

KIC 011768142

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})
011768142-01	OBS	2626.01	38.097219	140.003601	924.1	3.665	14.6	16.2	0.40	3554	1.46	0.81

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
011768142-01	OBS	PC	1.00	0	0	0	0	NO_COMMENT

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 011768142-01

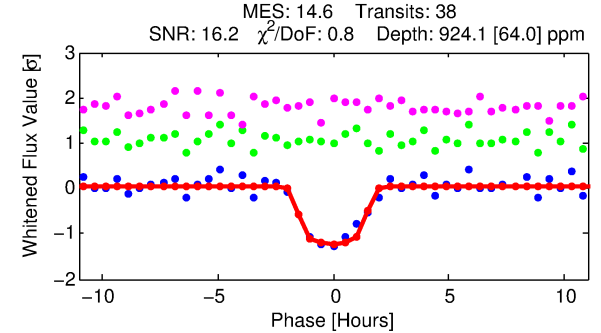
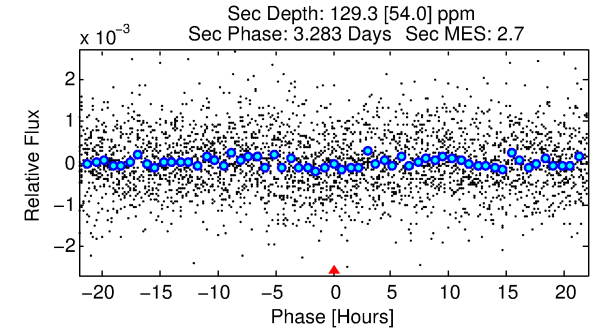
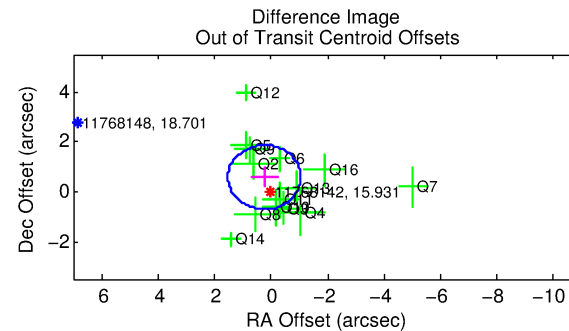
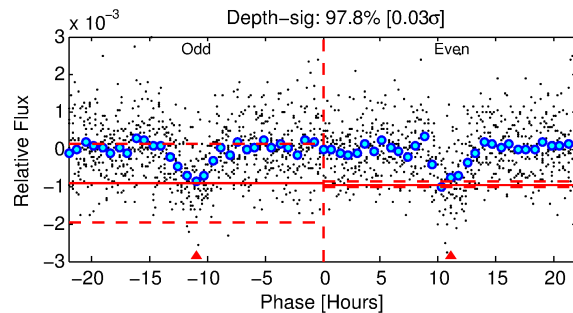
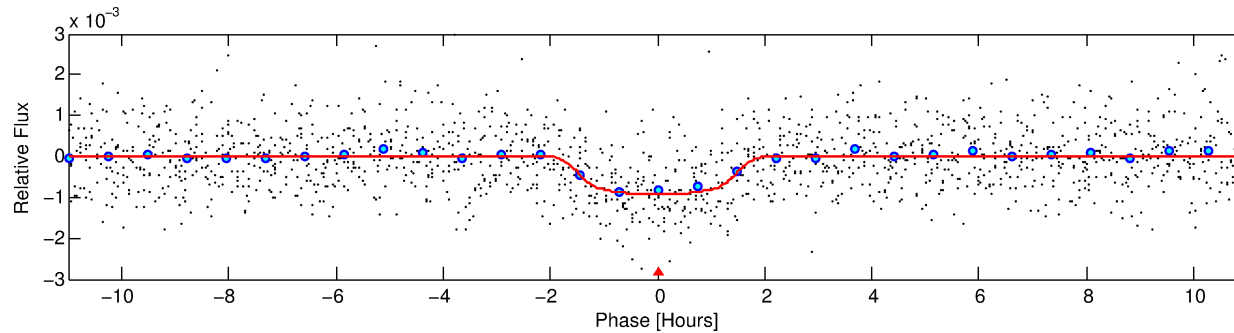
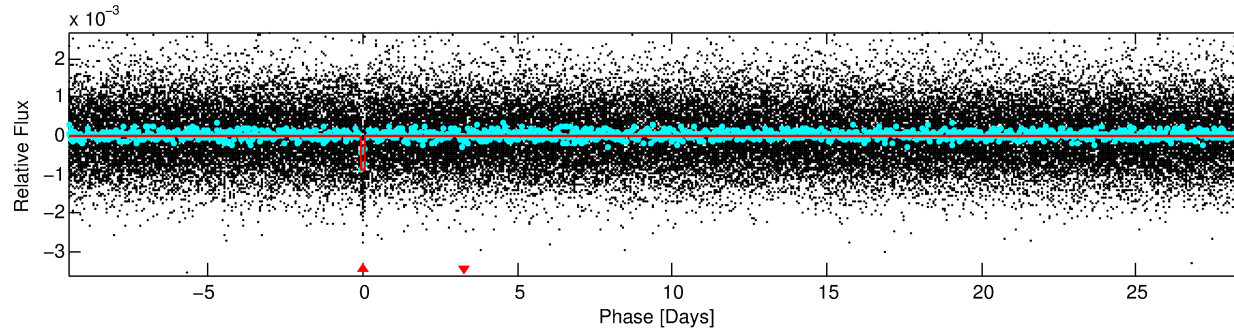
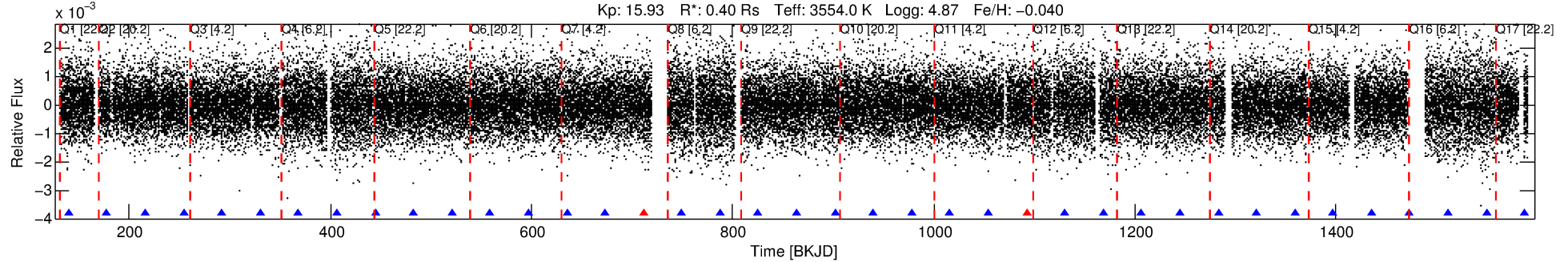
No Significant Match Found

DV One-Page Summary

KIC: 11768142 Candidate: 1 of 1 Period: 38.097 d

KOI: K02626.01 Corr: 0.960

Kp: 15.93 R*: 0.40 Rs Teff: 3554.0 K Logg: 4.87 Fe/H: -0.040



DV Fit Results:

Period = 38.09722 [0.00025] d
Epoch = 140.0036 [0.0053] BKJD
Rp/R* = 0.0337 [0.0037]
a/R* = 38.73 [16.02]
b = 0.91 [0.08]
Seff = 0.82 [0.12]
Teq = 242 [9] K
Rp = 1.46 [0.26] Re
a = 0.1667 [0.0166] AU
Ag = 924.51 [451.54] [2.05σ]
Teffp = 2066 [248] K [7.34σ]

