

KIC 008483132

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})
008483132-01	OBS	No	252.261131	324.311660	466.0	8.589	7.2	7.3	0.82	4972	1.94	0.71

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
008483132-01	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_MARSHALL_SKYE—ALL_TRANS_CHASES—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.

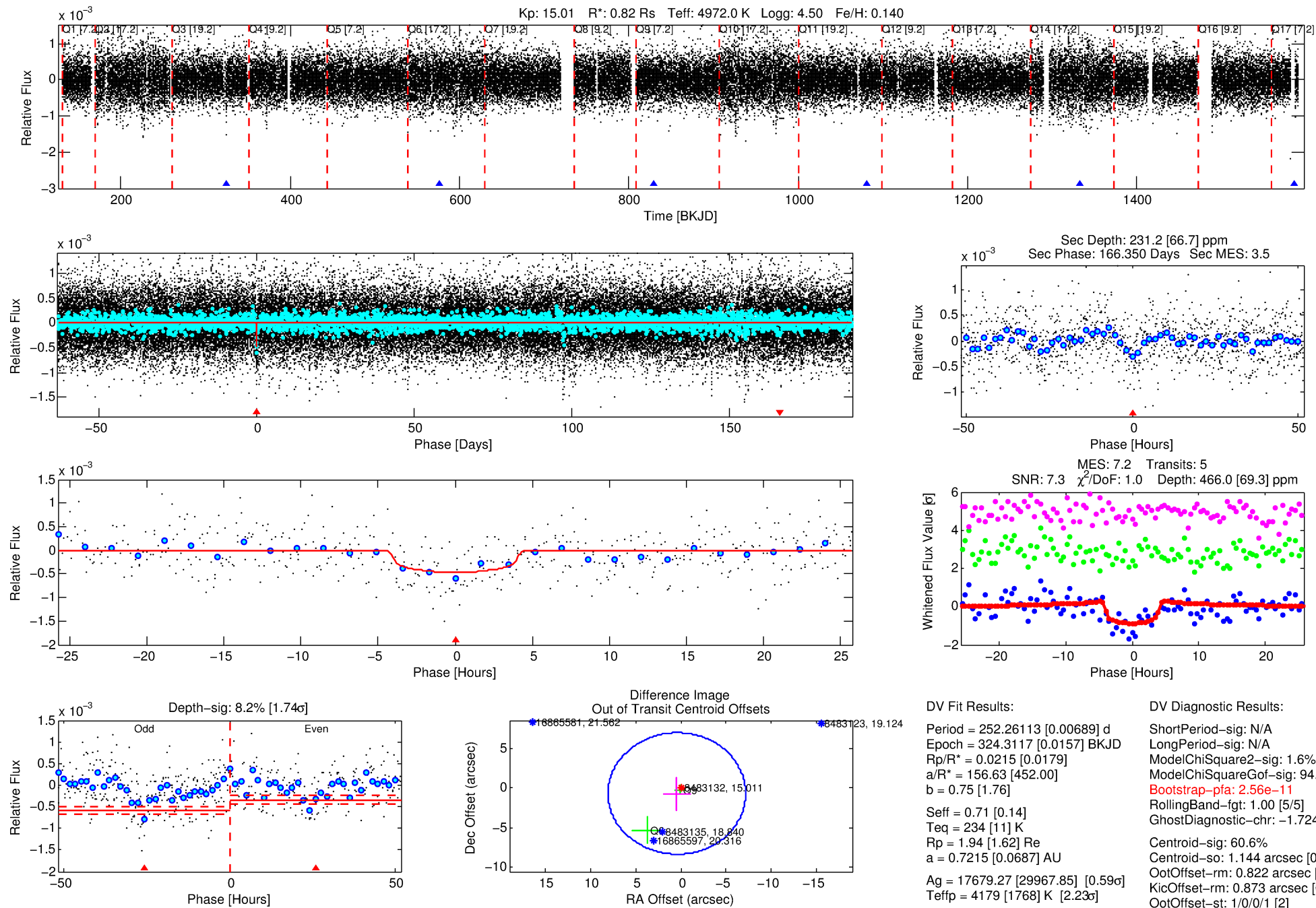
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 008483132-01

No Significant Match Found

DV One-Page Summary

KIC: 8483132 Candidate: 1 of 1 Period: 252.261 d



DV Fit Results:

Period = 252.26113 [0.00689] d
Epoch = 324.3117 [0.0157] BKJD
Rp/R* = 0.0215 [0.0179]
a/R* = 156.63 [452.00]
b = 0.75 [1.76]
Seff = 0.71 [0.14]
Teq = 234 [11] K
Rp = 1.94 [1.62] Re
a = 0.7215 [0.0687] AU
Ag = 17679.27 [29967.85] [0.59 σ]
Teff = 4179 [1768] K [2.23 σ]

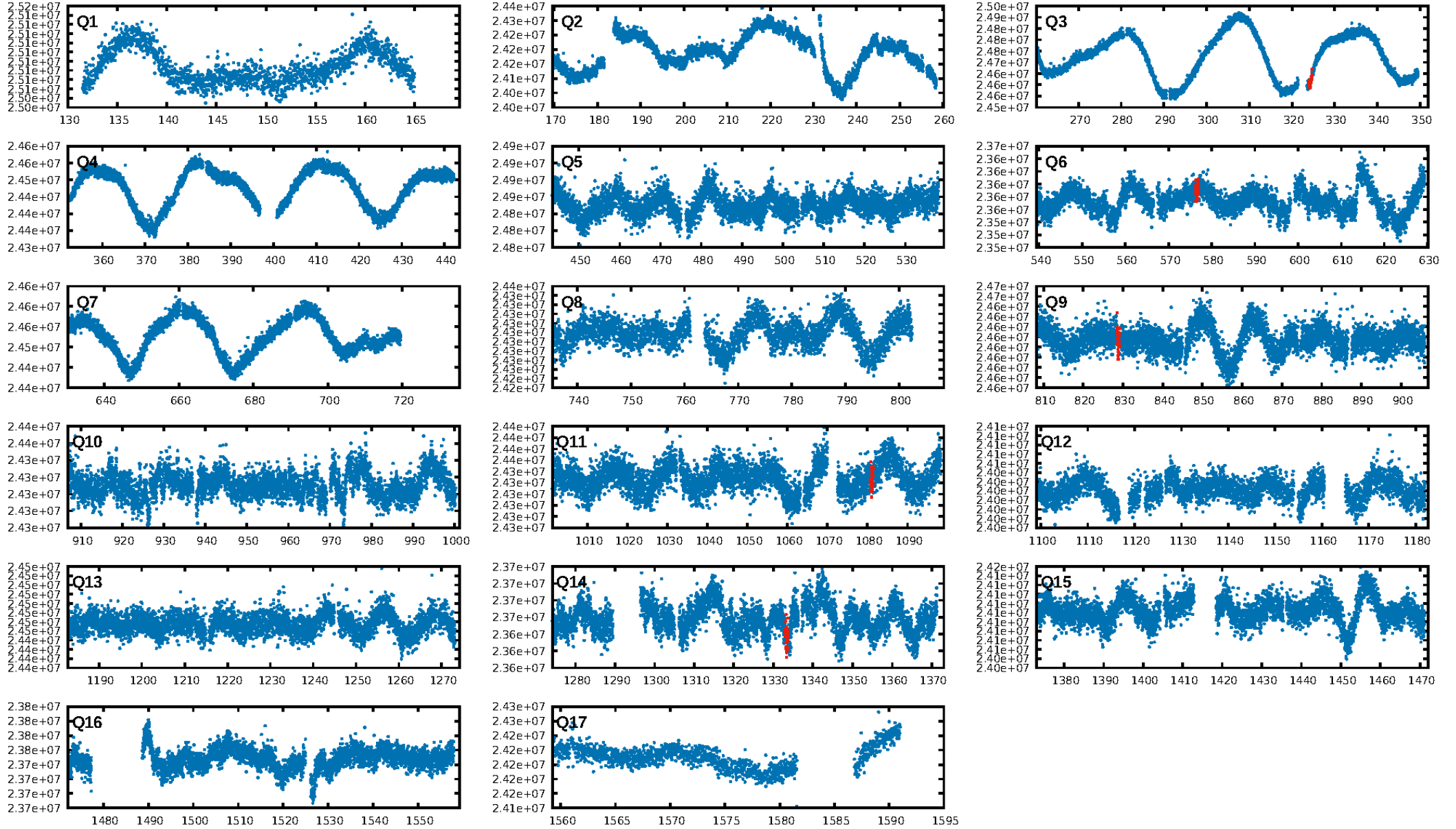
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: 1.6%
ModelChiSquareGof-sig: 94.8%
Bootstrap-pfa: 2.56e-11
RollingBand-fgt: 1.00 [5/5]
GhostDiagnostic-chr: -1.724
Centroid-sig: 60.6%
Centroid-so: 1.144 arcsec [0.67 σ]
OotOffset-rm: 0.822 arcsec [0.32 σ]
KicOffset-rm: 0.873 arcsec [0.34 σ]
OotOffset-st: 1/0/0/1 [2]
KicOffset-st: 1/0/0/1 [2]
DiffImageQuality-fgm: 0.50 [1/2]
DiffImageOverlap-fno: 1.00 [4/4]

