

KIC 010614158

Q1-17 DR25 TCE Parameters

TCE	Run Type	KOI?	Period (Days)	Epoch (BKJD)	Depth (ppm)	Duration (Hours)	MES	SNR	R_{\star} (R_{\odot})	T_{\star} (K)	R_p (R_{\oplus})	S_p (S_{\oplus})
010614158-01	OBS	6227.01	4.462221	133.720512	19524.5	13.879	223.3	163.8	3.62	4847	48.80	2460.99
010614158-02	OBS	No	49.405608	175.595030	467.4	1.997	12.2	2.6	3.62	4847	10.38	99.73
010614158-03	OBS	No	67.856514	161.896047	1200.0	2.027	11.6	6.0	3.62	4847	12.12	65.32

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
010614158-01	OBS	FP	0.00	1	0	0	0	SWEET_NTL
010614158-02	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_TRACKER—TRANS_GAPPED—LPP_DV—LPP_ALT—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_POS_DV— MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT
010614158-03	OBS	FP	0.00	1	0	0	0	ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_POS_DV—CENT_FEW_DIFFS

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.

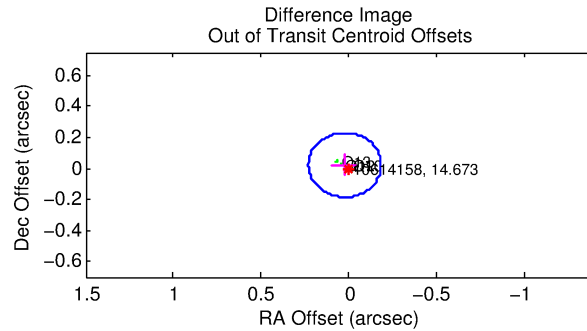
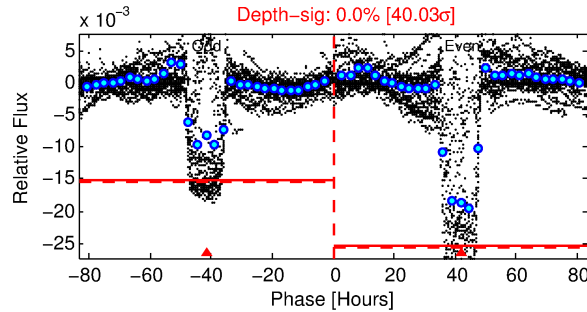
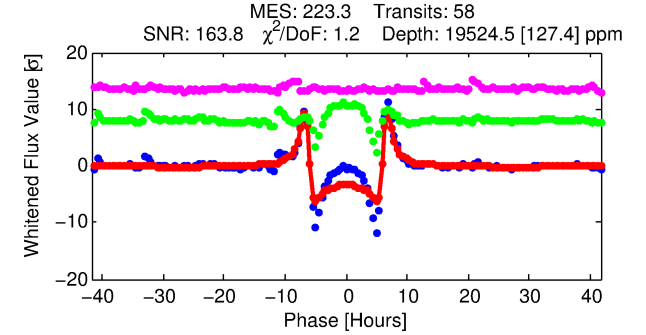
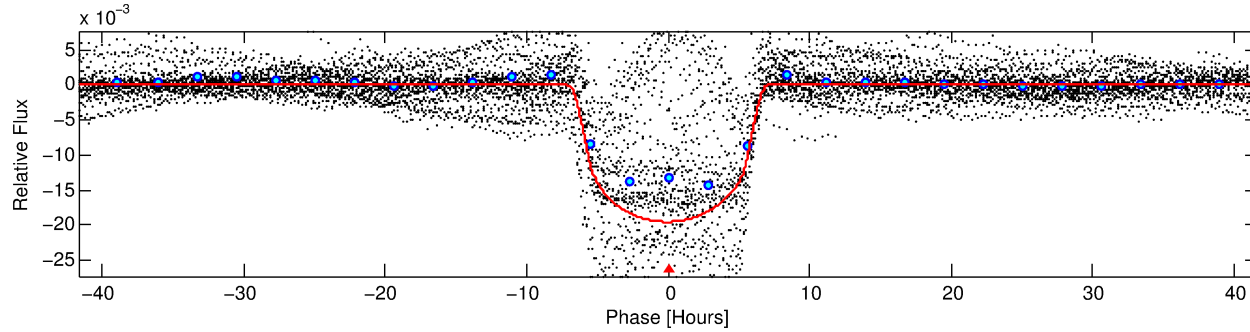
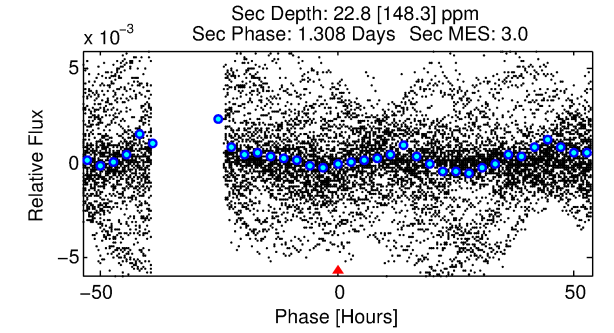
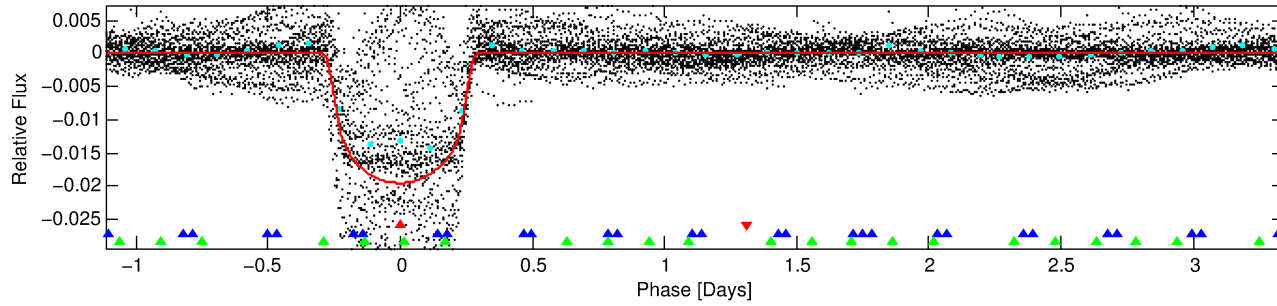
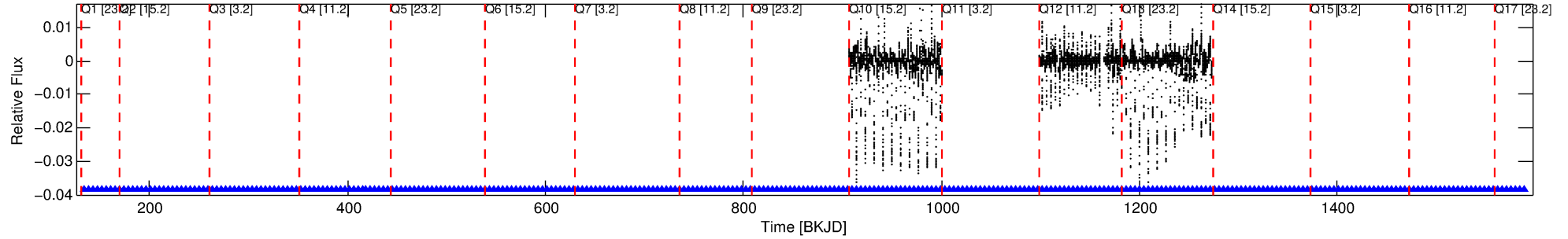
Ephemeris Match Information For 010614158-01

No Significant Match Found

DV One-Page Summary

KIC: 10614158 Candidate: 1 of 3 Period: 4.462 d
KOI: K06227.01 Corr: 0.947

Kp: 14.67 R*: 3.62 Rs Teff: 4847.0 K Logg: 3.28 Fe/H: -0.120



DV Fit Results:

Period = 4.46222 [0.00000] d
Epoch = 133.7205 [0.0008] BKJD
Rp/R* = 0.1236 [0.0005]
a/R* = 2.84 [0.02]
b = 0.00 [63.92]
Seff = 2460.99 [1566.11]
Teq = 1796 [286] K
Rp = 48.80 [27.52] Re
a = 0.0513 [0.0231] AU
Ag = 0.01 [0.09] [-10.89σ]
Teff = 953 [1550] K [-0.54σ]

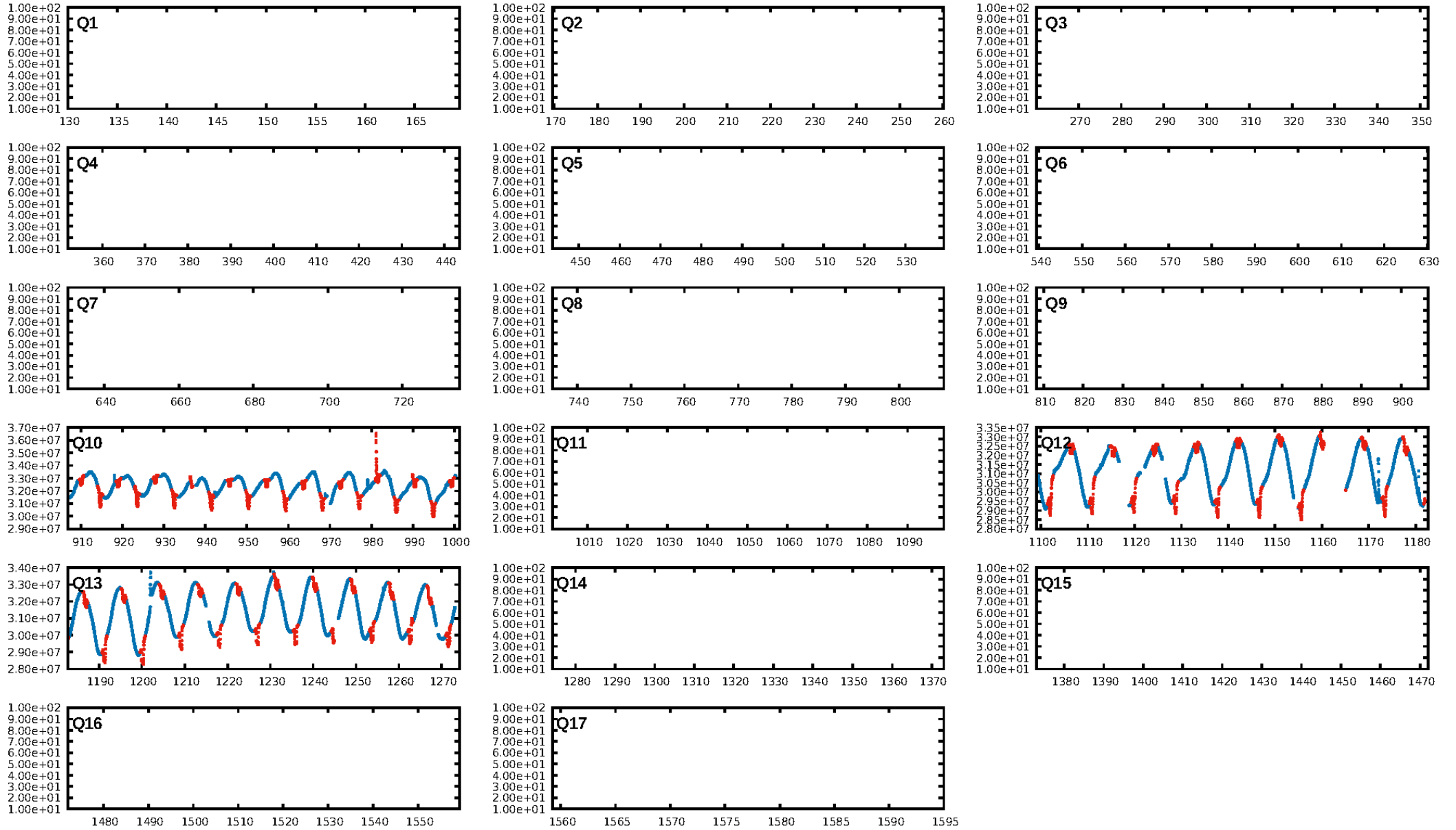
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: 100.0% [76.93σ]
ModelChiSquare2-sig: 0.0%
ModelChiSquareGof-sig: 100.0%
Bootstrap-pfa: 0.00e+00
RollingBand-fgt: 1.00 [58/58]
GhostDiagnostic-chr: 2.86
Centroid-sig: 0.0%
Centroid-so: 0.087 arcsec [8.15σ]
OotOffset-rm: 0.033 arcsec [0.48σ]
KicOffset-rm: 0.089 arcsec [0.70σ]
OotOffset-st: 1/0/1/1 [3]
KicOffset-st: 1/0/1/1 [3]
DiffImageQuality-fgm: 1.00 [3/3]
DiffImageOverlap-fno: 1.00 [3/3]

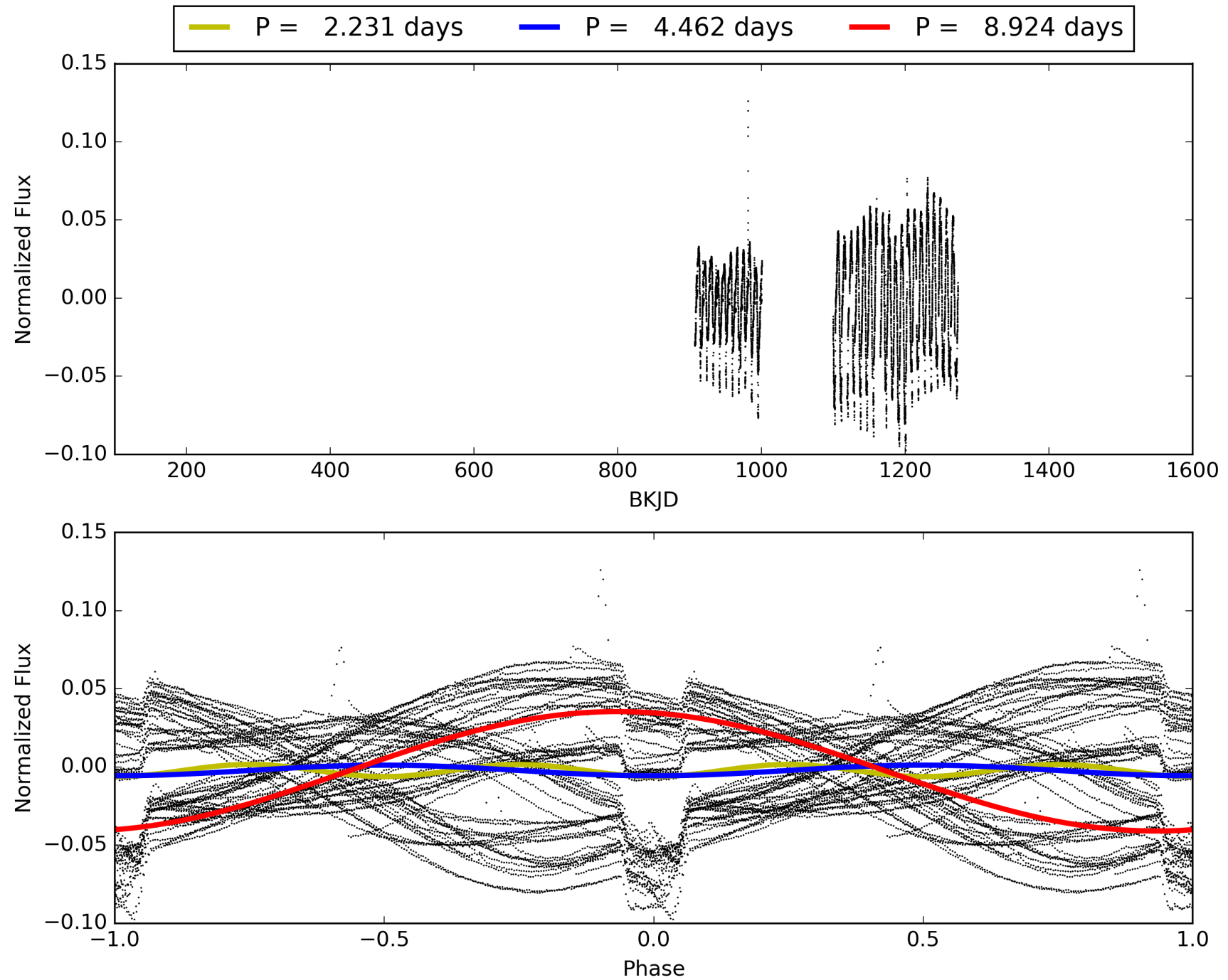
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 29-Jan-2016 09:01:18 Z

