

KIC 005964350

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})
005964350-01	OBS	No	1.039015	131.922416	10.0	4.490	8.6	6.7	1.73	7552	0.68	16082.00

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
005964350-01	OBS	FP	0.00	1	0	0	0	LPP_DV—LPP_ALT

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

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

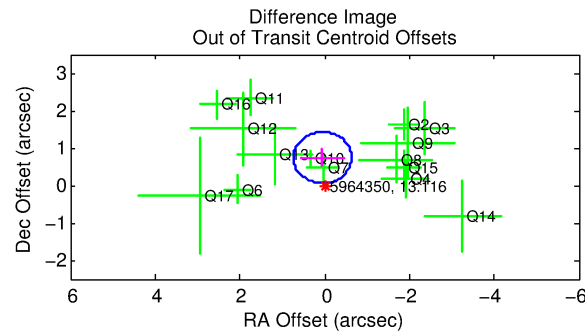
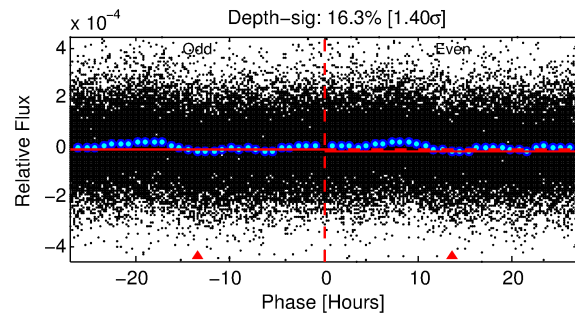
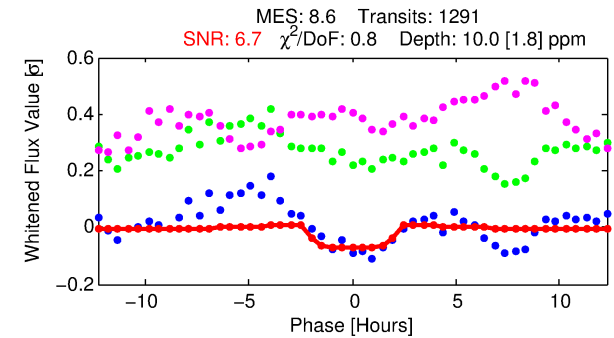
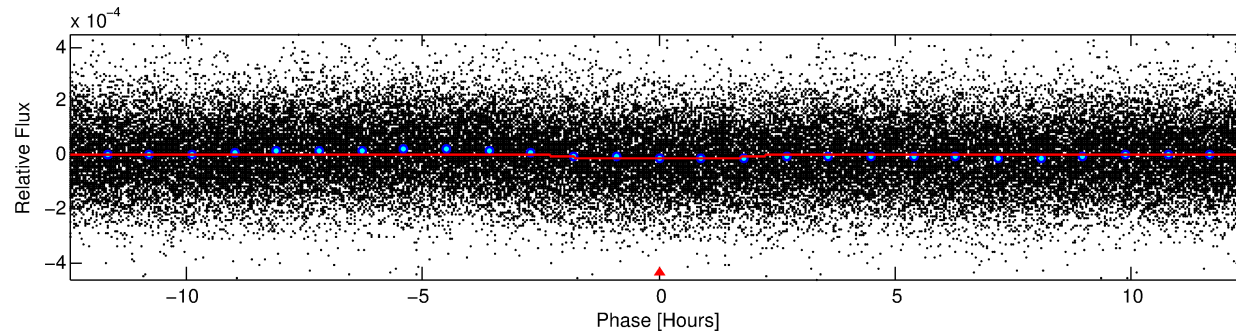
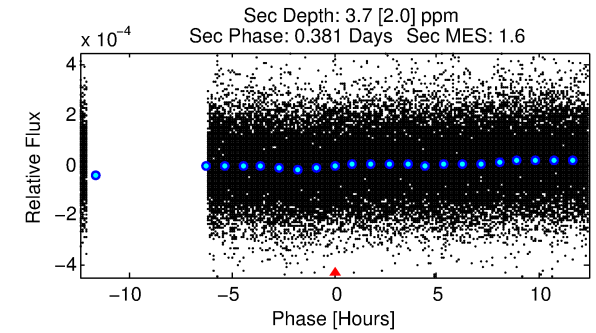
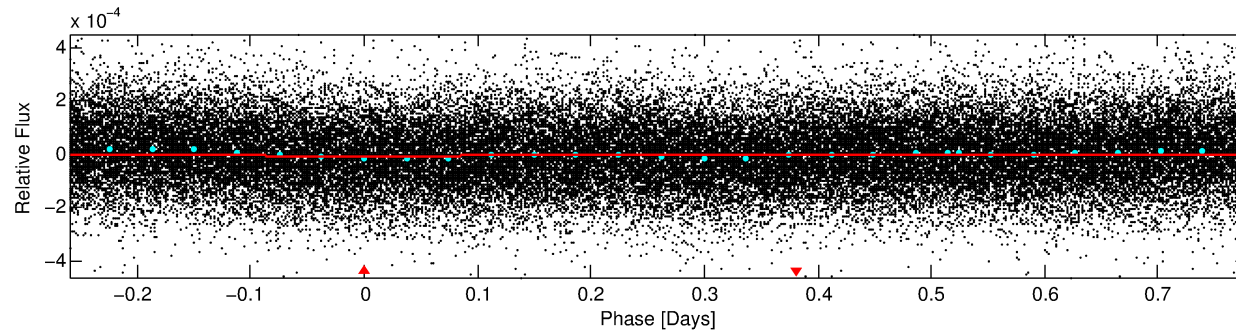
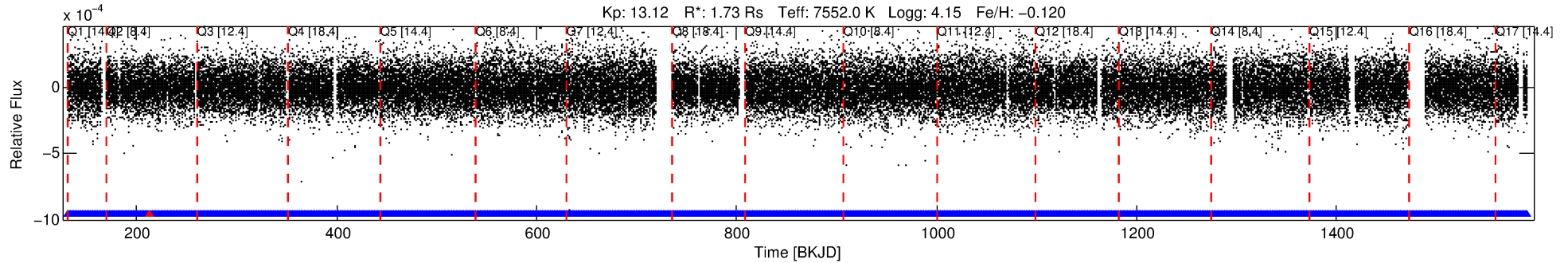
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 005964350-01

No Significant Match Found

DV One-Page Summary

KIC: 5964350 Candidate: 1 of 1 Period: 1.039 d



DV Fit Results:

Period = 1.03902 [0.00002] d
Epoch = 131.9224 [0.0065] BKJD
Rp/R* = 0.0036 [0.0011]
a/R* = 1.09 [0.36]
b = 0.97 [0.14]
Seff = 16082.00 [6091.45]
Teq = 2872 [272] K
Rp = 0.68 [0.30] Re
a = 0.0232 [0.0056] AU
Ag = 2.35 [2.10] [0.64σ]
Teffp = 5495 [1163] K [2.20σ]

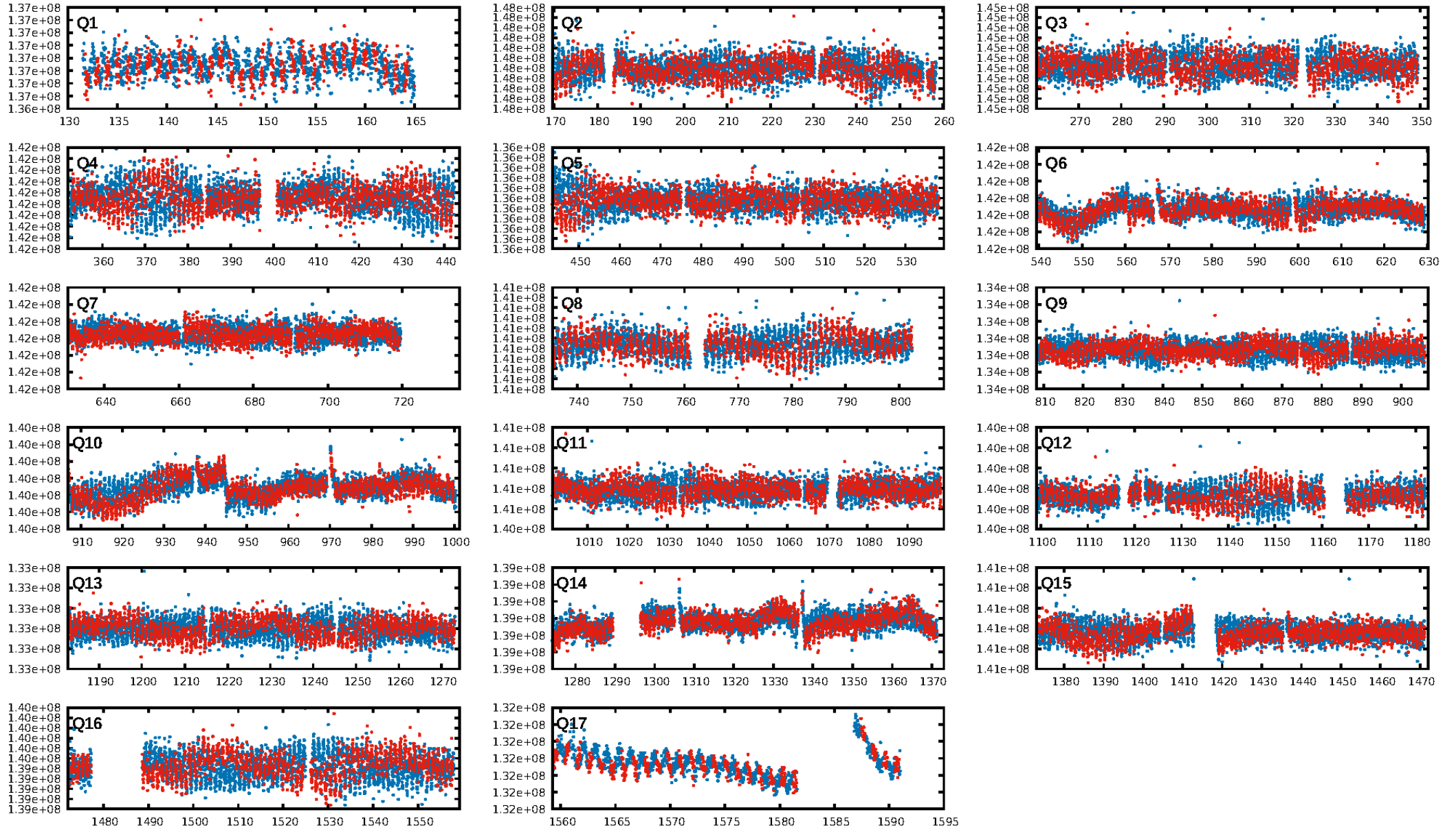
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: 7.37e-14
RollingBand-fgt: 1.00 [1232/1233]
GhostDiagnostic-chr: 25.3
Centroid-sig: 0.1%
Centroid-so: 3.170 arcsec [2.11σ]
OotOffset-rm: 0.741 arcsec [3.25σ]
KicOffset-rm: 0.887 arcsec [3.87σ]
OotOffset-st: 4/4/4/3 [15]
KicOffset-st: 4/4/4/3 [15]
DiffImageQuality-fgm: 0.53 [8/15]
DiffImageOverlap-fno: 1.00 [17/17]

