

KIC 003118797

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})
003118797-01	OBS	1950.01	66.416055	188.138152	2003.2	6.987	29.8	31.4	0.76	5383	3.39	4.71

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
003118797-01	OBS	PC	0.89	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 003118797-01

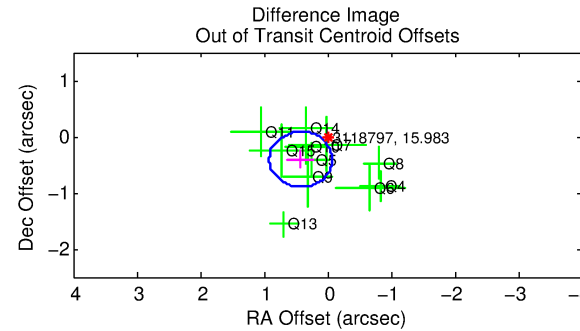
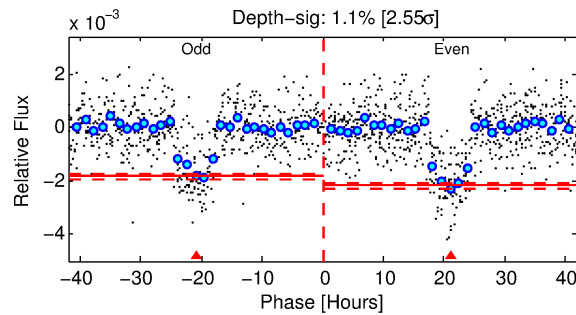
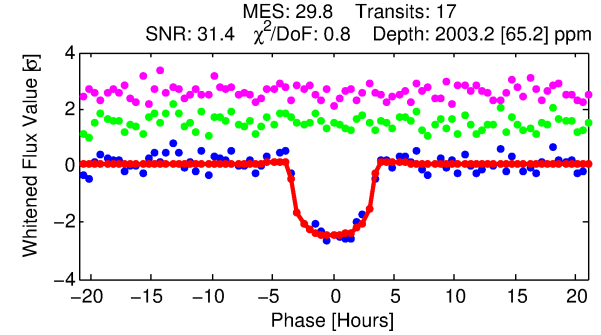
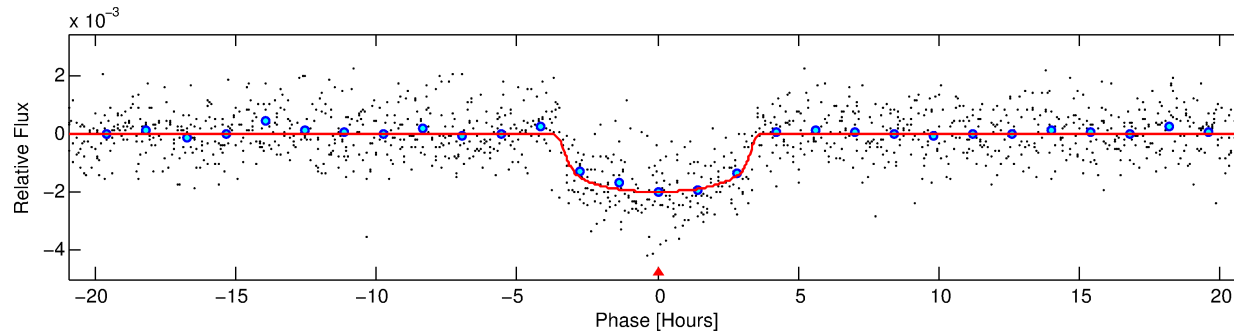
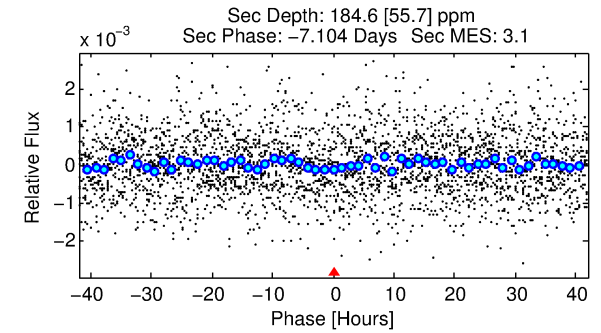
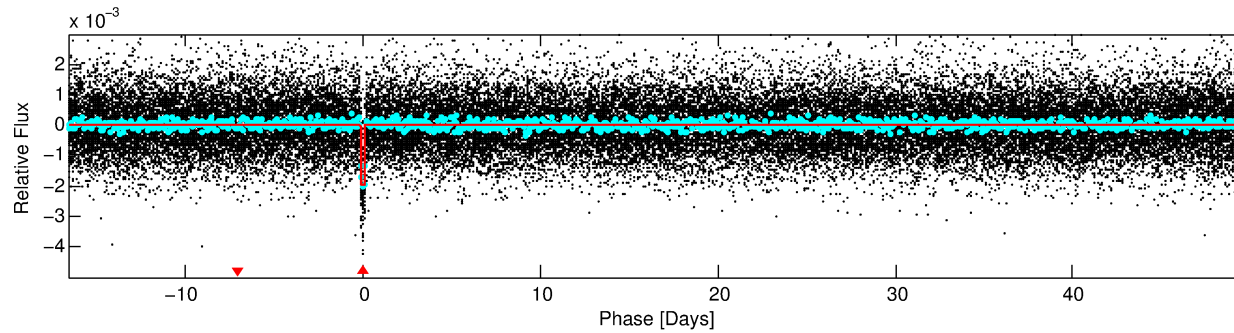
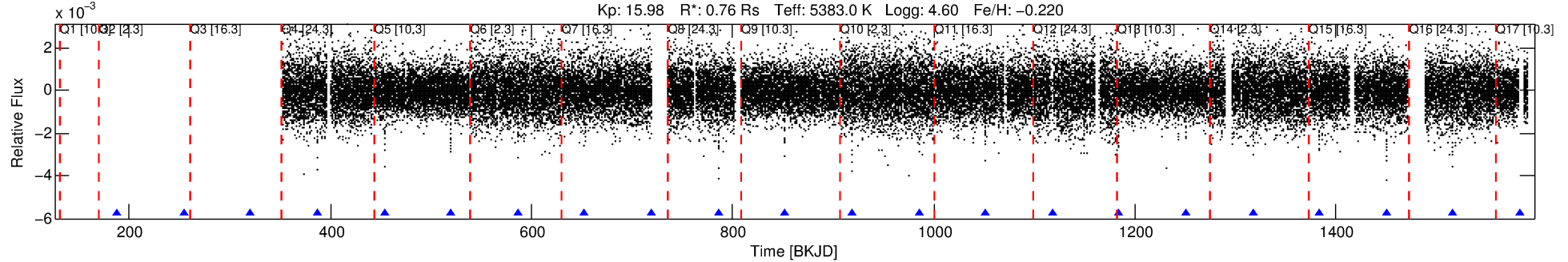
No Significant Match Found

DV One-Page Summary

KIC: 3118797 Candidate: 1 of 1 Period: 66.416 d

KOI: K01950.01 Corr: 0.993

Kp: 15.98 R*: 0.76 Rs Teff: 5383.0 K Logg: 4.60 Fe/H: -0.220



DV Fit Results:

Period = 66.41606 [0.00041] d
Epoch = 188.1382 [0.0052] BKJD
Rp/R* = 0.0410 [0.0134]
a/R* = 70.64 [90.72]
b = 0.37 [3.02]
Seff = 4.71 [1.27]
Teq = 376 [25] K
Rp = 3.39 [1.28] Re
a = 0.3032 [0.0472] AU
Ag = 810.16 [609.13] [1.33σ]
Teffp = 3099 [569] K [4.79σ]

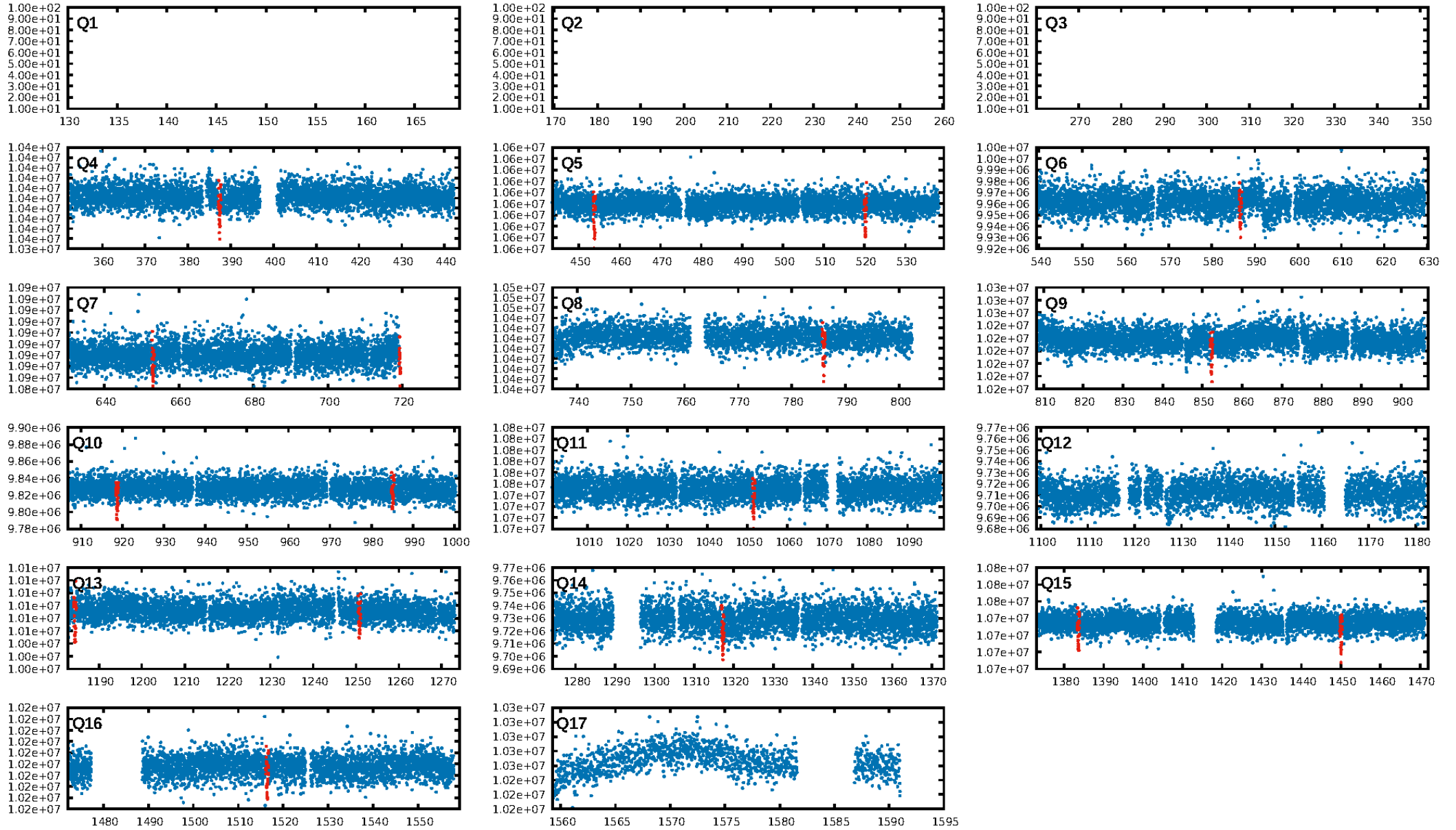
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: 0.7%
ModelChiSquareGof-sig: 100.0%
Bootstrap-pfa: 1.20e-155
RollingBand-fgt: 1.00 [17/17]
GhostDiagnostic-chr: 2.113
Centroid-sig: 0.0%
Centroid-so: 1.083 arcsec [3.26σ]
OotOffset-rm: 0.586 arcsec [3.56σ]
KicOffset-rm: 0.265 arcsec [1.50σ]
OotOffset-st: 3/3/2/3 [11]
KicOffset-st: 3/3/2/3 [11]
DiffImageQuality-fgm: 1.00 [11/11]
DiffImageOverlap-fno: 1.00 [11/11]

