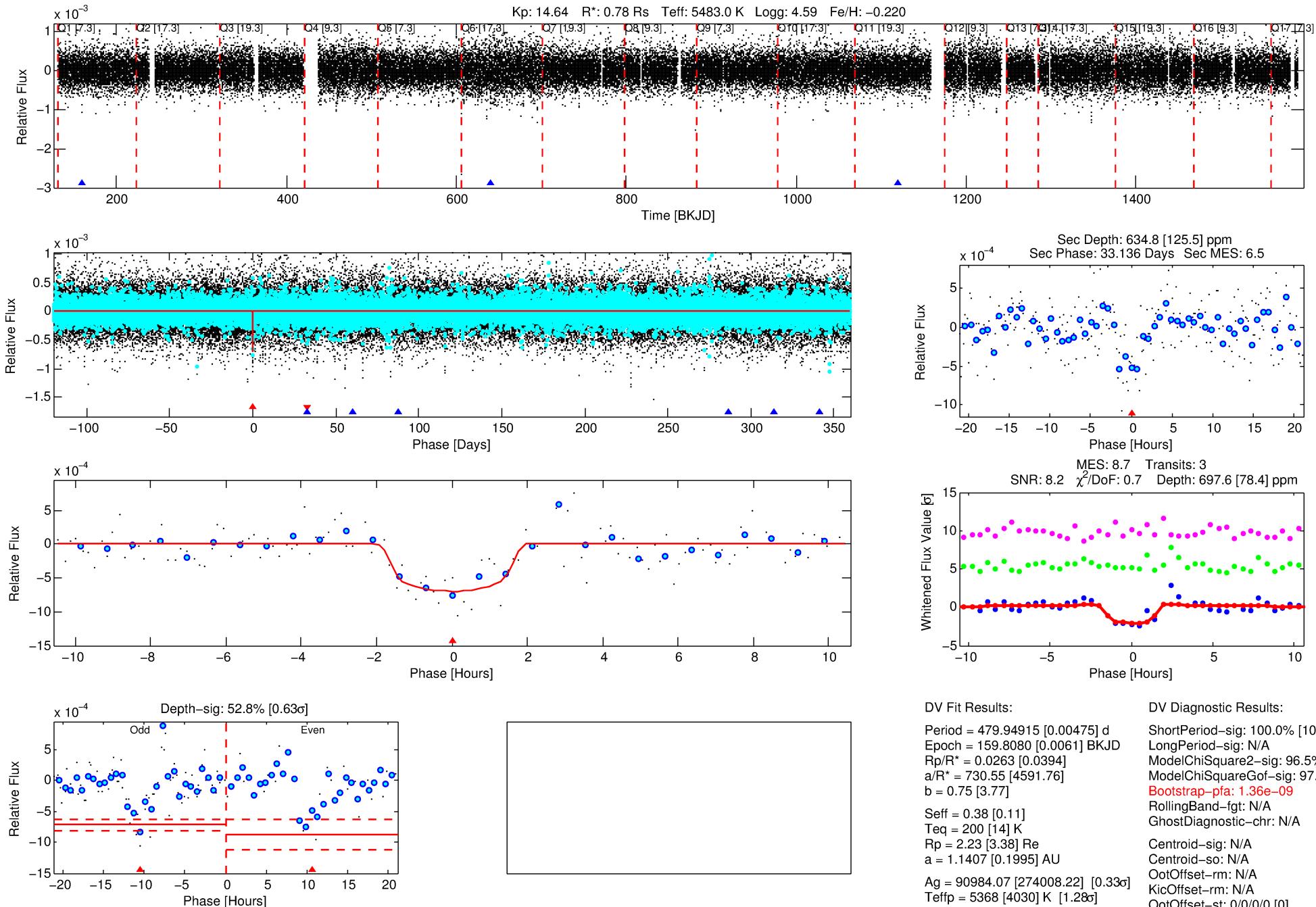


**WARNING: THIS DATA IS
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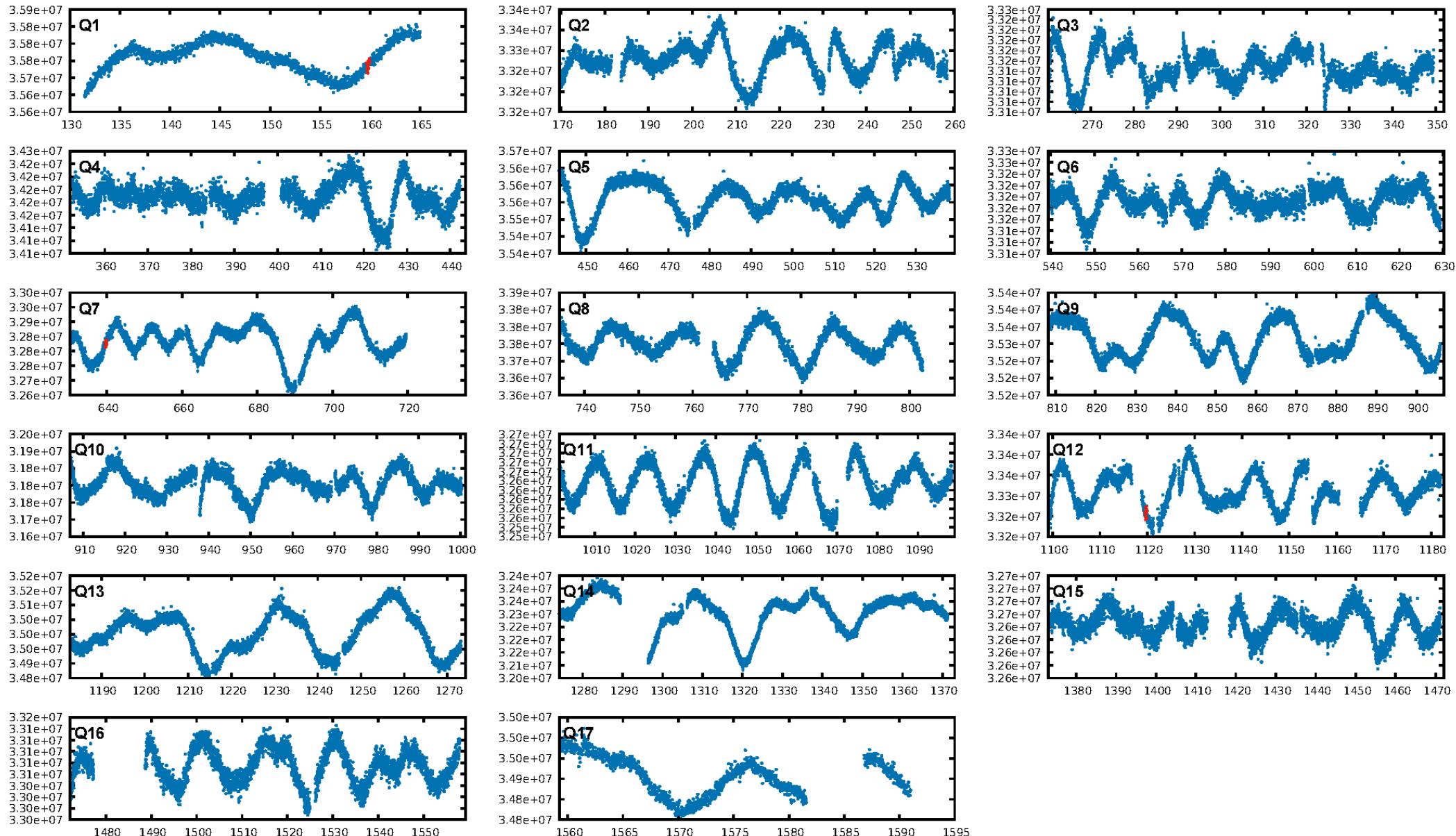
DV One-Page Summary

