

KIC 011703665

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})
011703665-01	OBS	No	388.578816	184.337779	281.0	6.204	7.2	5.8	1.75	4920	3.49	1.52

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
011703665-01	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_MARSHALL_SKYE--CENT_FEW_MEAS

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

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

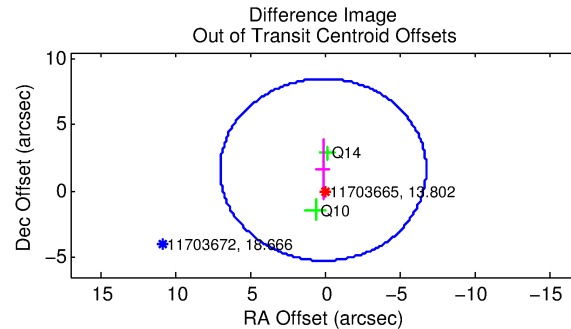
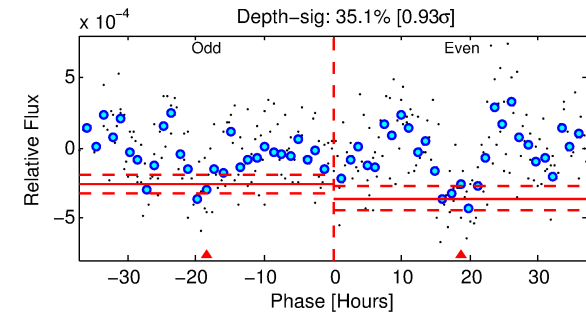
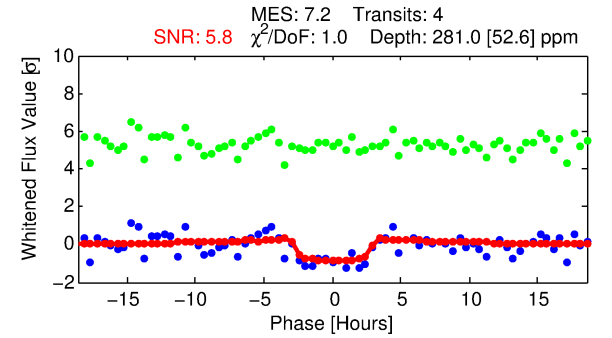
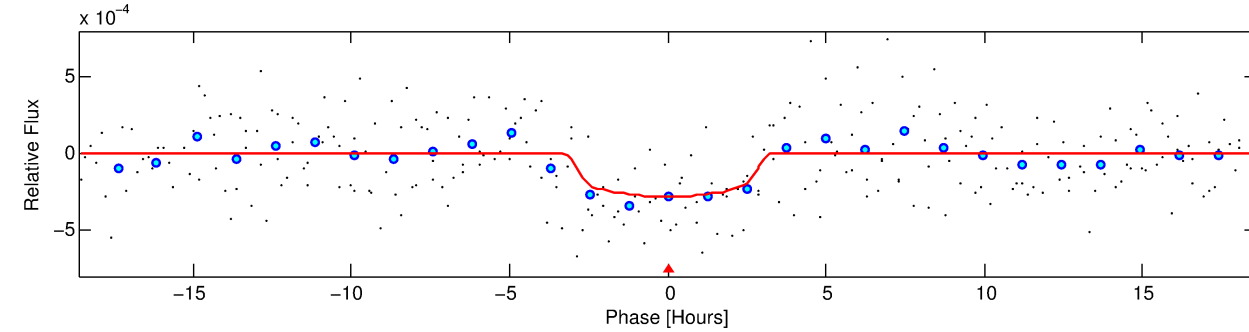
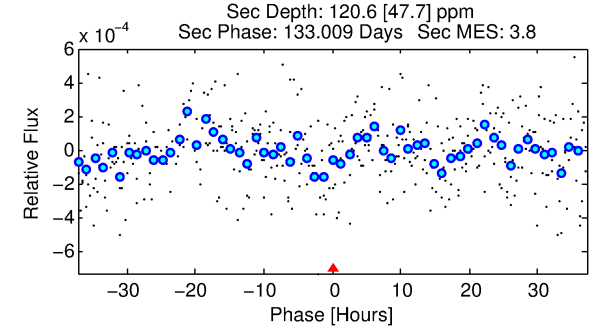
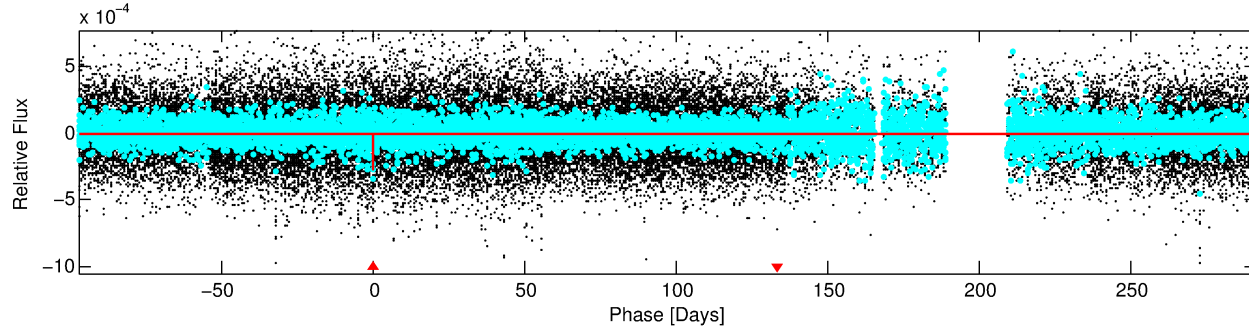
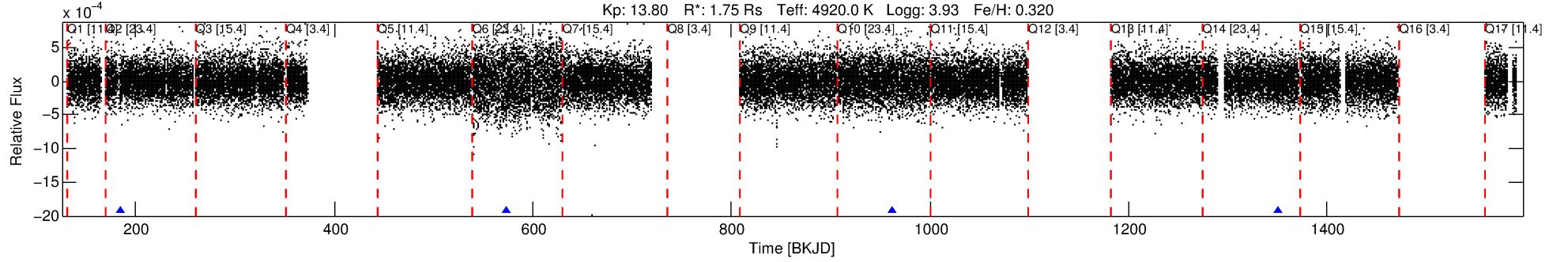
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 011703665-01

No Significant Match Found

DV One-Page Summary

KIC: 11703665 Candidate: 1 of 1 Period: 388.579 d



DV Fit Results:

Period = 388.57882 [0.00748] d
Epoch = 184.3378 [0.0146] BKJD
Rp/R* = 0.0183 [0.0118]
a/R* = 249.79 [595.24]
b = 0.87 [0.66]
Seff = 1.52 [1.63]
Teq = 283 [76] K
Rp = 3.49 [2.94] Re
a = 1.0277 [0.6314] AU
Ag = 5740.46 [9872.44] [0.58σ]
Teffp = 3813 [1295] K [2.72σ]

