

KIC 007294265

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})
007294265-01	OBS	No	431.282335	234.380429	1102.5	4.315	11.8	8.0	2.05	4871	7.32	1.78

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
007294265-01	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_CHASES_MARSHALL—LPP_DV—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_POS_DV—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.

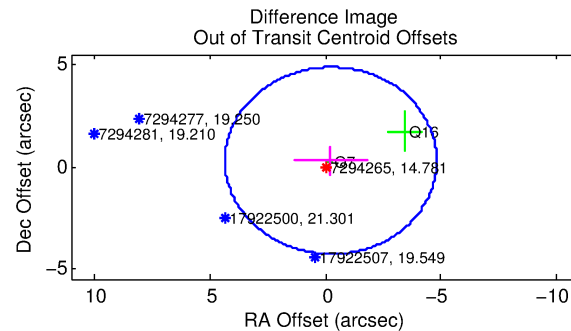
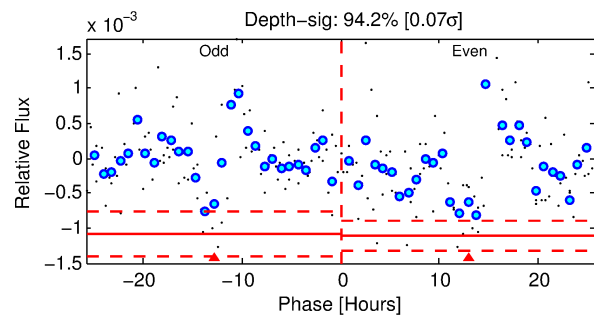
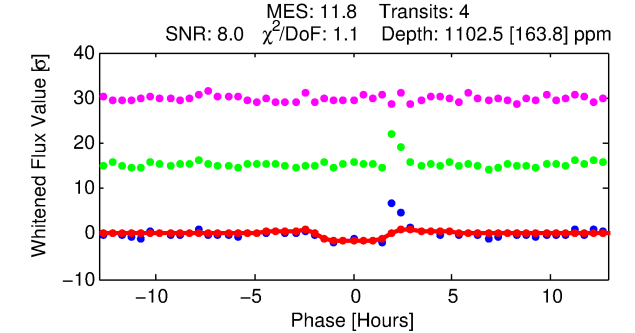
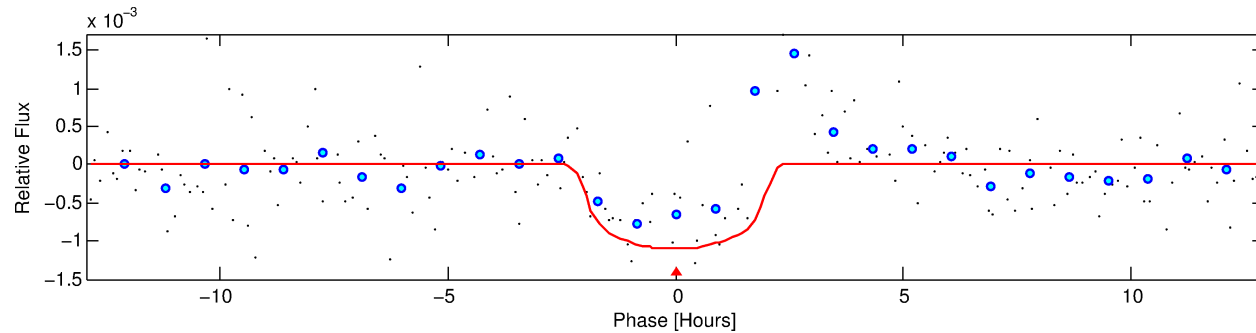
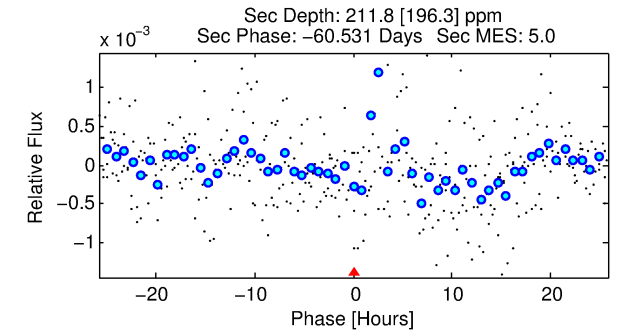
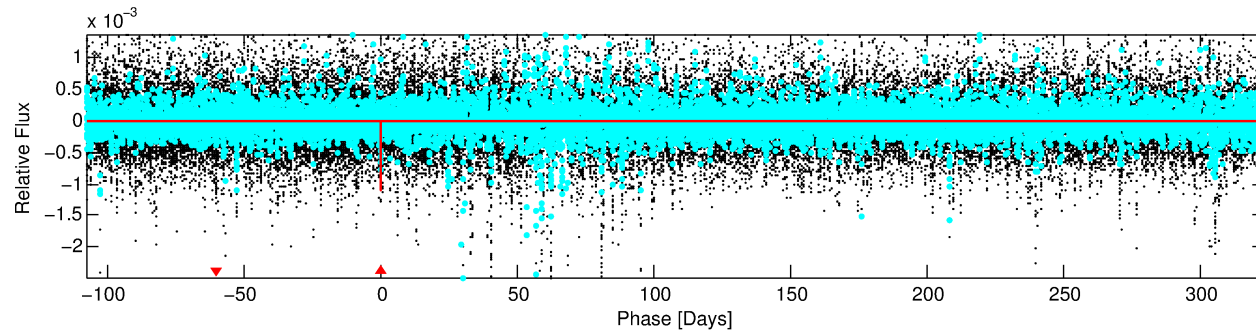
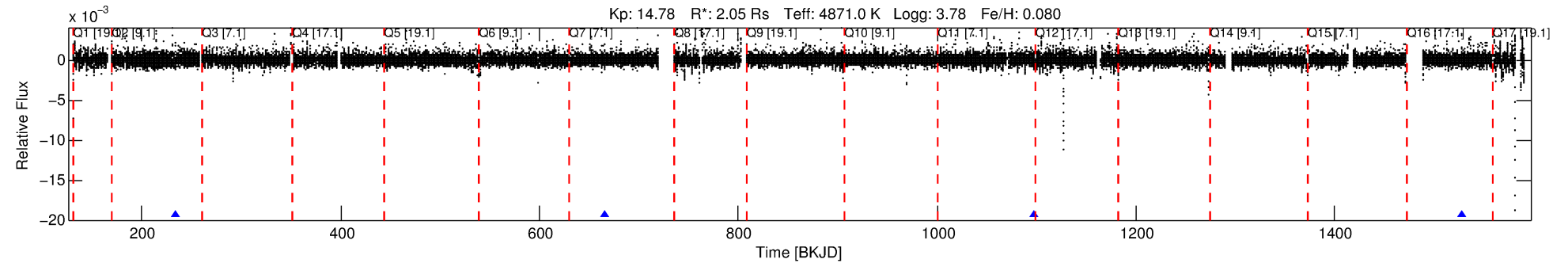
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 007294265-01

No Significant Match Found

DV One-Page Summary

KIC: 7294265 Candidate: 1 of 1 Period: 431.282 d



DV Fit Results:

Period = 431.28234 [0.00392] d
Epoch = 234.3804 [0.0074] BKJD
Rp/R* = 0.0327 [0.0360]
a/R* = 567.42 [2084.30]
b = 0.72 [2.55]
Seff = 1.78 [2.43]
Teq = 295 [100] K
Rp = 7.31 [9.34] Re
a = 1.0907 [0.8454] AU
Ag = 2590.93 [7122.08] [0.36σ]
Teffp = 3250 [1943] K [1.52σ]

