

KIC 005962873

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})
005962873-01	OBS	No	430.061187	515.921081	205.3	18.905	11.4	11.4	1.59	5971	2.45	2.24

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
005962873-01	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_MARSHALL—ALL_TRANS_CHASES—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.

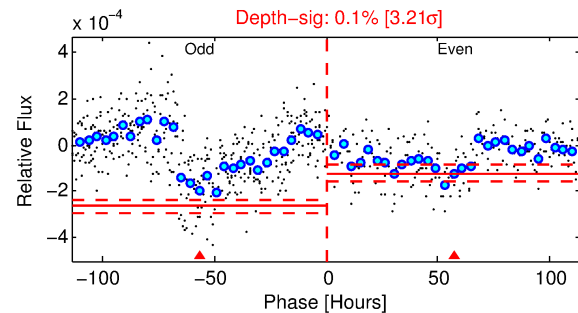
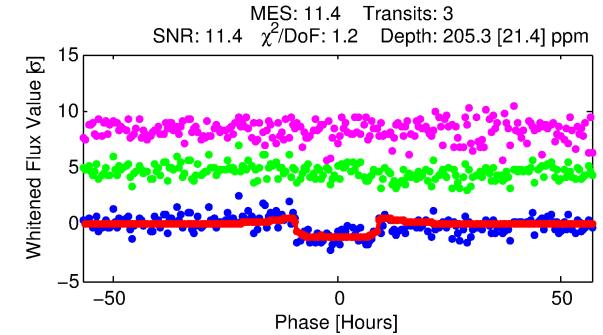
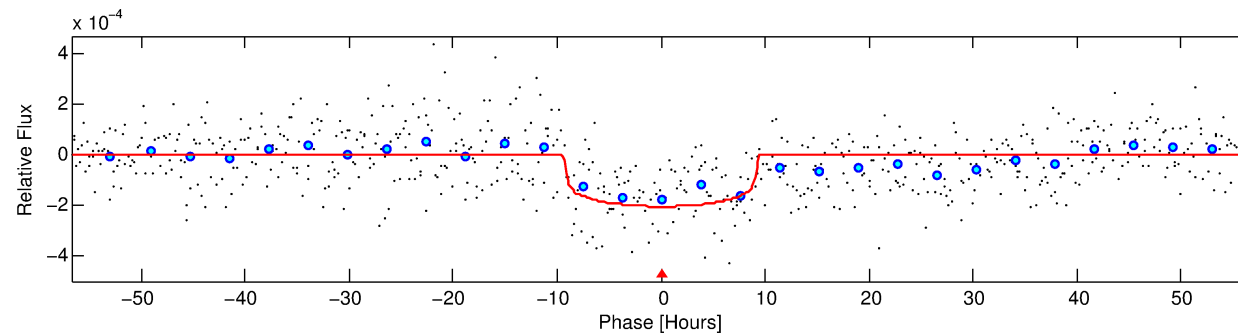
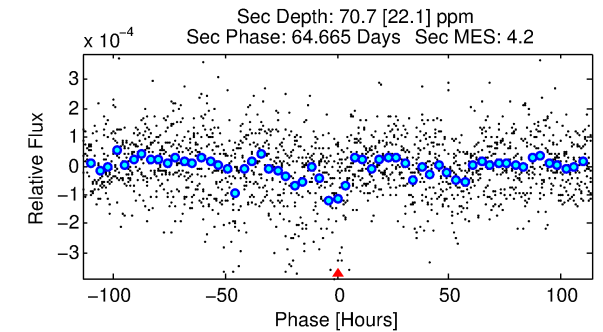
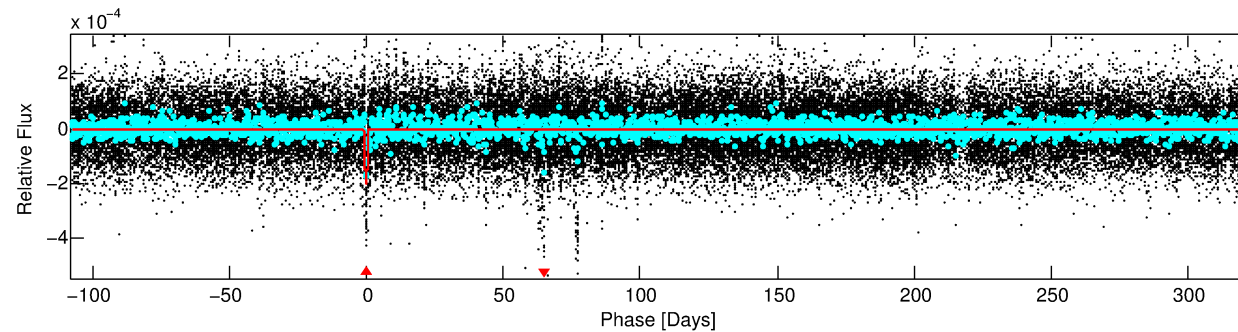
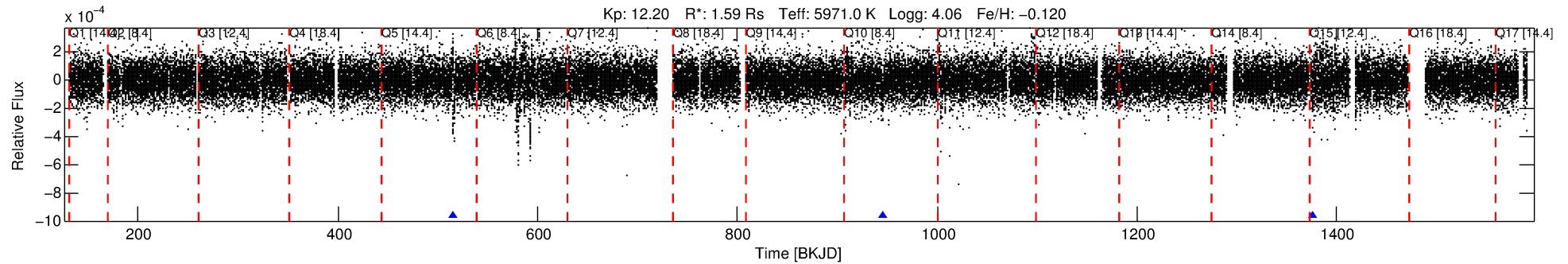
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 005962873-01

No Significant Match Found

DV One-Page Summary

KIC: 5962873 Candidate: 1 of 1 Period: 430.061 d



DV Fit Results:

Period = 430.06119 [0.01111] d
Epoch = 515.9211 [0.0128] BKJD
Rp/R* = 0.0141 [0.0027]
a/R* = 124.09 [108.52]
b = 0.72 [0.59]
Seff = 2.24 [0.76]
Teq = 312 [26] K
Rp = 2.45 [0.72] Re
a = 1.1346 [0.2411] AU
Ag = 8339.50 [4963.07] [1.68σ]
Teffp = 4609 [570] K [7.53σ]

