

KIC 007897915

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})
007897915-01	OBS	No	9.523641	135.689461	579.1	26.427	22.7	33.1	1.20	6424	5.54	263.18

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
007897915-01	OBS	FP	0.00	1	0	0	0	LPP_DV—CENT_KIC_POS

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

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

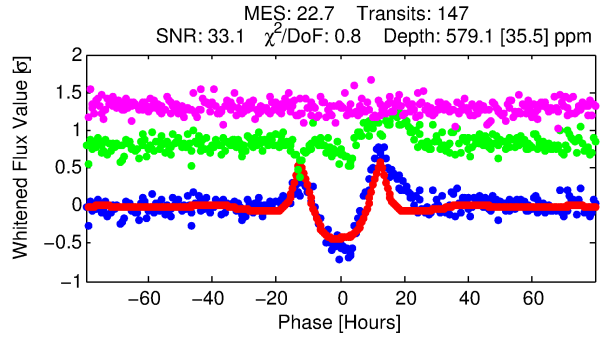
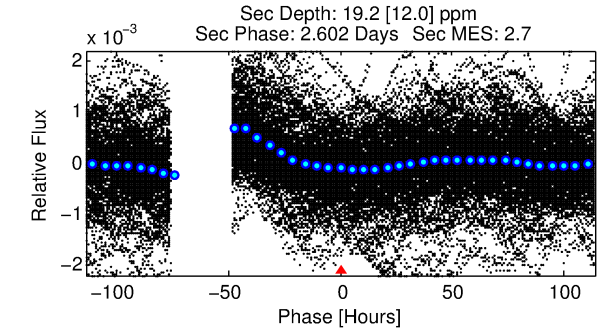
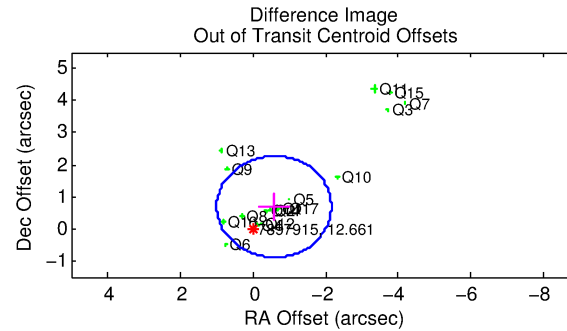
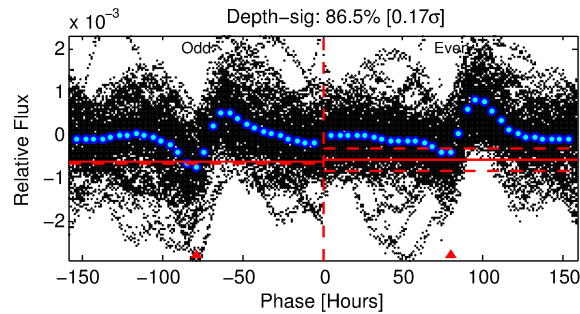
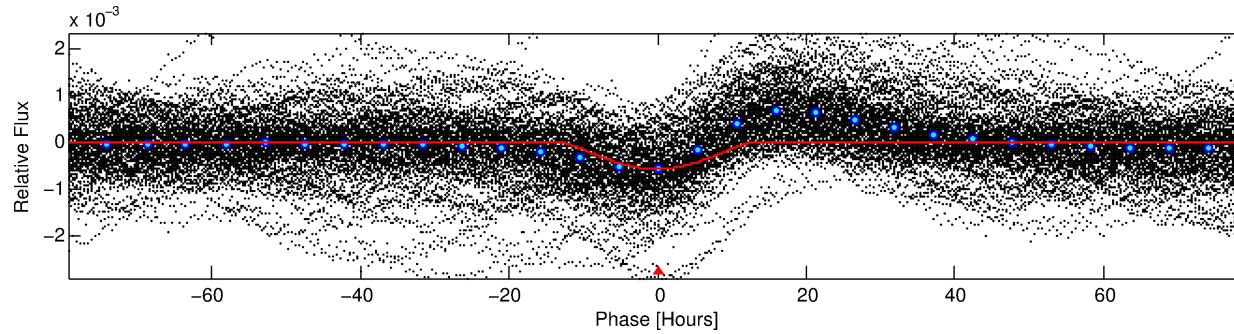
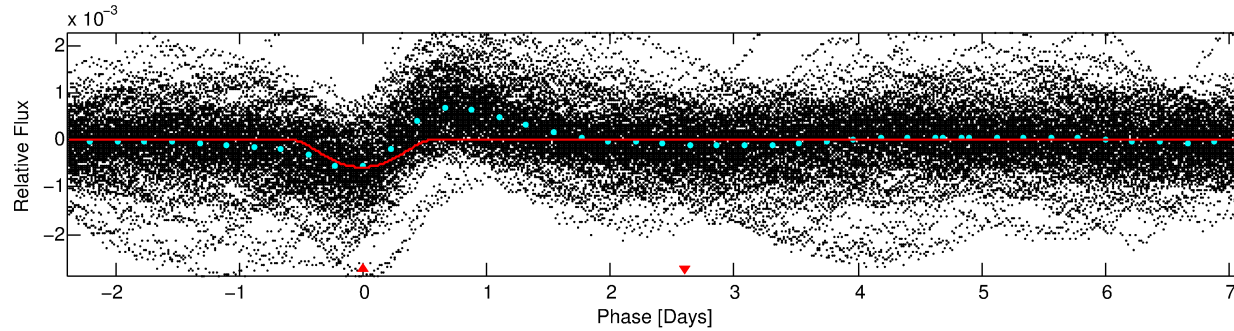
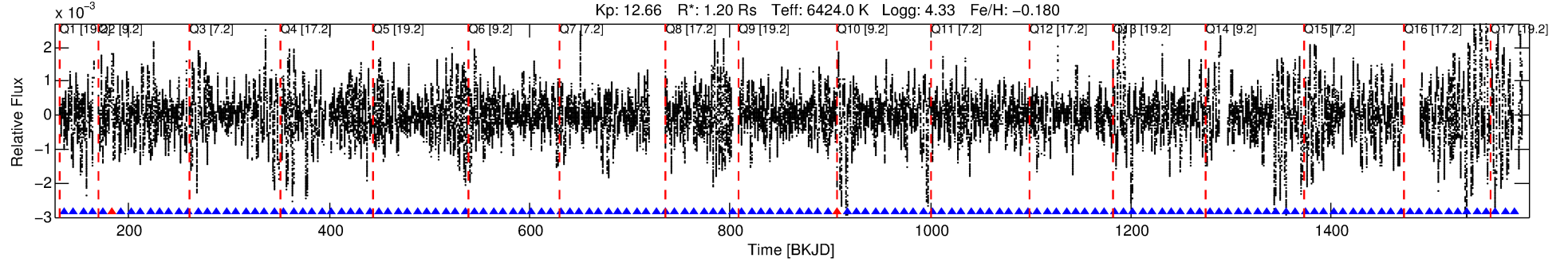
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 007897915-01

No Significant Match Found

DV One-Page Summary

KIC: 7897915 Candidate: 1 of 1 Period: 9.524 d



DV Fit Results:

Period = 9.52364 [0.00009] d
Epoch = 135.6895 [0.0076] BKJD
Rp/R* = 0.0424 [0.0076]
a/R* = 1.30 [0.01]
b = 1.00 [0.01]
Seff = 263.18 [103.61]
Teff = 1027 [101] K
Rp = 5.54 [2.04] Re
a = 0.0913 [0.0241] AU
Ag = 2.86 [2.33] [0.80 σ]
Teffp = 2065 [378] K [2.65 σ]

