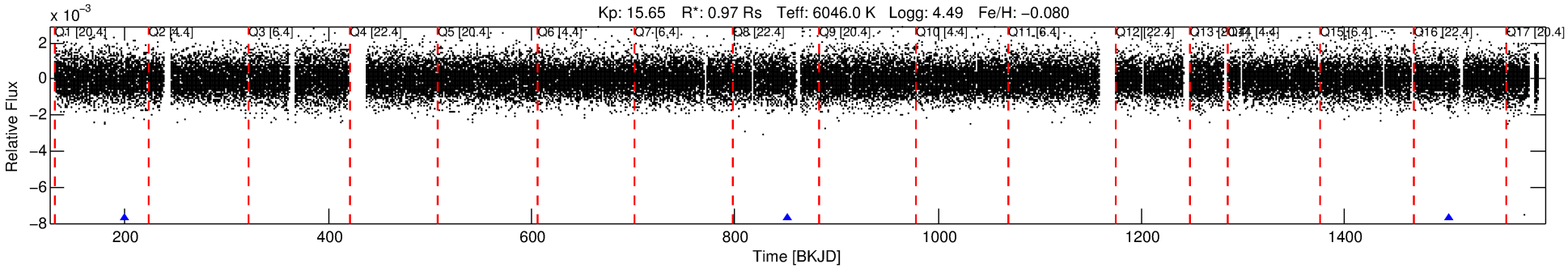
WARNING: THIS DATA IS SIMULATED, NOT OBSERVED

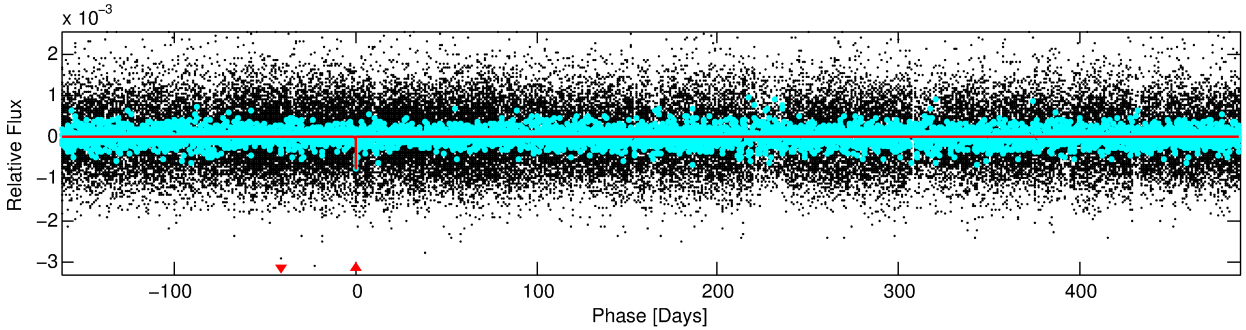
DV One-Page Summary

KIC: 4949239 Candidate: 1 of 1 Period: 651.906 d

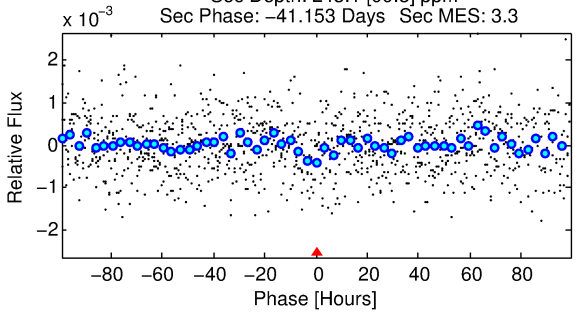
WARNING: THIS DATA IS SIMULATED, NOT OBSERVED

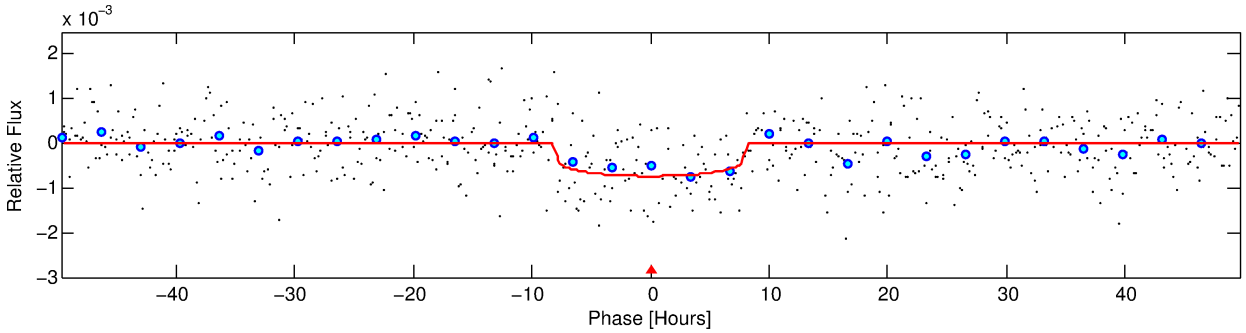
Kp: 15.65 R*: 0.97 Rs Teff: 6046.0 K Logg: 4.49 Fe/H: −0.080



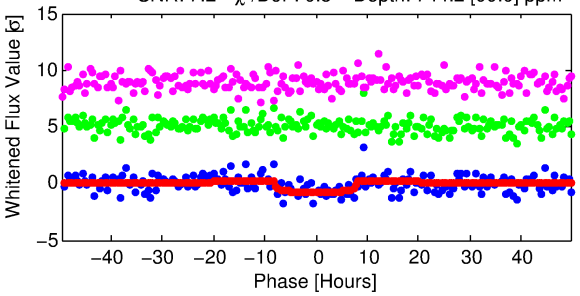


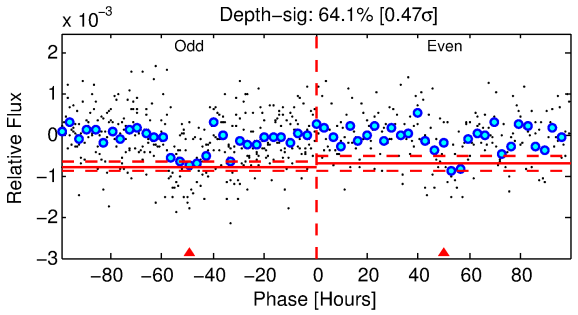
Sec Depth: 243.1 [99.8] ppm
Sec Phase: −41.153 Days Sec MES: 3.3





MES: 8.0 Transits: 3
SNR: 7.2 χ^2/DoF: 0.8 Depth: 744.2 [99.0] ppm





DV Fit Results:

Period = 651.90564 [0.01614] d
Epoch = 199.3541 [0.0210] BKJD
Rp/R* = 0.0259 [0.0108]
a/R* = 259.60 [508.25]
b = 0.55 [2.47]

Seff = 0.50 [0.19]
Teq = 215 [20] K
Rp = 2.74 [1.40] Re
a = 1.4983 [0.3668] AU

Ag = 39883.99 [39636.42] [1.01σ]
Teffp = 4694 [1102] K [4.06σ]

