

KIC 012067780

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})
012067780-01	OBS	No	0.573029	131.802573	75.9	2.238	9.0	8.0	3.79	8729	3.82	216423.40
012067780-02	OBS	No	0.594001	131.629000	172.2	2.235	11.5	12.0	3.79	8729	5.75	206295.72
012067780-03	OBS	No	36.425948	138.014724	1168.6	1.685	9.5	7.2	3.79	8729	14.43	853.08

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
012067780-01	OBS	FP	0.00	1	0	0	0	LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT
012067780-02	OBS	FP	0.00	1	0	0	0	TRANS_GAPPED—LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT
012067780-03	OBS	FP	0.00	1	0	1	0	TRANS_GAPPED—LPP_DV—HALO_GHOST

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

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

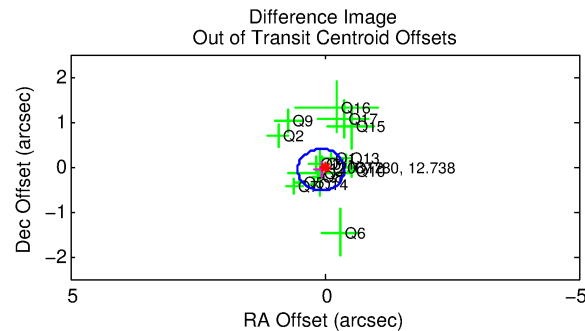
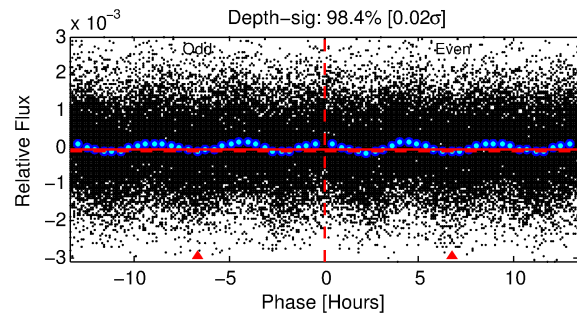
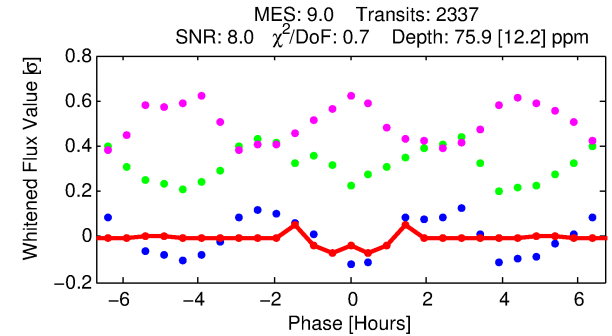
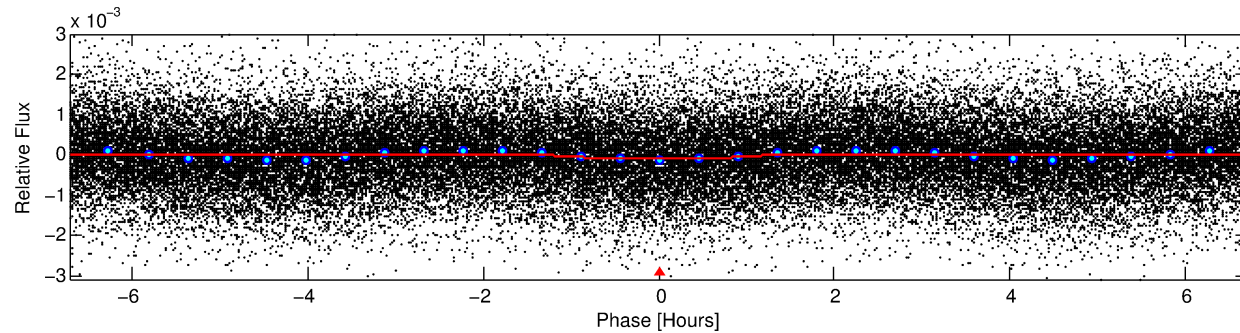
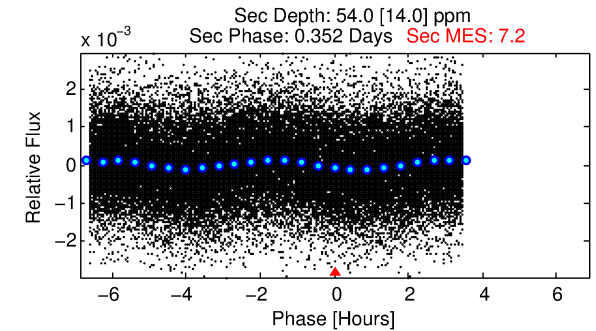
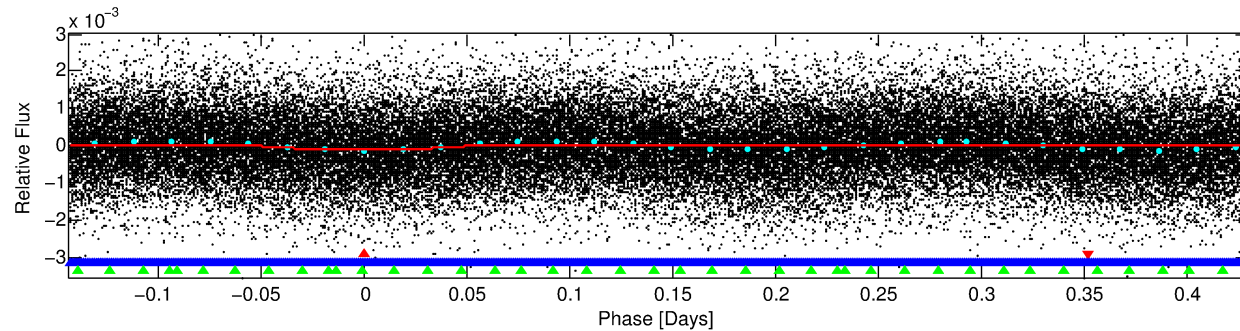
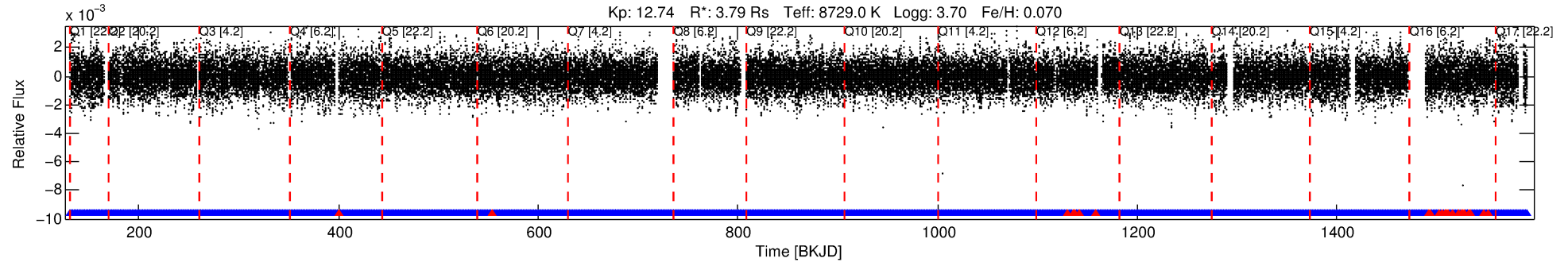
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 012067780-01

No Significant Match Found

DV One-Page Summary

KIC: 12067780 Candidate: 1 of 3 Period: 0.573 d



DV Fit Results:

Period = 0.57303 [0.00001] d
Epoch = 131.8026 [0.0013] BKJD
Rp/R* = 0.0092 [0.0021]
a/R* = 1.30 [0.75]
b = 0.90 [0.30]
Seff = 216423.40 [188180.45]
Teq = 5500 [1196] K
Rp = 3.82 [2.13] Re
a = 0.0186 [0.0089] AU
Ag = 0.70 [0.64] [-0.47σ]
Teffp = 7783 [1325] K [1.28σ]

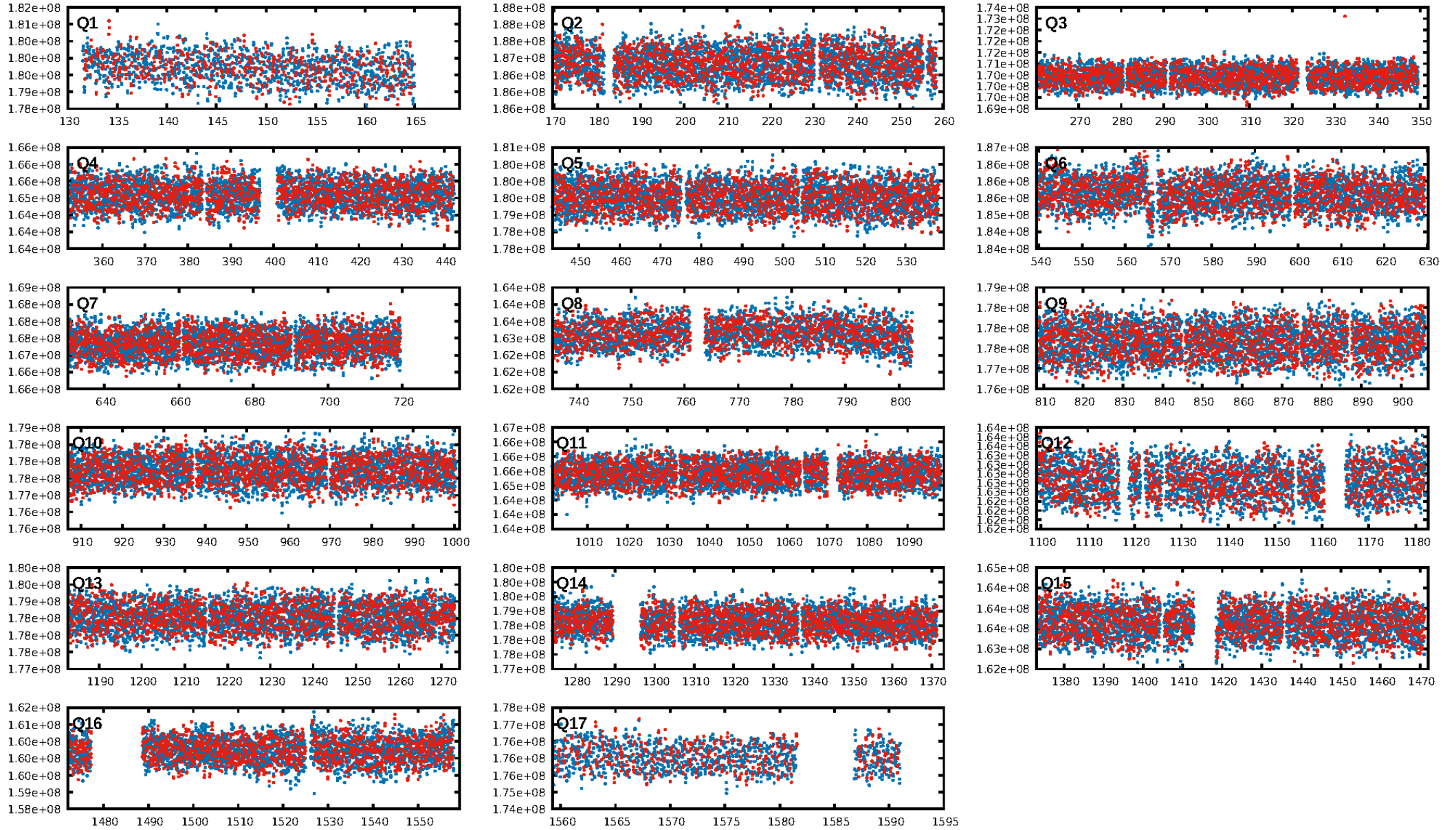
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: 12.6% [0.16σ]
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: N/A
RollingBand-fgt: 0.99 [2206/2231]
GhostDiagnostic-chr: 1.664
Centroid-sig: 2.1%
Centroid-so: 0.476 arcsec [1.91σ]
OotOffset-rm: 0.100 arcsec [0.66σ]
KicOffset-rm: 0.114 arcsec [0.73σ]
OotOffset-st: 4/4/4/5 [17]
KicOffset-st: 4/4/4/5 [17]
DiffImageQuality-fgm: 0.76 [13/17]
DiffImageOverlap-fno: 0.00 [0/17]

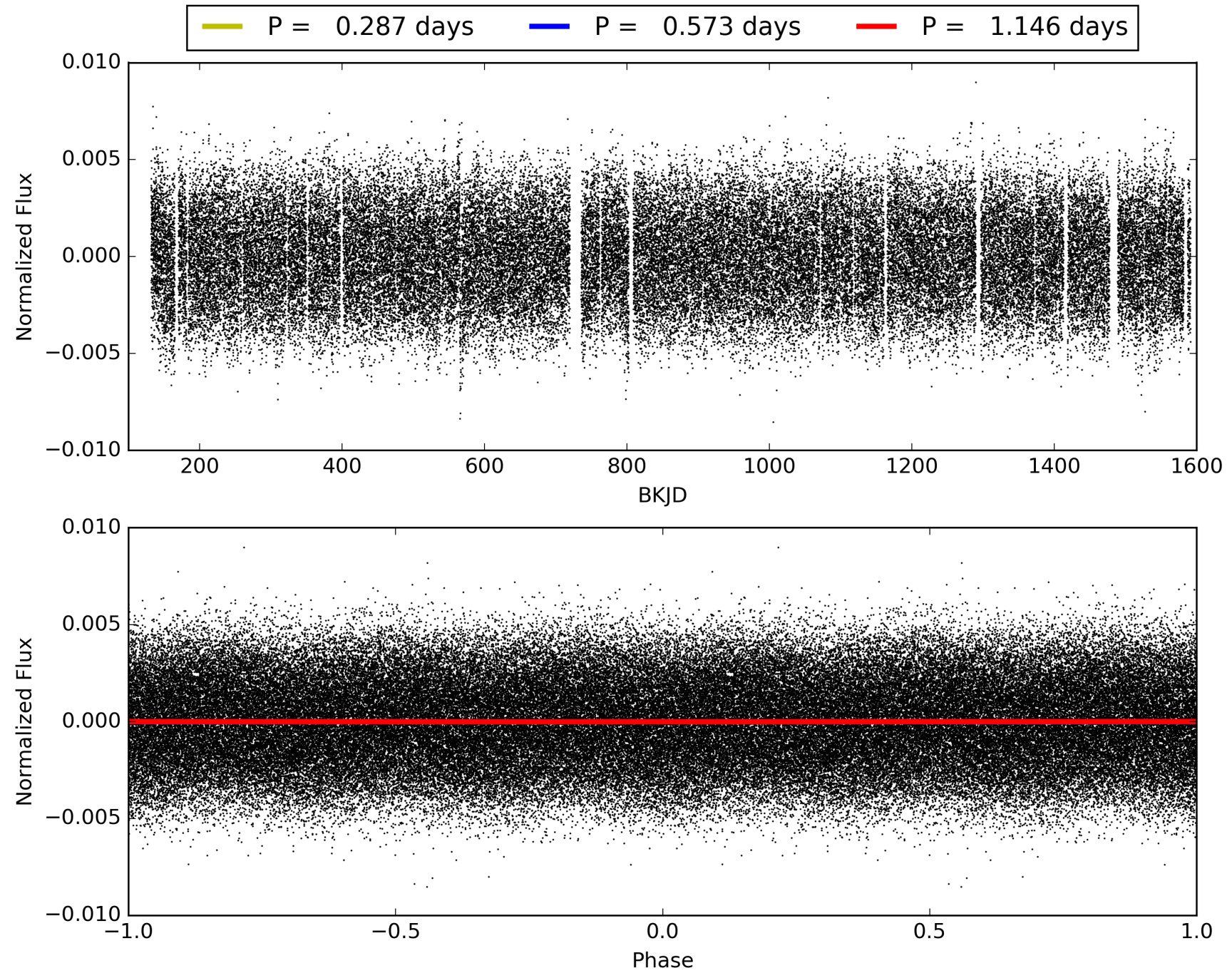
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 30-Jan-2016 06:03:30 Z

