

KIC 011713245

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})
011713245-01	OBS	No	2.083850	131.980106	2.9	7.467	8.3	7.1	2.90	9558	0.56	37425.96

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
011713245-01	OBS	FP	0.00	1	0	0	0	LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—CENT_SATURATED

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

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

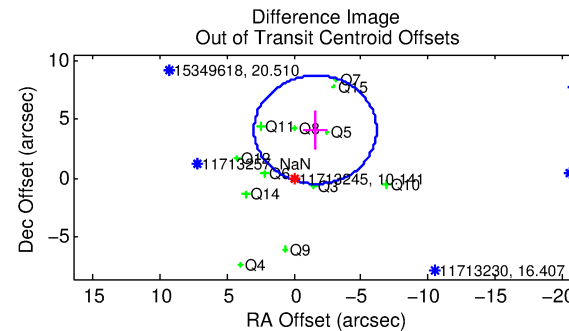
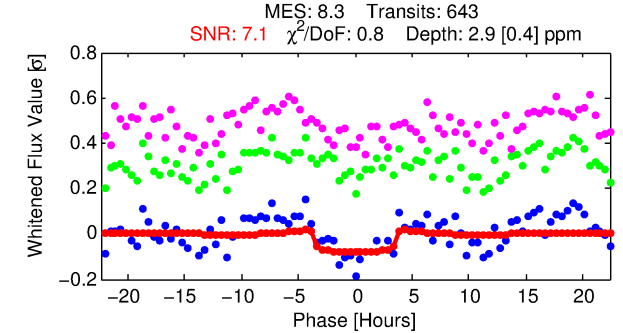
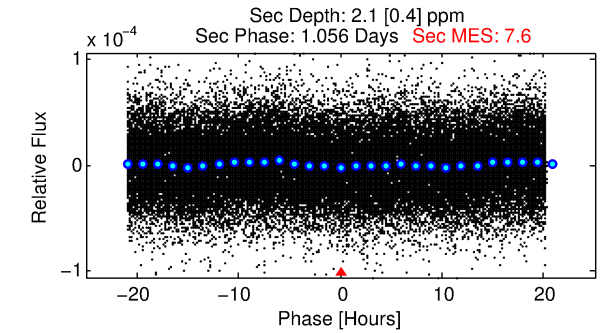
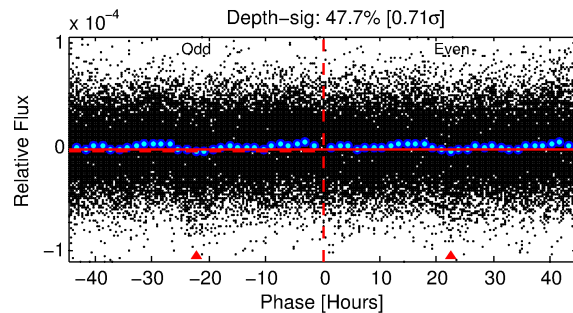
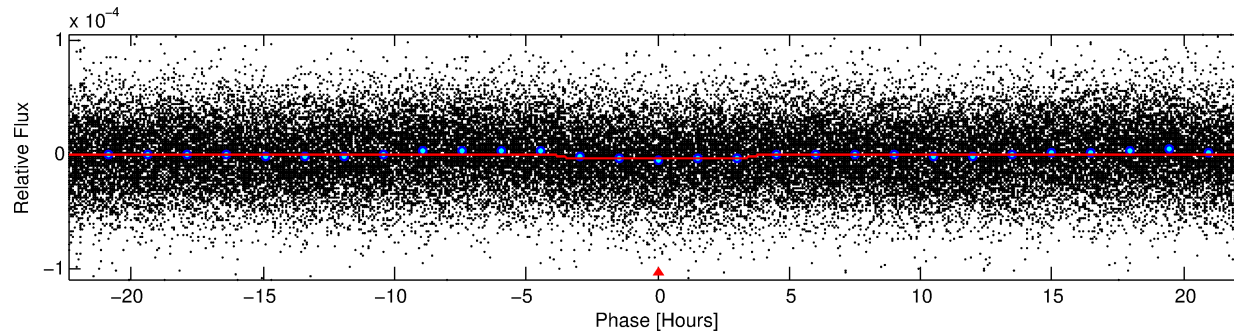
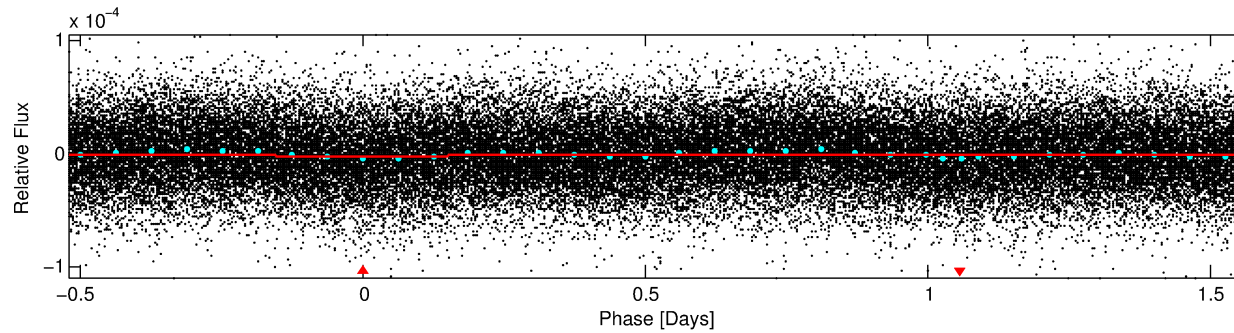
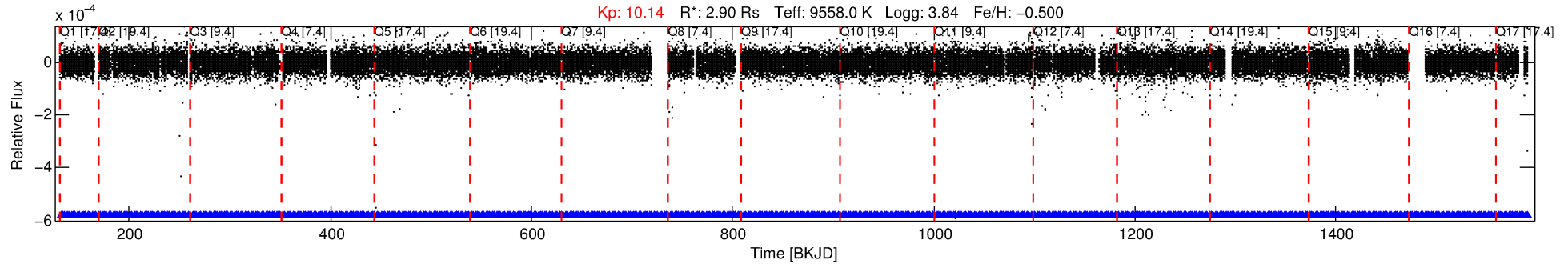
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 011713245-01

No Significant Match Found

DV One-Page Summary

KIC: 11713245 Candidate: 1 of 1 Period: 2.084 d



DV Fit Results:

Period = 2.08385 [0.00003] d
Epoch = 131.9801 [0.0079] BKJD
Rp/R* = 0.0018 [0.0002]
a/R* = 1.44 [0.59]
b = 0.85 [0.25]
Seff = 37425.96 [31211.86]
Teq = 3547 [739] K
Rp = 0.56 [0.26] Re
a = 0.0409 [0.0184] AU
Ag = 6.18 [4.99] [1.04 σ]
Teffp = 8647 [1085] K [3.88 σ]