KIC: 8218379 Candidate: 1 of 2 Period: 479.949 d

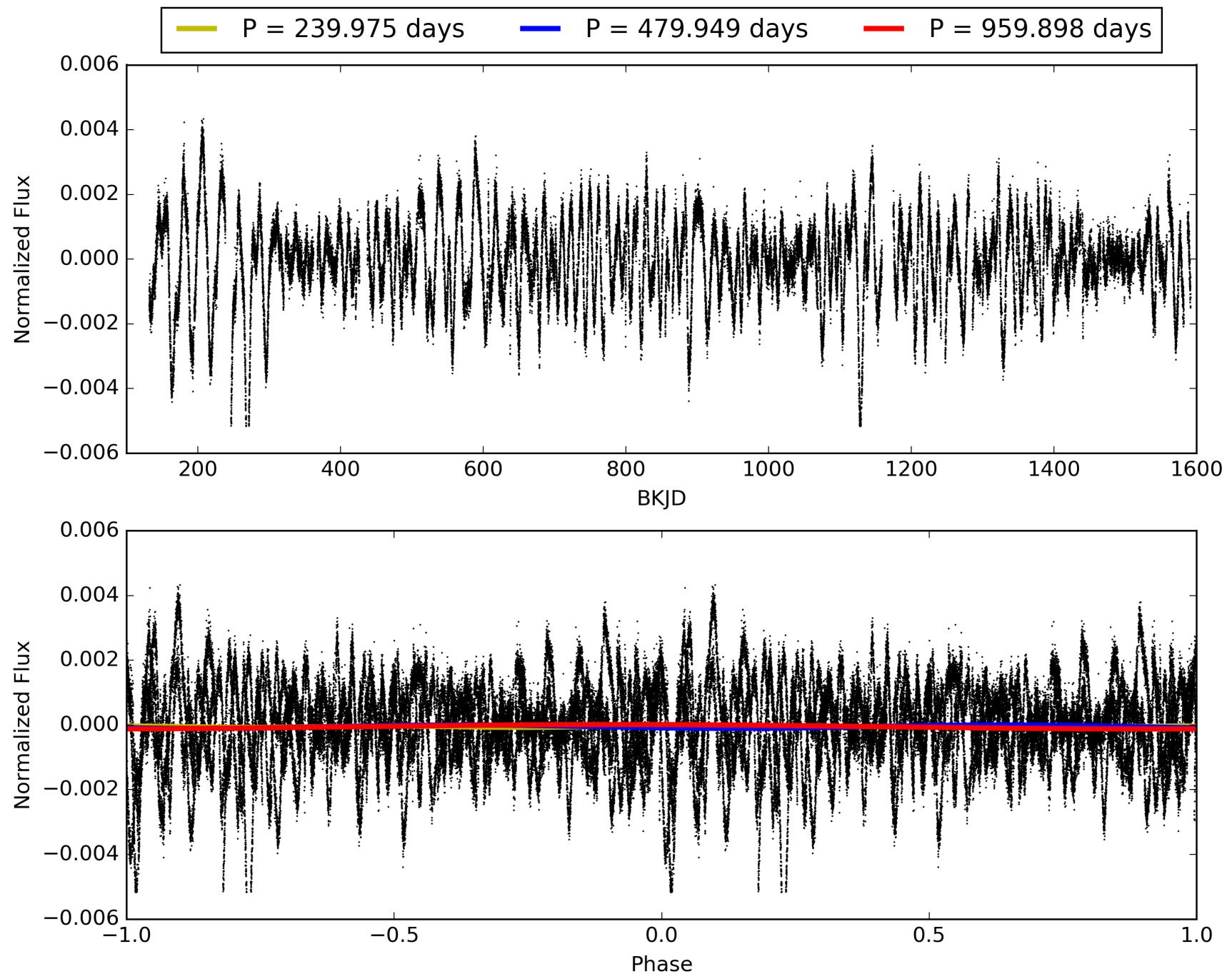
**WARNING: THIS DATA IS
SIMULATED, NOT OBSERVED**



TCE 008218379-01, PDC Light Curves

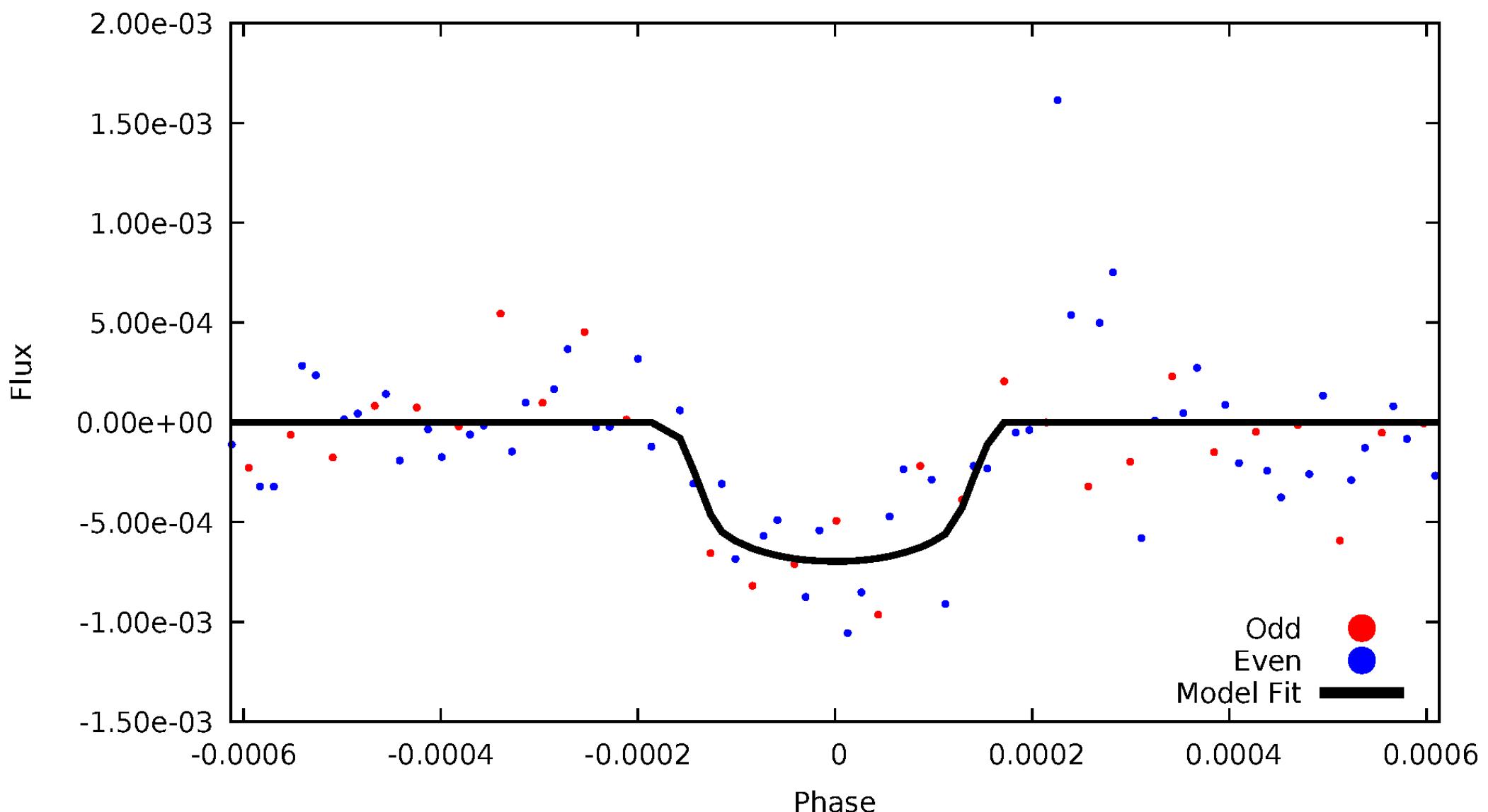


TCE 008218379-01



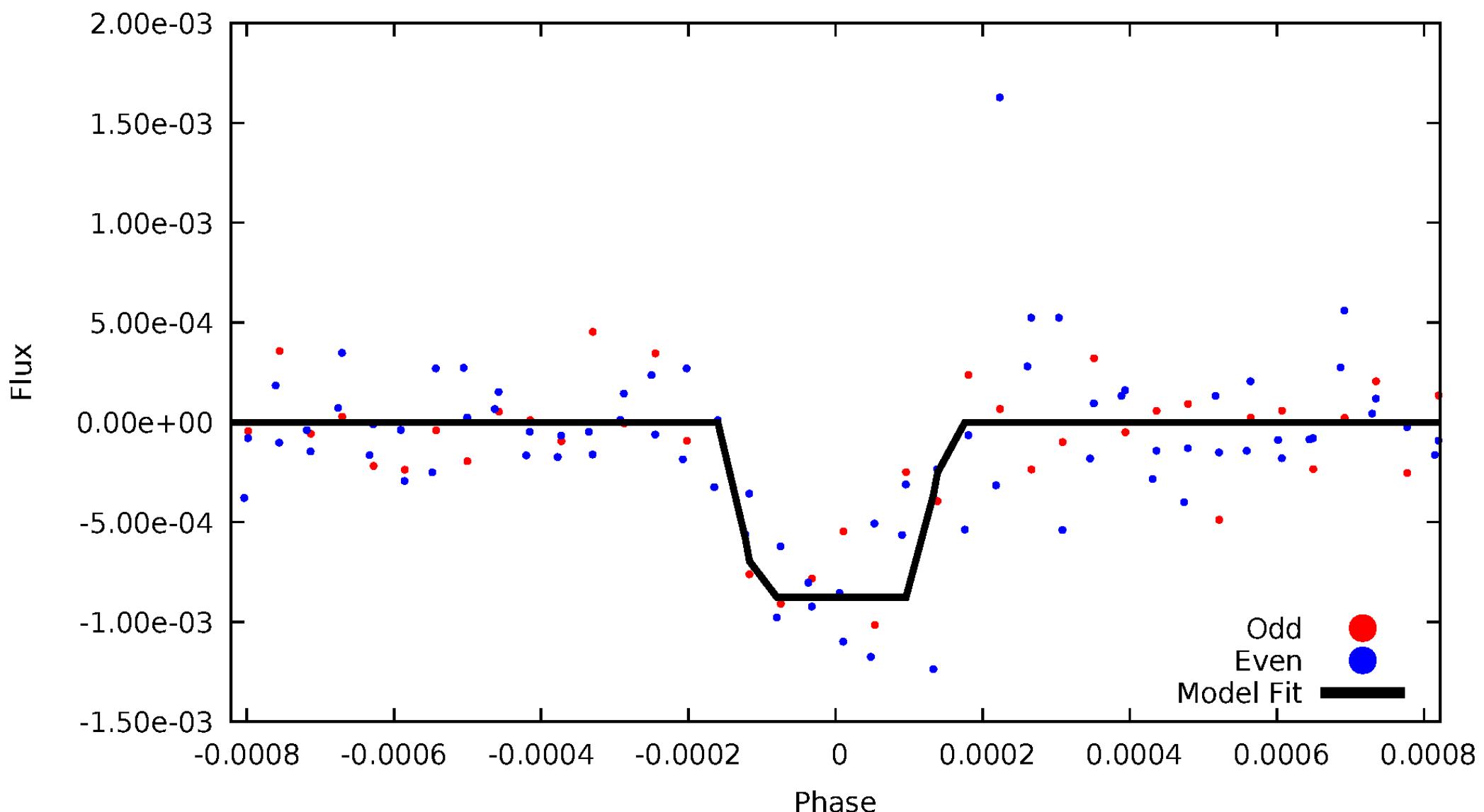
DV Odd/Even

TCE 008218379-01

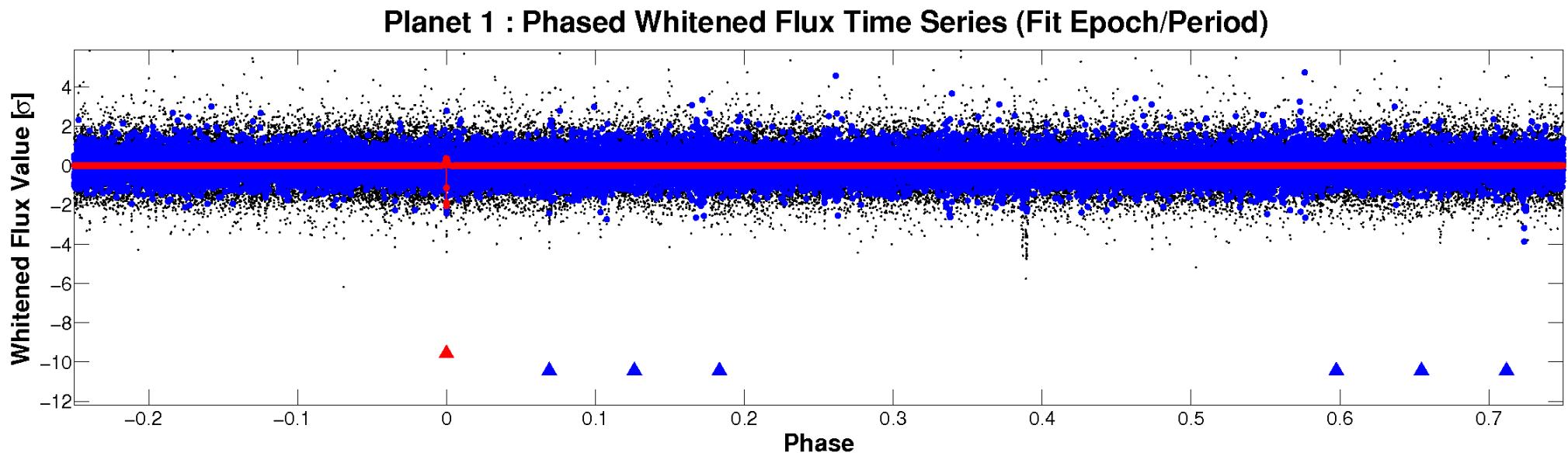
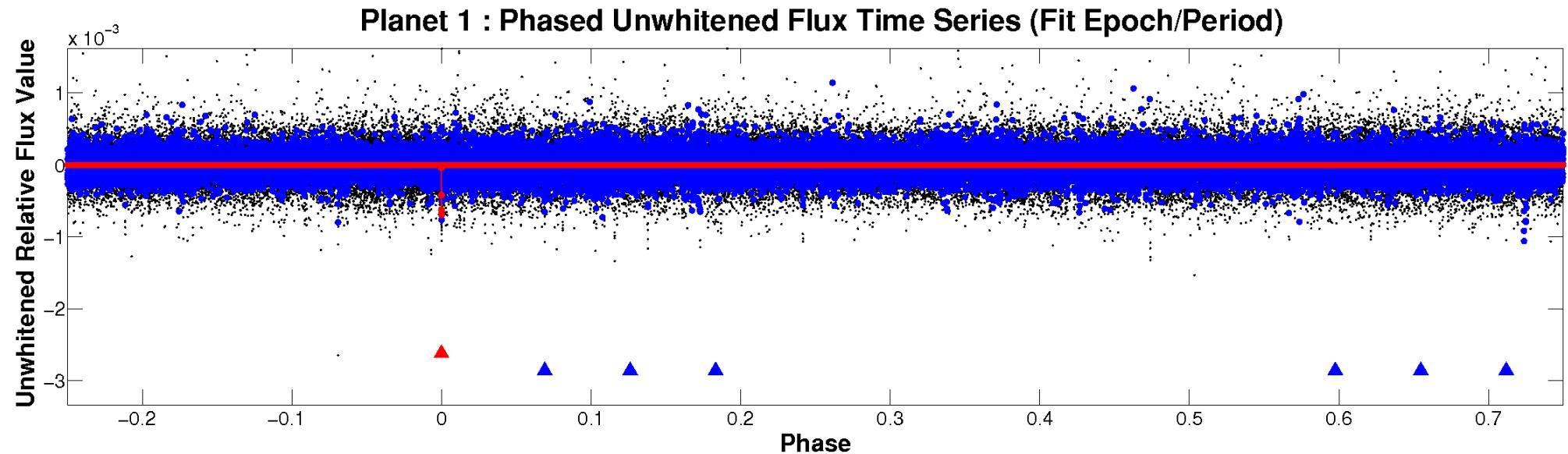