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

TCE 012067780-01, PDC Light Curves

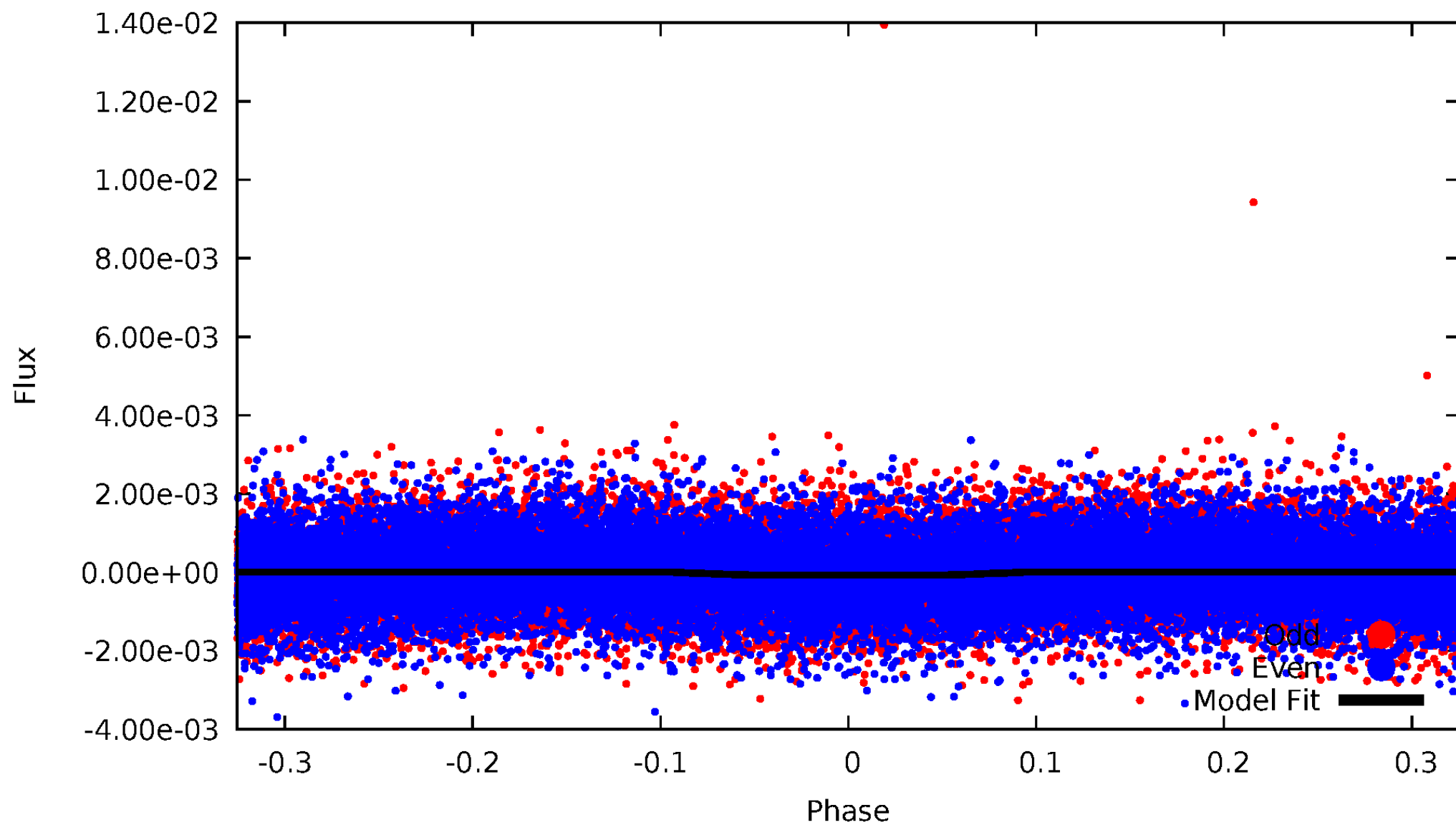


TCE 012067780-01



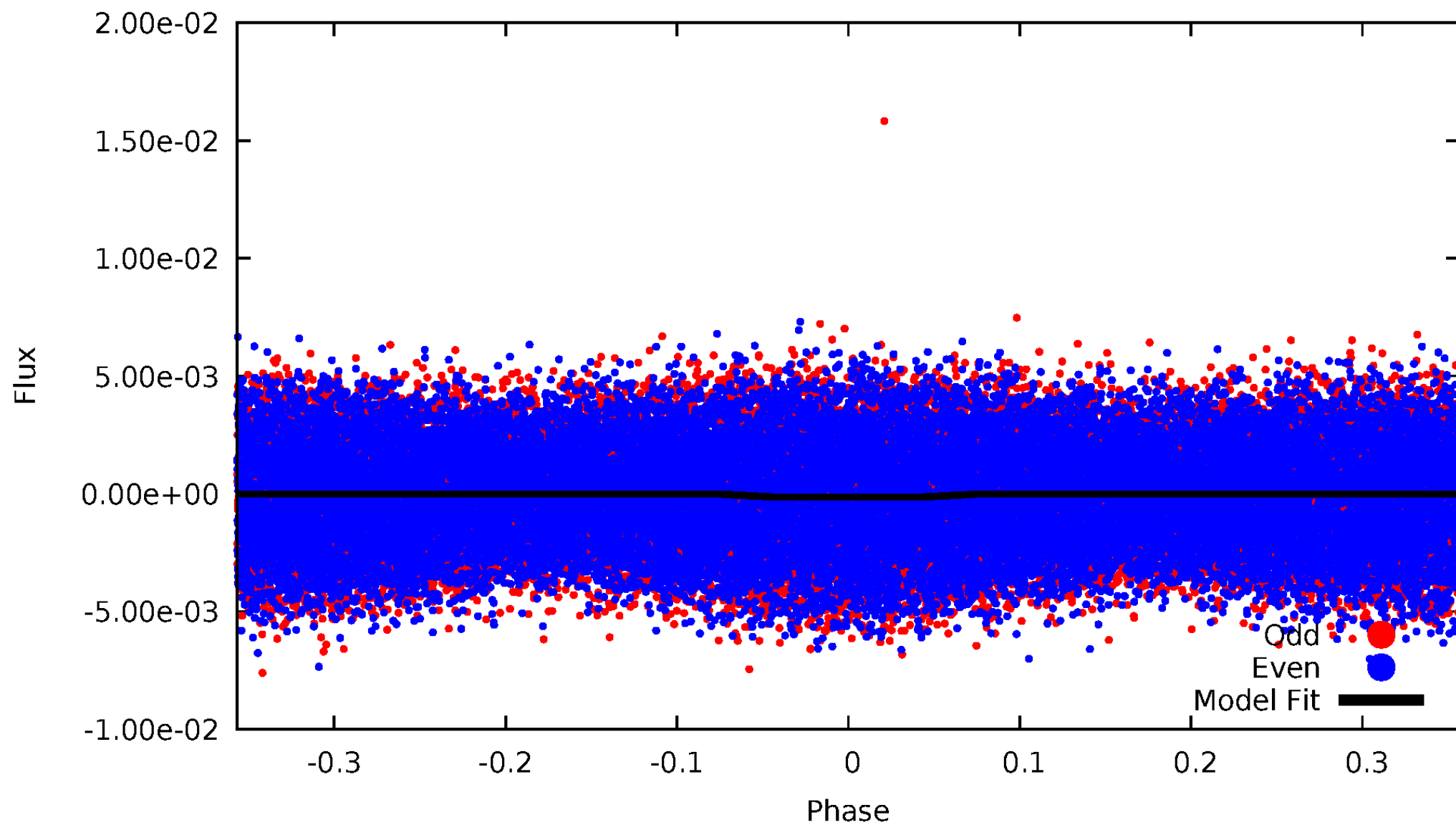
DV Odd/Even

TCE 012067780-01



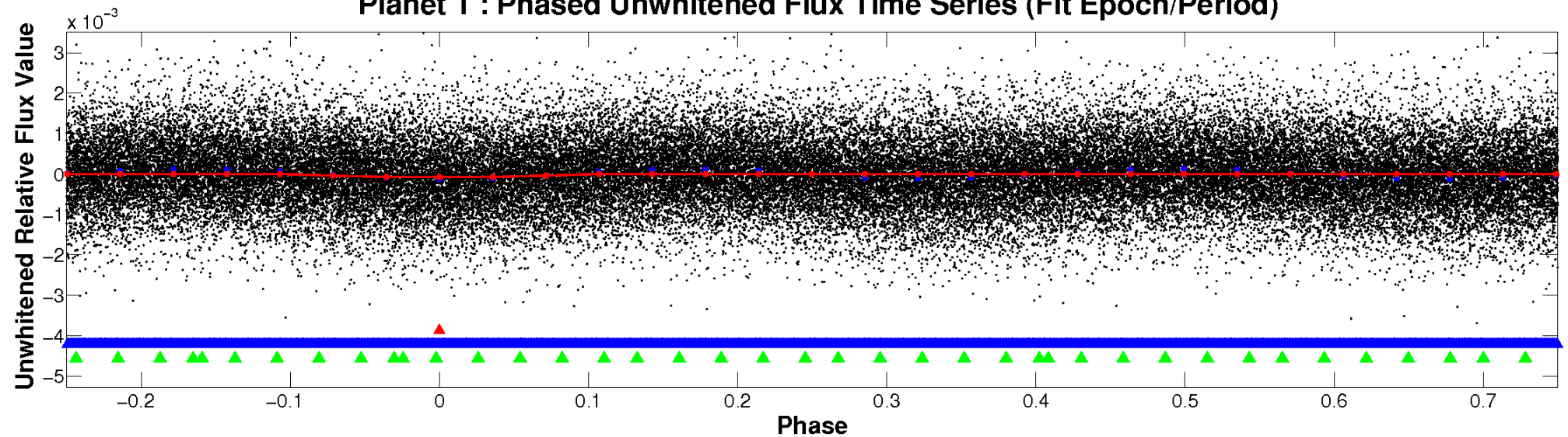
ALT Odd/Even

TCE 012067780-01

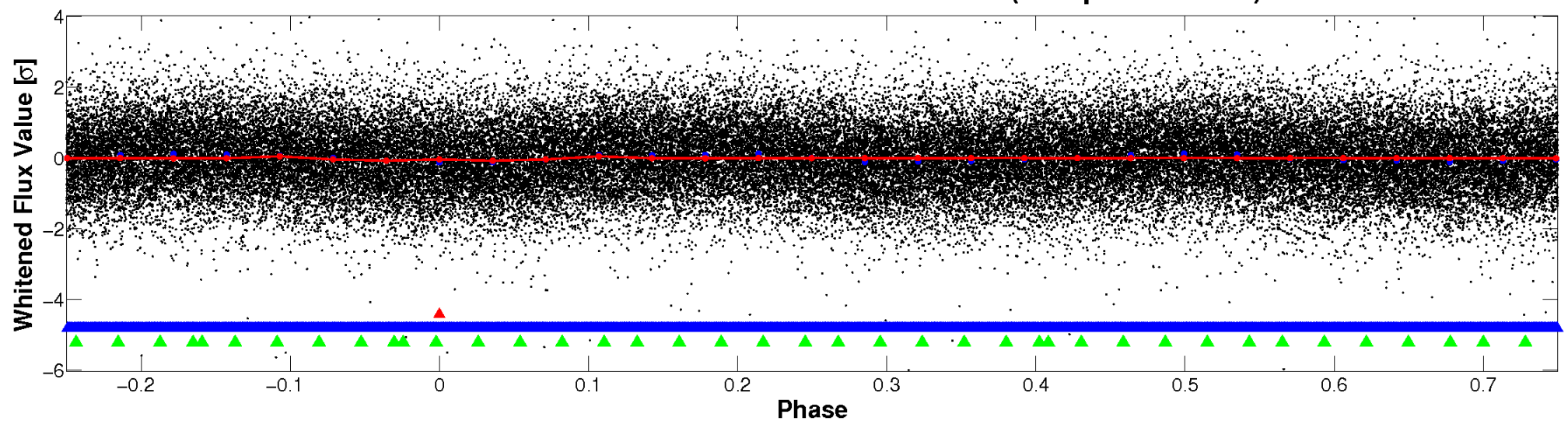


Non-Whitened Vs. Whitened Light Curve

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

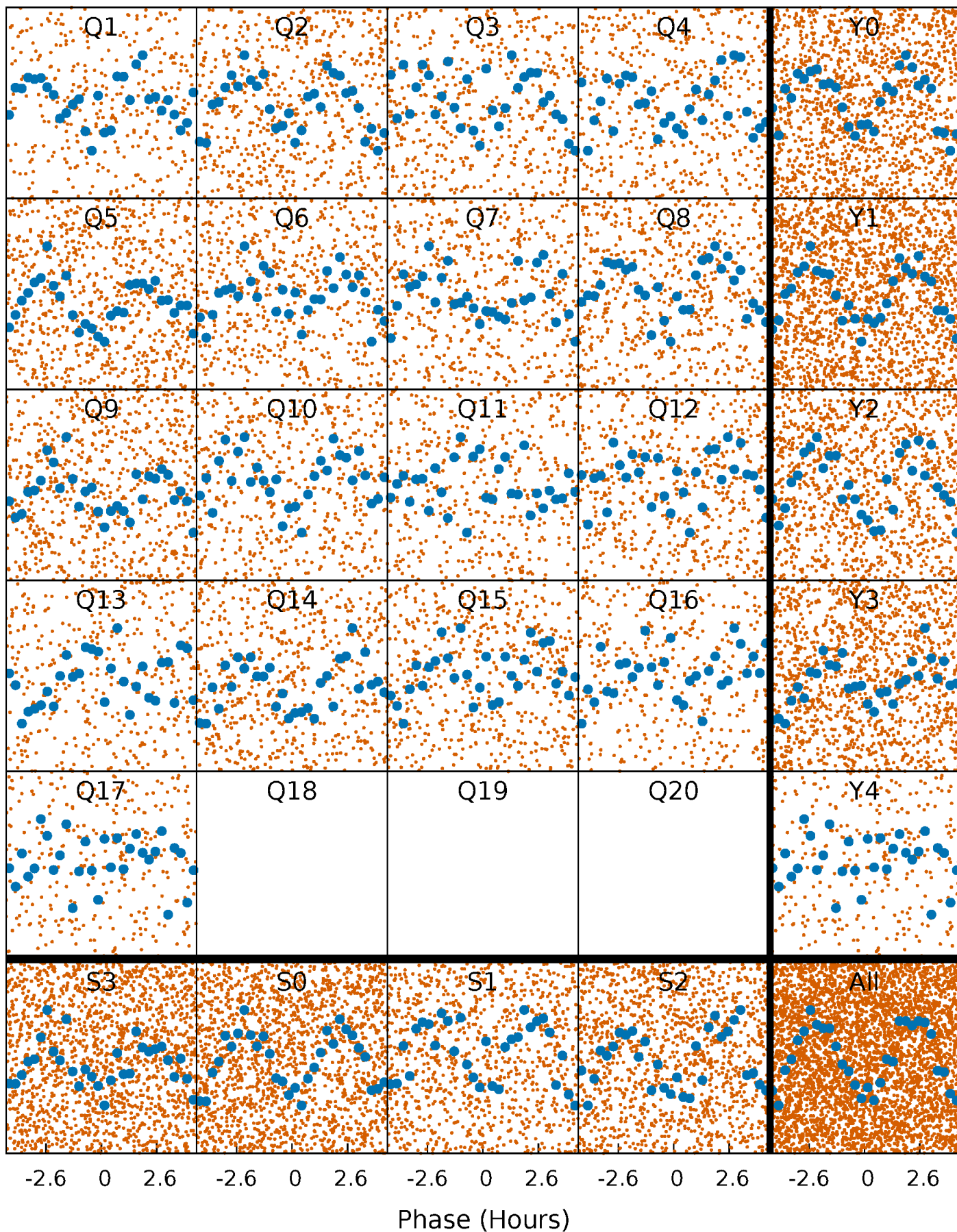


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



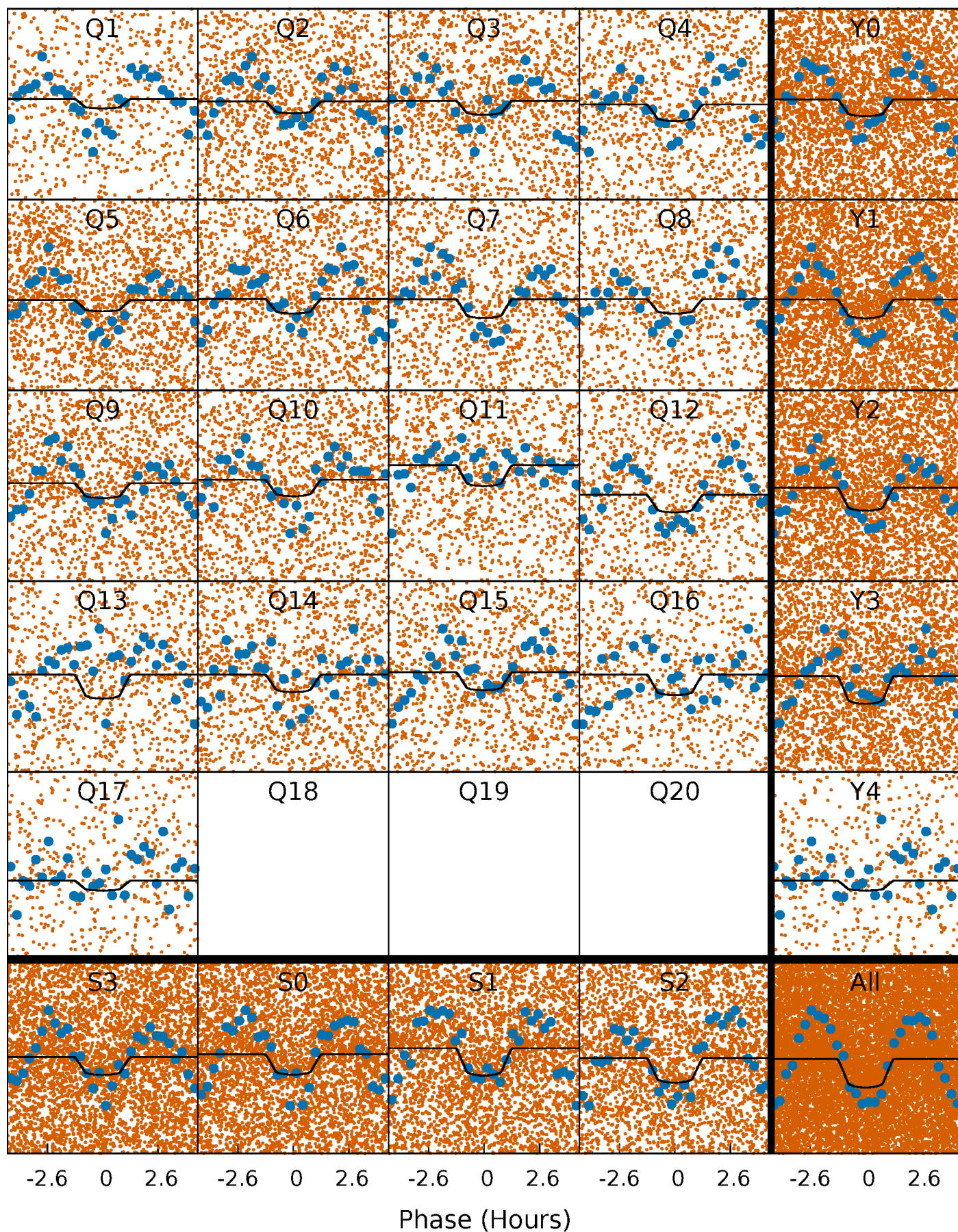
PDC Quarter-Phased Transit Curves

TCE 012067780-01 P= 0.573029 Days $T_0=131.802573$ (BKJD)



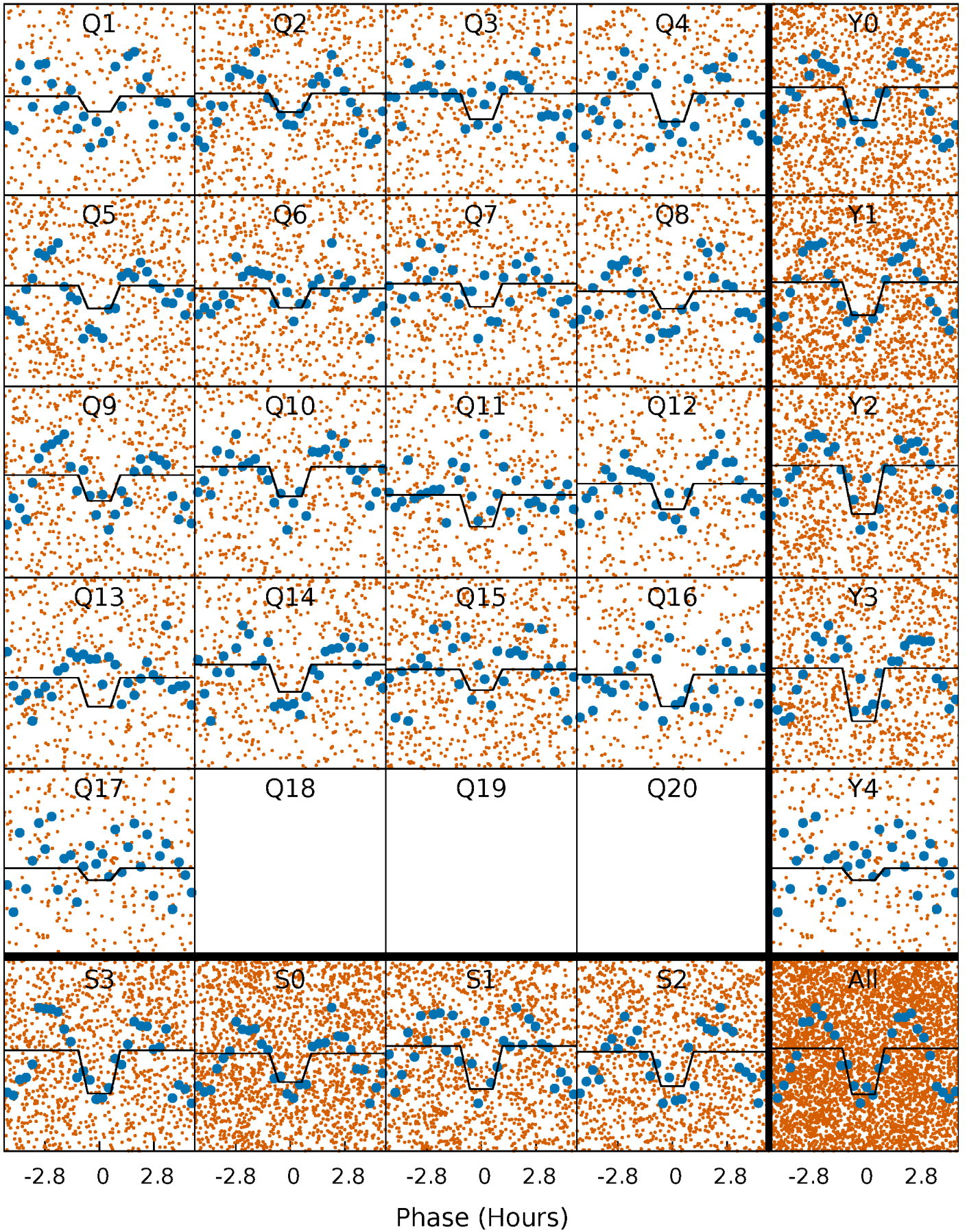
DV Quarter-Phased Transit Curves

TCE 012067780-01 P= 0.573029 Days $T_0=131.802573$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

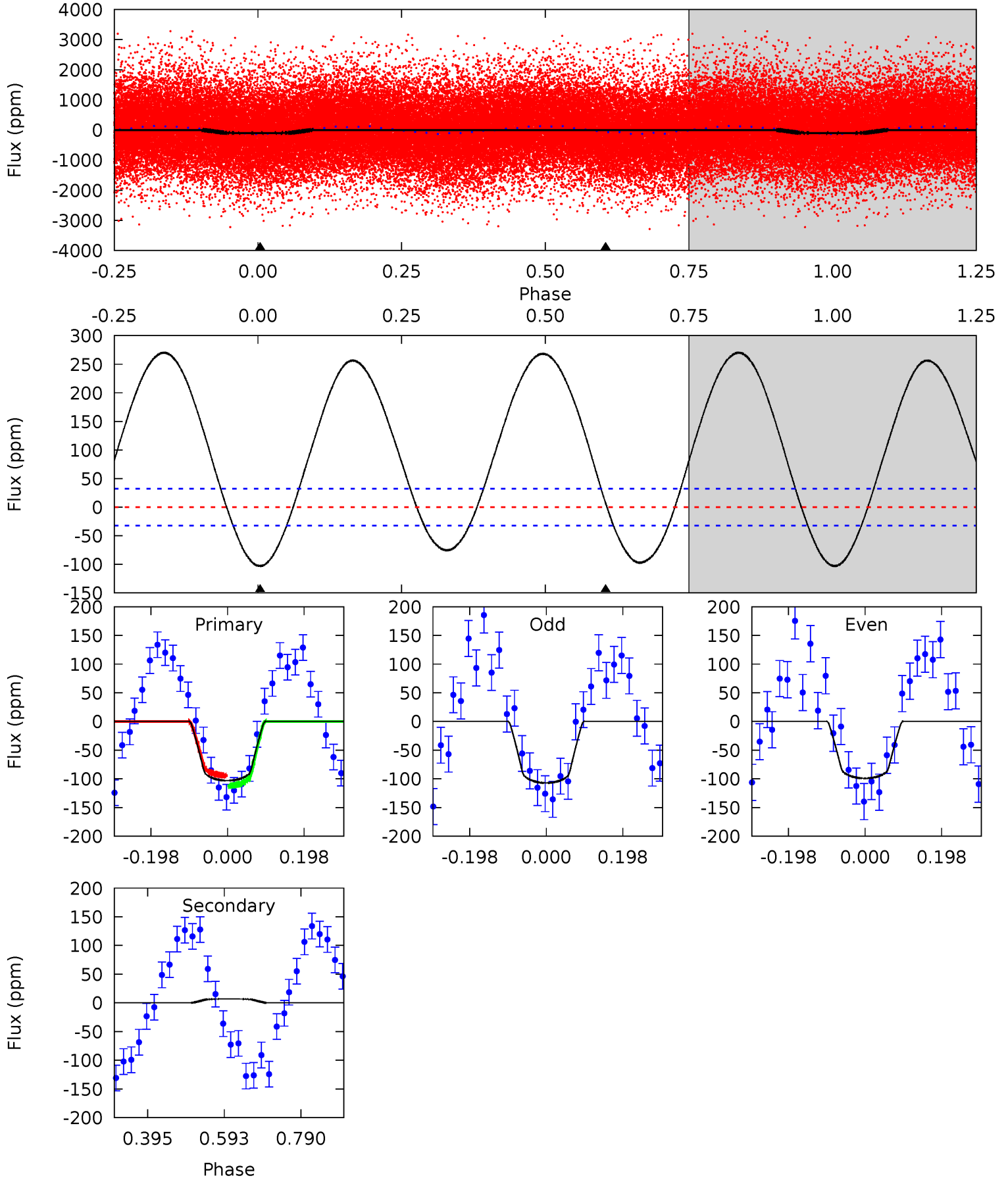
TCE 012067780-01 P= 0.573035 Days $T_0=131.799368$ (BKJD)



DV Model-Shift Uniqueness Test

012067780-01, P = 0.573029 Days, E = 131.229544 Days

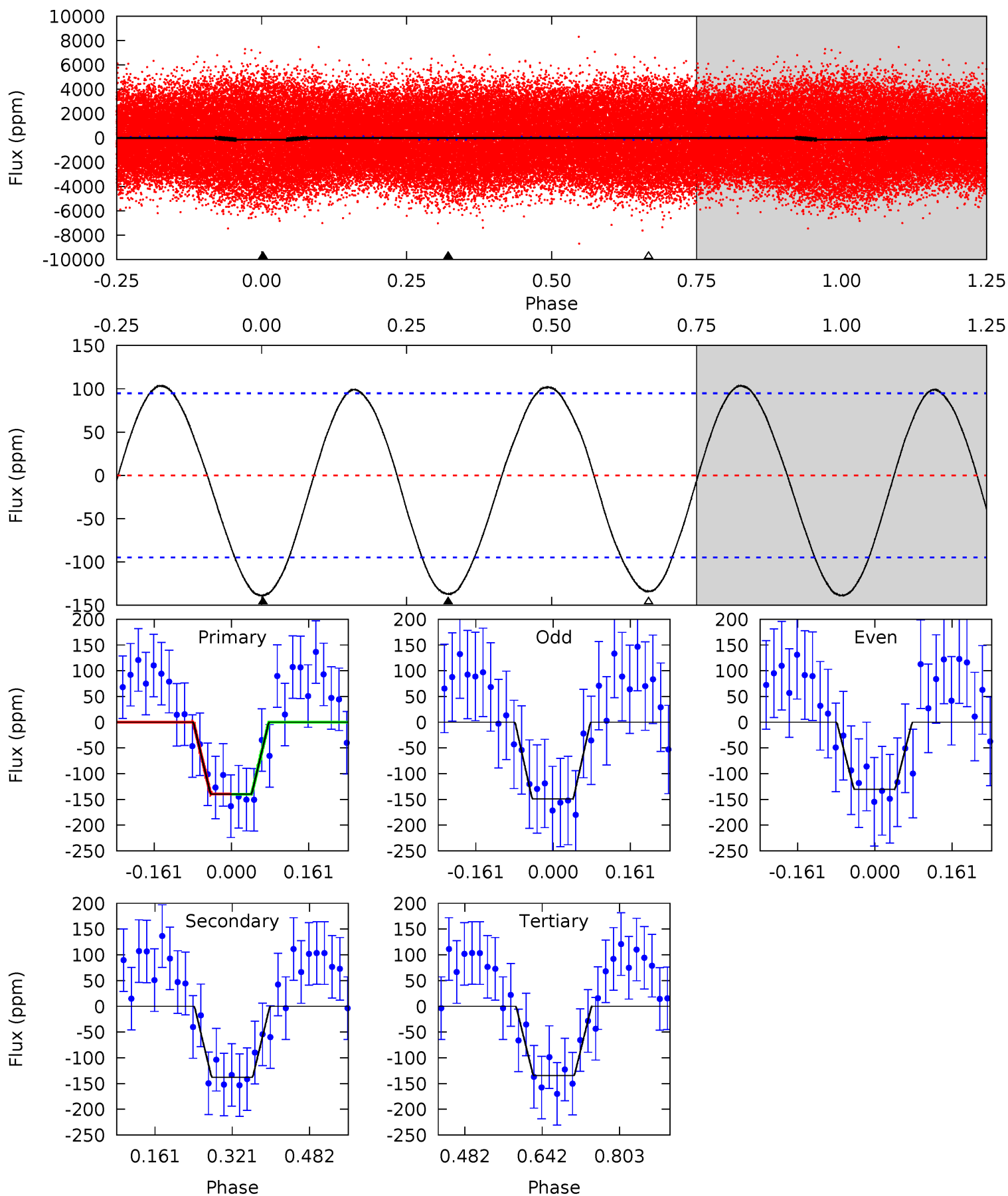
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
14.1	-0.93	0	0	4.42	1.29	12.3	14.1	14.1	-0.93	-0.93	0.55	1.10	0.72	1.22



Alt Model-Shift Uniqueness Test

012067780-01, P = 0.573035 Days, E = 131.226333 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
6.58	6.49	6.33	0	4.46	1.40	4.05	0.24	6.58	0.15	6.49	0.45	1.08	0.43	0.01



Stellar Parameters For KIC 012067780

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	8729^{+411}_{-961}	$3.696^{+0.435}_{-0.116}$	$0.070^{+0.050}_{-0.300}$	$3.786^{+0.830}_{-1.936}$	$2.593^{+0.241}_{-0.902}$	$0.067^{+0.339}_{-0.024}$
	+5%/-11%	+12%/-3%	+71%/-429%	+22%/-51%	+9%/-35%	+503%/-36%
Source	SPE68	SPE68	SPE68	DSEP		

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

Secondary Eclipse Parameters for KIC 012067780-01 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	7 ± 7	$3.49^{+1.19}_{-1.13}$	7285^{+870}_{-1103}	-6139^{+771}_{-821}	$-0.097^{+0.106}_{-0.188}$
Alt.	-138 ± 21	$4.49^{+1.27}_{-1.32}$	7234^{+842}_{-1072}	7716^{+1482}_{-1200}	$1.257^{+1.206}_{-0.508}$

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 $A_{obs} \gg 1.0$

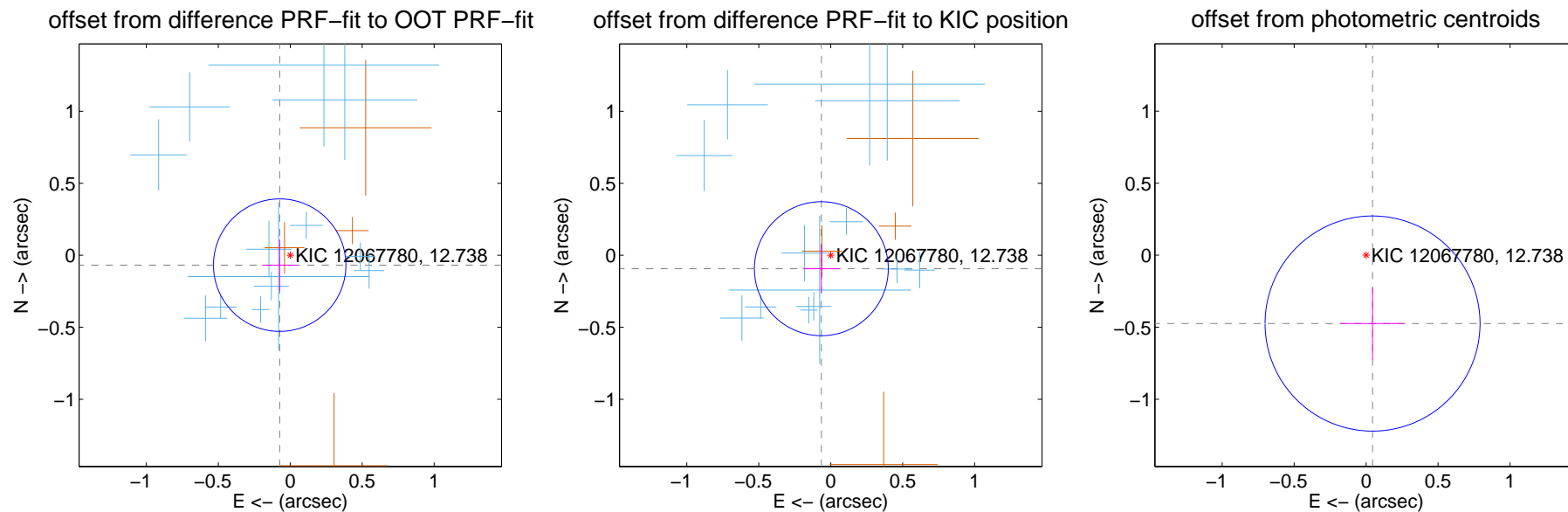
DV Centroid Data

Supplemental centroid analysis for 012067780-01. Kepler magnitude: 12.74. Transit SNR 7.97

There are 13 quarters with good PRF difference image offsets

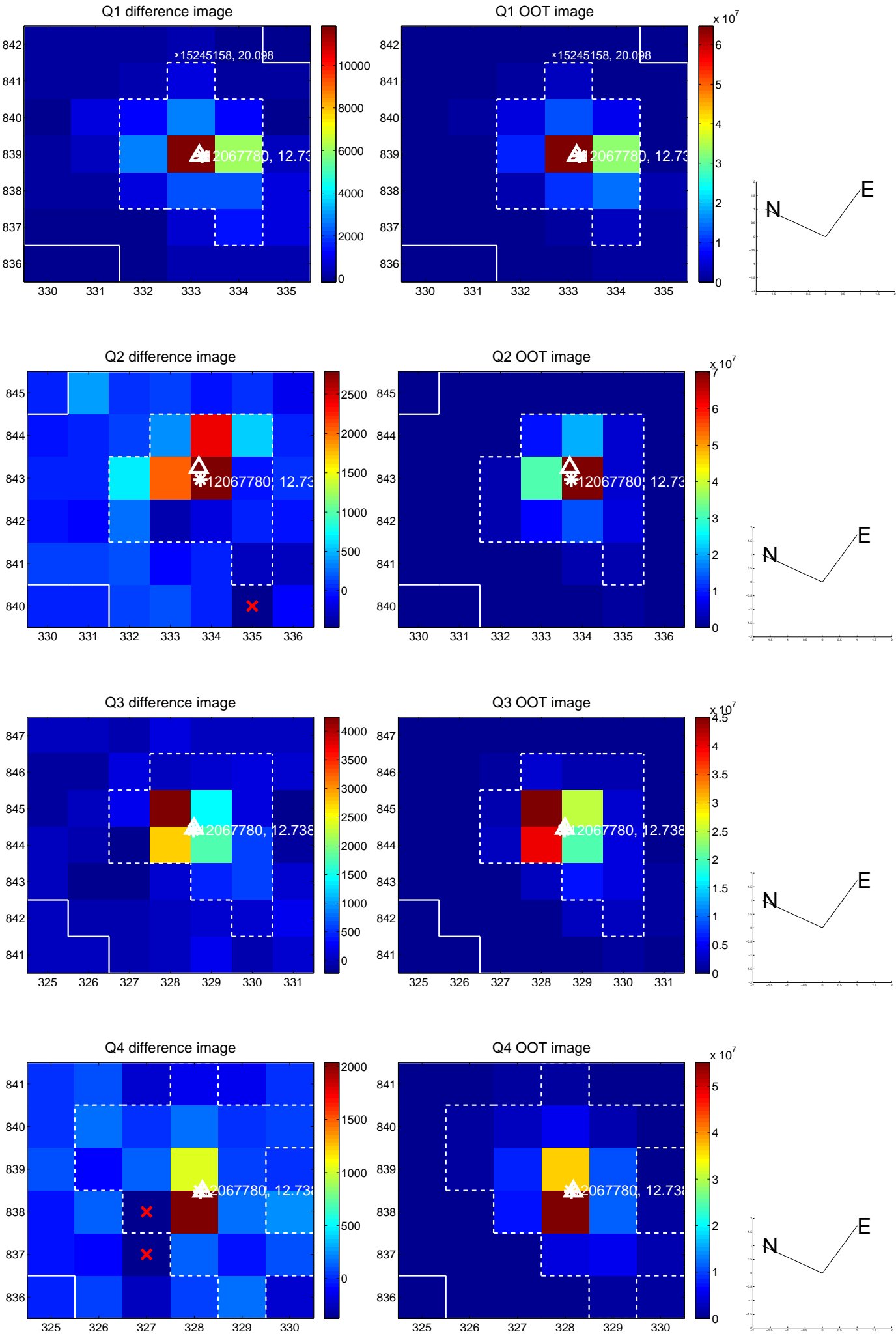
The direct PRF centroid is offset from the target star catalog position by about 0.01 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.100 ± 0.153	0.66	0.074 ± 0.122	-0.068 ± 0.179
PRF-fit source offset from KIC position	0.114 ± 0.155	0.73	0.065 ± 0.129	-0.093 ± 0.165
photometric centroid source offset	0.48 ± 0.25	1.91	-0.04 ± 0.22	-0.47 ± 0.25

