

KIC 003762528

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})
003762528-01	OBS	No	0.668414	131.825811	55.6	3.545	7.4	6.3	1.19	6592	1.01	9431.92

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
003762528-01	OBS	FP	0.00	1	0	1	0	LPP_DV—CENT_RESOLVED_OFFSET

Notes: OBS = Observed. INJ = Injected. INV = Inverted. SCR = Scrambled.

N = Not Transit-Like. S = Stellar Eclipse. C = Centroid Offset. E = Ephemeris Match.

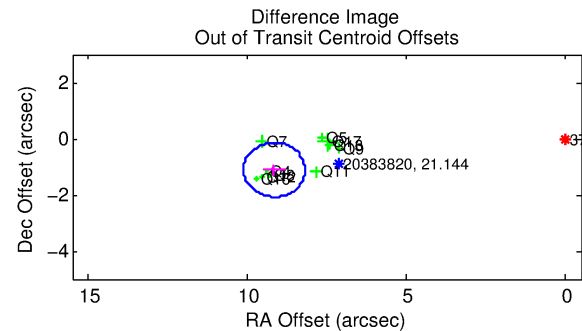
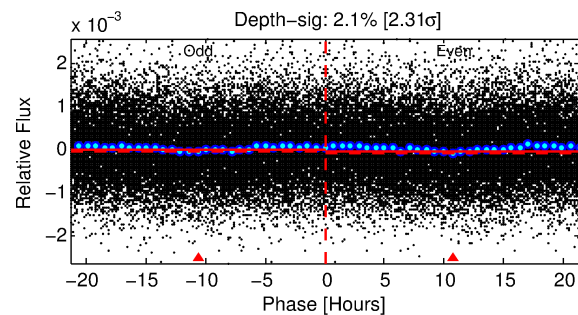
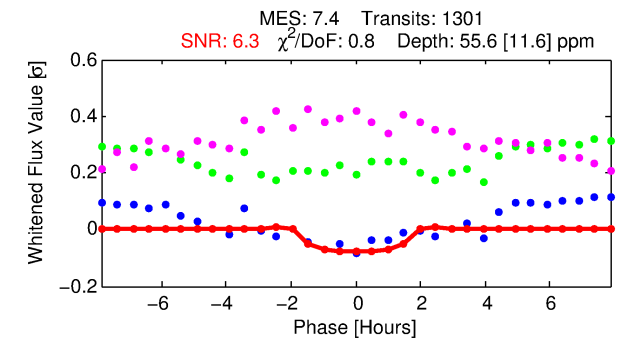
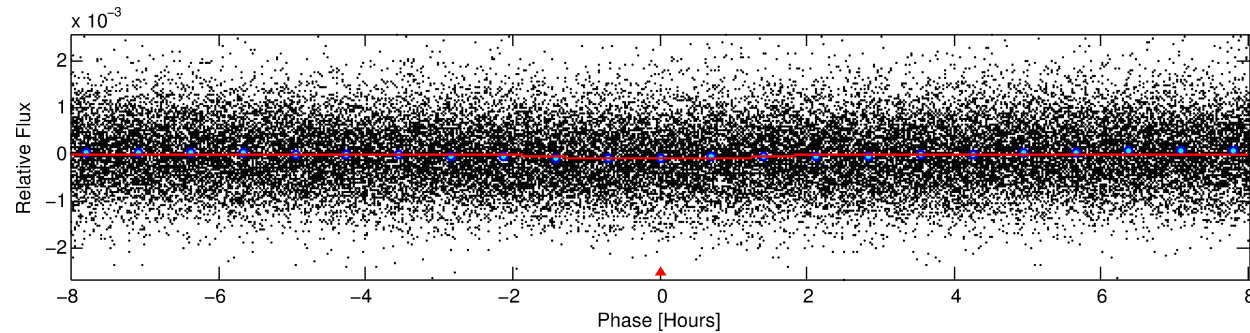
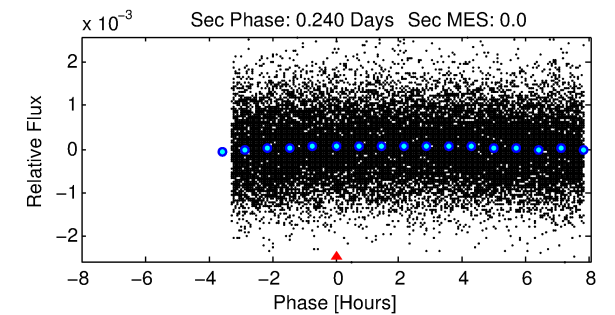
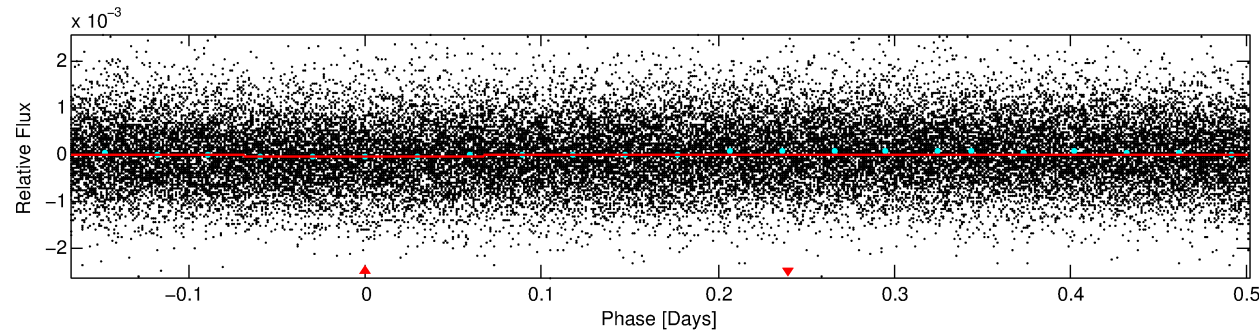
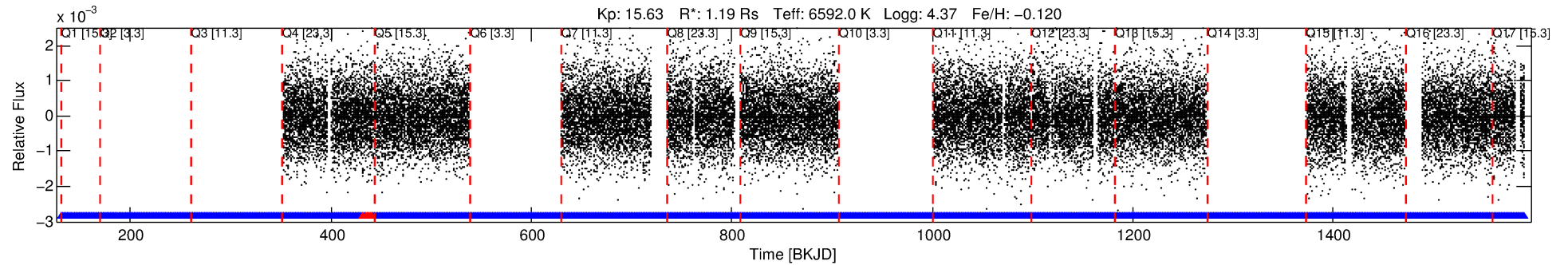
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 003762528-01

No Significant Match Found

DV One-Page Summary

KIC: 3762528 Candidate: 1 of 1 Period: 0.668 d



DV Fit Results:

Period = 0.66841 [0.00002] d
Epoch = 131.8258 [0.0064] BKJD
R/R* = 0.0078 [0.0097]
a/R* = 1.19 [2.53]
b = 0.86 [2.25]
Seff = 9431.92 [3454.14]
Teq = 2513 [230] K
Rp = 1.01 [1.29] Re
a = 0.0159 [0.0038] AU
Ag = N/A
Teffp = N/A

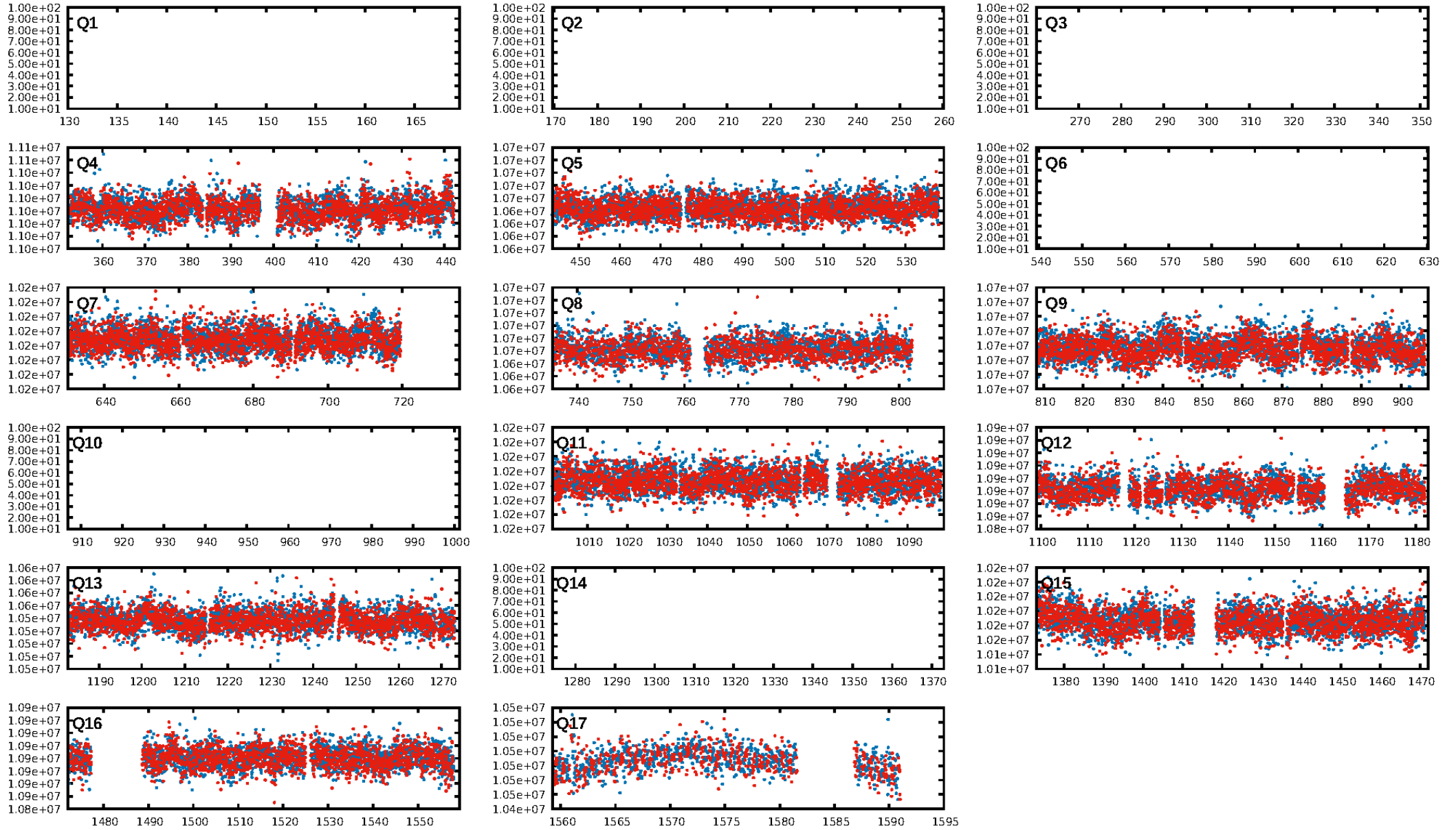
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: 1.23e-15
RollingBand-fgt: 0.99 [1249/1260]
GhostDiagnostic-chr: 281.6
Centroid-sig: 0.0%
Centroid-so: 6.025 arcsec [2.98σ]
OotOffset-rm: 9.222 arcsec [28.64σ]
KicOffset-rm: 9.259 arcsec [27.17σ]
OotOffset-st: 0/2/4/4 [10]
KicOffset-st: 0/2/4/4 [10]
DiffImageQuality-fgm: 1.00 [10/10]
DiffImageOverlap-fno: 1.00 [11/11]