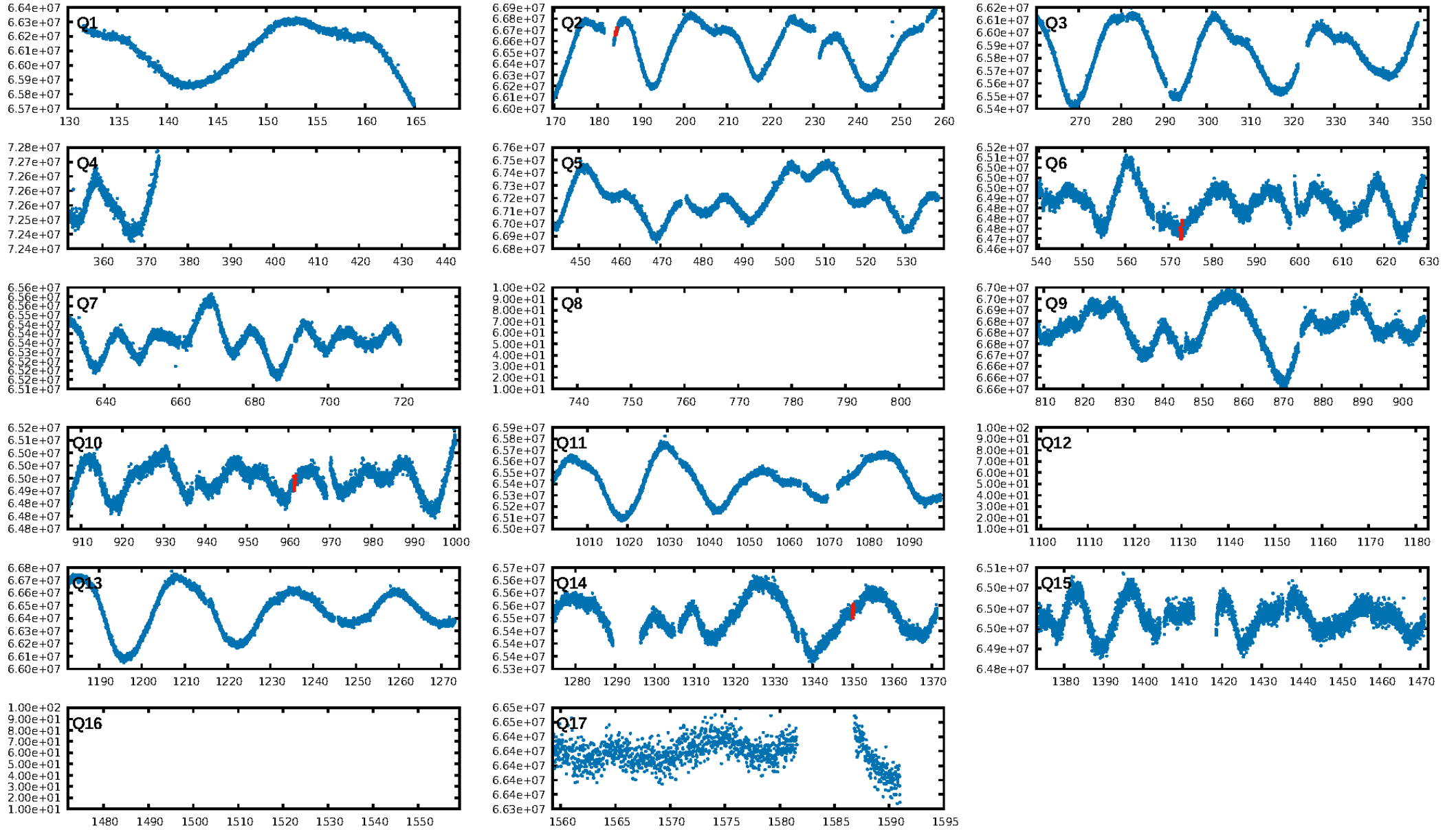
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: 53.2%
ModelChiSquareGof-sig: 99.6%
Bootstrap-pfa: 1.12e-10
RollingBand-fgt: 1.00 [4/4]
GhostDiagnostic-chr: -111.3
Centroid-sig: 36.9%
Centroid-so: 1.199 arcsec [0.73σ]
OotOffset-rm: 1.617 arcsec [0.70σ]
OotOffset-st: 2/0/0/0 [2]
KicOffset-rm: 2.003 arcsec [0.87σ]
KicOffset-st: 2/0/0/0 [2]
DiffImageQuality-fgm: 1.00 [2/2]
DiffImageOverlap-fno: 1.00 [3/3]

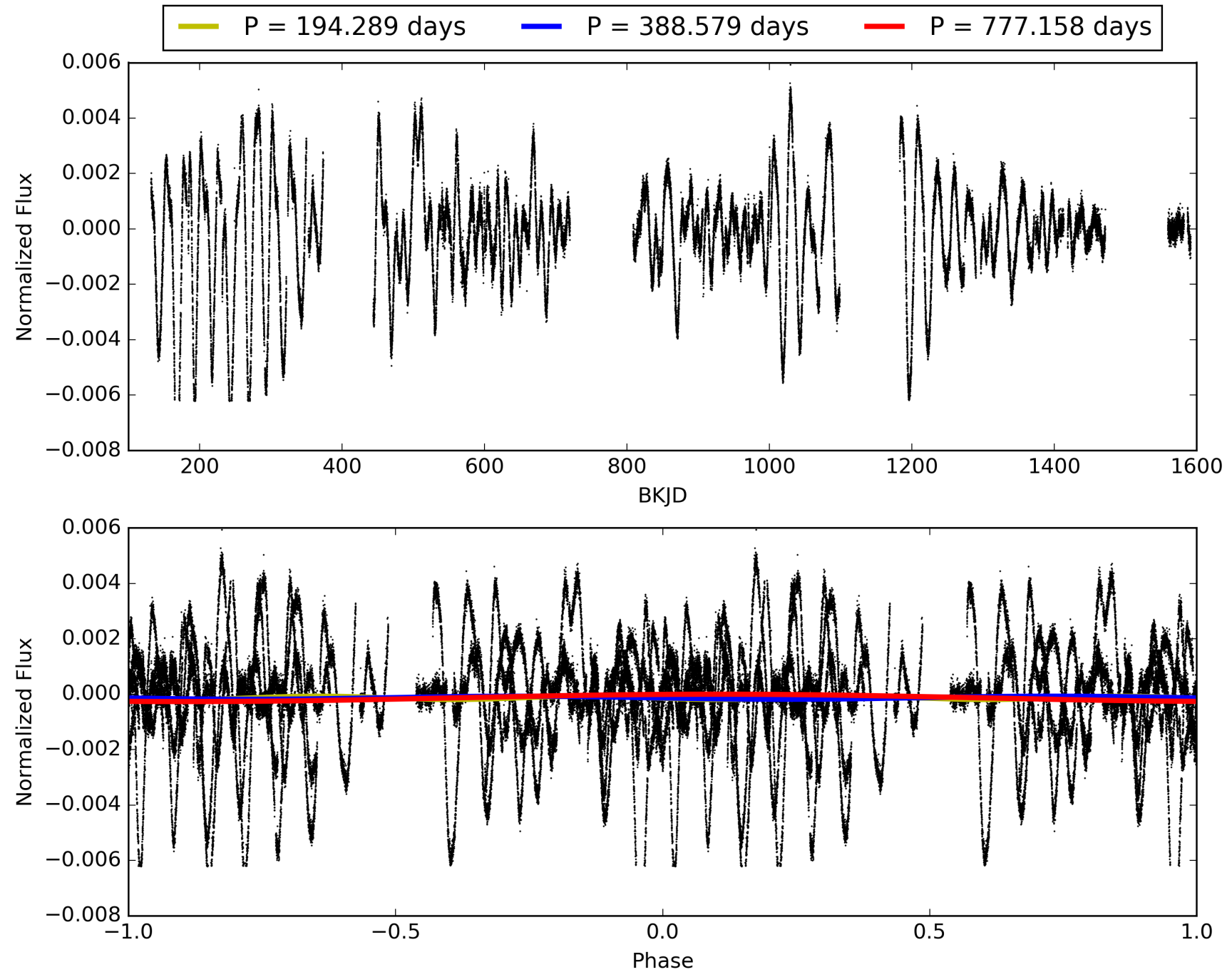
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 31-Jan-2016 22:41:36 Z

