

KIC 006866189

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})
006866189-01	OBS	No	367.445761	184.891749	211.0	7.198	7.7	6.2	0.83	5835	1.36	0.76

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
006866189-01	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_MARSHALL—INCONSISTENT_TRANS—CENT_FEW_DIFFS

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

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

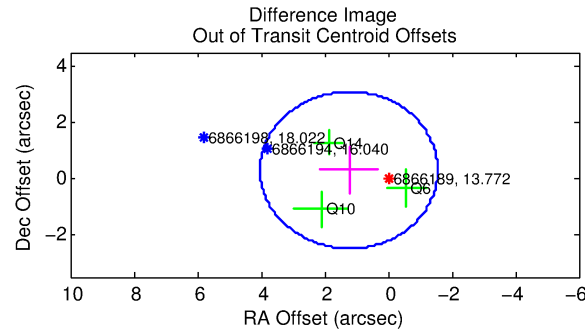
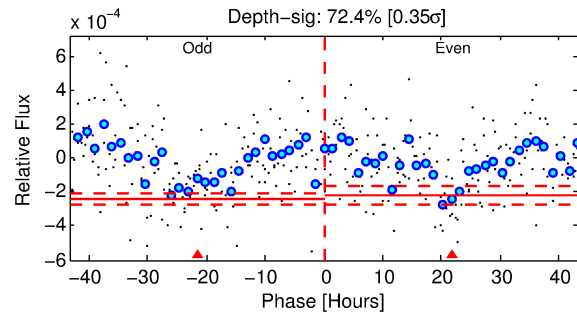
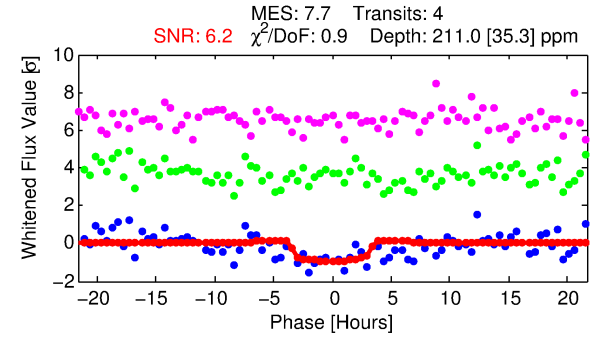
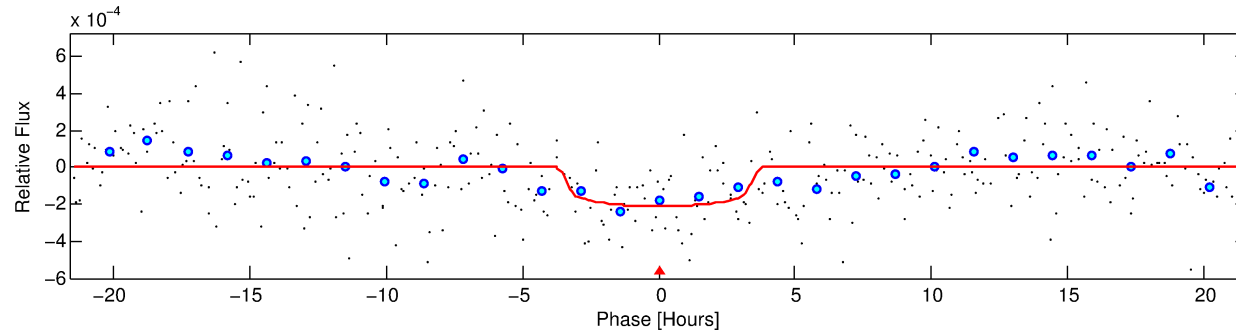
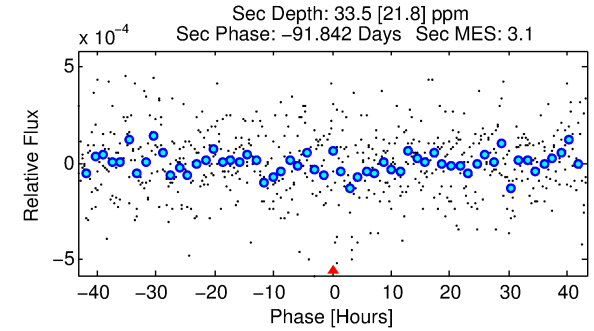
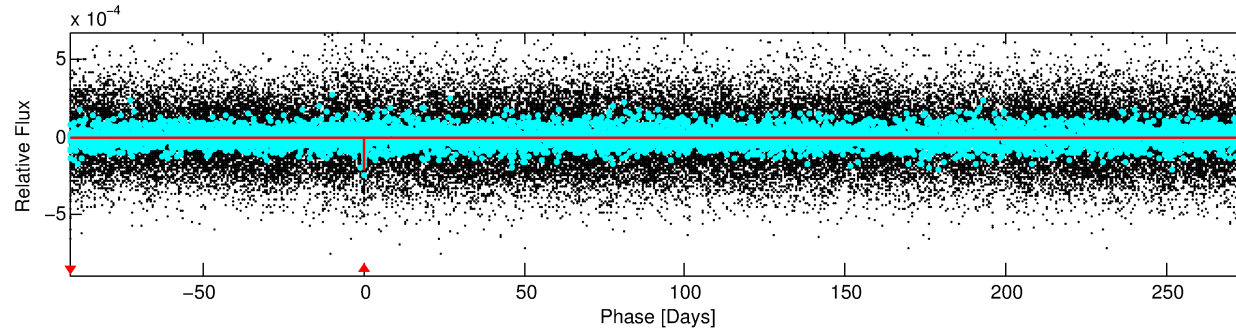
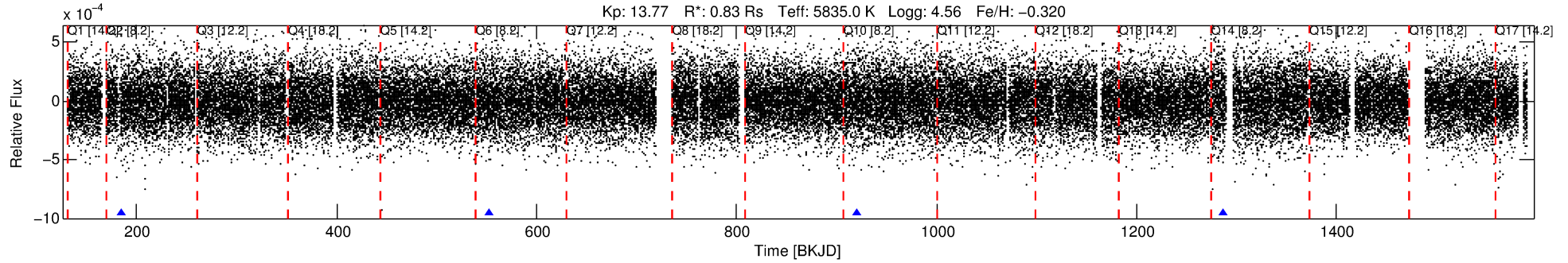
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 006866189-01

No Significant Match Found

DV One-Page Summary

KIC: 6866189 Candidate: 1 of 1 Period: 367.446 d



DV Fit Results:

Period = 367.44576 [0.01009] d
Epoch = 184.8917 [0.0179] BKJD
Rp/R* = 0.0150 [0.0098]
a/R* = 225.46 [710.44]
b = 0.83 [1.16]
Seff = 0.76 [0.28]
Teq = 238 [22] K
Rp = 1.36 [0.97] Re
a = 0.9733 [0.2381] AU
Ag = 9383.32 [14047.41] [0.67σ]
Teffp = 3624 [1321] K [2.56σ]