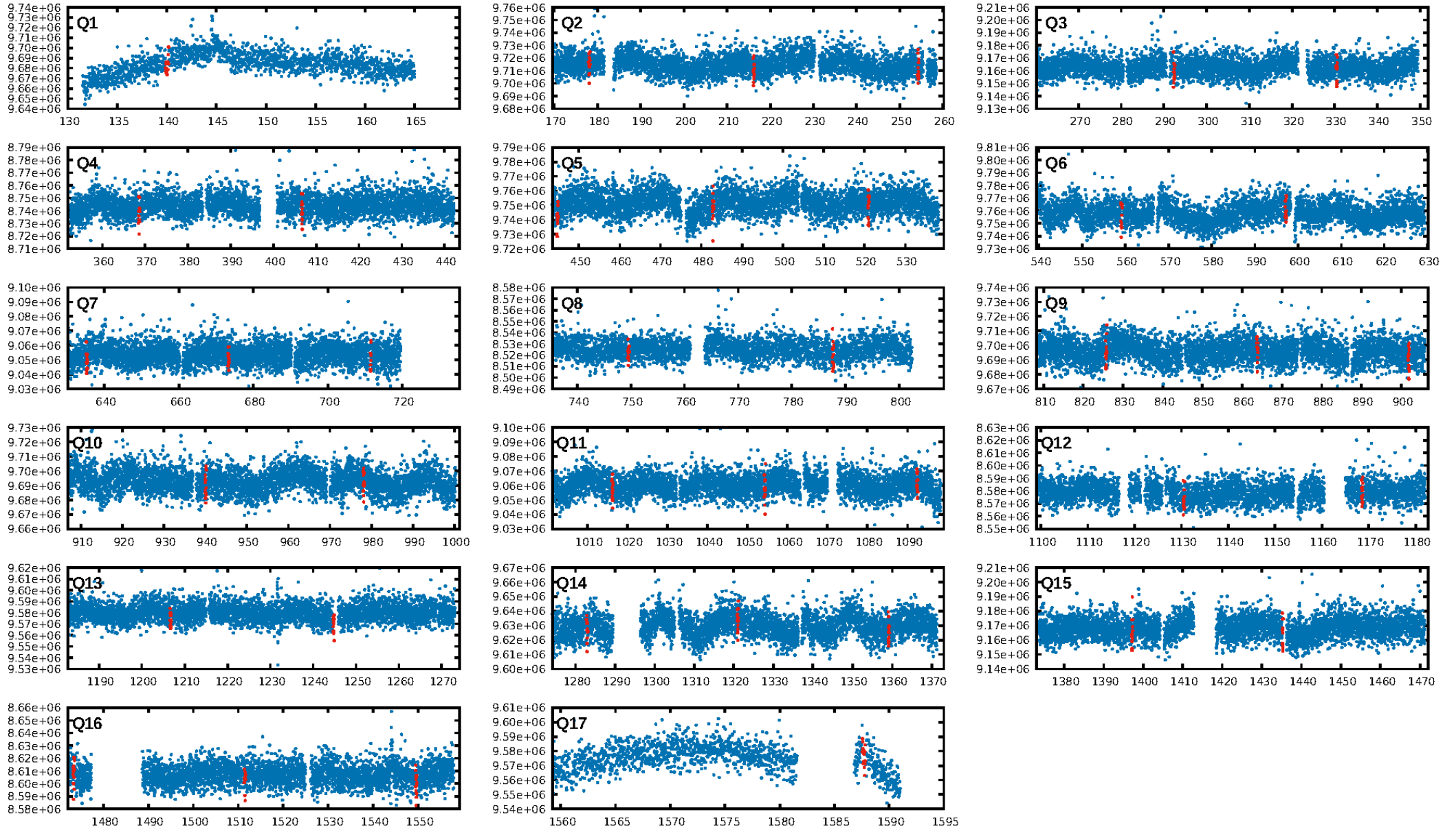
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: 99.1%
ModelChiSquareGof-sig: 100.0%
Bootstrap-pfa: 5.49e-47
RollingBand-fgt: 0.94 [34/36]
GhostDiagnostic-chr: 19.28
Centroid-sig: 0.0%
Centroid-so: 3.423 arcsec [3.55σ]
OotOffset-rm: 0.620 arcsec [1.45σ]
KicOffset-rm: 0.657 arcsec [1.60σ]
OotOffset-st: 4/3/4/3 [14]
KicOffset-st: 4/3/4/3 [14]
DiffImageQuality-fgm: 0.43 [6/14]
DiffImageOverlap-fno: 1.00 [15/15]

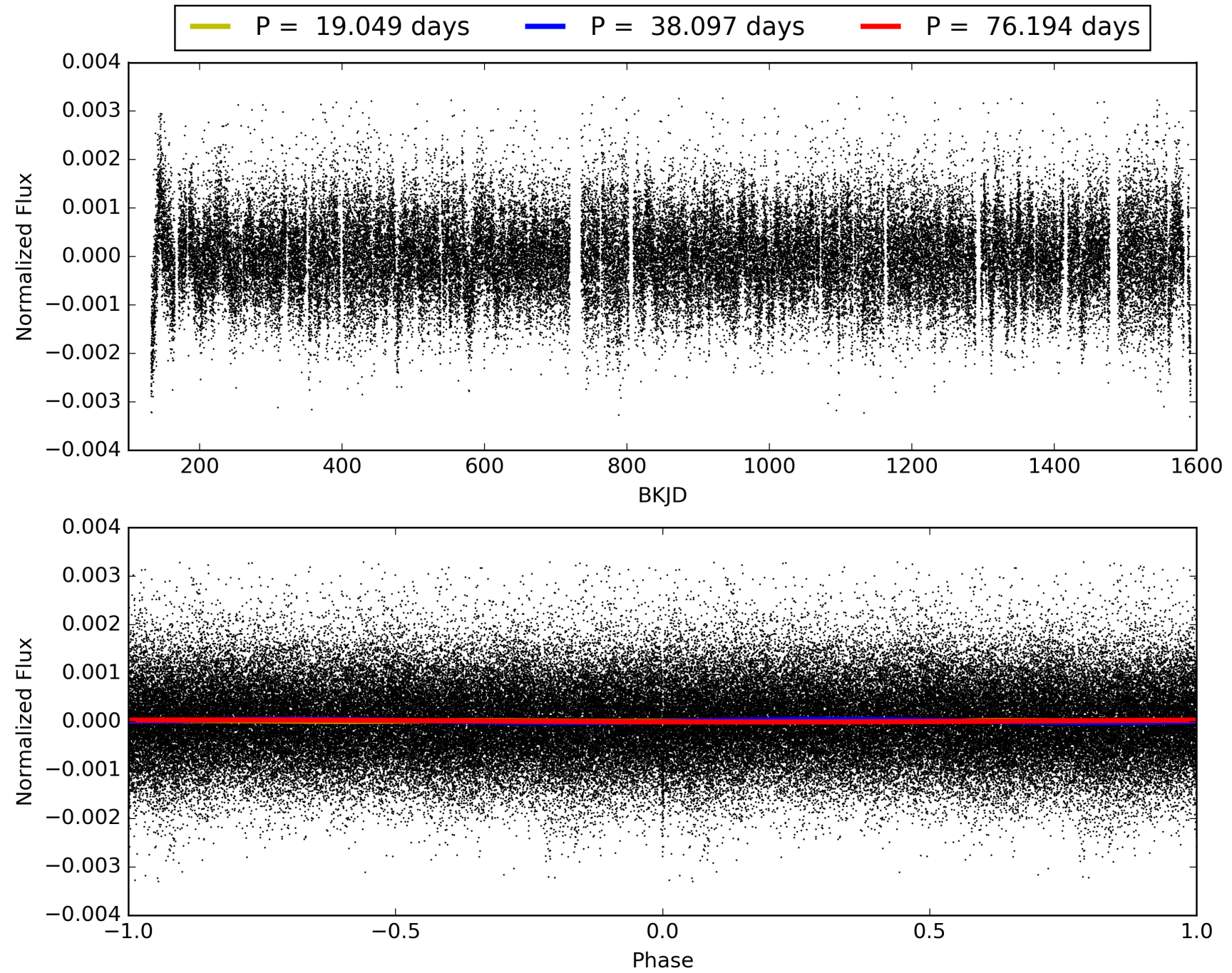
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 28-Jan-2016 21:35:28 Z

