

KIC 007203326

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})
007203326-01	OBS	7826.01	9.087502	137.203158	322.6	3.141	10.4	6.2	1.12	6078	2.20	225.20

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
007203326-01	OBS	FP	0.00	0	0	1	0	CENT_FEW_DIFFS—HALO_GHOST

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

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

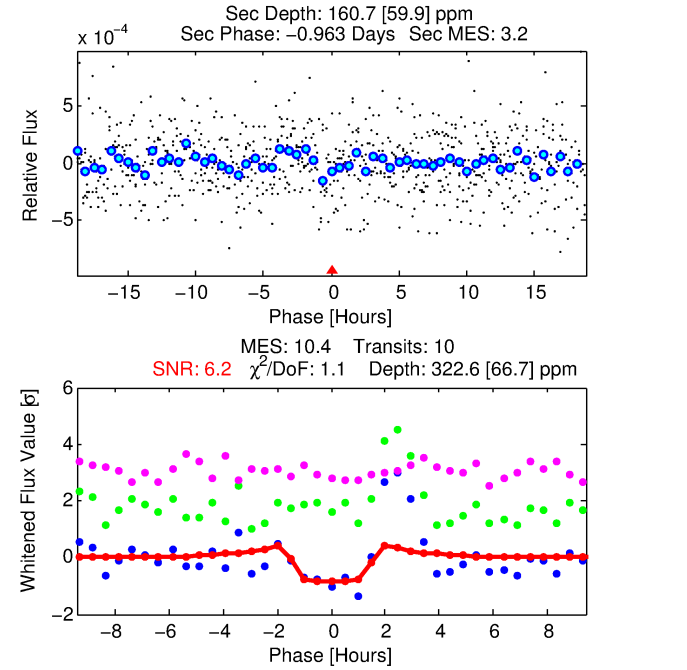
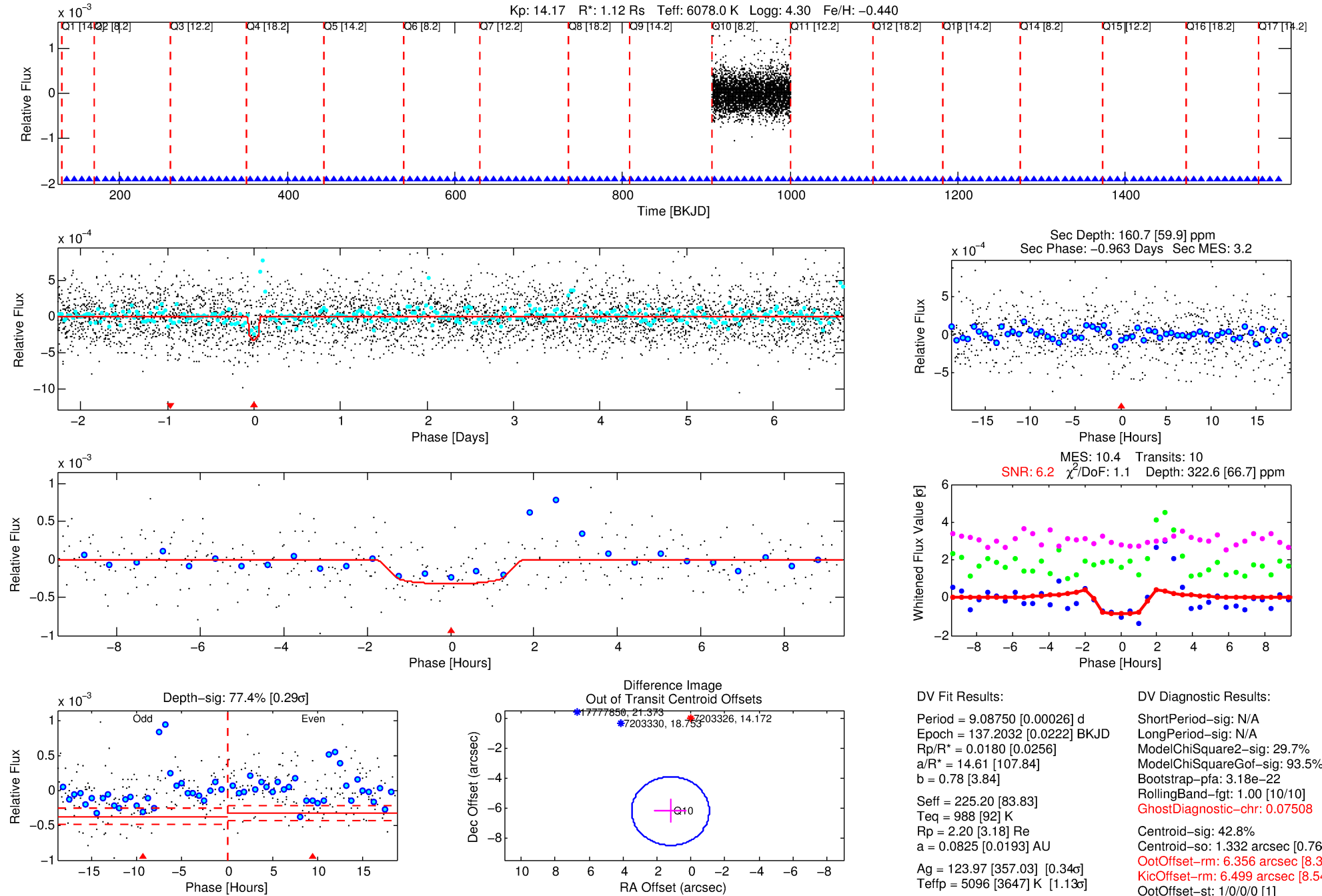
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 007203326-01

No Significant Match Found

DV One-Page Summary

KIC: 7203326 Candidate: 1 of 1 Period: 9.088 d



DV Fit Results:

Period = 9.08750 [0.00026] d
Epoch = 137.2032 [0.0222] BKJD
Rp/R* = 0.0180 [0.0256]
a/R* = 14.61 [107.84]
b = 0.78 [3.84]
Seff = 225.20 [83.83]
Teff = 988 [92] K
Rp = 2.20 [3.18] Re
a = 0.0825 [0.0193] AU
Ag = 123.97 [357.03] [0.34 σ]
Teffp = 5096 [3647] K [1.13 σ]

