

KIC 007382263

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})
007382263-01	OBS	No	1.418688	131.971378	34.9	3.626	7.4	6.9	0.82	5508	0.57	1127.17

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
007382263-01	OBS	FP	0.00	1	0	1	1	LPP_DV—LPP_ALT—CENT_RESOLVED_OFFSET—HALO_GHOST—EPHEM_MATCH

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.

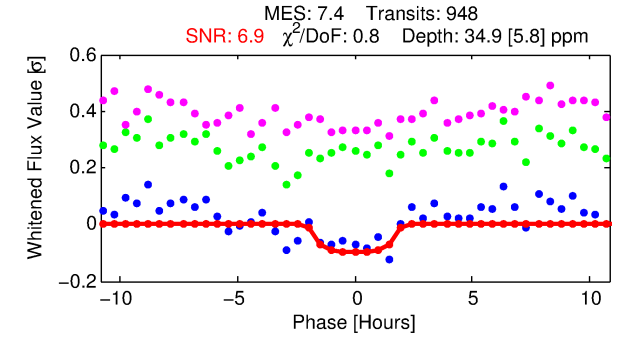
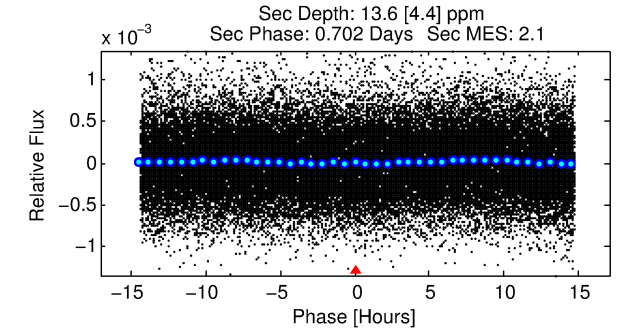
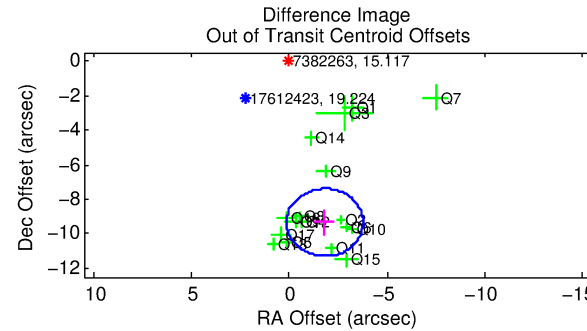
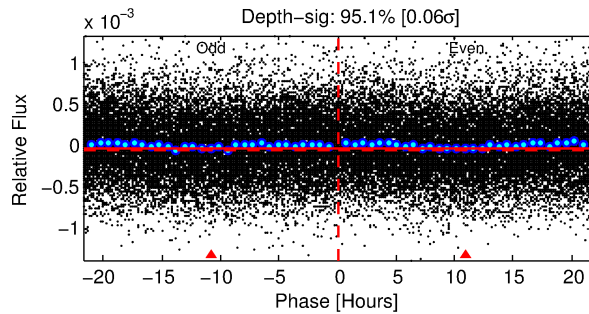
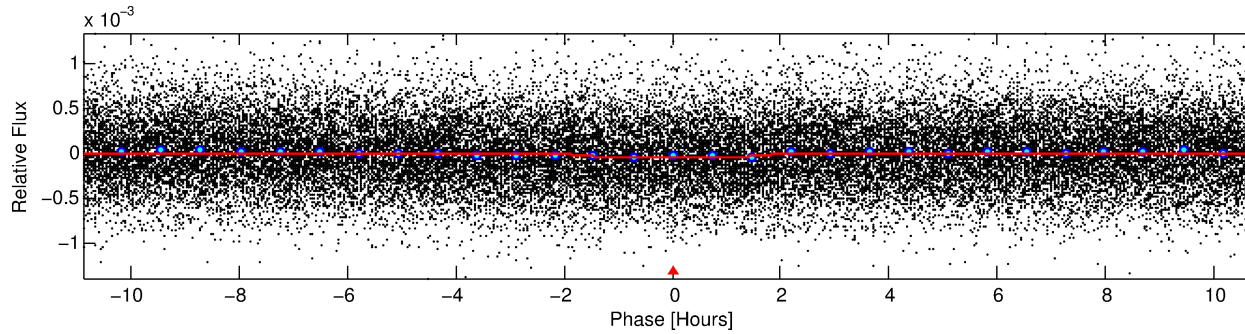
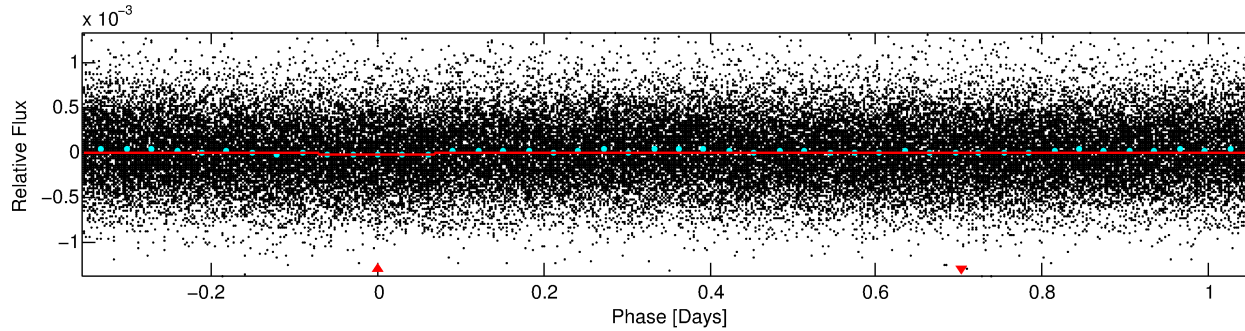
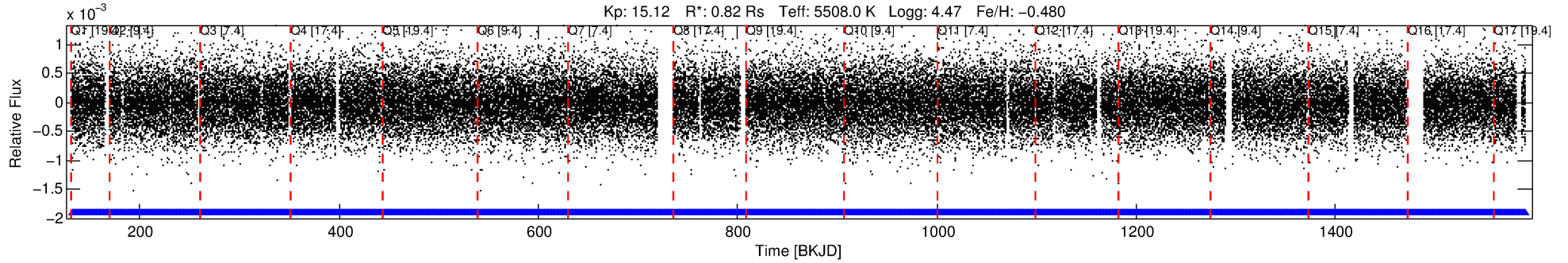
Ephemeris Match Information For 007382263-01

TCE (1)	KIC	Parent (2)	Parent KIC	$P_1:P_2$	Dist ($''$)	Δ Row	Δ Col	m_2	m_1	D_2/D_1	Mechanism	Flag	σ_P	σ_T
007382263-01	7382263	007382250-pri	7382250	1:1	27.4	-5	4	12.01	15.12	1000.00	Direct-PRF	0	2.55	3.62

Notes: $P_1:P_2$ is the period ratio. Dist is the distance in arcseconds. Δ Row and Δ Col are the number of pixels apart in row and column. m_2 and m_1 are the magnitudes of the parent and child. D_2/D_1 is the parent's transit depth divided by the child's. σ_P and σ_T are the significance of the match in period and epoch. For a match to be considered significant $\sigma_P < 5.0$ and $\sigma_T < 5.0$. Matches which have σ_P and σ_T very close to this cutoff should receive extra scrutiny, especially if the period ratio is very large.

DV One-Page Summary

KIC: 7382263 Candidate: 1 of 1 Period: 1.419 d



DV Fit Results:

Period = 1.41869 [0.00002] d
Epoch = 131.9714 [0.0071] BKJD
Rp/R* = 0.0064 [0.0058]
a/R* = 1.70 [4.81]
b = 0.89 [1.06]
Seff = 1127.17 [336.40]
Teq = 1477 [110] K
Rp = 0.57 [0.53] Re
a = 0.0223 [0.0039] AU
Ag = 11.33 [21.24] [0.49 σ]
Teffp = 4191 [1949] K [1.39 σ]

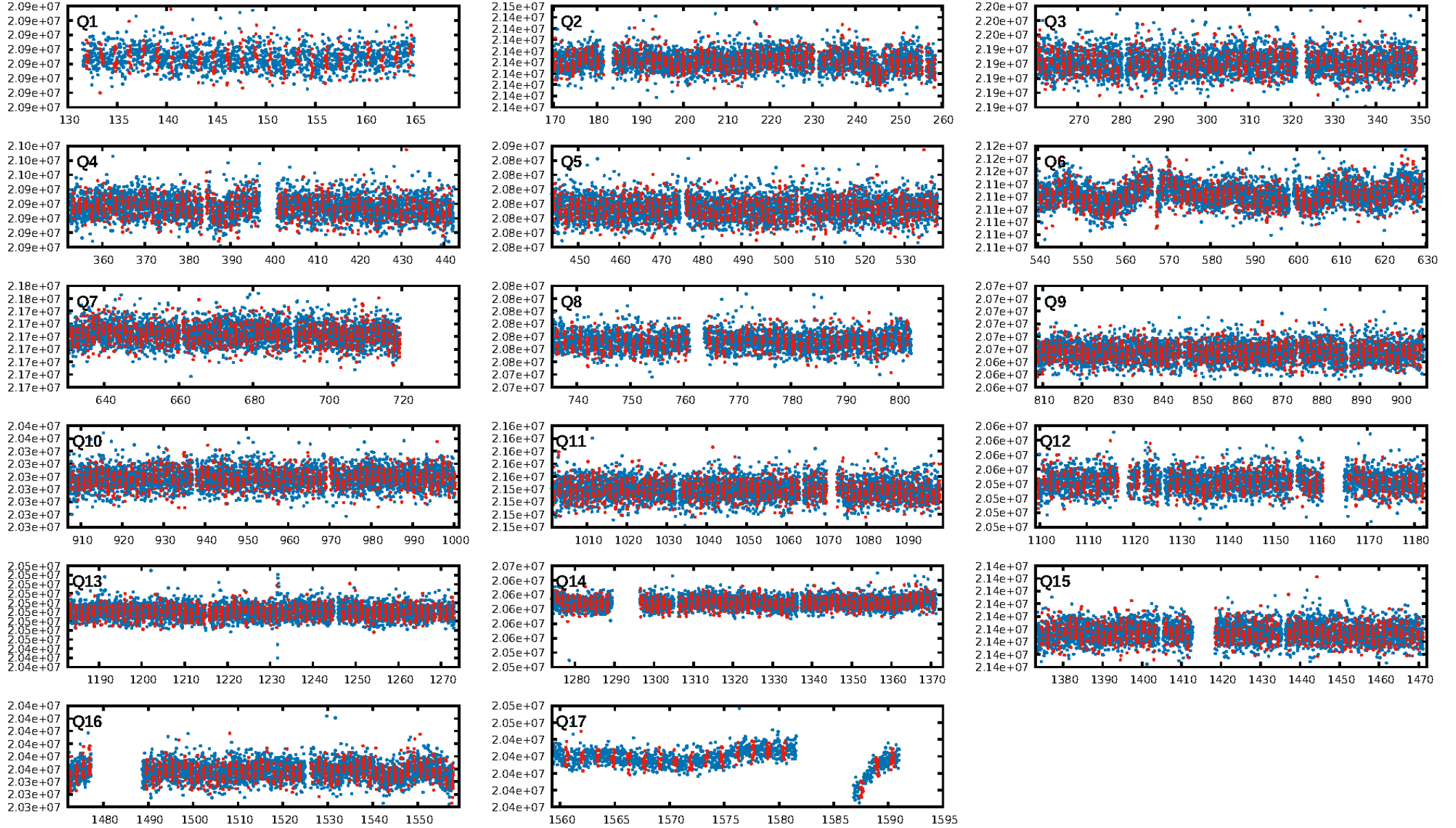
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: 1.06e-14
RollingBand-fgt: 1.00 [905/905]
GhostDiagnostic-chr: -0.05534
Centroid-sig: 0.0%
Centroid-so: 12.038 arcsec [5.43 σ]
OotOffset-rm: 9.524 arcsec [14.61 σ]
KicOffset-rm: 9.395 arcsec [14.28 σ]
OotOffset-st: 4/4/4/5 [17]
KicOffset-st: 4/4/4/5 [17]
DiffImageQuality-fgm: 0.47 [8/17]
DiffImageOverlap-fno: 1.00 [17/17]

