

KIC 008817703

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})
008817703-01	OBS	No	376.833662	134.466191	764.8	22.236	8.2	9.1	0.70	5517	2.06	0.47

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
008817703-01	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_MARSHALL_SKYE—LPP_DV—LPP_ALT—MOD_NONUNIQ_ALT—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.

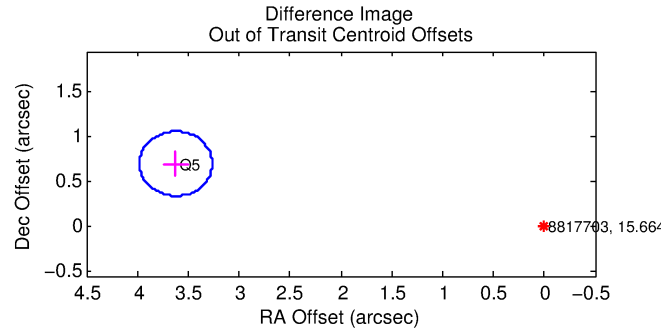
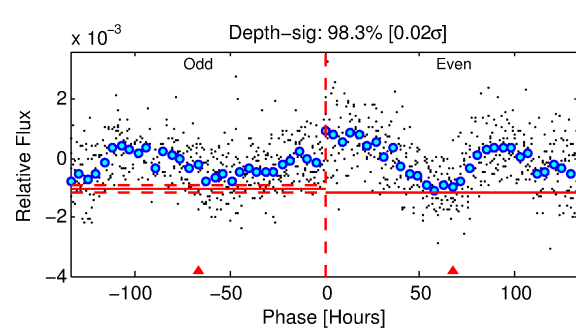
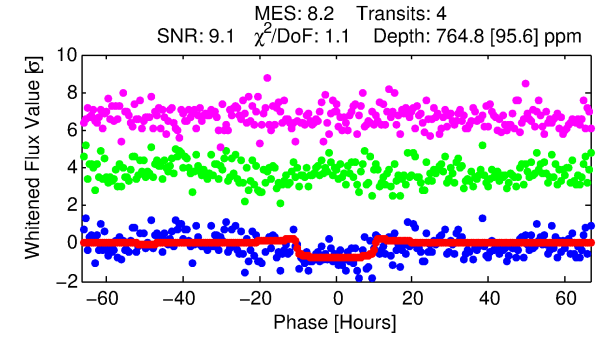
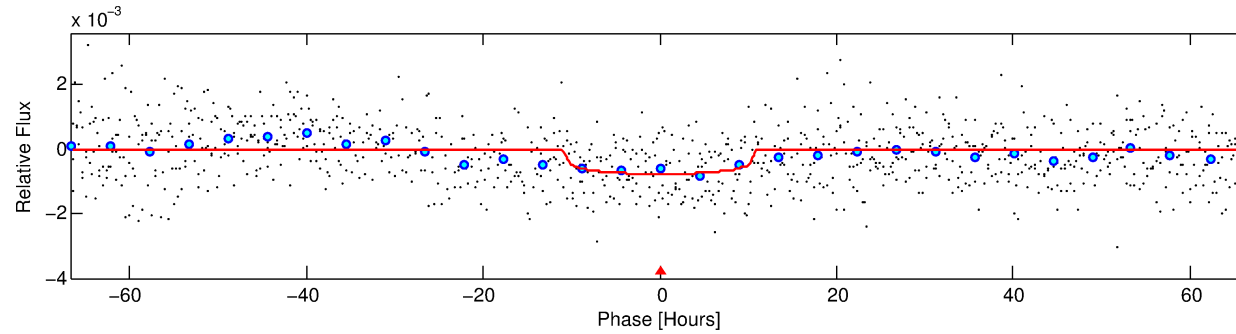
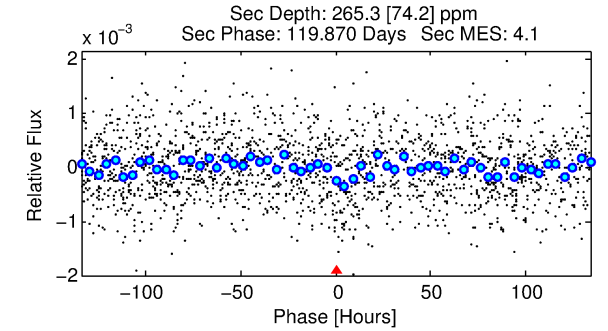
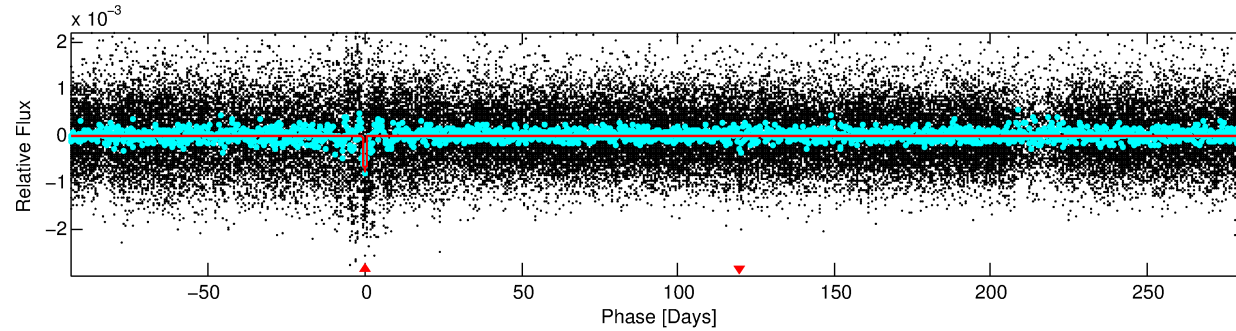
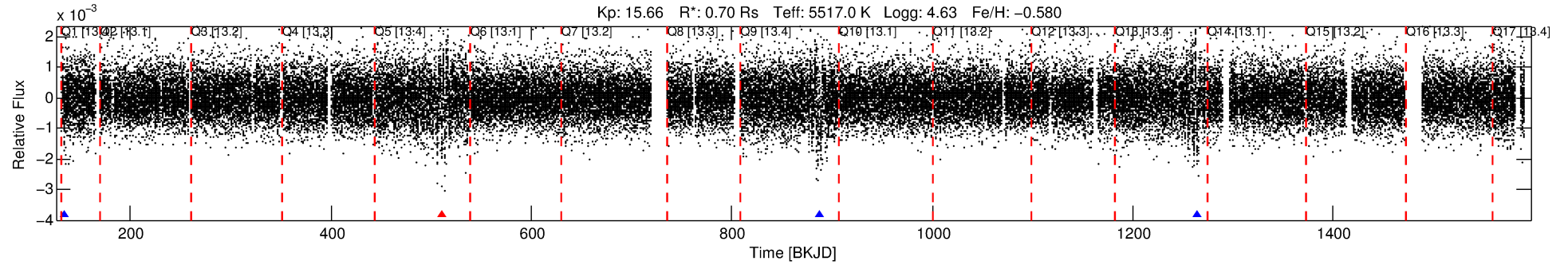
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 008817703-01

No Significant Match Found

DV One-Page Summary

KIC: 8817703 Candidate: 1 of 1 Period: 376.834 d



DV Fit Results:

Period = 376.83366 [0.01461] d
Epoch = 134.4662 [0.0279] BKJD
Rp/R* = 0.0268 [0.0071]
a/R* = 100.82 [115.00]
b = 0.67 [0.95]
Seff = 0.47 [0.11]
Teq = 211 [12] K
Rp = 2.06 [0.64] Re
a = 0.9372 [0.1265] AU
Ag = 30219.70 [19031.77] [1.59σ]
Teffp = 4300 [657] K [6.23σ]

