

KIC 009710669

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})
009710669-01	OBS	No	367.219241	134.562878	1458.1	13.364	8.3	8.3	1.08	6116	4.17	1.31

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
009710669-01	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.

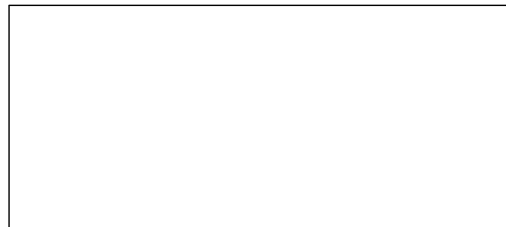
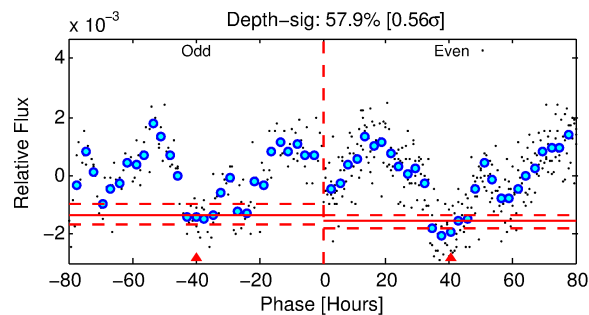
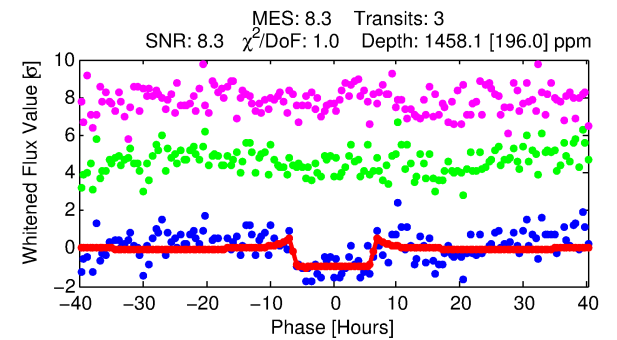
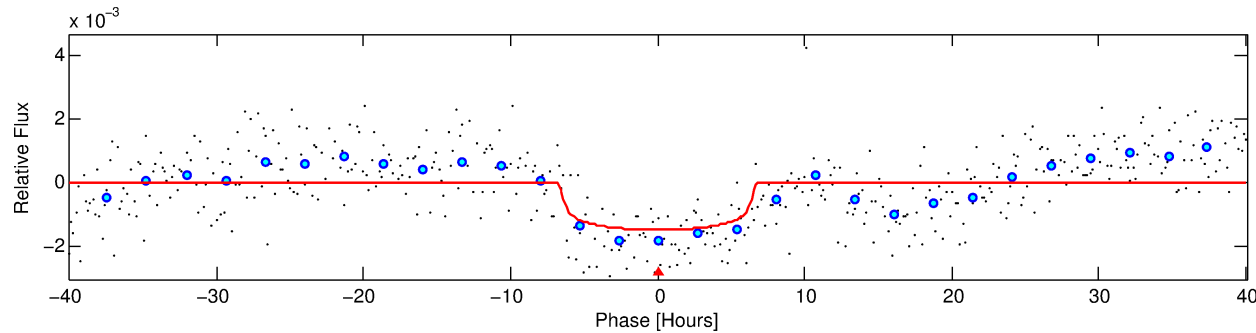
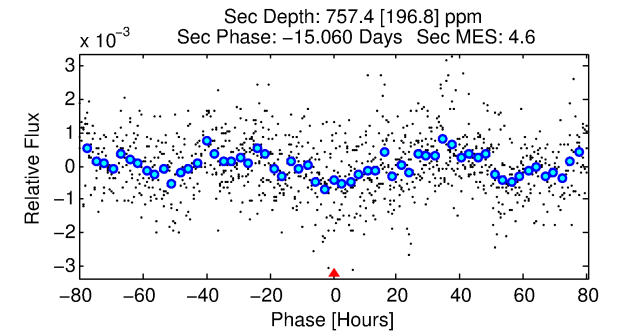
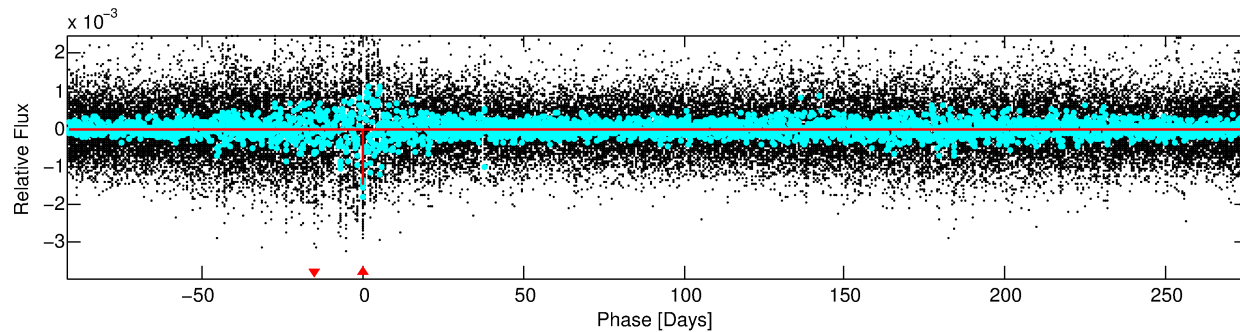
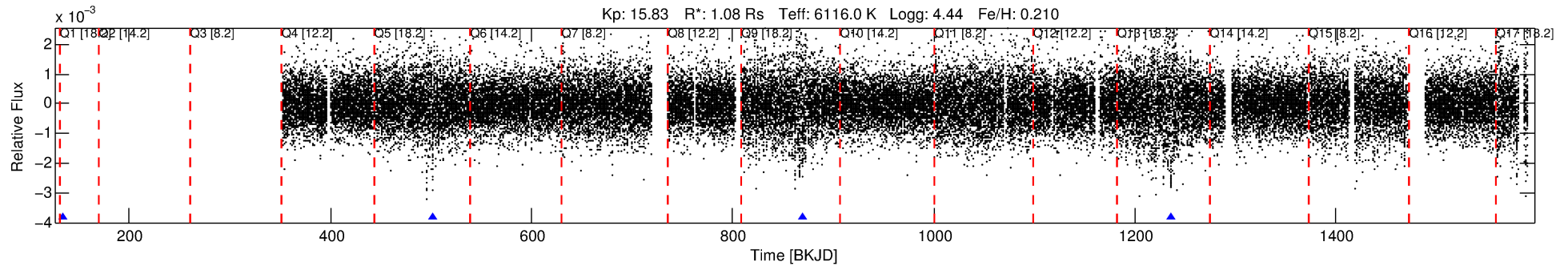
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 009710669-01

No Significant Match Found

DV One-Page Summary

KIC: 9710669 Candidate: 1 of 1 Period: 367.219 d



DV Fit Results:

Period = 367.21924 [0.01154] d
Epoch = 134.5629 [0.0247] BKJD
Rp/R* = 0.0352 [0.0162]
a/R* = 205.50 [431.28]
b = 0.34 [5.55]
Seff = 1.31 [0.52]
Teq = 273 [27] K
Rp = 4.17 [2.26] Re
a = 1.0609 [0.2602] AU
Ag = 26979.83 [27592.69] [0.98σ]
Teffp = 5404 [1312] K [3.91σ]

