

KIC 003865358

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})
003865358-01	OBS	No	1.316166	132.408361	26.9	11.508	8.1	8.0	1.81	8103	0.95	15078.88

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
003865358-01	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.

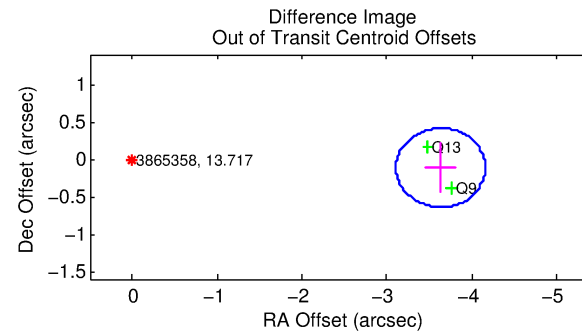
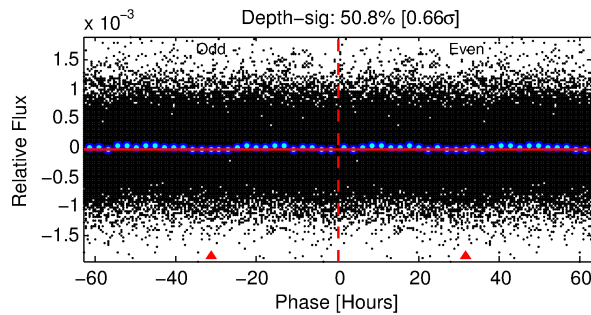
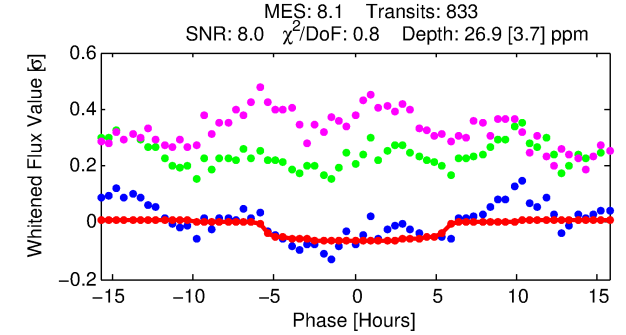
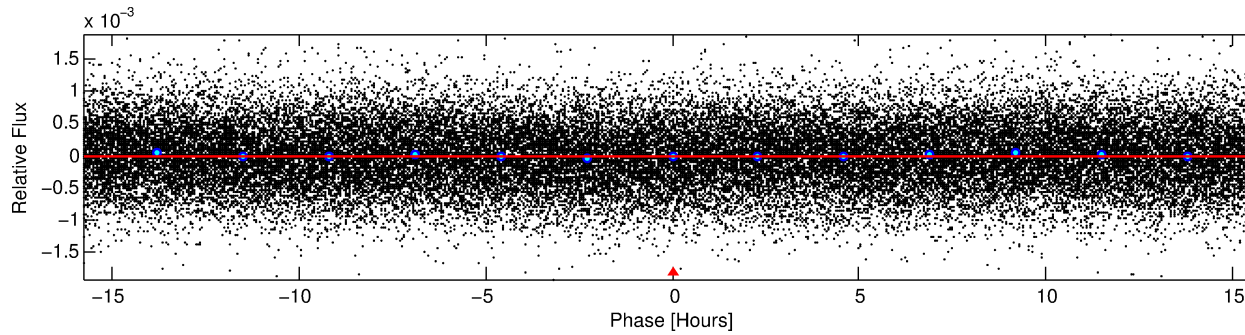
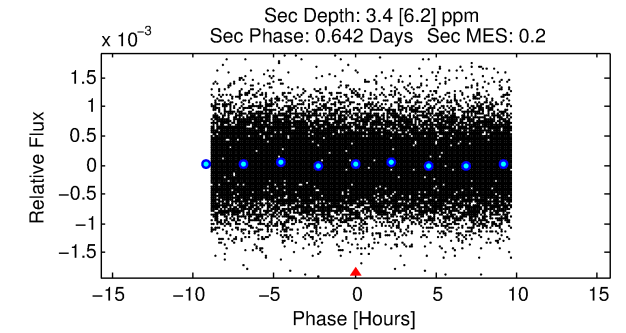
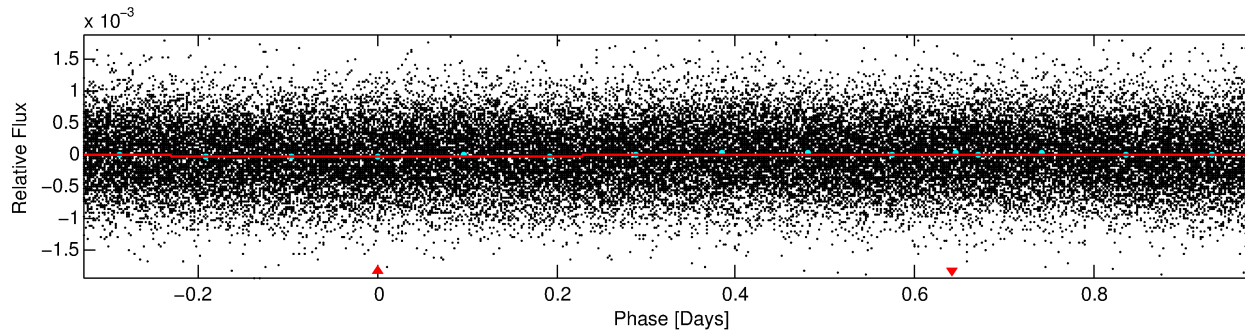
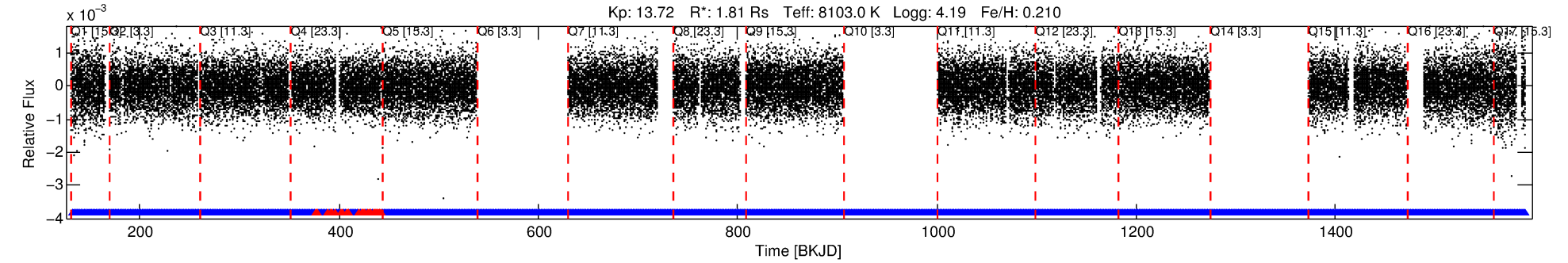
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 003865358-01

No Significant Match Found

DV One-Page Summary

KIC: 3865358 Candidate: 1 of 1 Period: 1.316 d



DV Fit Results:

Period = 1.31617 [0.00004] d
Epoch = 132.4084 [0.0148] BKJD
Rp/R* = 0.0048 [0.0097]
a/R* = 1.10 [2.37]
b = 0.05 [262.88]
Seff = 15078.88 [6173.82]
Teq = 2826 [289] K
Rp = 0.95 [1.94] Re
a = 0.0289 [0.0073] AU
Ag = 1.71 [7.61] [0.09σ]
Teffp = 4997 [5540] K [0.39σ]

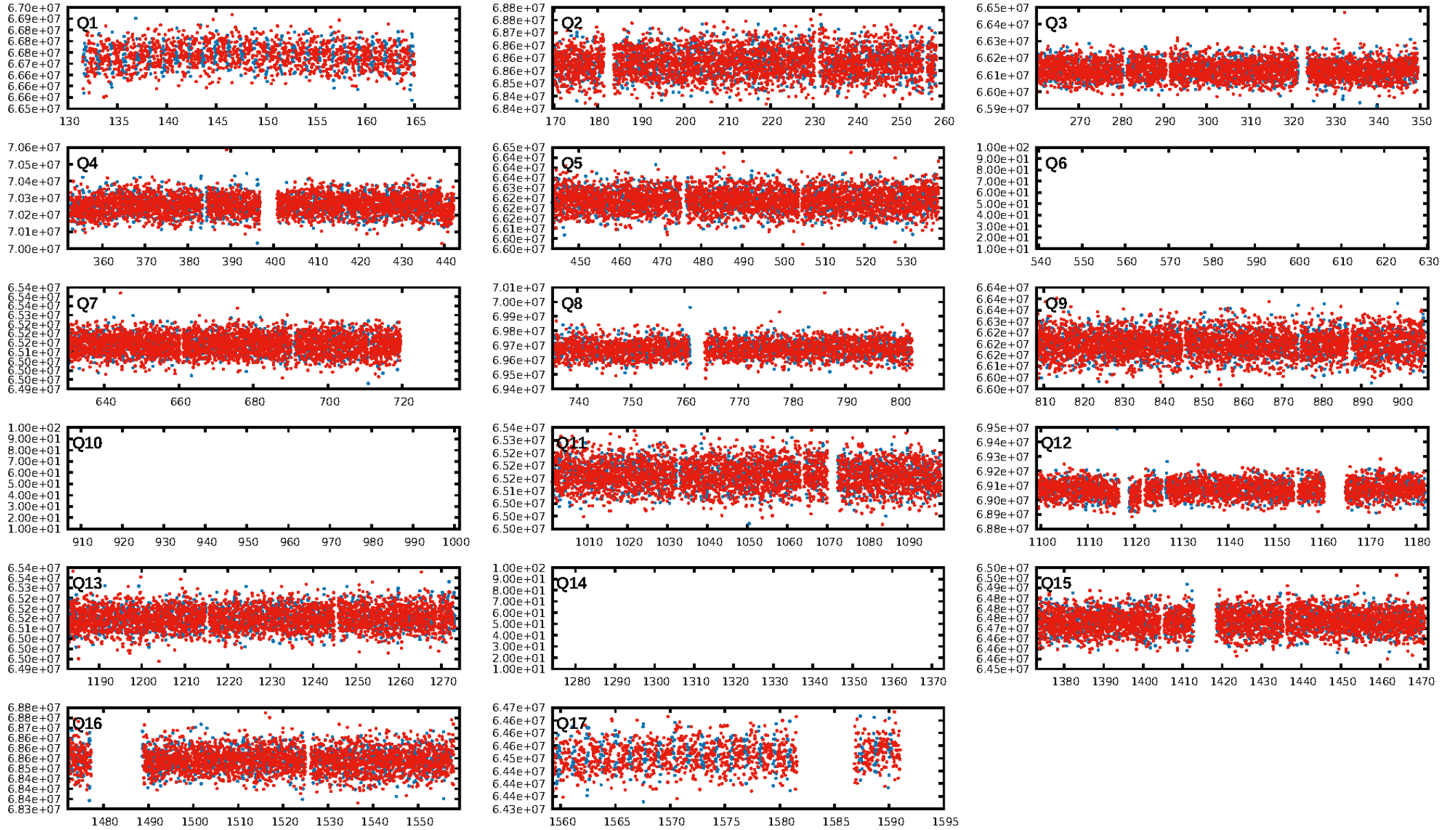
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: N/A
RollingBand-fgt: 0.97 [763/786]
GhostDiagnostic-chr: 8.871
Centroid-sig: 76.6%
Centroid-so: 0.878 arcsec [0.64σ]
OotOffset-rm: 3.638 arcsec [20.70σ]
KicOffset-rm: 3.679 arcsec [19.62σ]
OotOffset-st: 0/0/0/2 [2]
KicOffset-st: 0/0/0/2 [2]
DiffImageQuality-fgm: 0.00 [0/2]
DiffImageOverlap-fno: 1.00 [14/14]