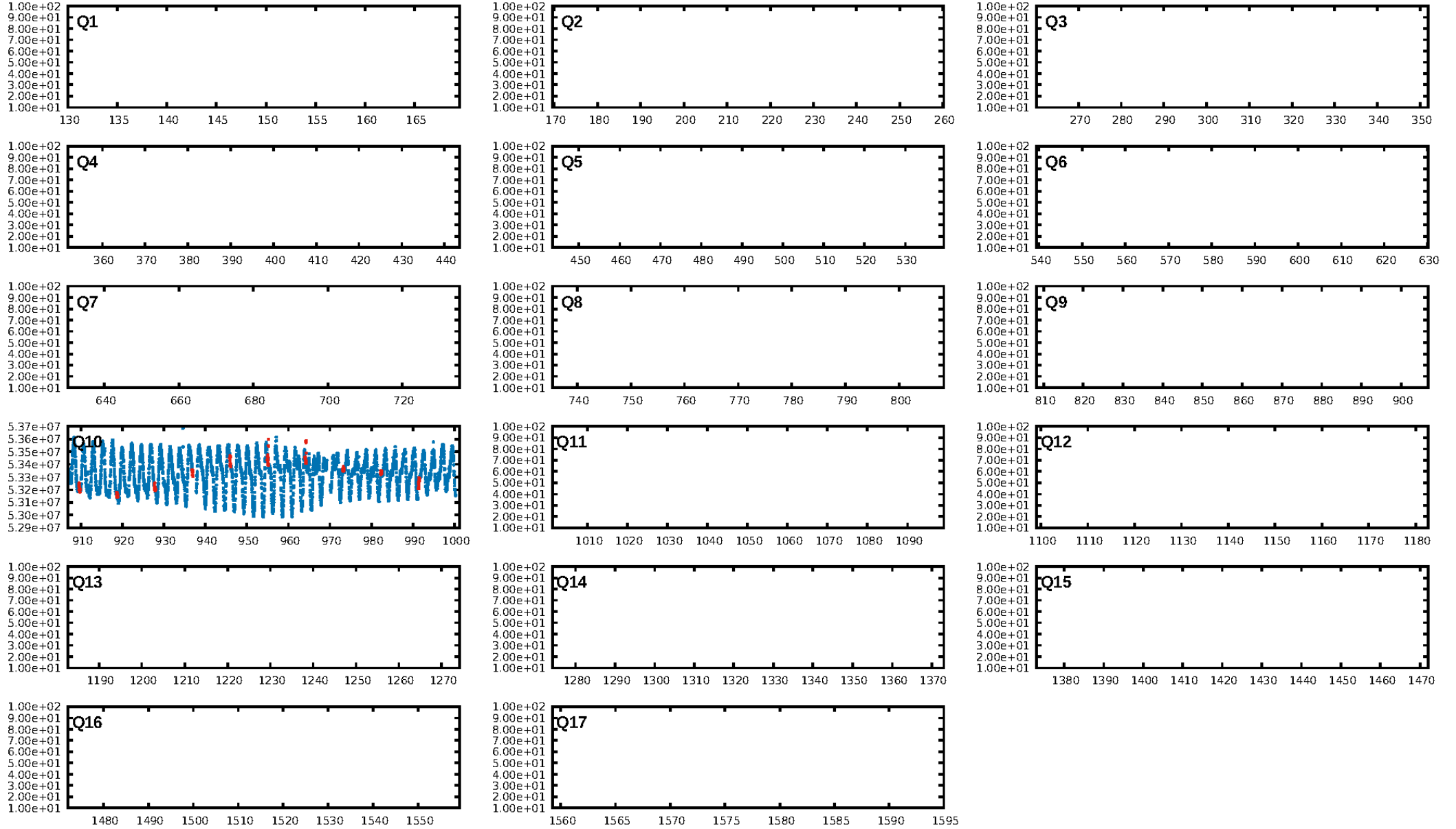
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: 29.7%
ModelChiSquareGof-sig: 93.5%
Bootstrap-pfa: 3.18e-22
RollingBand-fgt: 1.00 [10/10]
GhostDiagnostic-chr: 0.07508
Centroid-sig: 42.8%
Centroid-so: 1.332 arcsec [0.76 σ]
OotOffset-rm: 6.356 arcsec [8.34 σ]
KicOffset-rm: 6.499 arcsec [8.54 σ]
OotOffset-st: 1/0/0/0 [1]
KicOffset-st: 1/0/0/0 [1]
DiffImageQuality-fgm: 0.00 [0/1]
DiffImageOverlap-fno: 1.00 [1/1]

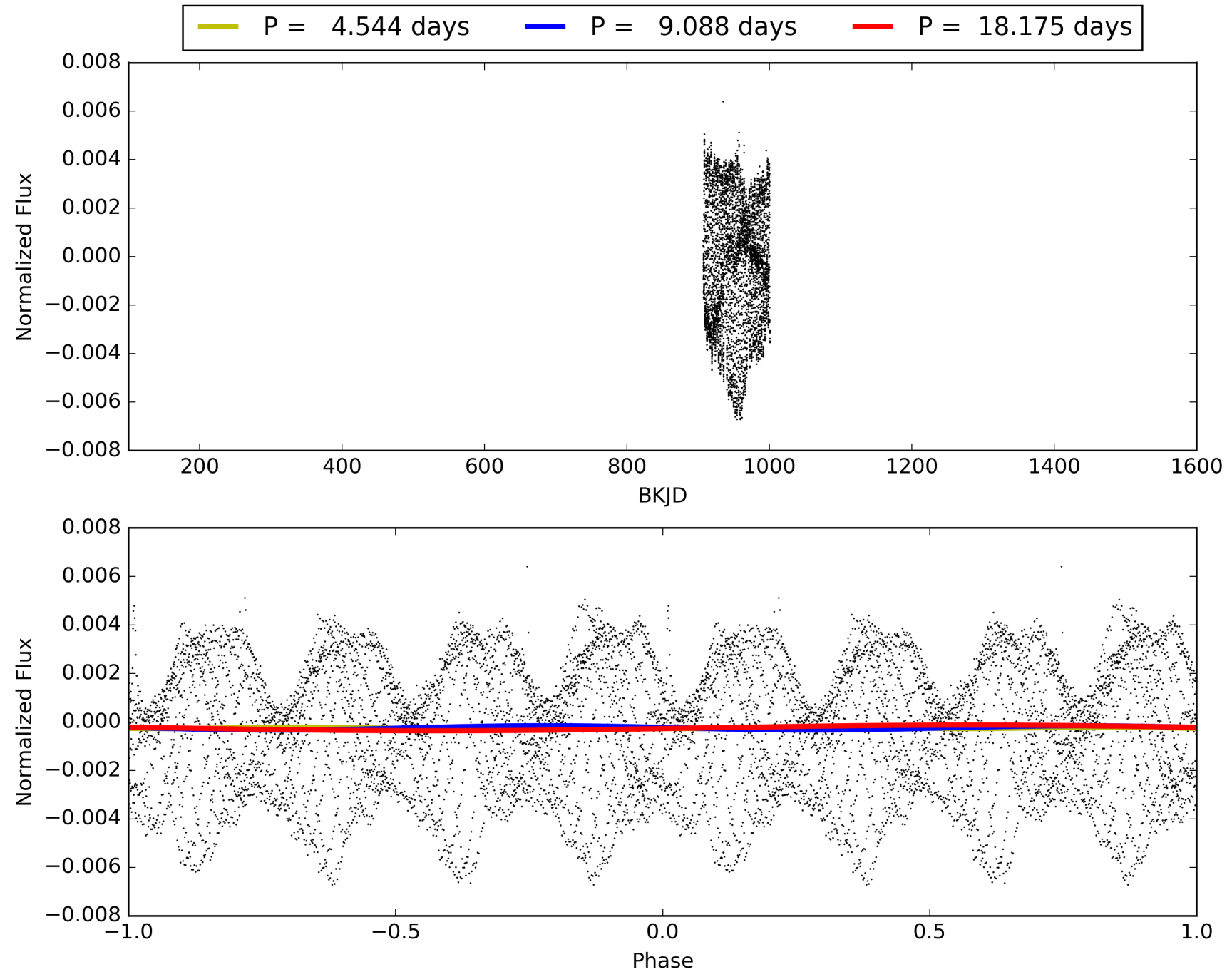
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 31-Jan-2016 02:47:12 Z

