

KIC 008332426

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})
008332426-01	OBS	No	0.717574	131.602940	5.6	5.724	8.3	3.9	1.68	8505	0.46	35726.19

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
008332426-01	OBS	FP	0.00	1	0	0	0	LPP_DV—LPP_ALT—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.

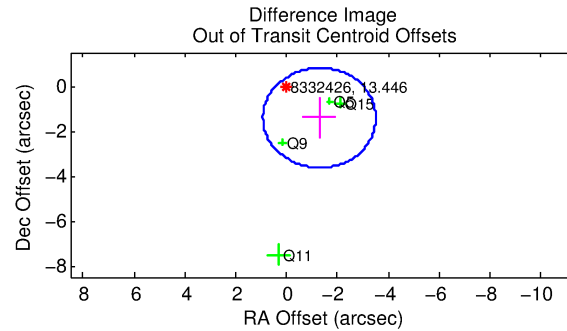
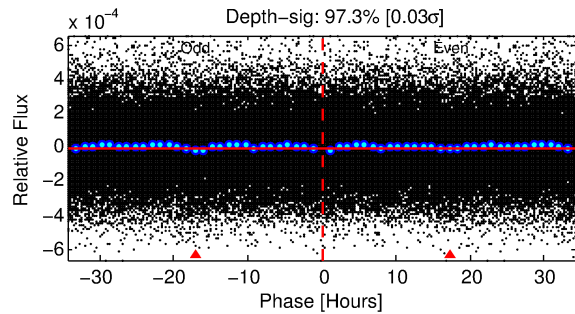
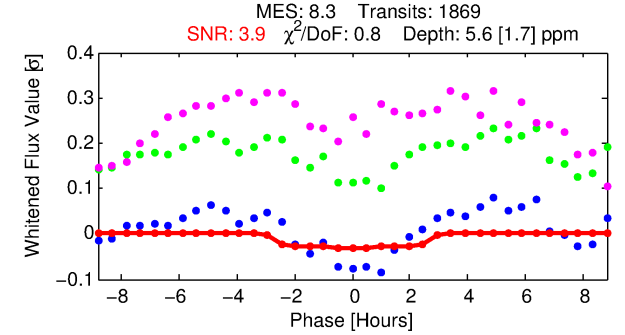
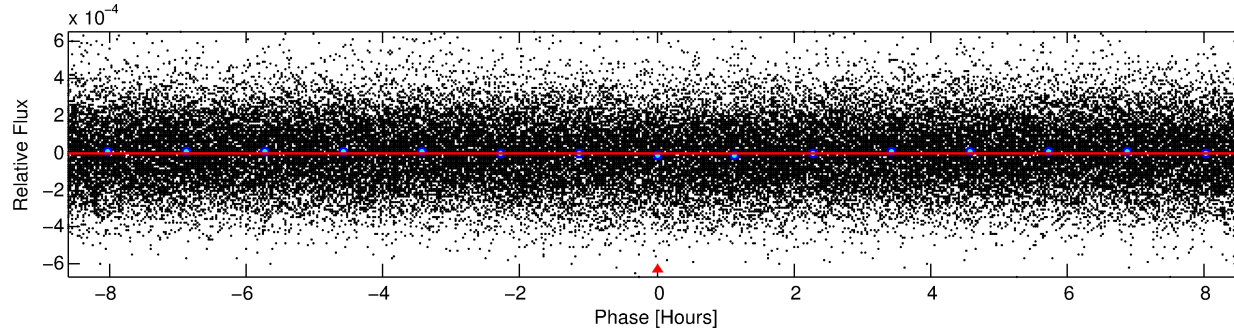
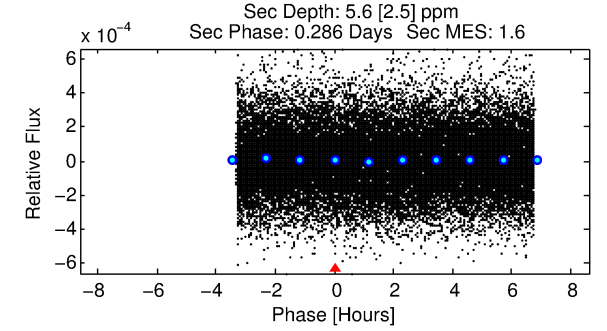
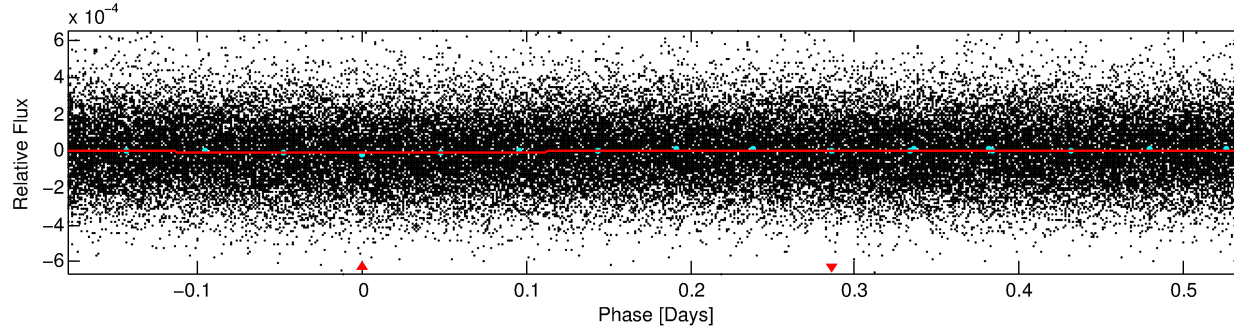
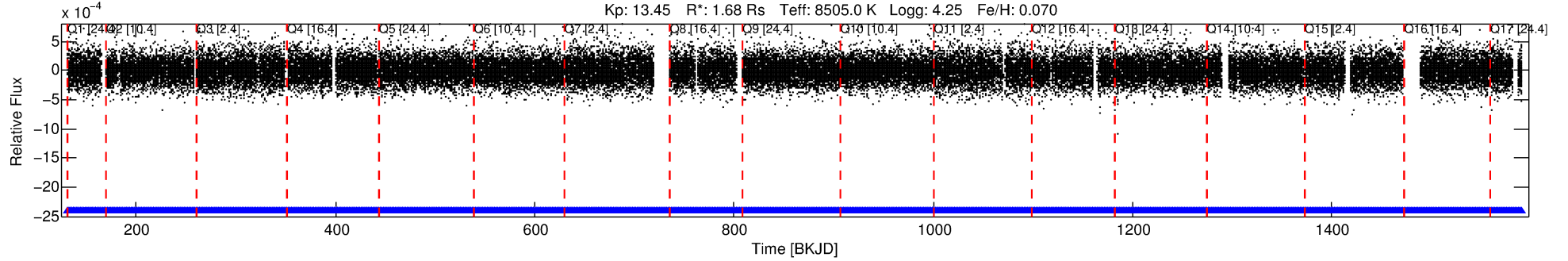
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 008332426-01

No Significant Match Found

DV One-Page Summary

KIC: 8332426 Candidate: 1 of 1 Period: 0.718 d



DV Fit Results:

Period = 0.71757 [0.00003] d
Epoch = 131.6029 [0.0146] BKJD
Rp/R* = 0.0025 [0.0036]
a/R* = 1.03 [0.65]
b = 0.90 [2.02]
Seff = 35726.19 [14601.62]
Teff = 3506 [358] K
Rp = 0.46 [0.67] Re
a = 0.0193 [0.0047] AU
Ag = 5.38 [15.62] [0.28σ]
Teffp = 8257 [5955] K [0.80σ]

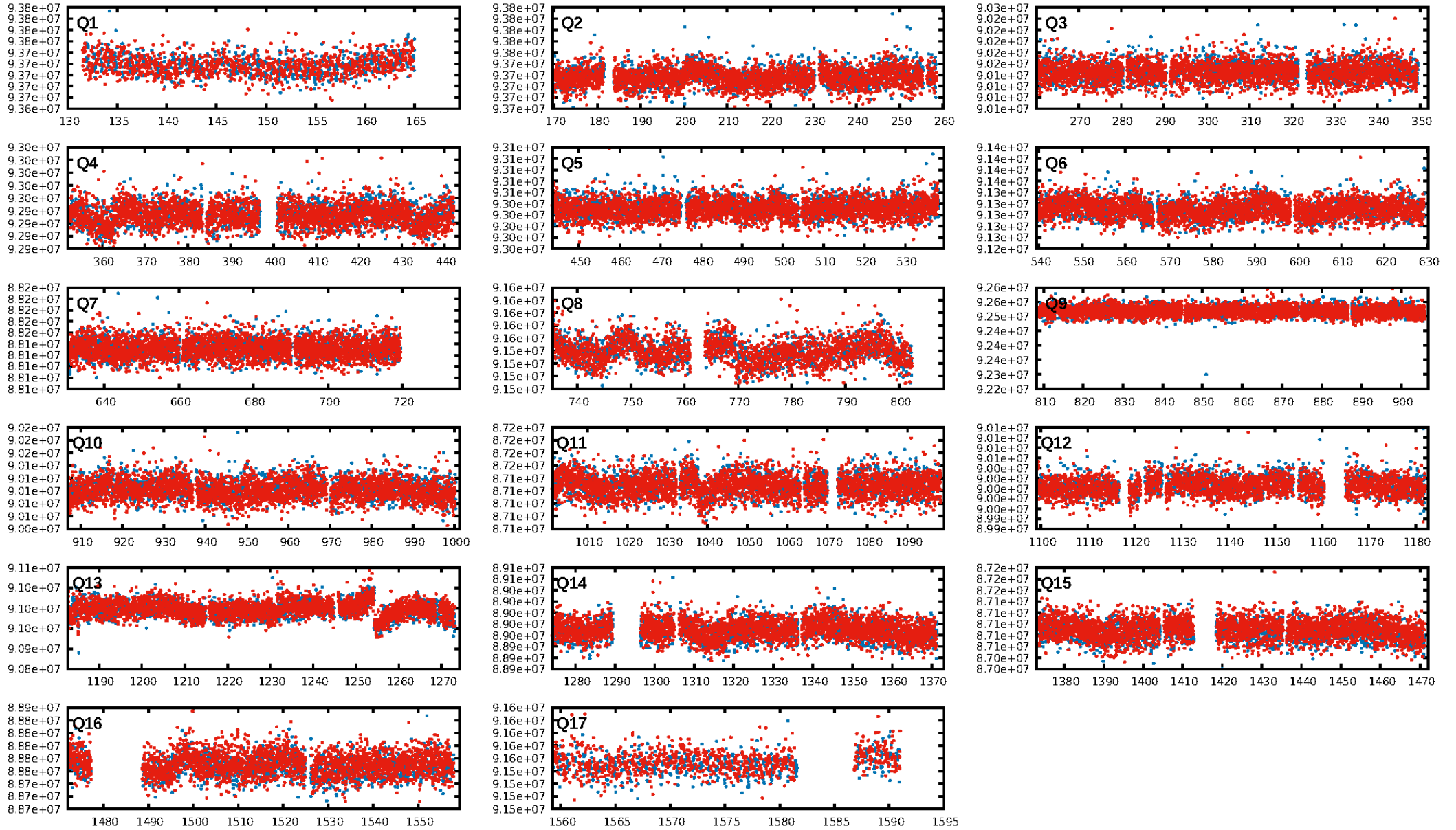
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: N/A
RollingBand-fgt: 1.00 [1785/1785]
GhostDiagnostic-chr: 3.381
Centroid-sig: 48.0%
Centroid-so: 4.508 arcsec [1.12σ]
OotOffset-rm: 1.915 arcsec [2.59σ]
OotOffset-st: 0/2/0/2 [4]
KicOffset-rm: 1.863 arcsec [2.53σ]
KicOffset-st: 0/2/0/2 [4]
DiffImageQuality-fgm: 0.25 [1/4]
DiffImageOverlap-fno: 1.00 [17/17]

