

KIC 009692206

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})
009692206-01	OBS	No	252.506458	216.984991	737.8	5.178	8.1	6.4	0.43	3667	1.19	0.08

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
009692206-01	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_CHASES_MARSHALL_SKYE—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.

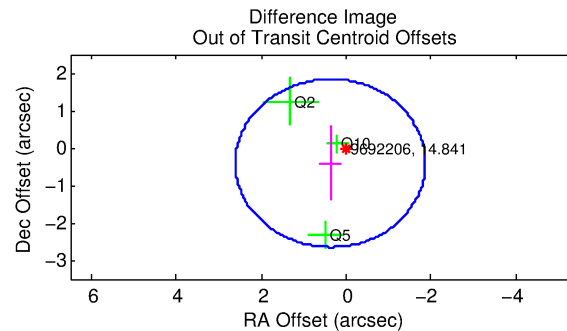
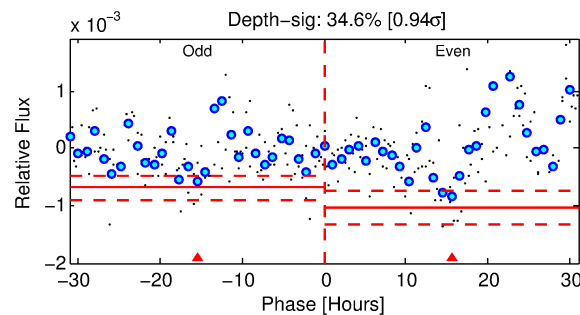
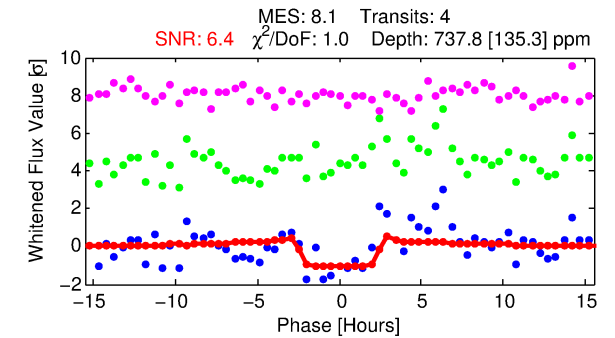
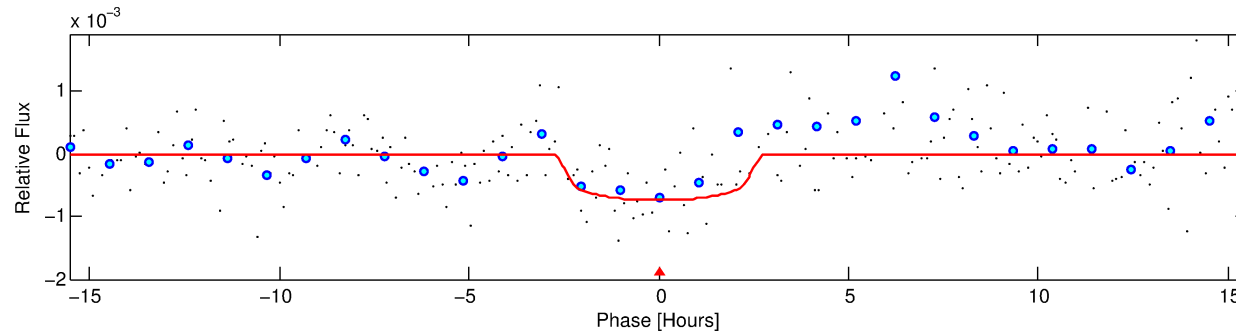
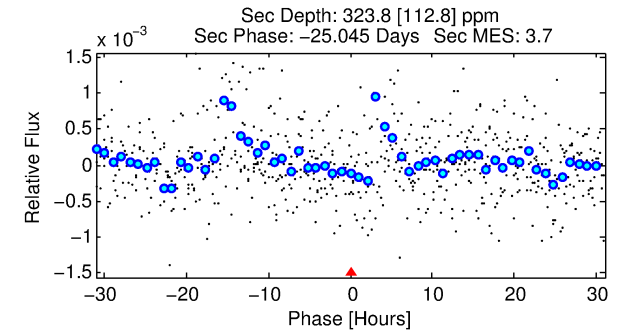
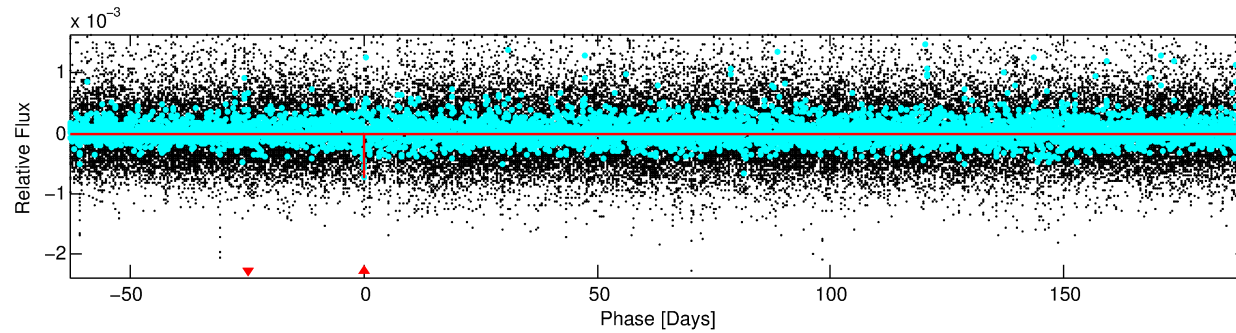
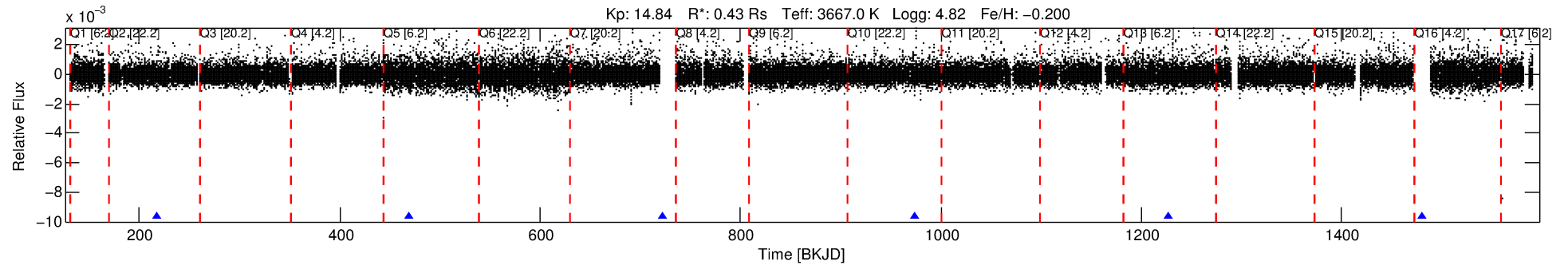
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 009692206-01

No Significant Match Found

DV One-Page Summary

KIC: 9692206 Candidate: 1 of 1 Period: 252.506 d



DV Fit Results:

Period = 252.50646 [0.00428] d
Epoch = 216.9850 [0.0107] BKJD
Rp/R* = 0.0253 [0.0325]
a/R* = 346.08 [2065.61]
b = 0.43 [11.19]
Seff = 0.08 [0.01]
Teq = 137 [4] K
Rp = 1.19 [1.53] Re
a = 0.5982 [0.0393] AU
Ag = 45164.36 [117478.48] [0.38σ]
Teffp = 3095 [2012] K [1.47σ]