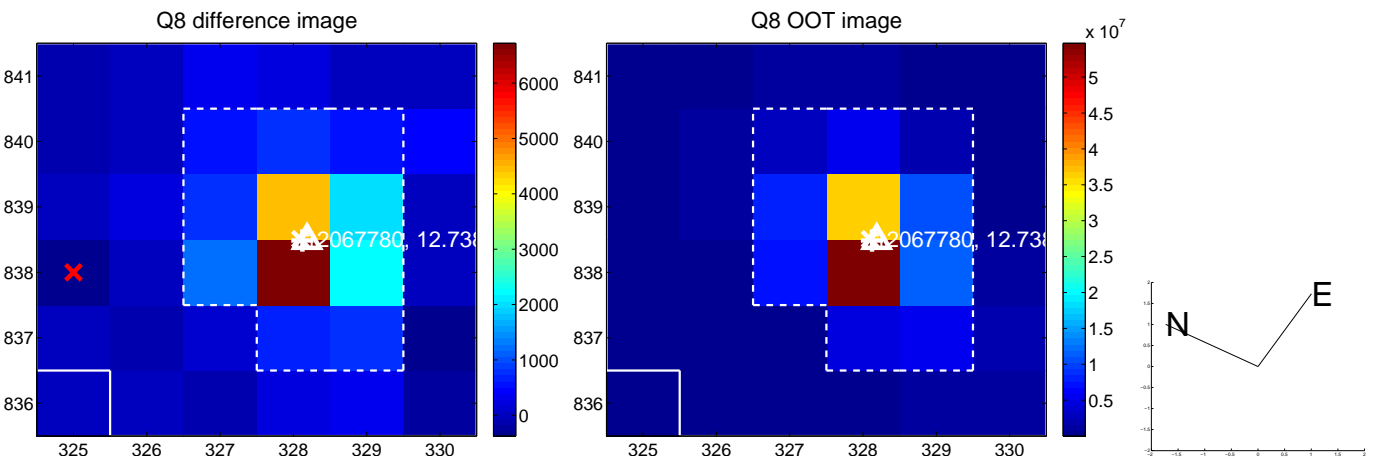
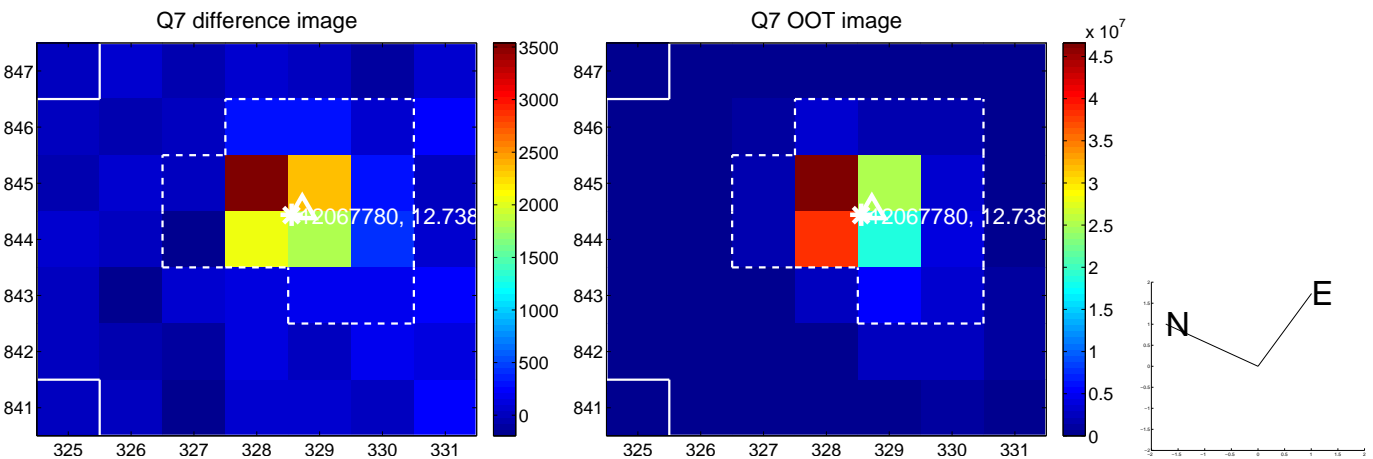
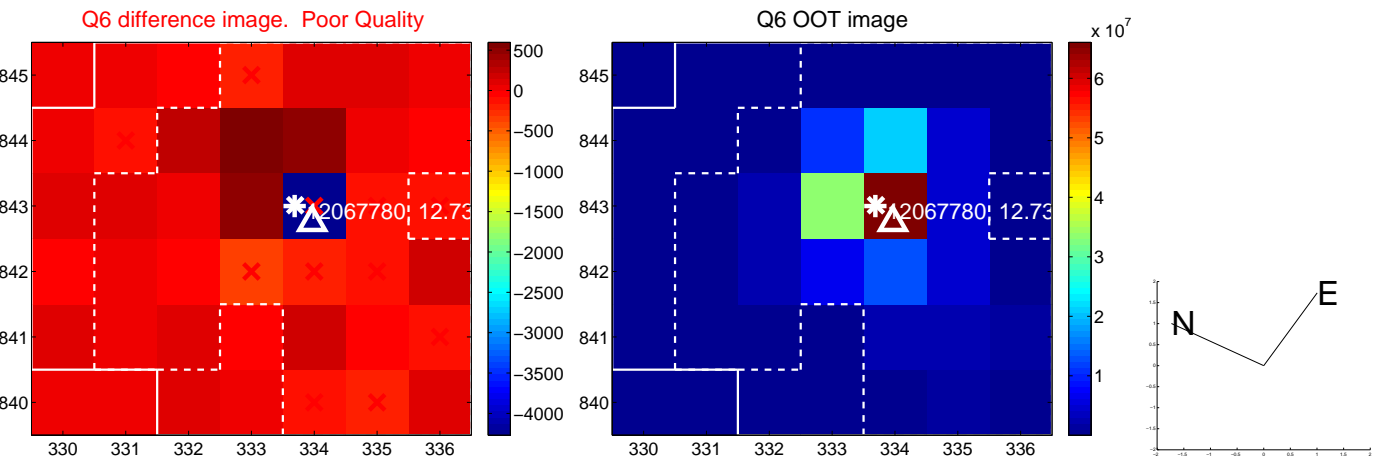
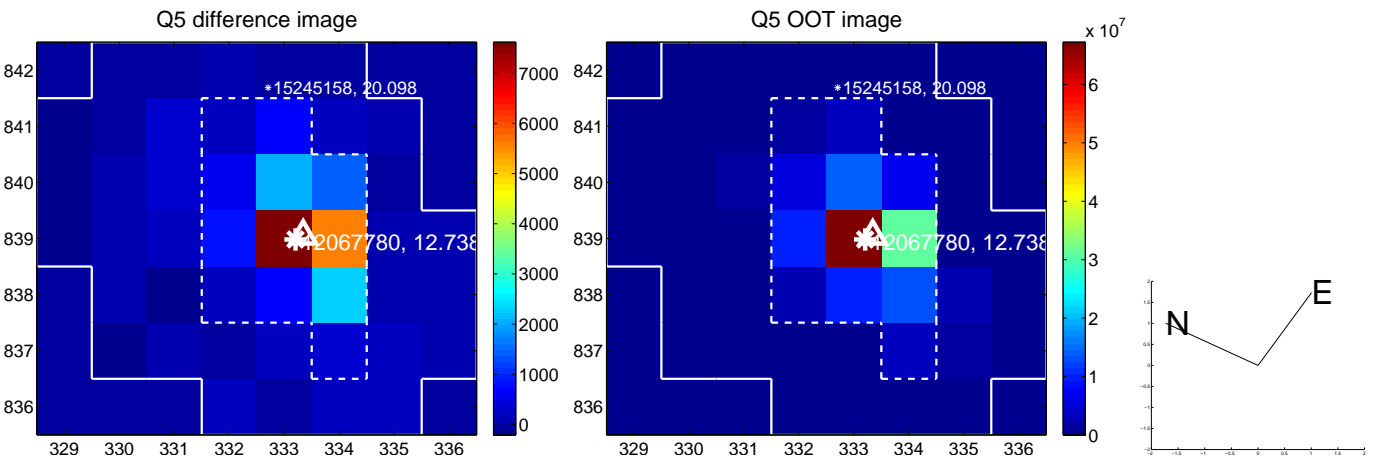


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses:** good quarterly centroid offsets; **Vermillion crosses:** bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

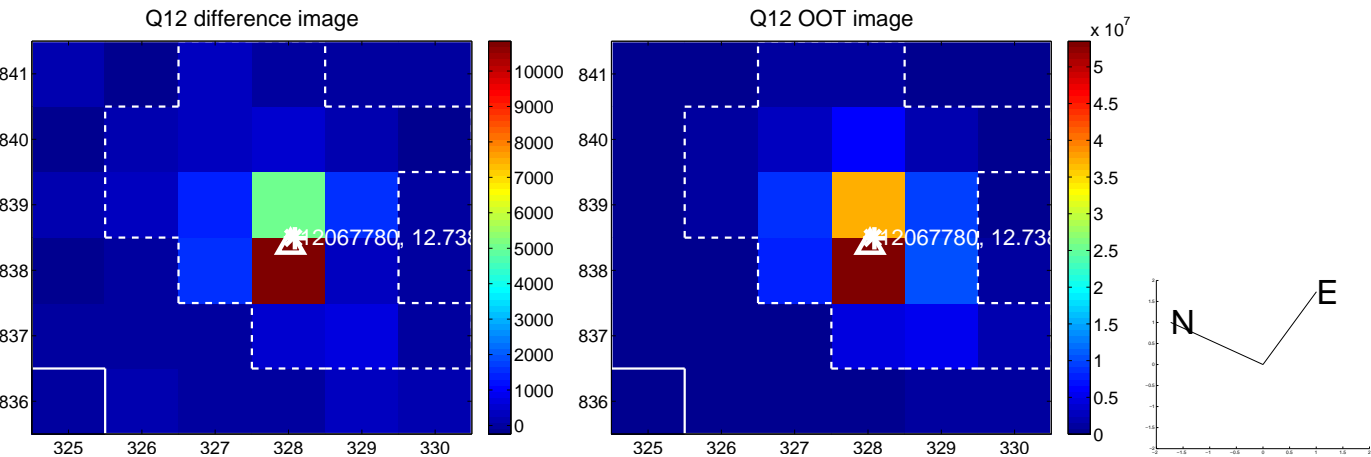
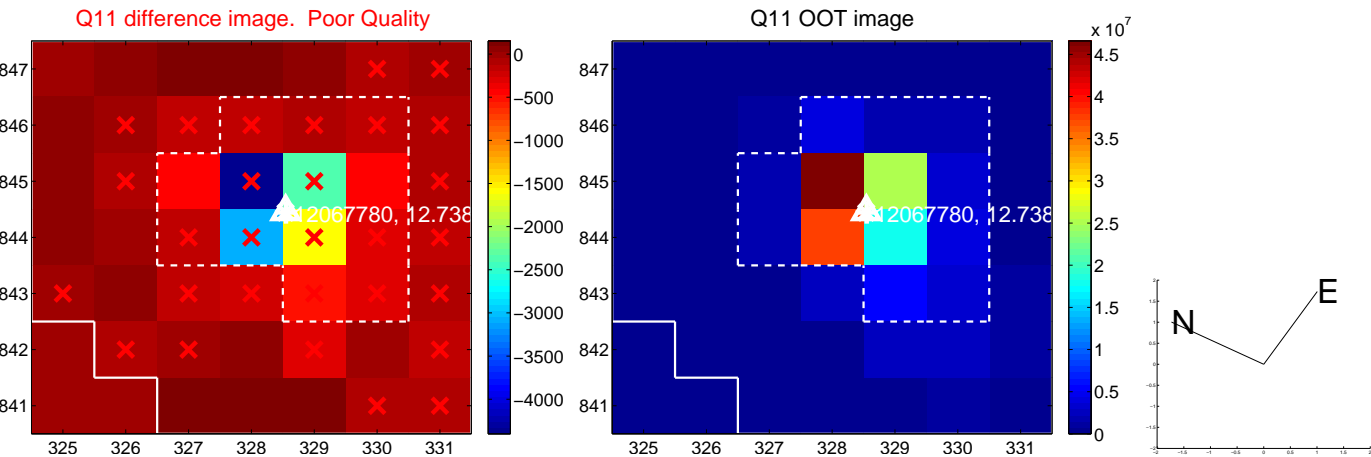
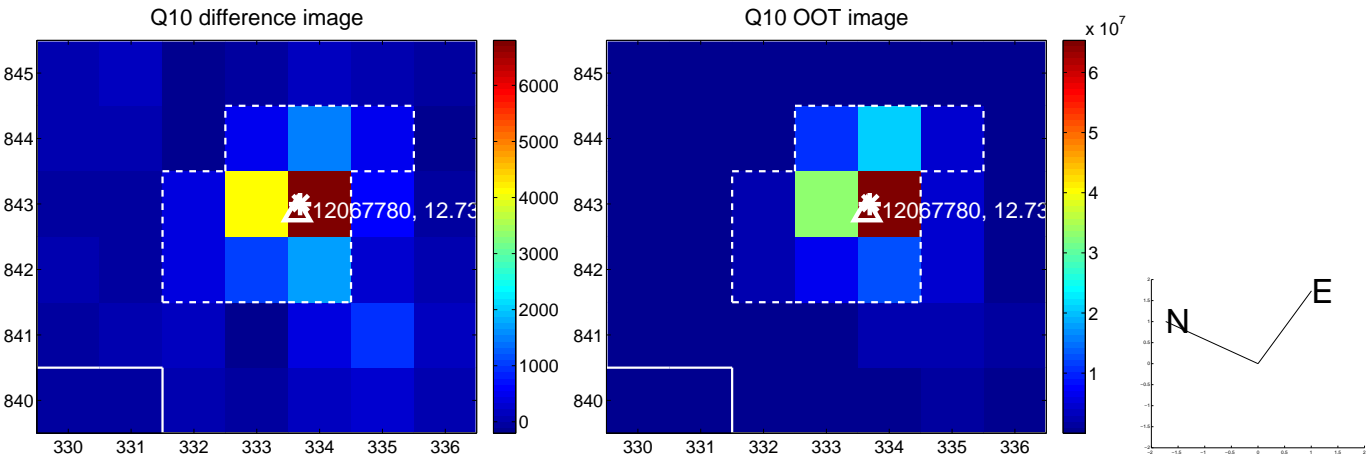
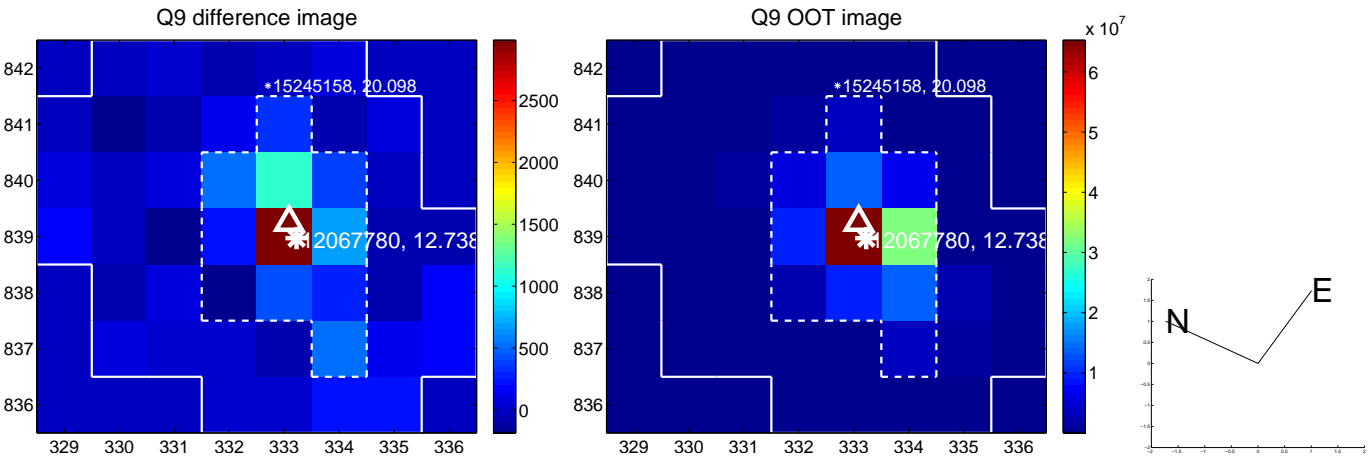
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



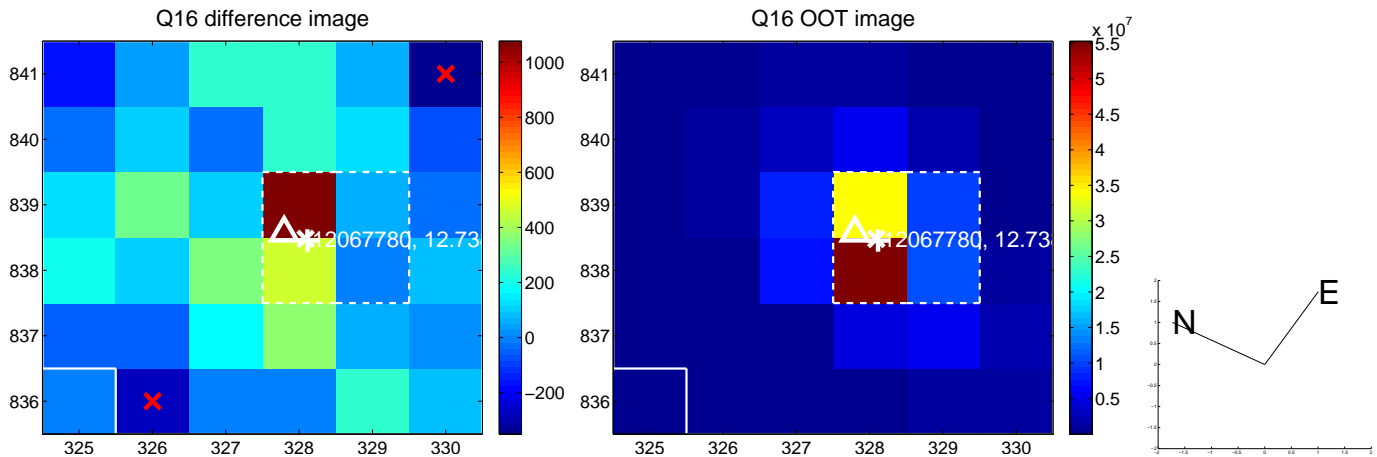
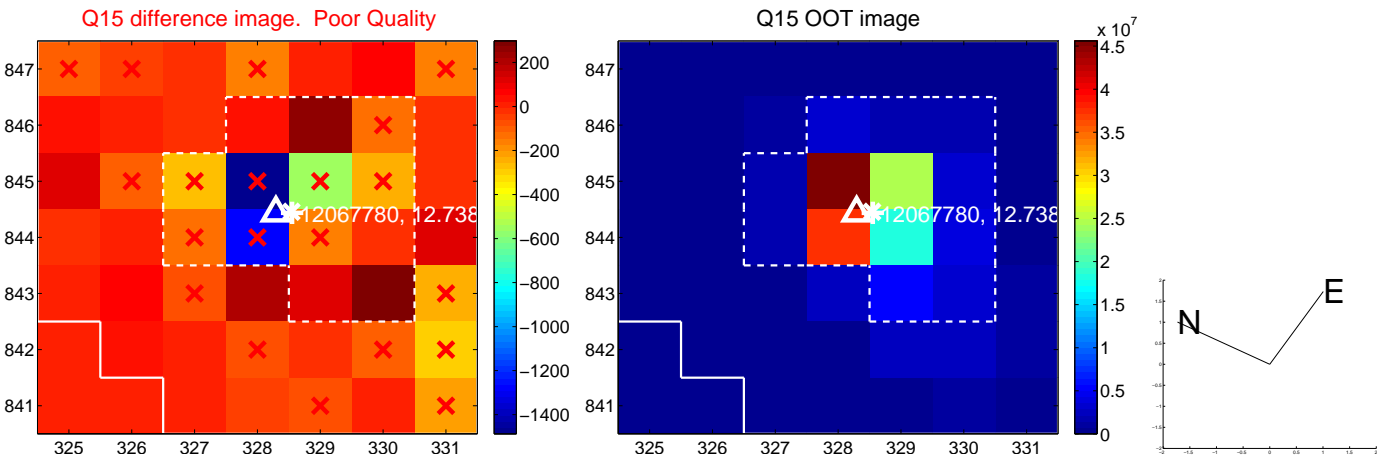
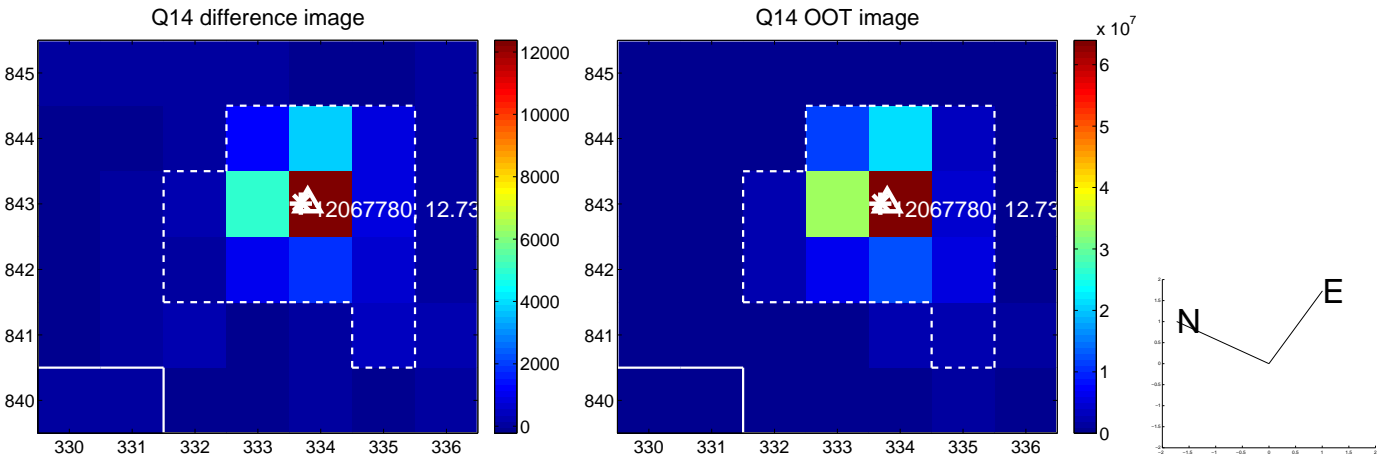
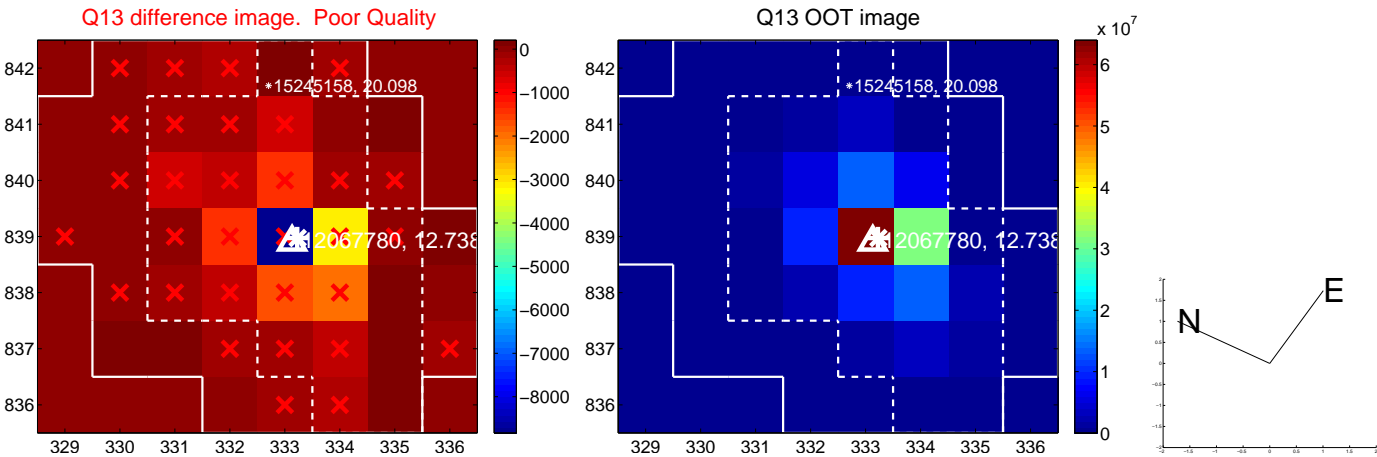
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



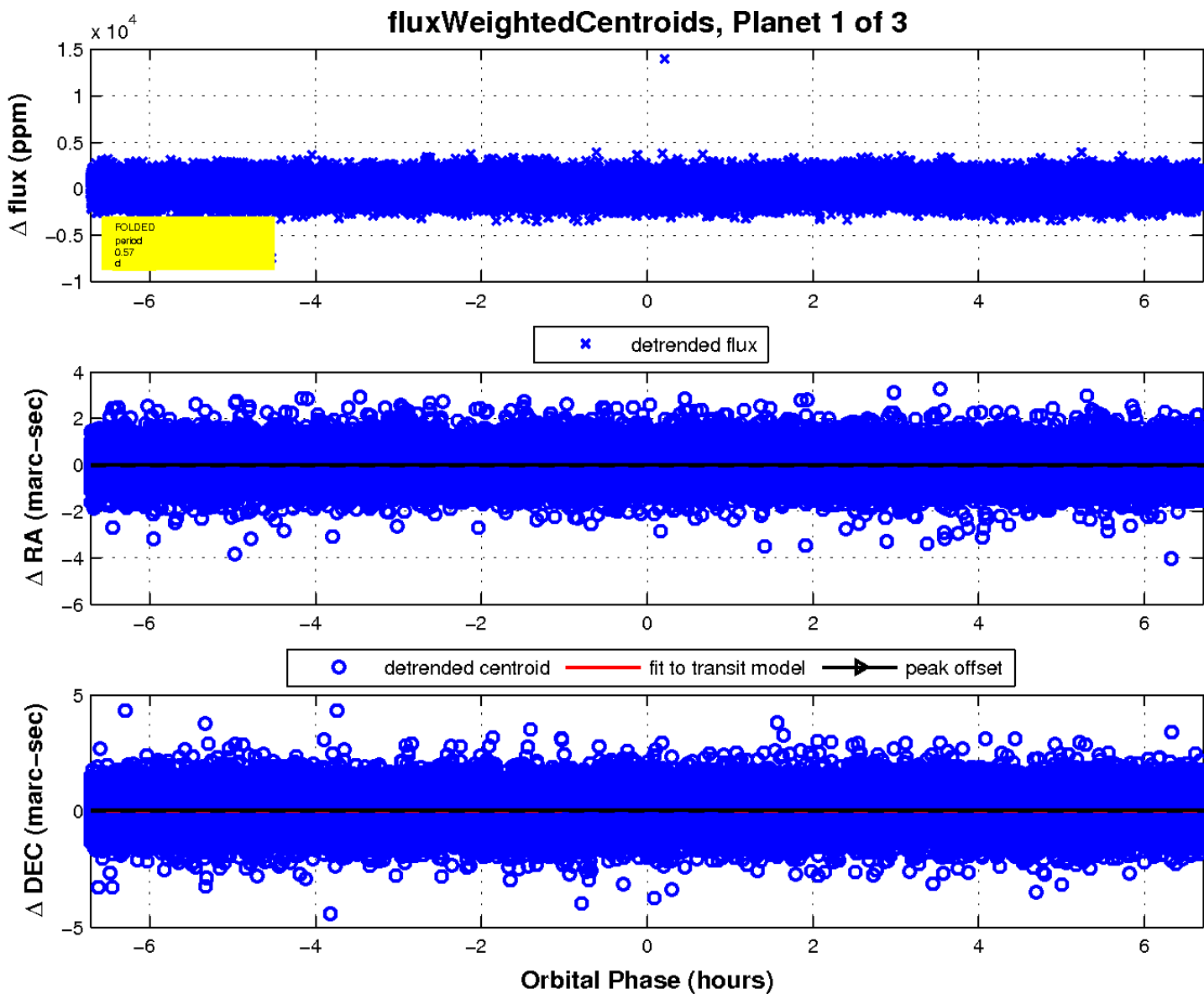
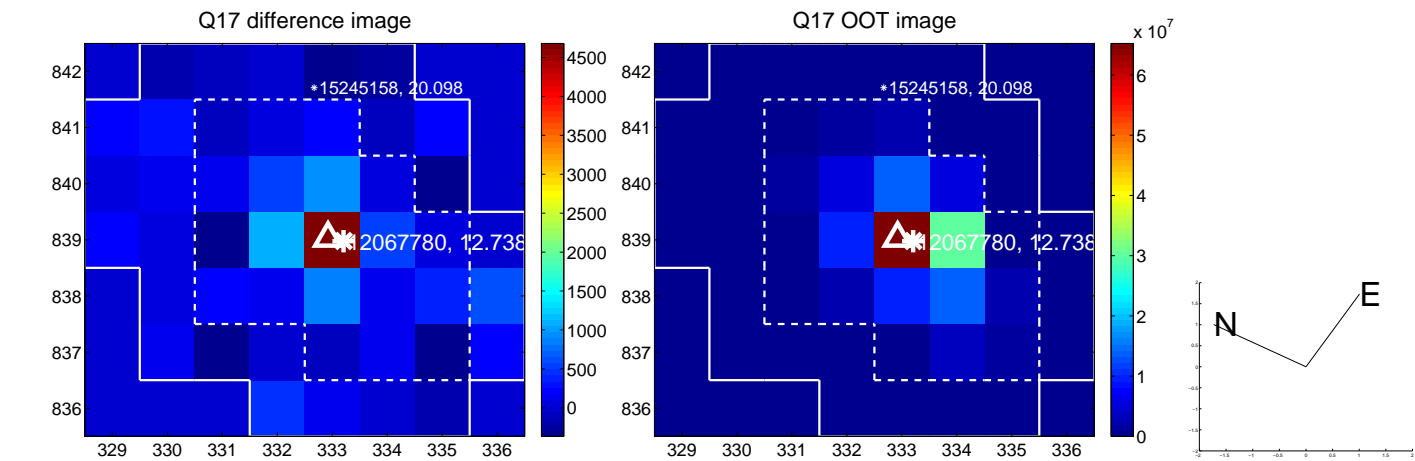
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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.