DV Diagnostic Results:

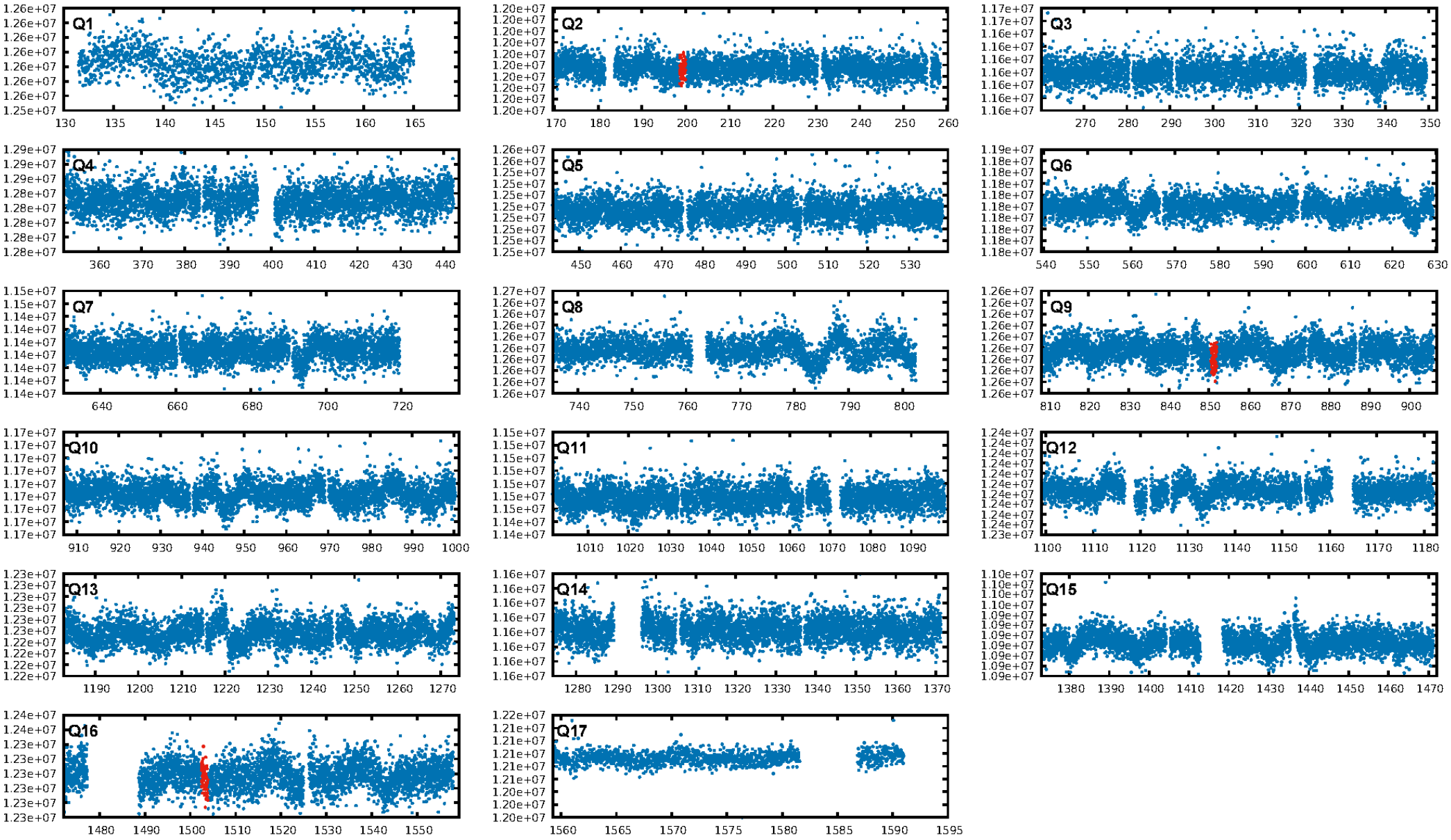
ShortPeriod−sig: N/A
LongPeriod−sig: N/A
ModelChiSquare2−sig: 32.9%
ModelChiSquareGof−sig: 100.0%
Bootstrap−pfa: 8.27e−11
RollingBand−fgt: N/A
GhostDiagnostic−chr: N/A

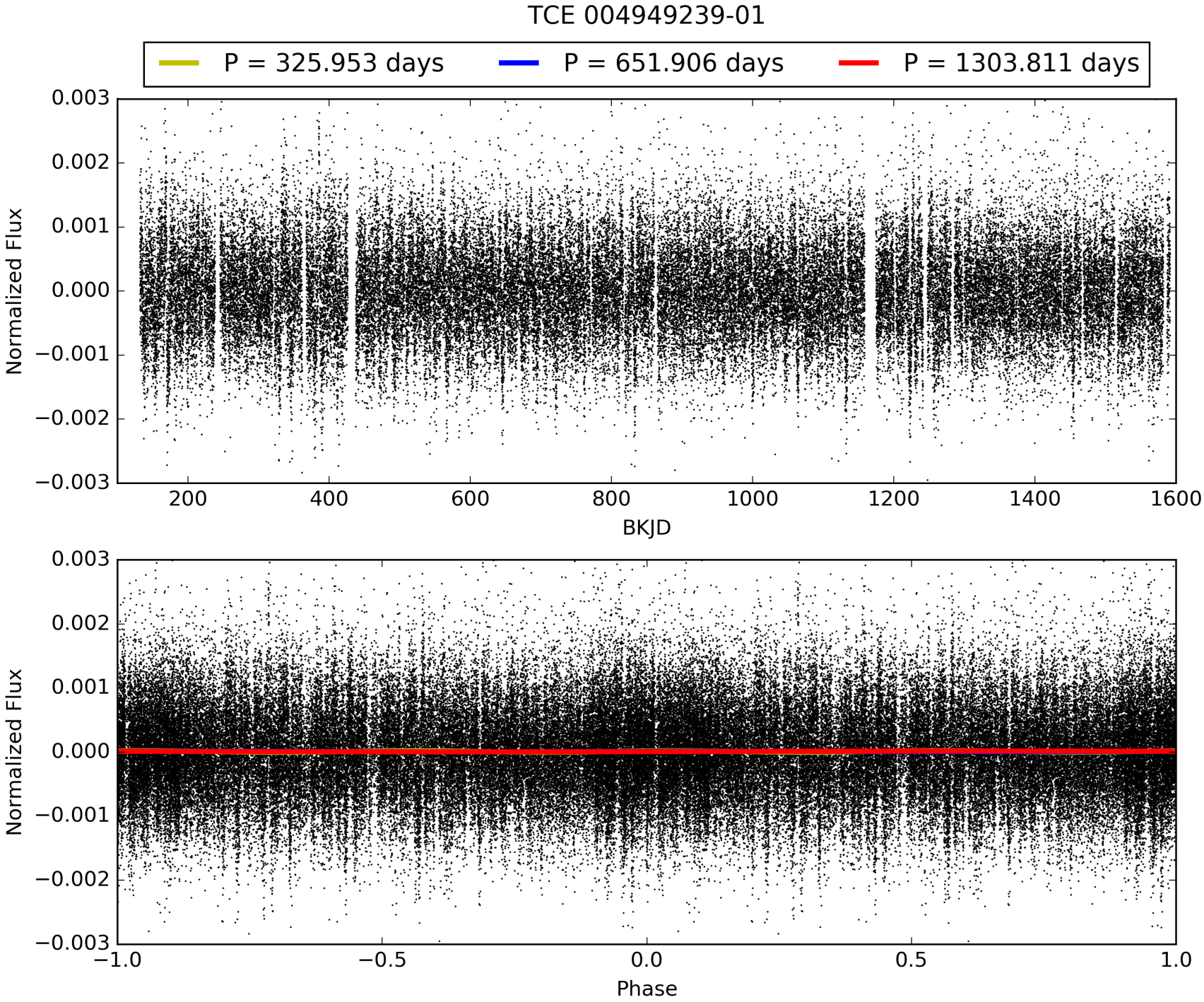
Centroid−sig: N/A
Centroid−so: N/A
OotOffset−rm: N/A
KicOffset−rm: N/A
OotOffset−st: 0/0/0/0 [0]
KicOffset−st: 0/0/0/0 [0]
DiffImageQuality−fgm: N/A
DiffImageOverlap−fno: N/A