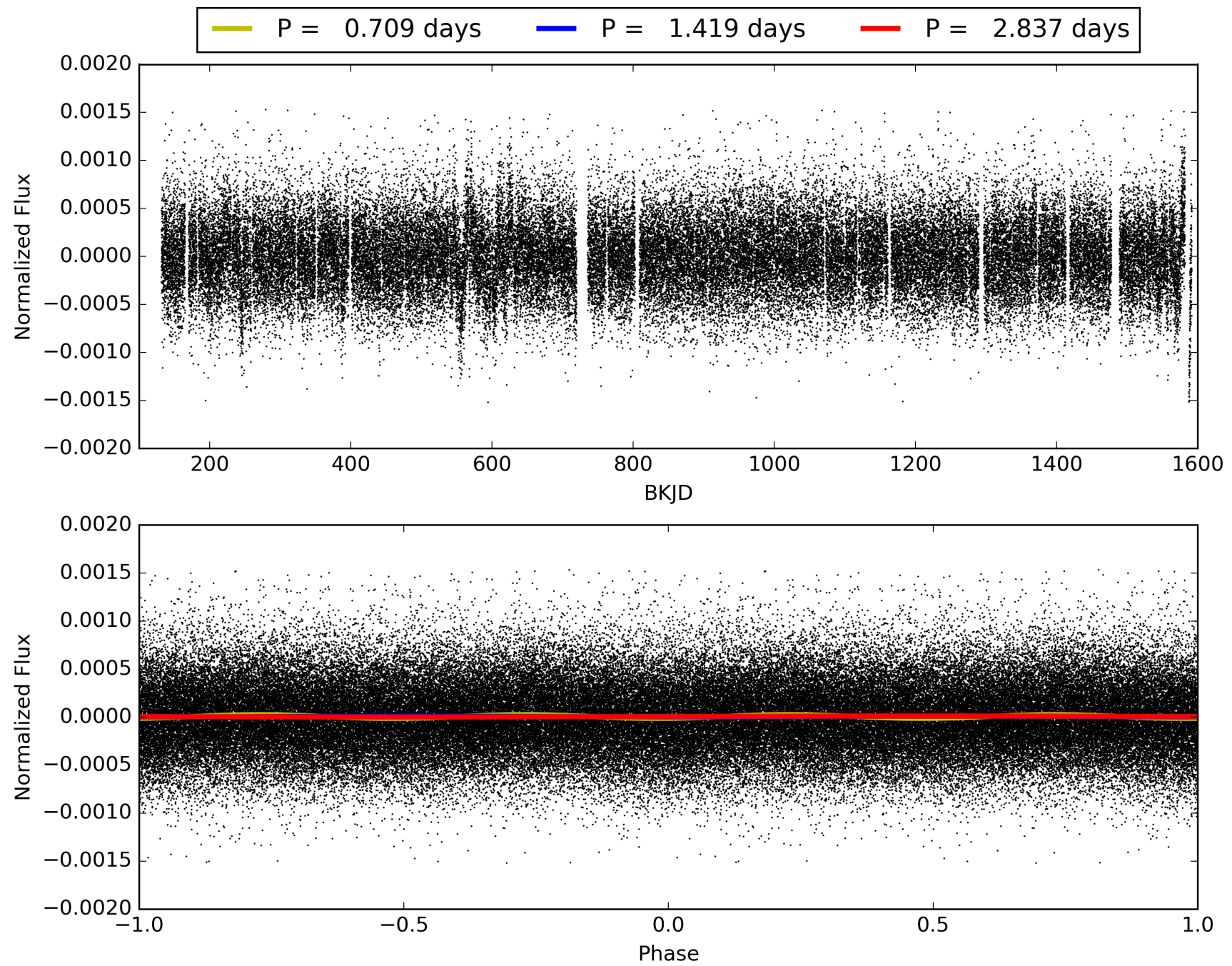
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 30-Jan-2016 22:26:59 Z