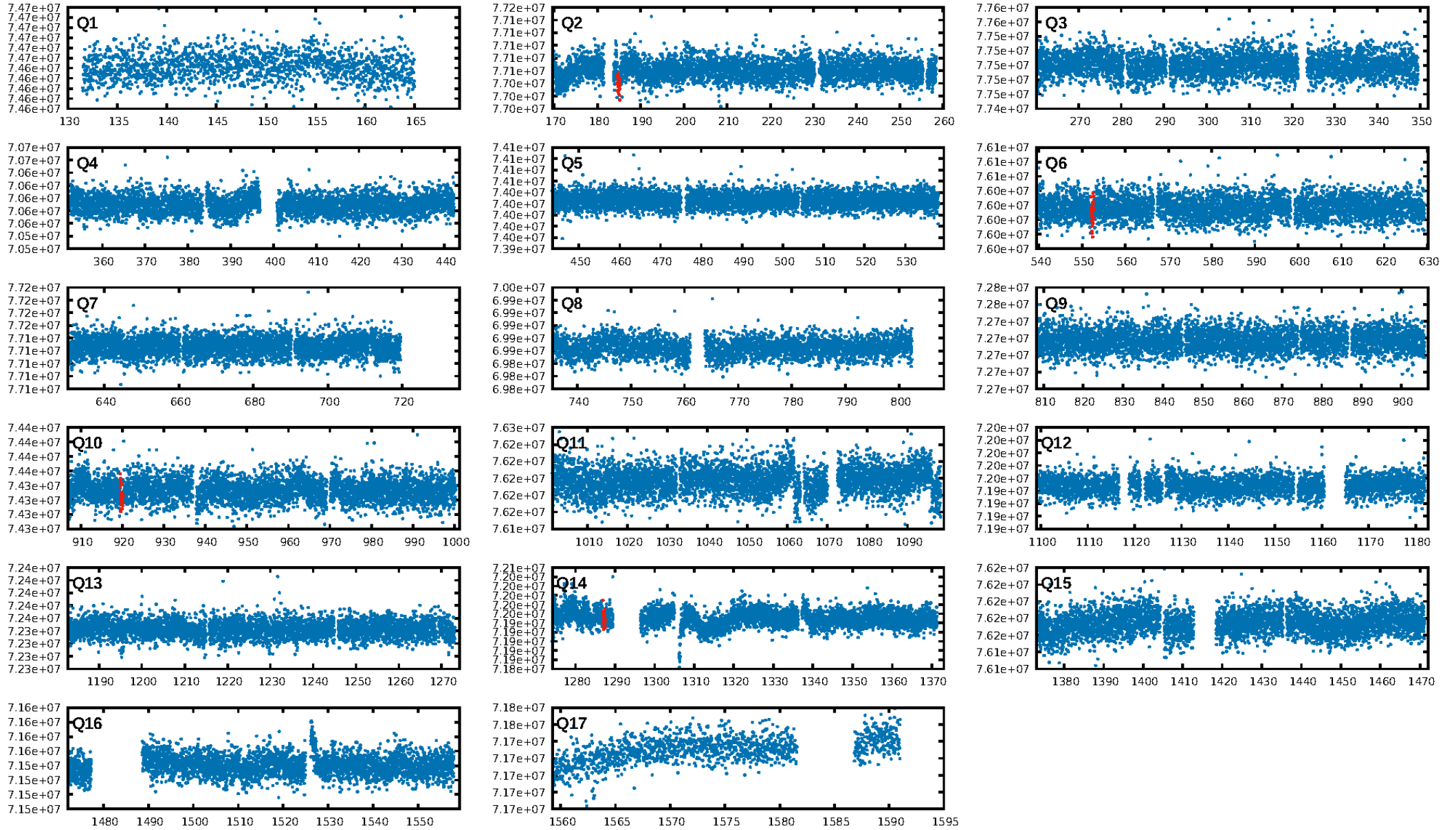
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: 47.7%
ModelChiSquareGof-sig: 100.0%
Bootstrap-pfa: 8.55e-10
RollingBand-fgt: 1.00 [4/4]
GhostDiagnostic-chr: 1.111
Centroid-sig: 0.5%
Centroid-so: 3.049 arcsec [1.86σ]
OotOffset-rm: 1.271 arcsec [1.37σ]
OotOffset-st: 3/0/0/0 [3]
KicOffset-rm: 1.307 arcsec [1.39σ]
KicOffset-st: 3/0/0/0 [3]
DiffImageQuality-fgm: 1.00 [3/3]
DiffImageOverlap-fno: 1.00 [3/3]

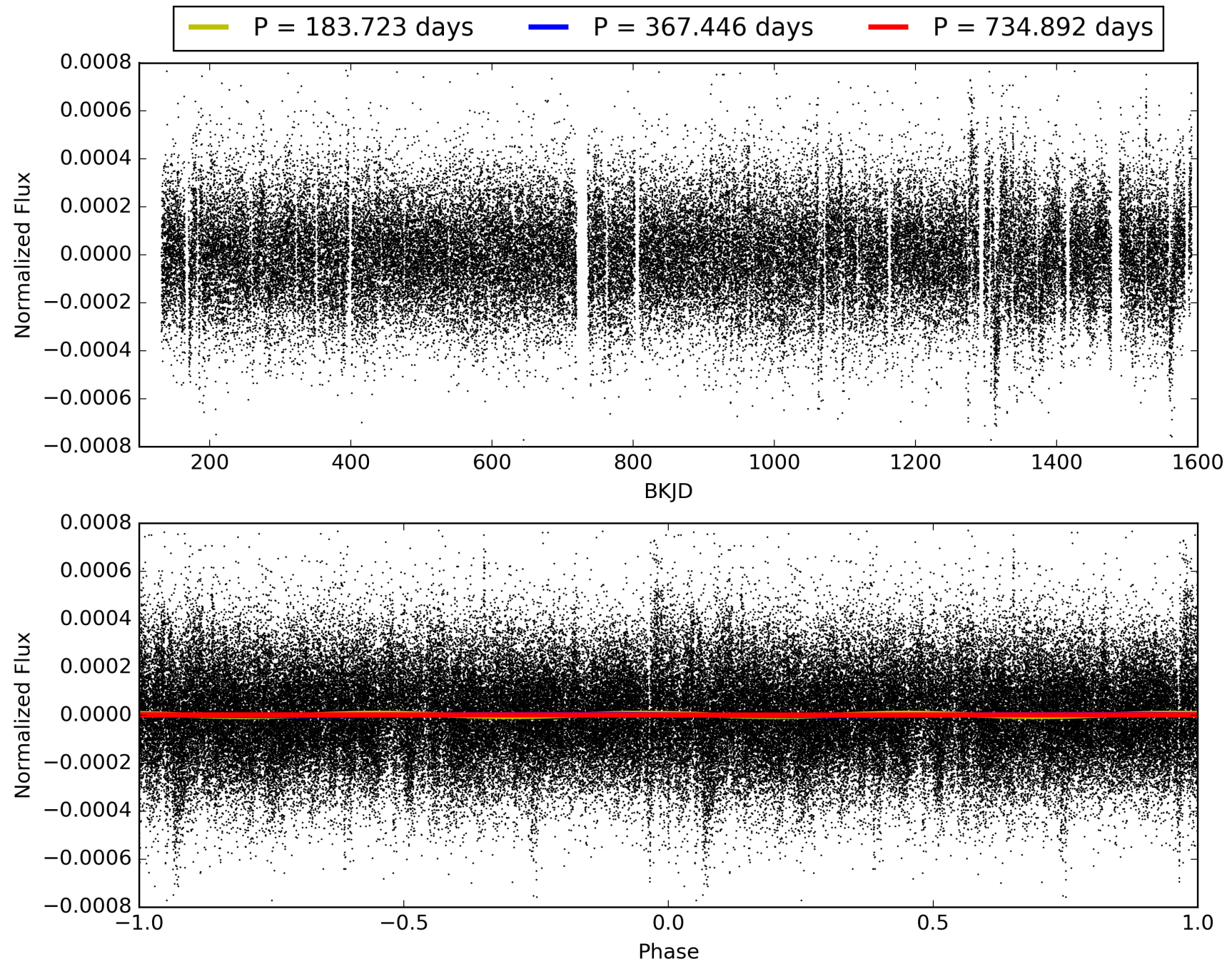
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 31-Jan-2016 04:19:02 Z

