

KIC 008092189

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})
008092189-01	OBS	No	347.347667	341.651463	356.1	27.300	8.6	8.5	0.82	5547	1.76	0.65

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
008092189-01	OBS	FP	0.00	1	0	1	0	INDIV_TRANS_MARSHALL_SKYE—CENT_FEW_DIFFS—HALO_GHOST

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

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

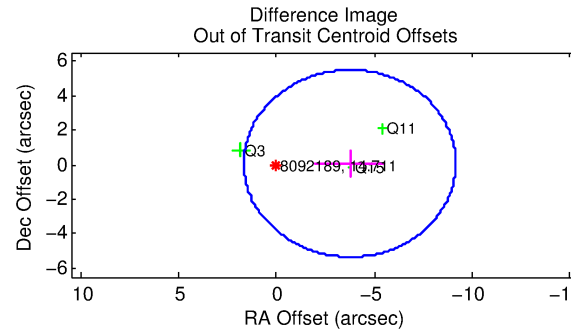
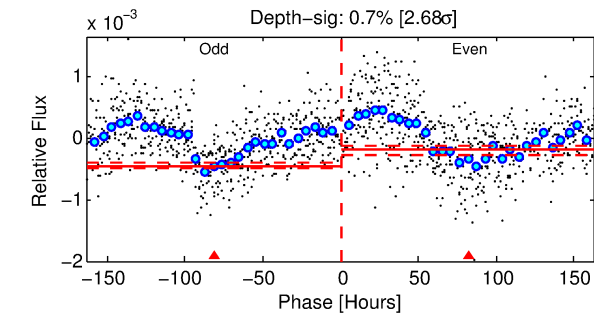
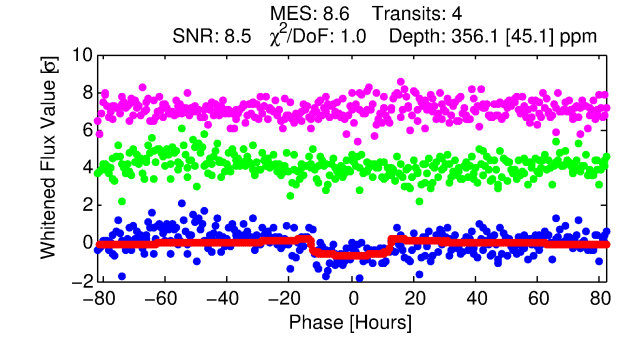
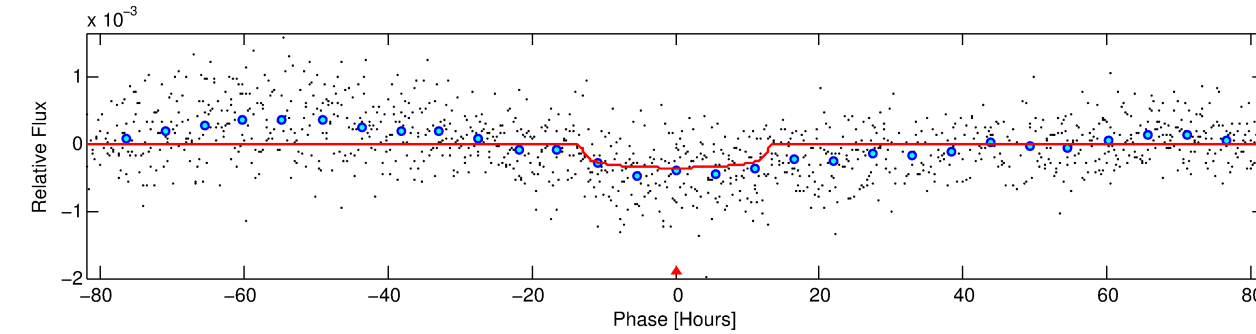
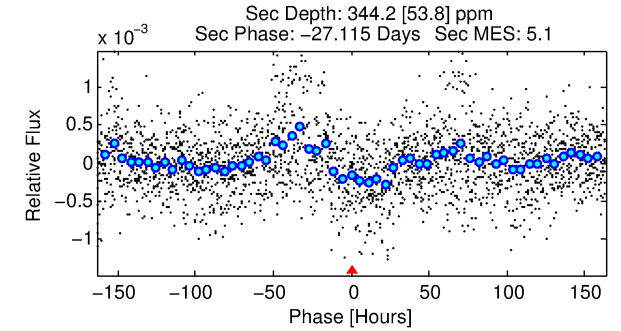
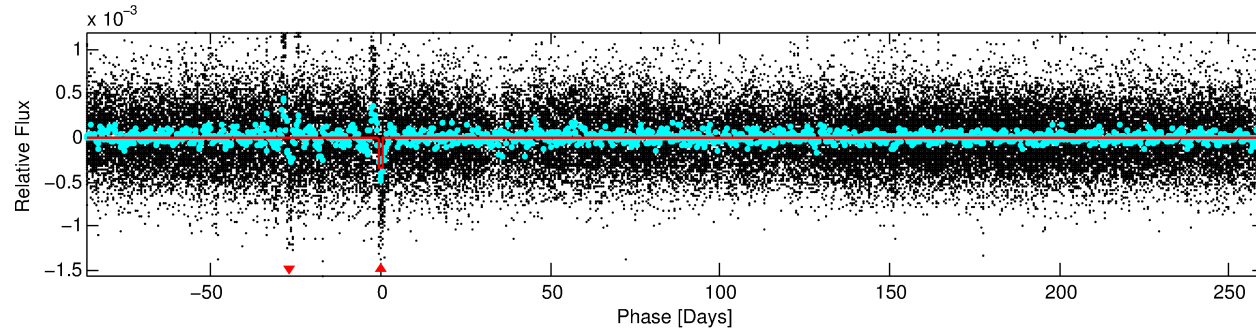
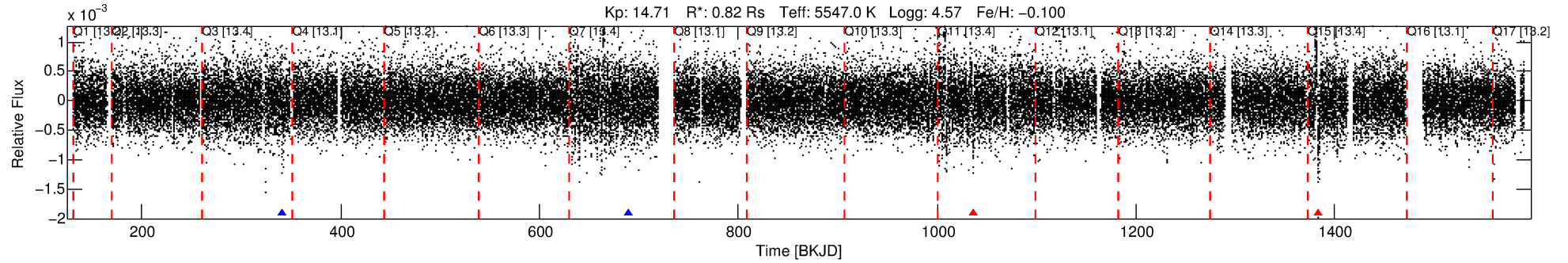
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 008092189-01

