

KIC 008095441

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})
008095441-01	OBS	2743.01	11.874563	140.212508	220.3	2.054	18.1	20.4	0.88	5523	1.50	66.44

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
008095441-01	OBS	PC	1.00	0	0	0	0	NO_COMMENT

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

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

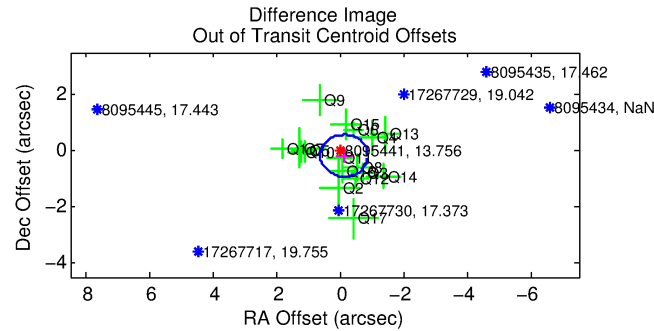
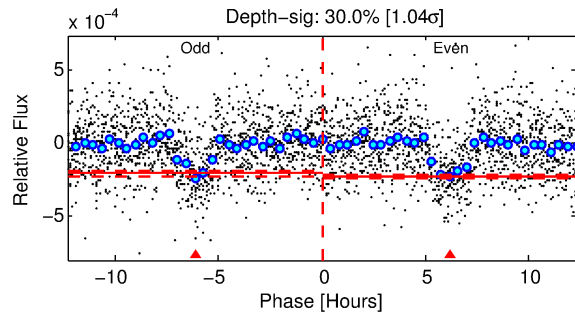
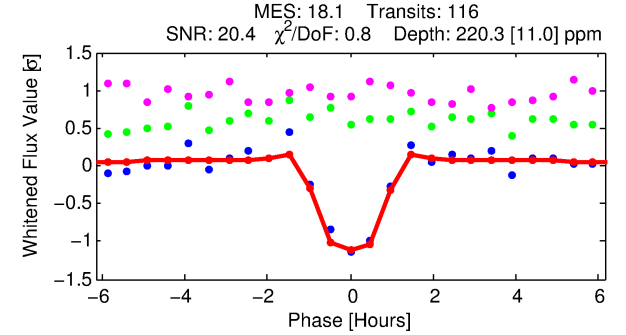
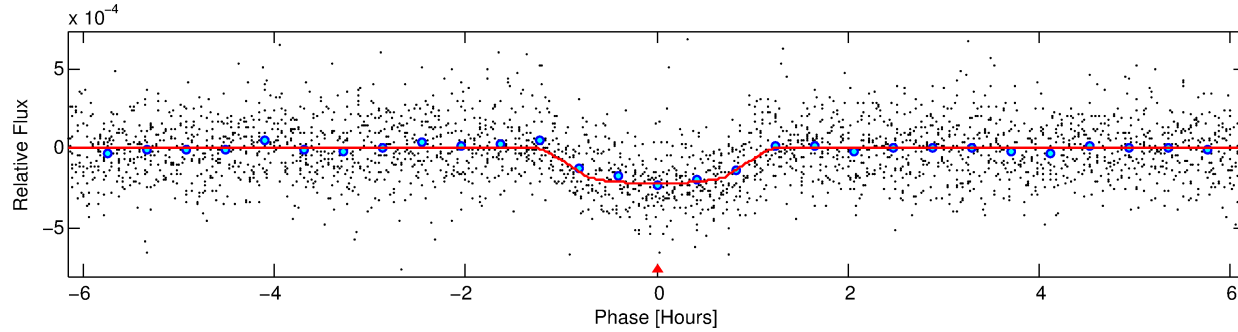
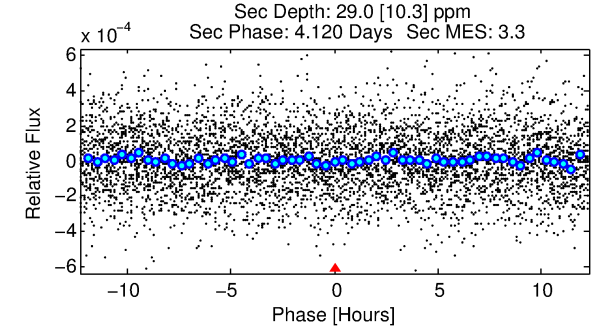
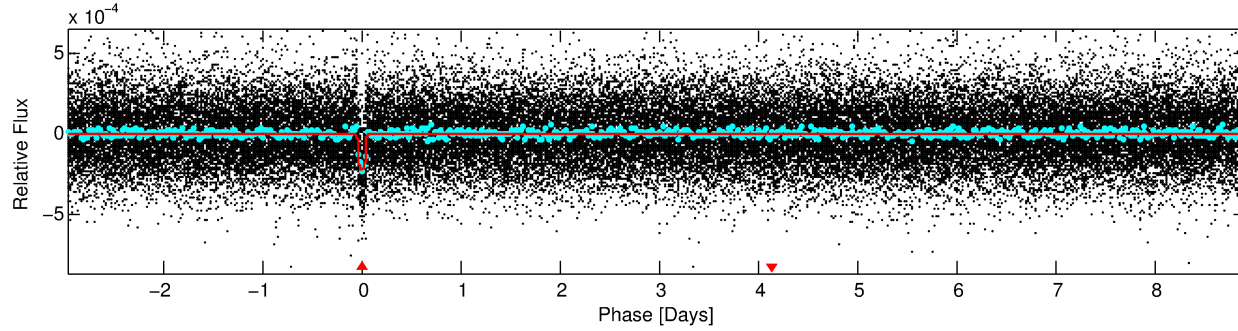
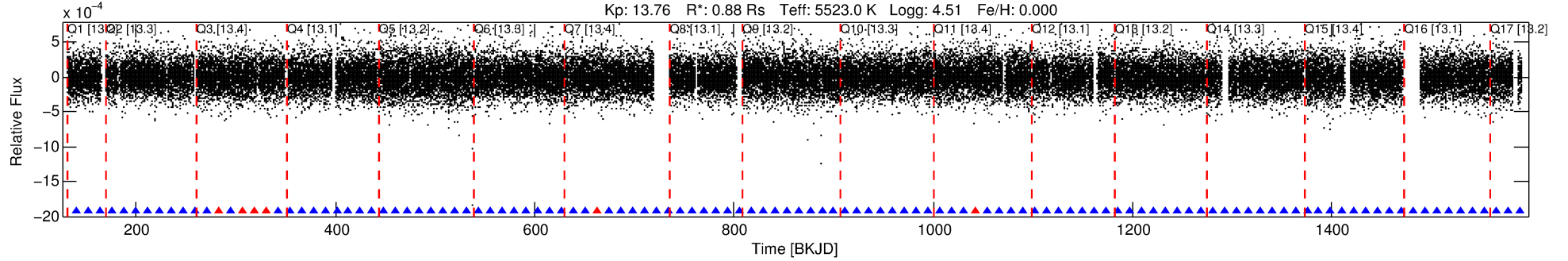
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 008095441-01

No Significant Match Found

DV One-Page Summary

KIC: 8095441 Candidate: 1 of 1 Period: 11.875 d
KOI: K02743.01 Corr: 0.982



DV Fit Results:

Period = 11.87456 [0.00003] d
Epoch = 140.2125 [0.0023] BKJD
Rp/R* = 0.0156 [0.0077]
a/R* = 25.00 [52.84]
b = 0.84 [0.74]
Seff = 66.44 [12.57]
Teq = 728 [34] K
Rp = 1.49 [0.76] Re
a = 0.0986 [0.0110] AU
Ag = 69.32 [74.02] [0.92σ]
Teffp = 3248 [858] K [2.93σ]

