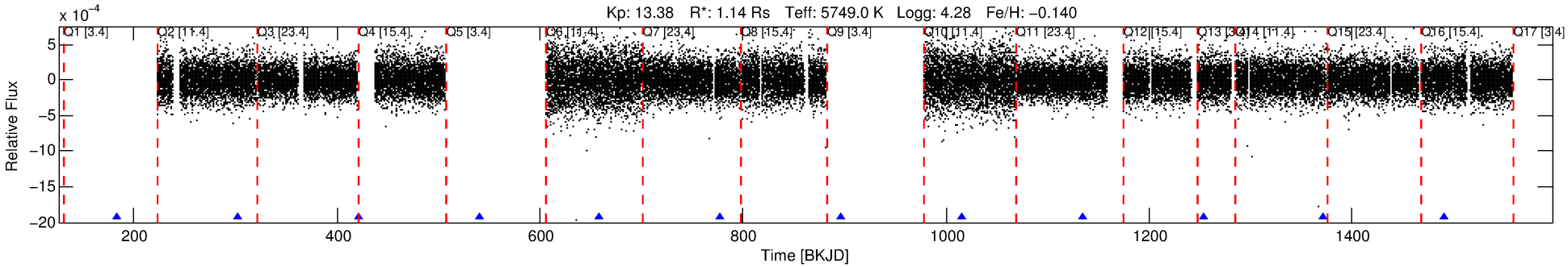
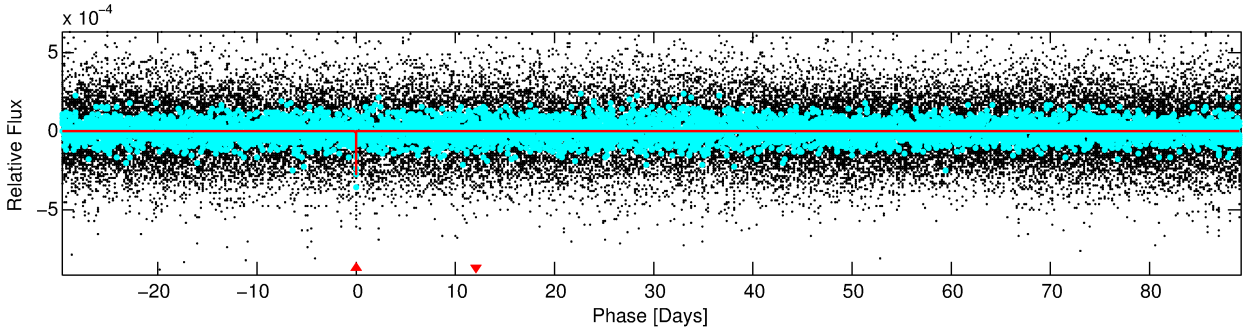
WARNING: THIS DATA IS SIMULATED, NOT OBSERVED

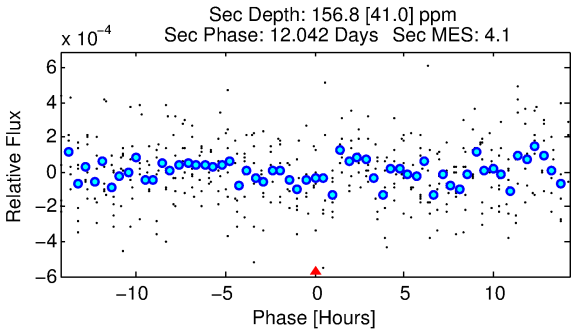
DV One-Page Summary

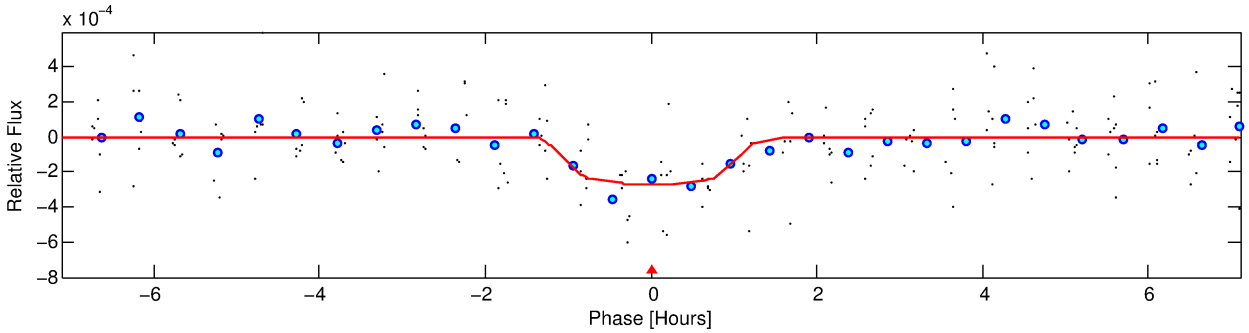
KIC: 5937733 Candidate: 1 of 1 Period: 118.862 d

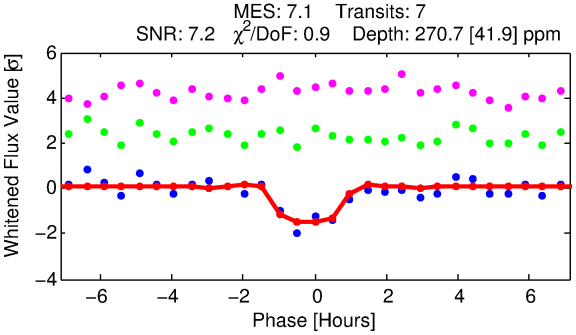
WARNING: THIS DATA IS SIMULATED, NOT OBSERVED

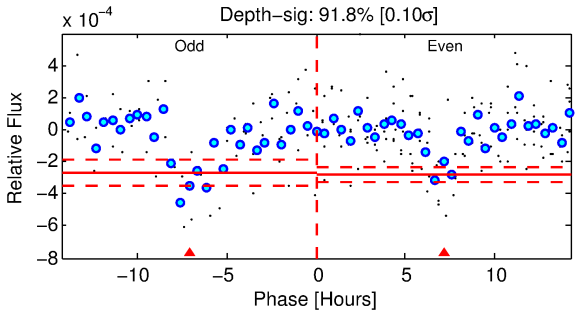












DV Fit Results:

Period = 118.86231 [0.00146] d
Epoch = 183.3229 [0.0105] BKJD
Rp/R* = 0.0177 [0.0176]
a/R* = 191.98 [907.26]
b = 0.89 [1.17]

Seff = 6.11 [2.46]
Teq = 401 [40] K
Rp = 2.21 [2.29] Re
a = 0.4575 [0.1169] AU

Ag = 3699.87 [7558.25] [0.49σ]
Teffp = 4834 [2427] K [1.83σ]

DV Diagnostic Results:

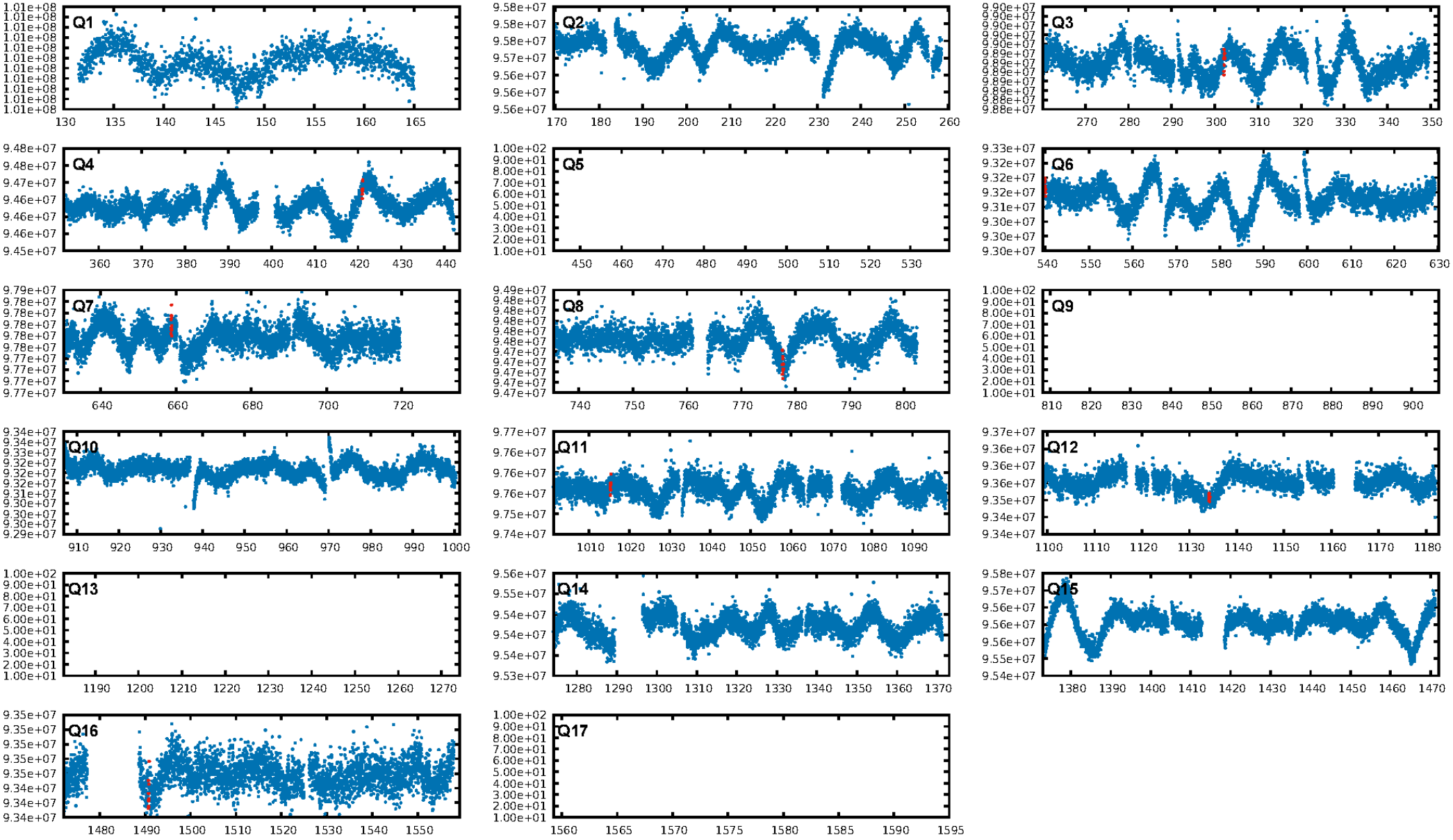
ShortPeriod−sig: N/A
LongPeriod−sig: N/A
ModelChiSquare2−sig: 87.6%
ModelChiSquareGof−sig: 99.2%
Bootstrap−pfa: 7.58e−12
RollingBand−fgt: N/A
GhostDiagnostic−chr: N/A

