

KIC 008042644

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})
008042644-01	OBS	6957.01	1.480644	132.981421	710.8	3.000	8.7	-1.0	0.94	6187	2.51	1770.27

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
008042644-01	OBS	PC	0.99	0	0	0	0	CENT_NOFITS

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.

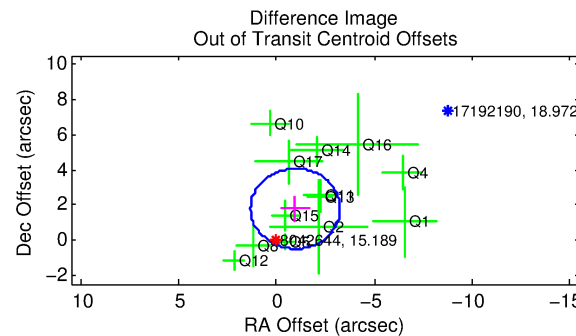
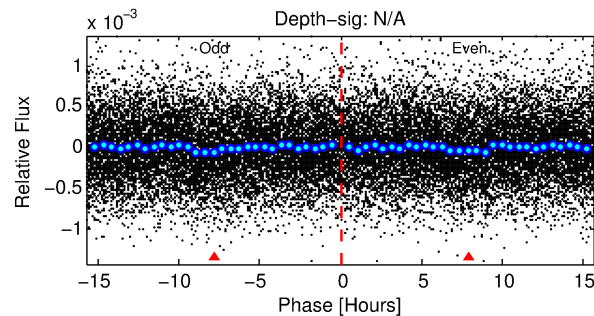
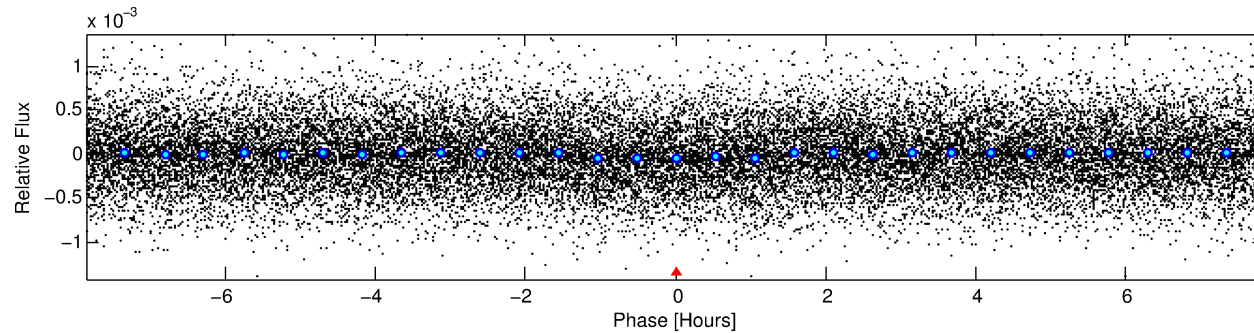
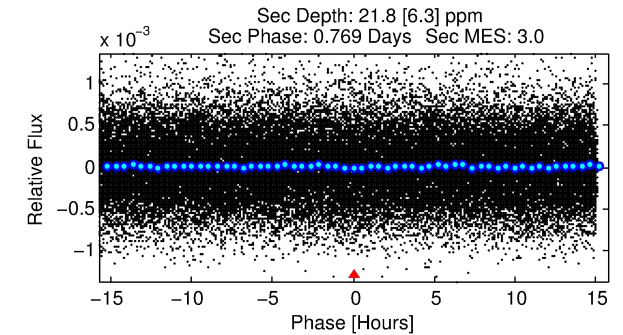
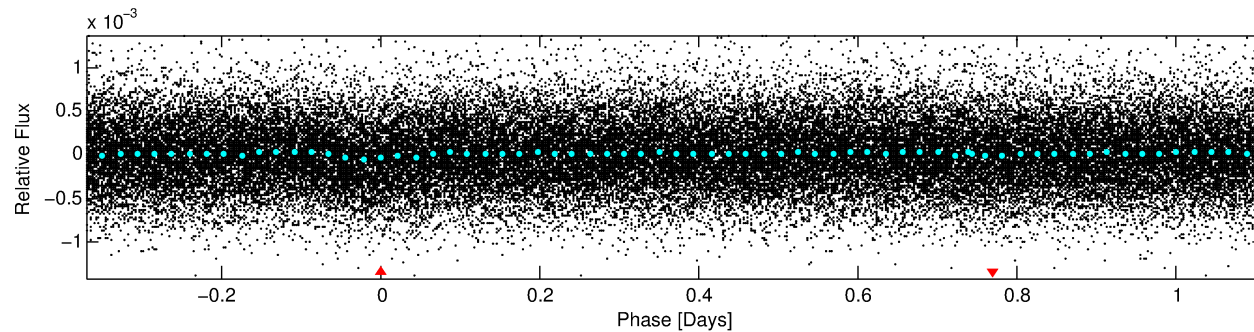
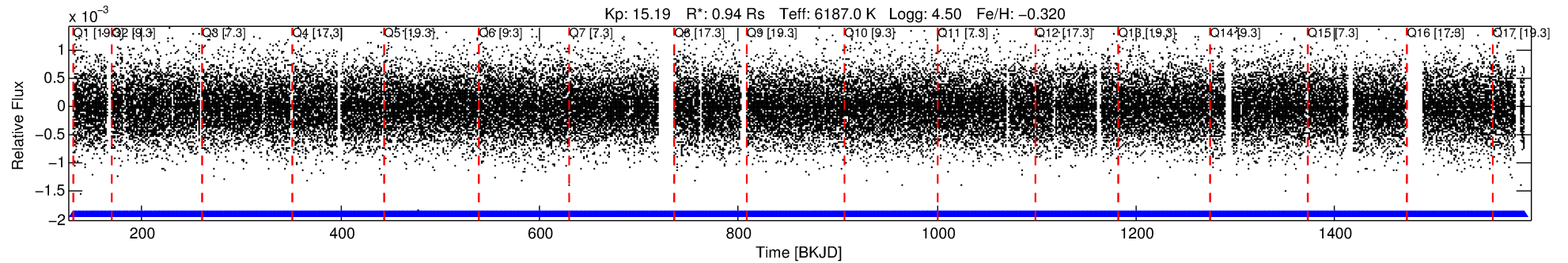
Ephemeris Match Information For 008042644-01

No Significant Match Found

DV One-Page Summary

KIC: 8042644 Candidate: 1 of 1 Period: 1.481 d

KOI: K06957.01 Corr: 0.937



TPS TCE Results:

Period = 1.48064 d
Epoch = 132.9814 BKJD

DV fit results are unavailable

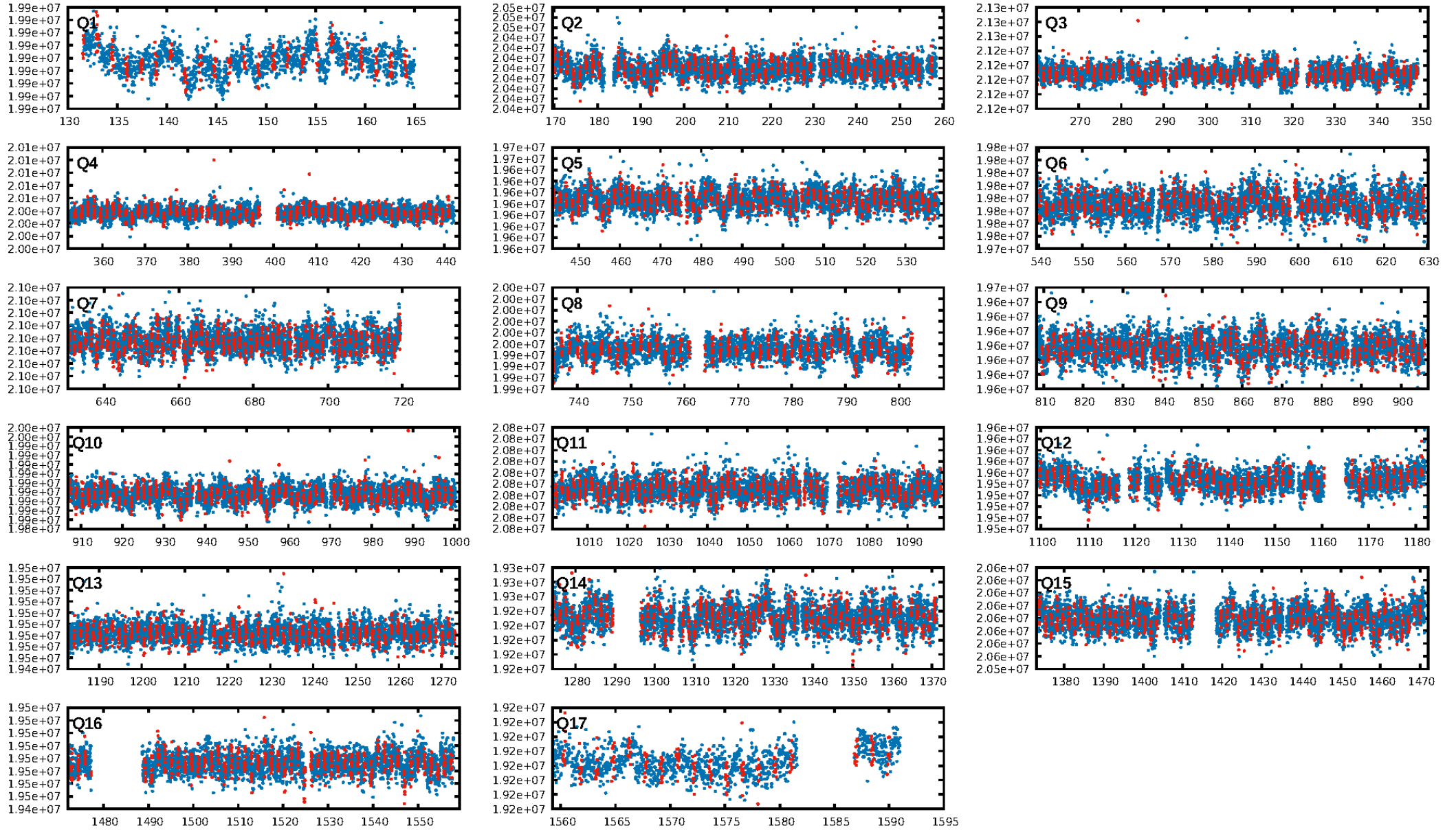
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: 4.21e-18
RollingBand-fgt: 1.00 [872/872]
GhostDiagnostic-chr: N/A
Centroid-sig: N/A
Centroid-so: N/A
OotOffset-rm: 2.023 arcsec [2.66σ]
KicOffset-rm: 2.046 arcsec [2.44σ]
OotOffset-st: 3/2/4/4 [13]
KicOffset-st: 3/2/4/4 [13]
DiffImageQuality-fgm: 0.31 [4/13]
DiffImageOverlap-fno: 1.00 [17/17]

