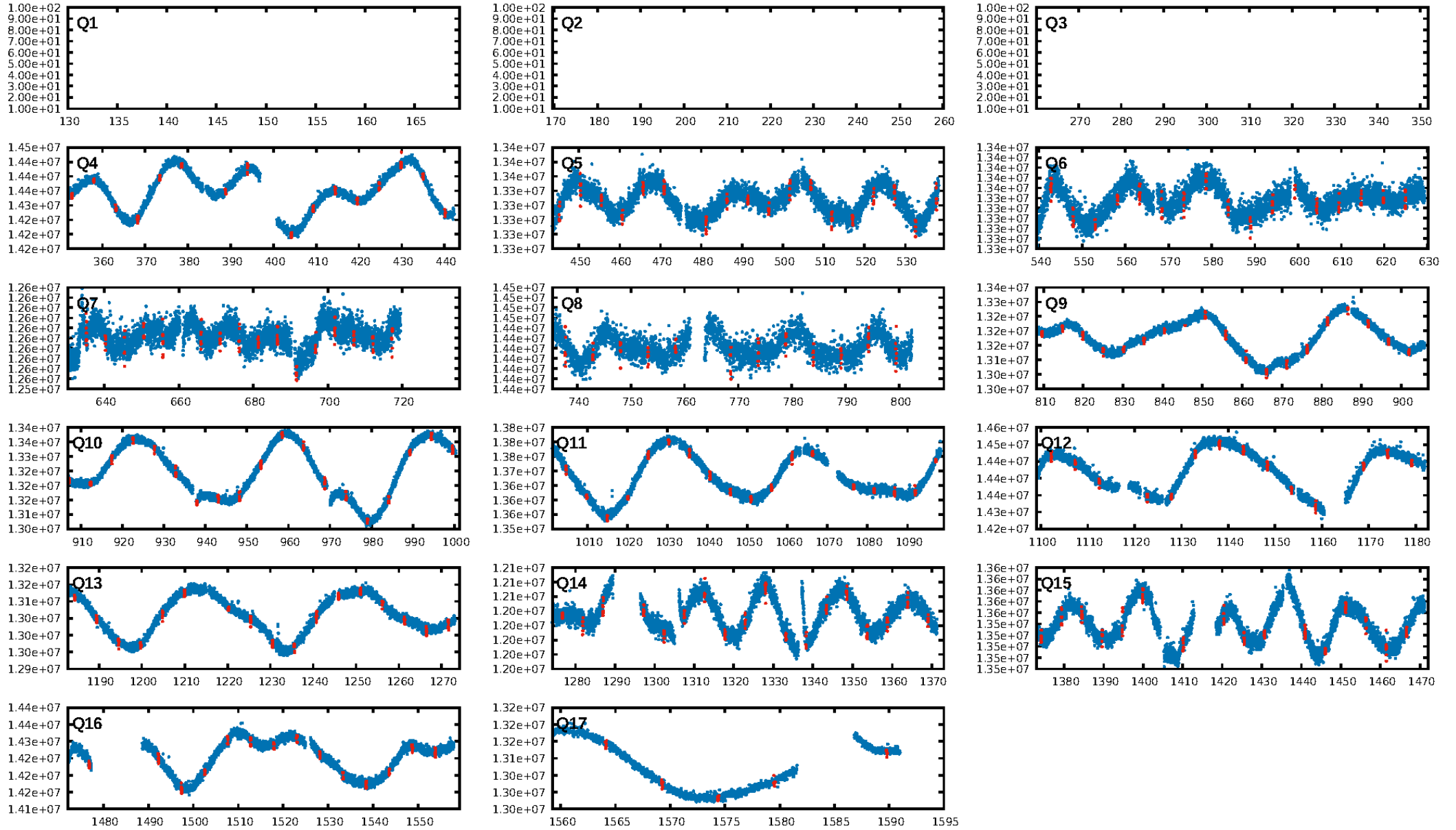
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: 9.63e-194
RollingBand-fgt: 1.00 [212/212]
GhostDiagnostic-chr: 11.69
Centroid-sig: 0.0%
Centroid-so: 1.095 arcsec [3.47σ]
OotOffset-rm: 0.214 arcsec [1.77σ]
OotOffset-st: 3/3/4/4 [14]
KicOffset-rm: 0.478 arcsec [3.53σ]
KicOffset-st: 3/3/4/4 [14]
DiffImageQuality-fgm: 1.00 [14/14]
DiffImageOverlap-fno: 1.00 [14/14]

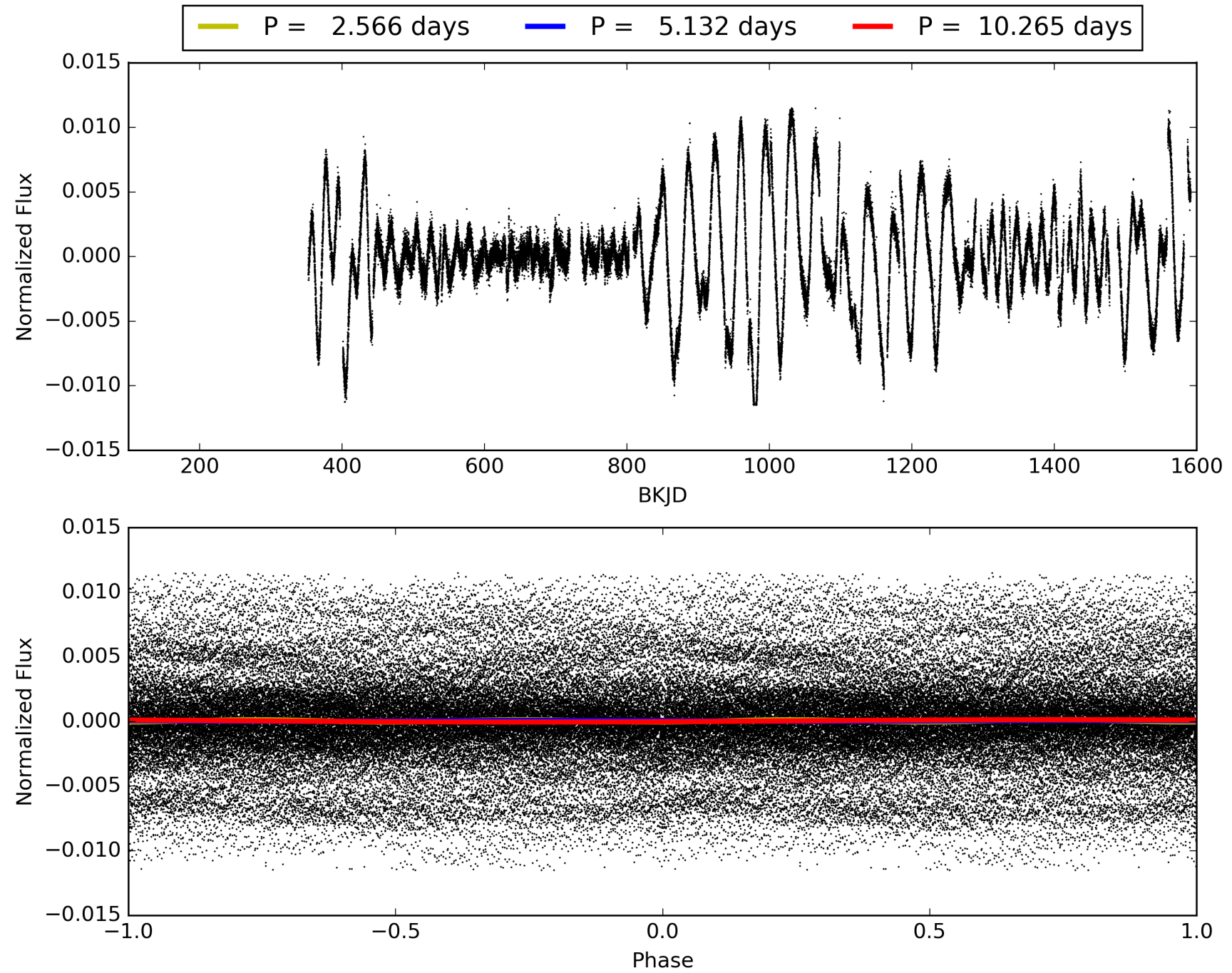
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 28-Jan-2016 21:01:38 Z

