

KIC 004764008

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})
004764008-01	OBS	No	0.657723	131.953919	18.9	6.905	8.0	7.1	1.98	8317	0.87	52763.56

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
004764008-01	OBS	FP	0.00	1	0	0	0	LPP_DV—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.

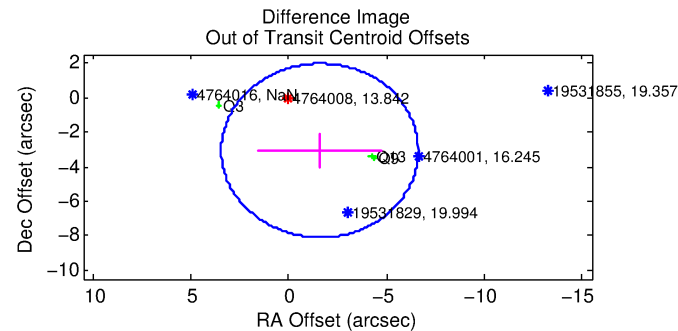
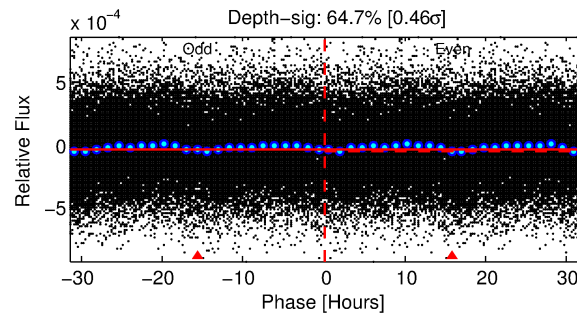
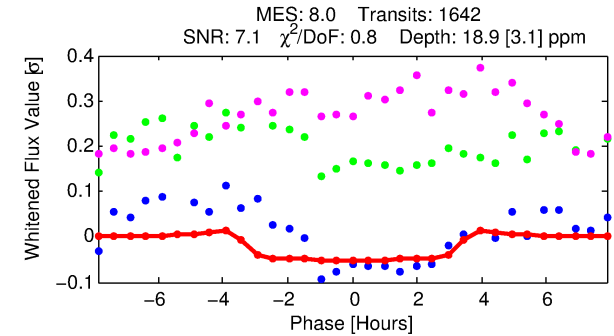
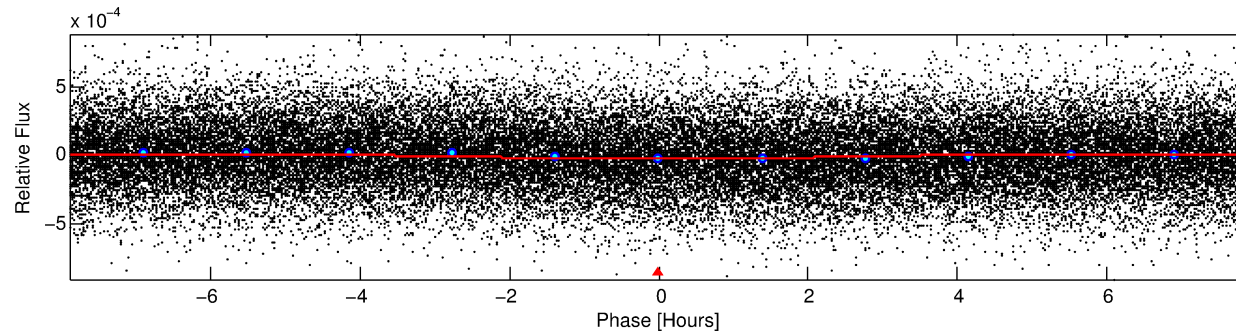
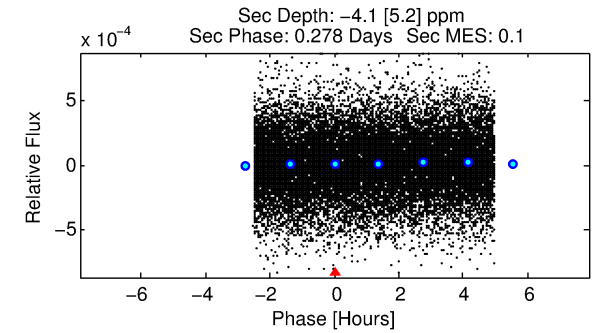
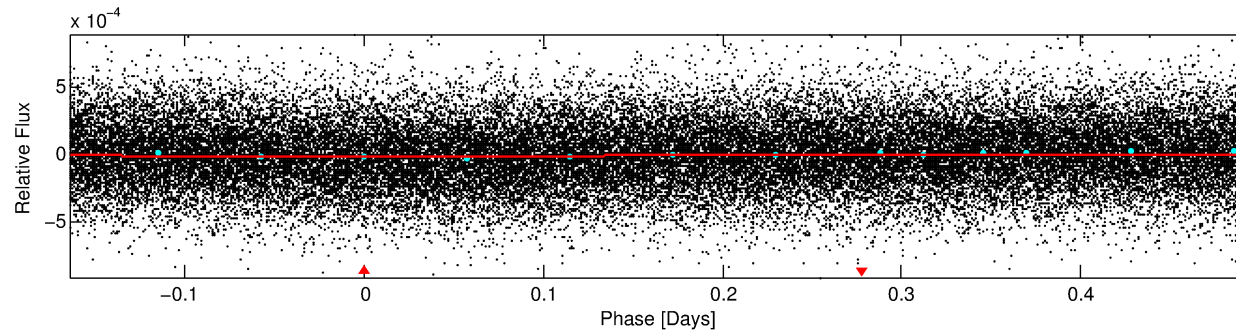
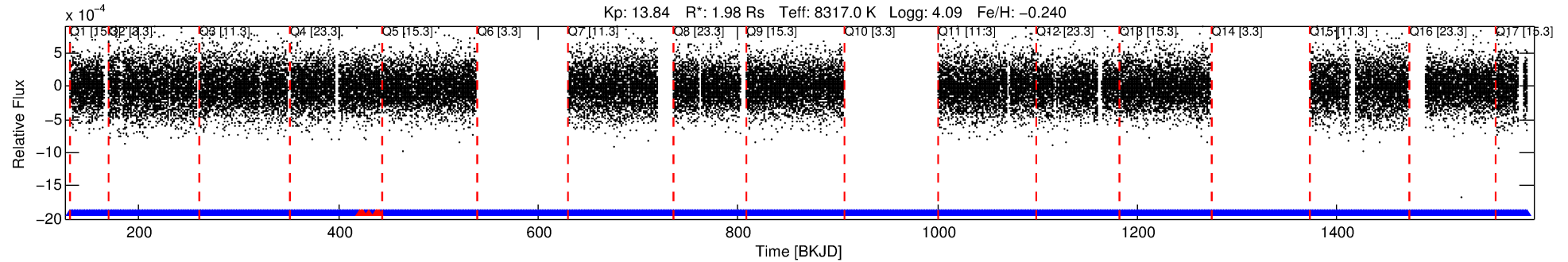
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 004764008-01

No Significant Match Found

DV One-Page Summary

KIC: 4764008 Candidate: 1 of 1 Period: 0.658 d



DV Fit Results:

Period = 0.65772 [0.00002] d
Epoch = 131.9539 [0.0072] BKJD
Rp/R* = 0.0040 [0.0037]
a/R* = 1.02 [0.23]
b = 0.24 [21.32]
Seff = 52763.56 [11812.21]
Teq = 3865 [216] K
Rp = 0.87 [0.82] Re
a = 0.0178 [0.0026] AU
Ag = N/A
Teffp = N/A

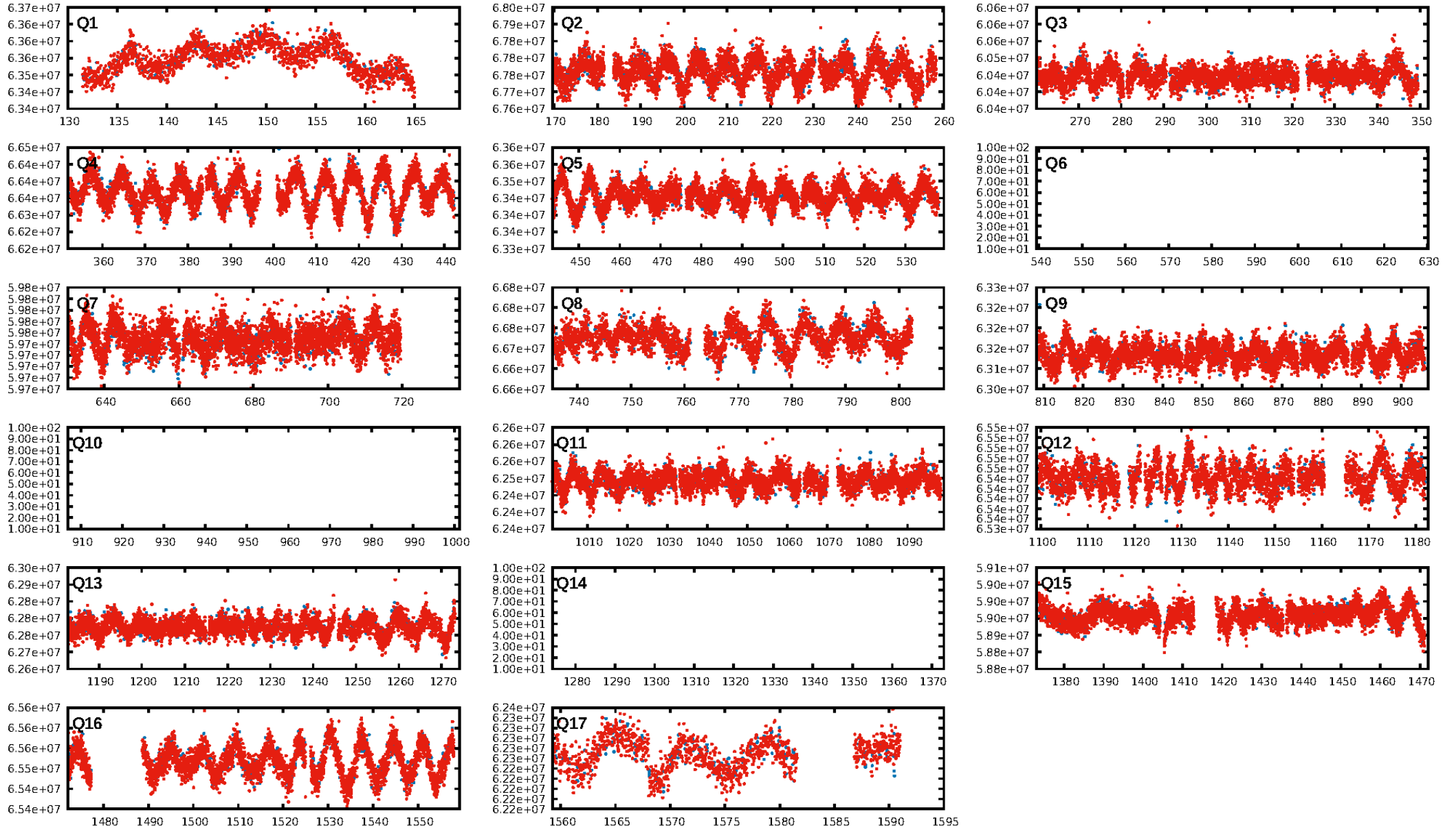
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: N/A
RollingBand-fgt: 0.99 [1541/1549]
GhostDiagnostic-chr: 1.583
Centroid-sig: 0.1%
Centroid-so: 1.857 arcsec [1.90σ]
OotOffset-rm: 3.453 arcsec [2.06σ]
KicOffset-rm: 3.534 arcsec [1.55σ]
OotOffset-st: 0/1/0/2 [3]
KicOffset-st: 0/1/0/2 [3]
DiffImageQuality-fgm: 0.00 [0/3]
DiffImageOverlap-fno: 1.00 [14/14]