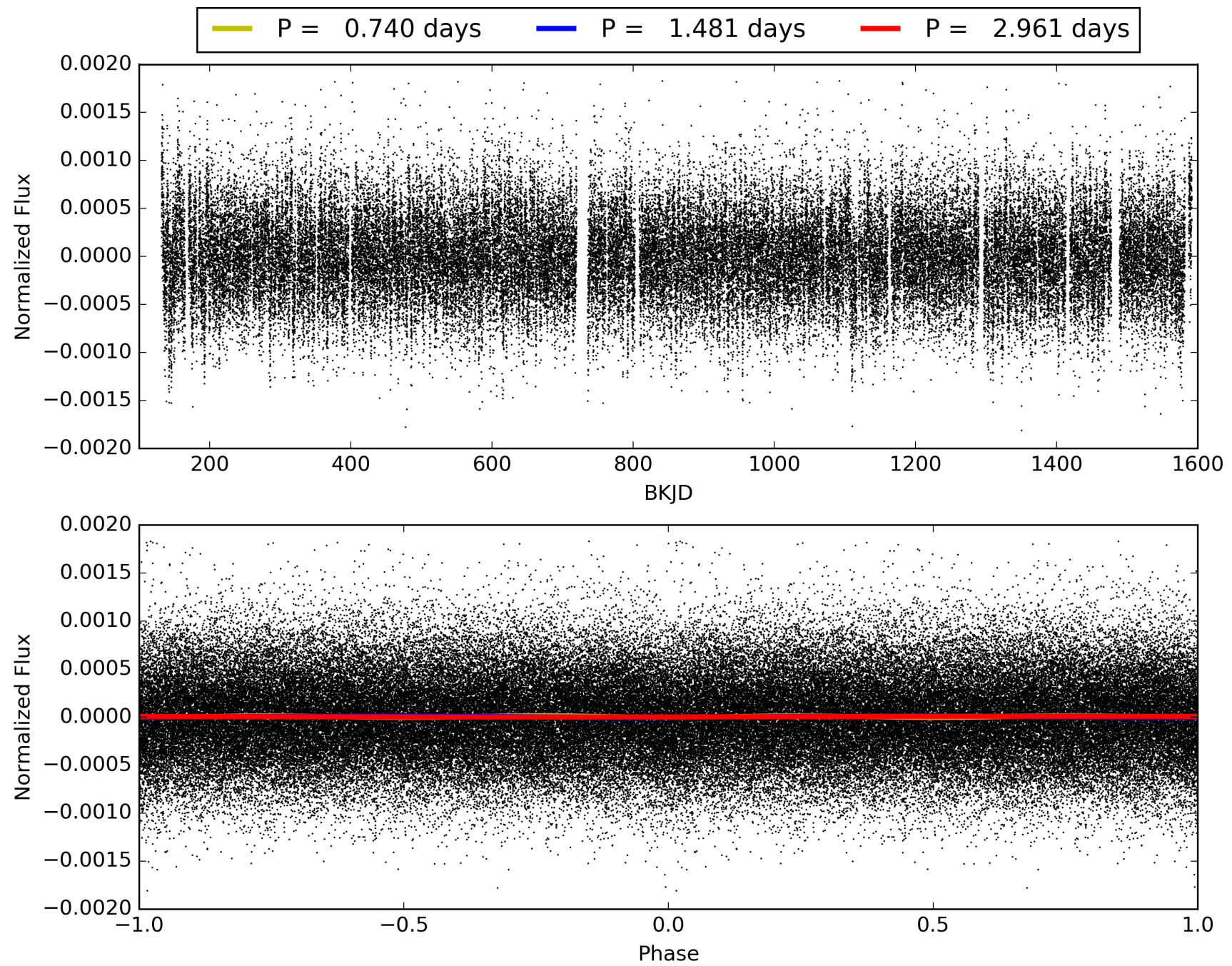
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 30-Jan-2016 11:08:15 Z