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

TCE 010614158-01, PDC Light Curves

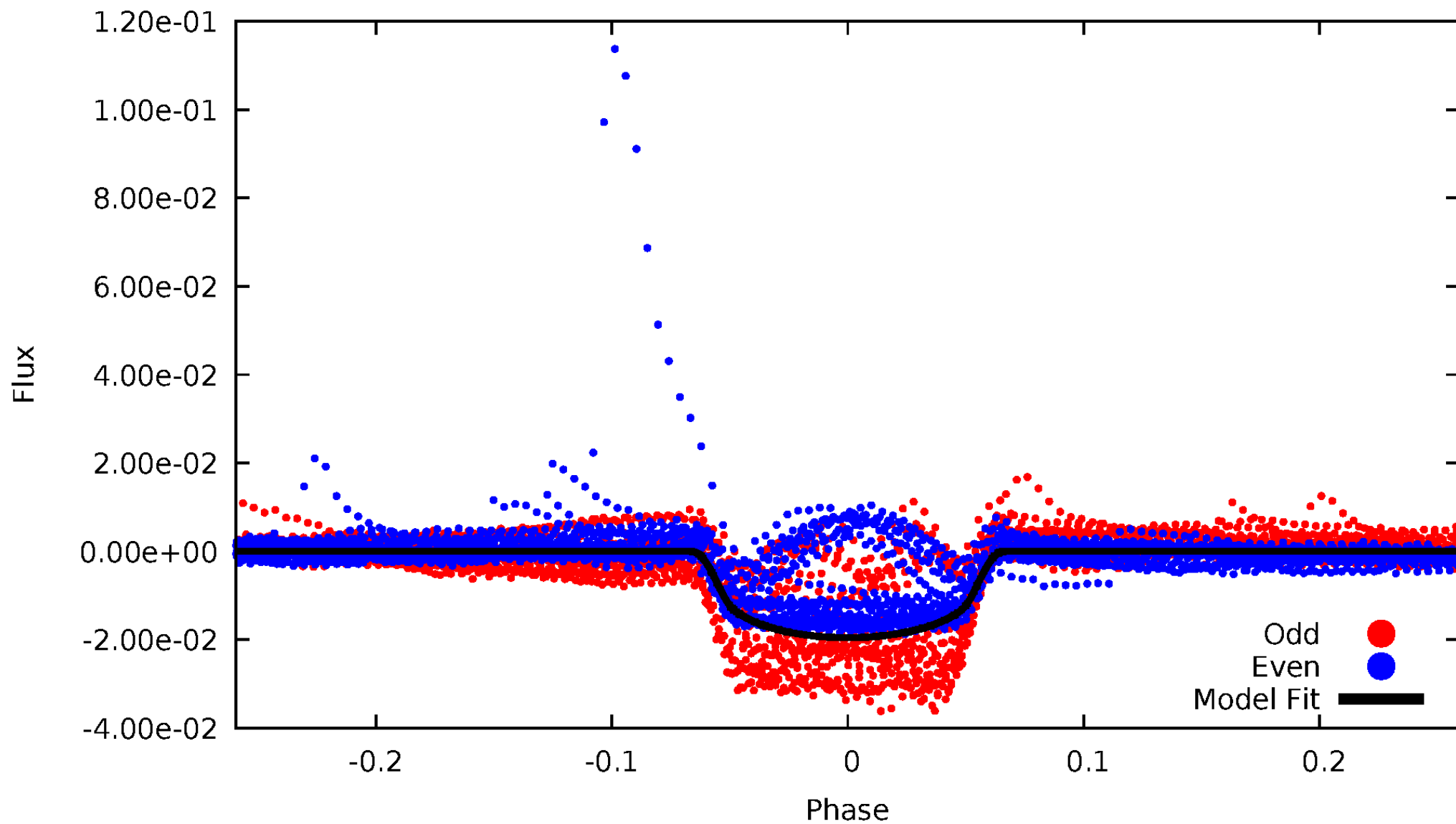


TCE 010614158-01



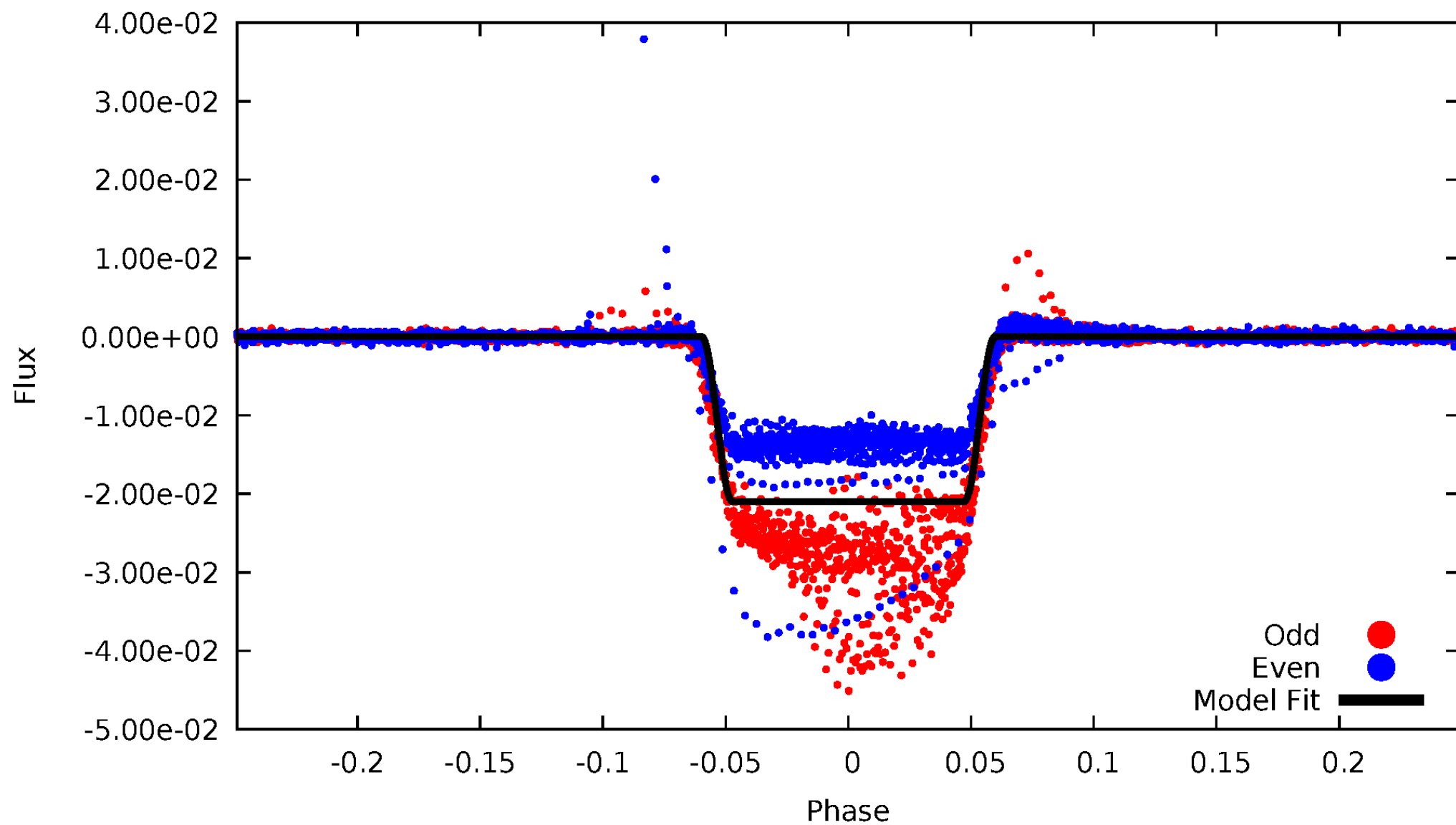
DV Odd/Even

TCE 010614158-01



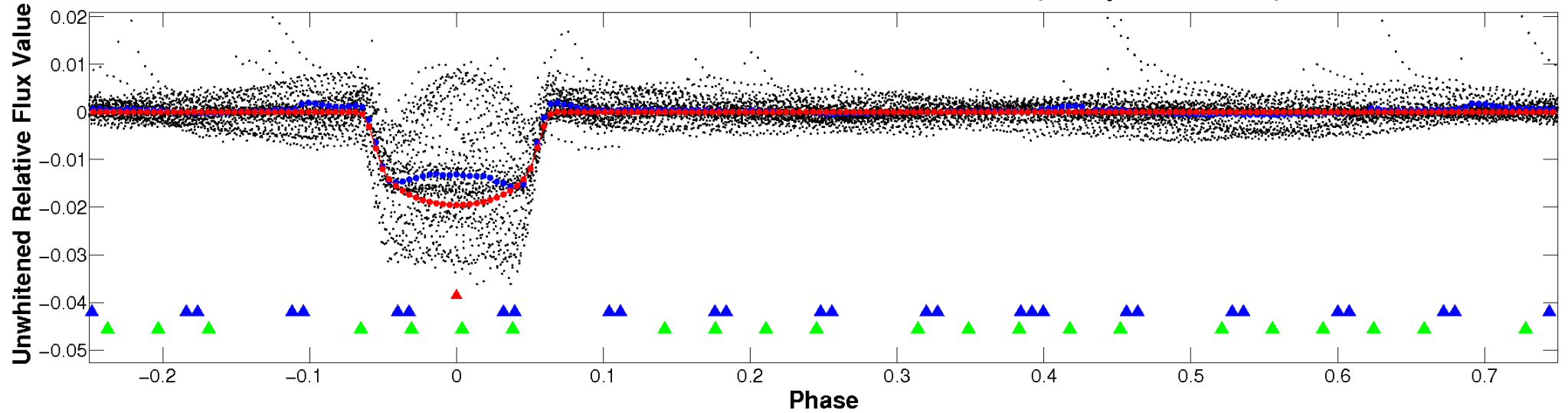
ALT Odd/Even

TCE 010614158-01

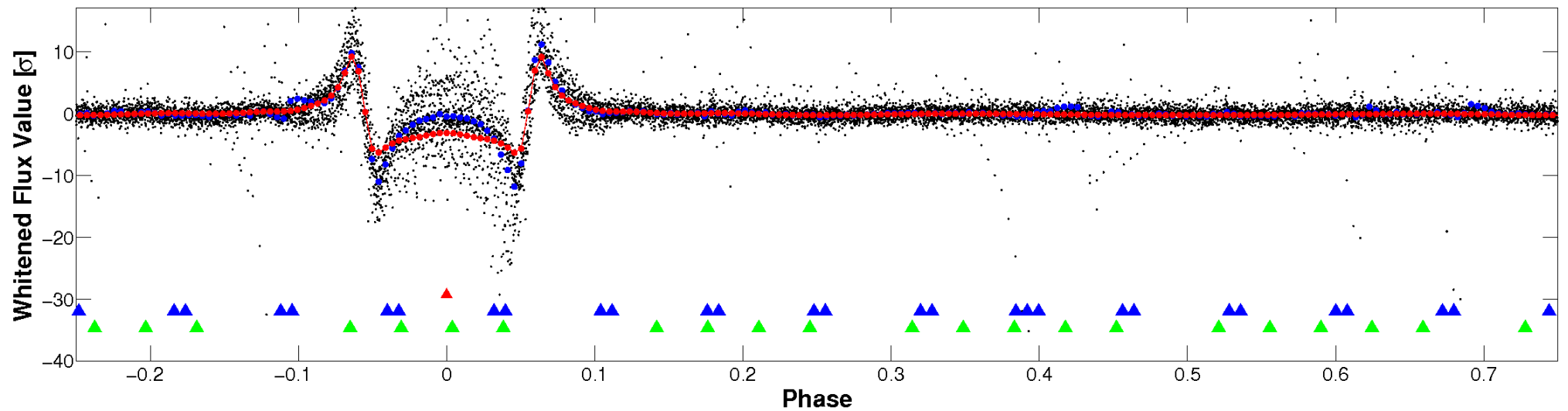


Non-Whitened Vs. Whitened Light Curve

Planet 1 : Phased Unwhitened Flux Time Series (Fit Epoch/Period)

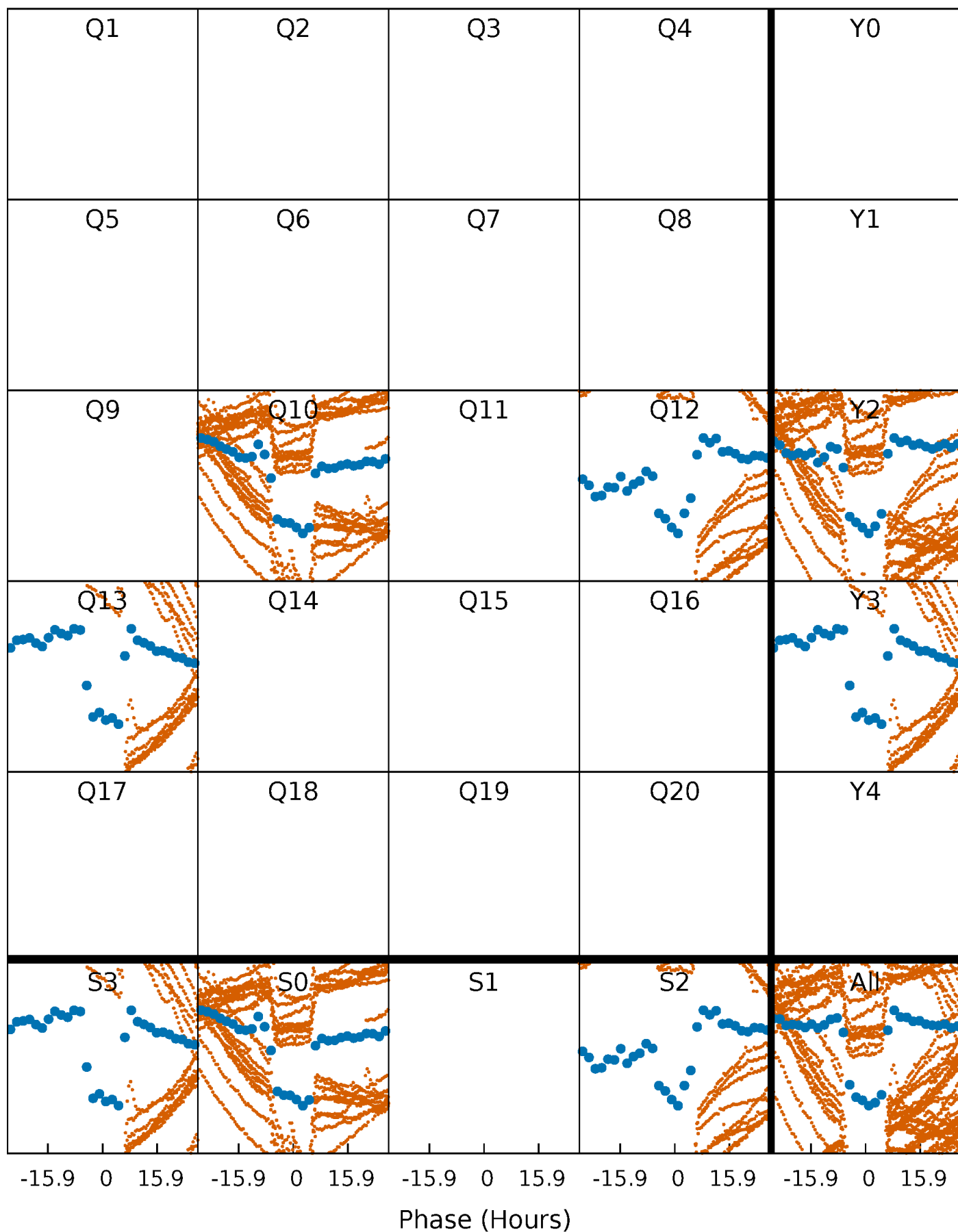


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



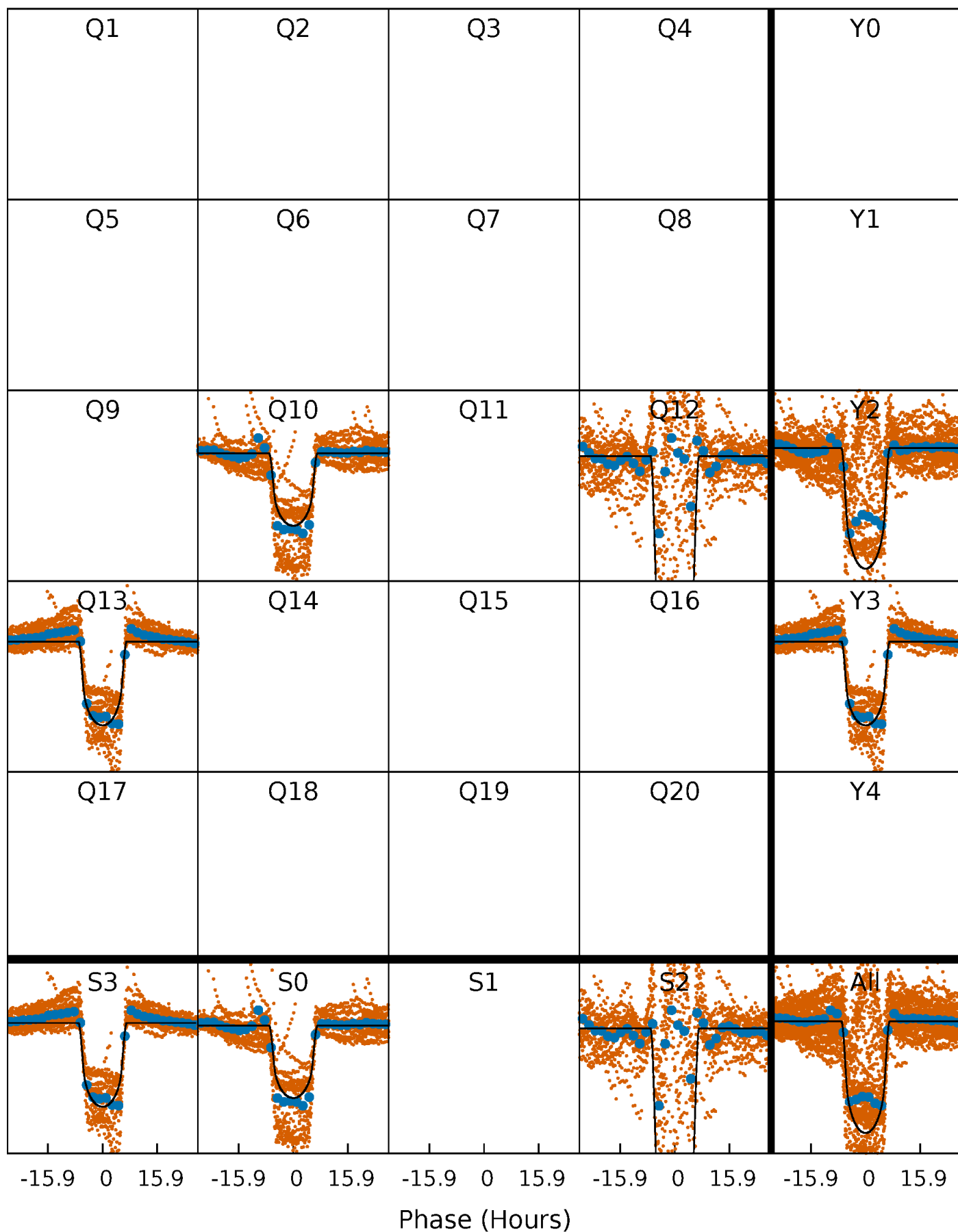
PDC Quarter-Phased Transit Curves

TCE 010614158-01 P= 4.462221 Days $T_0=133.720512$ (BKJD)



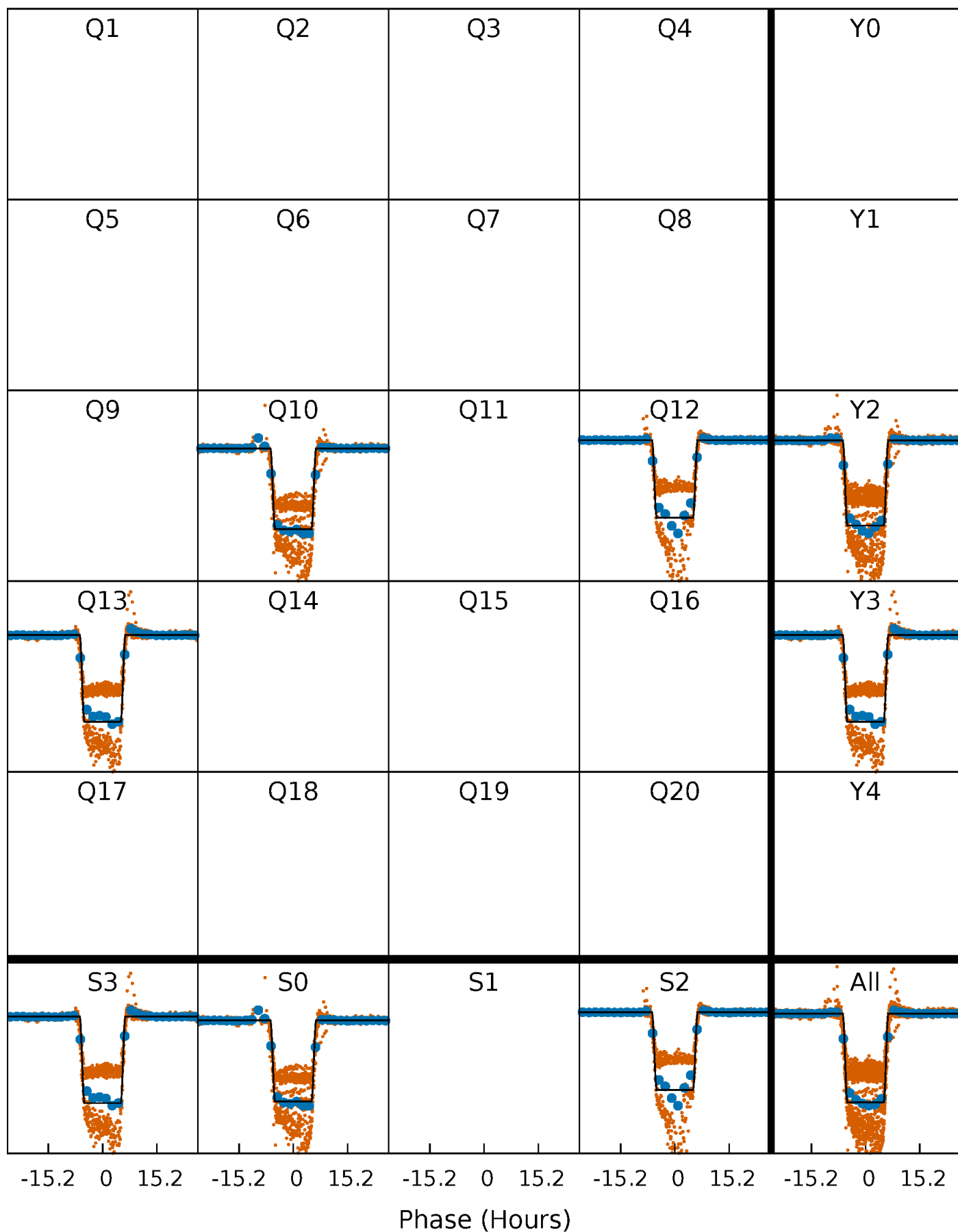
DV Quarter-Phased Transit Curves

TCE 010614158-01 P= 4.462221 Days $T_0=133.720512$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

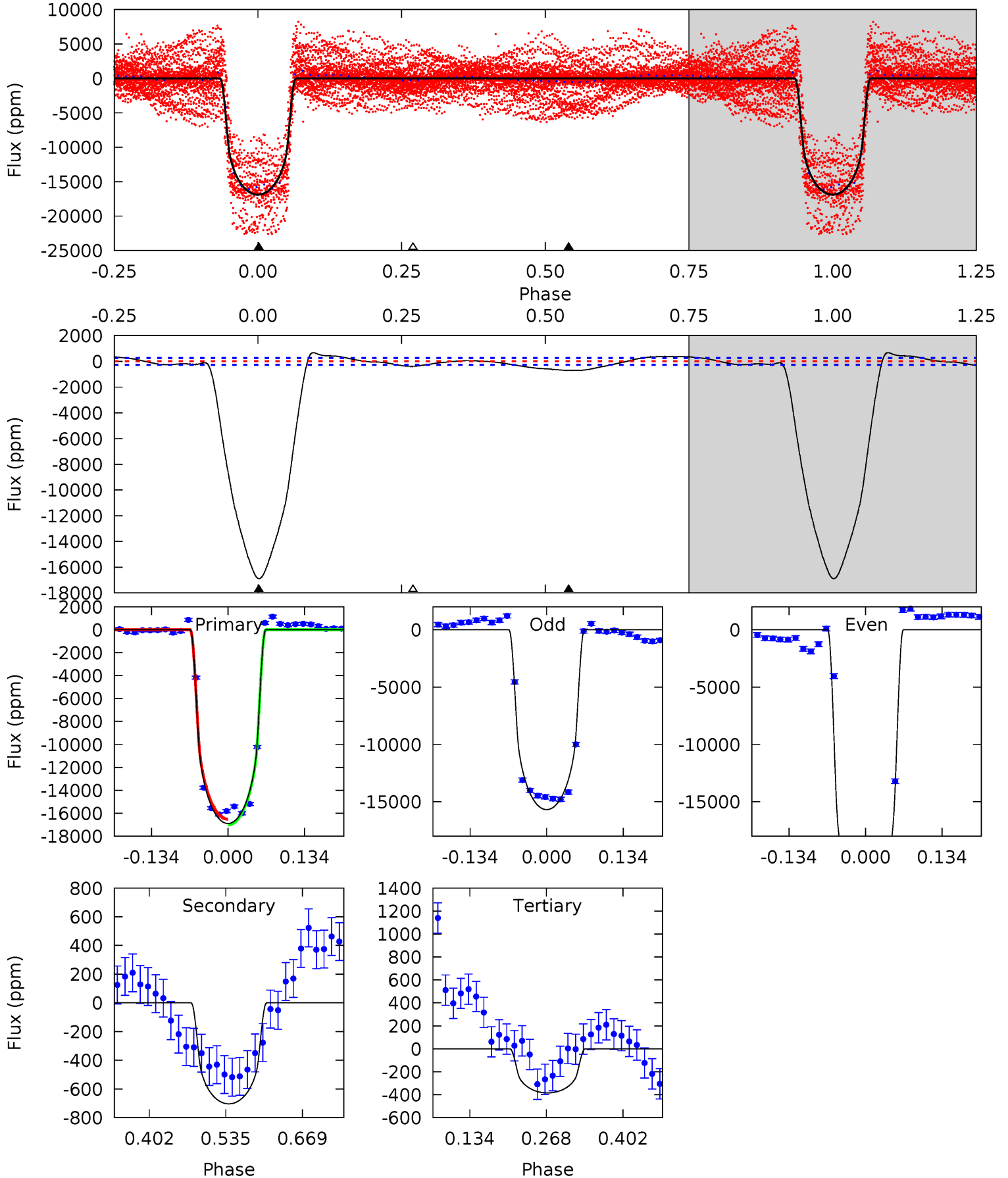
TCE 010614158-01 P= 4.462545 Days $T_0=133.651598$ (BKJD)



DV Model-Shift Uniqueness Test

010614158-01, P = 4.462221 Days, E = 133.720512 Days

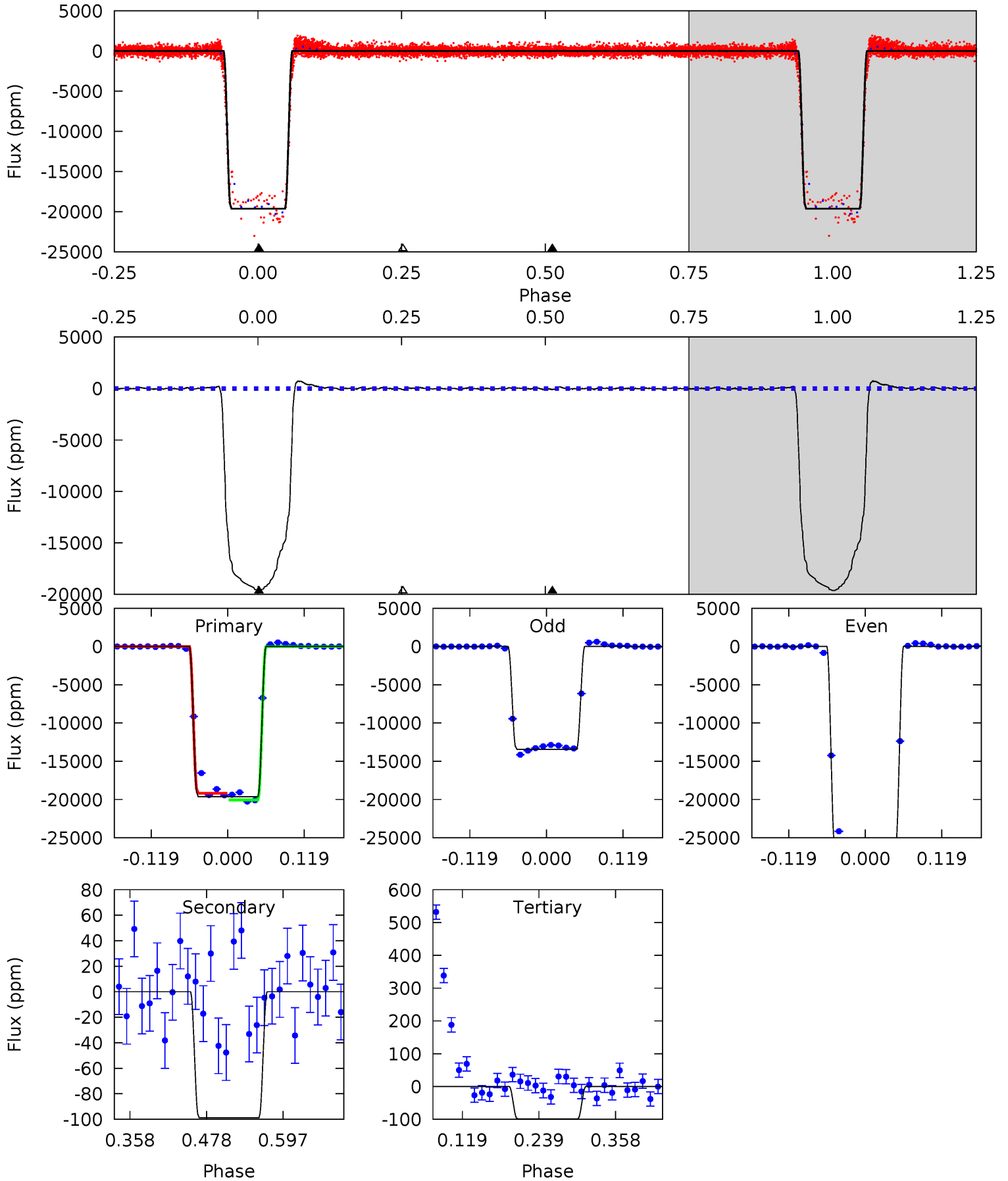
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
287.8	12.0	6.55	0	4.50	1.50	4.05	281.3	287.8	5.44	12.0	81.4	0.90	0.04	4.21



