

KIC 007592038

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})
007592038-01	OBS	No	2.930958	131.783441	187.1	4.500	9.4	-1.0	1.68	7078	2.33	3203.09

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
007592038-01	OBS	FP	0.00	1	0	1	0	SWEET_NTL—LPP_DV—LPP_ALT—MOD_NONUNIQ_ALT—CENT_NOFITS—HALO_GHOST

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

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

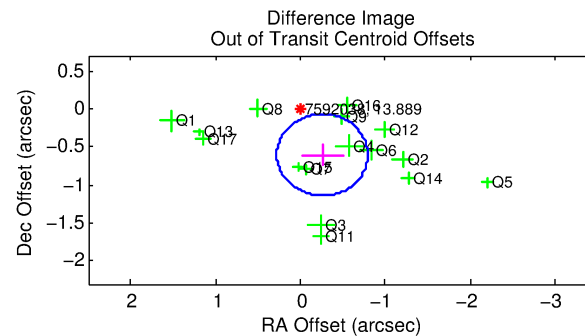
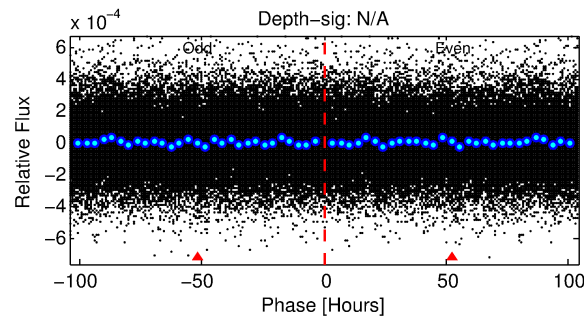
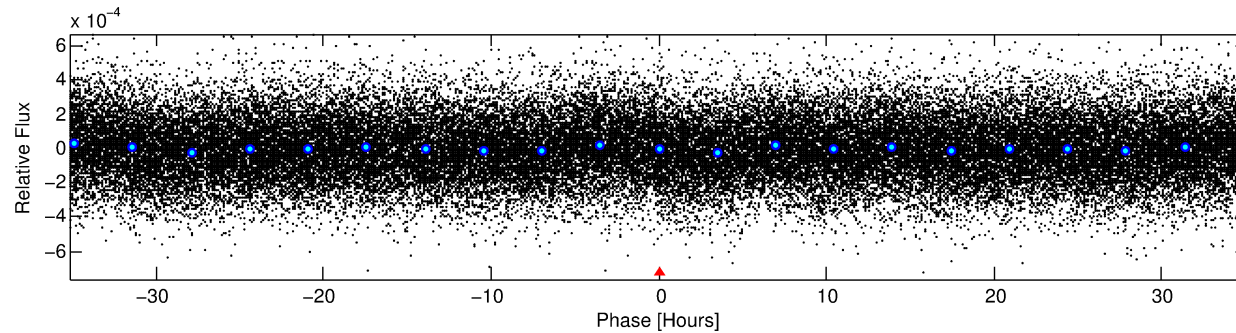
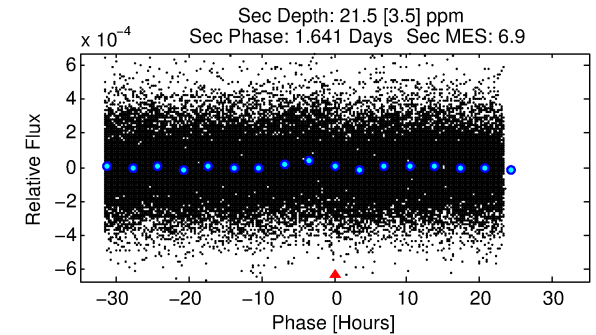
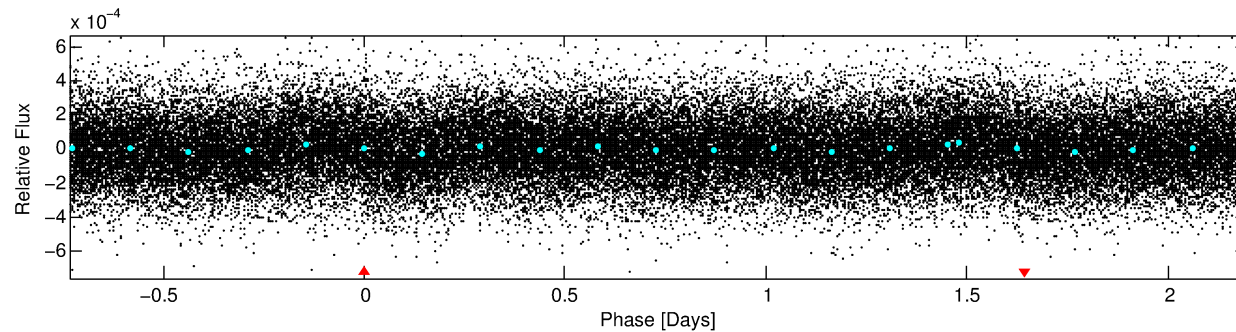
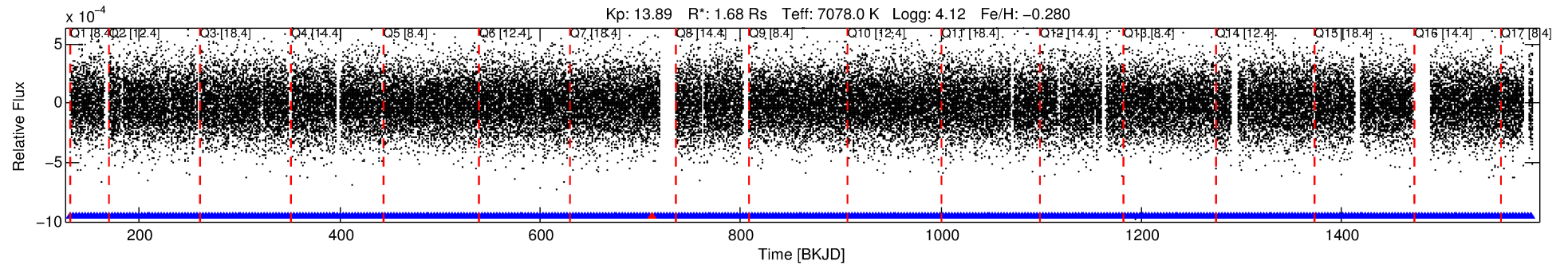
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 007592038-01

No Significant Match Found

DV One-Page Summary

KIC: 7592038 Candidate: 1 of 1 Period: 2.931 d



TPS TCE Results:

Period = 2.93096 d
Epoch = 131.7834 BKJD

DV fit results are unavailable

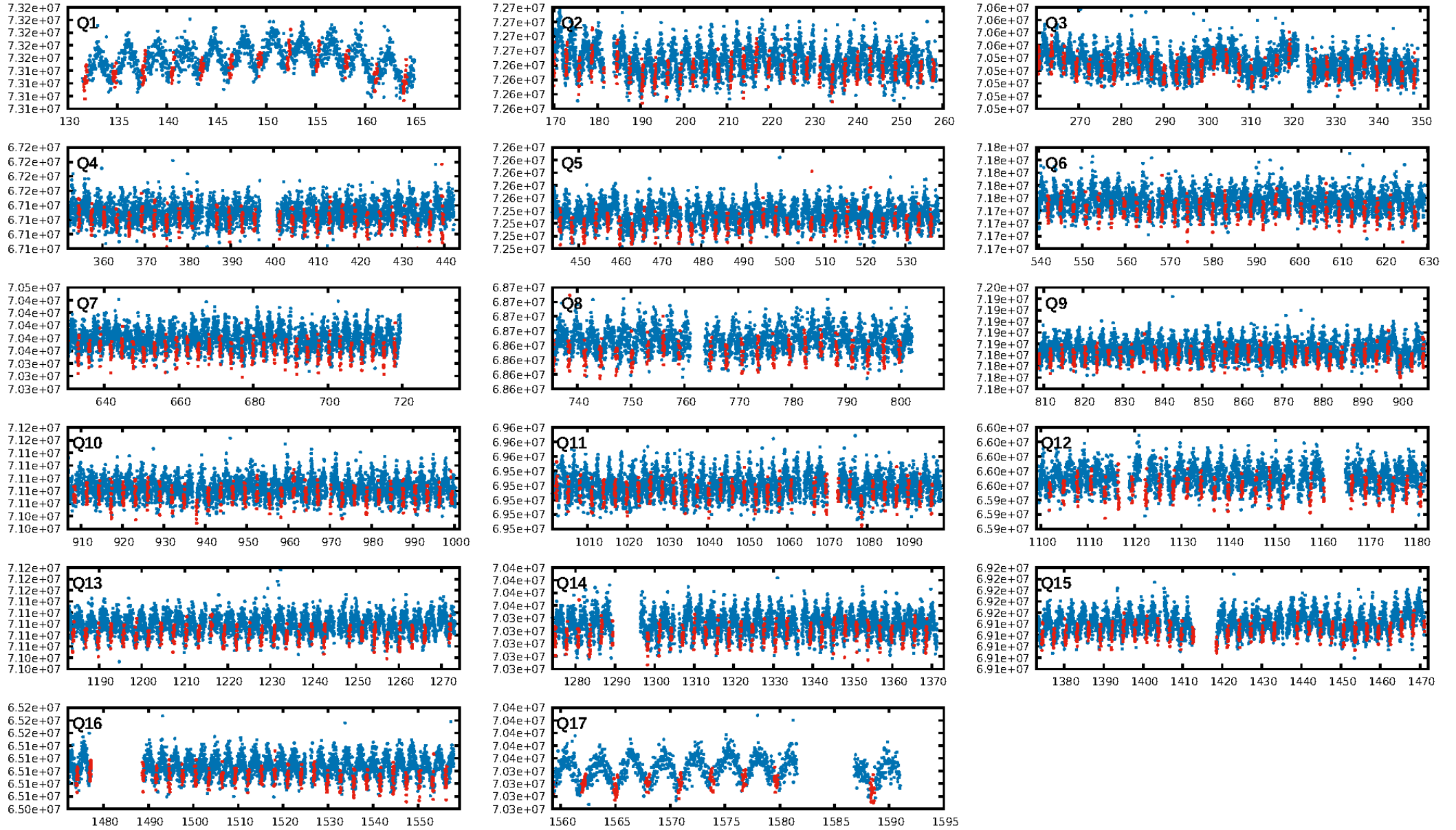
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: 1.02e-19
RollingBand-fgt: 1.00 [449/450]
GhostDiagnostic-chr: -0.1161
Centroid-sig: 91.8%
Centroid-so: 0.156 arcsec [0.53 σ]
OotOffset-rm: 0.658 arcsec [3.68 σ]
KicOffset-rm: 0.903 arcsec [5.65 σ]
OotOffset-st: 3/4/4/5 [16]
KicOffset-st: 3/4/4/5 [16]
DiffImageQuality-fgm: 1.00 [16/16]
DiffImageOverlap-fno: 1.00 [17/17]

