

KIC 008091197

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})
008091197-01	OBS	6960.01	4.886987	132.880152	111.6	1.187	7.8	9.4	1.01	6152	1.26	390.39

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
008091197-01	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.

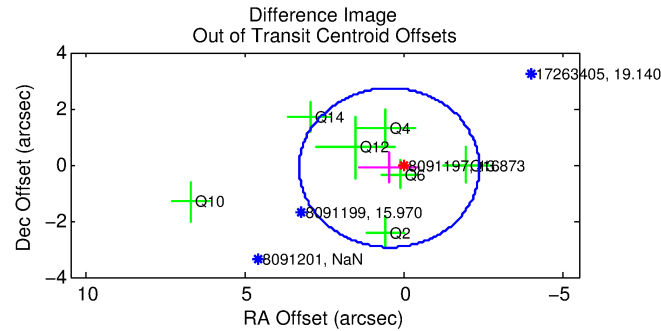
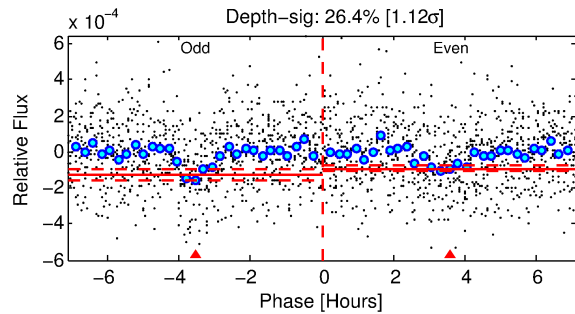
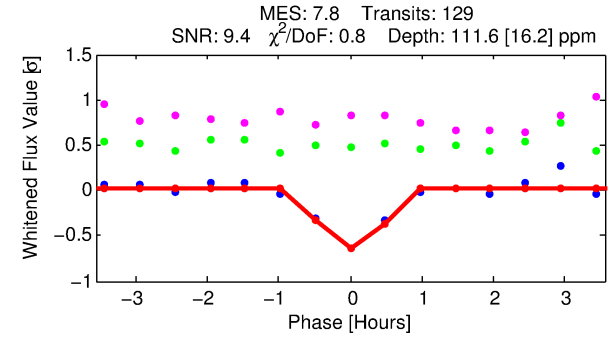
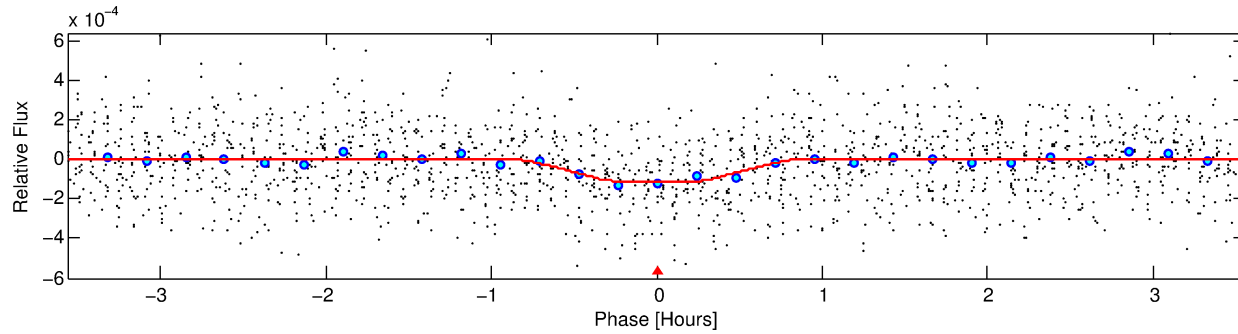
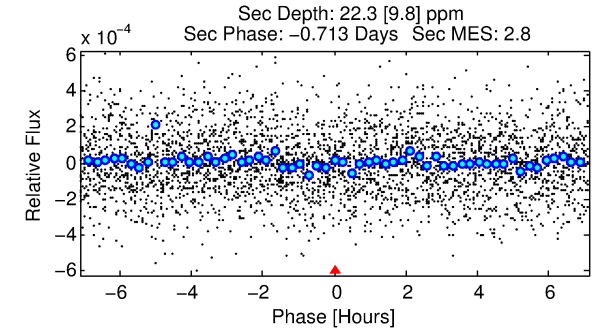
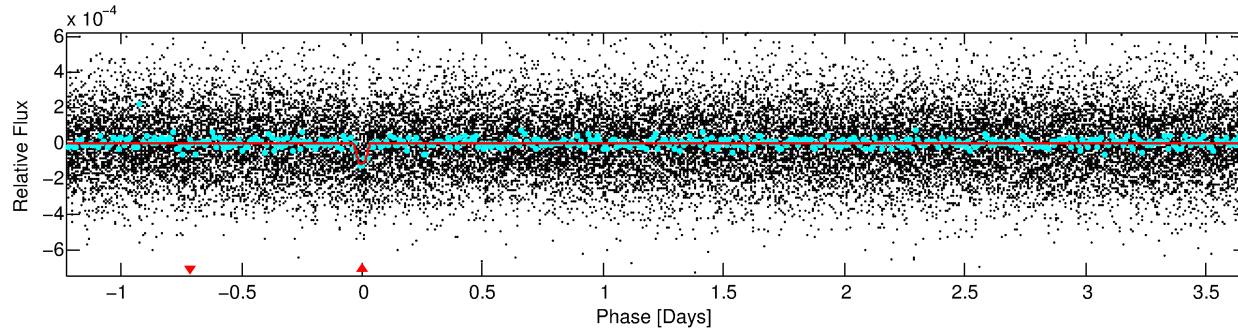
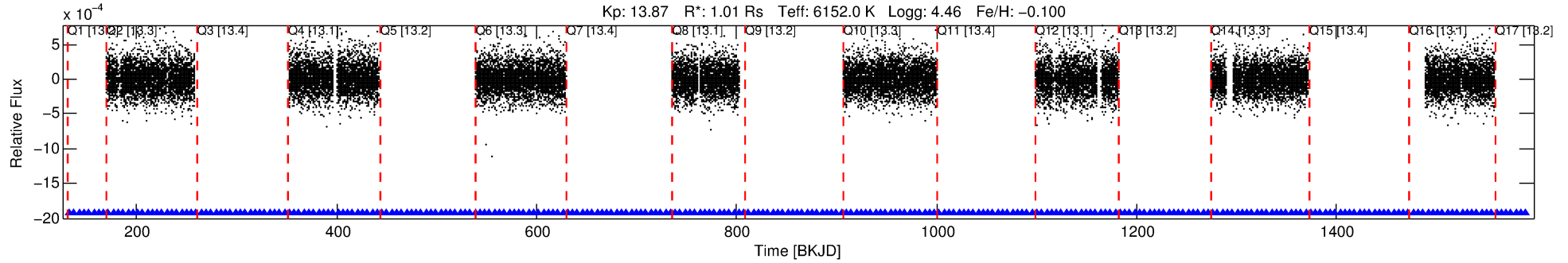
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 008091197-01

No Significant Match Found

DV One-Page Summary

KIC: 8091197 Candidate: 1 of 1 Period: 4.887 d
KOI: K06960.01 Corr: 0.983



DV Fit Results:

Period = 4.88699 [0.00002] d
Epoch = 132.8802 [0.0030] BKJD
Rp/R* = 0.0115 [0.0098]
a/R* = 14.55 [65.59]
b = 0.90 [0.97]
Seff = 390.39 [176.98]
Teq = 1133 [128] K
Rp = 1.26 [1.16] Re
a = 0.0579 [0.0166] AU
Ag = 25.87 [46.83] [0.53σ]
Teffp = 3952 [1747] K [1.61σ]

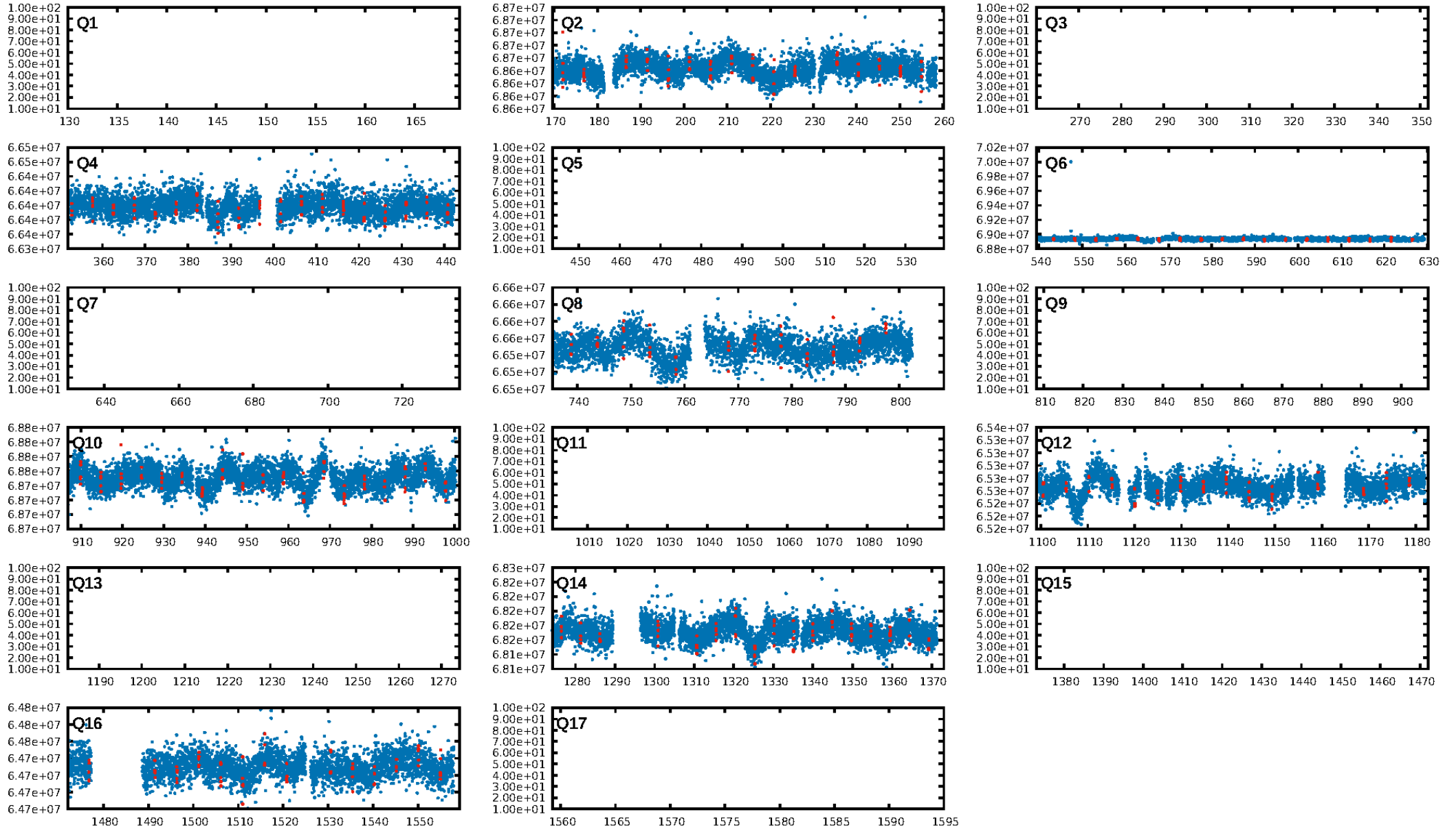
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: 99.5%
ModelChiSquareGof-sig: 100.0%
Bootstrap-pfa: 5.92e-15
RollingBand-fgt: 1.00 [129/129]
GhostDiagnostic-chr: 164.6
Centroid-sig: 99.2%
Centroid-so: 0.206 arcsec [0.15σ]
OotOffset-rm: 0.477 arcsec [0.50σ]
OotOffset-st: 4/0/3/0 [7]
KicOffset-rm: 0.502 arcsec [0.45σ]
KicOffset-st: 4/0/3/0 [7]
DiffImageQuality-fgm: 0.86 [6/7]
DiffImageOverlap-fno: 1.00 [8/8]