ALT Odd/Even

TCE 008218379-01

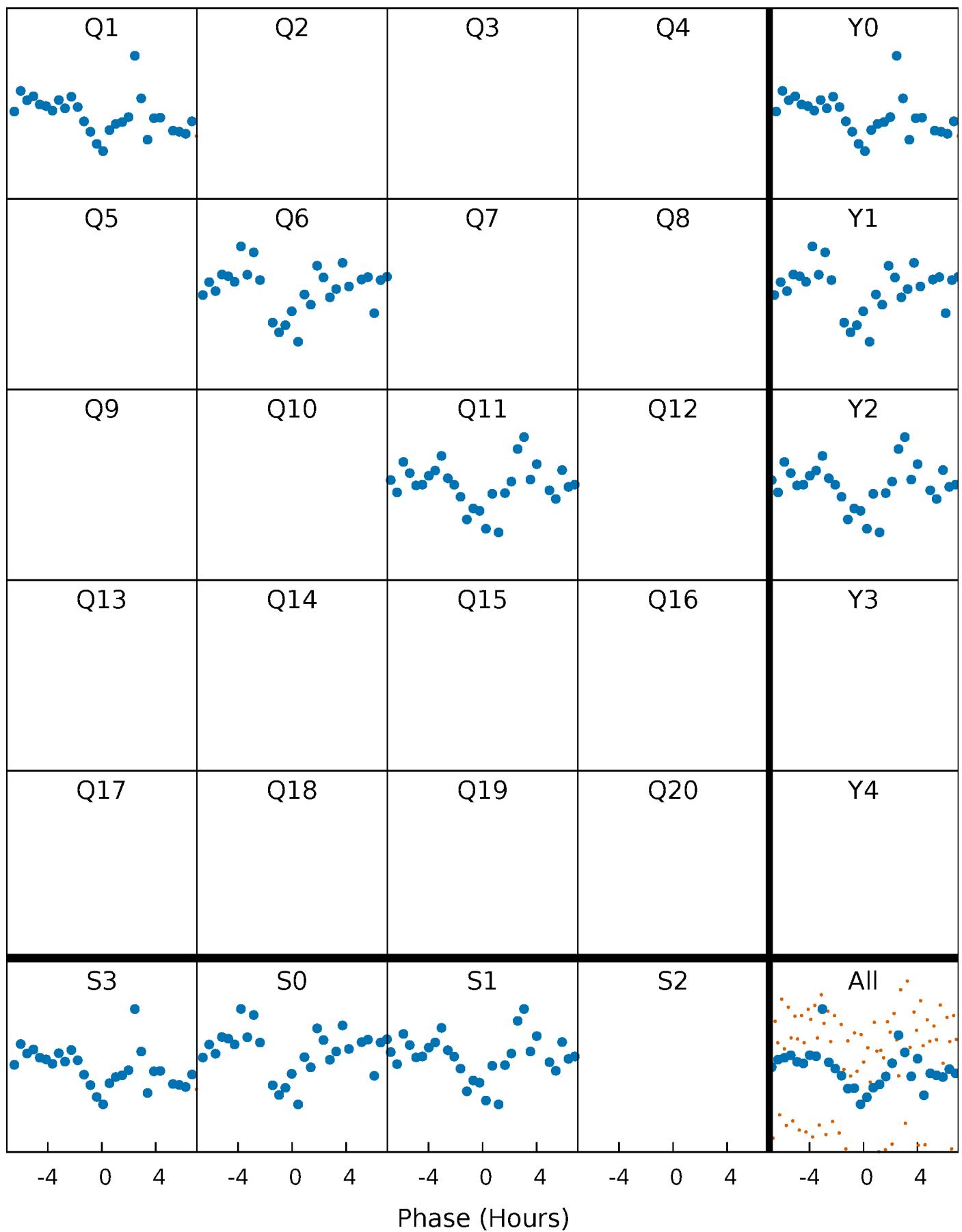


Non-Whitened Vs. Whitened Light Curve



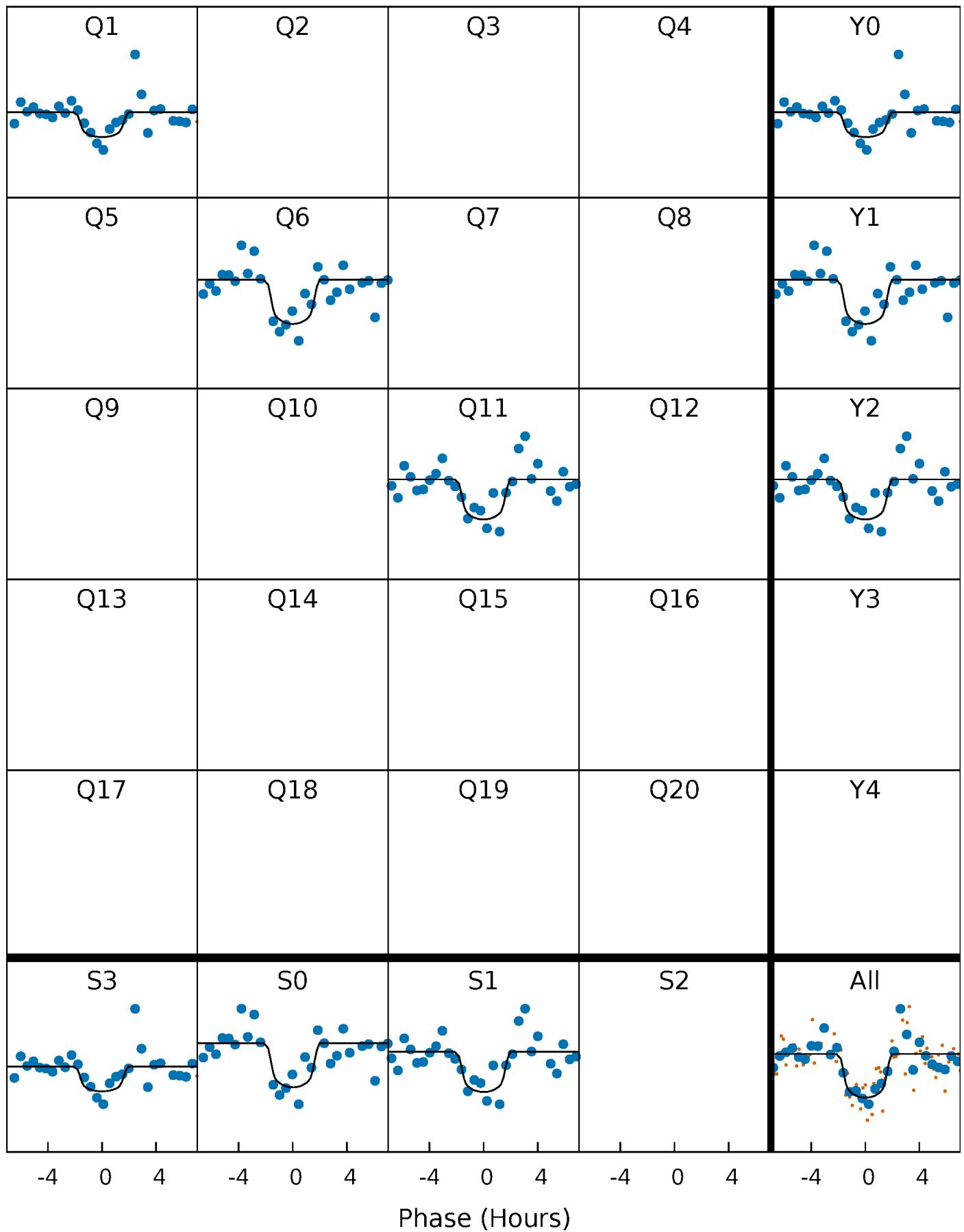
PDC Quarter-Phased Transit Curves

TCE 008218379-01 $P=479.949155$ Days $T_0=159.807959$ (BKJD)



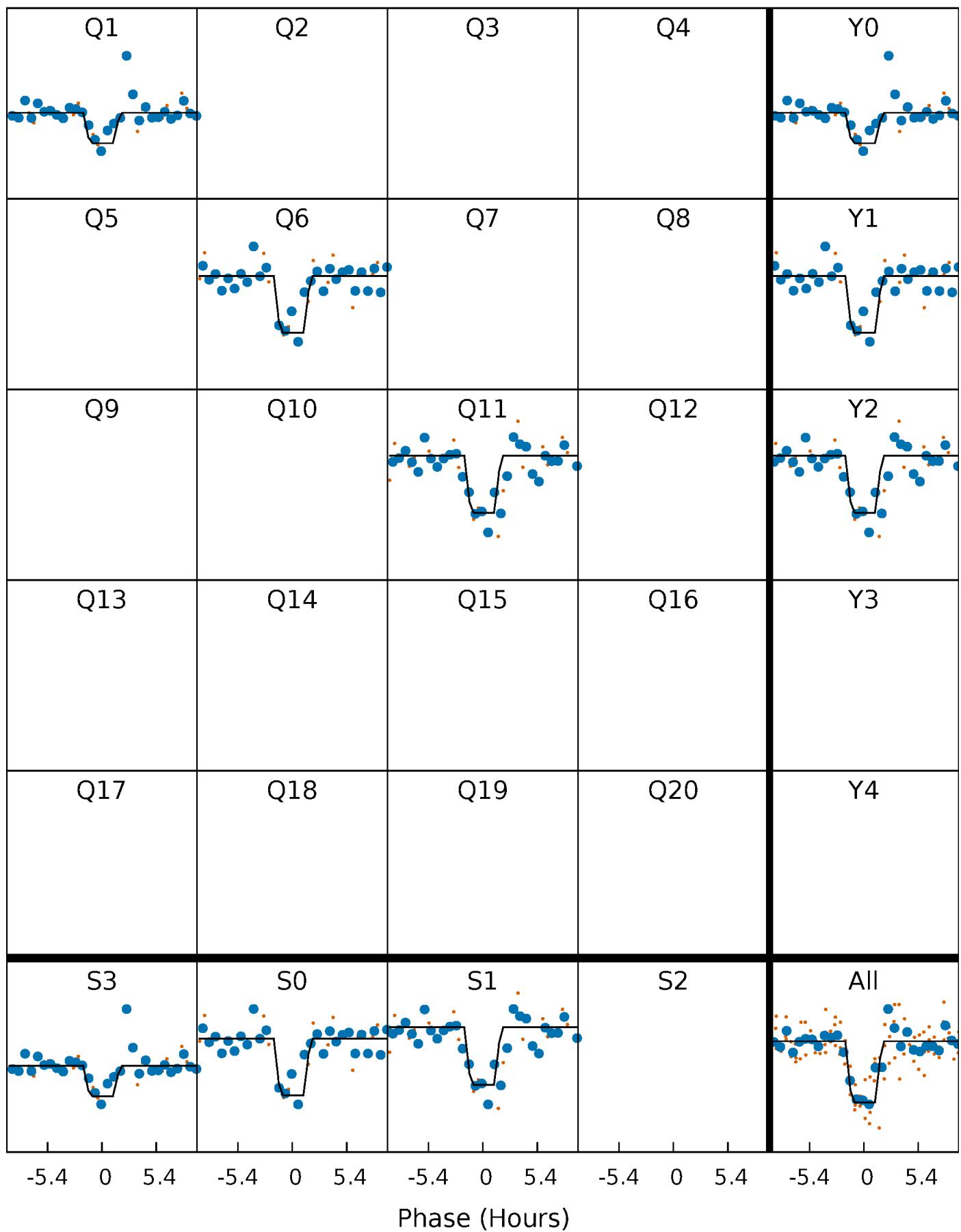
DV Quarter-Phased Transit Curves

TCE 008218379-01 $P=479.949155$ Days $T_0=159.807959$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

