

KIC 003328203

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})
003328203-01	OBS	No	528.841795	152.054984	854.9	2.732	18.3	9.8	0.77	5451	2.41	0.35

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
003328203-01	OBS	FP	0.00	1	0	1	0	INDIV_TRANS_CHASES_MARSHALL—LPP_DV—LPP_ALT—ALL_TRANS_CHASES—MOD_POS_DV—INCONSISTENT_TRANS—CENT_KIC_POS—HALO_GHOST

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

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

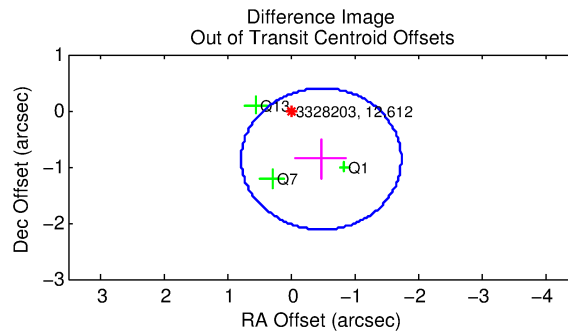
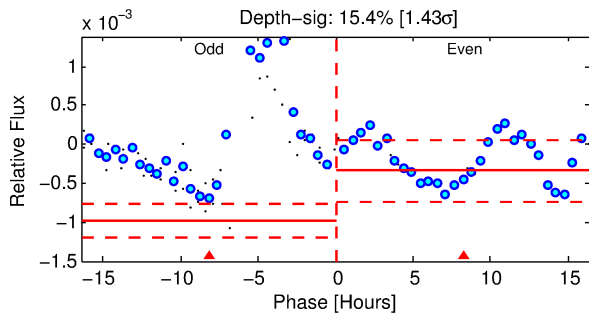
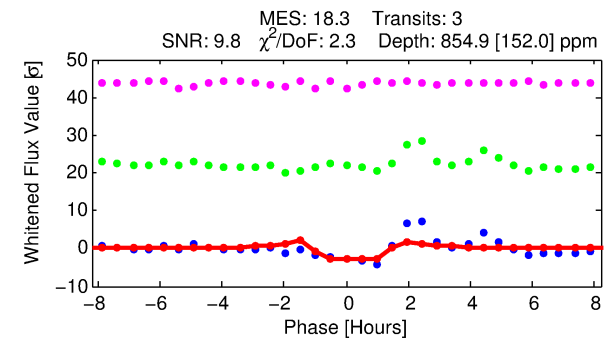
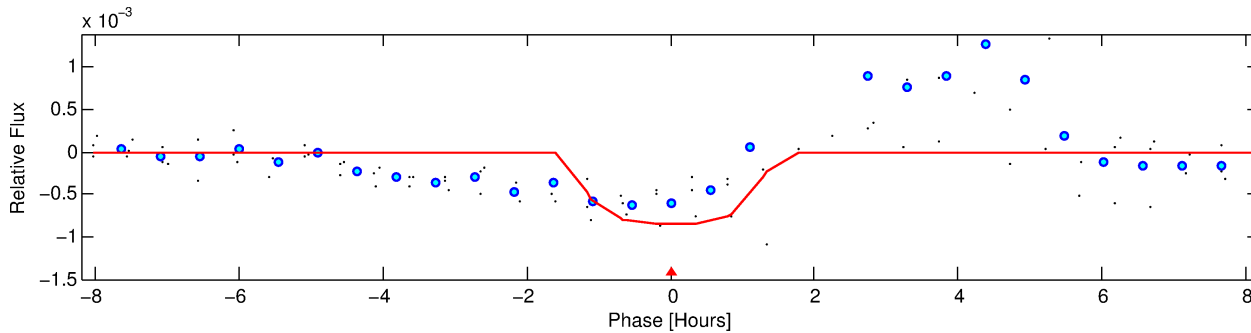
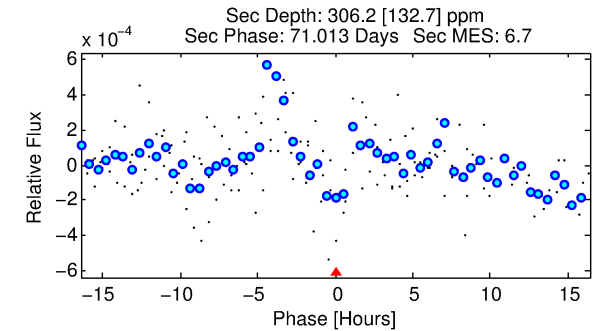
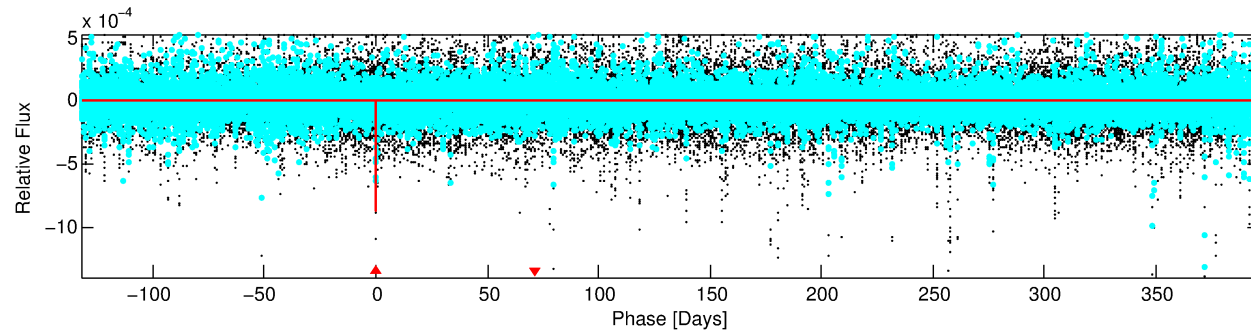
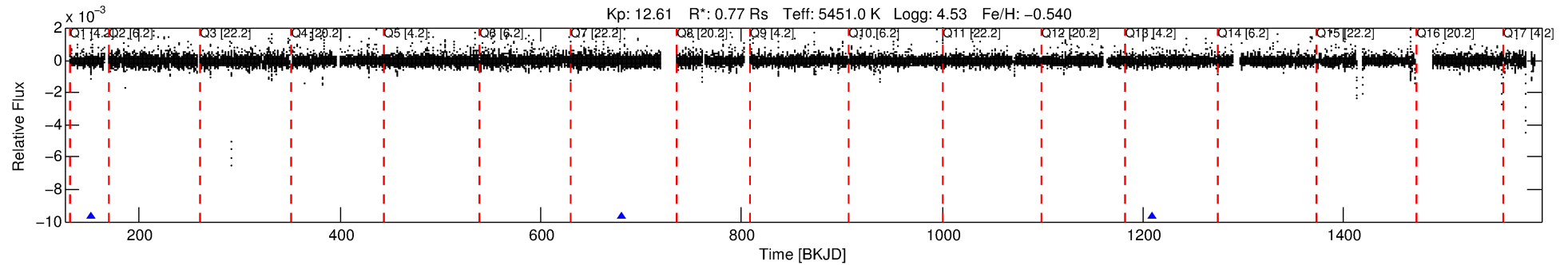
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 003328203-01

No Significant Match Found

DV One-Page Summary

KIC: 3328203 Candidate: 1 of 1 Period: 528.842 d



DV Fit Results:

Period = 528.84180 [0.00458] d
Epoch = 152.0550 [0.0060] BKJD
Rp/R* = 0.0288 [0.1071]
a/R* = 1088.78 [17550.96]
b = 0.72 [11.04]
Seff = 0.35 [0.07]
Teq = 196 [10] K
Rp = 2.41 [8.96] Re
a = 1.1483 [0.1374] AU
Ag = 38231.77 [284501.38] [0.13σ]
Teffp = 4246 [7898] K [0.51σ]