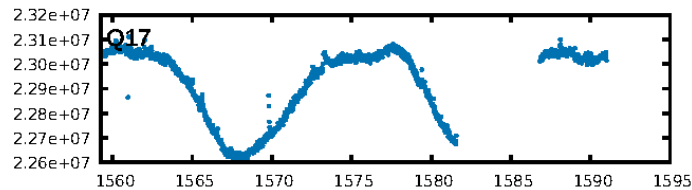
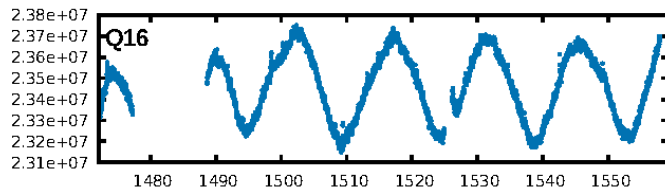
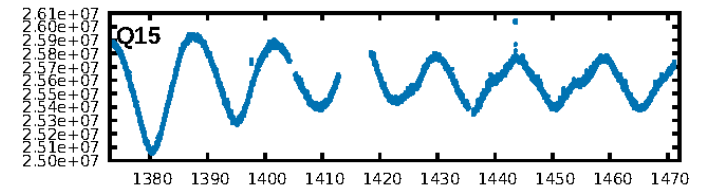
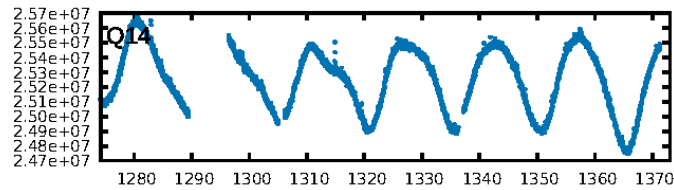
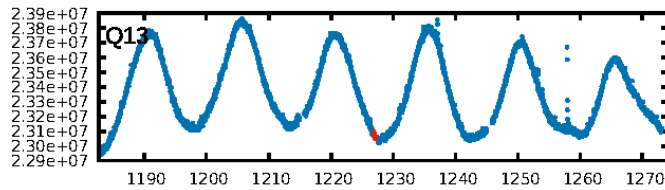
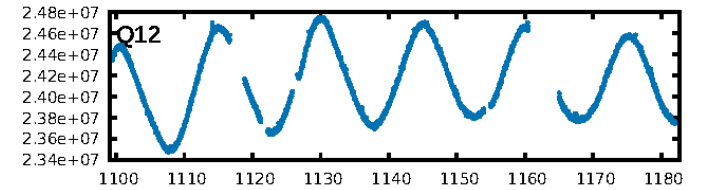
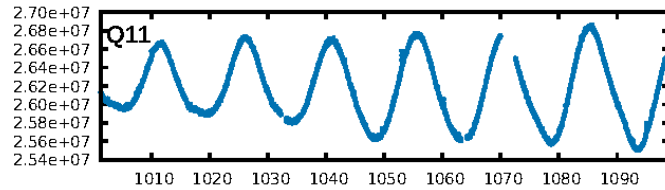
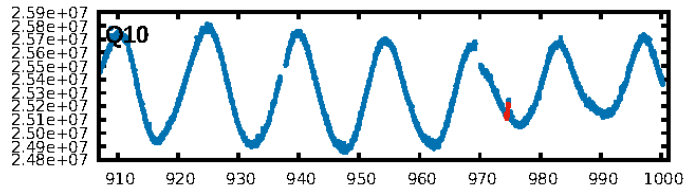
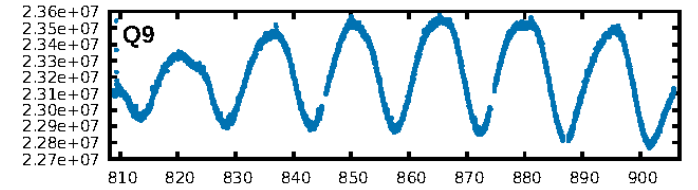
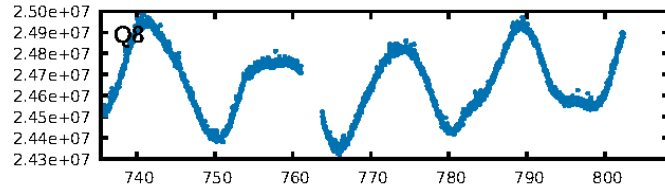
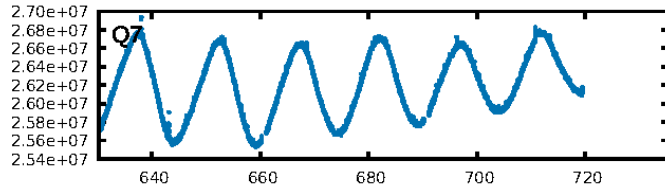
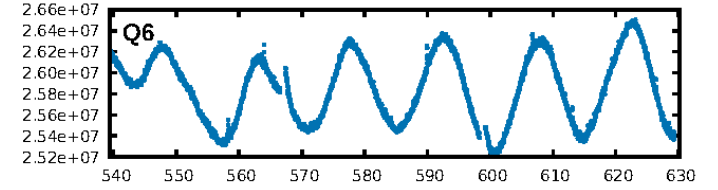
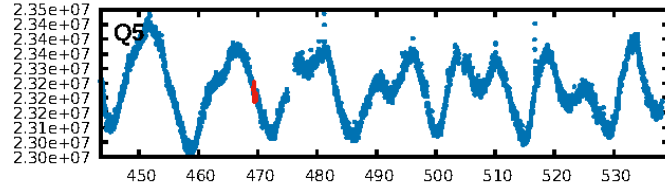
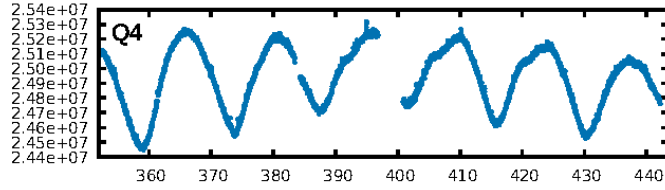
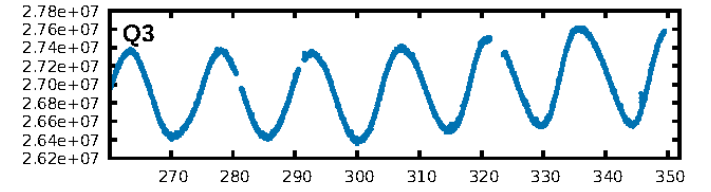
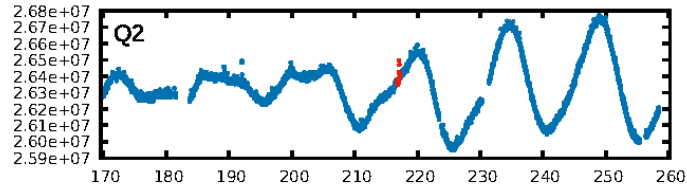
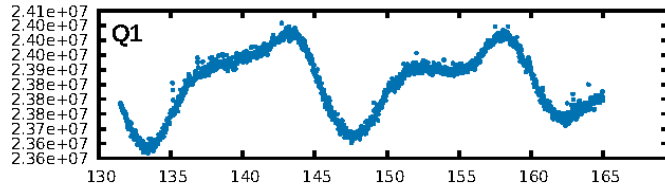
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: 37.1%
ModelChiSquareGof-sig: 98.8%
Bootstrap-pfa: 3.30e-10
RollingBand-fgt: 1.00 [4/4]
GhostDiagnostic-chr: -1.799
Centroid-sig: 41.2%
Centroid-so: 1.238 arcsec [0.94σ]
OotOffset-rm: 0.547 arcsec [0.73σ]
OotOffset-st: 2/0/0/1 [3]
KicOffset-rm: 0.391 arcsec [0.90σ]
KicOffset-st: 2/0/0/1 [3]
DiffImageQuality-fgm: 1.00 [3/3]
DiffImageOverlap-fno: 1.00 [3/3]

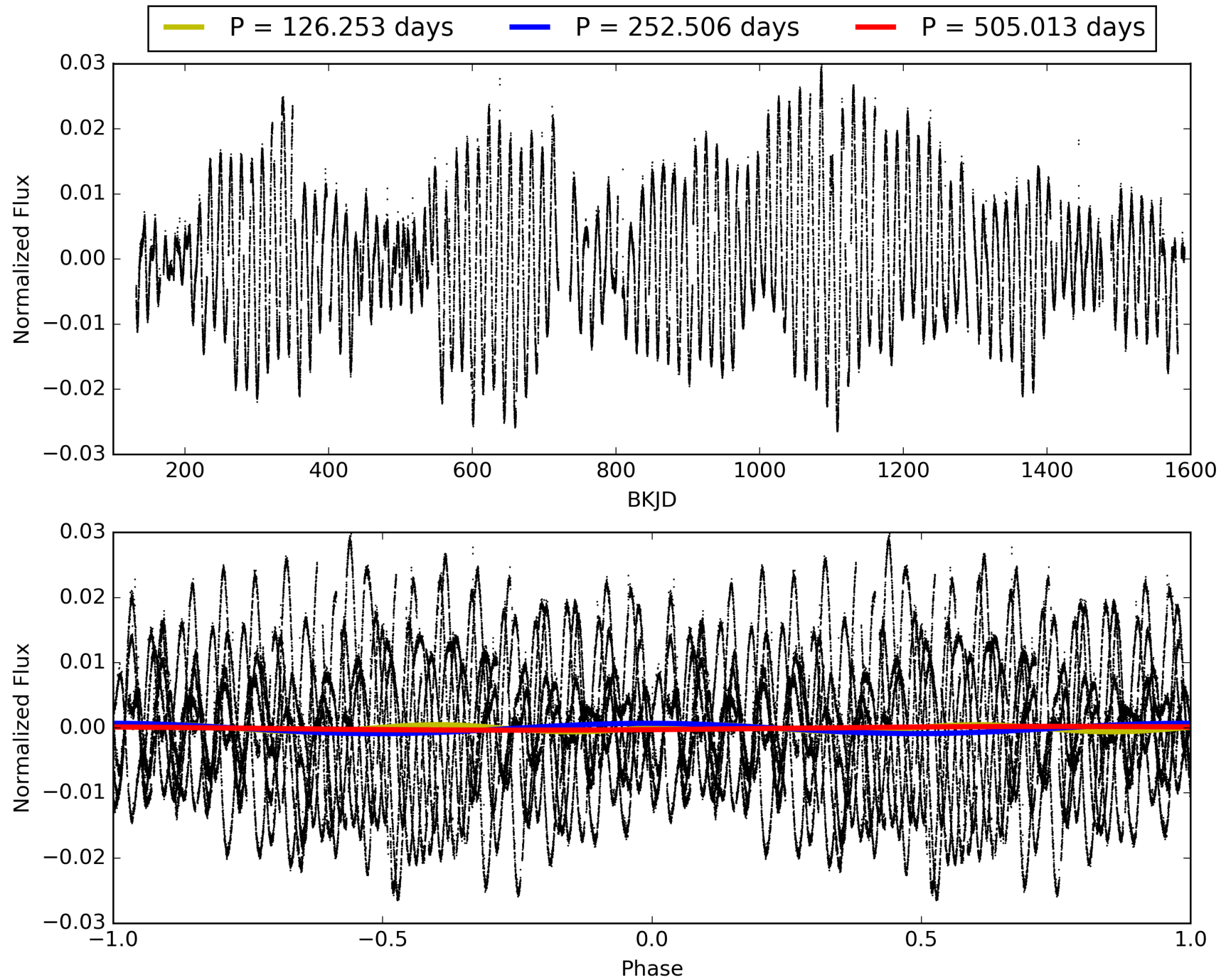
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 28-Jan-2016 20:56:57 Z