No Significant Match Found

DV One-Page Summary

KIC: 8092189 Candidate: 1 of 1 Period: 347.348 d



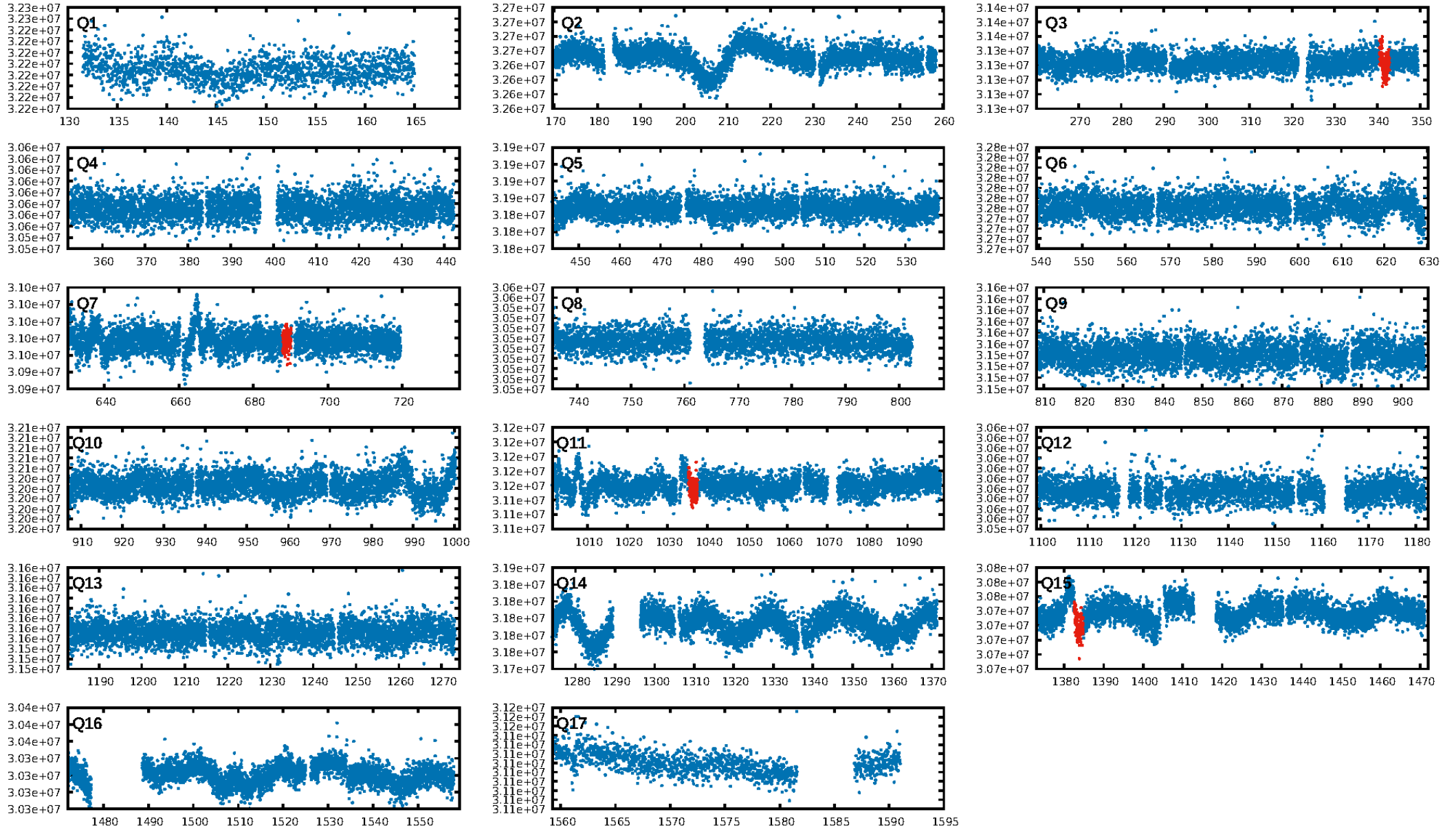
DV Fit Results:

Period = 347.34767 [0.01896] d
Epoch = 341.6515 [0.0341] BKJD
Rp/R* = 0.0197 [0.0031]
a/R* = 55.64 [34.39]
b = 0.84 [0.21]
Seff = 0.65 [0.18]
Teff = 229 [16] K
Rp = 1.77 [0.45] Re
a = 0.9385 [0.1589] AU
Ag = 53527.29 [23051.90] [2.32 σ]
Teffp = 5379 [500] K [10.29 σ]

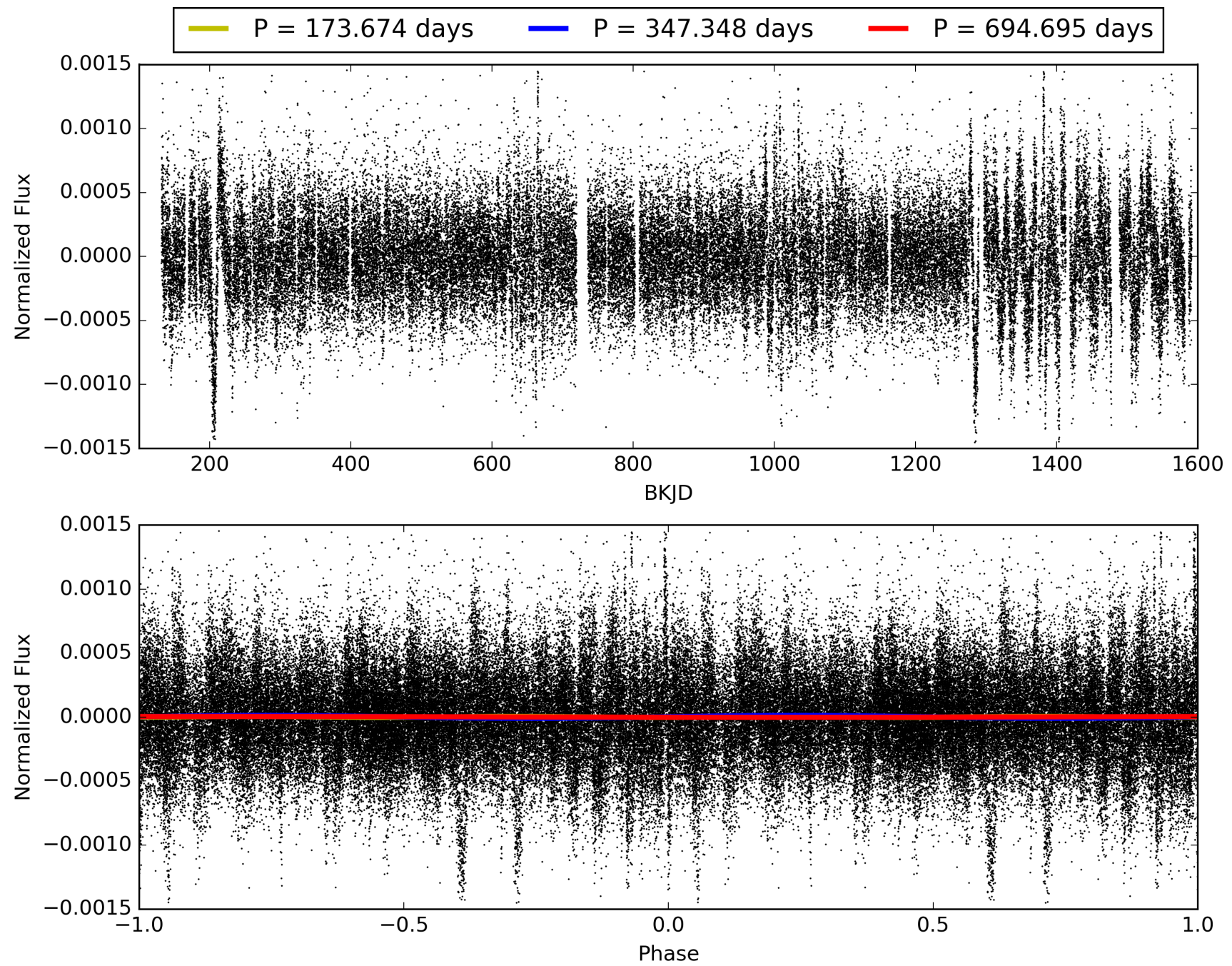
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: 0.1%
ModelChiSquareGof-sig: 100.0%
Bootstrap-pfa: 2.34e-11
RollingBand-fgt: 0.50 [2/4]
GhostDiagnostic-chr: 0.156
Centroid-sig: 14.3%
Centroid-so: 1.829 arcsec [0.97 σ]
OotOffset-rm: 3.747 arcsec [2.08 σ]
KicOffset-rm: 3.935 arcsec [2.11 σ]
OotOffset-st: 0/3/0/0 [3]
KicOffset-st: 0/3/0/0 [3]
DiffImageQuality-fgm: 0.33 [1/3]
DiffImageOverlap-fno: 1.00 [3/3]

