

KIC 008244190

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})
008244190-01	OBS	1071.01	1.092054	132.112662	100.8	1.418	16.5	19.3	0.86	5639	1.02	1597.25

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
008244190-01	OBS	FP	0.00	0	0	1	1	CENT_RESOLVED_OFFSET—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 008244190-01

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
008244190-01	8244190	3545.01	8244173	1:1	13.7	3	3	15.90	14.50	4353.30	Direct-PRF	0	1.04	0.69

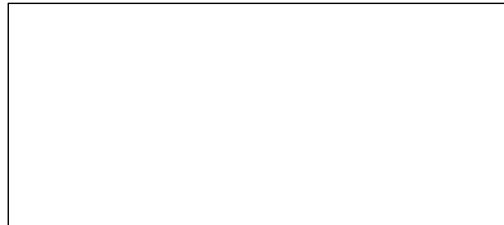
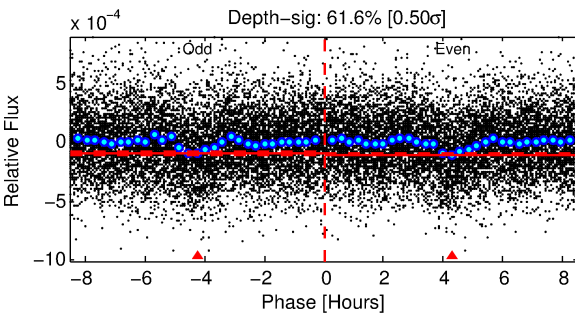
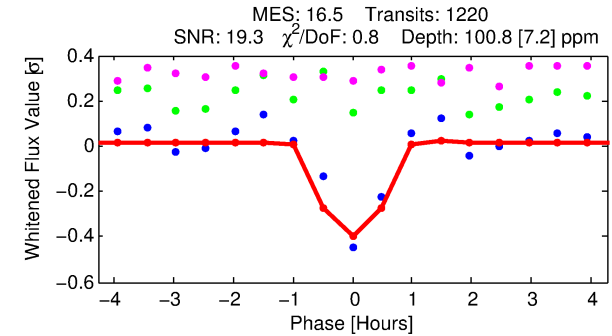
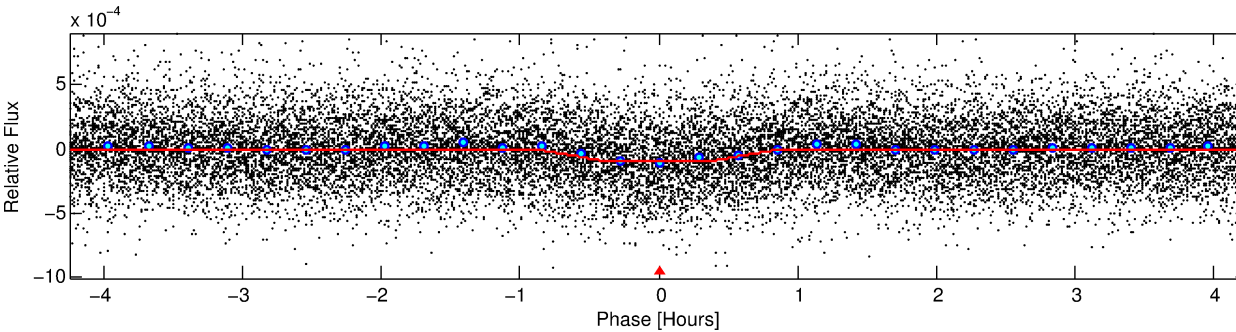
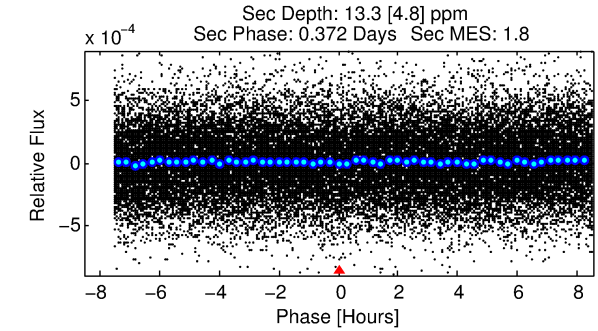
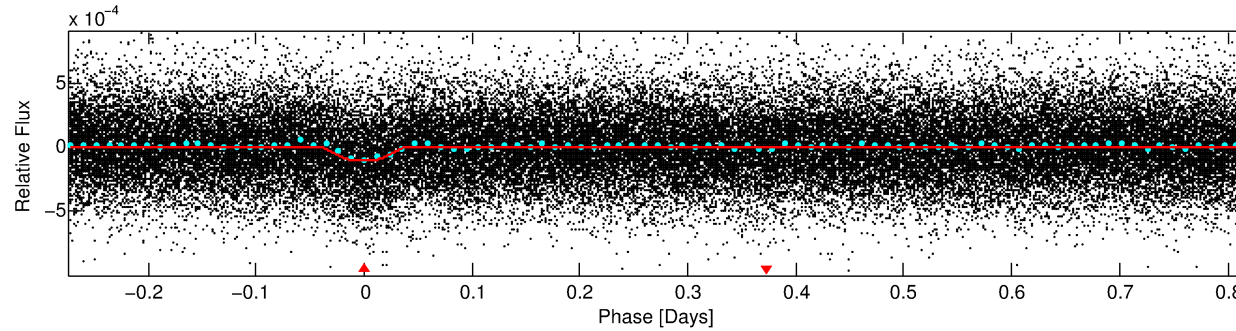
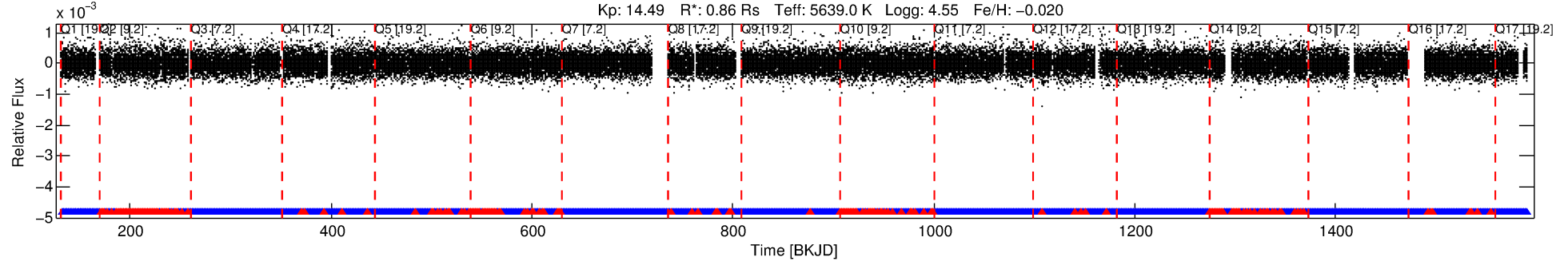
Notes: $P_1:P_2$ is the period ratio. Dist is the distance in arcseconds. Δ Row and Δ Col are the number of pixels apart in row and column. m_2 and m_1 are the magnitudes of the parent and child. D_2/D_1 is the parent's transit depth divided by the child's. σ_P and σ_T are the significance of the match 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: 8244190 Candidate: 1 of 1 Period: 1.092 d

KOI: K01071.01 Corr: 0.869

Kp: 14.49 R*: 0.86 Rs Teff: 5639.0 K Logg: 4.55 Fe/H: -0.020



DV Fit Results:

Period = 1.09205 [0.00001] d
Epoch = 132.1127 [0.0011] BKJD
Rp/R* = 0.0109 [0.0048]
a/R* = 2.95 [5.23]
b = 0.89 [0.47]
Seff = 1597.25 [574.73]
Teq = 1612 [145] K
Rp = 1.03 [0.53] Re
a = 0.0205 [0.0047] AU
Ag = 2.92 [2.93] [0.66σ]
Teffp = 3258 [775] K [2.09σ]

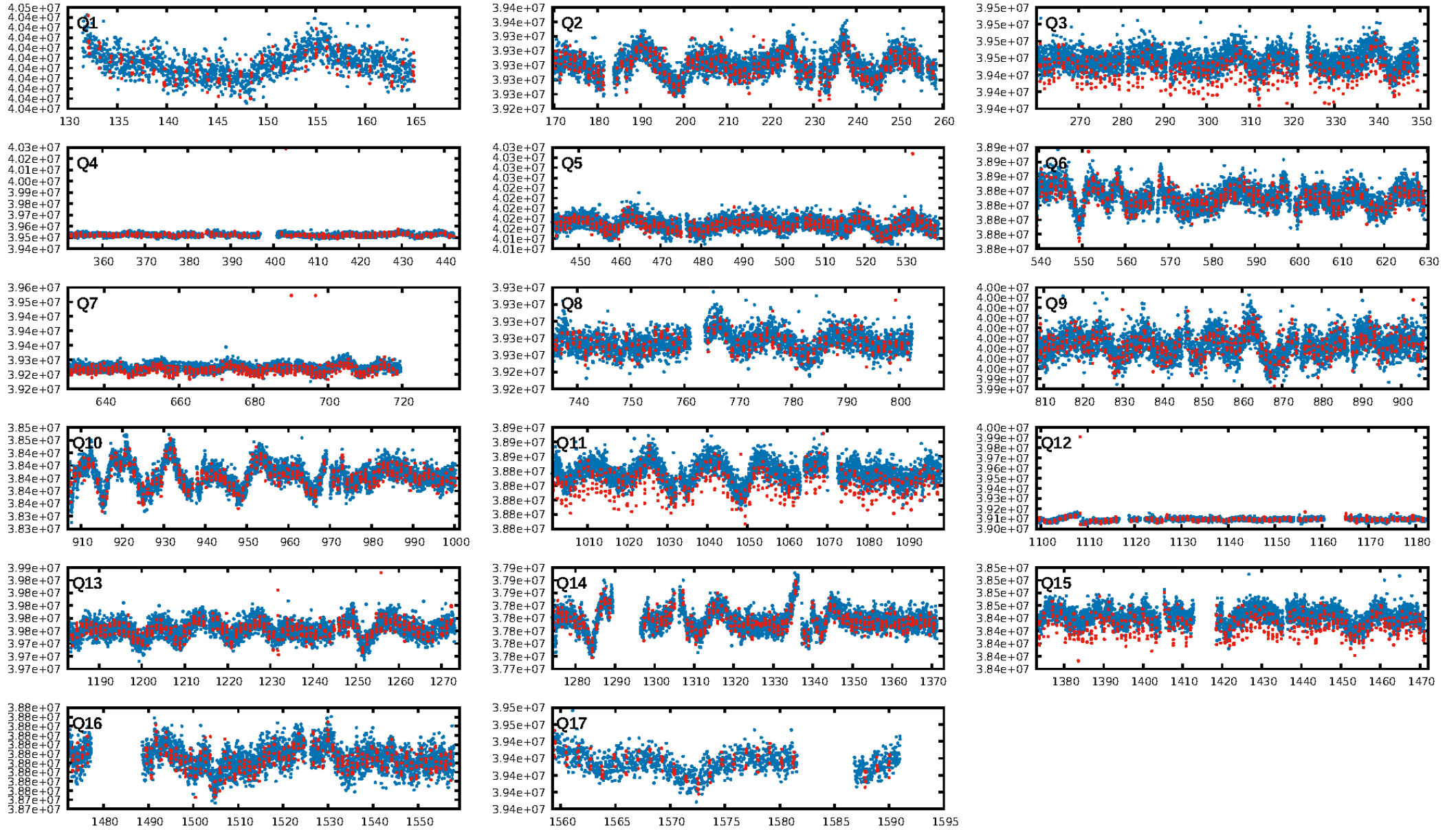
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: 3.21e-58
RollingBand-fgt: 0.83 [963/1165]
GhostDiagnostic-chr: -0.4268
Centroid-sig: N/A
Centroid-so: 250.755 arcsec [346.39σ]
OotOffset-rm: N/A
KicOffset-rm: N/A
OotOffset-st: 0/0/0/0 [0]
KicOffset-st: 0/0/0/0 [0]
DiffImageQuality-fgm: N/A
DiffImageOverlap-fno: 1.00 [17/17]