Software Revision: svn+ssh://murzim/repo/soc/branches/integ/ksop−2602@61285 −− Date Generated: 06−Jun−2016 01:59:02 Z

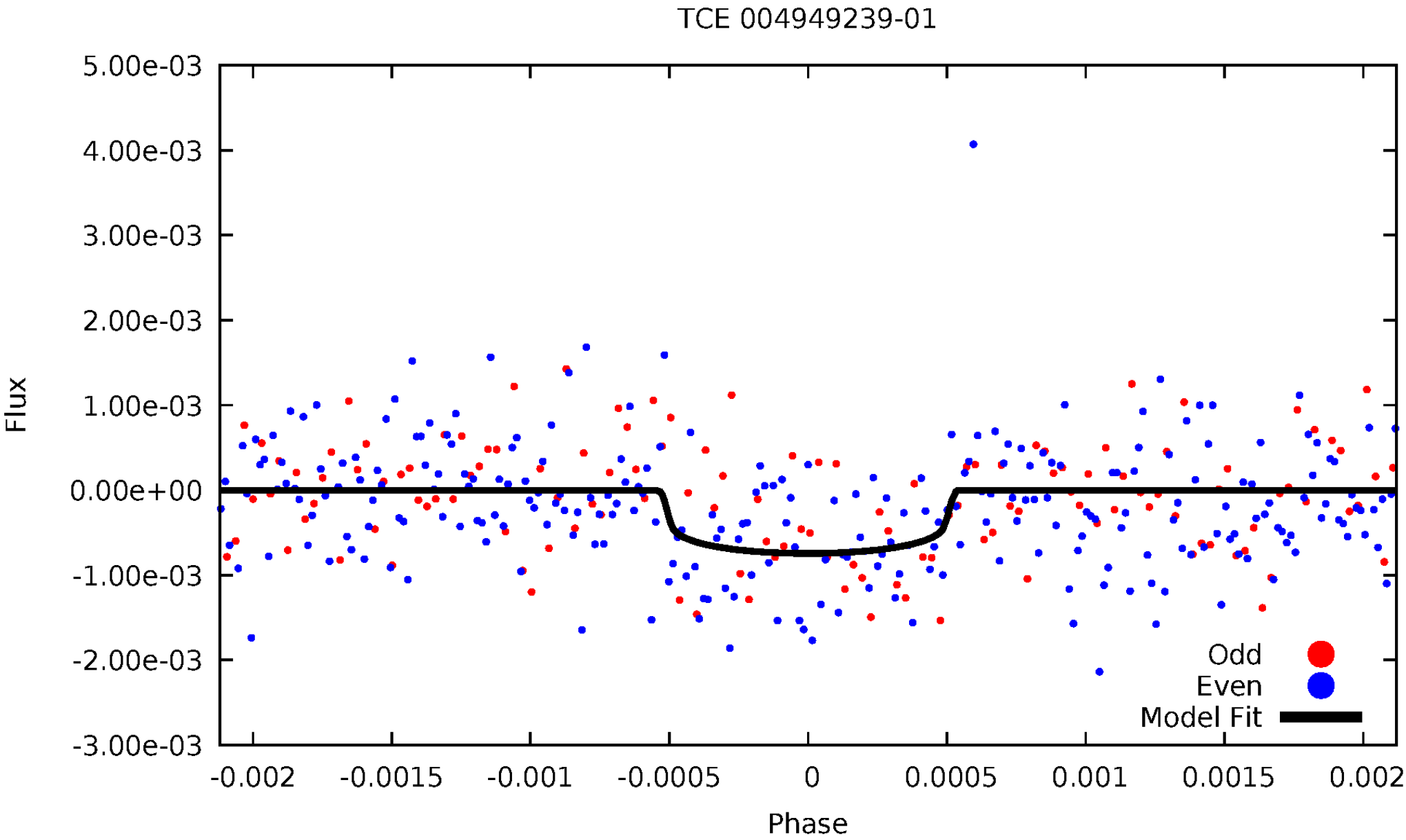
This Data Validation Report Summary was produced in the Kepler Science Operations Center Pipeline at NASA Ames Research Center