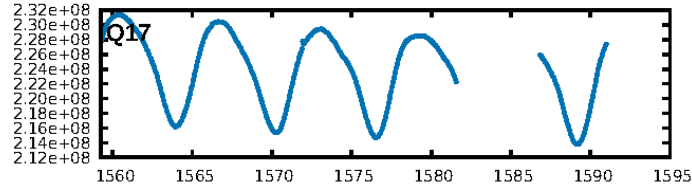
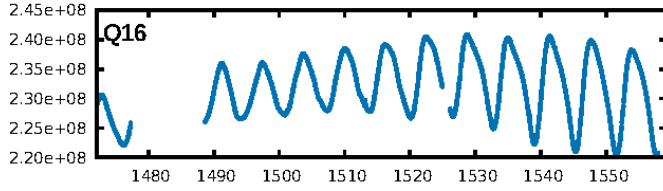
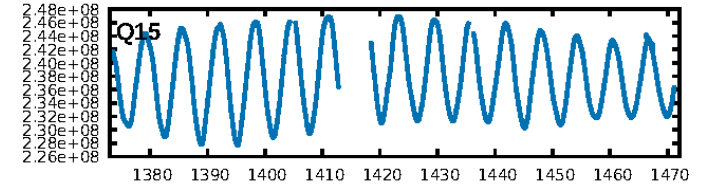
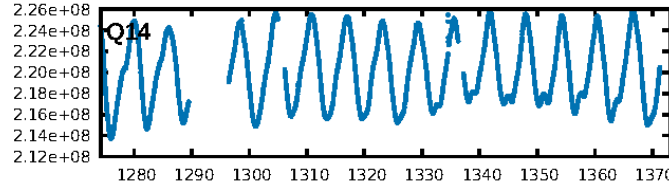
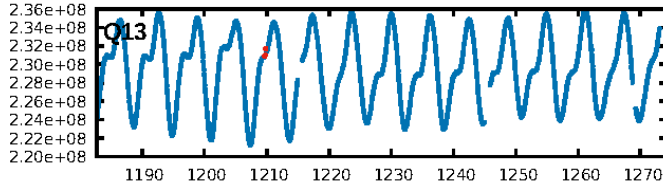
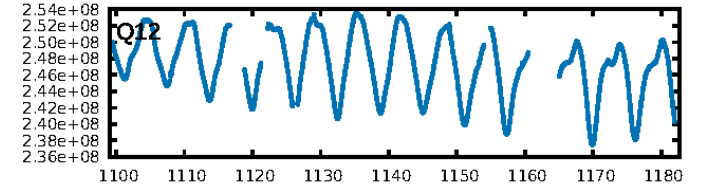
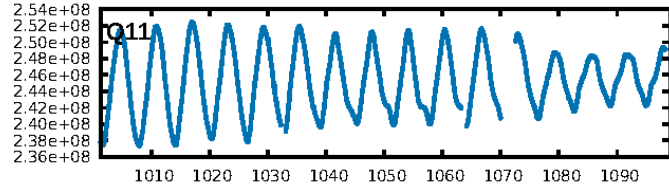
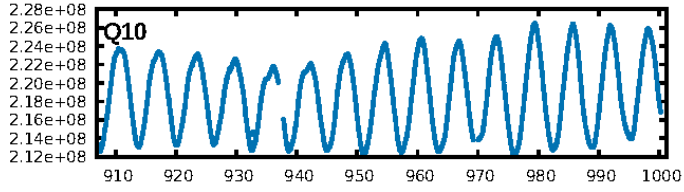
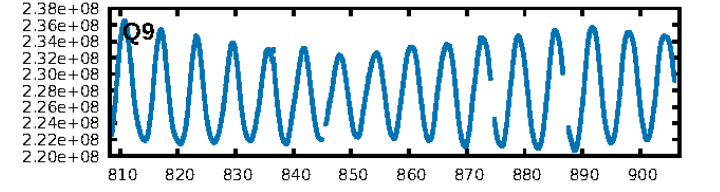
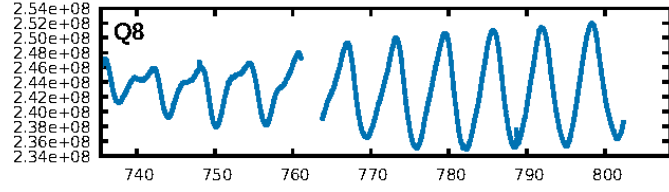
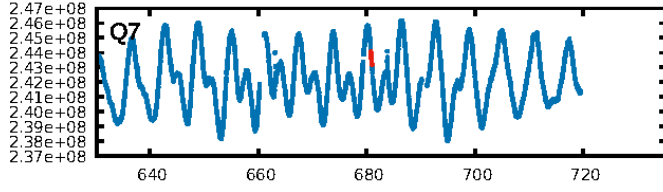
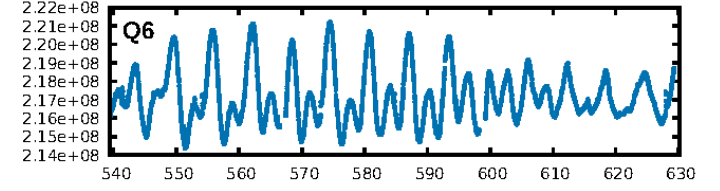
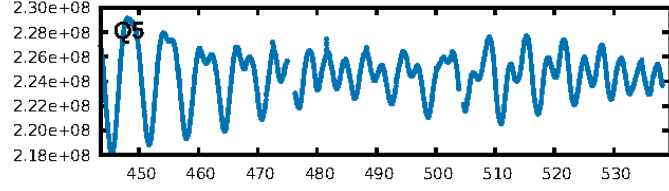
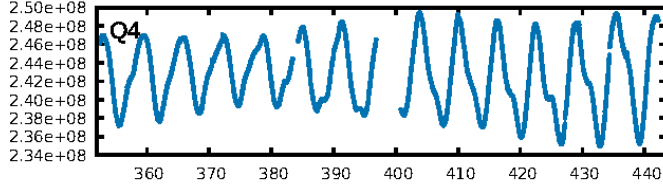
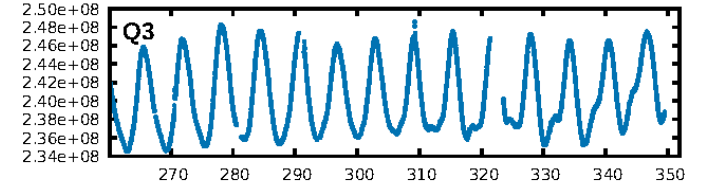
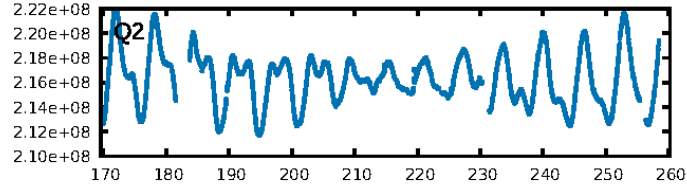
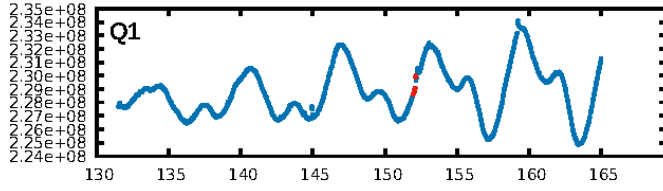
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: 0.0%
ModelChiSquareGof-sig: 11.2%
Bootstrap-pfa: 1.58e-13
RollingBand-fgt: 1.00 [2/2]
GhostDiagnostic-chr: -0.1531
Centroid-sig: 53.2%
Centroid-so: 0.279 arcsec [0.43σ]
OotOffset-rm: 0.990 arcsec [2.36σ]
OotOffset-st: 0.1/0/2 [3]
KicOffset-rm: 0.492 arcsec [0.84σ]
KicOffset-st: 0.1/0/2 [3]
DiffImageQuality-fgm: 1.00 [3/3]
DiffImageOverlap-fno: 1.00 [3/3]

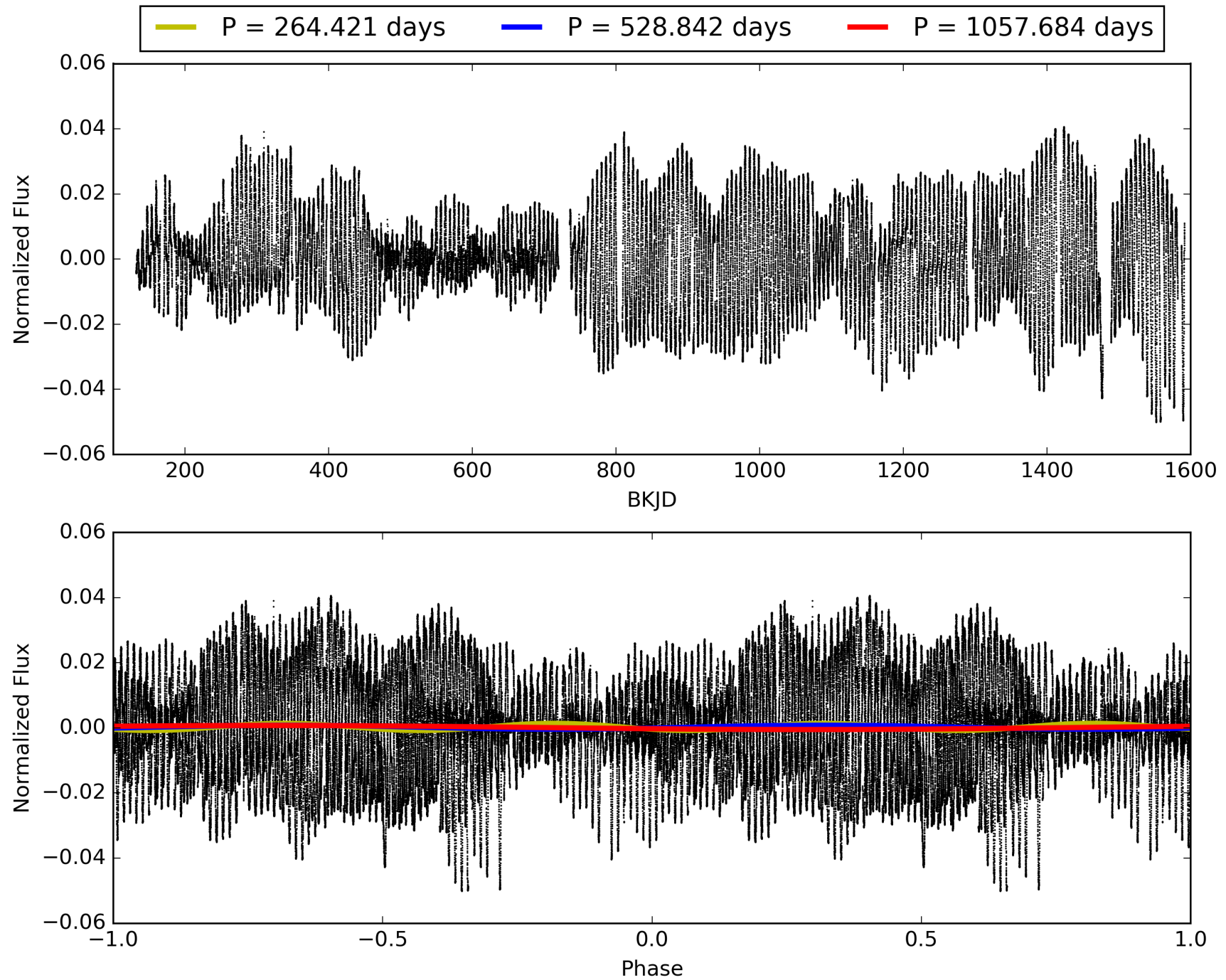
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 31-Jan-2016 22:02:17 Z