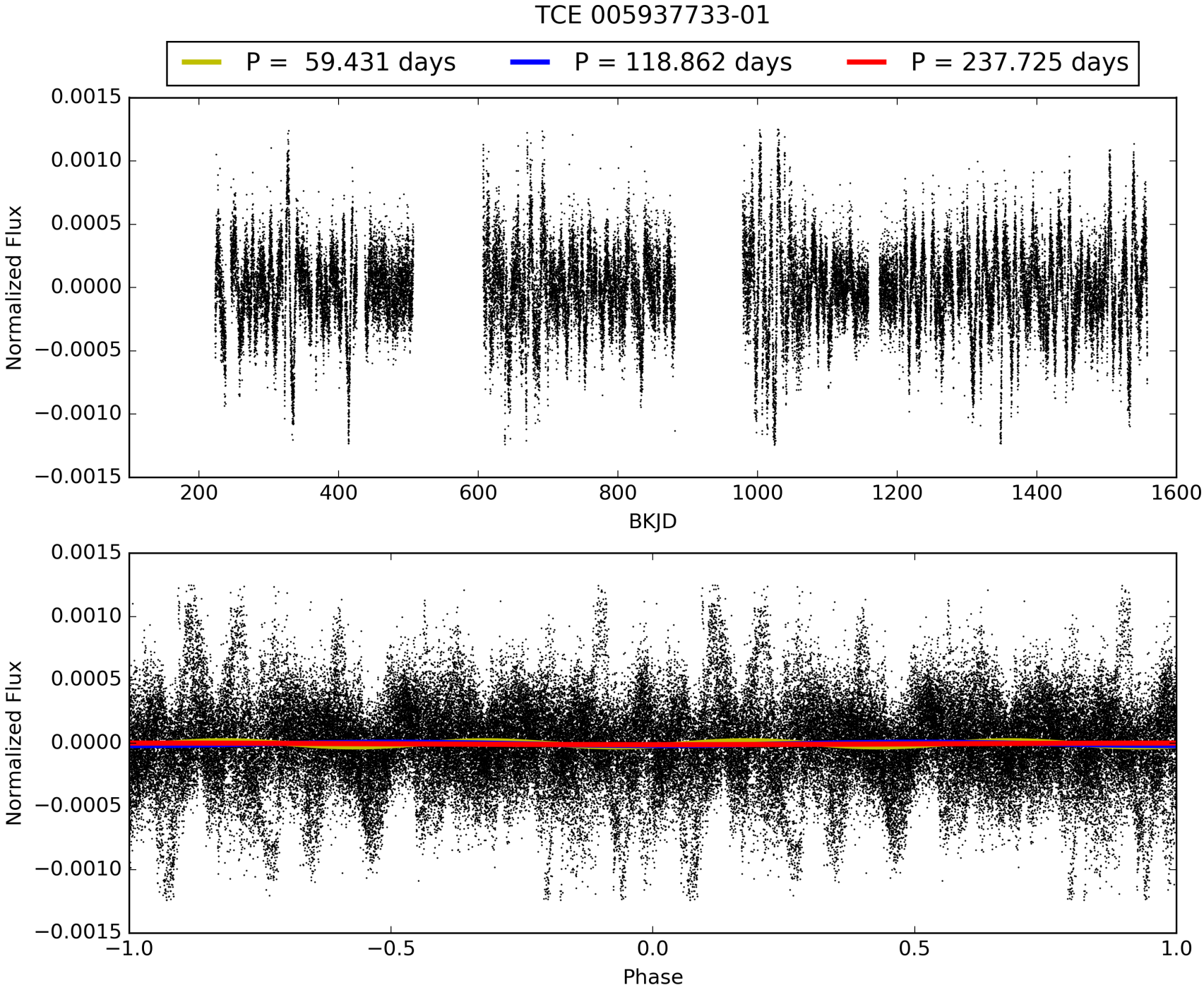
Centroid−sig: N/A
Centroid−so: N/A
OotOffset−rm: N/A
KicOffset−rm: N/A
OotOffset−st: 0/0/0/0 [0]
KicOffset−st: 0/0/0/0 [0]
DiffImageQuality−fgm: N/A
DiffImageOverlap−fno: N/A

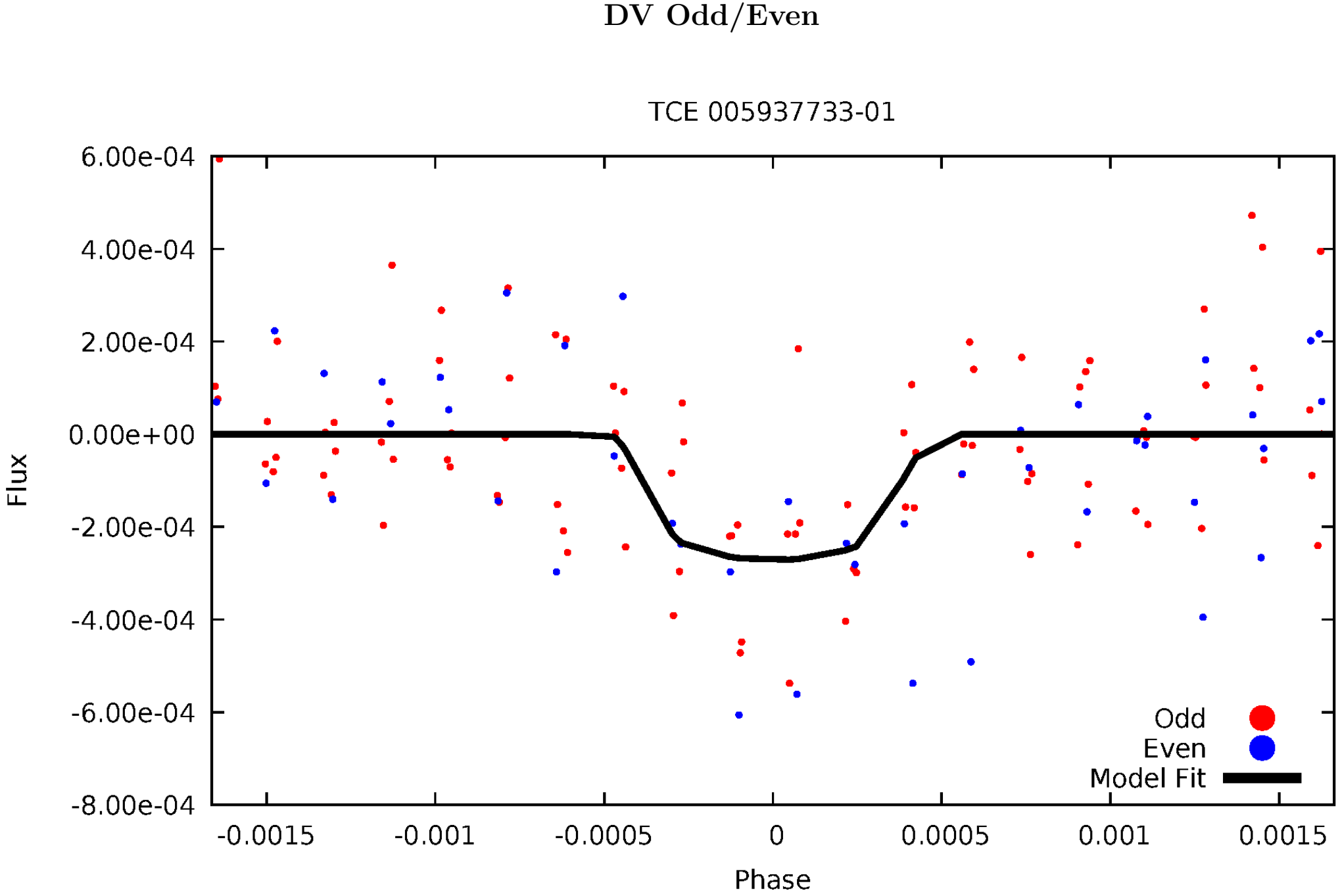
Software Revision: svn+ssh://murzim/repo/soc/branches/integ/ksop−2602@61285 −− Date Generated: 05−Jun−2016 11:18:51 Z