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

TCE 006866189-01, PDC Light Curves

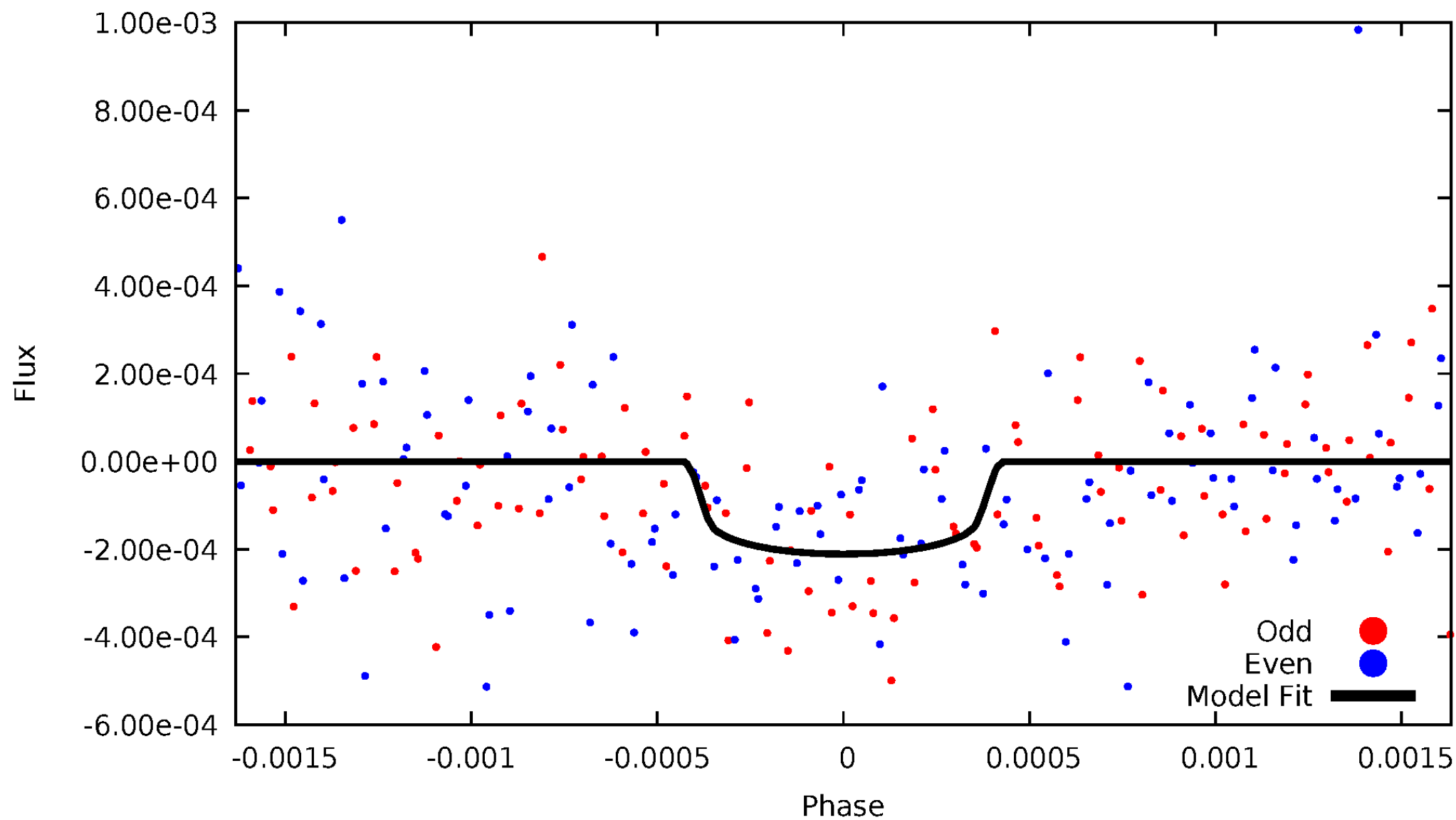


TCE 006866189-01



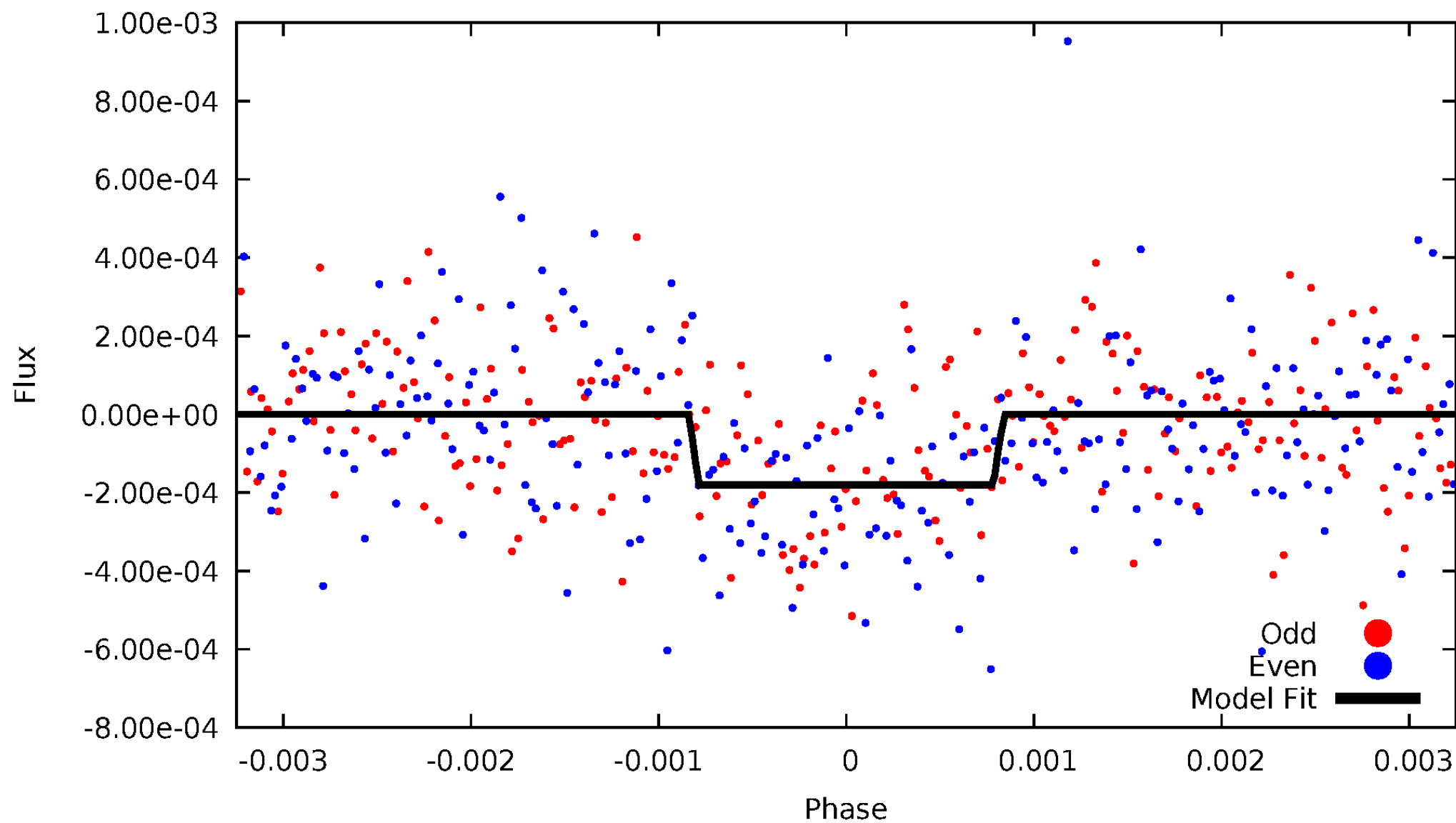
DV Odd/Even

TCE 006866189-01



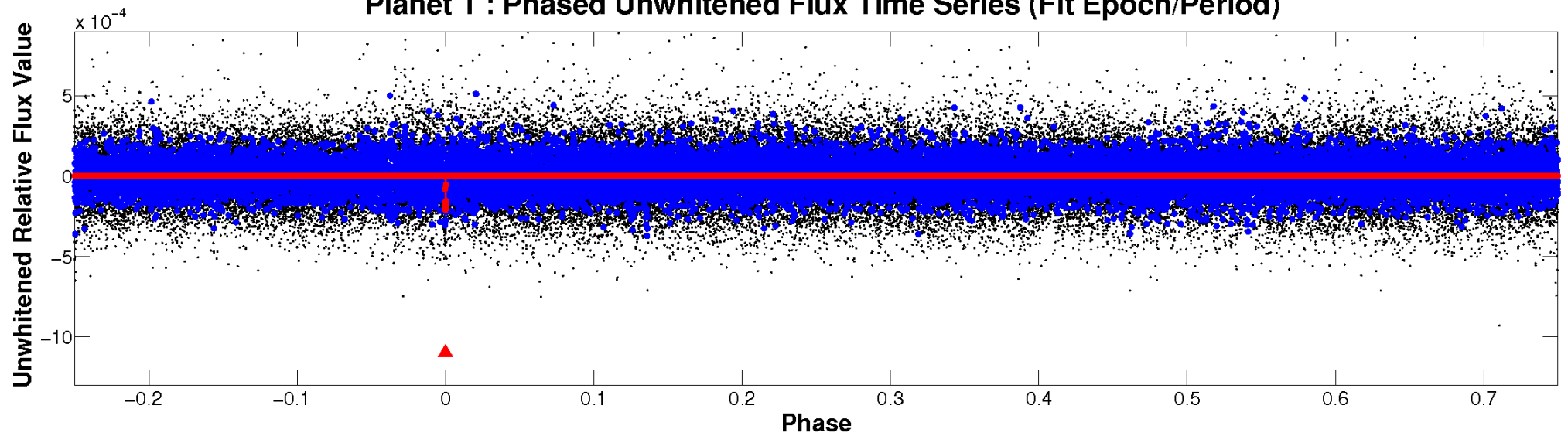
ALT Odd/Even

TCE 006866189-01

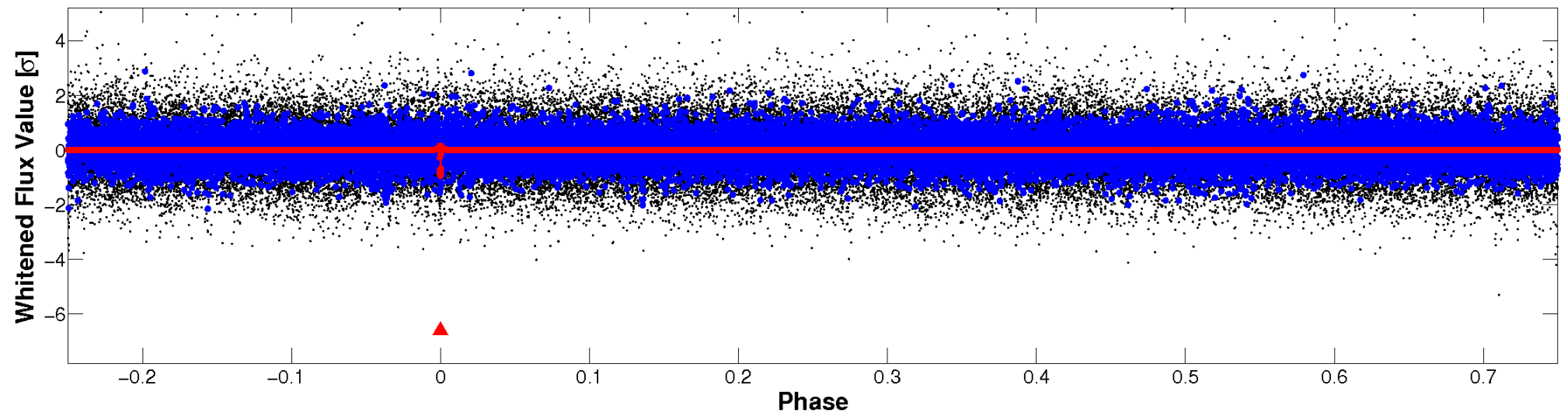


Non-Whitened Vs. Whitened Light Curve