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

TCE 003328203-01, PDC Light Curves

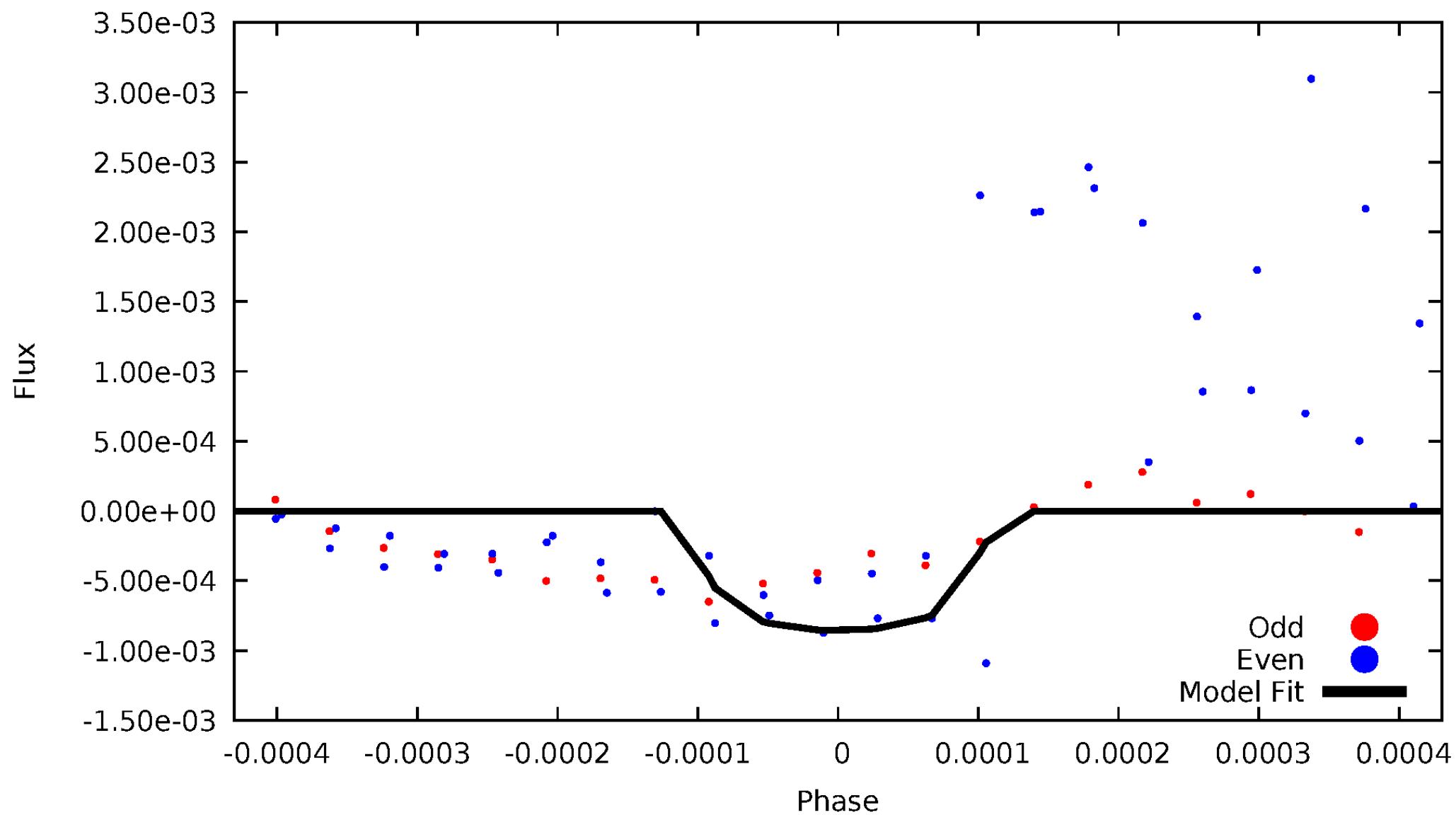


TCE 003328203-01



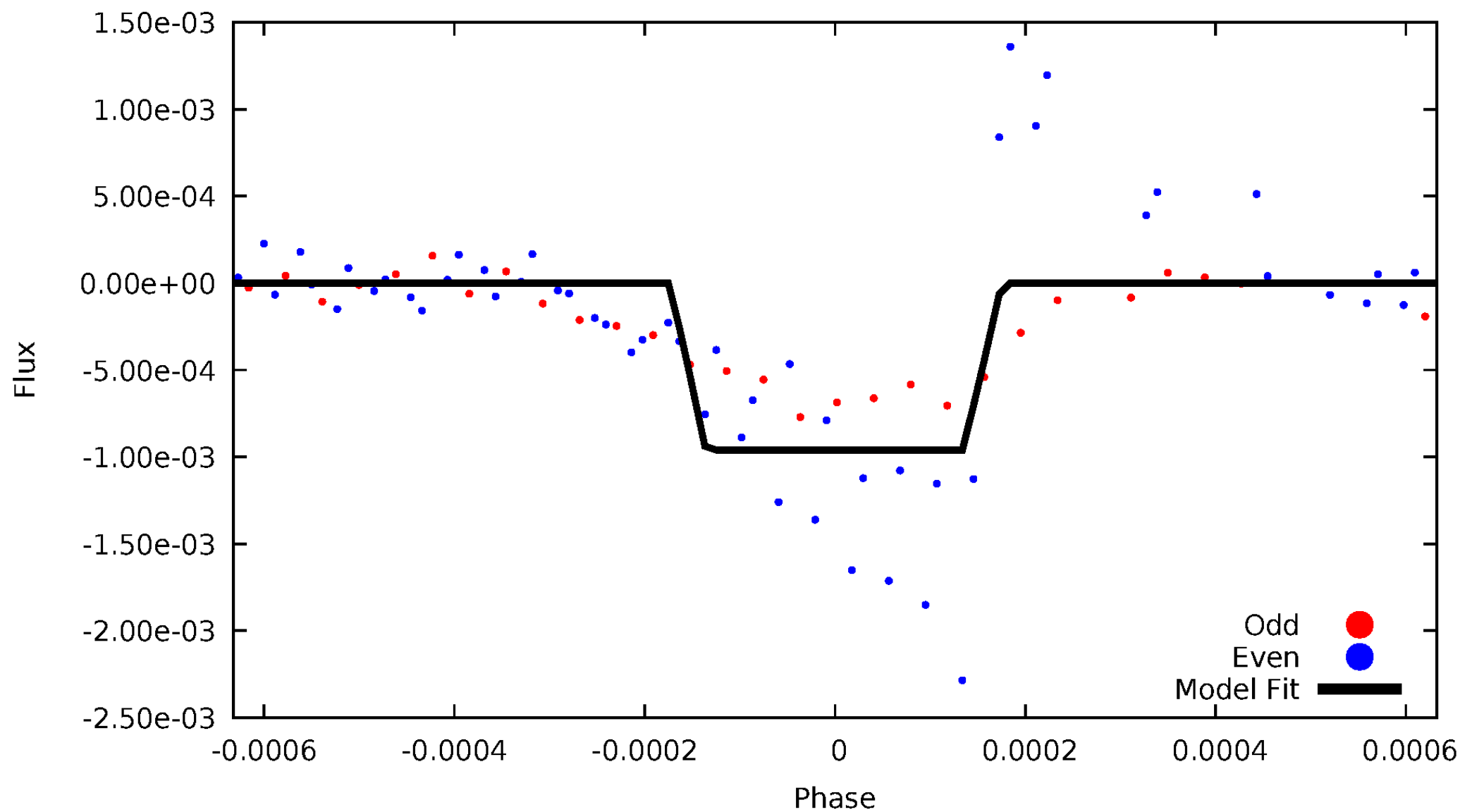
DV Odd/Even

TCE 003328203-01



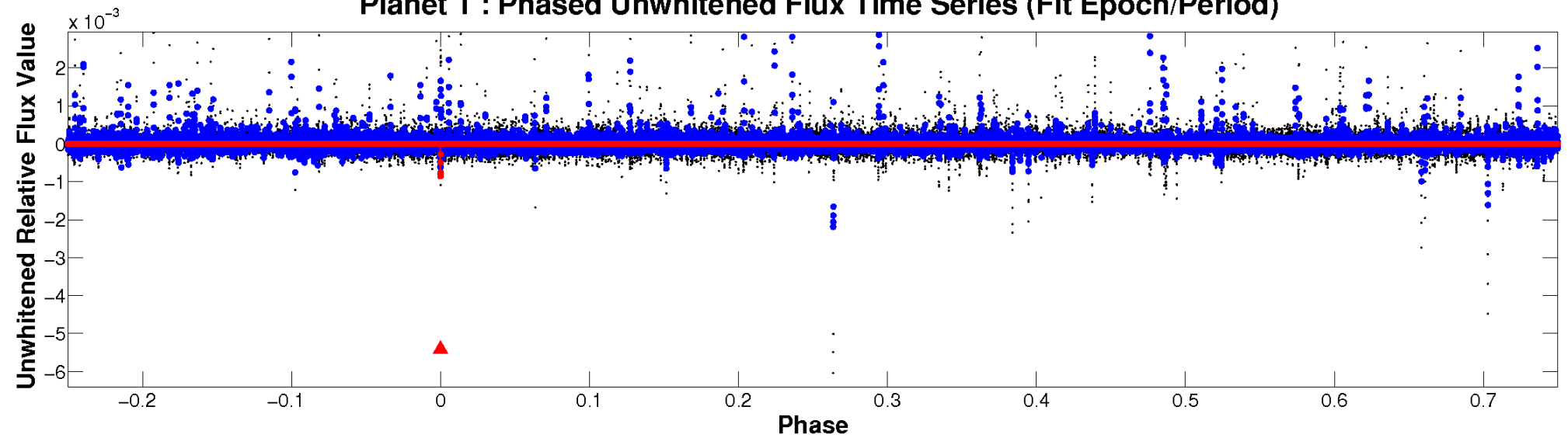
ALT Odd/Even

TCE 003328203-01

