

KIC 010964422

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})
010964422-01	OBS	No	1.008012	132.233984	0.0	10.348	9.5	0.0	1.85	6547	0.00	14488.60

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
010964422-01	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_SKYE_ZUMA_TRACKER—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.

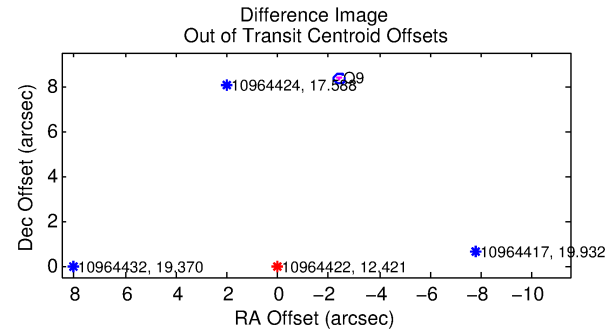
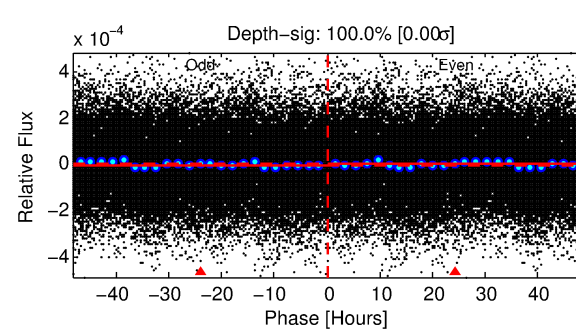
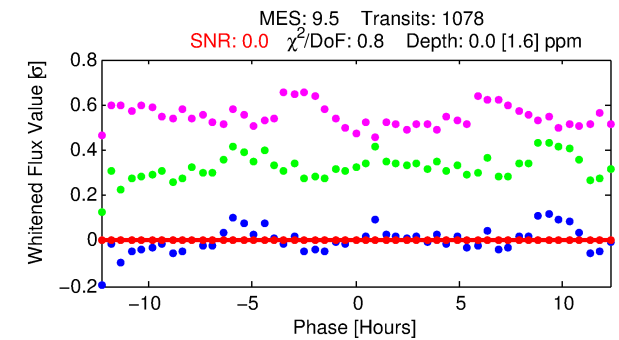
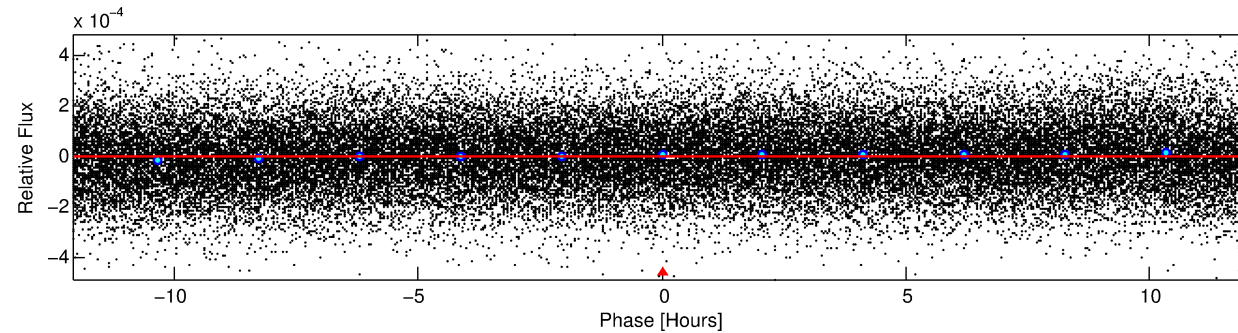
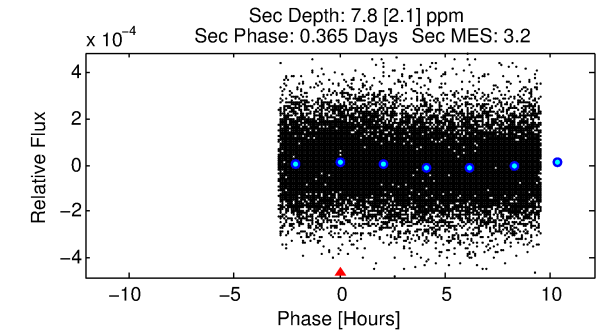
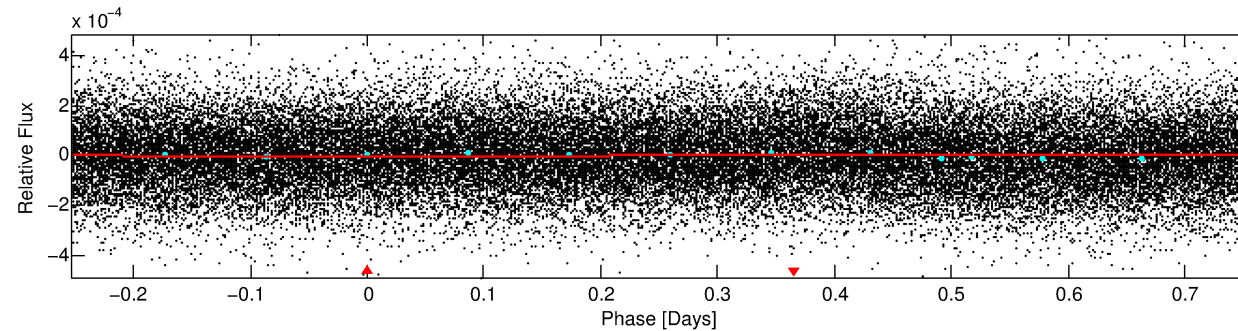
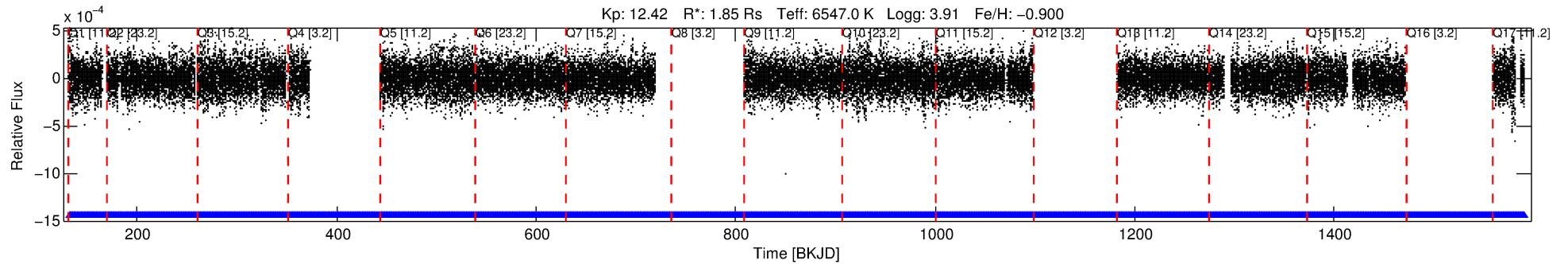
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 010964422-01

No Significant Match Found

DV One-Page Summary

KIC: 10964422 Candidate: 1 of 1 Period: 1.008 d



DV Fit Results:

Period = 1.00801 [0.59686] d
Epoch = 132.2340 [171.9820] BKJD
Rp/R* = 0.0000 [0.0358]
a/R* = 1.03 [132.72]
b = 0.01 [193657.22]
Seff = 14488.60 [16397.05]
Teq = 2798 [792] K
Rp = 0.00 [7.25] Re
a = 0.0198 [0.0123] AU
Ag = 108914.78 [403140405.87] [0.00σ]
Teff = 78577 [72716395] K [0.00σ]

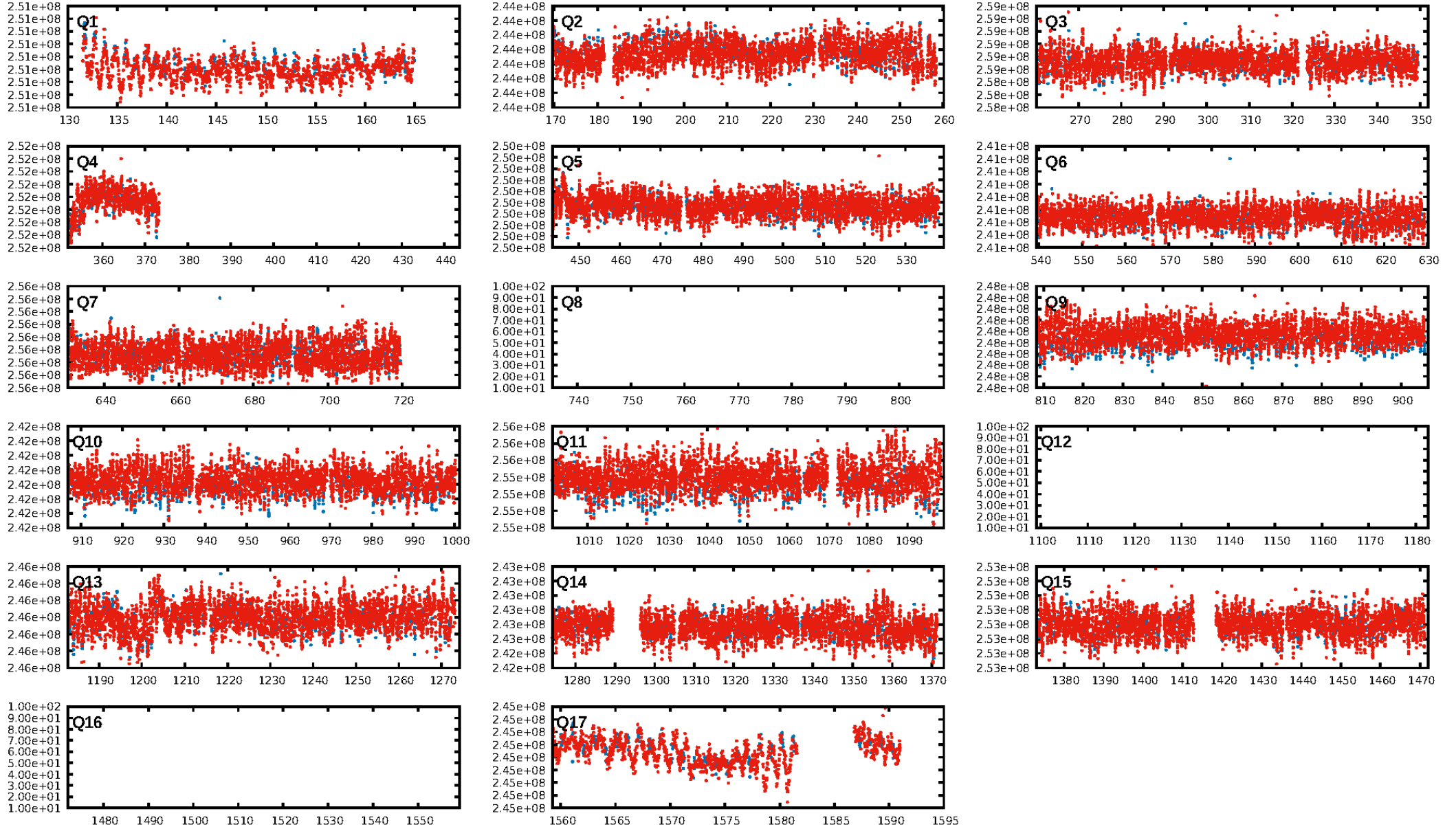
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: N/A
RollingBand-fgt: 1.00 [996/996]
GhostDiagnostic-chr: N/A
Centroid-sig: N/A
Centroid-so: N/A
OptOffset-rm: 8.687 arcsec [122.53σ]
KicOffset-rm: 8.663 arcsec [122.19σ]
OotOffset-st: 0/0/0/1 [1]
KicOffset-st: 0/0/0/1 [1]
DiffImageQuality-fgm: 0.00 [0/1]
DiffImageOverlap-fno: 1.00 [14/14]