Declination

KIC 012067780

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})
012067780-01	OBS	No	0.573029	131.802573	75.9	2.238	9.0	8.0	3.79	8729	3.82	216423.40
012067780-02	OBS	No	0.594001	131.629000	172.2	2.235	11.5	12.0	3.79	8729	5.75	206295.72
012067780-03	OBS	No	36.425948	138.014724	1168.6	1.685	9.5	7.2	3.79	8729	14.43	853.08

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
012067780-01	OBS	FP	0.00	1	0	0	0	LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT
012067780-02	OBS	FP	0.00	1	0	0	0	TRANS_GAPPED—LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT
012067780-03	OBS	FP	0.00	1	0	1	0	TRANS_GAPPED—LPP_DV—HALO_GHOST

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

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

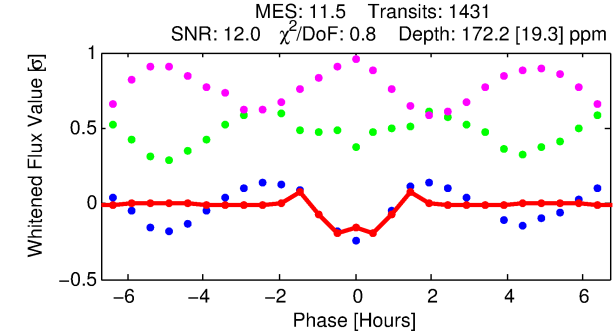
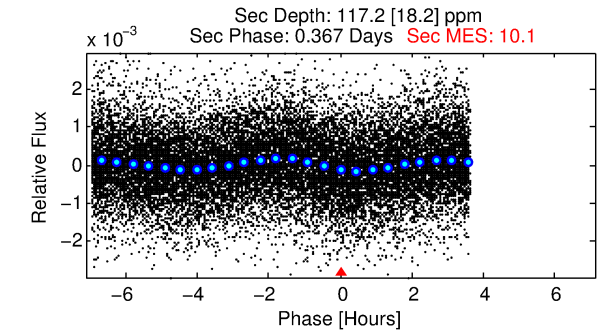
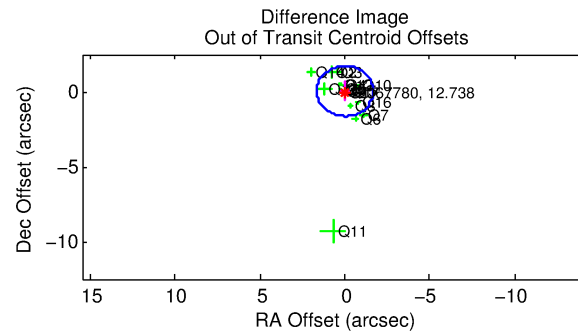
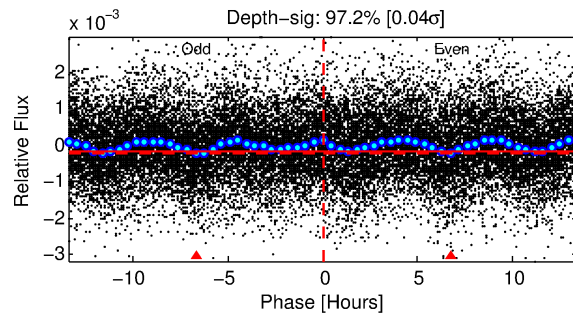
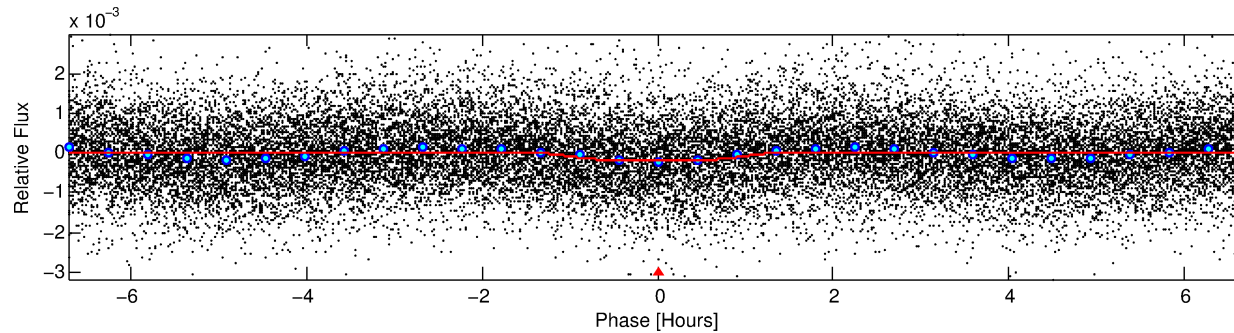
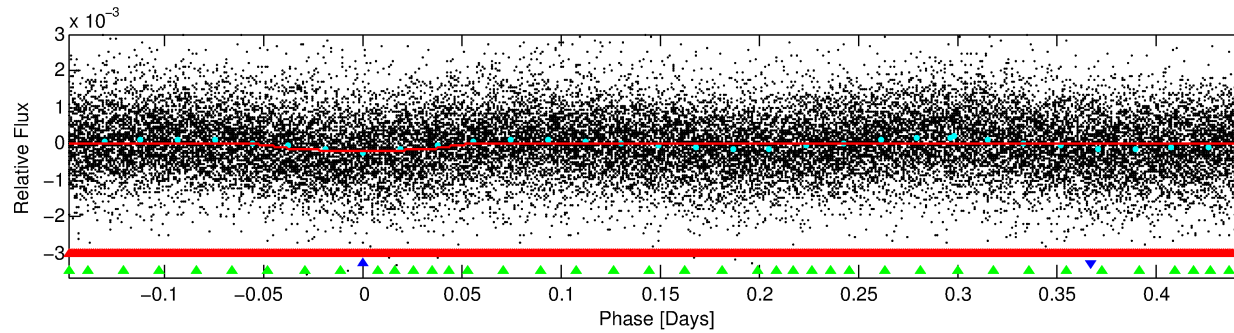
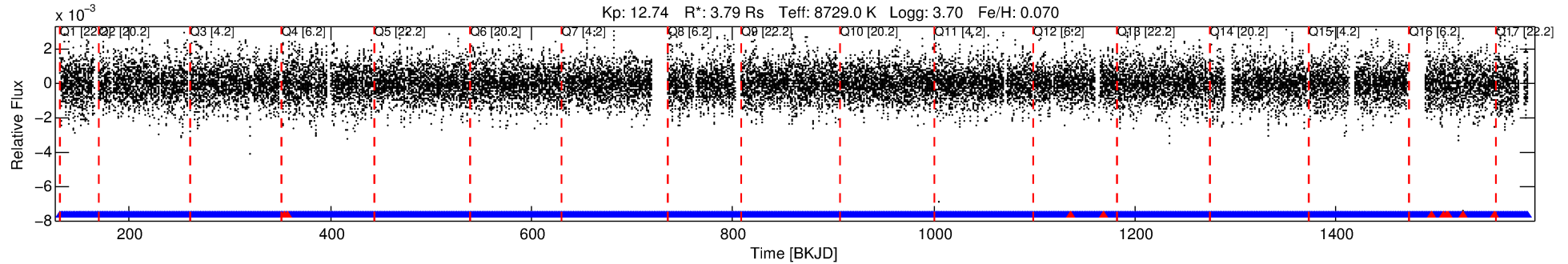
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 012067780-02

No Significant Match Found

DV One-Page Summary

KIC: 12067780 Candidate: 2 of 3 Period: 0.594 d



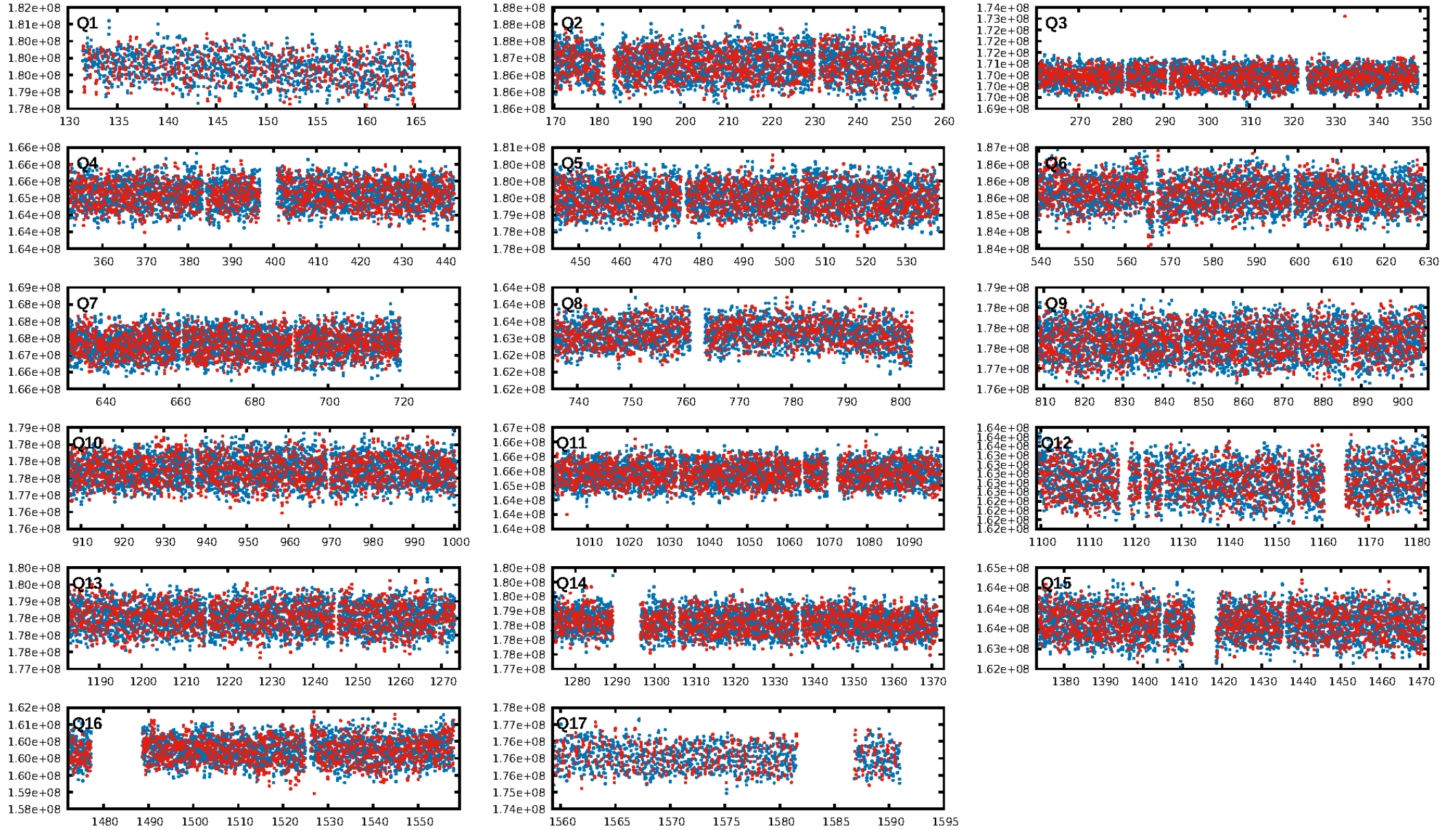
DV Fit Results:

Period = 0.59400 [0.00001] d
Epoch = 131.6290 [0.0013] BKJD
Rp/R* = 0.0139 [0.0026]
a/R* = 1.34 [0.71]
b = 0.90 [0.26]
Seff = 206295.72 [179374.41]
Teq = 5434 [1181] K
Rp = 5.75 [3.14] Re
a = 0.0190 [0.0091] AU
Ag = 0.70 [0.60] [-0.49 σ]
Teffp = 7699 [1157] K [1.37 σ]

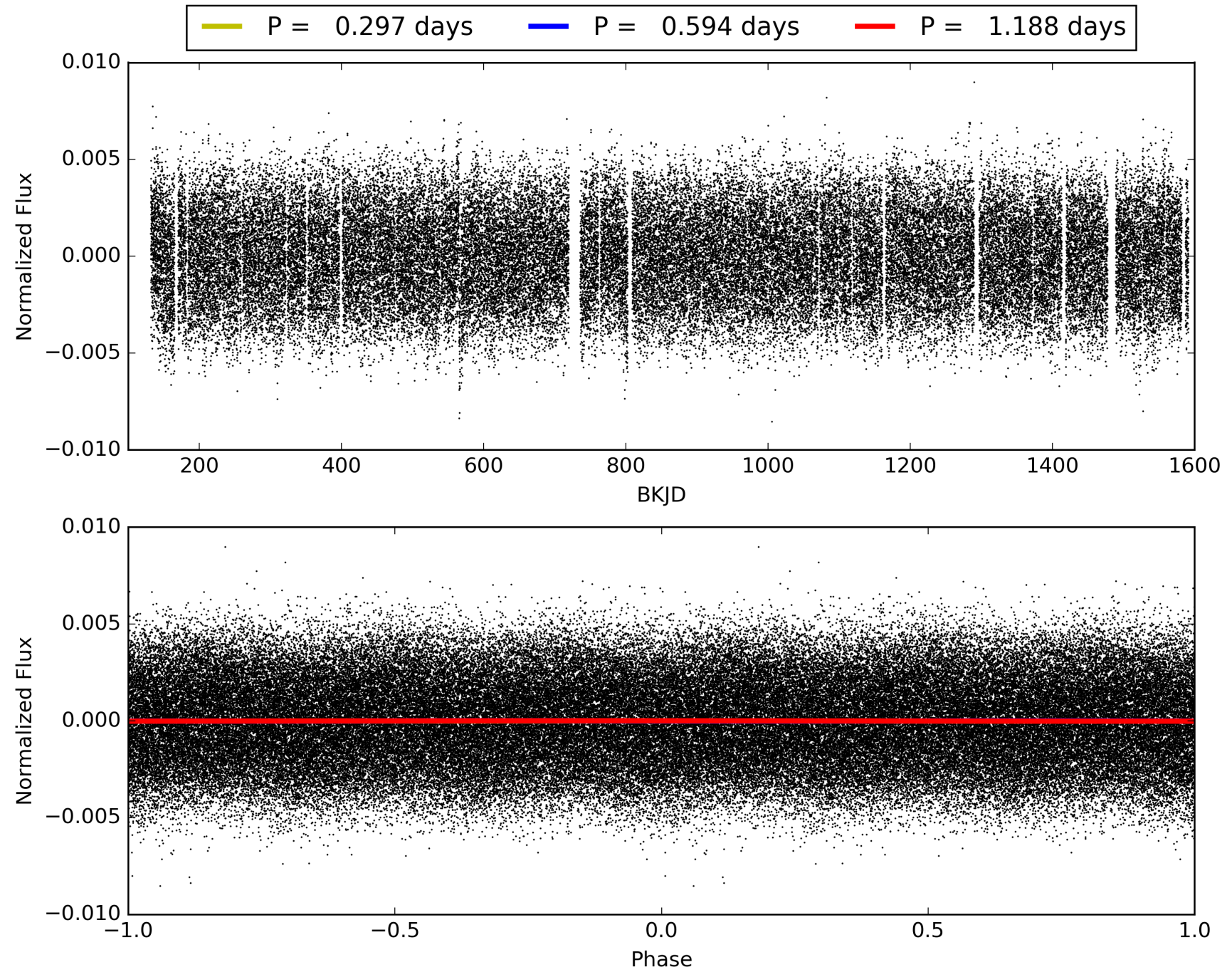
DV Diagnostic Results:

ShortPeriod-sig: 12.6% [0.16 σ]
LongPeriod-sig: 100.0% [307.21 σ]
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: N/A
RollingBand-fgt: 0.99 [1353/1365]
GhostDiagnostic-chr: 1.49
Centroid-sig: 32.1%
Centroid-so: 0.097 arcsec [0.95 σ]
OotOffset-rm: 0.046 arcsec [0.08 σ]
OotOffset-st: 4/4/4/5 [17]
KicOffset-rm: 0.035 arcsec [0.06 σ]
KicOffset-st: 4/4/4/5 [17]
DiffImageQuality-fgm: 0.53 [9/17]
DiffImageOverlap-fno: 0.00 [0/17]