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

TCE 007203326-01, PDC Light Curves

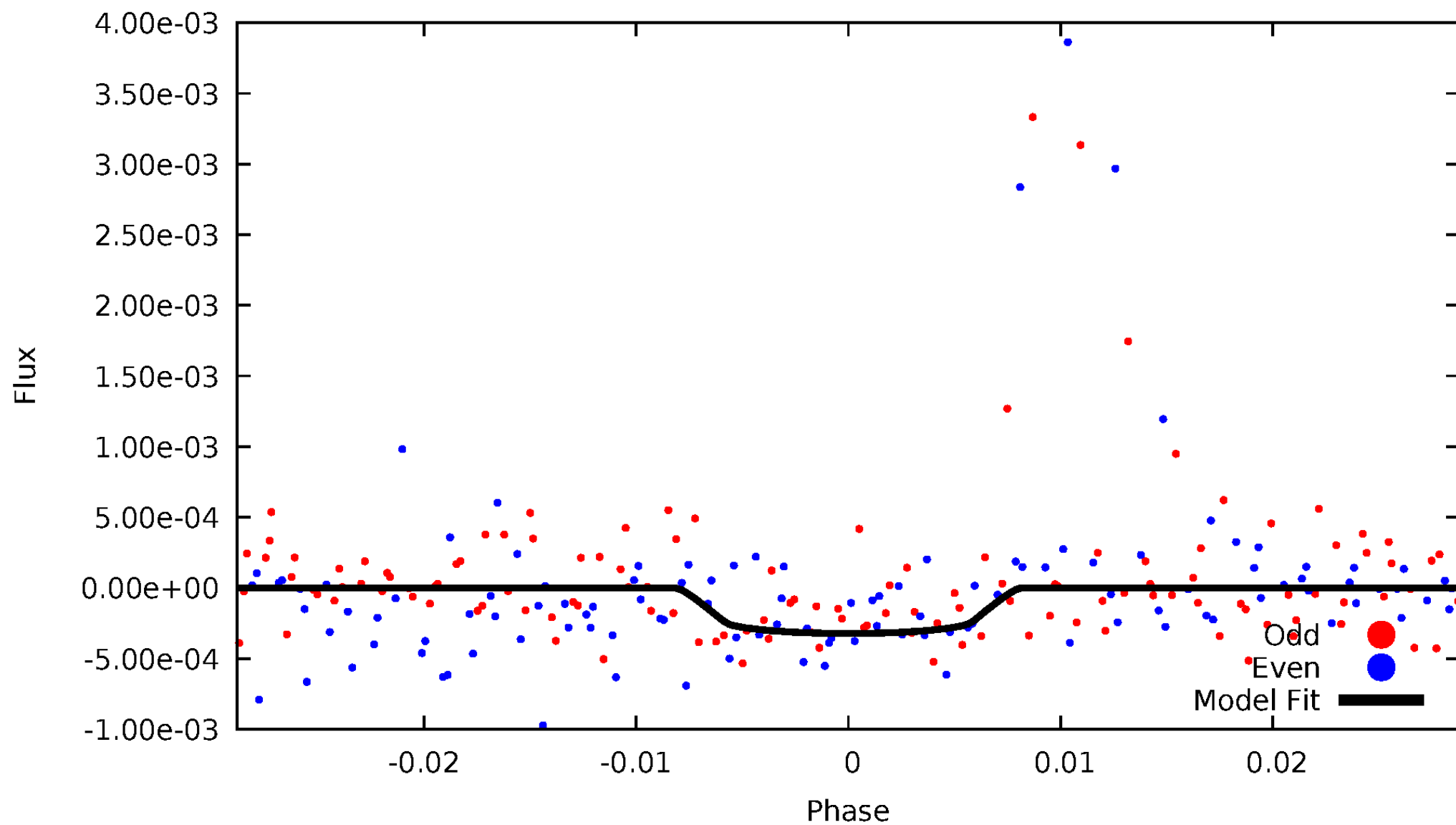


TCE 007203326-01