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

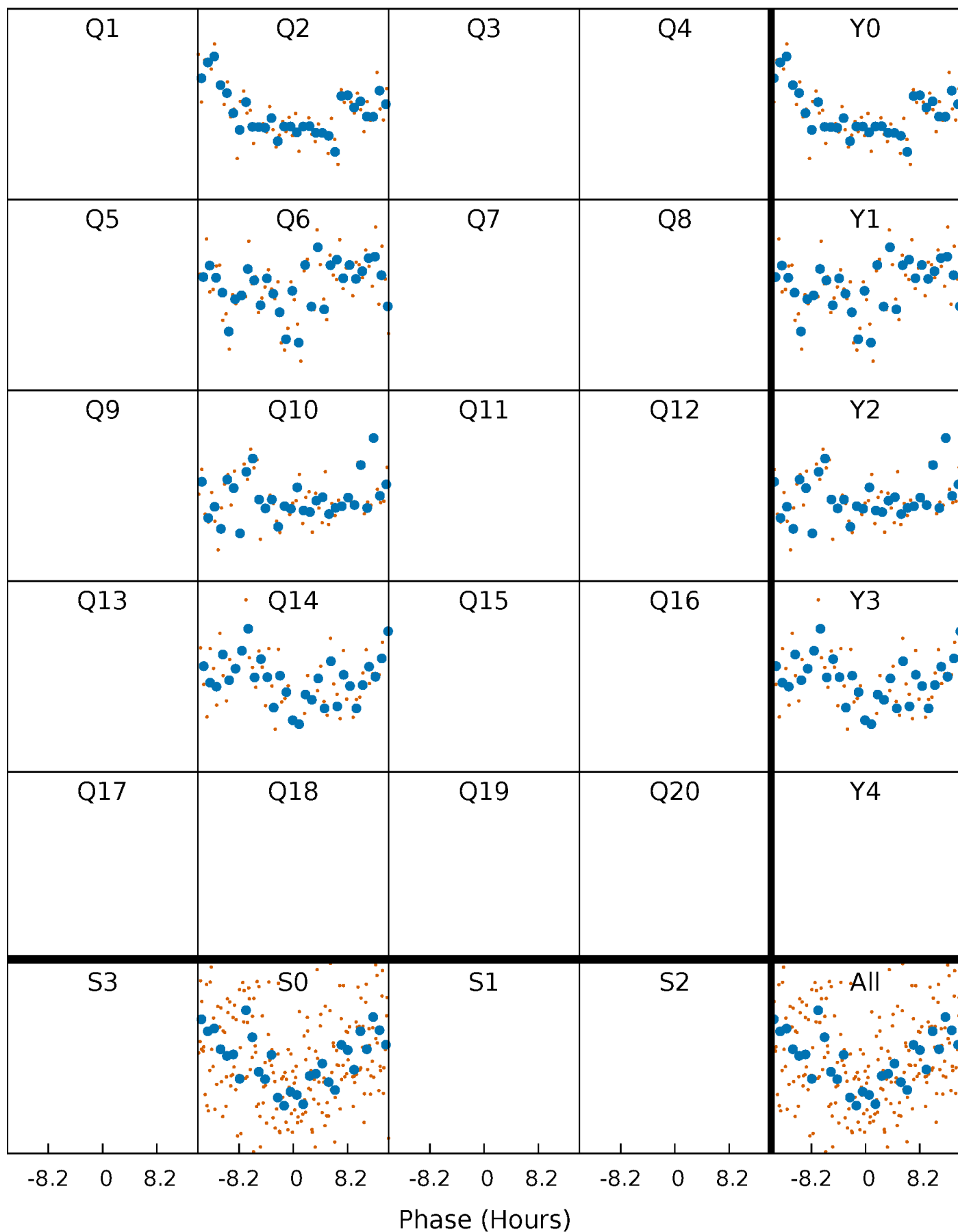


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



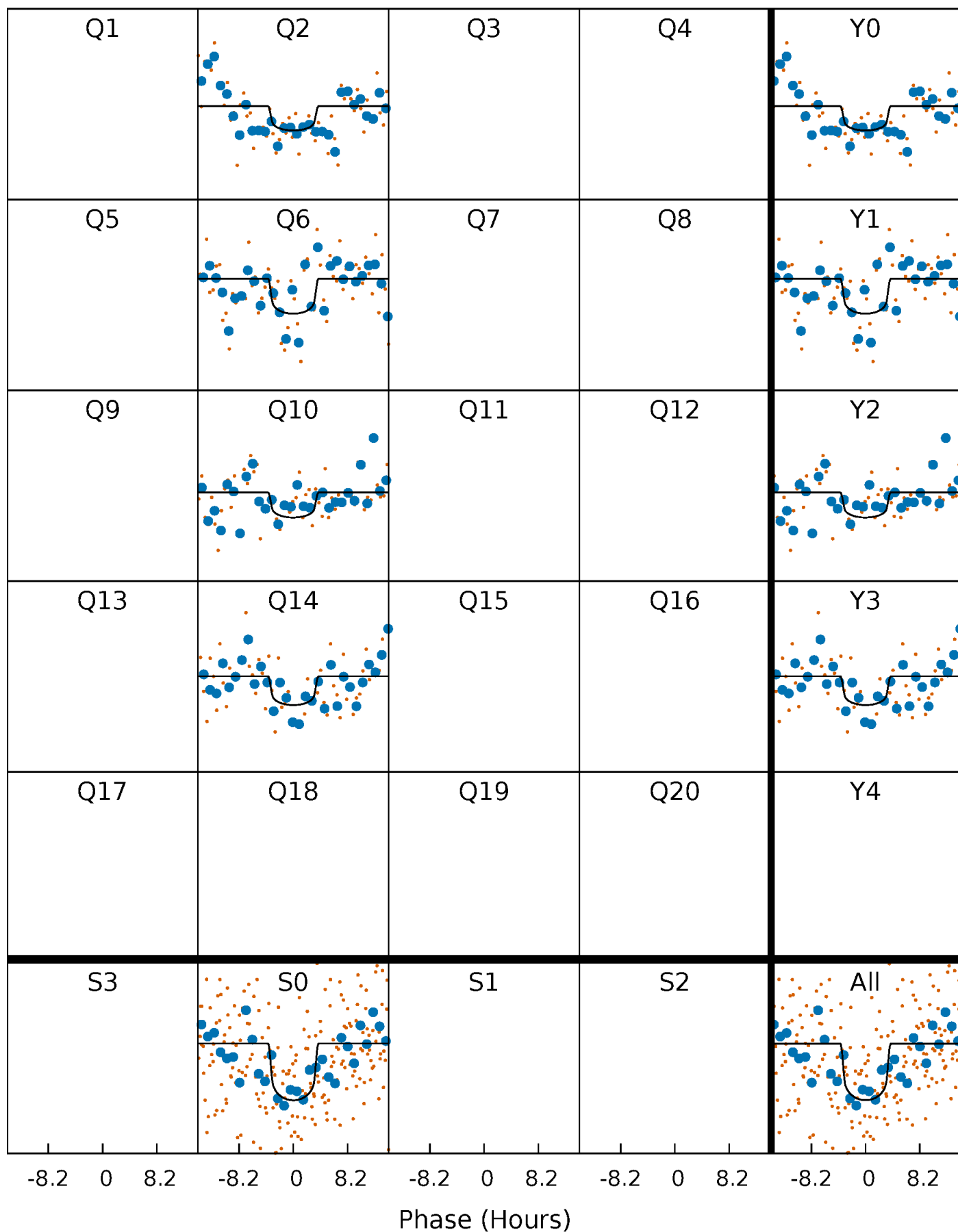
PDC Quarter-Phased Transit Curves

TCE 006866189-01 P=367.445761 Days $T_0=184.891750$ (BKJD)



DV Quarter-Phased Transit Curves

TCE 006866189-01 P=367.445761 Days $T_0=184.891750$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