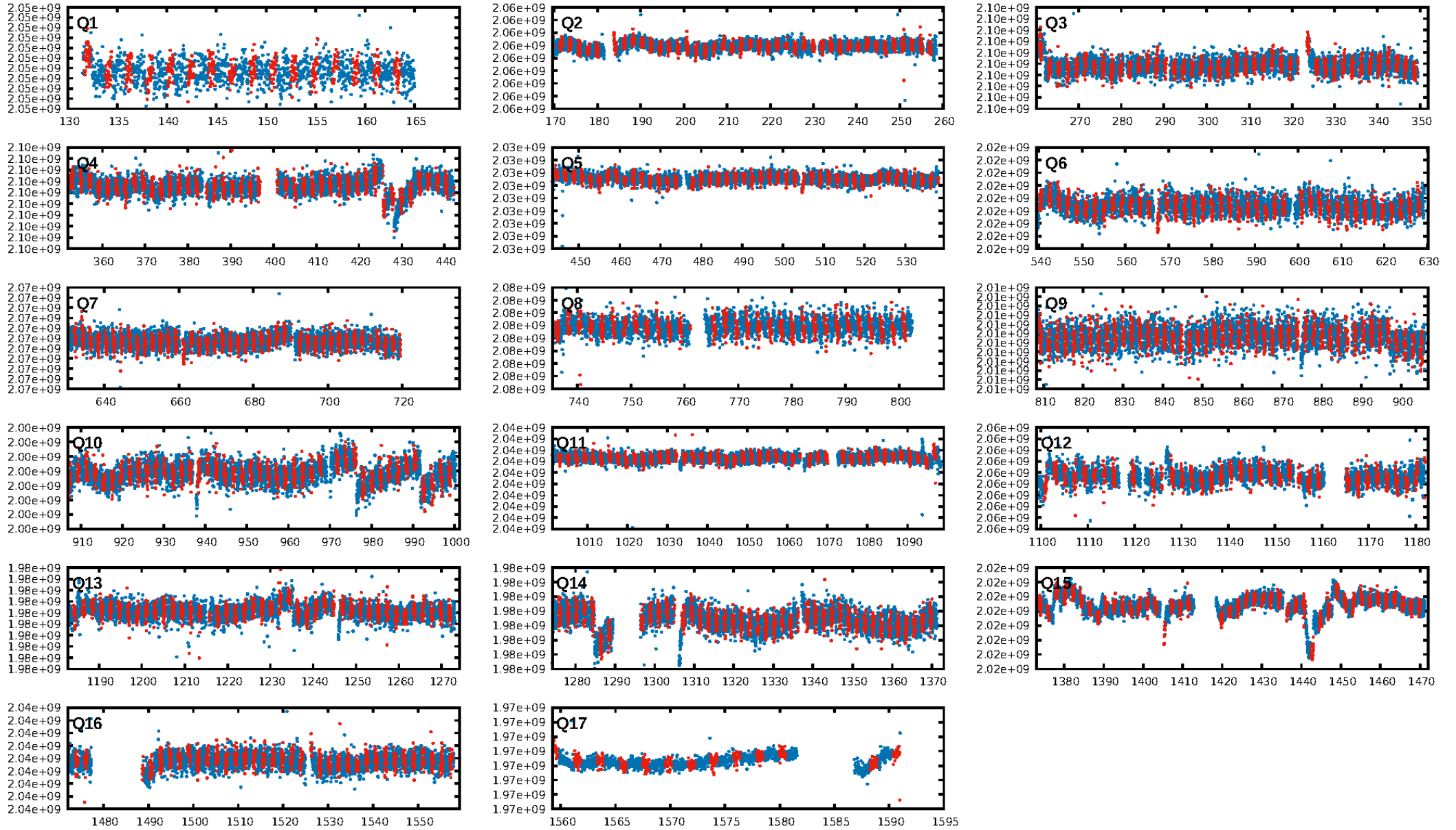
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: 6.12e-13
RollingBand-fgt: 1.00 [614/614]
GhostDiagnostic-chr: N/A
Centroid-sig: N/A
Centroid-so: N/A
OotOffset-rm: 4.417 arcsec [2.89 σ]
KicOffset-rm: 4.353 arcsec [3.07 σ]
OotOffset-st: 3/4/3/2 [12]
KicOffset-st: 3/4/3/2 [12]
DiffImageQuality-fgm: 0.50 [6/12]
DiffImageOverlap-fno: 1.00 [17/17]

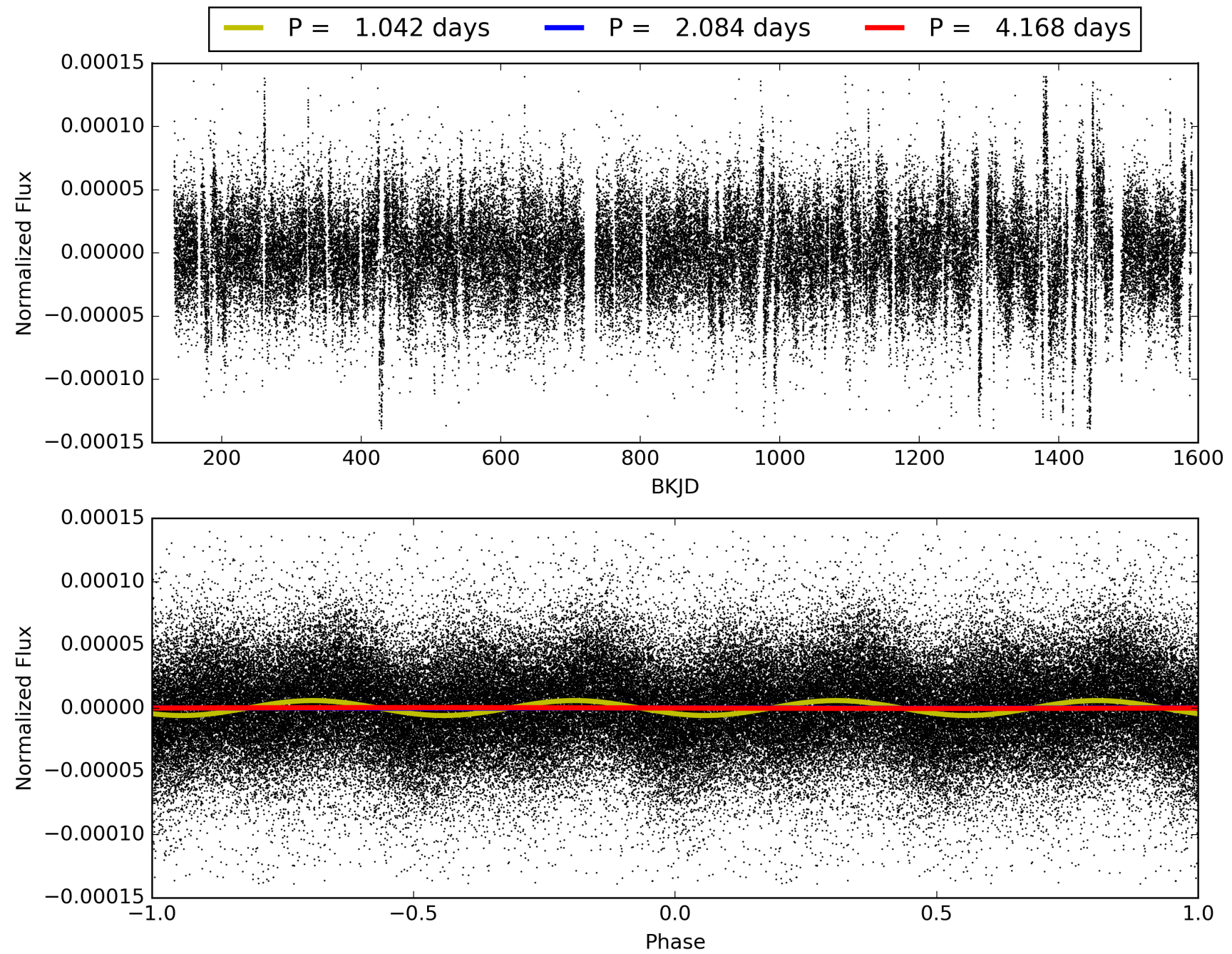
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 29-Jan-2016 01:17:11 Z