TCE 008092189-01, PDC Light Curves

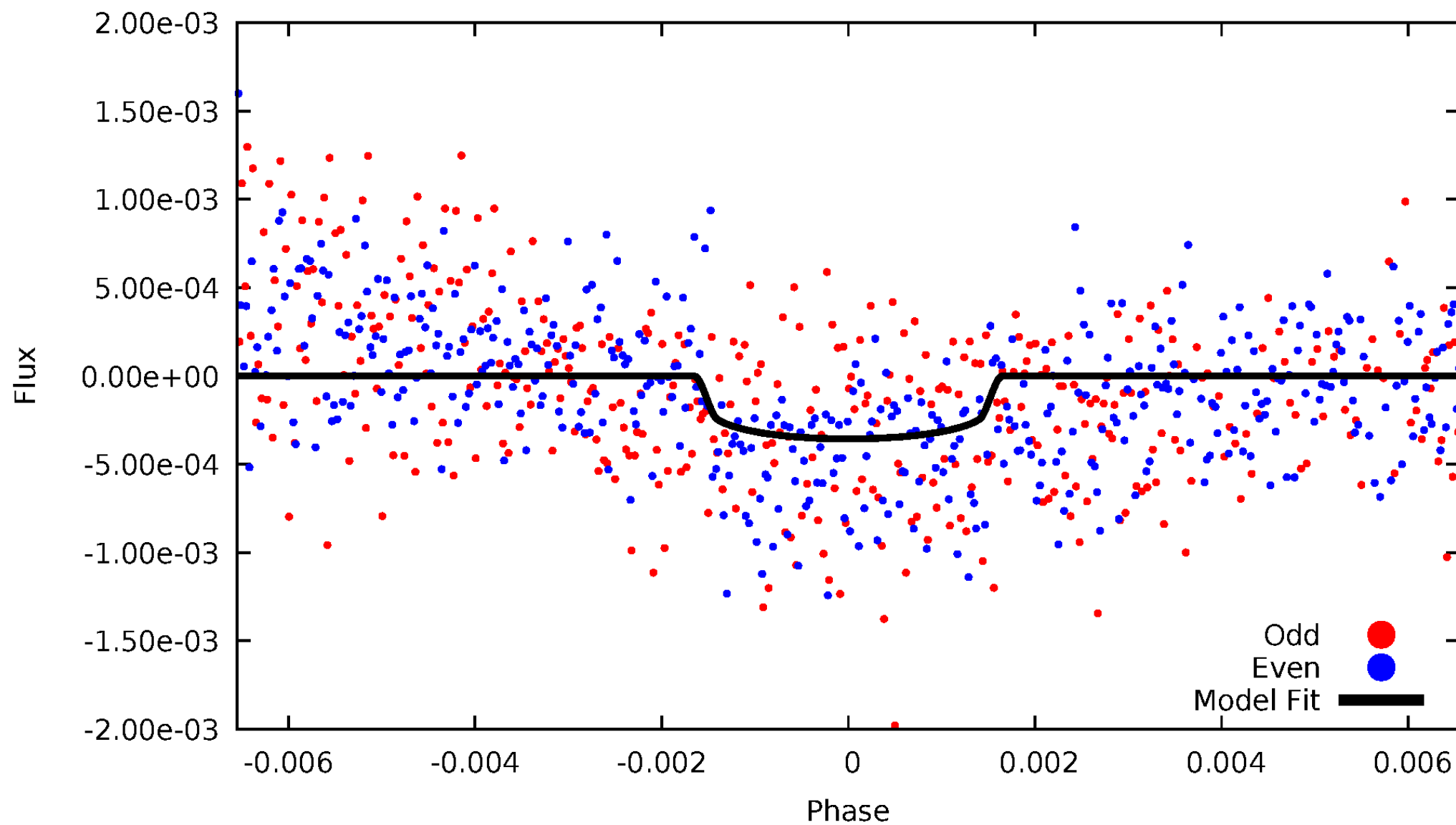


TCE 008092189-01



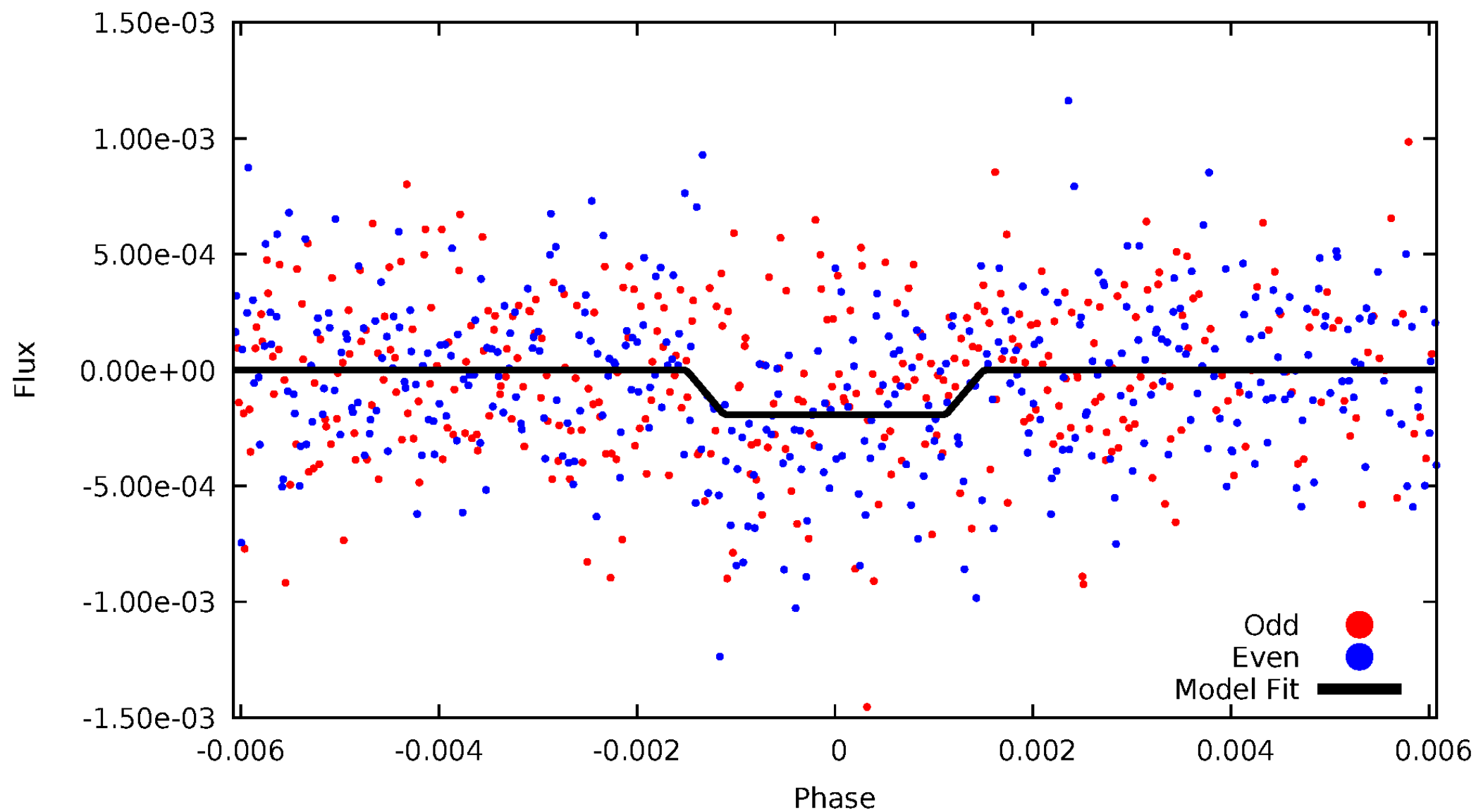
DV Odd/Even

TCE 008092189-01



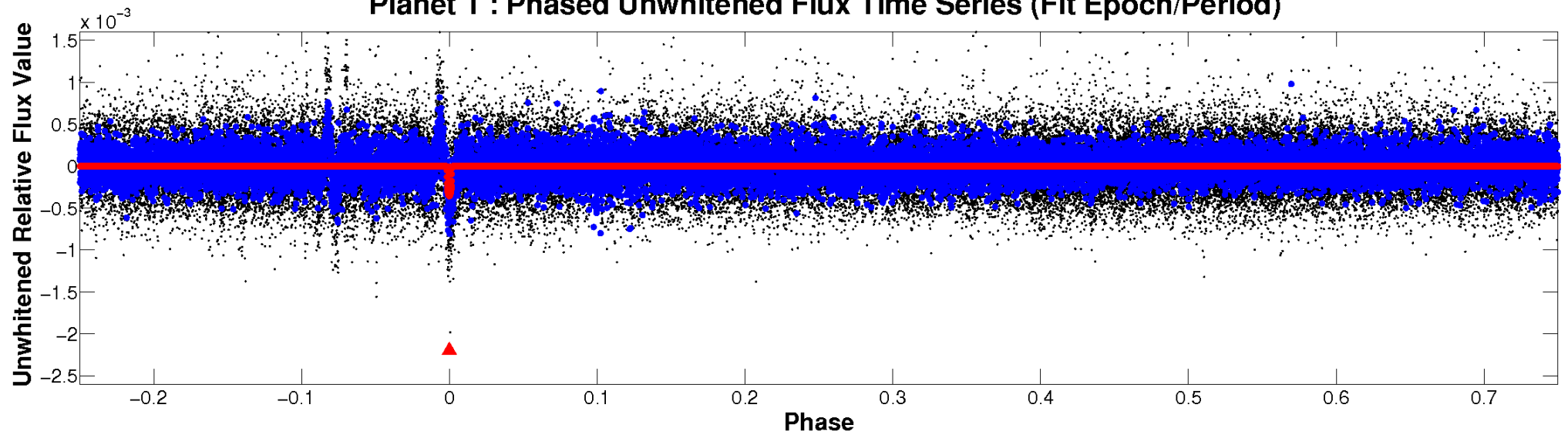
ALT Odd/Even

TCE 008092189-01

