

KIC 008895758

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})
008895758-01	OBS	3106.01	0.968978	132.424306	116.3	1.766	11.0	13.7	1.00	5866	1.28	2736.39

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
008895758-01	OBS	PC	0.88	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.

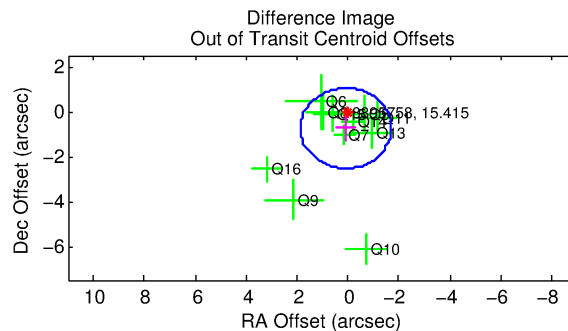
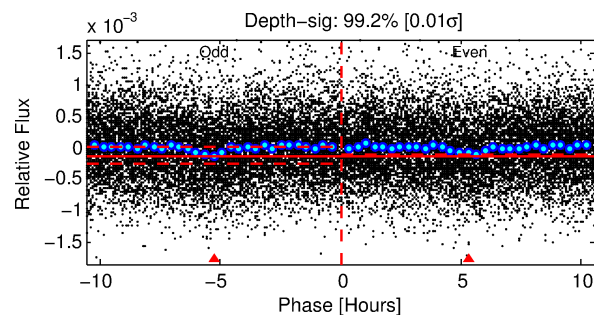
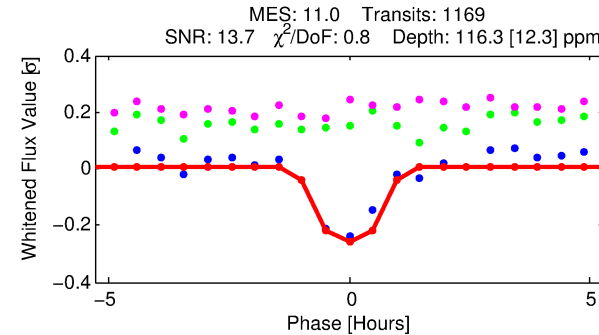
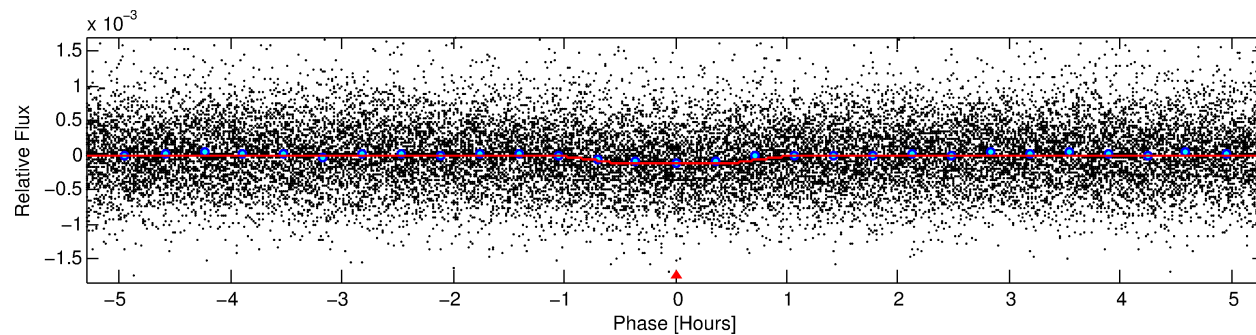
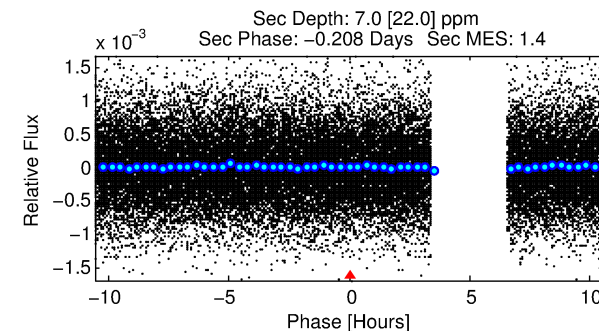
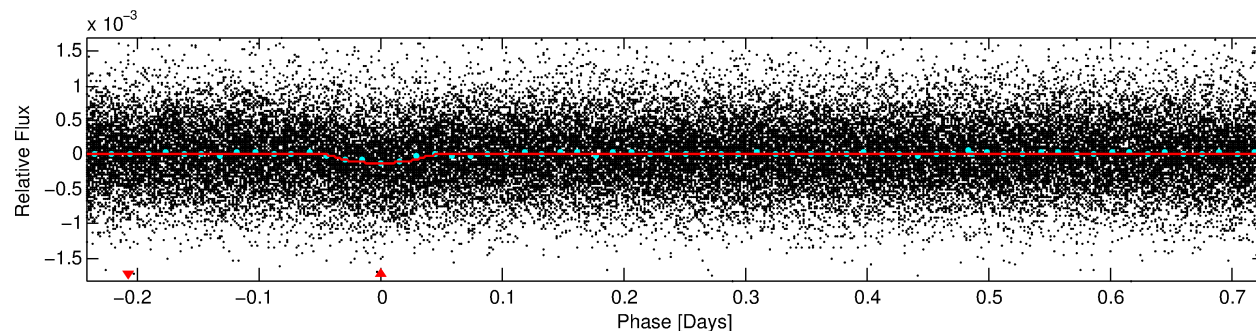
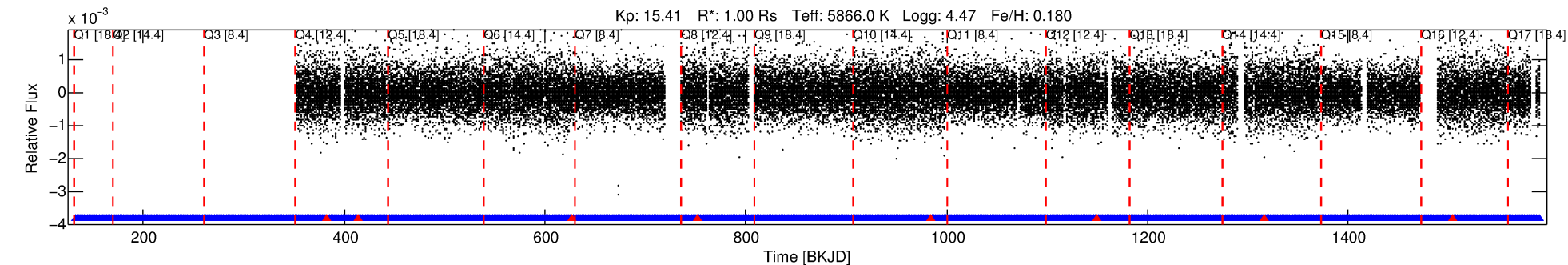
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 008895758-01

No Significant Match Found

DV One-Page Summary

KIC: 8895758 Candidate: 1 of 1 Period: 0.969 d
KOI: K03106.01 Corr: 0.954



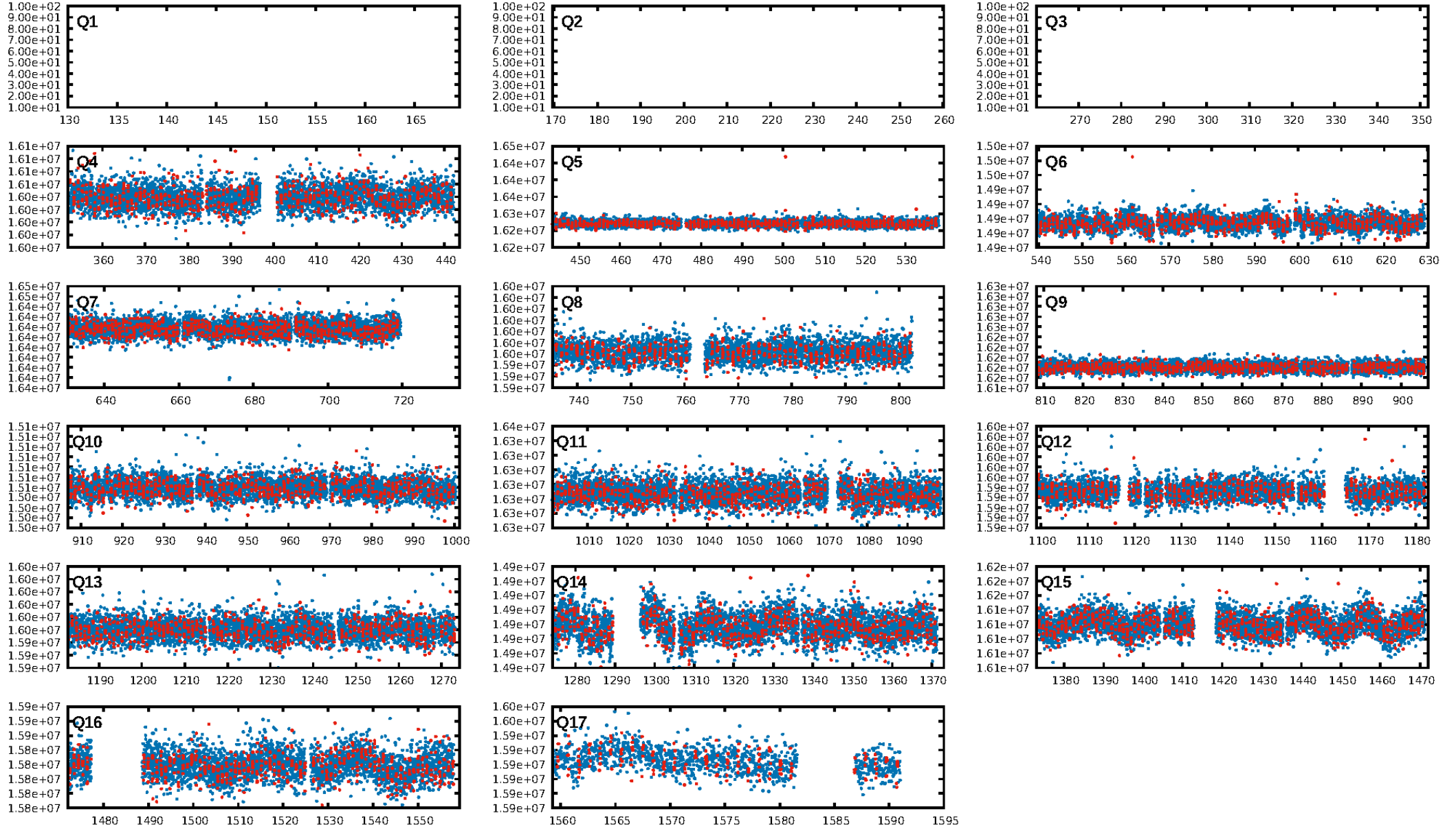
DV Fit Results:

