

KIC 007595579

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})
007595579-01	OBS	No	6.732217	136.517356	104.6	21.783	11.9	13.2	1.82	7719	3.65	1515.19

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
007595579-01	OBS	FP	0.00	1	0	0	0	LPP_DV—LPP_ALT

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

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

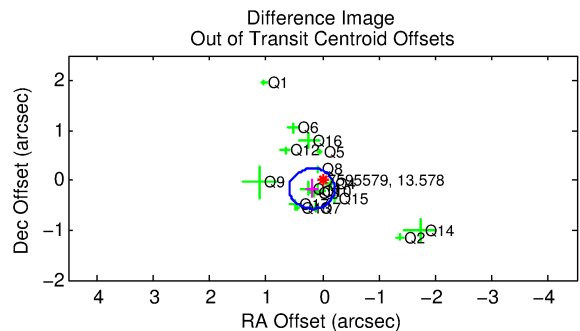
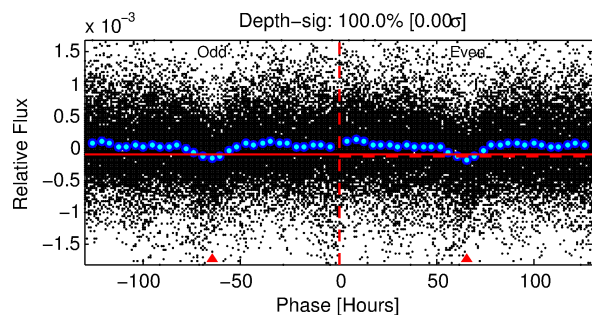
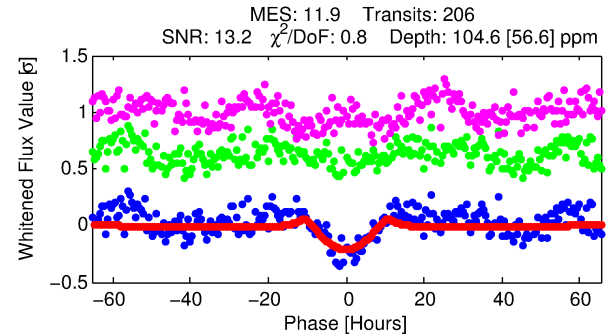
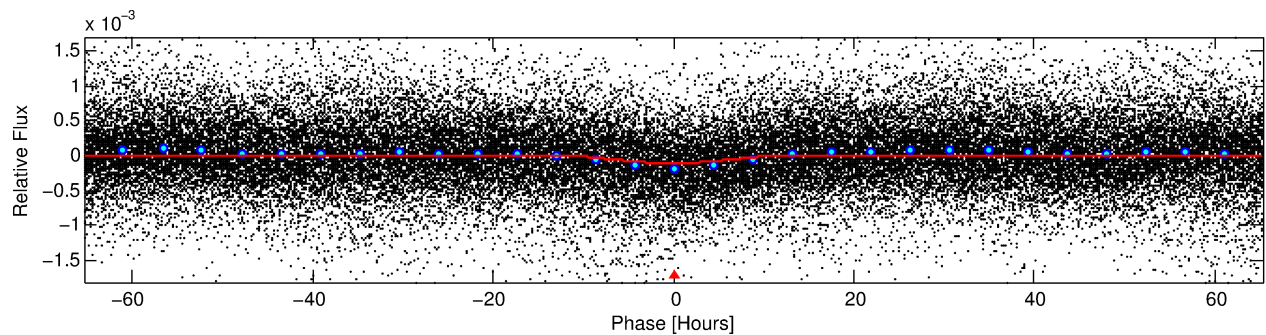
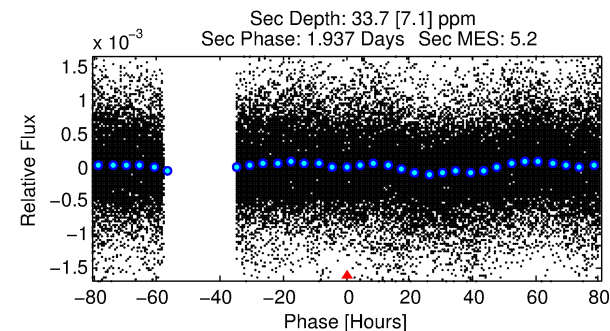
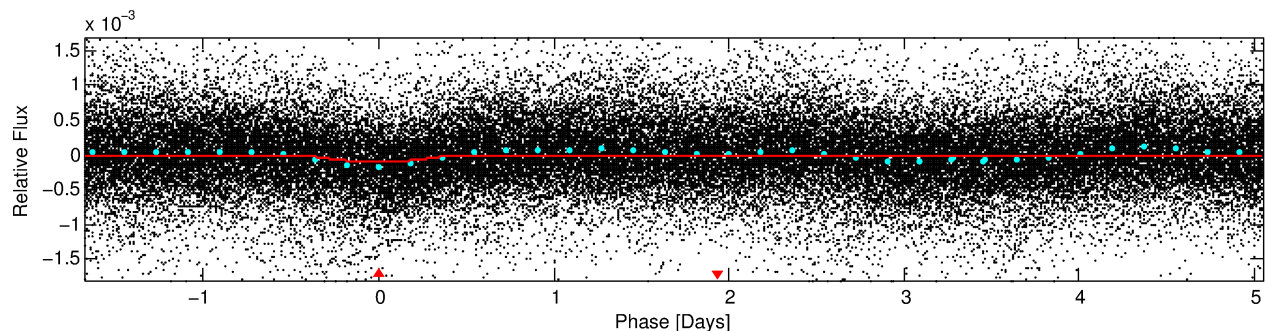
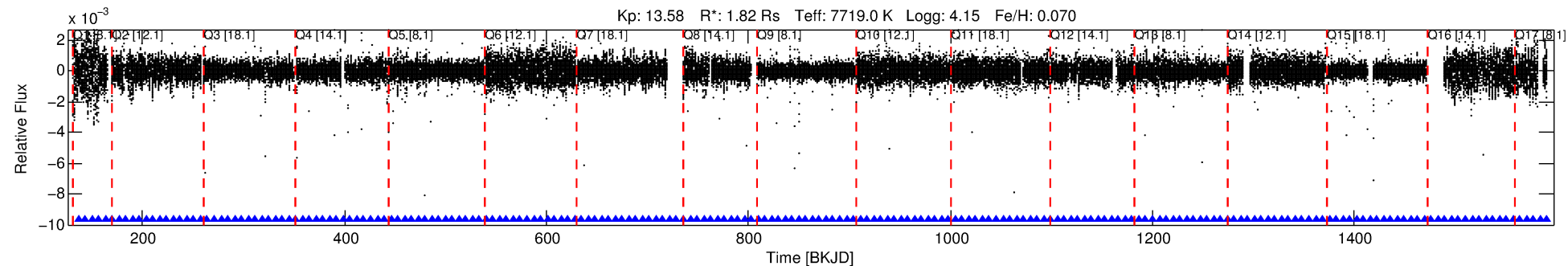
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 007595579-01

No Significant Match Found

DV One-Page Summary

KIC: 7595579 Candidate: 1 of 1 Period: 6.732 d



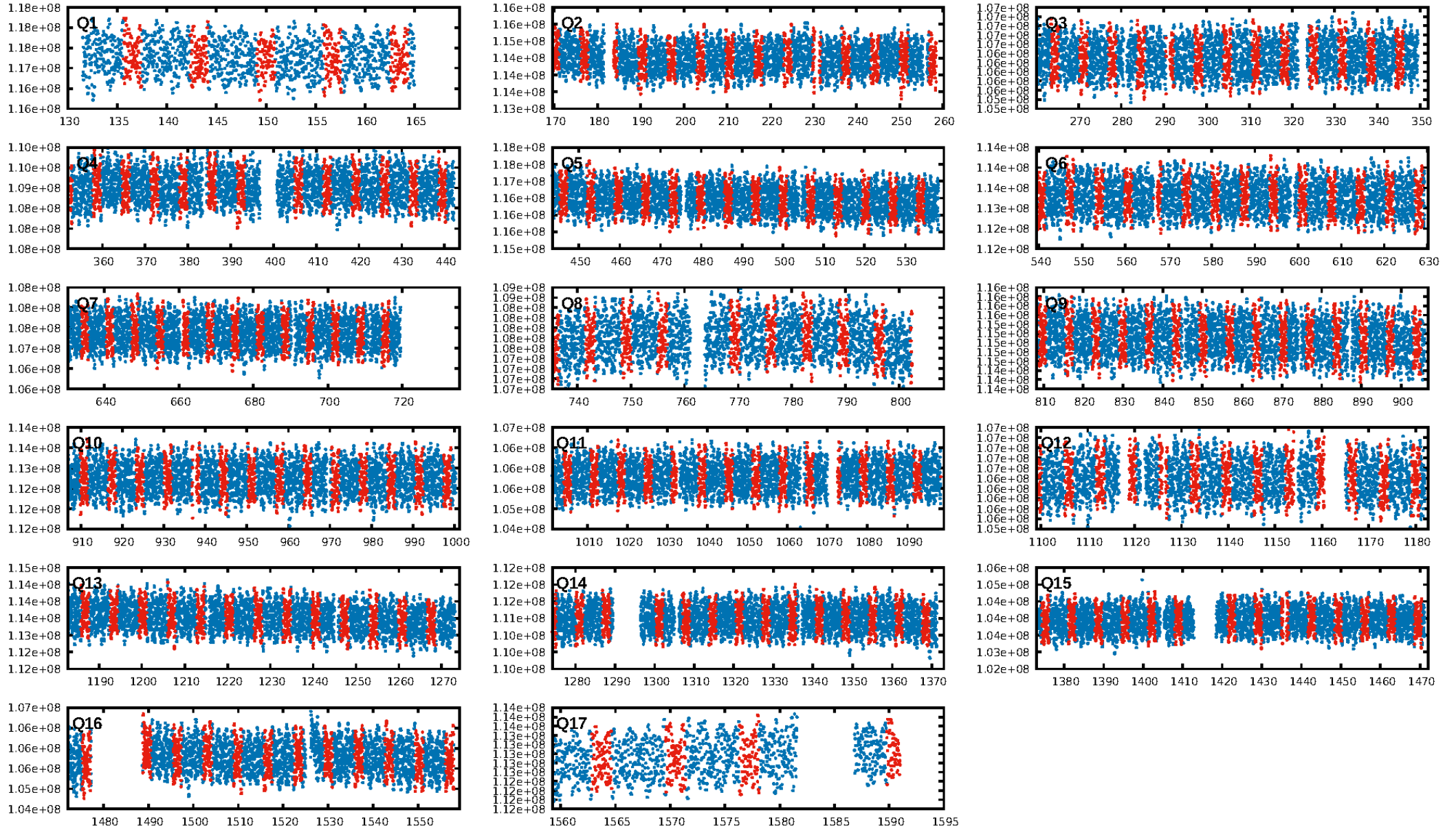
DV Fit Results:

Period = 6.73222 [0.00027] d
Epoch = 136.5174 [0.0308] BKJD
Rp/R* = 0.0184 [0.0228]
a/R* = 1.10 [0.04]
b = 1.00 [0.03]
Seff = 1515.19 [587.24]
Teff = 1591 [154] K
Rp = 3.65 [4.65] Re
a = 0.0834 [0.0204] AU
Ag = 9.67 [24.28] [0.36 σ]
Teffp = 4338 [2702] K [1.02 σ]

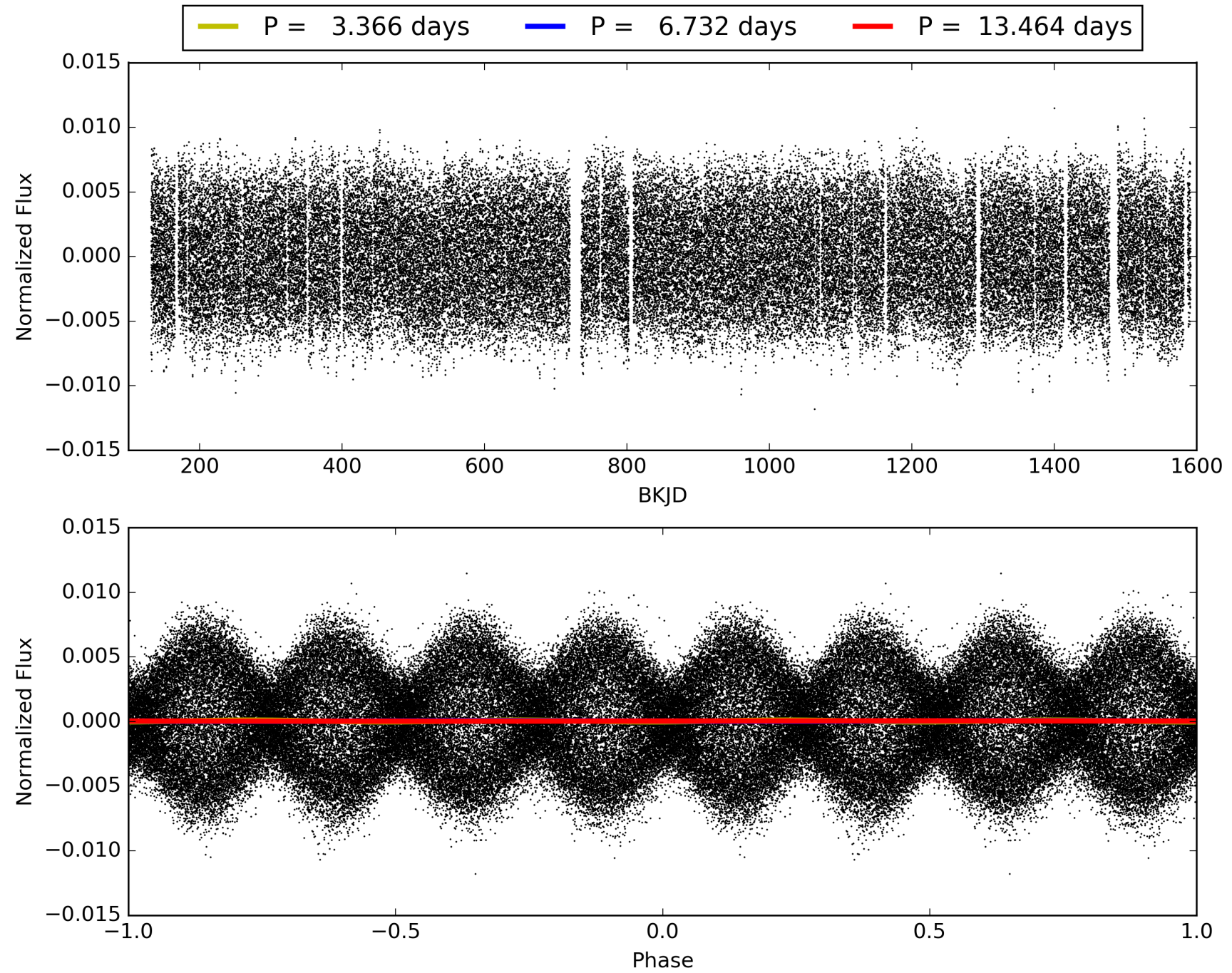
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: 3.08e-28
RollingBand-fgt: 1.00 [197/197]
GhostDiagnostic-chr: 4.303
Centroid-sig: 35.5%
Centroid-so: 0.400 arcsec [1.33 σ]
OotOffset-rm: 0.254 arcsec [1.89 σ]
KicOffset-rm: 0.320 arcsec [1.91 σ]
OotOffset-st: 4/4/4/5 [17]
KicOffset-st: 4/4/4/5 [17]
DiffImageQuality-fgm: 0.88 [15/17]
DiffImageOverlap-fno: 1.00 [17/17]