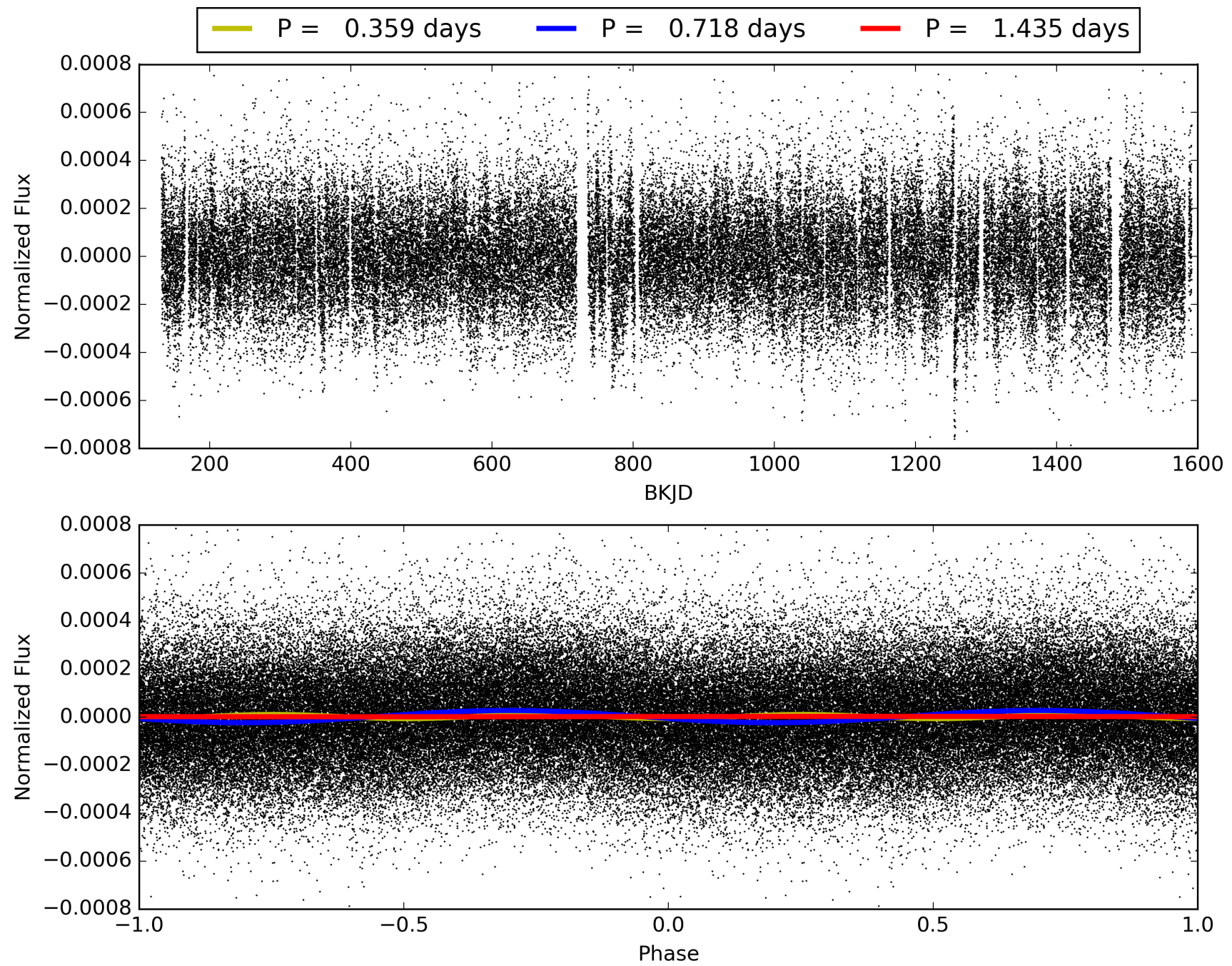
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 29-Jan-2016 22:58:48 Z