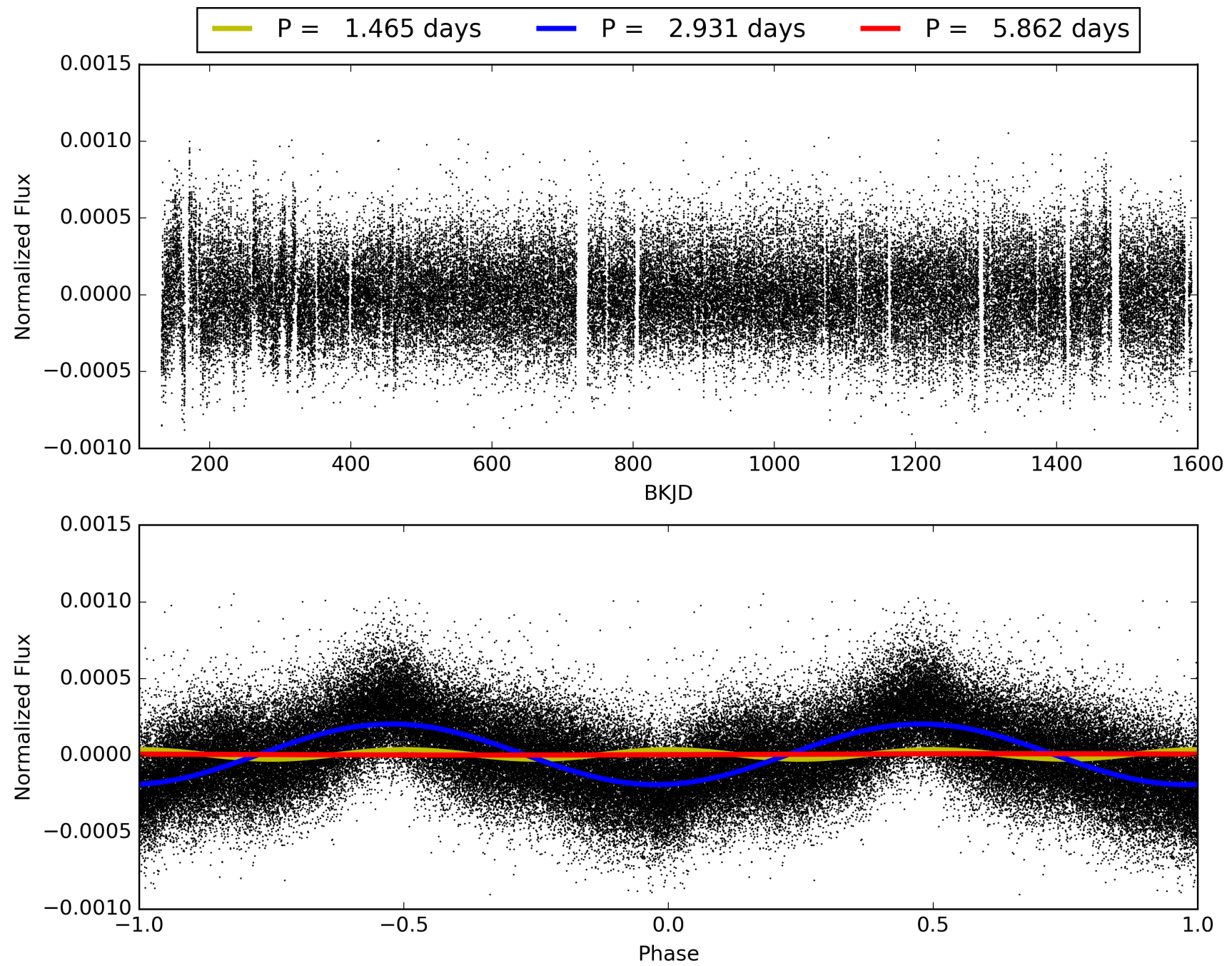
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 31-Jan-2016 22:35:14 Z