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

TCE 011713245-01, PDC Light Curves

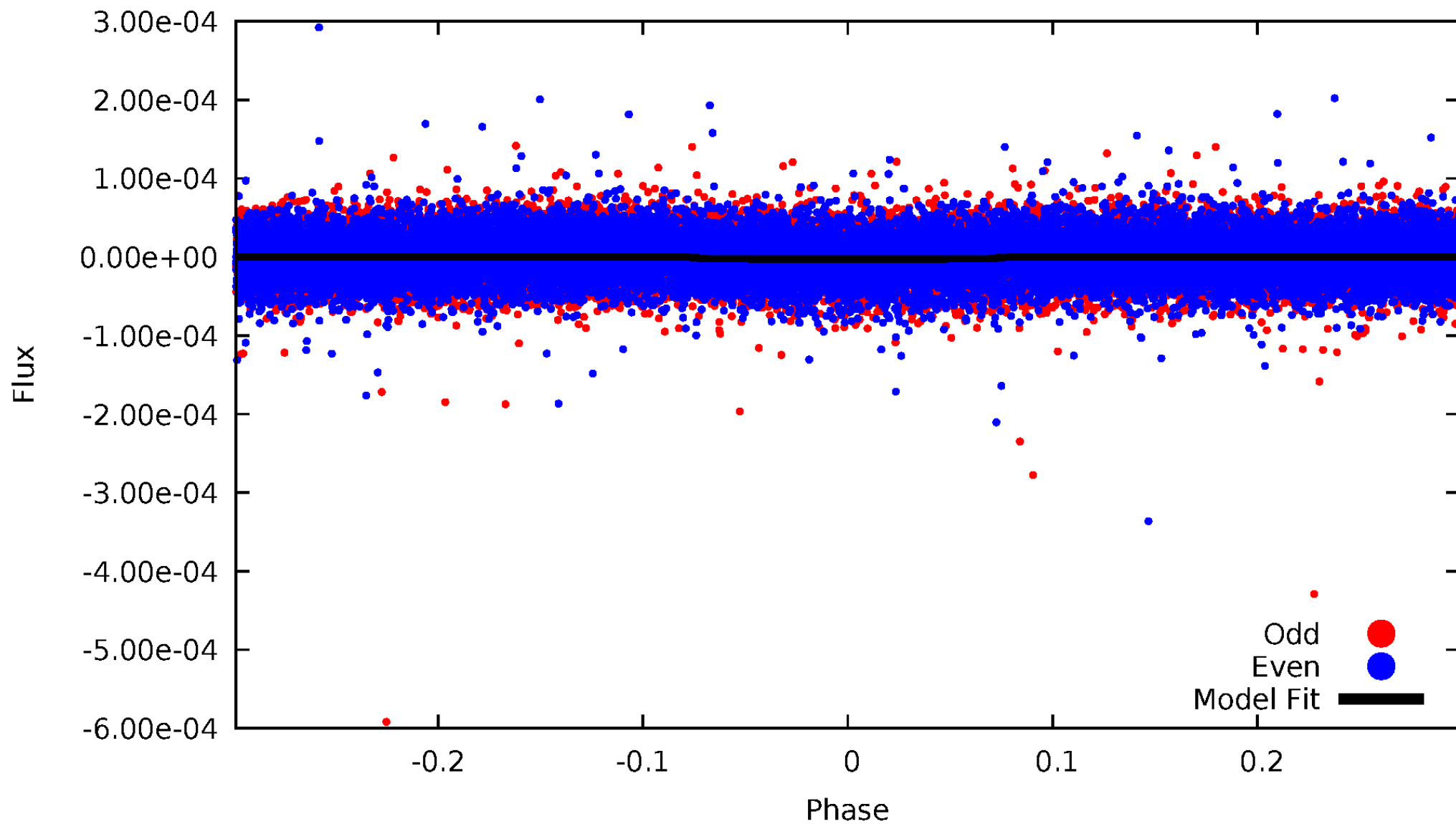


TCE 011713245-01



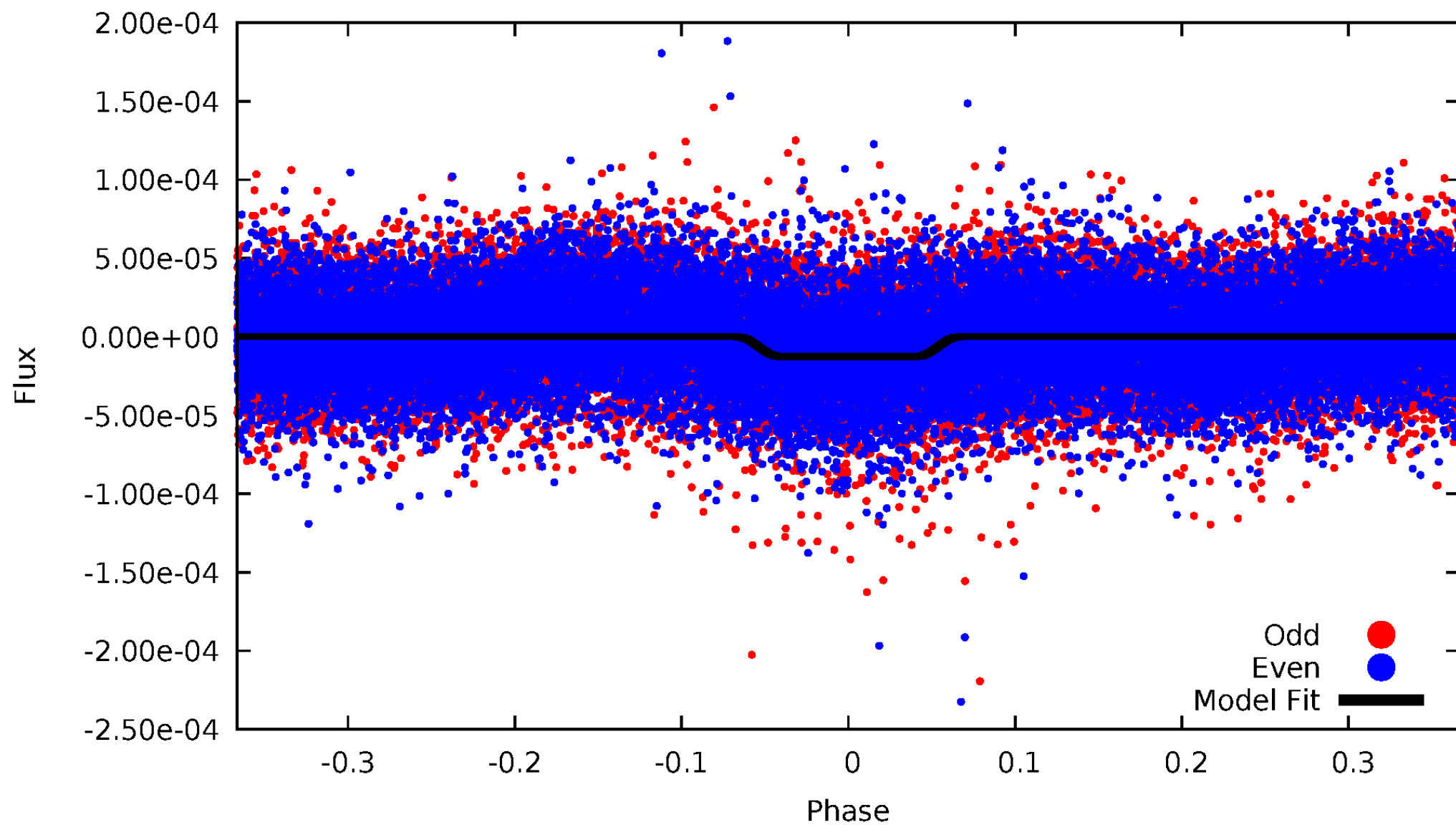
DV Odd/Even

TCE 011713245-01



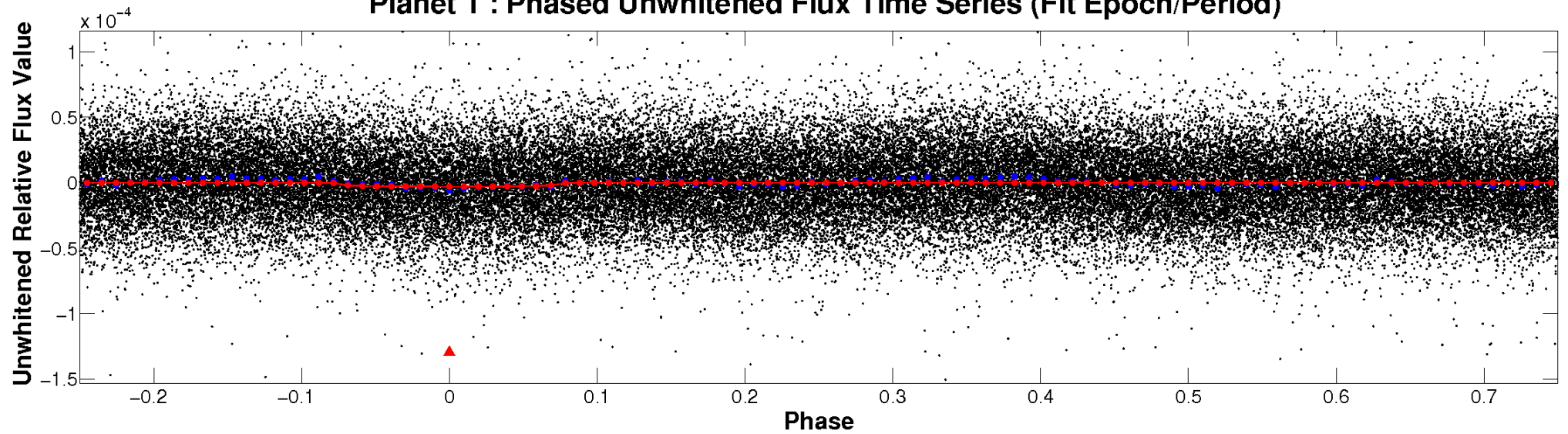
ALT Odd/Even

TCE 011713245-01

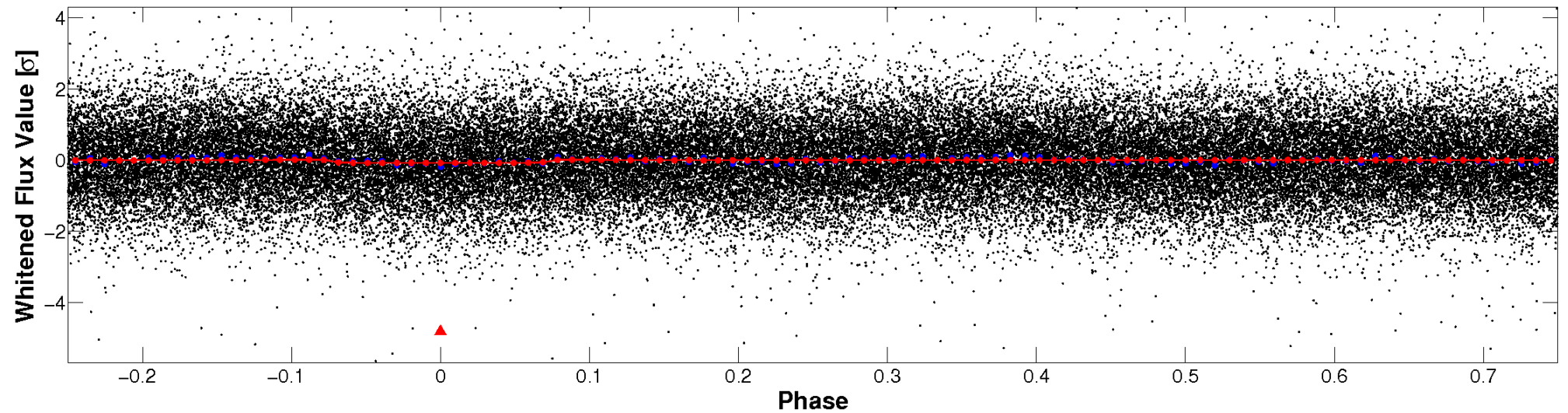