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

TCE 008332426-01, PDC Light Curves

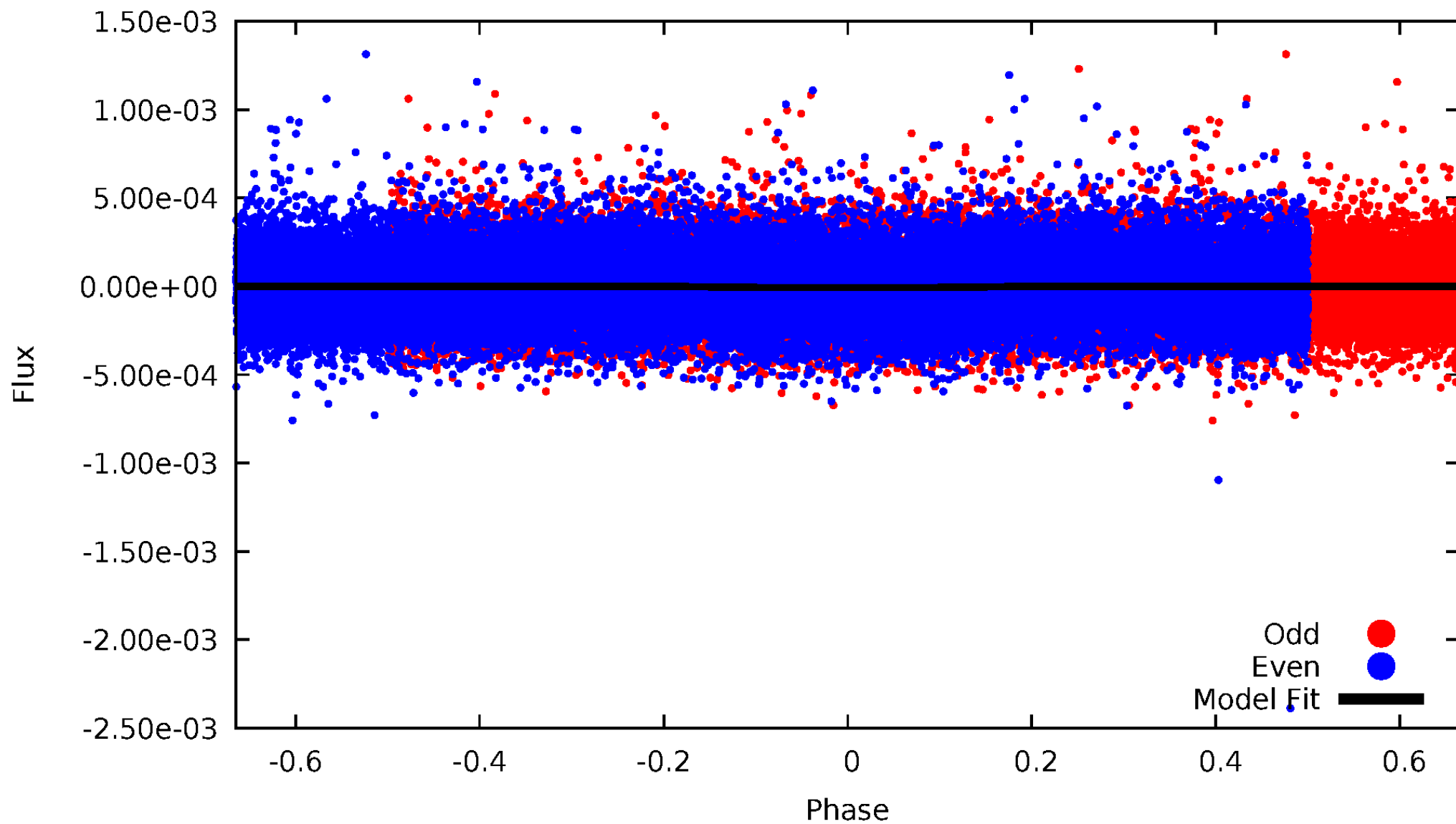


TCE 008332426-01



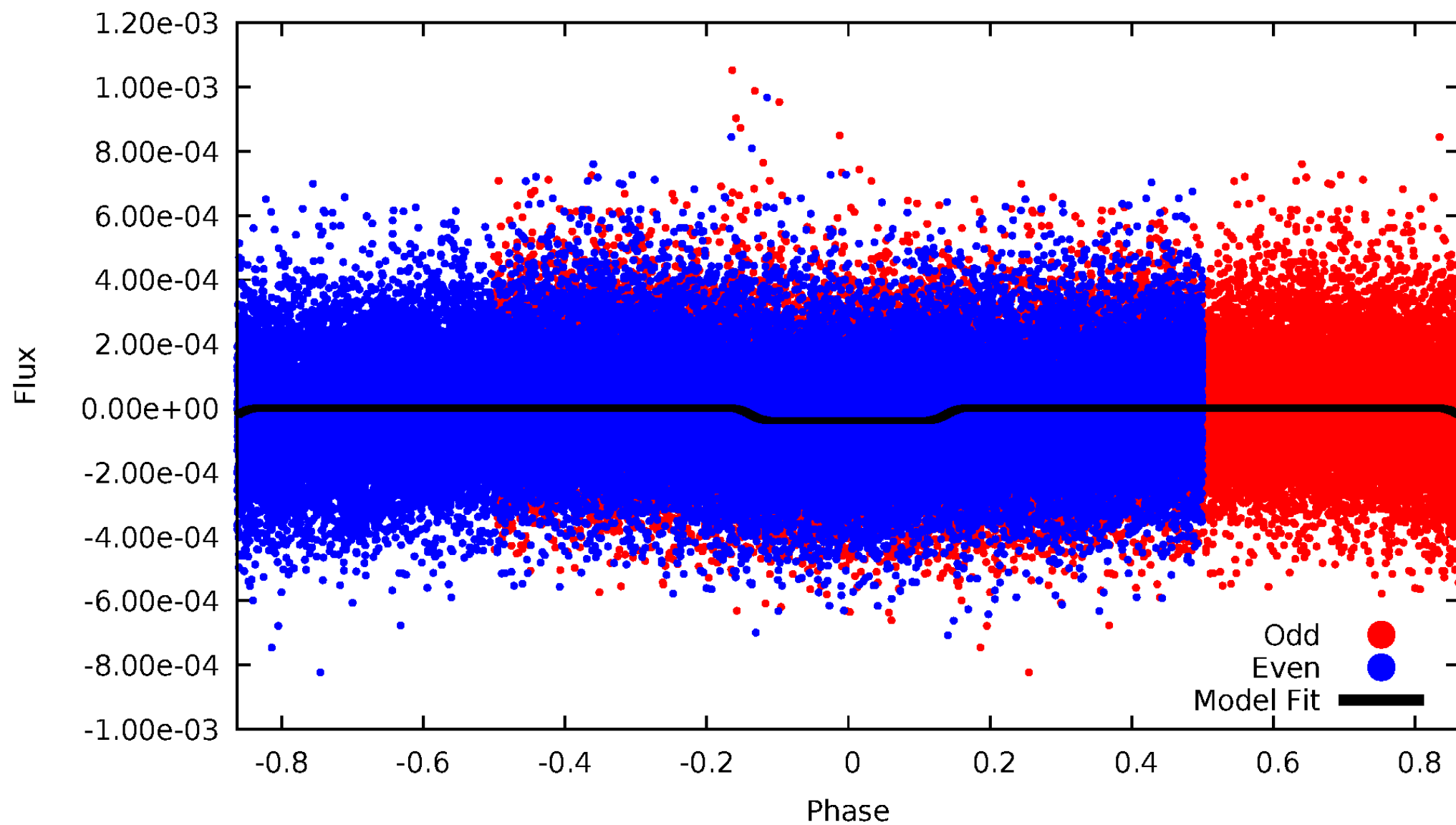
DV Odd/Even

TCE 008332426-01



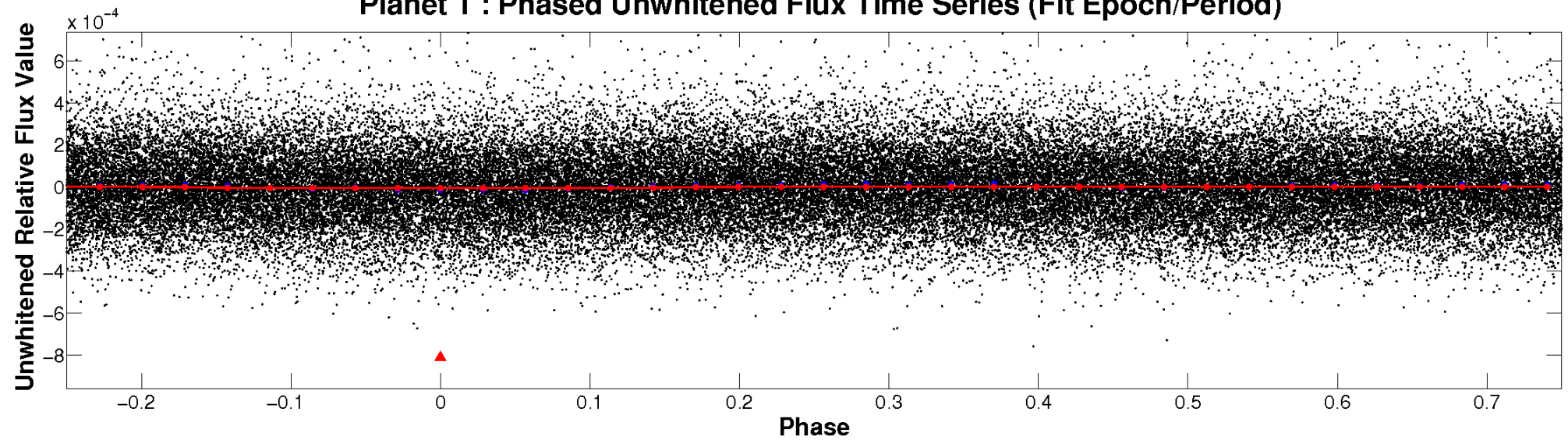
ALT Odd/Even

TCE 008332426-01

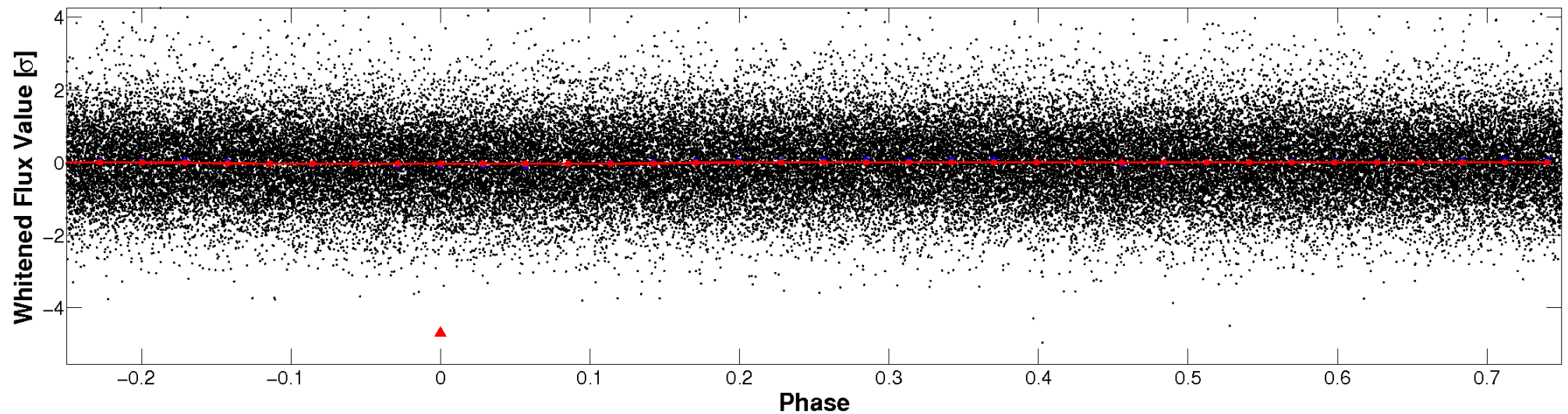


Non-Whitened Vs. Whitened Light Curve

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

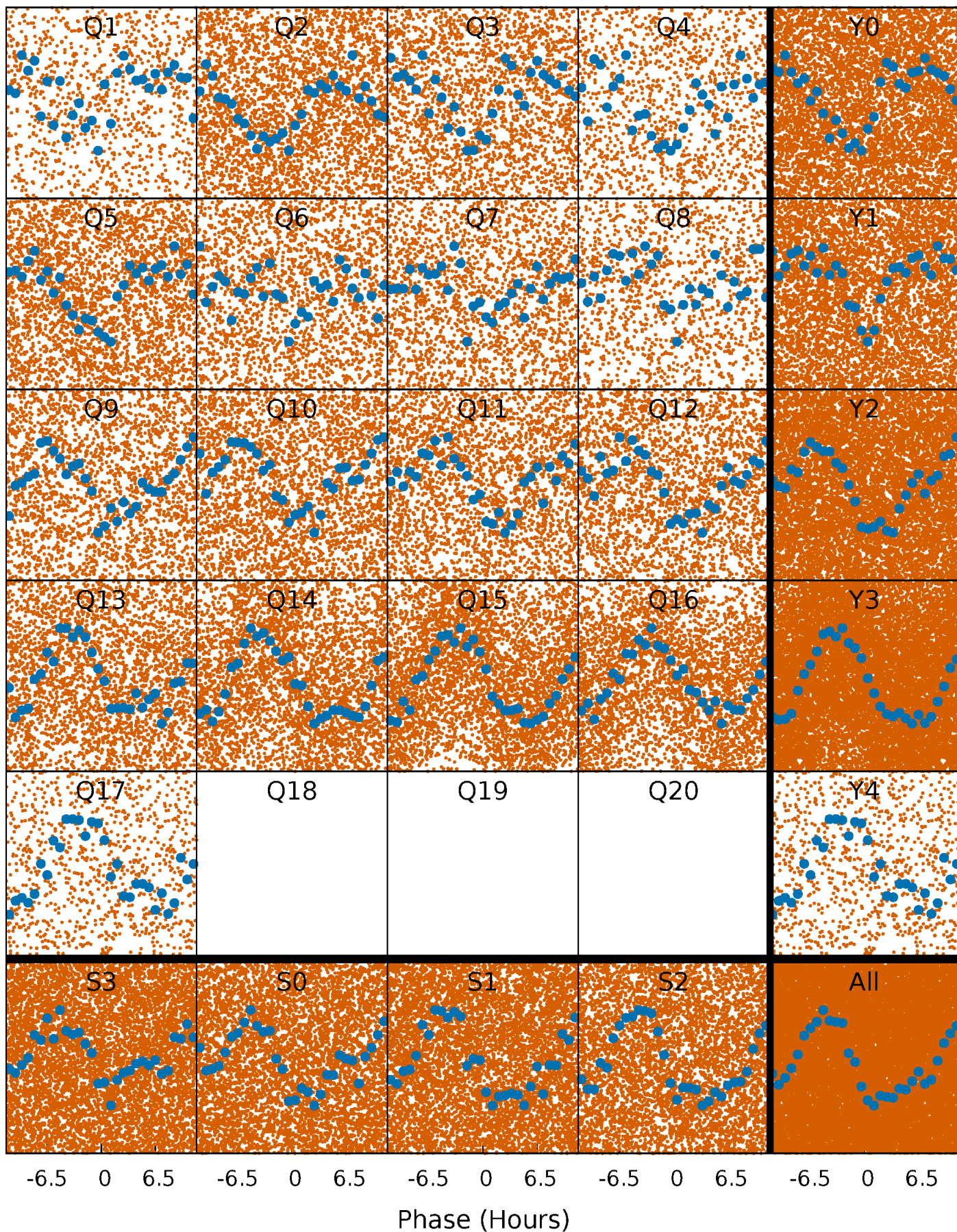