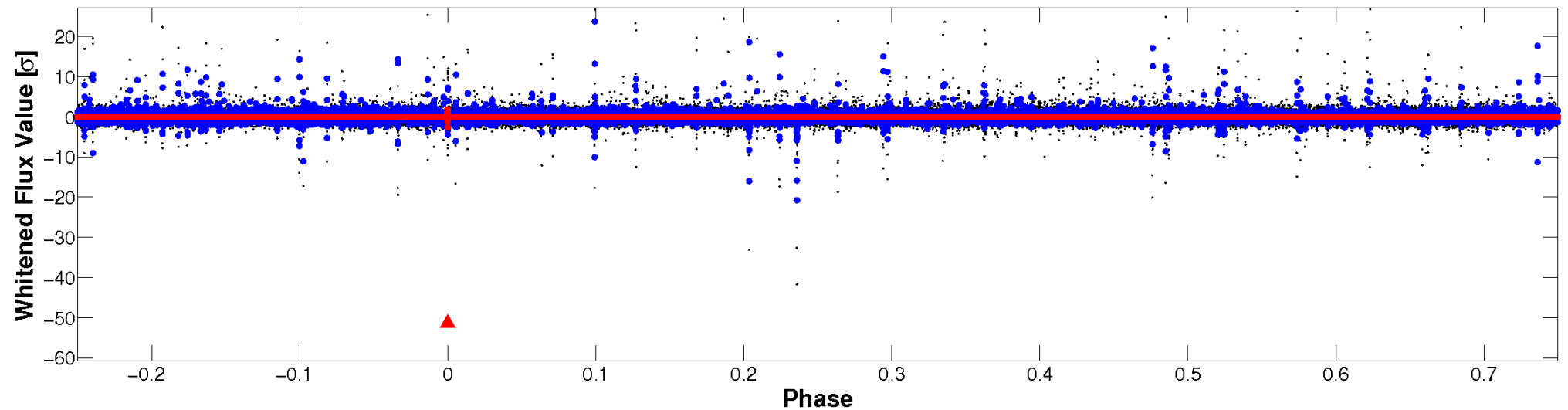


Non-Whitened Vs. Whitened Light Curve

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

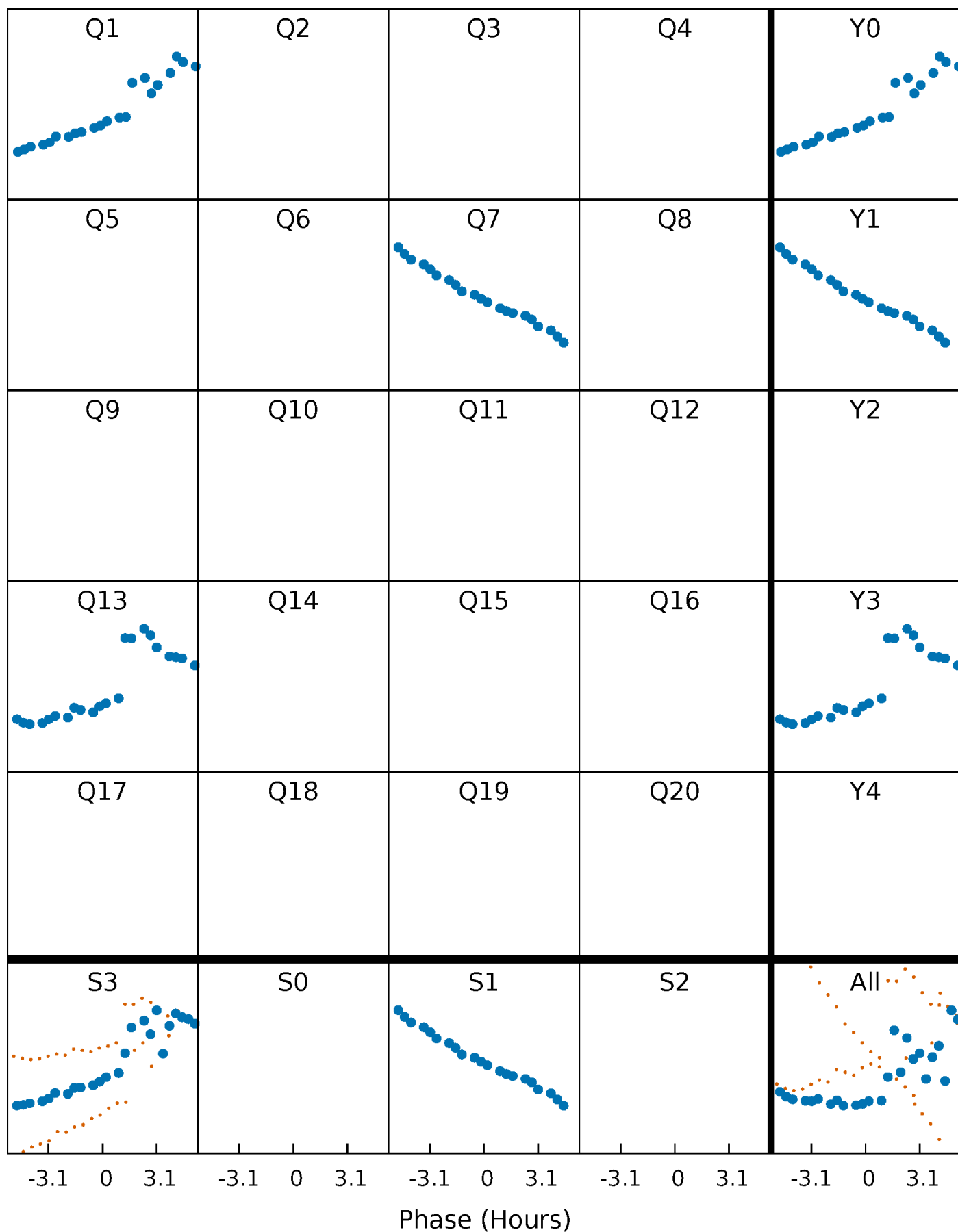


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



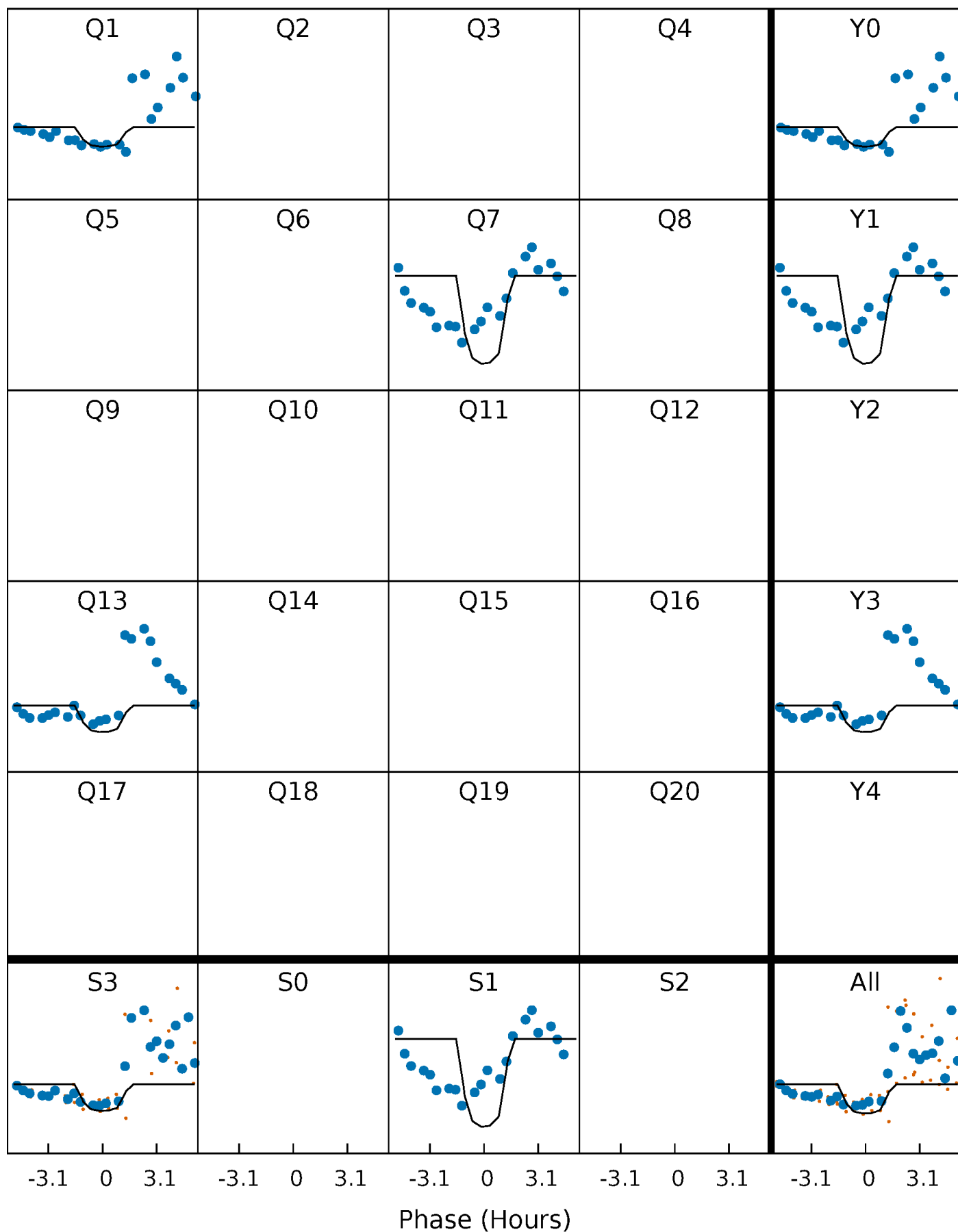
PDC Quarter-Phased Transit Curves