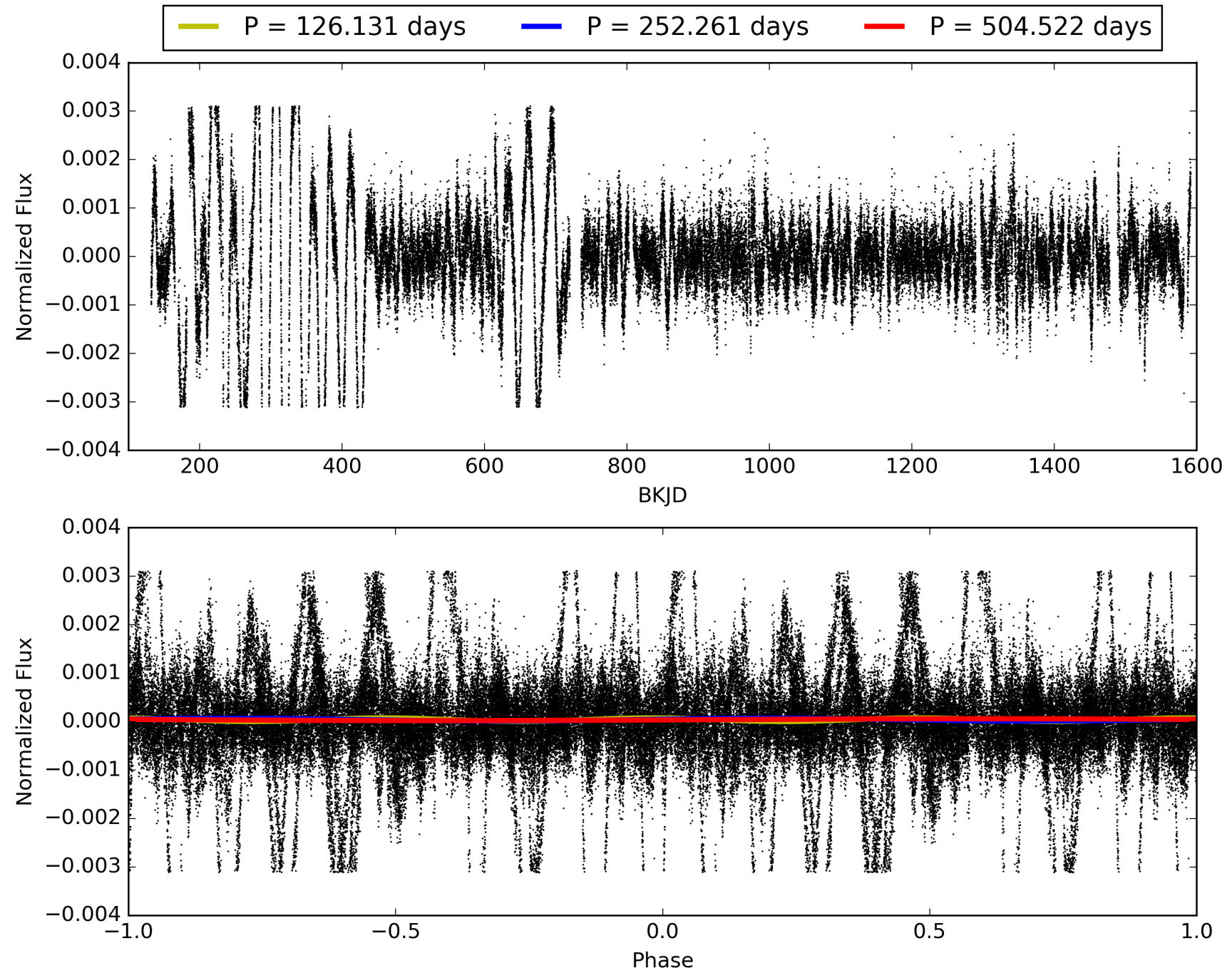
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 28-Jan-2016 20:56:09 Z