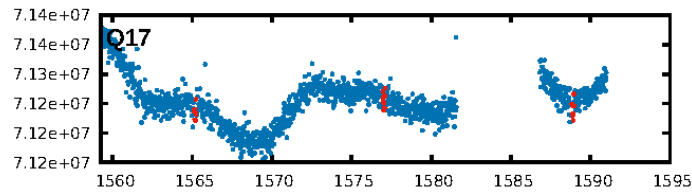
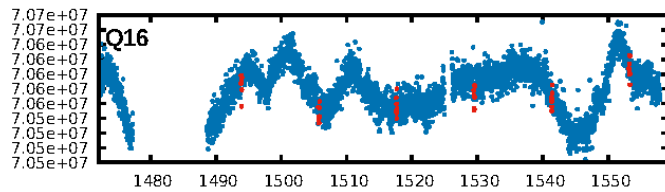
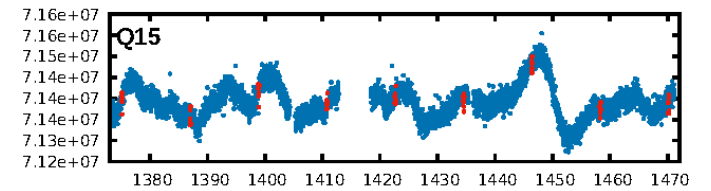
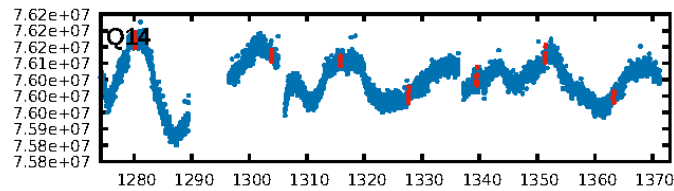
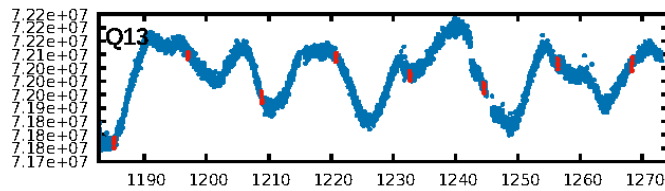
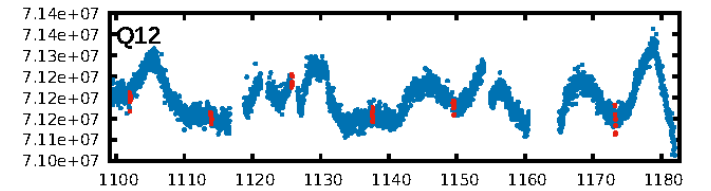
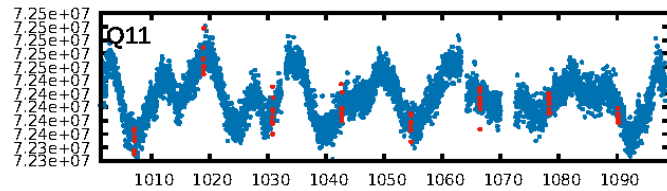
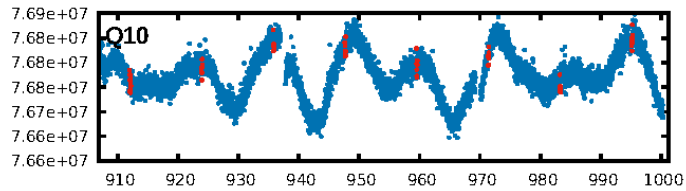
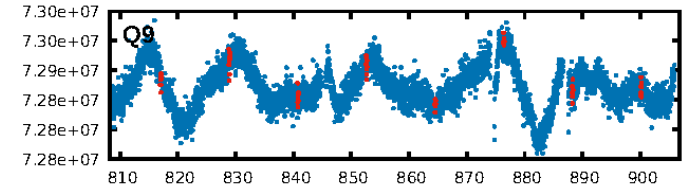
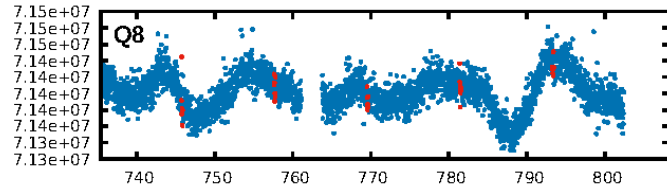
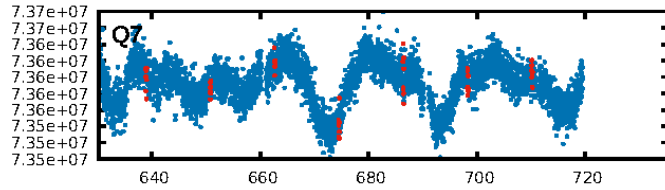
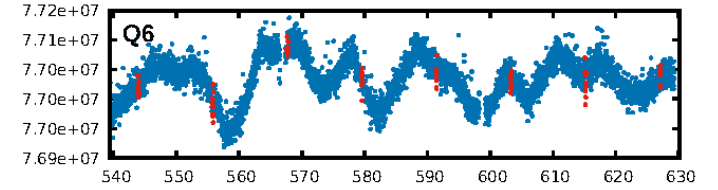
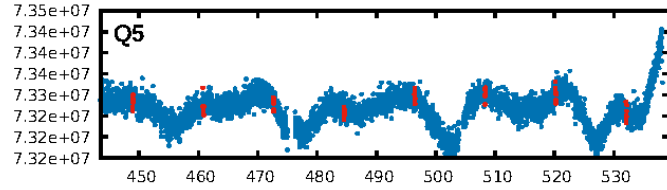
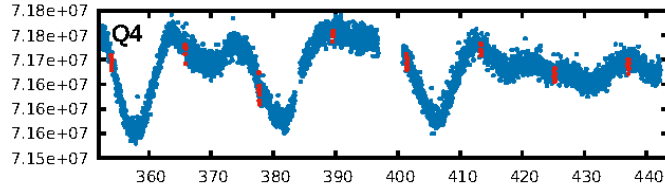
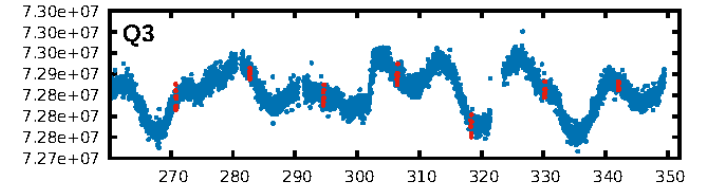
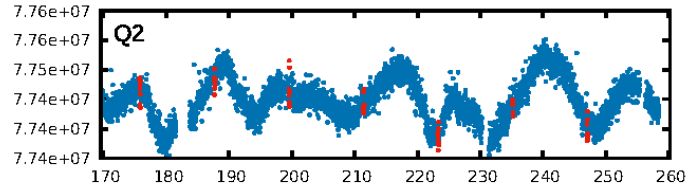
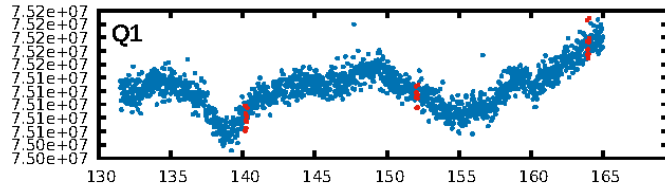
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: 100.0%
ModelChiSquareGof-sig: 100.0%
Bootstrap-pfa: 5.66e-72
RollingBand-fgt: 0.95 [104/110]
GhostDiagnostic-chr: 46.12
Centroid-sig: 15.1%
Centroid-so: 0.935 arcsec [1.59σ]
OotOffset-rm: 0.209 arcsec [0.84σ]
KicOffset-rm: 0.037 arcsec [0.16σ]
OotOffset-st: 4/4/4/5 [17]
KicOffset-st: 4/4/4/5 [17]
DiffImageQuality-fgm: 0.94 [16/17]
DiffImageOverlap-fno: 1.00 [17/17]

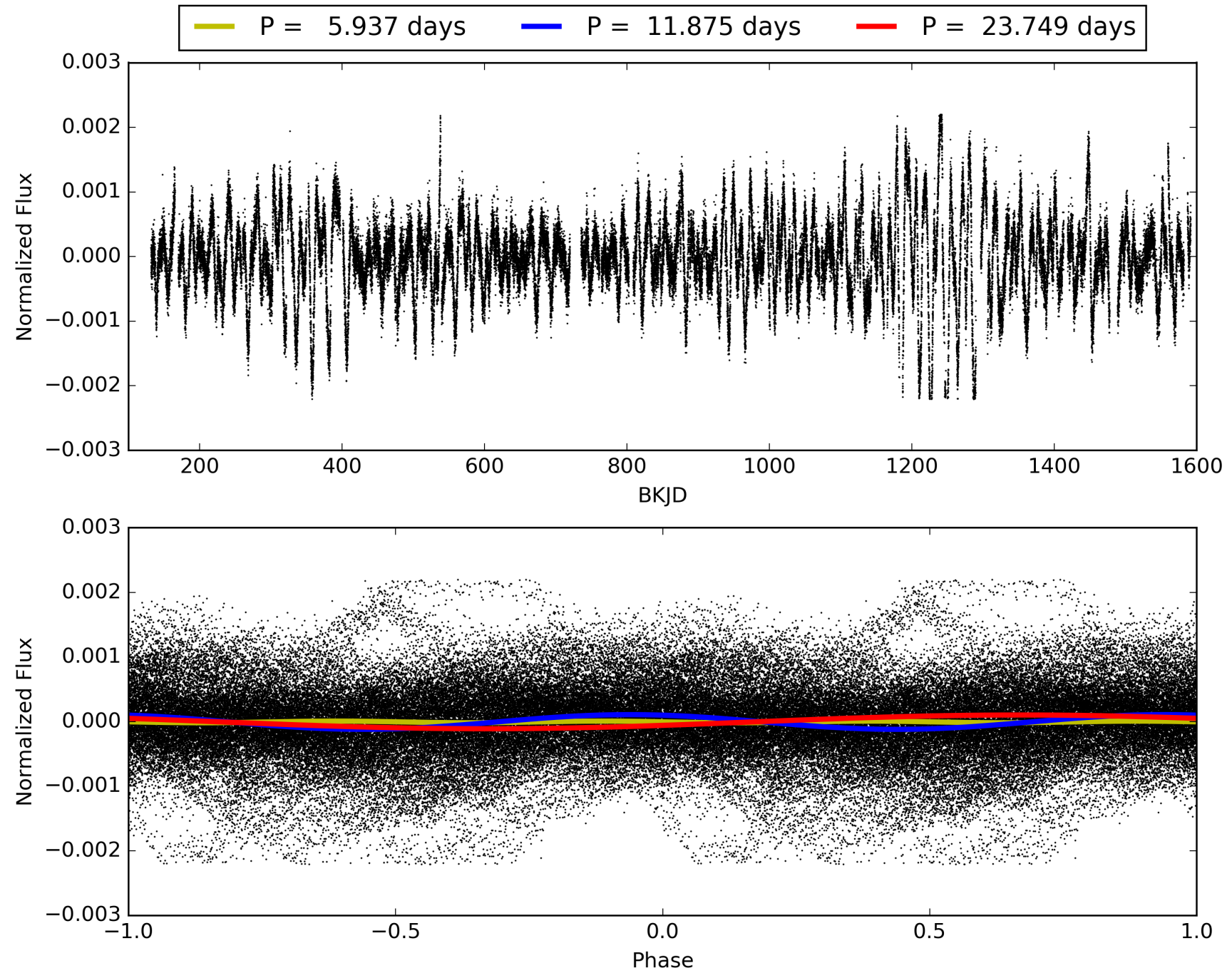
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 30-Jan-2016 12:53:18 Z