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

TCE 011348997-01, PDC Light Curves

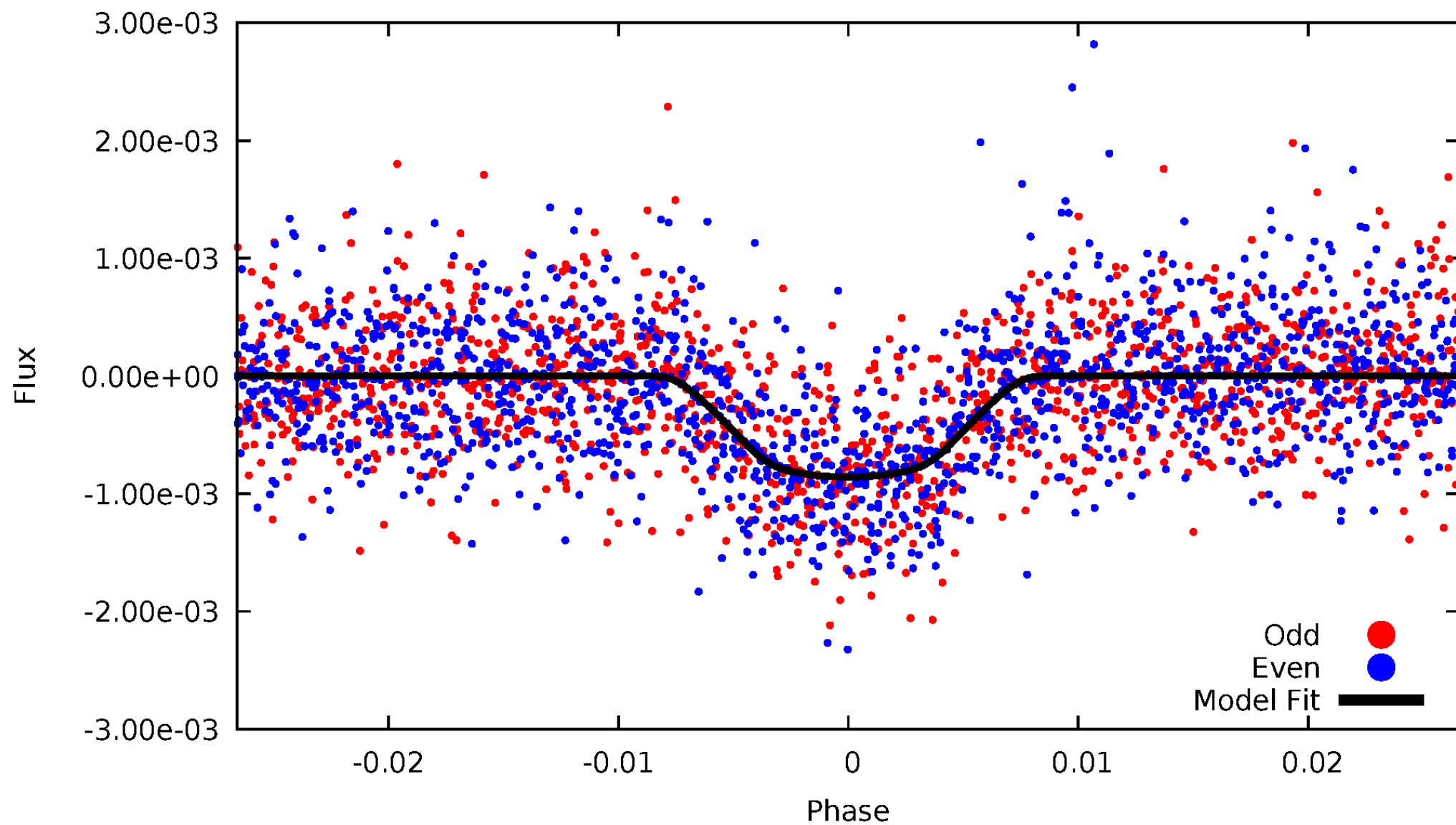


TCE 011348997-01



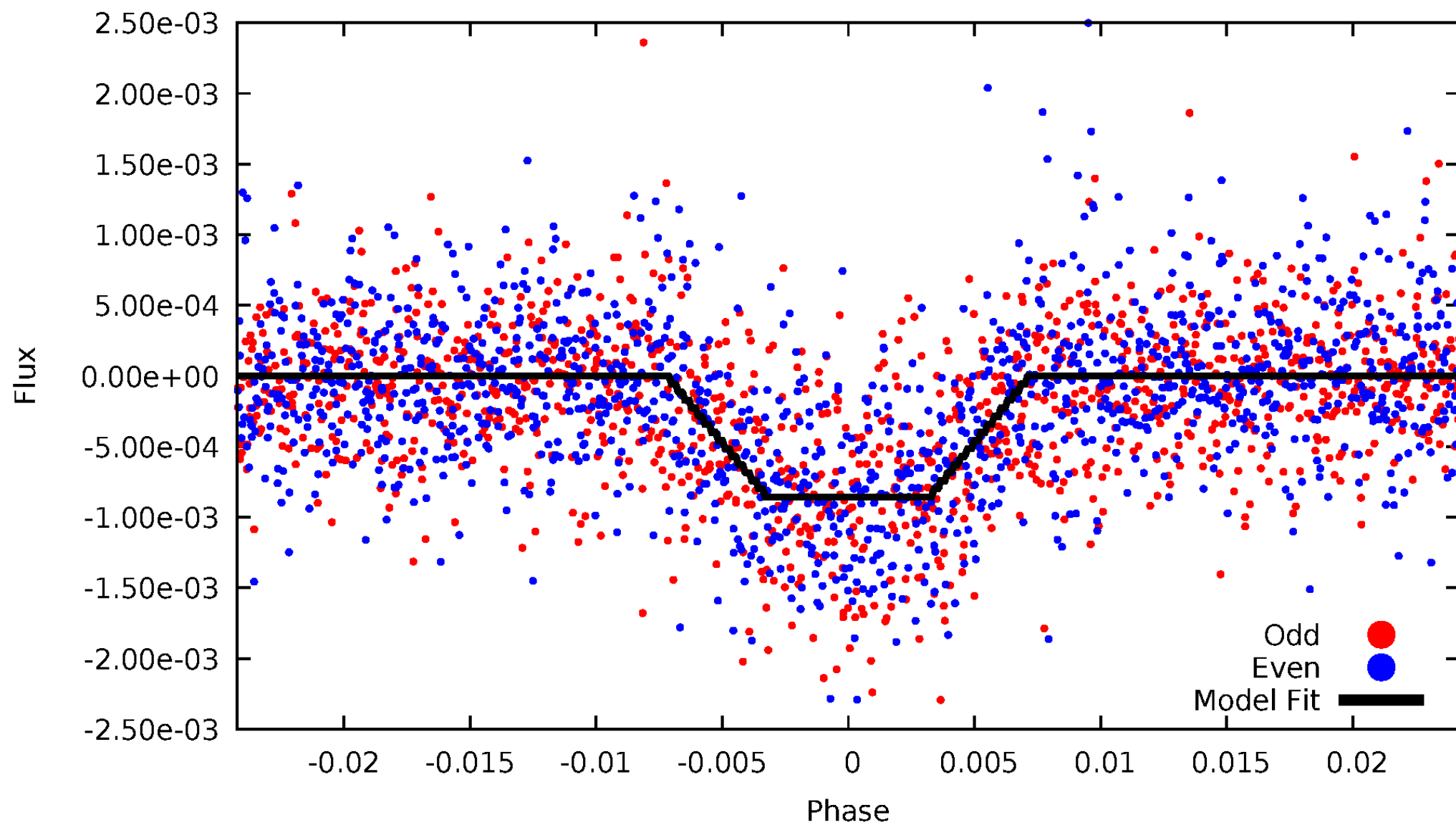
DV Odd/Even

TCE 011348997-01



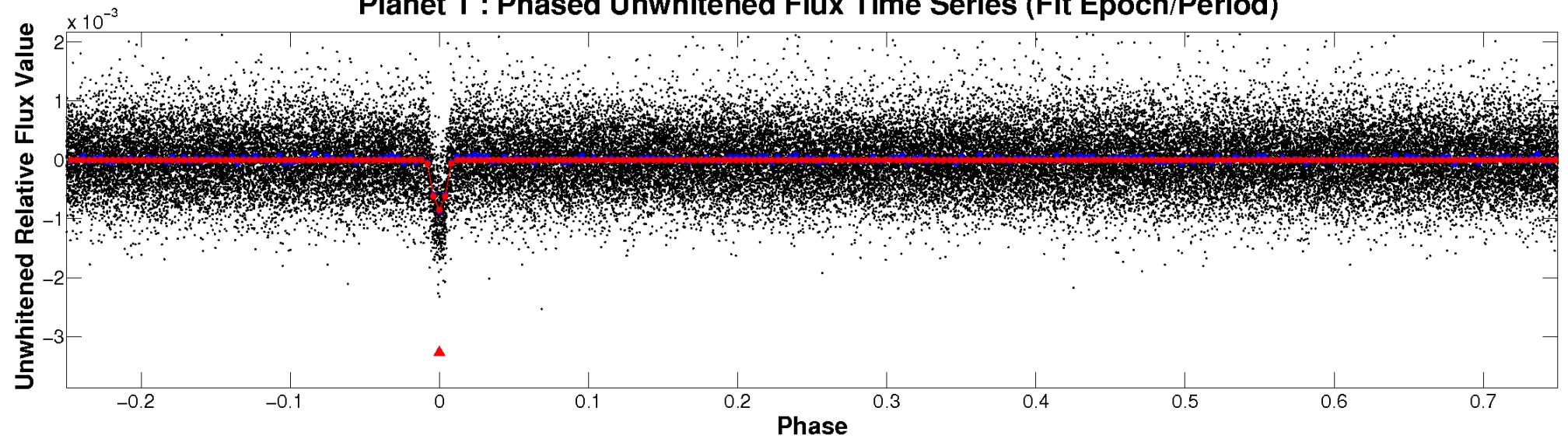
ALT Odd/Even