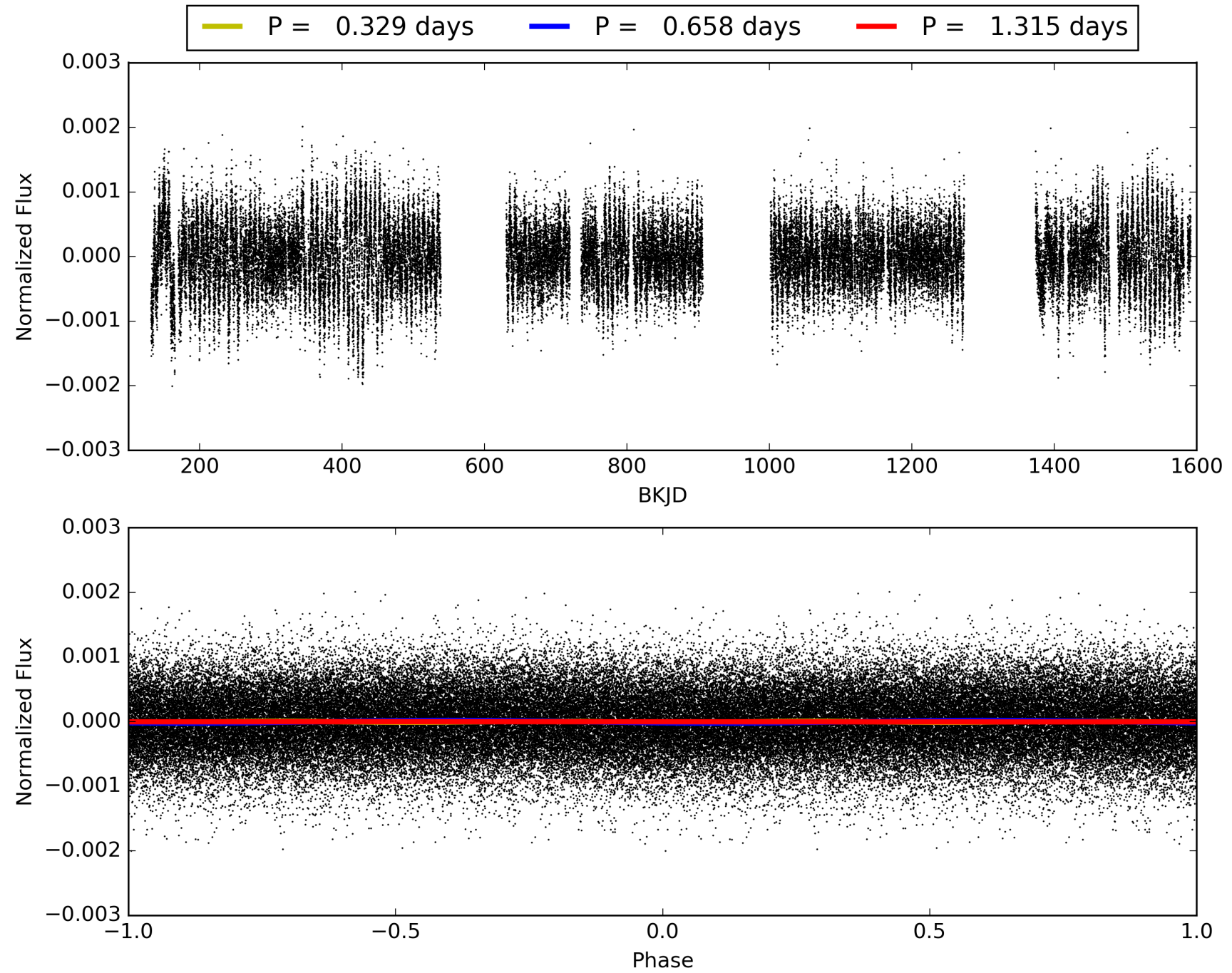
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 30-Jan-2016 04:32:57 Z