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

TCE 008483132-01, PDC Light Curves

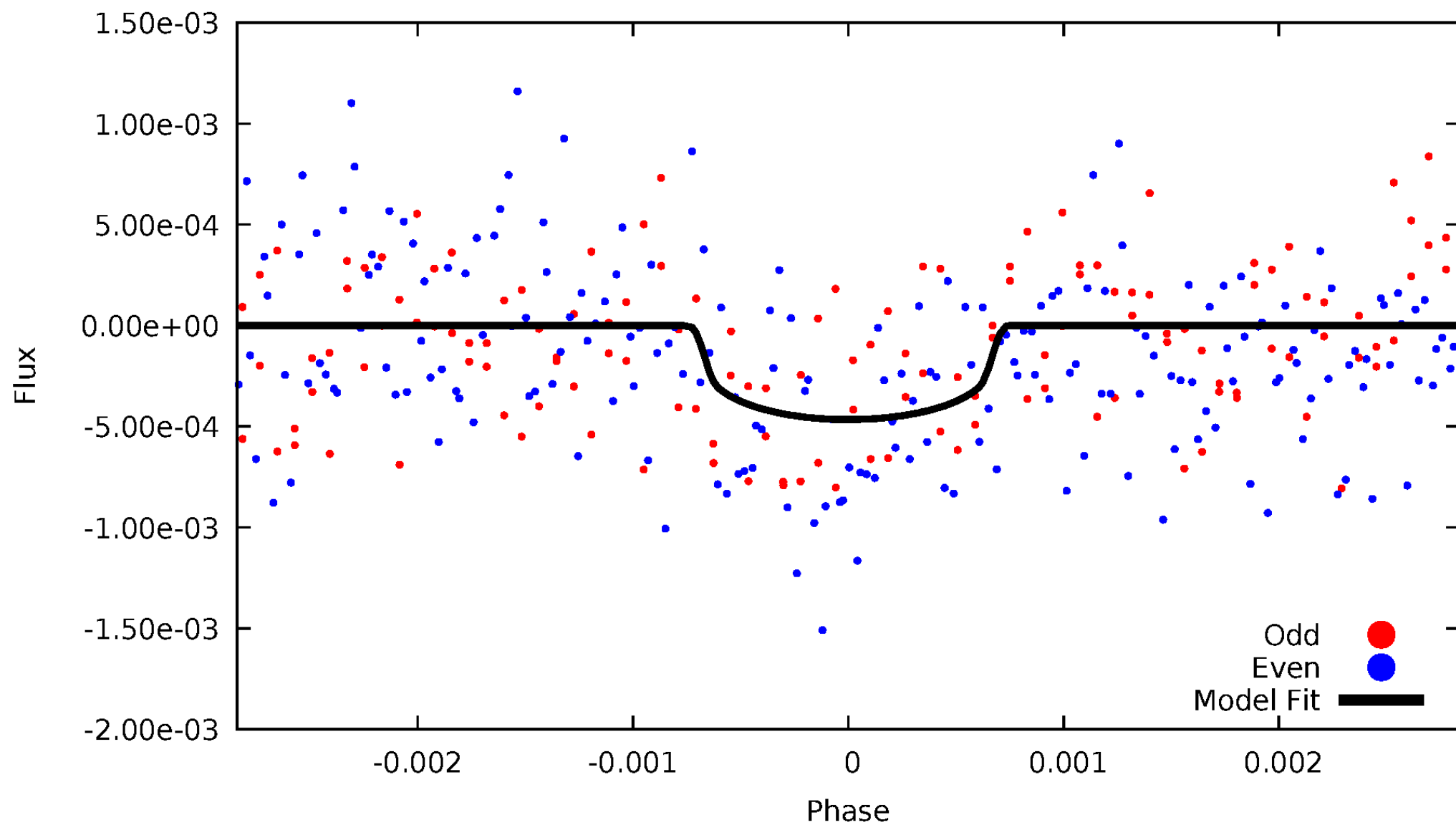


TCE 008483132-01



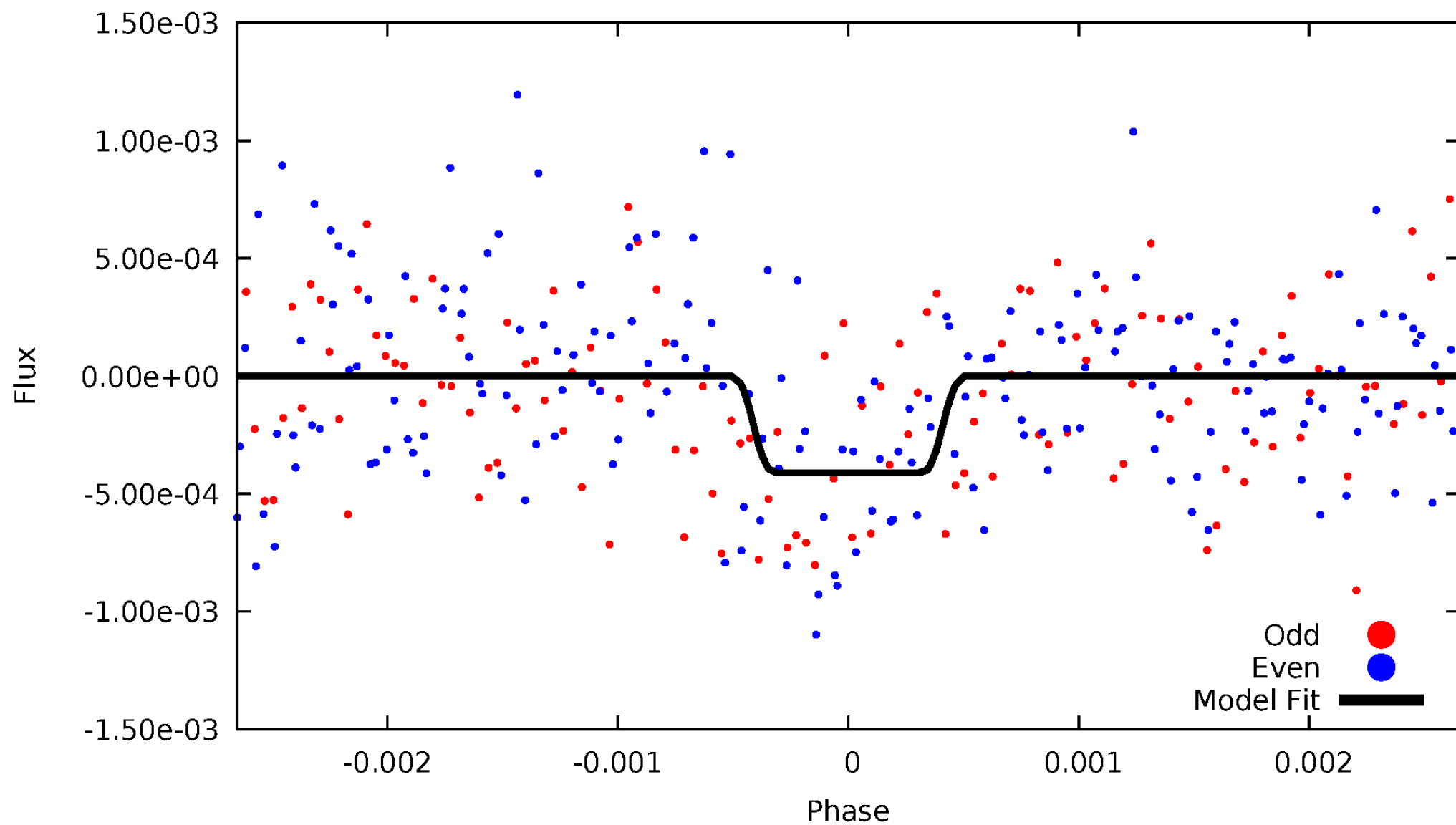
DV Odd/Even

TCE 008483132-01



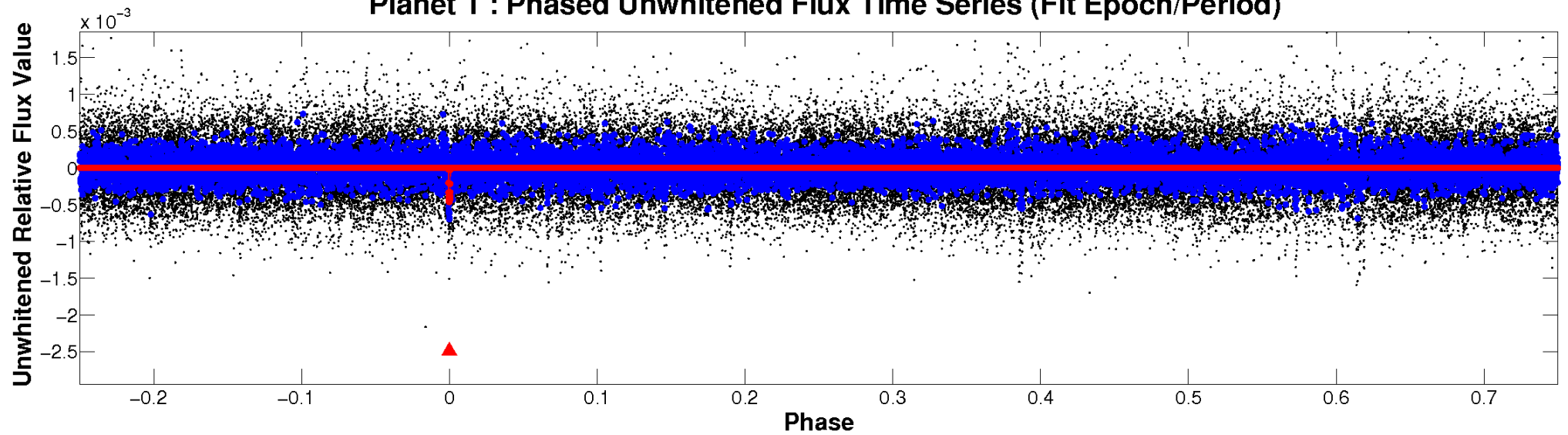
ALT Odd/Even

TCE 008483132-01

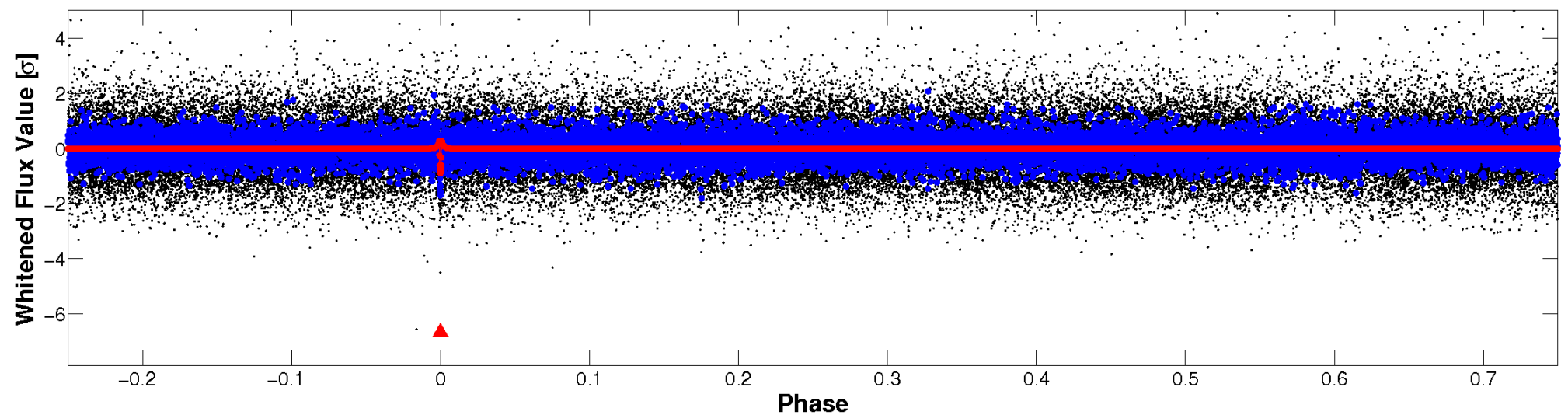


Non-Whitened Vs. Whitened Light Curve

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