Alt Model-Shift Uniqueness Test

010614158-01, P = 4.462545 Days, E = 133.651598 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
765.2	3.85	3.85	0	4.53	1.56	1.44	761.3	765.2	0.00	3.85	566.4	0.95	0.04	0



Stellar Parameters For KIC 010614158

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	M (M_{\odot})	p_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	4847^{+147}_{-110}	$3.277^{+0.325}_{-0.325}$	$-0.120^{+0.300}_{-0.200}$	$3.619^{+2.041}_{-1.099}$	$0.905^{+0.315}_{-0.147}$	$0.027^{+0.050}_{-0.020}$
	+3%/-2%	+10%/-10%	+250%/-167%	+56%/-30%	+35%/-16%	+187%/-75%
Source	KIC0	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 010614158-01 / KOI 6227.01

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	-704 ± 59	$49.11^{+15.68}_{-8.36}$	2516^{+358}_{-248}	2478^{+198}_{-4796}	$0.426^{+0.205}_{-0.166}$
Alt.	-99 ± 26	$56.79^{+17.44}_{-10.18}$	2500^{+342}_{-252}	-2702^{+173}_{-220}	$0.043^{+0.027}_{-0.019}$

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 $A_{obs} \gg 1.0$

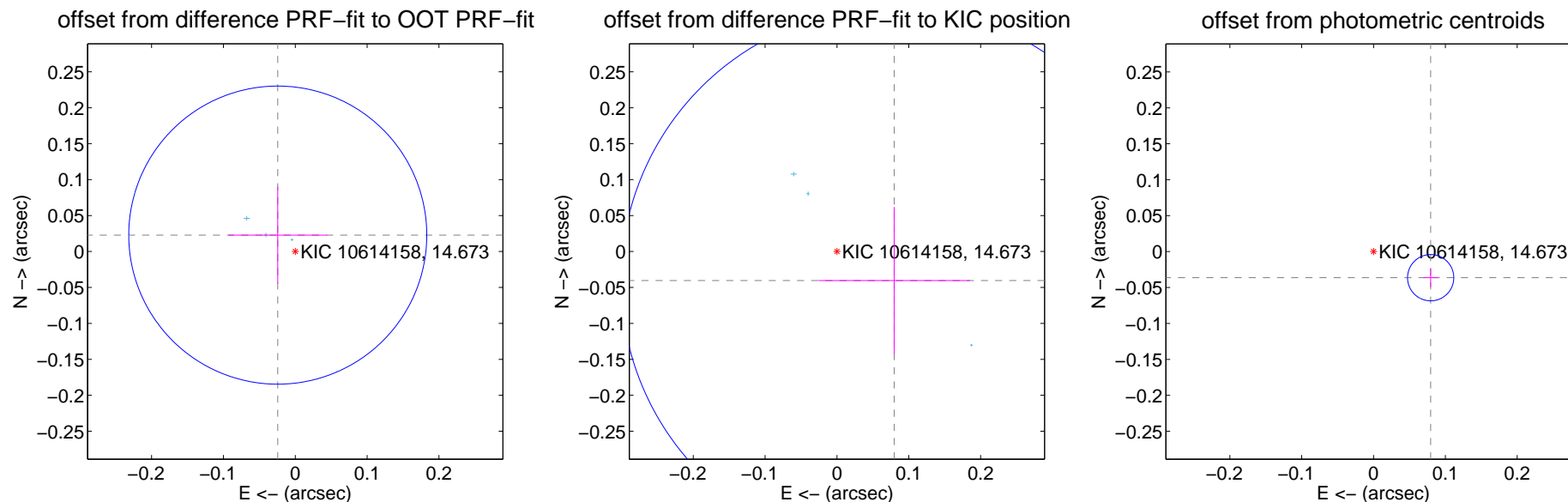
DV Centroid Data

Supplemental centroid analysis for 010614158-01. Kepler magnitude: 14.67. Transit SNR 163.78

There are 3 quarters with good PRF difference image offsets

The direct PRF centroid is offset from the target star catalog position by about 0.06 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.033 ± 0.069	0.48	0.024 ± 0.069	0.023 ± 0.067
PRF-fit source offset from KIC position	0.089 ± 0.127	0.70	-0.080 ± 0.105	-0.040 ± 0.102
photometric centroid source offset	0.09 ± 0.01	8.15	-0.08 ± 0.01	-0.04 ± 0.01



Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ . Red *: target star. Blue *: Other stars. Text next to a star gives its KIC ID and kepmag. KIC IDs > 15,000,000 are from the UKIRT catalog.

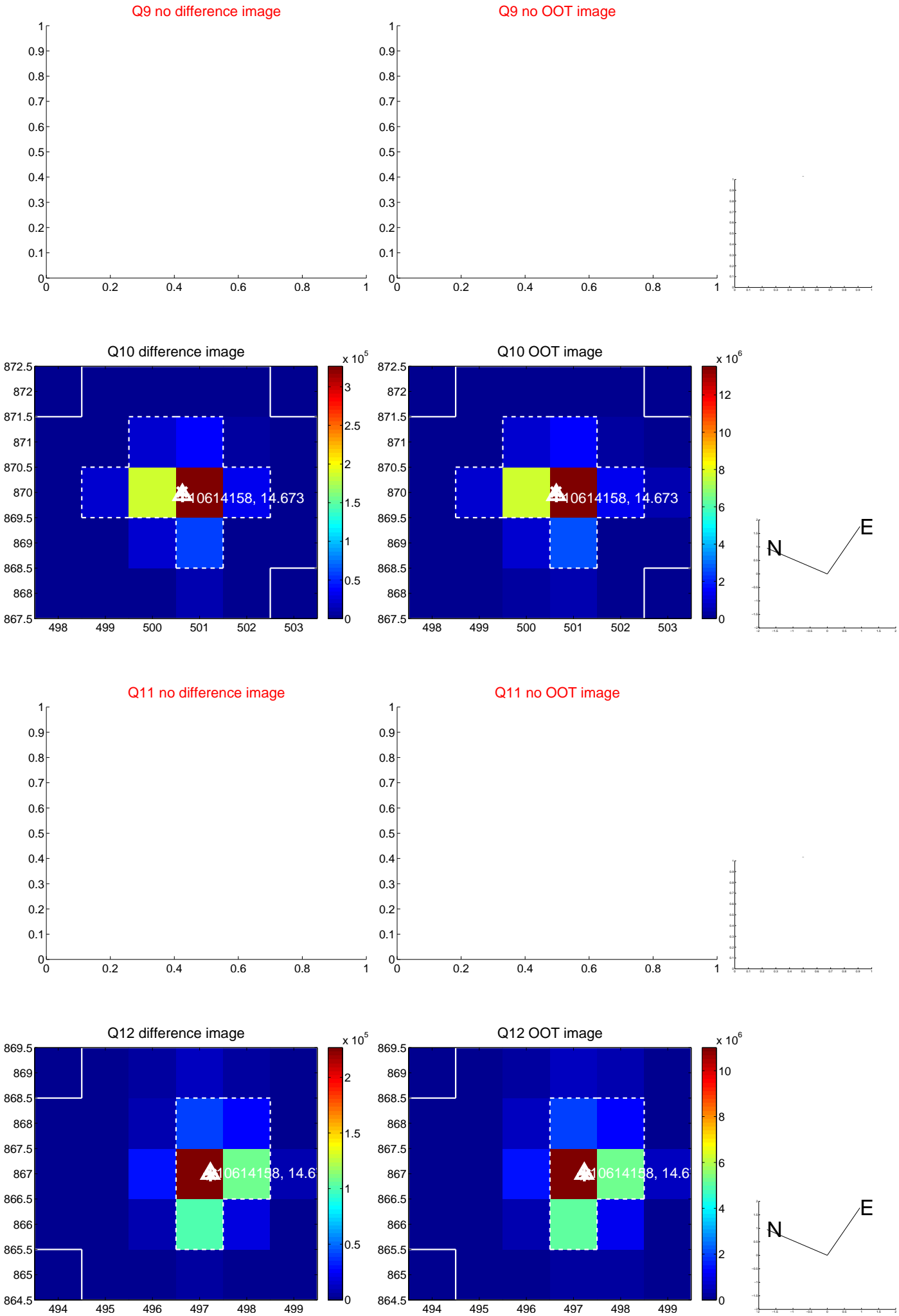
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



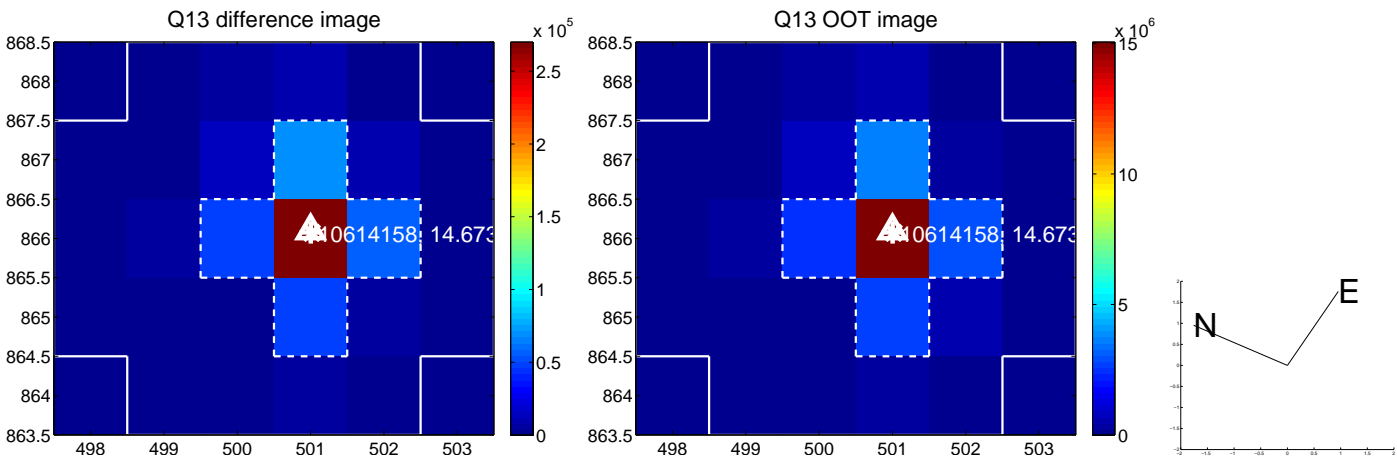
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



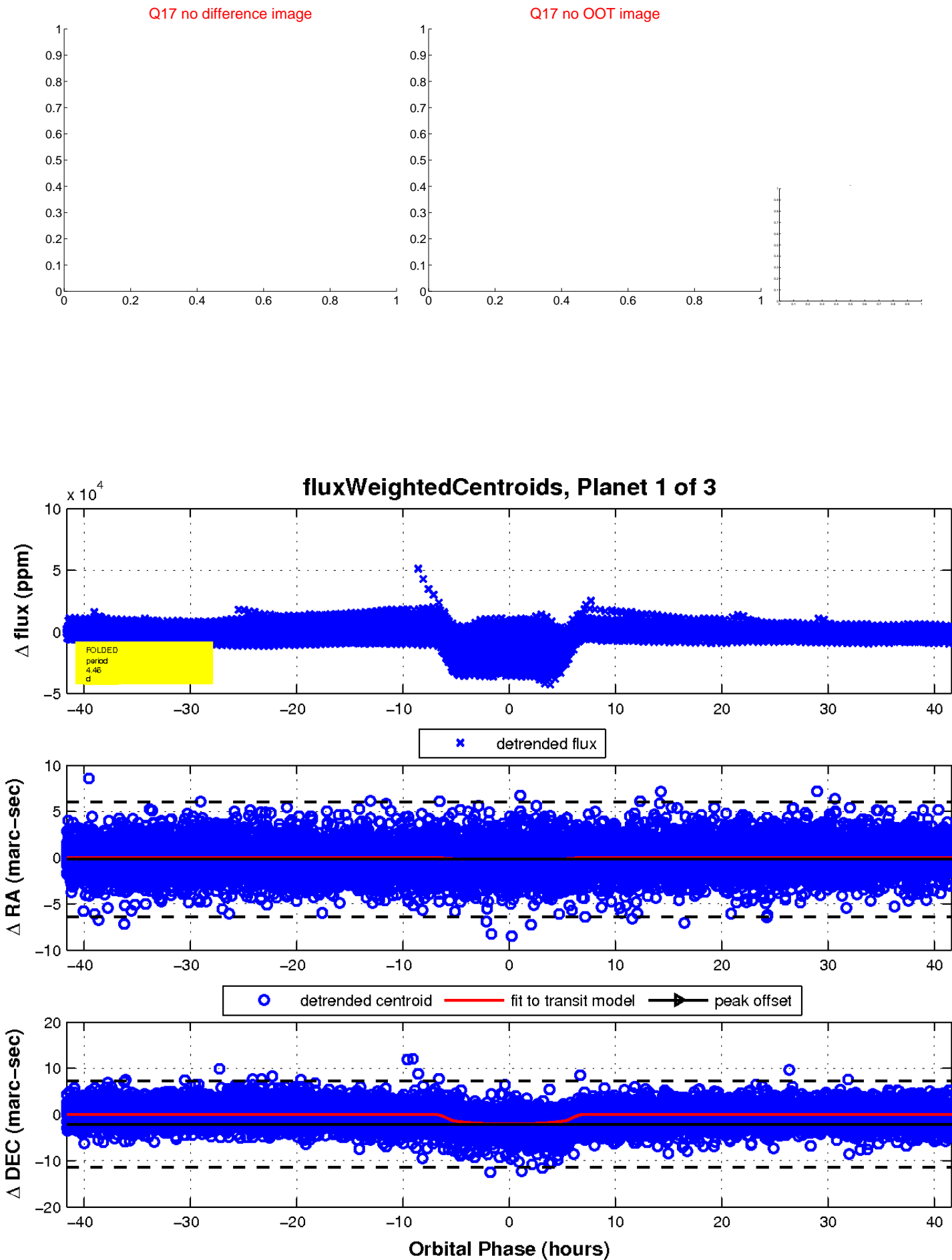
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



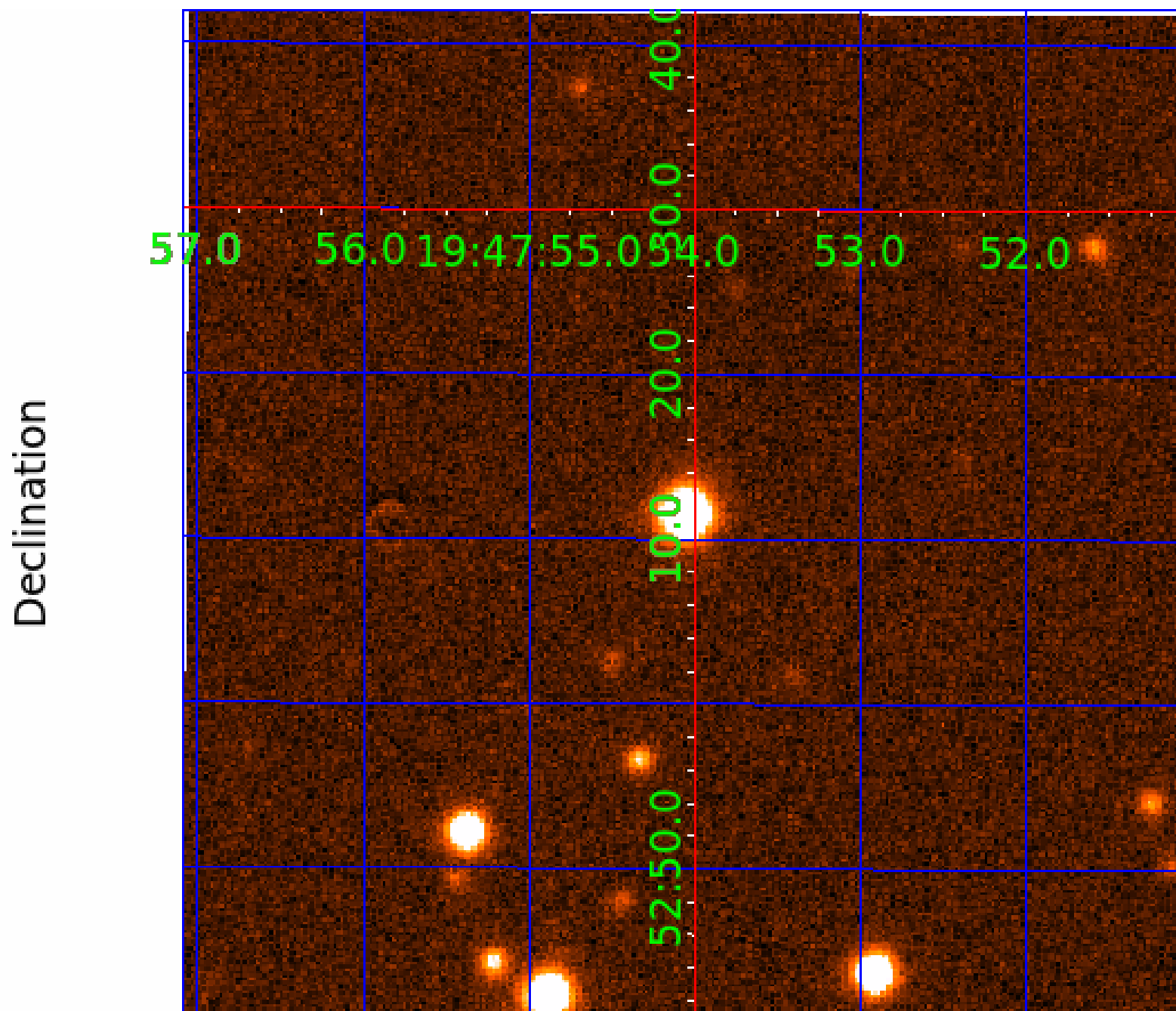
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



UKIRT Image



KIC 010614158

Q1-17 DR25 TCE Parameters

TCE	Run Type	KOI?	Period (Days)	Epoch (BKJD)	Depth (ppm)	Duration (Hours)	MES	SNR	R_{\star} (R_{\odot})	T_{\star} (K)	R_p (R_{\oplus})	S_p (S_{\oplus})
010614158-01	OBS	6227.01	4.462221	133.720512	19524.5	13.879	223.3	163.8	3.62	4847	48.80	2460.99
010614158-02	OBS	No	49.405608	175.595030	467.4	1.997	12.2	2.6	3.62	4847	10.38	99.73
010614158-03	OBS	No	67.856514	161.896047	1200.0	2.027	11.6	6.0	3.62	4847	12.12	65.32

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
010614158-01	OBS	FP	0.00	1	0	0	0	SWEET_NTL
010614158-02	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_TRACKER—TRANS_GAPPED—LPP_DV—LPP_ALT—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_POS_DV— MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT
010614158-03	OBS	FP	0.00	1	0	0	0	ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_POS_DV—CENT_FEW_DIFFS

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

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

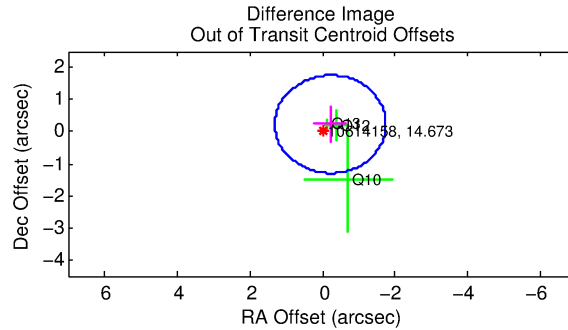
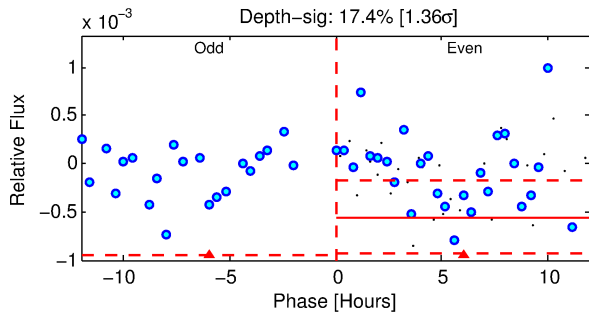
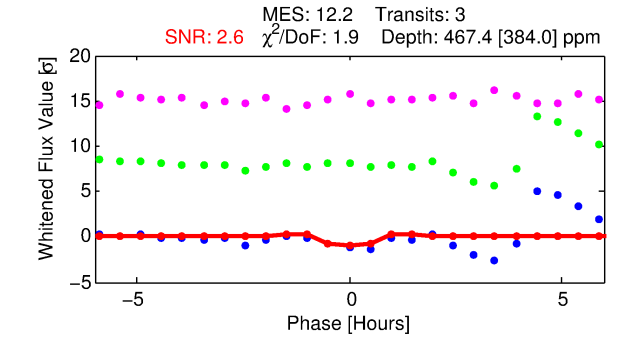
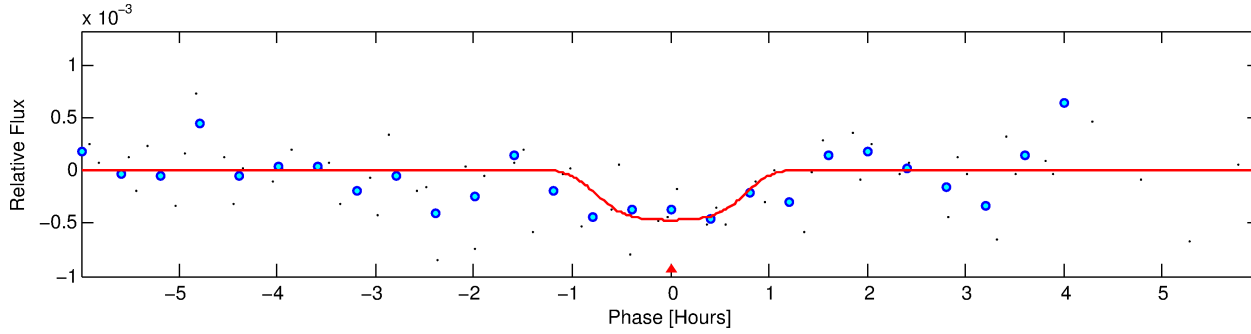
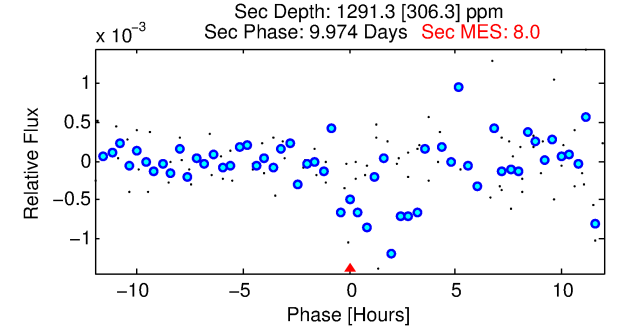
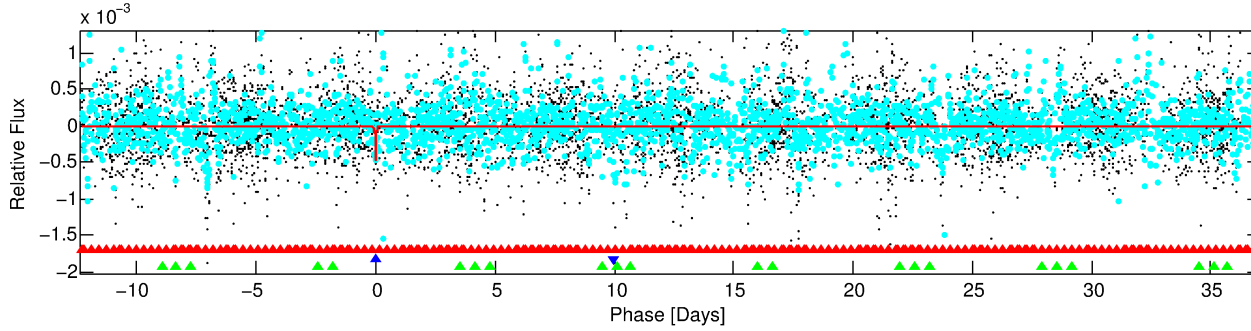
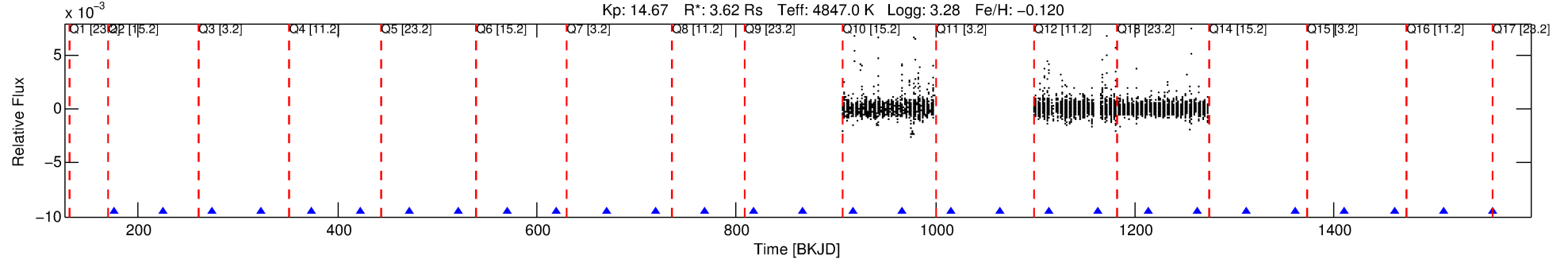
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 010614158-02