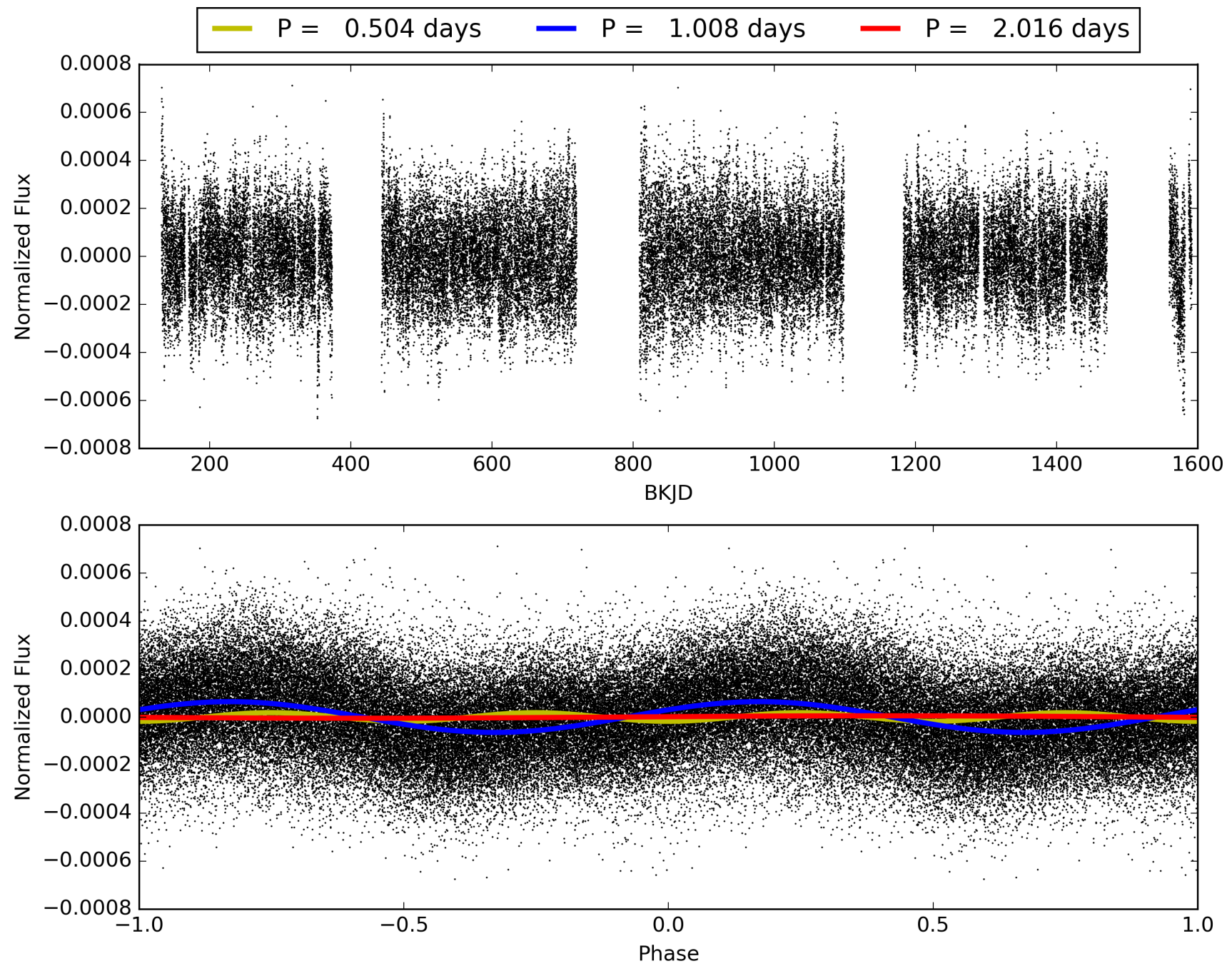
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 28-Jan-2016 22:30:20 Z