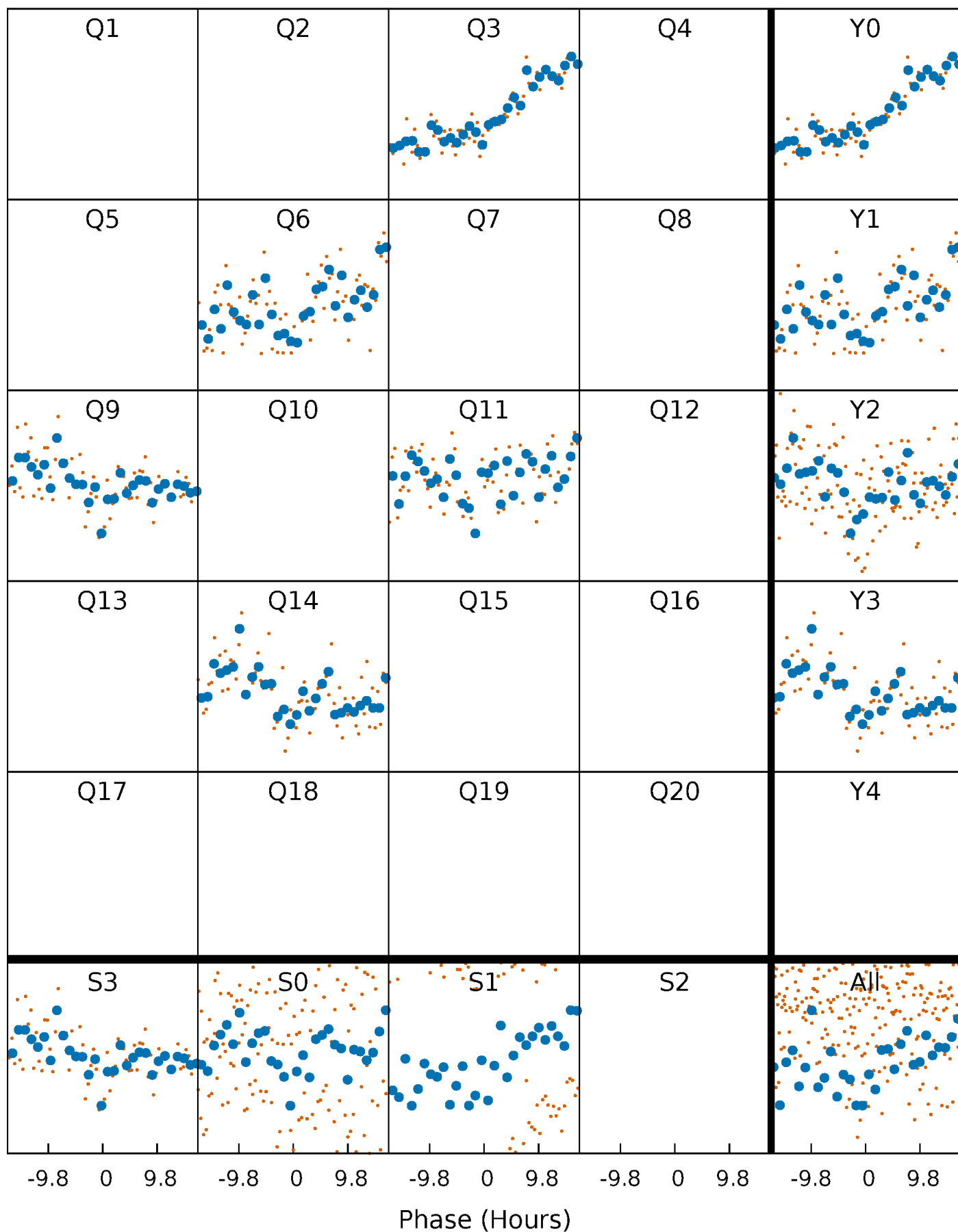


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



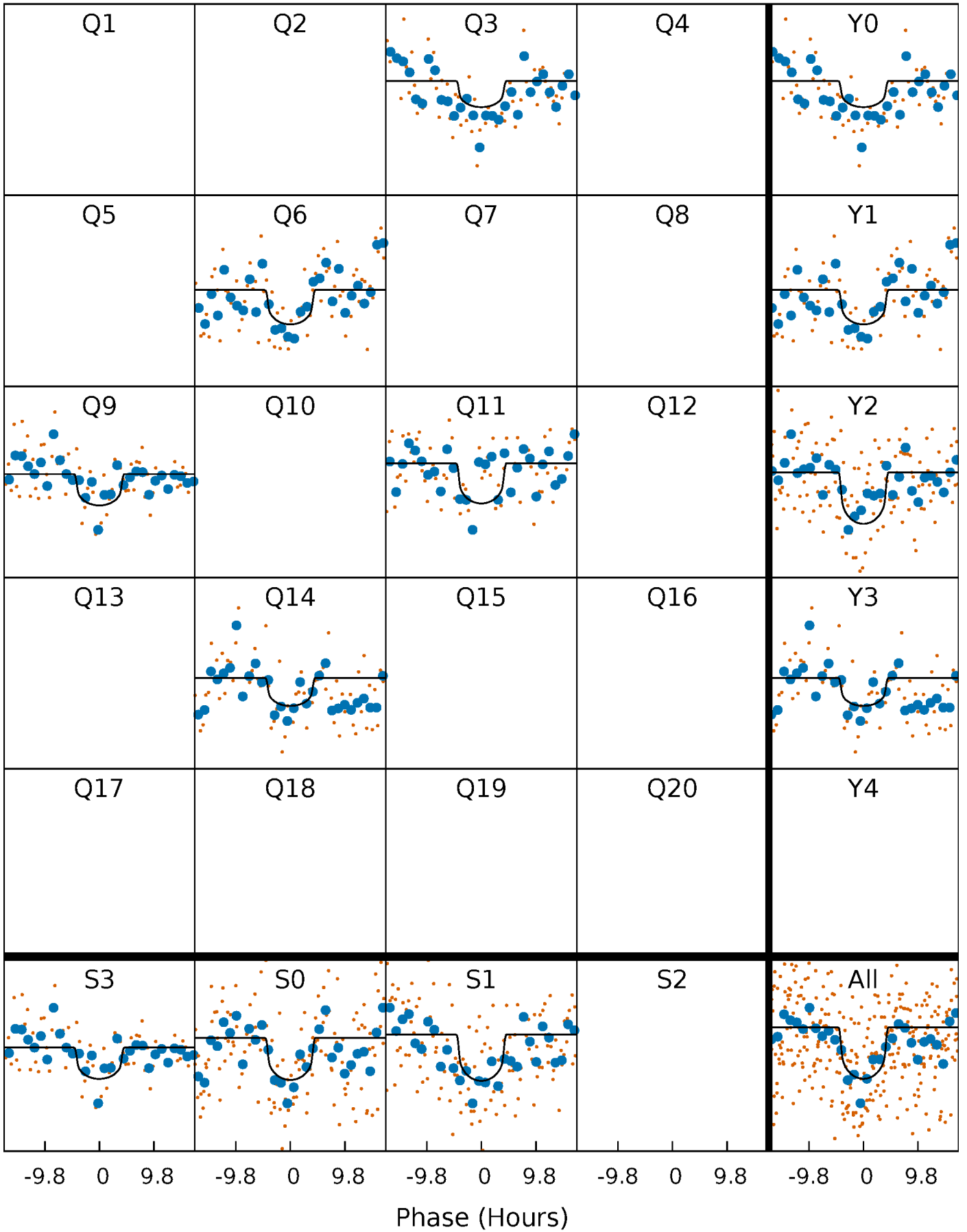
PDC Quarter-Phased Transit Curves

TCE 008483132-01 P=252.261131 Days $T_0=324.311660$ (BKJD)



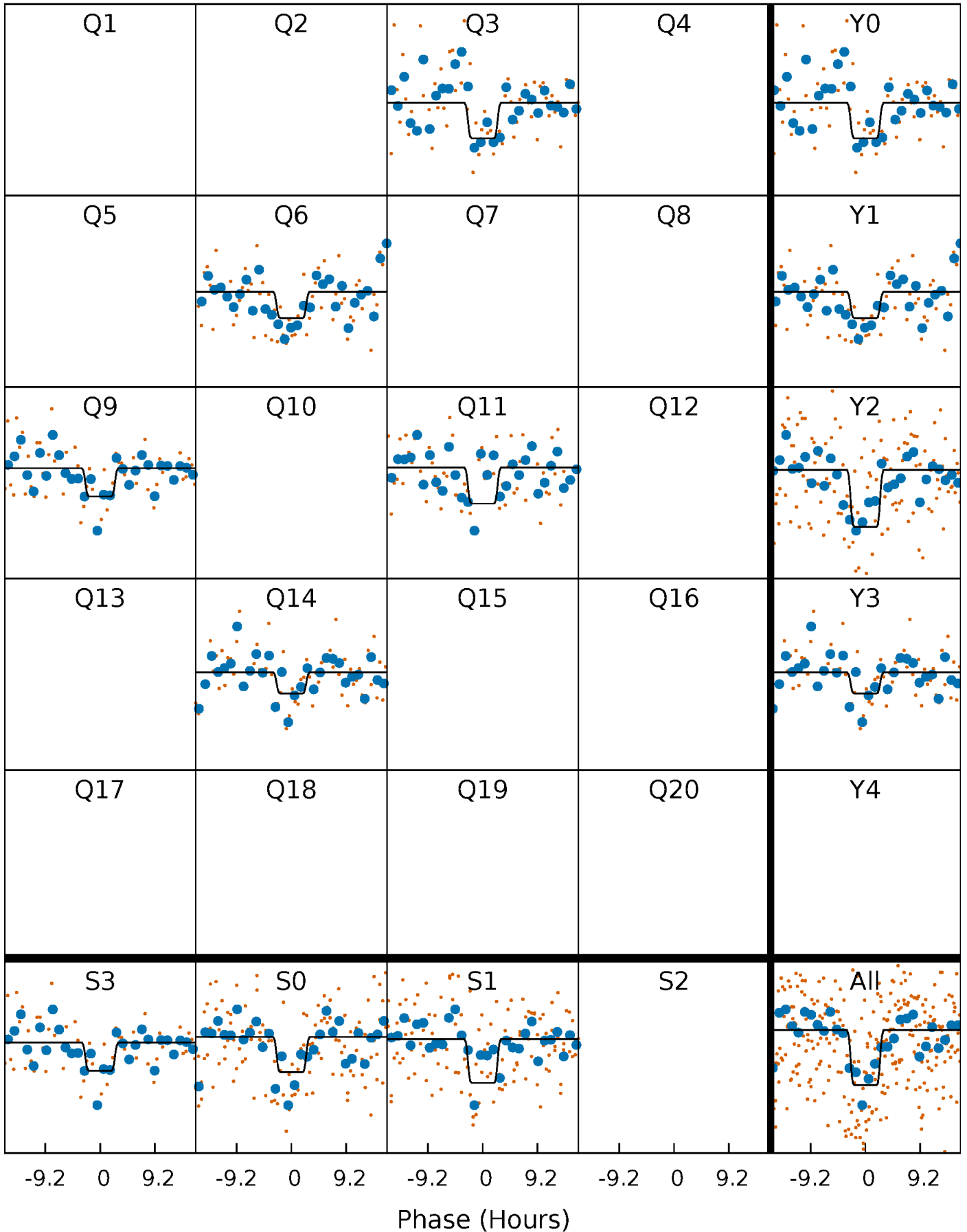
DV Quarter-Phased Transit Curves

TCE 008483132-01 P=252.261131 Days $T_0=324.311660$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