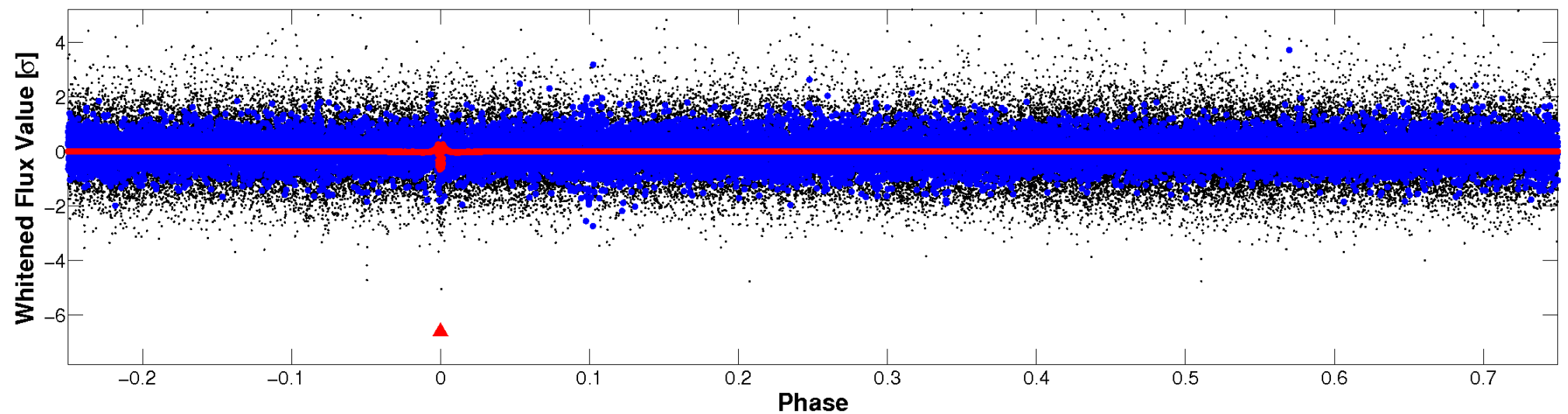


Non-Whitened Vs. Whitened Light Curve

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

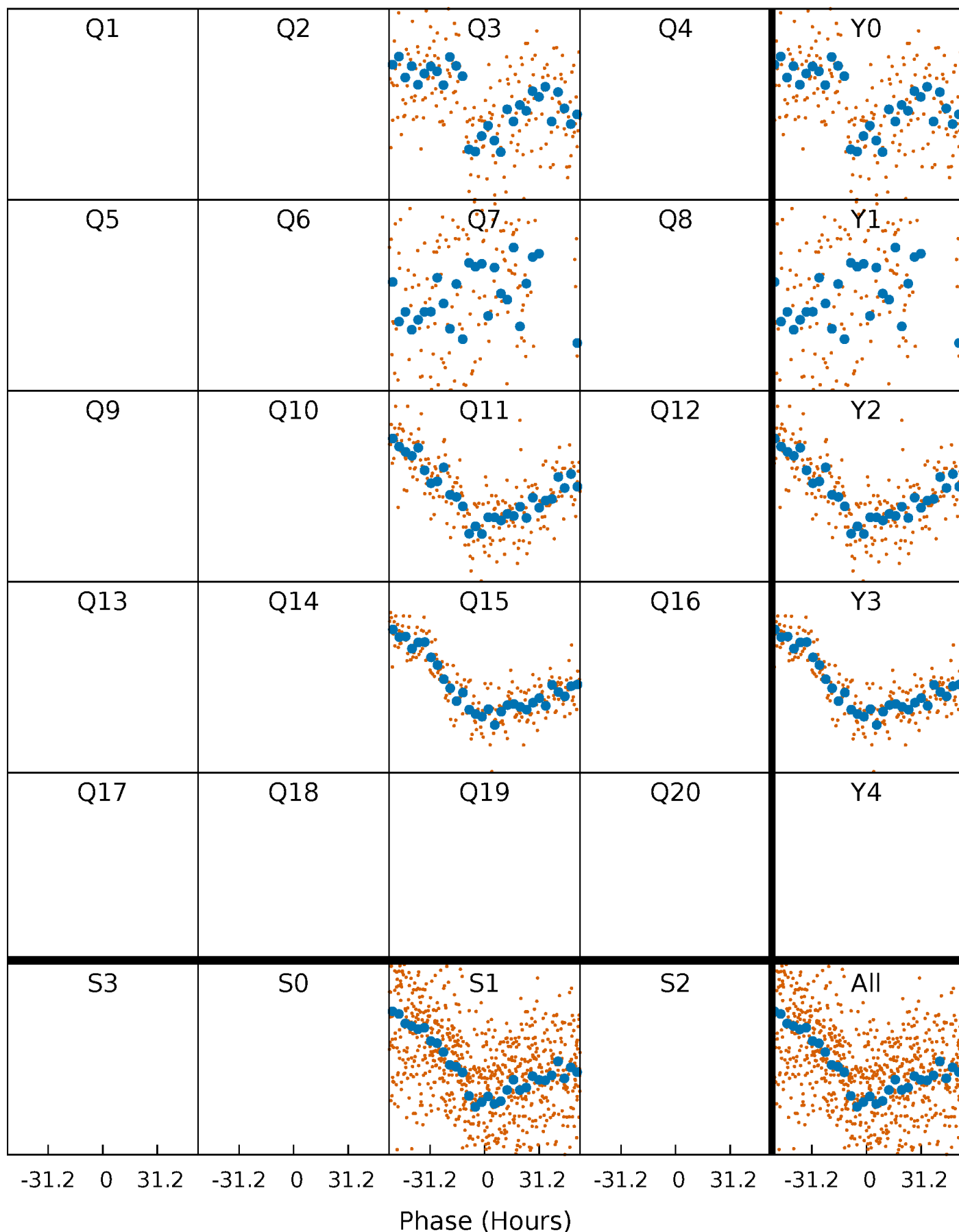


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



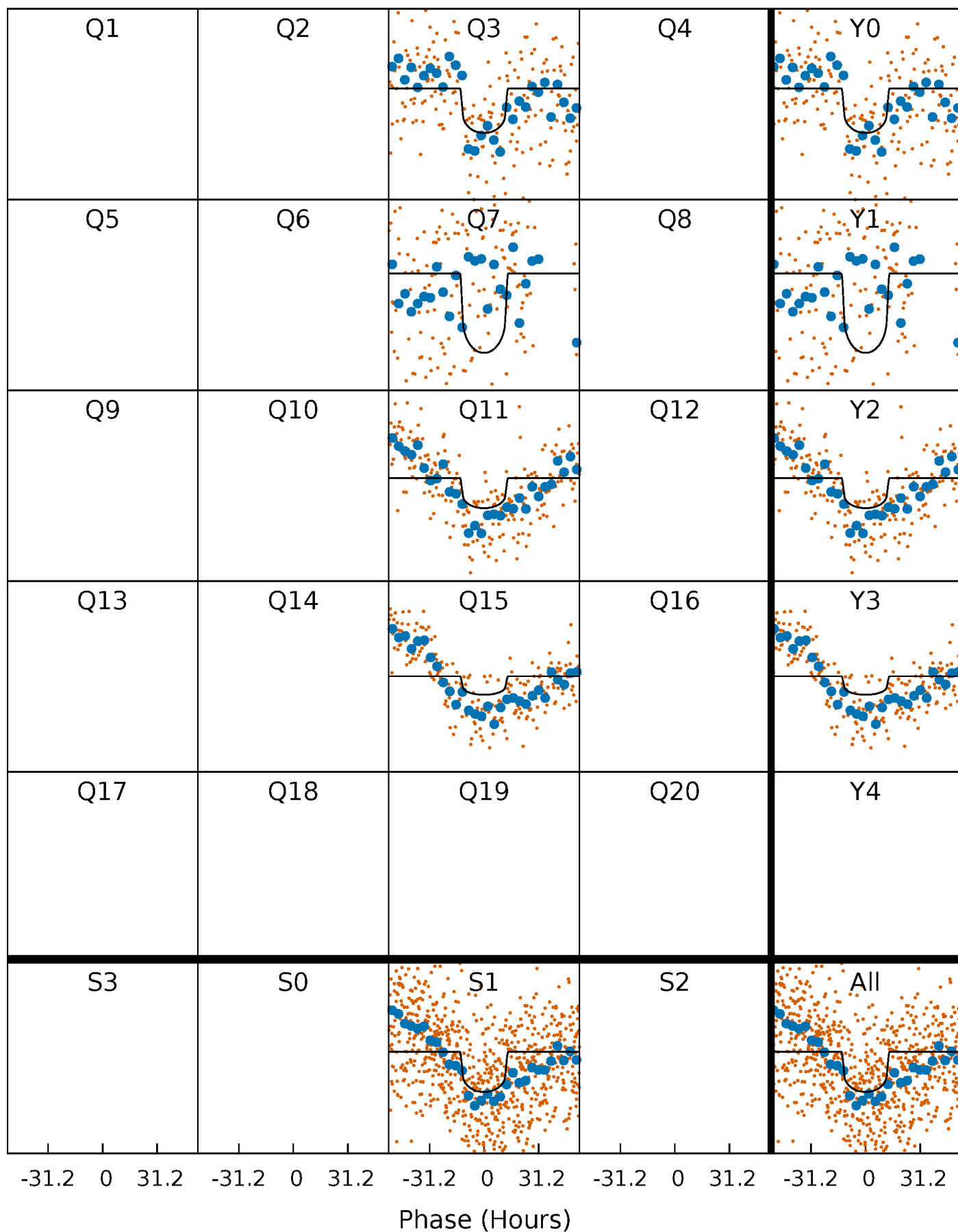