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

TCE 007592038-01, PDC Light Curves

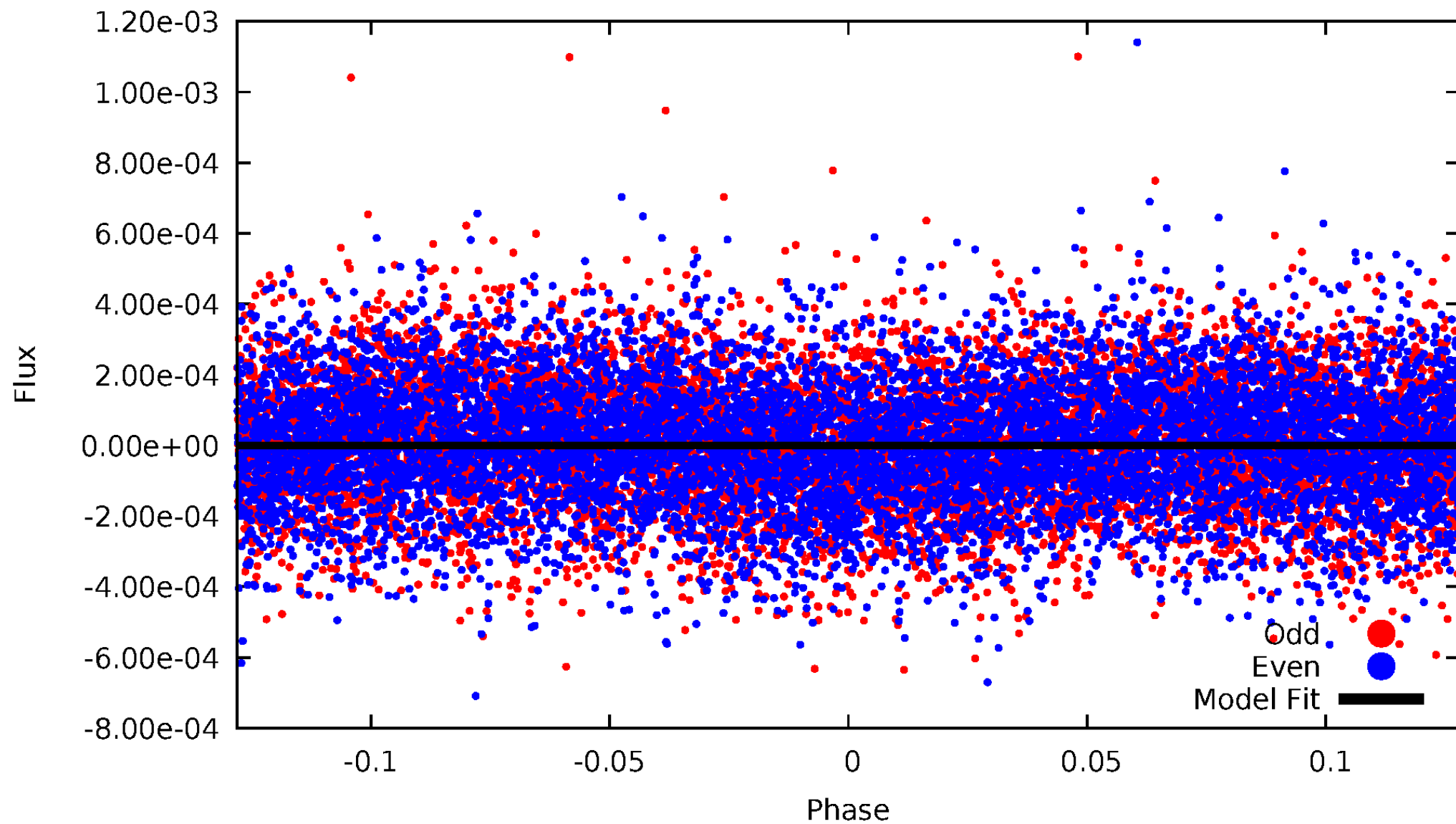


TCE 007592038-01



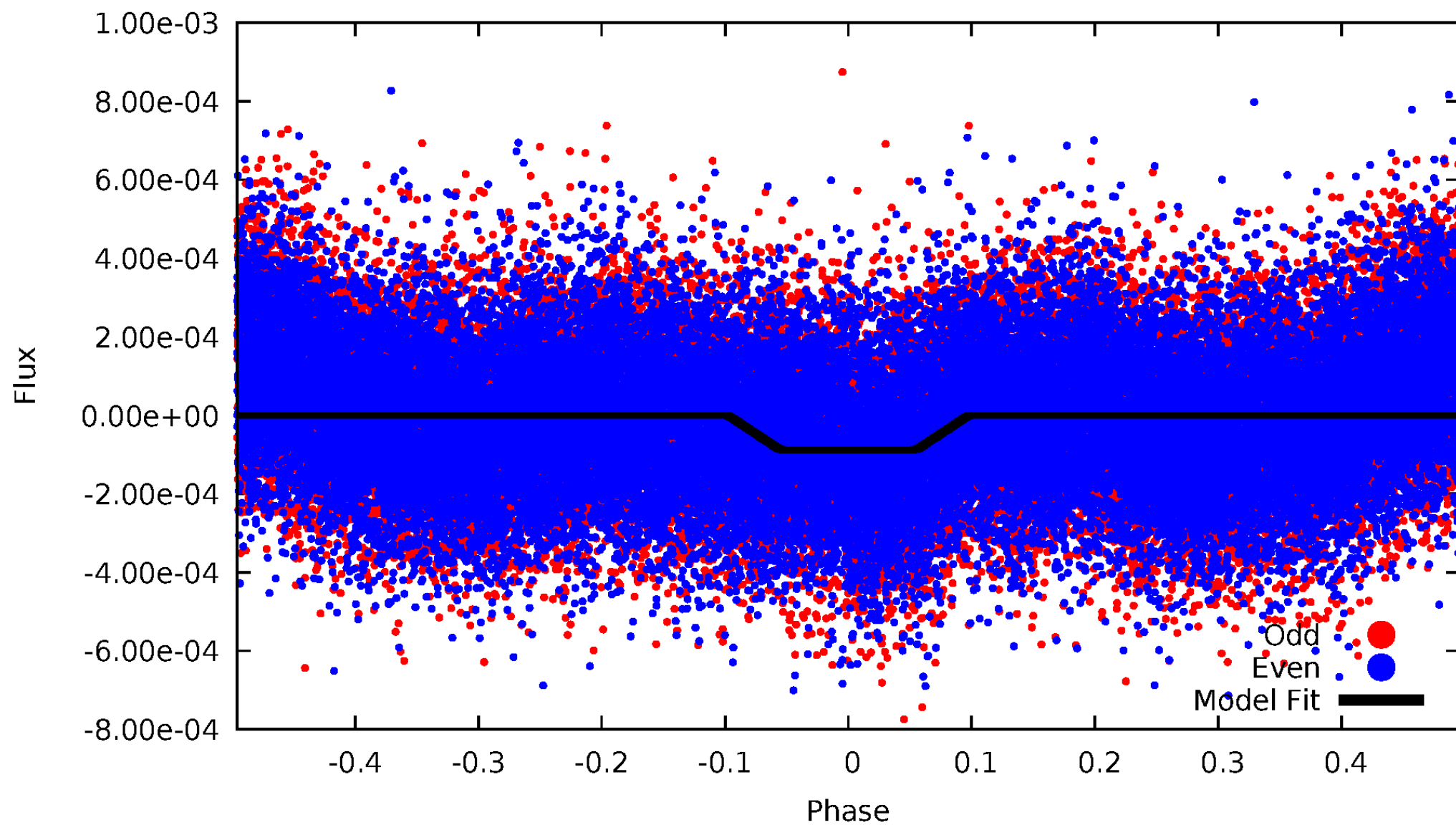
DV Odd/Even

TCE 007592038-01

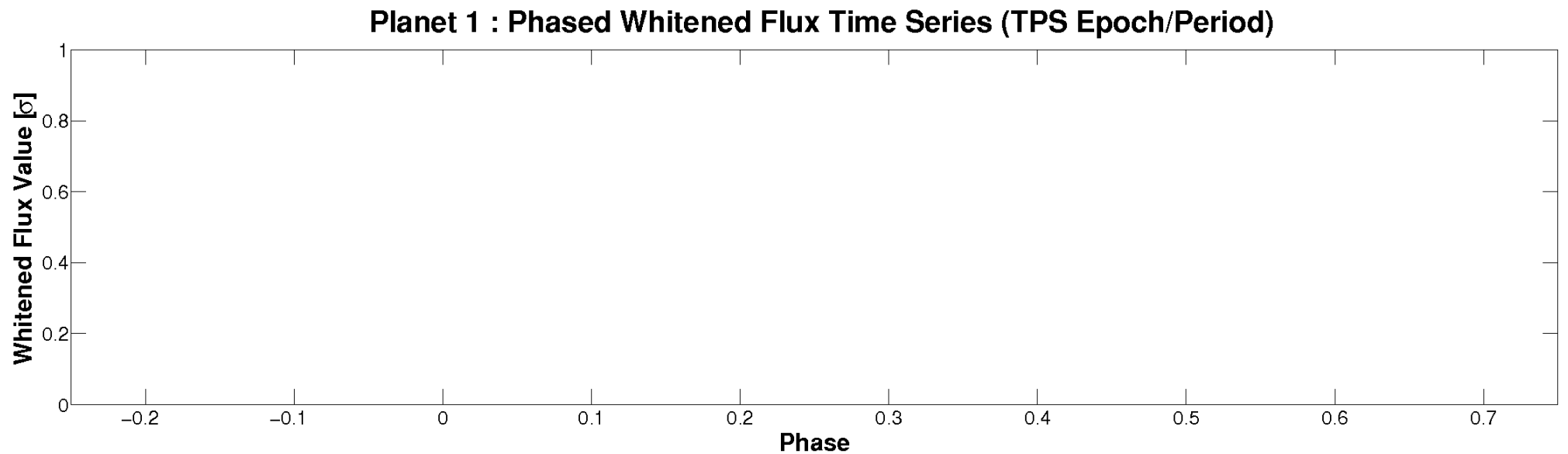
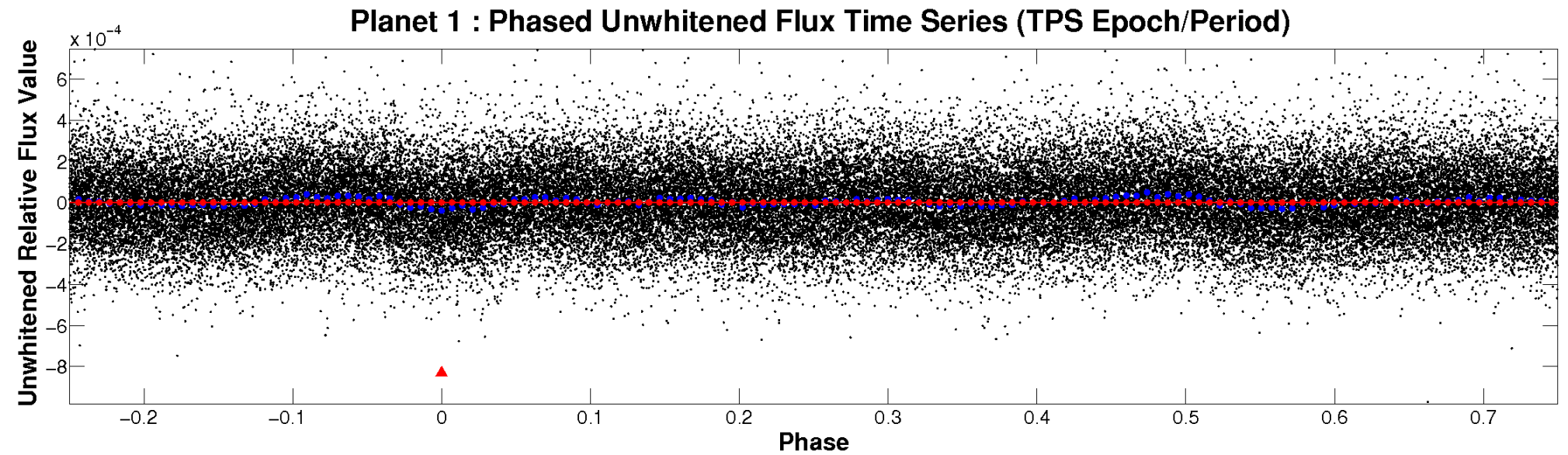