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

TCE 010964422-01, PDC Light Curves

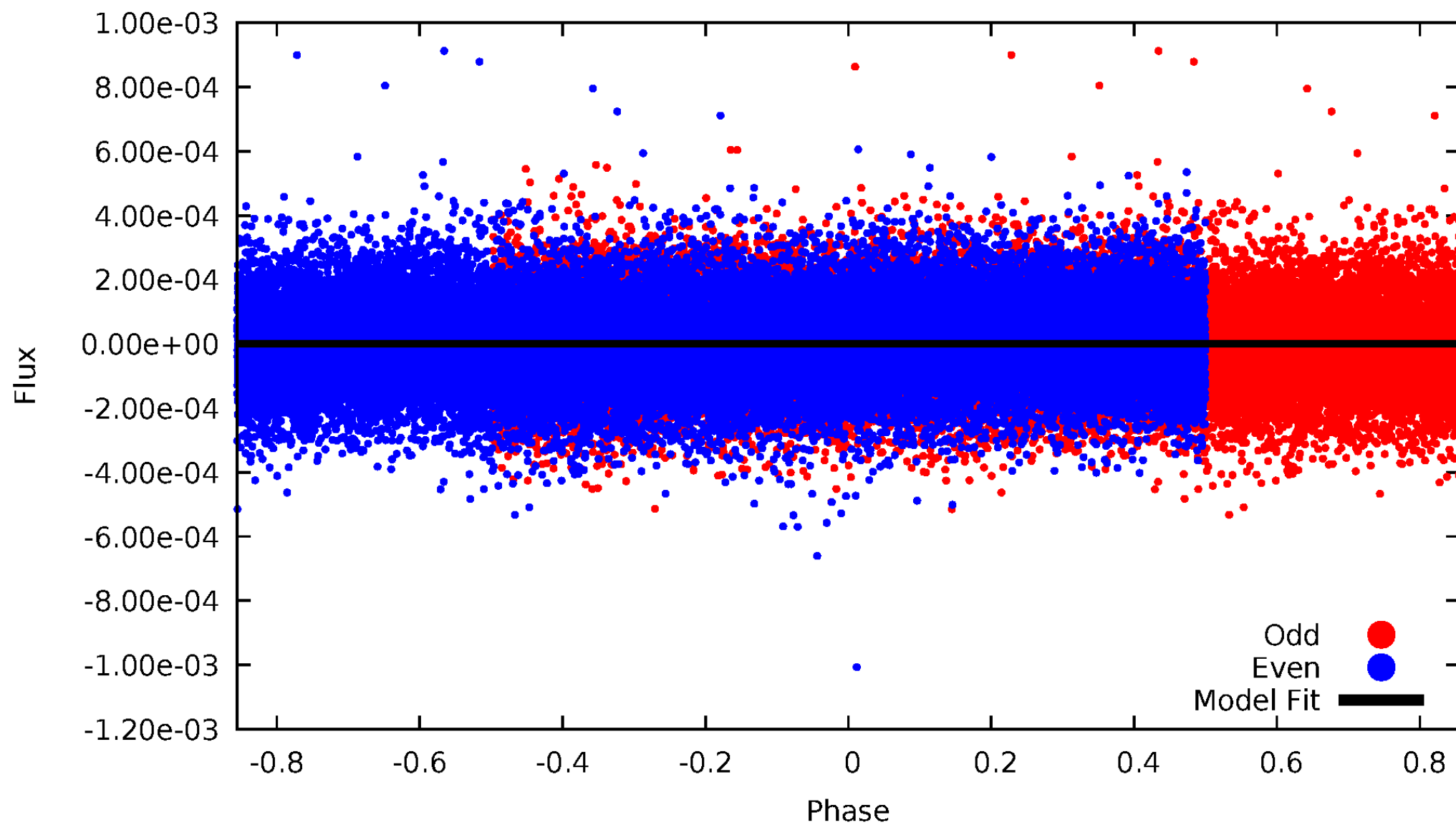


TCE 010964422-01



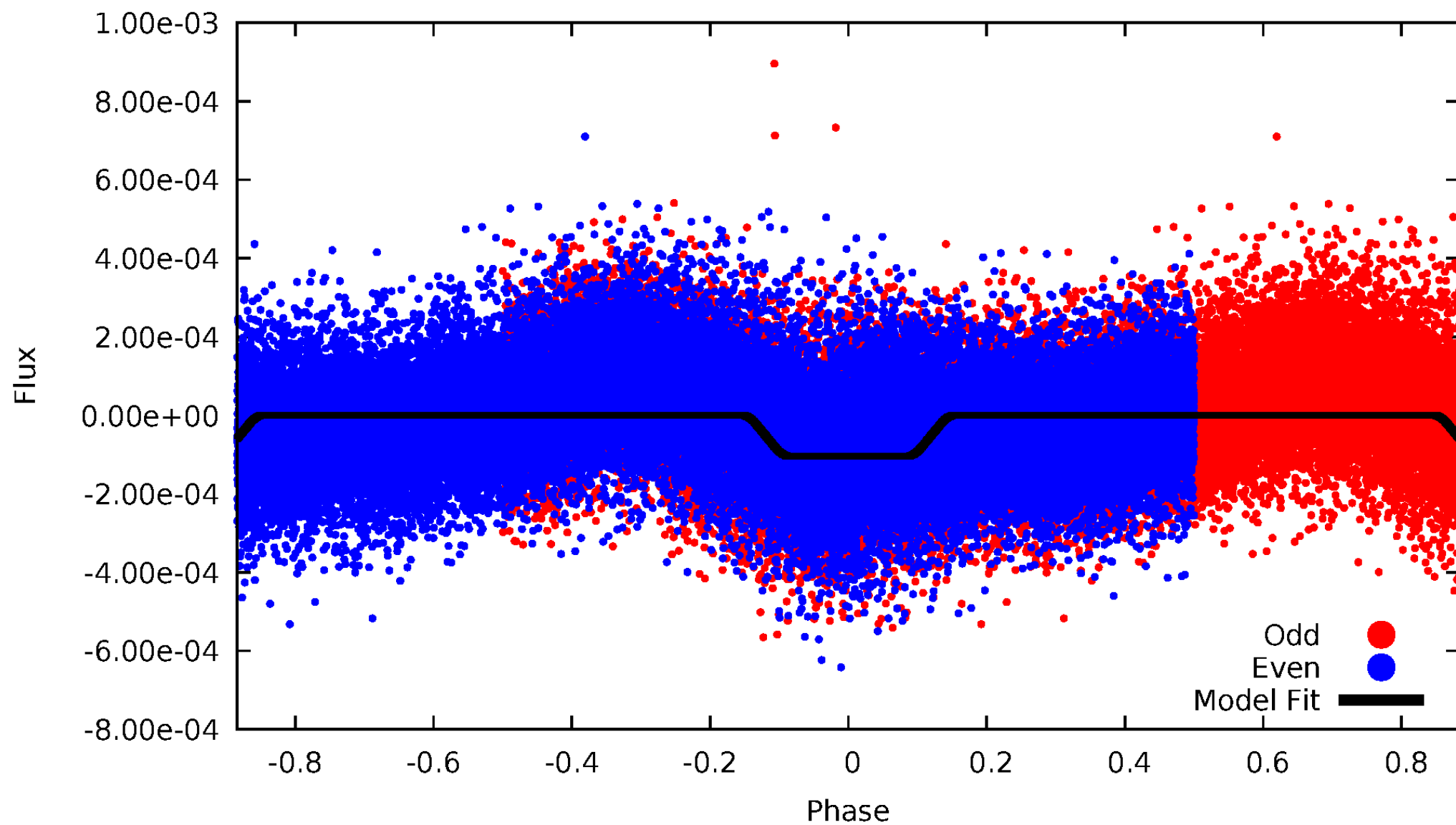
DV Odd/Even

TCE 010964422-01

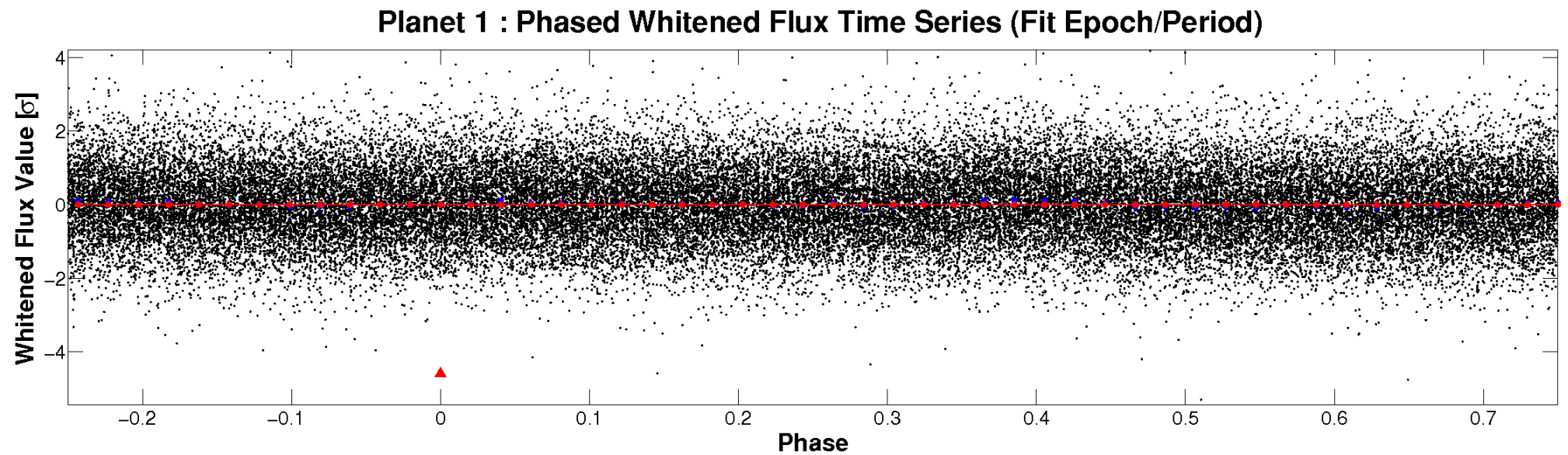
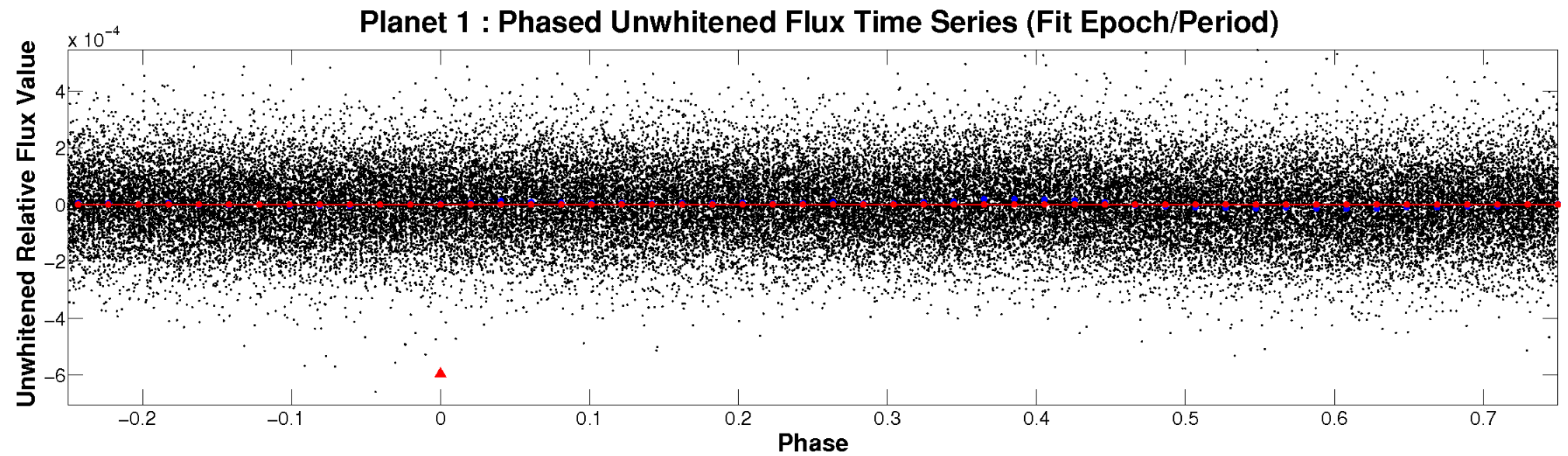