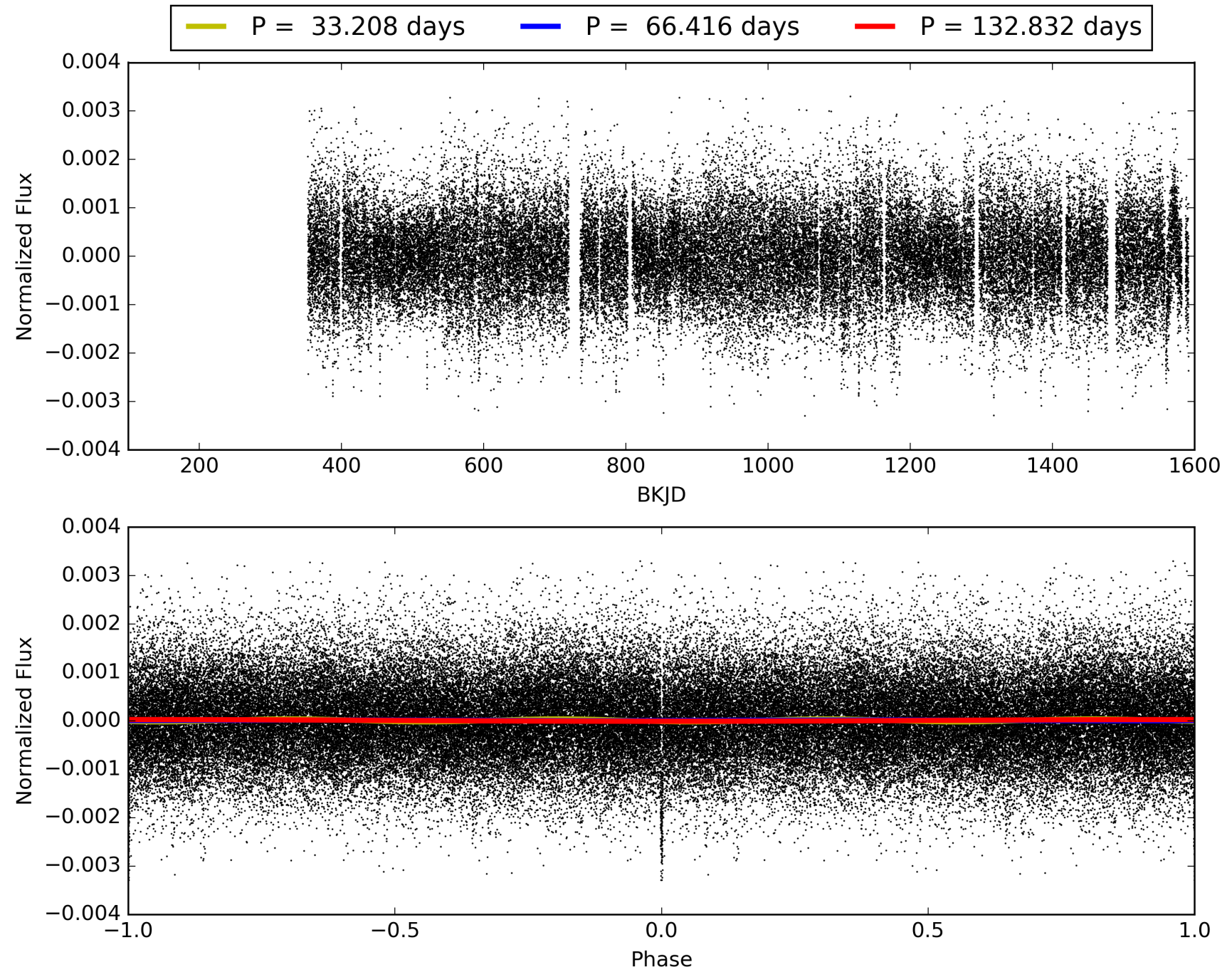
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 29-Jan-2016 19:15:45 Z