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

TCE 008095441-01, PDC Light Curves

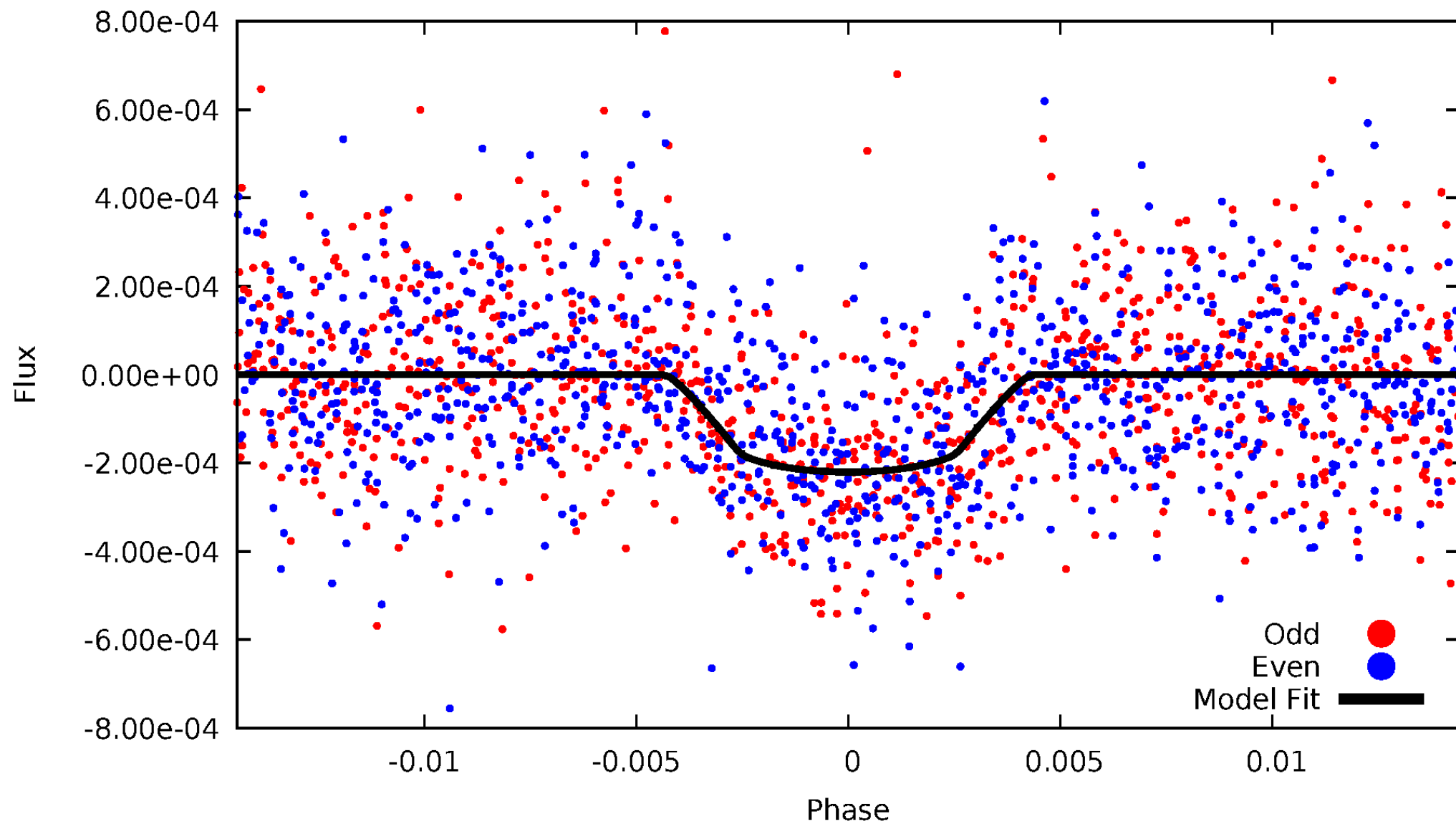


TCE 008095441-01



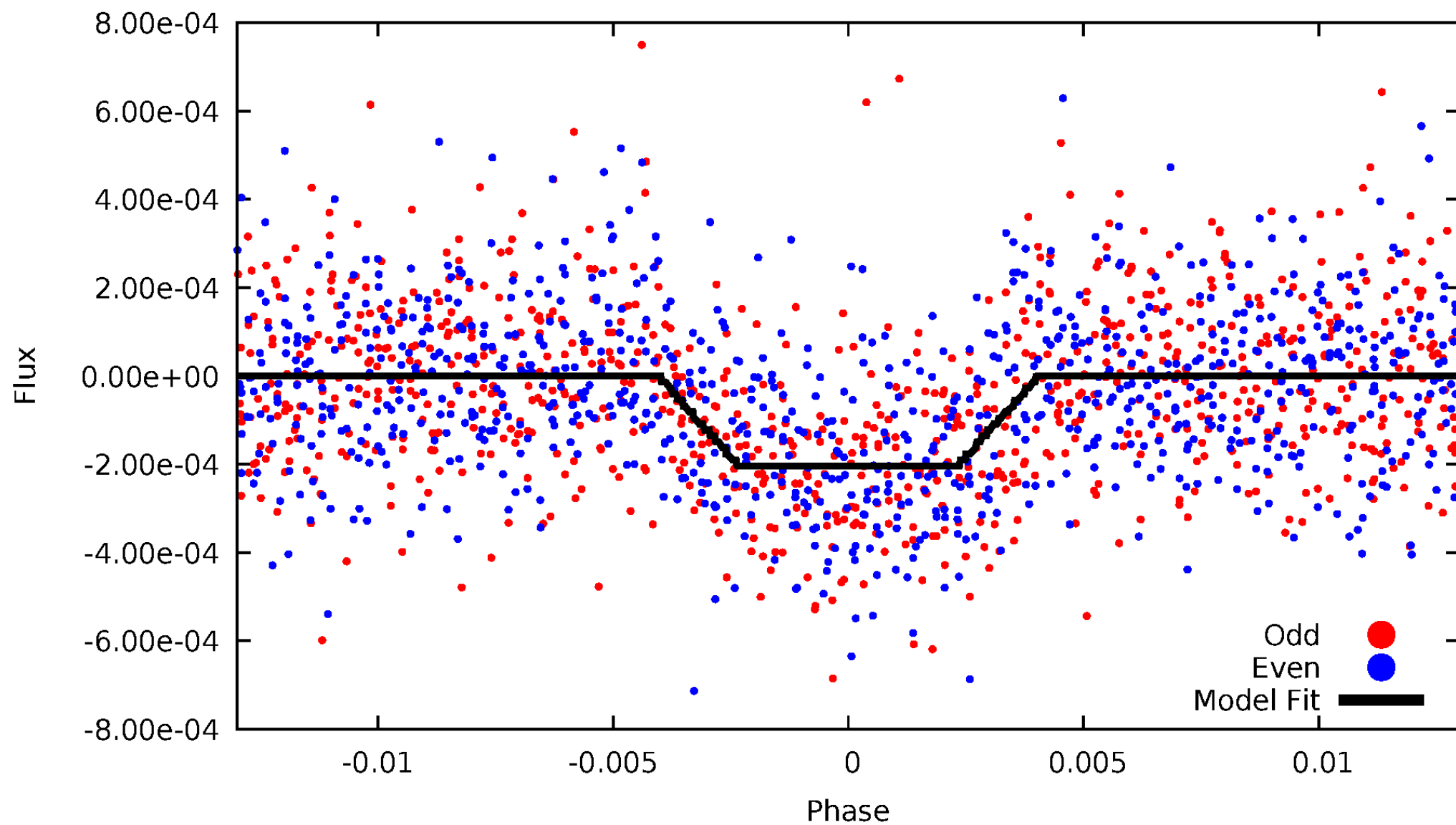
DV Odd/Even

TCE 008095441-01



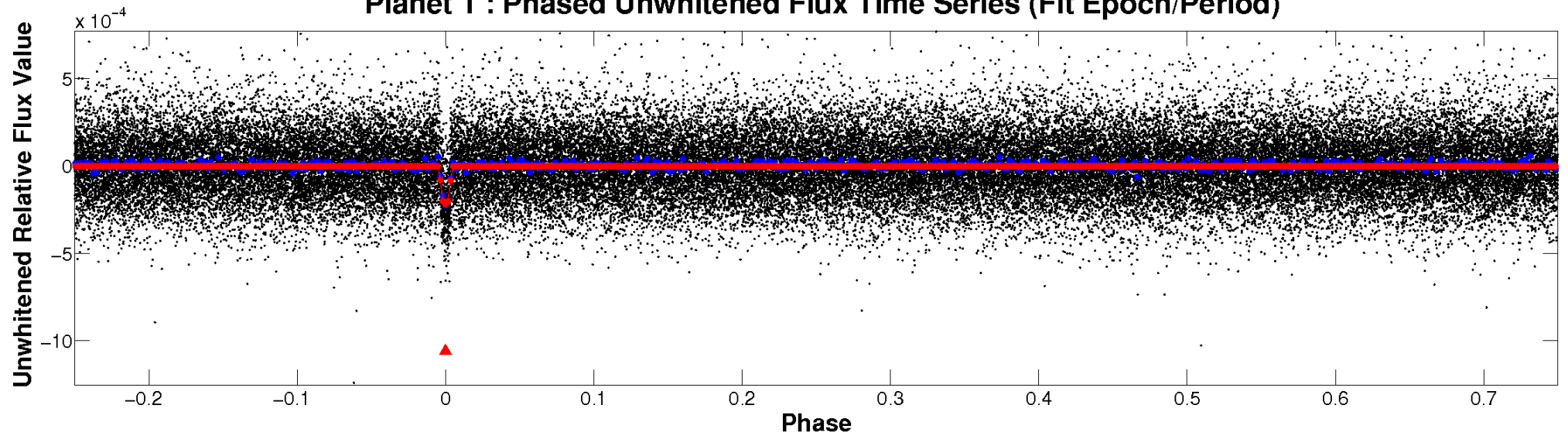
ALT Odd/Even

TCE 008095441-01

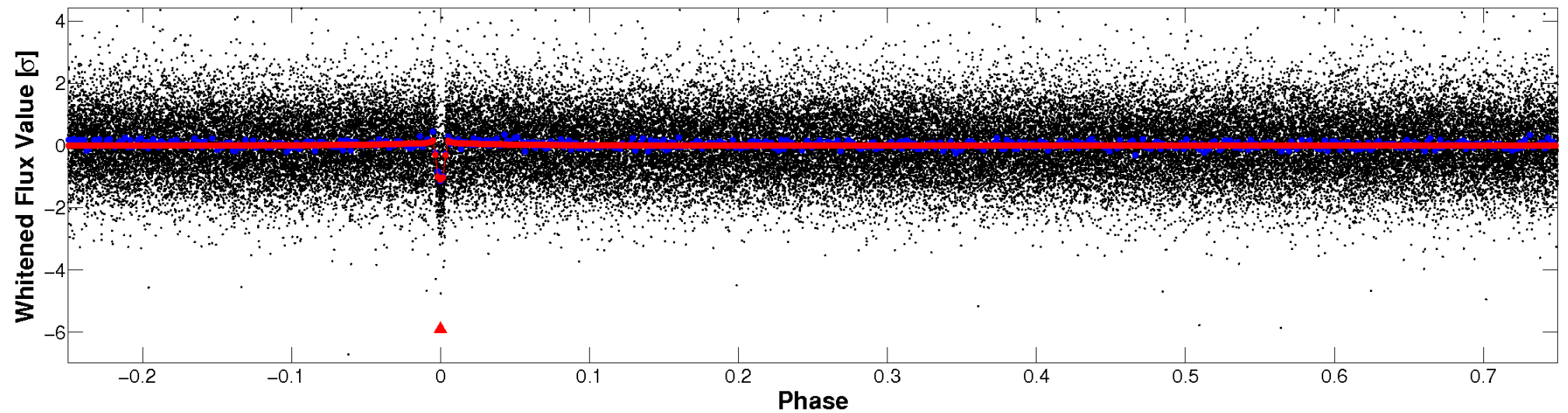