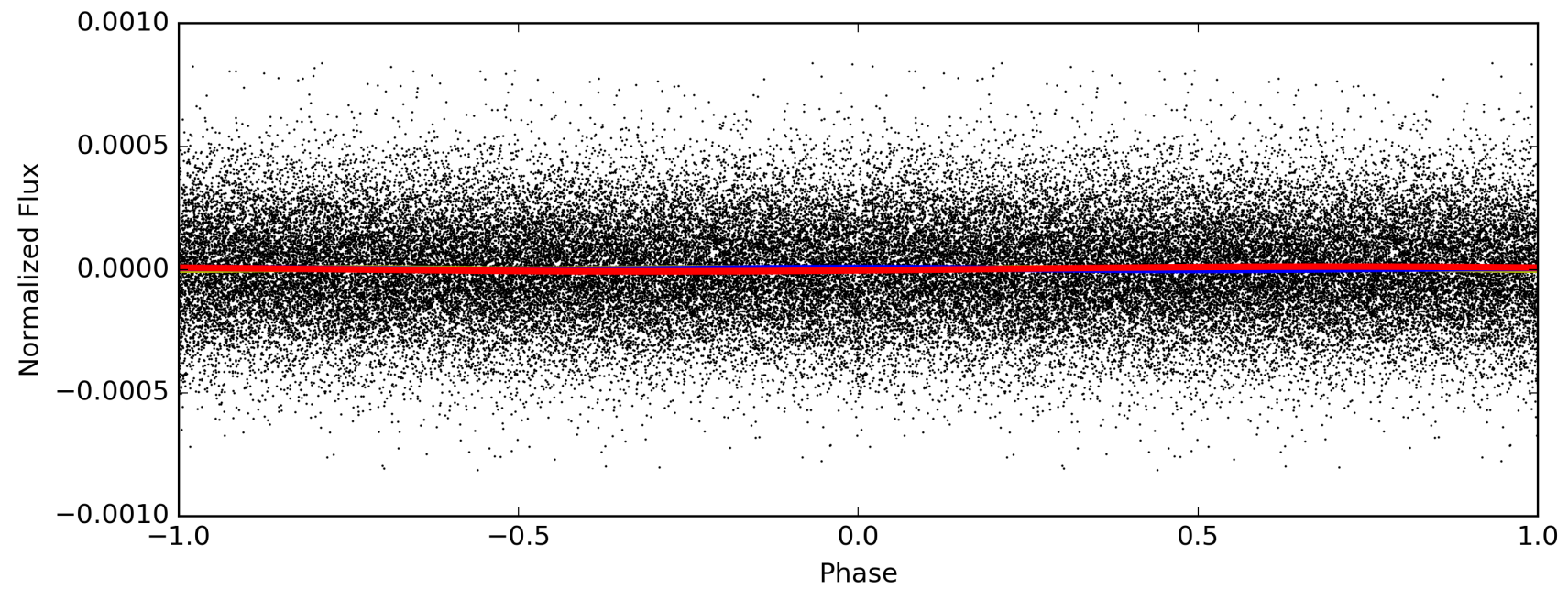
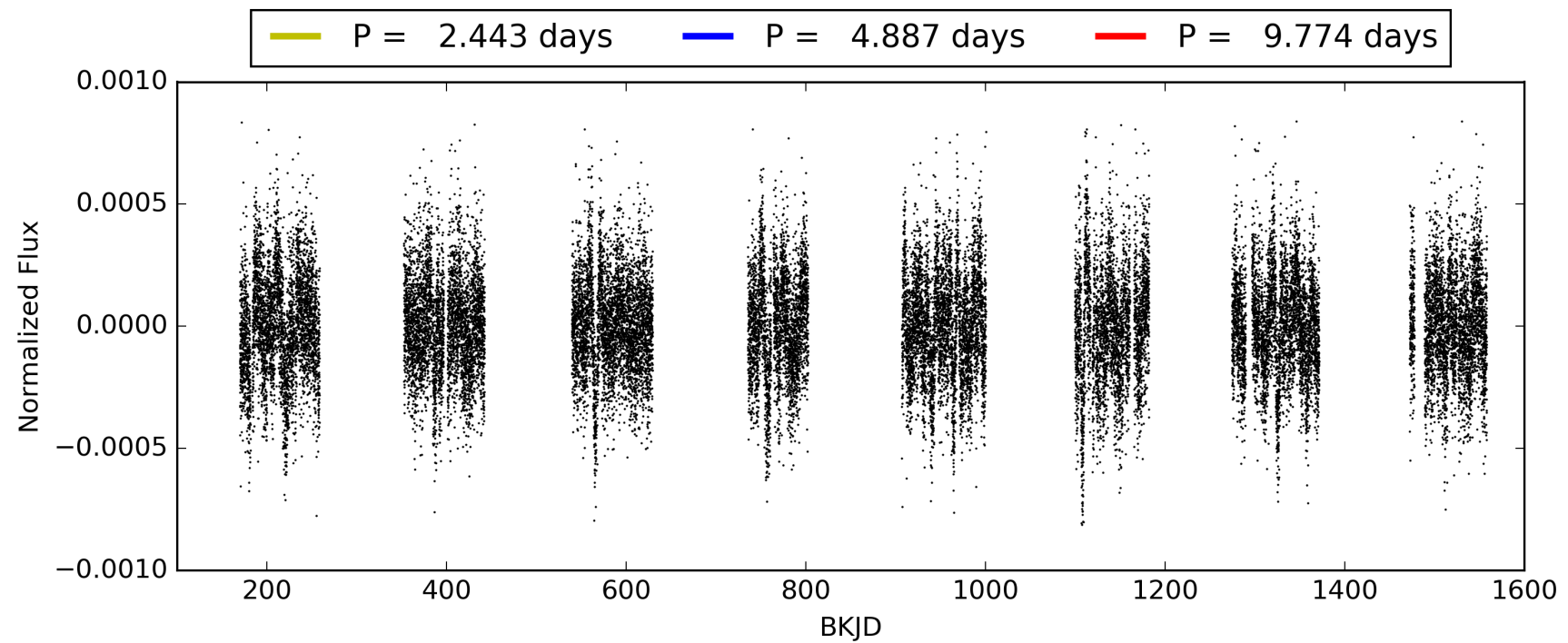
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 30-Jan-2016 13:59:08 Z