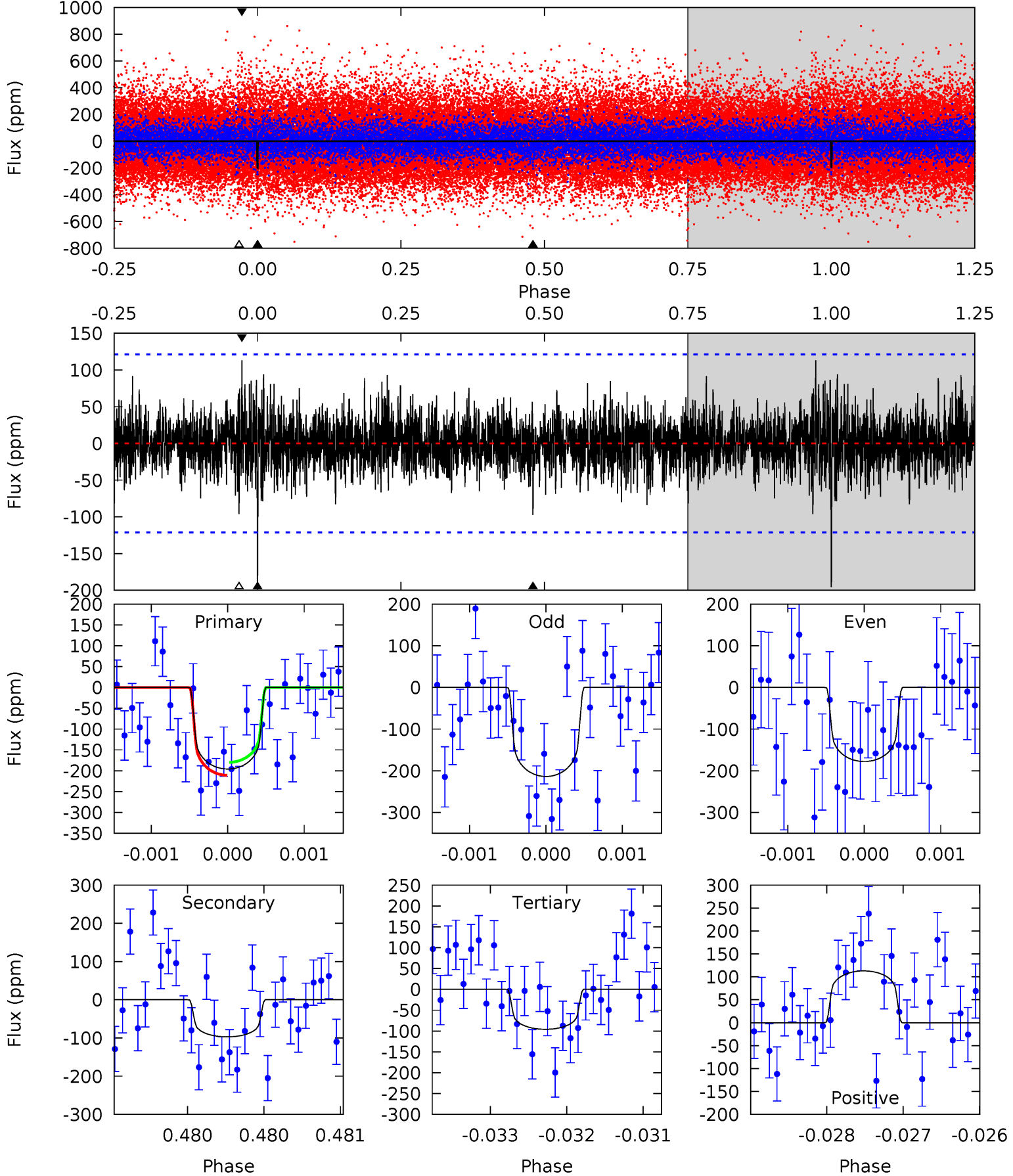
TCE 006866189-01 P=367.483954 Days $T_0=184.889824$ (BKJD)



DV Model-Shift Uniqueness Test

006866189-01, P = 367.445761 Days, E = 184.891750 Days

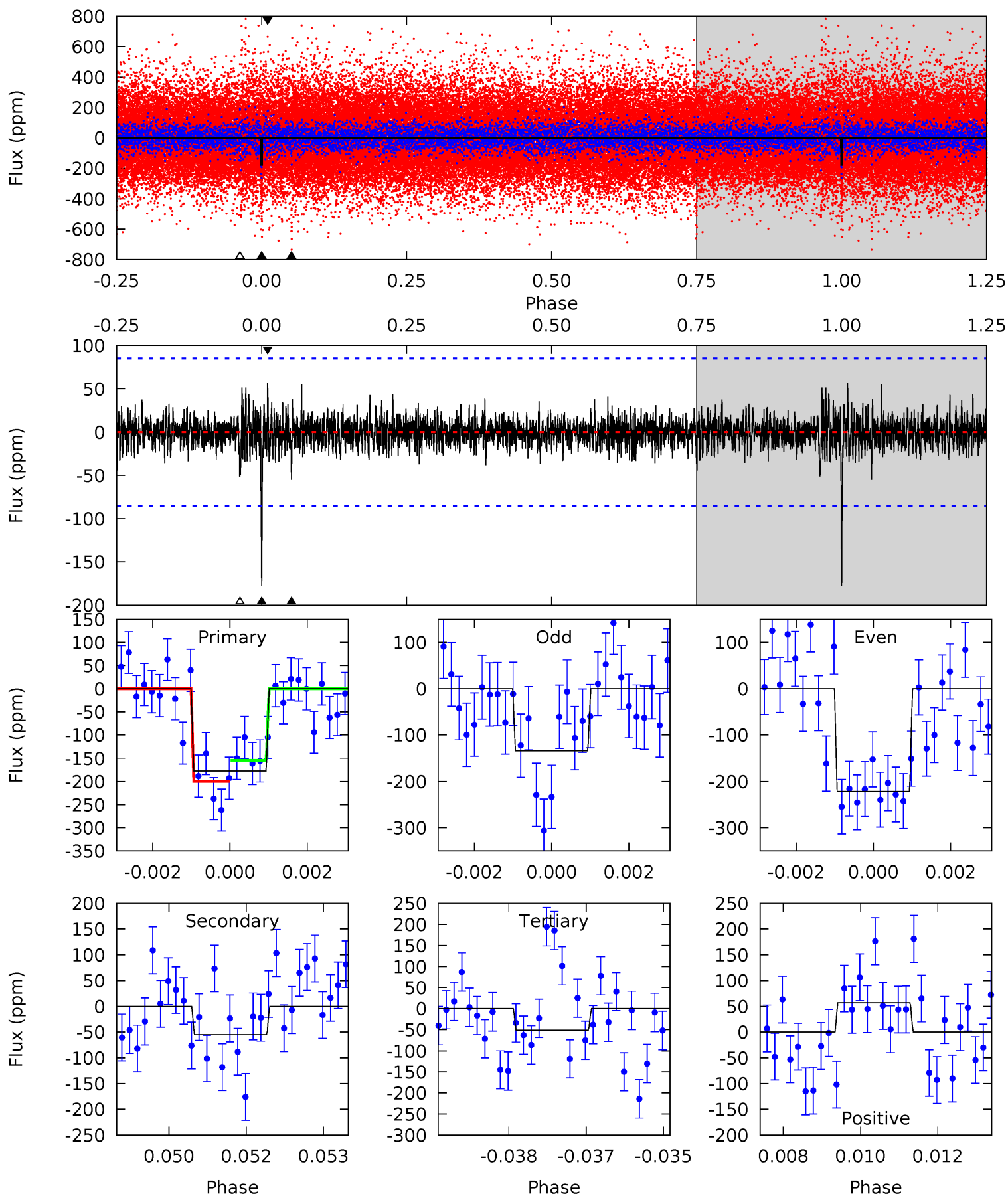
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
8.85	4.39	4.33	5.10	5.48	3.33	1.17	4.51	3.74	0.06	-0.72	0.81	0.92	0.37	0.70