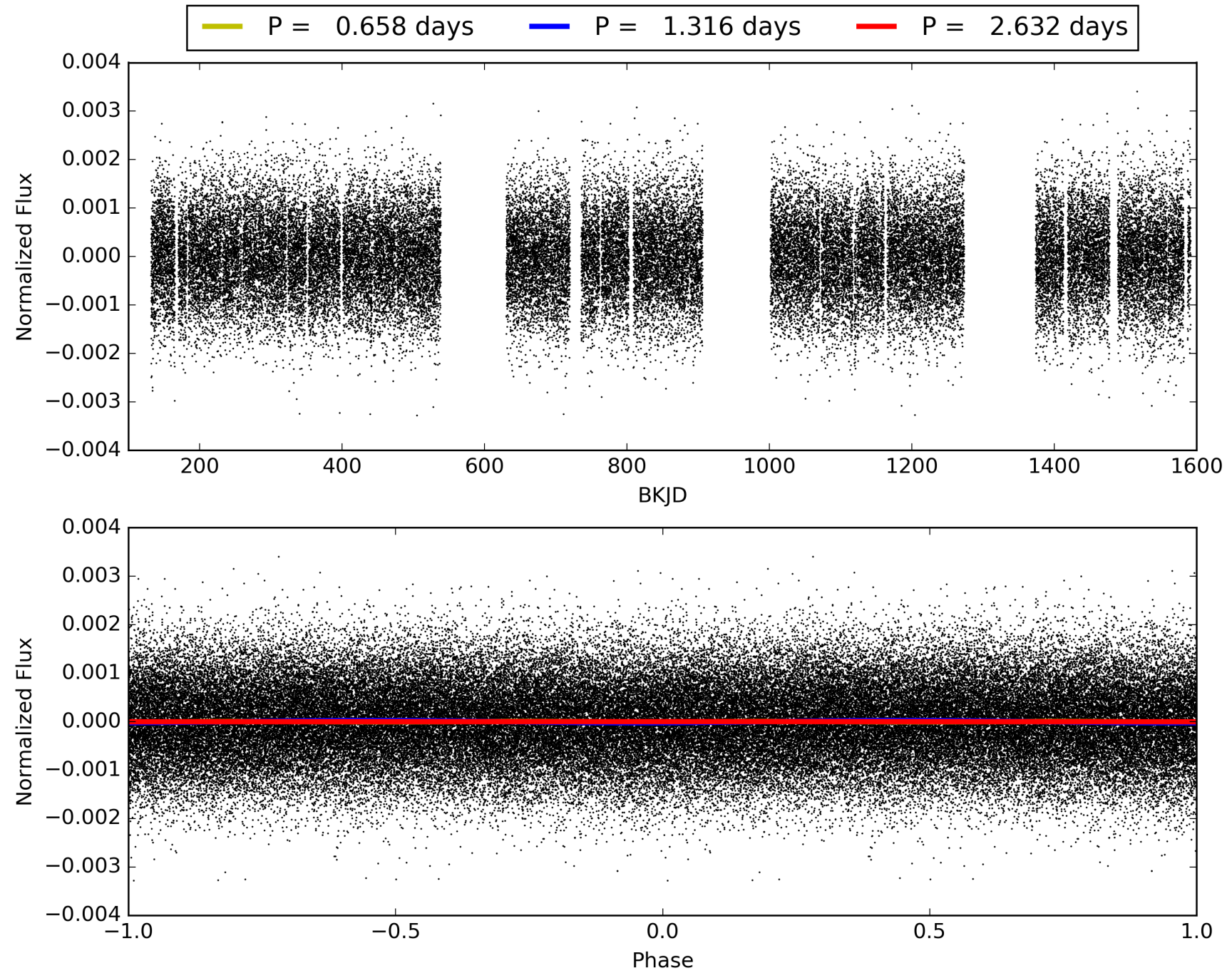
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 29-Jan-2016 21:04:40 Z