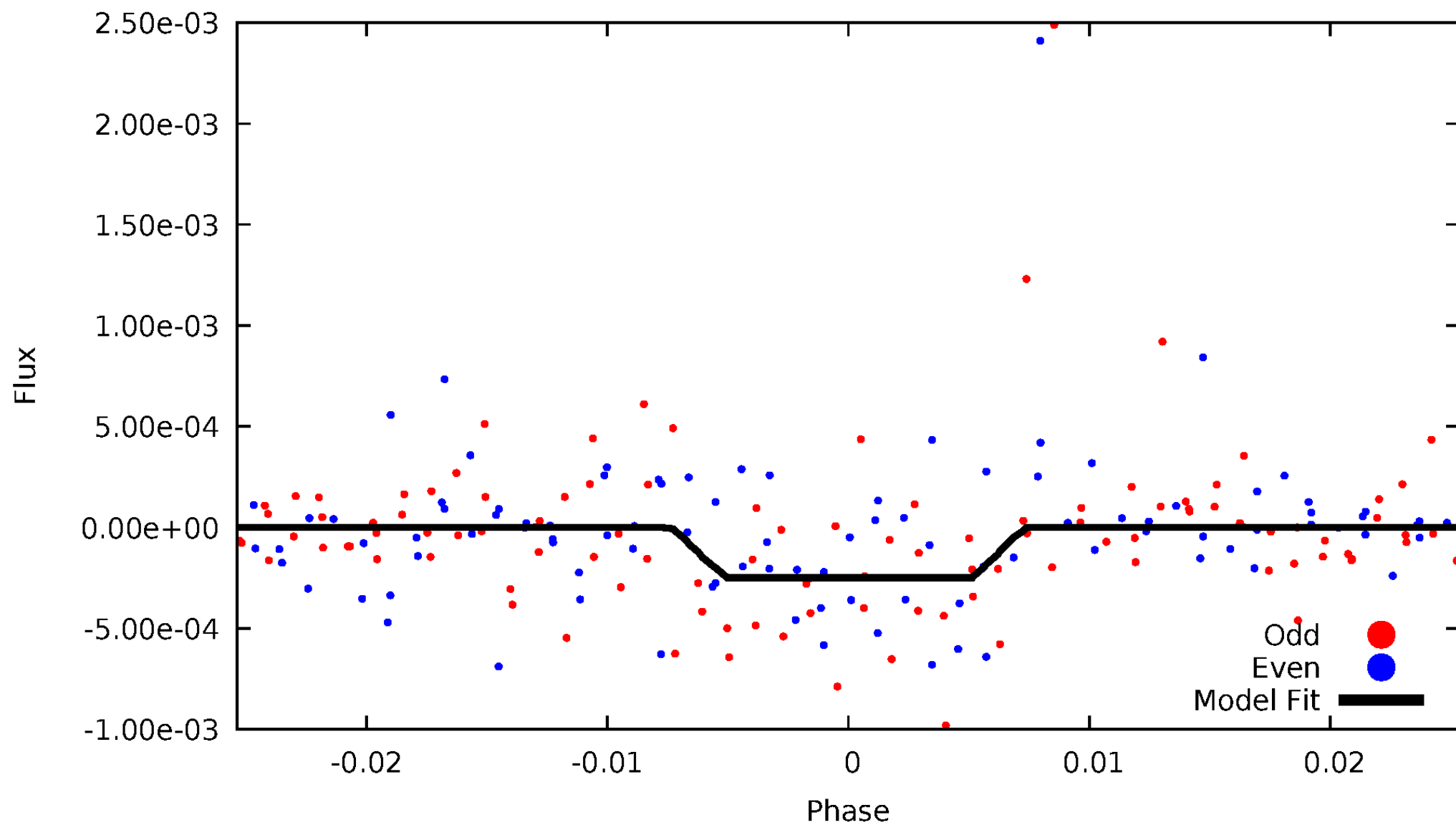
DV Odd/Even

TCE 007203326-01

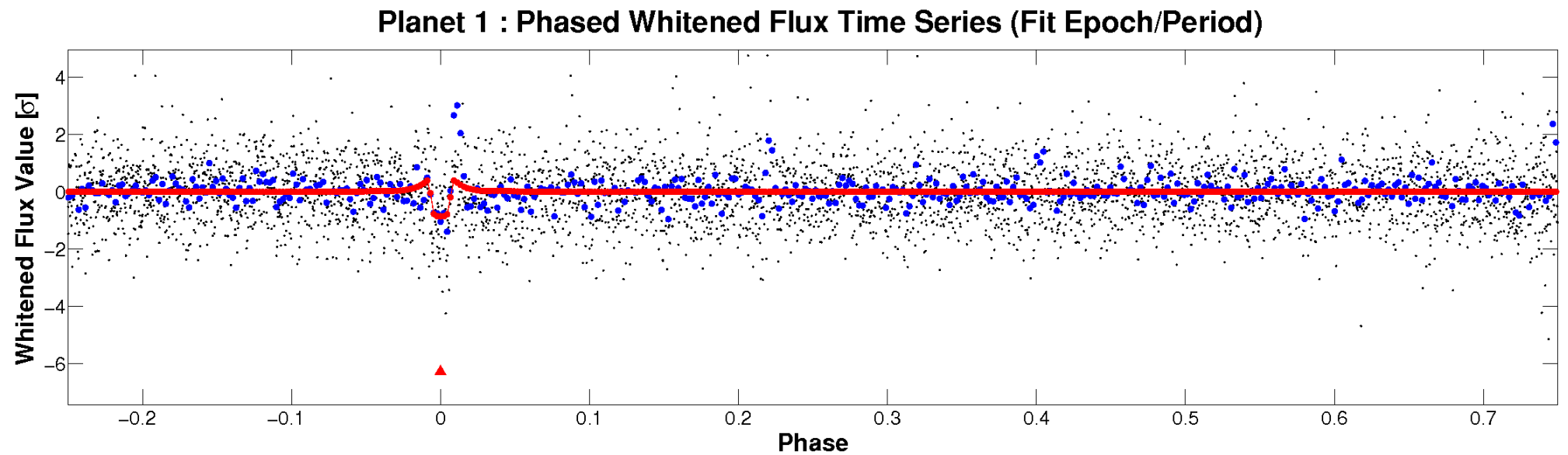
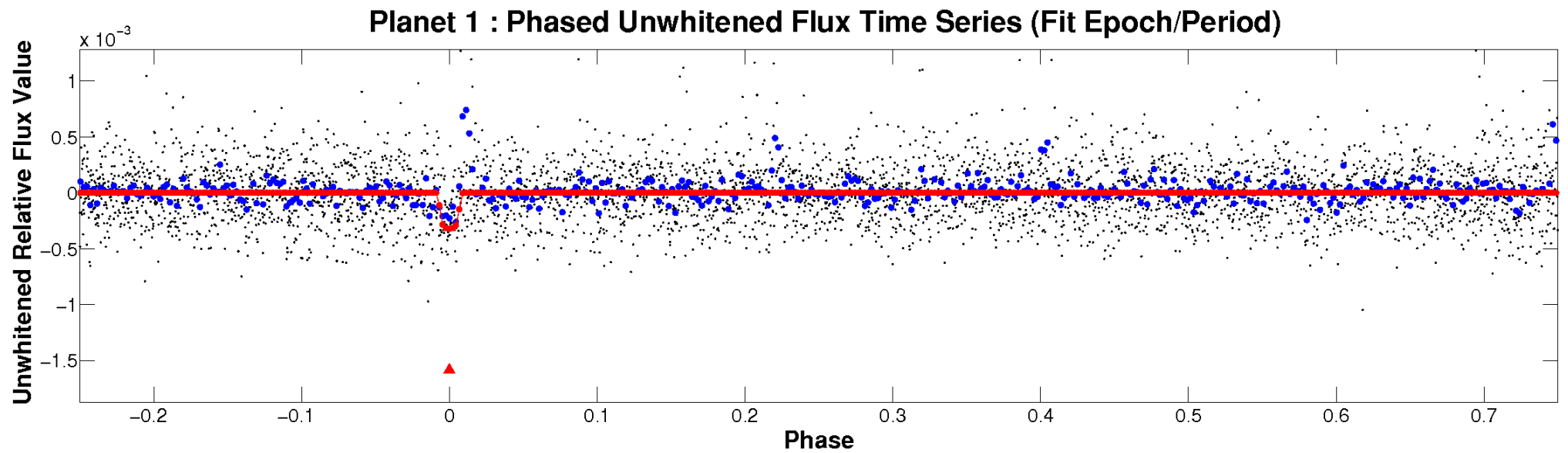