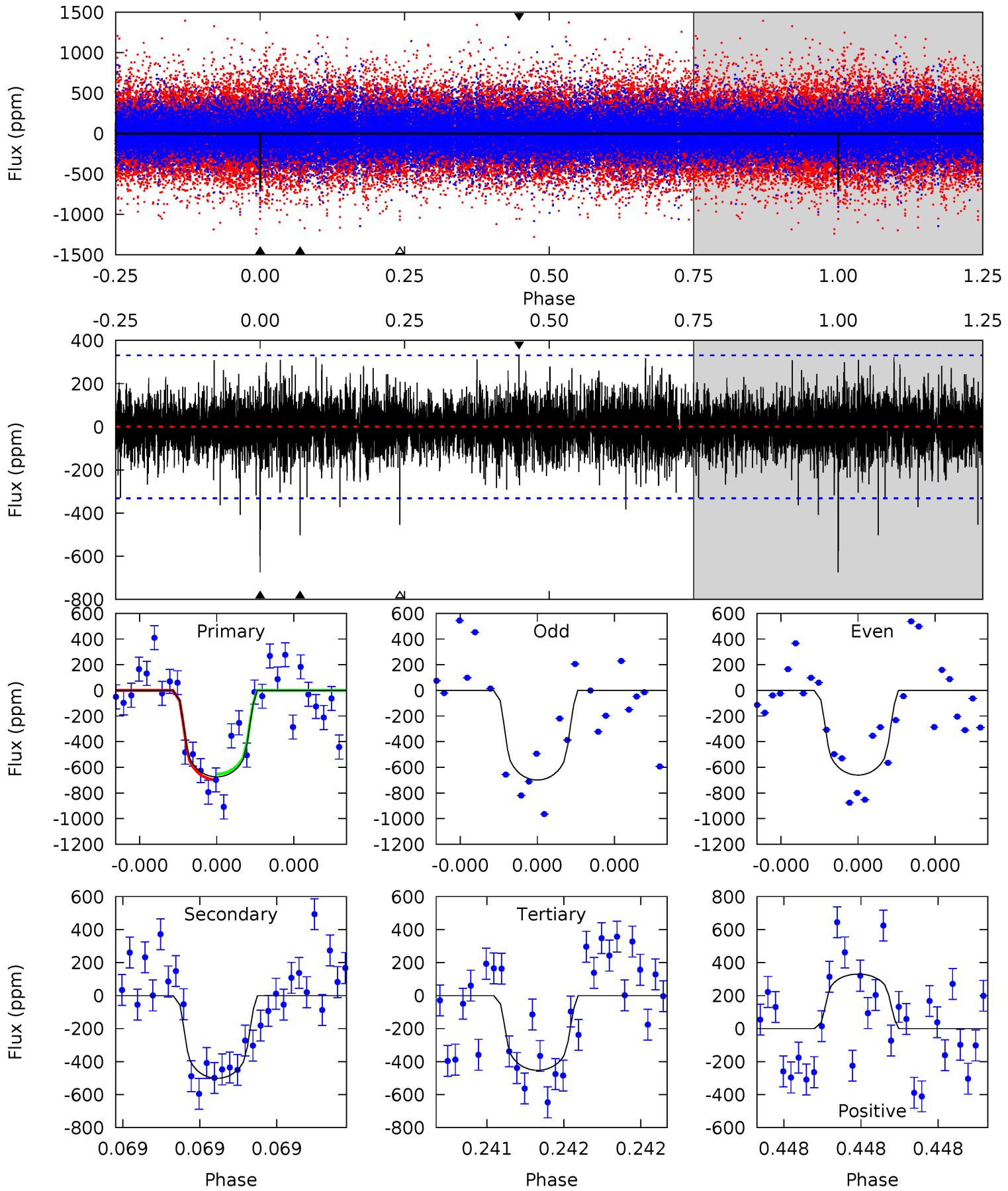
TCE 008218379-01 P=479.943457 Days $T_0=159.809168$ (BKJD)



DV Model-Shift Uniqueness Test

008218379-01, $P = 479.949155$ Days, $E = 159.807959$ Days

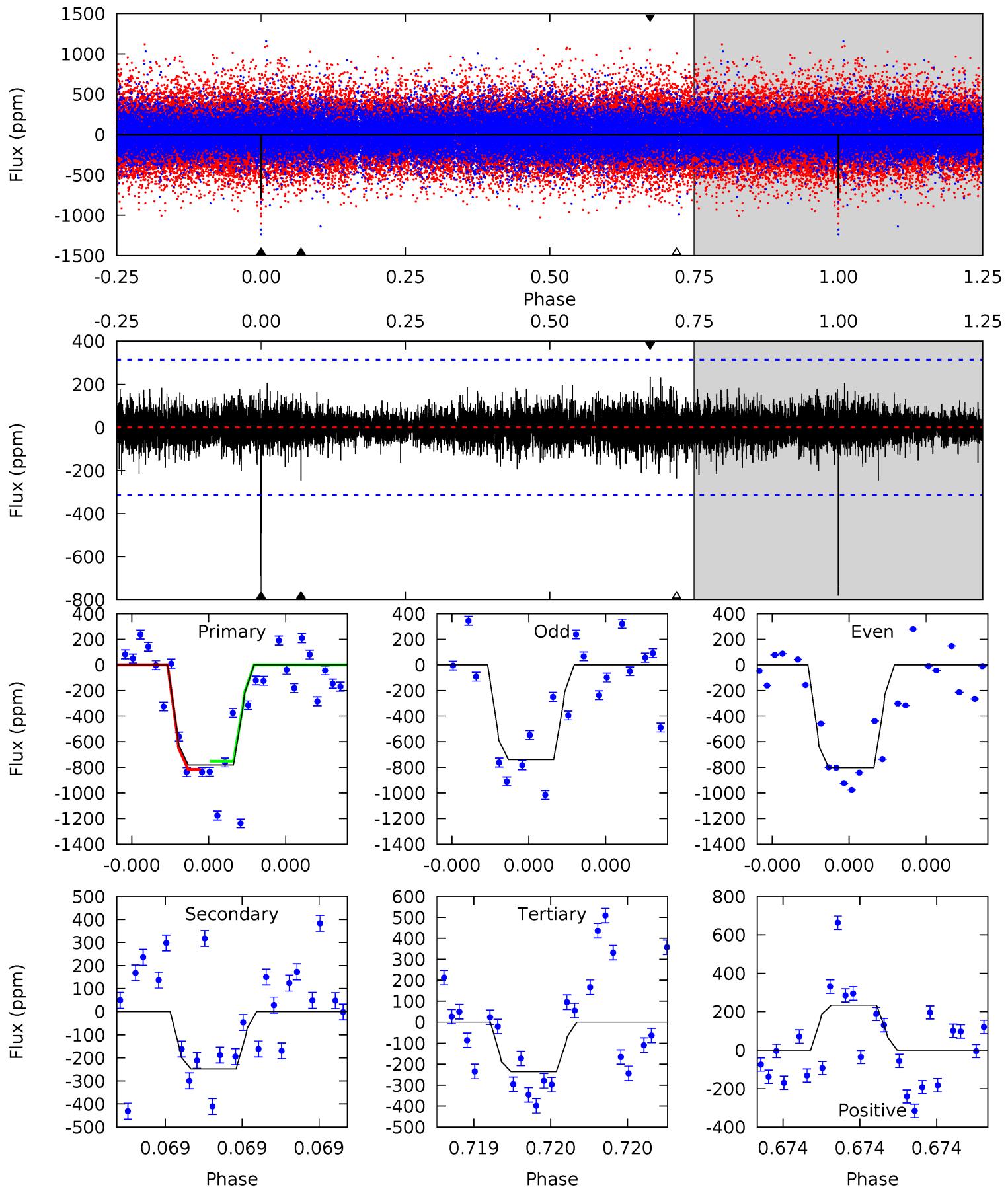
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
11.5	8.54	7.71	5.63	5.65	3.59	1.39	3.77	5.86	0.83	2.91	0.31	1.01	0.33	0.36



Alt Model-Shift Uniqueness Test

008218379-01, $P = 479.943457$ Days, $E = 159.809168$ Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
14.1	4.47	4.26	4.22	5.66	3.62	0.90	9.82	9.86	0.21	0.25	0.53	1.06	0.23	0.56



Stellar Parameters For KIC 008218379

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	5483^{+166}_{-149}	$4.589^{+0.034}_{-0.136}$	$-0.220^{+0.300}_{-0.300}$	$0.779^{+0.164}_{-0.059}$	$0.865^{+0.083}_{-0.102}$	$2.581^{+0.463}_{-1.004}$
	$+3\%/-3\%$	$+1\%/-3\%$	$+136\%/-136\%$	$+21\%/-8\%$	$+10\%/-12\%$	$+18\%/-39\%$
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 008218379-01 / KOI 1920.01

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (\text{K})$	$T_{obs} (\text{K})$	A_{obs}
DV	-501 ± 59	$3.52^{+2.83}_{-2.33}$	284^{+16}_{-11}	4348^{+2717}_{-854}	$29148^{+221117}_{-20607}$
Alt.	-248 ± 55	$3.81^{+3.17}_{-2.53}$	284^{+15}_{-11}	3680^{+1932}_{-606}	11446^{+93782}_{-7944}

T_{max} = Theoretical Maximum Planetary Temperature

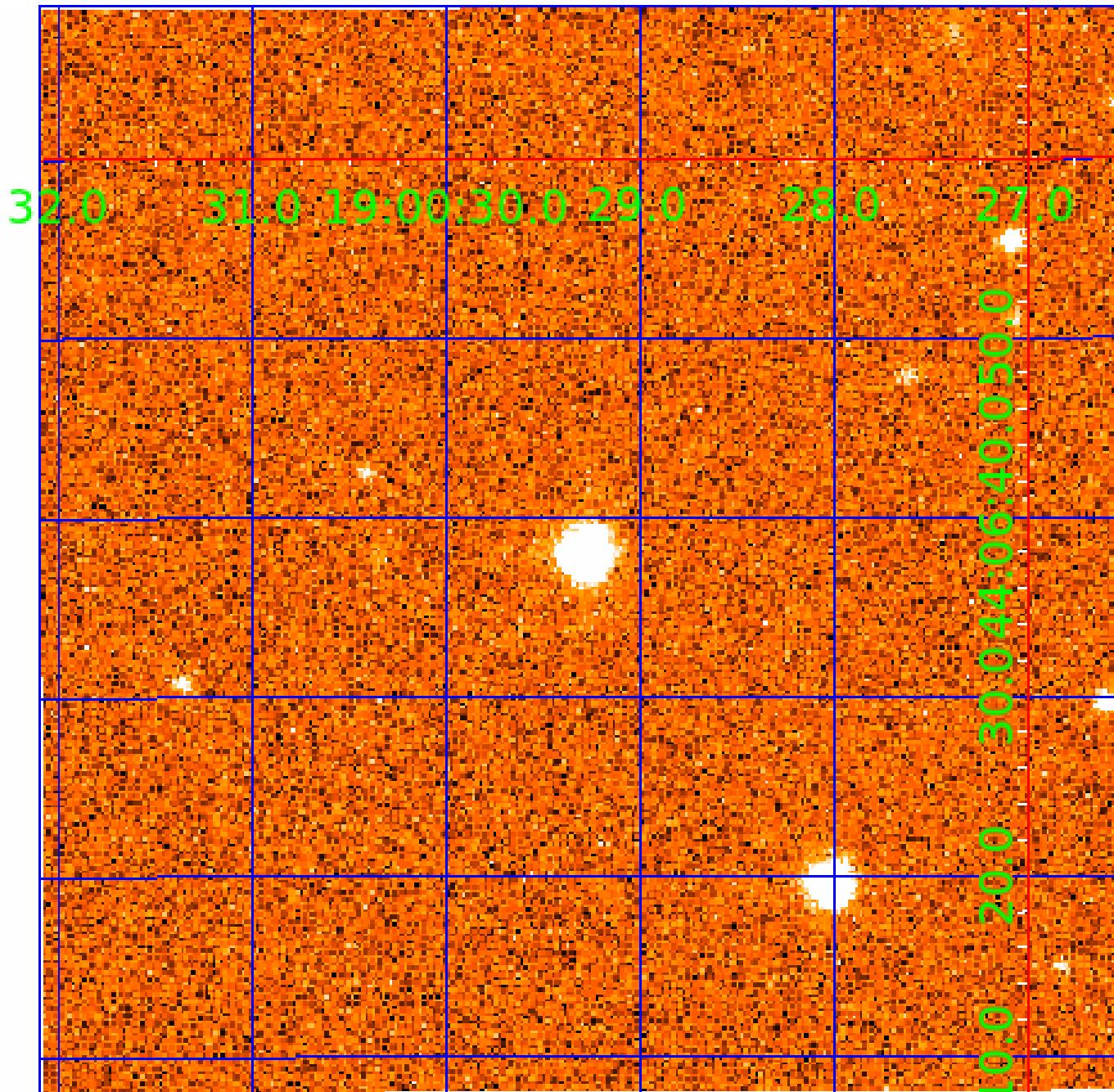
T_{obs} = Observed Planetary Temperature (Assuming $A=0.3$)

