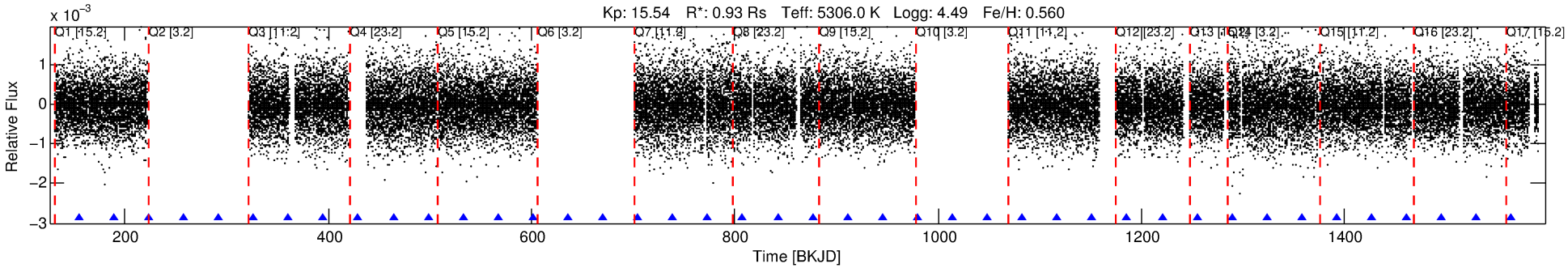
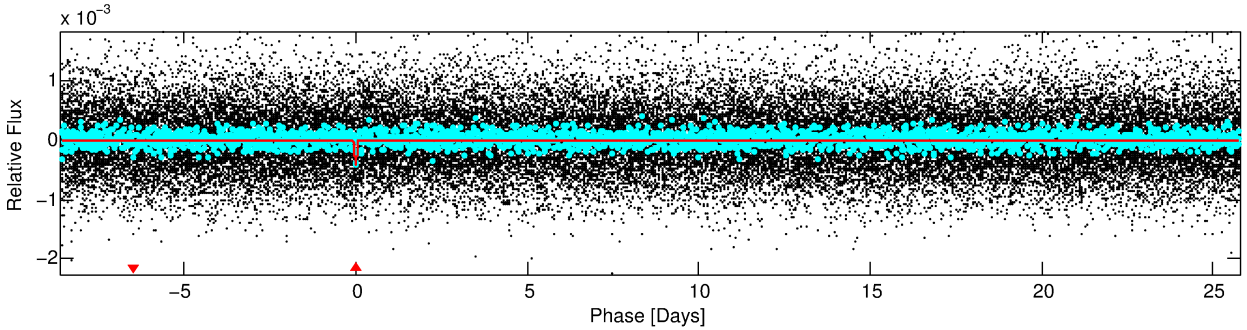
WARNING: THIS DATA IS SIMULATED, NOT OBSERVED

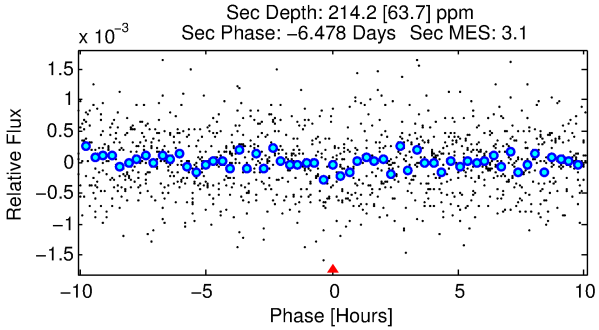
DV One-Page Summary

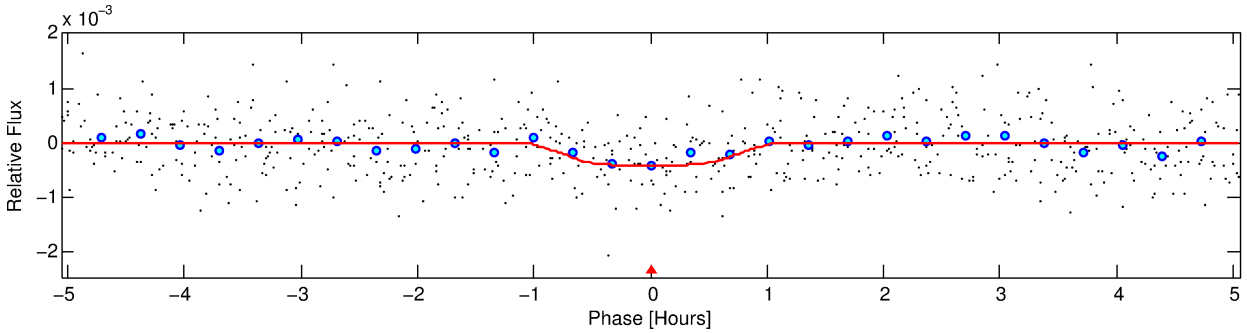
KIC: 5026303 Candidate: 1 of 1 Period: 34.379 d

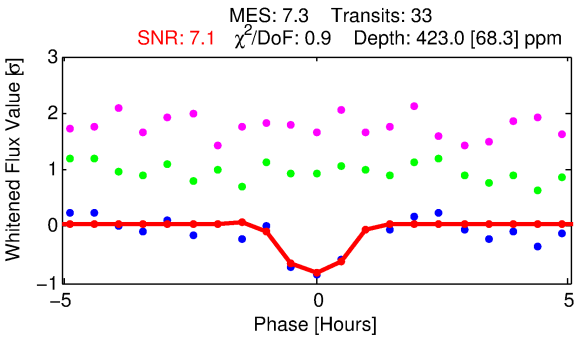
WARNING: THIS DATA IS SIMULATED, NOT OBSERVED

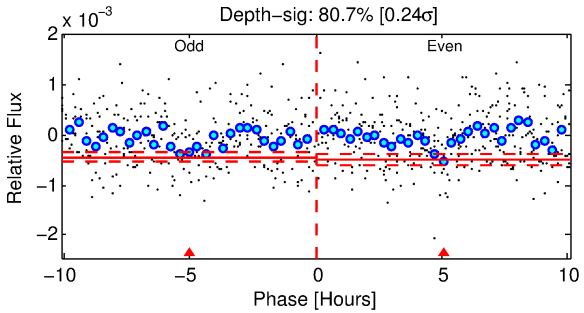












DV Fit Results:

Period = 34.37897 [0.00031] d
Epoch = 154.5866 [0.0080] BKJD
Rp/R* = 0.0185 [0.0469]
a/R* = 153.02 [1334.95]
b = 0.27 [30.27]

Seff = 14.45 [4.29]
Teq = 497 [37] K
Rp = 1.87 [4.76] Re
a = 0.2053 [0.0360] AU

Ag = 1414.87 [7187.53] [0.20σ]
Teffp = 4715 [5981] K [0.71σ]

DV Diagnostic Results:

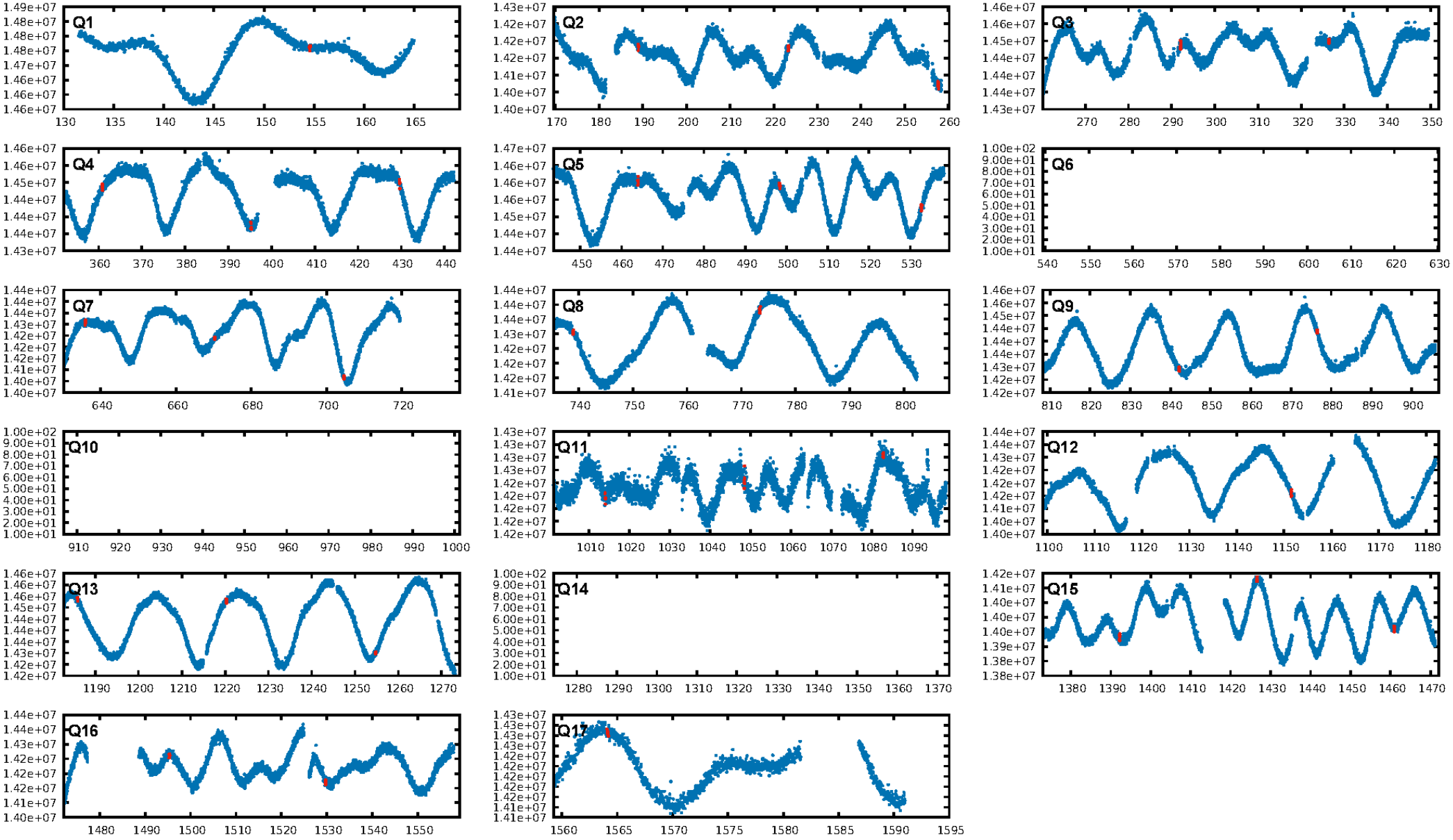
ShortPeriod−sig: N/A
LongPeriod−sig: N/A
ModelChiSquare2−sig: 95.7%
ModelChiSquareGof−sig: 100.0%
Bootstrap−pfa: 7.76e−13
RollingBand−fgt: N/A
GhostDiagnostic−chr: N/A