TCE 011348997-01

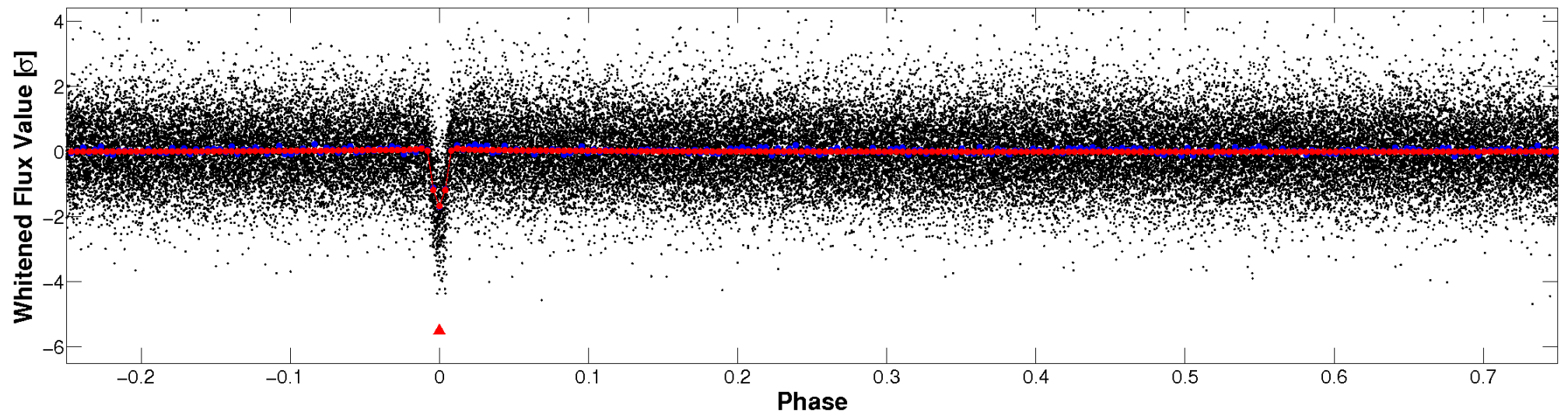


Non-Whitened Vs. Whitened Light Curve

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

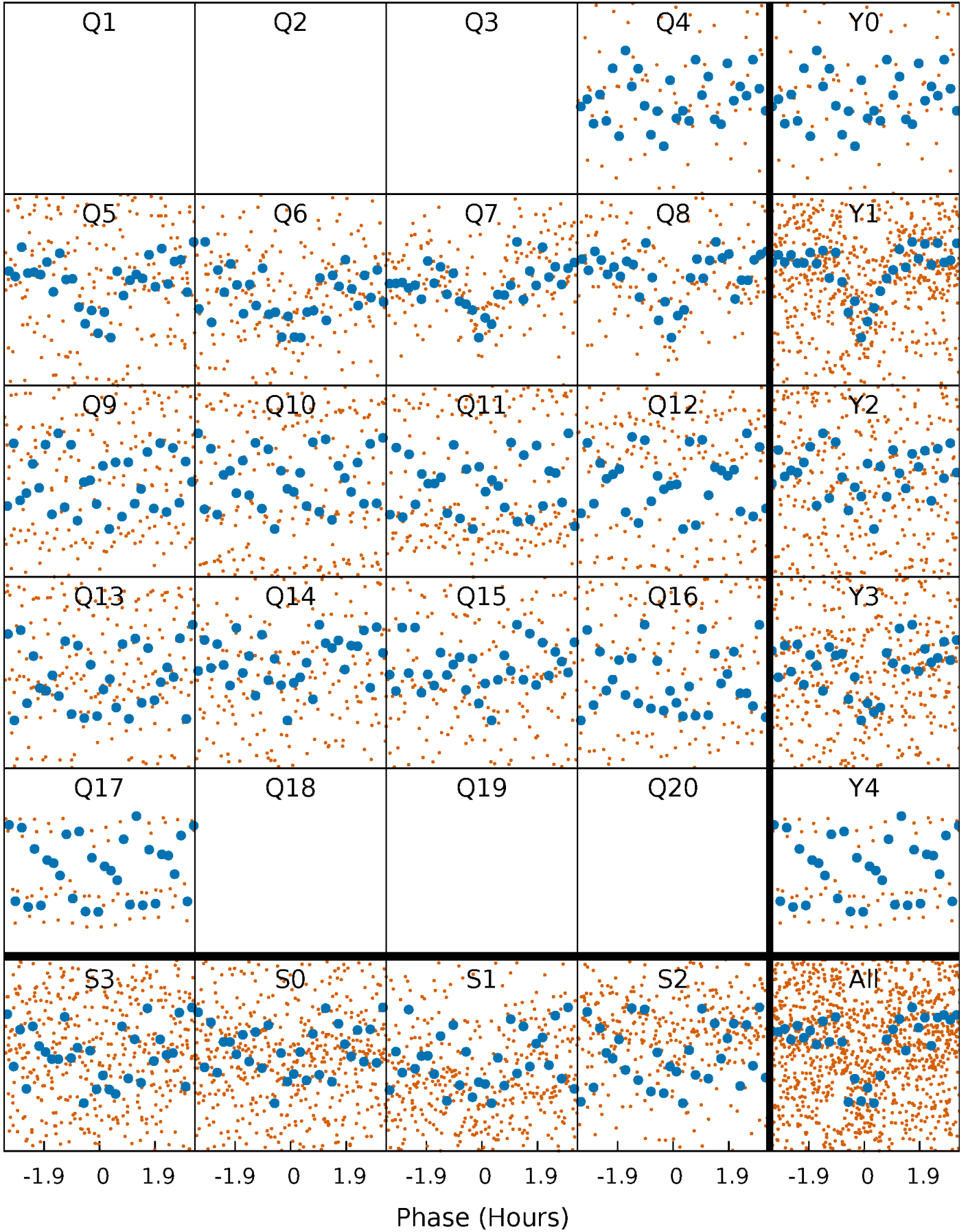


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



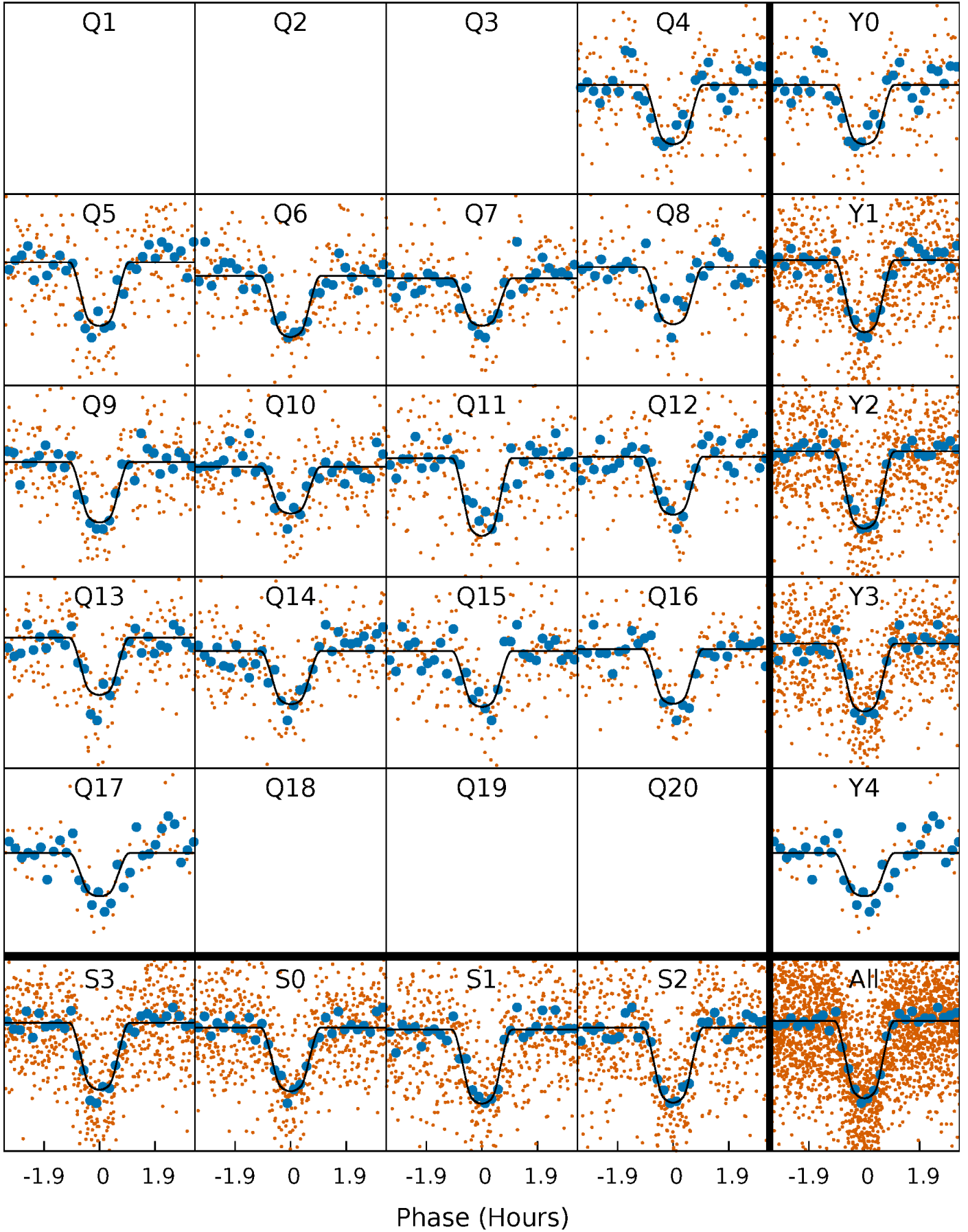