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



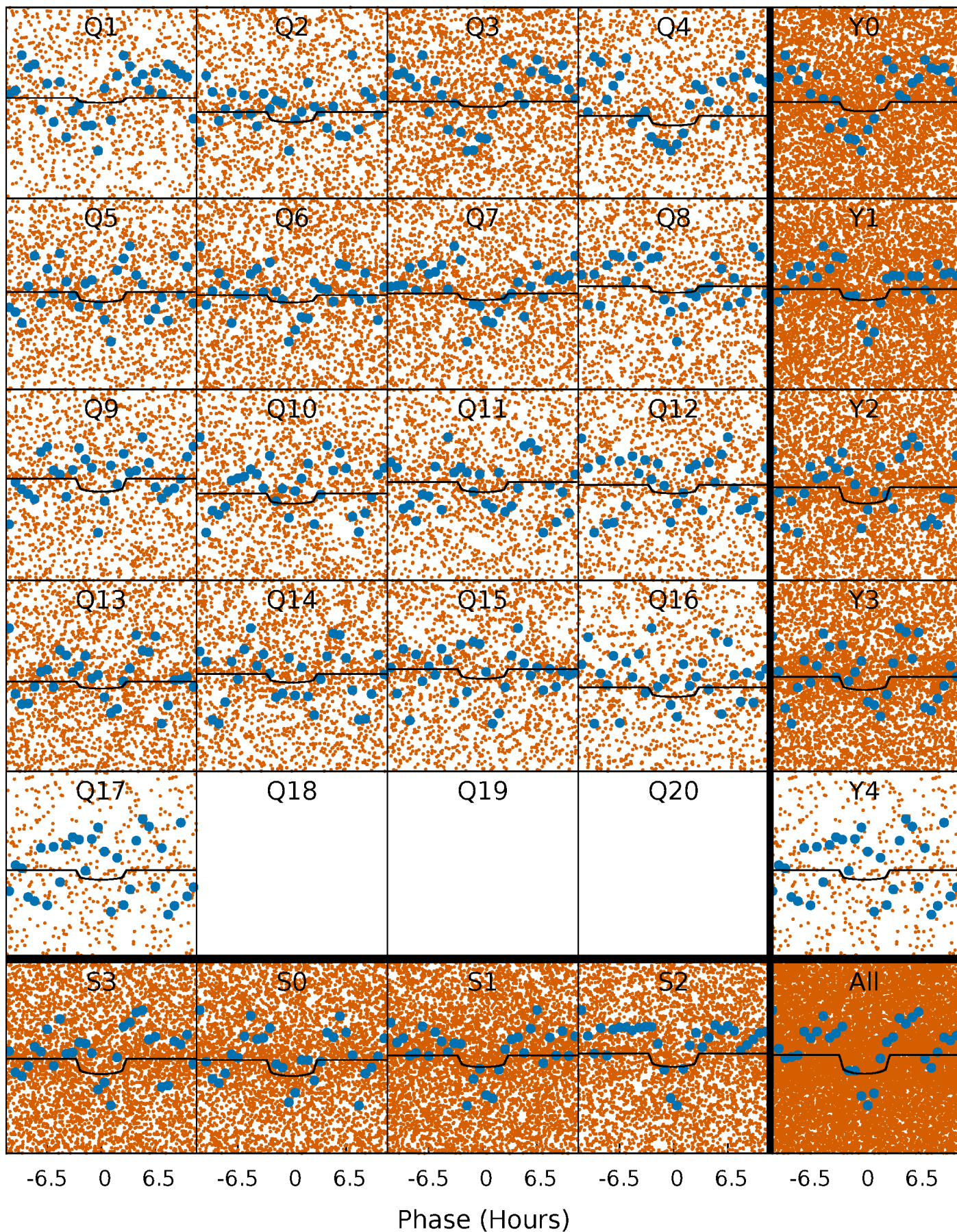
PDC Quarter-Phased Transit Curves

TCE 008332426-01 P= 0.717574 Days $T_0=131.602940$ (BKJD)



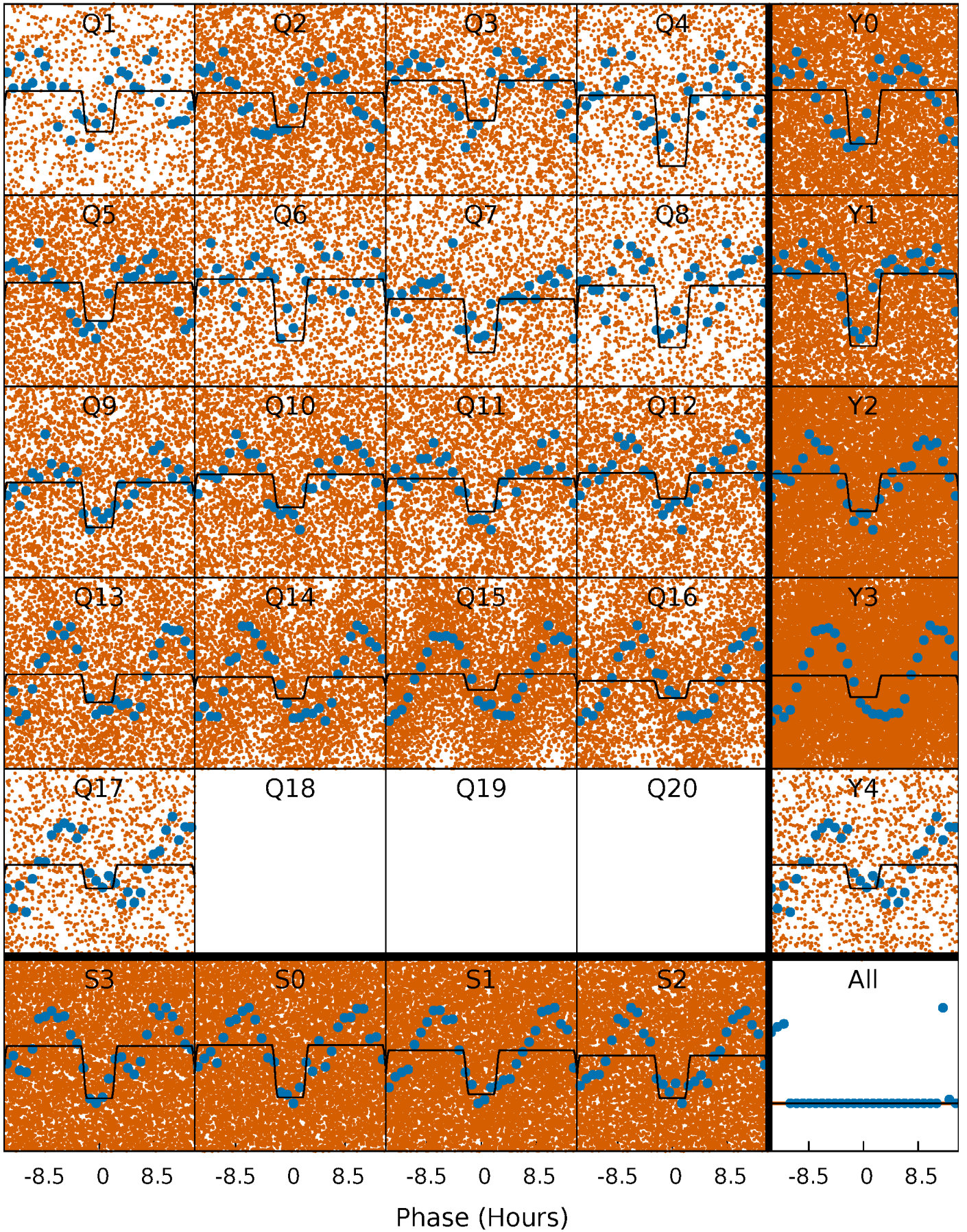
DV Quarter-Phased Transit Curves

TCE 008332426-01 P= 0.717574 Days $T_0=131.602940$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

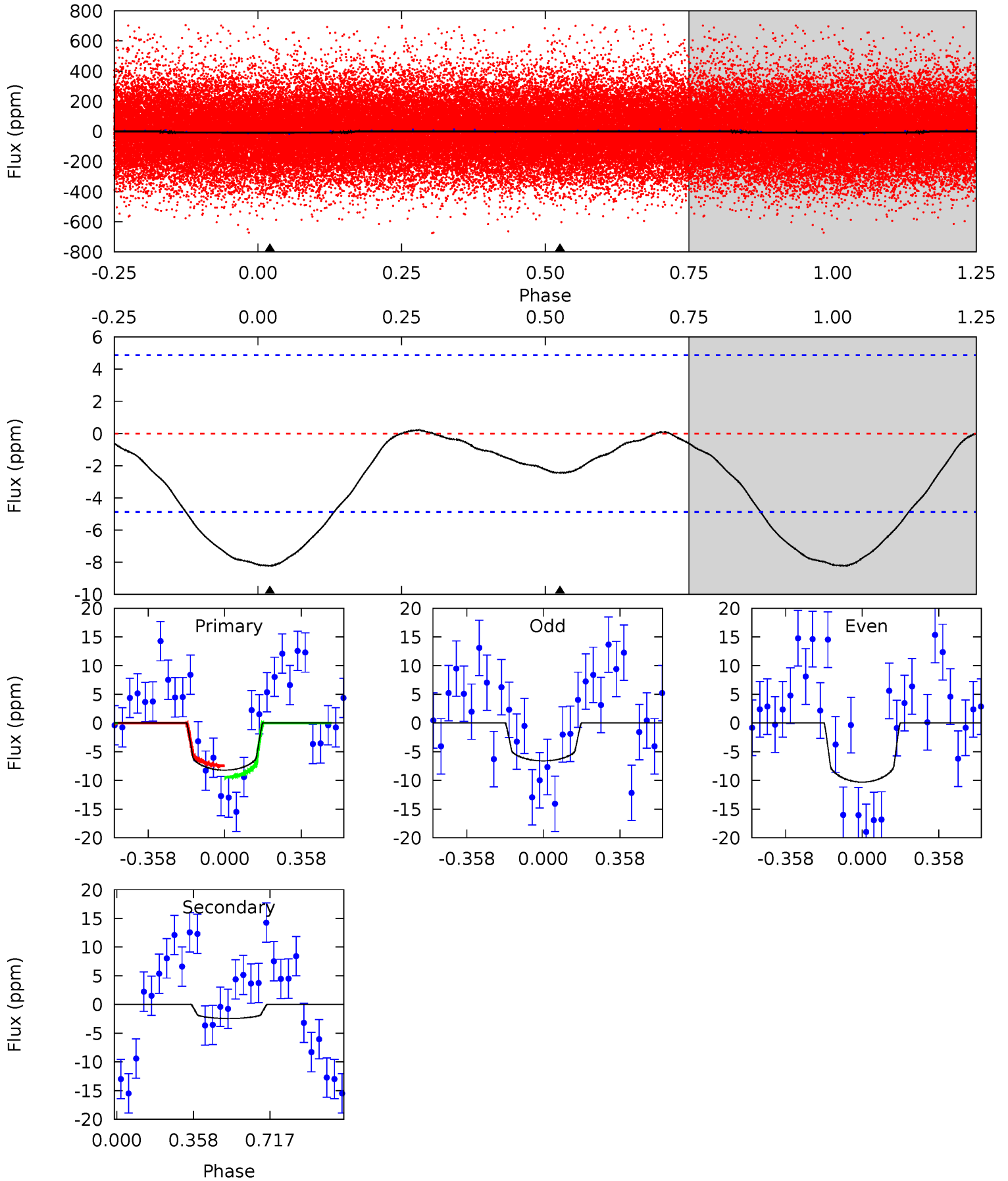
TCE 008332426-01 P= 0.717622 Days $T_0=131.617943$ (BKJD)