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

TCE 008042644-01, PDC Light Curves

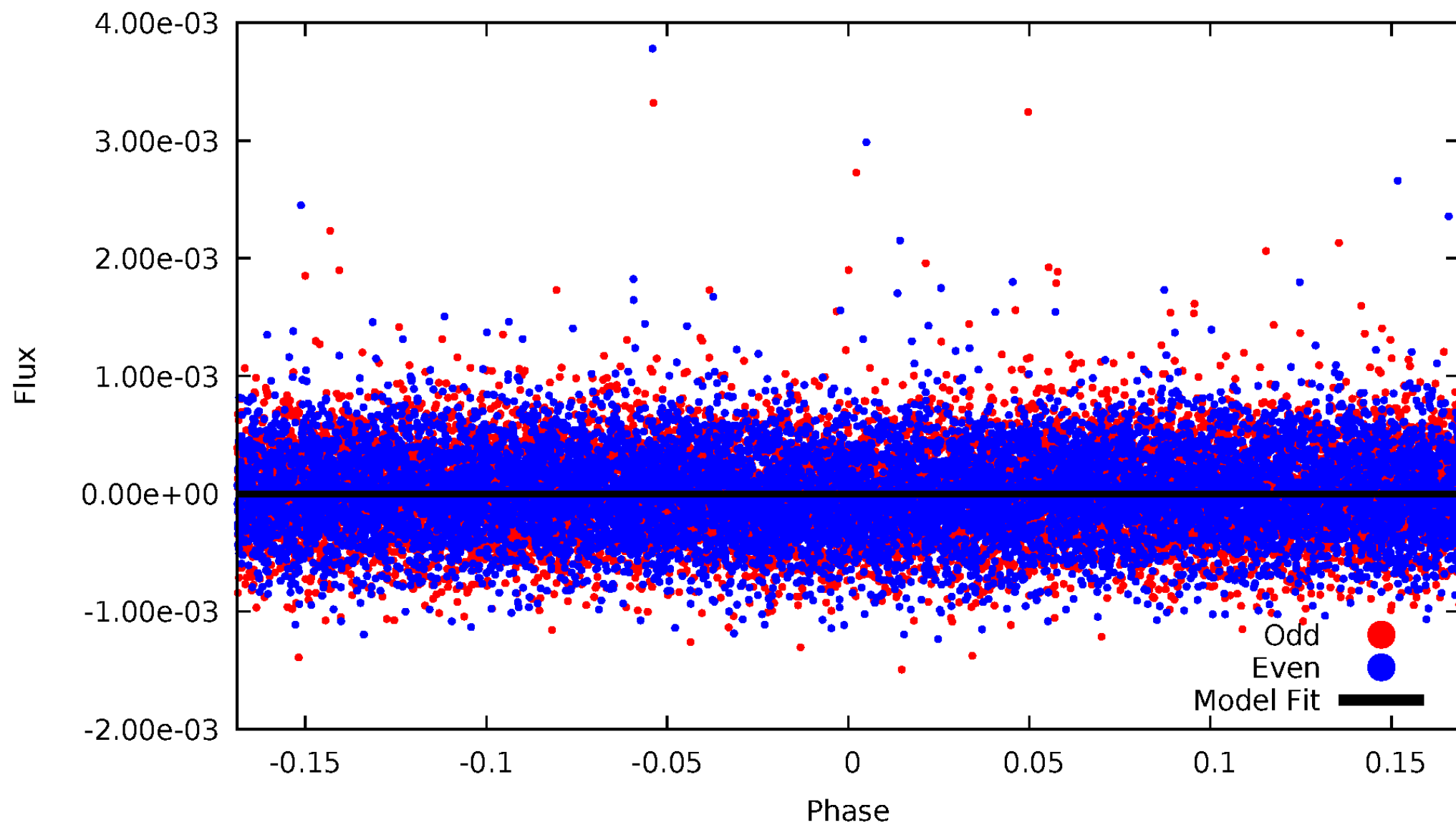


TCE 008042644-01



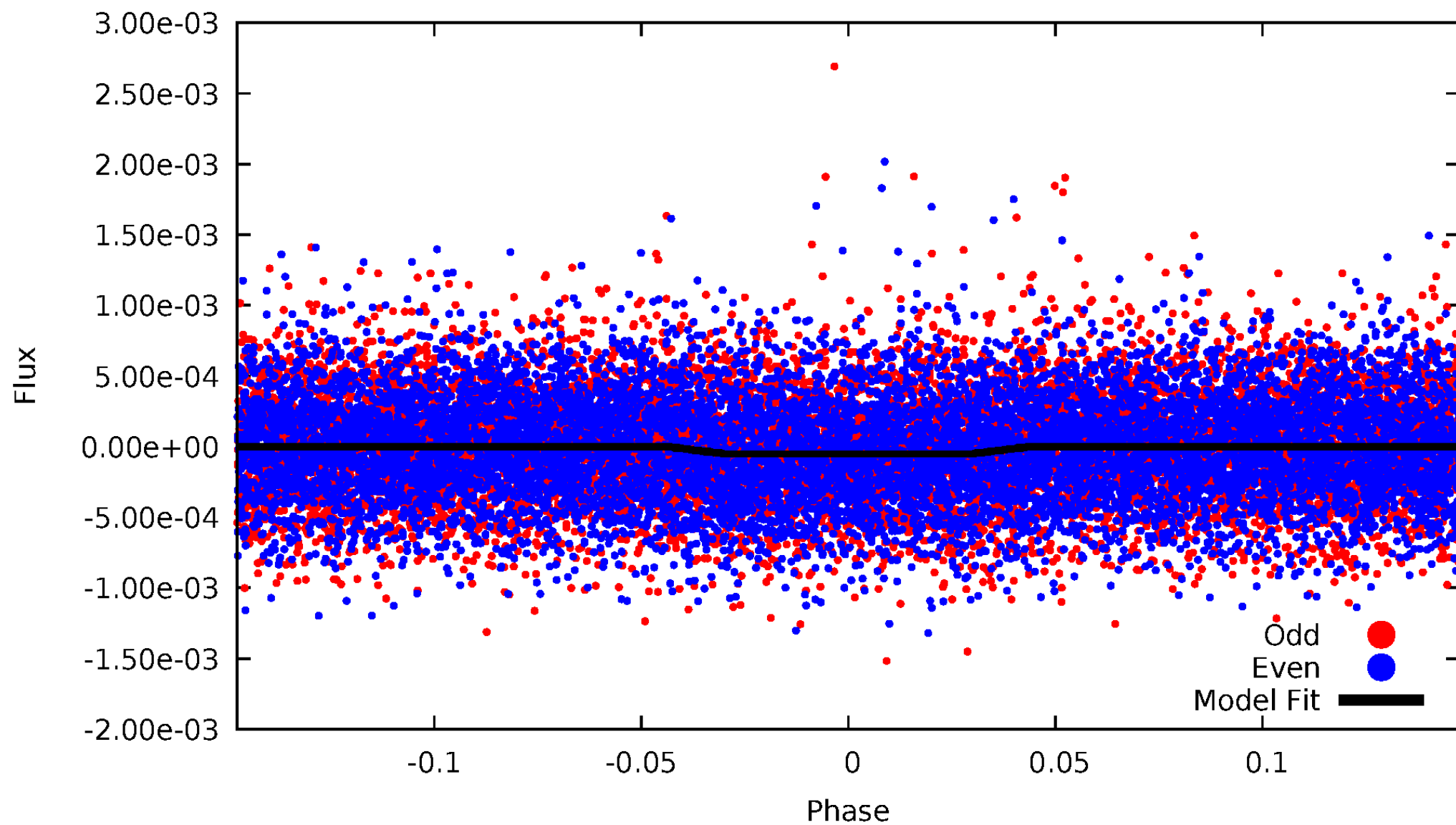
DV Odd/Even

TCE 008042644-01

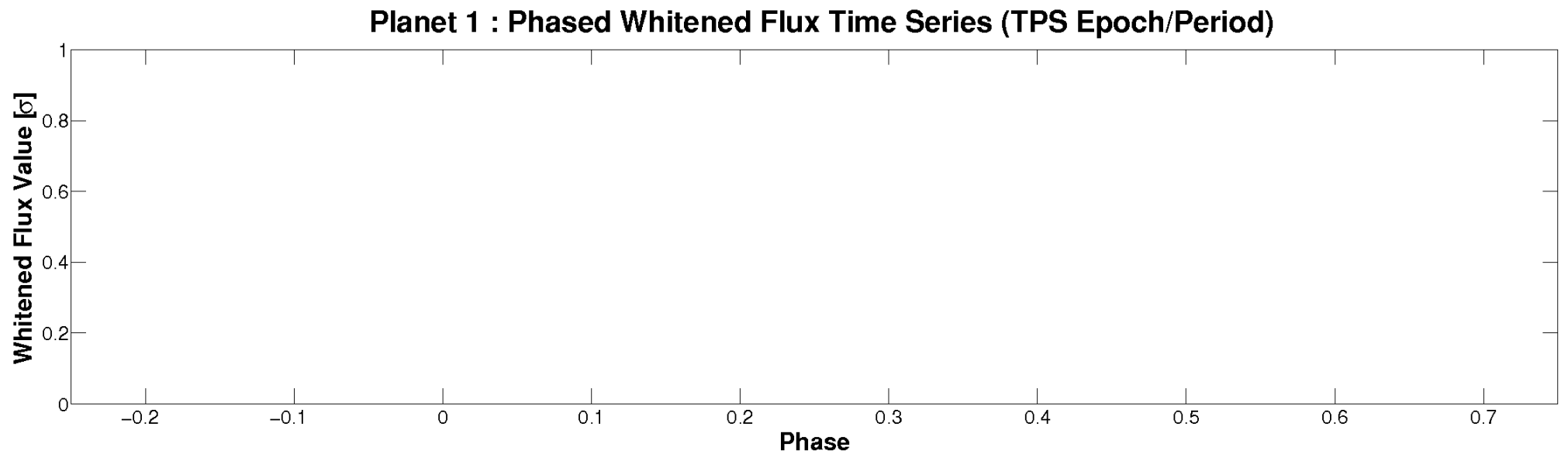
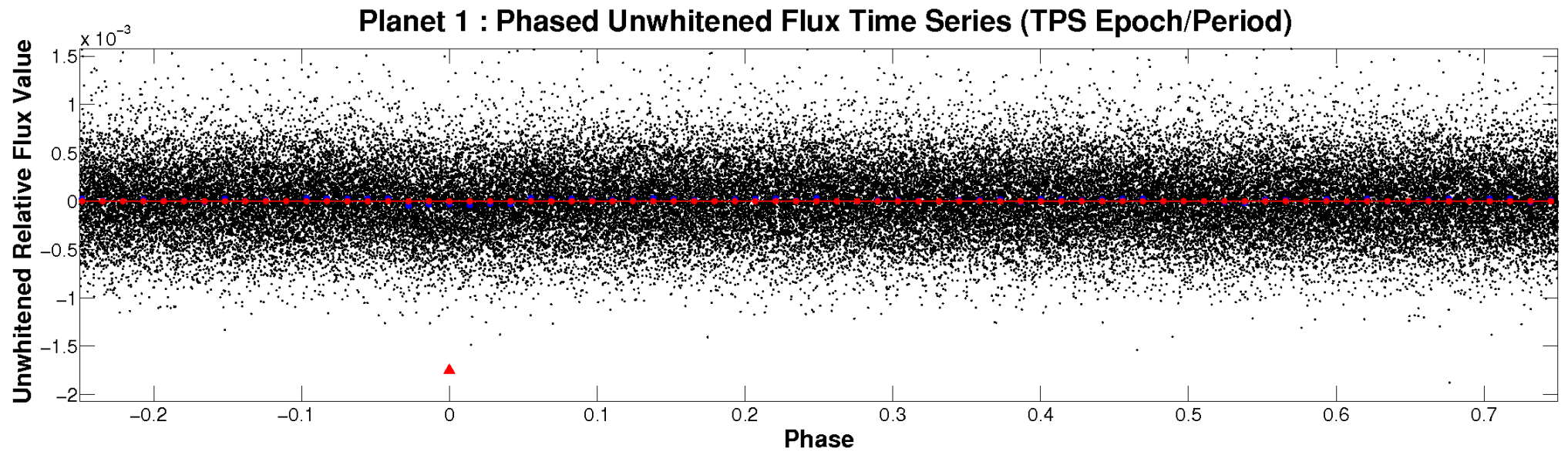