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

TCE 009692206-01, PDC Light Curves

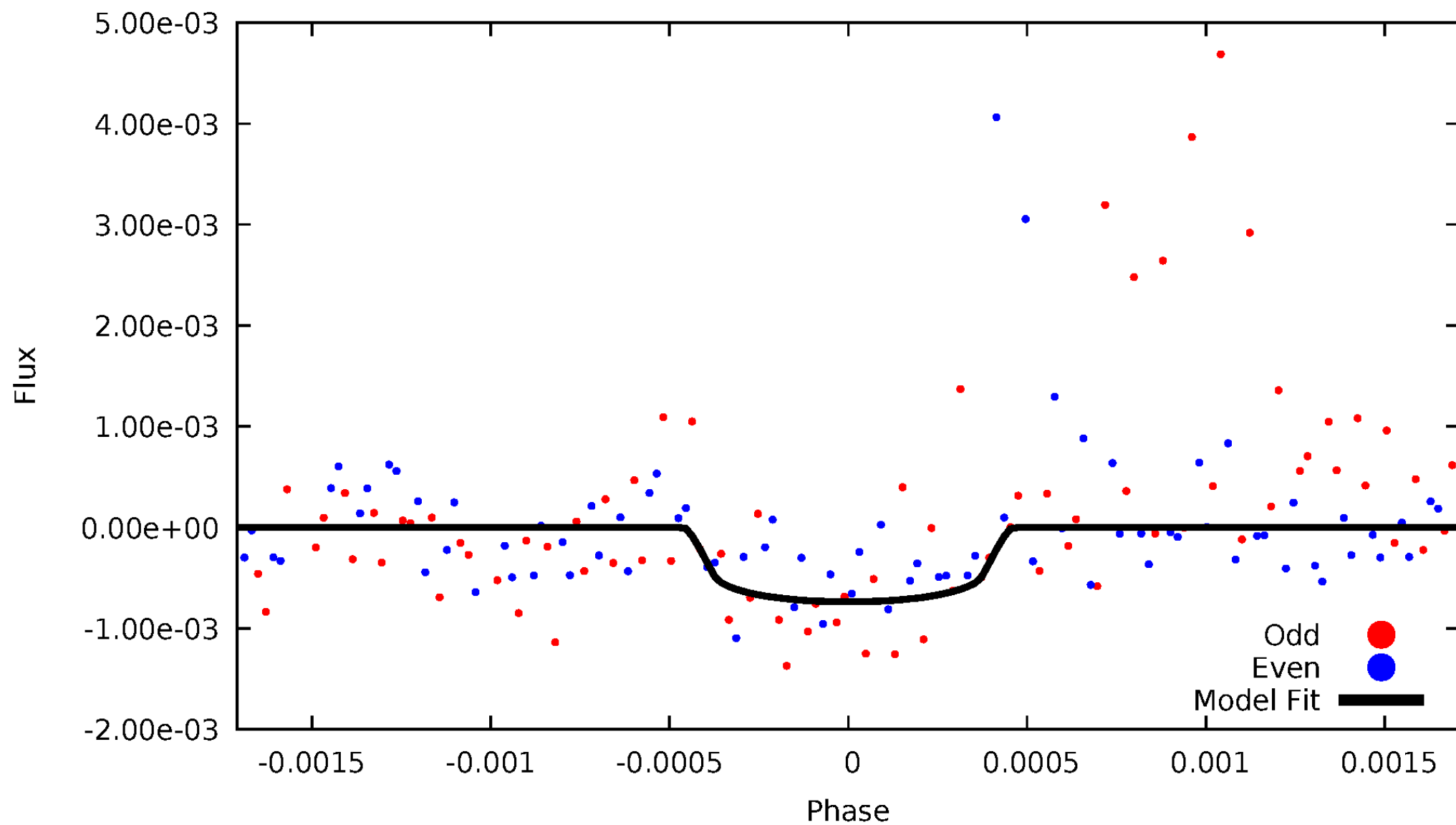


TCE 009692206-01



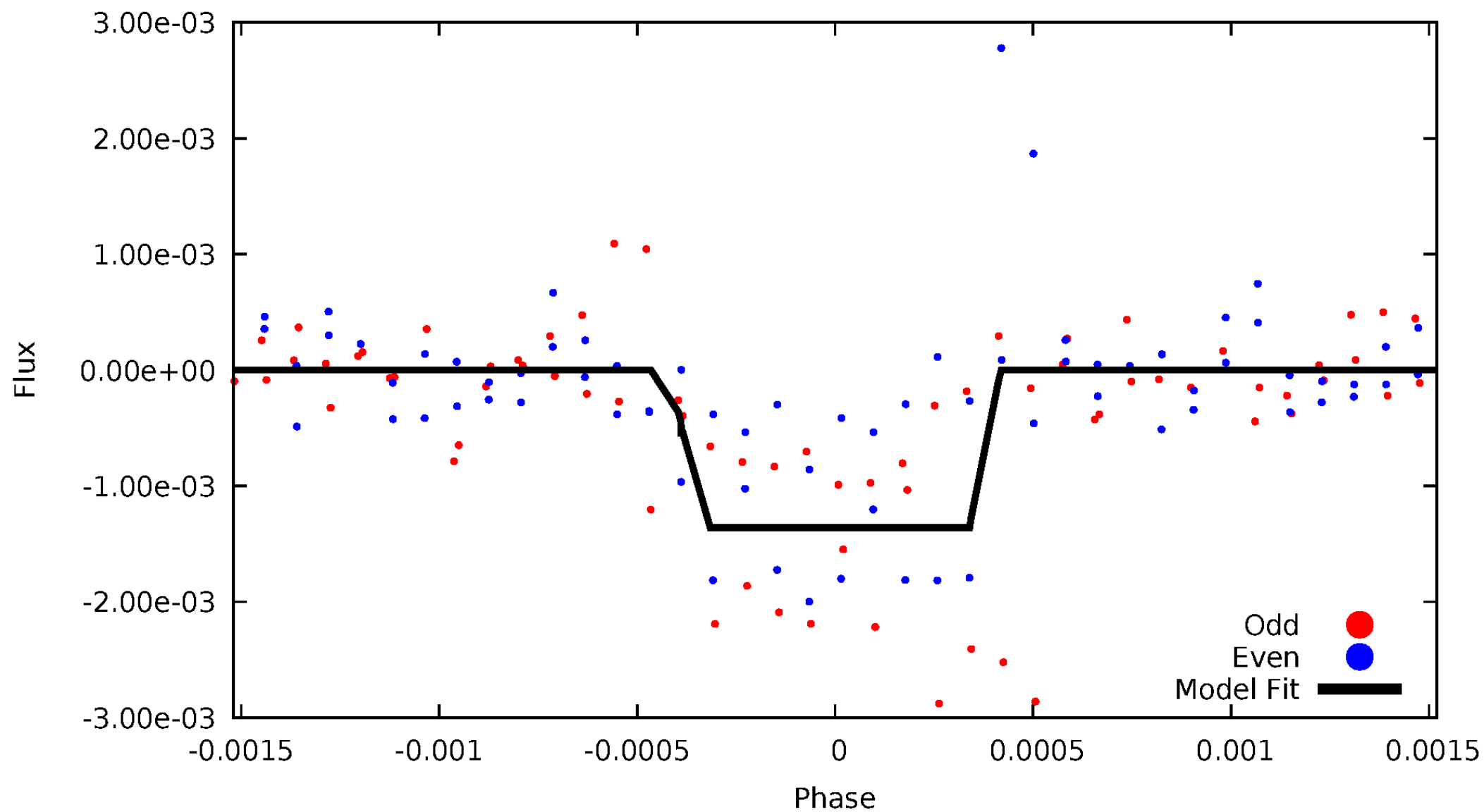
DV Odd/Even

TCE 009692206-01



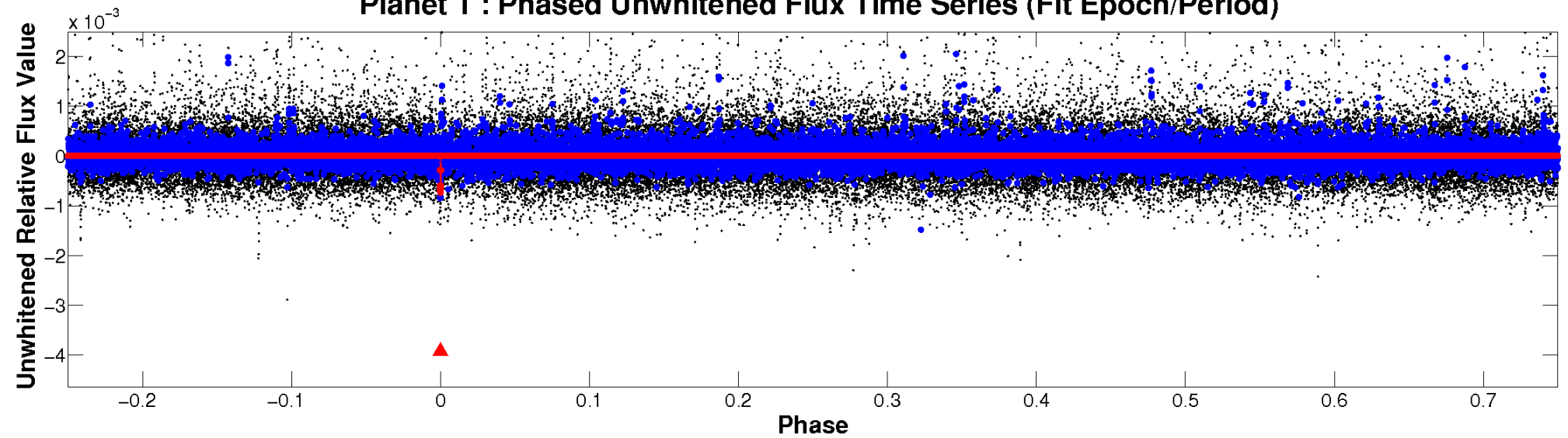
ALT Odd/Even

TCE 009692206-01

