

KIC 003326917

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})
003326917-01	OBS	No	386.220799	445.871098	14335.0	14.311	28.5	6.3	2.08	6740	43.25	6.33
003326917-02	OBS	No	590.313830	245.453461	12696.5	7.572	29.6	15.0	2.08	6740	40.86	3.60
003326917-03	OBS	No	394.320030	324.901017	1133.0	3.500	24.6	-1.0	2.08	6740	7.05	6.16

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
003326917-01	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_CHASES_ZUMA—LPP_DV—LPP_ALT—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_NONUNIQ_ALT—MOD_POS_ALT—INCONSISTENT_TRANS—CENT_FEW_DIFFS
003326917-02	OBS	FP	0.00	1	0	1	0	INDIV_TRANS_CHASES—LPP_DV—ALL_TRANS_CHASES—MOD_TER_DV—CENT_FEW_DIFFS—HALO_GHOST
003326917-03	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_CHASES—LPP_DV—ALL_TRANS_CHASES—INCONSISTENT_TRANS—CENT_NOFITS

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

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

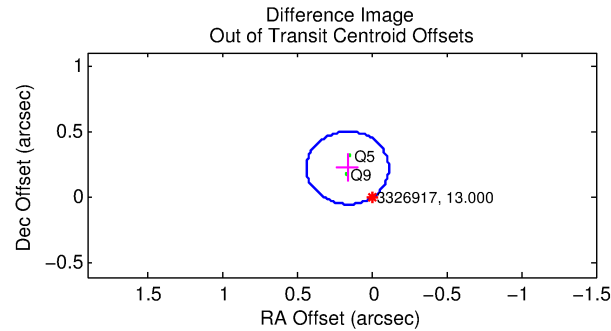
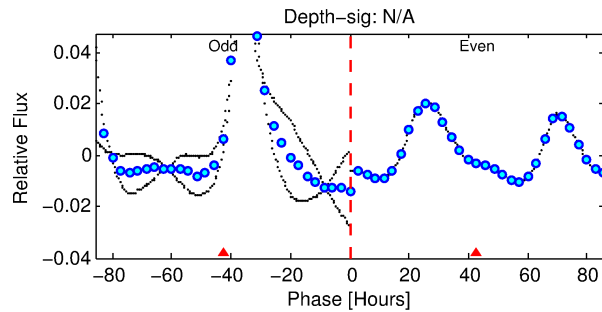
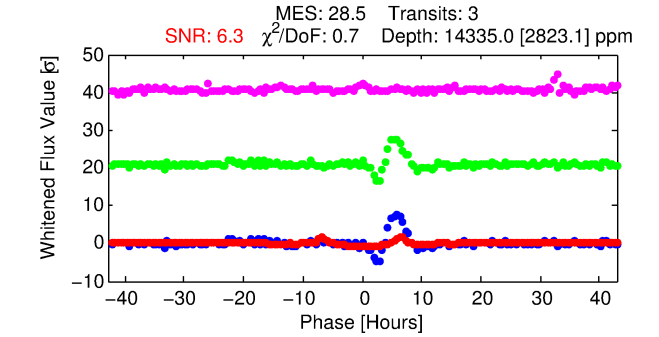
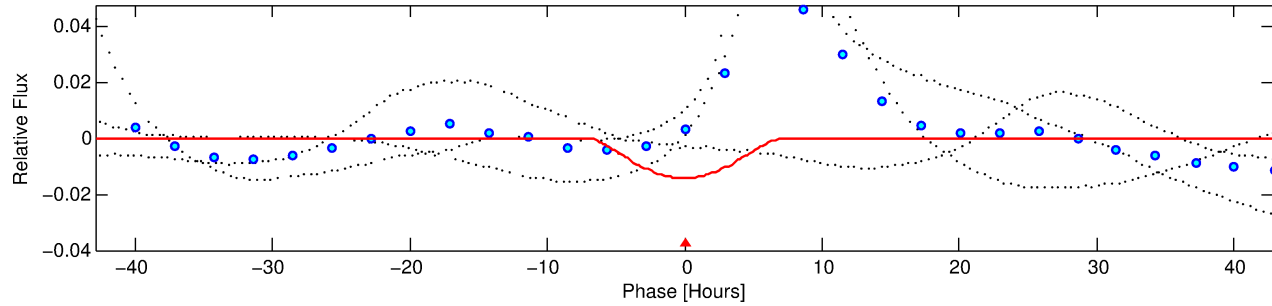
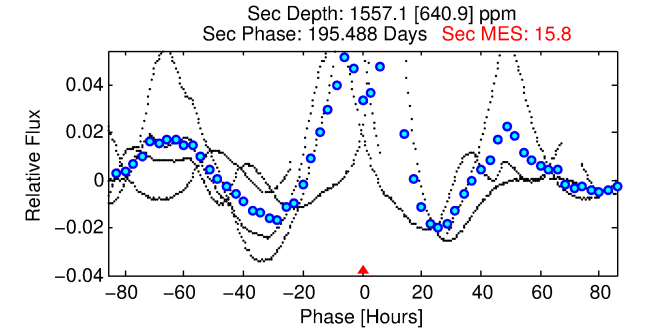
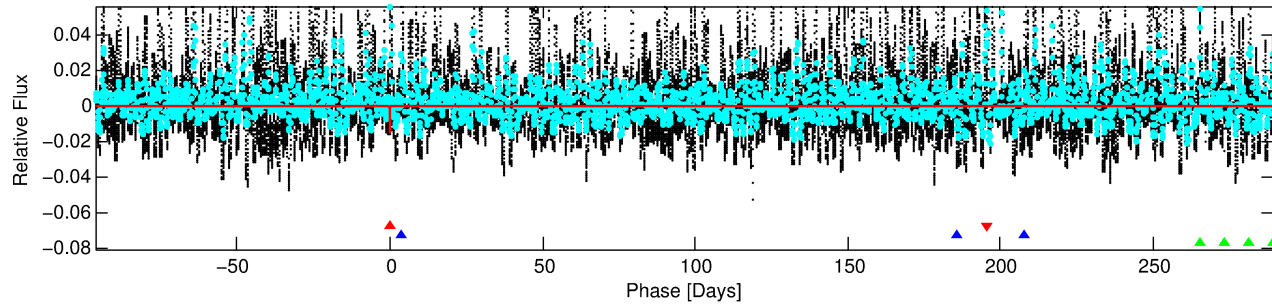
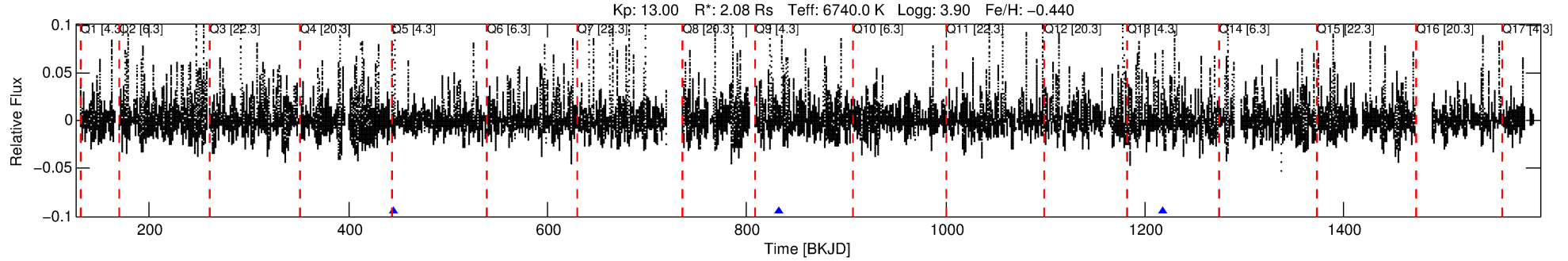
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 003326917-01

No Significant Match Found

DV One-Page Summary

KIC: 3326917 Candidate: 1 of 3 Period: 386.221 d



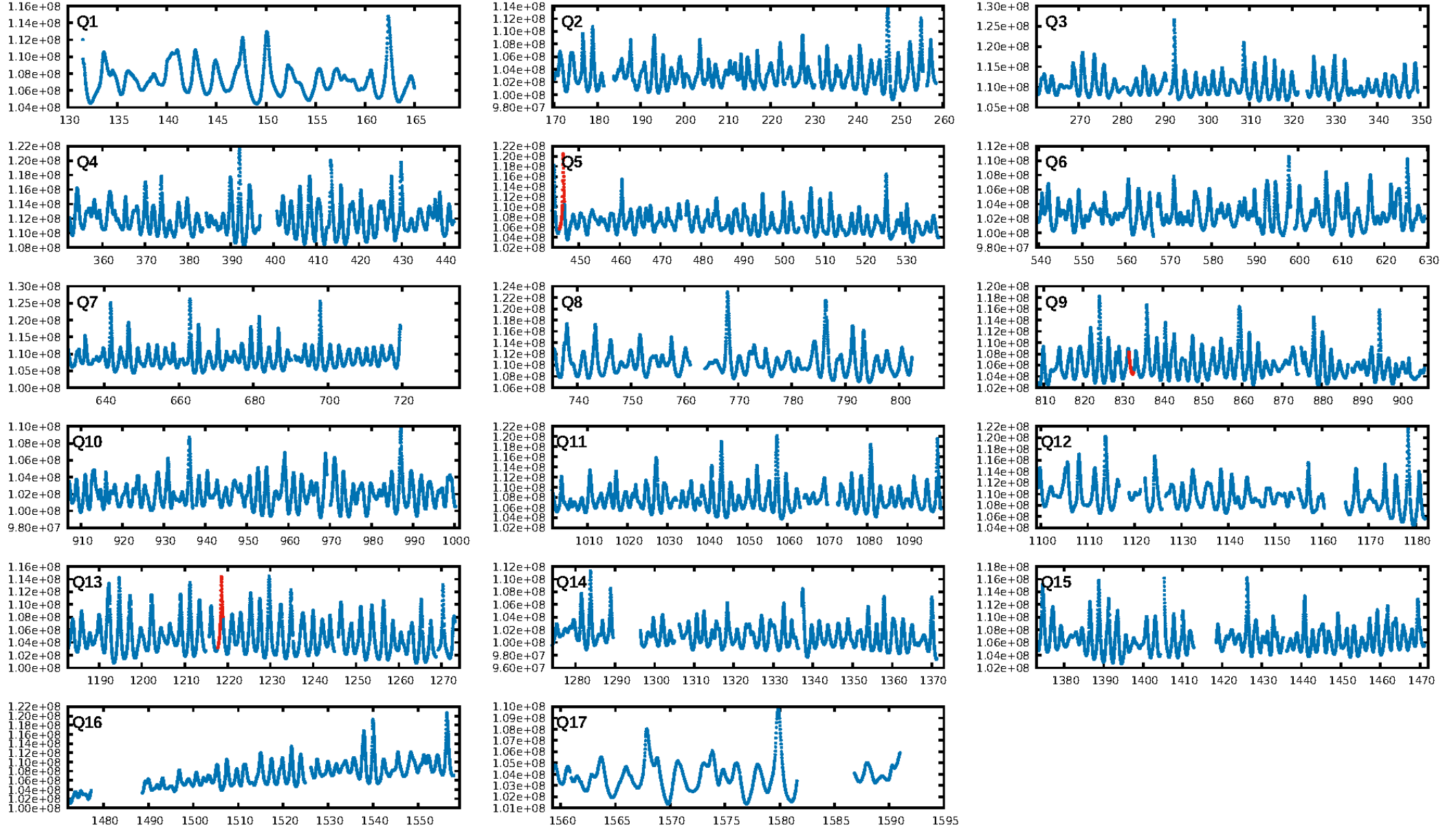
DV Fit Results:

Period = 386.22080 [0.00812] d
Epoch = 445.8711 [0.0121] BKJD
Rp/R* = 0.1910 [0.1667]
a/R* = 133.39 [12.22]
b = 1.00 [0.25]
Seff = 6.34 [4.62]
Teq = 405 [74] K
Rp = 43.25 [42.18] Re
a = 1.1210 [0.4890] AU
Ag = 575.57 [1110.68] [0.52σ]
Teffp = 3064 [1379] K [1.93σ]

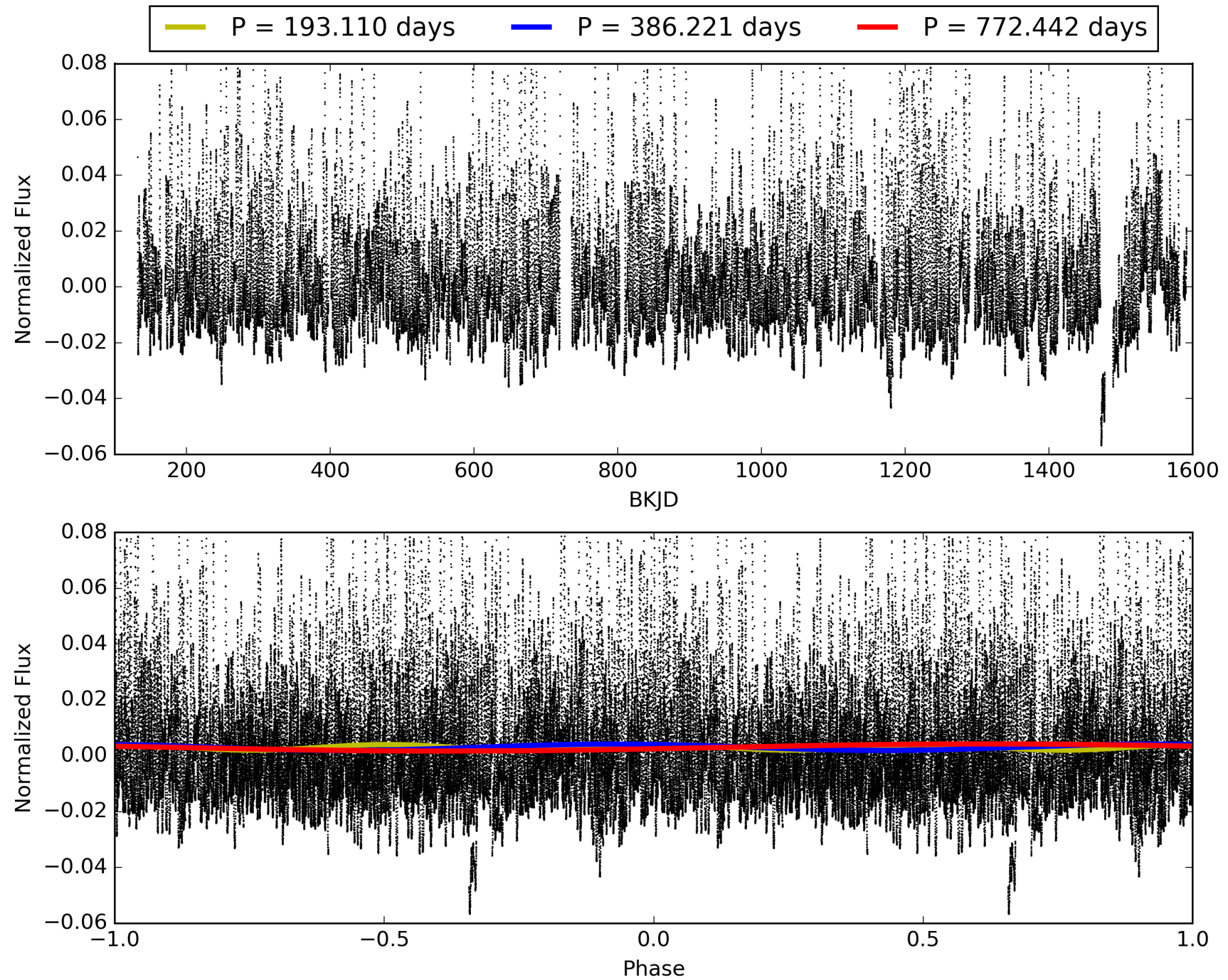
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: 100.0% [13.19σ]
ModelChiSquare2-sig: 14.3%
ModelChiSquareGof-sig: 100.0%
Bootstrap-pfa: N/A
RollingBand-fgt: 1.00 [3/3]
GhostDiagnostic-chr: 1.094
Centroid-sig: N/A
Centroid-so: 0.401 arcsec [1.59σ]
OotOffset-rm: 0.276 arcsec [3.01σ]
KicOffset-rm: 0.205 arcsec [2.17σ]
OotOffset-st: 0/0/0/2 [2]
KicOffset-st: 0/0/0/2 [2]
DiffImageQuality-fgm: 0.50 [1/2]
DiffImageOverlap-fno: 1.00 [2/2]

