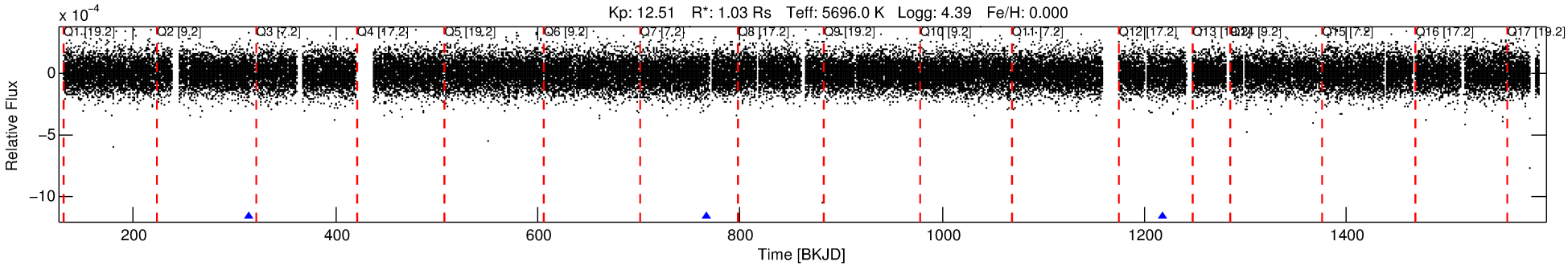
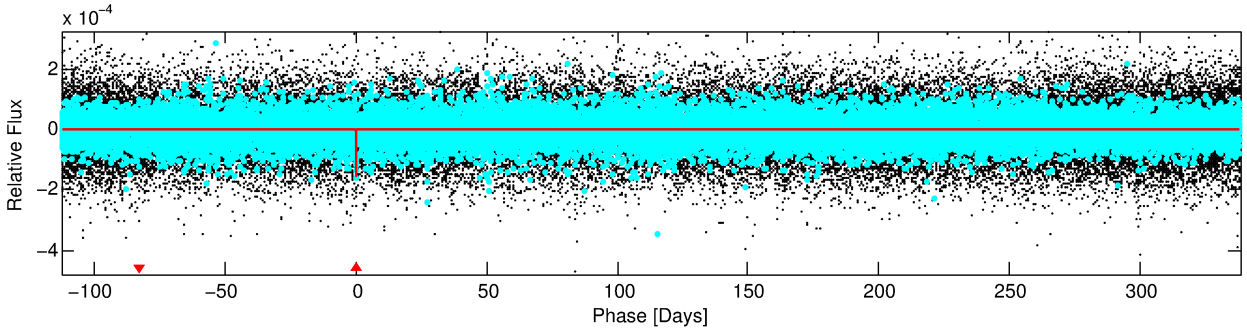
WARNING: THIS DATA IS SIMULATED, NOT OBSERVED

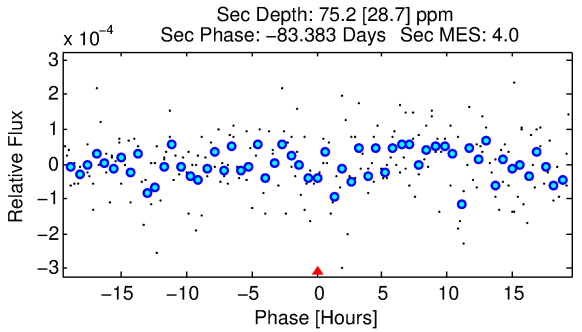
DV One-Page Summary

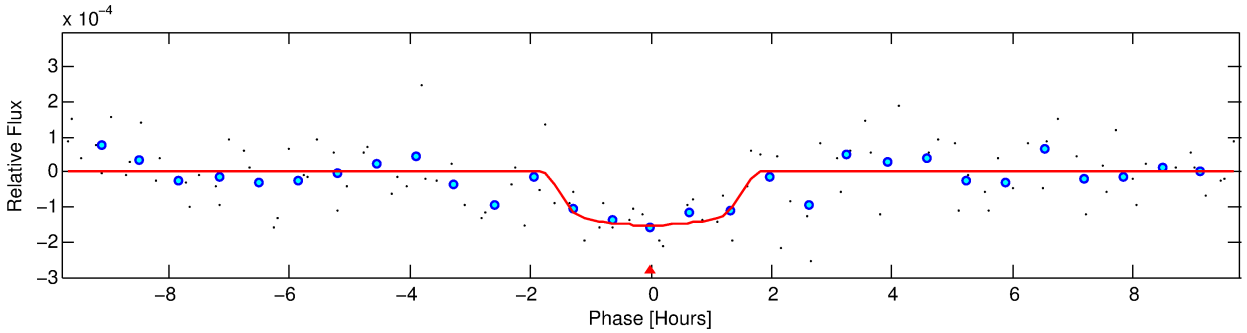
KIC: 7690646 Candidate: 1 of 1 Period: 451.571 d

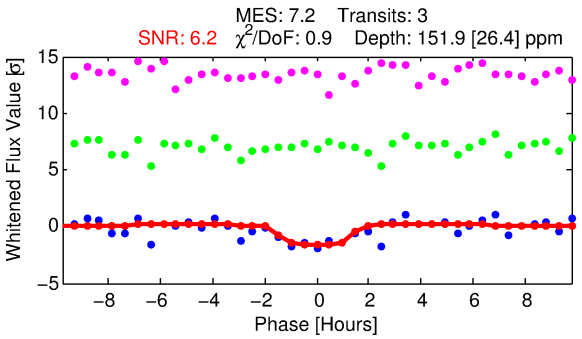
WARNING: THIS DATA IS SIMULATED, NOT OBSERVED

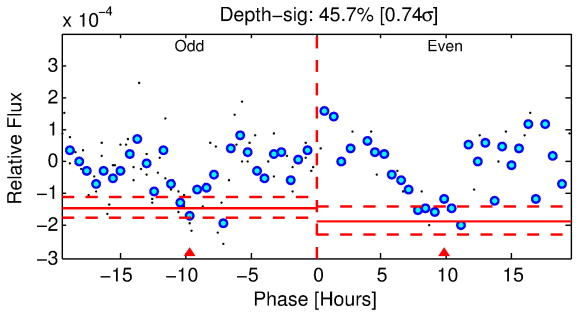












DV Fit Results:

Period = 451.57052 [0.00834] d
Epoch = 314.6526 [0.0103] BKJD
Rp/R* = 0.0135 [0.0143]
a/R* = 494.34 [2487.72]
b = 0.90 [1.08]

Seff = 0.78 [0.21]
Teq = 240 [16] K
Rp = 1.51 [1.63] Re
a = 1.1279 [0.1899] AU

Ag = 23167.81 [50271.94] [0.46σ]
Teffp = 4572 [2468] K [1.76σ]

DV Diagnostic Results:

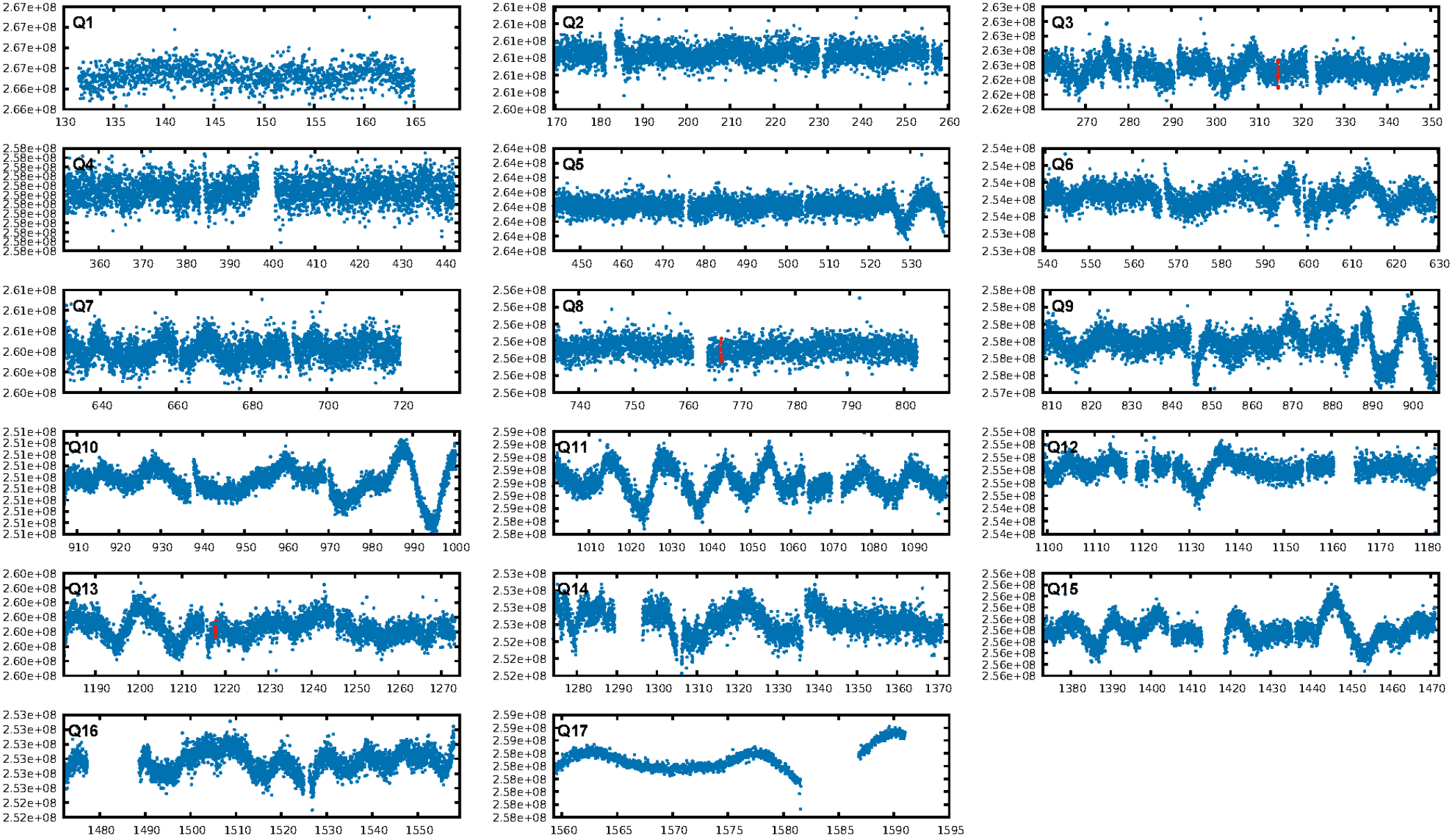
ShortPeriod−sig: N/A
LongPeriod−sig: N/A
ModelChiSquare2−sig: 44.8%
ModelChiSquareGof−sig: 99.8%
Bootstrap−pfa: 4.95e−09
RollingBand−fgt: N/A
GhostDiagnostic−chr: N/A

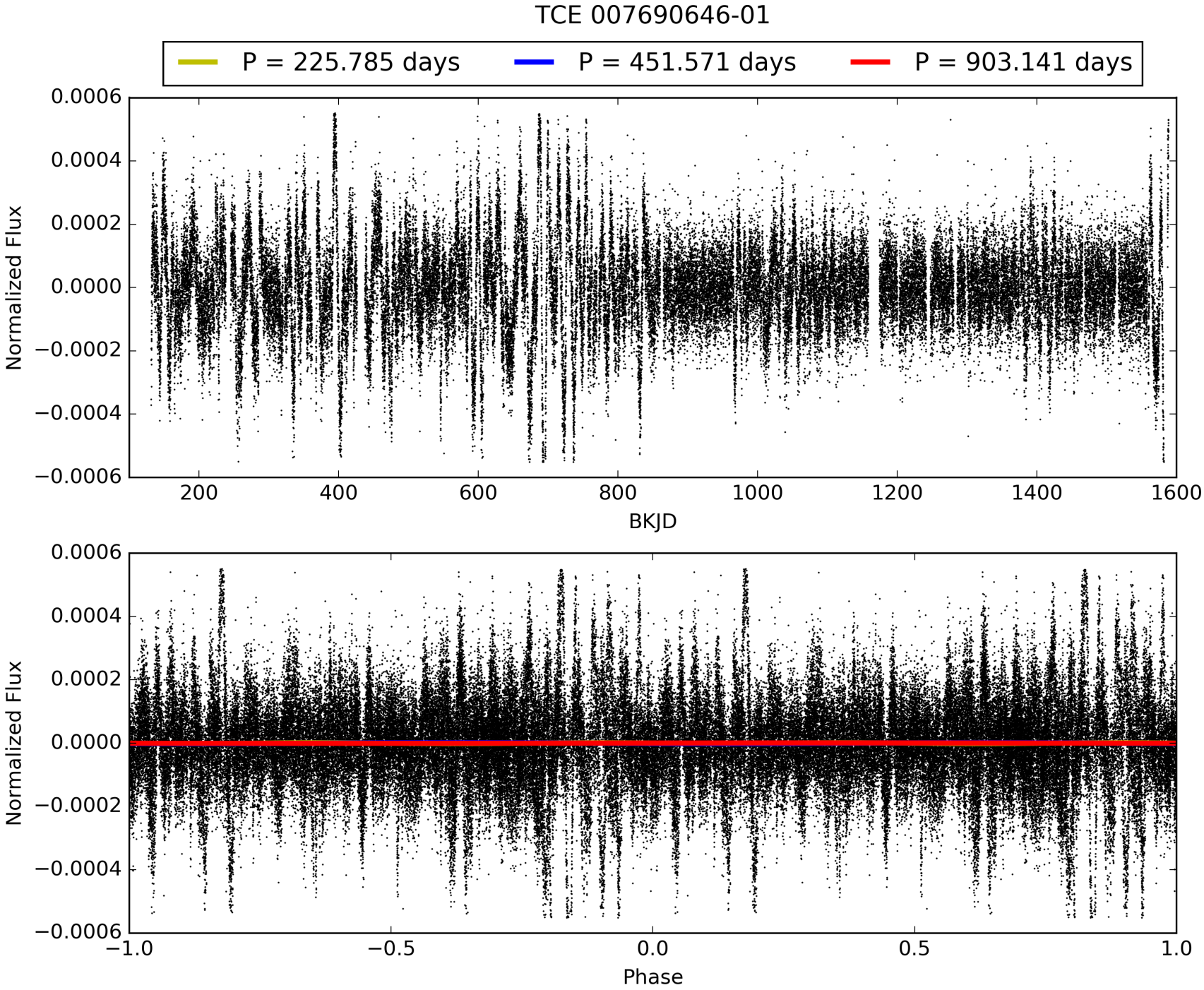
Centroid−sig: N/A
Centroid−so: N/A
OotOffset−rm: N/A
KicOffset−rm: N/A
OotOffset−st: 0/0/0/0 [0]
KicOffset−st: 0/0/0/0 [0]
DiffImageQuality−fgm: N/A
DiffImageOverlap−fno: N/A

Software Revision: svn+ssh://murzim/repo/soc/branches/integ/ksop−2602@61285 −− Date Generated: 02−Jun−2016 05:13:01 Z