No Significant Match Found

DV One-Page Summary

KIC: 10614158 Candidate: 2 of 3 Period: 49.406 d
KOI: K06227 Corr: No Ephemeris Match



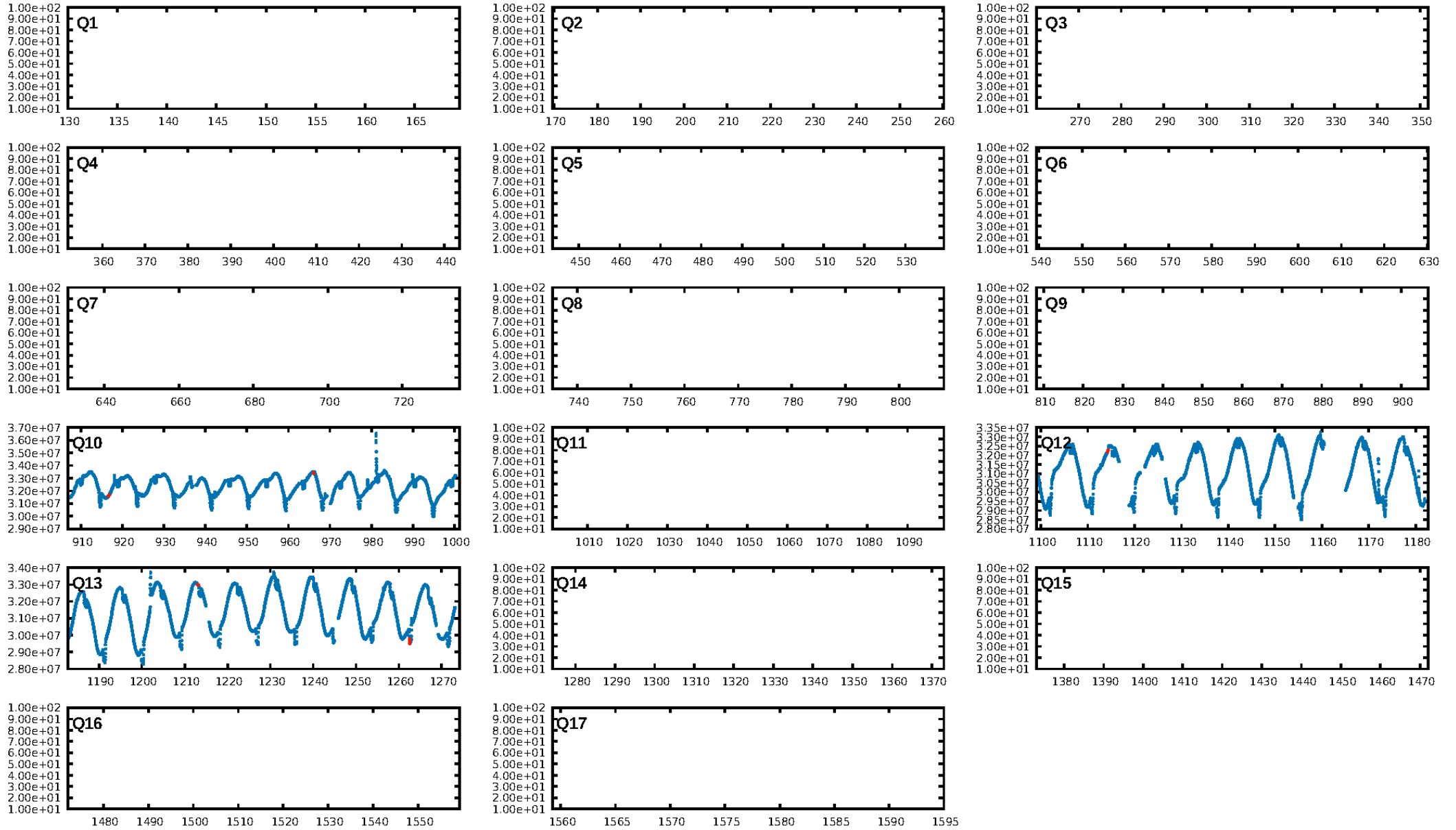
DV Fit Results:

Period = 49.40561 [0.00759] d
Epoch = 175.5950 [0.1288] BKJD
Rp/R* = 0.0263 [0.0366]
a/R* = 73.51 [376.42]
b = 0.95 [0.54]
Seff = 99.73 [63.46]
Teq = 806 [128] K
Rp = 10.38 [15.58] Re
a = 0.2548 [0.1150] AU
Ag = 428.23 [1225.05] [0.35σ]
Teffp = 5667 [3959] K [1.23σ]

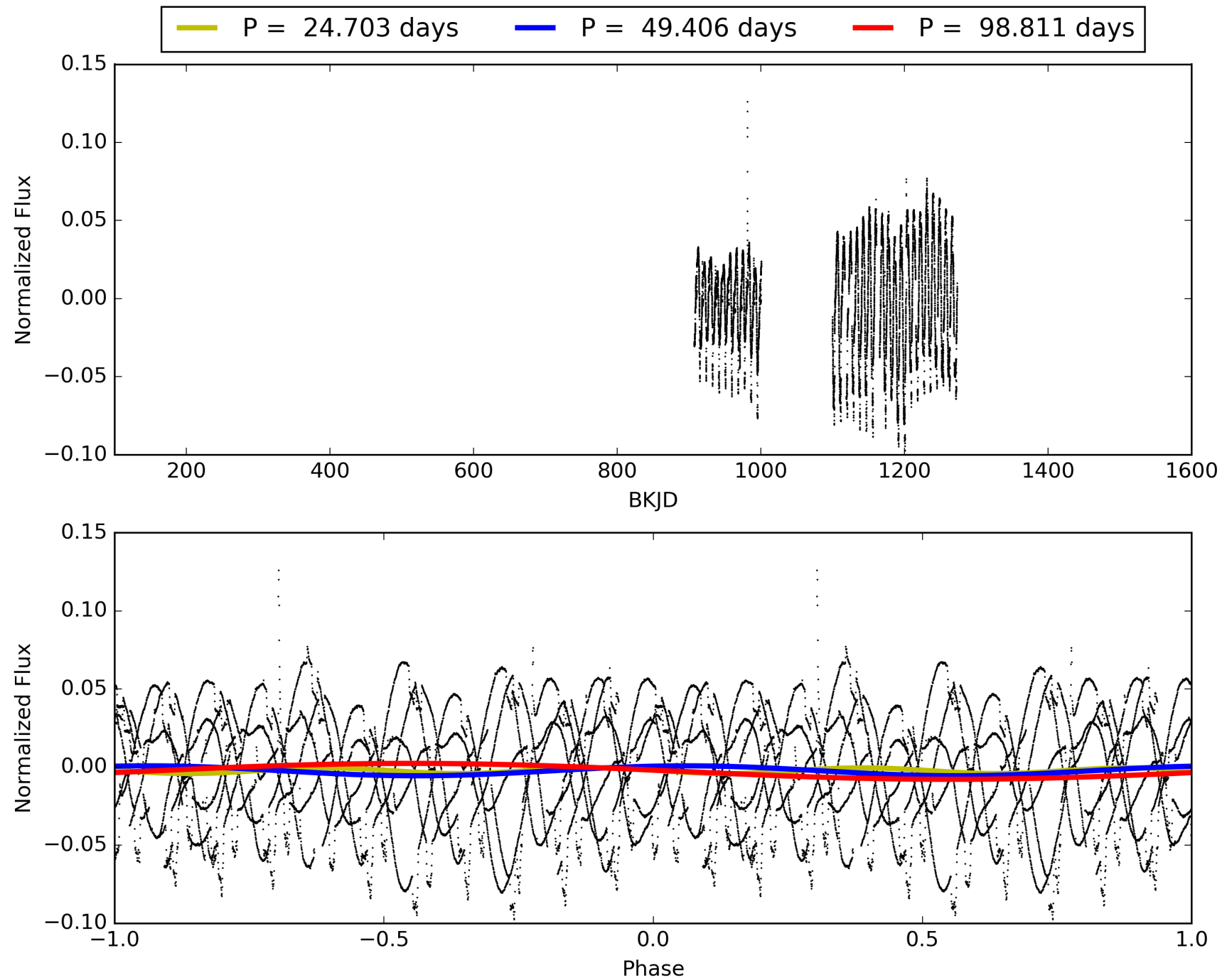
DV Diagnostic Results:

ShortPeriod-sig: 100.0% [76.93σ]
LongPeriod-sig: 100.0% [155.65σ]
ModelChiSquare2-sig: 77.0%
ModelChiSquareGof-sig: 88.4%
Bootstrap-pfa: 5.35e-21
RollingBand-fgt: 1.00 [3/3]
GhostDiagnostic-chr: -2.576
Centroid-sig: 53.3%
Centroid-so: 2.055 arcsec [0.67σ]
OotOffset-rm: 0.316 arcsec [0.62σ]
KicOffset-rm: 0.361 arcsec [0.68σ]
OotOffset-st: 1/0/1/1 [3]
KicOffset-st: 1/0/1/1 [3]
DiffImageQuality-fgm: 1.00 [3/3]
DiffImageOverlap-fno: 0.67 [2/3]

TCE 010614158-02, PDC Light Curves

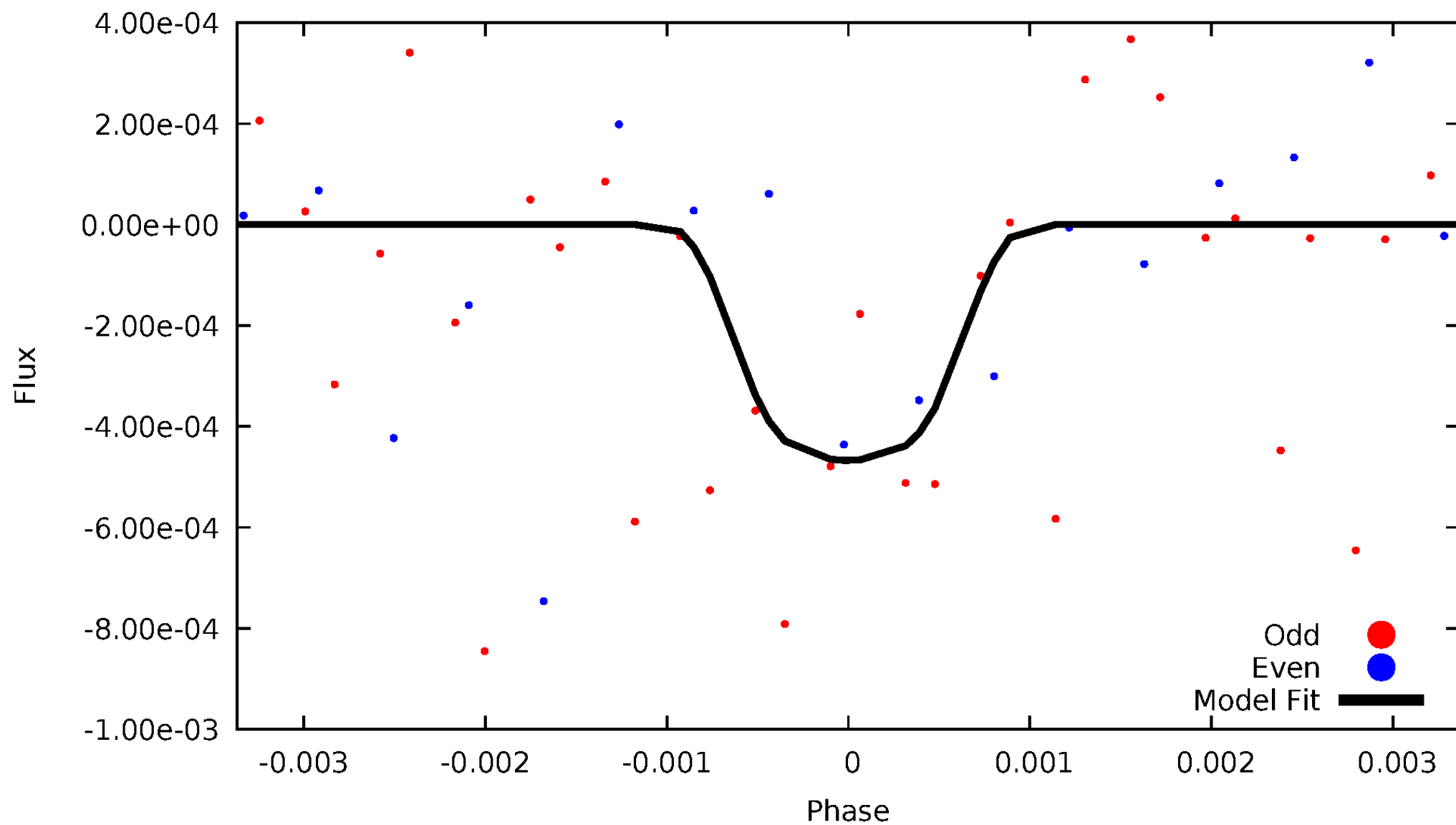


TCE 010614158-02



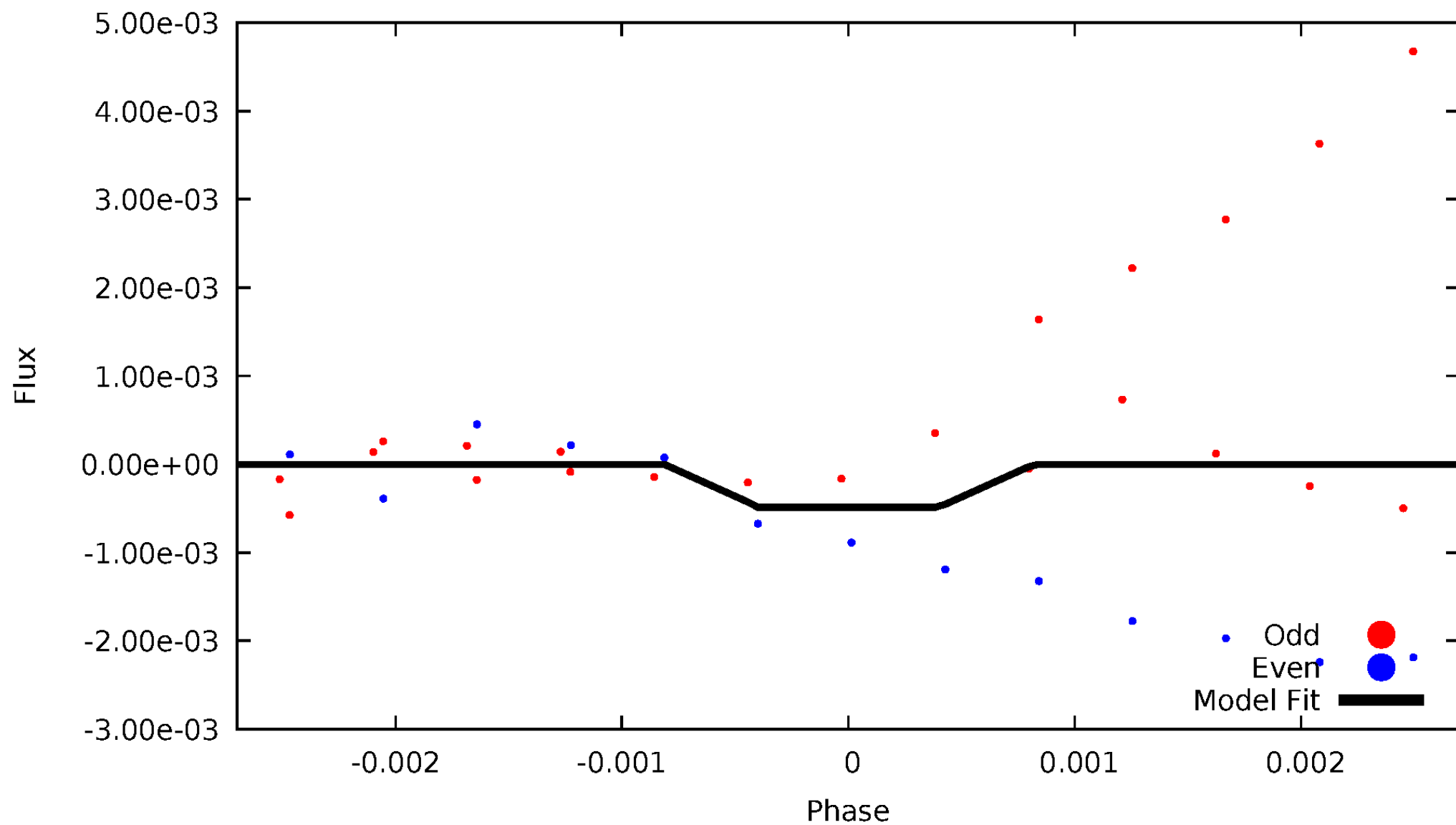
DV Odd/Even

TCE 010614158-02



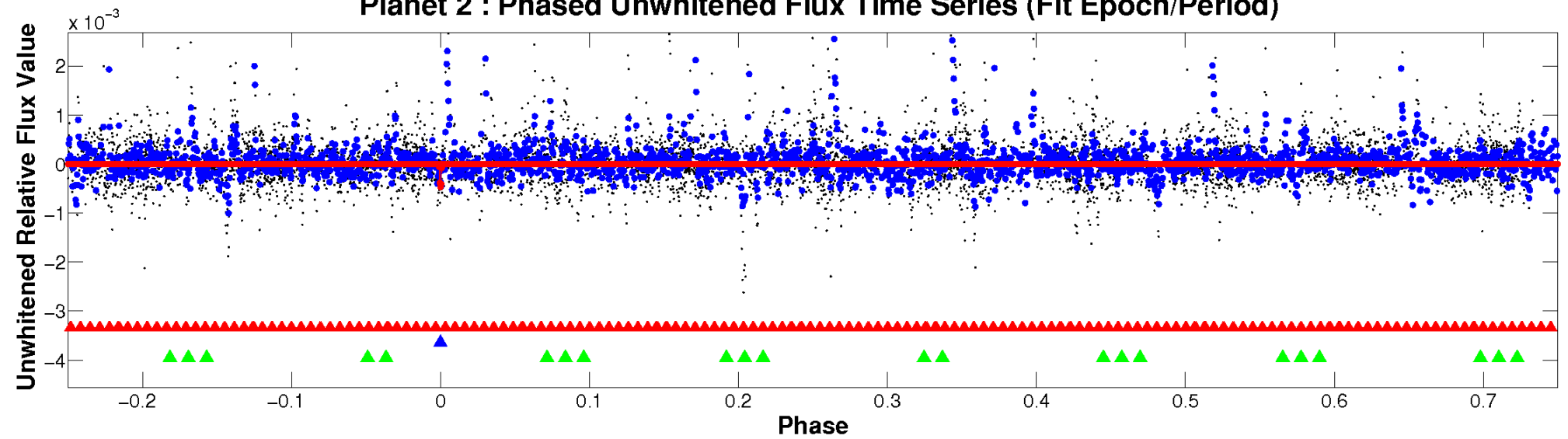
ALT Odd/Even

TCE 010614158-02

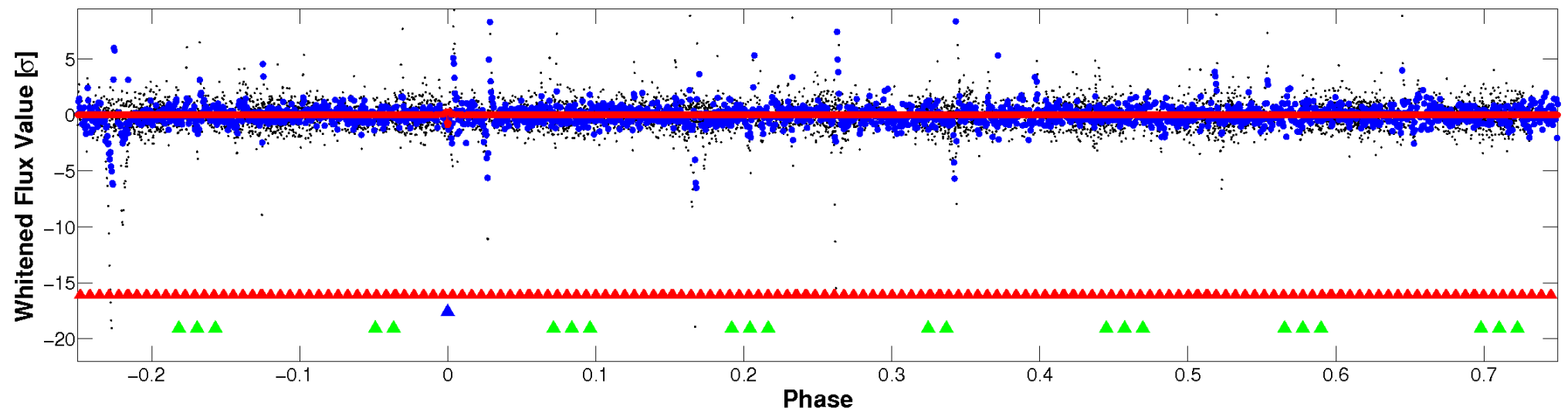


Non-Whitened Vs. Whitened Light Curve

Planet 2 : Phased Unwhitened Flux Time Series (Fit Epoch/Period)