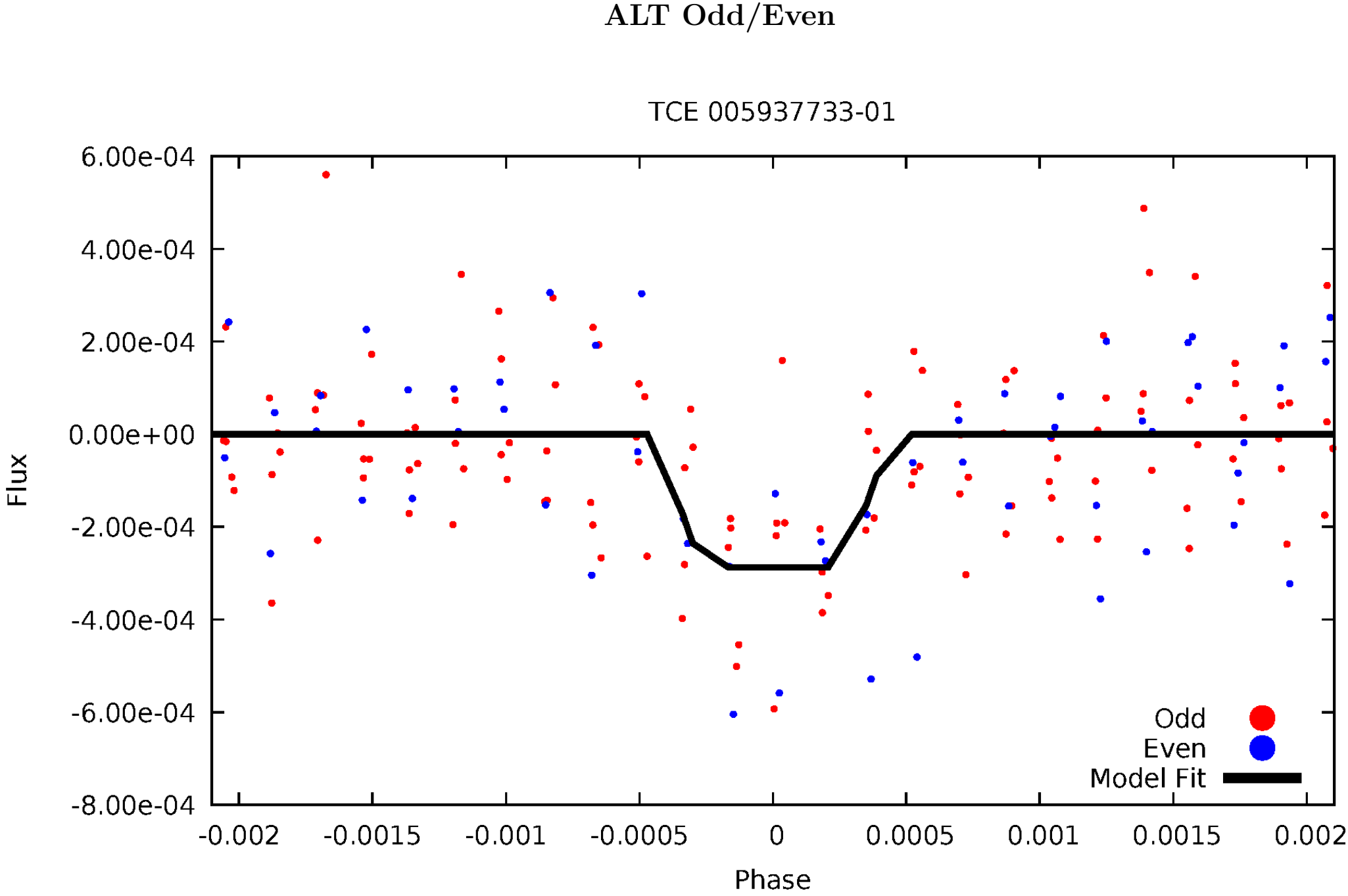
This Data Validation Report Summary was produced in the Kepler Science Operations Center Pipeline at NASA Ames Research Center