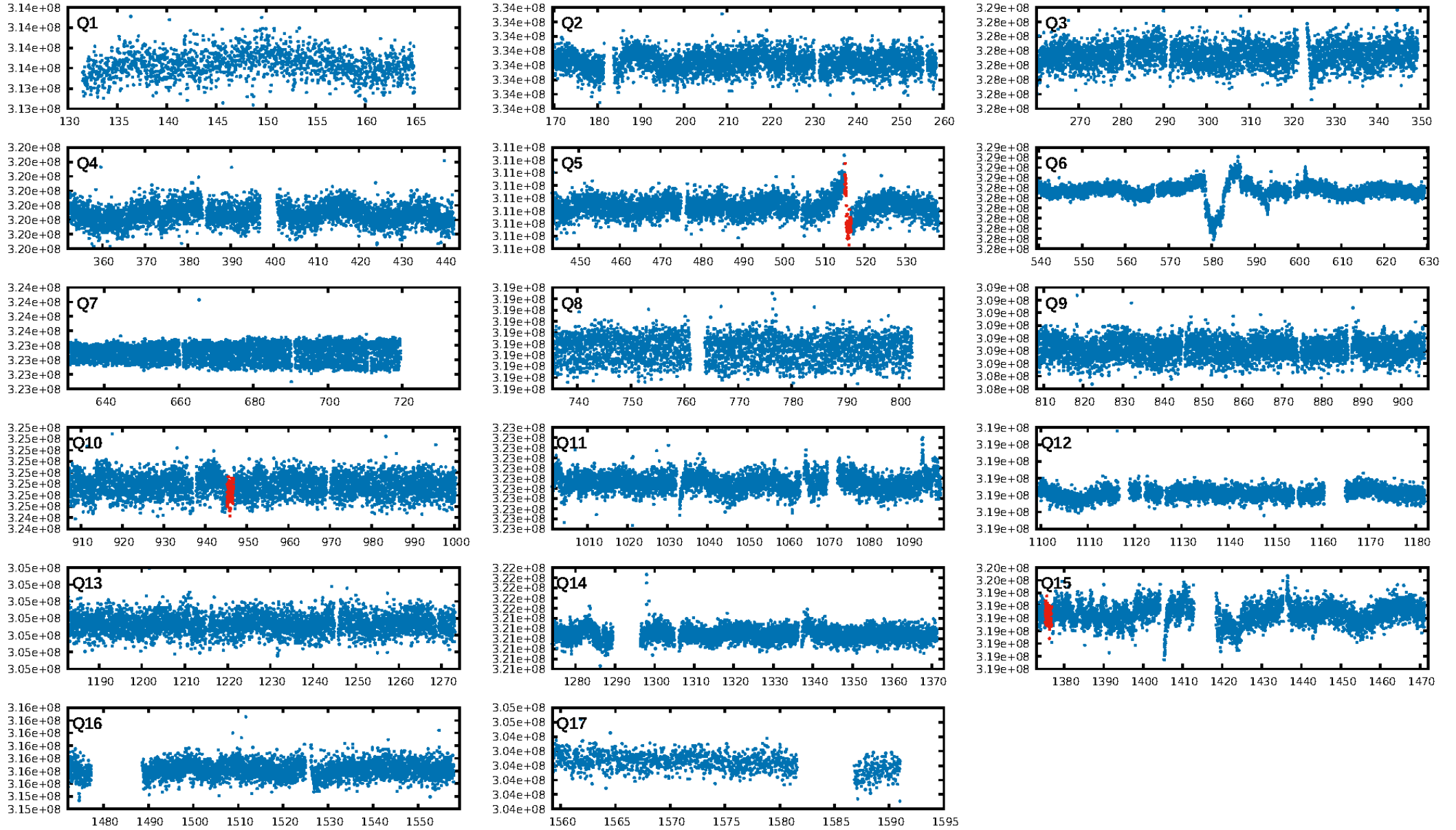
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: 0.0%
Bootstrap-pfa: 9.86e-13
RollingBand-fgt: 1.00 [3/3]
GhostDiagnostic-chr: 6.081
Centroid-sig: 0.1%
Centroid-so: 2.573 arcsec [2.80σ]
OotOffset-rm: N/A
OotOffset-st: 0/0/0/0 [0]
KicOffset-rm: N/A
KicOffset-st: 0/0/0/0 [0]
DiffImageQuality-fgm: N/A
DiffImageOverlap-fno: 1.00 [3/3]

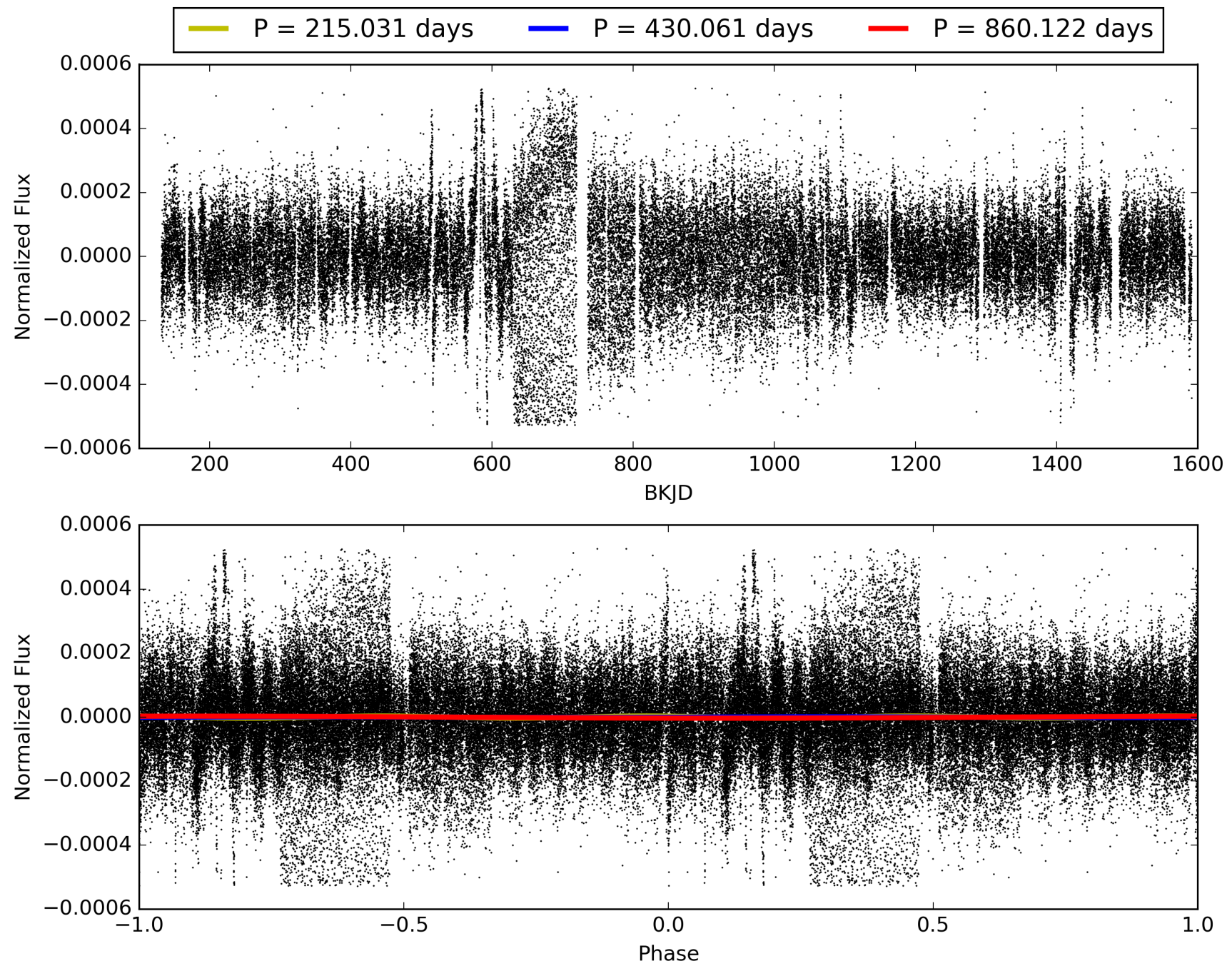
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 30-Jan-2016 16:03:31 Z