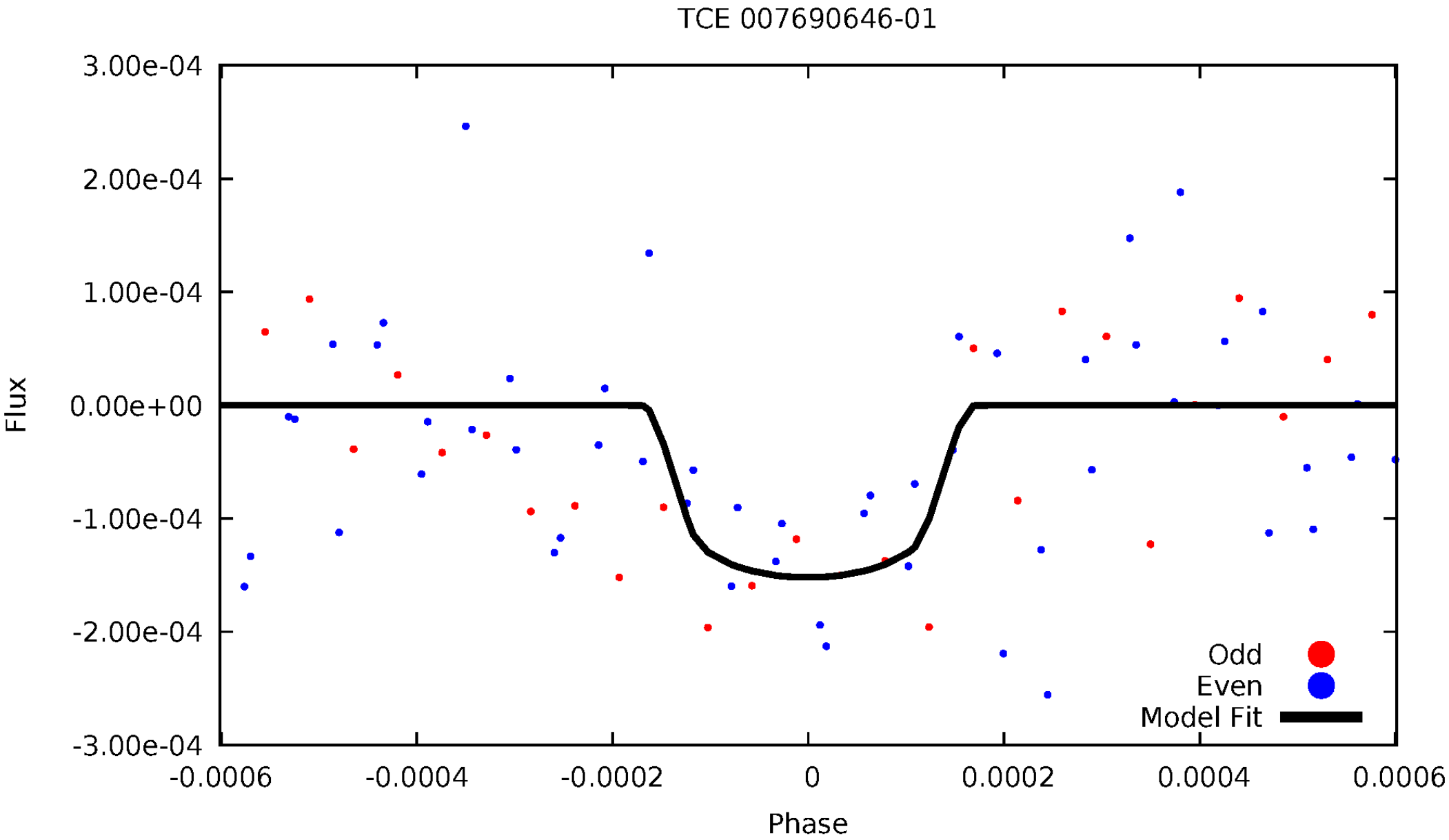
This Data Validation Report Summary was produced in the Kepler Science Operations Center Pipeline at NASA Ames Research Center