TCE 003326917-01, PDC Light Curves

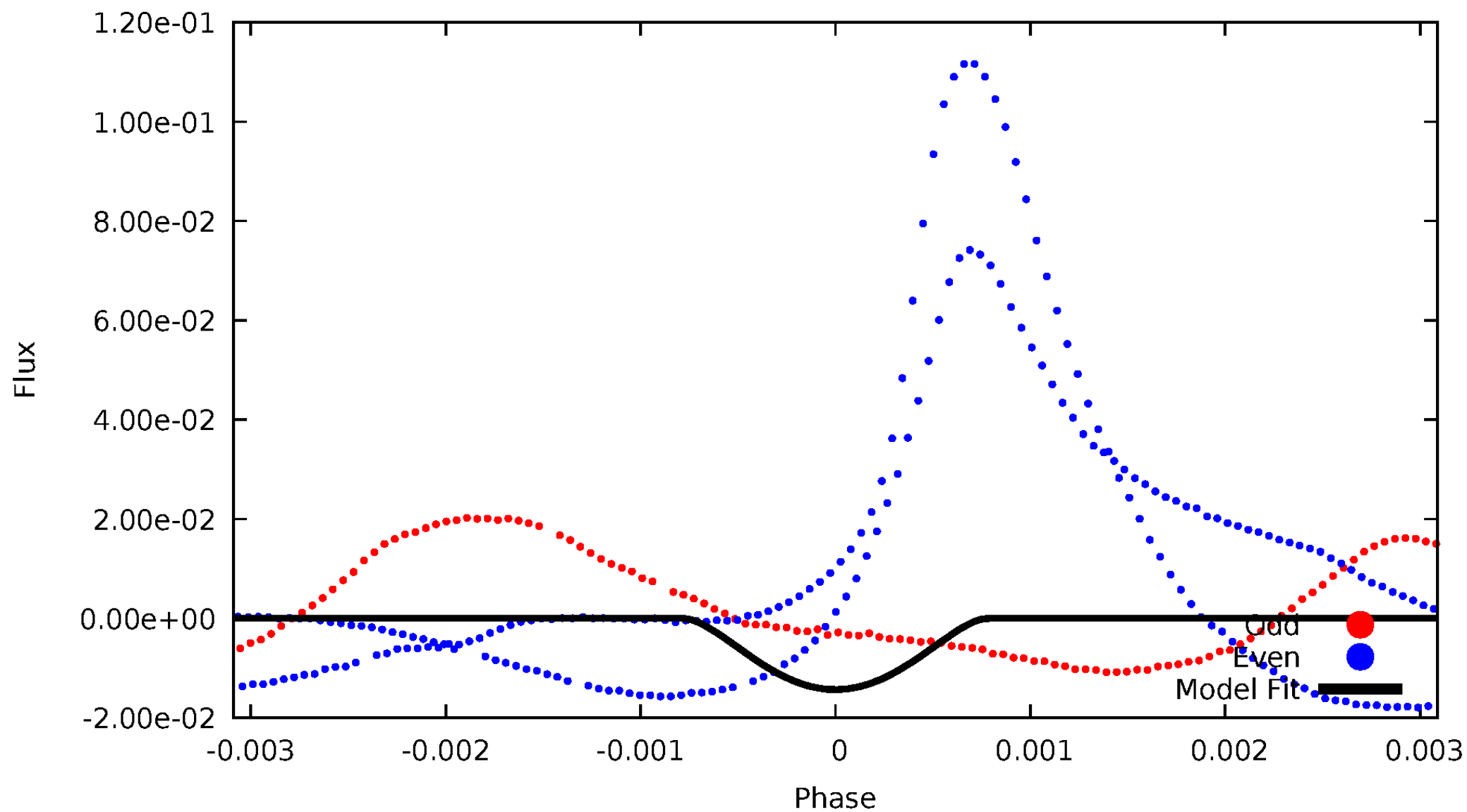


TCE 003326917-01



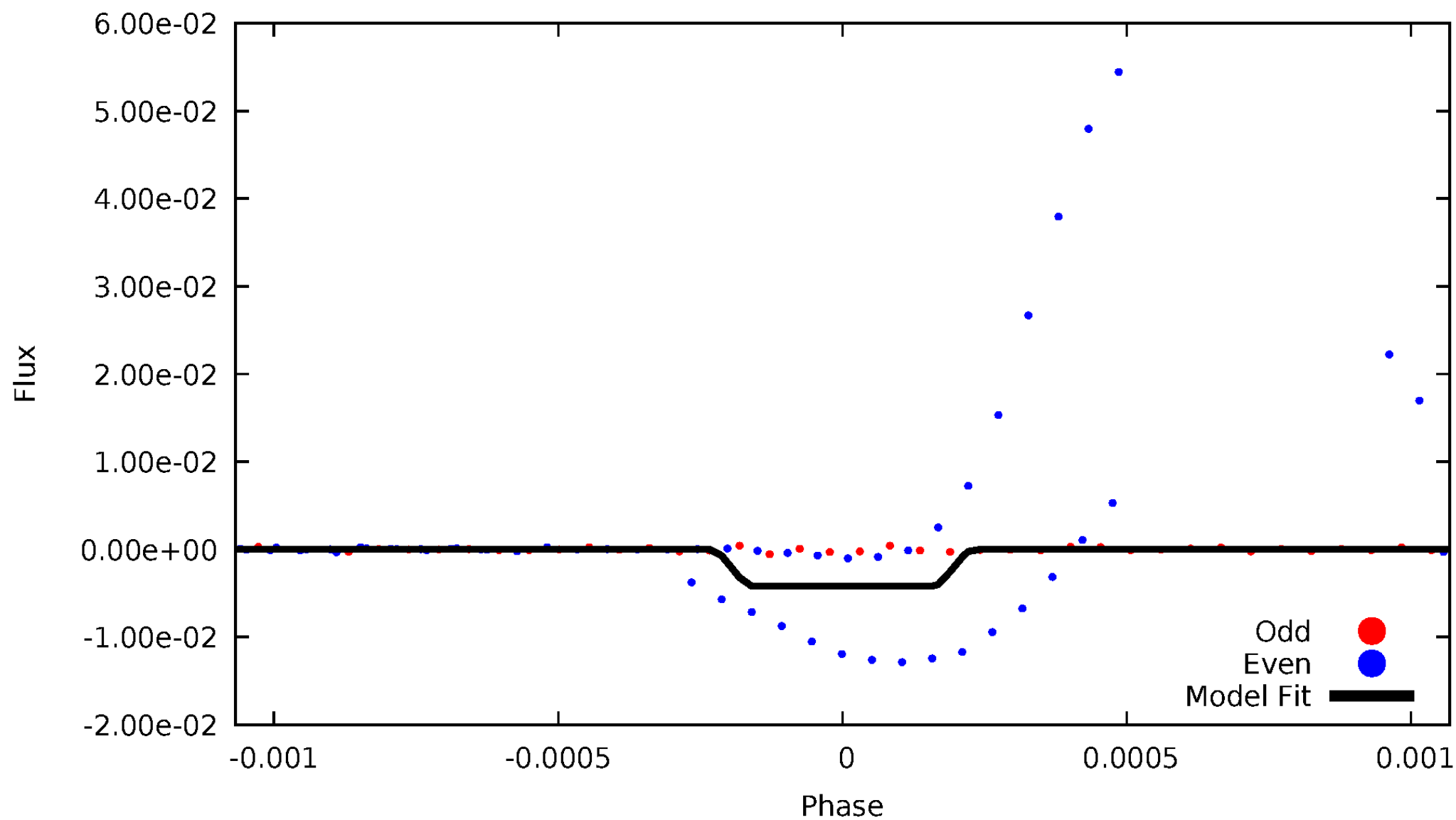
DV Odd/Even

TCE 003326917-01



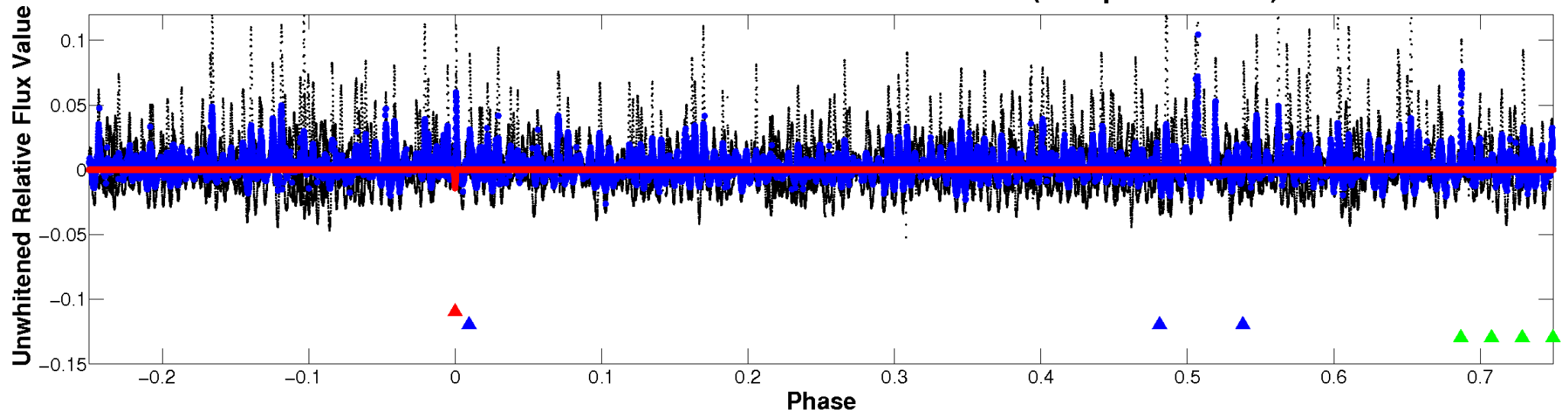
ALT Odd/Even

TCE 003326917-01

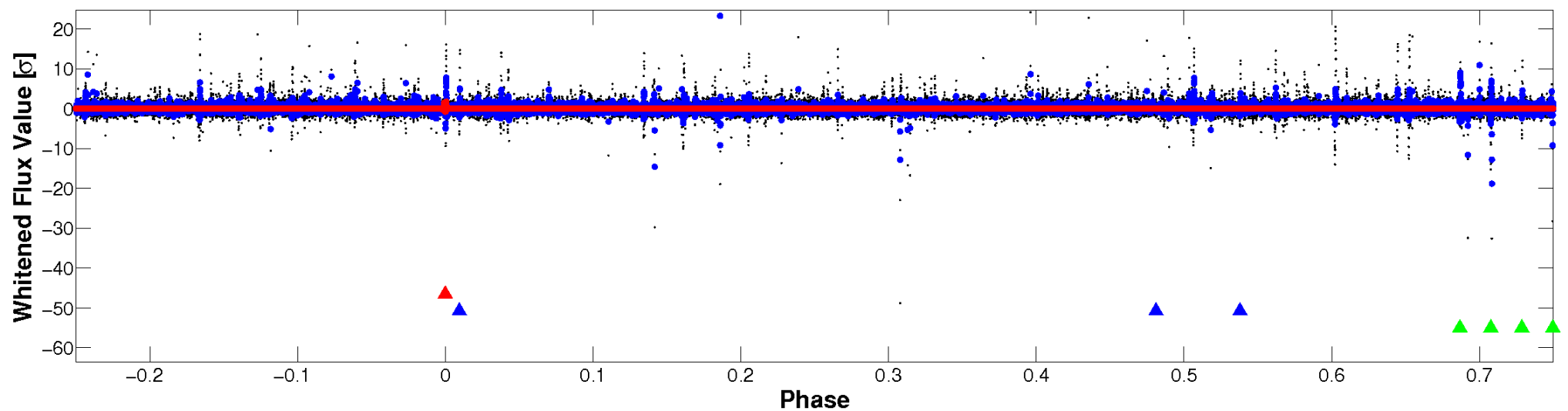


Non-Whitened Vs. Whitened Light Curve

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

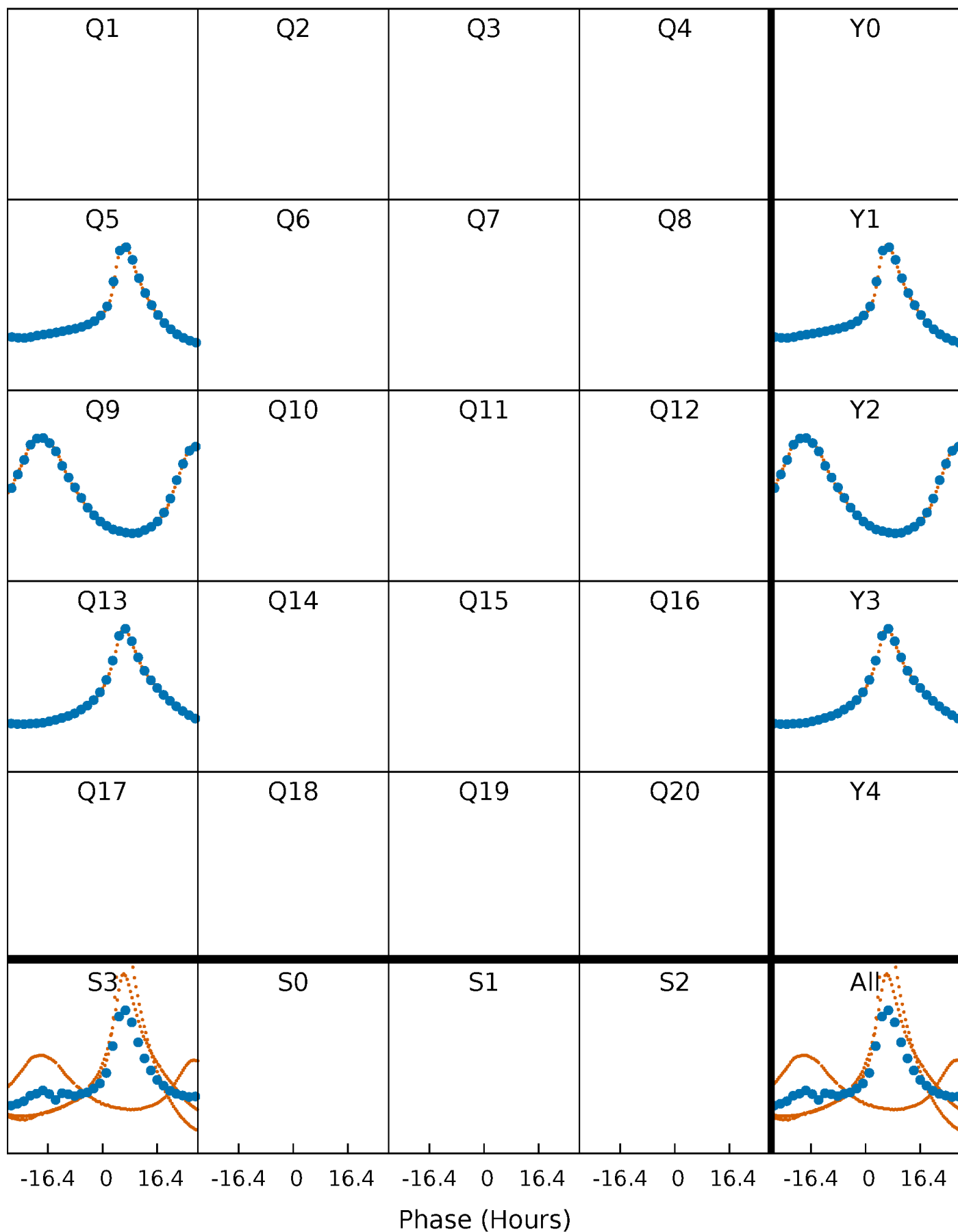


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



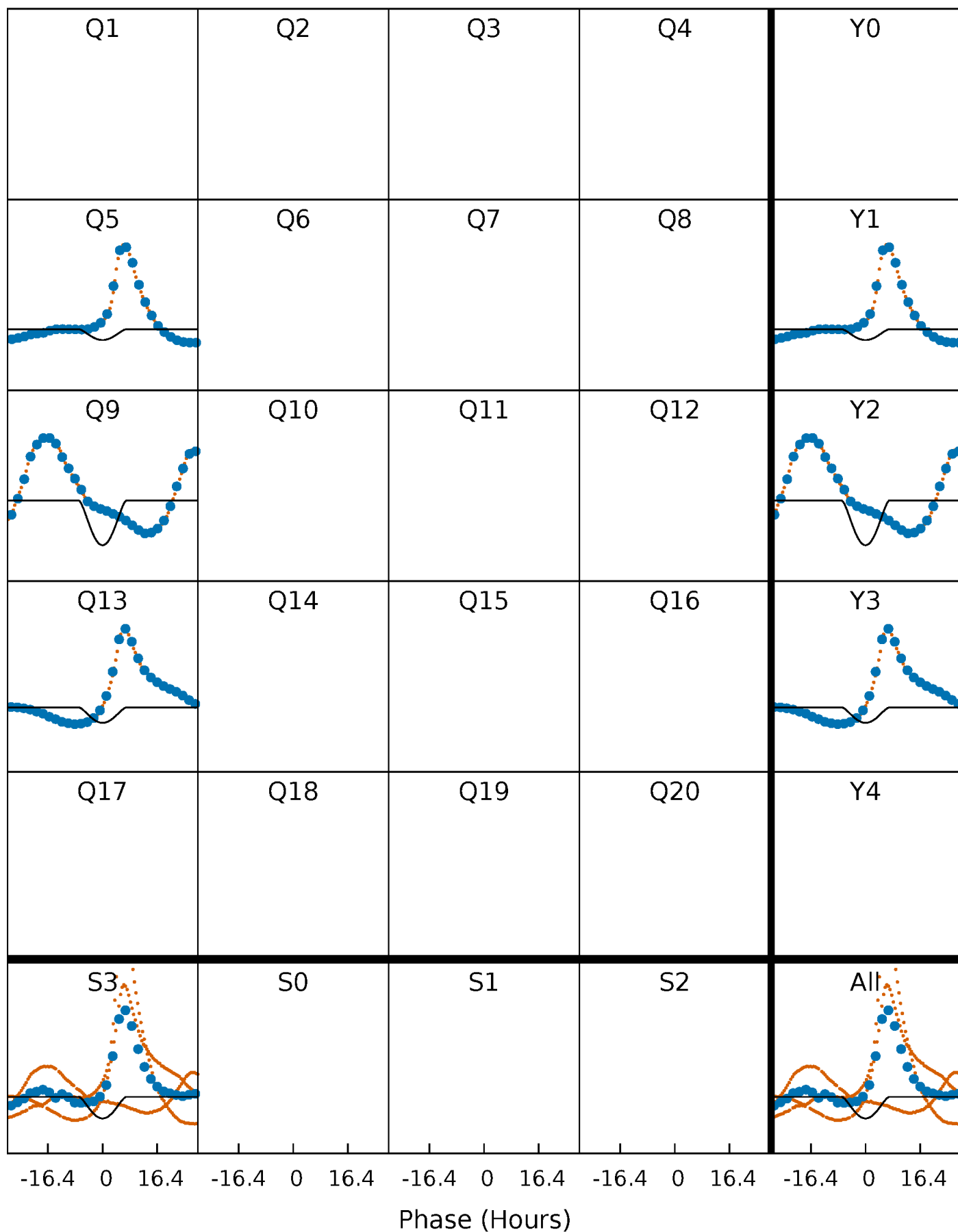
PDC Quarter-Phased Transit Curves

TCE 003326917-01 P=386.220799 Days $T_0=445.871098$ (BKJD)



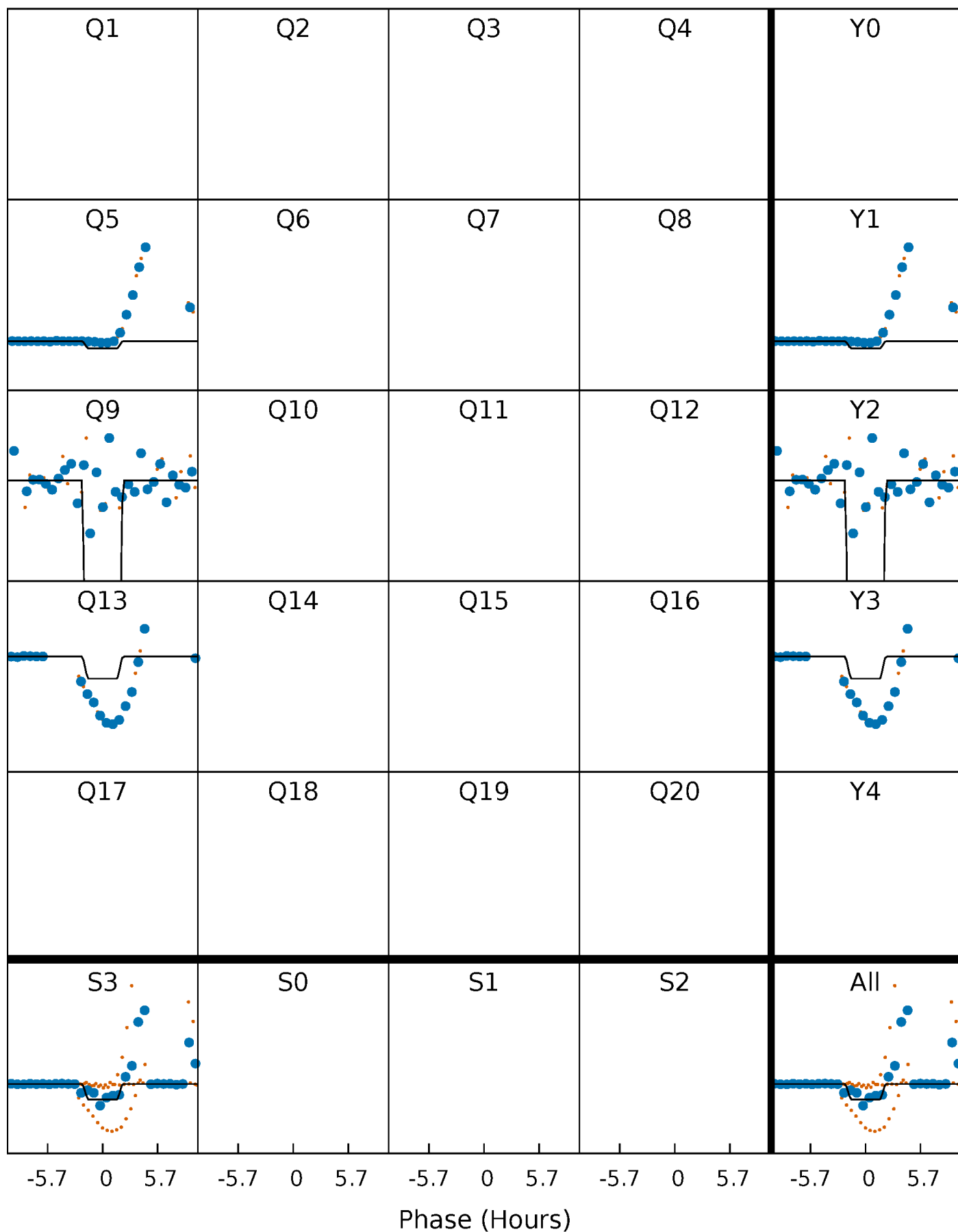
DV Quarter-Phased Transit Curves

TCE 003326917-01 $P=386.220799$ Days $T_0=445.871098$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

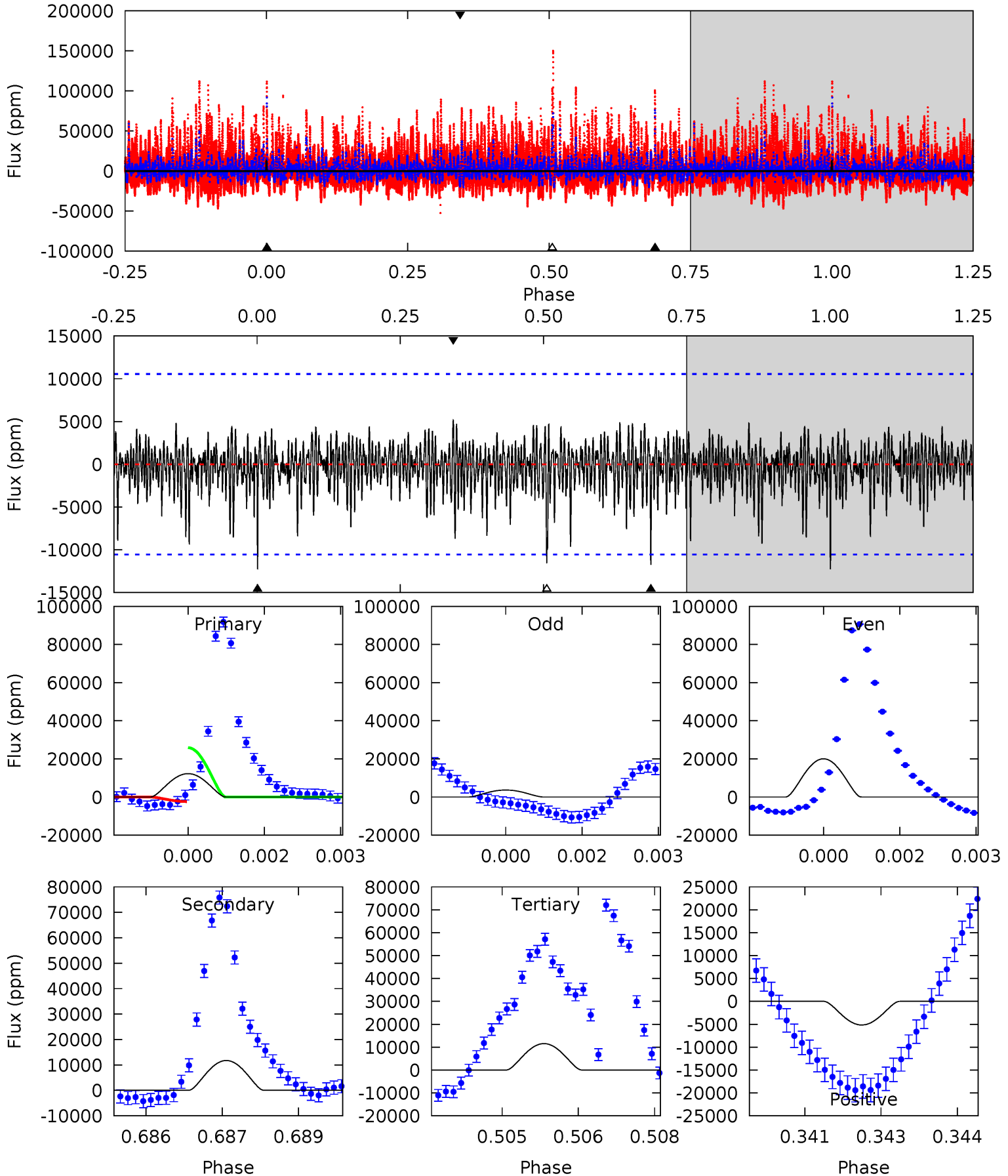
TCE 003326917-01 P=386.228340 Days $T_0=445.898034$ (BKJD)



DV Model-Shift Uniqueness Test

003326917-01, $P = 386.220799$ Days, $E = 59.650299$ Days

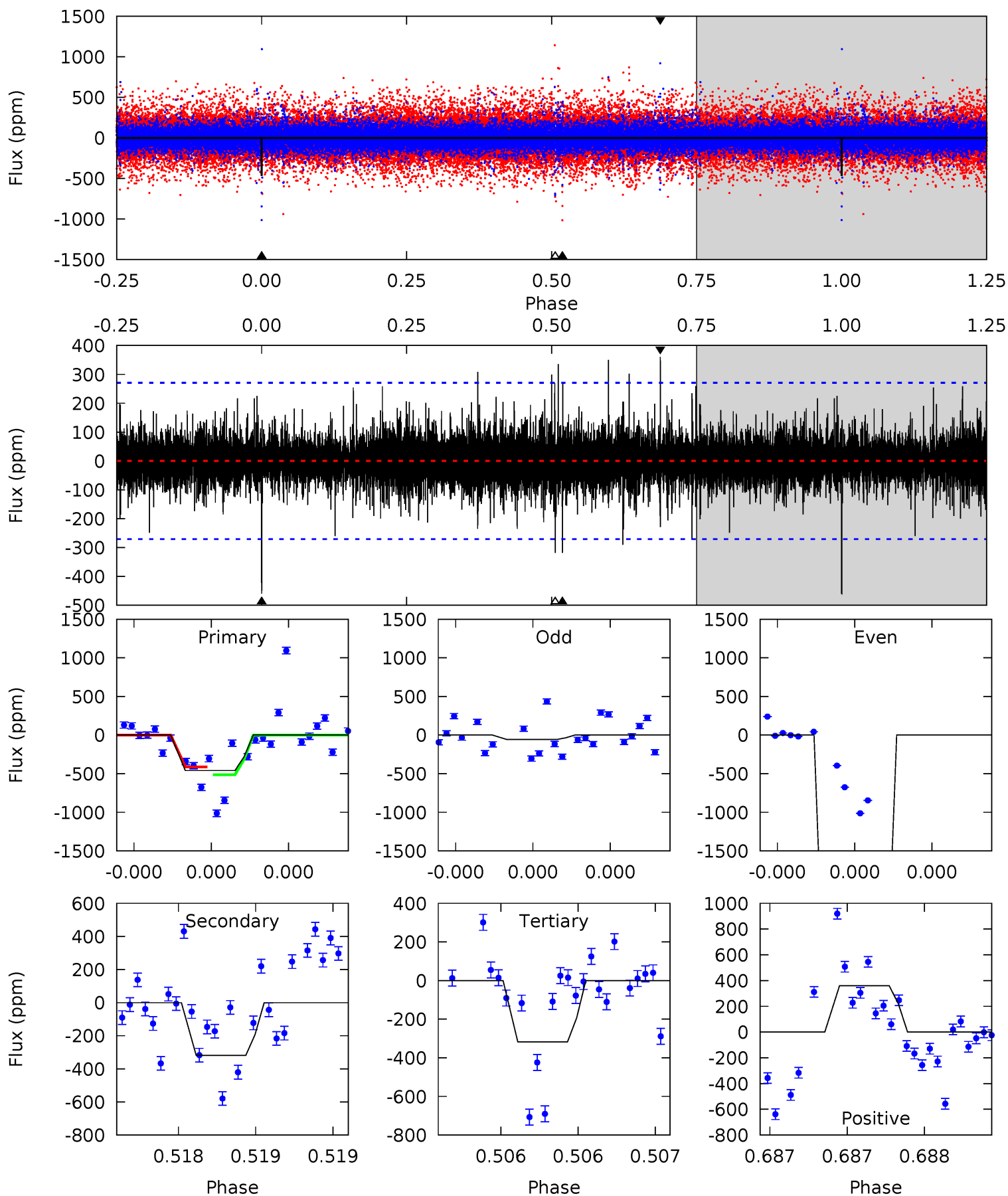
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
6.24	5.98	5.88	2.63	5.37	3.16	1.18	0.36	3.62	0.10	3.35	3.71	1.05	0.30	6.00



Alt Model-Shift Uniqueness Test

003326917-01, P = 386.228340 Days, E = 59.669694 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
9.49	6.58	6.57	7.44	5.59	3.51	1.04	2.92	2.04	0.01	-0.87	49.7	50.8	0.44	0



Stellar Parameters For KIC 003326917

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	M (M_{\odot})	p_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	6740^{+190}_{-262}	$3.904^{+0.424}_{-0.133}$	$-0.440^{+0.300}_{-0.300}$	$2.075^{+0.487}_{-0.904}$	$1.259^{+0.195}_{-0.238}$	$0.199^{+0.659}_{-0.076}$
	+3%/-4%	+11%/-3%	+68%/-68%	+23%/-44%	+15%/-19%	+332%/-38%
Source	PHO54	PHO54	PHO54	DSEP		

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

Secondary Eclipse Parameters for KIC 003326917-01 / KOI

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	-11753 ± 1966	$44.21^{+32.71}_{-28.37}$	551^{+43}_{-68}	4863^{+3325}_{-894}	4131^{+28467}_{-2725}
Alt.	-318 ± 48	$30.92^{+29.42}_{-21.40}$	555^{+41}_{-59}	2998^{+1377}_{-479}	227^{+2101}_{-167}

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 $A_{obs} \gg 1.0$

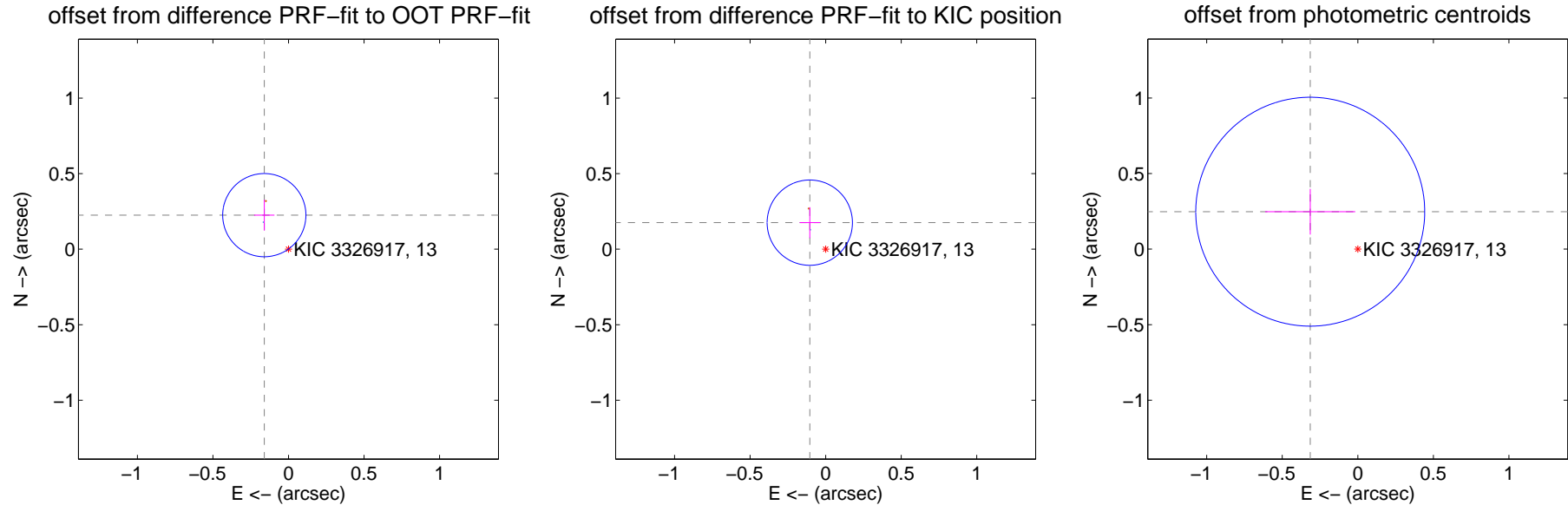
DV Centroid Data

Supplemental centroid analysis for 003326917-01. Kepler magnitude: 13.00. Transit SNR 6.34