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

TCE 005962873-01, PDC Light Curves

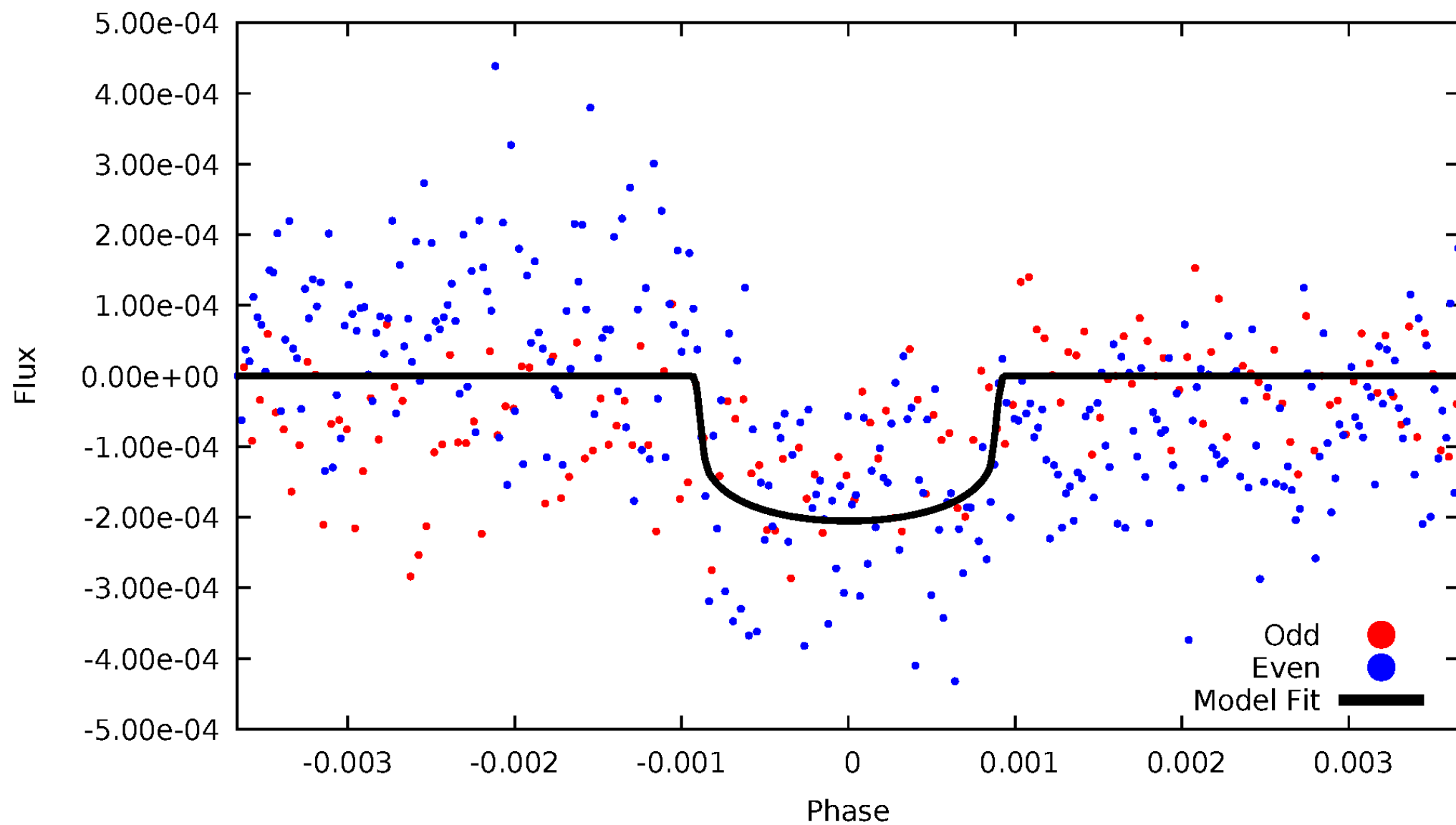


TCE 005962873-01



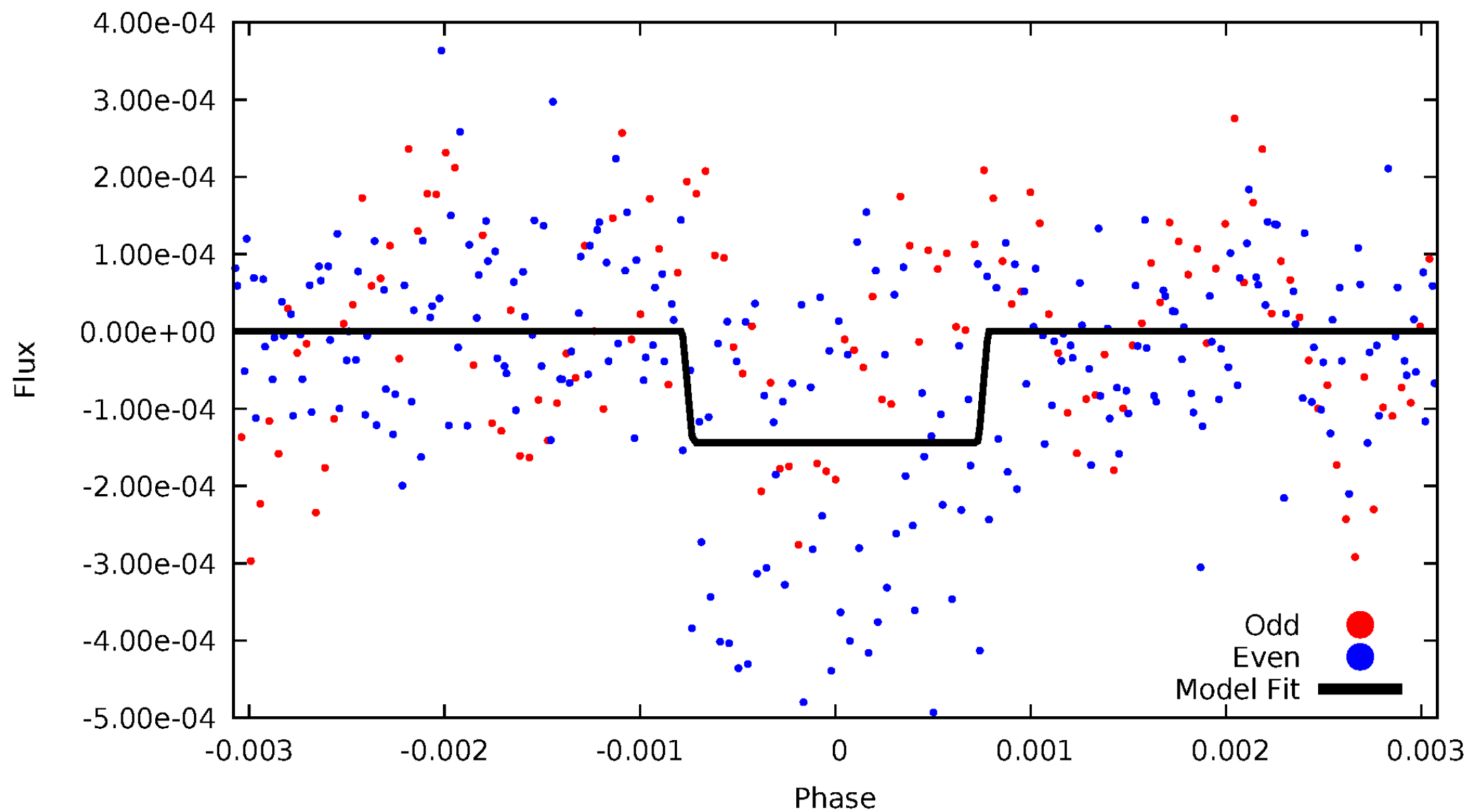
DV Odd/Even

TCE 005962873-01



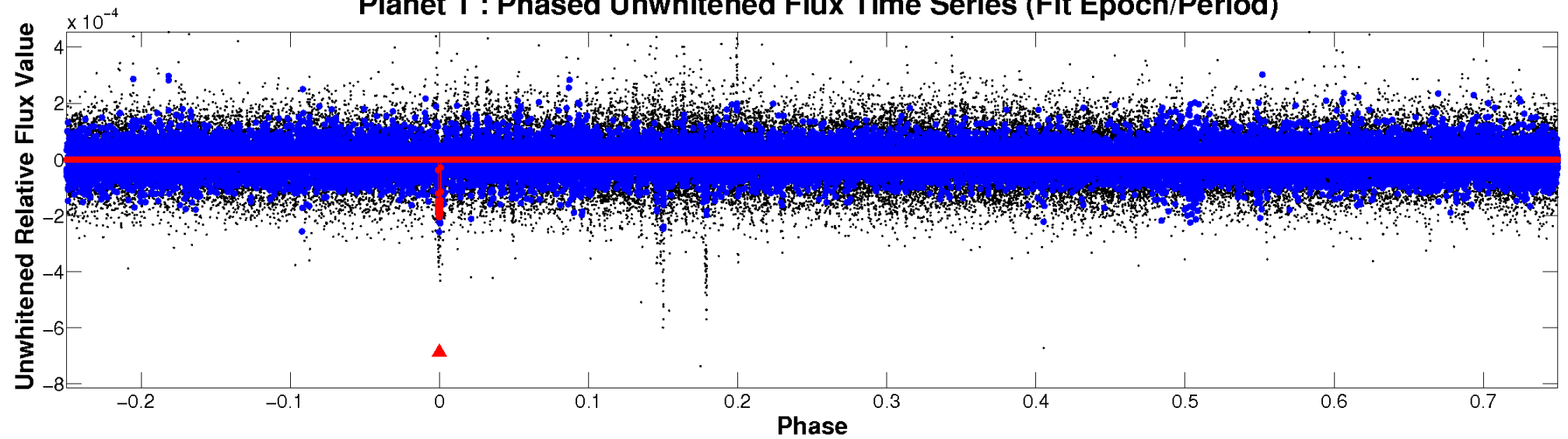
ALT Odd/Even

TCE 005962873-01