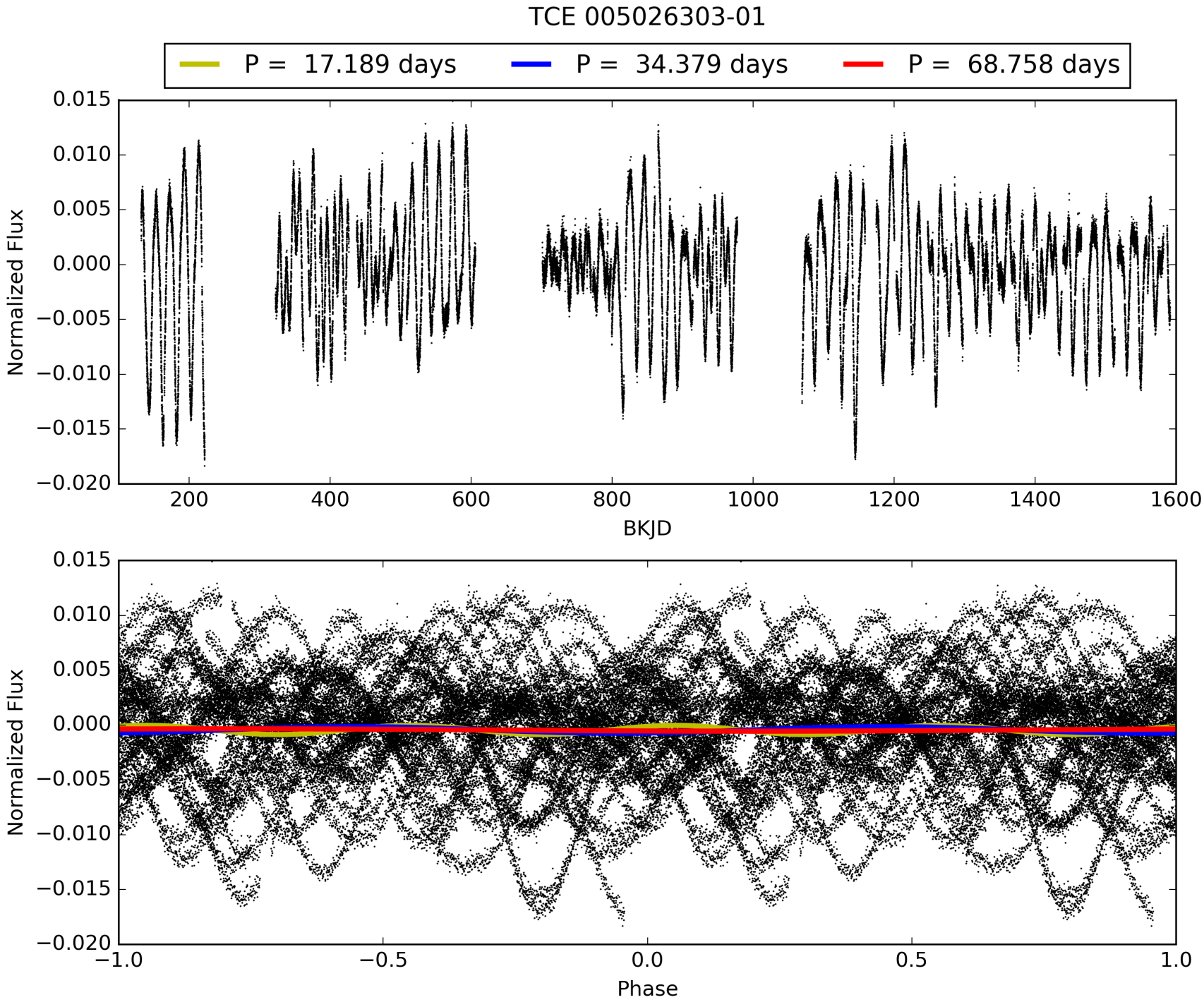
Centroid−sig: N/A
Centroid−so: N/A
OotOffset−rm: N/A
KicOffset−rm: N/A
OotOffset−st: 0/0/0/0 [0]
KicOffset−st: 0/0/0/0 [0]
DiffImageQuality−fgm: N/A
DiffImageOverlap−fno: N/A

Software Revision: svn+ssh://murzim/repo/soc/branches/integ/ksop−2602@61285 −− Date Generated: 06−Jun−2016 14:59:11 Z

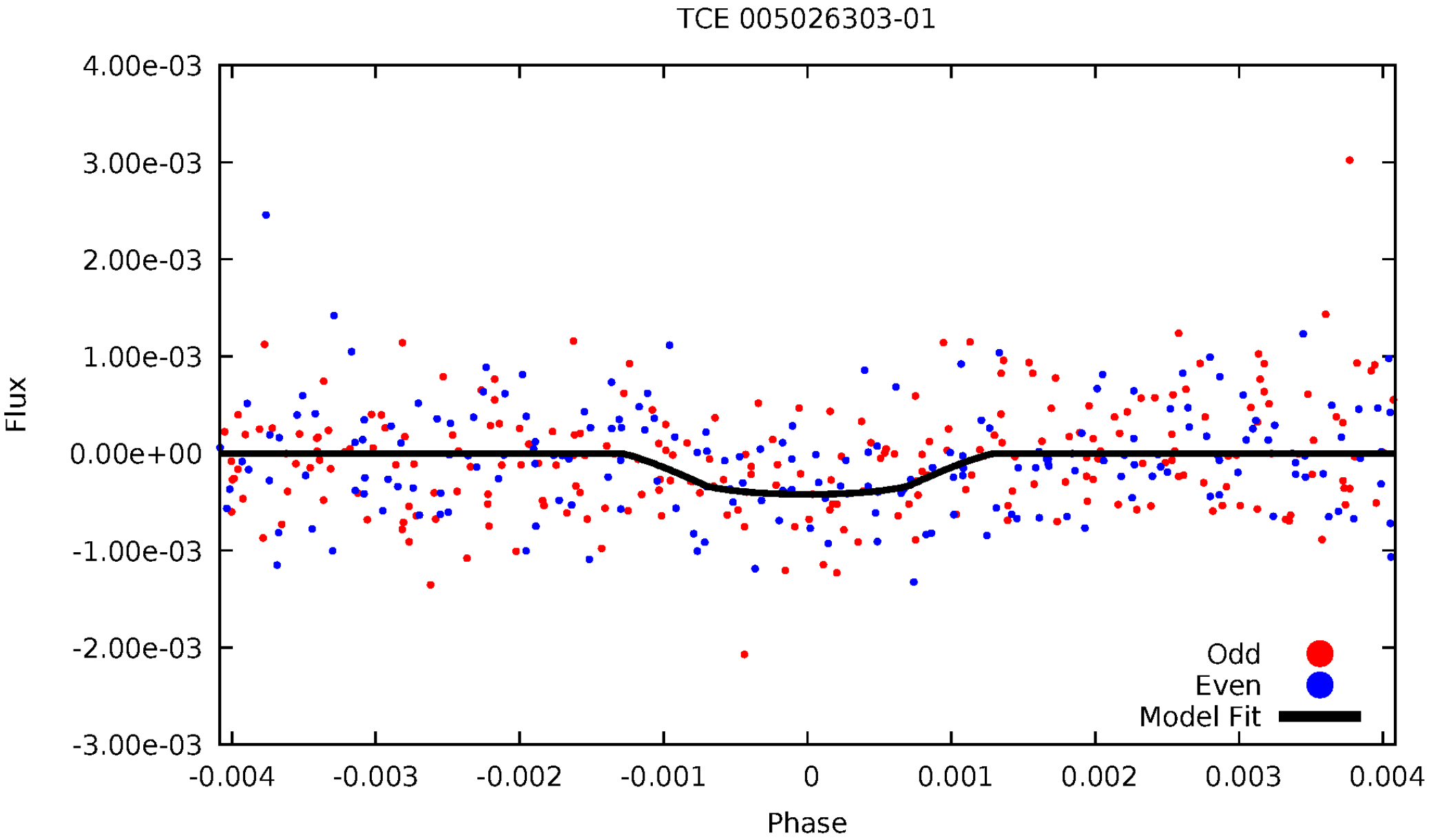
This Data Validation Report Summary was produced in the Kepler Science Operations Center Pipeline at NASA Ames Research Center

