

KIC 009119652

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})
009119652-01	OBS	6193.01	1.108110	131.709110	384027.5	2.000	6787.8	-1.0	1.77	5299	86.18	5667.33
009119652-02	OBS	No	11.625537	137.742227	4487.4	11.615	295.9	18.0	1.77	5299	11.64	246.76
009119652-03	OBS	No	1.108030	132.362392	3740.6	3.500	127.6	-1.0	1.77	5299	10.65	5667.87
009119652-04	OBS	No	5.295568	136.426620	4652.9	1.500	36.5	-1.0	1.77	5299	11.93	704.05
009119652-05	OBS	No	1.099190	132.505427	4777.3	3.500	27.1	-1.0	1.77	5299	12.04	5728.73

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
009119652-01	OBS	FP	0.00	0	1	0	0	DEPTH_ODDEVEN_DV—DEPTH_ODDEVEN_ALT—MOD_ODDEVEN_ALT—HAS_SEC_TCE—CENT_NOFITS
009119652-02	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_SKYE_TRACKER—LPP_DV—MOD_NONUNIQ_DV—MOD_TER_DV—CENT_FEW_DIFFS
009119652-03	OBS	FP	0.00	1	1	1	0	IS_SEC_TCE—CENT_NOFITS—HALO_GHOST
009119652-04	OBS	FP	0.00	1	0	0	0	TRANS_GAPPED—LPP_DV—LPP_ALT—ALL_TRANS_CHASES—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—CENT_NOFITS
009119652-05	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_ZUMA—TRANS_GAPPED—SWEET_NTL—LPP_DV—LPP_ALT—MOD_NONUNIQ_ALT—CENT_NOFITS

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.

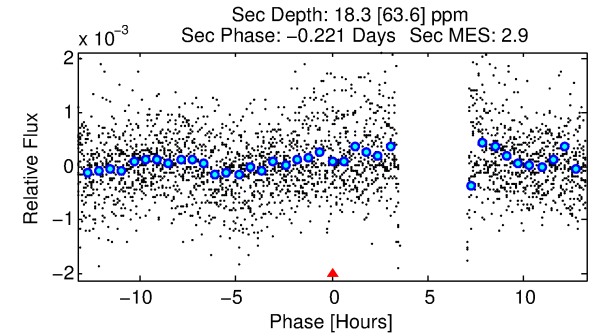
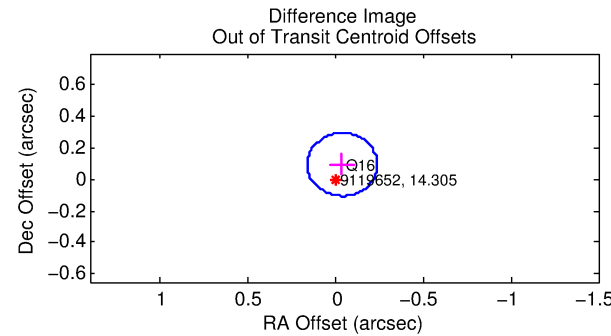
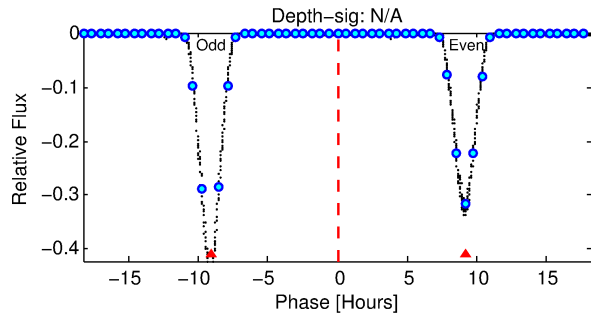
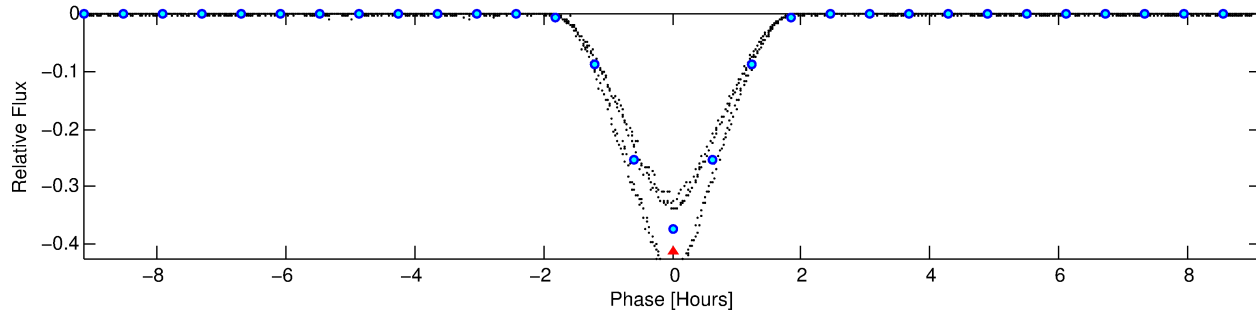
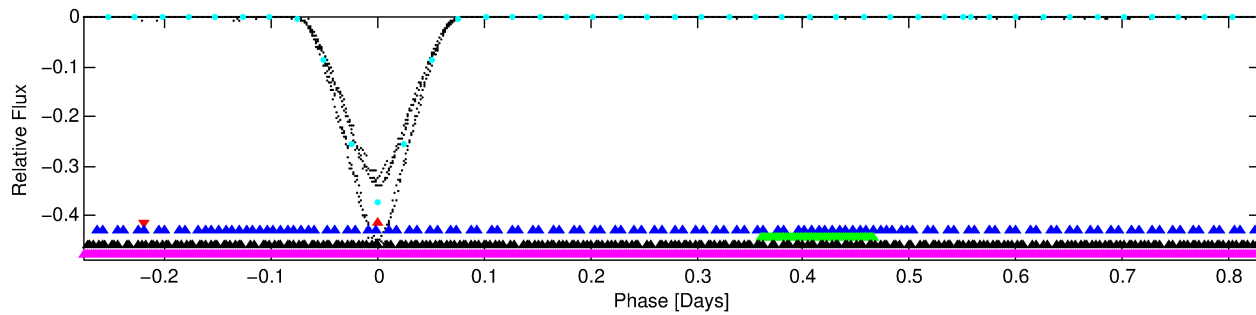
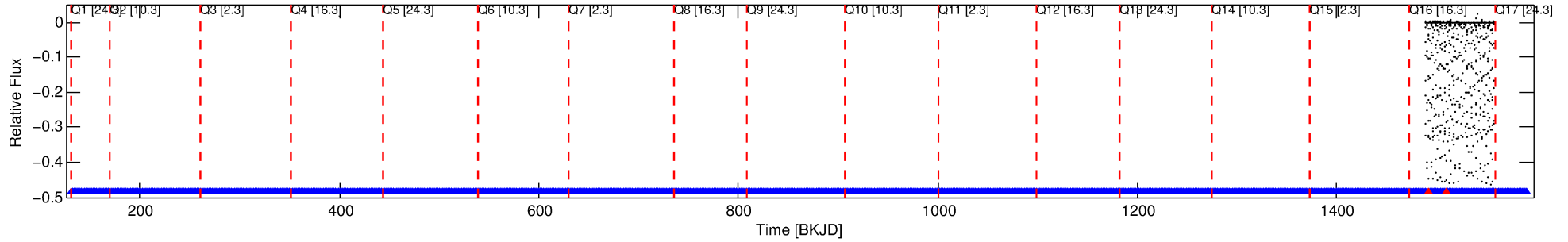
Ephemeris Match Information For 009119652-01

No Significant Match Found

DV One-Page Summary

KIC: 9119652 Candidate: 1 of 5 Period: 1.108 d
KOI: K06193.01 Corr: 0.764

Kp: 14.31 R*: 1.77 Rs Teff: 5299.0 K Logg: 3.87 Fe/H: -0.440



TPS TCE Results:

Period = 1.10811 d
Epoch = 131.7091 BKJD

DV fit results are unavailable

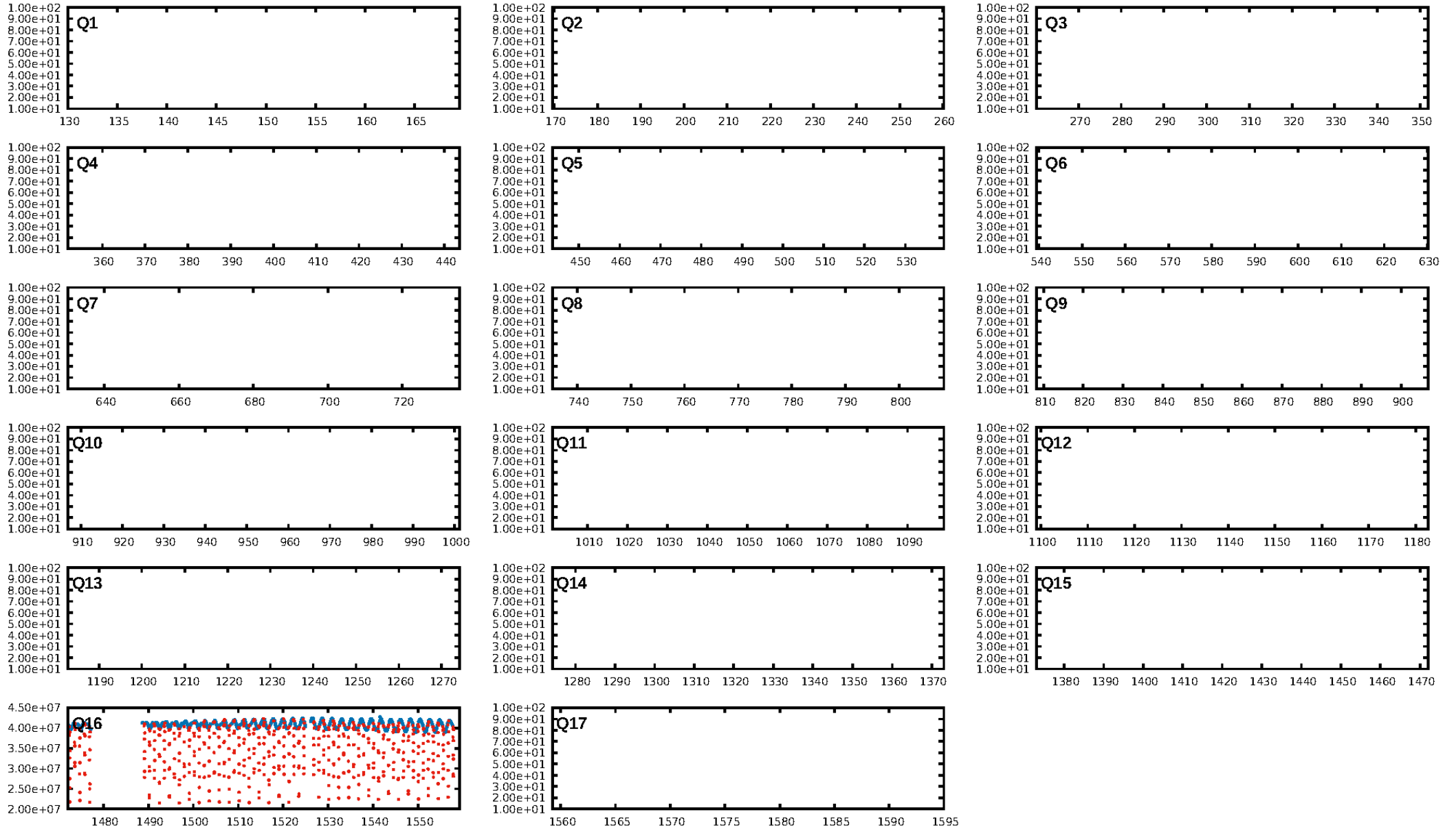
DV Diagnostic Results:

ShortPeriod-sig: 0.0% [0.00 σ]
LongPeriod-sig: 100.0% [40.20 σ]
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: N/A
RollingBand-fgt: 0.95 [59/62]
GhostDiagnostic-chr: 1.414
Centroid-sig: N/A
Centroid-so: 1.017 arcsec [385.56 σ]
OotOffset-rm: 0.104 arcsec [1.55 σ]
KicOffset-rm: 0.323 arcsec [4.84 σ]
OotOffset-st: 0/0/1/0 [1]
KicOffset-st: 0/0/1/0 [1]
DiffImageQuality-fgm: 1.00 [1/1]
DiffImageOverlap-fno: 1.00 [1/1]

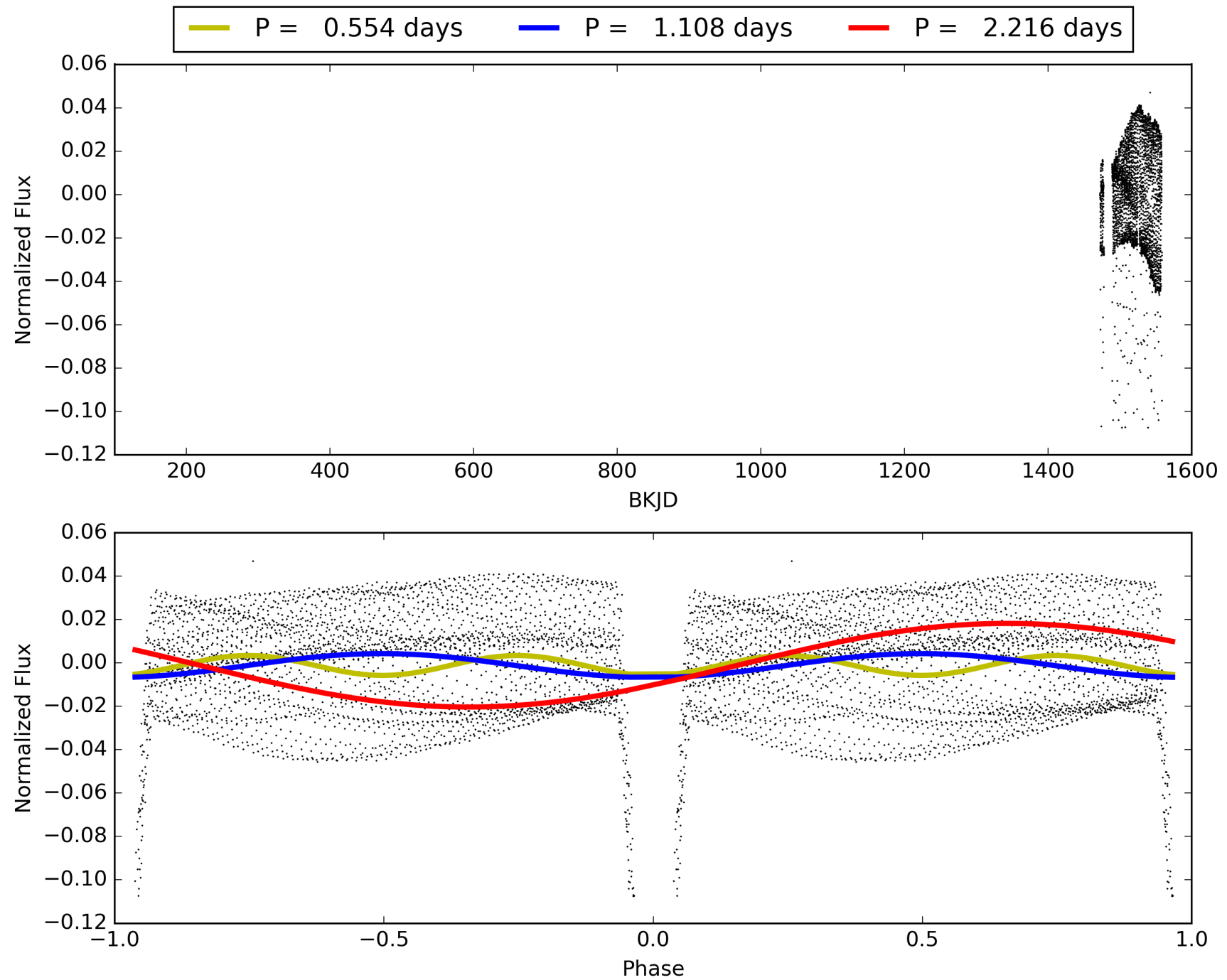
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 01-Feb-2016 12:46:40 Z

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

TCE 009119652-01, PDC Light Curves

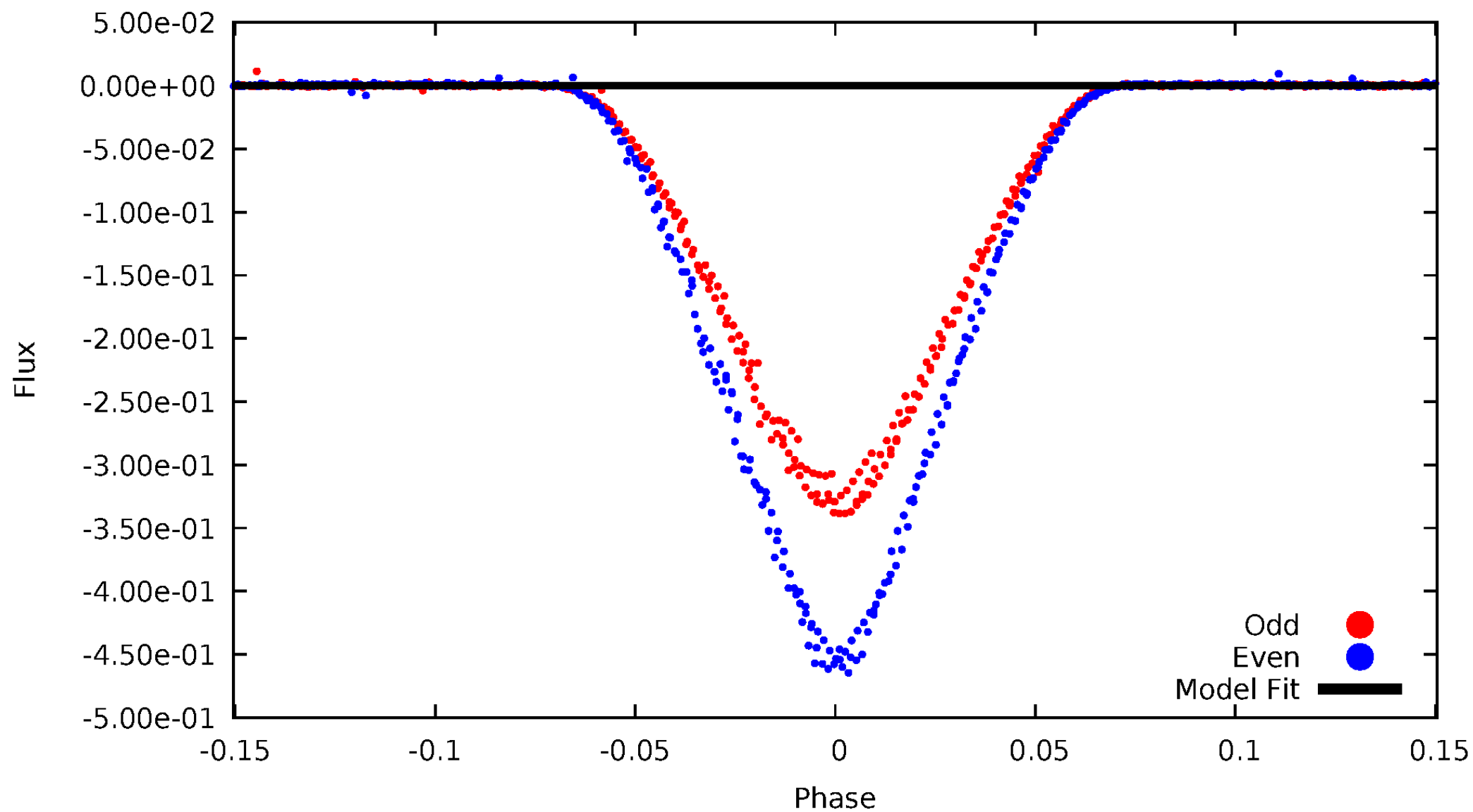


TCE 009119652-01



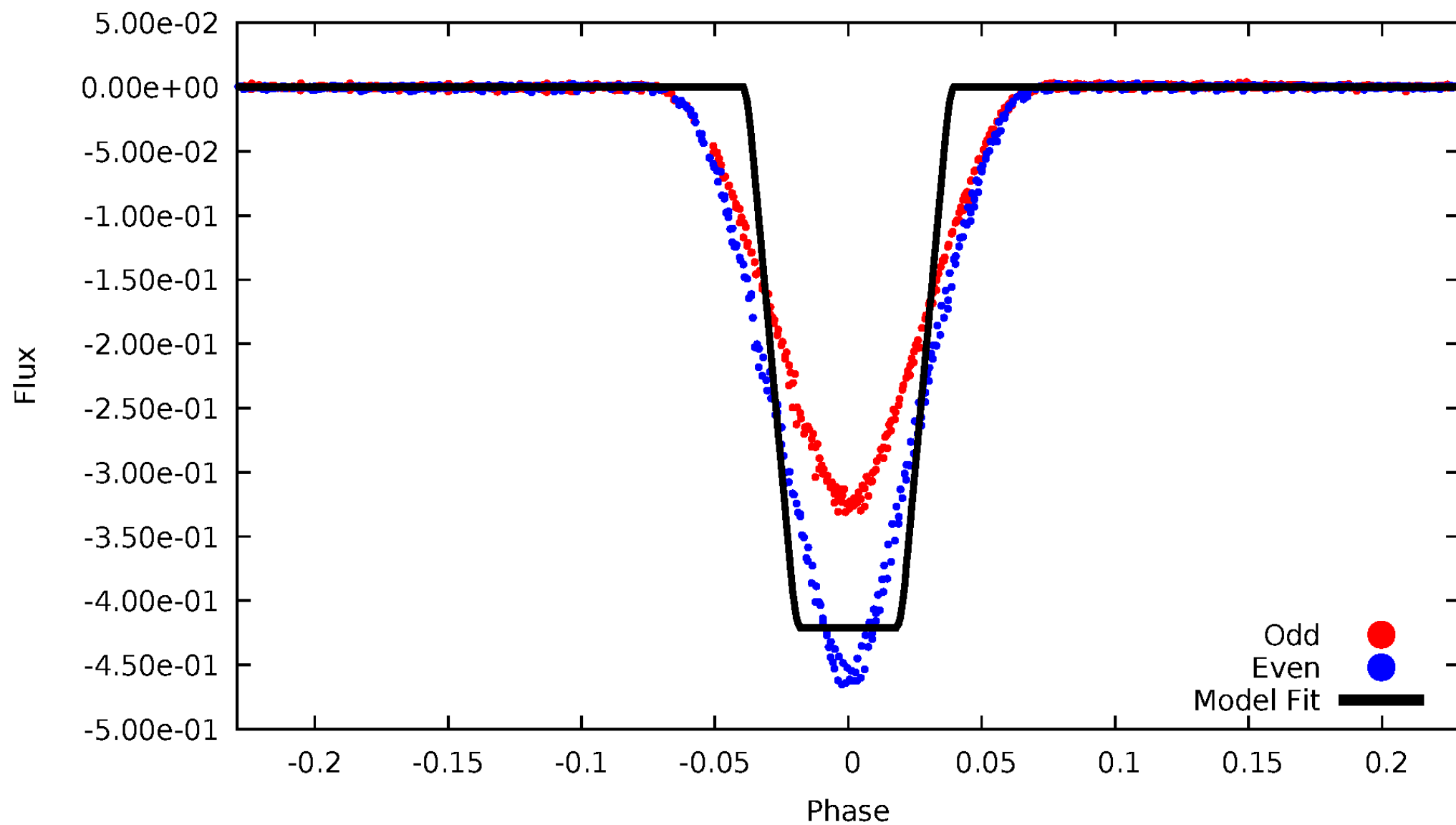
DV Odd/Even

TCE 009119652-01



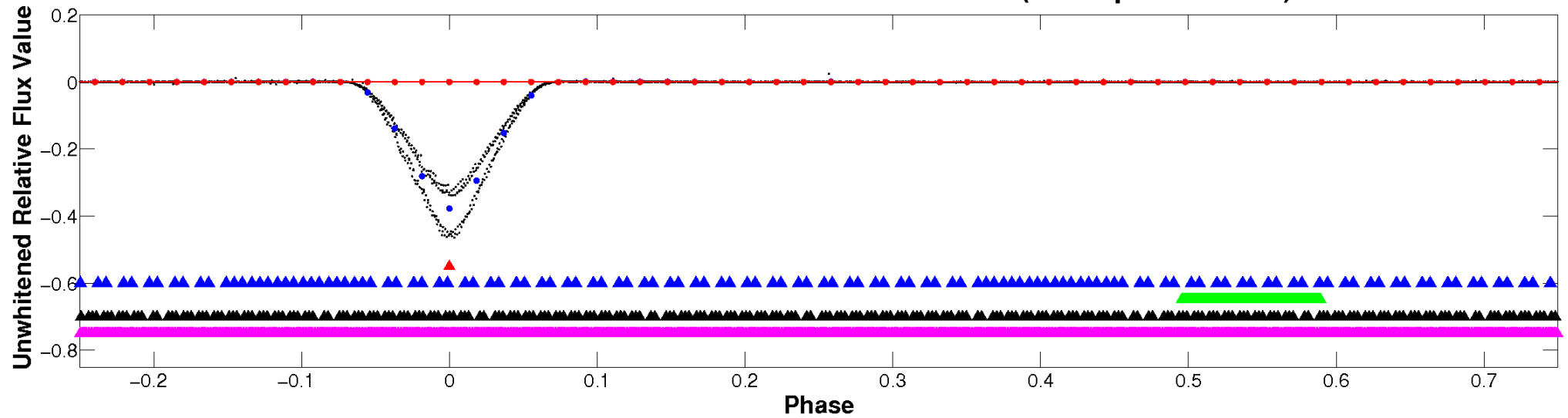
ALT Odd/Even

TCE 009119652-01



Non-Whitened Vs. Whitened Light Curve

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

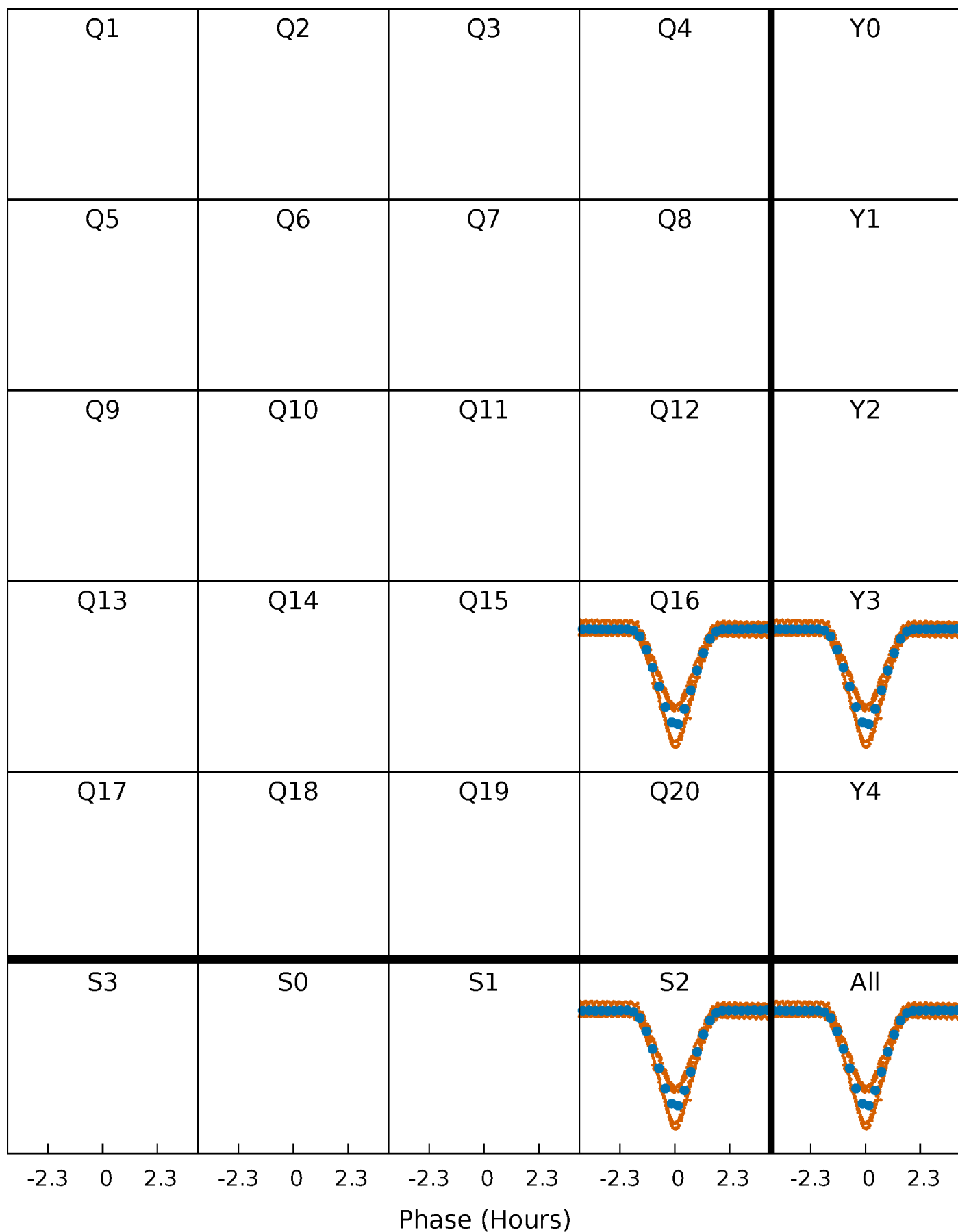


Planet 1 : Phased Whitened Flux Time Series (TPS Epoch/Period)



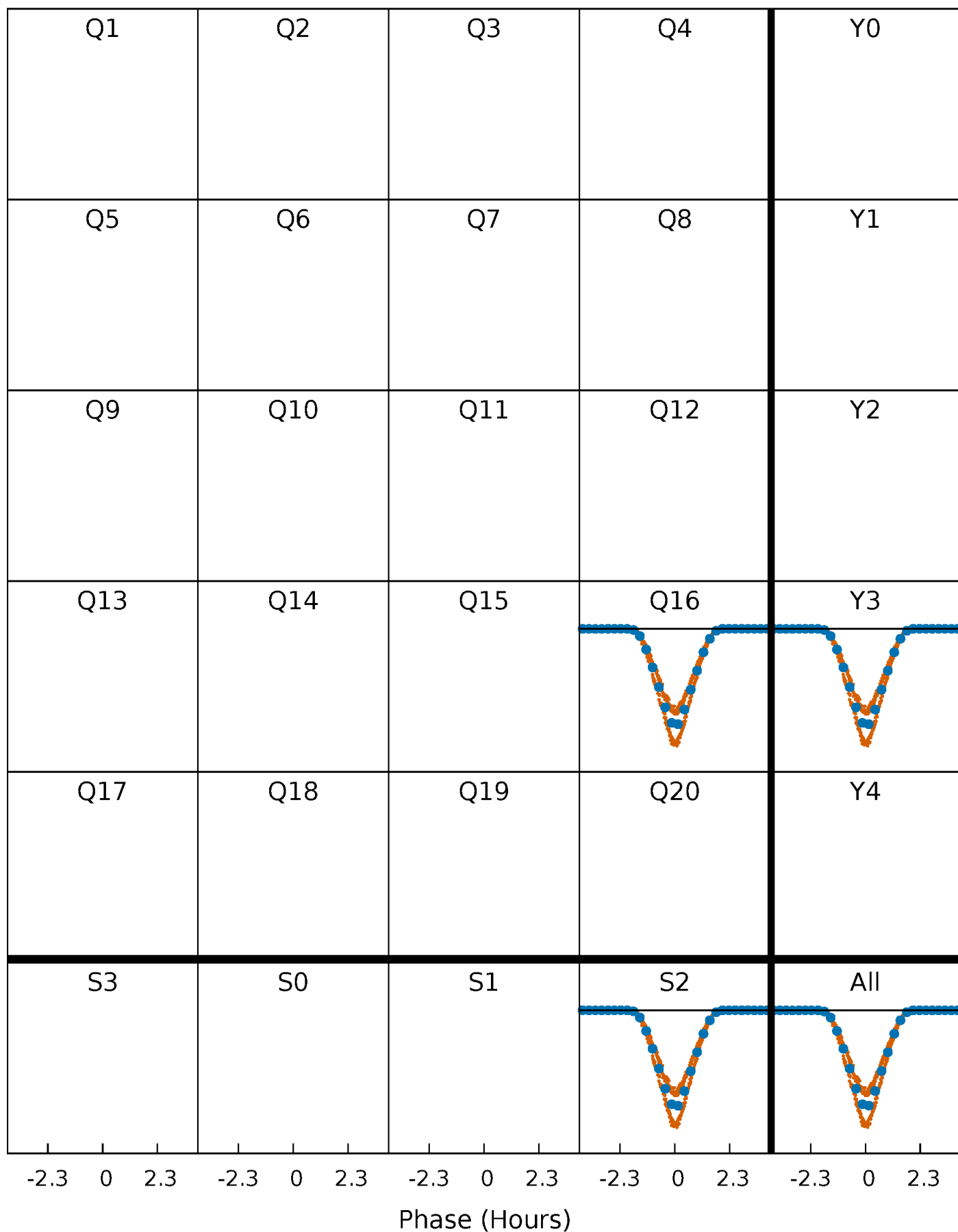
PDC Quarter-Phased Transit Curves

TCE 009119652-01 P= 1.108110 Days $T_0=131.709110$ (BKJD)



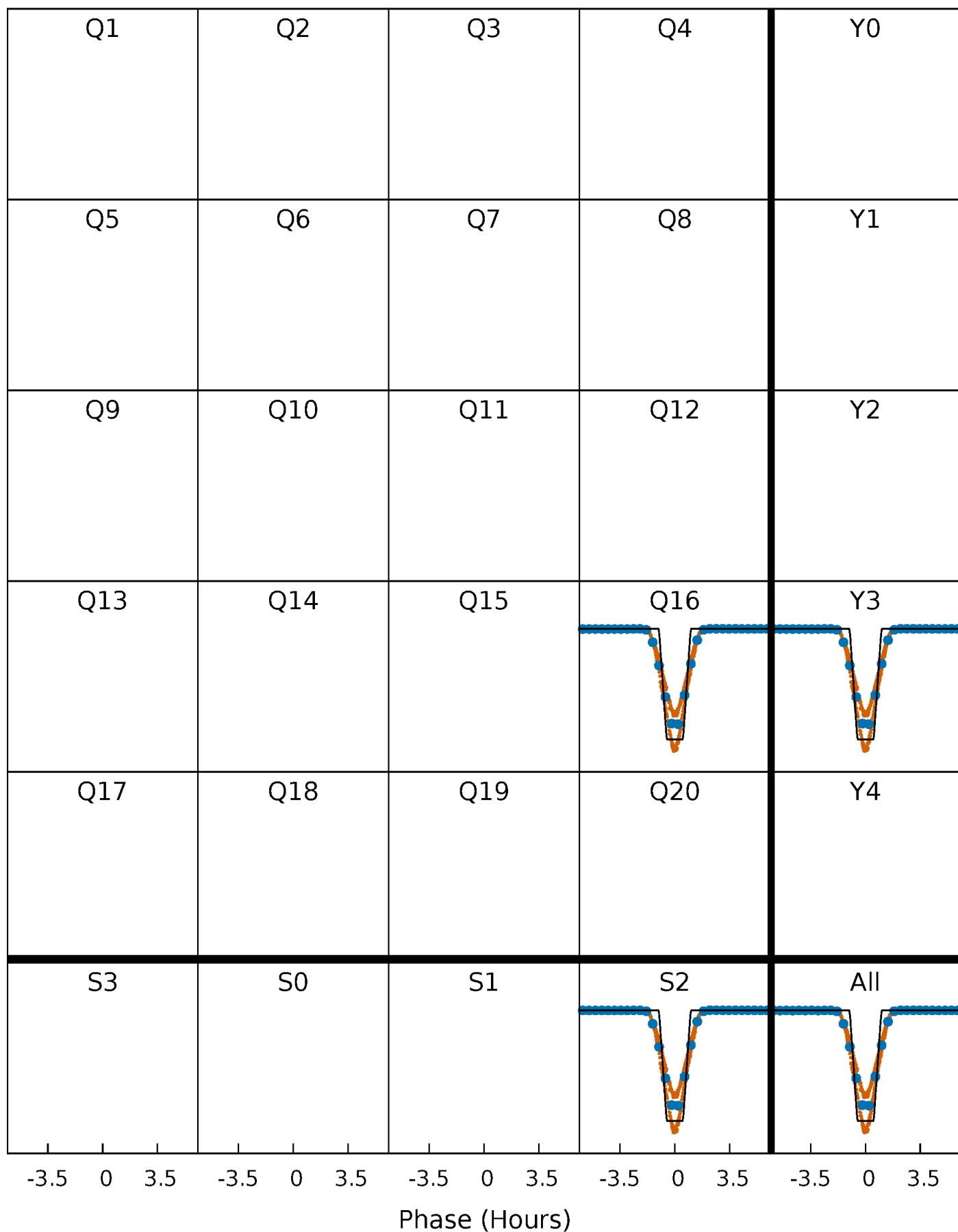
DV Quarter-Phased Transit Curves

TCE 009119652-01 P= 1.108110 Days $T_0=131.709110$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

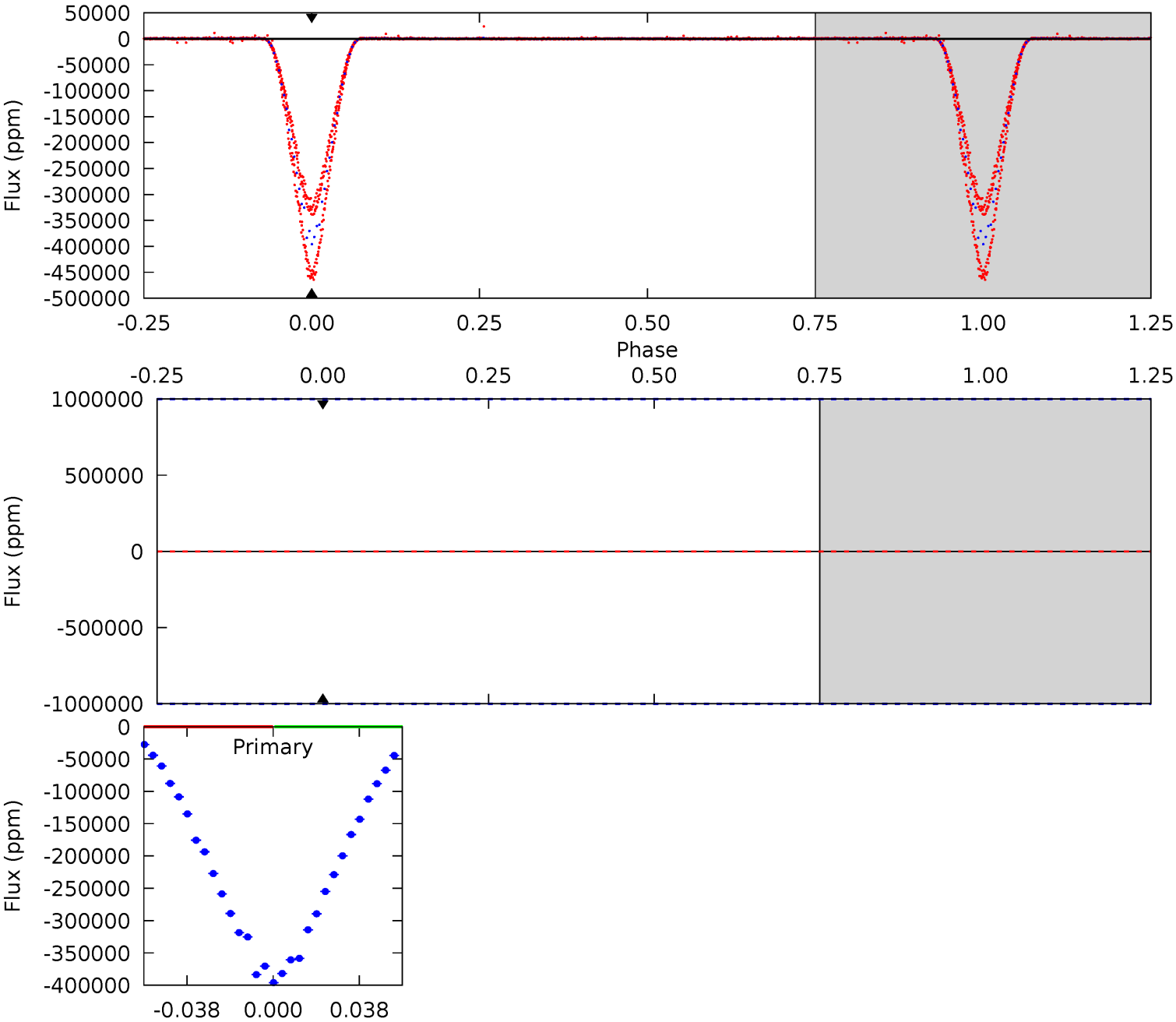
TCE 009119652-01 P= 1.108110 Days $T_0=131.709866$ (BKJD)