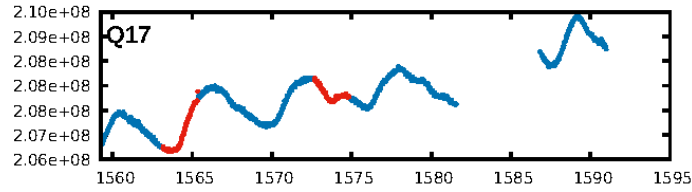
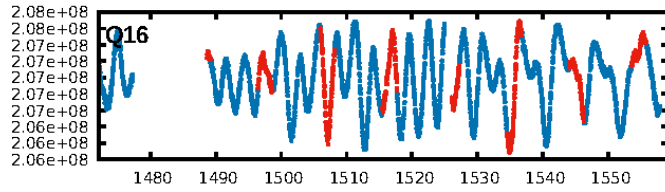
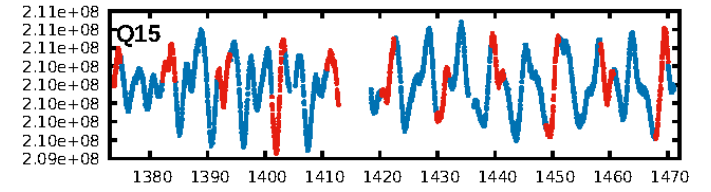
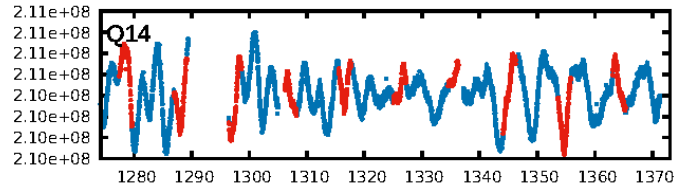
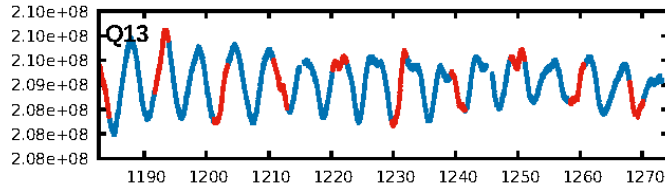
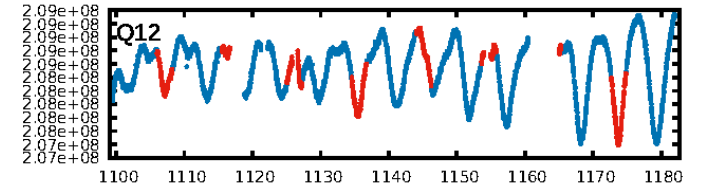
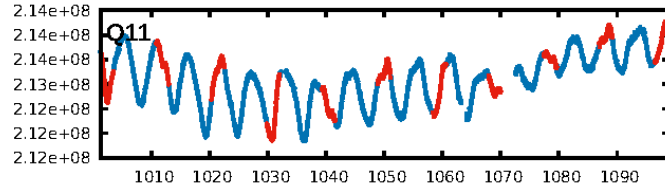
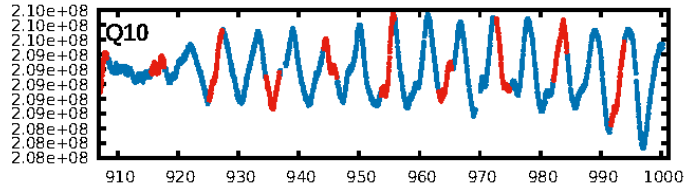
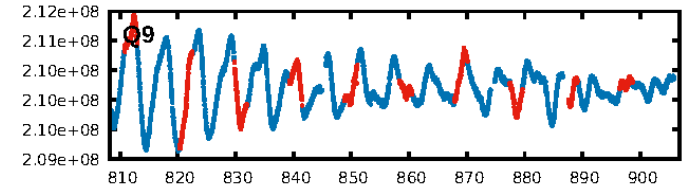
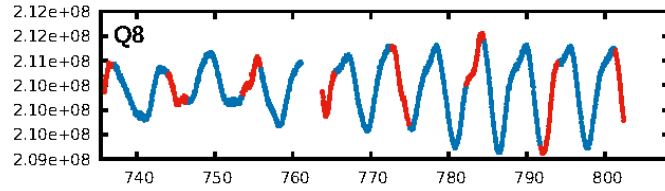
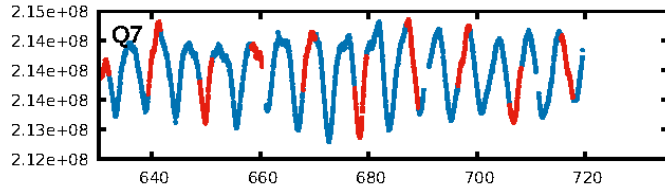
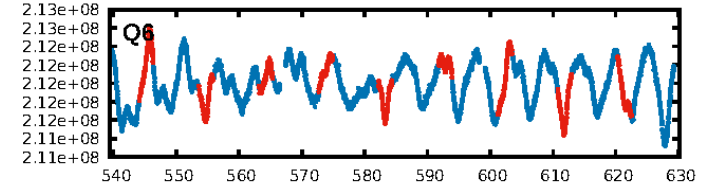
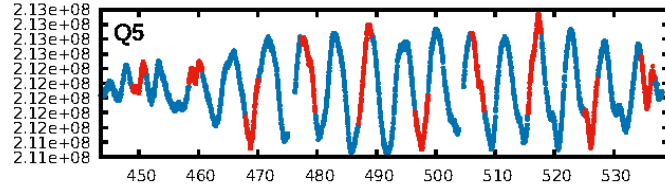
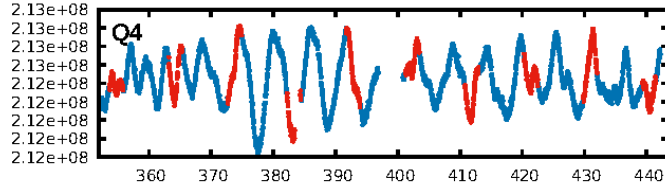
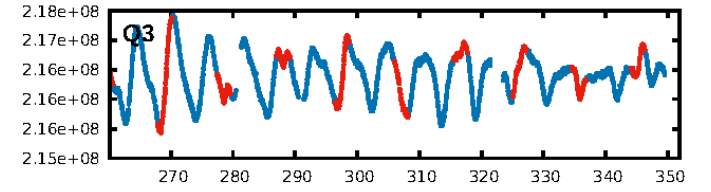
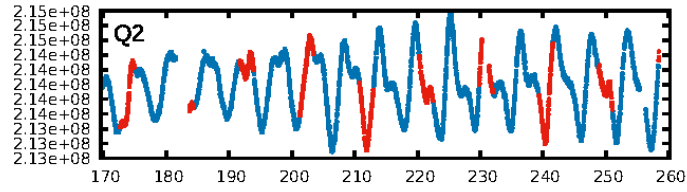
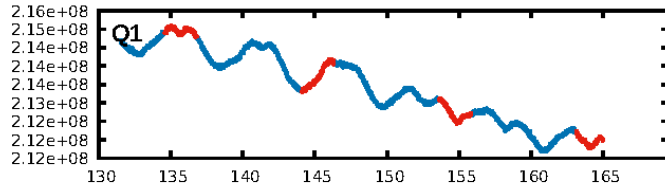
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: 60.0%
ModelChiSquareGof-sig: 100.0%
Bootstrap-pfa: 2.22e-119
RollingBand-fgt: 0.99 [139/141]
GhostDiagnostic-chr: 2.47
Centroid-sig: 0.0%
Centroid-so: 0.689 arcsec [3.91 σ]
OotOffset-rm: 0.903 arcsec [1.72 σ]
KicOffset-rm: 0.190 arcsec [1.14 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]

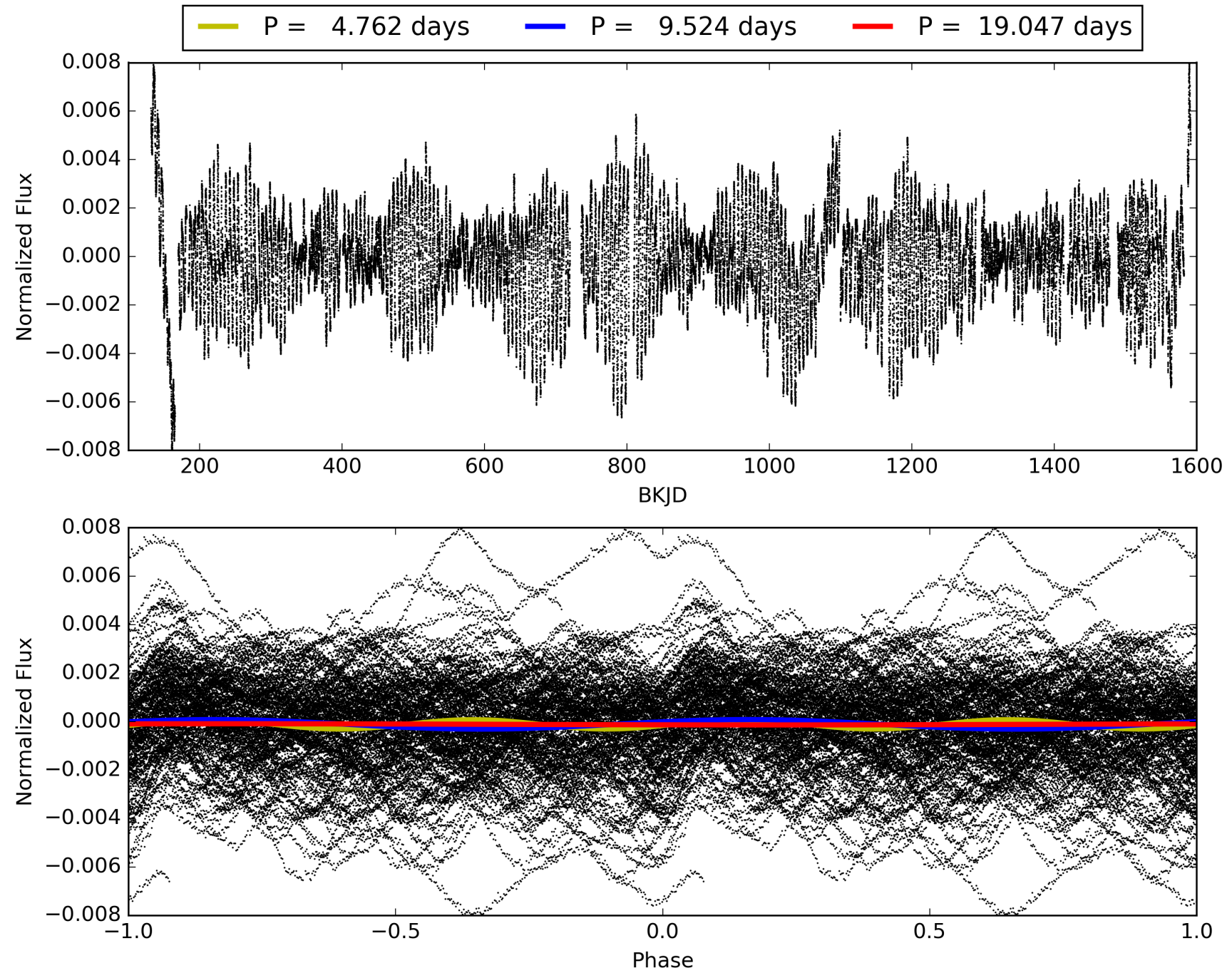
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 29-Jan-2016 06:24:17 Z