Non-Whitened Vs. Whitened Light Curve

Planet 1 : Phased Unwhitened Flux Time Series (Fit Epoch/Period)

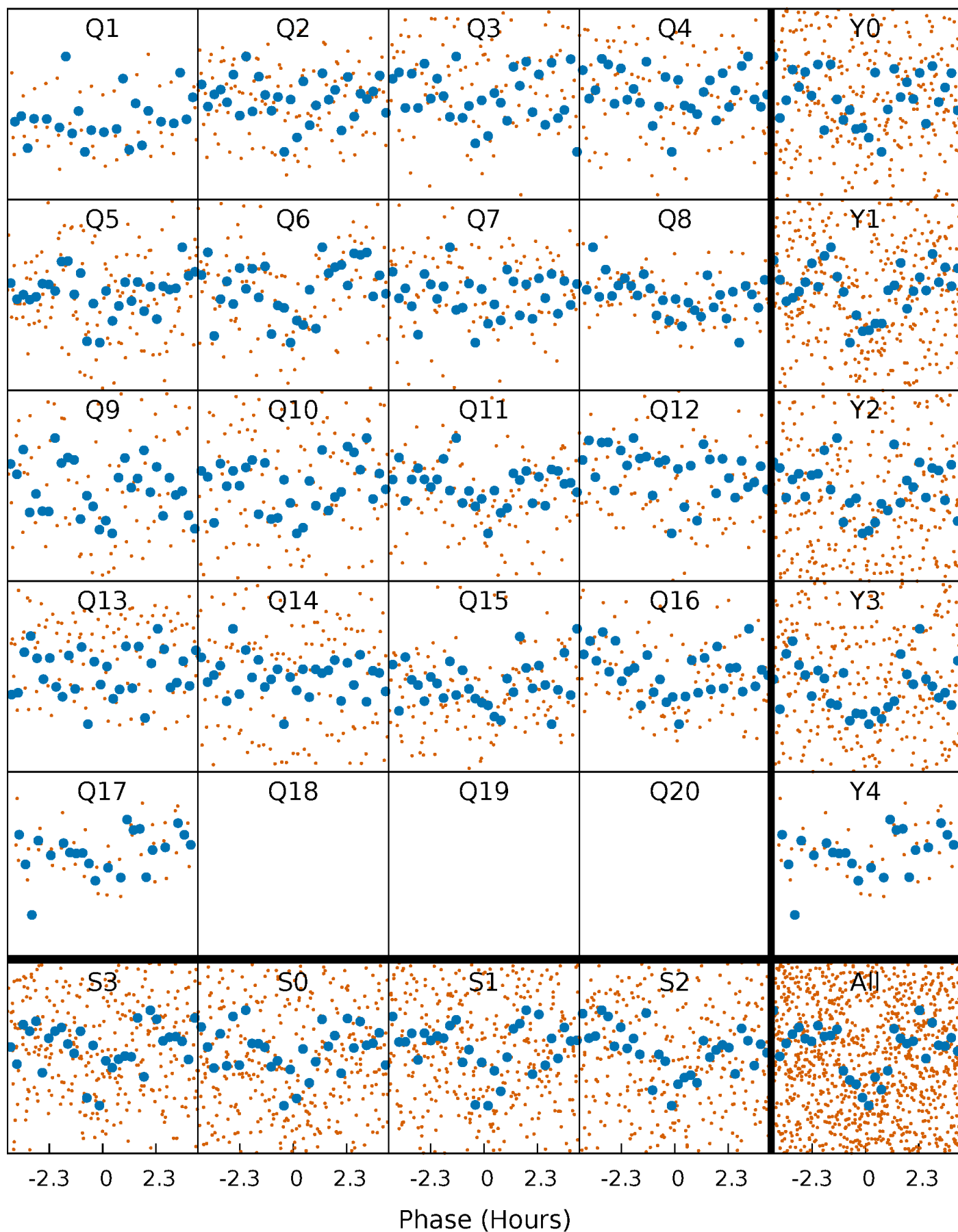


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



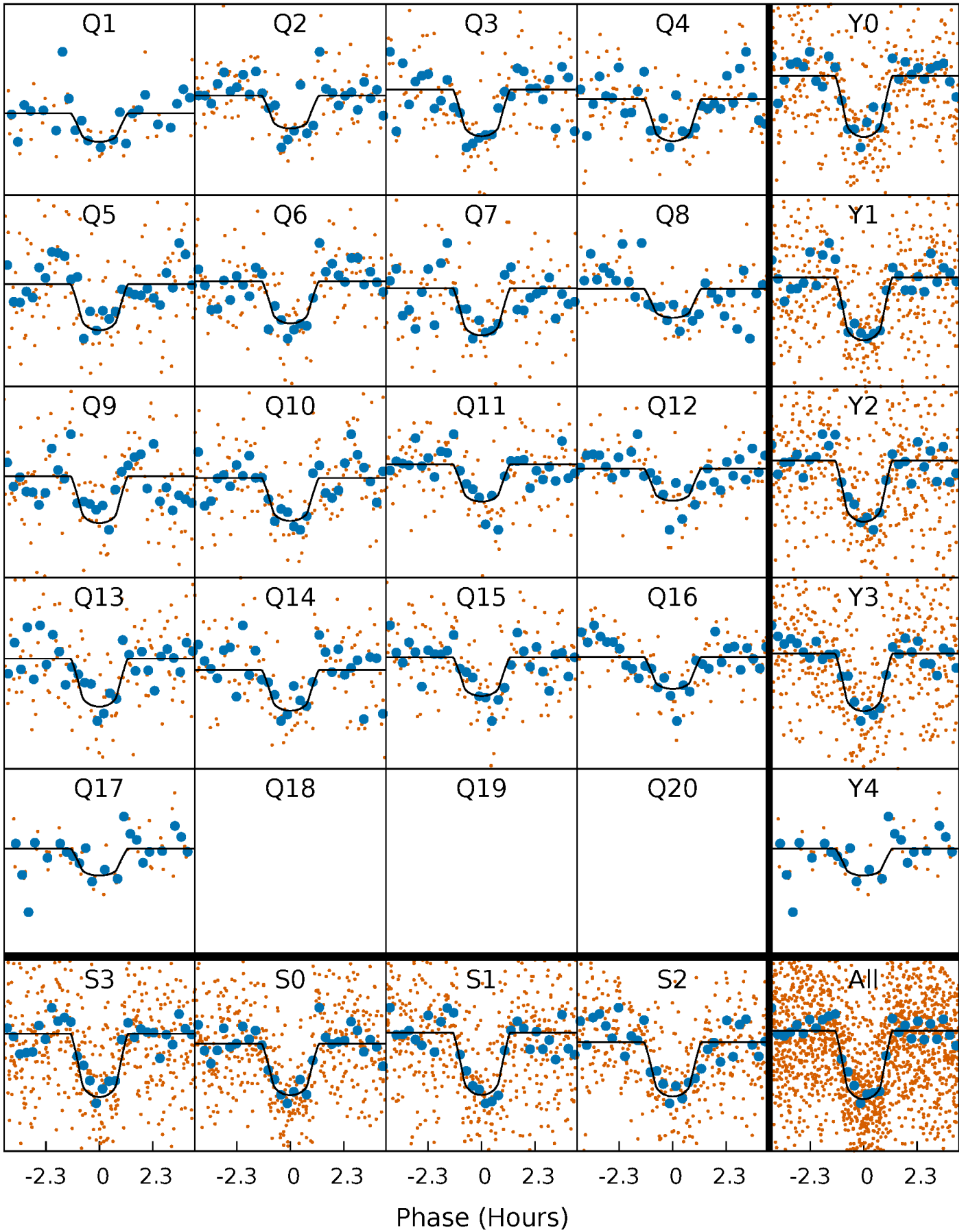
PDC Quarter-Phased Transit Curves

TCE 008095441-01 P= 11.874563 Days $T_0=140.212508$ (BKJD)