DV Model-Shift Uniqueness Test

009119652-01, P = 1.108110 Days, E = 131.709110 Days

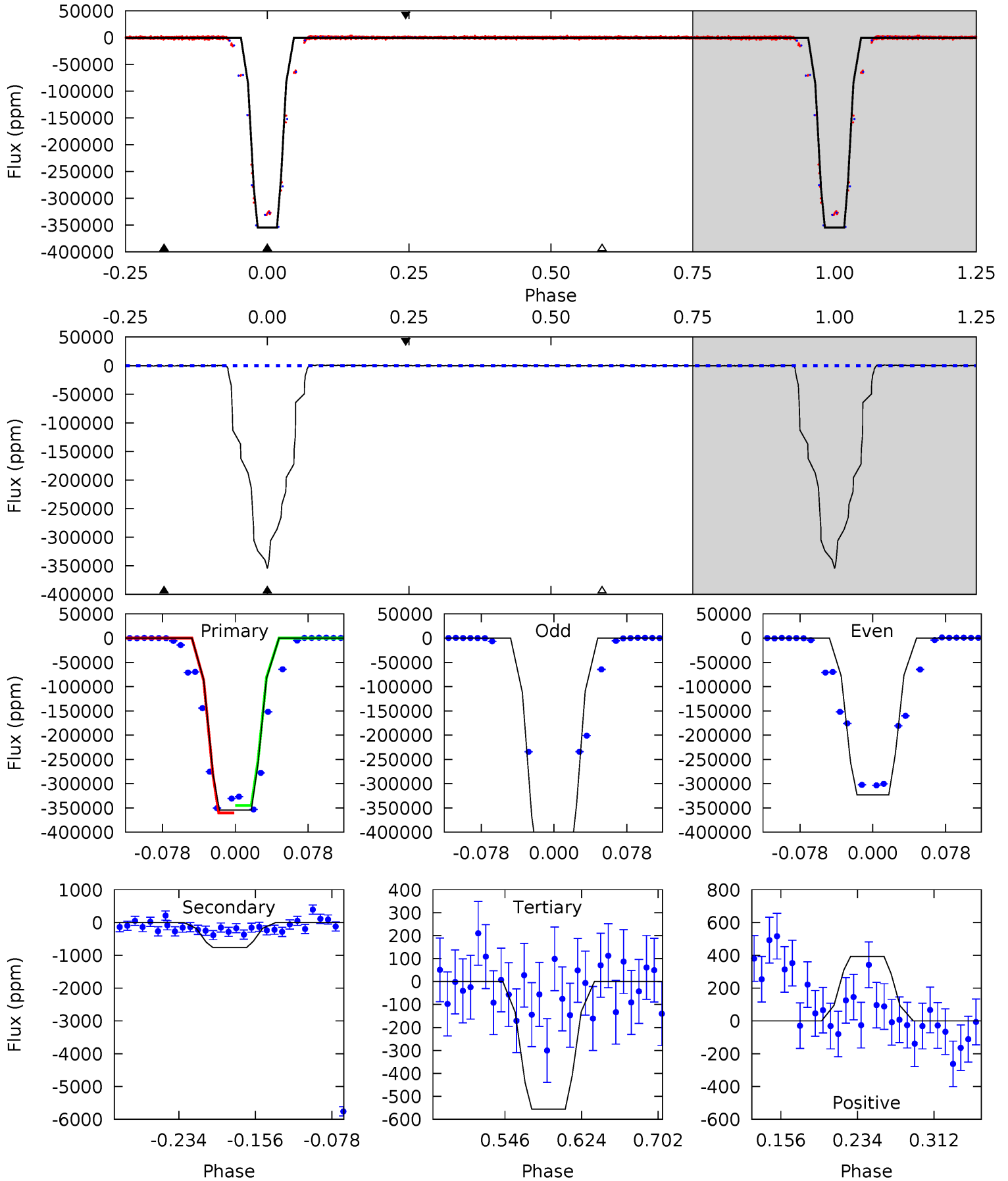
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
0	0	0	0	1.00	1.00	1.00	0	0	0	0	0	0	0	0



Alt Model-Shift Uniqueness Test

009119652-01, P = 1.108110 Days, E = 131.709866 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
1611	3.48	2.52	1.79	4.62	1.76	1.22	1609	1609	0.95	1.69	369.7	1.12	0.00	0



Stellar Parameters For KIC 009119652

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	$M(M_{\odot})$	p_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	5299^{+204}_{-167}	$3.865^{+0.742}_{-0.318}$	$-0.440^{+0.350}_{-0.250}$	$1.769^{+1.081}_{-1.081}$	$0.837^{+0.139}_{-0.114}$	$0.213^{+2.399}_{-0.161}$
	+4%/-3%	+19%/-8%	+80%/-57%	+61%/-61%	+17%/-14%	+1127%/-76%
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 009119652-01 / KOI 6193.01

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	0 ± 1000000	$79.16^{+35.80}_{-27.66}$	3024^{+461}_{-516}	-3283^{+7951}_{-1358}	$-0.033^{+3.994}_{-3.494}$
Alt.	-765 ± 220	$117.96^{+47.68}_{-37.14}$	3030^{+496}_{-521}	-3076^{+323}_{-303}	$0.012^{+0.015}_{-0.006}$

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

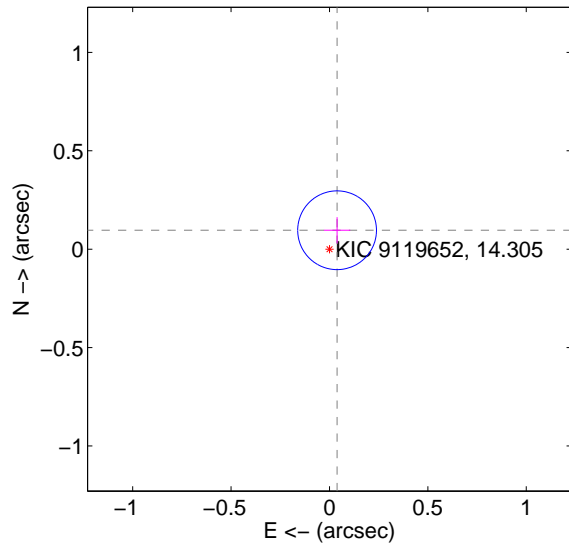
Supplemental centroid analysis for 009119652-01. Kepler magnitude: 14.30. Transit SNR -1.00

There are 1 quarters with good PRF difference image offsets

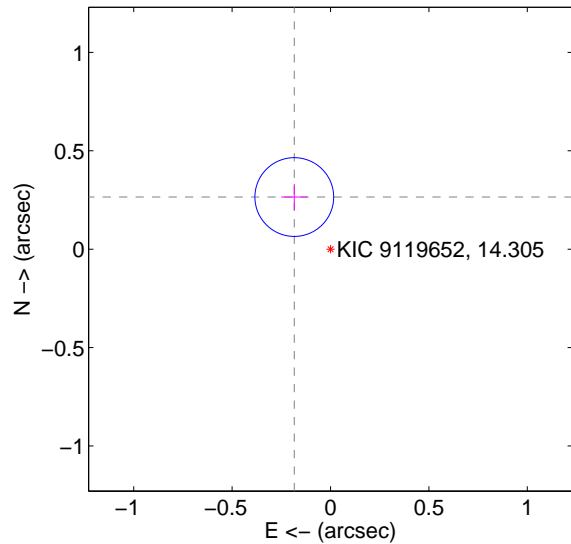
The direct PRF centroid is offset from the target star catalog position by about 0.28 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.104 ± 0.067	1.55	-0.039 ± 0.067	0.096 ± 0.067
PRF-fit source offset from KIC position	0.323 ± 0.067	4.84	0.184 ± 0.067	0.265 ± 0.067
photometric centroid source offset	1.02 ± 0.00	385.56	0.94 ± 0.00	0.39 ± 0.00

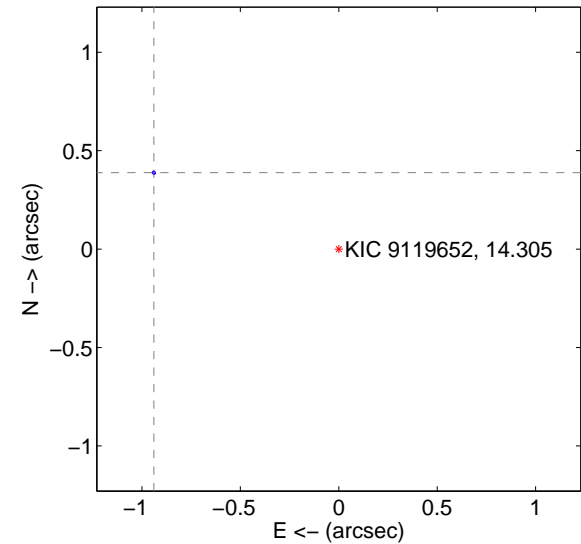
offset from difference PRF-fit to OOT PRF-fit



offset from difference PRF-fit to KIC position



offset from photometric centroids



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.

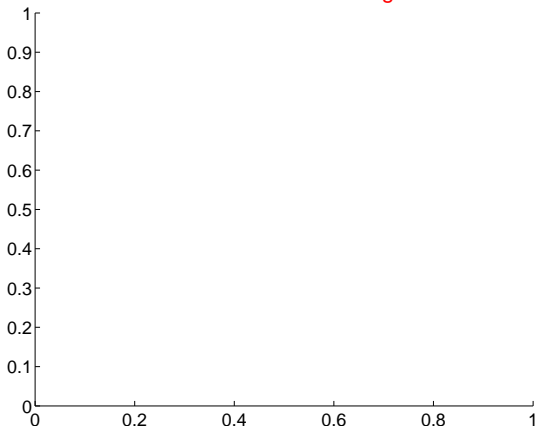


white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.

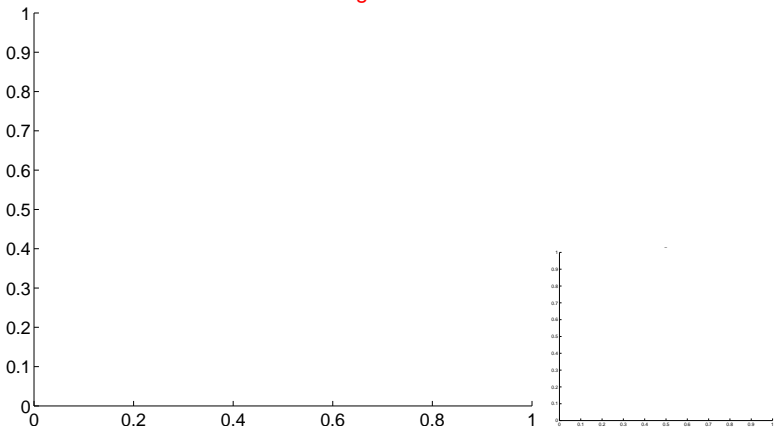


white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.

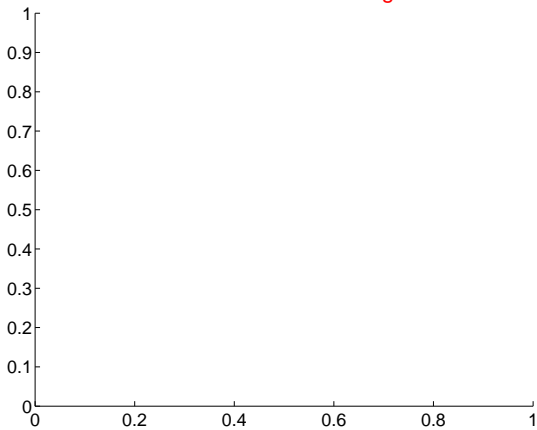
Q13 no difference image



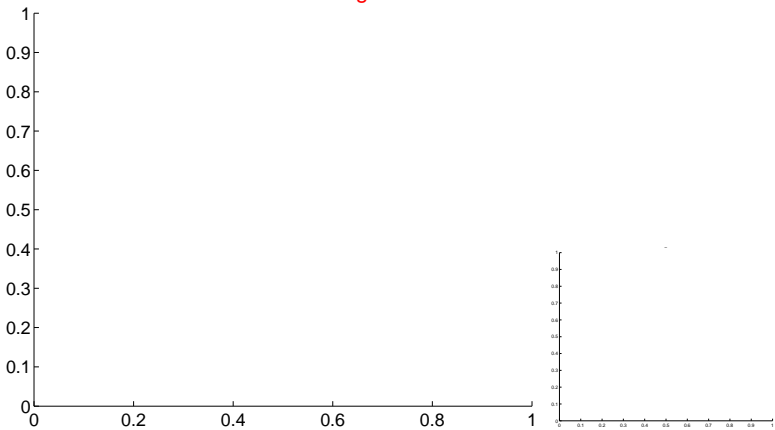
Q13 no OOT image



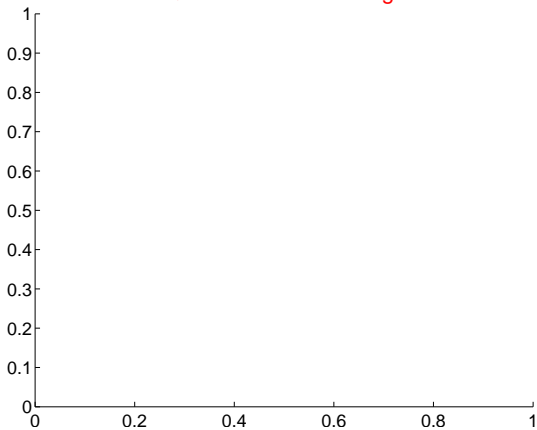
Q14 no difference image



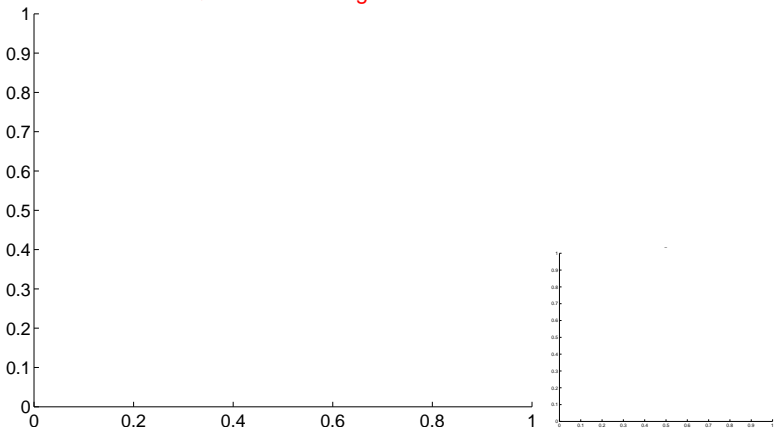
Q14 no OOT image



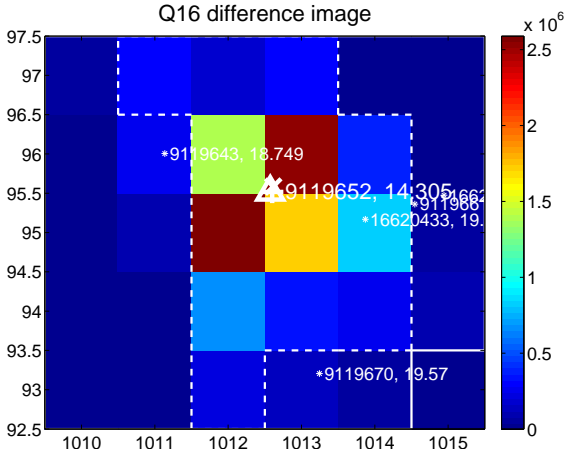
Q15 no difference image



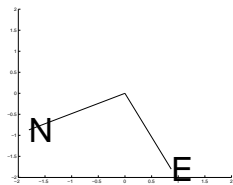
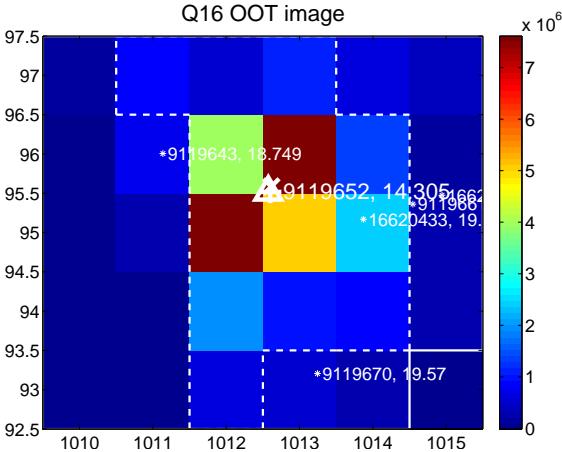
Q15 no OOT image



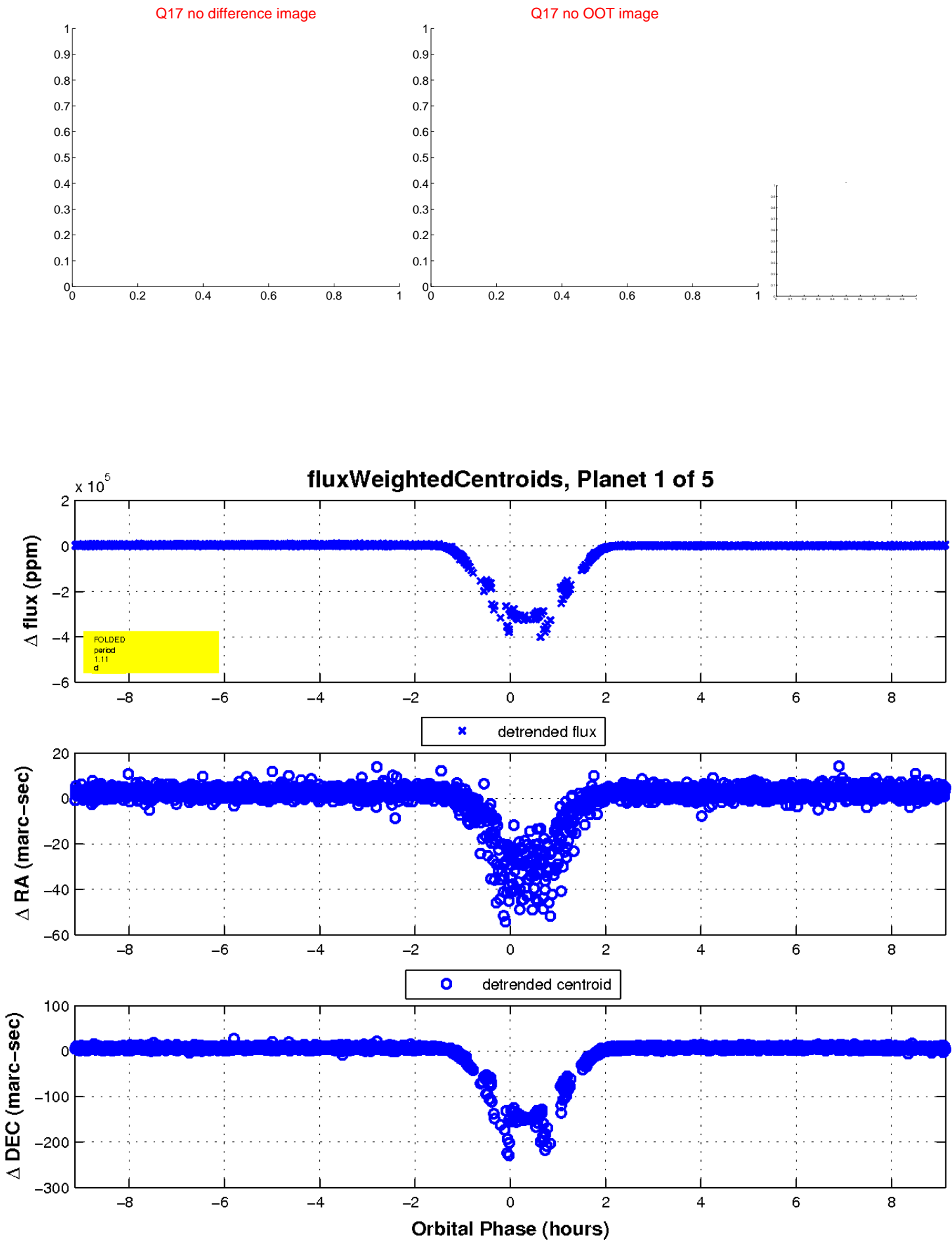
Q16 difference image



Q16 OOT image

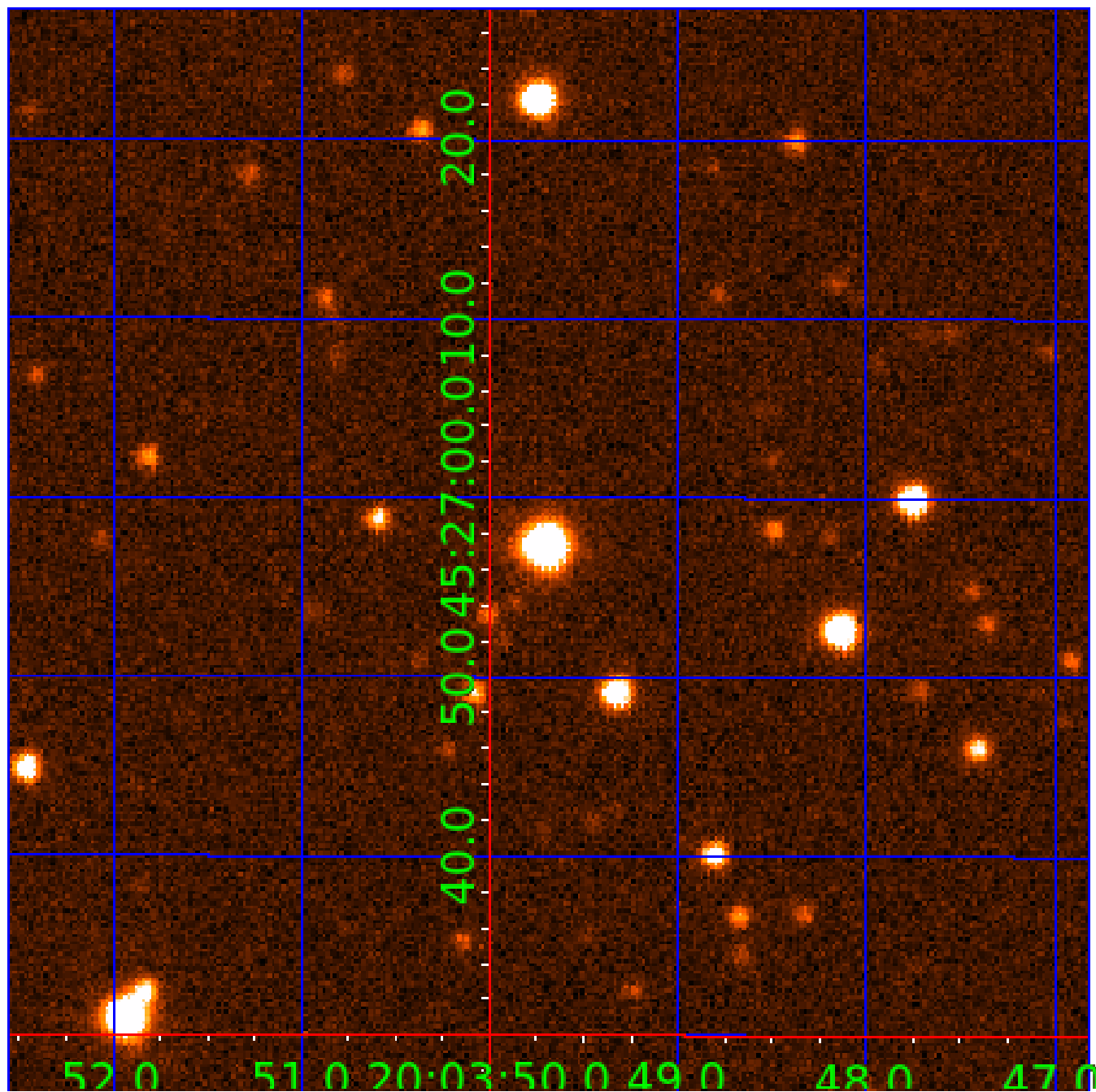


white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



UKIRT Image

Declination



KIC 009119652

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})
009119652-01	OBS	6193.01	1.108110	131.709110	384027.5	2.000	6787.8	-1.0	1.77	5299	86.18	5667.33
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Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
009119652-01	OBS	FP	0.00	0	1	0	0	DEPTH_ODDEVEN_DV—DEPTH_ODDEVEN_ALT—MOD_ODDEVEN_ALT—HAS_SEC_TCE—CENT_NOFITS
009119652-02	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_SKYE_TRACKER—LPP_DV—MOD_NONUNIQ_DV—MOD_TER_DV—CENT_FEW_DIFFS
009119652-03	OBS	FP	0.00	1	1	1	0	IS_SEC_TCE—CENT_NOFITS—HALO_GHOST
009119652-04	OBS	FP	0.00	1	0	0	0	TRANS_GAPPED—LPP_DV—LPP_ALT—ALL_TRANS_CHASES—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—CENT_NOFITS
009119652-05	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_ZUMA—TRANS_GAPPED—SWEET_NTL—LPP_DV—LPP_ALT—MOD_NONUNIQ_ALT—CENT_NOFITS

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 009119652-02

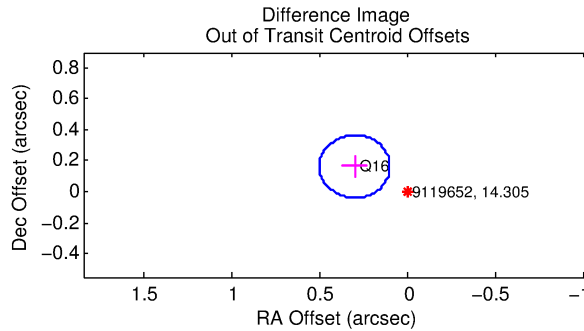
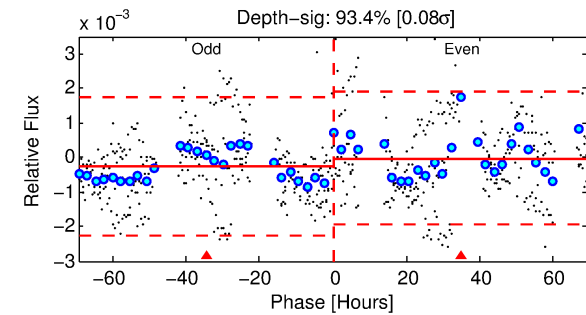
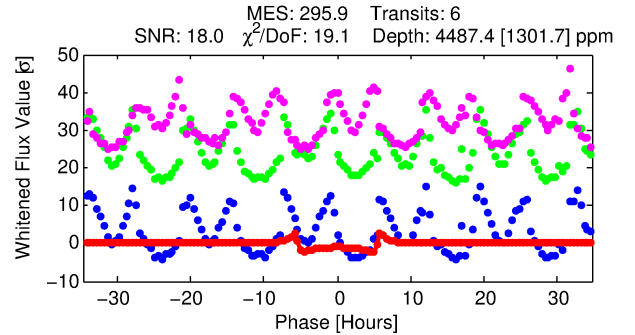
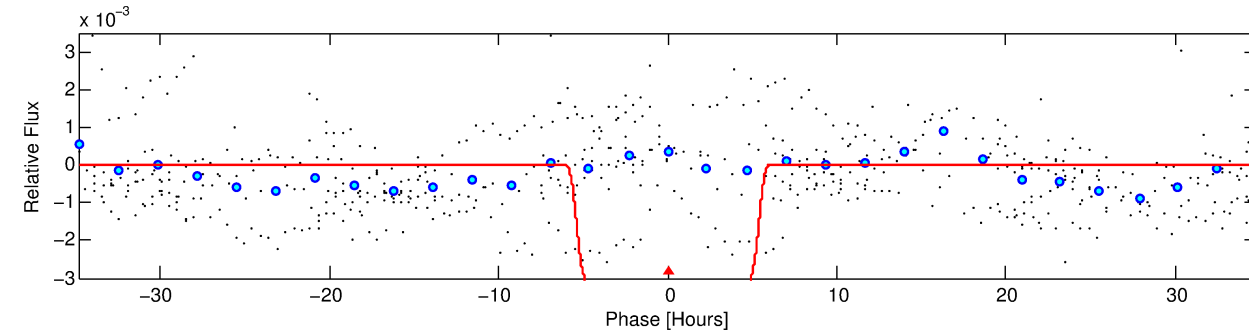
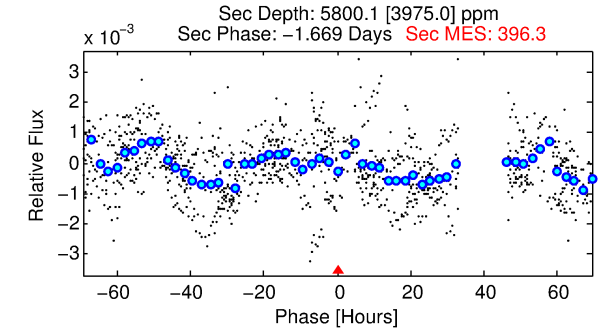
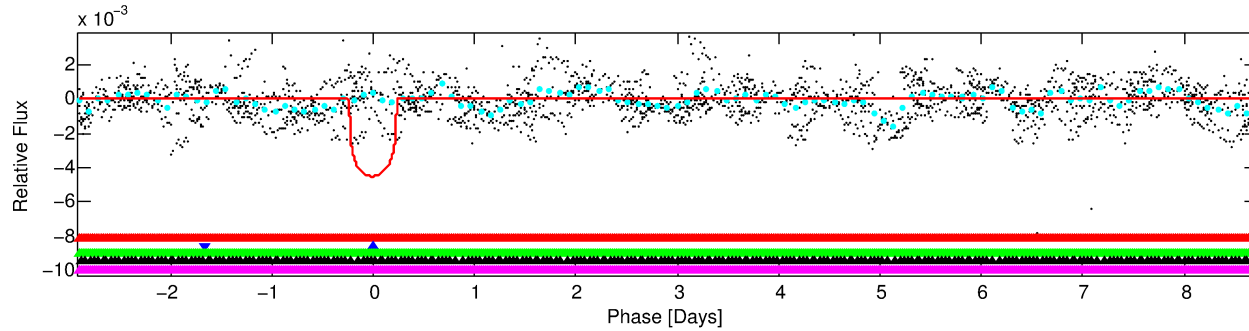
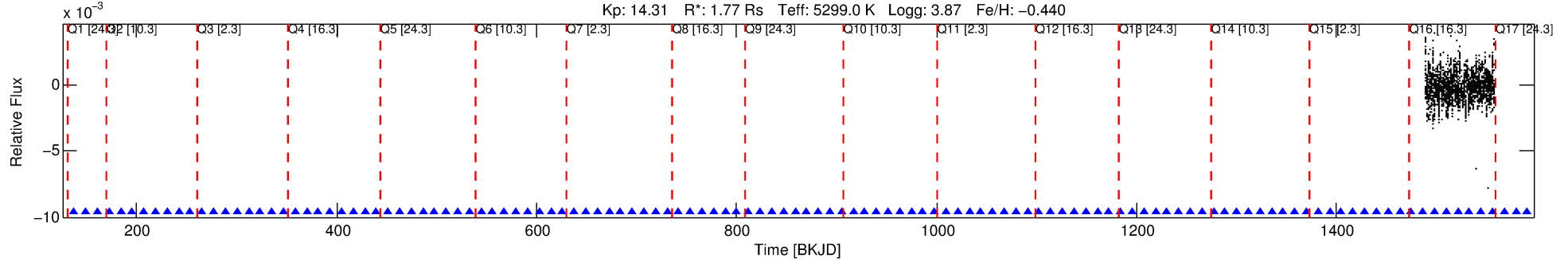
No Significant Match Found

DV One-Page Summary

KIC: 9119652 Candidate: 2 of 5 Period: 11.626 d

KOI: K06193 Corr: No Ephemeris Match

Kp: 14.31 R*: 1.77 Rs Teff: 5299.0 K Logg: 3.87 Fe/H: -0.440



DV Fit Results:

Period = 11.62554 [0.00042] d
Epoch = 137.7422 [0.0468] BKJD
Rp/R* = 0.0603 [0.0343]
a/R* = 8.12 [17.68]
b = 0.04 [54.10]
Seff = 246.76 [300.91]
Teq = 1011 [308] K
Rp = 11.65 [9.72] Re
a = 0.0947 [0.0663] AU
Ag = 210.80 [378.48] [0.55σ]
Teffp = 5954 [1988] K [2.46σ]

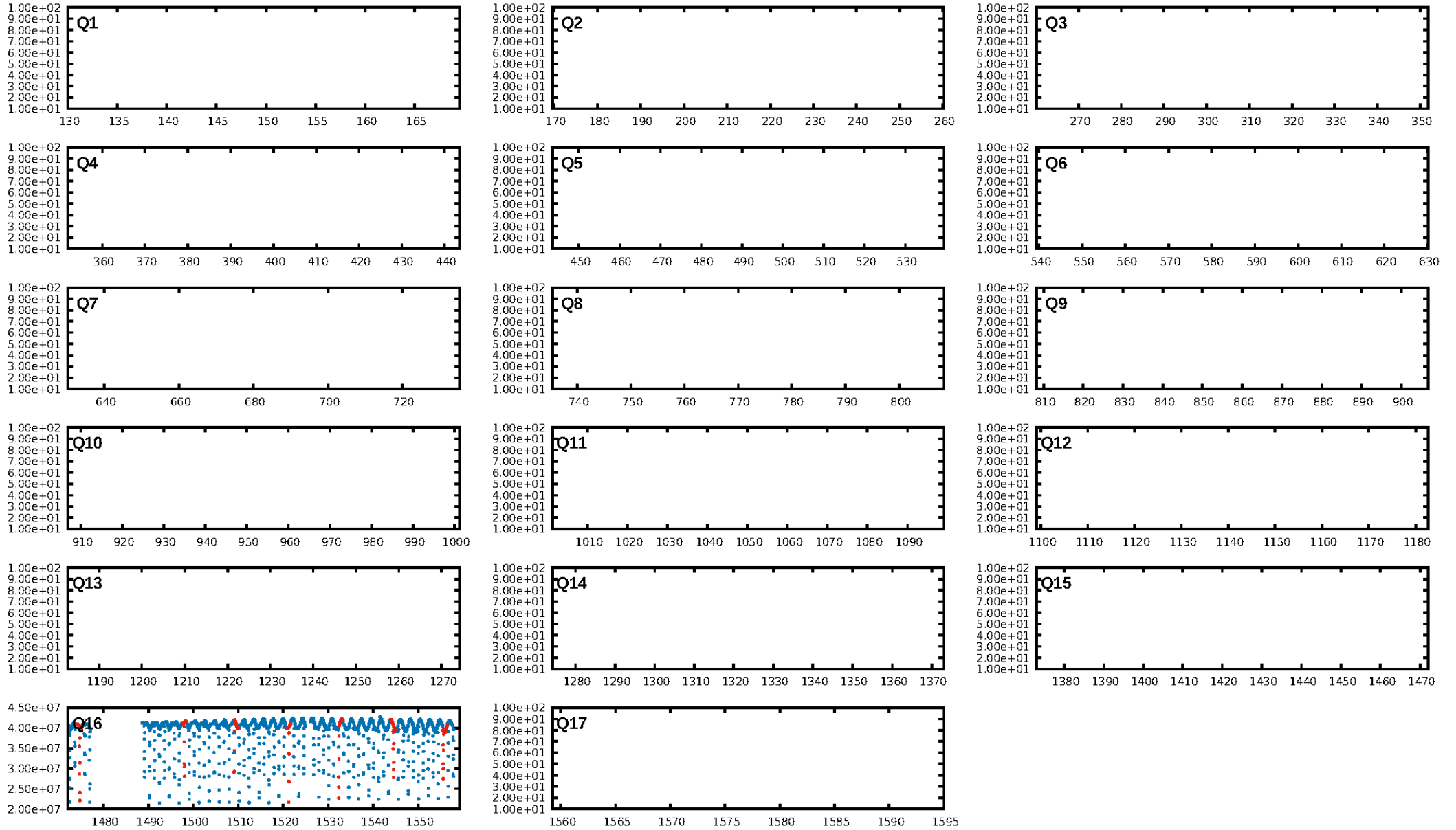
DV Diagnostic Results:

ShortPeriod-sig: 100.0% [12.97σ]
LongPeriod-sig: N/A
ModelChiSquare2-sig: 0.0%
ModelChiSquareGof-sig: 0.0%
Bootstrap-pfa: N/A
RollingBand-fgt: 1.00 [6/6]
GhostDiagnostic-chr: 1.325
Centroid-sig: N/A
Centroid-so: 1.387 arcsec [2.31σ]
OotOffset-rm: 0.345 arcsec [5.13σ]
KicOffset-rm: 0.616 arcsec [9.17σ]
OotOffset-st: 0/0/1/0 [1]
KicOffset-st: 0/0/1/0 [1]
DiffImageQuality-fgm: 1.00 [1/1]
DiffImageOverlap-fno: 0.00 [0/1]