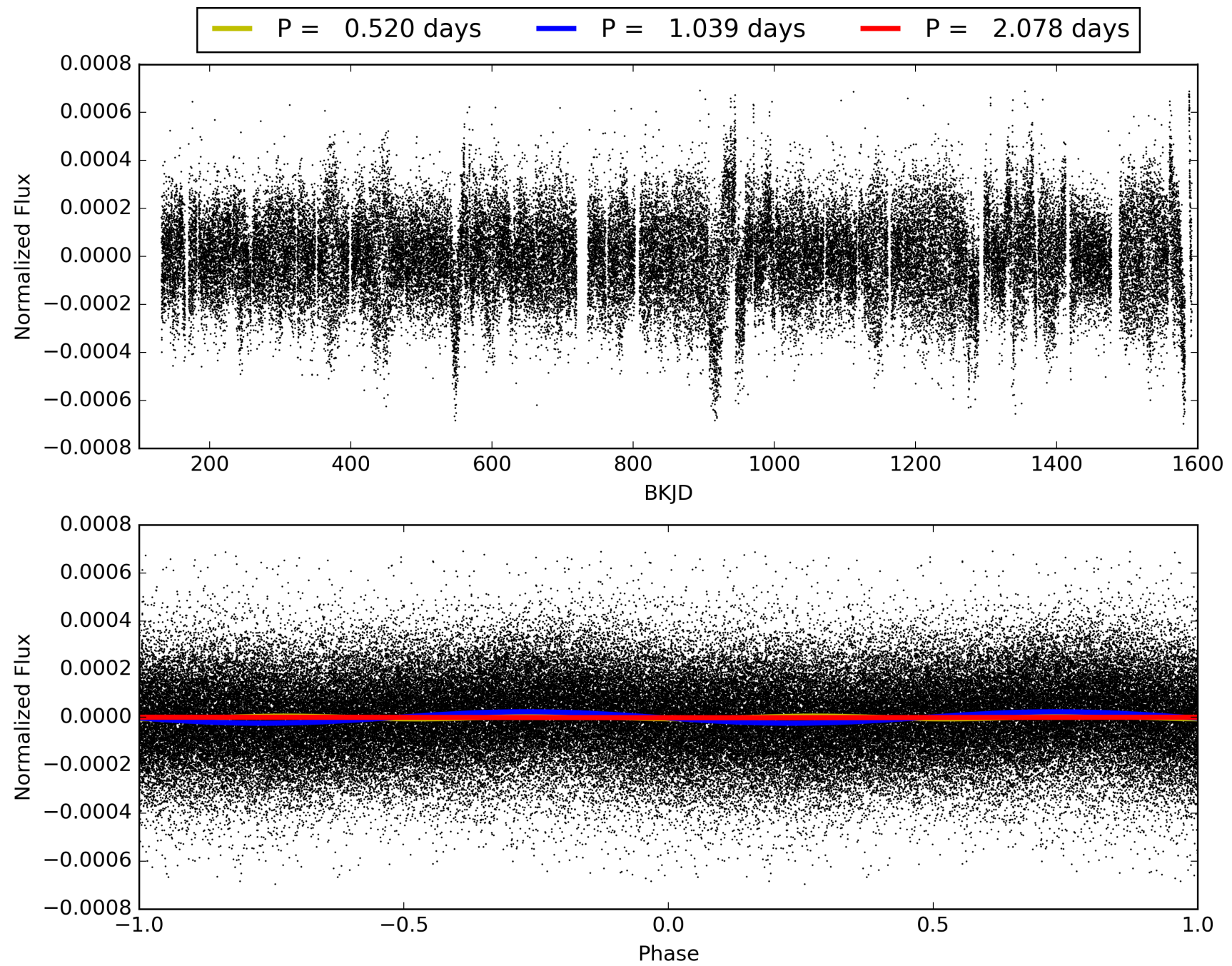
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 30-Jan-2016 18:17:32 Z