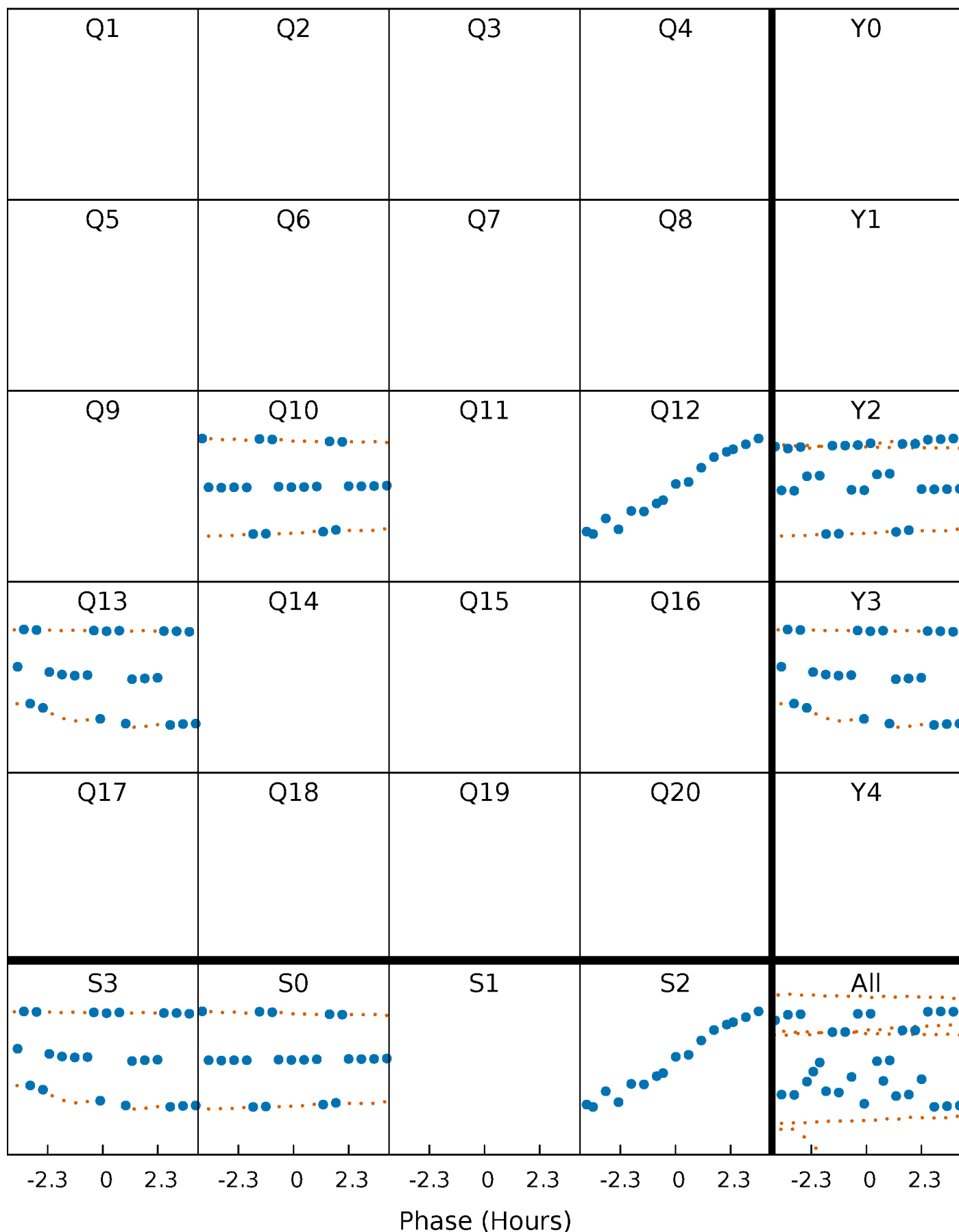


Planet 2 : Phased Whitened Flux Time Series (Fit Epoch/Period)



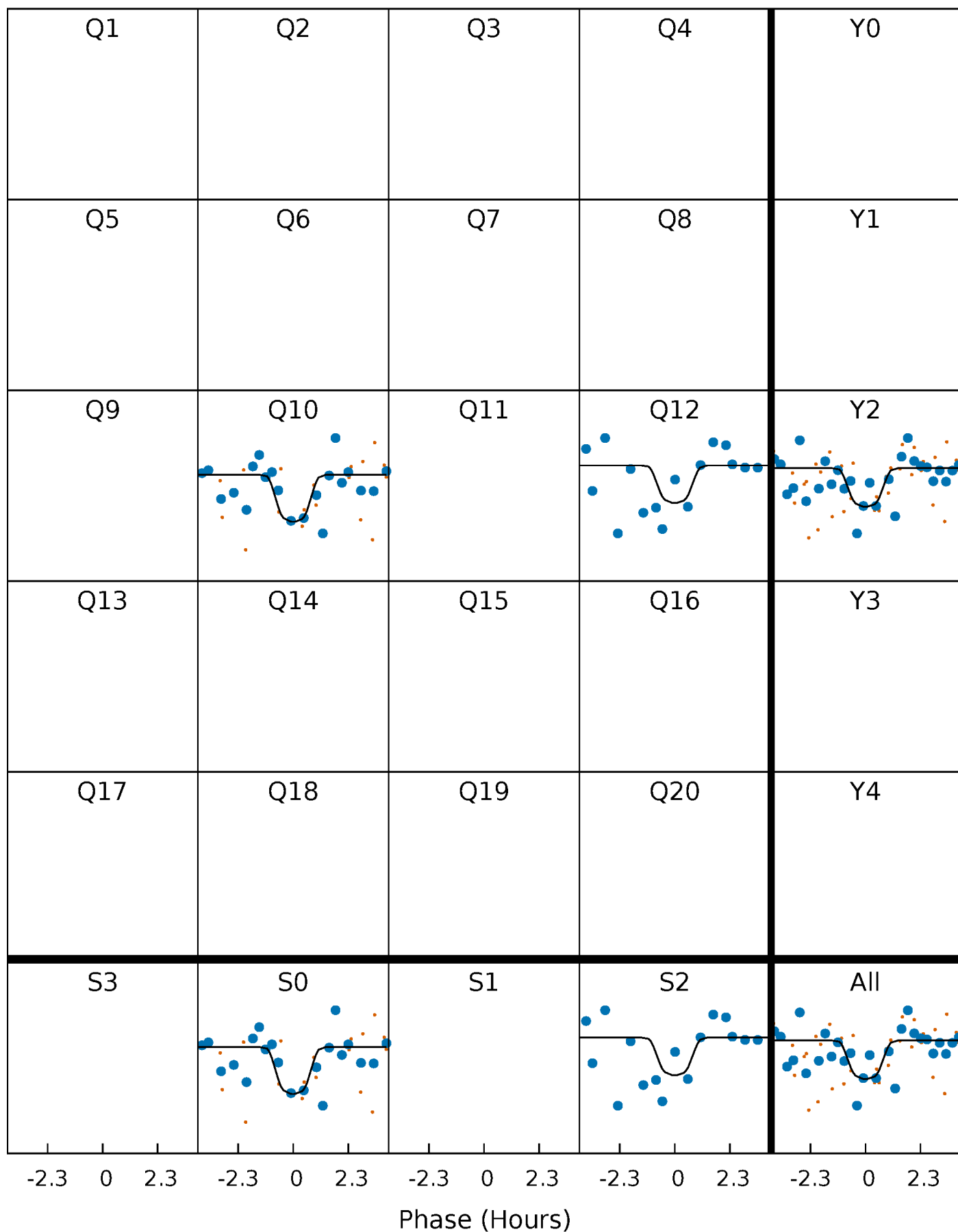
PDC Quarter-Phased Transit Curves

TCE 010614158-02 P= 49.405608 Days $T_0=175.595030$ (BKJD)



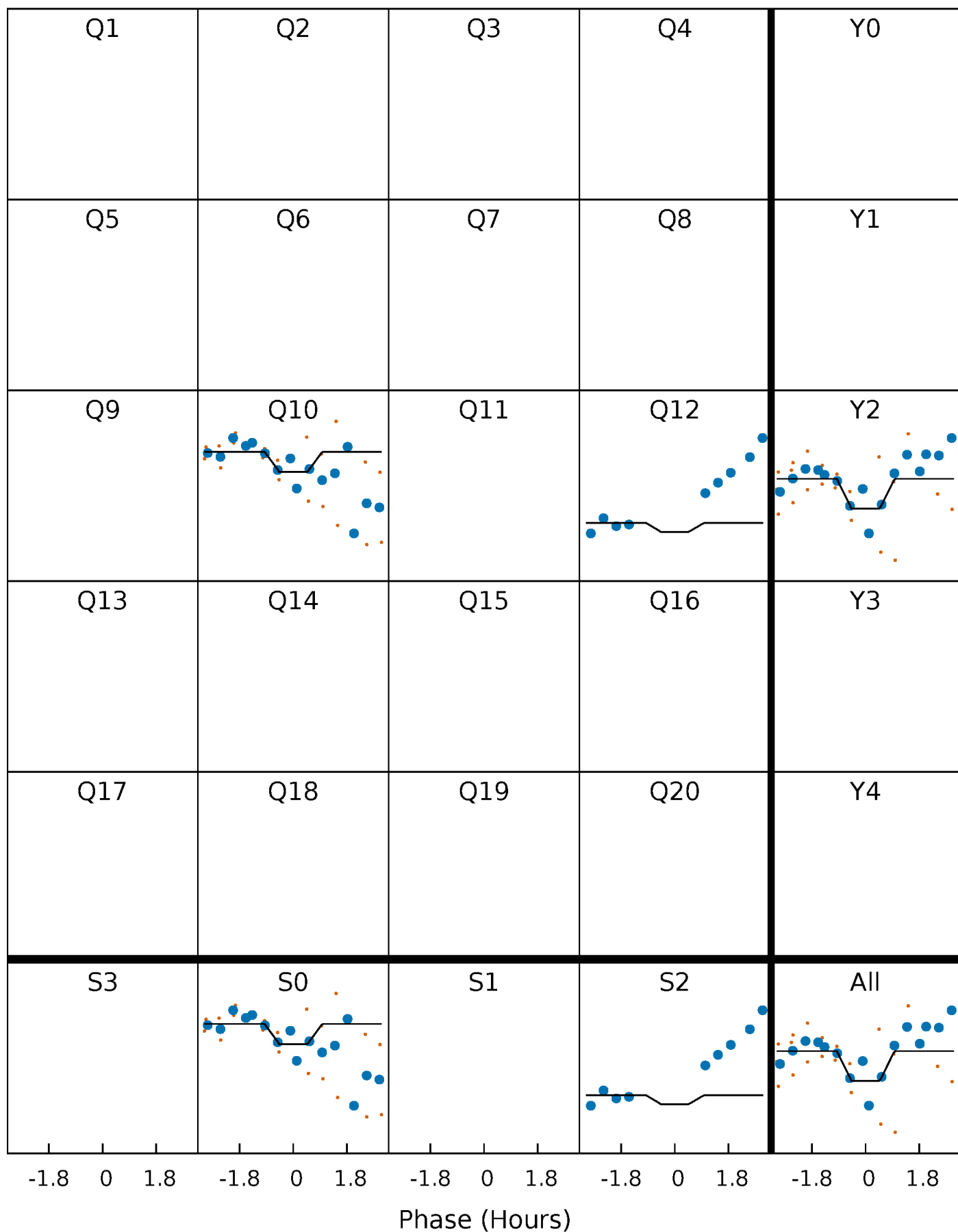
DV Quarter-Phased Transit Curves

TCE 010614158-02 P= 49.405608 Days $T_0=175.595030$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

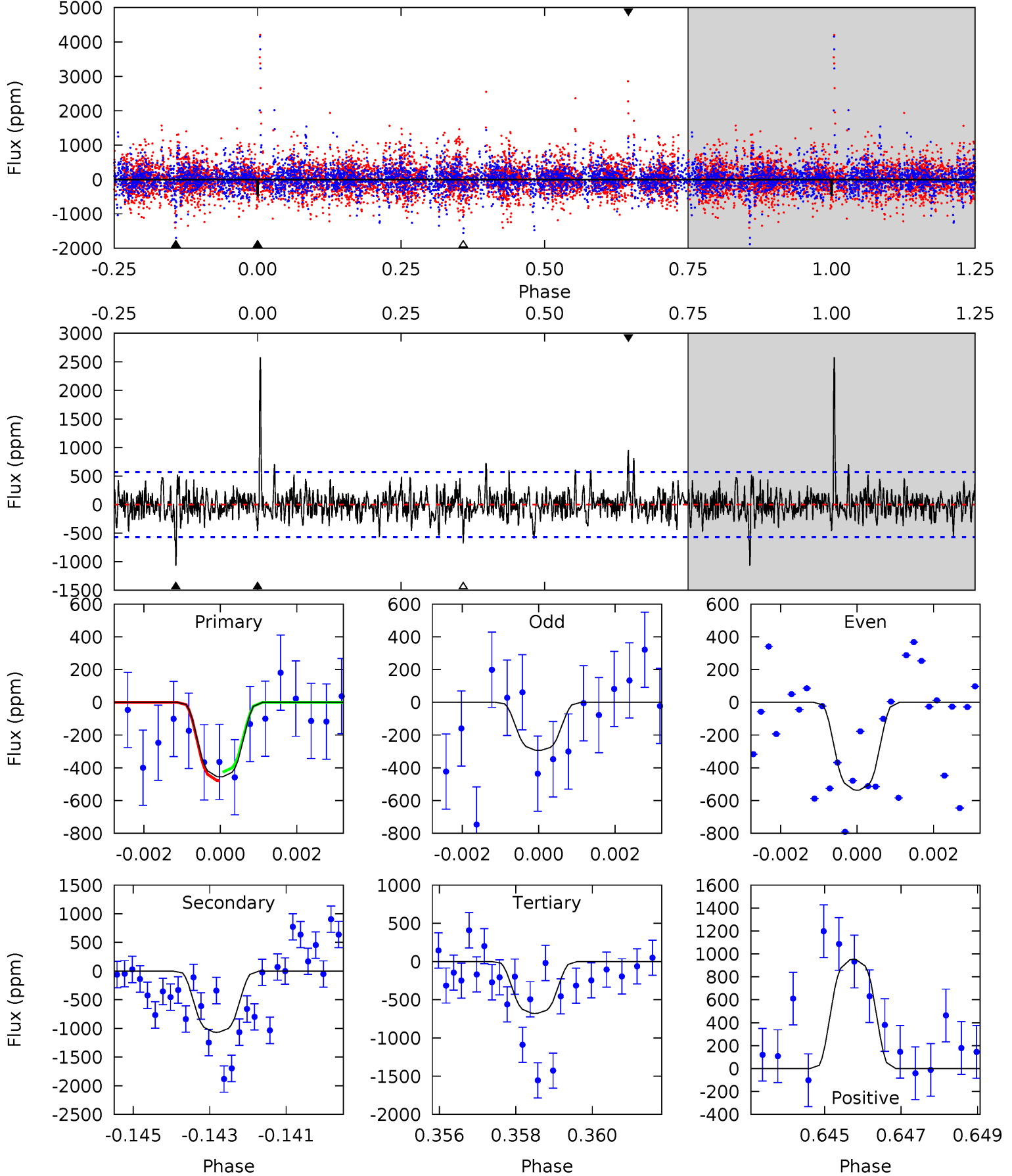
TCE 010614158-02 P= 49.407079 Days $T_0=175.590026$ (BKJD)



DV Model-Shift Uniqueness Test

010614158-02, $P = 49.405608$ Days, $E = 175.595030$ Days

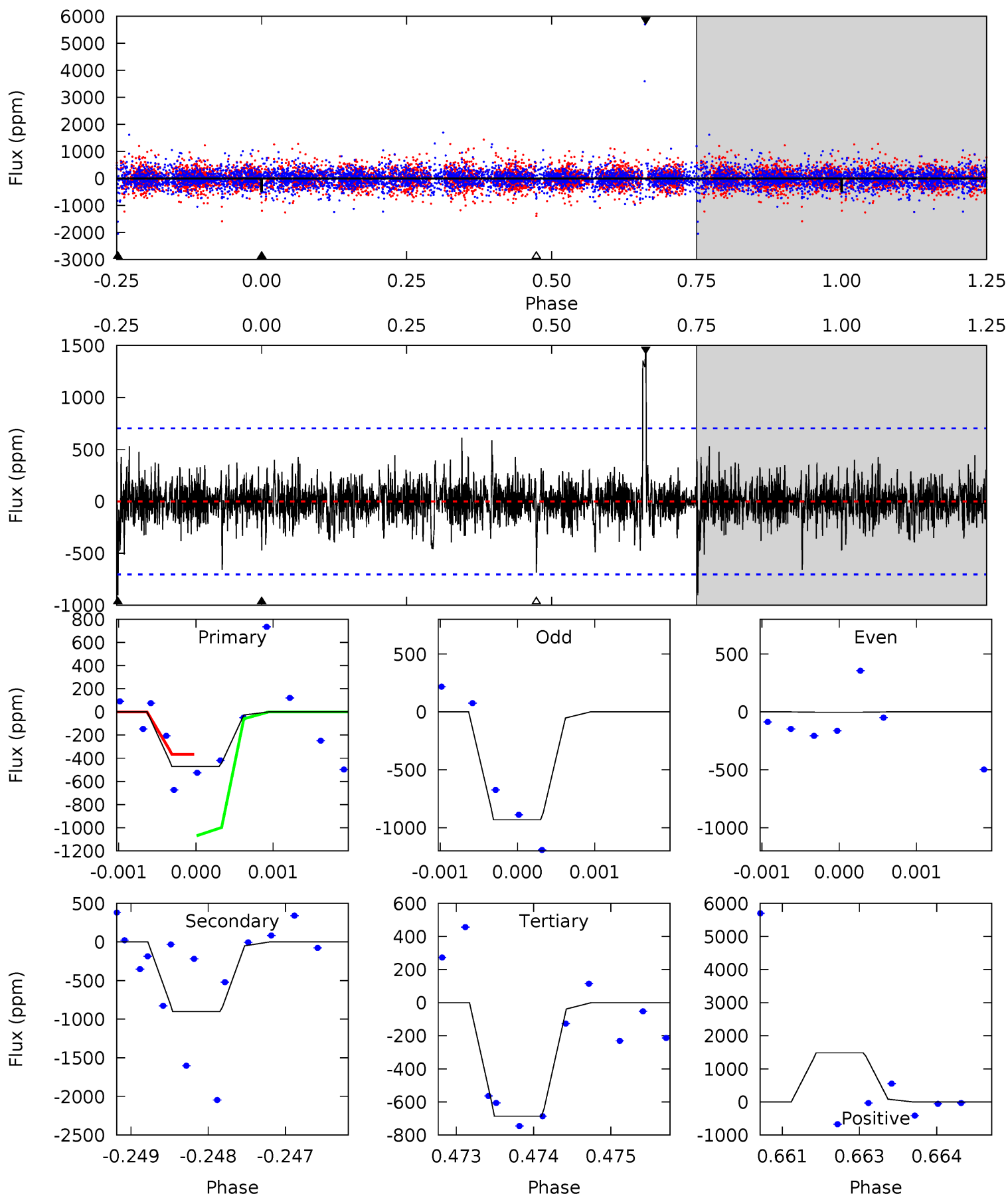
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
4.25	9.94	6.33	8.88	5.32	3.08	1.80	-2.08	-4.63	3.61	1.06	1.02	0.90	0.71	0.25



Alt Model-Shift Uniqueness Test

010614158-02, P = 49.407079 Days, E = 175.590026 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
3.63	6.95	5.27	11.4	5.41	3.22	1.06	-1.64	-7.76	1.67	-4.45	3.00	1.00	0.62	2.54



Stellar Parameters For KIC 010614158

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	M (M_{\odot})	p_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	4847^{+147}_{-110}	$3.277^{+0.325}_{-0.325}$	$-0.120^{+0.300}_{-0.200}$	$3.619^{+2.041}_{-1.099}$	$0.905^{+0.315}_{-0.147}$	$0.027^{+0.050}_{-0.020}$
	+3%/-2%	+10%/-10%	+250%/-167%	+56%/-30%	+35%/-16%	+187%/-75%
Source	KIC0	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 010614158-02 / KOI

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	-1067 ± 107	$15.12^{+14.78}_{-10.28}$	1121^{+144}_{-110}	4539^{+3266}_{-881}	172^{+1509}_{-129}
Alt.	-903 ± 130	$13.90^{+14.02}_{-9.45}$	1129^{+145}_{-112}	4560^{+3539}_{-941}	170^{+1597}_{-128}

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 $A_{obs} \gg 1.0$

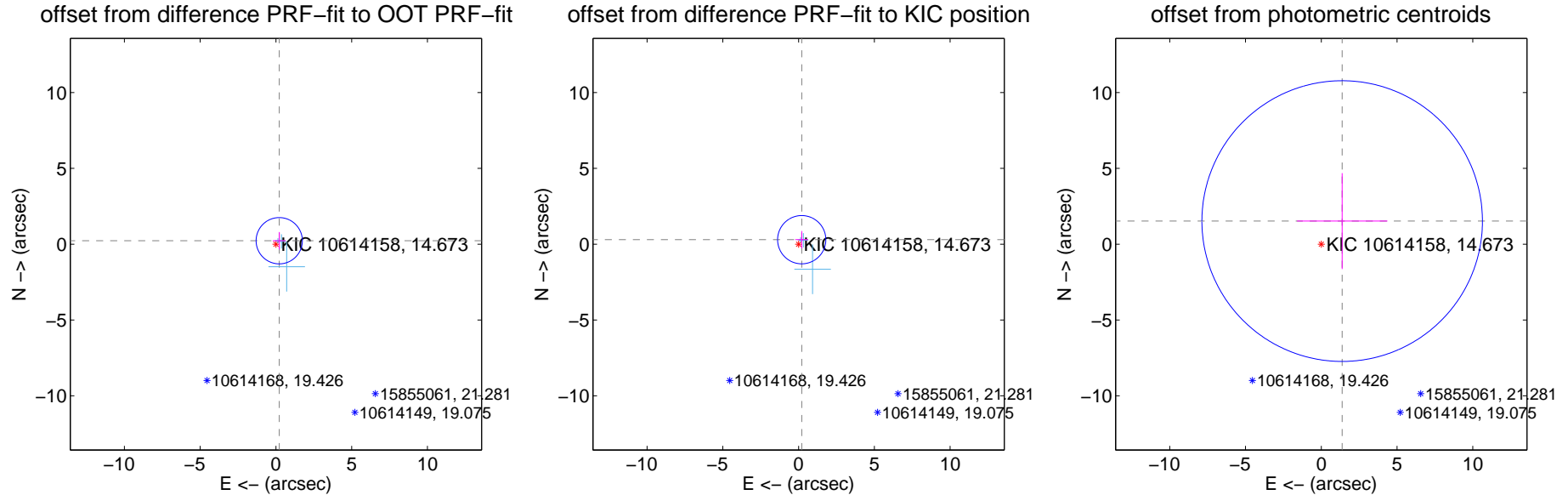
DV Centroid Data

Supplemental centroid analysis for 010614158-02. Kepler magnitude: 14.67. Transit SNR 2.63

There are 3 quarters with good PRF difference image offsets

The direct PRF centroid is offset from the target star catalog position by about 0.07 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.316 ± 0.509	0.62	-0.219 ± 0.426	0.228 ± 0.575
PRF-fit source offset from KIC position	0.361 ± 0.531	0.68	-0.206 ± 0.426	0.296 ± 0.575
photometric centroid source offset	2.06 ± 3.09	0.67	-1.38 ± 2.99	1.52 ± 3.17



Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ . Red *: target star. Blue *: Other stars. Text next to a star gives its KIC ID and kepmag. KIC IDs > 15,000,000 are from the UKIRT catalog.

