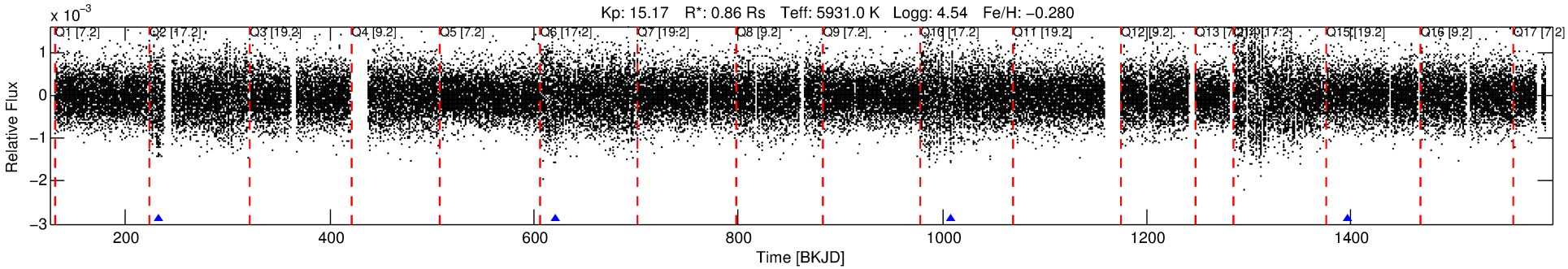
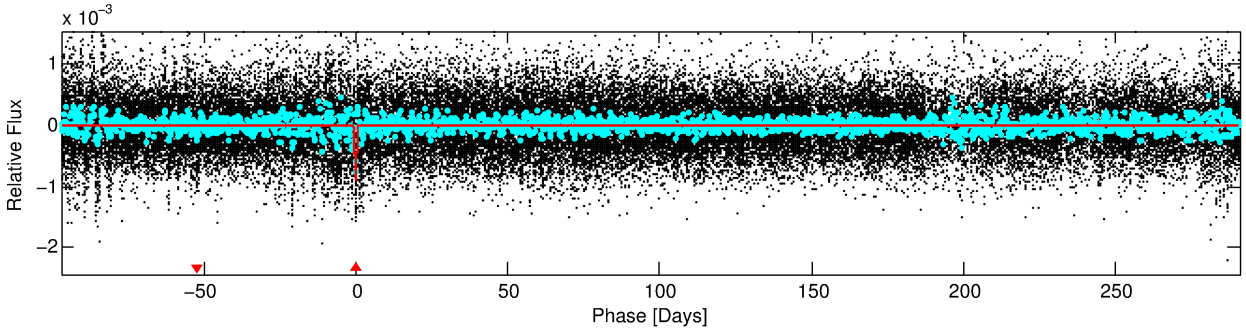
WARNING: THIS DATA IS SIMULATED, NOT OBSERVED

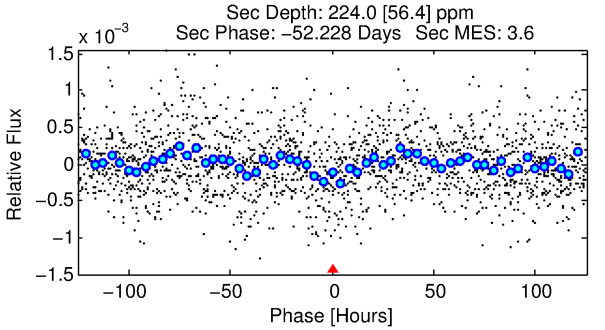
DV One-Page Summary

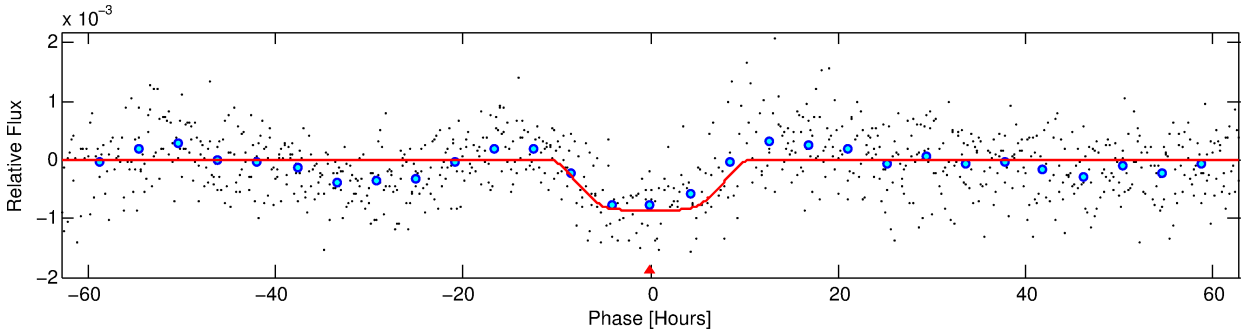
KIC: 9075882 Candidate: 1 of 1 Period: 387.854 d

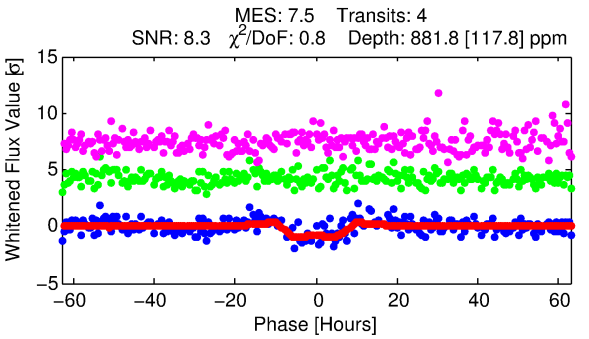
WARNING: THIS DATA IS SIMULATED, NOT OBSERVED

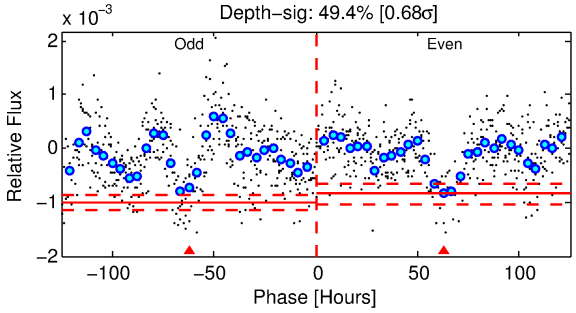












DV Fit Results:

Period = 387.85406 [0.01745] d
Epoch = 232.9412 [0.0319] BKJD
Rp/R* = 0.0342 [0.0028]
a/R* = 58.06 [8.96]
b = 0.95 [0.02]

Seff = 0.79 [0.29]
Teq = 240 [22] K
Rp = 3.22 [0.96] Re
a = 1.0244 [0.2464] AU

Ag = 12480.50 [5768.04] [2.16σ]
Teffp = 3925 [318] K [11.56σ]

DV Diagnostic Results:

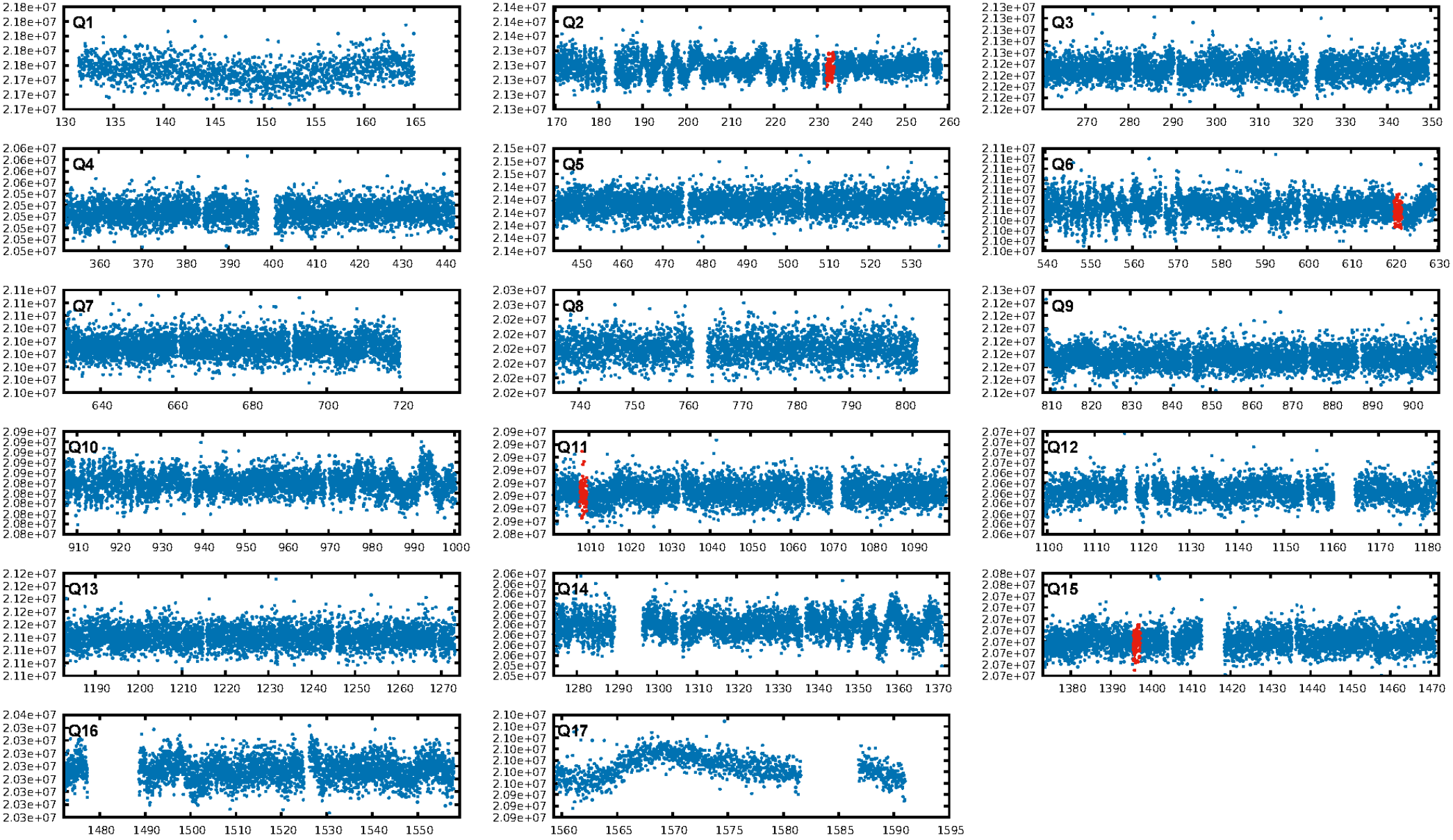
ShortPeriod−sig: N/A
LongPeriod−sig: N/A
ModelChiSquare2−sig: 84.9%
ModelChiSquareGof−sig: 100.0%
Bootstrap−pfa: 1.99e−08
RollingBand−fgt: N/A
GhostDiagnostic−chr: N/A