PDC Quarter-Phased Transit Curves

TCE 011348997-01 P= 5.132461 Days $T_0=132.164269$ (BKJD)



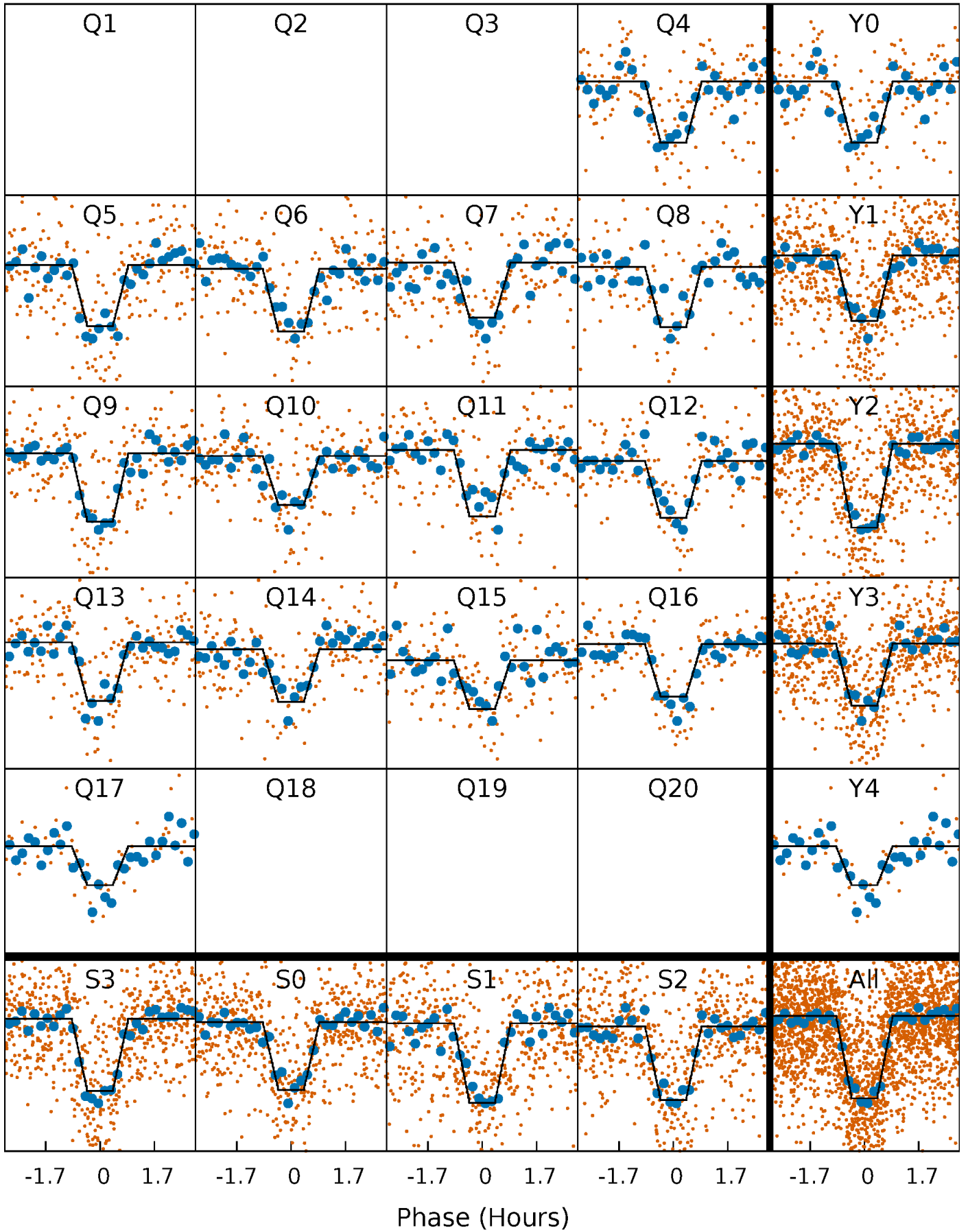
DV Quarter-Phased Transit Curves

TCE 011348997-01 P= 5.132461 Days $T_0=132.164269$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