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

TCE 004764008-01, PDC Light Curves

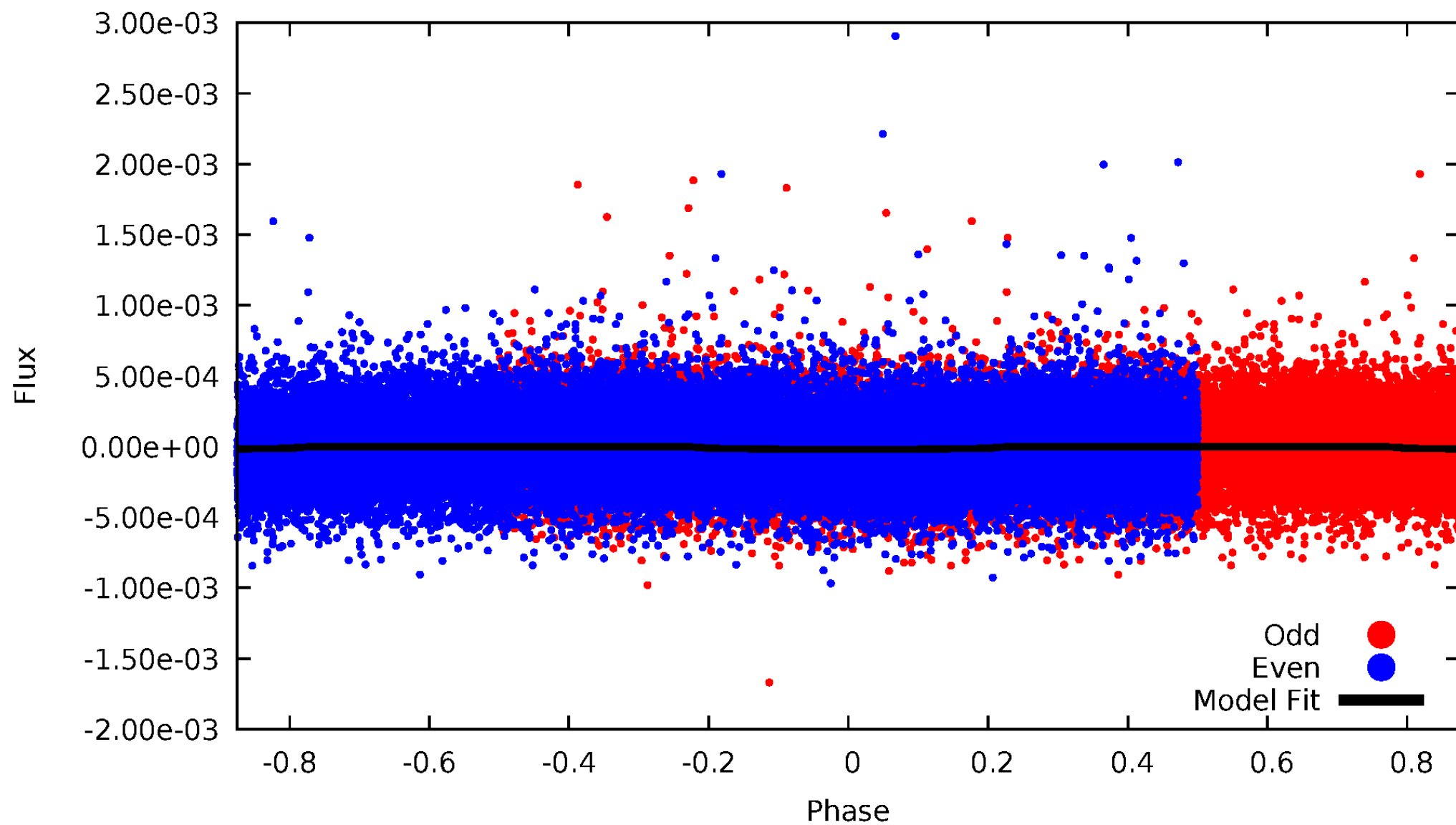


TCE 004764008-01



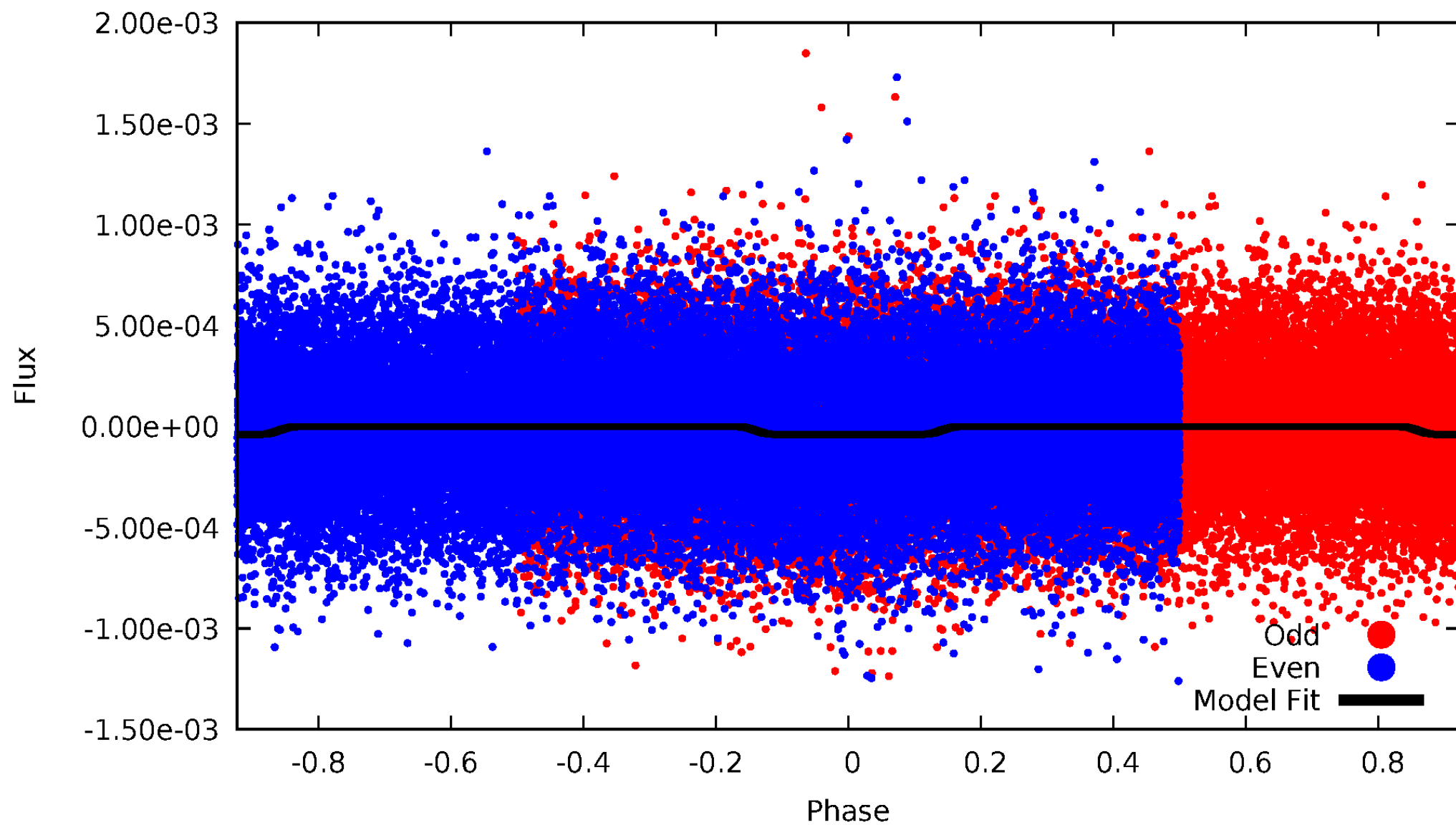
DV Odd/Even

TCE 004764008-01

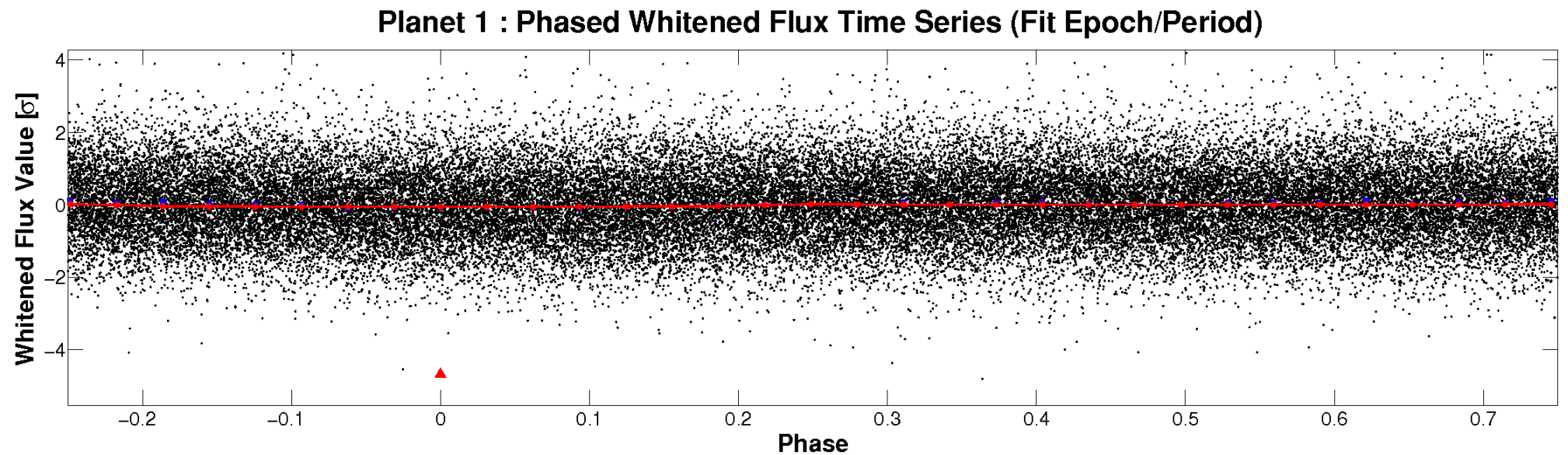
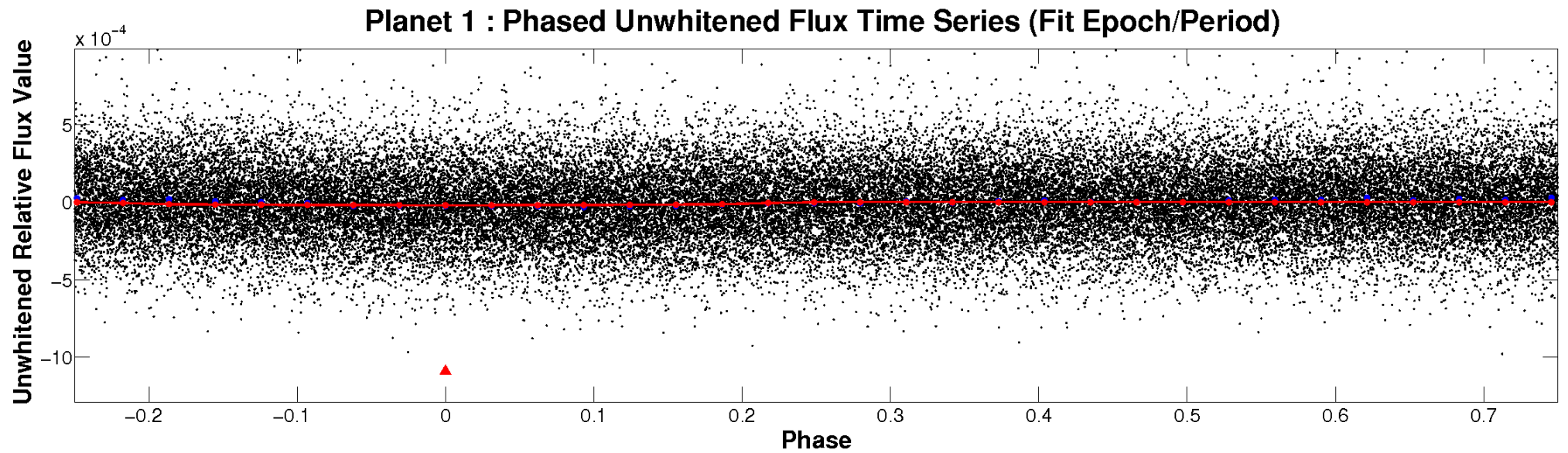