DV Model-Shift Uniqueness Test

008332426-01, P = 0.717574 Days, E = 130.885366 Days

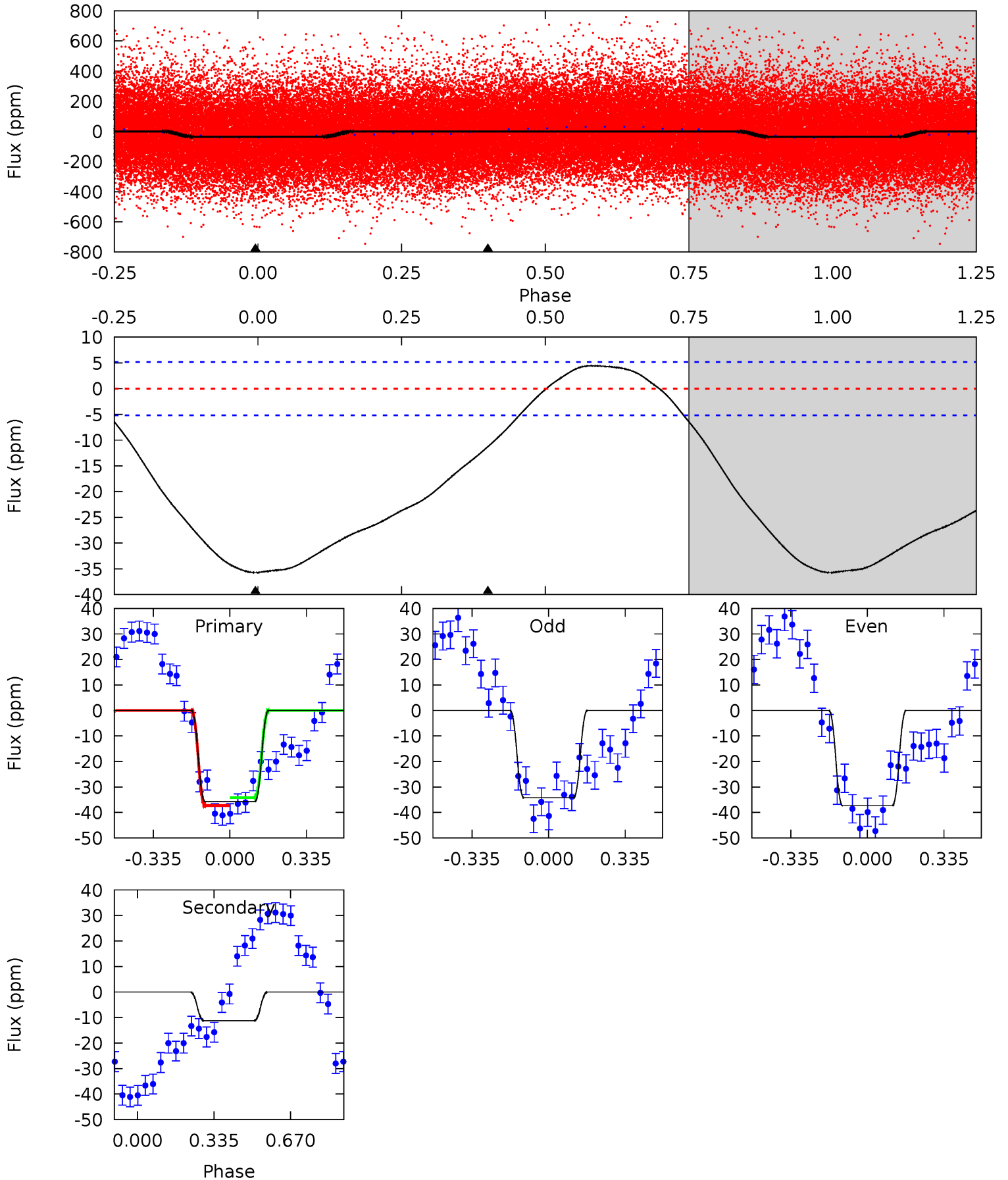
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
7.22	2.15	0	0	4.29	0.92	0.55	7.22	7.22	2.15	2.15	1.64	0.99	0.03	0.88



Alt Model-Shift Uniqueness Test

008332426-01, P = 0.717622 Days, E = 130.900321 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
29.8	9.39	0	0	4.30	0.96	2.46	29.8	29.8	9.39	9.39	1.30	1.05	0.11	1.31



Stellar Parameters For KIC 008332426

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	8505^{+234}_{-402}	$4.254^{+0.067}_{-0.202}$	$0.070^{+0.250}_{-0.550}$	$1.682^{+0.473}_{-0.255}$	$1.856^{+0.329}_{-0.329}$	$0.549^{+0.195}_{-0.279}$
	+3%/-5%	+2%/-5%	+357%/-786%	+28%/-15%	+18%/-18%	+36%/-51%
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 008332426-01 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	-2 ± 1	$0.69^{+0.63}_{-0.45}$	4977^{+362}_{-295}	4878^{+4509}_{-8225}	$0.958^{+6.635}_{-0.739}$
Alt.	-11 ± 1	$1.22^{+0.68}_{-0.61}$	4988^{+335}_{-293}	5573^{+2941}_{-1251}	$1.486^{+4.548}_{-0.850}$

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

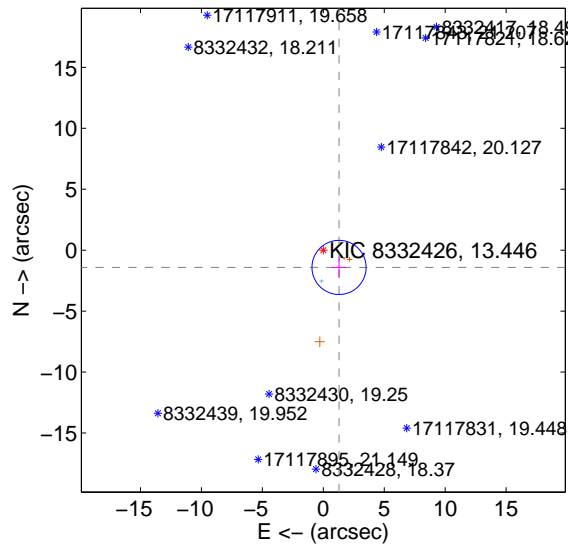
Supplemental centroid analysis for 008332426-01. Kepler magnitude: 13.45. Transit SNR 3.93

There are 1 quarters with good PRF difference image offsets

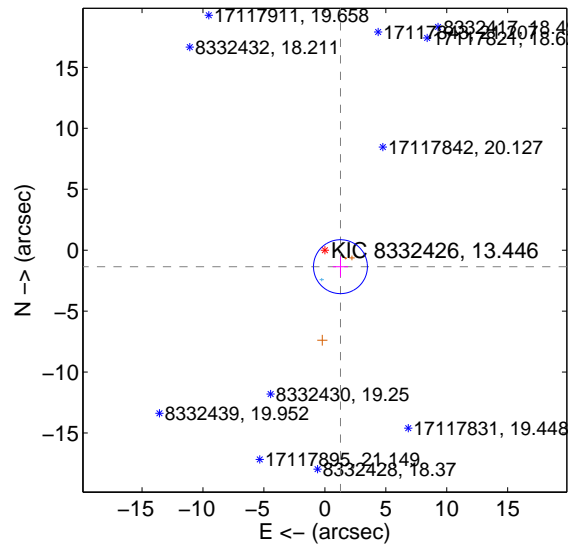
The direct PRF centroid is offset from the target star catalog position by about 0.14 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	1.915 ± 0.740	2.59	-1.291 ± 0.600	-1.415 ± 0.839
PRF-fit source offset from KIC position	1.863 ± 0.737	2.53	-1.280 ± 0.626	-1.354 ± 0.824
photometric centroid source offset	4.51 ± 4.01	1.12	4.39 ± 4.01	-1.04 ± 4.02