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

TCE 003865358-01, PDC Light Curves

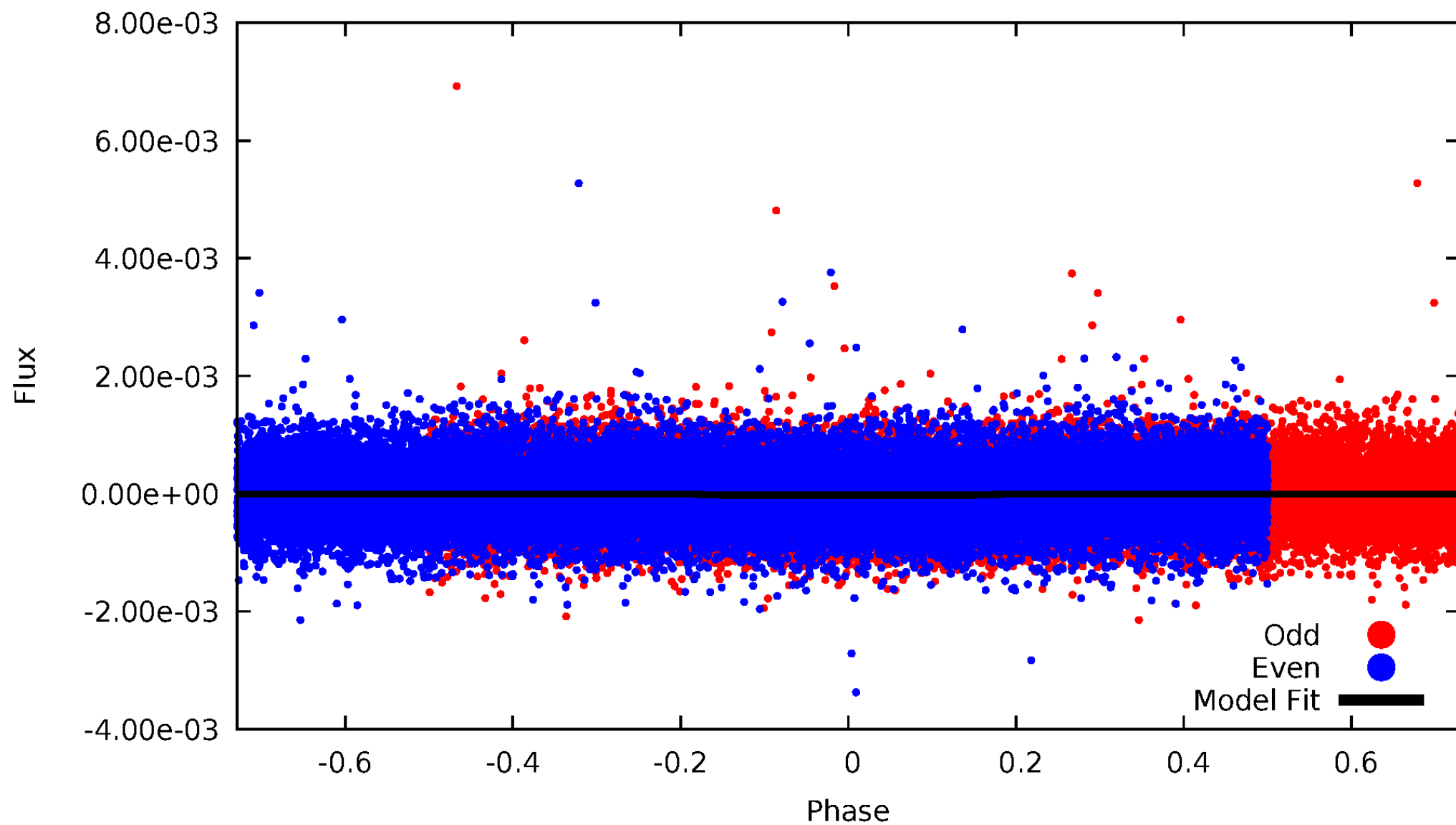


TCE 003865358-01



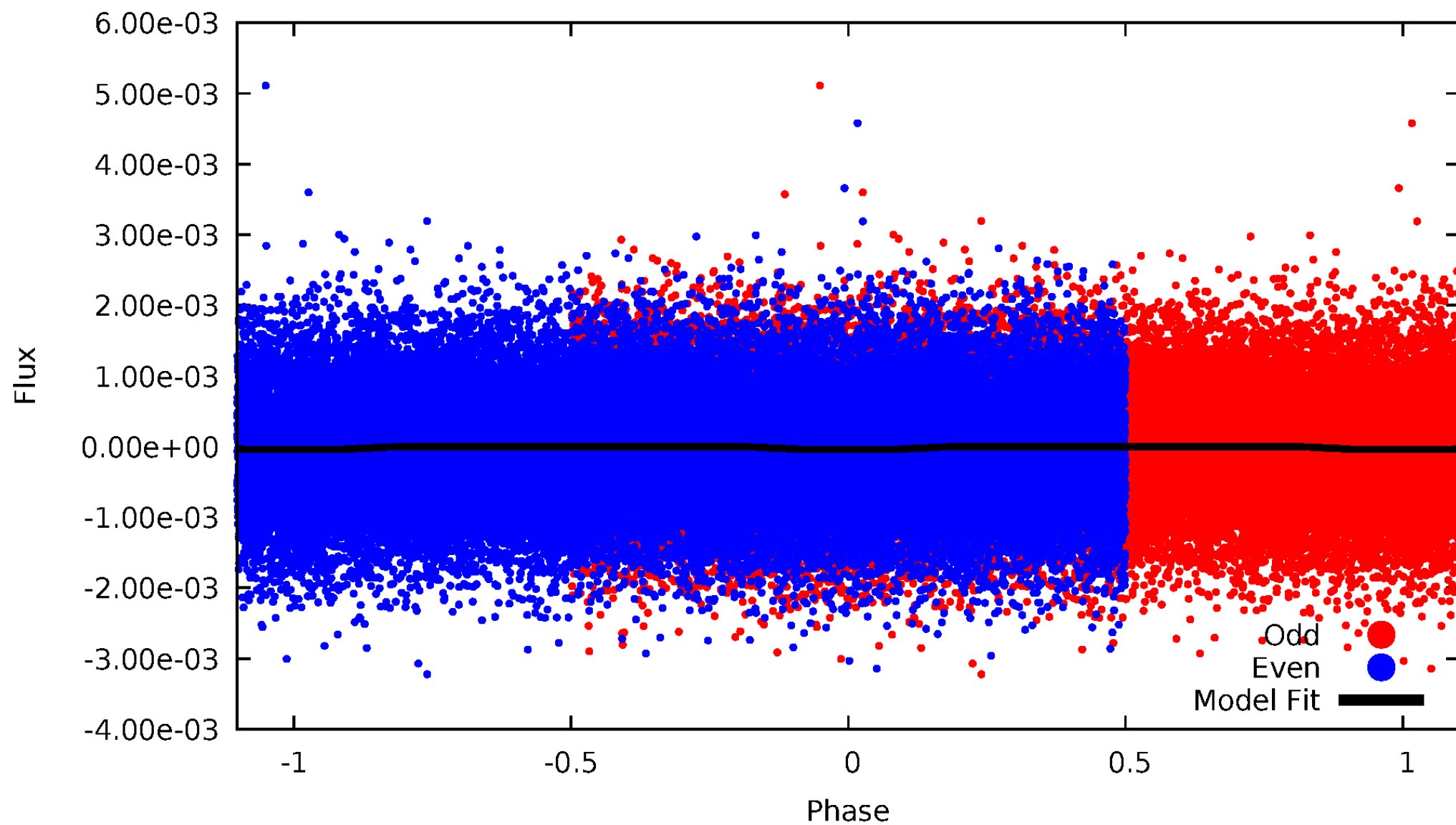
DV Odd/Even

TCE 003865358-01



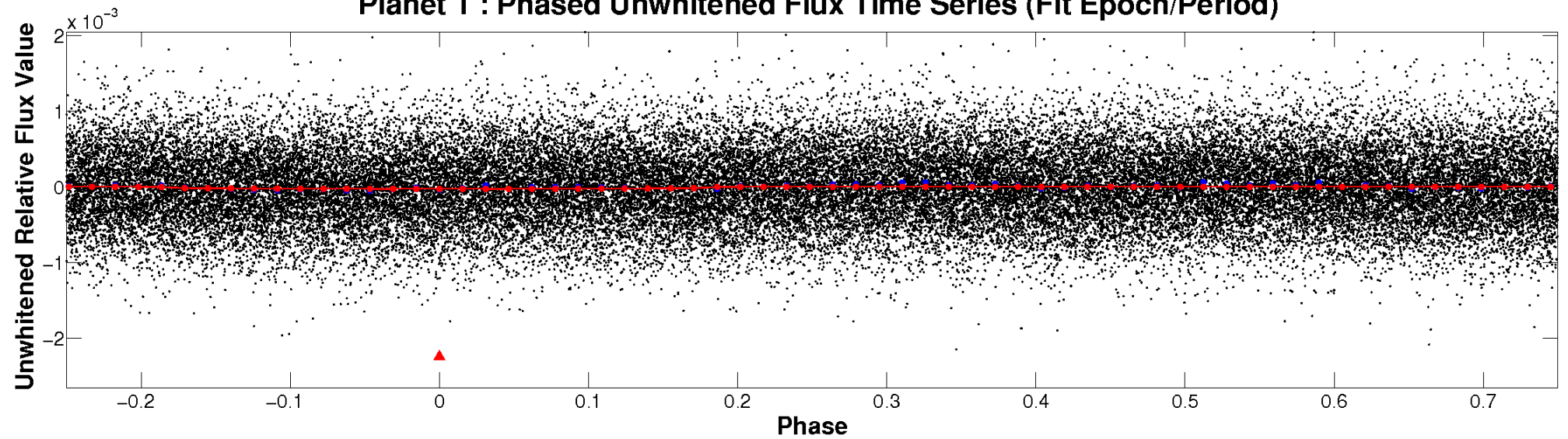
ALT Odd/Even

TCE 003865358-01

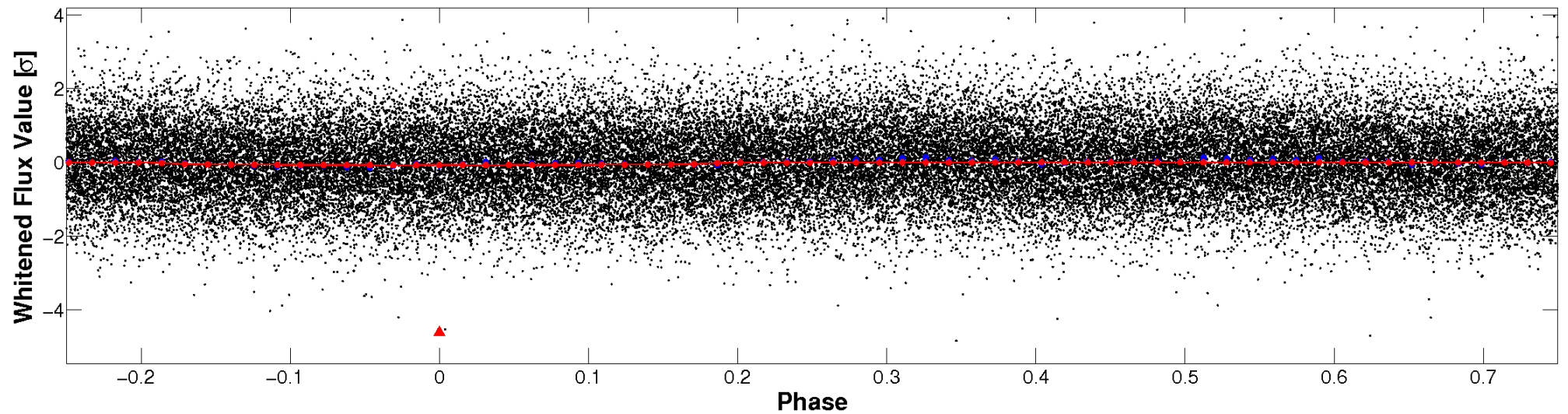


Non-Whitened Vs. Whitened Light Curve

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

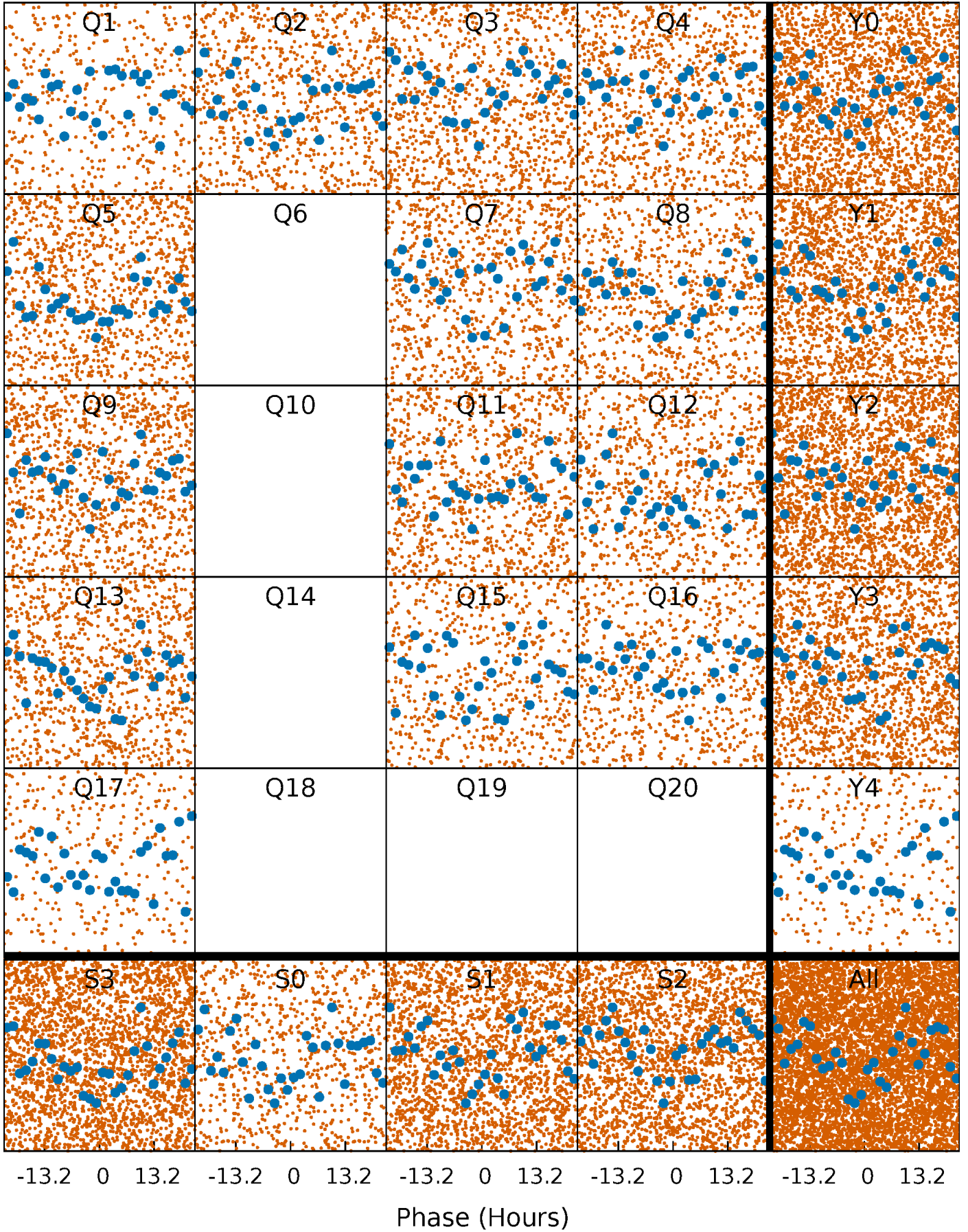