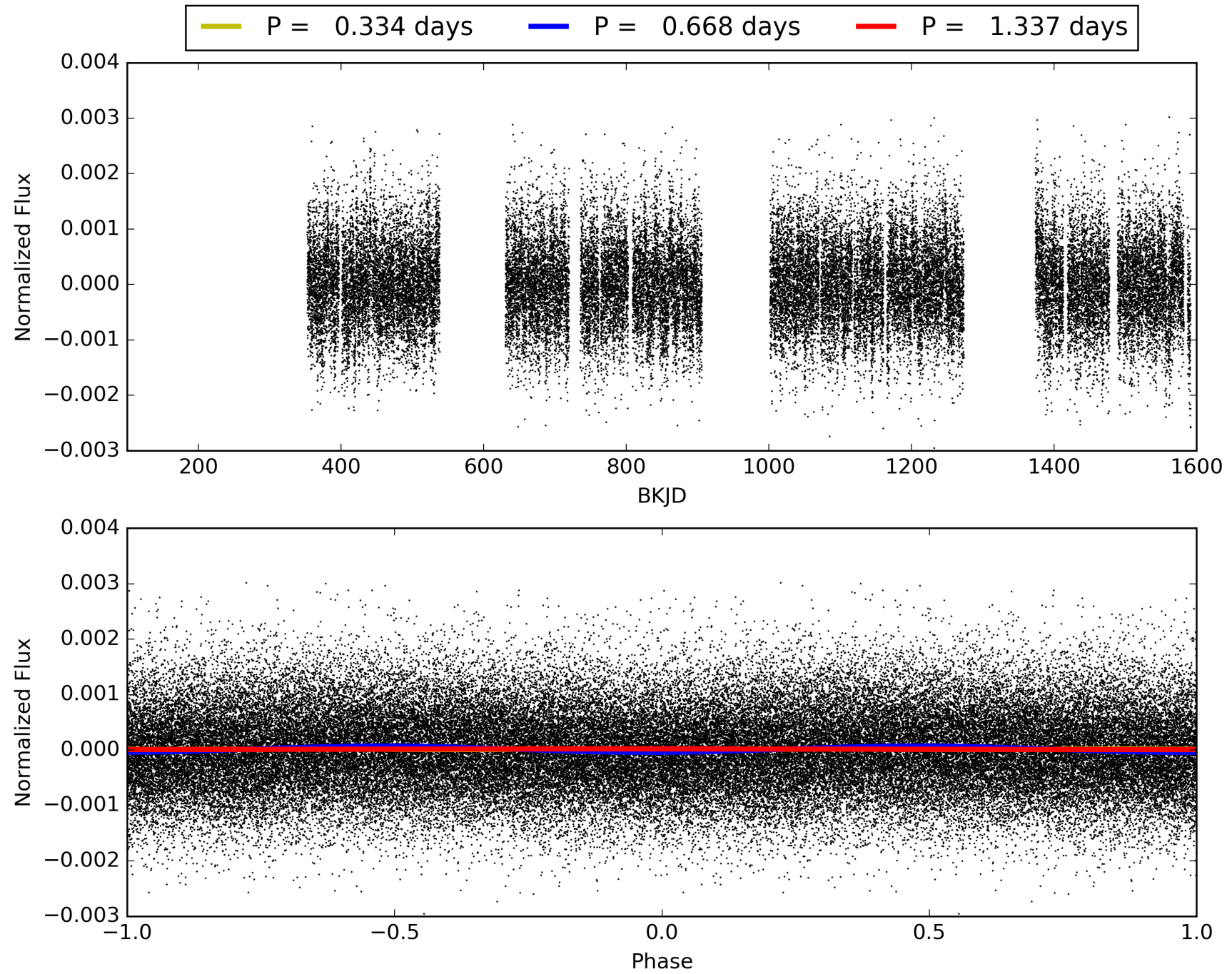
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 30-Jan-2016 01:55:53 Z