Period = 0.96898 [0.00001] d
Epoch = 132.4243 [0.0019] BKJD
Rp/R* = 0.0118 [0.0078]
a/R* = 2.17 [5.44]
b = 0.90 [0.71]
Seff = 2736.39 [1145.31]
Teff = 1844 [193] K
Rp = 1.28 [0.95] Re
a = 0.0197 [0.0053] AU
Ag = 0.91 [3.12] [-0.03σ]
Teffp = 2787 [2366] K [0.40σ]

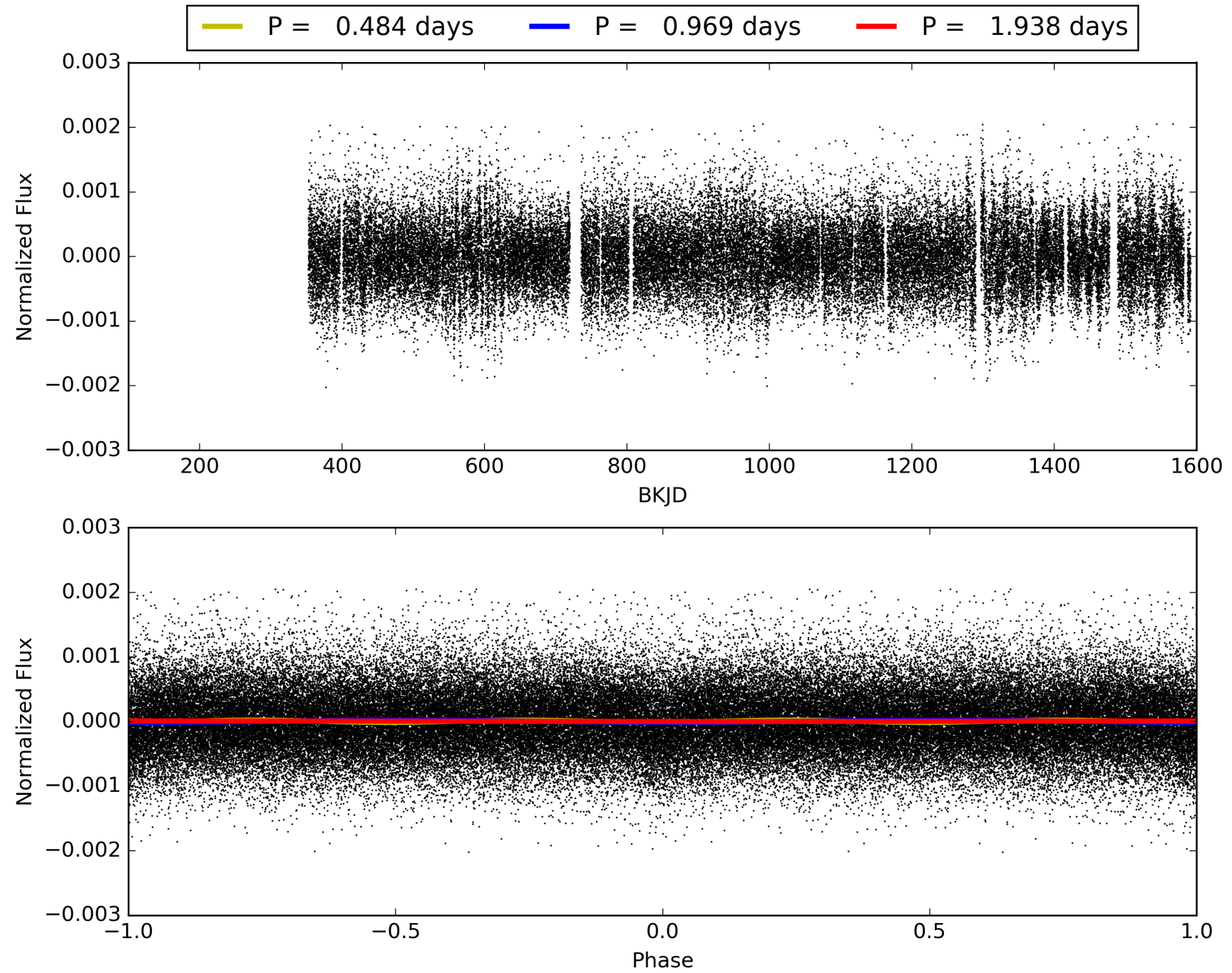
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: 9.63e-29
RollingBand-fgt: 0.99 [1133/1141]
GhostDiagnostic-chr: 2.25
Centroid-sig: 55.1%
Centroid-so: 0.850 arcsec [0.81σ]
OotOffset-rm: 0.749 arcsec [1.26σ]
KicOffset-rm: 0.655 arcsec [1.14σ]
OotOffset-st: 3/3/2/3 [11]
KicOffset-st: 3/3/2/3 [11]
DiffImageQuality-fgm: 0.73 [8/11]
DiffImageOverlap-fno: 1.00 [14/14]