Alt Model-Shift Uniqueness Test

006866189-01, P = 367.483954 Days, E = 184.889824 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
11.2	3.47	3.23	3.58	5.36	3.14	0.76	7.94	7.60	0.23	-0.11	2.75	1.27	0.24	1.41



Stellar Parameters For KIC 006866189

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	5835^{+139}_{-157}	$4.556^{+0.046}_{-0.196}$	$-0.320^{+0.300}_{-0.300}$	$0.833^{+0.241}_{-0.075}$	$0.910^{+0.099}_{-0.110}$	$2.222^{+0.417}_{-1.098}$
	+2%/-3%	+1%/-4%	+94%/-94%	+29%/-9%	+11%/-12%	+19%/-49%
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 006866189-01 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	-97 ± 22	$1.48^{+0.96}_{-0.79}$	338^{+22}_{-13}	4705^{+2170}_{-772}	22185^{+83806}_{-14192}
Alt.	-55 ± 16	$1.41^{+0.91}_{-0.80}$	339^{+23}_{-15}	4325^{+1826}_{-707}	13997^{+58981}_{-9318}

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

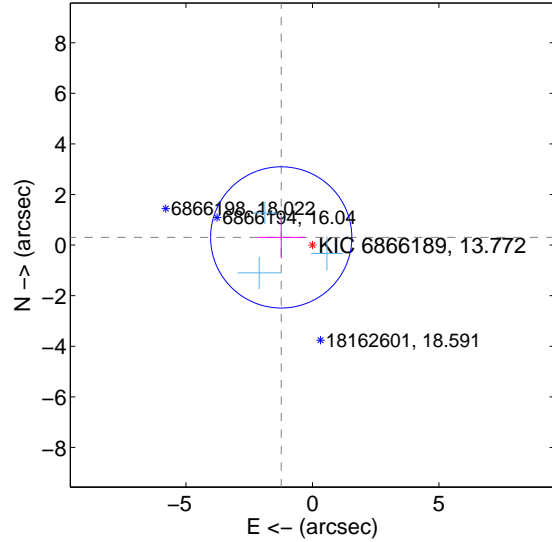
Supplemental centroid analysis for 006866189-01. Kepler magnitude: 13.77. Transit SNR 6.22

There are 3 quarters with good PRF difference image offsets

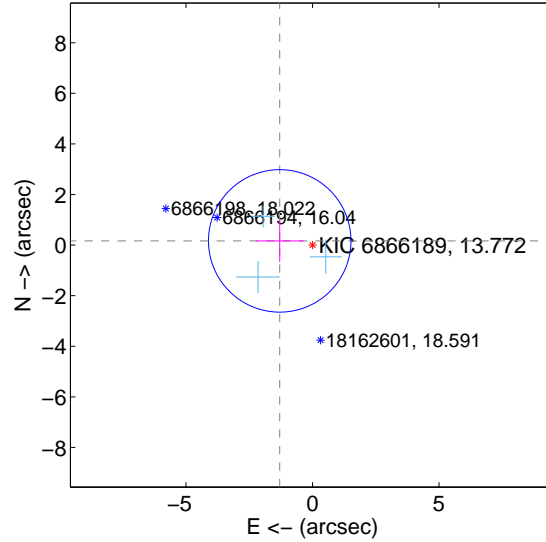
The direct PRF centroid is offset from the target star catalog position by about 0.15 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	1.271 ± 0.930	1.37	1.234 ± 0.937	0.304 ± 0.821
PRF-fit source offset from KIC position	1.307 ± 0.939	1.39	1.297 ± 0.940	0.166 ± 0.827
photometric centroid source offset	3.05 ± 1.64	1.86	0.28 ± 1.84	3.04 ± 1.64

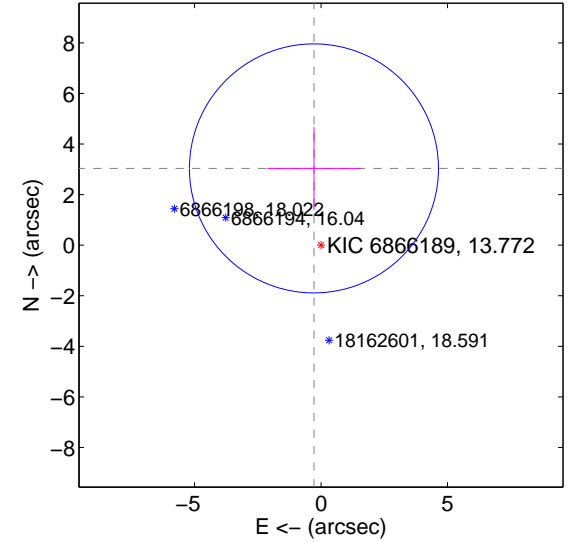
offset from difference PRF-fit to OOT PRF-fit