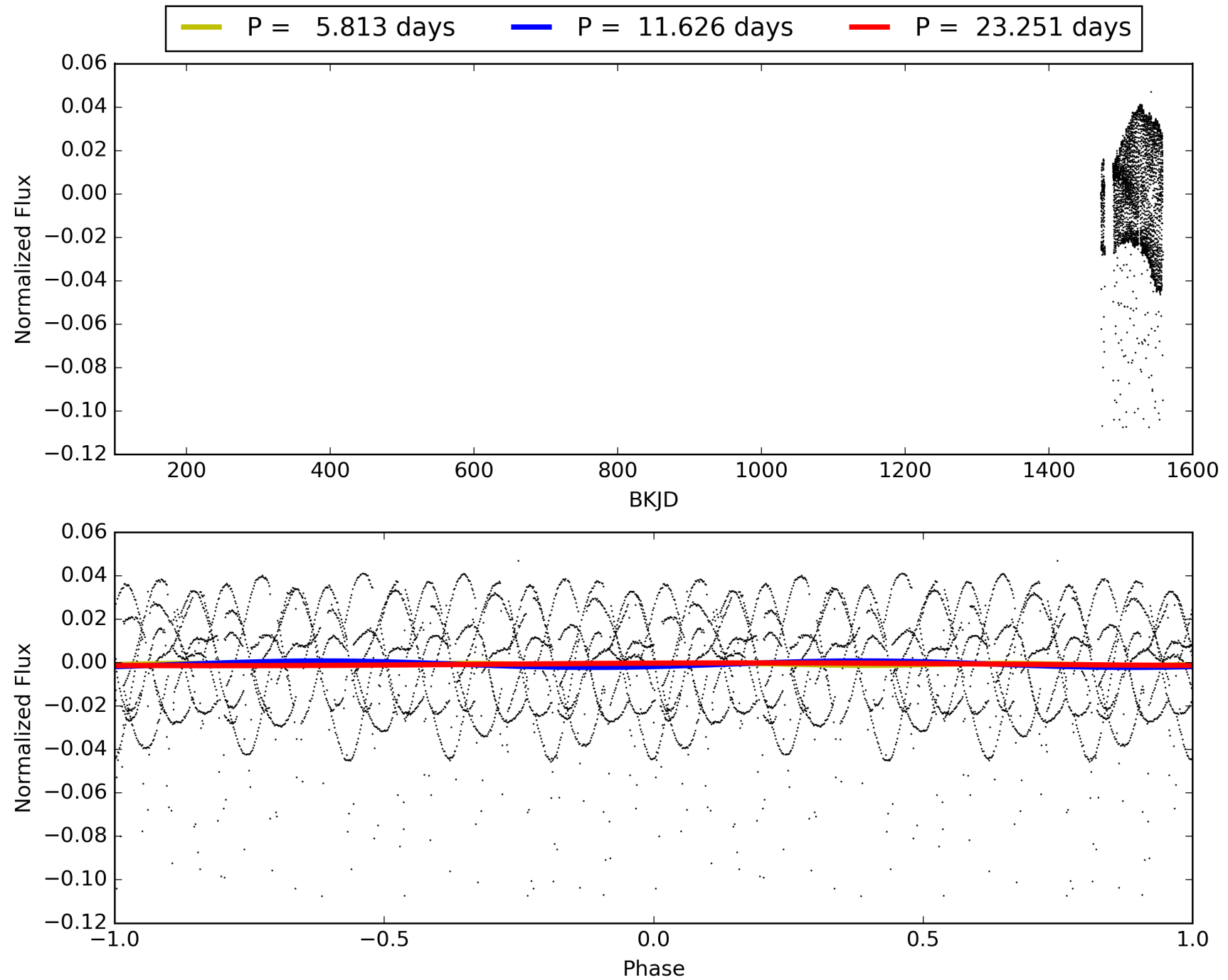
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 01-Feb-2016 12:46:44 Z

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

TCE 009119652-02, PDC Light Curves

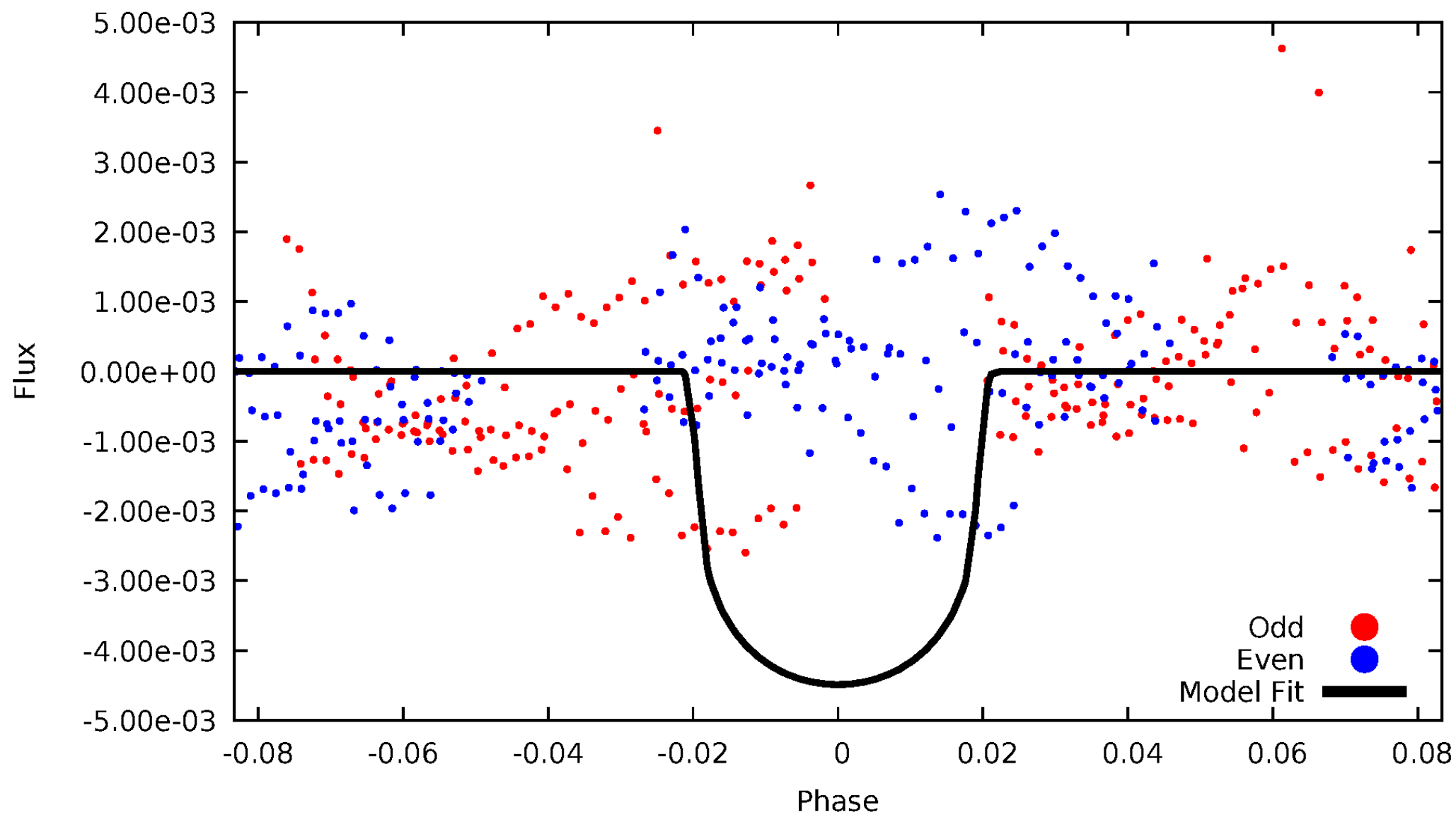


TCE 009119652-02



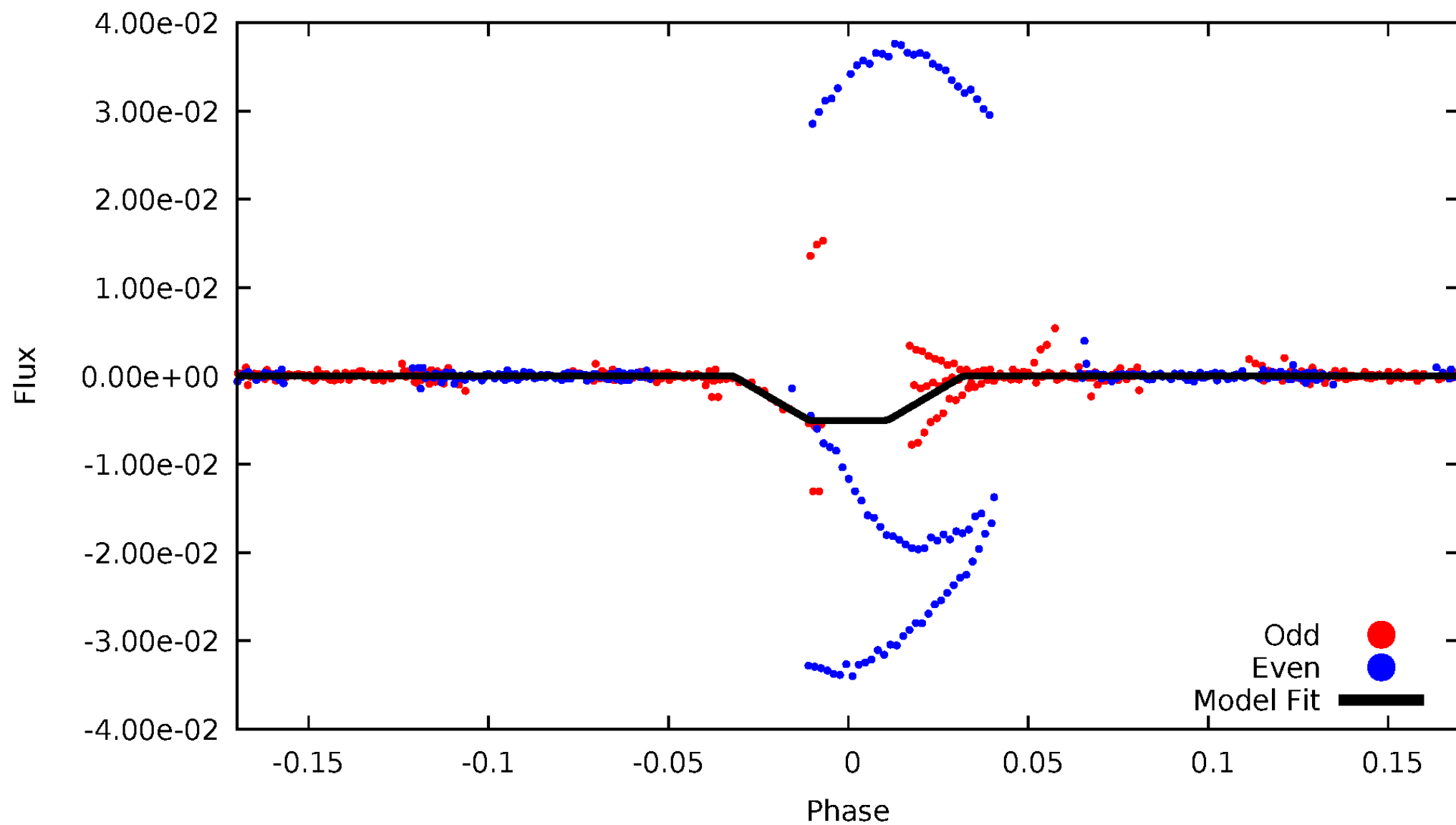
DV Odd/Even

TCE 009119652-02



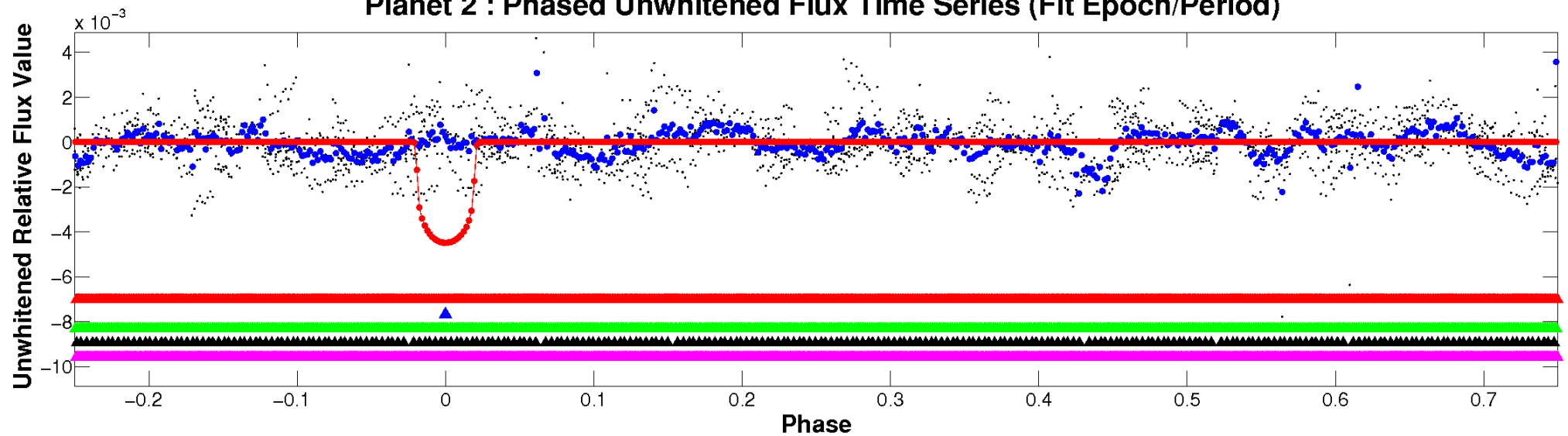
ALT Odd/Even

TCE 009119652-02

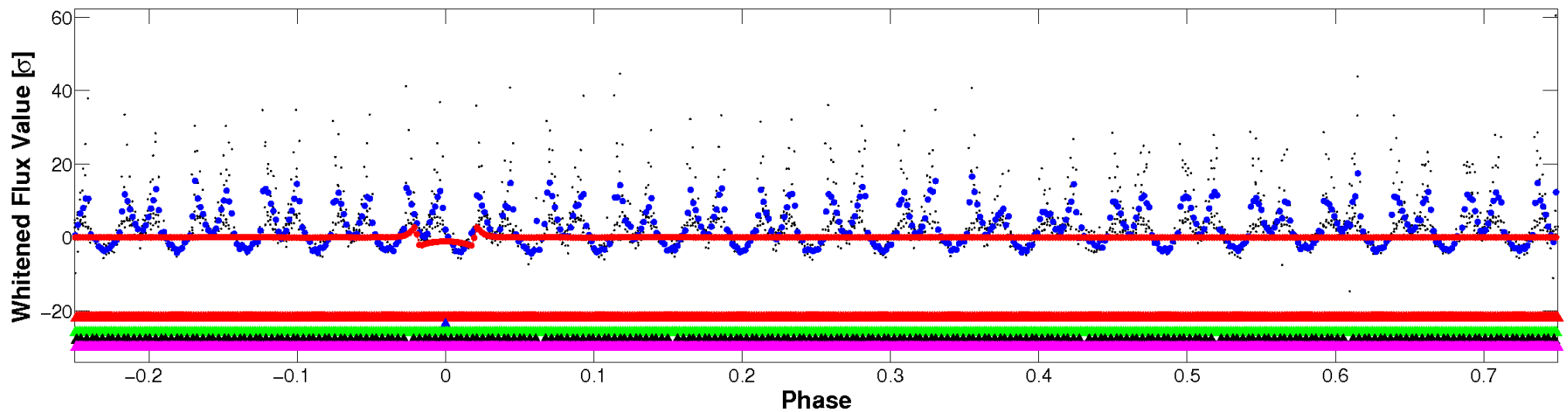


Non-Whitened Vs. Whitened Light Curve

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

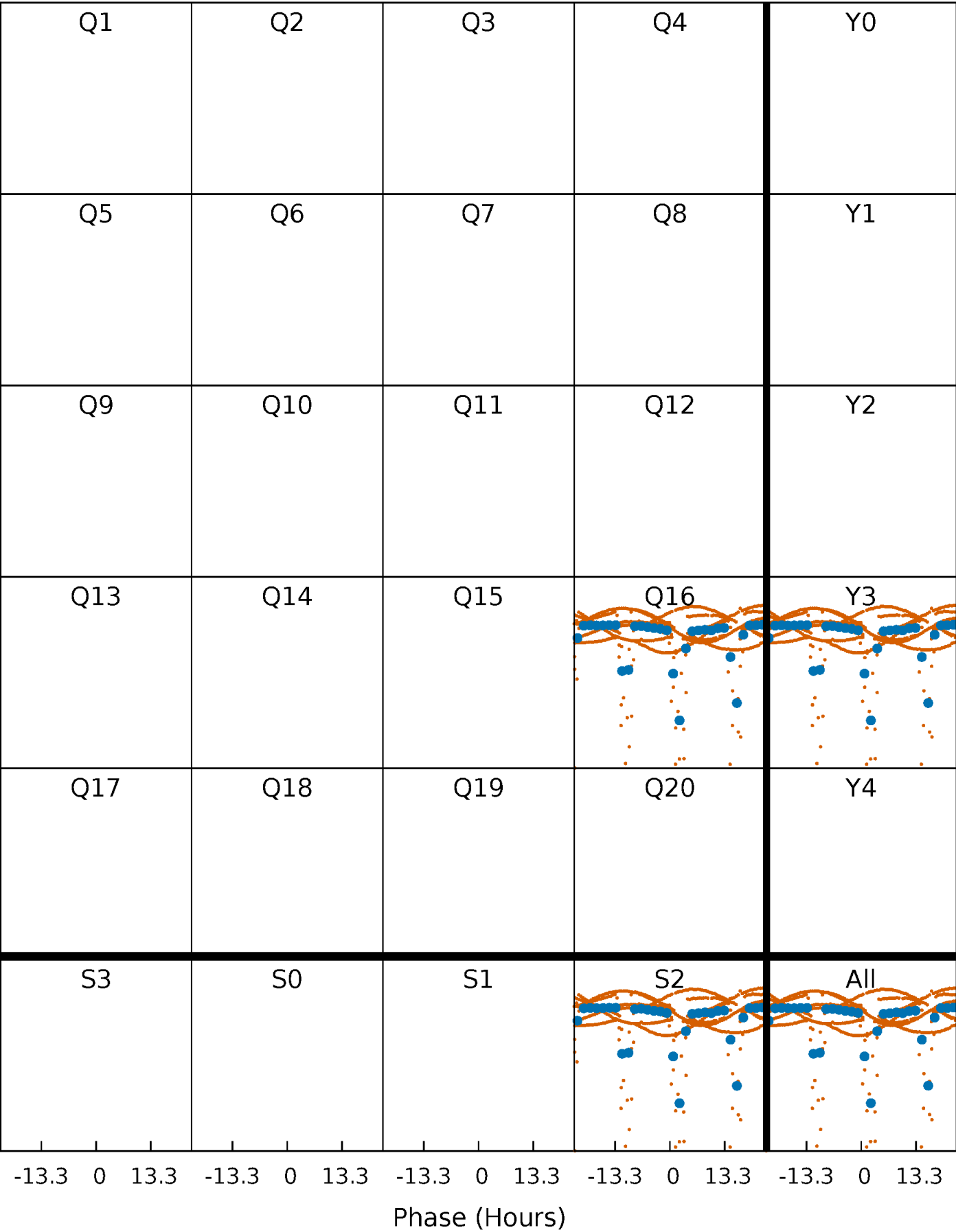


Planet 2 : Phased Whitened Flux Time Series (Fit Epoch/Period)



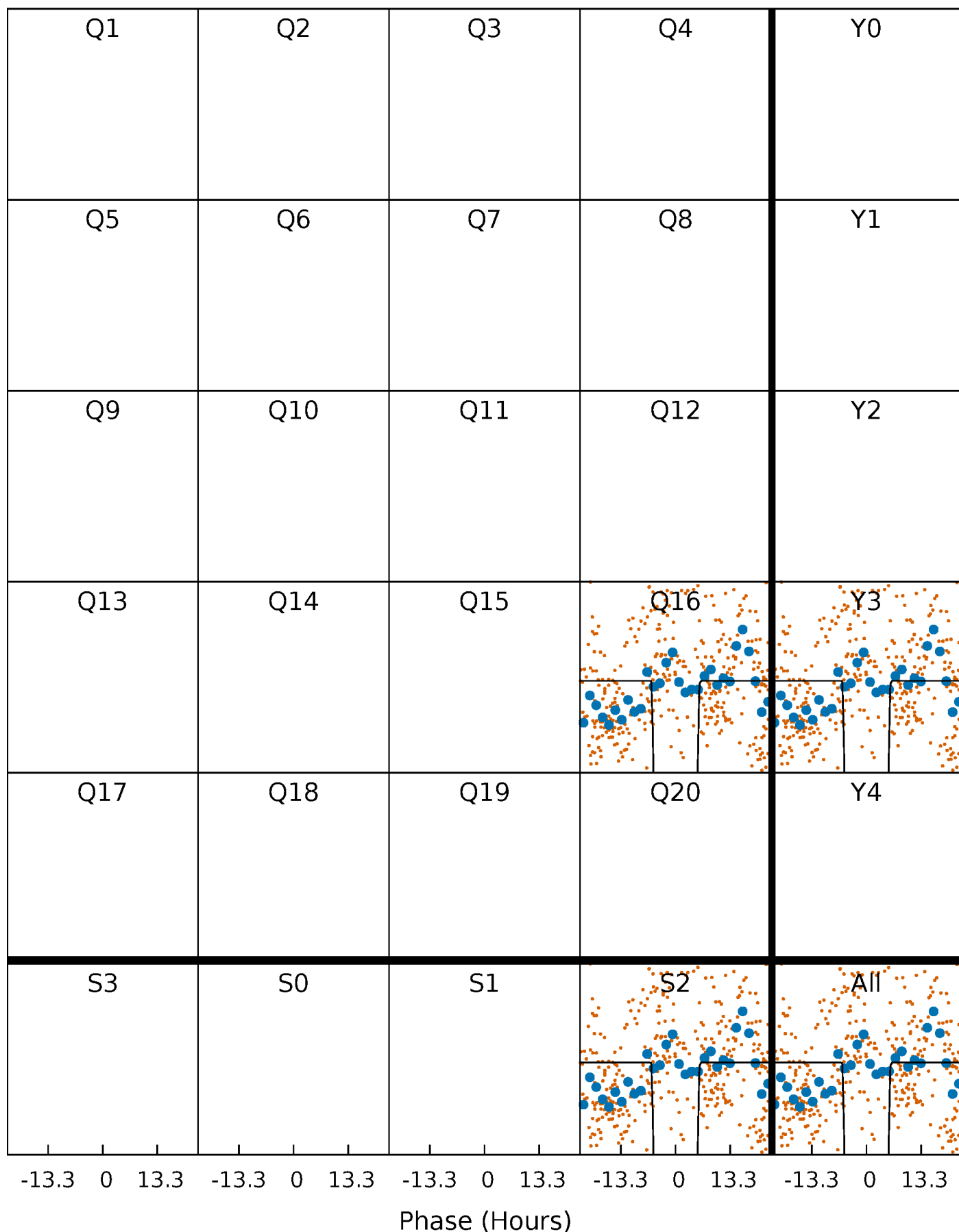
PDC Quarter-Phased Transit Curves

TCE 009119652-02 P= 11.625537 Days T₀=137.742227 (BKJD)



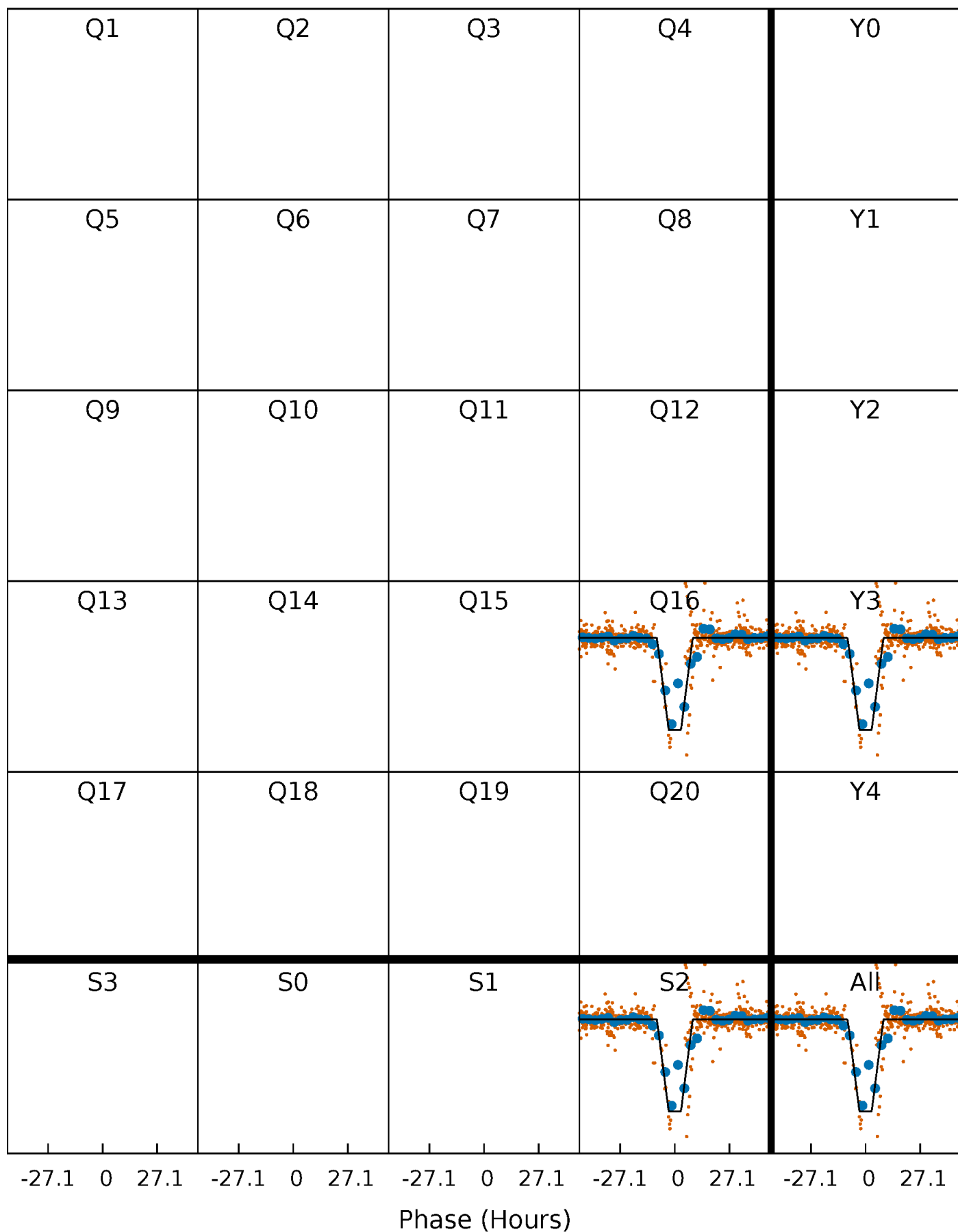
DV Quarter-Phased Transit Curves

TCE 009119652-02 P= 11.625537 Days $T_0=137.742227$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

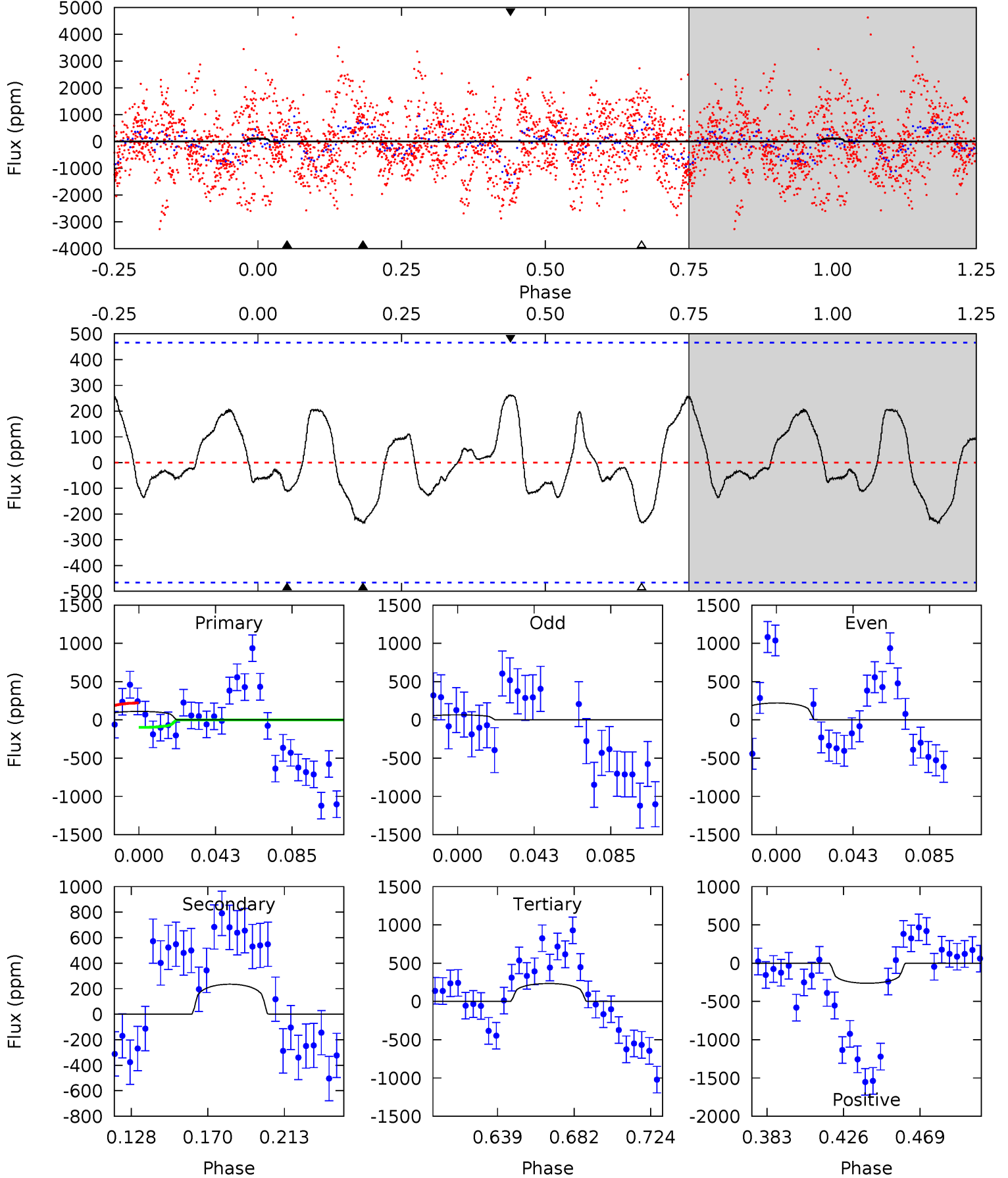
TCE 009119652-02 P= 11.633867 Days $T_0=136.794554$ (BKJD)



DV Model-Shift Uniqueness Test

009119652-02, P = 11.625537 Days, E = 137.742227 Days

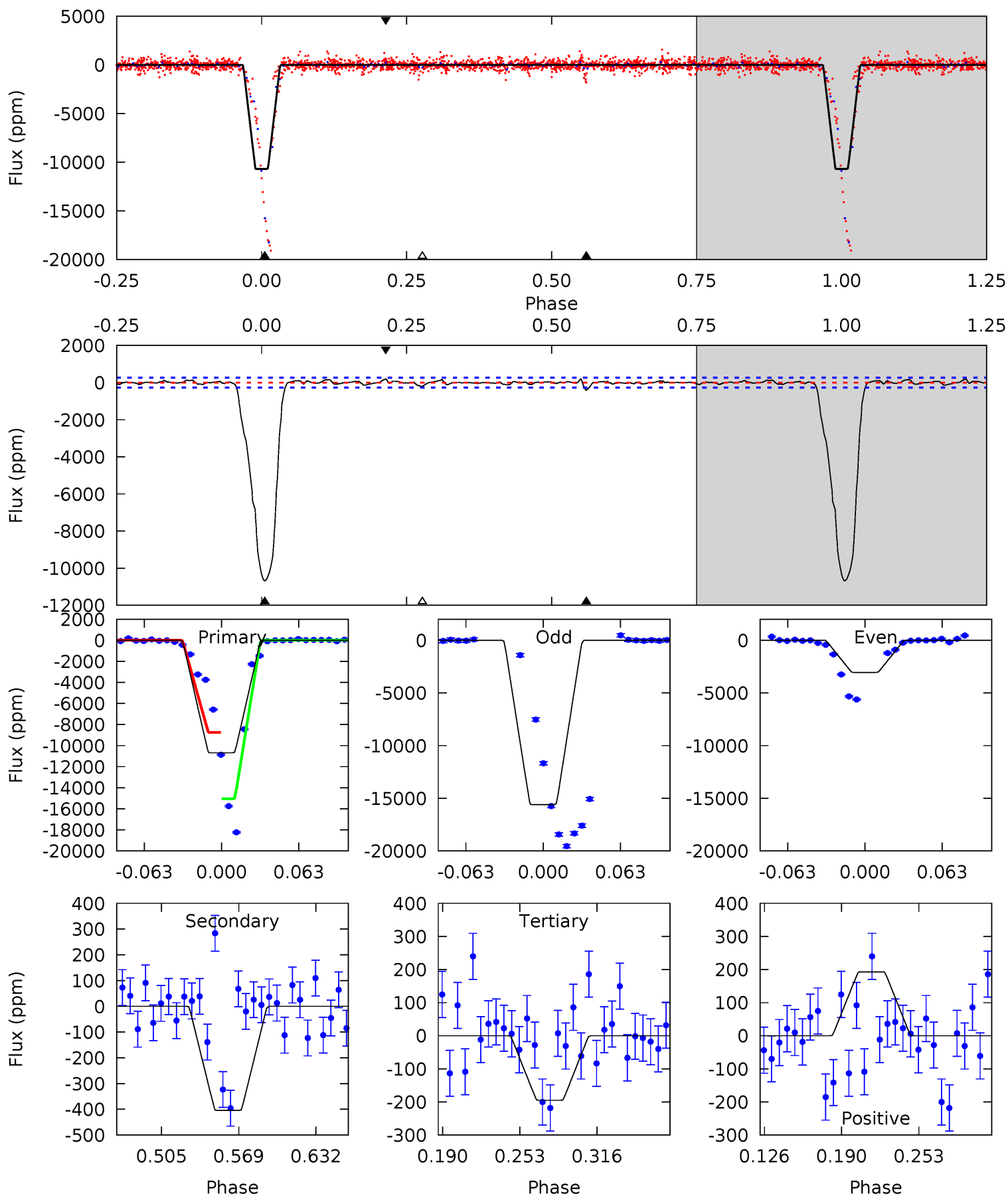
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
1.13	2.39	2.38	2.67	4.74	2.03	1.18	-1.25	-1.54	0.01	-0.28	0.72	0.12	0.53	0.60



Alt Model-Shift Uniqueness Test

009119652-02, P = 11.633867 Days, E = 136.794554 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
187.2	7.09	3.42	3.38	4.66	1.86	1.06	183.8	183.8	3.67	3.70	106.1	0.50	0.02	54.3



Stellar Parameters For KIC 009119652

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	$M(M_{\odot})$	p_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	5299^{+204}_{-167}	$3.865^{+0.742}_{-0.318}$	$-0.440^{+0.350}_{-0.250}$	$1.769^{+1.081}_{-1.081}$	$0.837^{+0.139}_{-0.114}$	$0.213^{+2.399}_{-0.161}$
	+4%/-3%	+19%/-8%	+80%/-57%	+61%/-61%	+17%/-14%	+1127%/-76%
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 009119652-02 / KOI

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	-235 ± 98	$10.99^{+7.81}_{-6.15}$	1389^{+230}_{-245}	3164^{+796}_{-451}	$8.781^{+36.610}_{-6.091}$
Alt.	-404 ± 57	$13.24^{+9.60}_{-7.05}$	1395^{+207}_{-239}	3265^{+786}_{-376}	11^{+36}_{-8}

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 $A_{\text{obs}} \gg 1.0$

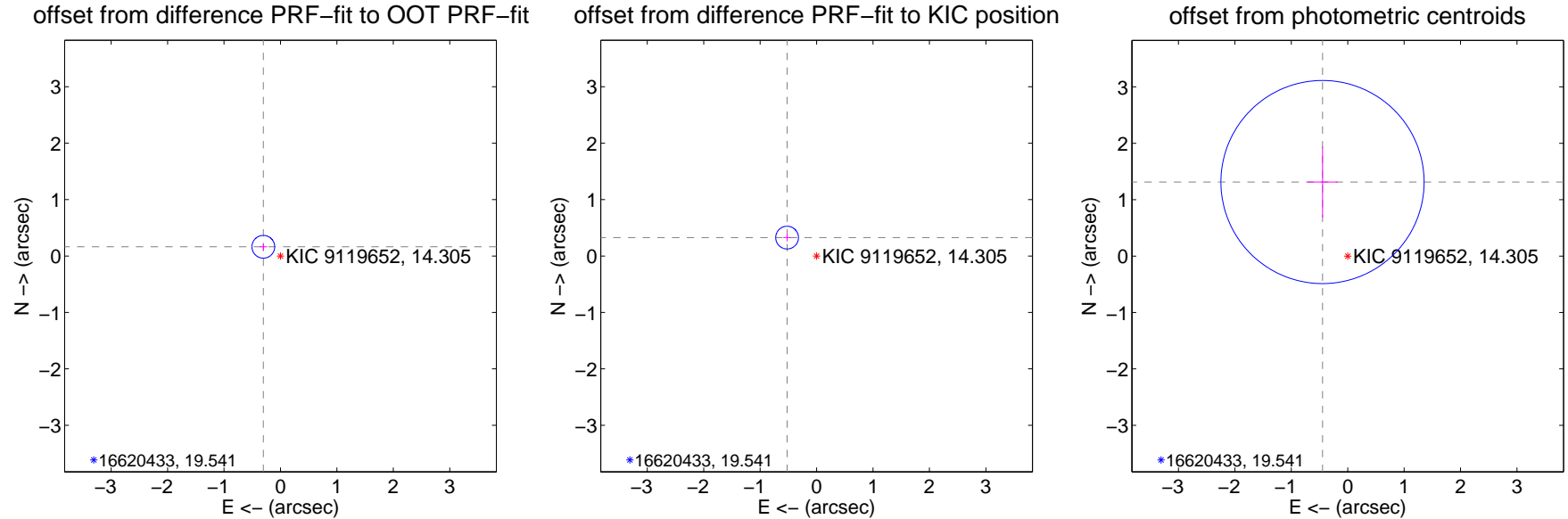
DV Centroid Data

Supplemental centroid analysis for 009119652-02. Kepler magnitude: 14.30. Transit SNR 18.02

There are 1 quarters with good PRF difference image offsets

The direct PRF centroid is offset from the target star catalog position by about 0.27 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.345 ± 0.067	5.13	0.303 ± 0.067	0.164 ± 0.067
PRF-fit source offset from KIC position	0.616 ± 0.067	9.17	0.523 ± 0.067	0.327 ± 0.067
photometric centroid source offset	1.39 ± 0.60	2.31	0.45 ± 0.27	1.31 ± 0.63



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.

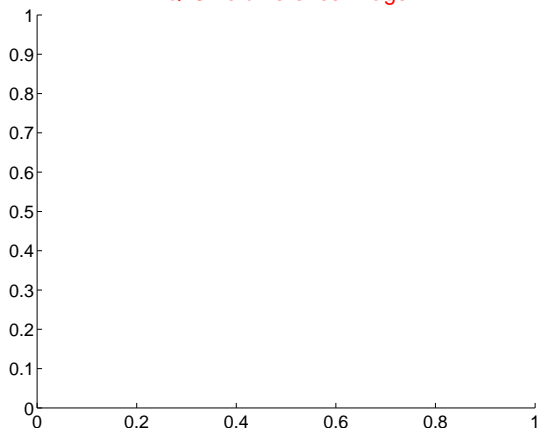


white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.