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

TCE 005964350-01, PDC Light Curves

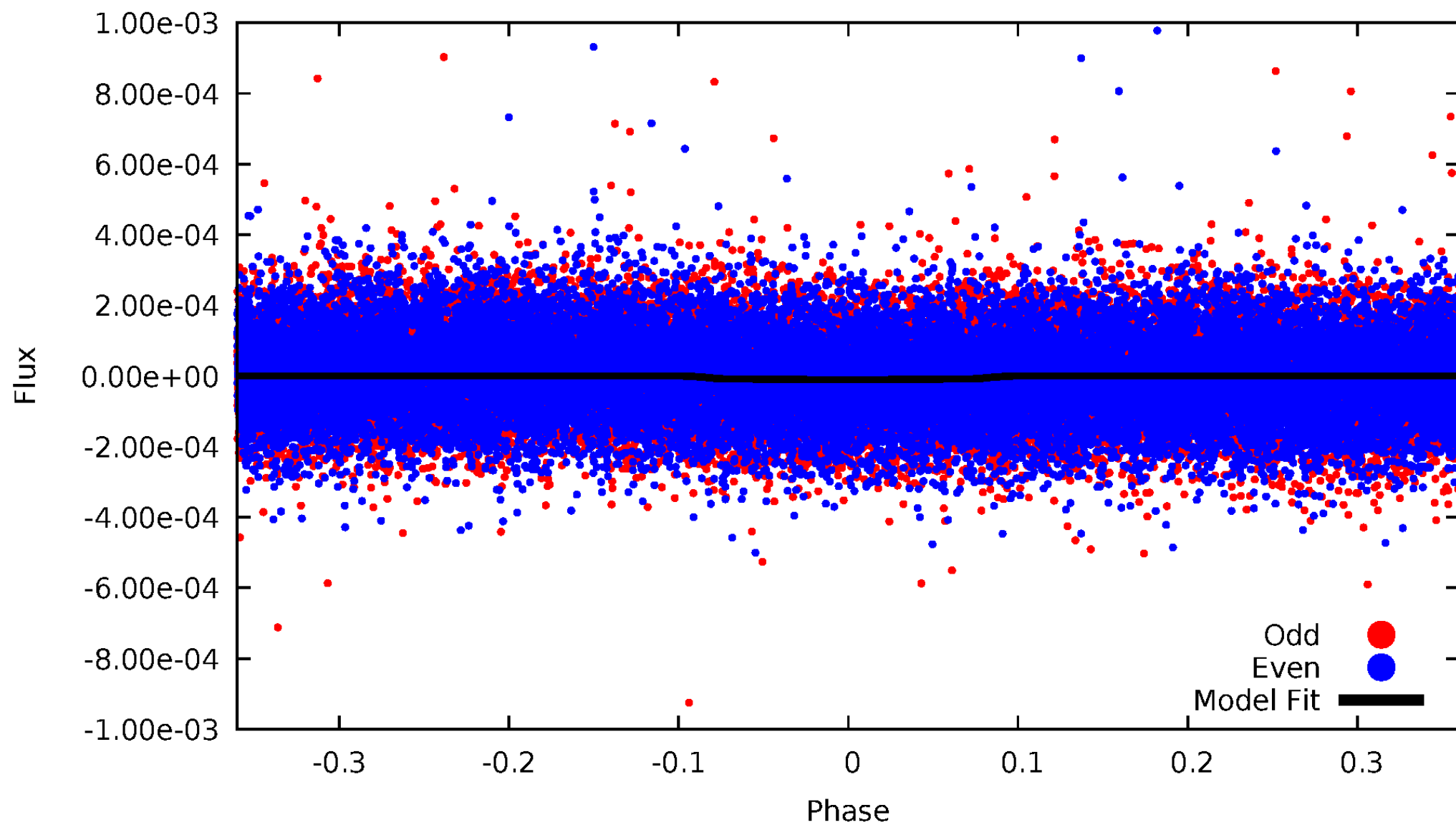


TCE 005964350-01



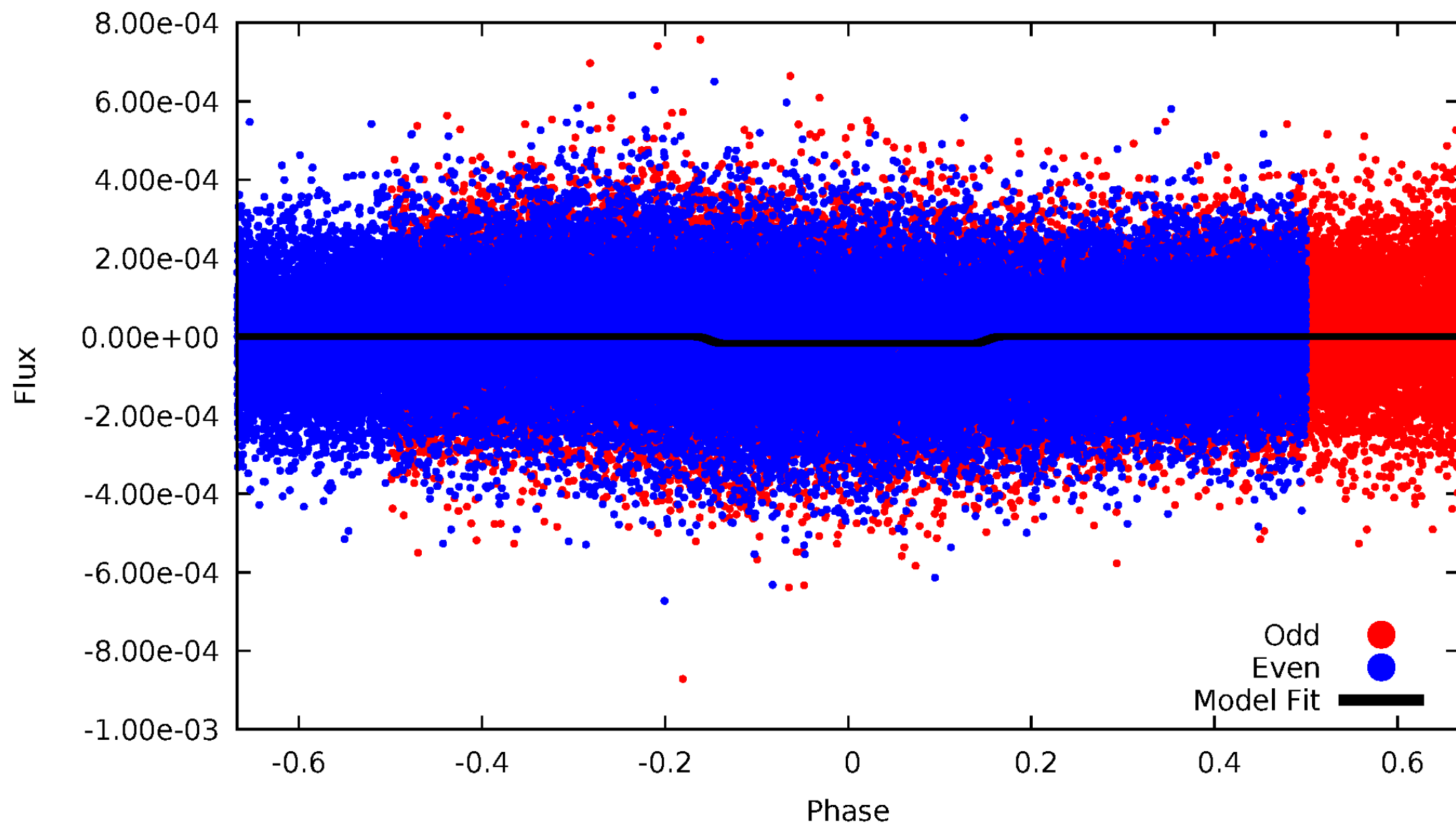
DV Odd/Even

TCE 005964350-01



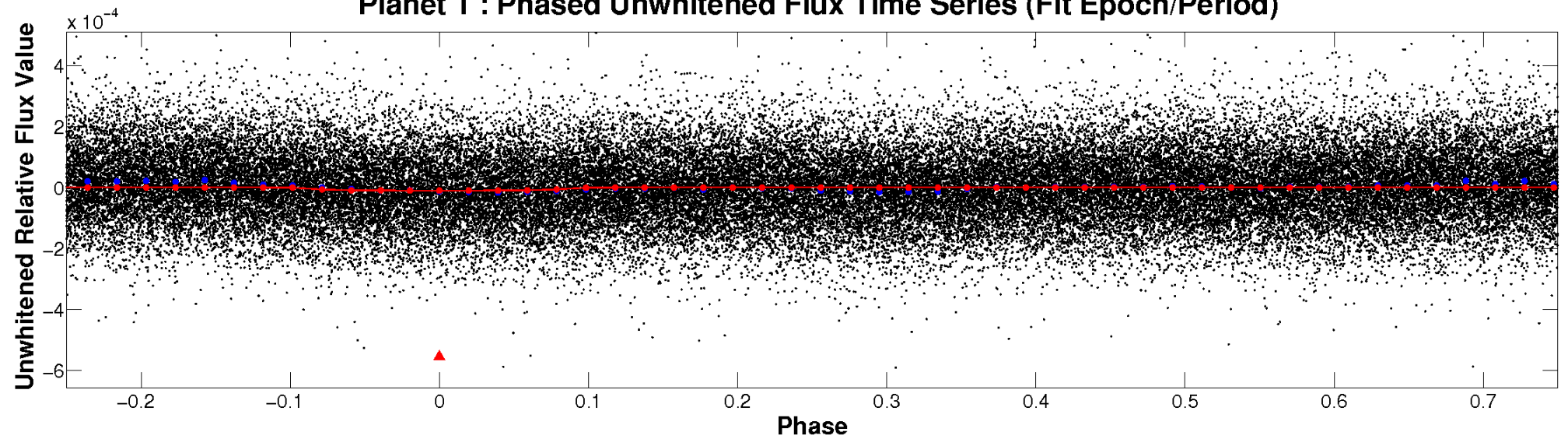
ALT Odd/Even

TCE 005964350-01

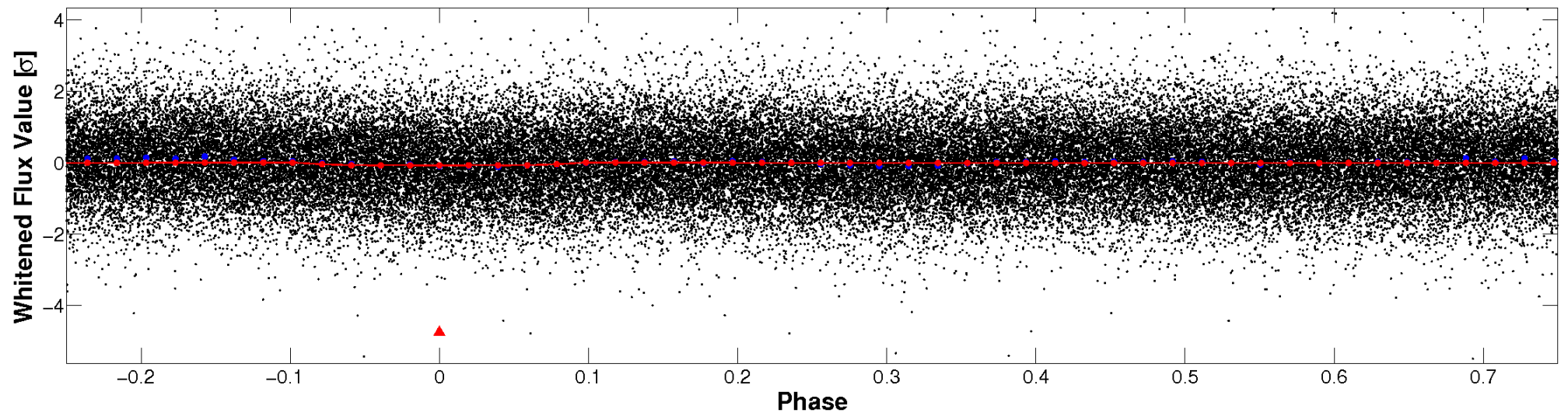


Non-Whitened Vs. Whitened Light Curve

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

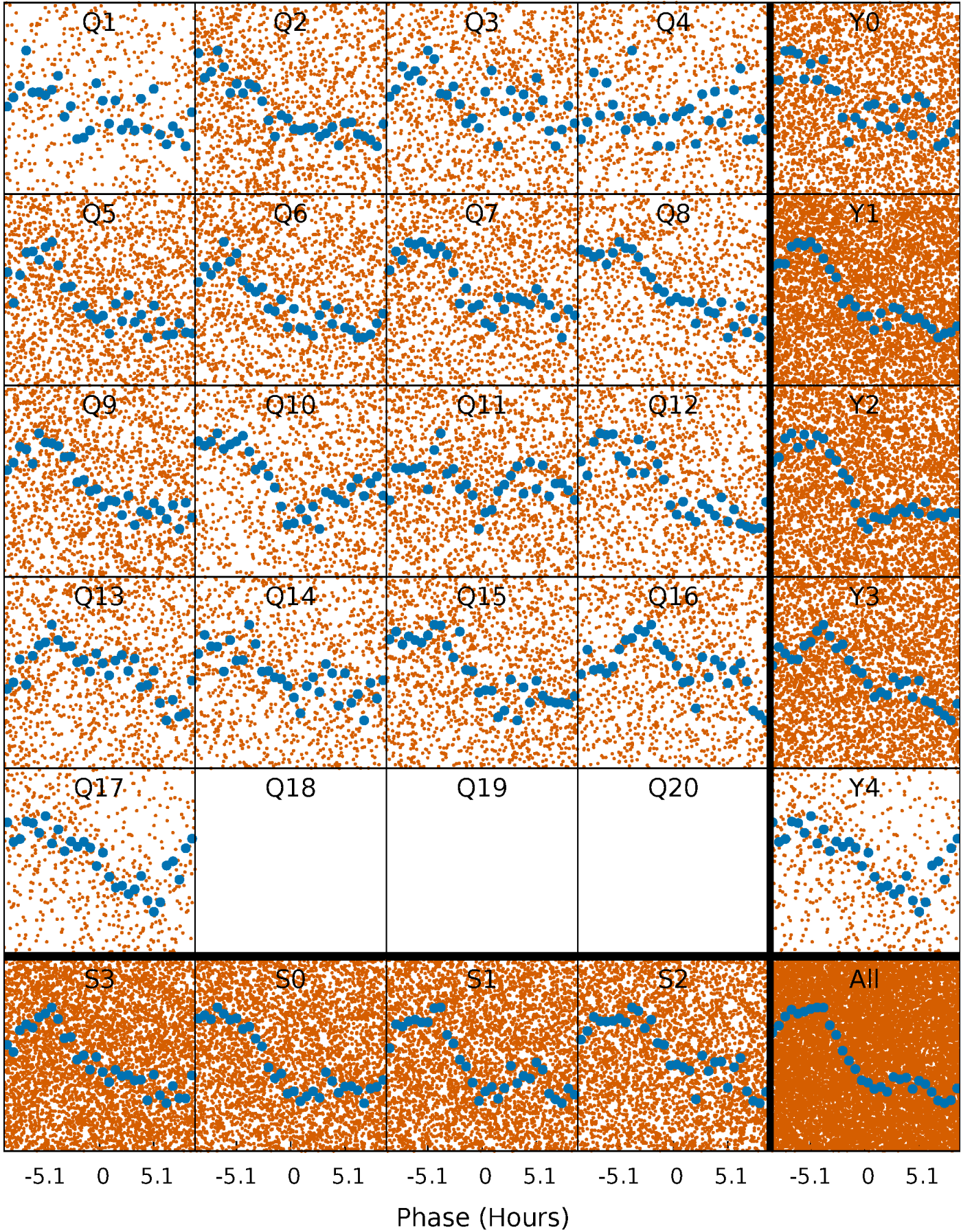


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



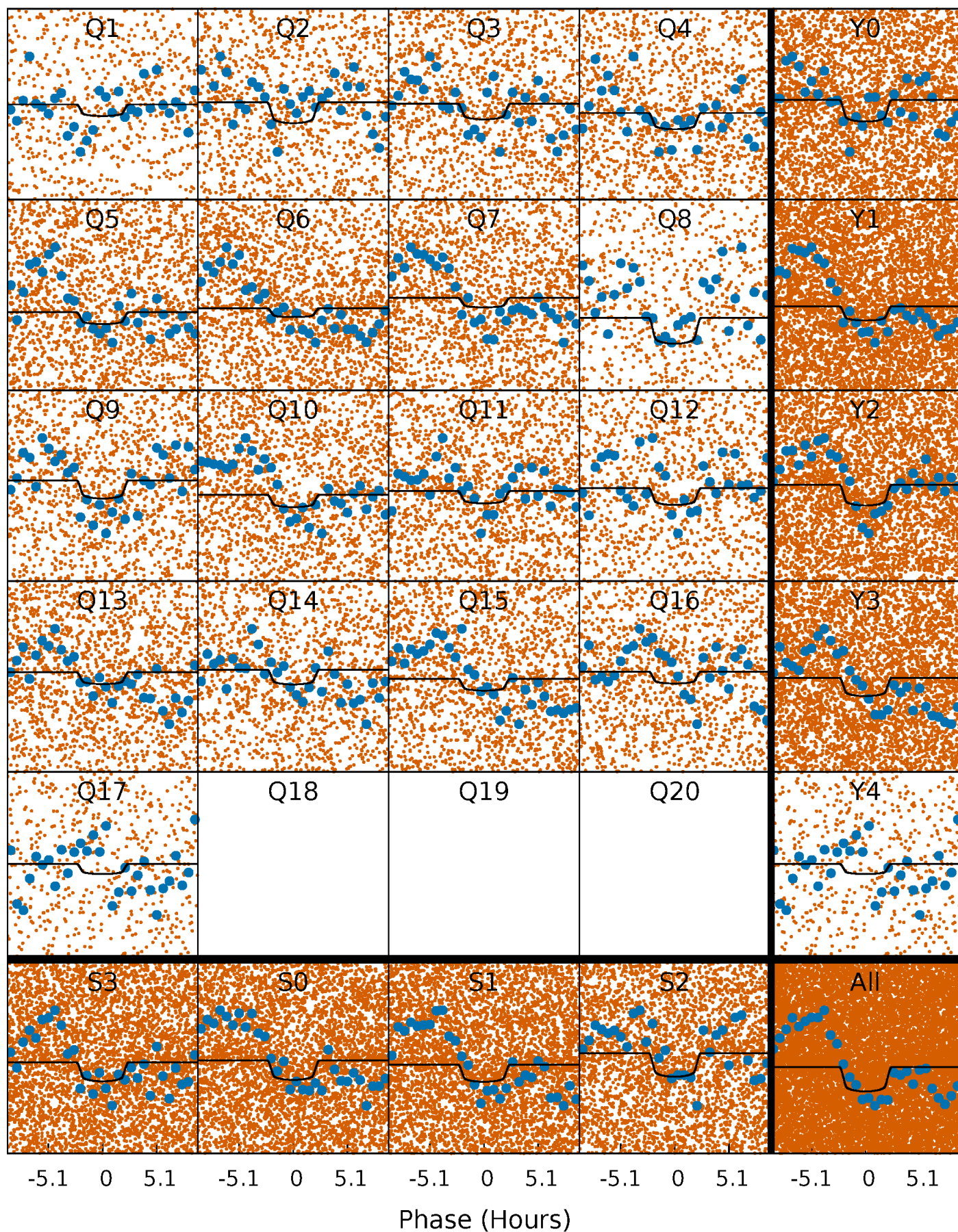
PDC Quarter-Phased Transit Curves

TCE 005964350-01 P= 1.039015 Days $T_0=131.922415$ (BKJD)