TCE 005937733-01, PDC Light Curves

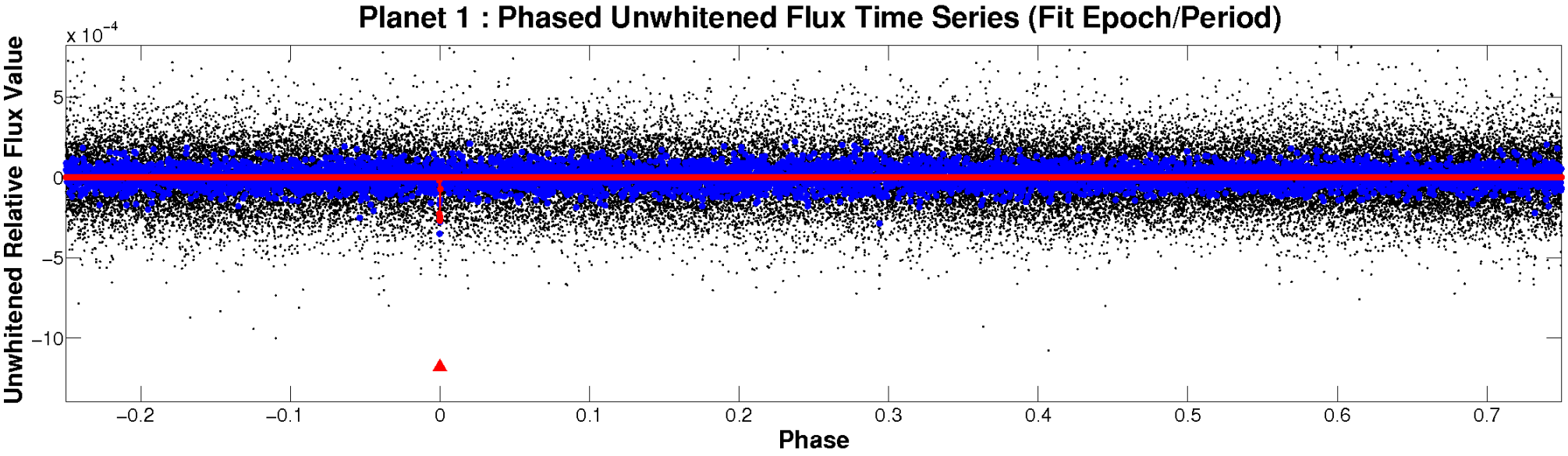


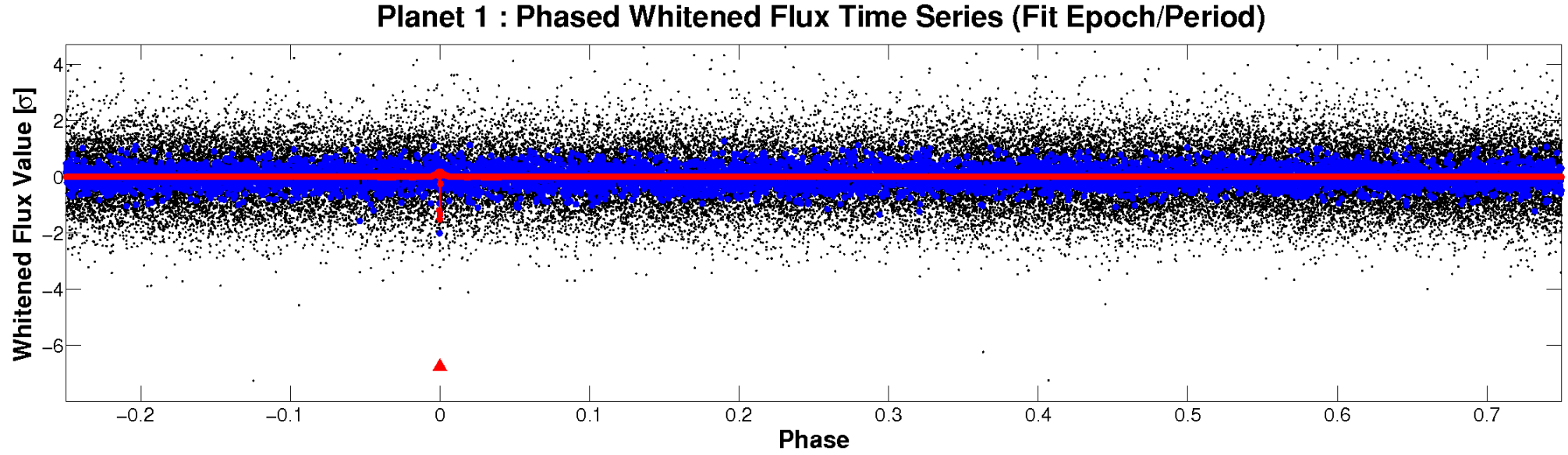

TCE 005937733-01
P = 59.431 days
P = 118.862 days
P = 237.725 days
Normalized Flux
0.0015
0.0010
0.0005
0.0000
−0.0005
−0.0010
−0.0015
200
400
600
800
1000
1200
1400
1600
BKJD
Normalized Flux
−1.0
−0.5
0.0
0.5
1.0
Phase


DV Odd/Even
TCE 005937733-01
6.00e-04
4.00e-04
2.00e-04
0.00e+00
-2.00e-04
-4.00e-04
-6.00e-04
-8.00e-04
Flux
-0.0015
-0.001
-0.0005
0
0.0005
0.001
0.0015
Phase
Odd
Even
Model Fit


ALT Odd/Even
TCE 005937733-01
6.00e-04
4.00e-04
2.00e-04
0.00e+00
-2.00e-04
-4.00e-04
-6.00e-04
-8.00e-04
Flux
-0.002
-0.0015
-0.001
-0.0005
0
0.0005
0.001
0.0015
0.002
Phase
Odd
Even
Model Fit