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

TCE 011768142-01, PDC Light Curves

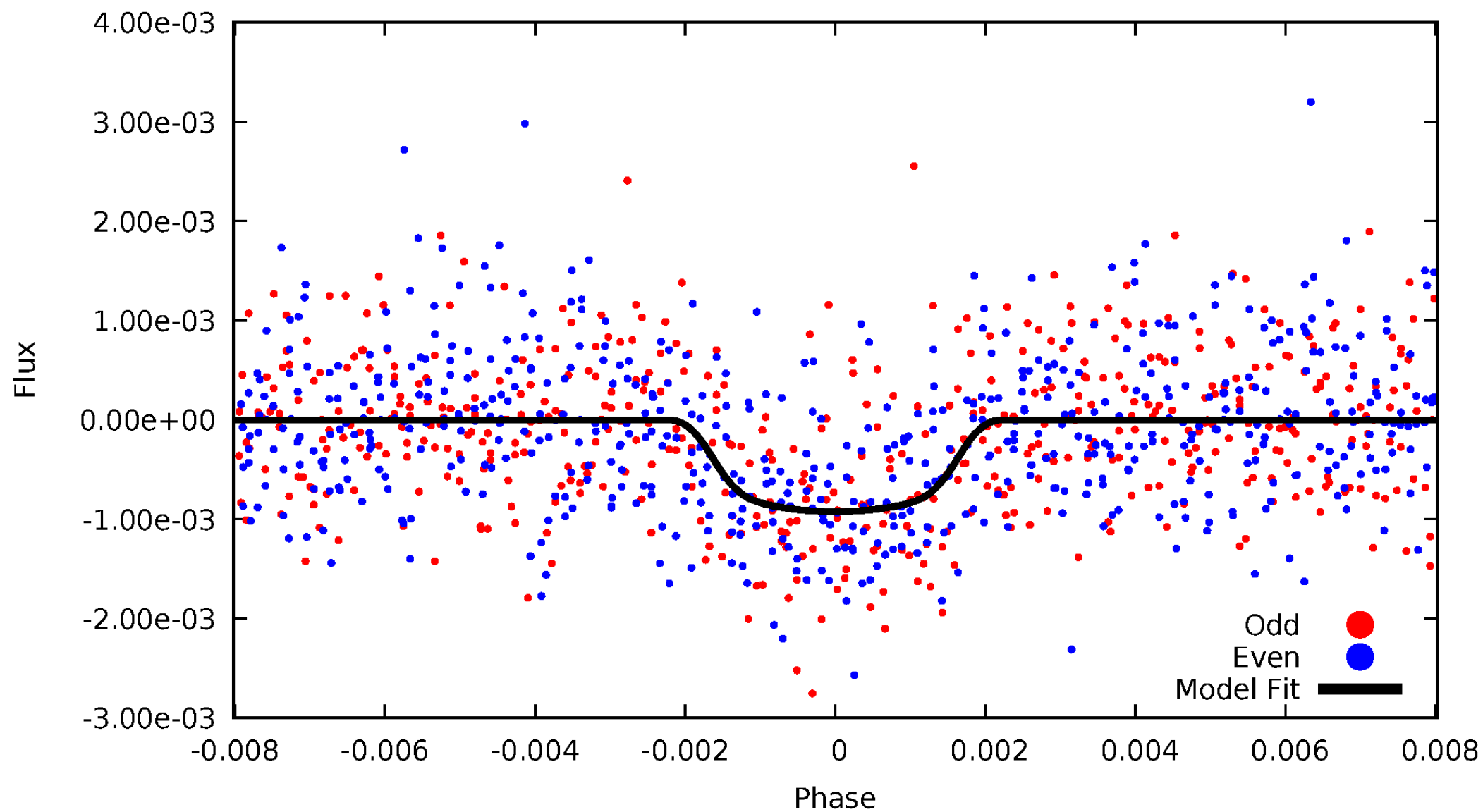


TCE 011768142-01



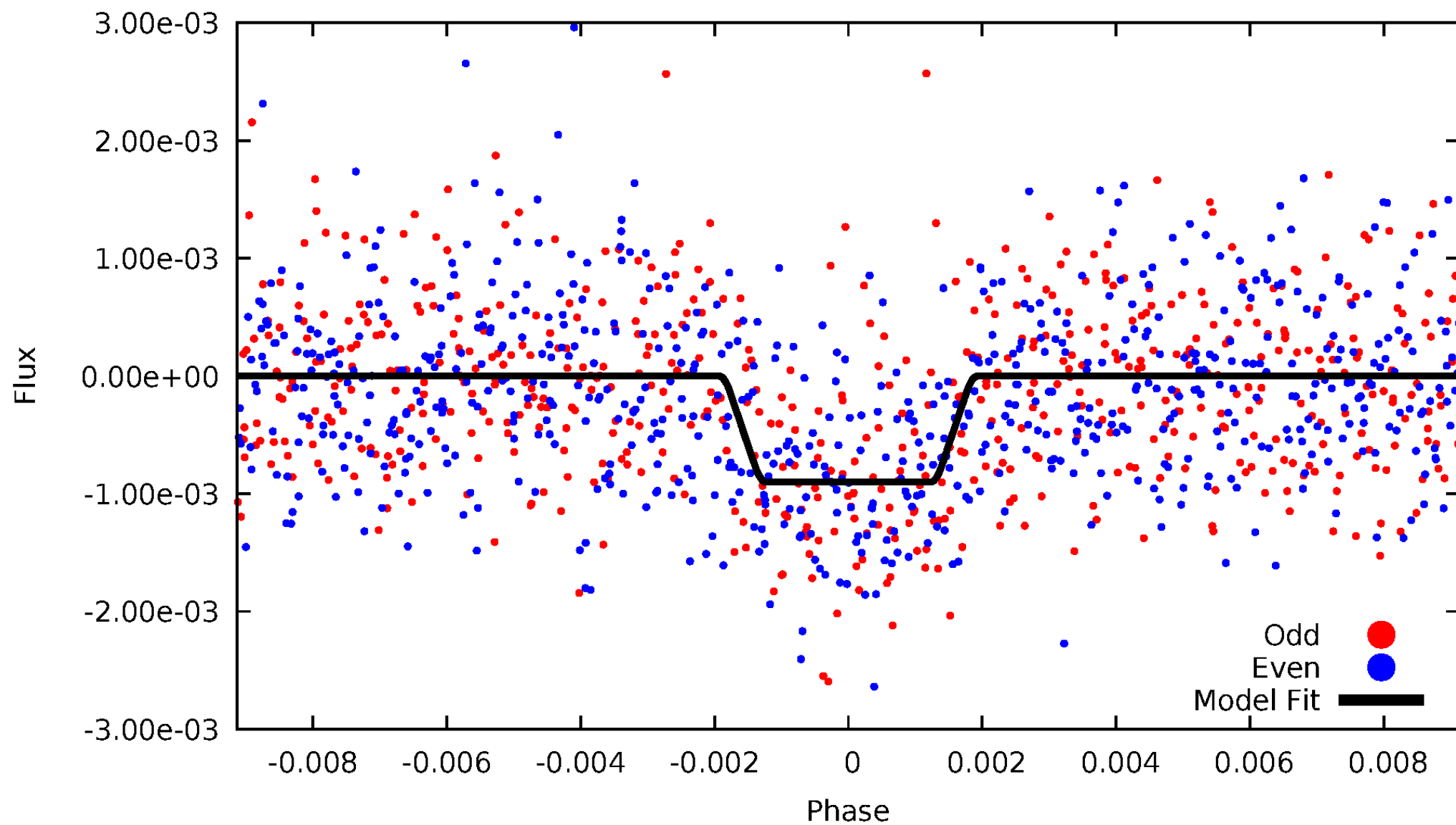
DV Odd/Even

TCE 011768142-01



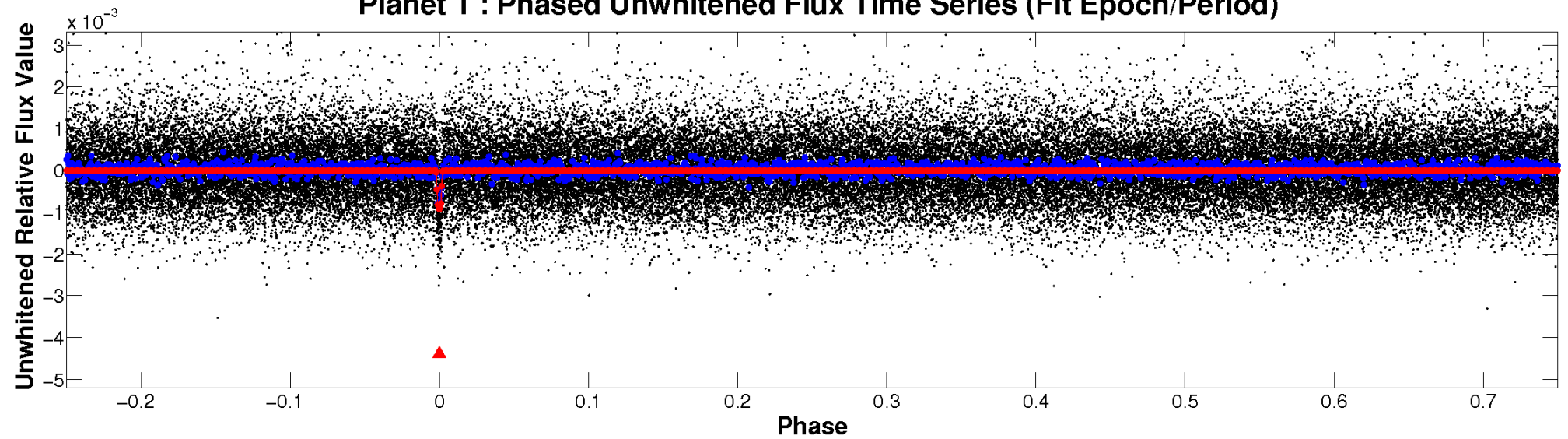
ALT Odd/Even

TCE 011768142-01

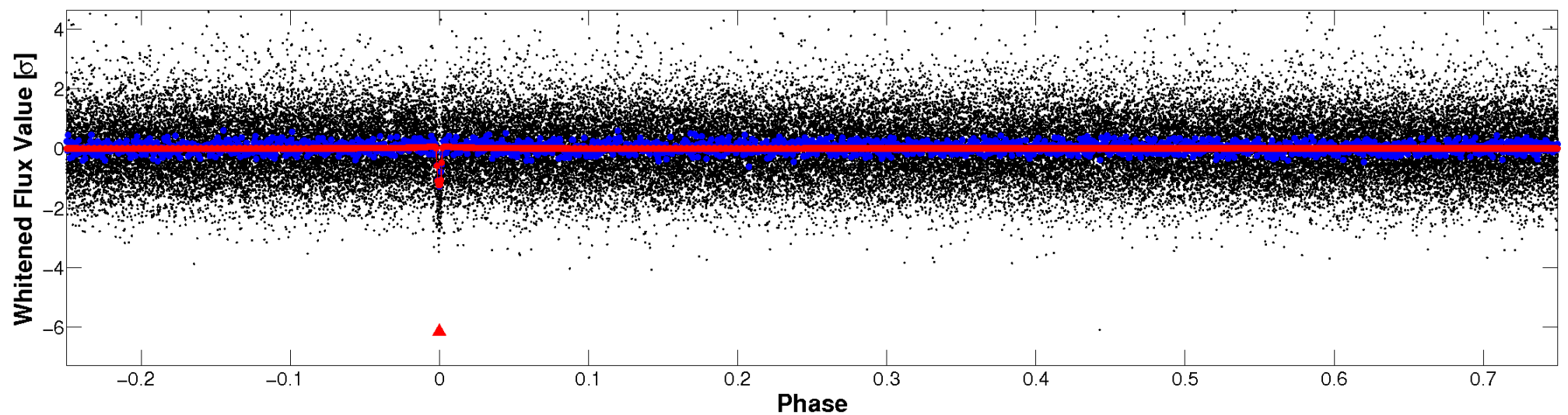