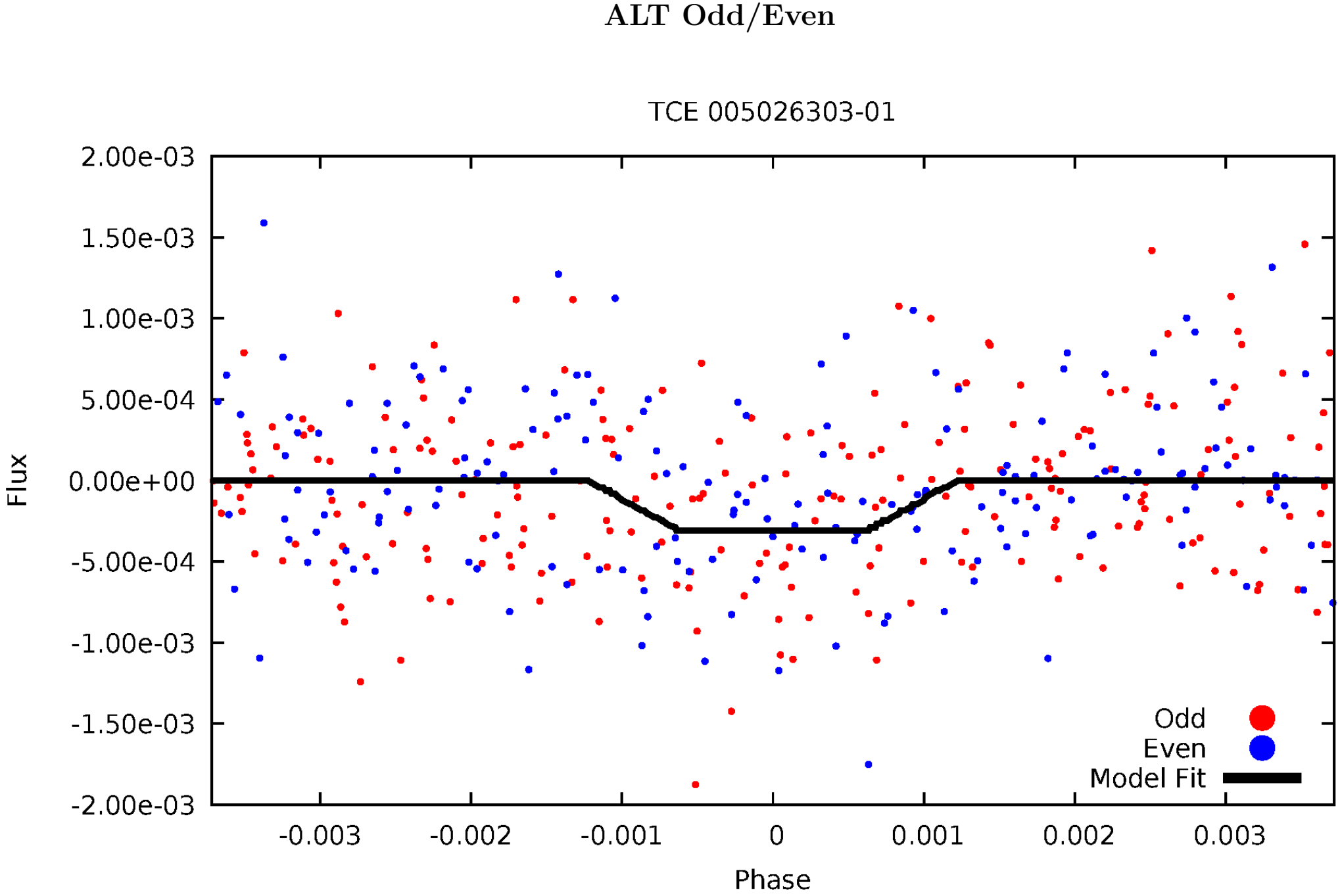
TCE 005026303-01, PDC Light Curves



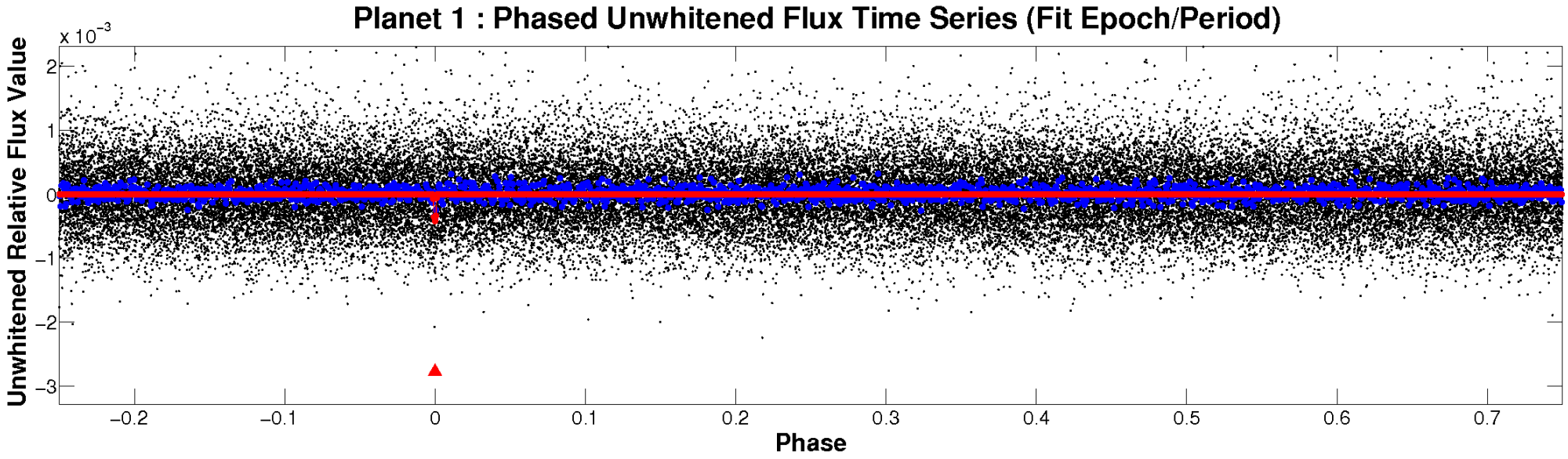

TCE 005026303-01
P = 17.189 days
P = 34.379 days
P = 68.758 days
Normalized Flux
0.015
0.010
0.005
0.000
−0.005
−0.010
−0.015
−0.020
200
400
600
800
1000
1200
1400
1600
BKJD
Normalized Flux
0.015
0.010
0.005
0.000
−0.005
−0.010
−0.015
−0.020
−1.0
−0.5
0.0
0.5
1.0
Phase