TCE 007595579-01, PDC Light Curves

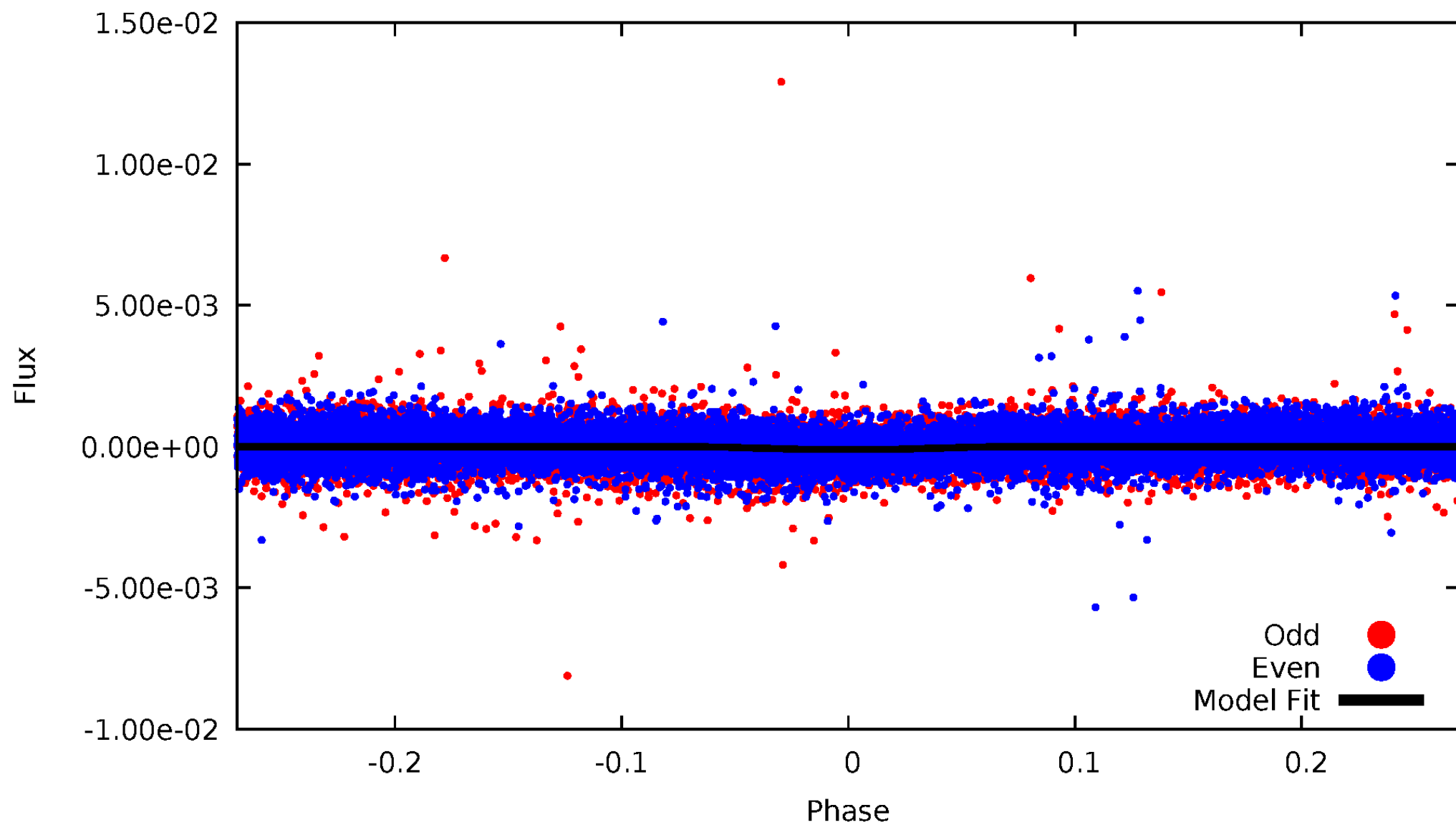


TCE 007595579-01



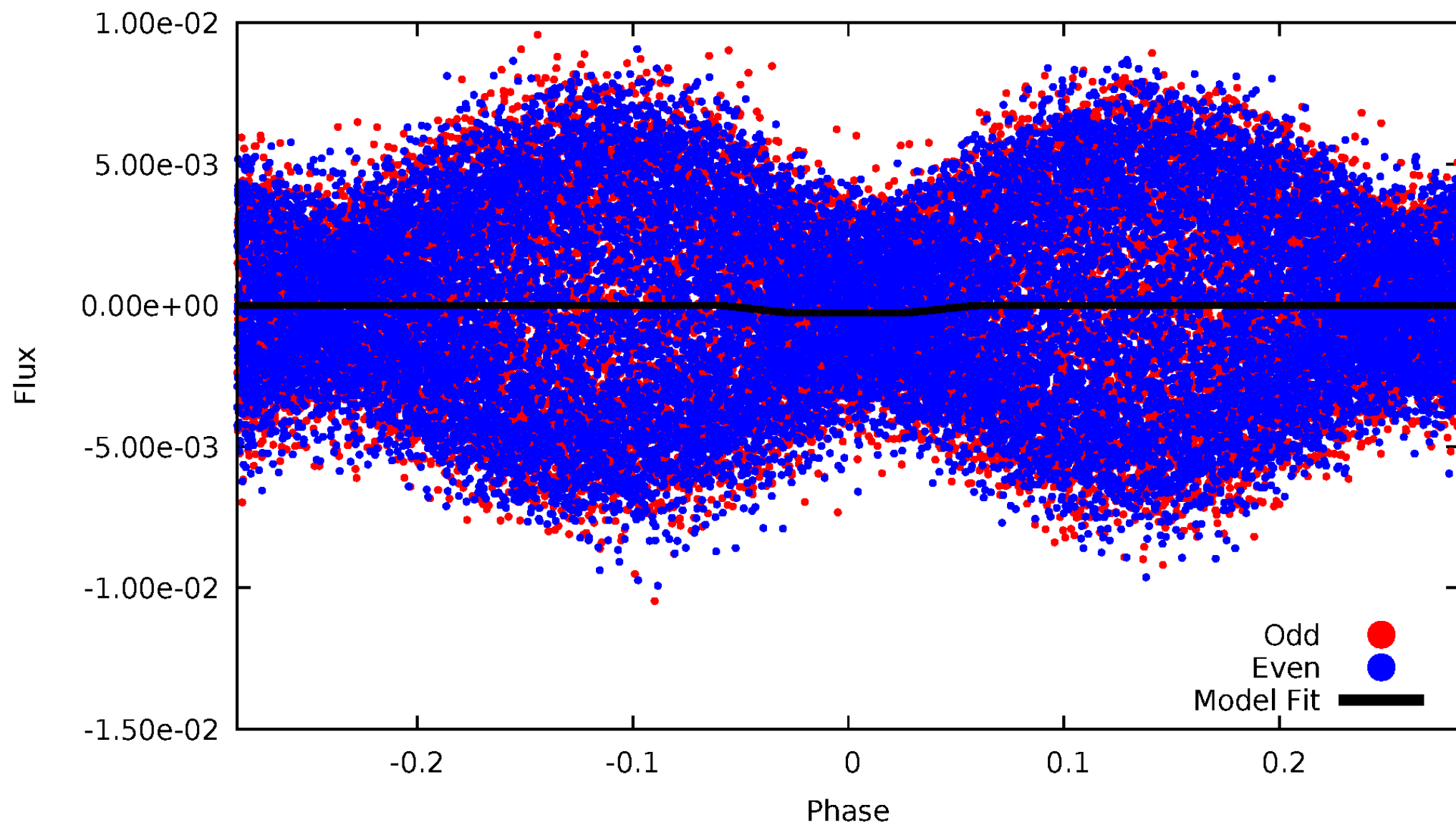
DV Odd/Even

TCE 007595579-01



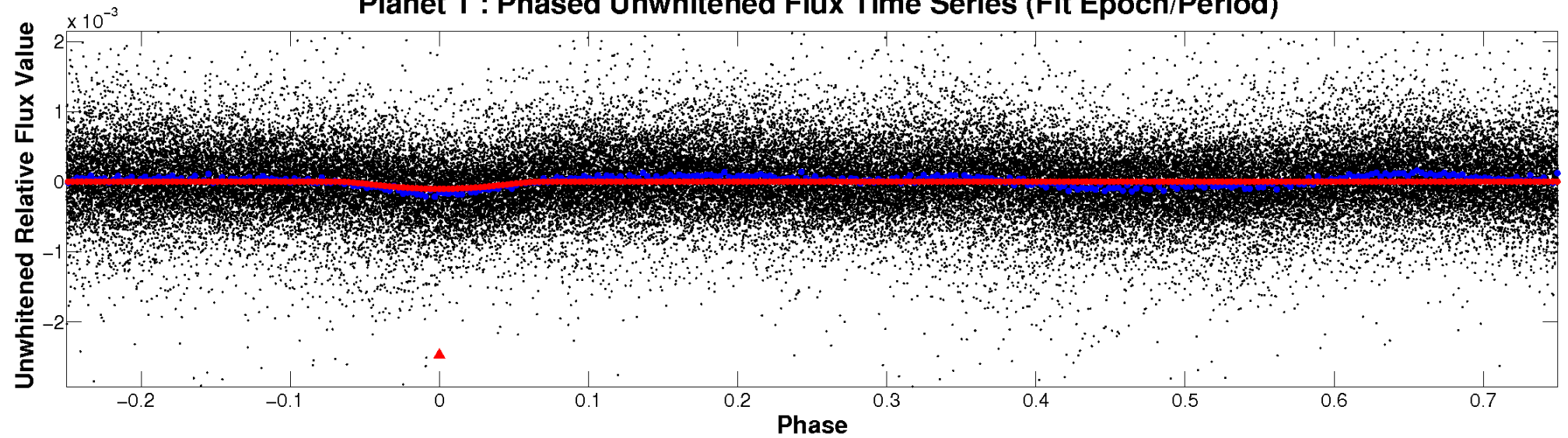
ALT Odd/Even

TCE 007595579-01

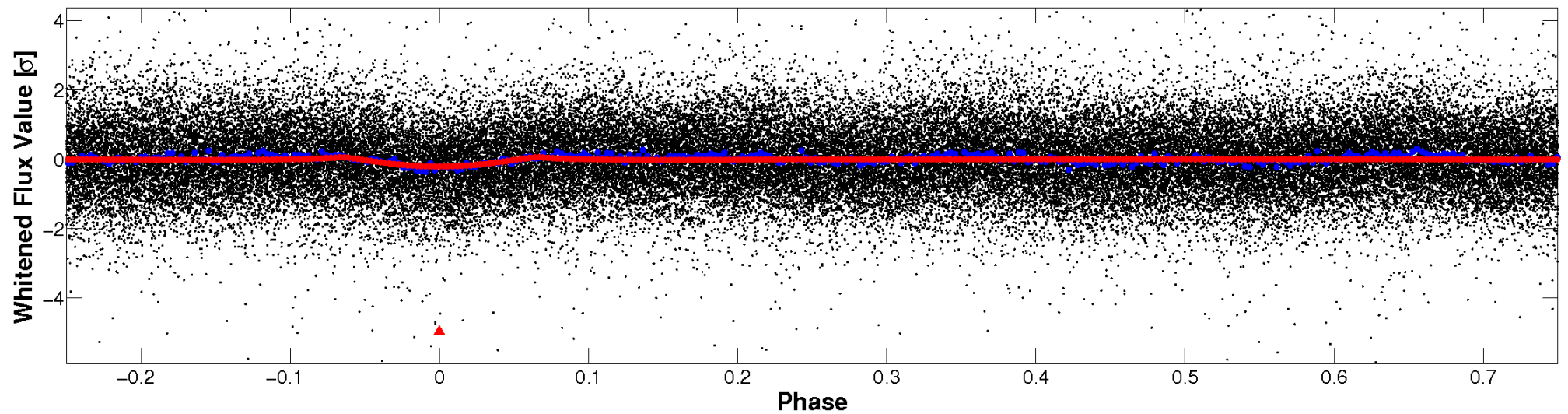


Non-Whitened Vs. Whitened Light Curve

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

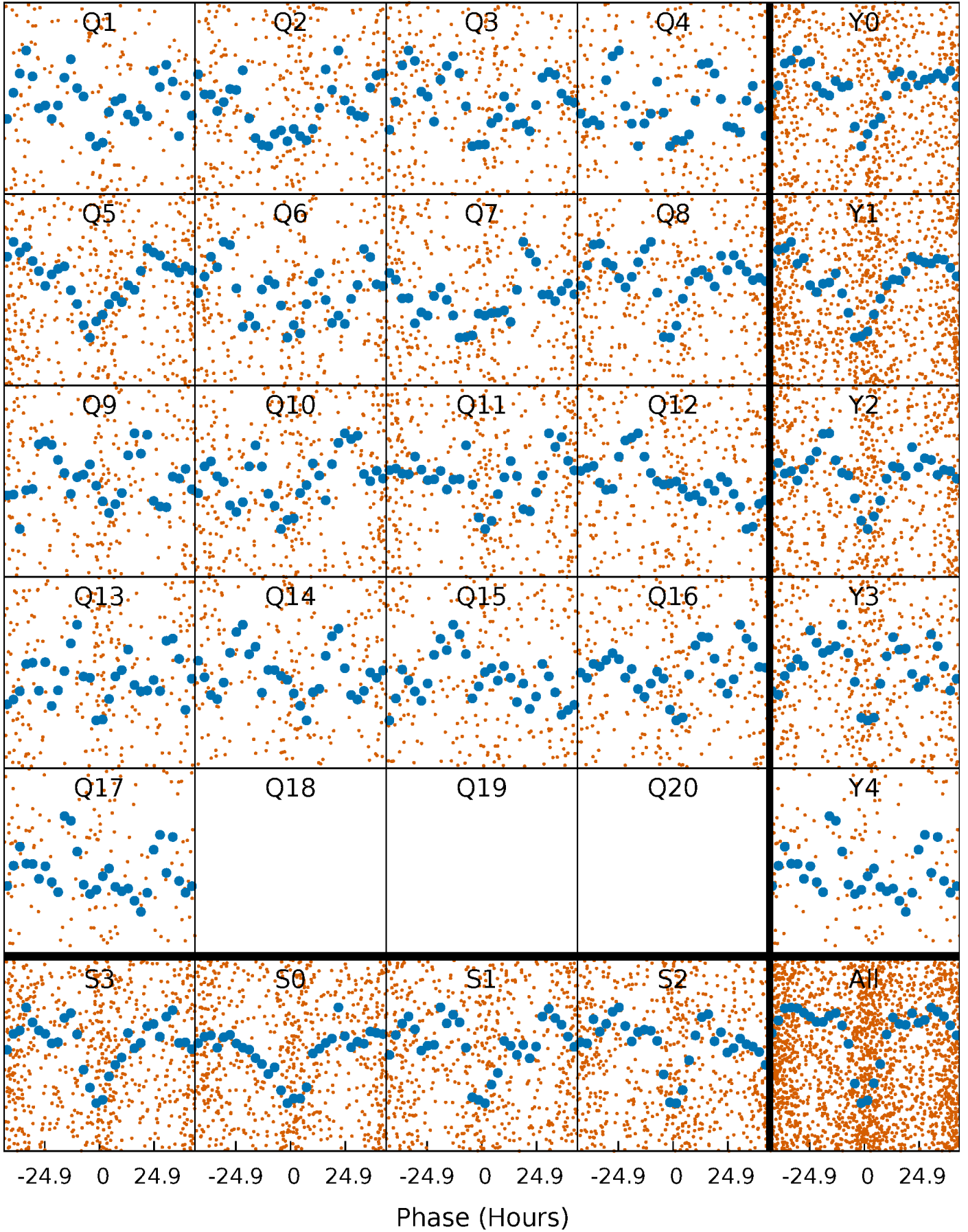