Non-Whitened Vs. Whitened Light Curve

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

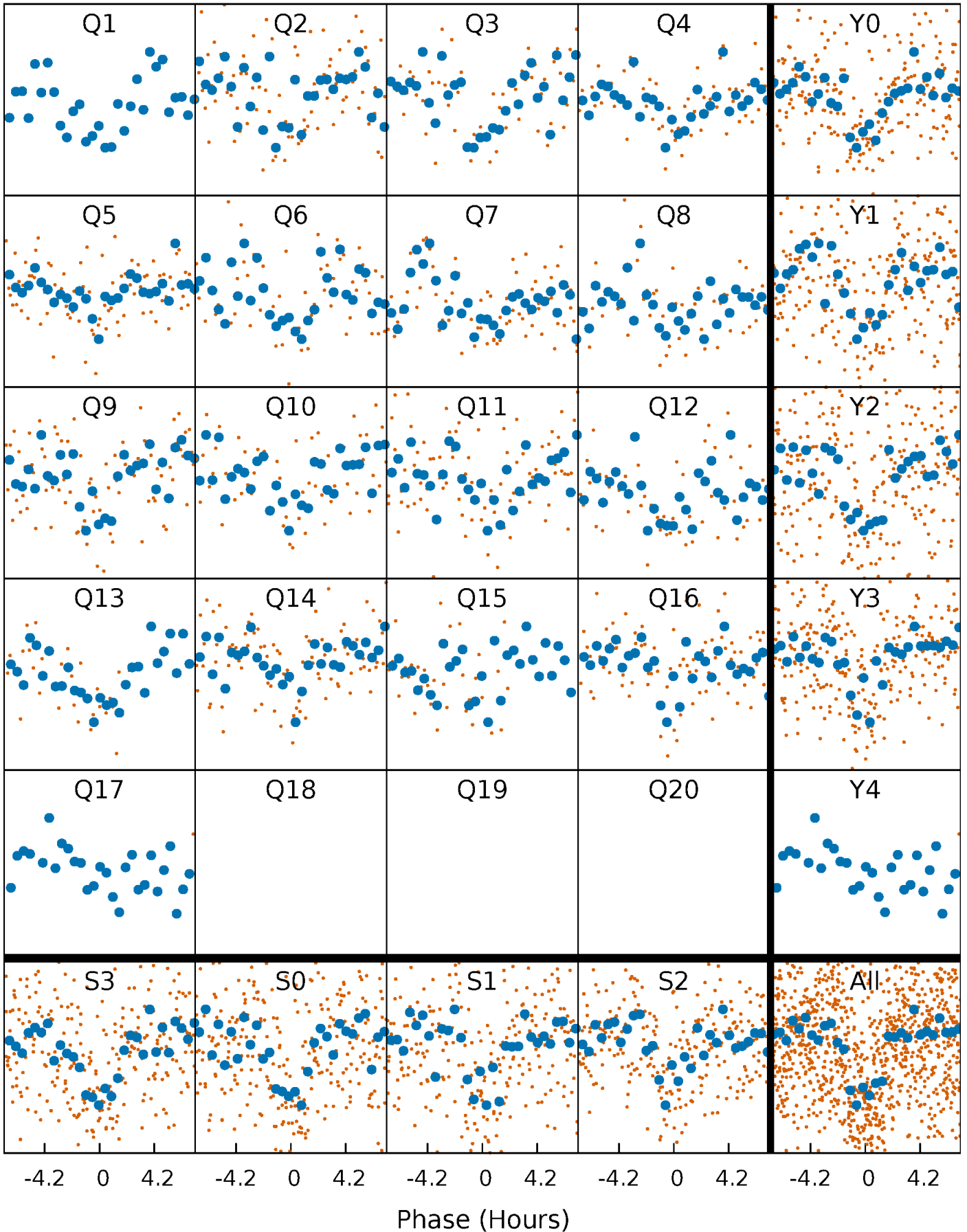


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



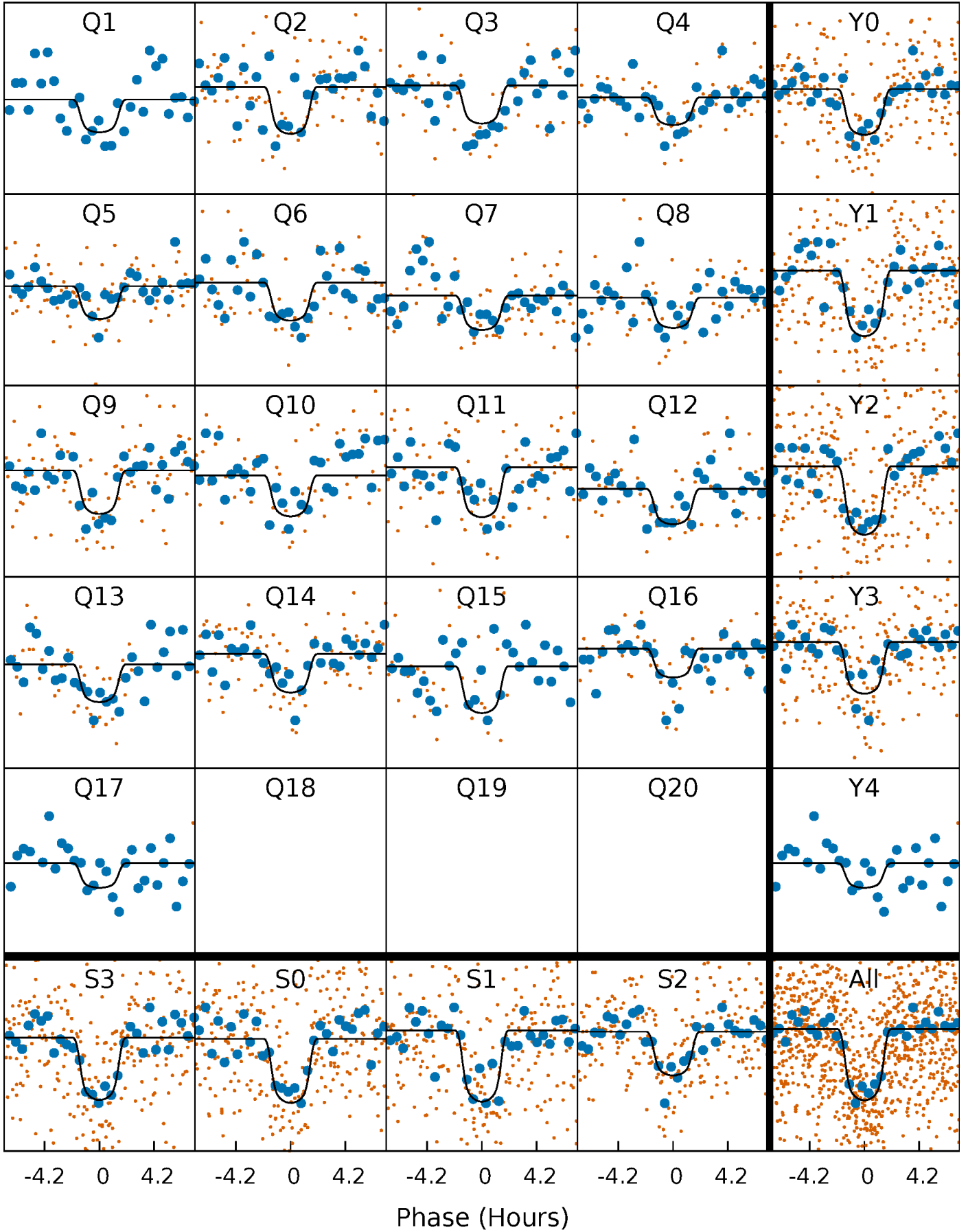
PDC Quarter-Phased Transit Curves

TCE 011768142-01 P= 38.097219 Days $T_0=140.003601$ (BKJD)