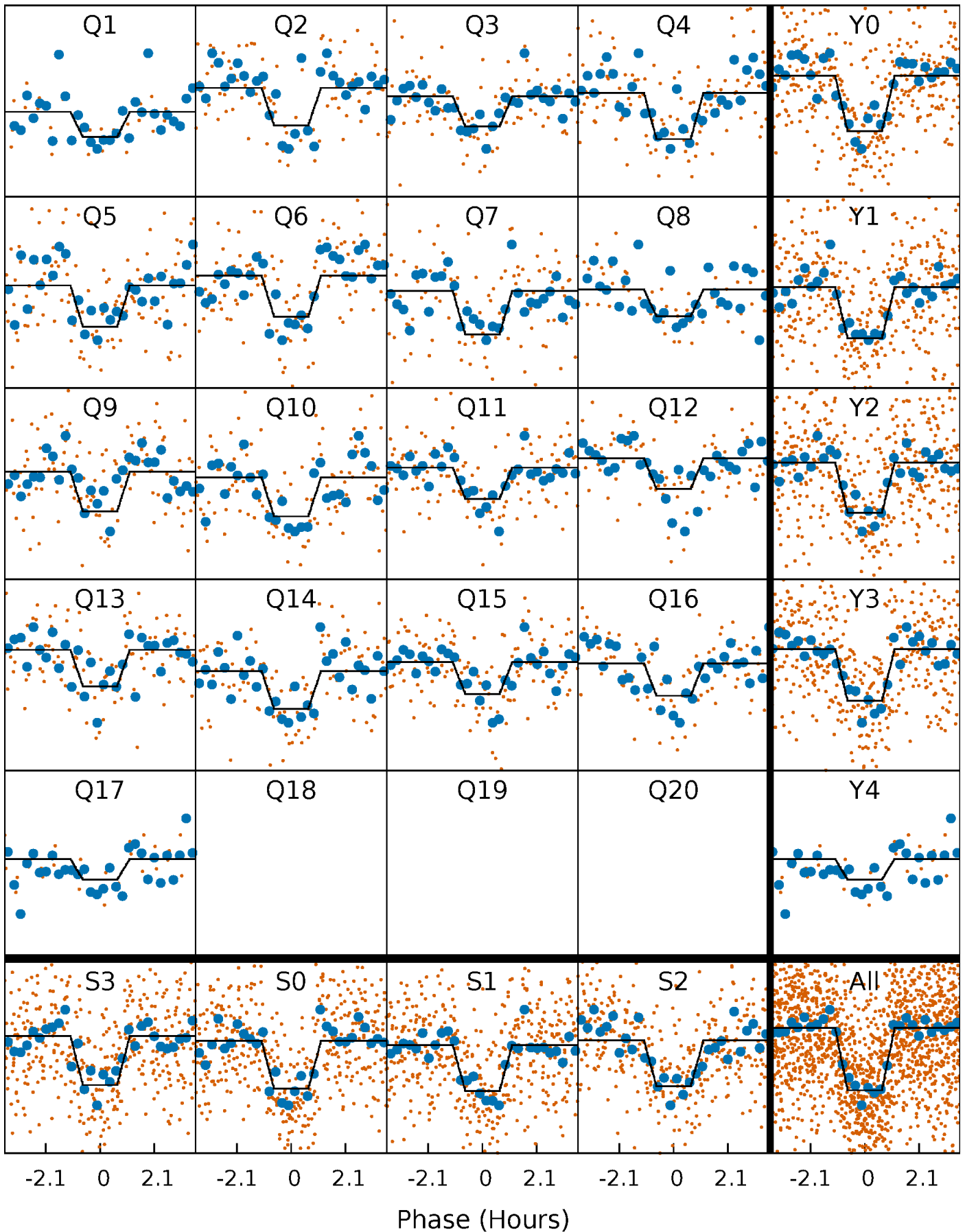
DV Quarter-Phased Transit Curves

TCE 008095441-01 P= 11.874563 Days $T_0=140.212508$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

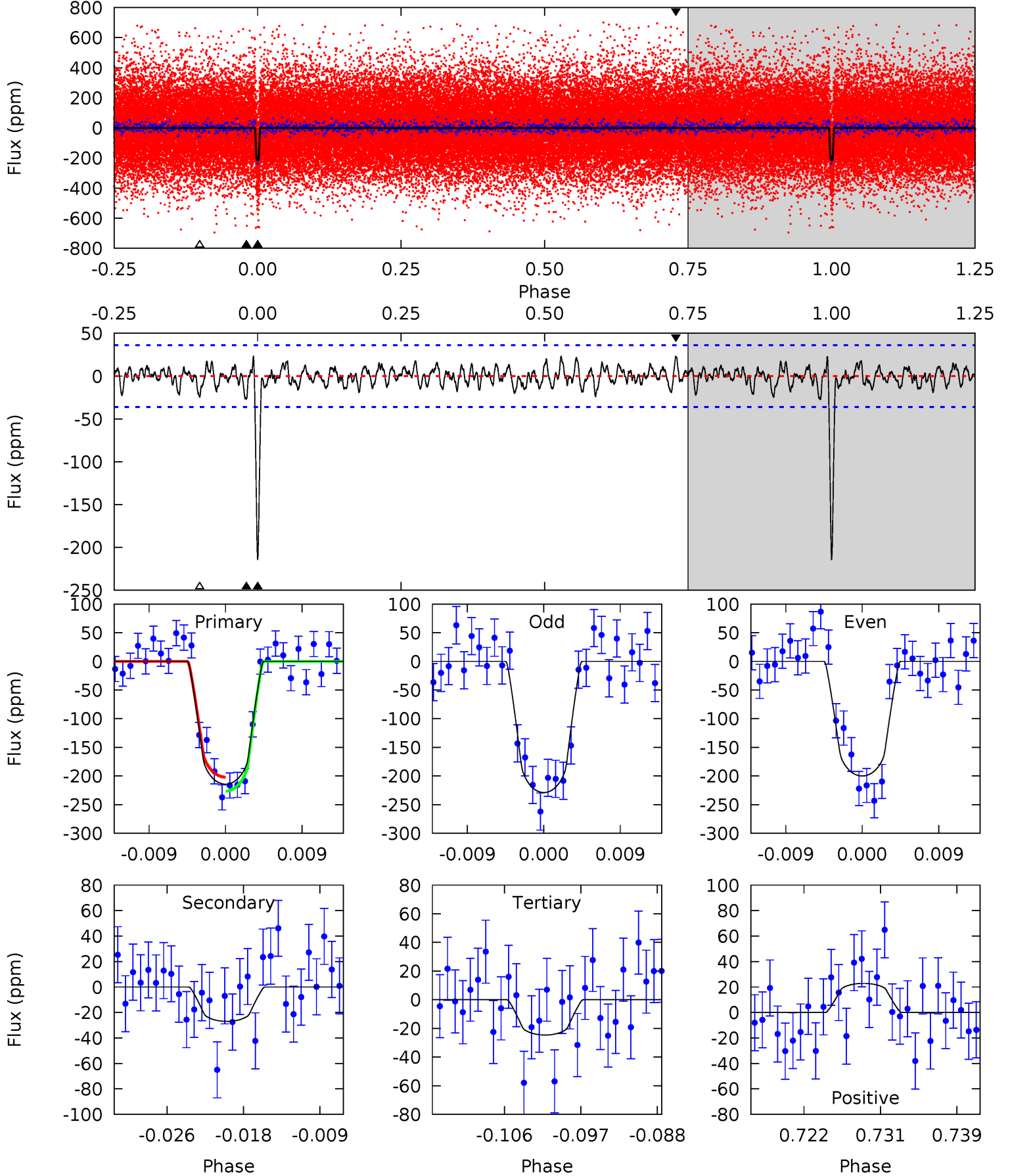
TCE 008095441-01 P= 11.874562 Days $T_0=140.213342$ (BKJD)