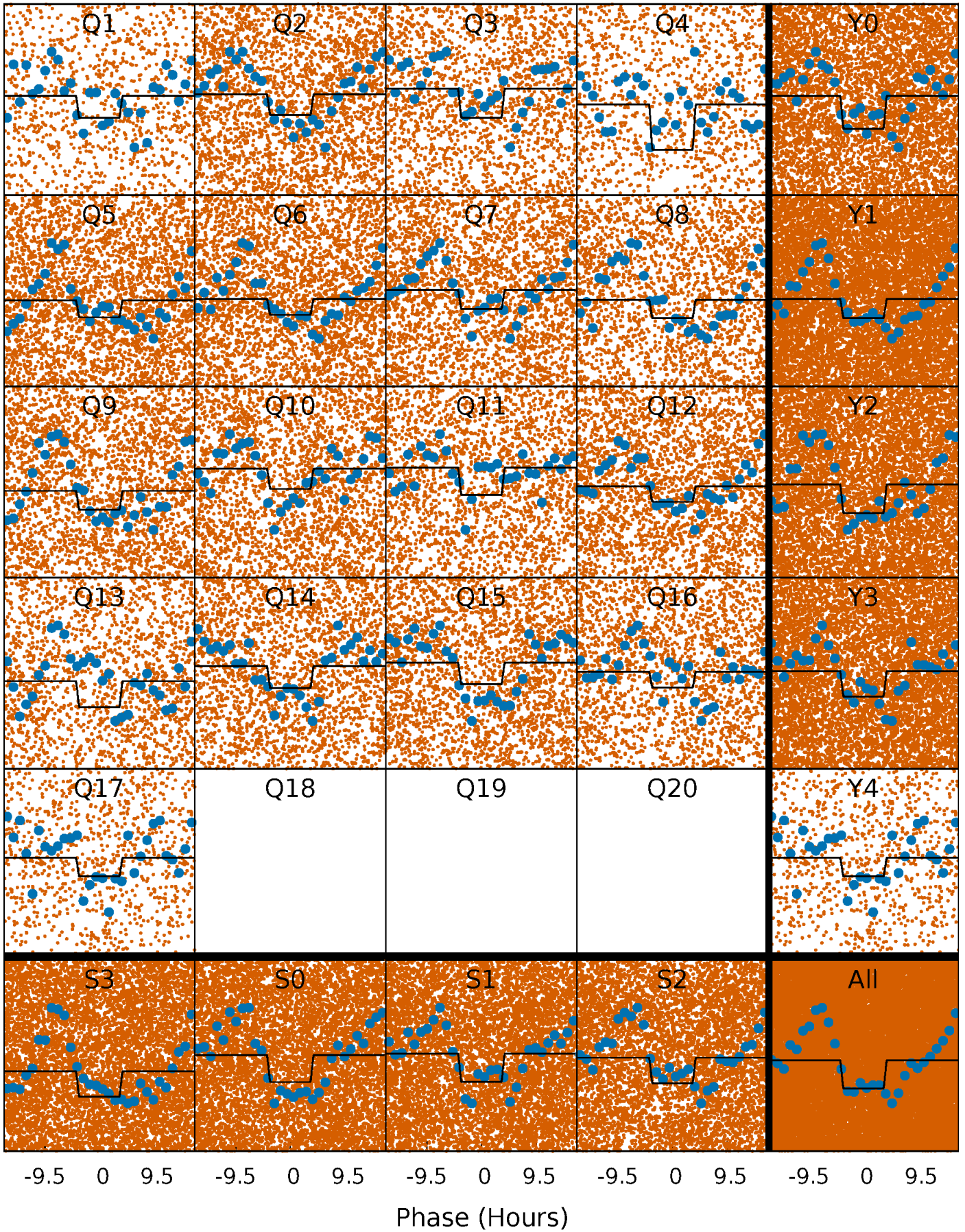
DV Quarter-Phased Transit Curves

TCE 005964350-01 P= 1.039015 Days $T_0=131.922415$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

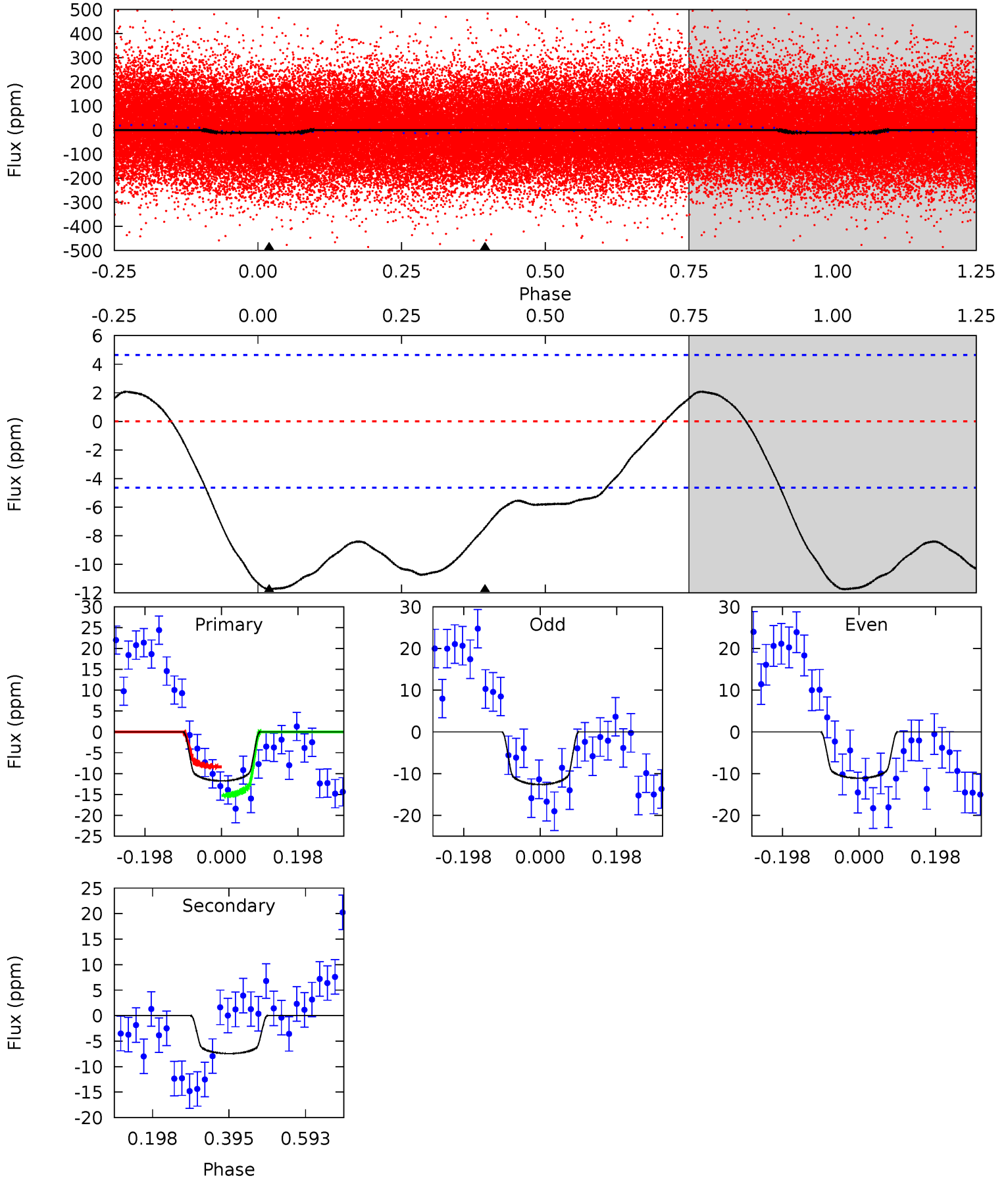
TCE 005964350-01 P= 1.039084 Days $T_0=131.979407$ (BKJD)



DV Model-Shift Uniqueness Test

005964350-01, P = 1.039015 Days, E = 130.883400 Days

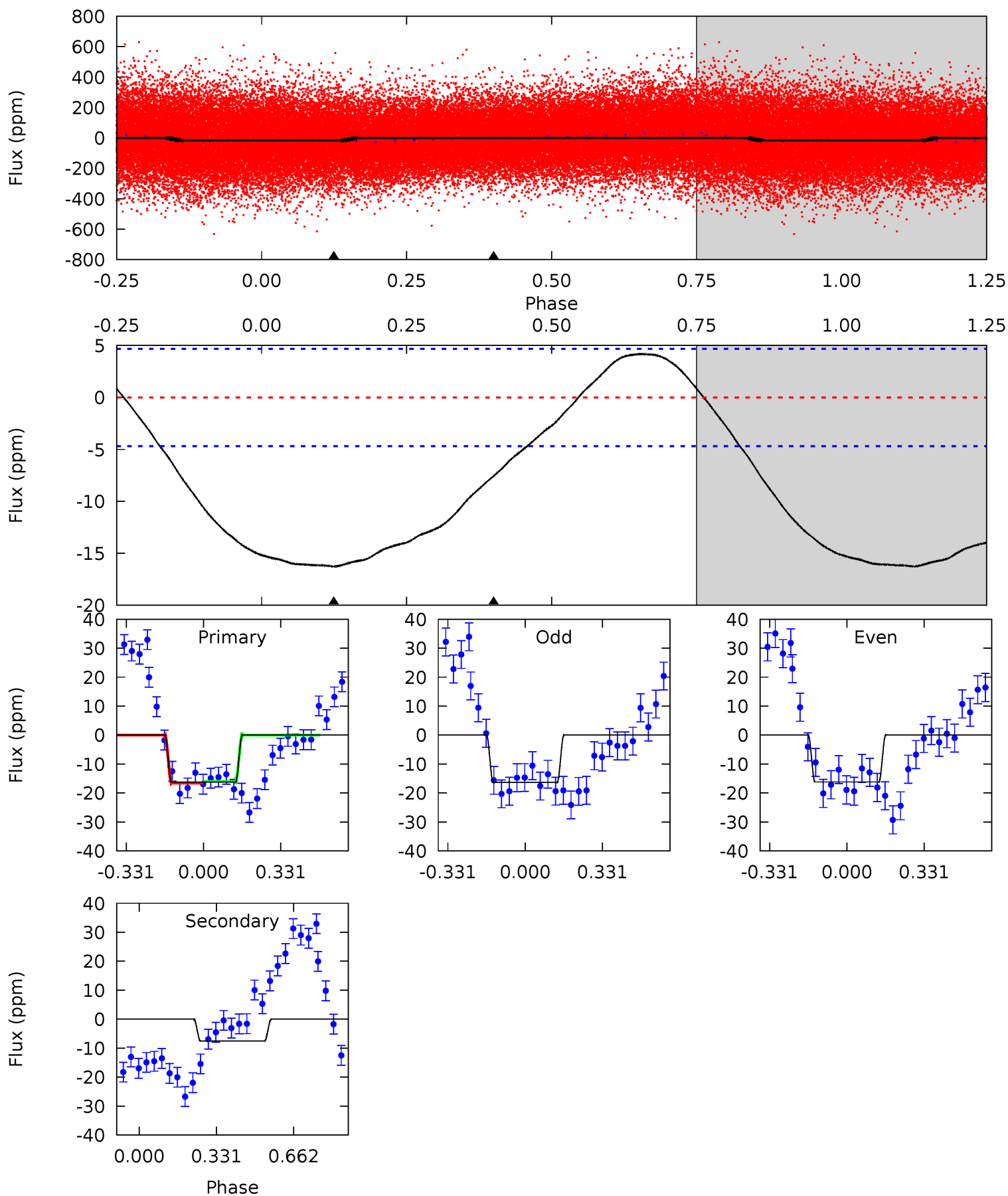
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
11.2	7.08	0	0	4.42	1.29	2.23	11.2	11.2	7.08	7.08	0.73	1.21	0.15	3.27