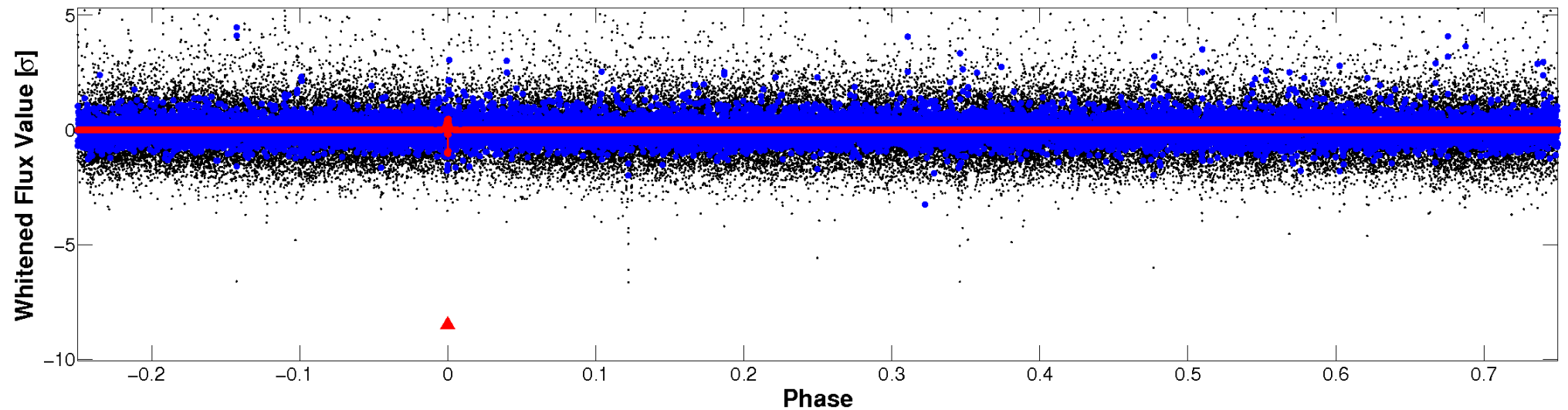


Non-Whitened Vs. Whitened Light Curve

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

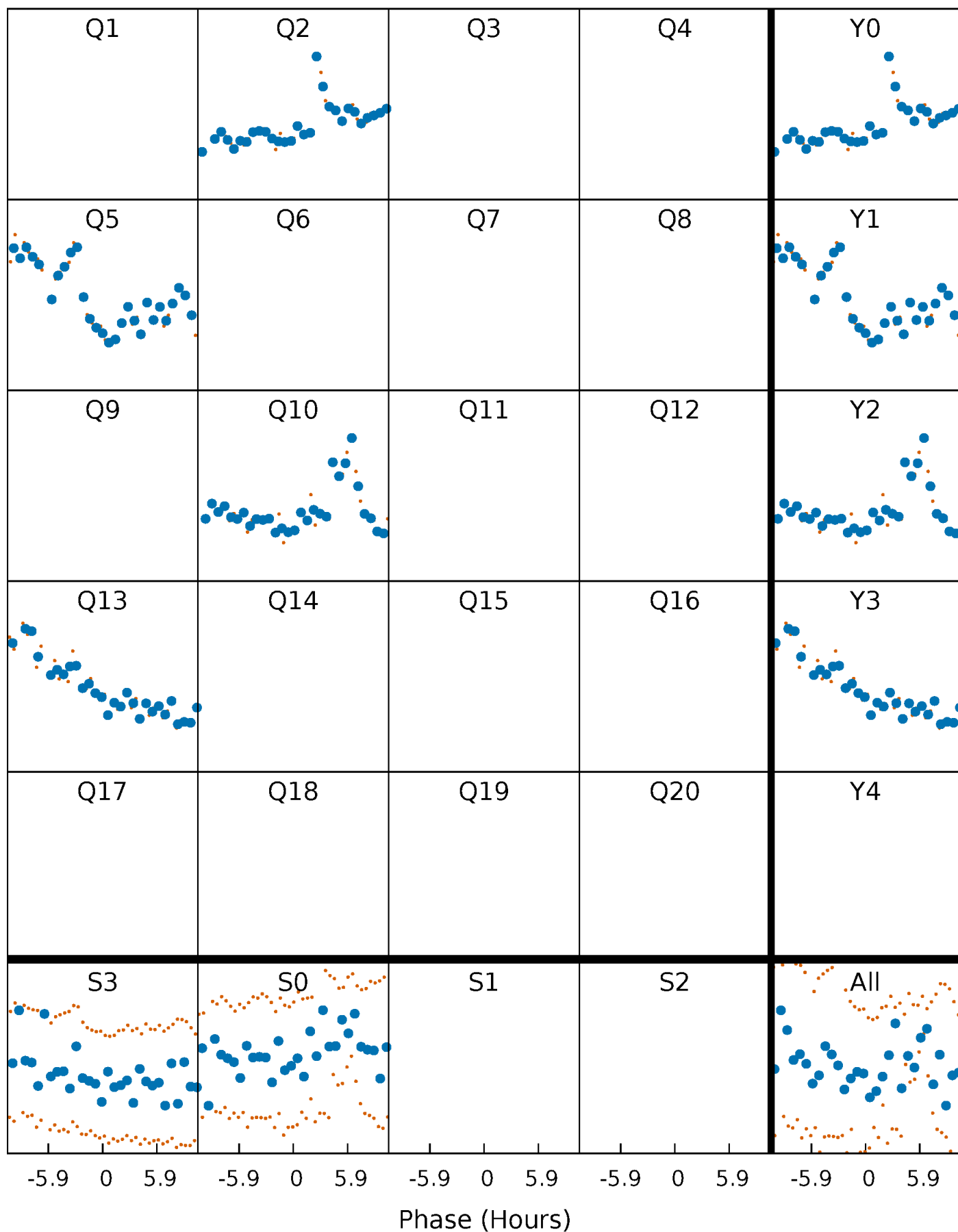


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



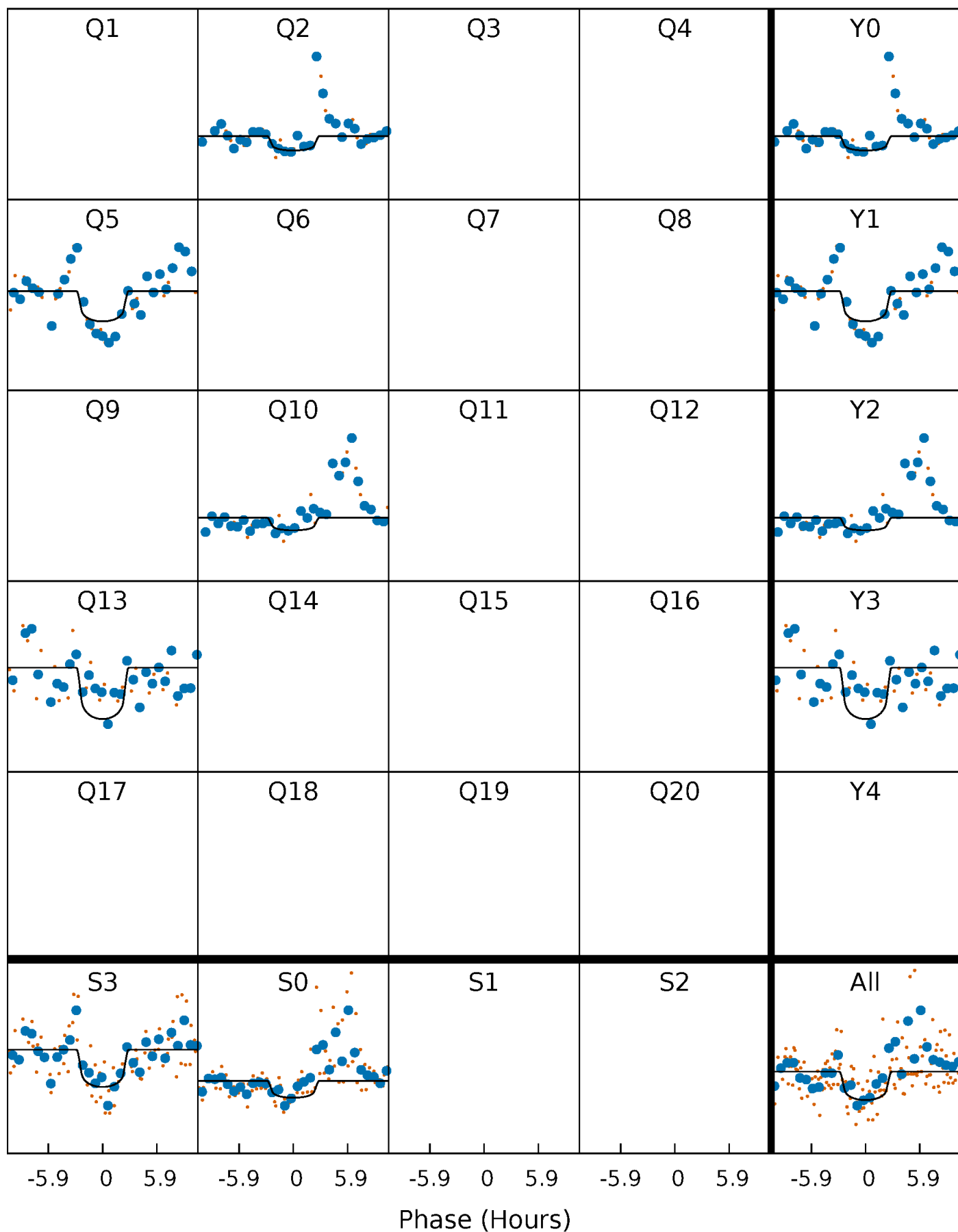
PDC Quarter-Phased Transit Curves