ALT Odd/Even

TCE 007203326-01

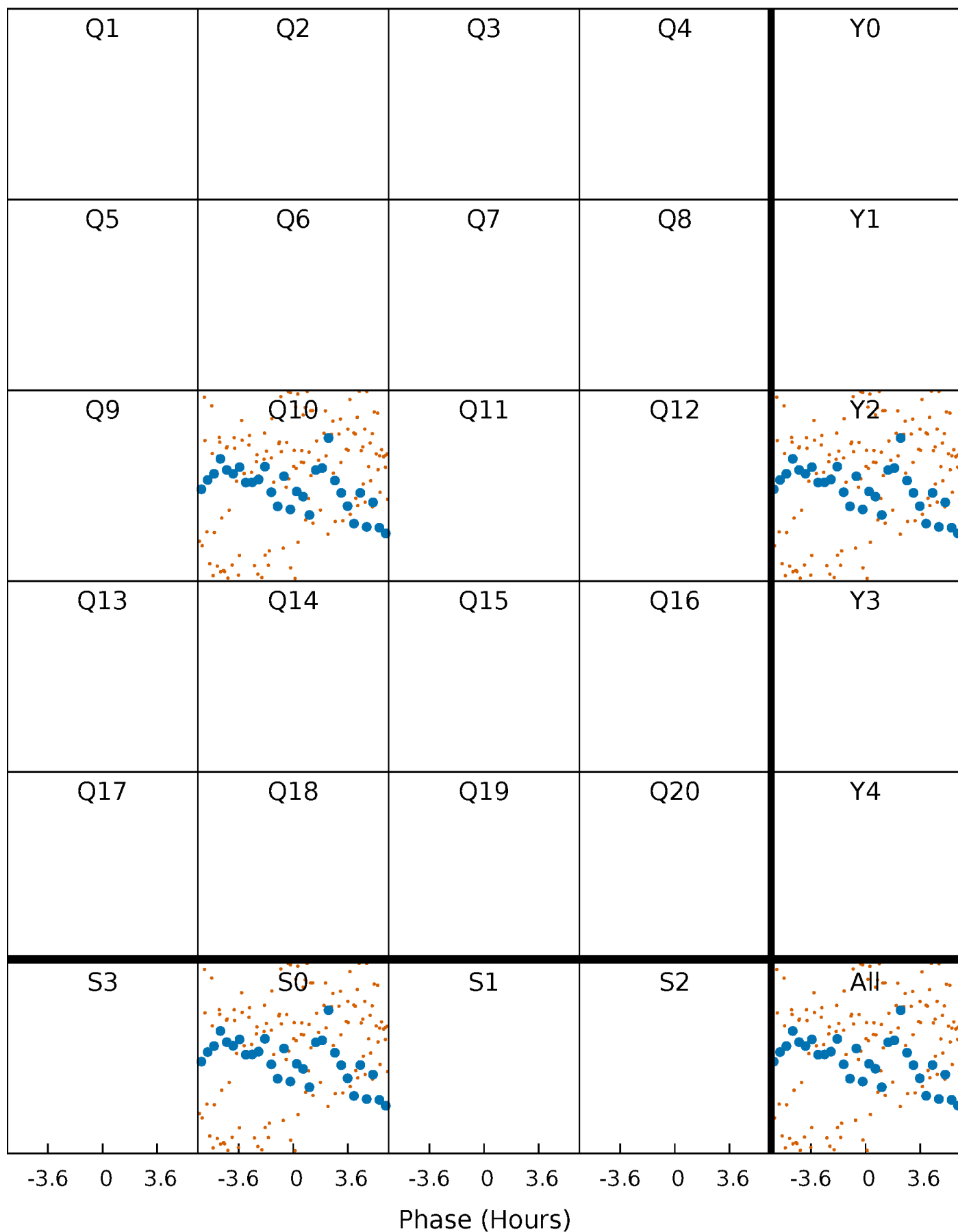


Non-Whitened Vs. Whitened Light Curve



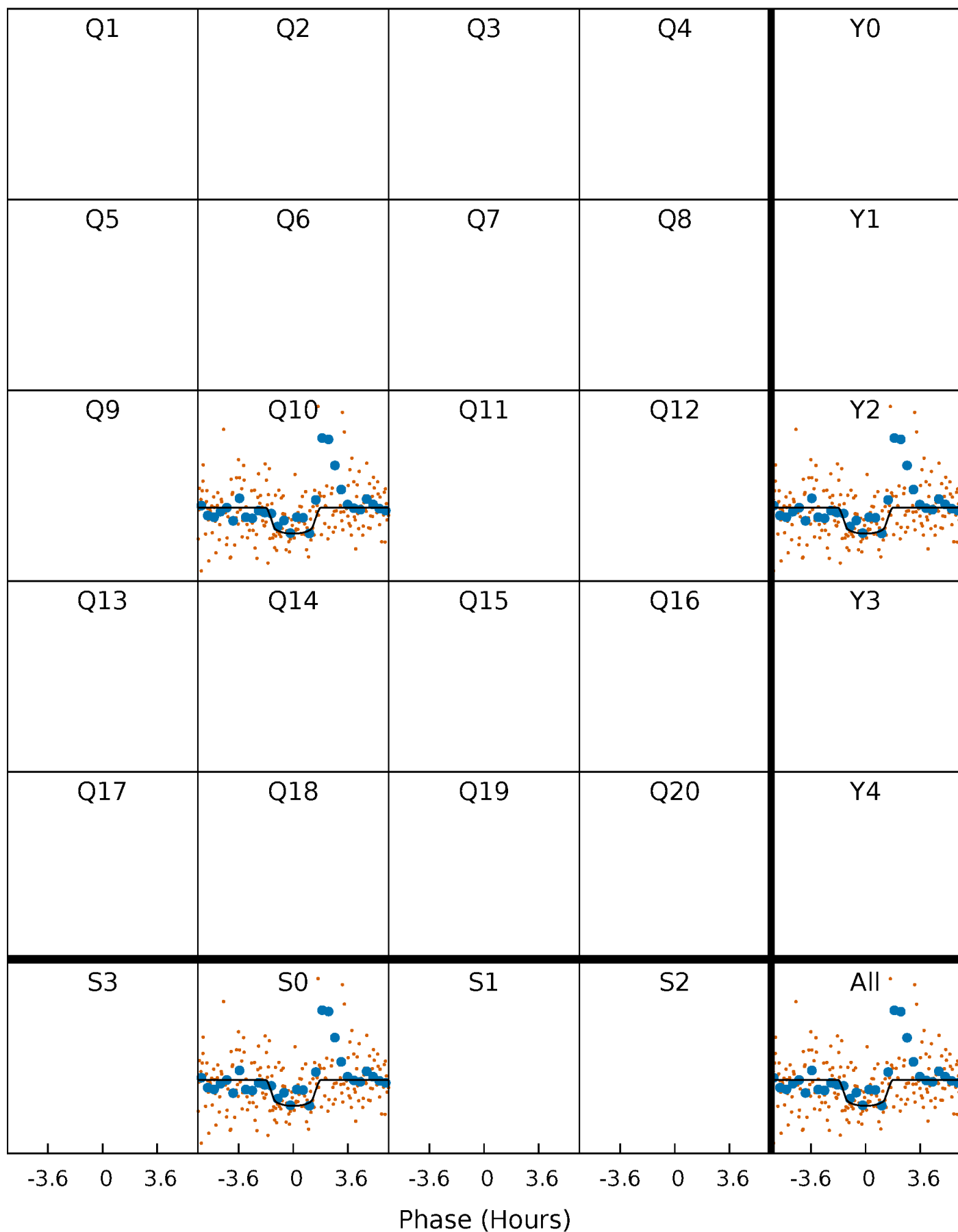
PDC Quarter-Phased Transit Curves

TCE 007203326-01 P= 9.087502 Days $T_0=137.203158$ (BKJD)