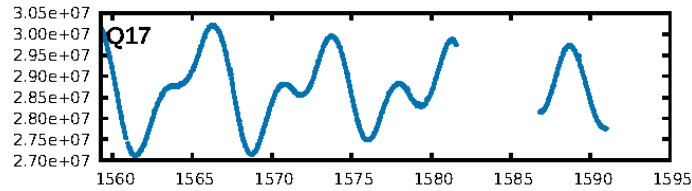
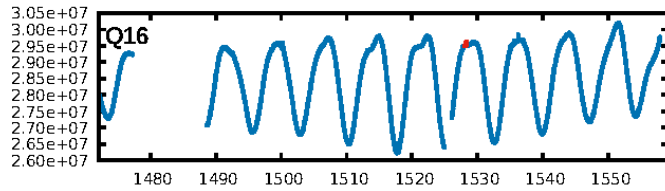
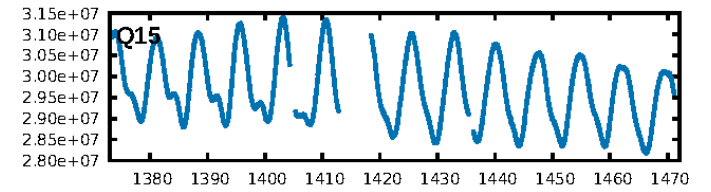
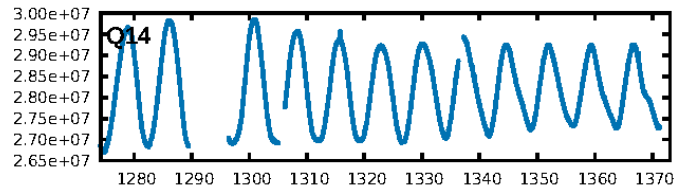
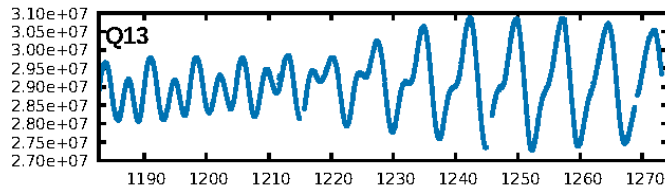
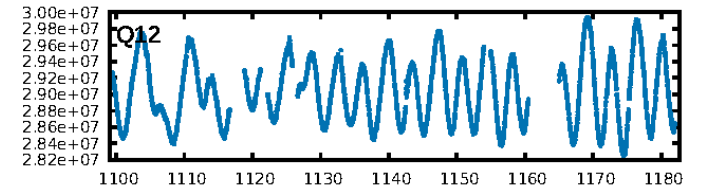
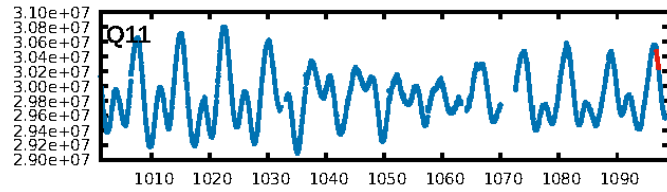
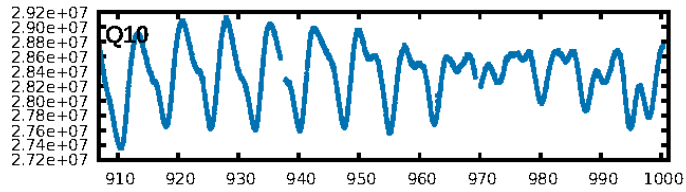
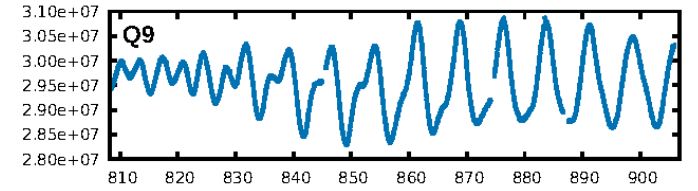
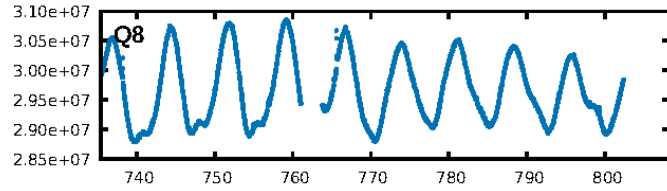
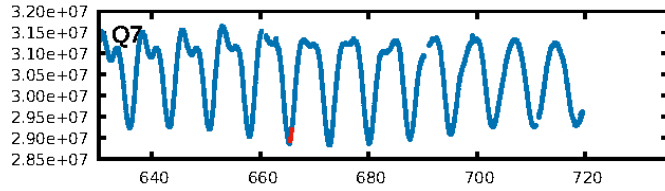
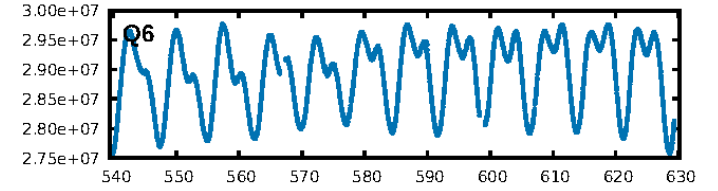
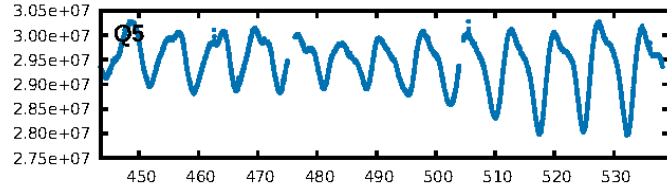
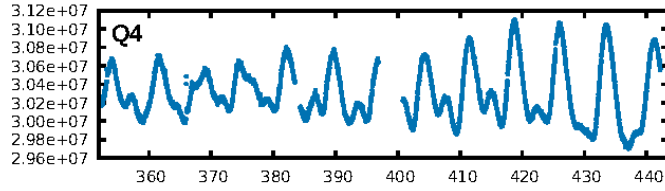
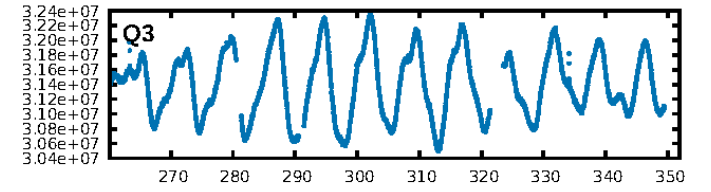
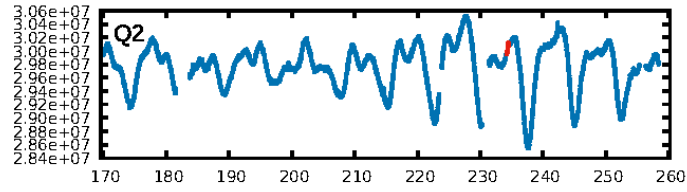
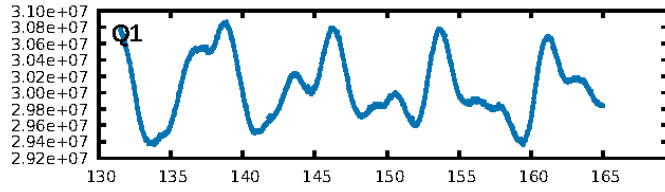
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: 34.0%
ModelChiSquareGof-sig: 99.0%
Bootstrap-pfa: 2.51e-09
RollingBand-fgt: 1.00 [4/4]
GhostDiagnostic-chr: -2.023
Centroid-sig: 31.0%
Centroid-so: 0.716 arcsec [0.71σ]
OotOffset-rm: 0.377 arcsec [0.25σ]
KicOffset-rm: 0.222 arcsec [0.15σ]
OotOffset-st: 0/1/1/0 [2]
KicOffset-st: 0/1/1/0 [2]
DiffImageQuality-fgm: 0.50 [1/2]
DiffImageOverlap-fno: 1.00 [3/3]

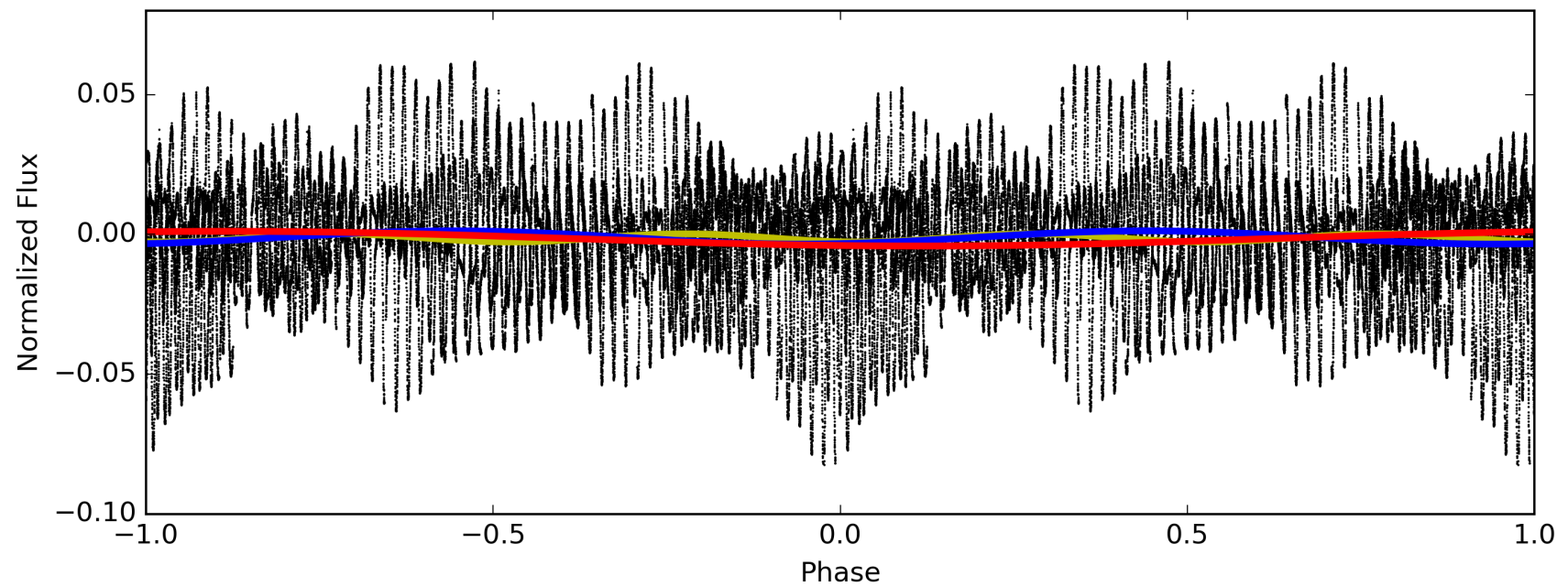
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 30-Jan-2016 17:11:16 Z