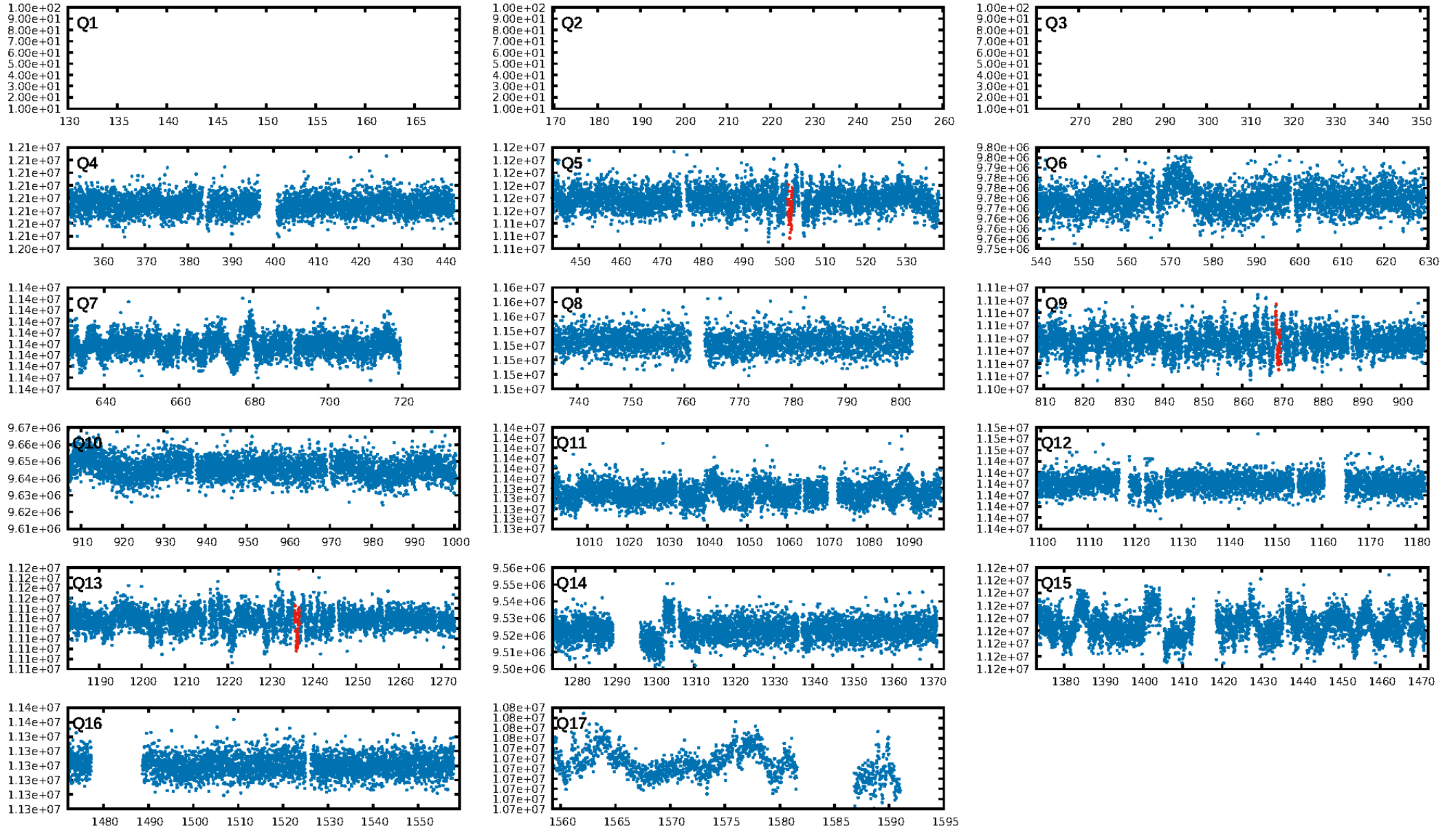
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: 5.1%
ModelChiSquareGof-sig: 99.8%
Bootstrap-pfa: 5.69e-10
RollingBand-fgt: 1.00 [3/3]
GhostDiagnostic-chr: -0.8636
Centroid-sig: 3.1%
Centroid-so: 3.117 arcsec [1.52σ]
OotOffset-rm: N/A
KicOffset-rm: N/A
OotOffset-st: 0/0/0/0 [0]
KicOffset-st: 0/0/0/0 [0]
DiffImageQuality-fgm: N/A
DiffImageOverlap-fno: 1.00 [3/3]

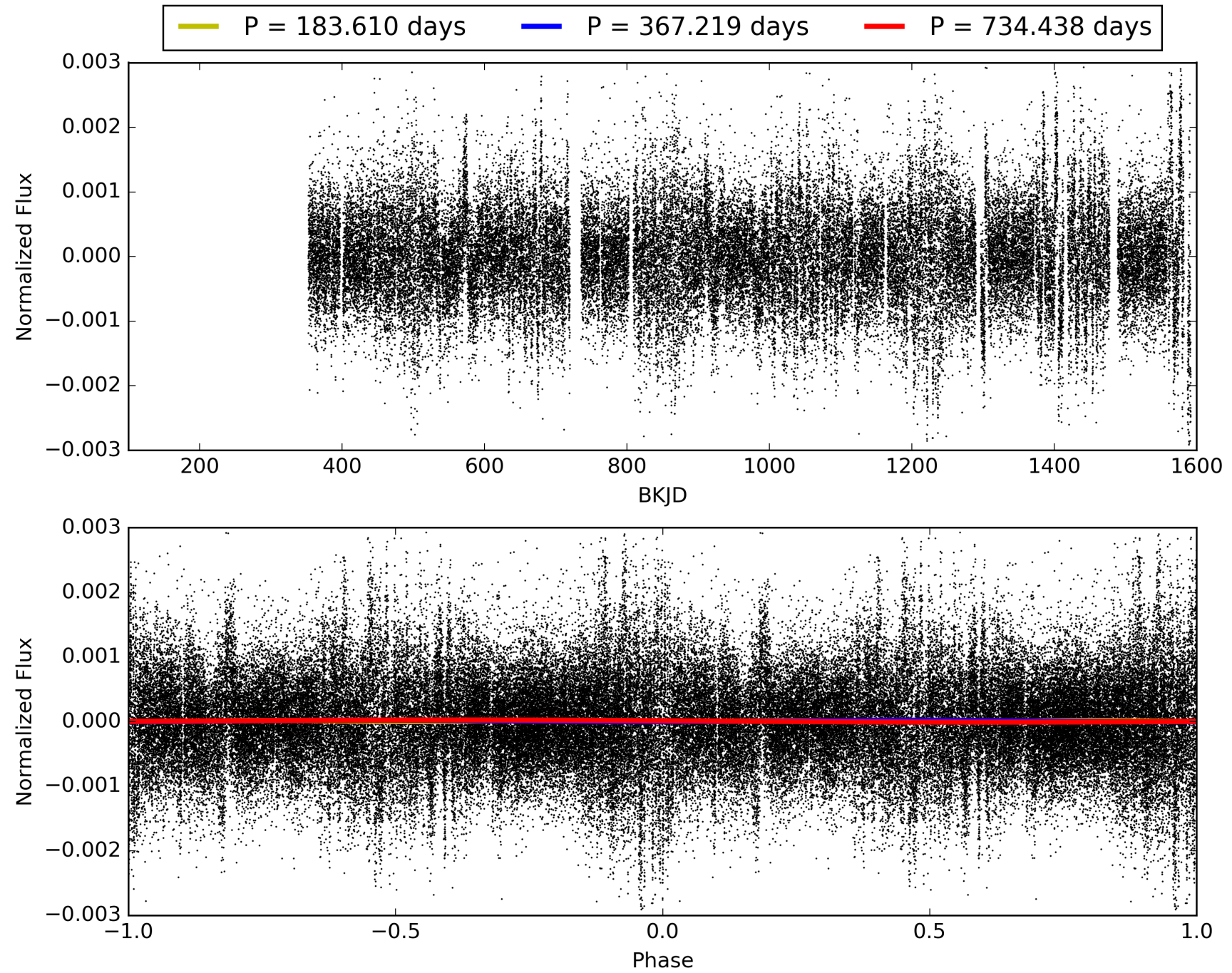
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 30-Jan-2016 12:21:47 Z