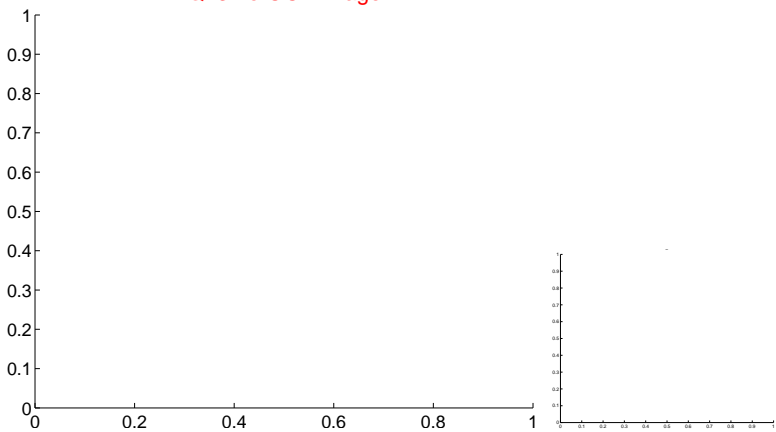


white ×: KIC target position; +: OOT centroid; △: difference centroid. red ✕: large negative pixel value.

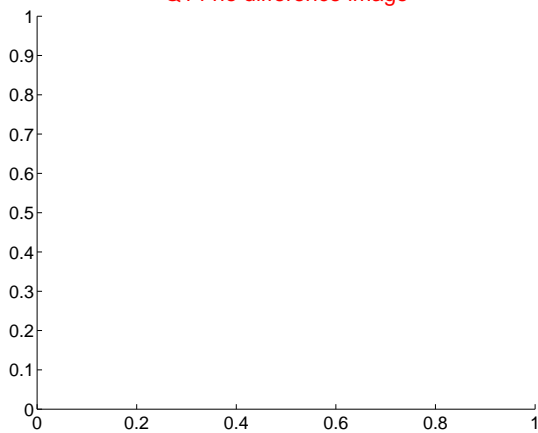
Q13 no difference image



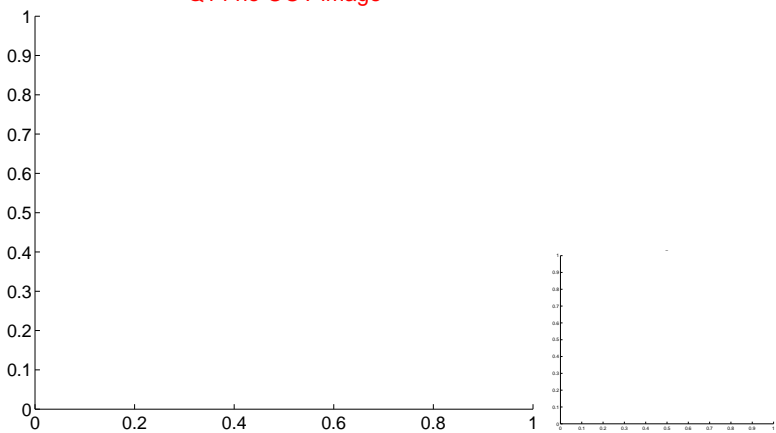
Q13 no OOT image



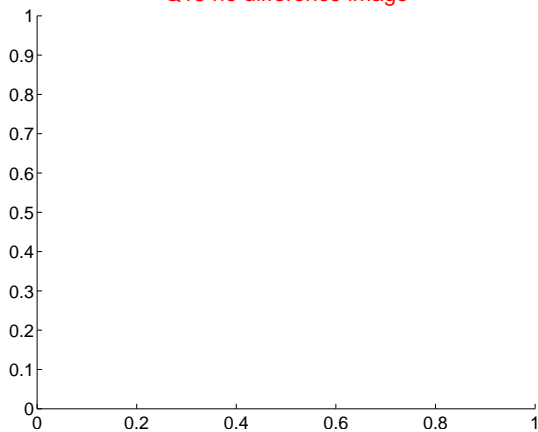
Q14 no difference image



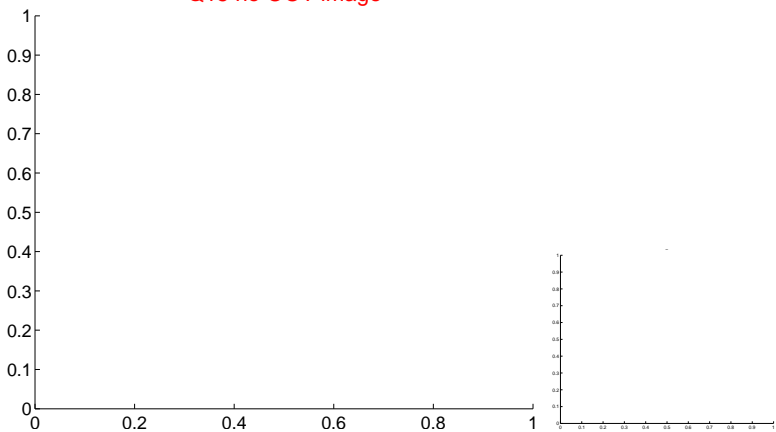
Q14 no OOT image



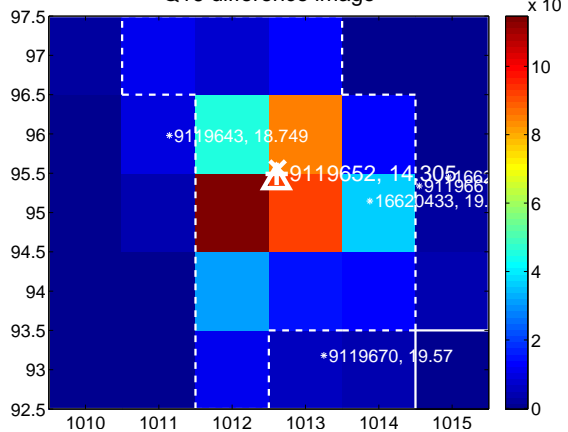
Q15 no difference image



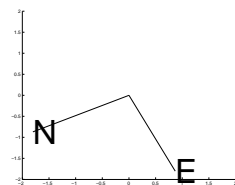
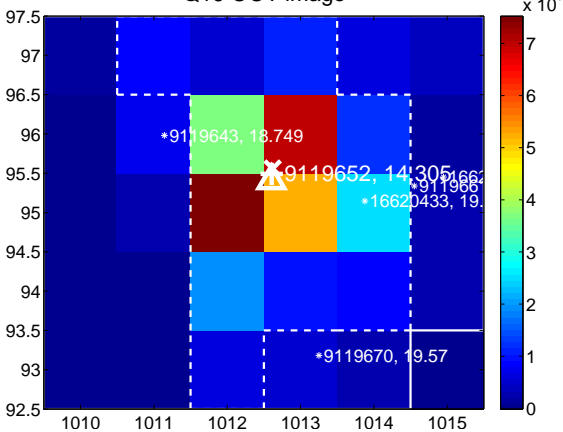
Q15 no OOT image



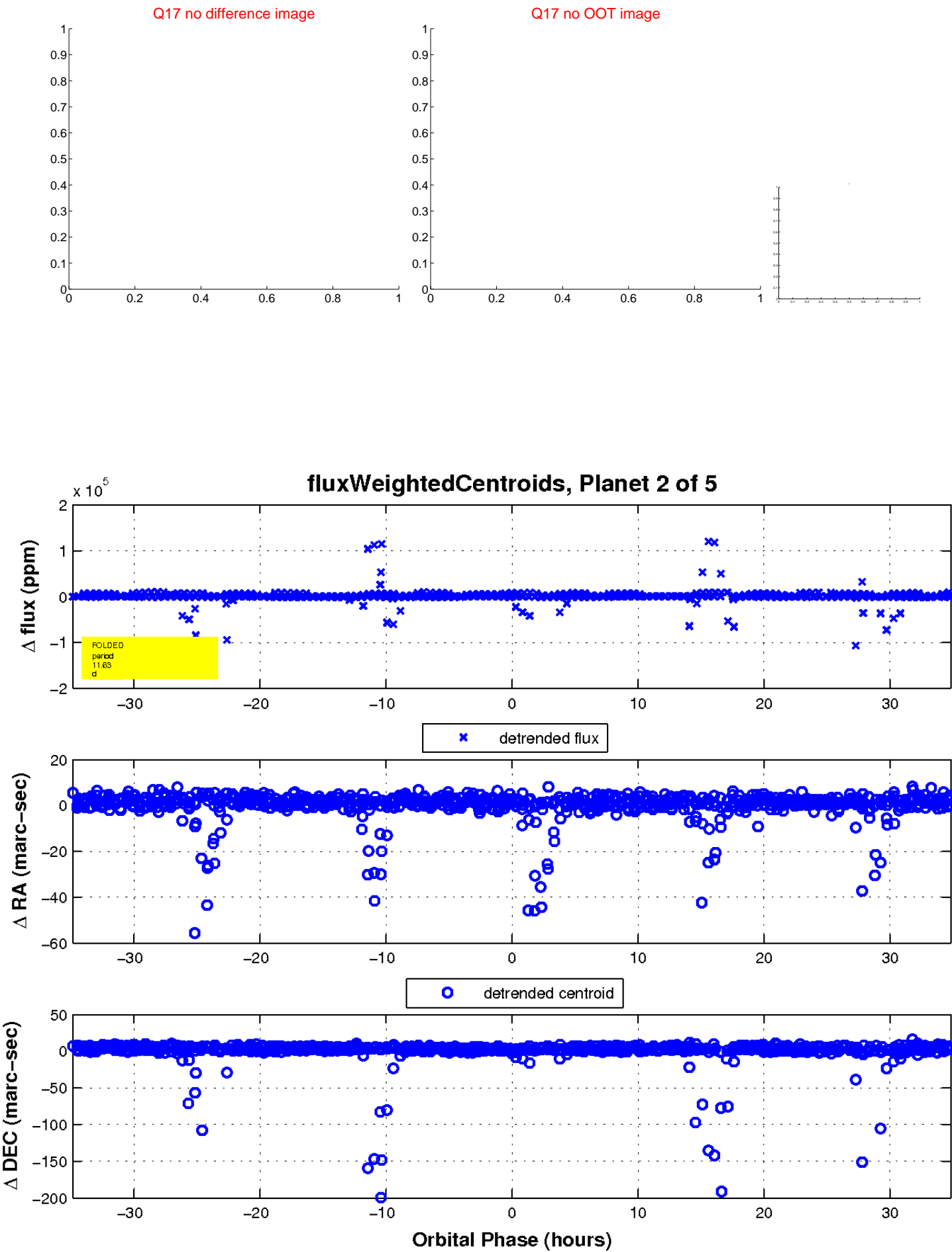
Q16 difference image



Q16 OOT image

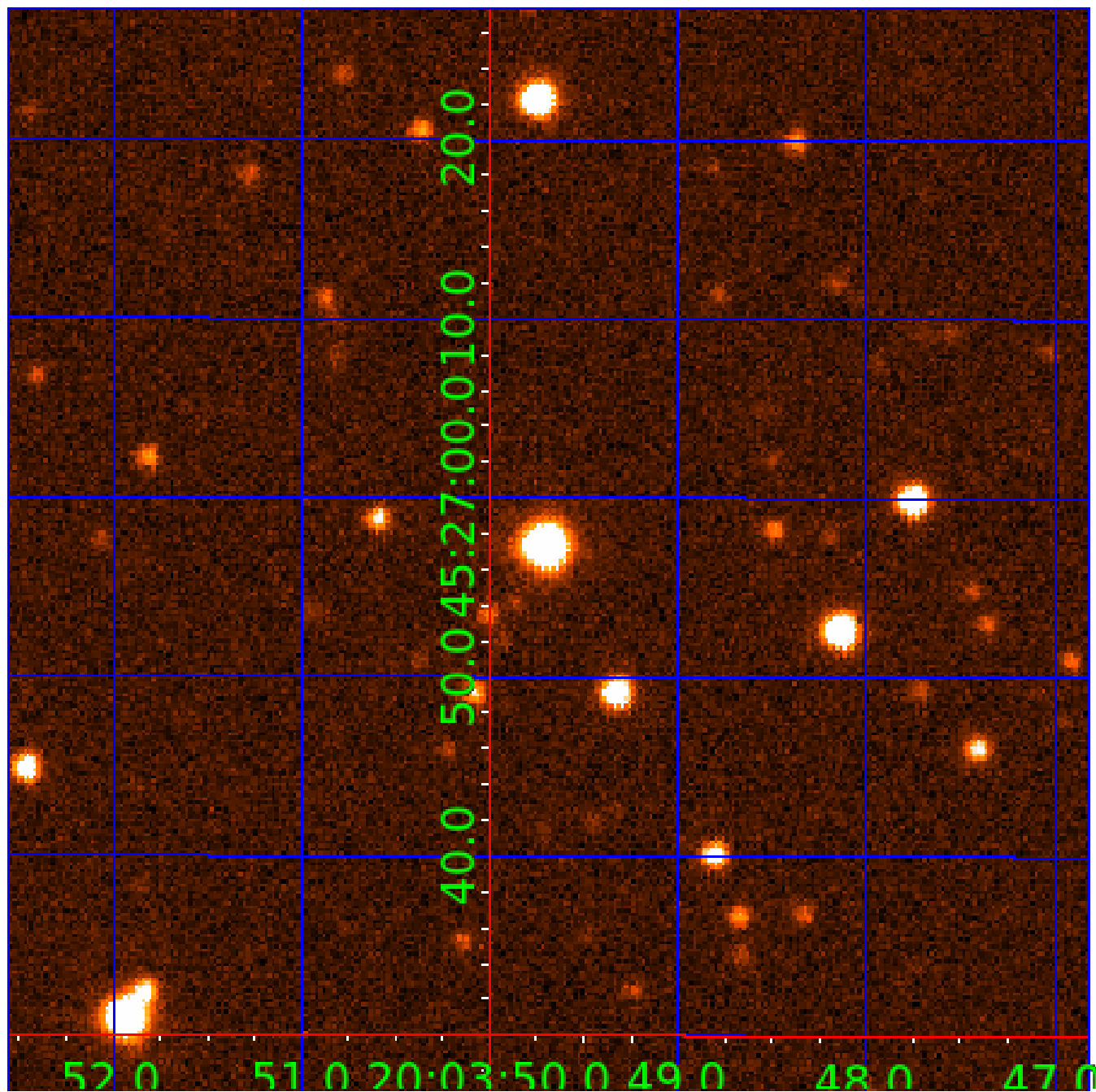


white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



UKIRT Image

Declination



KIC 009119652

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})
009119652-01	OBS	6193.01	1.108110	131.709110	384027.5	2.000	6787.8	-1.0	1.77	5299	86.18	5667.33
009119652-02	OBS	No	11.625537	137.742227	4487.4	11.615	295.9	18.0	1.77	5299	11.64	246.76
009119652-03	OBS	No	1.108030	132.362392	3740.6	3.500	127.6	-1.0	1.77	5299	10.65	5667.87
009119652-04	OBS	No	5.295568	136.426620	4652.9	1.500	36.5	-1.0	1.77	5299	11.93	704.05
009119652-05	OBS	No	1.099190	132.505427	4777.3	3.500	27.1	-1.0	1.77	5299	12.04	5728.73

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
009119652-01	OBS	FP	0.00	0	1	0	0	DEPTH_ODDEVEN_DV—DEPTH_ODDEVEN_ALT—MOD_ODDEVEN_ALT—HAS_SEC_TCE—CENT_NOFITS
009119652-02	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_SKYE_TRACKER—LPP_DV—MOD_NONUNIQ_DV—MOD_TER_DV—CENT_FEW_DIFFS
009119652-03	OBS	FP	0.00	1	1	1	0	IS_SEC_TCE—CENT_NOFITS—HALO_GHOST
009119652-04	OBS	FP	0.00	1	0	0	0	TRANS_GAPPED—LPP_DV—LPP_ALT—ALL_TRANS_CHASES—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—CENT_NOFITS
009119652-05	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_ZUMA—TRANS_GAPPED—SWEET_NTL—LPP_DV—LPP_ALT—MOD_NONUNIQ_ALT—CENT_NOFITS

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 009119652-03

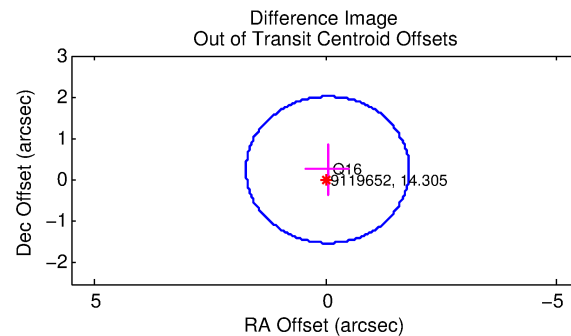
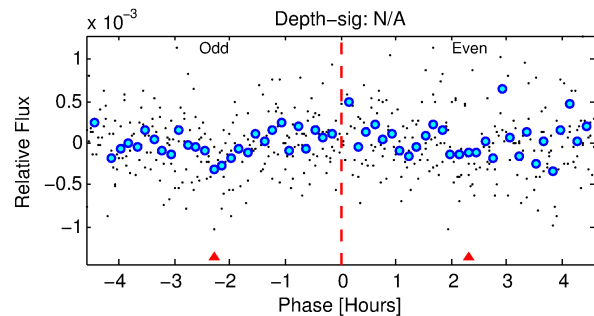
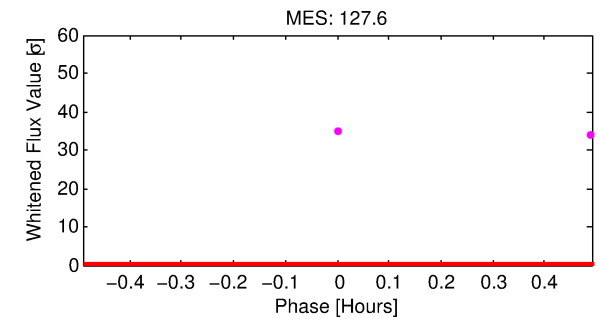
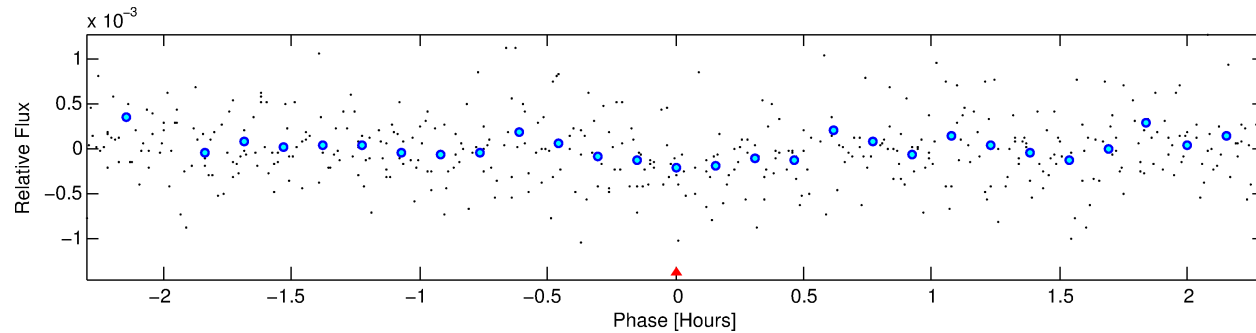
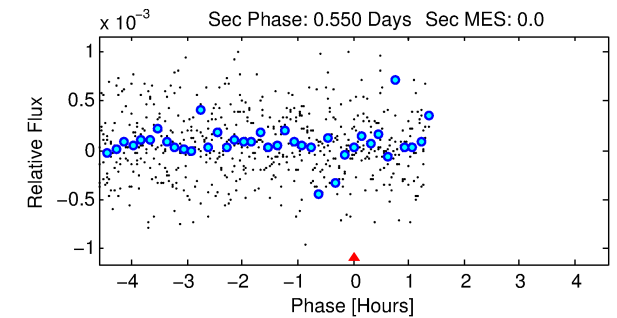
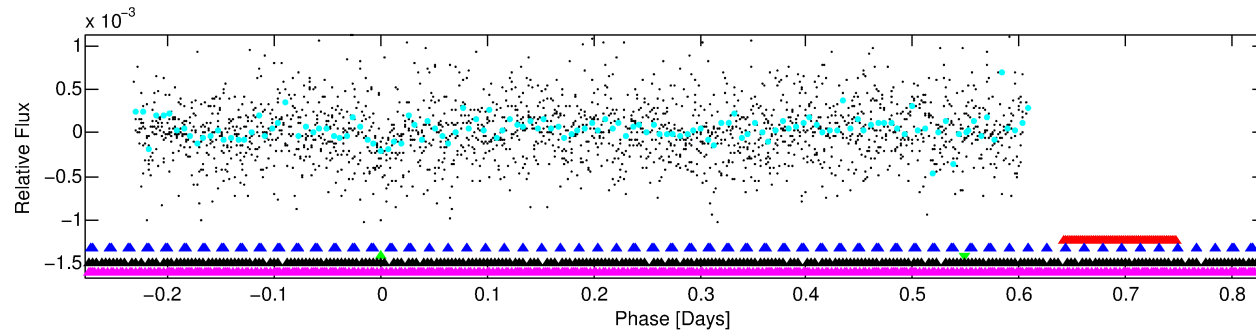
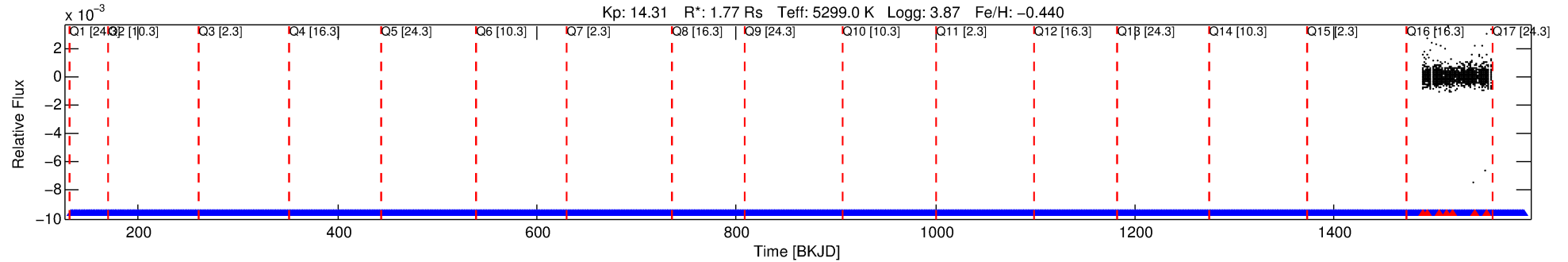
No Significant Match Found

DV One-Page Summary

KIC: 9119652 Candidate: 3 of 5 Period: 1.108 d

KOI: K06193 Corr: No Ephemeris Match

Kp: 14.31 R*: 1.77 Rs Teff: 5299.0 K Logg: 3.87 Fe/H: -0.440



TPS TCE Results:

Period = 1.10803 d
Epoch = 132.3624 BKJD

DV fit results are unavailable

DV Diagnostic Results:

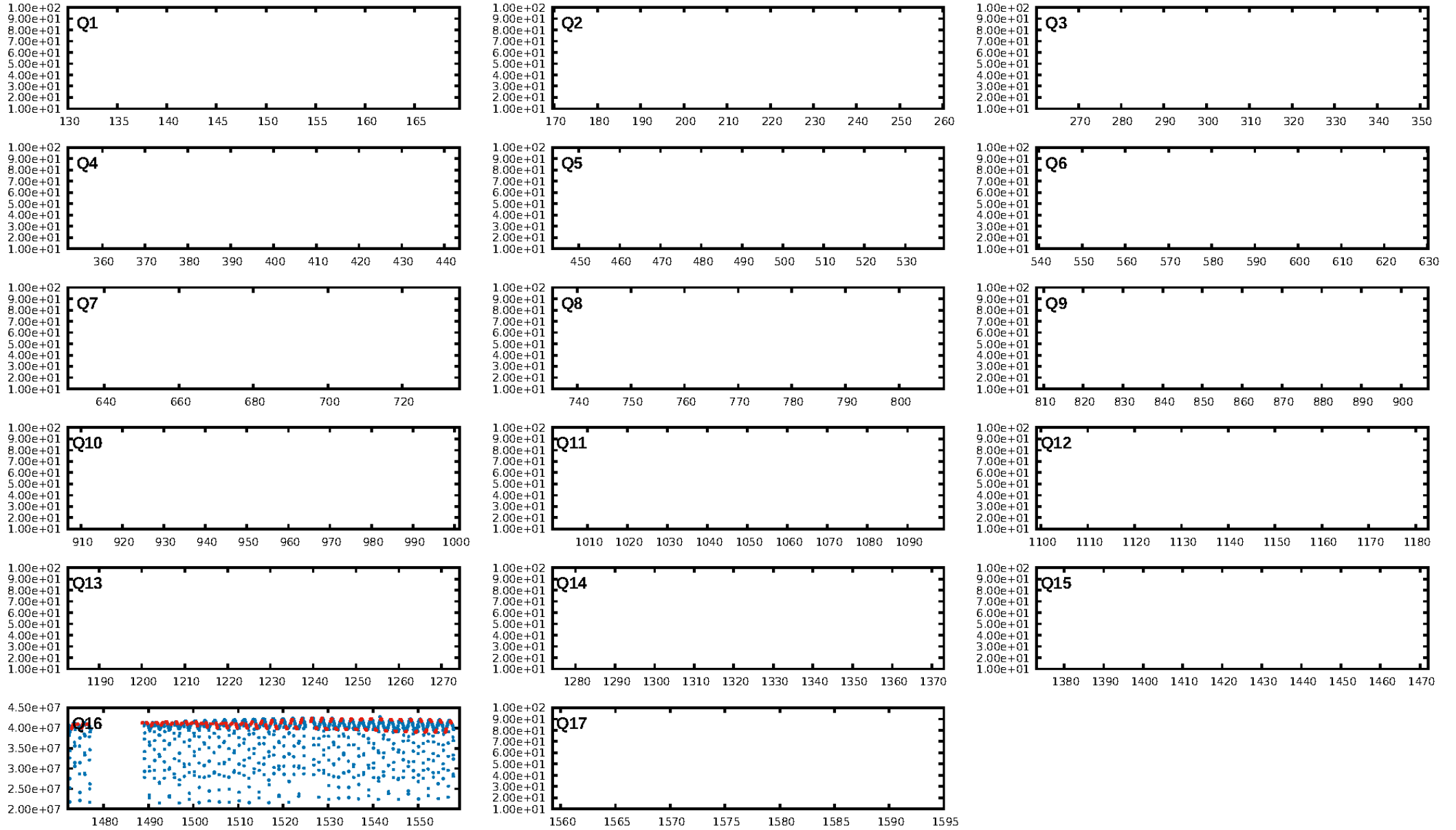
ShortPeriod-sig: 3.4% [0.04σ]
LongPeriod-sig: 0.0% [0.00σ]
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: N/A
RollingBand-fgt: 0.87 [45/52]
GhostDiagnostic-chr: 0.04348

Centroid-sig: N/A
Centroid-so: 5.743 arcsec [1.33σ]
OotOffset-rm: 0.255 arcsec [0.43σ]
KicOffset-rm: 0.412 arcsec [0.71σ]
OotOffset-st: 0/0/1/0 [1]
KicOffset-st: 0/0/1/0 [1]
DiffImageQuality-fgm: 0.00 [0/1]
DiffImageOverlap-fno: 1.00 [1/1]

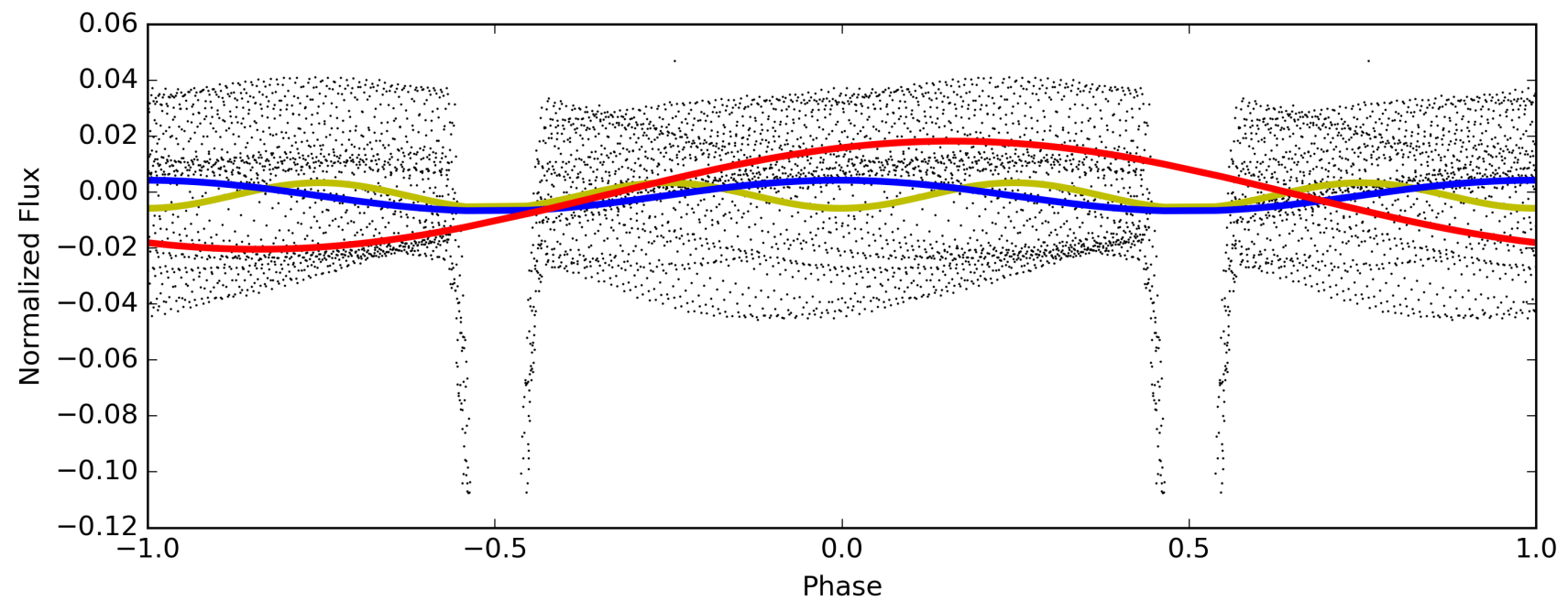
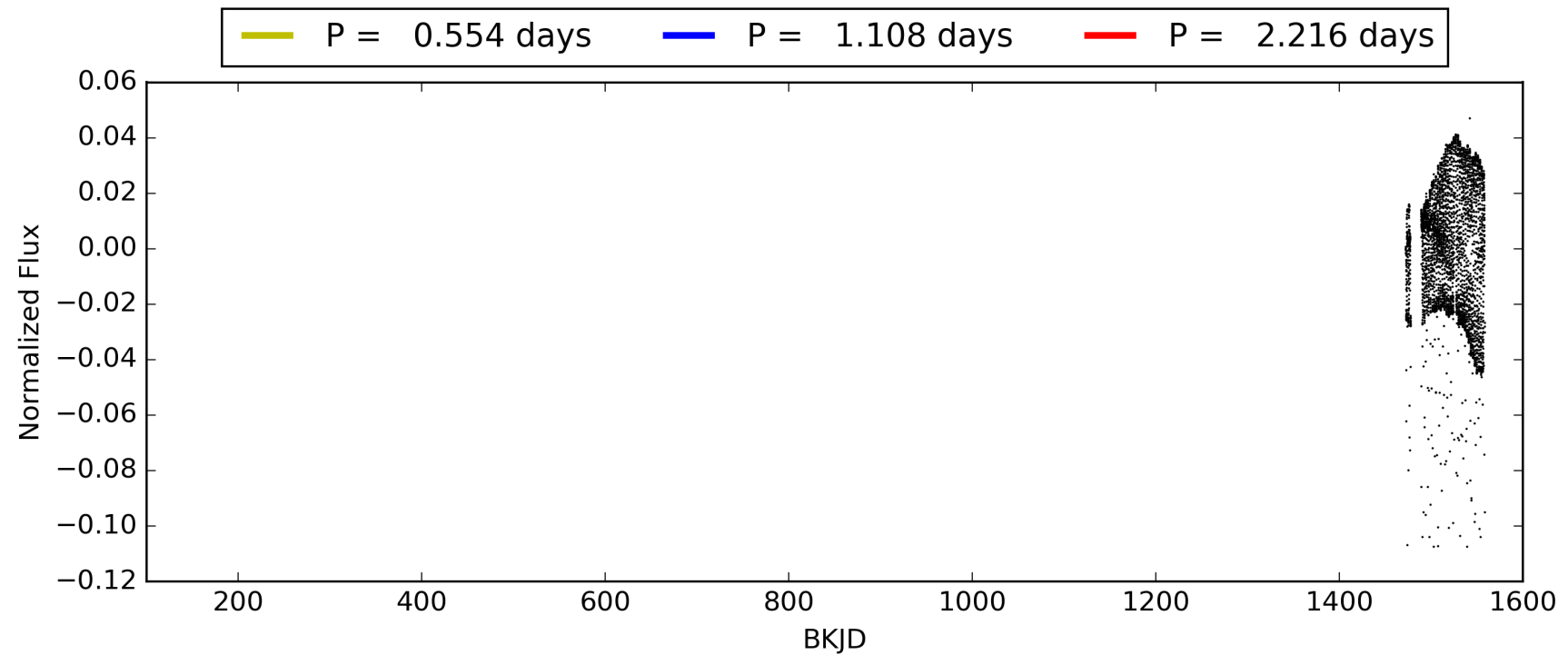
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 01-Feb-2016 12:46:47 Z