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

TCE 007897915-01, PDC Light Curves

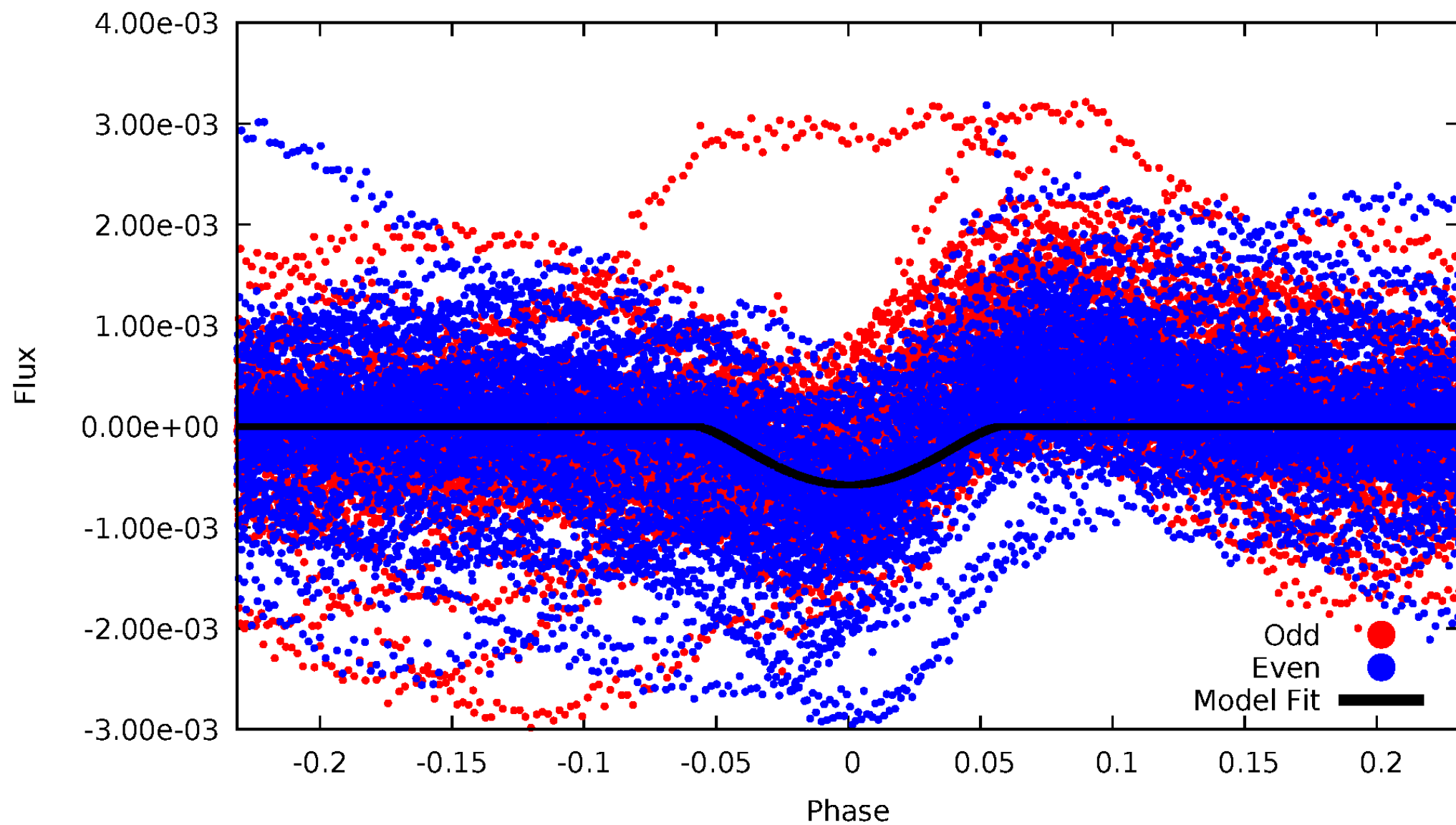


TCE 007897915-01



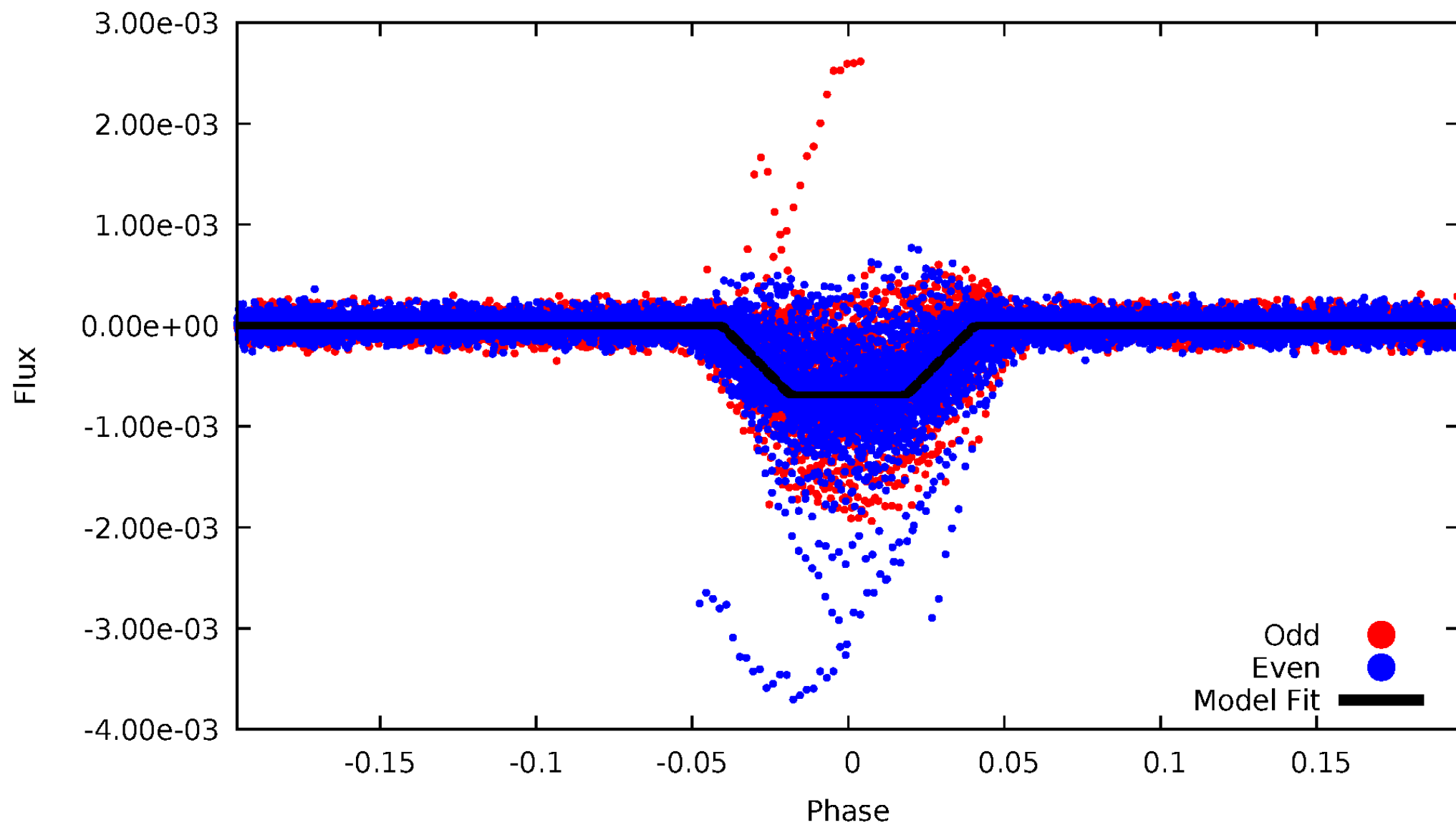
DV Odd/Even

TCE 007897915-01

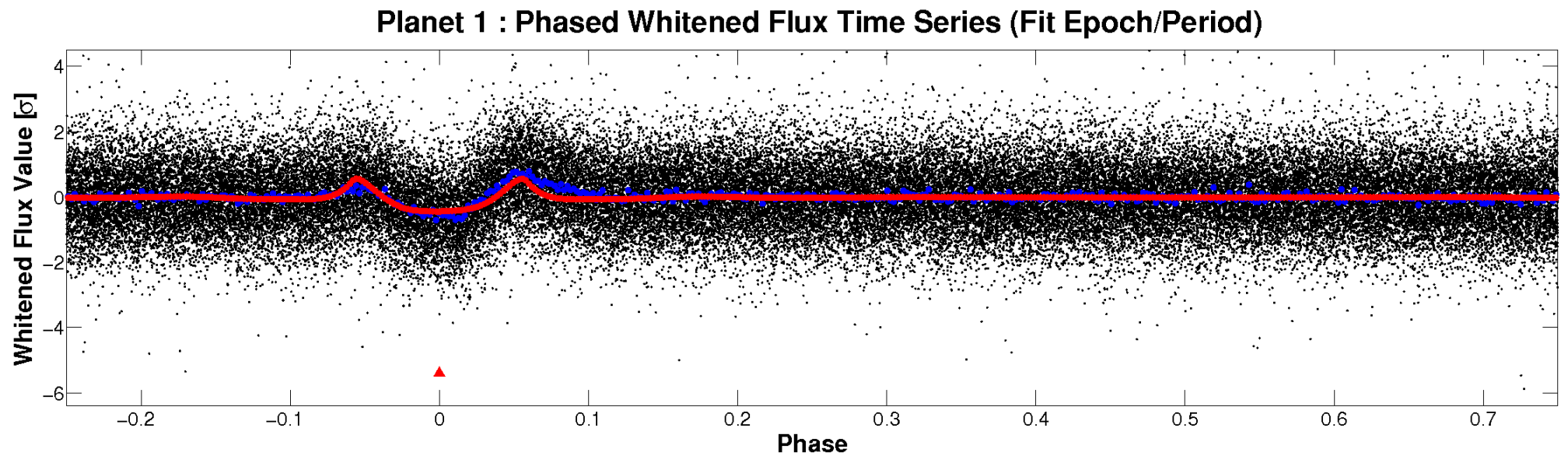
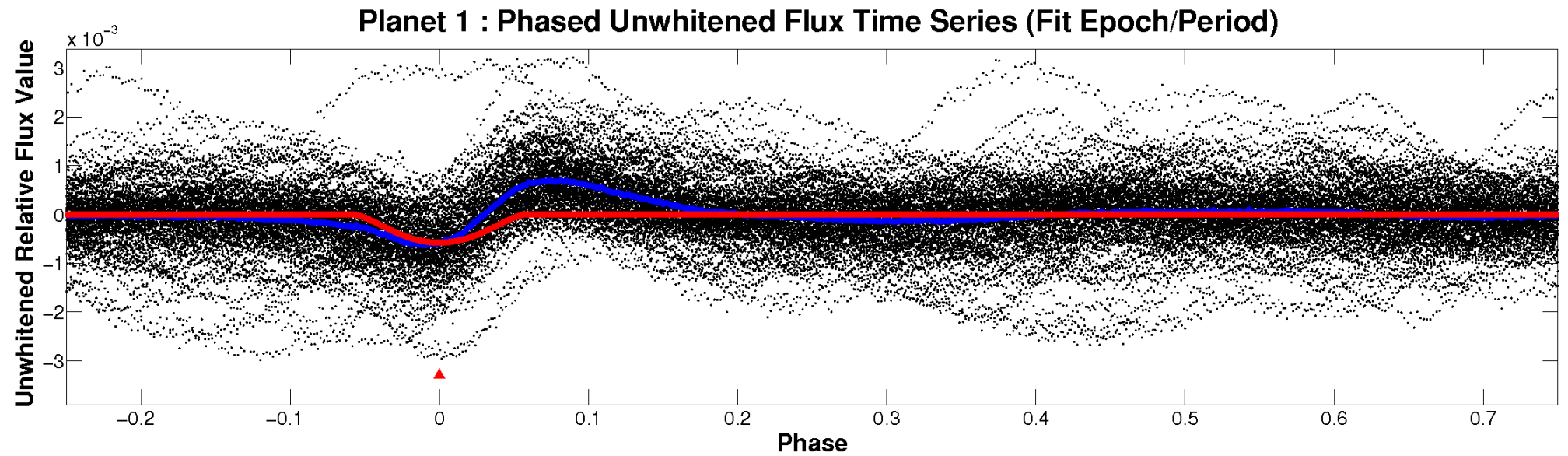