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

TCE 009710669-01, PDC Light Curves

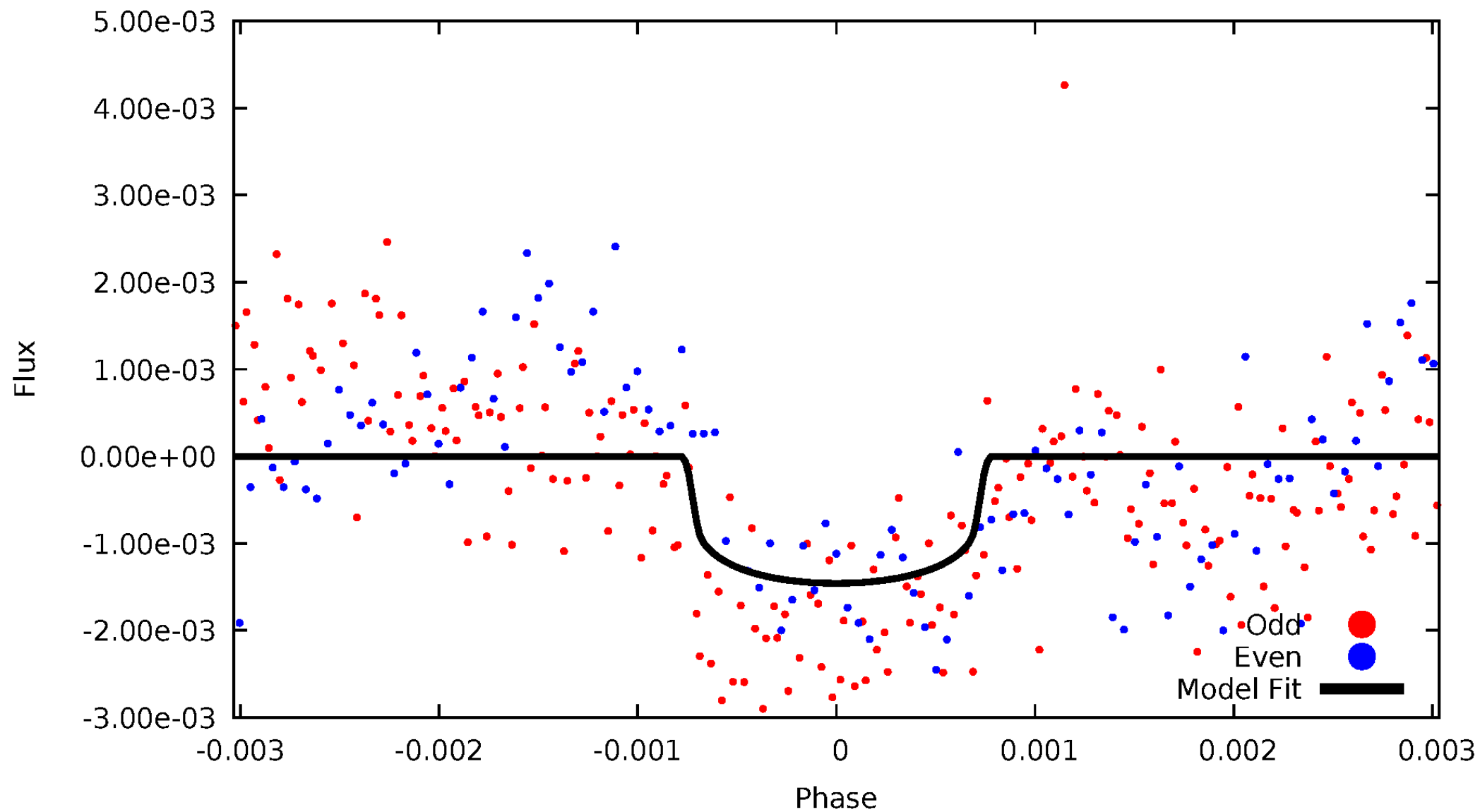


TCE 009710669-01



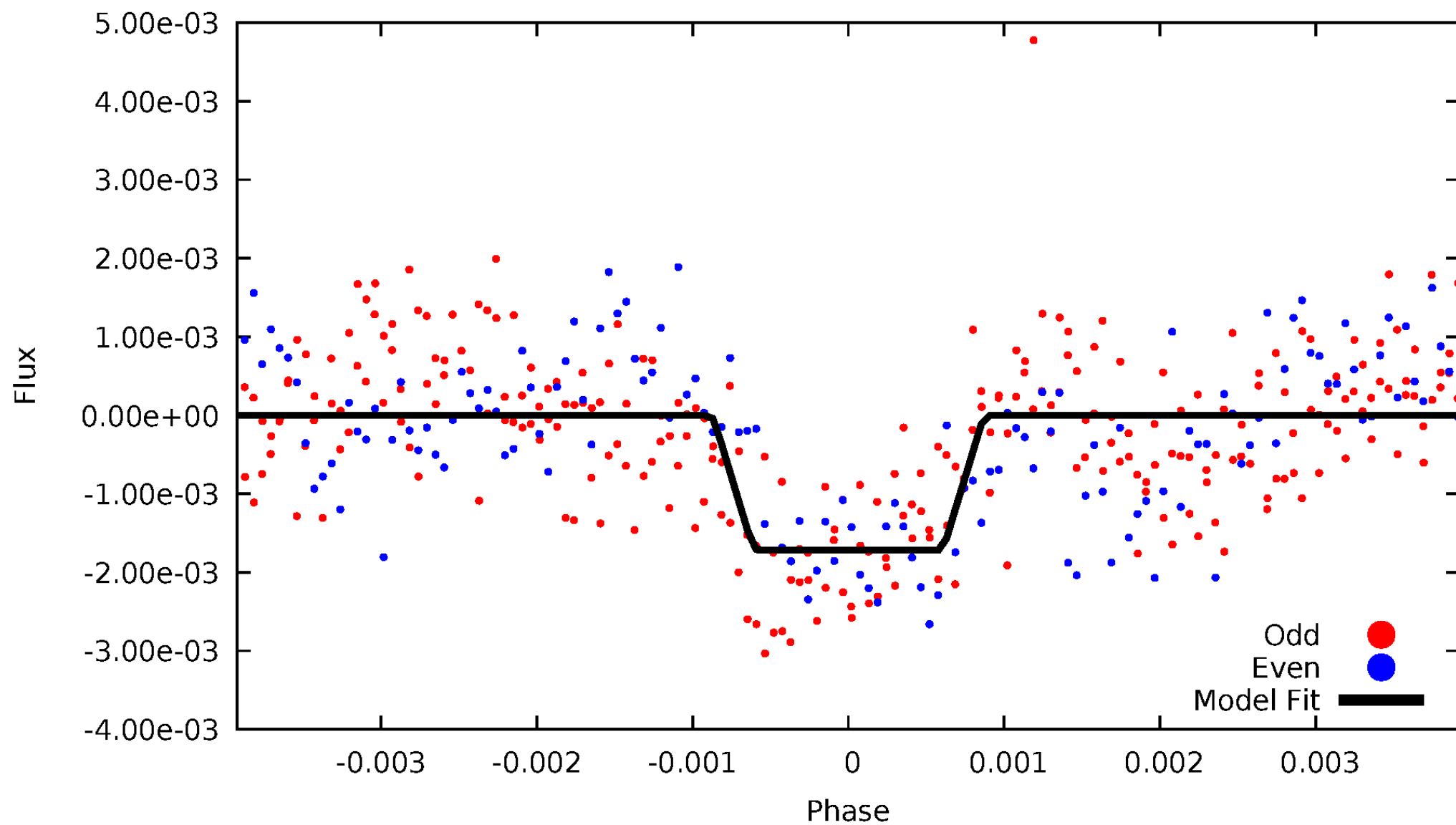
DV Odd/Even

TCE 009710669-01



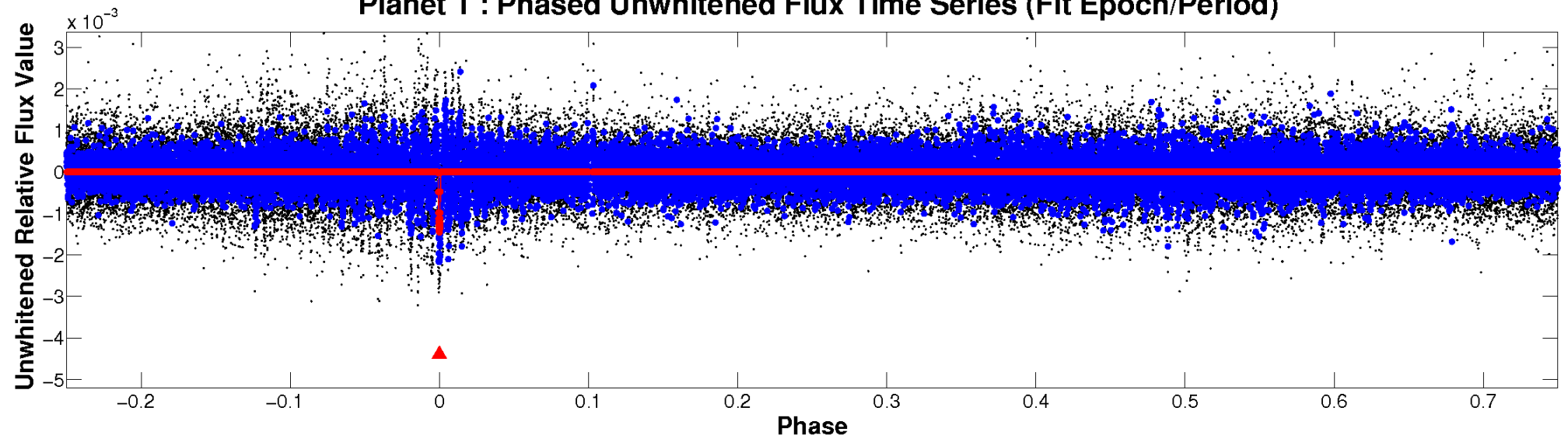
ALT Odd/Even