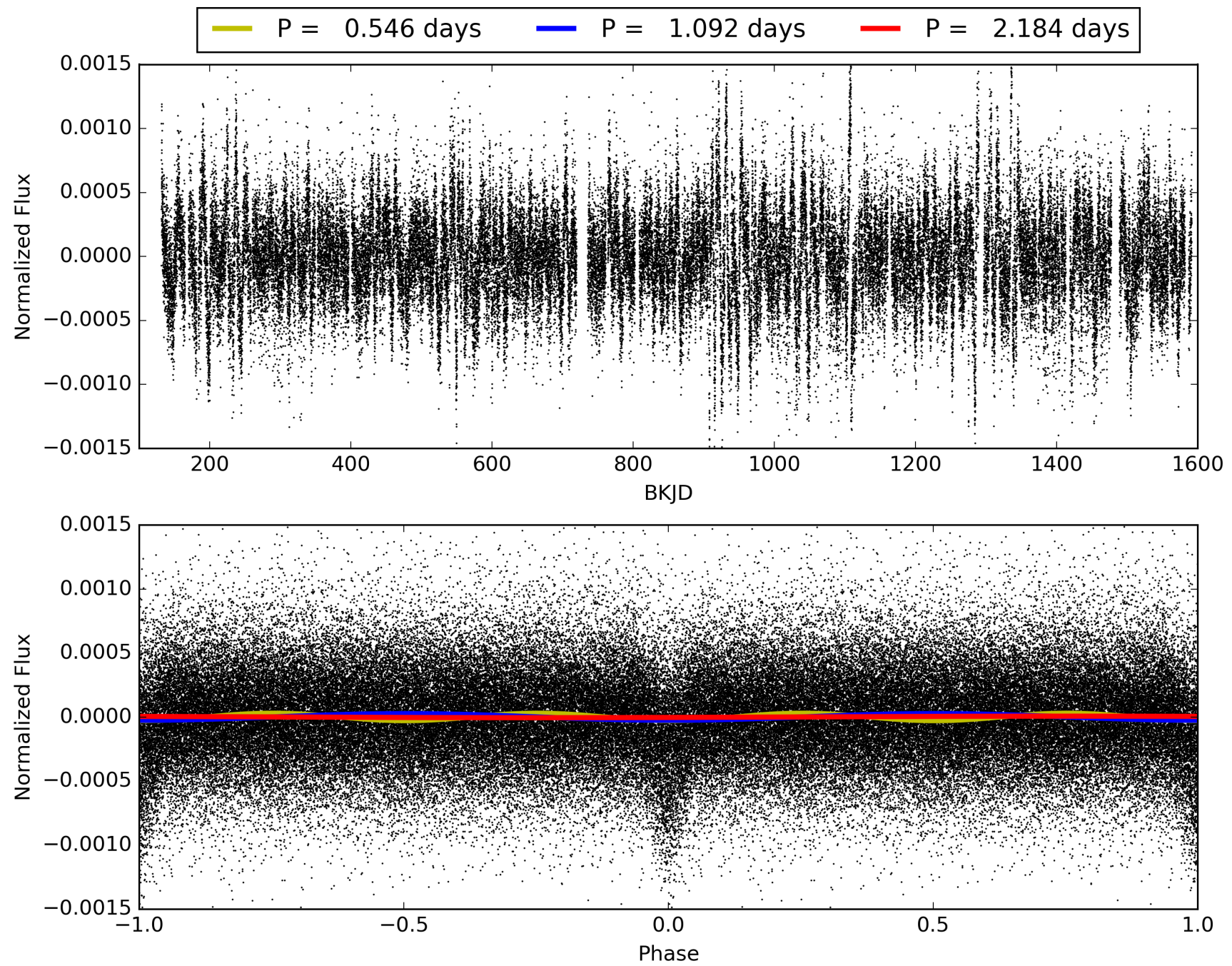
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 29-Jan-2016 09:36:48 Z