ALT Odd/Even

TCE 007592038-01

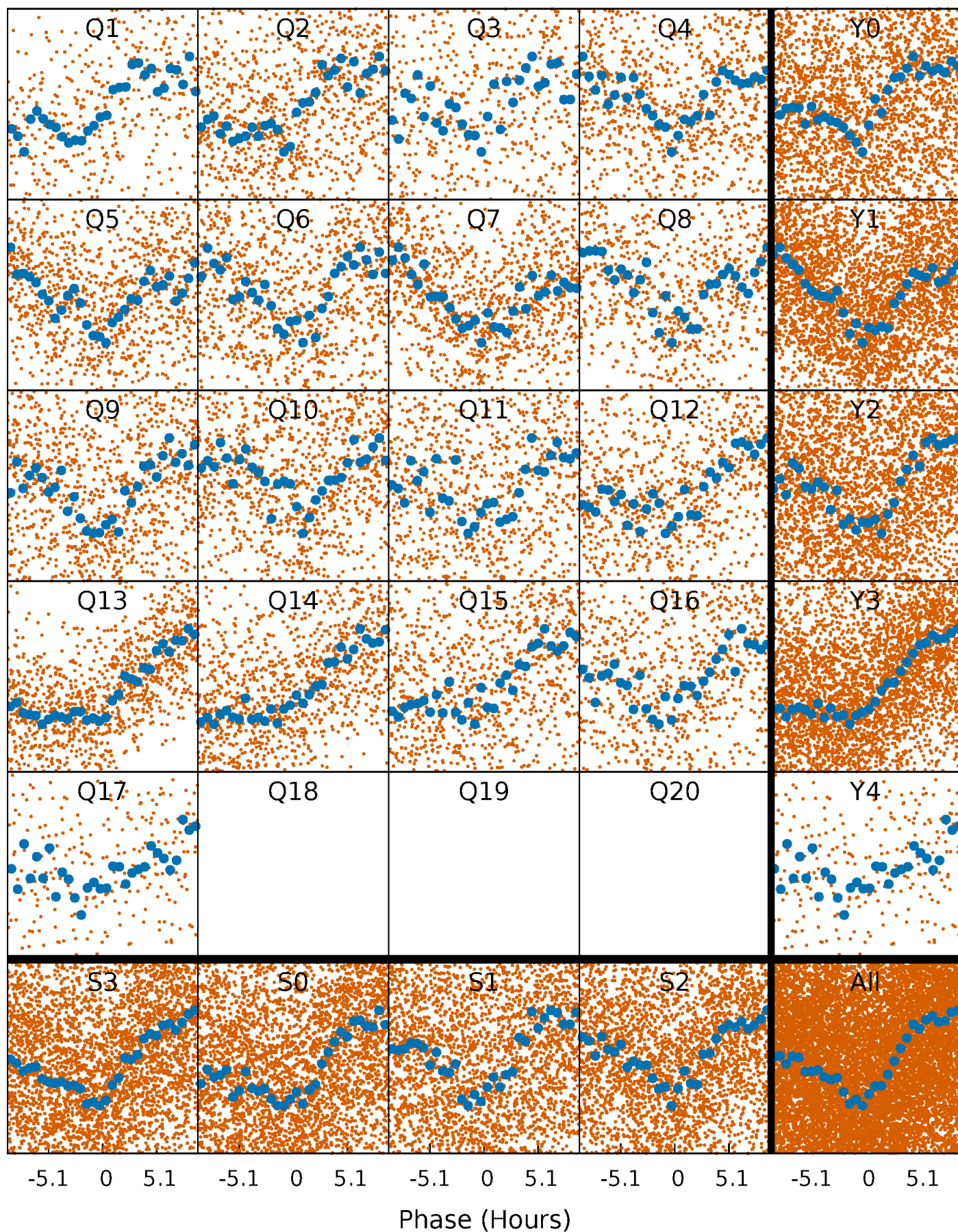


Non-Whitened Vs. Whitened Light Curve



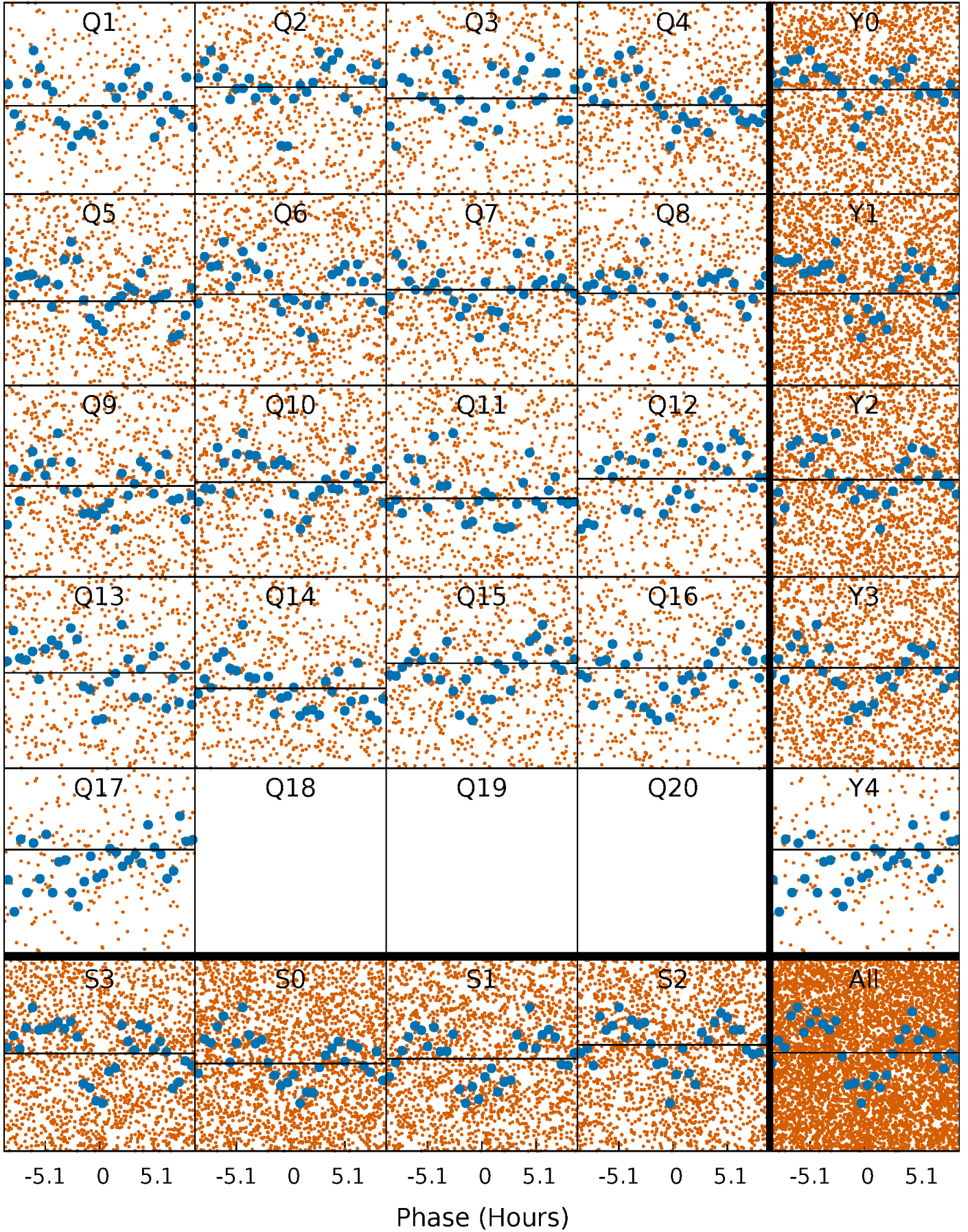
PDC Quarter-Phased Transit Curves

TCE 007592038-01 P= 2.930958 Days $T_0=131.783441$ (BKJD)



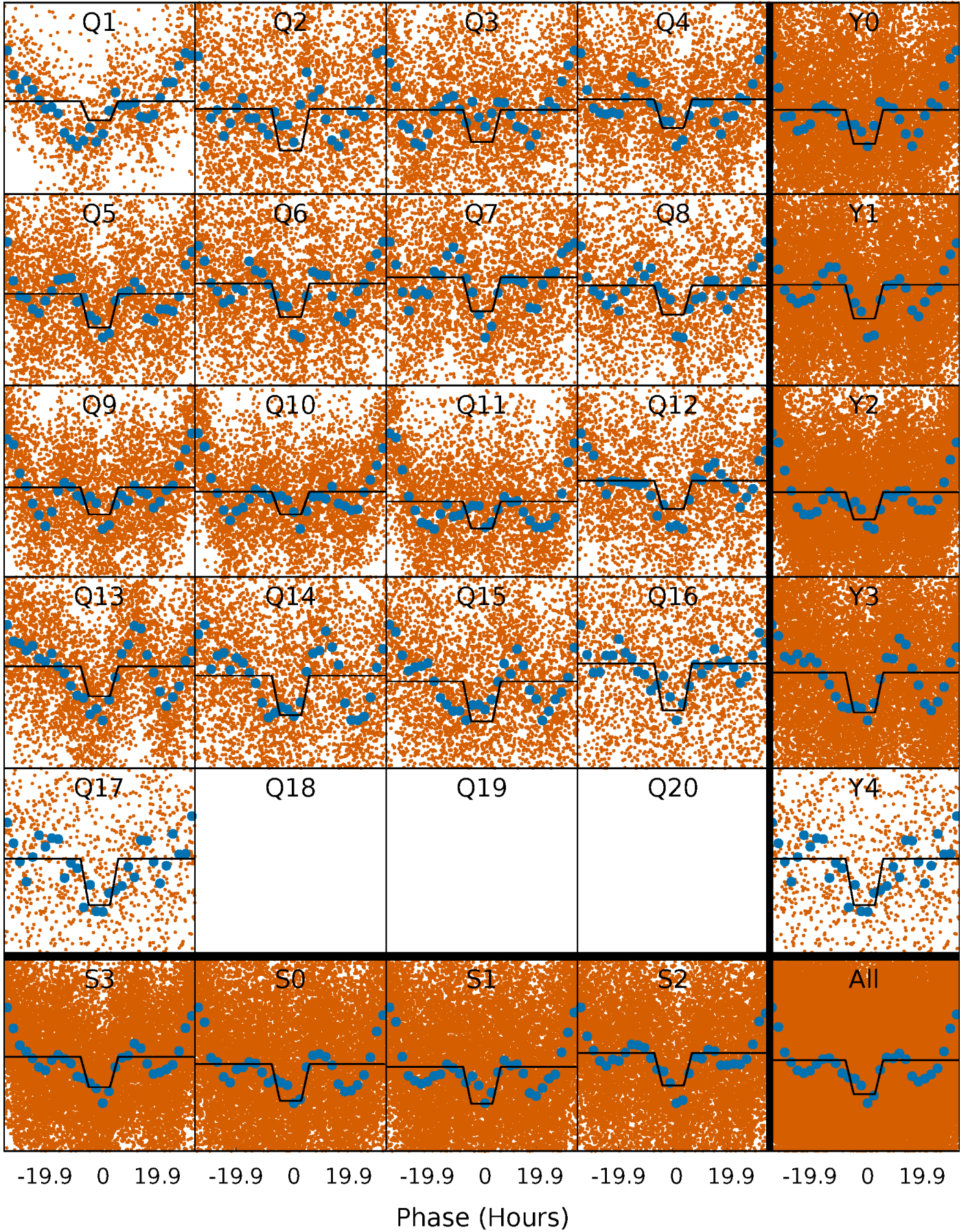
DV Quarter-Phased Transit Curves

TCE 007592038-01 P= 2.930958 Days $T_0=131.783441$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

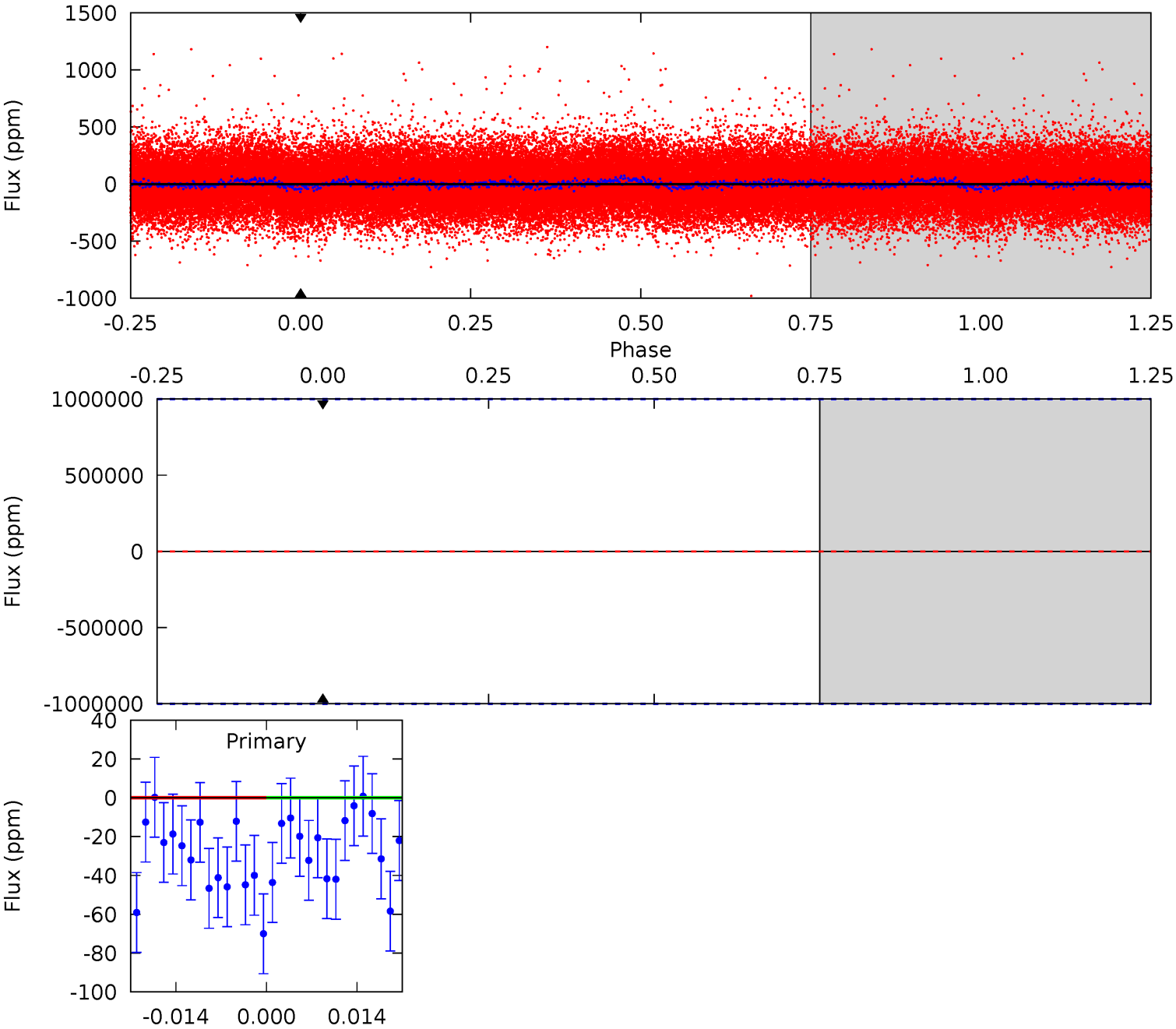
TCE 007592038-01 P= 2.930958 Days $T_0=131.685385$ (BKJD)