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

TCE 003762528-01, PDC Light Curves

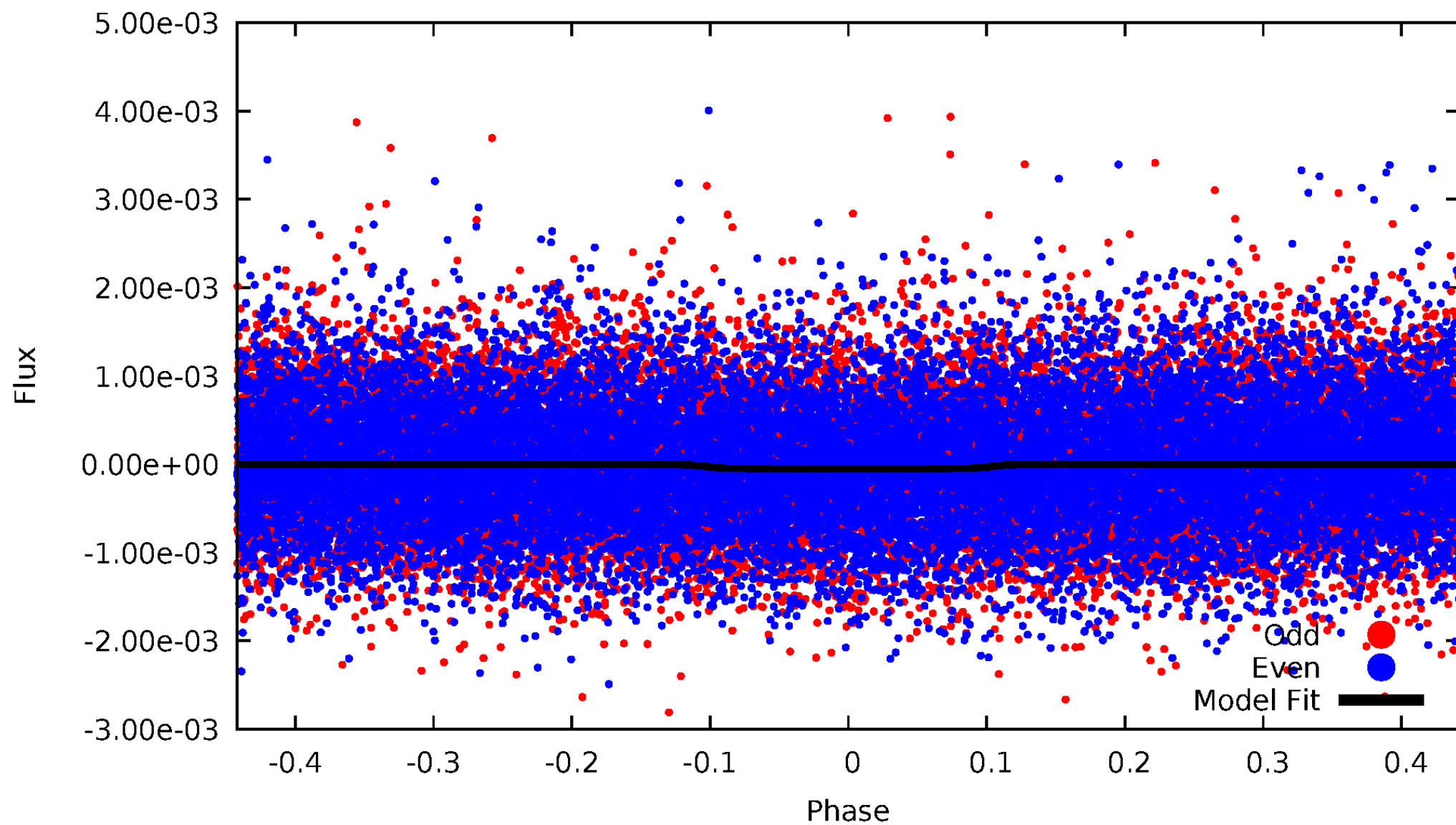


TCE 003762528-01



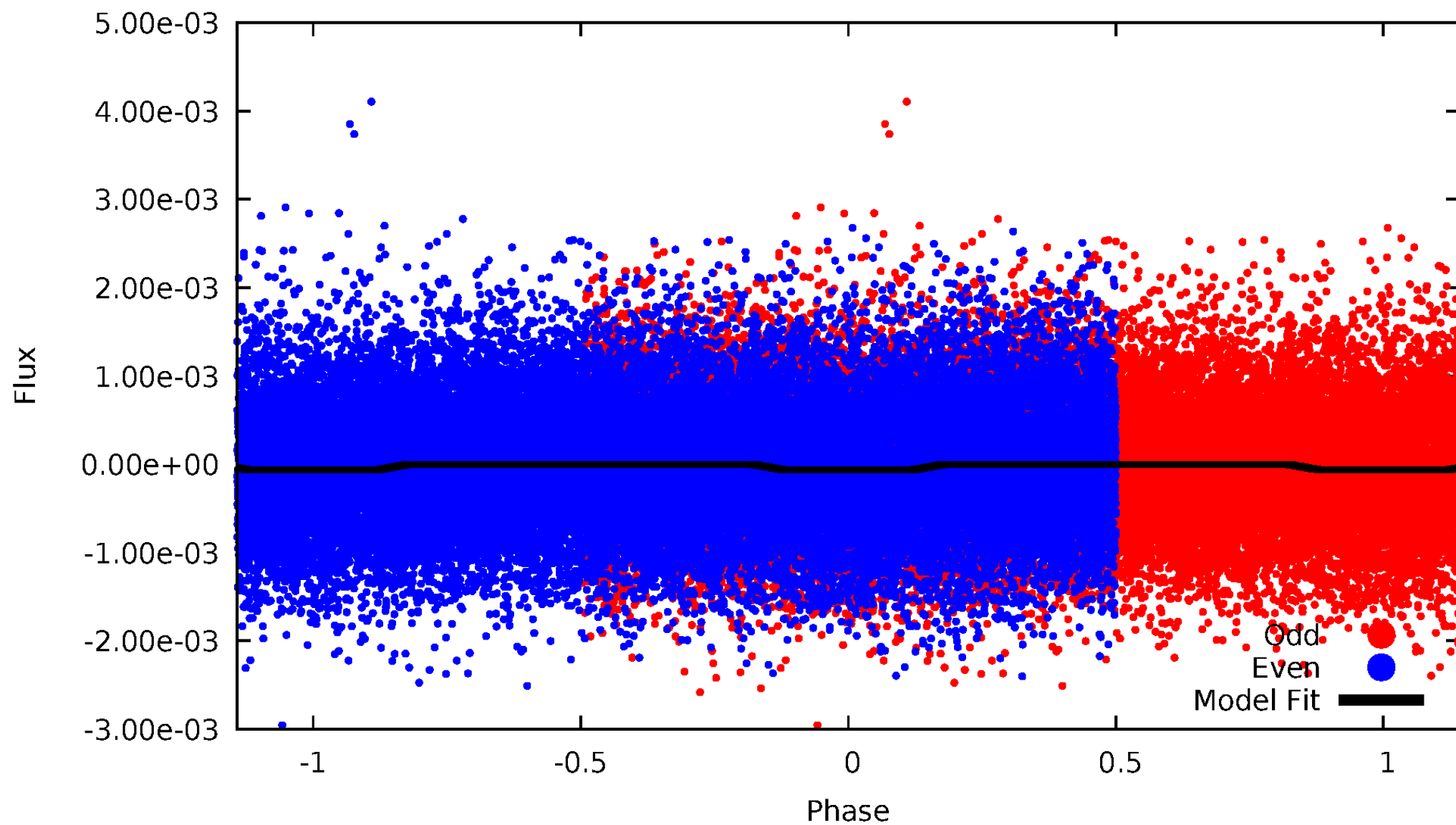
DV Odd/Even

TCE 003762528-01

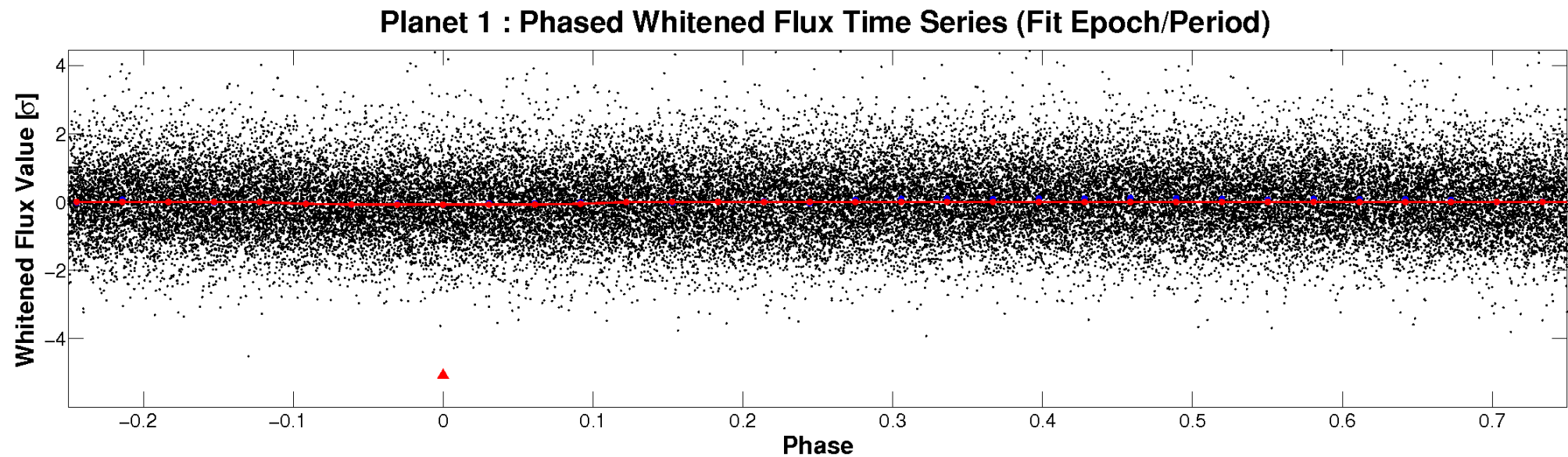
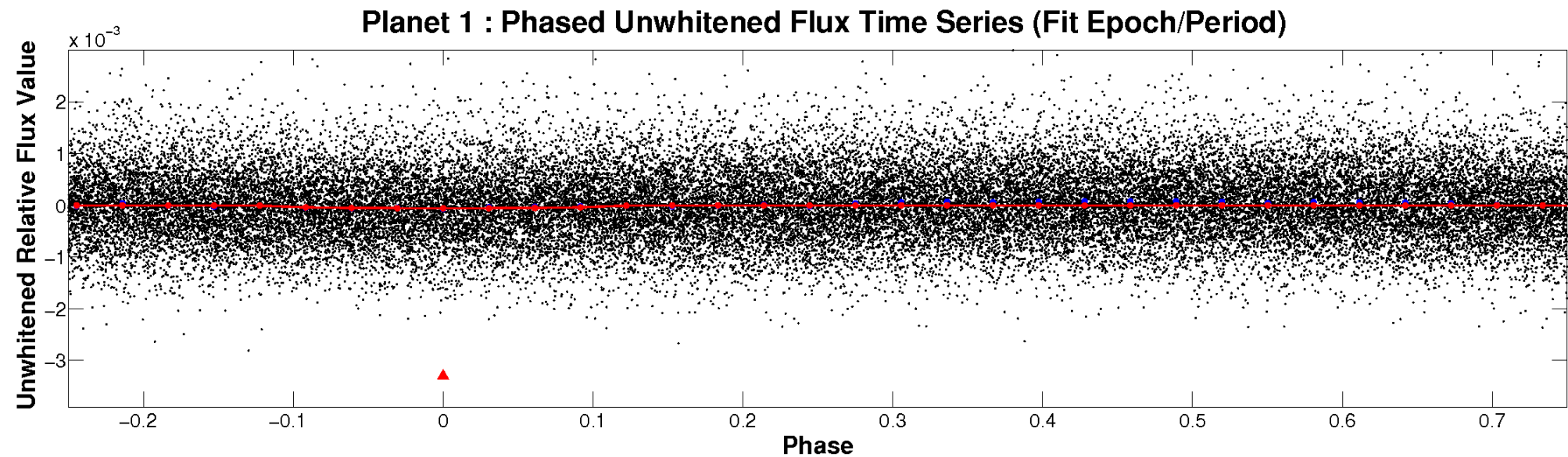