ALT Odd/Even

TCE 010964422-01

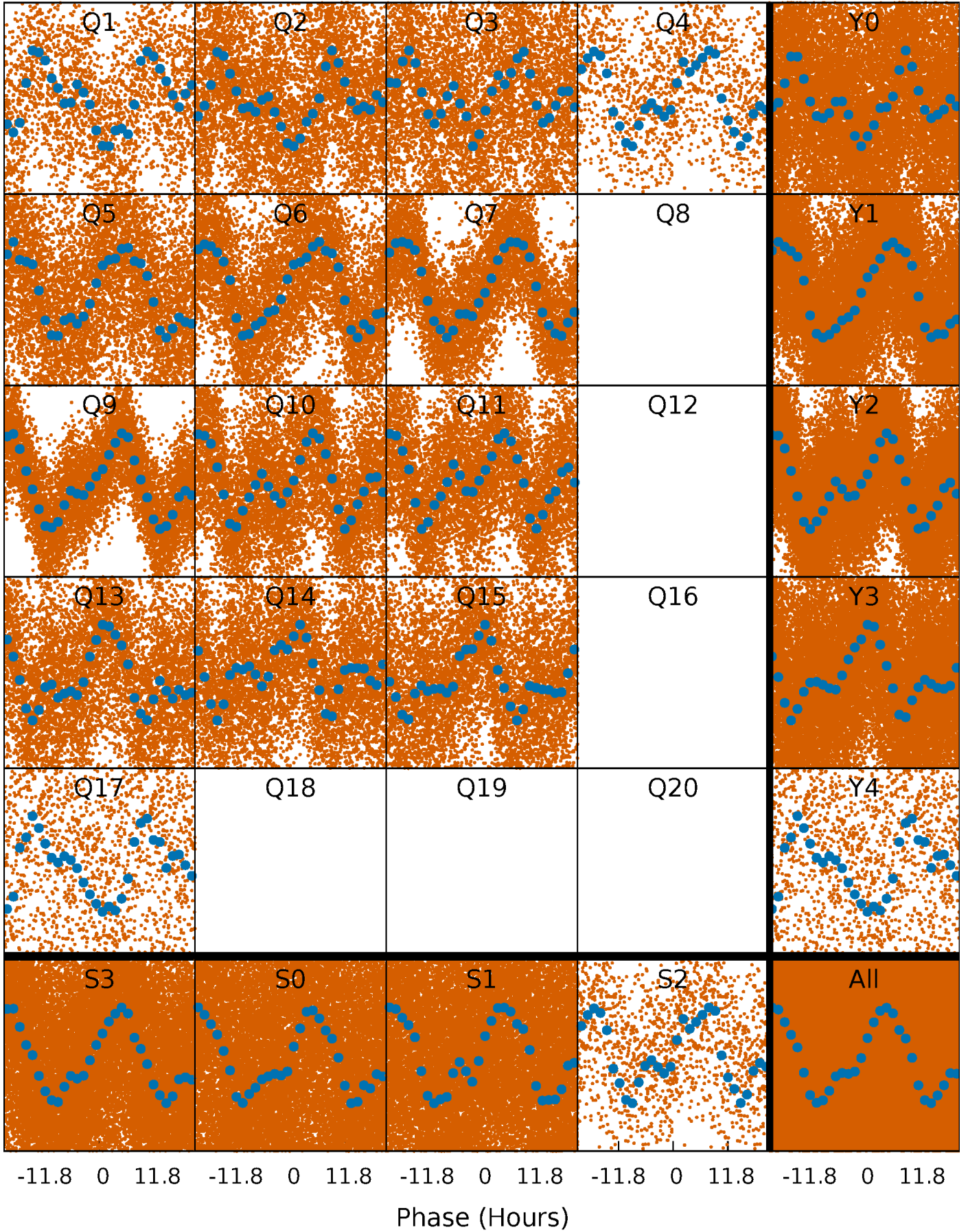


Non-Whitened Vs. Whitened Light Curve



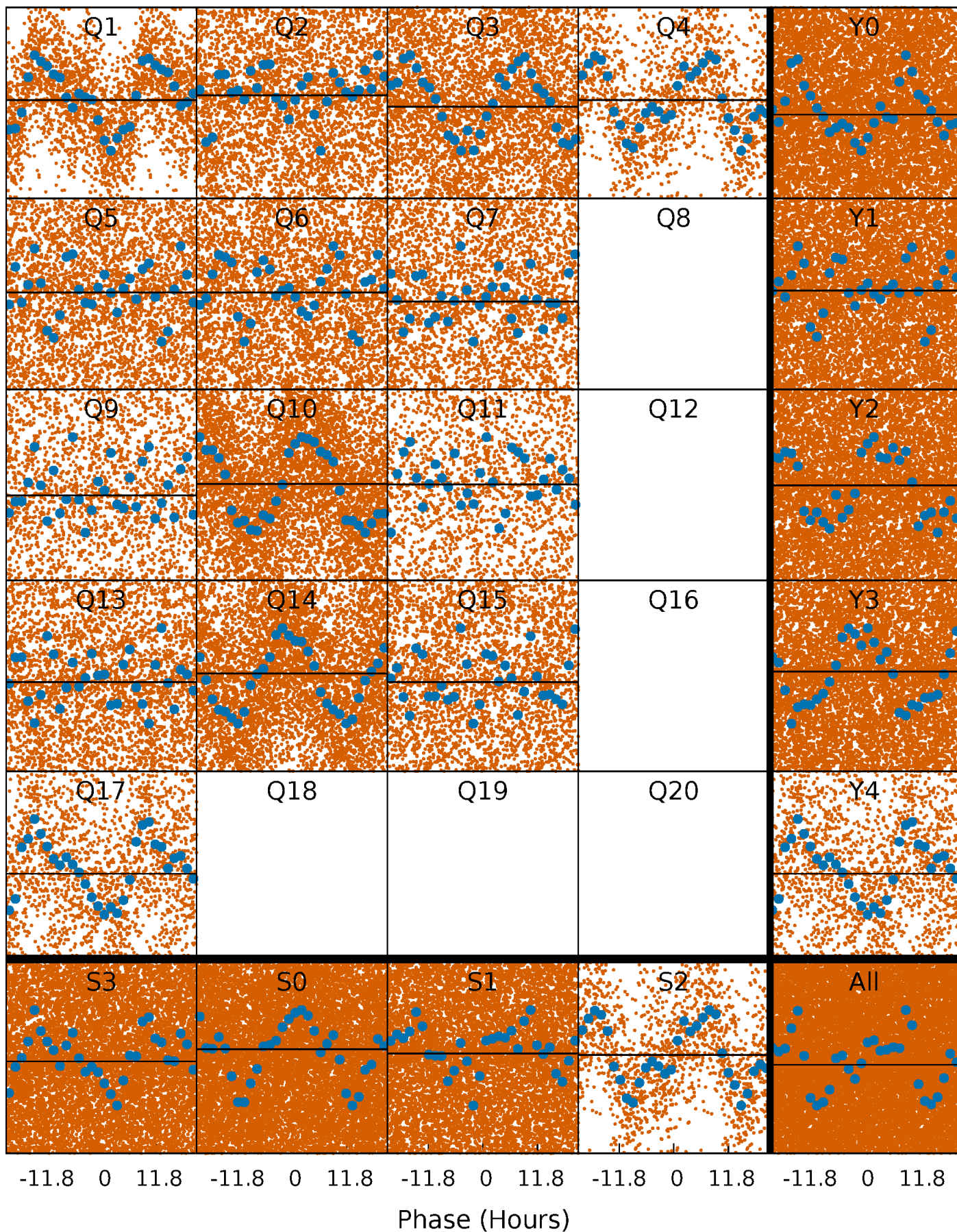
PDC Quarter-Phased Transit Curves

TCE 010964422-01 P= 1.008012 Days $T_0=132.233984$ (BKJD)



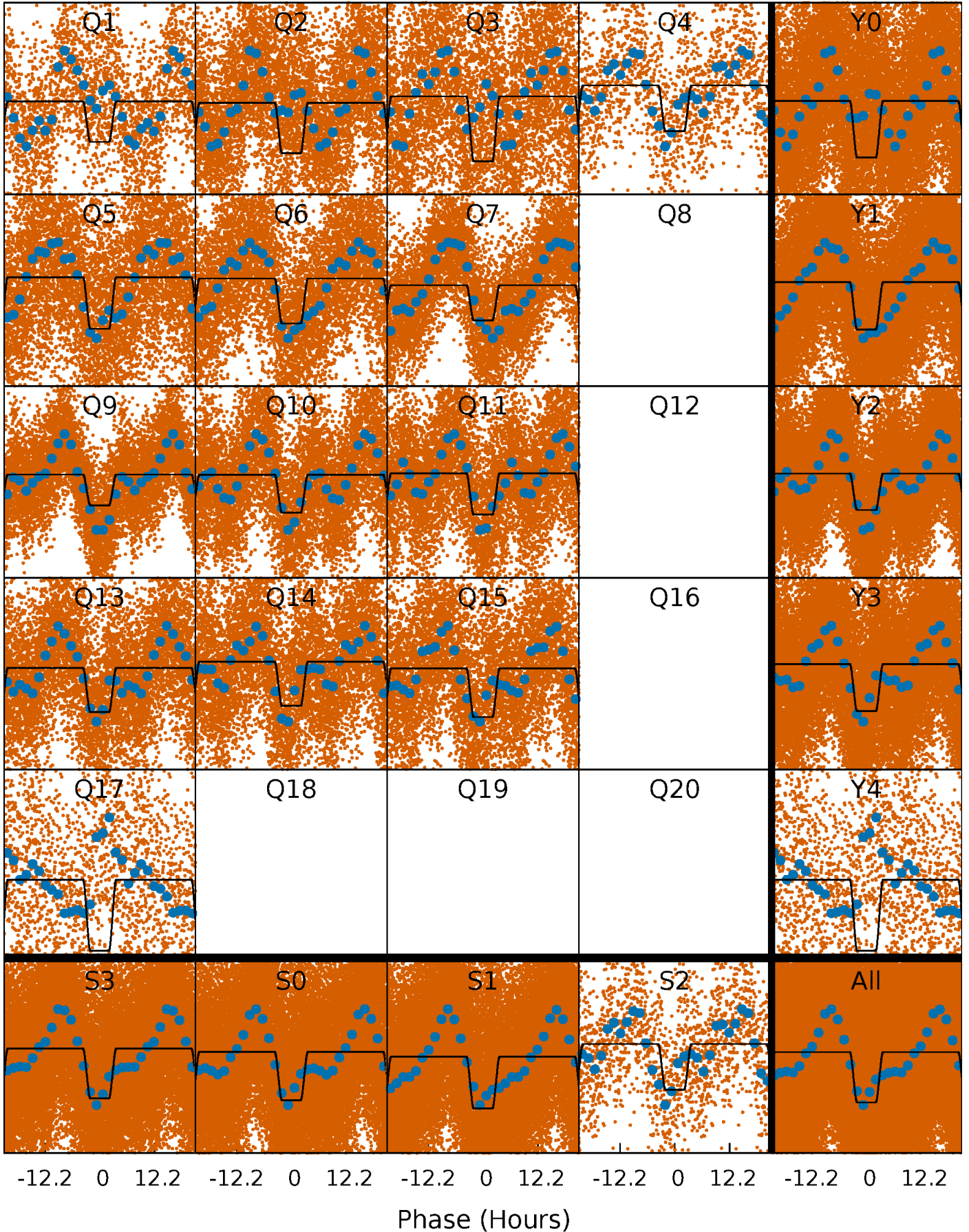
DV Quarter-Phased Transit Curves

TCE 010964422-01 P= 1.008012 Days $T_0=132.233984$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