ALT Odd/Even

TCE 004764008-01

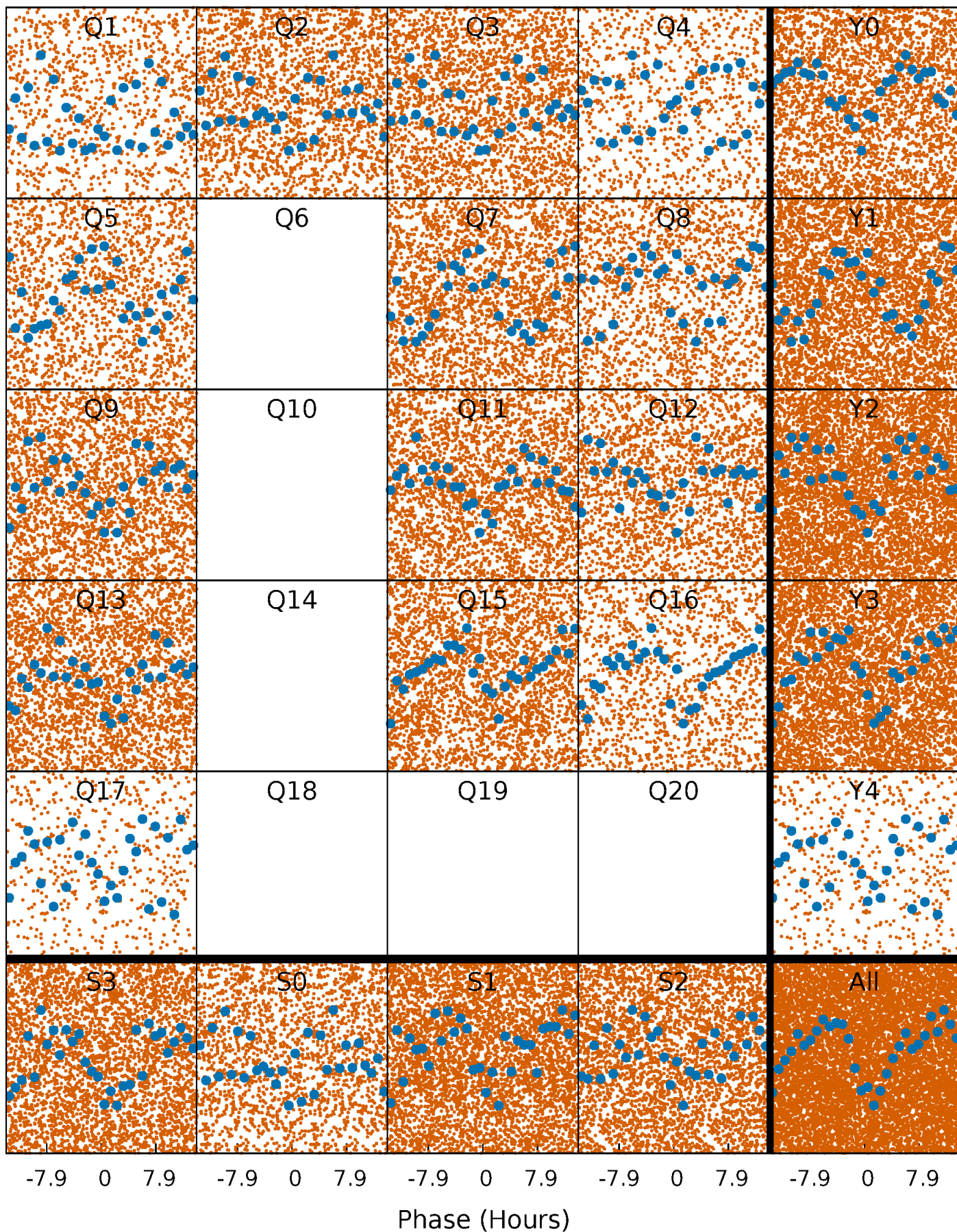


Non-Whitened Vs. Whitened Light Curve



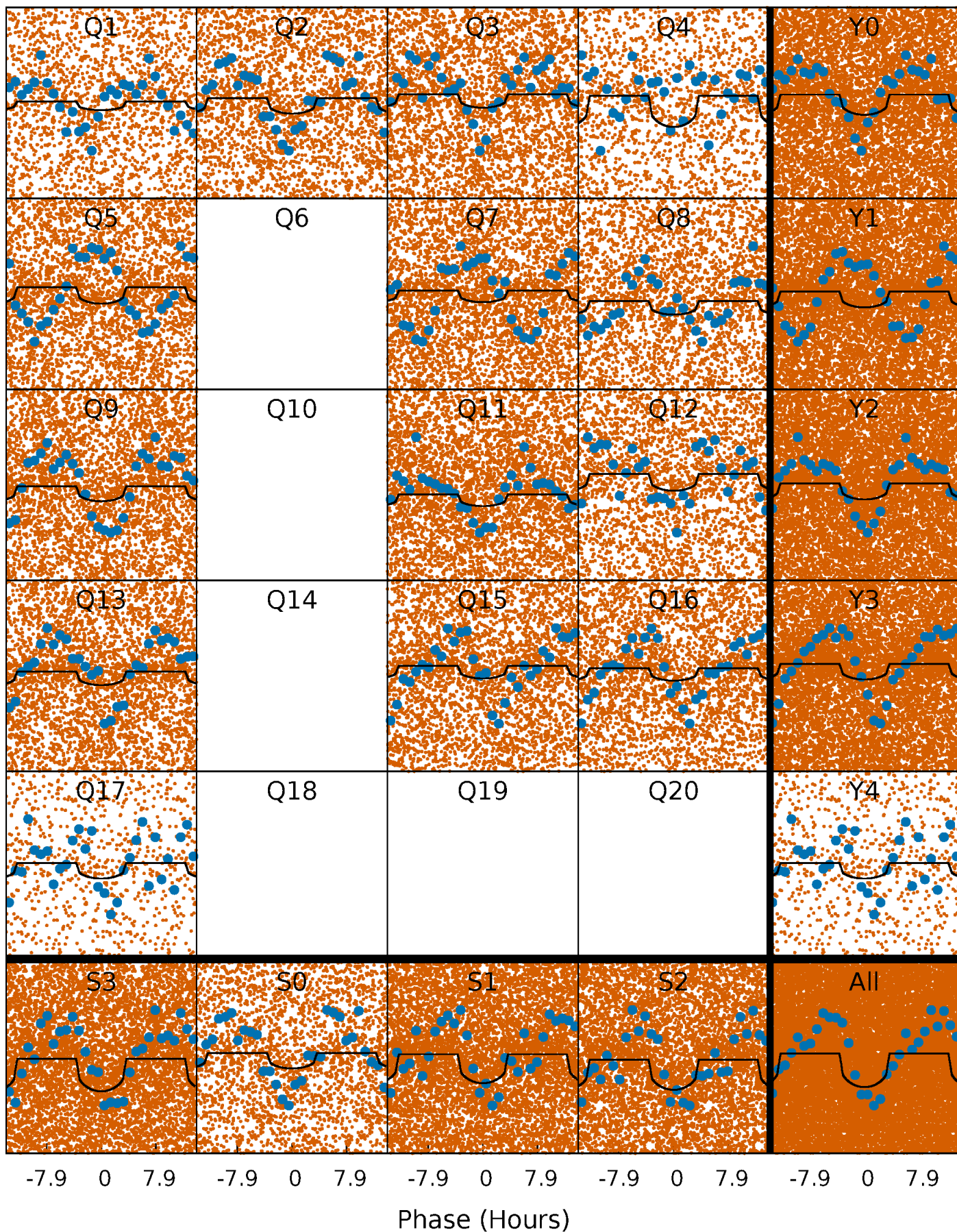
PDC Quarter-Phased Transit Curves

TCE 004764008-01 P= 0.657723 Days $T_0=131.953919$ (BKJD)



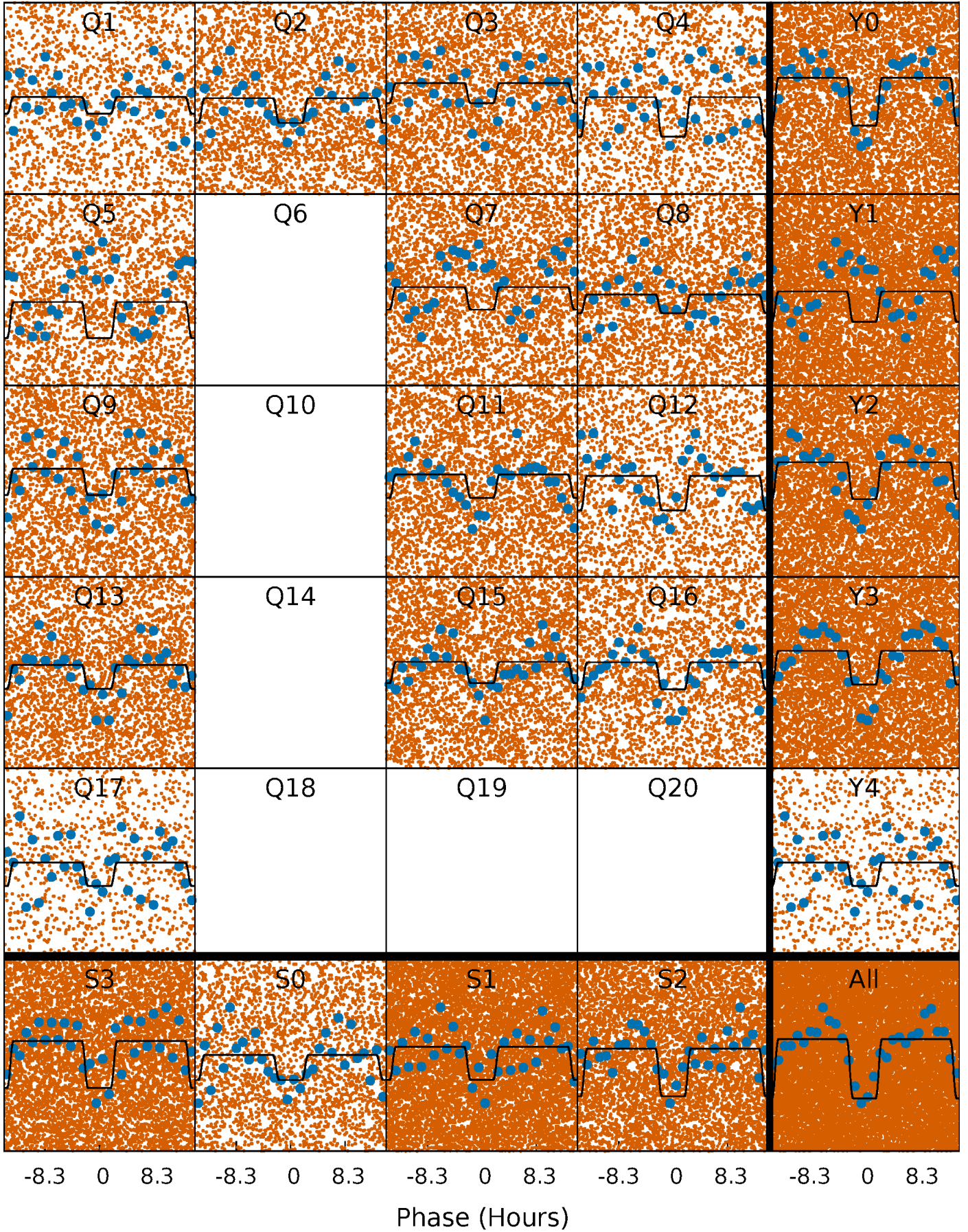
DV Quarter-Phased Transit Curves

TCE 004764008-01 P= 0.657723 Days $T_0=131.953919$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