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



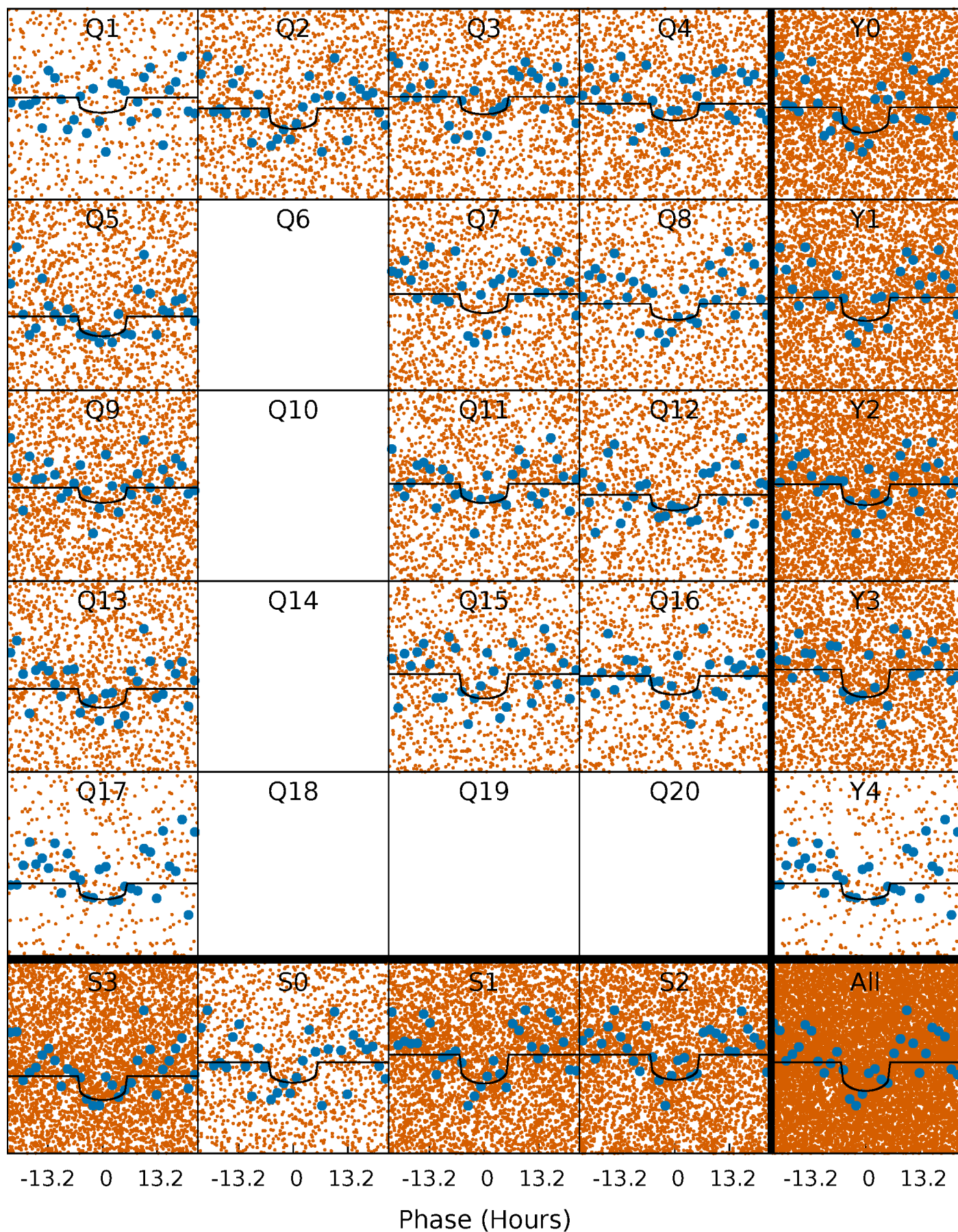
PDC Quarter-Phased Transit Curves

TCE 003865358-01 P= 1.316166 Days $T_0=132.408361$ (BKJD)



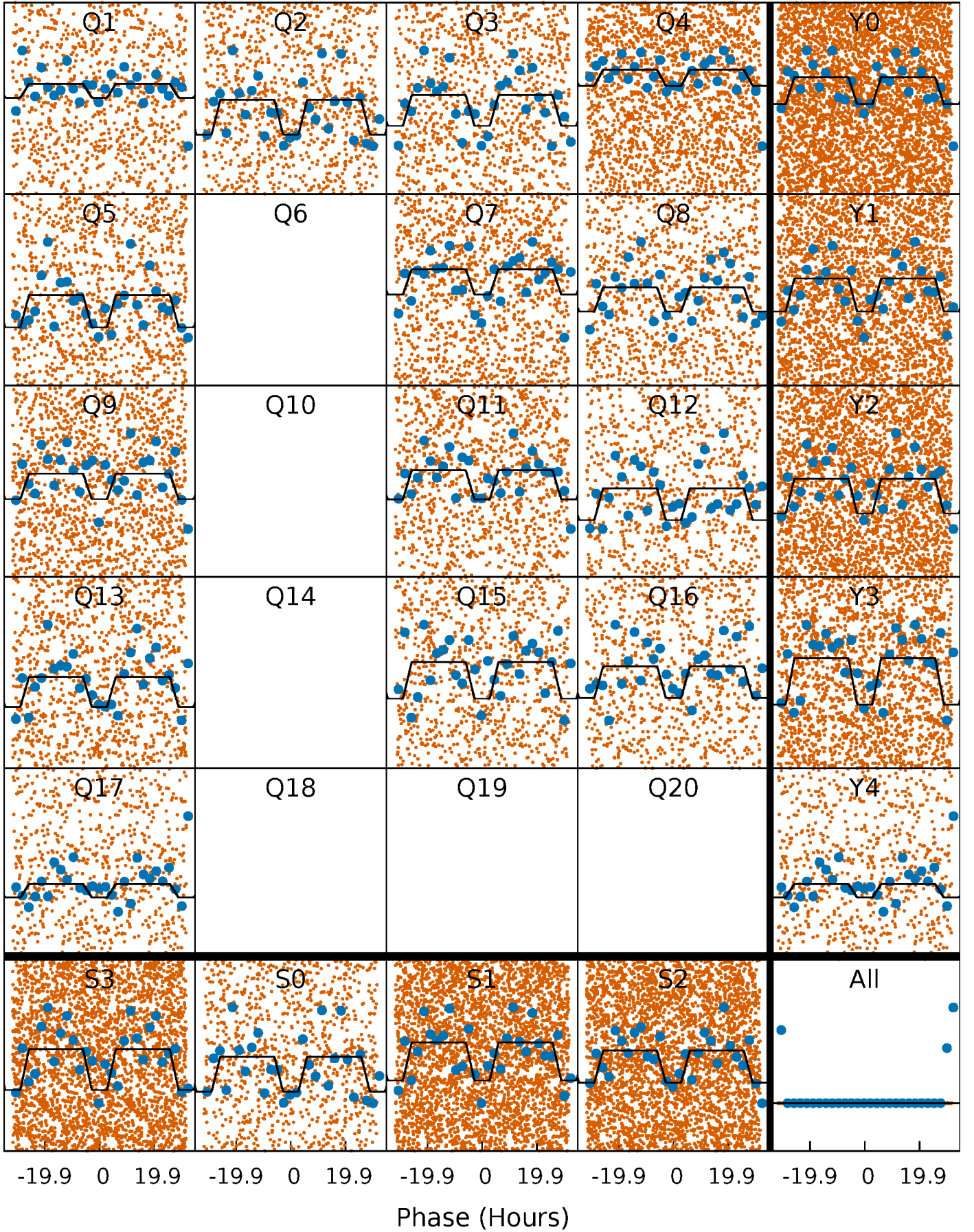
DV Quarter-Phased Transit Curves

TCE 003865358-01 P= 1.316166 Days $T_0=132.408361$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

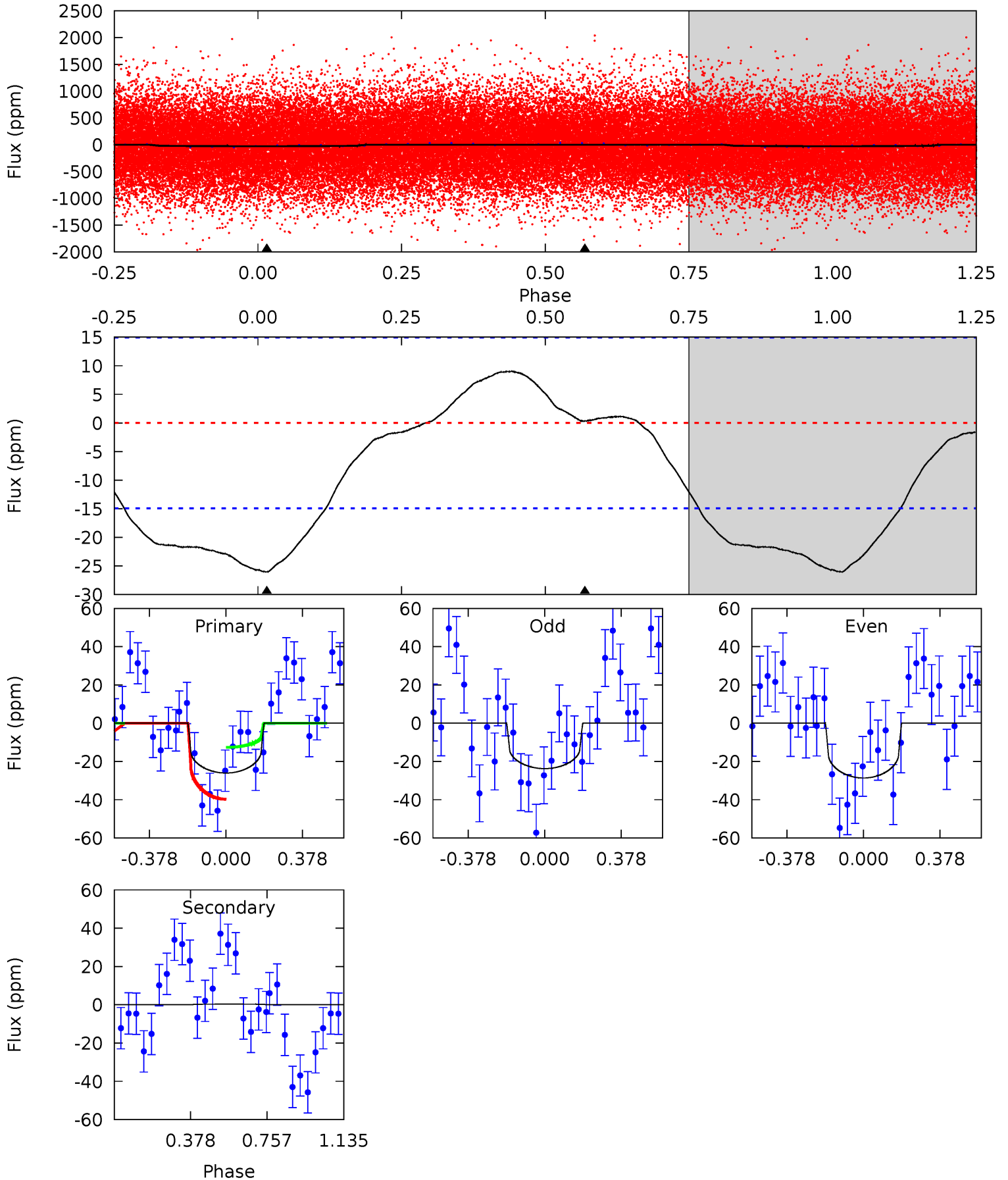
TCE 003865358-01 P= 1.316091 Days $T_0=132.373753$ (BKJD)