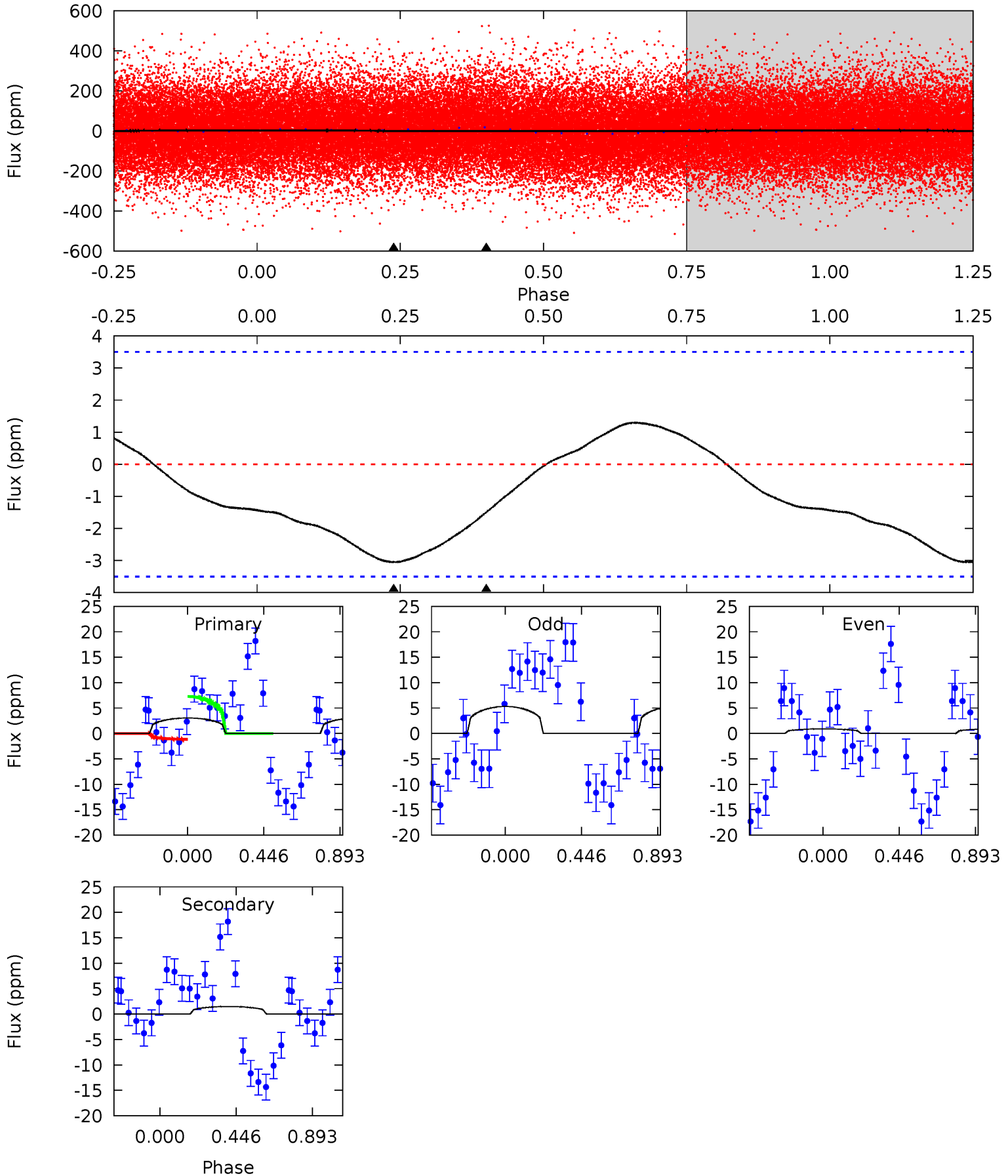
TCE 010964422-01 P= 1.007714 Days $T_0=131.980614$ (BKJD)



DV Model-Shift Uniqueness Test

010964422-01, P = 1.008012 Days, E = 131.225972 Days

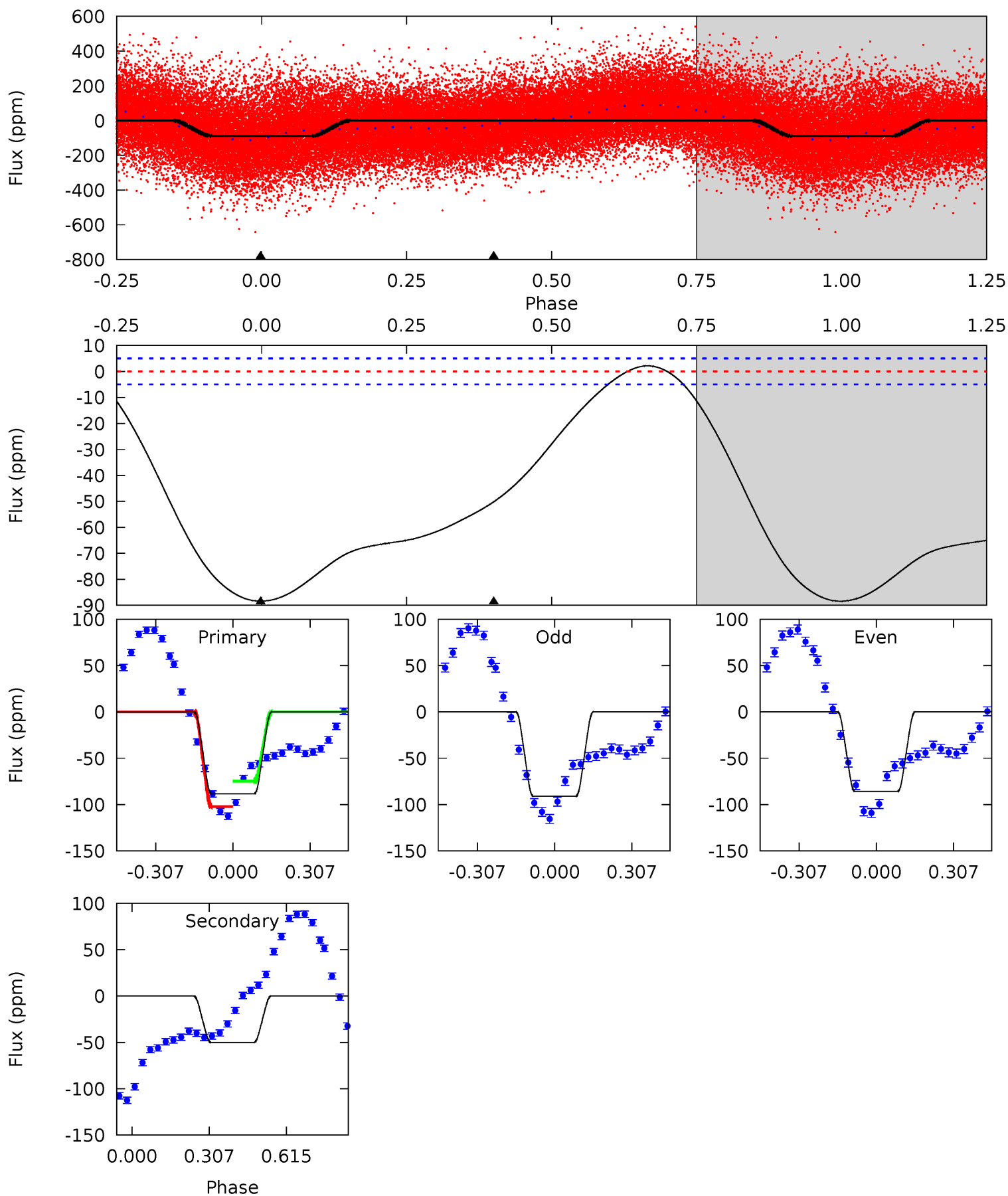
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
3.69	1.81	0	0	4.24	0.76	0.48	3.69	3.69	1.81	1.81	2.69	0.45	0.30	3.73



Alt Model-Shift Uniqueness Test

010964422-01, P = 1.007714 Days, E = 130.972900 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
76.5	43.4	0	0	4.32	1.02	3.42	76.5	76.5	43.4	43.4	2.24	0.97	0.02	12.4



Stellar Parameters For KIC 010964422

	$T_{\text{eff}} (K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M (M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	6547^{+207}_{-230}	$3.907^{+0.480}_{-0.160}$	$-0.900^{+0.300}_{-0.300}$	$1.853^{+0.461}_{-0.856}$	$1.011^{+0.121}_{-0.148}$	$0.224^{+1.055}_{-0.099}$
	+3%/-4%	+12%/-4%	+33%/-33%	+25%/-46%	+12%/-15%	+471%/-44%
Source	PHO54	PHO54	PHO54	DSEP		

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

Secondary Eclipse Parameters for KIC 010964422-01 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	-1 ± 1	$4.48^{+5.29}_{-3.04}$	3861^{+1054}_{-681}	-3497^{+719}_{-705}	$0.011^{+0.133}_{-0.010}$
Alt.	-50 ± 1	$5.18^{+5.50}_{-3.61}$	3816^{+1004}_{-712}	2857^{+2831}_{-6633}	$0.388^{+3.538}_{-0.324}$

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

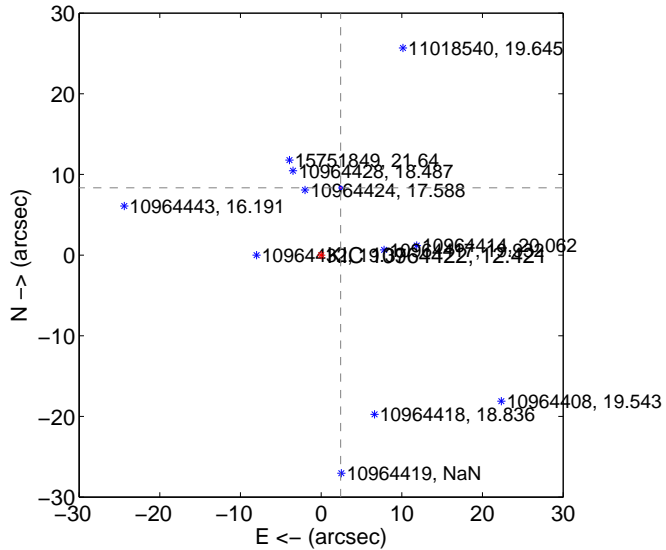
Supplemental centroid analysis for 010964422-01. Kepler magnitude: 12.42. Transit SNR 0.00

There are 0 quarters with good PRF difference image offsets

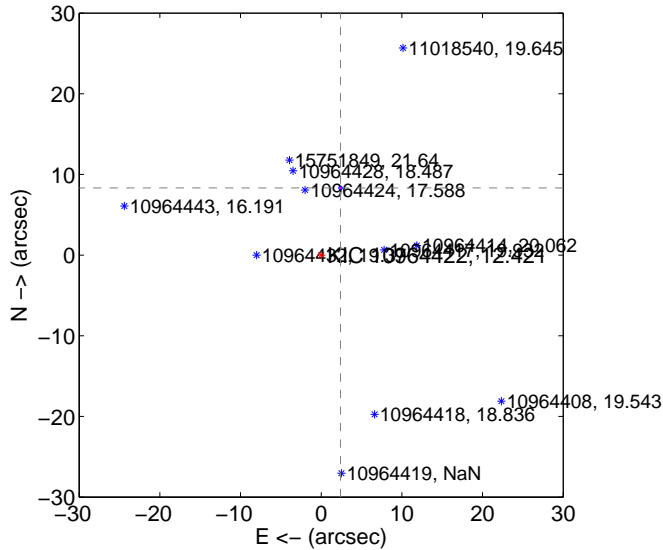
The direct PRF centroid is offset from the target star catalog position by about 0.03 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	8.687 ± 0.071	122.53	-2.425 ± 0.073	8.342 ± 0.071
PRF-fit source offset from KIC position	8.663 ± 0.071	122.19	-2.395 ± 0.073	8.325 ± 0.071
photometric centroid source offset	—	—	—	—