TCE 008895758-01, PDC Light Curves

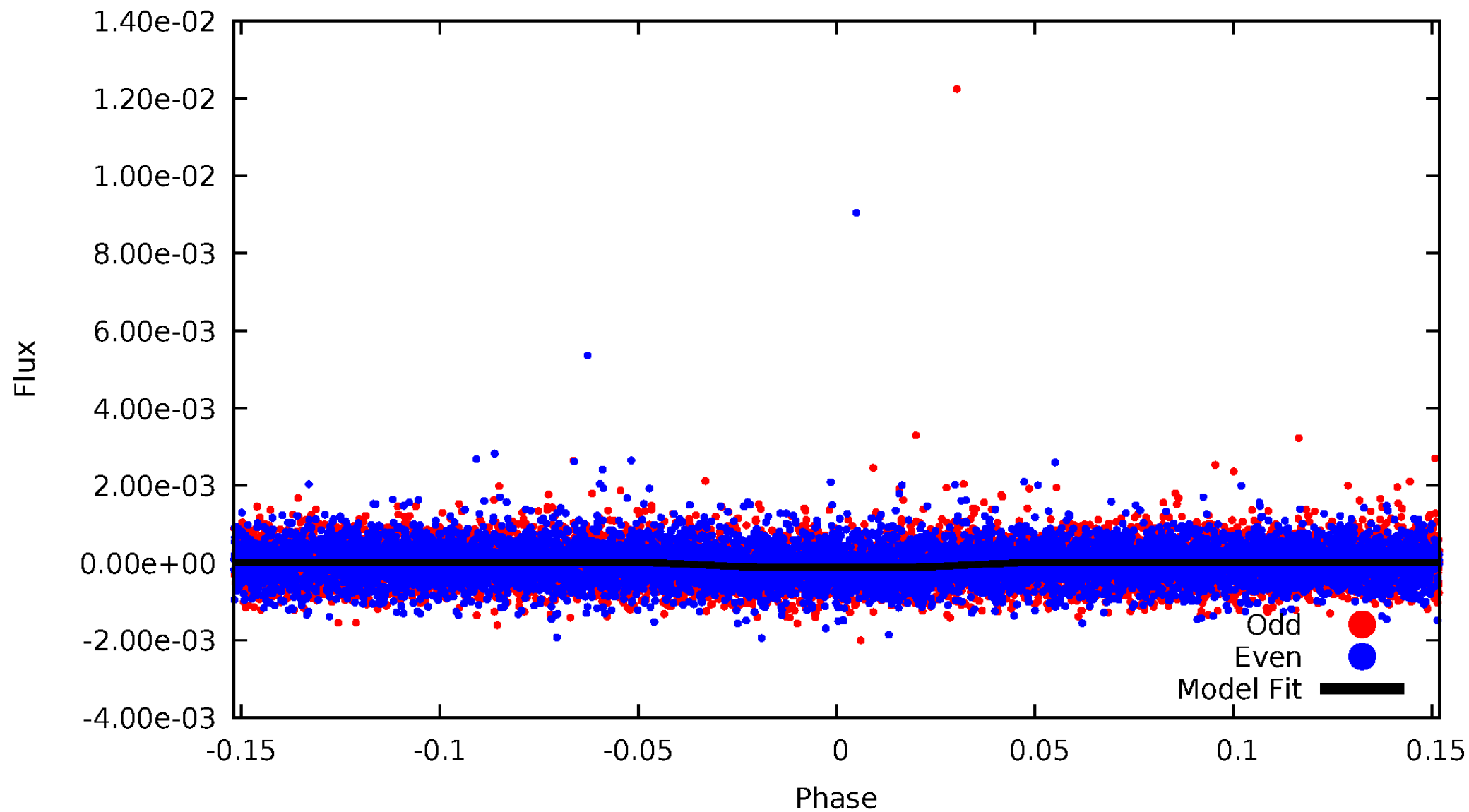


TCE 008895758-01



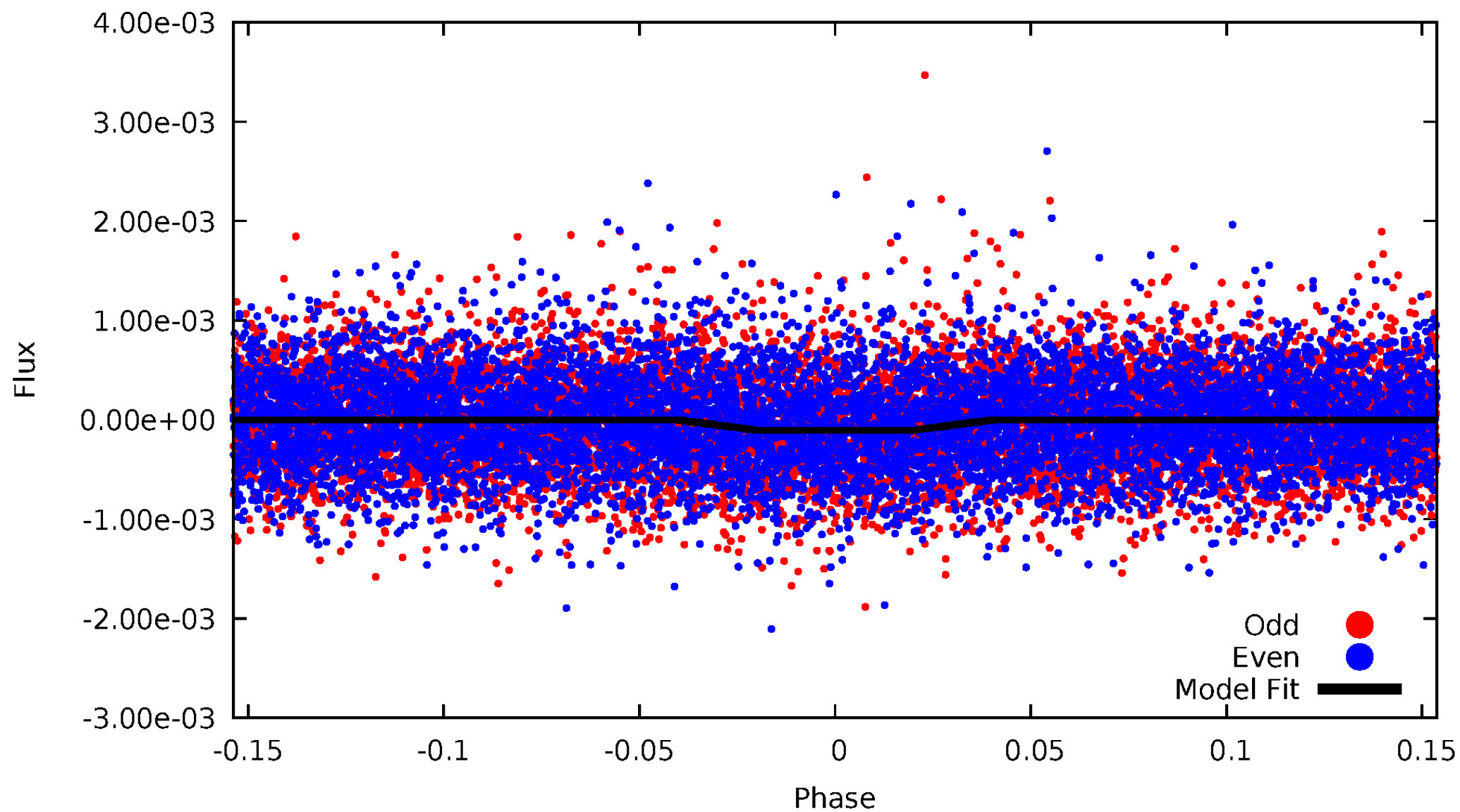
DV Odd/Even

TCE 008895758-01



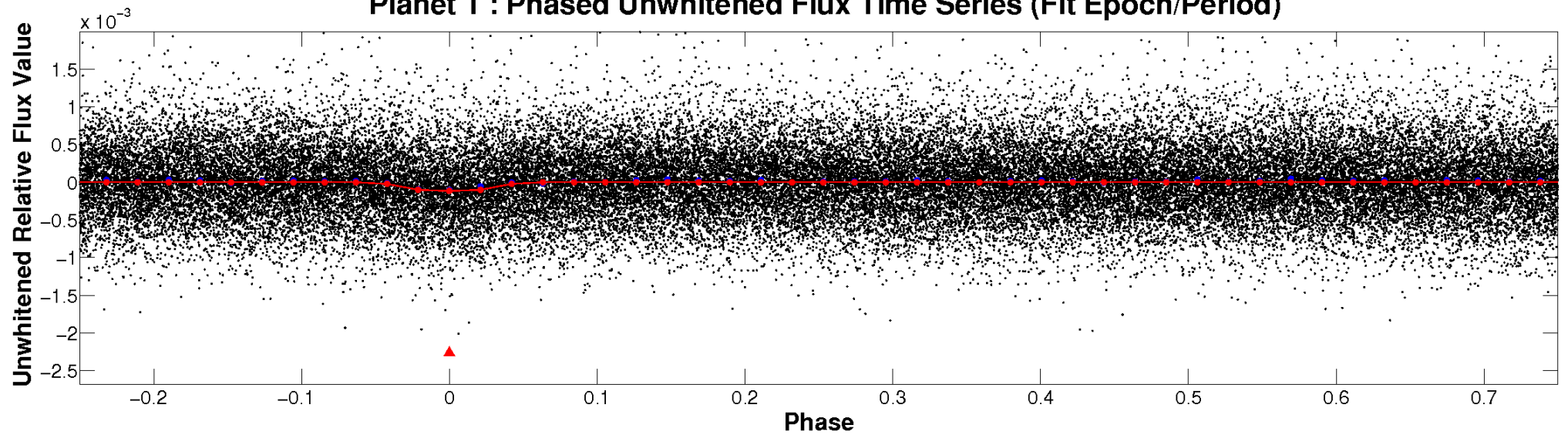
ALT Odd/Even

TCE 008895758-01

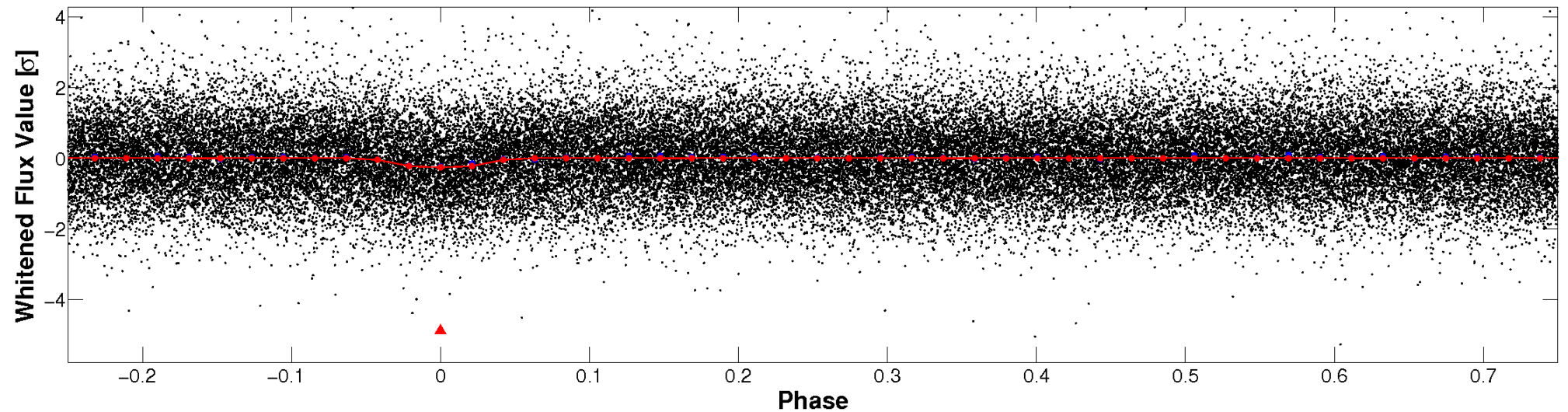


Non-Whitened Vs. Whitened Light Curve

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

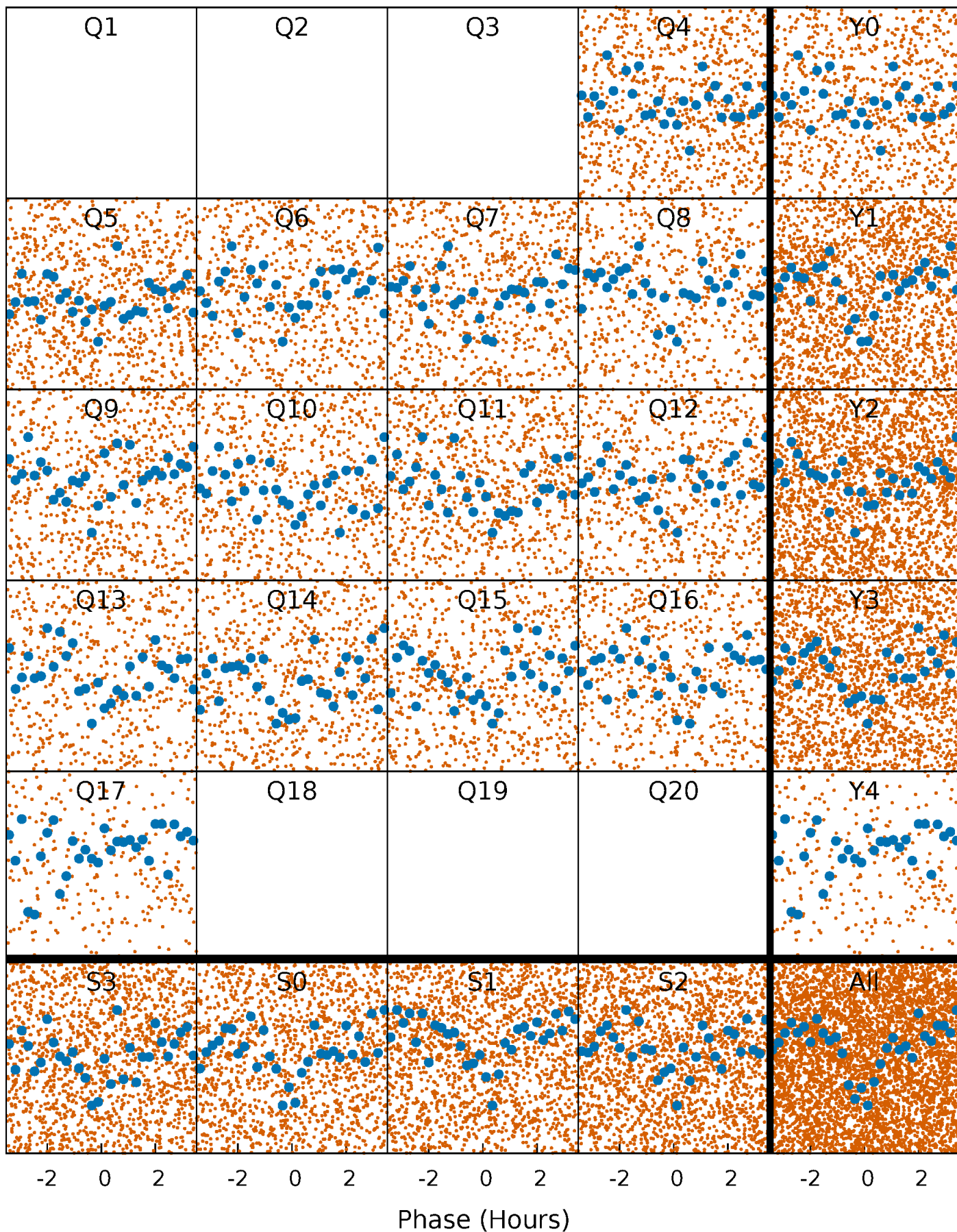