TCE 012067780-02, PDC Light Curves

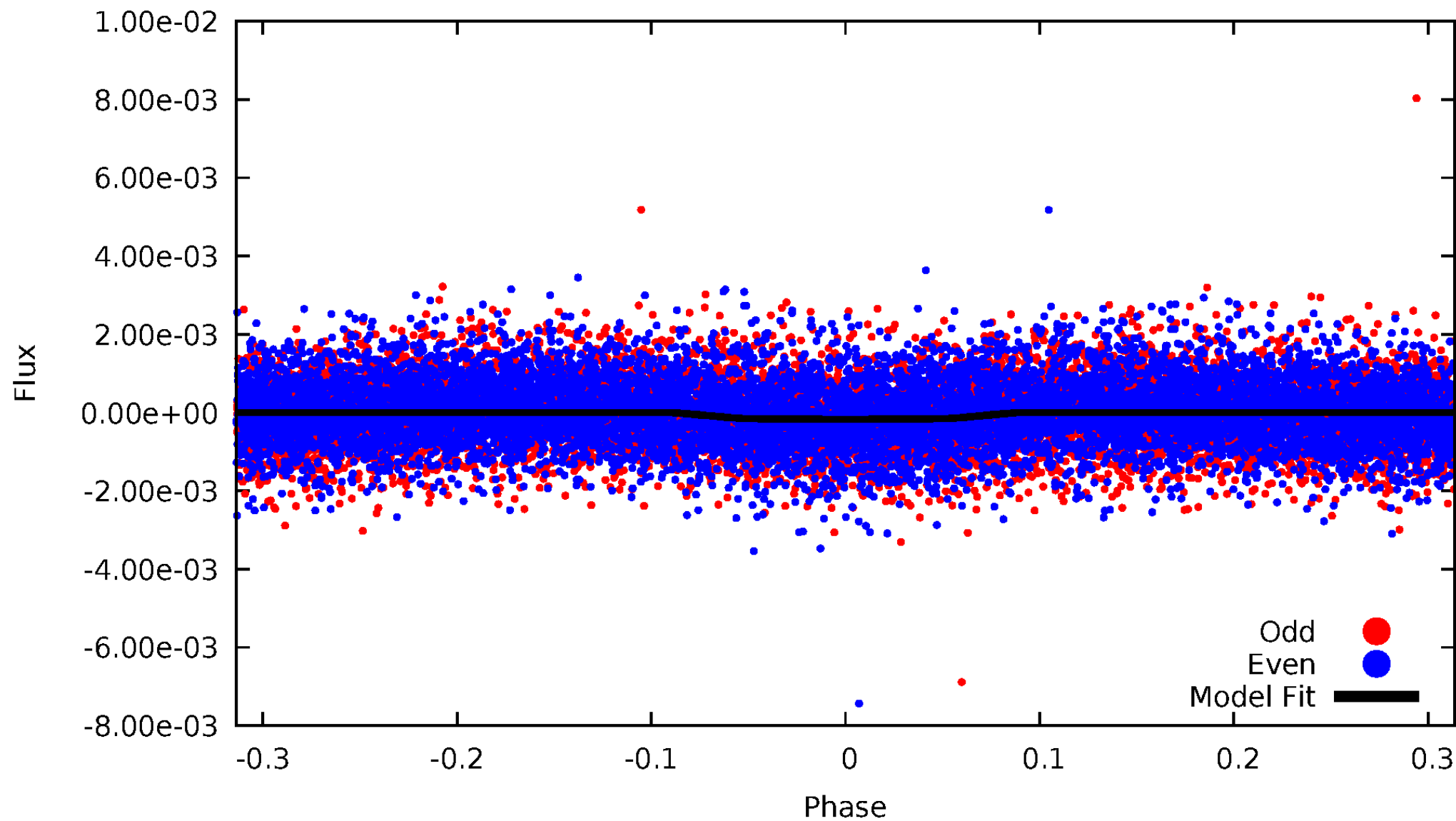


TCE 012067780-02



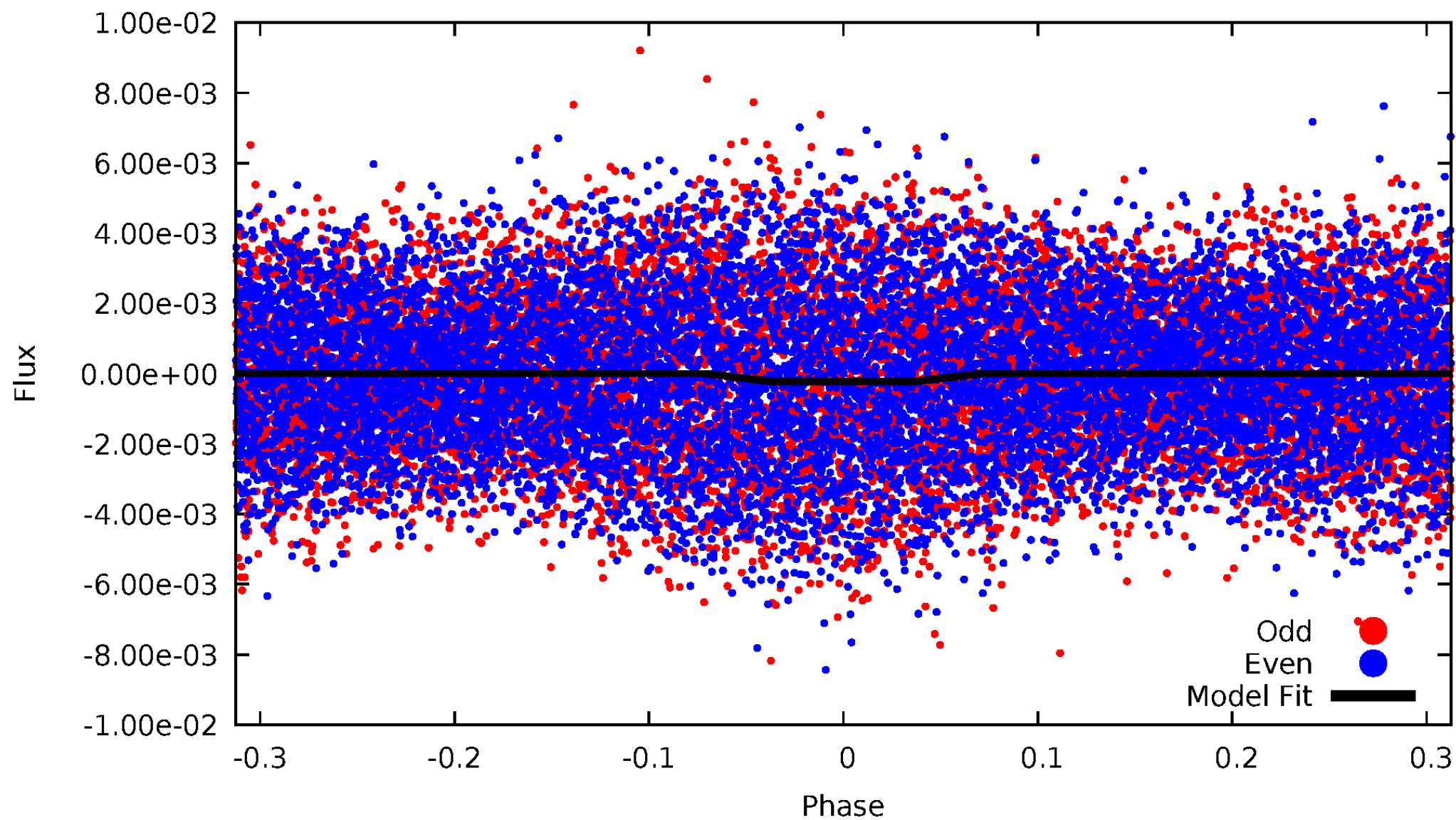
DV Odd/Even

TCE 012067780-02



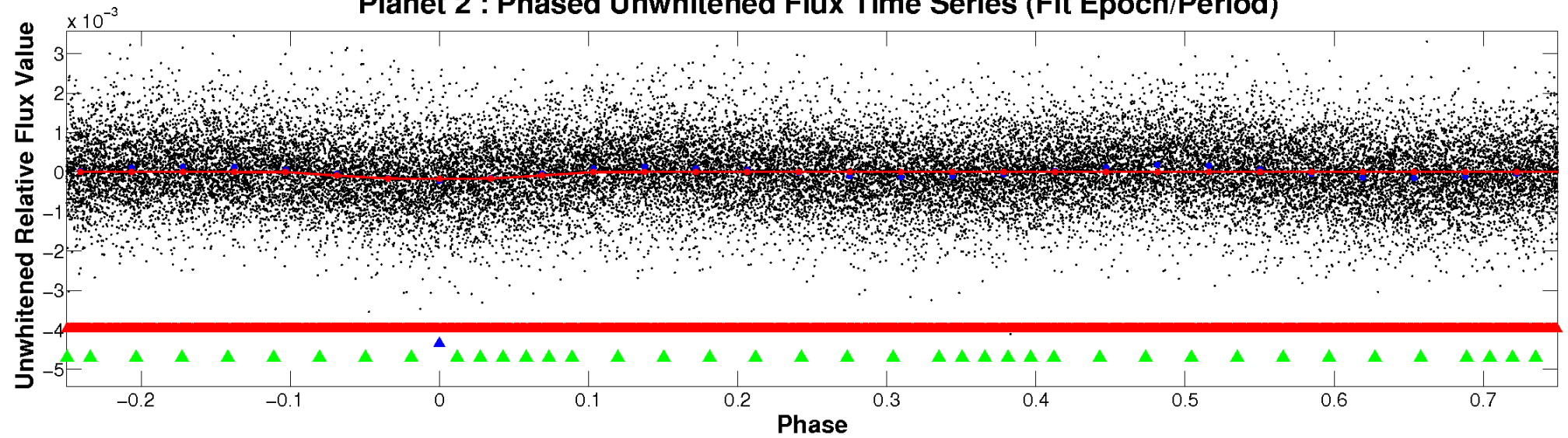
ALT Odd/Even

TCE 012067780-02

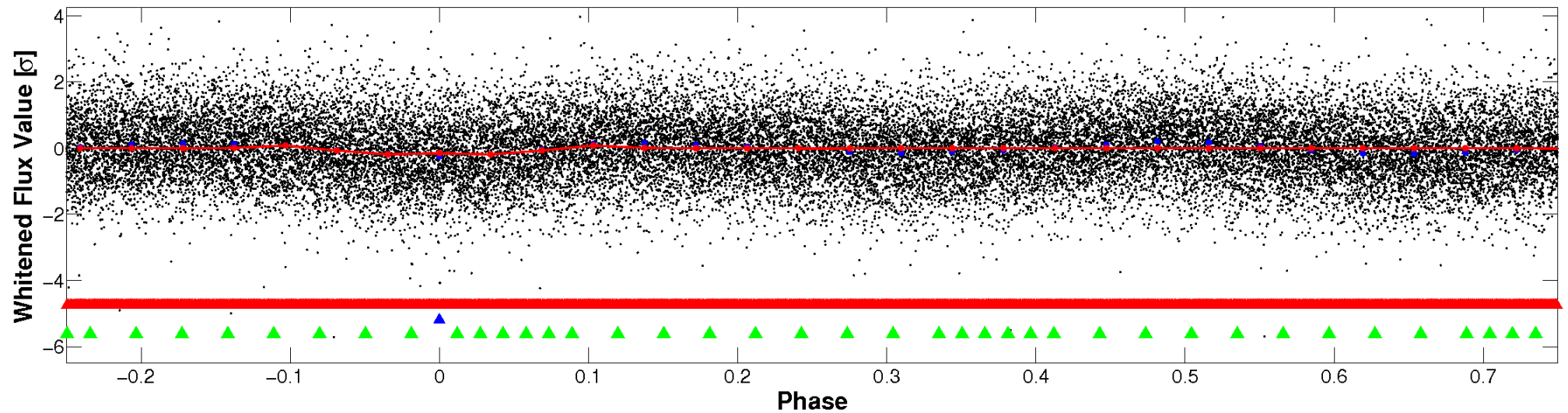


Non-Whitened Vs. Whitened Light Curve

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

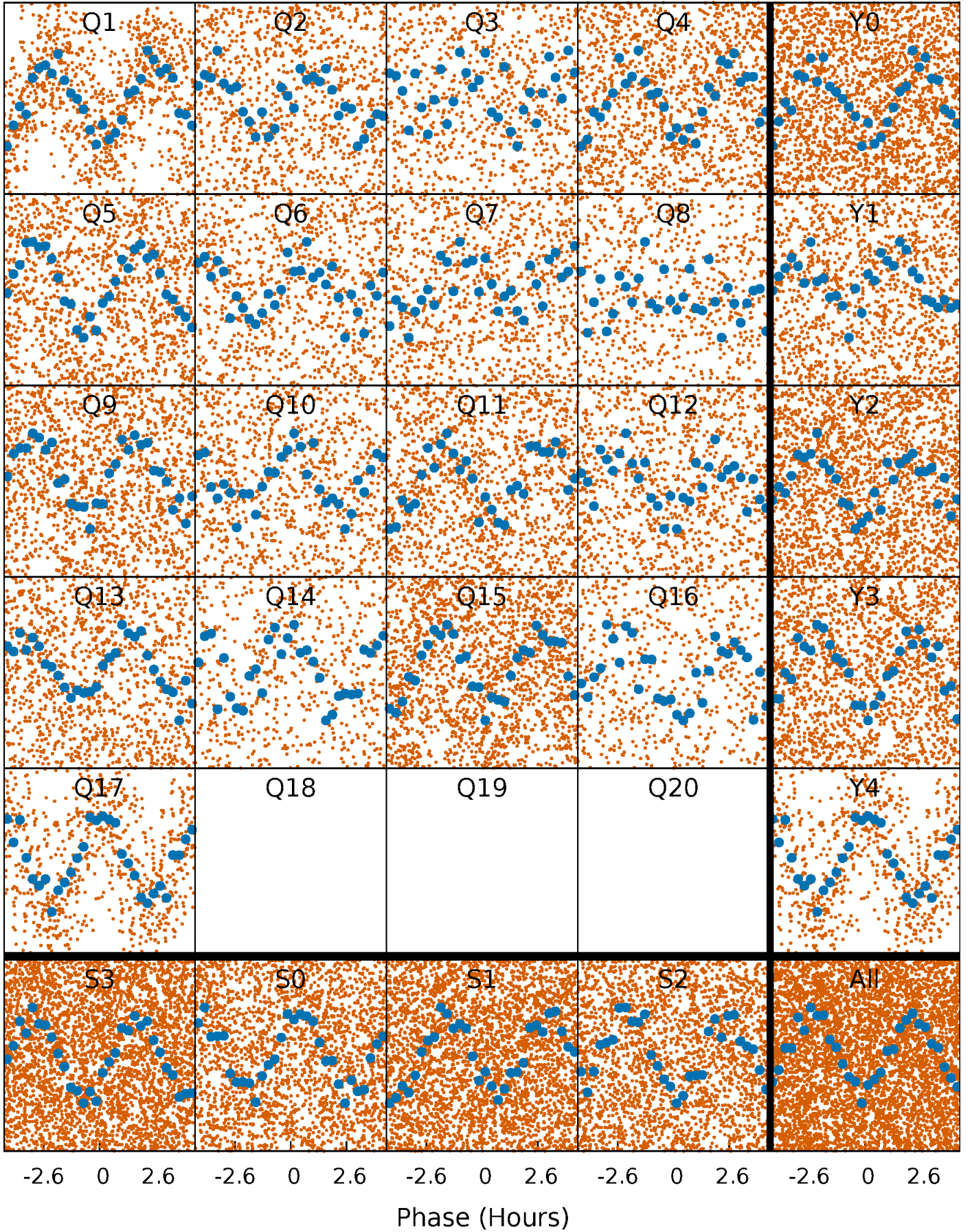


Planet 2 : Phased Whitened Flux Time Series (Fit Epoch/Period)



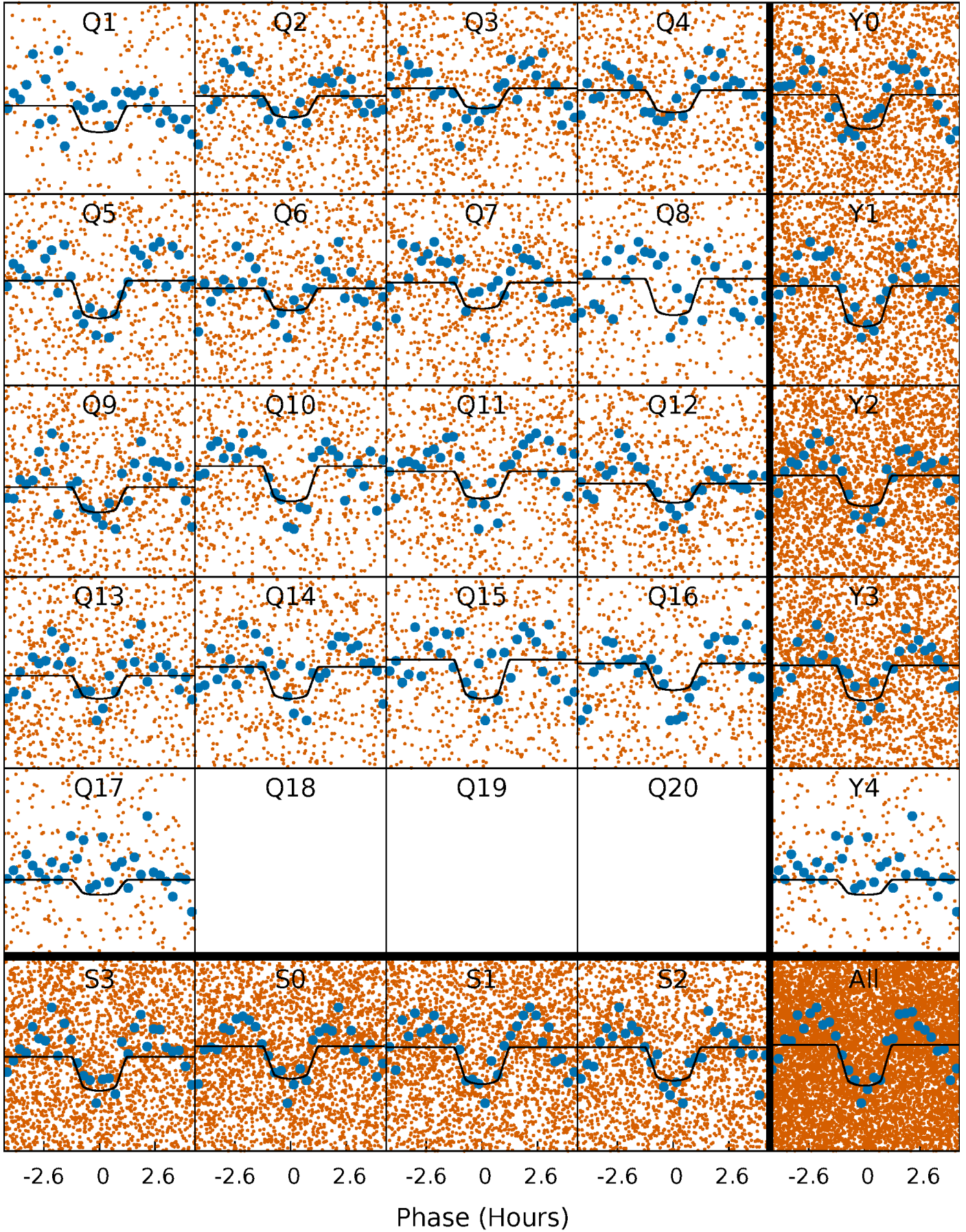
PDC Quarter-Phased Transit Curves

TCE 012067780-02 $P = 0.594001$ Days $T_0 = 131.629000$ (BKJD)



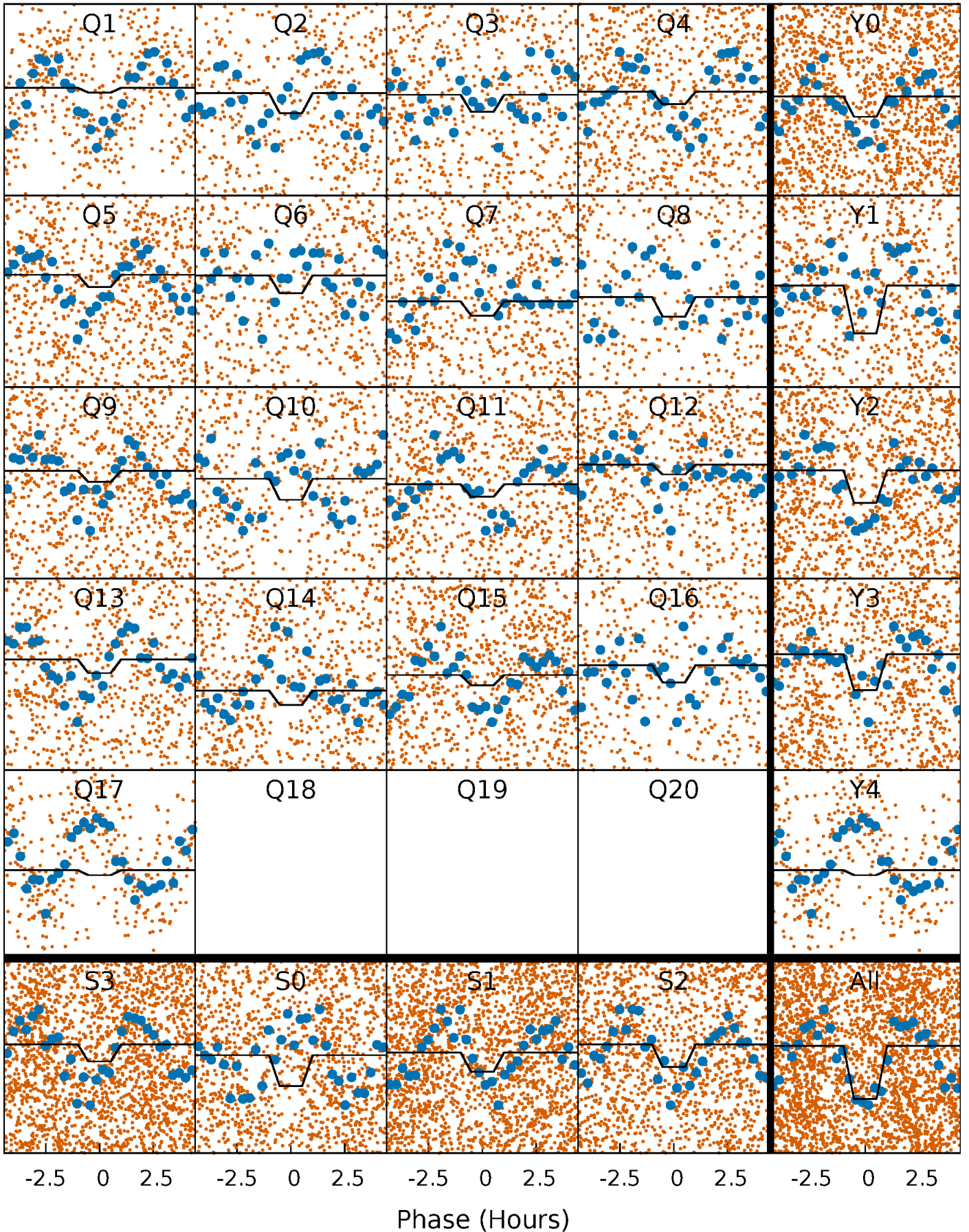
DV Quarter-Phased Transit Curves

TCE 012067780-02 P= 0.594001 Days $T_0=131.629000$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

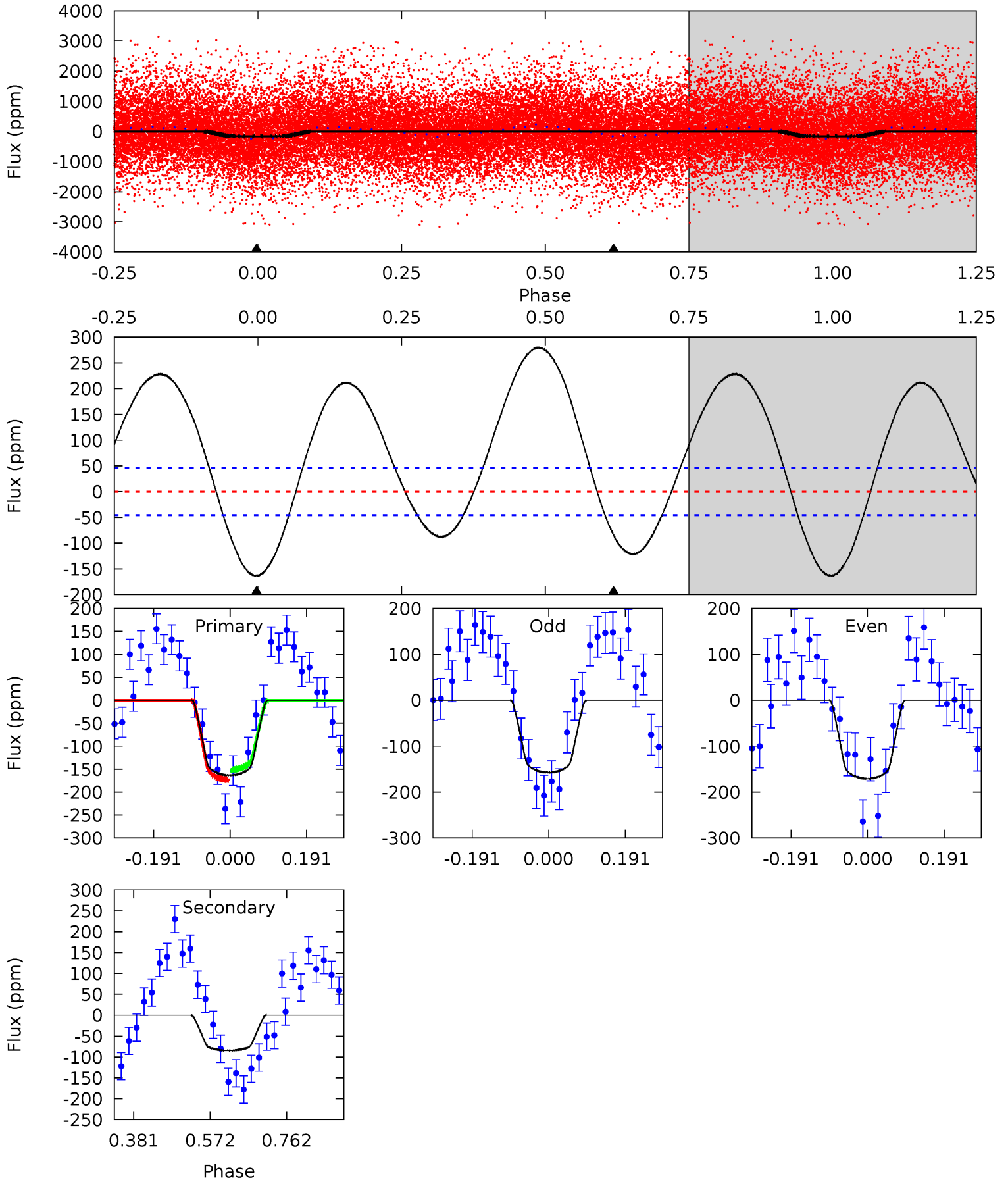
TCE 012067780-02 $P = 0.594005$ Days $T_0 = 131.629238$ (BKJD)



DV Model-Shift Uniqueness Test

012067780-02, P = 0.594001 Days, E = 131.034999 Days

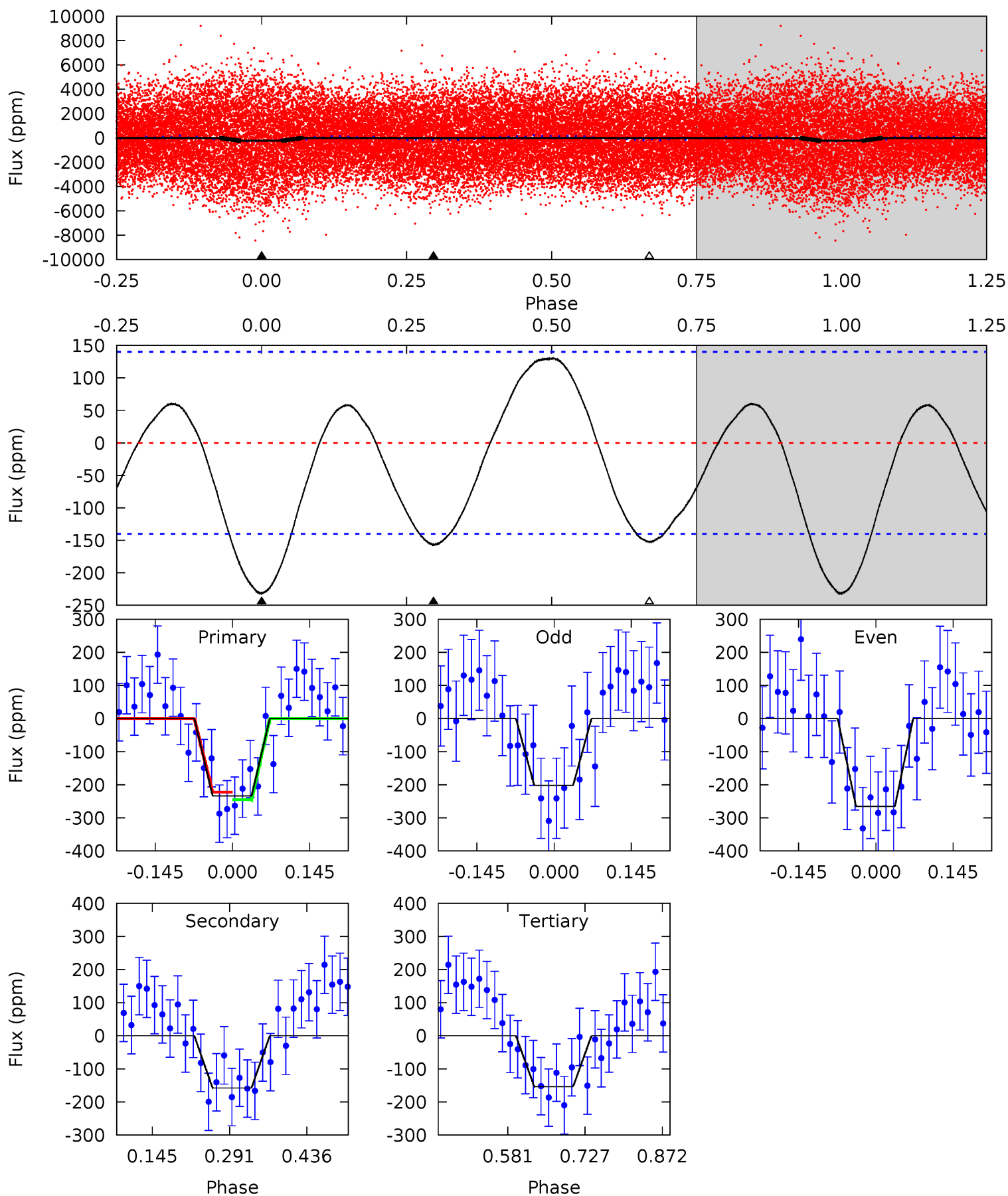
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
15.8	8.16	0	0	4.43	1.31	7.97	15.8	15.8	8.16	8.16	0.65	0.92	0.63	1.05



Alt Model-Shift Uniqueness Test

012067780-02, P = 0.594005 Days, E = 131.035233 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
7.48	5.05	4.91	0	4.49	1.46	3.11	2.57	7.48	0.14	5.05	1.01	1.15	0.36	0.37



Stellar Parameters For KIC 012067780

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	$M(M_{\odot})$	p_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	8729^{+411}_{-961}	$3.696^{+0.435}_{-0.116}$	$0.070^{+0.050}_{-0.300}$	$3.786^{+0.830}_{-1.936}$	$2.593^{+0.241}_{-0.902}$	$0.067^{+0.339}_{-0.024}$
	+5%/-11%	+12%/-3%	+71%/-429%	+22%/-51%	+9%/-35%	+503%/-36%
Source	SPE68	SPE68	SPE68	DSEP		

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

Secondary Eclipse Parameters for KIC 012067780-02 / KOI

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	-85 ± 10	$5.30^{+1.52}_{-1.51}$	7227^{+796}_{-971}	5564^{+1222}_{-1471}	$0.589^{+0.505}_{-0.235}$
Alt.	-158 ± 31	$5.74^{+1.49}_{-1.66}$	7194^{+846}_{-1055}	6746^{+1417}_{-1176}	$0.950^{+0.805}_{-0.385}$

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 $A_{obs} \gg 1.0$

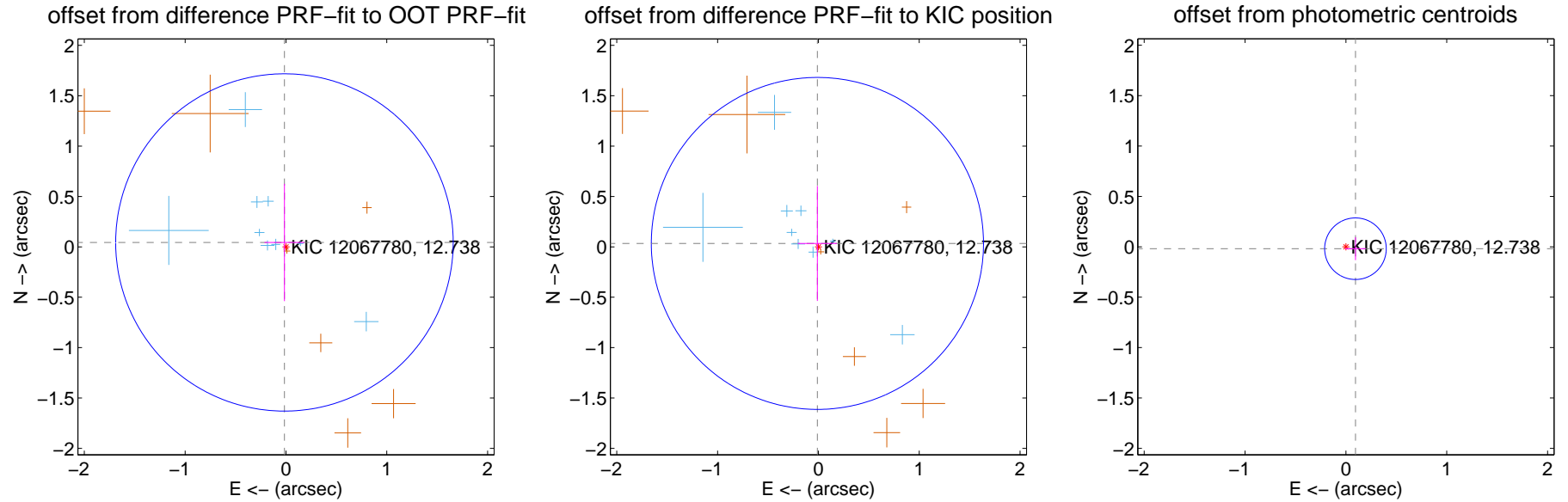
DV Centroid Data

Supplemental centroid analysis for 012067780-02. Kepler magnitude: 12.74. Transit SNR 11.96