TCE 009692206-01 P=252.506458 Days $T_0=216.984991$ (BKJD)



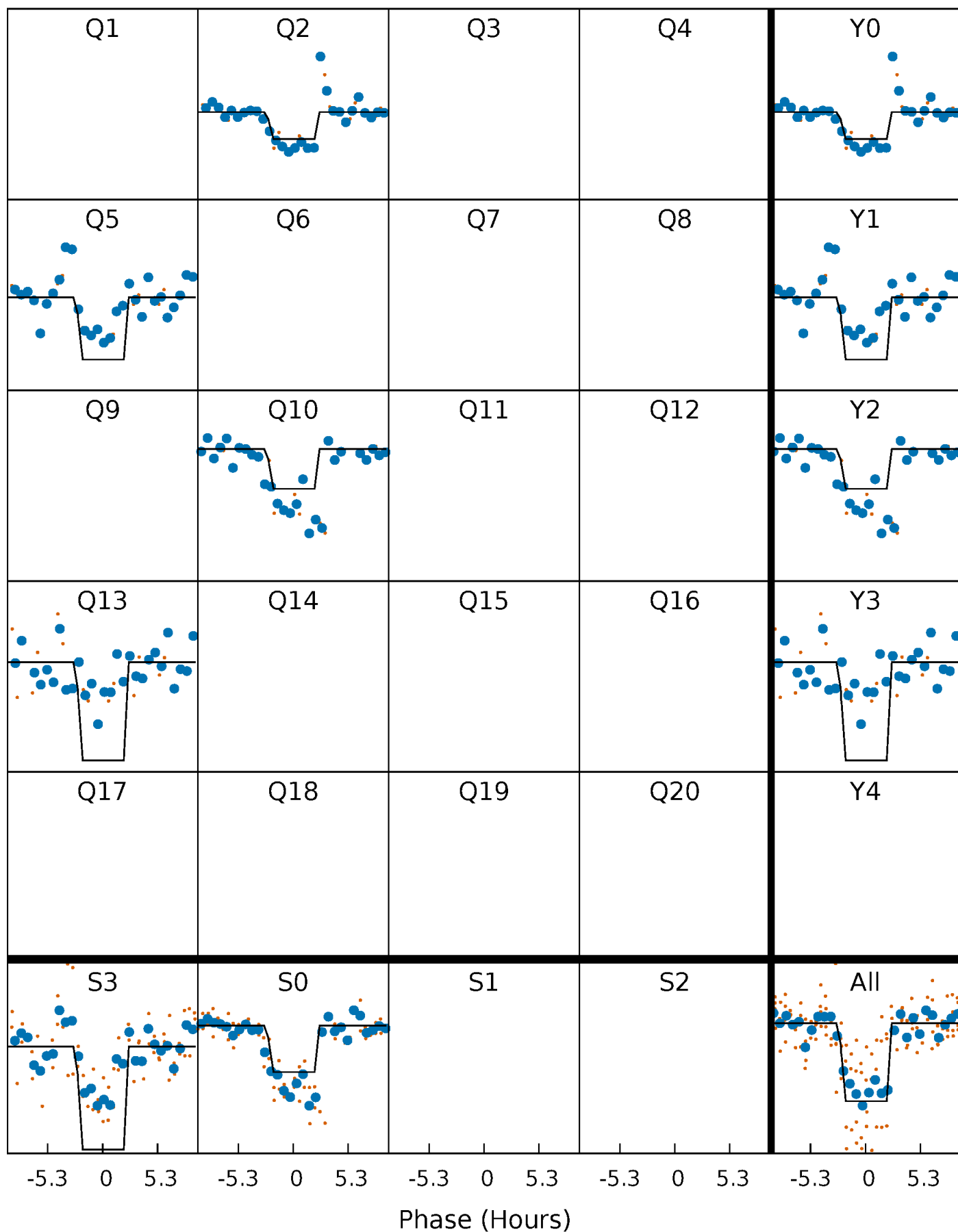
DV Quarter-Phased Transit Curves

TCE 009692206-01 P=252.506458 Days $T_0=216.984991$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

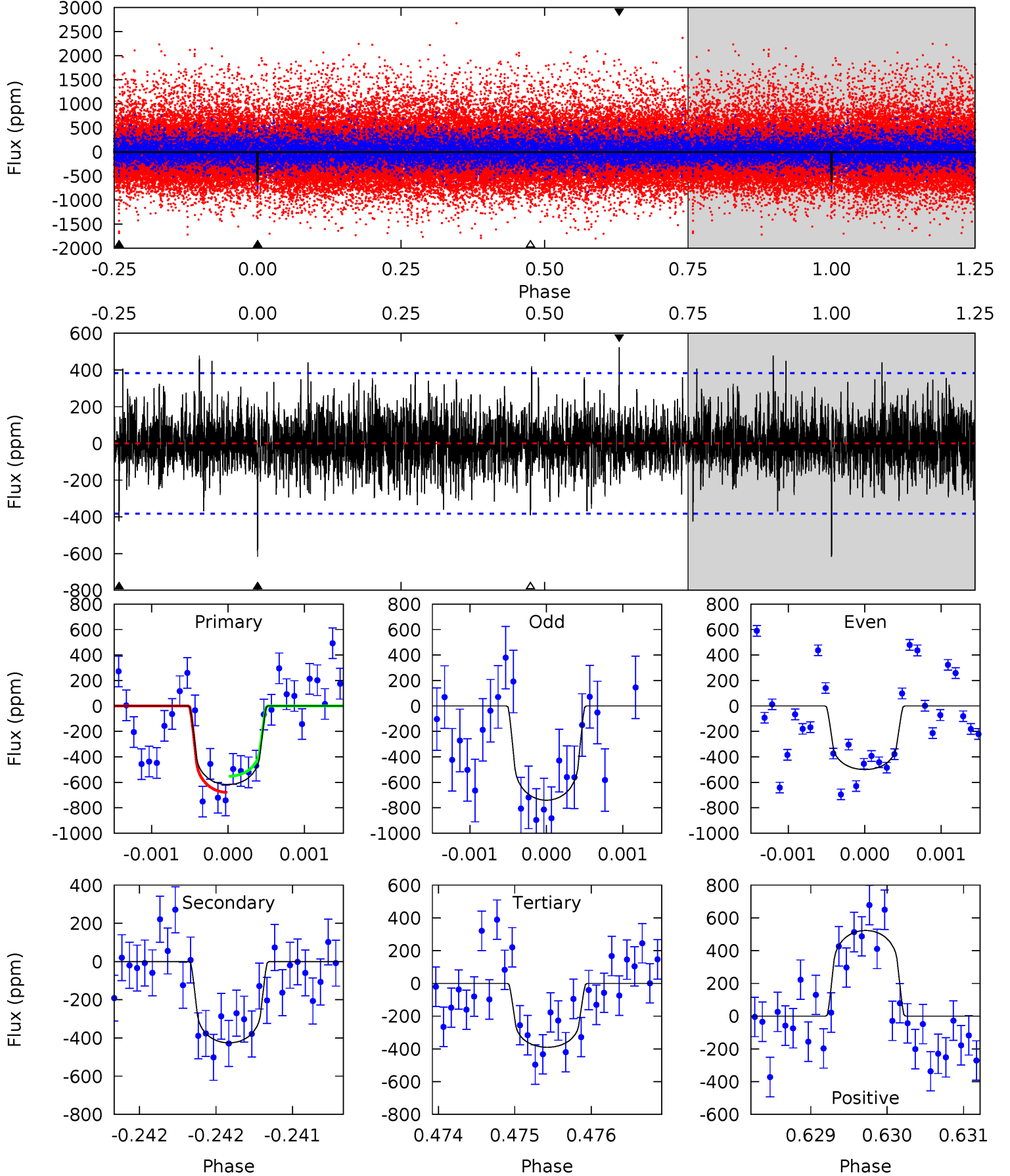
TCE 009692206-01 P=252.517934 Days $T_0=216.983667$ (BKJD)