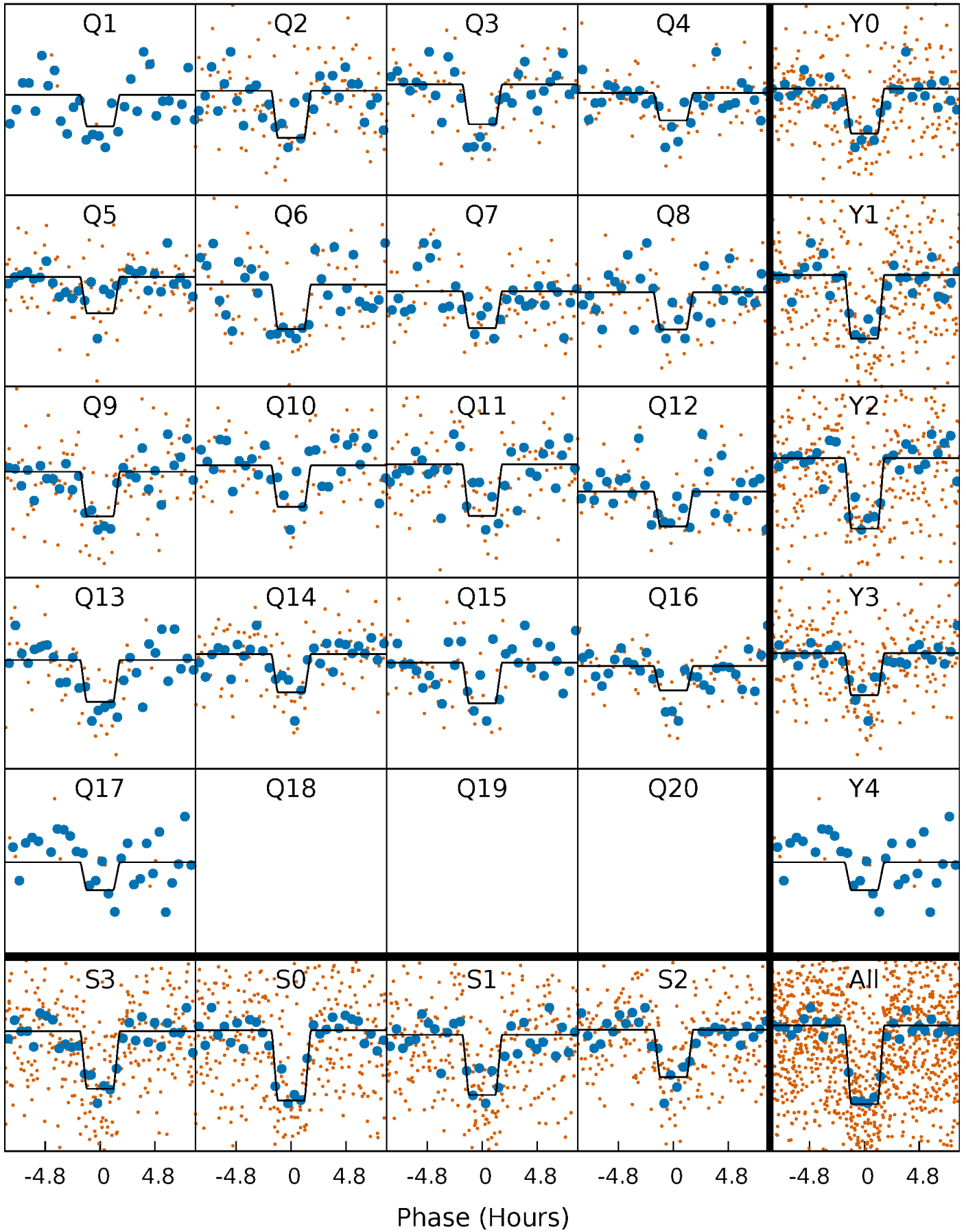
DV Quarter-Phased Transit Curves

TCE 011768142-01 P= 38.097219 Days $T_0=140.003601$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

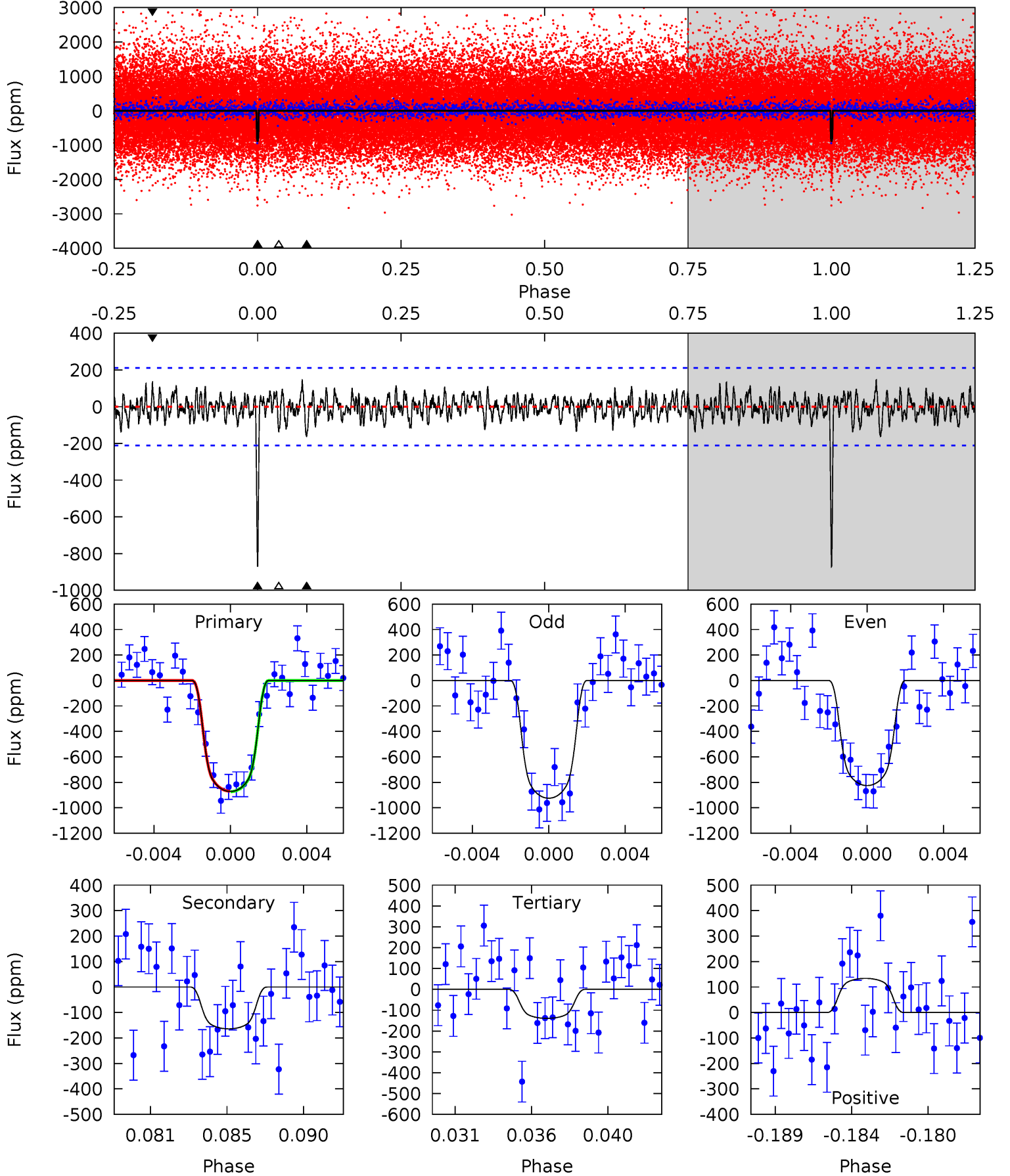
TCE 011768142-01 P= 38.097043 Days $T_0=140.004934$ (BKJD)