There are 1 quarters with good PRF difference image offsets

The direct PRF centroid is offset from the target star catalog position by about 0.08 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.276 \pm 0.092	3.01	0.160 \pm 0.067	0.225 \pm 0.102
PRF-fit source offset from KIC position	0.205 \pm 0.094	2.17	0.105 \pm 0.067	0.176 \pm 0.102
photometric centroid source offset	0.40 \pm 0.25	1.59	0.31 \pm 0.30	0.25 \pm 0.15

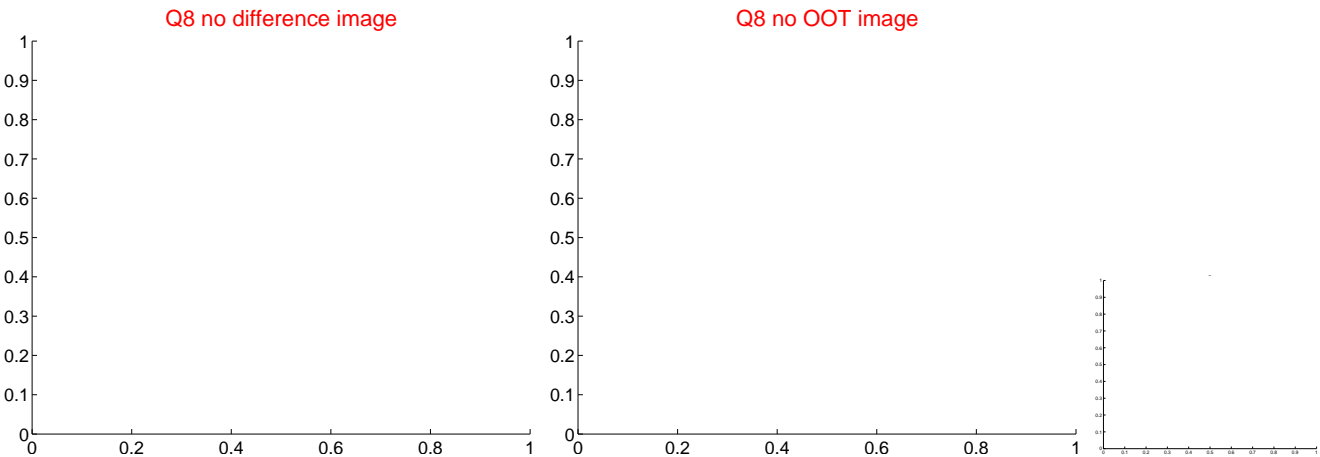
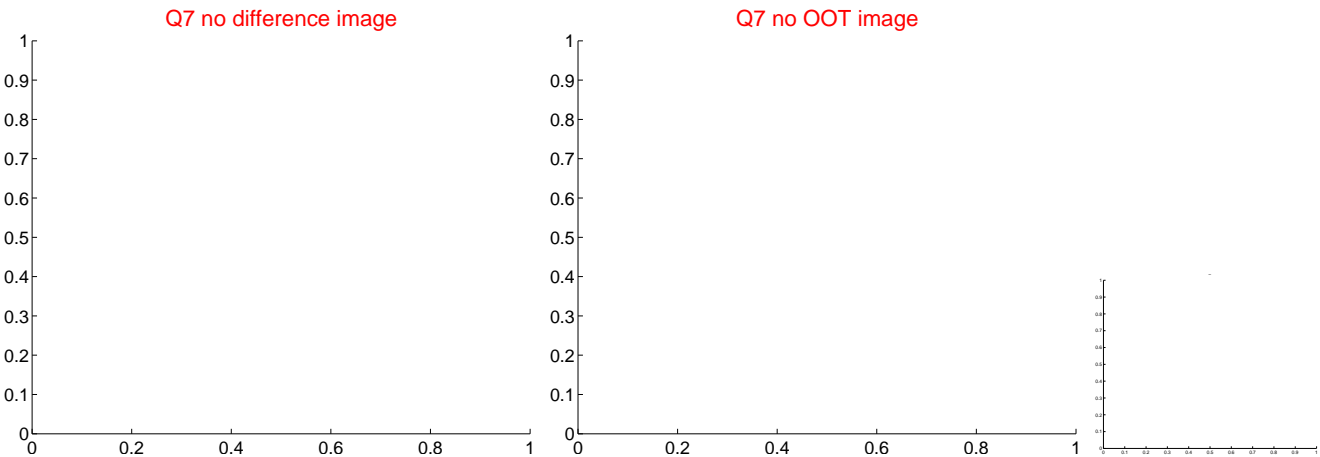
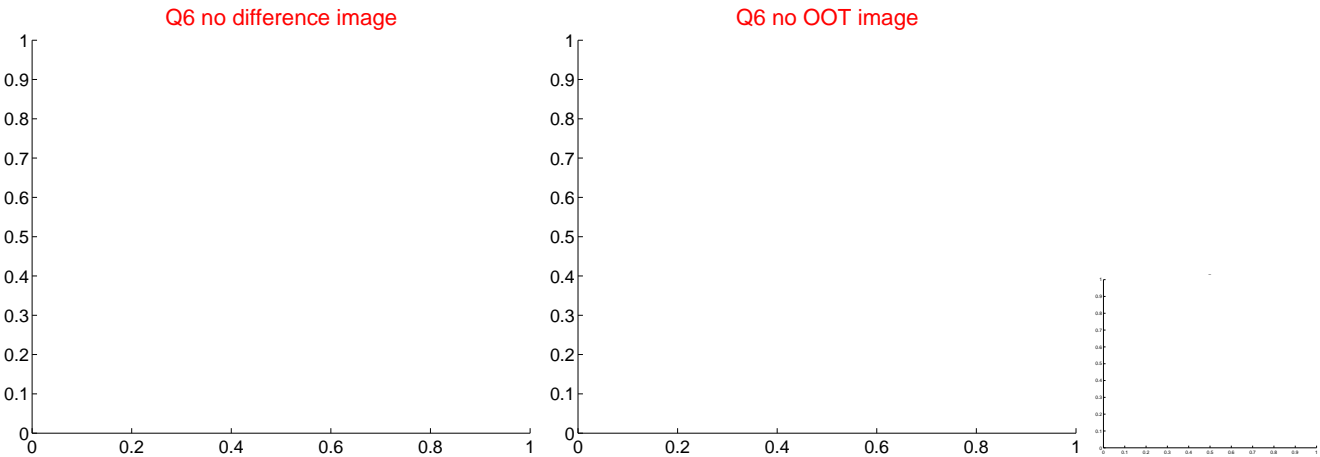
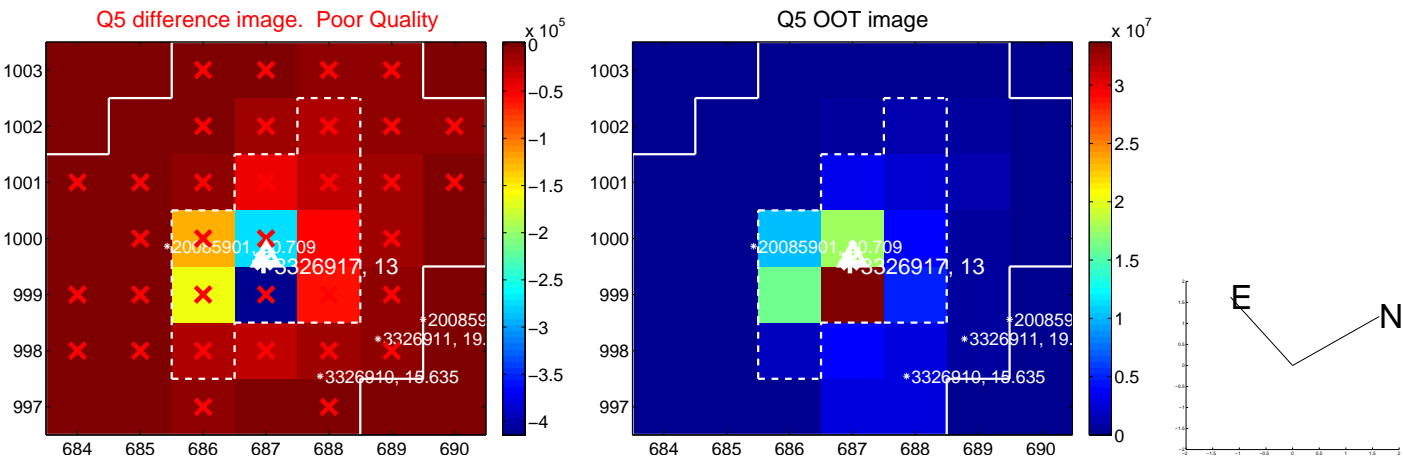


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ . 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.

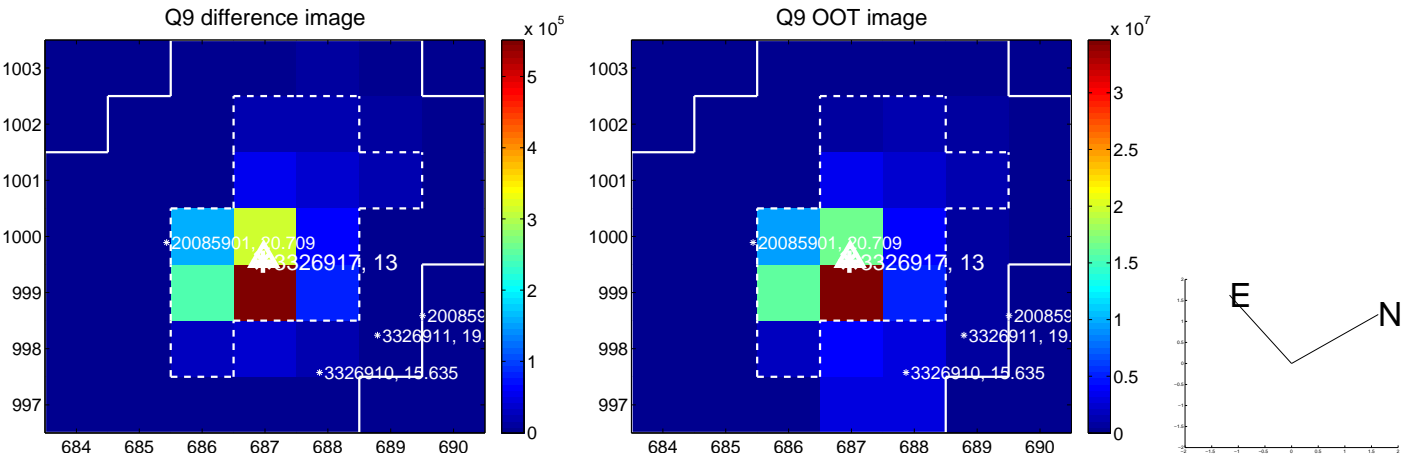
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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



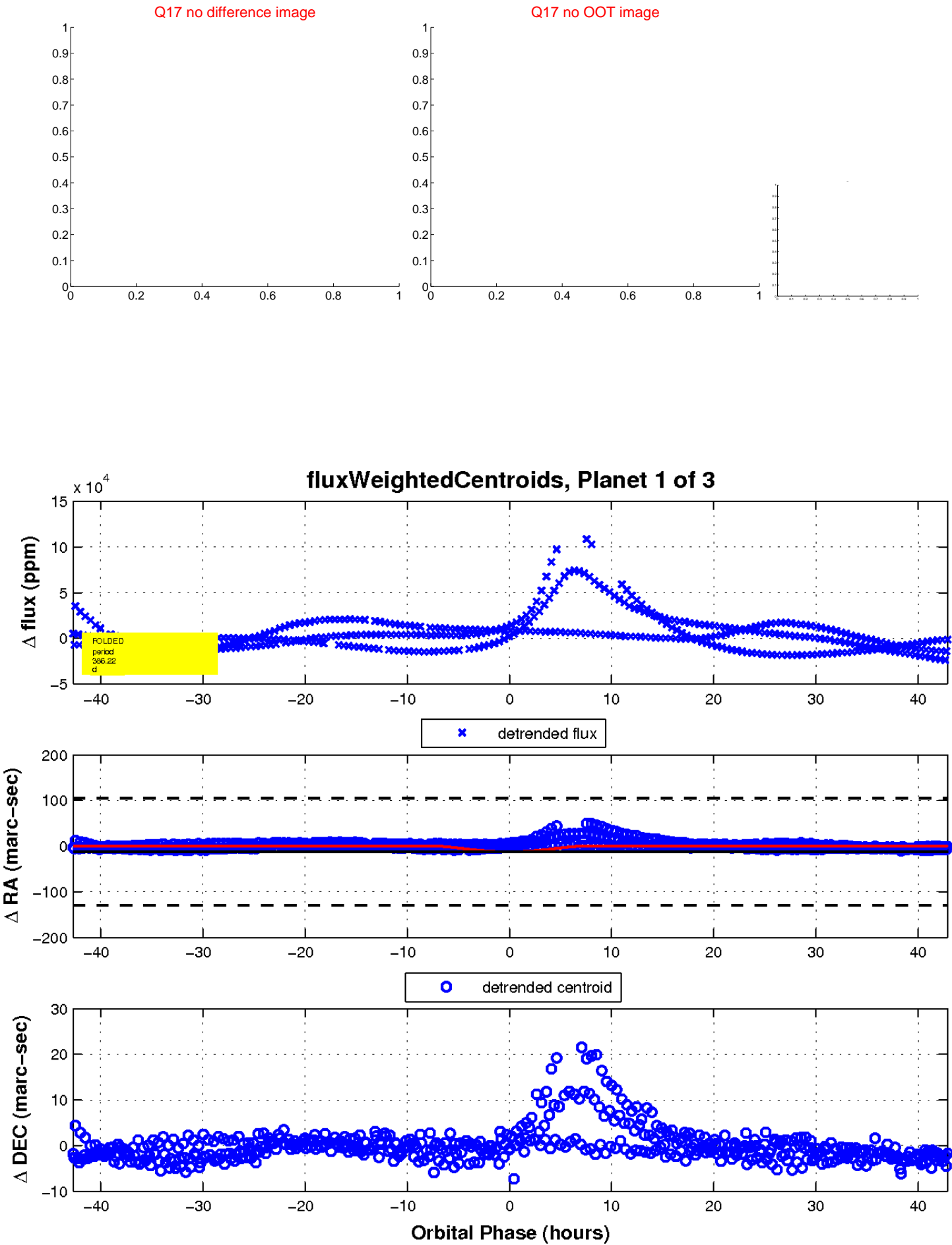
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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

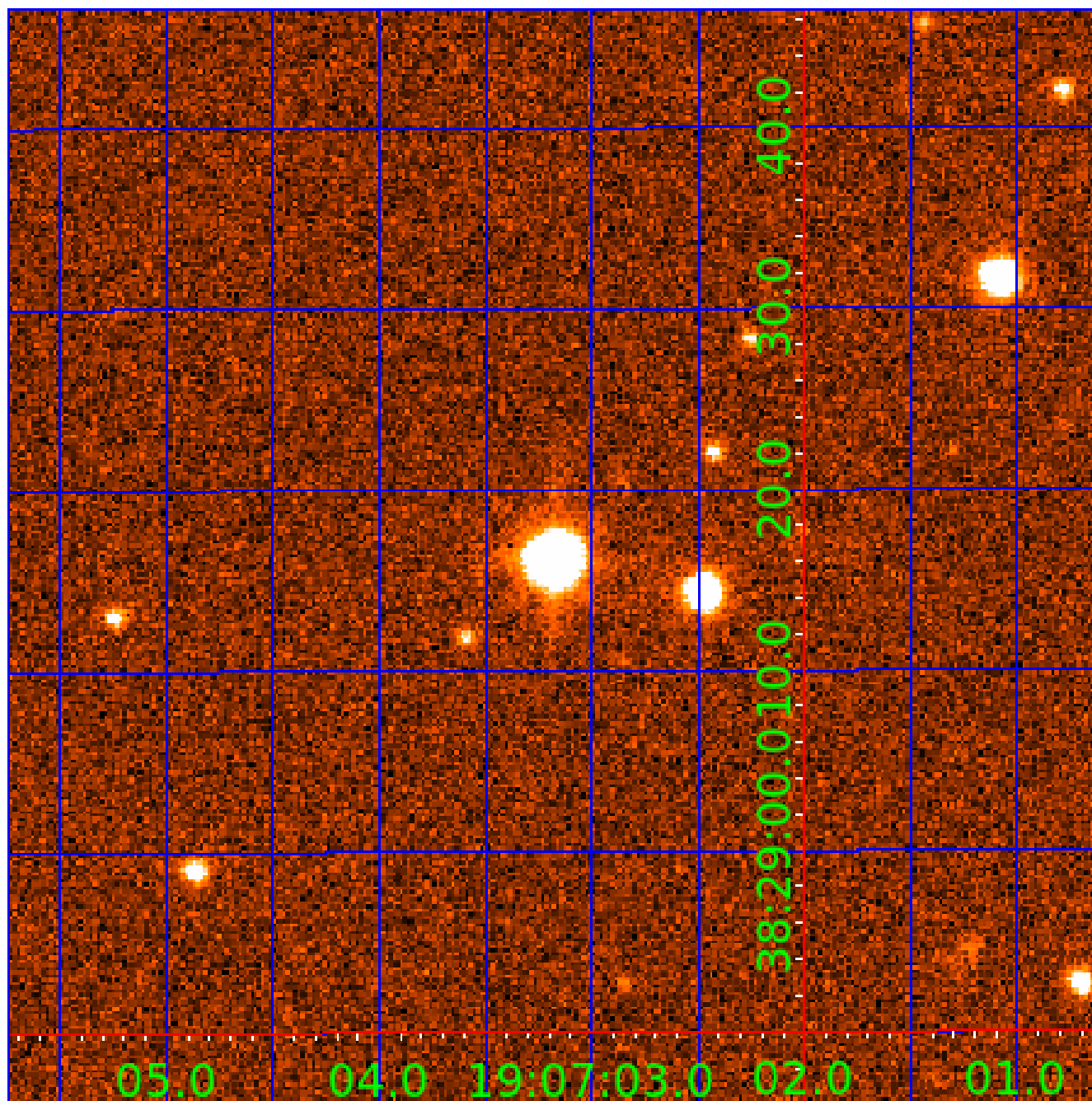


white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



UKIRT Image

Declination



KIC 003326917

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})
003326917-01	OBS	No	386.220799	445.871098	14335.0	14.311	28.5	6.3	2.08	6740	43.25	6.33
003326917-02	OBS	No	590.313830	245.453461	12696.5	7.572	29.6	15.0	2.08	6740	40.86	3.60
003326917-03	OBS	No	394.320030	324.901017	1133.0	3.500	24.6	-1.0	2.08	6740	7.05	6.16

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
003326917-01	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_CHASES_ZUMA—LPP_DV—LPP_ALT—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_NONUNIQ_ALT—MOD_POS_ALT—INCONSISTENT_TRANS—CENT_FEW_DIFFS
003326917-02	OBS	FP	0.00	1	0	1	0	INDIV_TRANS_CHASES—LPP_DV—ALL_TRANS_CHASES—MOD_TER_DV—CENT_FEW_DIFFS—HALO_GHOST
003326917-03	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_CHASES—LPP_DV—ALL_TRANS_CHASES—INCONSISTENT_TRANS—CENT_NOFITS

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

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

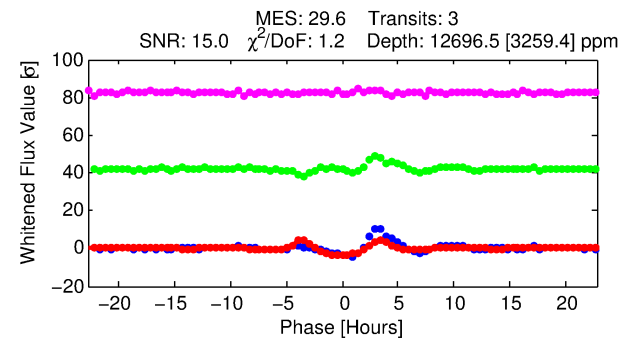
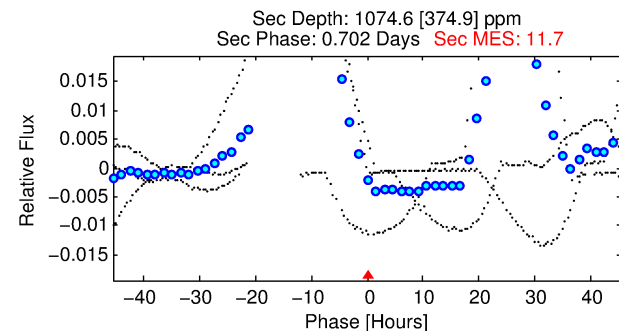
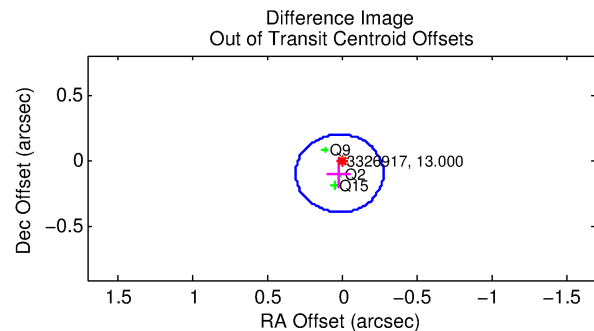
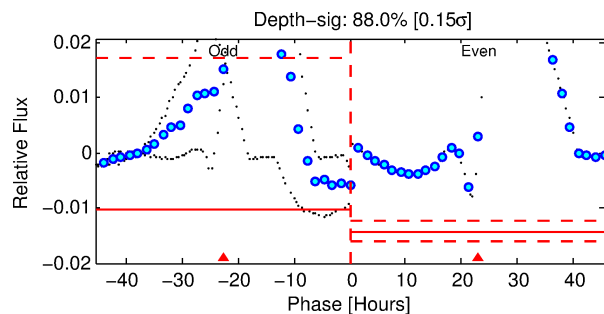
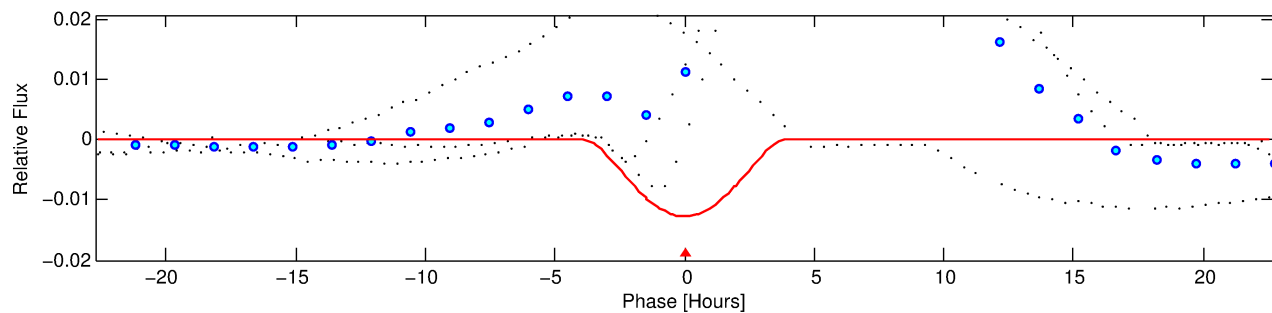
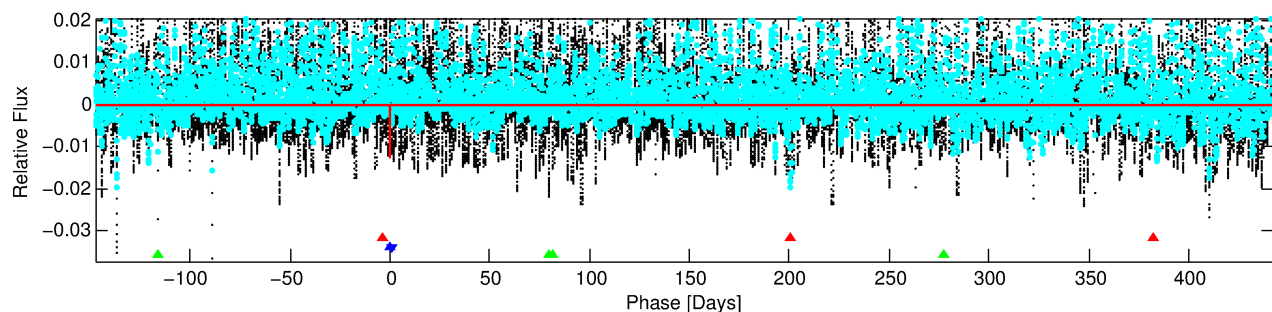
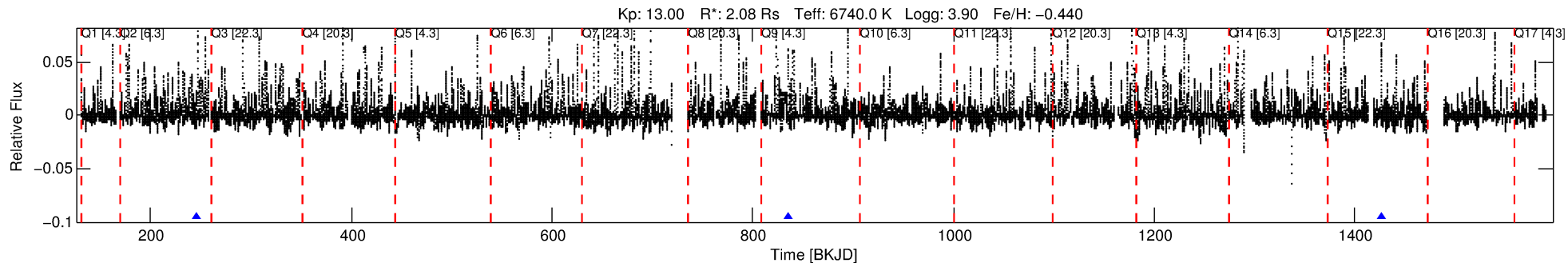
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 003326917-02