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

TCE 008091197-01, PDC Light Curves

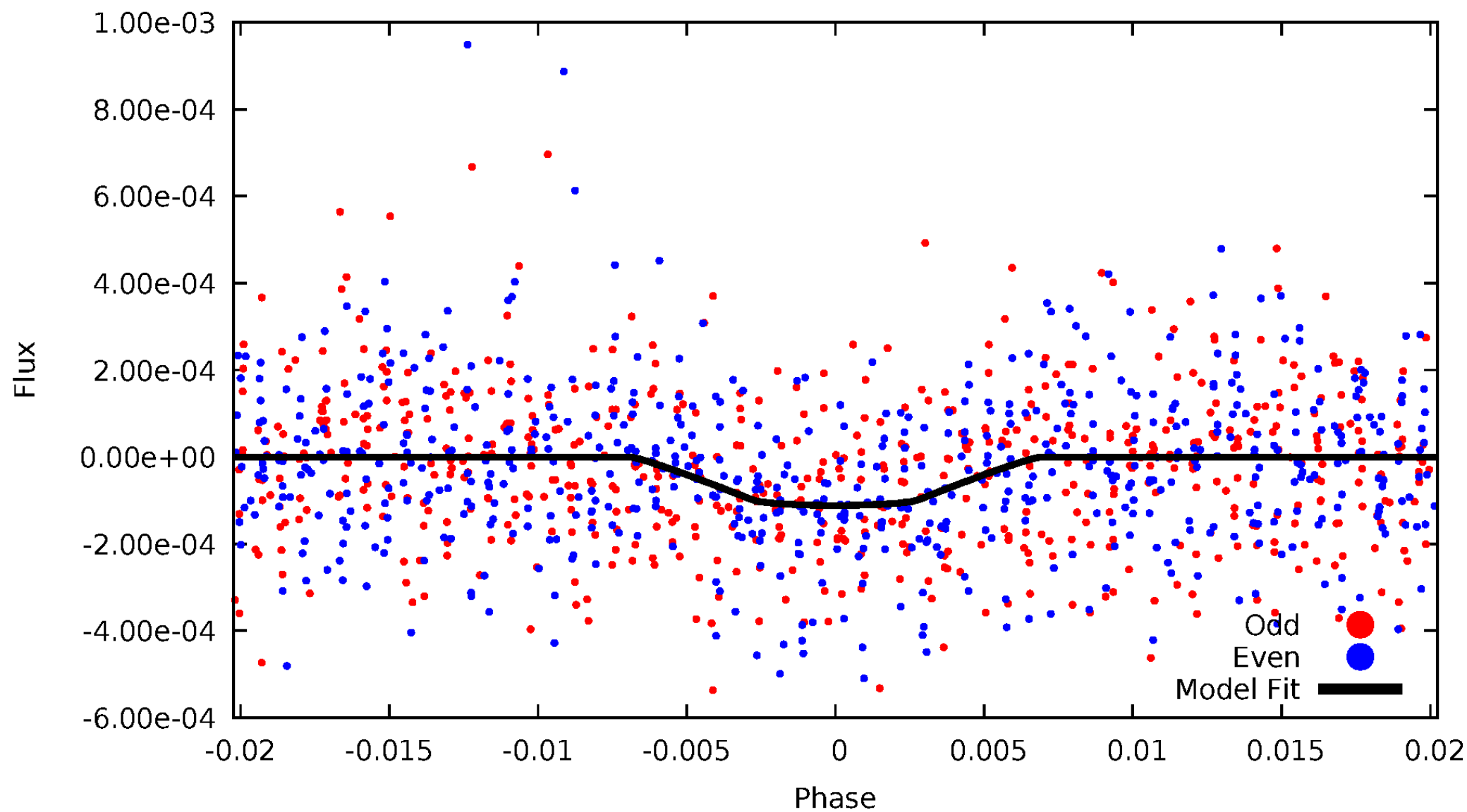


TCE 008091197-01



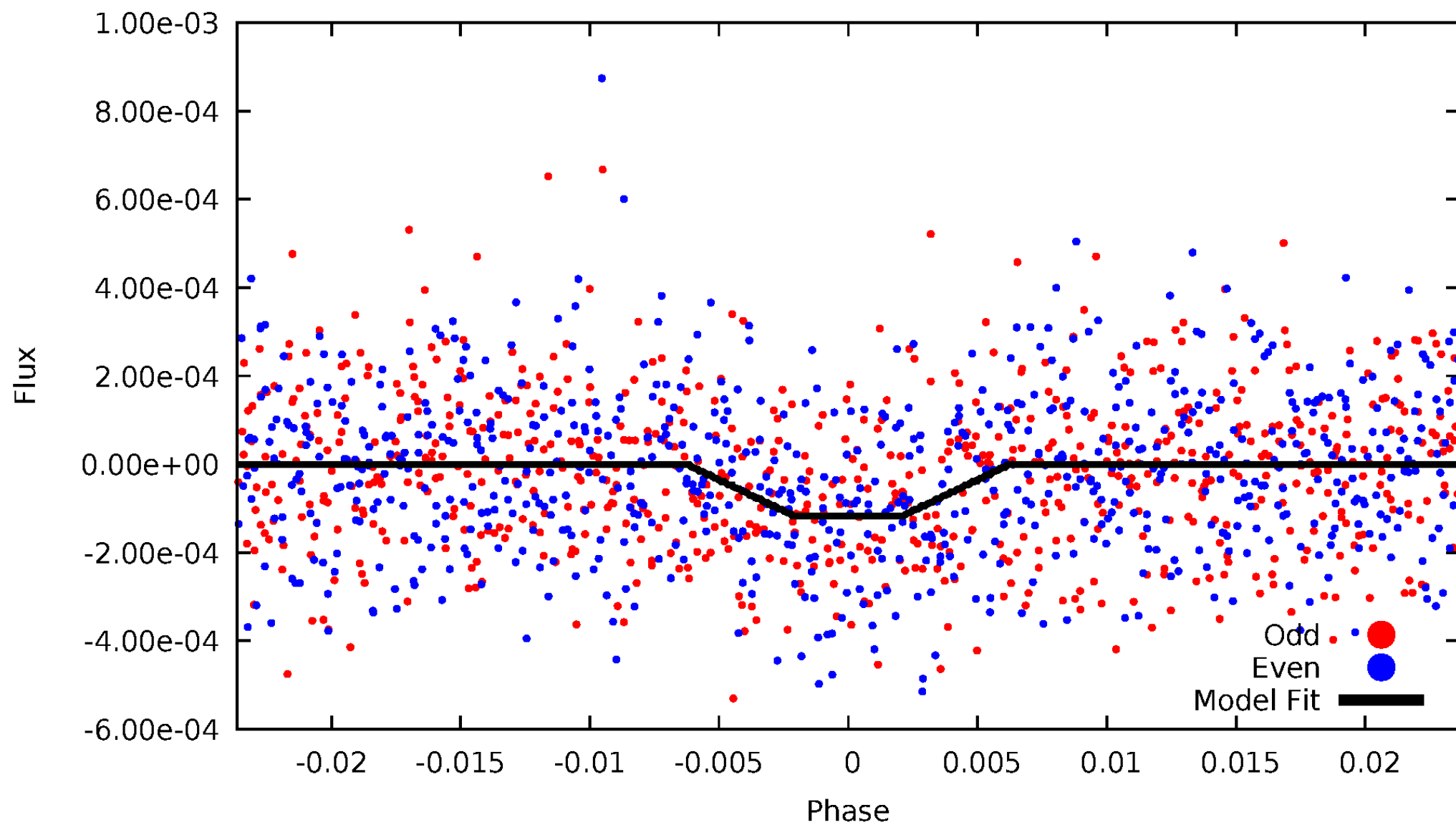
DV Odd/Even

TCE 008091197-01

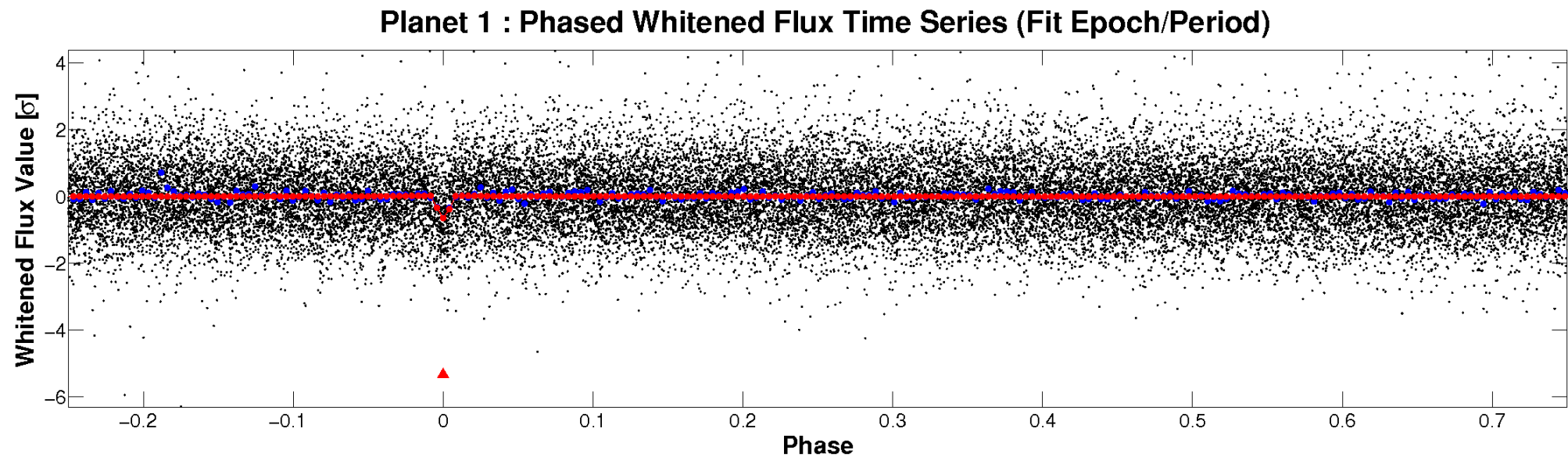
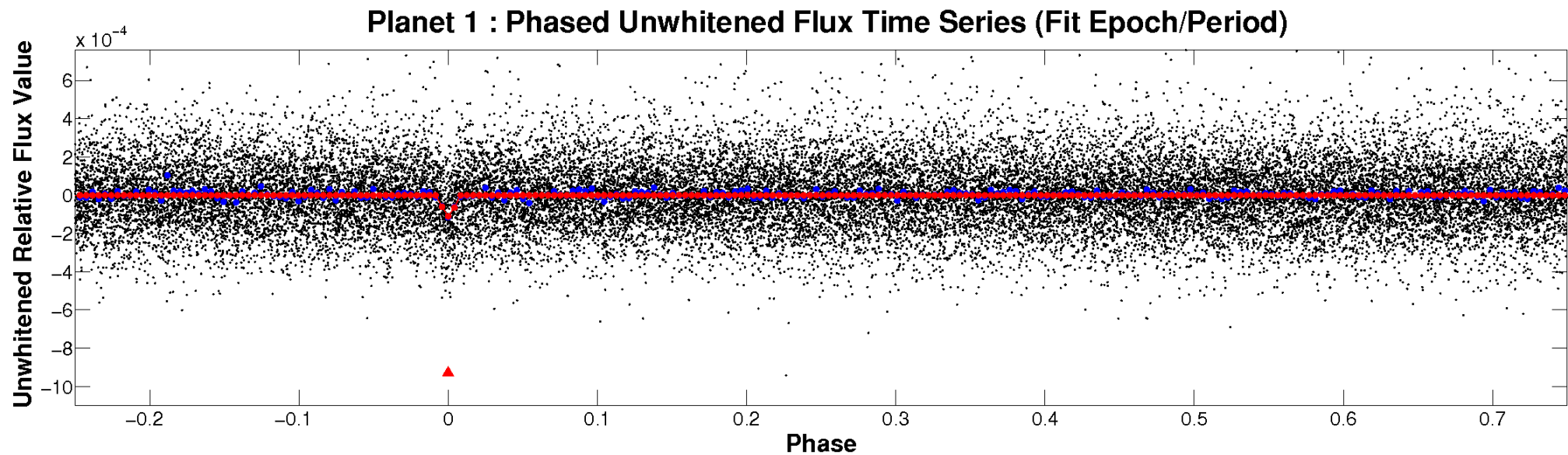