ALT Odd/Even

TCE 008042644-01

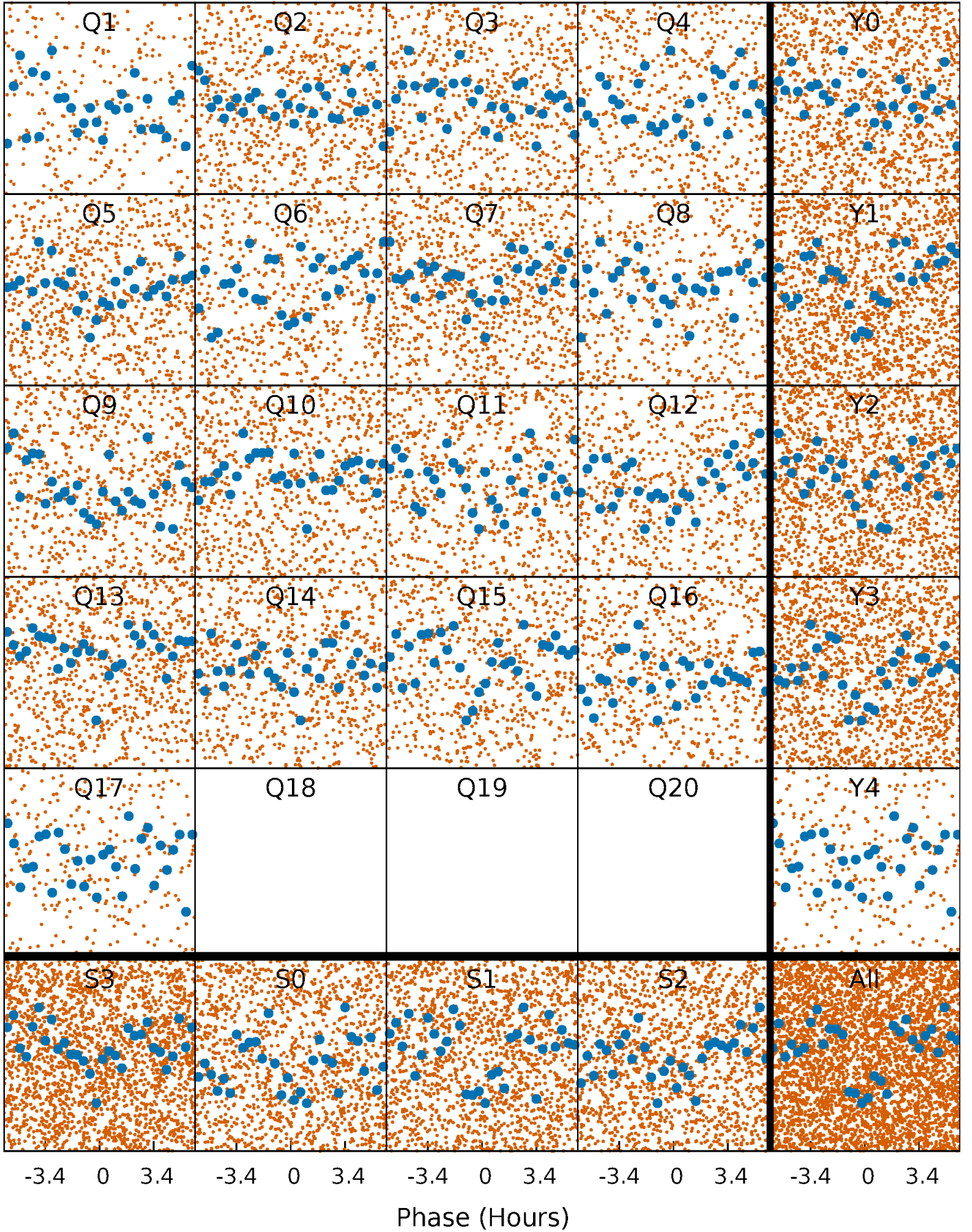


Non-Whitened Vs. Whitened Light Curve



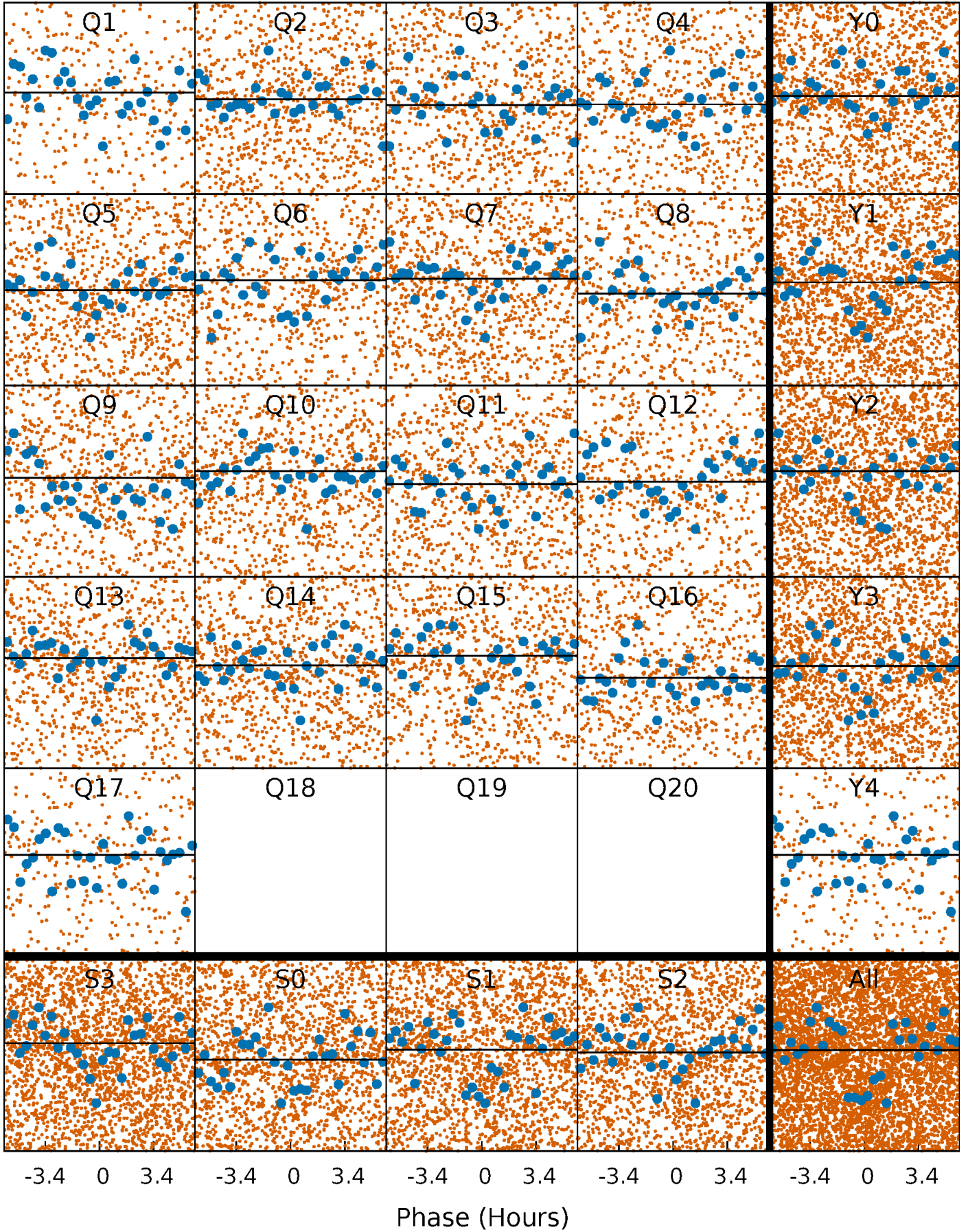
PDC Quarter-Phased Transit Curves

TCE 008042644-01 P= 1.480644 Days $T_0=132.981421$ (BKJD)



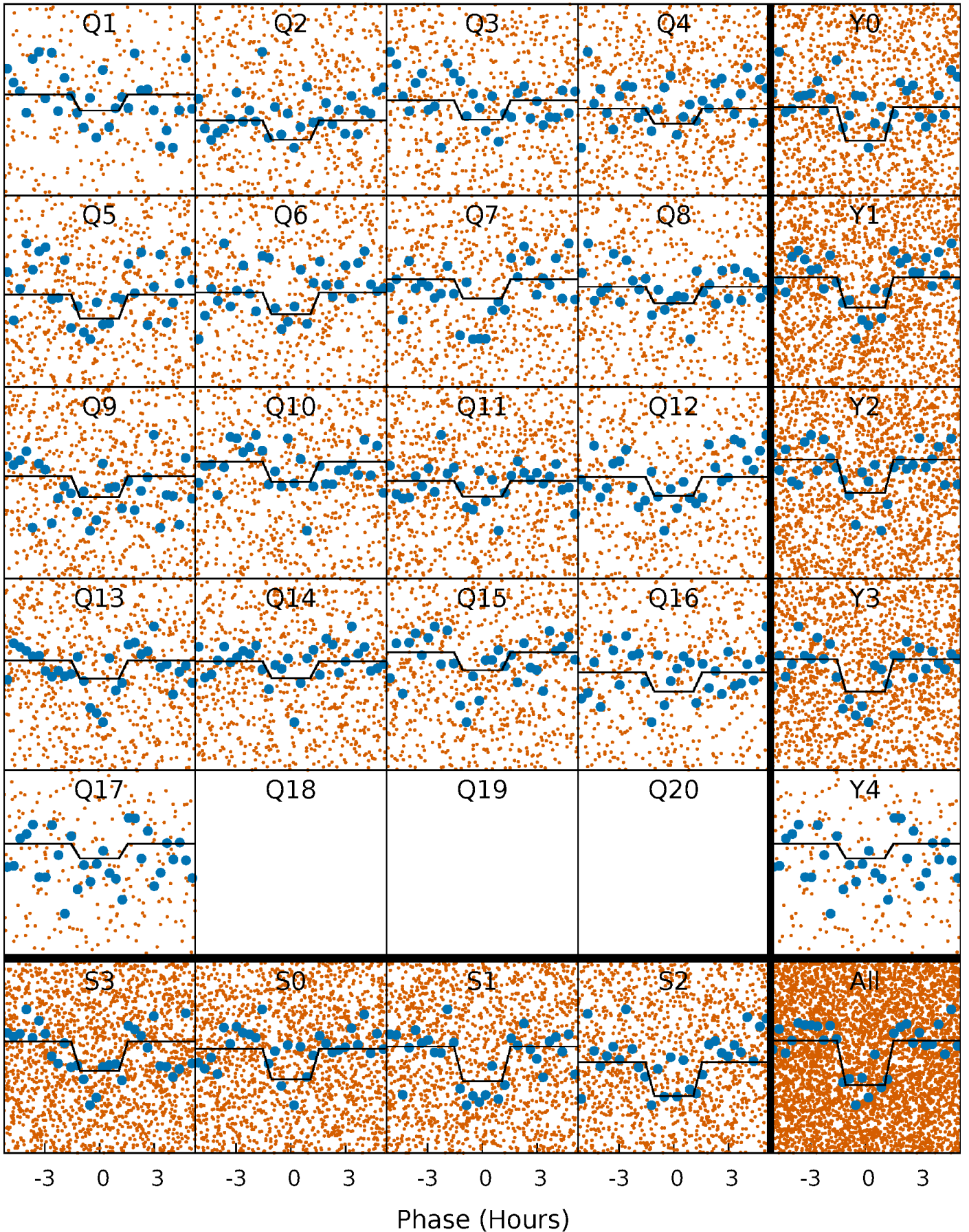
DV Quarter-Phased Transit Curves

TCE 008042644-01 P= 1.480644 Days $T_0=132.981421$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

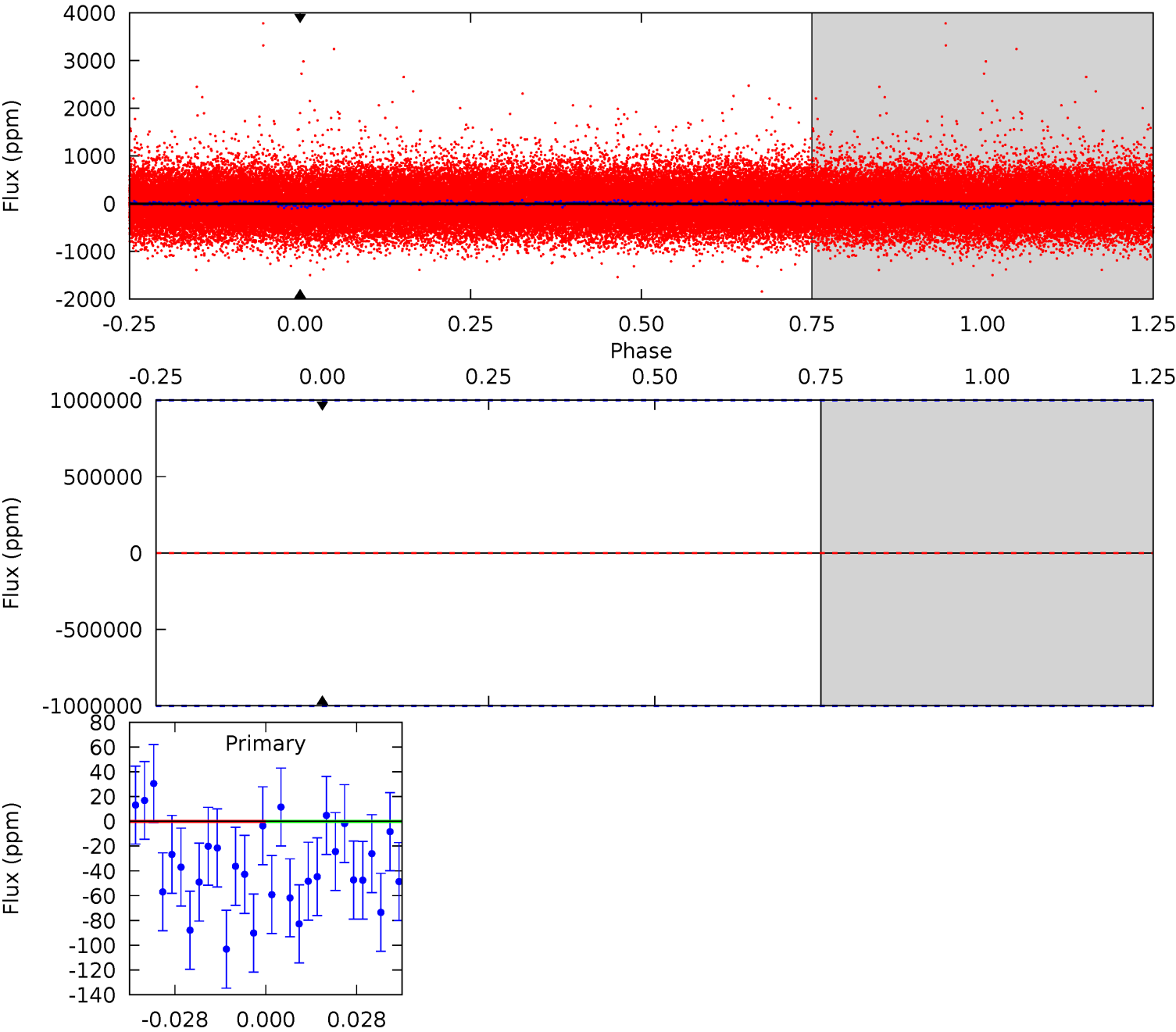
TCE 008042644-01 P= 1.480644 Days $T_0=131.508956$ (BKJD)