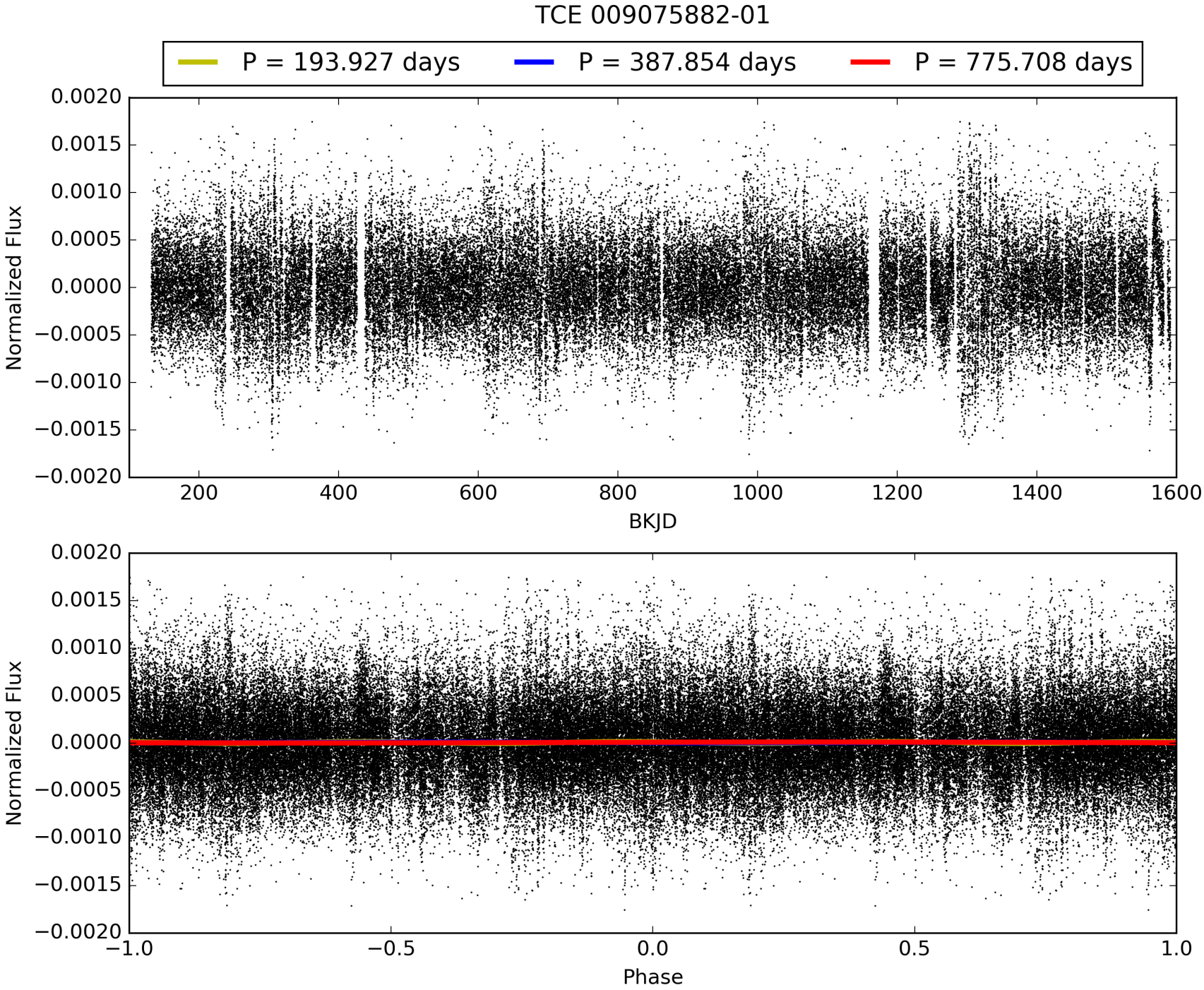
Centroid−sig: N/A
Centroid−so: N/A
OotOffset−rm: N/A
KicOffset−rm: N/A
OotOffset−st: 0/0/0/0 [0]
KicOffset−st: 0/0/0/0 [0]
DiffImageQuality−fgm: N/A
DiffImageOverlap−fno: N/A

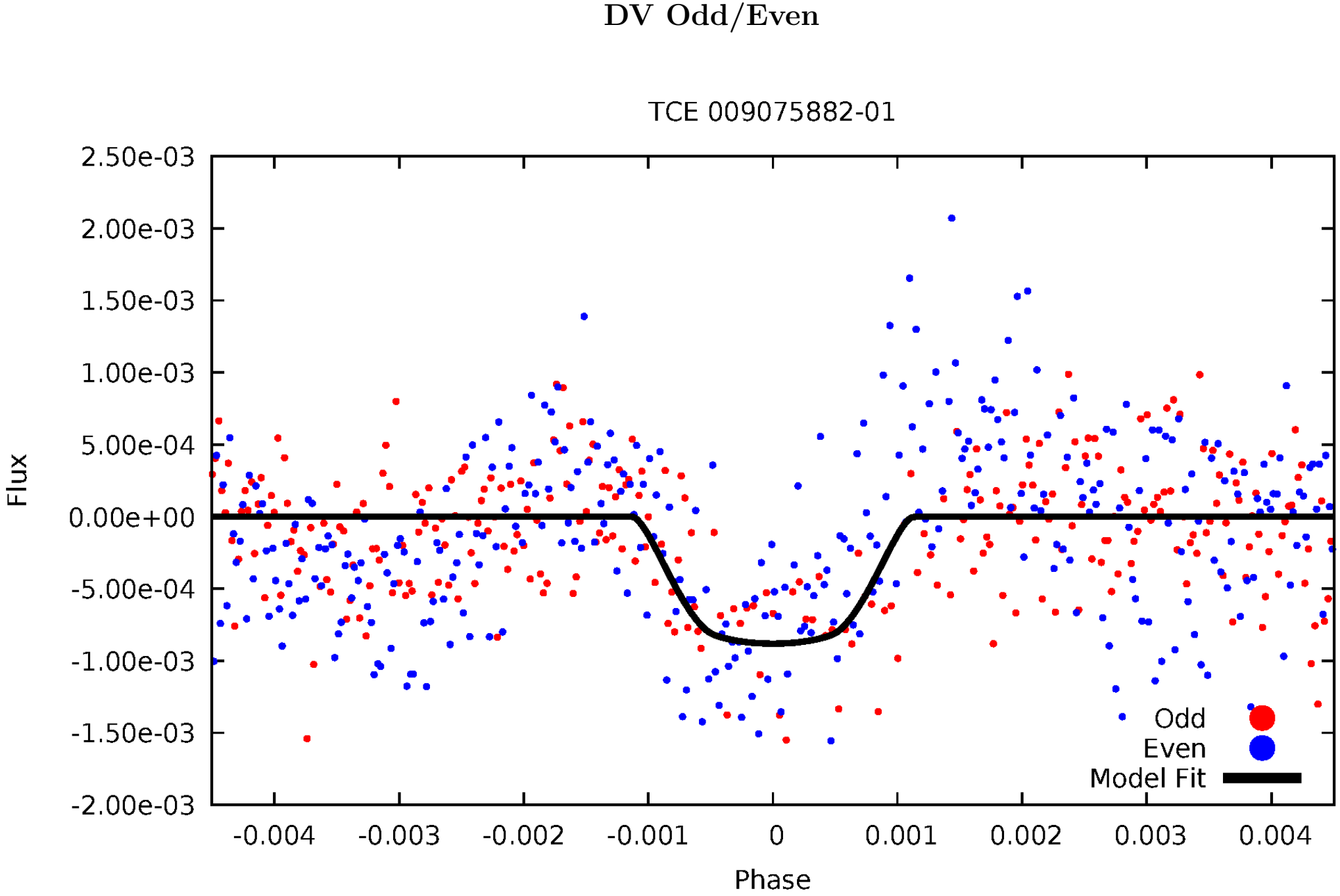
Software Revision: svn+ssh://murzim/repo/soc/branches/integ/ksop−2602@61285 −− Date Generated: 02−Jun−2016 01:38:58 Z