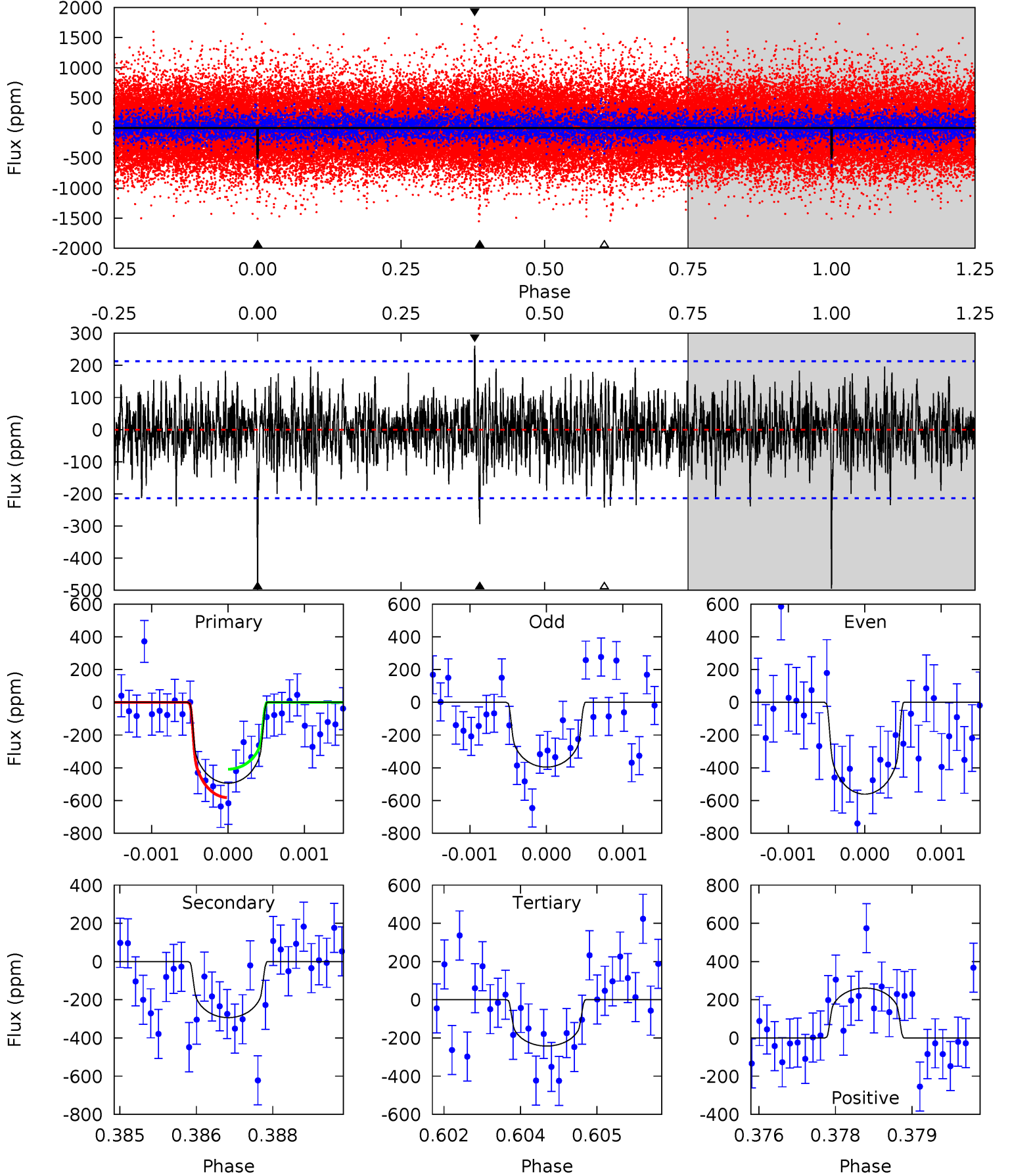
TCE 008483132-01 P=252.245487 Days $T_0=324.349073$ (BKJD)



DV Model-Shift Uniqueness Test

008483132-01, $P = 252.261131$ Days, $E = 72.050529$ Days

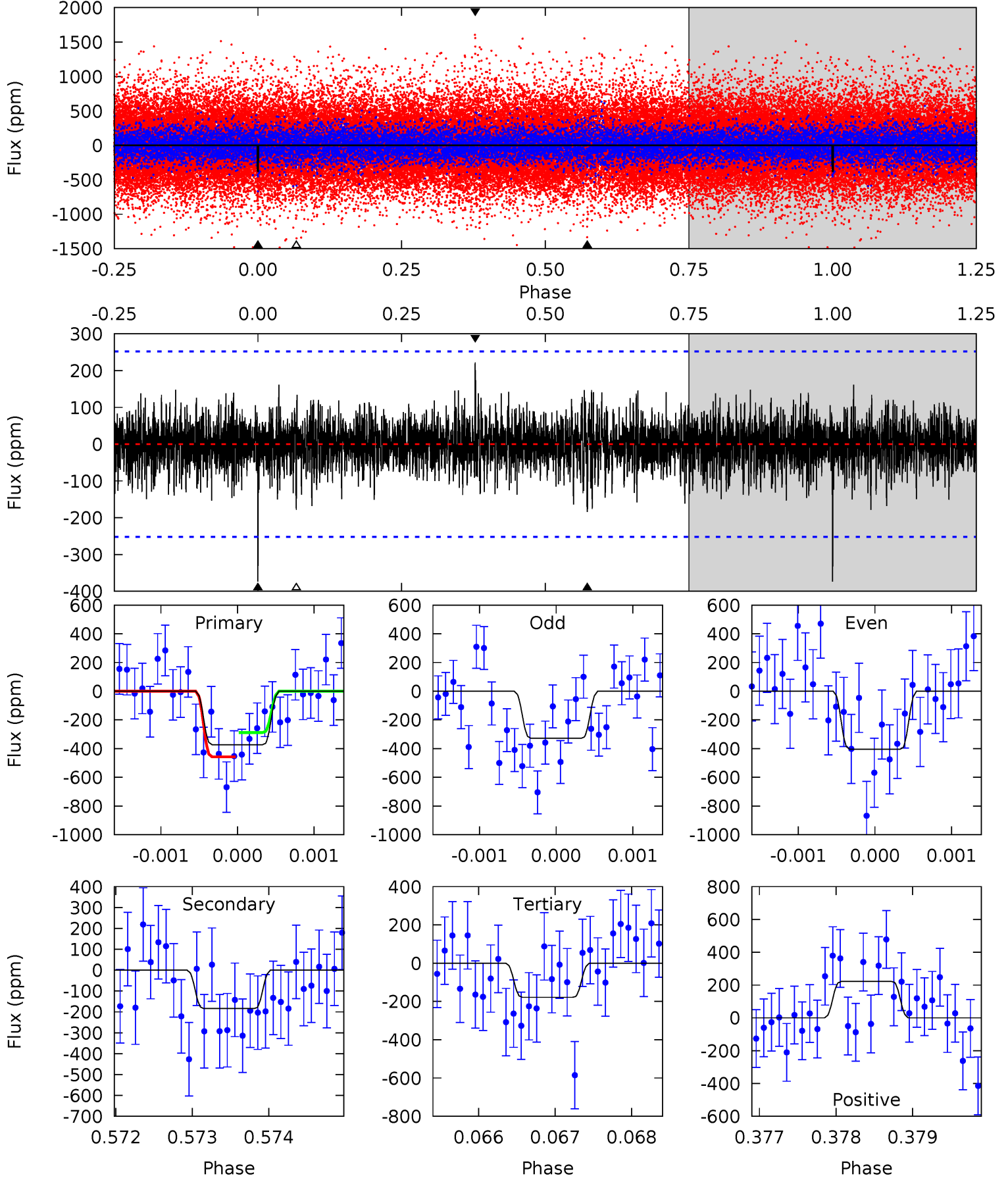
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
12.5	7.41	6.12	6.60	5.38	3.18	1.67	6.36	5.89	1.29	0.82	2.06	0.98	0.35	2.19



Alt Model-Shift Uniqueness Test

008483132-01, P = 252.245487 Days, E = 72.103586 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
8.10	4.00	3.87	4.82	5.46	3.31	1.04	4.23	3.29	0.12	-0.82	0.80	0.87	0.37	1.84



Stellar Parameters For KIC 008483132

	$T_{\text{eff}} (K)$	$\log(g)$	$[\text{Fe}/\text{H}]$	$R (R_{\odot})$	$M (M_{\odot})$	$\rho_{\star} (\text{g}\cdot\text{cm}^{-3})$
	4972^{+149}_{-134}	$4.502^{+0.088}_{-0.088}$	$0.140^{+0.250}_{-0.250}$	$0.824^{+0.075}_{-0.083}$	$0.786^{+0.078}_{-0.056}$	$1.983^{+0.695}_{-0.472}$
	+3%/-3%	+2%/-2%	+179%/-179%	+9%/-10%	+10%/-7%	+35%/-24%
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 008483132-01 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	A_{obs}
DV	-294 ± 40	$2.23^{+1.40}_{-1.14}$	328^{+13}_{-12}	4305^{+1555}_{-699}	16767^{+55571}_{-10415}
Alt.	-184 ± 46	$2.00^{+1.46}_{-1.22}$	328^{+13}_{-14}	4105^{+1880}_{-731}	13606^{+71878}_{-9570}

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

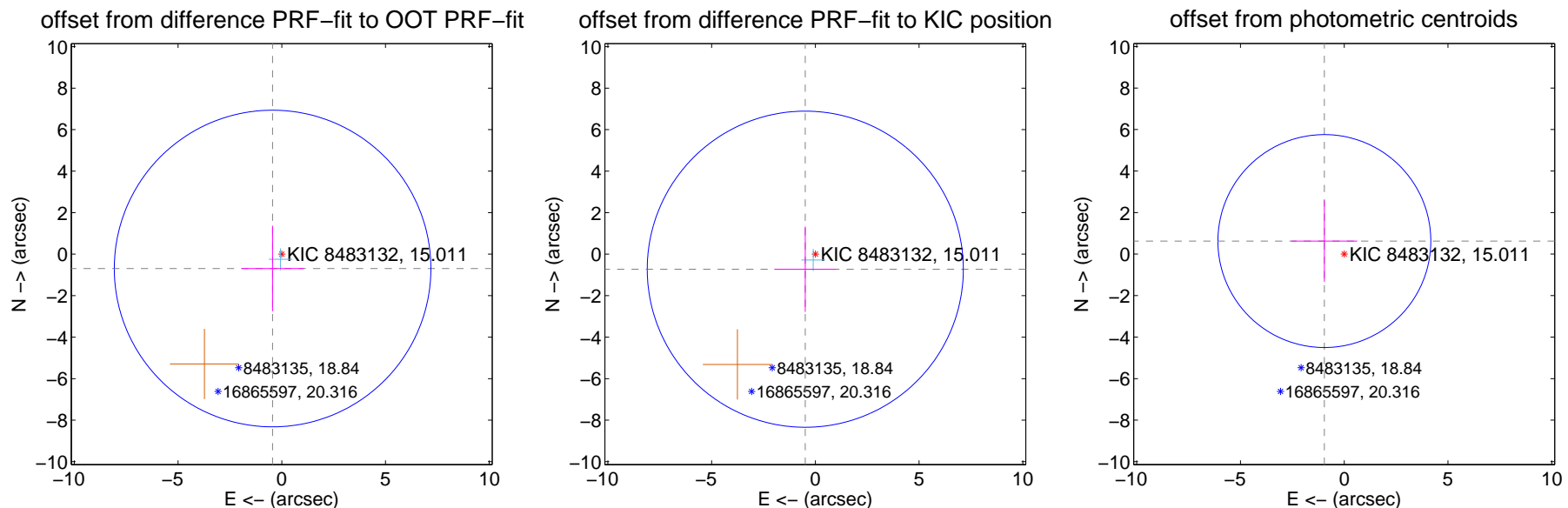
DV Centroid Data

Supplemental centroid analysis for 008483132-01. Kepler magnitude: 15.01. Transit SNR 7.30