DV Model-Shift Uniqueness Test

008042644-01, P = 1.480644 Days, E = 131.500777 Days

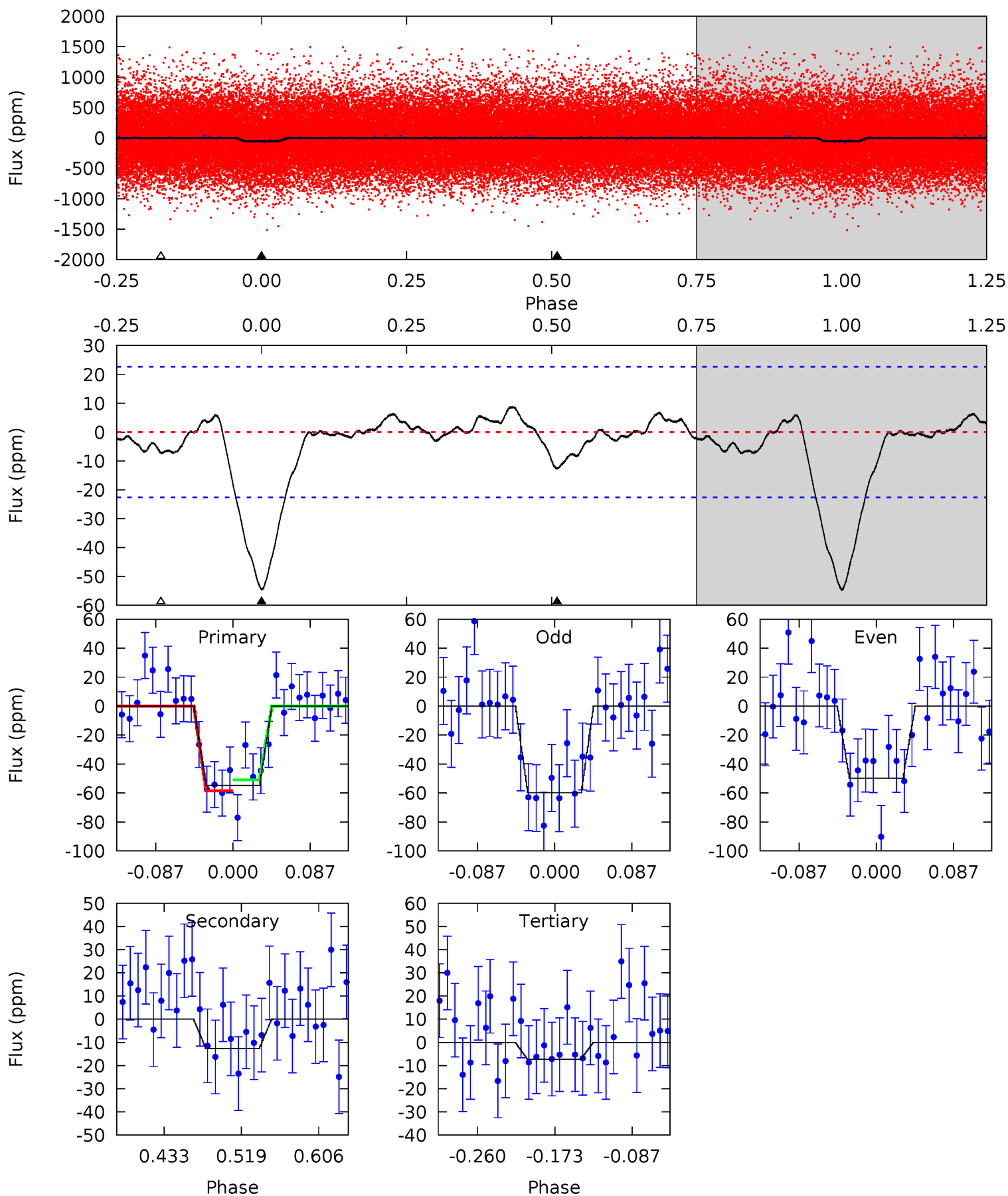
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
0	0	0	0	1.00	1.00	1.00	0	0	0	0	0	0	0	0



Alt Model-Shift Uniqueness Test

008042644-01, P = 1.480644 Days, E = 131.508956 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
11.1	2.57	1.49	0	4.60	1.71	0.68	9.64	11.1	1.08	2.57	1.02	0.96	0.14	0.77



Stellar Parameters For KIC 008042644

	$T_{\text{eff}} (K)$	$\log(g)$	$[\text{Fe}/\text{H}]$	$R (R_{\odot})$	$M (M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	6187^{+175}_{-219}	$4.499^{+0.054}_{-0.216}$	$-0.320^{+0.300}_{-0.300}$	$0.937^{+0.305}_{-0.102}$	$1.011^{+0.134}_{-0.134}$	$1.732^{+0.398}_{-0.983}$
	+3%/-4%	+1%/-5%	+94%/-94%	+33%/-11%	+13%/-13%	+23%/-57%
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 008042644-01 / KOI 6957.01

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	0 ± 1000000	$8.49^{+8.34}_{-5.83}$	2359^{+173}_{-122}	4604^{+23422}_{-24430}	$7.385^{+1166.358}_{-640.073}$
Alt.	-13 ± 5	$7.68^{+7.78}_{-5.36}$	2362^{+181}_{-118}	-2597^{+5515}_{-140}	$0.067^{+0.724}_{-0.052}$

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 $A_{obs} \gg 1.0$

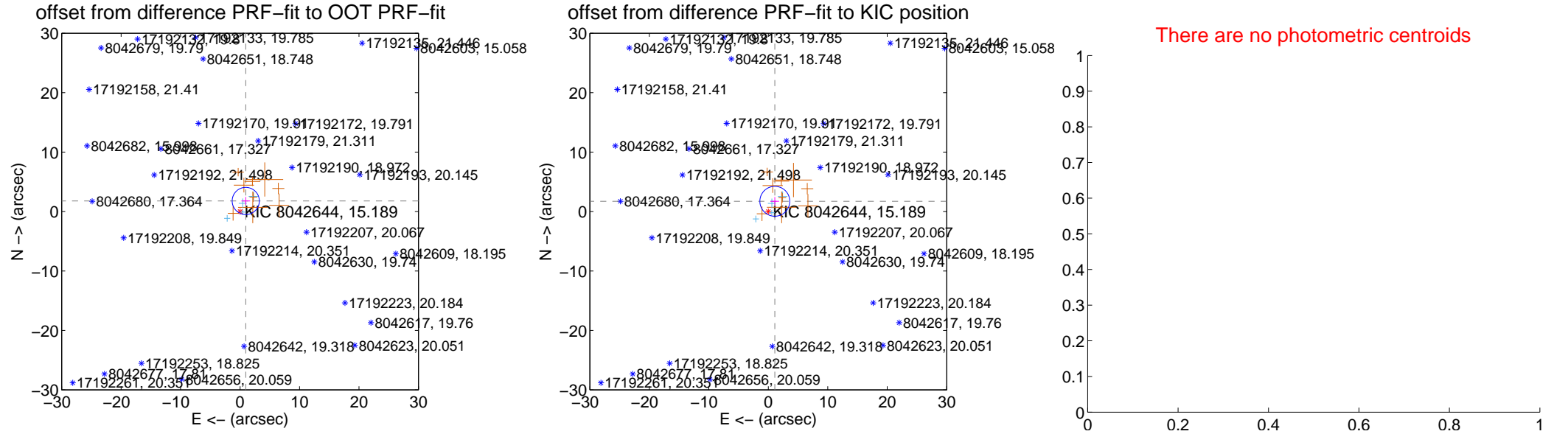
DV Centroid Data

Supplemental centroid analysis for 008042644-01. Kepler magnitude: 15.19. Transit SNR -1.00