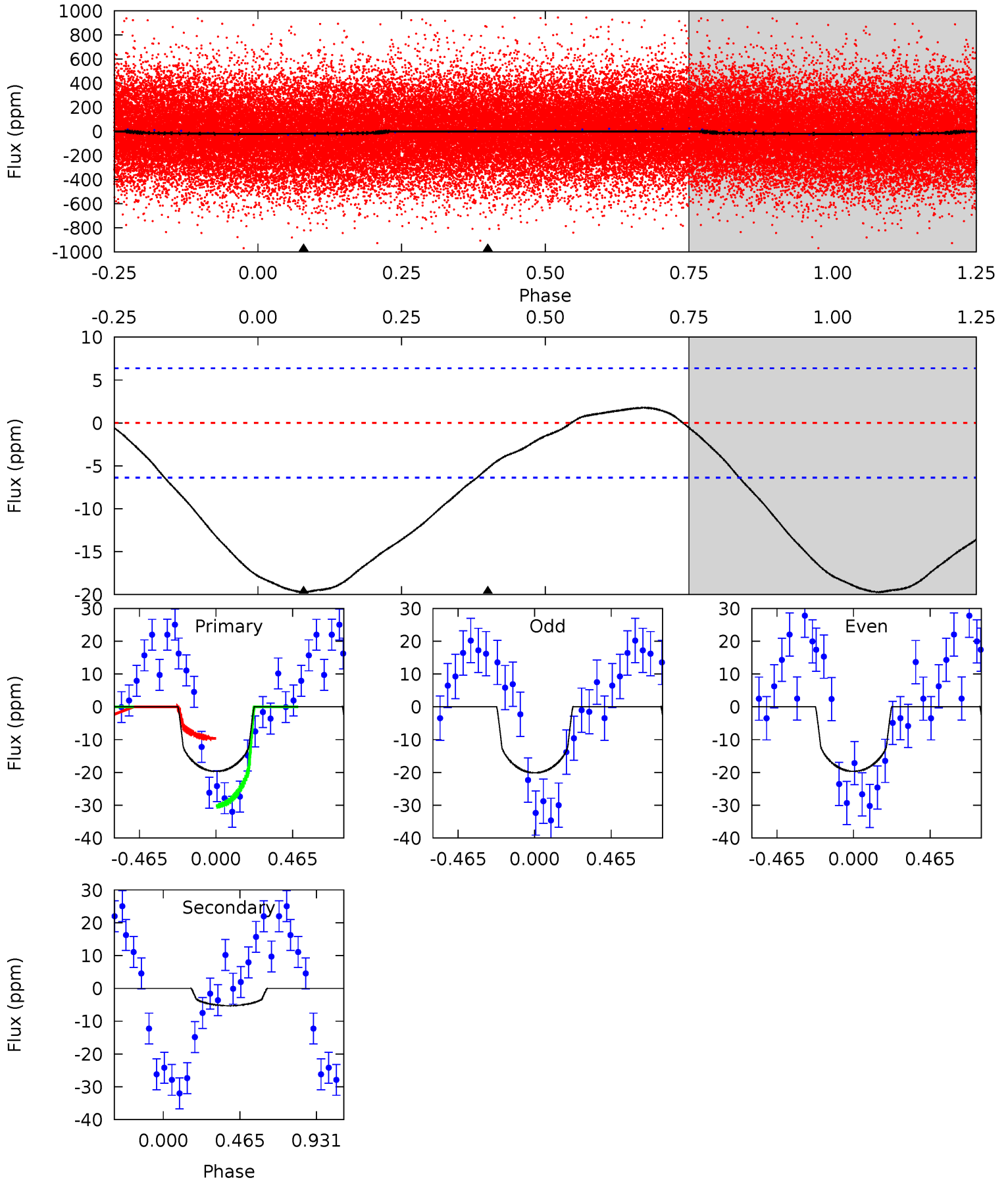
TCE 004764008-01 P= 0.657784 Days $T_0=131.914155$ (BKJD)



DV Model-Shift Uniqueness Test

004764008-01, P = 0.657723 Days, E = 131.296196 Days

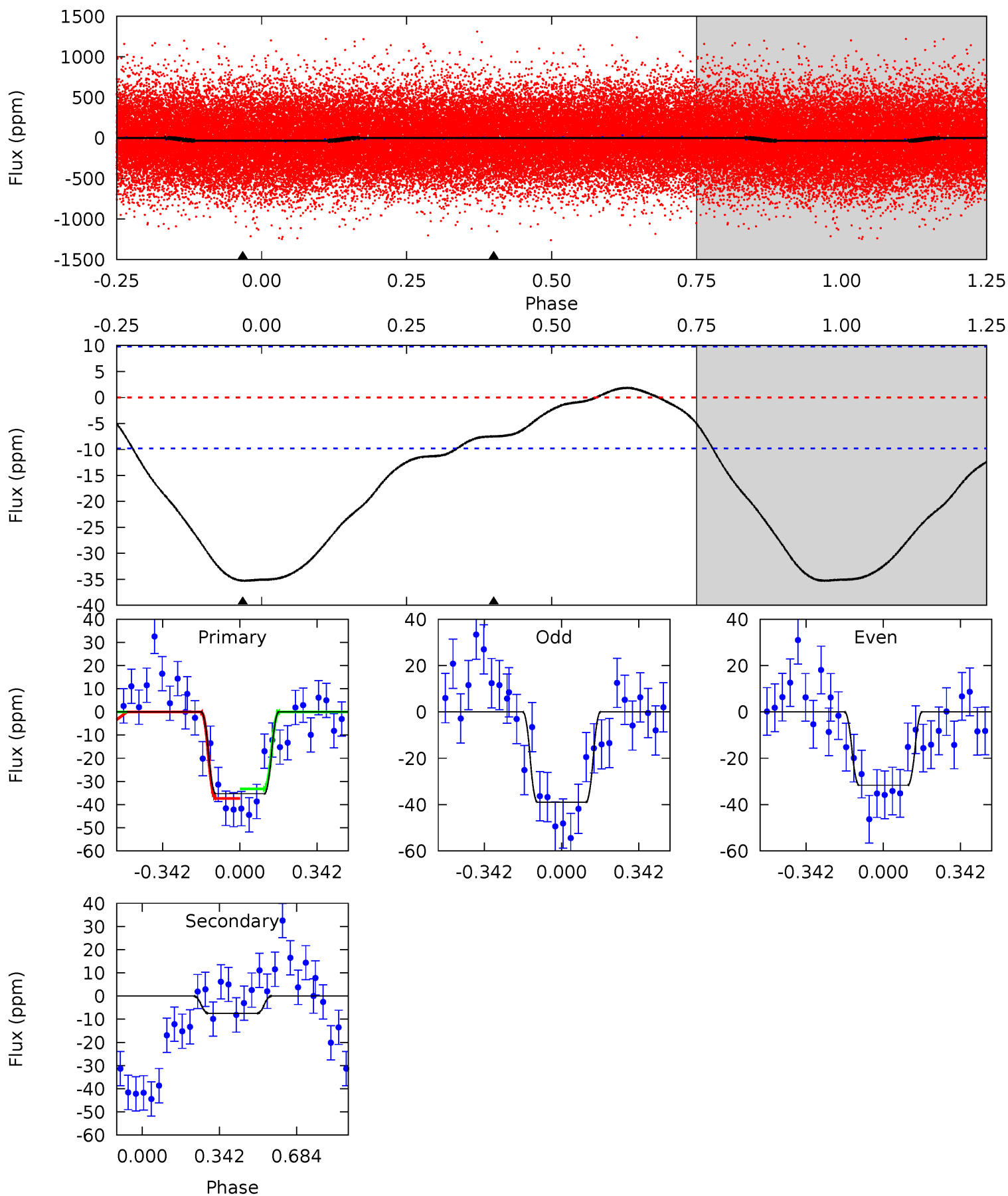
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
13.1	3.51	0	0	4.23	0.73	0.94	13.1	13.1	3.51	3.51	0.15	1.05	0.08	6.84



Alt Model-Shift Uniqueness Test

004764008-01, P = 0.657784 Days, E = 131.256371 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
15.5	3.30	0	0	4.30	0.95	0.66	15.5	15.5	3.30	3.30	1.59	1.17	0.05	0.86



Stellar Parameters For KIC 004764008

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	$M(M_{\odot})$	ρ_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	8317^{+66}_{-1}	$4.088^{+0.121}_{-0.099}$	$-0.240^{+0.050}_{-0.200}$	$1.979^{+0.281}_{-0.343}$	$1.749^{+0.084}_{-0.195}$	$0.318^{+0.190}_{-0.092}$
	+1%/-0%	+3%/-2%	+21%/-83%	+14%/-17%	+5%/-11%	+60%/-29%
Source	SPE68	SPE68	SPE68	DSEP		

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

Secondary Eclipse Parameters for KIC 004764008-01 / KOI

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	-5 ± 2	$1.01^{+0.76}_{-0.65}$	5371^{+203}_{-244}	5016^{+4811}_{-8099}	$0.859^{+5.577}_{-0.591}$
Alt.	-8 ± 2	$1.39^{+0.80}_{-0.73}$	5372^{+220}_{-243}	4577^{+2779}_{-8014}	$0.644^{+2.303}_{-0.411}$

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 $A_{obs} \gg 1.0$

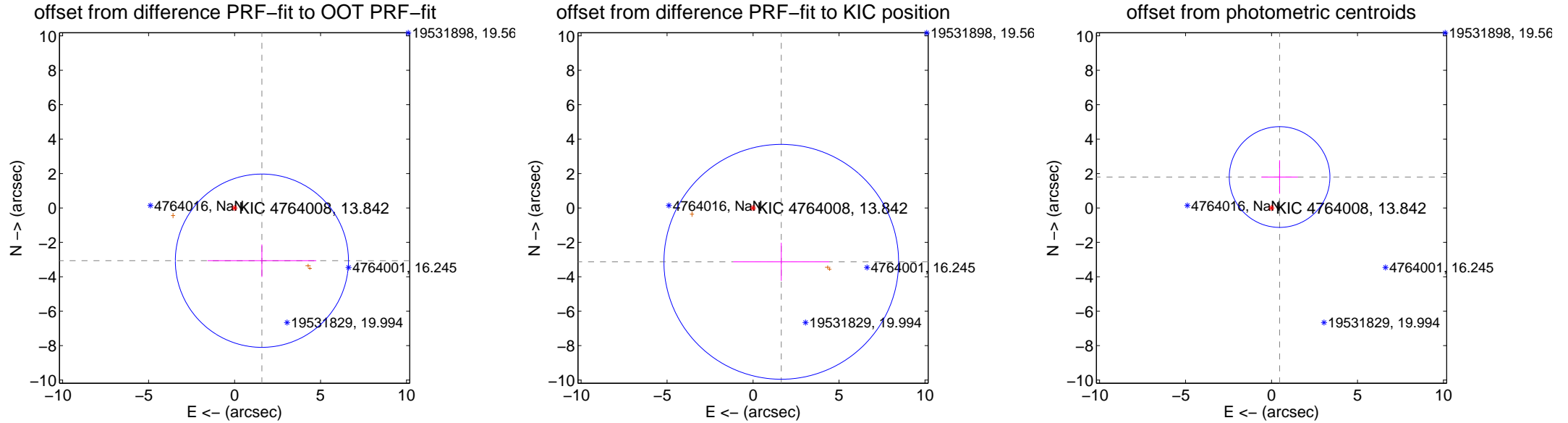
DV Centroid Data

Supplemental centroid analysis for 004764008-01. Kepler magnitude: 13.84. Transit SNR 7.12