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



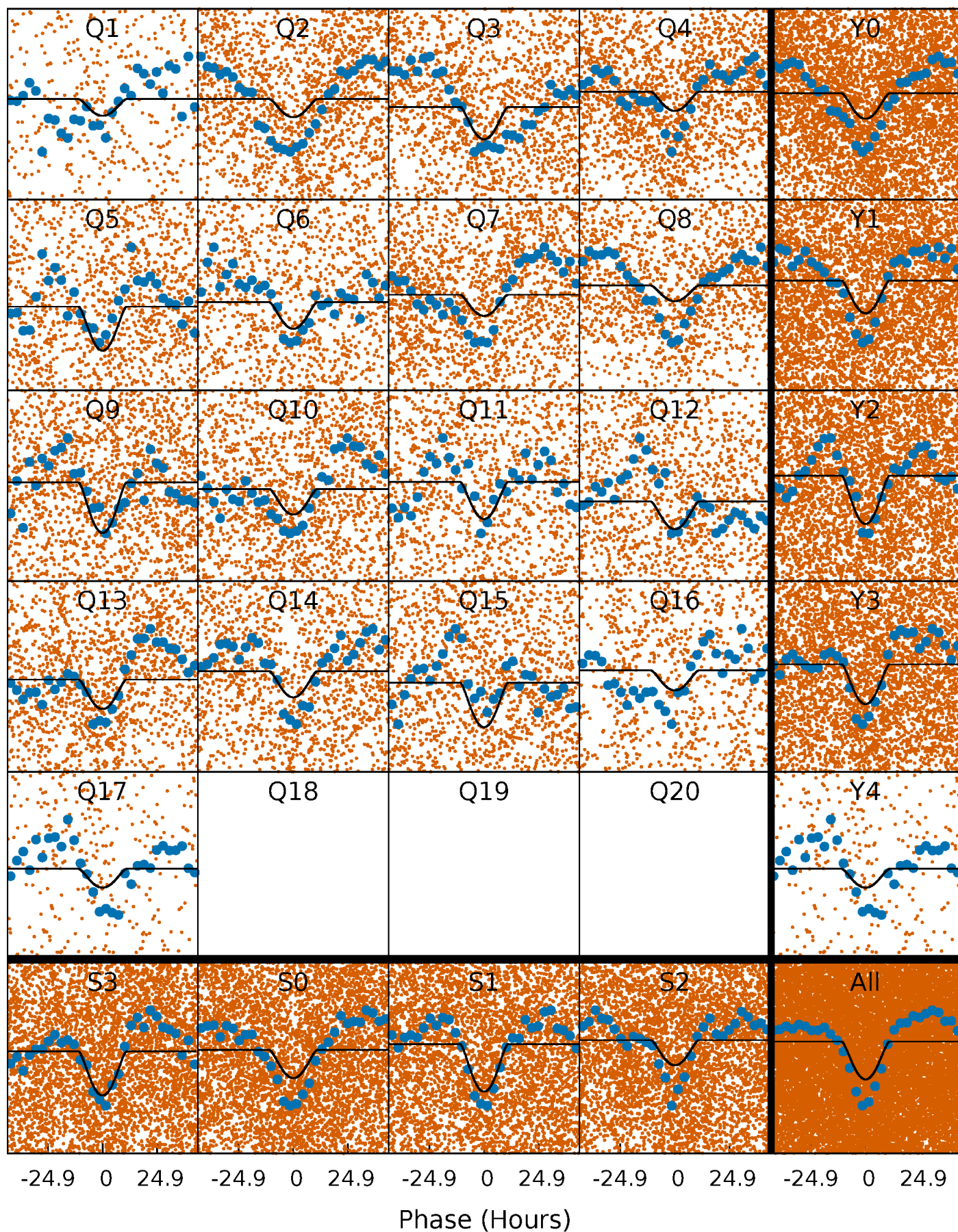
PDC Quarter-Phased Transit Curves

TCE 007595579-01 P= 6.732217 Days $T_0=136.517356$ (BKJD)



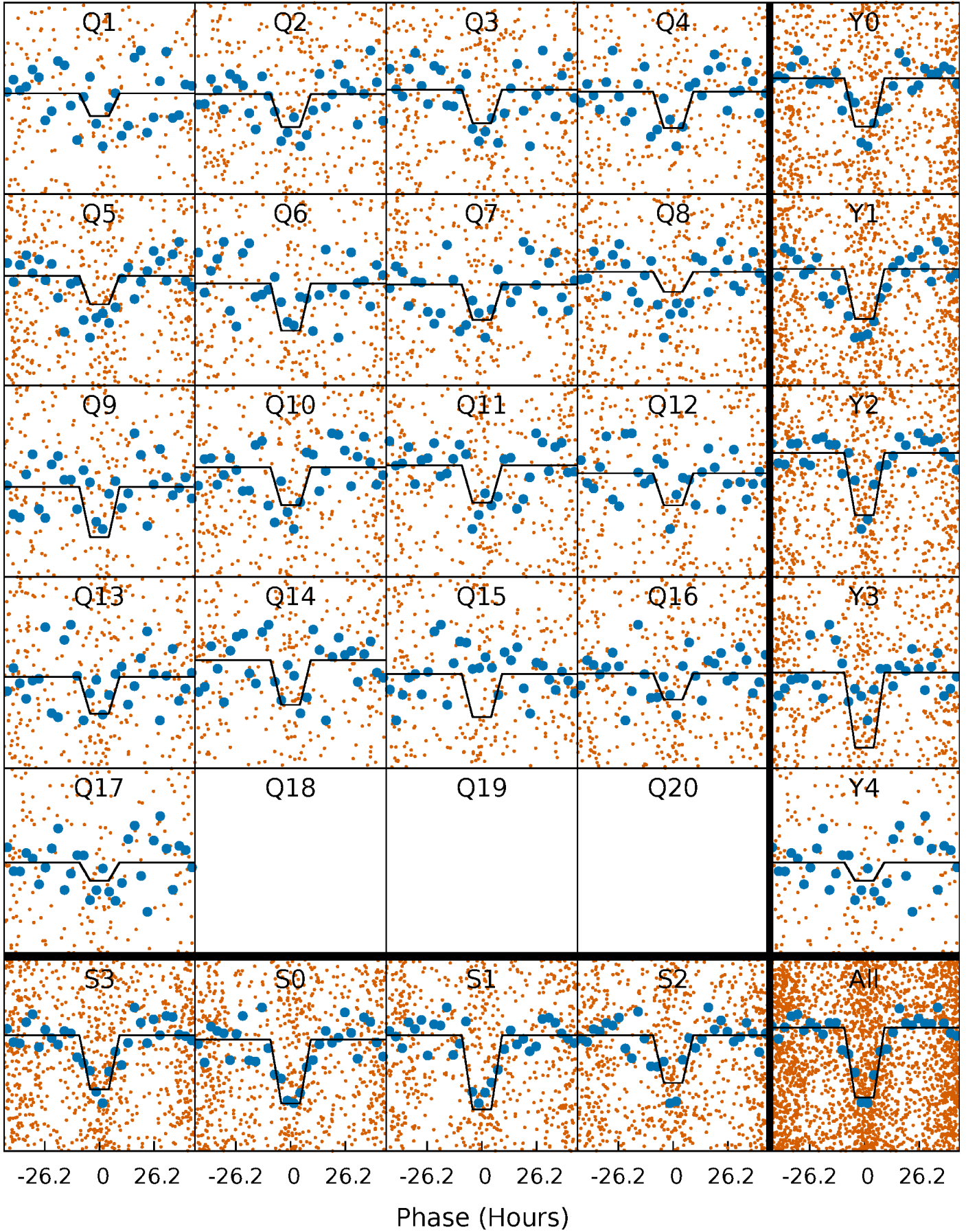
DV Quarter-Phased Transit Curves

TCE 007595579-01 P= 6.732217 Days $T_0=136.517356$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

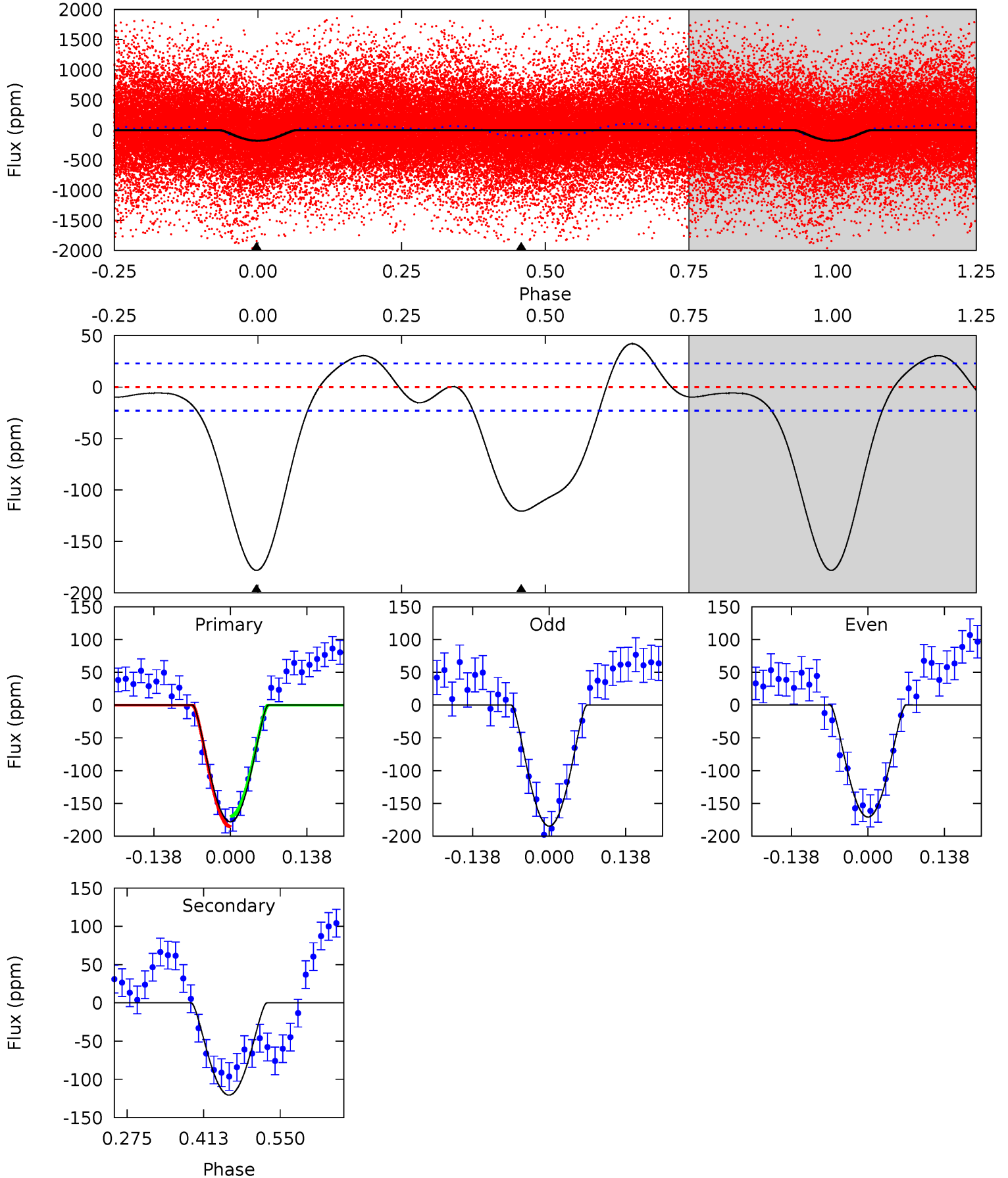
TCE 007595579-01 P= 6.732546 Days $T_0=136.506986$ (BKJD)