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



KIC 008218379

Q1-17 DR25 TCE Parameters

TCE	Run Type	KOI?	Period (Days)	Epoch (BKJD)	Depth (ppm)	Duration (Hours)	MES	SNR	R_* (R_\odot)	T_* (K)	R_p (R_\oplus)	S_p (S_\oplus)
008218379-01	SCR	No	479.949154	159.807959	697.6	3.529	8.7	8.2	0.78	5483	2.23	0.38
008218379-02	SCR	No	253.686645	192.946960	587.7	4.094	7.4	8.6	0.78	5483	2.10	0.88

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
008218379-01	SCR	PC	0.69	0	0	0	0	NO_COMMENT
008218379-02	SCR	FP	0.09	1	0	0	0	INDIV_TRANS_CHASES

Notes: OBS = Observed. INJ = Injected. INV = Inverted. SCR = Scrambled.

N = Not Transit-Like. S = Stellar Eclipse. C = Centroid Offset. E = Ephemeris Match.

See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 008218379-02

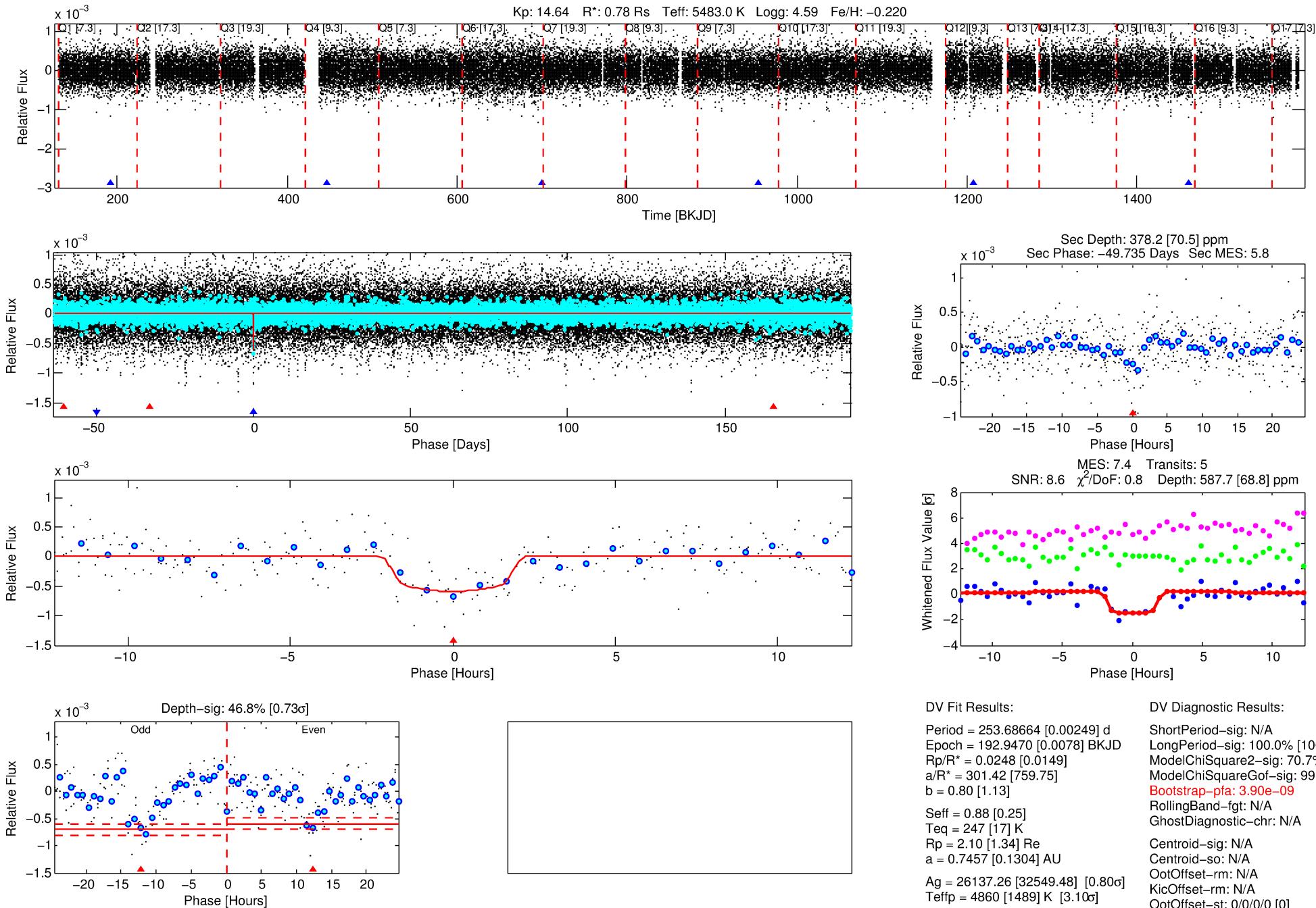
No Significant Match Found

**WARNING: THIS DATA IS
SIMULATED, NOT OBSERVED**

DV One-Page Summary

KIC: 8218379 Candidate: 2 of 2 Period: 253.687 d

**WARNING: THIS DATA IS
SIMULATED, NOT OBSERVED**



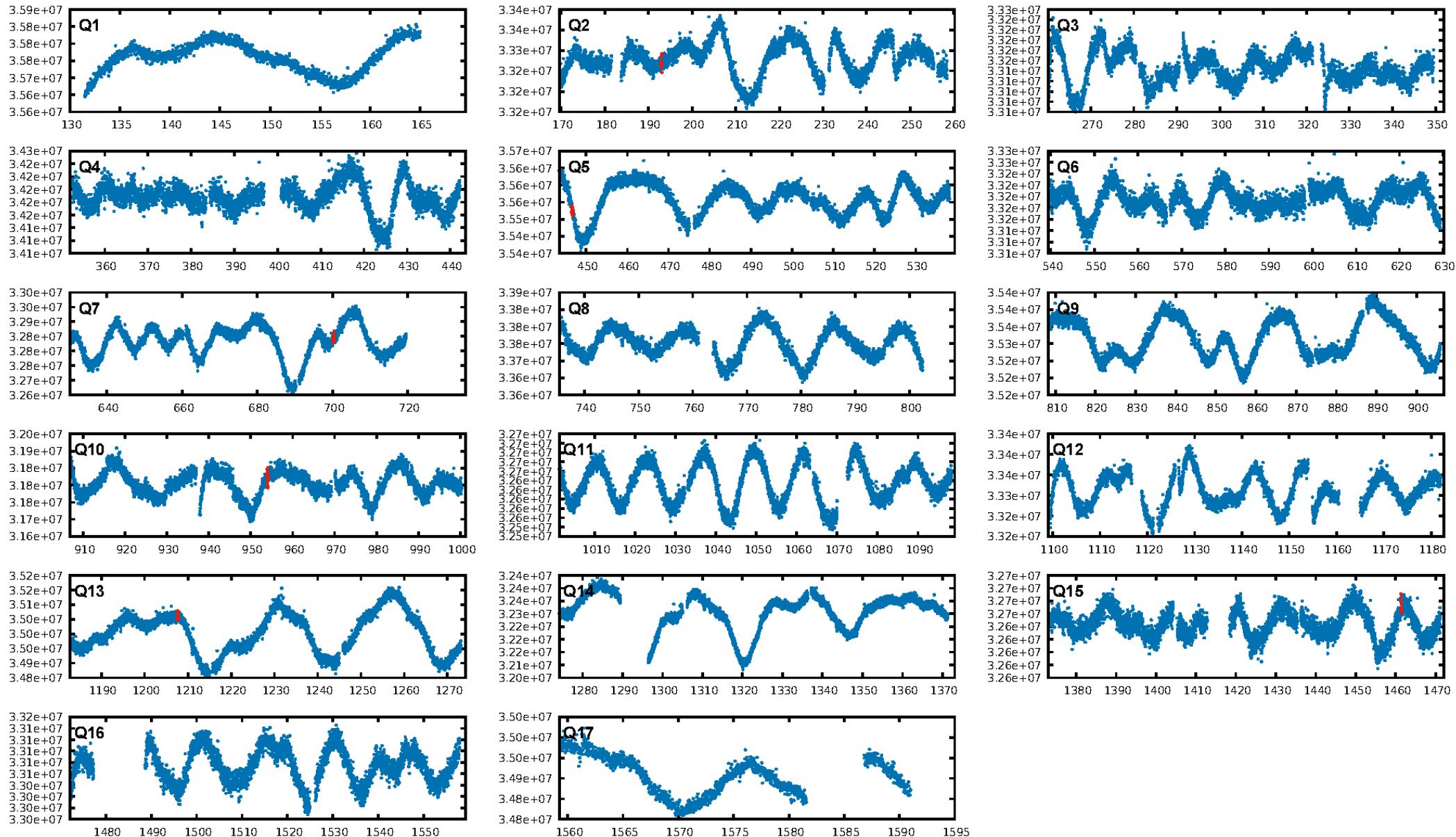
DV Fit Results:

Period = 253.68664 [0.00249] d
Epoch = 192.9470 [0.0078] BKJD
Rp/R* = 0.0248 [0.0149]
a/R* = 301.42 [759.75]
b = 0.80 [1.13]
Seff = 0.88 [0.25]
Teq = 247 [17] K
Rp = 2.10 [1.34] Re
a = 0.7457 [0.1304] AU
Ag = 26137.26 [32549.48] [0.80 σ]
Teffp = 4860 [1489] K [3.10 σ]