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

TCE 008244190-01, PDC Light Curves

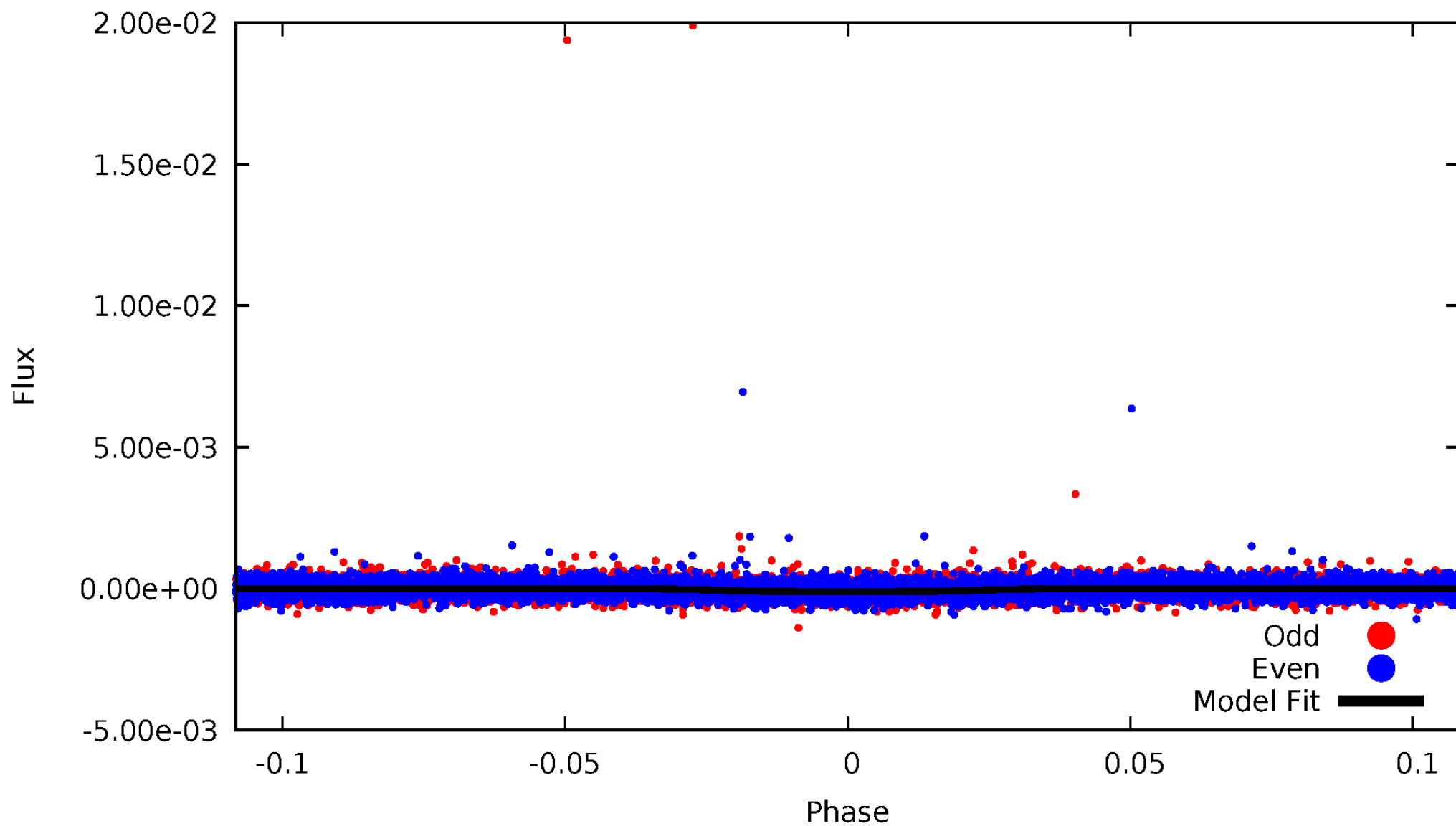


TCE 008244190-01



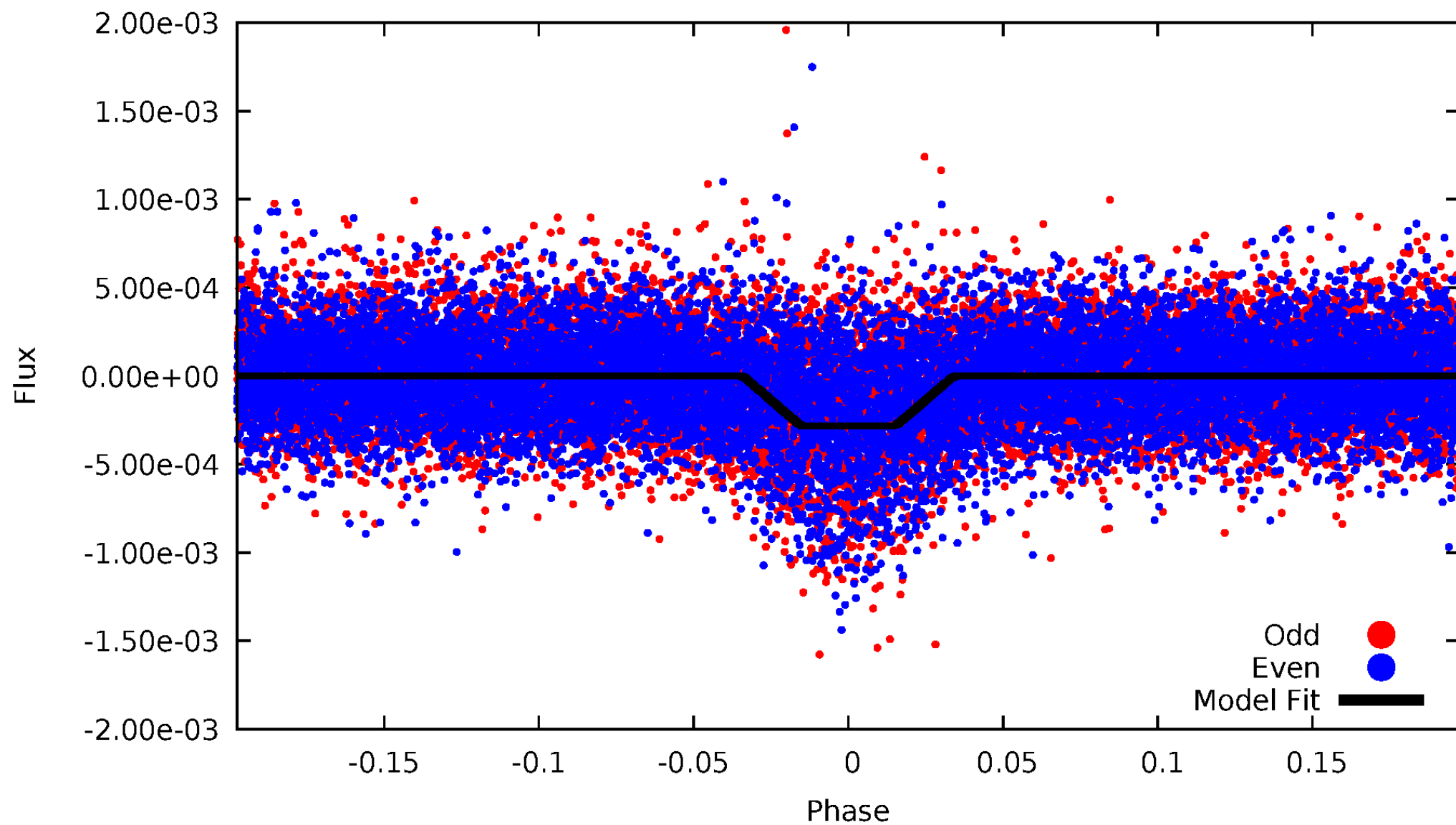
DV Odd/Even

TCE 008244190-01

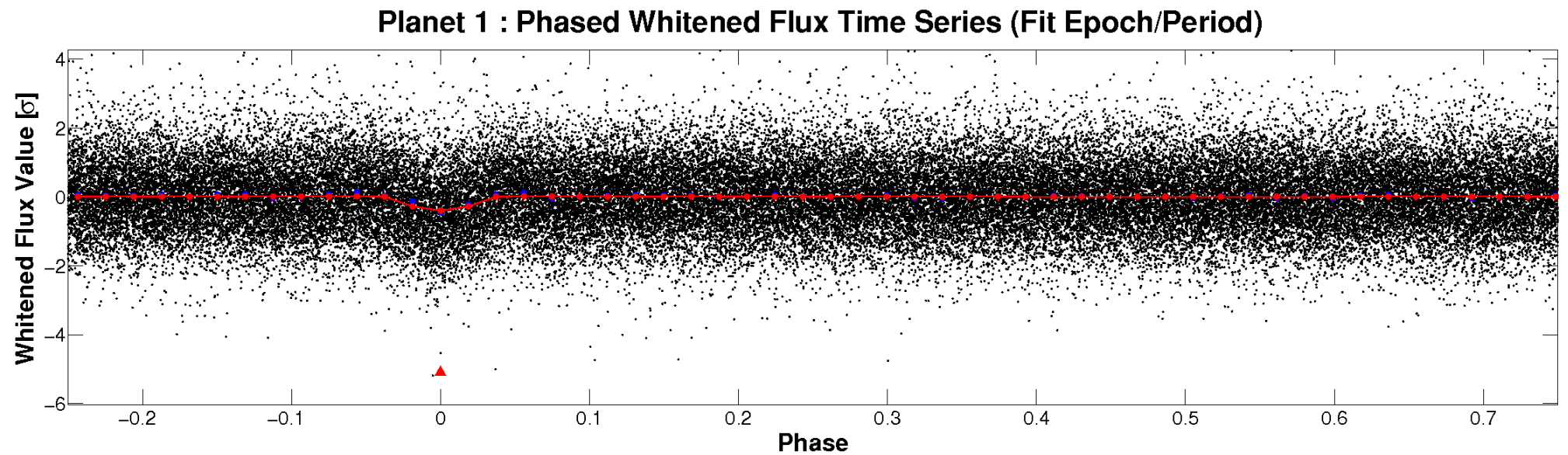
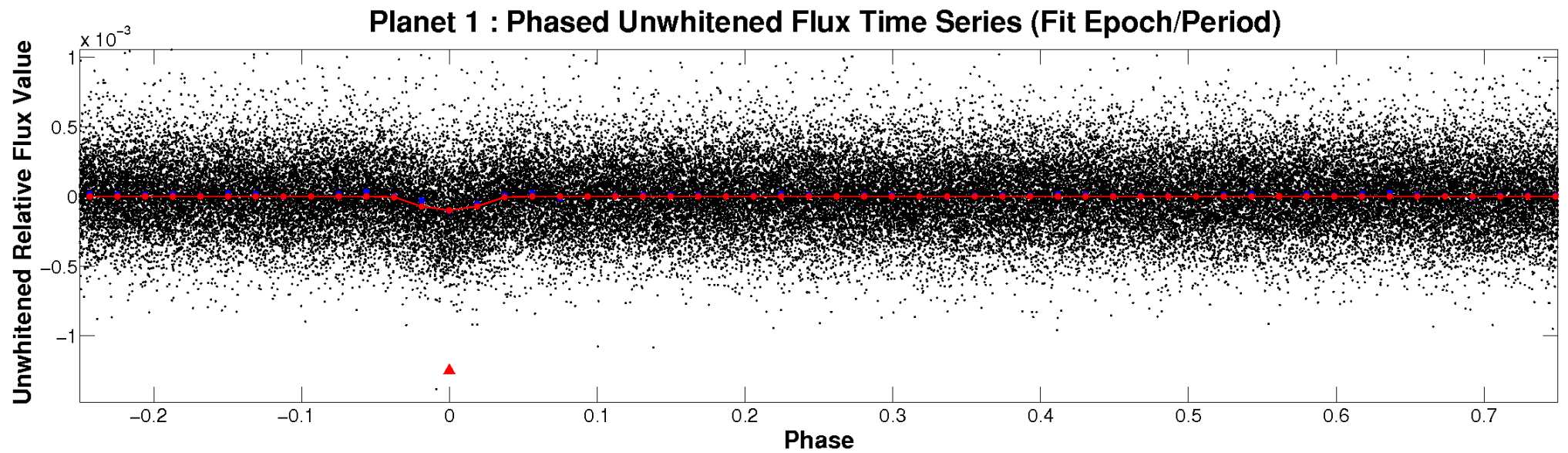