Alt Model-Shift Uniqueness Test

005964350-01, P = 1.039084 Days, E = 130.940323 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
15.0	6.95	0	0	4.31	0.97	1.87	15.0	15.0	6.95	6.95	0.10	1.37	0.20	0.29



Stellar Parameters For KIC 005964350

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	7552^{+211}_{-316}	$4.154^{+0.120}_{-0.180}$	$-0.120^{+0.200}_{-0.350}$	$1.726^{+0.512}_{-0.341}$	$1.549^{+0.219}_{-0.219}$	$0.424^{+0.249}_{-0.212}$
	+3%/-4%	+3%/-4%	+167%/-292%	+30%/-20%	+14%/-14%	+59%/-50%
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 005964350-01 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	A_{obs}
DV	-7 ± 1	$0.71^{+0.24}_{-0.24}$	4045^{+303}_{-250}	6298^{+1549}_{-899}	$4.336^{+5.303}_{-1.959}$
Alt.	-8 ± 1	$0.79^{+0.24}_{-0.22}$	4018^{+301}_{-253}	5916^{+1198}_{-716}	$3.557^{+3.312}_{-1.448}$

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

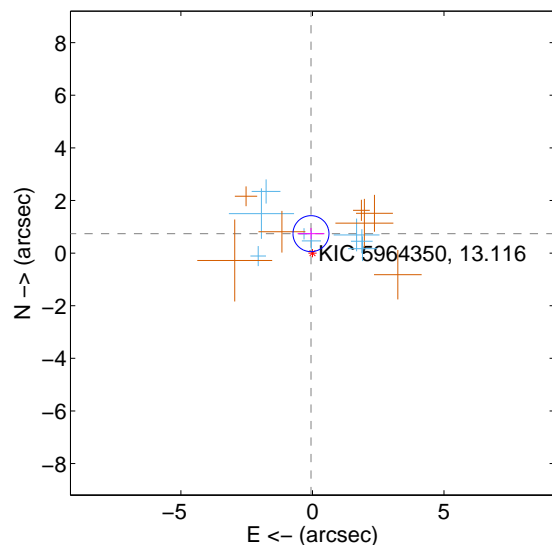
Supplemental centroid analysis for 005964350-01. Kepler magnitude: 13.12. Transit SNR 6.69

There are 8 quarters with good PRF difference image offsets

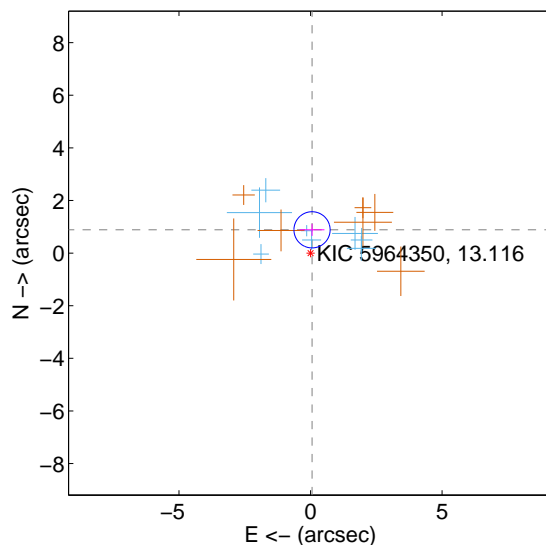
The direct PRF centroid is offset from the target star catalog position by about 0.05 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.741 ± 0.228	3.25	0.056 ± 0.510	0.739 ± 0.216
PRF-fit source offset from KIC position	0.887 ± 0.229	3.87	-0.057 ± 0.472	0.885 ± 0.228
photometric centroid source offset	3.17 ± 1.50	2.11	1.92 ± 1.68	2.52 ± 1.38

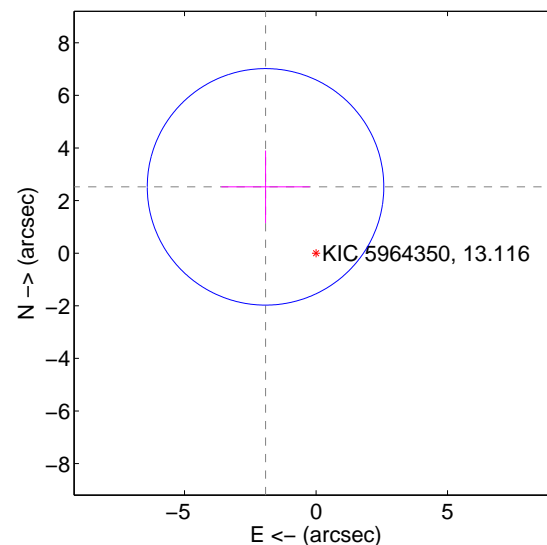
offset from difference PRF-fit to OOT PRF-fit



offset from difference PRF-fit to KIC position

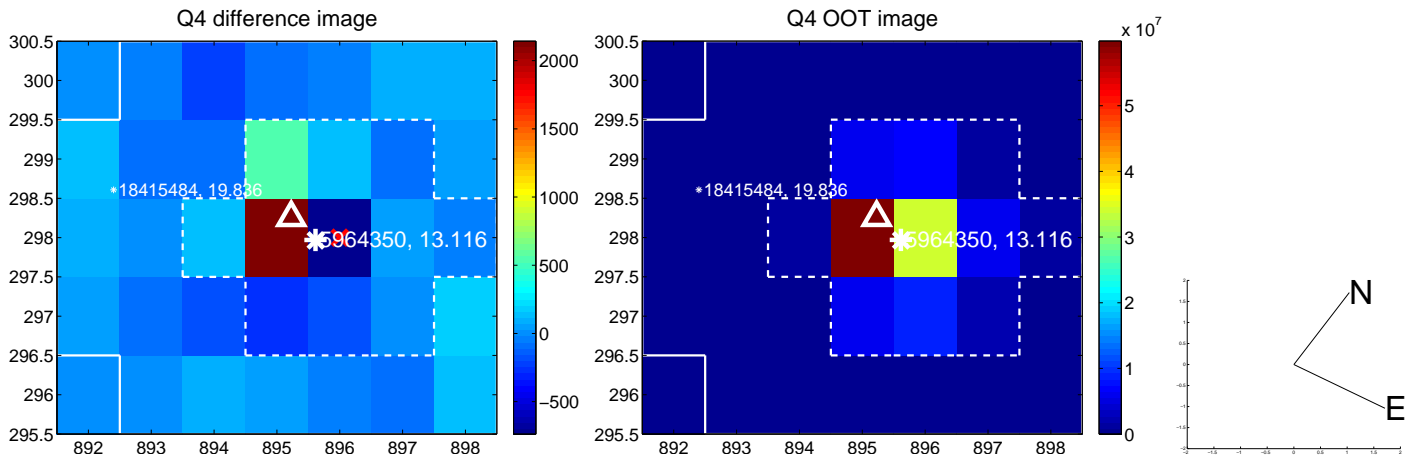
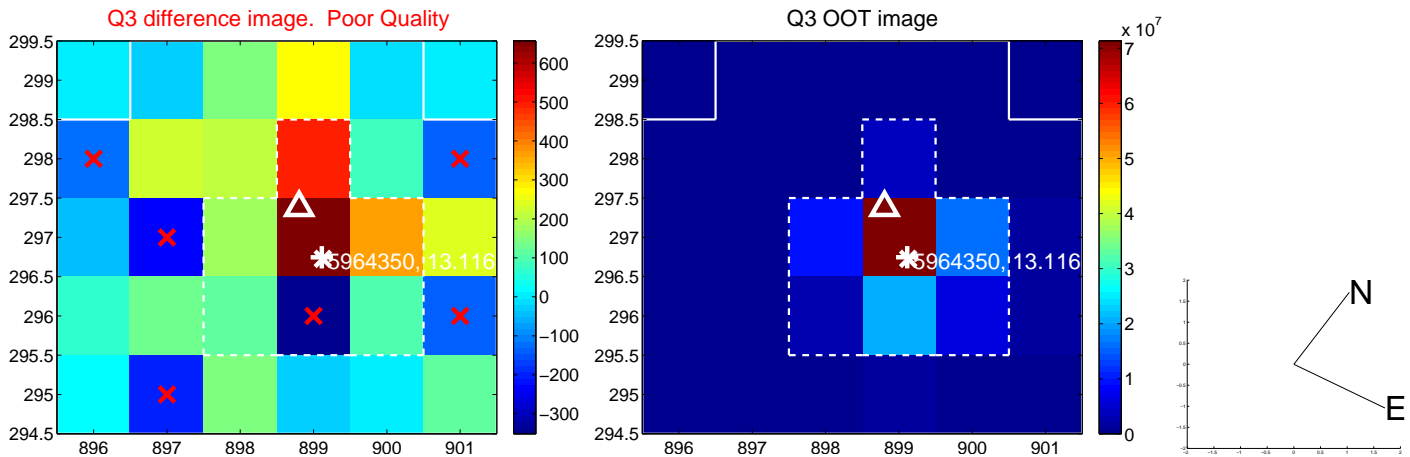
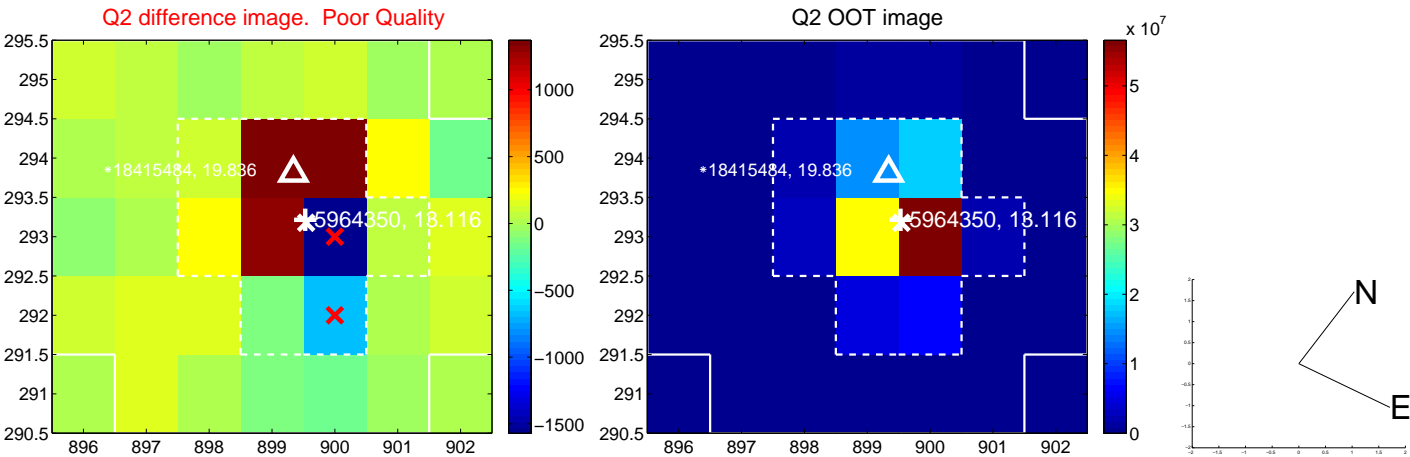
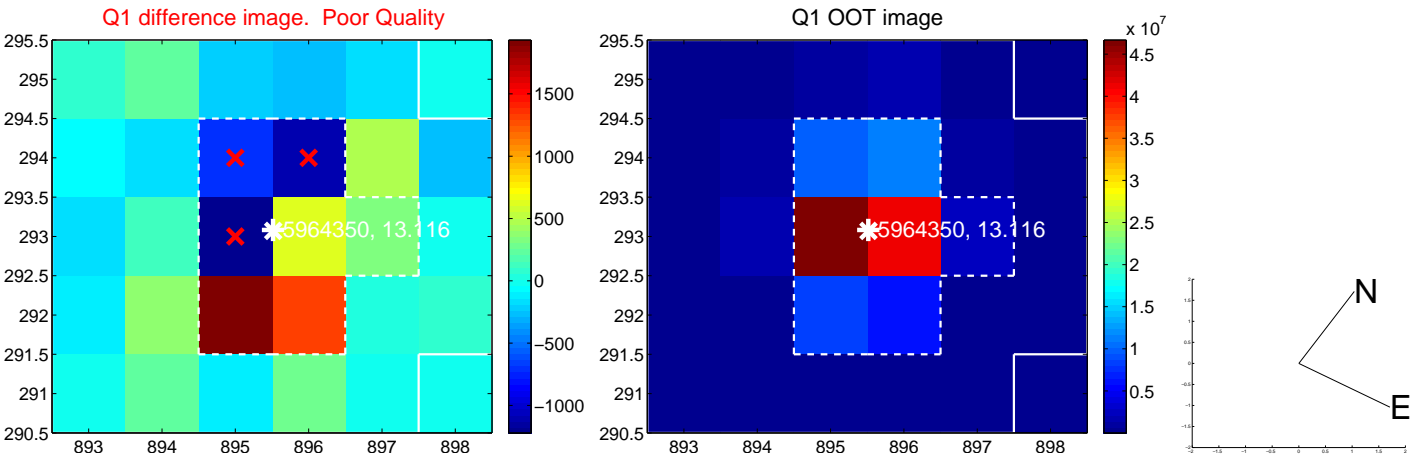