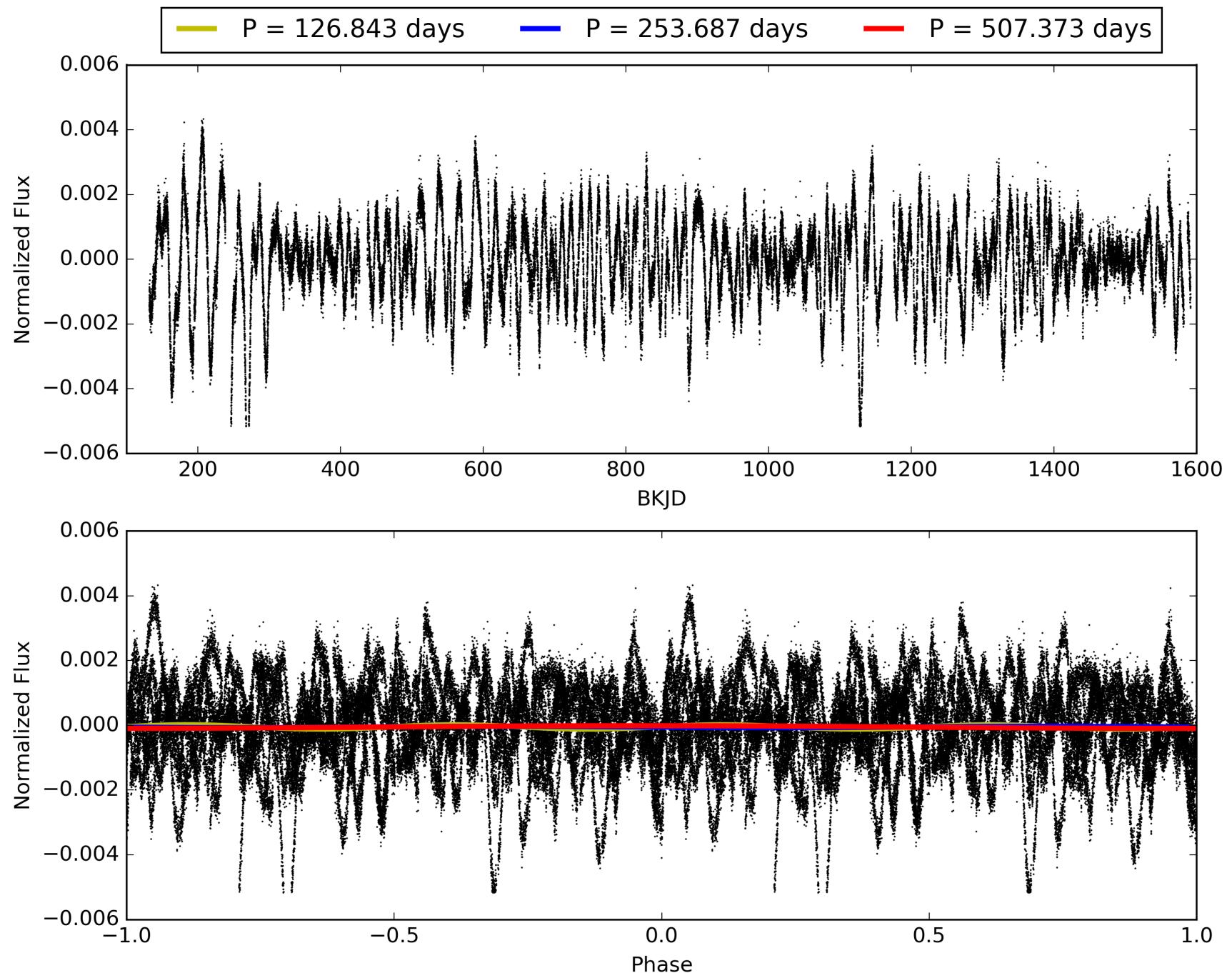
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: 100.0% [1004.62 σ]
ModelChiSquare2-sig: 70.7%
ModelChiSquareGof-sig: 99.1%
Bootstrap-pfa: 3.90e-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
KicOffset-st: 0/0/0/0
DiffImageQuality-fgm: N/A
DiffImageOverlap-fno: N/A