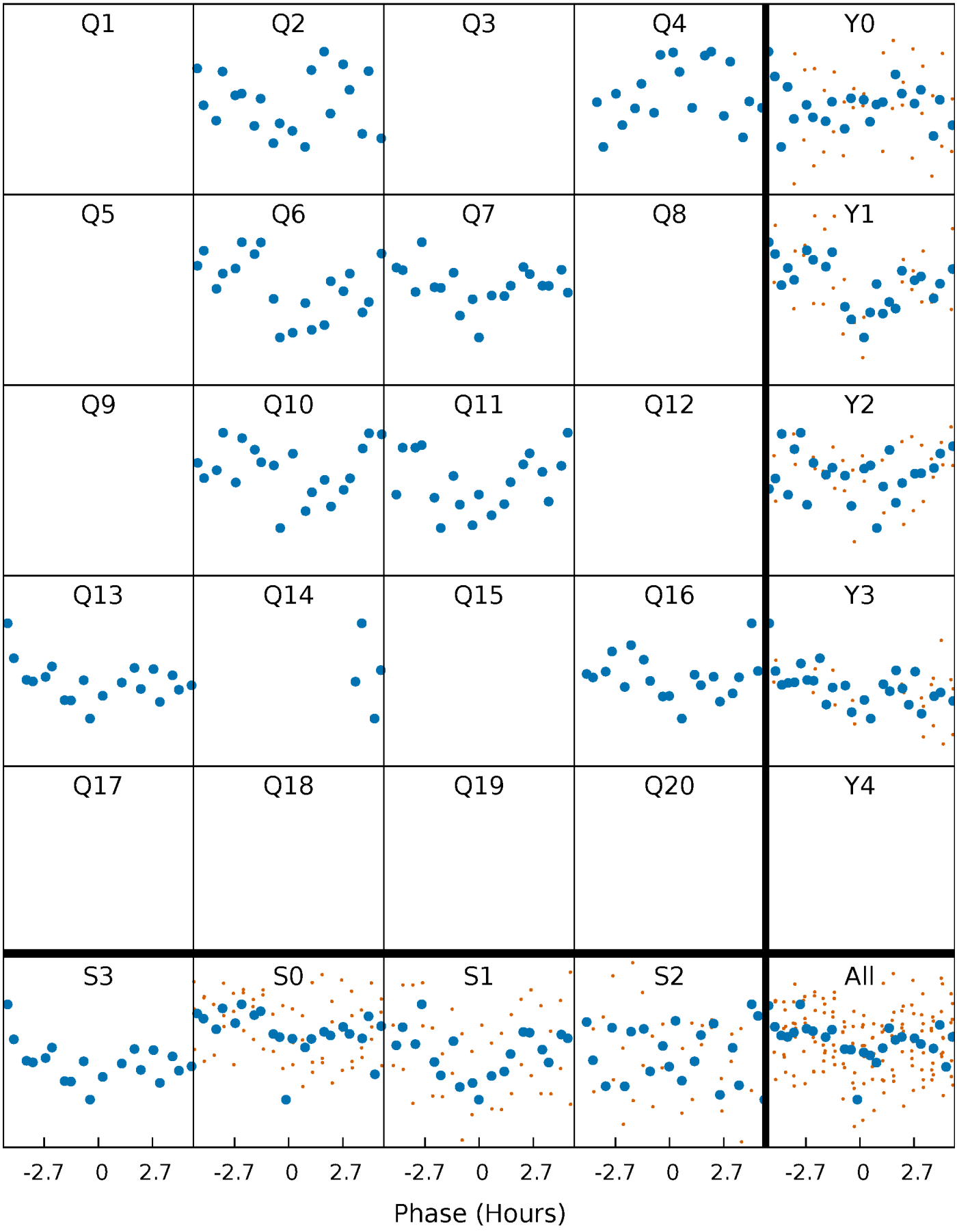
Non-Whitened Vs. Whitened Light Curve





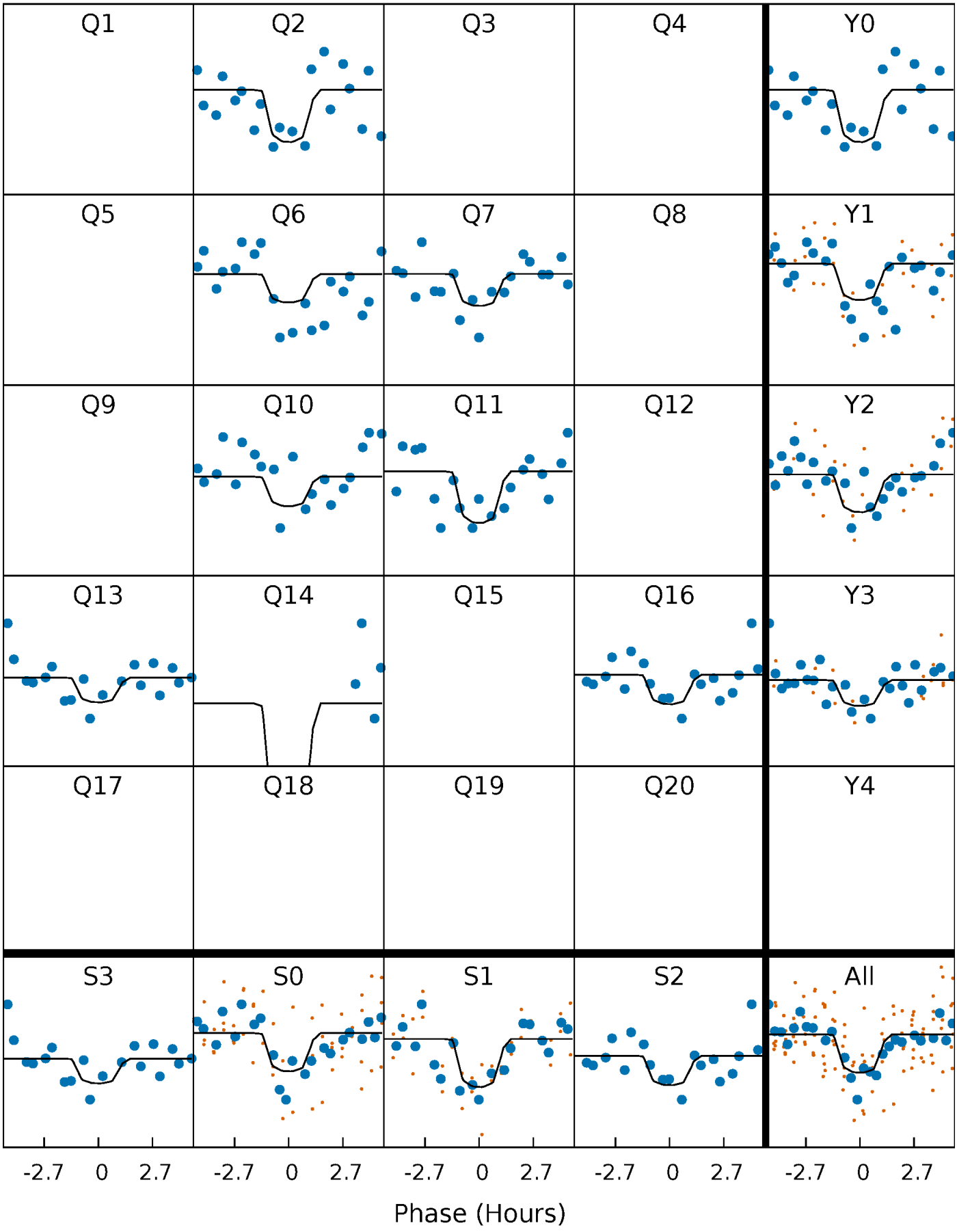
PDC Quarter-Phased Transit Curves

TCE 005937733-01 P=118.862310 Days T_0=183.322861 (BKJD)