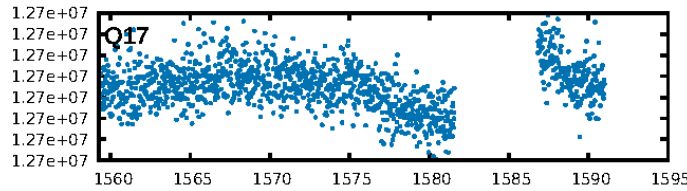
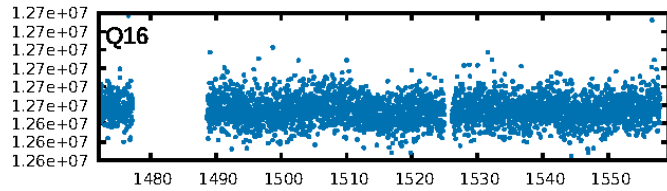
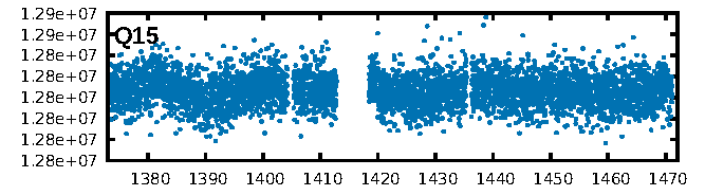
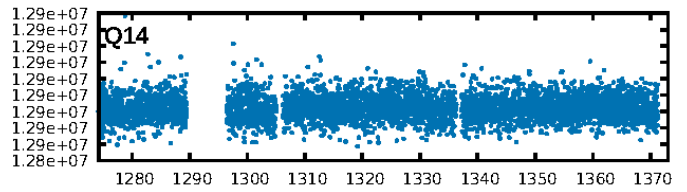
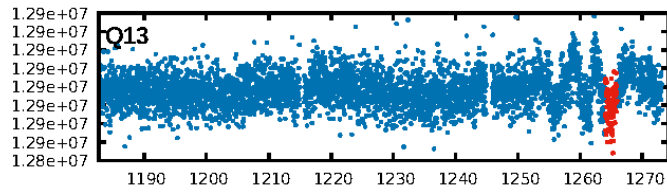
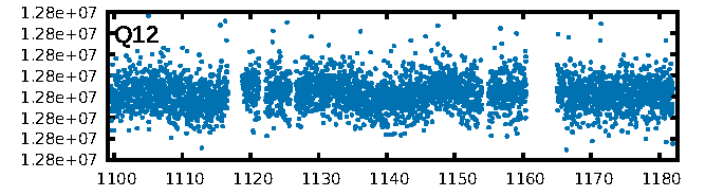
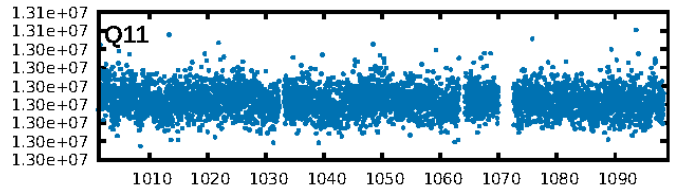
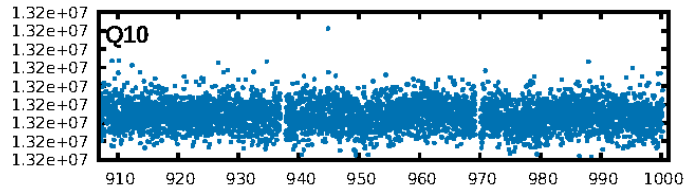
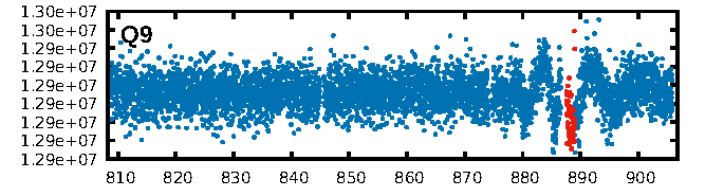
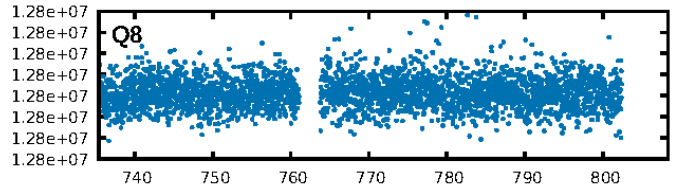
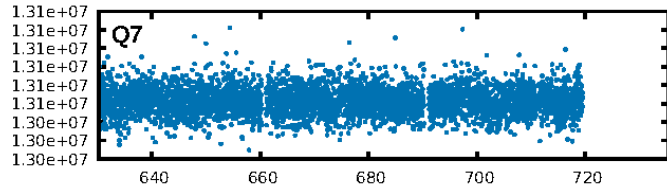
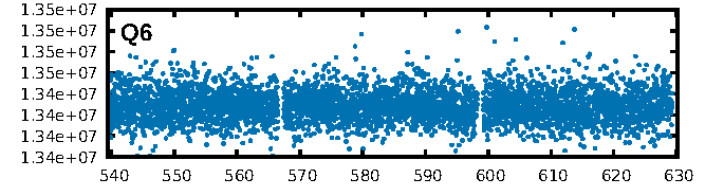
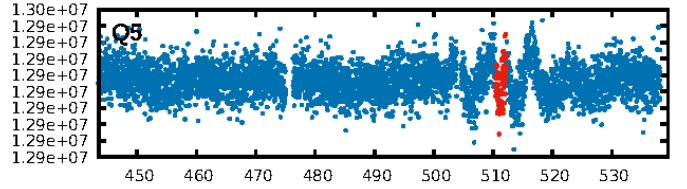
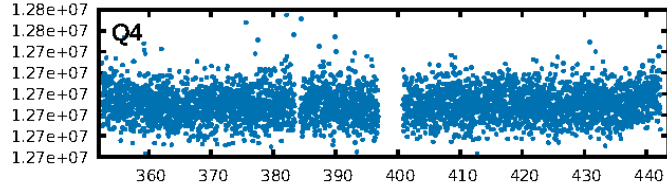
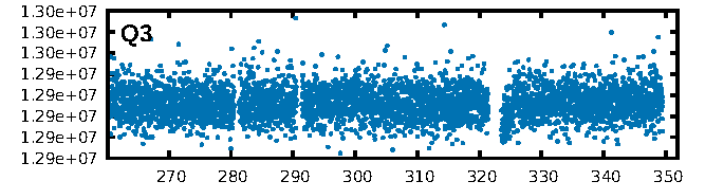
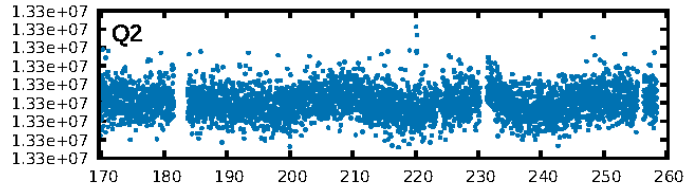
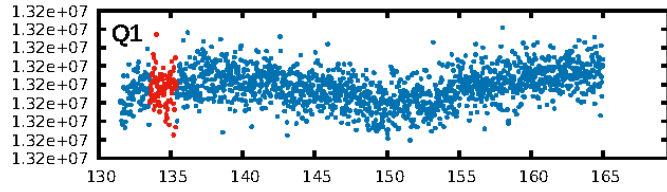
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: 0.8%
ModelChiSquareGoF-sig: 94.9%
Bootstrap-pfa: 1.40e-09
RollingBand-fgt: 0.67 [2/3]
GhostDiagnostic-chr: 0.2954
Centroid-sig: 98.2%
Centroid-so: 0.360 arcsec [0.29σ]
OotOffset-rm: 3.689 arcsec [30.83σ]
KicOffset-rm: 3.633 arcsec [30.37σ]
OotOffset-st: 0/0/0/1 [1]
KicOffset-st: 0/0/0/1 [1]
DiffImageQuality-fgm: 0.00 [0/1]
DiffImageOverlap-fno: 1.00 [3/3]

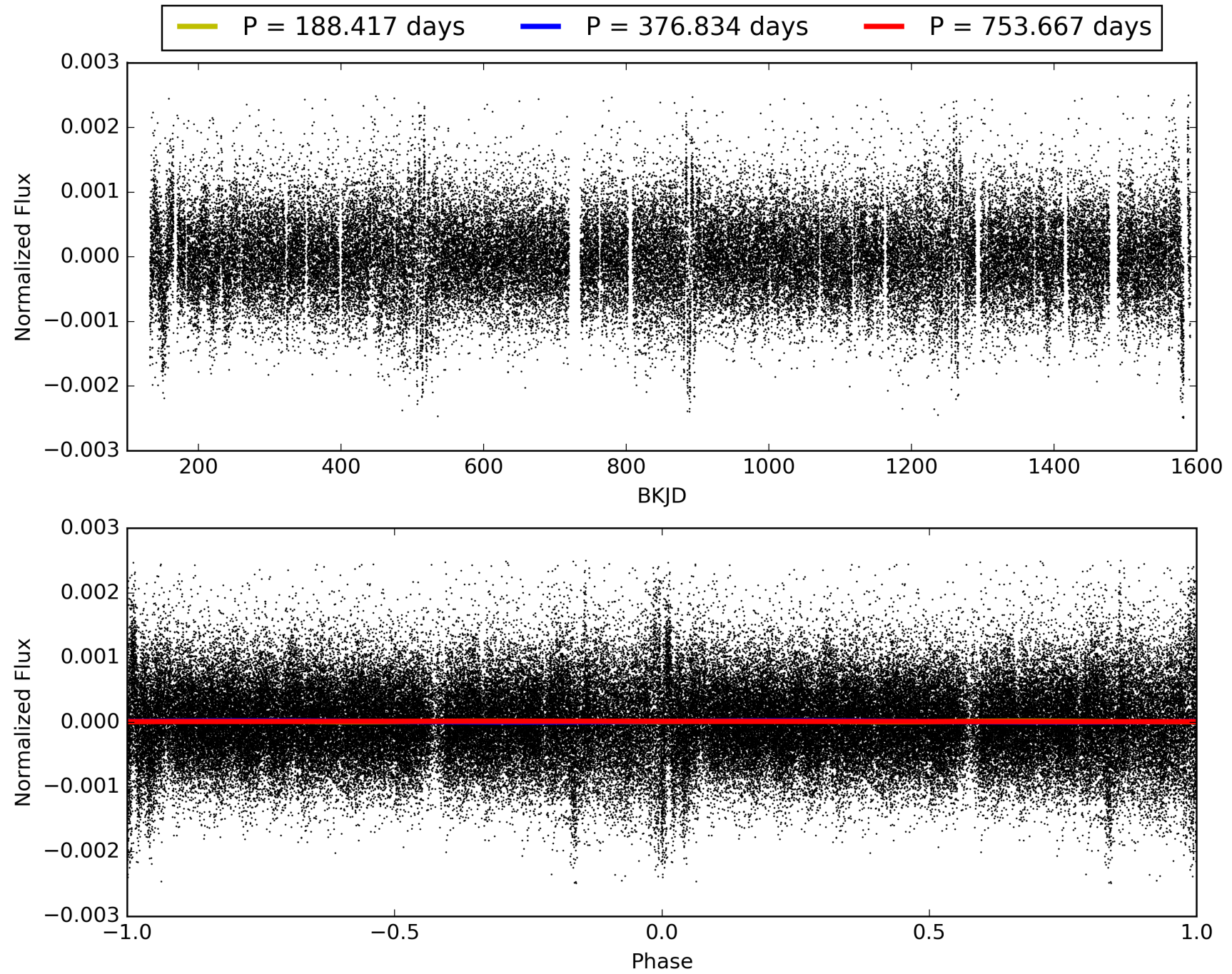
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 30-Jan-2016 15:52:40 Z