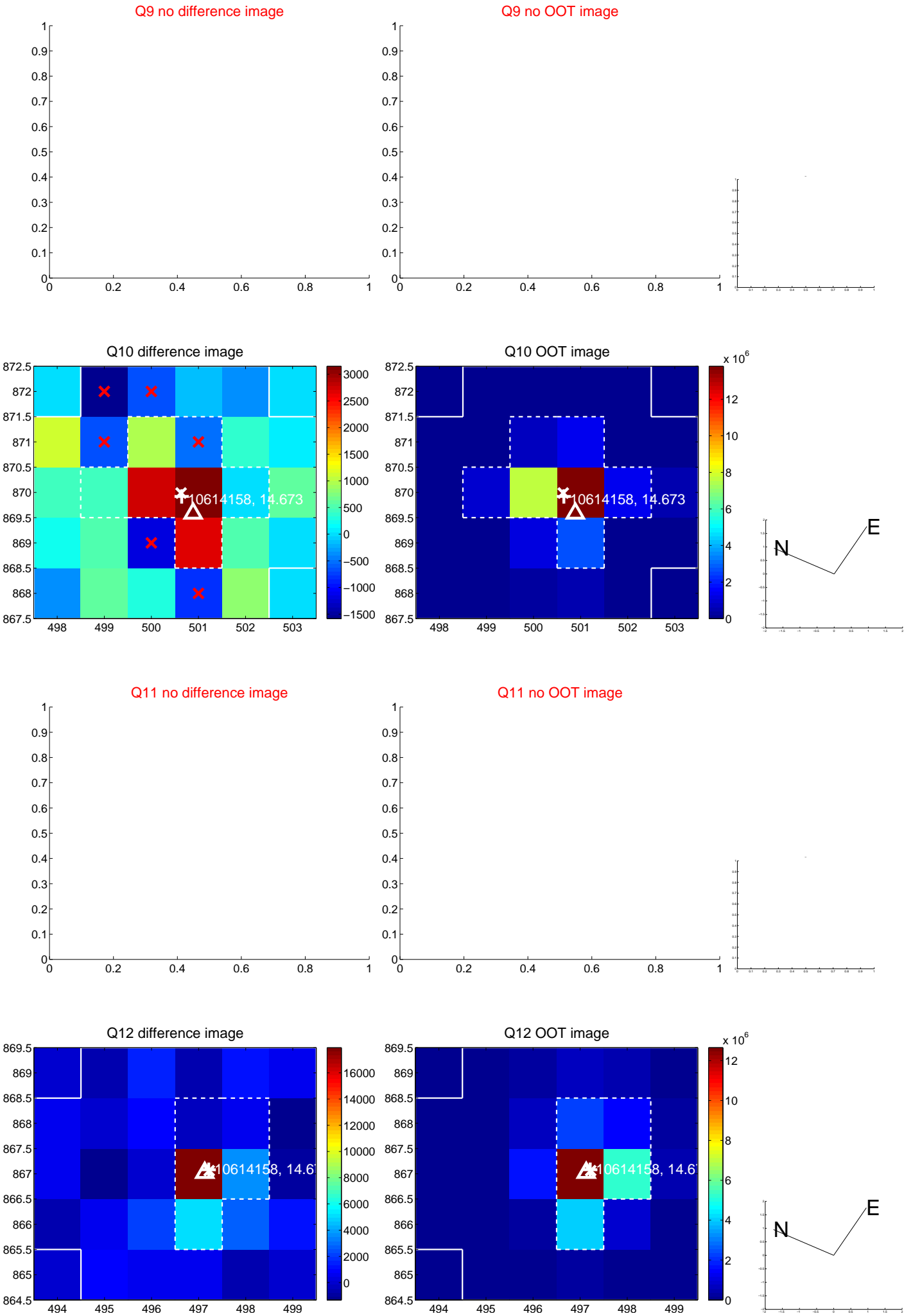
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



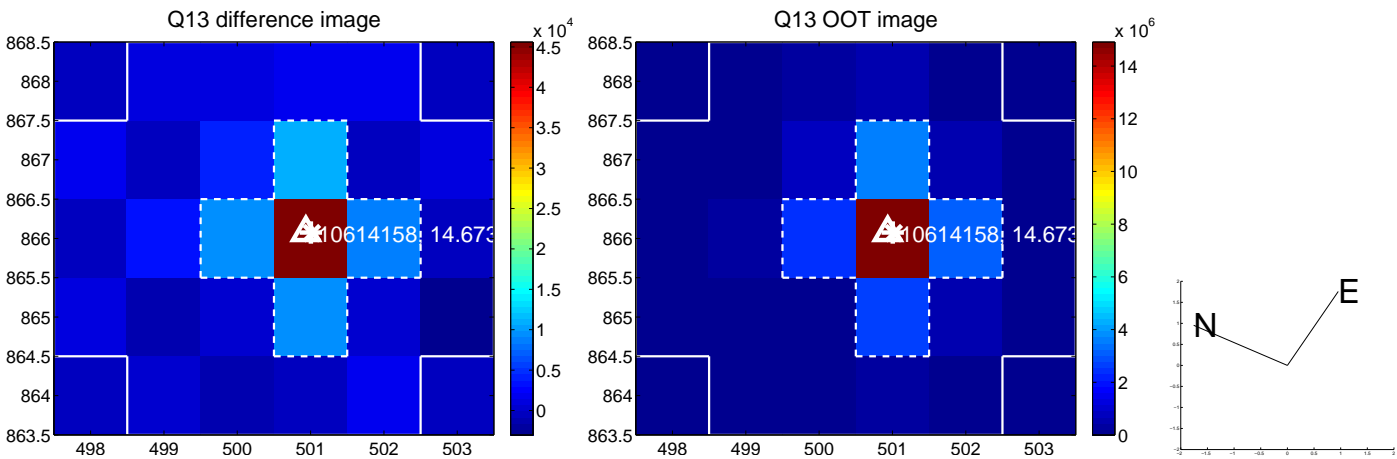
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



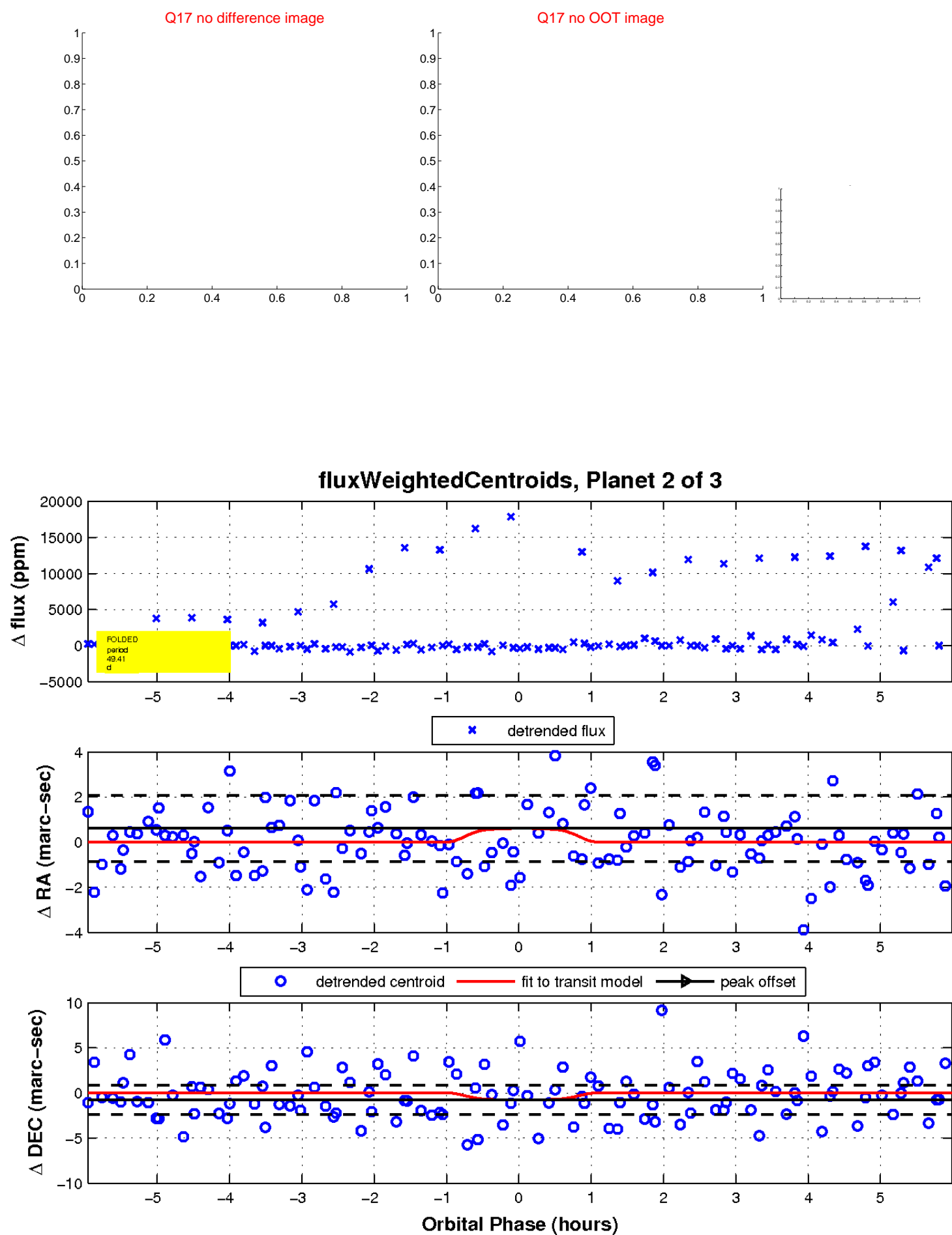
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.

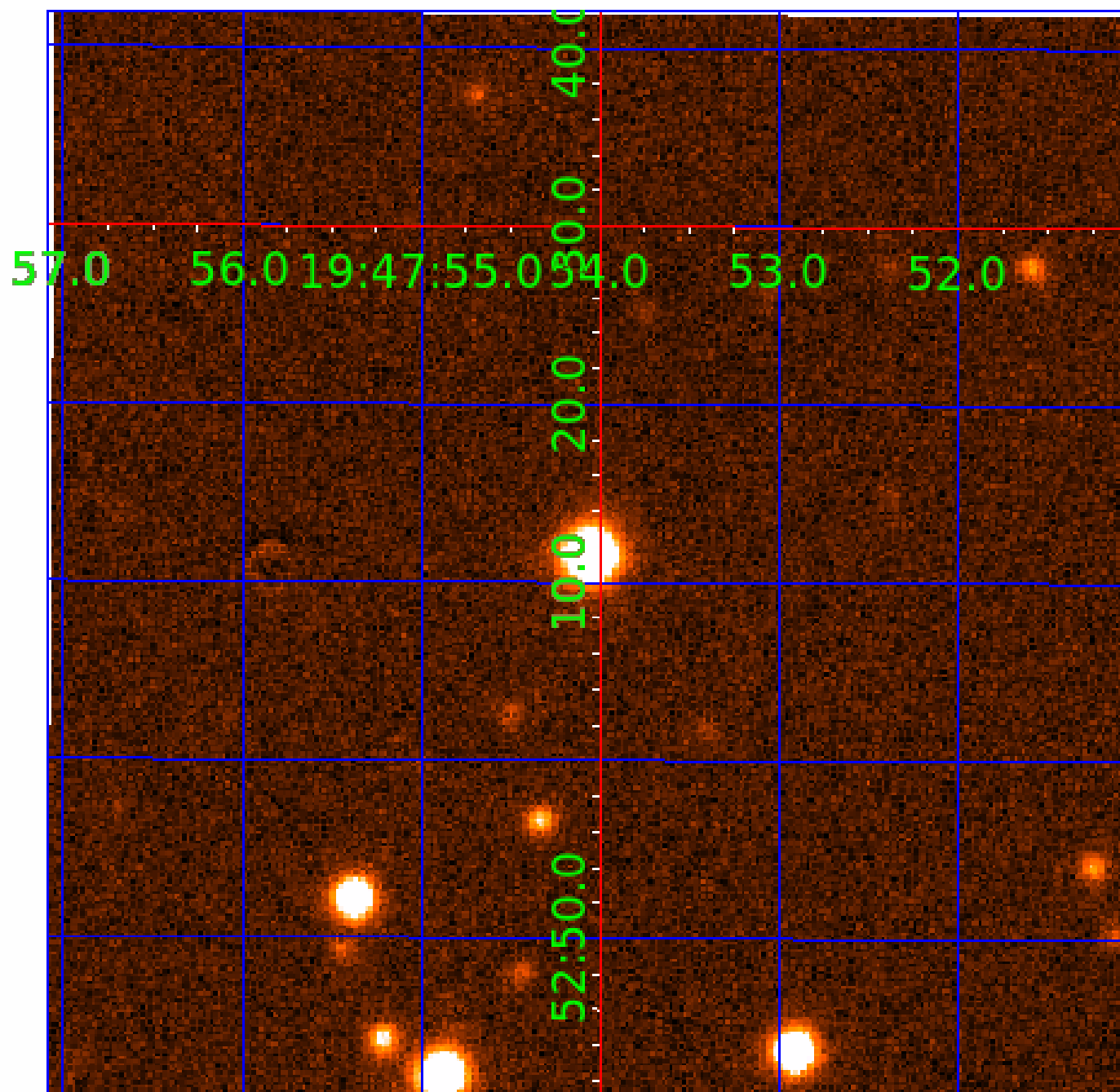


white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



UKIRT Image

Declination



KIC 010614158

Q1-17 DR25 TCE Parameters

TCE	Run Type	KOI?	Period (Days)	Epoch (BKJD)	Depth (ppm)	Duration (Hours)	MES	SNR	R_{\star} (R_{\odot})	T_{\star} (K)	R_p (R_{\oplus})	S_p (S_{\oplus})
010614158-01	OBS	6227.01	4.462221	133.720512	19524.5	13.879	223.3	163.8	3.62	4847	48.80	2460.99
010614158-02	OBS	No	49.405608	175.595030	467.4	1.997	12.2	2.6	3.62	4847	10.38	99.73
010614158-03	OBS	No	67.856514	161.896047	1200.0	2.027	11.6	6.0	3.62	4847	12.12	65.32

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
010614158-01	OBS	FP	0.00	1	0	0	0	SWEET_NTL
010614158-02	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_TRACKER—TRANS_GAPPED—LPP_DV—LPP_ALT—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_POS_DV— MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT
010614158-03	OBS	FP	0.00	1	0	0	0	ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_POS_DV—CENT_FEW_DIFFS

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.

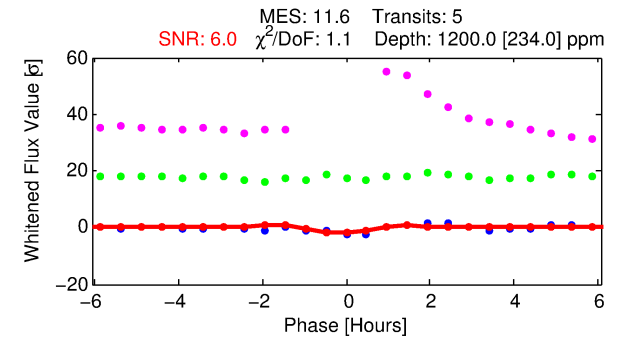
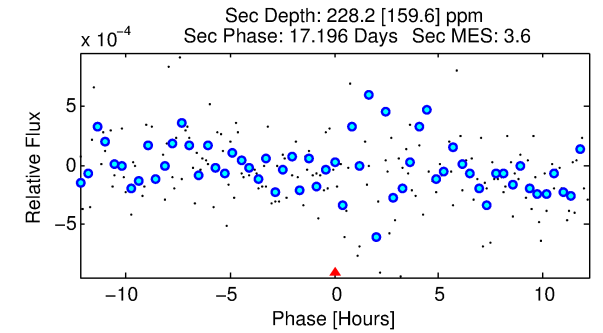
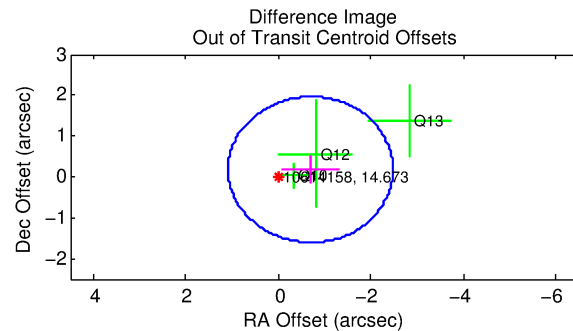
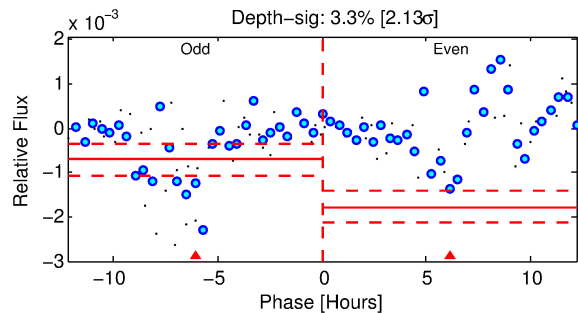
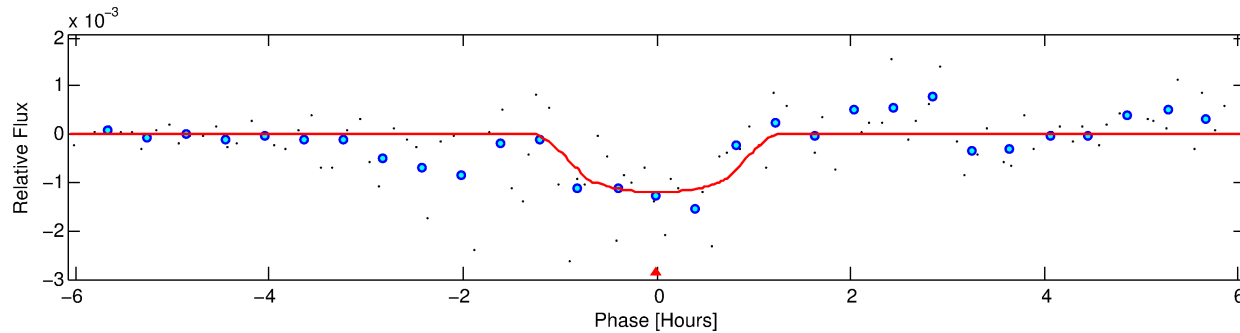
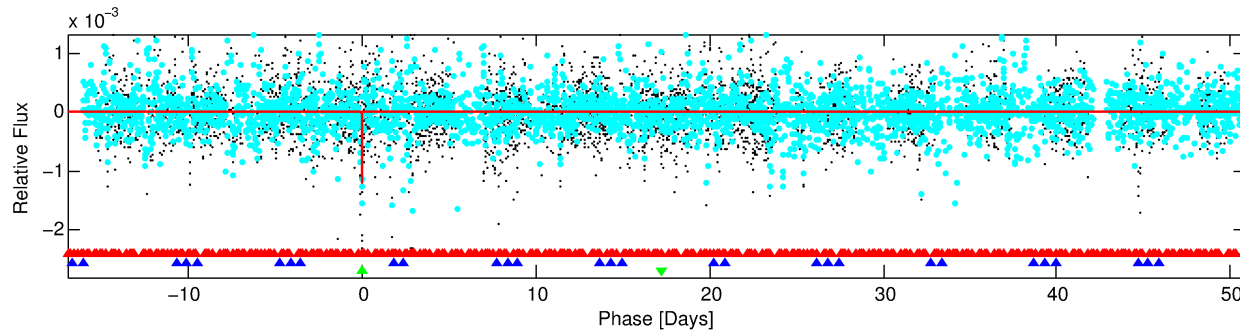
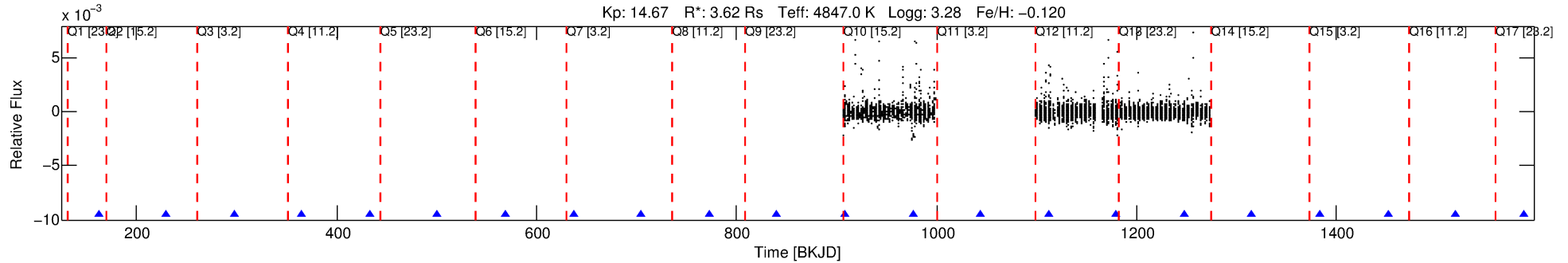
Ephemeris Match Information For 010614158-03

No Significant Match Found

DV One-Page Summary

KIC: 10614158 Candidate: 3 of 3 Period: 67.857 d

KOI: K06227 Corr: No Ephemeris Match



DV Fit Results:

Period = 67.85651 [0.00247] d
Epoch = 161.8960 [0.0325] BKJD
Rp/R* = 0.0307 [0.2123]
a/R* = 263.58 [5946.97]
b = 0.02 [1125.31]
Seff = 65.32 [41.57]
Teq = 725 [115] K
Rp = 12.12 [84.11] Re
a = 0.3149 [0.1421] AU
Ag = 84.69 [1173.93] [0.07 σ]
Teffp = 3400 [11771] K [0.23 σ]