ALT Odd/Even

TCE 008091197-01

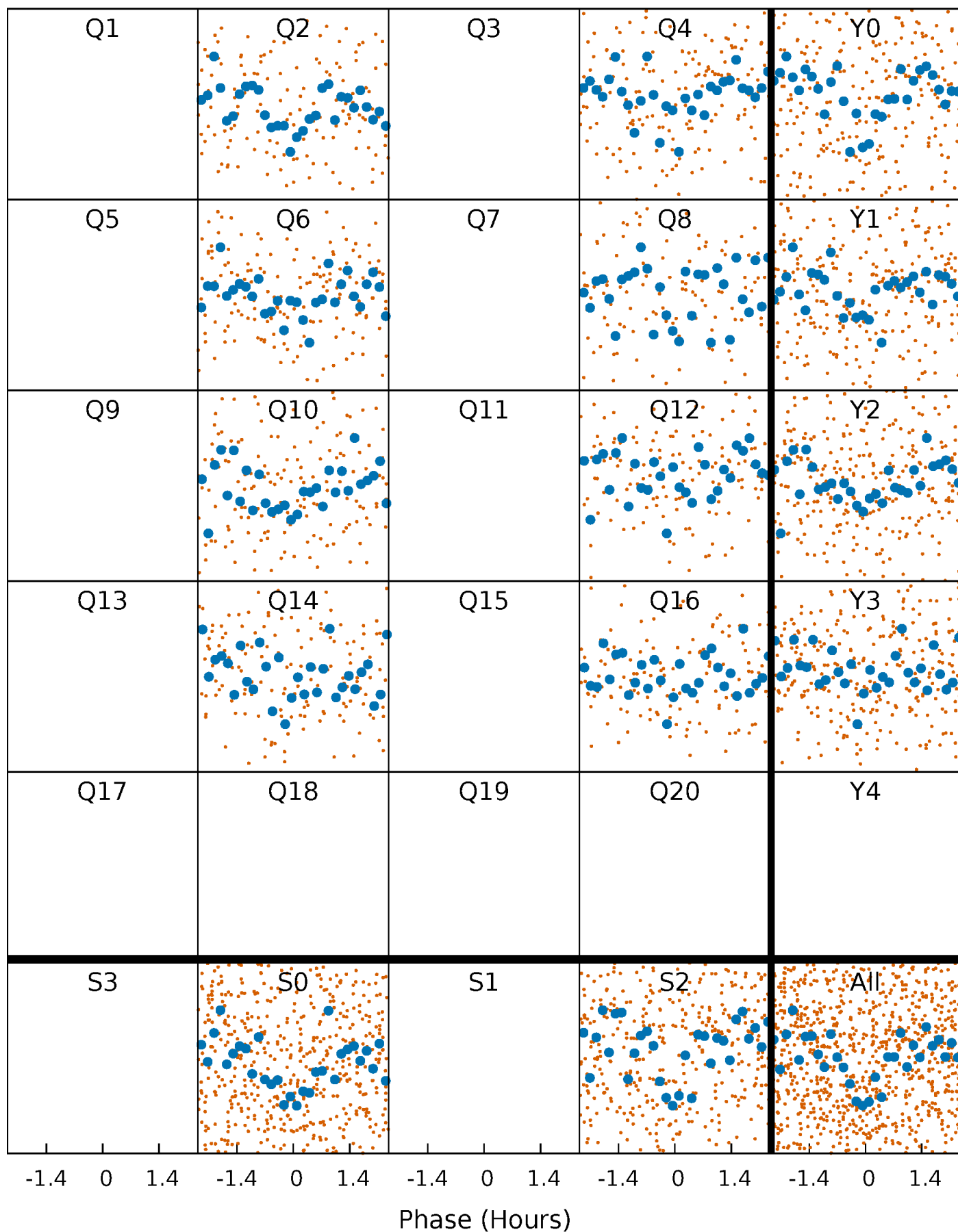


Non-Whitened Vs. Whitened Light Curve



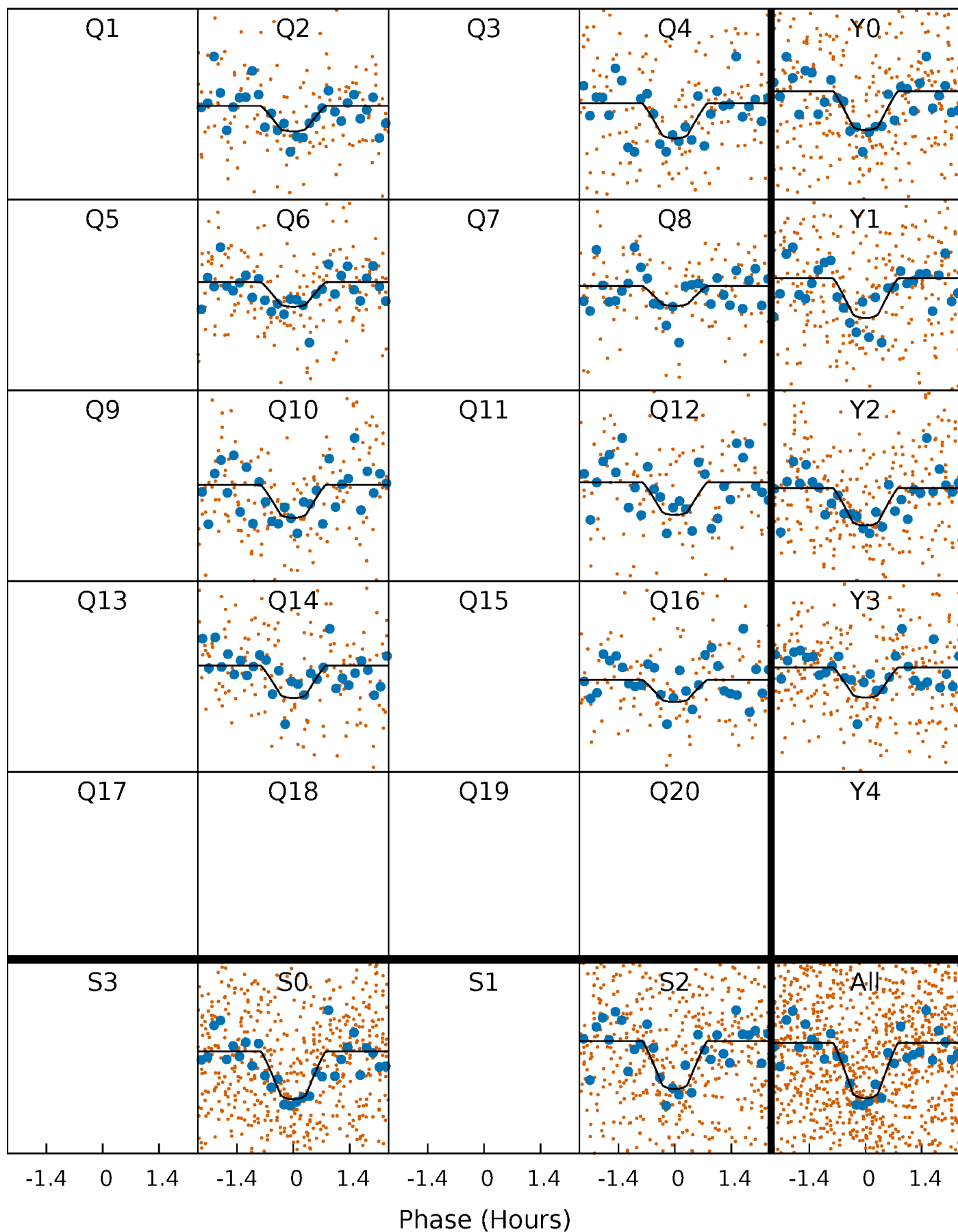
PDC Quarter-Phased Transit Curves

TCE 008091197-01 P= 4.886987 Days $T_0=132.880152$ (BKJD)



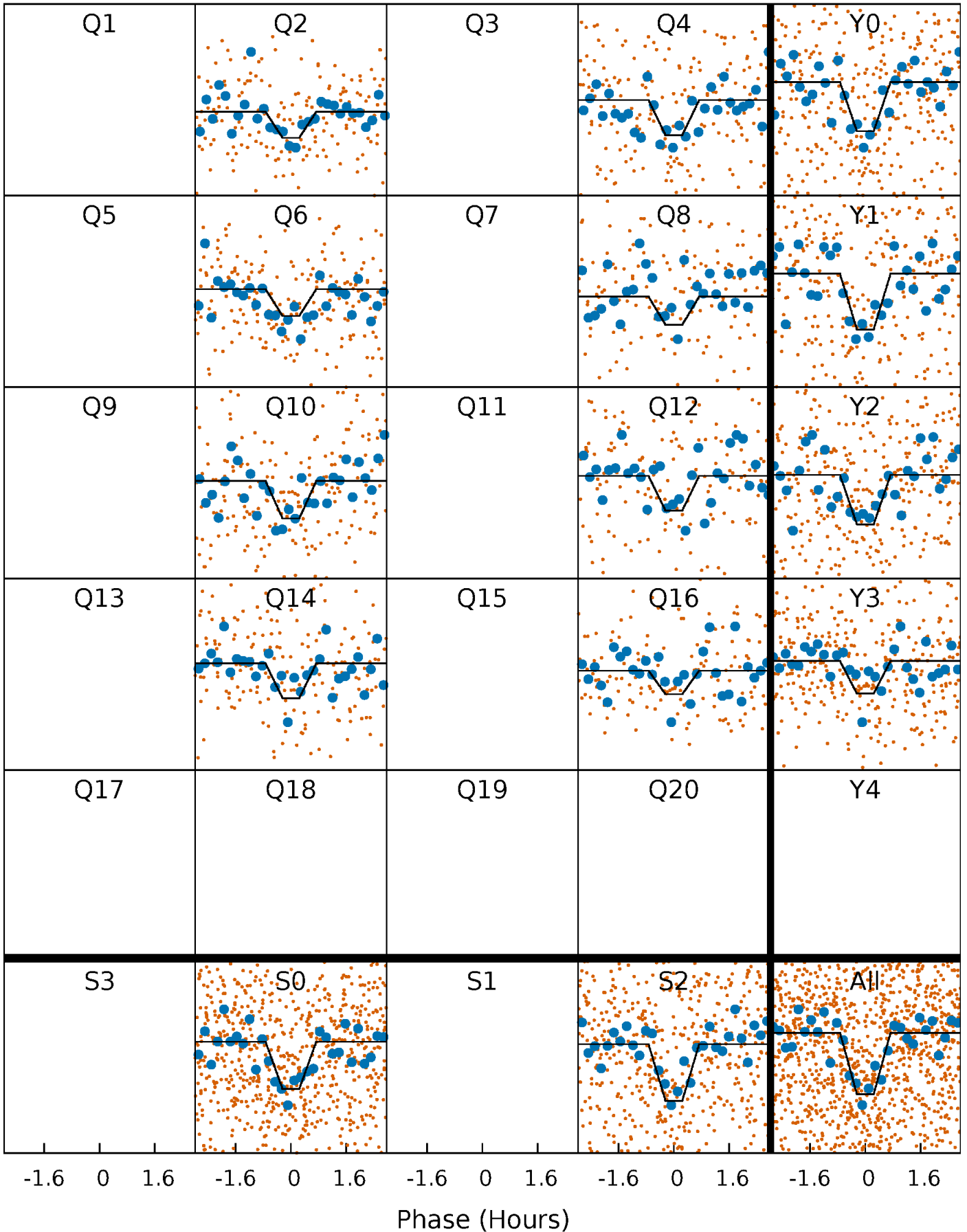
DV Quarter-Phased Transit Curves

TCE 008091197-01 P= 4.886987 Days $T_0=132.880152$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