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

TCE 008817703-01, PDC Light Curves

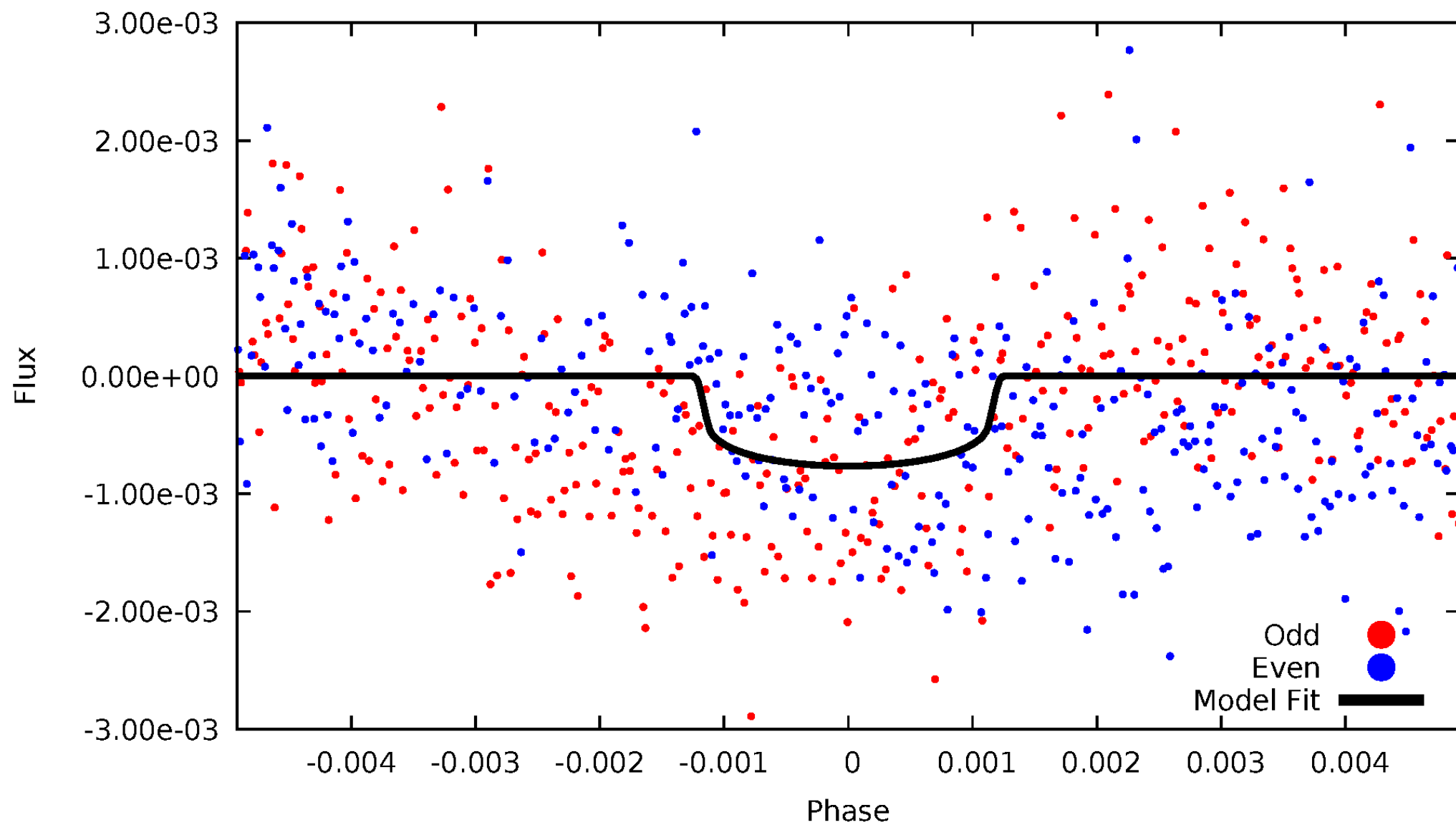


TCE 008817703-01



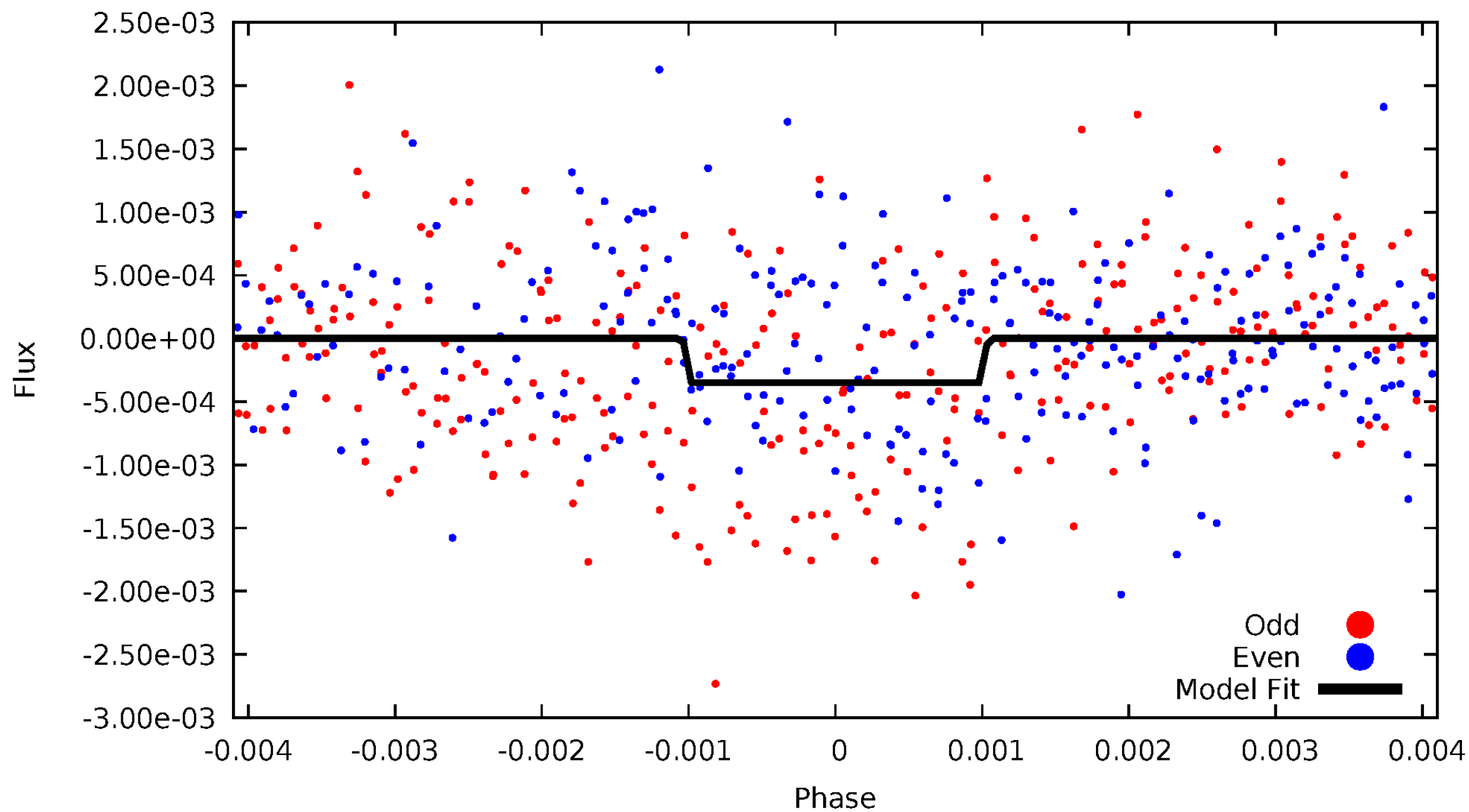
DV Odd/Even

TCE 008817703-01



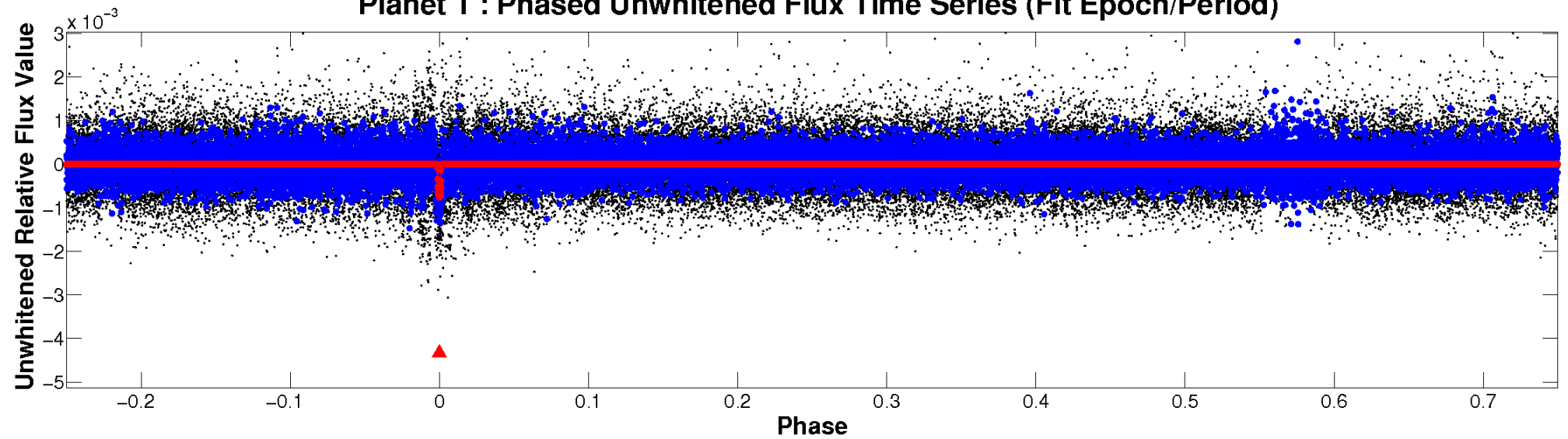
ALT Odd/Even

TCE 008817703-01