No Significant Match Found

DV One-Page Summary

KIC: 3326917 Candidate: 2 of 3 Period: 590.314 d



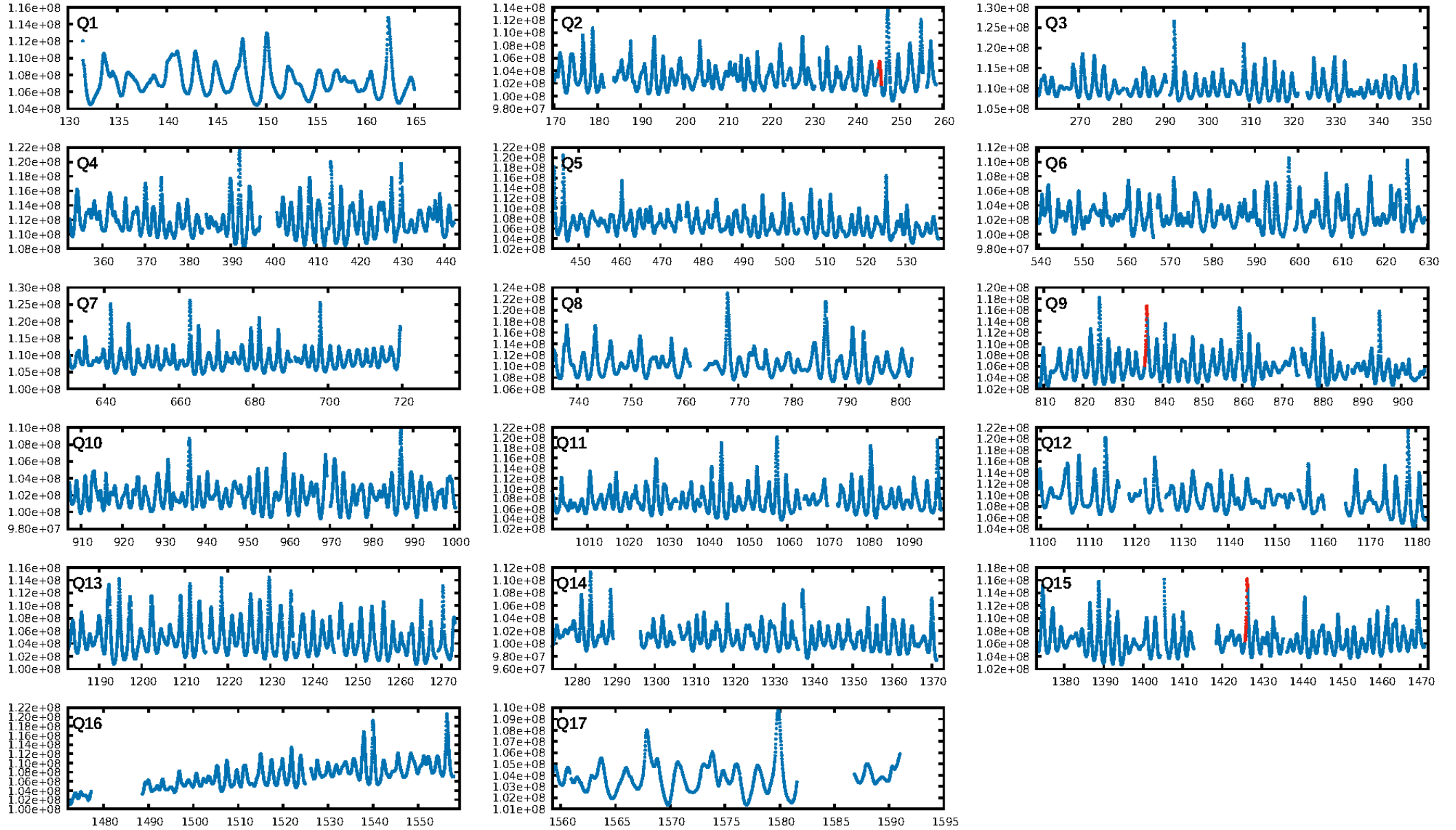
DV Fit Results:

Period = 590.31383 [0.00339] d
Epoch = 245.4535 [0.0050] BKJD
Rp/R* = 0.1804 [0.0929]
a/R* = 373.57 [25.09]
b = 1.00 [0.10]
Seff = 3.60 [2.62]
Teq = 351 [64] K
Rp = 40.86 [27.56] Re
a = 1.4874 [0.6488] AU
Ag = 783.42 [1018.57] [0.77 σ]
Teffp = 2873 [789] K [3.19 σ]

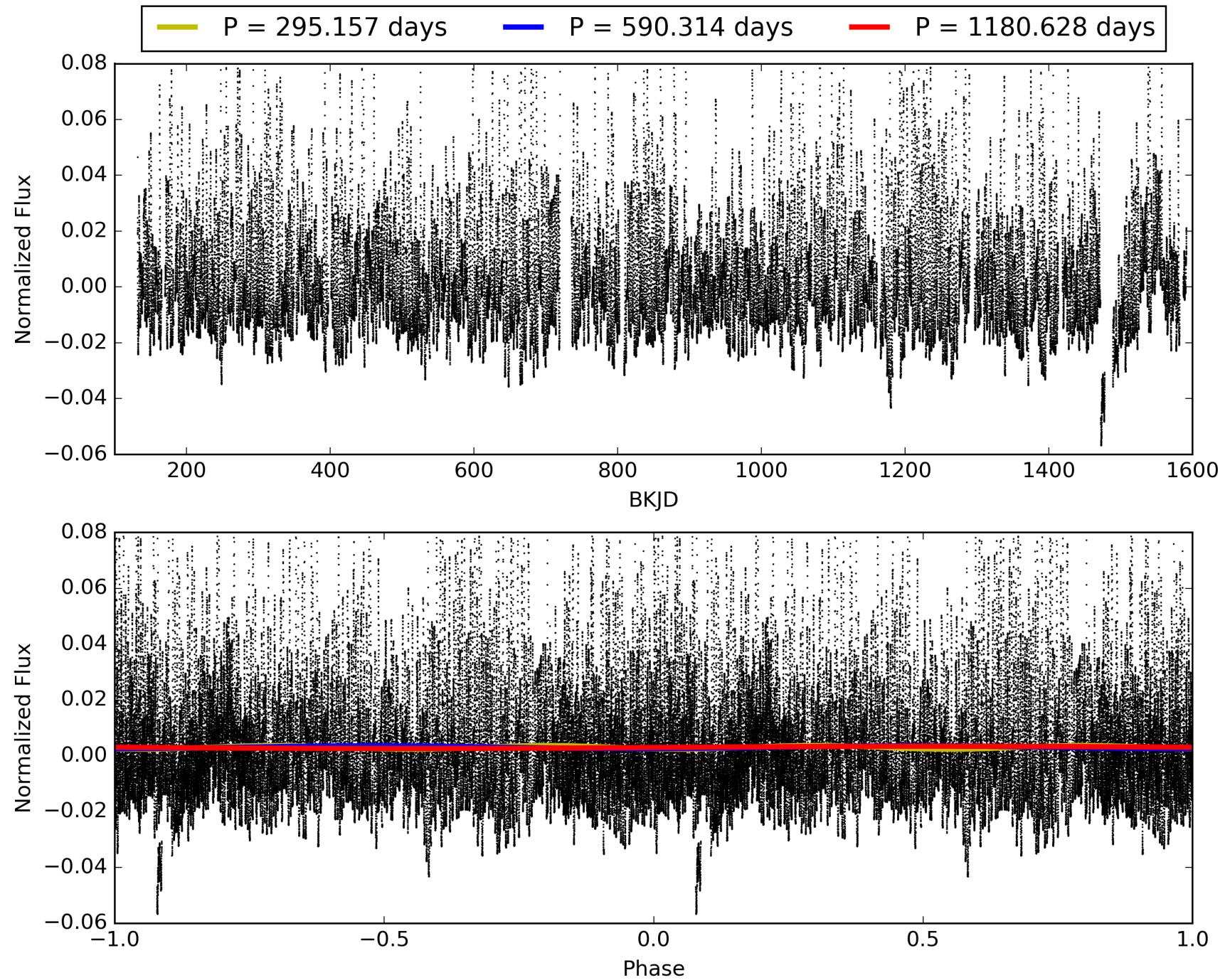
DV Diagnostic Results:

ShortPeriod-sig: 100.0% [563.87 σ]
LongPeriod-sig: N/A
ModelChiSquare2-sig: 0.0%
ModelChiSquareGof-sig: 45.5%
Bootstrap-pfa: N/A
RollingBand-fgt: 1.00 [3/3]
GhostDiagnostic-chr: -0.1625
Centroid-sig: N/A
Centroid-so: 0.641 arcsec [2.87 σ]
OotOffset-rm: 0.094 arcsec [0.96 σ]
KicOffset-rm: 0.055 arcsec [0.68 σ]
OotOffset-st: 1/1/0/1 [3]
KicOffset-st: 1/1/0/1 [3]
DiffImageQuality-fgm: 0.00 [0/3]
DiffImageOverlap-fno: 1.00 [3/3]

TCE 003326917-02, PDC Light Curves

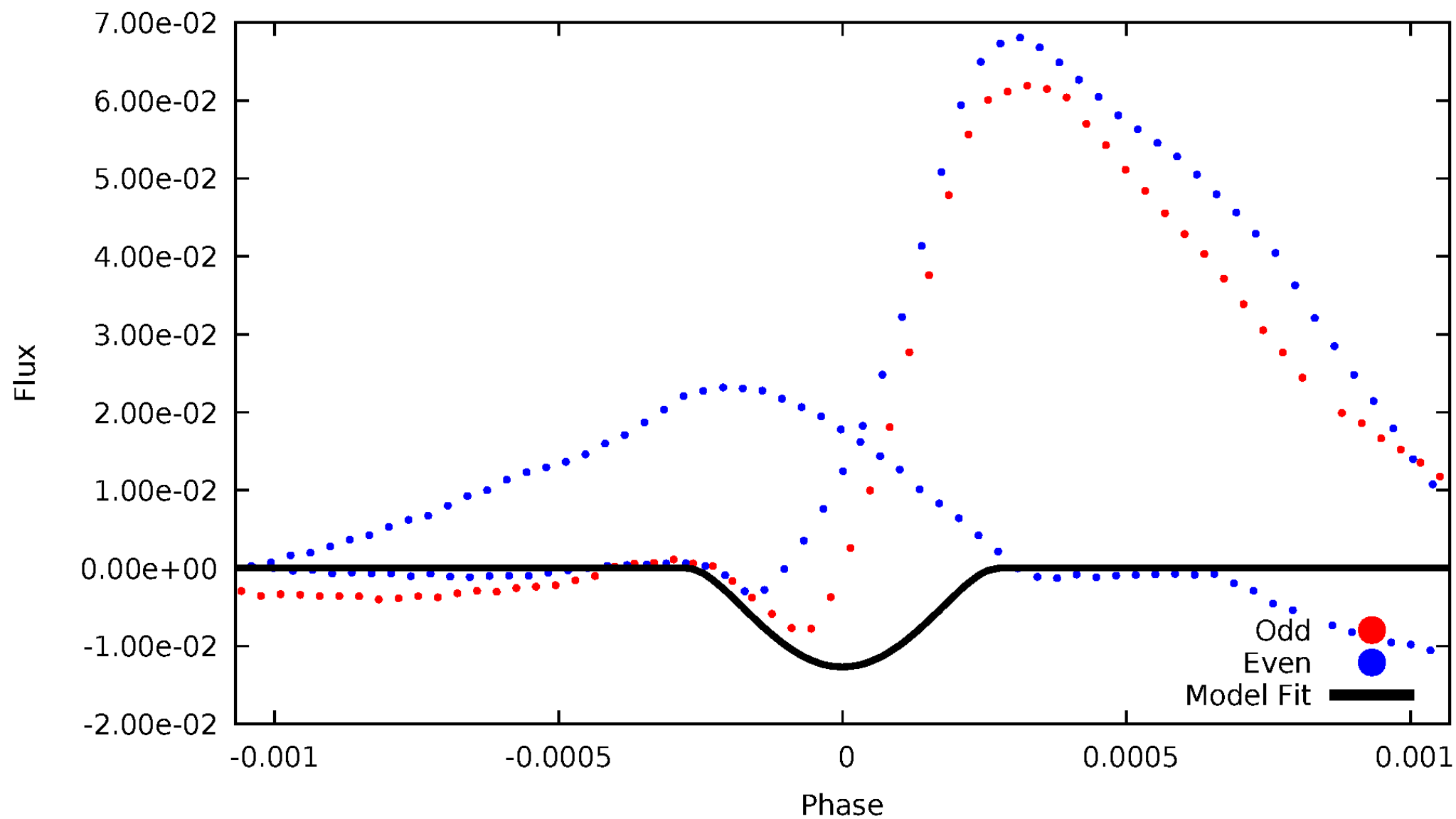


TCE 003326917-02



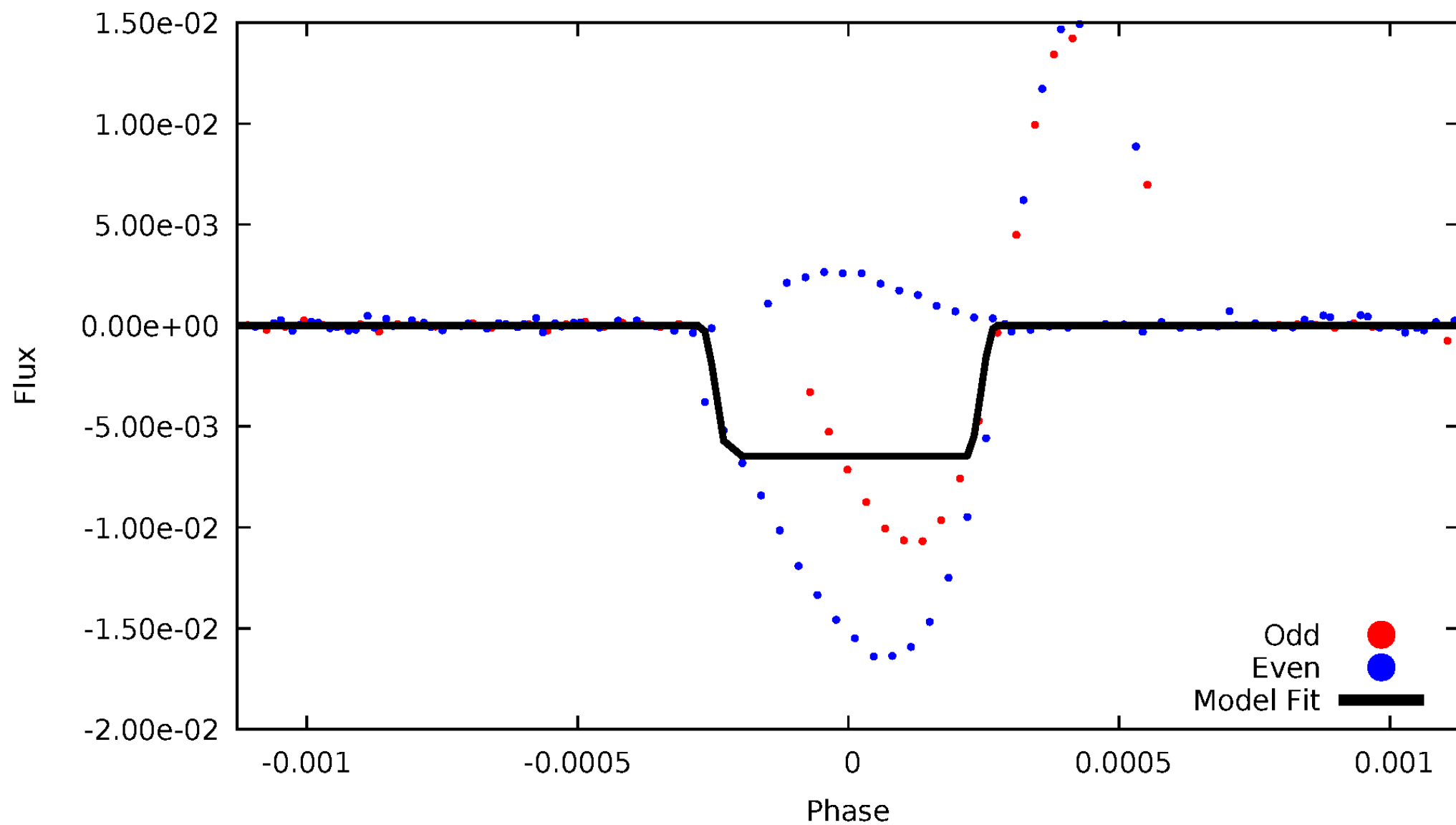
DV Odd/Even

TCE 003326917-02



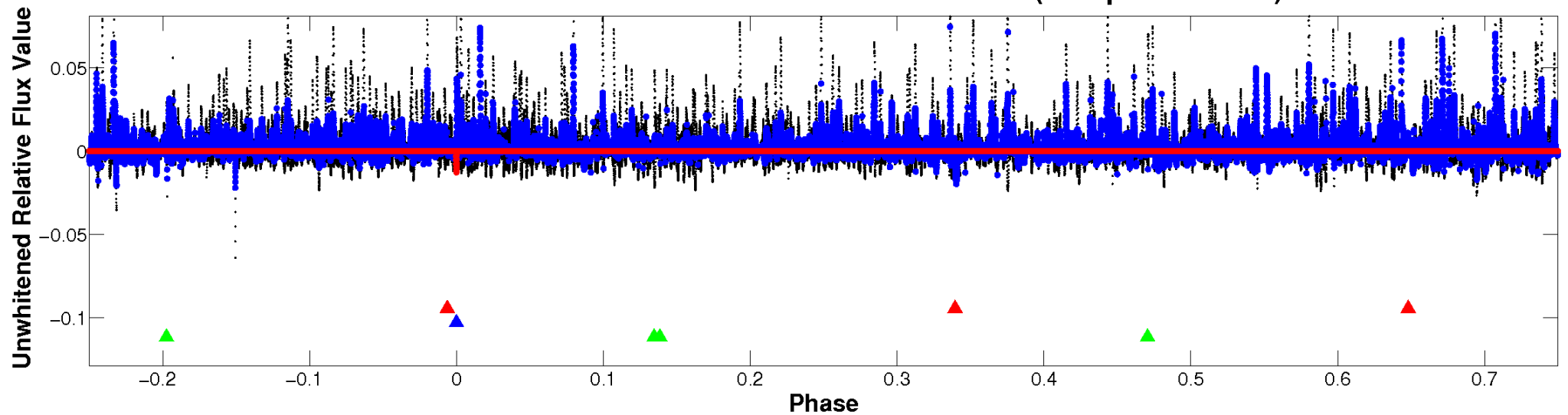
ALT Odd/Even

TCE 003326917-02

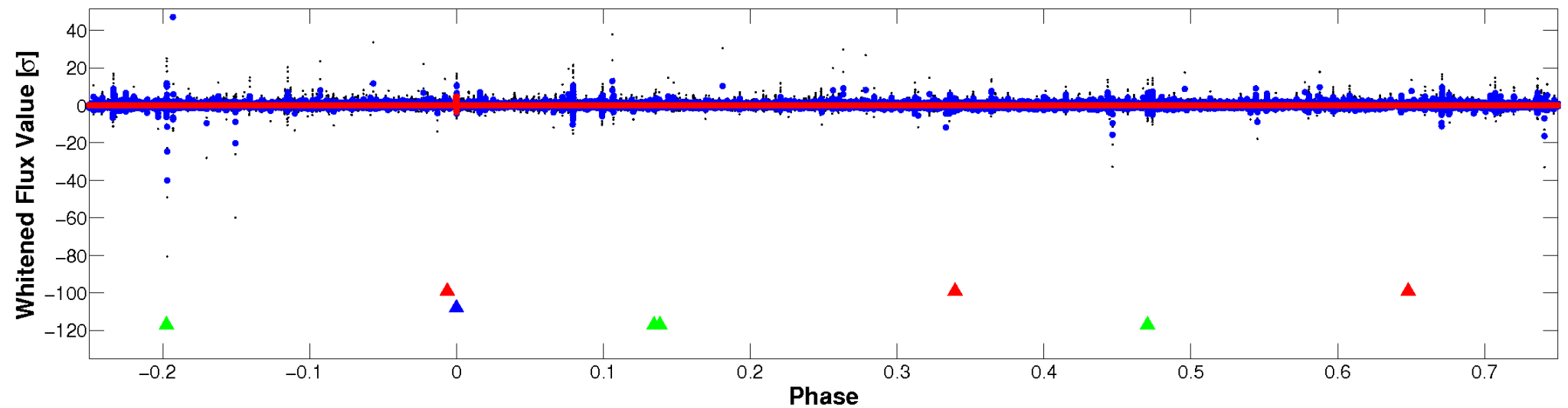


Non-Whitened Vs. Whitened Light Curve

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

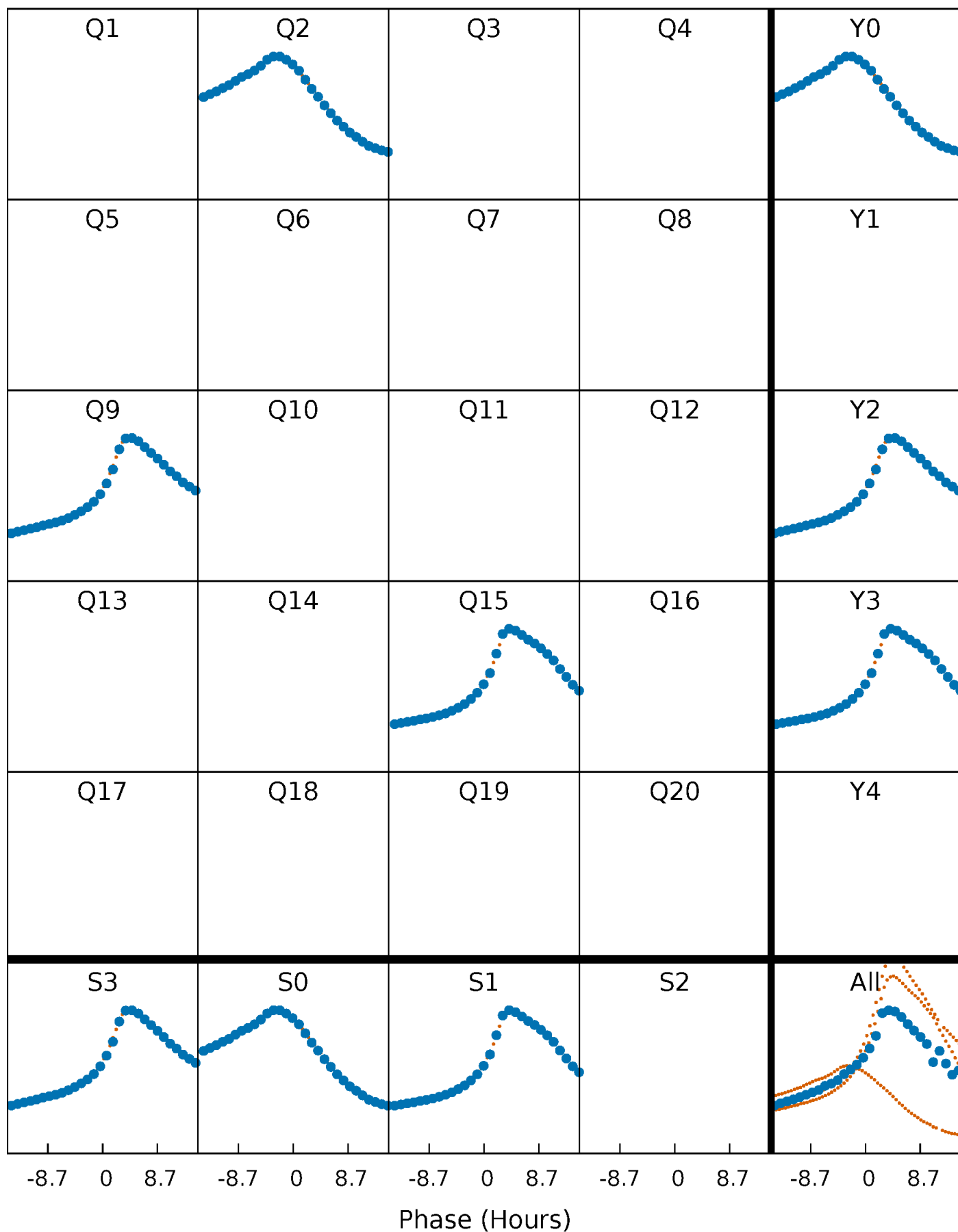


Planet 2 : Phased Whitened Flux Time Series (Fit Epoch/Period)