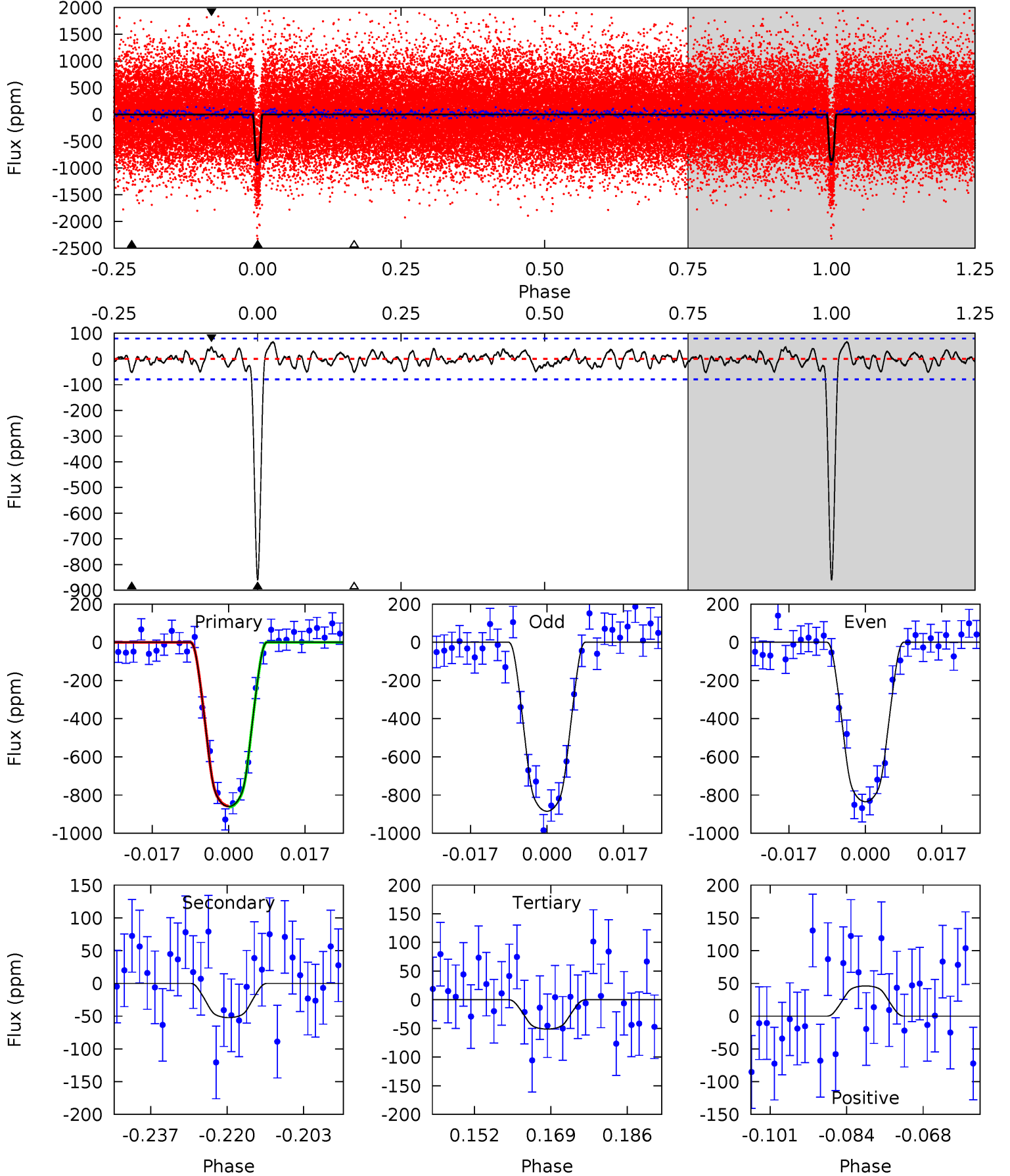
TCE 011348997-01 P= 5.132478 Days $T_0=132.161361$ (BKJD)



DV Model-Shift Uniqueness Test

011348997-01, P = 5.132461 Days, E = 132.164269 Days

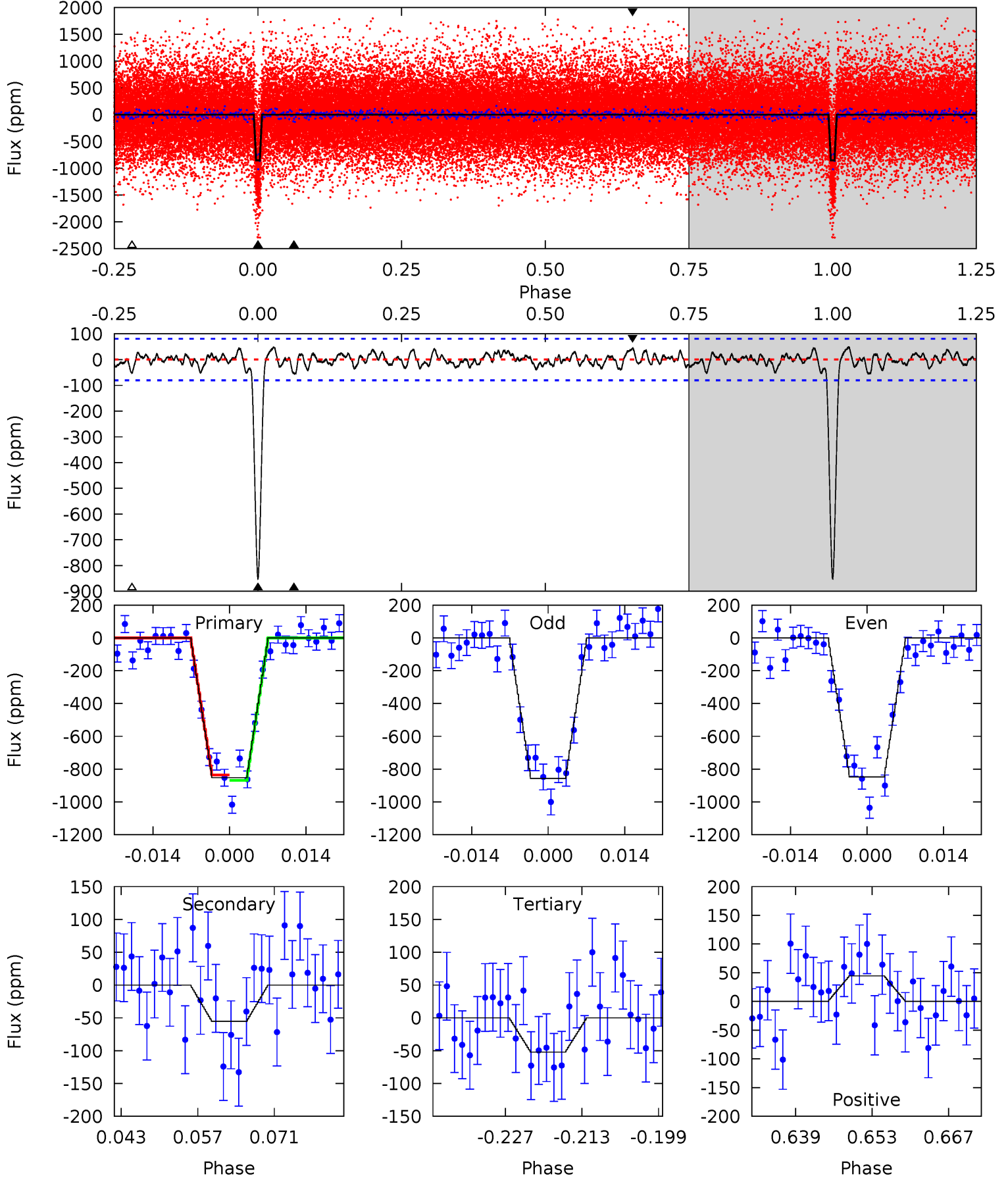
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
53.3	3.24	3.17	2.86	4.92	2.39	1.30	50.2	50.5	0.07	0.38	1.55	1.01	0.07	0.16