There are 4 quarters with good PRF difference image offsets

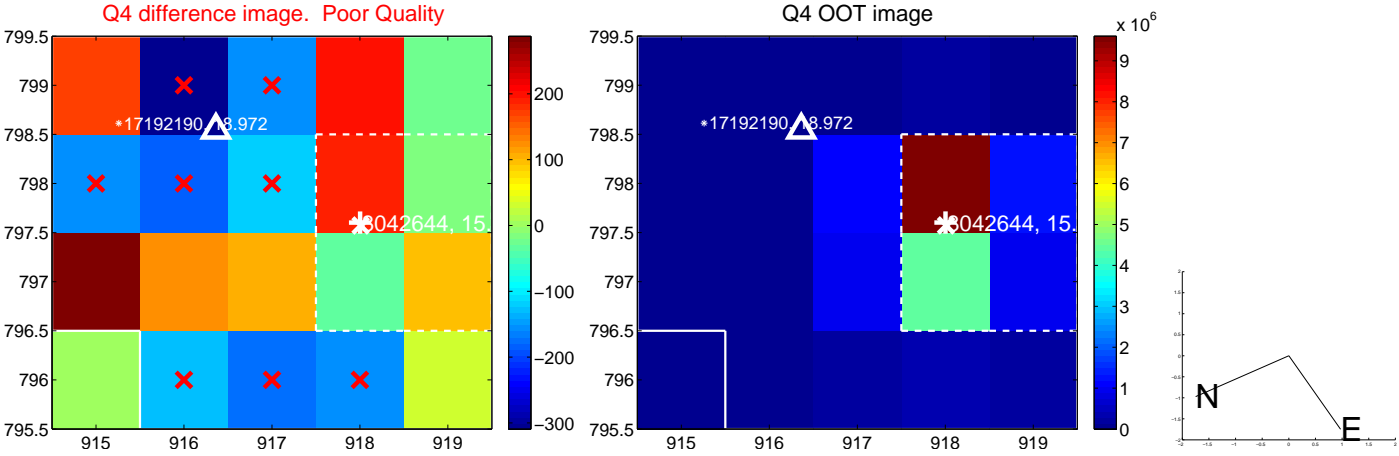
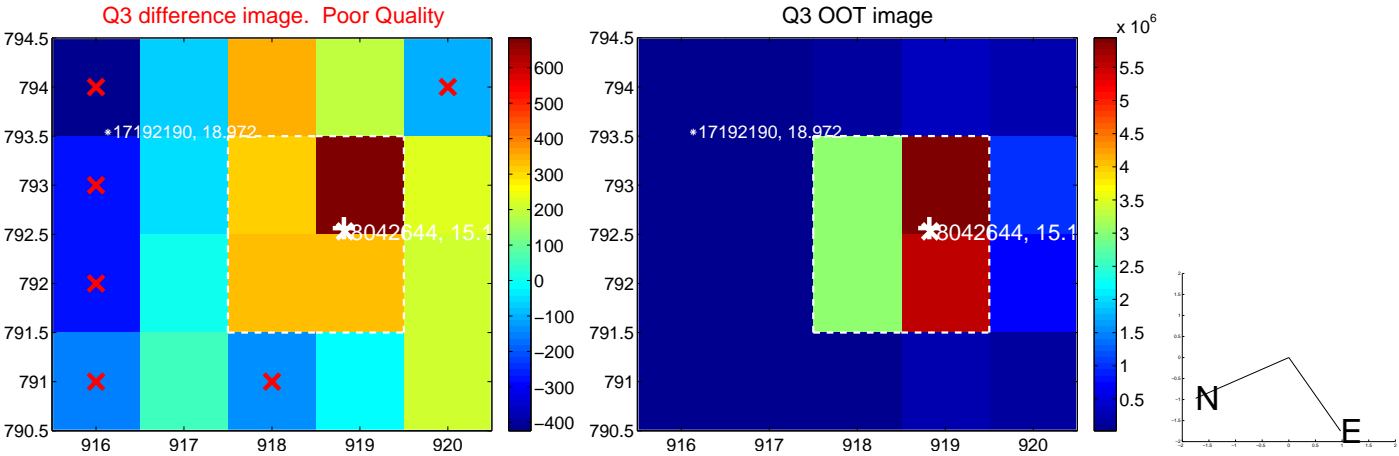
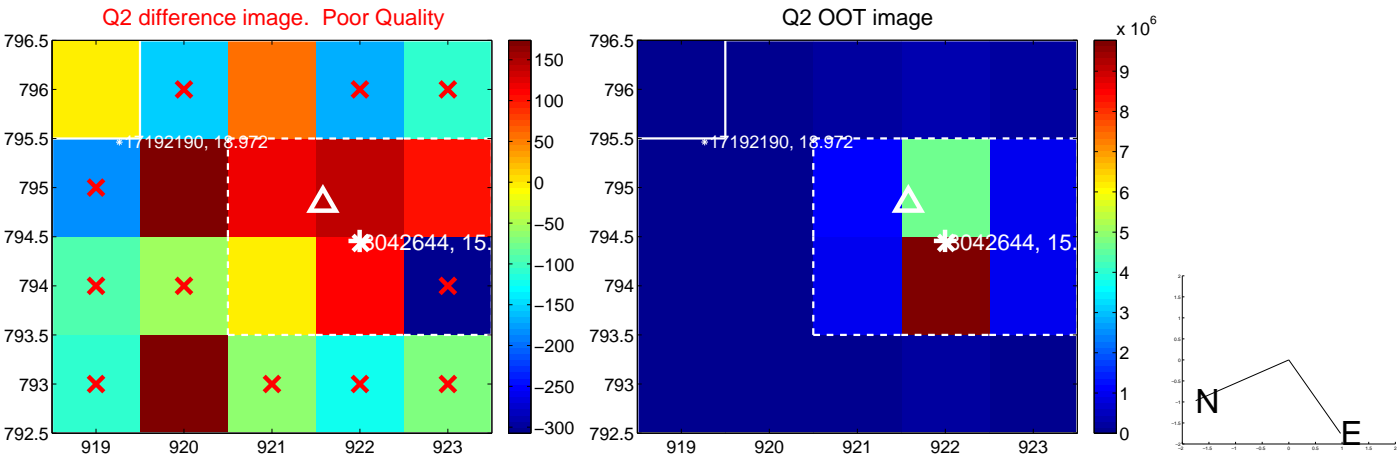
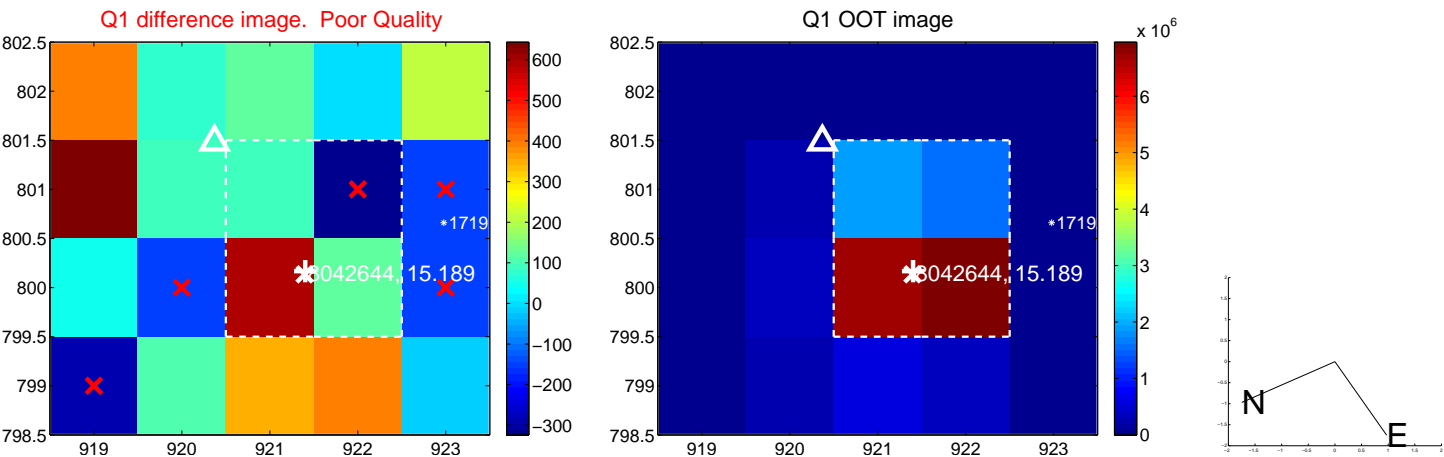
The direct PRF centroid is offset from the target star catalog position by about 0.13 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	2.023 ± 0.761	2.66	-0.957 ± 0.738	1.783 ± 0.661
PRF-fit source offset from KIC position	2.046 ± 0.838	2.44	-1.098 ± 0.712	1.727 ± 0.709
photometric centroid source offset	—	—	—	—

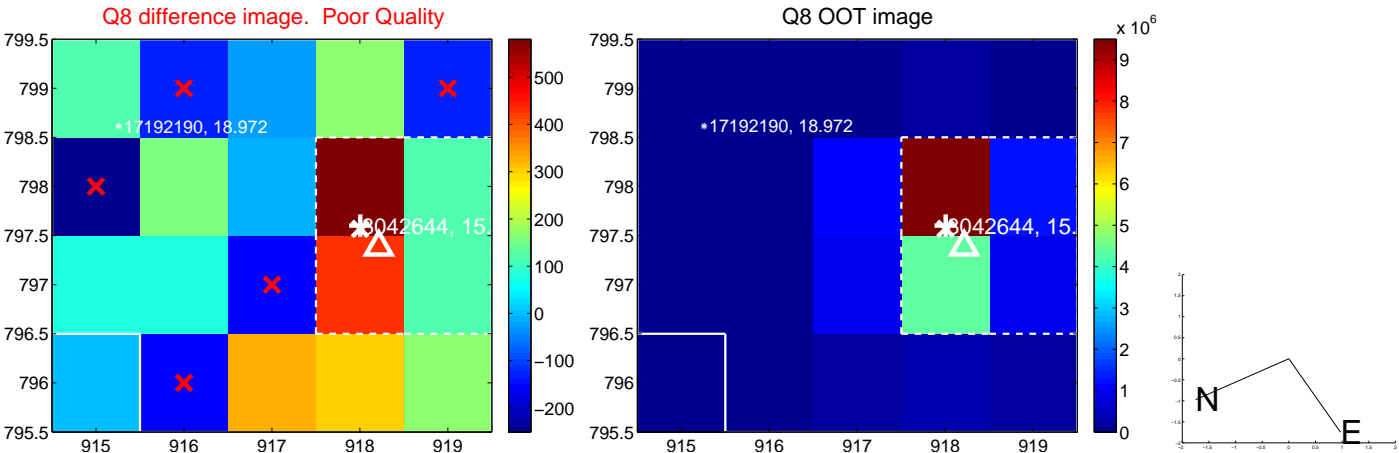
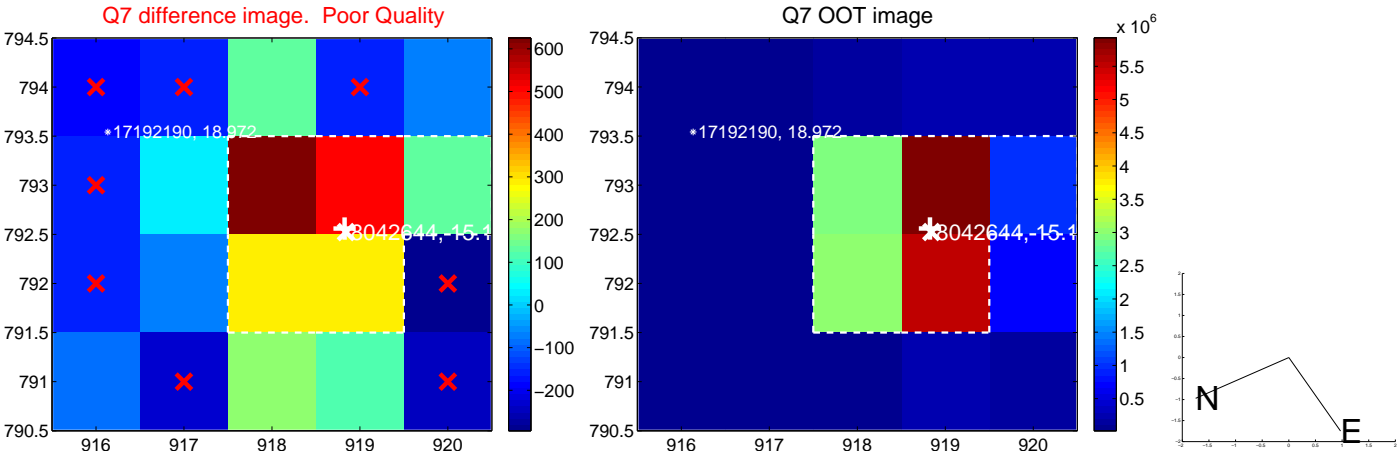
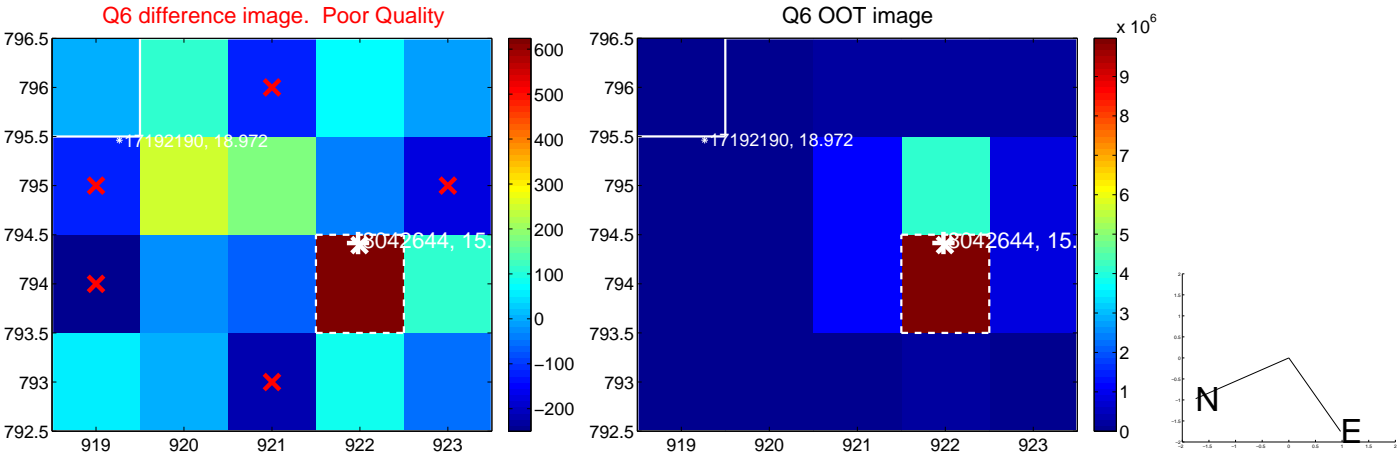
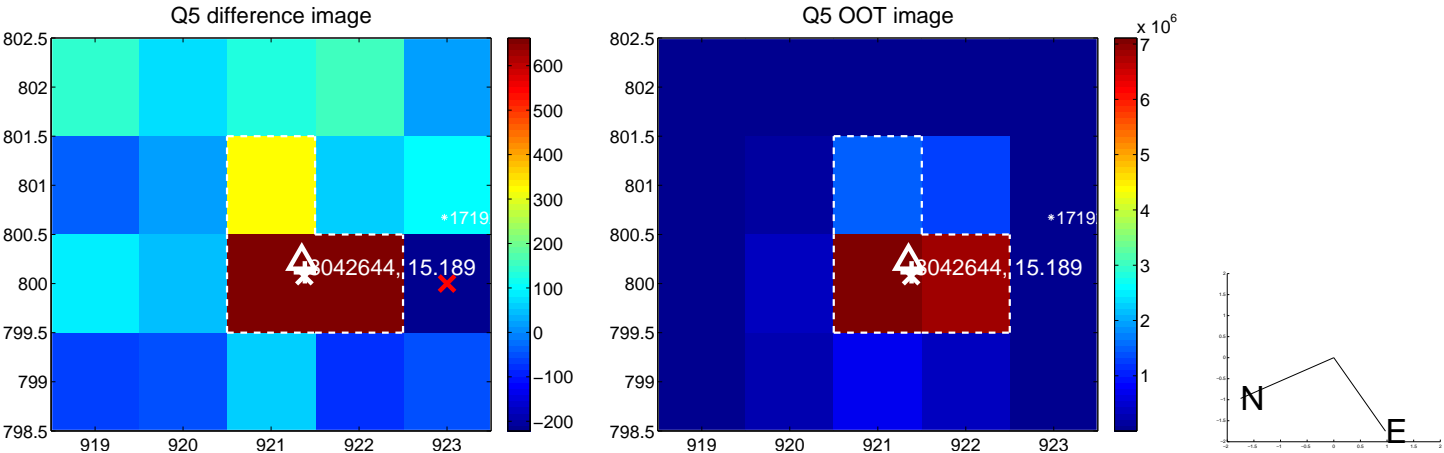