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

TCE 009119652-03, PDC Light Curves

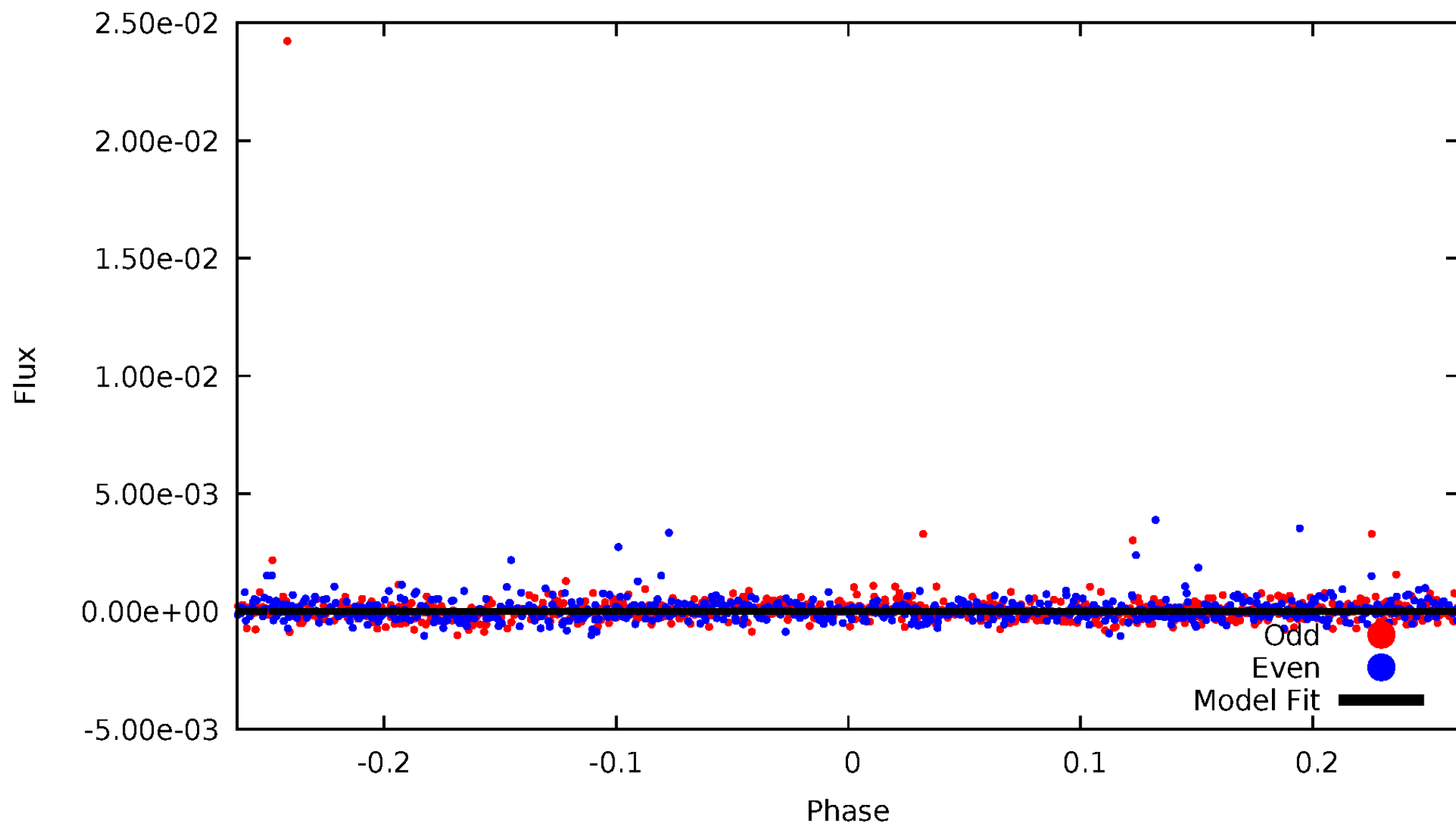


TCE 009119652-03



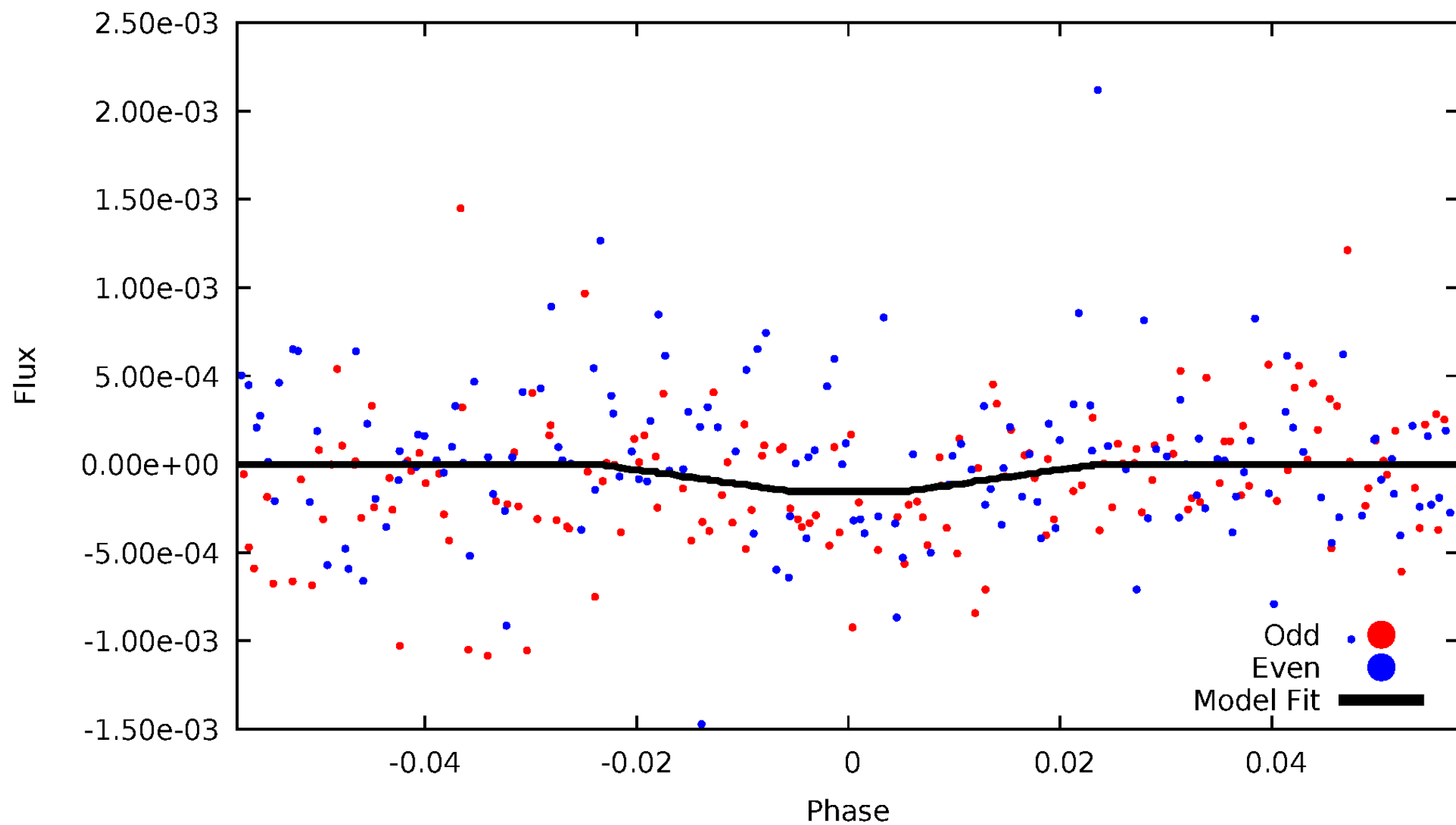
DV Odd/Even

TCE 009119652-03



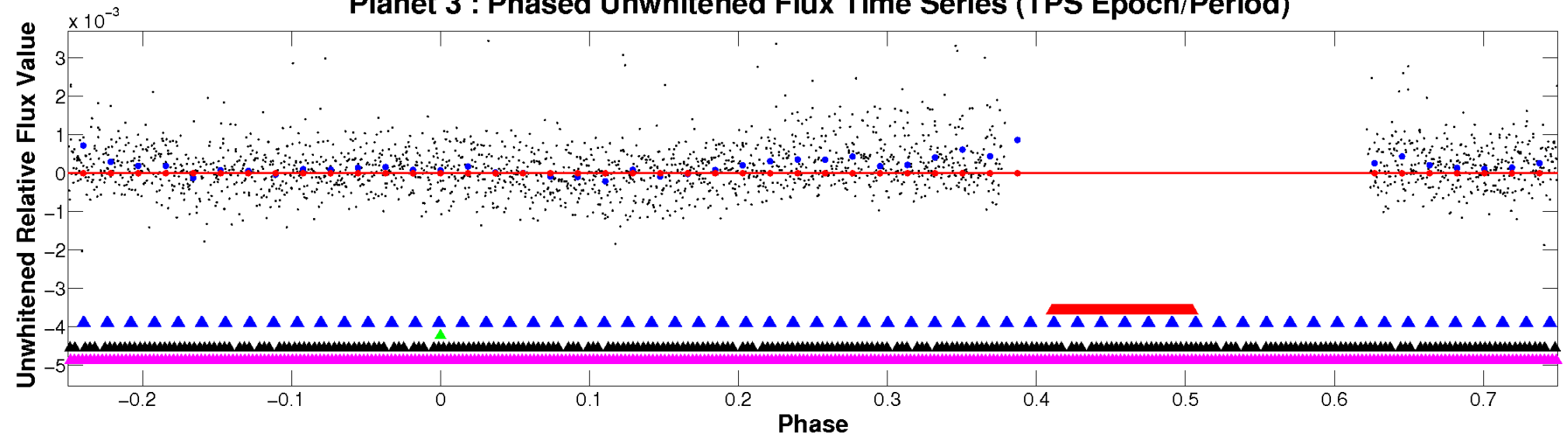
ALT Odd/Even

TCE 009119652-03



Non-Whitened Vs. Whitened Light Curve

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

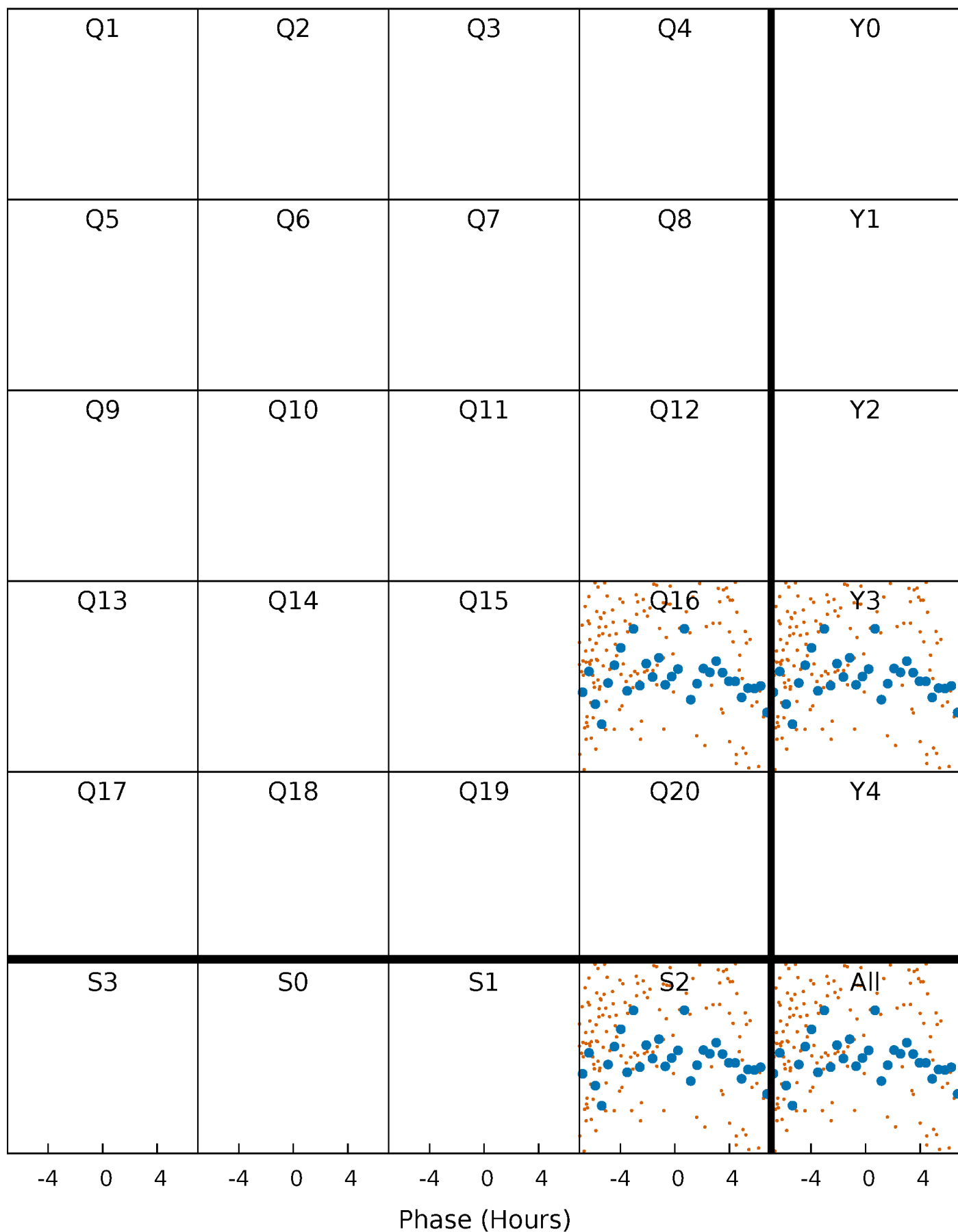


Planet 3 : Phased Whitened Flux Time Series (TPS Epoch/Period)



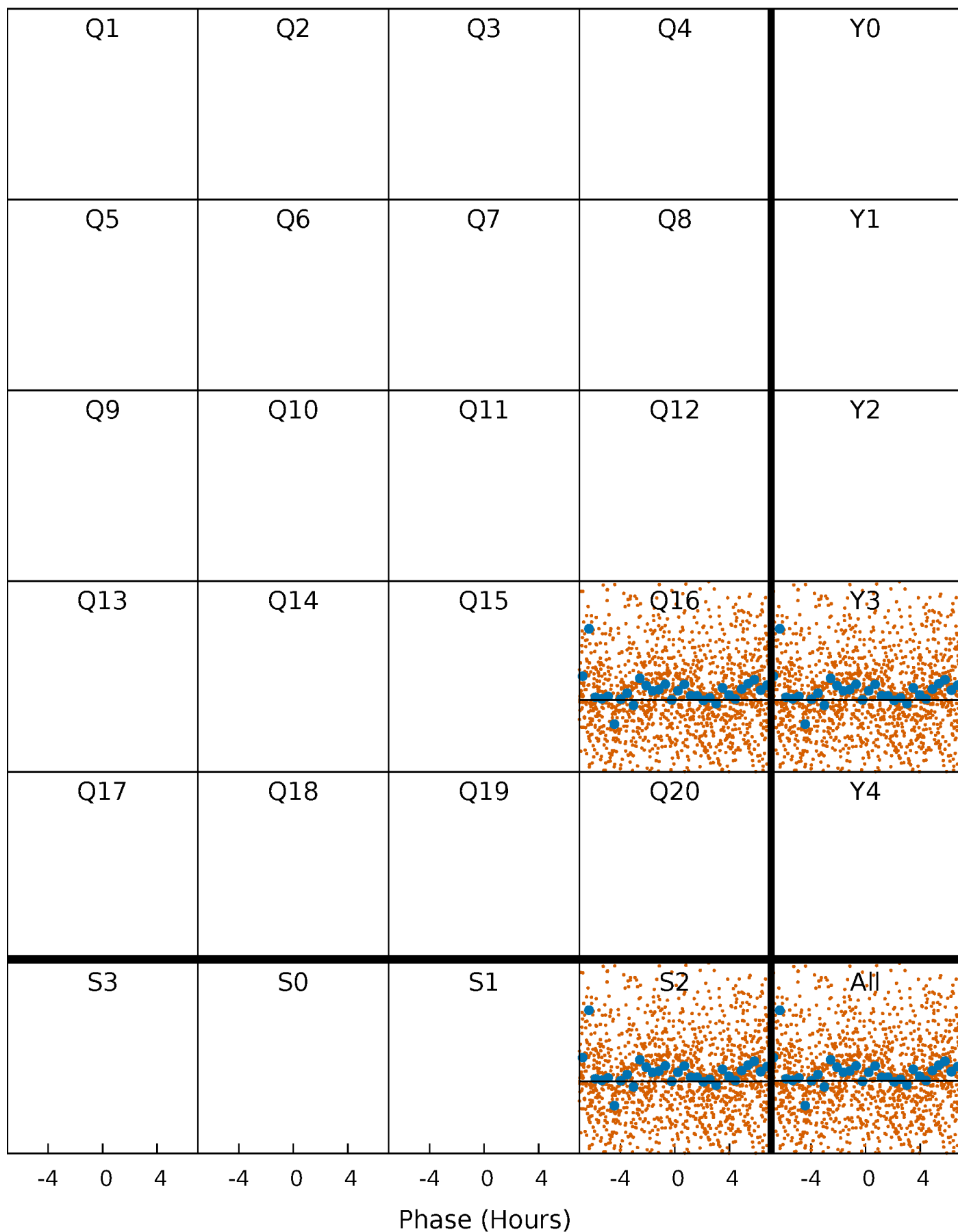
PDC Quarter-Phased Transit Curves

TCE 009119652-03 P= 1.108030 Days $T_0=132.362392$ (BKJD)



DV Quarter-Phased Transit Curves

TCE 009119652-03 P= 1.108030 Days $T_0=132.362392$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

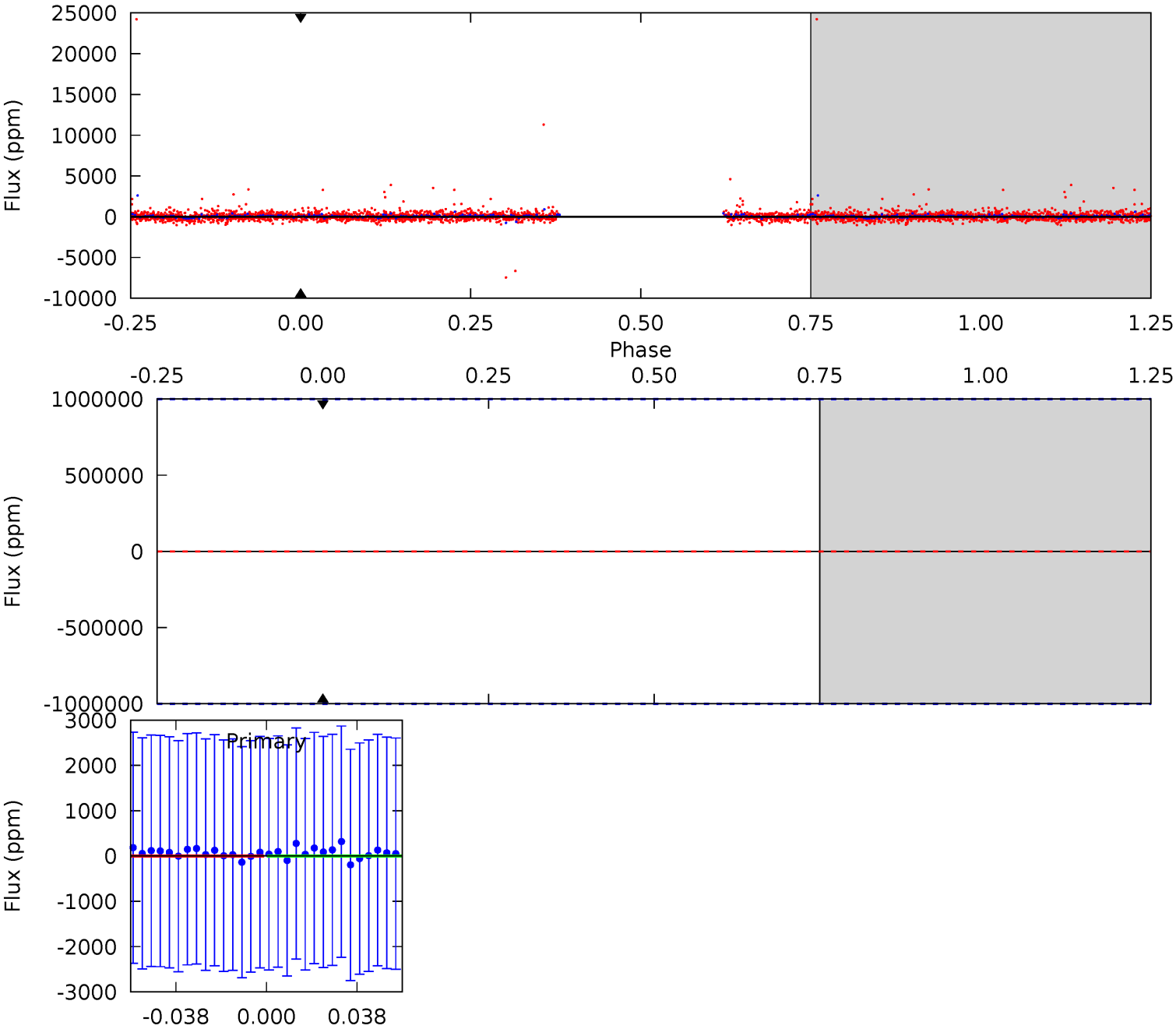
TCE 009119652-03 P= 1.108030 Days $T_0=132.175288$ (BKJD)



DV Model-Shift Uniqueness Test

009119652-03, P = 1.108030 Days, E = 132.362392 Days

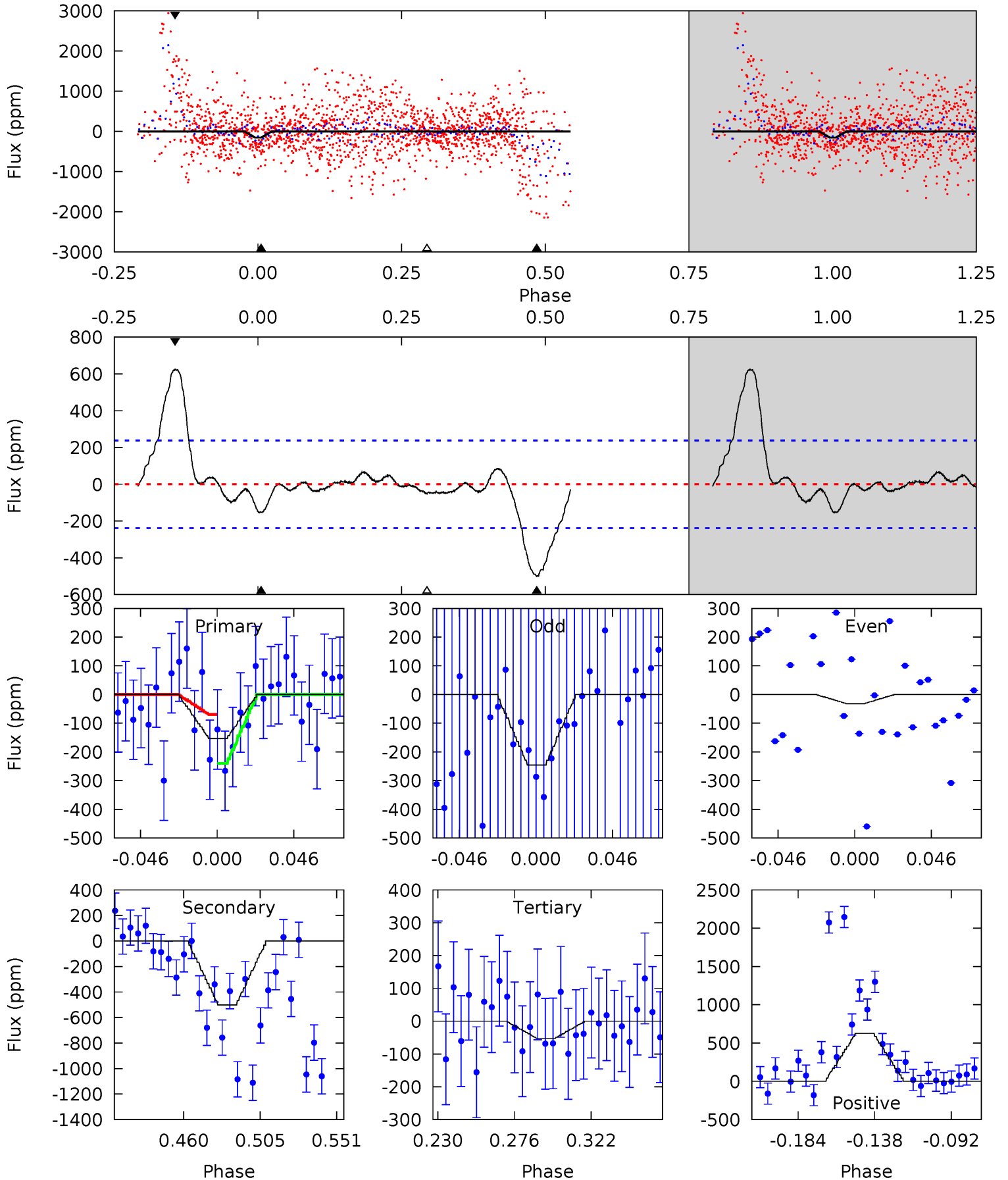
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
0	0	0	0	1.00	1.00	1.00	0	0	0	0	0	0	0	0



Alt Model-Shift Uniqueness Test

009119652-03, P = 1.108030 Days, E = 132.175288 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
3.04	9.93	1.04	12.4	4.73	2.00	2.47	2.00	-9.37	8.89	-2.47	1.86	0.81	0.56	1.42



Stellar Parameters For KIC 009119652

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	$M(M_{\odot})$	p_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	5299^{+204}_{-167}	$3.865^{+0.742}_{-0.318}$	$-0.440^{+0.350}_{-0.250}$	$1.769^{+1.081}_{-1.081}$	$0.837^{+0.139}_{-0.114}$	$0.213^{+2.399}_{-0.161}$
	+4%/-3%	+19%/-8%	+80%/-57%	+61%/-61%	+17%/-14%	+1127%/-76%
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 009119652-03 / KOI

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	0 ± 1000000	$16.54^{+17.40}_{-10.85}$	3000^{+482}_{-549}	-3918^{+16852}_{-7906}	$-1.111^{+160.527}_{-107.204}$
Alt.	-501 ± 50	$12.45^{+15.57}_{-8.75}$	3032^{+510}_{-479}	3079^{+2083}_{-5986}	$0.685^{+6.901}_{-0.545}$

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 $A_{\text{obs}} \gg 1.0$

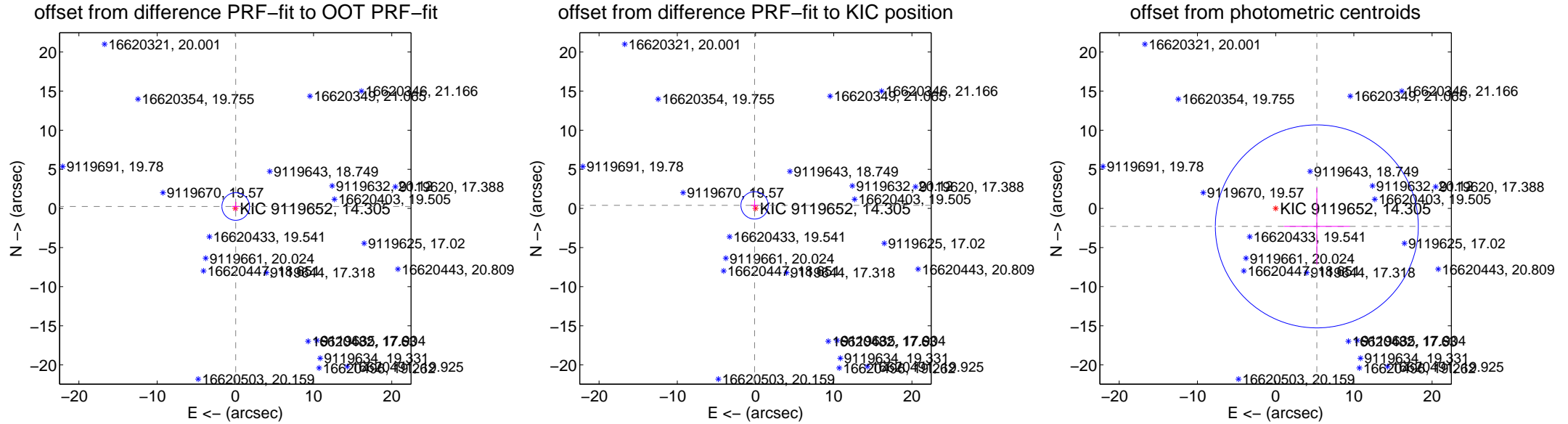
DV Centroid Data

Supplemental centroid analysis for 009119652-03. Kepler magnitude: 14.30. Transit SNR -1.00

There are 0 quarters with good PRF difference image offsets

The direct PRF centroid is offset from the target star catalog position by about 0.22 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.255 ± 0.588	0.43	-0.047 ± 0.457	0.251 ± 0.592
PRF-fit source offset from KIC position	0.412 ± 0.583	0.71	0.116 ± 0.457	0.395 ± 0.592
photometric centroid source offset	5.74 ± 4.32	1.33	-5.26 ± 4.21	-2.29 ± 4.90



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.



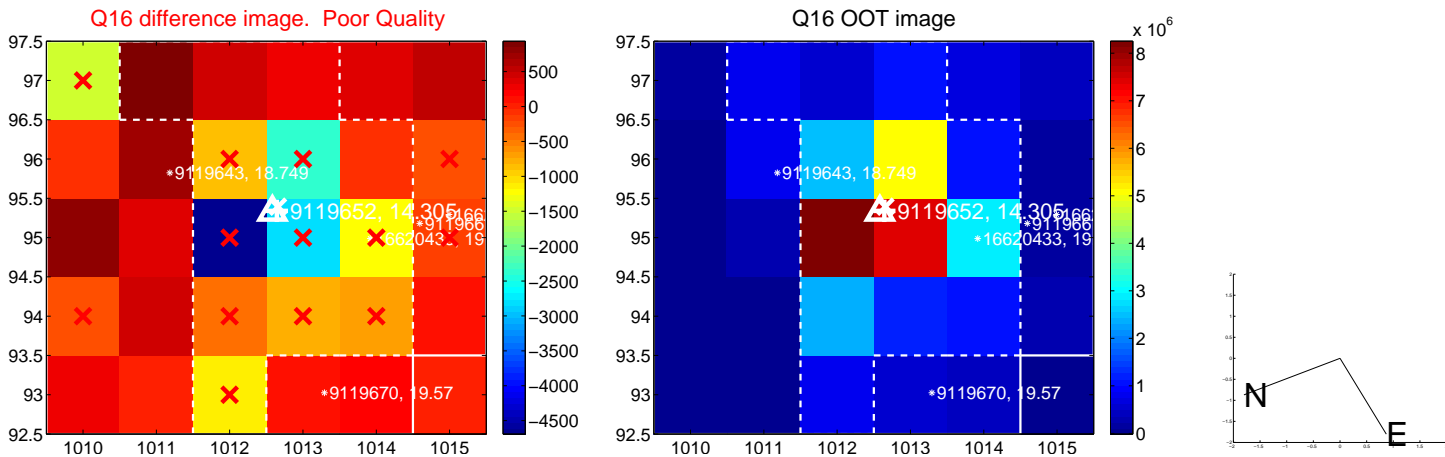
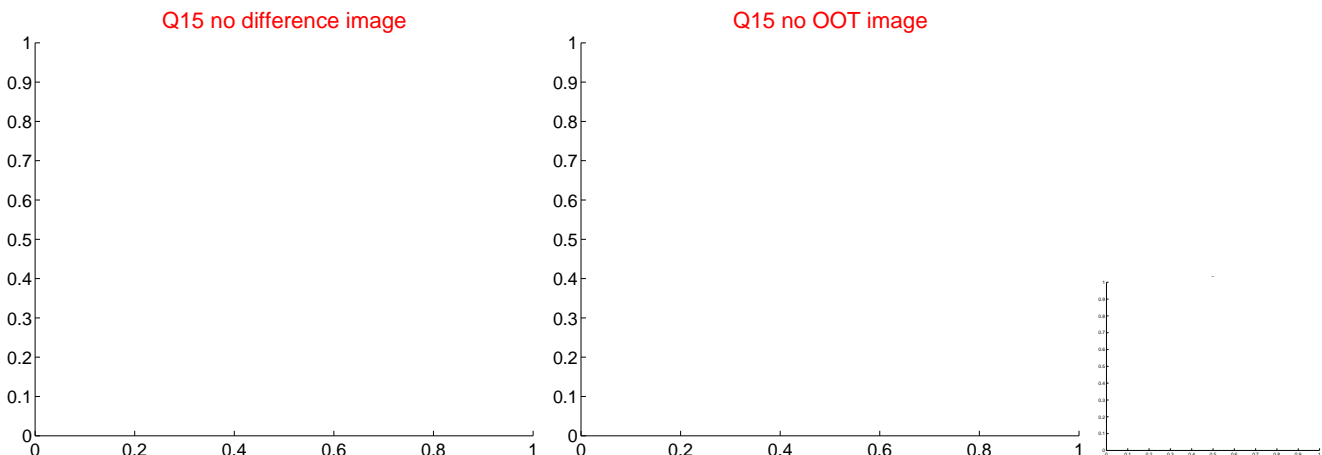
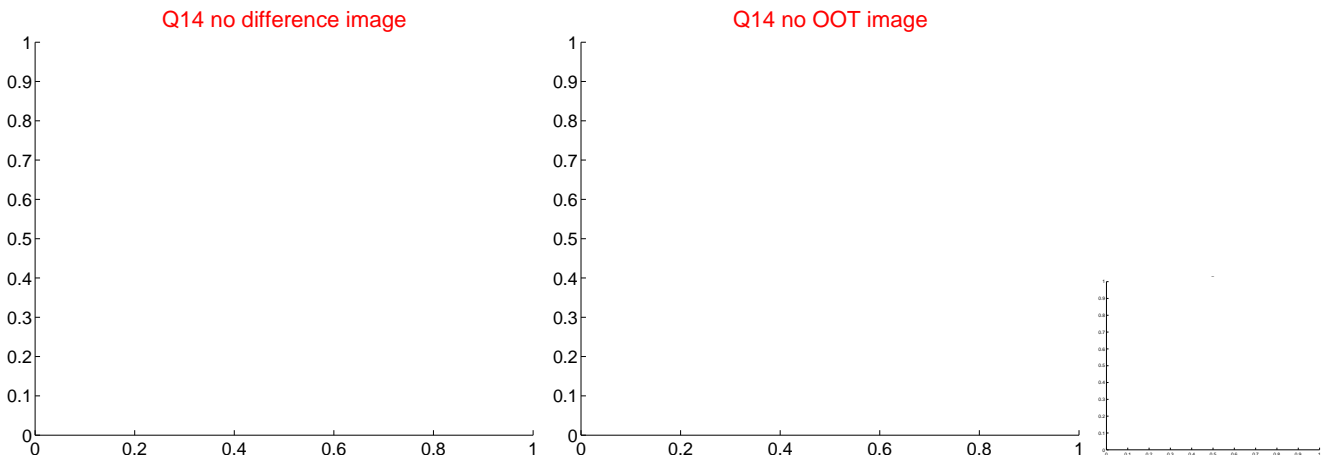
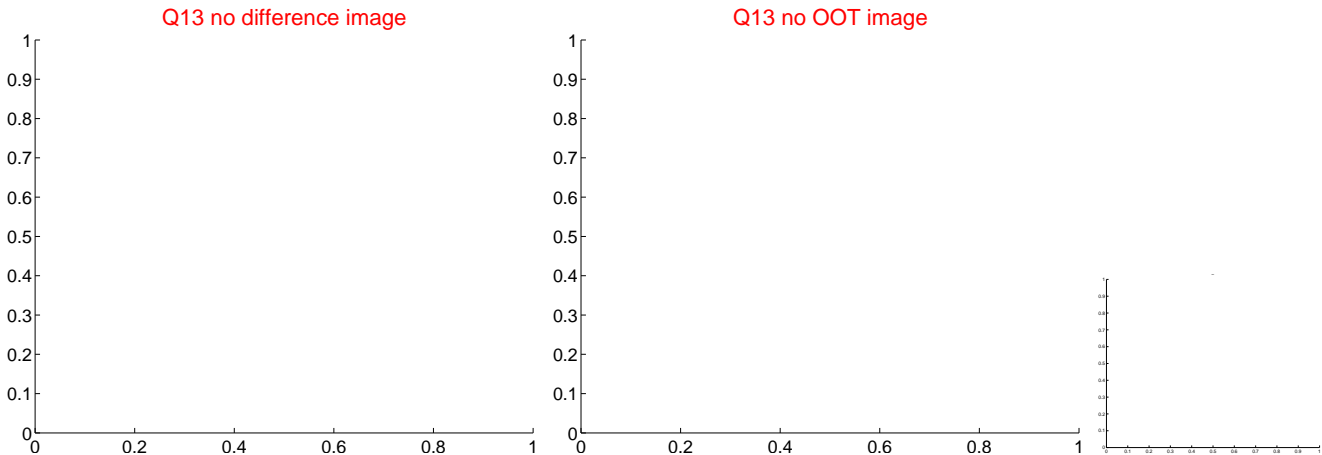
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



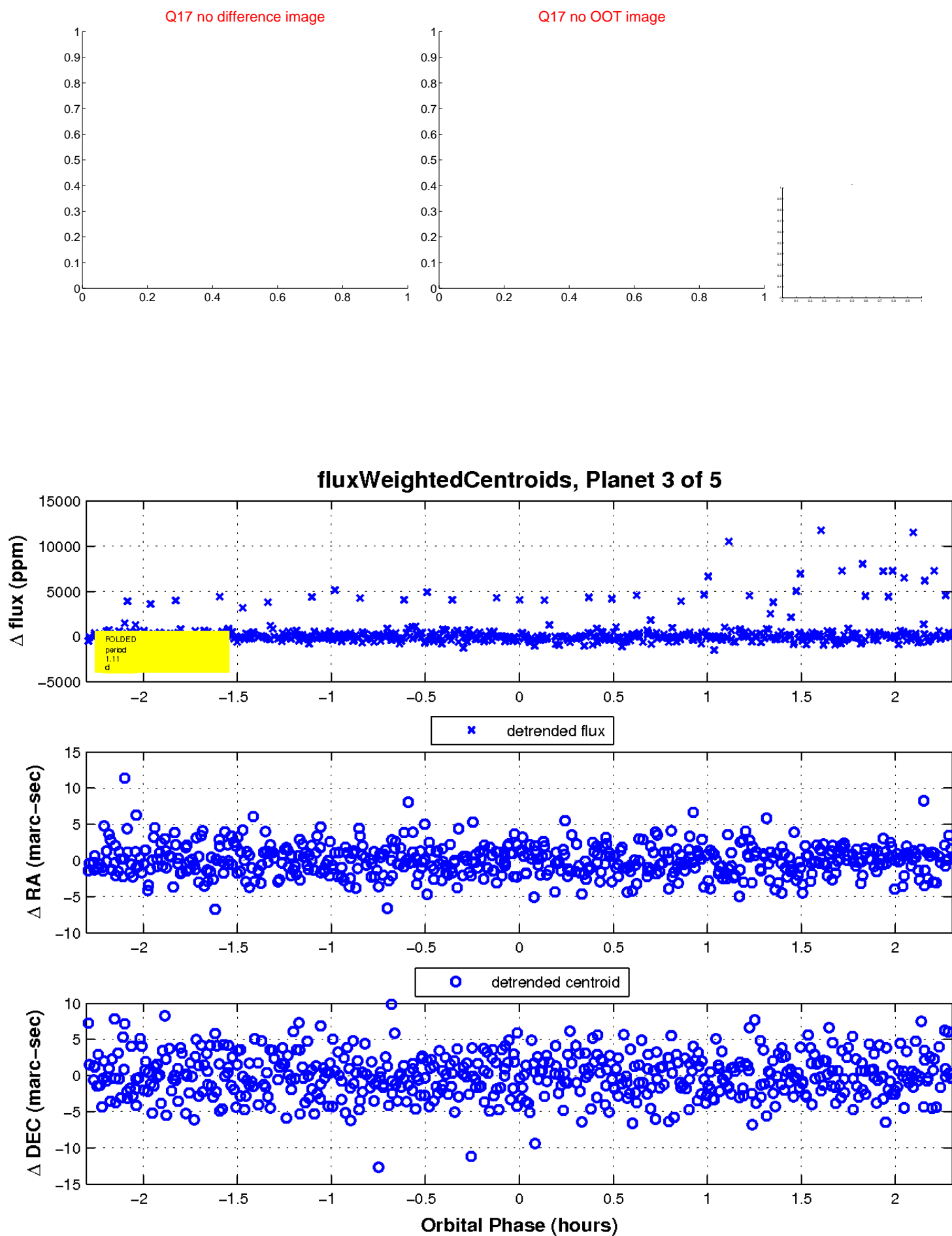
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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

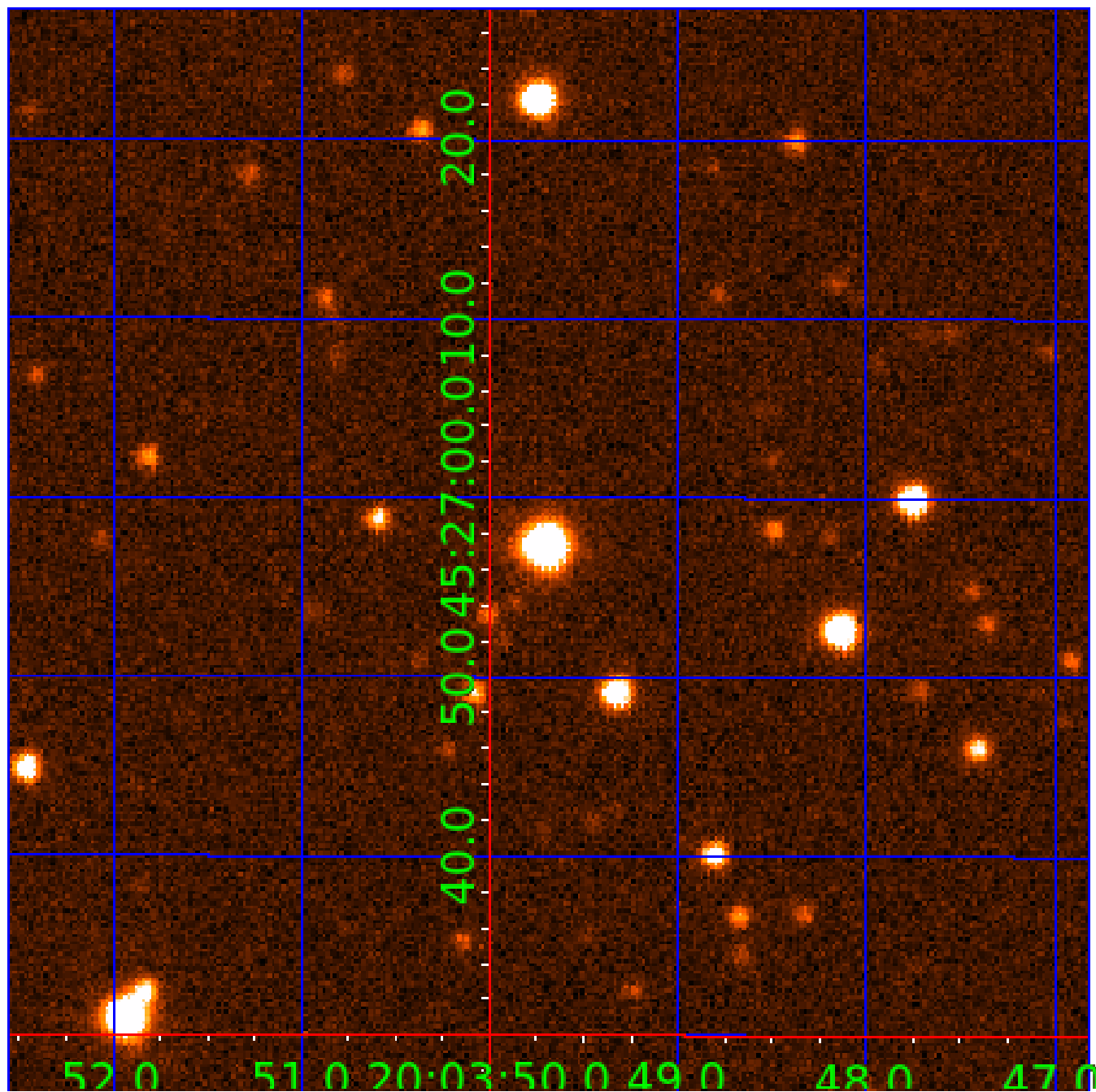


white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



UKIRT Image

Declination



KIC 009119652

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})
009119652-01	OBS	6193.01	1.108110	131.709110	384027.5	2.000	6787.8	-1.0	1.77	5299	86.18	5667.33
009119652-02	OBS	No	11.625537	137.742227	4487.4	11.615	295.9	18.0	1.77	5299	11.64	246.76
009119652-03	OBS	No	1.108030	132.362392	3740.6	3.500	127.6	-1.0	1.77	5299	10.65	5667.87
009119652-04	OBS	No	5.295568	136.426620	4652.9	1.500	36.5	-1.0	1.77	5299	11.93	704.05
009119652-05	OBS	No	1.099190	132.505427	4777.3	3.500	27.1	-1.0	1.77	5299	12.04	5728.73