ALT Odd/Even

TCE 008244190-01

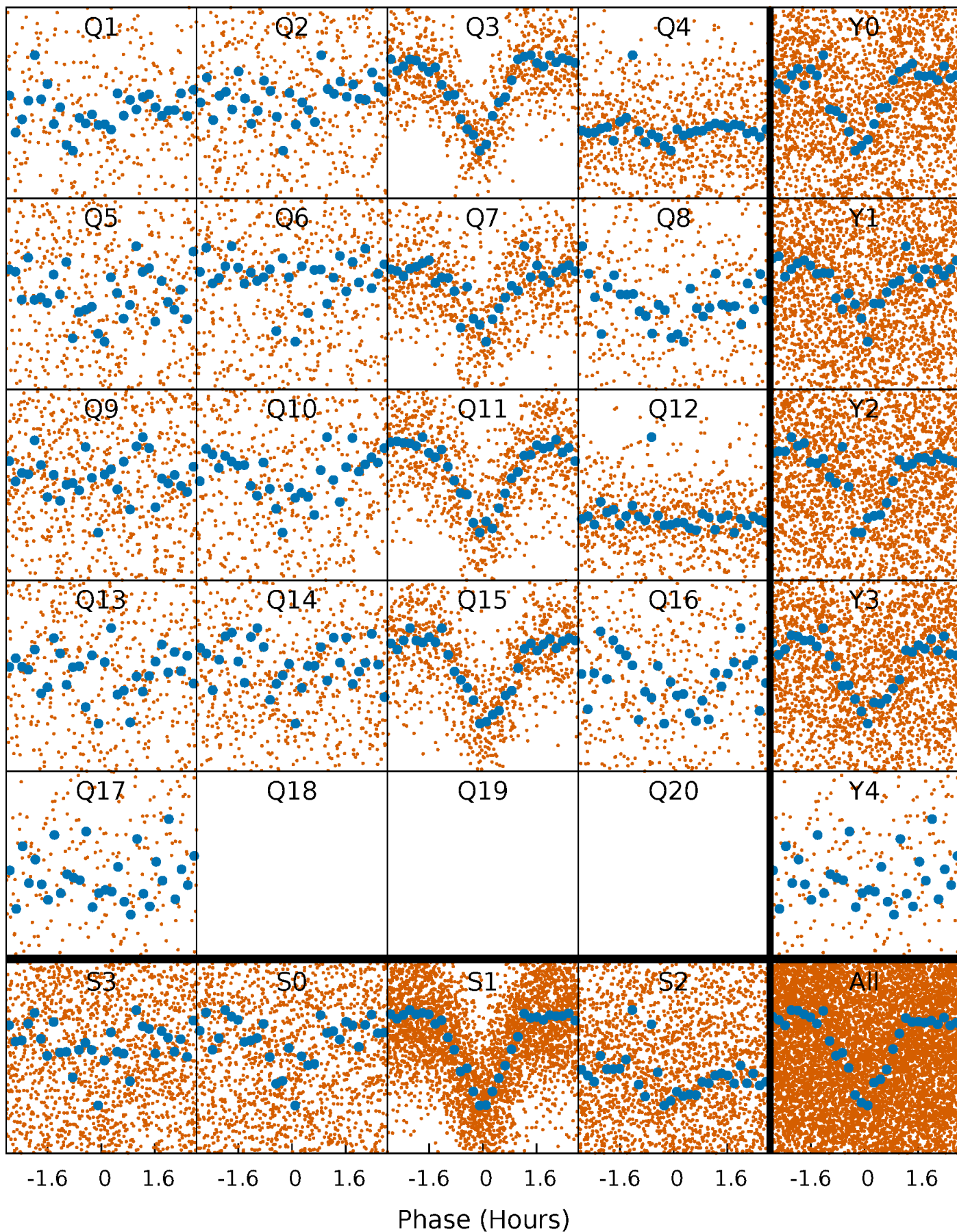


Non-Whitened Vs. Whitened Light Curve



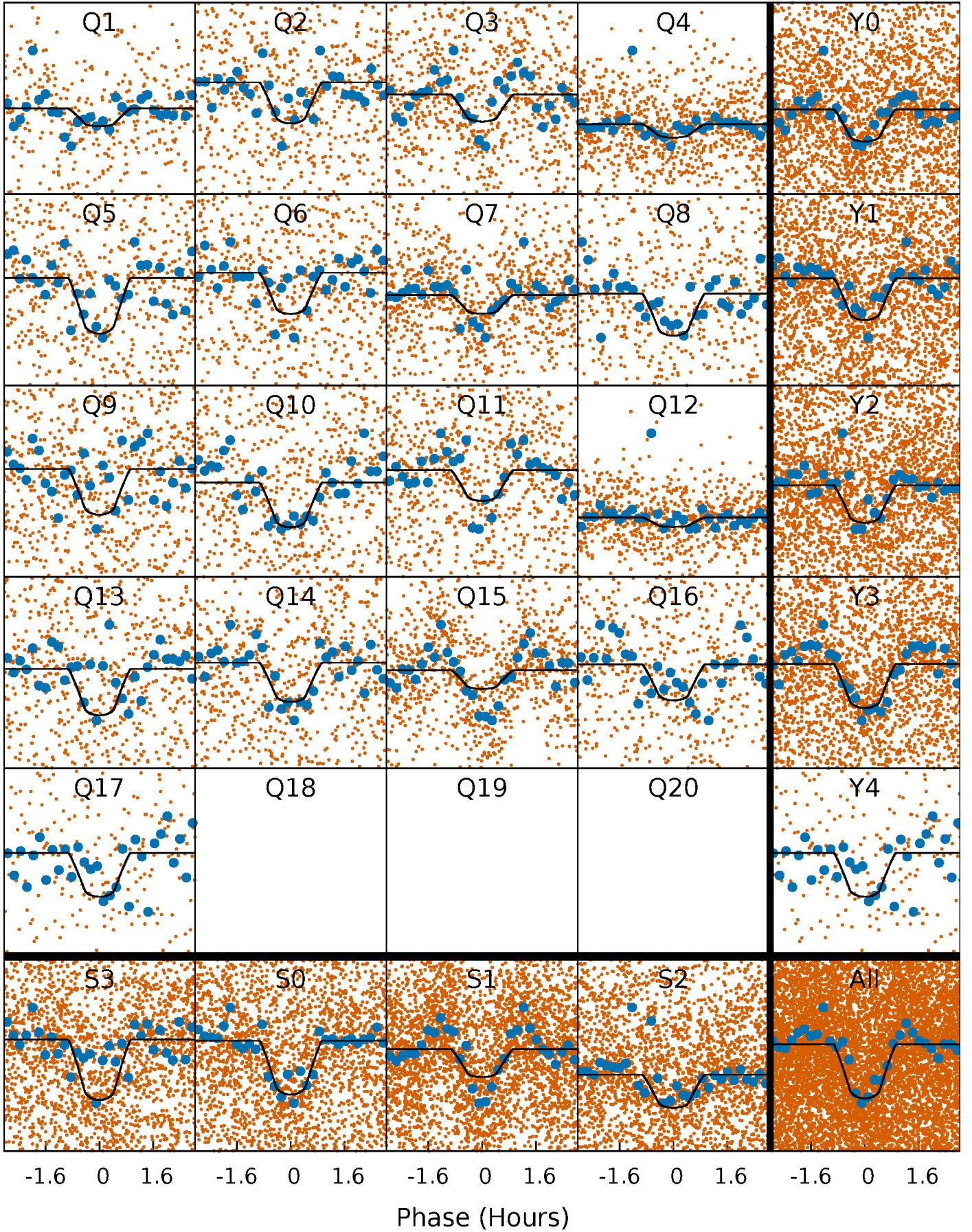
PDC Quarter-Phased Transit Curves

TCE 008244190-01 P= 1.092054 Days $T_0=132.112662$ (BKJD)



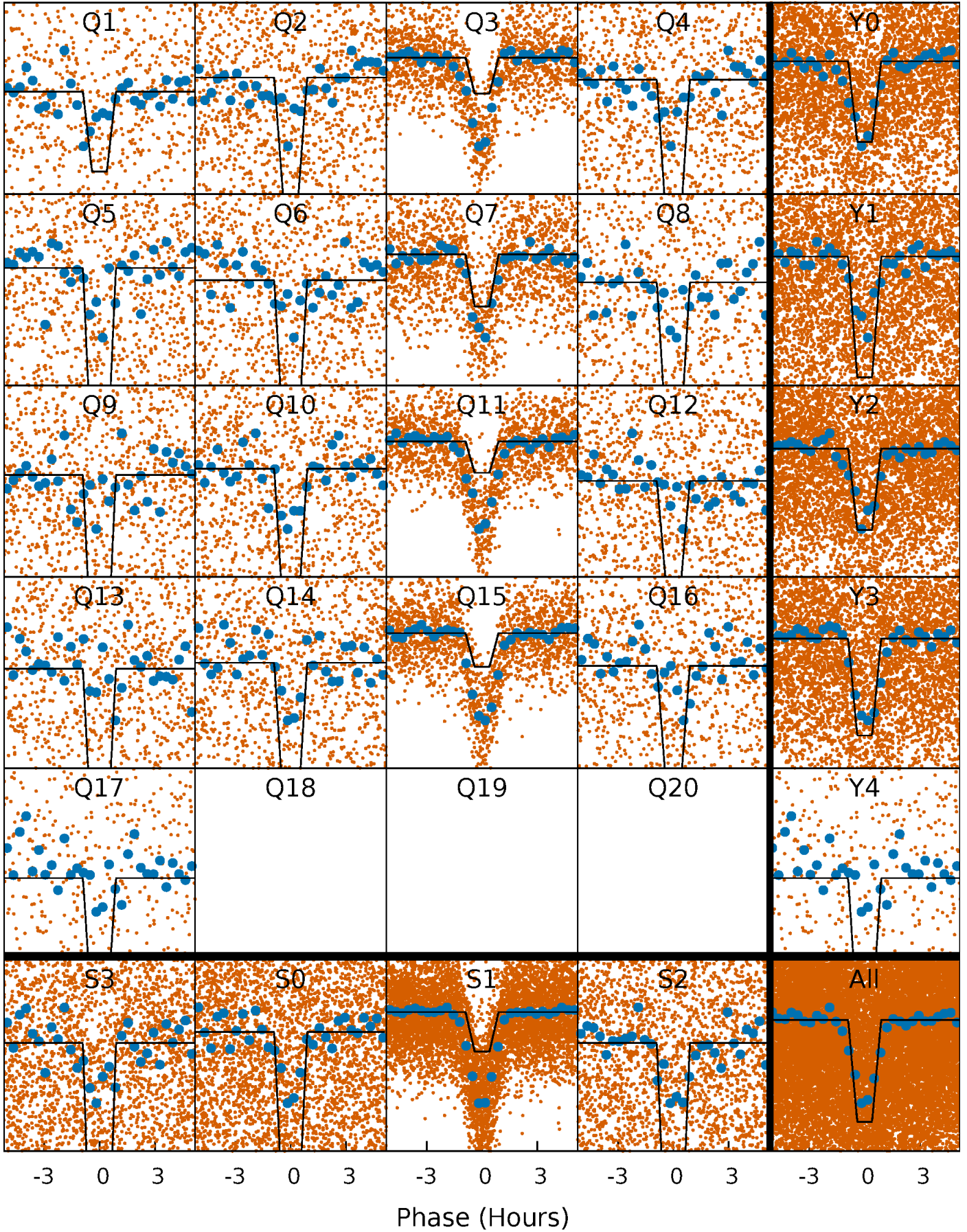
DV Quarter-Phased Transit Curves

TCE 008244190-01 P= 1.092054 Days $T_0=132.112662$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

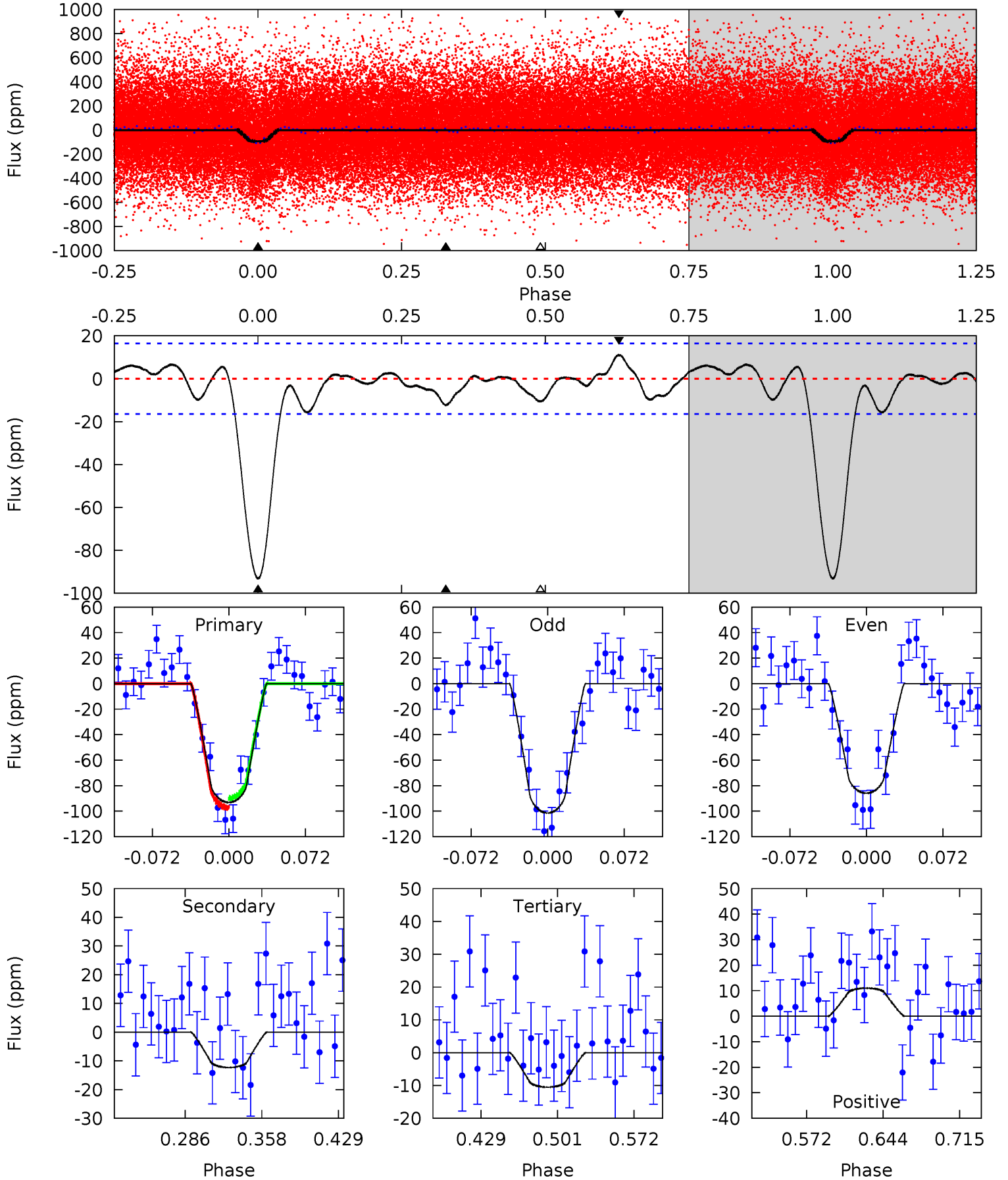
TCE 008244190-01 P= 1.092060 Days $T_0=132.107512$ (BKJD)