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

TCE 011703665-01, PDC Light Curves

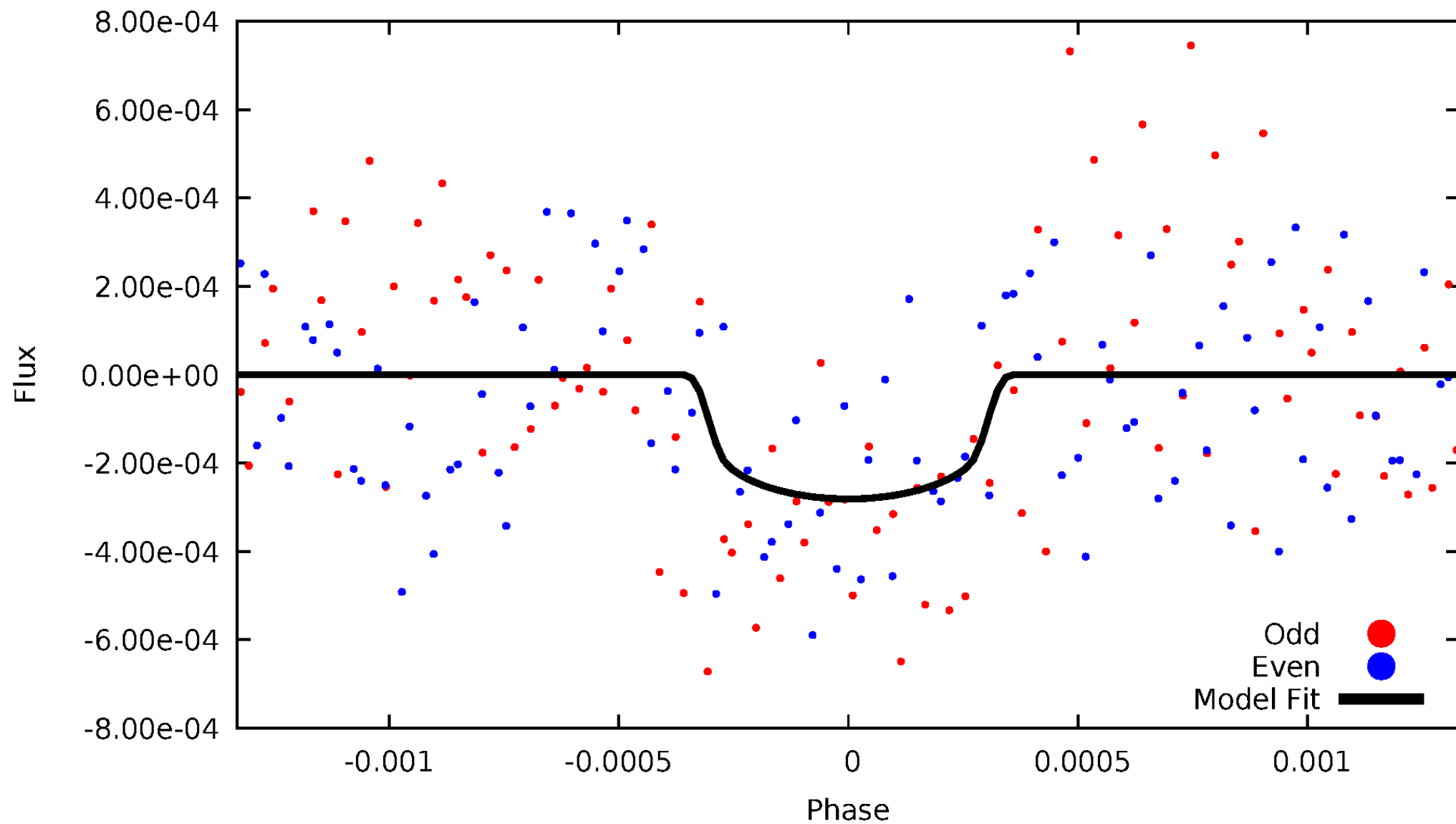


TCE 011703665-01



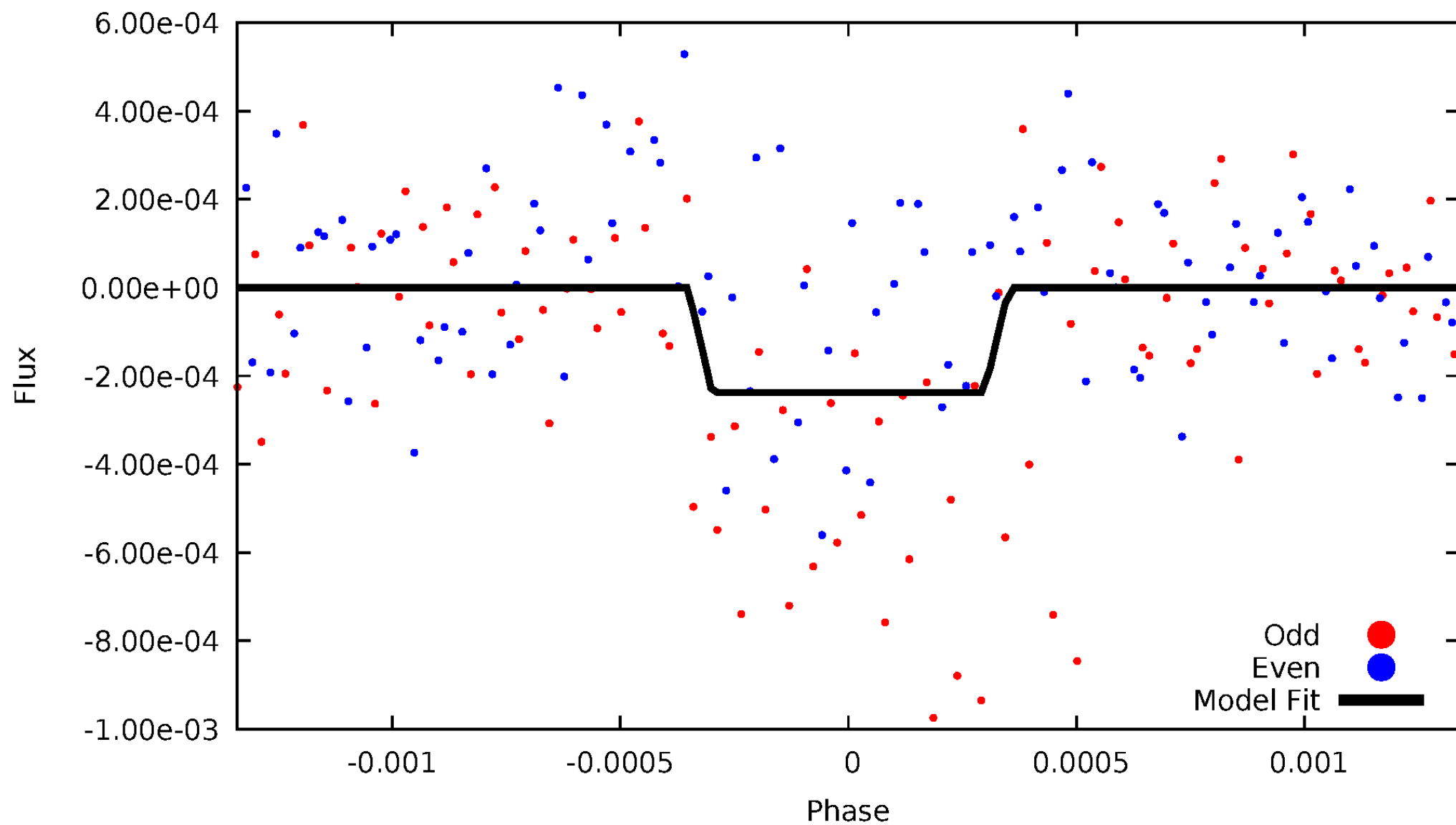
DV Odd/Even

TCE 011703665-01



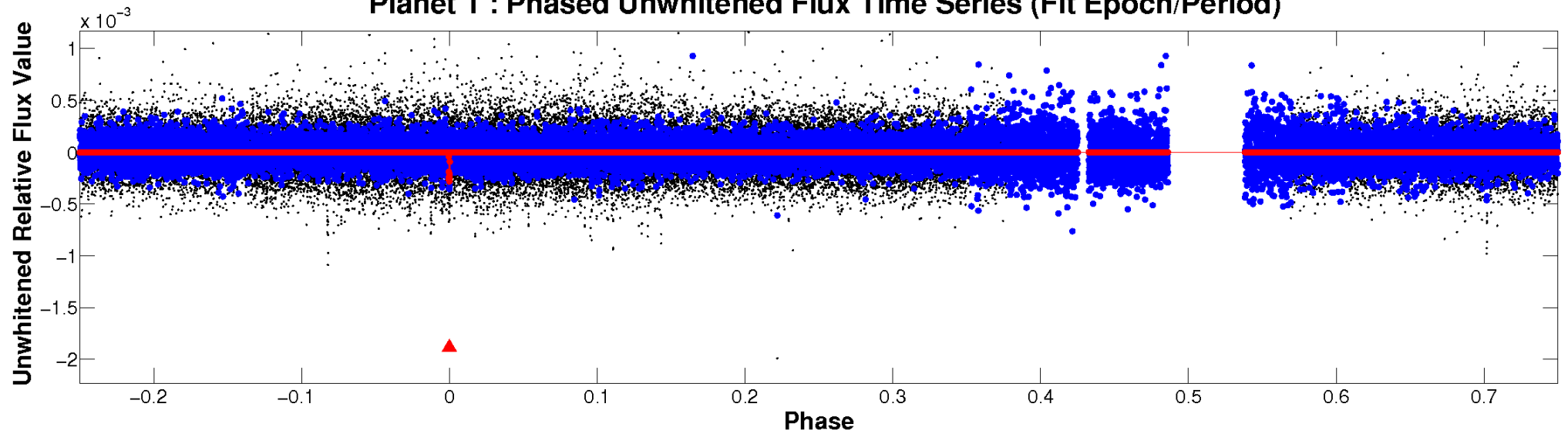
ALT Odd/Even

TCE 011703665-01

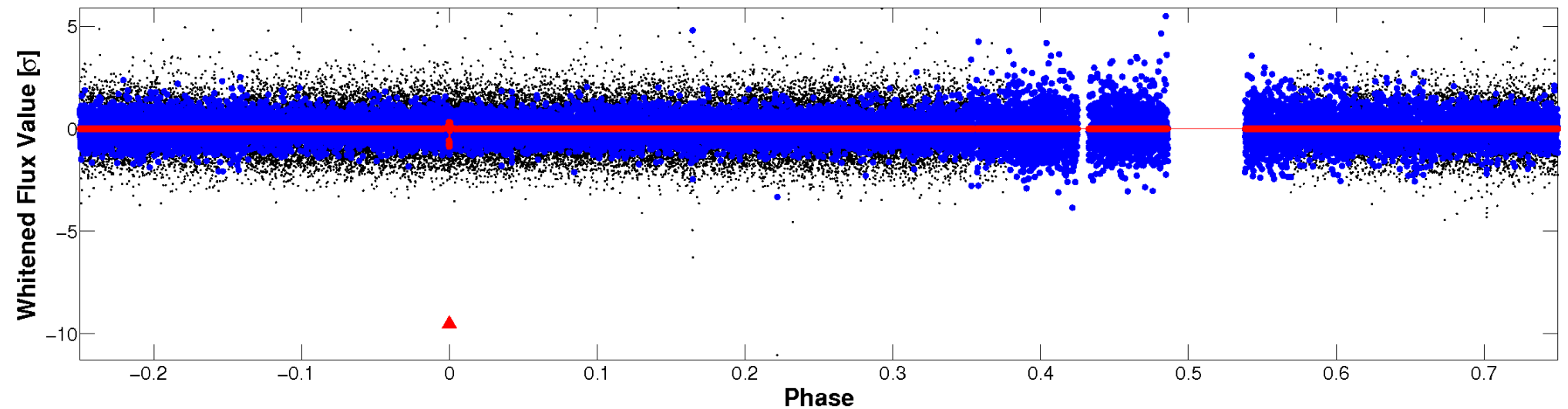