DV Model-Shift Uniqueness Test

009692206-01, P = 252.506458 Days, E = 216.984991 Days

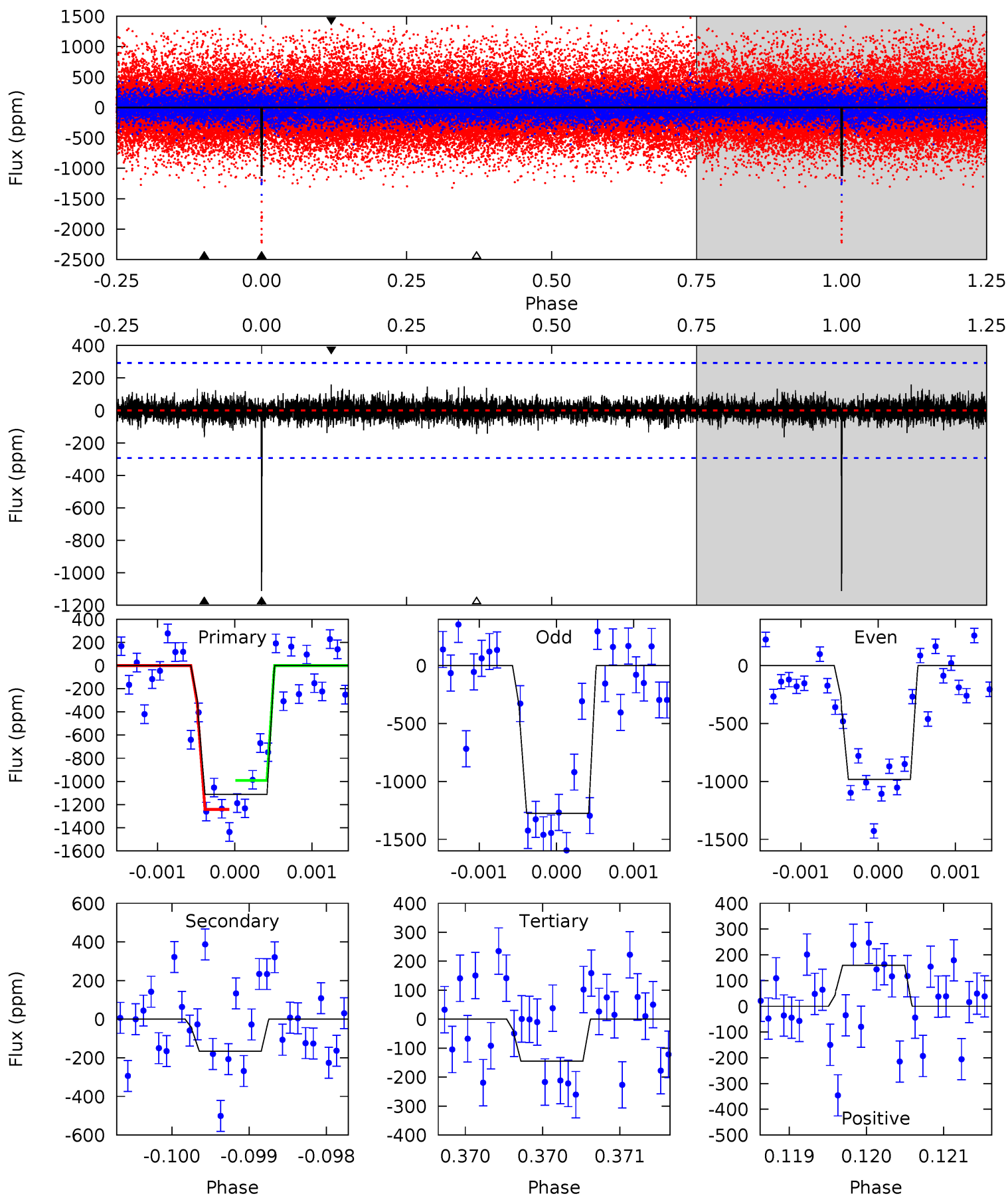
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
8.83	6.09	5.58	7.48	5.47	3.32	1.53	3.25	1.35	0.51	-1.39	1.68	1.25	0.46	0.91



Alt Model-Shift Uniqueness Test

009692206-01, P = 252.517934 Days, E = 216.983667 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
20.8	3.10	2.71	2.99	5.49	3.35	0.63	18.1	17.9	0.39	0.11	2.76	1.01	0.13	2.35



Stellar Parameters For KIC 009692206

	$T_{\text{eff}} (K)$	$\log(g)$	$[\text{Fe}/\text{H}]$	$R (R_{\odot})$	$M (M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	3667^{+58}_{-58}	$4.820^{+0.042}_{-0.032}$	$-0.200^{+0.100}_{-0.100}$	$0.431^{+0.030}_{-0.037}$	$0.447^{+0.032}_{-0.035}$	$7.884^{+1.534}_{-1.068}$
	+2%/-2%	+1%/-1%	+50%/-50%	+7%/-9%	+7%/-8%	+19%/-14%
Source	PHO2	PHO2	PHO2	DSEP		

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

Secondary Eclipse Parameters for KIC 009692206-01 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	A_{obs}
DV	-426 ± 70	$1.59^{+1.24}_{-1.02}$	191^{+4}_{-4}	3121^{+1241}_{-455}	$31875^{+223274}_{-21772}$
Alt.	-165 ± 53	$1.96^{+1.43}_{-1.21}$	192^{+4}_{-4}	2592^{+754}_{-320}	7839^{+43172}_{-5297}

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

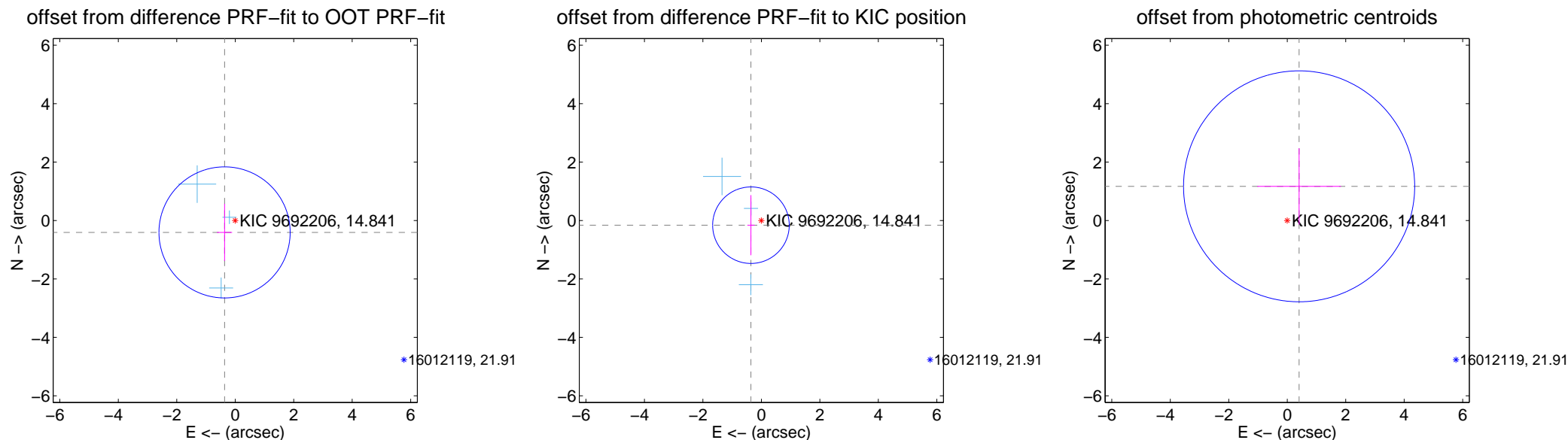
DV Centroid Data

Supplemental centroid analysis for 009692206-01. Kepler magnitude: 14.84. Transit SNR 6.39