DV Model-Shift Uniqueness Test

007592038-01, P = 2.930958 Days, E = 128.852483 Days

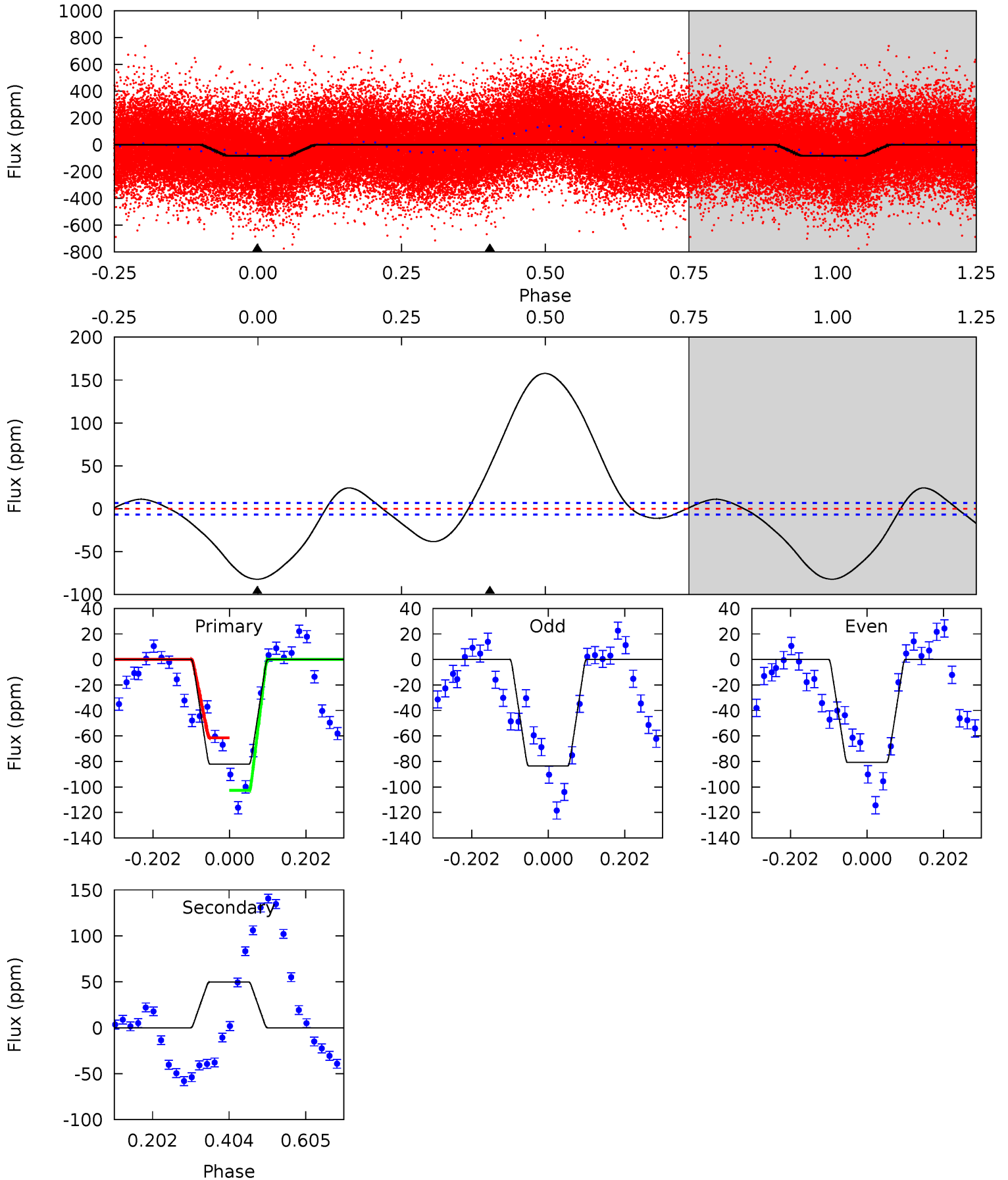
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
0	0	0	0	1.00	1.00	1.00	0	0	0	0	0	0	0	0



Alt Model-Shift Uniqueness Test

007592038-01, P = 2.930958 Days, E = 128.754427 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
54.1	-32.8	0	0	4.42	1.28	8.97	54.1	54.1	-32.8	-32.8	0.90	1.05	0.66	13.4



Stellar Parameters For KIC 007592038

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	M (M_{\odot})	p_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	7078^{+199}_{-274}	$4.124^{+0.175}_{-0.175}$	$-0.280^{+0.250}_{-0.350}$	$1.681^{+0.502}_{-0.411}$	$1.374^{+0.214}_{-0.235}$	$0.408^{+0.385}_{-0.197}$
	+3%/-4%	+4%/-4%	+89%/-125%	+30%/-24%	+16%/-17%	+94%/-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 007592038-01 / KOI

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	0 ± 1000000	$13.52^{+14.84}_{-9.43}$	2679^{+217}_{-193}	5472^{+32080}_{-40995}	13^{+1110}_{-1110}
Alt.	50 ± 2	$13.01^{+14.85}_{-9.47}$	2679^{+208}_{-191}	-3224^{+255}_{-1230}	$-0.313^{+0.242}_{-3.555}$

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 $T_{\text{obs}} \gg T_{\text{max}}$ AND $A_{\text{obs}} \gg 1.0$

DV Centroid Data

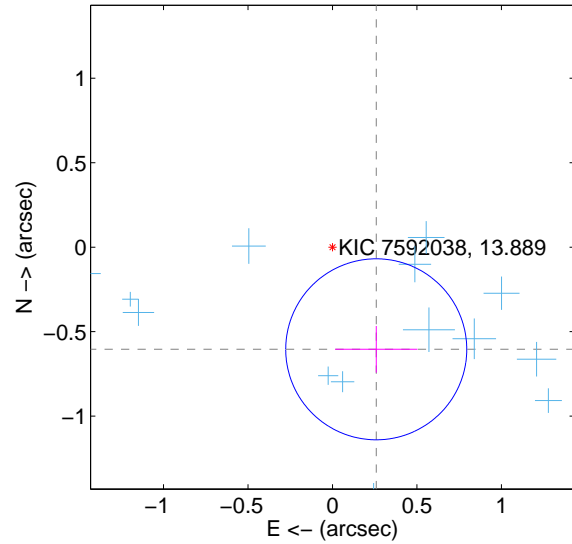
Supplemental centroid analysis for 007592038-01. Kepler magnitude: 13.89. Transit SNR -1.00

There are 16 quarters with good PRF difference image offsets

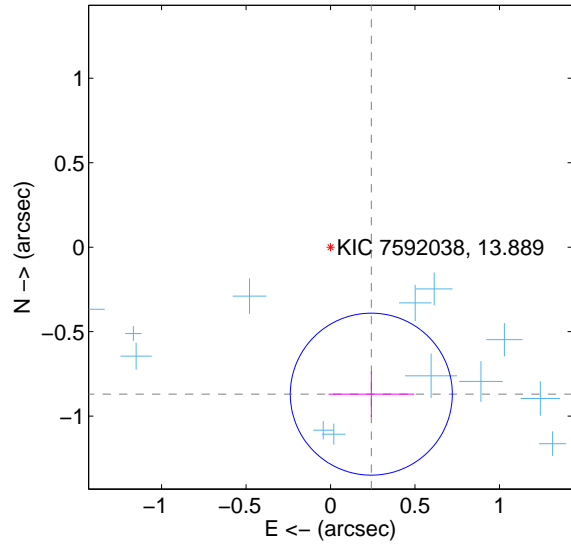
The direct PRF centroid is offset from the target star catalog position by about 0.26 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.658 ± 0.179	3.68	-0.259 ± 0.243	-0.605 ± 0.138
PRF-fit source offset from KIC position	0.903 ± 0.160	5.65	-0.241 ± 0.253	-0.870 ± 0.135
photometric centroid source offset	0.16 ± 0.29	0.53	-0.06 ± 0.28	-0.14 ± 0.29