Alt Model-Shift Uniqueness Test

011348997-01, P = 5.132478 Days, E = 132.161361 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
52.4	3.40	3.20	2.74	4.96	2.45	1.17	49.2	49.7	0.20	0.66	0.28	0.99	0.05	1.02



Stellar Parameters For KIC 011348997

	$T_{\text{eff}} (K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M (M_{\odot})$	$p_{\star} (g \cdot \text{cm}^{-3})$
	3879^{+77}_{-77}	$4.707^{+0.018}_{-0.036}$	$0.320^{+0.150}_{-0.150}$	$0.578^{+0.032}_{-0.027}$	$0.619^{+0.023}_{-0.035}$	$4.521^{+0.434}_{-0.535}$
	+2%/-2%	+0%/-1%	+47%/-47%	+6%/-5%	+4%/-6%	+10%/-12%
Source	SPE70	SPE60	SPE70	DSEP		

KIC = Kepler Input Catalog; PHO = Photometry; SPE = Spectroscopy; AST = Asteroseismology
 TRA = Transits; DESP = Dartmouth Models; MULT = Multiple Models

Secondary Eclipse Parameters for KIC 011348997-01 / KOI 2090.01

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	A_{obs}
DV	-52 ± 16	$2.09^{+0.30}_{-0.28}$	820^{+19}_{-18}	2497^{+140}_{-128}	16^{+8}_{-5}
Alt.	-55 ± 16	$1.87^{+0.29}_{-0.30}$	818^{+19}_{-18}	2586^{+151}_{-149}	22^{+11}_{-8}

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

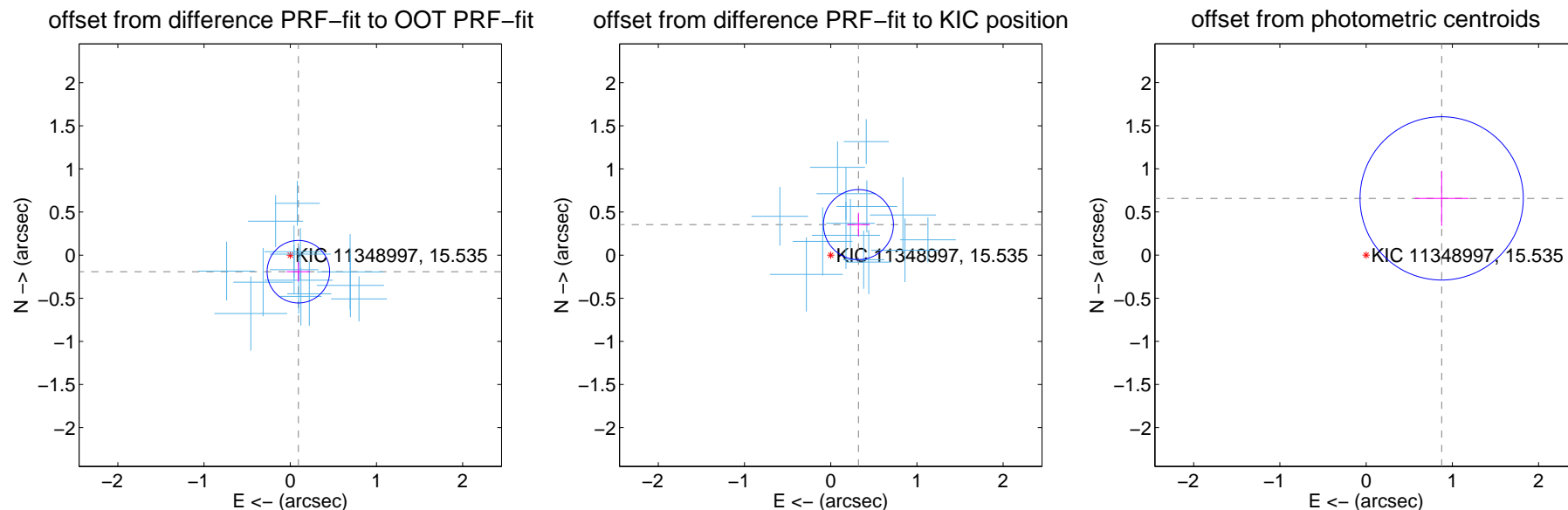
DV Centroid Data

Supplemental centroid analysis for 011348997-01. Kepler magnitude: 15.54. Transit SNR 34.95

There are 14 quarters with good PRF difference image offsets

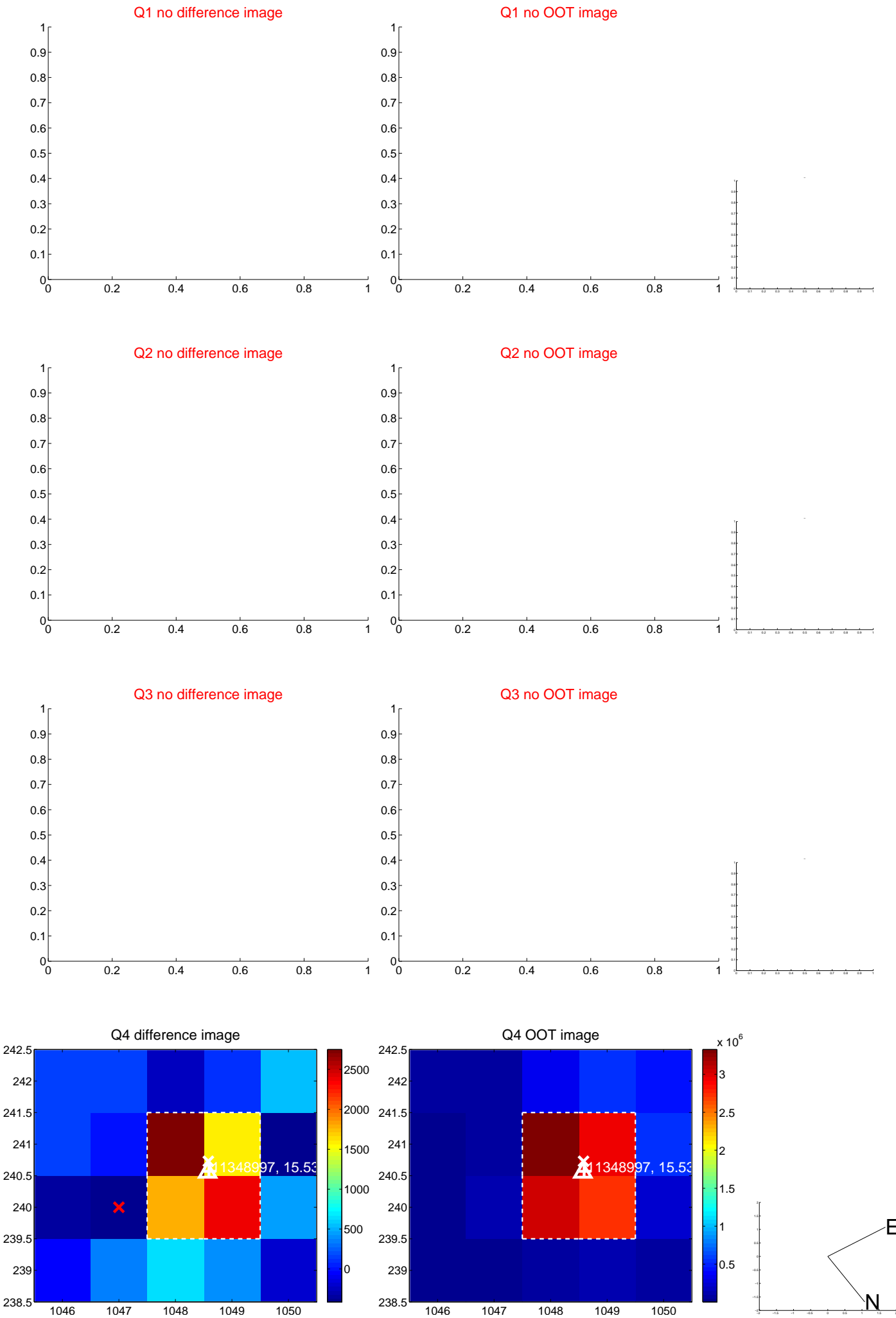
The direct PRF centroid is offset from the target star catalog position by about 0.67 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.214 ± 0.121	1.77	-0.094 ± 0.135	-0.192 ± 0.115
PRF-fit source offset from KIC position	0.478 ± 0.135	3.53	-0.321 ± 0.131	0.354 ± 0.137
photometric centroid source offset	1.10 ± 0.32	3.47	-0.88 ± 0.31	0.66 ± 0.32