offset from photometric centroids

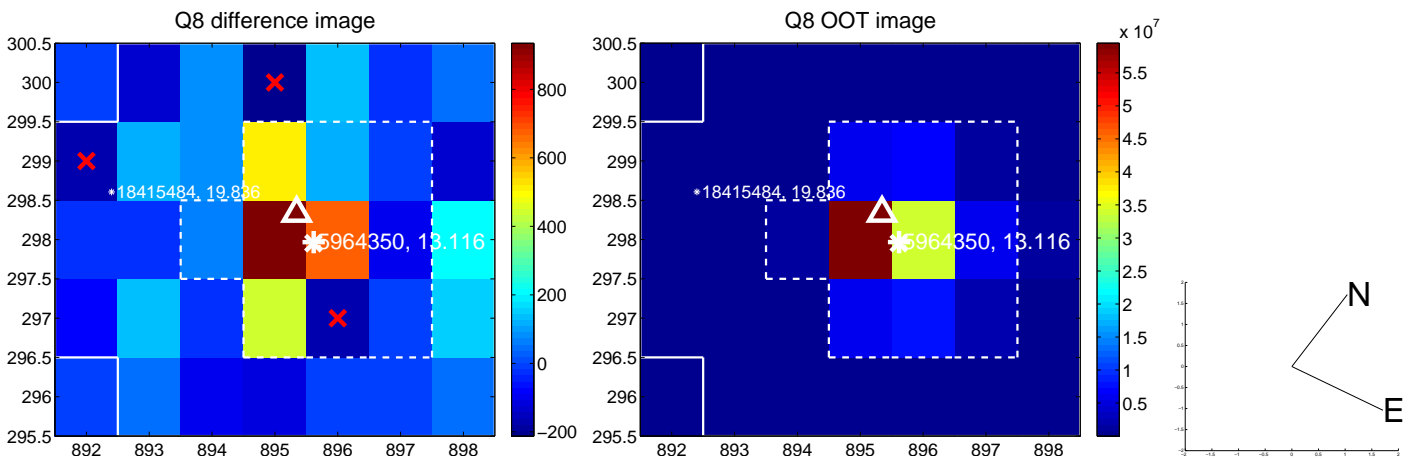
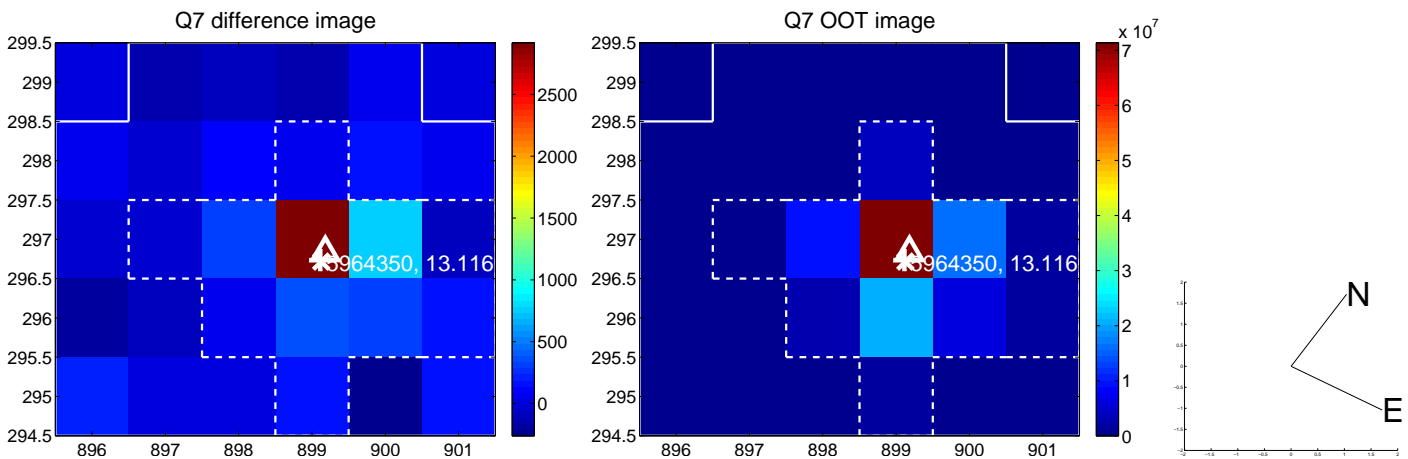
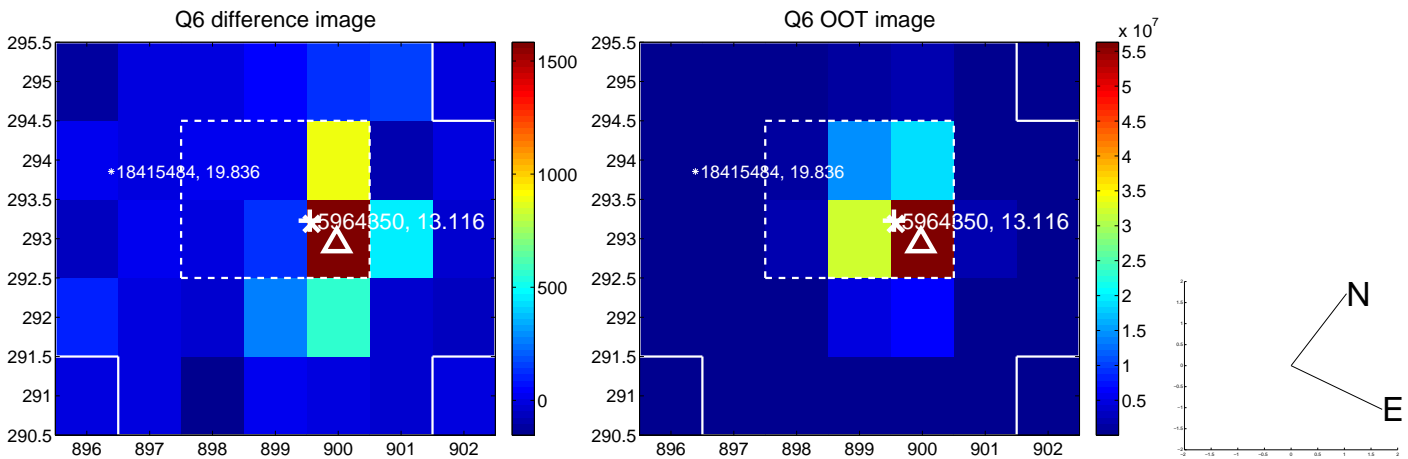
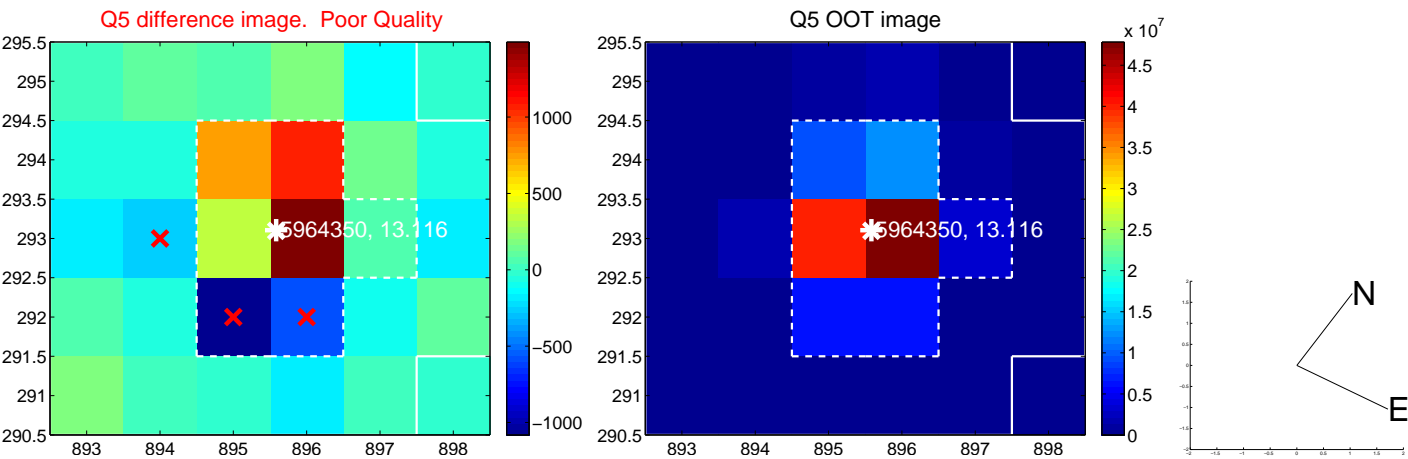