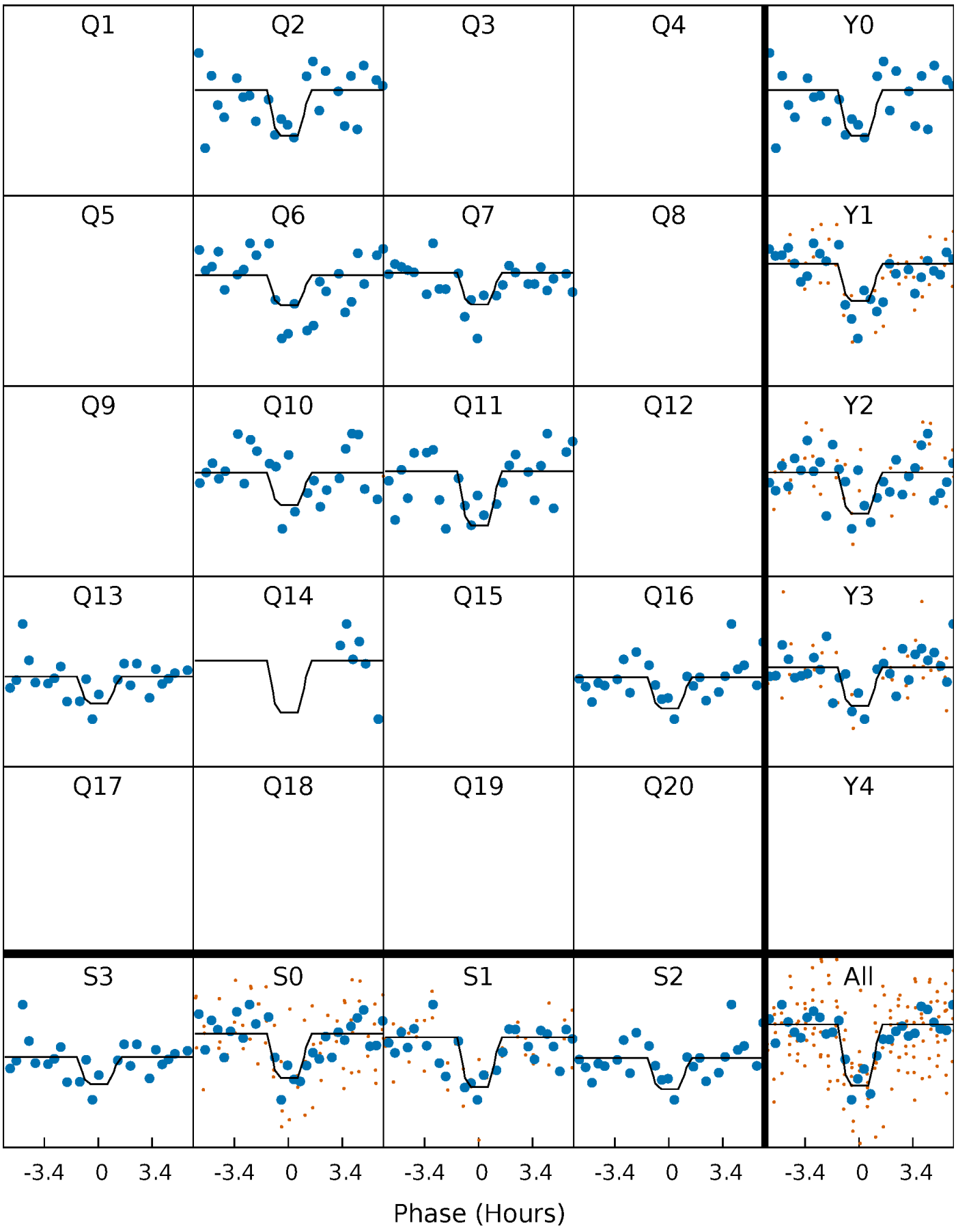
DV Quarter-Phased Transit Curves

TCE 005937733-01 P=118.862310 Days T_0=183.322861 (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

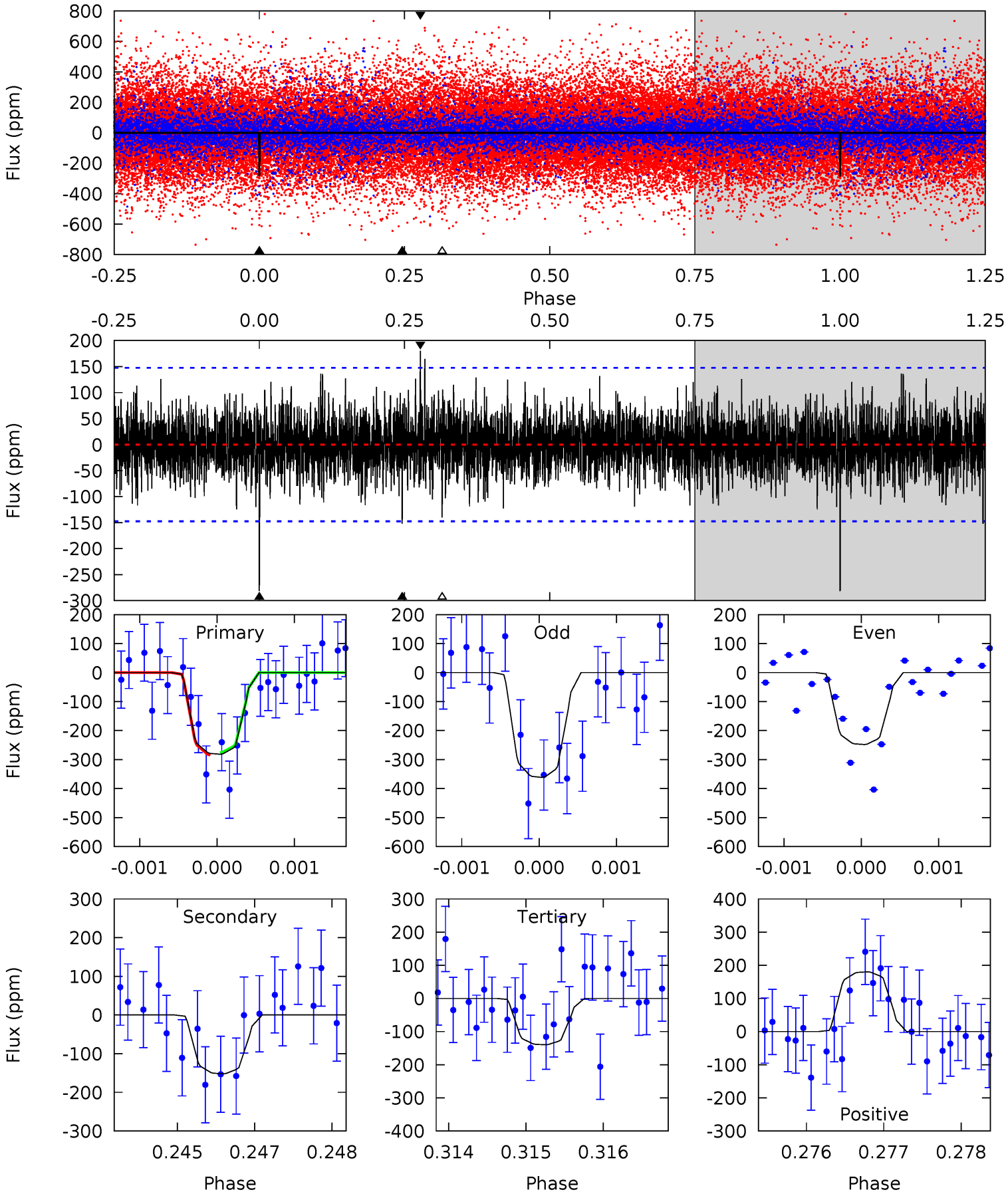
TCE 005937733-01 P=118.862022 Days T_0=183.329629 (BKJD)