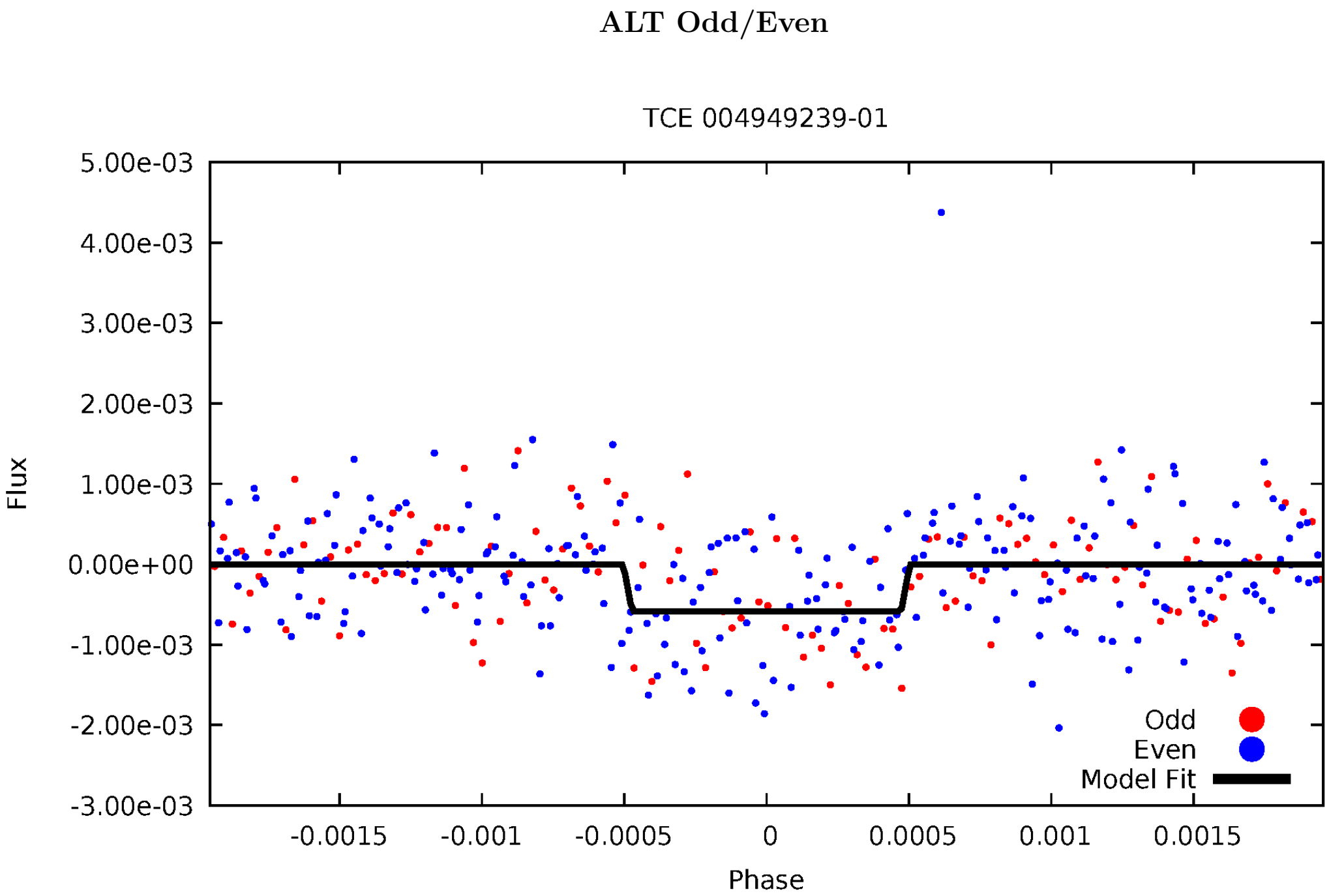
TCE 004949239-01, PDC Light Curves



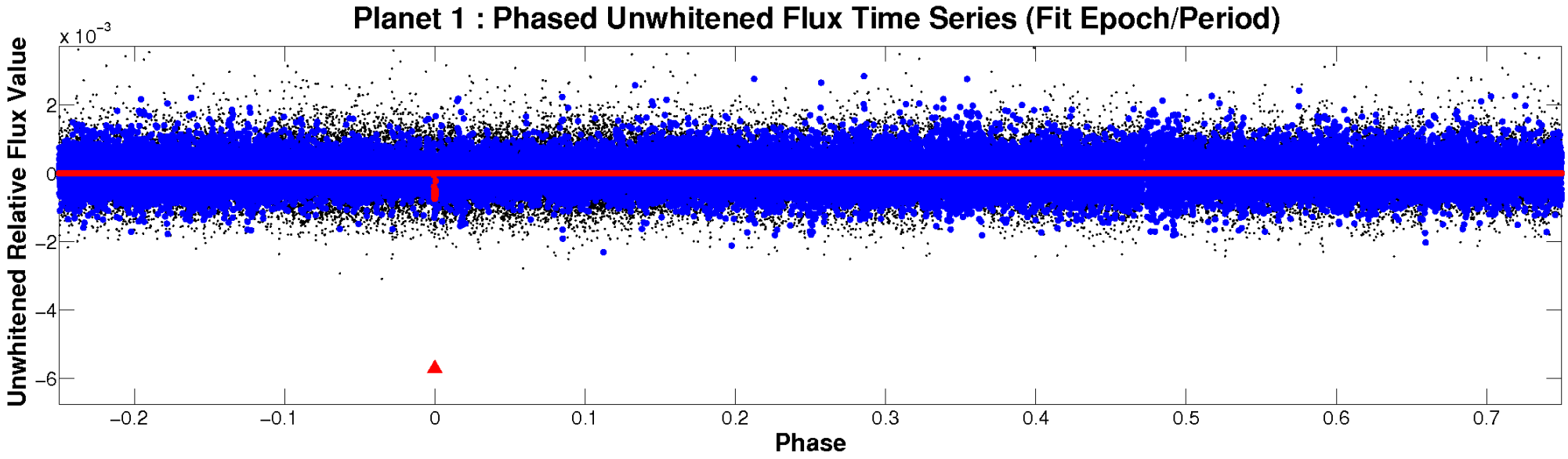

TCE 004949239-01
P = 325.953 days
P = 651.906 days
P = 1303.811 days
Normalized Flux
0.003
0.002
0.001
0.000
−0.001
−0.002
−0.003
200
400
600
800
1000
1200
1400
1600
BKJD
Normalized Flux
0.003
0.002
0.001
0.000
−0.001
−0.002
−0.003
−1.0
−0.5
0.0
0.5
1.0
Phase

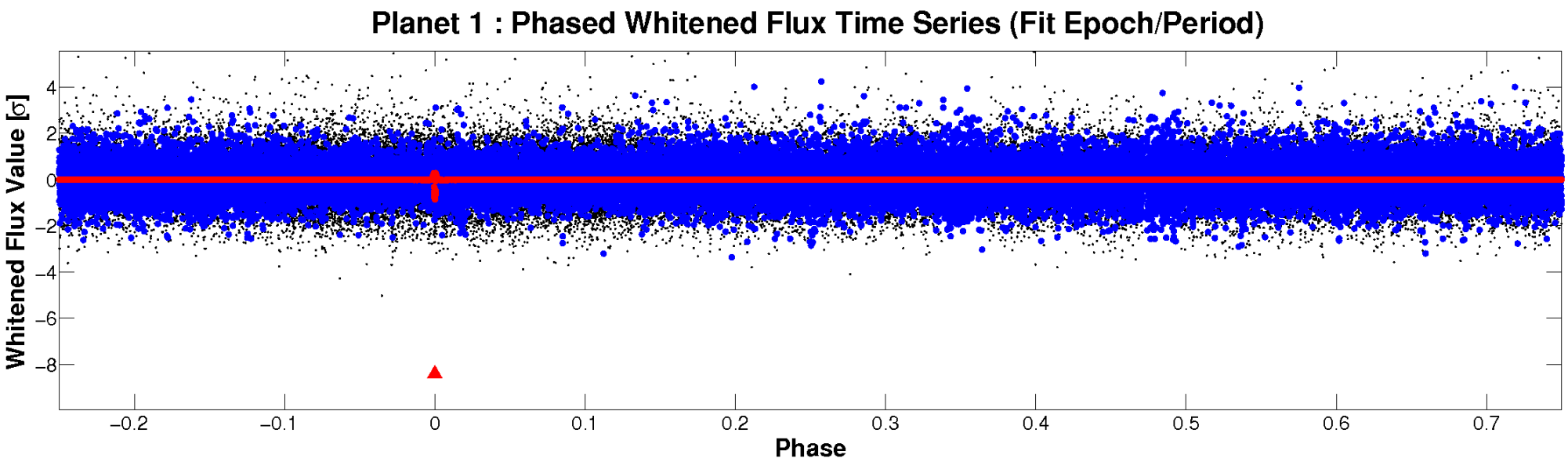
DV Odd/Even


TCE 004949239-01
5.00e-03
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
-0.002
-0.0015
-0.001
-0.0005
0
0.0005
0.001
0.0015
0.002
Phase
Odd
Even
Model Fit