TCE 009710669-01

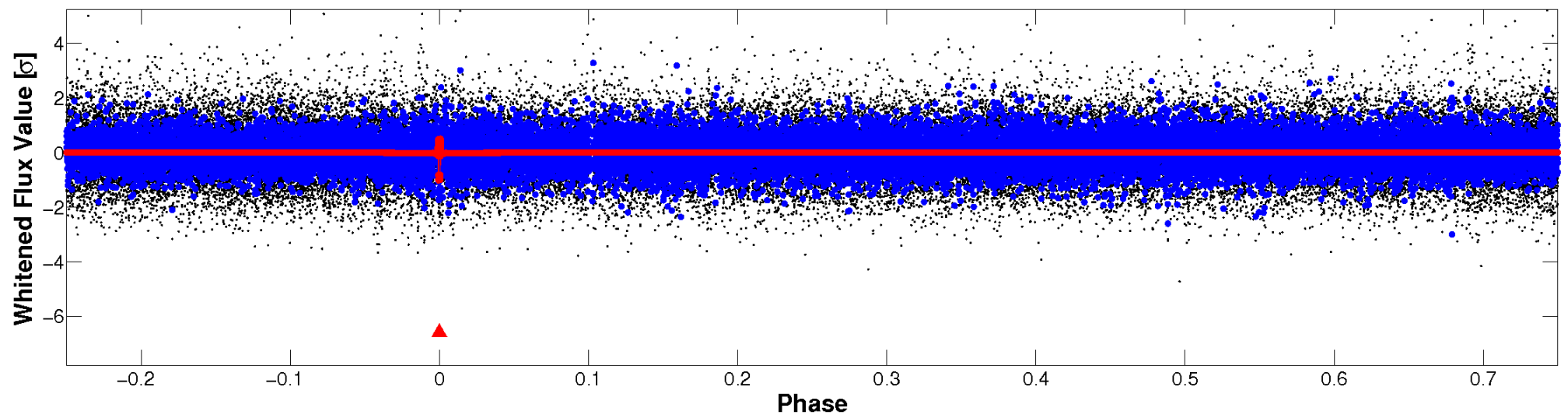


Non-Whitened Vs. Whitened Light Curve

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

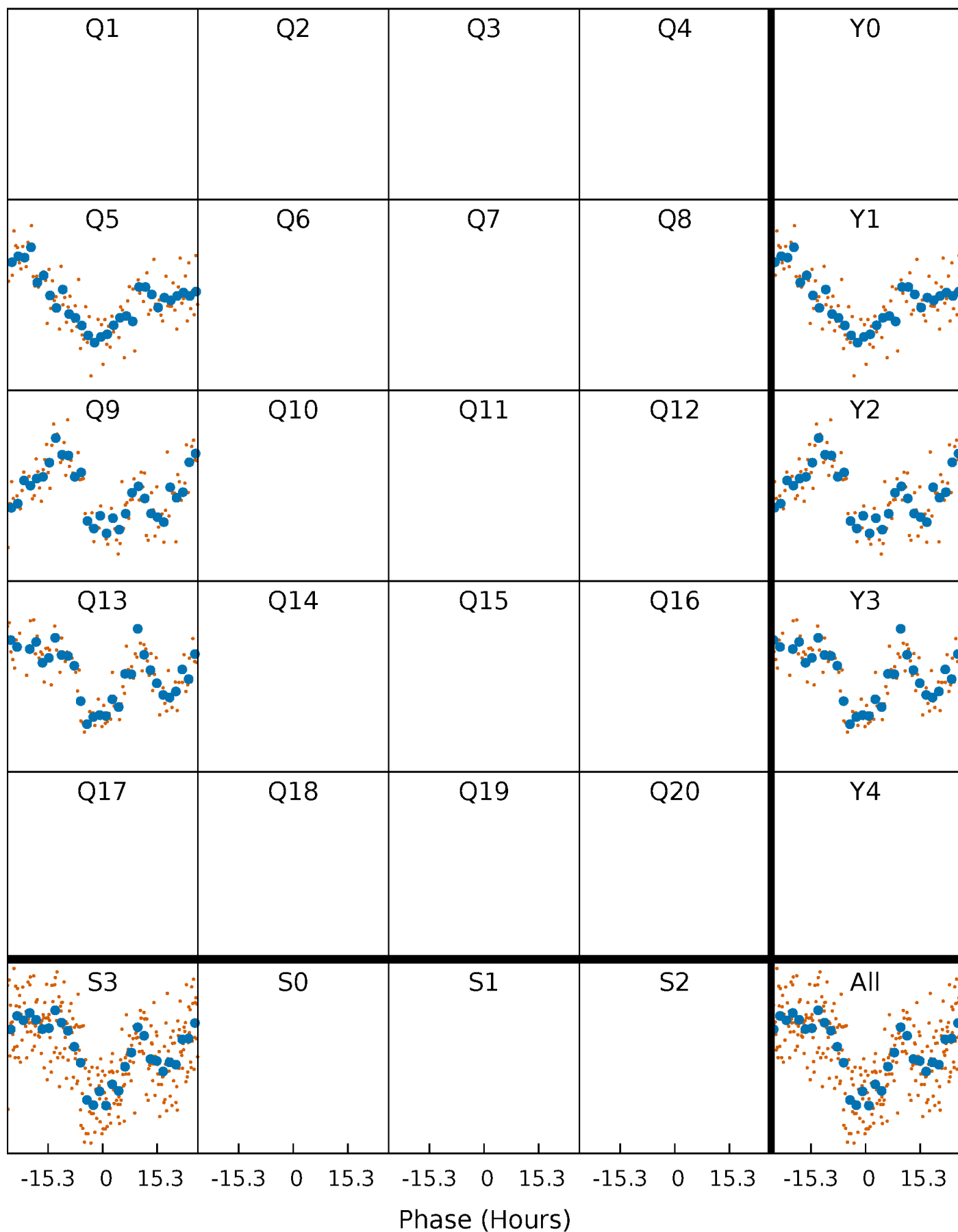


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



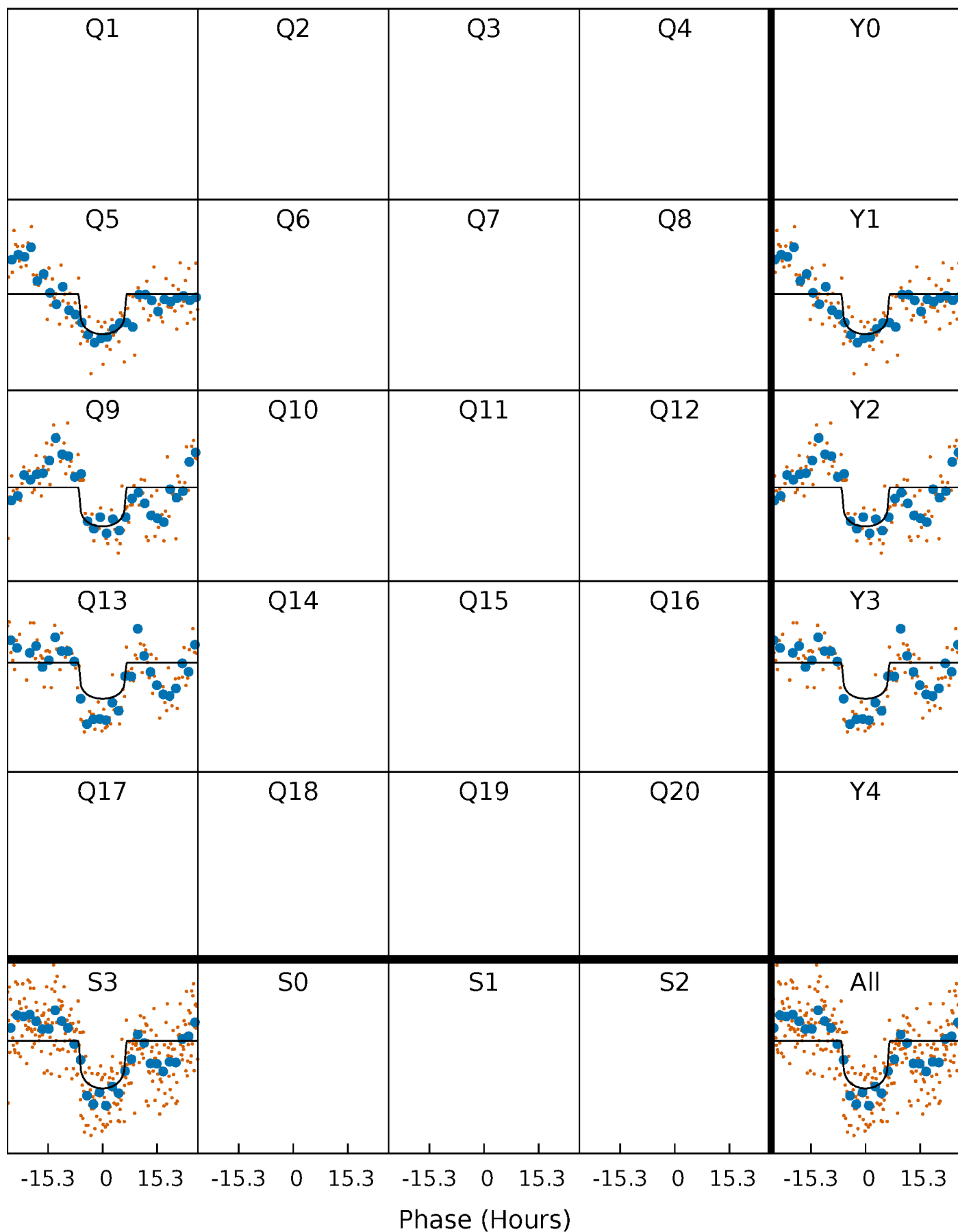