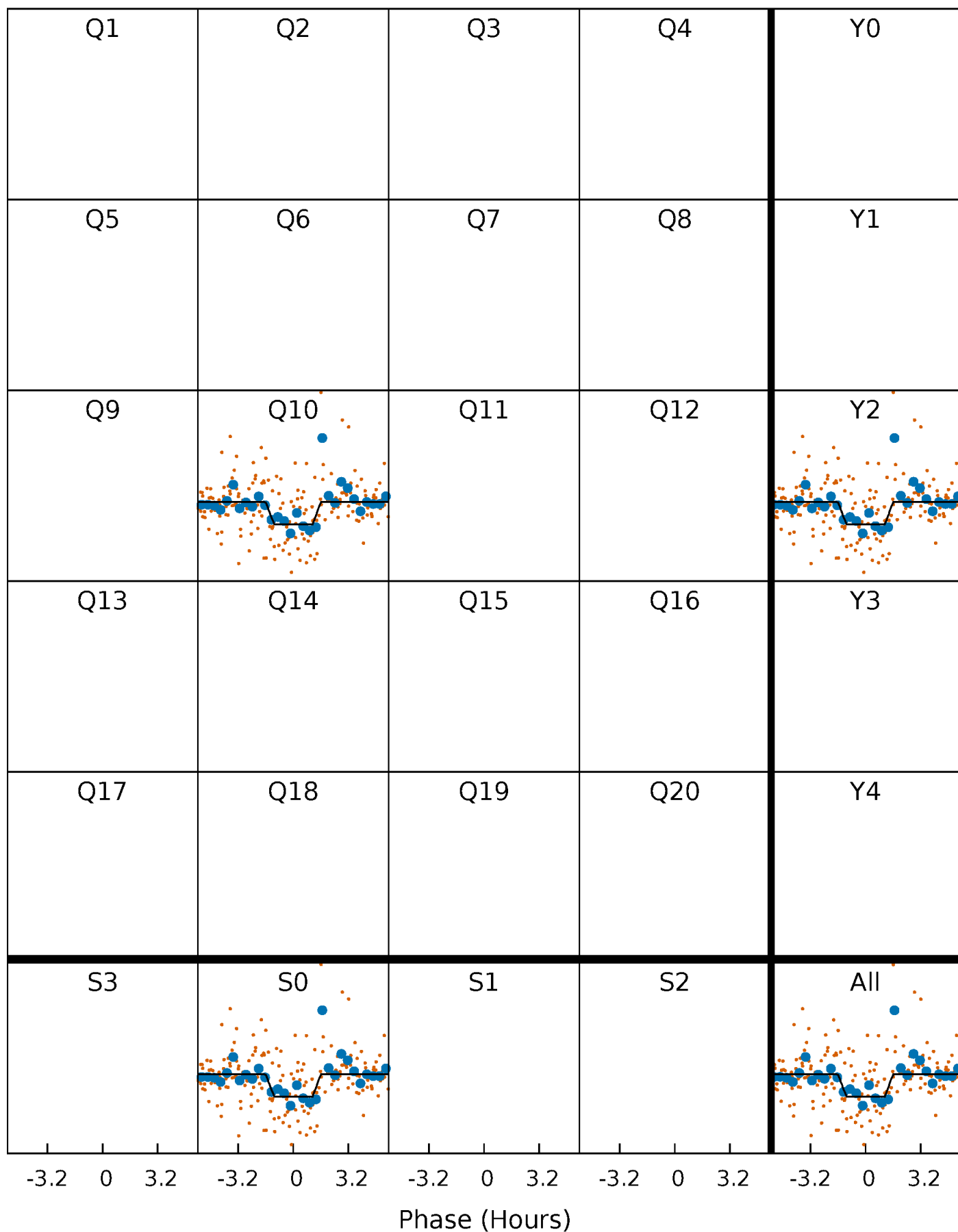
DV Quarter-Phased Transit Curves

TCE 007203326-01 P= 9.087502 Days $T_0=137.203158$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

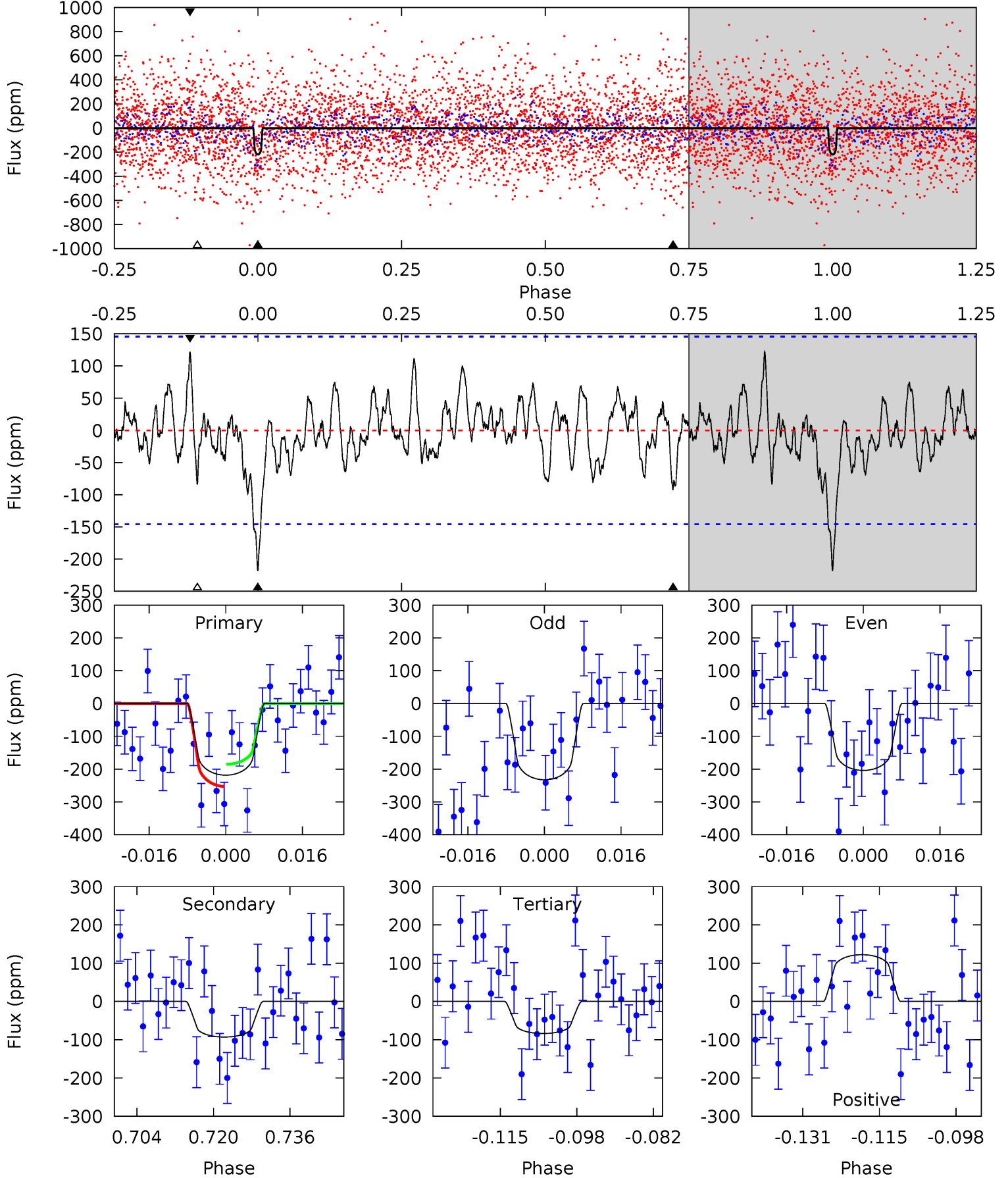
TCE 007203326-01 P= 9.087732 Days $T_0=137.183621$ (BKJD)