DV Model-Shift Uniqueness Test

003865358-01, P = 1.316166 Days, E = 131.092195 Days

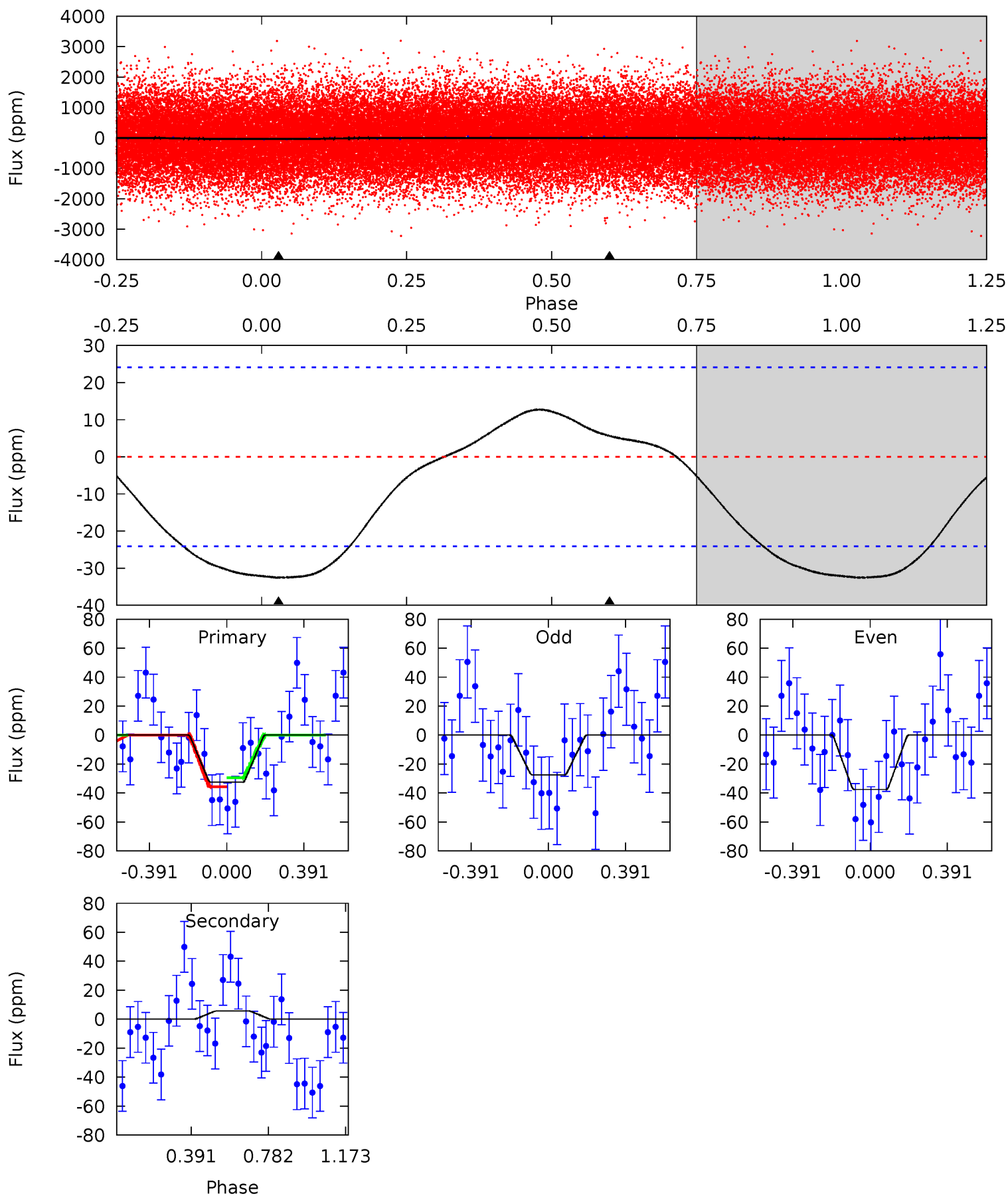
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
7.46	-0.10	0	0	4.28	0.88	0.46	7.46	7.46	-0.10	-0.10	0.70	1.03	0.26	3.91



Alt Model-Shift Uniqueness Test

003865358-01, P = 1.316091 Days, E = 131.057662 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
5.76	-1.00	0	0	4.27	0.86	0.37	5.76	5.76	-1.00	-1.00	0.88	1.42	0.28	0.54



Stellar Parameters For KIC 003865358

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	M (M_{\odot})	p_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	8103^{+227}_{-357}	$4.194^{+0.067}_{-0.202}$	$0.210^{+0.150}_{-0.500}$	$1.807^{+0.545}_{-0.233}$	$1.861^{+0.259}_{-0.288}$	$0.444^{+0.158}_{-0.227}$
	+3%/-4%	+2%/-5%	+71%/-238%	+30%/-13%	+14%/-15%	+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 003865358-01 / KOI

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	0 ± 3	$1.70^{+1.83}_{-1.18}$	4018^{+266}_{-228}	-3676^{+7775}_{-1165}	$-0.007^{+0.893}_{-1.092}$
Alt.	6 ± 6	$1.97^{+1.86}_{-1.33}$	4027^{+259}_{-220}	-4316^{+662}_{-2353}	$-0.470^{+0.460}_{-5.044}$

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

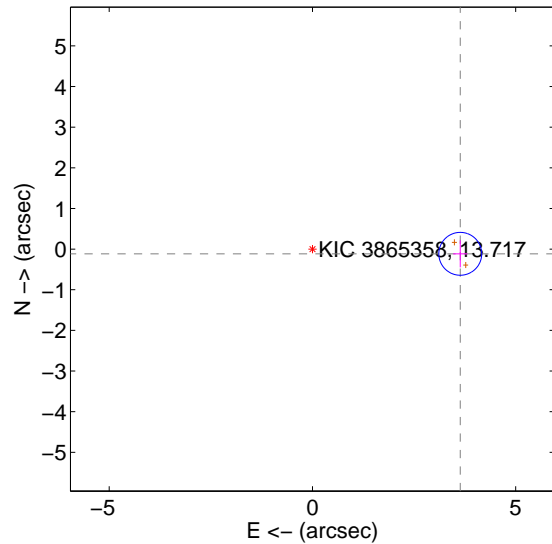
Supplemental centroid analysis for 003865358-01. Kepler magnitude: 13.72. Transit SNR 8.01

There are 0 quarters with good PRF difference image offsets

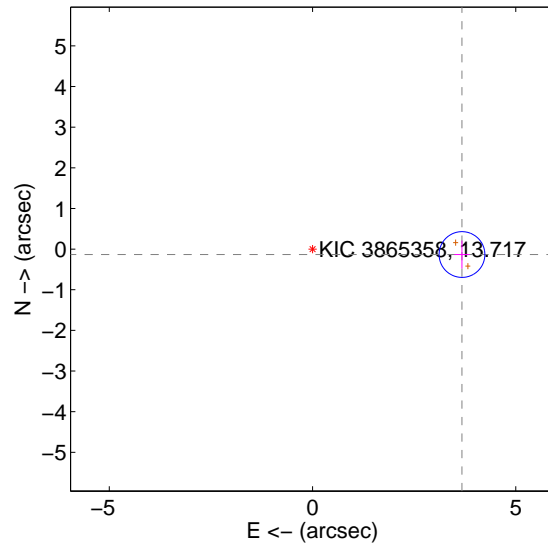
The direct PRF centroid is offset from the target star catalog position by about 0.03 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	3.638 ± 0.176	20.70	-3.636 ± 0.176	-0.116 ± 0.332
PRF-fit source offset from KIC position	3.679 ± 0.188	19.62	-3.676 ± 0.187	-0.134 ± 0.344
photometric centroid source offset	0.88 ± 1.36	0.64	0.84 ± 1.37	-0.24 ± 1.30

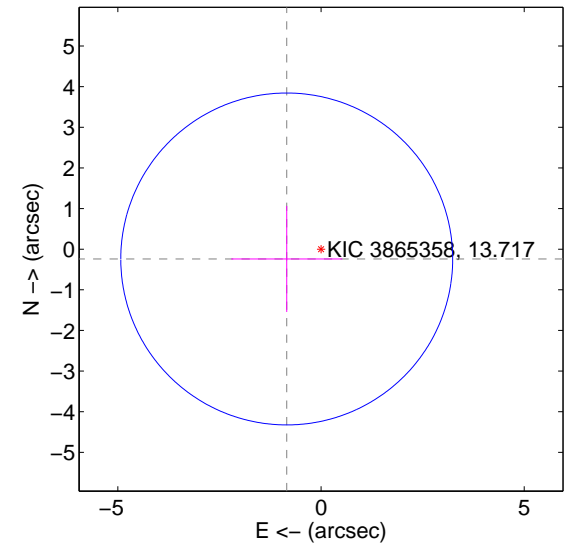
offset from difference PRF-fit to OOT PRF-fit