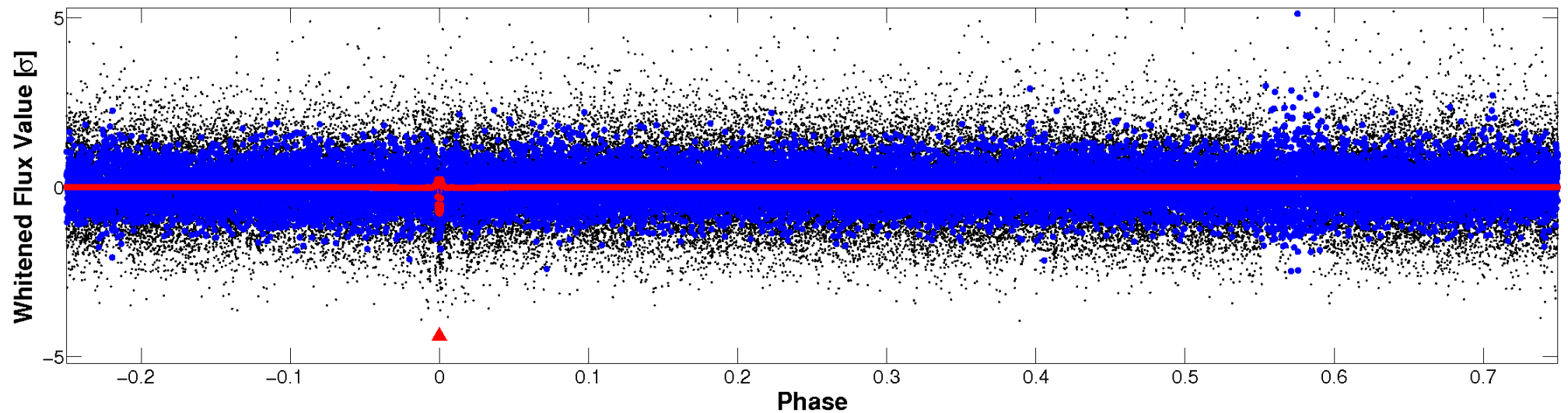


Non-Whitened Vs. Whitened Light Curve

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

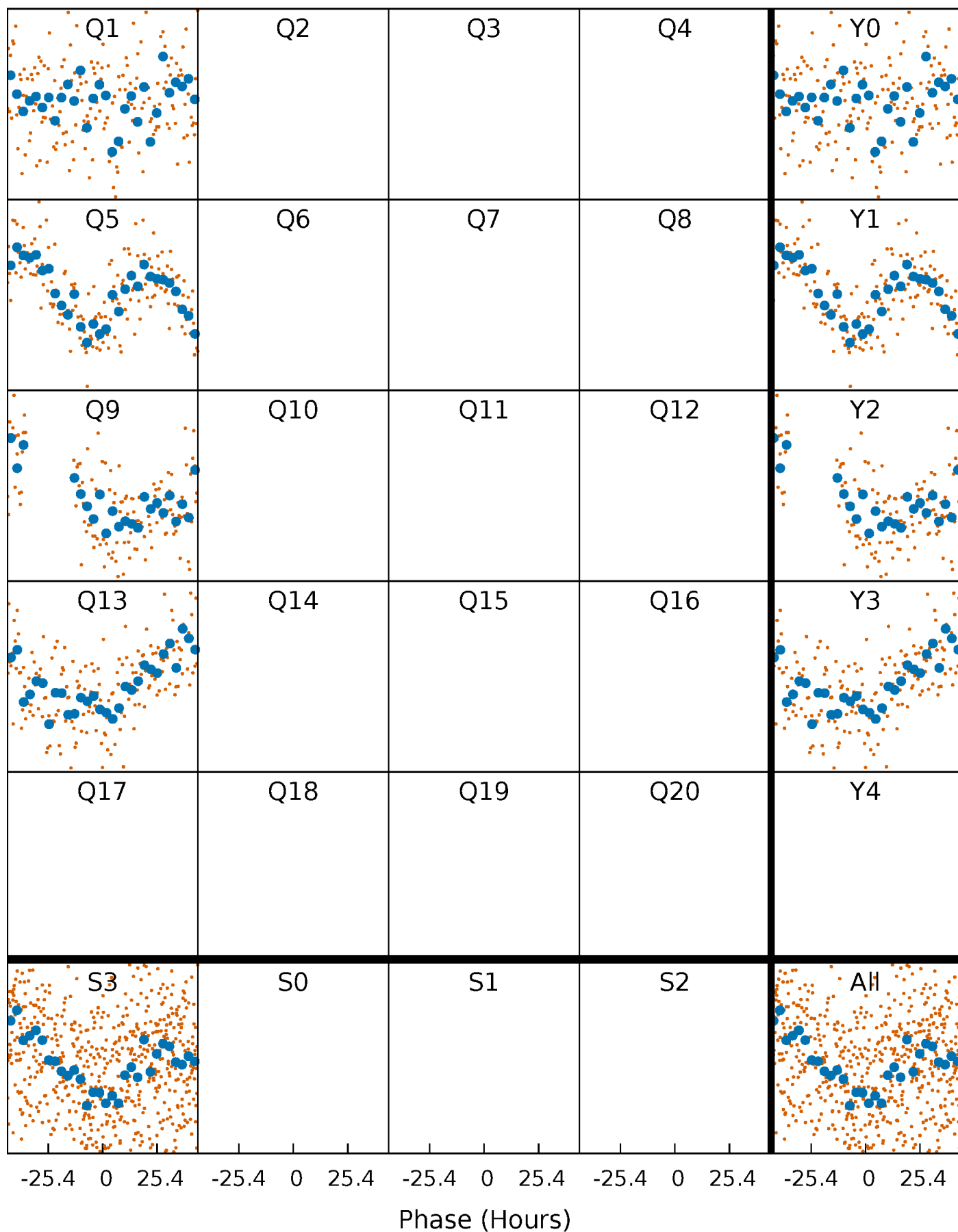


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



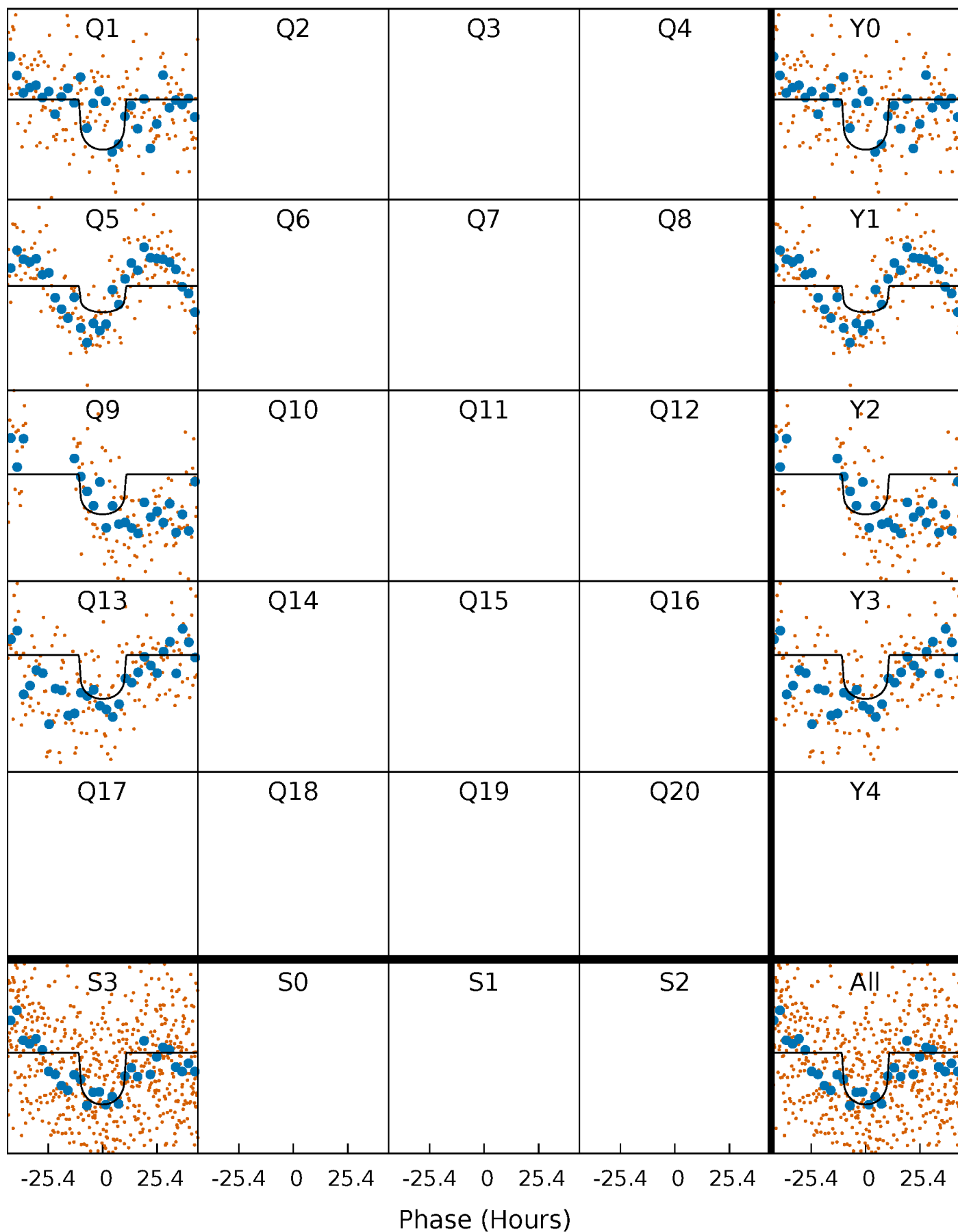
PDC Quarter-Phased Transit Curves