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

TCE 007382263-01, PDC Light Curves

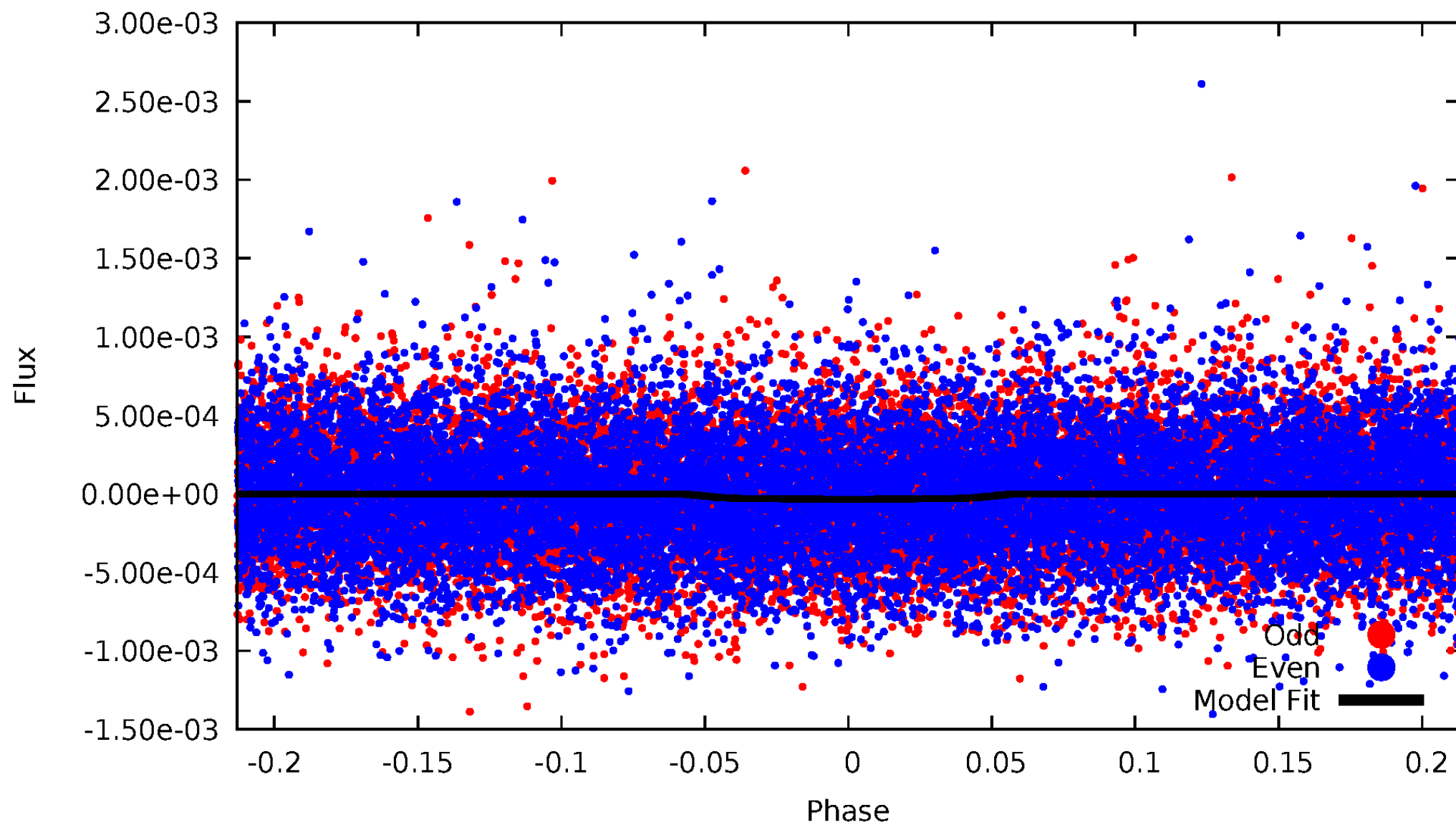


TCE 007382263-01



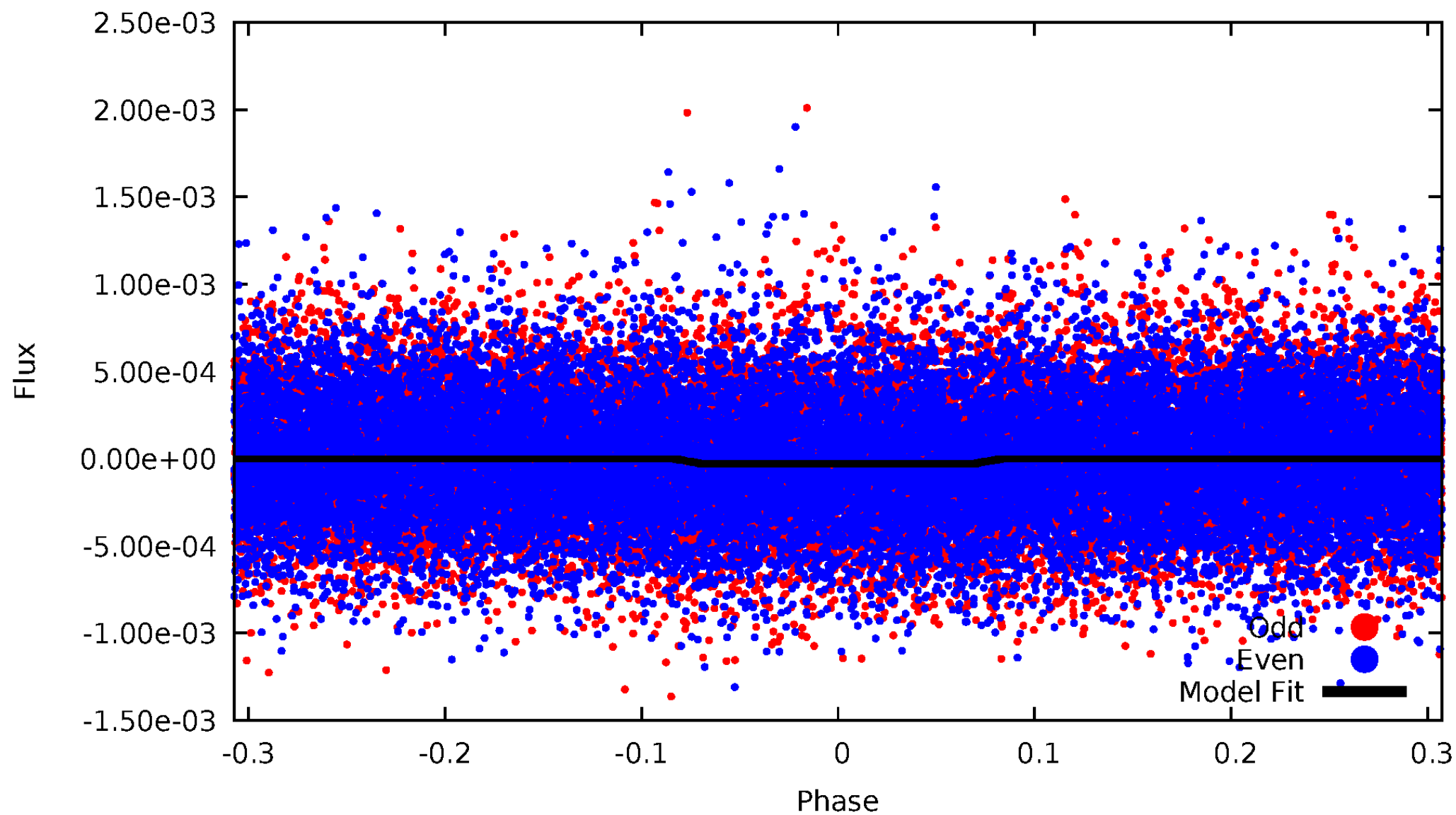
DV Odd/Even

TCE 007382263-01



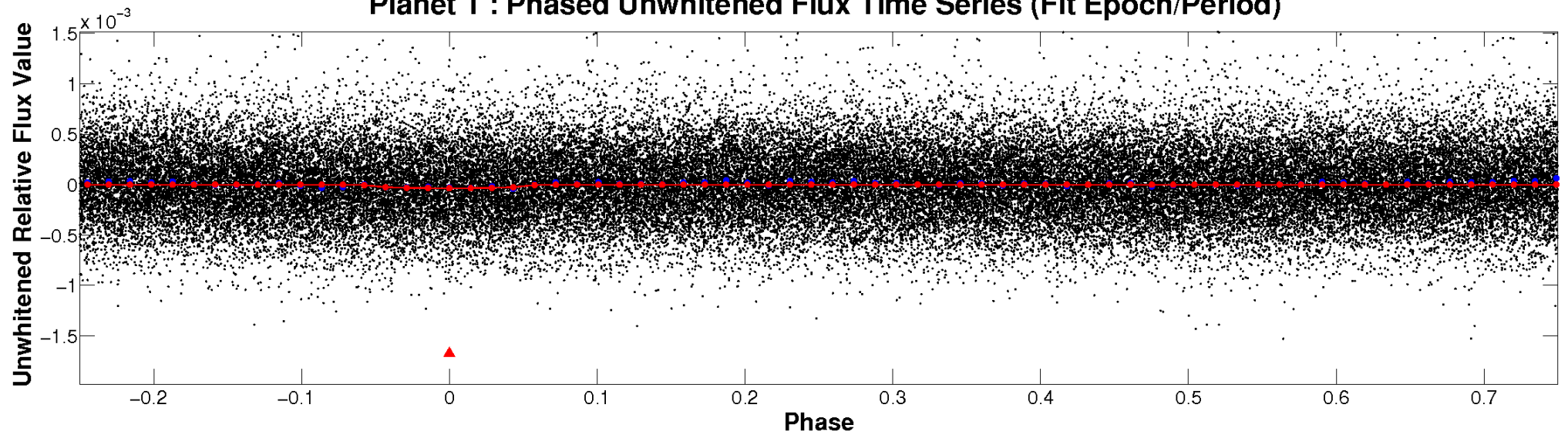
ALT Odd/Even

TCE 007382263-01

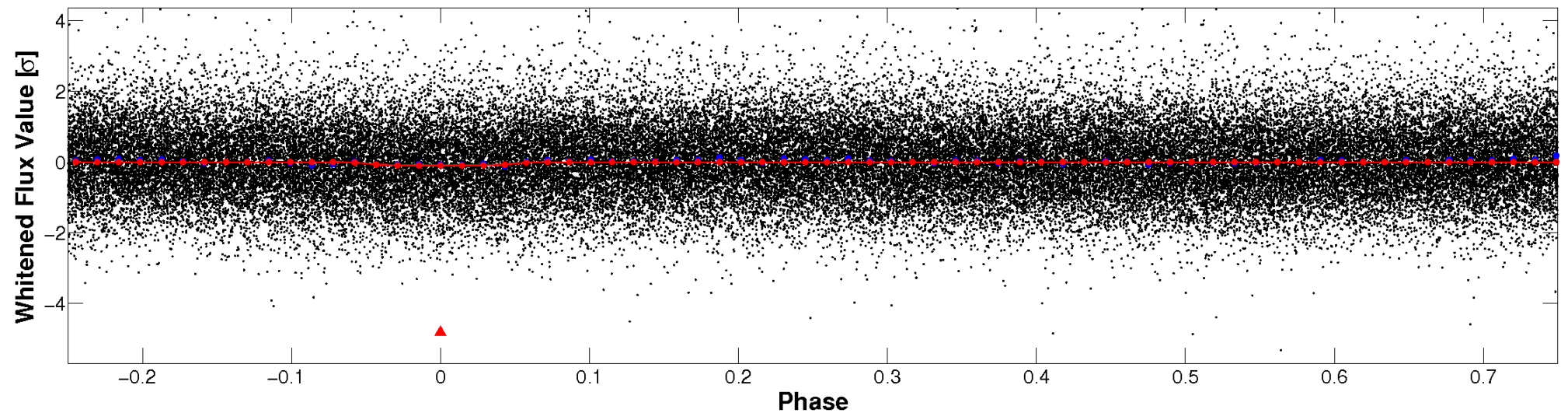


Non-Whitened Vs. Whitened Light Curve

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

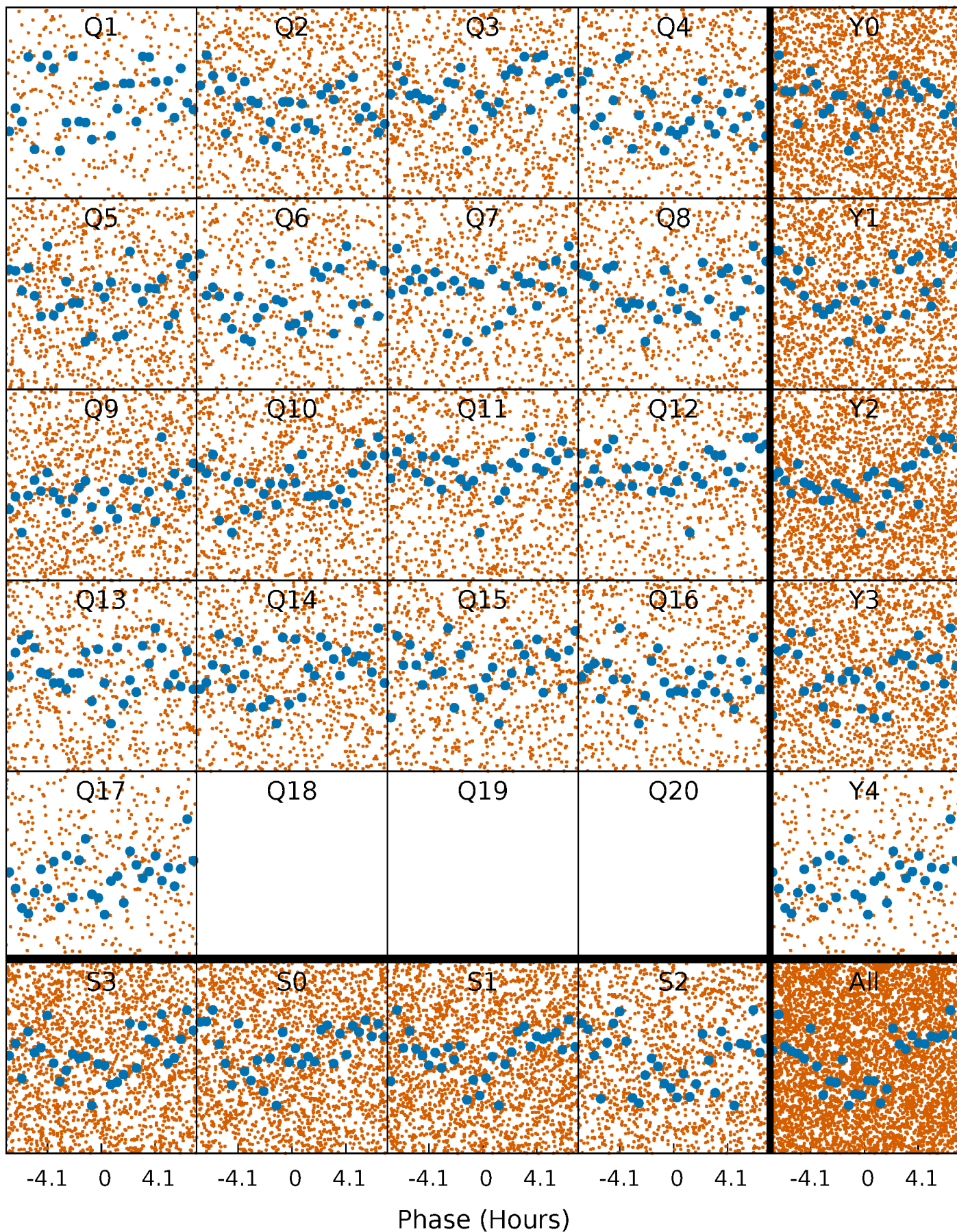


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



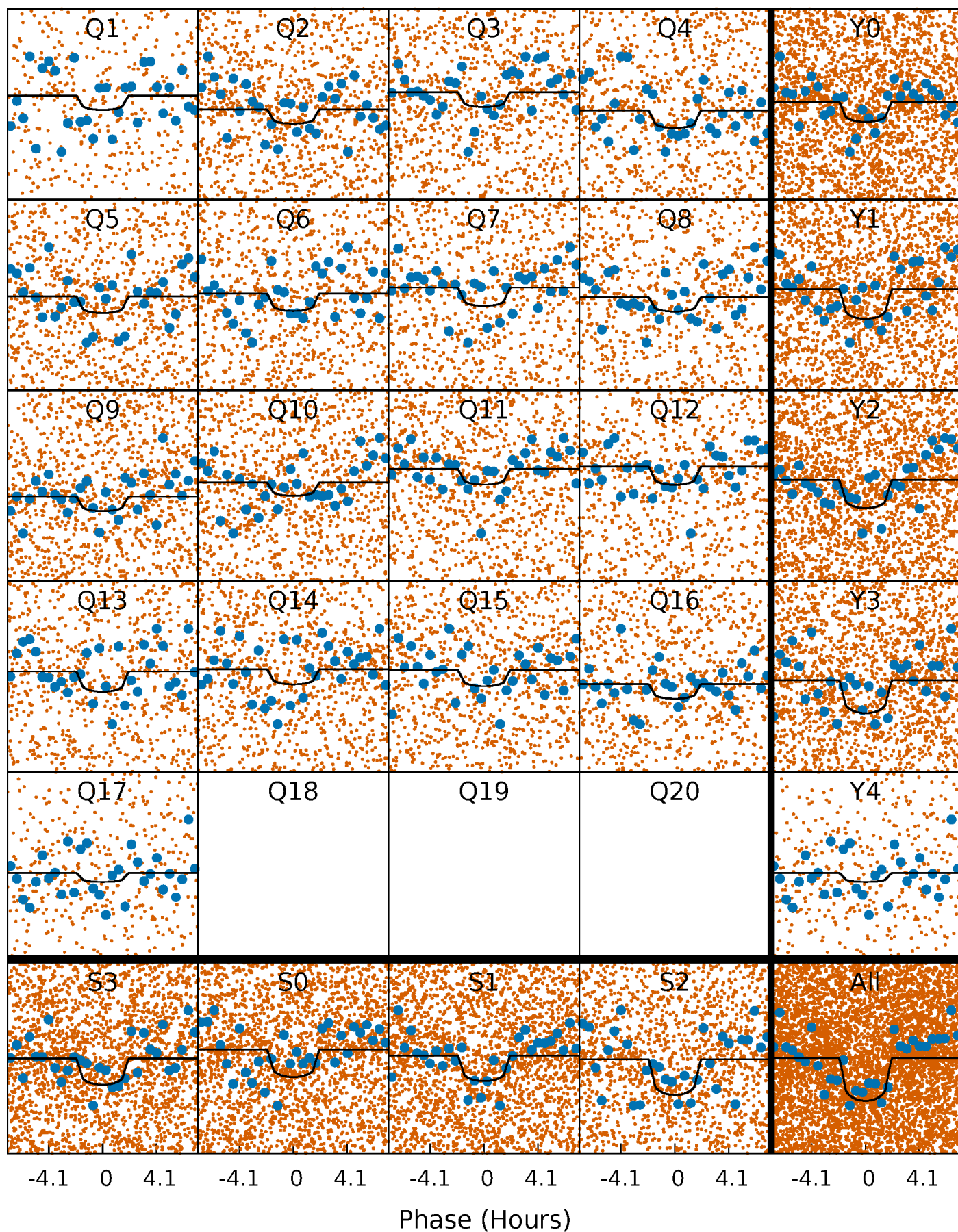
PDC Quarter-Phased Transit Curves

TCE 007382263-01 P= 1.418688 Days $T_0=131.971378$ (BKJD)