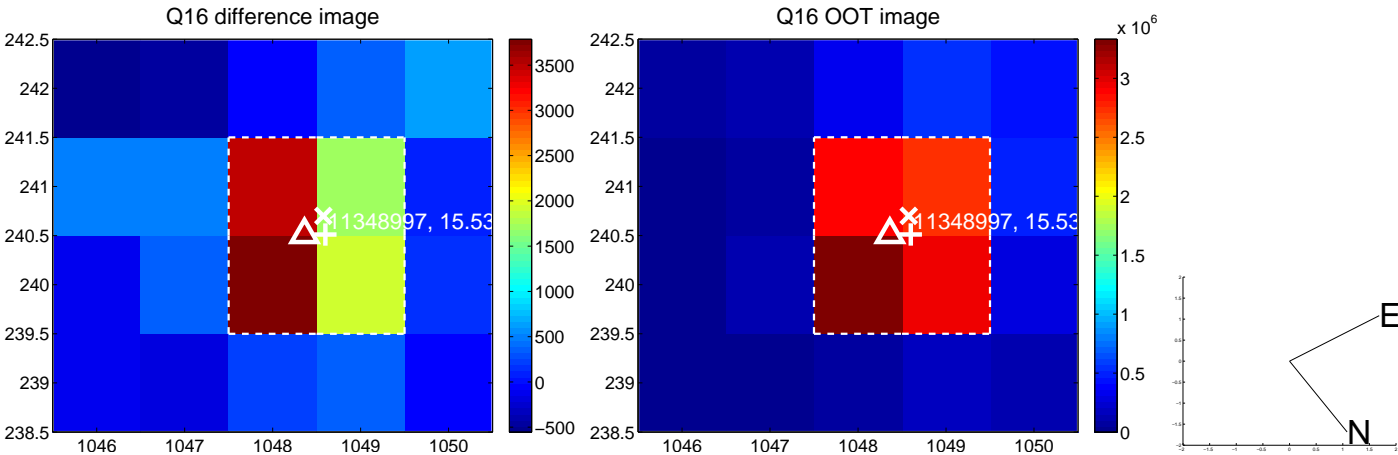
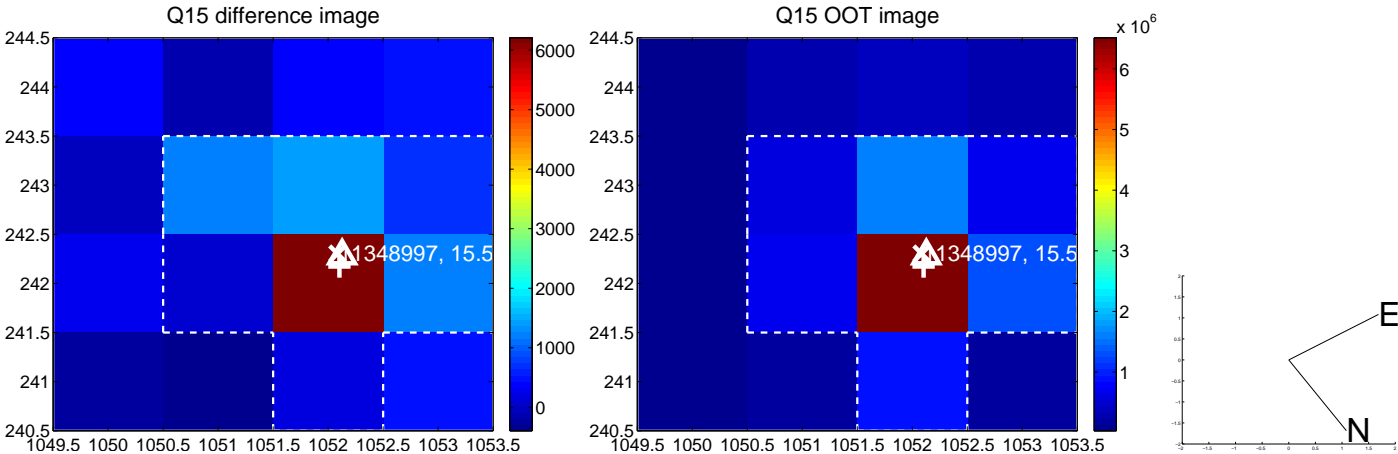
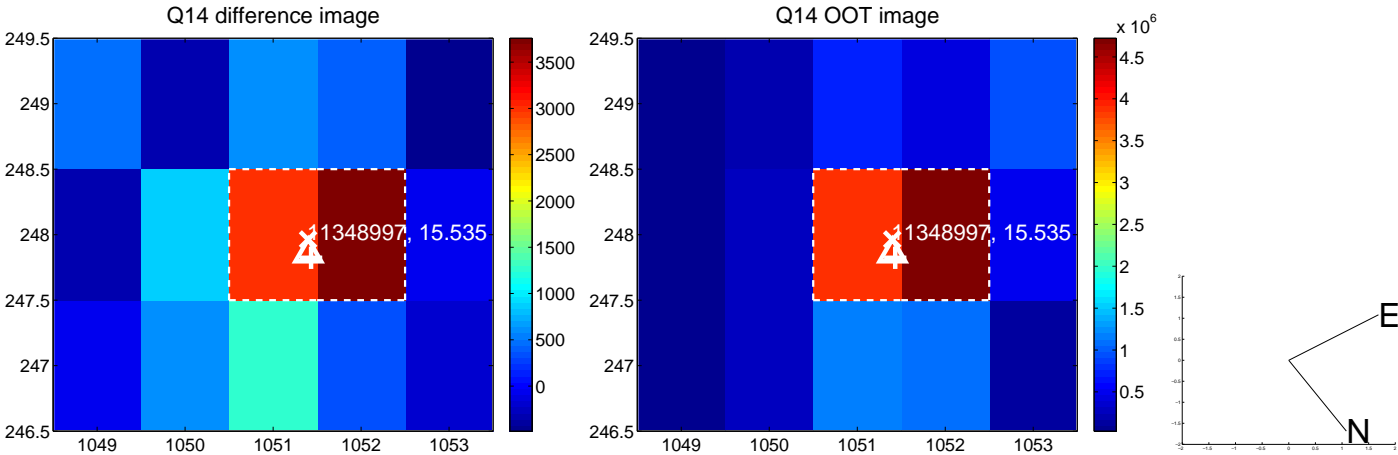
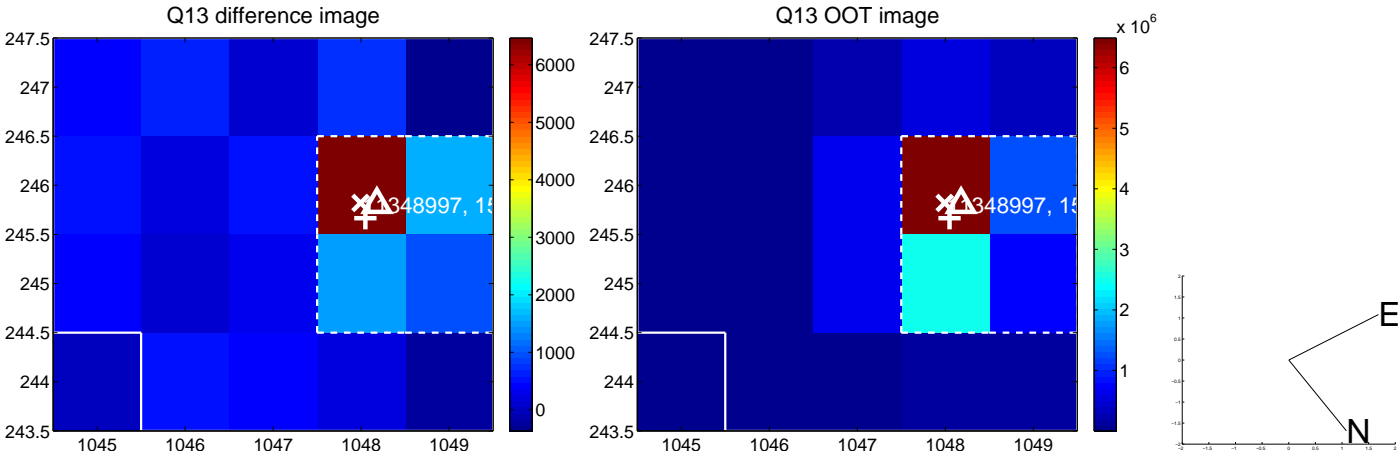