TCE 008817703-01 P=376.833662 Days $T_0=134.466191$ (BKJD)



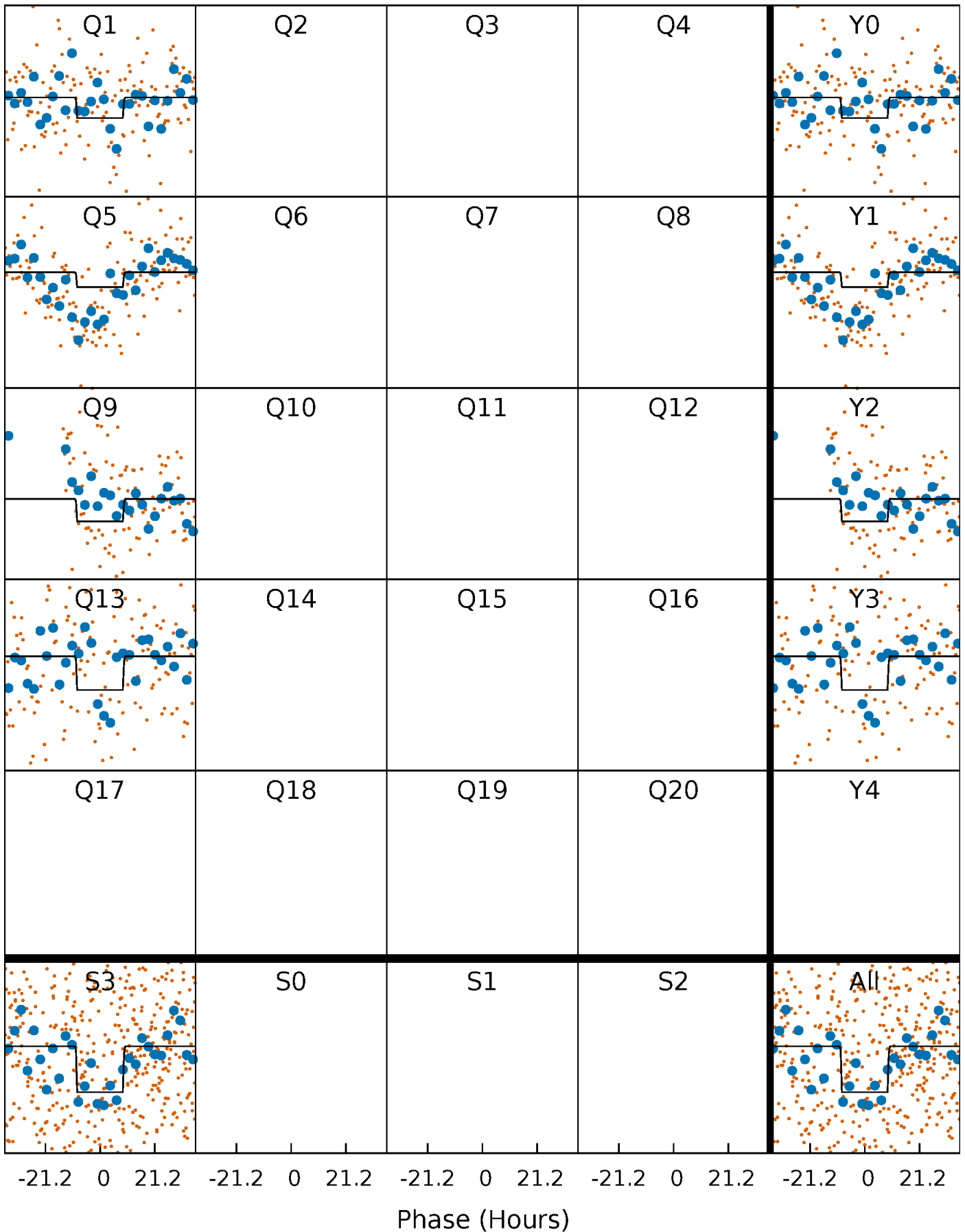
DV Quarter-Phased Transit Curves

TCE 008817703-01 P=376.833662 Days $T_0=134.466191$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

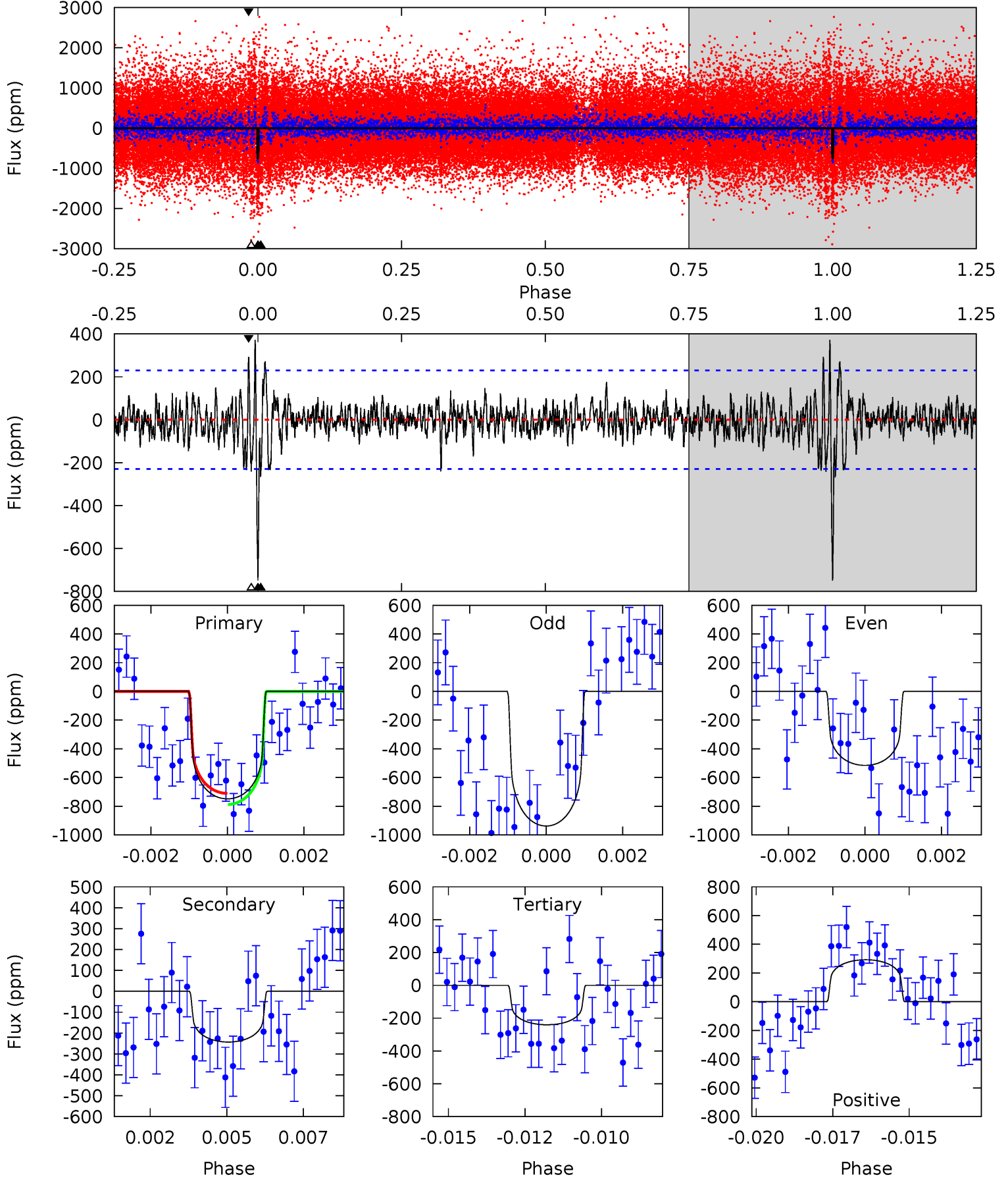
TCE 008817703-01 P=376.856147 Days $T_0=134.456885$ (BKJD)