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

TCE 007294265-01, PDC Light Curves

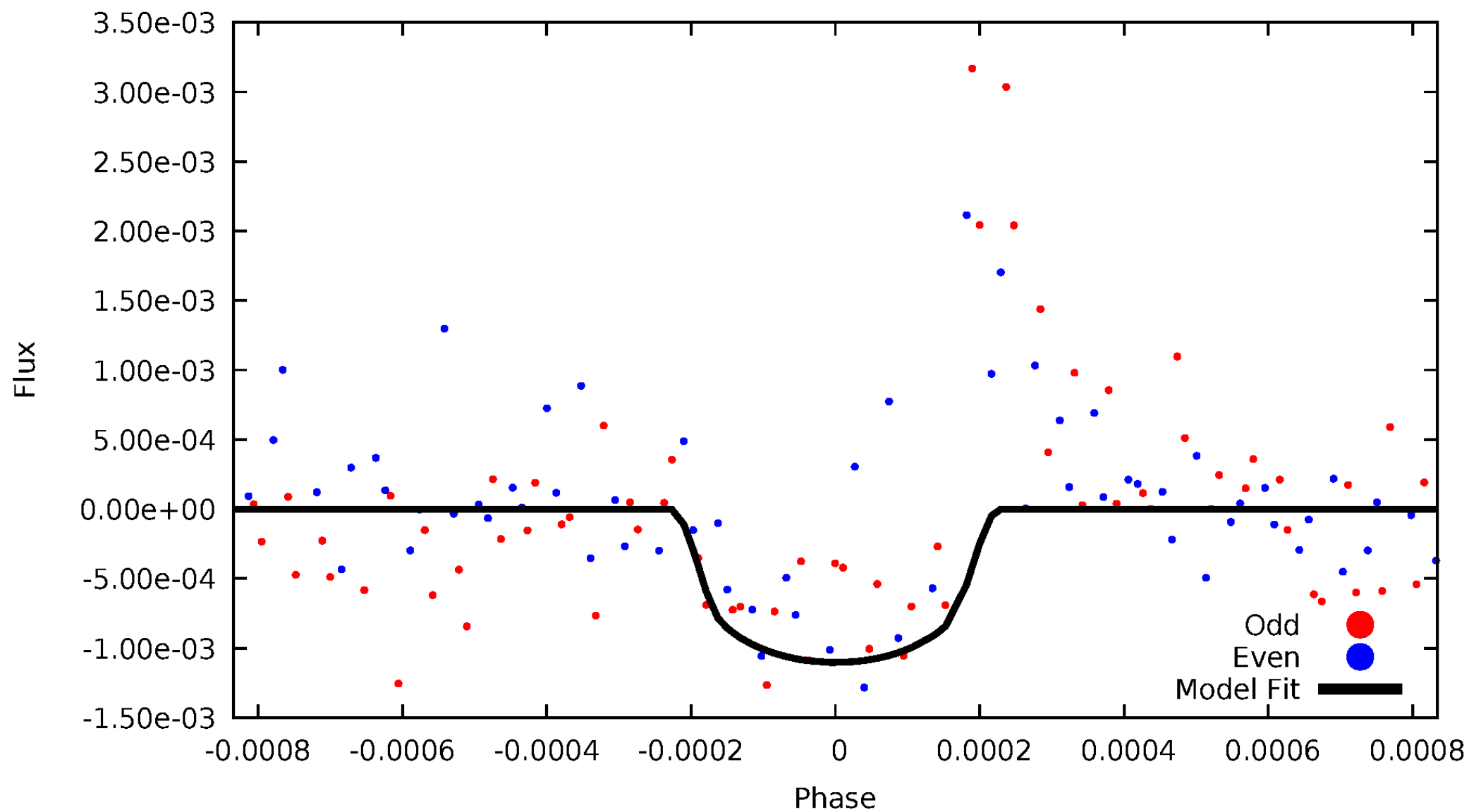


— P = 215.641 days — P = 431.282 days — P = 862.565 days



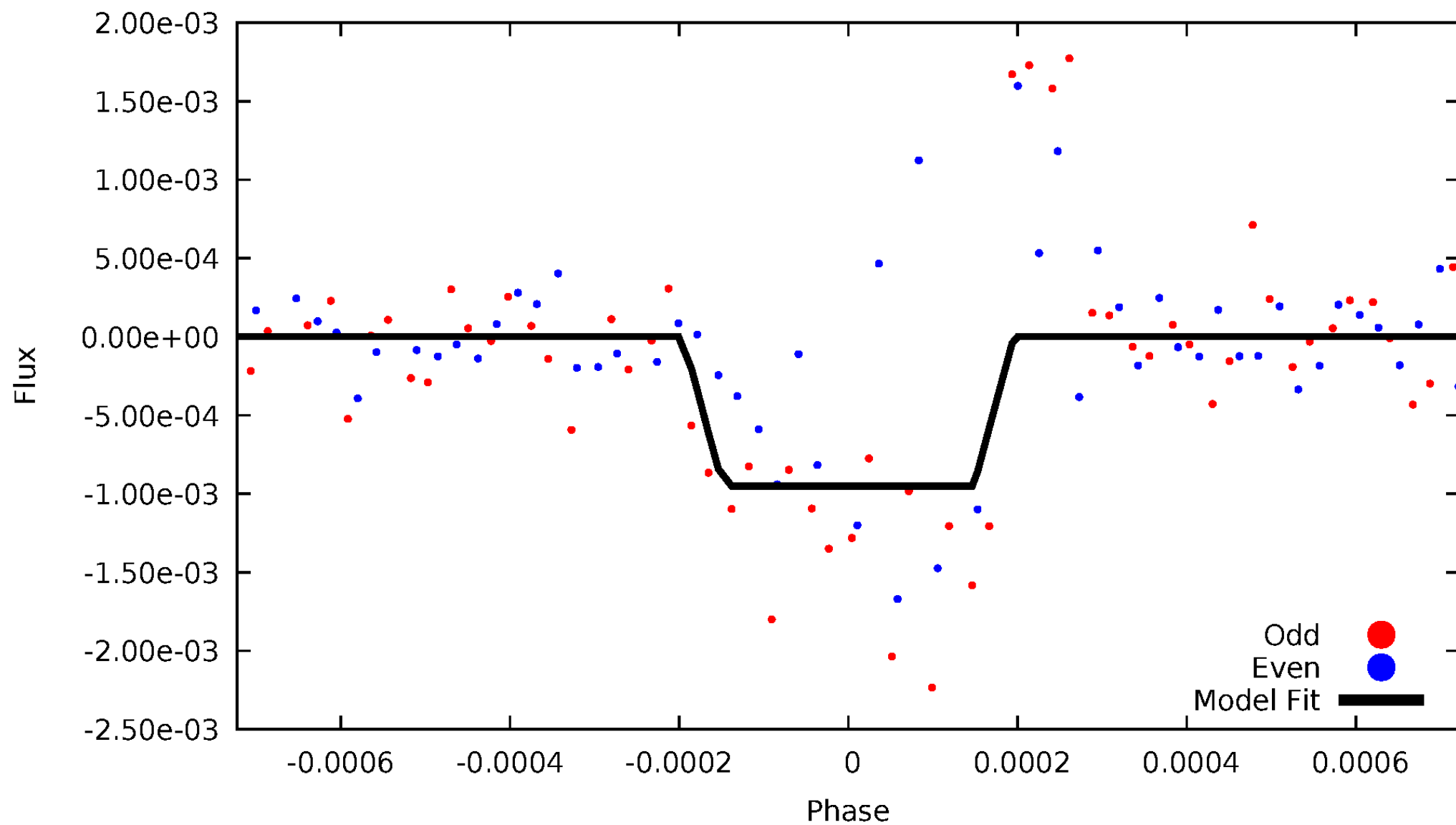
DV Odd/Even

TCE 007294265-01



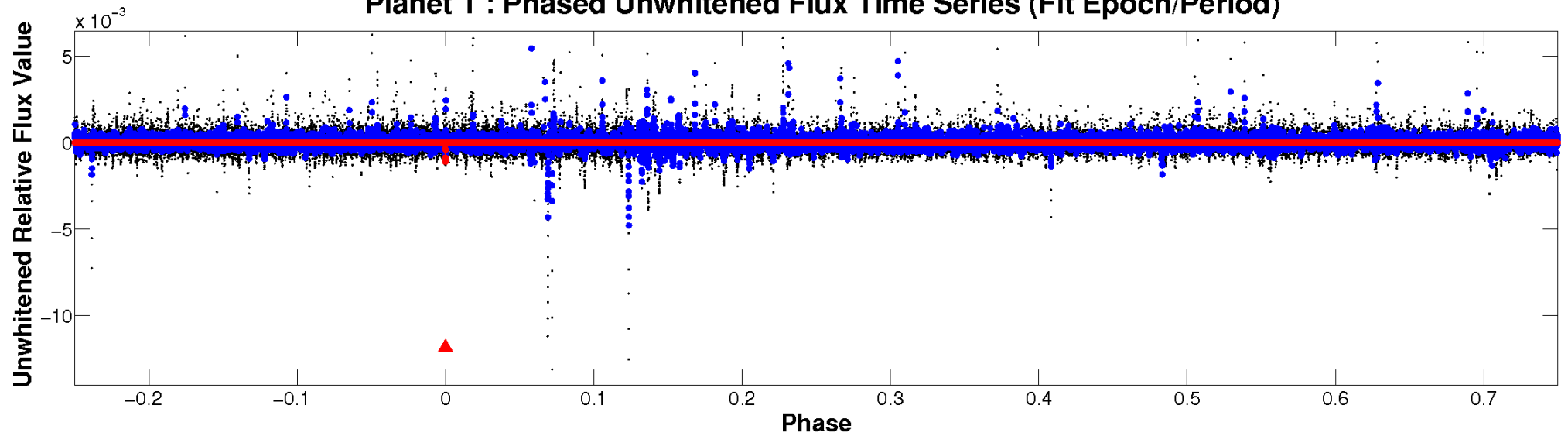