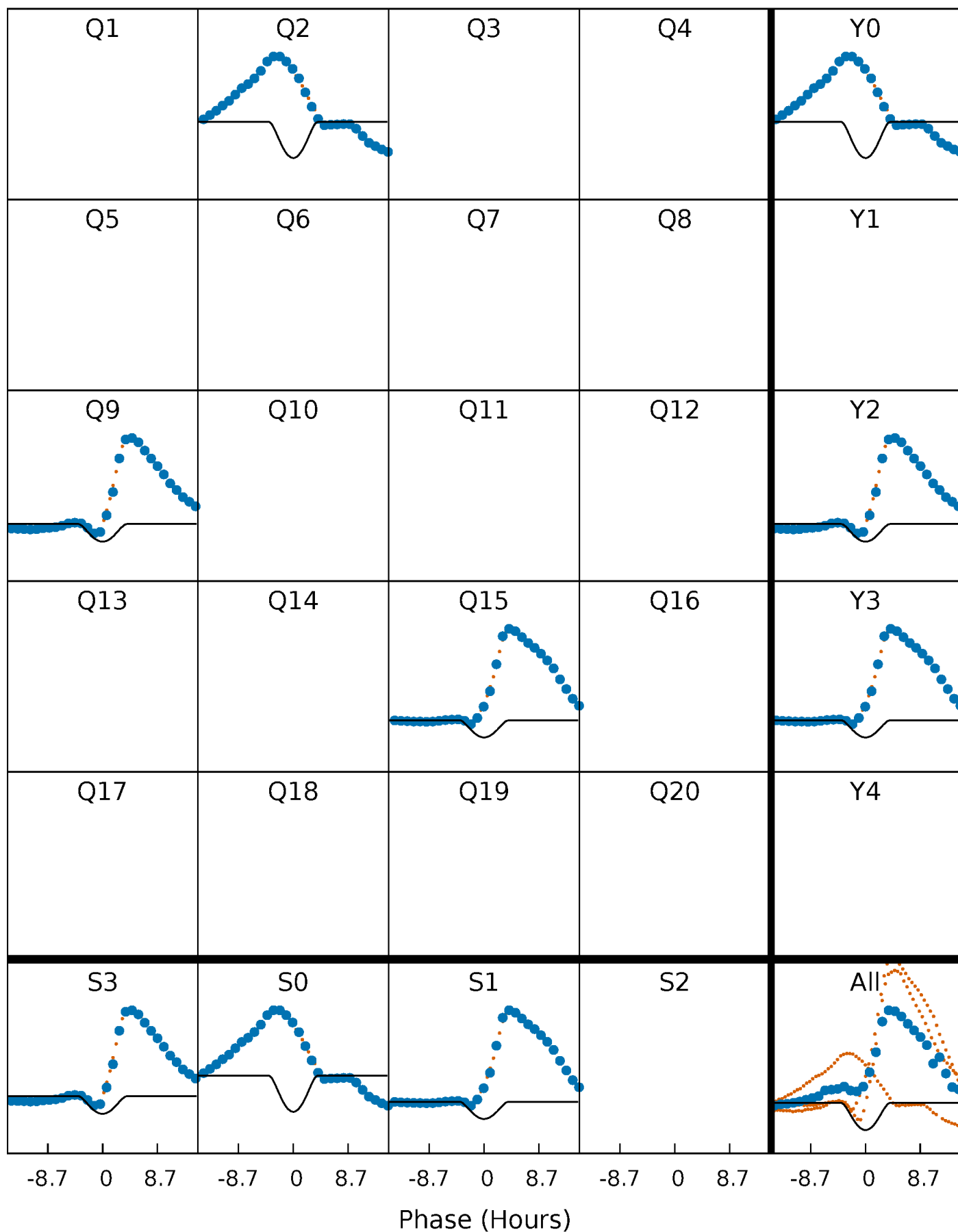
PDC Quarter-Phased Transit Curves

TCE 003326917-02 P=590.313830 Days $T_0=245.453461$ (BKJD)



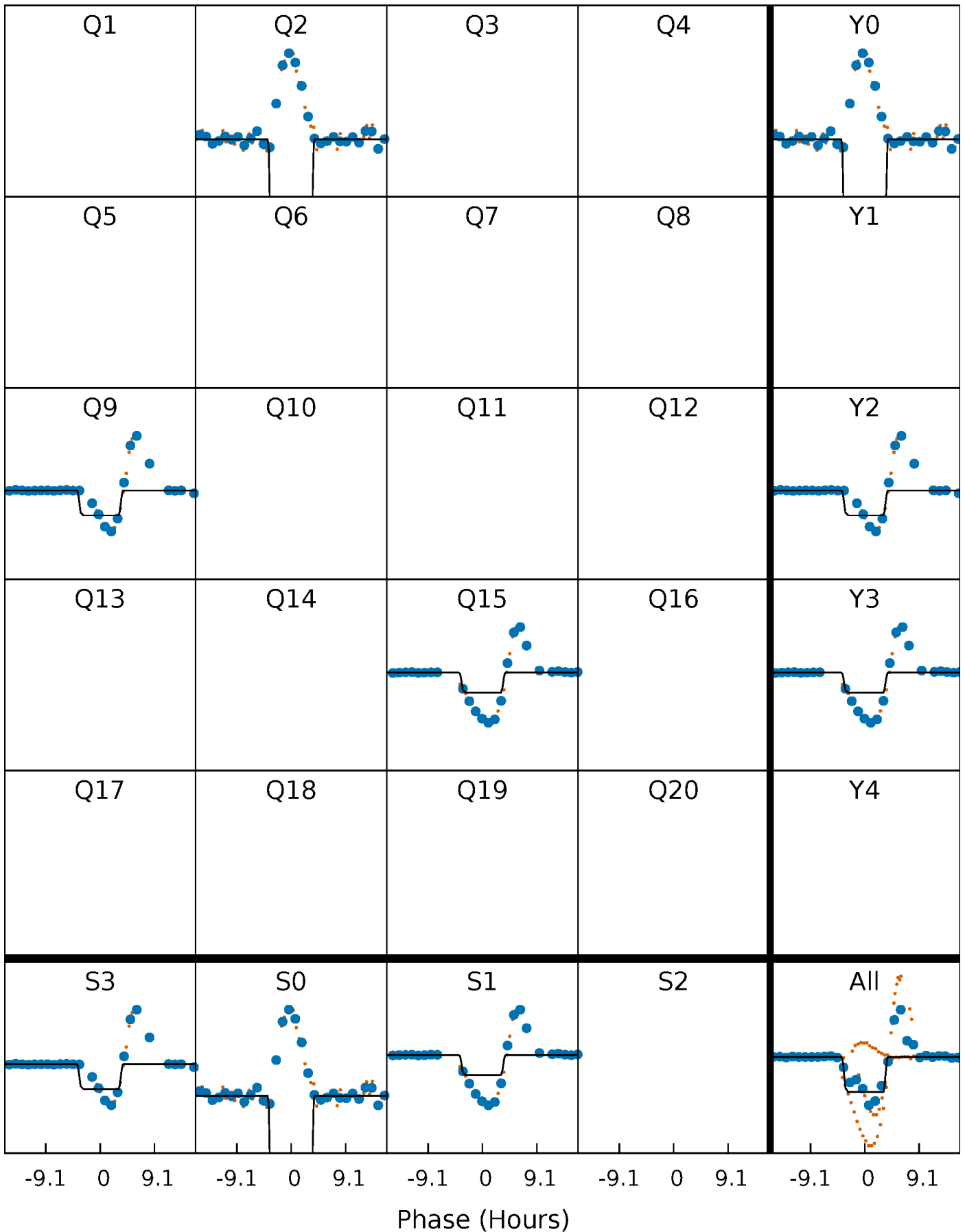
DV Quarter-Phased Transit Curves

TCE 003326917-02 P=590.313830 Days $T_0=245.453461$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

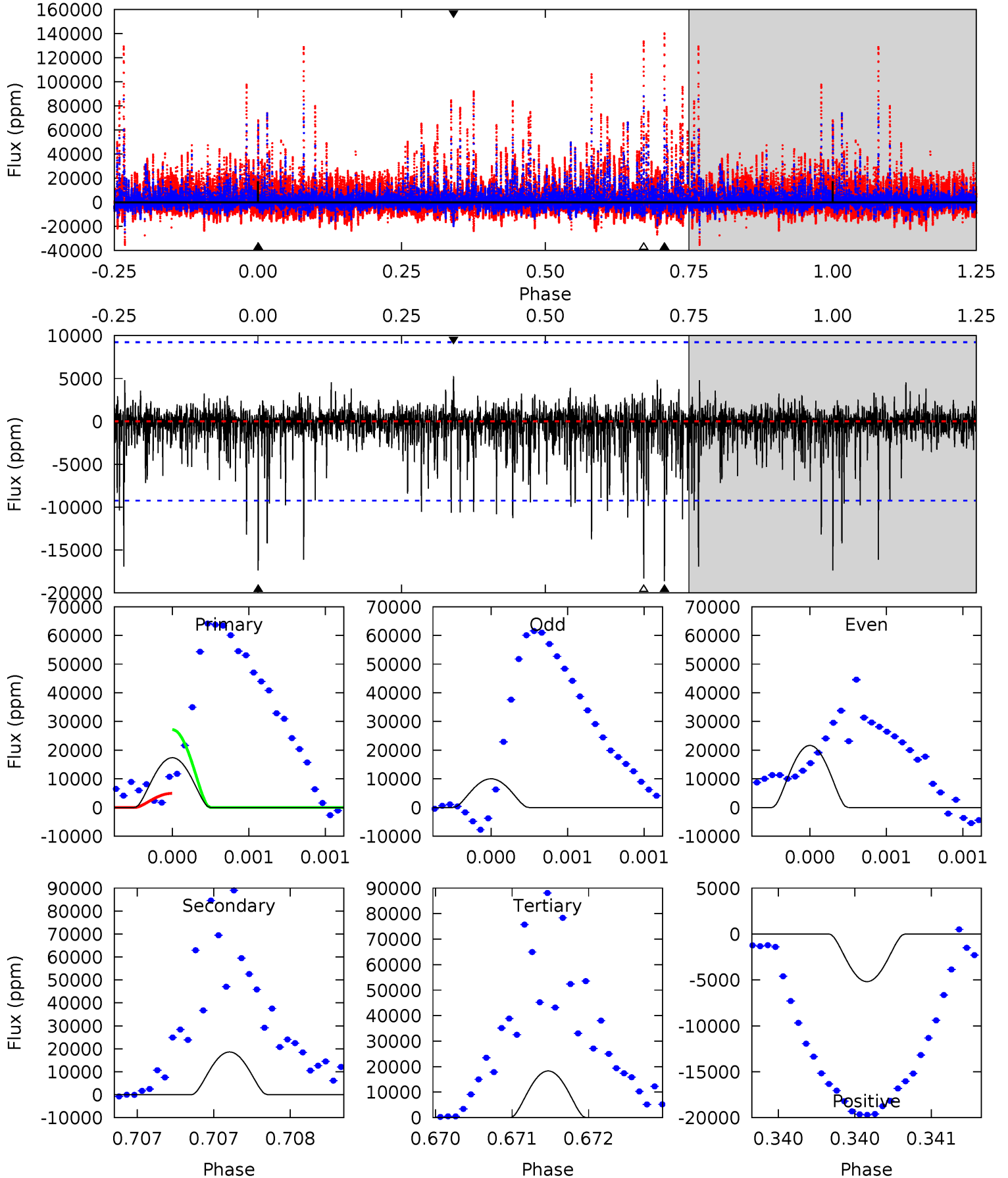
TCE 003326917-02 P=590.318737 Days $T_0=245.355479$ (BKJD)



DV Model-Shift Uniqueness Test

003326917-02, P = 590.313830 Days, E = 245.453461 Days

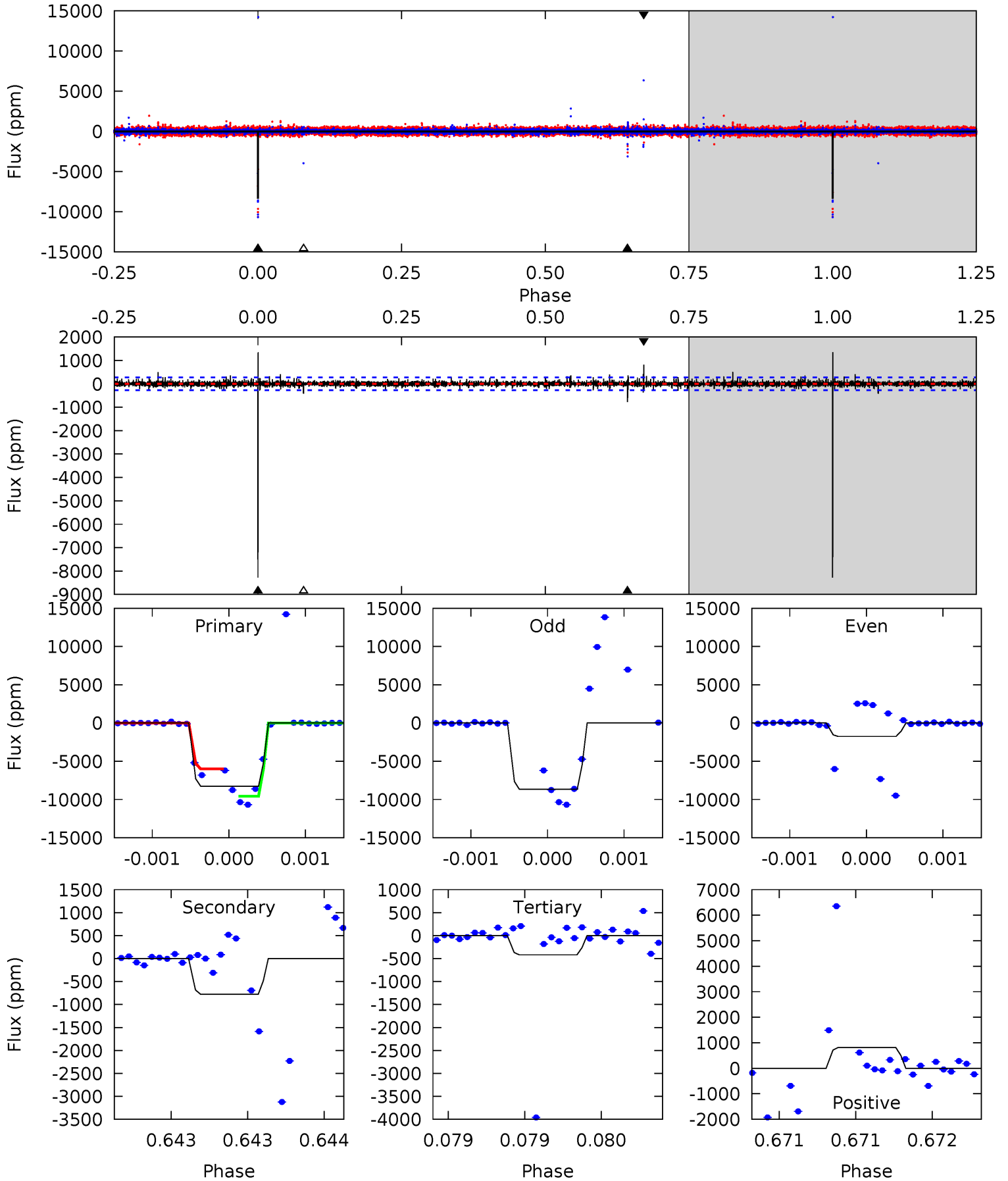
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
10.5	11.2	11.0	3.12	5.55	3.45	1.21	-0.57	7.33	0.18	8.08	3.08	0.83	0.22	6.62



Alt Model-Shift Uniqueness Test

003326917-02, P = 590.318737 Days, E = 245.355479 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
169.7	15.9	8.57	16.6	5.56	3.46	1.02	161.1	153.1	7.32	-0.76	50.8	0.77	0.14	0



Stellar Parameters For KIC 003326917

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	M (M_{\odot})	p_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	6740^{+190}_{-262}	$3.904^{+0.424}_{-0.133}$	$-0.440^{+0.300}_{-0.300}$	$2.075^{+0.487}_{-0.904}$	$1.259^{+0.195}_{-0.238}$	$0.199^{+0.659}_{-0.076}$
	+3%/-4%	+11%/-3%	+68%/-68%	+23%/-44%	+15%/-19%	+332%/-38%
Source	PHO54	PHO54	PHO54	DSEP		

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

Secondary Eclipse Parameters for KIC 003326917-02 / KOI

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	-18634 \pm 1663	$37.39^{+23.14}_{-19.54}$	479^{+37}_{-57}	5846^{+2678}_{-1020}	16277^{+55976}_{-9998}
Alt.	-775 \pm 49	$20.26^{+20.61}_{-12.72}$	474^{+39}_{-50}	3900^{+1845}_{-727}	2322^{+14239}_{-1755}

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 $A_{obs} \gg 1.0$

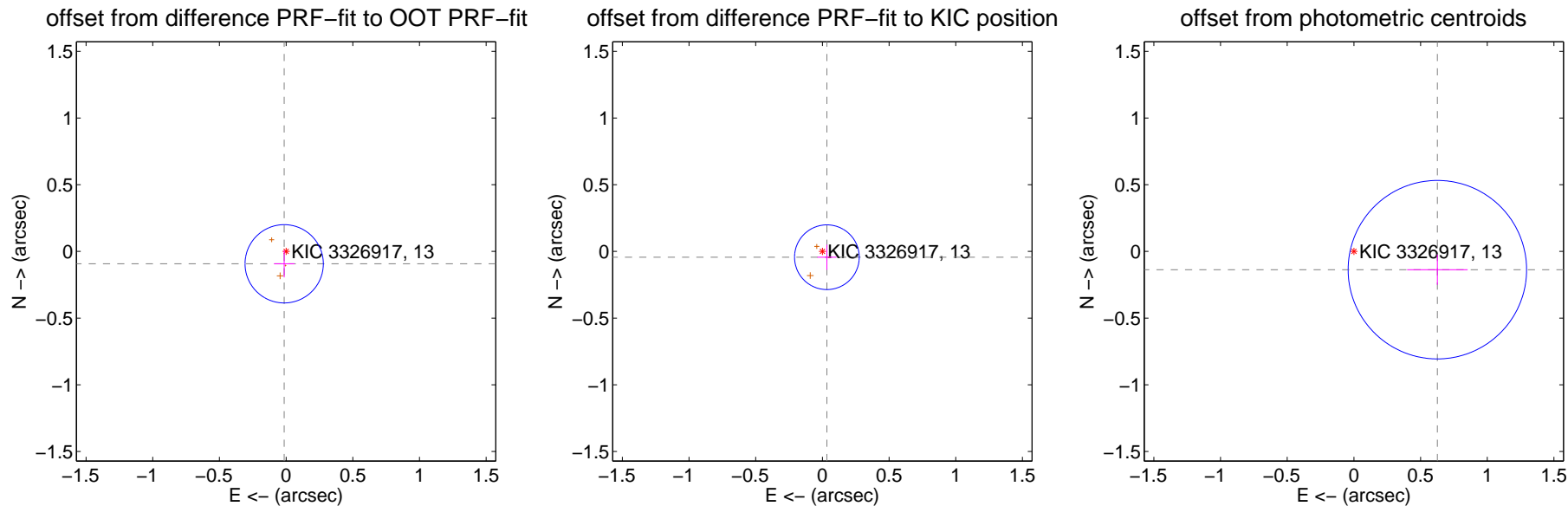
DV Centroid Data

Supplemental centroid analysis for 003326917-02. Kepler magnitude: 13.00. Transit SNR 15.02

There are 0 quarters with good PRF difference image offsets

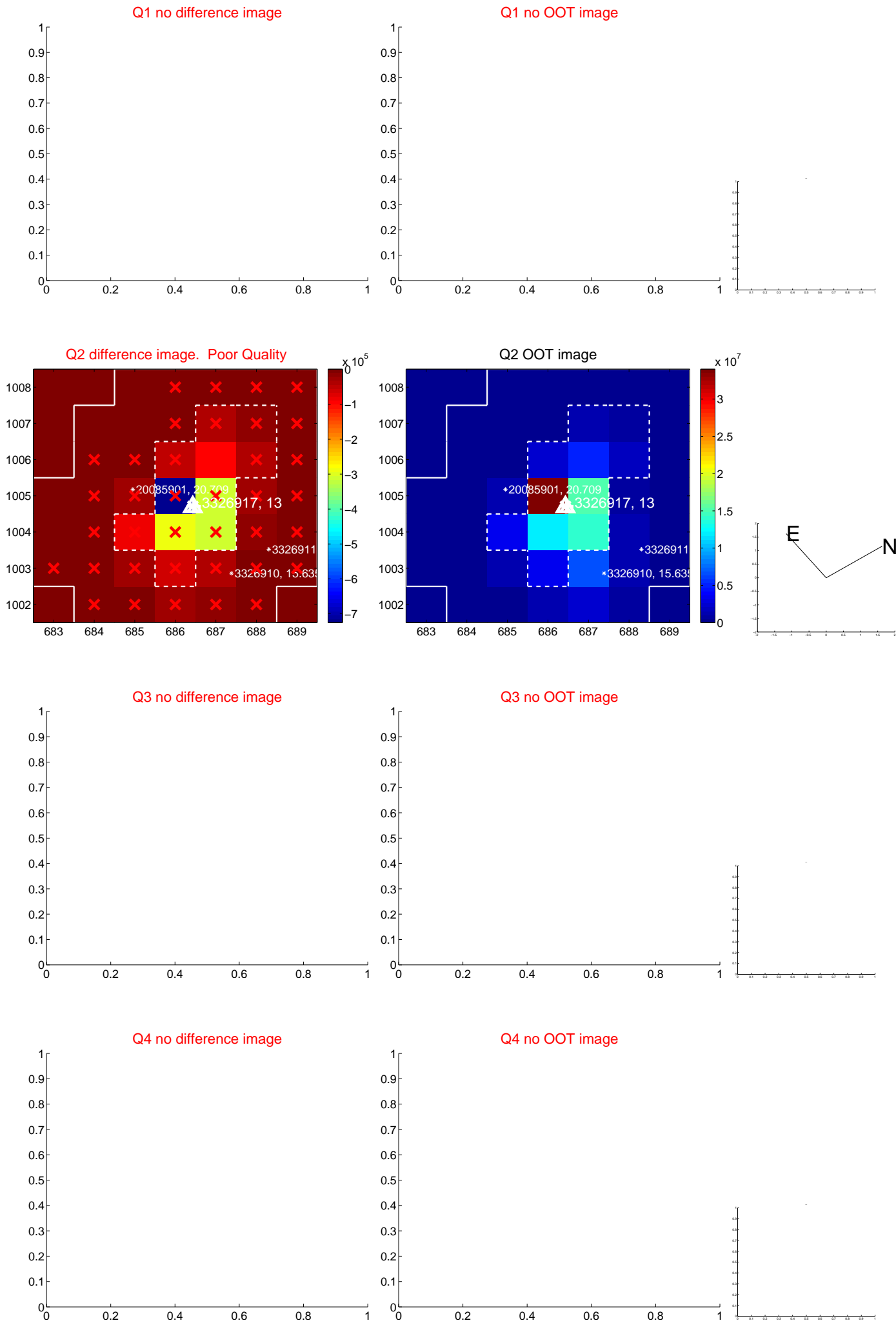
The direct PRF centroid is offset from the target star catalog position by about 0.05 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.094 ± 0.098	0.96	0.014 ± 0.077	-0.093 ± 0.102
PRF-fit source offset from KIC position	0.055 ± 0.081	0.68	-0.034 ± 0.071	-0.043 ± 0.094
photometric centroid source offset	0.64 ± 0.22	2.87	-0.63 ± 0.23	-0.14 ± 0.11