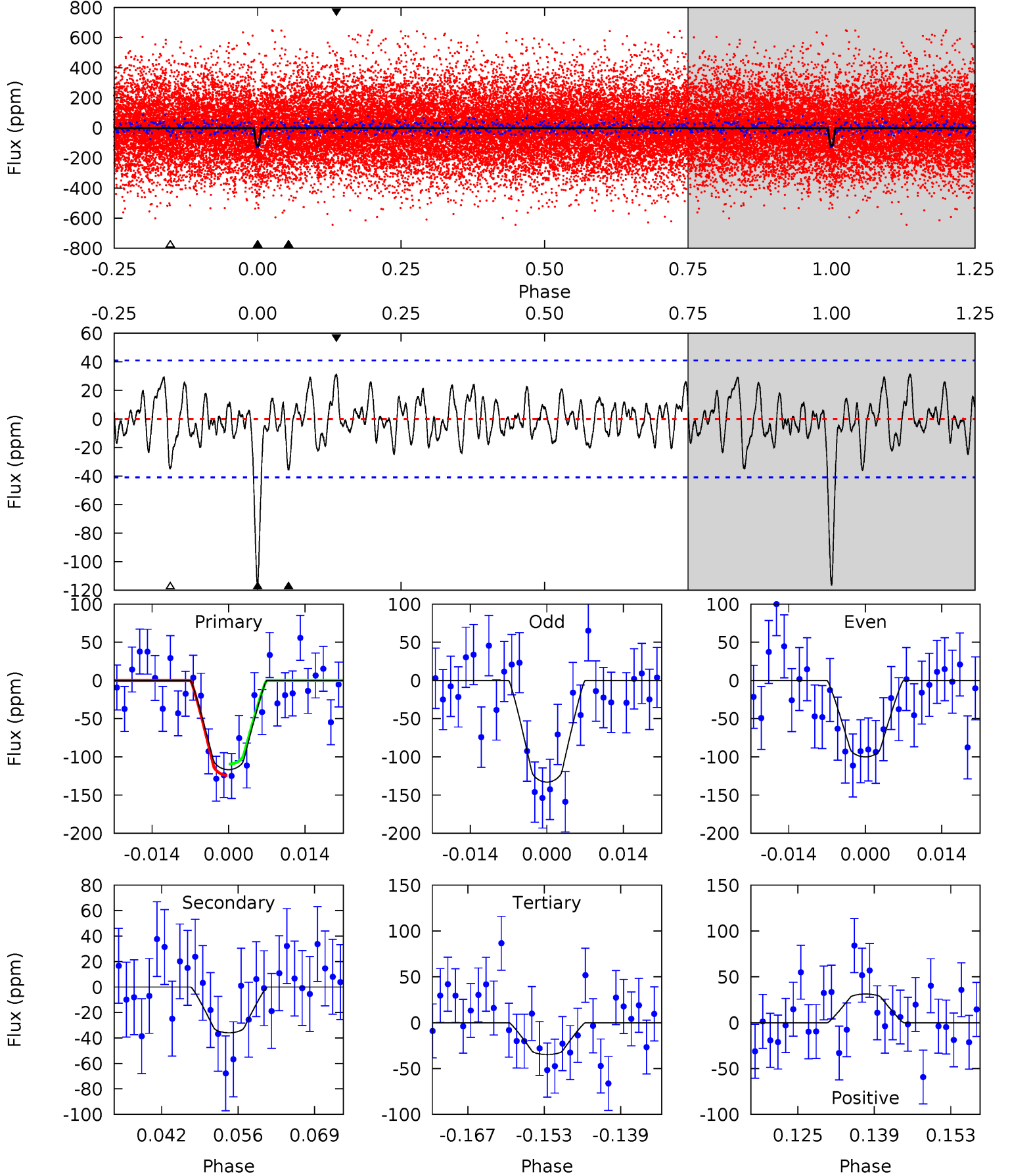
TCE 008091197-01 P= 4.886969 Days $T_0=132.882259$ (BKJD)



DV Model-Shift Uniqueness Test

008091197-01, P = 4.886987 Days, E = 132.880152 Days

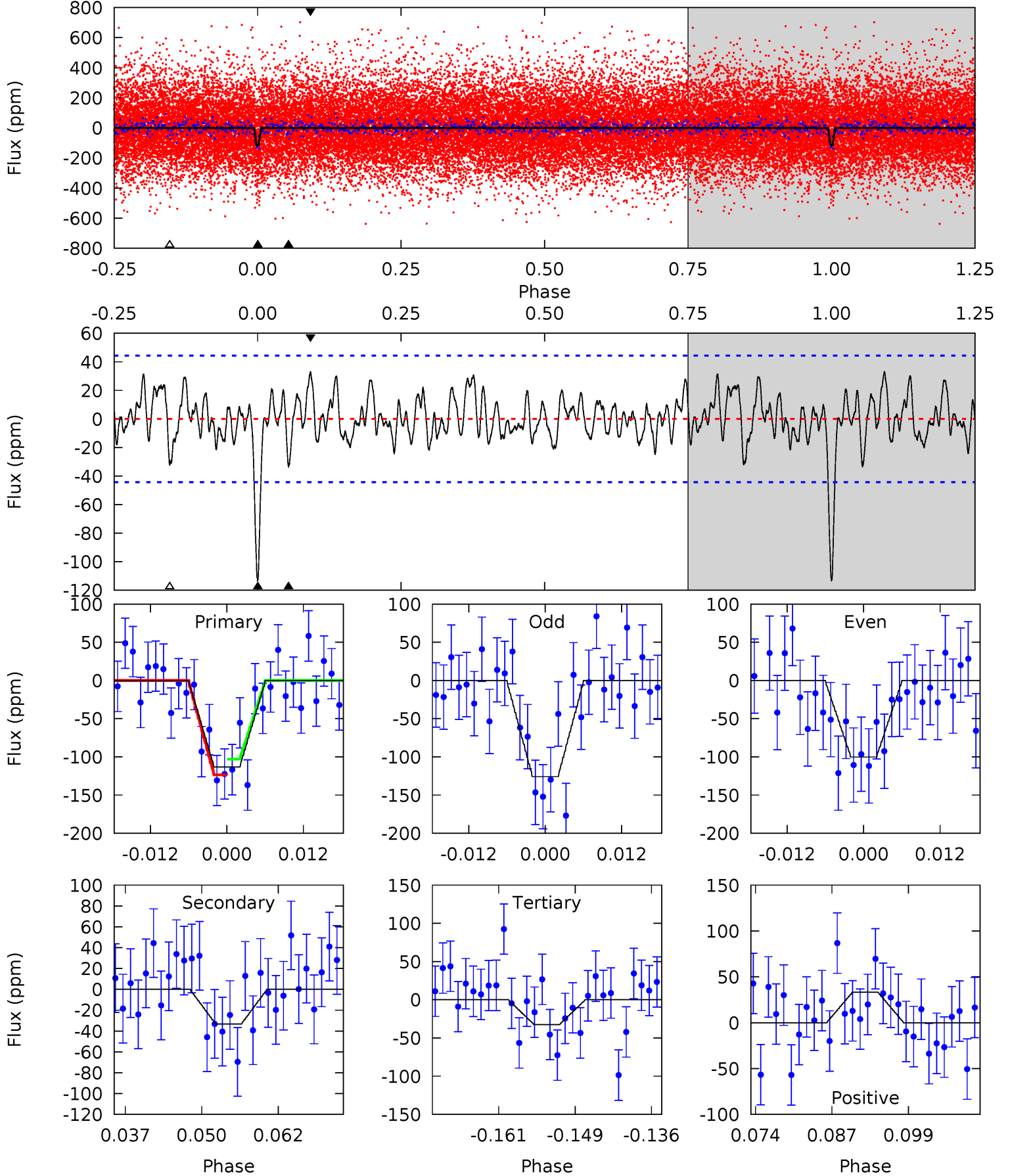
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
14.1	4.35	4.21	3.79	4.96	2.46	1.42	9.94	10.4	0.15	0.57	2.01	1.17	0.21	0.91



Alt Model-Shift Uniqueness Test

008091197-01, P = 4.886969 Days, E = 132.882259 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
12.7	3.75	3.64	3.72	4.99	2.50	1.38	9.08	9.00	0.11	0.03	1.45	1.17	0.23	1.17



Stellar Parameters For KIC 008091197

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	6152^{+193}_{-257}	$4.464^{+0.058}_{-0.232}$	$-0.100^{+0.250}_{-0.300}$	$1.009^{+0.341}_{-0.114}$	$1.079^{+0.151}_{-0.151}$	$1.480^{+0.438}_{-0.791}$
	+3%/-4%	+1%/-5%	+250%/-300%	+34%/-11%	+14%/-14%	+30%/-53%
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 008091197-01 / KOI 6960.01

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	A_{obs}
DV	-36 ± 8	$1.53^{+1.12}_{-0.92}$	1625^{+115}_{-94}	4342^{+2146}_{-748}	28^{+141}_{-18}
Alt.	-33 ± 9	$1.38^{+1.12}_{-0.85}$	1619^{+132}_{-85}	4422^{+2390}_{-841}	30^{+158}_{-21}

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

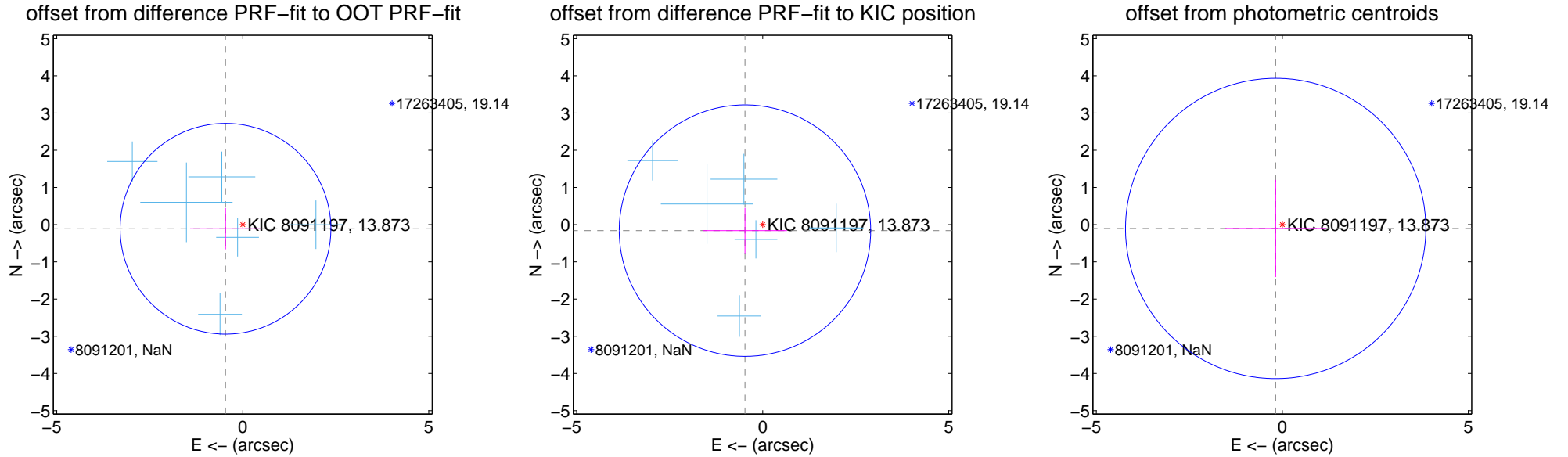
DV Centroid Data

Supplemental centroid analysis for 008091197-01. Kepler magnitude: 13.87. Transit SNR 9.45

There are 6 quarters with good PRF difference image offsets

The direct PRF centroid is offset from the target star catalog position by about 0.09 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.477 ± 0.944	0.50	0.464 ± 0.951	-0.110 ± 0.555
PRF-fit source offset from KIC position	0.502 ± 1.127	0.45	0.476 ± 1.128	-0.160 ± 0.610
photometric centroid source offset	0.21 ± 1.35	0.15	0.18 ± 1.36	-0.10 ± 1.31



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.