ALT Odd/Even

TCE 007294265-01

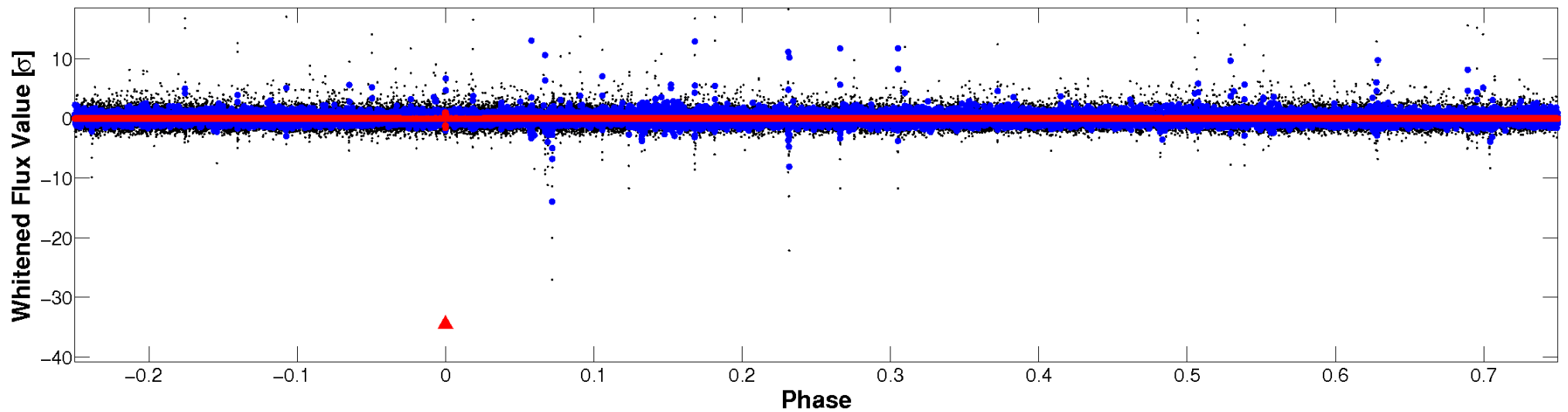


Non-Whitened Vs. Whitened Light Curve

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

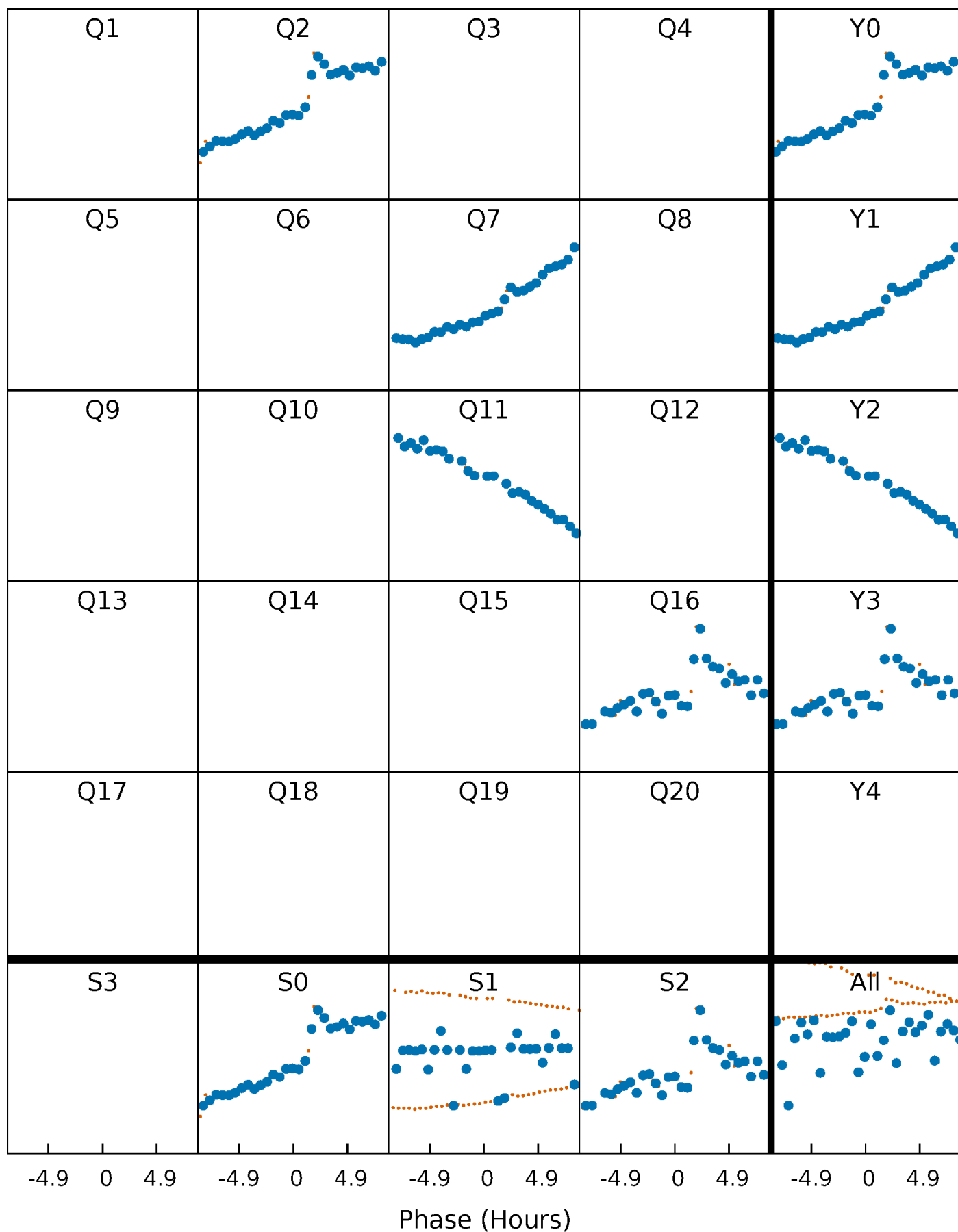


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