There are 9 quarters with good PRF difference image offsets

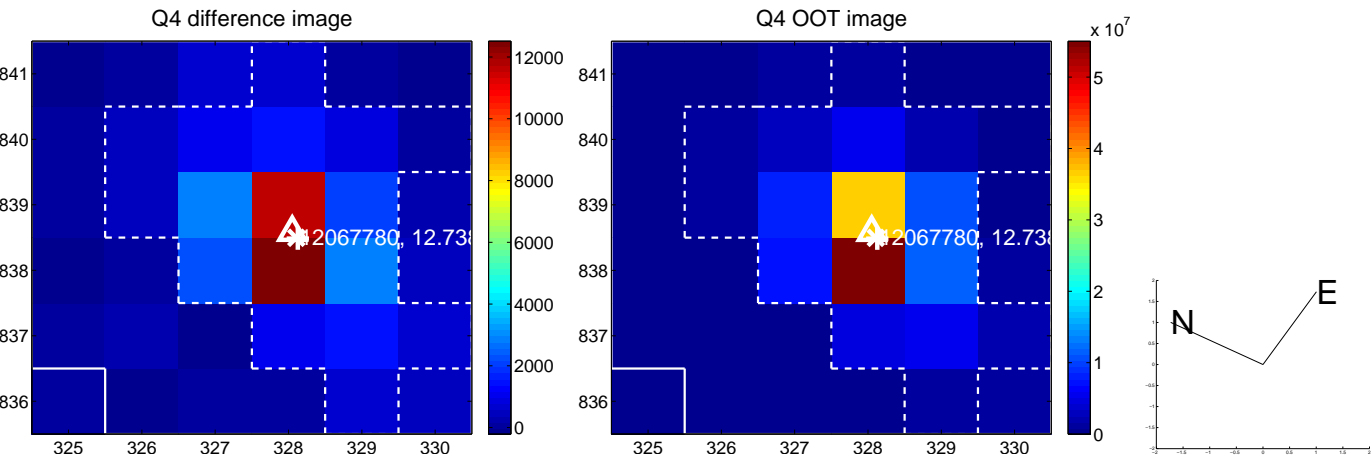
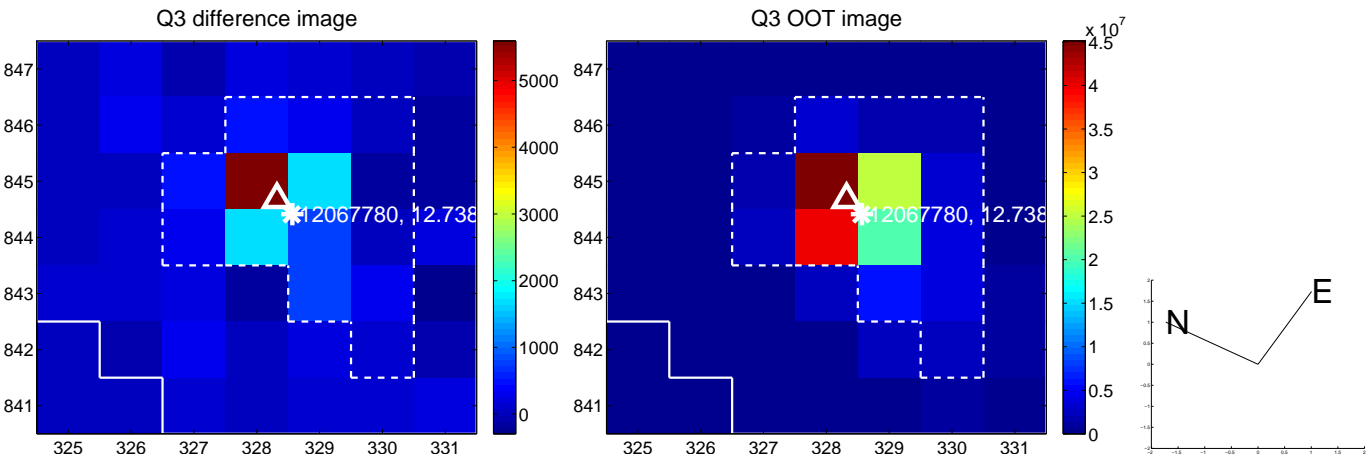
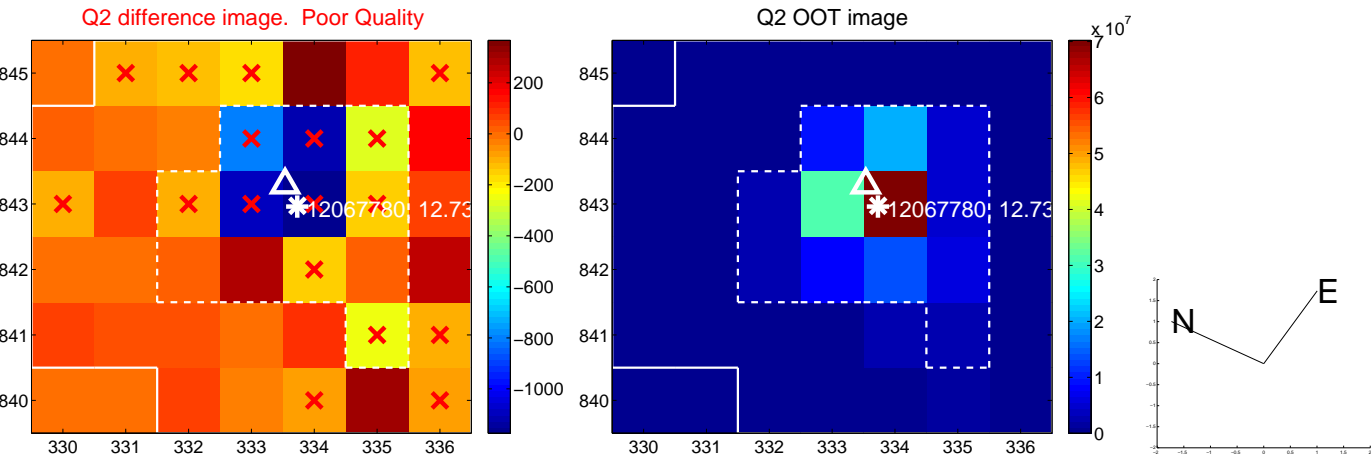
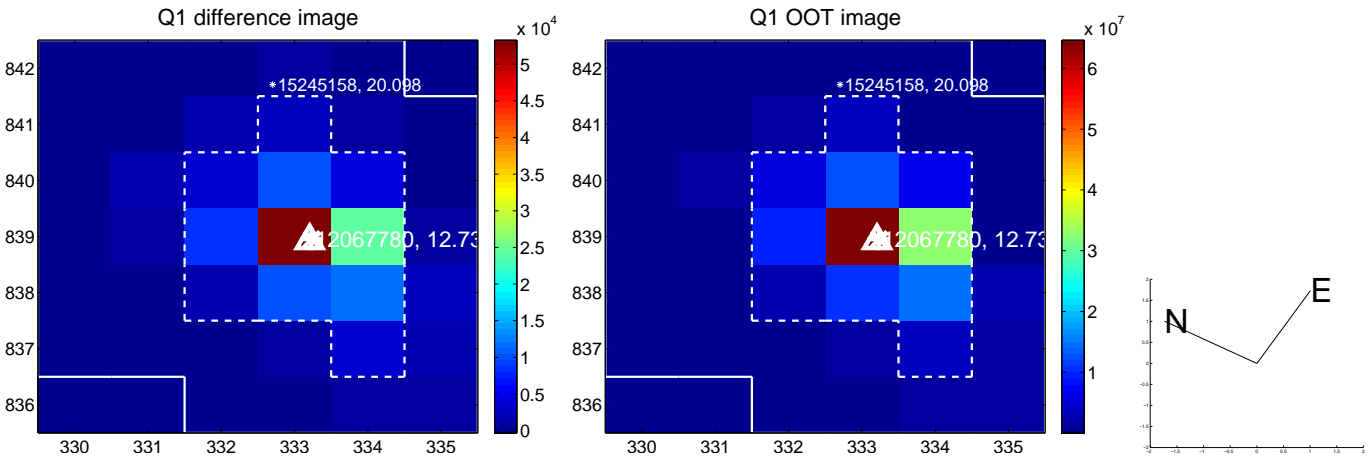
The direct PRF centroid is offset from the target star catalog position by about 0.02 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.046 ± 0.558	0.08	0.015 ± 0.197	0.044 ± 0.582
PRF-fit source offset from KIC position	0.035 ± 0.549	0.06	0.010 ± 0.193	0.034 ± 0.571
photometric centroid source offset	0.10 ± 0.10	0.95	-0.09 ± 0.10	-0.02 ± 0.11

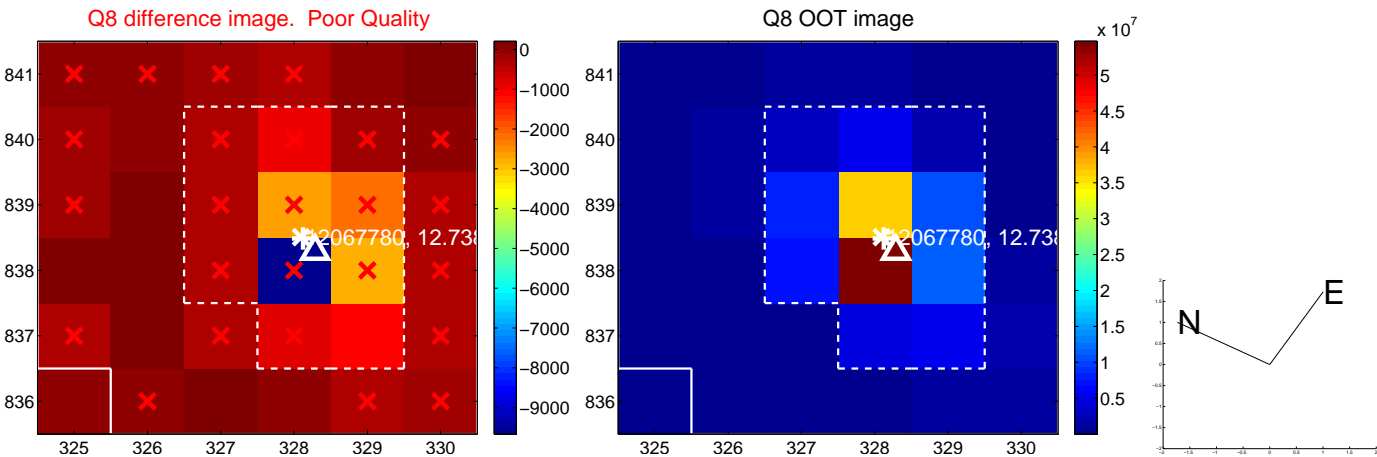
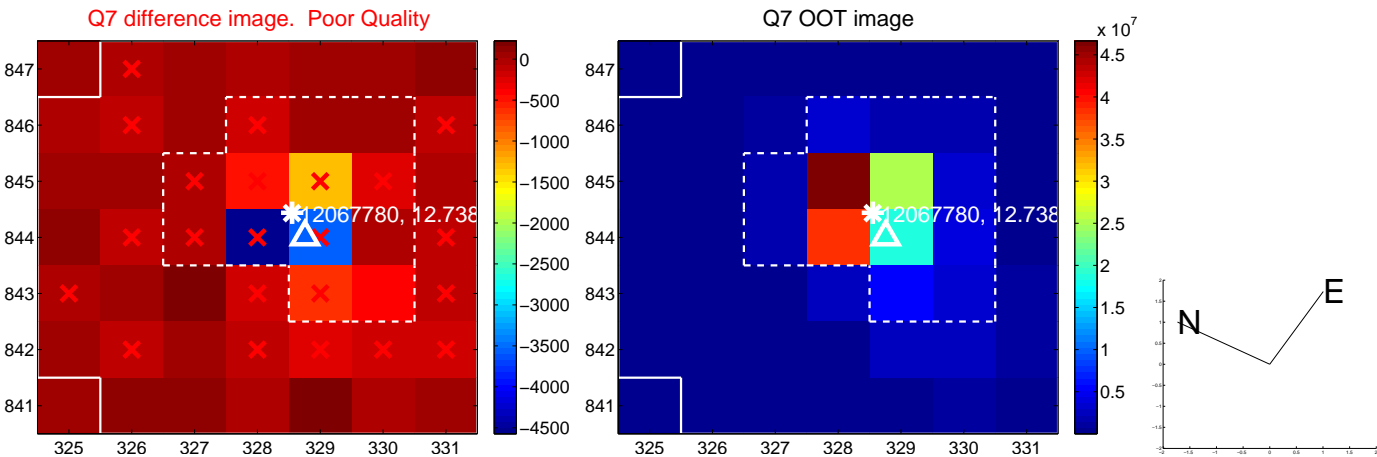
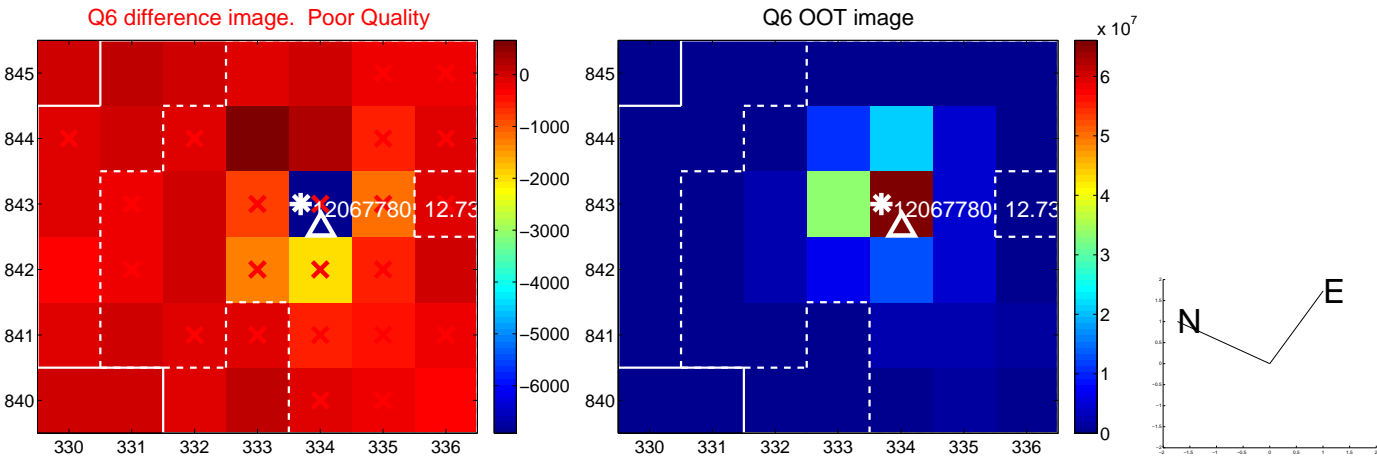
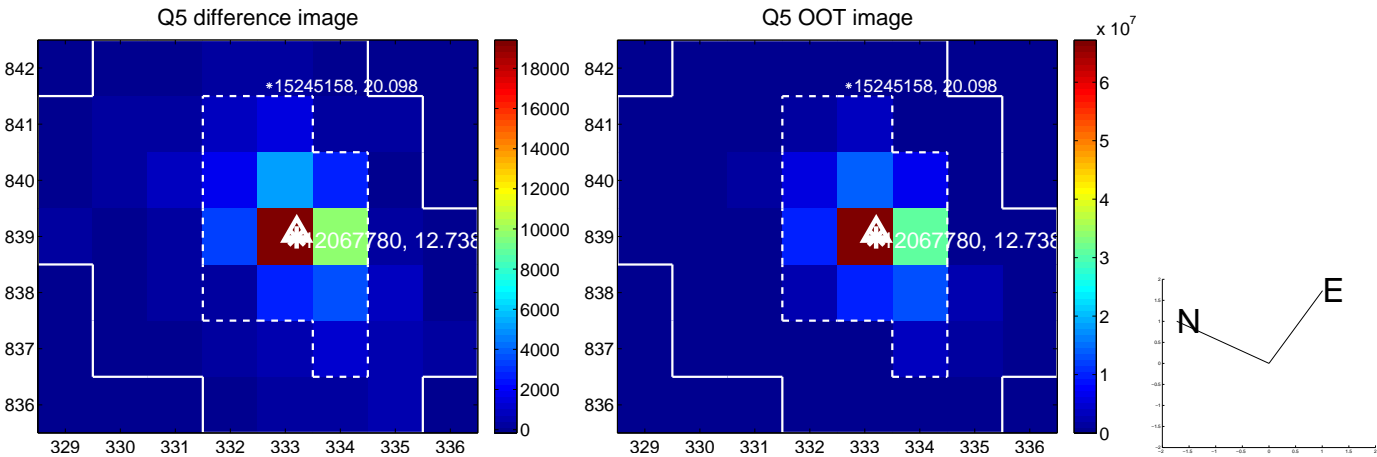


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets**; **Vermillion crosses: bad quarterly centroid offsets**; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

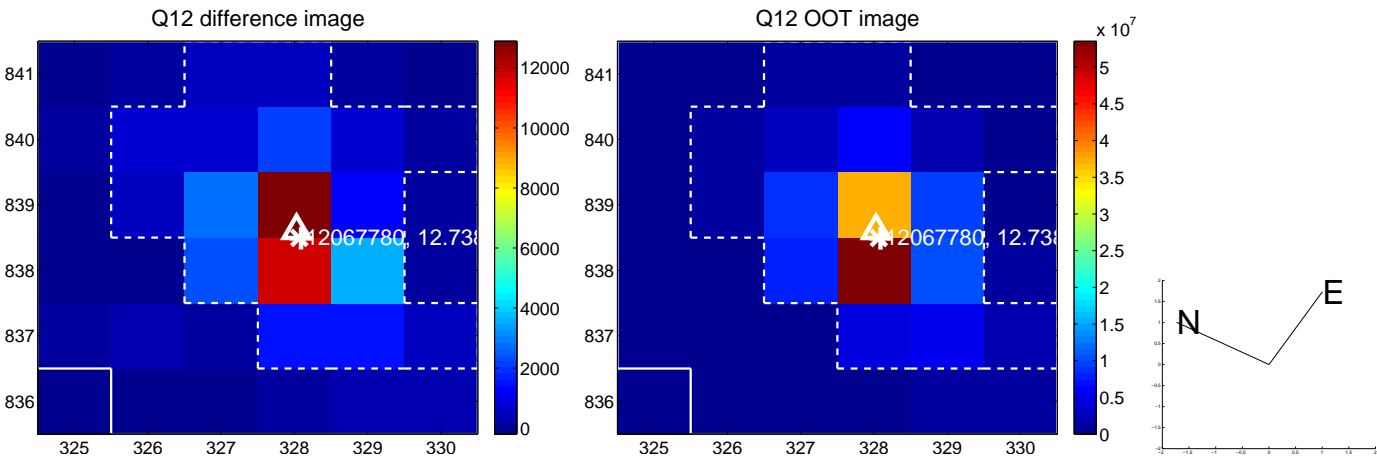
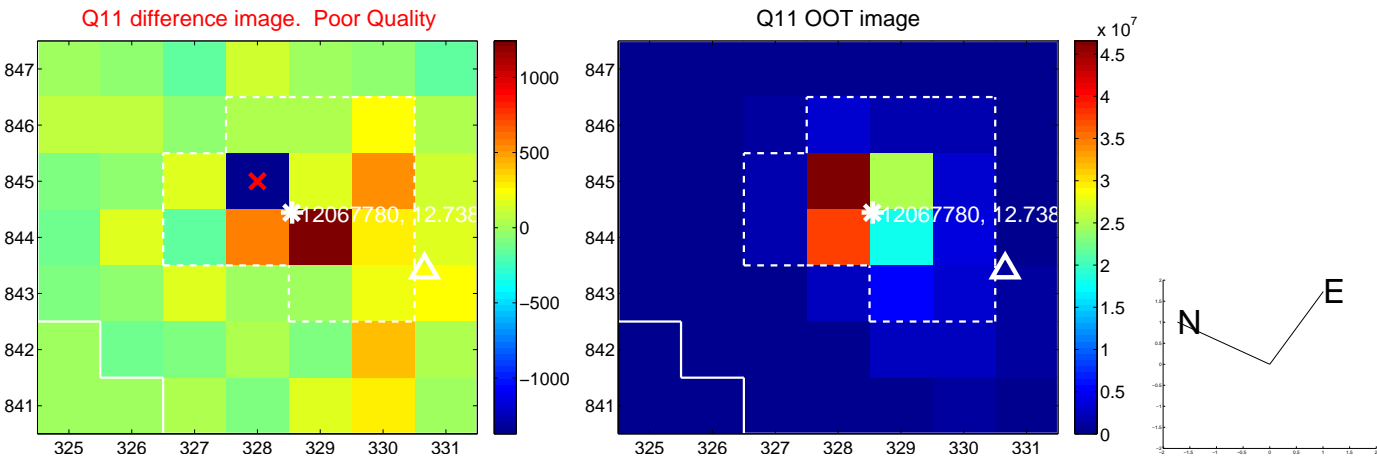
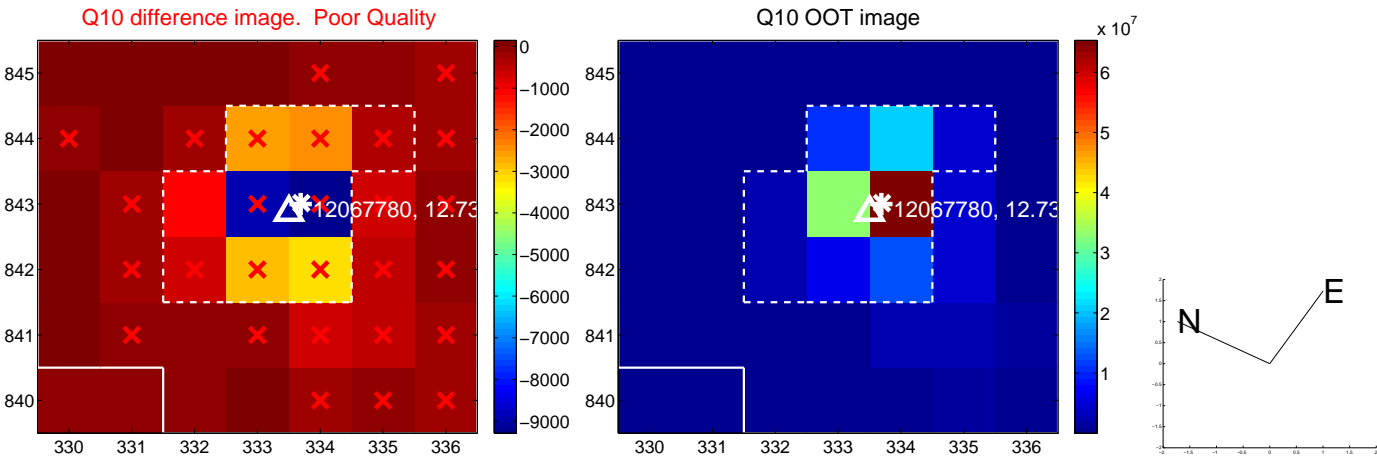
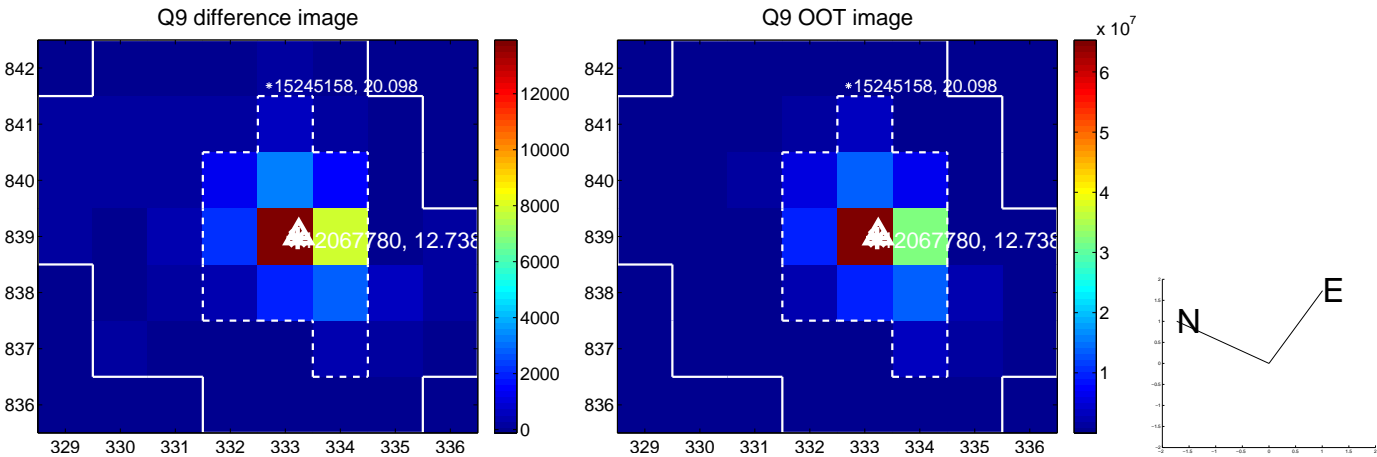
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