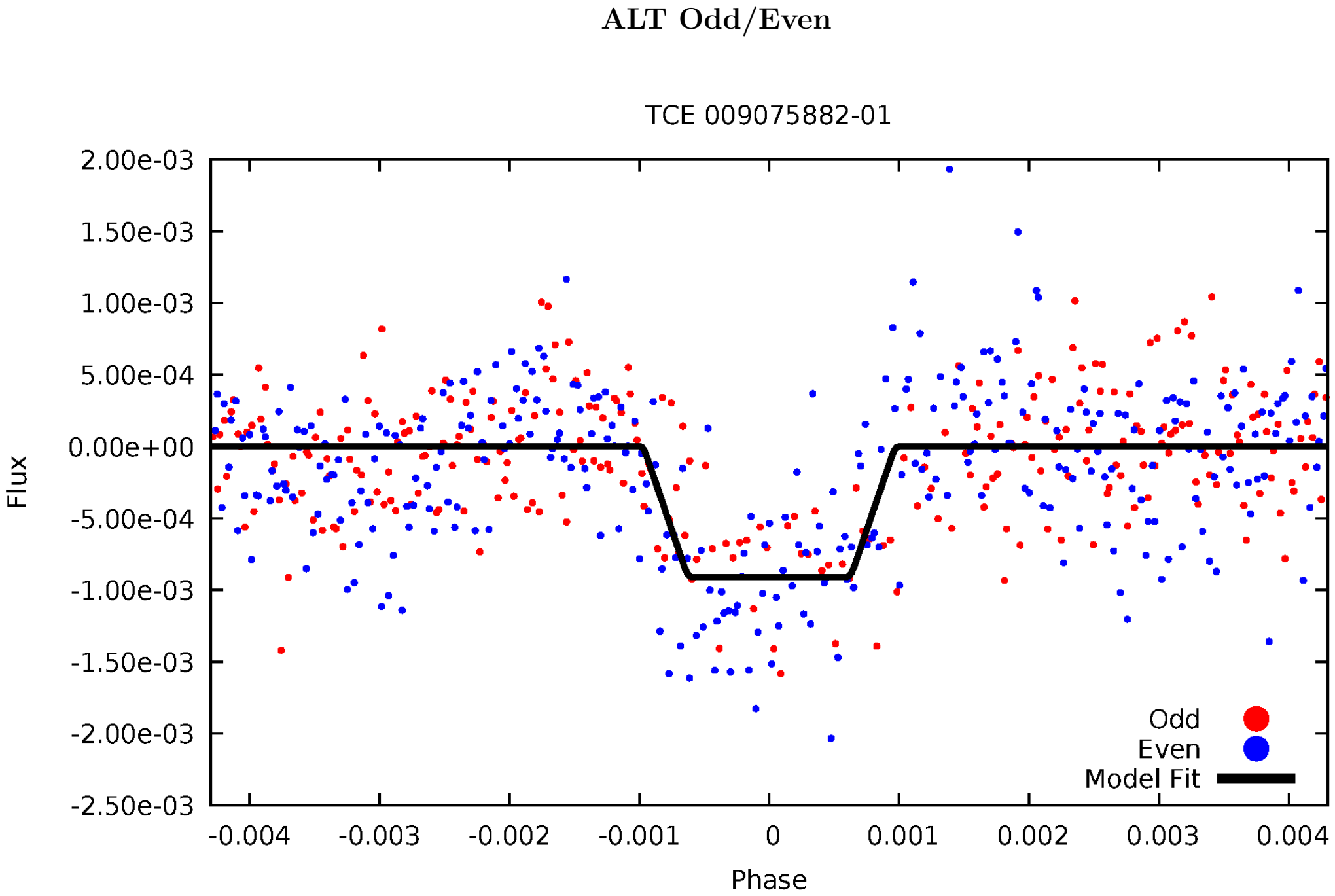
This Data Validation Report Summary was produced in the Kepler Science Operations Center Pipeline at NASA Ames Research Center