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
009119652-01	OBS	FP	0.00	0	1	0	0	DEPTH_ODDEVEN_DV—DEPTH_ODDEVEN_ALT—MOD_ODDEVEN_ALT—HAS_SEC_TCE—CENT_NOFITS
009119652-02	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_SKYE_TRACKER—LPP_DV—MOD_NONUNIQ_DV—MOD_TER_DV—CENT_FEW_DIFFS
009119652-03	OBS	FP	0.00	1	1	1	0	IS_SEC_TCE—CENT_NOFITS—HALO_GHOST
009119652-04	OBS	FP	0.00	1	0	0	0	TRANS_GAPPED—LPP_DV—LPP_ALT—ALL_TRANS_CHASES—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—CENT_NOFITS
009119652-05	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_ZUMA—TRANS_GAPPED—SWEET_NTL—LPP_DV—LPP_ALT—MOD_NONUNIQ_ALT—CENT_NOFITS

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 009119652-04

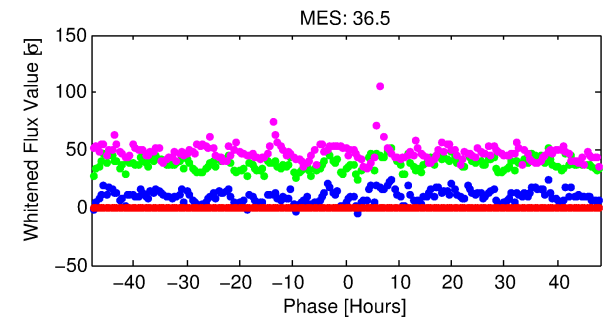
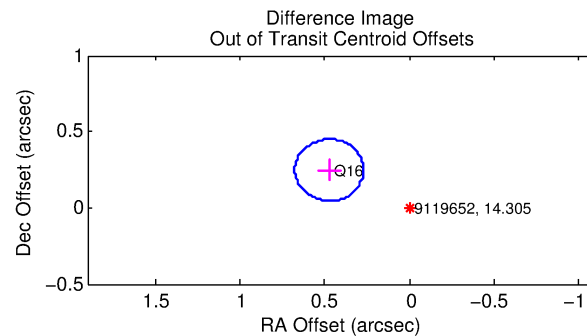
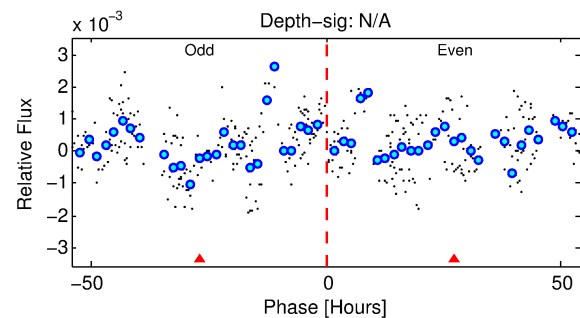
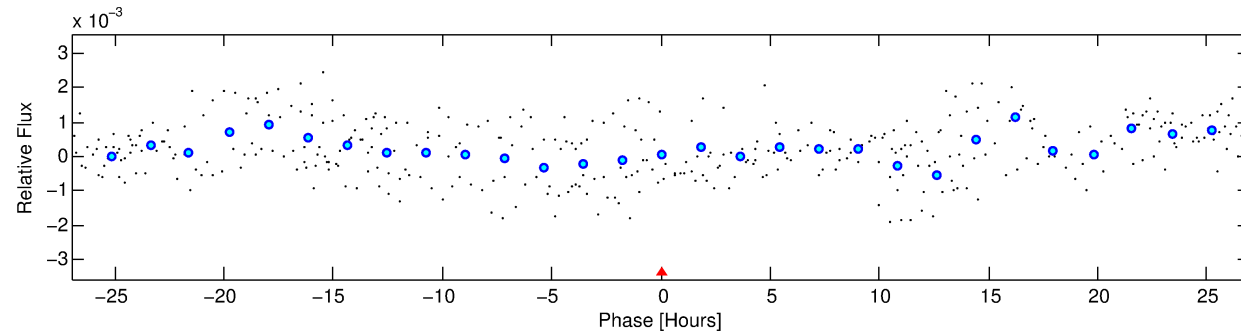
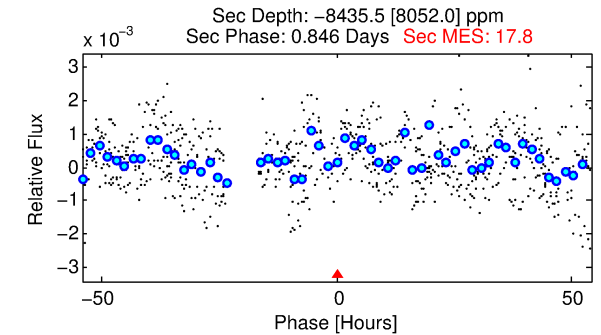
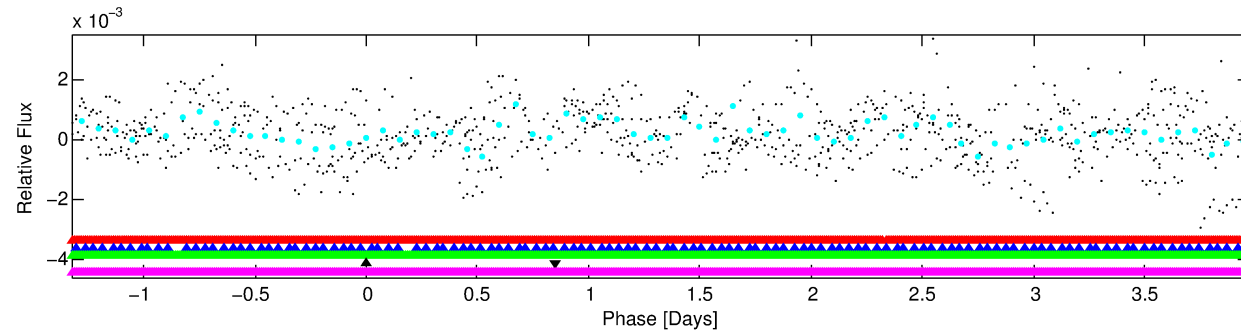
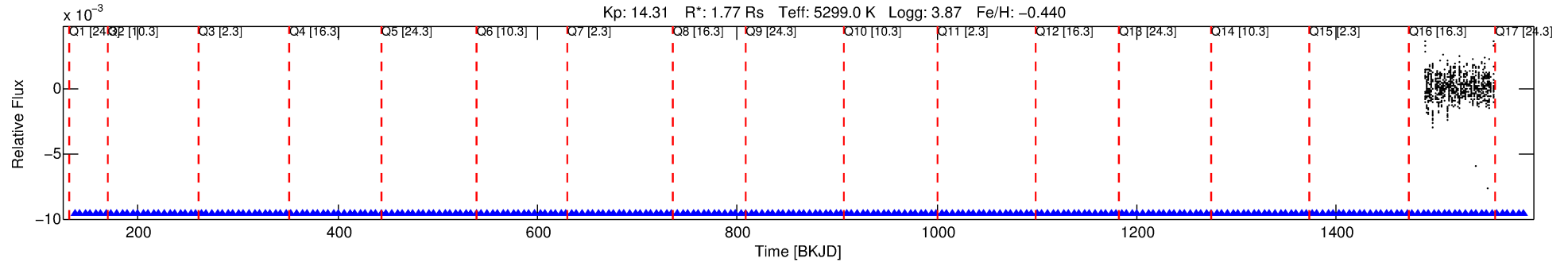
No Significant Match Found

DV One-Page Summary

KIC: 9119652 Candidate: 4 of 5 Period: 5.296 d

KOI: K06193 Corr: No Ephemeris Match

Kp: 14.31 R*: 1.77 Rs Teff: 5299.0 K Logg: 3.87 Fe/H: -0.440



TPS TCE Results:

Period = 5.29557 d
Epoch = 136.4266 BKJD

DV fit results are unavailable

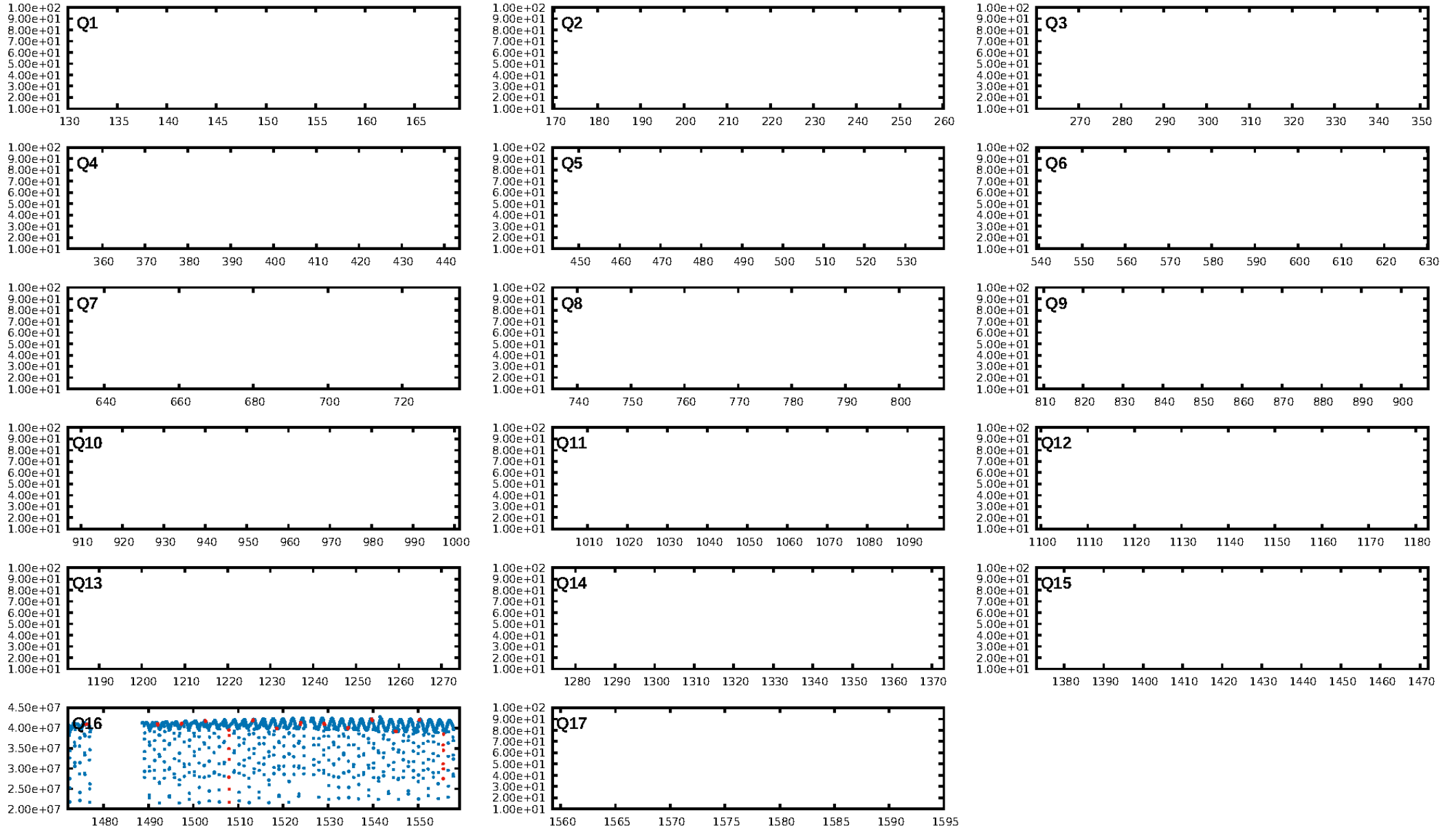
DV Diagnostic Results:

ShortPeriod-sig: 100.0% [40.20σ]
LongPeriod-sig: 100.0% [12.97σ]
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: N/A
RollingBand-fgt: 1.00 [11/11]
GhostDiagnostic-chr: N/A
Centroid-sig: N/A
Centroid-so: N/A
OotOffset-rm: 0.536 arcsec [7.95σ]
KicOffset-rm: 0.762 arcsec [11.29σ]
OotOffset-st: 0/0/1/0 [1]
KicOffset-st: 0/0/1/0 [1]
DiffImageQuality-fgm: 0.00 [0/1]
DiffImageOverlap-fno: 0.00 [0/1]

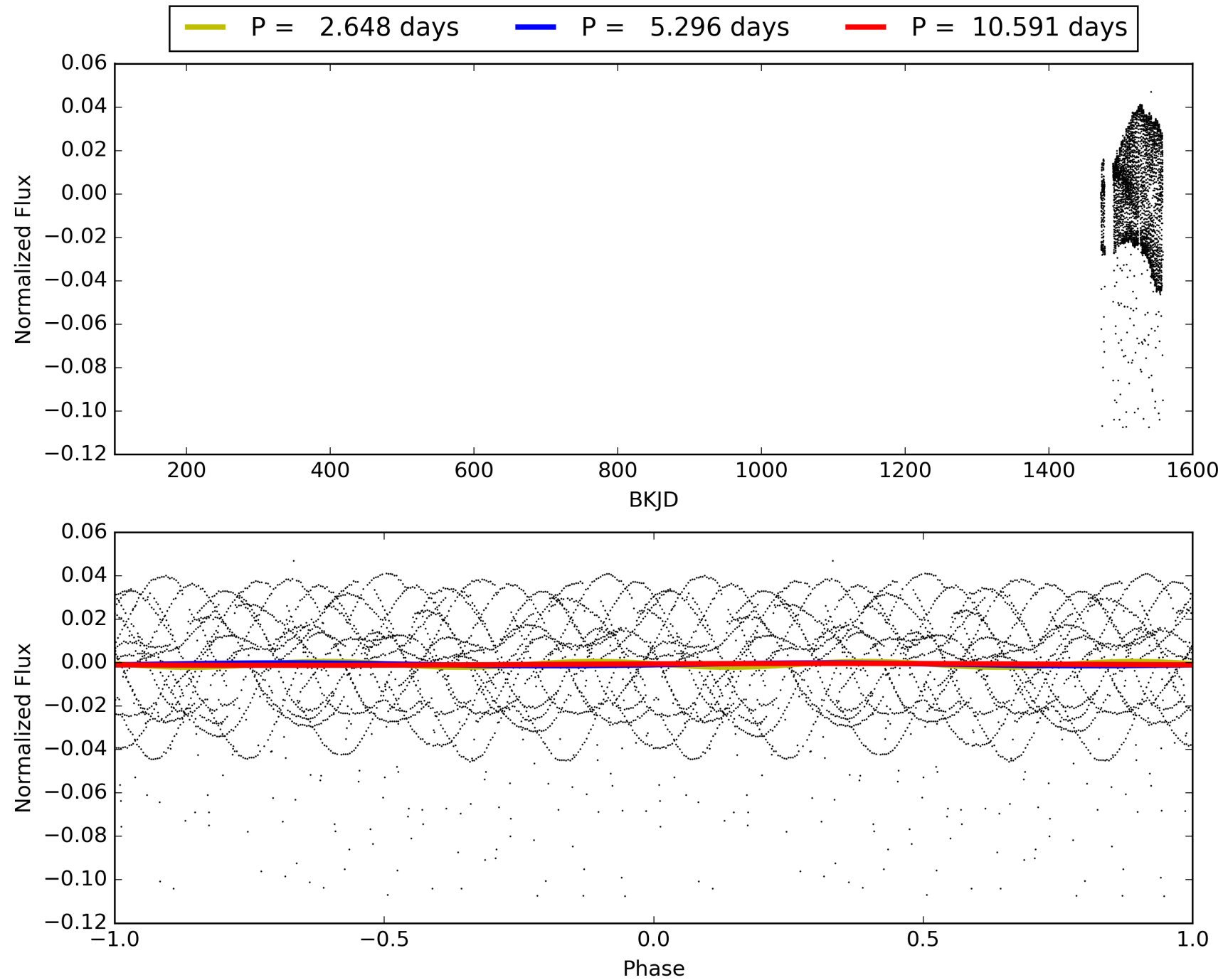
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 01-Feb-2016 12:46:51 Z

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

TCE 009119652-04, PDC Light Curves

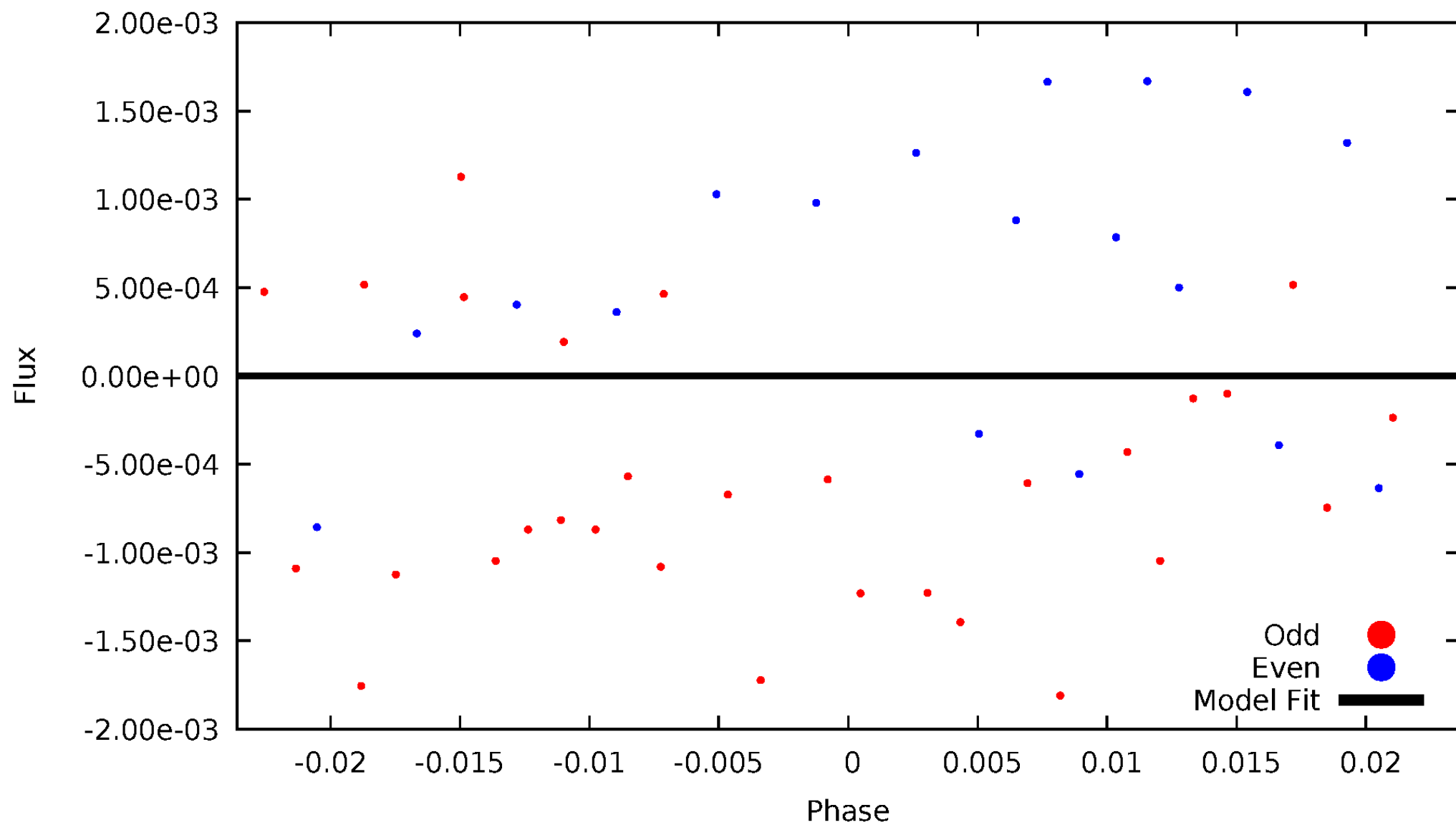


TCE 009119652-04



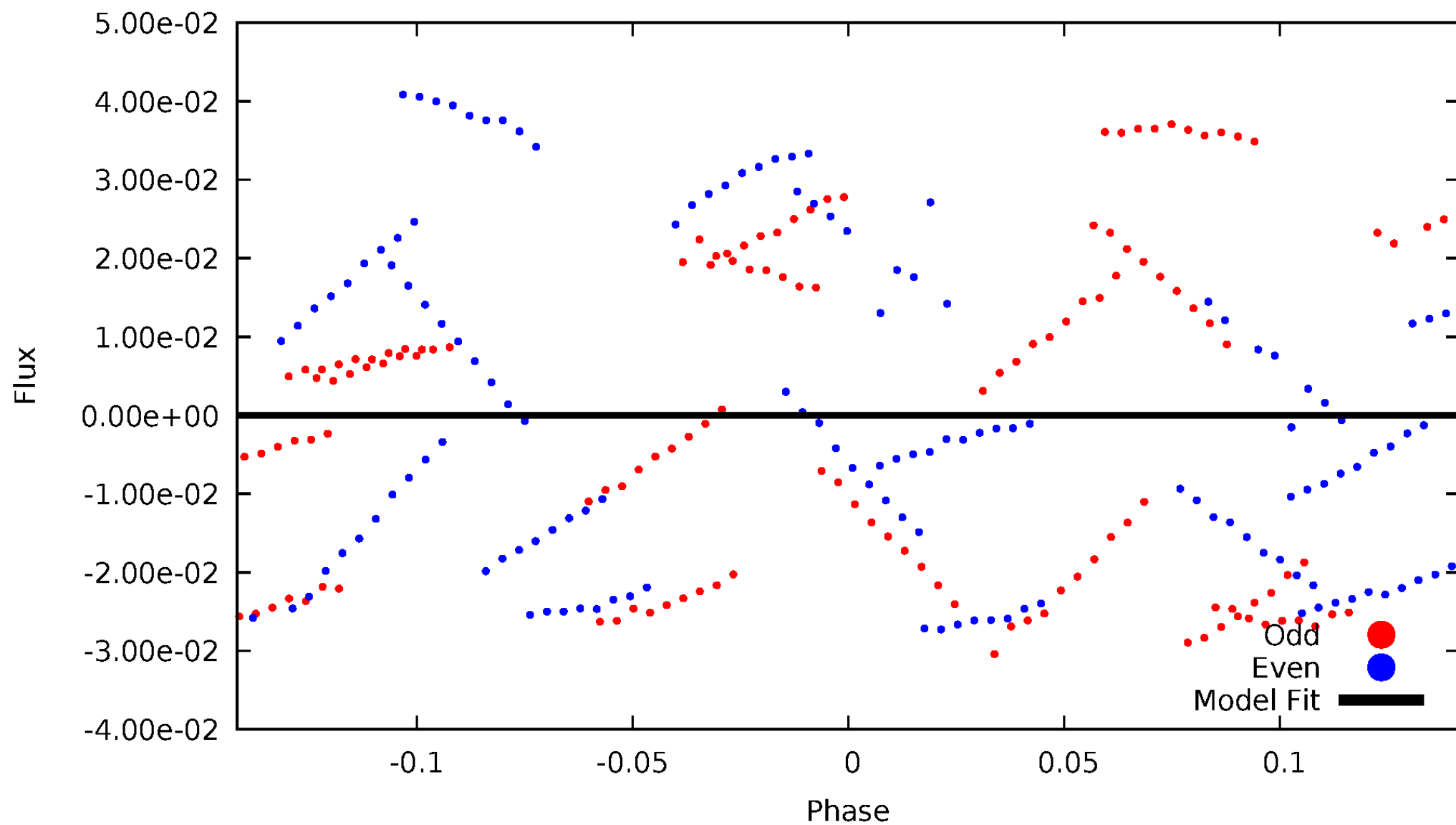
DV Odd/Even

TCE 009119652-04



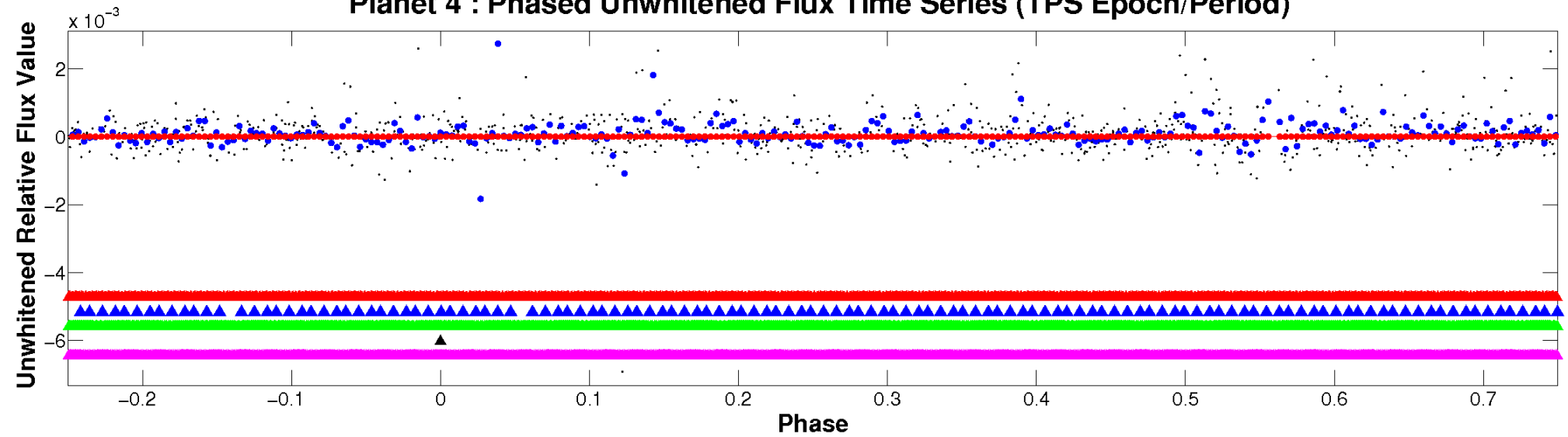
ALT Odd/Even

TCE 009119652-04



Non-Whitened Vs. Whitened Light Curve

Planet 4 : Phased Unwhitened Flux Time Series (TPS Epoch/Period)

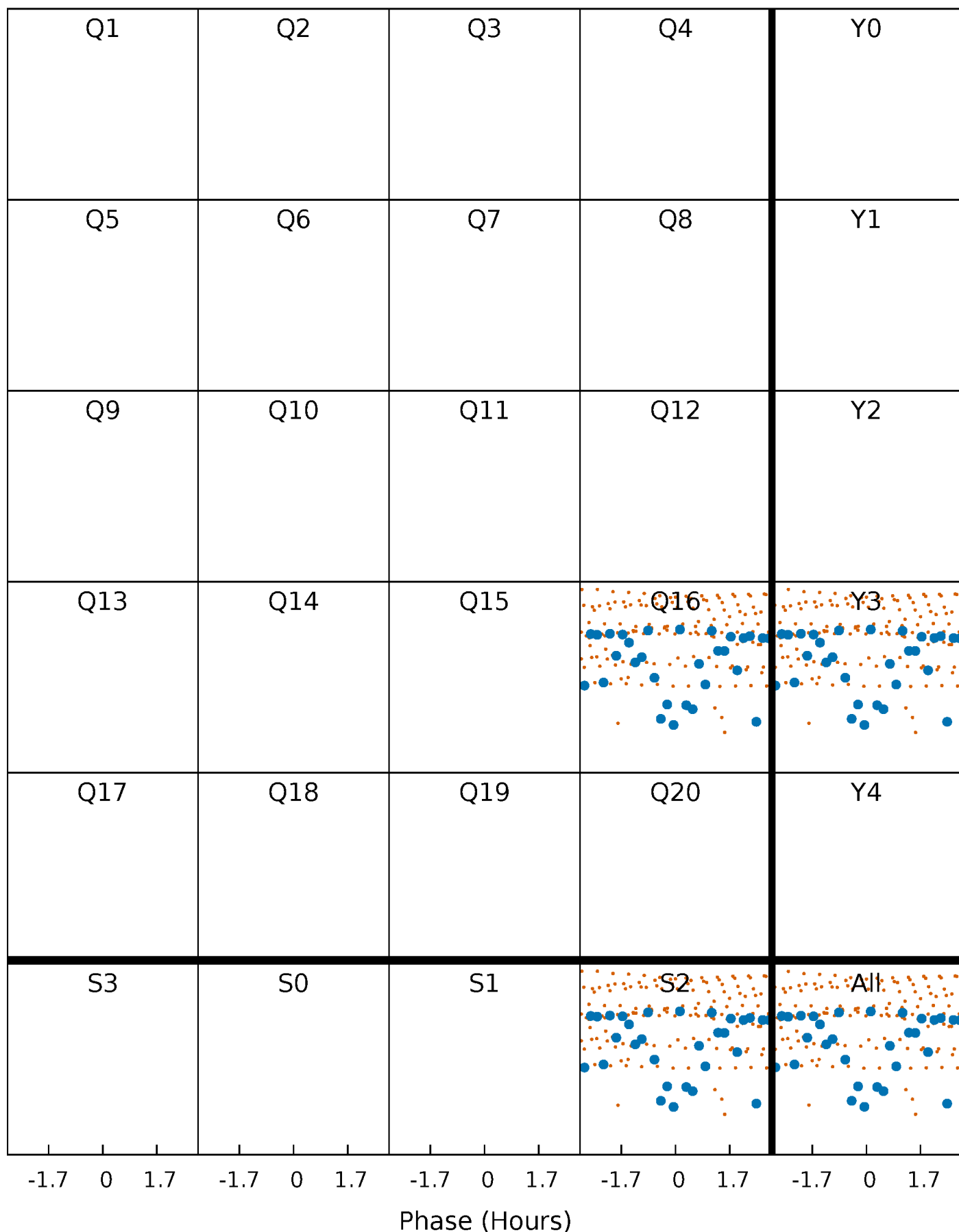


Planet 4 : Phased Whitened Flux Time Series (TPS Epoch/Period)



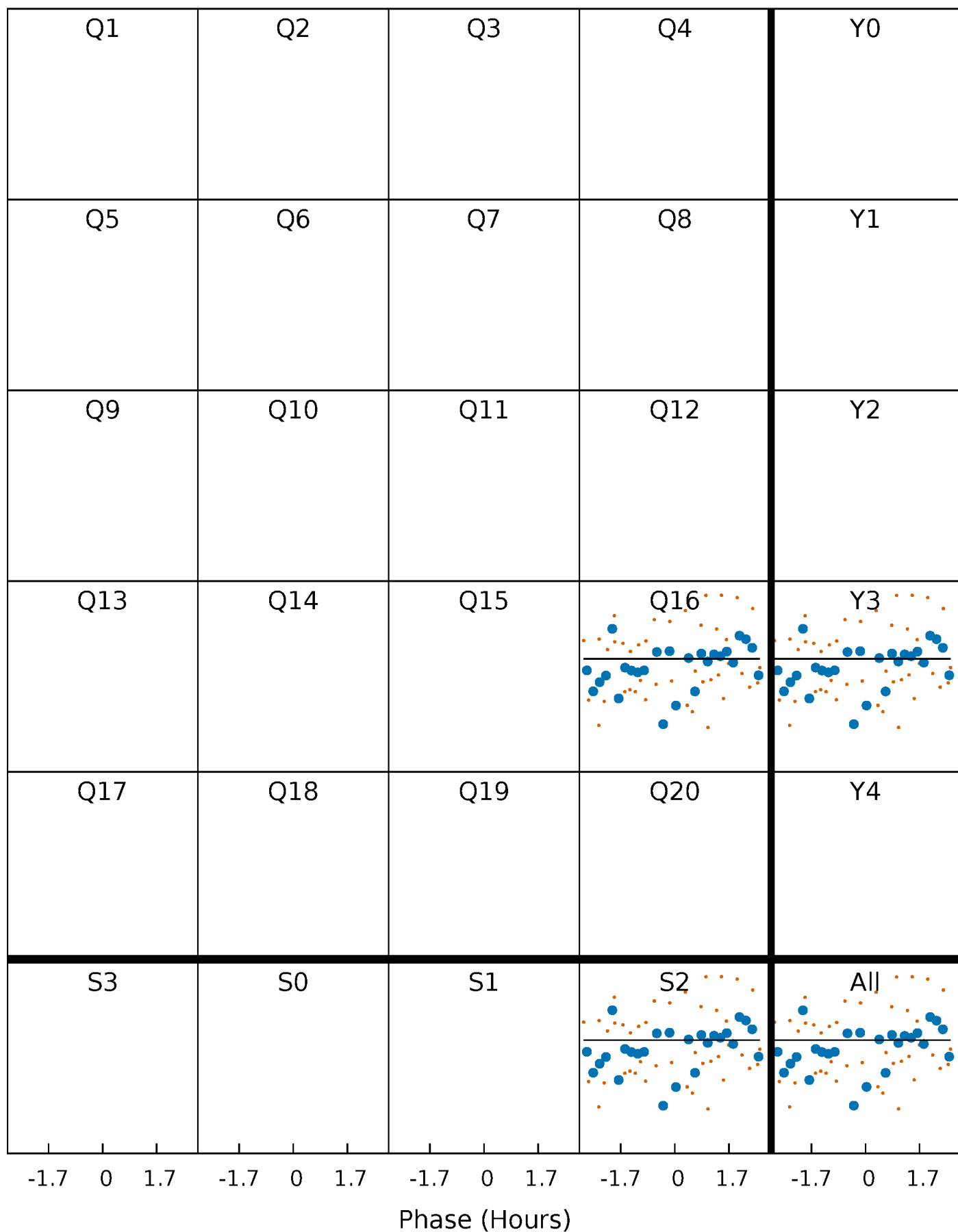
PDC Quarter-Phased Transit Curves

TCE 009119652-04 P= 5.295568 Days $T_0=136.426620$ (BKJD)



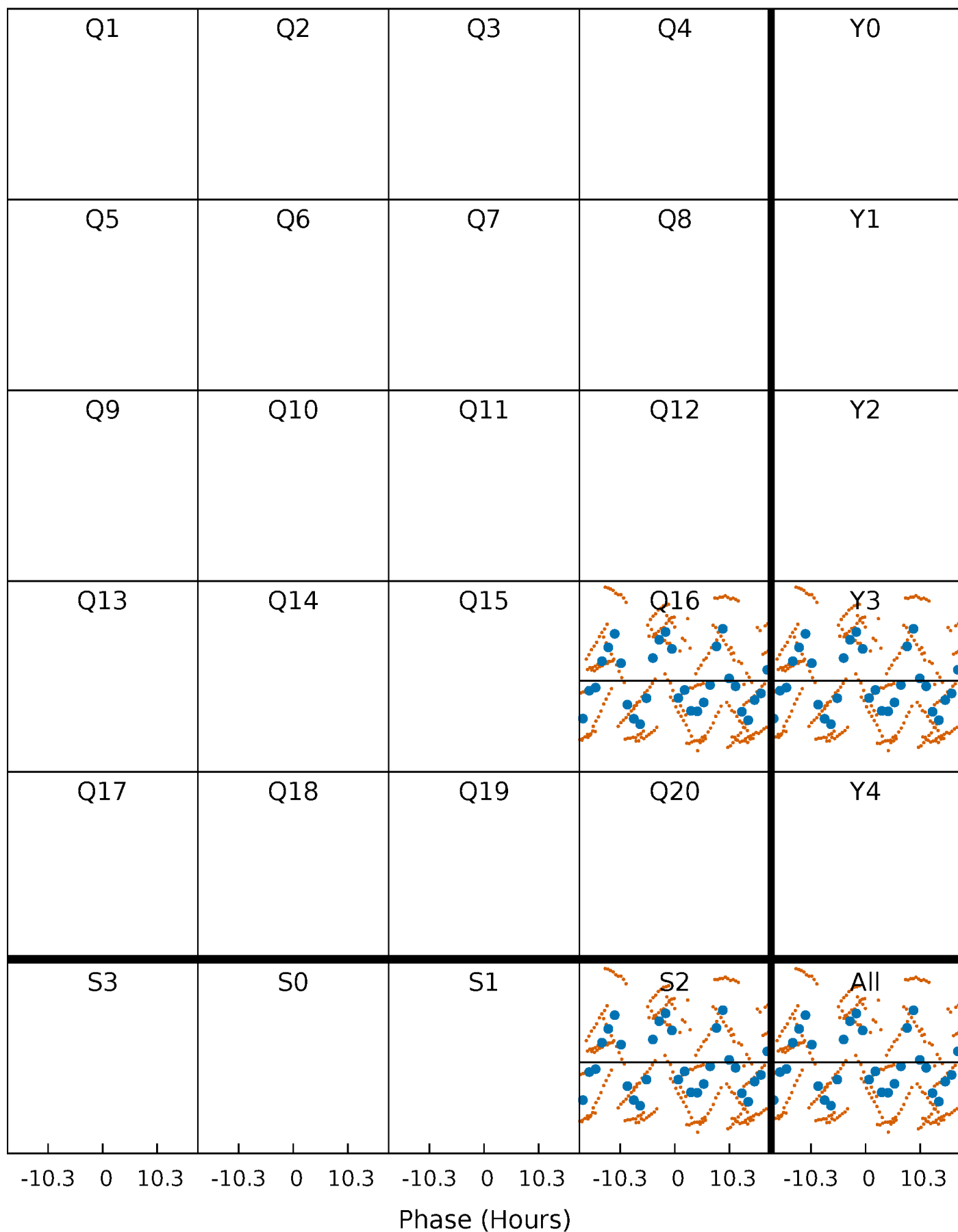
DV Quarter-Phased Transit Curves

TCE 009119652-04 P= 5.295568 Days $T_0=136.426620$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