DV Model-Shift Uniqueness Test

008244190-01, P = 1.092054 Days, E = 131.020608 Days

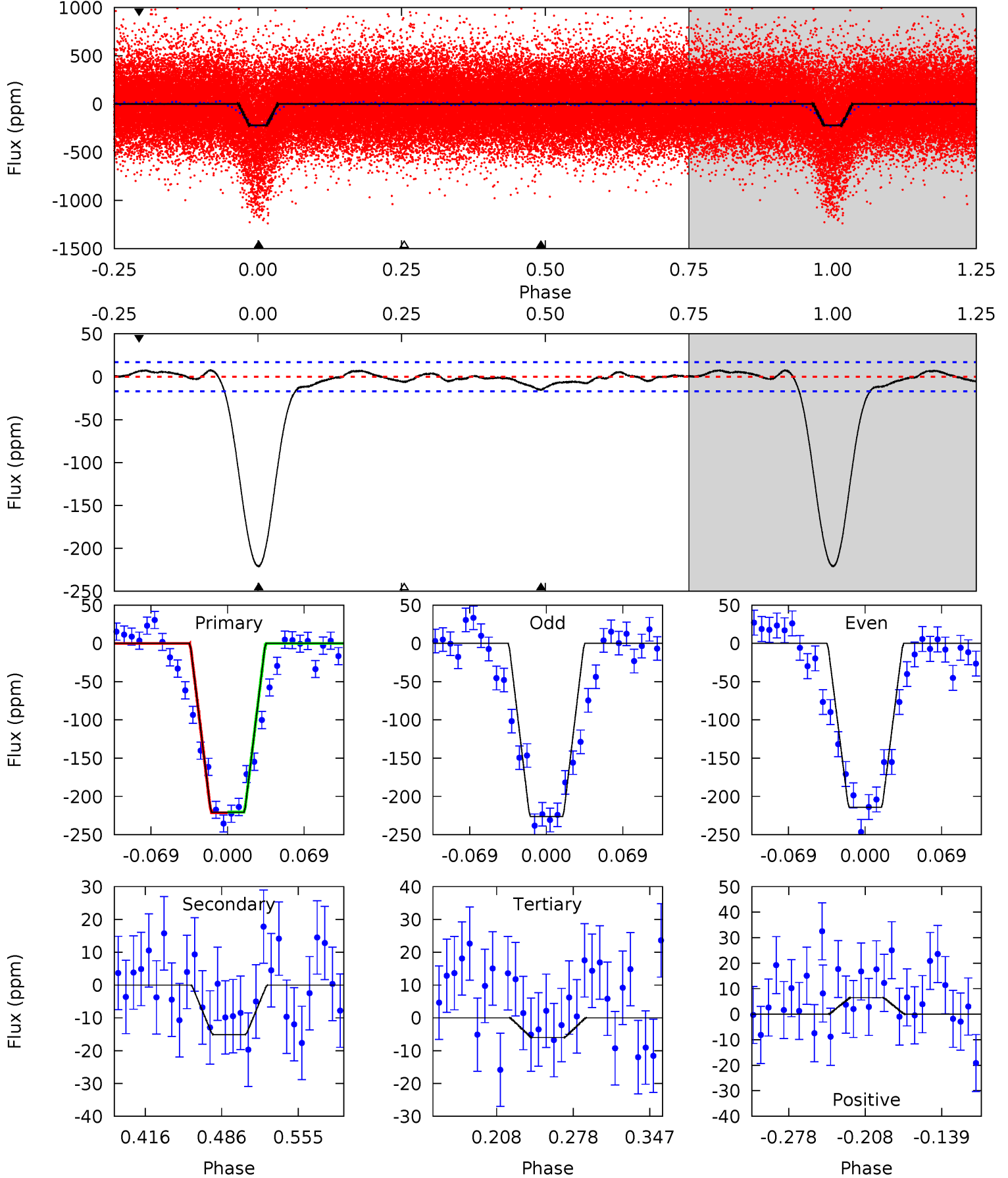
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
26.3	3.48	2.97	3.11	4.63	1.80	1.53	23.3	23.2	0.51	0.37	2.20	0.97	0.11	1.08



Alt Model-Shift Uniqueness Test

008244190-01, P = 1.092060 Days, E = 131.015452 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
60.0	4.10	1.63	1.76	4.64	1.82	1.15	58.4	58.2	2.48	2.34	1.64	1.42	0.03	0.12



Stellar Parameters For KIC 008244190

	$T_{\text{eff}} (K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M (M_{\odot})$	$p_{\star} (g \cdot cm^{-3})$
	5639^{+152}_{-169}	$4.551^{+0.033}_{-0.187}$	$-0.020^{+0.250}_{-0.300}$	$0.859^{+0.233}_{-0.078}$	$0.959^{+0.094}_{-0.115}$	$2.131^{+0.384}_{-1.031}$
	+3%/-3%	+1%/-4%	+1250%/-1500%	+27%/-9%	+10%/-12%	+18%/-48%
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 008244190-01 / KOI 1071.01

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	-12 ± 4	$1.08^{+0.48}_{-0.47}$	2305^{+152}_{-102}	3546^{+886}_{-504}	$2.334^{+5.523}_{-1.315}$
Alt.	-15 ± 4	$1.67^{+0.57}_{-0.49}$	2308^{+137}_{-98}	3113^{+455}_{-389}	$1.188^{+1.301}_{-0.555}$

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 $A_{obs} \gg 1.0$

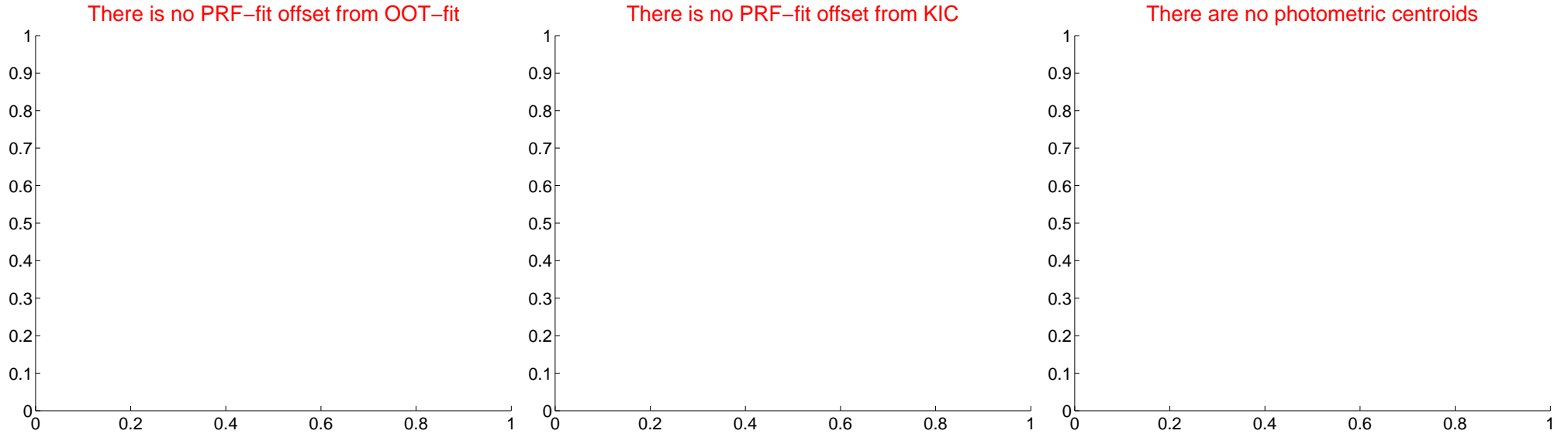
DV Centroid Data

Supplemental centroid analysis for 008244190-01. Kepler magnitude: 14.49. Transit SNR 19.33

There are 0 quarters with good PRF difference image offsets

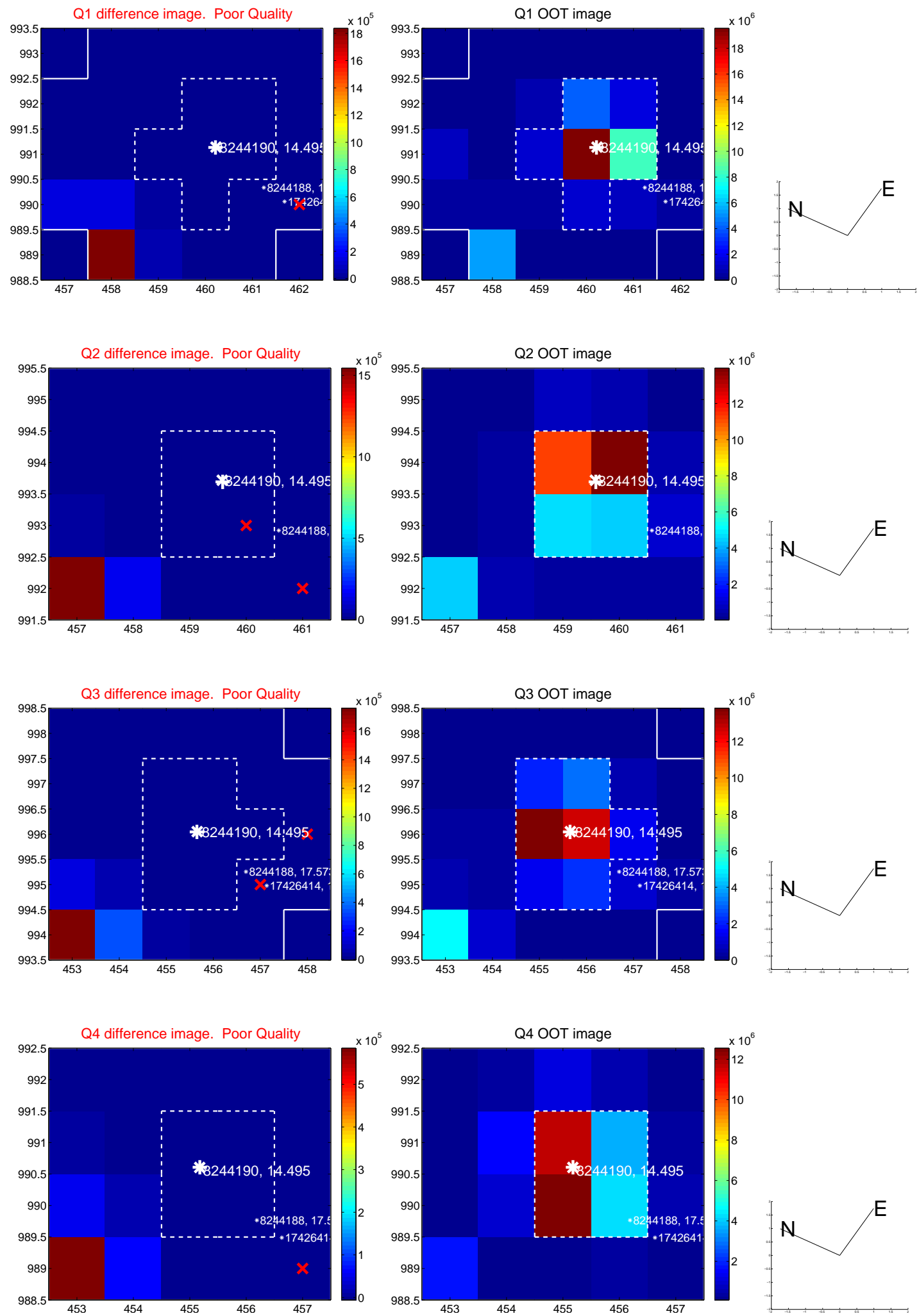
The direct PRF centroid is offset from the target star catalog position by about NaN arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	—	—	—	—
PRF-fit source offset from KIC position	—	—	—	—
photometric centroid source offset	—	—	—	—