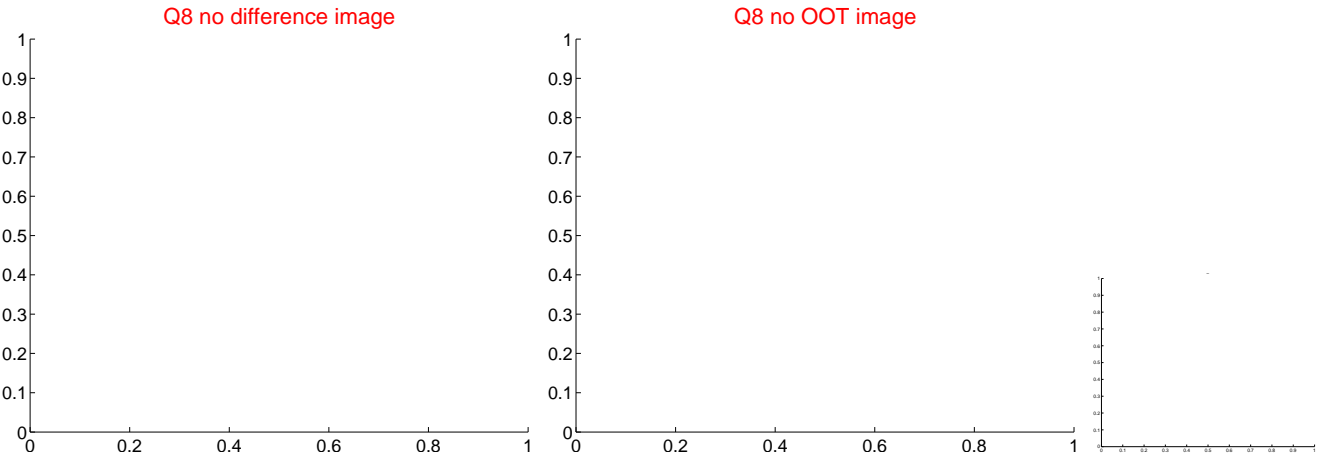
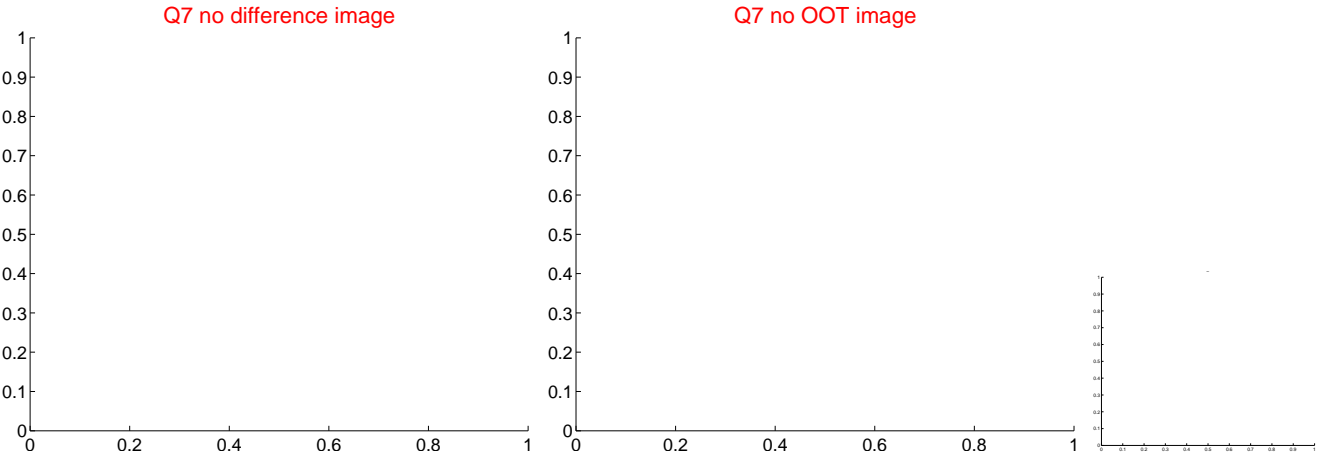
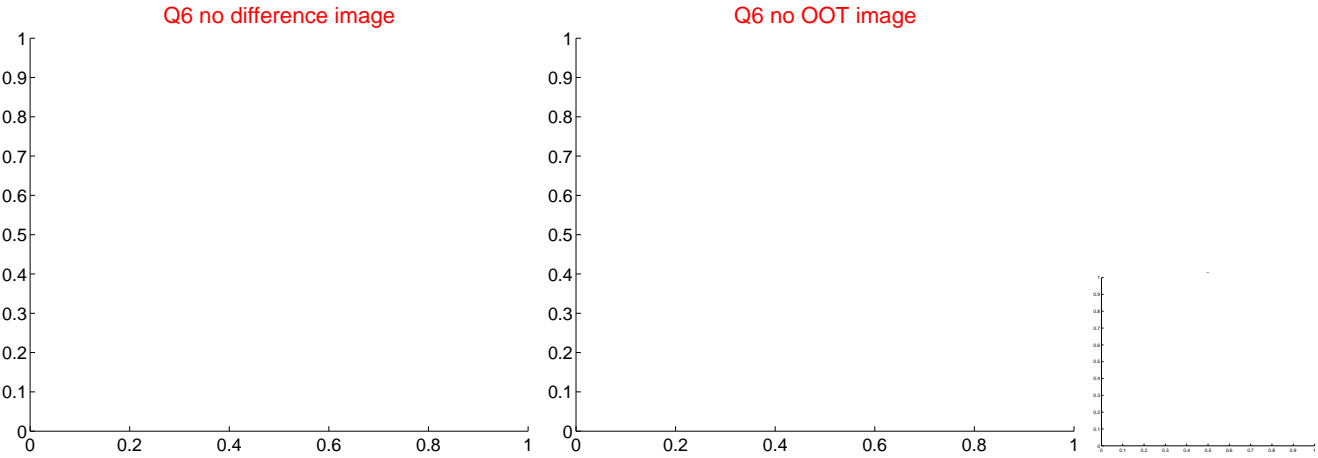
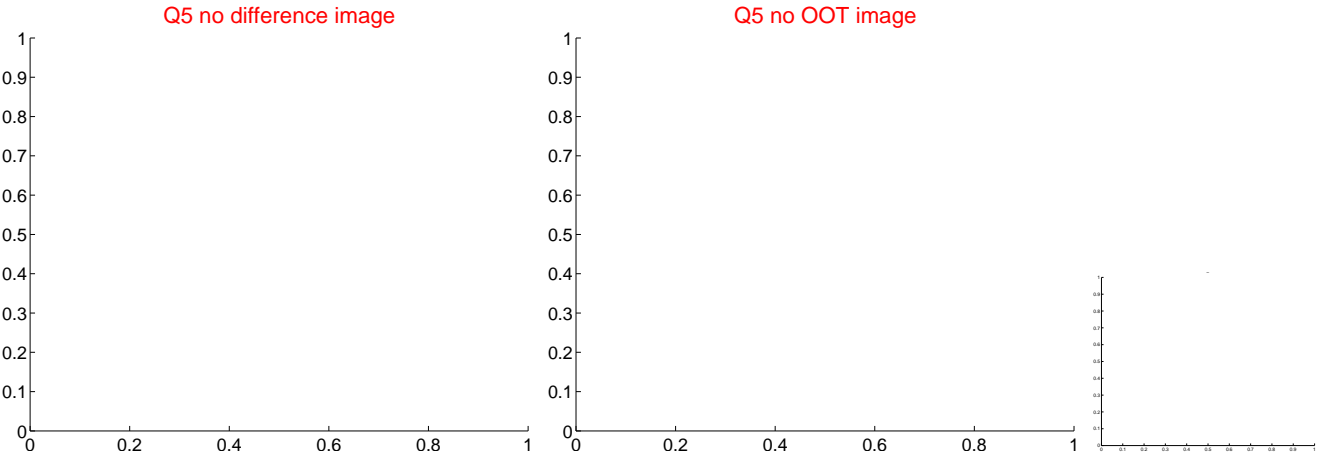


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ . 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.

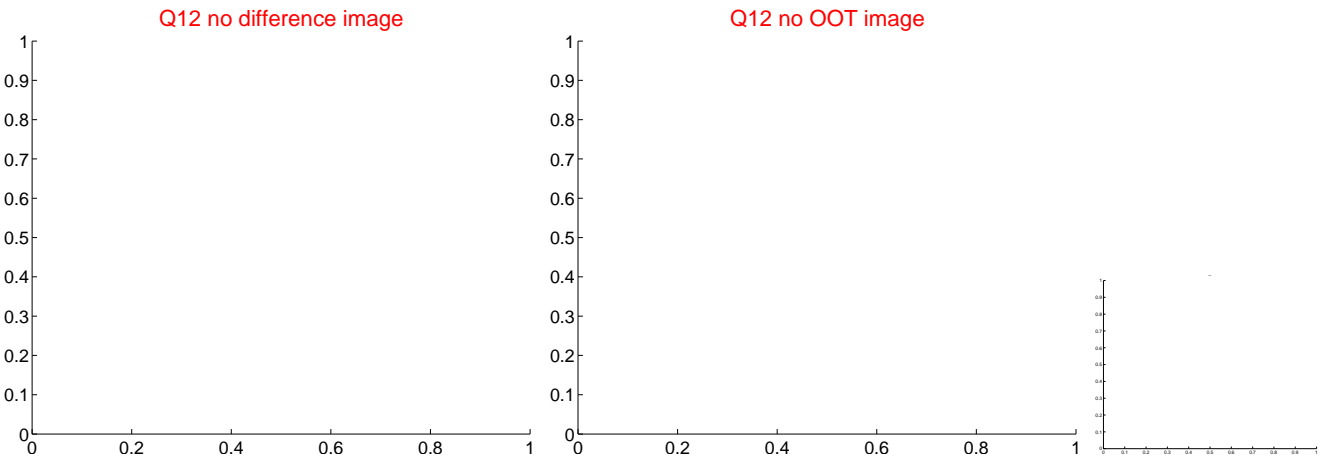
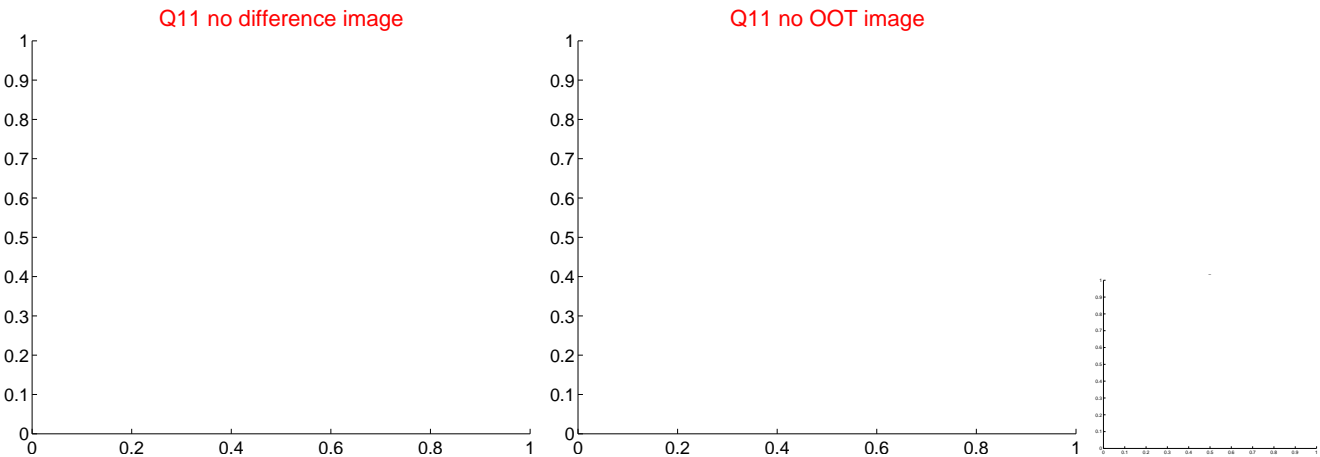
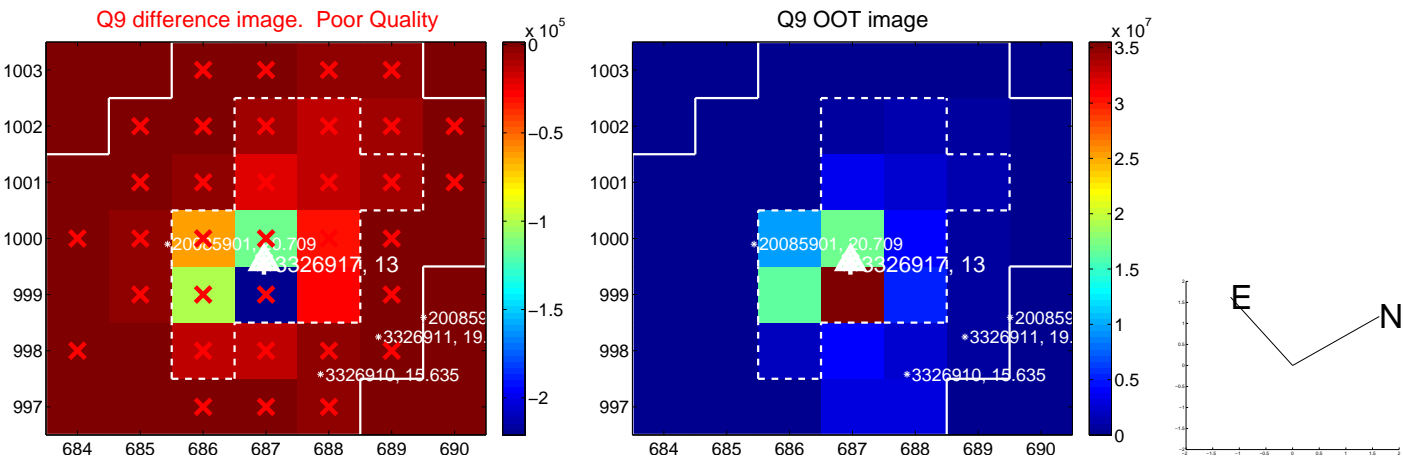
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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



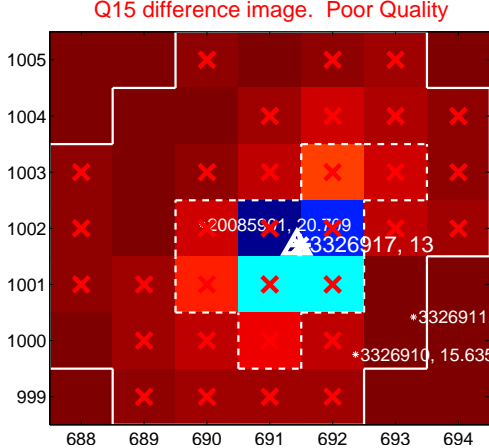
Q14 no difference image



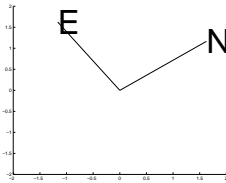
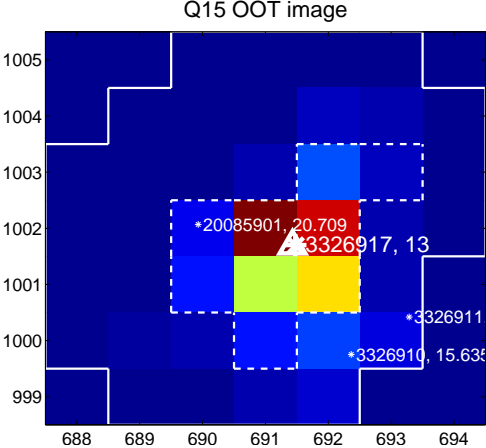
Q14 no OOT image



Q15 difference image. Poor Quality



Q15 OOT image



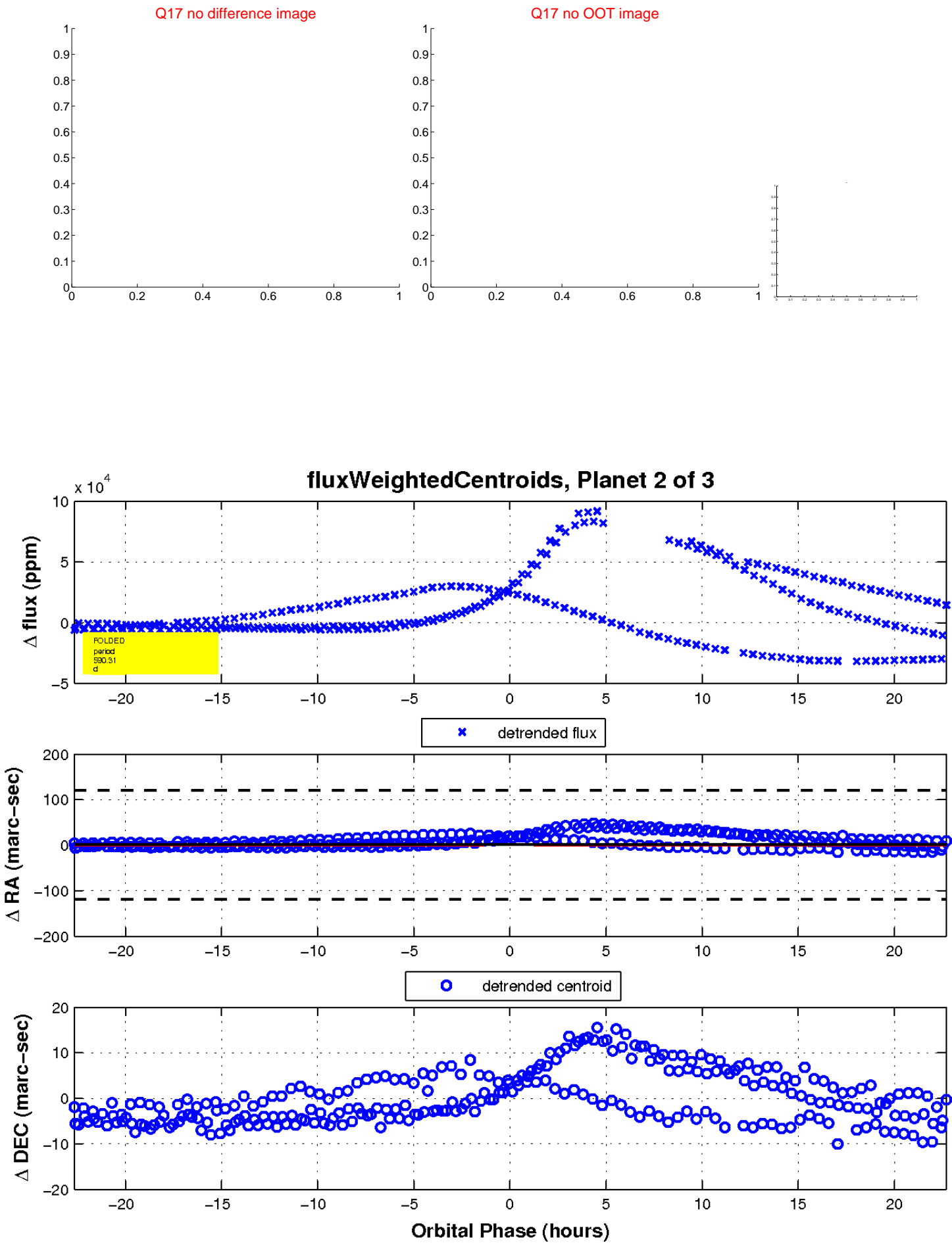
Q16 no difference image



Q16 no OOT image

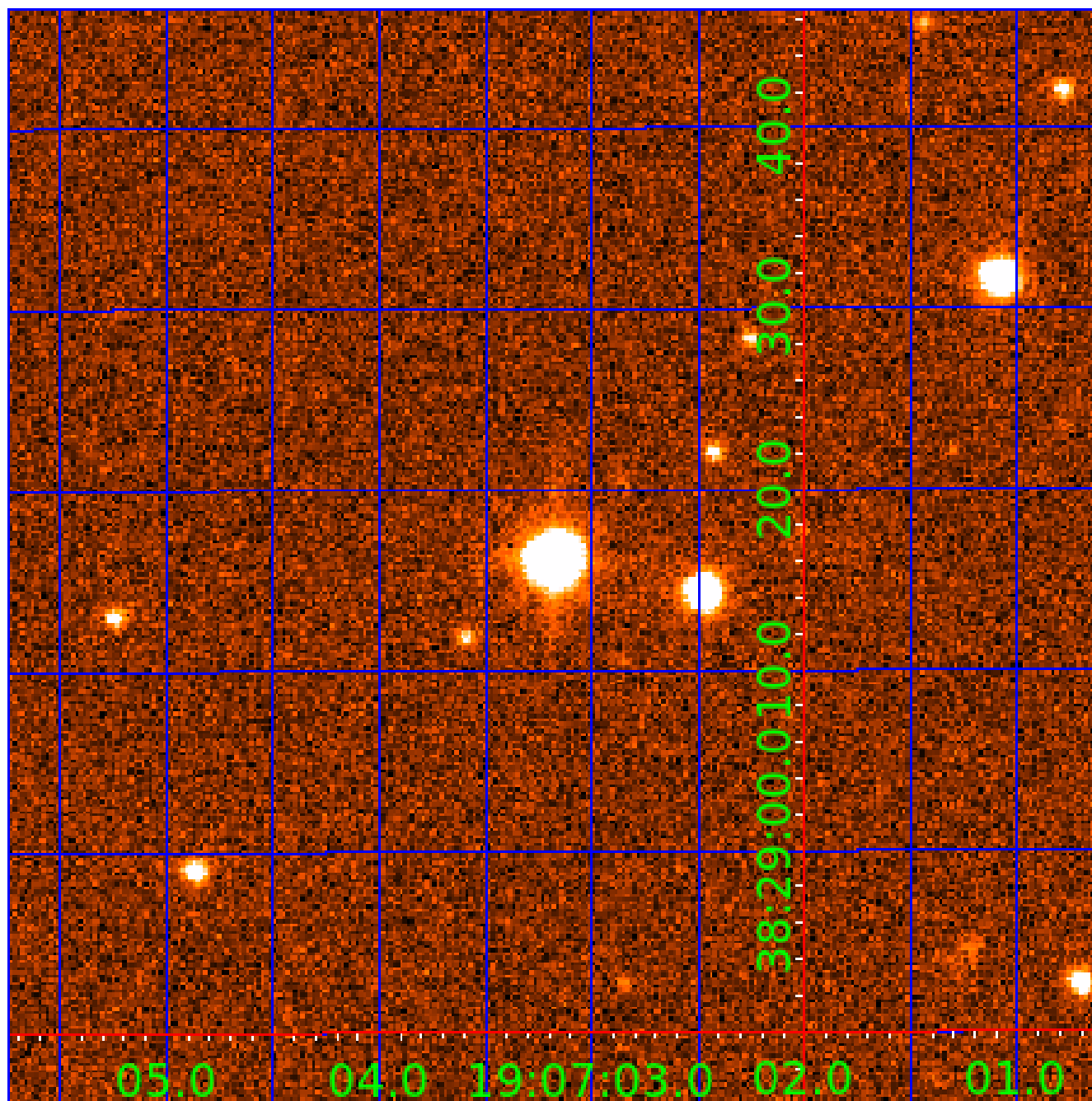


white ×: KIC target position; +: OOT centroid; △: difference centroid. red ✕: large negative pixel value.



UKIRT Image

Declination



KIC 003326917

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})
003326917-01	OBS	No	386.220799	445.871098	14335.0	14.311	28.5	6.3	2.08	6740	43.25	6.33
003326917-02	OBS	No	590.313830	245.453461	12696.5	7.572	29.6	15.0	2.08	6740	40.86	3.60
003326917-03	OBS	No	394.320030	324.901017	1133.0	3.500	24.6	-1.0	2.08	6740	7.05	6.16

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
003326917-01	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_CHASES_ZUMA—LPP_DV—LPP_ALT—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_NONUNIQ_ALT—MOD_POS_ALT—INCONSISTENT_TRANS—CENT_FEW_DIFFS
003326917-02	OBS	FP	0.00	1	0	1	0	INDIV_TRANS_CHASES—LPP_DV—ALL_TRANS_CHASES—MOD_TER_DV—CENT_FEW_DIFFS—HALO_GHOST
003326917-03	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_CHASES—LPP_DV—ALL_TRANS_CHASES—INCONSISTENT_TRANS—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.