offset from difference PRF-fit to KIC position



offset from photometric centroids

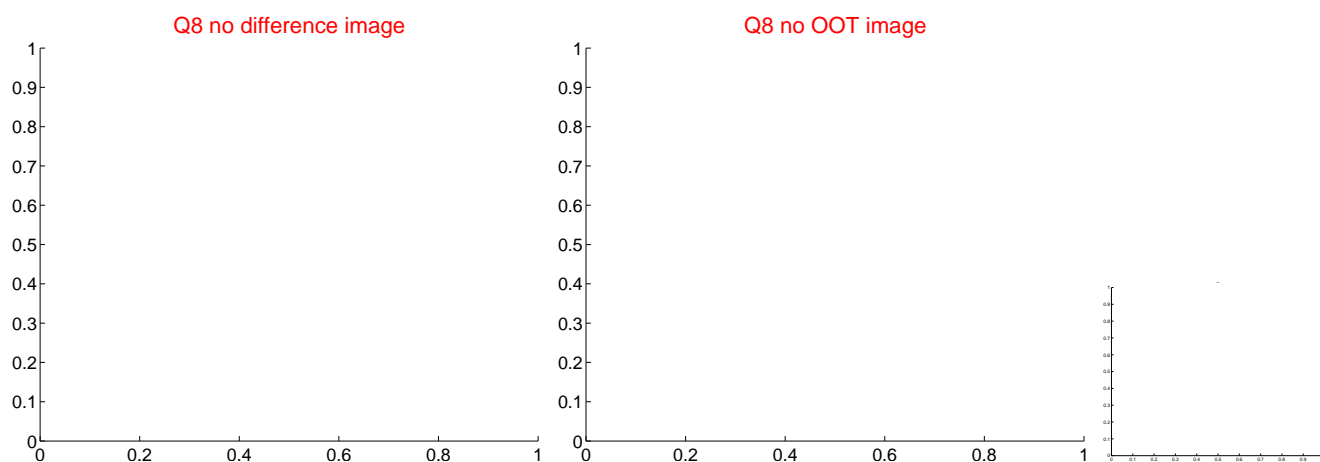
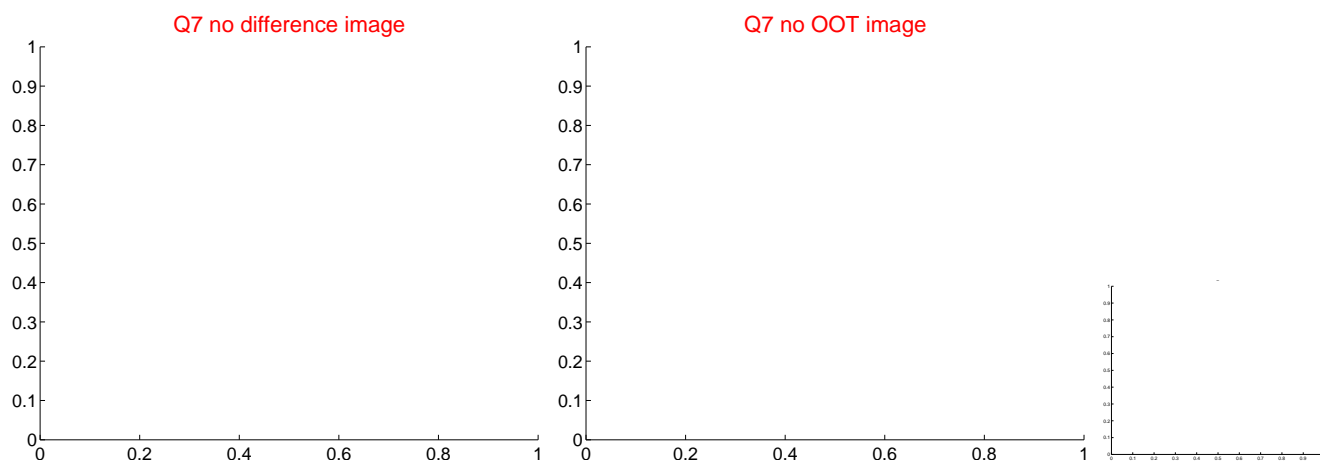
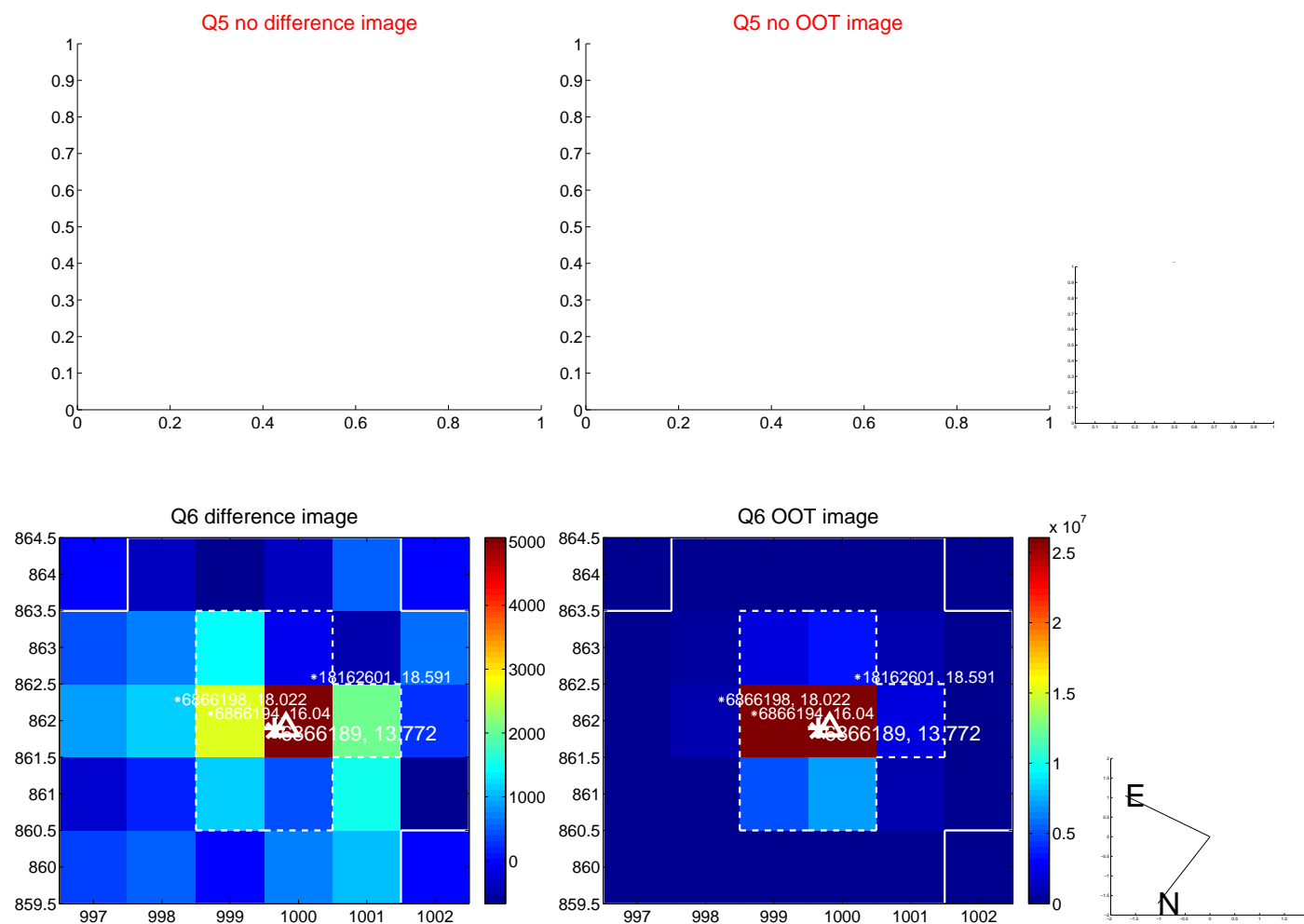


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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

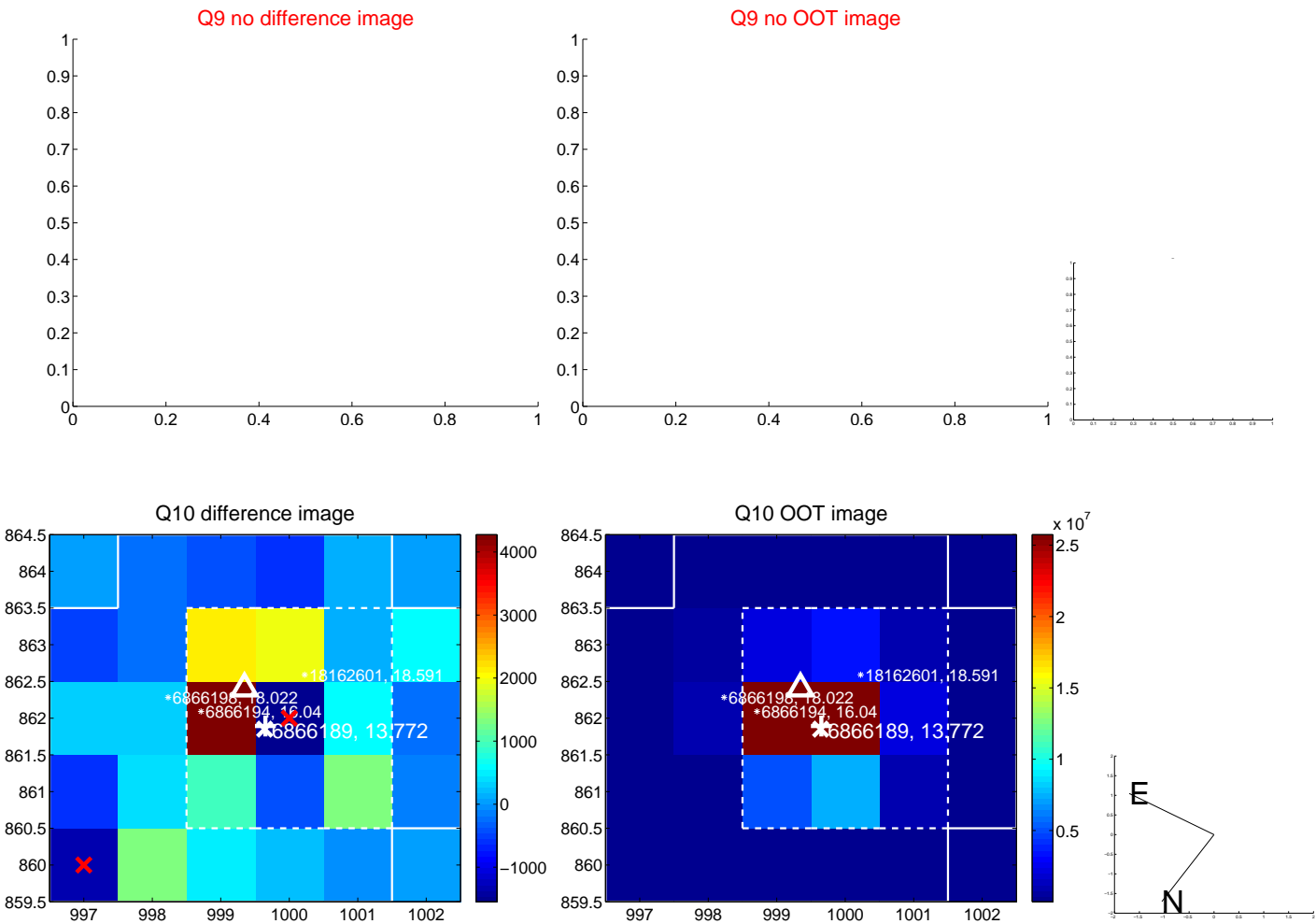
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