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

TCE 003118797-01, PDC Light Curves

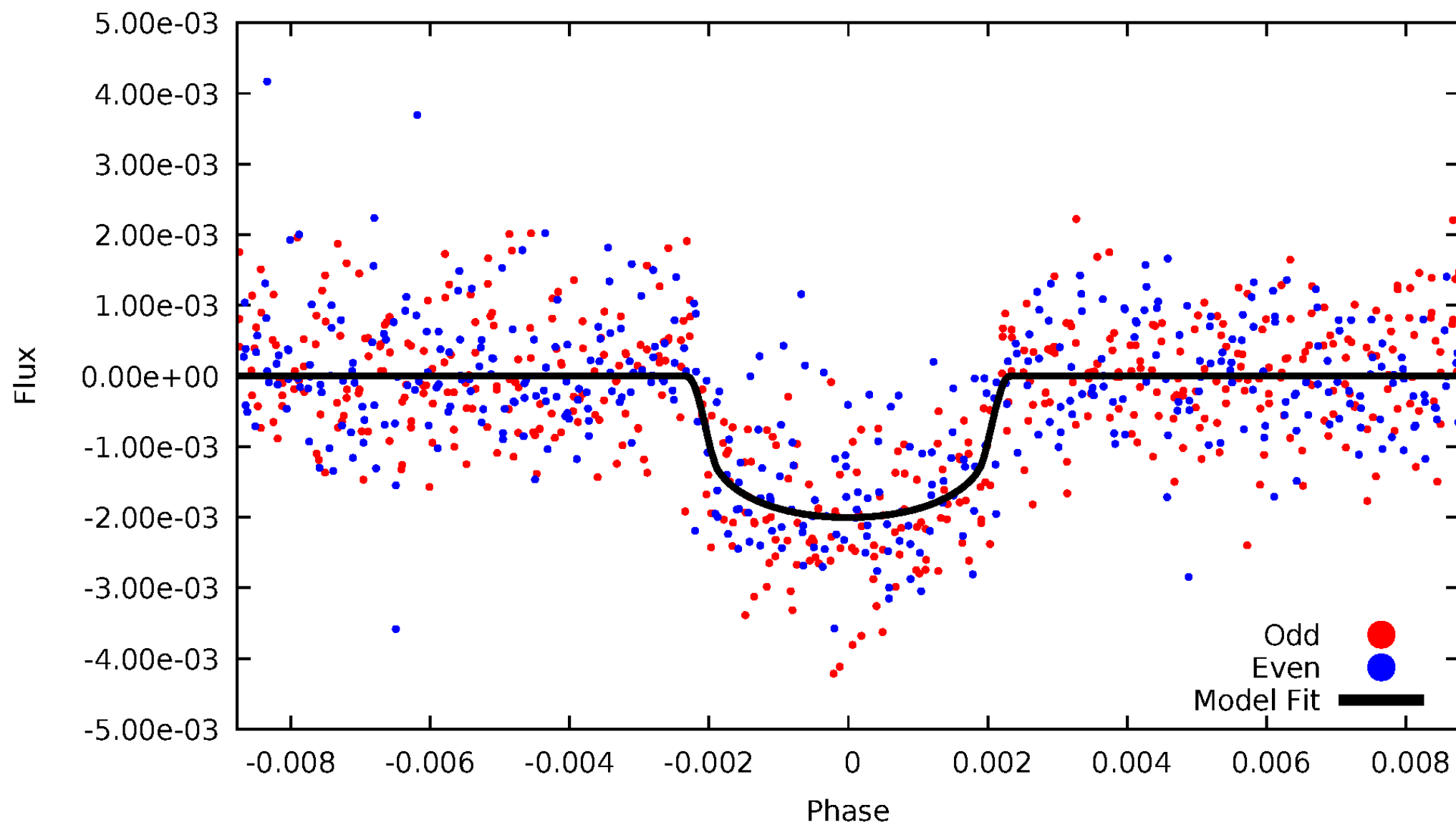


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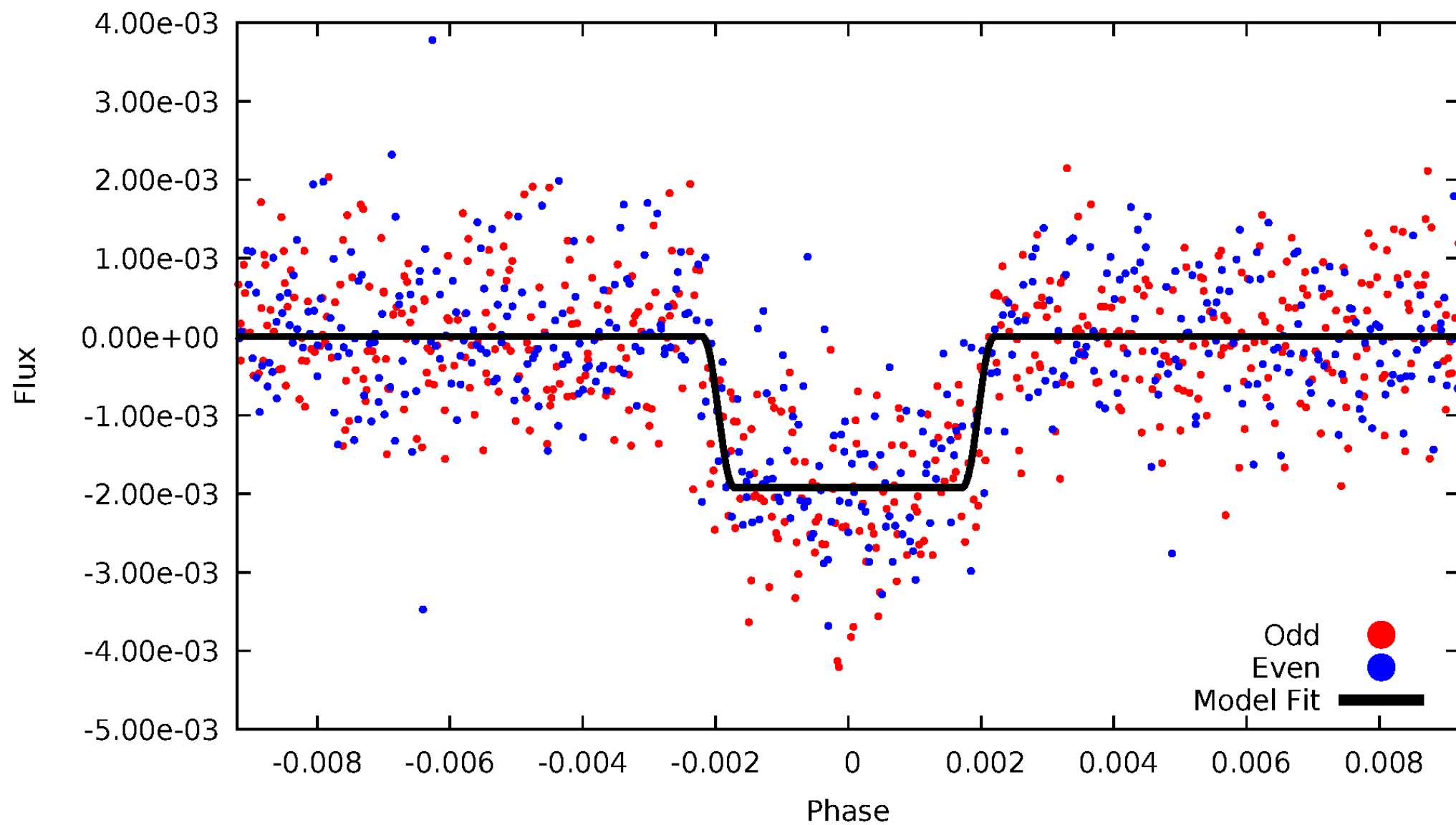
DV Odd/Even

TCE 003118797-01

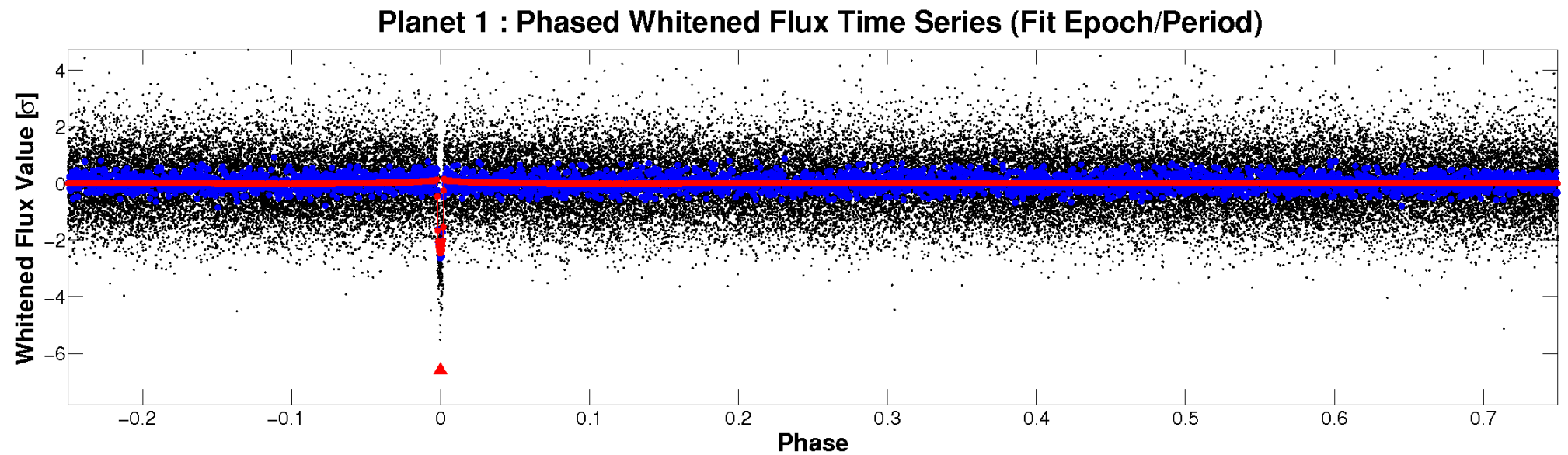
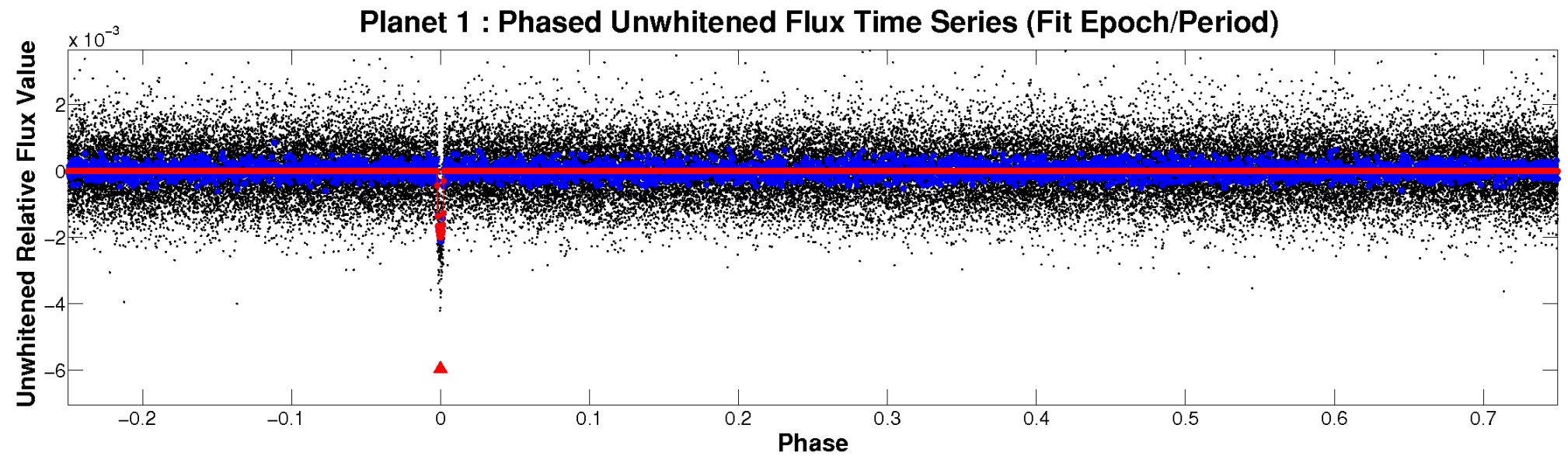