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets**; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

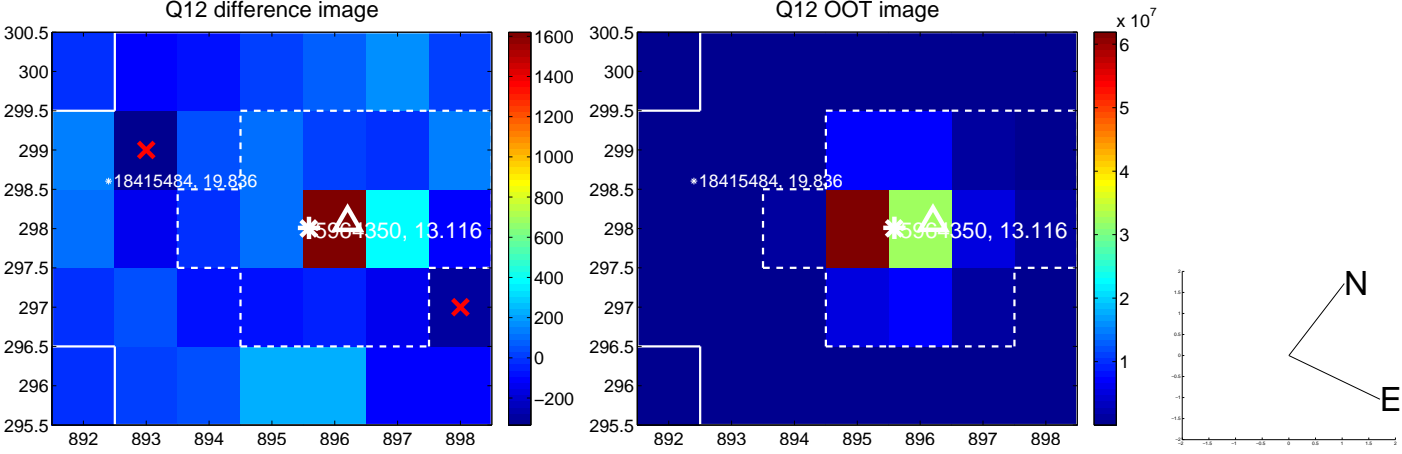
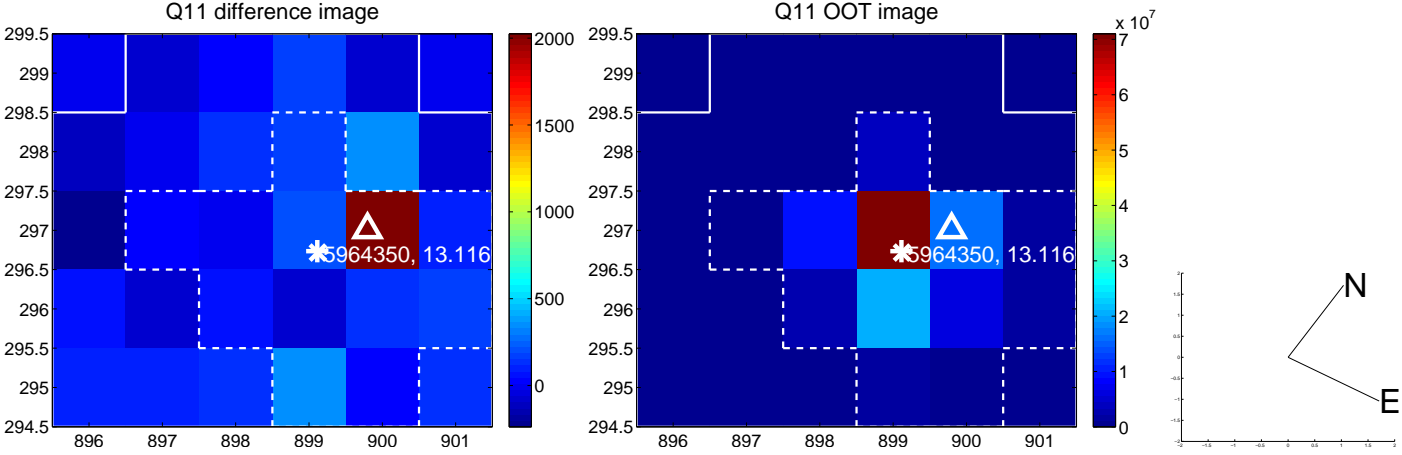
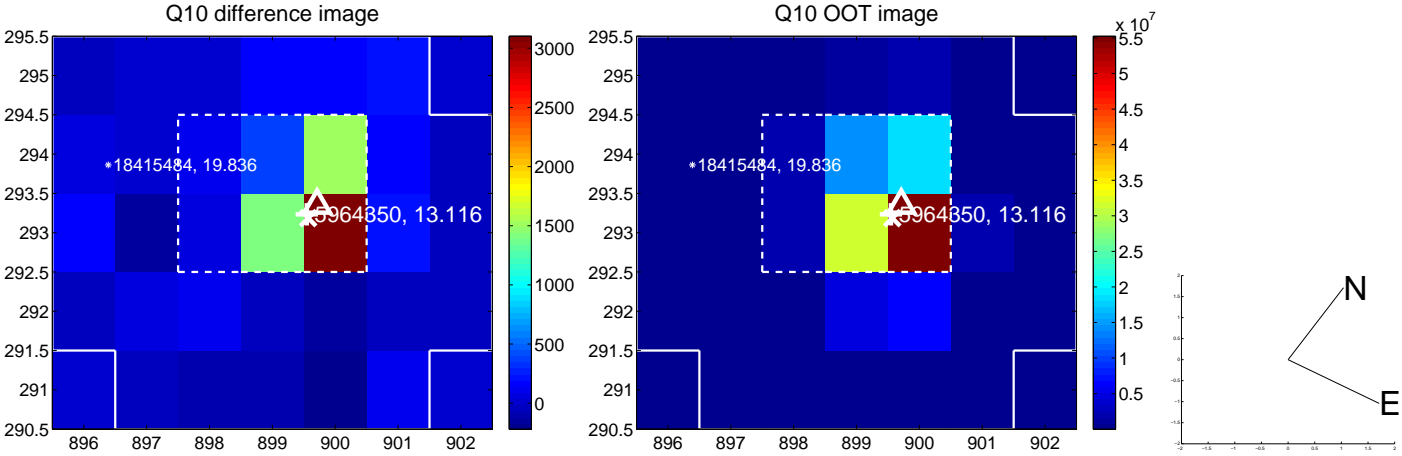
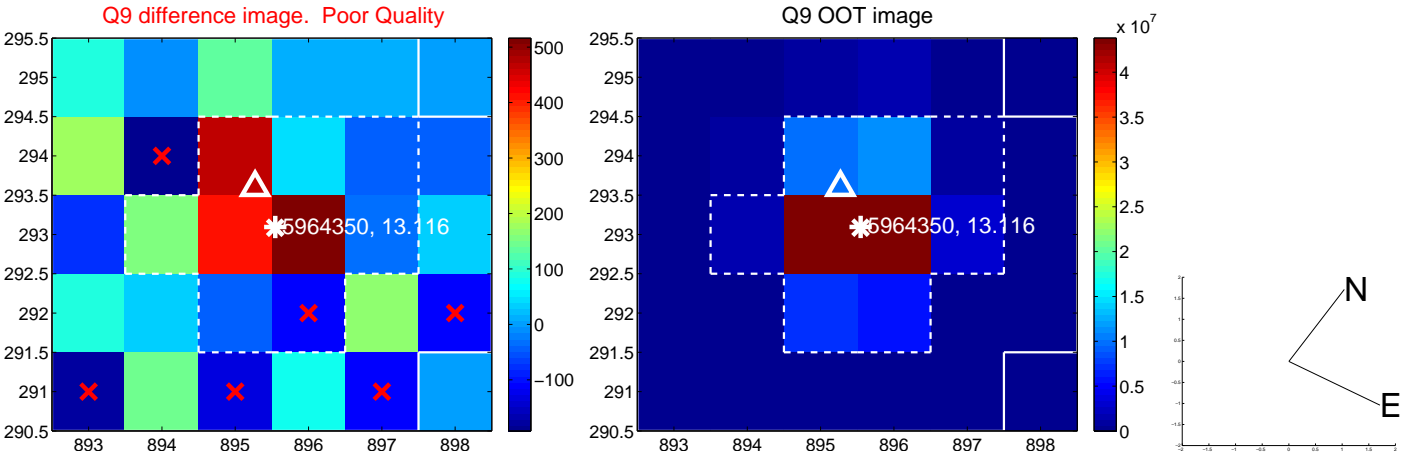
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