ALT Odd/Even

TCE 007897915-01

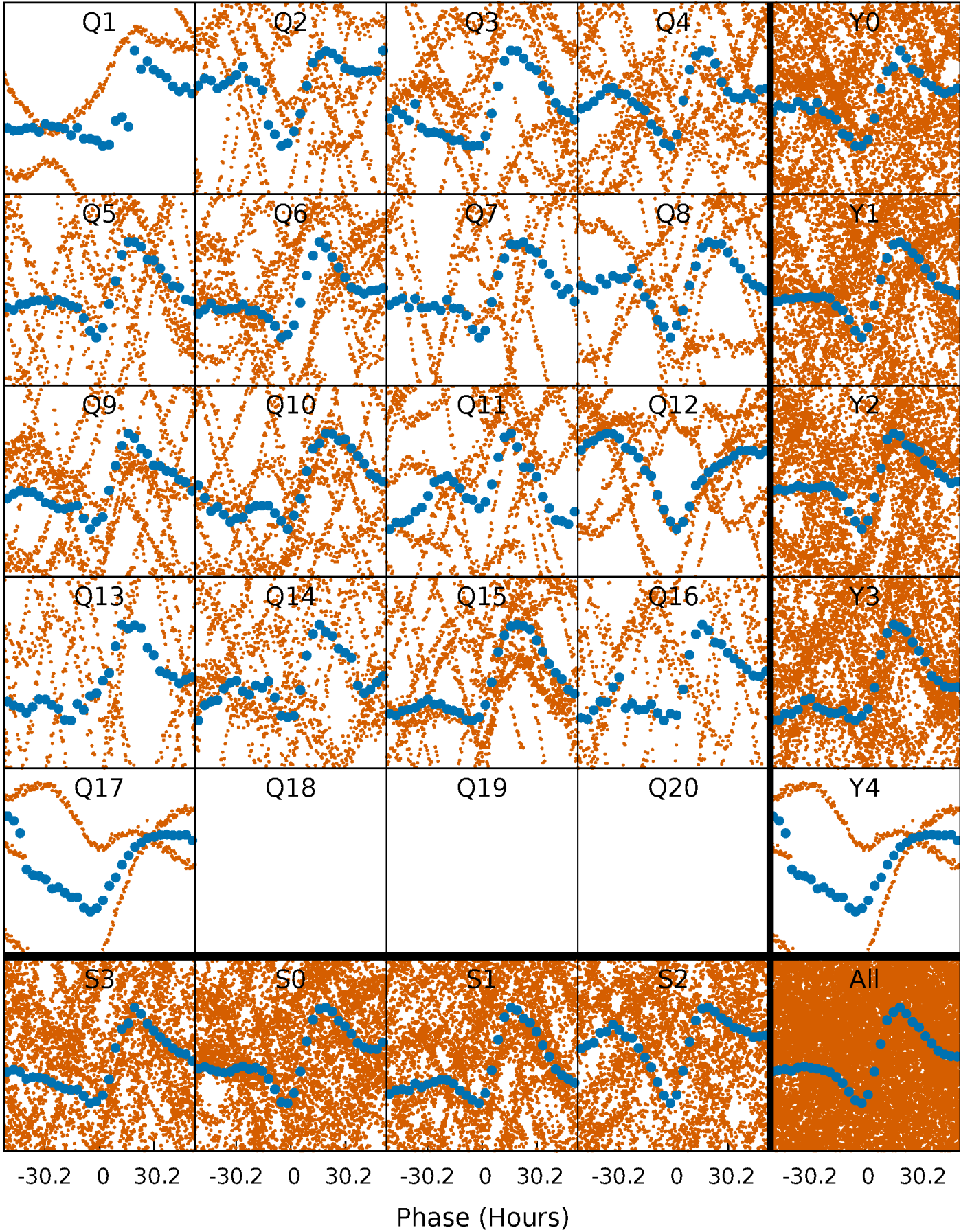


Non-Whitened Vs. Whitened Light Curve



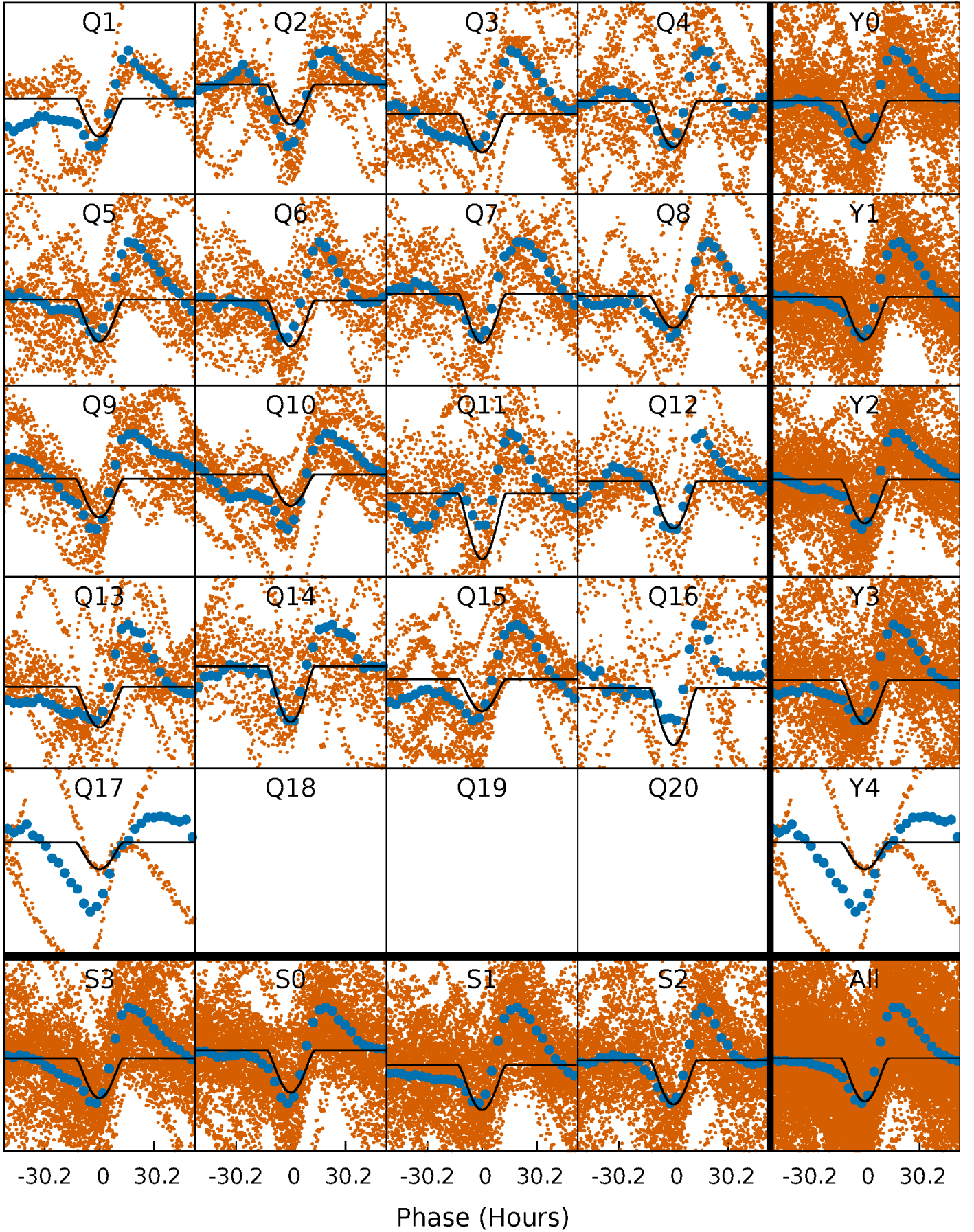
PDC Quarter-Phased Transit Curves

TCE 007897915-01 P= 9.523641 Days $T_0=135.689461$ (BKJD)