ALT Odd/Even

TCE 003118797-01

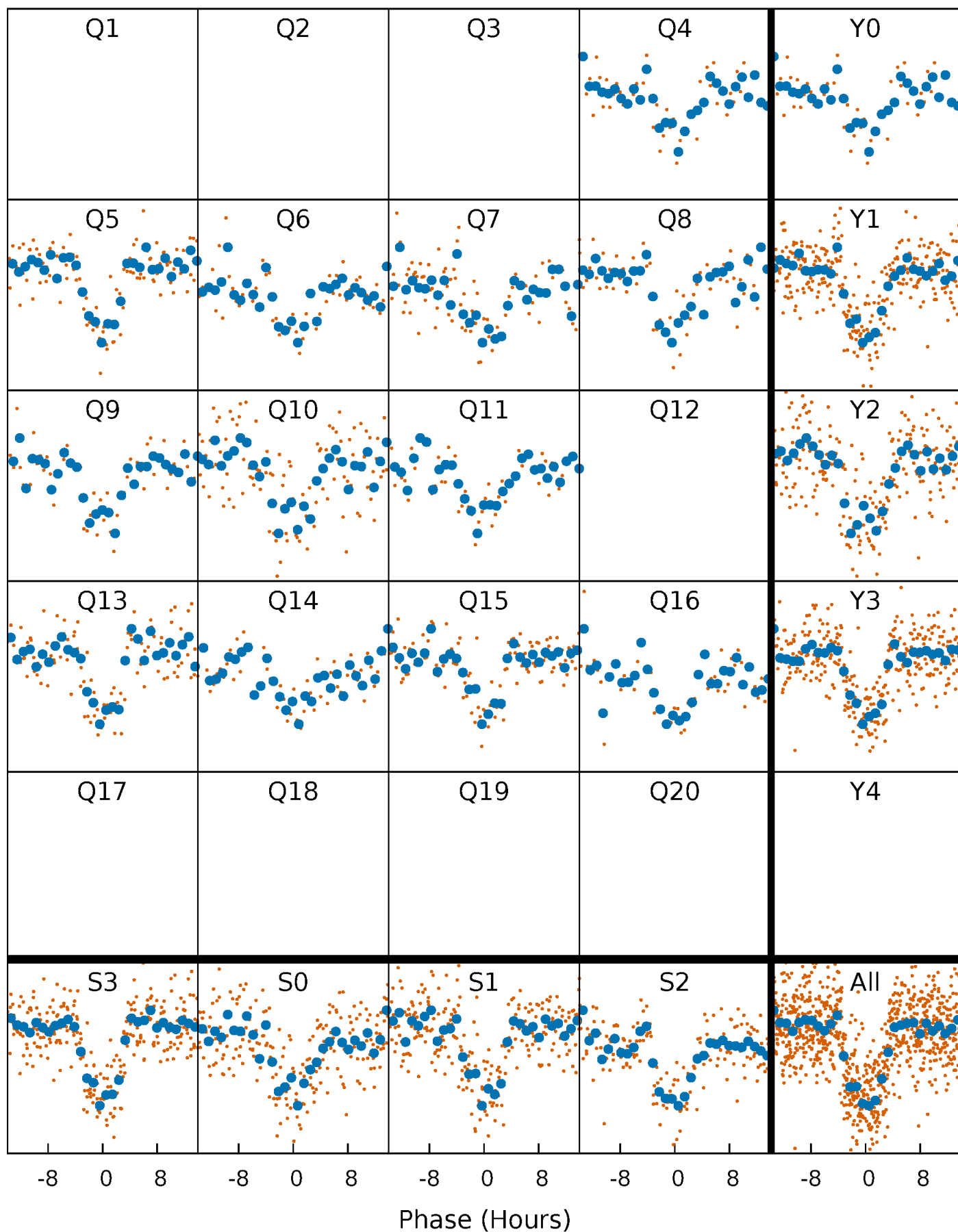


Non-Whitened Vs. Whitened Light Curve



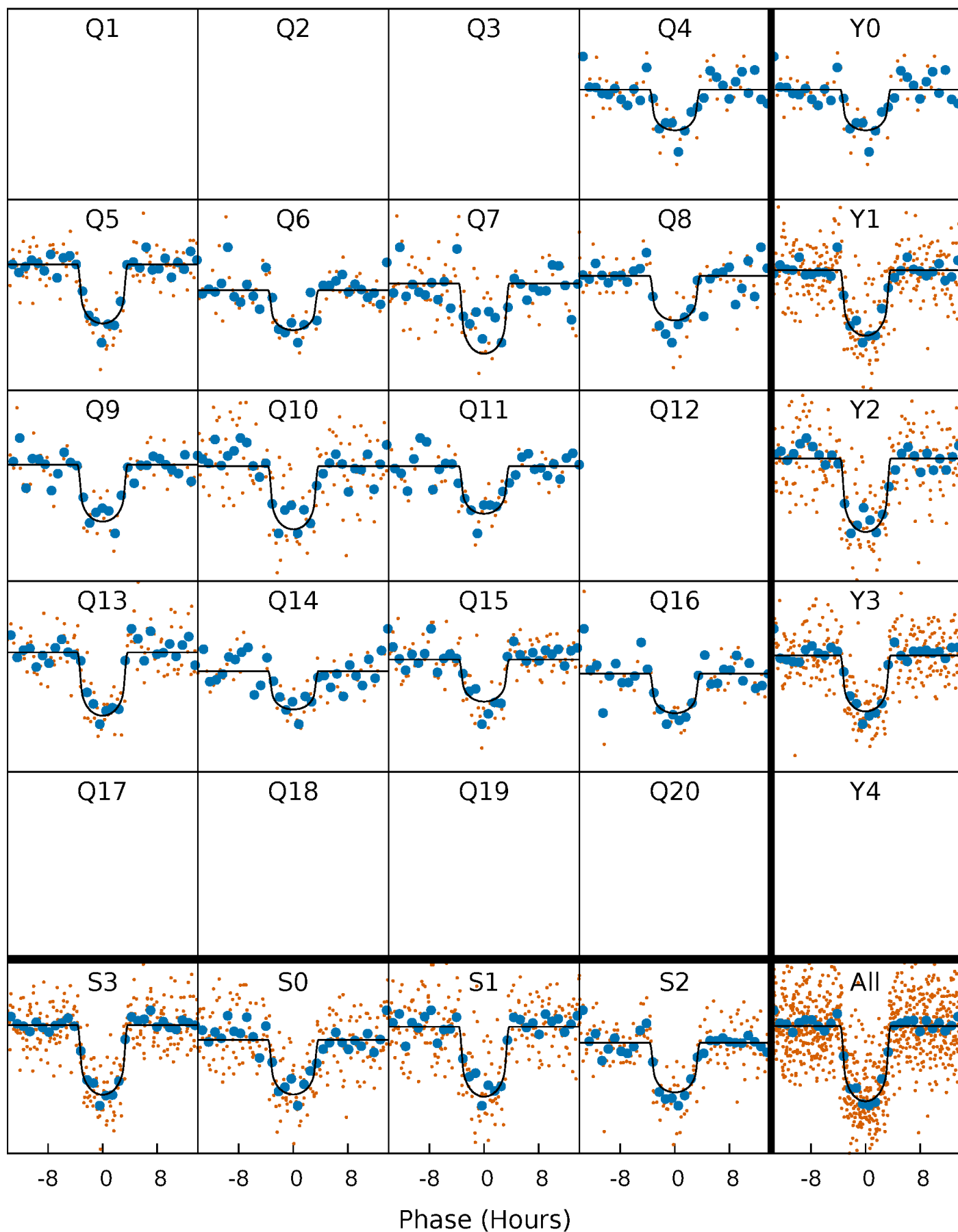
PDC Quarter-Phased Transit Curves

TCE 003118797-01 P= 66.416055 Days $T_0=188.138152$ (BKJD)



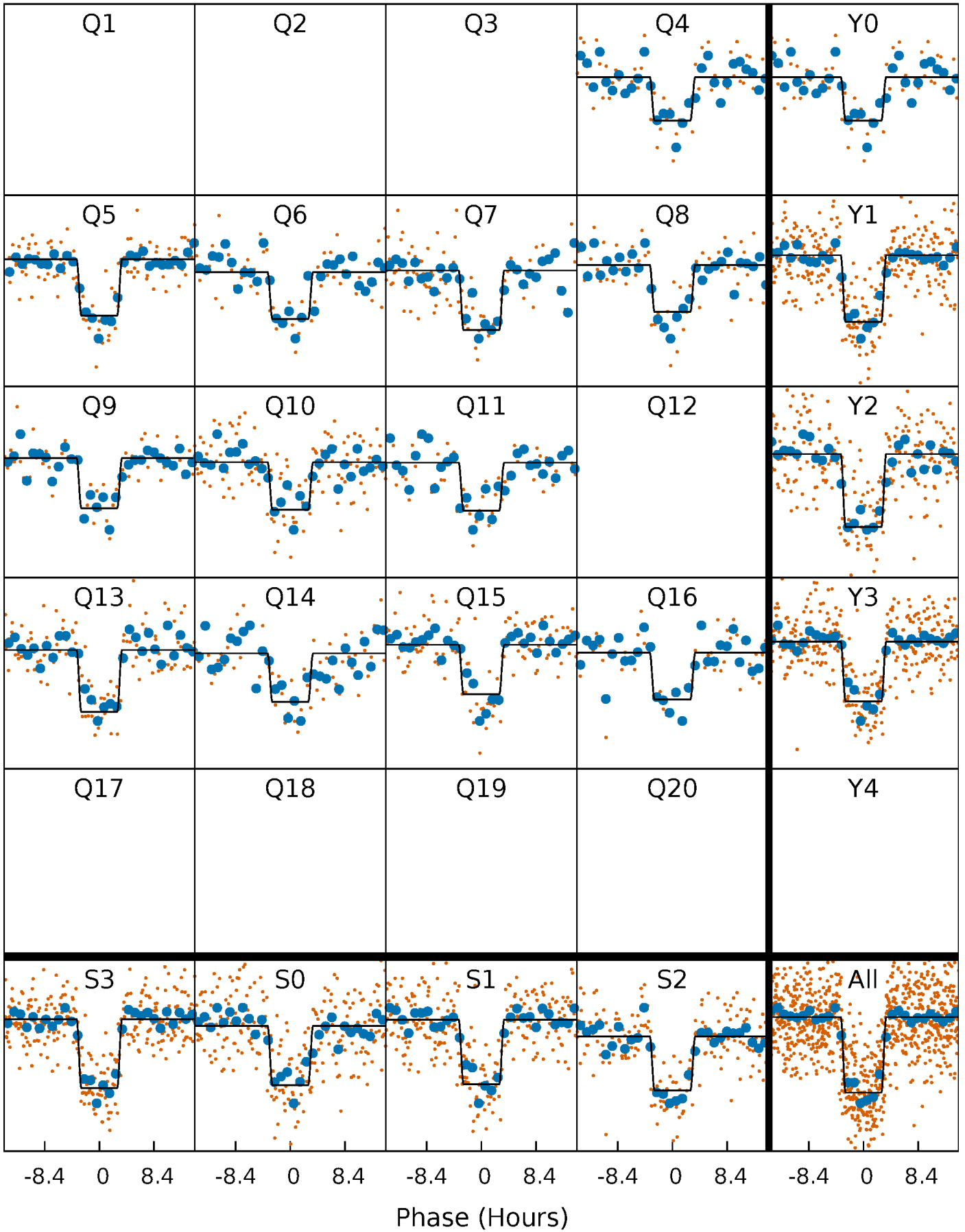
DV Quarter-Phased Transit Curves

TCE 003118797-01 P= 66.416055 Days $T_0=188.138152$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