Non-Whitened Vs. Whitened Light Curve

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

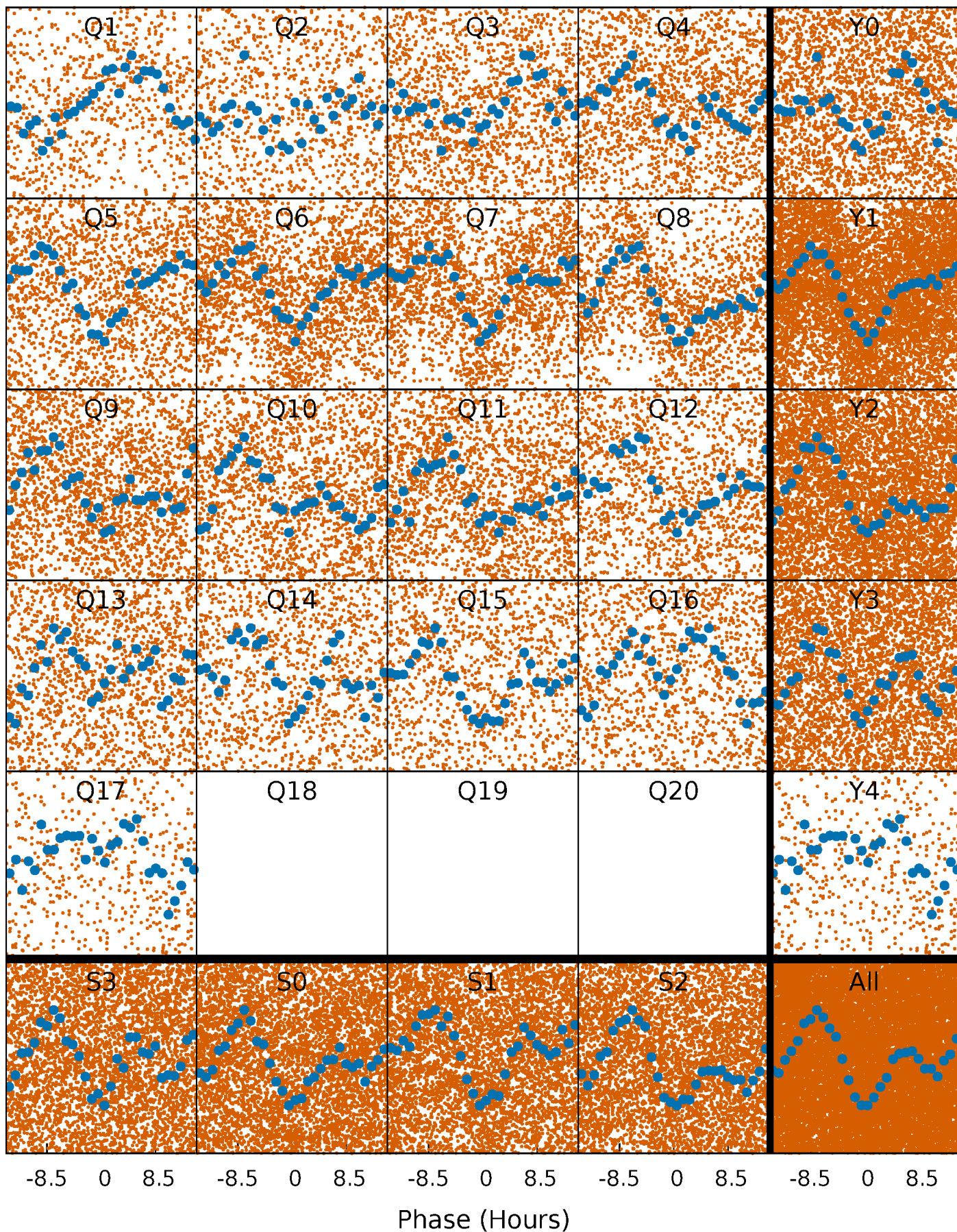


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



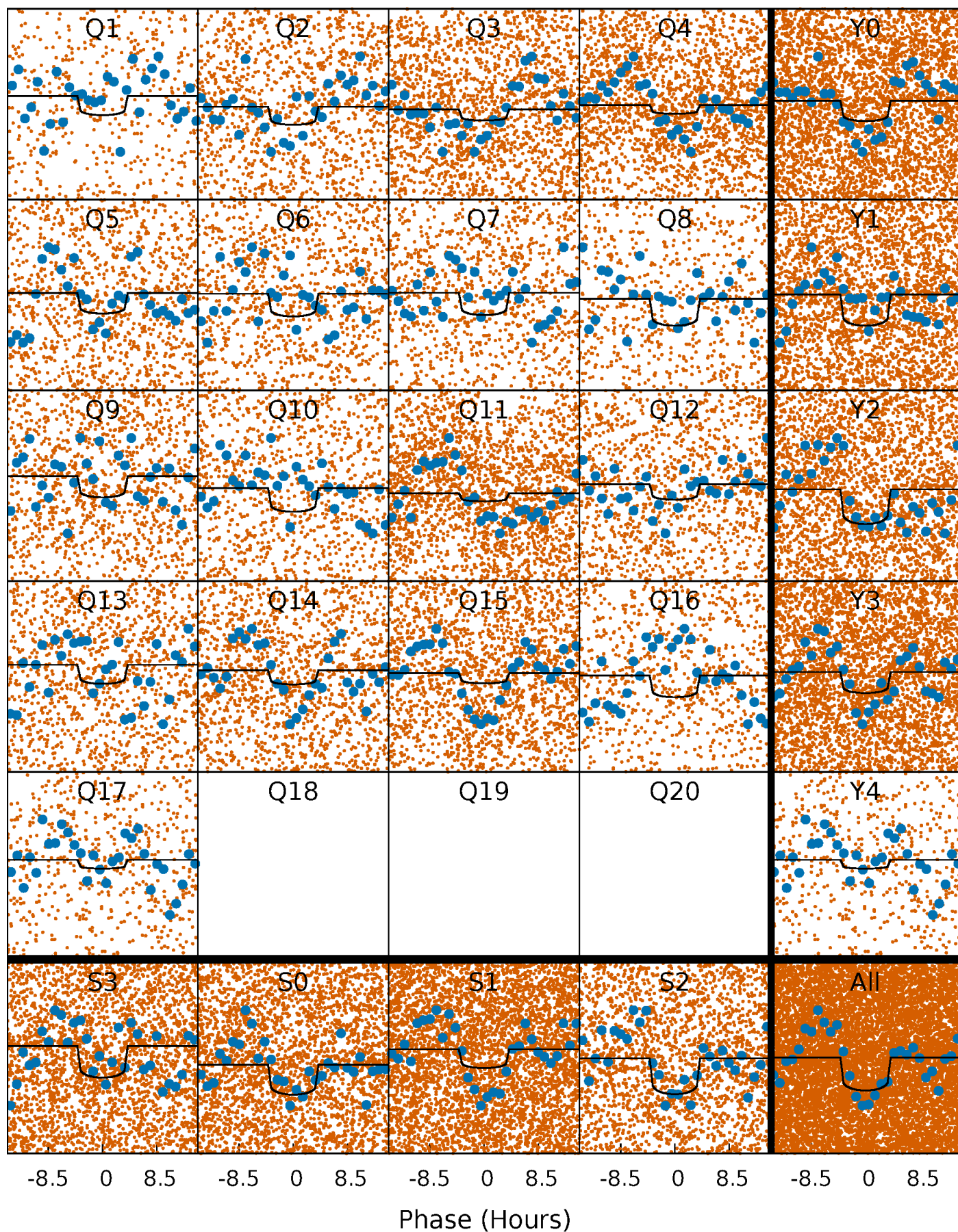
PDC Quarter-Phased Transit Curves

TCE 011713245-01 P= 2.083850 Days $T_0=131.980106$ (BKJD)