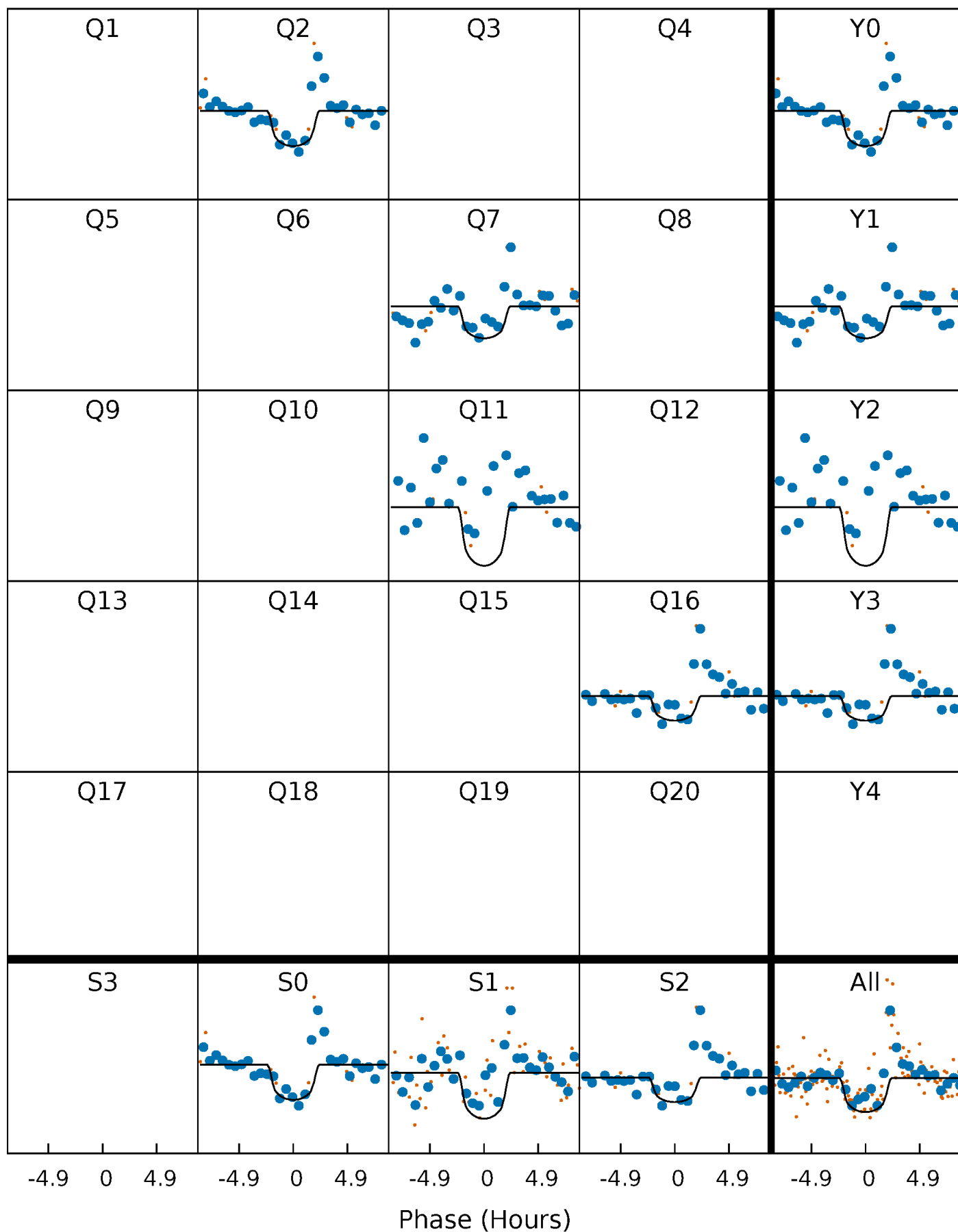
PDC Quarter-Phased Transit Curves

TCE 007294265-01 P=431.282335 Days $T_0=234.380429$ (BKJD)



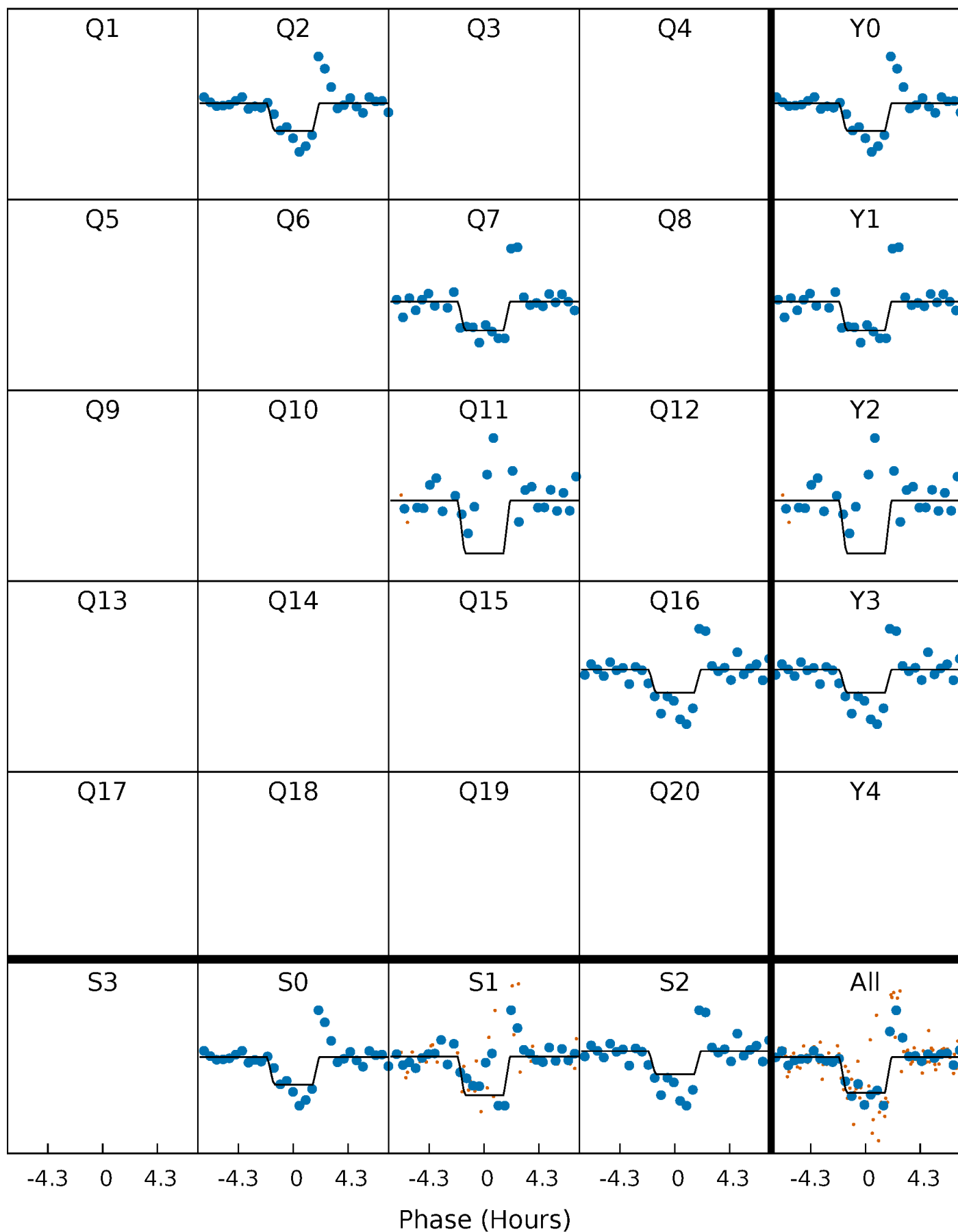
DV Quarter-Phased Transit Curves

TCE 007294265-01 P=431.282335 Days $T_0=234.380429$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