TCE 008218379-02, PDC Light Curves

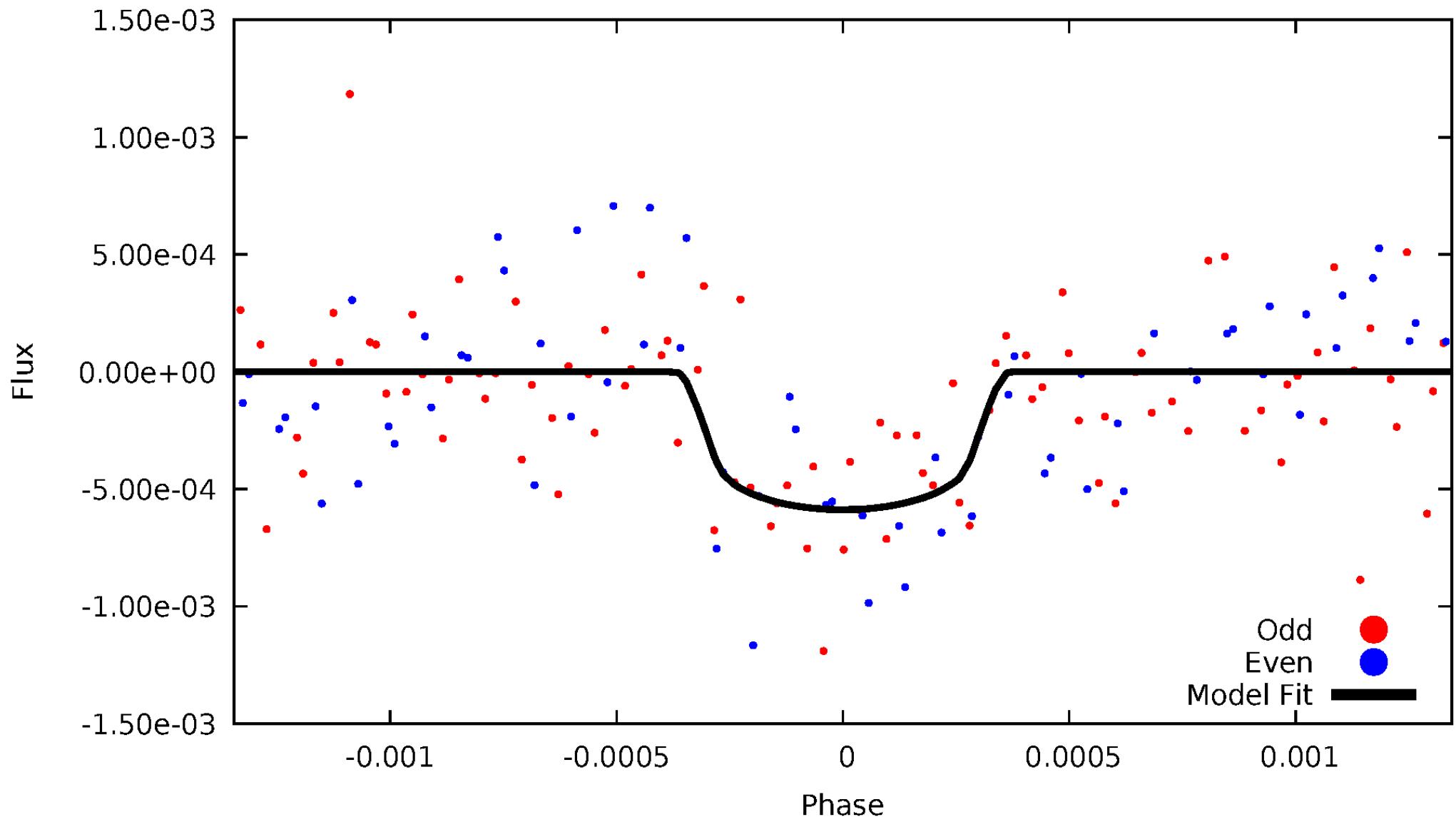


TCE 008218379-02



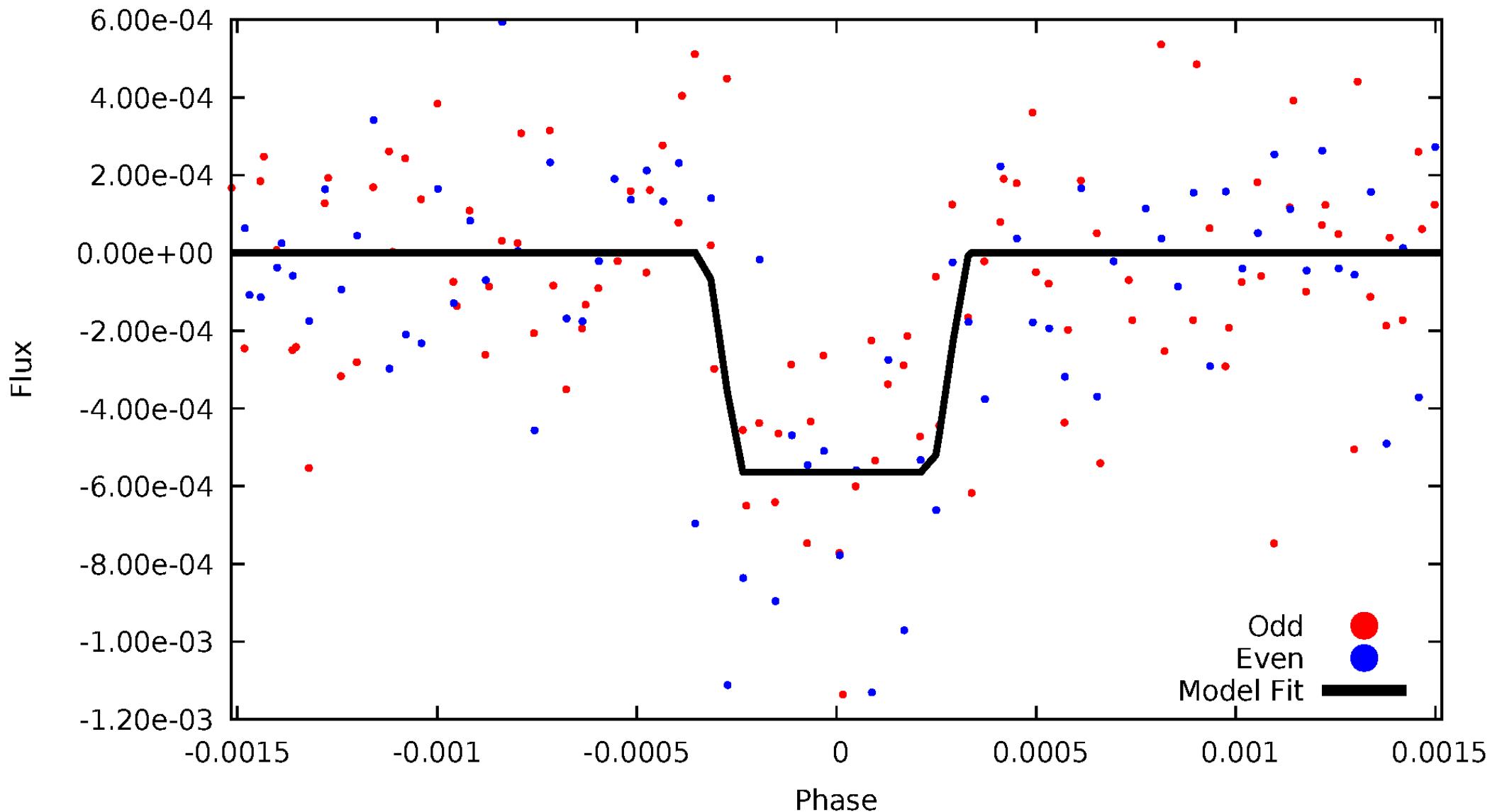
DV Odd/Even

TCE 008218379-02

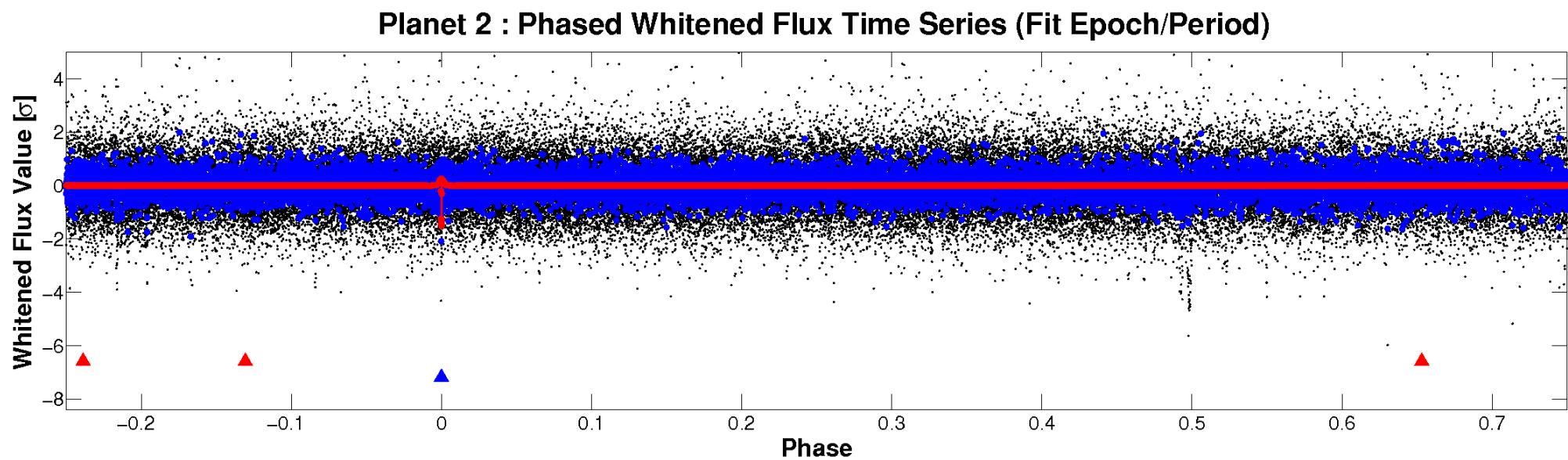
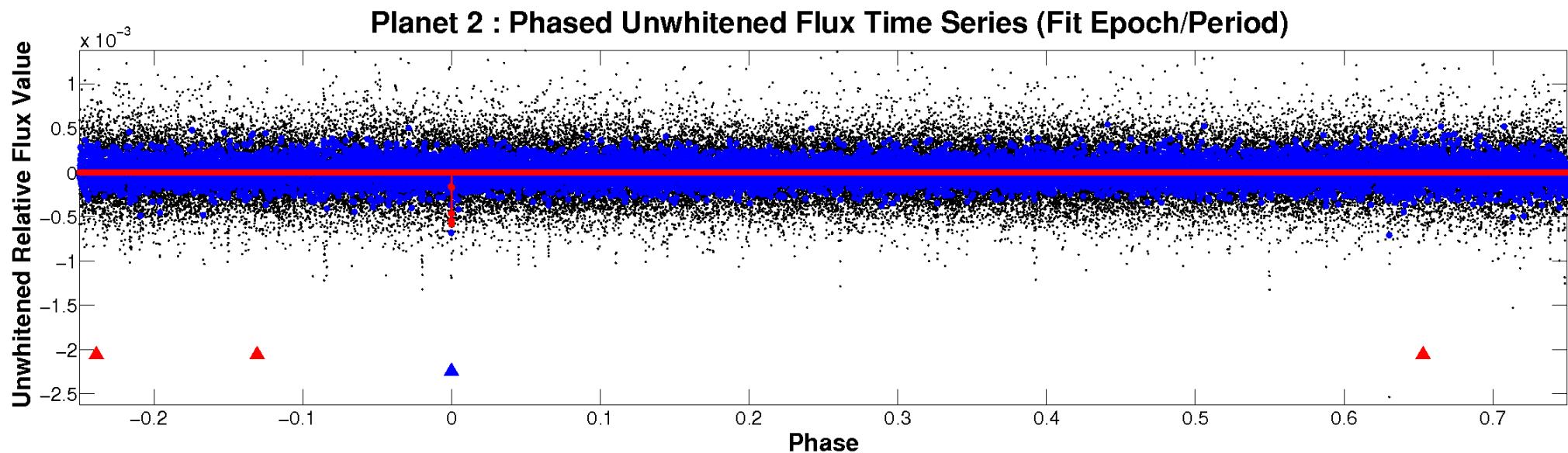


ALT Odd/Even

TCE 008218379-02

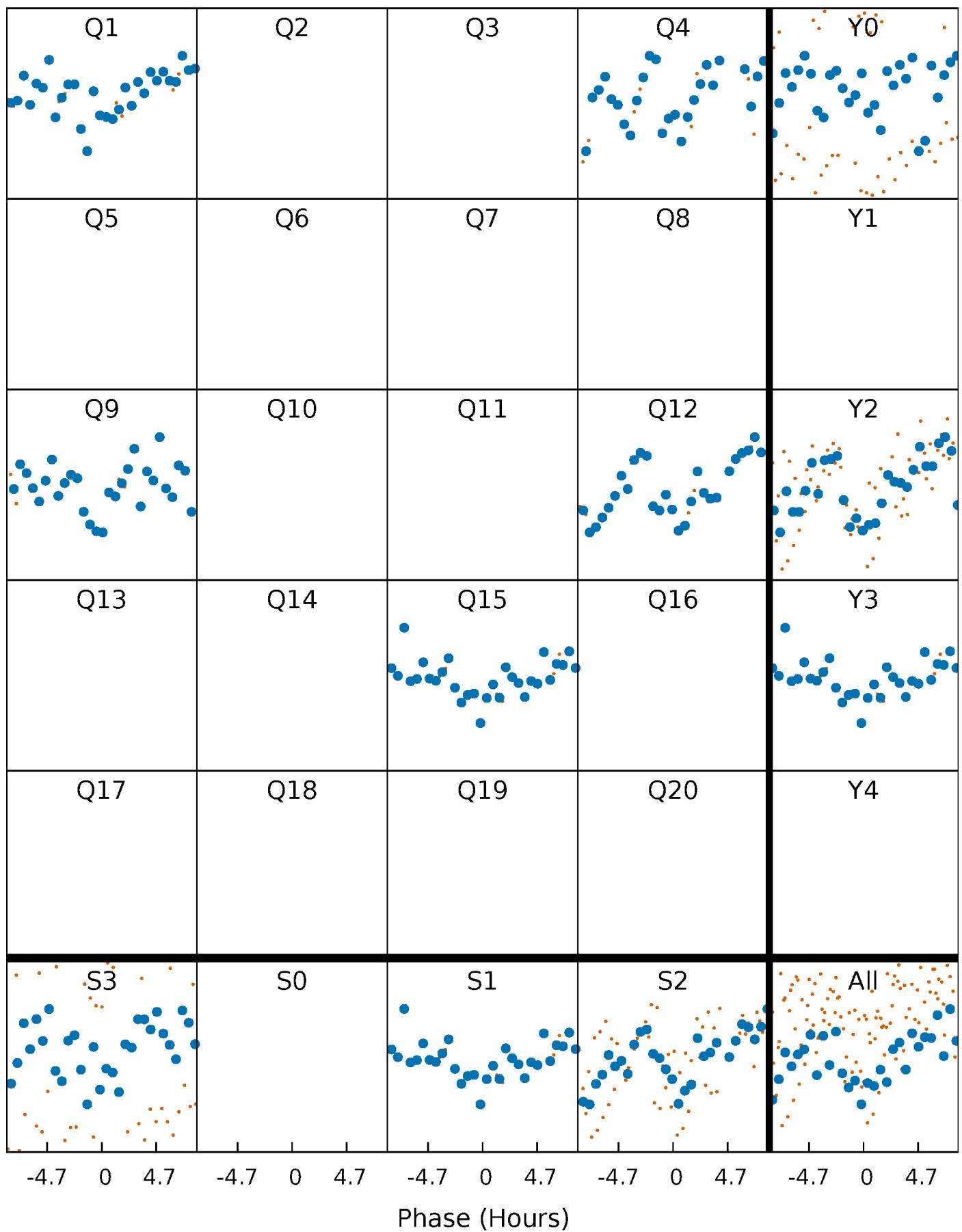


Non-Whitened Vs. Whitened Light Curve



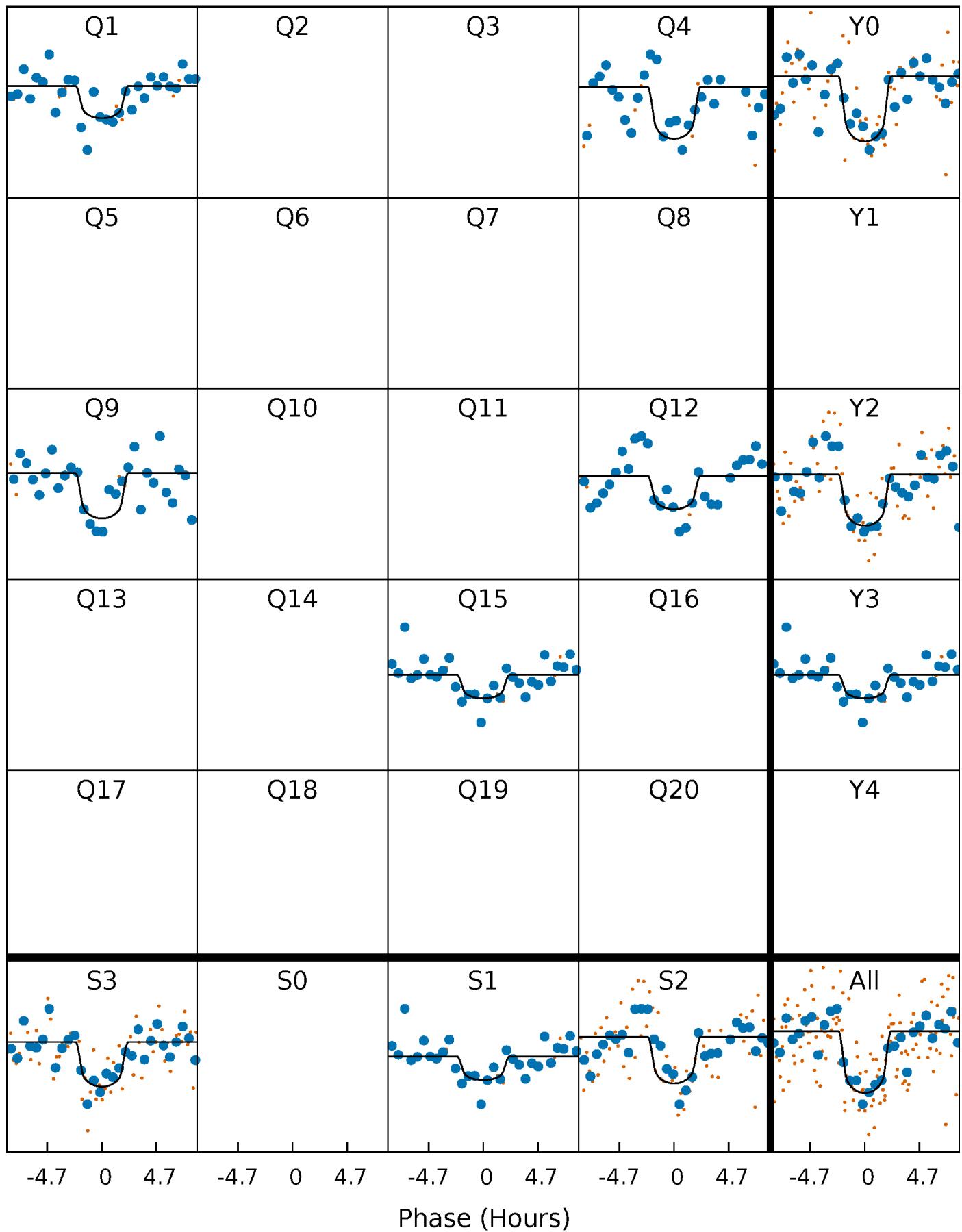
PDC Quarter-Phased Transit Curves

TCE 008218379-02 $P=253.686645$ Days $T_0=192.946960$ (BKJD)