PDC Quarter-Phased Transit Curves

TCE 009710669-01 P=367.219241 Days $T_0=134.562878$ (BKJD)



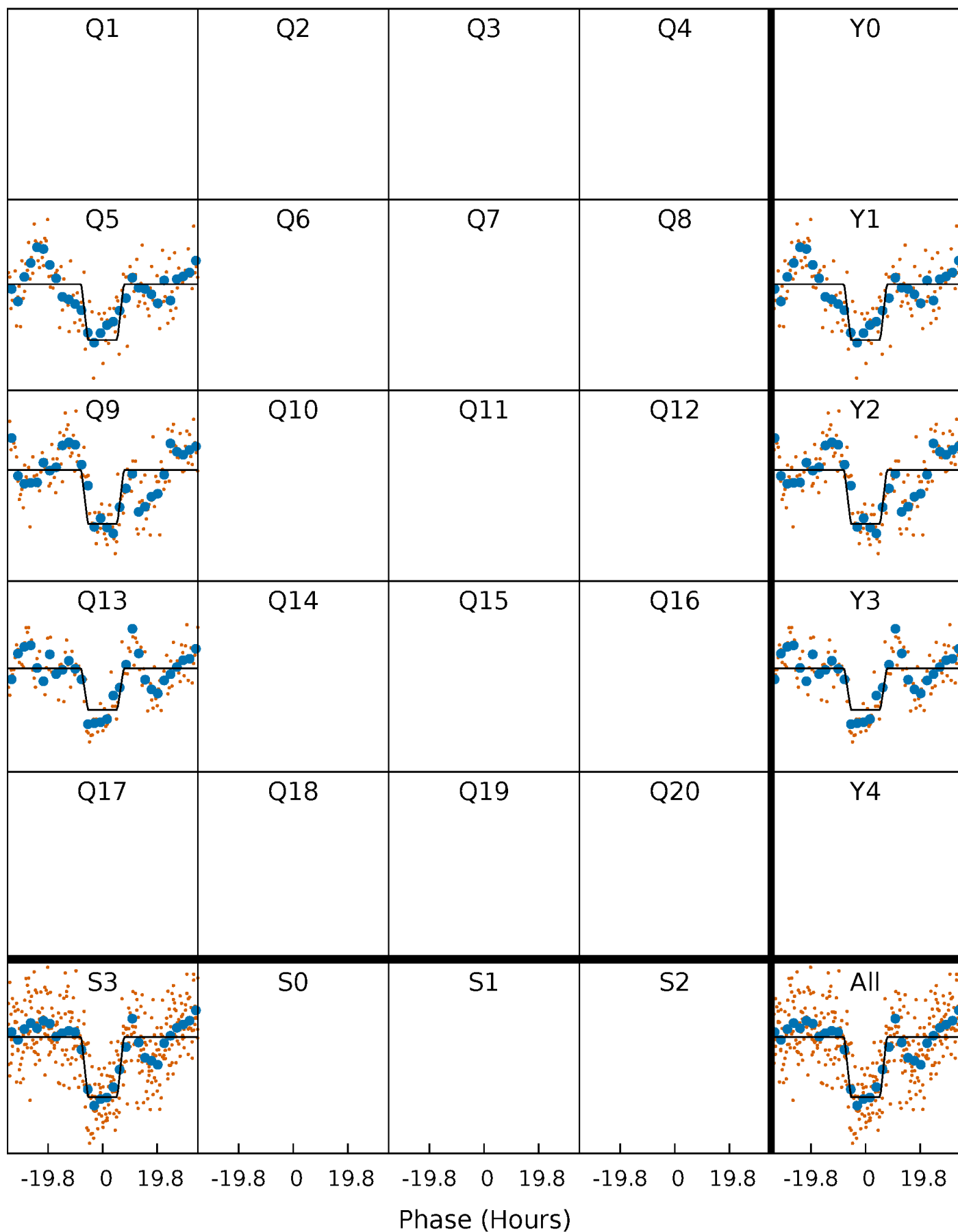
DV Quarter-Phased Transit Curves

TCE 009710669-01 $P=367.219241$ Days $T_0=134.562878$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