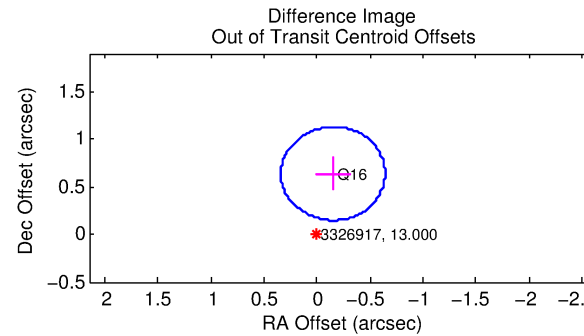
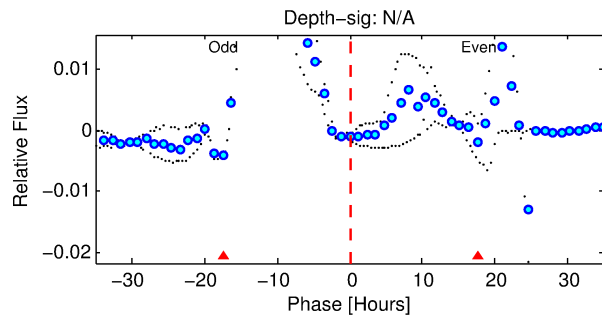
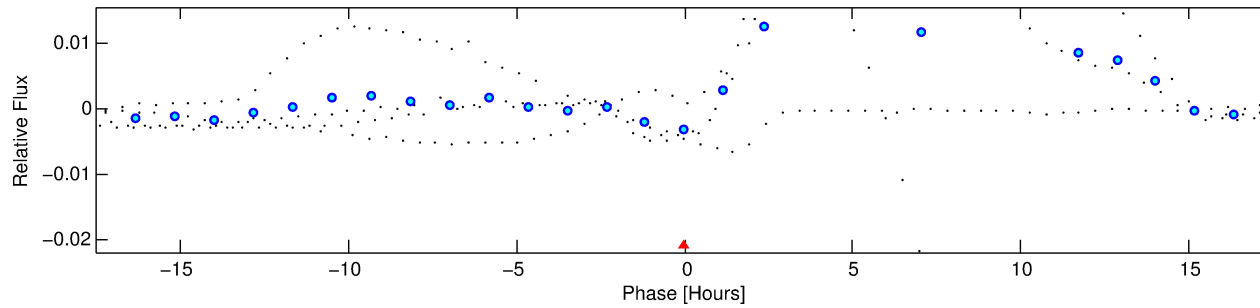
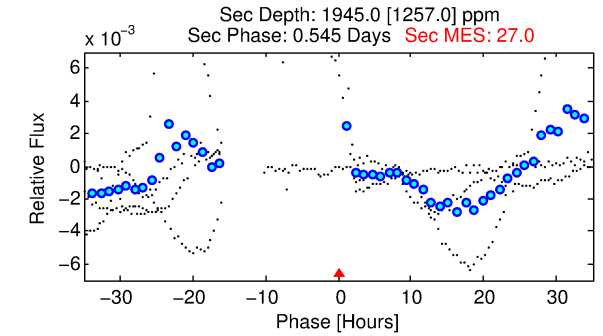
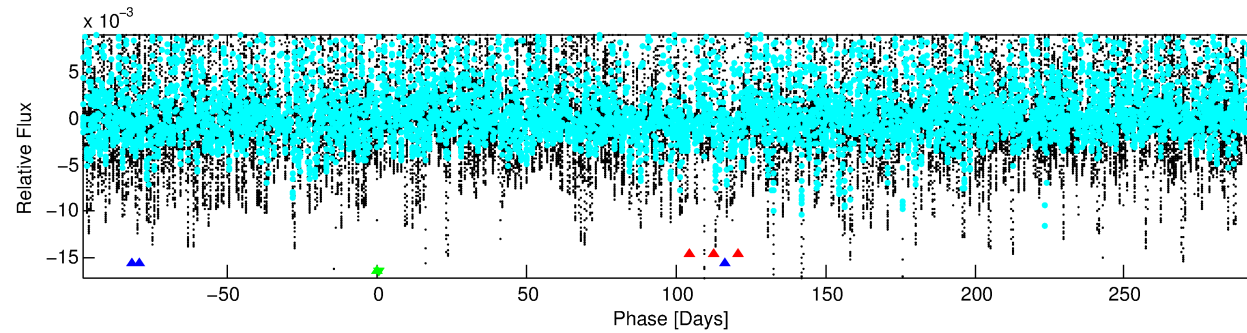
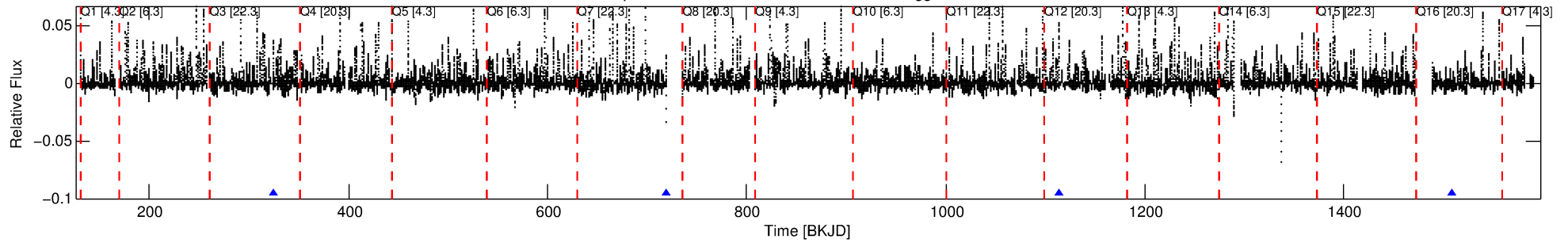
Ephemeris Match Information For 003326917-03

No Significant Match Found

DV One-Page Summary

KIC: 3326917 Candidate: 3 of 3 Period: 394.320 d

Kp: 13.00 R*: 2.08 Rs Teff: 6740.0 K Logg: 3.90 Fe/H: -0.440



TPS TCE Results:

Period = 394.32003 d
Epoch = 324.9010 BKJD

DV fit results are unavailable

DV Diagnostic Results:

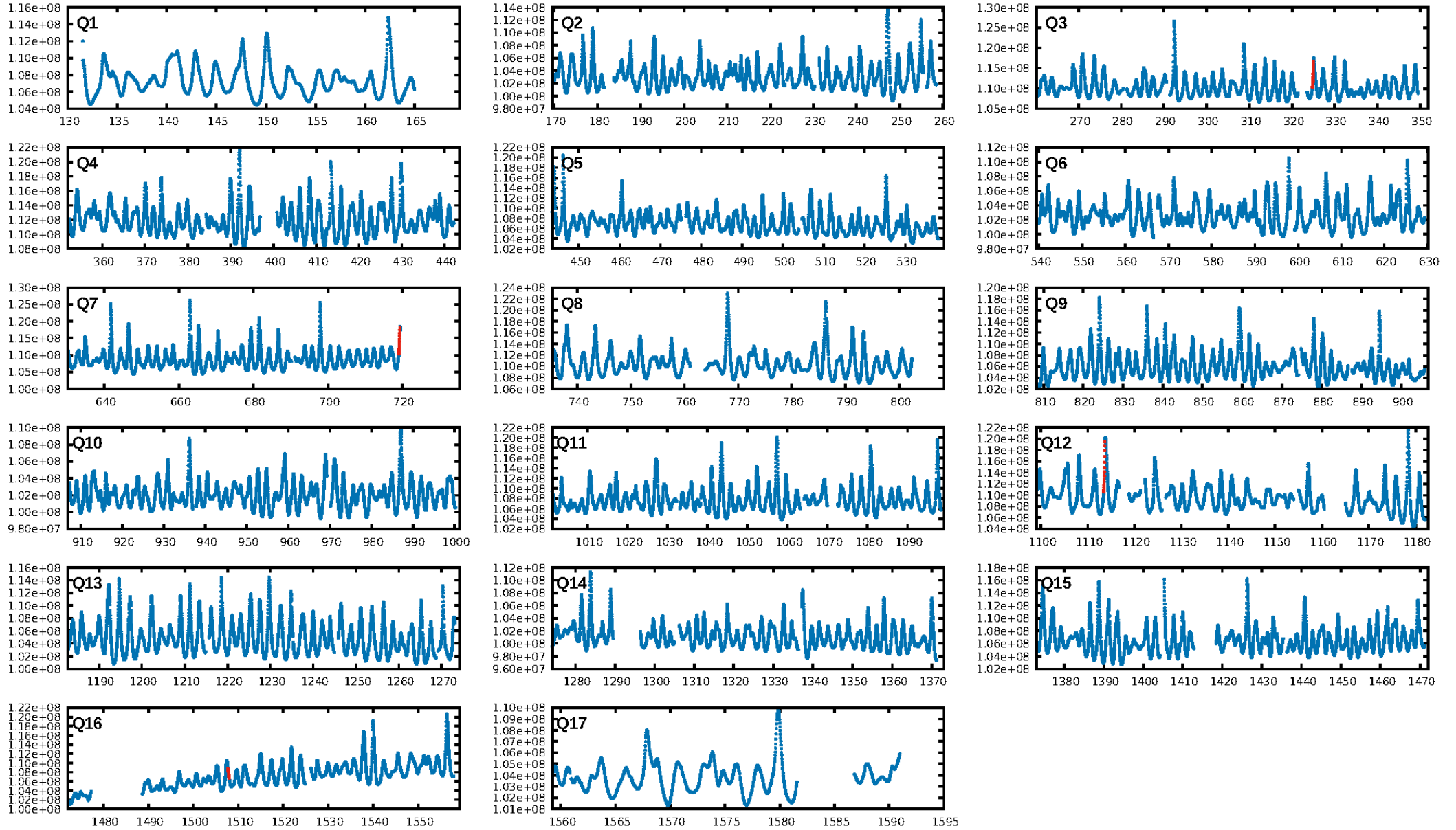
ShortPeriod-sig: 100.0% [13.19 σ]
LongPeriod-sig: 100.0% [563.87 σ]
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: N/A
RollingBand-fgt: 1.00 [4/4]
GhostDiagnostic-chr: 1.48

Centroid-sig: N/A
Centroid-so: 0.647 arcsec [3.27 σ]
OotOffset-rm: 0.656 arcsec [4.01 σ]
KicOffset-rm: 0.645 arcsec [3.97 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]

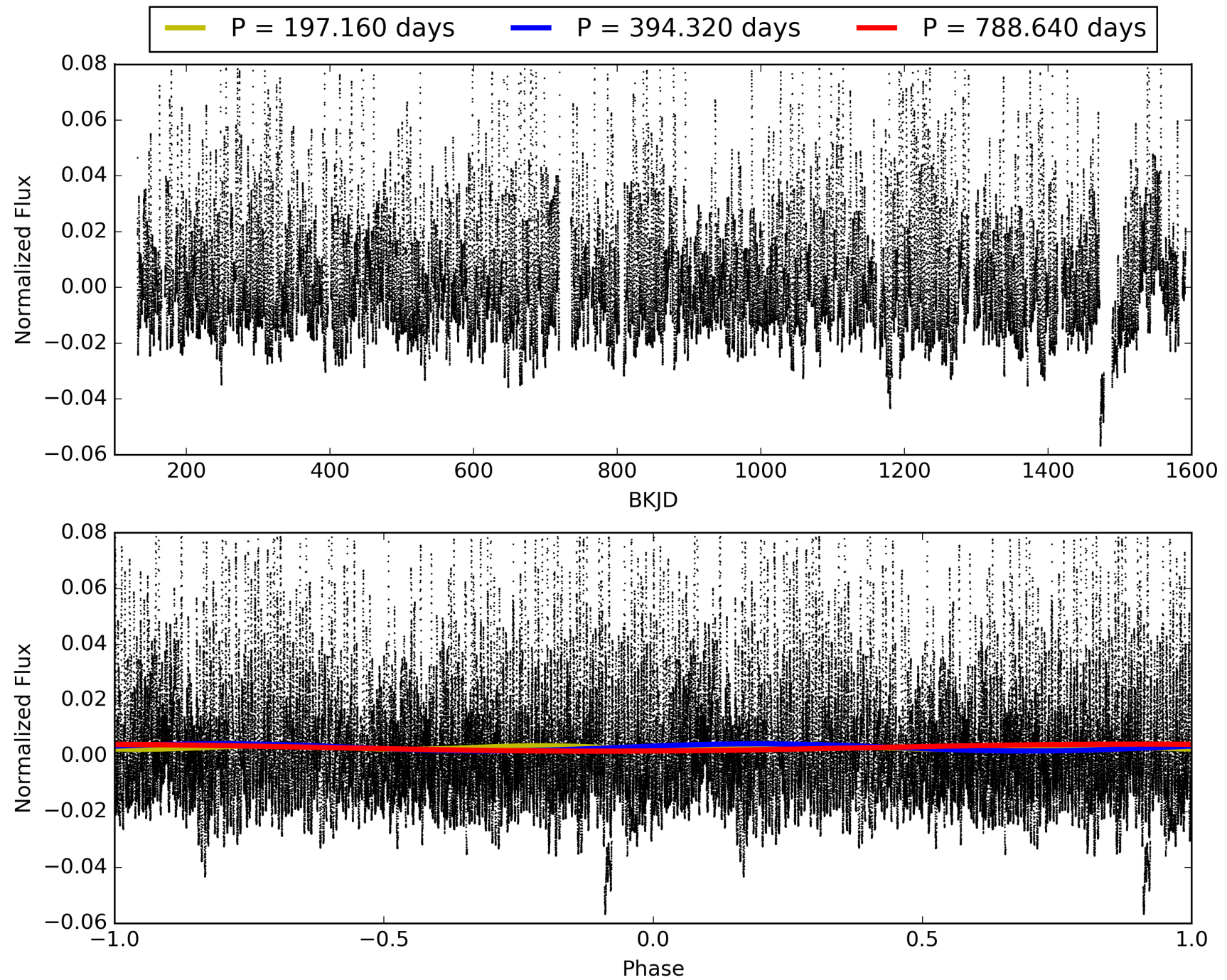
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 02-Feb-2016 01:18:51 Z

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

TCE 003326917-03, PDC Light Curves

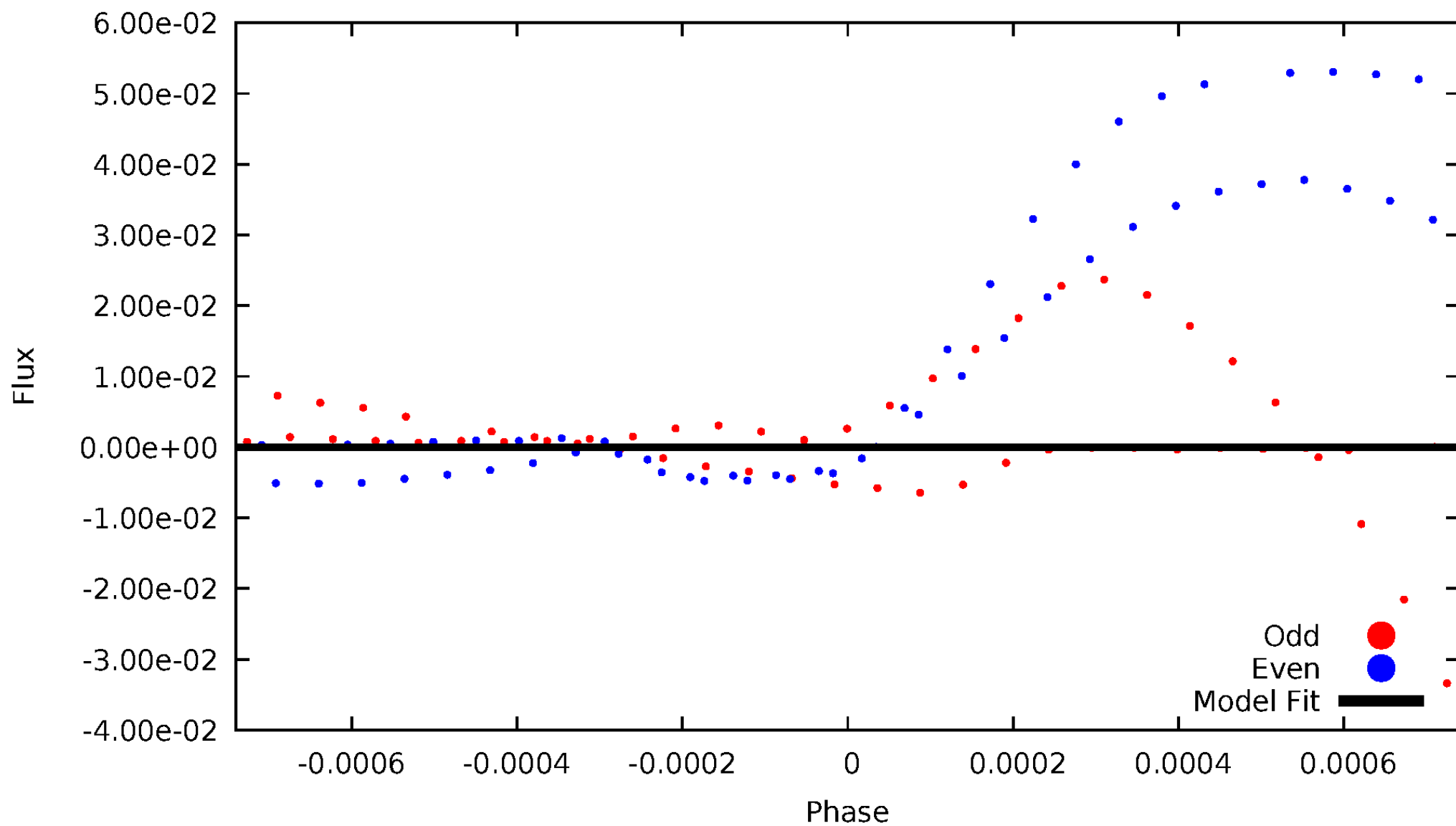


TCE 003326917-03



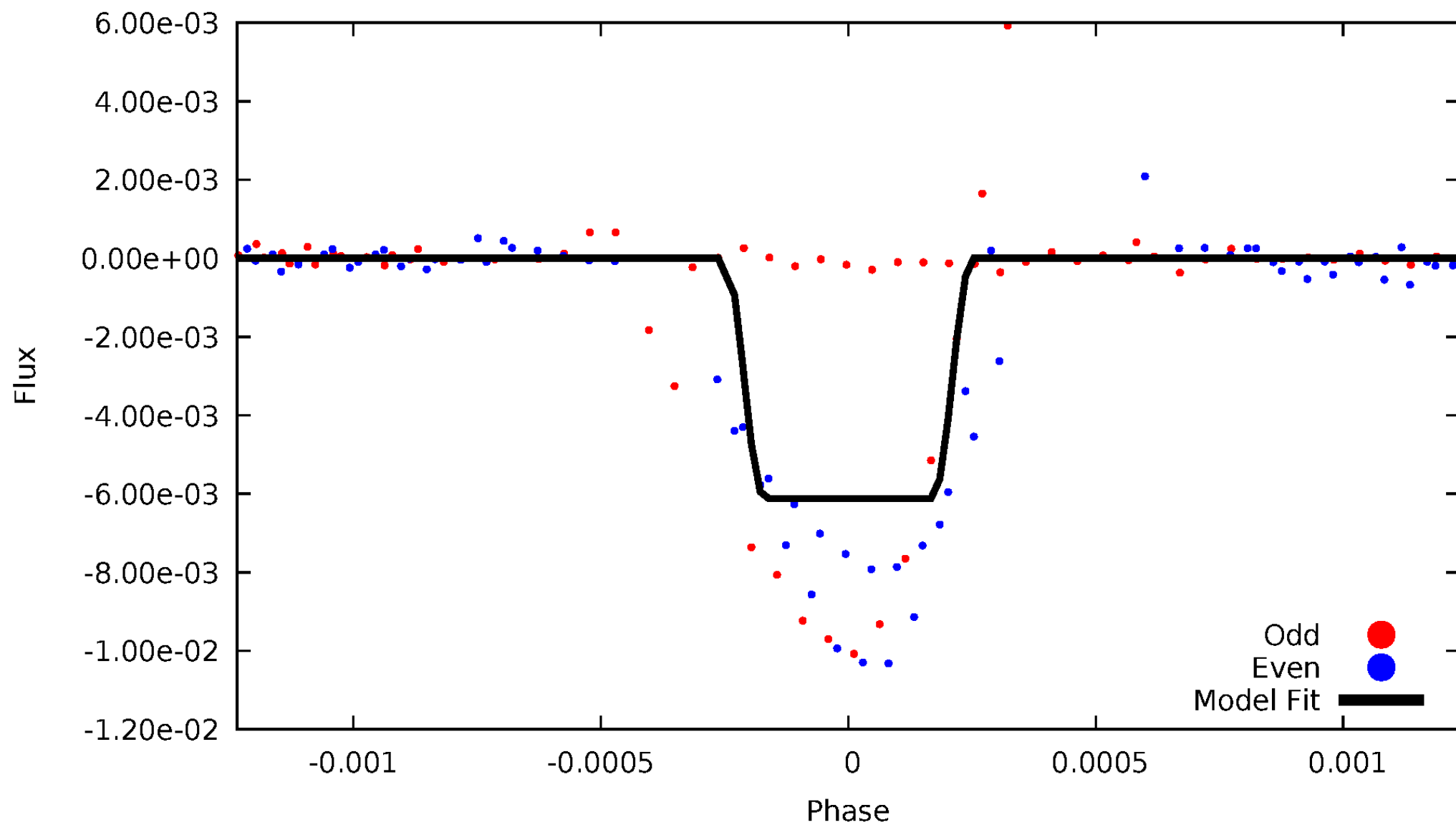
DV Odd/Even

TCE 003326917-03



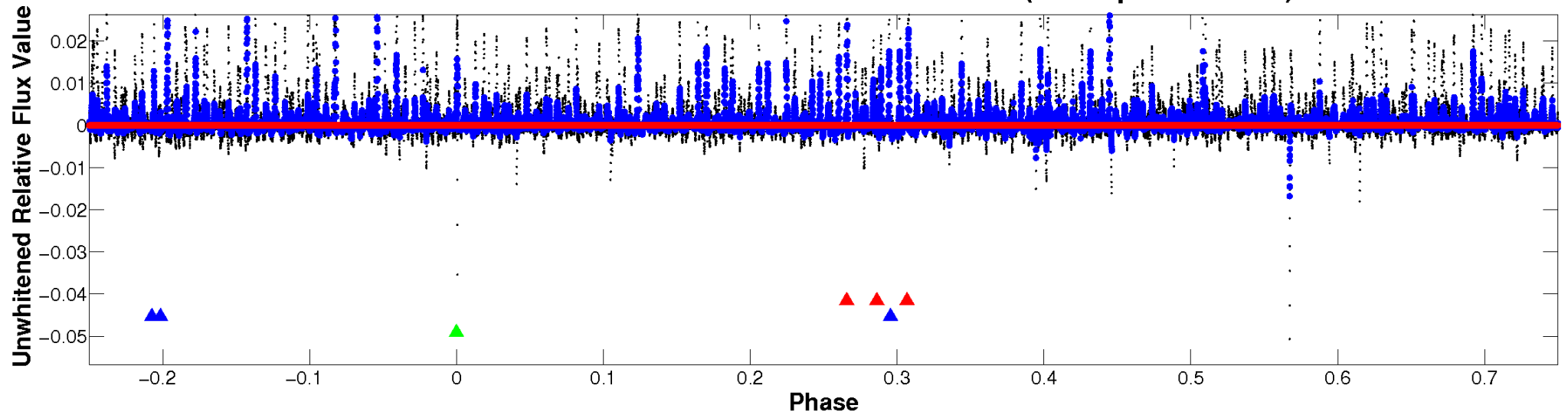
ALT Odd/Even

TCE 003326917-03



Non-Whitened Vs. Whitened Light Curve

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

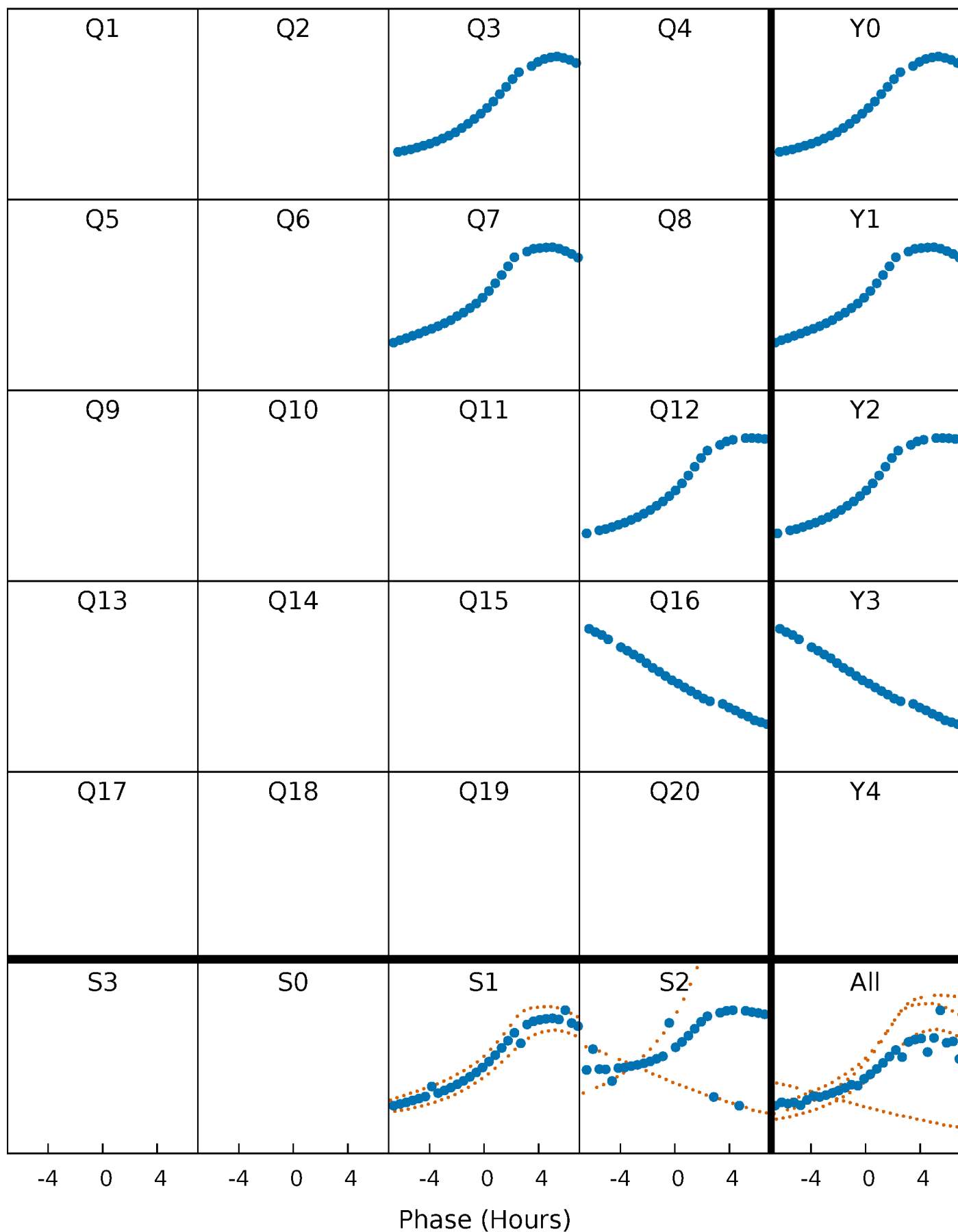


Planet 3 : Phased Whitened Flux Time Series (TPS Epoch/Period)