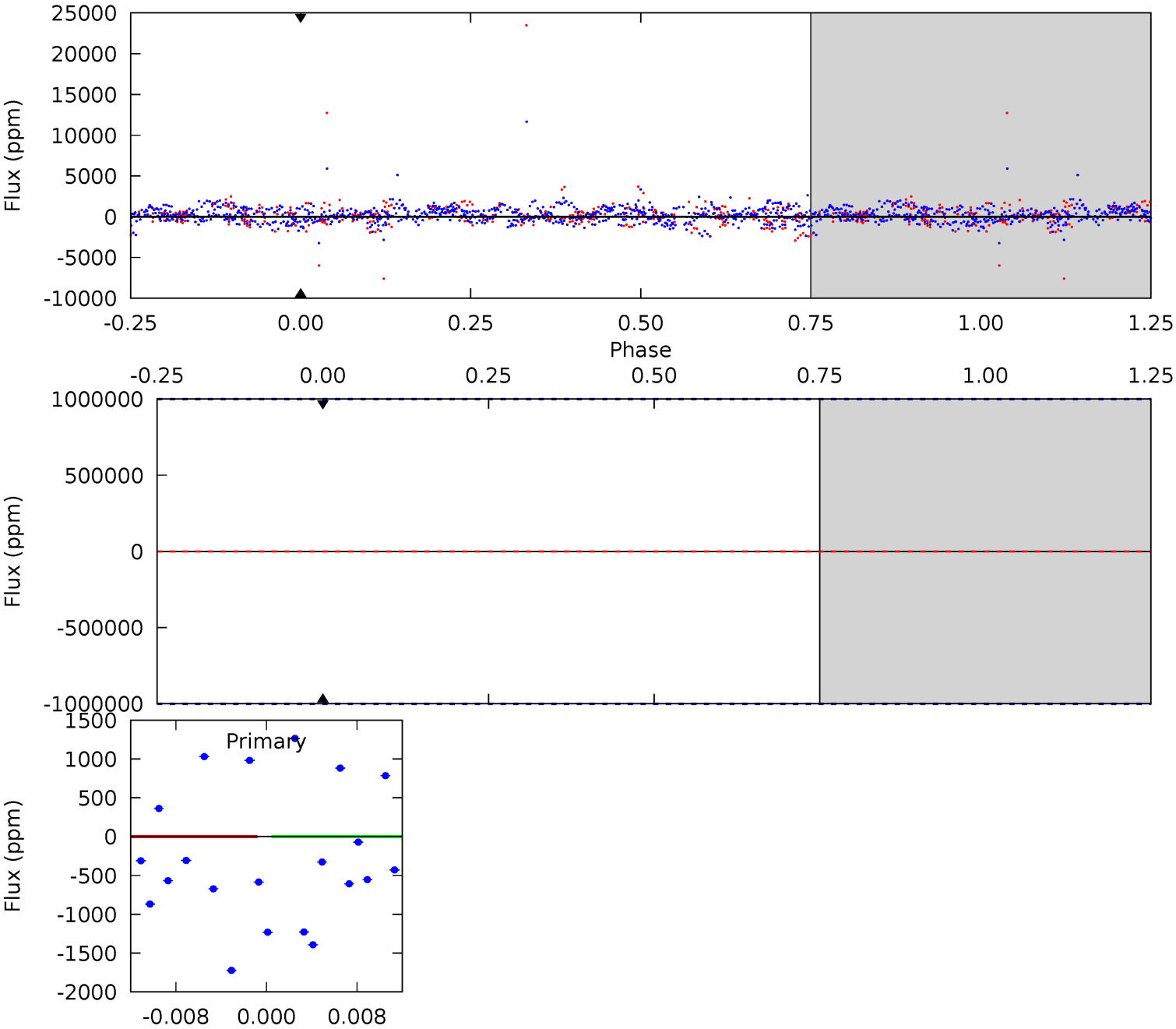
TCE 009119652-04 P= 5.295568 Days $T_0=136.530079$ (BKJD)



DV Model-Shift Uniqueness Test

009119652-04, P = 5.295568 Days, E = 136.426620 Days

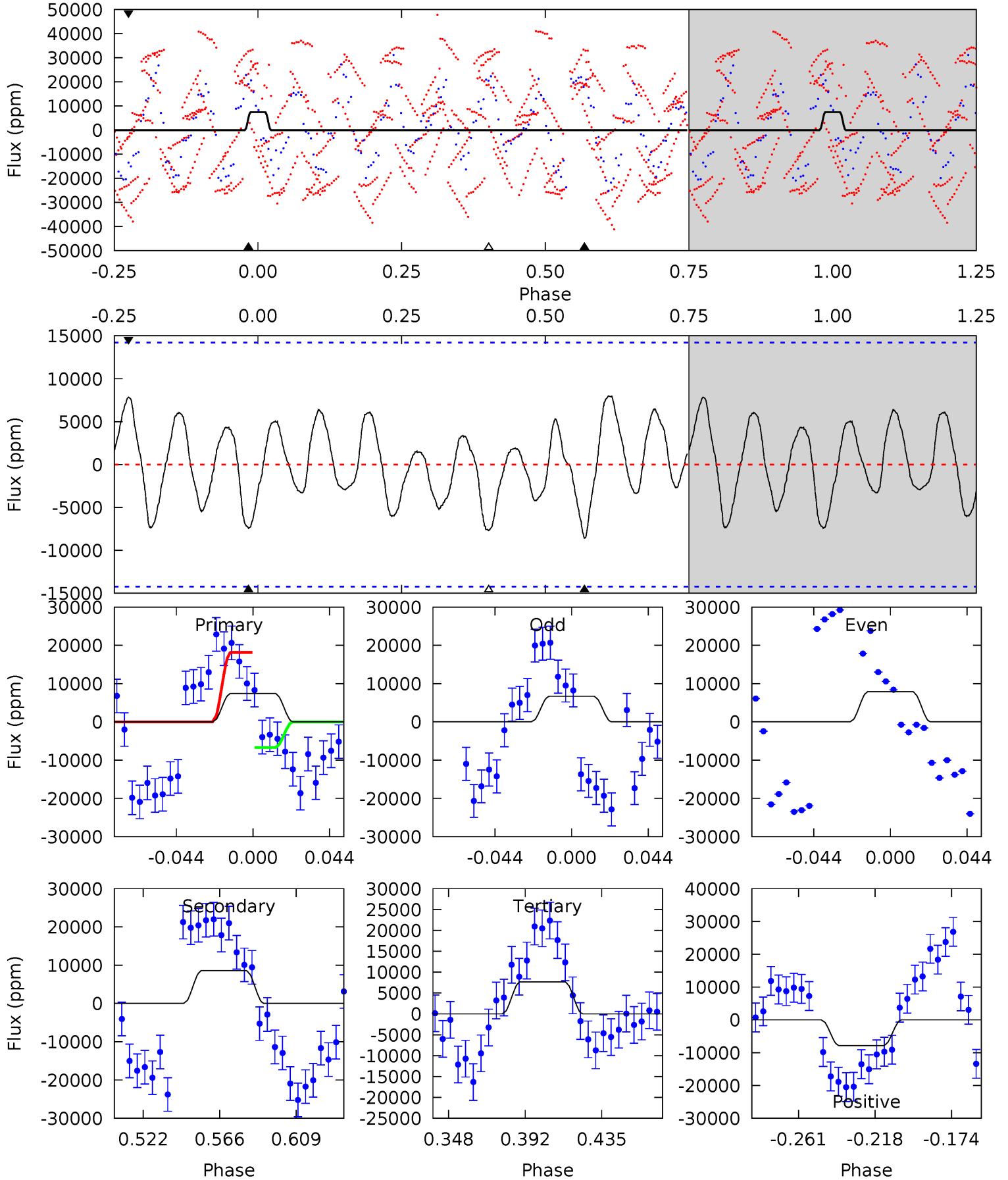
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
0	0	0	0	1.00	1.00	1.00	0	0	0	0	0	0	0	0



Alt Model-Shift Uniqueness Test

009119652-04, P = 5.295568 Days, E = 136.530079 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
2.48	2.86	2.56	2.61	4.74	2.02	1.30	-0.09	-0.14	0.30	0.25	0.20	0.48	0.48	1.92



Stellar Parameters For KIC 009119652

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	$M(M_{\odot})$	p_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	5299^{+204}_{-167}	$3.865^{+0.742}_{-0.318}$	$-0.440^{+0.350}_{-0.250}$	$1.769^{+1.081}_{-1.081}$	$0.837^{+0.139}_{-0.114}$	$0.213^{+2.399}_{-0.161}$
	+4%/-3%	+19%/-8%	+80%/-57%	+61%/-61%	+17%/-14%	+1127%/-76%
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 009119652-04 / KOI

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	0 ± 1000000	$15.86^{+19.14}_{-10.82}$	1824^{+300}_{-333}	3964^{+10362}_{-18140}	13^{+1333}_{-1170}
Alt.	-8597 ± 3002	$11.75^{+16.56}_{-8.24}$	1802^{+311}_{-320}	6078^{+7456}_{-1792}	106^{+1024}_{-91}

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 $A_{obs} \gg 1.0$

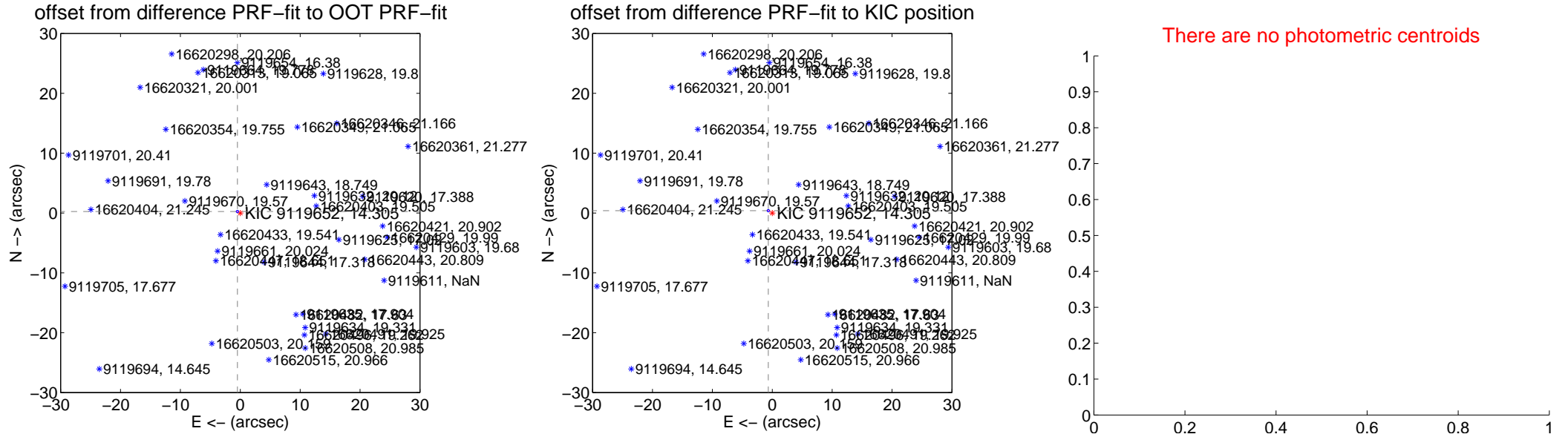
DV Centroid Data

Supplemental centroid analysis for 009119652-04. Kepler magnitude: 14.30. Transit SNR -1.00

There are 0 quarters with good PRF difference image offsets

The direct PRF centroid is offset from the target star catalog position by about 0.23 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.536 \pm 0.067	7.95	0.475 \pm 0.067	0.248 \pm 0.068
PRF-fit source offset from KIC position	0.762 \pm 0.067	11.29	0.655 \pm 0.067	0.388 \pm 0.068
photometric centroid source offset	—	—	—	—



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.



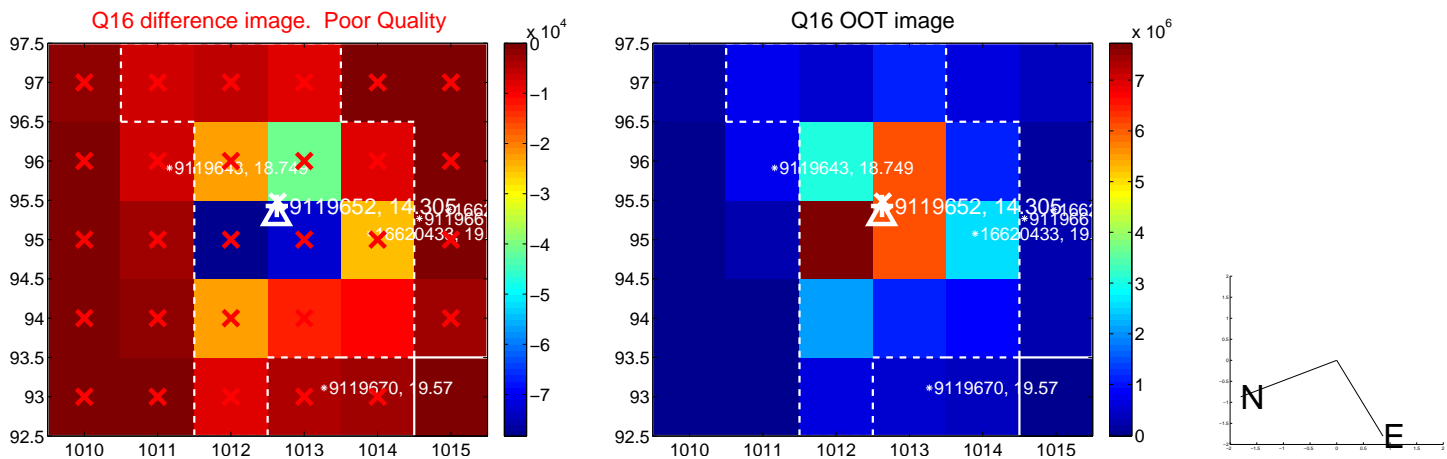
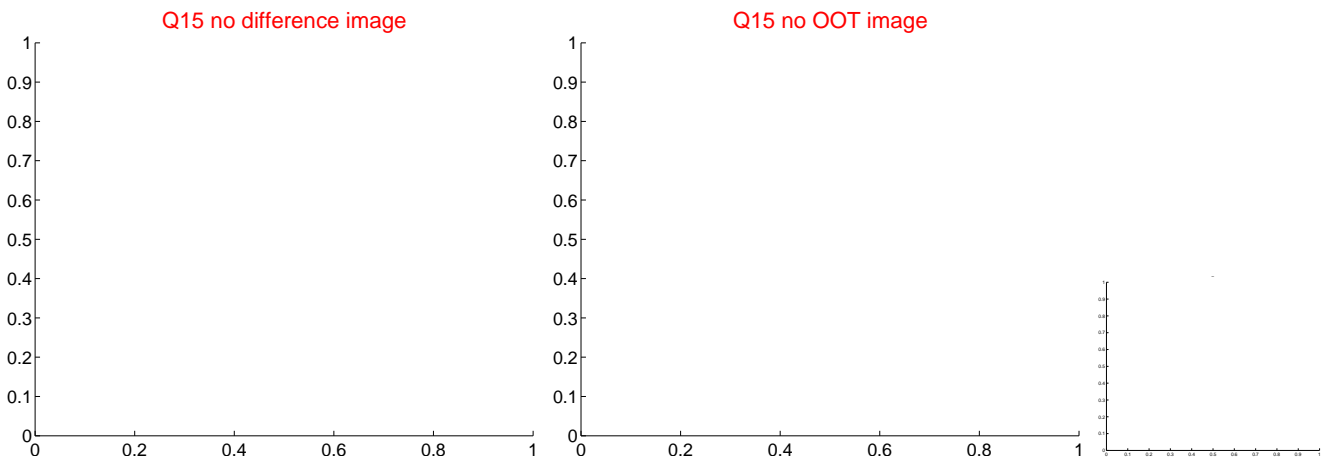
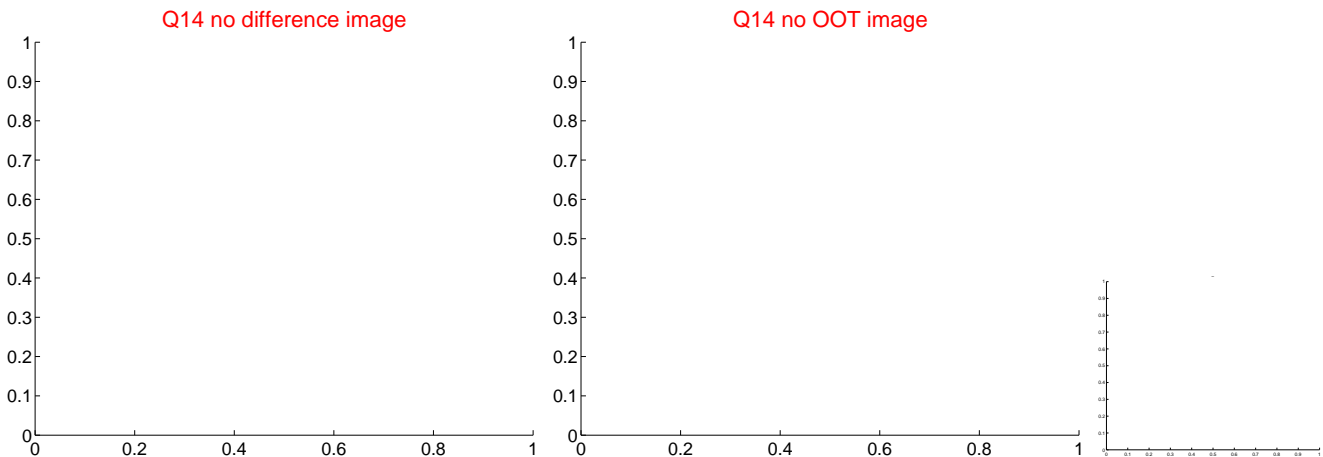
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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



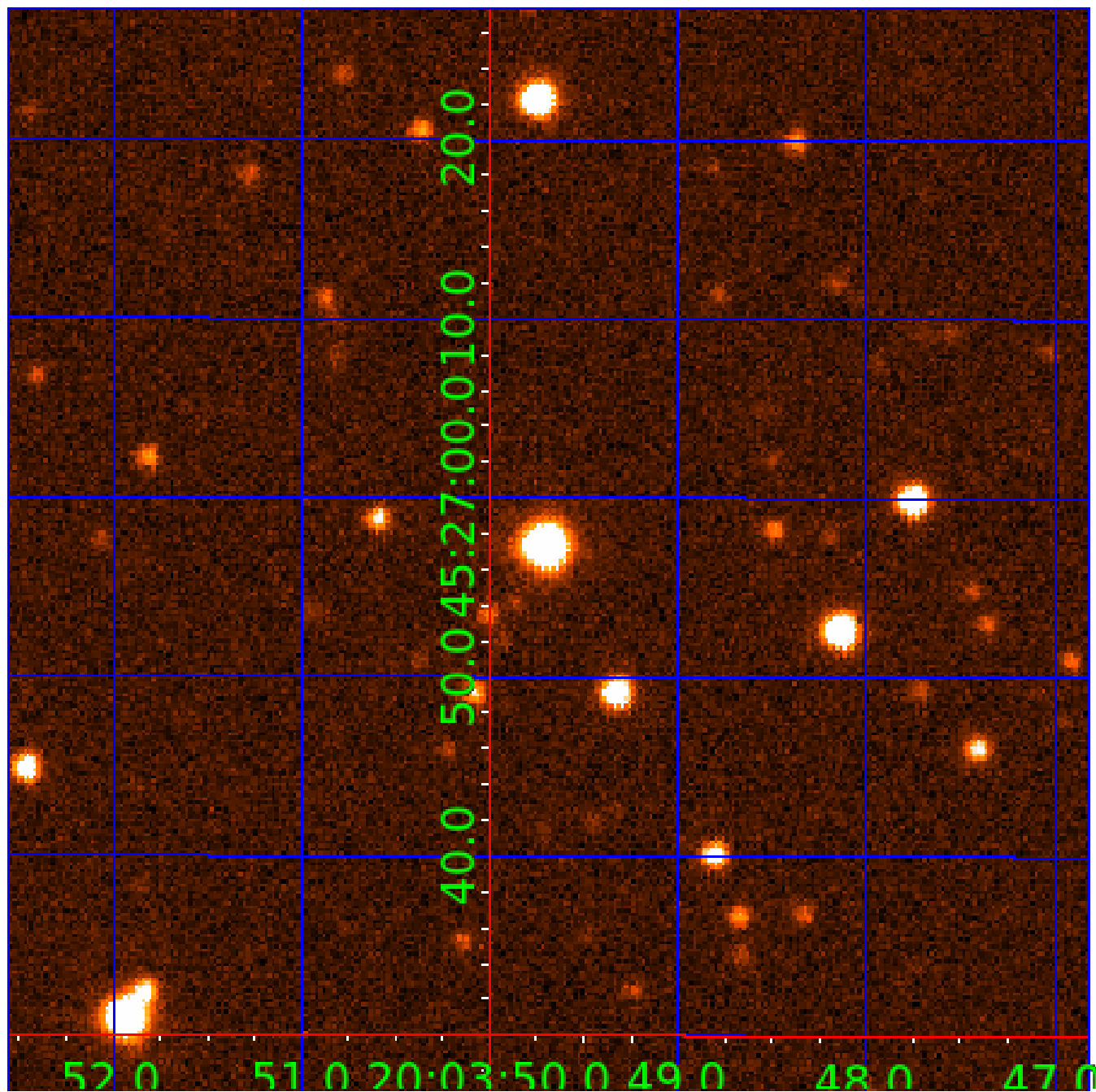
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



folded centroid time series figure for this object.

UKIRT Image

Declination



KIC 009119652

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})
009119652-01	OBS	6193.01	1.108110	131.709110	384027.5	2.000	6787.8	-1.0	1.77	5299	86.18	5667.33
009119652-02	OBS	No	11.625537	137.742227	4487.4	11.615	295.9	18.0	1.77	5299	11.64	246.76
009119652-03	OBS	No	1.108030	132.362392	3740.6	3.500	127.6	-1.0	1.77	5299	10.65	5667.87
009119652-04	OBS	No	5.295568	136.426620	4652.9	1.500	36.5	-1.0	1.77	5299	11.93	704.05
009119652-05	OBS	No	1.099190	132.505427	4777.3	3.500	27.1	-1.0	1.77	5299	12.04	5728.73

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
009119652-01	OBS	FP	0.00	0	1	0	0	DEPTH_ODDEVEN_DV—DEPTH_ODDEVEN_ALT—MOD_ODDEVEN_ALT—HAS_SEC_TCE—CENT_NOFITS
009119652-02	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_SKYE_TRACKER—LPP_DV—MOD_NONUNIQ_DV—MOD_TER_DV—CENT_FEW_DIFFS
009119652-03	OBS	FP	0.00	1	1	1	0	IS_SEC_TCE—CENT_NOFITS—HALO_GHOST
009119652-04	OBS	FP	0.00	1	0	0	0	TRANS_GAPPED—LPP_DV—LPP_ALT—ALL_TRANS_CHASES—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—CENT_NOFITS
009119652-05	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_ZUMA—TRANS_GAPPED—SWEET_NTL—LPP_DV—LPP_ALT—MOD_NONUNIQ_ALT—CENT_NOFITS

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 009119652-05

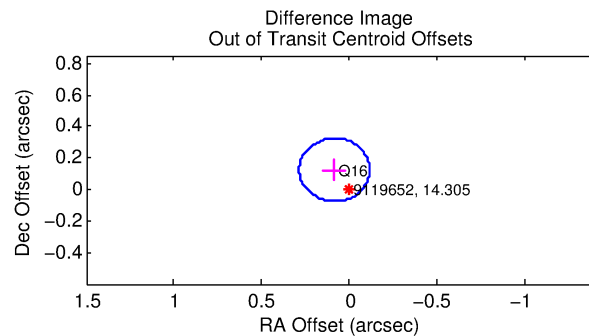
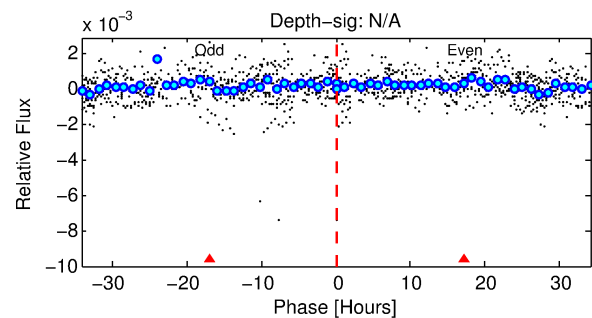
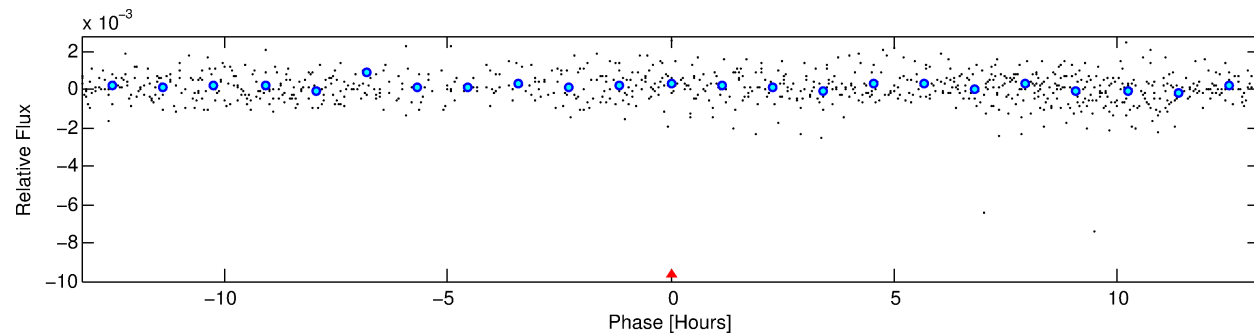
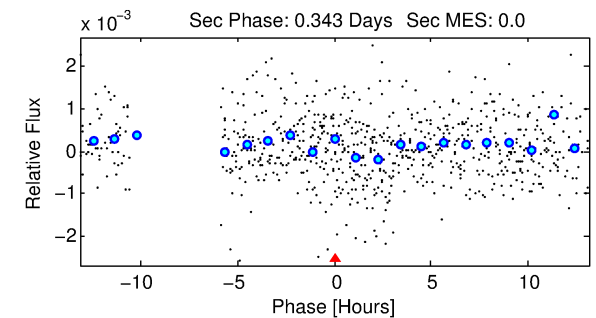
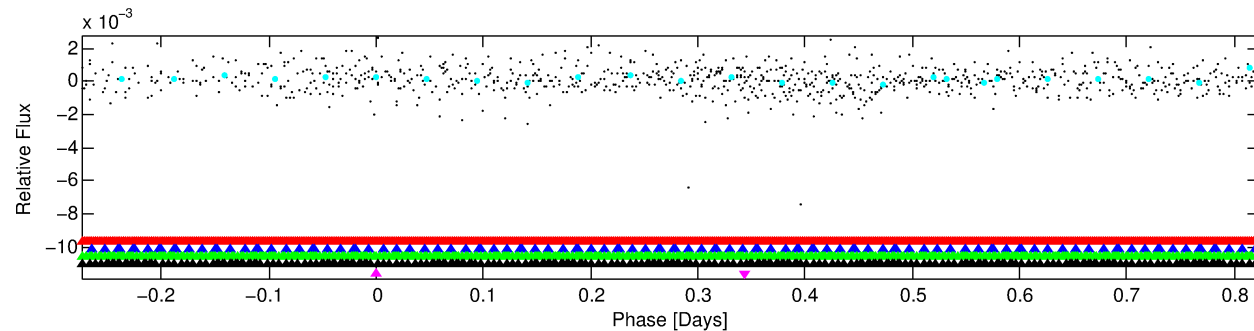
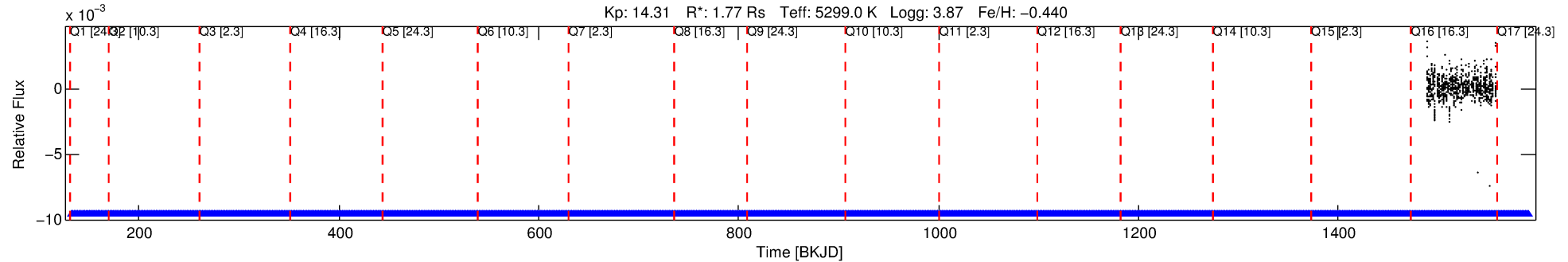
No Significant Match Found

DV One-Page Summary

KIC: 9119652 Candidate: 5 of 5 Period: 1.099 d

KOI: K06193 Corr: No Ephemeris Match

Kp: 14.31 R*: 1.77 Rs Teff: 5299.0 K Logg: 3.87 Fe/H: -0.440



TPS TCE Results:

Period = 1.09919 d
Epoch = 132.5054 BKJD

DV fit results are unavailable

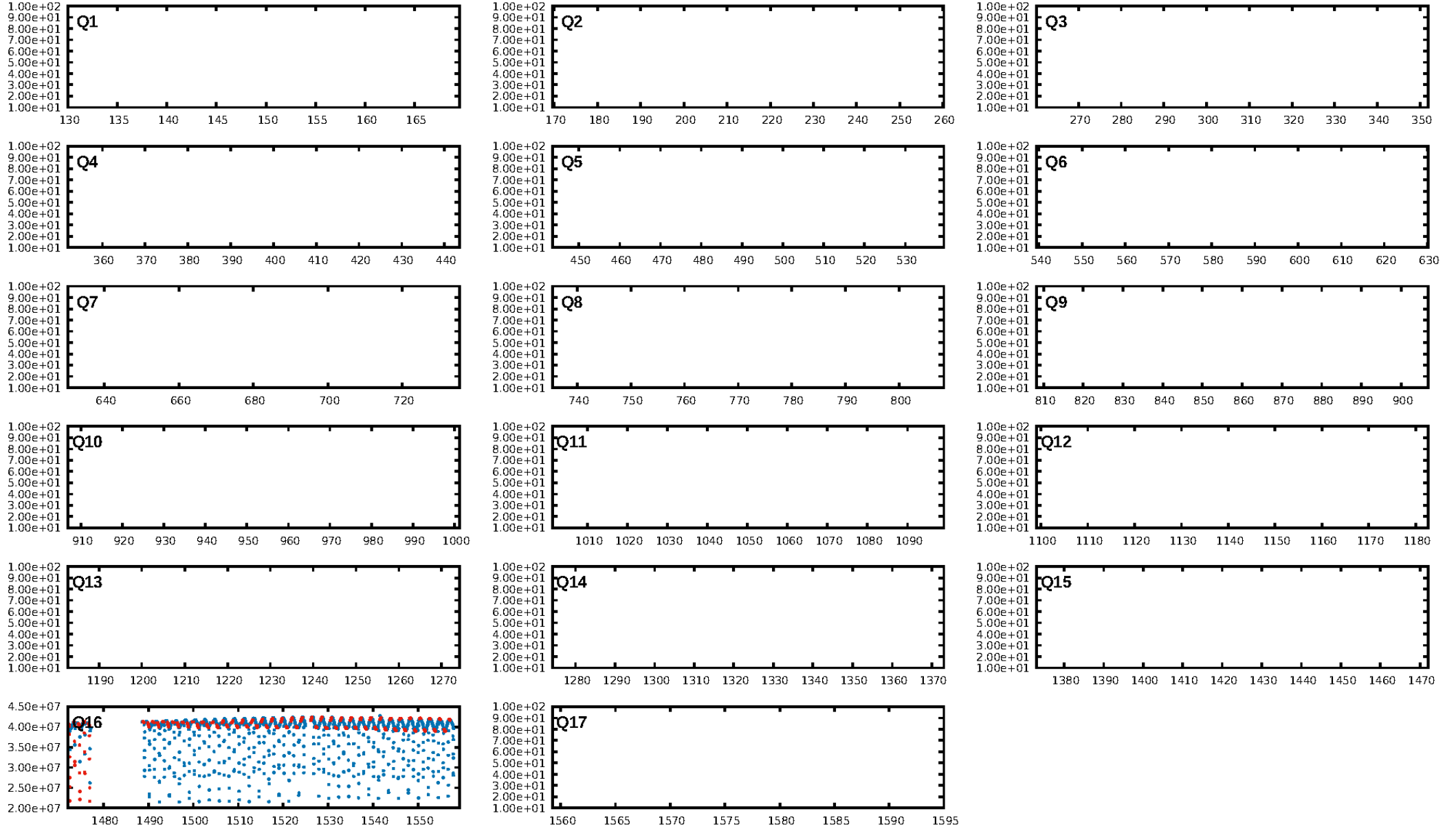
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: 3.4% [0.04σ]
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: N/A
RollingBand-fgt: 1.00 [33/33]
GhostDiagnostic-chr: -2.366
Centroid-sig: N/A
Centroid-so: 0.940 arcsec [14.89σ]
OotOffset-rm: 0.152 arcsec [2.27σ]
KicOffset-rm: 0.379 arcsec [5.67σ]
OotOffset-st: 0/0/1/0 [1]
KicOffset-st: 0/0/1/0 [1]
DiffImageQuality-fgm: 0.00 [0/1]
DiffImageOverlap-fno: 0.00 [0/1]

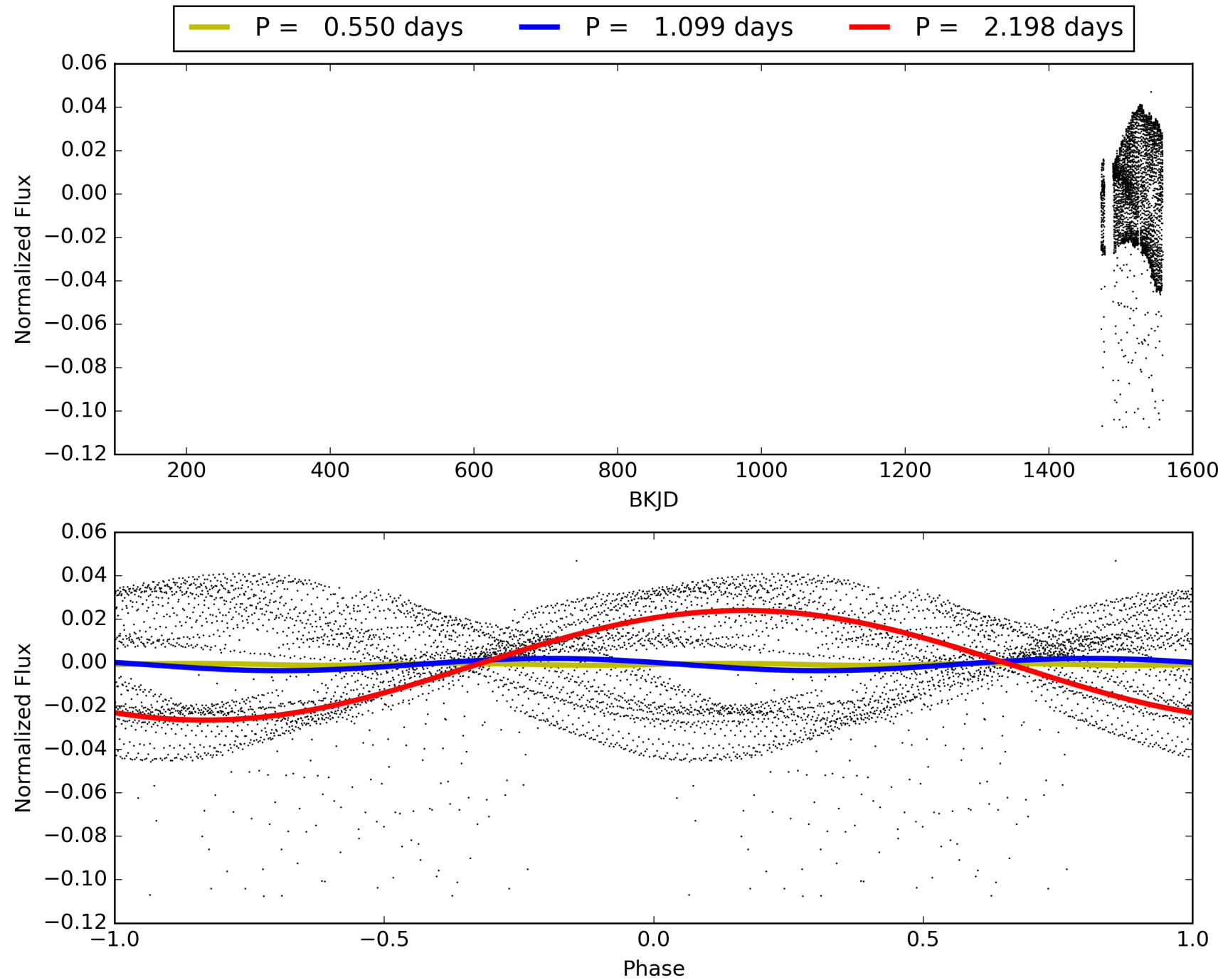
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 01-Feb-2016 12:46:55 Z