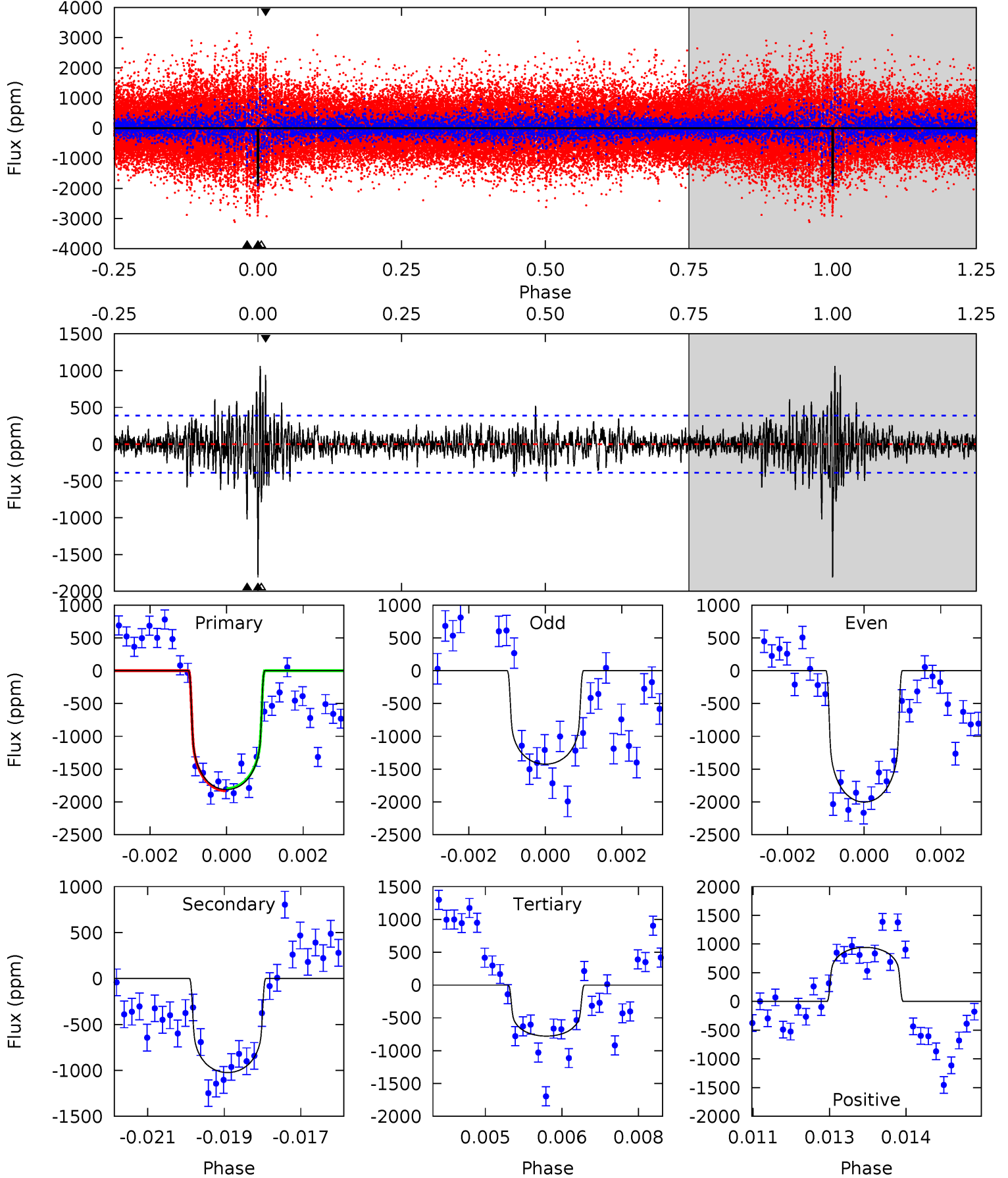
TCE 009710669-01 P=367.211507 Days $T_0=134.571000$ (BKJD)



DV Model-Shift Uniqueness Test

009710669-01, P = 367.219241 Days, E = 134.562878 Days

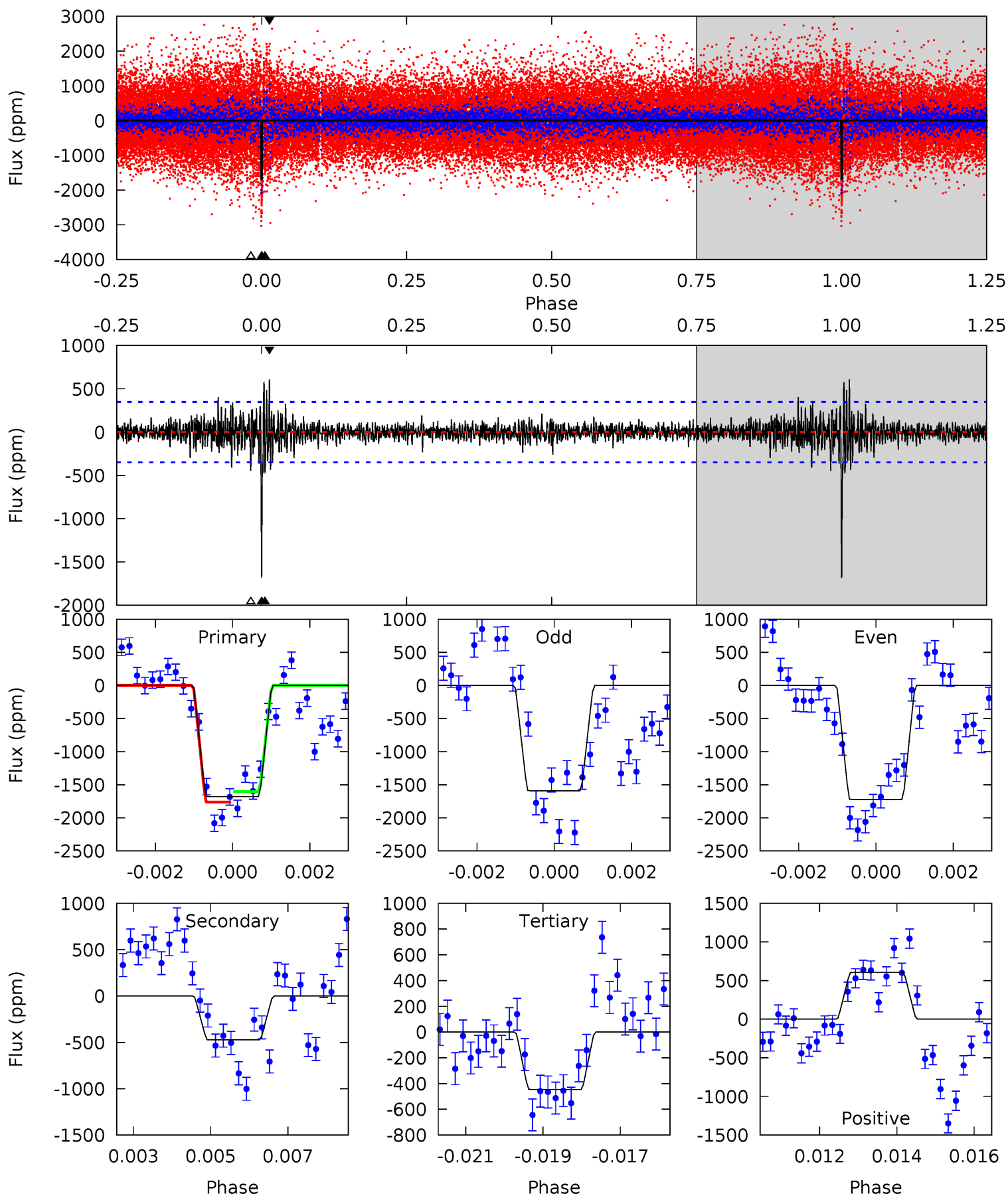
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
25.1	14.2	10.8	13.0	5.37	3.16	2.14	14.3	12.0	3.40	1.13	3.73	1.09	0.37	0.24