TCE 003328203-01 P=528.841795 Days $T_0=152.054984$ (BKJD)



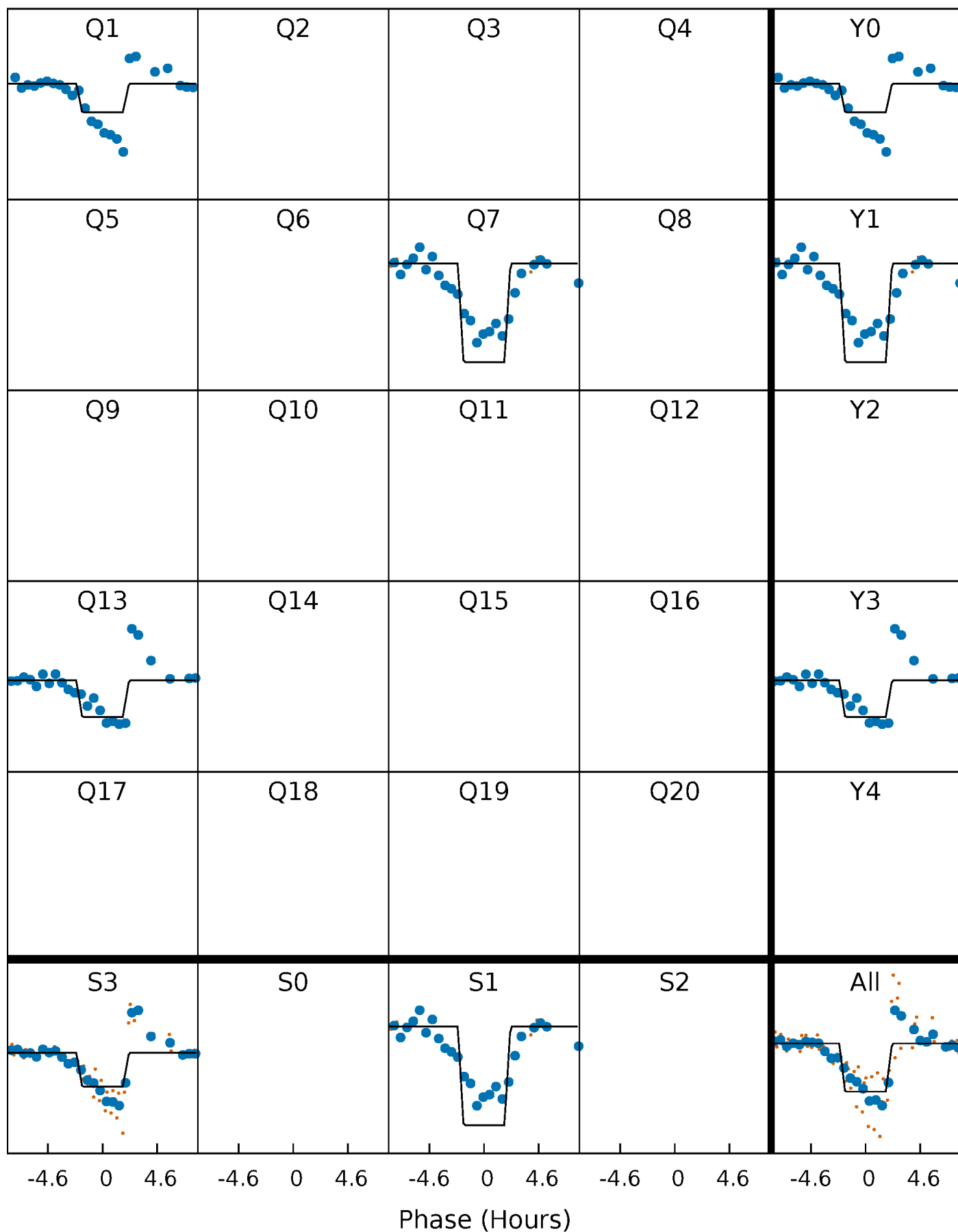
DV Quarter-Phased Transit Curves

TCE 003328203-01 P=528.841795 Days $T_0=152.054984$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

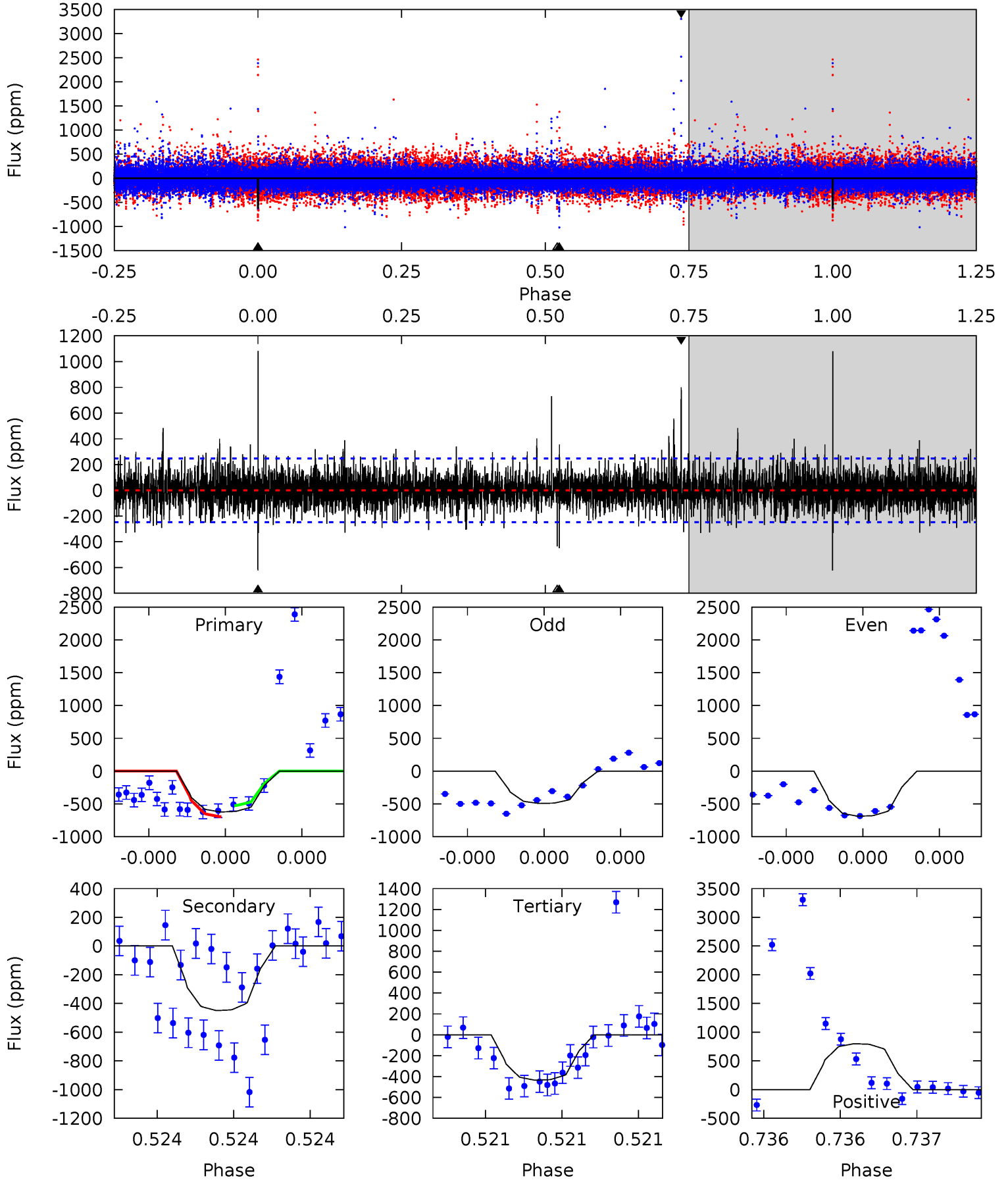
TCE 003328203-01 P=528.827344 Days $T_0=152.040069$ (BKJD)