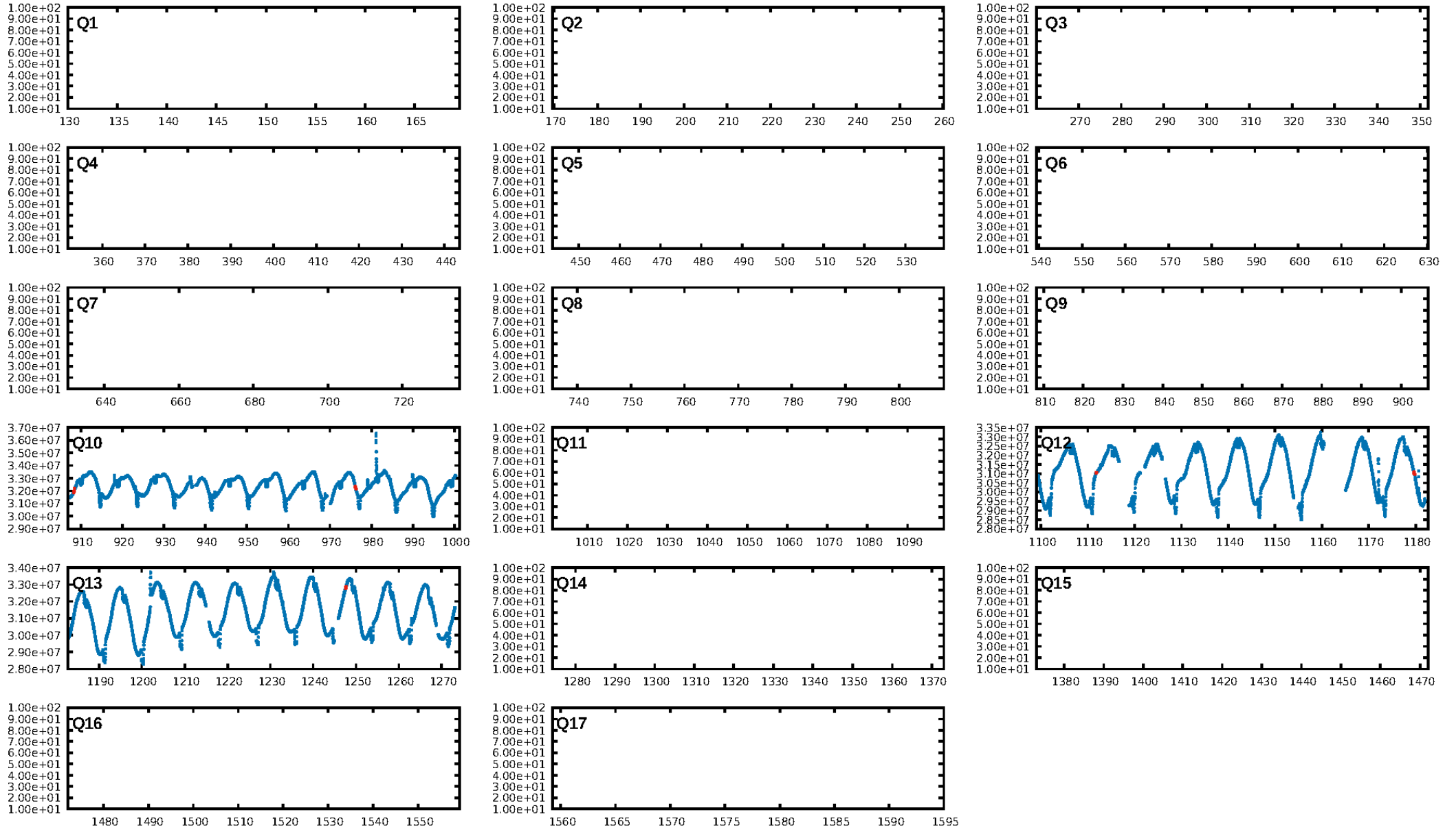
DV Diagnostic Results:

ShortPeriod-sig: 100.0% [155.65 σ]
LongPeriod-sig: N/A
ModelChiSquare2-sig: 26.0%
ModelChiSquareGof-sig: 91.2%
Bootstrap-pfa: 1.61e-18
RollingBand-fgt: 1.00 [5/5]
GhostDiagnostic-chr: 1.401
Centroid-sig: 9.6%
Centroid-so: 1.184 arcsec [1.09 σ]
OotOffset-rm: 0.717 arcsec [1.21 σ]
OotOffset-st: 1/0/1/1 [3]
KicOffset-rm: 0.813 arcsec [1.13 σ]
KicOffset-st: 1/0/1/1 [3]
DiffImageQuality-fgm: 0.33 [1/3]
DiffImageOverlap-fno: 1.00 [3/3]

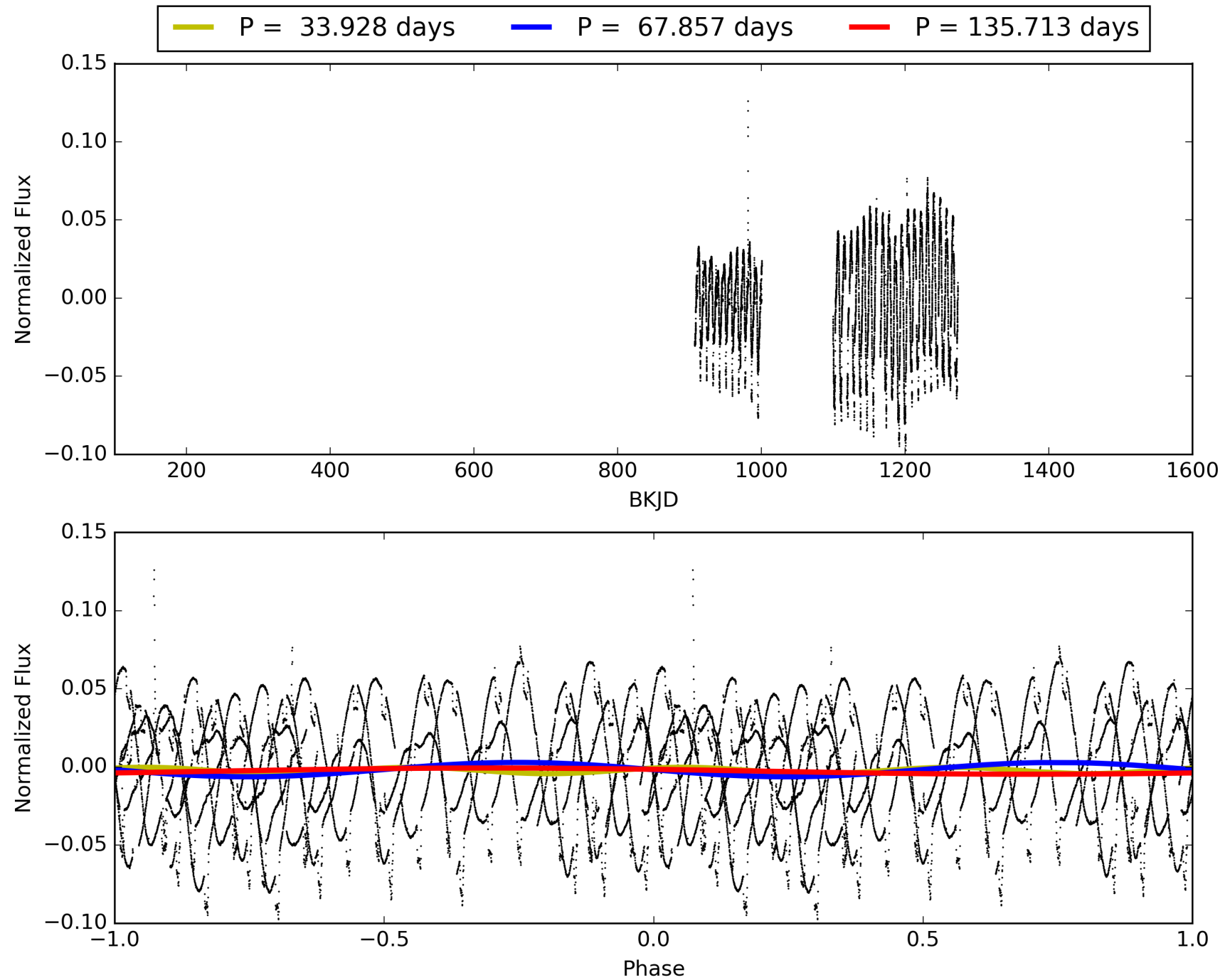
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 29-Jan-2016 09:01:26 Z

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

TCE 010614158-03, PDC Light Curves

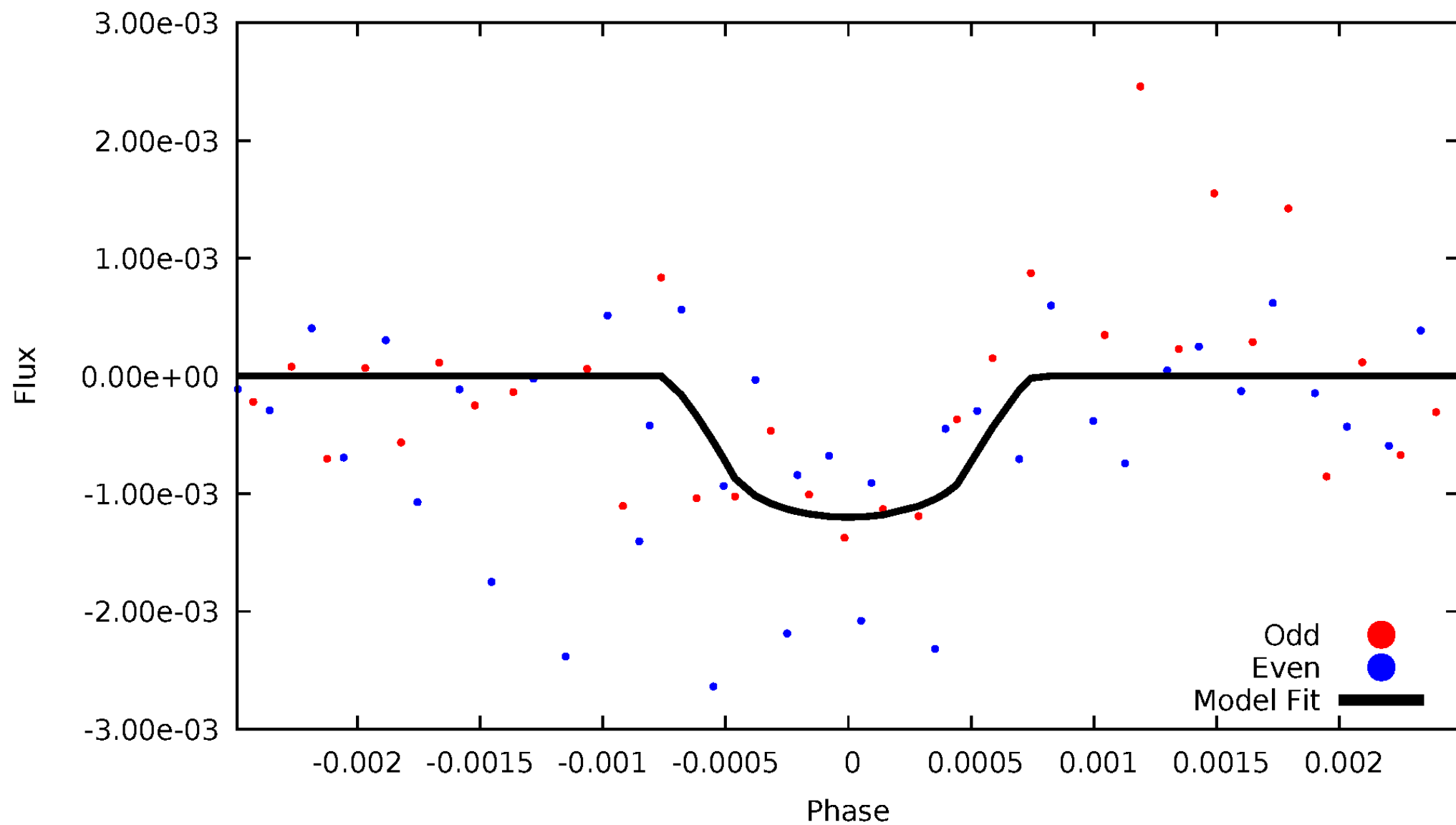


TCE 010614158-03



DV Odd/Even

TCE 010614158-03

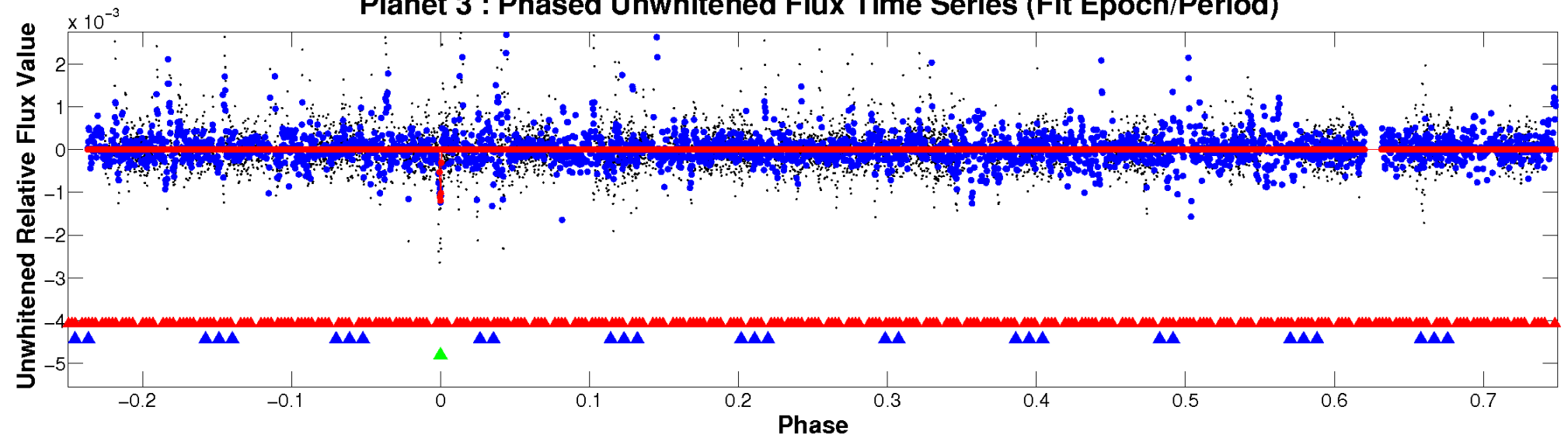


ALT Odd/Even

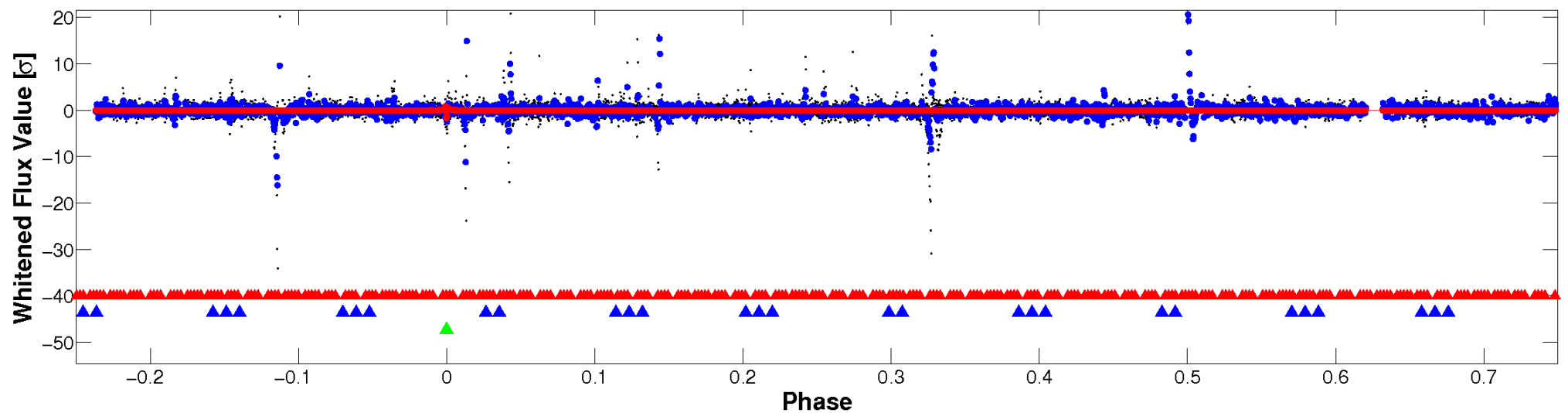
This plot does not exist for this TCE.

Non-Whitened Vs. Whitened Light Curve

Planet 3 : Phased Unwhitened Flux Time Series (Fit Epoch/Period)

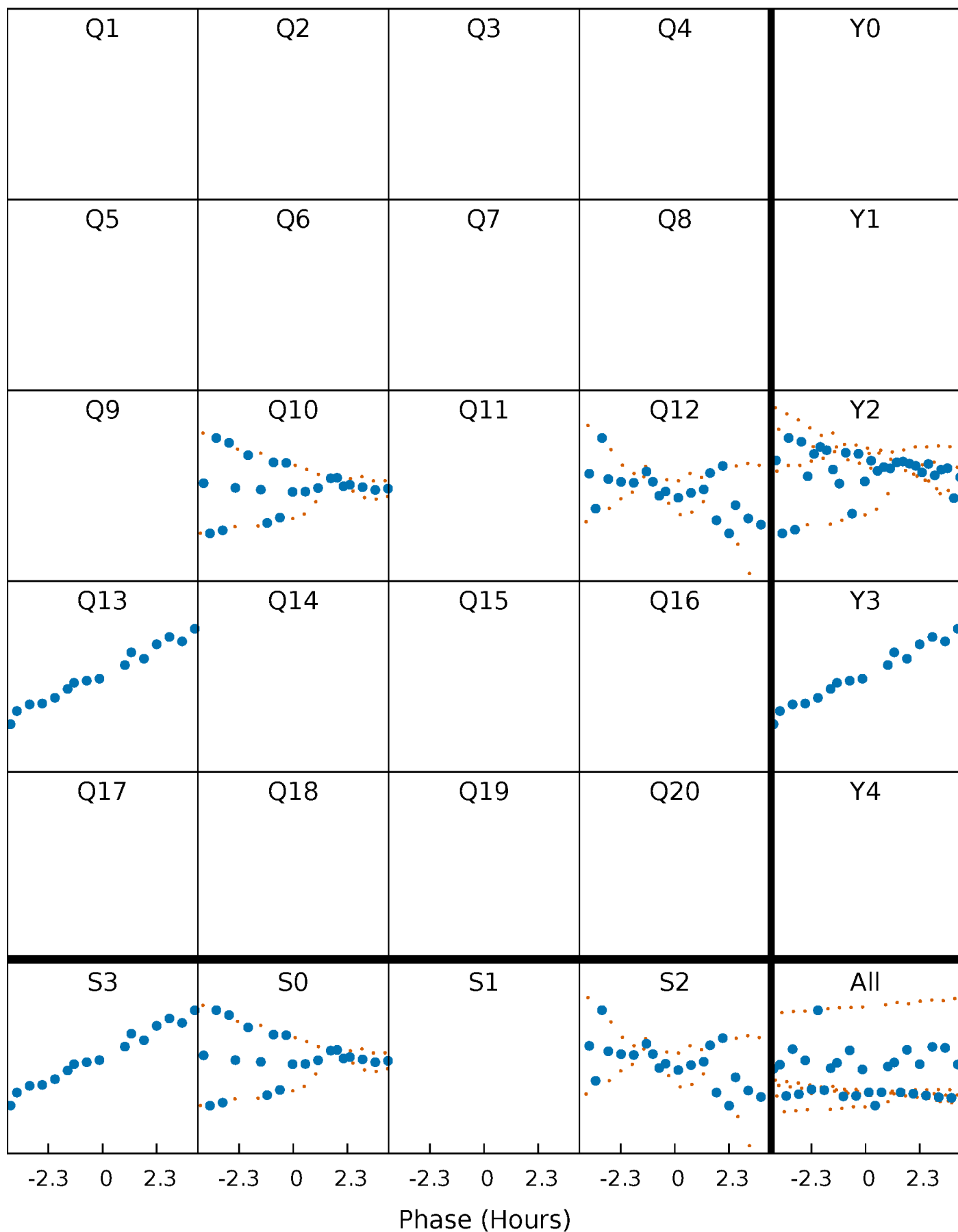


Planet 3 : Phased Whitened Flux Time Series (Fit Epoch/Period)



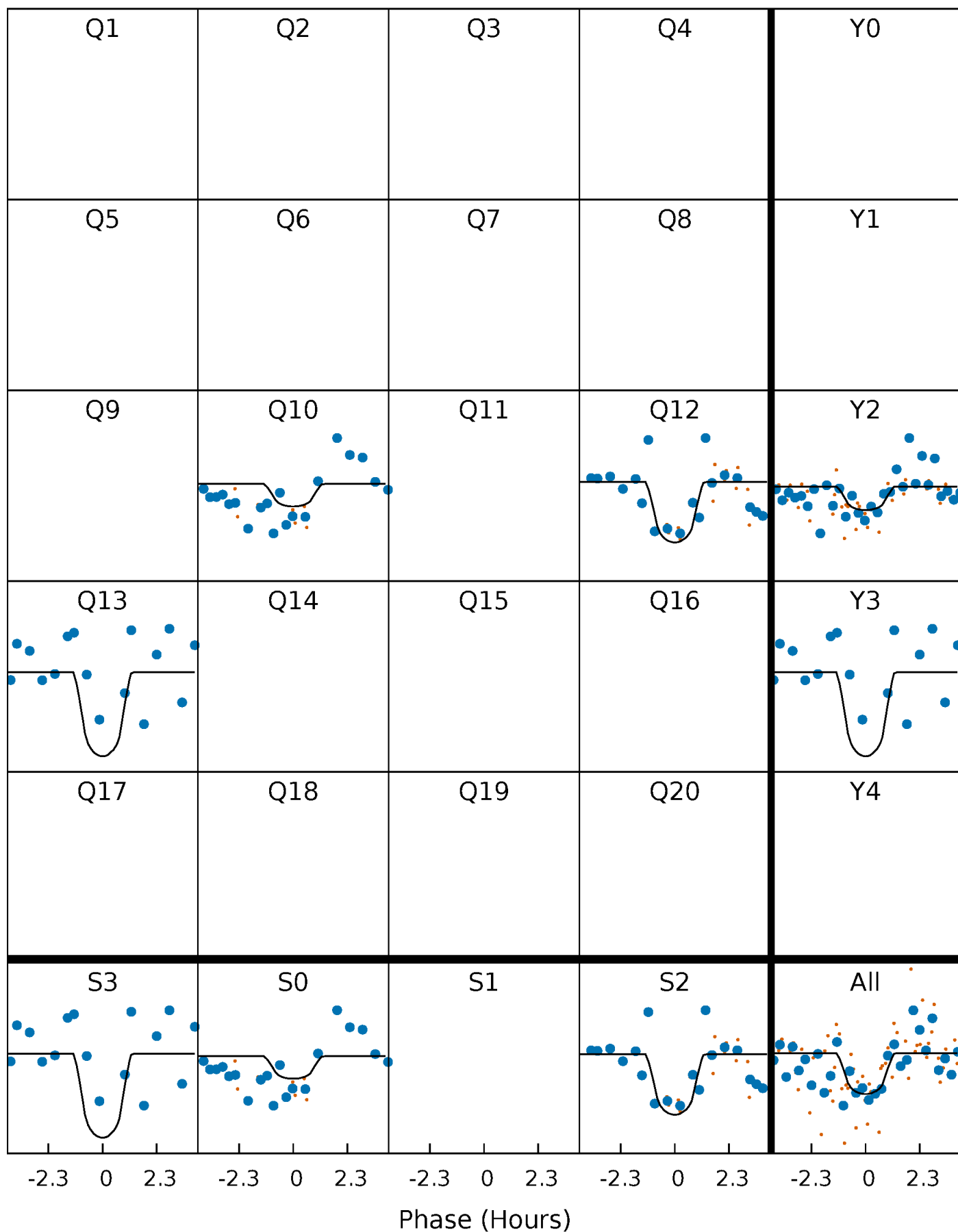
PDC Quarter-Phased Transit Curves

TCE 010614158-03 P= 67.856514 Days $T_0=161.896047$ (BKJD)



DV Quarter-Phased Transit Curves

TCE 010614158-03 P= 67.856514 Days $T_0=161.896047$ (BKJD)

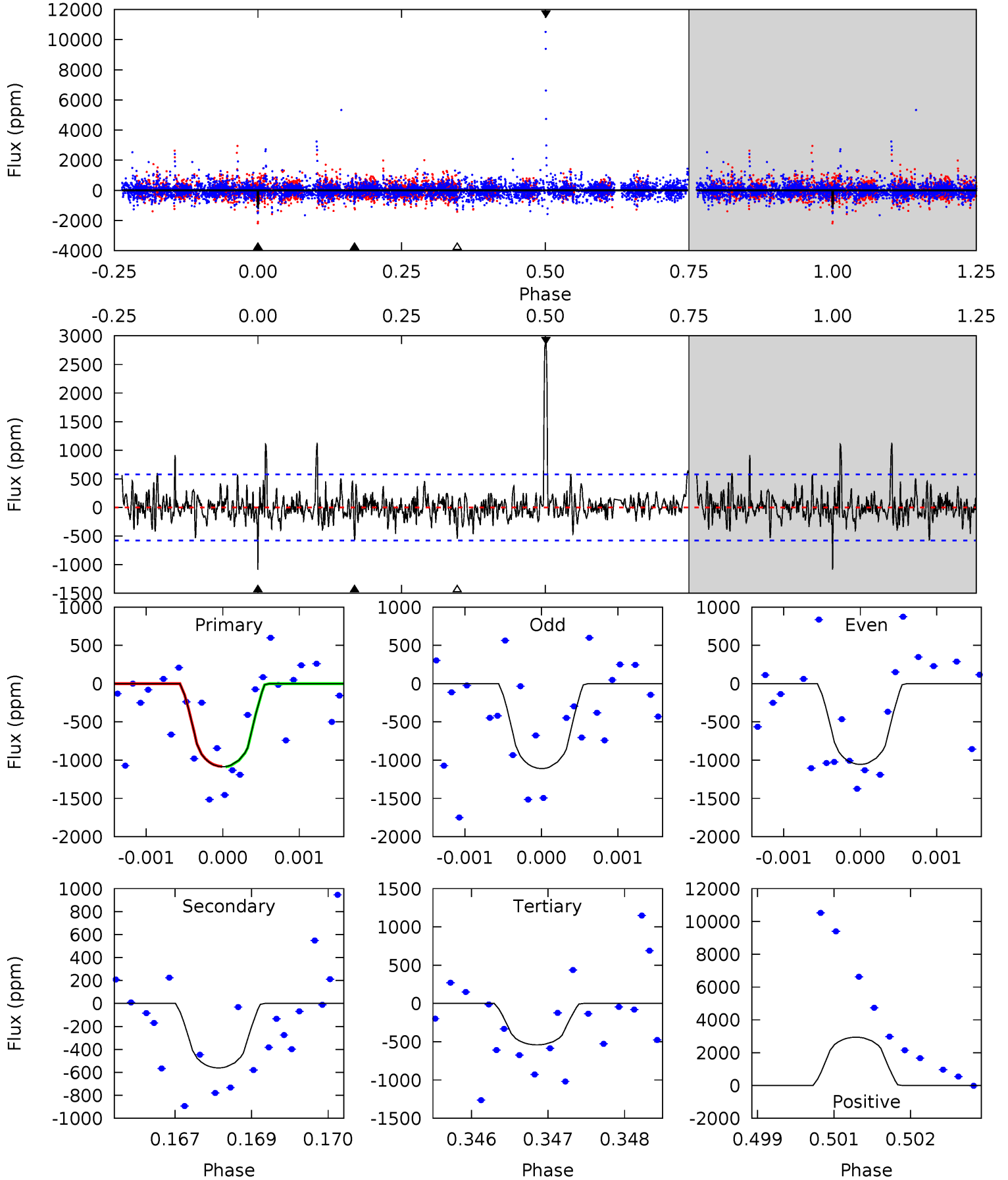


This plot does not exist for this TCE.