ALT Odd/Even

TCE 003762528-01

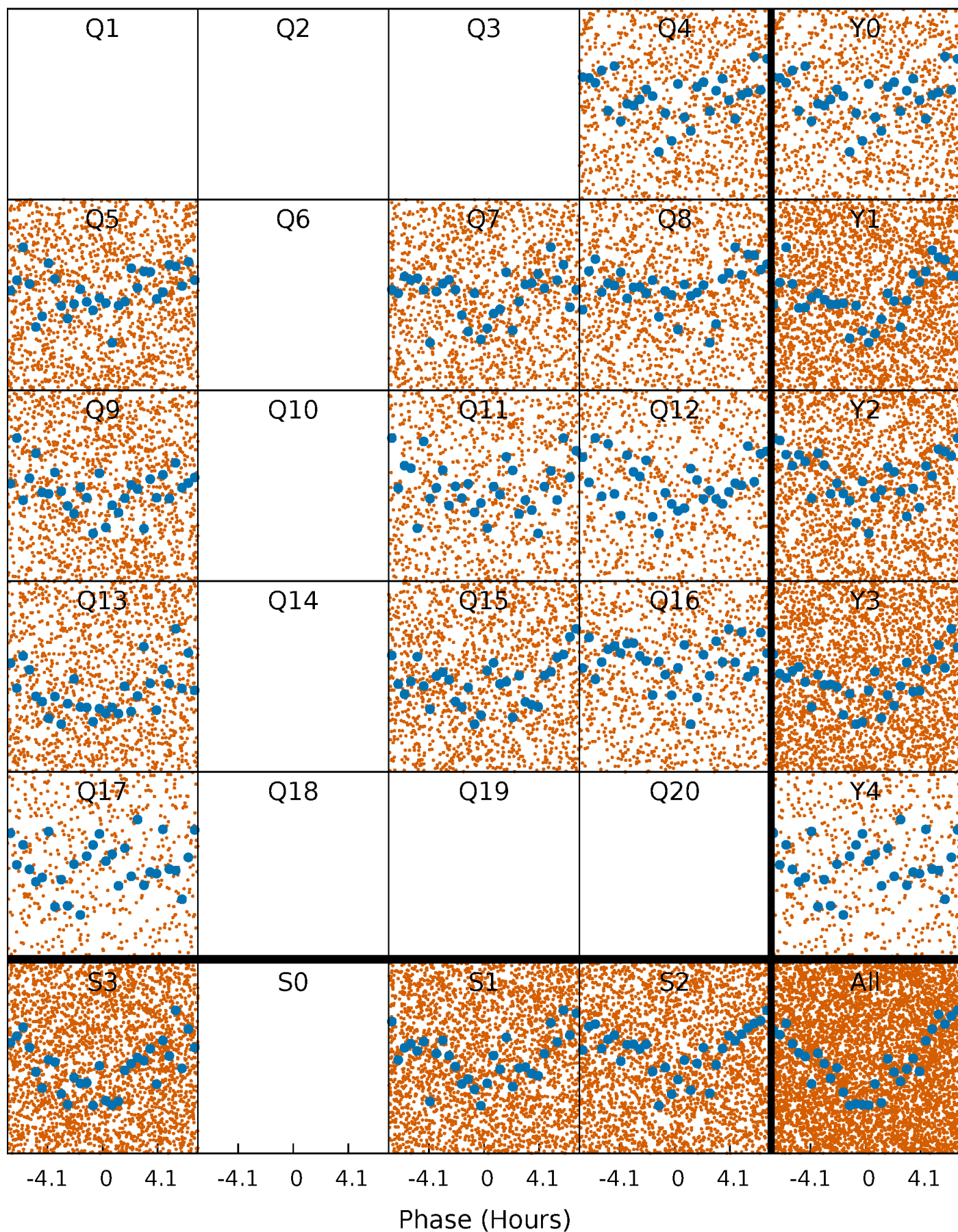


Non-Whitened Vs. Whitened Light Curve



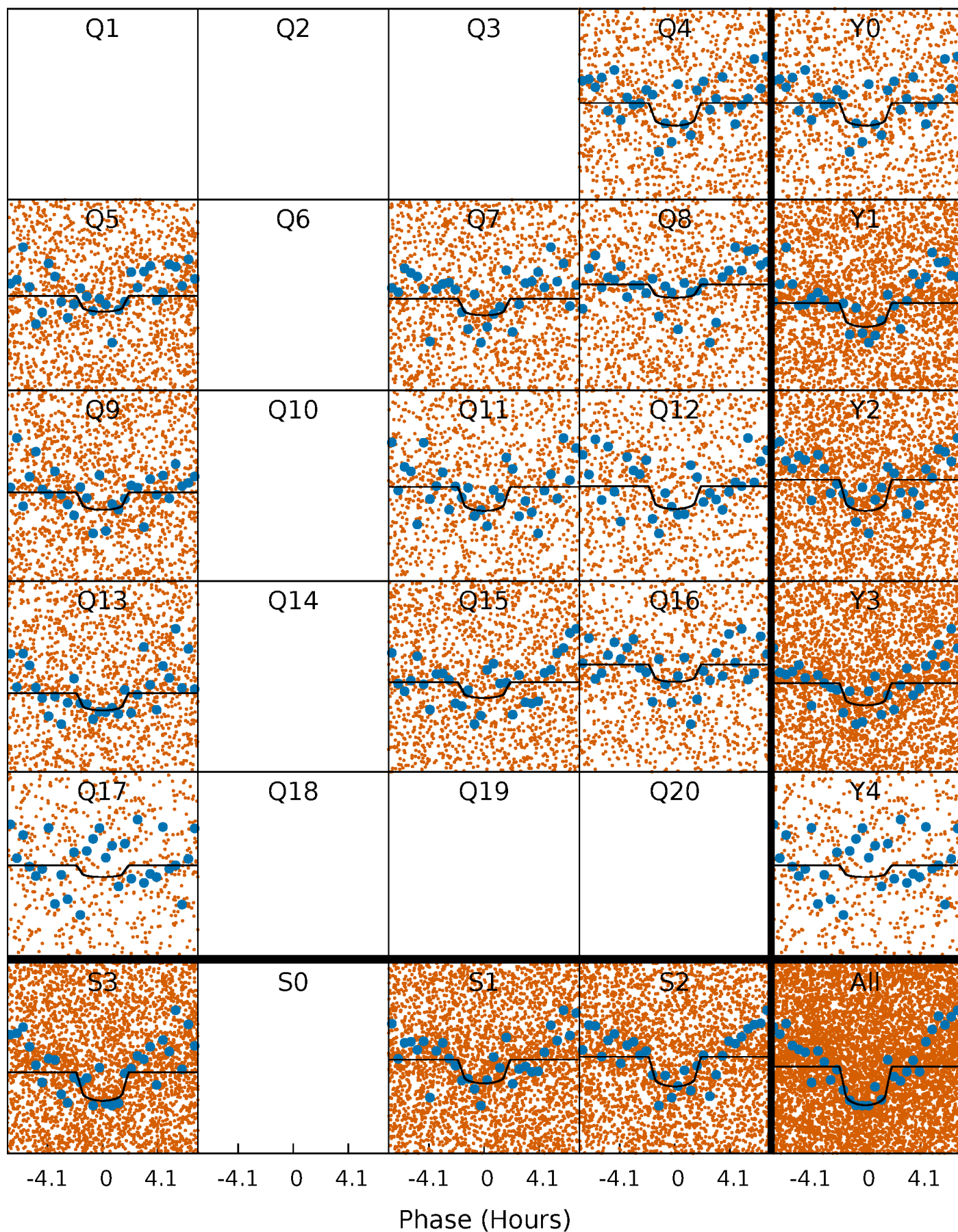
PDC Quarter-Phased Transit Curves

TCE 003762528-01 P= 0.668414 Days $T_0=131.825811$ (BKJD)



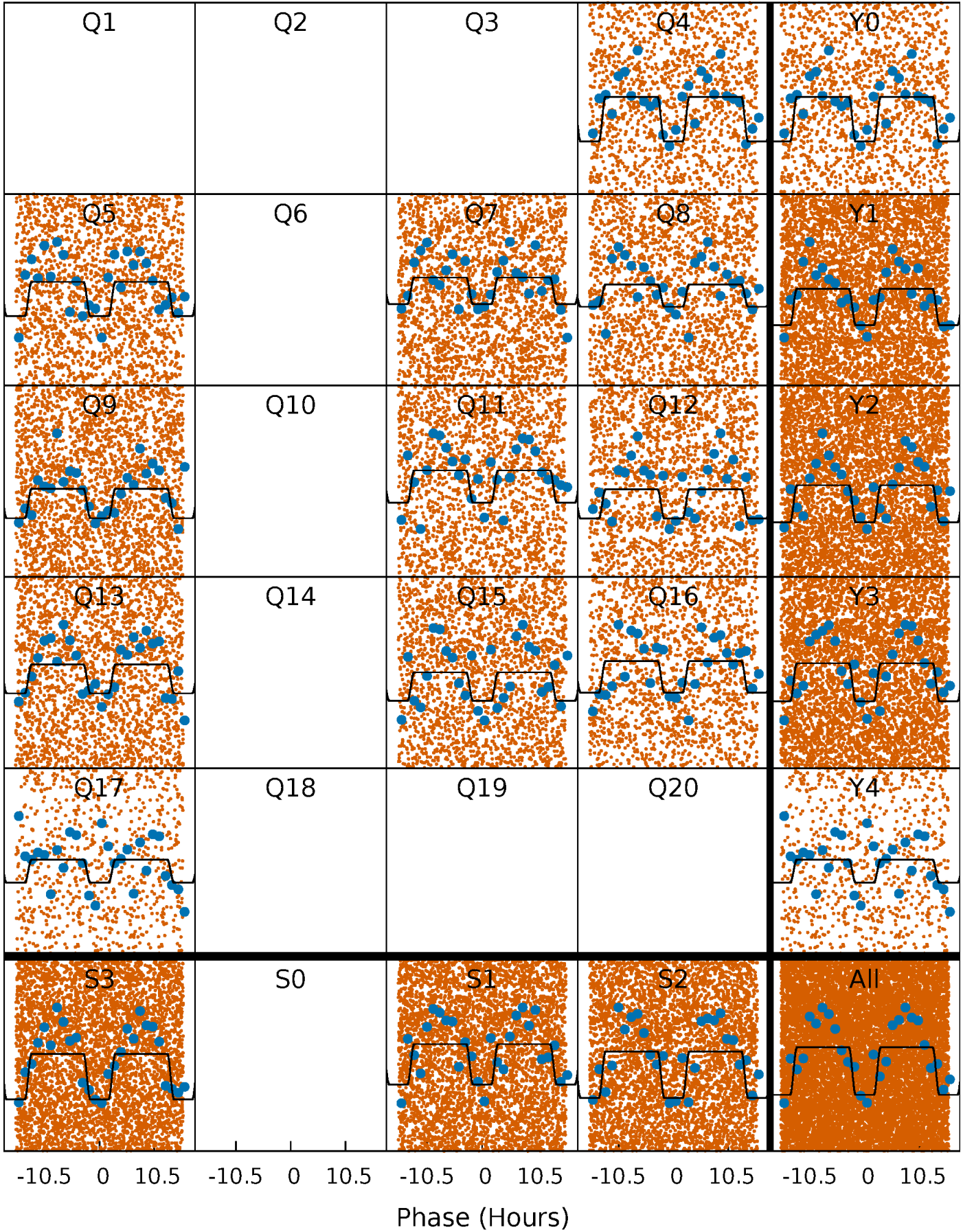
DV Quarter-Phased Transit Curves

TCE 003762528-01 P= 0.668414 Days $T_0=131.825811$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