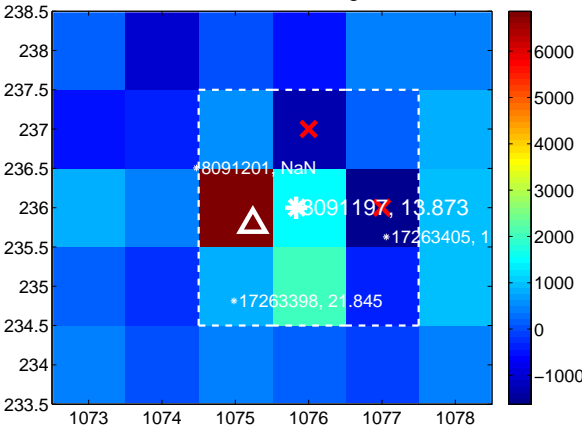
Q1 no difference image



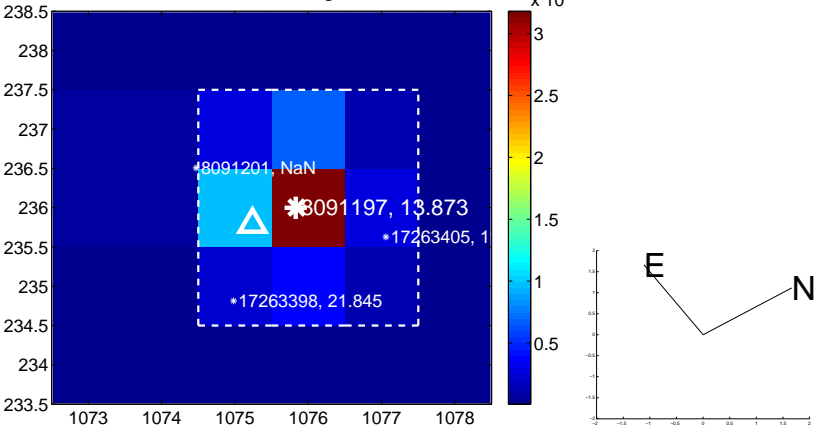
Q1 no OOT image



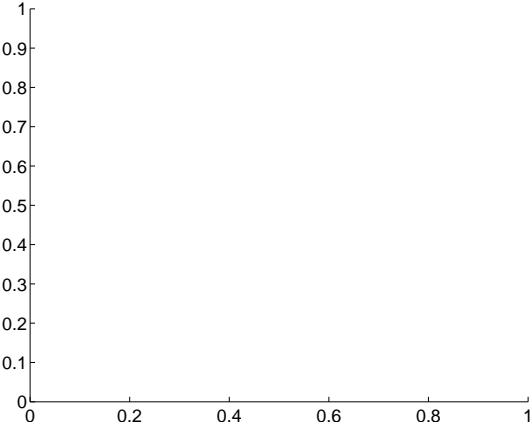
Q2 difference image



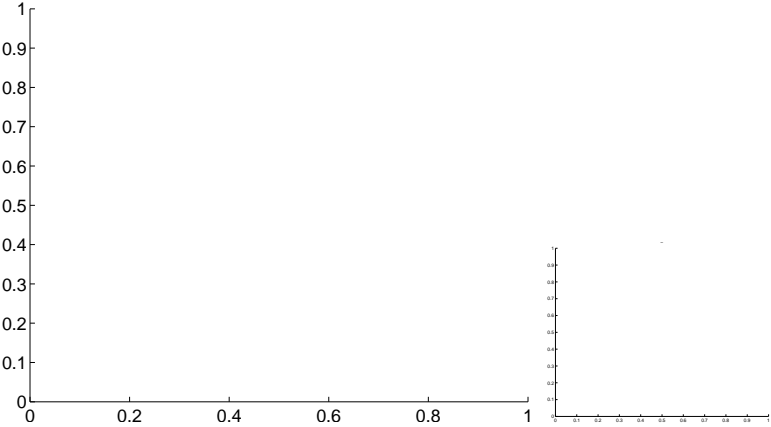
Q2 OOT image



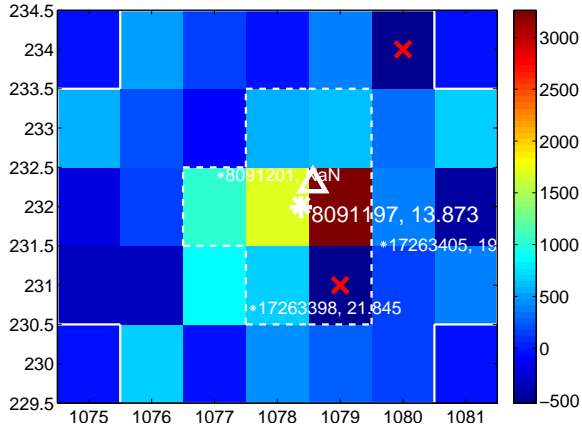
Q3 no difference image



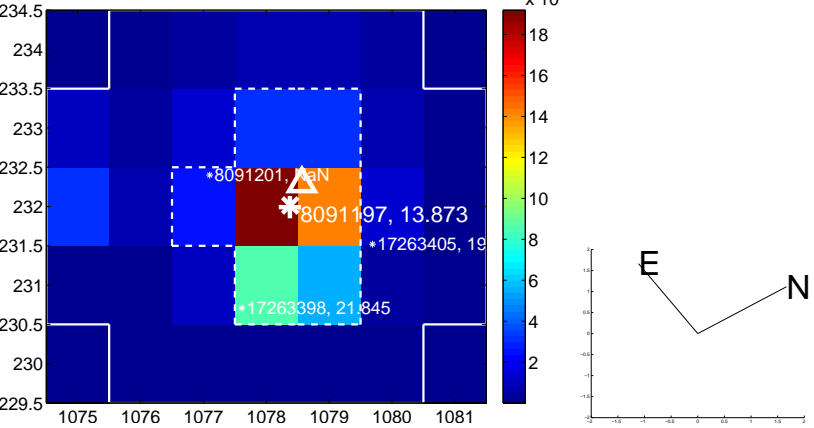
Q3 no OOT image