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

TCE 009119652-05, PDC Light Curves

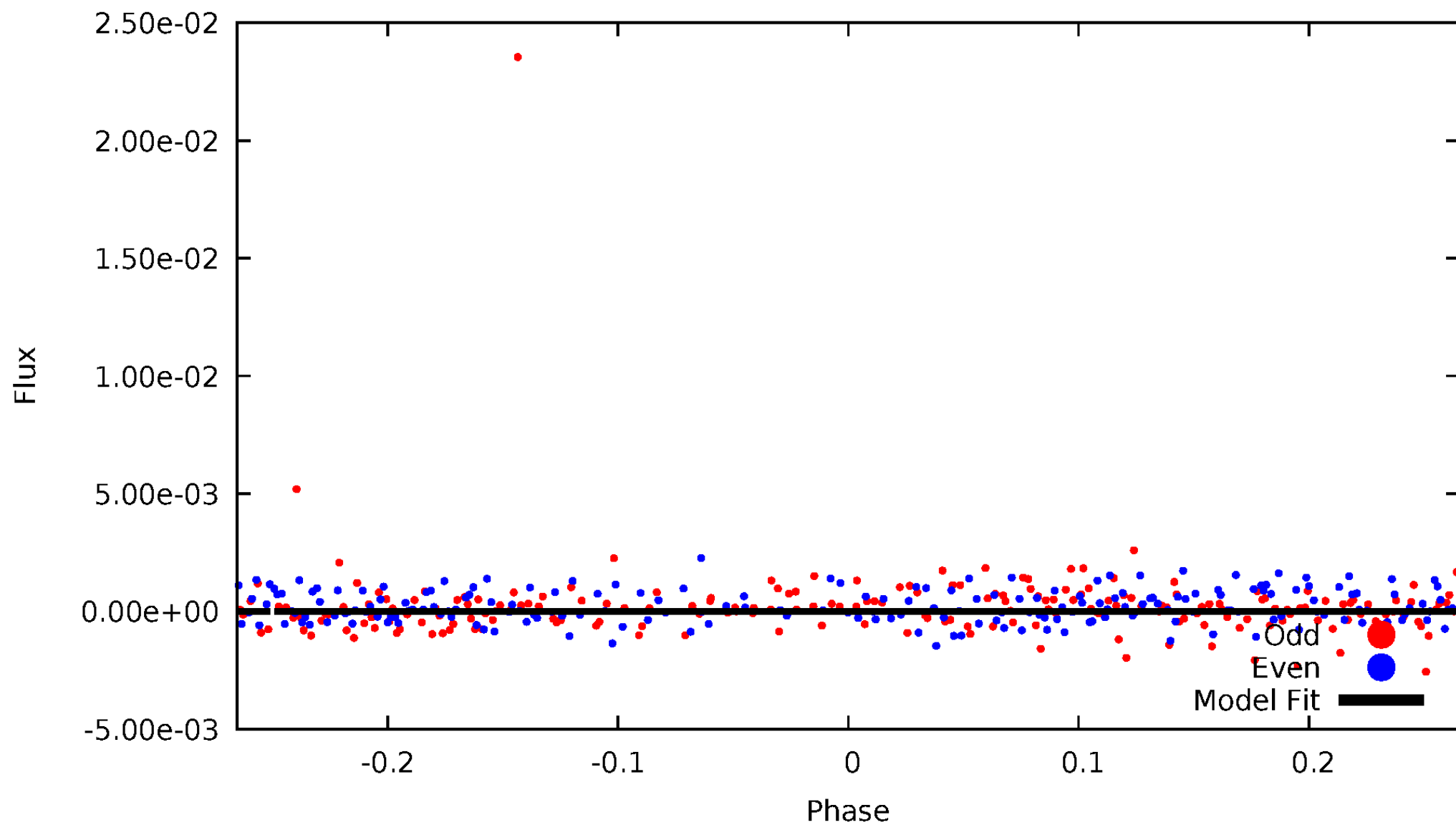


TCE 009119652-05



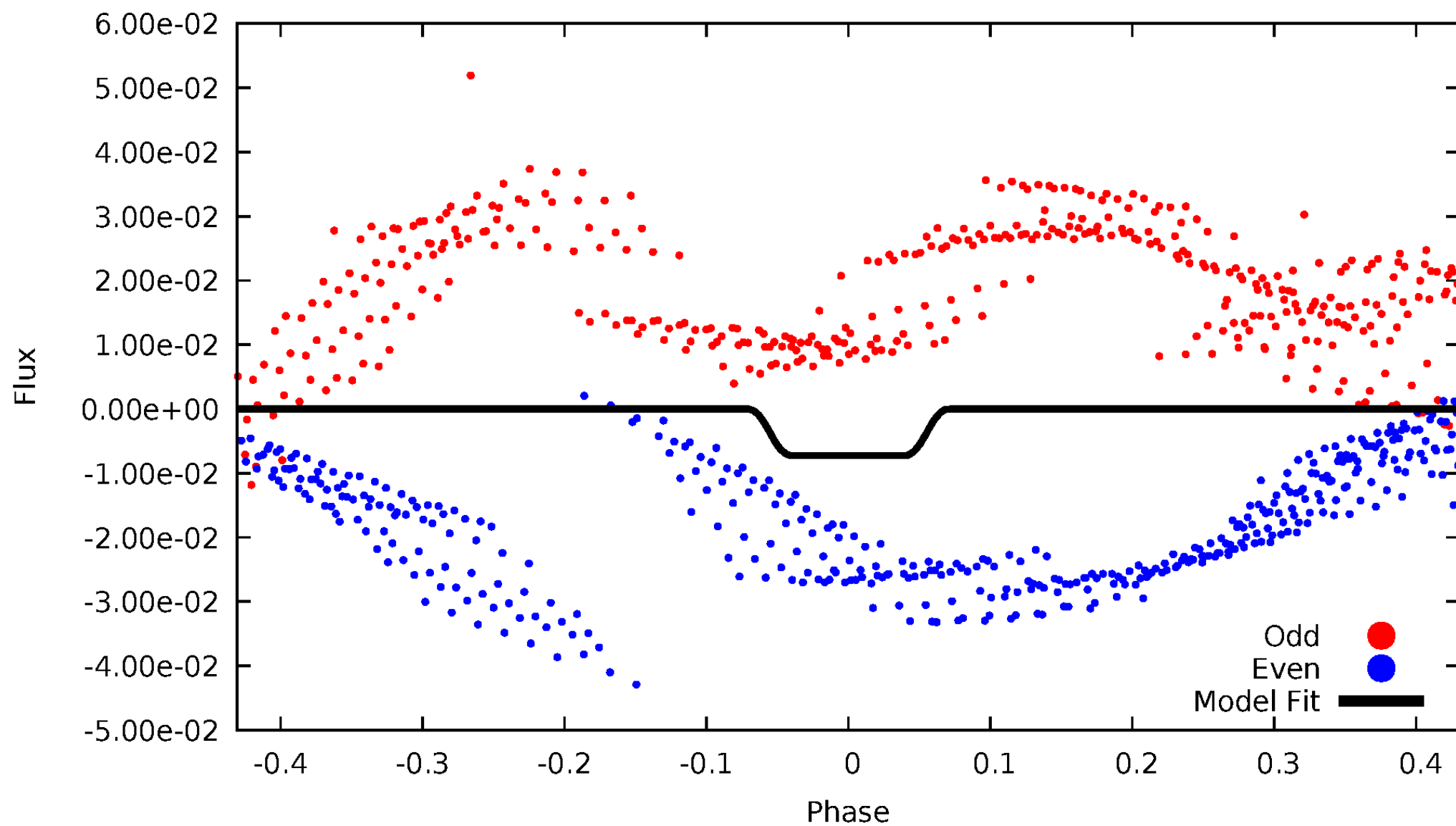
DV Odd/Even

TCE 009119652-05



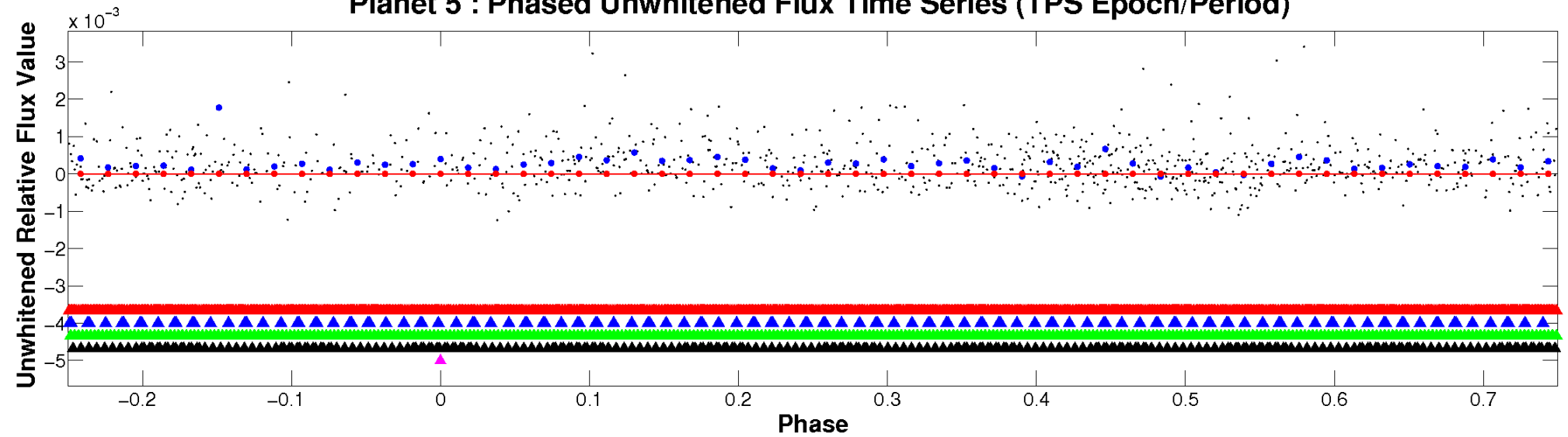
ALT Odd/Even

TCE 009119652-05



Non-Whitened Vs. Whitened Light Curve

Planet 5 : Phased Unwhitened Flux Time Series (TPS Epoch/Period)

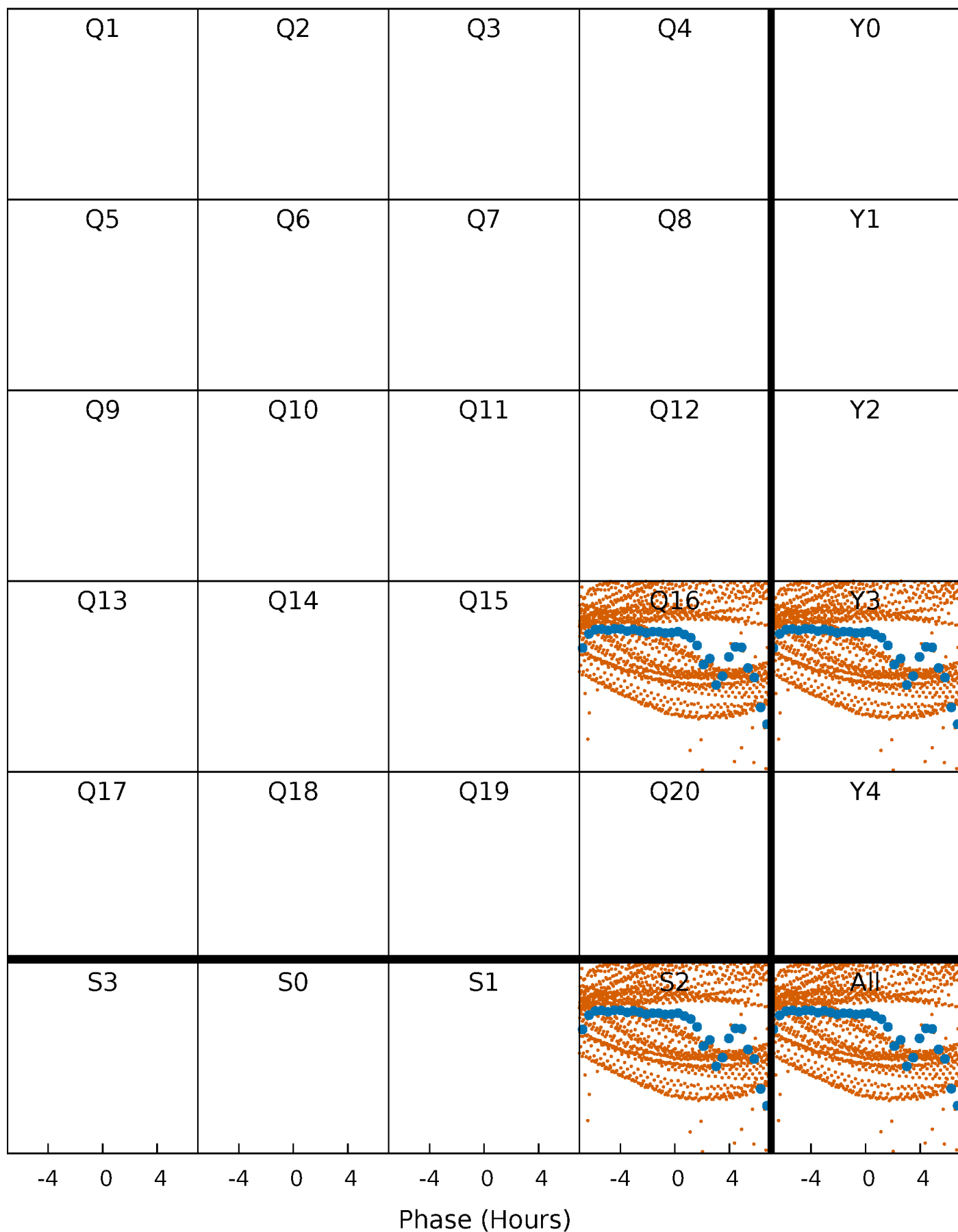


Planet 5 : Phased Whitened Flux Time Series (TPS Epoch/Period)



PDC Quarter-Phased Transit Curves

TCE 009119652-05 P= 1.099190 Days $T_0=132.505427$ (BKJD)



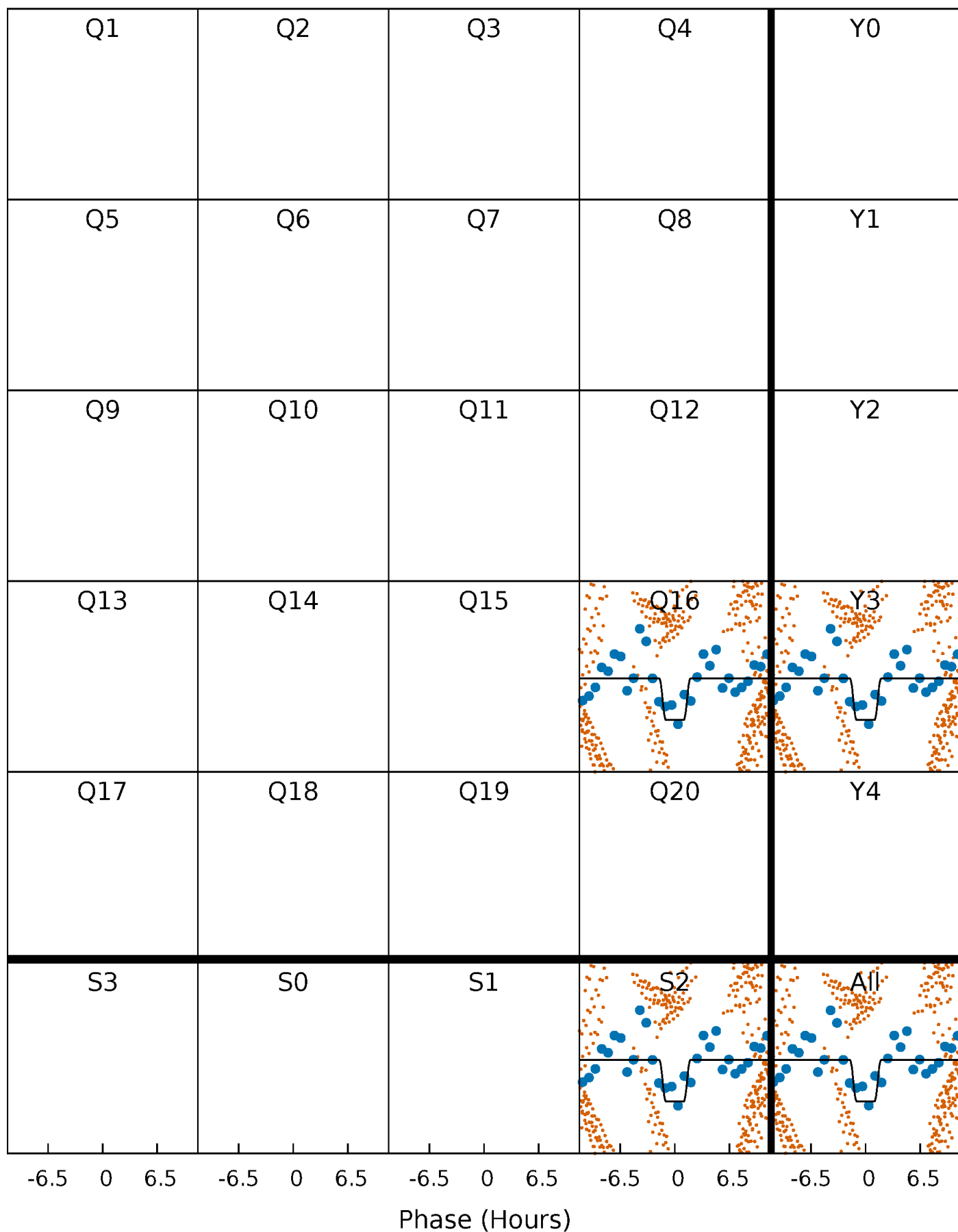
DV Quarter-Phased Transit Curves

TCE 009119652-05 P= 1.099190 Days $T_0=132.505427$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

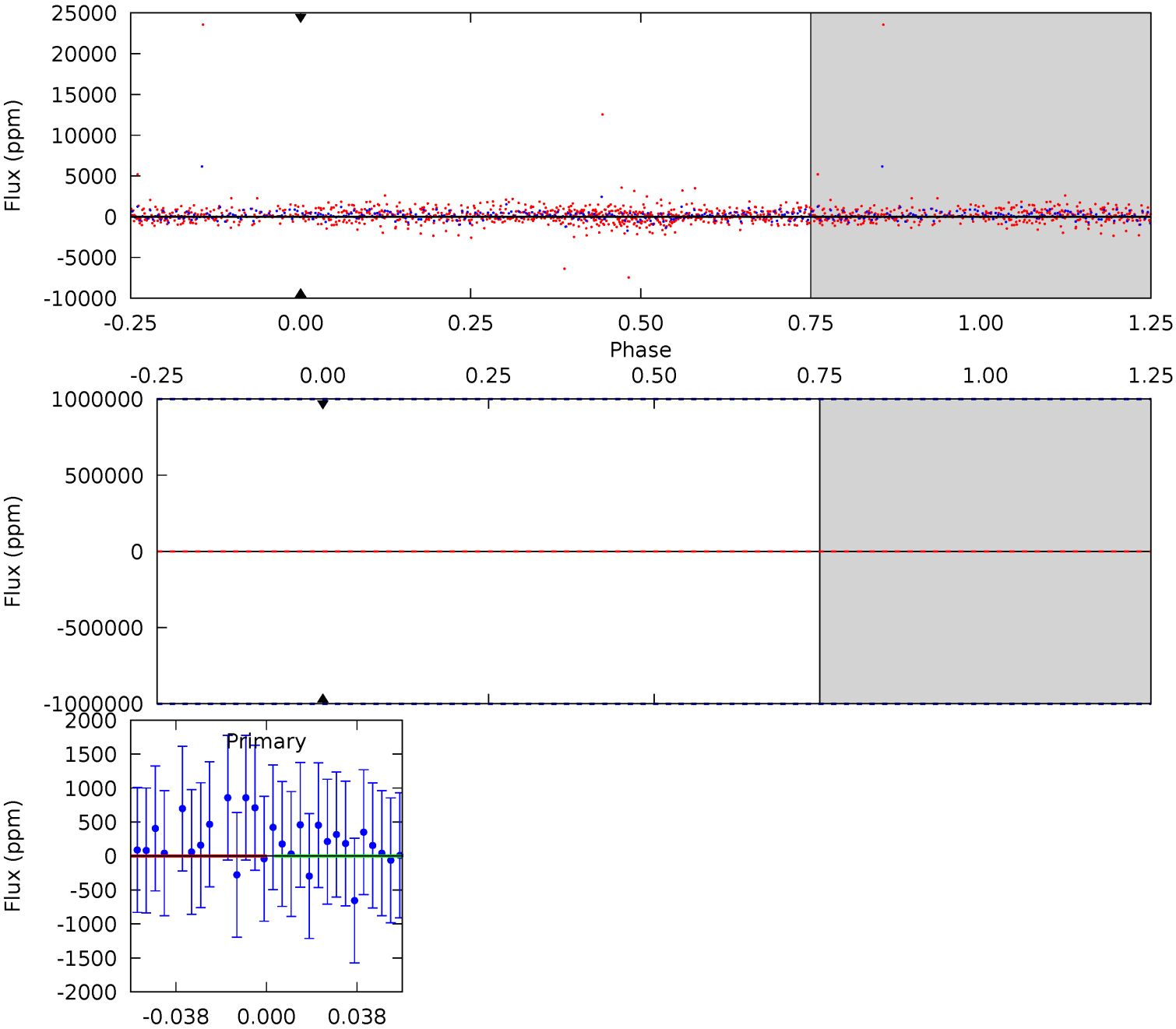
TCE 009119652-05 $P = 1.099190$ Days $T_0 = 132.640143$ (BKJD)



DV Model-Shift Uniqueness Test

009119652-05, P = 1.099190 Days, E = 132.505427 Days

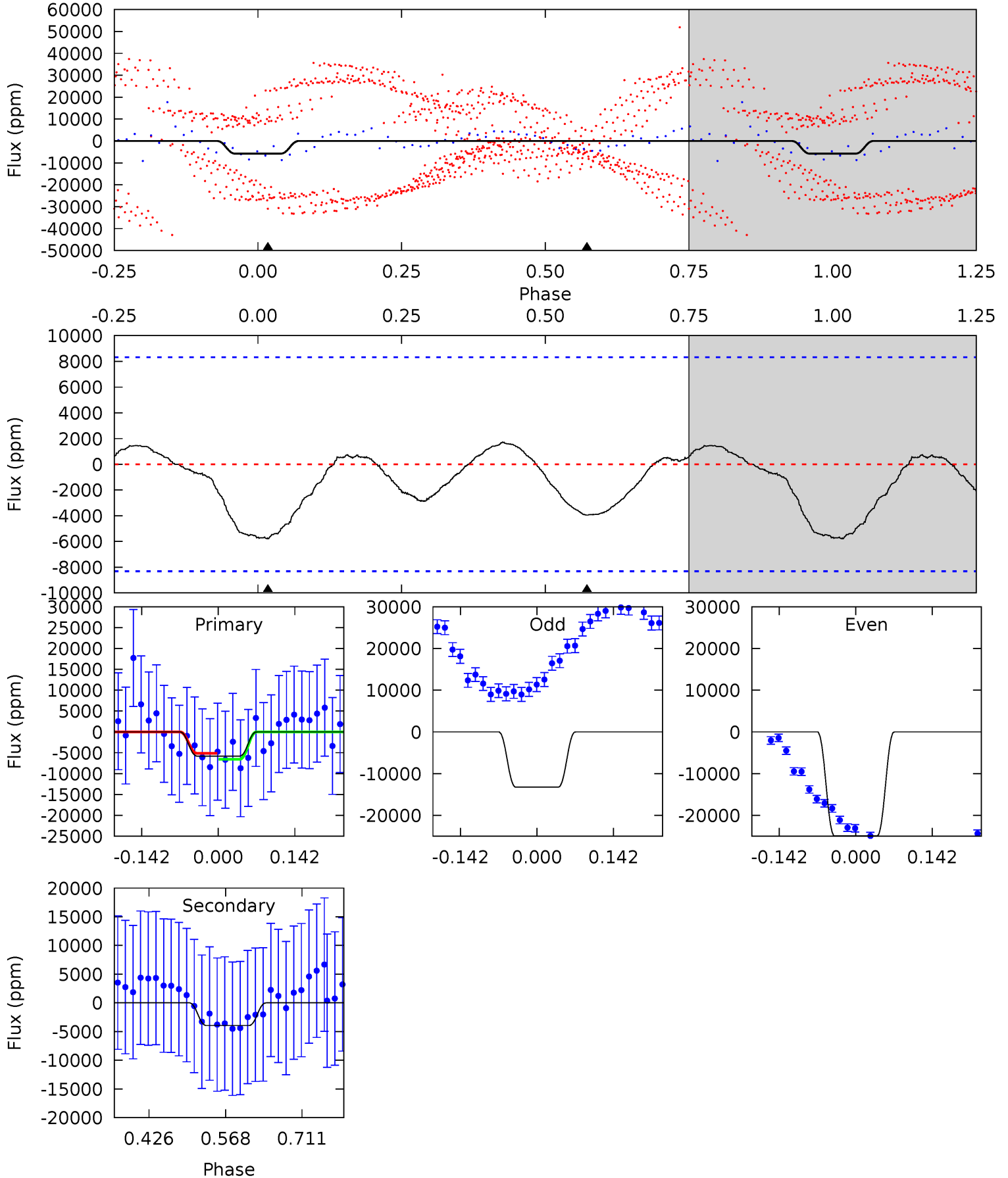
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
0	0	0	0	1.00	1.00	1.00	0	0	0	0	0	0	0	0



Alt Model-Shift Uniqueness Test

009119652-05, P = 1.099190 Days, E = 132.640143 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
3.13	2.13	0	0	4.49	1.47	0.76	3.13	3.13	2.13	2.13	5.57	1.40	0.23	0.35



Stellar Parameters For KIC 009119652

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	$M(M_{\odot})$	p_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	5299^{+204}_{-167}	$3.865^{+0.742}_{-0.318}$	$-0.440^{+0.350}_{-0.250}$	$1.769^{+1.081}_{-1.081}$	$0.837^{+0.139}_{-0.114}$	$0.213^{+2.399}_{-0.161}$
	+4%/-3%	+19%/-8%	+80%/-57%	+61%/-61%	+17%/-14%	+1127%/-76%
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 009119652-05 / KOI

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	0 ± 1000000	$16.54^{+19.43}_{-11.12}$	3068^{+483}_{-538}	-4475^{+16903}_{-8957}	$-2.345^{+126.673}_{-156.759}$
Alt.	-3948 ± 1852	$19.07^{+19.48}_{-13.21}$	3037^{+467}_{-542}	4022^{+2647}_{-1210}	$2.144^{+23.181}_{-1.685}$

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 $A_{obs} \gg 1.0$

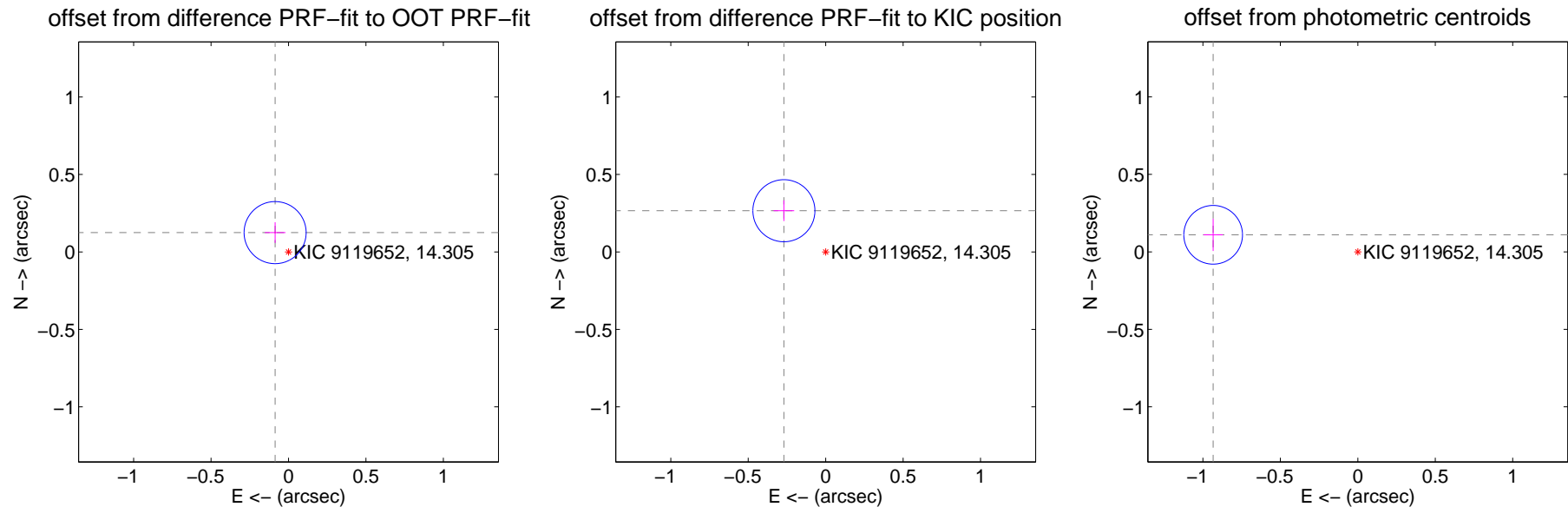
DV Centroid Data

Supplemental centroid analysis for 009119652-05. Kepler magnitude: 14.30. Transit SNR -1.00

There are 0 quarters with good PRF difference image offsets

The direct PRF centroid is offset from the target star catalog position by about 0.23 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.152 ± 0.067	2.27	0.086 ± 0.067	0.125 ± 0.067
PRF-fit source offset from KIC position	0.379 ± 0.067	5.67	0.270 ± 0.067	0.266 ± 0.067
photometric centroid source offset	0.94 ± 0.06	14.89	0.93 ± 0.06	0.11 ± 0.10



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.



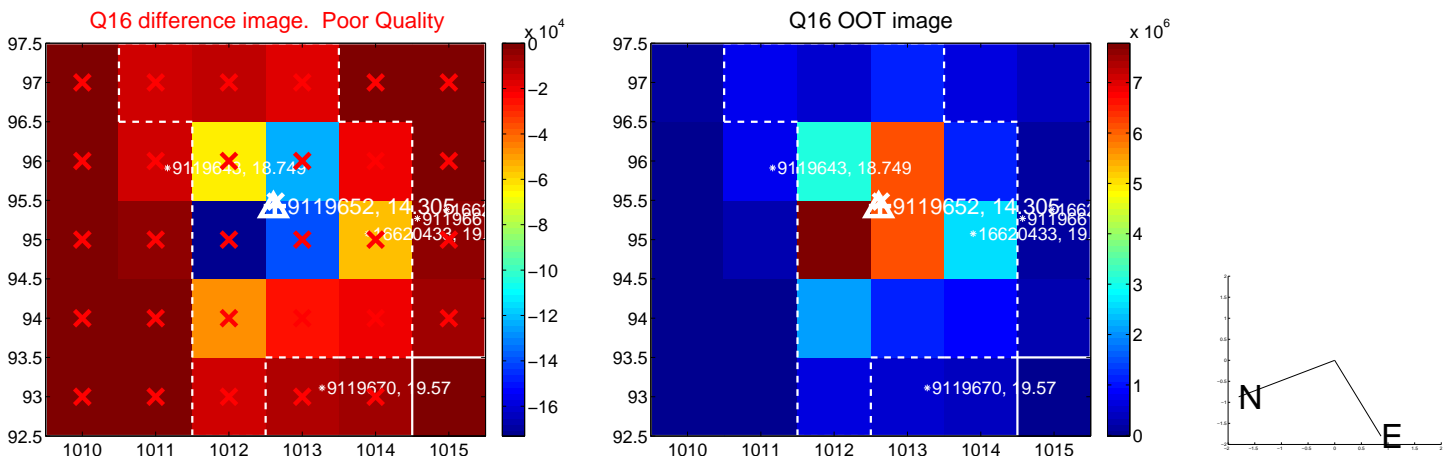
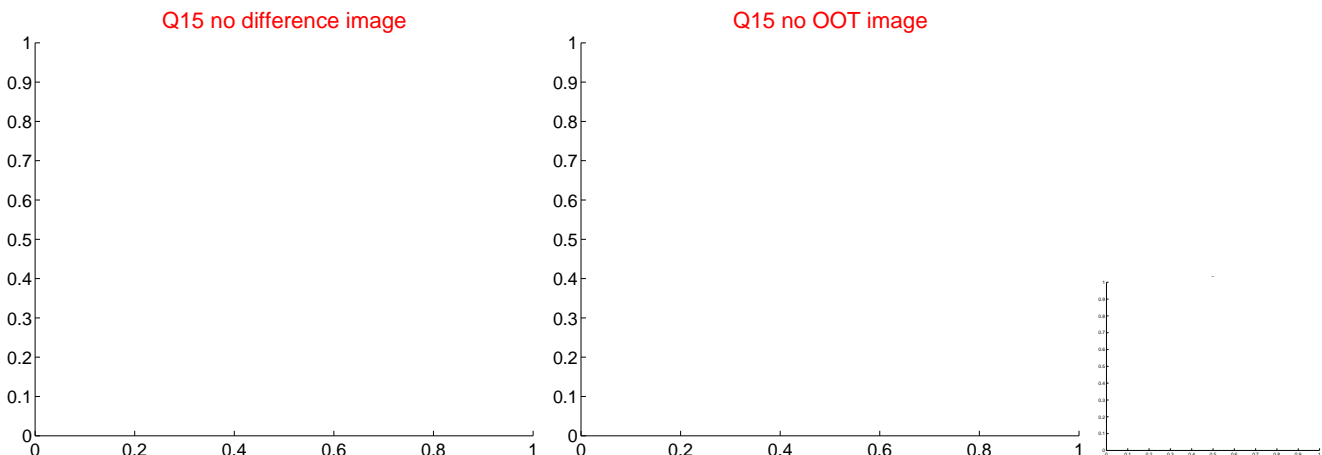
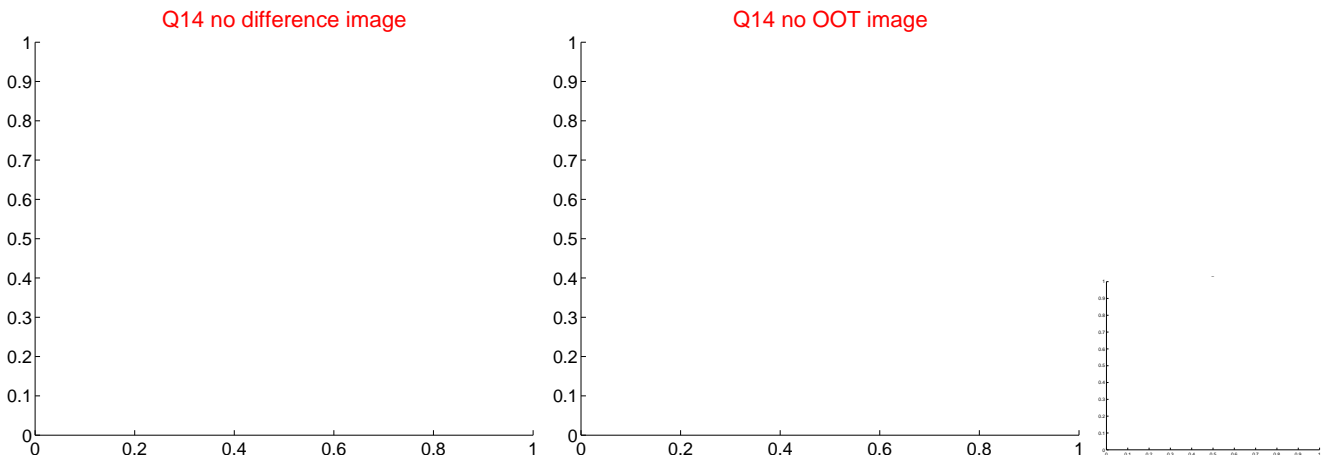
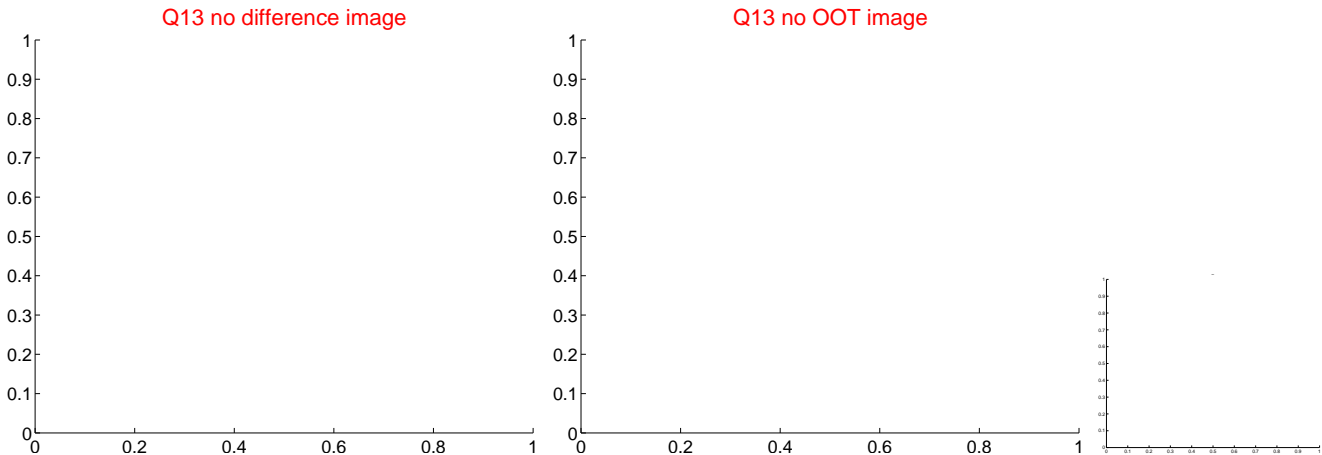
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



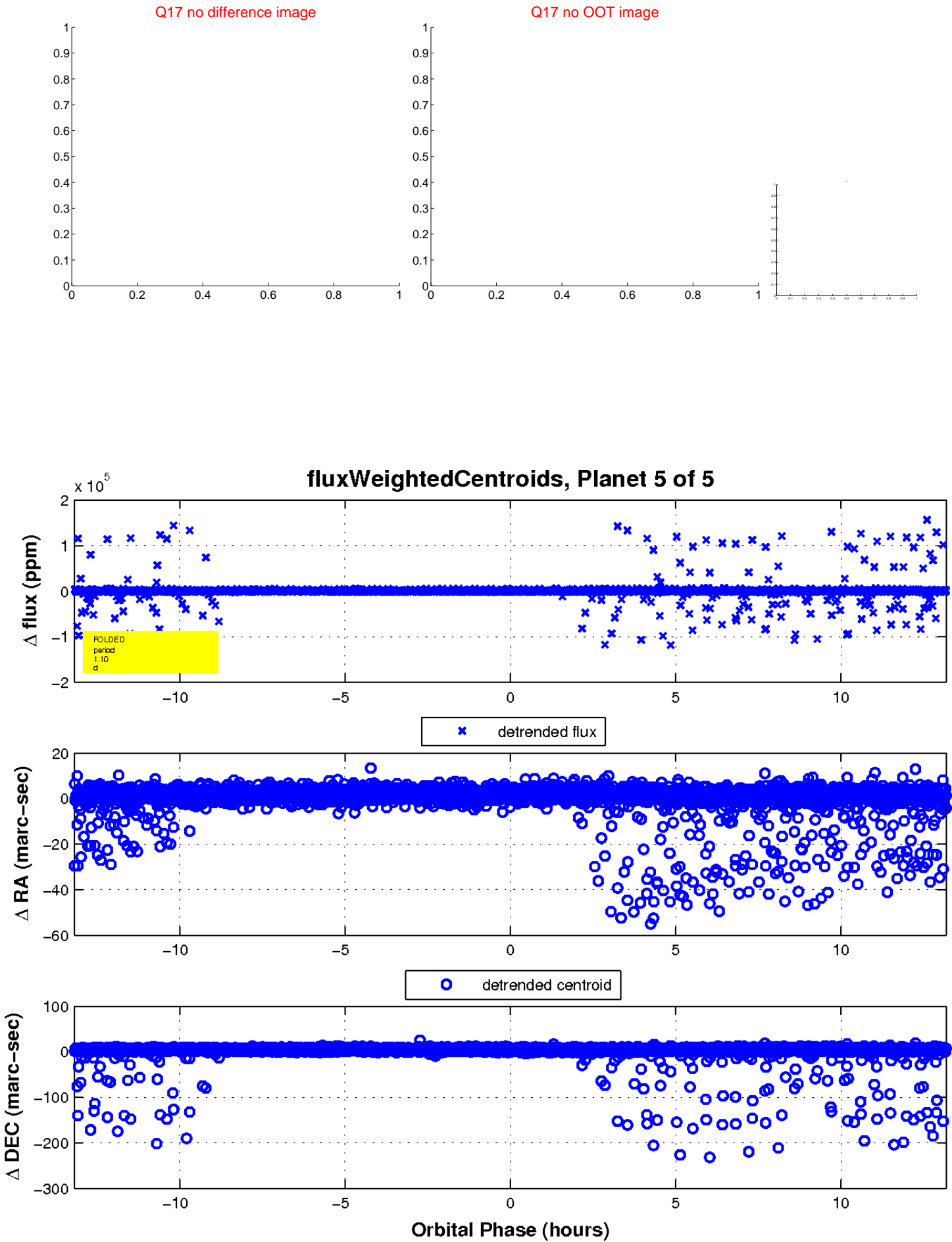
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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



UKIRT Image

Declination