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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

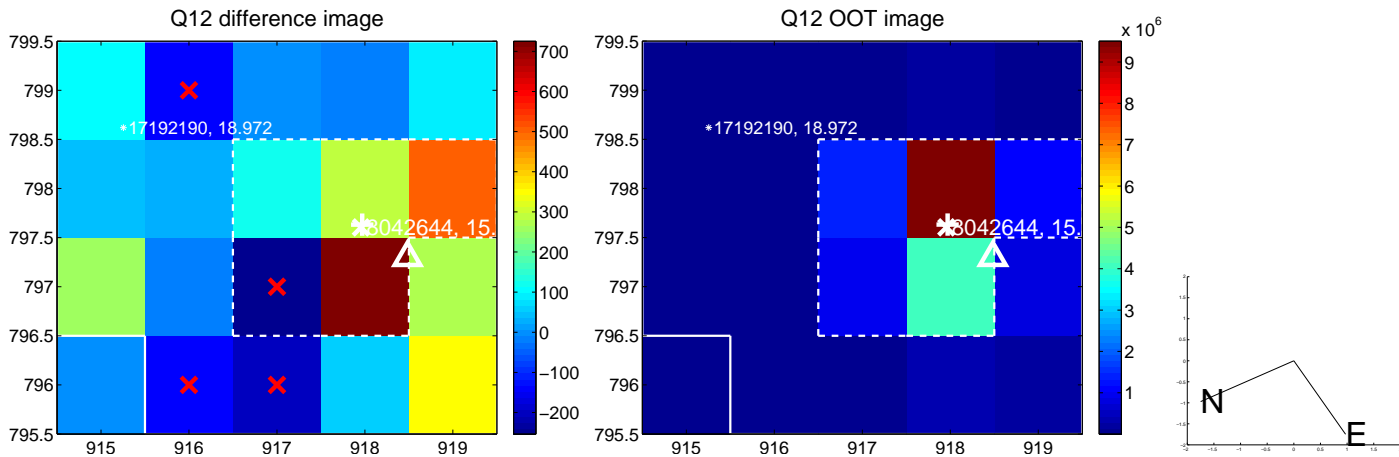
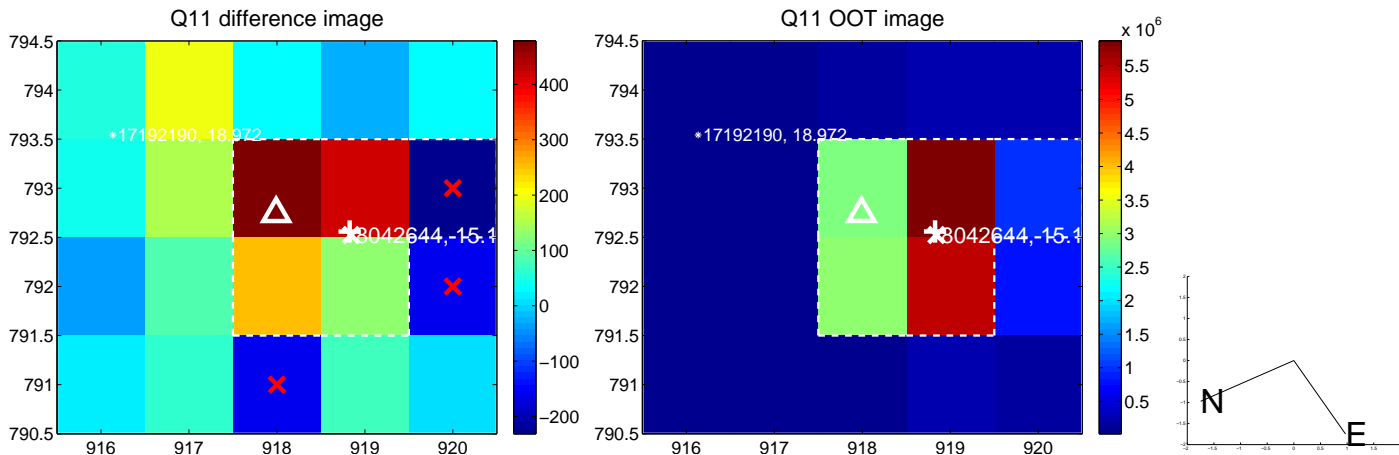
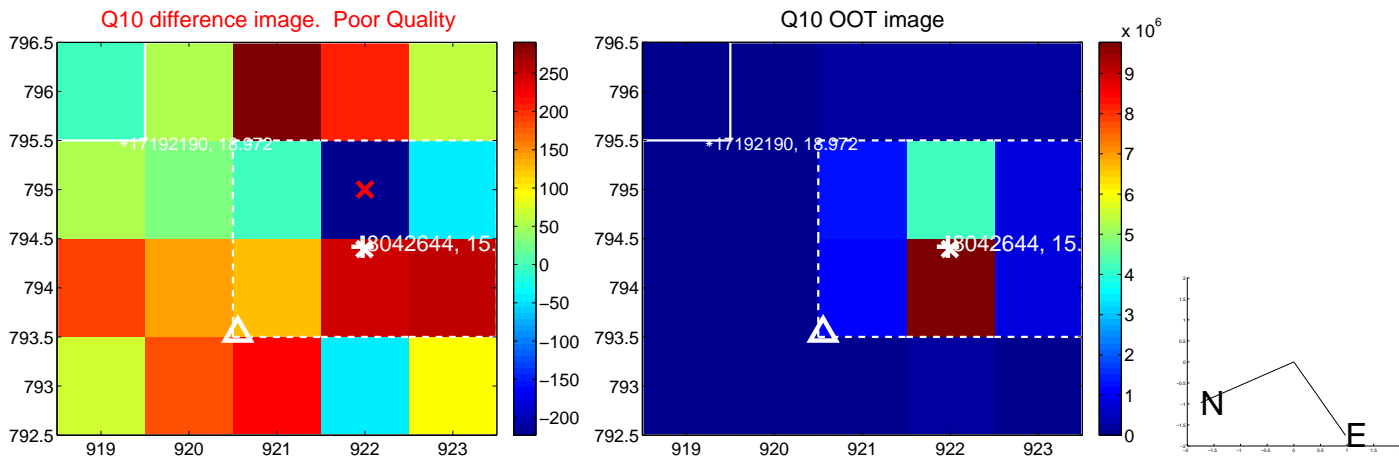
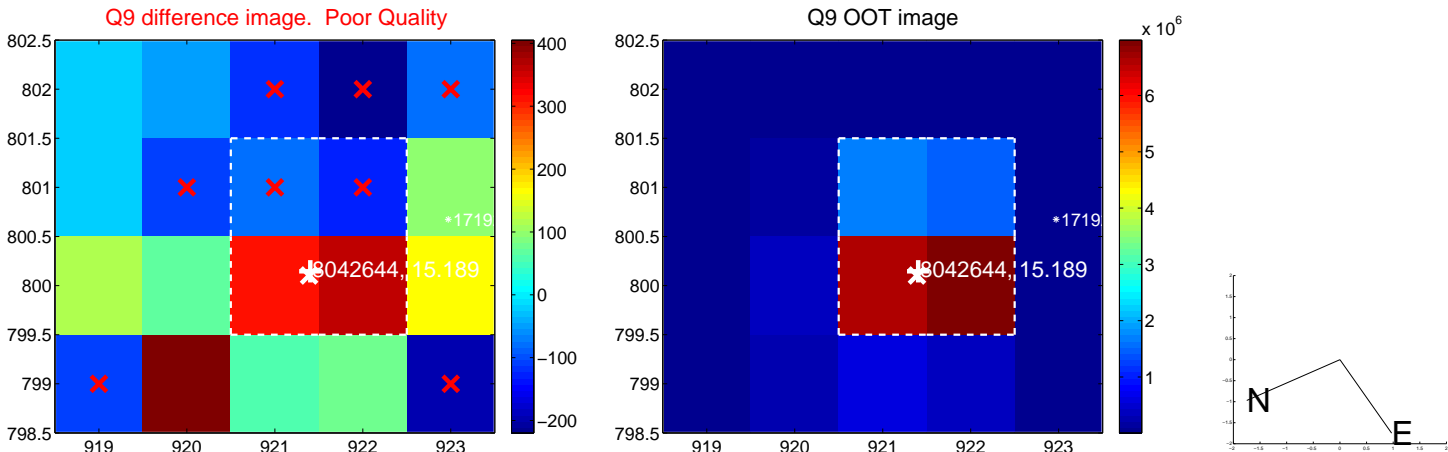
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