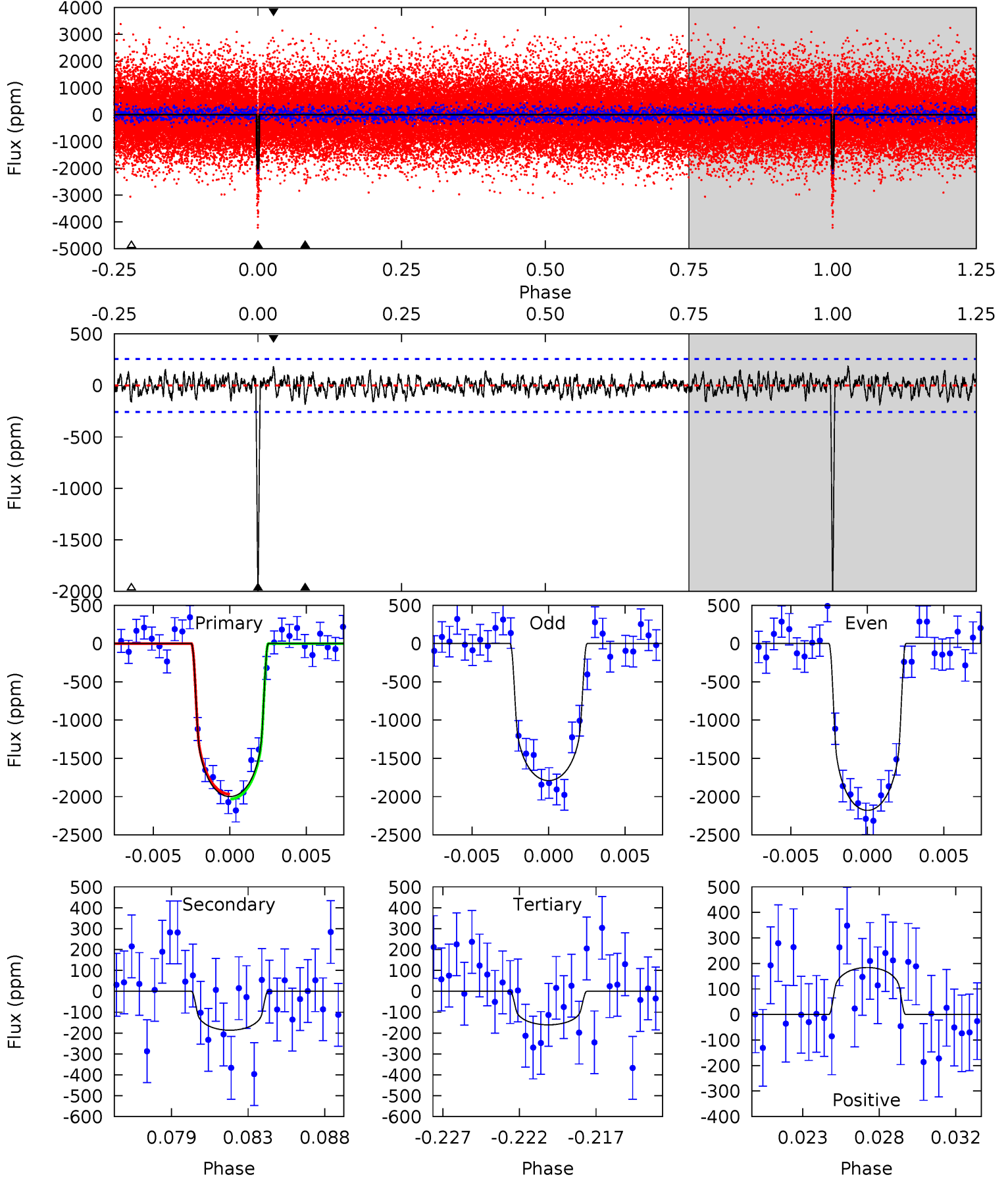
TCE 003118797-01 P= 66.415295 Days $T_0=188.147787$ (BKJD)



DV Model-Shift Uniqueness Test

003118797-01, $P = 66.416055$ Days, $E = 188.138152$ Days

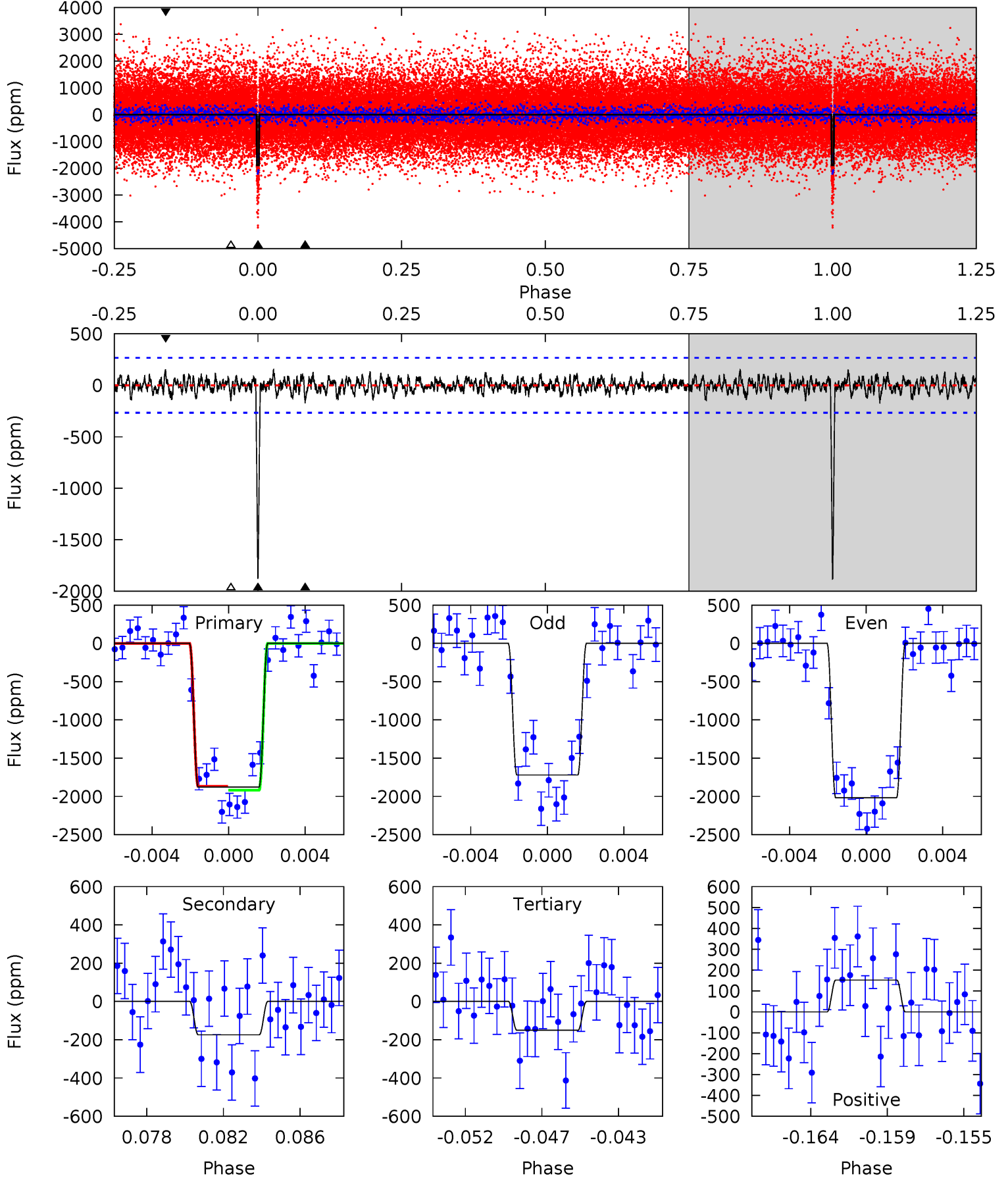
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
40.1	3.74	3.22	3.69	5.17	2.83	1.15	36.9	36.4	0.52	0.05	3.90	0.99	0.08	0.64



Alt Model-Shift Uniqueness Test

003118797-01, $P = 66.415295$ Days, $E = 188.147787$ Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
36.6	3.40	2.94	2.97	5.19	2.85	0.96	33.7	33.6	0.46	0.43	2.87	0.99	0.08	0.50



Stellar Parameters For KIC 003118797

	$T_{\text{eff}} (K)$	$\log(g)$	$[\text{Fe}/\text{H}]$	$R (R_{\odot})$	$M (M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	5383^{+204}_{-185}	$4.603^{+0.030}_{-0.120}$	$-0.220^{+0.300}_{-0.300}$	$0.759^{+0.143}_{-0.061}$	$0.851^{+0.078}_{-0.096}$	$2.738^{+0.444}_{-0.995}$
	+4%/-3%	+1%/-3%	+136%/-136%	+19%/-8%	+9%/-11%	+16%/-36%
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 003118797-01 / KOI 1950.01

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	A_{obs}
DV	-186 ± 50	$3.49^{+1.25}_{-1.16}$	533^{+27}_{-21}	3563^{+517}_{-367}	769^{+916}_{-387}
Alt.	-174 ± 51	$3.82^{+1.16}_{-1.15}$	535^{+27}_{-24}	3433^{+451}_{-356}	603^{+672}_{-302}