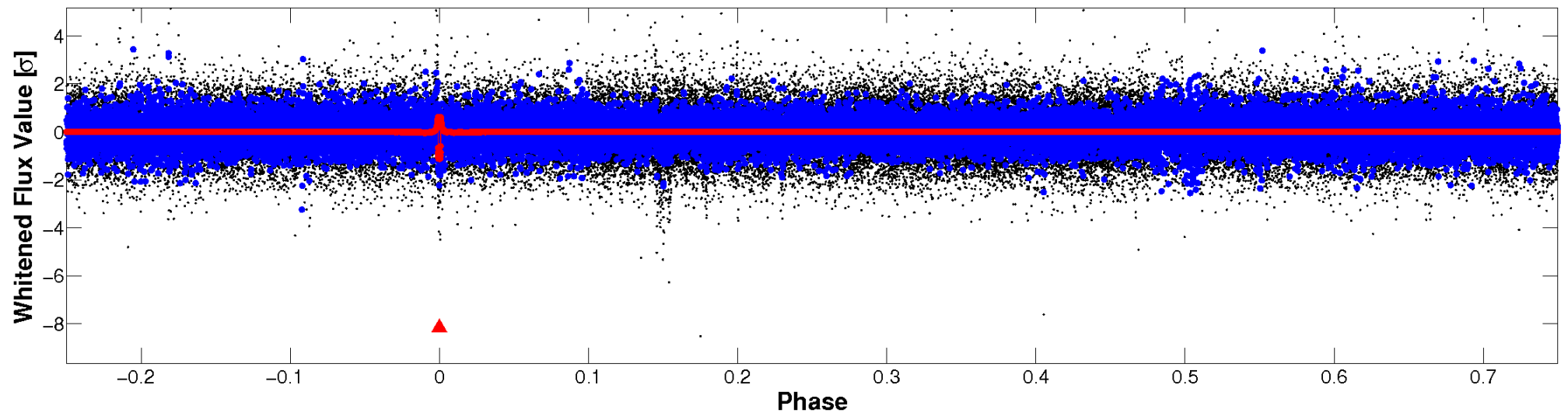


Non-Whitened Vs. Whitened Light Curve

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

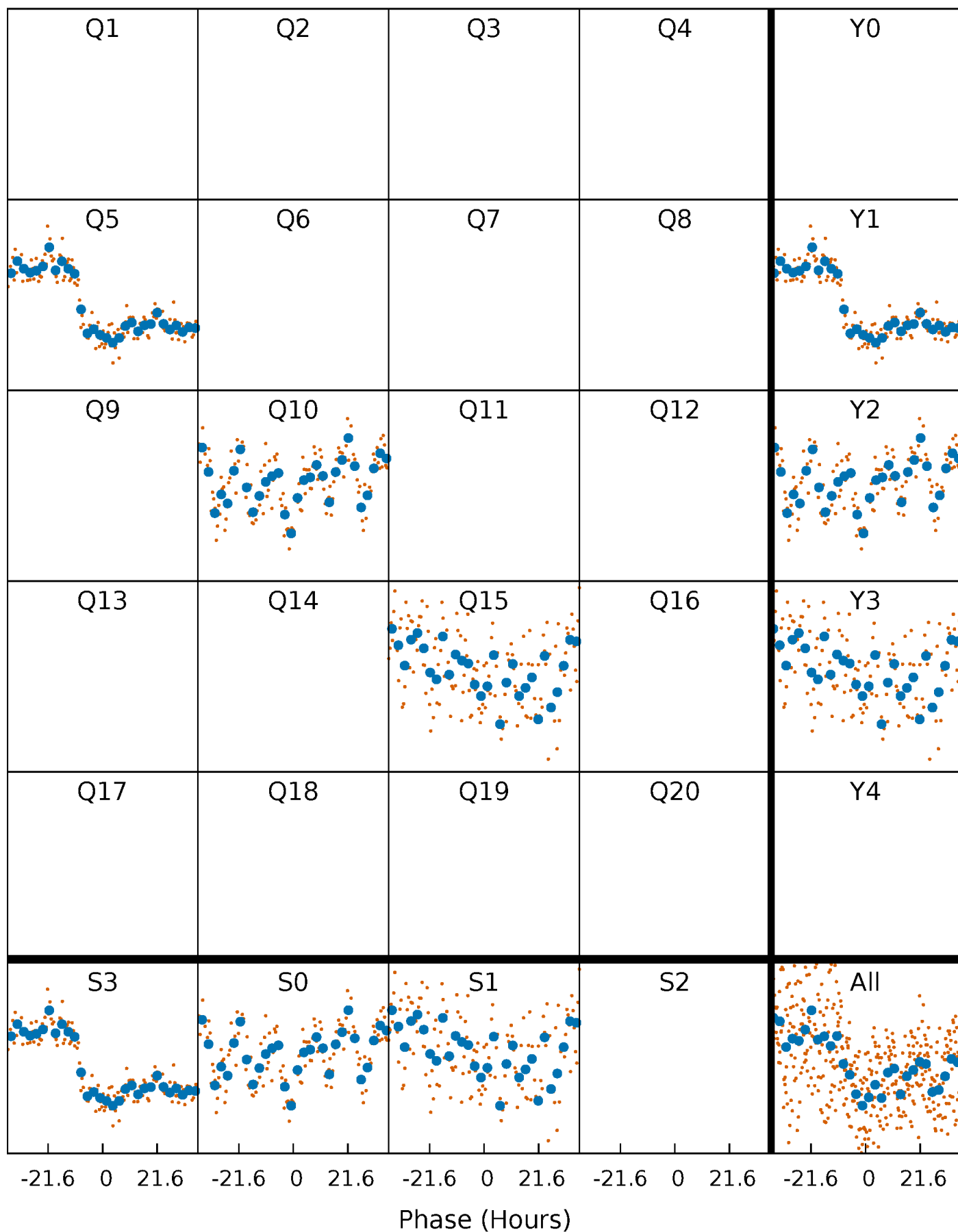


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



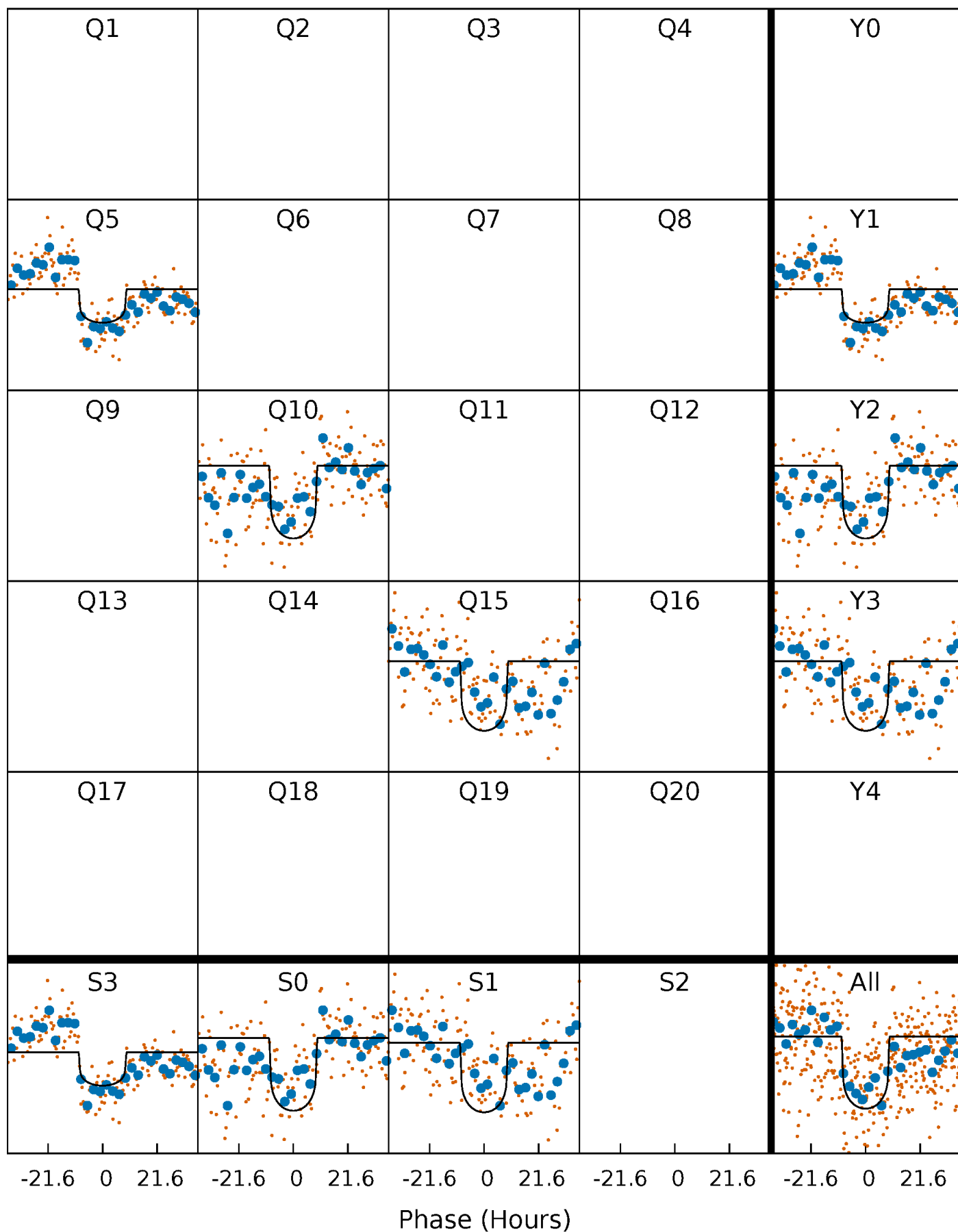
PDC Quarter-Phased Transit Curves