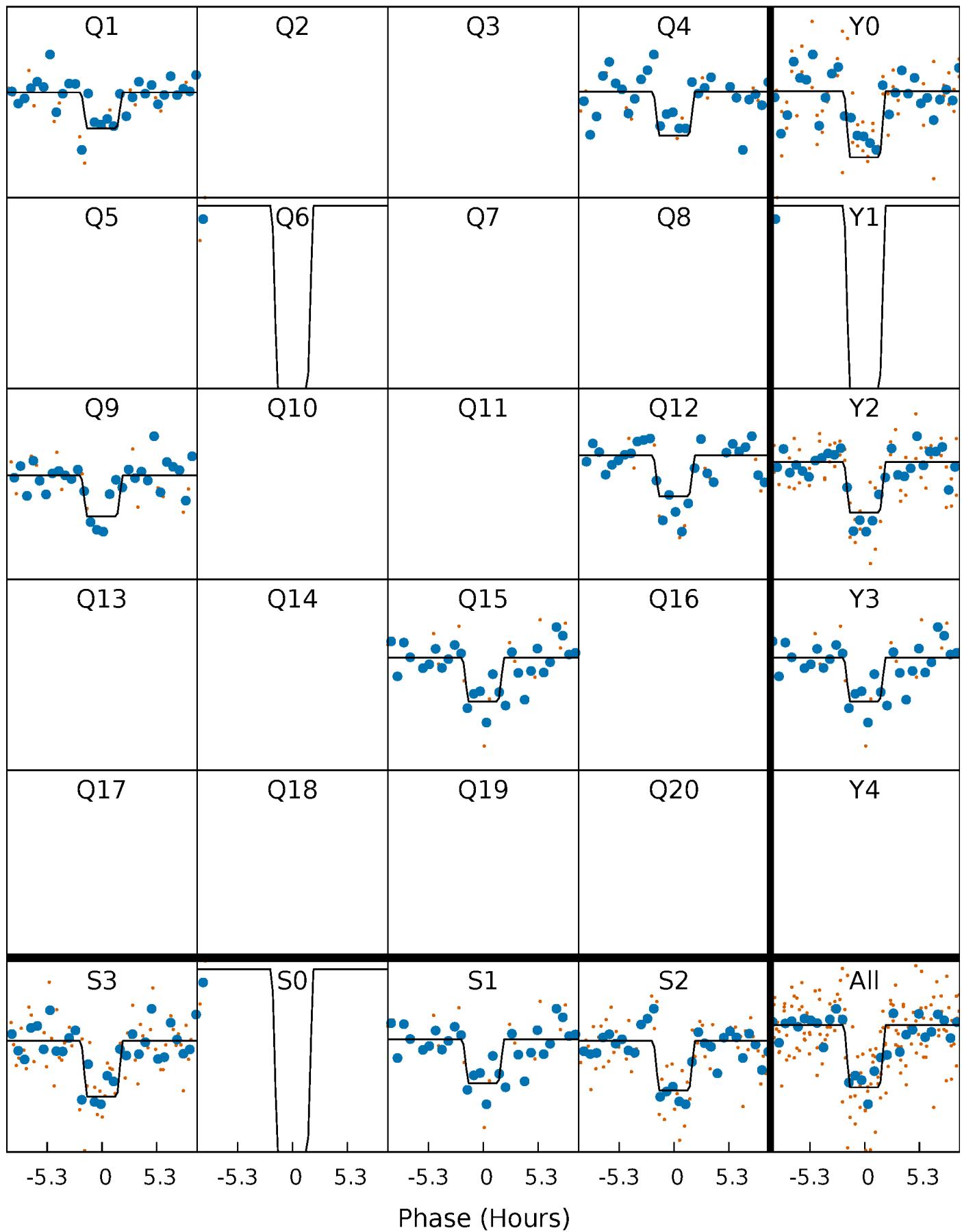
DV Quarter-Phased Transit Curves

TCE 008218379-02 $P=253.686645$ Days $T_0=192.946960$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

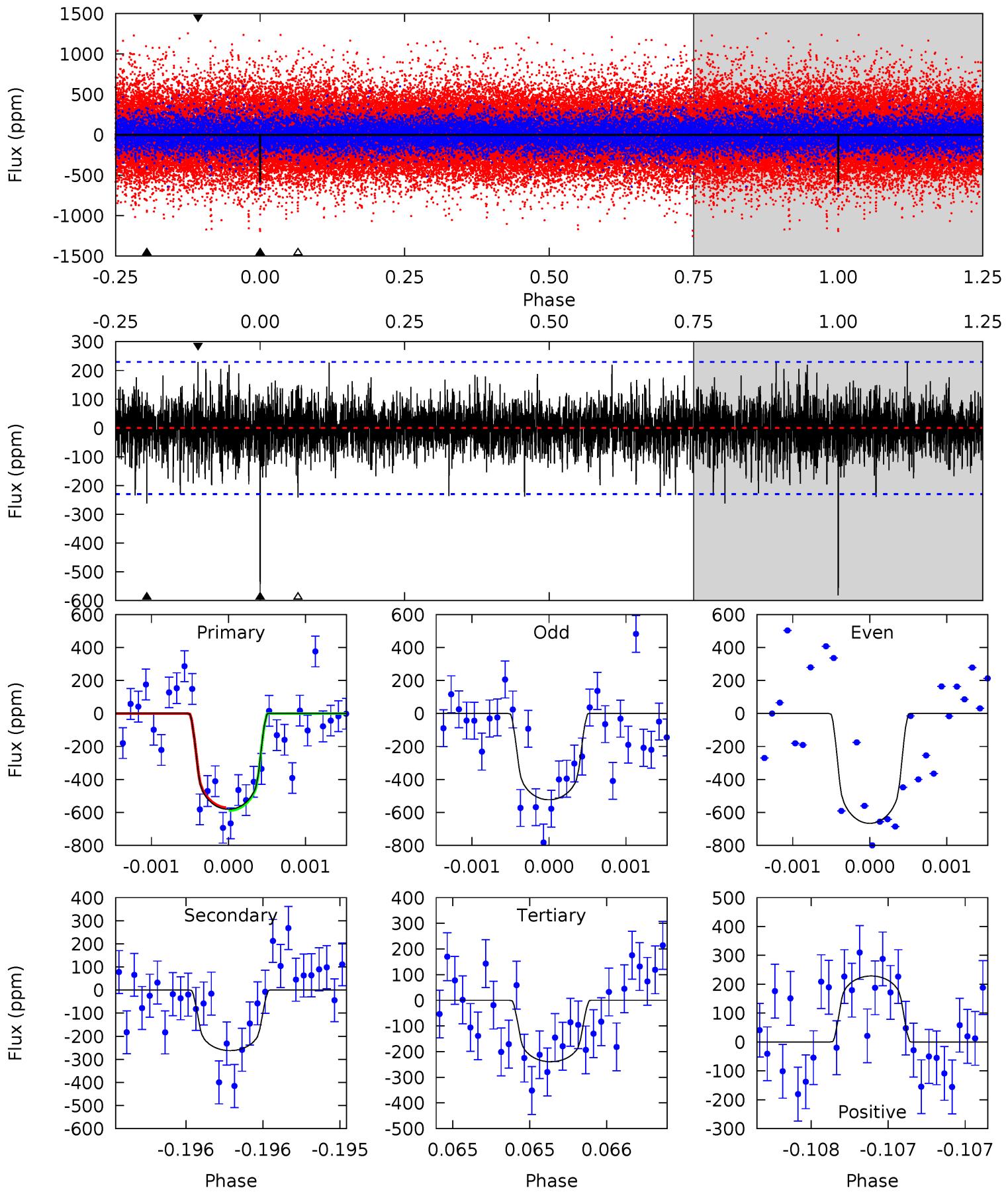
TCE 008218379-02 $P=253.679896$ Days $T_0=192.965890$ (BKJD)



DV Model-Shift Uniqueness Test

008218379-02, $P = 253.686645$ Days, $E = 192.946960$ Days

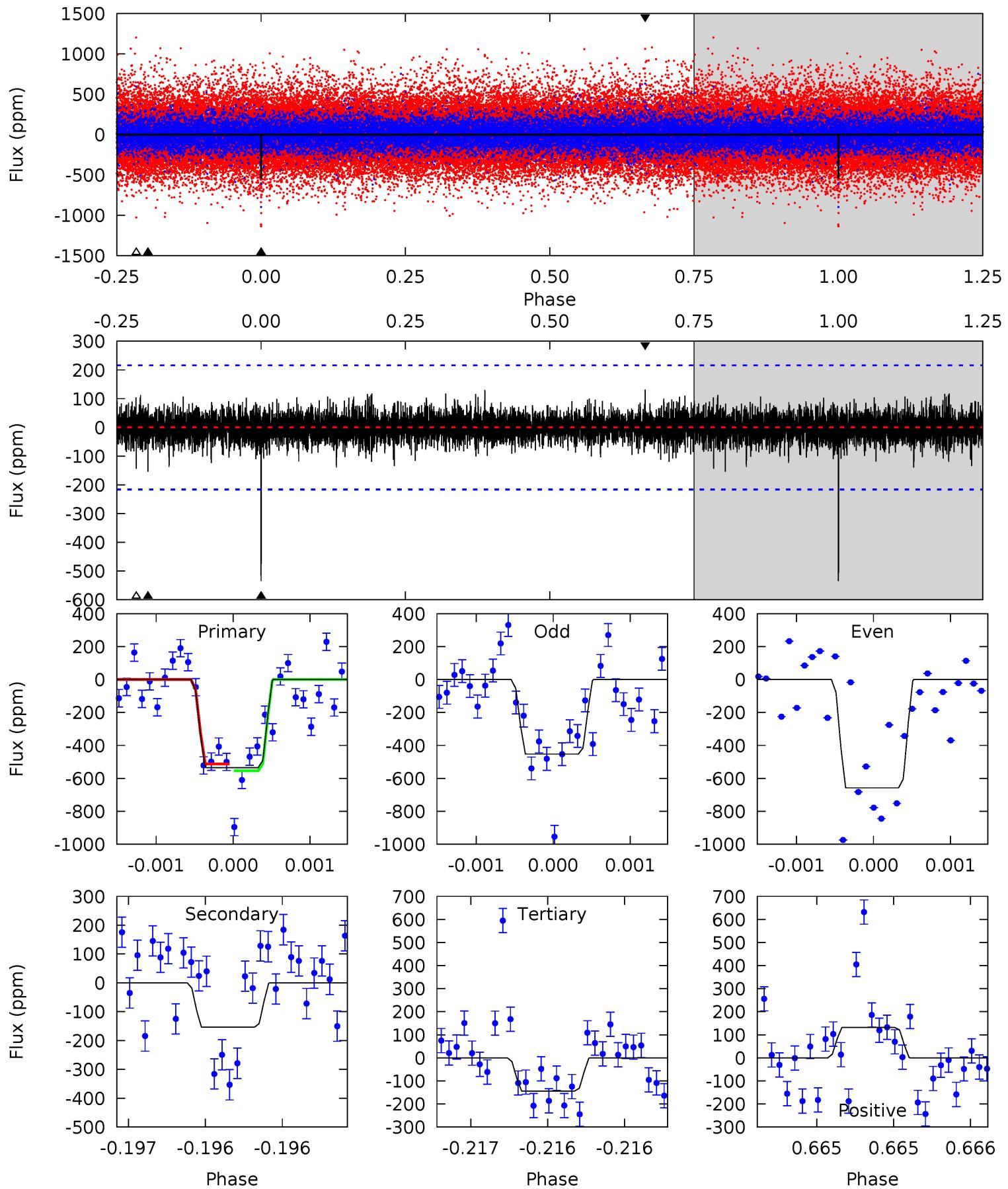
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
14.0	6.30	5.75	5.49	5.51	3.38	1.44	8.20	8.46	0.55	0.81	1.70	0.87	0.28	0.20



Alt Model-Shift Uniqueness Test

008218379-02, $P = 253.679896$ Days, $E = 192.965890$ Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
13.7	3.94	3.68	3.36	5.53	3.41	0.88	9.99	10.3	0.26	0.58	2.60	1.14	0.20	0.53



Stellar Parameters For KIC 008218379

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	5483^{+166}_{-149}	$4.589^{+0.034}_{-0.136}$	$-0.220^{+0.300}_{-0.300}$	$0.779^{+0.164}_{-0.059}$	$0.865^{+0.083}_{-0.102}$	$2.581^{+0.463}_{-1.004}$
	$+3\%/-3\%$	$+1\%/-3\%$	$+136\%/-136\%$	$+21\%/-8\%$	$+10\%/-12\%$	$+18\%/-39\%$
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 008218379-02 / KOI 1920.02

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (\text{K})$	$T_{obs} (\text{K})$	A_{obs}
DV	-262 ± 42	$2.14^{+1.32}_{-1.10}$	352^{+16}_{-14}	4583^{+1891}_{-731}	16950^{+58712}_{-10430}
Alt.	-154 ± 39	$2.15^{+1.36}_{-1.17}$	352^{+19}_{-13}	4137^{+1599}_{-623}	10059^{+37673}_{-6517}

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