DV Model-Shift Uniqueness Test

008095441-01, P = 11.874563 Days, E = 128.337945 Days

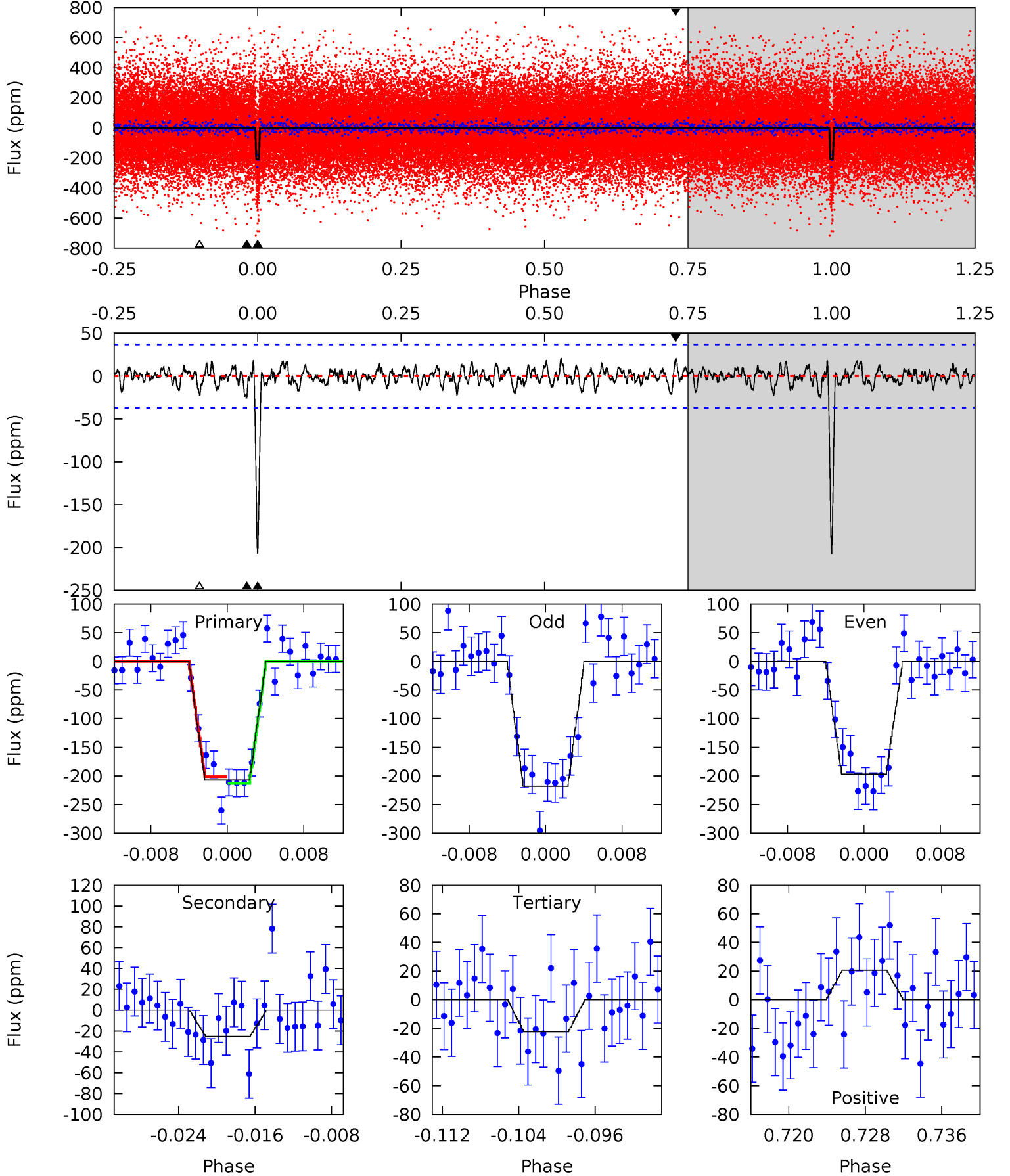
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
29.9	3.76	3.44	3.19	5.05	2.62	1.19	26.5	26.7	0.33	0.57	2.02	0.96	0.10	1.71



Alt Model-Shift Uniqueness Test

008095441-01, P = 11.874562 Days, E = 128.338780 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
28.4	3.44	3.07	2.82	5.07	2.65	1.04	25.3	25.6	0.36	0.61	1.46	1.00	0.09	0.80



Stellar Parameters For KIC 008095441

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	5523^{+110}_{-1}	$4.506^{+0.049}_{-0.098}$	$0.000^{+0.150}_{-0.150}$	$0.880^{+0.109}_{-0.059}$	$0.907^{+0.055}_{-0.055}$	$1.874^{+0.309}_{-0.528}$
	+2%/-0%	+1%/-2%	+inf%/-inf%	+12%/-7%	+6%/-6%	+16%/-28%
Source	SPE57	SPE57	SPE57	DSEP		

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

Secondary Eclipse Parameters for KIC 008095441-01 / KOI 2743.01

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	A_{obs}
DV	-27 ± 7	$1.56^{+0.73}_{-0.73}$	1022^{+40}_{-42}	3580^{+913}_{-452}	59^{+157}_{-34}
Alt.	-25 ± 7	$1.44^{+0.73}_{-0.73}$	1020^{+36}_{-41}	3615^{+1055}_{-477}	62^{+210}_{-37}

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

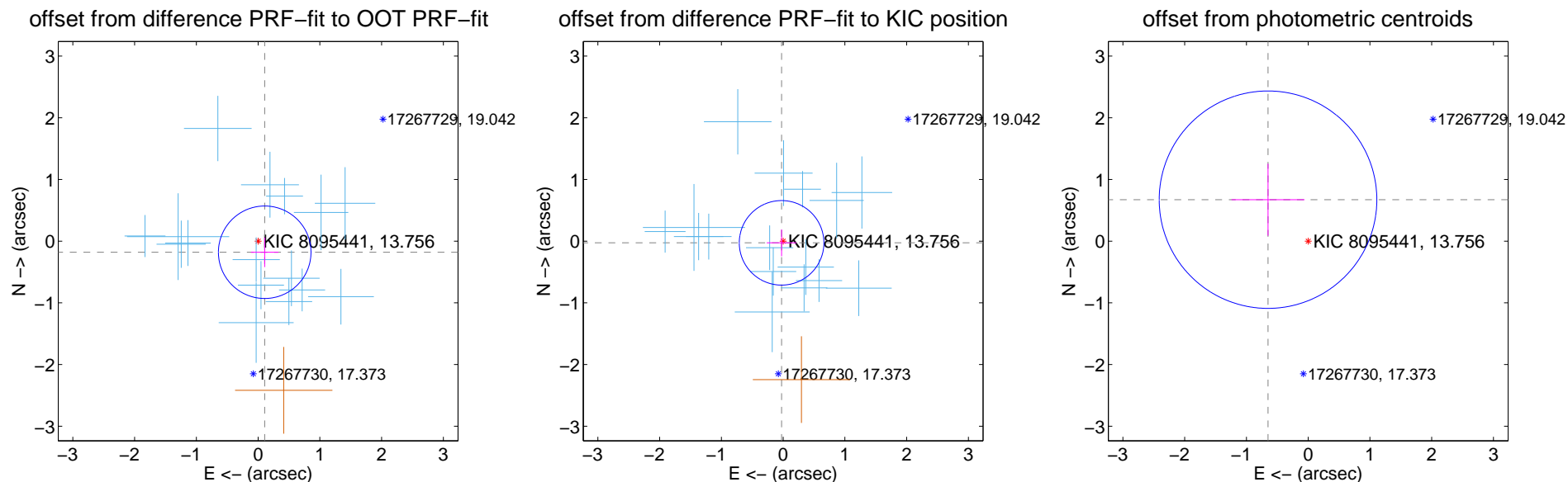
DV Centroid Data

Supplemental centroid analysis for 008095441-01. Kepler magnitude: 13.76. Transit SNR 20.37

There are 16 quarters with good PRF difference image offsets

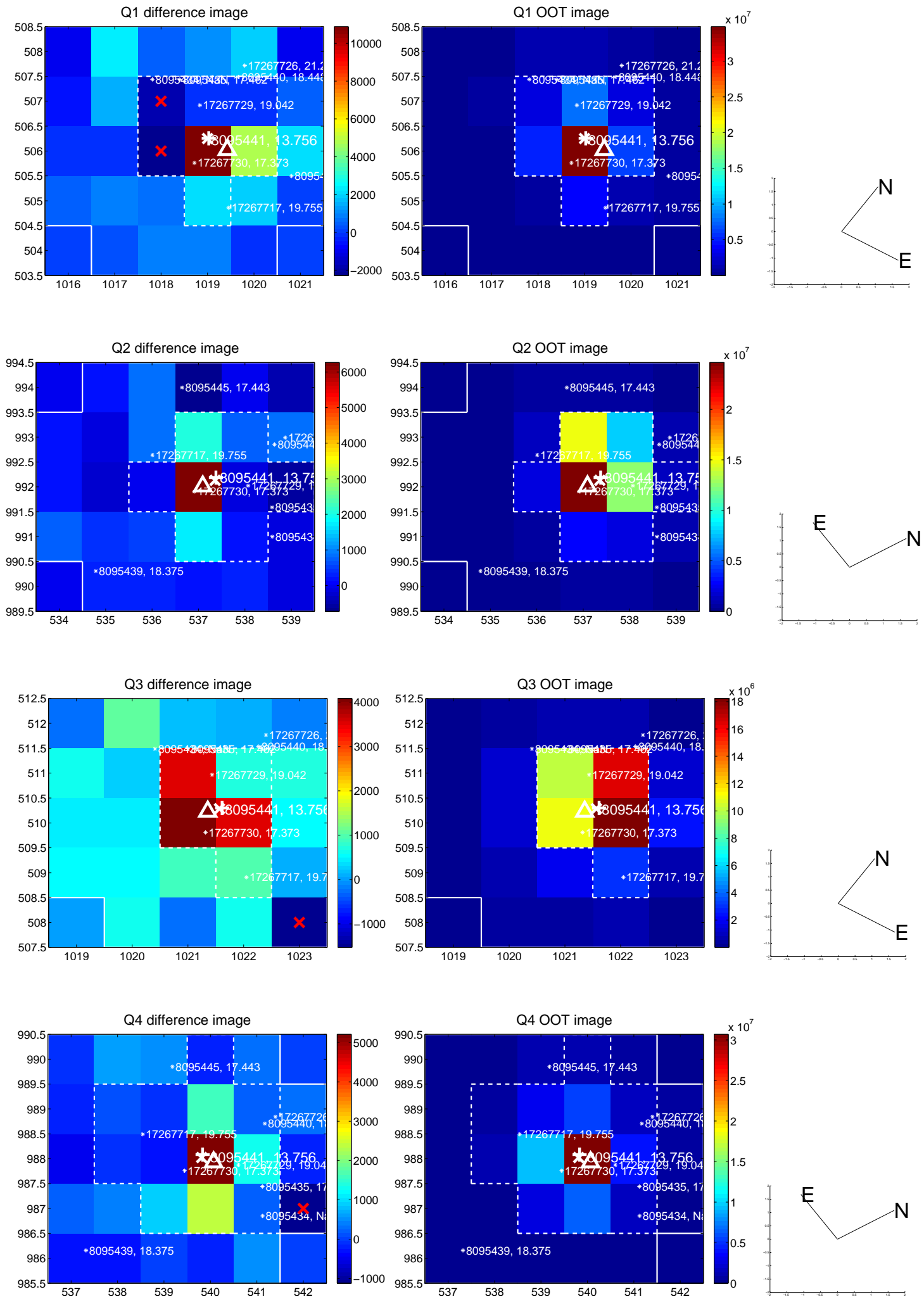
The direct PRF centroid is offset from the target star catalog position by about 0.21 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.209 ± 0.250	0.84	-0.107 ± 0.223	-0.180 ± 0.241
PRF-fit source offset from KIC position	0.037 ± 0.228	0.16	0.025 ± 0.241	-0.027 ± 0.217
photometric centroid source offset	0.94 ± 0.59	1.59	0.65 ± 0.59	0.67 ± 0.58