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

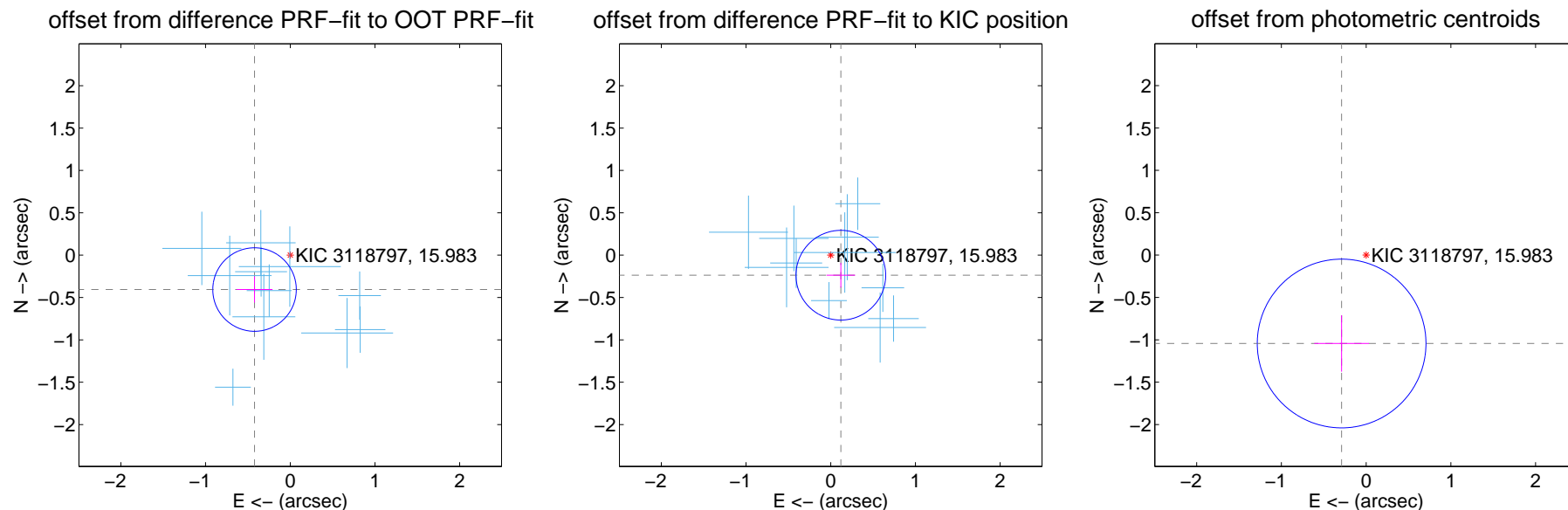
DV Centroid Data

Supplemental centroid analysis for 003118797-01. Kepler magnitude: 15.98. Transit SNR 31.36

There are 11 quarters with good PRF difference image offsets

The direct PRF centroid is offset from the target star catalog position by about 0.22 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.586 ± 0.164	3.56	0.422 ± 0.212	-0.406 ± 0.154
PRF-fit source offset from KIC position	0.265 ± 0.177	1.50	-0.119 ± 0.168	-0.237 ± 0.145
photometric centroid source offset	1.08 ± 0.33	3.26	0.29 ± 0.32	-1.04 ± 0.33



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 ×: KIC target position; +: OOT centroid; △: difference centroid. red ✕: large negative pixel value.