PDC Quarter-Phased Transit Curves

TCE 008092189-01 P=347.347667 Days $T_0=341.651463$ (BKJD)



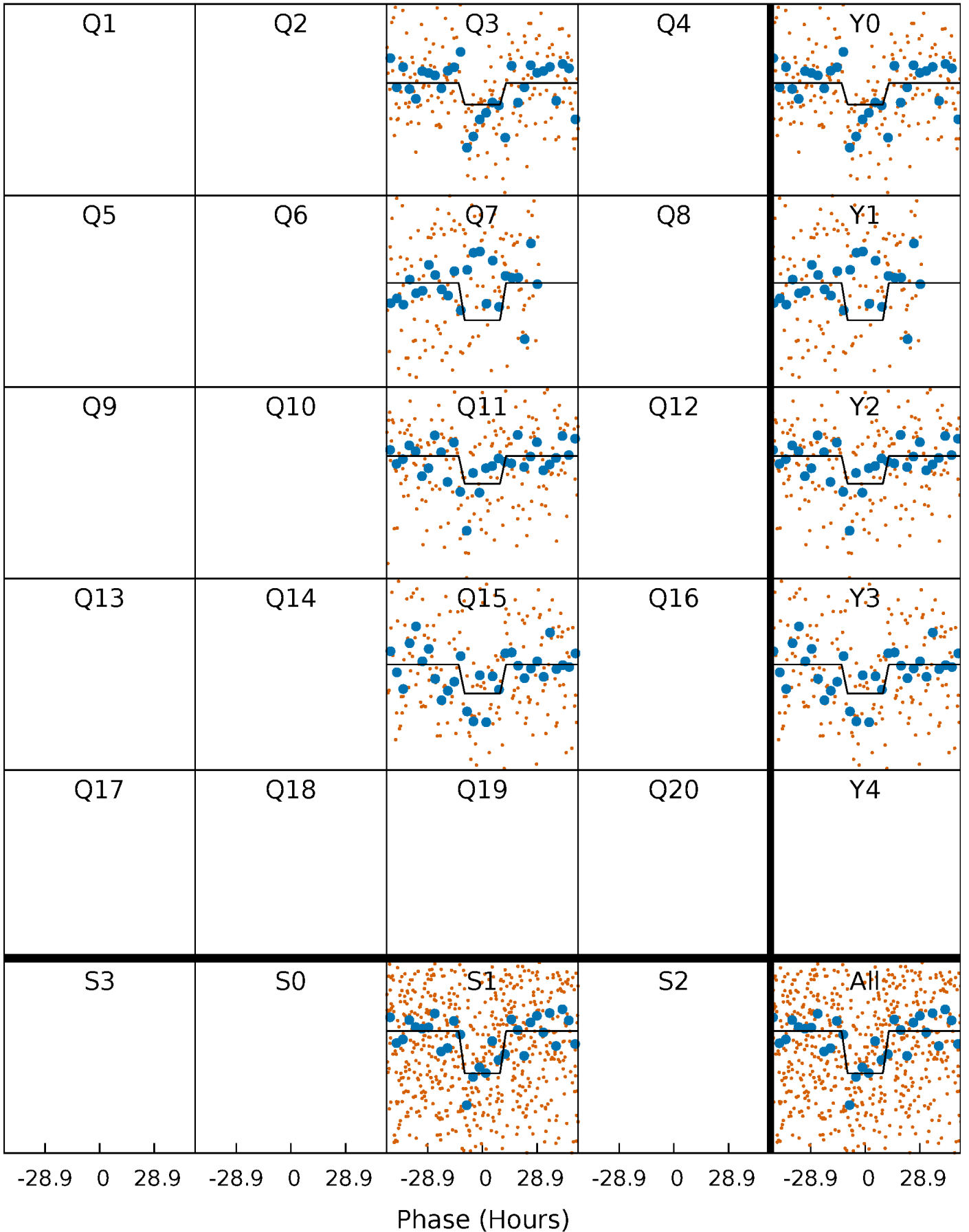
DV Quarter-Phased Transit Curves

TCE 008092189-01 P=347.347667 Days $T_0=341.651463$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