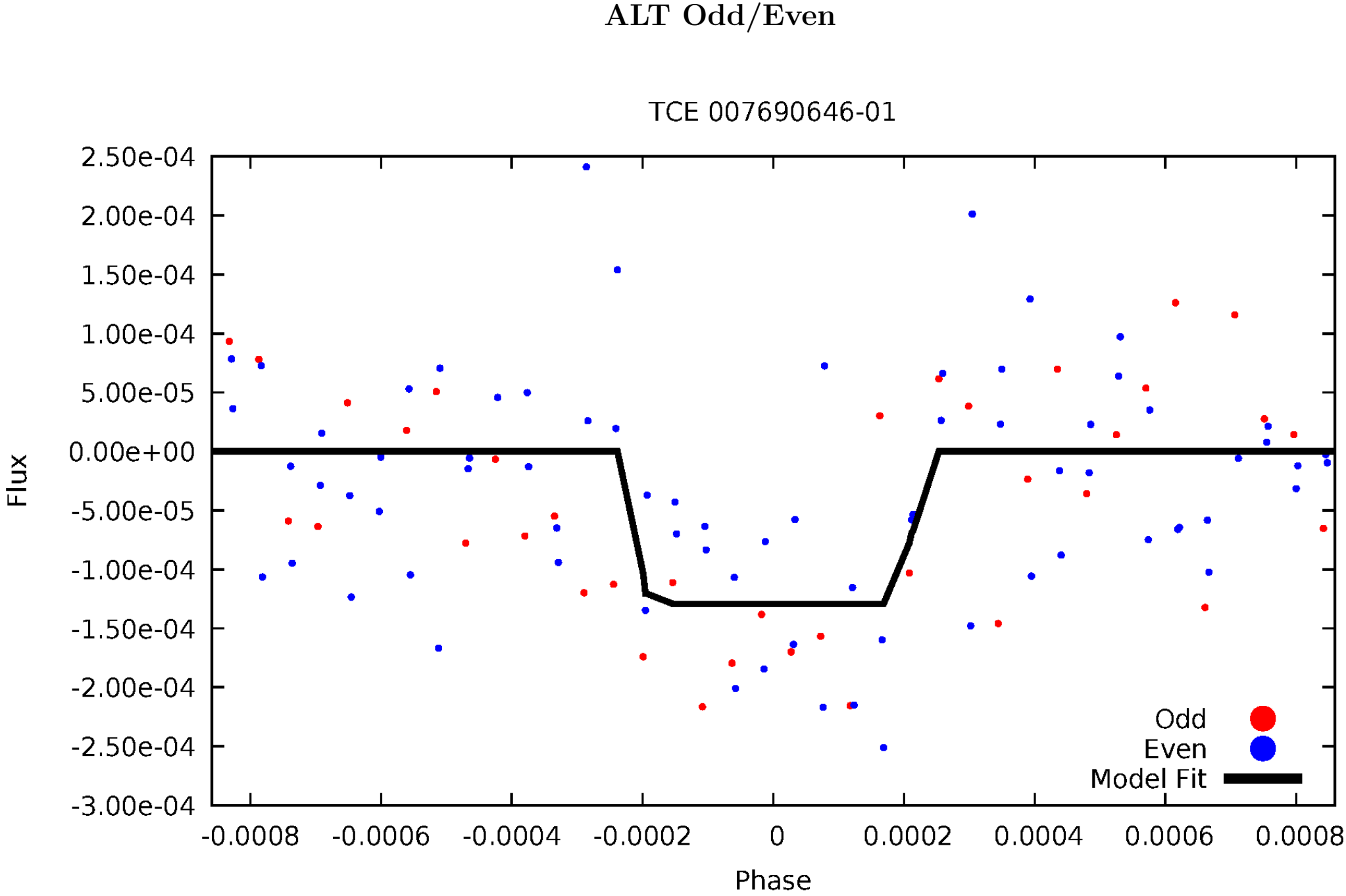
TCE 007690646-01, PDC Light Curves



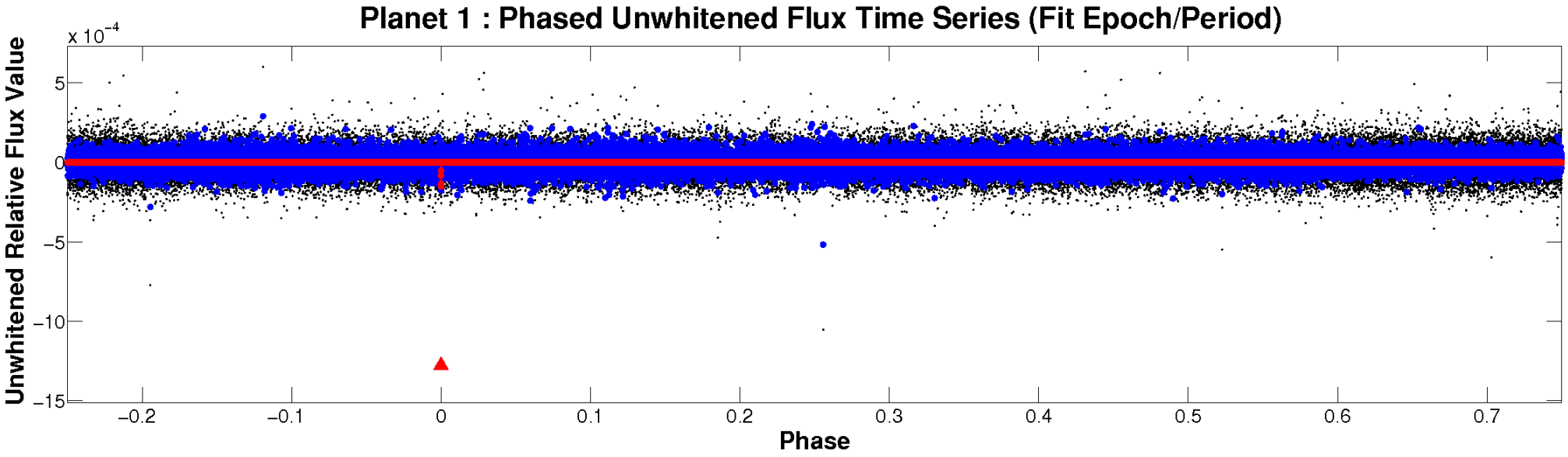

TCE 007690646-01
P = 225.785 days
P = 451.571 days
P = 903.141 days
Normalized Flux
0.0006
0.0004
0.0002
0.0000
−0.0002
−0.0004
−0.0006
200
400
600
800
1000
1200
1400
1600
BKJD
Normalized Flux
0.0006
0.0004
0.0002
0.0000
−0.0002
−0.0004
−0.0006
−1.0
−0.5
0.0
0.5
1.0
Phase

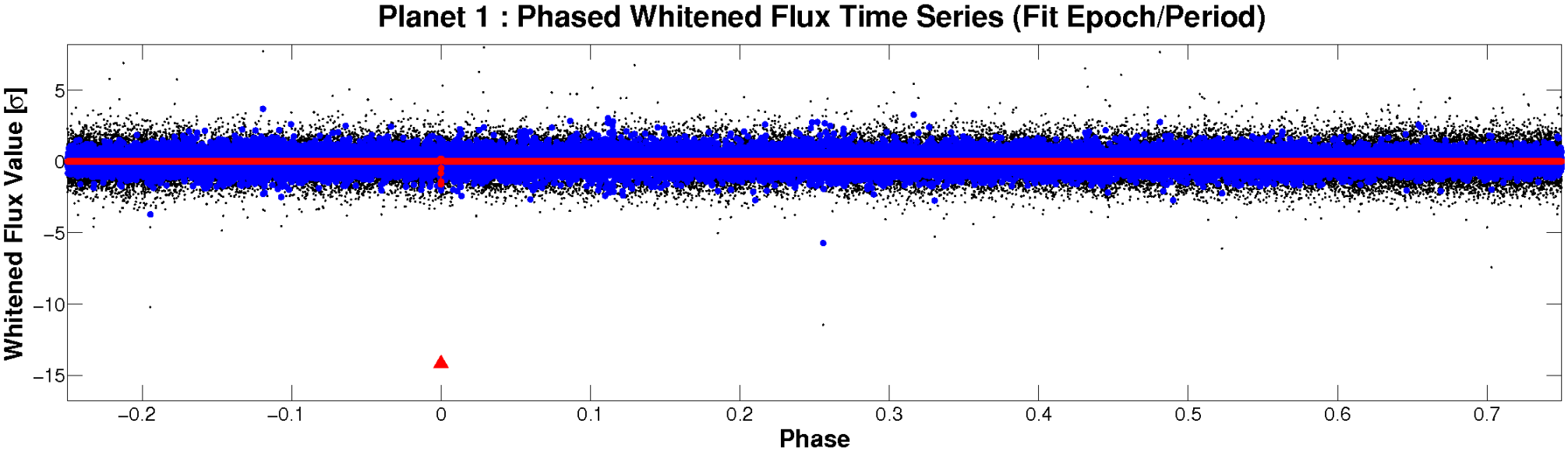
DV Odd/Even


TCE 007690646-01
3.00e-04
2.00e-04
1.00e-04
0.00e+00
-1.00e-04
-2.00e-04
-3.00e-04
Flux
-0.0006
-0.0004
-0.0002
0
0.0002
0.0004
0.0006
Phase
Odd
Even
Model Fit


ALT Odd/Even
TCE 007690646-01
2.50e-04
2.00e-04
1.50e-04
1.00e-04
5.00e-05
0.00e+00
-5.00e-05
-1.00e-04
-1.50e-04
-2.00e-04
-2.50e-04
-3.00e-04
Flux
-0.0008
-0.0006
-0.0004
-0.0002
0
0.0002
0.0004
0.0006
0.0008
Phase
Odd
Even
Model Fit