Alt Model-Shift Uniqueness Test

009710669-01, P = 367.211507 Days, E = 134.571000 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
25.9	7.28	6.87	9.32	5.35	3.13	1.27	19.0	16.5	0.41	-2.04	0.96	1.05	0.26	1.23



Stellar Parameters For KIC 009710669

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	M (M_{\odot})	p_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	6116^{+190}_{-253}	$4.440^{+0.050}_{-0.200}$	$0.210^{+0.200}_{-0.350}$	$1.084^{+0.311}_{-0.133}$	$1.181^{+0.136}_{-0.181}$	$1.307^{+0.360}_{-0.678}$
	+3%/-4%	+1%/-5%	+95%/-167%	+29%/-12%	+12%/-15%	+28%/-52%
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 009710669-01 / KOI

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	-1024 ± 72	$4.39^{+2.03}_{-2.01}$	391^{+27}_{-23}	5793^{+2411}_{-863}	31642^{+84196}_{-16984}
Alt.	-473 ± 65	$5.13^{+2.24}_{-2.05}$	389^{+27}_{-21}	4599^{+1116}_{-580}	10839^{+19109}_{-5607}

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 $A_{obs} \gg 1.0$

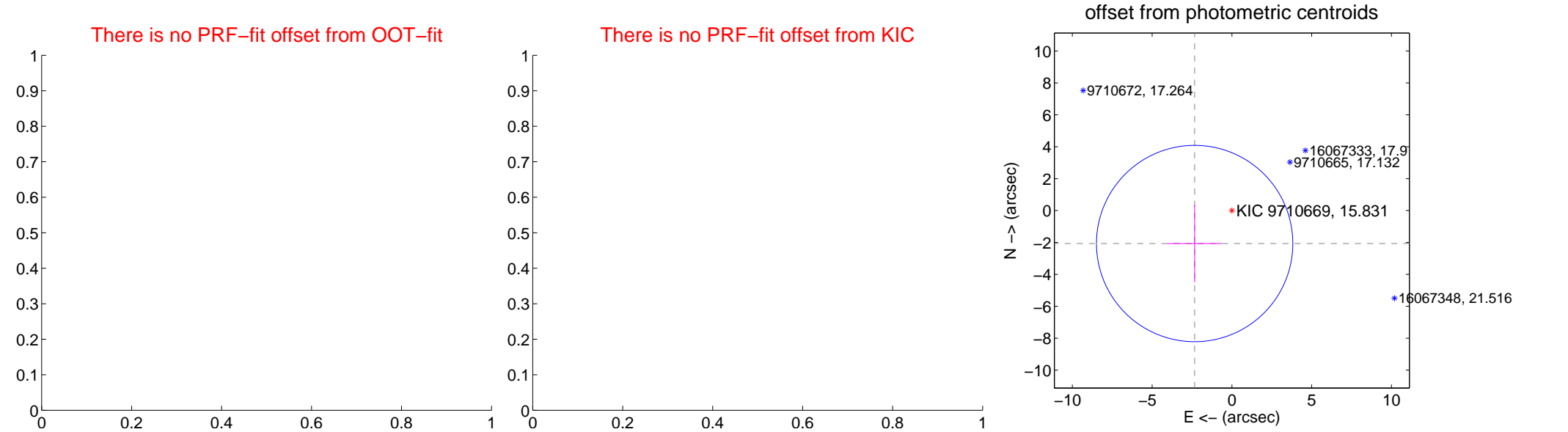
DV Centroid Data

Supplemental centroid analysis for 009710669-01. Kepler magnitude: 15.83. Transit SNR 8.27

There are 0 quarters with good PRF difference image offsets

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

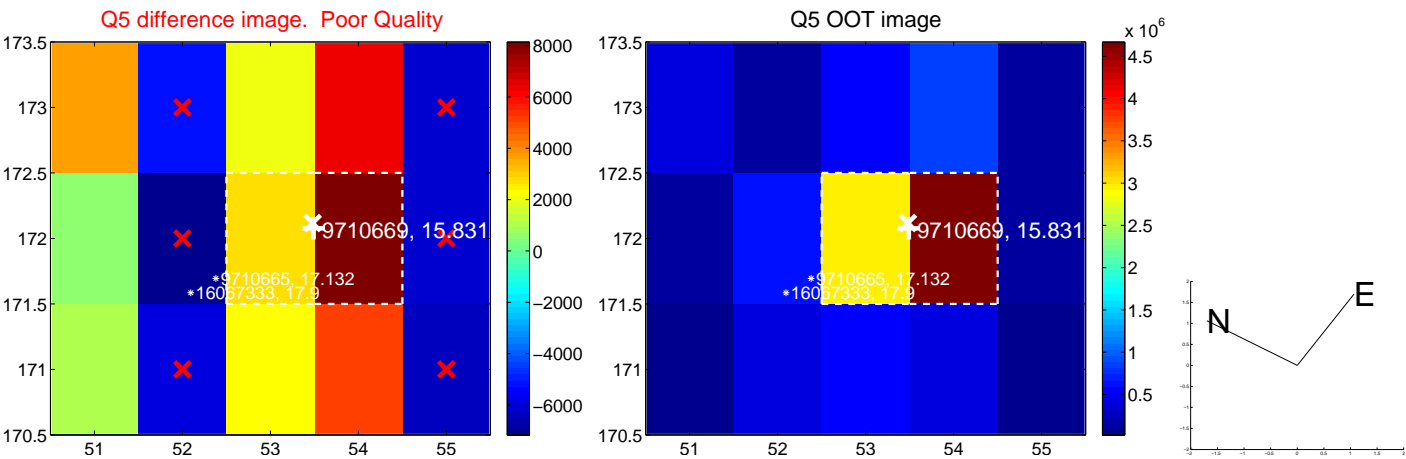
	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	—	—	—	—
PRF-fit source offset from KIC position	—	—	—	—
photometric centroid source offset	3.12 ± 2.05	1.52	2.33 ± 1.70	-2.07 ± 2.43