DV Model-Shift Uniqueness Test

003328203-01, P = 528.841795 Days, E = 152.054984 Days

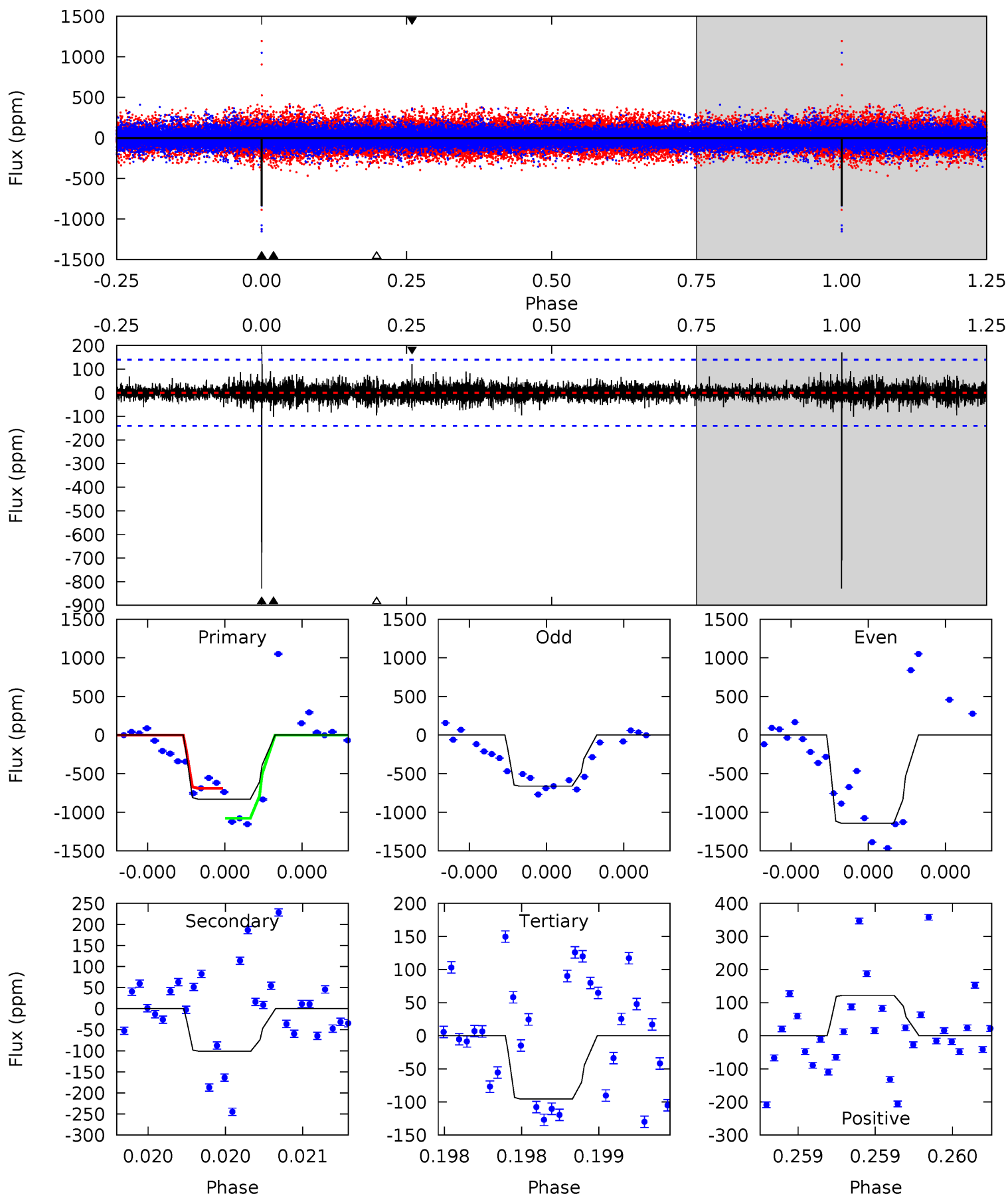
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
14.4	10.4	10.1	18.5	5.73	3.72	1.91	4.34	-4.07	0.34	-8.07	1.57	1.15	0.63	1.95



Alt Model-Shift Uniqueness Test

003328203-01, P = 528.827344 Days, E = 152.040069 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
33.4	4.06	3.84	4.90	5.65	3.59	0.72	29.6	28.5	0.22	-0.83	11.5	1.15	0.17	7.74



Stellar Parameters For KIC 003328203

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	5451^{+162}_{-146}	$4.528^{+0.095}_{-0.085}$	$-0.540^{+0.300}_{-0.300}$	$0.766^{+0.109}_{-0.090}$	$0.722^{+0.097}_{-0.045}$	$2.264^{+0.854}_{-0.619}$
	+3%/-3%	+2%/-2%	+56%/-56%	+14%/-12%	+13%/-6%	+38%/-27%
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 003328203-01 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	-450 ± 43	$7.22^{+7.12}_{-5.12}$	274^{+12}_{-11}	3268^{+1789}_{-576}	6311^{+70724}_{-4733}
Alt.	-101 ± 25	$7.16^{+7.33}_{-4.97}$	274^{+13}_{-11}	2651^{+1095}_{-413}	1363^{+12737}_{-1033}

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 $A_{obs} \gg 1.0$

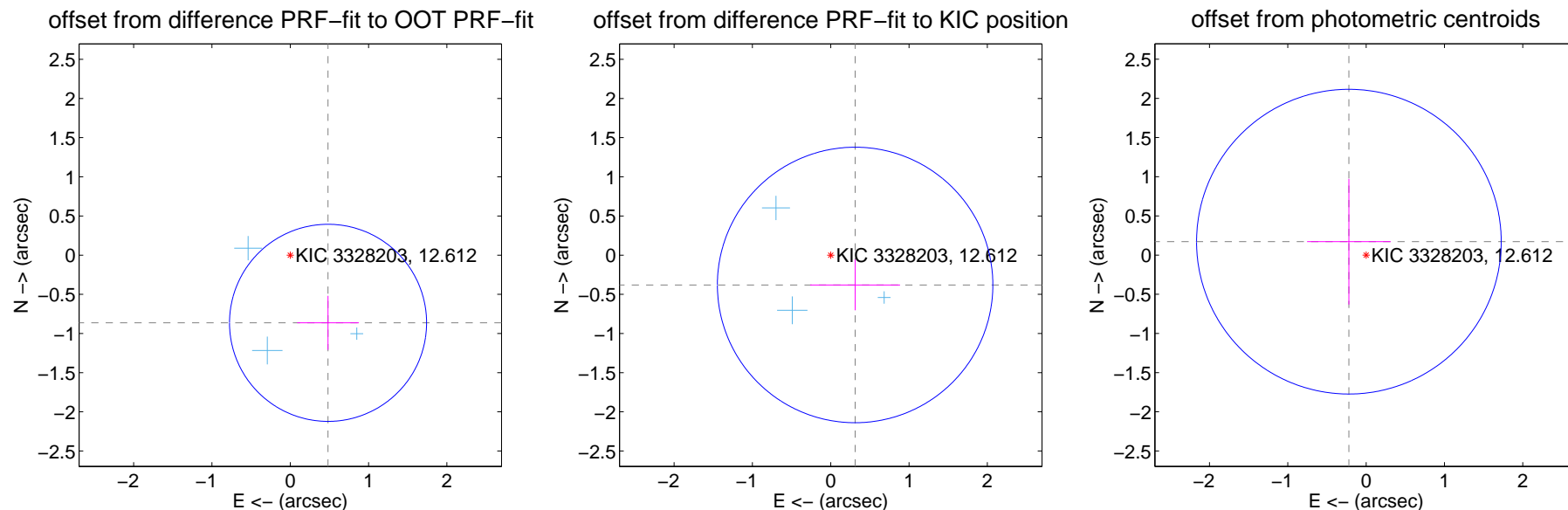
DV Centroid Data

Supplemental centroid analysis for 003328203-01. Kepler magnitude: 12.61. Transit SNR 9.78