DV Model-Shift Uniqueness Test

007595579-01, P = 6.732217 Days, E = 129.785139 Days

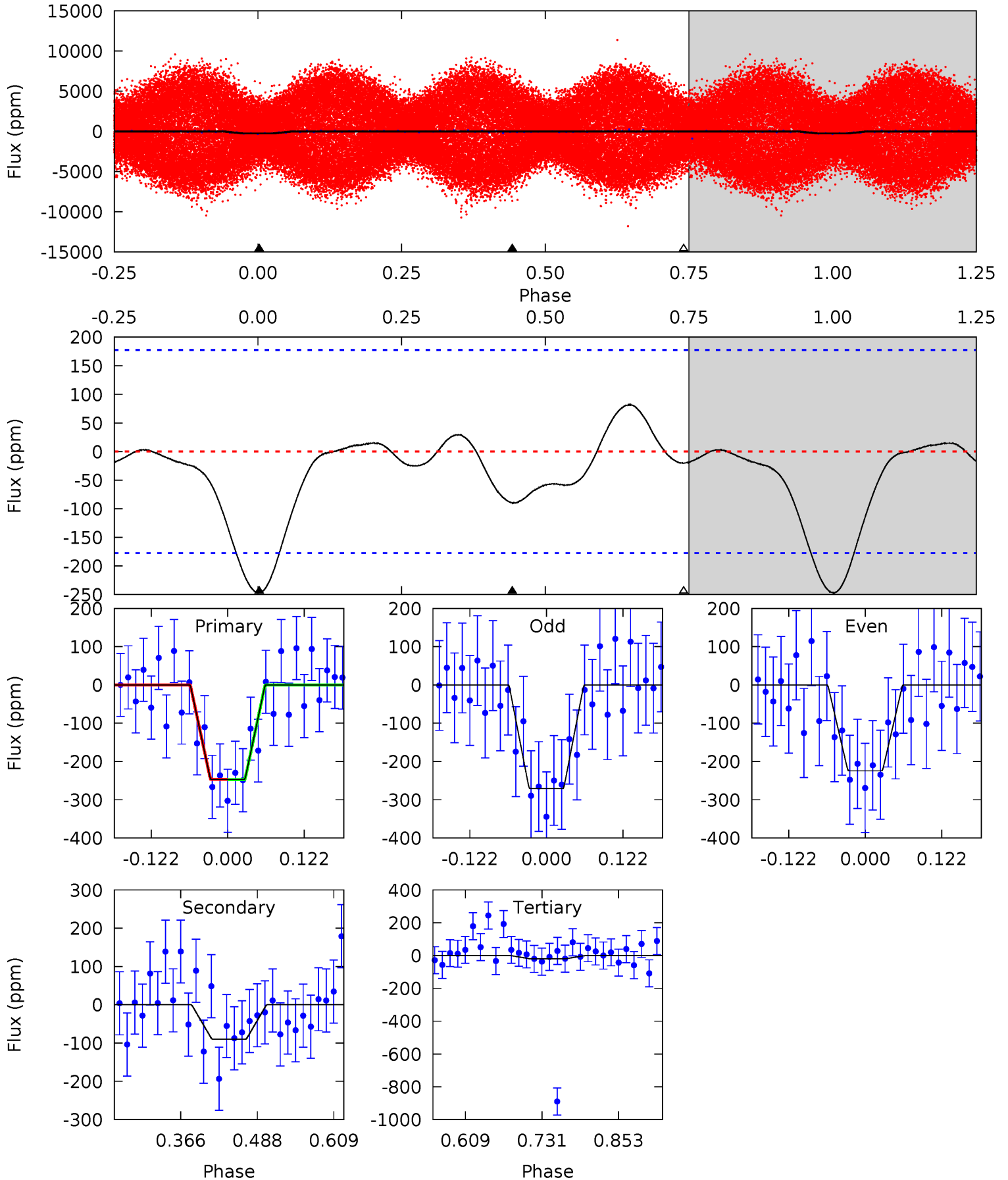
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
35.0	23.7	0	0	4.50	1.49	3.55	35.0	35.0	23.7	23.7	1.36	1.15	0.19	1.52



Alt Model-Shift Uniqueness Test

007595579-01, P = 6.732546 Days, E = 129.774440 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
6.30	2.29	0.52	0	4.52	1.55	0.75	5.78	6.30	1.77	2.29	0.59	16.8	0.25	0.01



Stellar Parameters For KIC 007595579

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	$M(M_{\odot})$	p_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	7719^{+214}_{-322}	$4.150^{+0.101}_{-0.188}$	$0.070^{+0.200}_{-0.400}$	$1.821^{+0.540}_{-0.291}$	$1.707^{+0.204}_{-0.249}$	$0.398^{+0.185}_{-0.203}$
	+3%/-4%	+2%/-5%	+286%/-571%	+30%/-16%	+12%/-15%	+46%/-51%
Source	PHO54	PHO54	PHO54	DSEP		

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

Secondary Eclipse Parameters for KIC 007595579-01 / KOI

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	-121 ± 5	$4.75^{+4.07}_{-3.24}$	2239^{+160}_{-138}	5166^{+4413}_{-1128}	20^{+182}_{-14}
Alt.	-90 ± 39	$4.69^{+3.87}_{-3.07}$	2234^{+162}_{-140}	4836^{+3633}_{-1069}	14^{+110}_{-10}

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

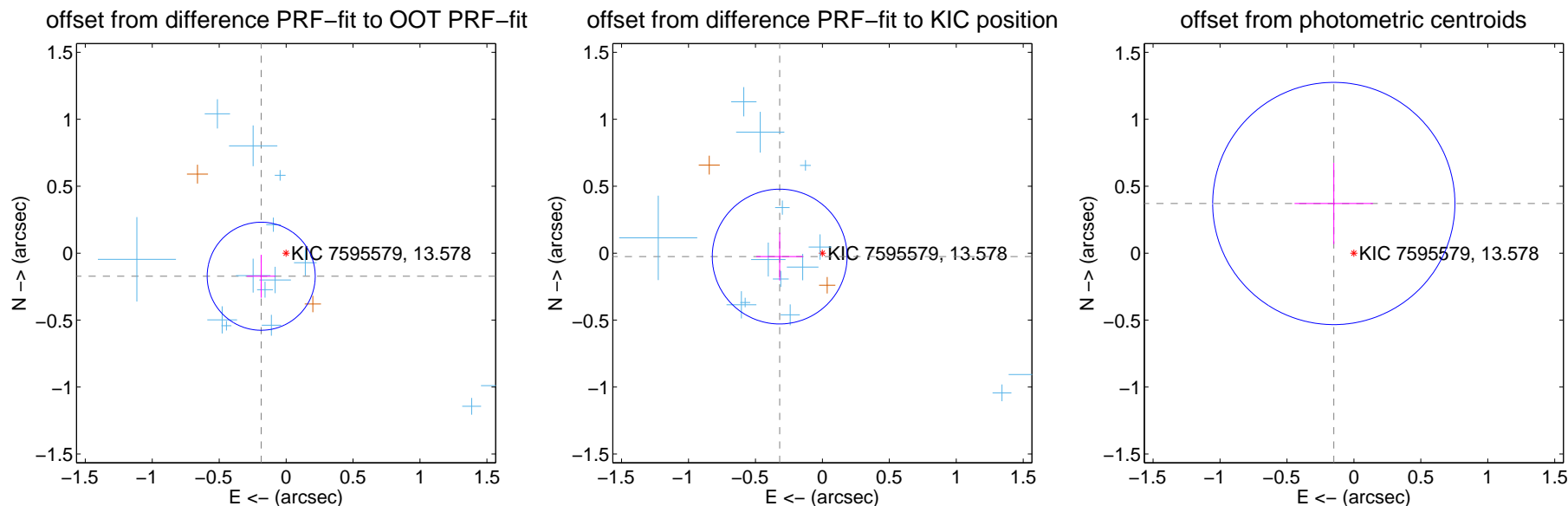
DV Centroid Data

Supplemental centroid analysis for 007595579-01. Kepler magnitude: 13.58. Transit SNR 13.23

There are 15 quarters with good PRF difference image offsets

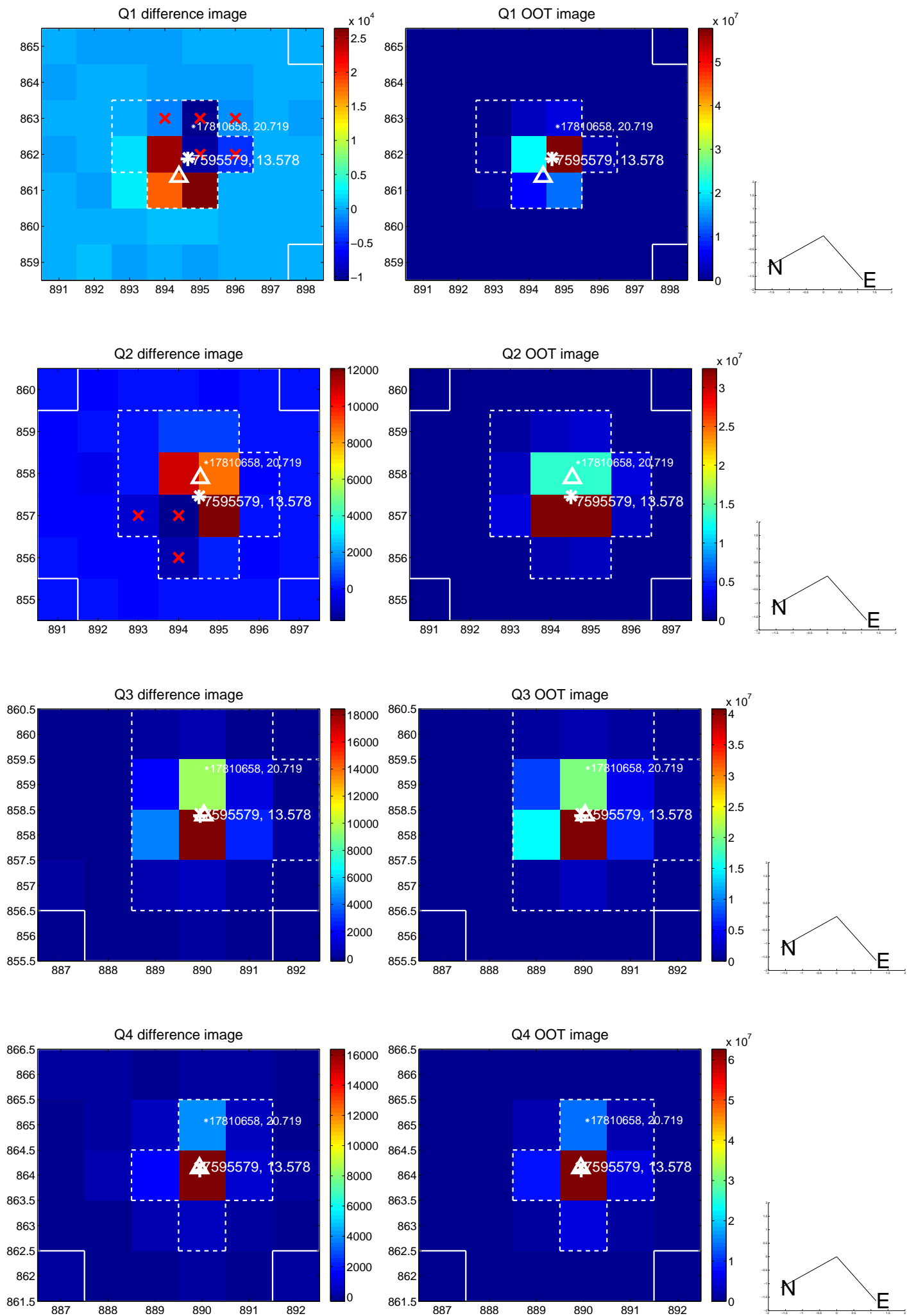
The direct PRF centroid is offset from the target star catalog position by about 0.17 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.254 ± 0.134	1.89	0.186 ± 0.107	-0.172 ± 0.160
PRF-fit source offset from KIC position	0.320 ± 0.168	1.91	0.319 ± 0.175	-0.025 ± 0.179
photometric centroid source offset	0.40 ± 0.30	1.33	0.15 ± 0.29	0.37 ± 0.30