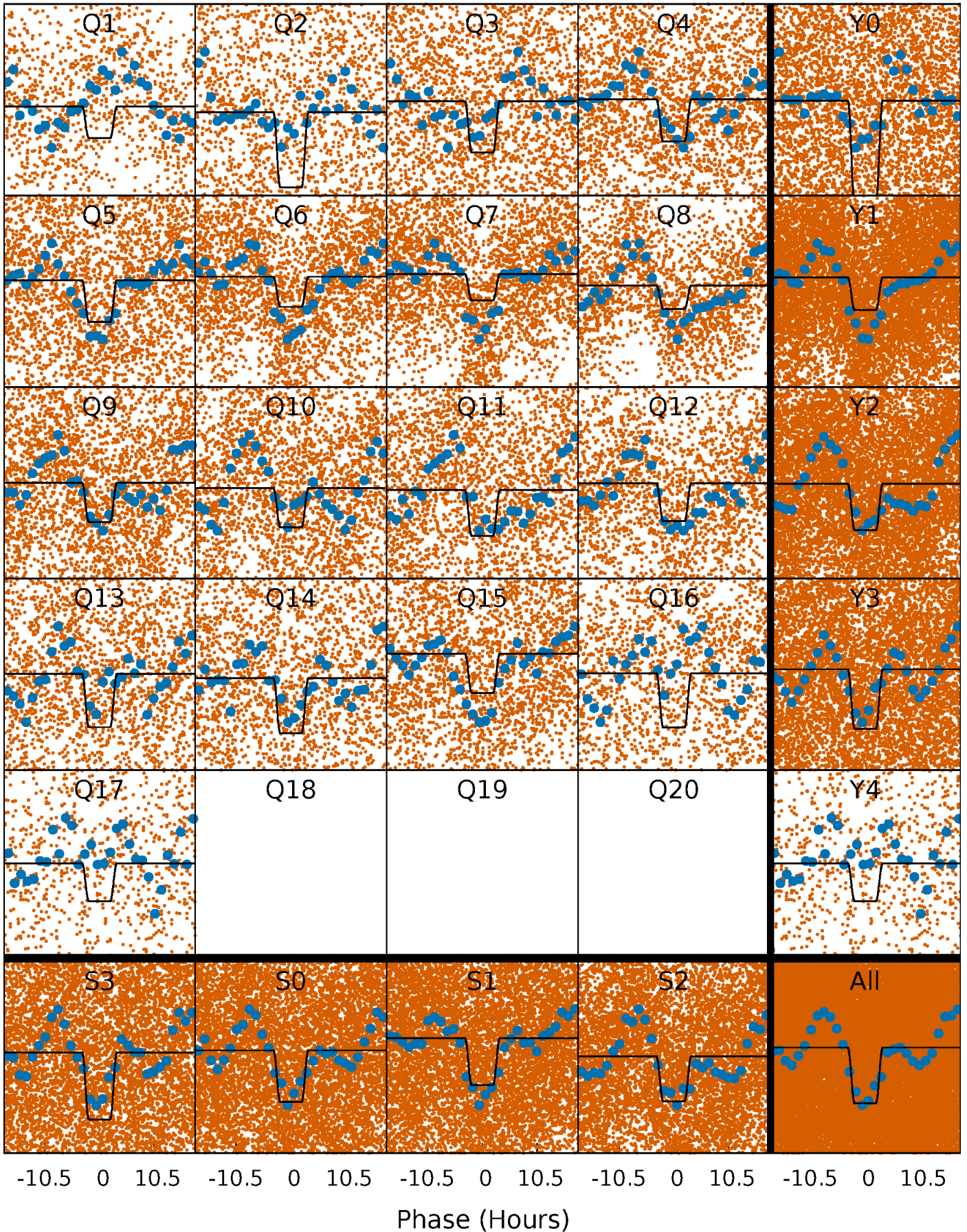
DV Quarter-Phased Transit Curves

TCE 011713245-01 P= 2.083850 Days $T_0=131.980106$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

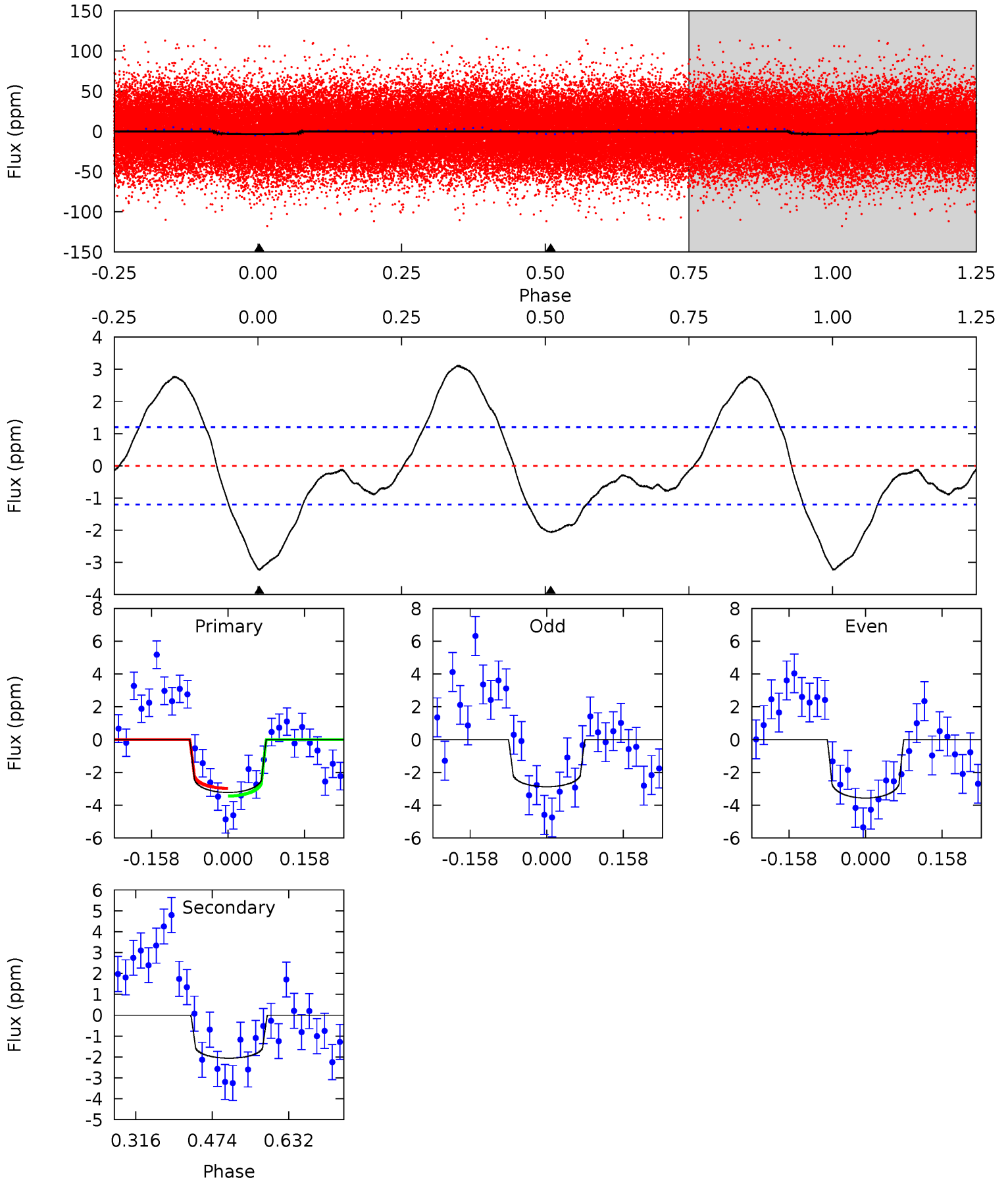
TCE 011713245-01 P= 2.083852 Days $T_0=131.989723$ (BKJD)