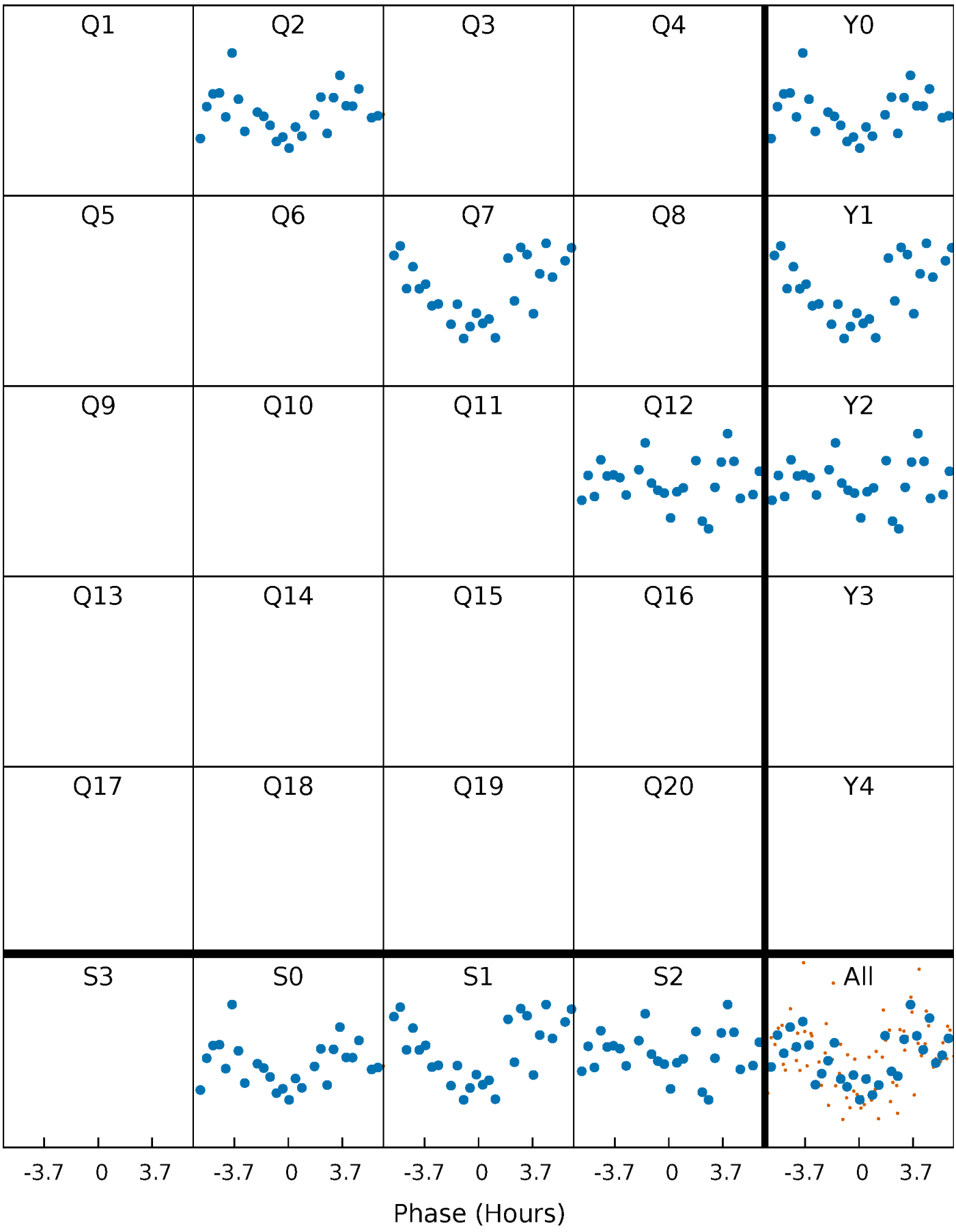
Non-Whitened Vs. Whitened Light Curve





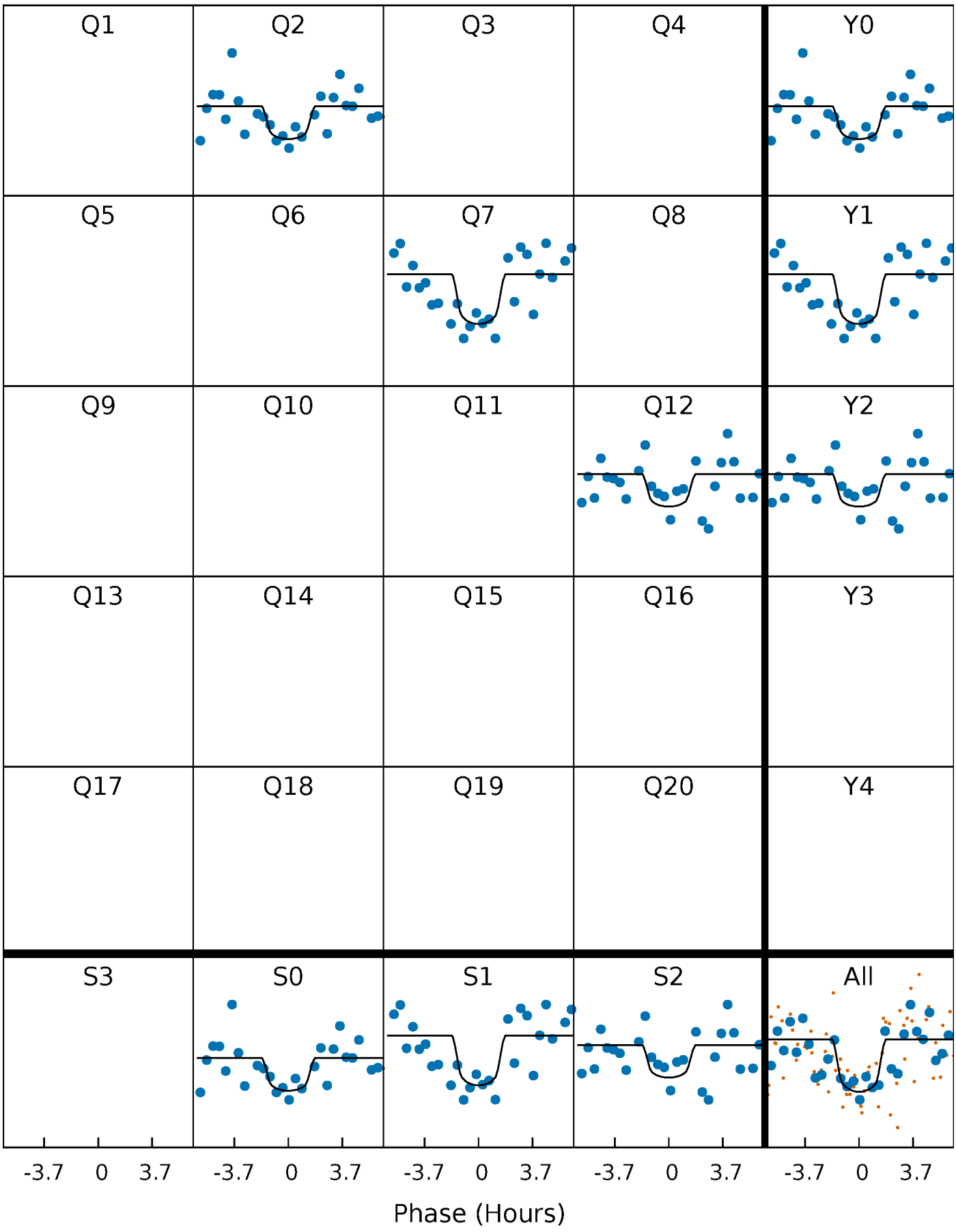
PDC Quarter-Phased Transit Curves

TCE 007690646-01 P=451.570521 Days T_0=314.652573 (BKJD)