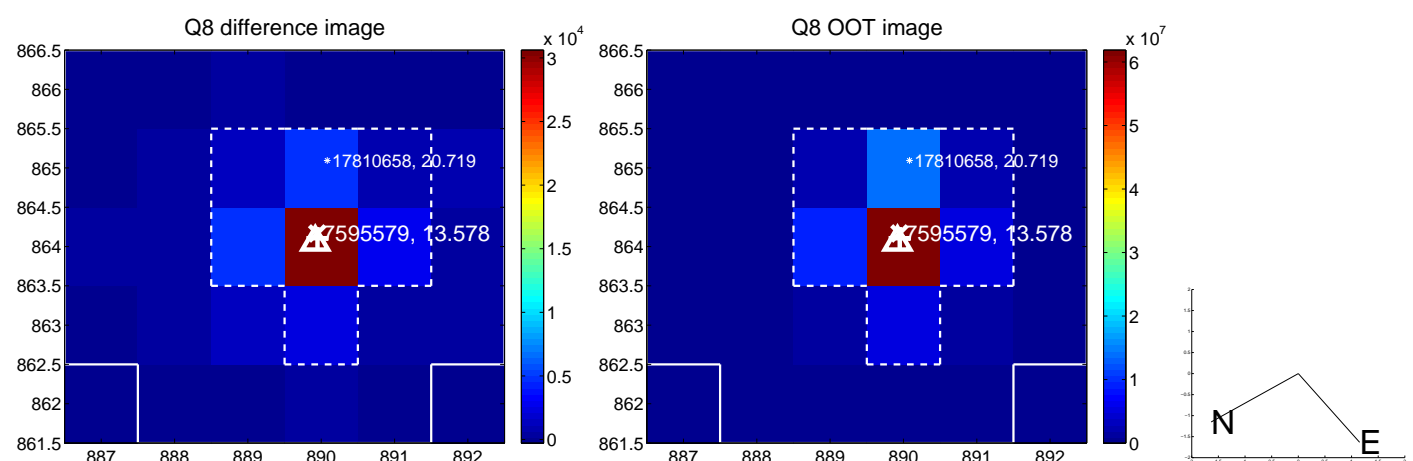
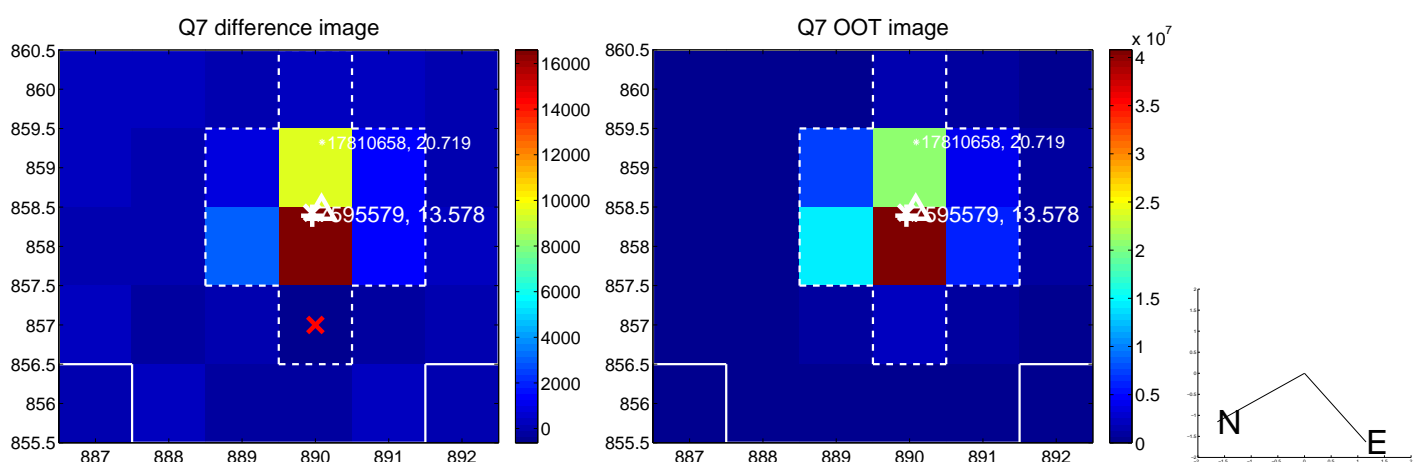
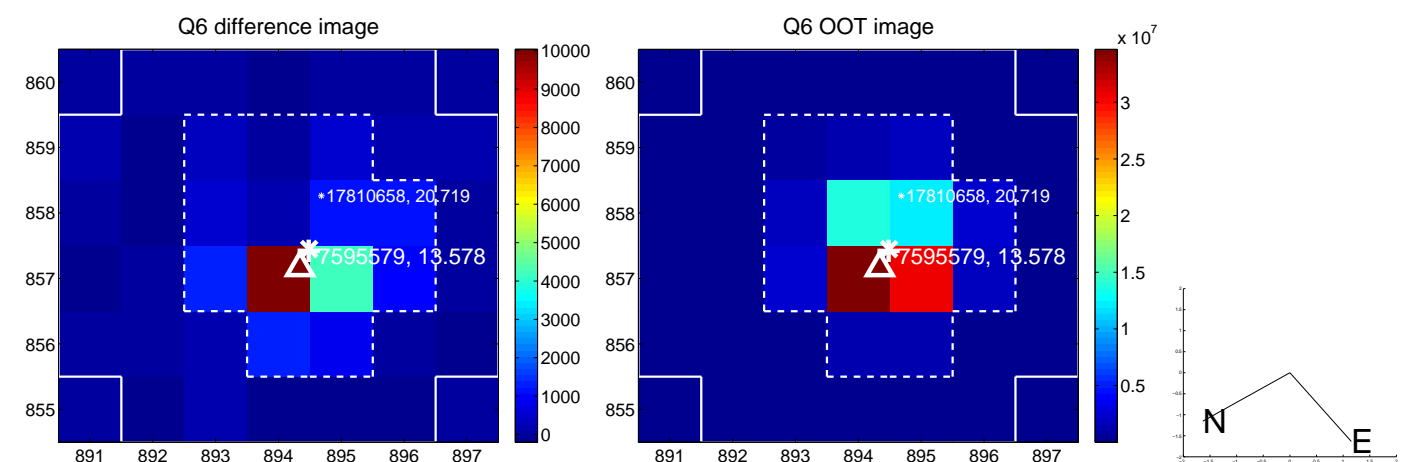
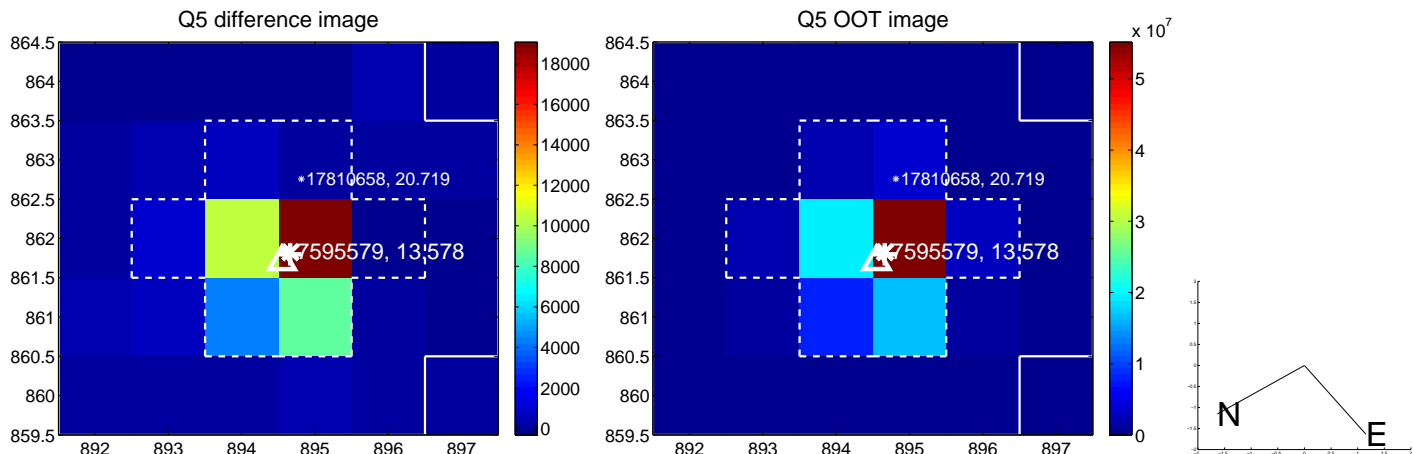


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses:** good quarterly centroid offsets; **Vermillion crosses:** bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