ALT Odd/Even
TCE 004949239-01
5.00e-03
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
-0.0015
-0.001
-0.0005
0
0.0005
0.001
0.0015
Phase
Odd
Even
Model Fit

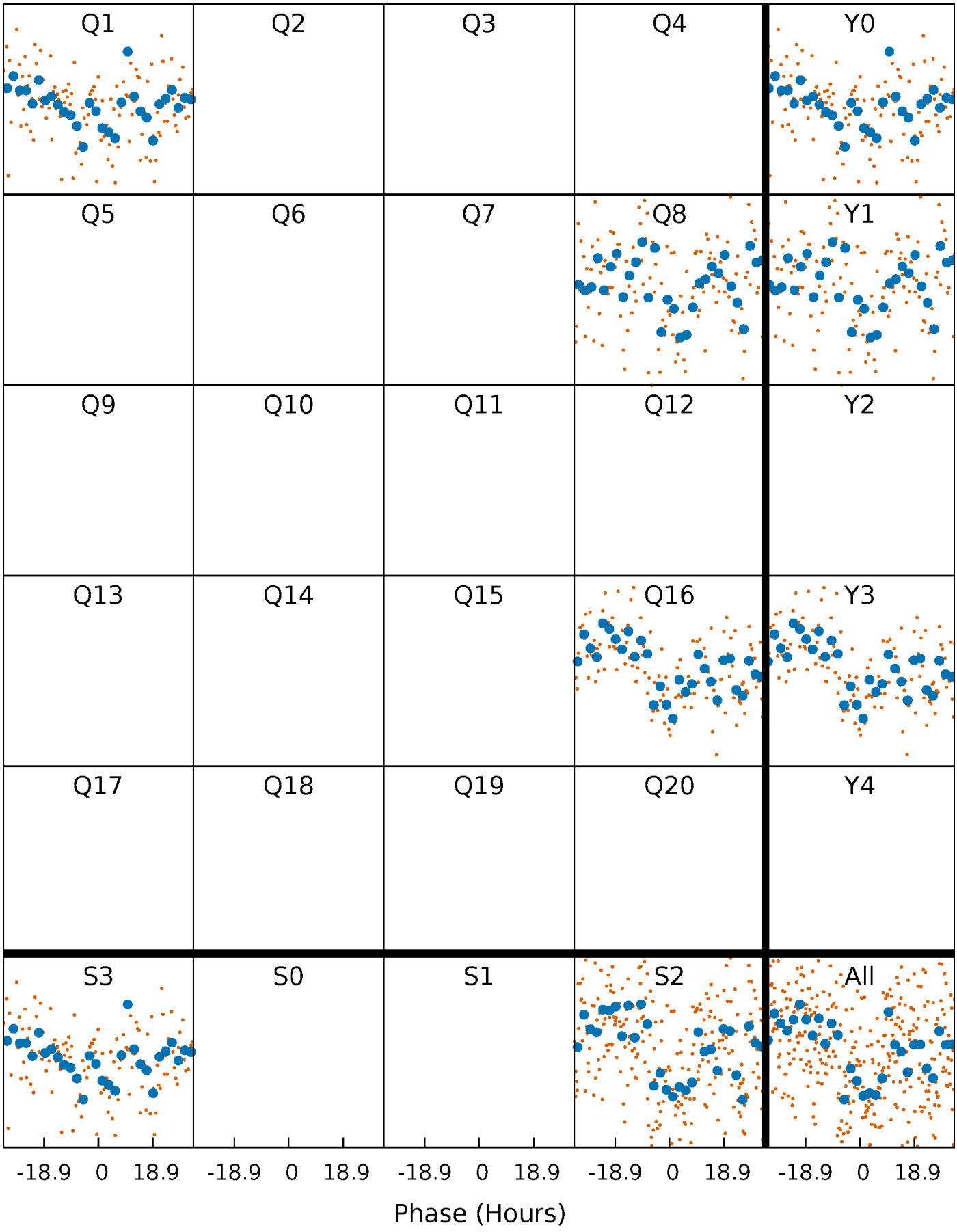
Non-Whitened Vs. Whitened Light Curve





PDC Quarter-Phased Transit Curves

TCE 004949239-01 P=651.905642 Days T_0=199.354075 (BKJD)



DV Quarter-Phased Transit Curves

TCE 004949239-01 P=651.905642 Days T_0=199.354075 (BKJD)