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses:** good quarterly centroid offsets; **Vermillion crosses:** bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

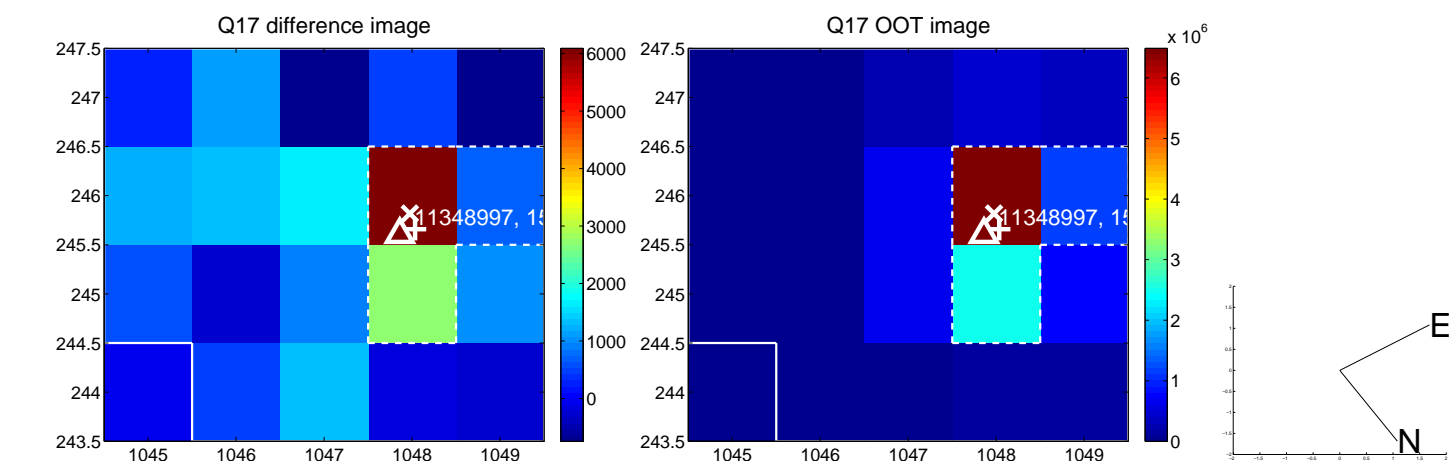
white ×: KIC target position; +: OOT centroid; △: difference centroid. red ×: large negative pixel value.



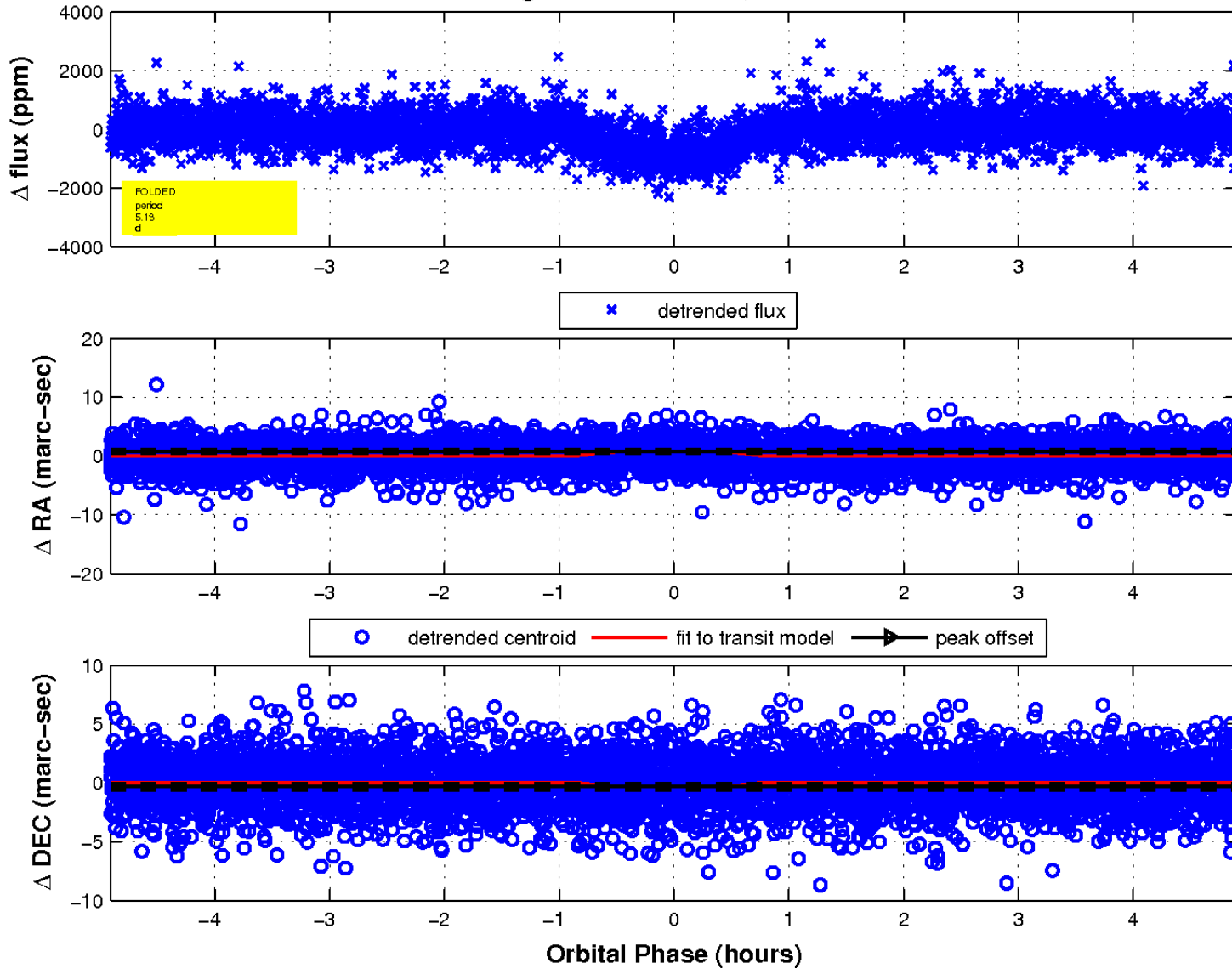
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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



fluxWeightedCentroids, Planet 1 of 1



UKIRT Image

Declination