DV Model-Shift Uniqueness Test

011713245-01, P = 2.083850 Days, E = 129.896256 Days

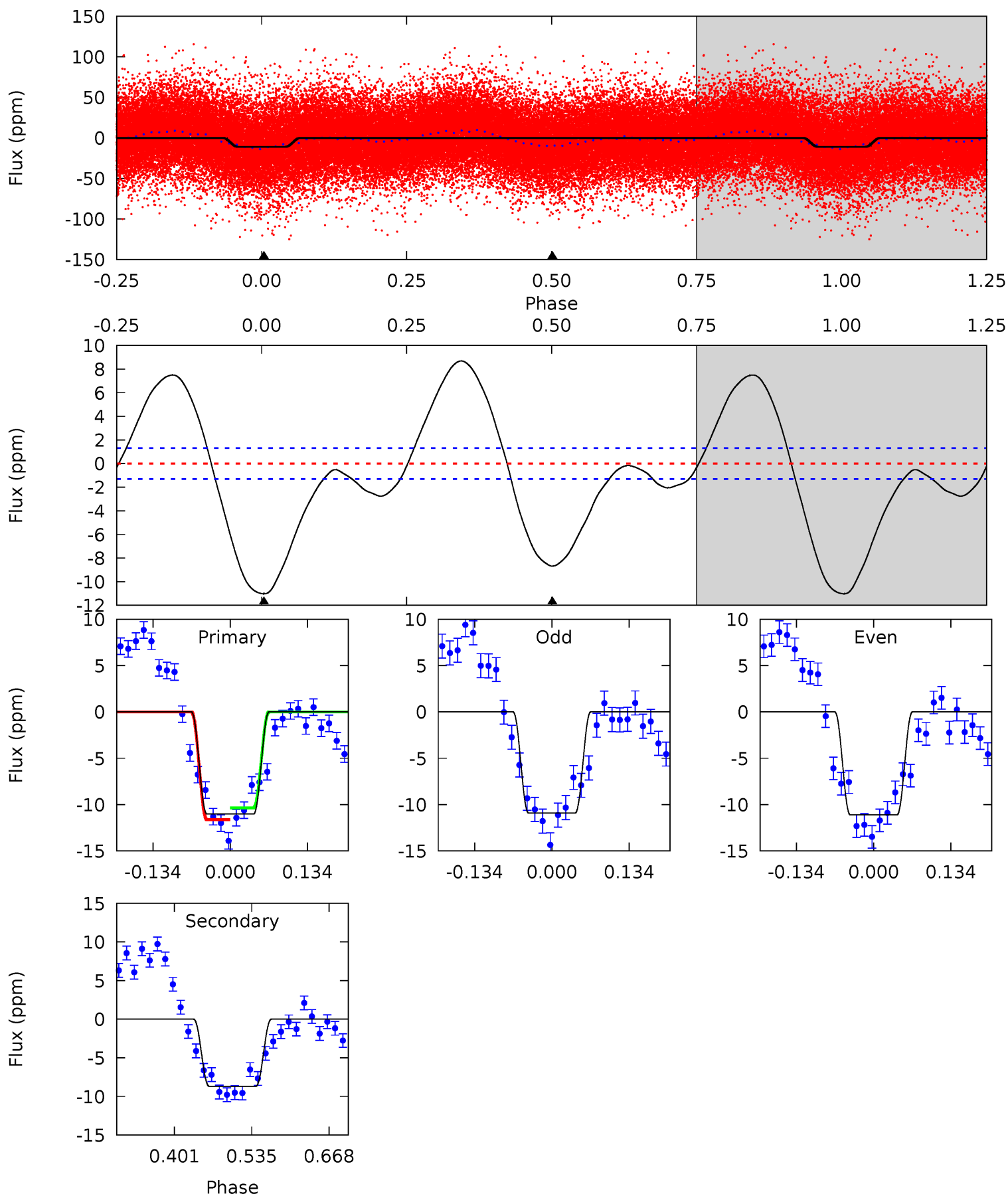
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
11.9	7.63	0	0	4.47	1.41	4.74	11.9	11.9	7.63	7.63	1.28	0.87	0.49	0.88



Alt Model-Shift Uniqueness Test

011713245-01, P = 2.083852 Days, E = 129.905871 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
37.8	29.8	0	0	4.50	1.50	13.6	37.8	37.8	29.8	29.8	0.36	1.00	0.44	2.18



Stellar Parameters For KIC 011713245

	$T_{\text{eff}} (K)$	$\log(g)$	$[\text{Fe}/\text{H}]$	$R (R_{\odot})$	$M (M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	9558^{+495}_{-920}	$3.838^{+0.442}_{-0.078}$	$-0.500^{+0.050}_{-0.200}$	$2.897^{+0.457}_{-1.281}$	$2.107^{+0.231}_{-0.539}$	$0.122^{+0.467}_{-0.040}$
	+5%/-10%	+12%/-2%	+10%/-40%	+16%/-44%	+11%/-26%	+382%/-33%
Source	SPE68	SPE68	SPE68	DSEP		

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

Secondary Eclipse Parameters for KIC 011713245-01 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	A_{obs}
DV	-2 ± 0	$0.51^{+0.11}_{-0.12}$	4656^{+494}_{-659}	8041^{+1042}_{-892}	$7.318^{+5.098}_{-2.405}$
Alt.	-9 ± 0	$1.04^{+0.18}_{-0.26}$	4688^{+485}_{-662}	8283^{+624}_{-736}	$7.402^{+4.494}_{-1.839}$

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

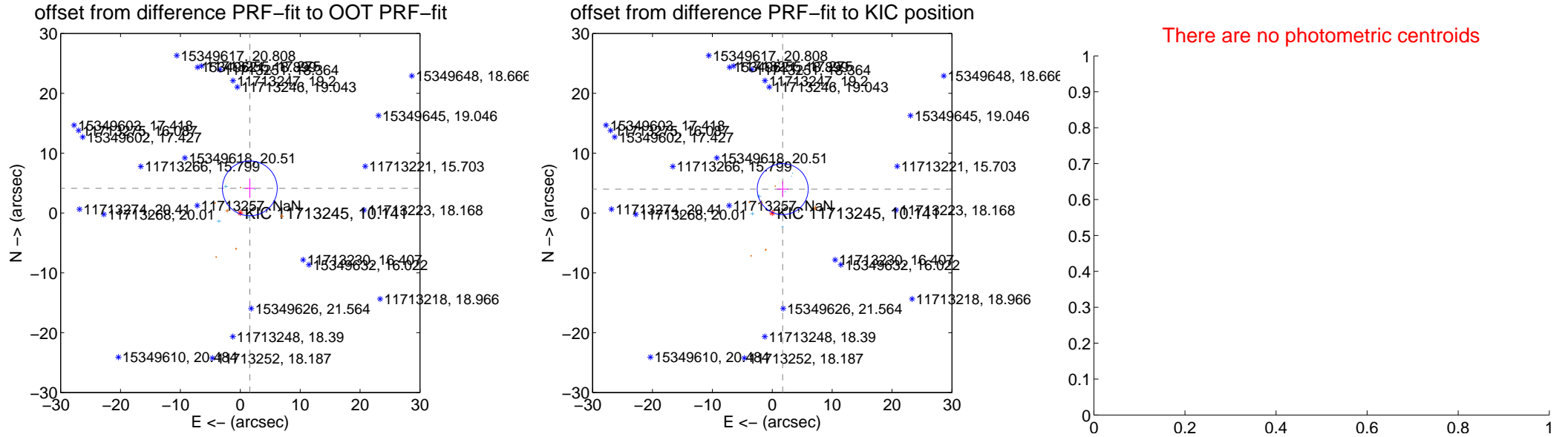
DV Centroid Data

Supplemental centroid analysis for 011713245-01. **Kepler magnitude: 10.14.** Transit SNR 7.09