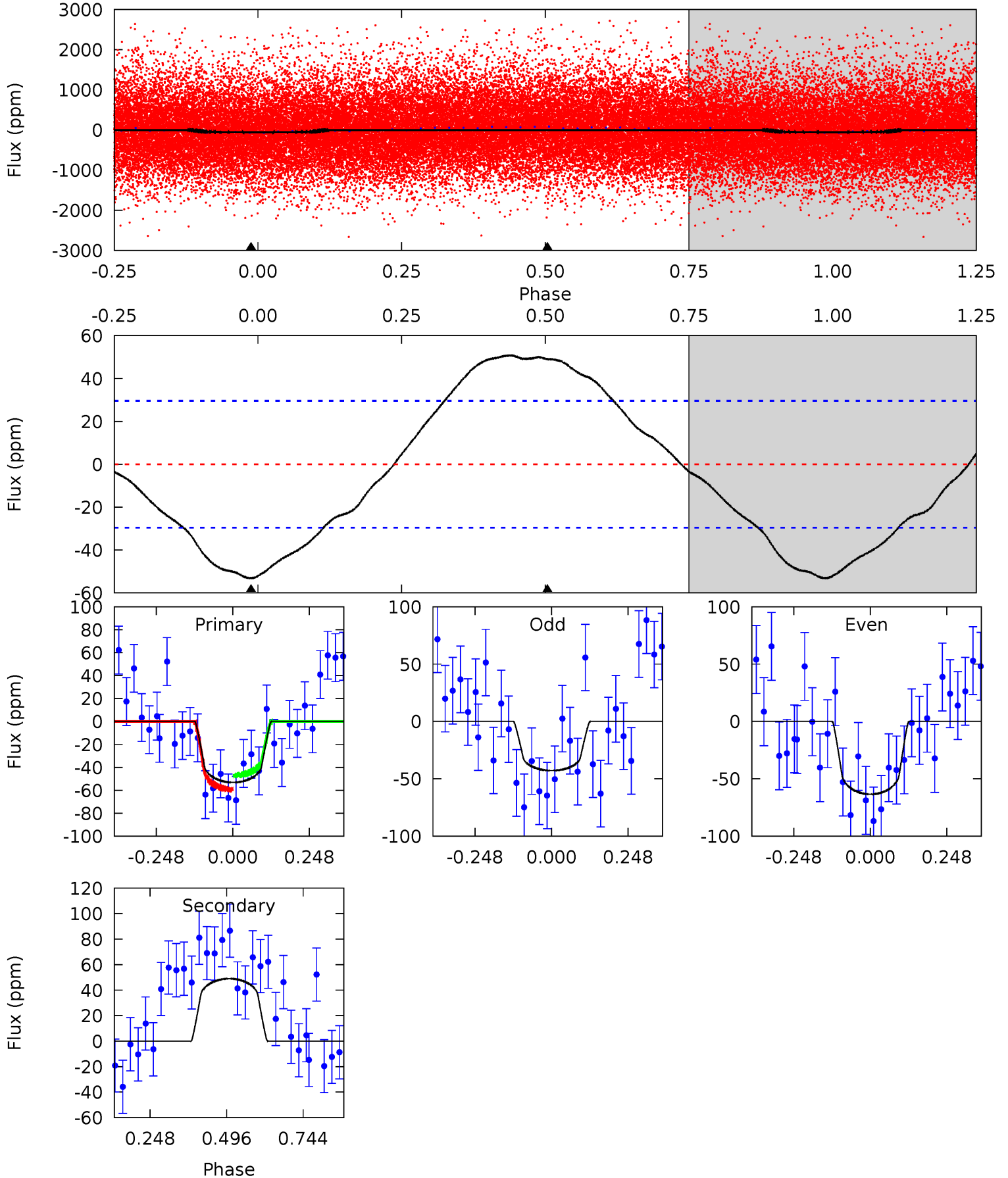
TCE 003762528-01 P= 0.668373 Days $T_0=131.863690$ (BKJD)



DV Model-Shift Uniqueness Test

003762528-01, P = 0.668414 Days, E = 131.825811 Days

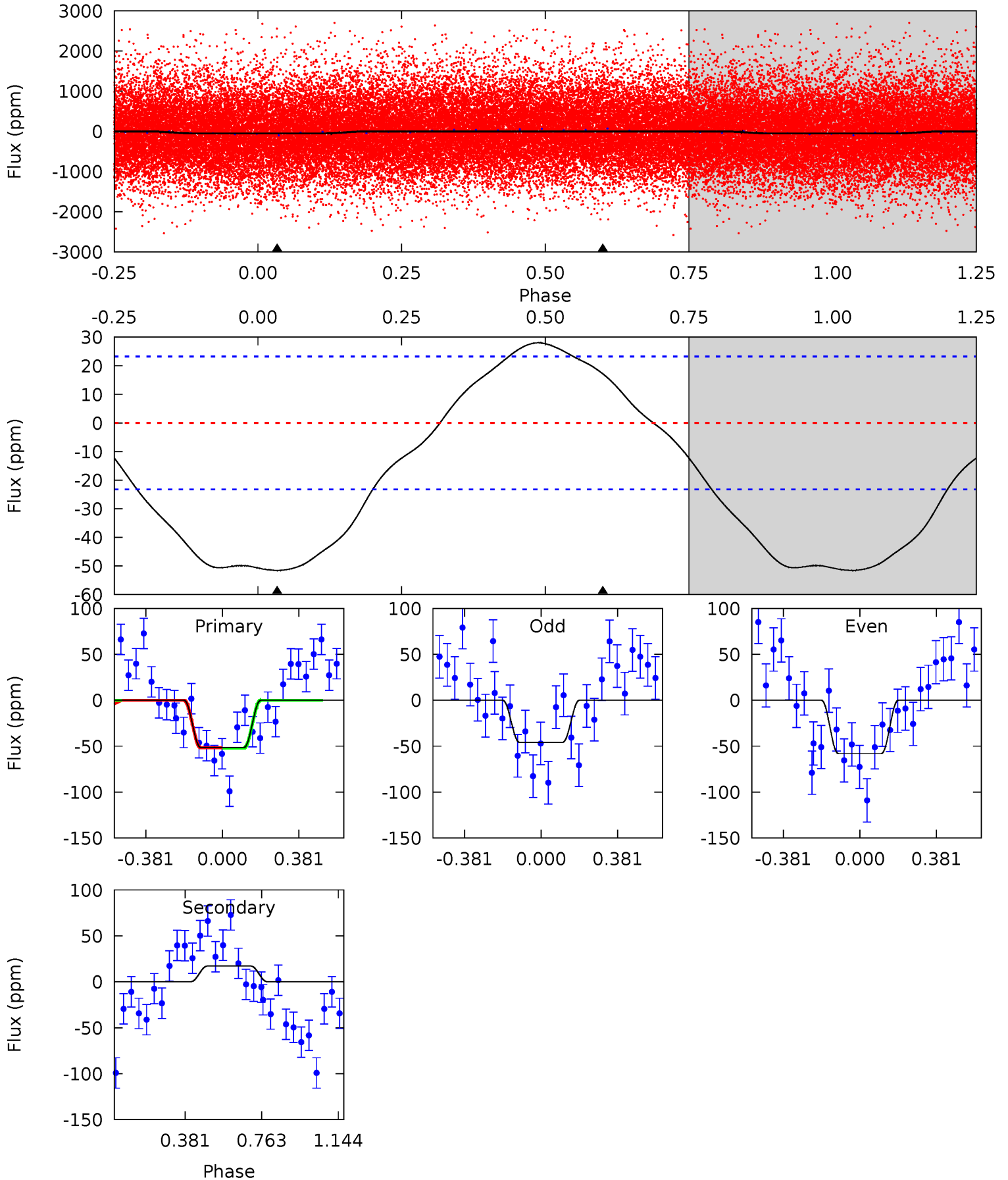
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
7.86	-7.24	0	0	4.37	1.16	0.88	7.86	7.86	-7.24	-7.24	1.53	0.81	0.49	0.93



Alt Model-Shift Uniqueness Test

003762528-01, P = 0.668373 Days, E = 131.863690 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
9.49	-3.16	0	0	4.28	0.88	1.27	9.49	9.49	-3.16	-3.16	1.12	1.06	0.35	0.03



Stellar Parameters For KIC 003762528

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	6592^{+186}_{-255}	$4.369^{+0.075}_{-0.175}$	$-0.120^{+0.250}_{-0.300}$	$1.190^{+0.348}_{-0.149}$	$1.211^{+0.170}_{-0.170}$	$1.013^{+0.328}_{-0.485}$
	+3%/-4%	+2%/-4%	+208%/-250%	+29%/-13%	+14%/-14%	+32%/-48%
Source	KIC0	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 003762528-01 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	A_{obs}
DV	49 ± 7	$1.41^{+1.22}_{-0.98}$	3548^{+242}_{-196}	-5460^{+1073}_{-4909}	$-3.330^{+2.370}_{-29.764}$
Alt.	17 ± 5	$1.31^{+1.15}_{-0.88}$	3557^{+250}_{-215}	-4635^{+741}_{-2742}	$-1.335^{+1.003}_{-10.720}$

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 $A_{\text{obs}} \gg 1.0$

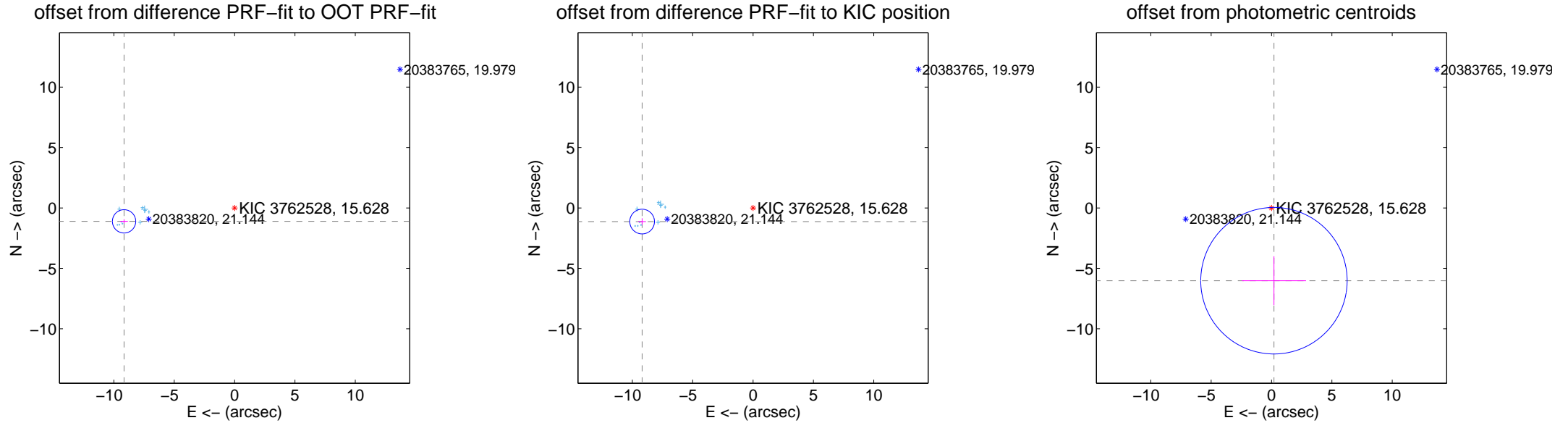
DV Centroid Data

Supplemental centroid analysis for 003762528-01. Kepler magnitude: 15.63. Transit SNR 6.29