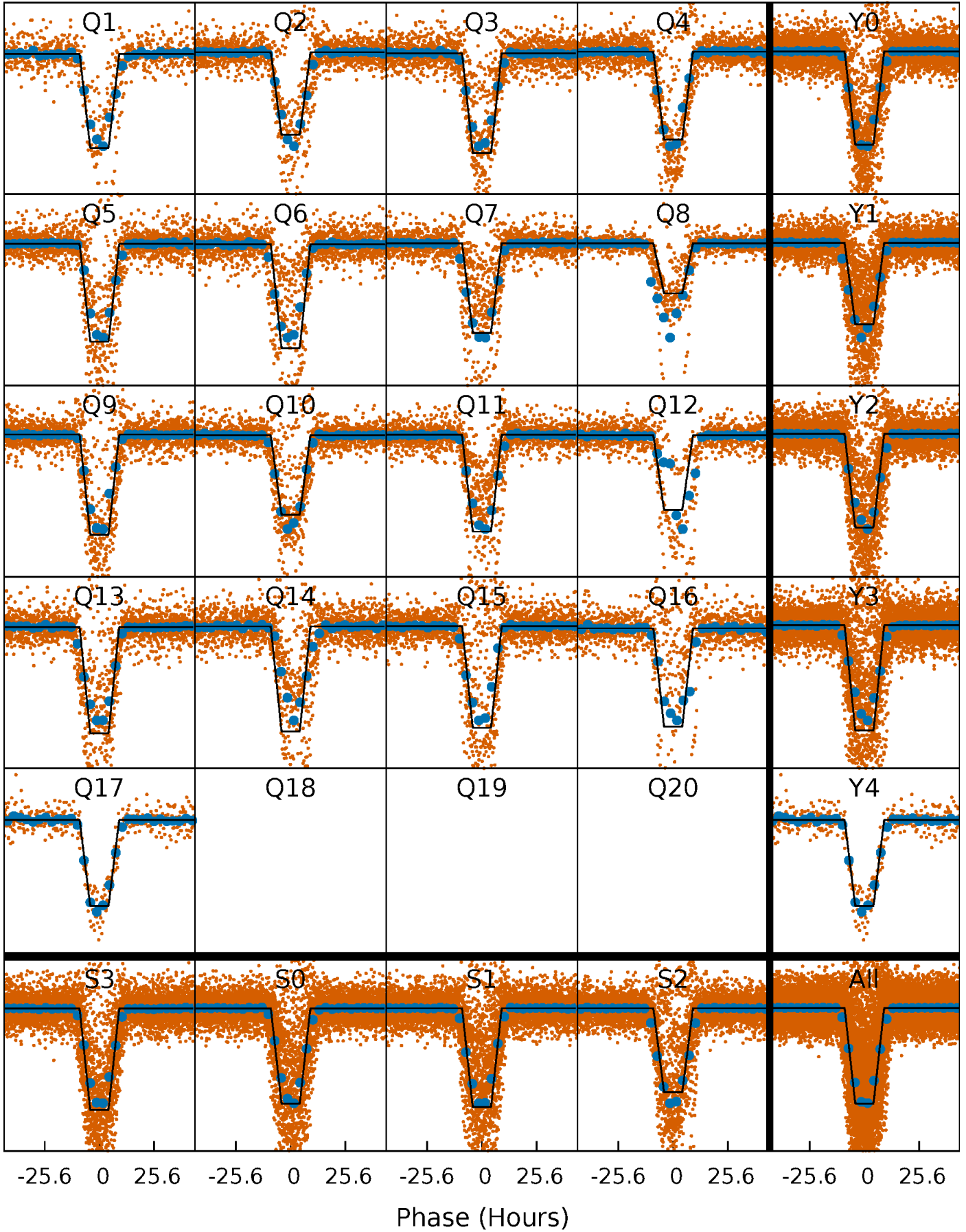
DV Quarter-Phased Transit Curves

TCE 007897915-01 P= 9.523641 Days $T_0=135.689461$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

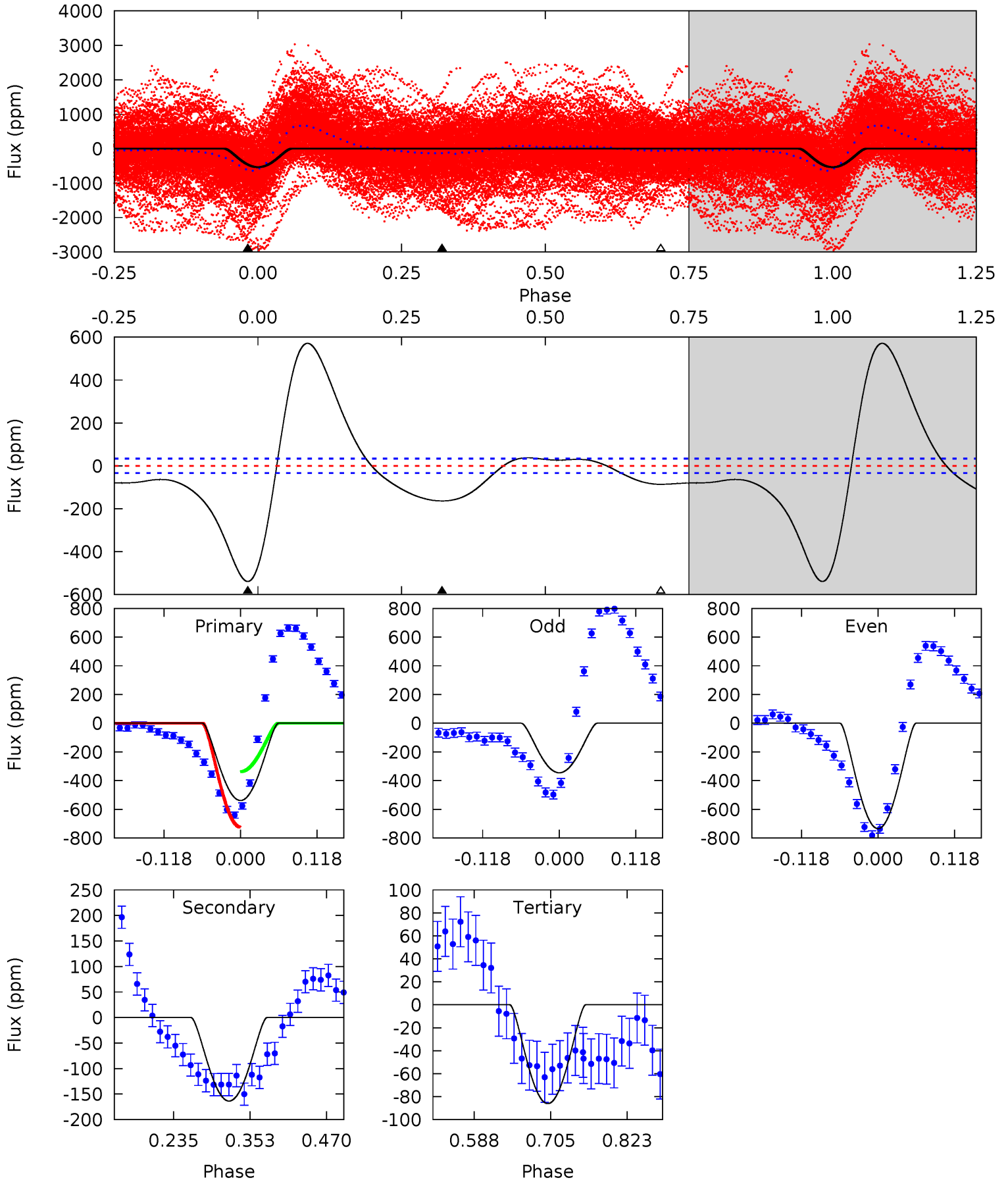
TCE 007897915-01 P= 9.523154 Days $T_0=135.732222$ (BKJD)



DV Model-Shift Uniqueness Test

007897915-01, P = 9.523641 Days, E = 126.165820 Days

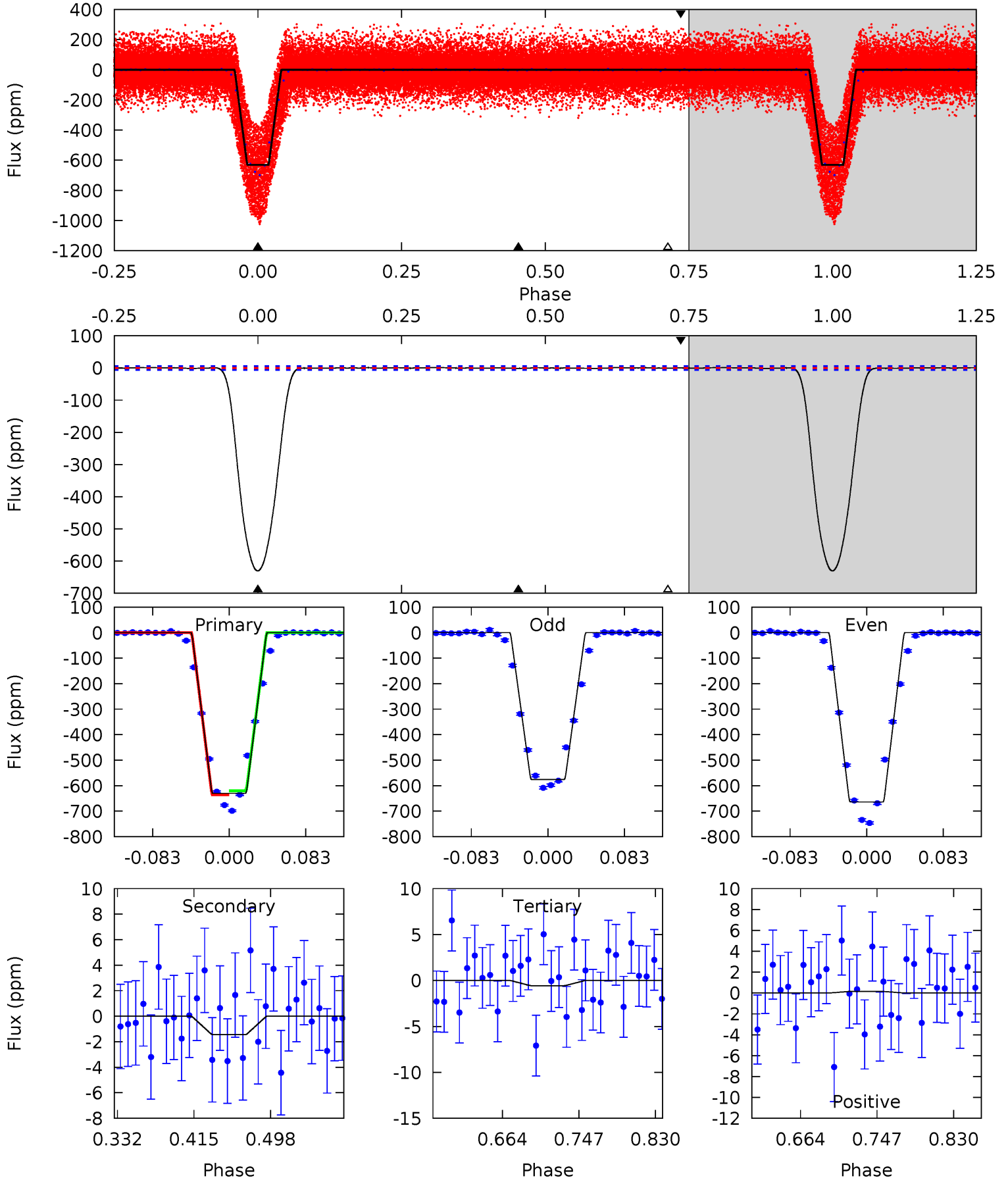
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
72.6	22.0	11.6	0	4.53	1.57	18.6	61.0	72.6	10.5	22.0	26.3	0.91	0.51	26.8