DV Model-Shift Uniqueness Test

007203326-01, P = 9.087502 Days, E = 137.203158 Days

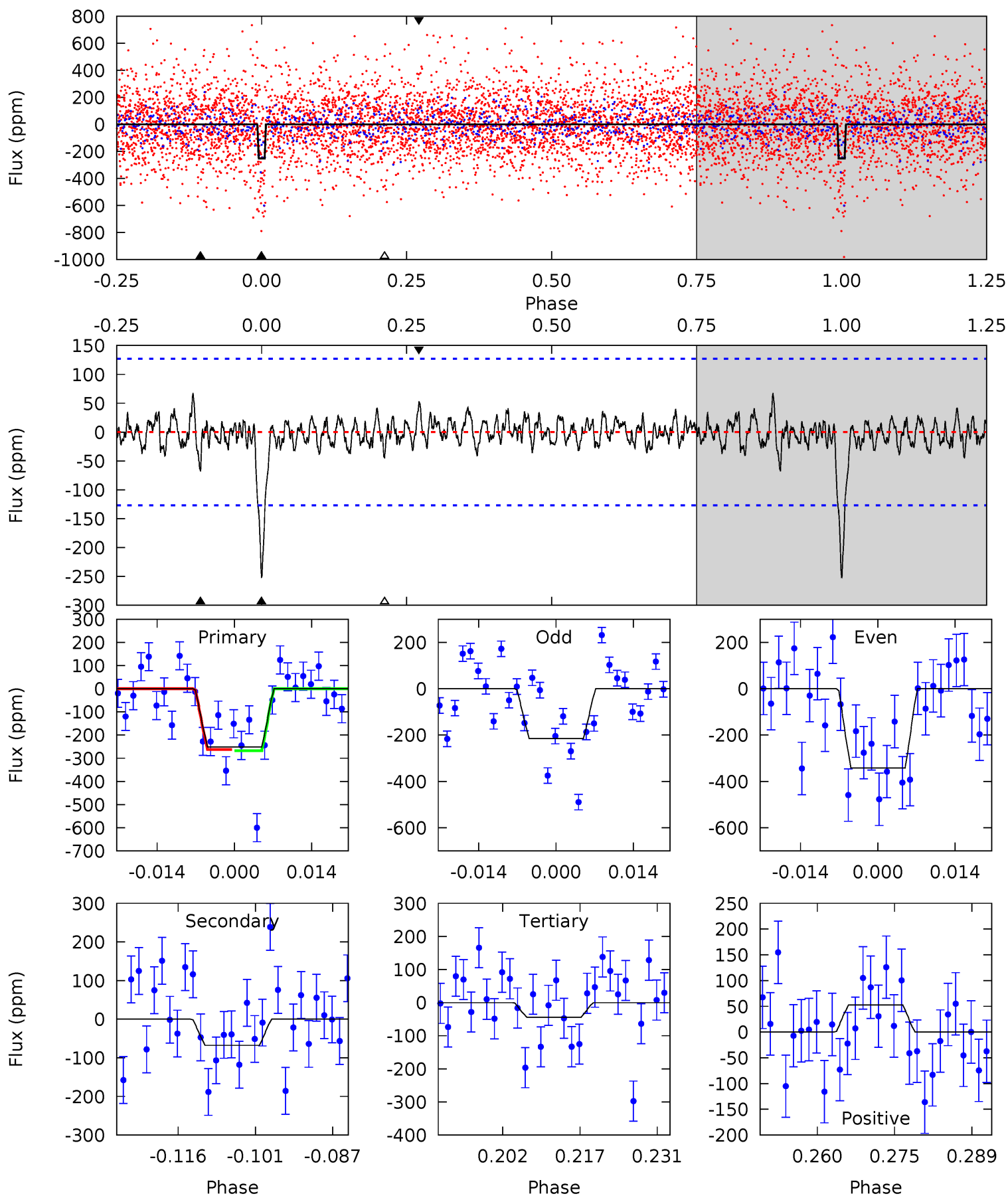
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
7.39	3.15	2.83	4.13	4.93	2.40	1.26	4.56	3.26	0.31	-0.99	0.48	0.96	0.36	1.14



Alt Model-Shift Uniqueness Test

007203326-01, P = 9.087732 Days, E = 137.183621 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
9.83	2.65	1.72	2.05	4.96	2.45	0.69	8.11	7.77	0.93	0.60	2.46	1.12	0.21	0.11



Stellar Parameters For KIC 007203326

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	$M(M_{\odot})$	p_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	6078^{+214}_{-214}	$4.297^{+0.190}_{-0.190}$	$-0.440^{+0.300}_{-0.300}$	$1.119^{+0.308}_{-0.224}$	$0.905^{+0.129}_{-0.094}$	$0.909^{+0.978}_{-0.434}$
	+4%/-4%	+4%/-4%	+68%/-68%	+28%/-20%	+14%/-10%	+108%/-48%
Source	KIC0	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 007203326-01 / KOI 7826.01

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	-93 ± 30	$3.11^{+2.80}_{-2.03}$	1386^{+106}_{-101}	4043^{+2020}_{-809}	37^{+233}_{-28}
Alt.	-68 ± 26	$3.12^{+2.63}_{-2.01}$	1385^{+112}_{-106}	3778^{+2012}_{-700}	25^{+177}_{-18}

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 $A_{obs} \gg 1.0$

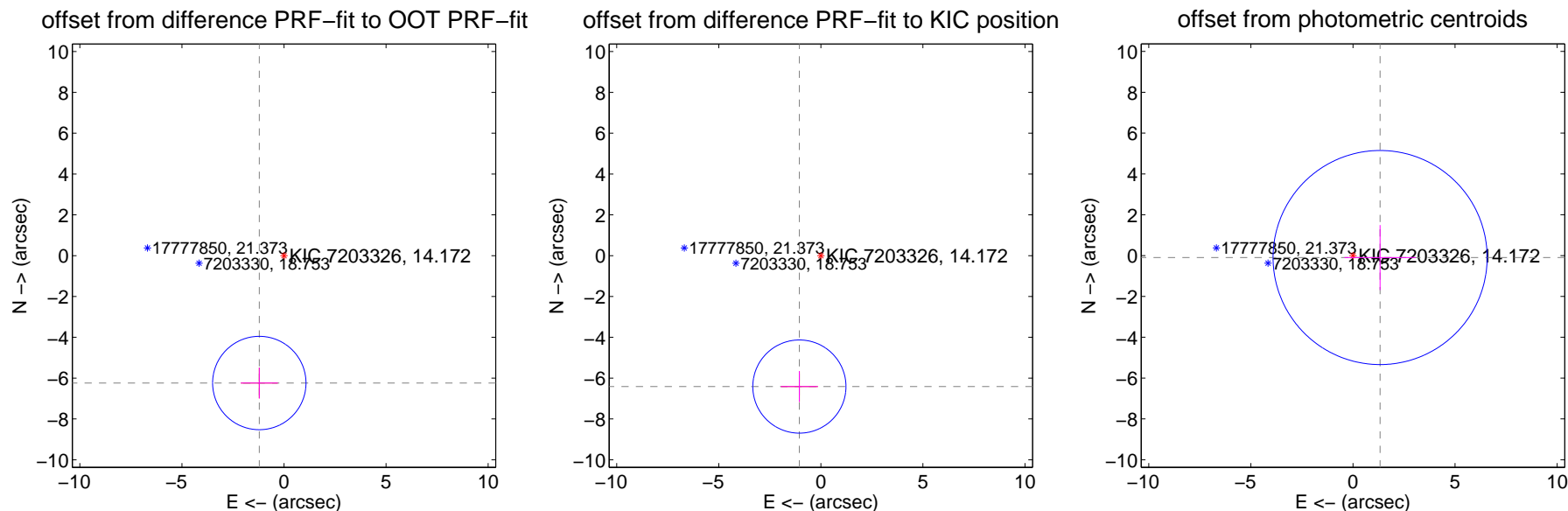
DV Centroid Data

Supplemental centroid analysis for 007203326-01. Kepler magnitude: 14.17. Transit SNR 6.21

There are 0 quarters with good PRF difference image offsets

The direct PRF centroid is offset from the target star catalog position by about 0.24 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	6.356 ± 0.762	8.34	1.210 ± 0.907	-6.240 ± 0.756
PRF-fit source offset from KIC position	6.499 ± 0.761	8.54	1.051 ± 0.907	-6.414 ± 0.756
photometric centroid source offset	1.33 ± 1.75	0.76	-1.33 ± 1.75	-0.10 ± 1.59



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.