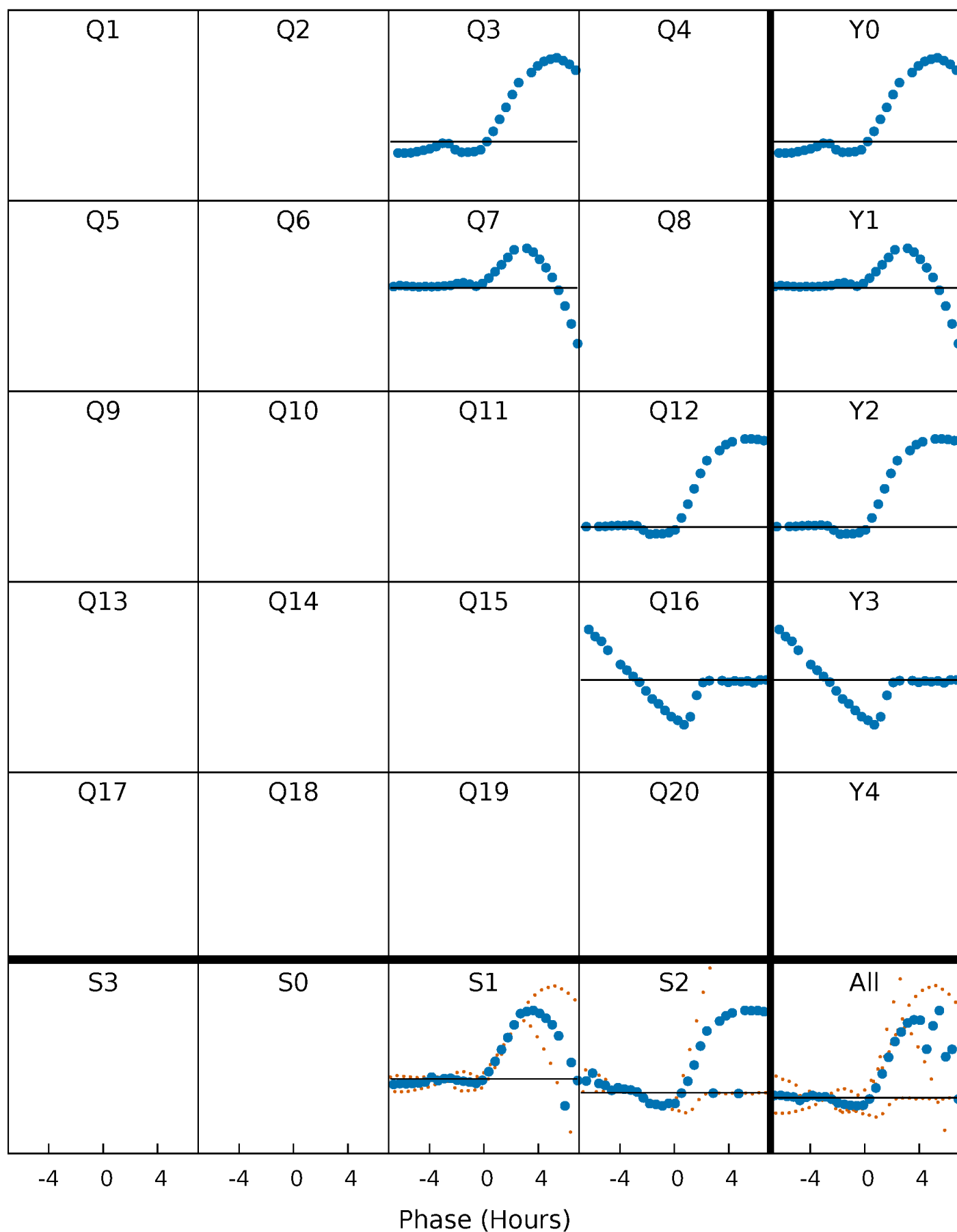
PDC Quarter-Phased Transit Curves

TCE 003326917-03 $P=394.320030$ Days $T_0=324.901017$ (BKJD)



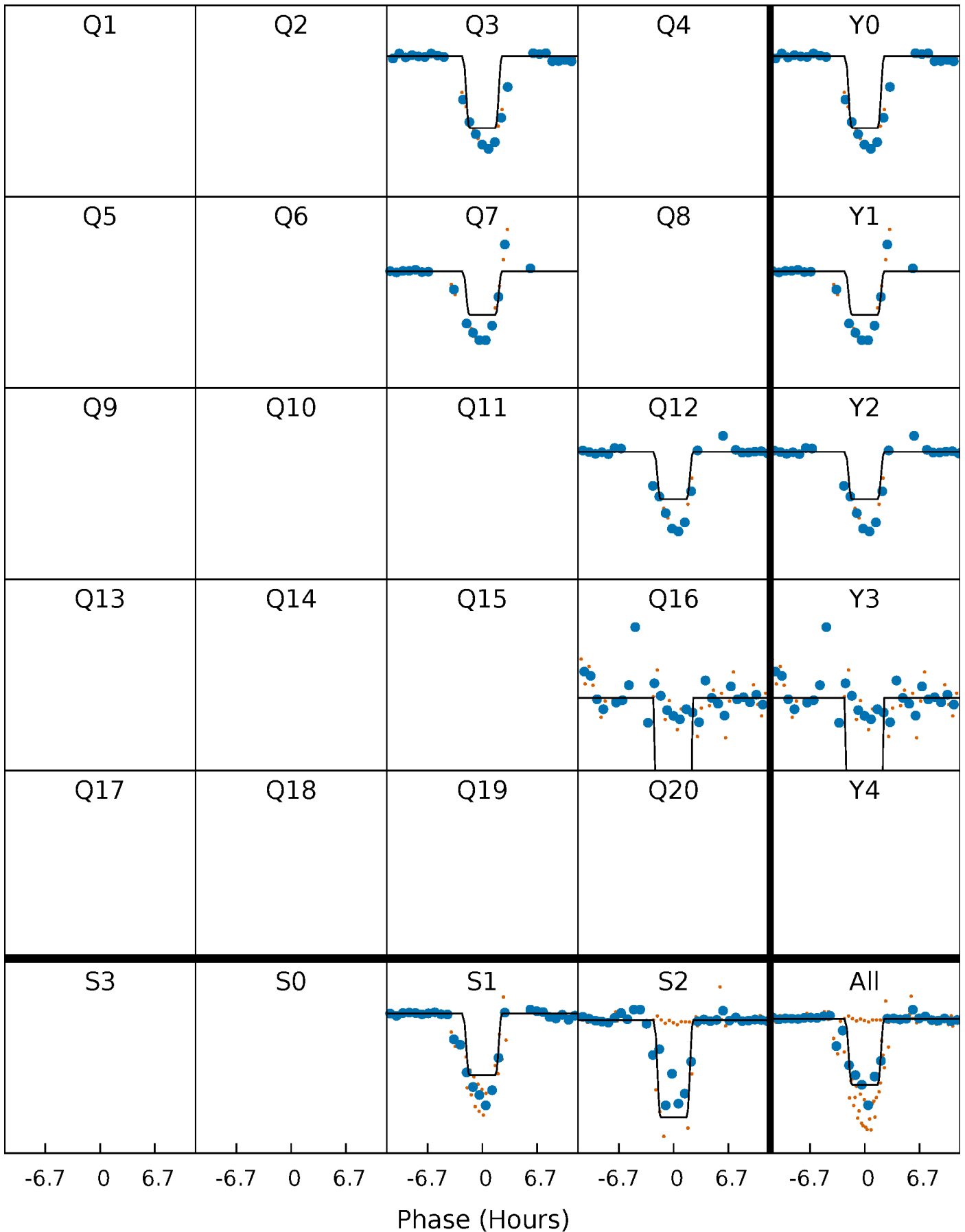
DV Quarter-Phased Transit Curves

TCE 003326917-03 $P=394.320030$ Days $T_0=324.901017$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

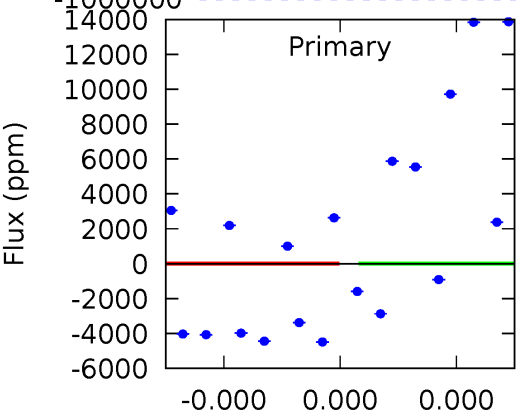
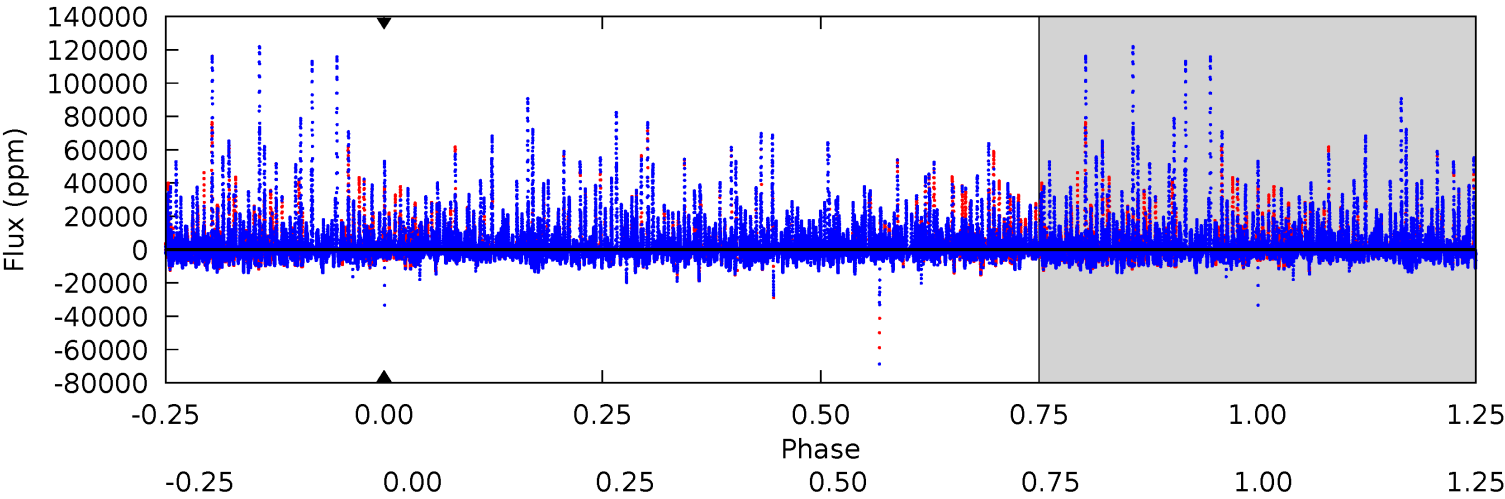
TCE 003326917-03 P=394.320030 Days $T_0=324.875719$ (BKJD)



DV Model-Shift Uniqueness Test

003326917-03, P = 394.320030 Days, E = 324.901017 Days

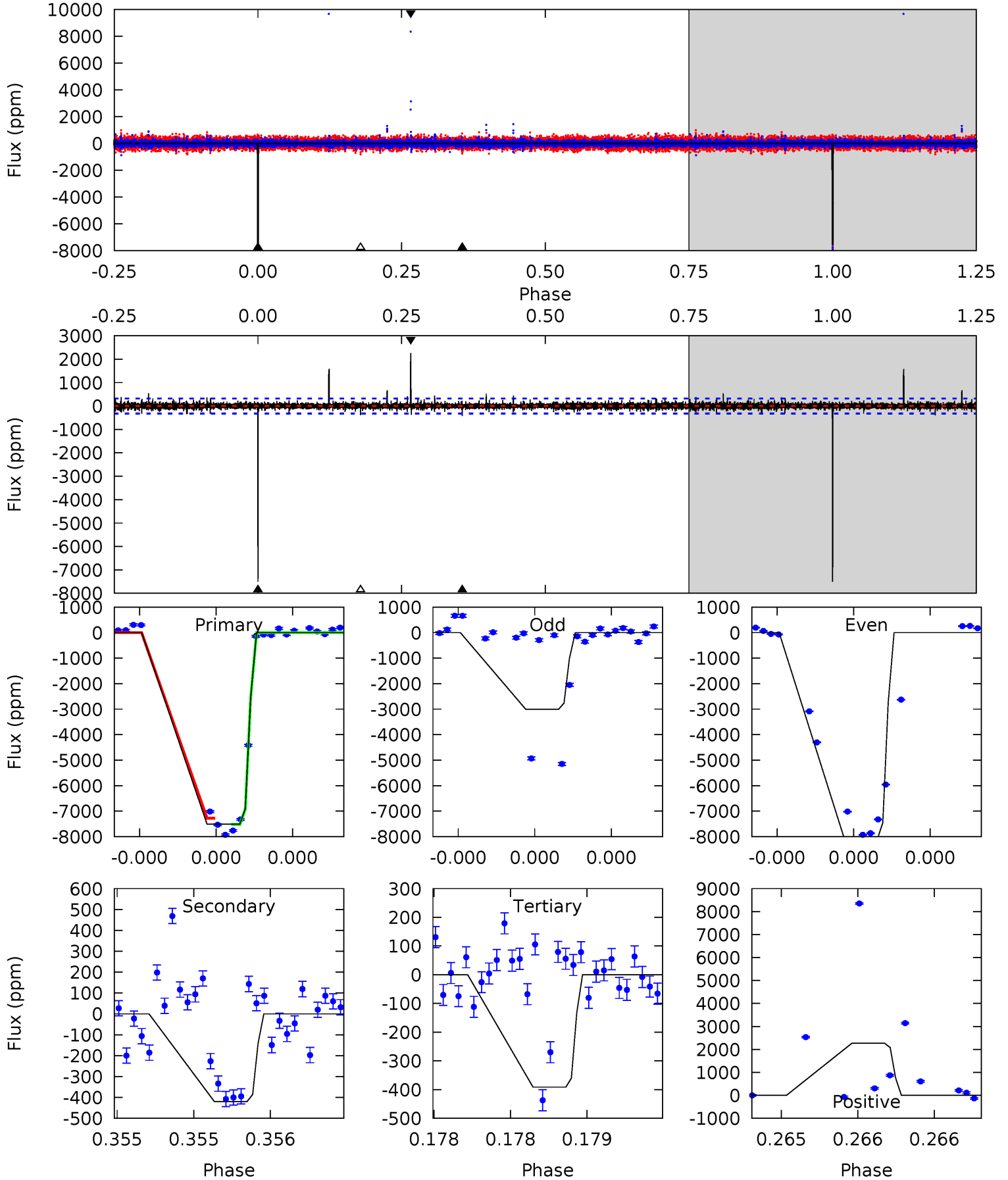
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
0	0	0	0	1.00	1.00	1.00	0	0	0	0	0	0	0	0



Alt Model-Shift Uniqueness Test

003326917-03, P = 394.320030 Days, E = 324.875719 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
129.6	7.24	6.76	39.1	5.58	3.49	1.22	122.9	90.5	0.48	-31.9	54.5	0.78	0.23	0



Stellar Parameters For KIC 003326917

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	M (M_{\odot})	p_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	6740^{+190}_{-262}	$3.904^{+0.424}_{-0.133}$	$-0.440^{+0.300}_{-0.300}$	$2.075^{+0.487}_{-0.904}$	$1.259^{+0.195}_{-0.238}$	$0.199^{+0.659}_{-0.076}$
	+3%/-4%	+11%/-3%	+68%/-68%	+23%/-44%	+15%/-19%	+332%/-38%
Source	PHO54	PHO54	PHO54	DSEP		

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

Secondary Eclipse Parameters for KIC 003326917-03 / KOI

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	0 ± 1000000	$16.53^{+17.73}_{-11.82}$	548^{+44}_{-59}	4615^{+23277}_{-34004}	$4179^{+490033}_{-489433}$
Alt.	-420 ± 58	$21.59^{+20.58}_{-14.78}$	549^{+45}_{-67}	3466^{+1749}_{-596}	630^{+5526}_{-458}

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 $A_{obs} \gg 1.0$

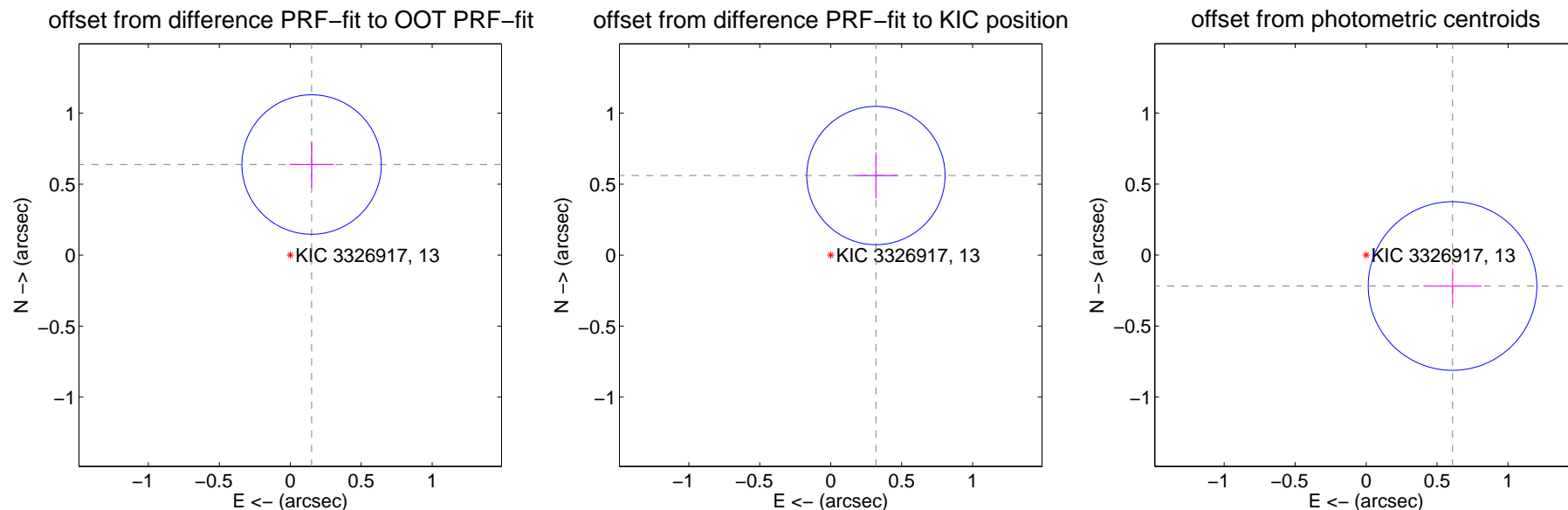
DV Centroid Data

Supplemental centroid analysis for 003326917-03. Kepler magnitude: 13.00. 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 0.19 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.656 ± 0.164	4.01	-0.151 ± 0.157	0.639 ± 0.164
PRF-fit source offset from KIC position	0.645 ± 0.162	3.97	-0.319 ± 0.157	0.561 ± 0.164
photometric centroid source offset	0.65 ± 0.20	3.27	-0.61 ± 0.21	-0.22 ± 0.12



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.



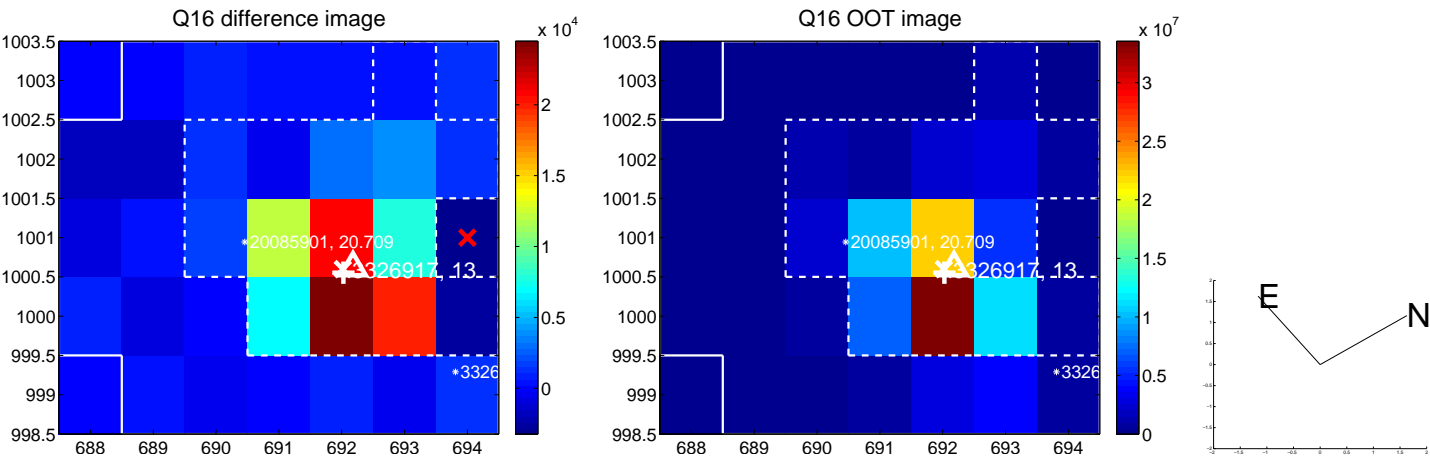
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



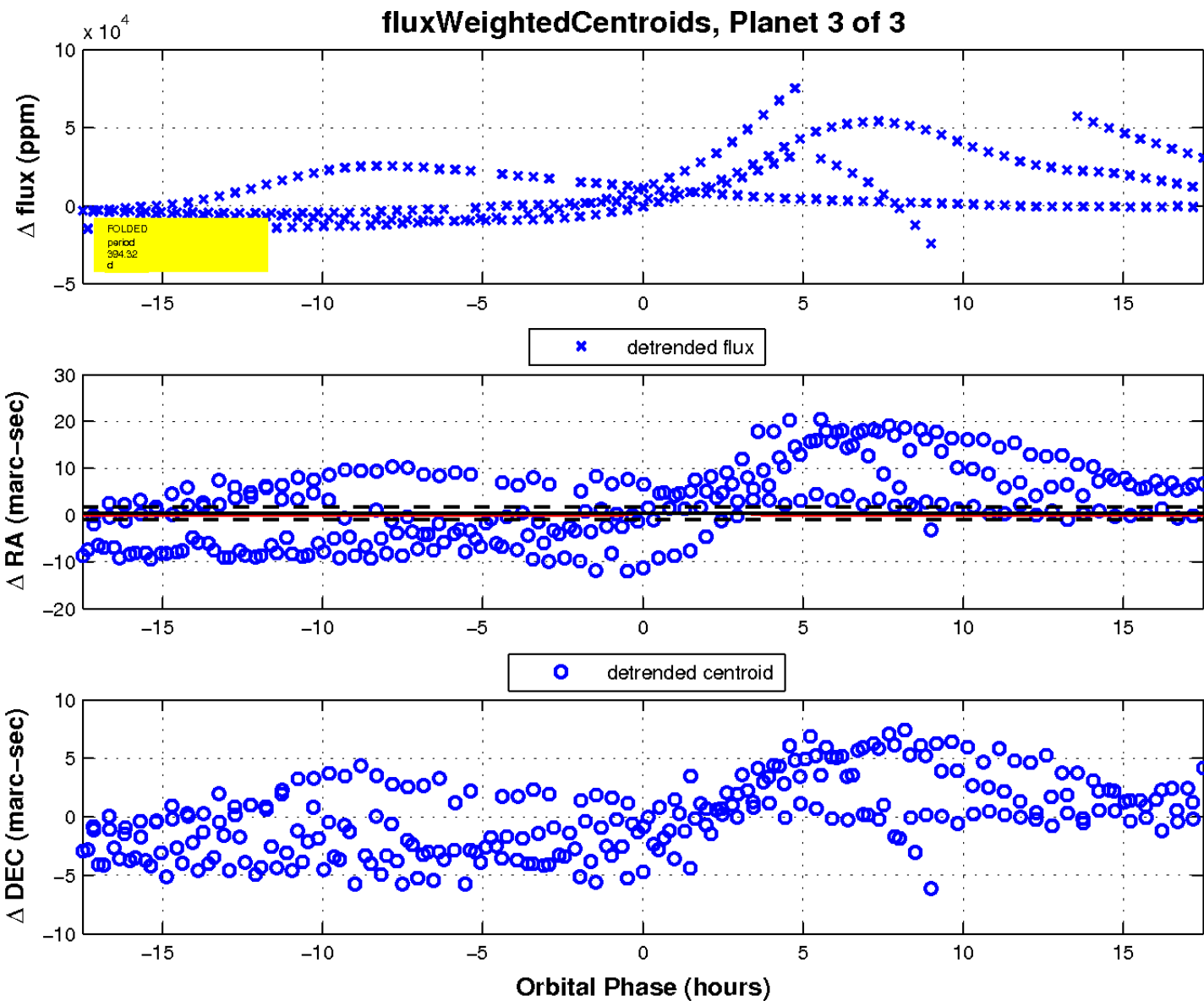
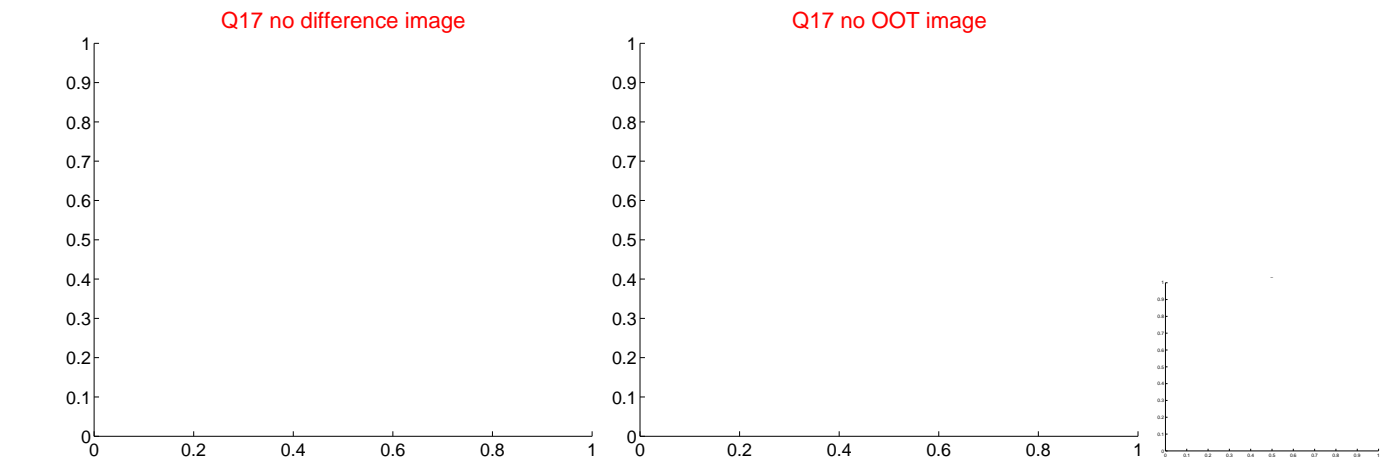
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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

Declination