There are 10 quarters with good PRF difference image offsets

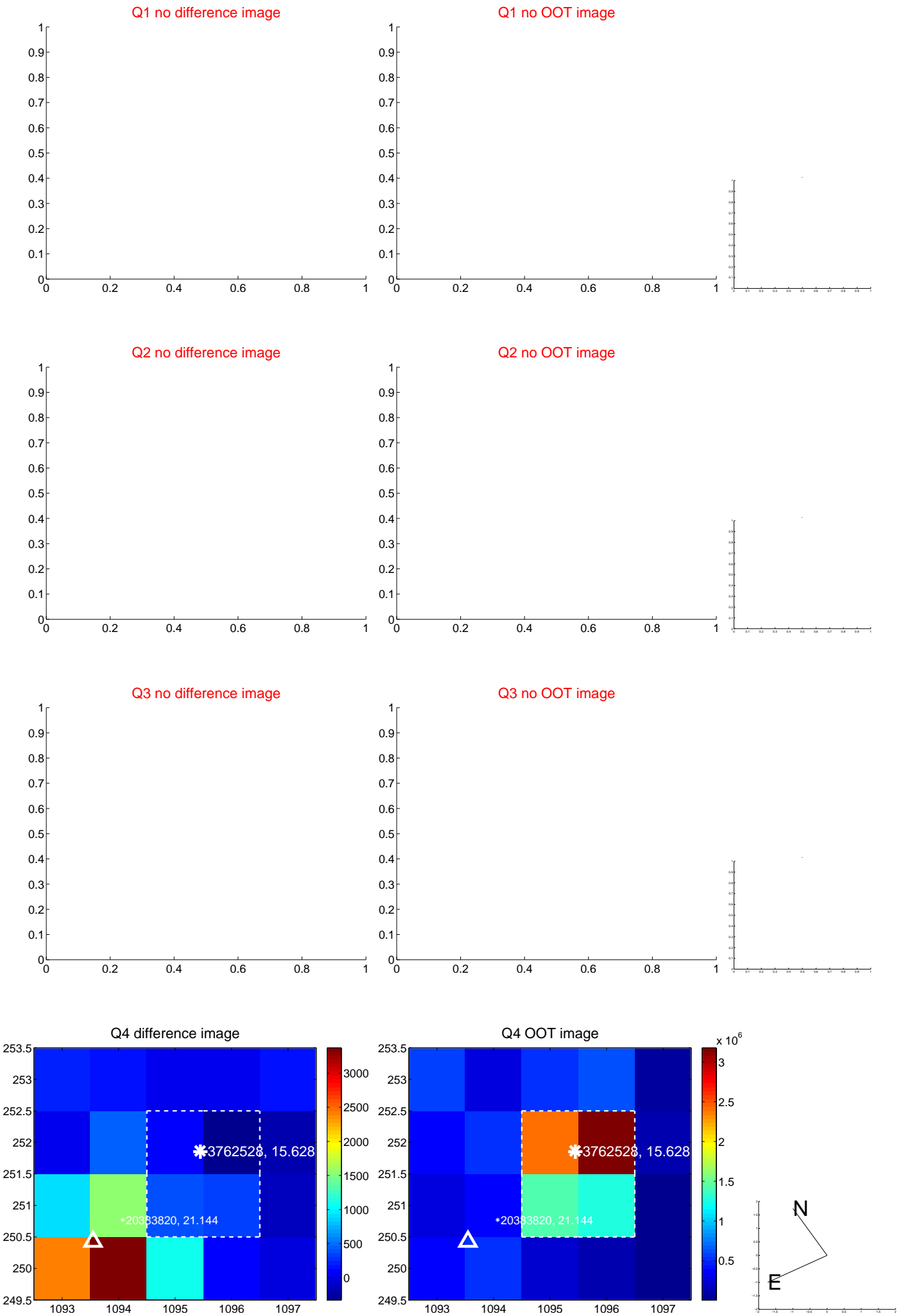
The direct PRF centroid is offset from the target star catalog position by about 0.47 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	9.222 ± 0.322	28.64	9.155 ± 0.315	-1.109 ± 0.174
PRF-fit source offset from KIC position	9.259 ± 0.341	27.17	9.190 ± 0.319	-1.127 ± 0.270
photometric centroid source offset	6.02 ± 2.02	2.98	-0.20 ± 2.66	-6.02 ± 2.02

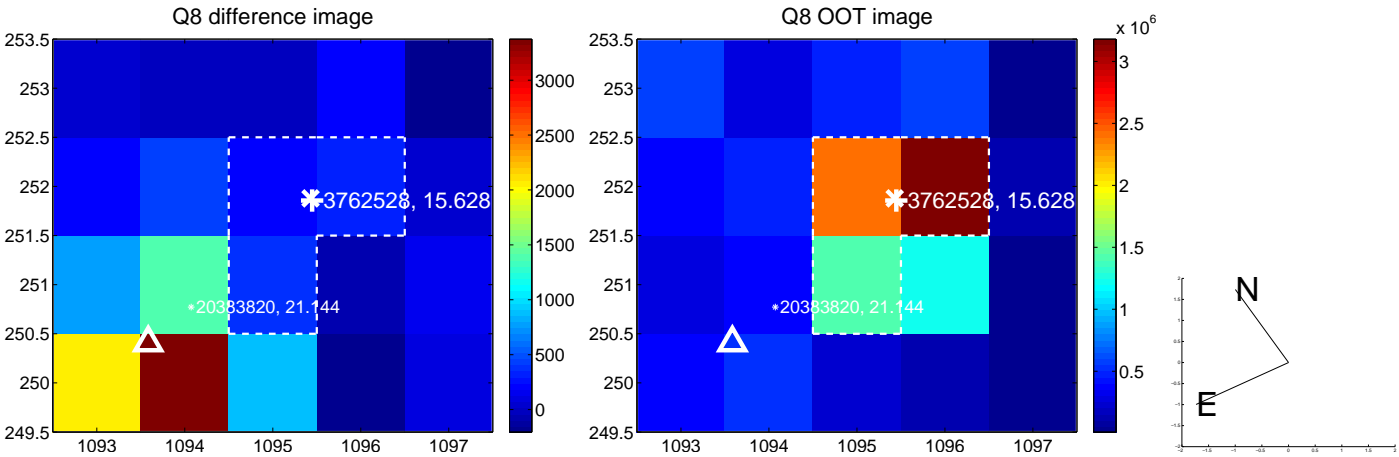
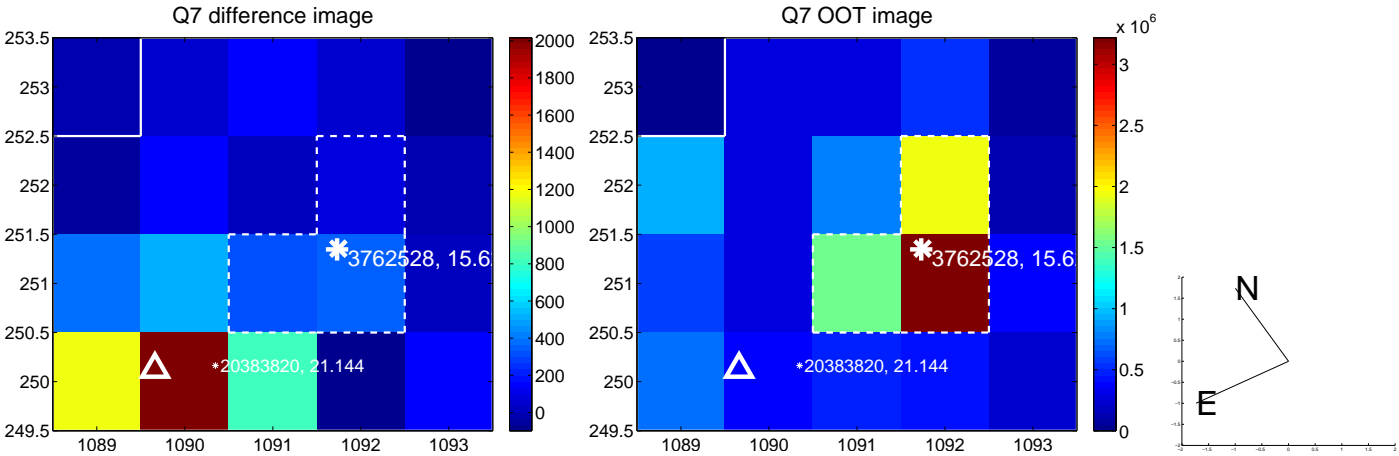
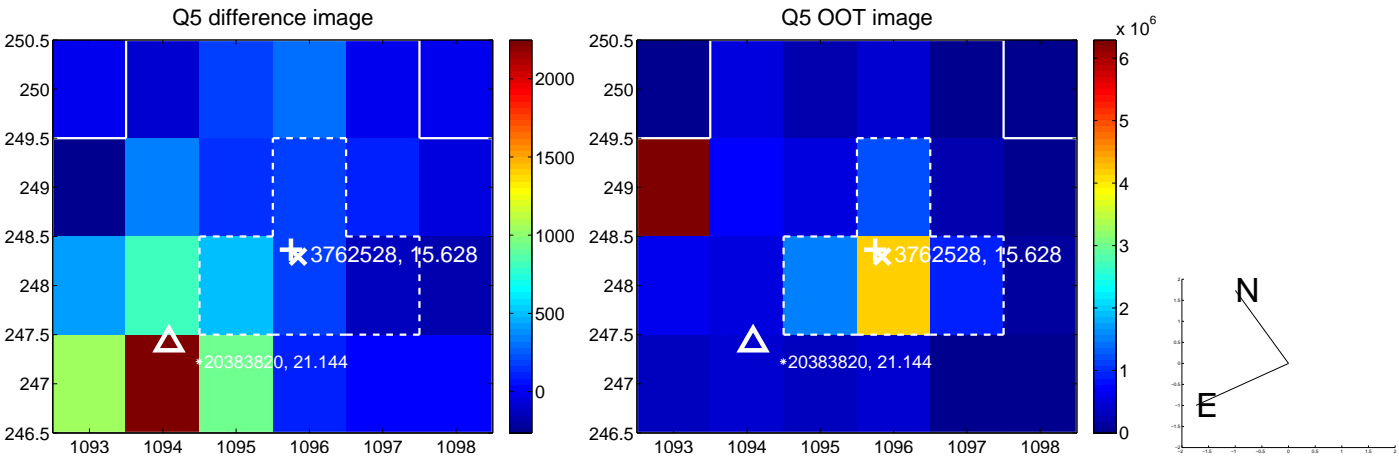