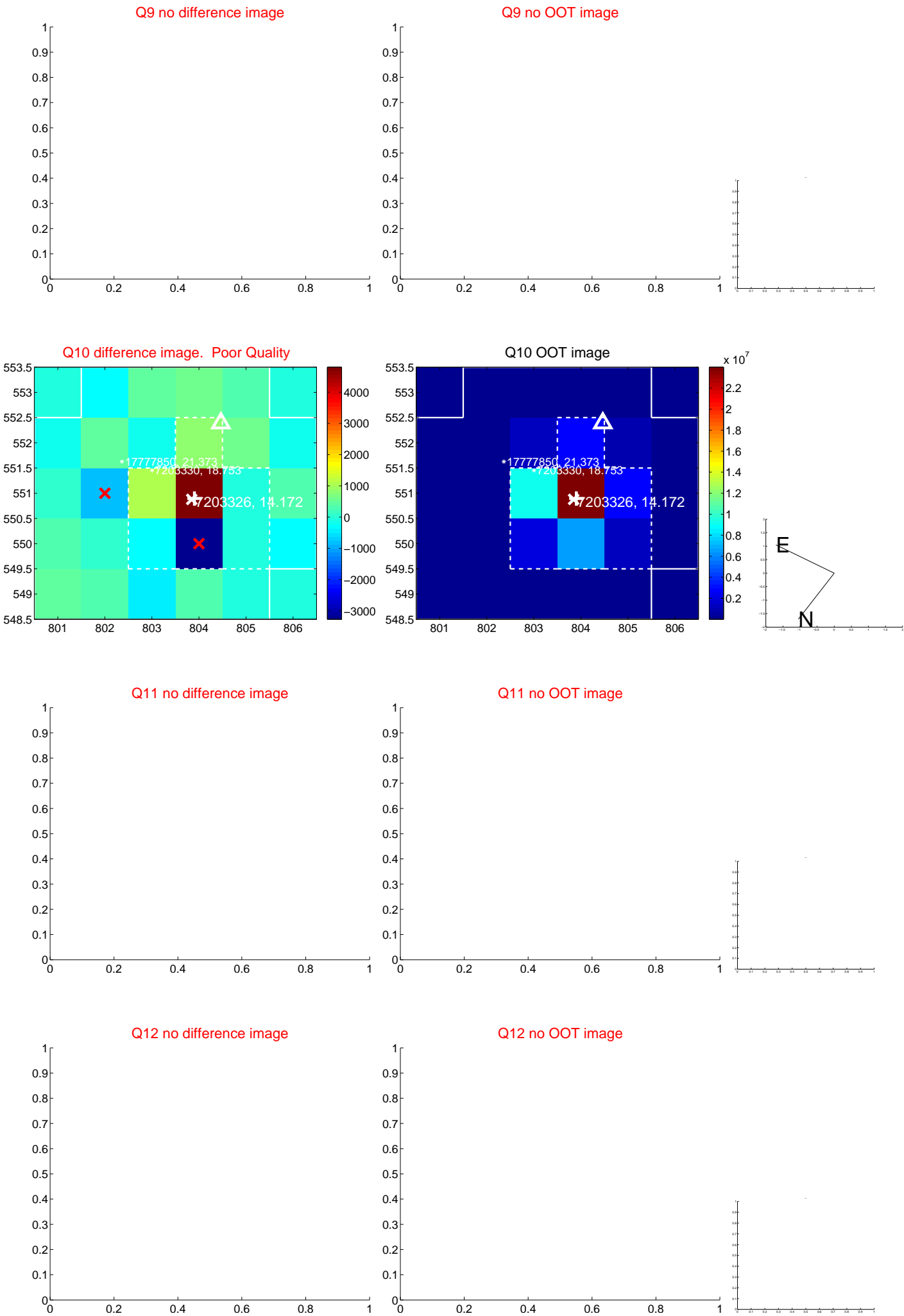
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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



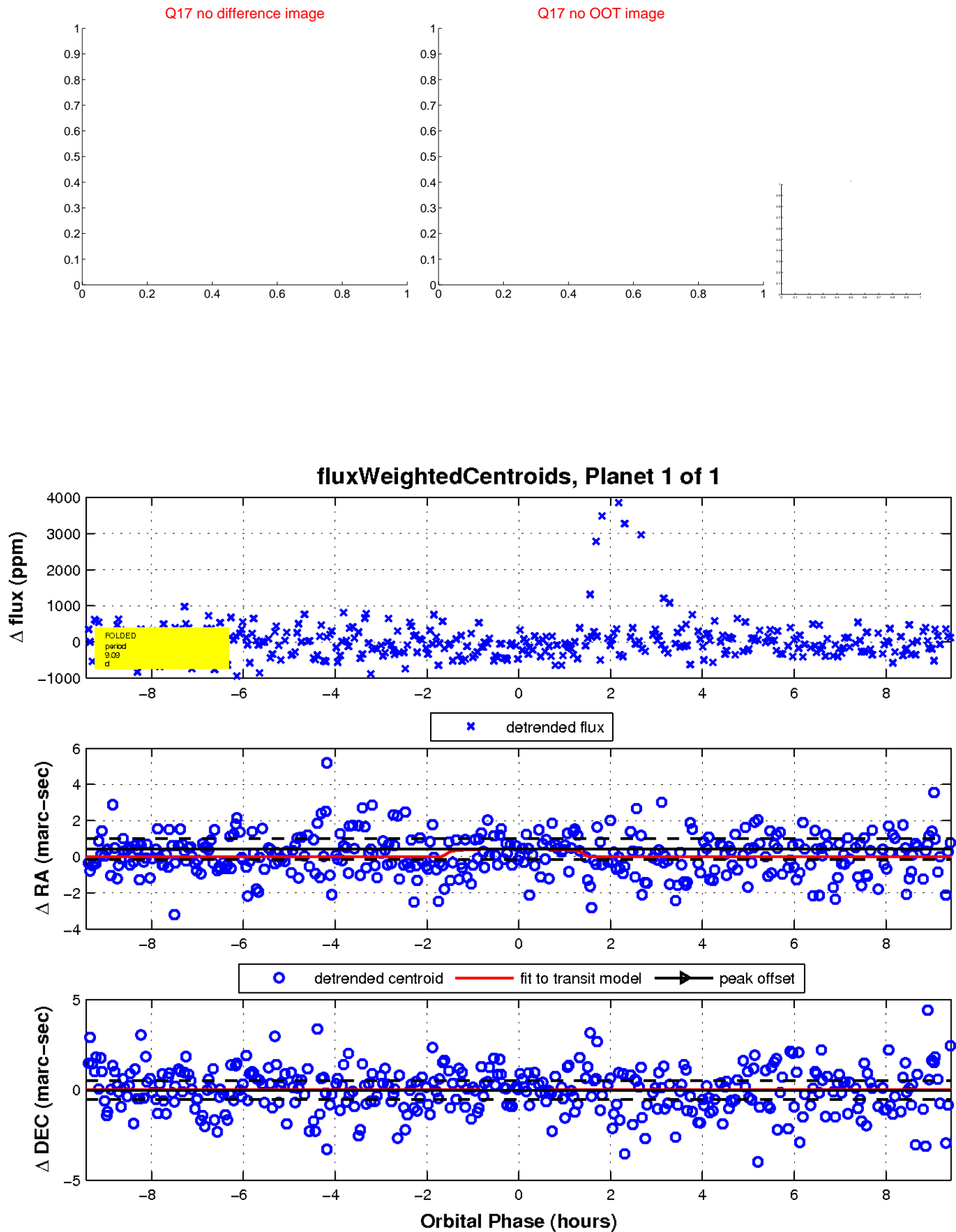
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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.



UKIRT Image

Declination