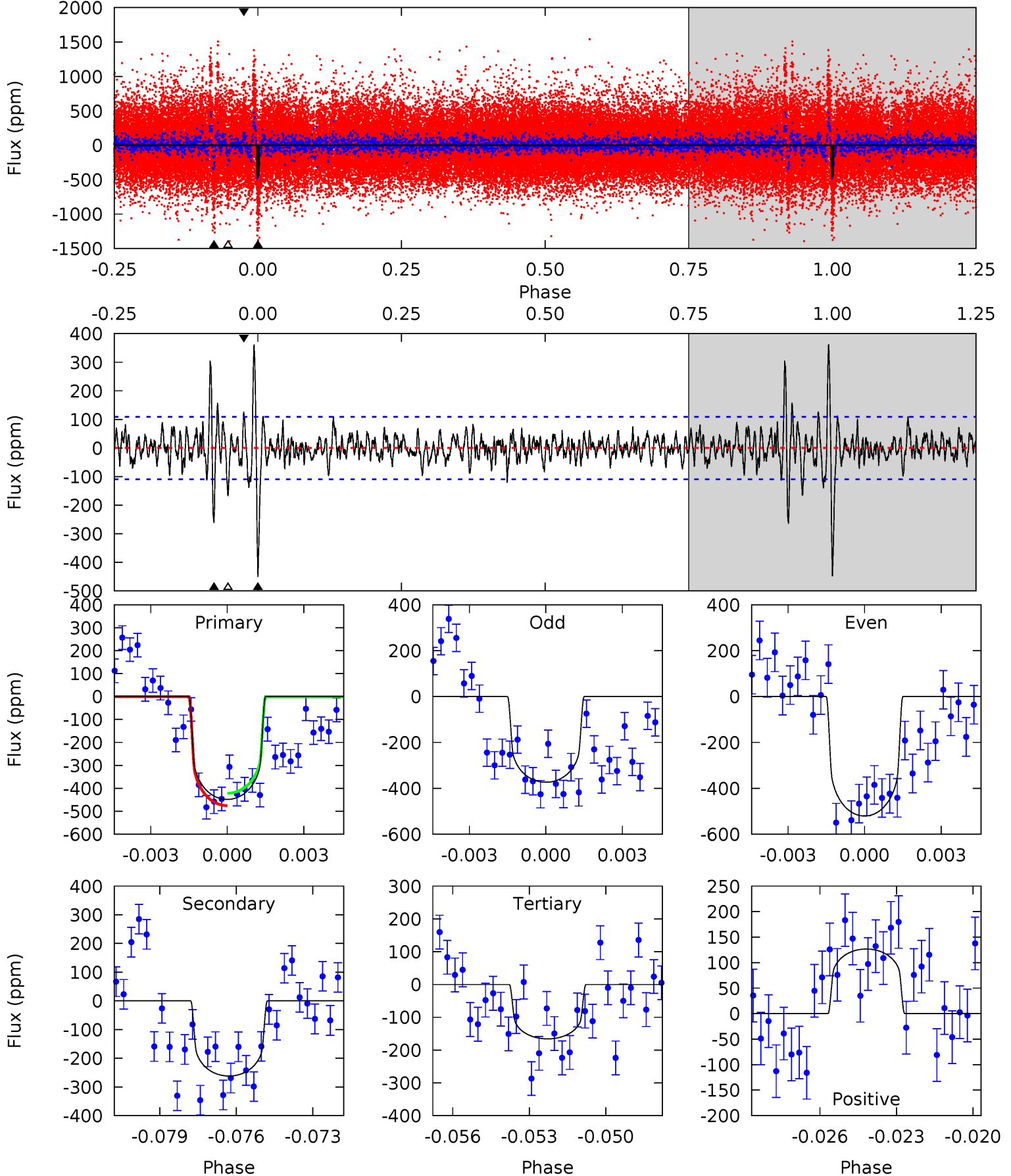
TCE 008092189-01 P=347.384142 Days $T_0=341.603391$ (BKJD)



DV Model-Shift Uniqueness Test

008092189-01, P = 347.347667 Days, E = 341.651463 Days

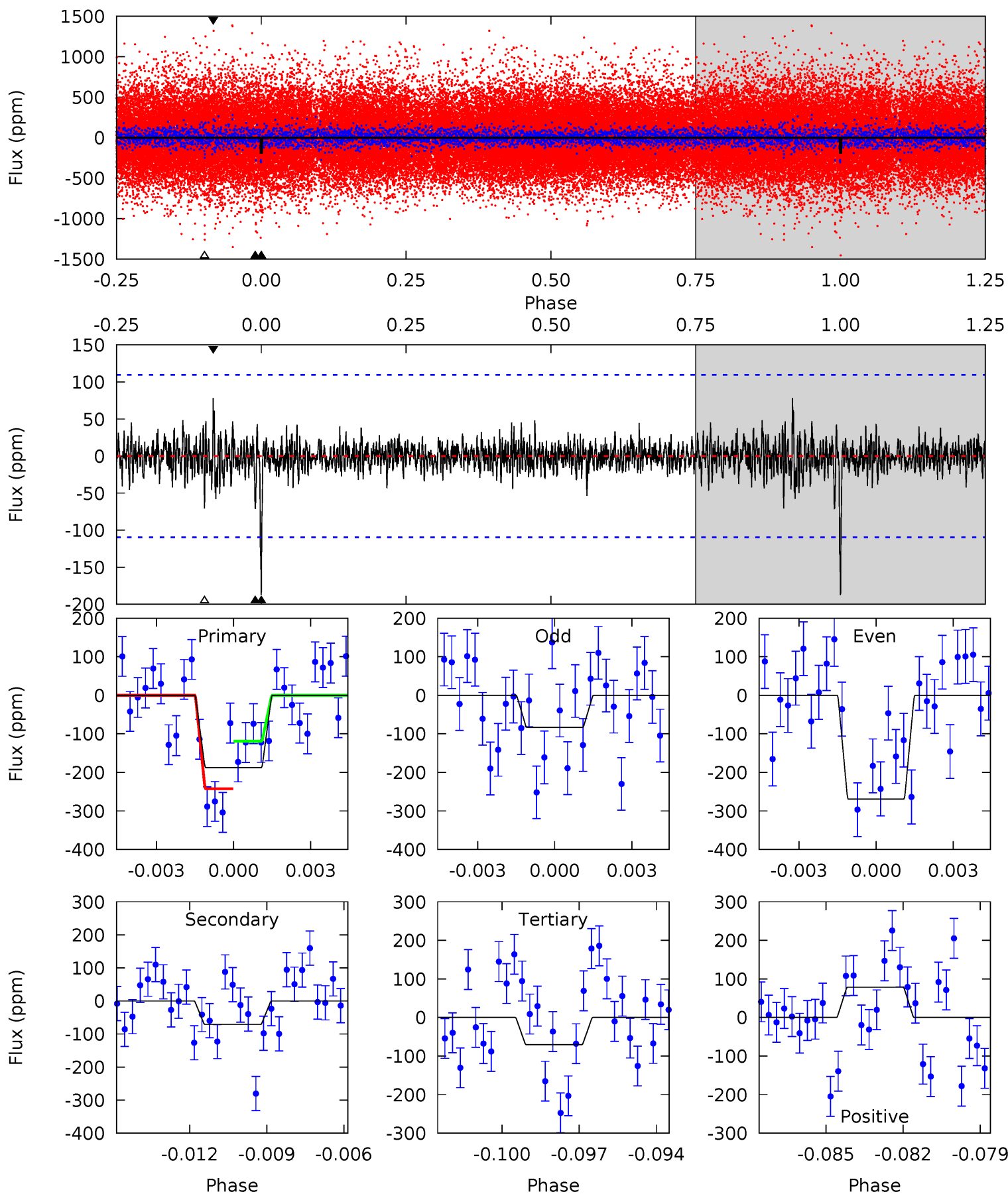
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
21.5	12.6	7.95	6.07	5.23	2.94	2.18	13.5	15.4	4.60	6.48	3.52	0.88	0.45	1.29



Alt Model-Shift Uniqueness Test

008092189-01, P = 347.384142 Days, E = 341.603391 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
8.99	3.40	3.37	3.75	5.25	2.96	0.70	5.62	5.23	0.03	-0.35	4.46	0.85	0.29	2.94



Stellar Parameters For KIC 008092189

	$T_{\text{eff}}(K)$	$\log(g)$	$[\text{Fe}/\text{H}]$	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	5547^{+152}_{-166}	$4.571^{+0.032}_{-0.136}$	$-0.100^{+0.300}_{-0.300}$	$0.820^{+0.164}_{-0.070}$	$0.918^{+0.074}_{-0.111}$	$2.348^{+0.428}_{-0.929}$
	+3%/-3%	+1%/-3%	+300%/-300%	+20%/-9%	+8%/-12%	+18%/-40%
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 008092189-01 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	A_{obs}
DV	-262 ± 21	$1.84^{+0.32}_{-0.33}$	326^{+16}_{-14}	5062^{+428}_{-325}	36873^{+16488}_{-10346}
Alt.	-71 ± 21	$1.29^{+0.34}_{-0.30}$	325^{+16}_{-13}	4483^{+565}_{-442}	19997^{+16514}_{-8825}

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

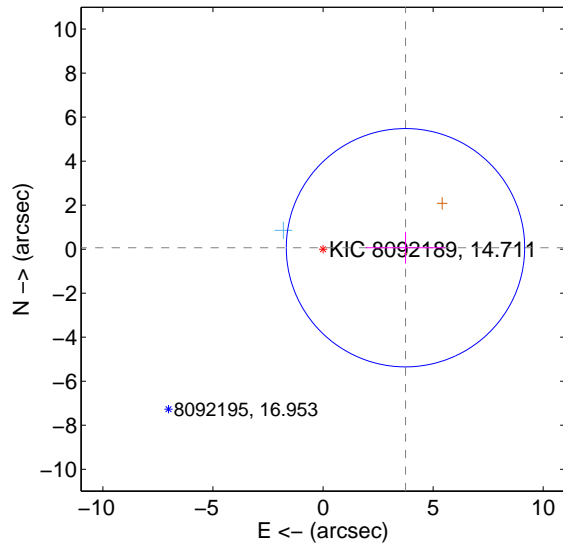
Supplemental centroid analysis for 008092189-01. Kepler magnitude: 14.71. Transit SNR 8.46