TCE 009075882-01, PDC Light Curves

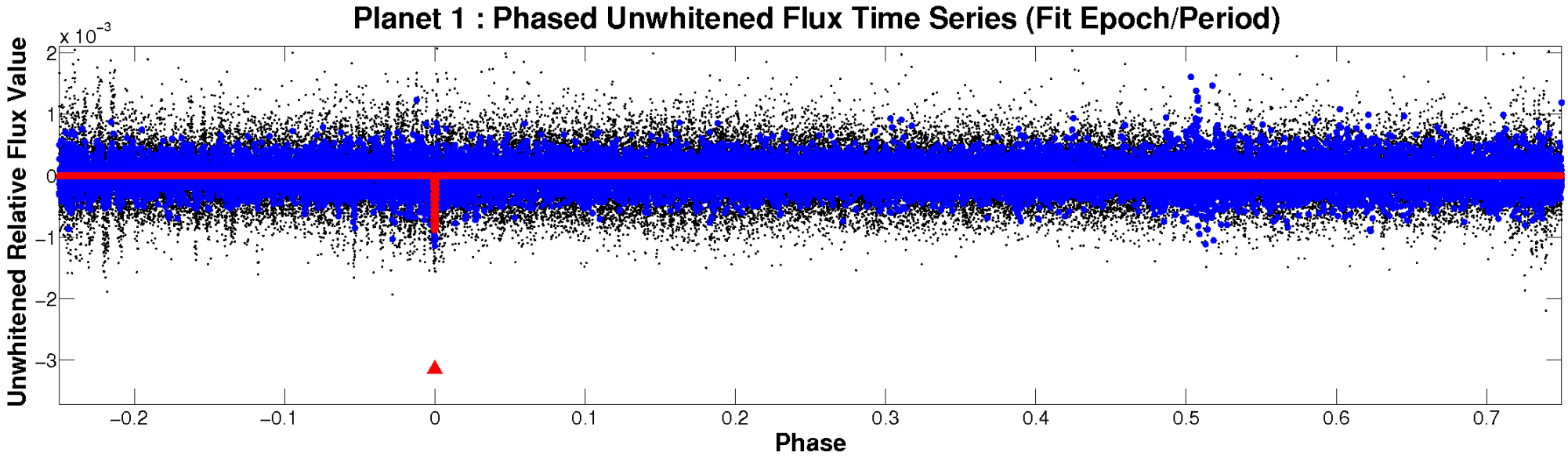


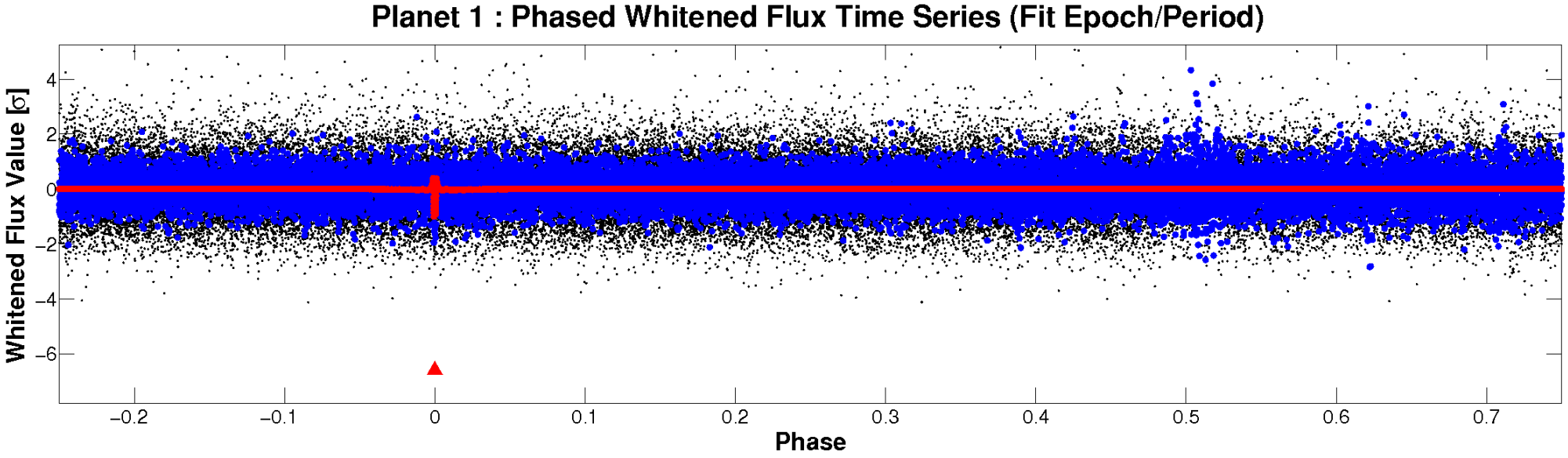

TCE 009075882-01
P = 193.927 days
P = 387.854 days
P = 775.708 days
Normalized Flux
0.0020
0.0015
0.0010
0.0005
0.0000
−0.0005
−0.0010
−0.0015
−0.0020
200
400
600
800
1000
1200
1400
1600
BKJD
Normalized Flux
−1.0
−0.5
0.0
0.5
1.0
Phase


DV Odd/Even
TCE 009075882-01
2.50e-03
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
-0.004
-0.003
-0.002
-0.001
0
0.001
0.002
0.003
0.004
Phase
Odd
Even
Model Fit


ALT Odd/Even
TCE 009075882-01
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
-2.50e-03
Flux
-0.004
-0.003
-0.002
-0.001
0
0.001
0.002
0.003
0.004
Phase
Odd
Even
Model Fit

Non-Whitened Vs. Whitened Light Curve





PDC Quarter-Phased Transit Curves

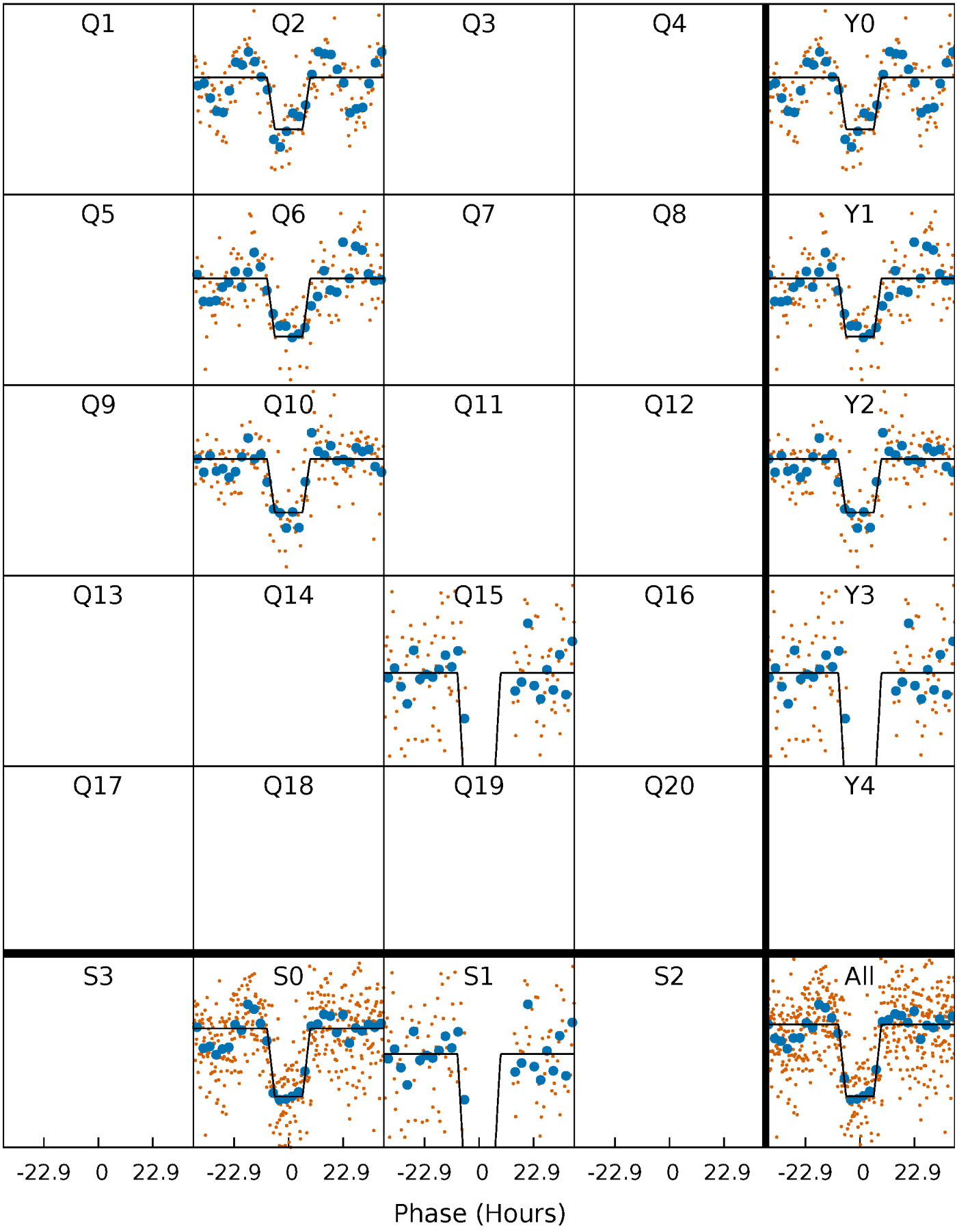
TCE 009075882-01 P=387.854056 Days T_0=232.941225 (BKJD)