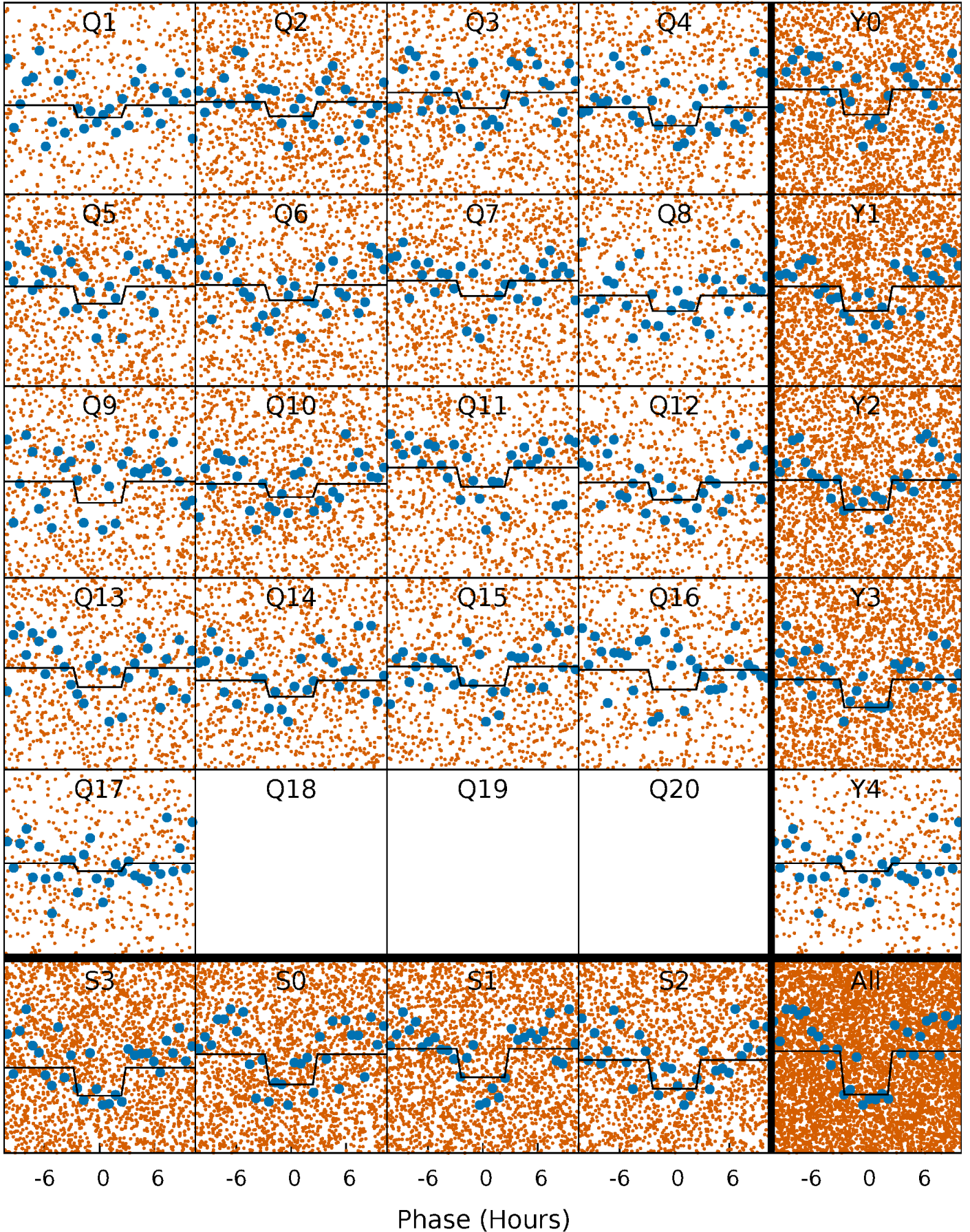
DV Quarter-Phased Transit Curves

TCE 007382263-01 P= 1.418688 Days $T_0=131.971378$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

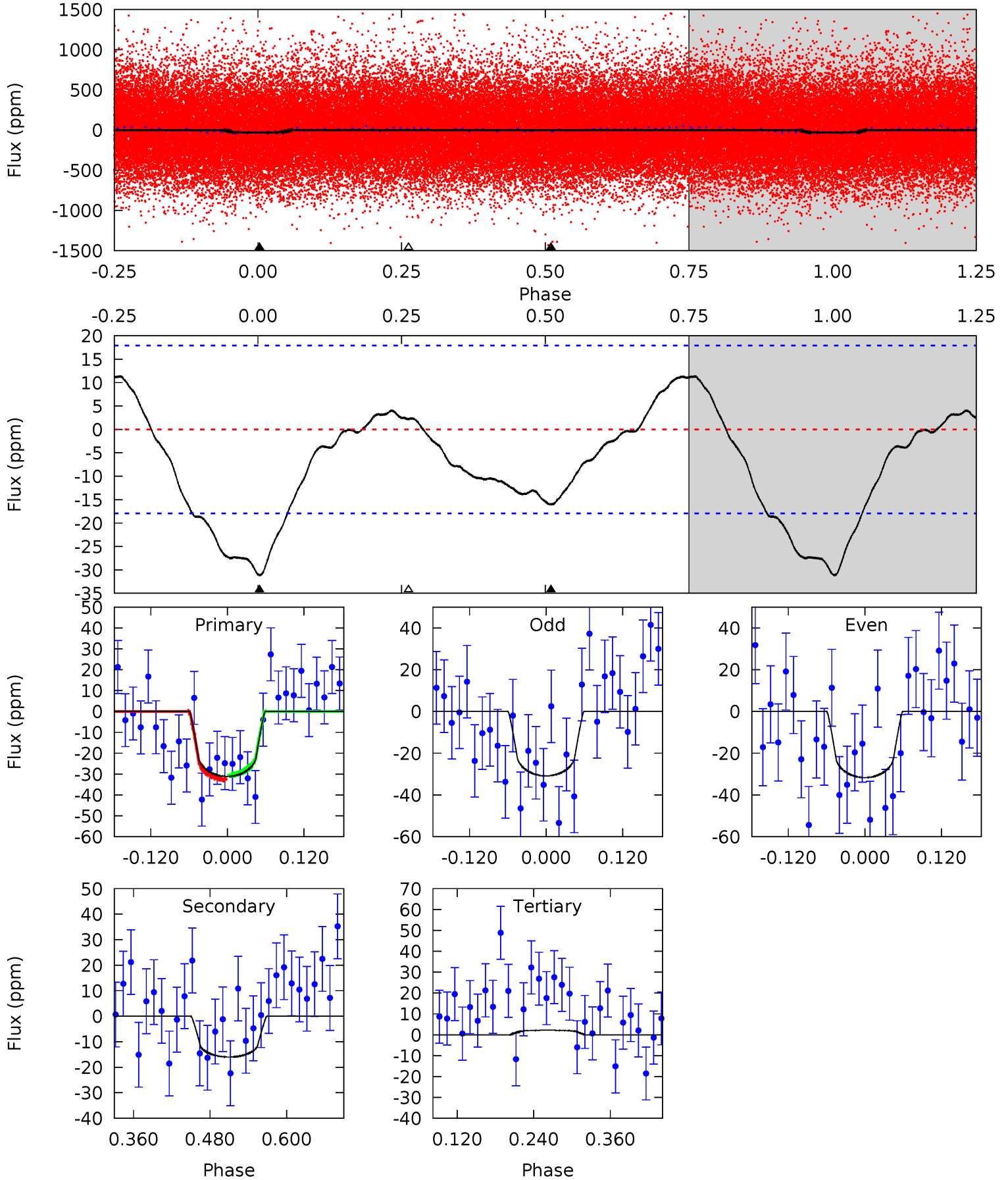
TCE 007382263-01 P= 1.418700 Days $T_0=131.931164$ (BKJD)



DV Model-Shift Uniqueness Test

007382263-01, P = 1.418688 Days, E = 130.552690 Days

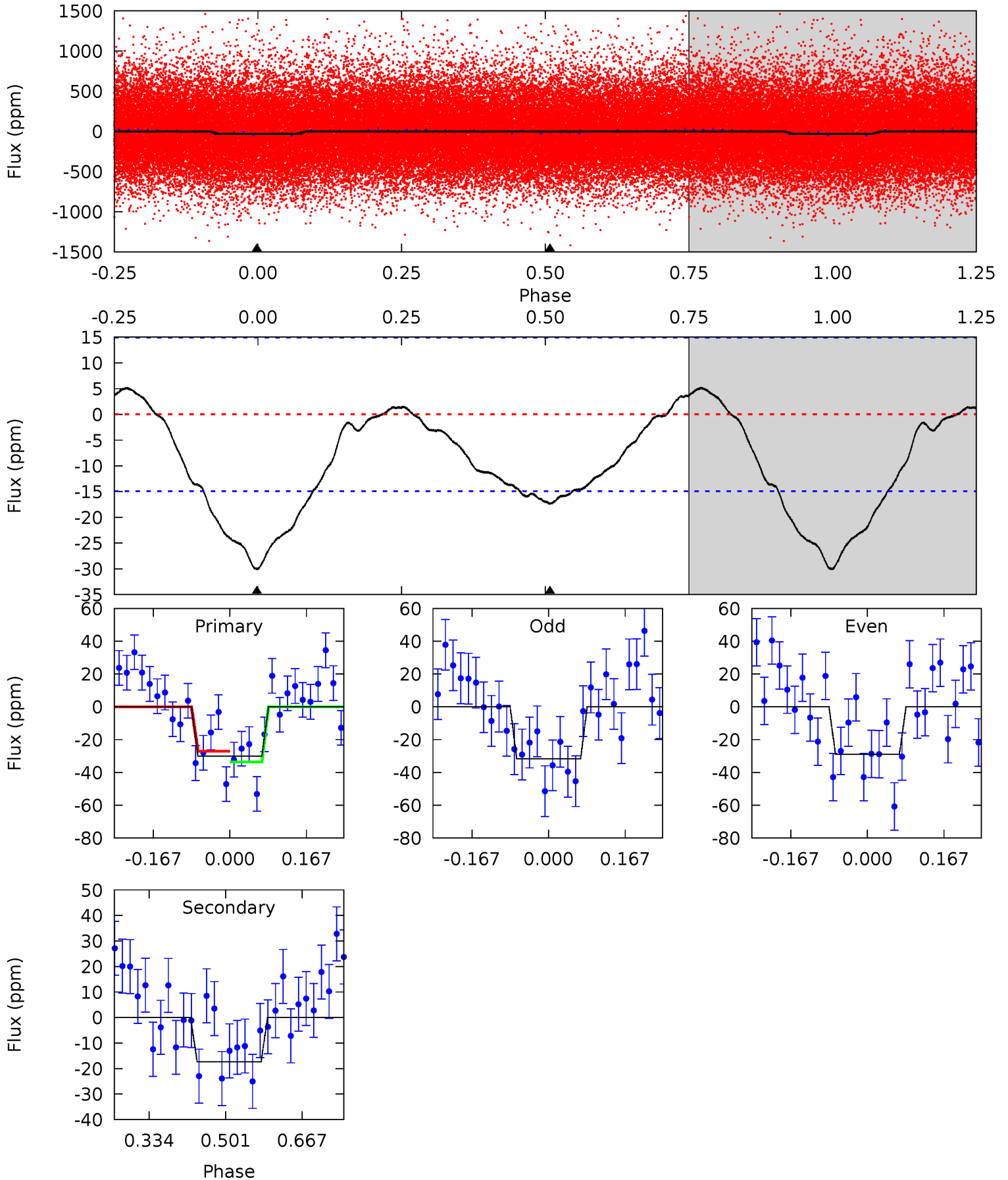
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
7.86	4.04	-0.55	0	4.53	1.55	1.67	8.41	7.86	4.59	4.04	0.10	0.85	0.27	0.26