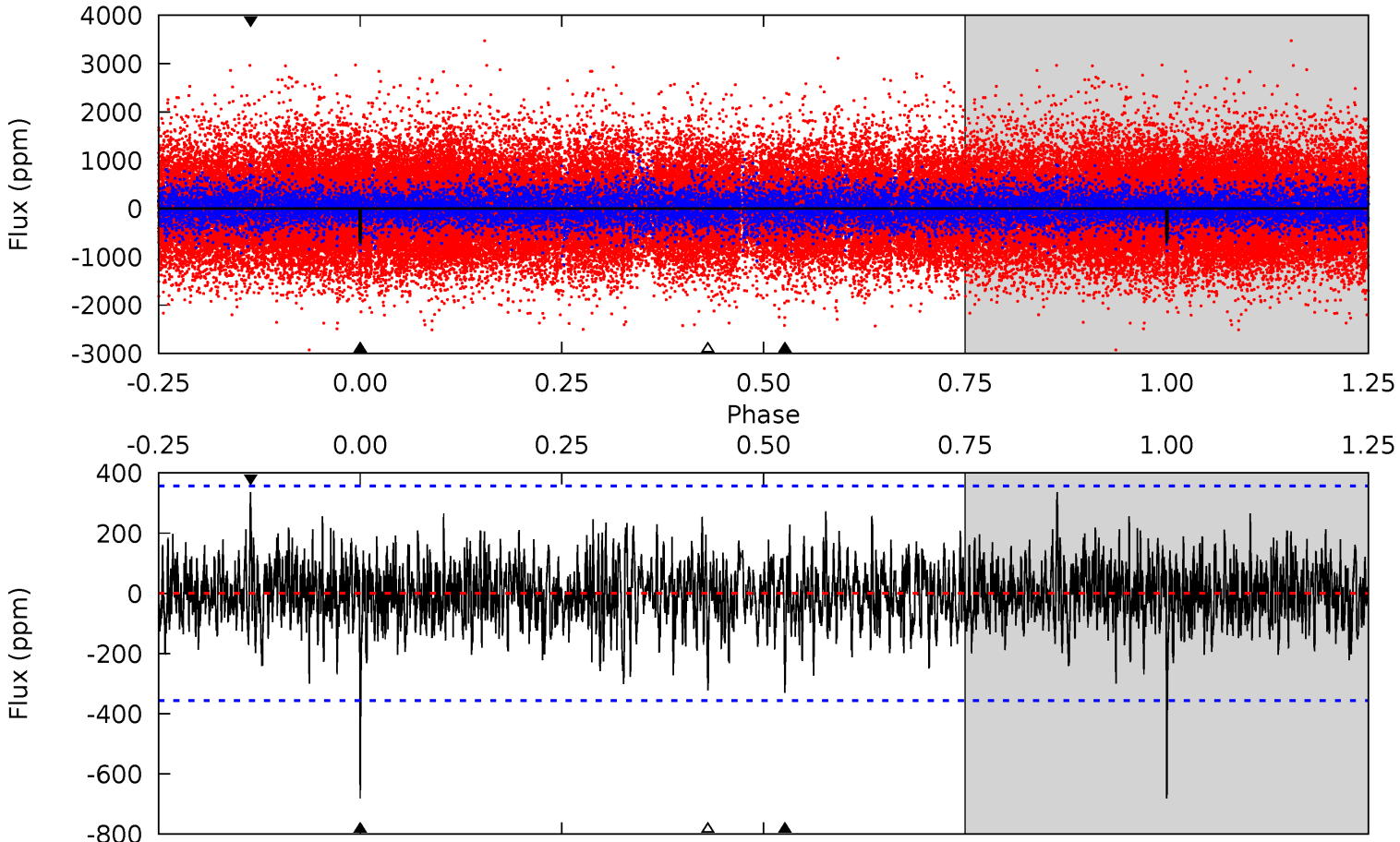
Alt. Detrend Quarter-Phased Transit Curves

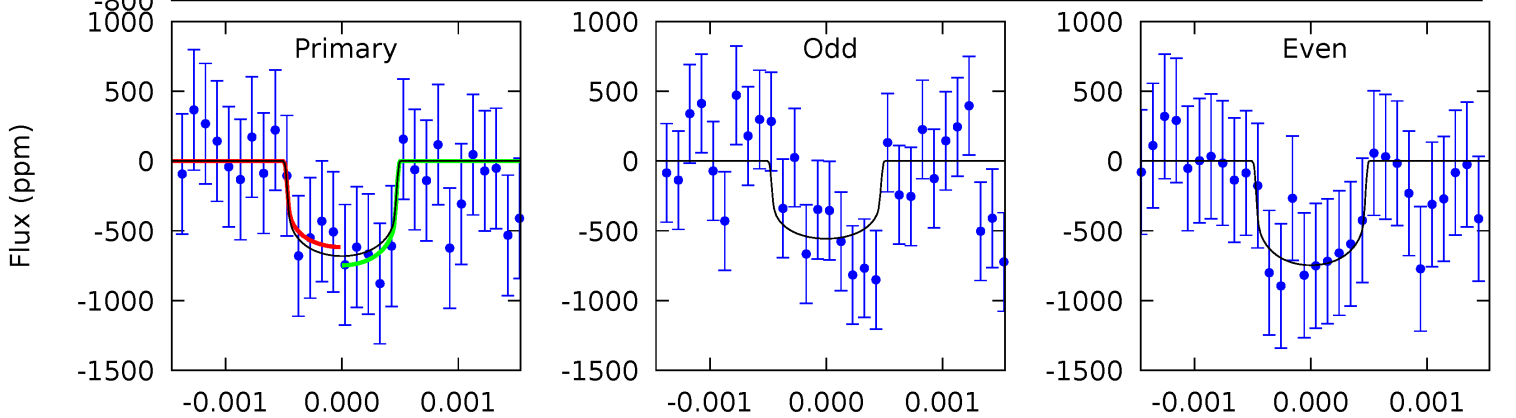
TCE 004949239-01 P=651.919109 Days T_0=199.341970 (BKJD)

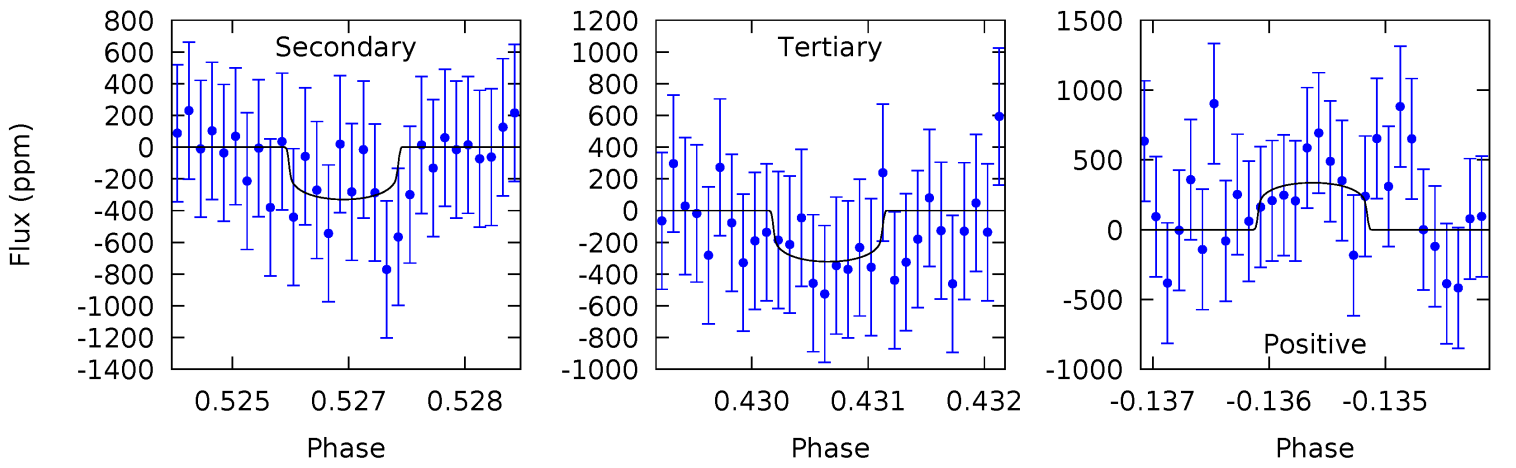
DV Model-Shift Uniqueness Test

004949239-01, P = 651.905642 Days, E = 199.354075 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	5.03	4.91	5.12	5.44	3.27	1.35	5.48	5.27	0.12	-0.09	1.39	1.06	0.33	1.00