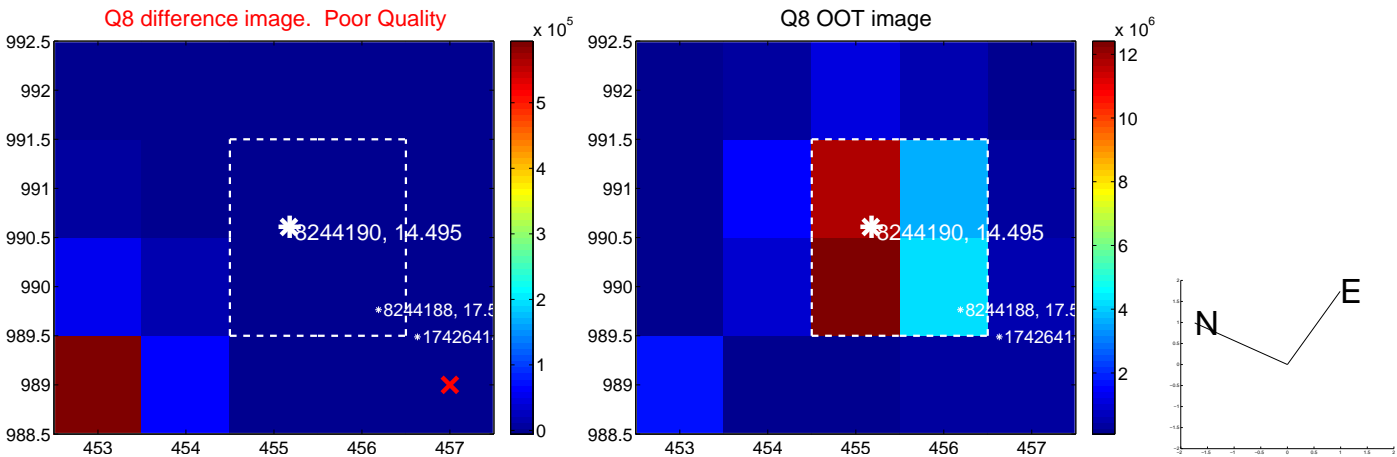
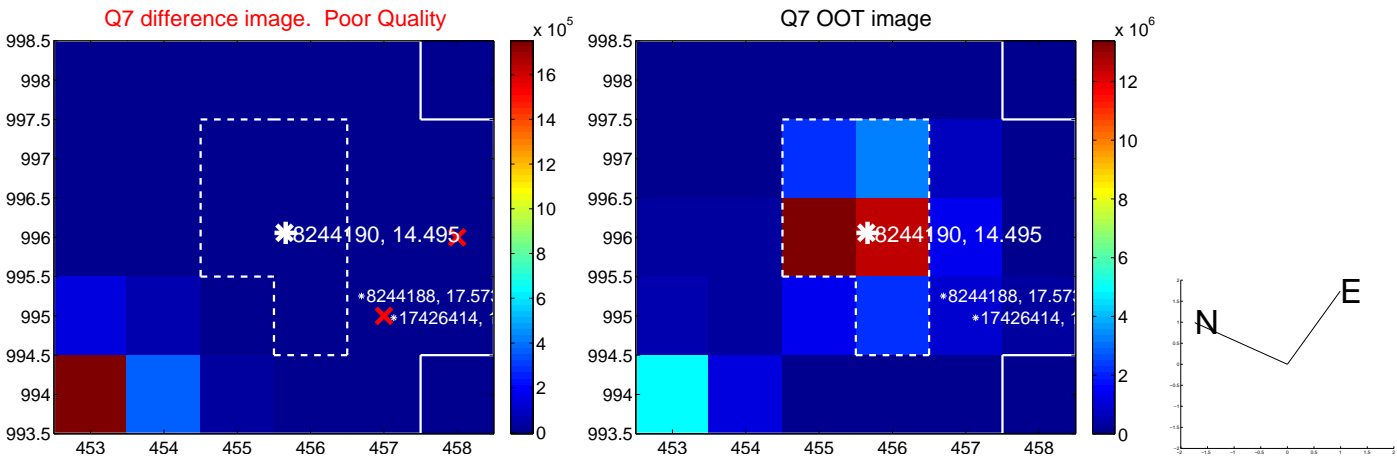
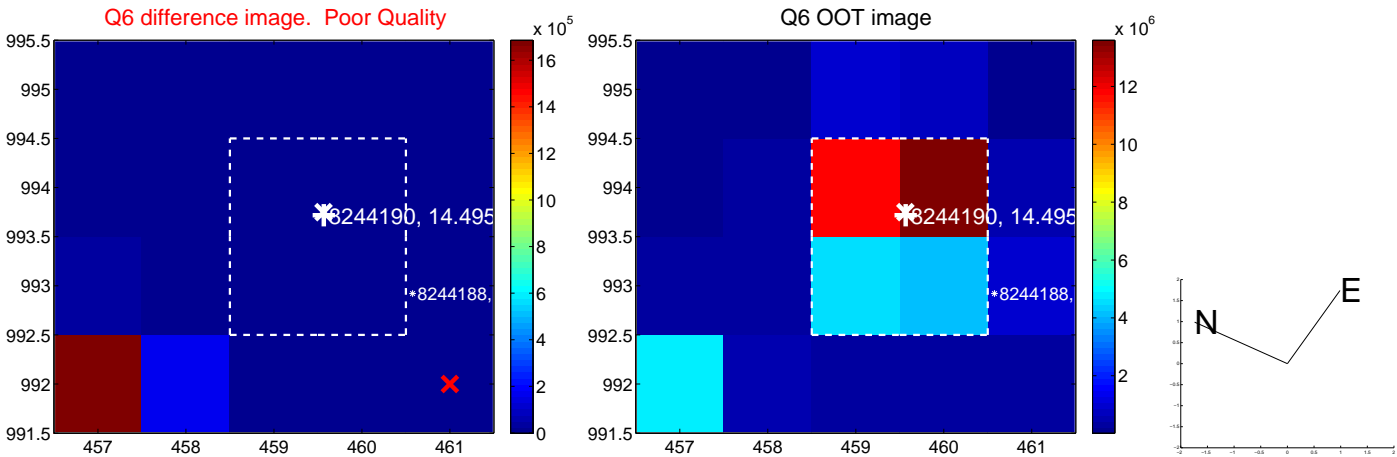
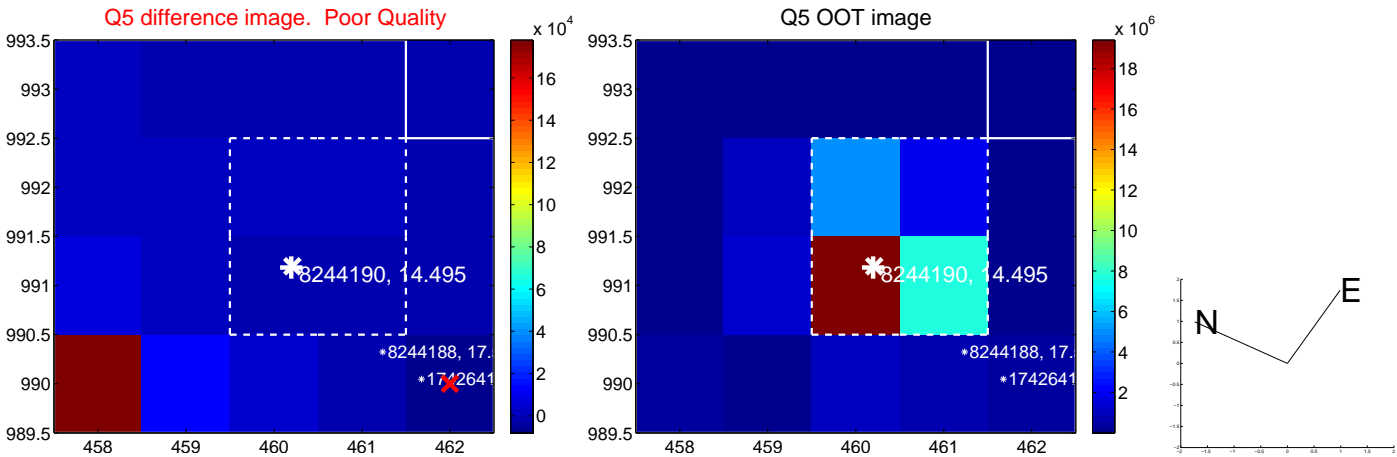


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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