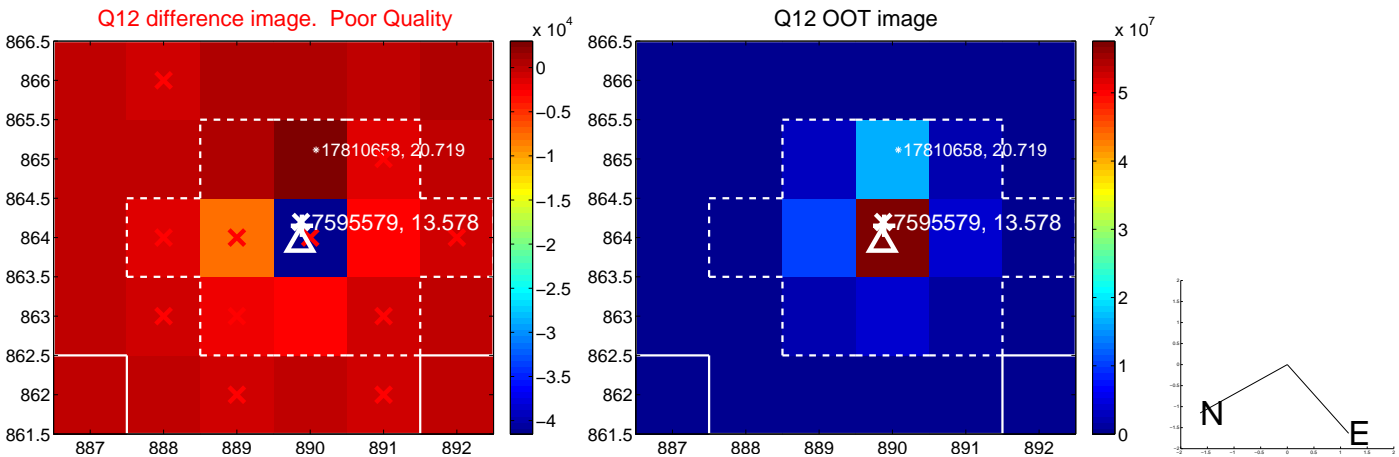
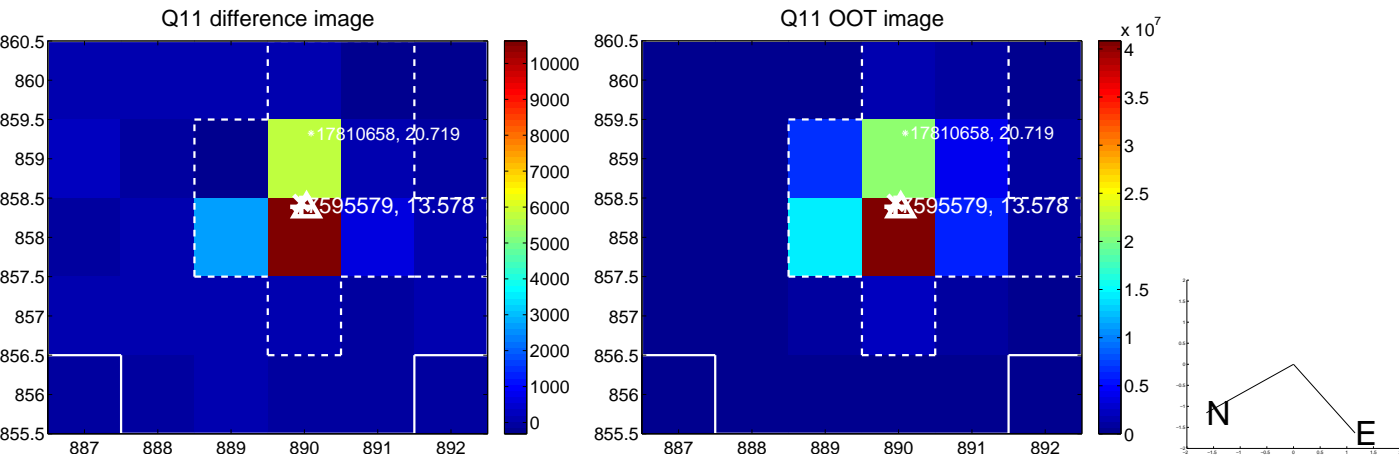
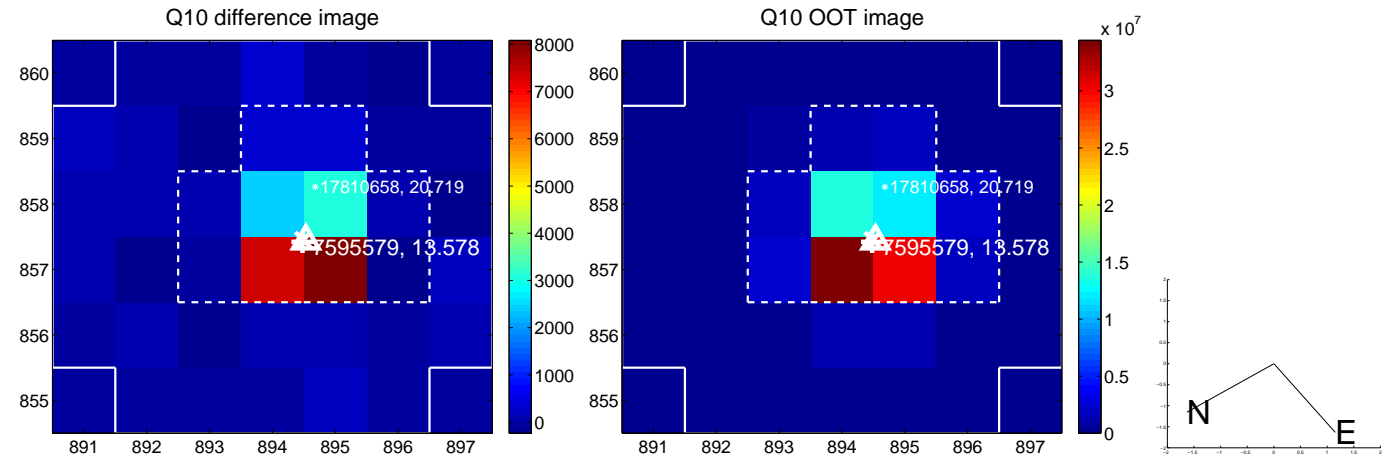
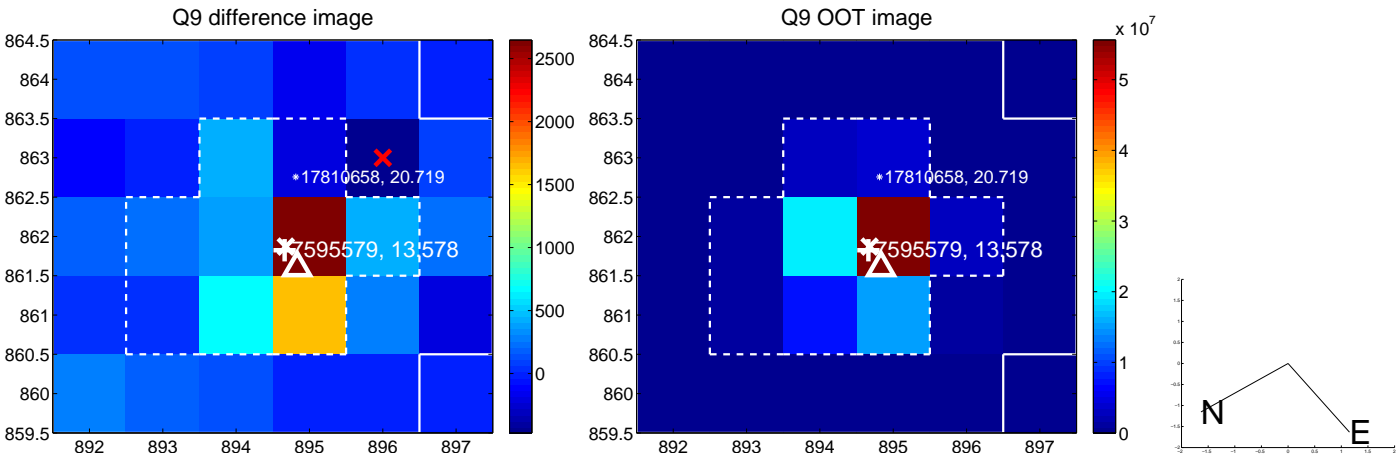
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