Non-Whitened Vs. Whitened Light Curve

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

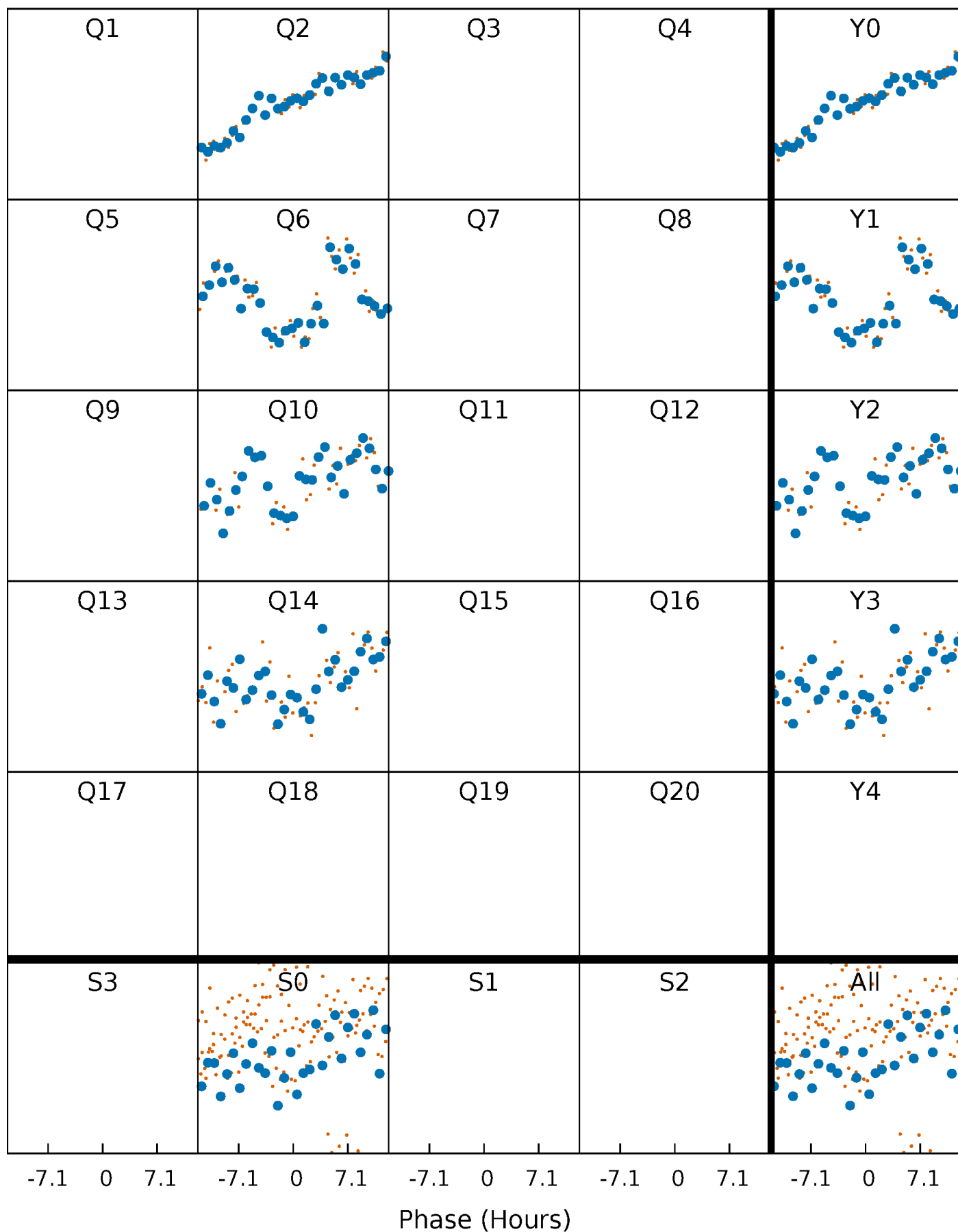


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



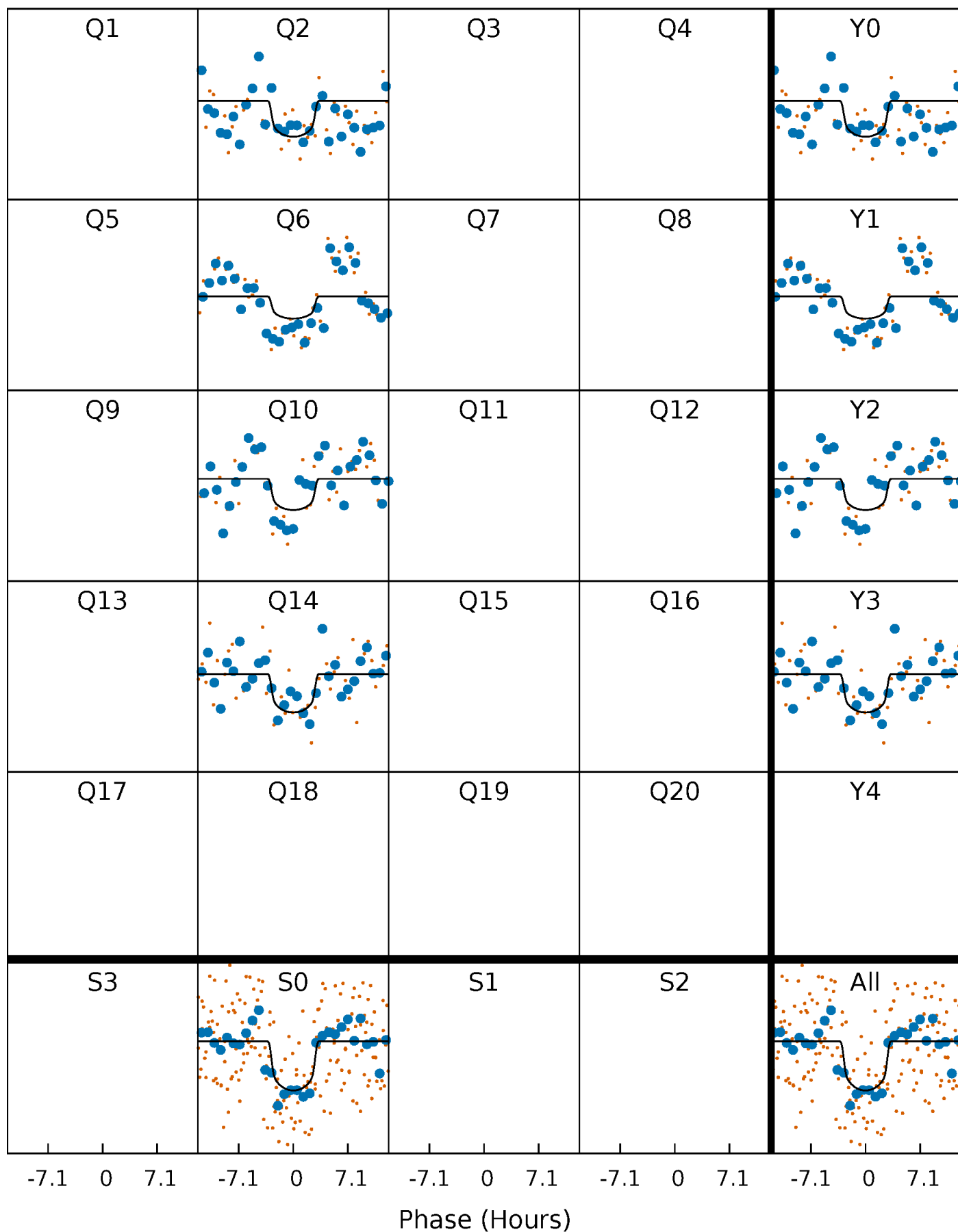
PDC Quarter-Phased Transit Curves

TCE 011703665-01 P=388.578816 Days $T_0=184.337779$ (BKJD)