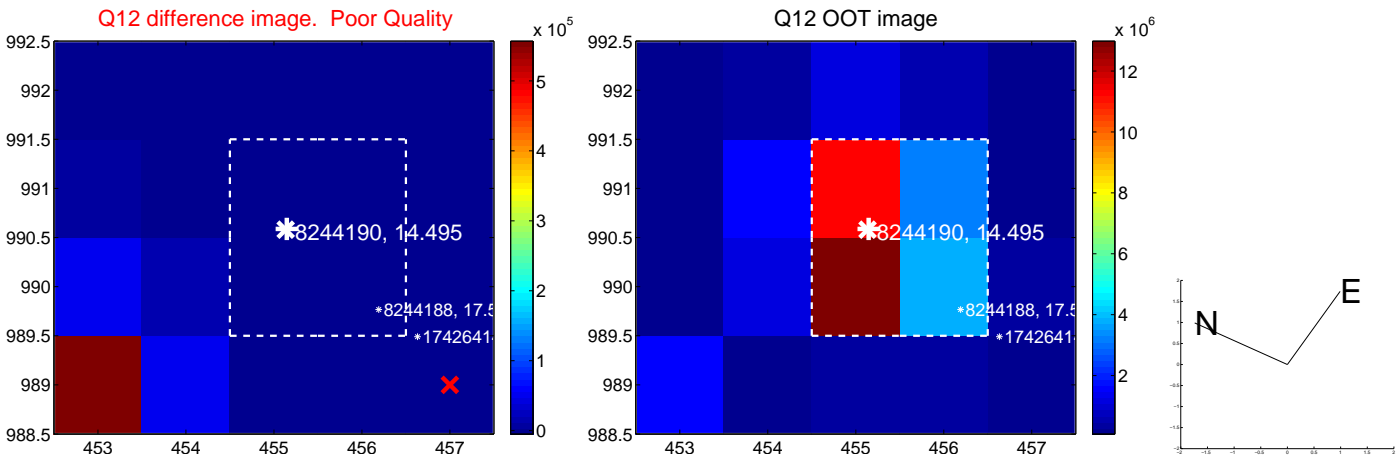
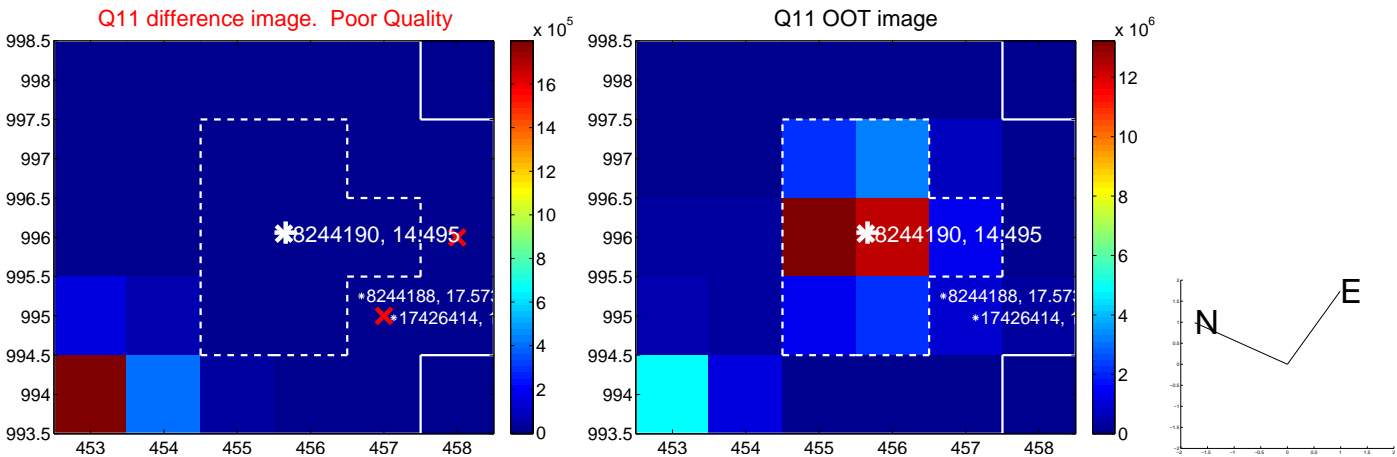
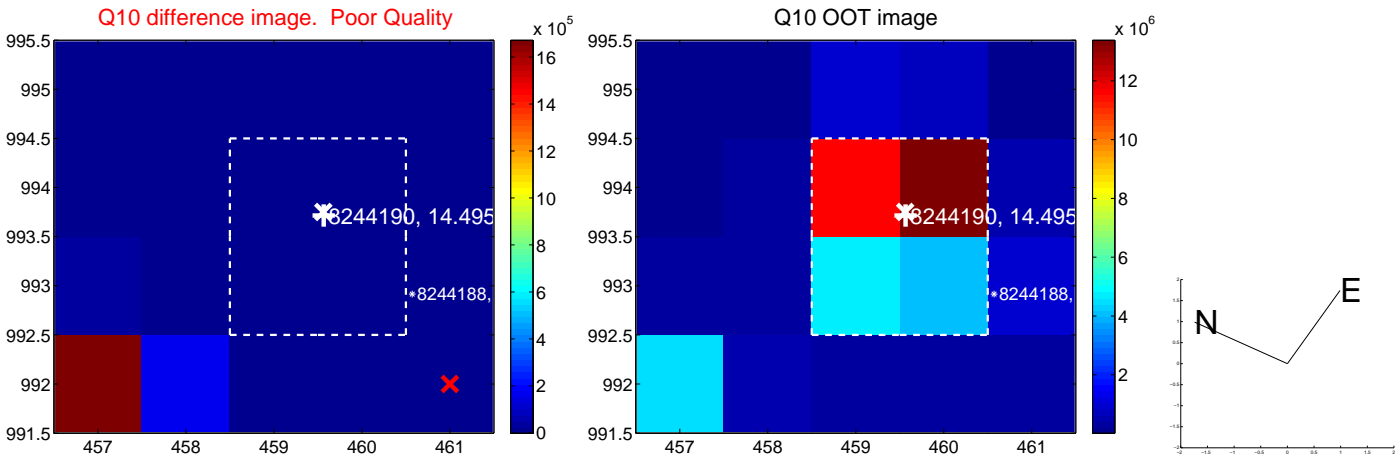
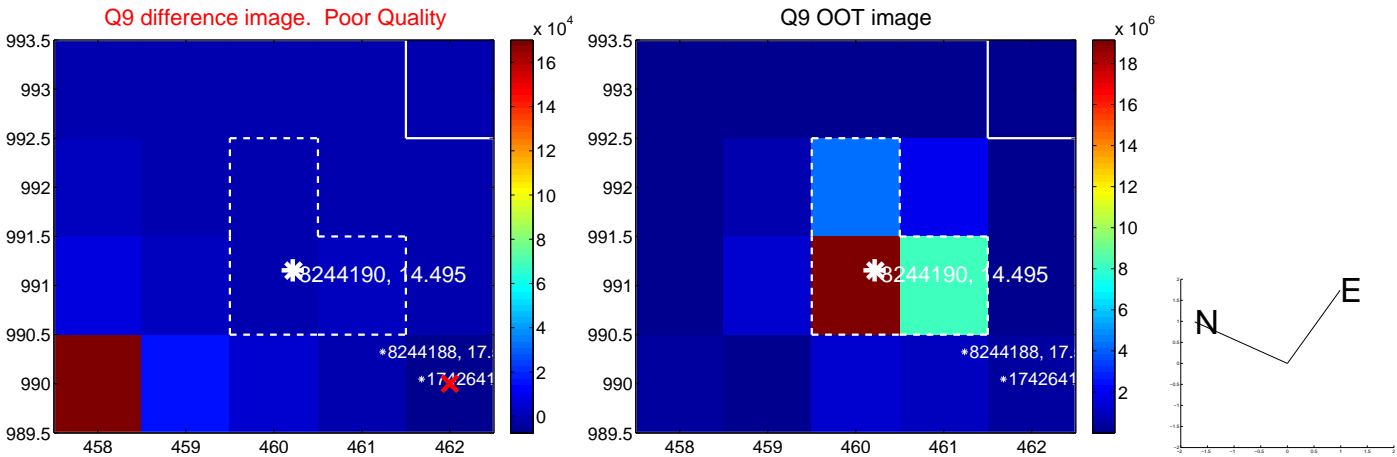
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