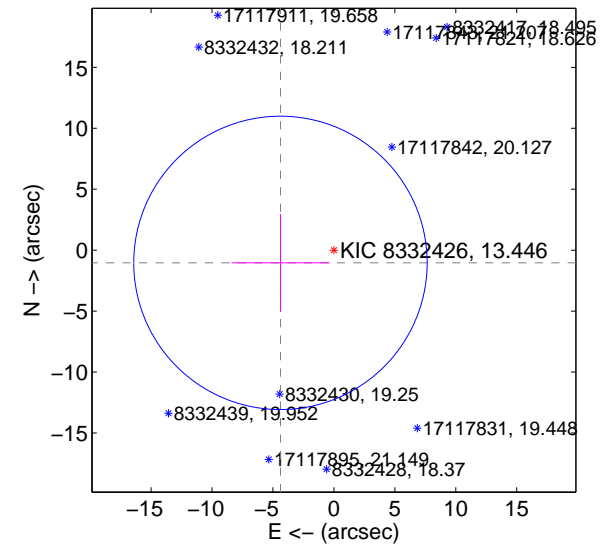
offset from difference PRF-fit to OOT PRF-fit



offset from difference PRF-fit to KIC position

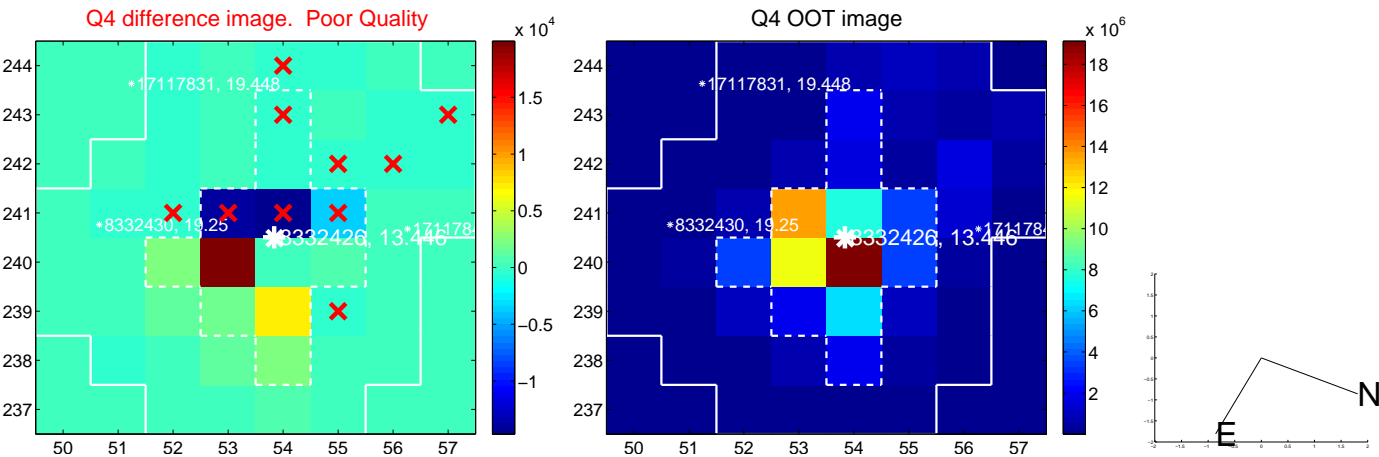
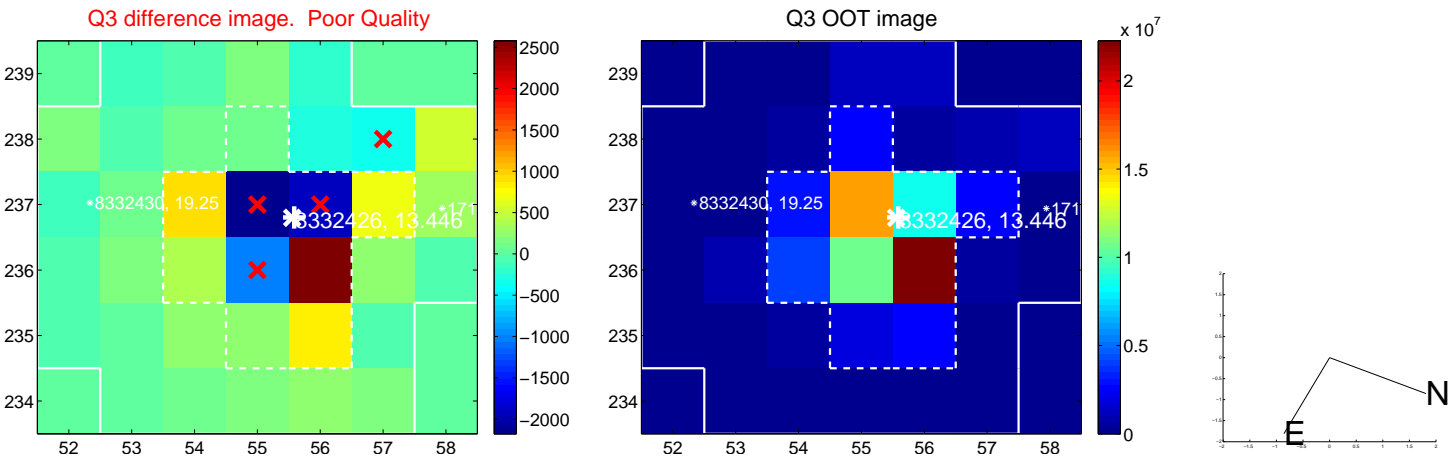
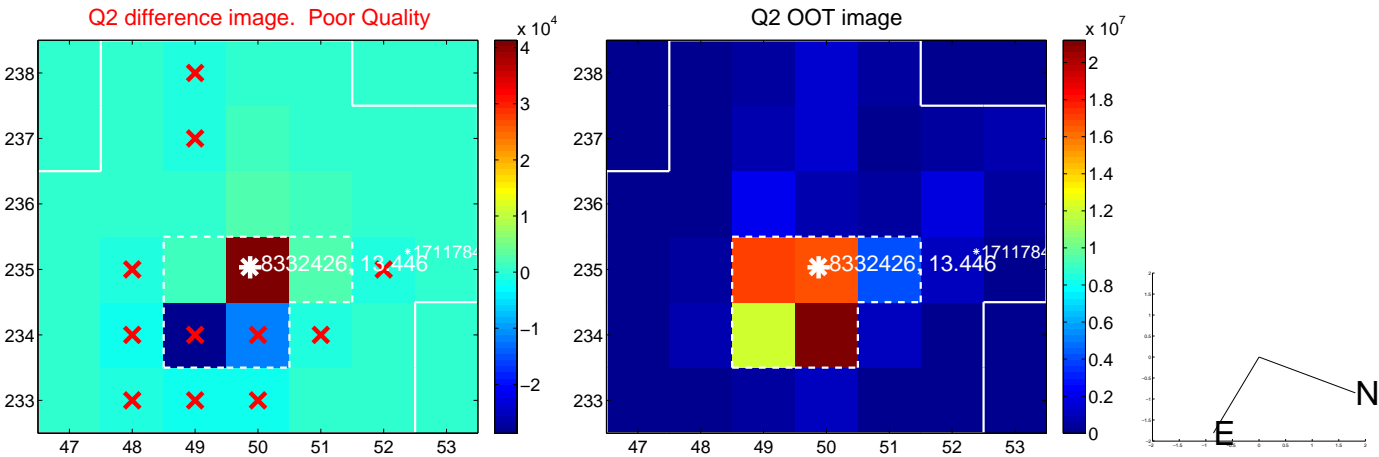
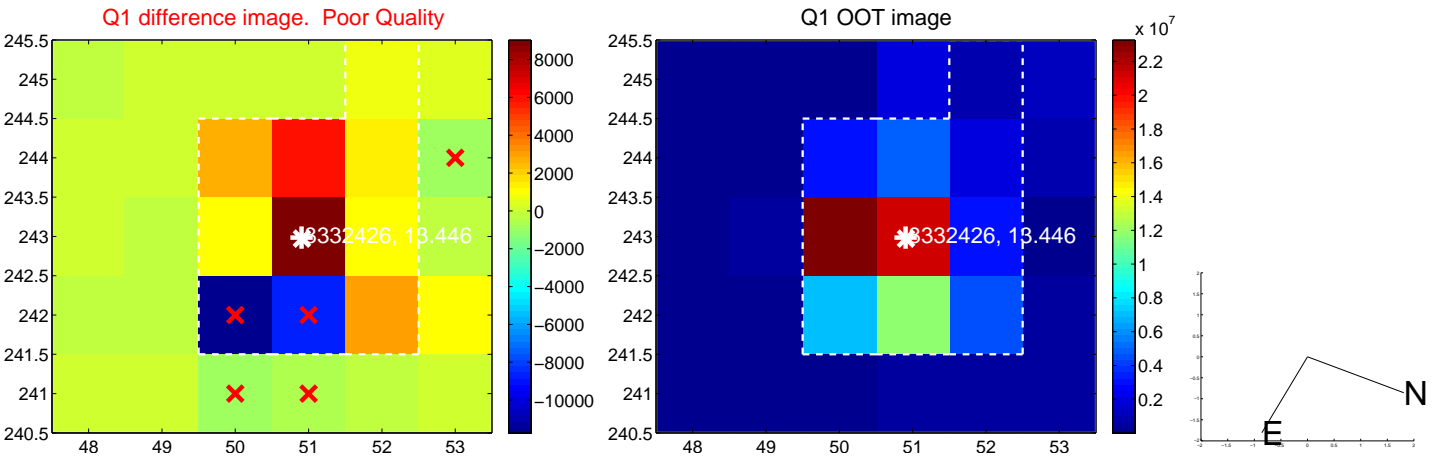