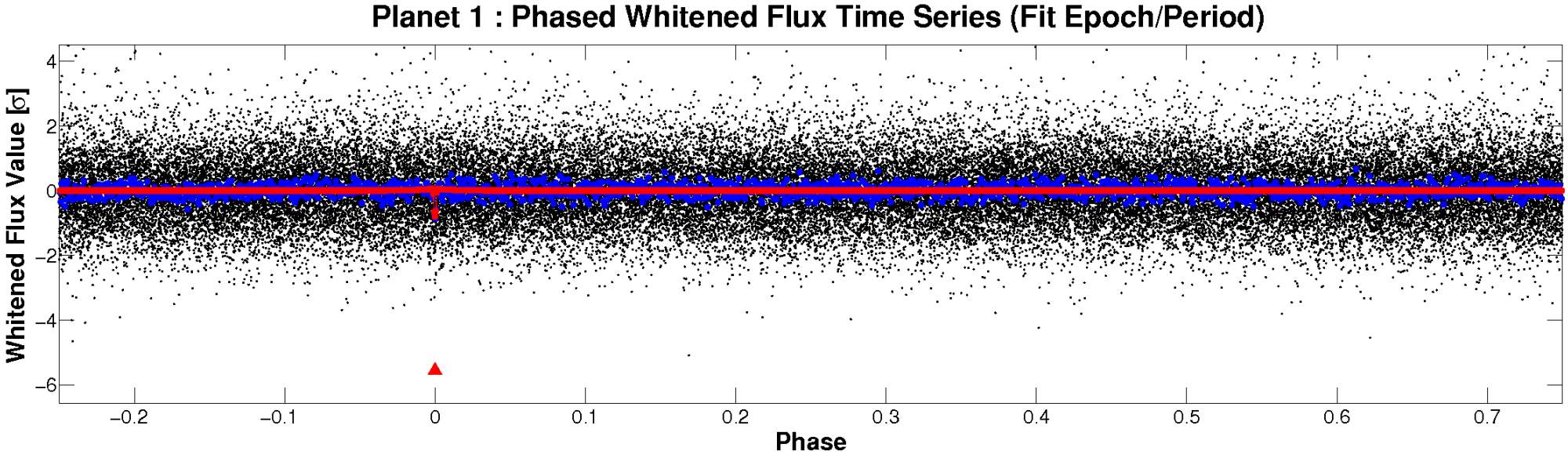
DV Odd/Even


TCE 005026303-01
4.00e-03
3.00e-03
2.00e-03
1.00e-03
0.00e+00
-1.00e-03
-2.00e-03
-3.00e-03
Flux
-0.004
-0.003
-0.002
-0.001
0
0.001
0.002
0.003
0.004
Phase
Odd
Even
Model Fit


ALT Odd/Even
TCE 005026303-01
2.00e-03
1.50e-03
1.00e-03
5.00e-04
0.00e+00
-5.00e-04
-1.00e-03
-1.50e-03
-2.00e-03
Flux
-0.003
-0.002
-0.001
0
0.001
0.002
0.003
Phase
Odd
Even
Model Fit