Alt Model-Shift Uniqueness Test

007382263-01, P = 1.418700 Days, E = 130.512464 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
8.97	5.19	0	0	4.46	1.38	0.78	8.97	8.97	5.19	5.19	0.41	0.94	0.15	0.96



Stellar Parameters For KIC 007382263

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	$M(M_{\odot})$	p_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	5508^{+180}_{-163}	$4.472^{+0.126}_{-0.154}$	$-0.480^{+0.300}_{-0.300}$	$0.825^{+0.157}_{-0.129}$	$0.735^{+0.116}_{-0.041}$	$1.847^{+1.047}_{-0.729}$
	+3%/-3%	+3%/-3%	+62%/-62%	+19%/-16%	+16%/-6%	+57%/-39%
Source	PHO1	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 007382263-01 / KOI

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	-16 ± 4	$0.68^{+0.48}_{-0.42}$	2077^{+111}_{-122}	4227^{+2259}_{-783}	$9.808^{+49.477}_{-6.786}$
Alt.	-17 ± 3	$0.61^{+0.49}_{-0.41}$	2076^{+133}_{-109}	4499^{+3207}_{-854}	13^{+99}_{-9}

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

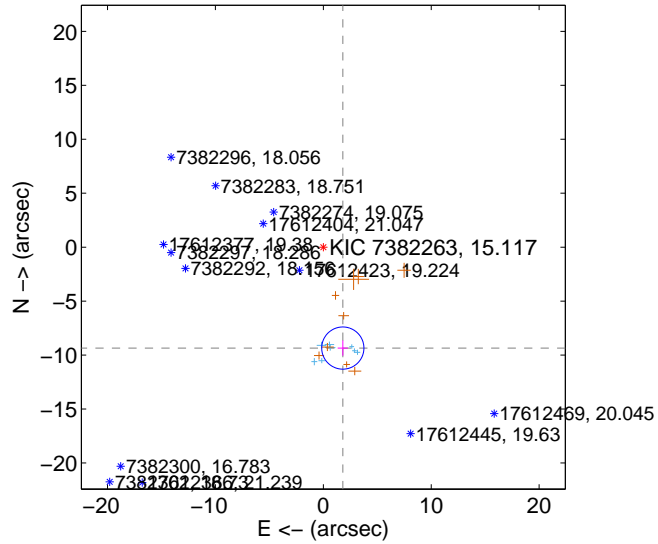
Supplemental centroid analysis for 007382263-01. Kepler magnitude: 15.12. Transit SNR 6.89

There are 8 quarters with good PRF difference image offsets

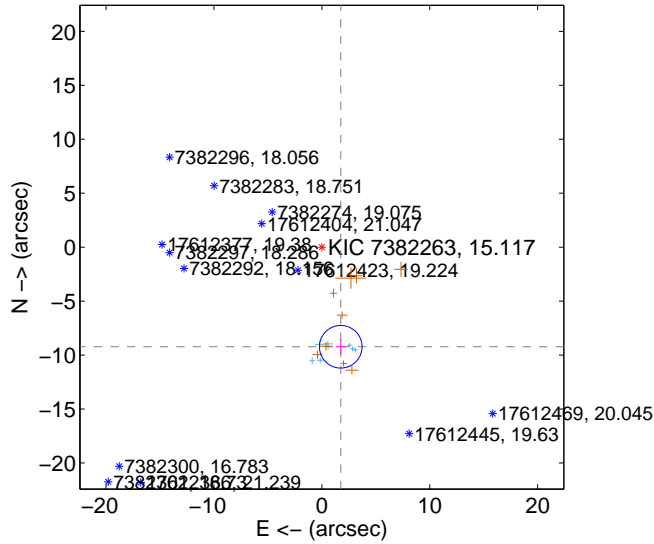
The direct PRF centroid is offset from the target star catalog position by about 0.09 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	9.524 ± 0.652	14.61	-1.807 ± 0.470	-9.351 ± 0.707
PRF-fit source offset from KIC position	9.395 ± 0.658	14.28	-1.752 ± 0.444	-9.230 ± 0.715
photometric centroid source offset	12.04 ± 2.22	5.43	-1.72 ± 2.29	-11.92 ± 2.21

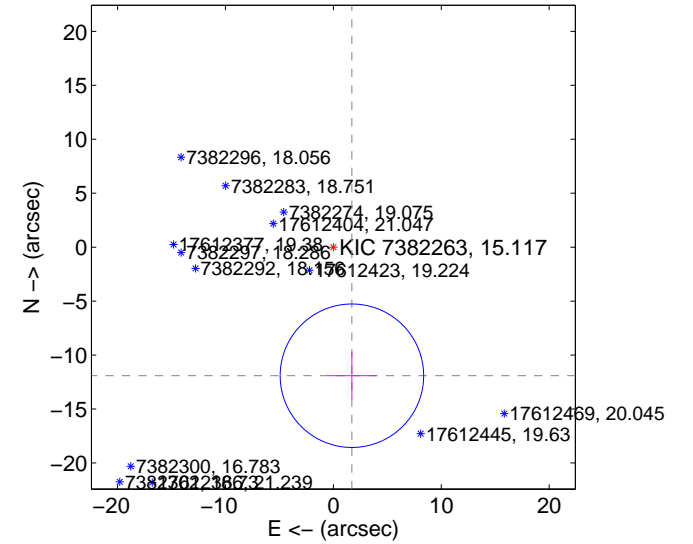
offset from difference PRF-fit to OOT PRF-fit



offset from difference PRF-fit to KIC position

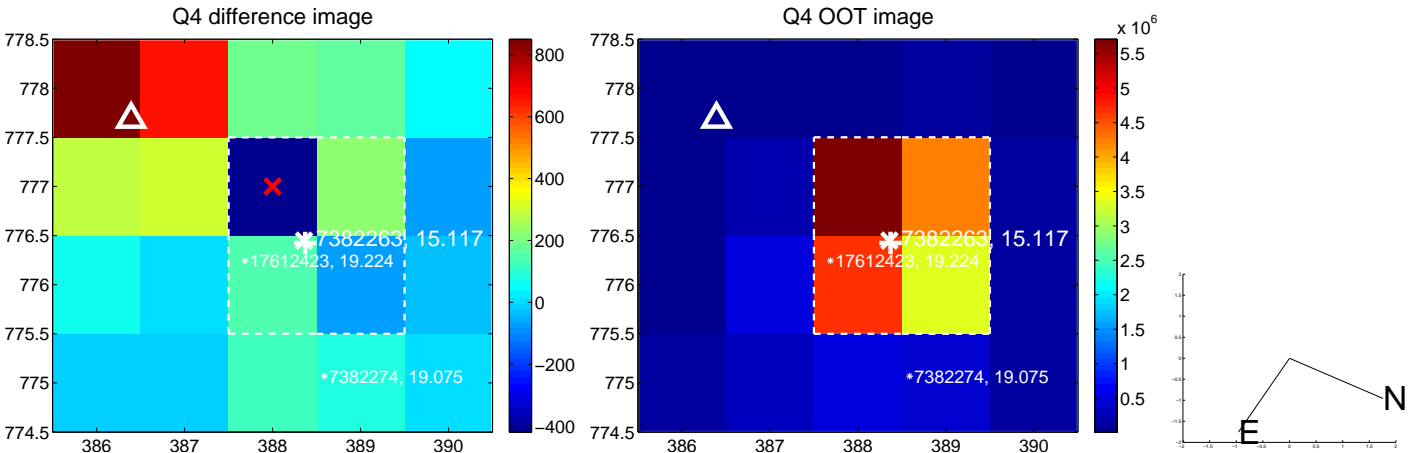
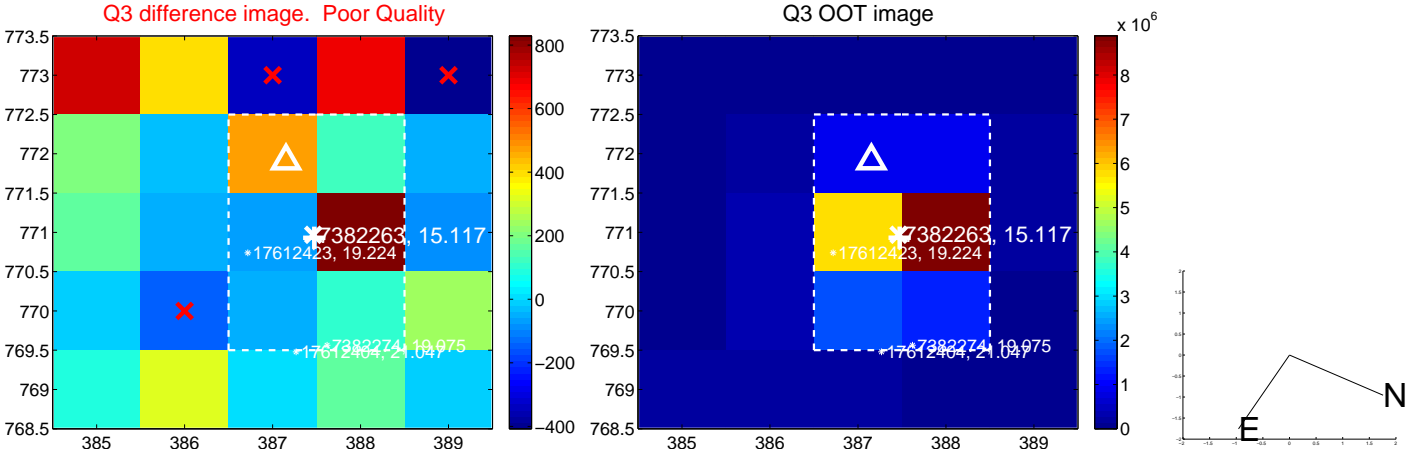
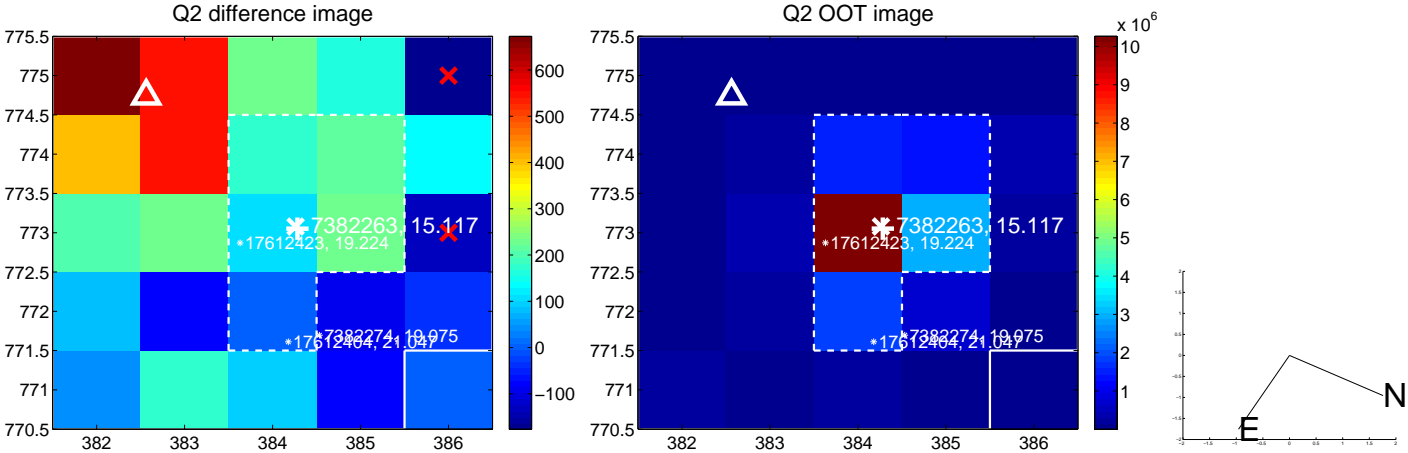
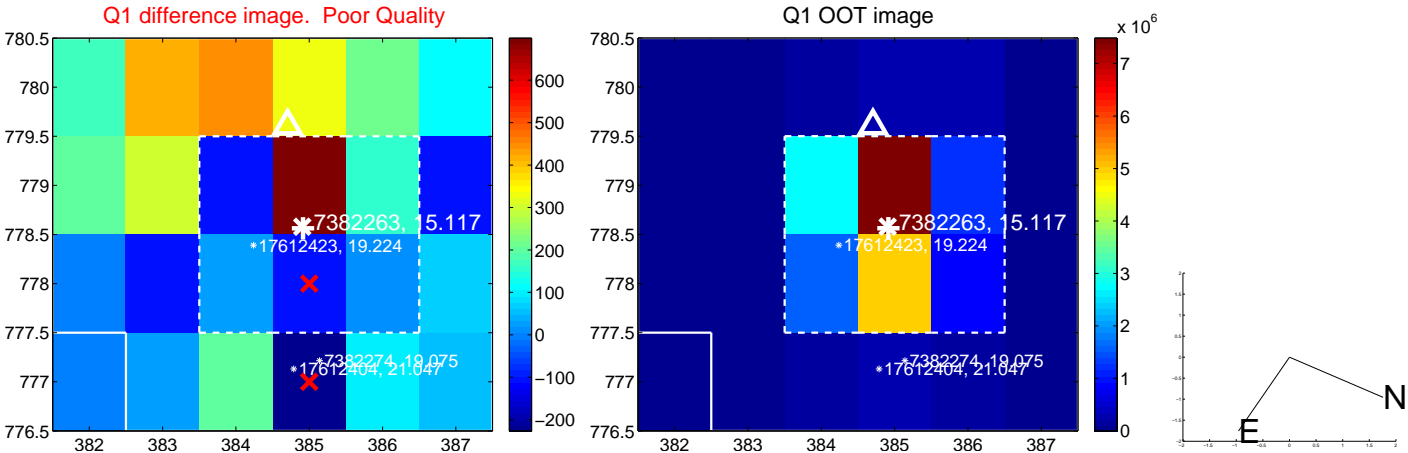