There are 1 quarters with good PRF difference image offsets

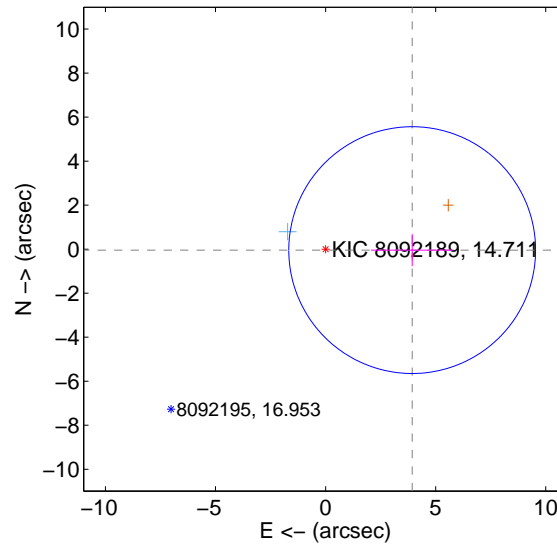
The direct PRF centroid is offset from the target star catalog position by about 0.22 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	3.747 ± 1.805	2.08	-3.746 ± 1.800	0.066 ± 0.718
PRF-fit source offset from KIC position	3.935 ± 1.869	2.11	-3.935 ± 1.873	-0.043 ± 0.727
photometric centroid source offset	1.83 ± 1.89	0.97	-0.35 ± 1.64	1.80 ± 1.90

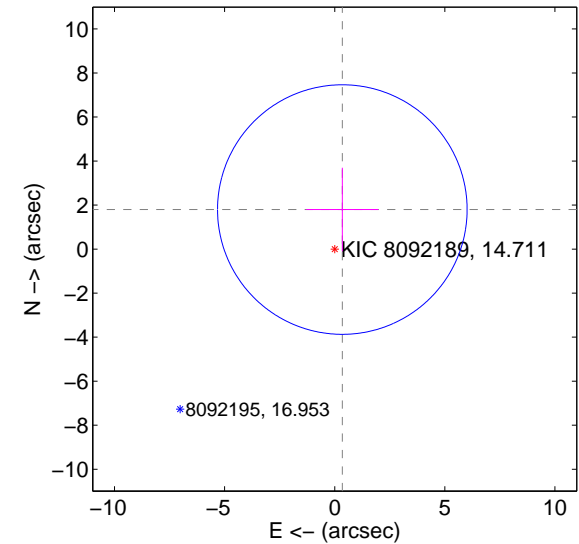
offset from difference PRF-fit to OOT PRF-fit



offset from difference PRF-fit to KIC position

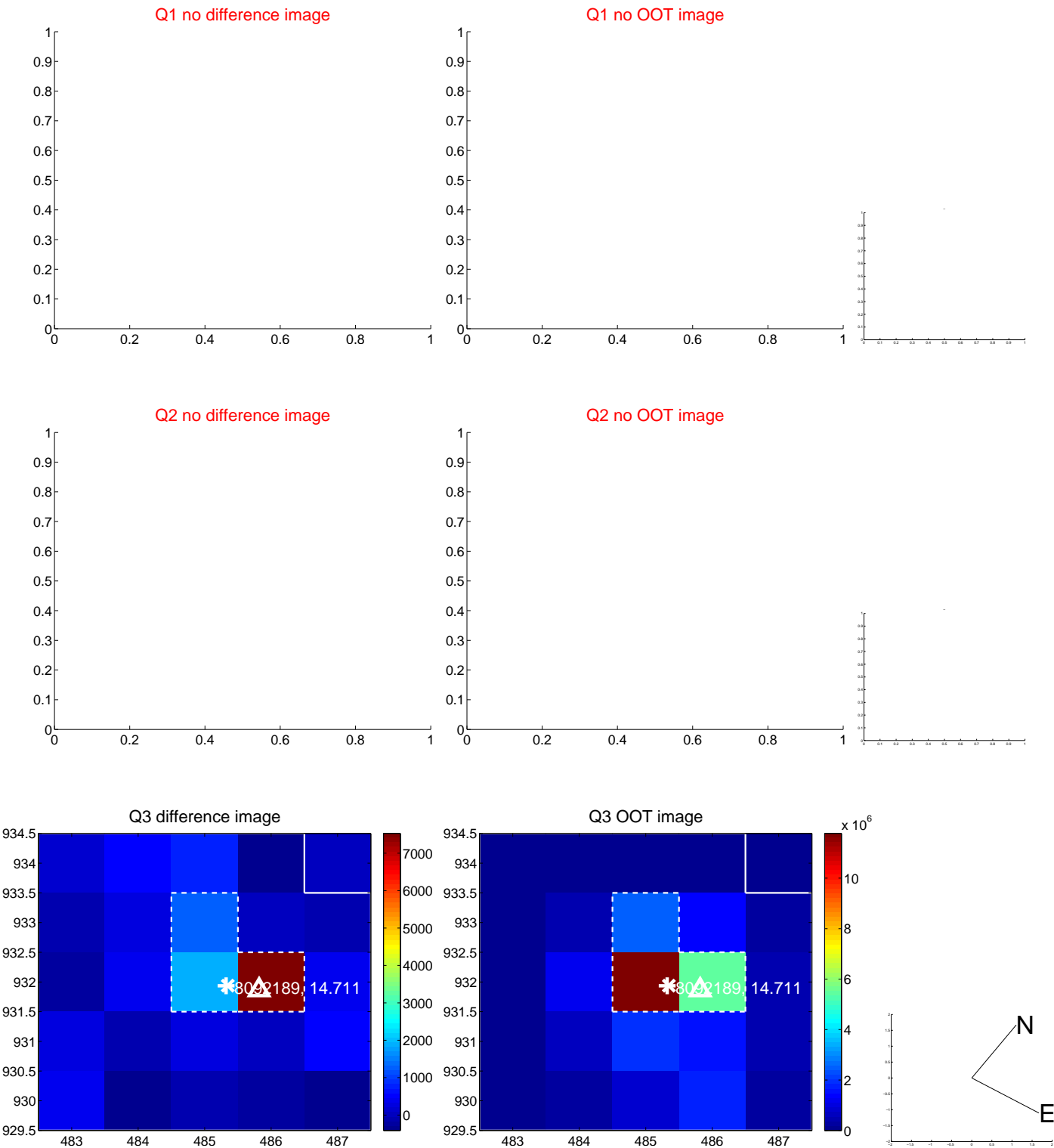


offset from photometric centroids



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.

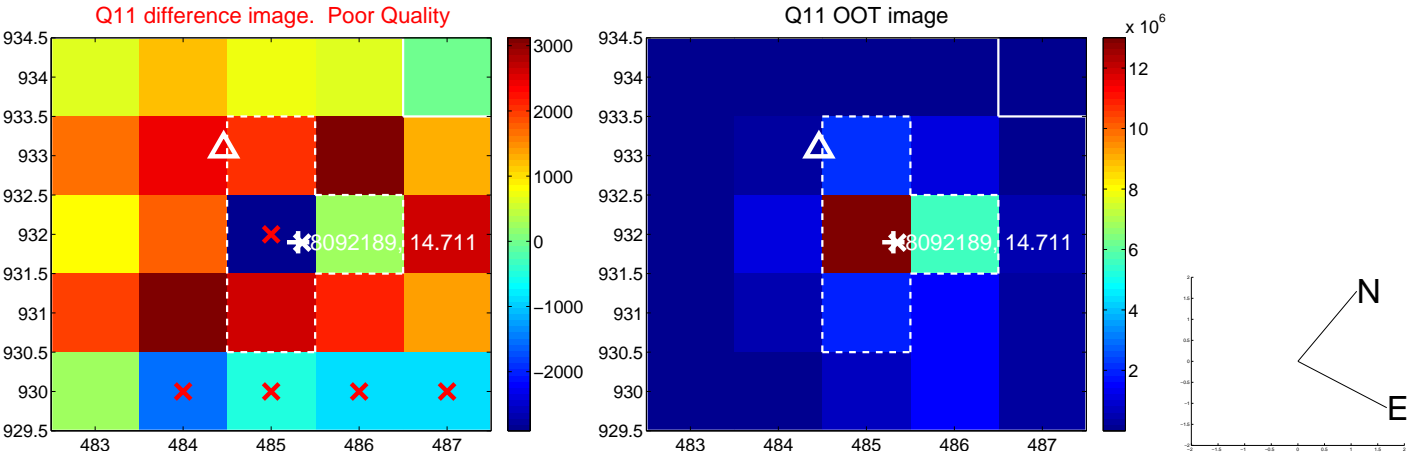
white ×: KIC target position; +: OOT centroid; △: difference centroid. red ×: large negative pixel value.