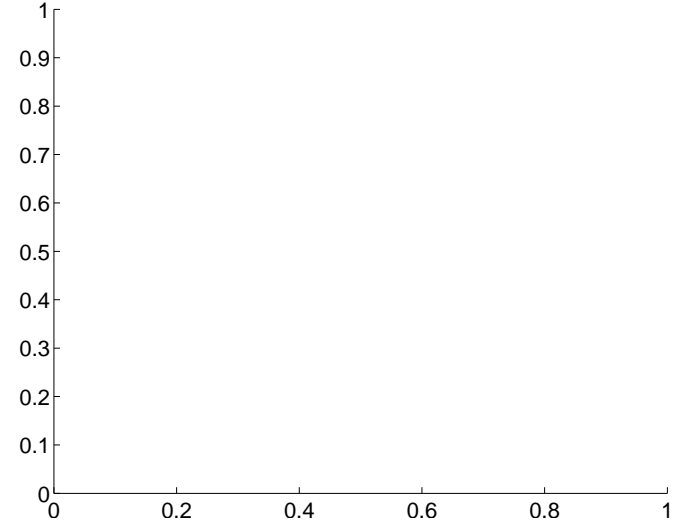
offset from difference PRF-fit to OOT PRF-fit



offset from difference PRF-fit to KIC position

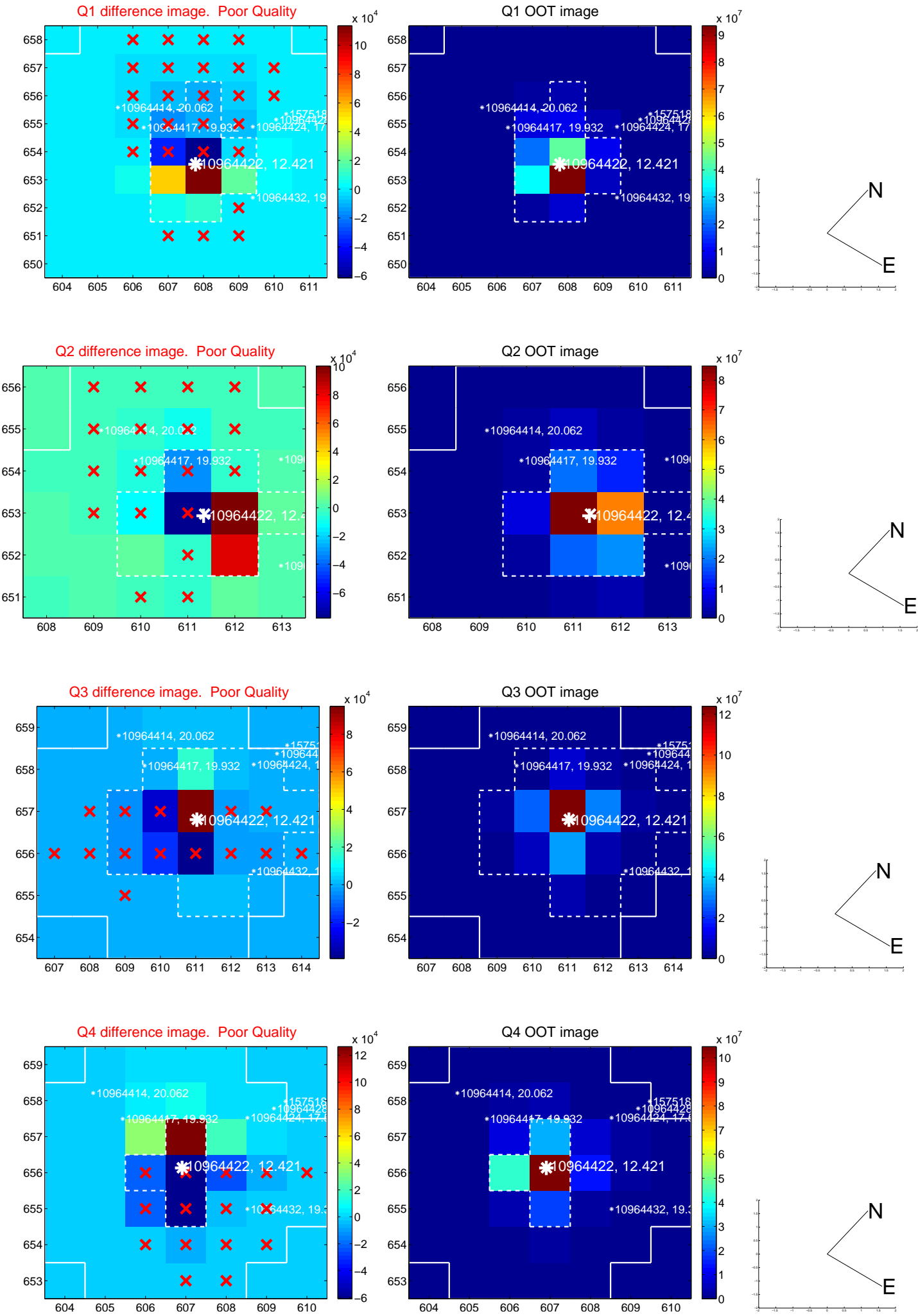


There are no photometric centroids

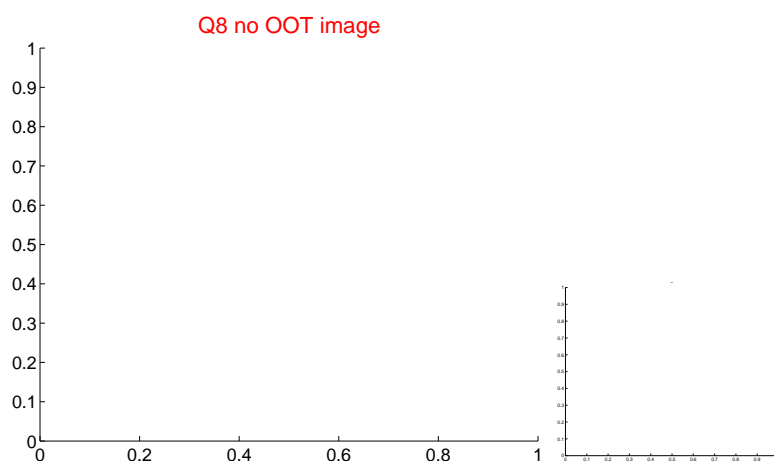
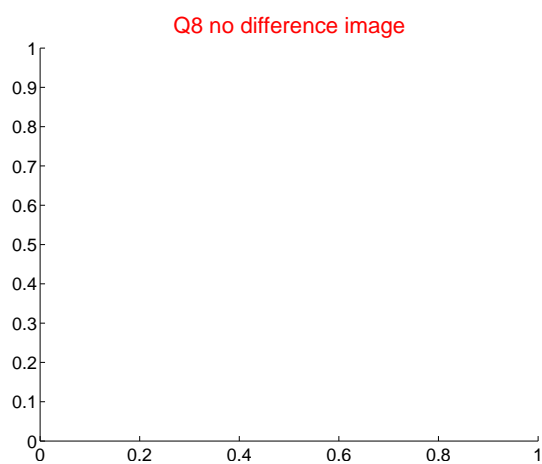
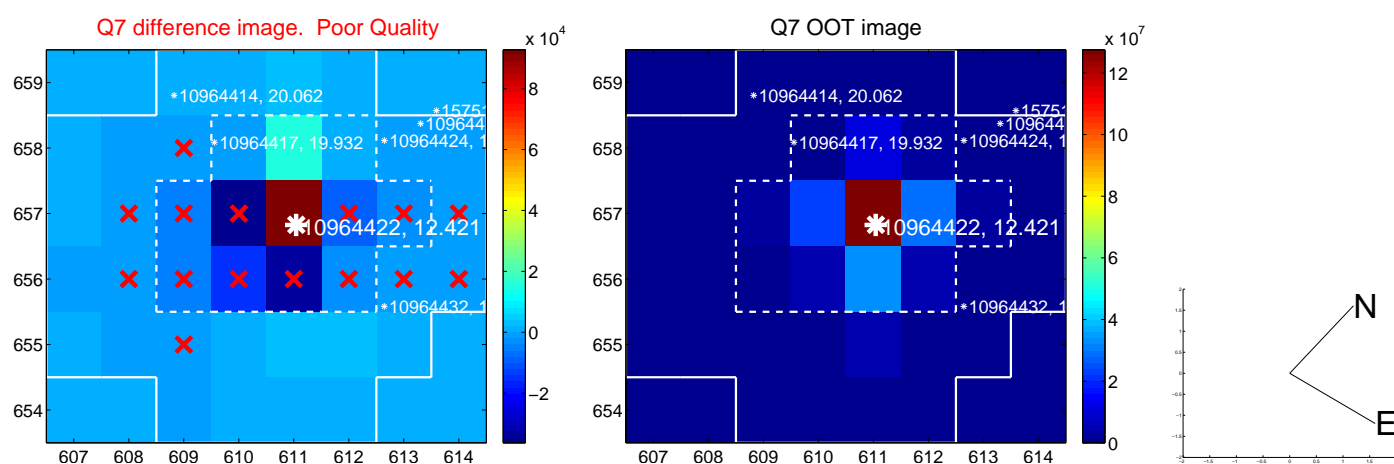
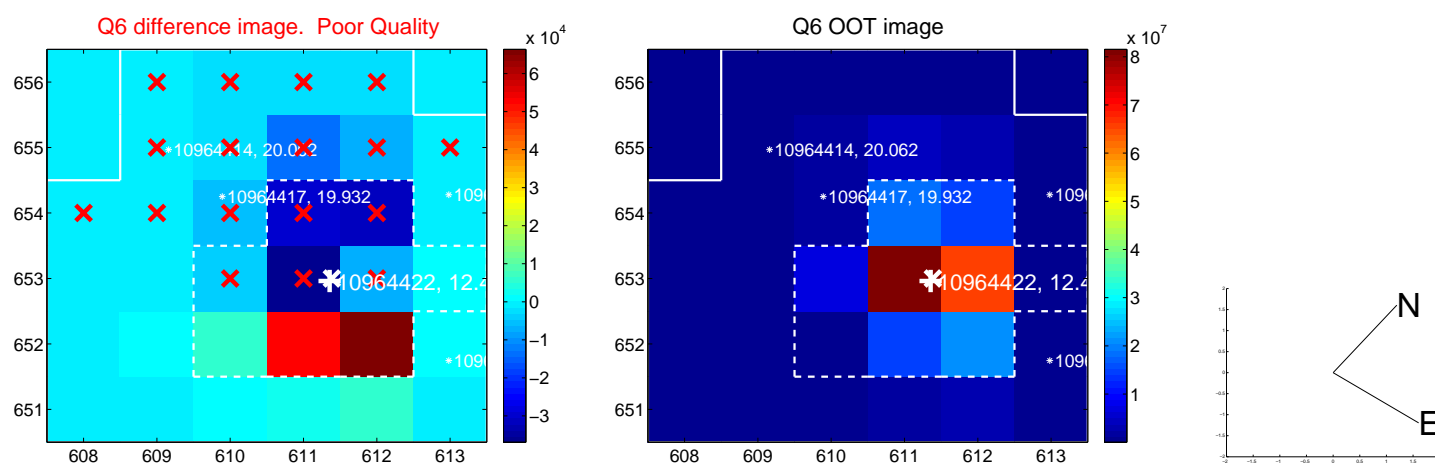
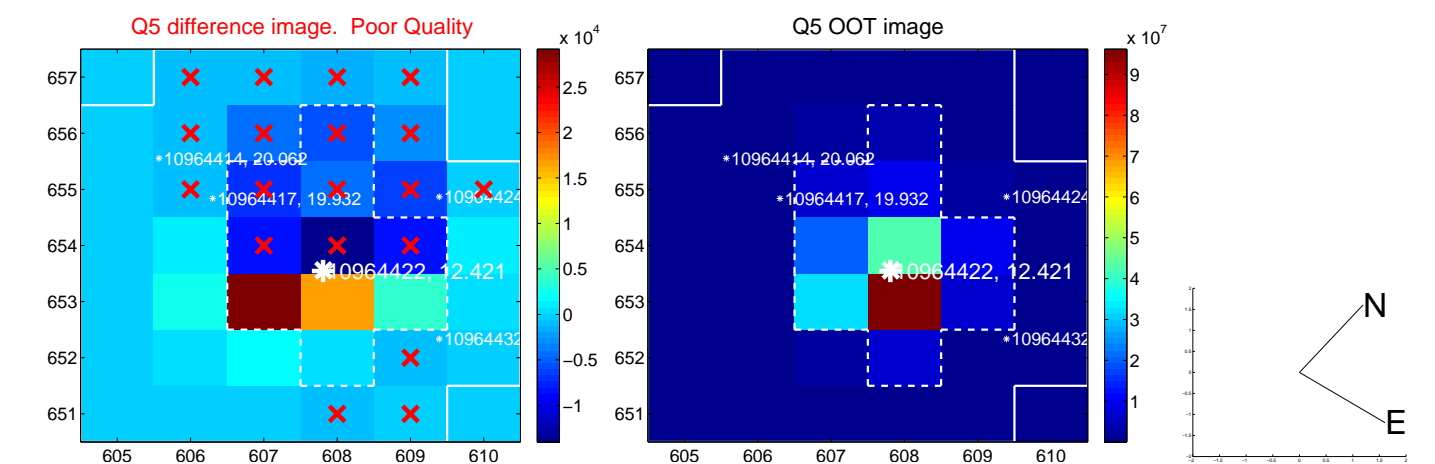