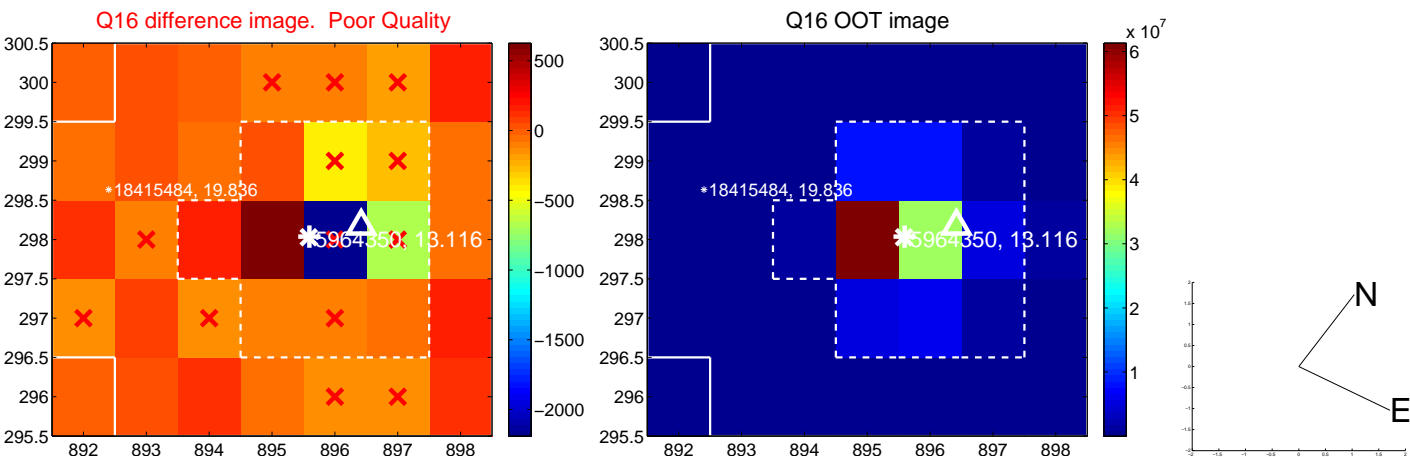
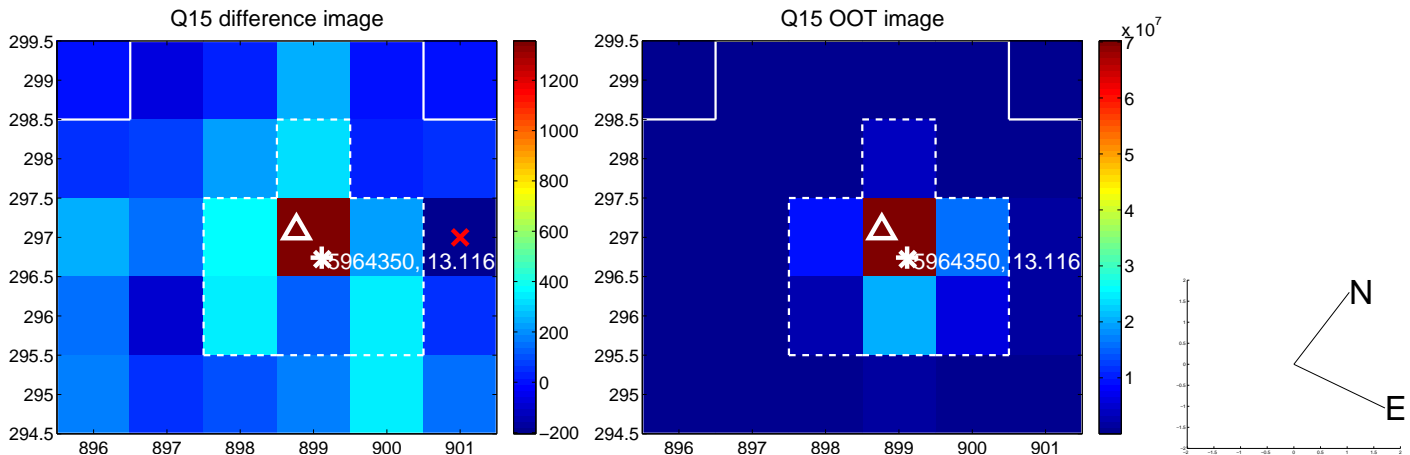
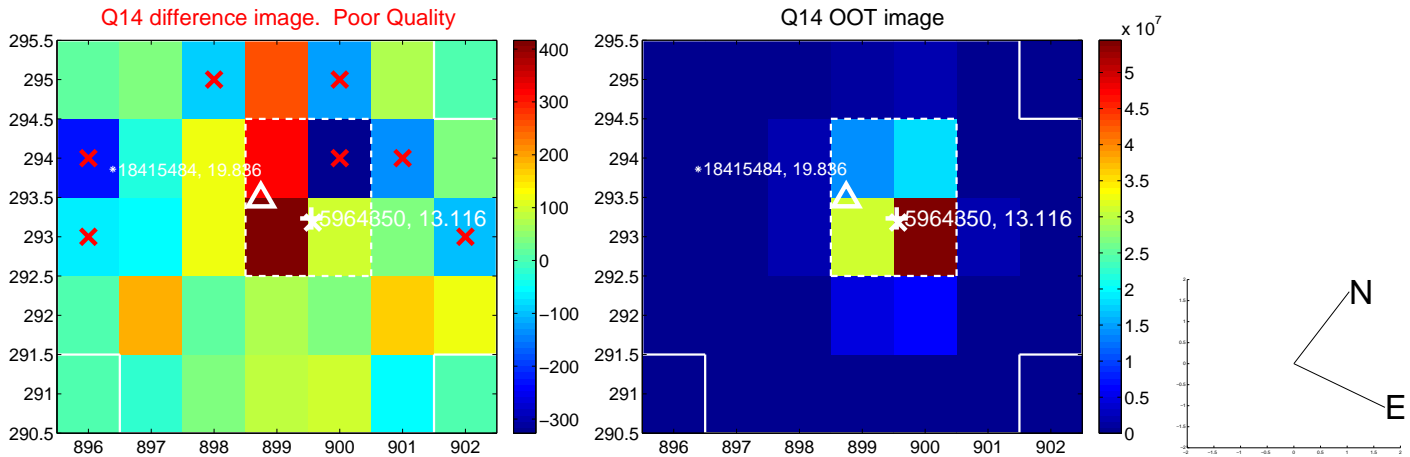
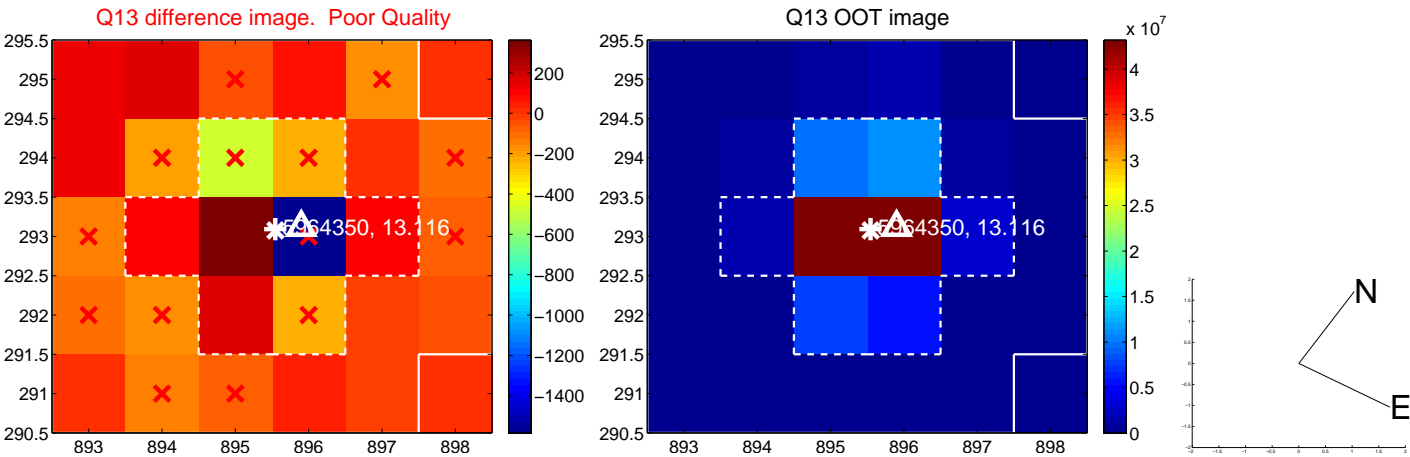
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



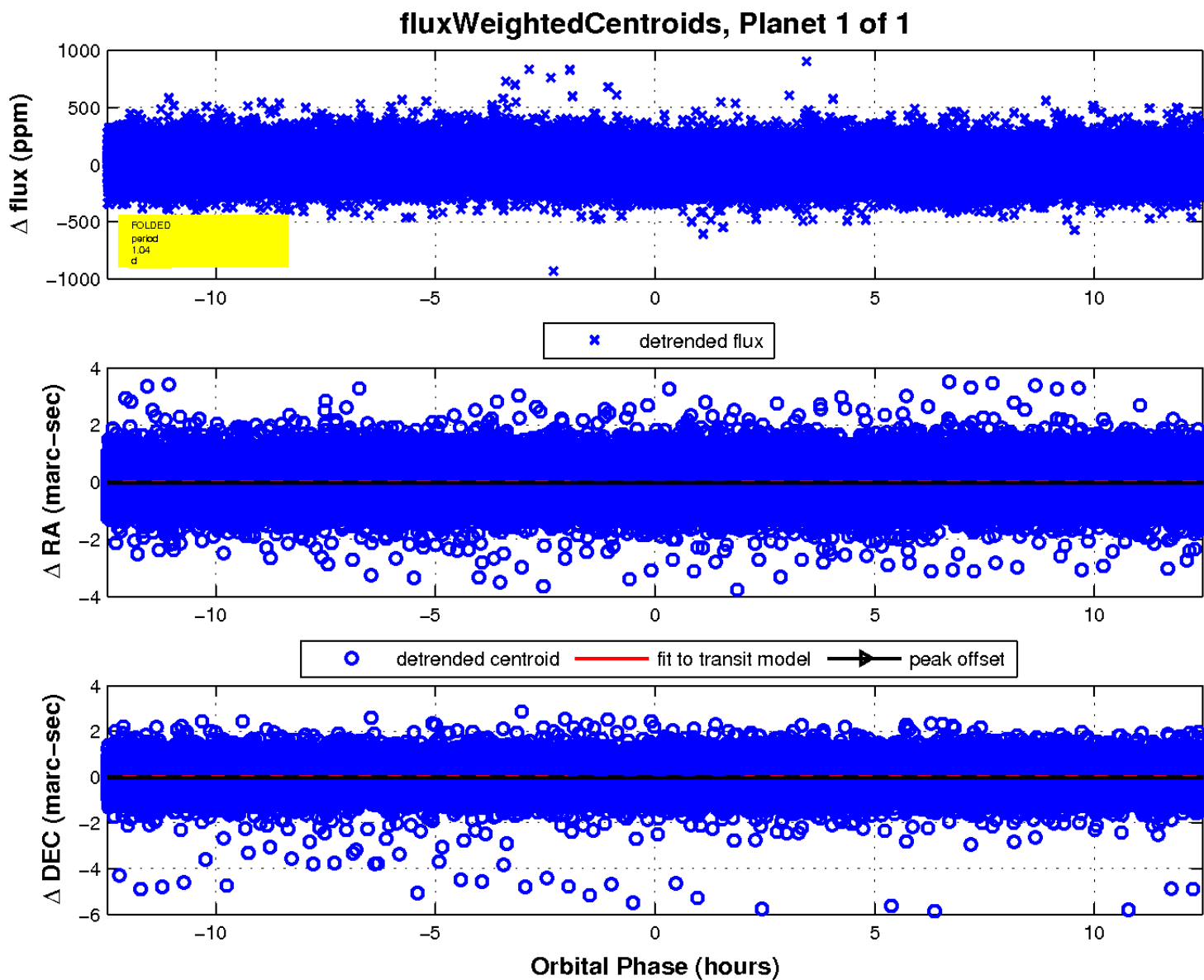
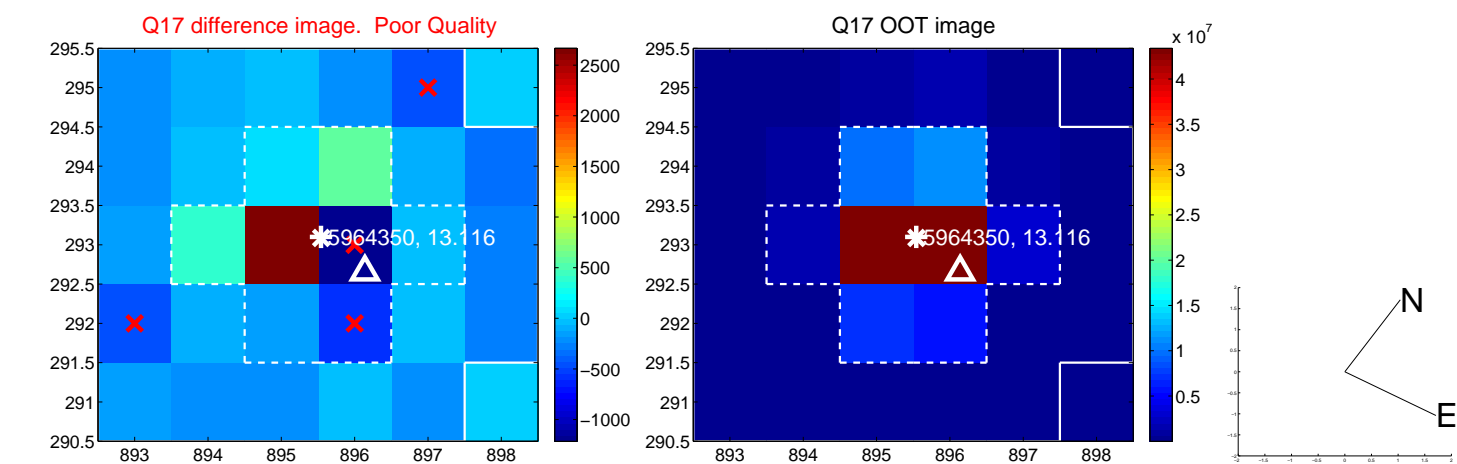
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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



UKIRT Image

Declination