DV Model-Shift Uniqueness Test

008817703-01, P = 376.833662 Days, E = 134.466191 Days

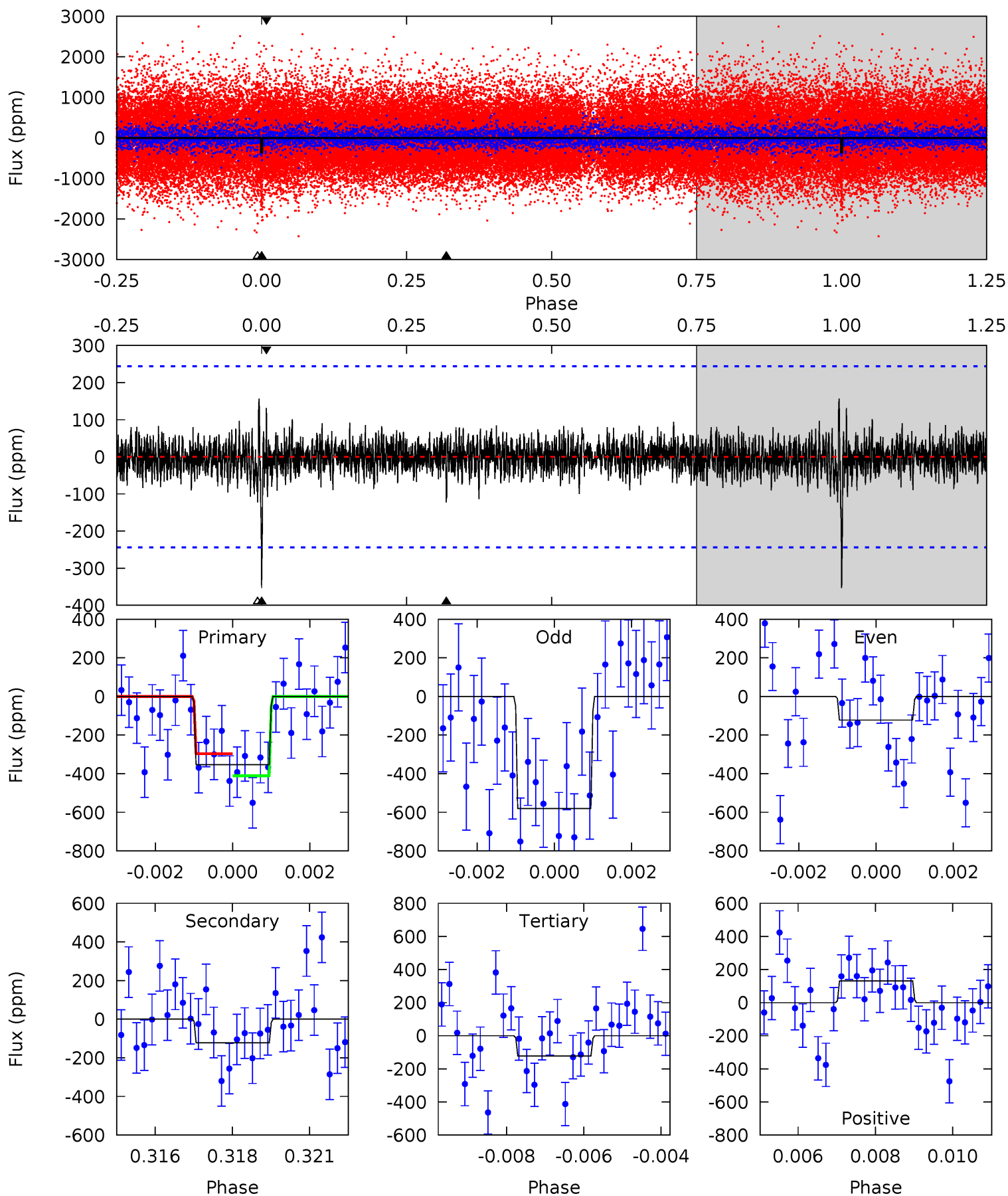
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
17.2	5.59	5.54	6.73	5.29	3.03	1.43	11.7	10.5	0.06	-1.14	4.88	0.91	0.33	0.89



Alt Model-Shift Uniqueness Test

008817703-01, P = 376.856147 Days, E = 134.456885 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
7.71	2.68	2.68	2.87	5.32	3.08	0.66	5.03	4.84	0.00	-0.19	5.03	1.48	0.31	1.24



Stellar Parameters For KIC 008817703

	$T_{\text{eff}}(K)$	$\log(g)$	$[\text{Fe}/\text{H}]$	R (R_{\odot})	$M(M_{\odot})$	p_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	5517^{+163}_{-163}	$4.631^{+0.032}_{-0.104}$	$-0.580^{+0.300}_{-0.300}$	$0.704^{+0.115}_{-0.046}$	$0.788^{+0.073}_{-0.073}$	$3.187^{+0.446}_{-1.032}$
	+3%/-3%	+1%/-2%	+52%/-52%	+16%/-7%	+9%/-9%	+14%/-32%
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 008817703-01 / KOI

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	-243 ± 43	$2.11^{+0.59}_{-0.58}$	299^{+13}_{-11}	4408^{+615}_{-397}	26024^{+24754}_{-10317}
Alt.	-123 ± 46	$1.50^{+0.58}_{-0.58}$	299^{+13}_{-11}	4396^{+1105}_{-575}	25272^{+48216}_{-13662}

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

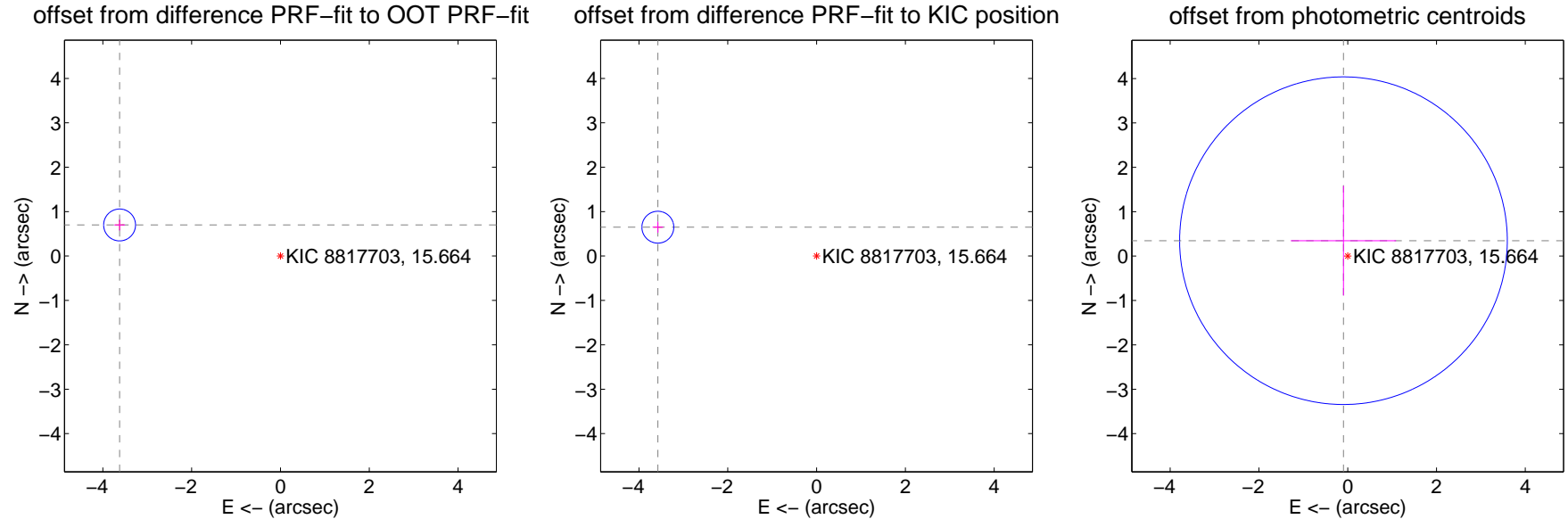
DV Centroid Data

Supplemental centroid analysis for 008817703-01. Kepler magnitude: 15.66. Transit SNR 9.13