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



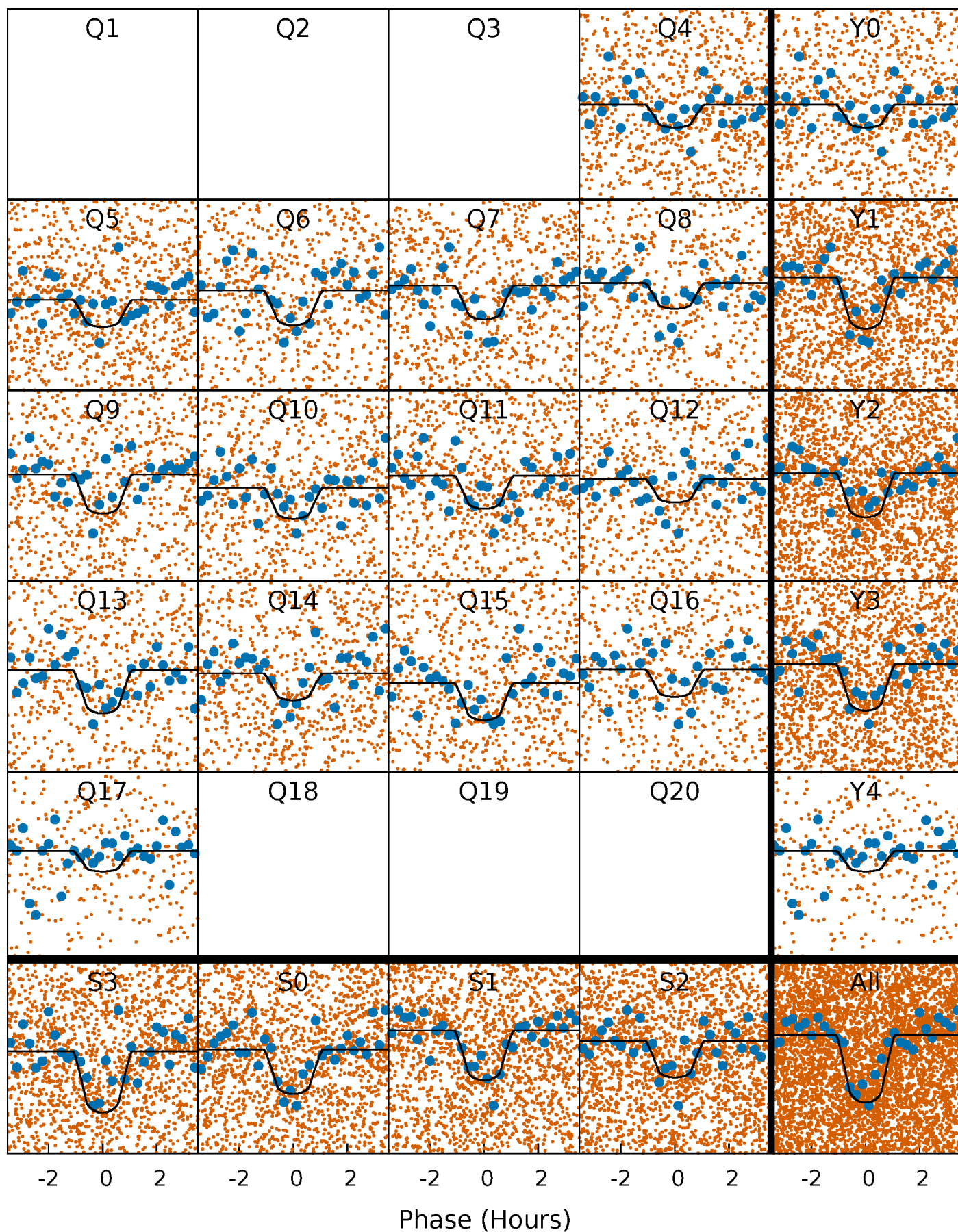
PDC Quarter-Phased Transit Curves

TCE 008895758-01 P= 0.968978 Days $T_0=132.424306$ (BKJD)



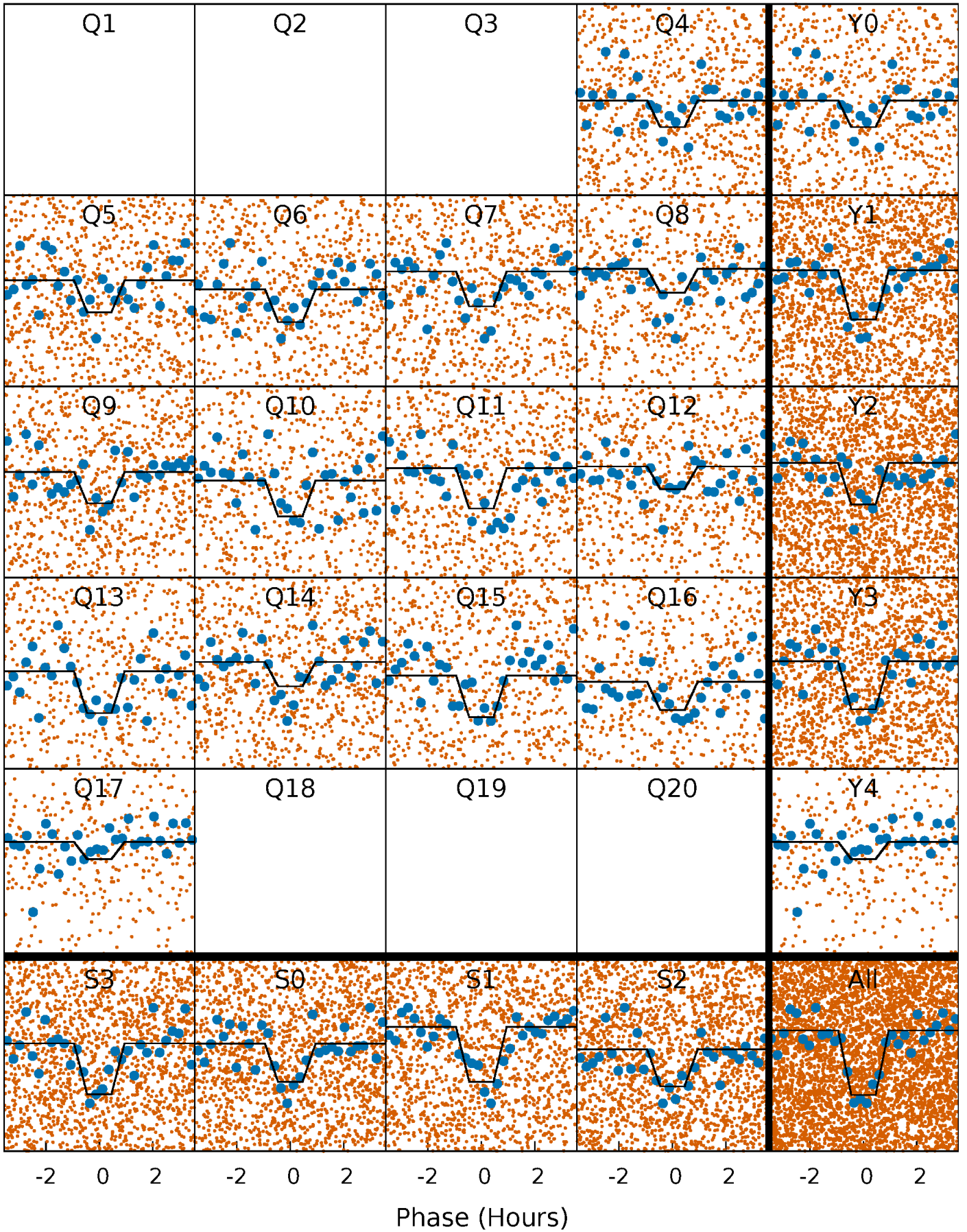
DV Quarter-Phased Transit Curves

TCE 008895758-01 P= 0.968978 Days $T_0=132.424306$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

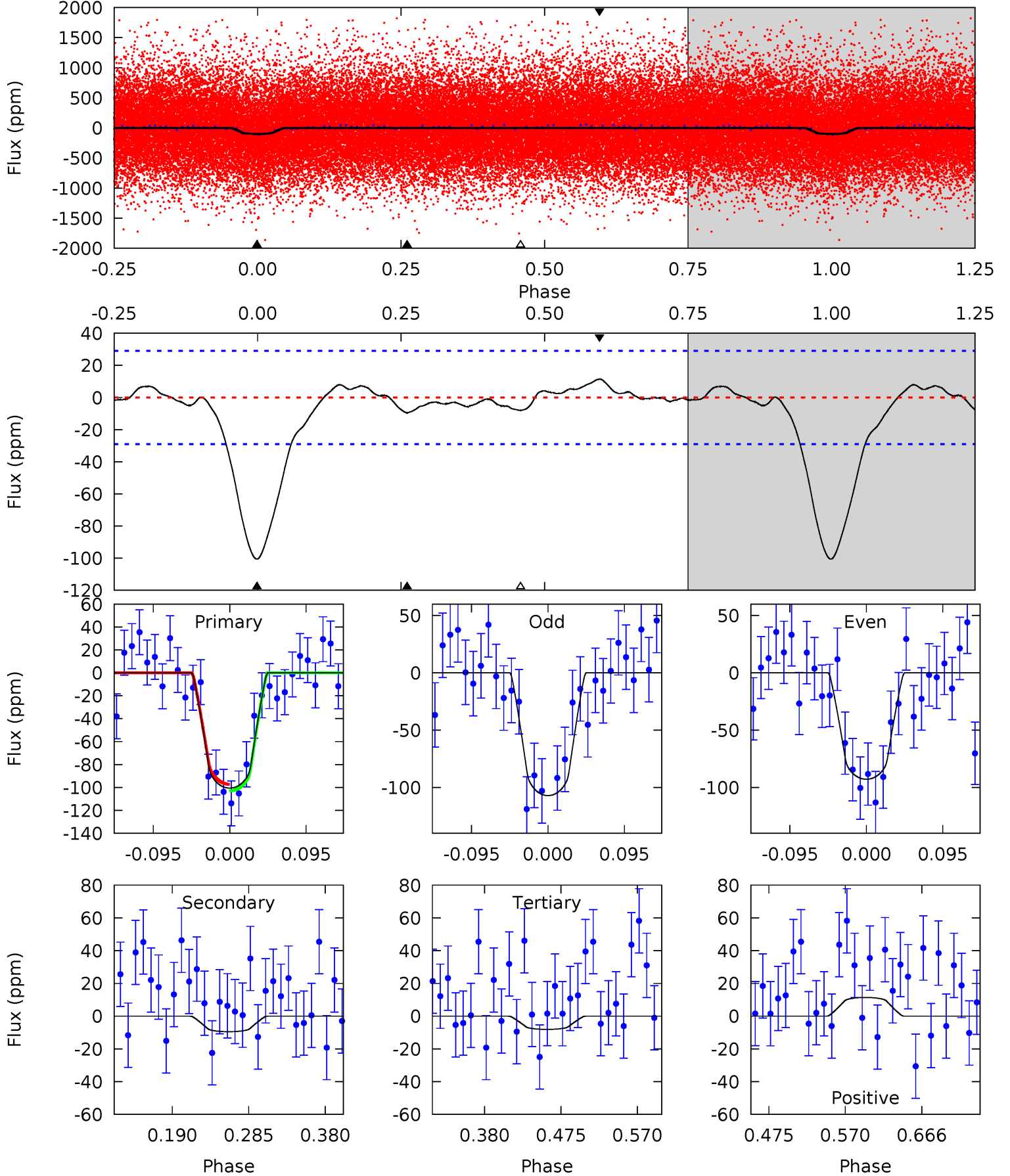
TCE 008895758-01 P= 0.968972 Days $T_0=132.427607$ (BKJD)