There are 0 quarters with good PRF difference image offsets

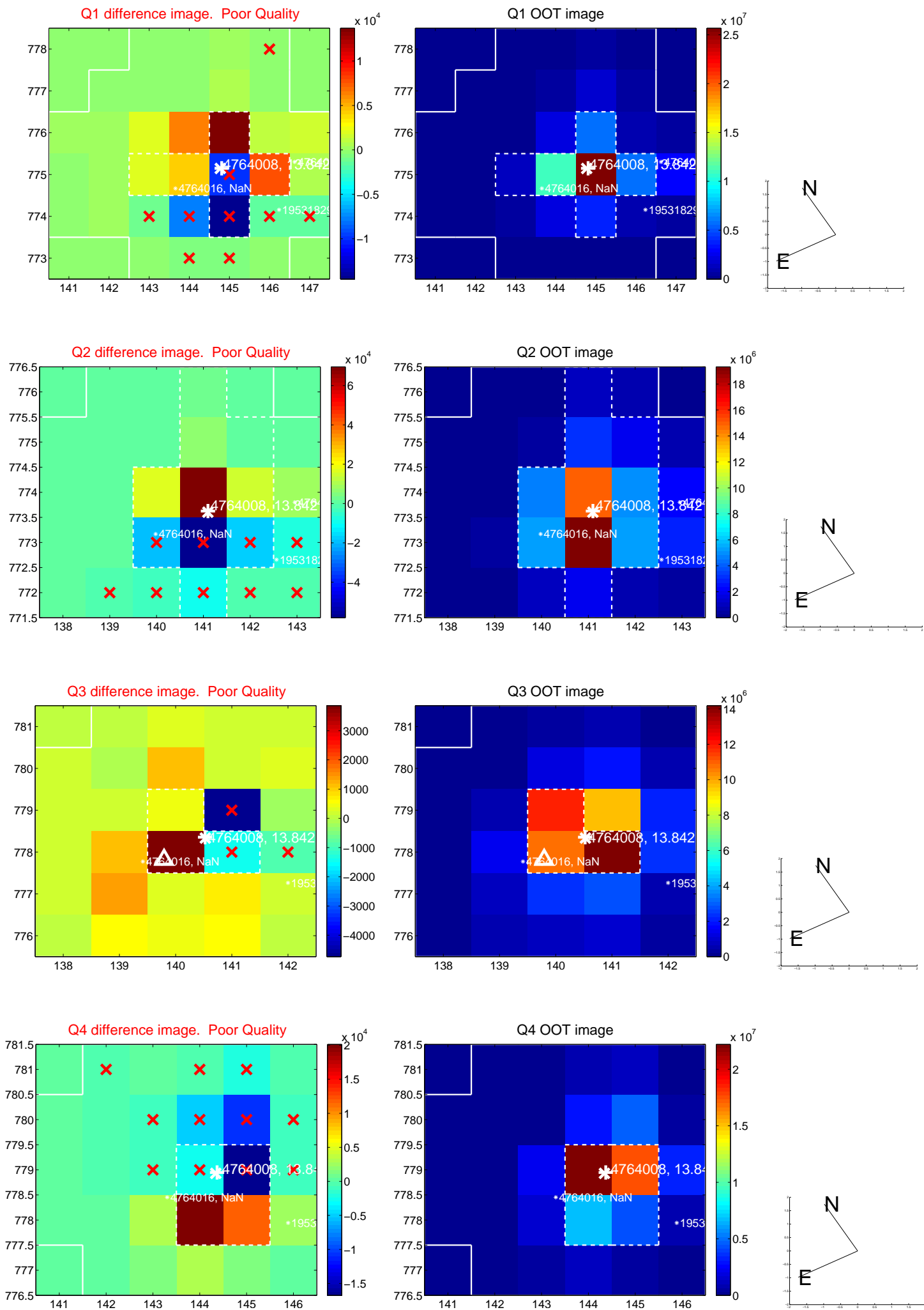
The direct PRF centroid is offset from the target star catalog position by about 0.11 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	3.453 ± 1.678	2.06	-1.589 ± 3.161	-3.065 ± 0.941
PRF-fit source offset from KIC position	3.534 ± 2.274	1.55	-1.642 ± 2.791	-3.129 ± 1.106
photometric centroid source offset	1.86 ± 0.98	1.90	-0.47 ± 1.06	1.80 ± 0.97

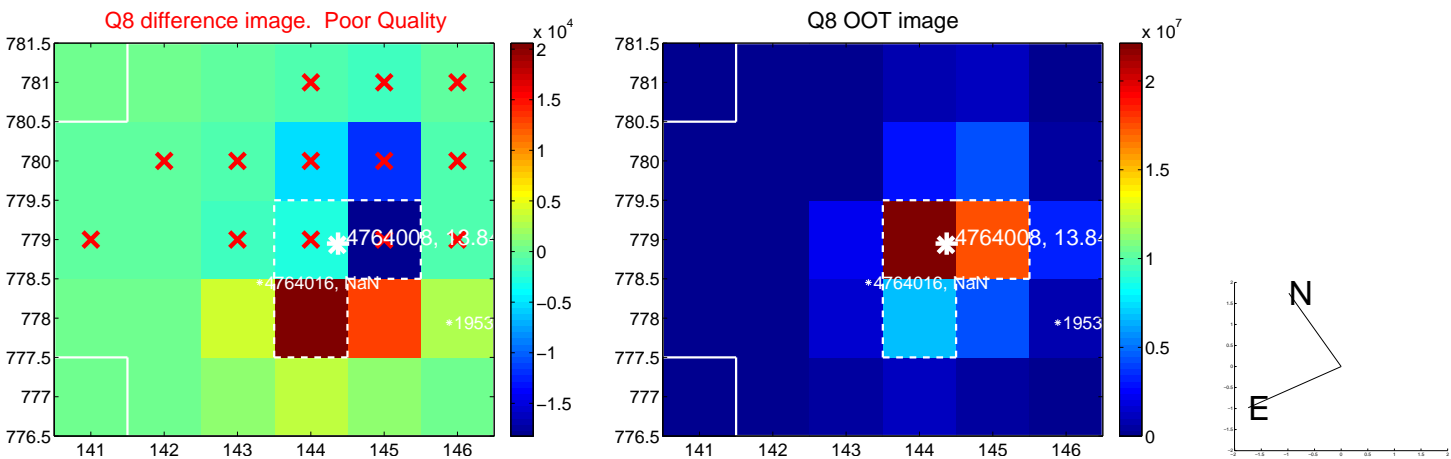
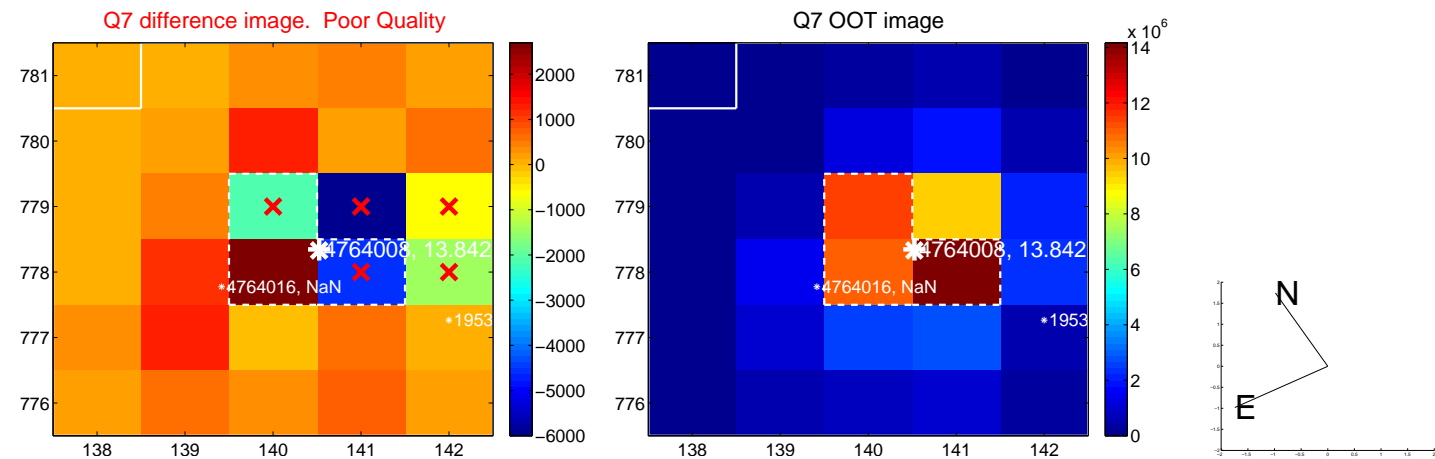
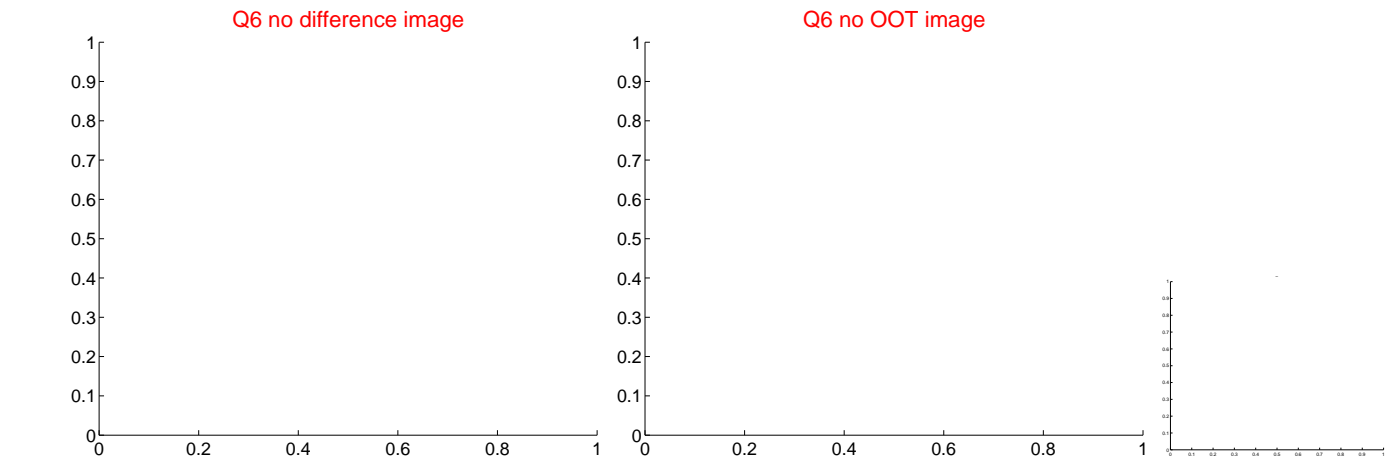
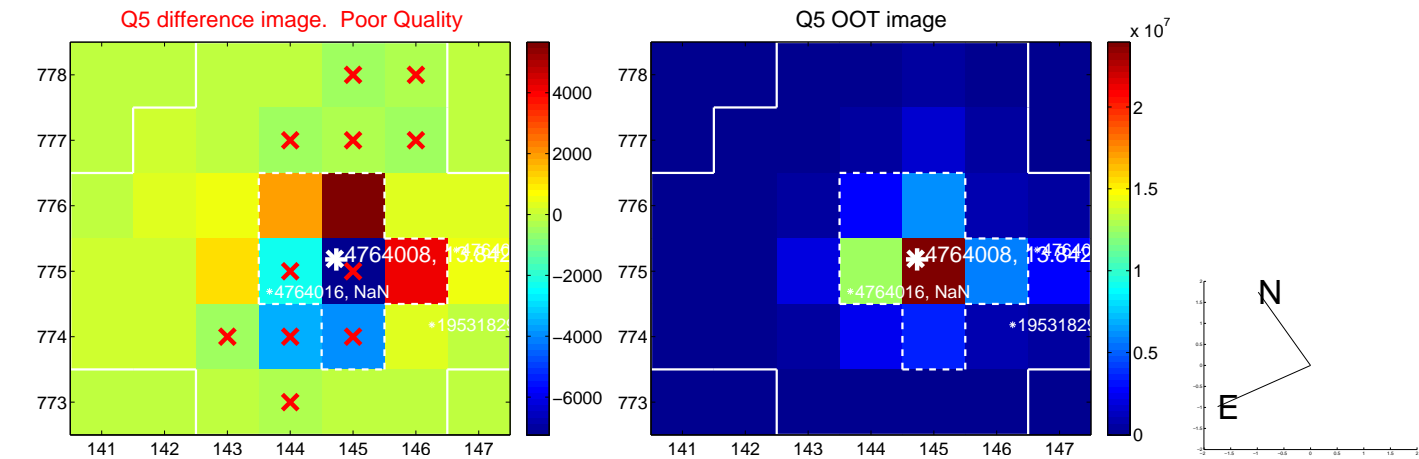