There are 3 quarters with good PRF difference image offsets

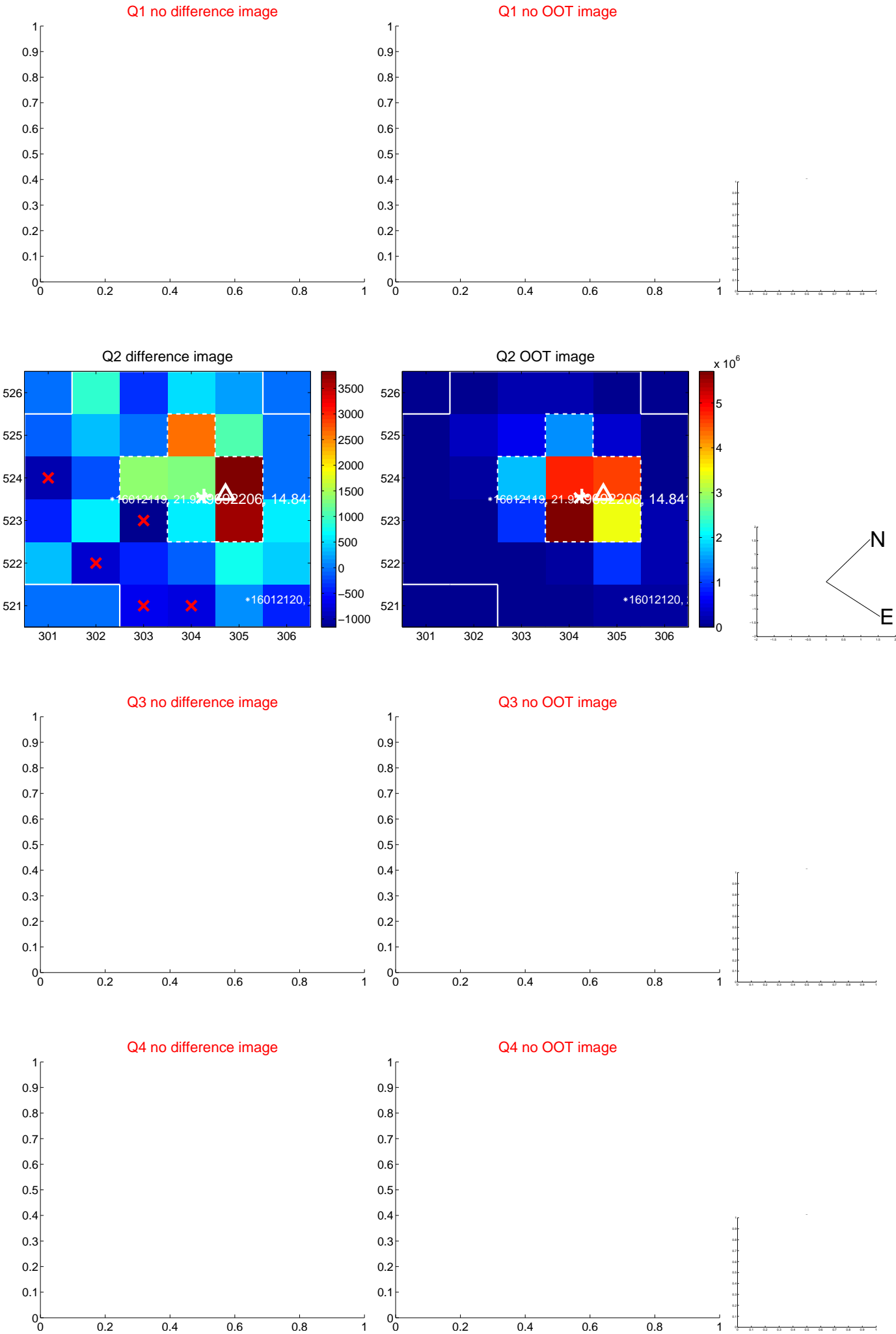
The direct PRF centroid is offset from the target star catalog position by about 0.34 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.547 ± 0.748	0.73	0.366 ± 0.258	-0.407 ± 0.978
PRF-fit source offset from KIC position	0.391 ± 0.436	0.90	0.357 ± 0.121	-0.161 ± 1.029
photometric centroid source offset	1.24 ± 1.32	0.94	-0.41 ± 1.43	1.17 ± 1.30

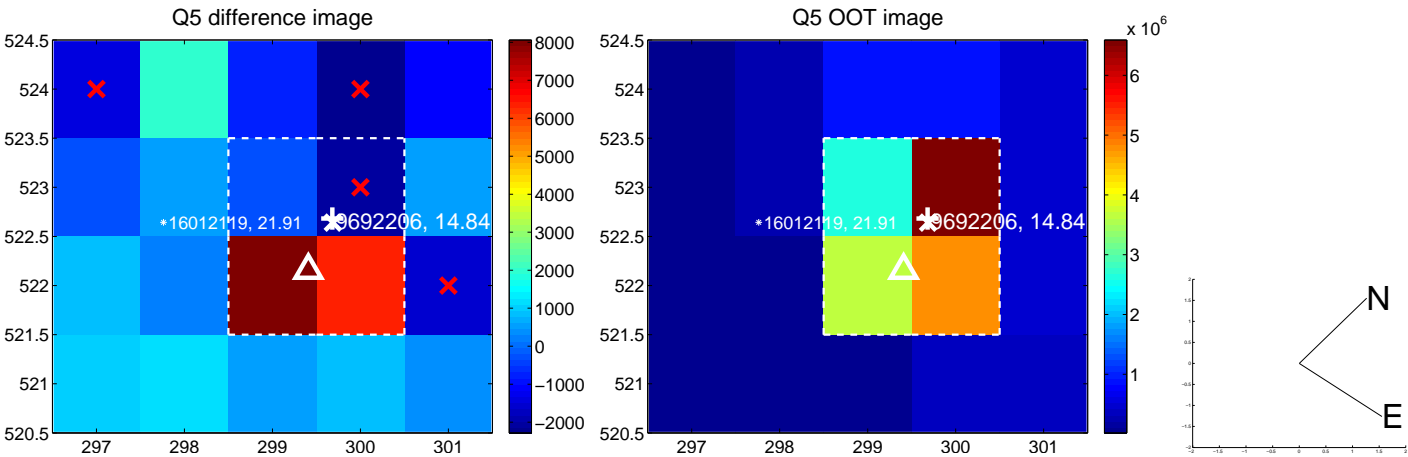


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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