DV Model-Shift Uniqueness Test

011768142-01, $P = 38.097219$ Days, $E = 101.906382$ Days

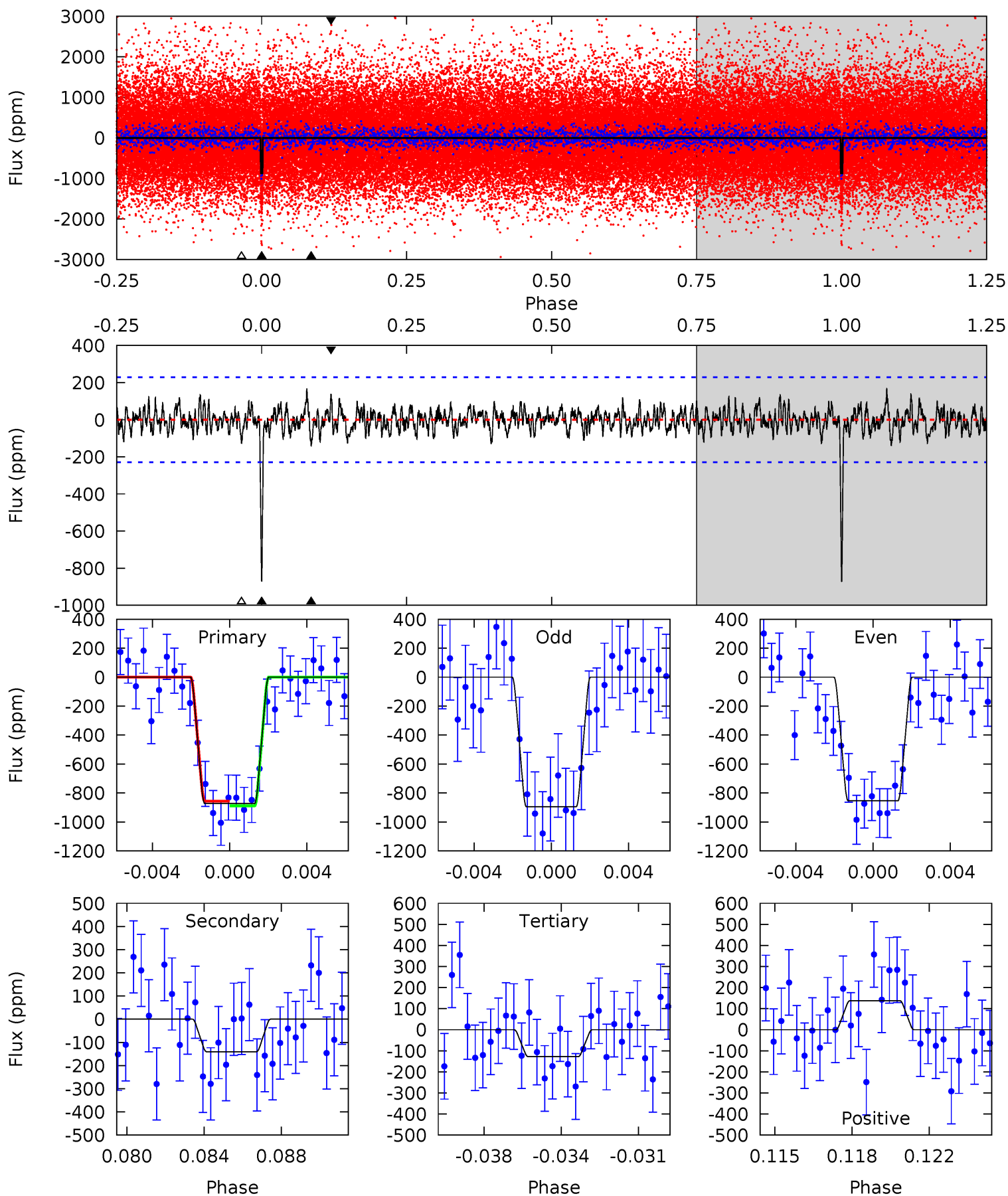
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
21.4	4.03	3.42	3.29	5.18	2.84	1.17	18.0	18.1	0.61	0.74	1.22	0.99	0.14	0.04



Alt Model-Shift Uniqueness Test

011768142-01, $P = 38.097043$ Days, $E = 101.907891$ Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
19.8	3.19	2.91	3.13	5.21	2.89	1.05	16.9	16.7	0.27	0.05	0.47	1.02	0.16	0.36



Stellar Parameters For KIC 011768142

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	3554^{+71}_{-80}	$4.867^{+0.055}_{-0.055}$	$-0.040^{+0.150}_{-0.150}$	$0.398^{+0.049}_{-0.054}$	$0.426^{+0.047}_{-0.076}$	$9.531^{+3.191}_{-2.001}$
	+2%/-2%	+1%/-1%	+375%/-375%	+12%/-14%	+11%/-18%	+33%/-21%
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 011768142-01 / KOI 2626.01

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	-164 ± 41	$1.45^{+0.19}_{-0.18}$	338^{+12}_{-11}	2693^{+114}_{-133}	1182^{+455}_{-380}
Alt.	-140 ± 44	$1.31^{+0.20}_{-0.19}$	339^{+10}_{-11}	2711^{+148}_{-141}	1225^{+597}_{-406}

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 $A_{obs} \gg 1.0$

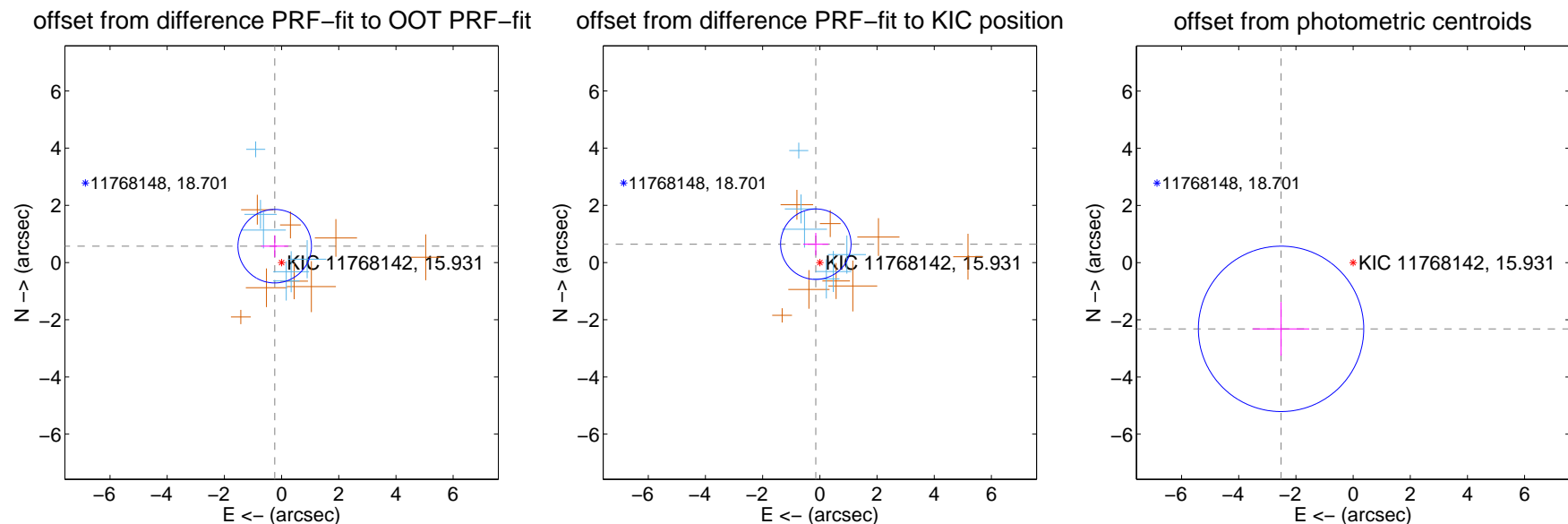
DV Centroid Data

Supplemental centroid analysis for 011768142-01. Kepler magnitude: 15.93. Transit SNR 16.18