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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

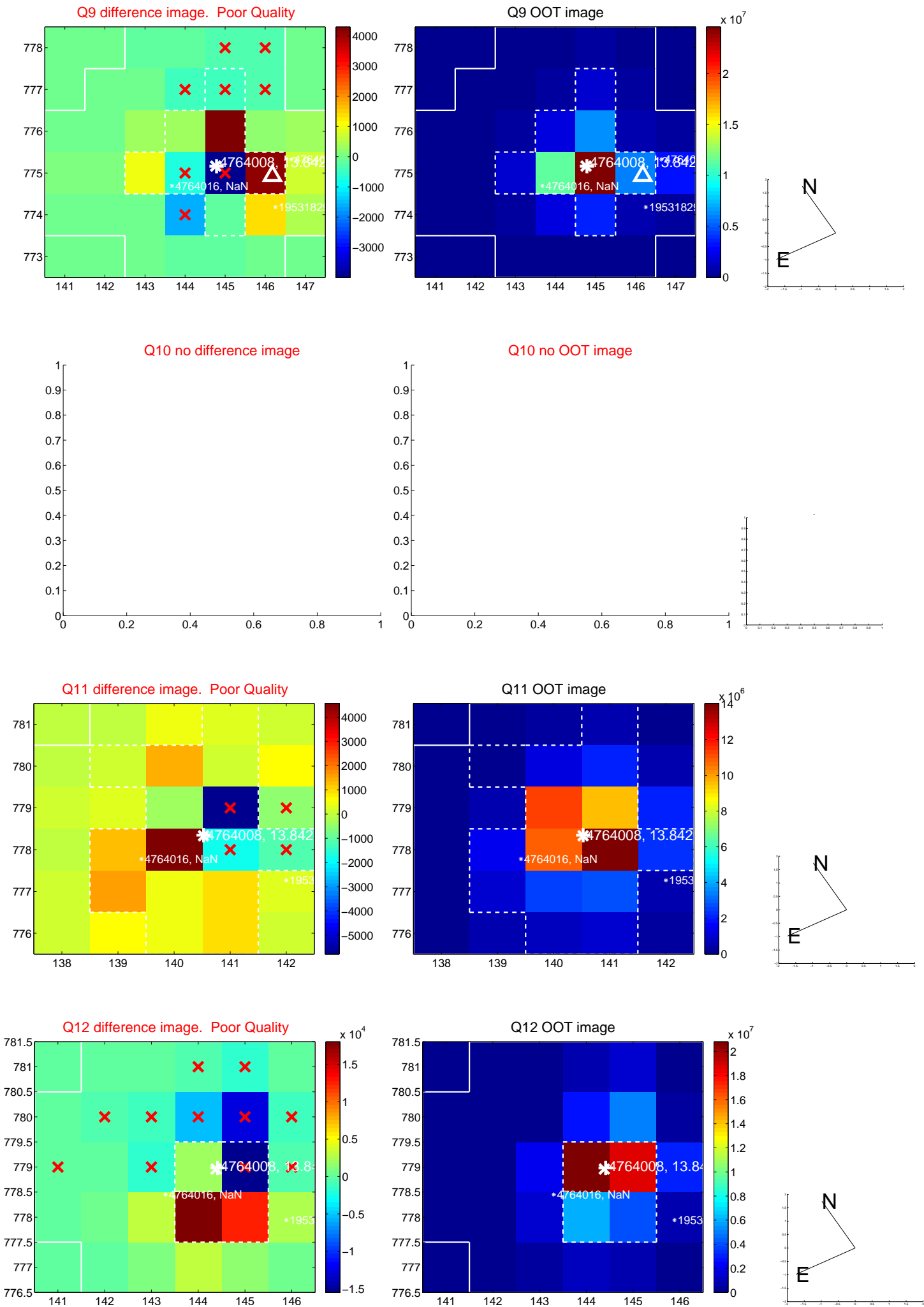
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