Q1 no difference image



Q1 no OOT image



Q2 no difference image



Q2 no OOT image



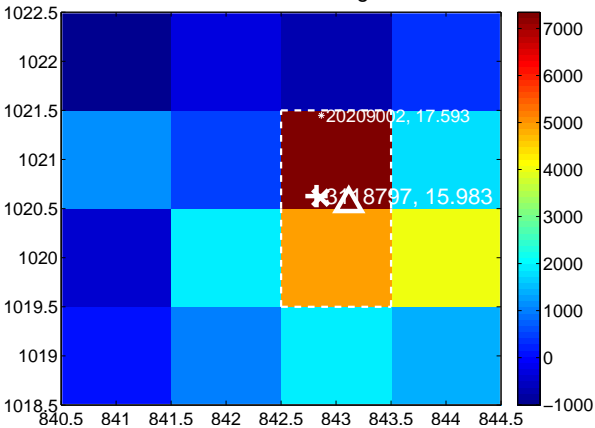
Q3 no difference image



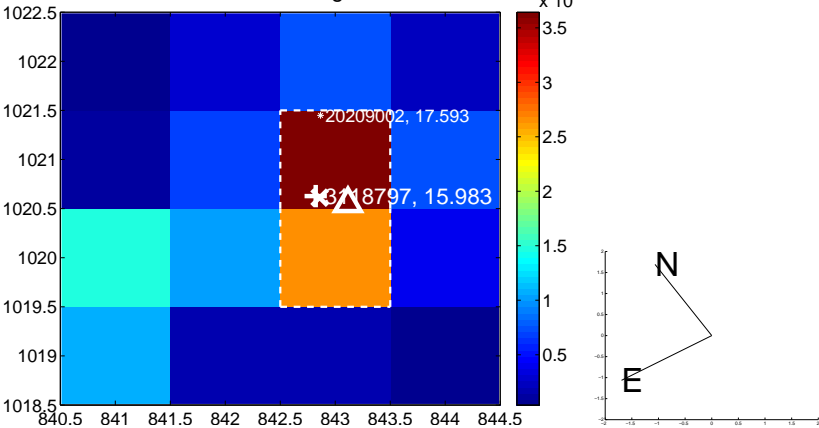
Q3 no OOT image



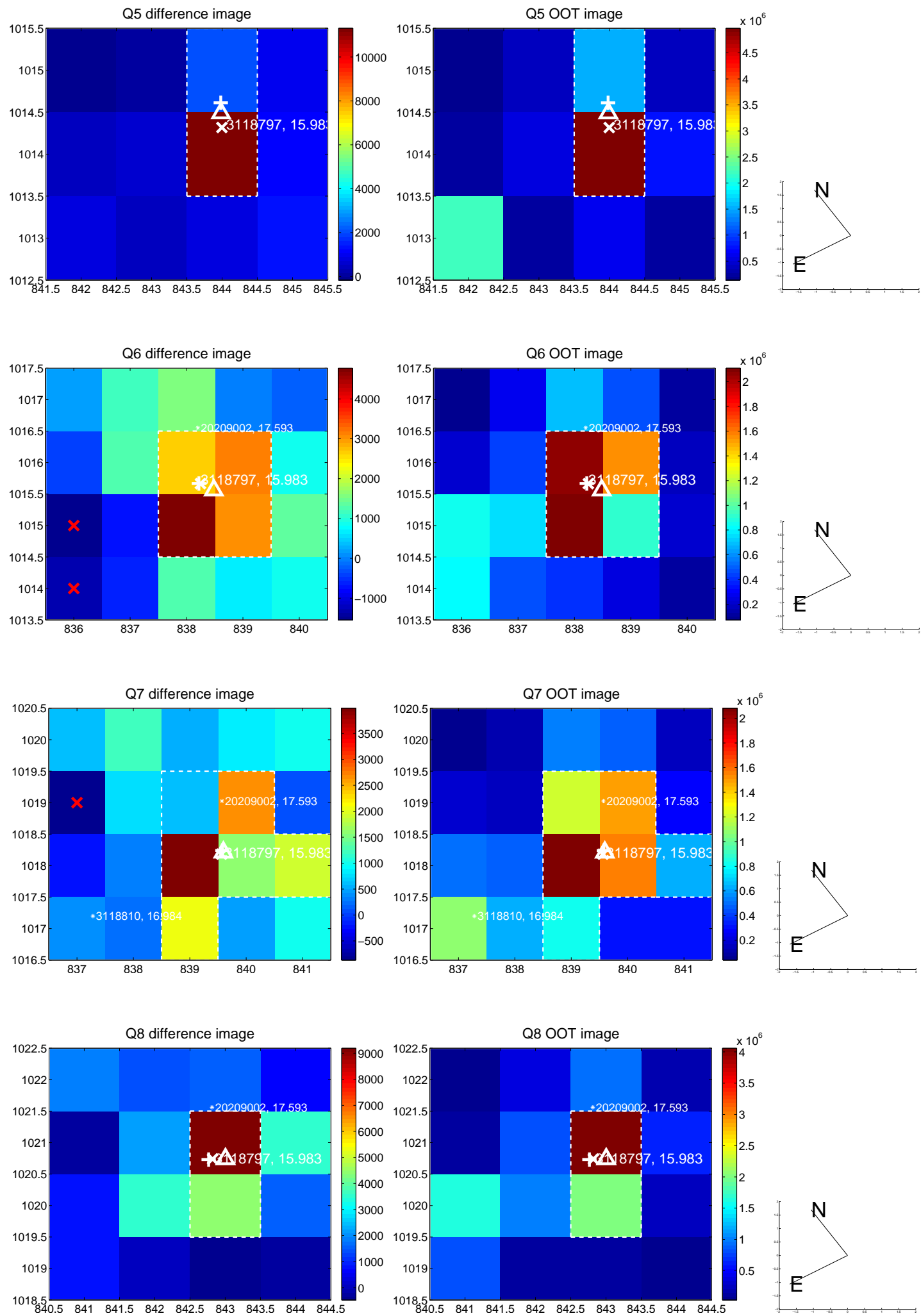
Q4 difference image



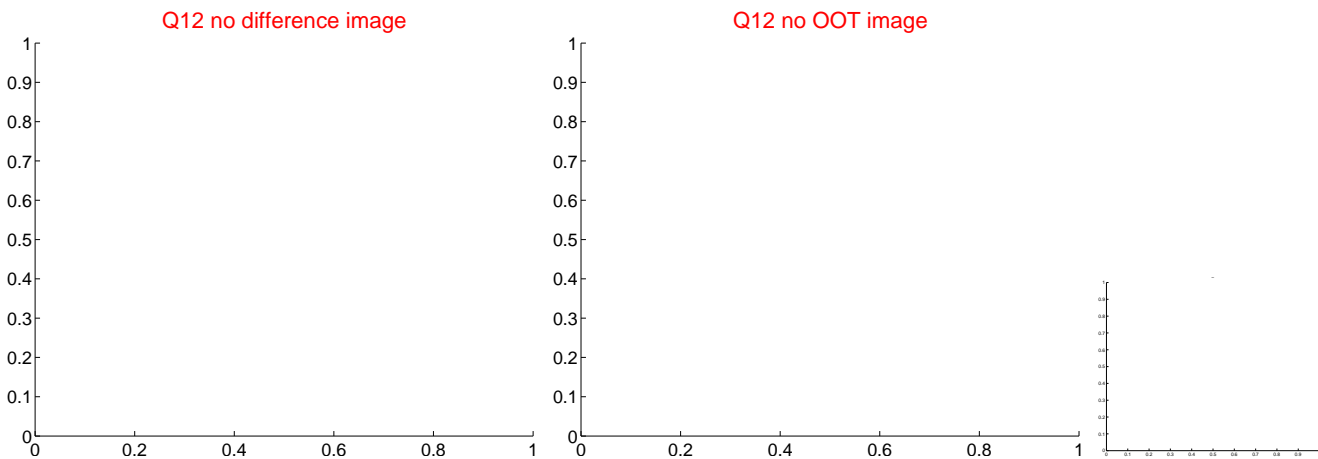
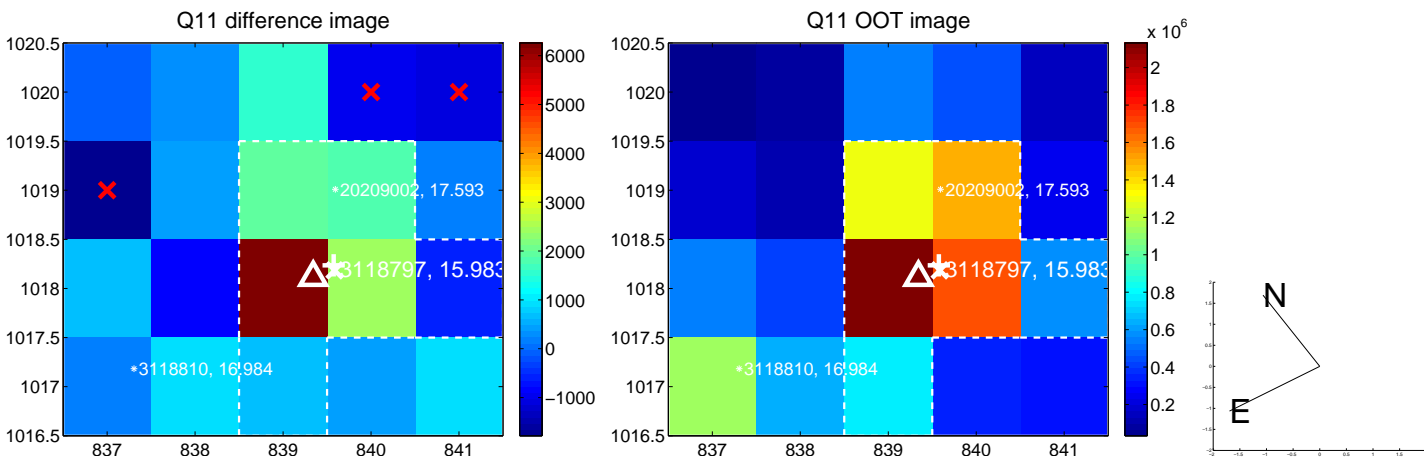
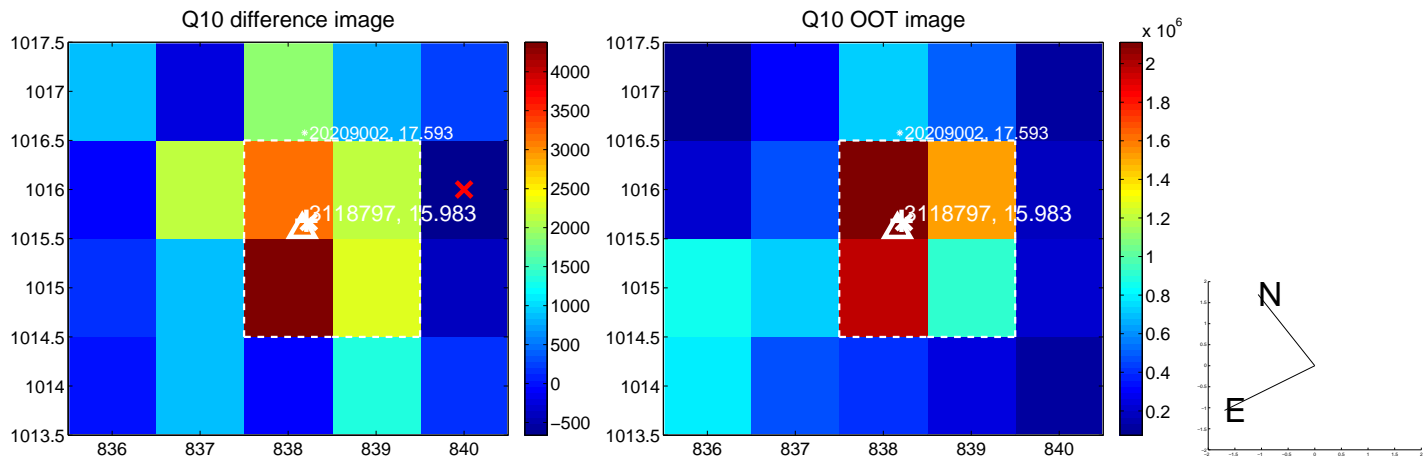
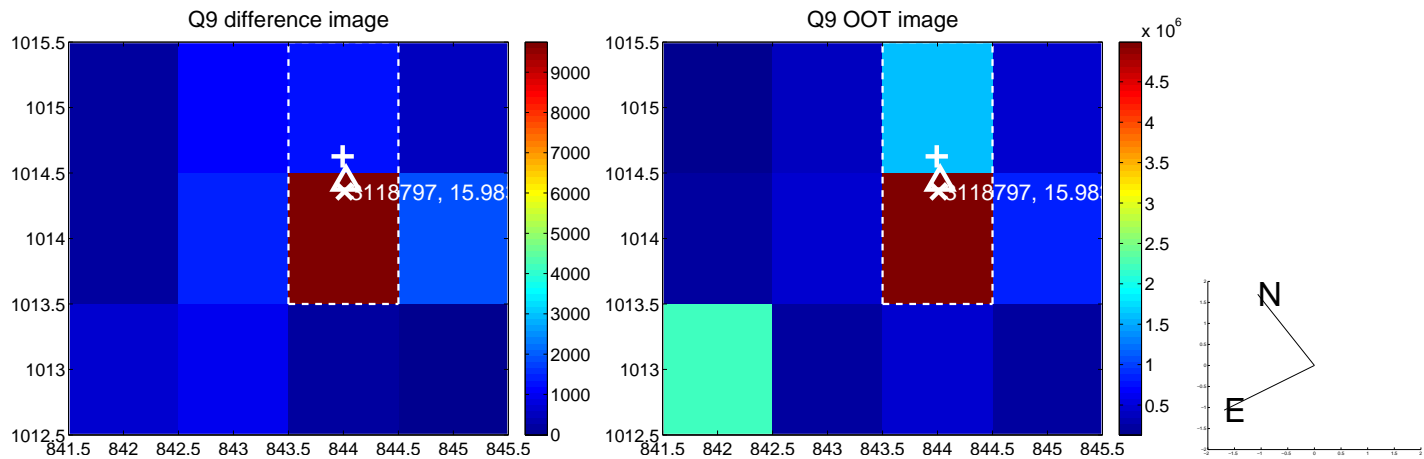
Q4 OOT image