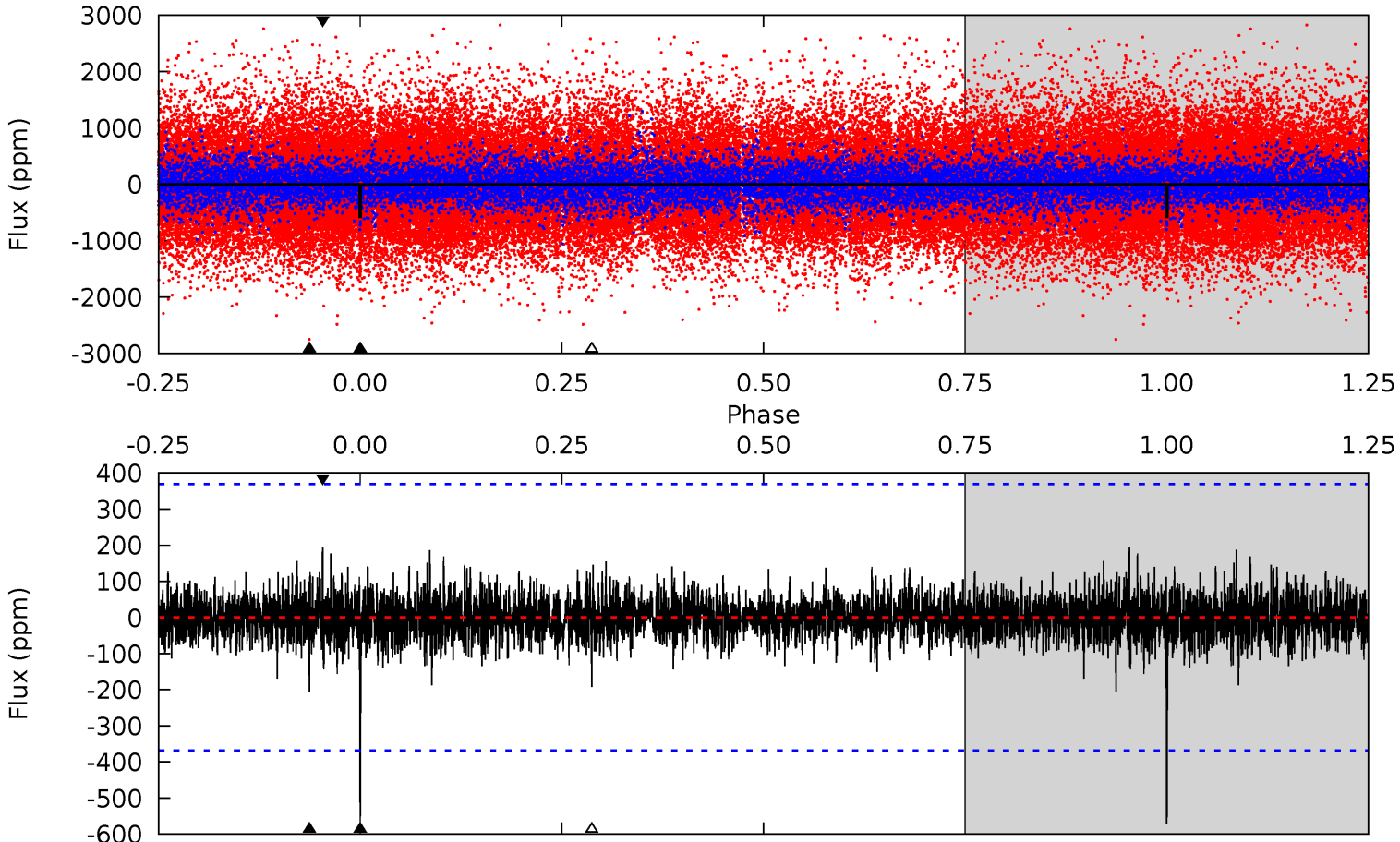


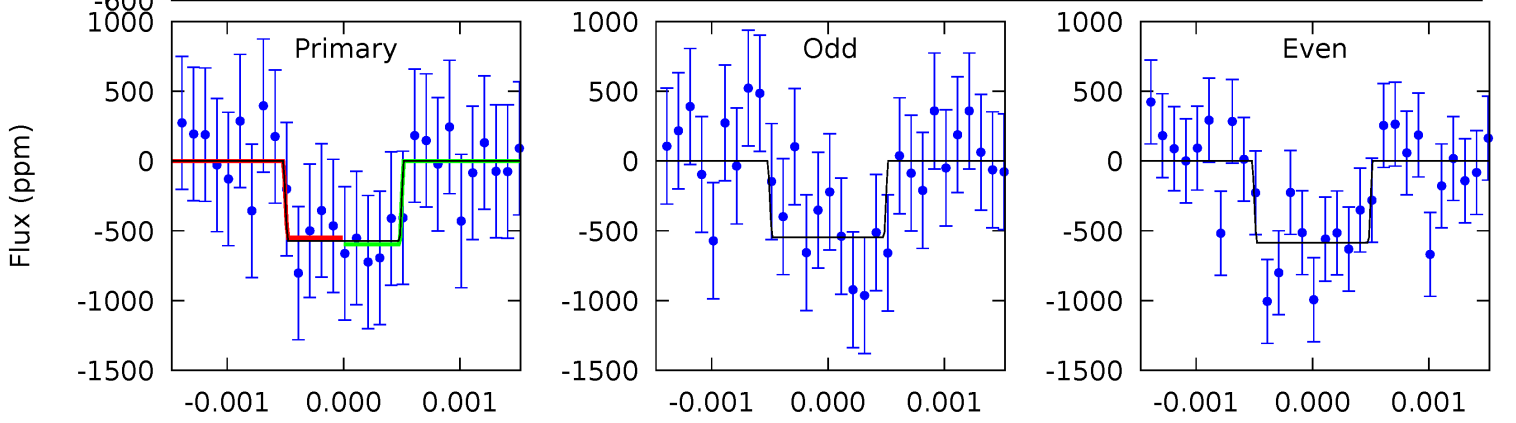


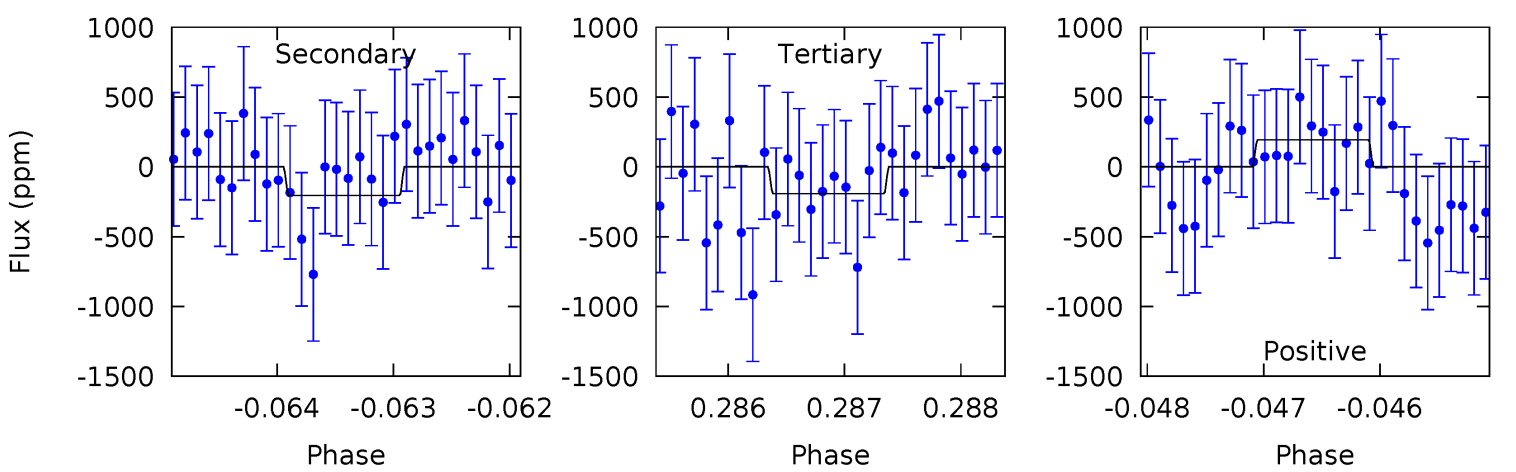
Alt Model-Shift Uniqueness Test

004949239-01, P = 651.919109 Days, E = 199.341970 Days

Pri	Sec	Ter	Pos	FA_1	FA_2	F_{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
8.46	3.03	2.84	2.86	5.46	3.30	0.65	5.62	5.60	0.19	0.17	0.28	1.05	0.25	0.34







Stellar Parameters For KIC 004949239

	$T_{\rm eff}(K)$	$\log(g)$	[Fe/H]	R ($R_\odot$)	$M(M_\odot)$	$p_\star$ (g·cm^{-3})
	6046^{+189}_{-210}	$4.486^{+0.048}_{-0.192}$	$-0.080^{+0.250}_{-0.300}$	$0.972^{+0.285}_{-0.095}$	$1.053^{+0.126}_{-0.139}$	$1.615^{+0.421}_{-0.810}$