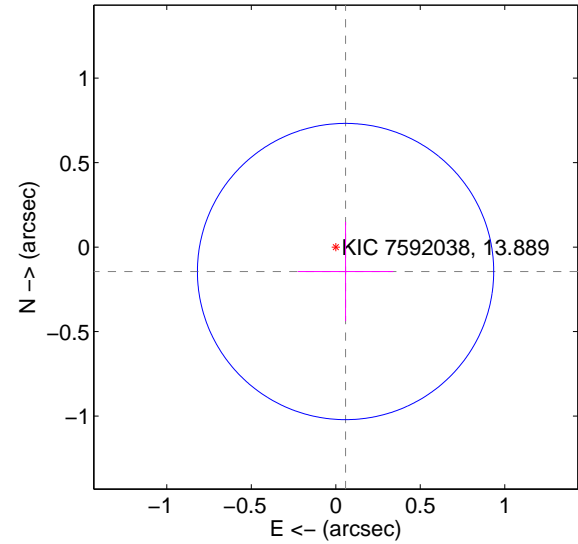
offset from difference PRF-fit to OOT PRF-fit



offset from difference PRF-fit to KIC position

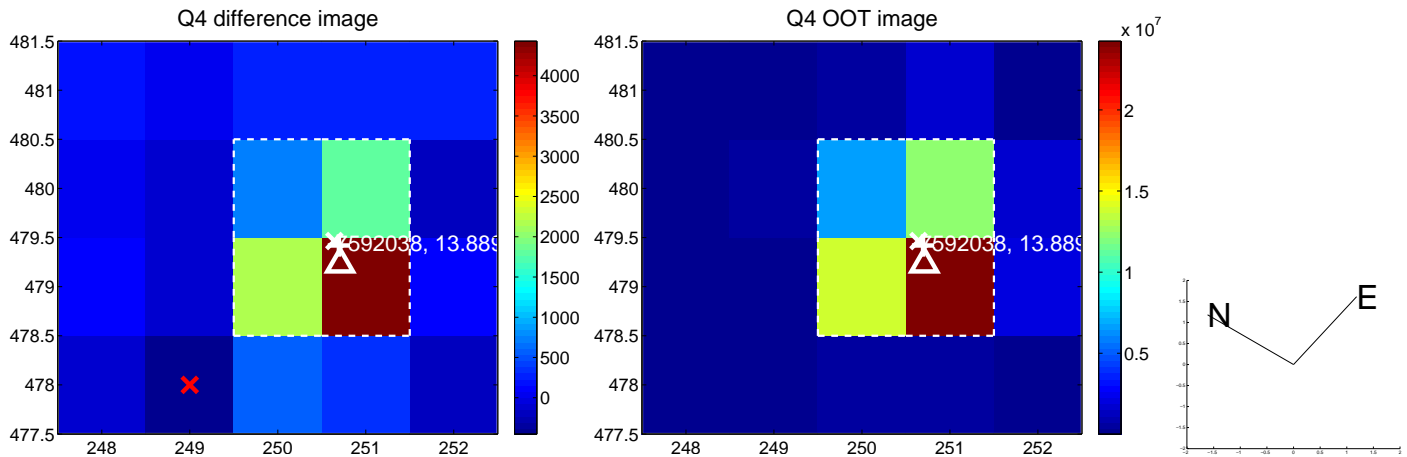
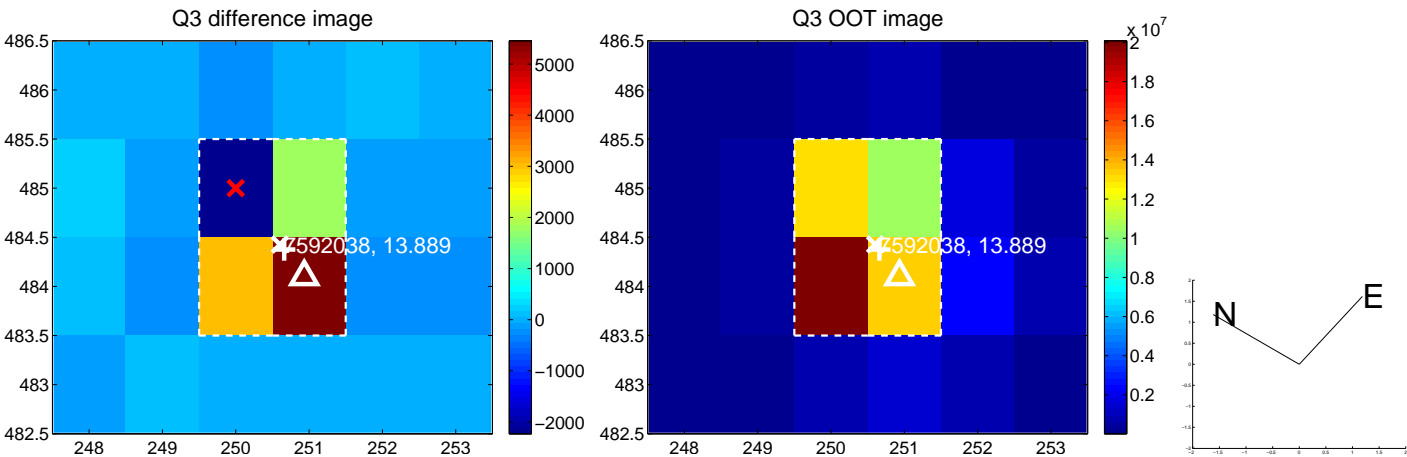
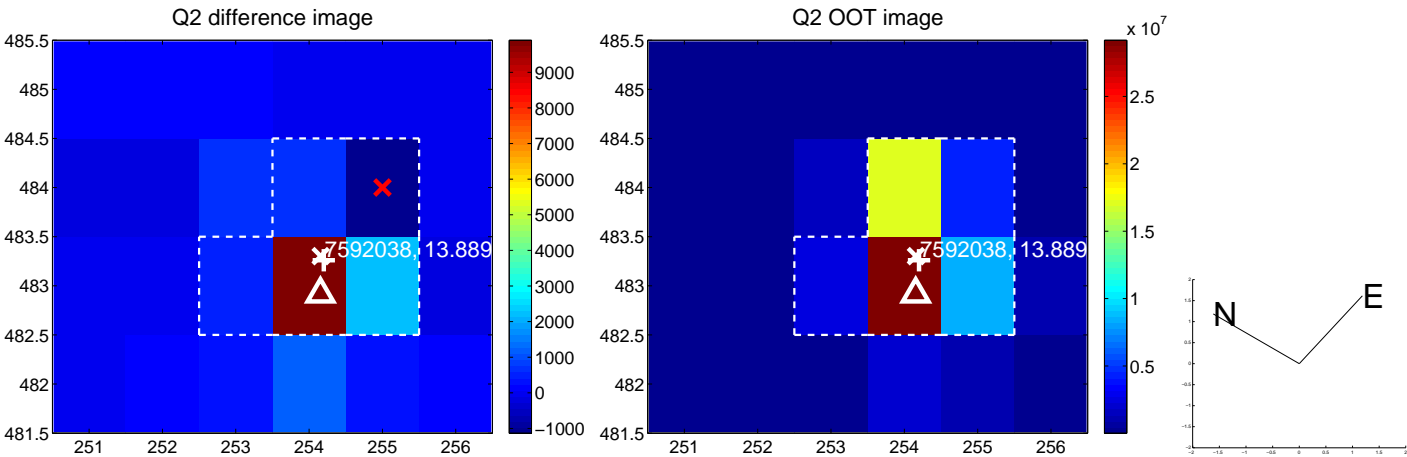
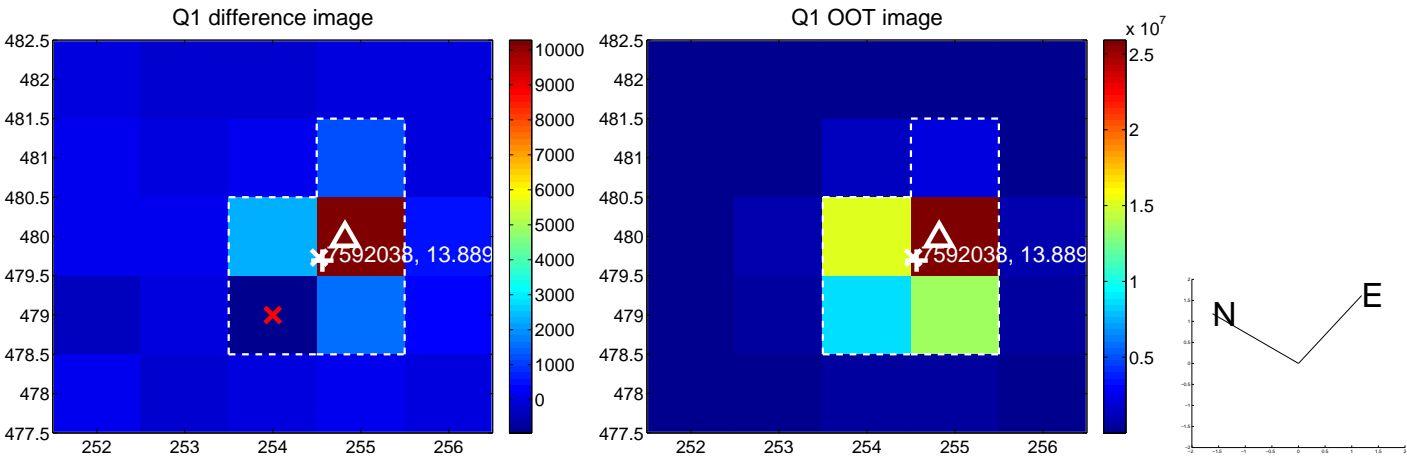