There are 1 quarters with good PRF difference image offsets

The direct PRF centroid is offset from the target star catalog position by about 0.06 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.822 ± 2.543	0.32	0.443 ± 1.499	-0.693 ± 2.061
PRF-fit source offset from KIC position	0.873 ± 2.539	0.34	0.485 ± 1.494	-0.726 ± 2.056
photometric centroid source offset	1.14 ± 1.71	0.67	0.96 ± 1.59	0.63 ± 1.96

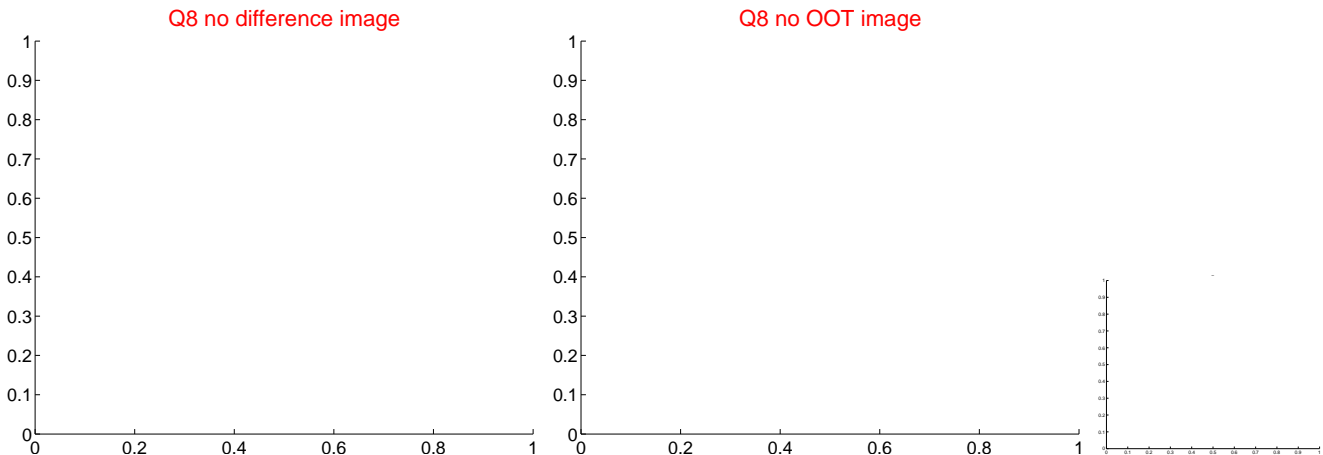
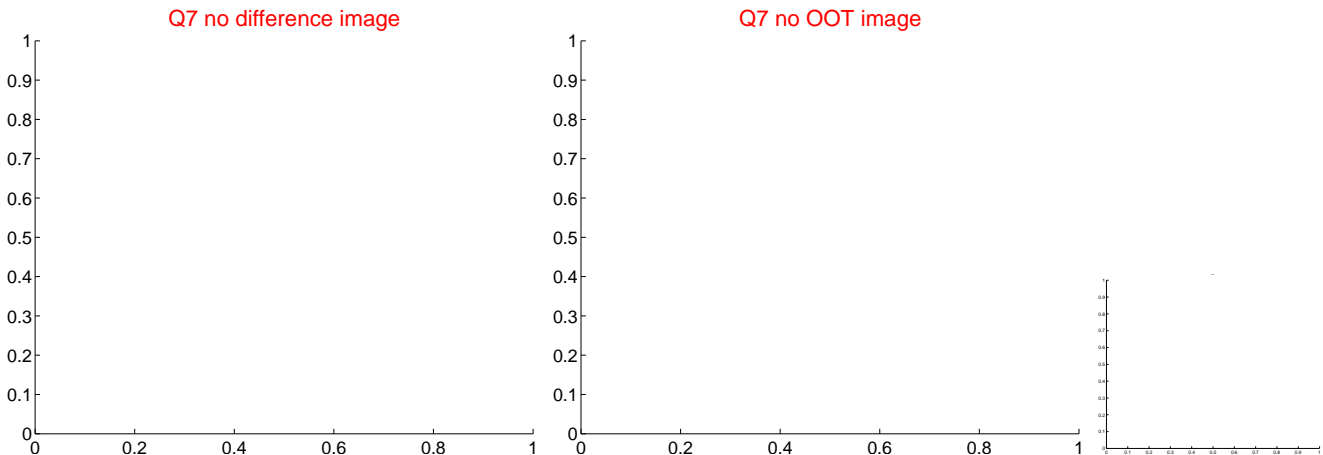
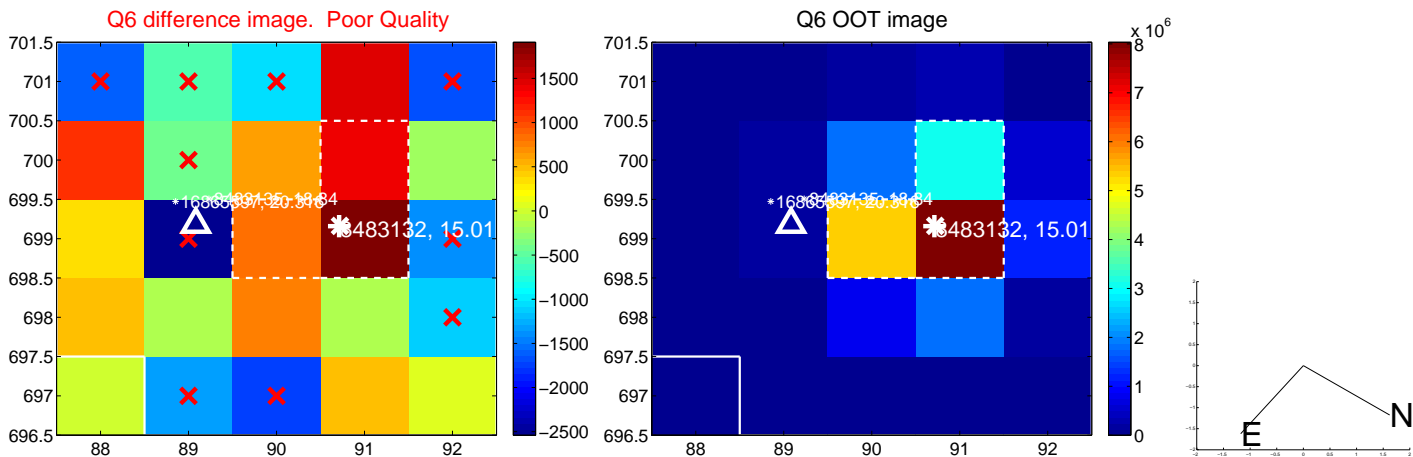
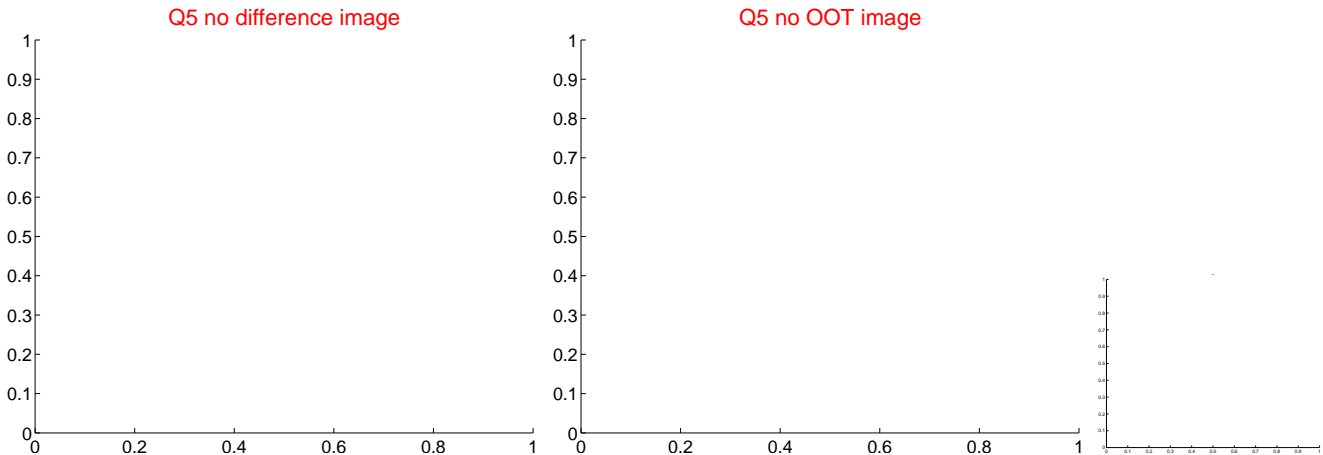


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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