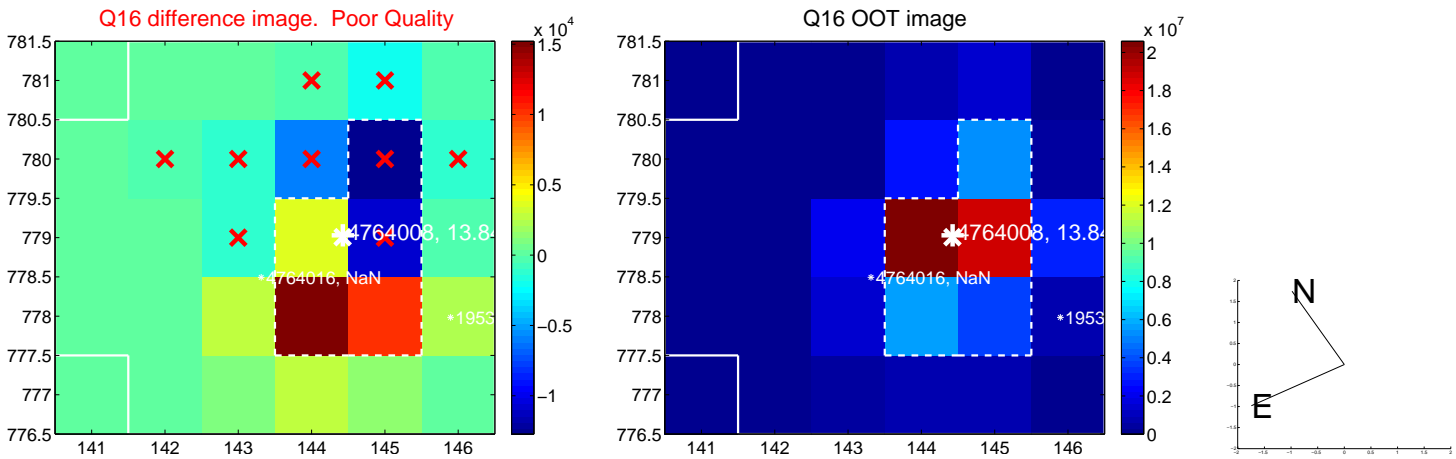
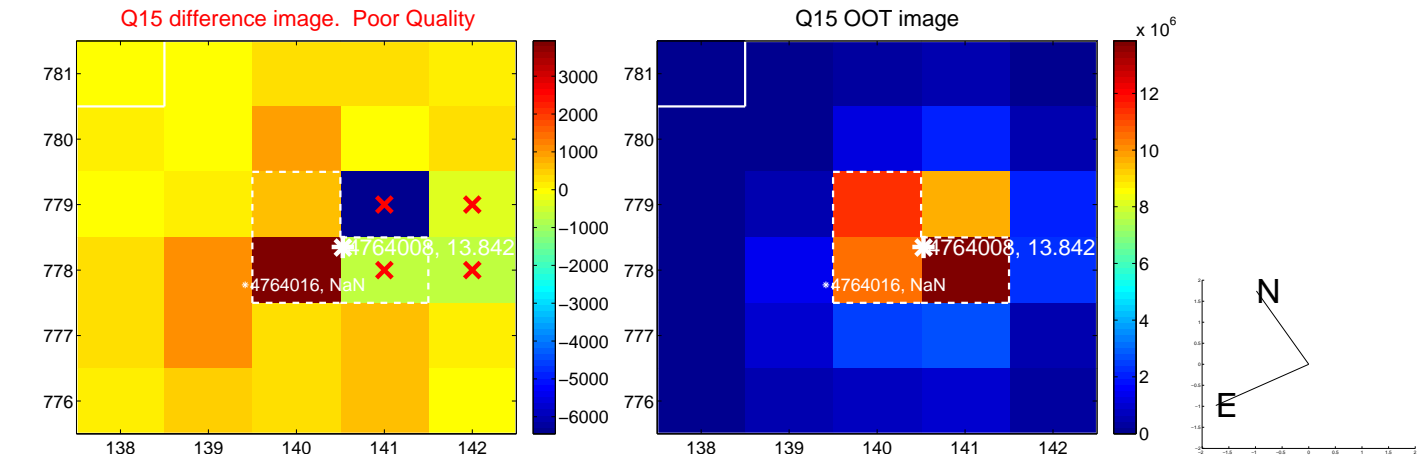
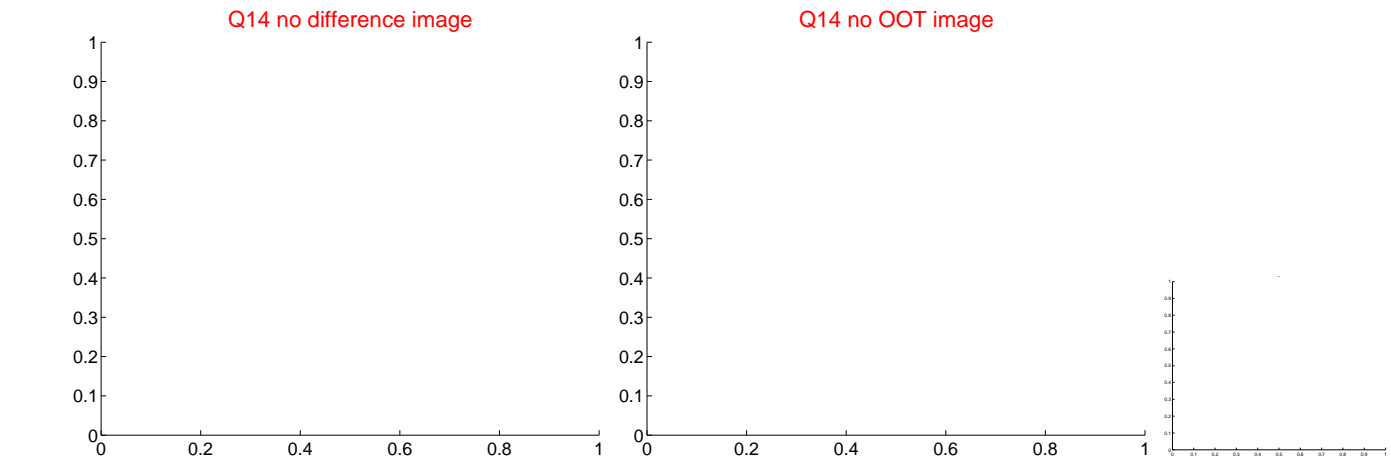
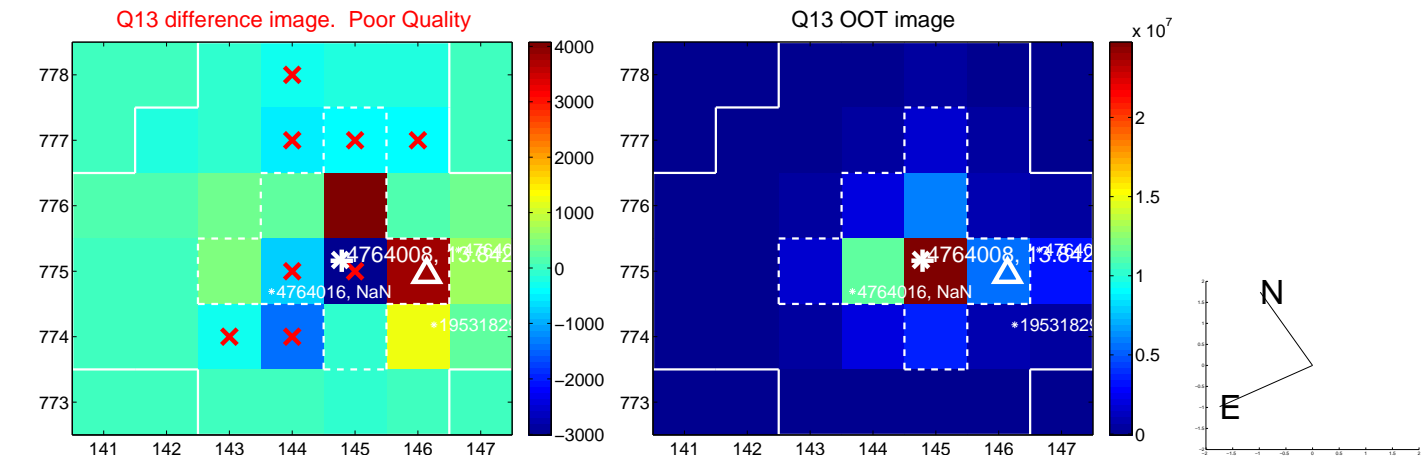
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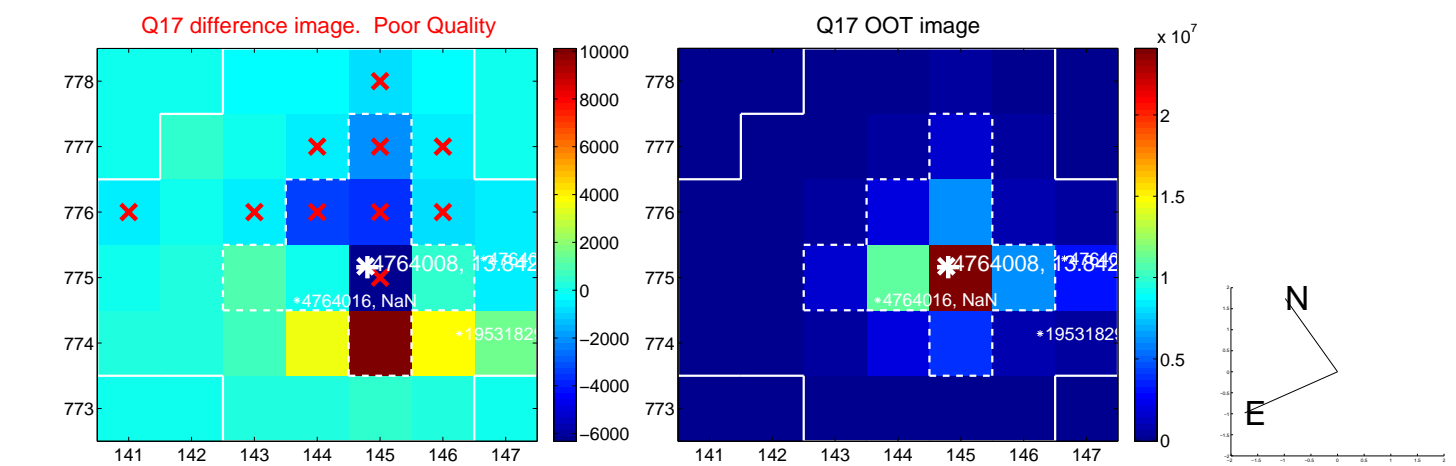
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



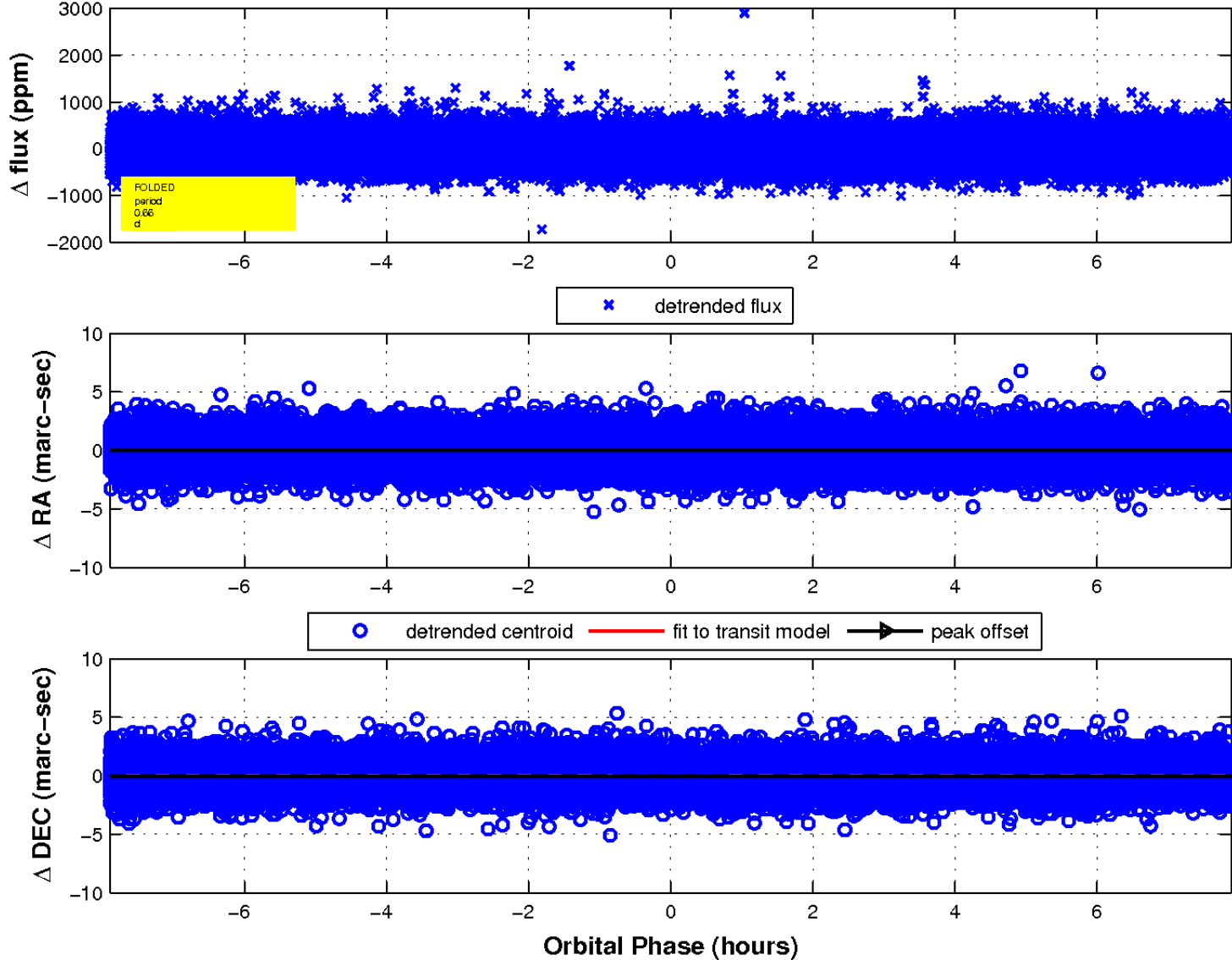
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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



fluxWeightedCentroids, Planet 1 of 1



UKIRT Image

Declination