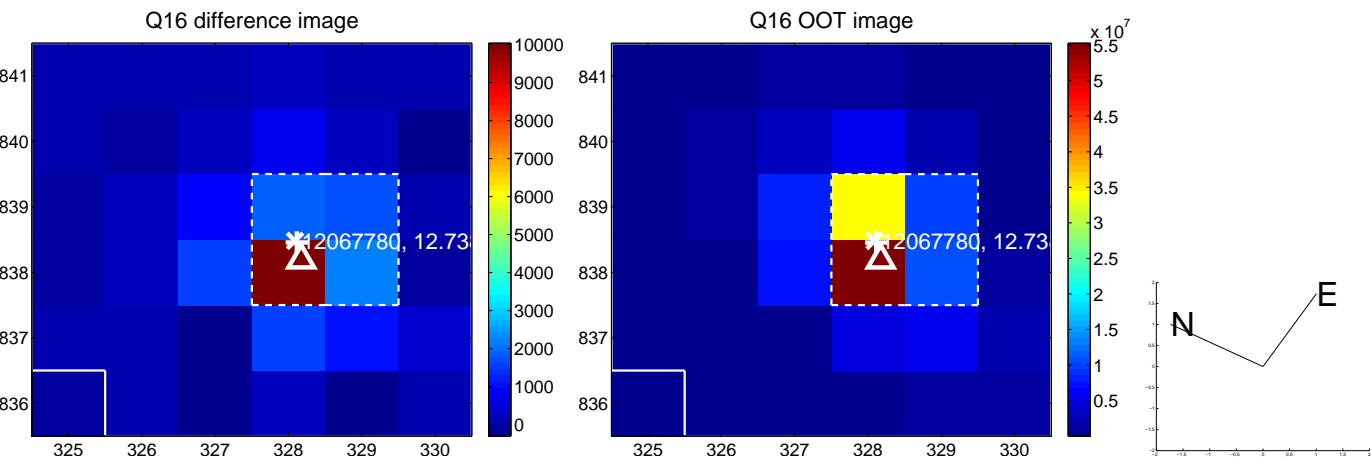
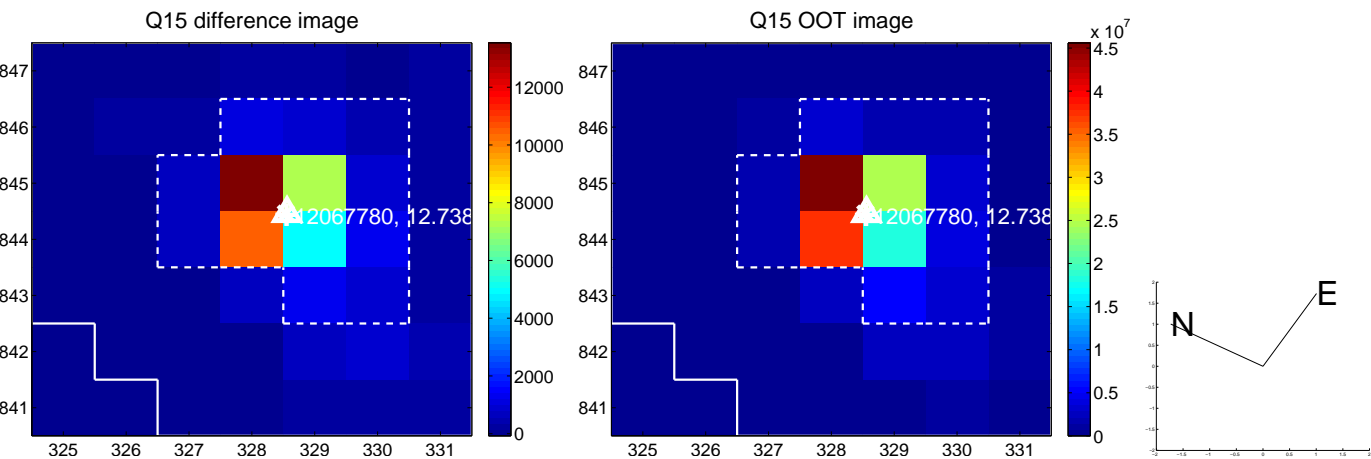
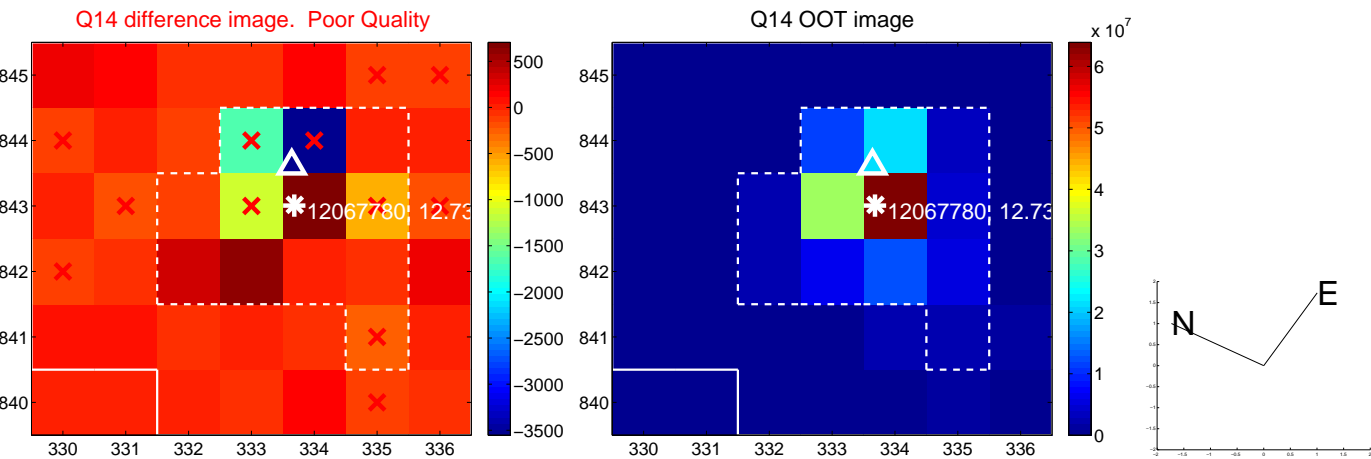
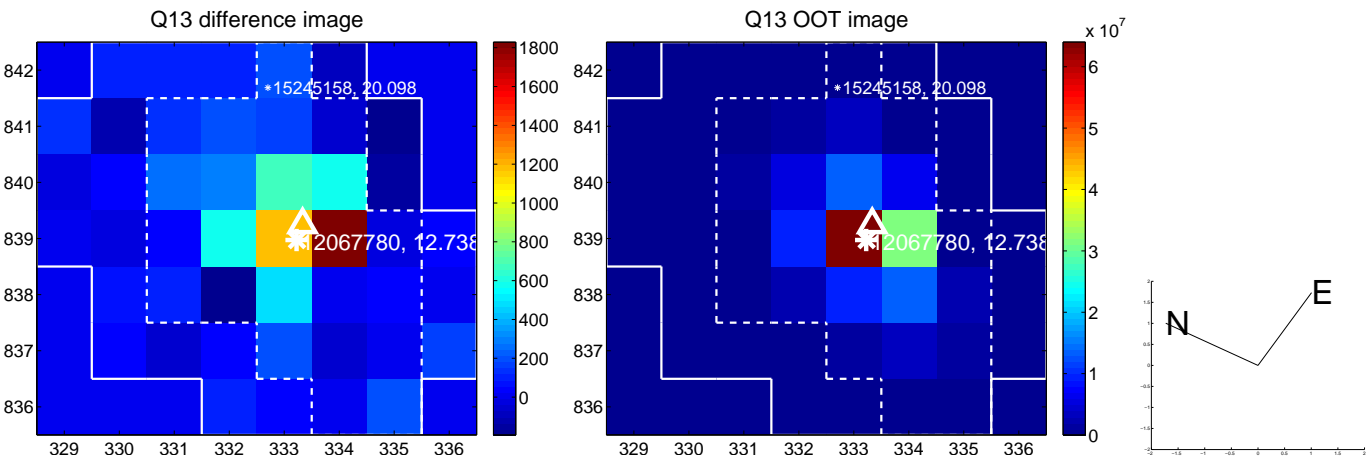
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



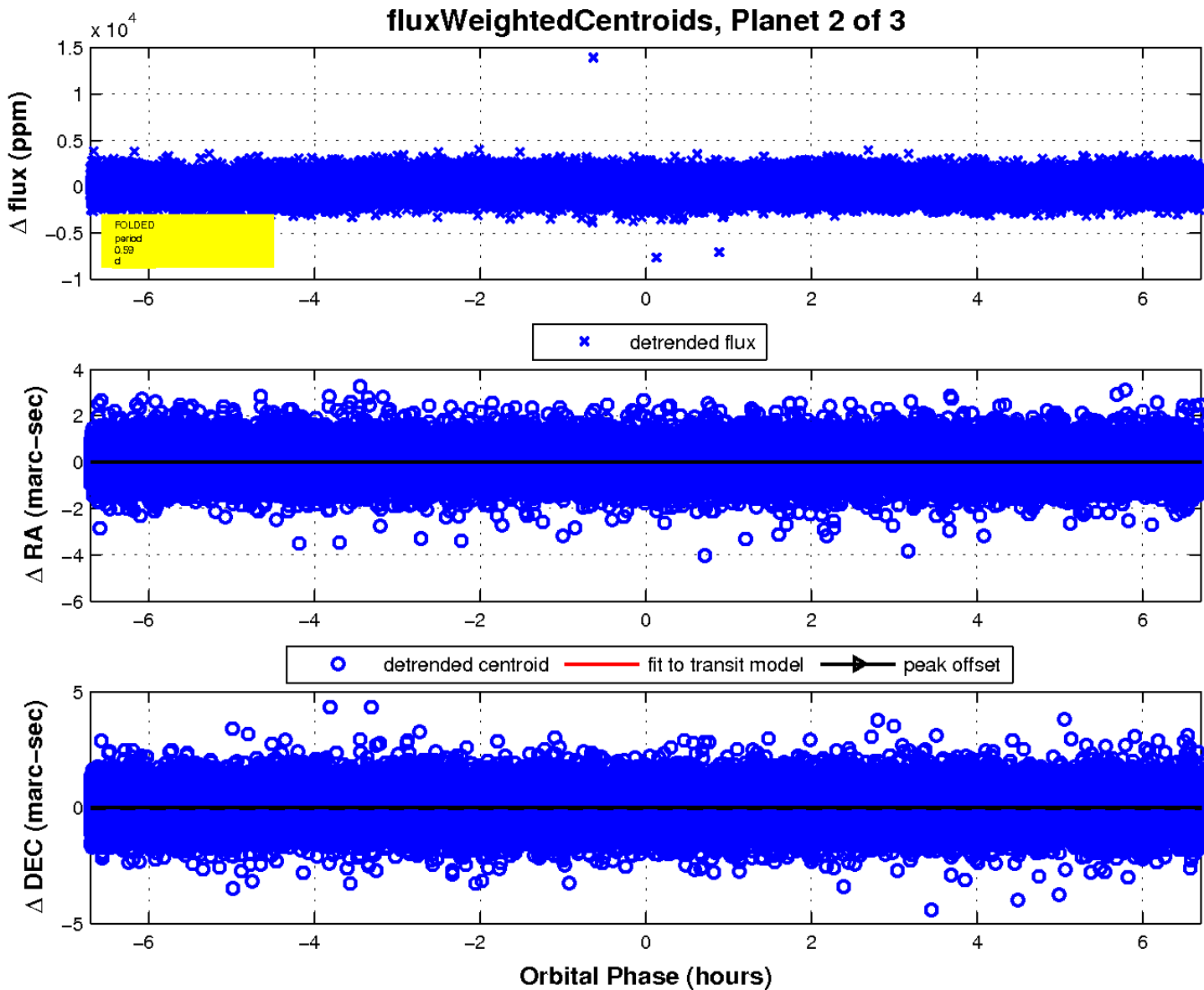
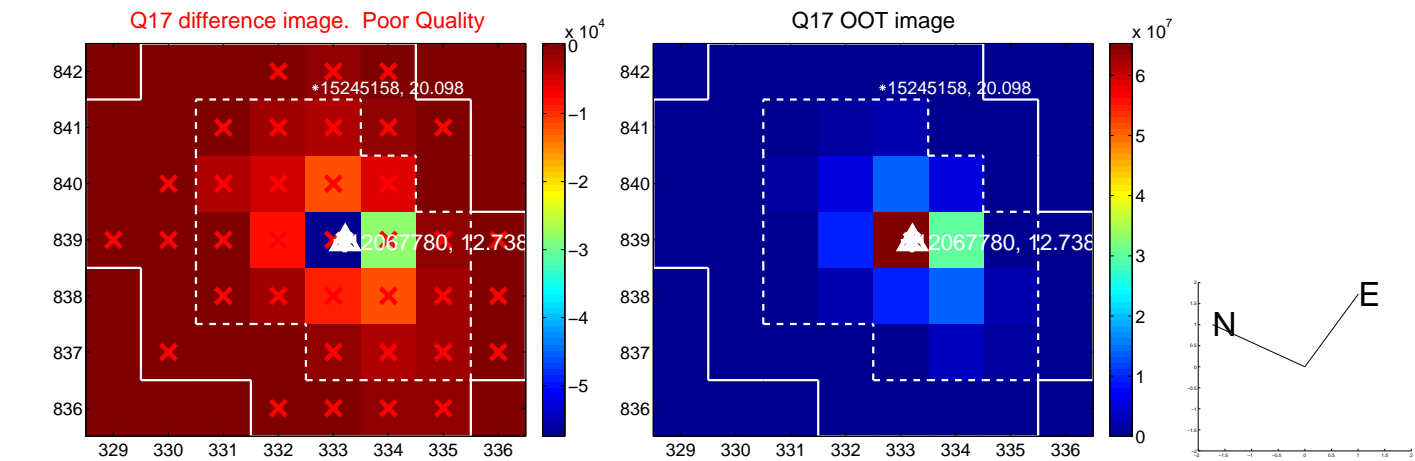
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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



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



Declination

KIC 012067780

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})
012067780-01	OBS	No	0.573029	131.802573	75.9	2.238	9.0	8.0	3.79	8729	3.82	216423.40
012067780-02	OBS	No	0.594001	131.629000	172.2	2.235	11.5	12.0	3.79	8729	5.75	206295.72
012067780-03	OBS	No	36.425948	138.014724	1168.6	1.685	9.5	7.2	3.79	8729	14.43	853.08

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
012067780-01	OBS	FP	0.00	1	0	0	0	LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT
012067780-02	OBS	FP	0.00	1	0	0	0	TRANS_GAPPED—LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT
012067780-03	OBS	FP	0.00	1	0	1	0	TRANS_GAPPED—LPP_DV—HALO_GHOST

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

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

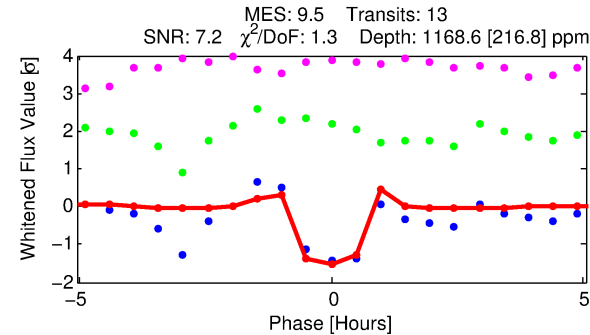
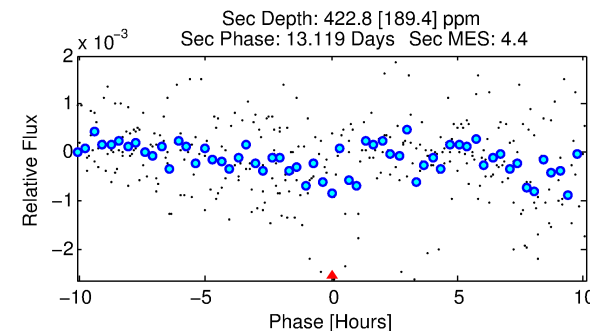
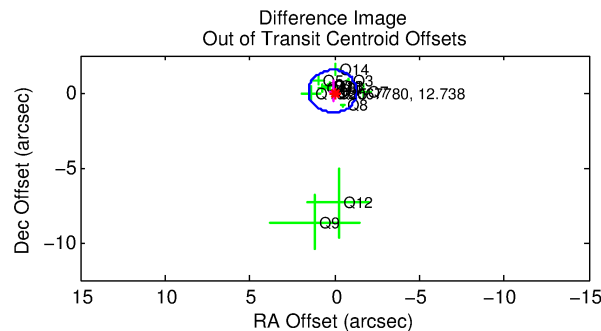
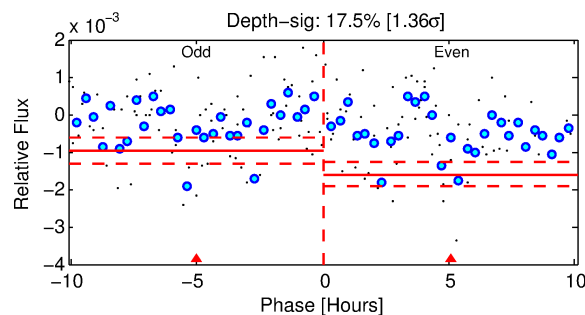
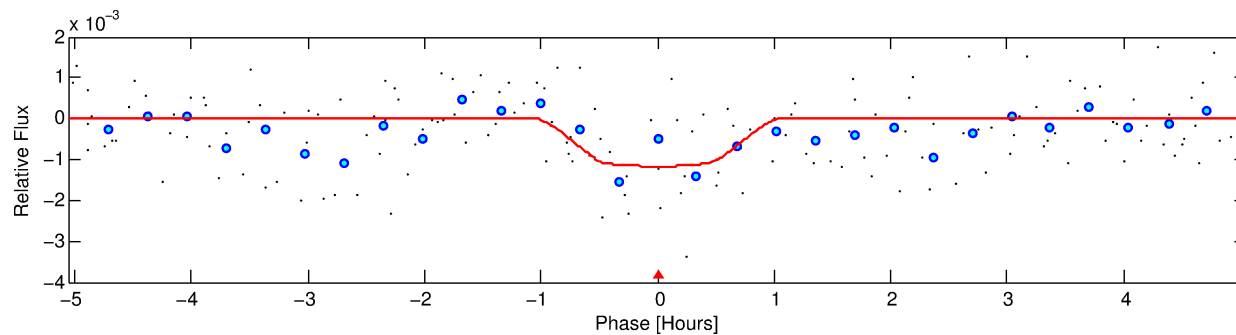
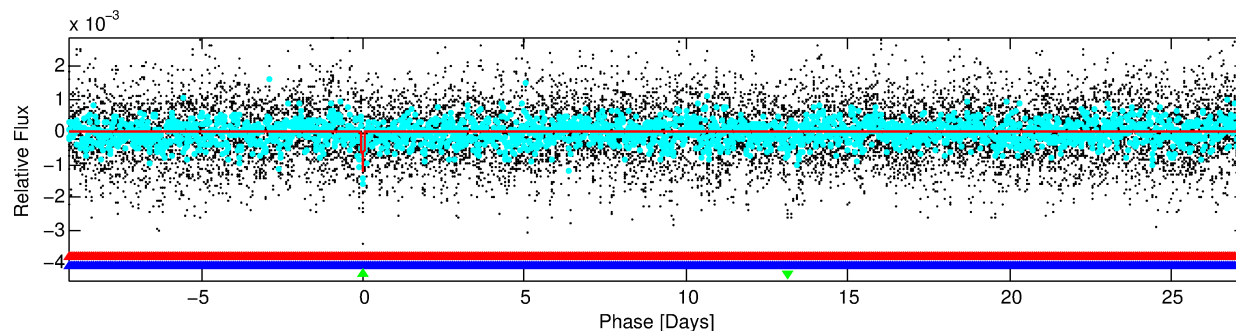
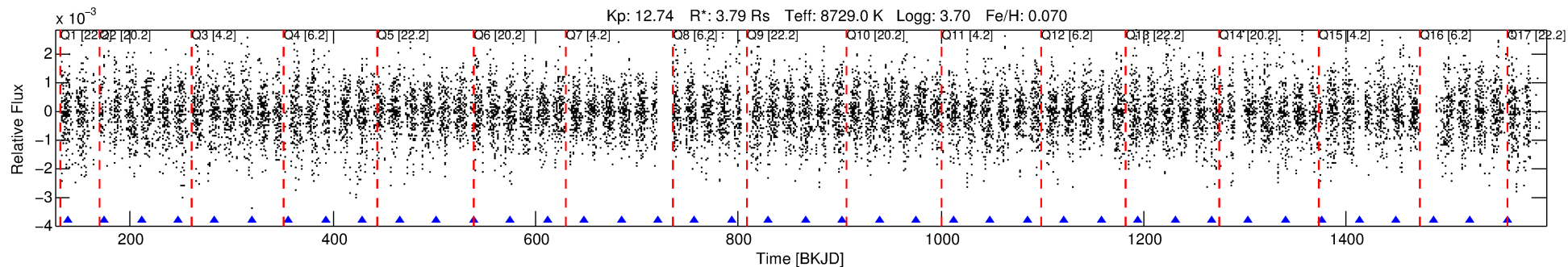
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 012067780-03

No Significant Match Found

DV One-Page Summary

KIC: 12067780 Candidate: 3 of 3 Period: 36.426 d



DV Fit Results:

Period = 36.42595 [0.00020] d
Epoch = 138.0147 [0.0048] BKJD
Rp/R* = 0.0349 [0.0134]
a/R* = 103.44 [229.49]
b = 0.82 [0.88]
Seff = 853.08 [741.76]
Teq = 1378 [300] K
Rp = 14.43 [9.23] Re
a = 0.2956 [0.1411] AU
Ag = 97.58 [113.43] [0.85 σ]
Teffp = 6697 [1660] K [3.15 σ]

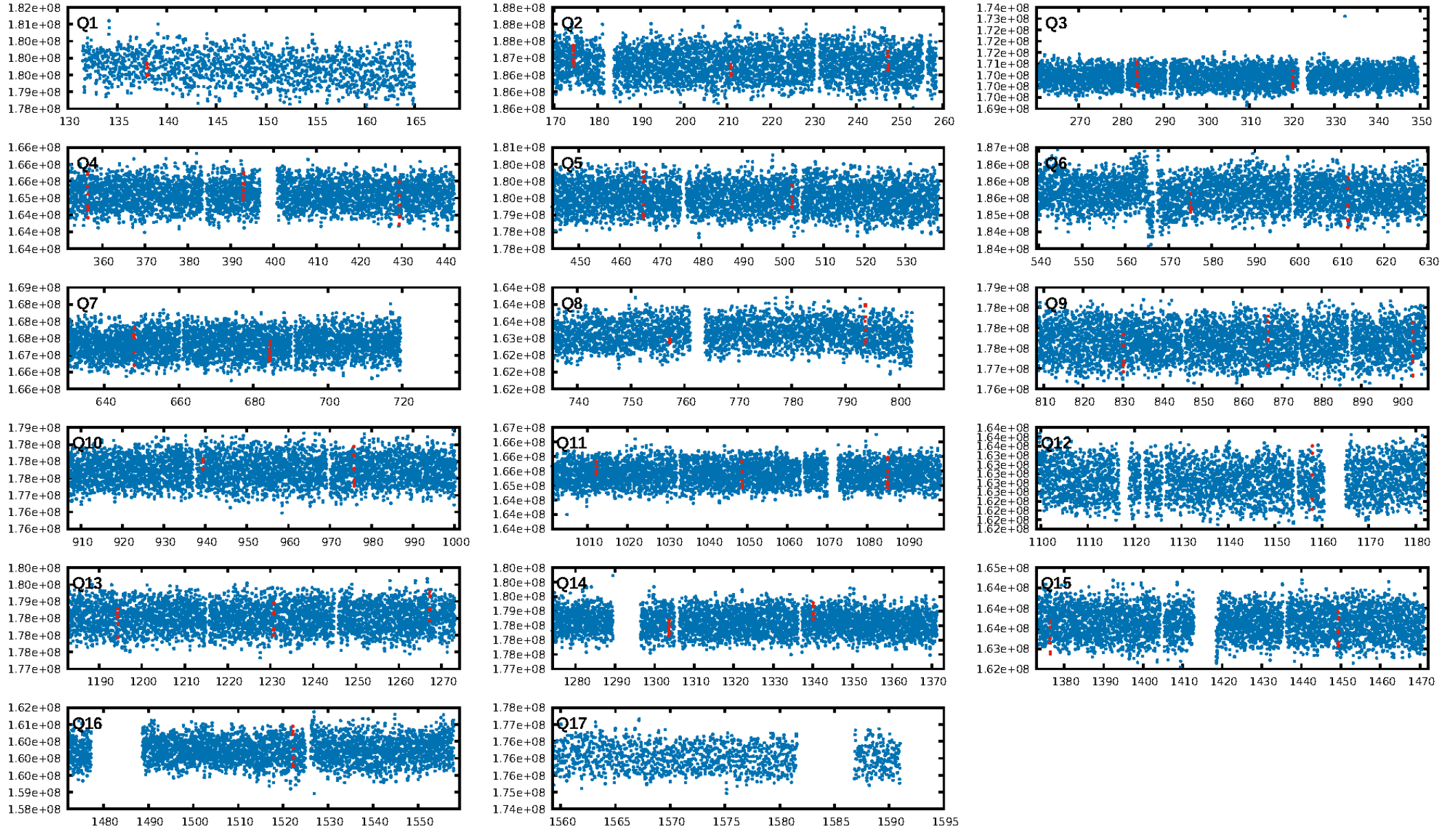
DV Diagnostic Results:

ShortPeriod-sig: 100.0% [307.21 σ]
LongPeriod-sig: N/A
ModelChiSquare2-sig: 1.4%
ModelChiSquareGof-sig: 99.8%
Bootstrap-pfa: N/A
RollingBand-fgt: 1.00 [13/13]
GhostDiagnostic-chr: -0.03464
Centroid-sig: 0.4%
Centroid-so: 0.306 arcsec [2.04 σ]
OotOffset-rm: 0.155 arcsec [0.33 σ]
OotOffset-st: 4/4/4/4 [16]
KicOffset-rm: 0.119 arcsec [0.20 σ]
KicOffset-st: 4/4/4/4 [16]
DiffImageQuality-fgm: 0.56 [9/16]
DiffImageOverlap-fno: 0.00 [0/16]

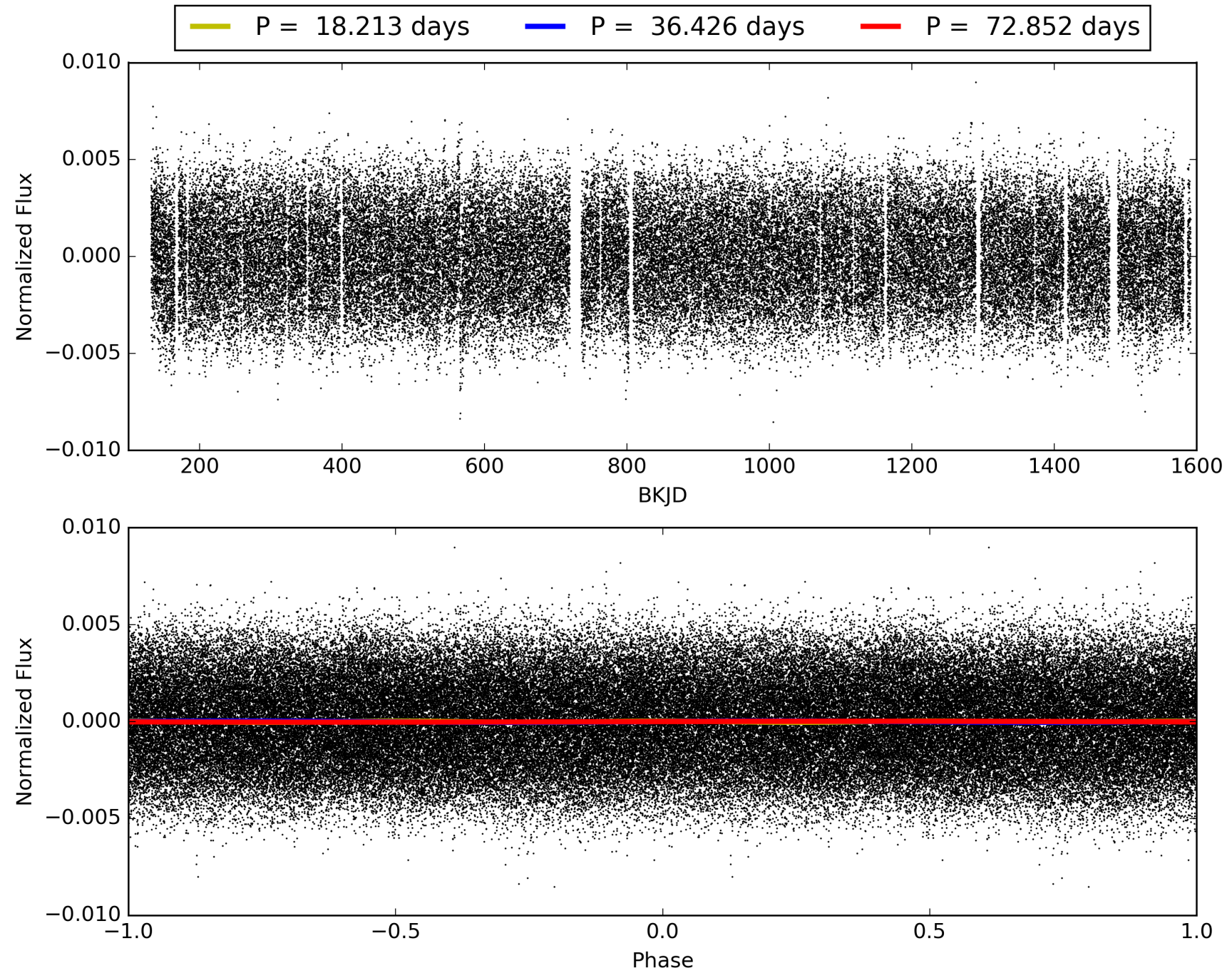
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 30-Jan-2016 06:03:49 Z