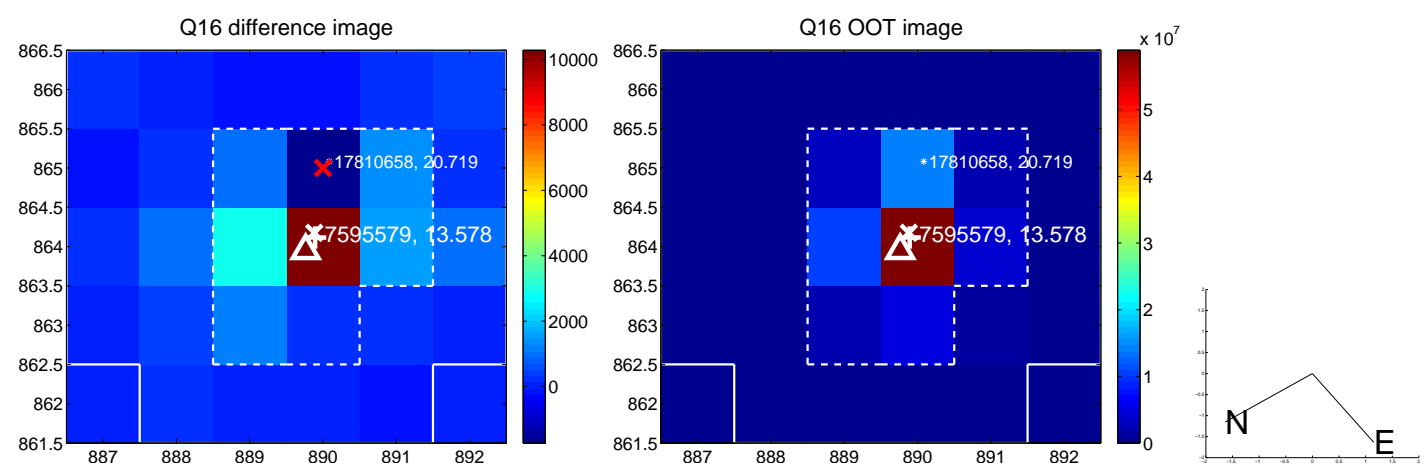
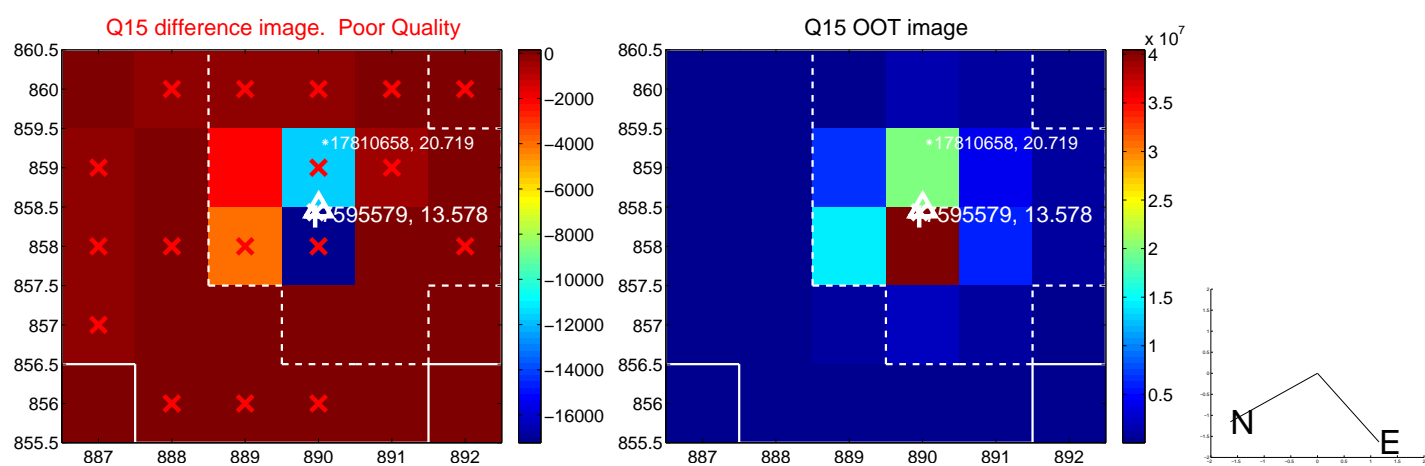
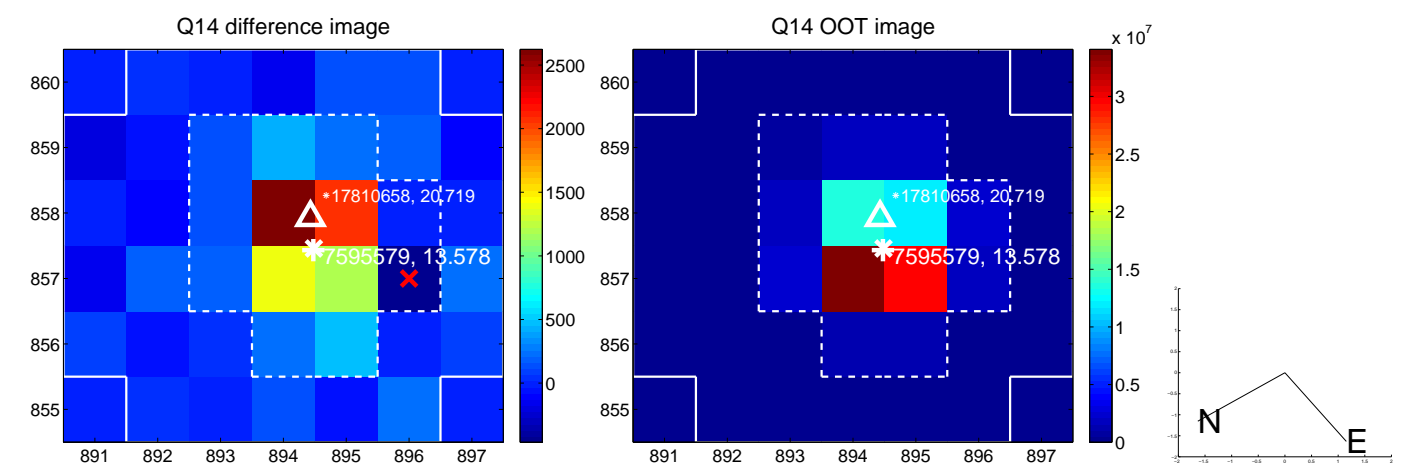
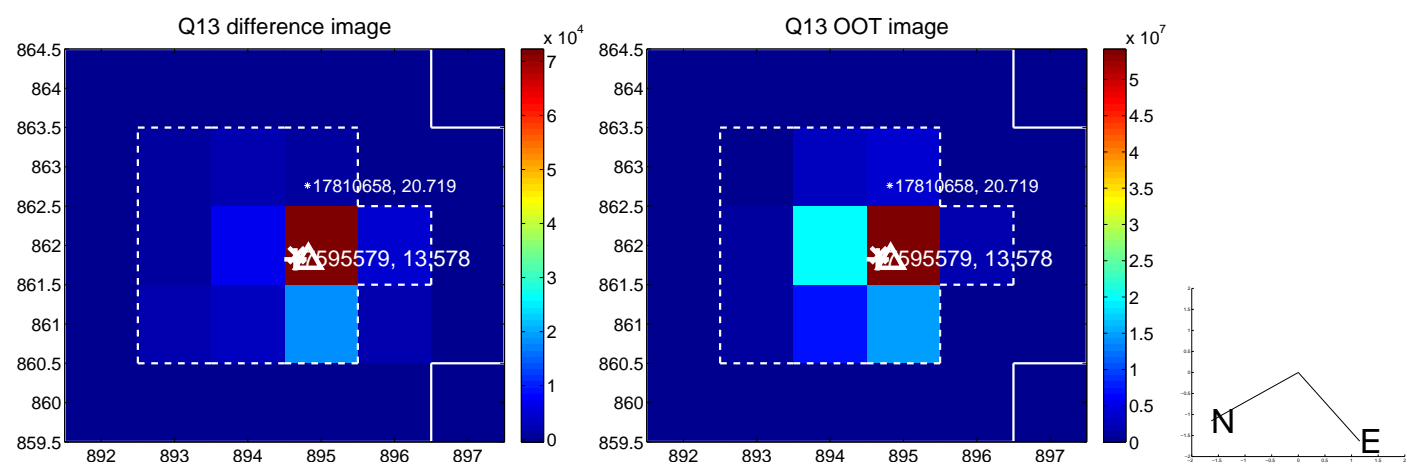
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



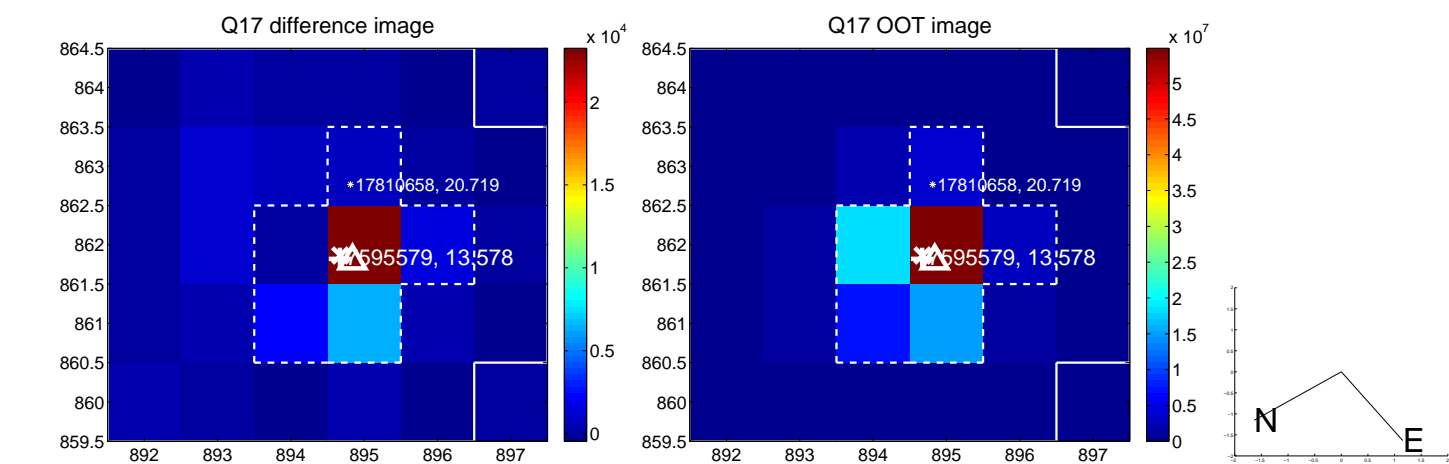
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



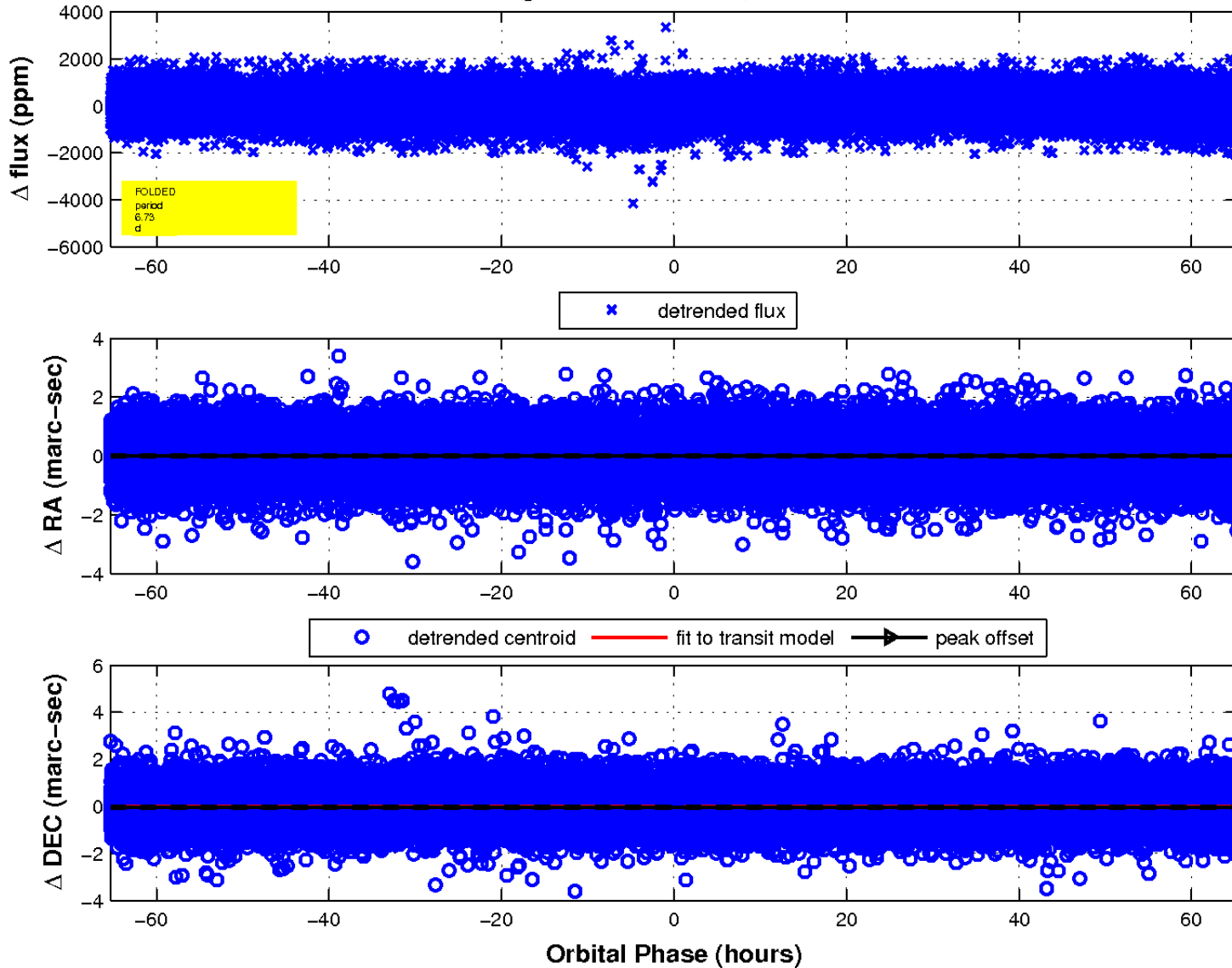
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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



fluxWeightedCentroids, Planet 1 of 1



UKIRT Image