DV Quarter-Phased Transit Curves

TCE 009075882-01 P=387.854056 Days T_0=232.941225 (BKJD)

Alt. Detrend Quarter-Phased Transit Curves

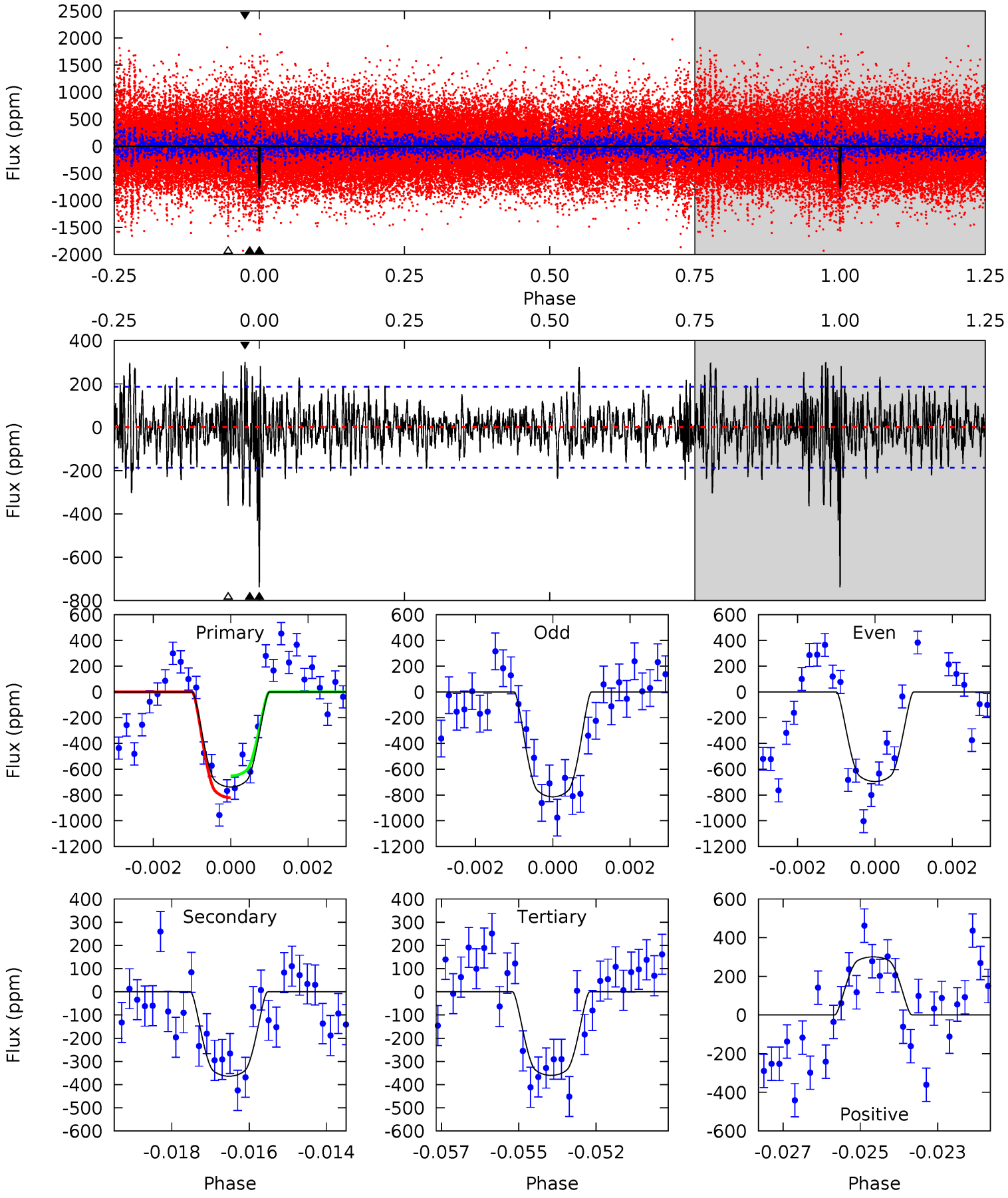
TCE 009075882-01 P=387.842591 Days T_0=232.959792 (BKJD)