There are 3 quarters with good PRF difference image offsets

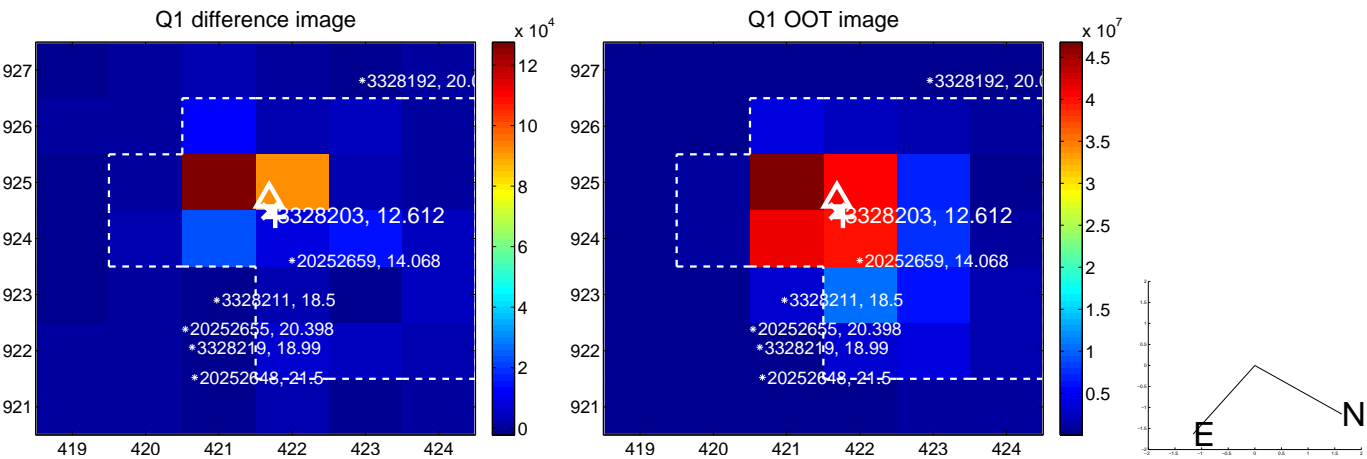
The direct PRF centroid is offset from the target star catalog position by about 0.54 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.990 ± 0.419	2.36	-0.482 ± 0.394	-0.864 ± 0.345
PRF-fit source offset from KIC position	0.492 ± 0.586	0.84	-0.312 ± 0.574	-0.380 ± 0.323
photometric centroid source offset	0.28 ± 0.65	0.43	0.22 ± 0.53	0.17 ± 0.80

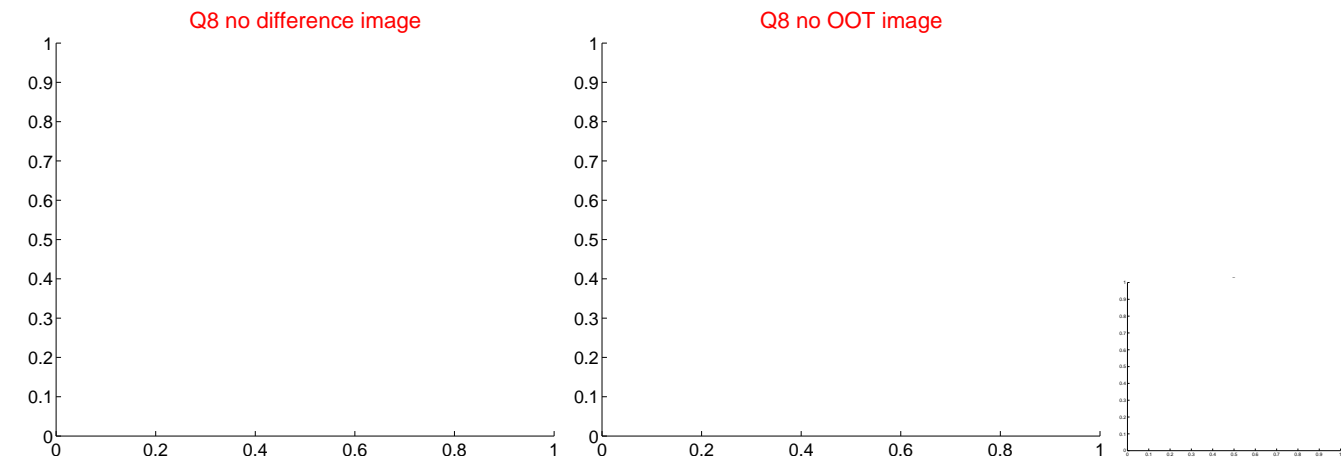
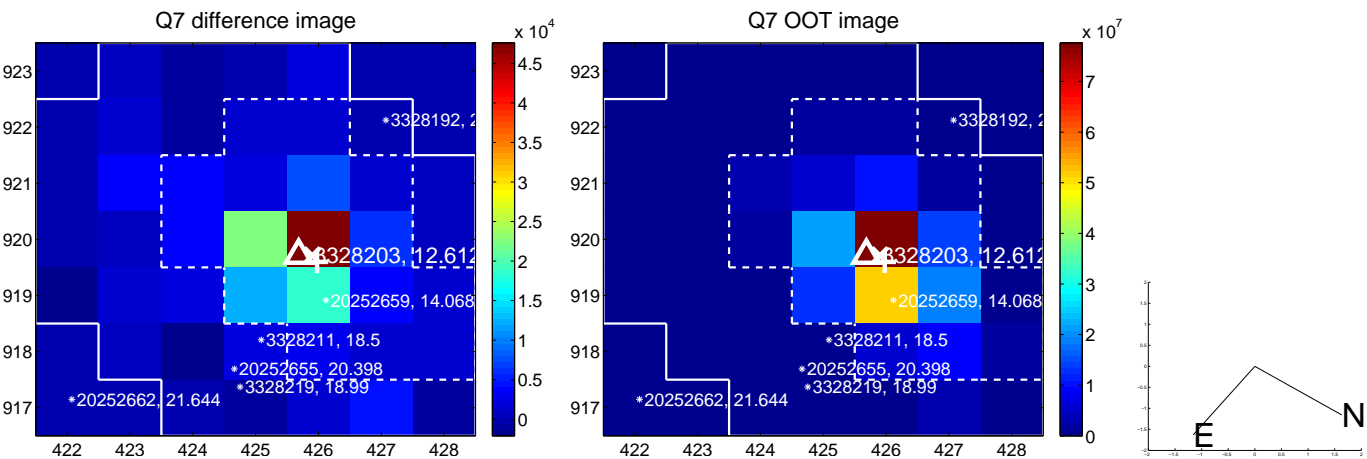


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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