Alt Model-Shift Uniqueness Test

007897915-01, P = 9.523154 Days, E = 126.209068 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
493.9	1.13	0.44	0.12	4.60	1.73	0.49	493.4	493.8	0.69	1.01	34.2	1.09	0.00	0



Stellar Parameters For KIC 007897915

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	6424^{+146}_{-178}	$4.329^{+0.087}_{-0.203}$	$-0.180^{+0.250}_{-0.300}$	$1.199^{+0.384}_{-0.165}$	$1.116^{+0.177}_{-0.129}$	$0.912^{+0.368}_{-0.479}$
	+2%/-3%	+2%/-5%	+139%/-167%	+32%/-14%	+16%/-12%	+40%/-53%
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 007897915-01 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	-164 ± 7	$5.79^{+1.34}_{-1.16}$	1449^{+105}_{-71}	3844^{+274}_{-216}	22^{+12}_{-7}
Alt.	-1 ± 1	$3.48^{+1.21}_{-1.05}$	1460^{+101}_{-75}	2092^{+391}_{-4226}	$0.512^{+0.816}_{-0.464}$

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 $A_{obs} \gg 1.0$

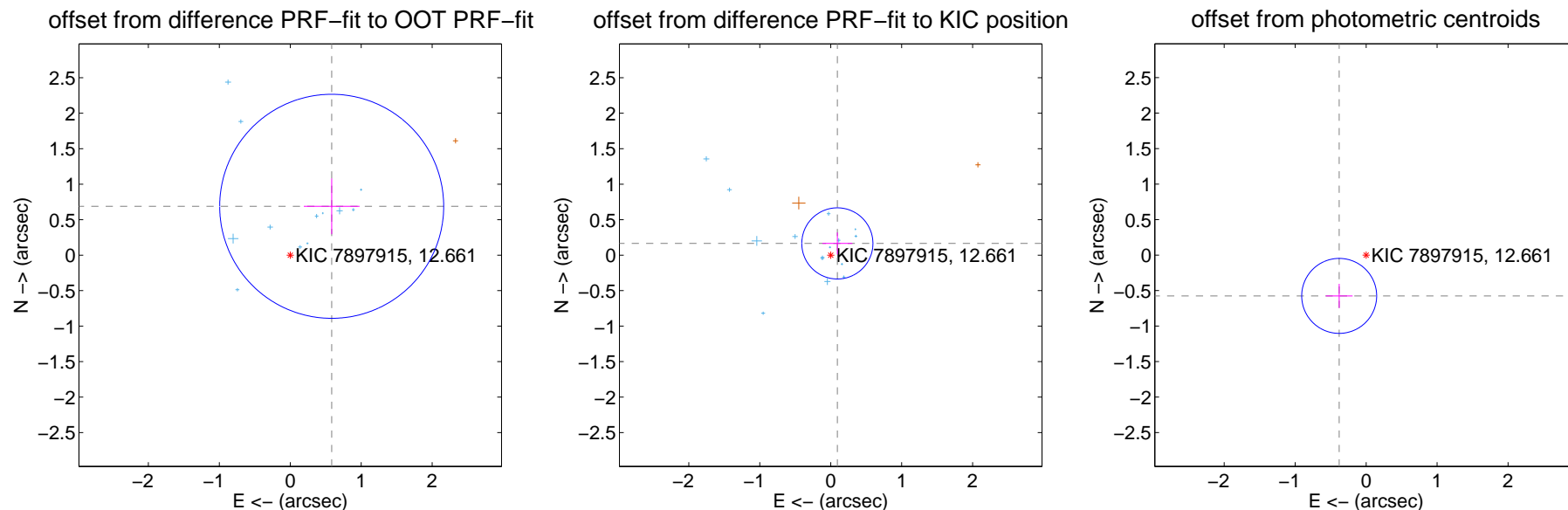
DV Centroid Data

Supplemental centroid analysis for 007897915-01. Kepler magnitude: 12.66. Transit SNR 33.06

There are 15 quarters with good PRF difference image offsets

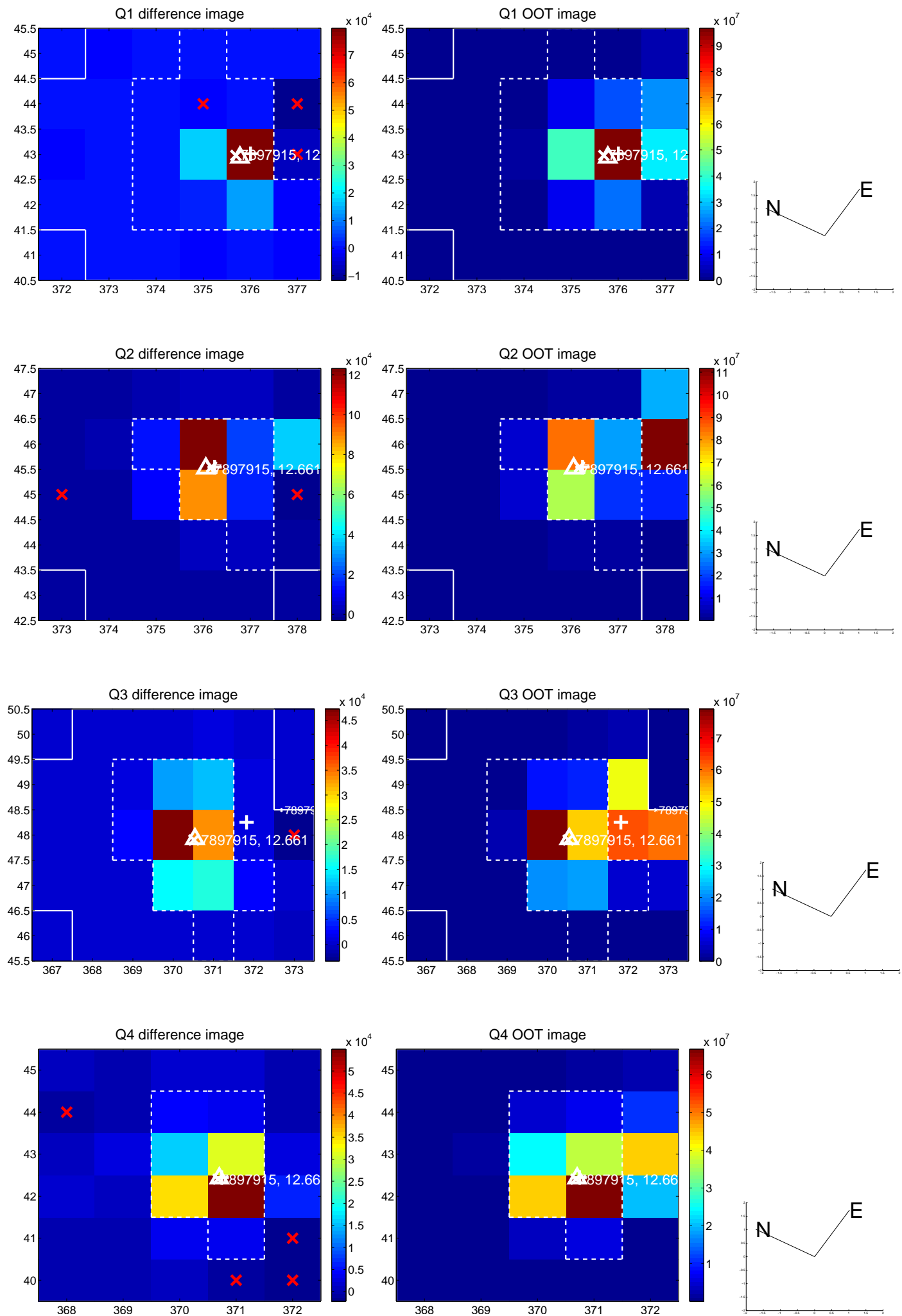
The direct PRF centroid is offset from the target star catalog position by about 1.18 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.903 ± 0.526	1.72	-0.584 ± 0.394	0.688 ± 0.393
PRF-fit source offset from KIC position	0.190 ± 0.167	1.14	-0.093 ± 0.212	0.166 ± 0.155
photometric centroid source offset	0.69 ± 0.18	3.91	0.38 ± 0.19	-0.57 ± 0.17