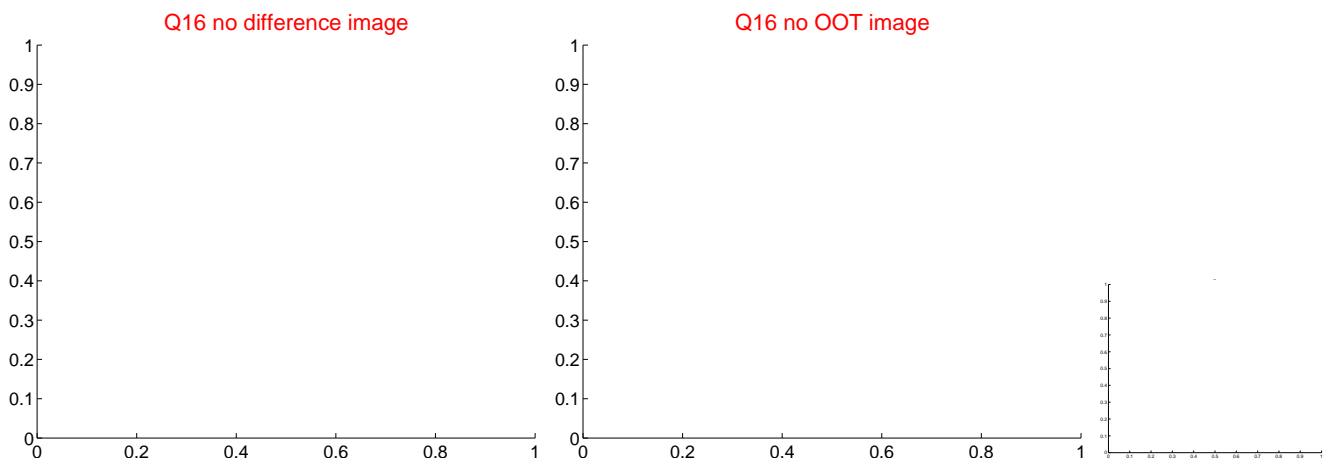
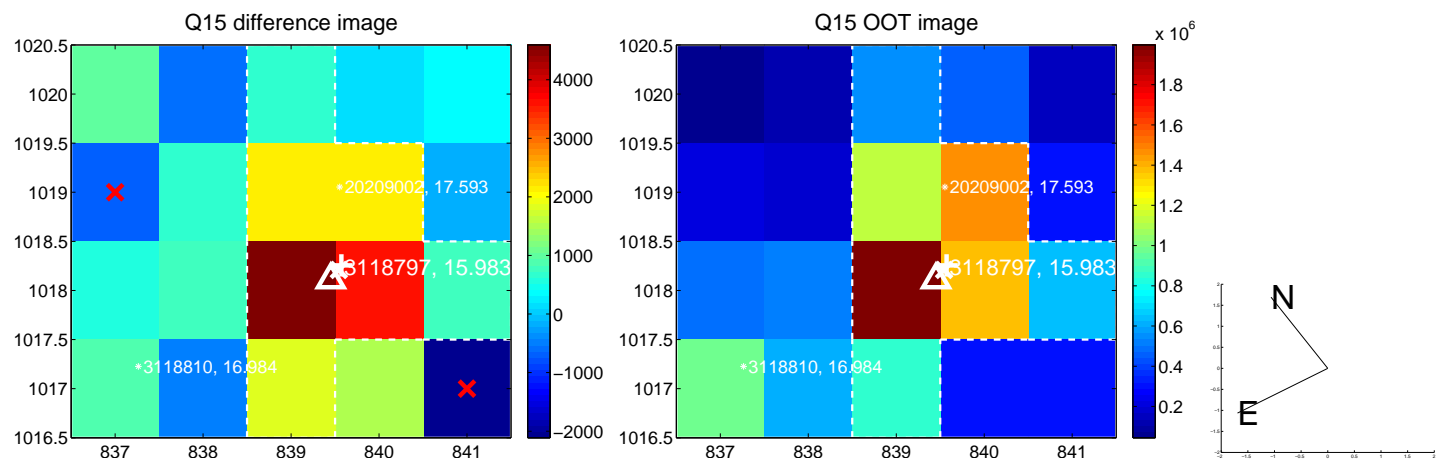
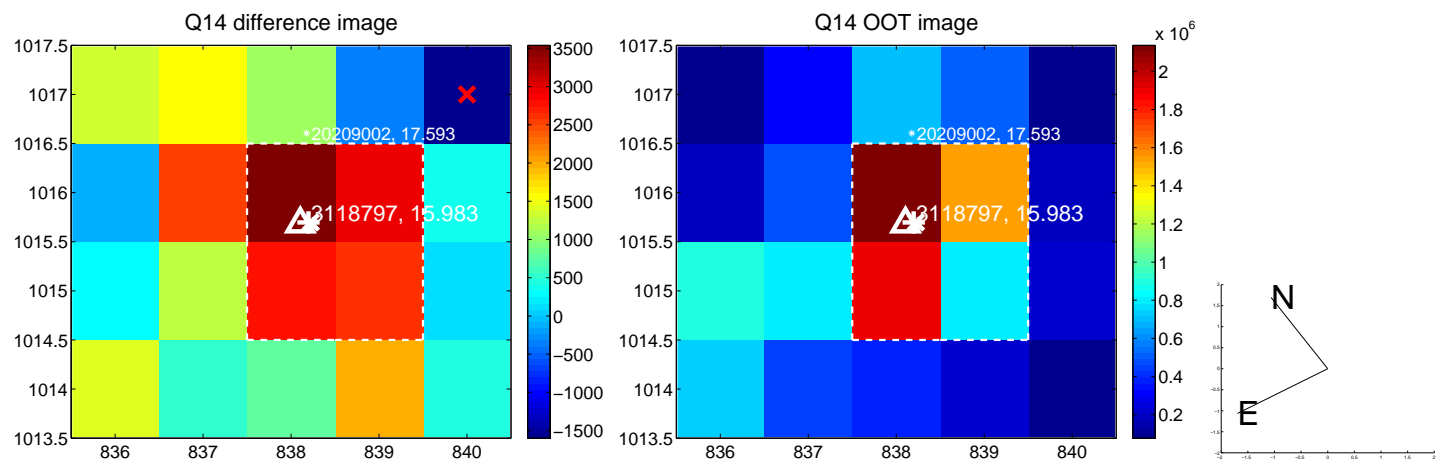
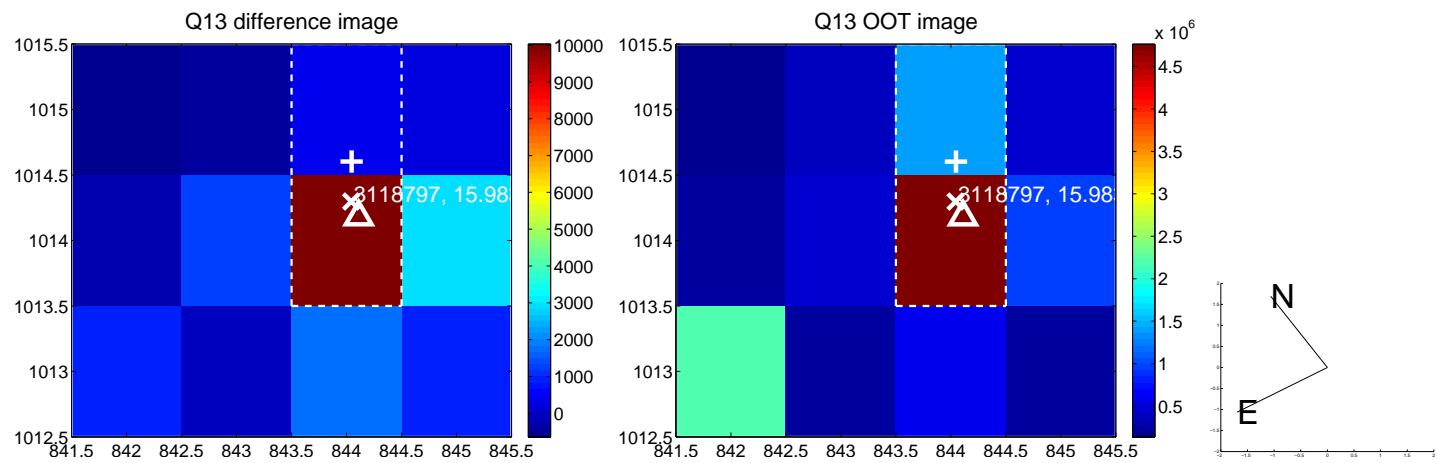
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



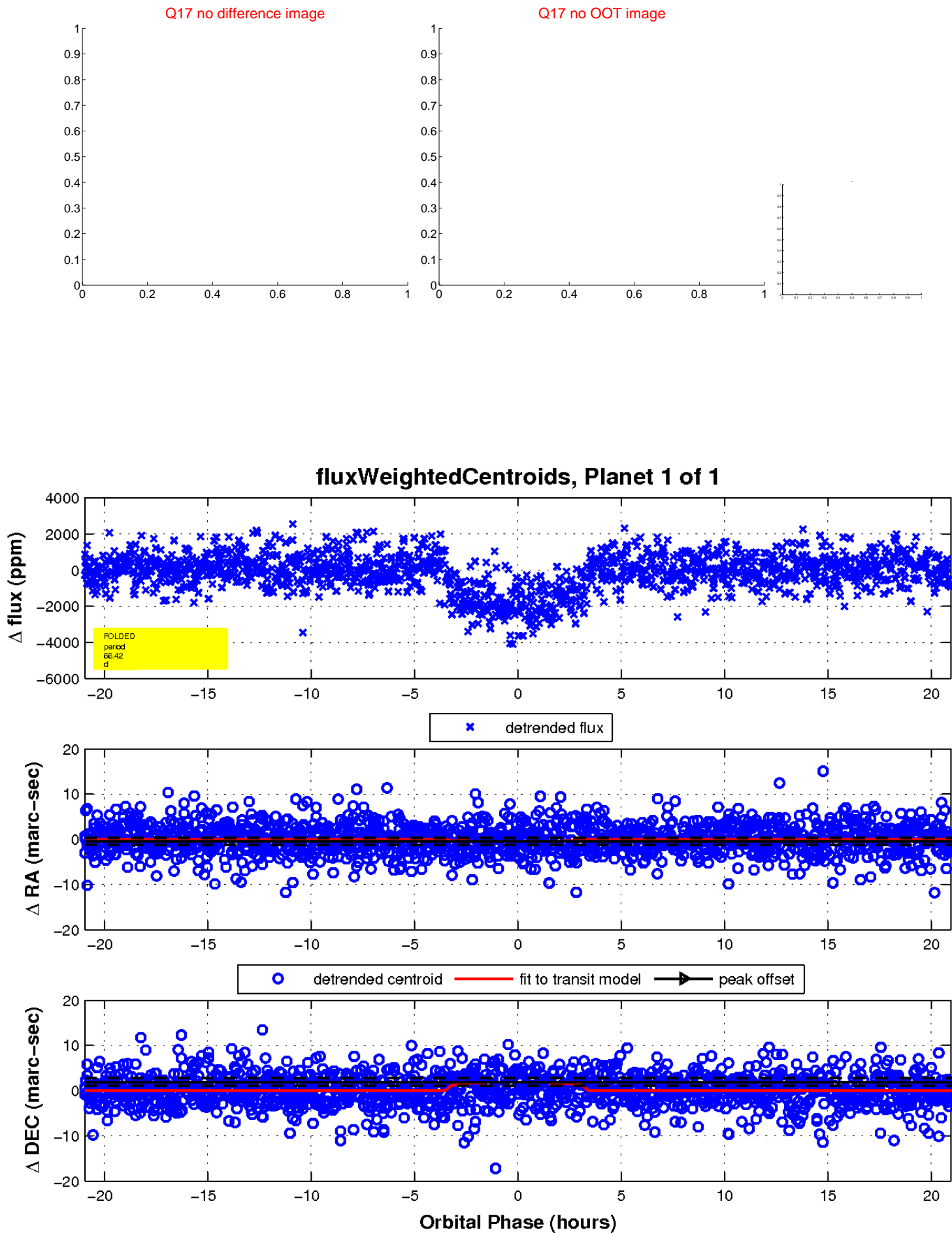
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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



UKIRT Image

DECLINATION