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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

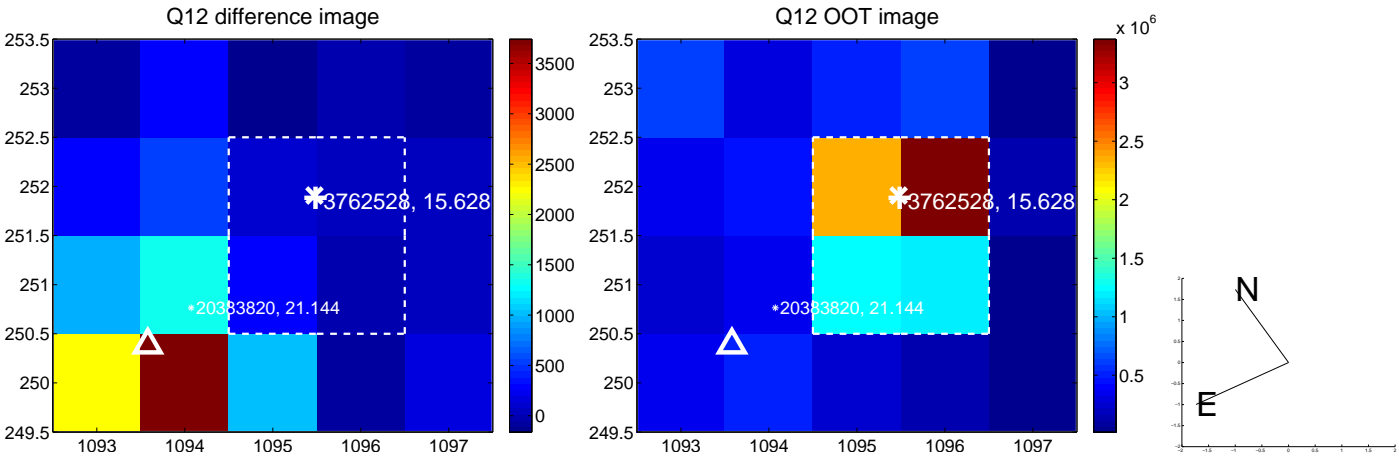
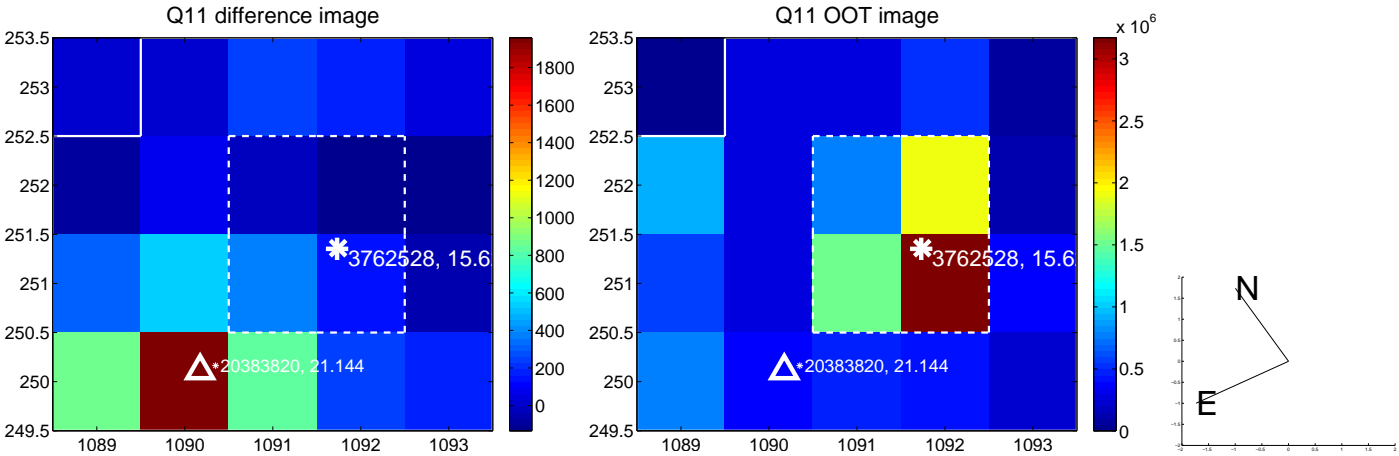
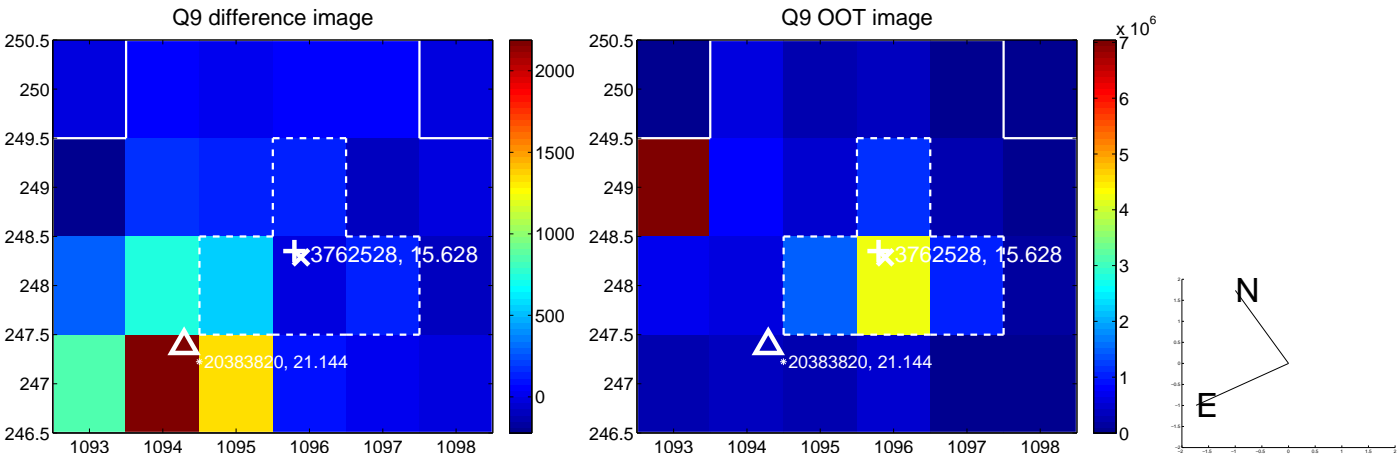
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