offset from difference PRF-fit to KIC position

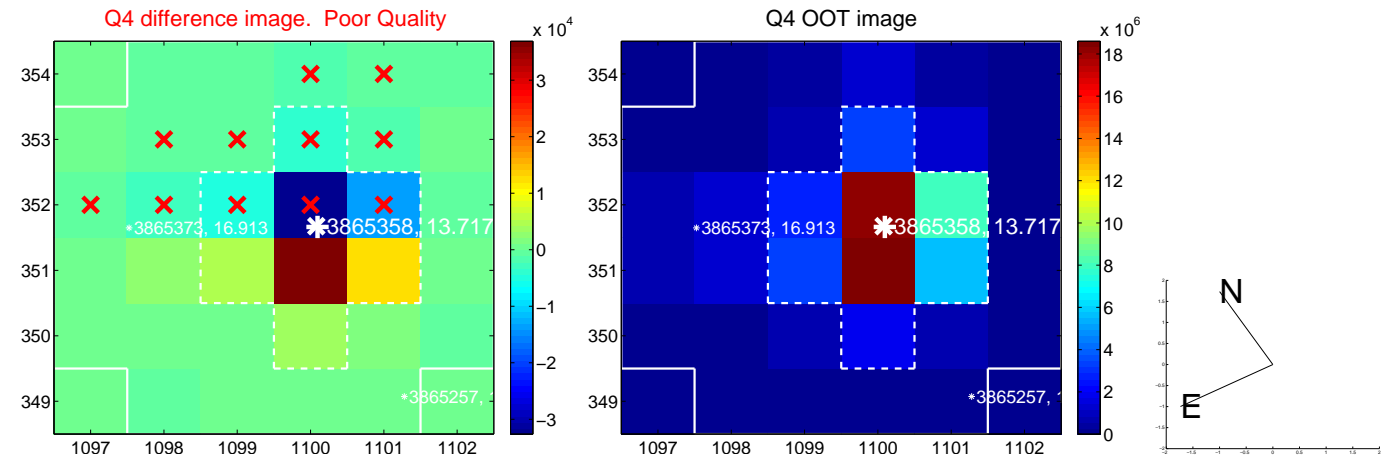
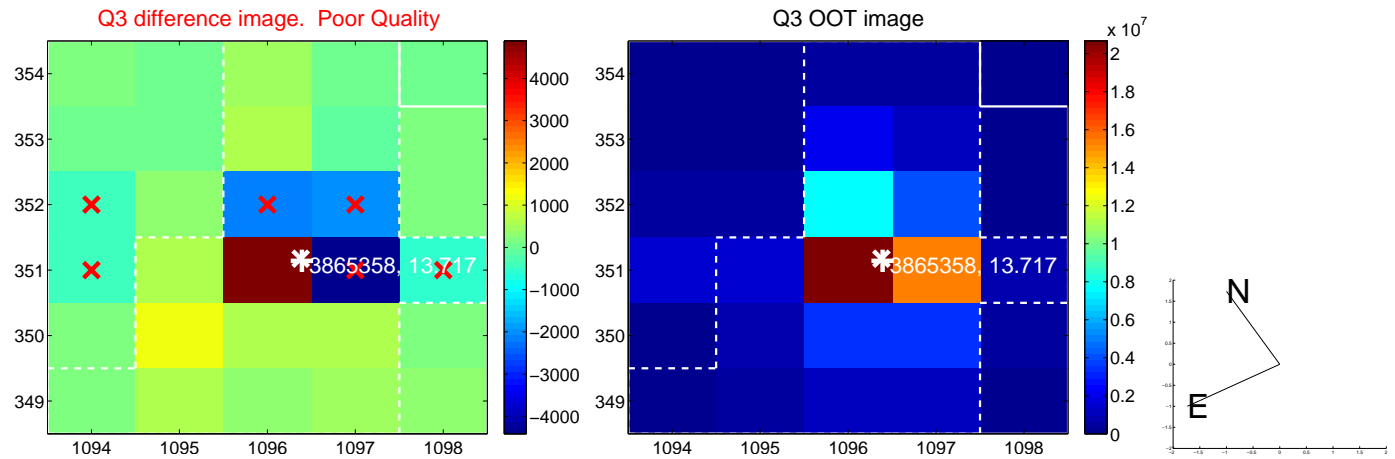
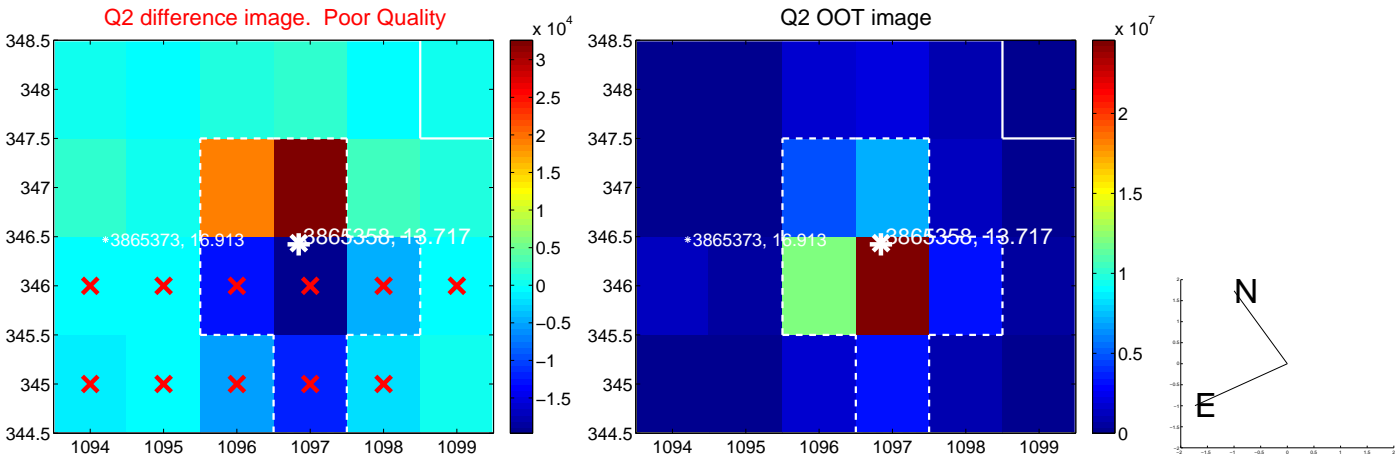
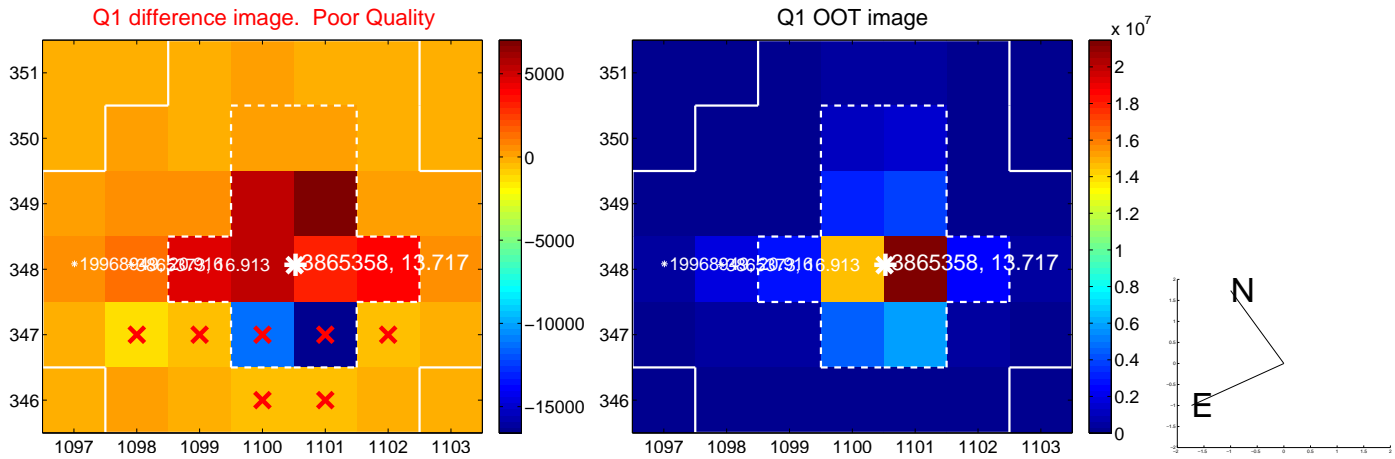


offset from photometric centroids

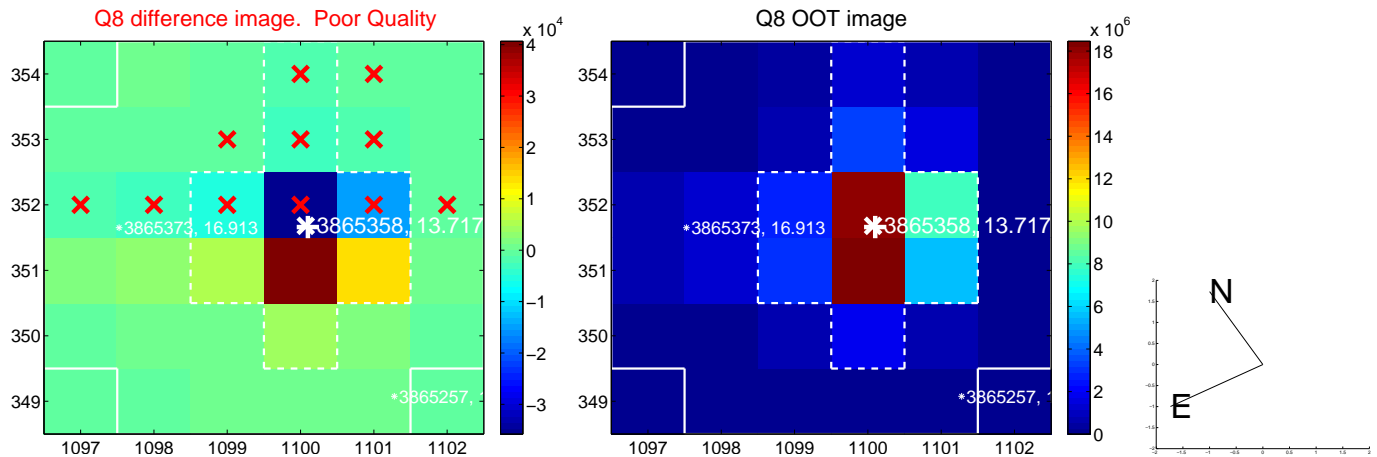
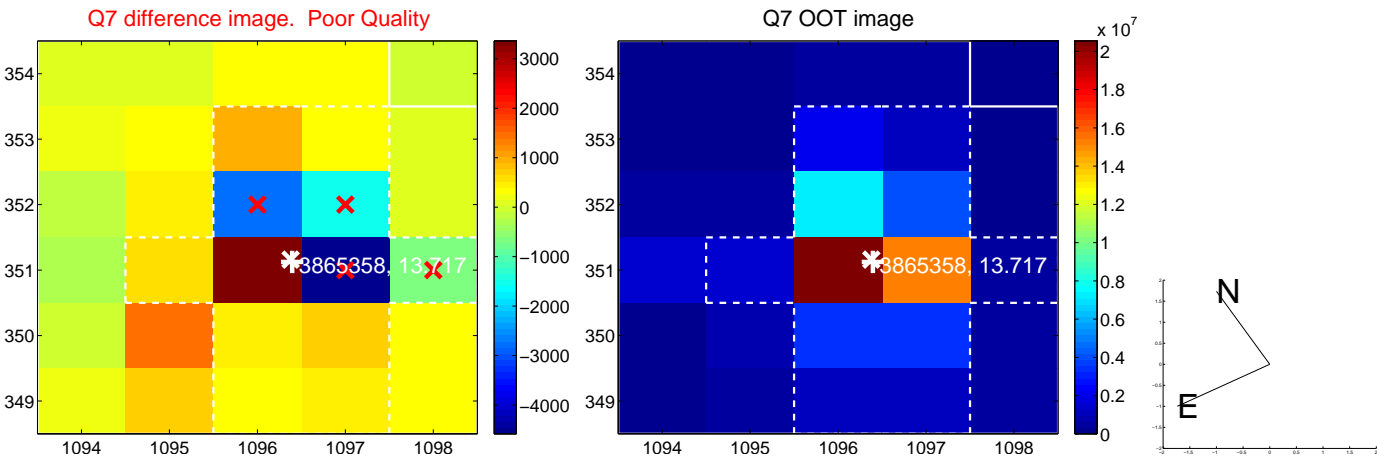
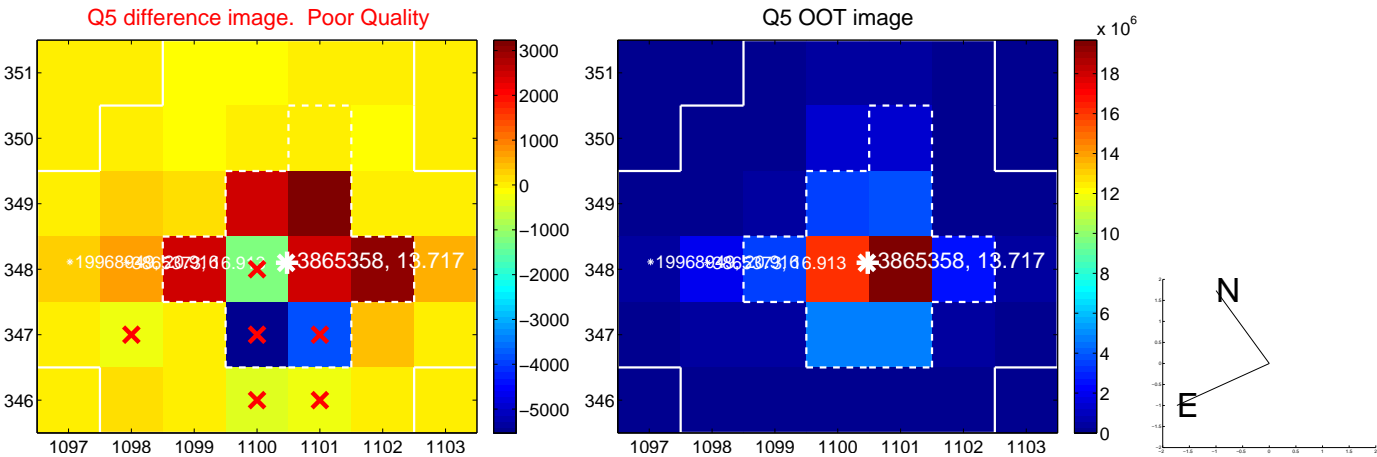