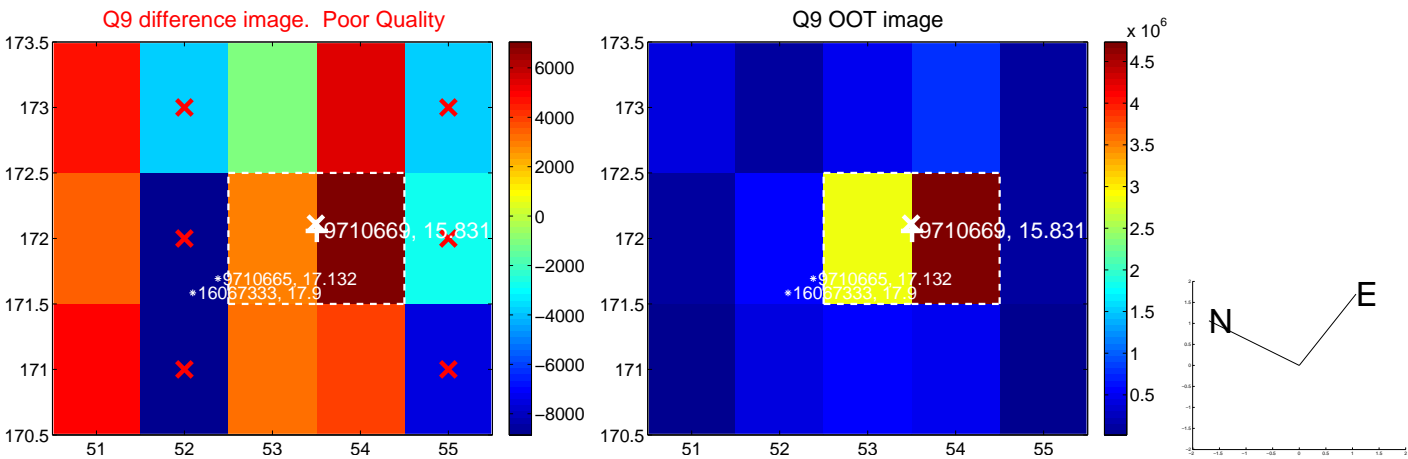
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



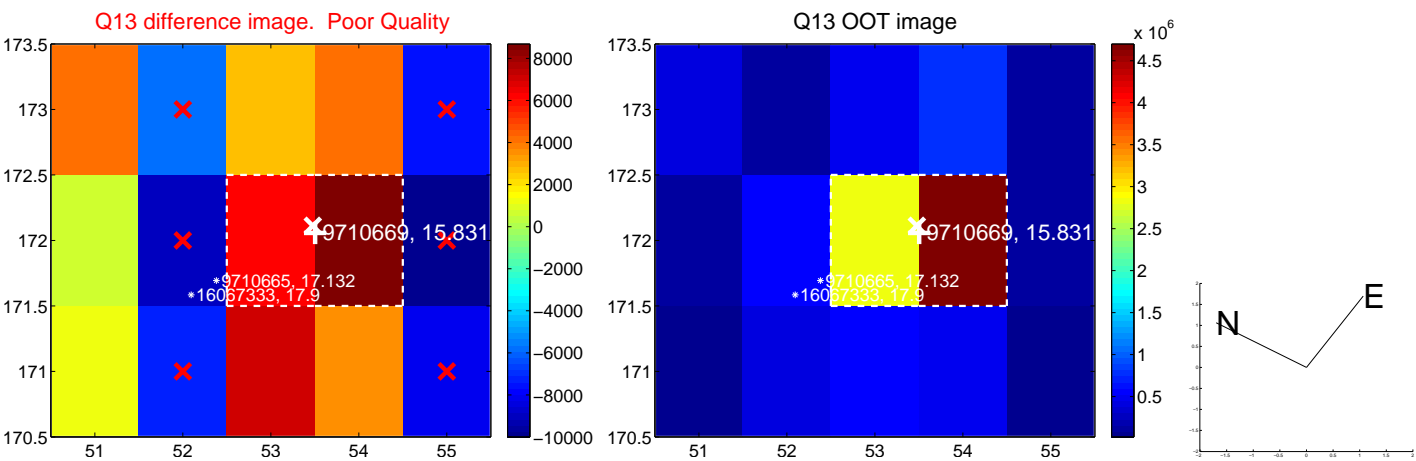
white ×: KIC target position; +: OOT centroid; △: difference centroid. red ×: large negative pixel value.



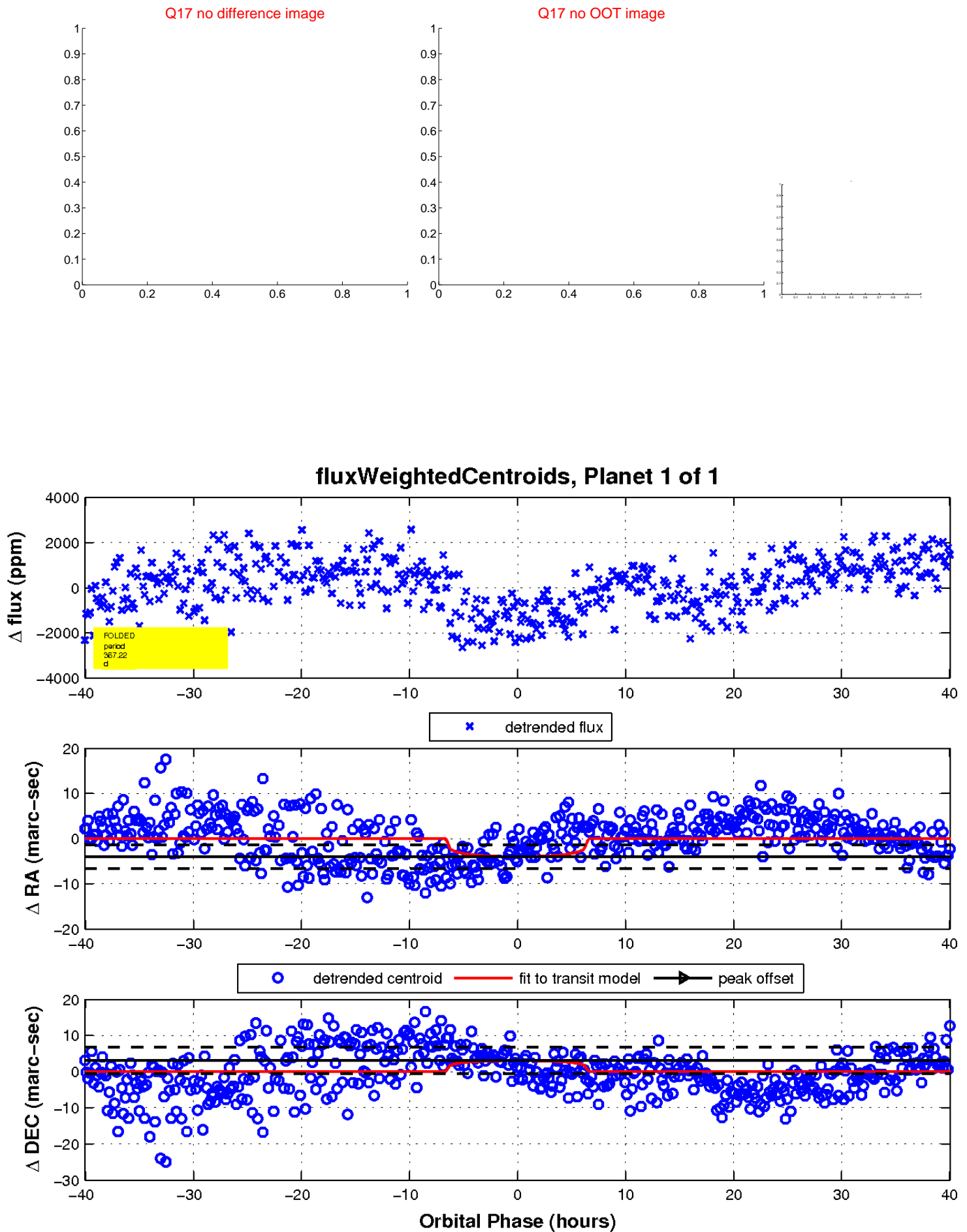
white ×: KIC target position; +: OOT centroid; △: difference centroid. red ×: large negative pixel value.



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



UKIRT Image

Declination