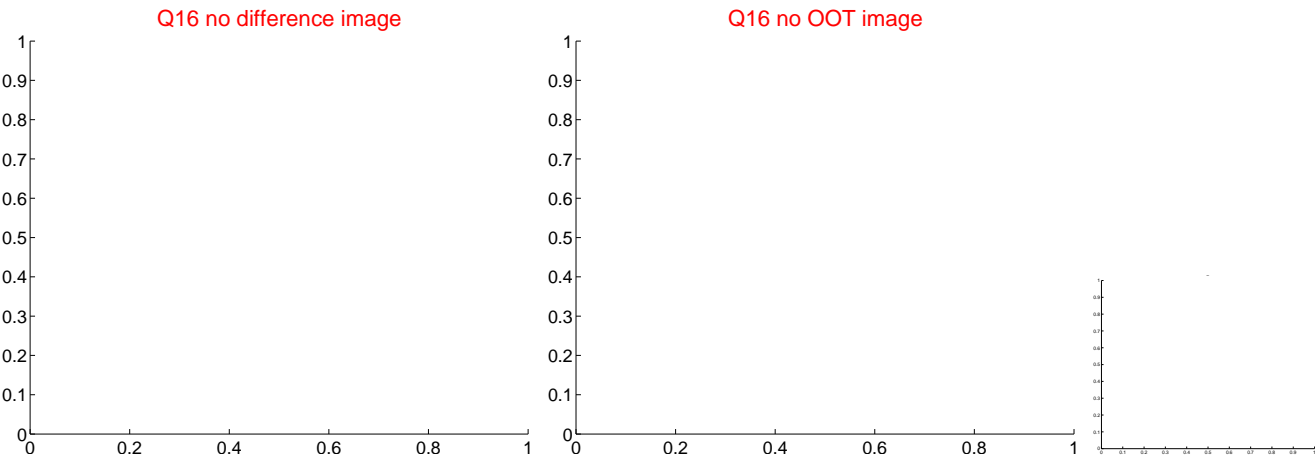
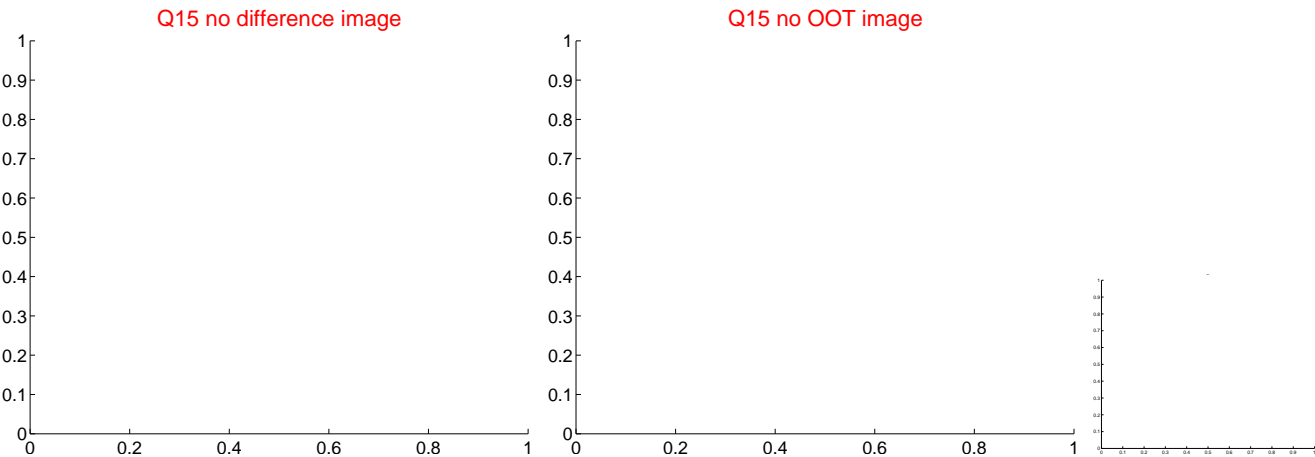
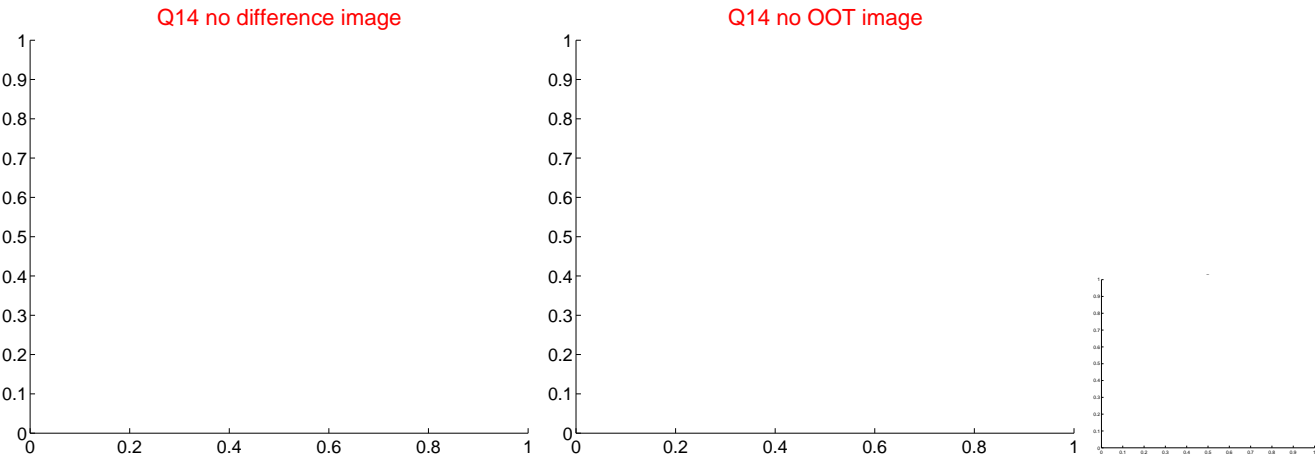
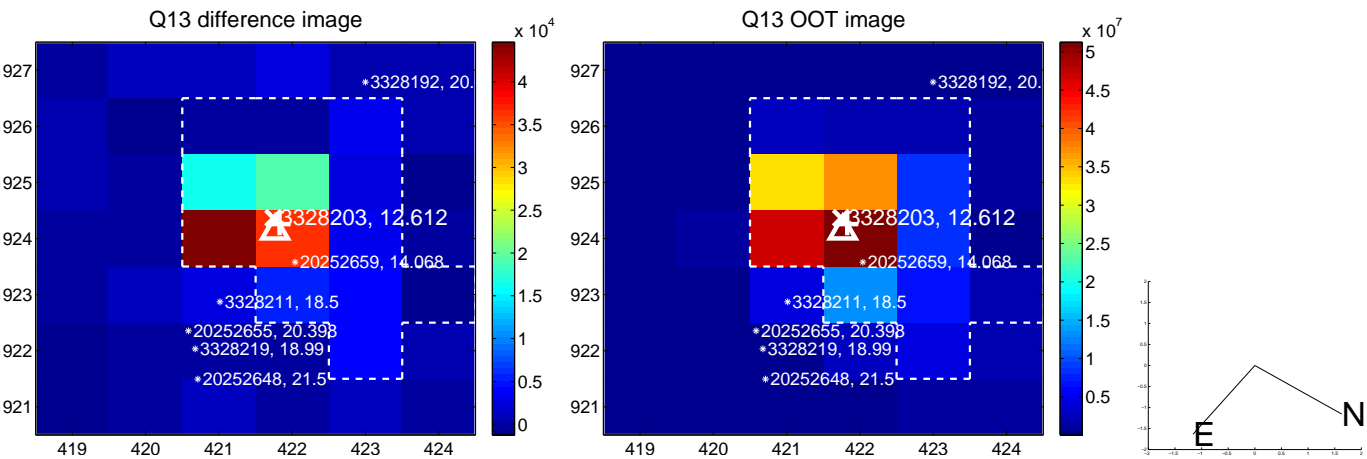
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



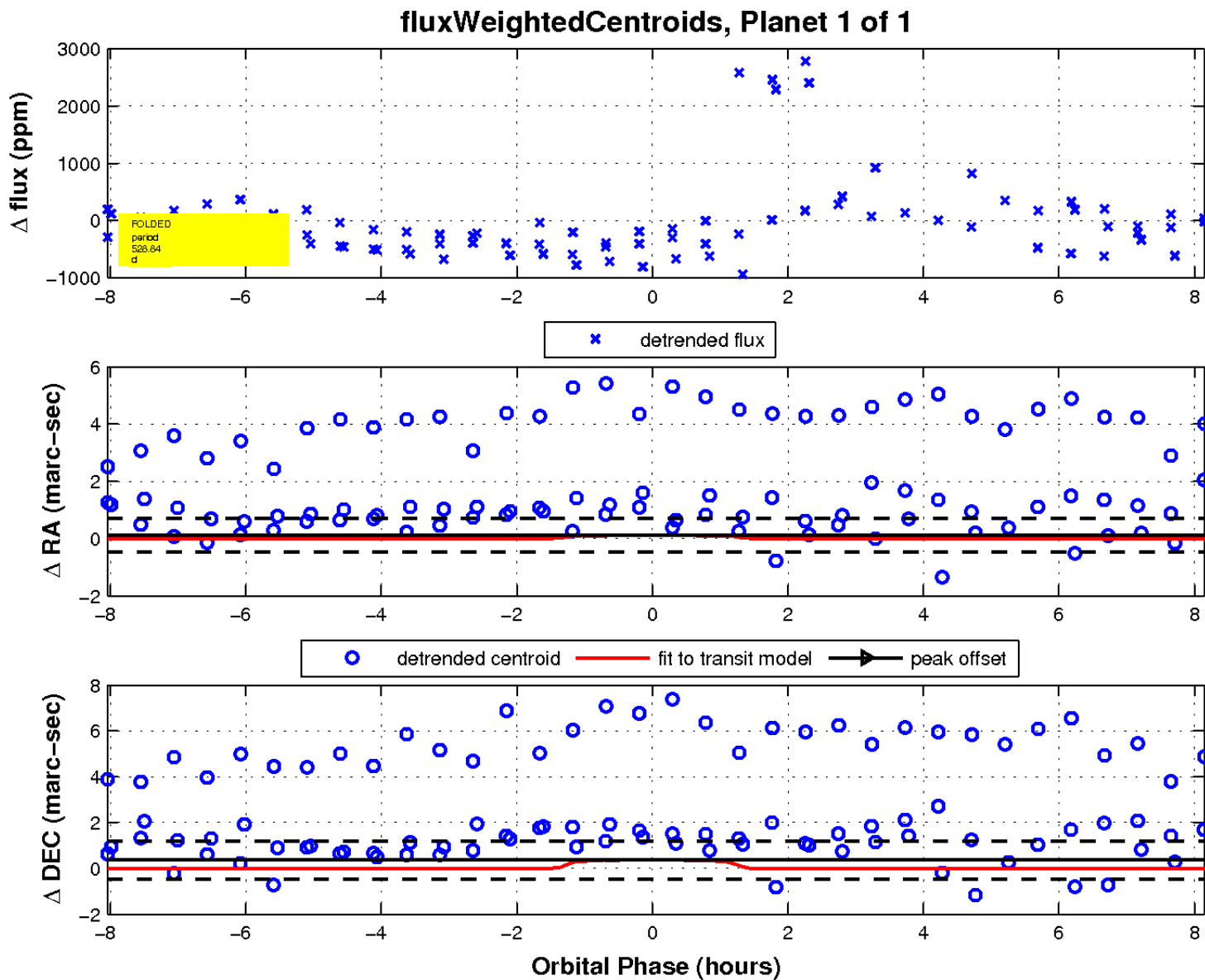
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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



UKIRT Image