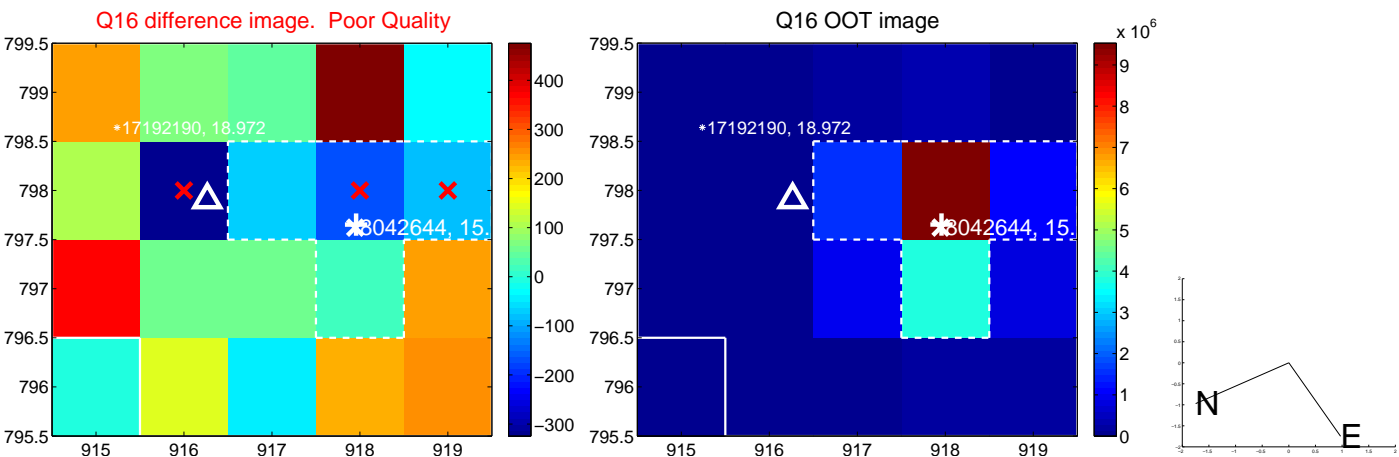
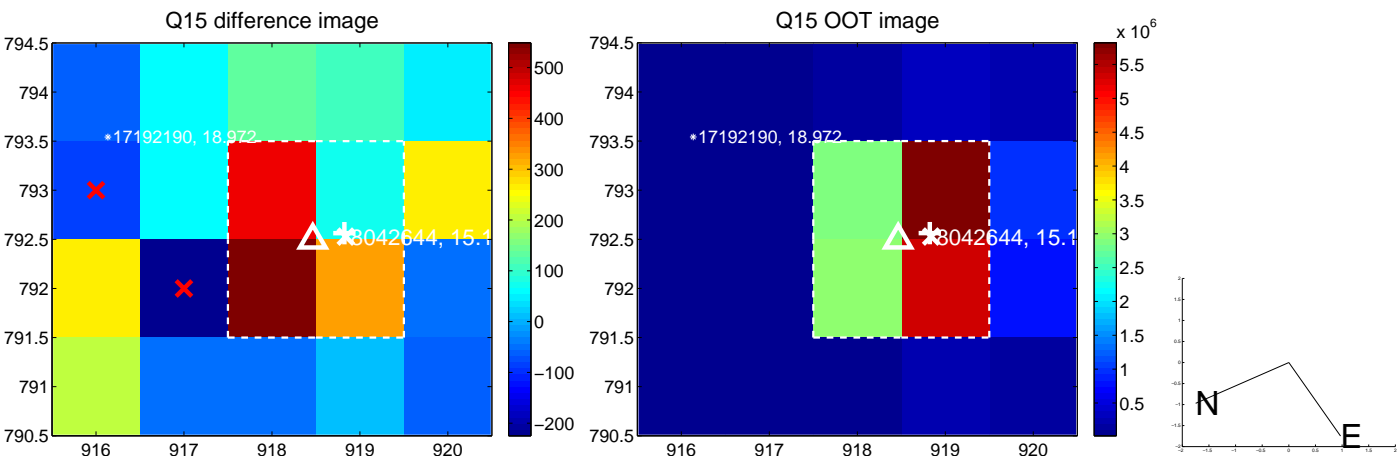
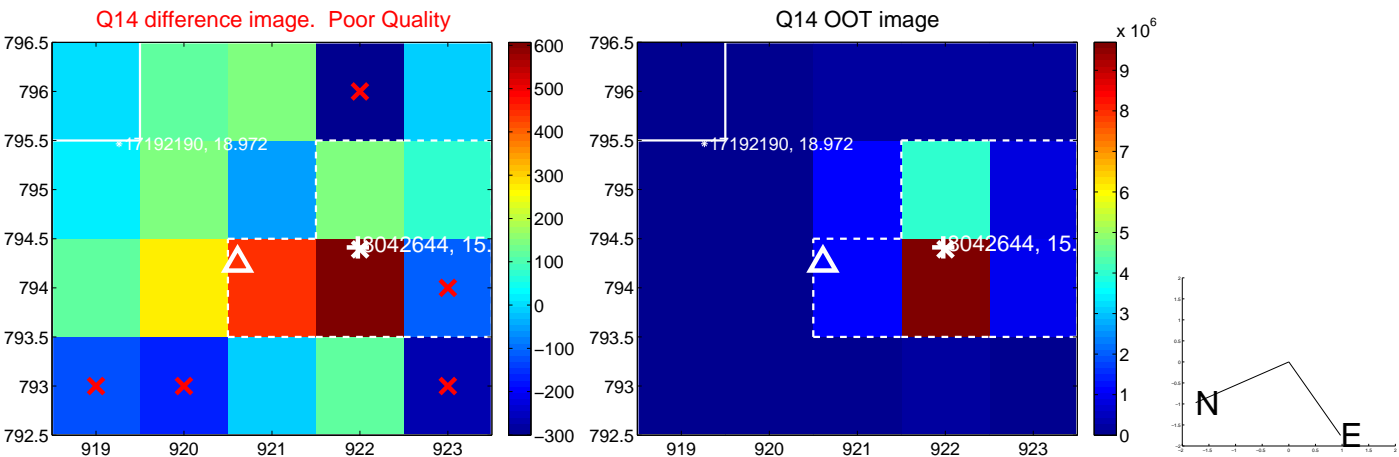
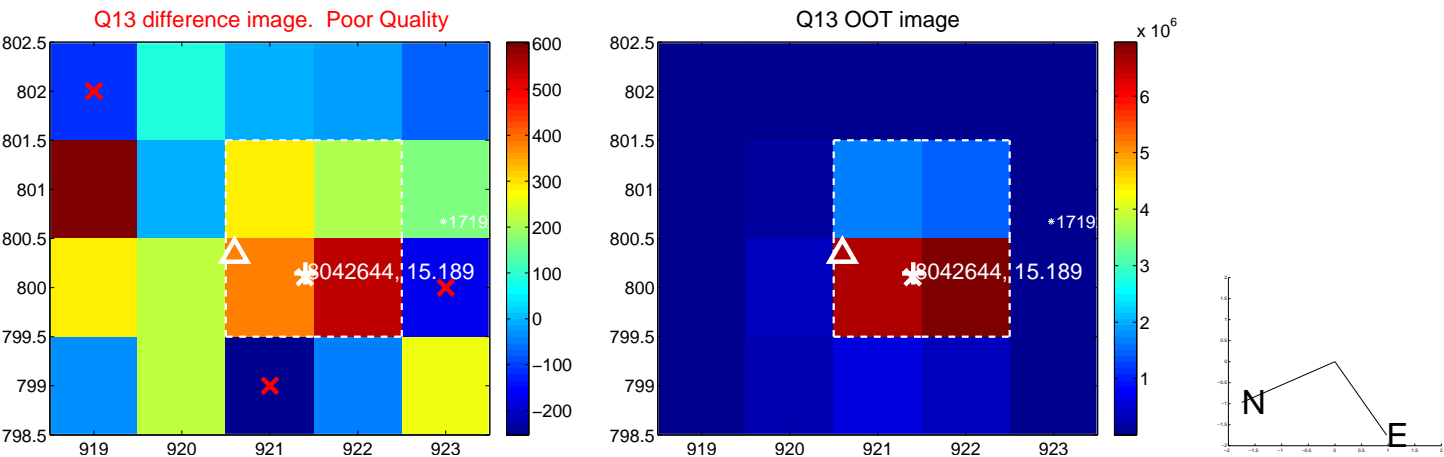
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



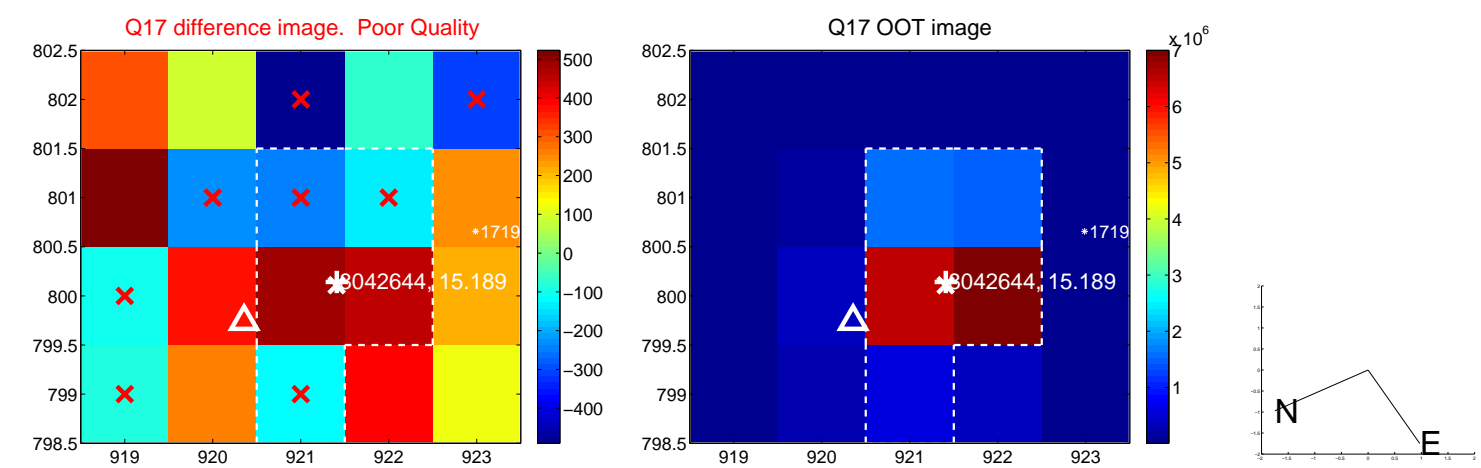
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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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