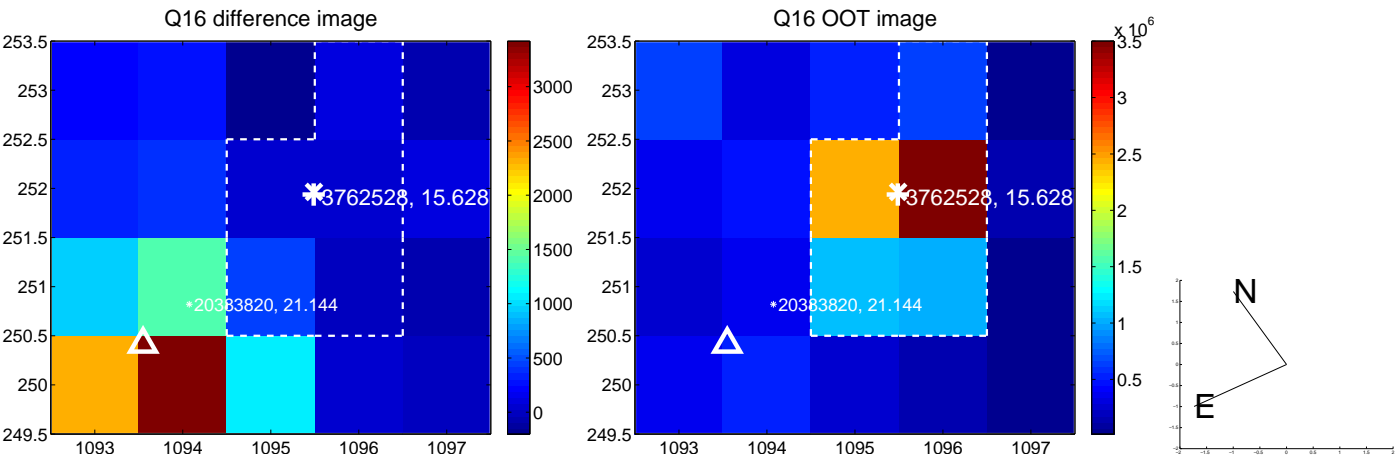
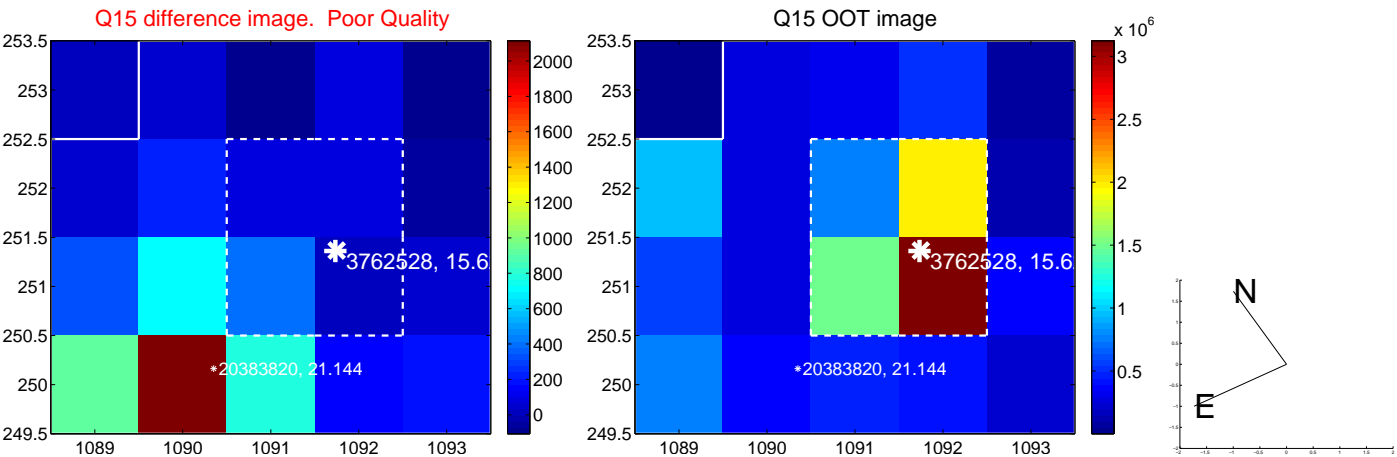
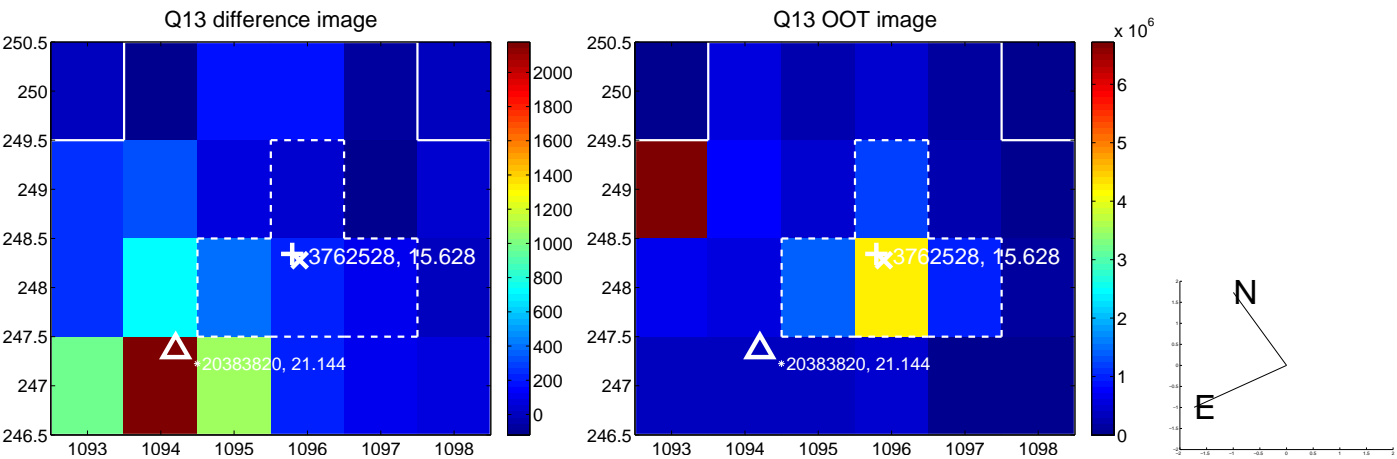
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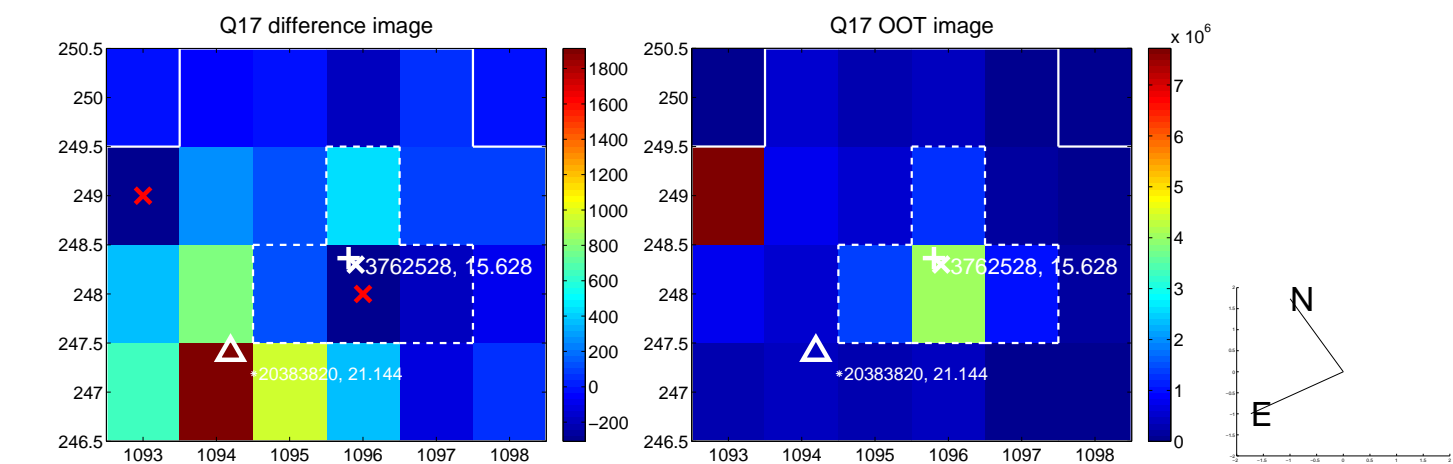
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



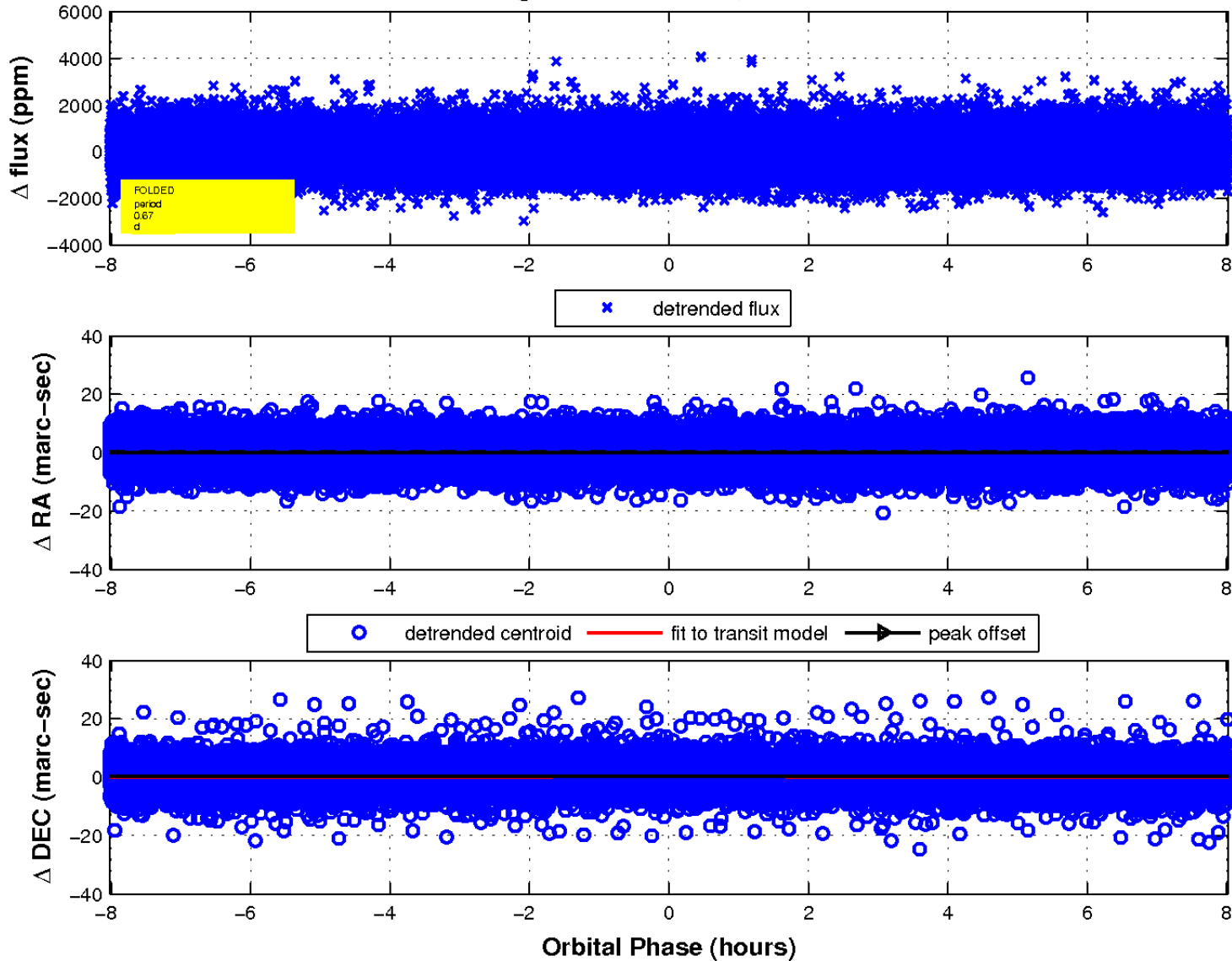
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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



fluxWeightedCentroids, Planet 1 of 1



UKIRT Image

Declination