offset from photometric centroids

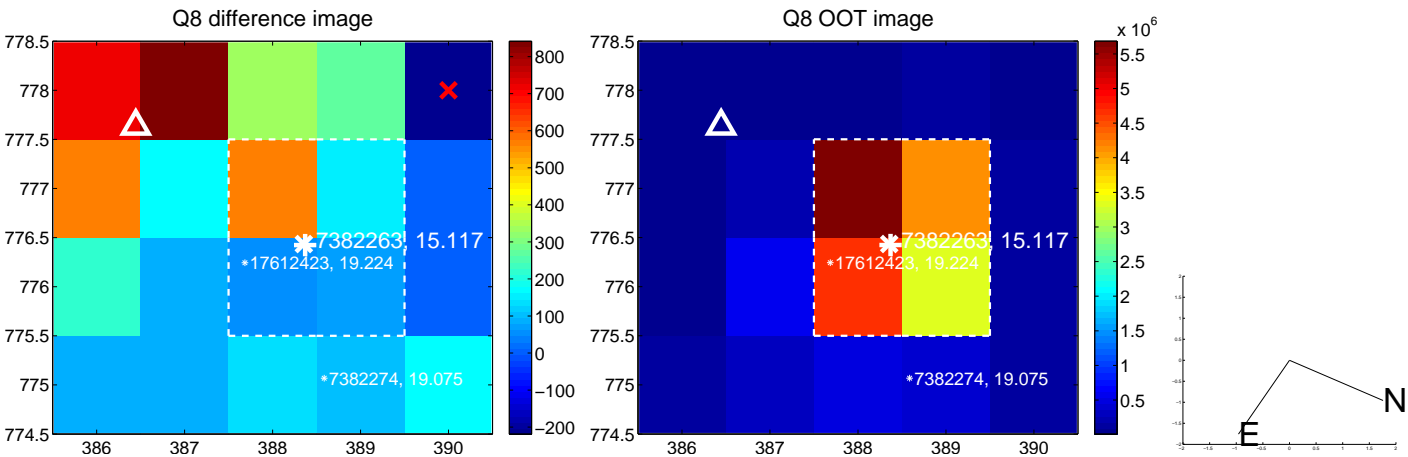
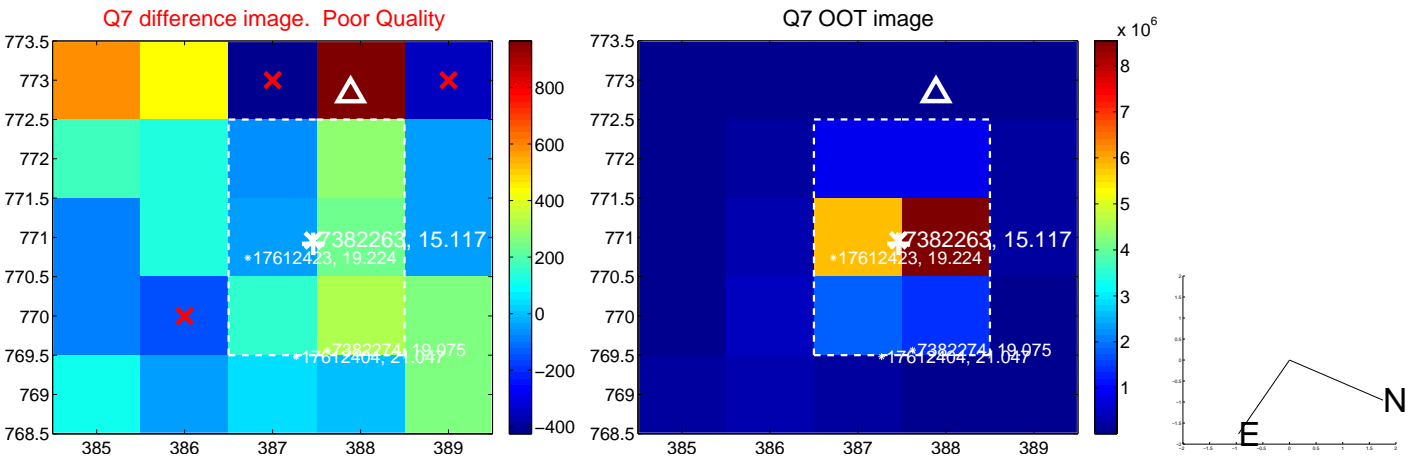
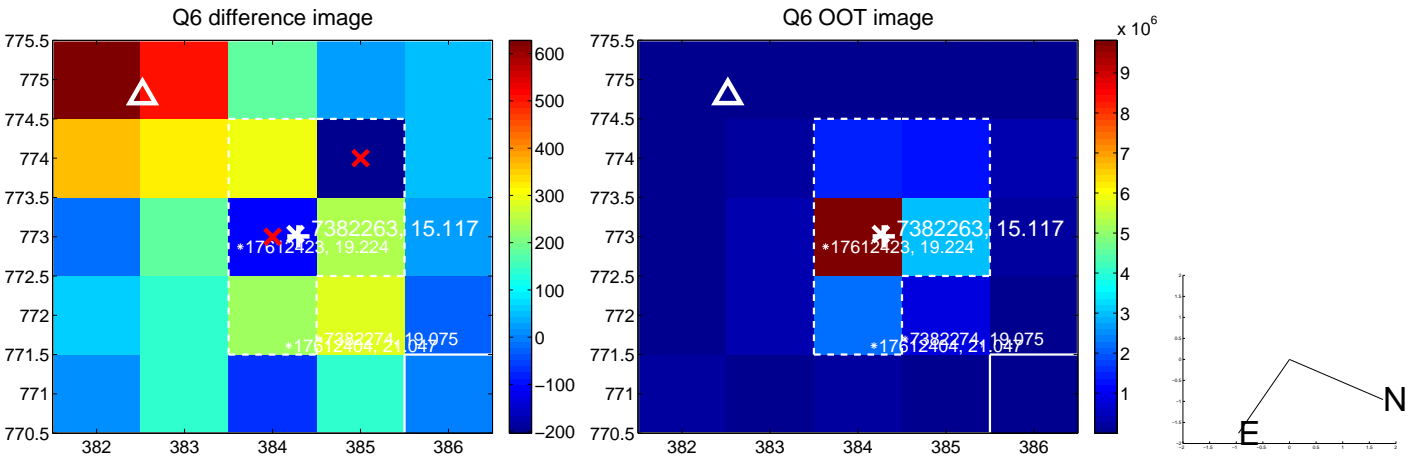
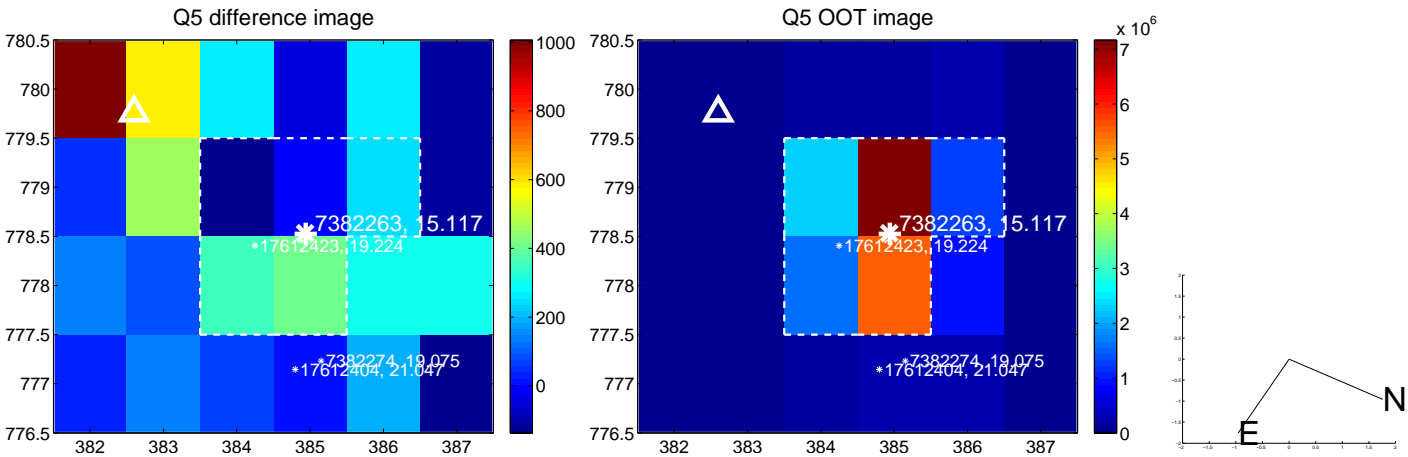