There are 6 quarters with good PRF difference image offsets

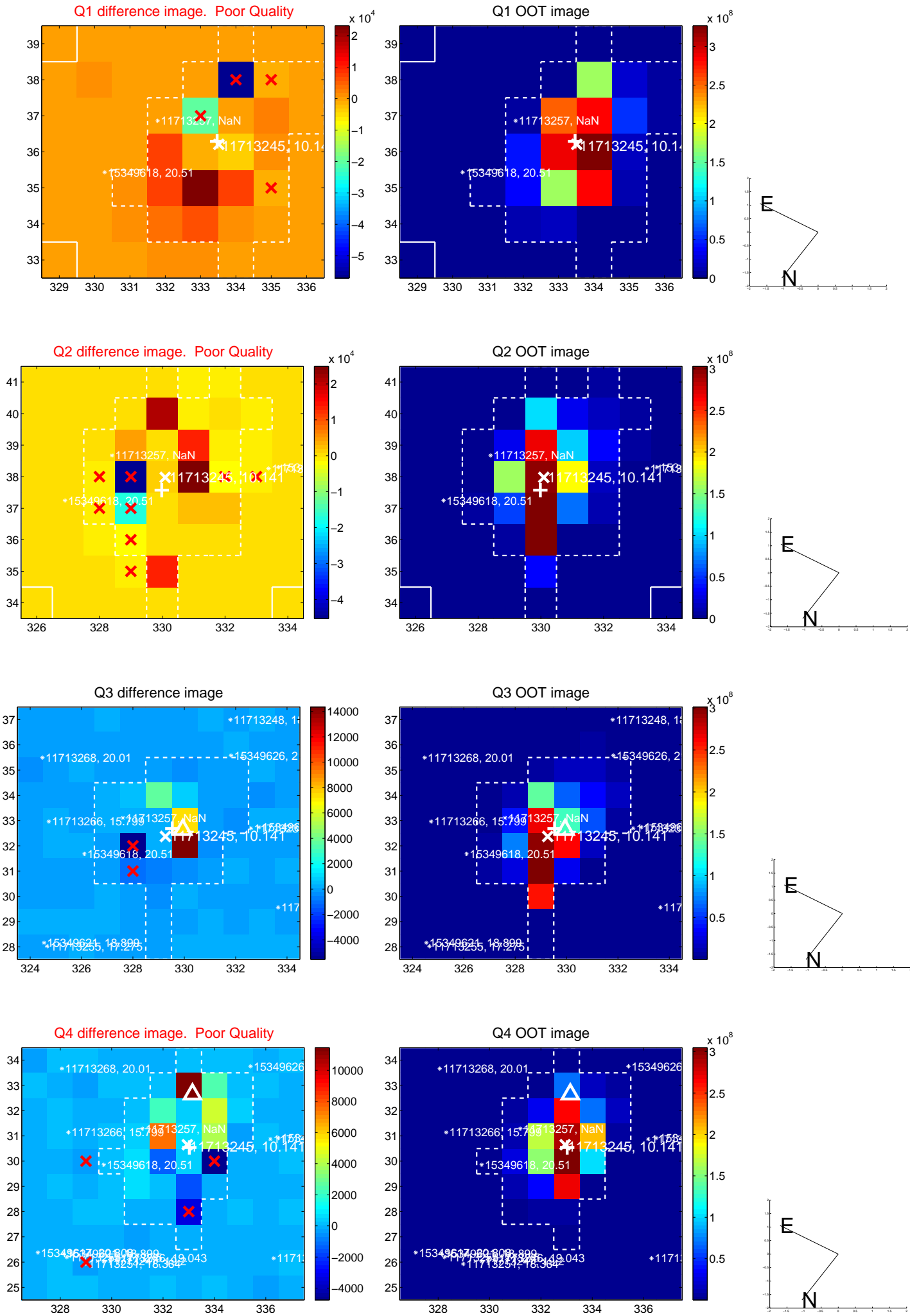
The direct PRF centroid is offset from the target star catalog position by about 1.68 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	4.417 ± 1.526	2.89	-1.591 ± 0.832	4.121 ± 1.604
PRF-fit source offset from KIC position	4.353 ± 1.418	3.07	-1.746 ± 0.962	3.987 ± 1.308
photometric centroid source offset	—	—	—	—

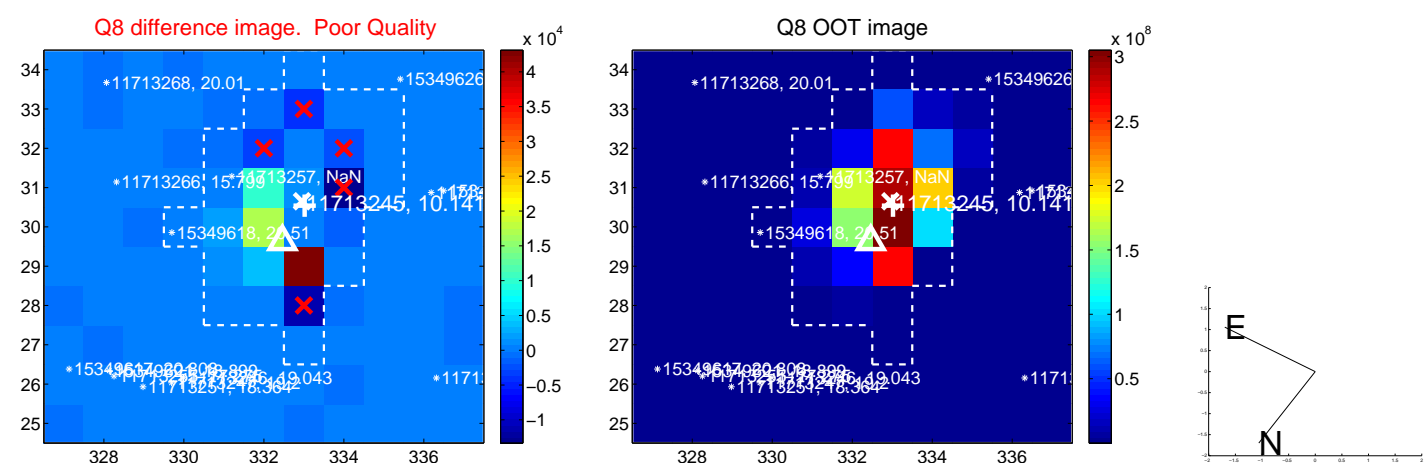
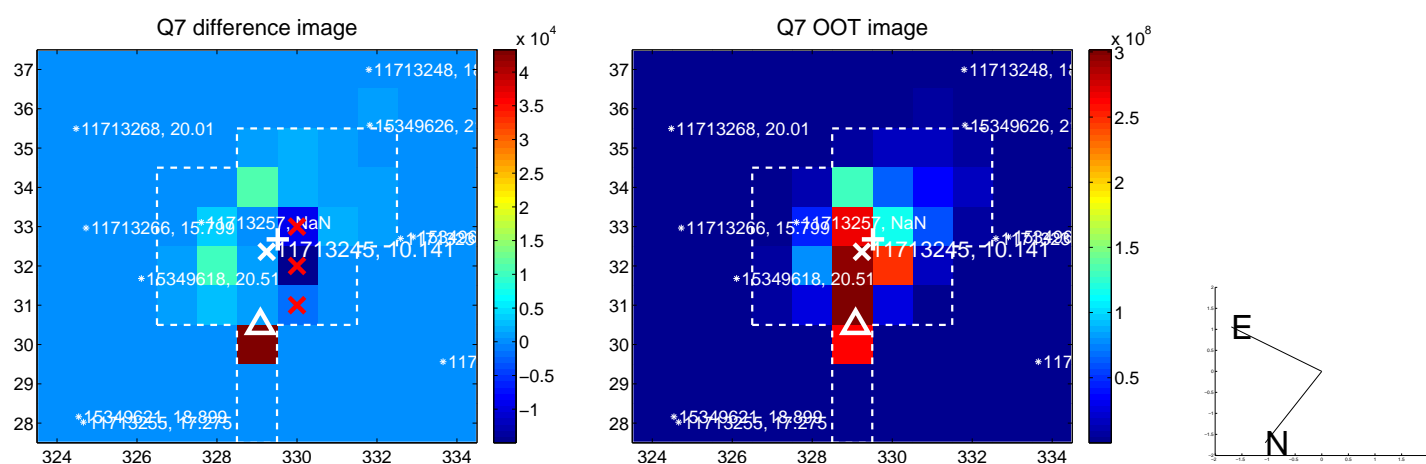
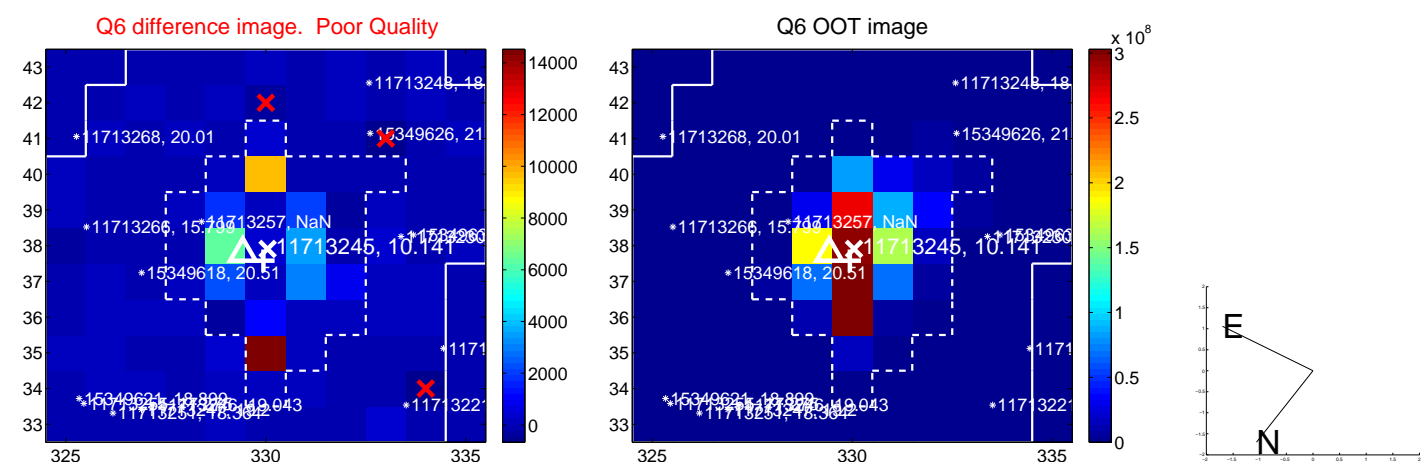
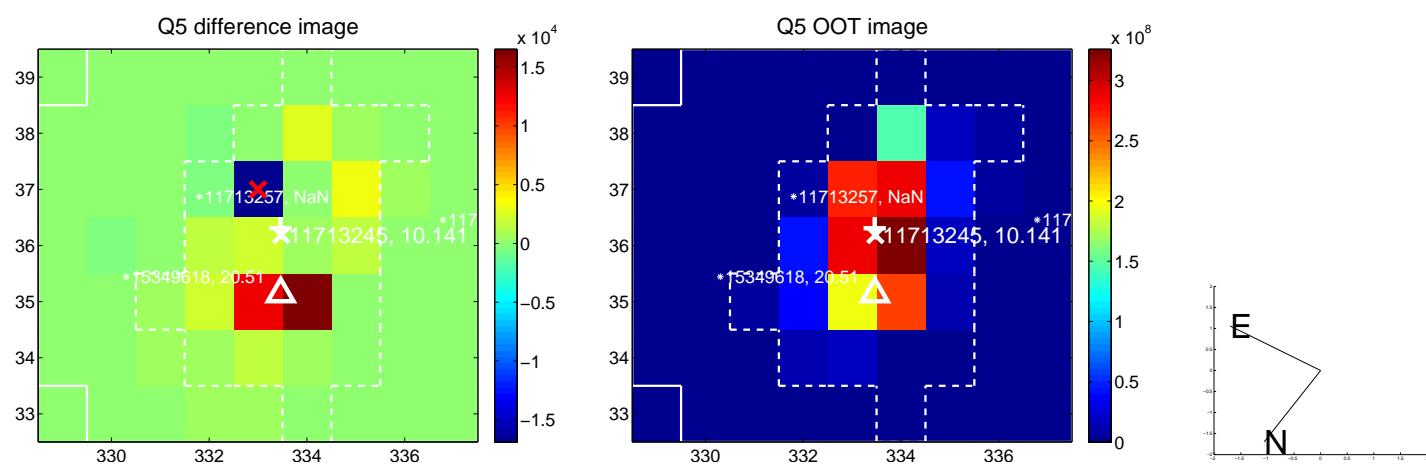