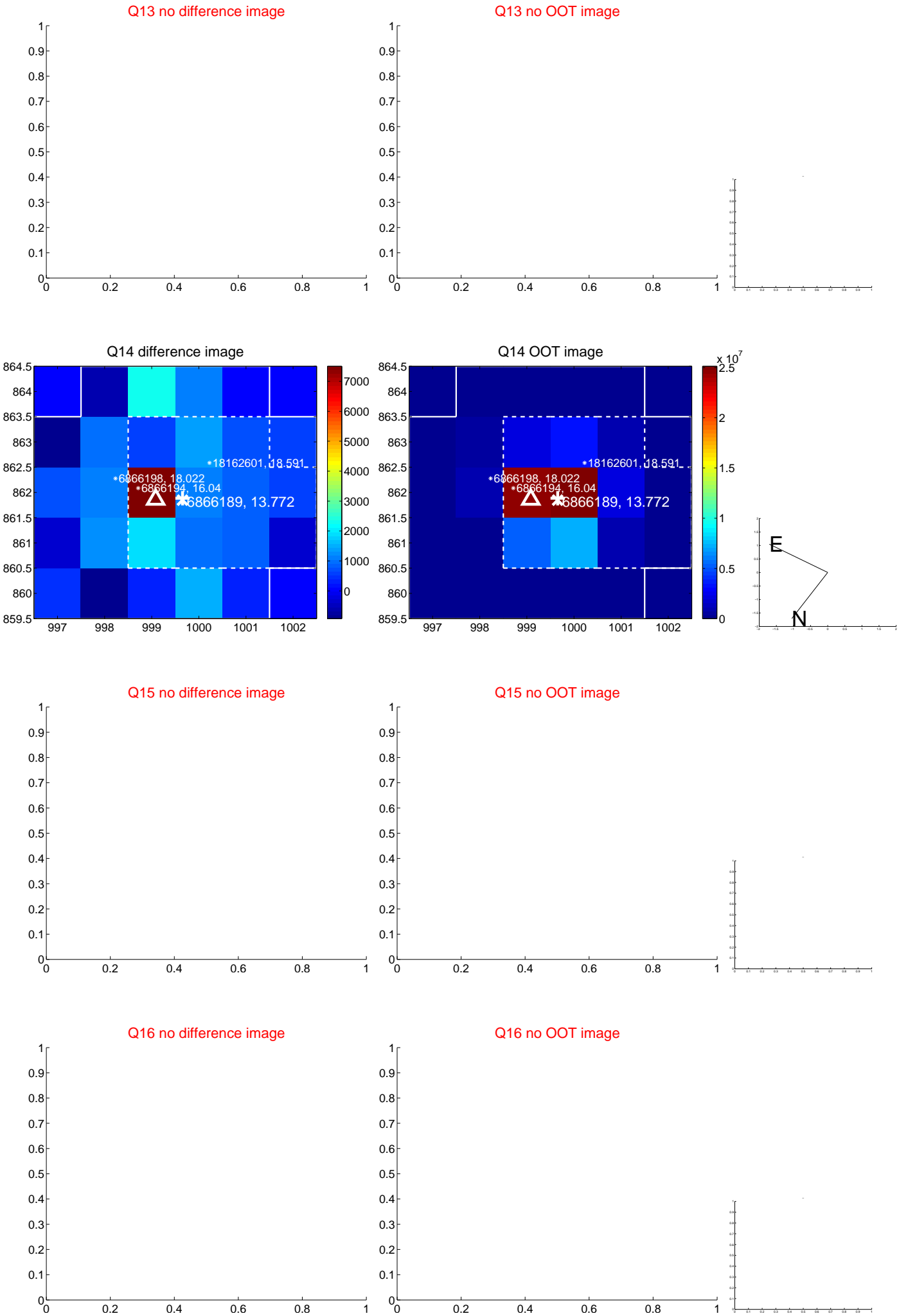
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



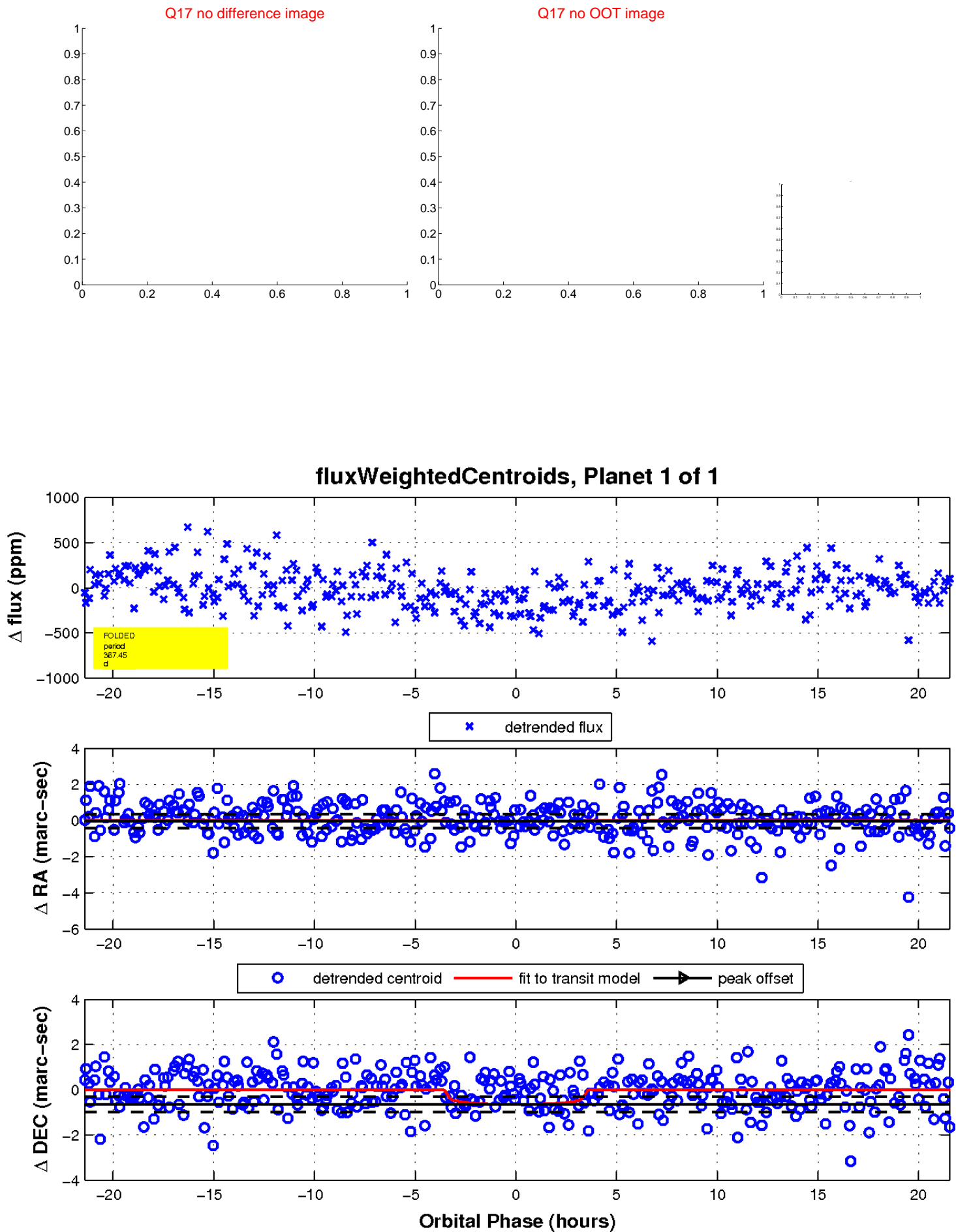
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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



UKIRT Image