offset from photometric centroids

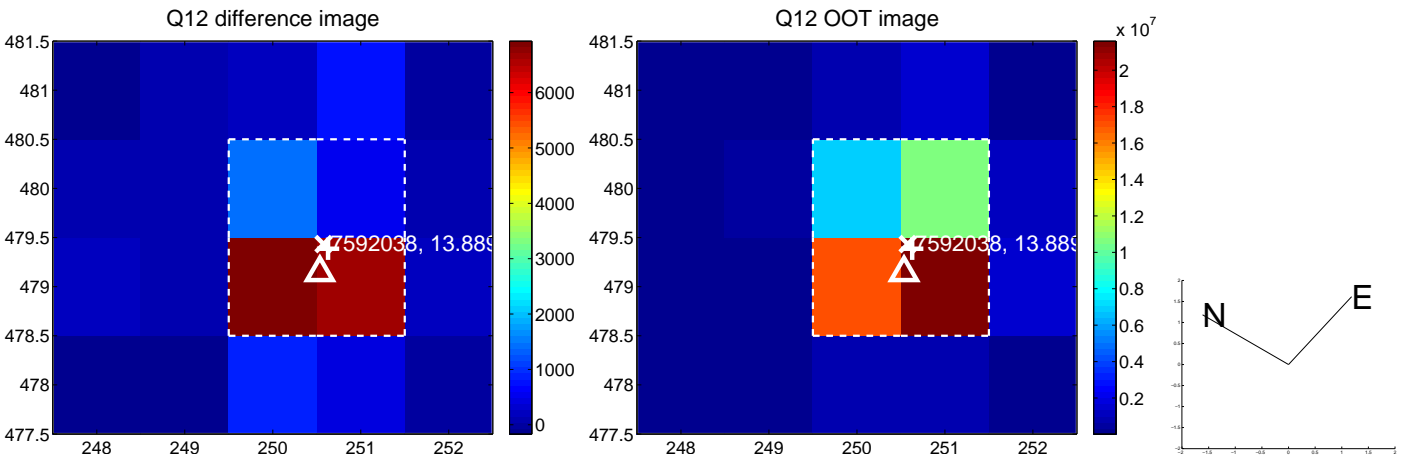
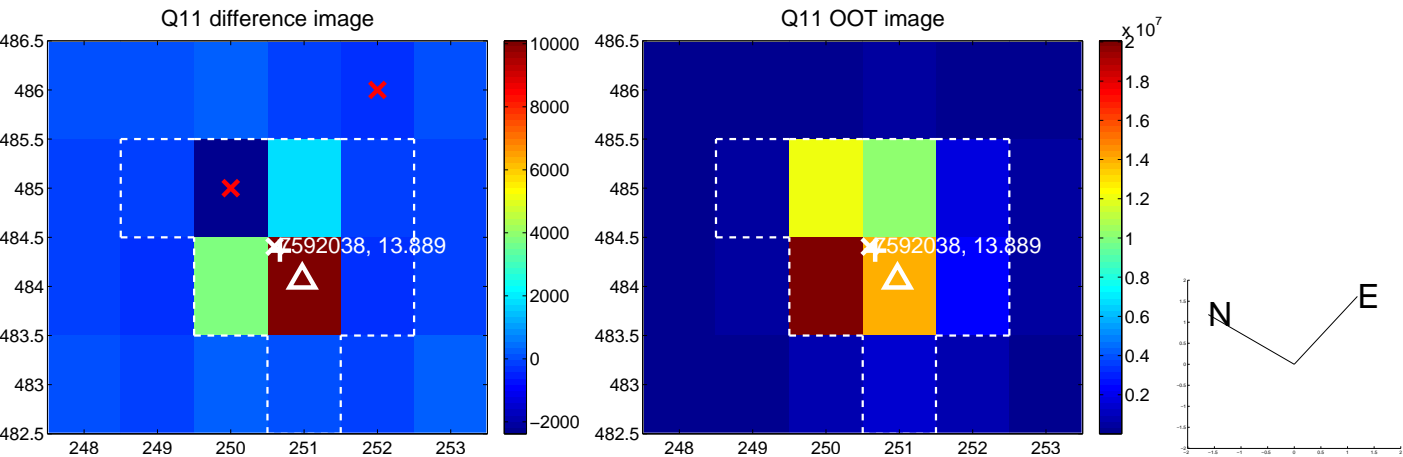
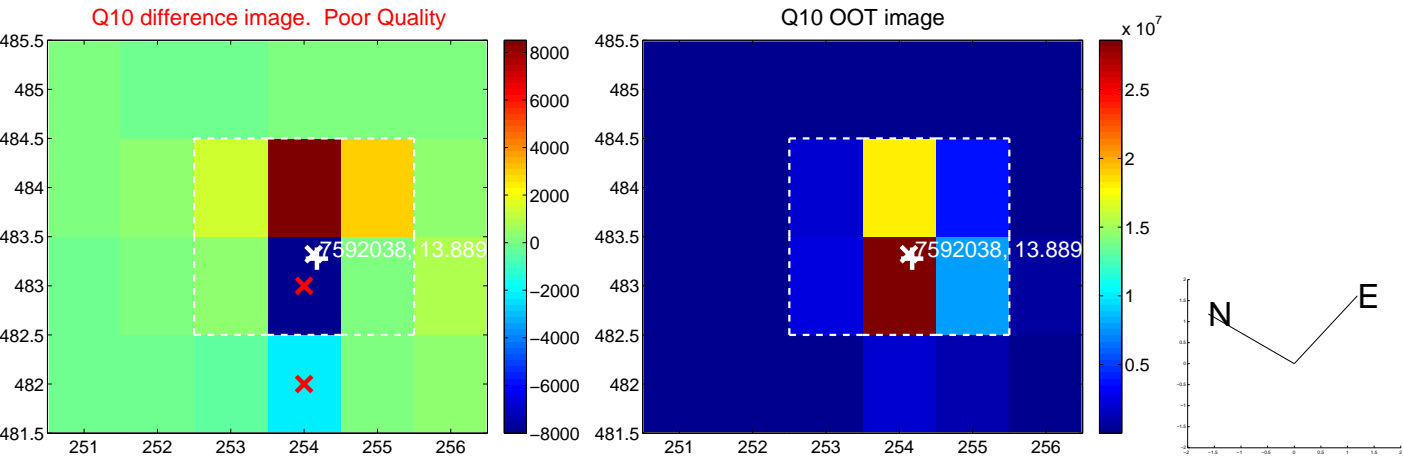
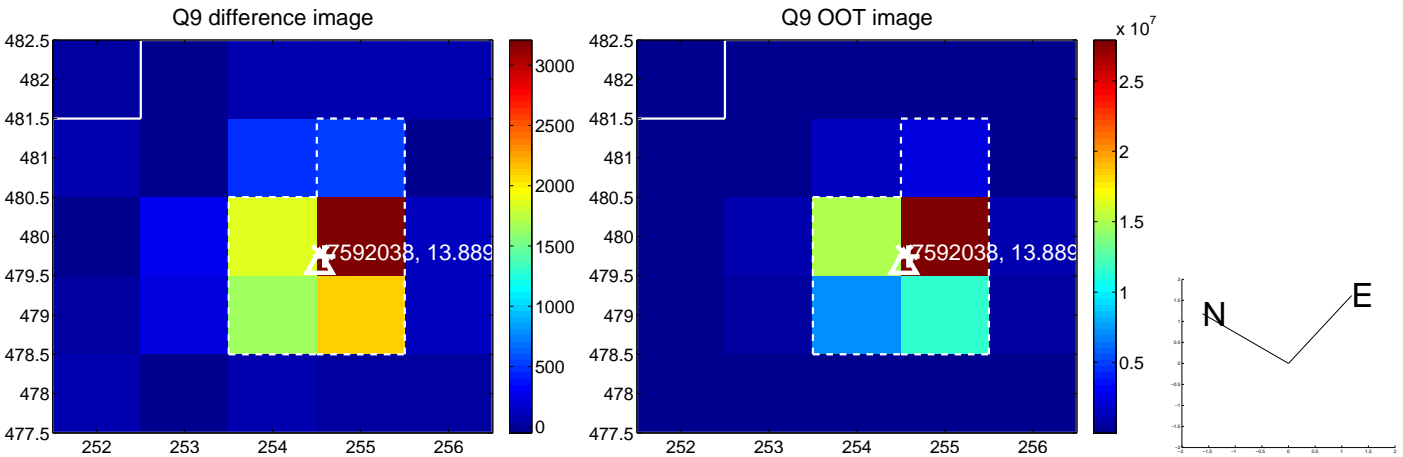


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses:** good quarterly centroid offsets; **Vermillion crosses:** bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