DV Model-Shift Uniqueness Test

010614158-03, P = 67.856514 Days, E = 161.896047 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
10.1	5.24	5.05	27.5	5.40	3.20	1.93	5.08	-17.3	0.19	-22.2	0.08	1.17	0.73	0.02



Alt Model-Shift Uniqueness Test

This plot does not exist for this TCE.

Stellar Parameters For KIC 010614158

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	M (M_{\odot})	p_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	4847^{+147}_{-110}	$3.277^{+0.325}_{-0.325}$	$-0.120^{+0.300}_{-0.200}$	$3.619^{+2.041}_{-1.099}$	$0.905^{+0.315}_{-0.147}$	$0.027^{+0.050}_{-0.020}$
	+3%/-2%	+10%/-10%	+250%/-167%	+56%/-30%	+35%/-16%	+187%/-75%
Source	KIC0	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 010614158-03 / KOI

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	-562 ± 107	$58.91^{+80.31}_{-40.90}$	1011^{+137}_{-97}	2642^{+1178}_{-495}	$8.398^{+83.817}_{-6.806}$
Alt.	N/A	N/A	N/A	N/A	N/A

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 $T_{\text{obs}} \gg T_{\text{max}}$ AND $A_{\text{obs}} \gg 1.0$

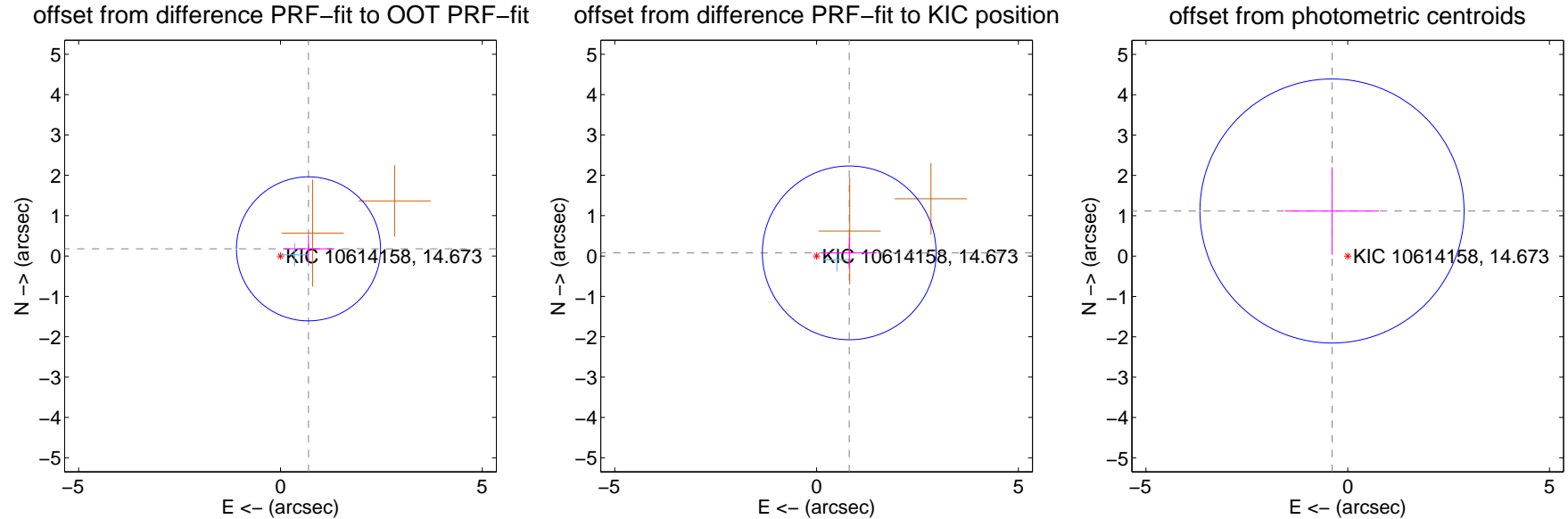
DV Centroid Data

Supplemental centroid analysis for 010614158-03. Kepler magnitude: 14.67. Transit SNR 6.00

There are 1 quarters with good PRF difference image offsets

The direct PRF centroid is offset from the target star catalog position by about 0.05 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.717 ± 0.595	1.21	-0.695 ± 0.609	0.177 ± 0.310
PRF-fit source offset from KIC position	0.813 ± 0.718	1.13	-0.809 ± 0.684	0.078 ± 0.397
photometric centroid source offset	1.18 ± 1.09	1.09	0.39 ± 1.17	1.12 ± 1.08



Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ . Red *: target star. Blue *: Other stars. Text next to a star gives its KIC ID and kepmag. KIC IDs > 15,000,000 are from the UKIRT catalog.

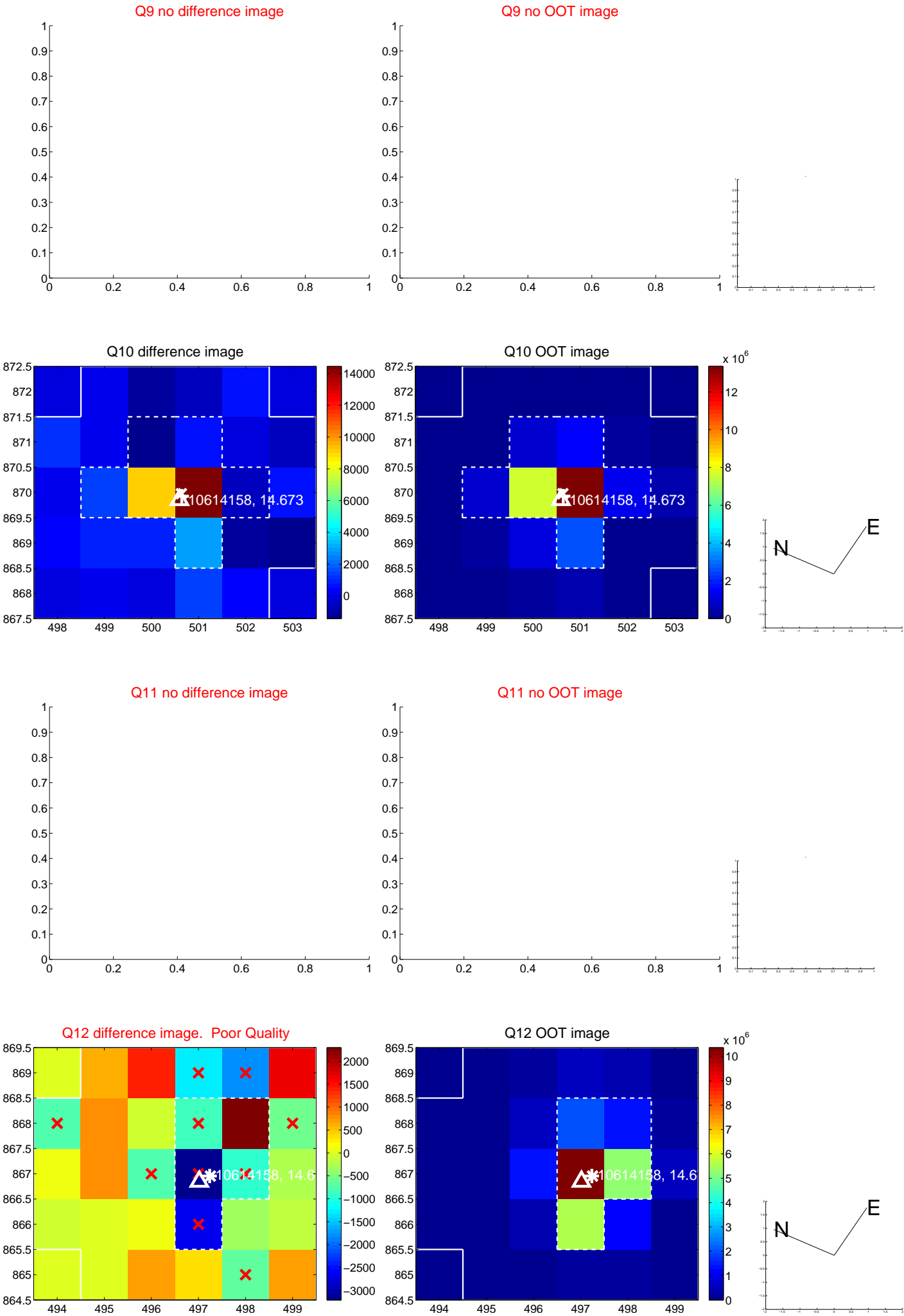
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



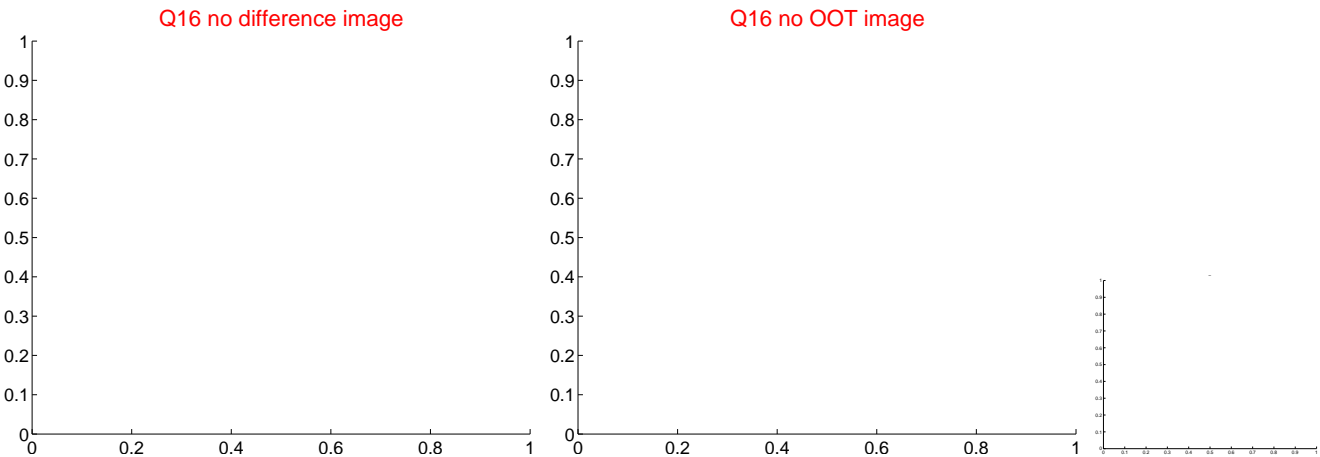
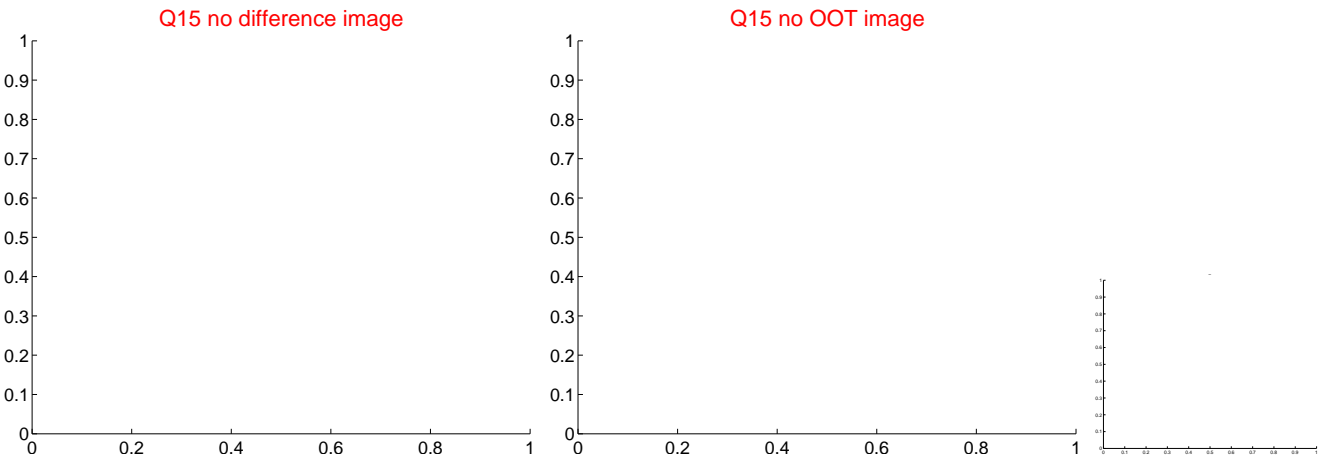
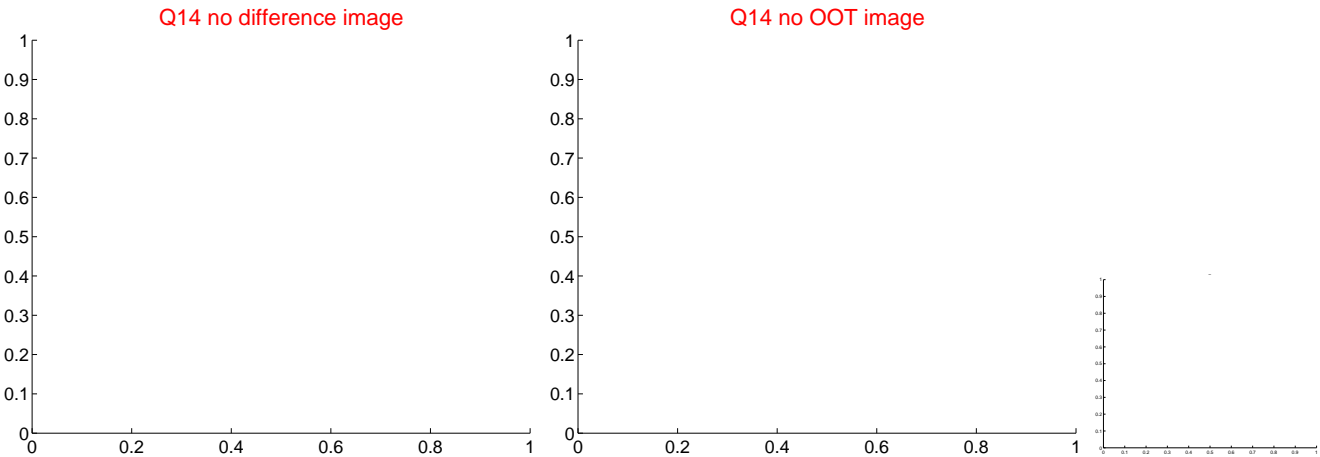
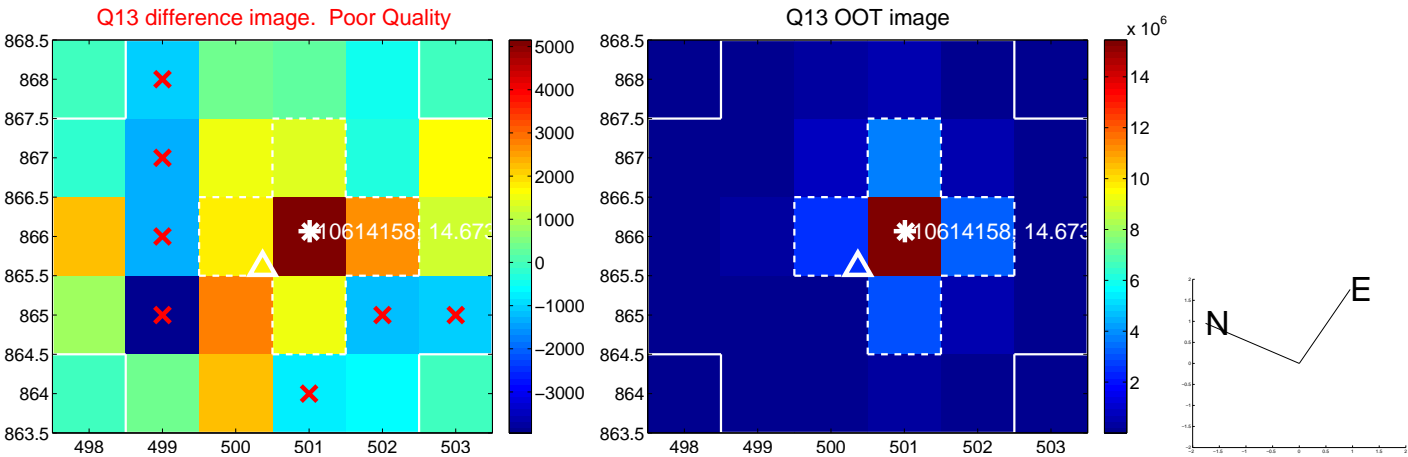
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



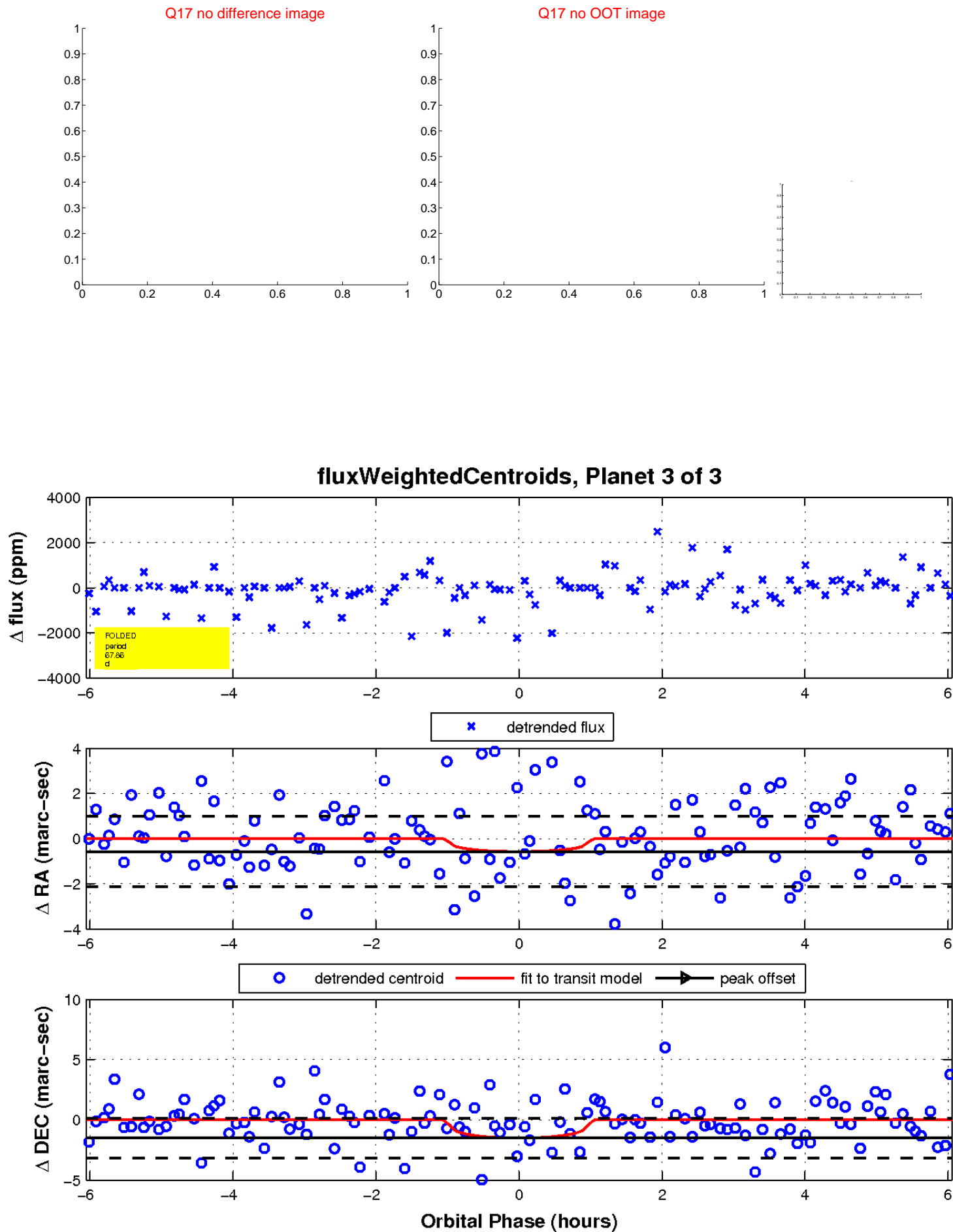
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



white ×: KIC target position; +: OOT centroid; △: difference centroid. red ×: large negative pixel value.



white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



UKIRT Image