TCE 005962873-01 P=430.061188 Days $T_0=515.921081$ (BKJD)



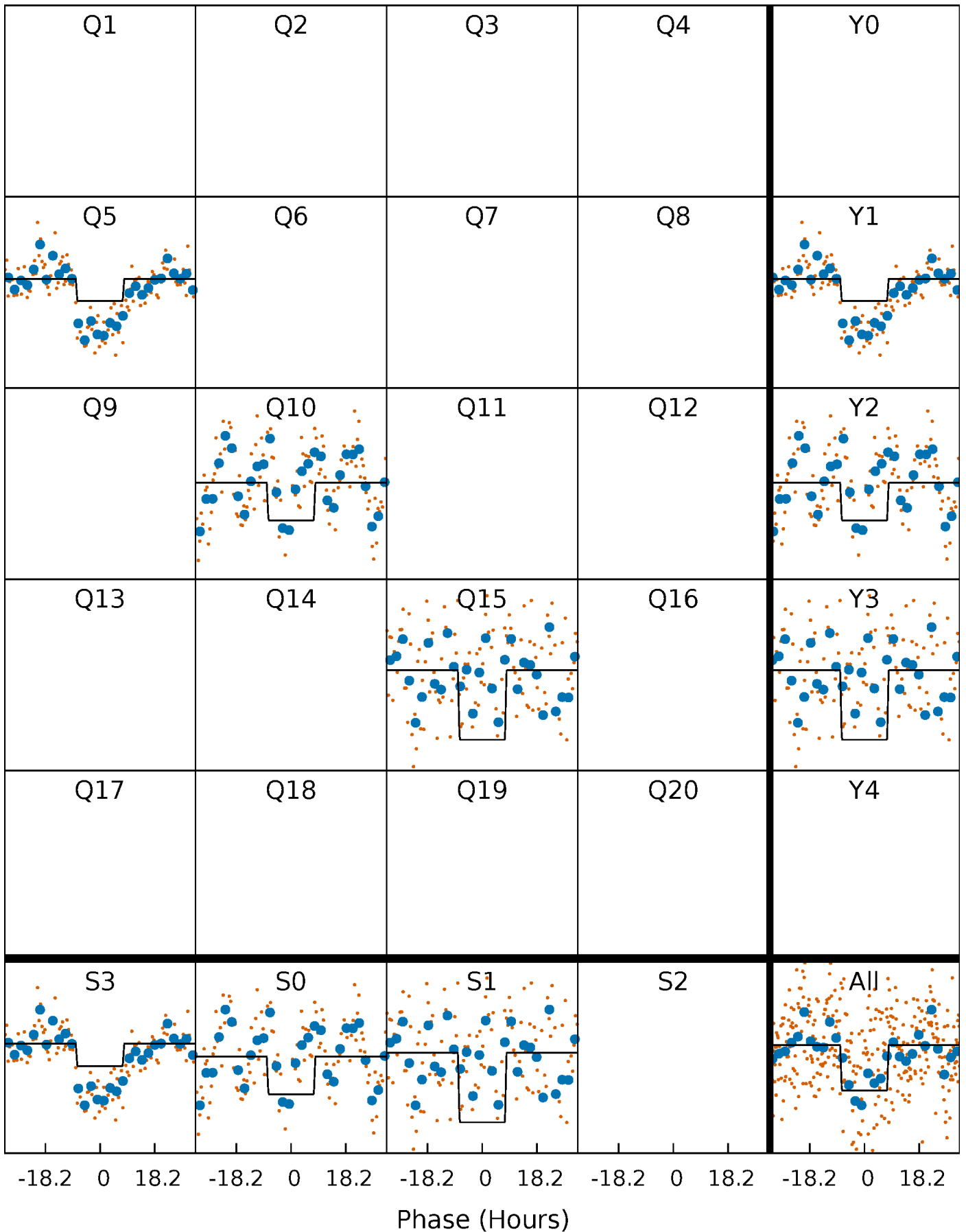
DV Quarter-Phased Transit Curves

TCE 005962873-01 P=430.061188 Days $T_0=515.921081$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

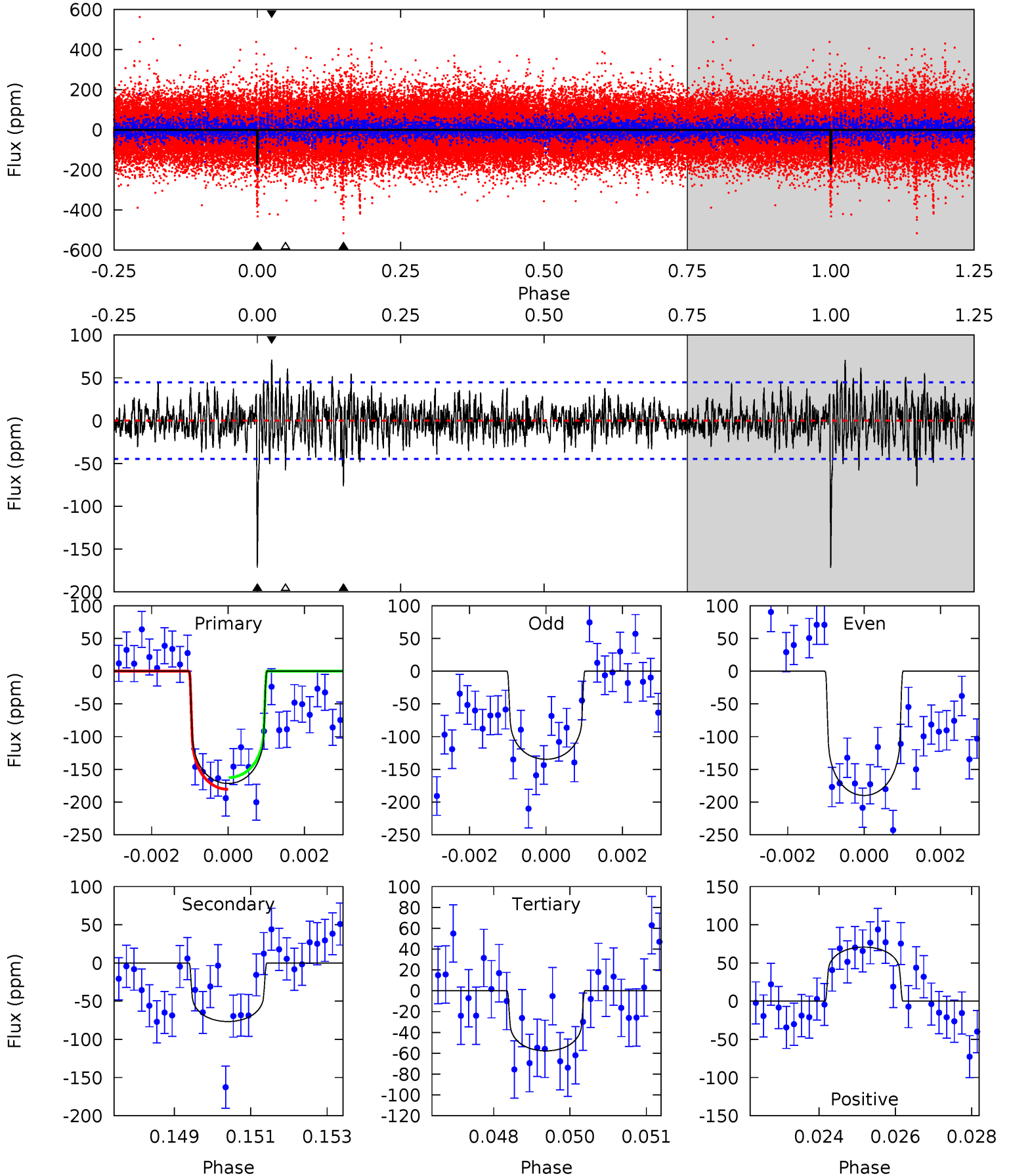
TCE 005962873-01 P=430.119627 Days $T_0=515.877878$ (BKJD)