There are 6 quarters with good PRF difference image offsets

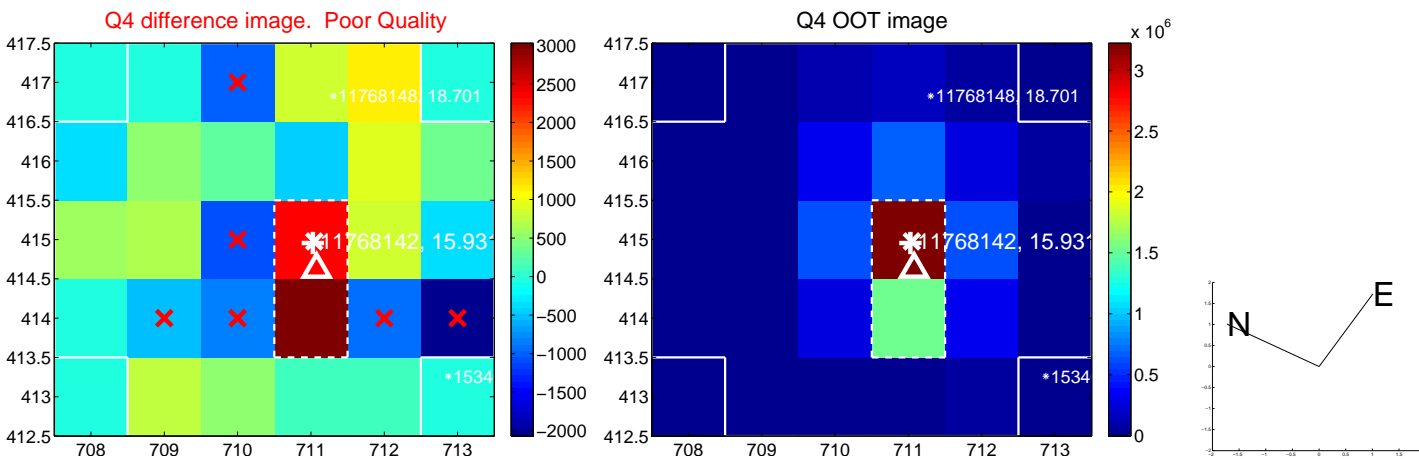
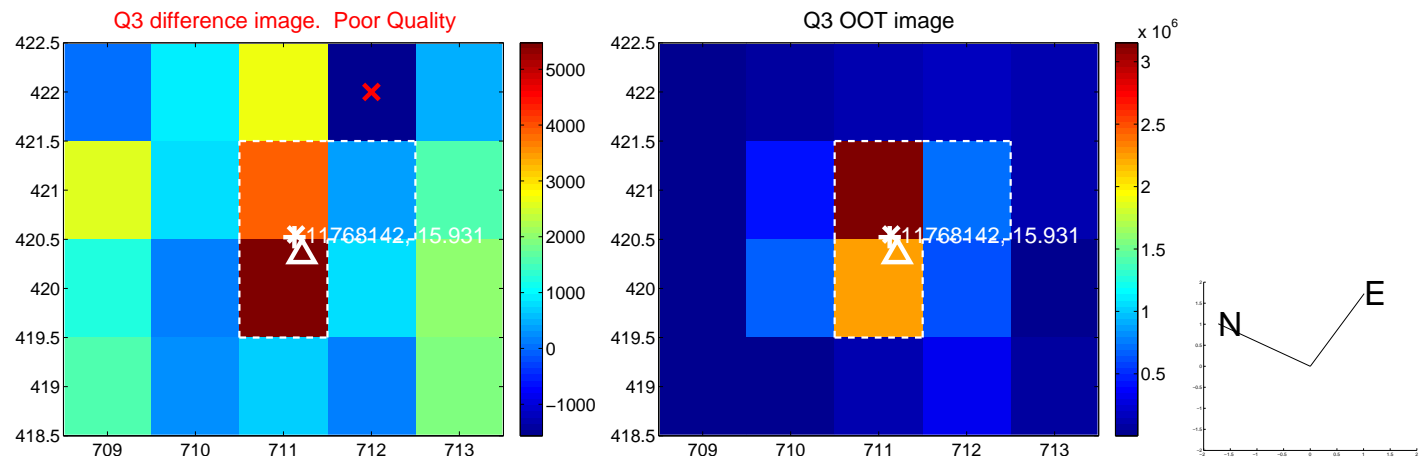
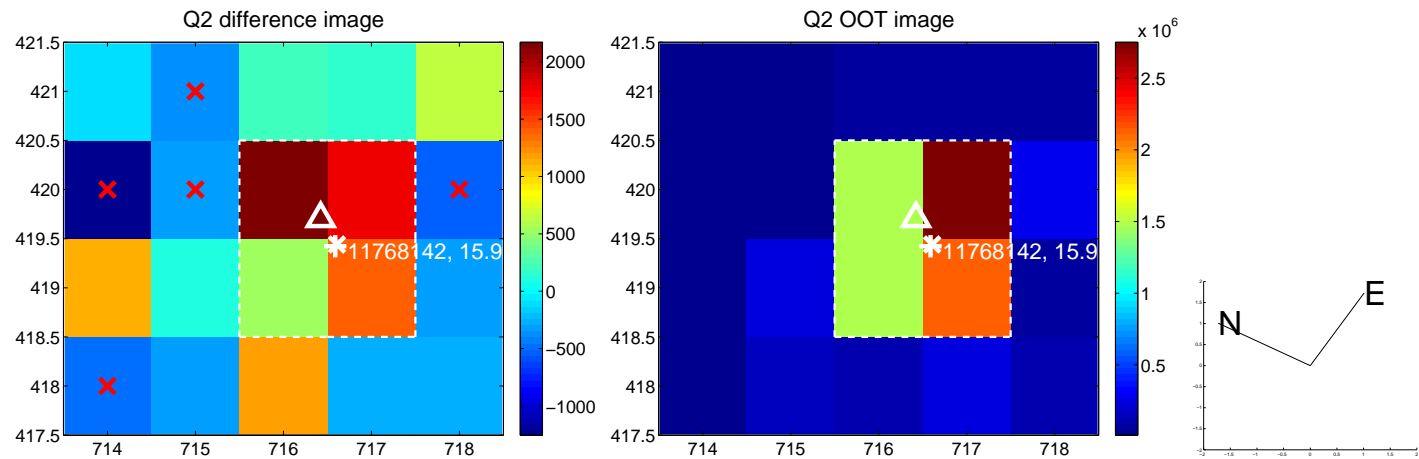
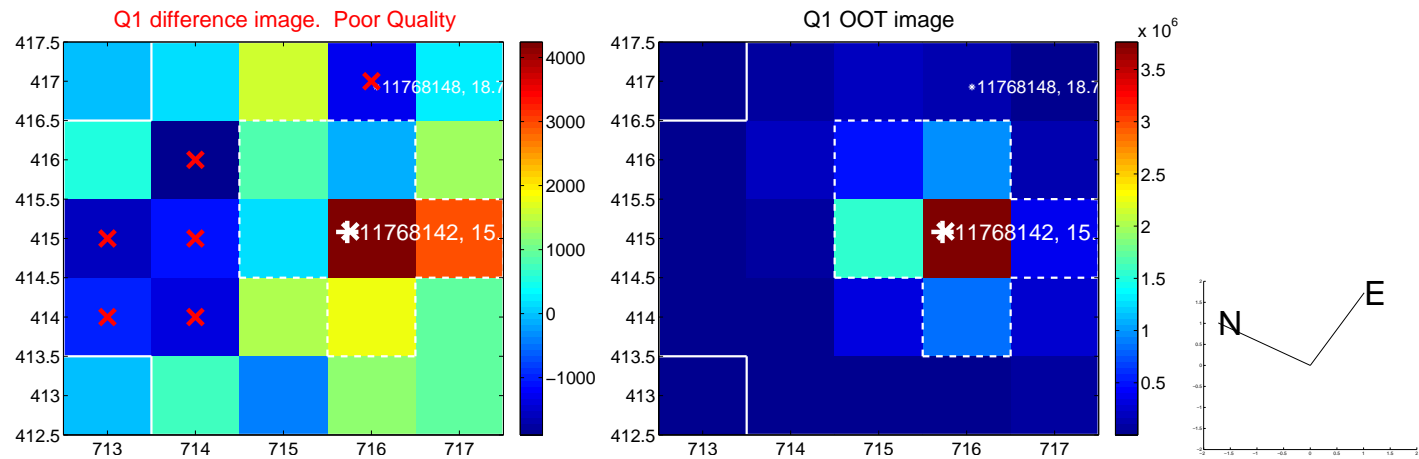
The direct PRF centroid is offset from the target star catalog position by about 0.15 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.620 ± 0.428	1.45	0.240 ± 0.472	0.572 ± 0.379
PRF-fit source offset from KIC position	0.657 ± 0.411	1.60	0.141 ± 0.439	0.641 ± 0.392
photometric centroid source offset	3.42 ± 0.96	3.55	2.52 ± 0.99	-2.32 ± 0.94