DV Model-Shift Uniqueness Test

008895758-01, P = 0.968978 Days, E = 132.424306 Days

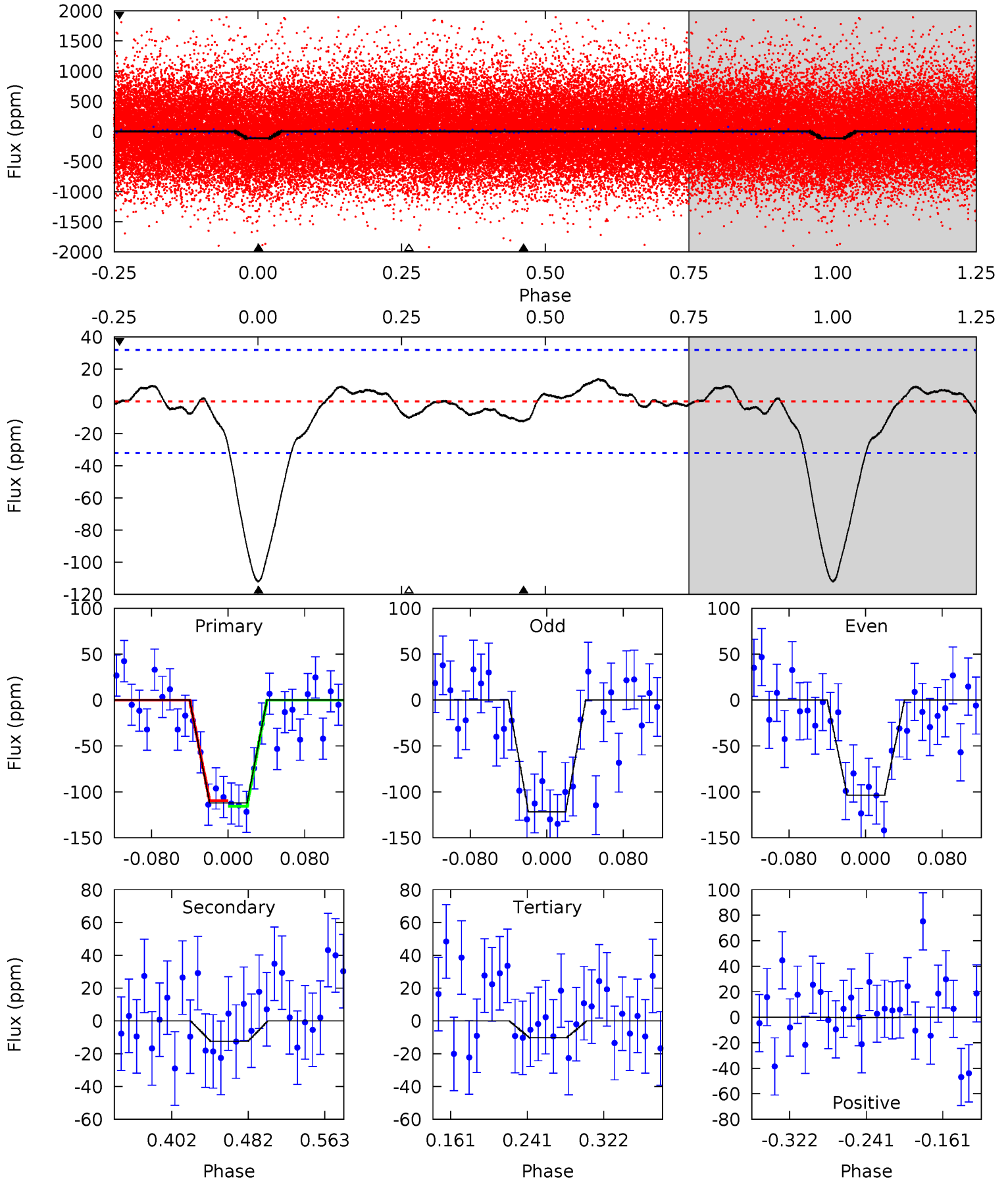
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
15.9	1.50	1.28	1.80	4.58	1.67	0.74	14.6	14.1	0.22	-0.30	1.12	0.87	0.10	0.46



Alt Model-Shift Uniqueness Test

008895758-01, P = 0.968972 Days, E = 132.427607 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
16.1	1.79	1.47	-0.03	4.61	1.75	0.90	14.6	16.1	0.32	1.82	1.29	0.86	0.11	0.43



Stellar Parameters For KIC 008895758

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	5866^{+182}_{-203}	$4.473^{+0.054}_{-0.216}$	$0.180^{+0.200}_{-0.300}$	$1.000^{+0.322}_{-0.107}$	$1.083^{+0.125}_{-0.150}$	$1.526^{+0.350}_{-0.830}$
	+3%/-3%	+1%/-5%	+111%/-167%	+32%/-11%	+12%/-14%	+23%/-54%
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 008895758-01 / KOI 3106.01

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	-10 ± 6	$1.48^{+0.81}_{-0.80}$	2642^{+205}_{-133}	3126^{+1211}_{-5725}	$0.845^{+3.519}_{-0.683}$
Alt.	-12 ± 7	$1.29^{+0.86}_{-0.75}$	2634^{+206}_{-137}	3451^{+1604}_{-1044}	$1.355^{+7.461}_{-0.980}$

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 $A_{obs} \gg 1.0$

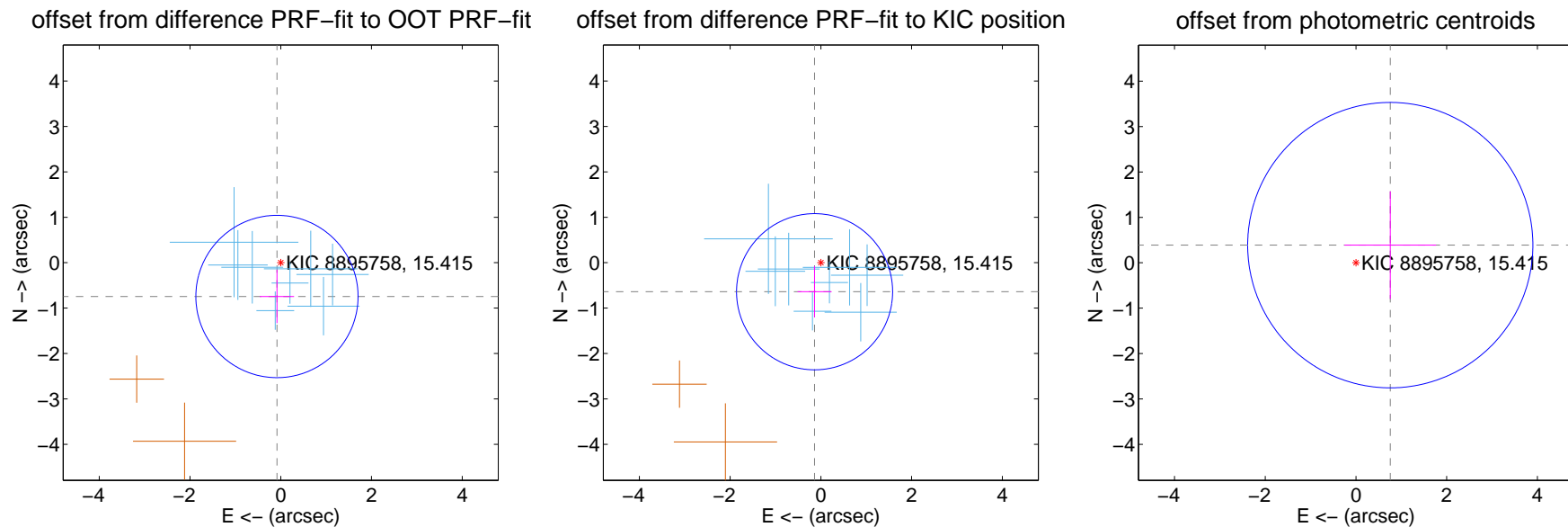
DV Centroid Data

Supplemental centroid analysis for 008895758-01. Kepler magnitude: 15.41. Transit SNR 13.71

There are 8 quarters with good PRF difference image offsets

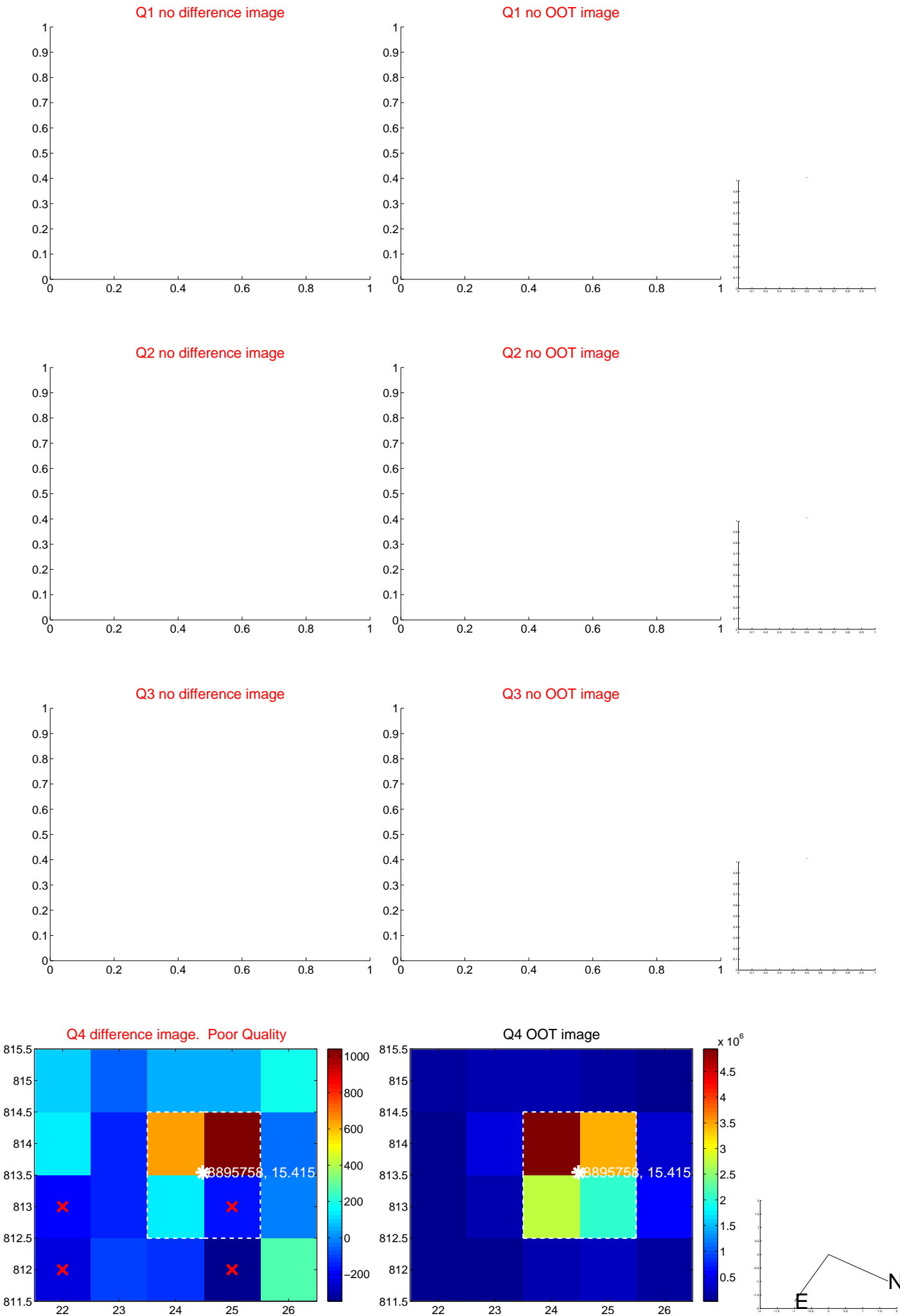
The direct PRF centroid is offset from the target star catalog position by about 0.13 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.749 ± 0.596	1.26	0.084 ± 0.378	-0.744 ± 0.588
PRF-fit source offset from KIC position	0.655 ± 0.573	1.14	0.139 ± 0.375	-0.640 ± 0.565
photometric centroid source offset	0.85 ± 1.05	0.81	-0.76 ± 1.01	0.39 ± 1.18