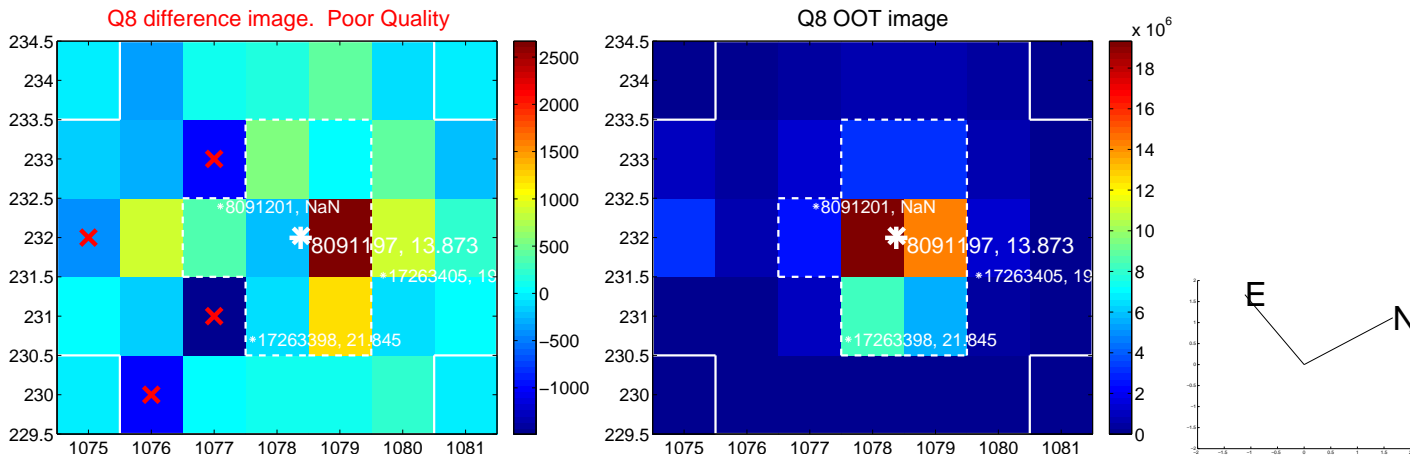
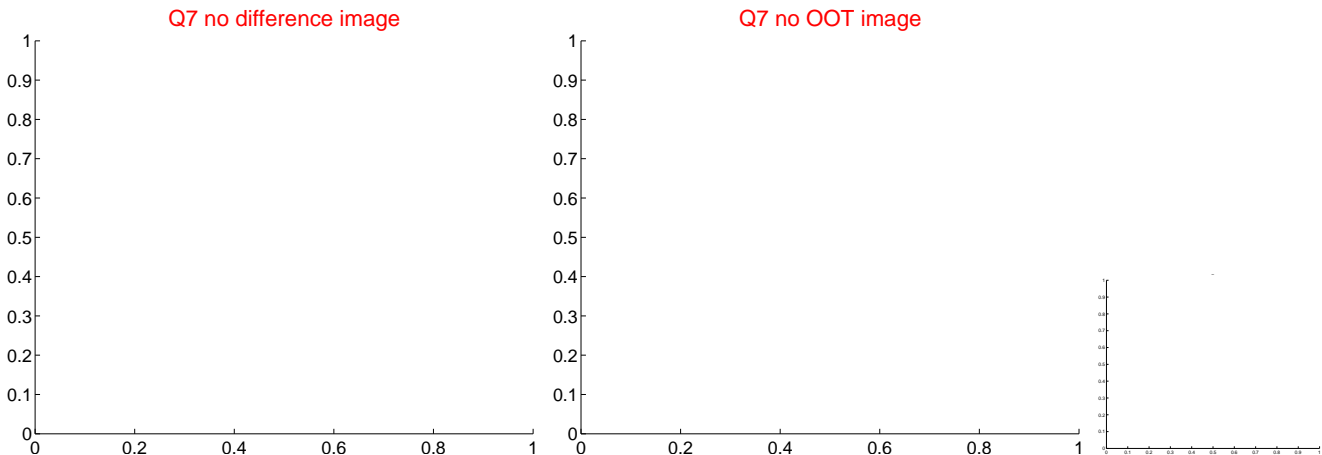
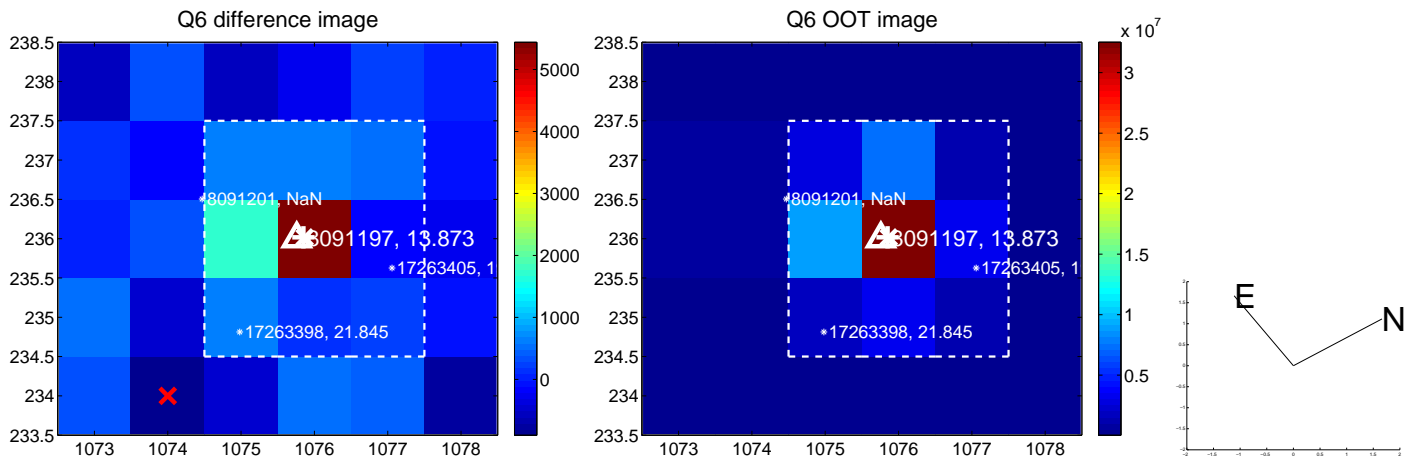
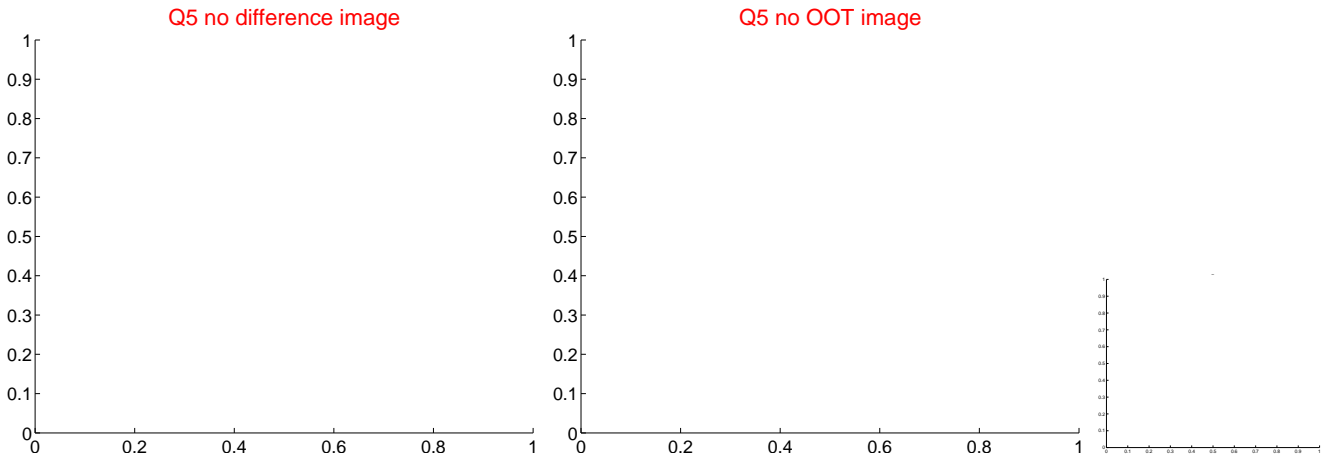
Q4 difference image



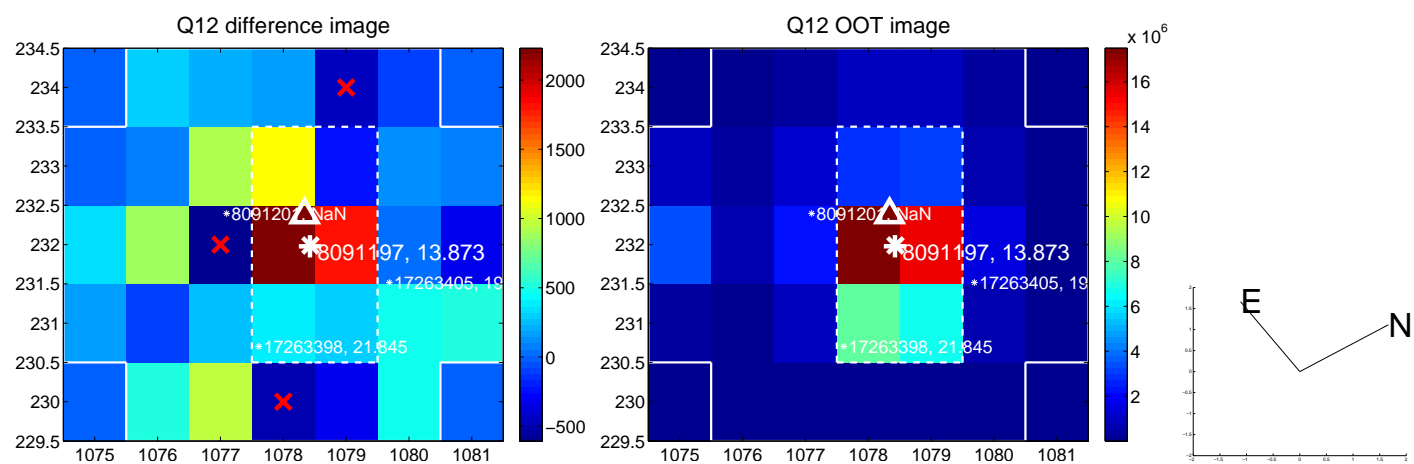
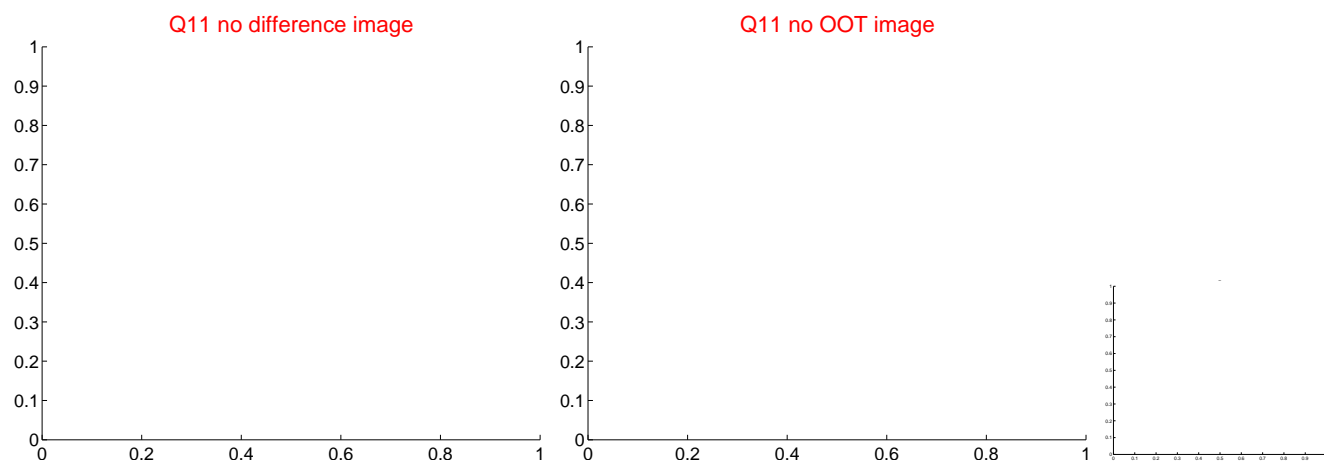
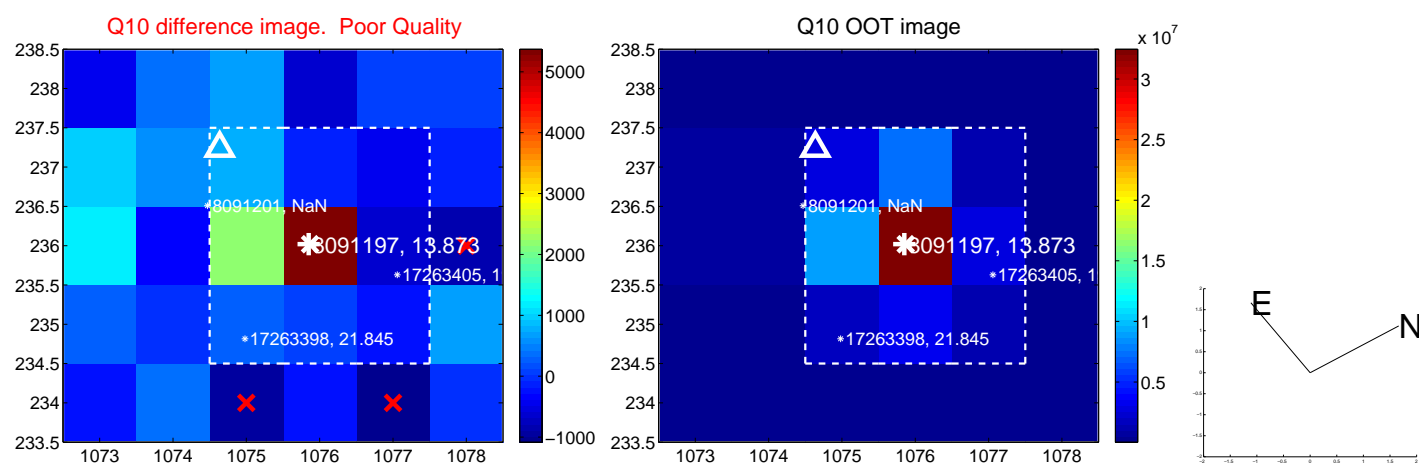
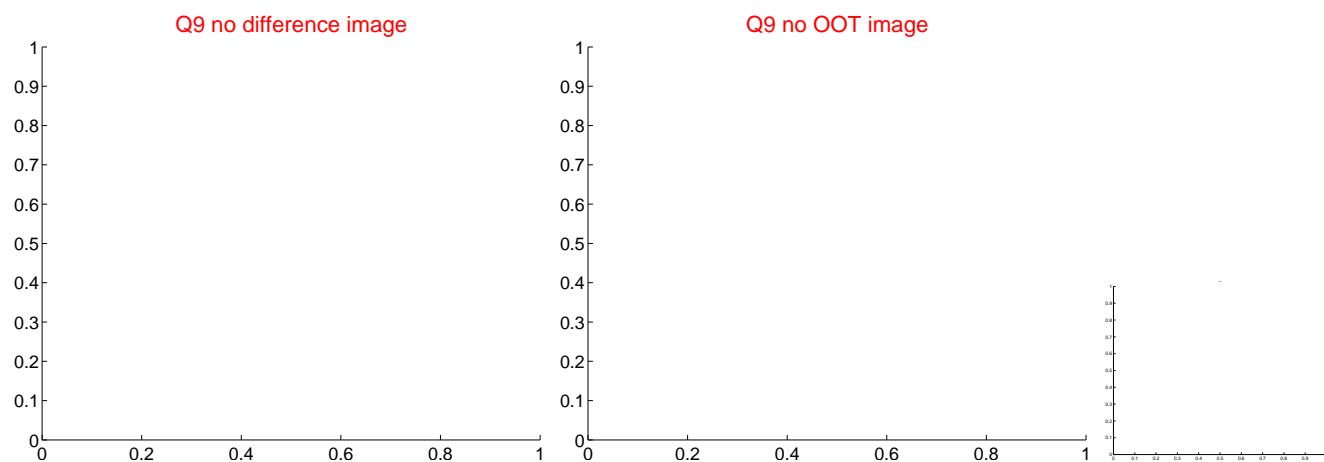
Q4 OOT image