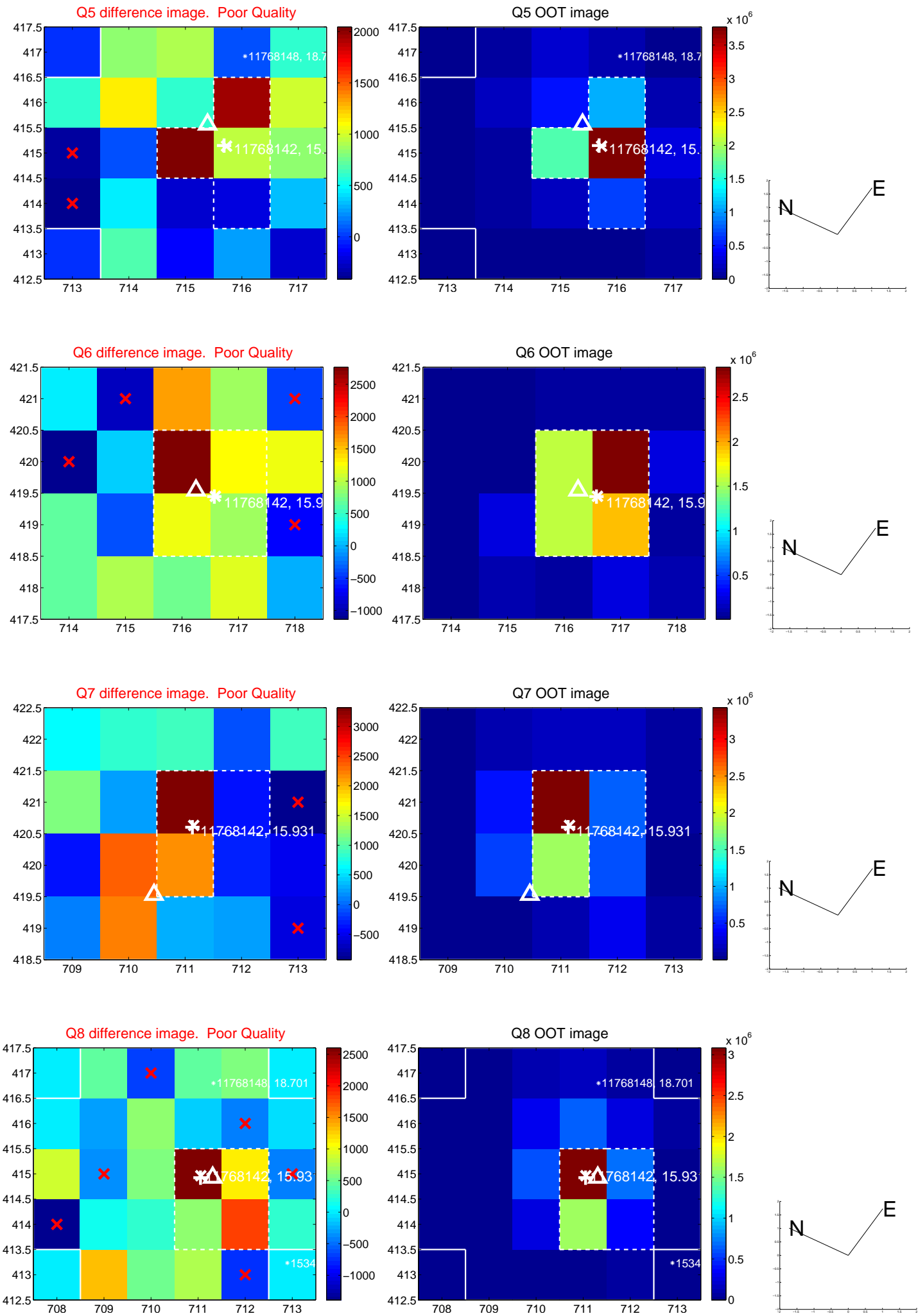


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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

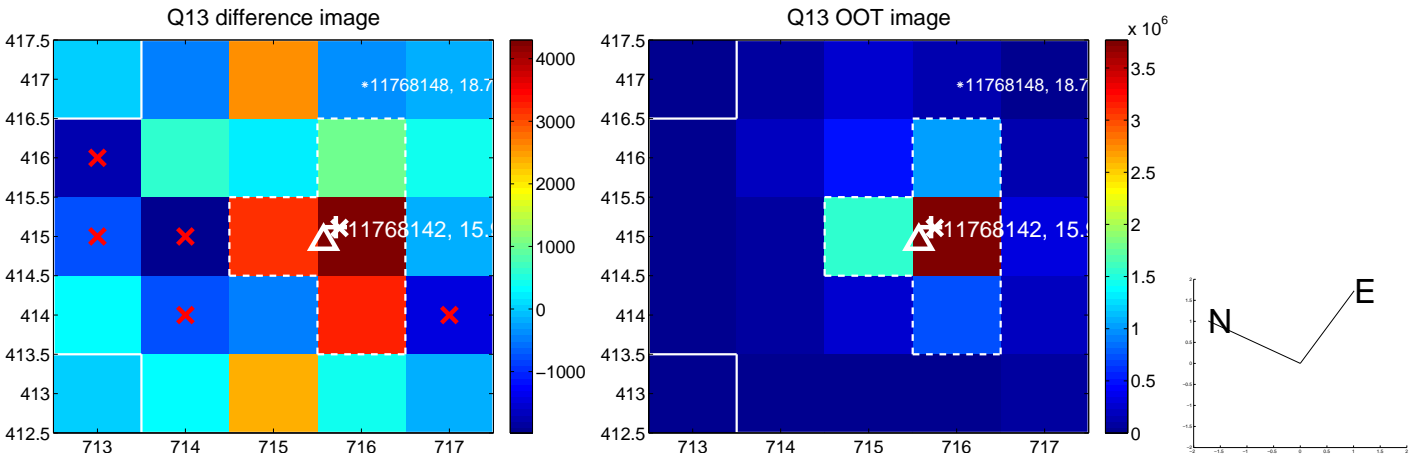
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



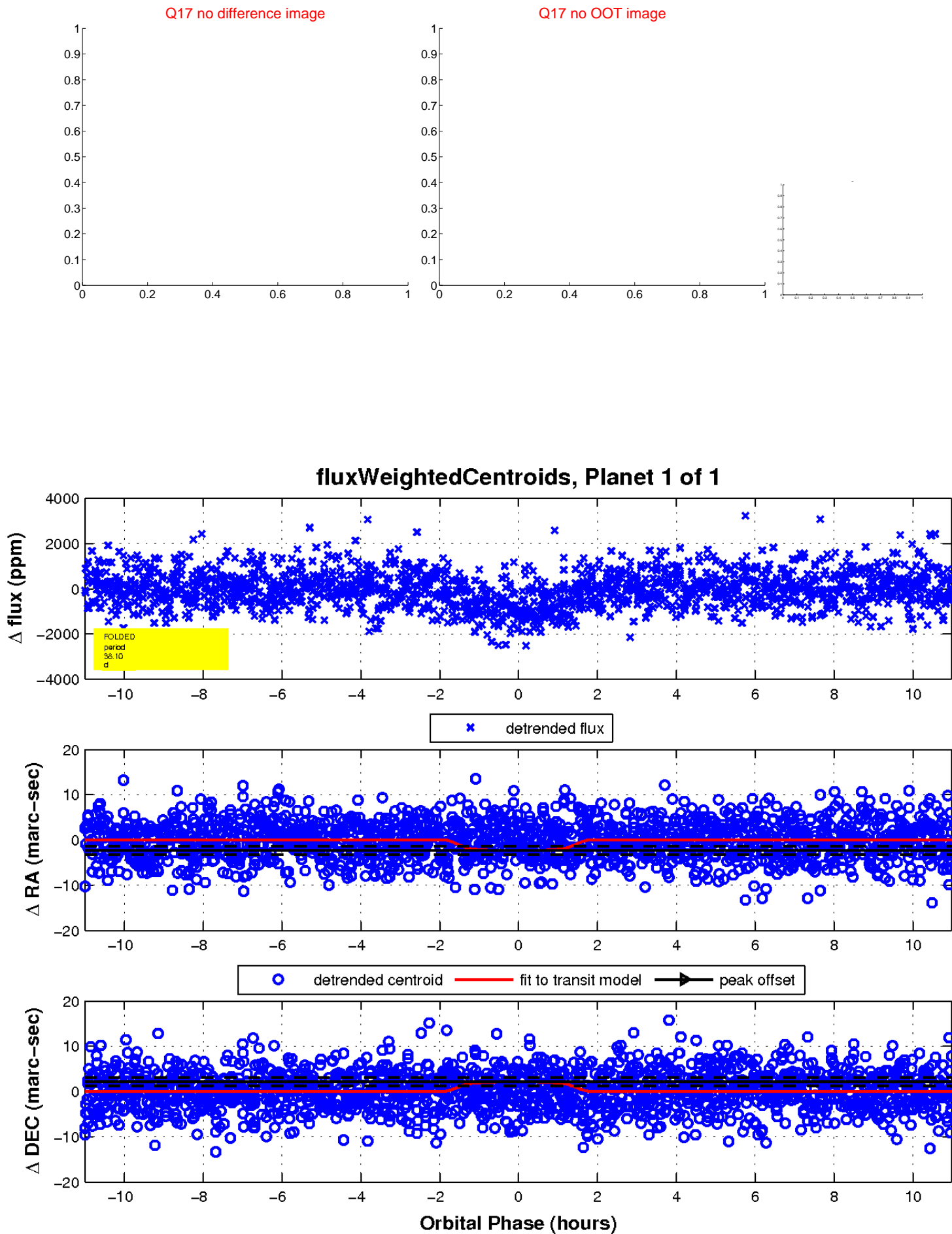
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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



UKIRT Image