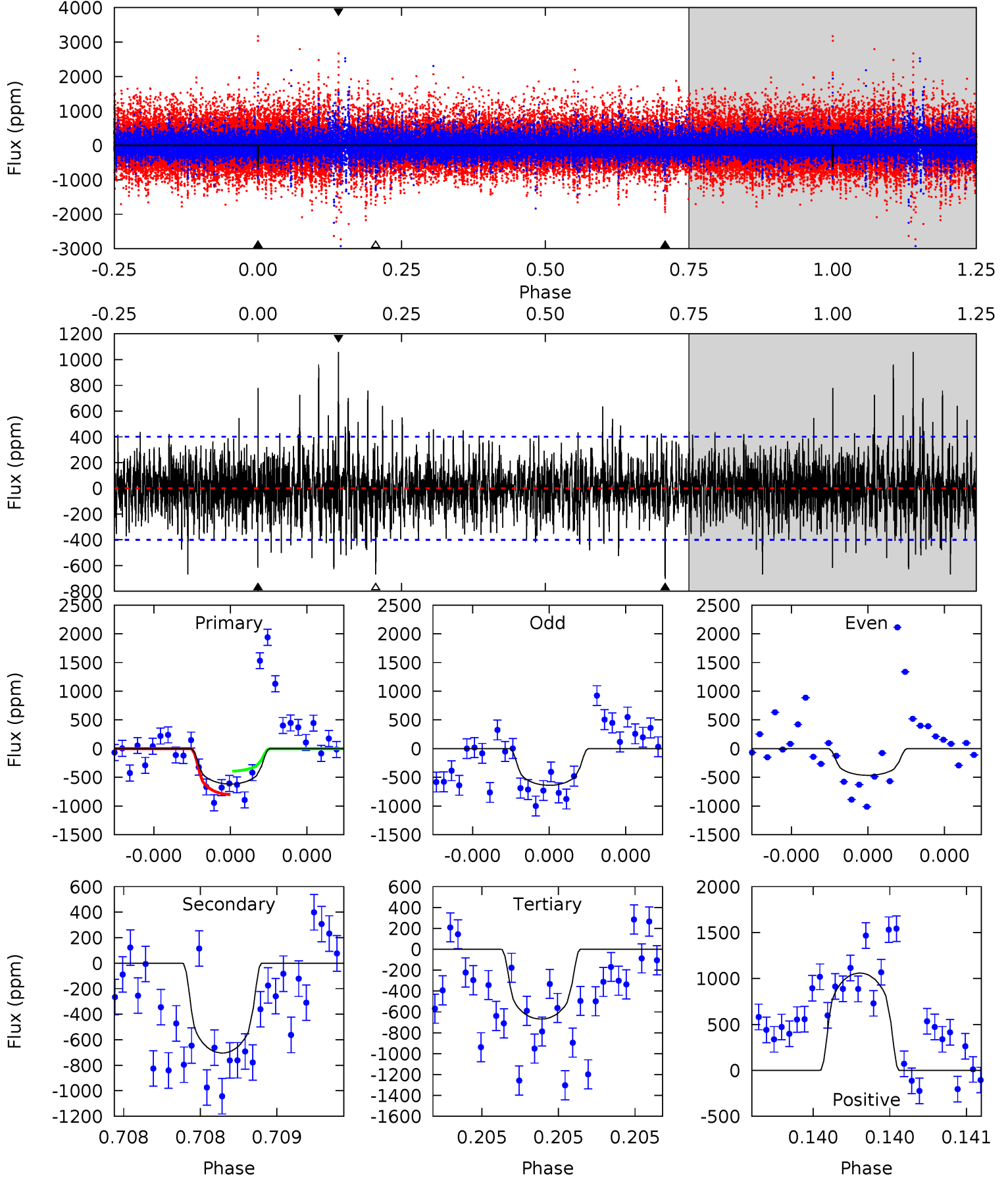
TCE 007294265-01 P=431.284340 Days $T_0=234.372492$ (BKJD)



DV Model-Shift Uniqueness Test

007294265-01, P = 431.282335 Days, E = 234.380429 Days

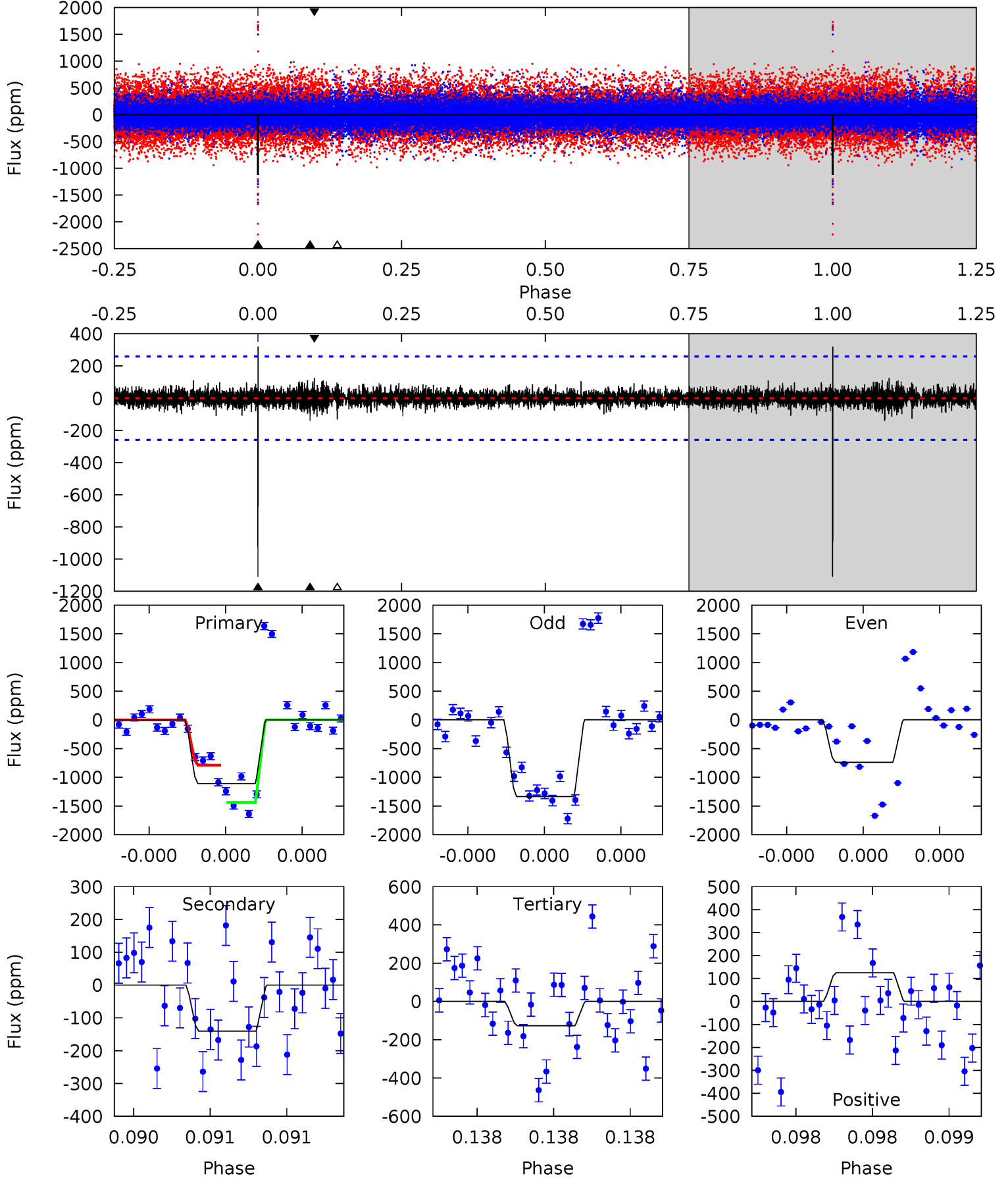
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
8.63	9.84	9.34	14.8	5.59	3.51	2.12	-0.71	-6.16	0.49	-4.95	1.12	0.80	0.60	2.86



Alt Model-Shift Uniqueness Test

007294265-01, P = 431.284340 Days, E = 234.372492 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
24.1	3.04	2.76	2.71	5.62	3.55	0.54	21.3	21.4	0.28	0.33	6.66	0.84	0.22	7.10



Stellar Parameters For KIC 007294265

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	4871^{+129}_{-129}	$3.783^{+0.840}_{-0.280}$	$0.080^{+0.250}_{-0.300}$	$2.050^{+1.082}_{-1.323}$	$0.930^{+0.216}_{-0.177}$	$0.152^{+2.901}_{-0.093}$
	+3%/-3%	+22%/-7%	+312%/-375%	+53%/-65%	+23%/-19%	+1909%/-61%
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 007294265-01 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	-704 ± 72	$8.00^{+8.37}_{-5.28}$	401^{+53}_{-74}	4098^{+2063}_{-726}	7190^{+52684}_{-5412}
Alt.	-140 ± 46	$7.68^{+8.00}_{-4.99}$	402^{+59}_{-71}	3189^{+1276}_{-501}	1478^{+11567}_{-1145}

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 $A_{obs} \gg 1.0$

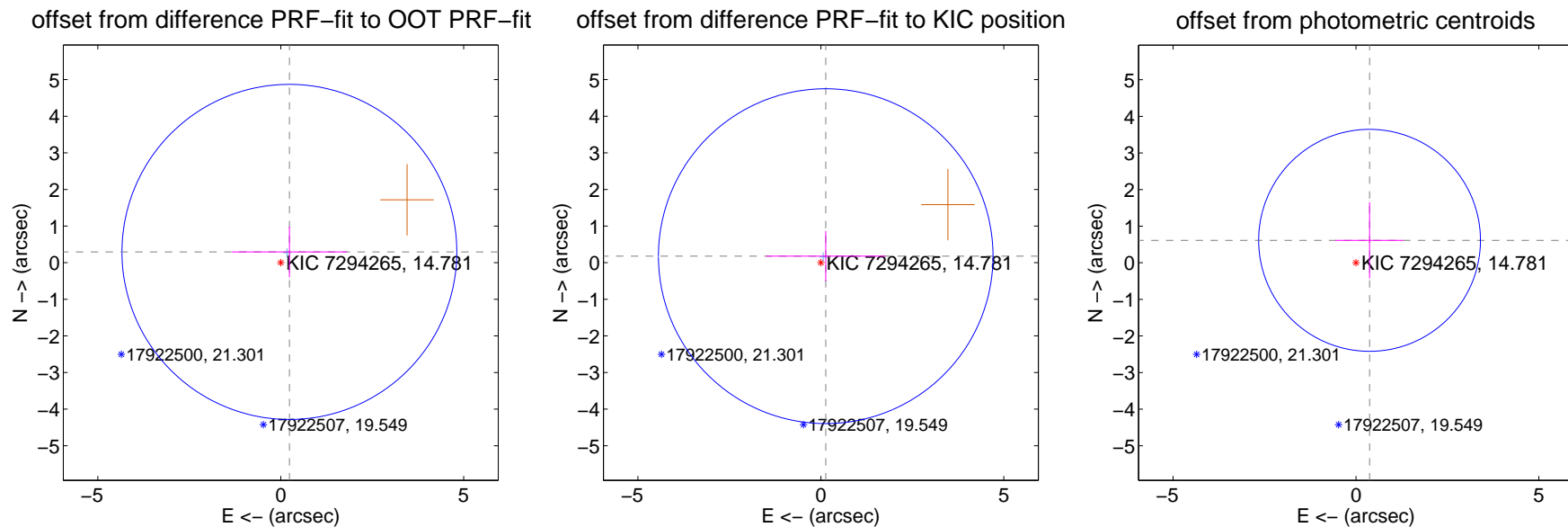
DV Centroid Data

Supplemental centroid analysis for 007294265-01. Kepler magnitude: 14.78. Transit SNR 8.00