DV Model-Shift Uniqueness Test

005962873-01, $P = 430.061188$ Days, $E = 85.859893$ Days

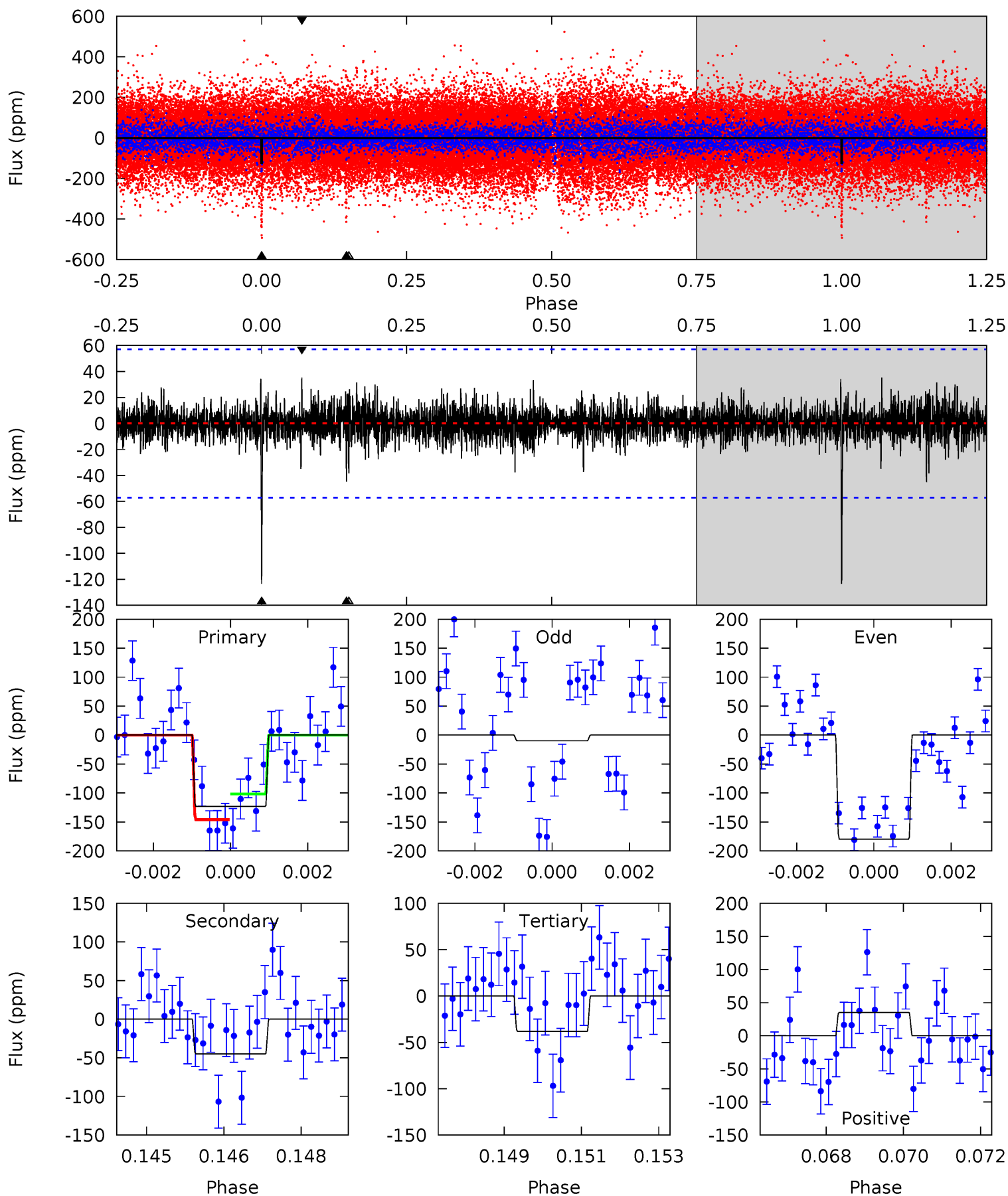
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
20.5	9.17	6.90	8.46	5.34	3.12	1.90	13.6	12.1	2.26	0.70	3.12	1.28	0.29	1.07



Alt Model-Shift Uniqueness Test

005962873-01, P = 430.119627 Days, E = 85.758251 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
11.6	4.22	3.59	3.31	5.37	3.16	0.78	7.99	8.28	0.63	0.91	7.18	4.74	0.22	2.08



Stellar Parameters For KIC 005962873

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	M (M_{\odot})	p_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	5971^{+80}_{-80}	$4.057^{+0.195}_{-0.105}$	$-0.120^{+0.150}_{-0.150}$	$1.591^{+0.270}_{-0.360}$	$1.053^{+0.098}_{-0.089}$	$0.368^{+0.371}_{-0.116}$
	+1%/-1%	+5%/-3%	+125%/-125%	+17%/-23%	+9%/-8%	+101%/-31%
Source	SPE68	SPE68	SPE68	DSEP		

KIC = Kepler Input Catalog; PHO = Photometry; SPE = Spectroscopy; AST = Asteroseismology
 TRA = Transits; DESP = Dartmouth Models; MULT = Multiple Models

Secondary Eclipse Parameters for KIC 005962873-01 / KOI

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	-77 ± 8	$2.39^{+0.59}_{-0.52}$	434^{+21}_{-27}	4820^{+460}_{-337}	9517^{+5912}_{-3460}
Alt.	-45 ± 11	$2.00^{+0.59}_{-0.50}$	433^{+20}_{-28}	4629^{+543}_{-413}	7948^{+6248}_{-3392}

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

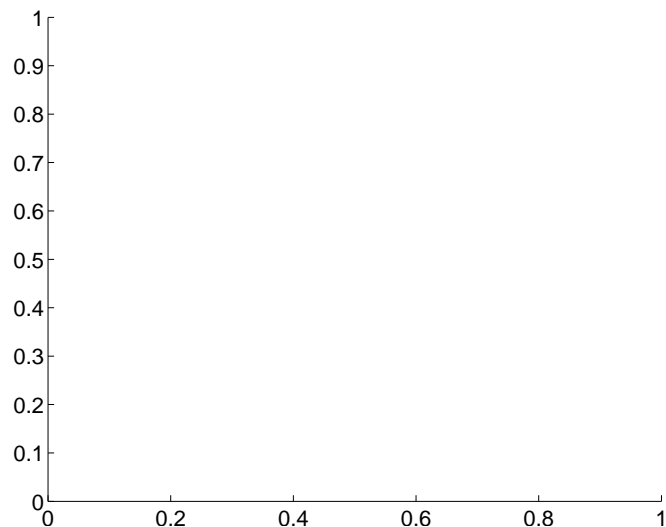
Supplemental centroid analysis for 005962873-01. Kepler magnitude: 12.20. Transit SNR 11.40