DV Model-Shift Uniqueness Test

009075882-01, P = 387.854056 Days, E = 232.941225 Days

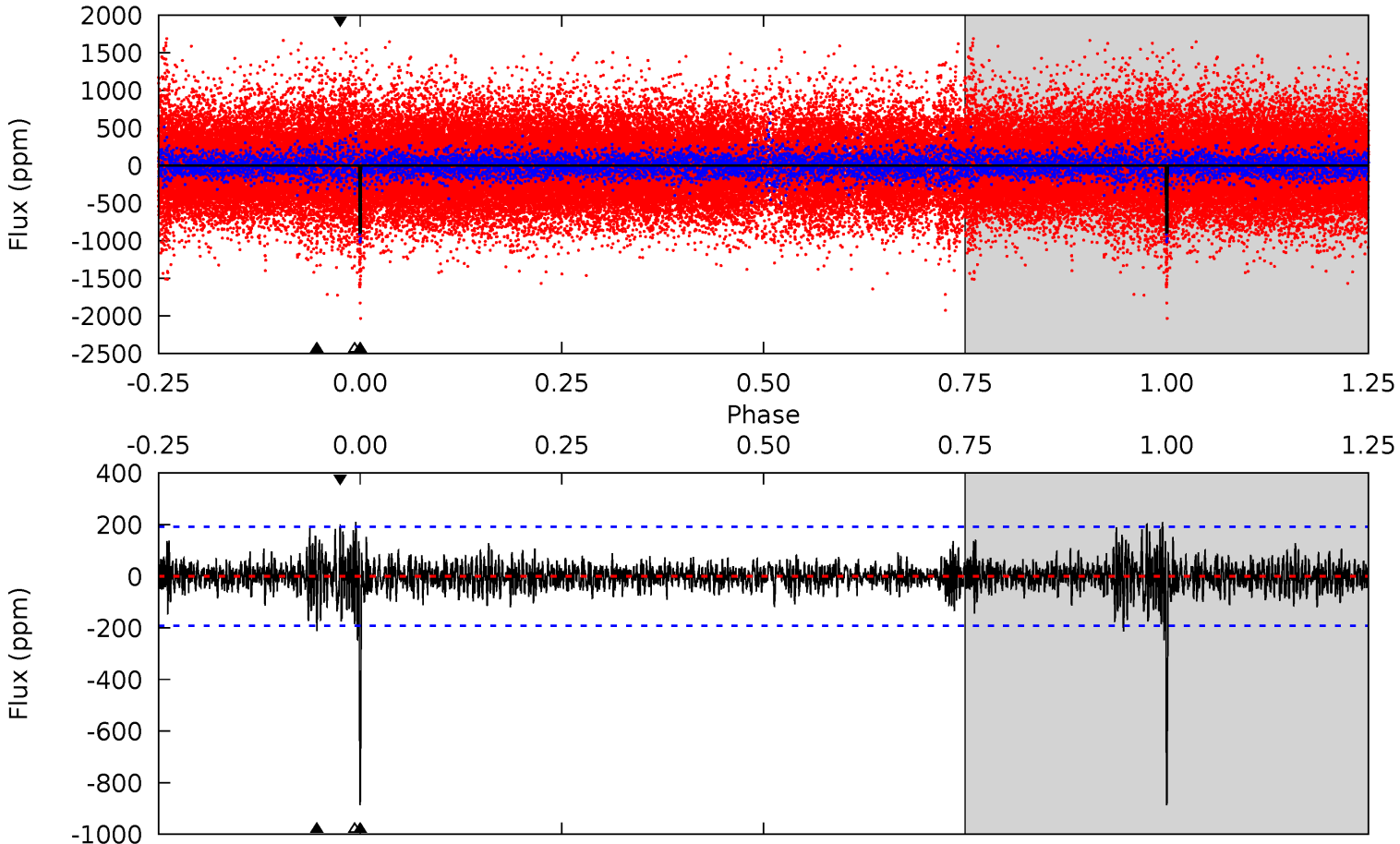
Pri	Sec	Ter	Pos	FA_1	FA_2	F_{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
21.0	10.3	10.2	8.54	5.30	3.05	2.43	10.7	12.4	0.10	1.79	1.64	0.95	0.29	2.40