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses:** good quarterly centroid offsets; **Vermillion crosses:** bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

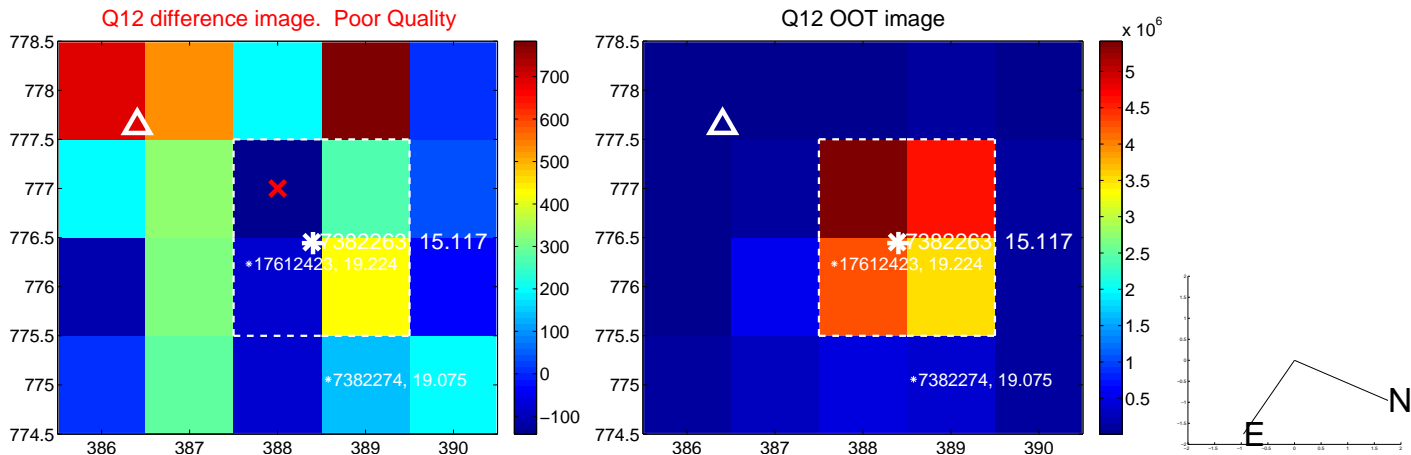
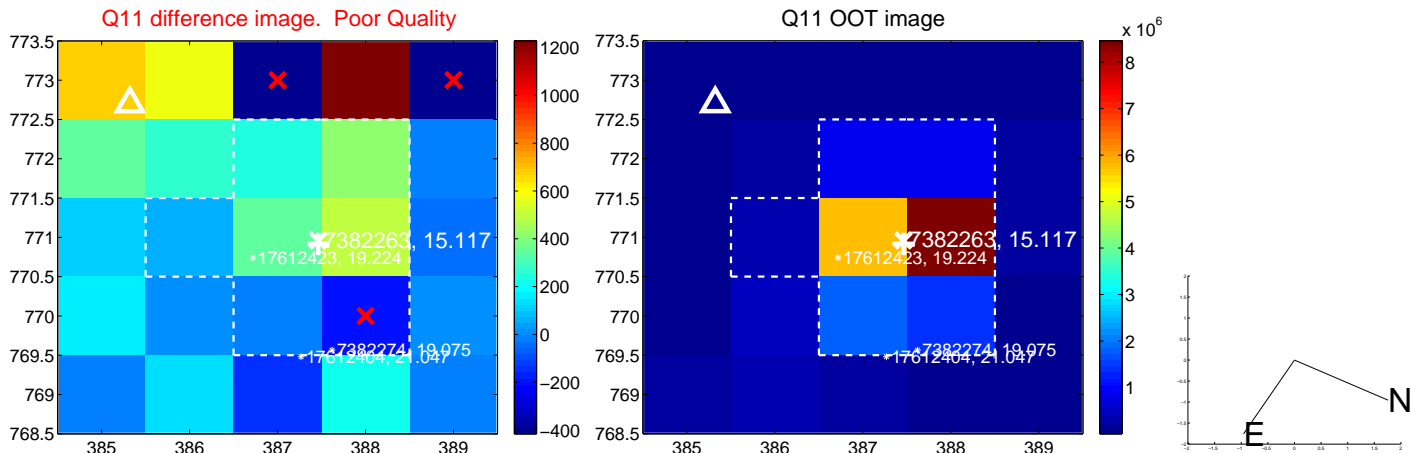
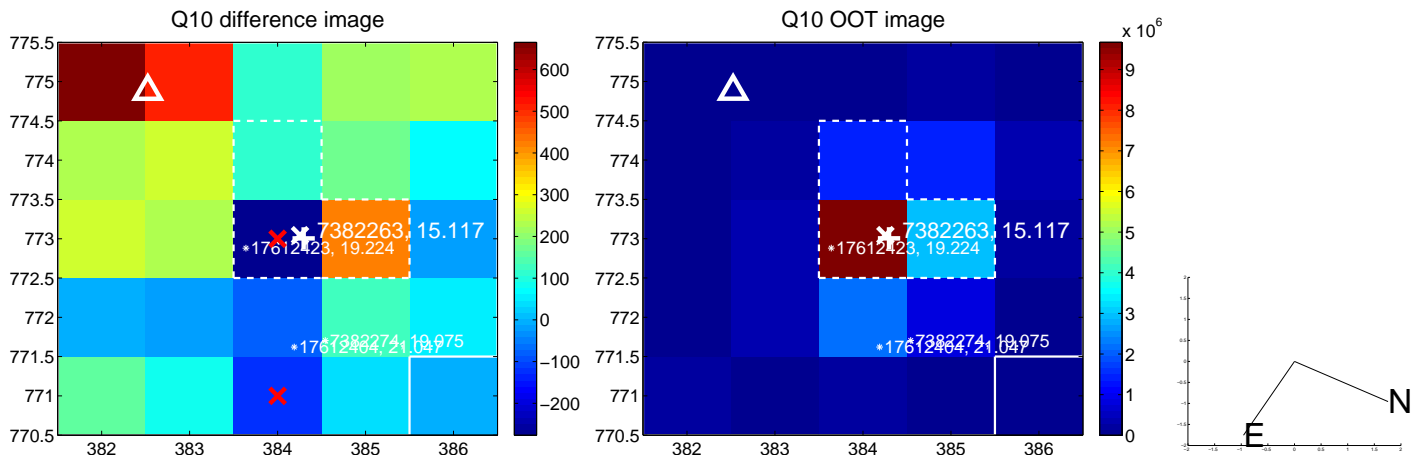
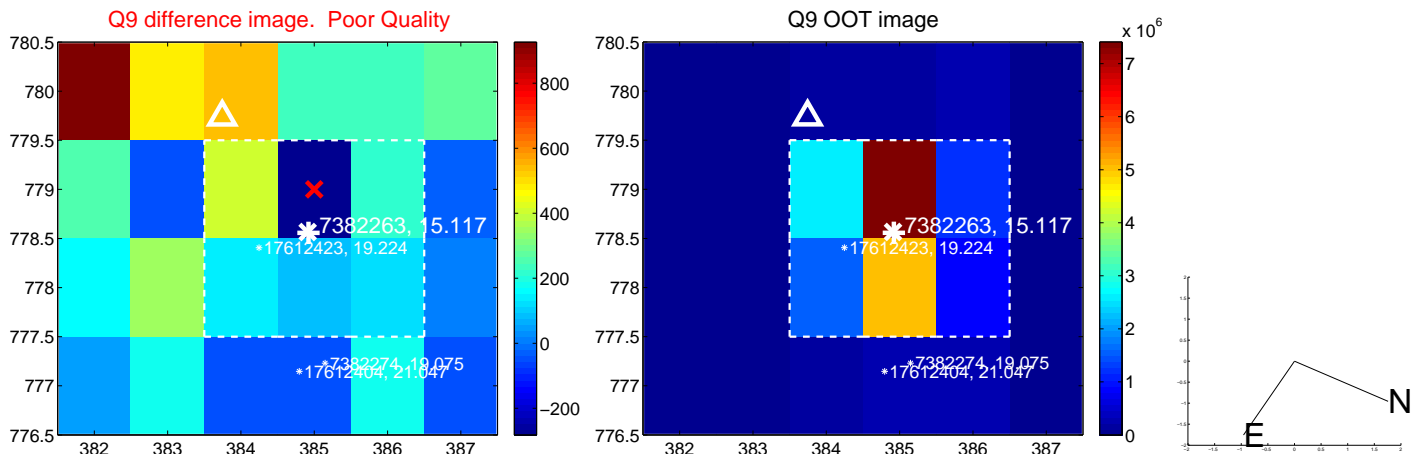
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