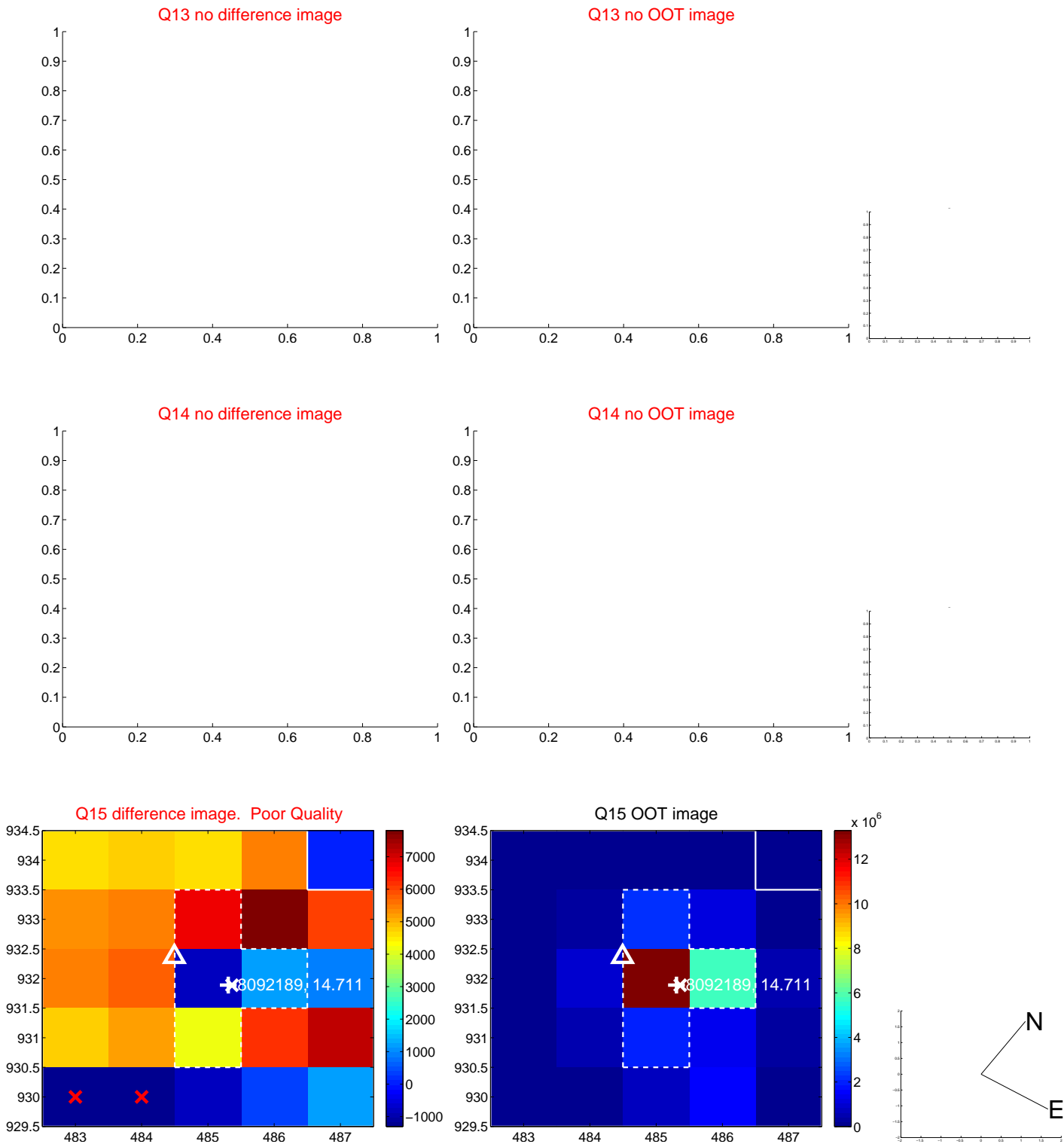
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



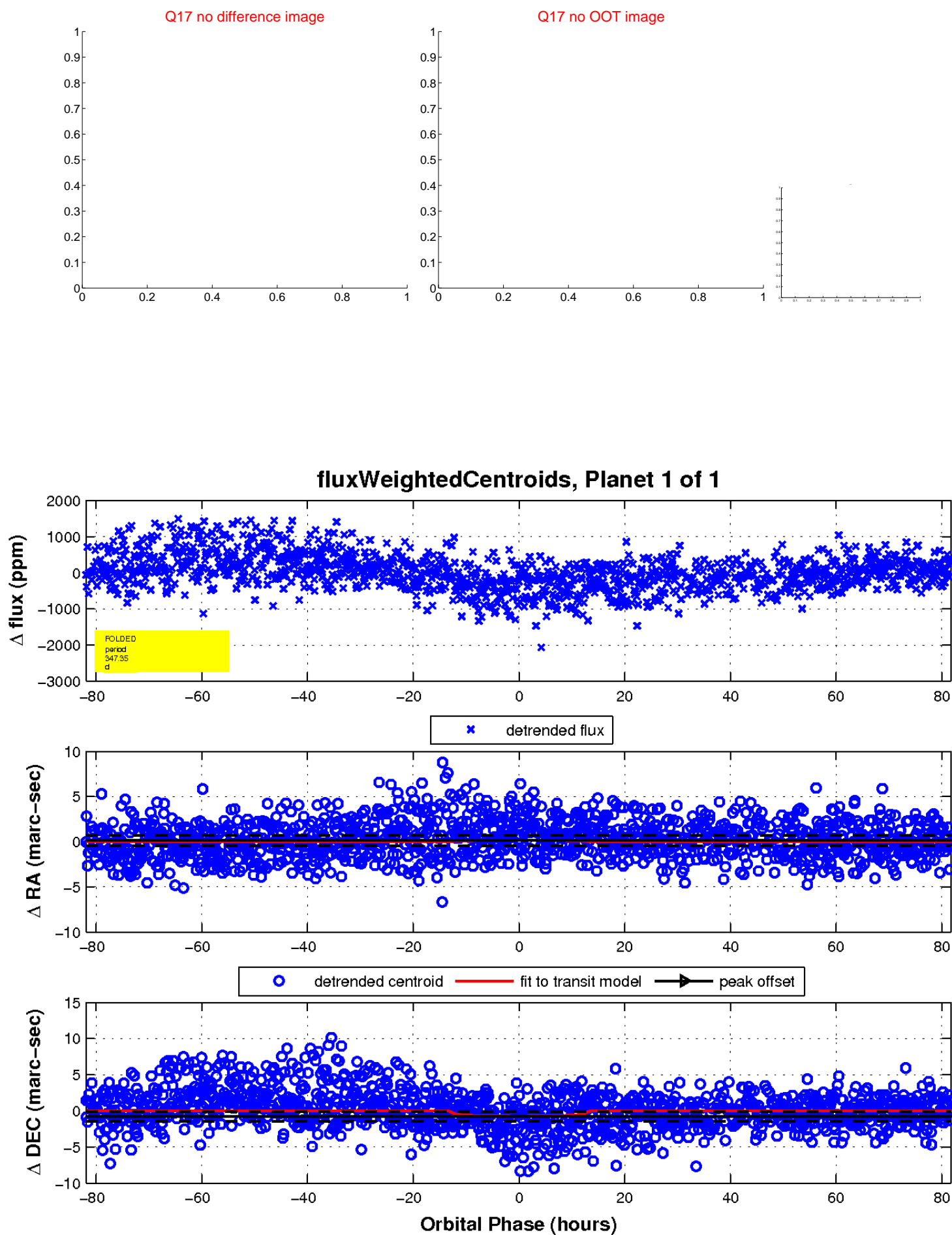
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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



UKIRT Image

Declination