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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

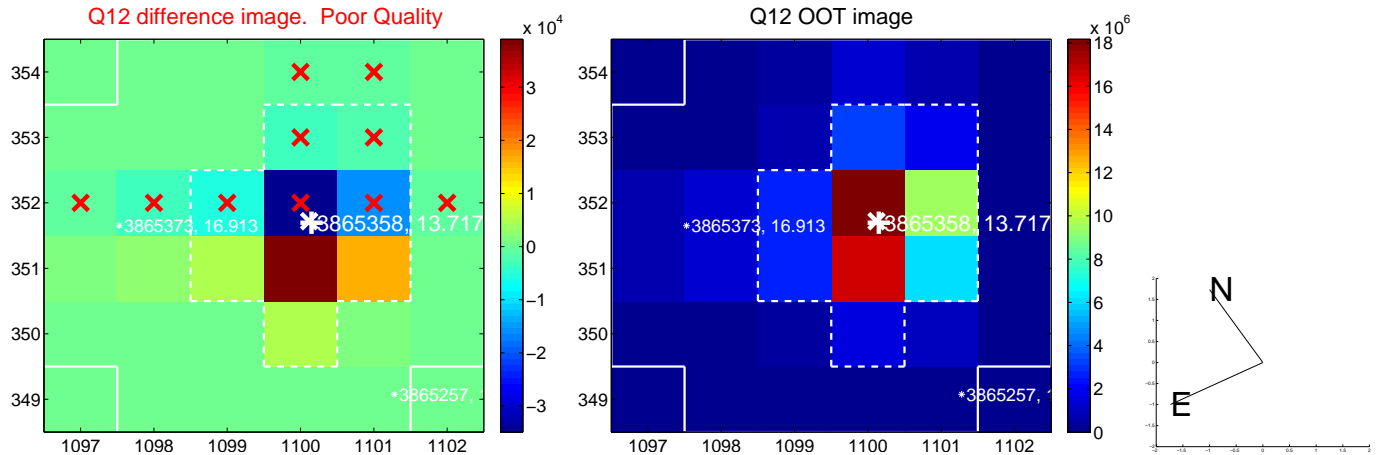
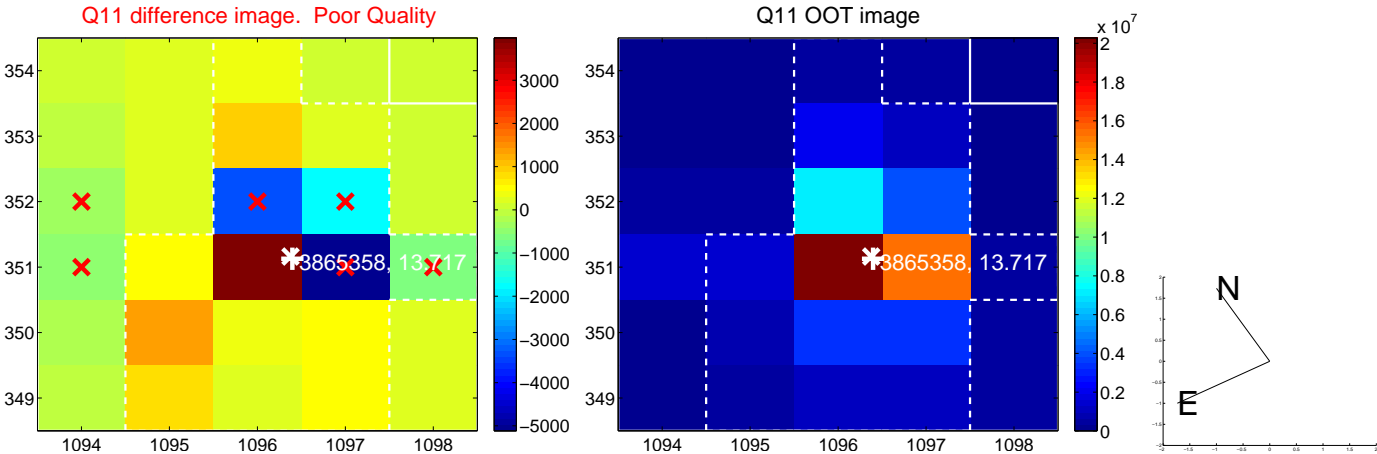
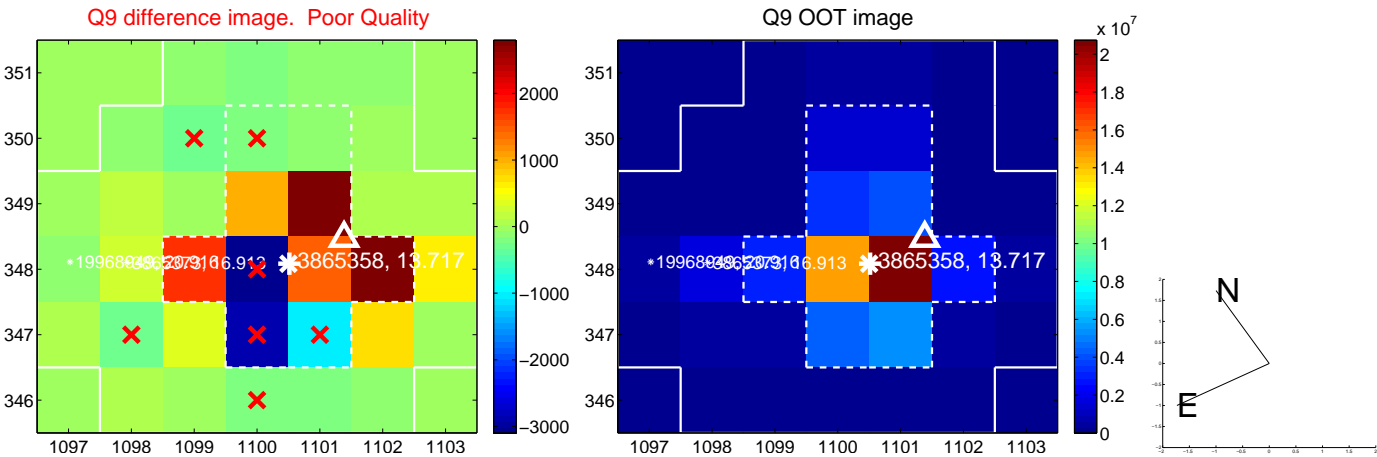
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