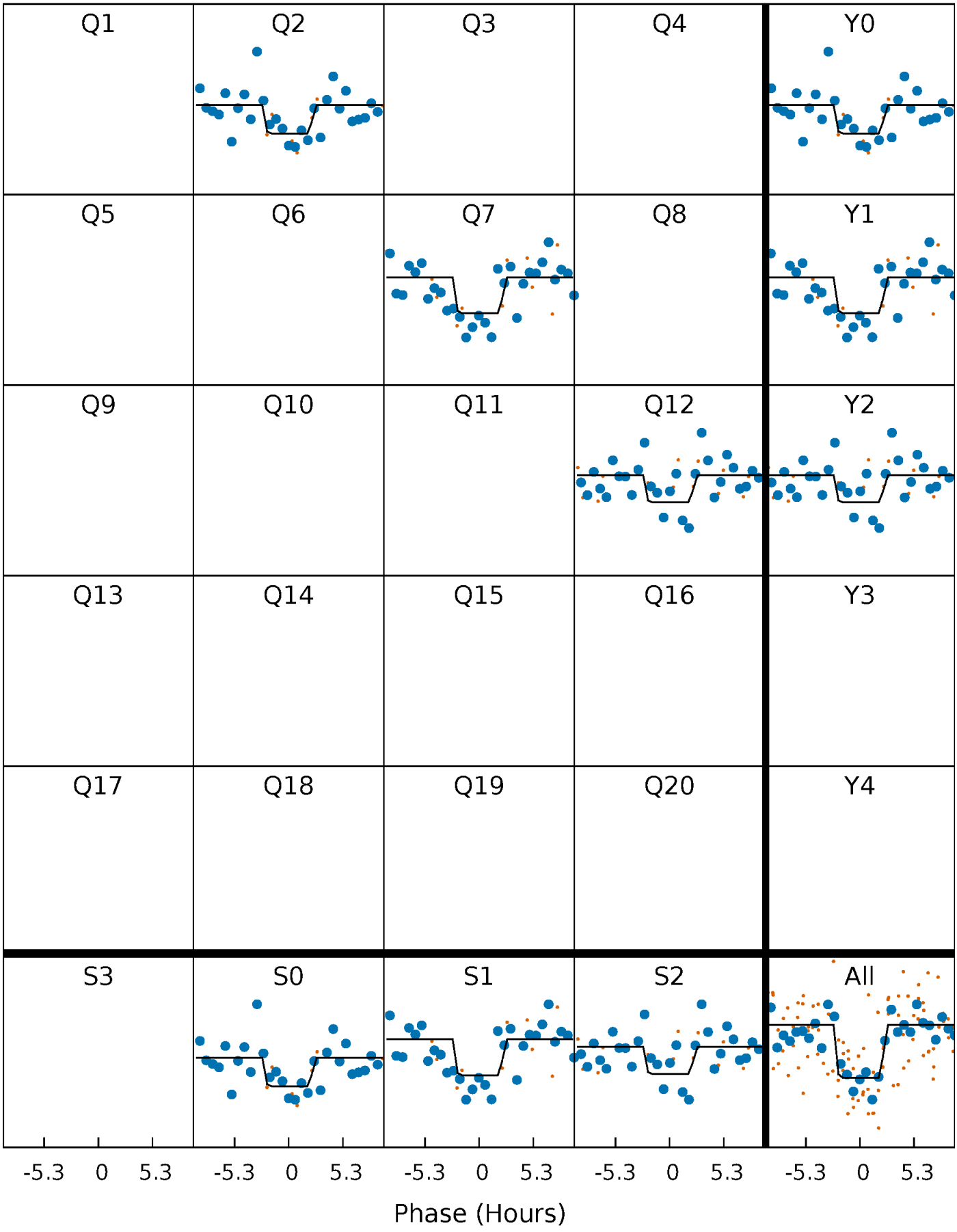
DV Quarter-Phased Transit Curves

TCE 007690646-01 P=451.570521 Days T_0=314.652573 (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

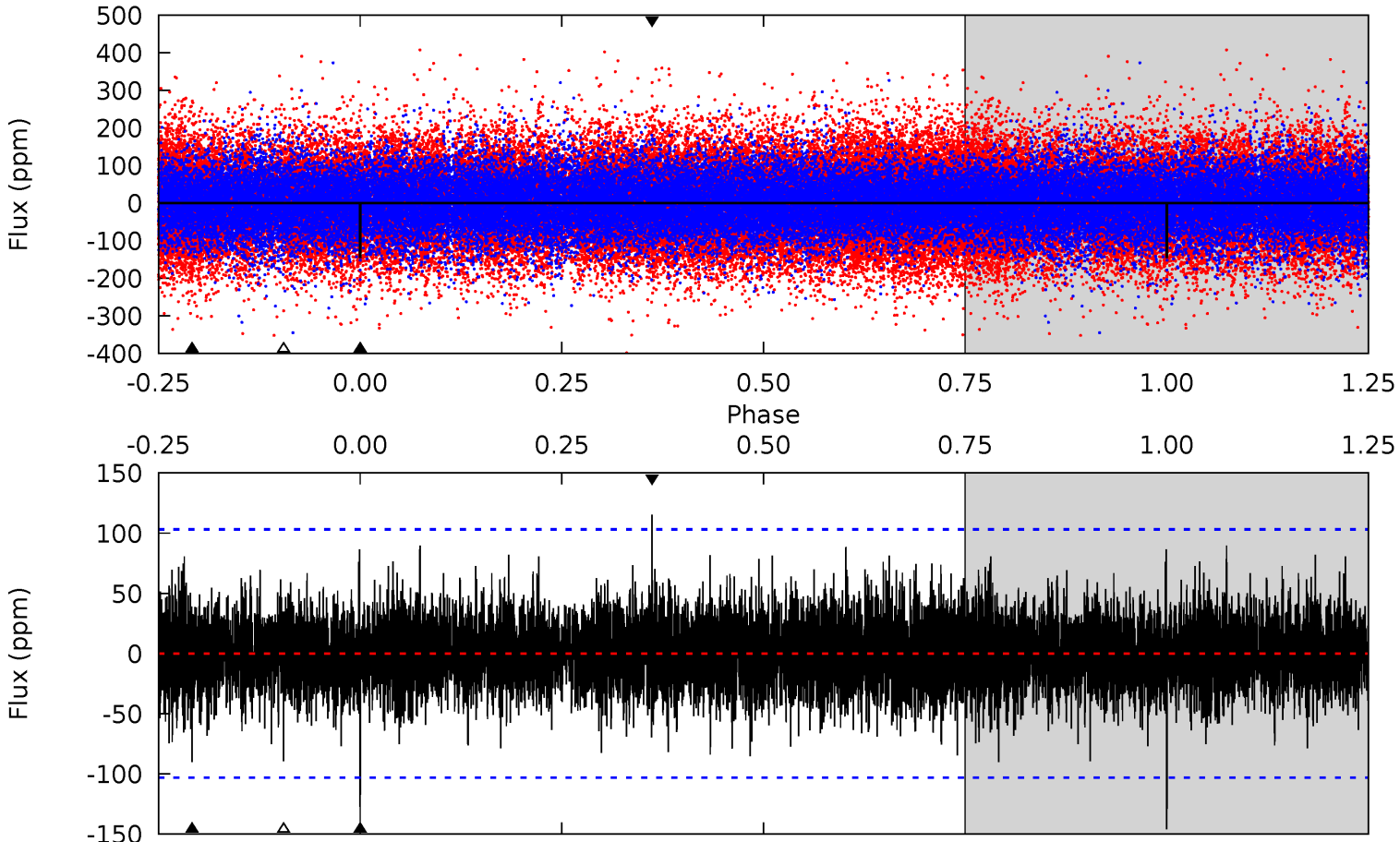
TCE 007690646-01 P=451.602109 Days T_0=314.623664 (BKJD)