There are 0 quarters with good PRF difference image offsets

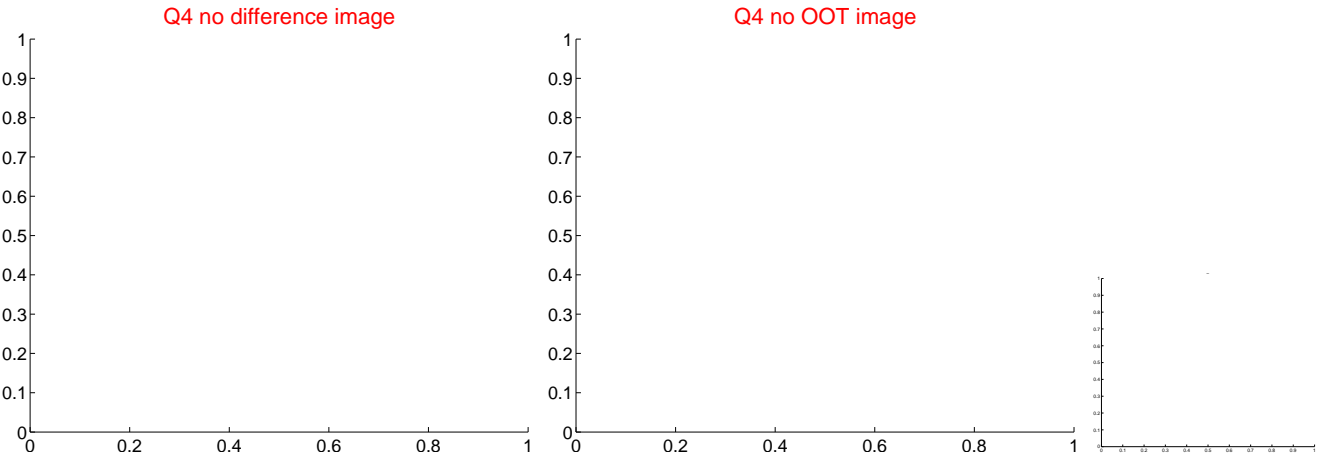
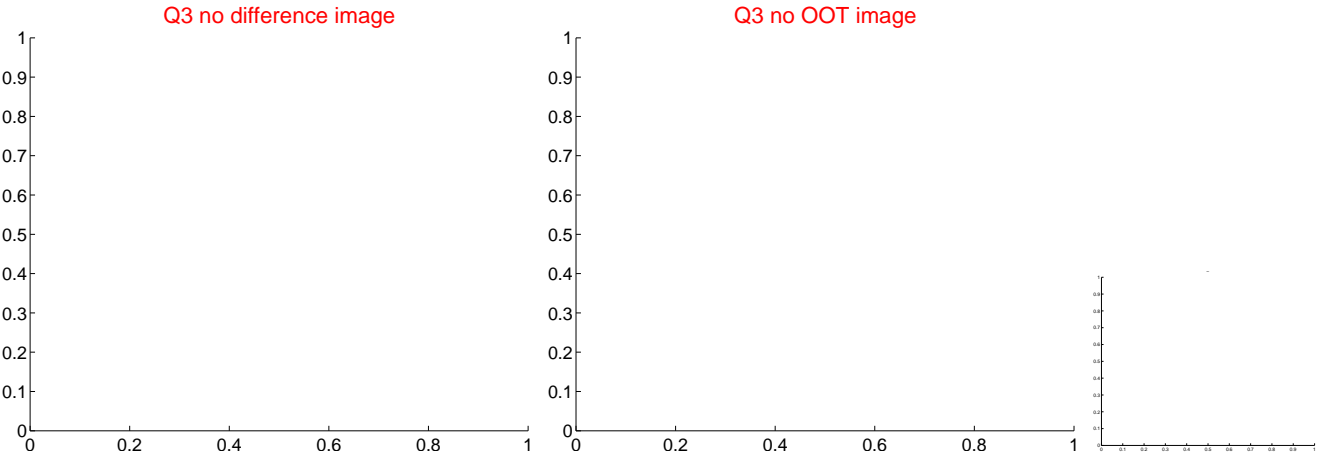
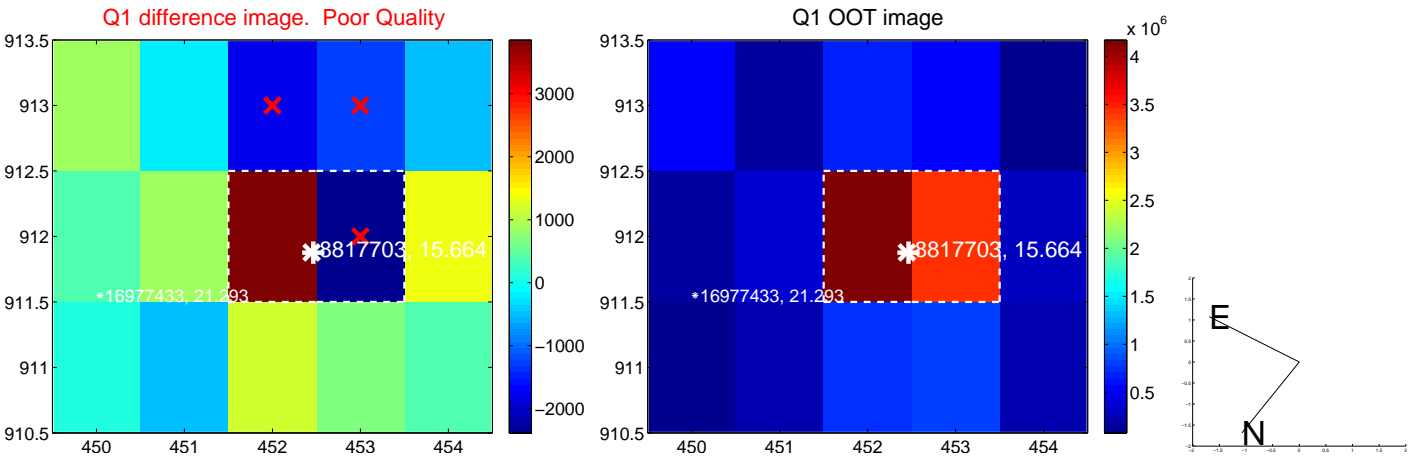
The direct PRF centroid is offset from the target star catalog position by about 0.07 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	3.689 ± 0.120	30.83	3.622 ± 0.119	0.700 ± 0.126
PRF-fit source offset from KIC position	3.633 ± 0.120	30.37	3.575 ± 0.119	0.649 ± 0.126
photometric centroid source offset	0.36 ± 1.23	0.29	0.10 ± 1.19	0.35 ± 1.23

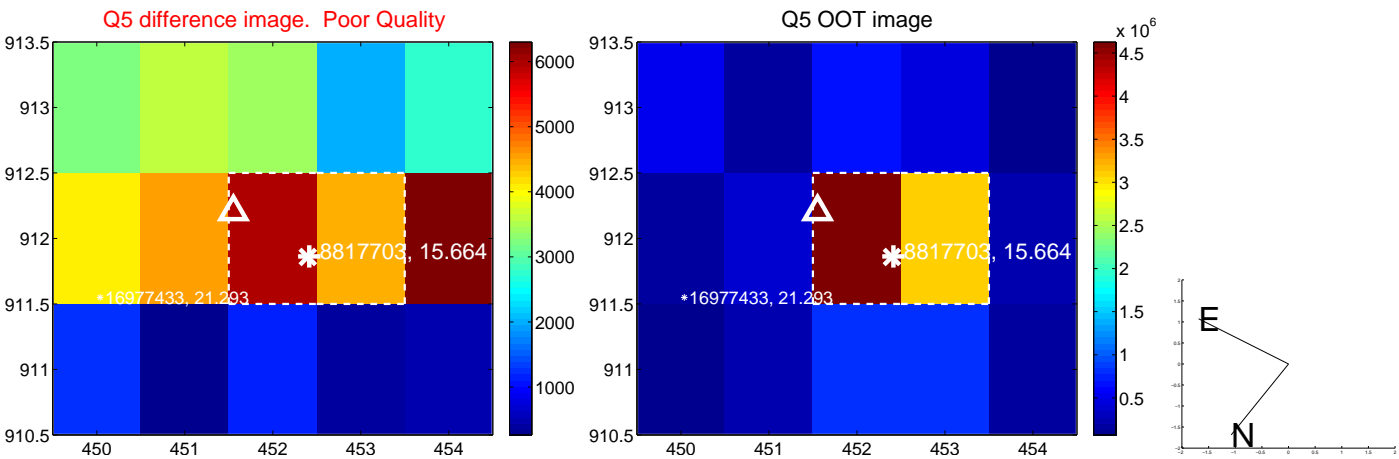


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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