	+3%/-3%	+1%/-4%	+312%/-375%	+29%/-10%	+12%/-13%	+26%/-50%
Source	PHO1	KIC0	KIC0	DSEP		

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

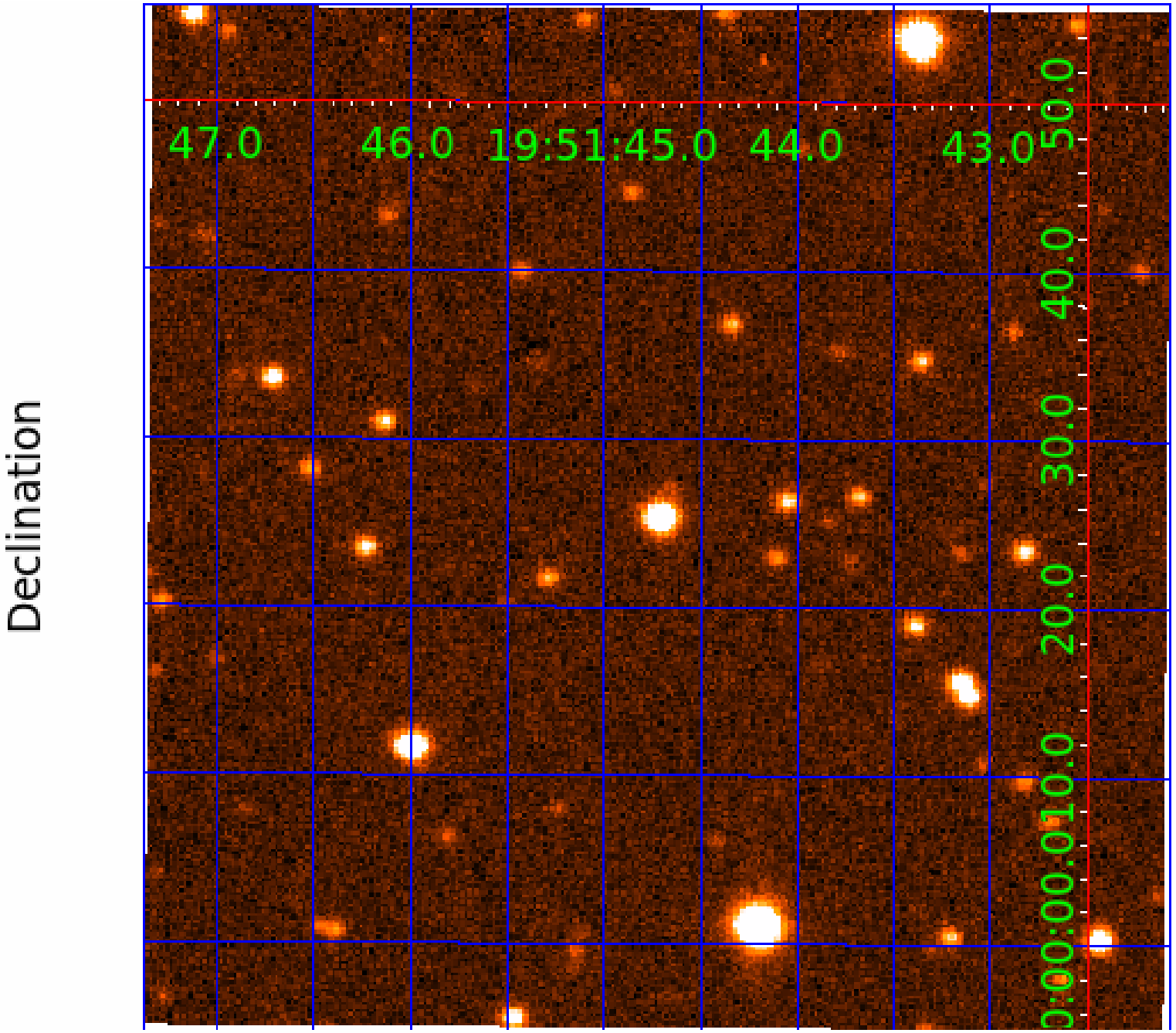
Secondary Eclipse Parameters for KIC 004949239-01 / KOI

Detrend	Depth (ppm)	R_p ($R_\oplus$)	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	-330±66	$2.94^{+1.37}_{-1.19}$	307^{+20}_{-15}	5103^{+1382}_{-709}	46556^{+82168}_{-24996}
Alt.	-205±68	$2.66^{+1.20}_{-1.16}$	307^{+20}_{-14}	4755^{+1447}_{-718}	34345^{+72610}_{-20022}

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


47.0
46.0
19:51:45.0
44.0
43.0
50.0
40.0
30.0
20.0
10.0
0:00:00.0
Declination