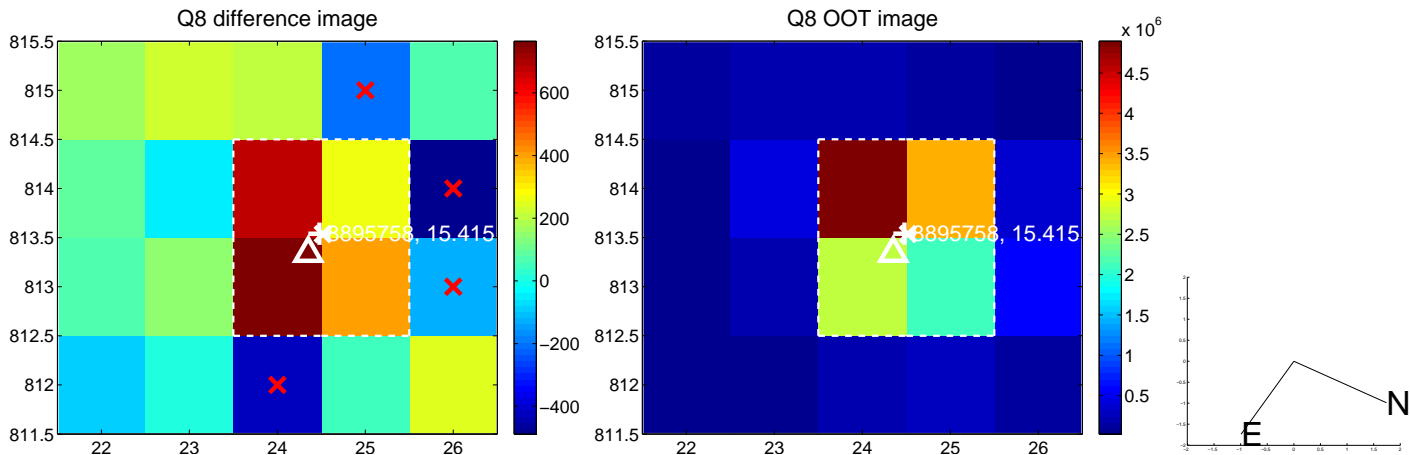
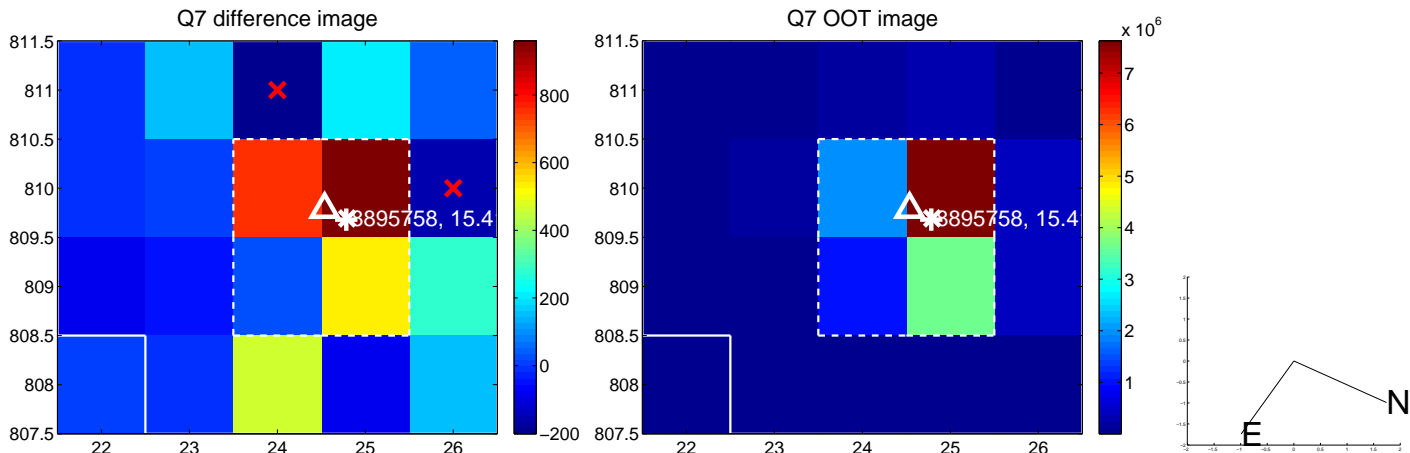
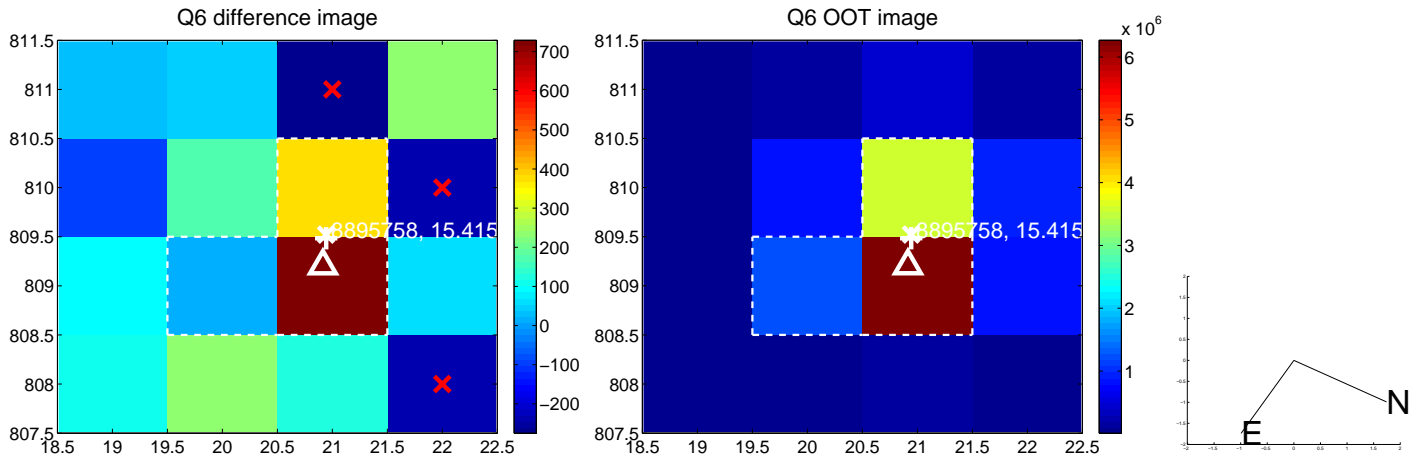
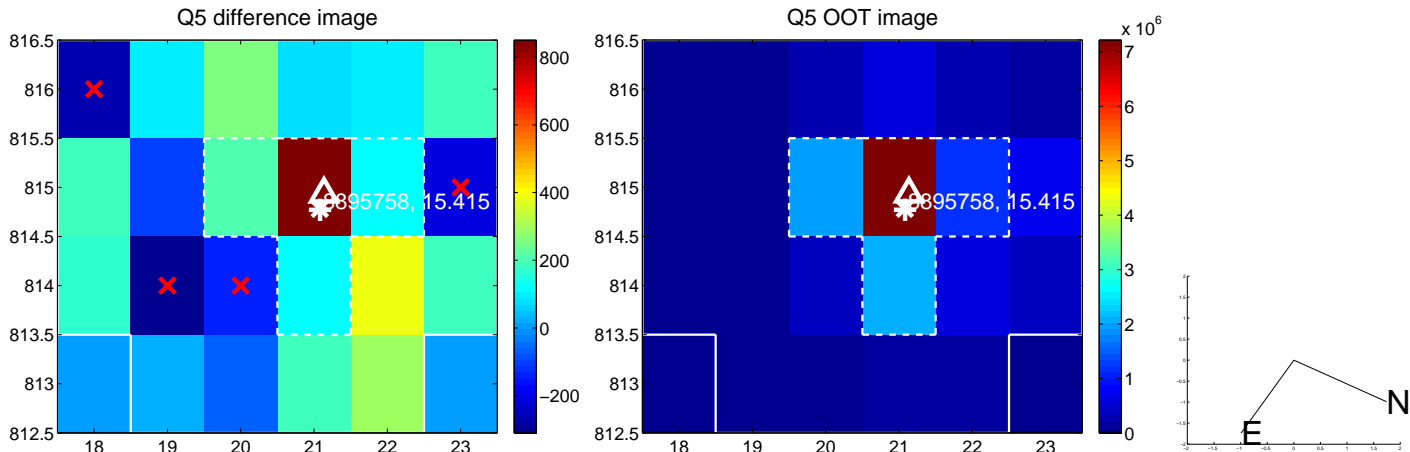


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses:** good quarterly centroid offsets; **Vermillion crosses:** bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