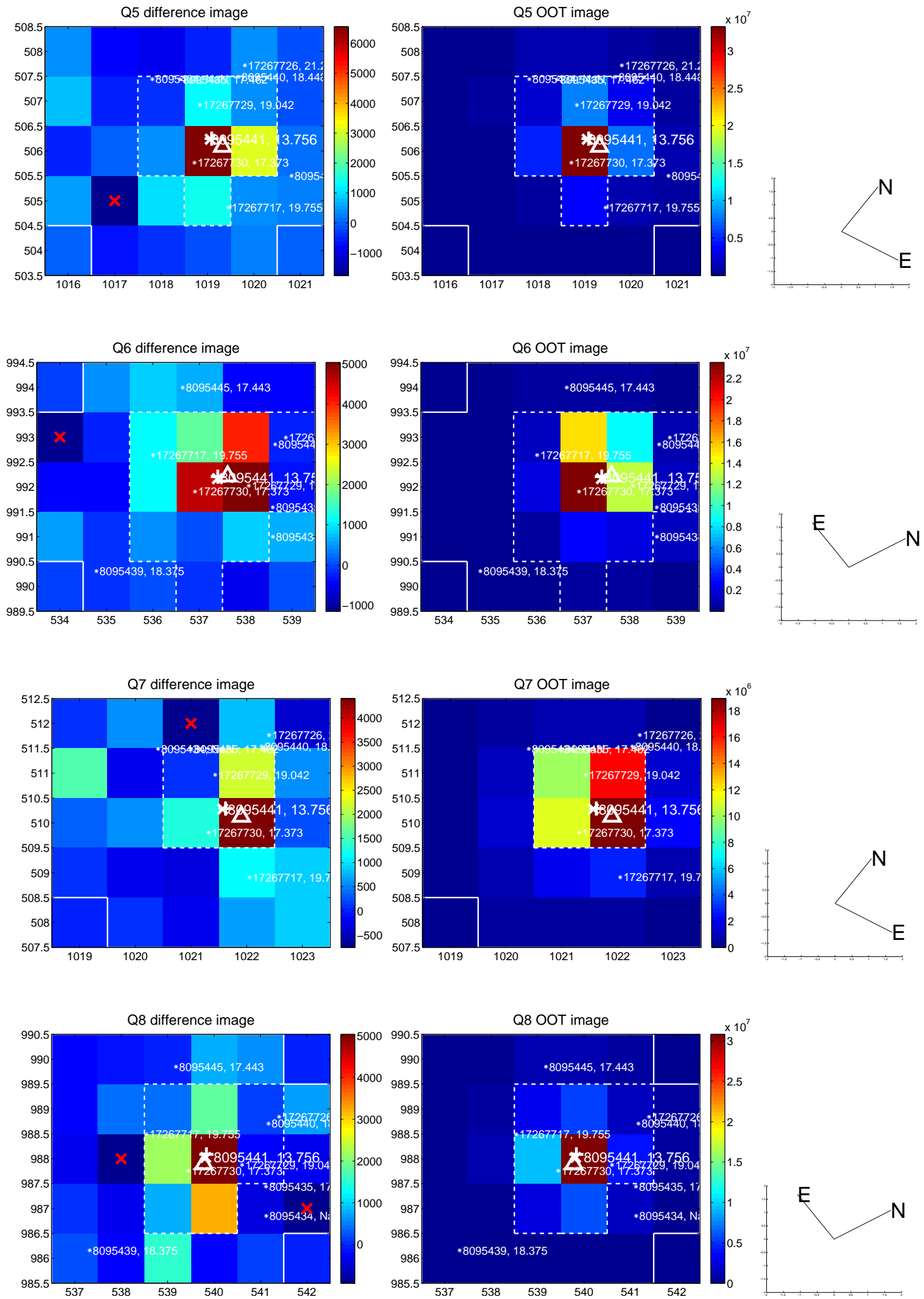


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses:** good quarterly centroid offsets; **Vermillion crosses:** bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

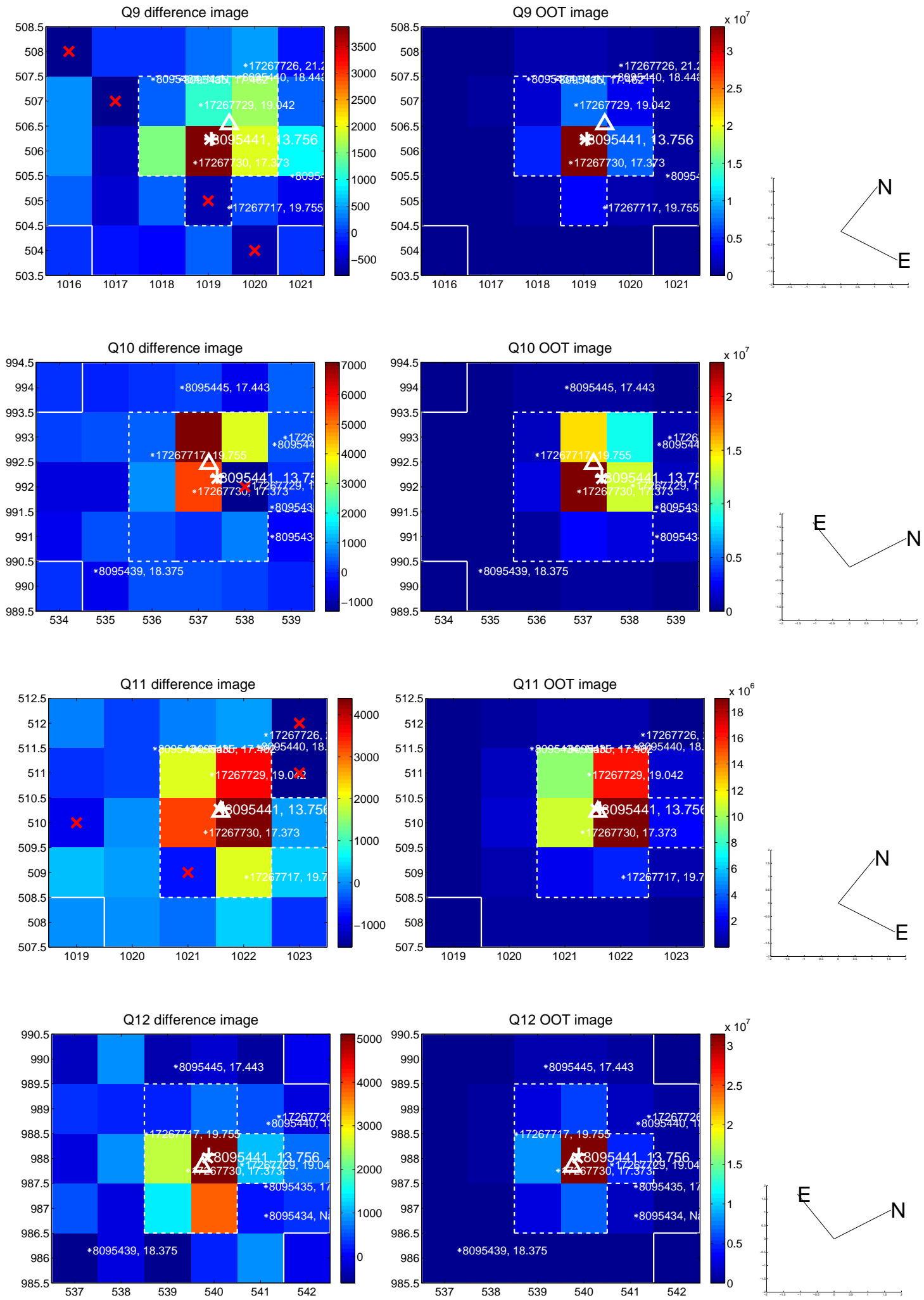
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