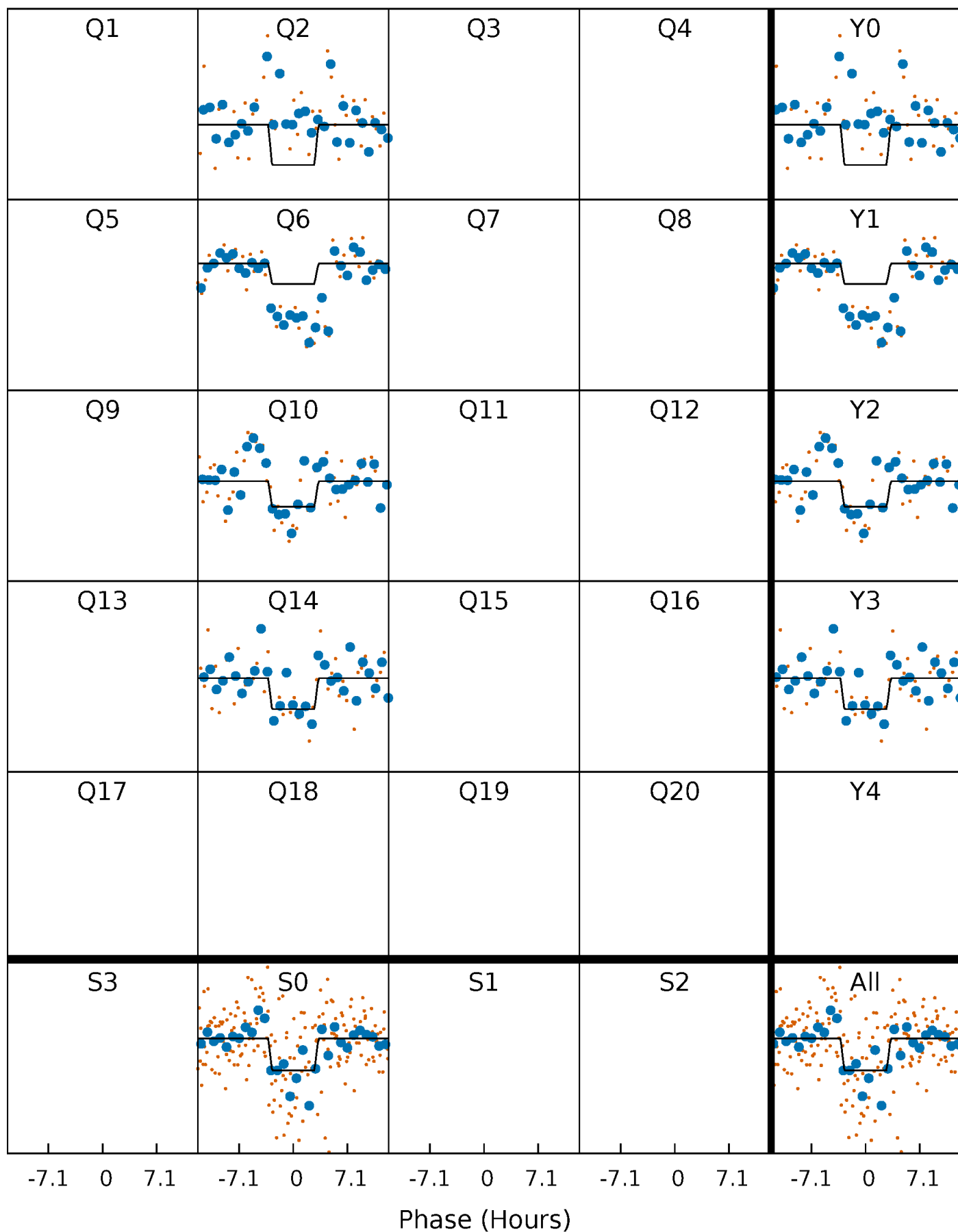
DV Quarter-Phased Transit Curves

TCE 011703665-01 P=388.578816 Days $T_0=184.337779$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

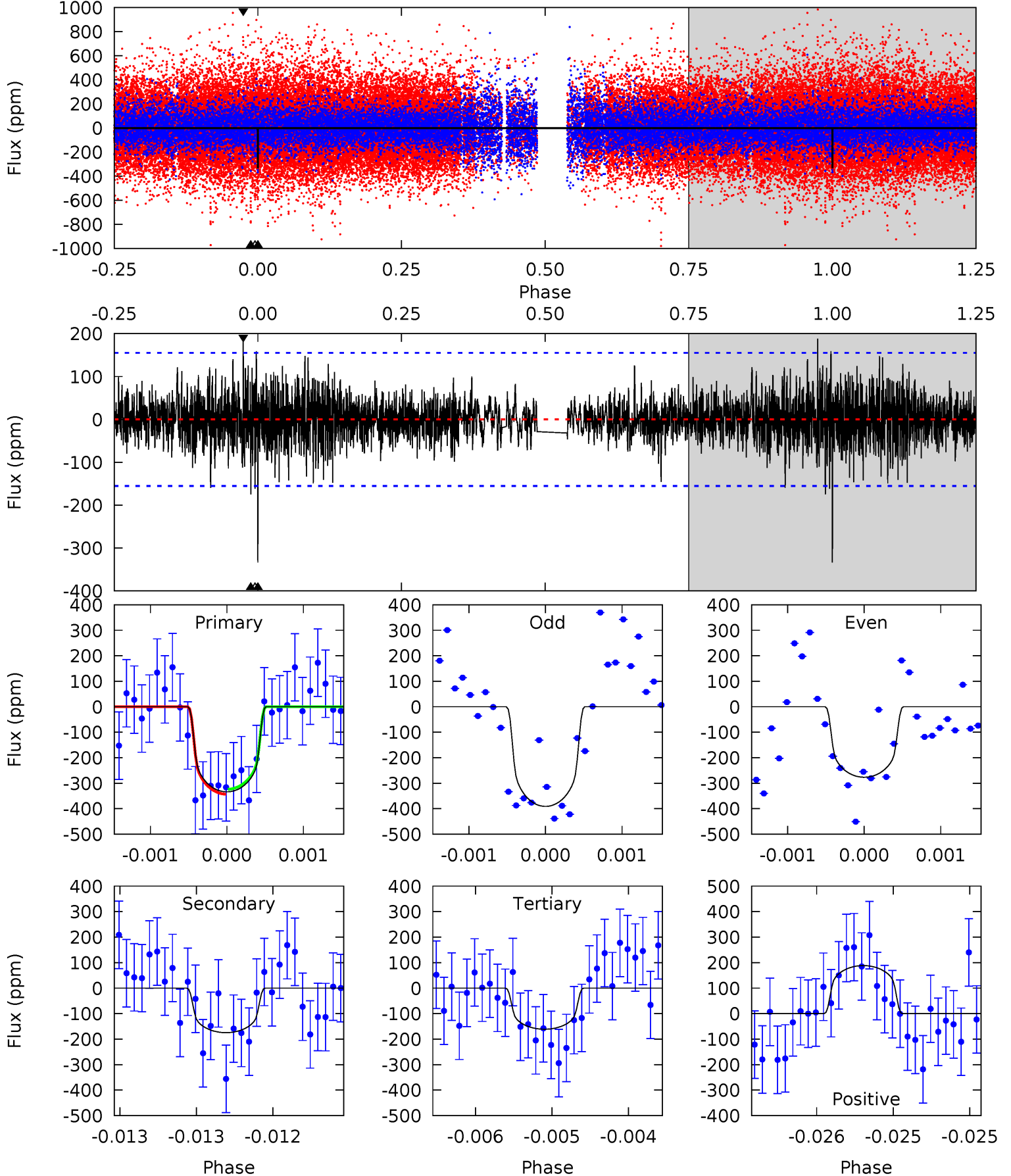
TCE 011703665-01 P=388.598633 Days $T_0=184.290207$ (BKJD)



DV Model-Shift Uniqueness Test

011703665-01, $P = 388.578816$ Days, $E = 184.337779$ Days

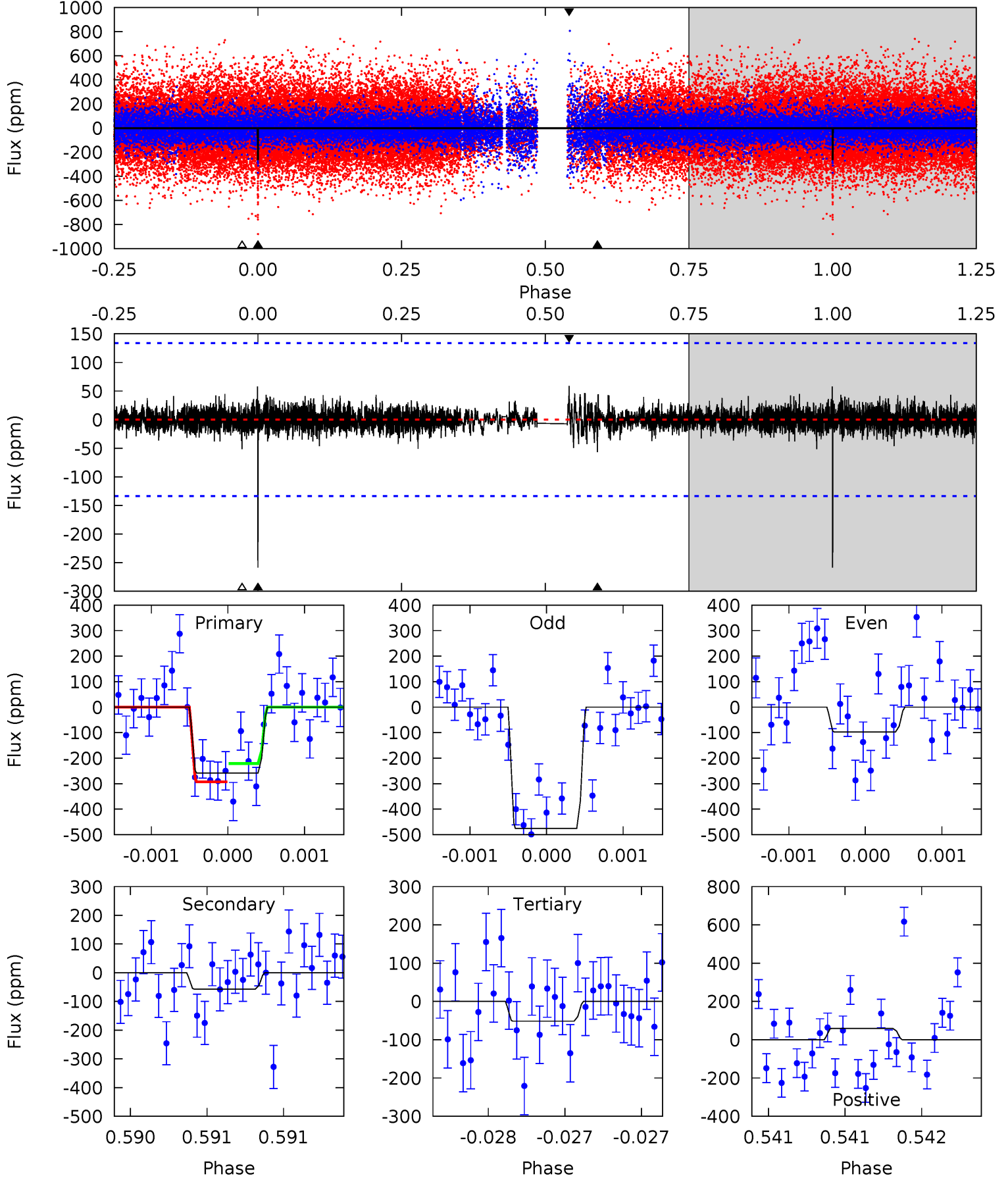
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
11.9	6.21	5.73	6.70	5.51	3.39	1.40	6.14	5.17	0.48	-0.49	2.05	1.13	0.36	0.34