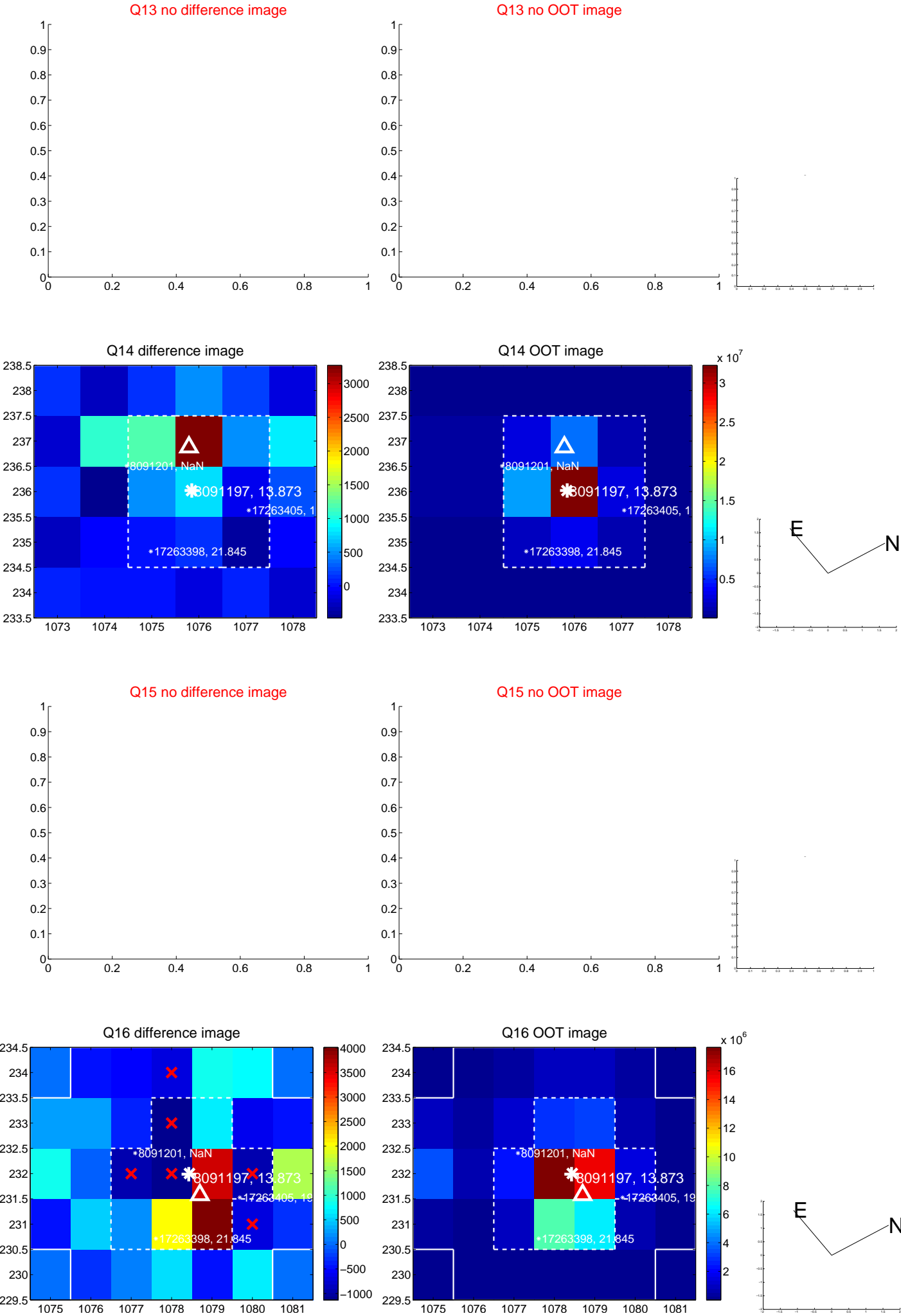
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value



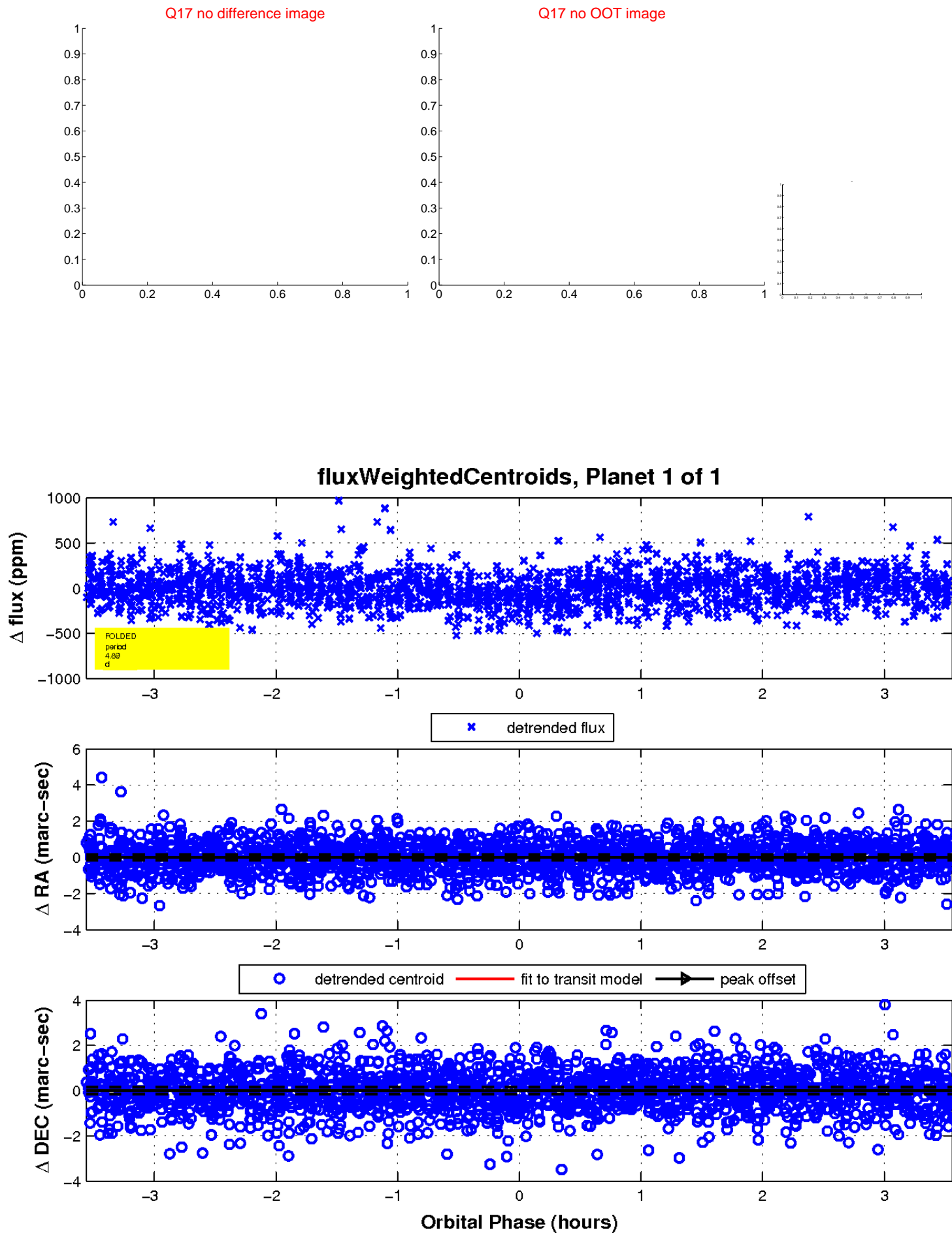
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value



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



UKIRT Image

Declination