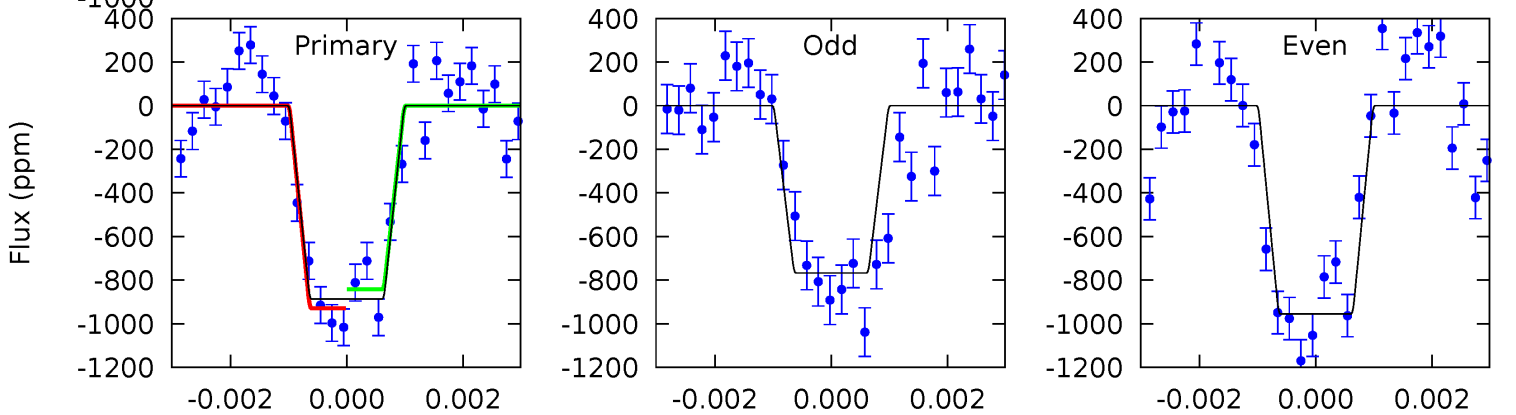


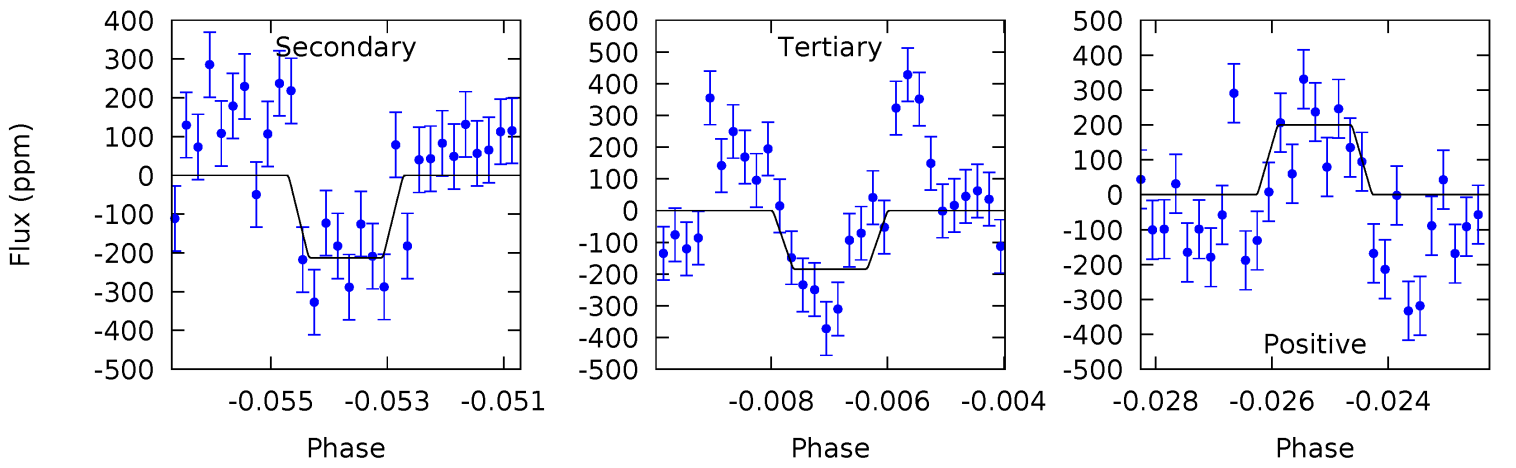
Alt Model-Shift Uniqueness Test

009075882-01, P = 387.842591 Days, E = 232.959792 Days

Pri	Sec	Ter	Pos	FA_1	FA_2	F_{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
24.7	5.91	5.12	5.56	5.33	3.10	1.20	19.5	19.1	0.79	0.35	2.53	0.86	0.19	1.20







Stellar Parameters For KIC 009075882

	$T_{\rm eff}(K)$	$\log(g)$	[Fe/H]	R ($R_\odot$)	$M(M_\odot)$	$p_\star$ (g·cm^{-3})
	5931^{+161}_{-178}	$4.545^{+0.036}_{-0.192}$	$-0.280^{+0.300}_{-0.300}$	$0.863^{+0.246}_{-0.077}$	$0.953^{+0.109}_{-0.119}$	$2.087^{+0.391}_{-0.983}$
	+3%/-3%	+1%/-4%	+107%/-107%	+29%/-9%	+11%/-12%	+19%/-47%
Source	PHO1	KIC0	KIC0	DSEP		

KIC = Kepler Input Catalog; PHO = Photometry; SPE = Spectroscopy; AST = Asteroseismology
TRA = Transits; DESP = Dartmouth Models; MULT = Multiple Models

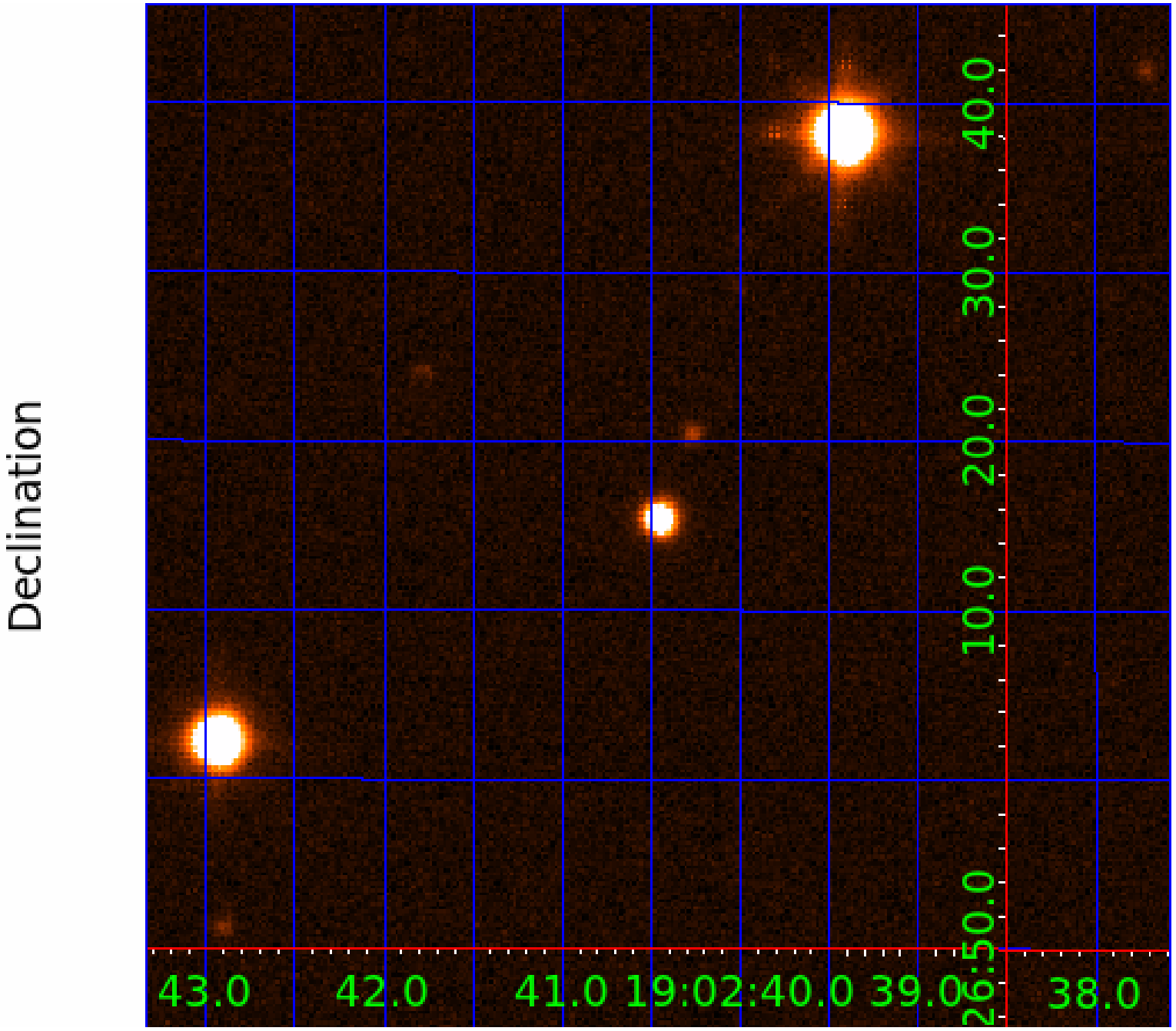
Secondary Eclipse Parameters for KIC 009075882-01 / KOI 8175.01

Detrend	Depth (ppm)	R_p ($R_\oplus$)	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	-364±35	$3.39^{+0.50}_{-0.42}$	344^{+22}_{-15}	4586^{+220}_{-185}	17886^{+5321}_{-4326}
Alt.	-213±36	$3.00^{+0.46}_{-0.37}$	344^{+22}_{-15}	4318^{+245}_{-218}	13075^{+4455}_{-3664}

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


Declination
40.0
30.0
20.0
10.0
50.0
26:
43.0
42.0
41.0
19:02:40.0
39.0
38.0