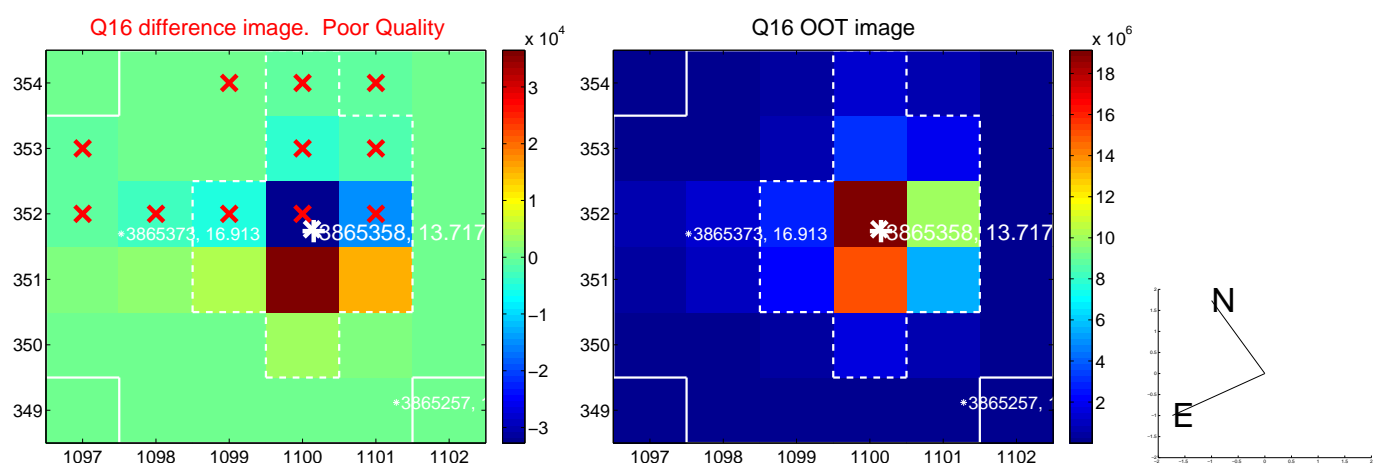
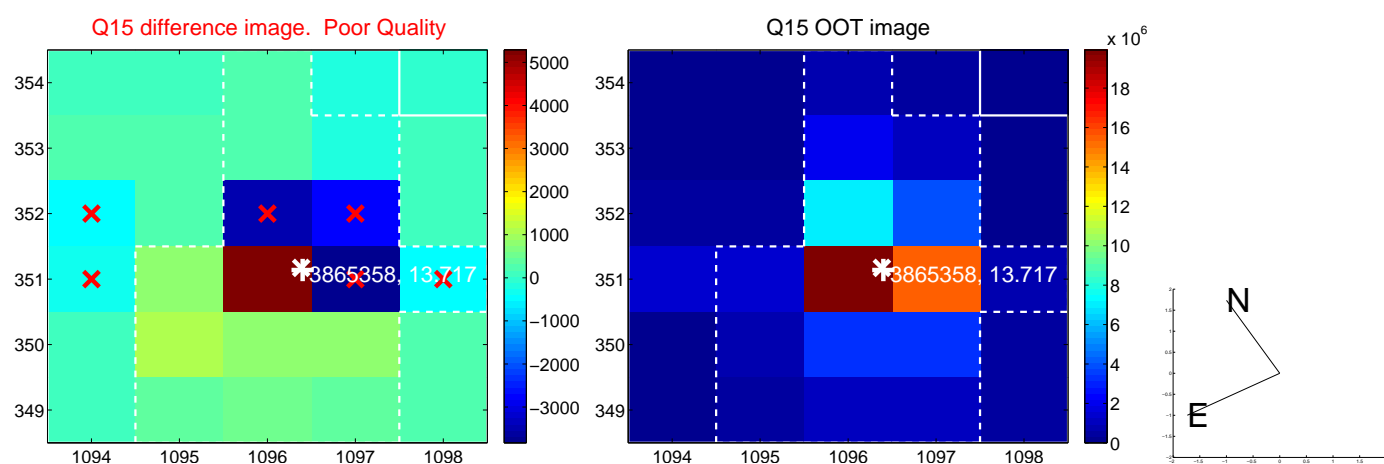
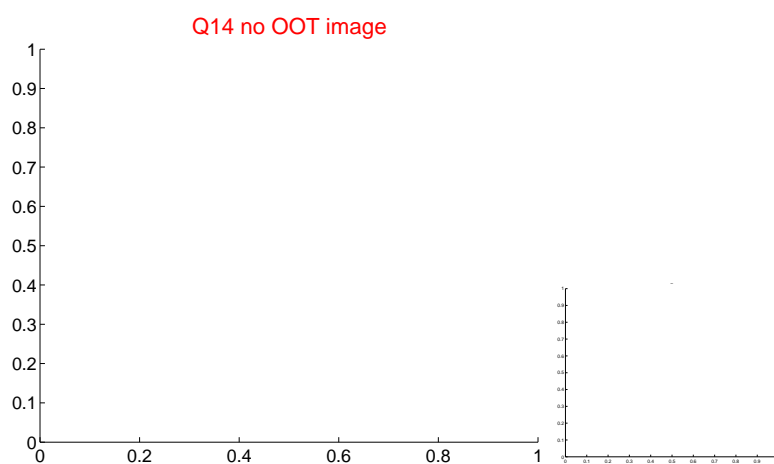
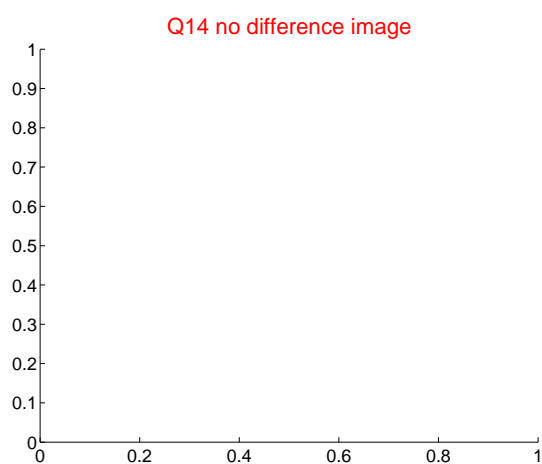
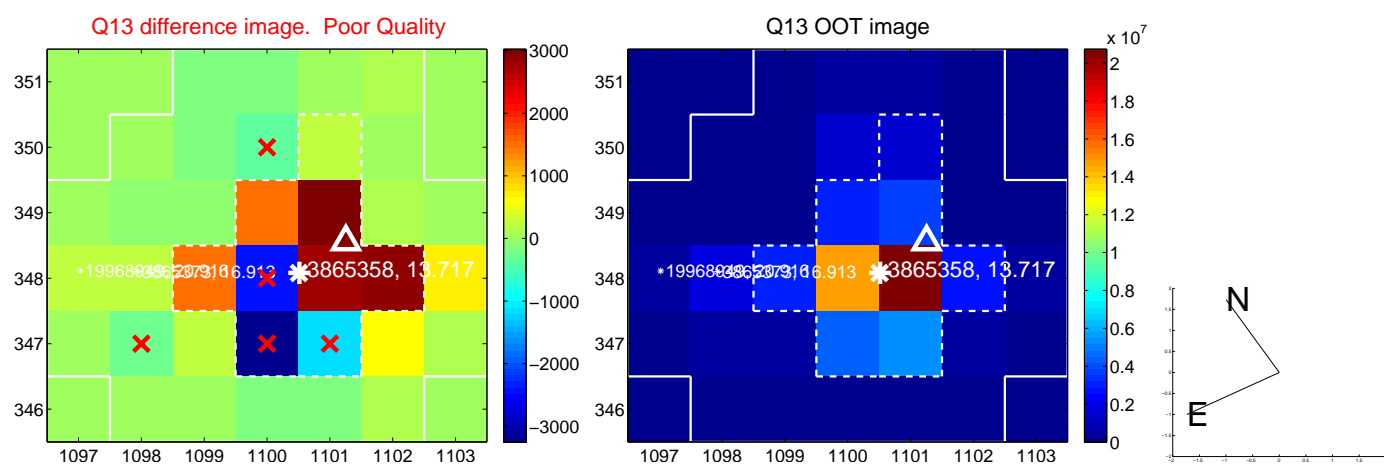
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



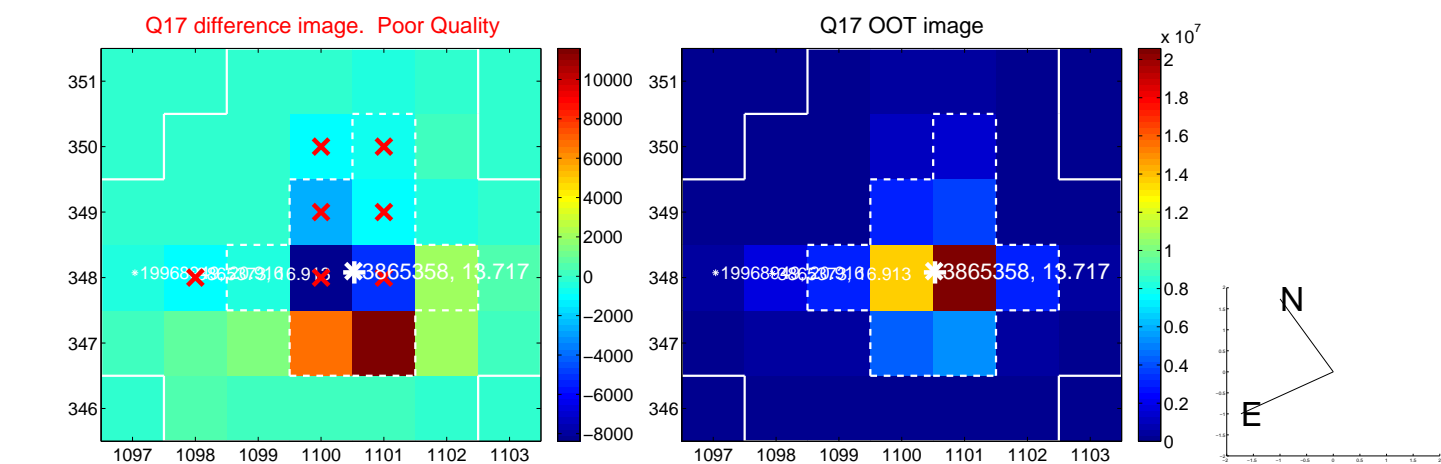
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



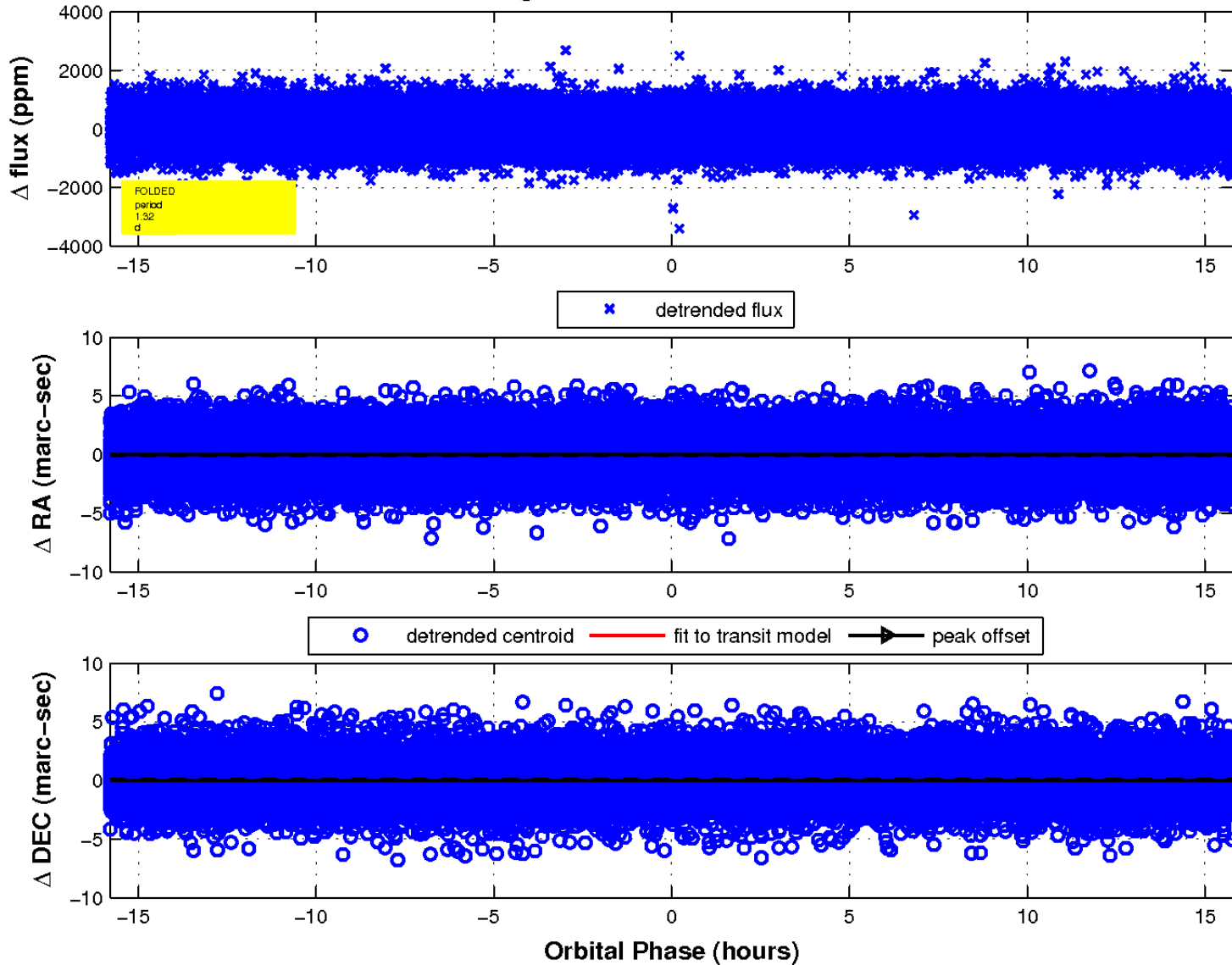
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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



fluxWeightedCentroids, Planet 1 of 1



UKIRT Image

Declination