offset from photometric centroids

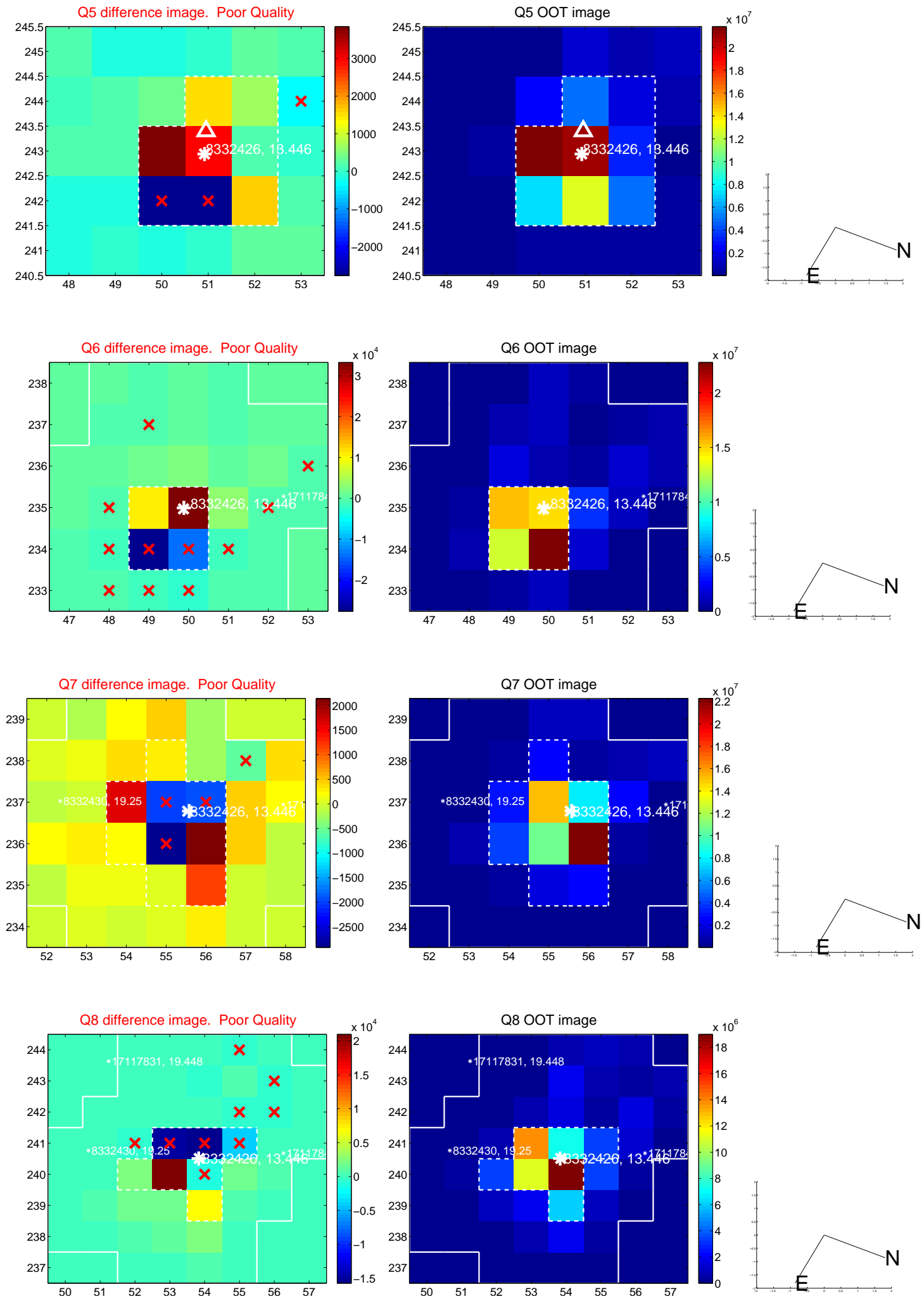


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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

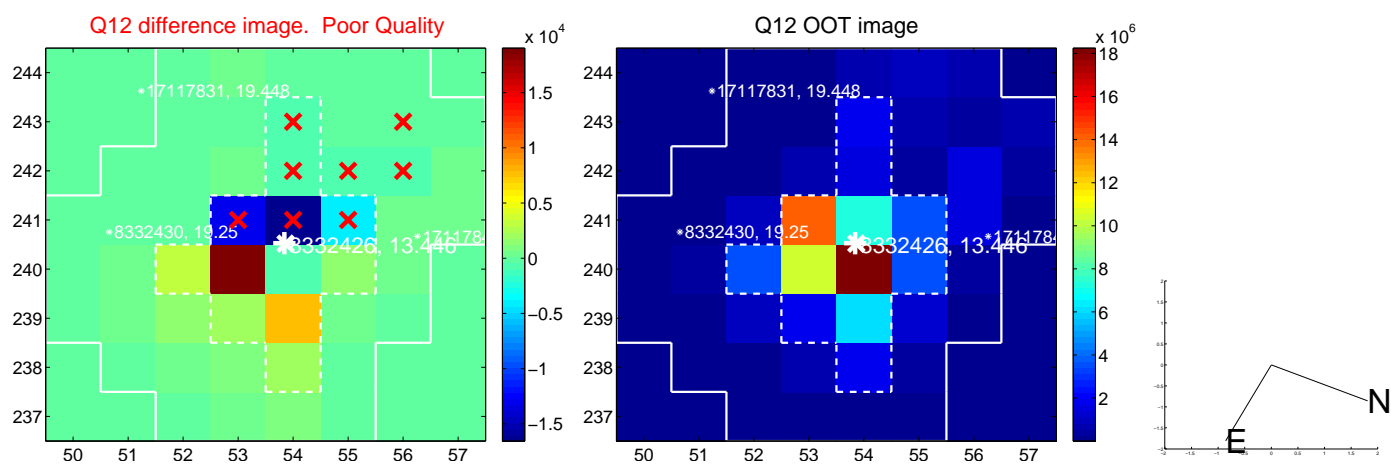
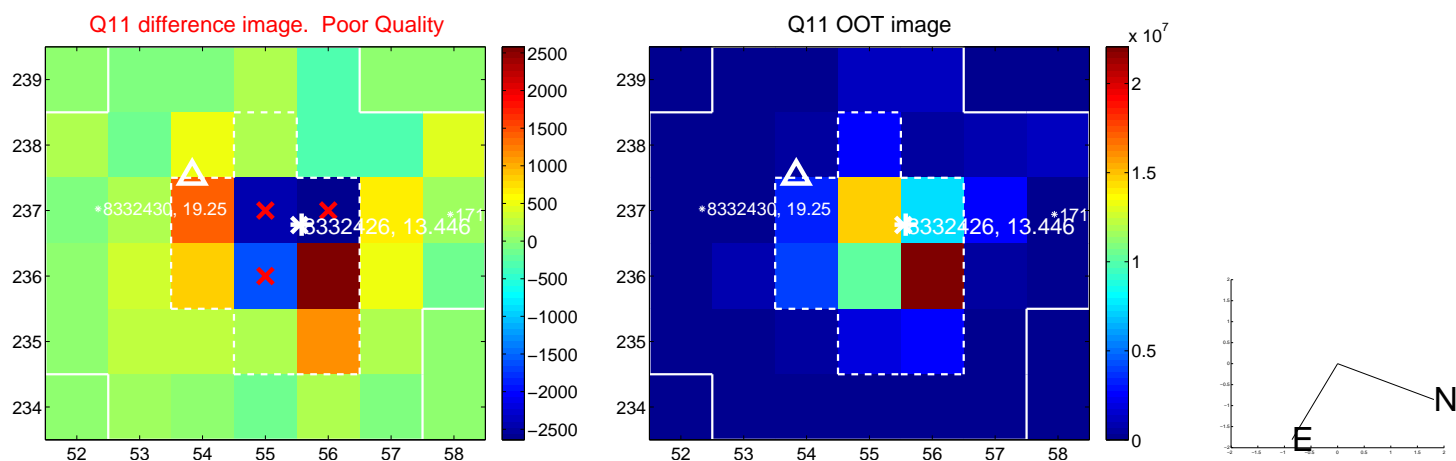
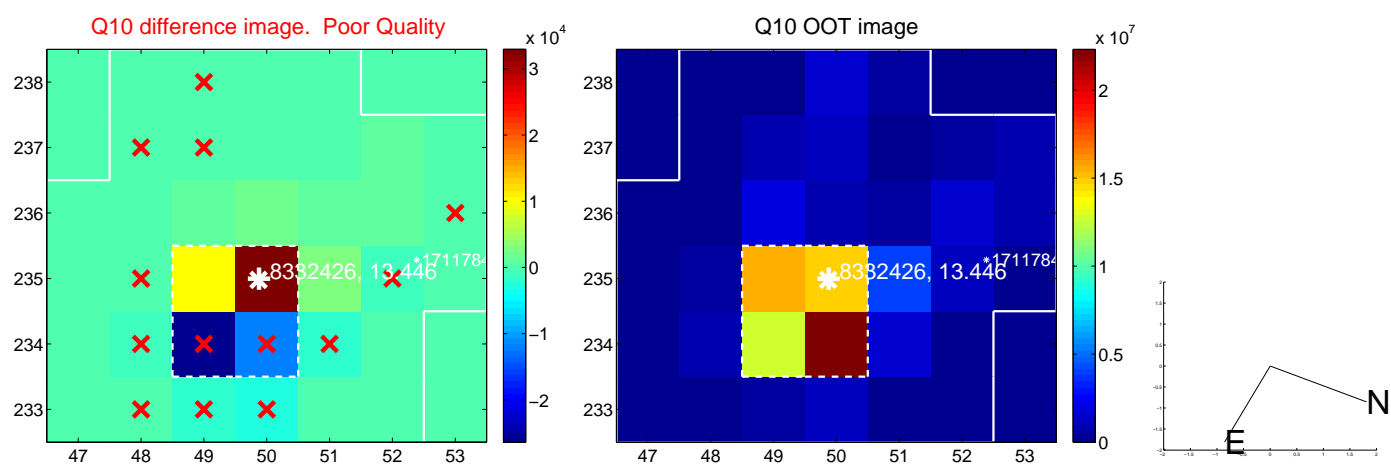
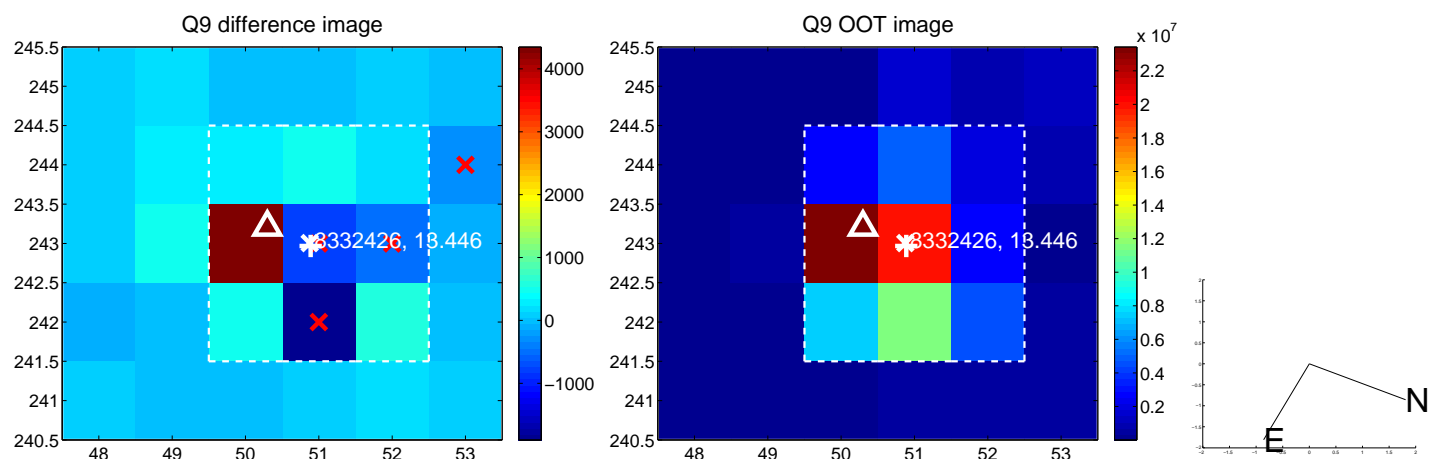
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