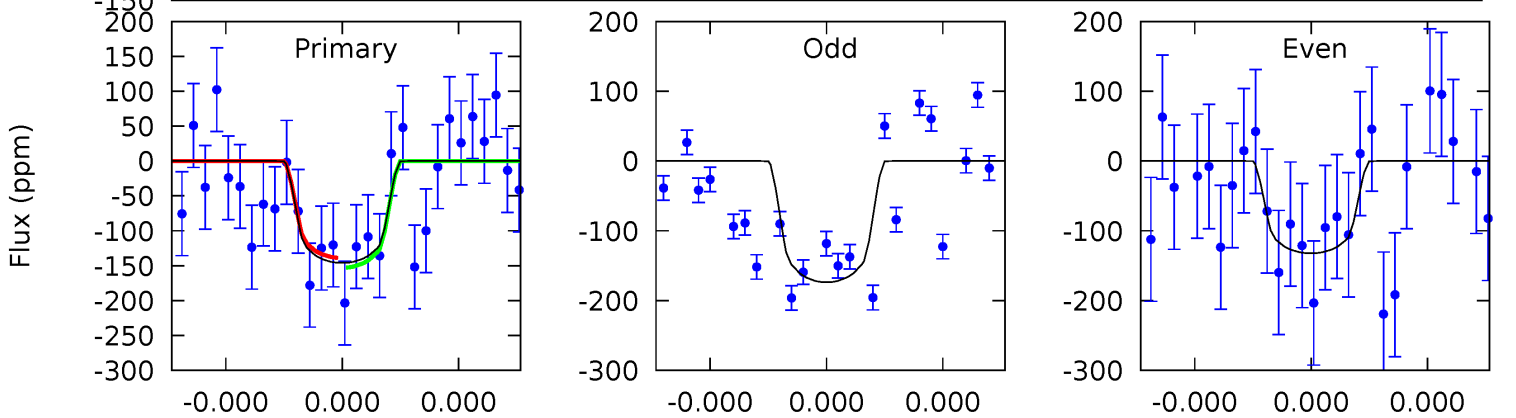


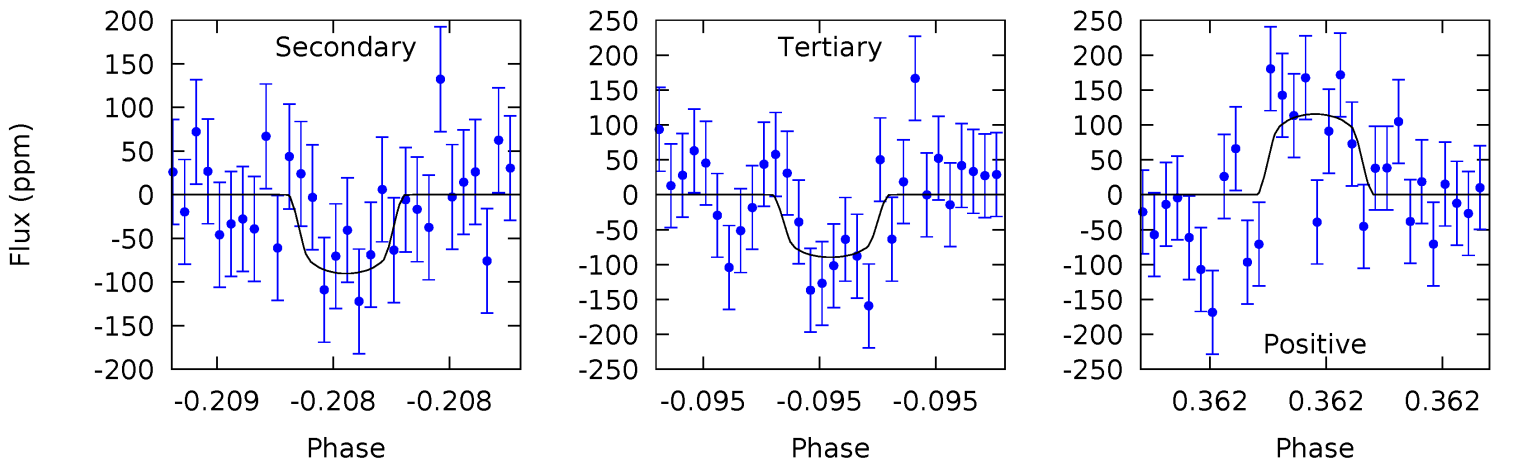
DV Model-Shift Uniqueness Test

007690646-01, P = 451.570521 Days, E = 314.652573 Days

Pri	Sec	Ter	Pos	FA_1	FA_2	F_{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
7.99	4.94	4.90	6.32	5.64	3.58	1.27	3.09	1.67	0.04	-1.38	1.06	0.96	0.44	0.38