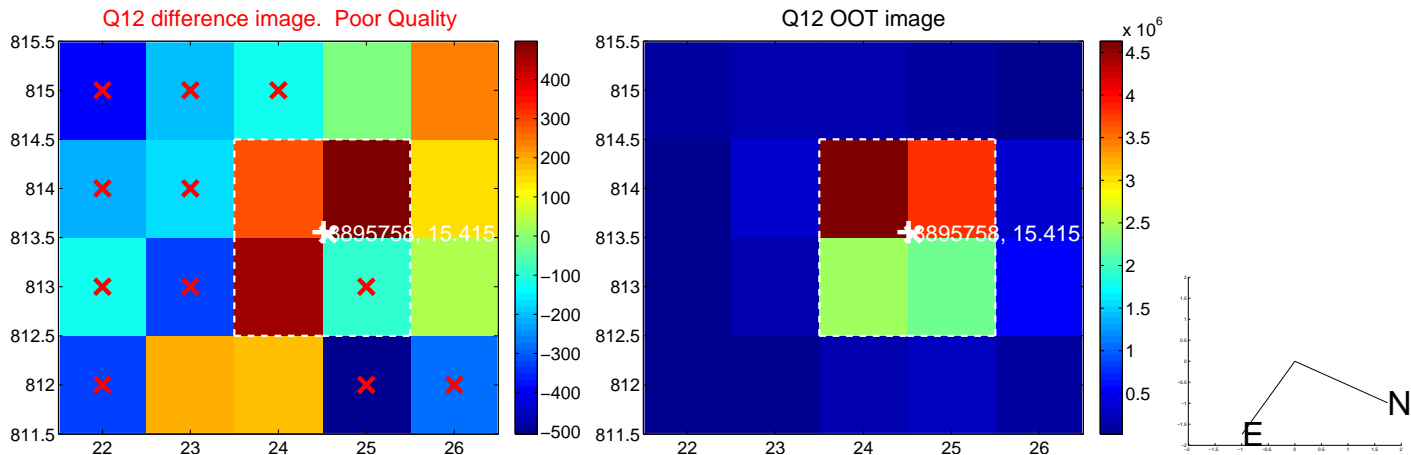
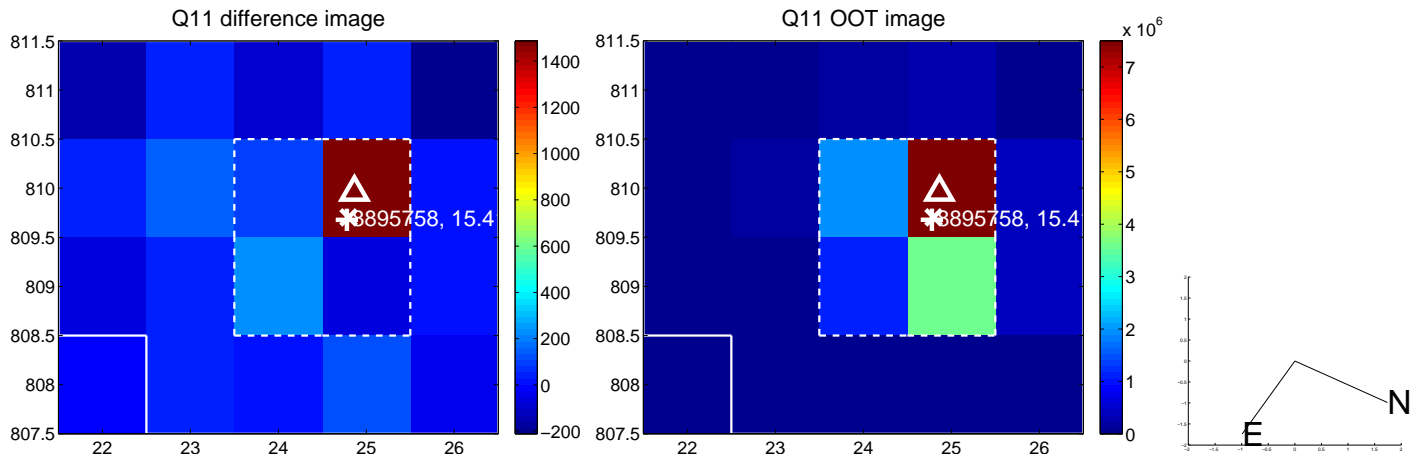
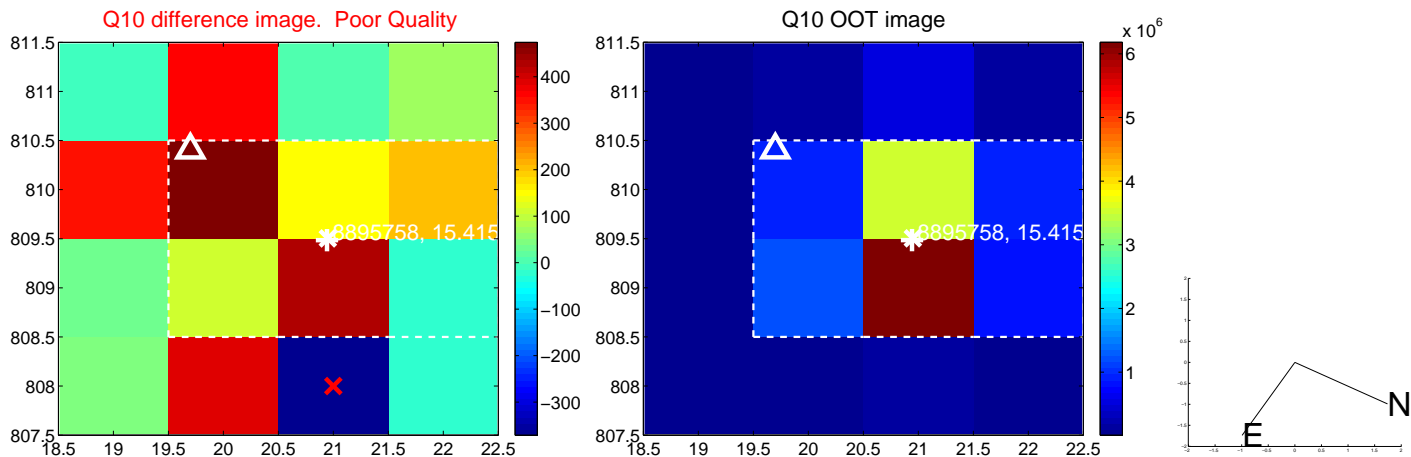
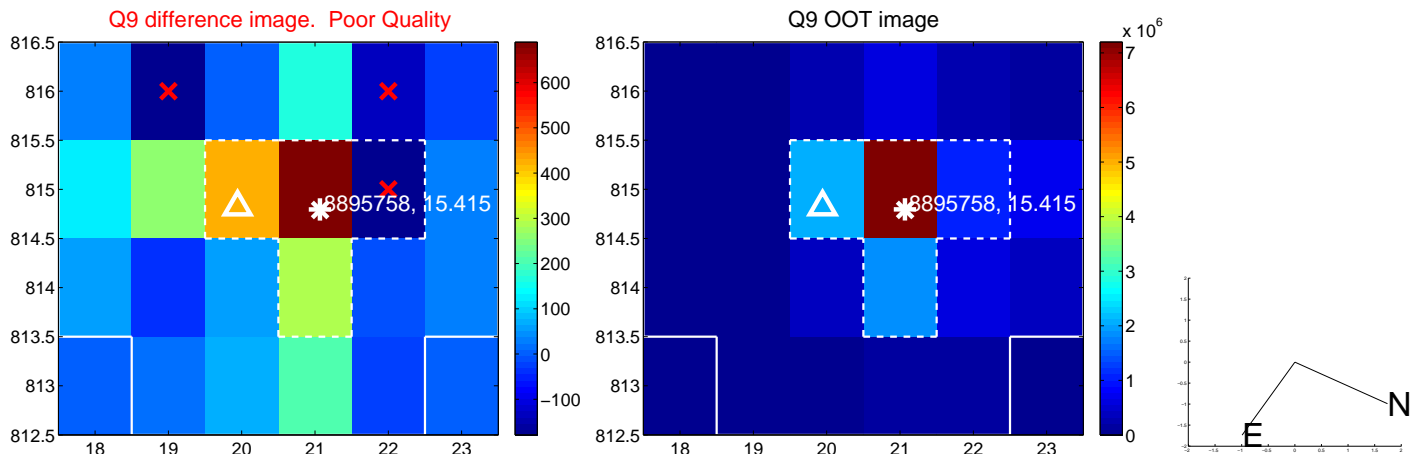
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