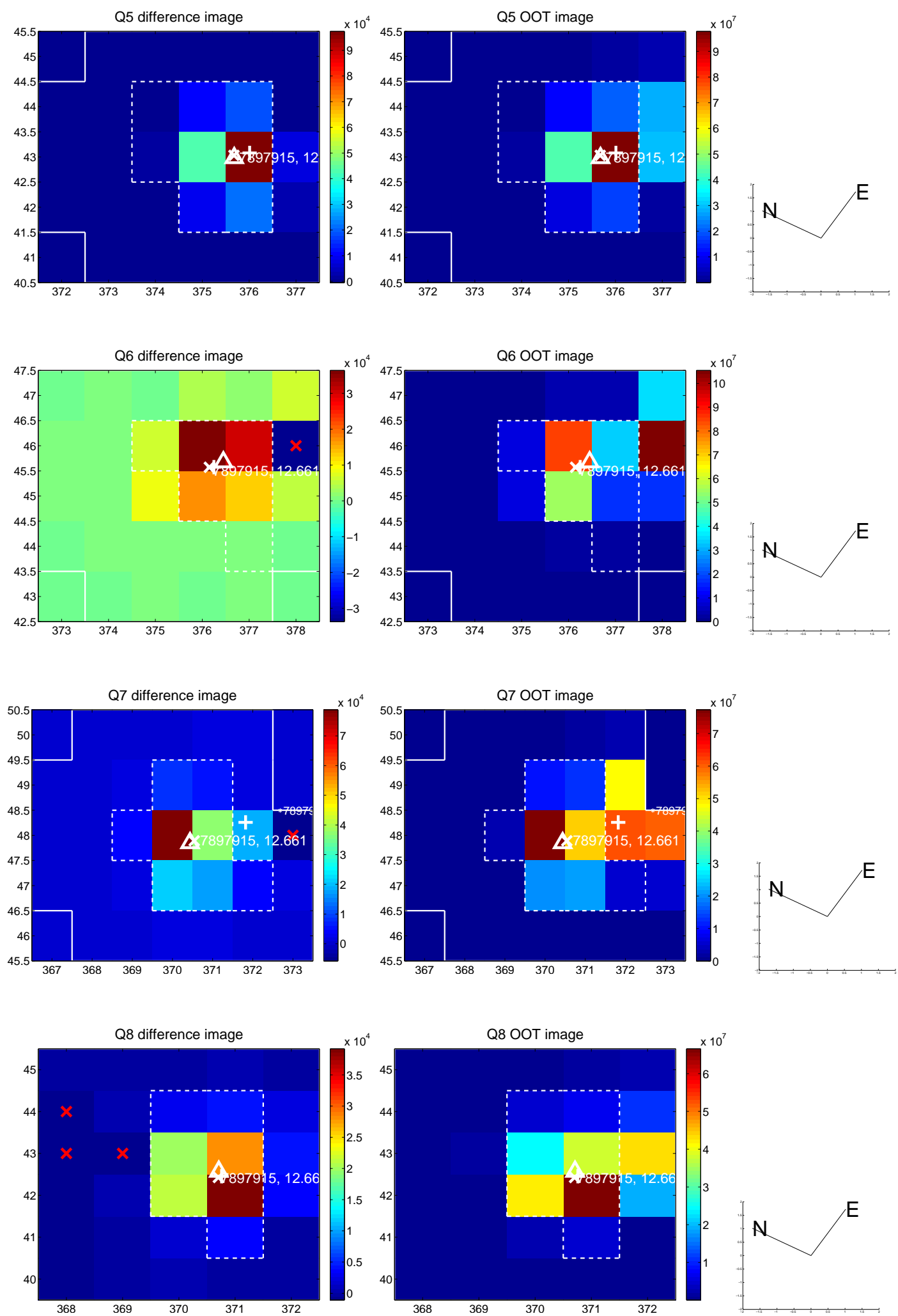


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses:** good quarterly centroid offsets; **Vermillion crosses:** bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

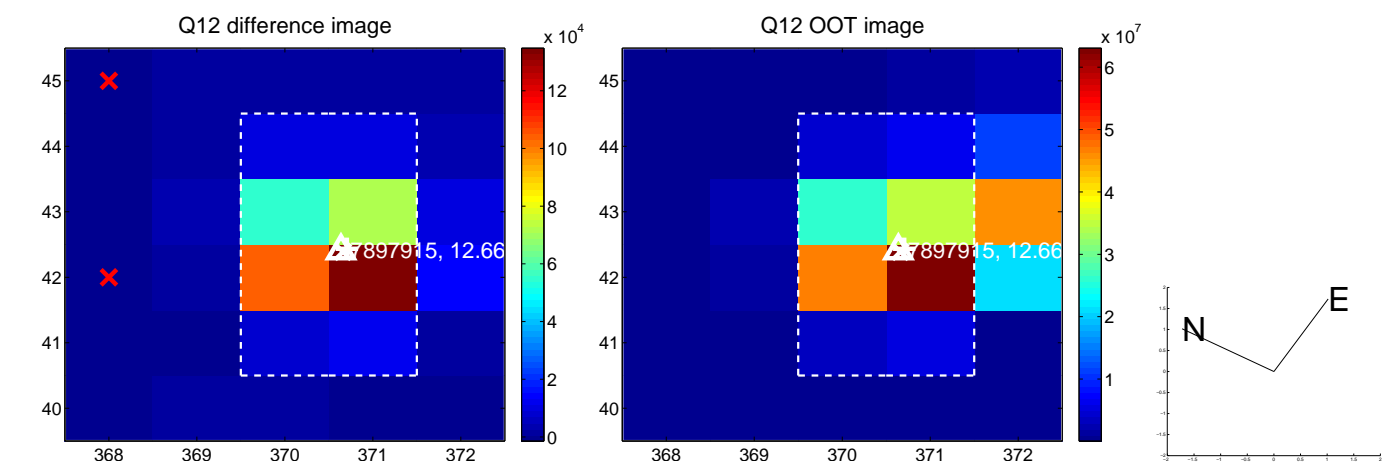
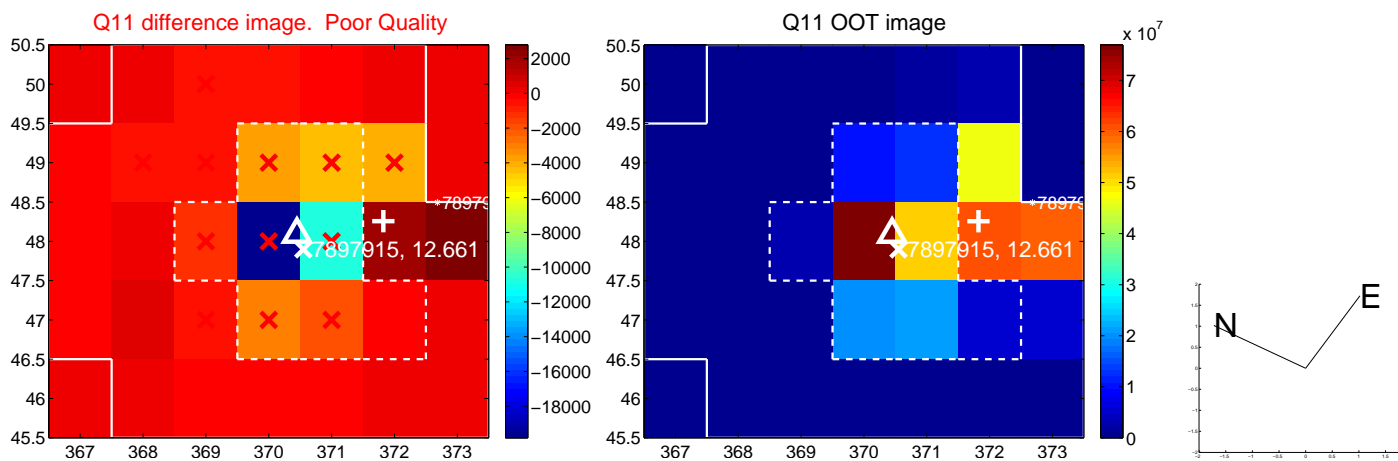
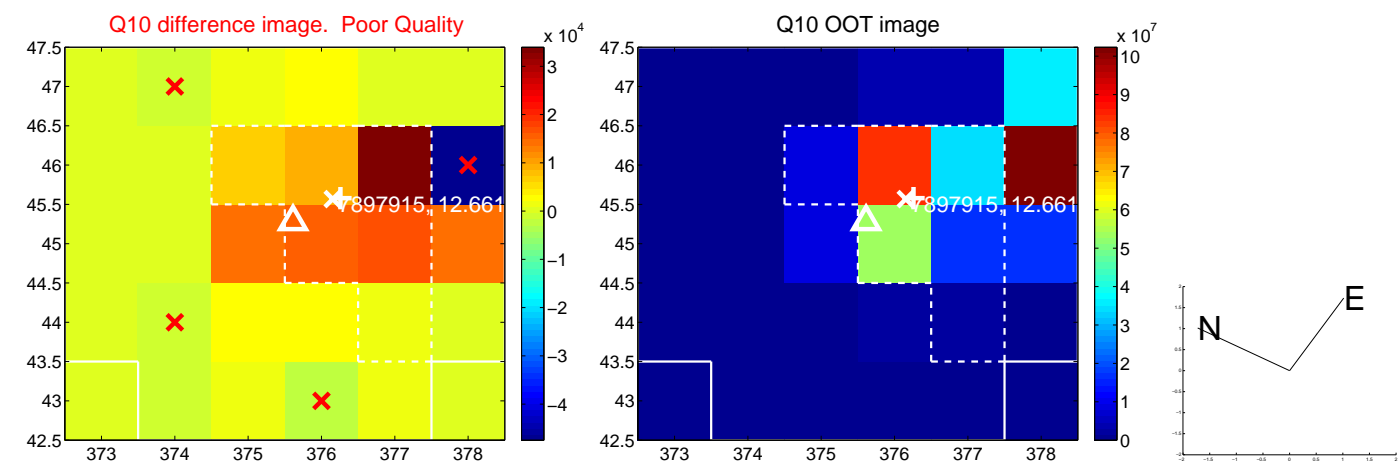
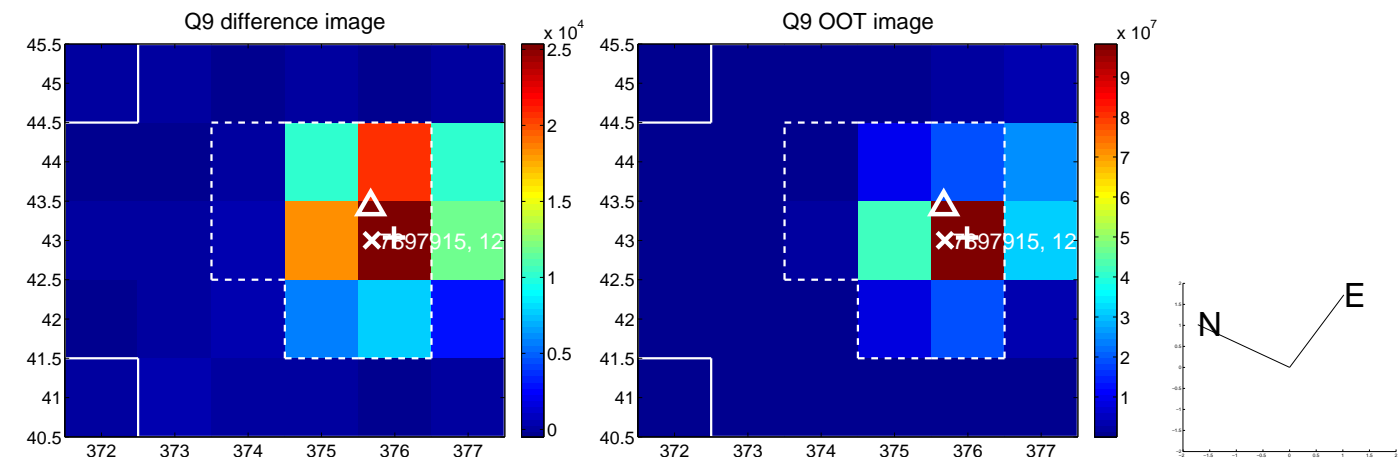
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