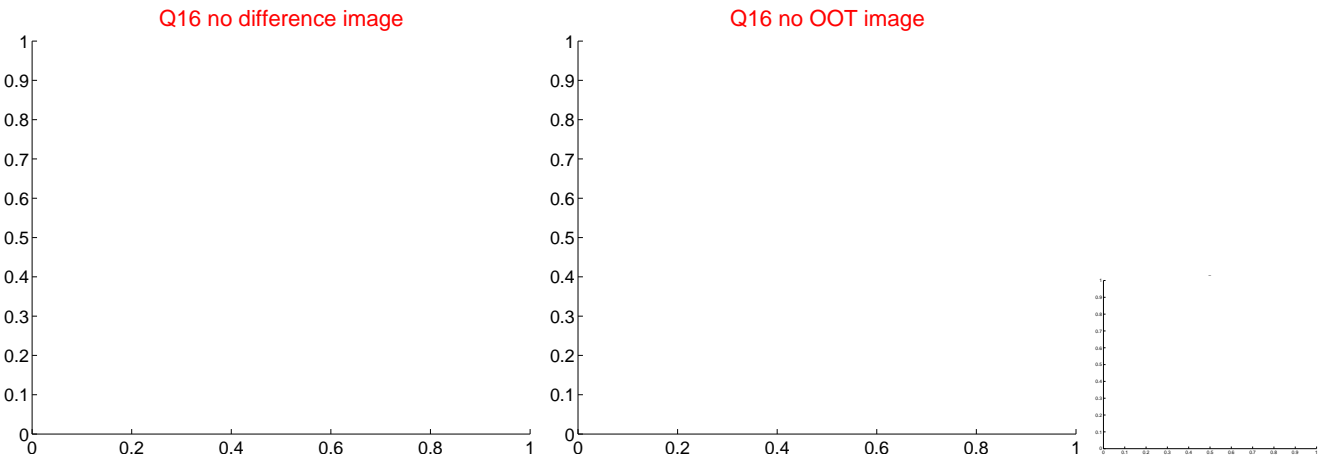
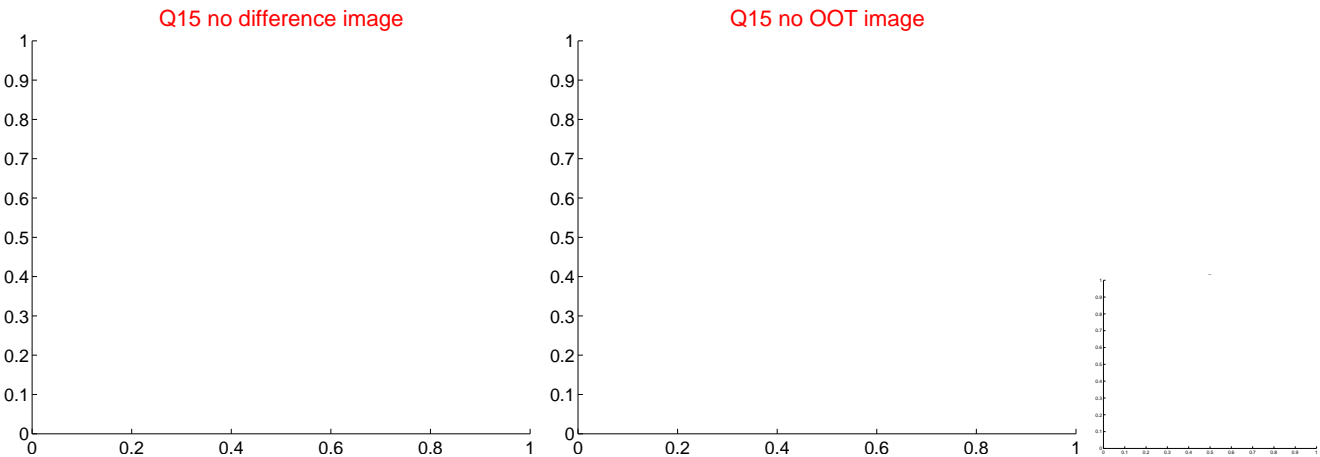
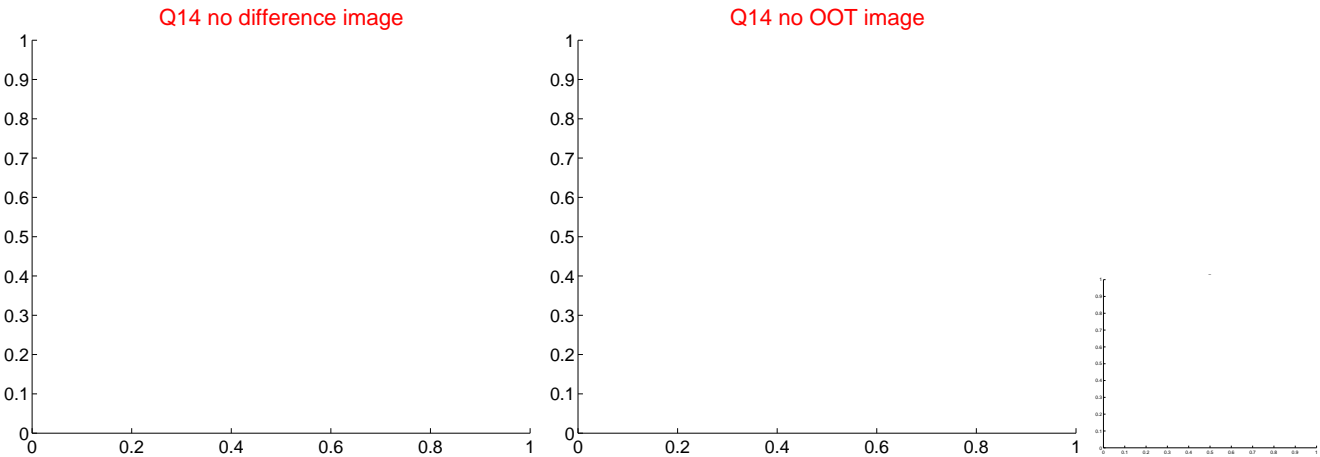
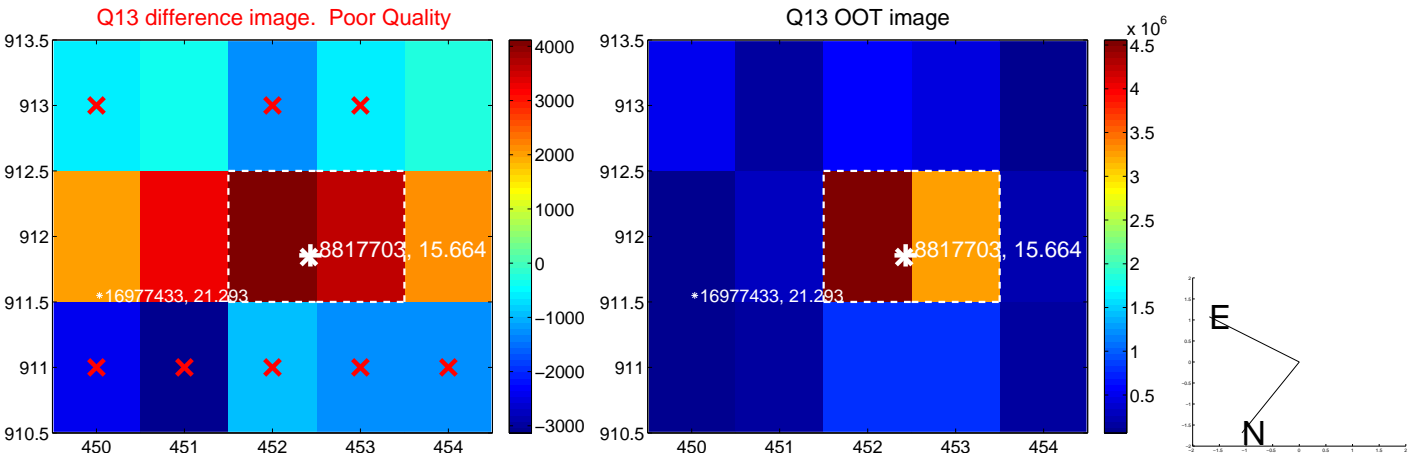
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



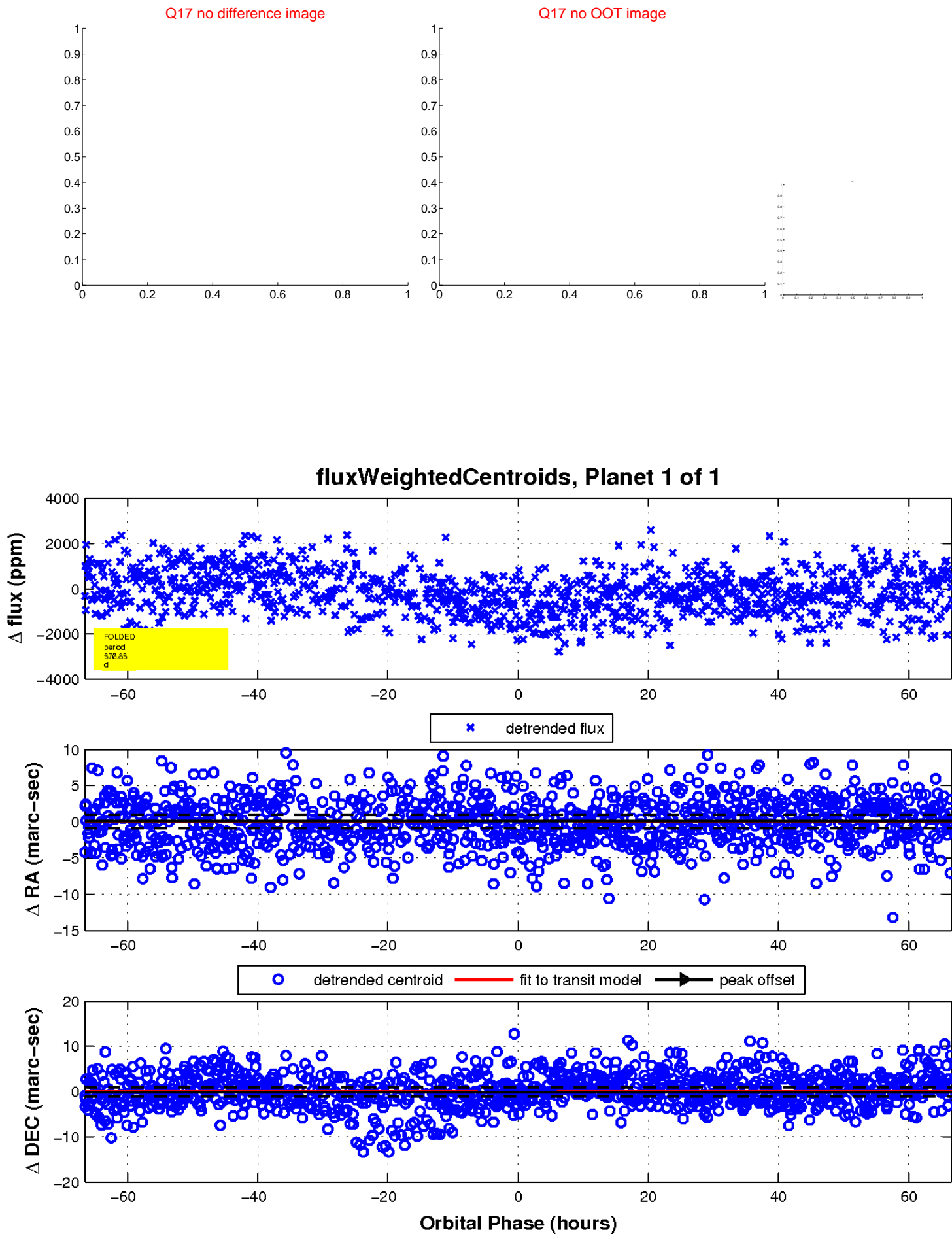
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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

Declination