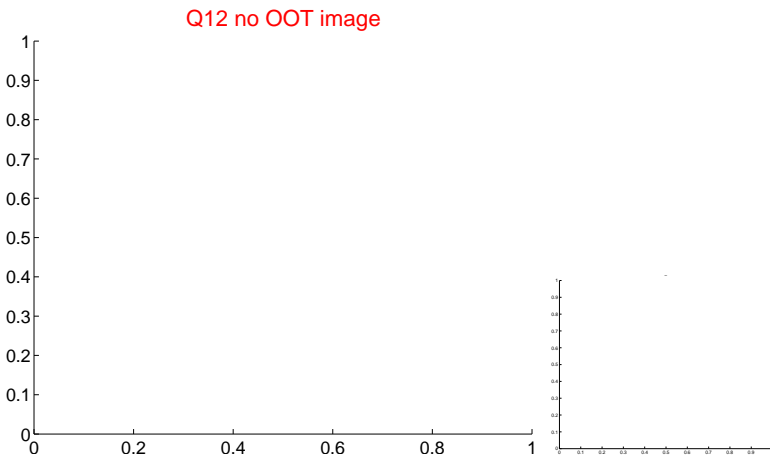
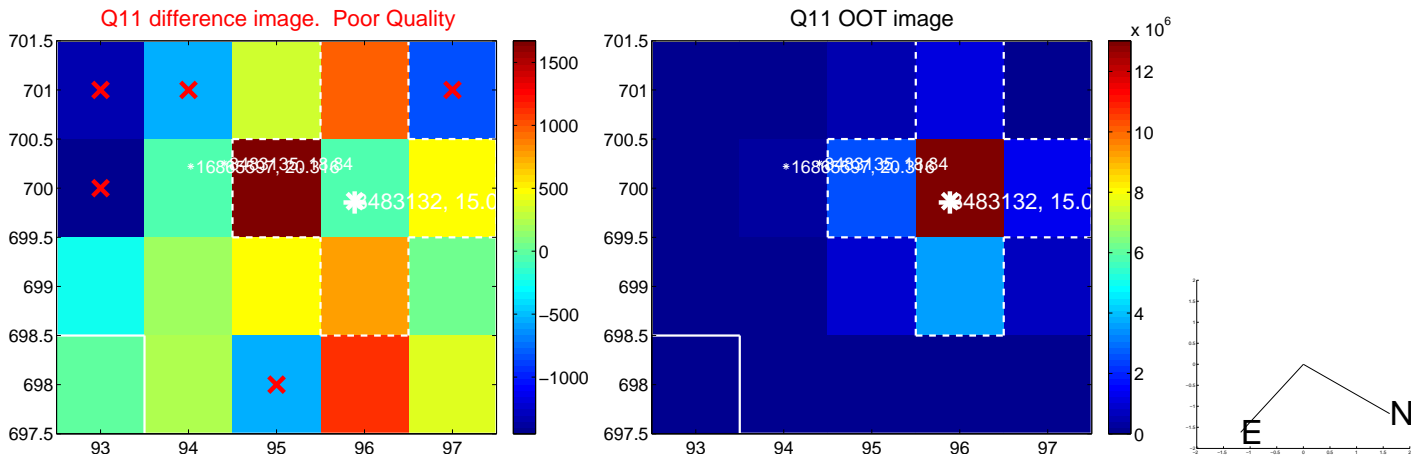
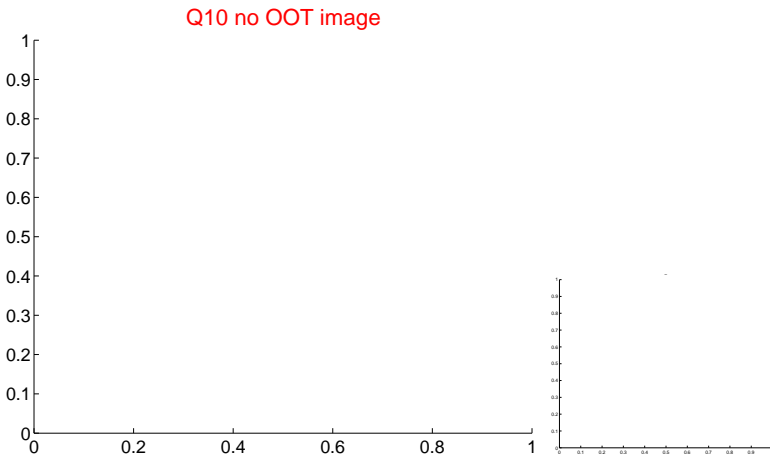
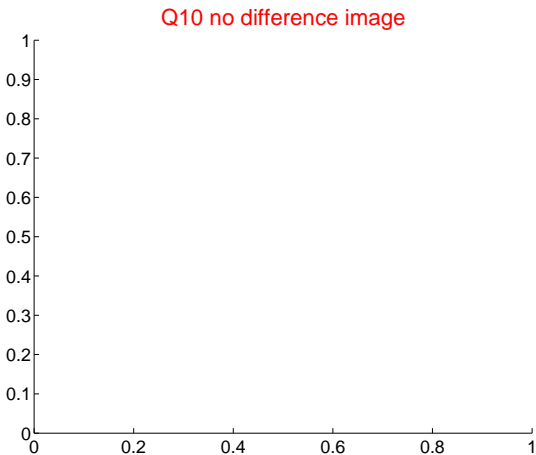
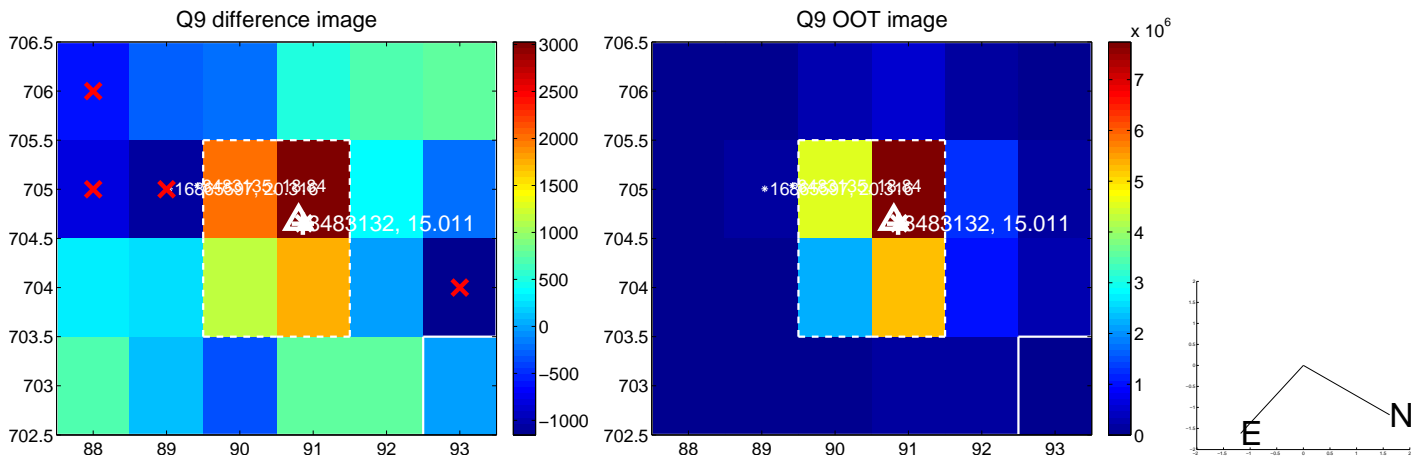
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