There are 0 quarters with good PRF difference image offsets

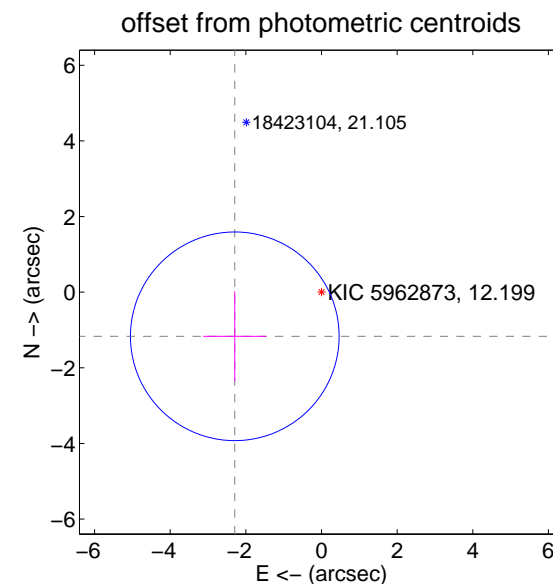
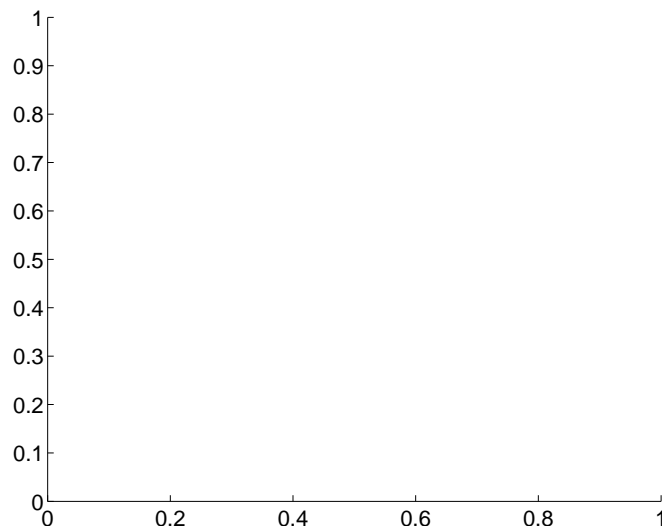
The direct PRF centroid is offset from the target star catalog position by about NaN arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	—	—	—	—
PRF-fit source offset from KIC position	—	—	—	—
photometric centroid source offset	2.57 ± 0.92	2.80	2.29 ± 0.84	-1.17 ± 1.19

There is no PRF-fit offset from OOT-fit



There is no PRF-fit offset from KIC

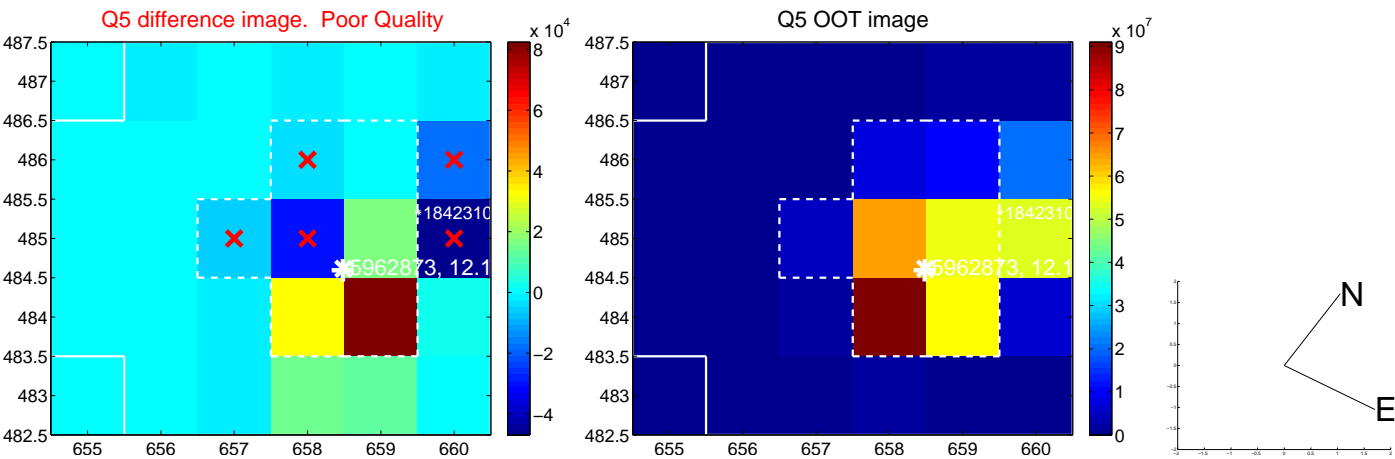


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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

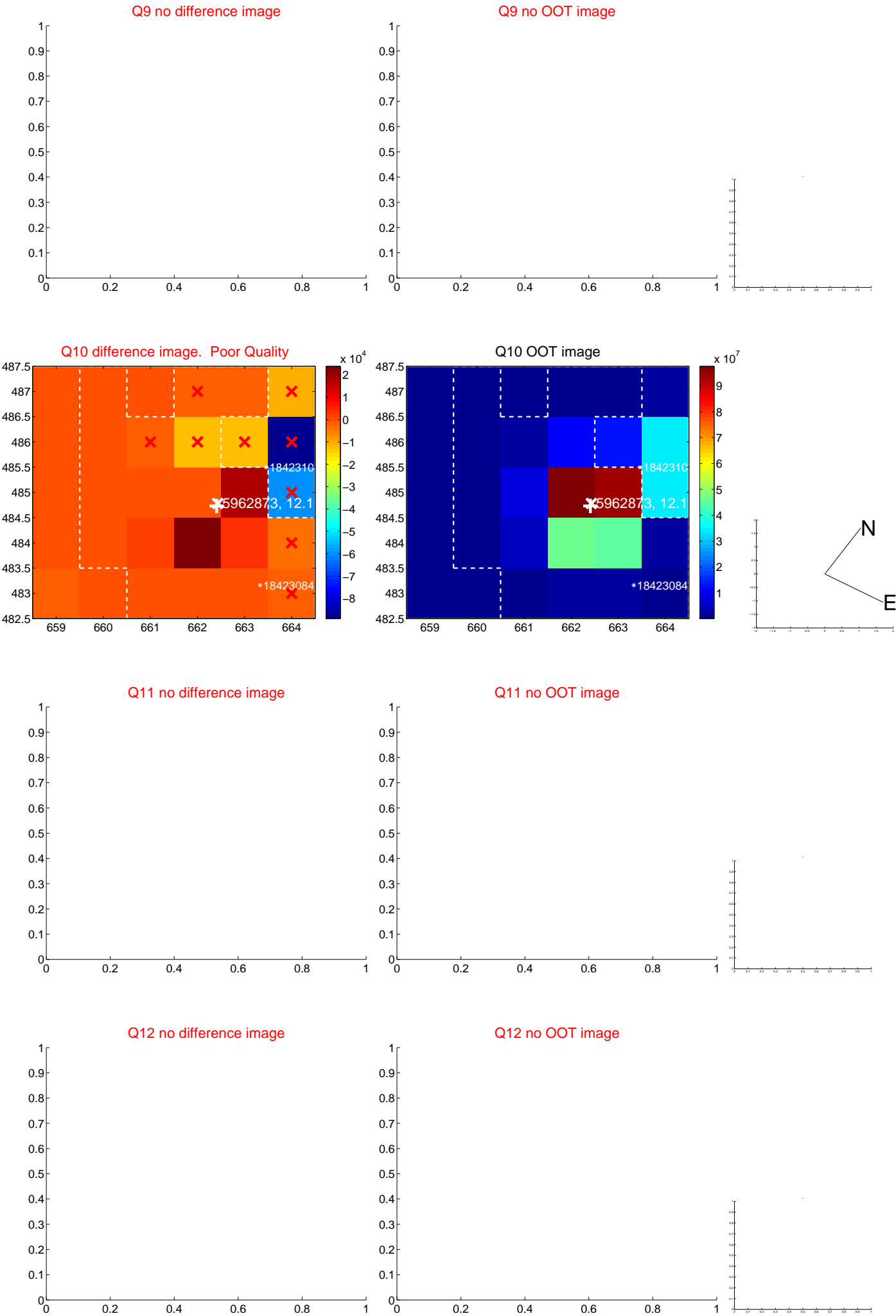
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