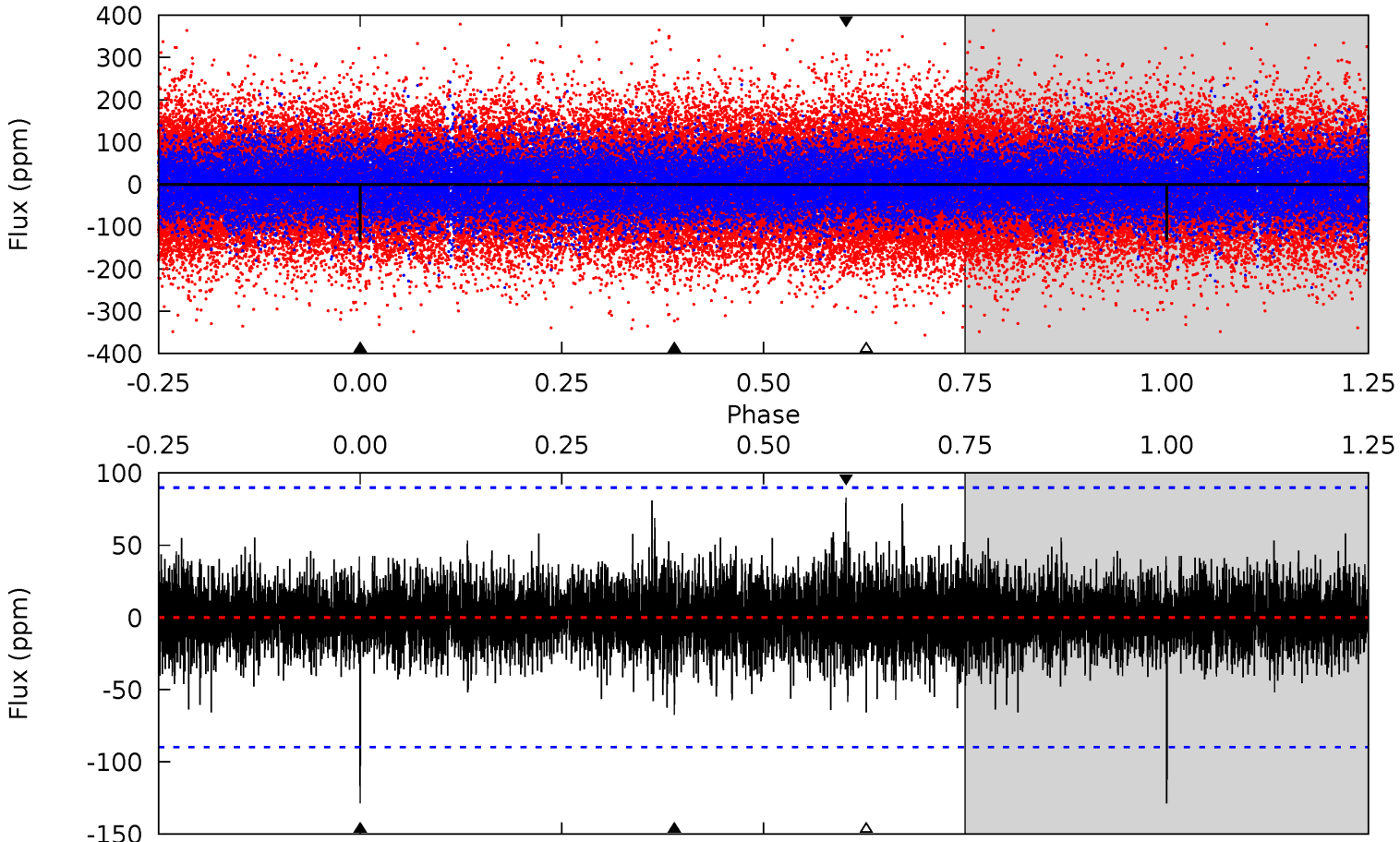


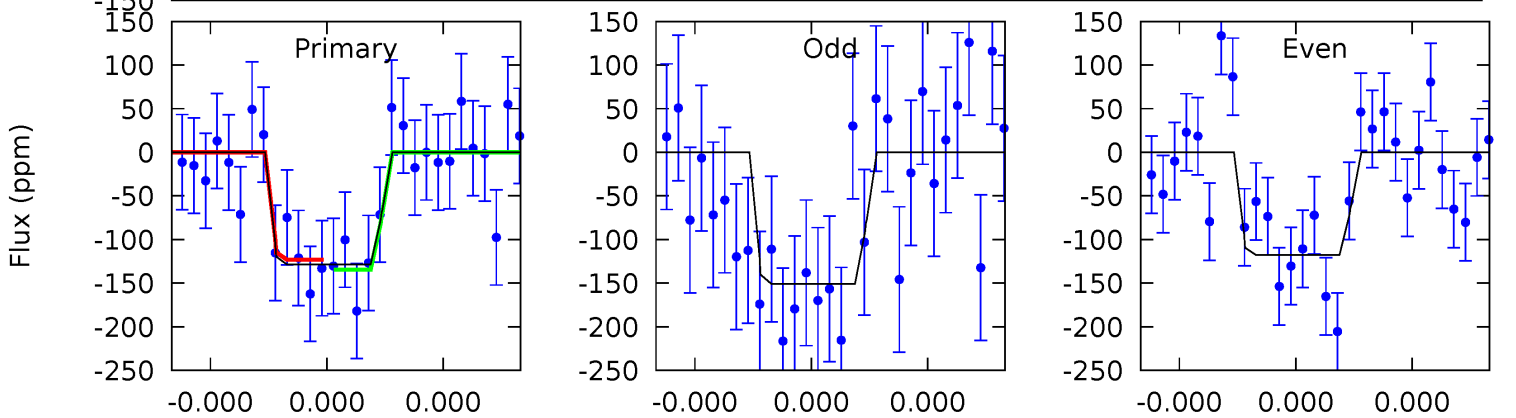


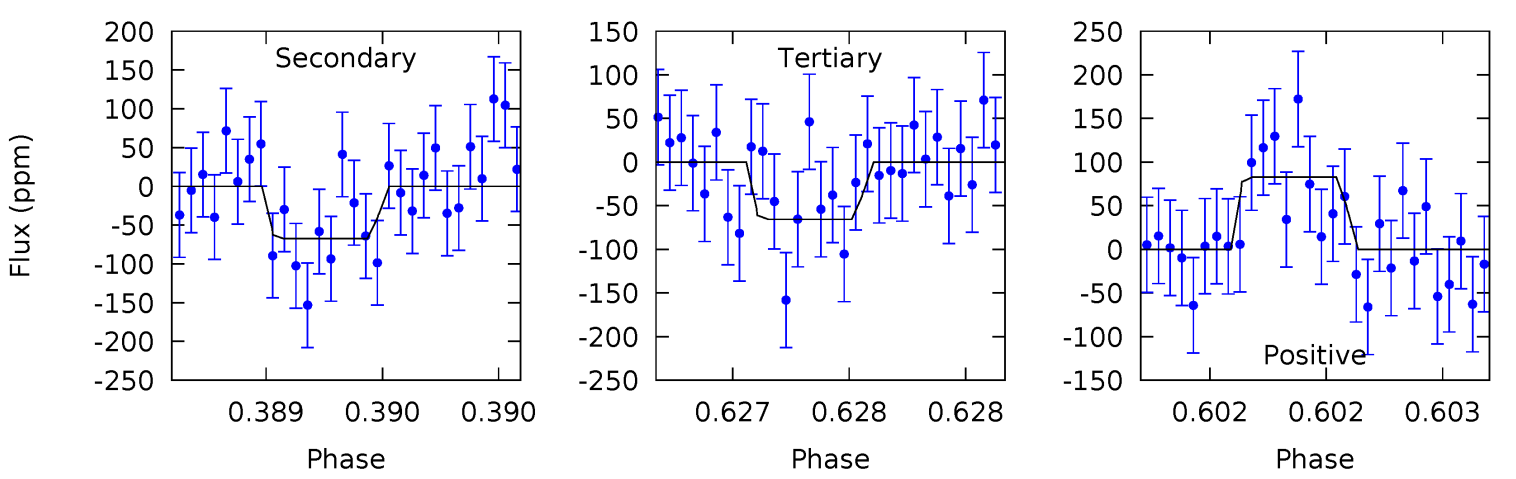
Alt Model-Shift Uniqueness Test

007690646-01, P = 451.602109 Days, E = 314.623664 Days

Pri	Sec	Ter	Pos	FA_1	FA_2	F_{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
8.01	4.20	4.08	5.17	5.59	3.51	1.05	3.93	2.85	0.11	-0.97	0.97	0.97	0.39	0.35







Stellar Parameters For KIC 007690646

	$T_{\rm eff}(K)$	$\log(g)$	[Fe/H]	R ($R_\odot$)	$M(M_\odot)$	$p_\star$ (g·cm^{-3})
	5696^{+156}_{-156}	$4.388^{+0.108}_{-0.132}$	$0.000^{+0.250}_{-0.300}$	$1.026^{+0.207}_{-0.138}$	$0.937^{+0.112}_{-0.084}$	$1.223^{+0.610}_{-0.477}$
	+3%/-3%	+2%/-3%	+inf%/-inf%	+20%/-13%	+12%/-9%	+50%/-39%
Source	PHO1	FLK73	KIC0	DSEP		

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

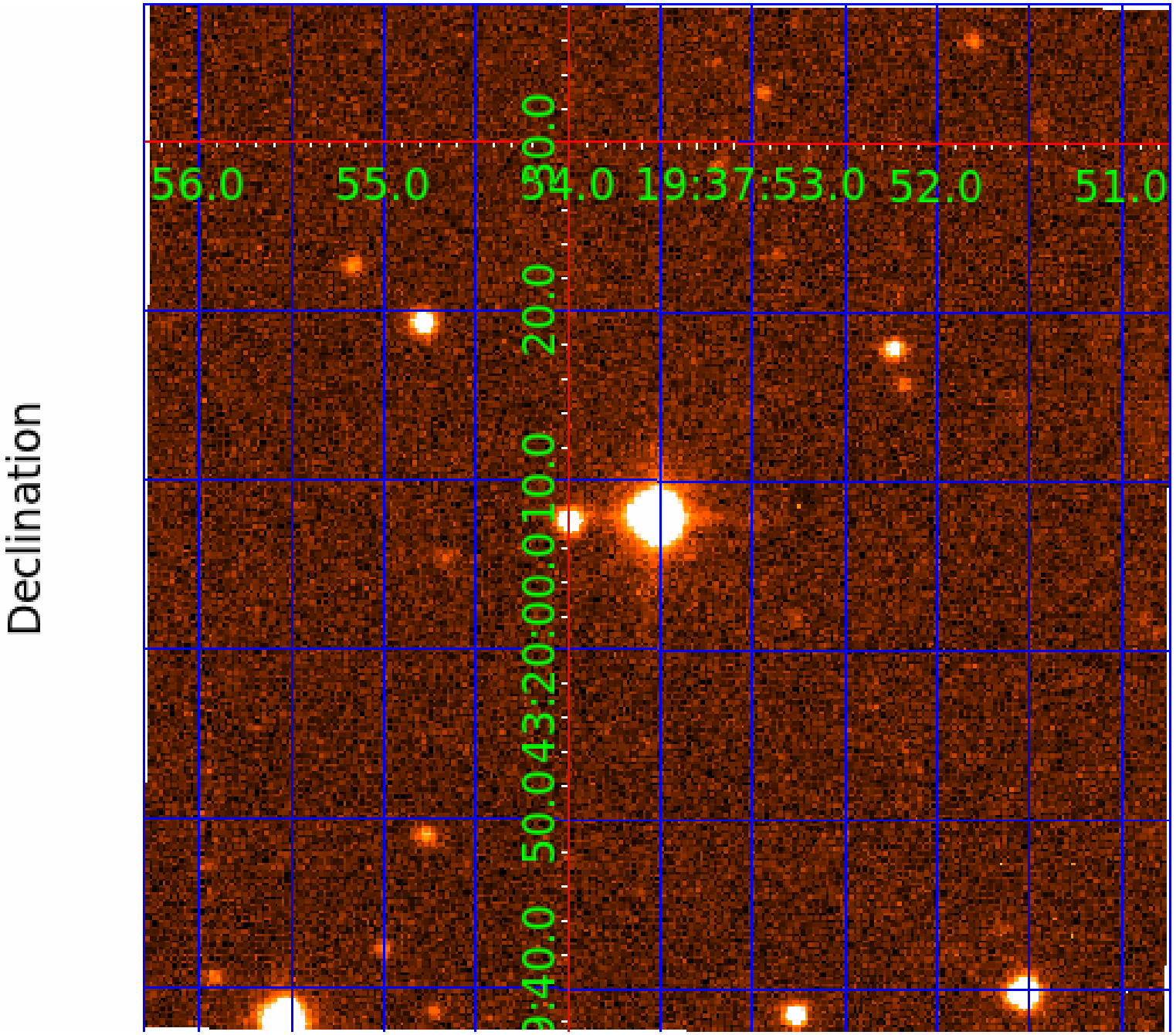
Secondary Eclipse Parameters for KIC 007690646-01 / KOI

Detrend	Depth (ppm)	R_p ($R_\oplus$)	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	-90±18	$1.83^{+1.52}_{-1.16}$	336^{+19}_{-16}	4499^{+2739}_{-855}	$18057^{+123031}_{-12403}$
Alt.	-67±16	$1.70^{+1.35}_{-1.12}$	336^{+18}_{-15}	4399^{+2904}_{-842}	$16088^{+130915}_{-11356}$

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


56.0
55.0
54.0
19:37:53.0
52.0
51.0
30.0
20.0
10.0
43:20:00.0
50.0
40.0
Declination