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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

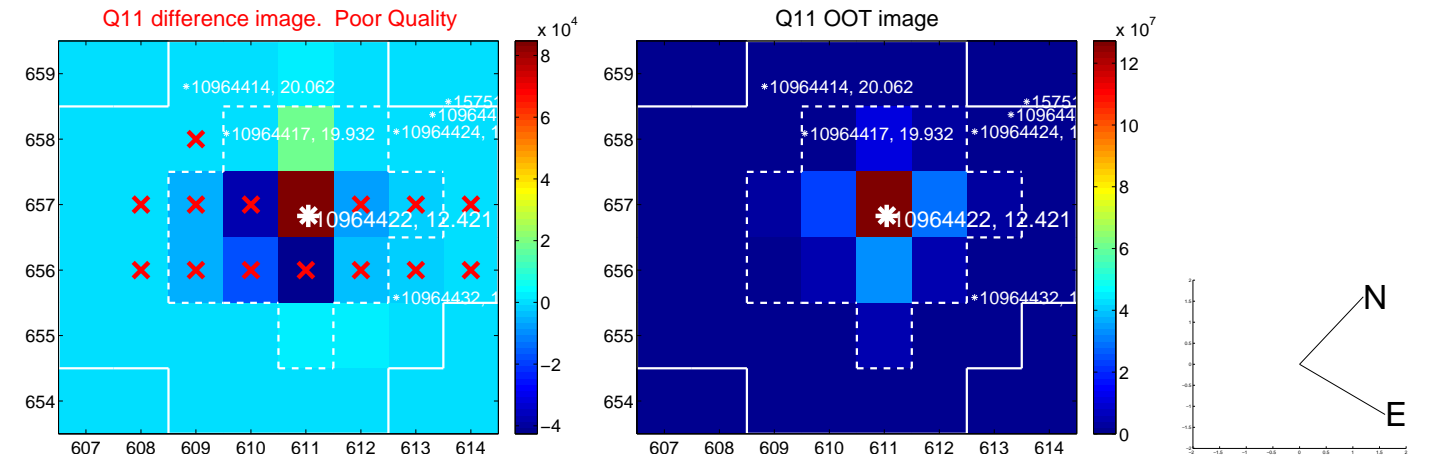
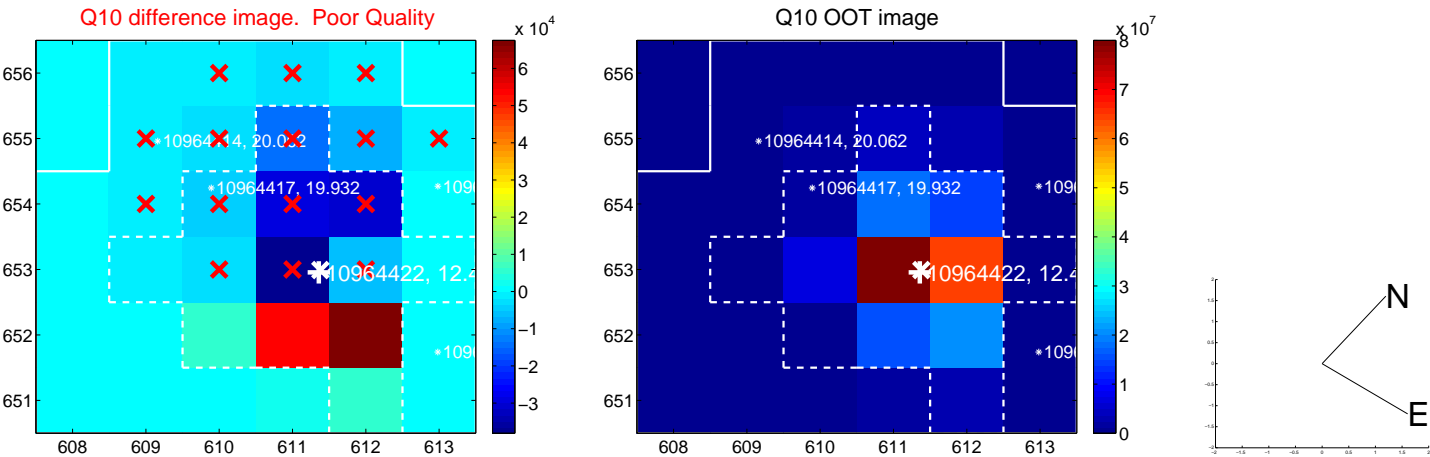
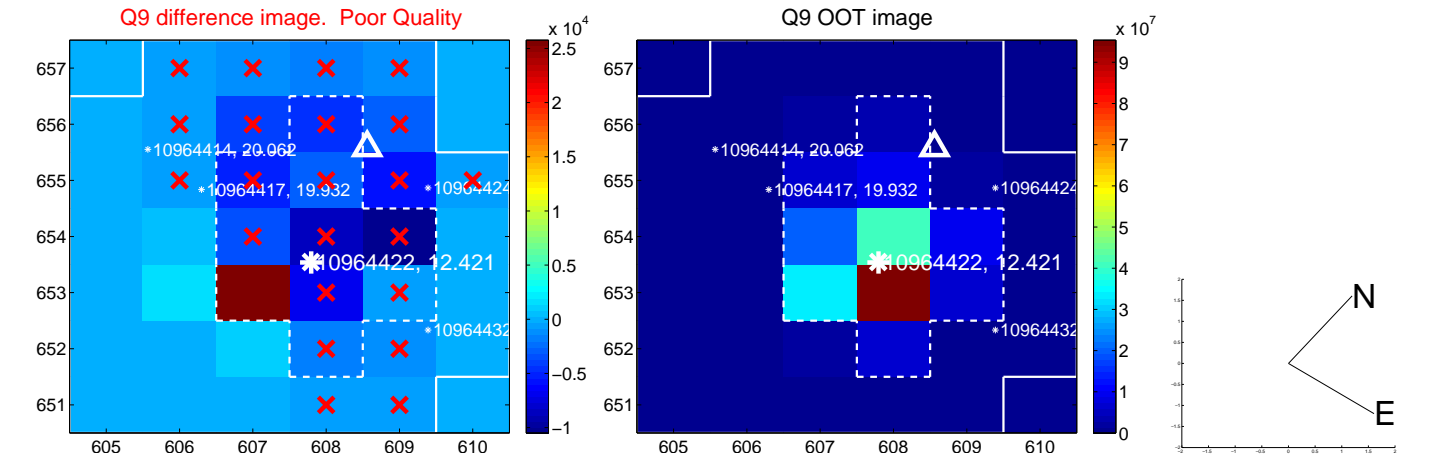
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