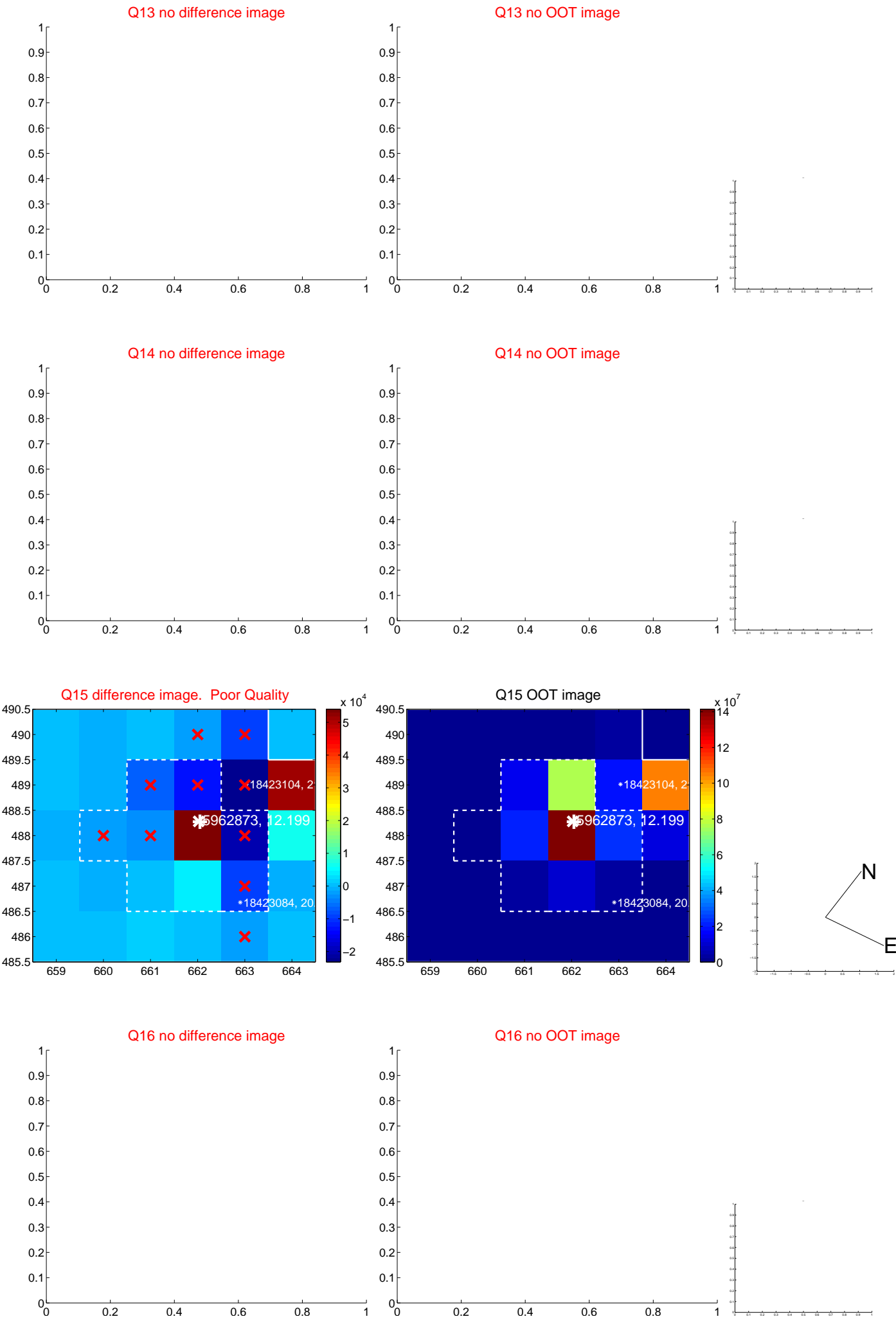
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



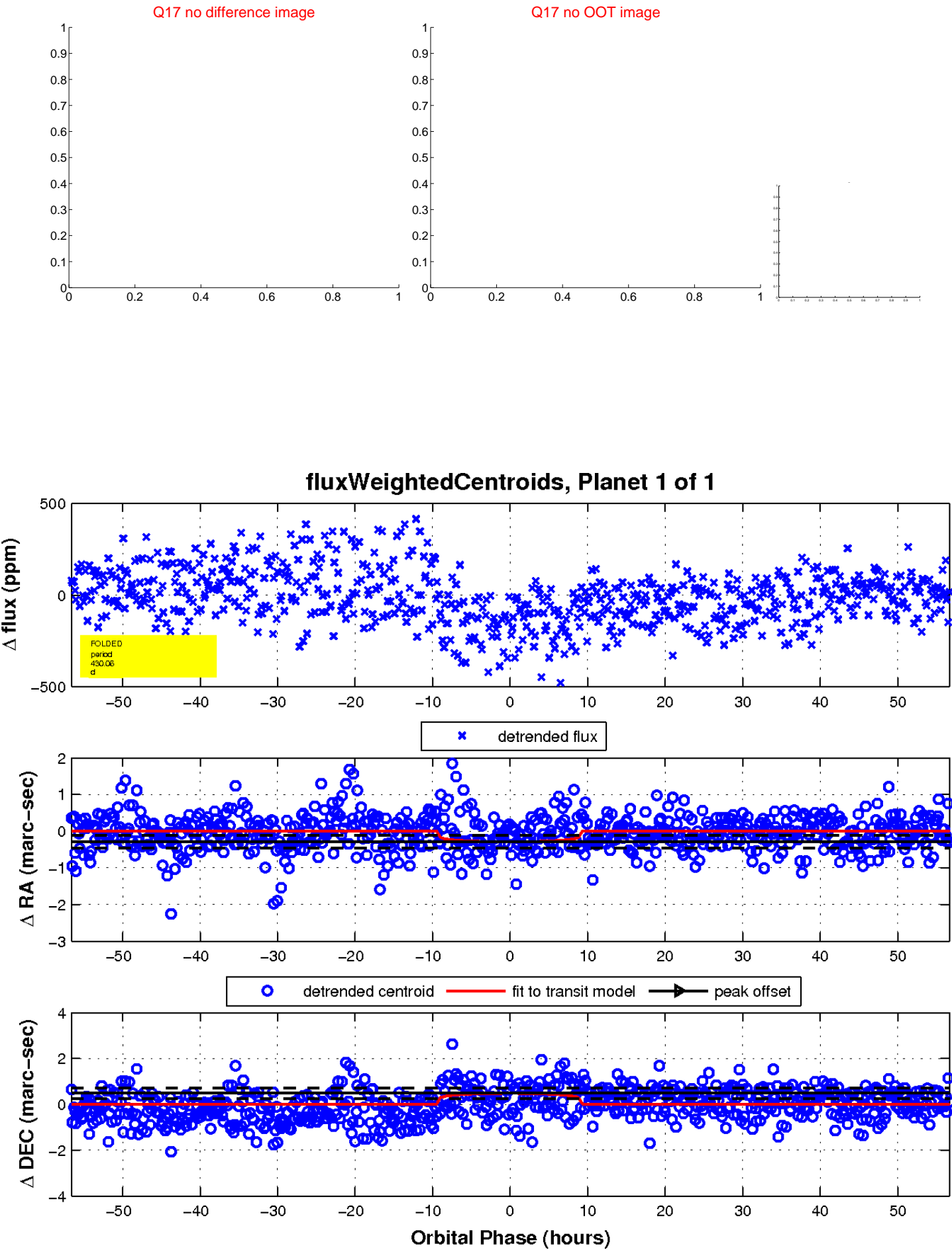
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



white ×: 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.



UKIRT Image