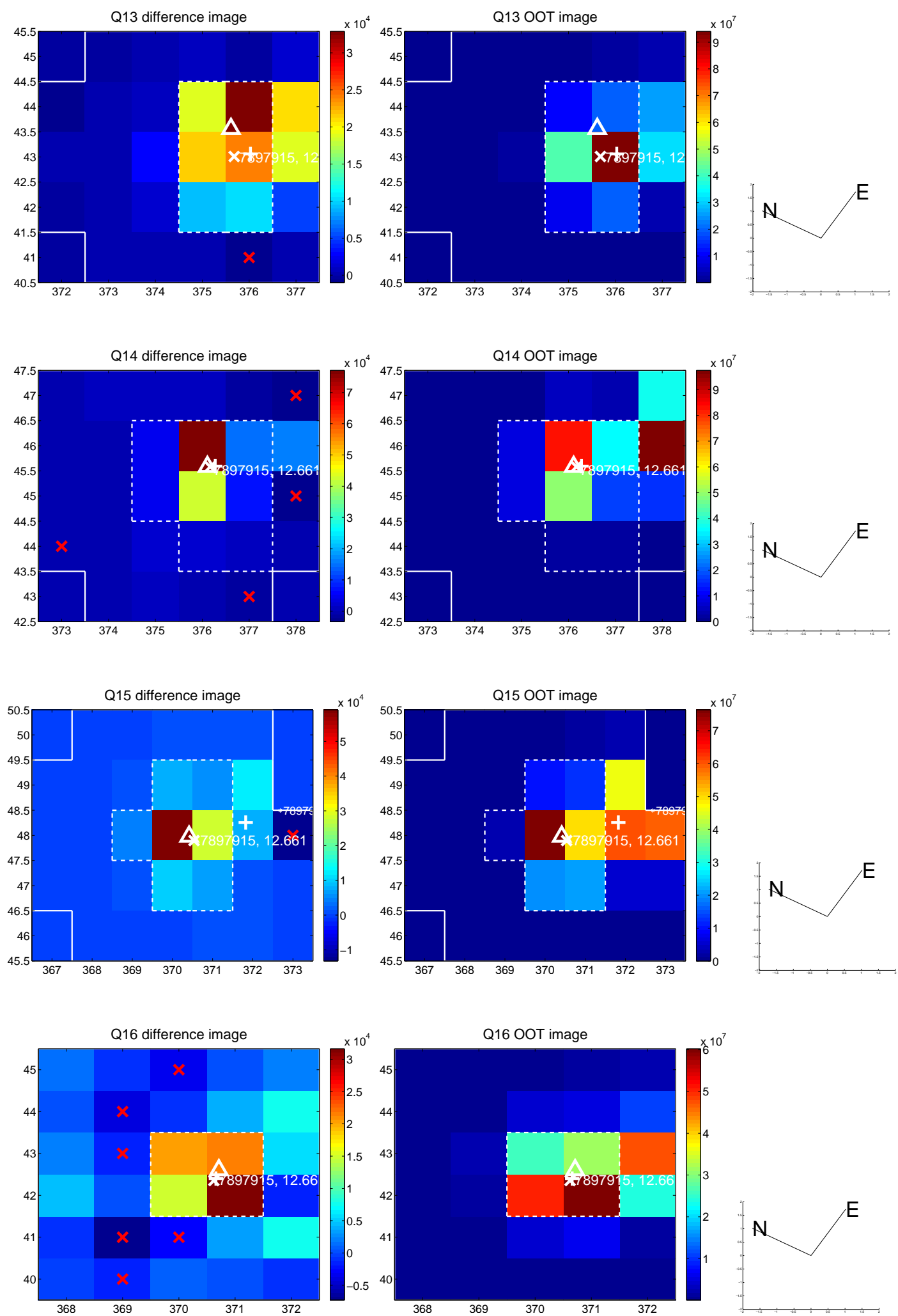
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



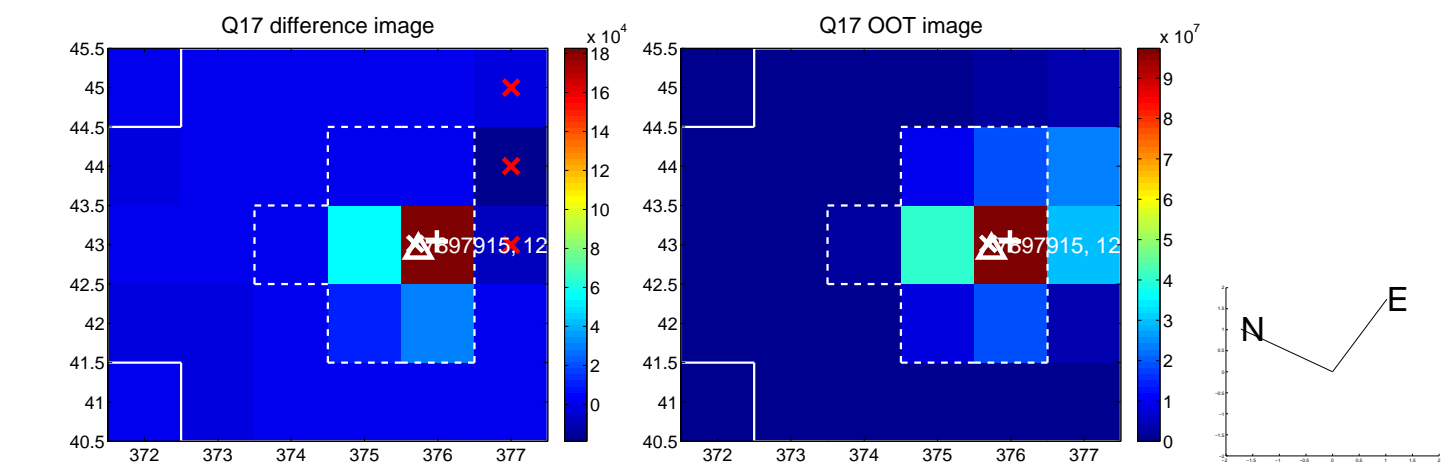
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



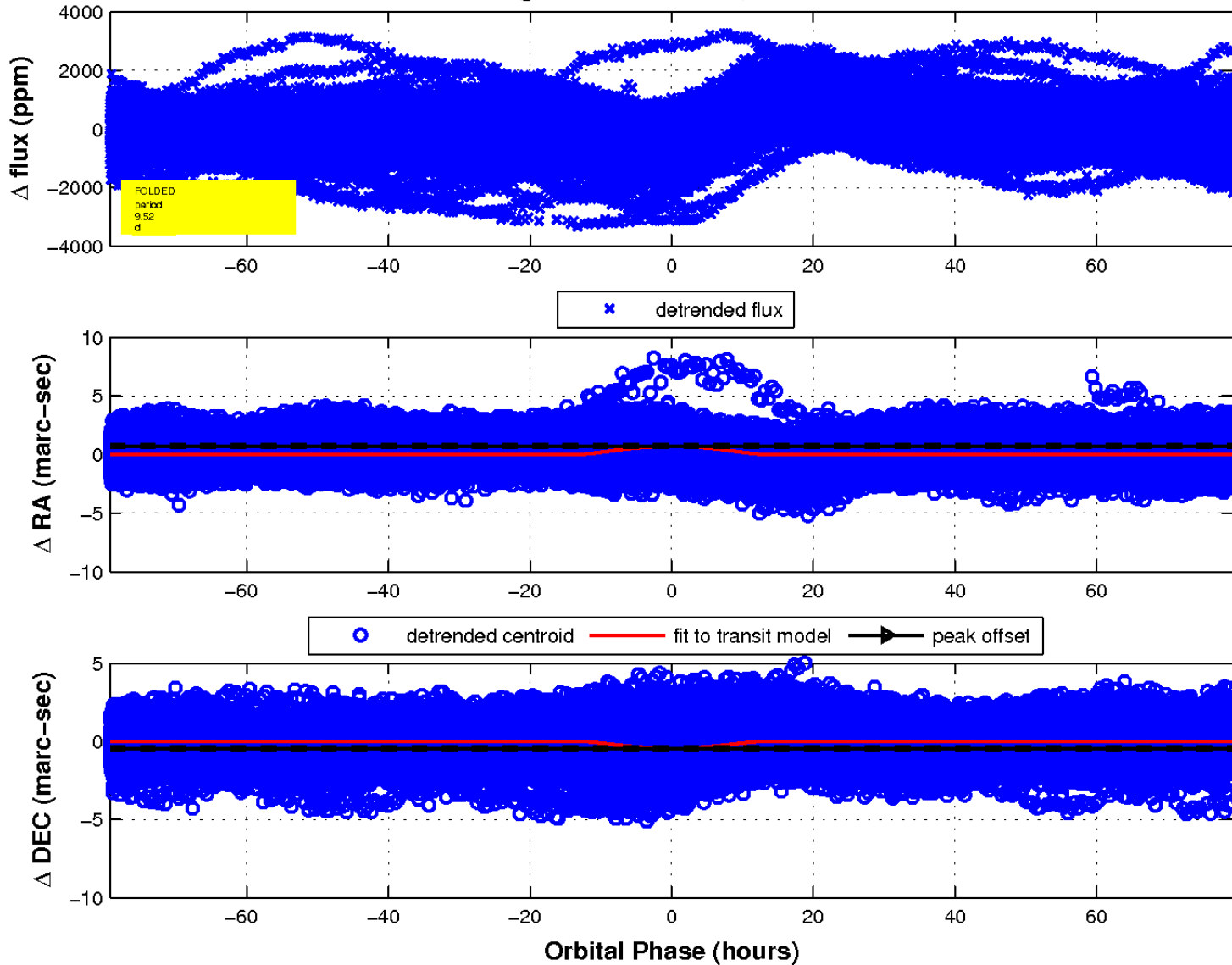
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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



fluxWeightedCentroids, Planet 1 of 1



UKIRT Image

Declination