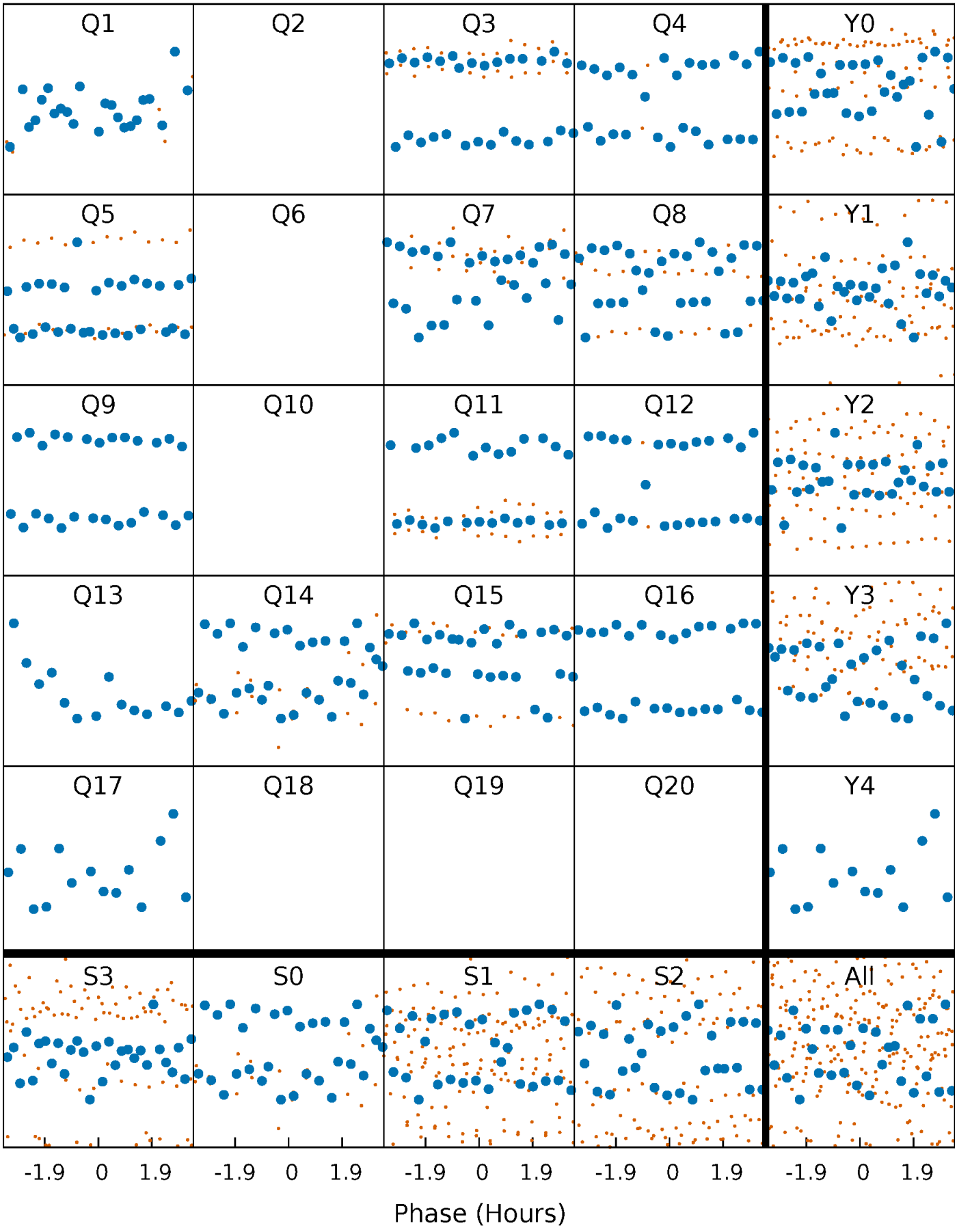
Non-Whitened Vs. Whitened Light Curve





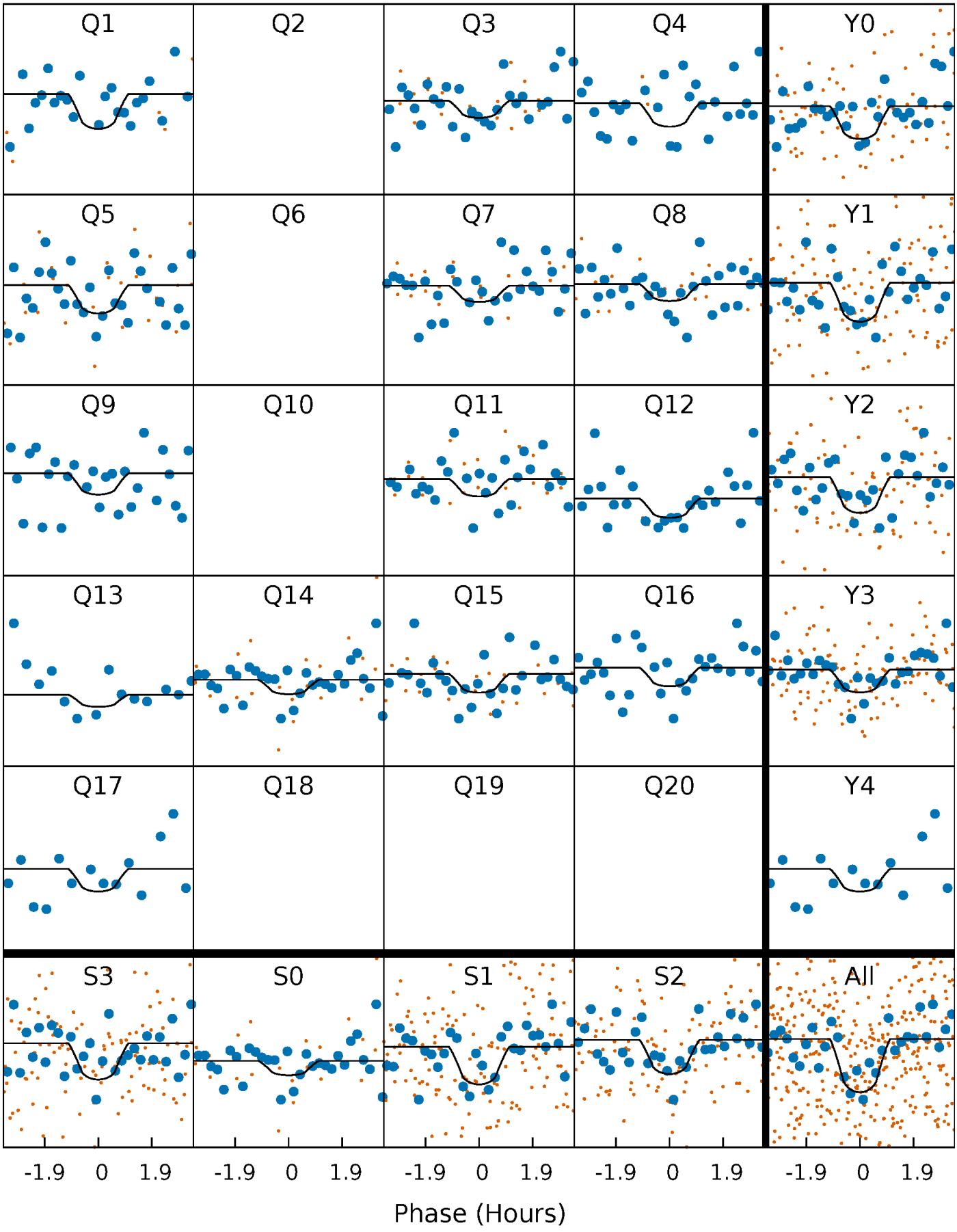
PDC Quarter-Phased Transit Curves

TCE 005026303-01 P= 34.378965 Days T_0=154.586571 (BKJD)