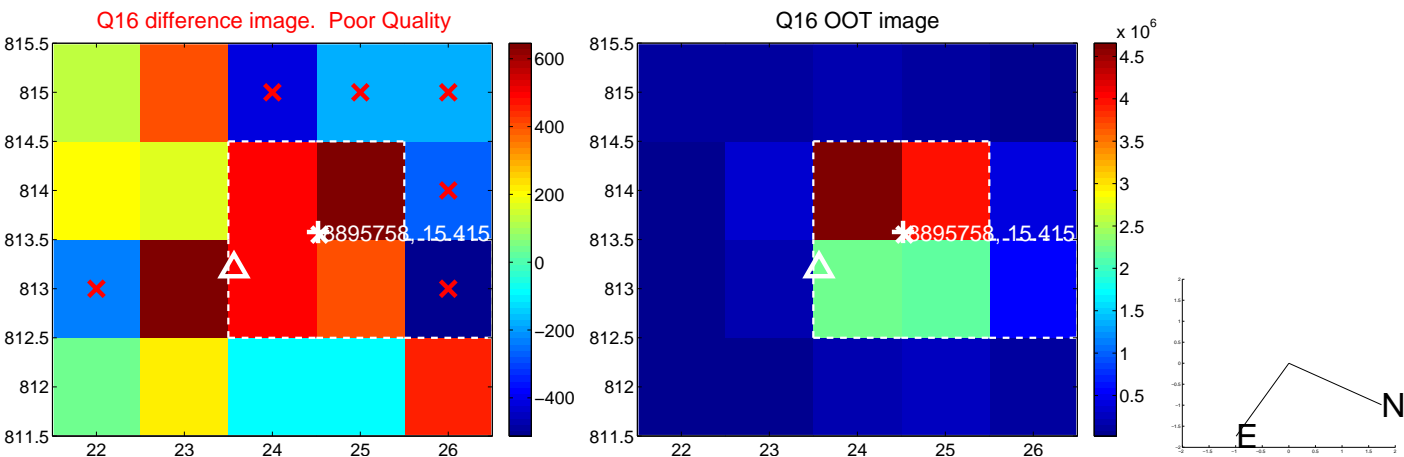
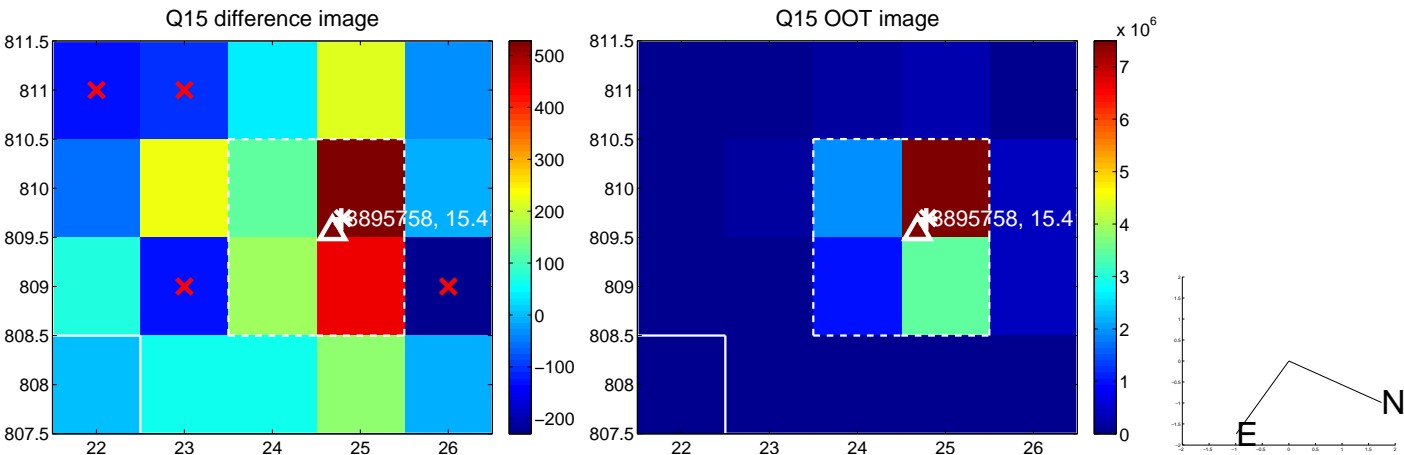
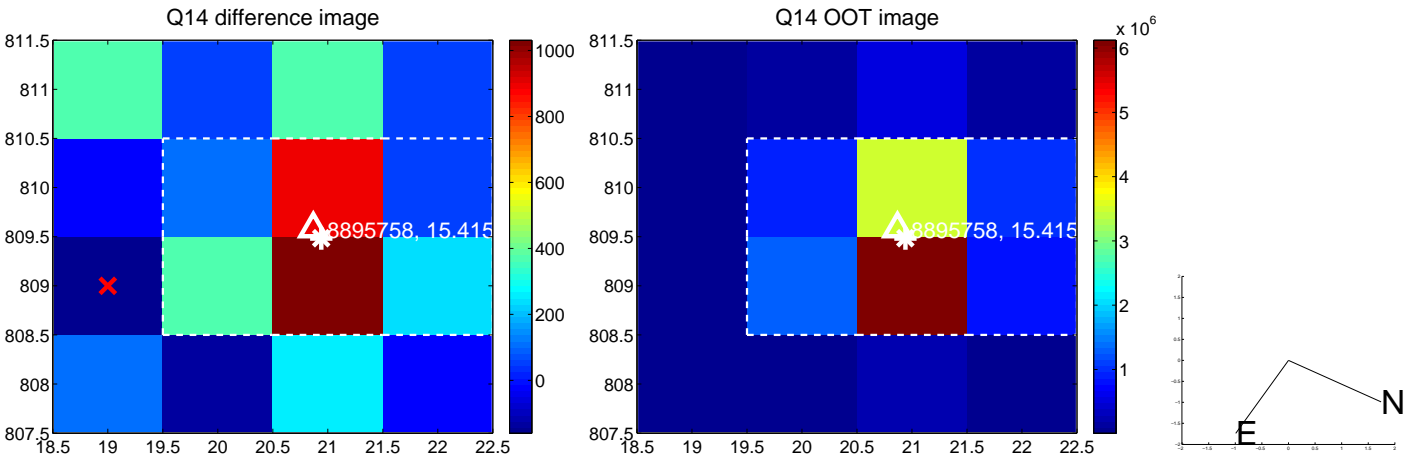
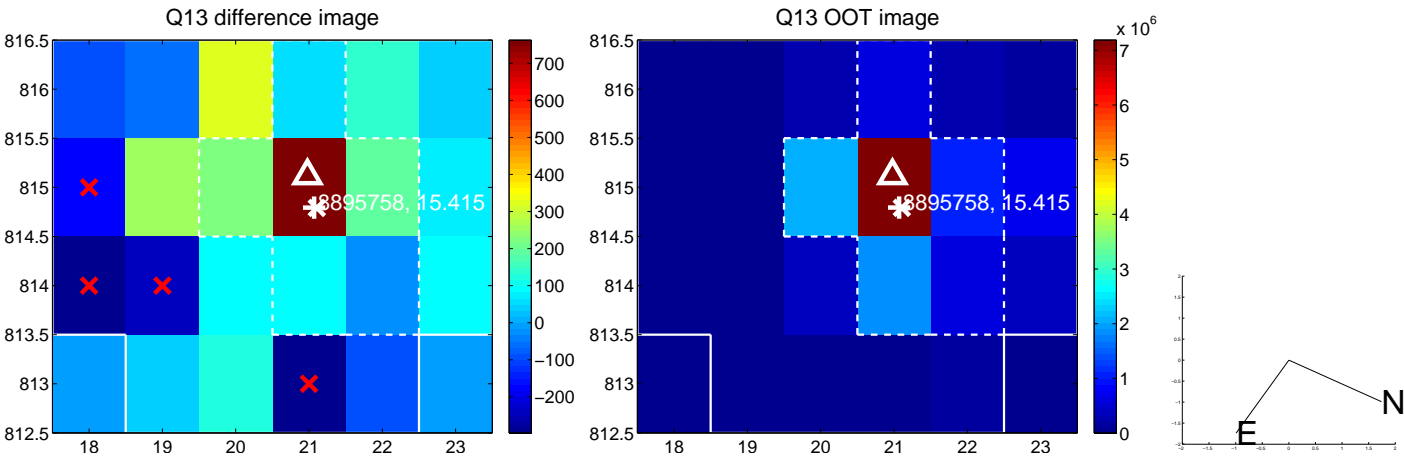
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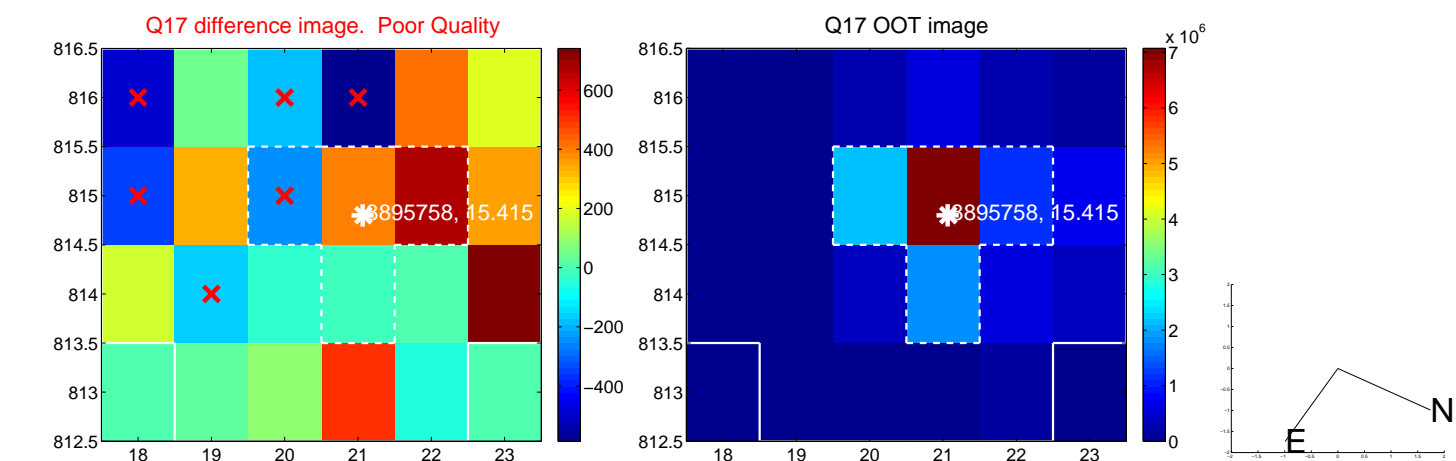
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



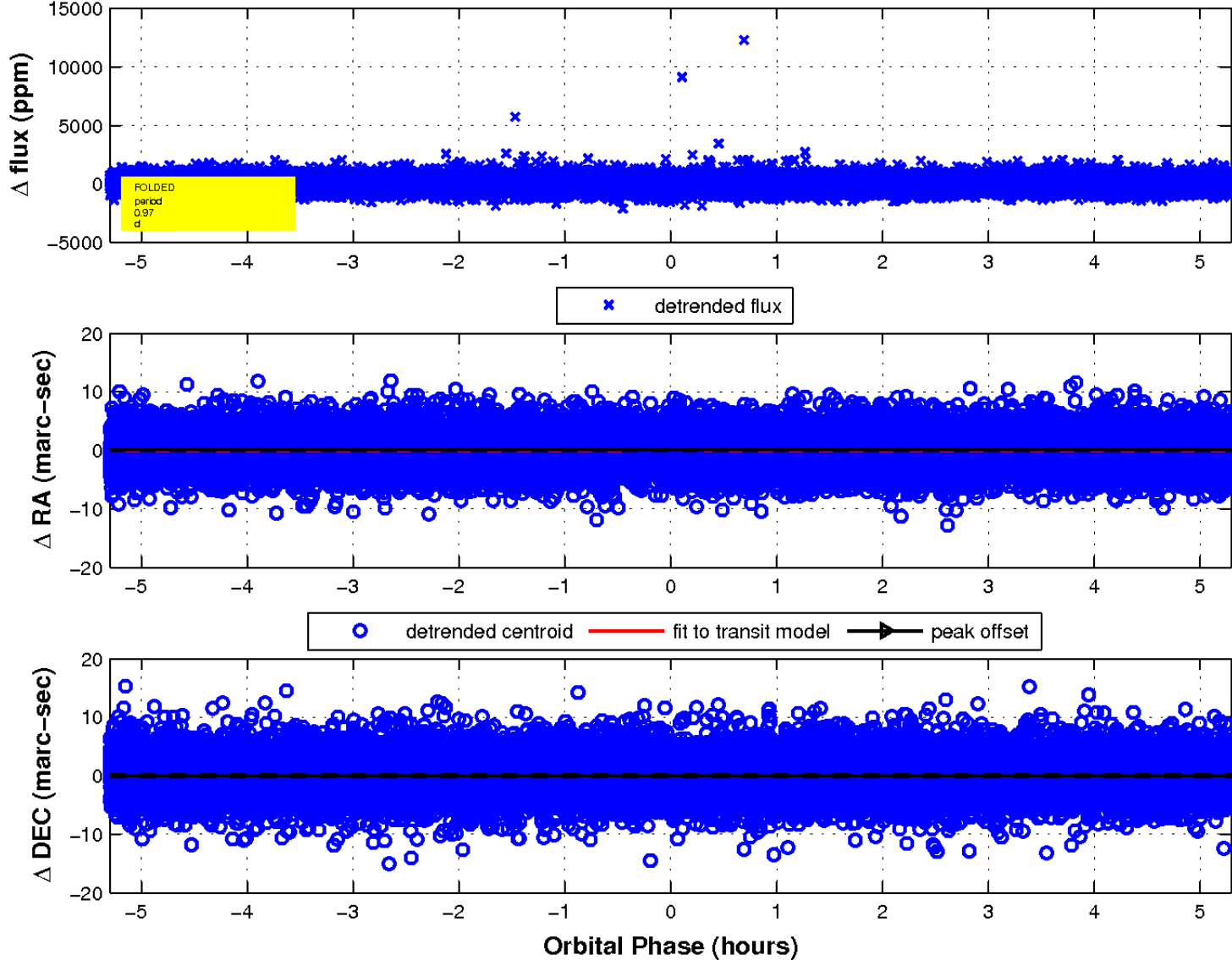
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fluxWeightedCentroids, Planet 1 of 1



UKIRT Image

Declination