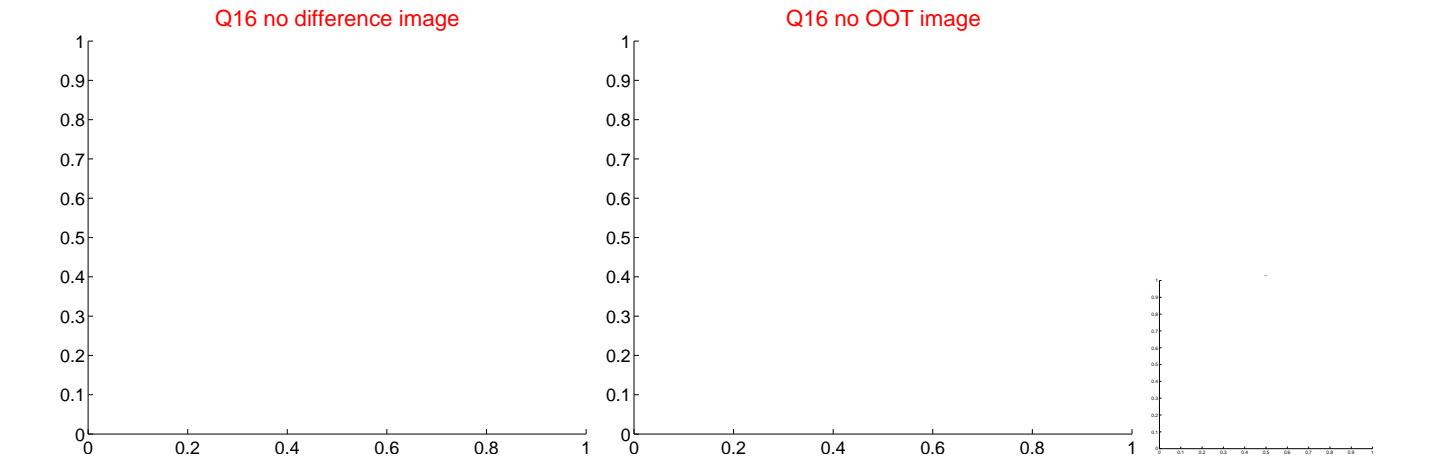
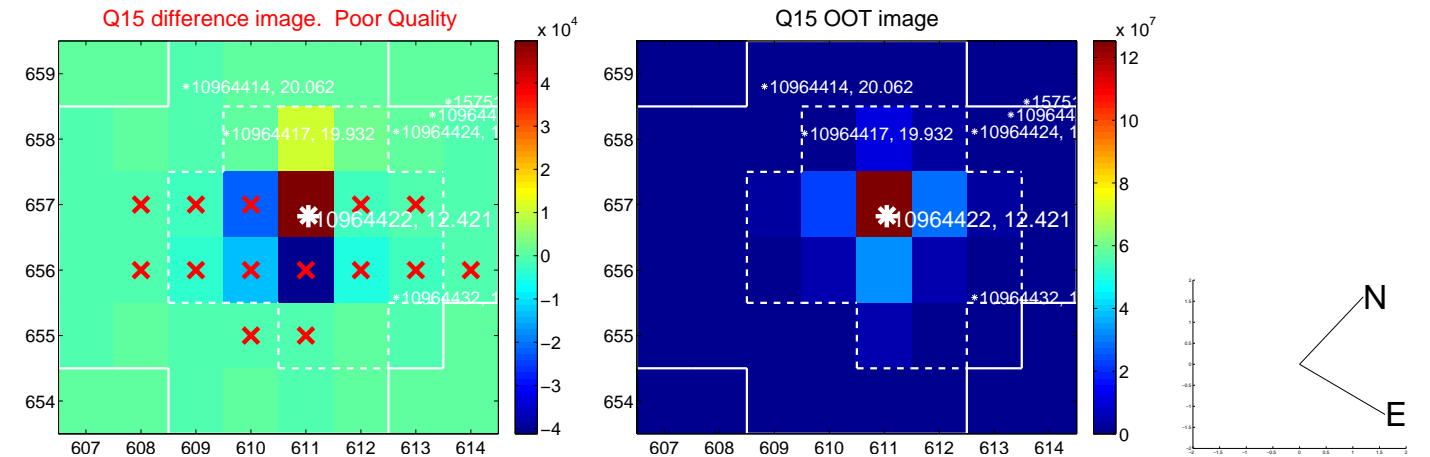
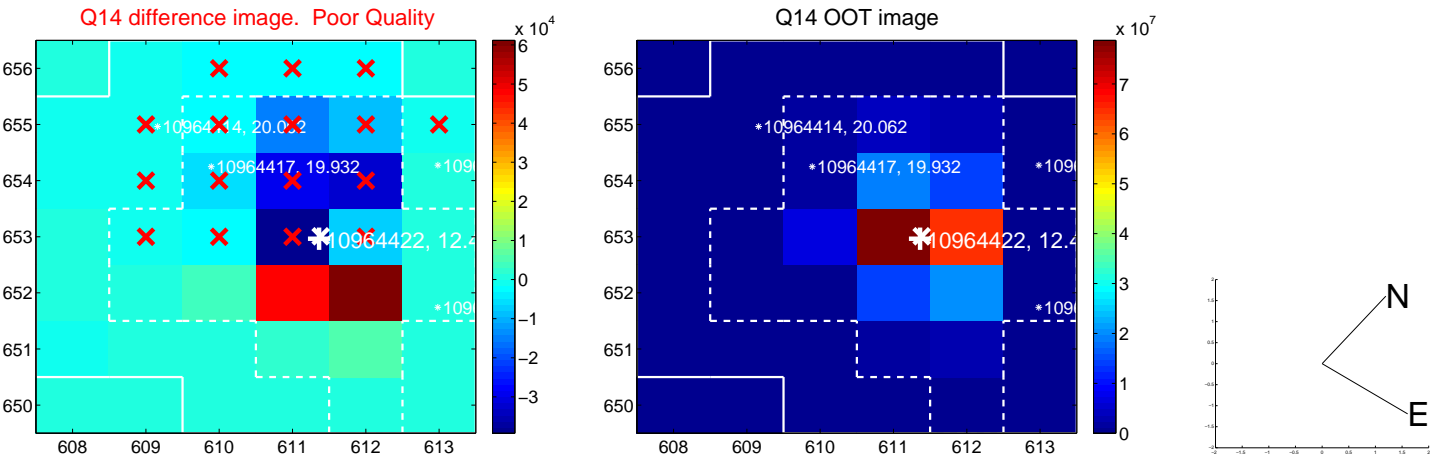
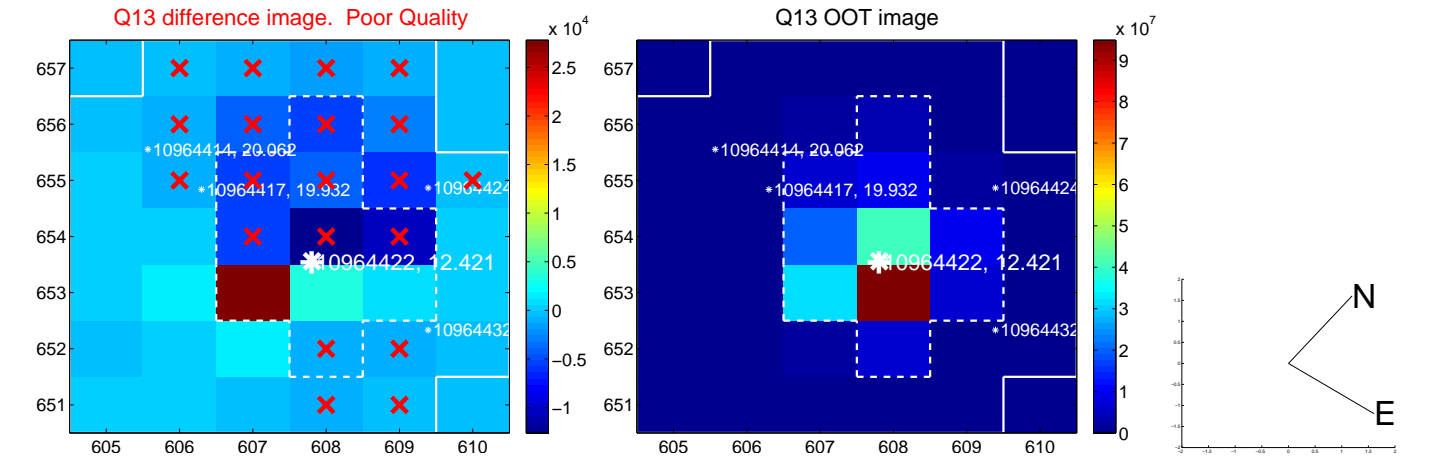
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



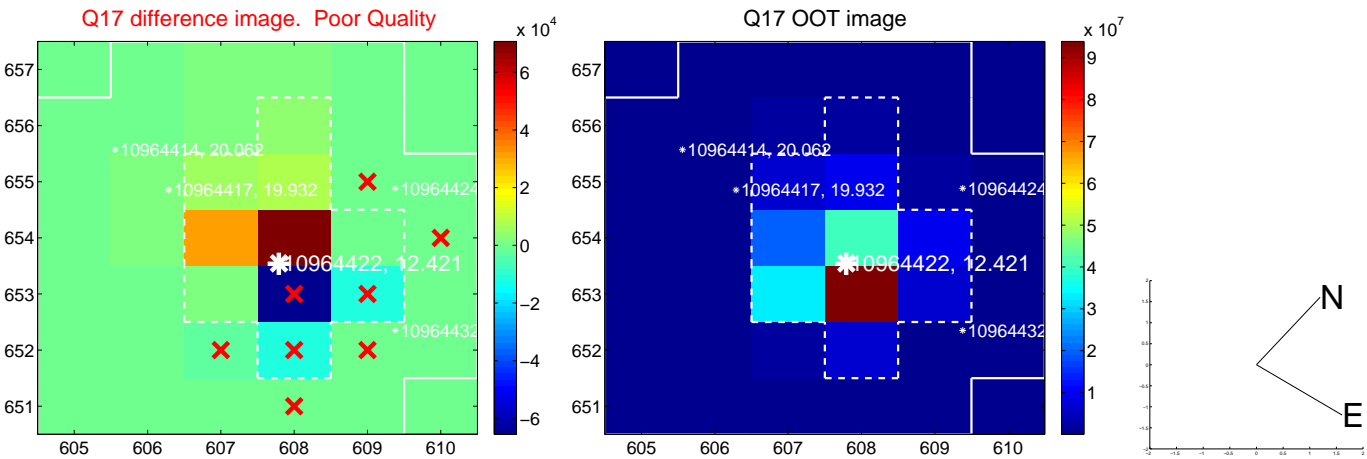
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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



folded centroid time series figure for this object.

UKIRT Image