DV Model-Shift Uniqueness Test

005937733-01, P = 118.862310 Days, E = 183.322861 Days

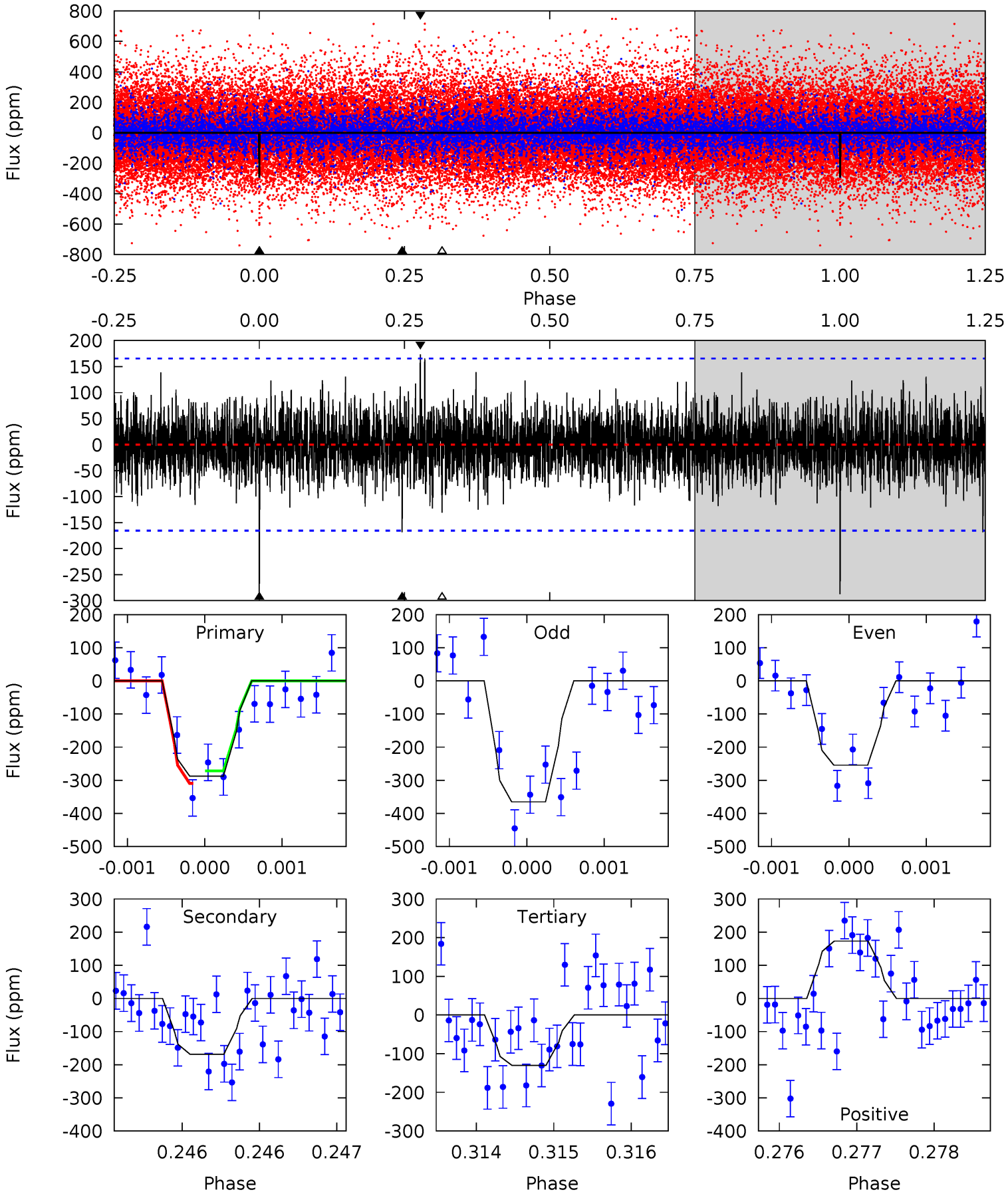
Pri	Sec	Ter	Pos	FA_1	FA_2	F_{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
10.4	5.61	5.16	6.66	5.45	3.28	1.40	5.24	3.74	0.45	-1.05	1.93	1.14	0.39	0.16



Alt Model-Shift Uniqueness Test

005937733-01, P = 118.862022 Days, E = 183.329629 Days

Pri	Sec	Ter	Pos	FA_1	FA_2	F_{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
9.51	5.57	4.32	5.73	5.48	3.33	1.25	5.19	3.78	1.25	-0.15	1.65	1.23	0.38	0.61



Stellar Parameters For KIC 005937733

	$T_{\rm eff}(K)$	$\log(g)$	[Fe/H]	R ($R_\odot$)	$M(M_\odot)$	$p_\star$ (g·cm^{-3})
	5749^{+154}_{-154}	$4.278^{+0.220}_{-0.180}$	$-0.140^{+0.300}_{-0.300}$	$1.143^{+0.329}_{-0.269}$	$0.904^{+0.134}_{-0.082}$	$0.853^{+0.987}_{-0.427}$
	+3%/-3%	+5%/-4%	+214%/-214%	+29%/-24%	+15%/-9%	+116%/-50%
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 005937733-01 / KOI

Detrend	Depth (ppm)	R_p ($R_\oplus$)	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	-152±27	$2.67^{+1.90}_{-1.59}$	559^{+44}_{-43}	4487^{+2493}_{-769}	2521^{+13223}_{-1697}
Alt.	-168±30	$2.60^{+2.15}_{-1.60}$	555^{+44}_{-41}	4637^{+2648}_{-910}	2824^{+15687}_{-1989}

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 $A_{obs} \gg 1.0$

UKIRT Image