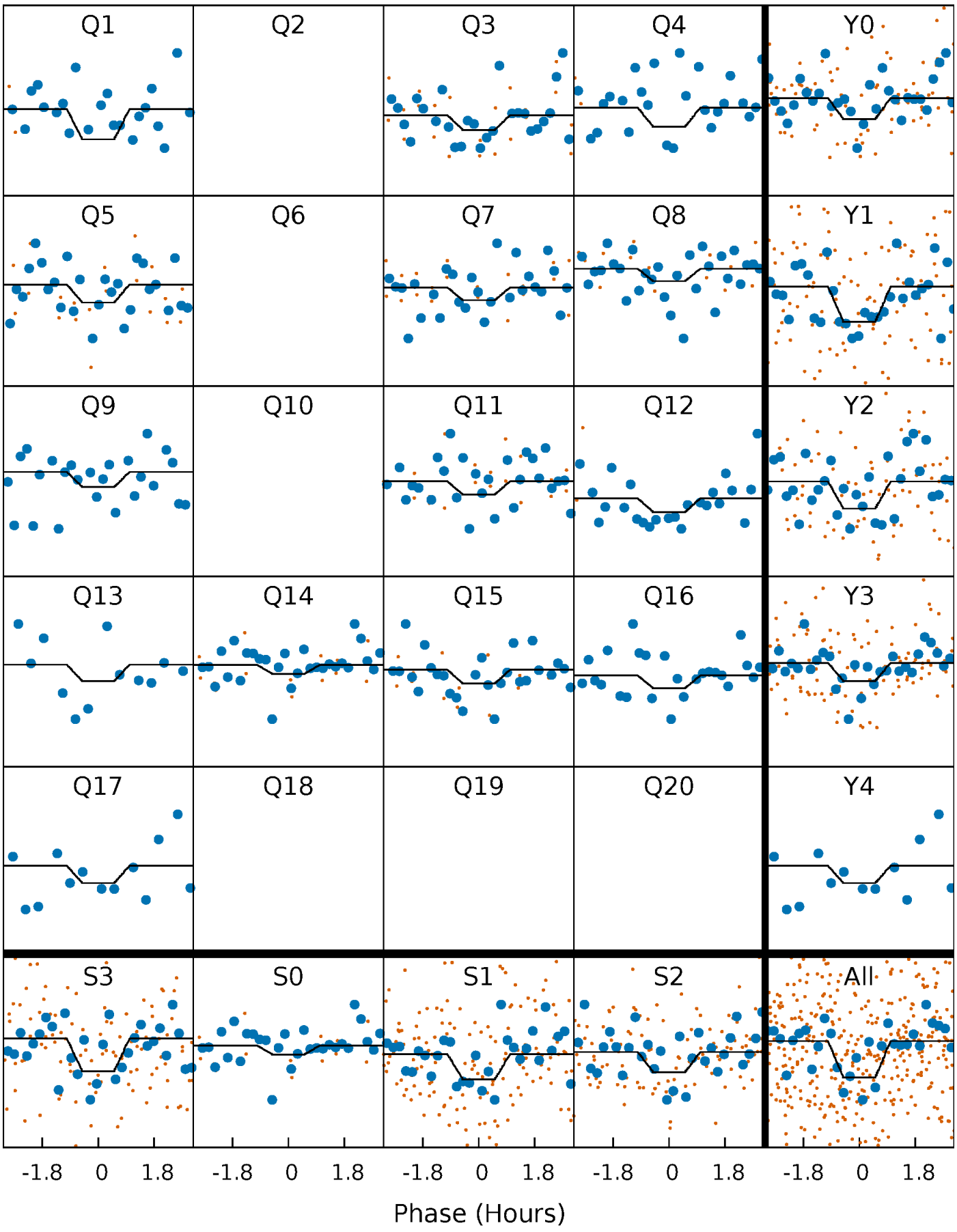
DV Quarter-Phased Transit Curves

TCE 005026303-01 P= 34.378965 Days T_0=154.586571 (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

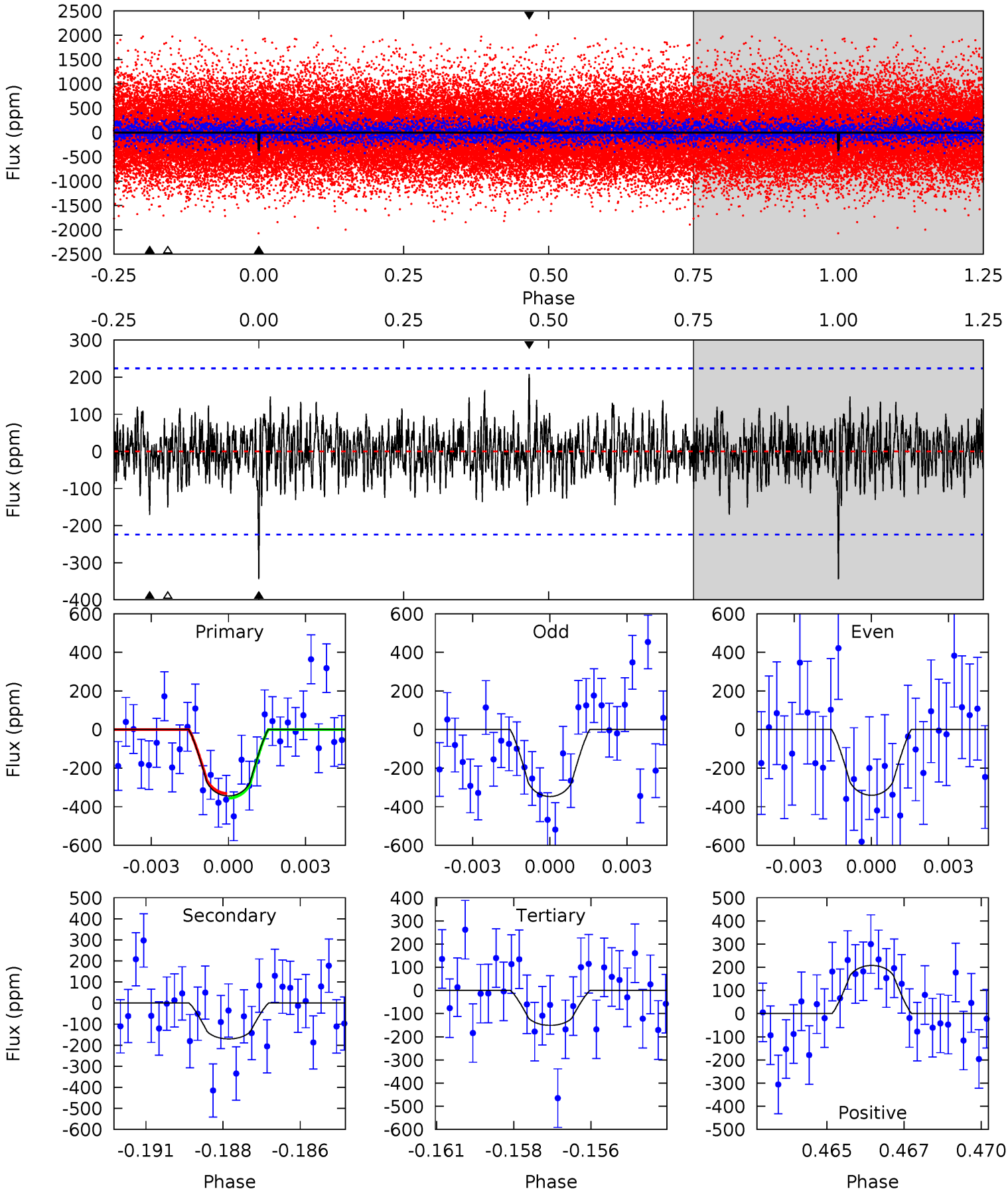
TCE 005026303-01 P= 34.378884 Days T_0=154.591821 (BKJD)