Alt Model-Shift Uniqueness Test

011703665-01, P = 388.598633 Days, E = 184.290207 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
10.7	2.34	2.12	2.43	5.51	3.39	0.48	8.53	8.23	0.23	-0.08	7.97	1.16	0.19	1.49



Stellar Parameters For KIC 011703665

	$T_{\text{eff}} (K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M (M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	4920^{+148}_{-133}	$3.933^{+0.651}_{-0.279}$	$0.320^{+0.150}_{-0.250}$	$1.751^{+0.939}_{-0.939}$	$0.958^{+0.191}_{-0.157}$	$0.252^{+2.404}_{-0.158}$
	+3%/-3%	+17%/-7%	+47%/-78%	+54%/-54%	+20%/-16%	+955%/-63%
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 011703665-01 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	-175 ± 28	$3.30^{+2.80}_{-1.94}$	386^{+59}_{-59}	4255^{+1794}_{-650}	9435^{+44868}_{-6683}
Alt.	-57 ± 24	$2.92^{+2.31}_{-1.79}$	386^{+56}_{-61}	3653^{+1501}_{-617}	3759^{+20442}_{-2755}

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 $A_{obs} \gg 1.0$

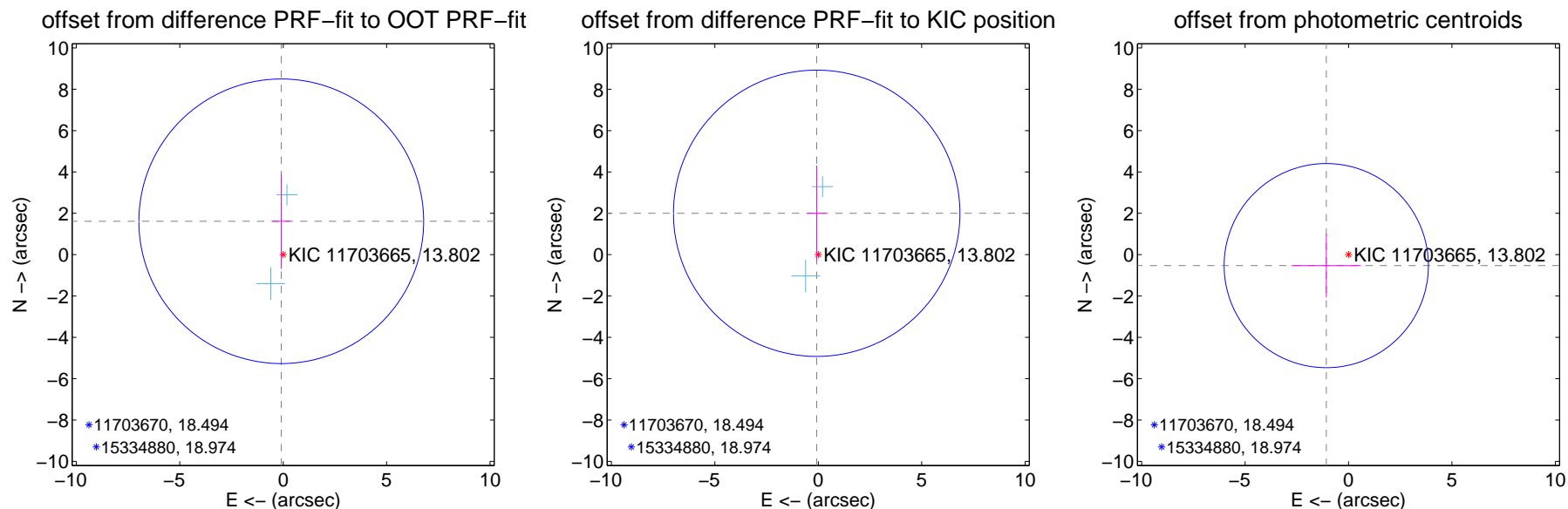
DV Centroid Data

Supplemental centroid analysis for 011703665-01. Kepler magnitude: 13.80. Transit SNR 5.84

There are 2 quarters with good PRF difference image offsets

The direct PRF centroid is offset from the target star catalog position by about 0.39 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	1.617 ± 2.295	0.70	0.092 ± 0.439	1.615 ± 2.298
PRF-fit source offset from KIC position	2.003 ± 2.308	0.87	0.075 ± 0.461	2.002 ± 2.310
photometric centroid source offset	1.20 ± 1.65	0.73	1.08 ± 1.67	-0.53 ± 1.53

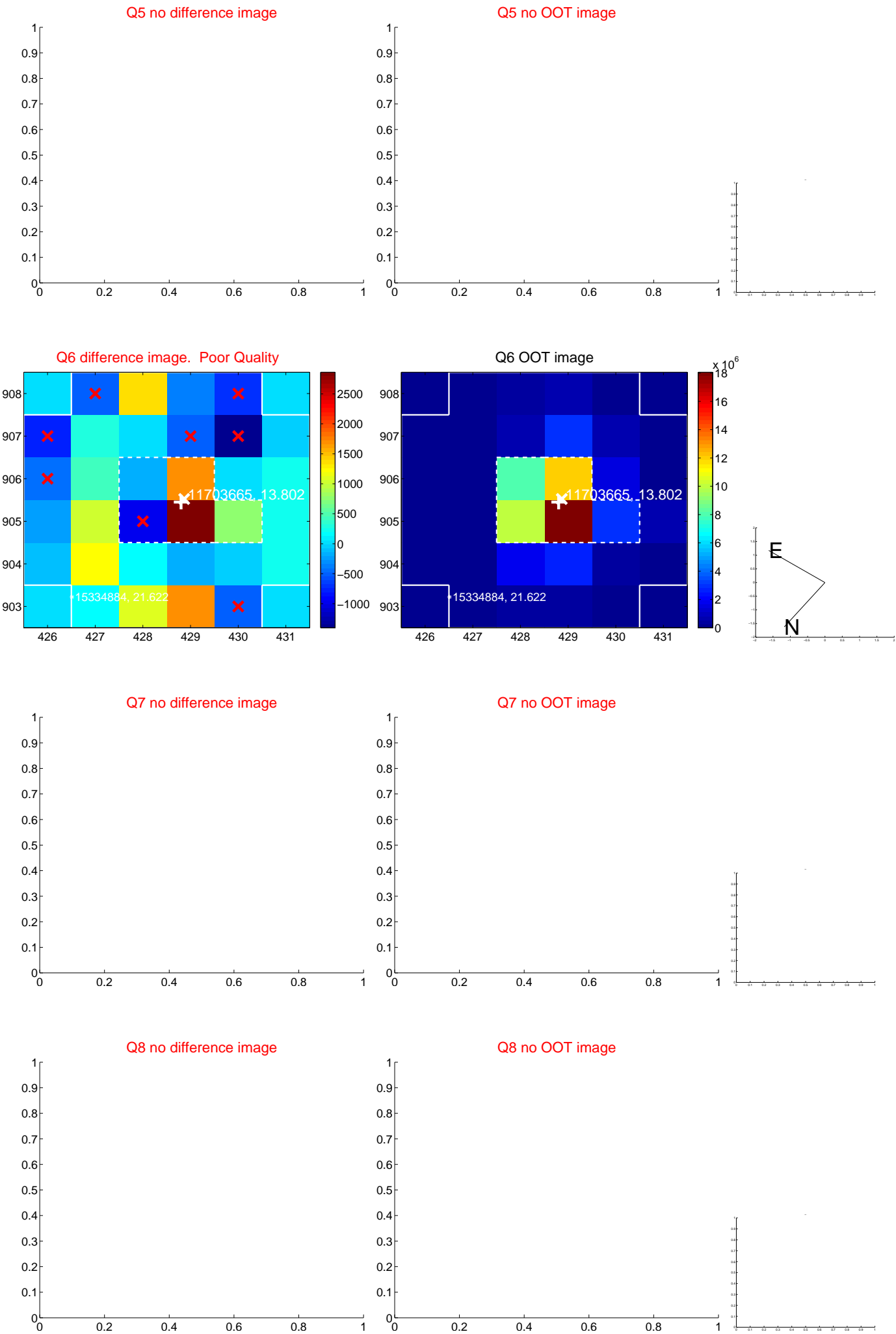


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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