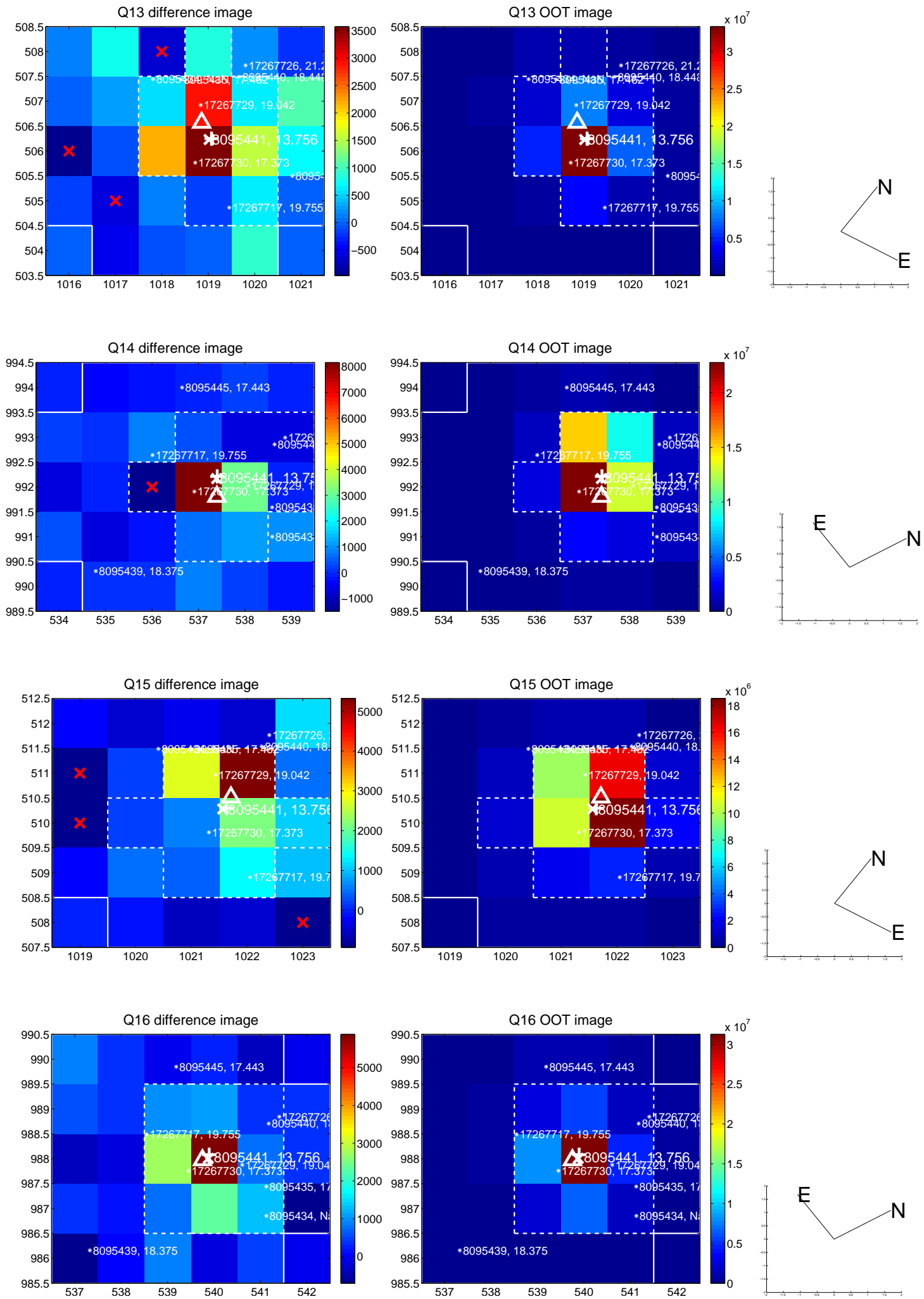
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



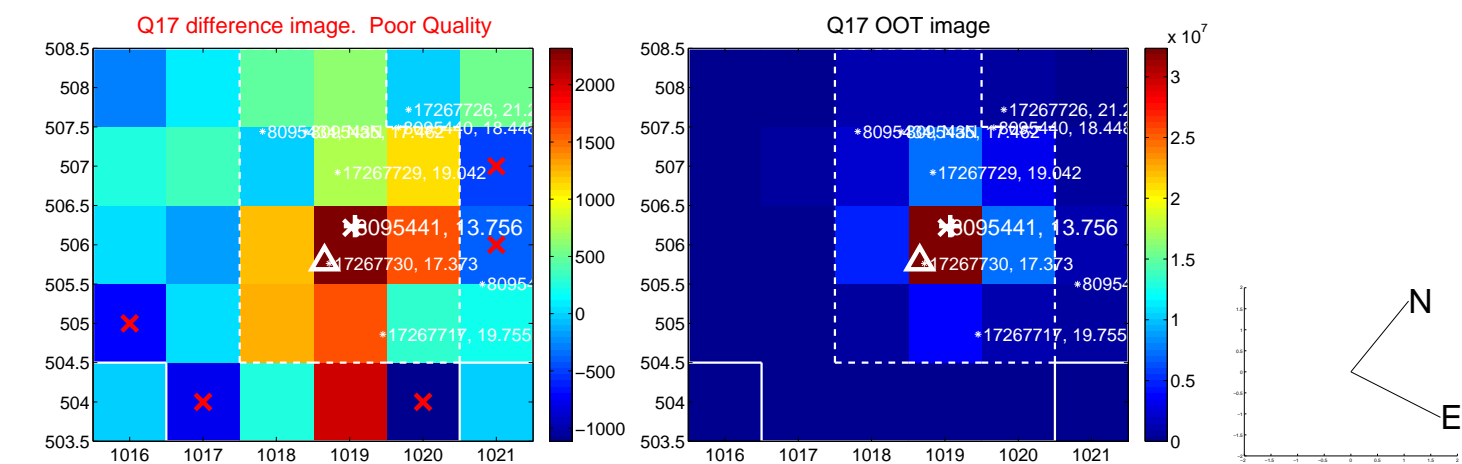
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



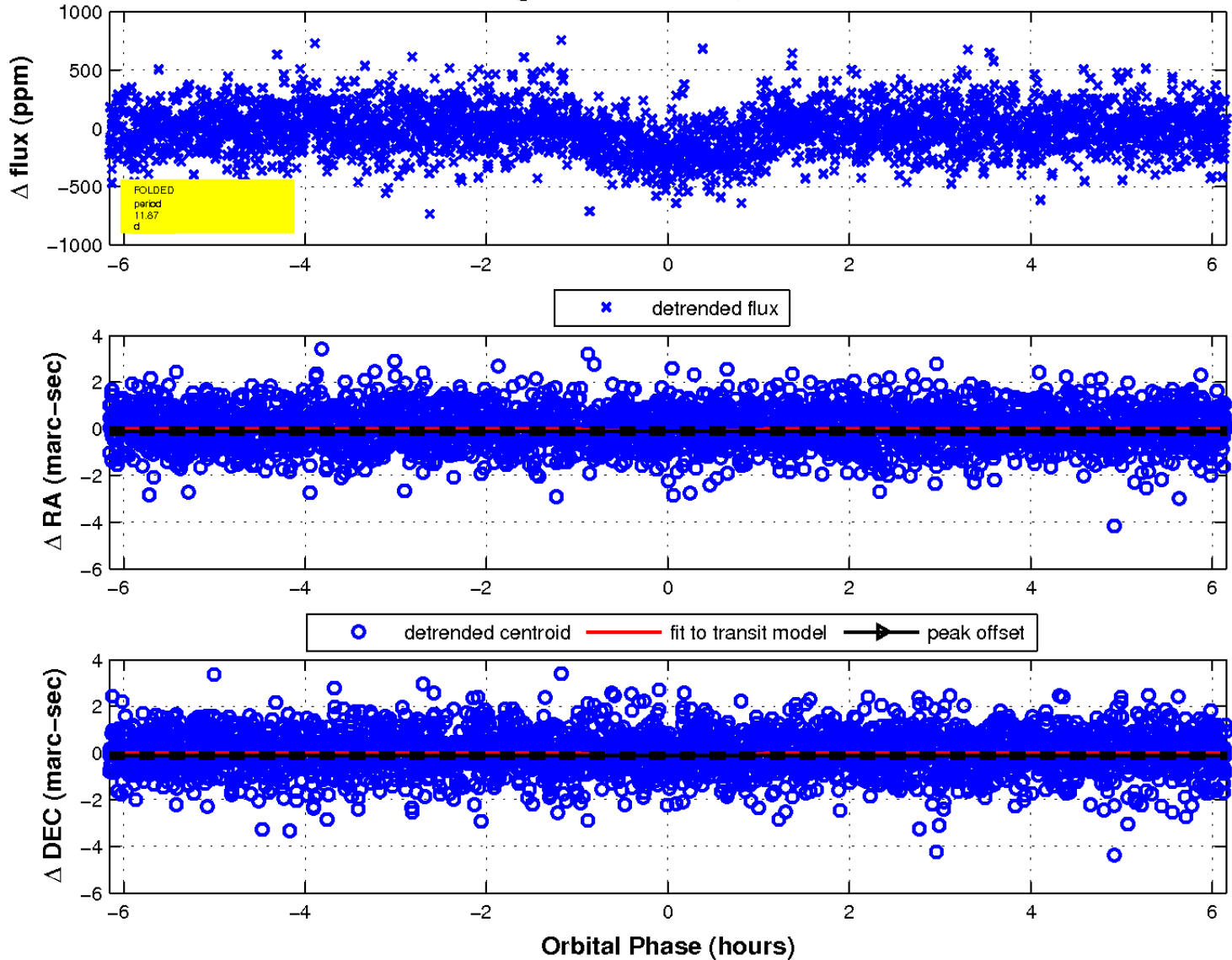
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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



fluxWeightedCentroids, Planet 1 of 1



UKIRT Image

Declination