DV Model-Shift Uniqueness Test

005026303-01, P = 34.378965 Days, E = 120.207606 Days

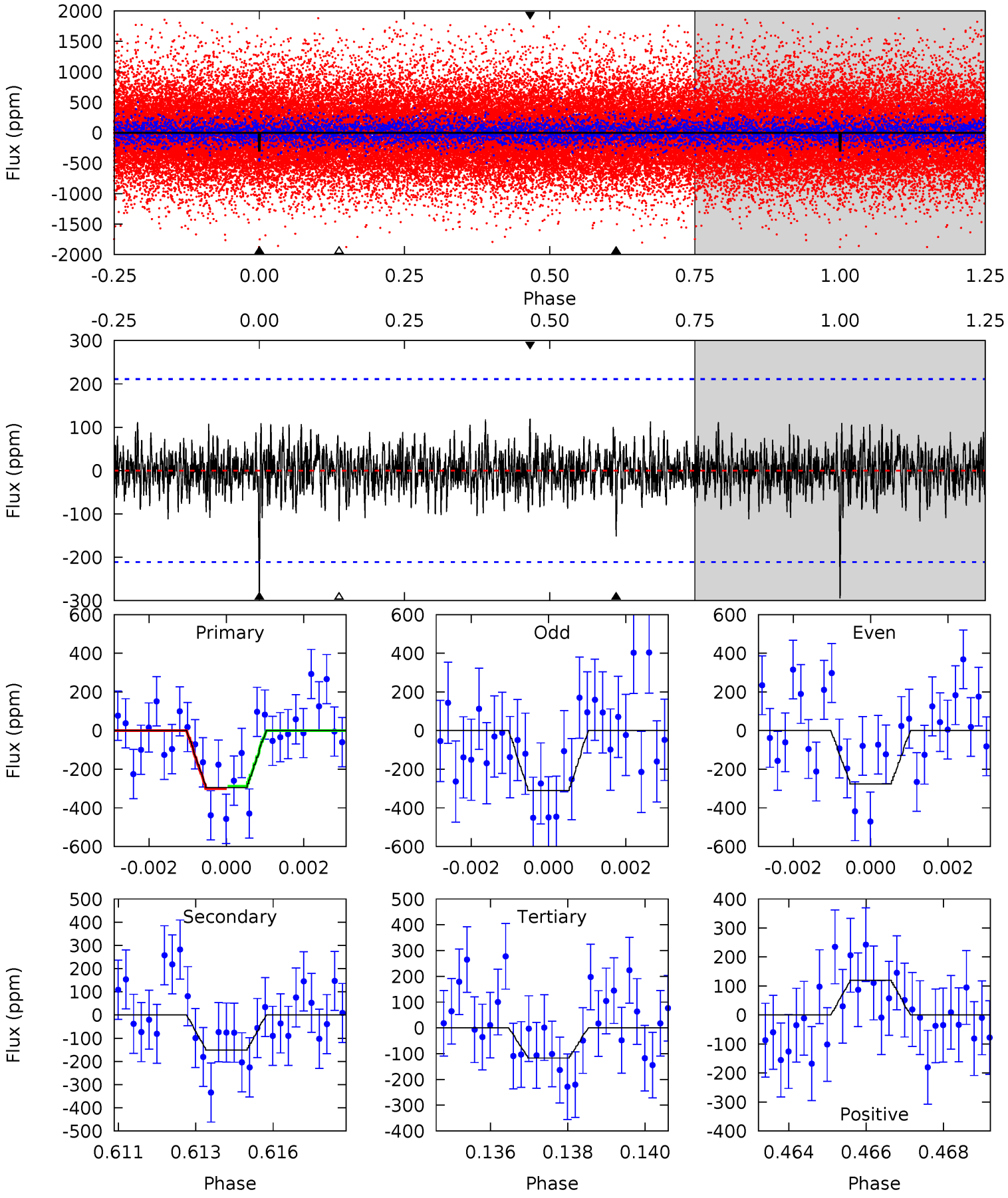
Pri	Sec	Ter	Pos	FA_1	FA_2	F_{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
8.11	4.02	3.56	4.90	5.29	3.02	1.20	4.56	3.21	0.46	-0.88	0.08	1.27	0.38	0.28



Alt Model-Shift Uniqueness Test

005026303-01, P = 34.378884 Days, E = 120.212937 Days

Pri	Sec	Ter	Pos	FA_1	FA_2	F_{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
7.40	3.80	2.93	3.01	5.30	3.04	0.93	4.47	4.39	0.87	0.79	0.44	1.04	0.29	0.15



Stellar Parameters For KIC 005026303

	$T_{\rm eff}(K)$	$\log(g)$	[Fe/H]	R ($R_\odot$)	$M(M_\odot)$	$p_\star$ (g·cm^{-3})
	5306^{+175}_{-159}	$4.494^{+0.050}_{-0.150}$	$0.560^{+0.050}_{-0.300}$	$0.926^{+0.184}_{-0.085}$	$0.974^{+0.055}_{-0.086}$	$1.729^{+0.418}_{-0.726}$
	+3%/-3%	+1%/-3%	+9%/-54%	+20%/-9%	+6%/-9%	+24%/-42%
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 005026303-01 / KOI

Detrend	Depth (ppm)	R_p ($R_\oplus$)	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	-170±42	$3.85^{+4.08}_{-2.55}$	705^{+38}_{-29}	3569^{+1796}_{-679}	249^{+1941}_{-190}
Alt.	-151±40	$4.11^{+4.22}_{-2.71}$	707^{+40}_{-29}	3489^{+1663}_{-670}	216^{+1452}_{-163}

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