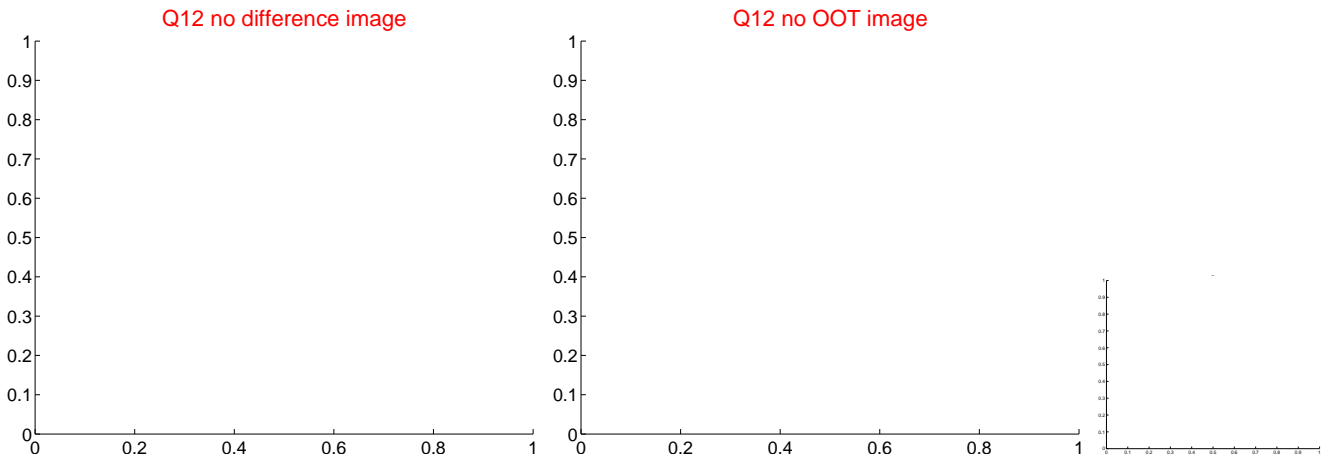
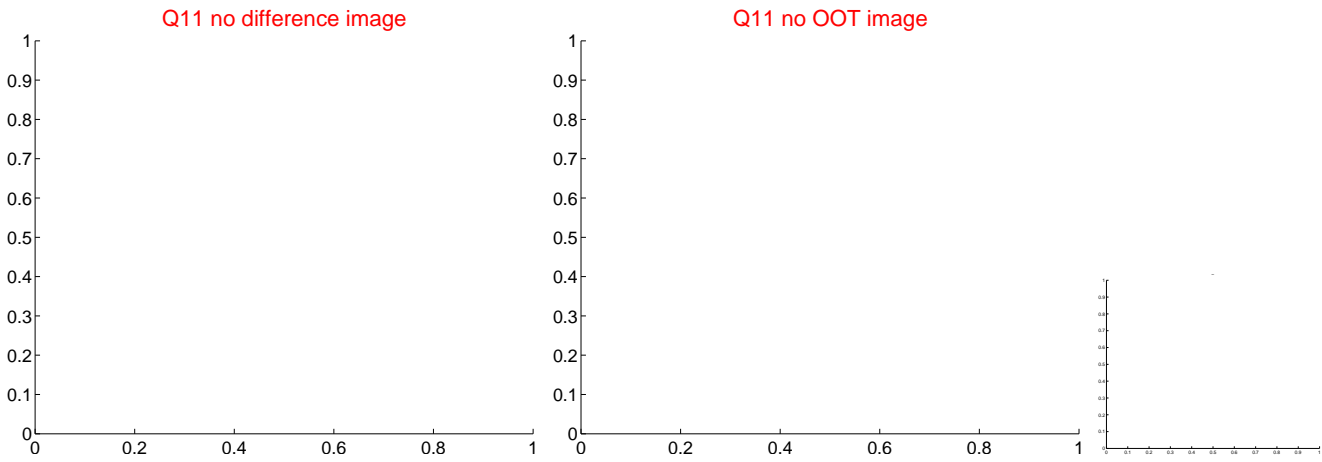
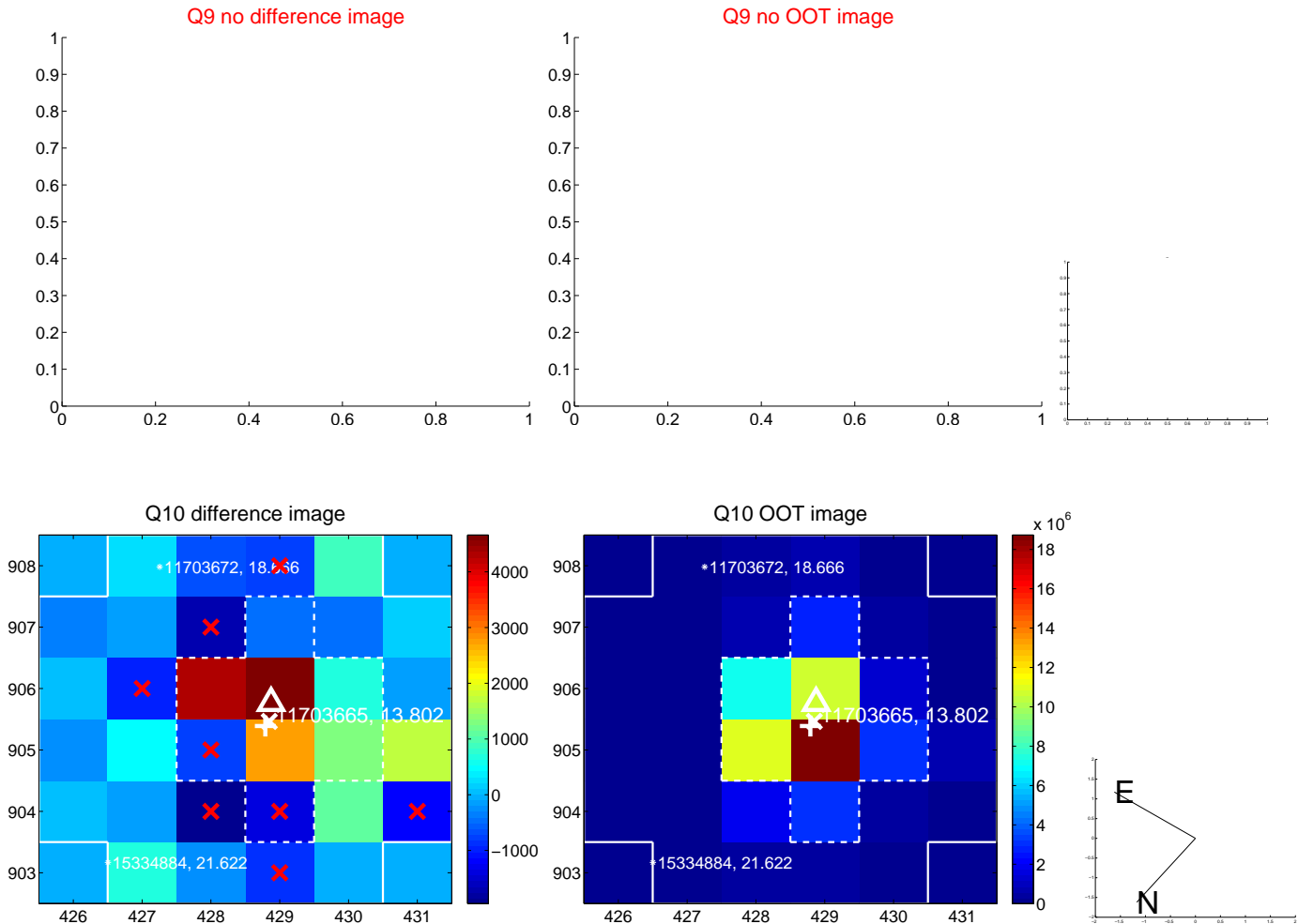
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