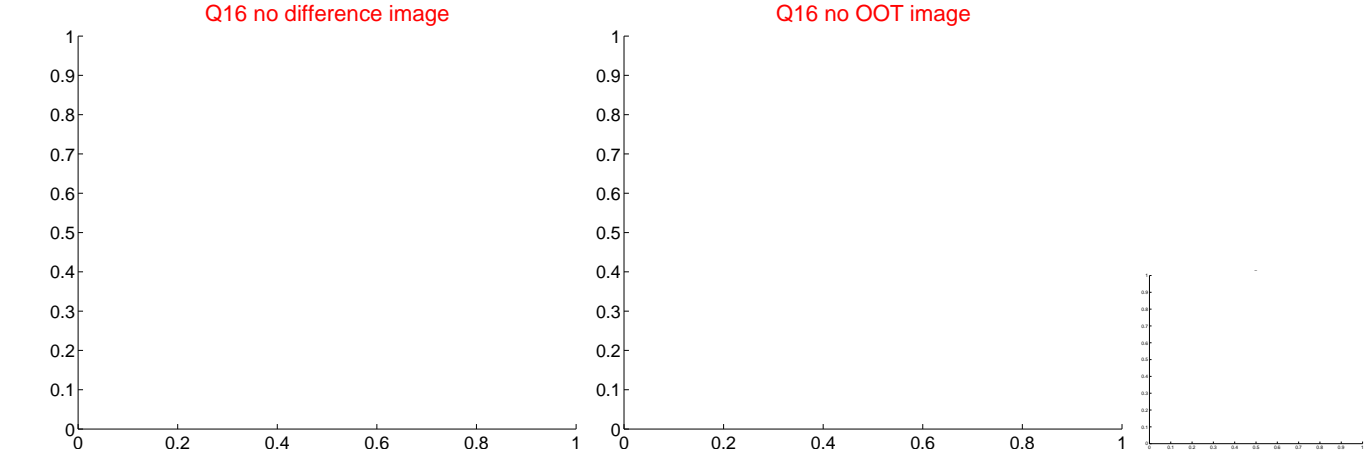
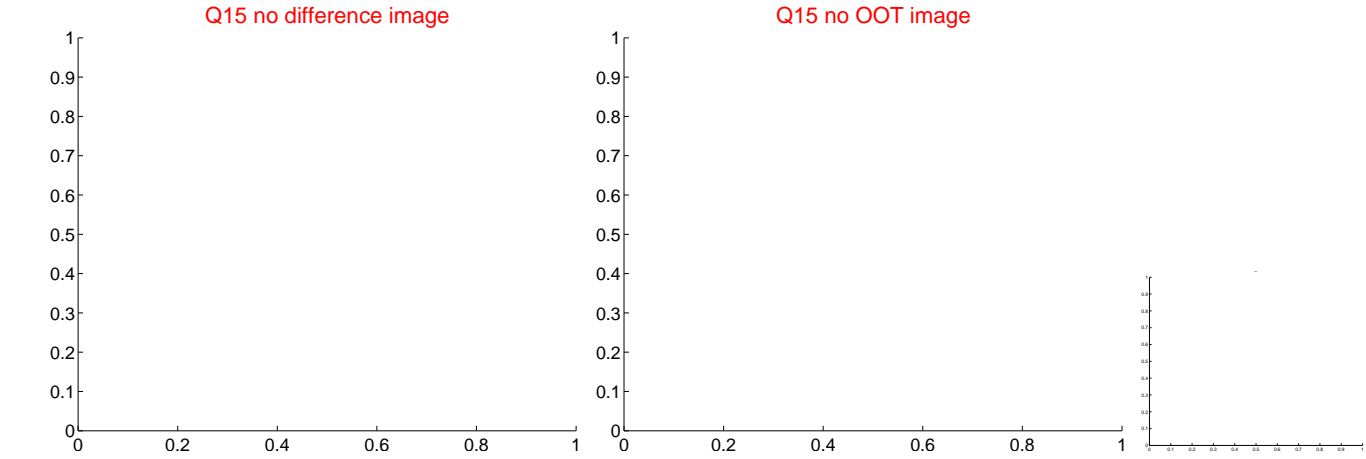
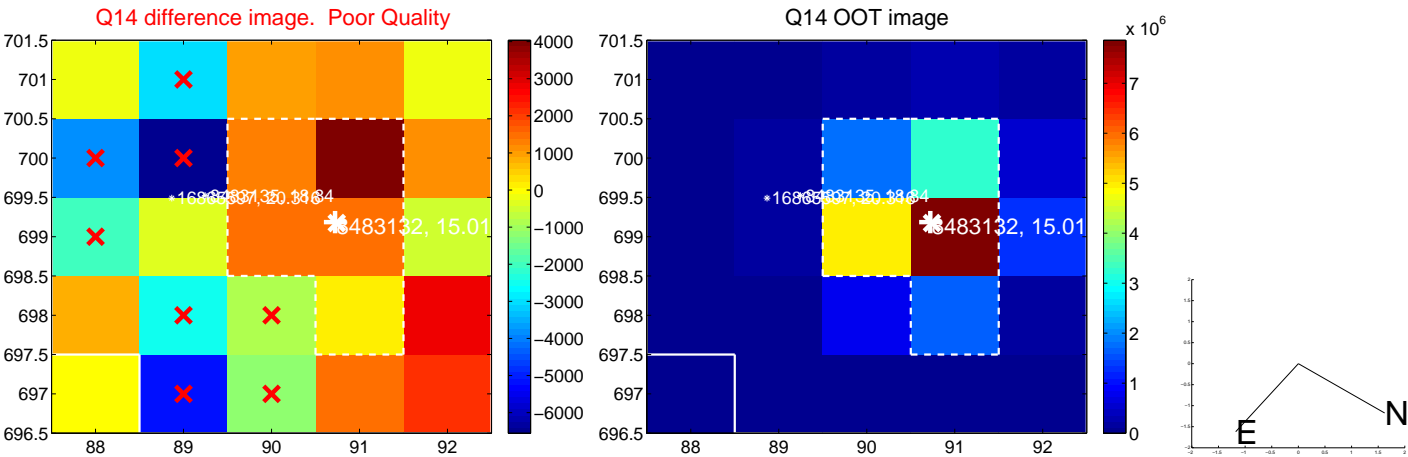
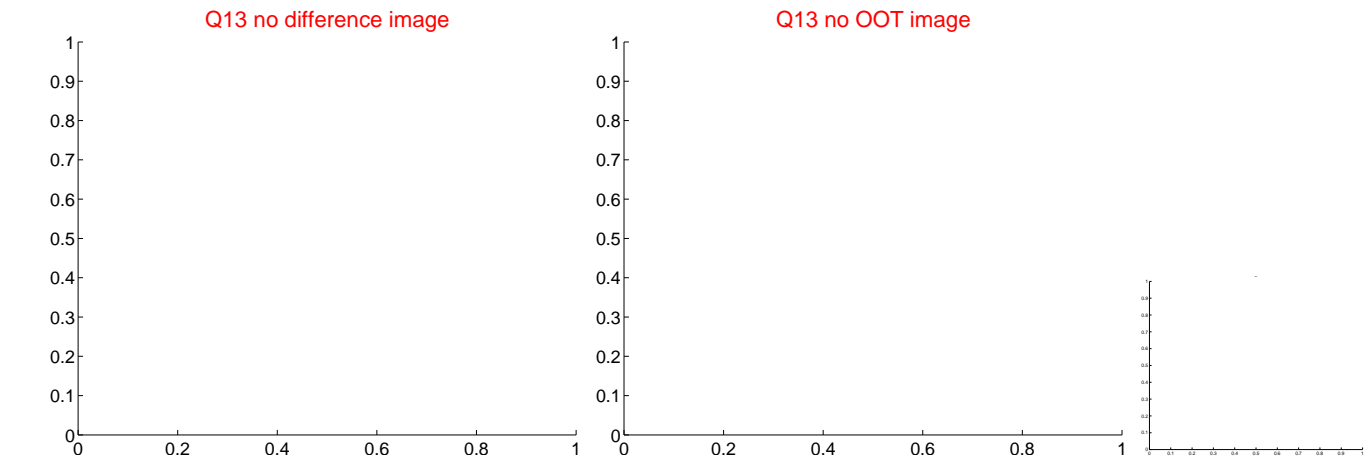
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value



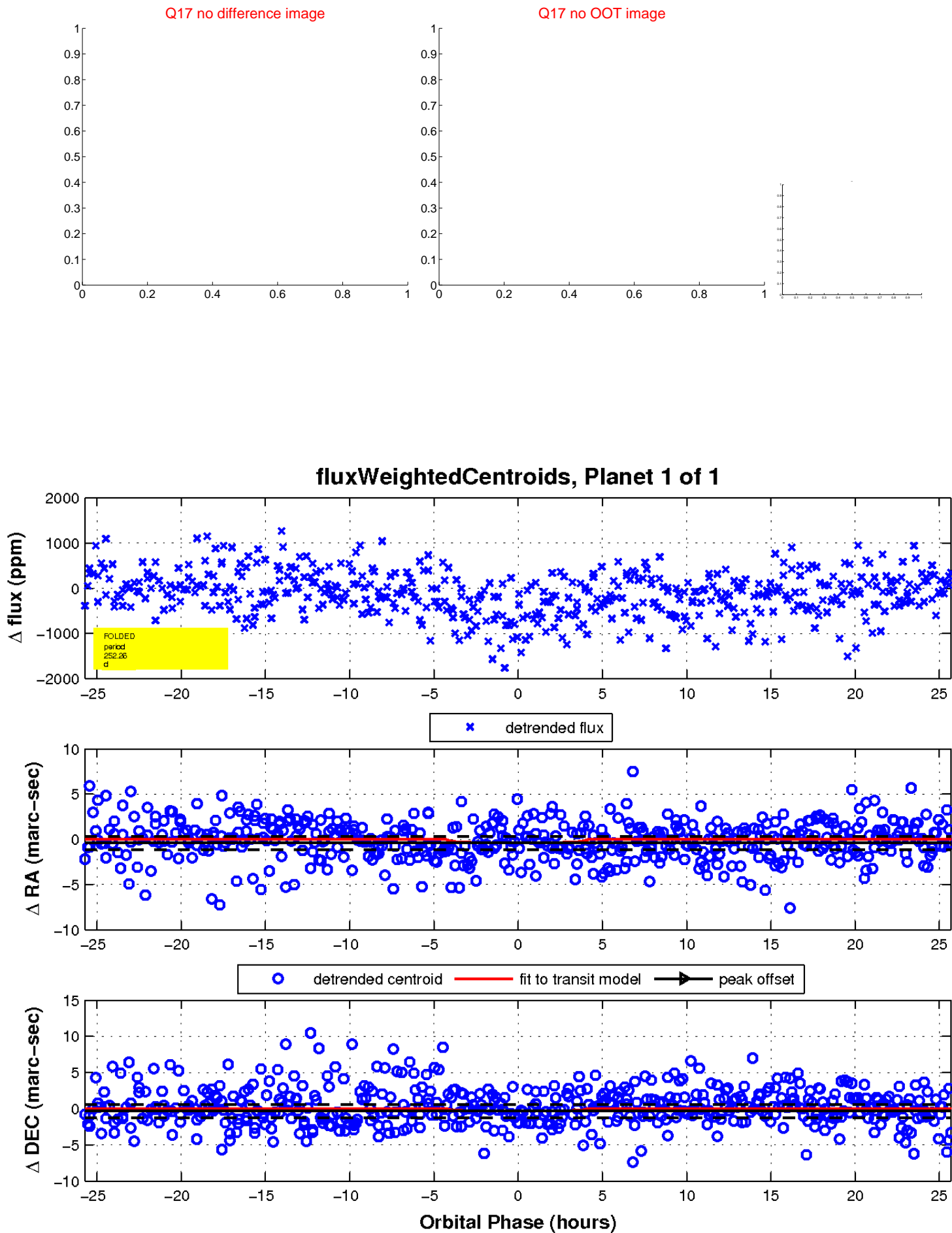
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value



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UKIRT Image

Declination