There are 1 quarters with good PRF difference image offsets

The direct PRF centroid is offset from the target star catalog position by about 0.13 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.377 ± 1.525	0.25	-0.236 ± 1.573	0.294 ± 0.695
PRF-fit source offset from KIC position	0.222 ± 1.524	0.15	-0.132 ± 1.633	0.178 ± 0.687
photometric centroid source offset	0.72 ± 1.01	0.71	-0.37 ± 0.93	0.61 ± 1.04



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.

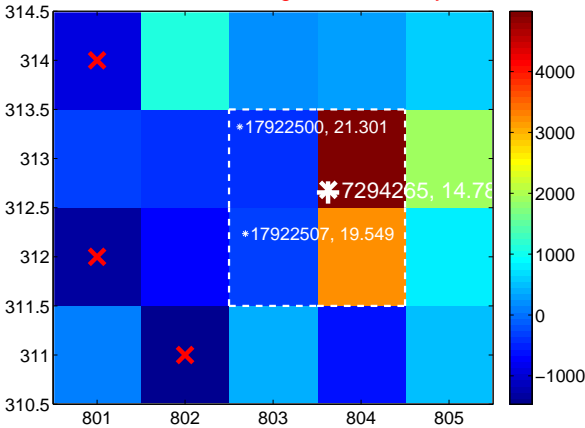
Q1 no difference image