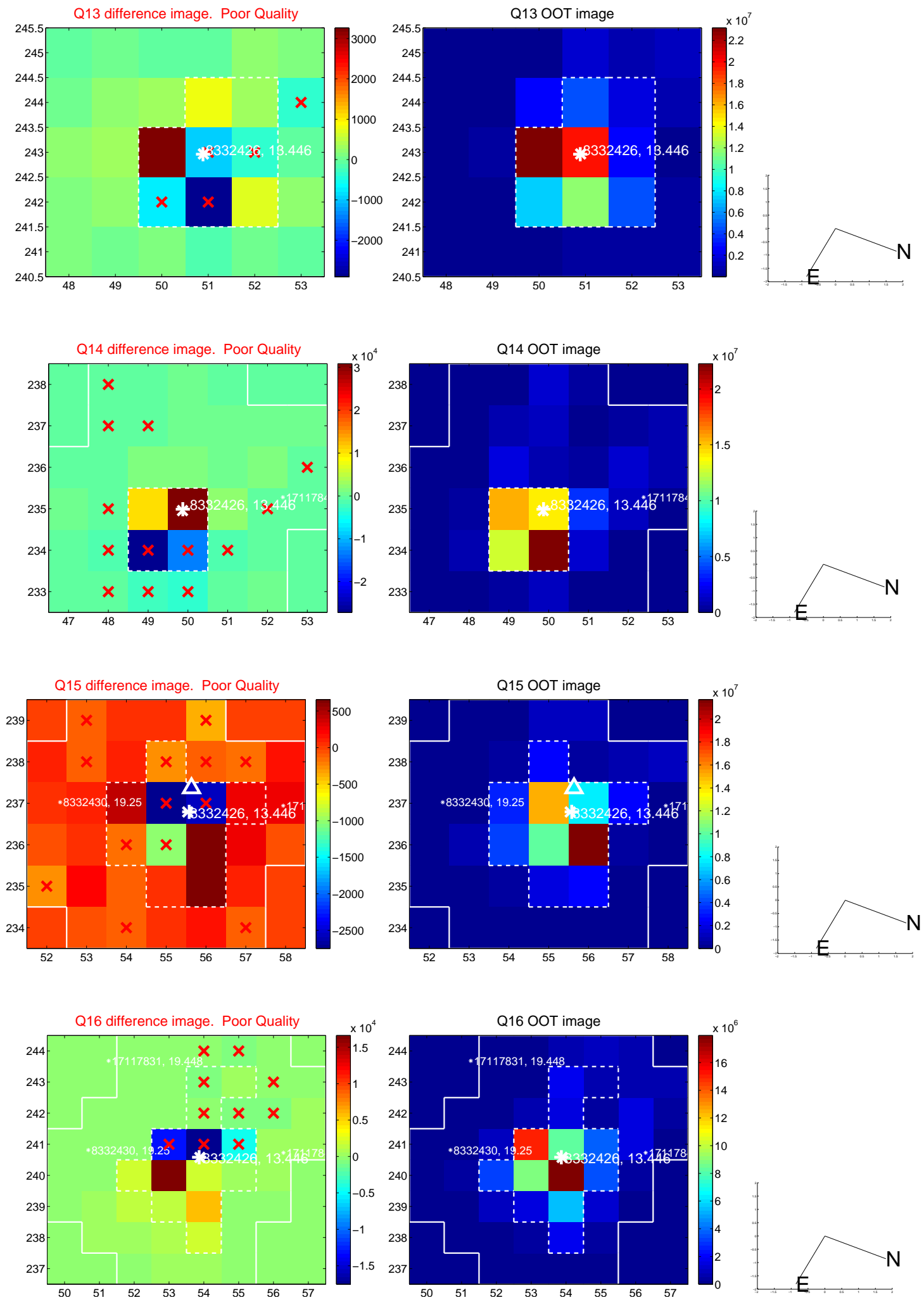
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



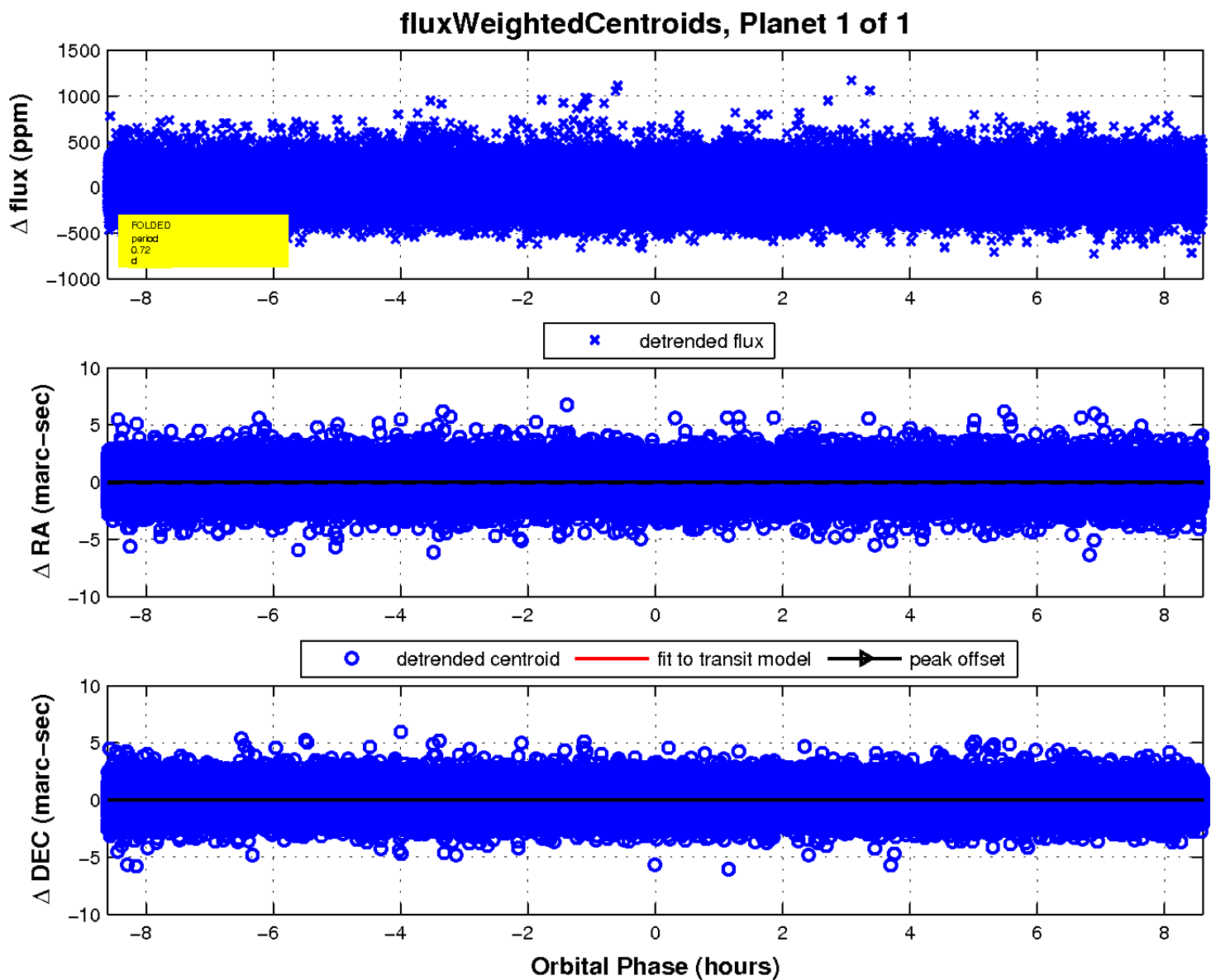
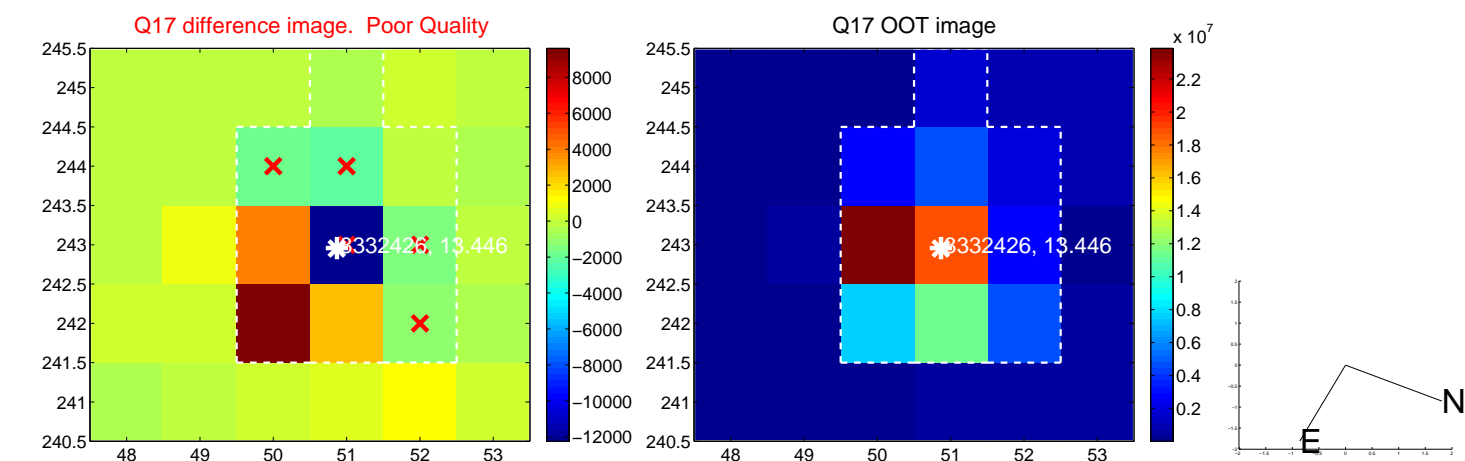
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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.



UKIRT Image

Declination