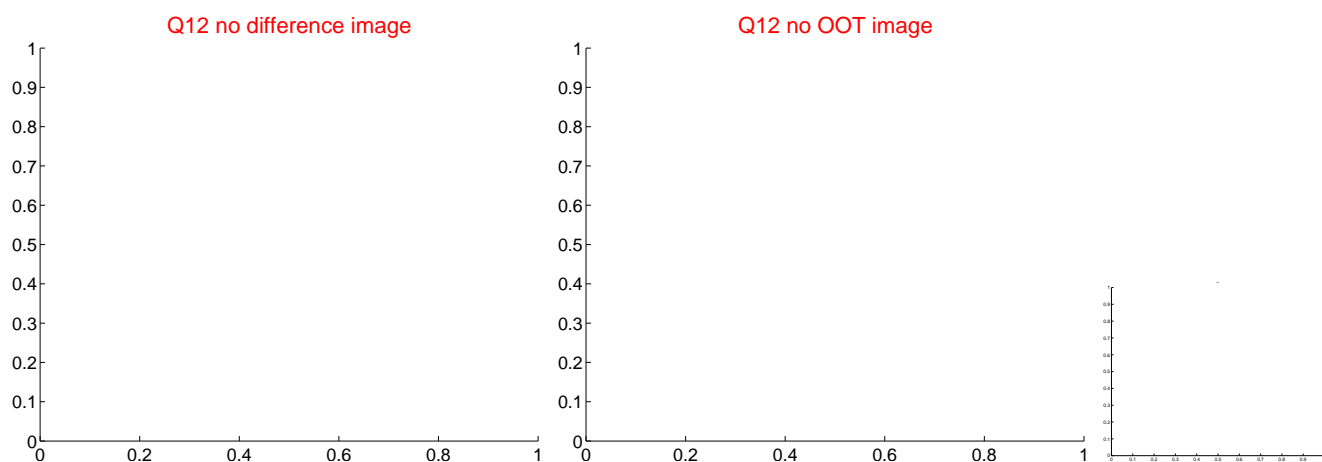
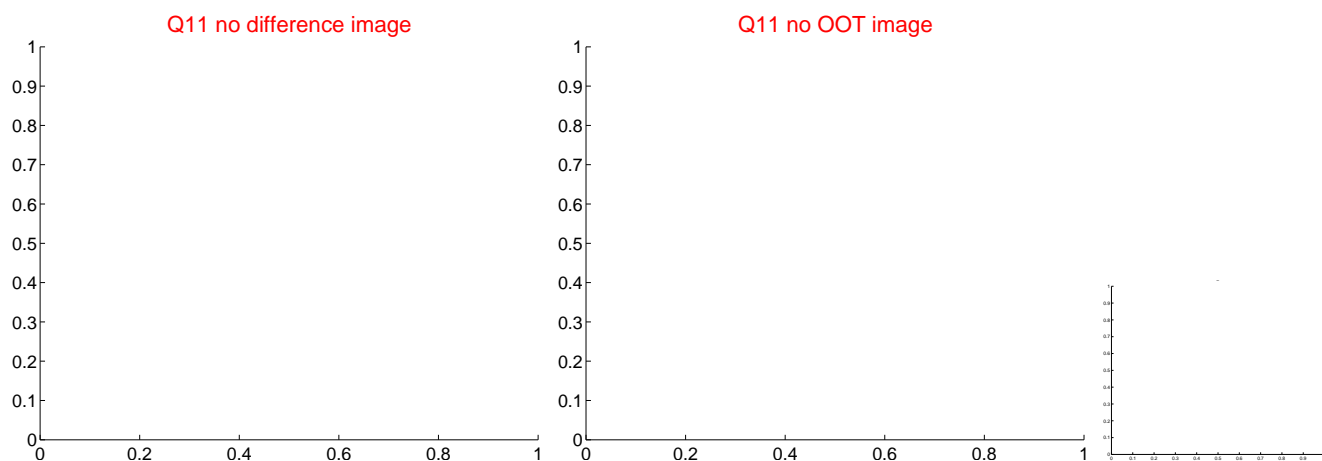
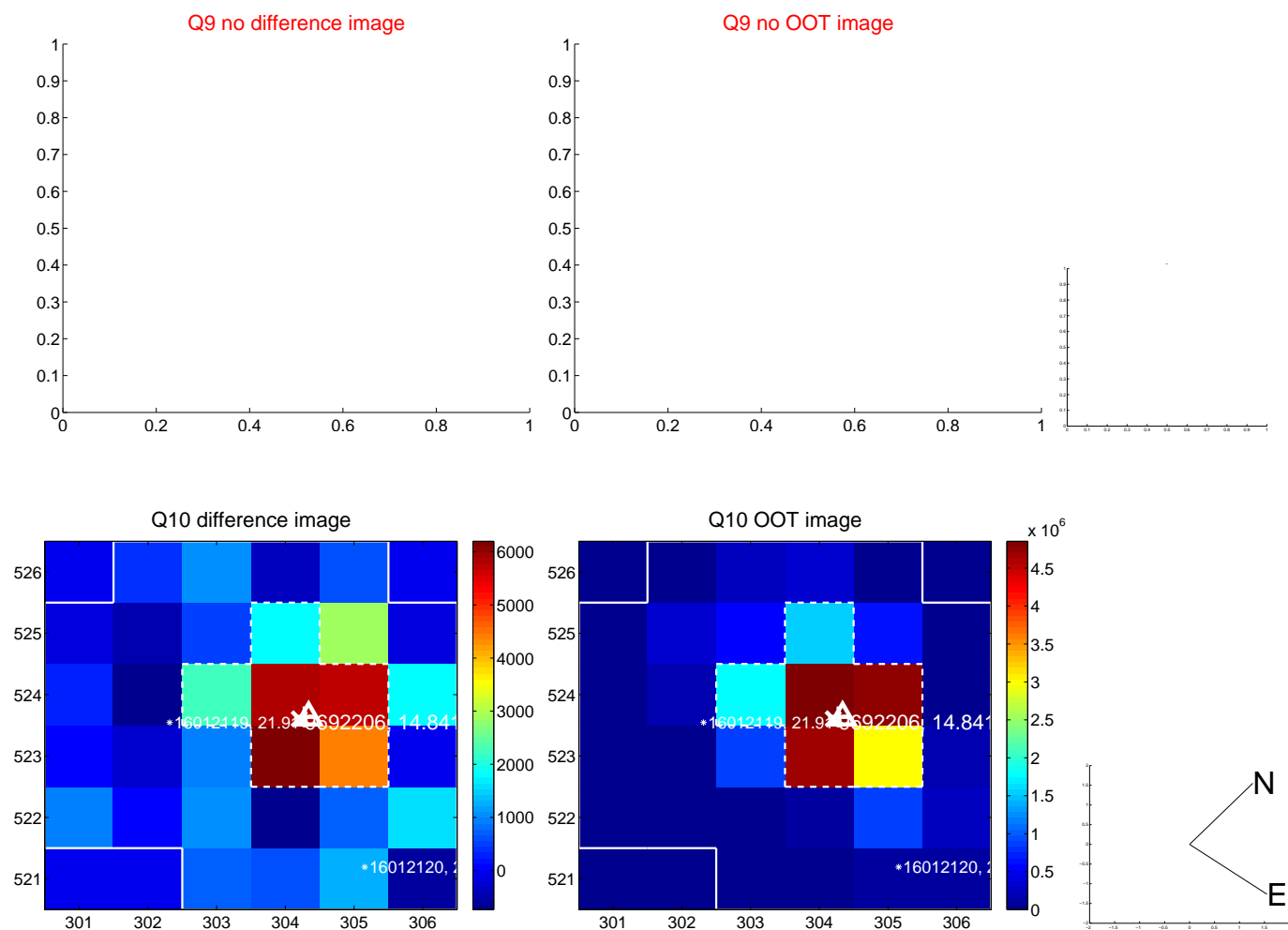
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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



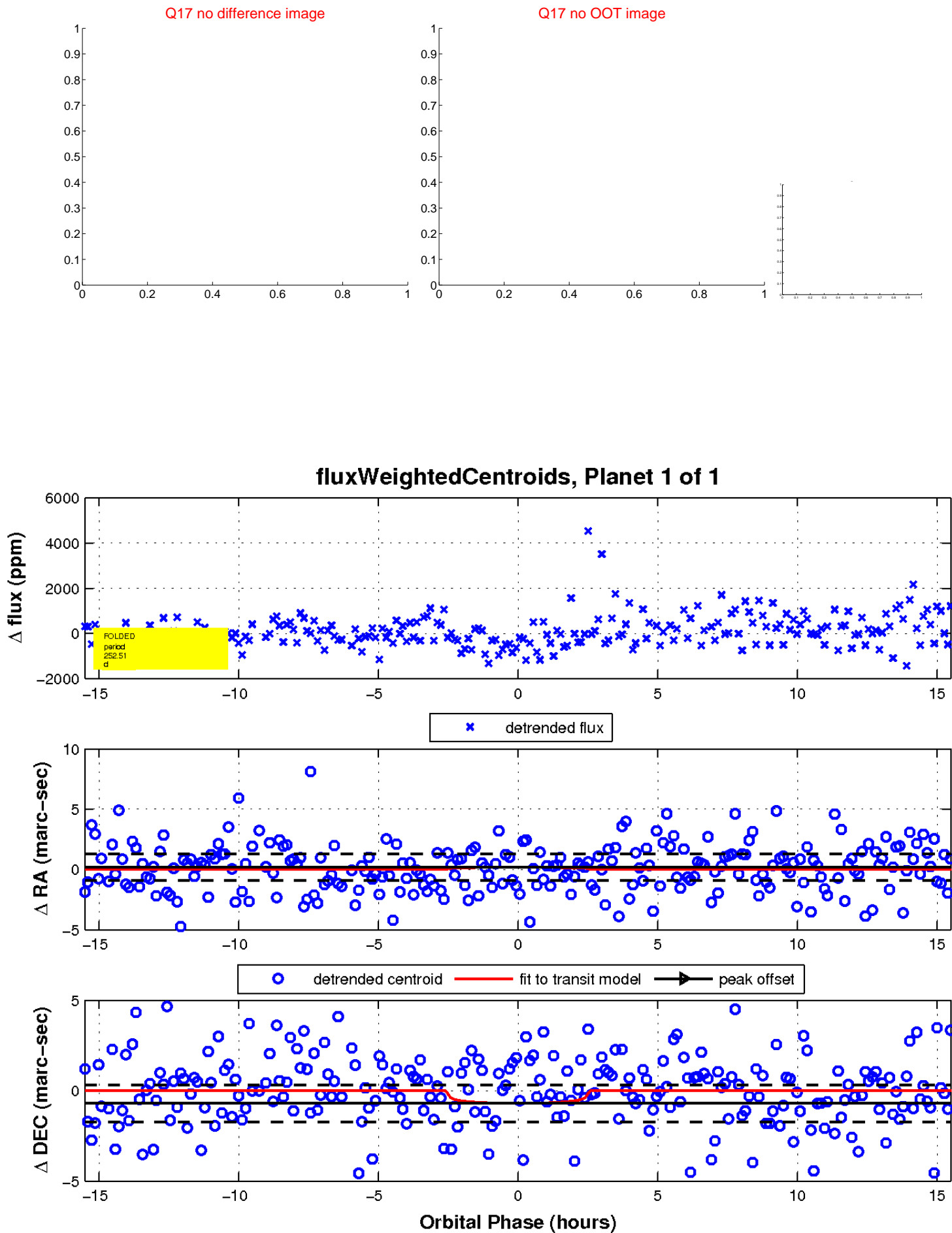
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value



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



UKIRT Image

Declination