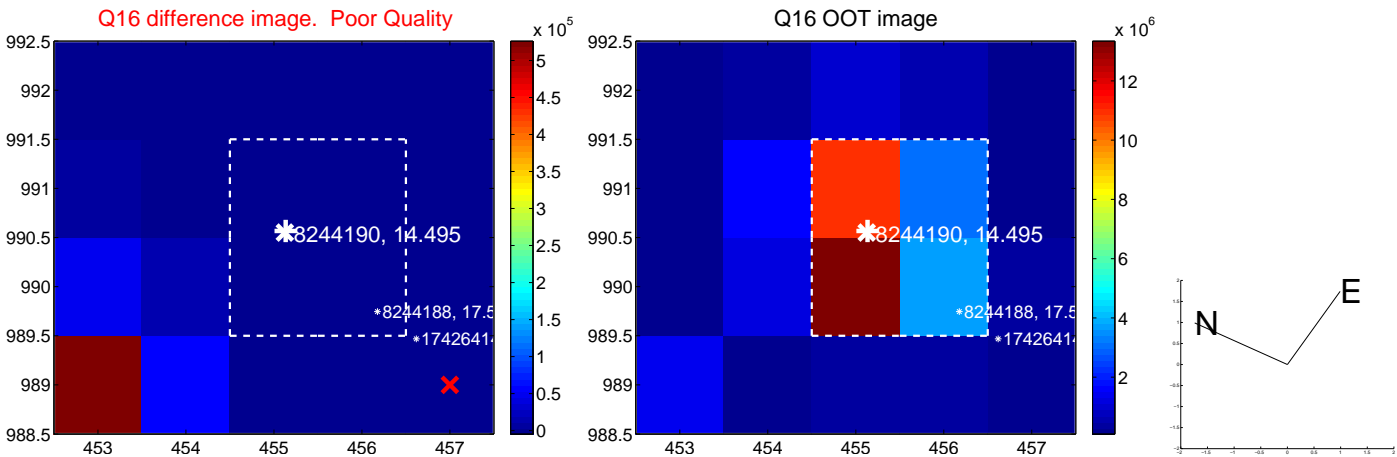
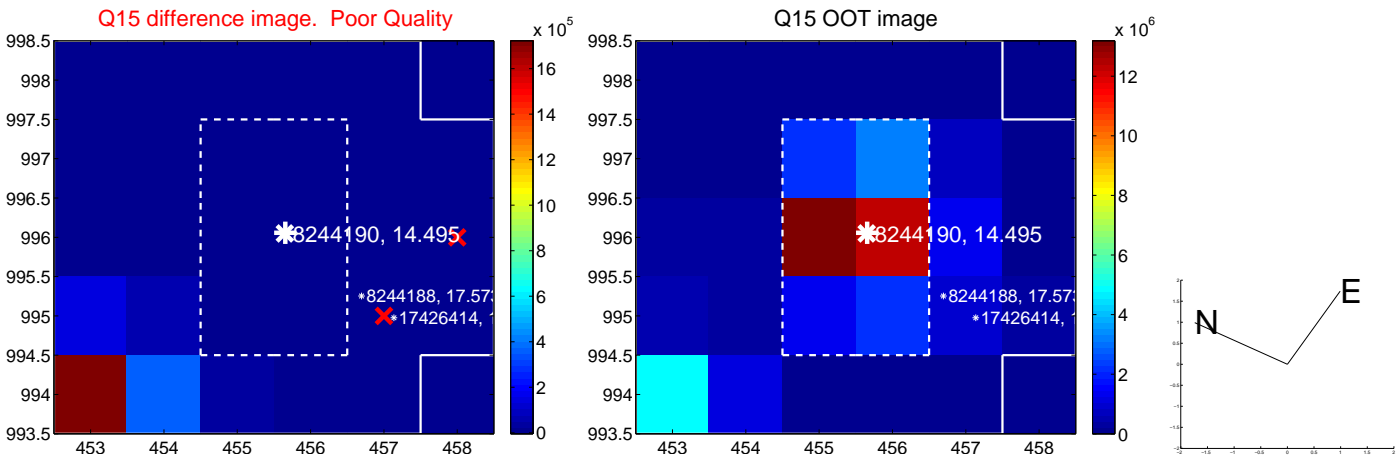
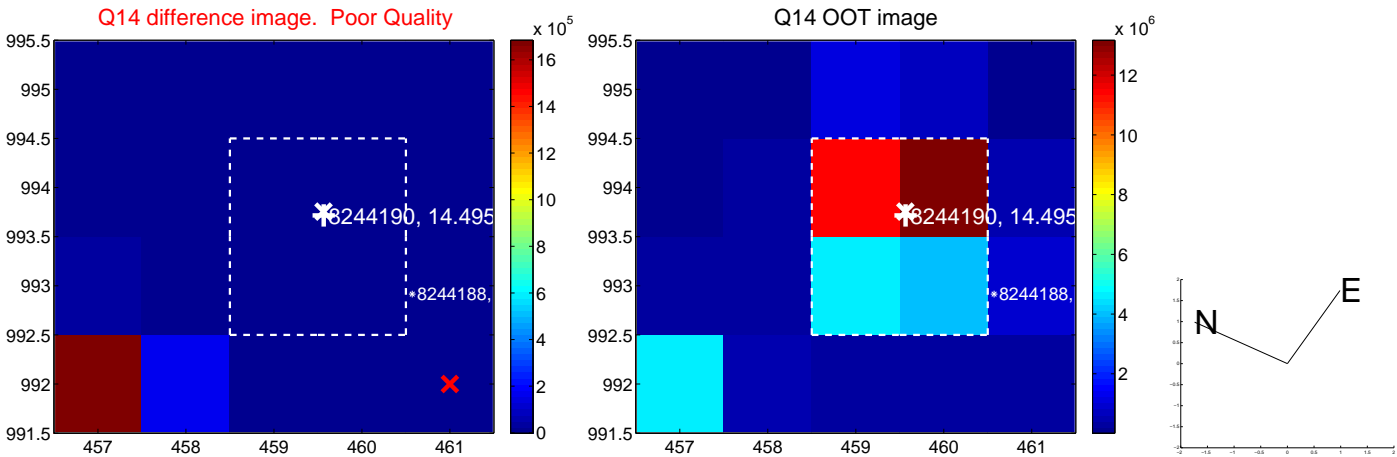
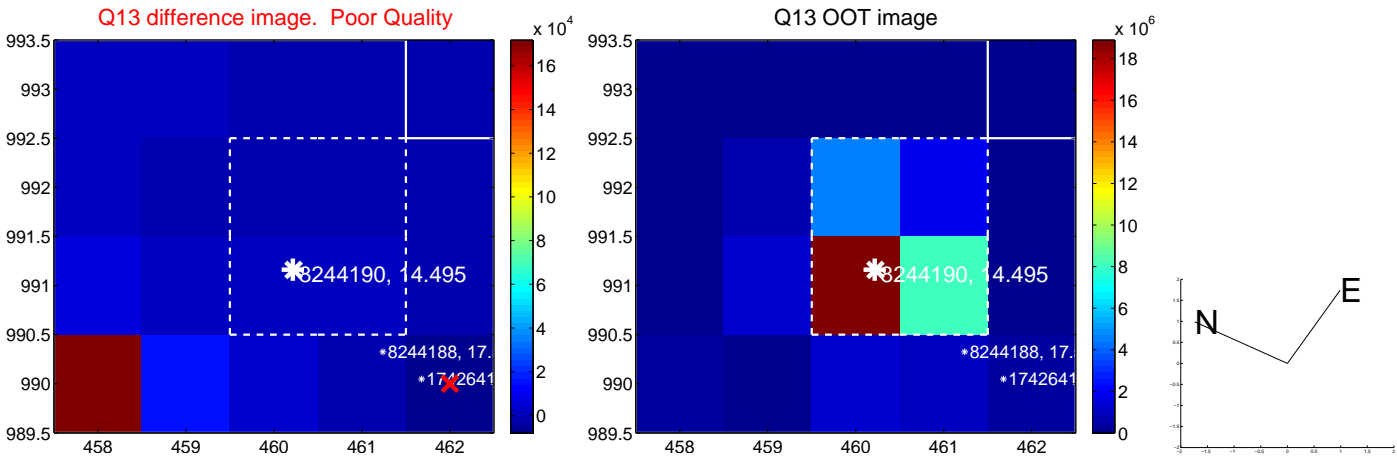
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



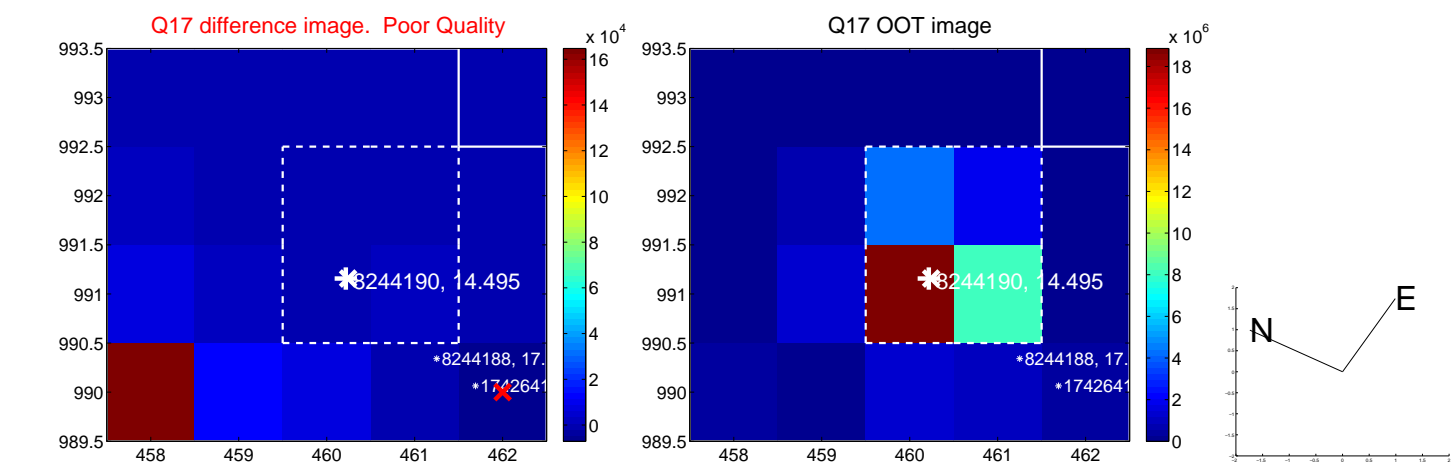
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



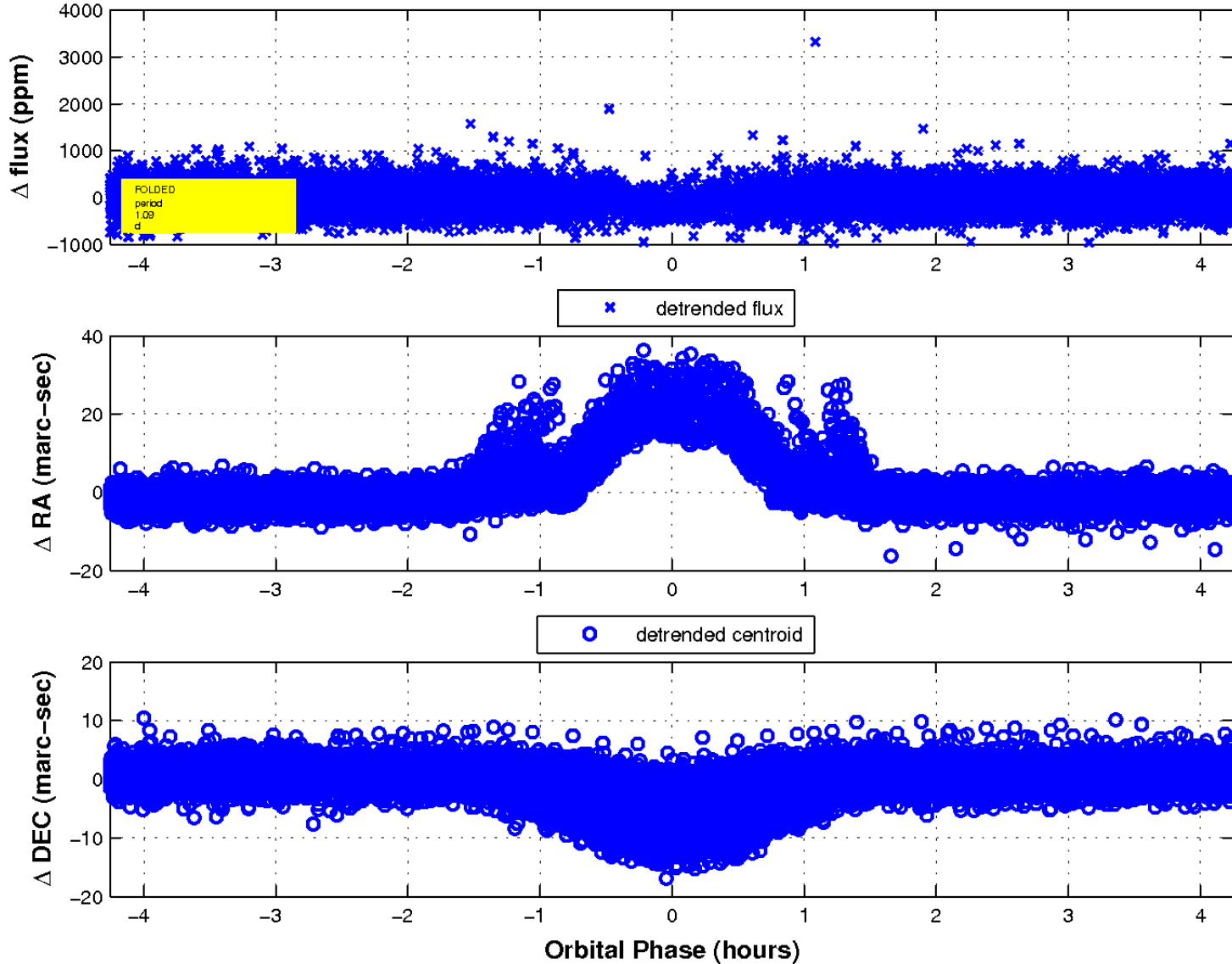
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



white ×: KIC target position; +: OOT centroid; △: difference centroid. red ✕: large negative pixel value.



fluxWeightedCentroids, Planet 1 of 1



UKIRT Image

Declination