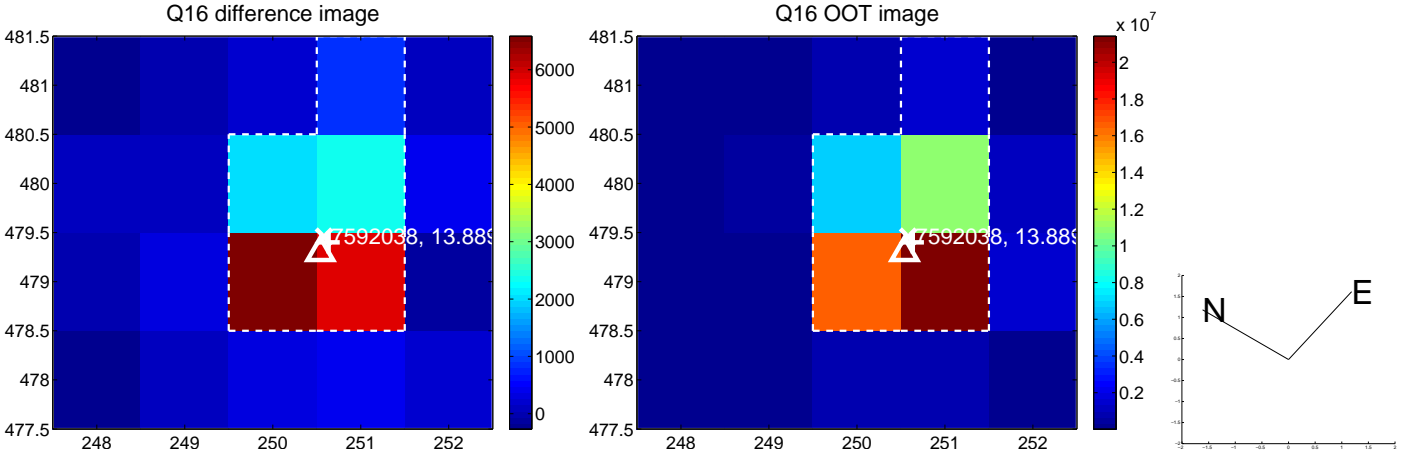
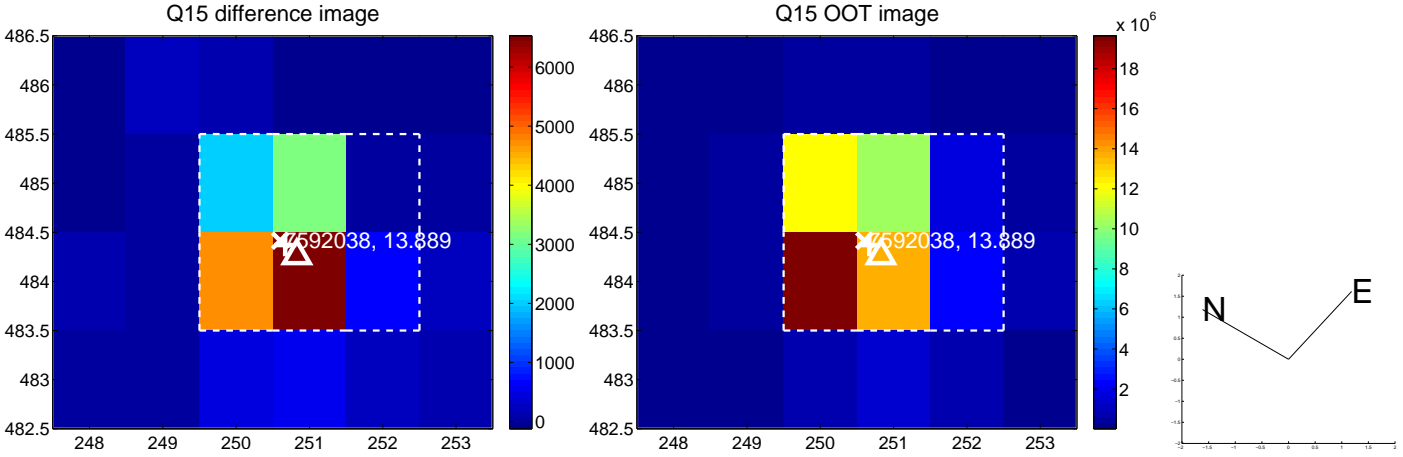
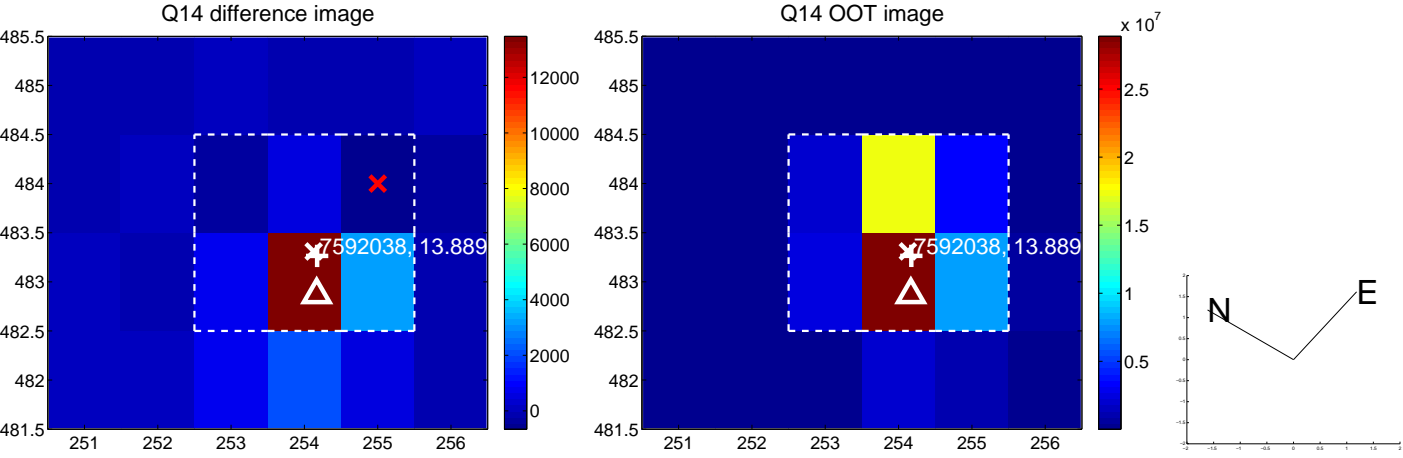
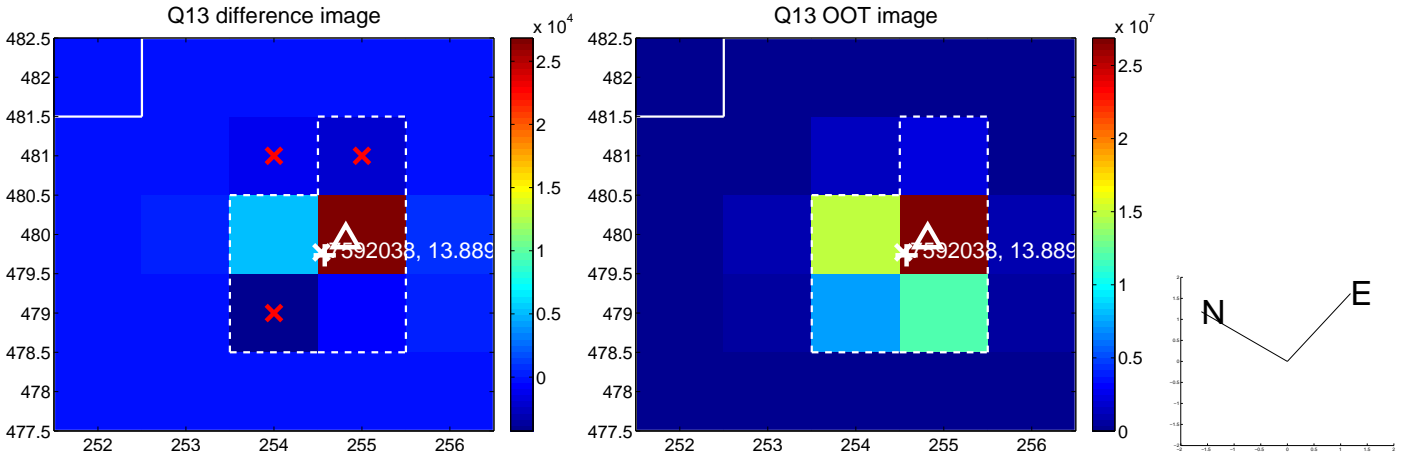
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



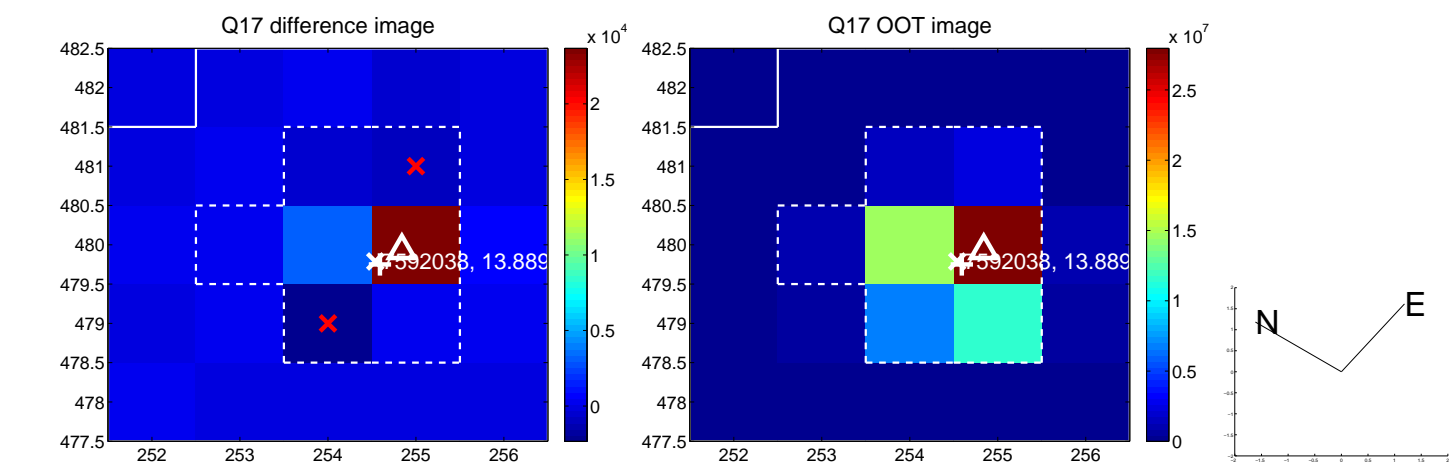
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



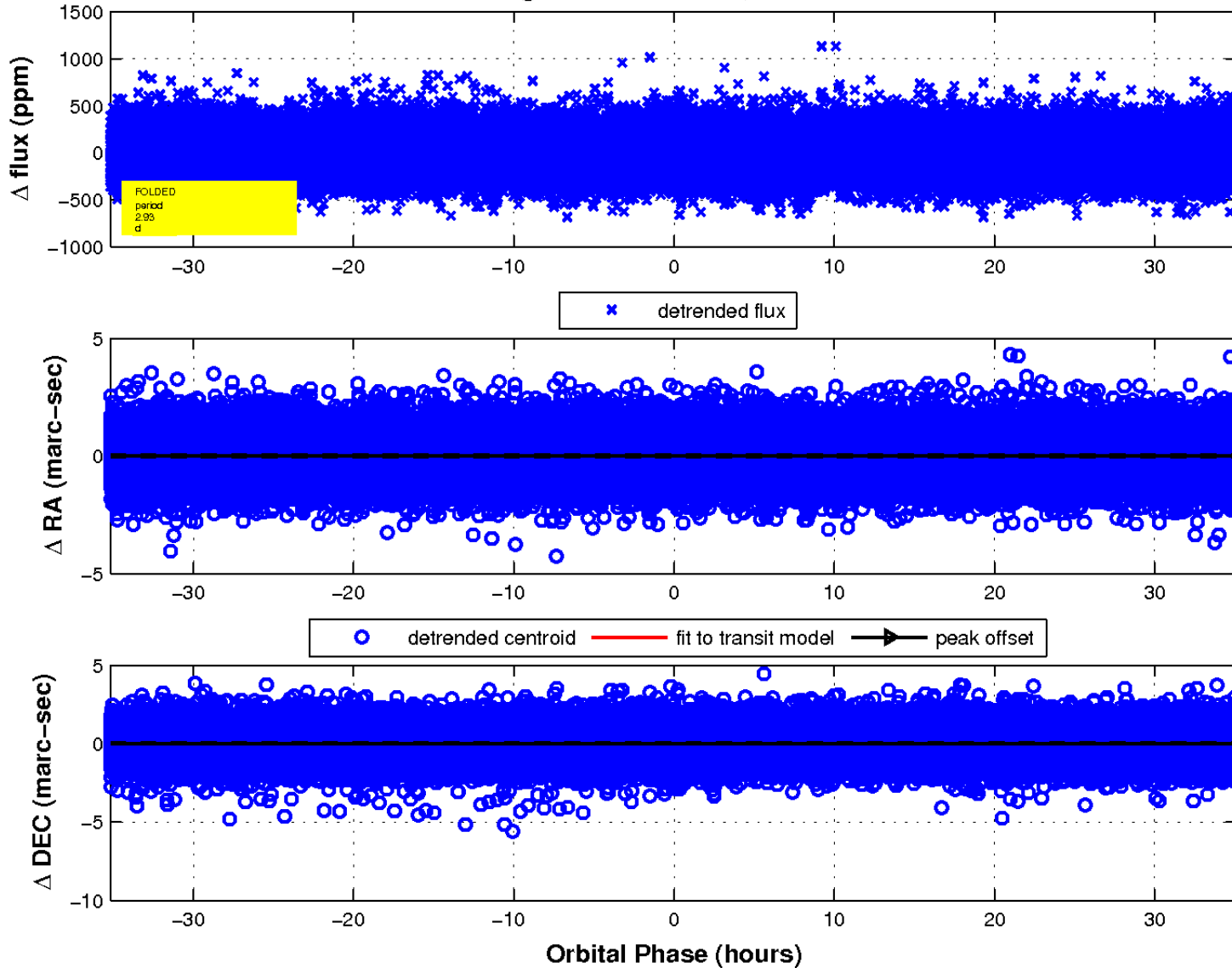
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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



fluxWeightedCentroids, Planet 1 of 1



UKIRT Image

Declination