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets;** magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

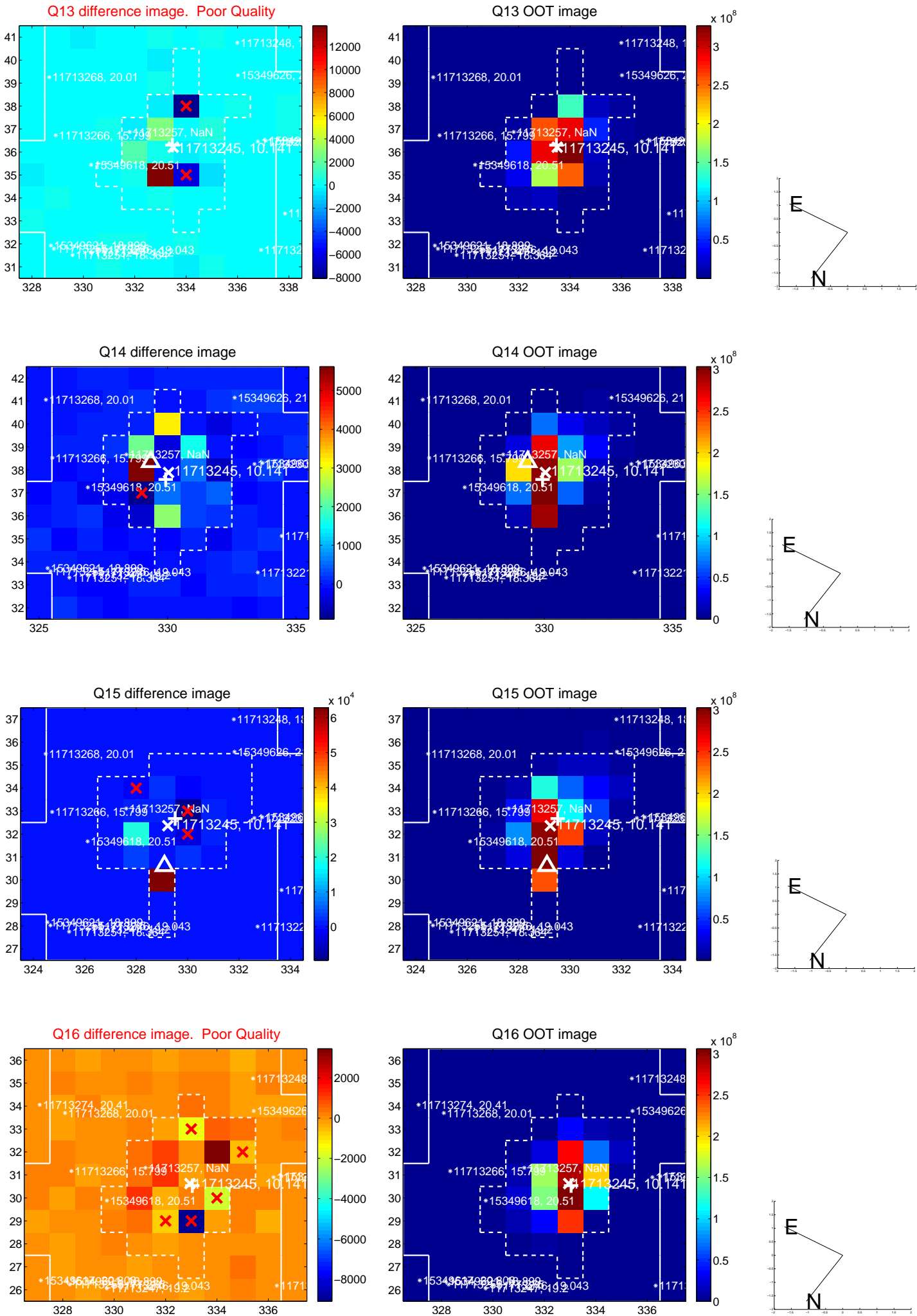
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



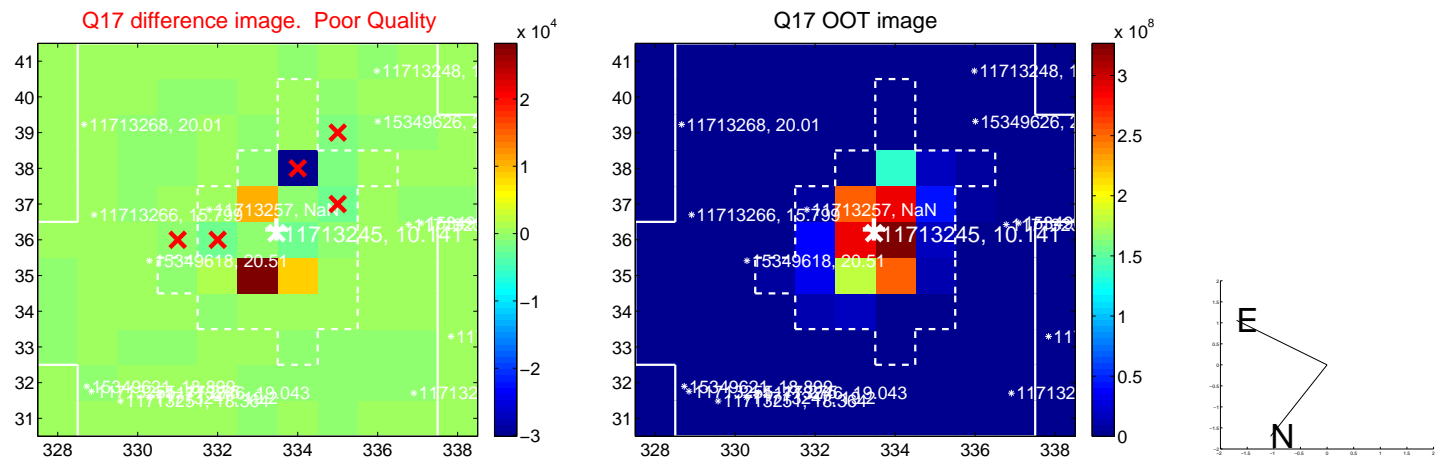
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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



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



folded centroid time series figure for this object.

UKIRT Image