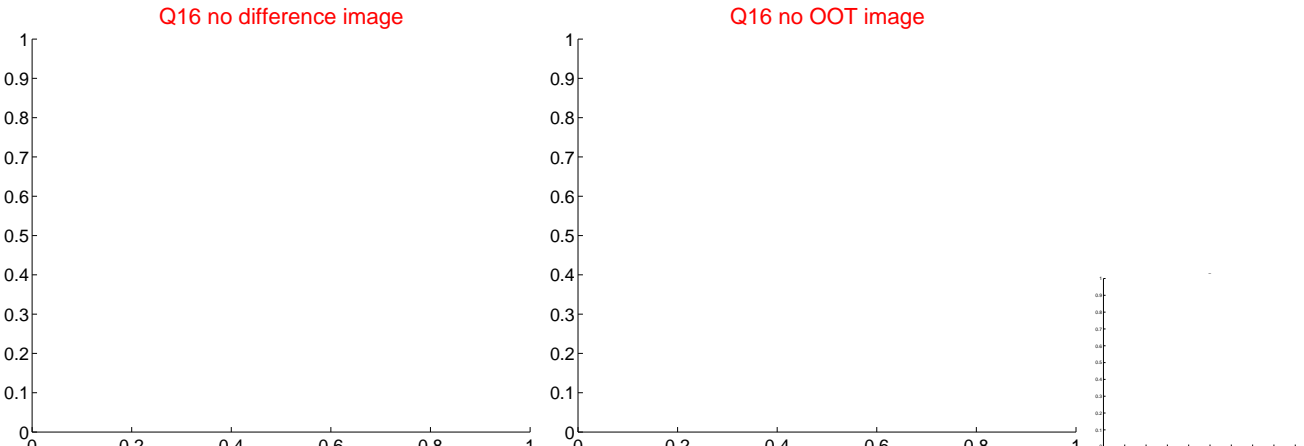
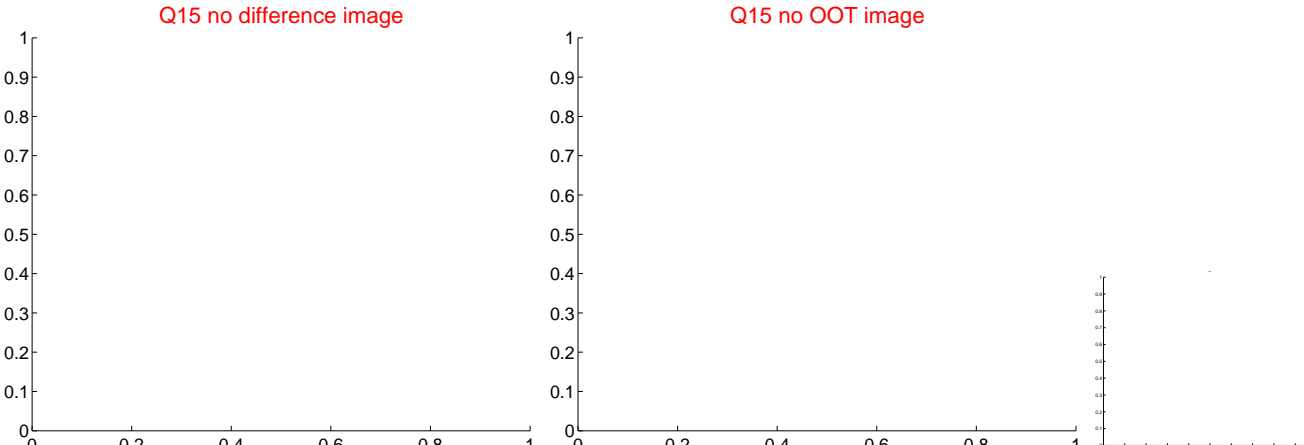
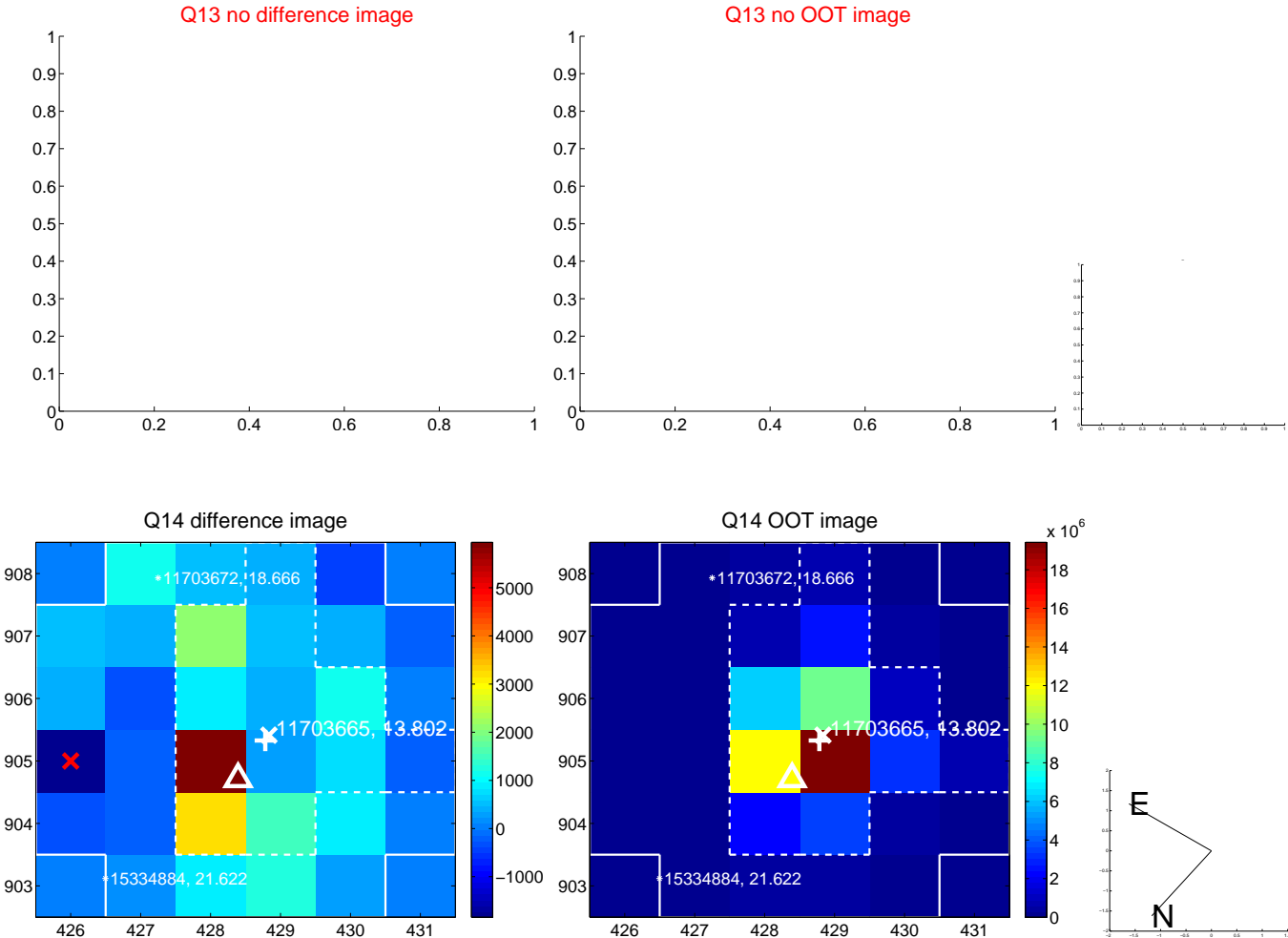
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



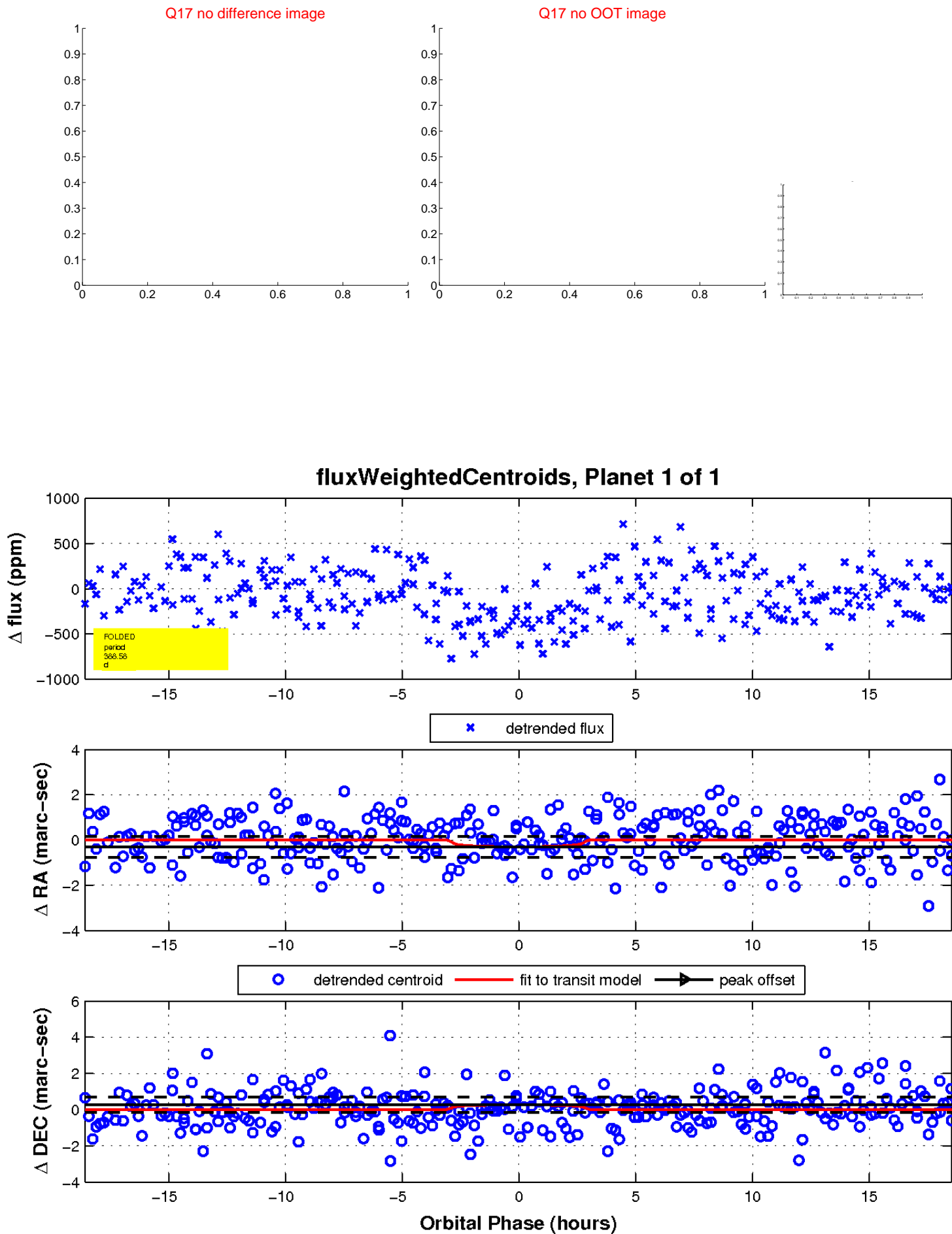
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white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



UKIRT Image

Declination