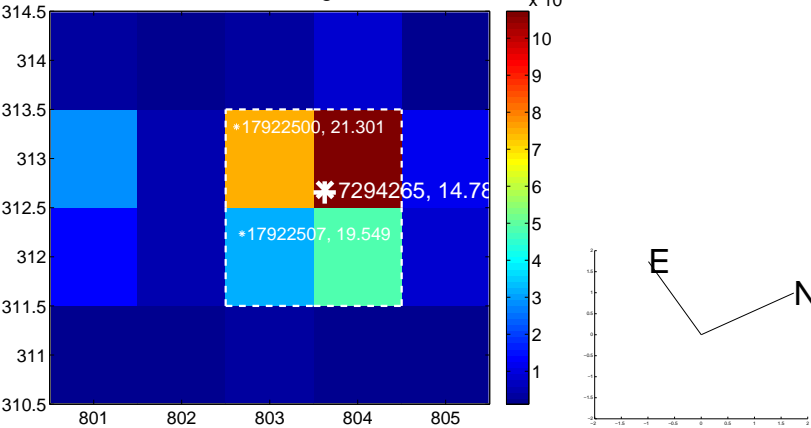
Q1 no OOT image



Q2 difference image. Poor Quality



Q2 OOT image



Q3 no difference image



Q3 no OOT image



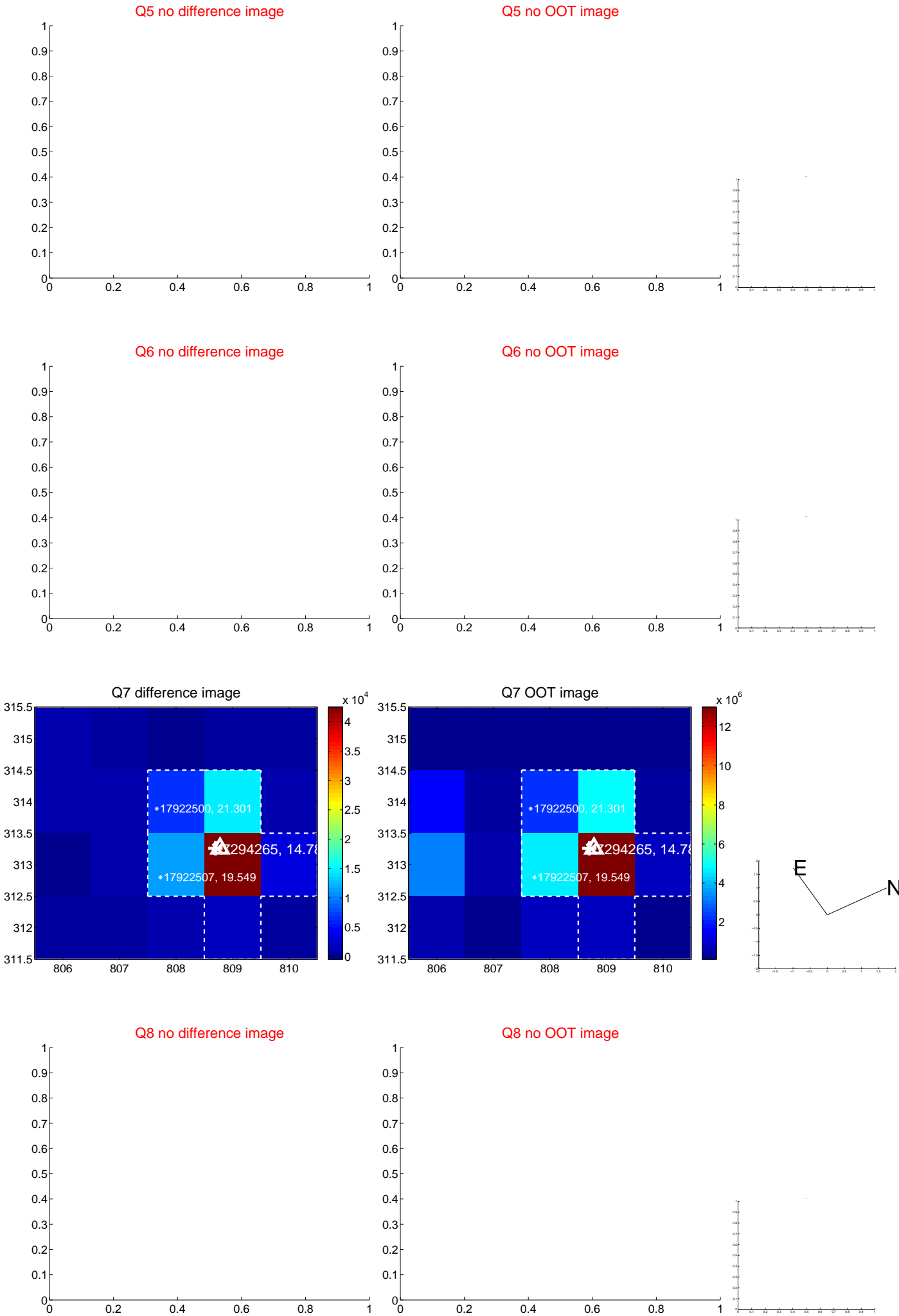
Q4 no difference image



Q4 no OOT image



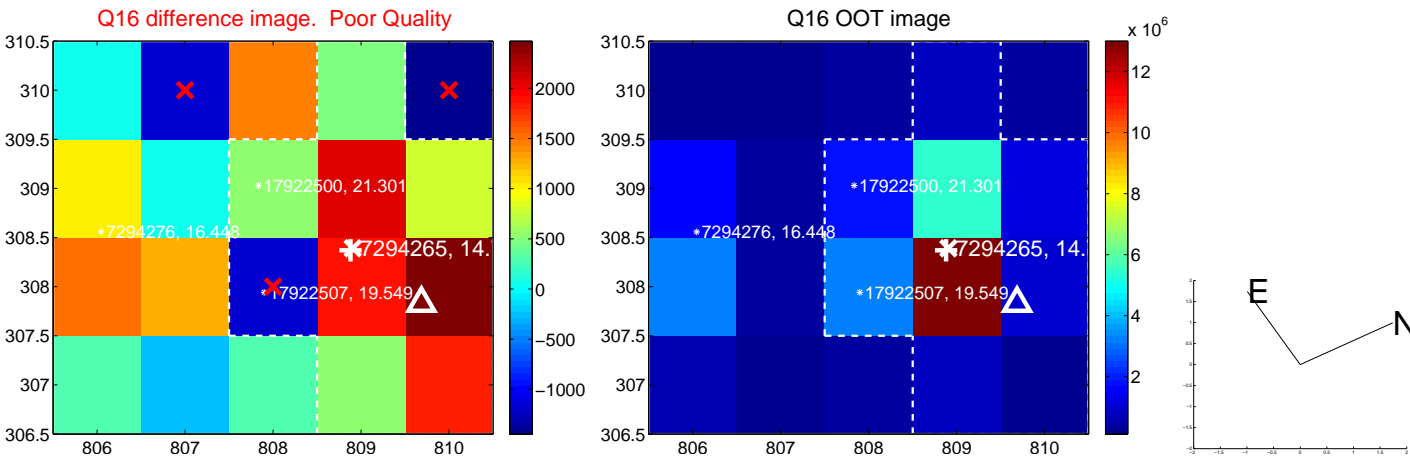
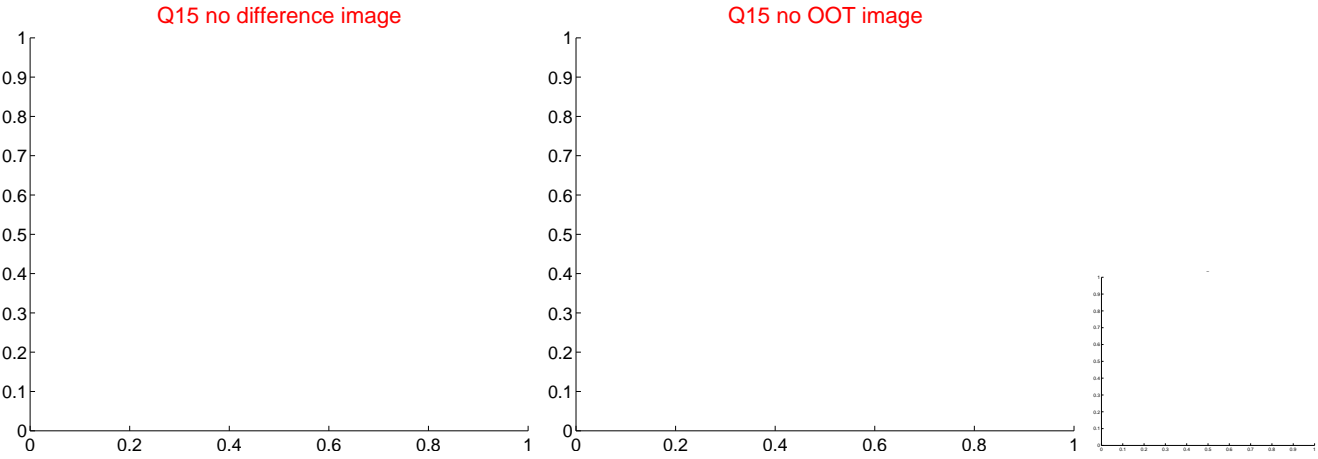
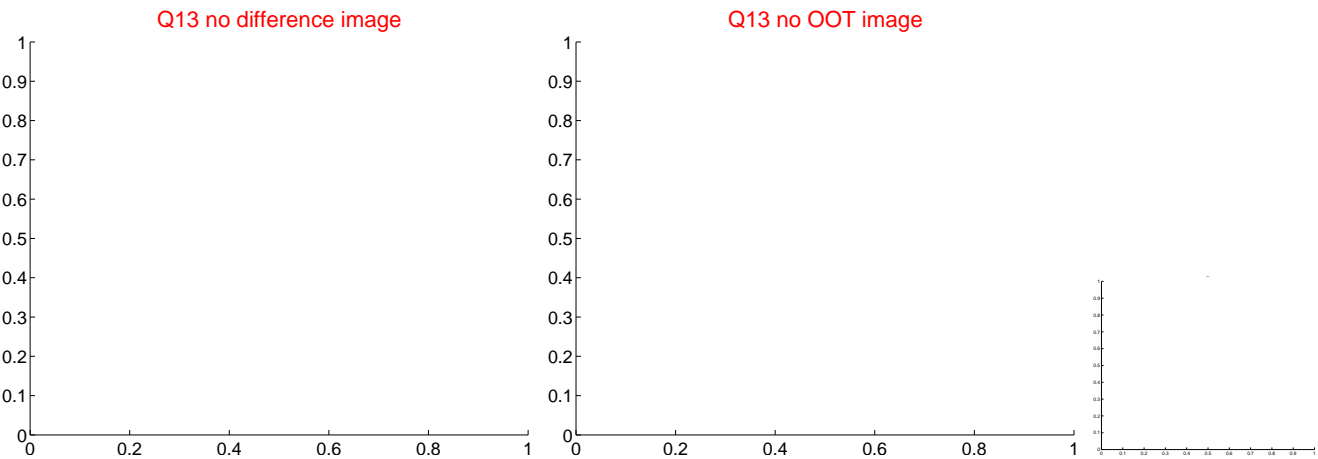
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



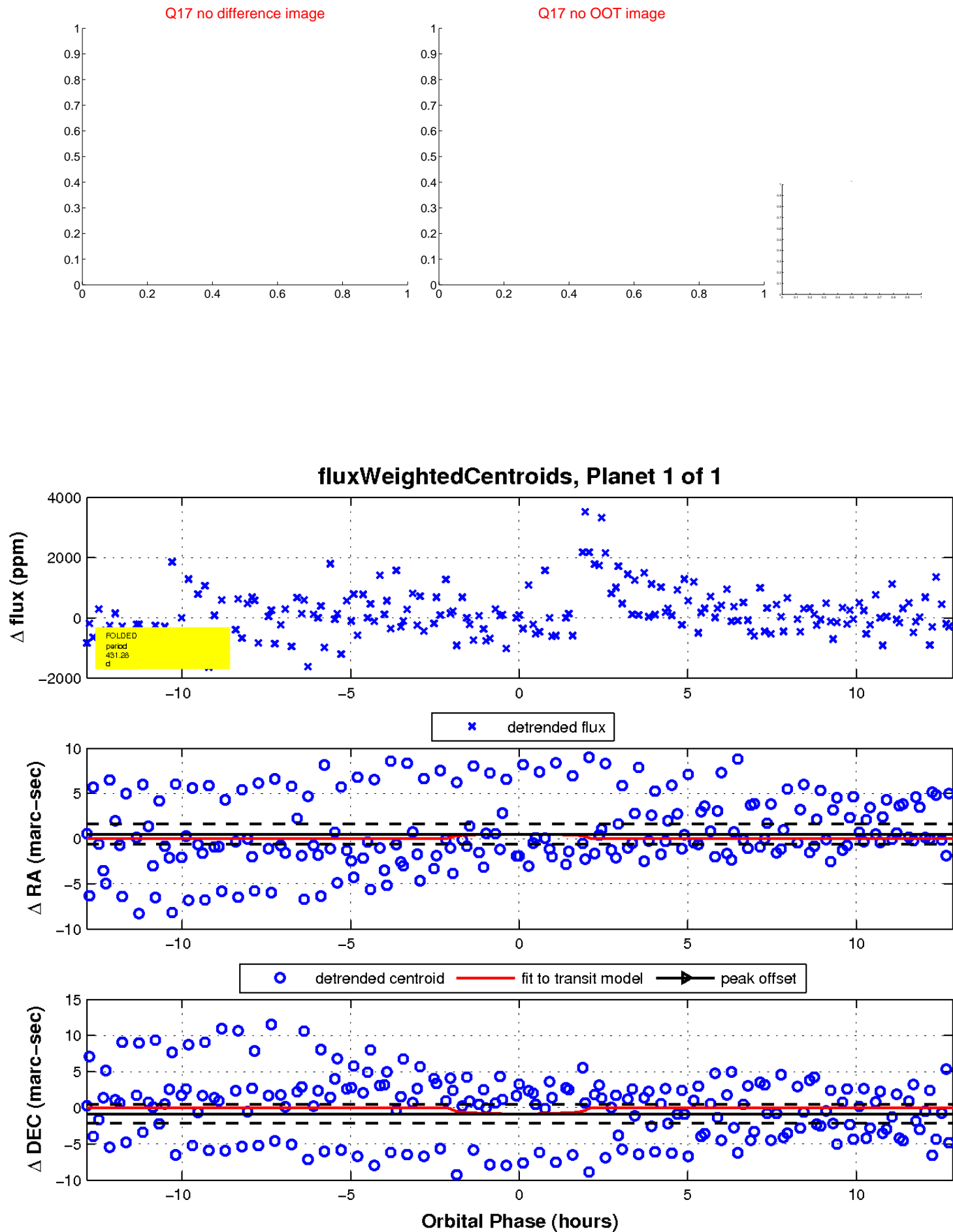
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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