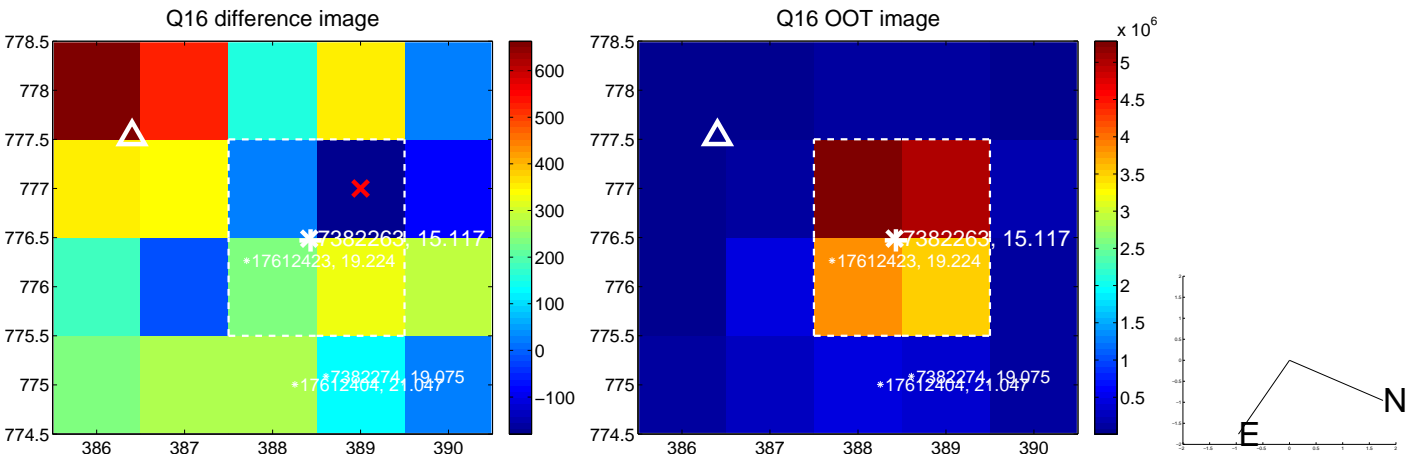
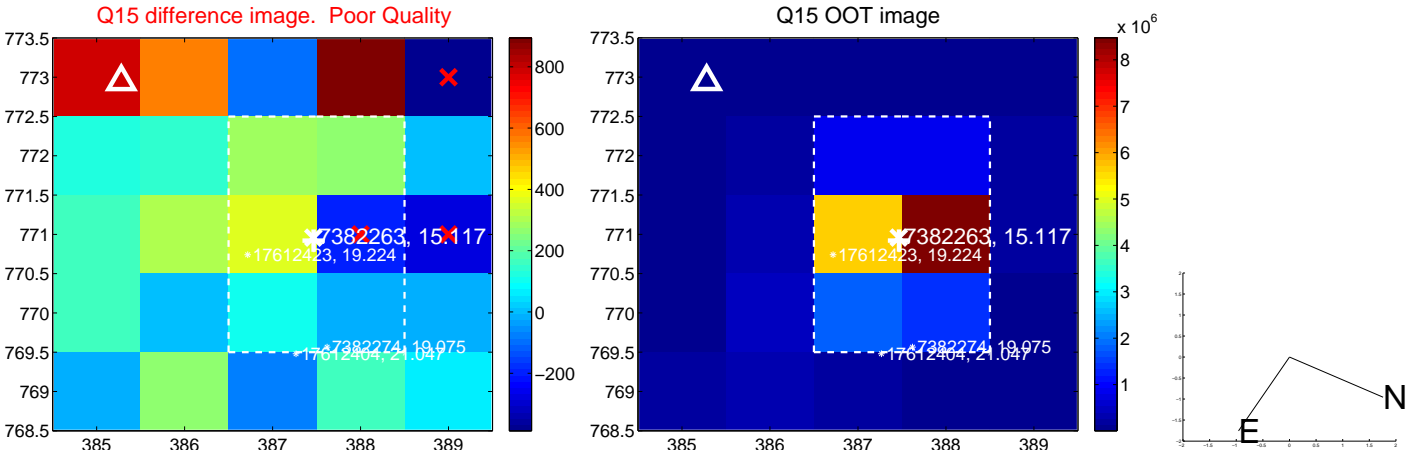
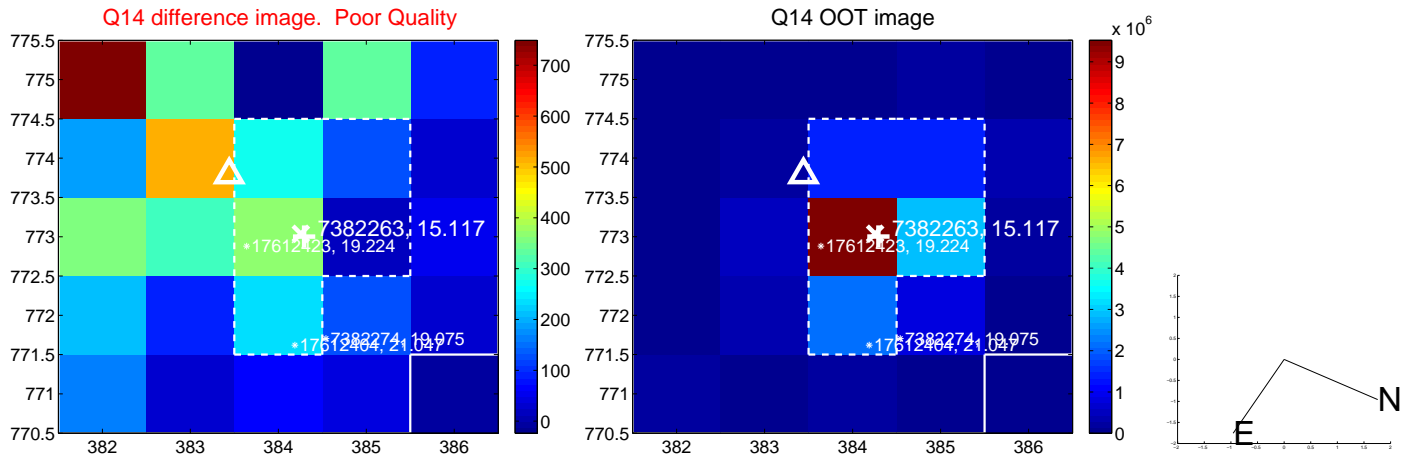
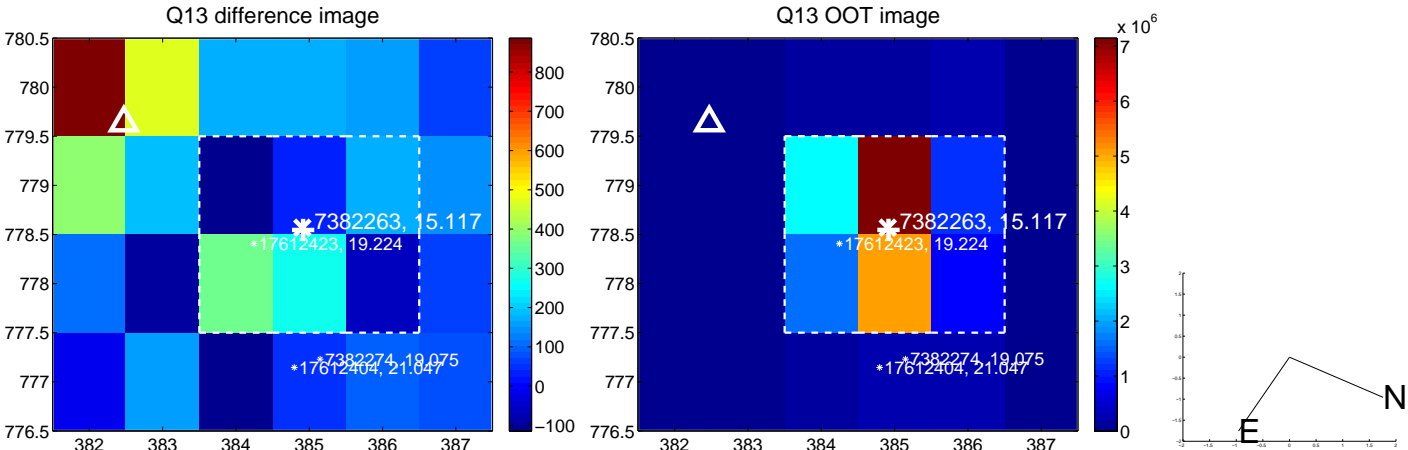
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



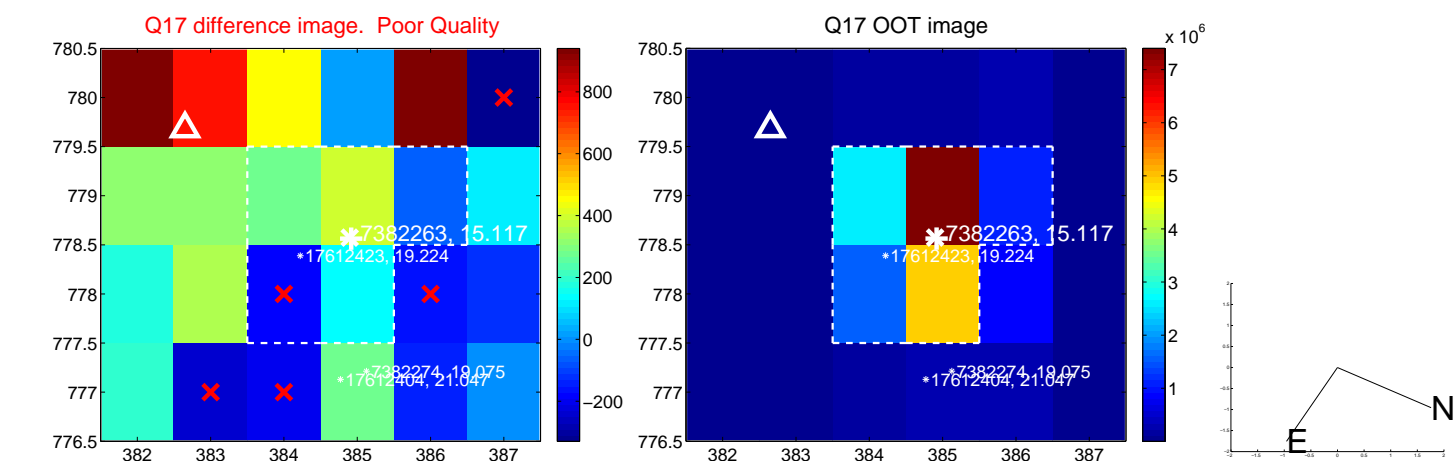
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



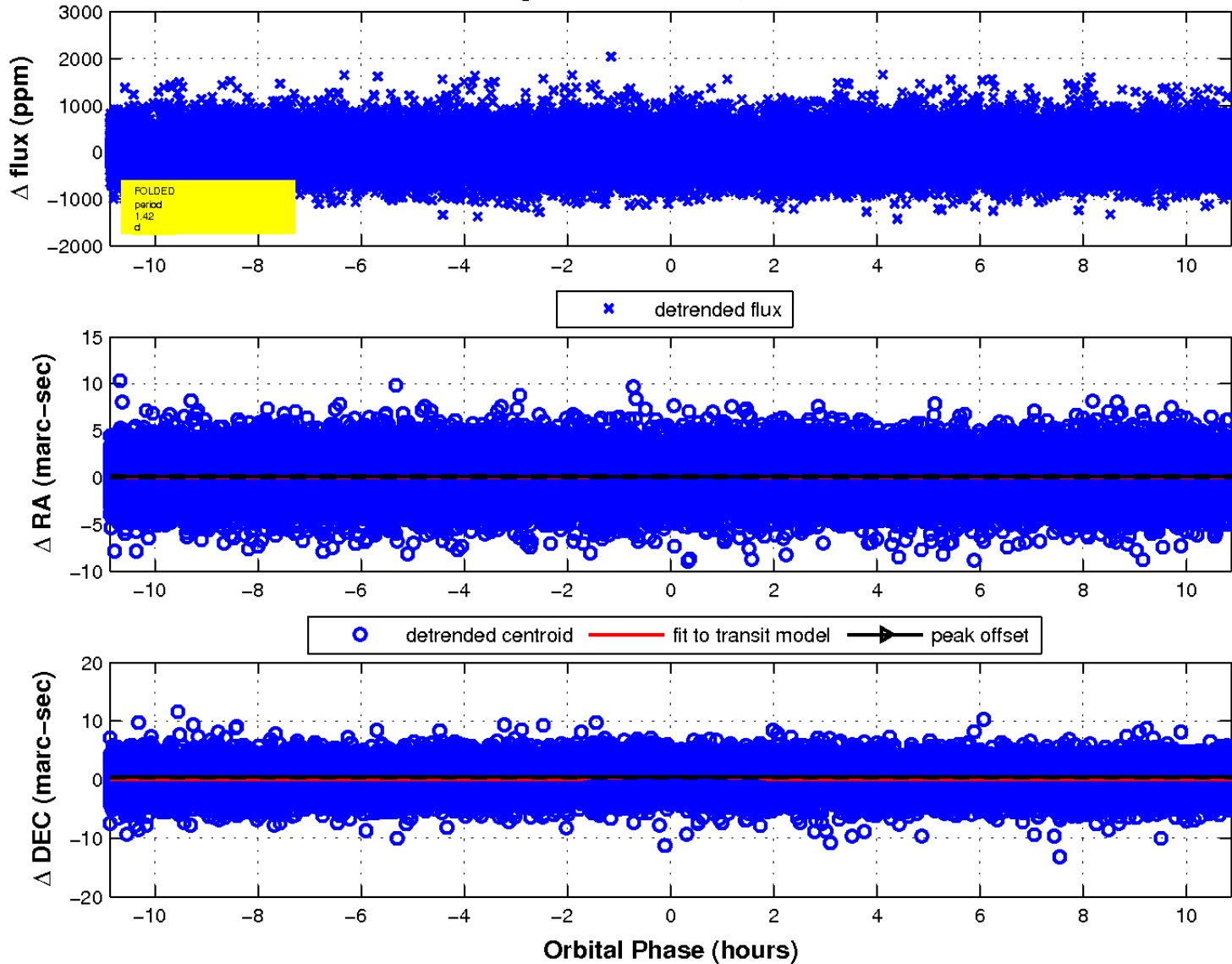
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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



fluxWeightedCentroids, Planet 1 of 1



UKIRT Image