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

TCE 012067780-03, PDC Light Curves

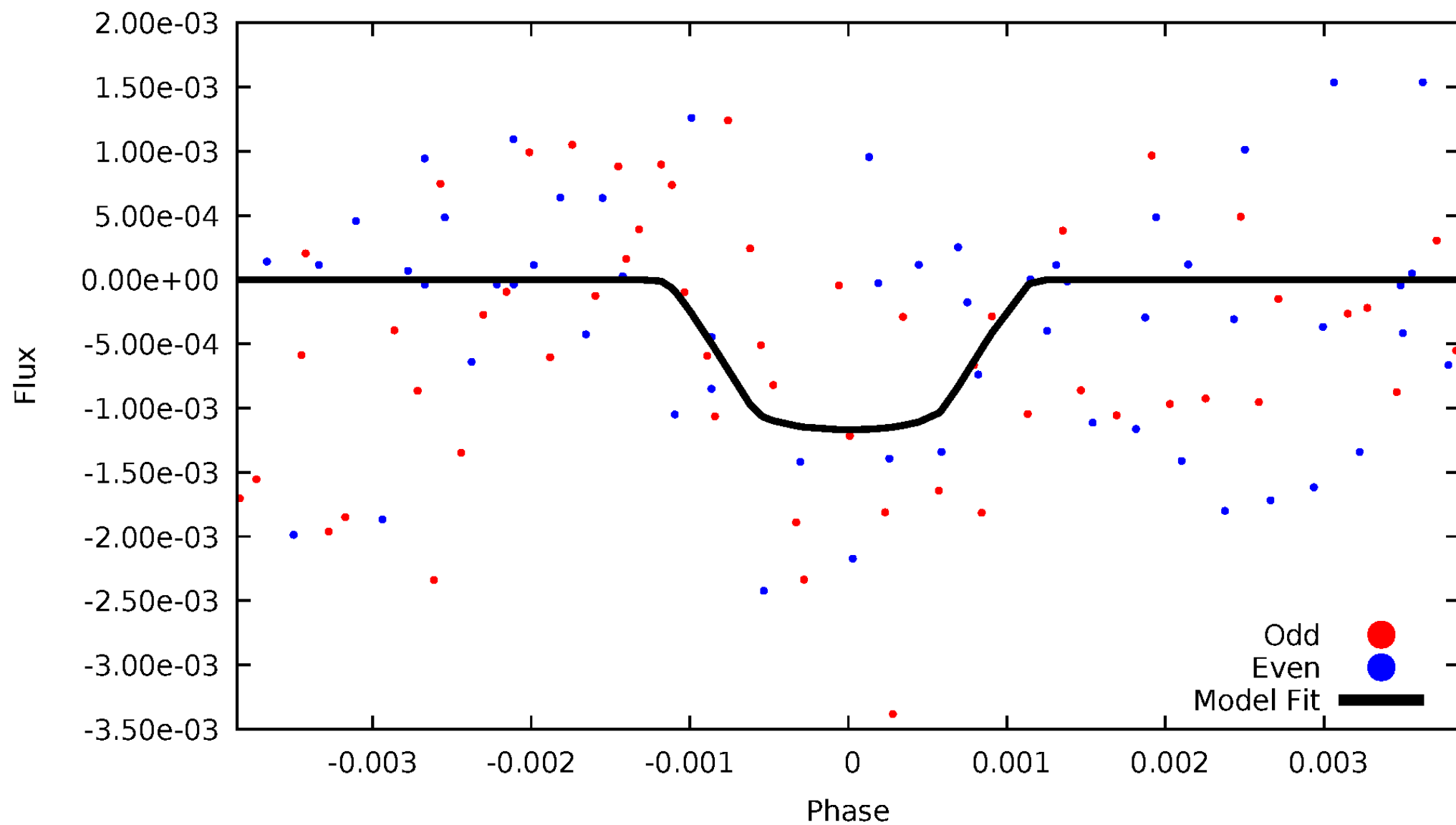


TCE 012067780-03



DV Odd/Even

TCE 012067780-03

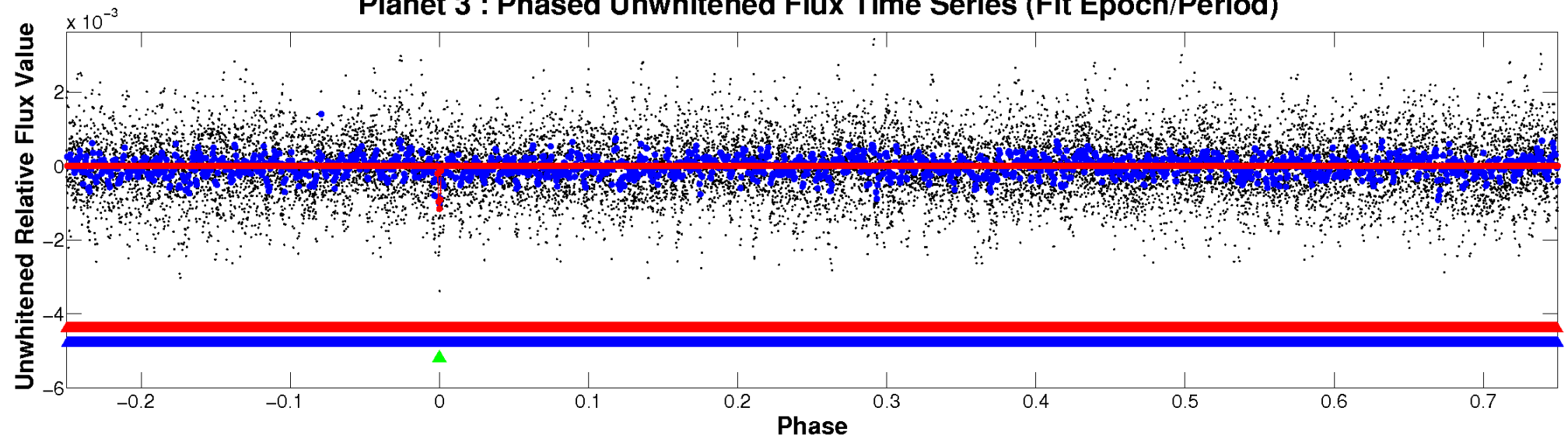


ALT Odd/Even

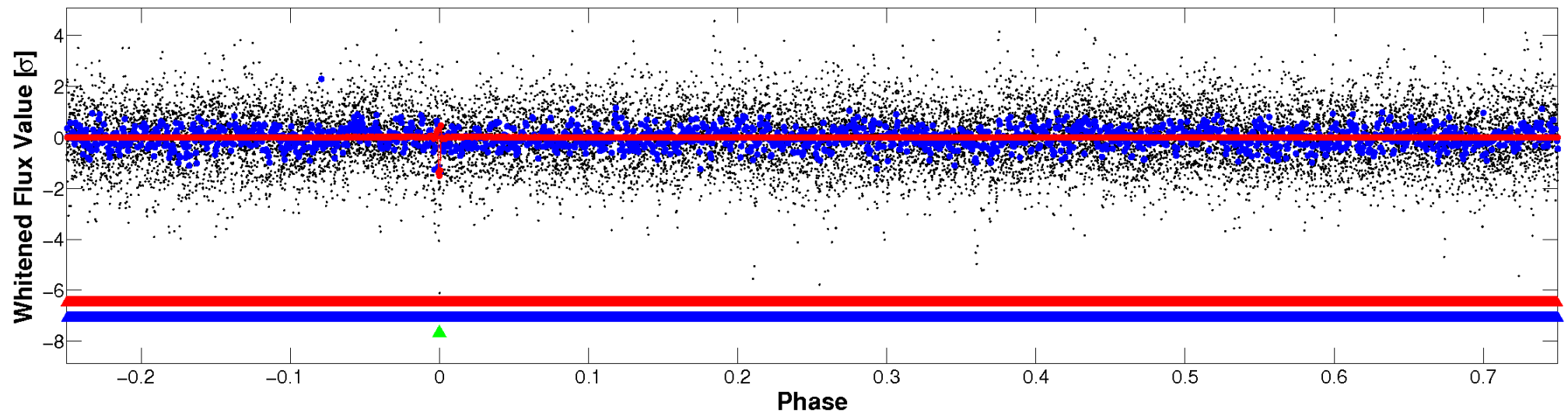
This plot does not exist for this TCE.

Non-Whitened Vs. Whitened Light Curve

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

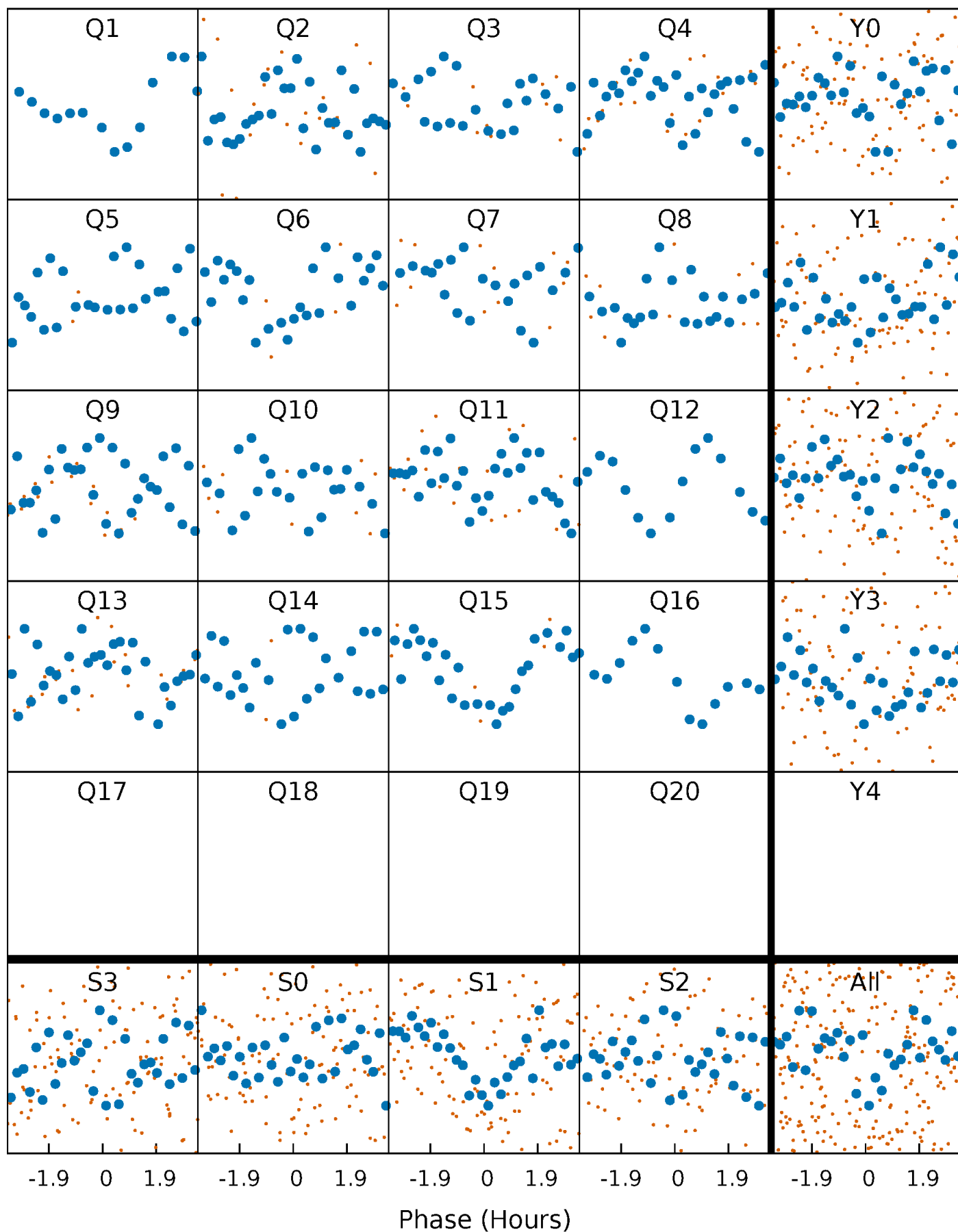


Planet 3 : Phased Whitened Flux Time Series (Fit Epoch/Period)



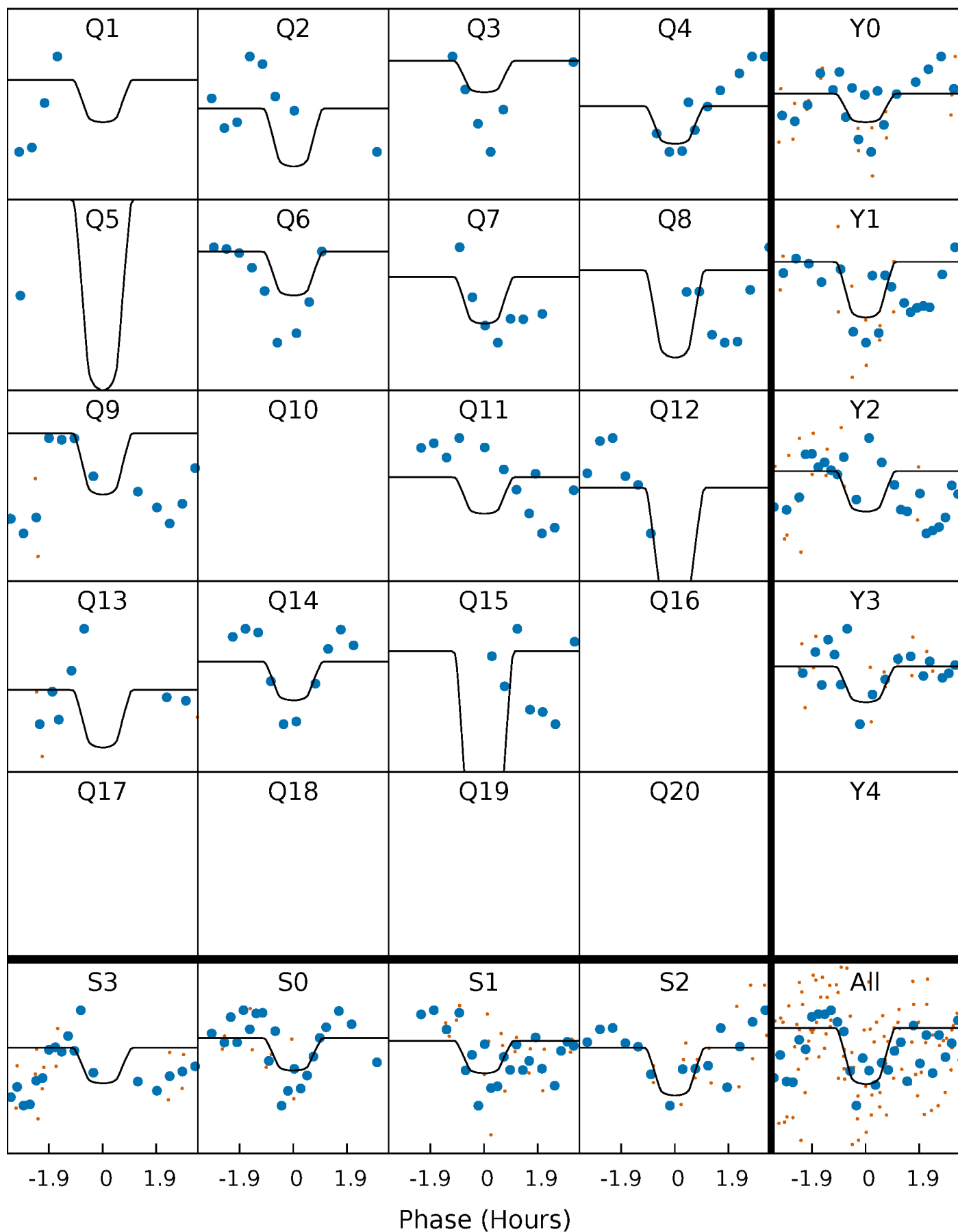
PDC Quarter-Phased Transit Curves

TCE 012067780-03 $P = 36.425948$ Days $T_0 = 138.014724$ (BKJD)



DV Quarter-Phased Transit Curves

TCE 012067780-03 P= 36.425948 Days $T_0=138.014724$ (BKJD)

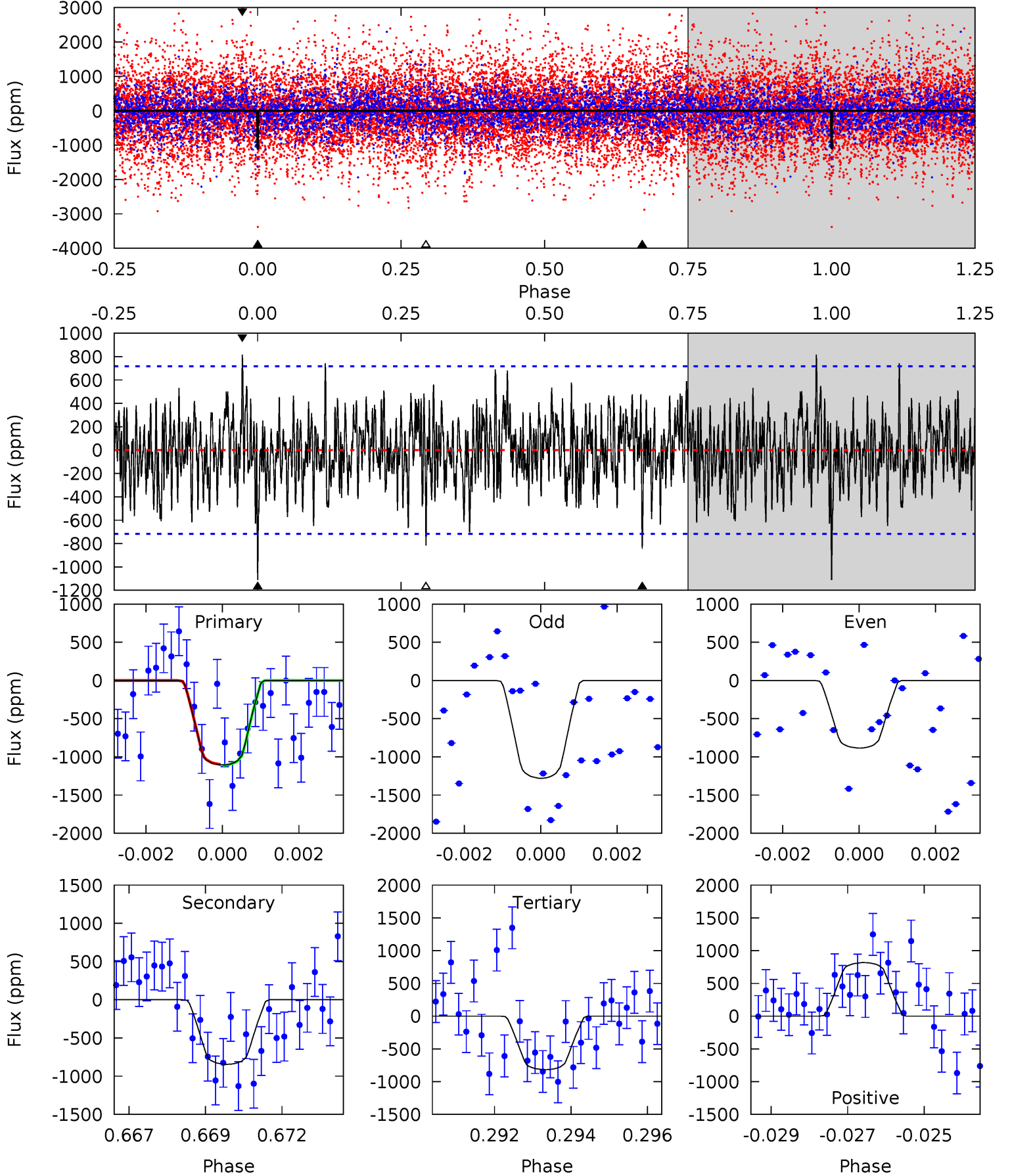


This plot does not exist for this TCE.

DV Model-Shift Uniqueness Test

012067780-03, $P = 36.425948$ Days, $E = 101.588776$ Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
8.18	6.25	6.04	6.04	5.30	3.05	1.77	2.14	2.14	0.21	0.21	1.46	0.96	0.42	0.04



Alt Model-Shift Uniqueness Test

This plot does not exist for this TCE.

Stellar Parameters For KIC 012067780

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	$M(M_{\odot})$	p_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	8729^{+411}_{-961}	$3.696^{+0.435}_{-0.116}$	$0.070^{+0.050}_{-0.300}$	$3.786^{+0.830}_{-1.936}$	$2.593^{+0.241}_{-0.902}$	$0.067^{+0.339}_{-0.024}$
	+5%/-11%	+12%/-3%	+71%/-429%	+22%/-51%	+9%/-35%	+503%/-36%
Source	SPE68	SPE68	SPE68	DSEP		

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

Secondary Eclipse Parameters for KIC 012067780-03 / KOI

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	-845 ± 135	$12.71^{+6.13}_{-5.13}$	1825^{+215}_{-274}	7638^{+2540}_{-1407}	240^{+427}_{-128}
Alt.	N/A	N/A	N/A	N/A	N/A

T_{max} = Theoretical Maximum Planetary Temperature
 T_{obs} = Observed Planetary Temperature (Assuming $A=0.3$)
 A_{obs} = Observed Albedo (Assuming $T=0$)

If a secondary eclipse is present, the system is likely an EB if $T_{obs} \gg T_{max}$ AND $A_{obs} \gg 1.0$

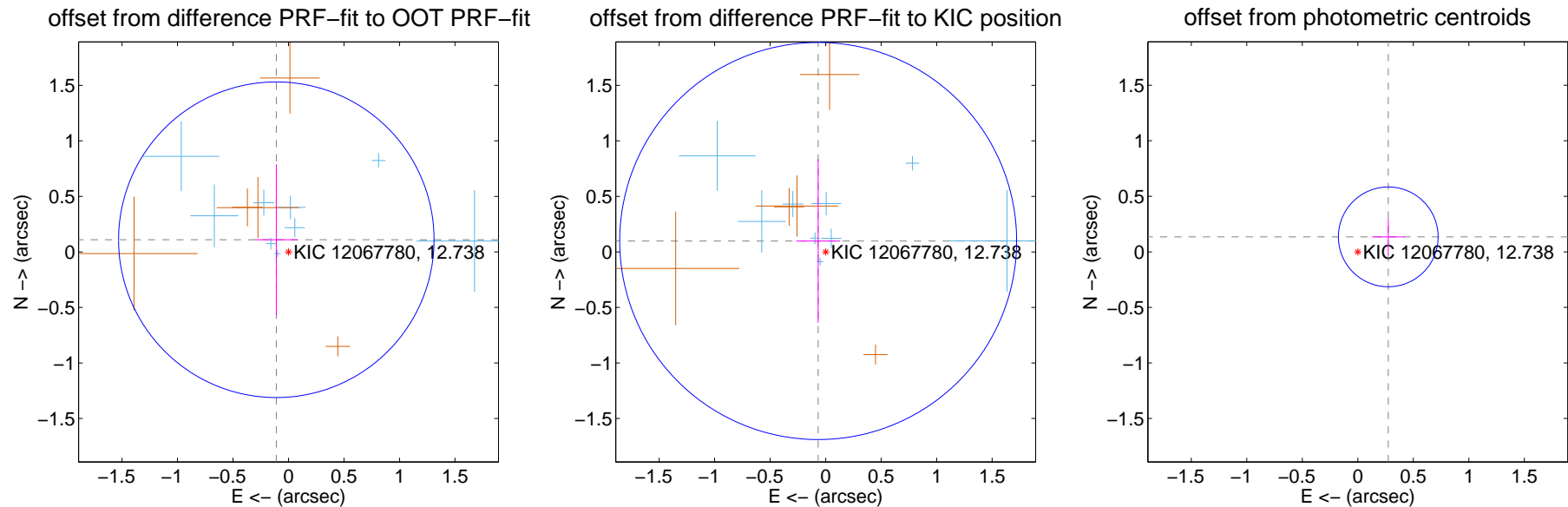
DV Centroid Data

Supplemental centroid analysis for 012067780-03. Kepler magnitude: 12.74. Transit SNR 7.20

There are 9 quarters with good PRF difference image offsets

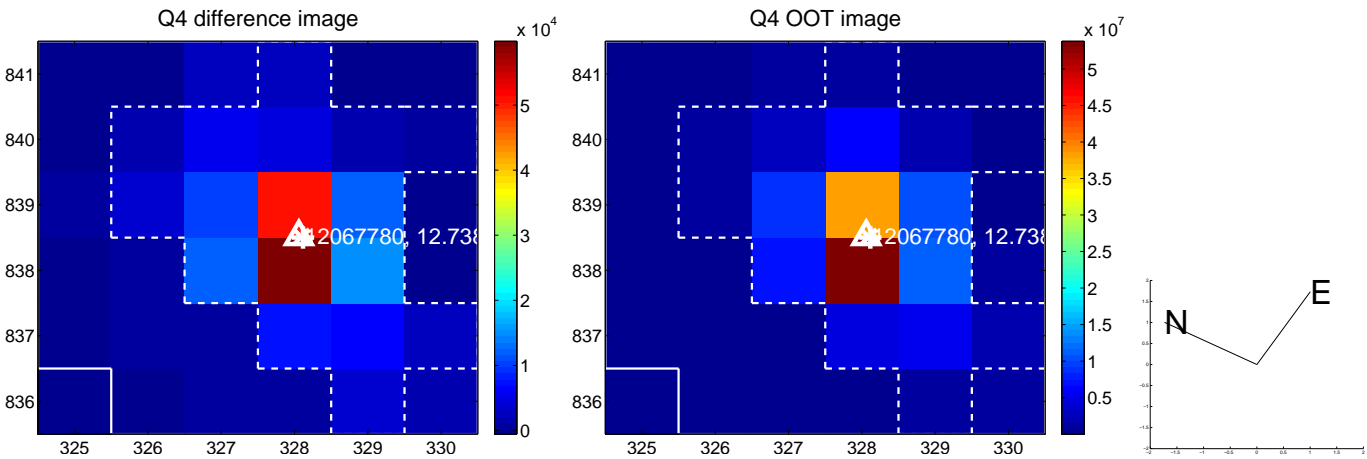
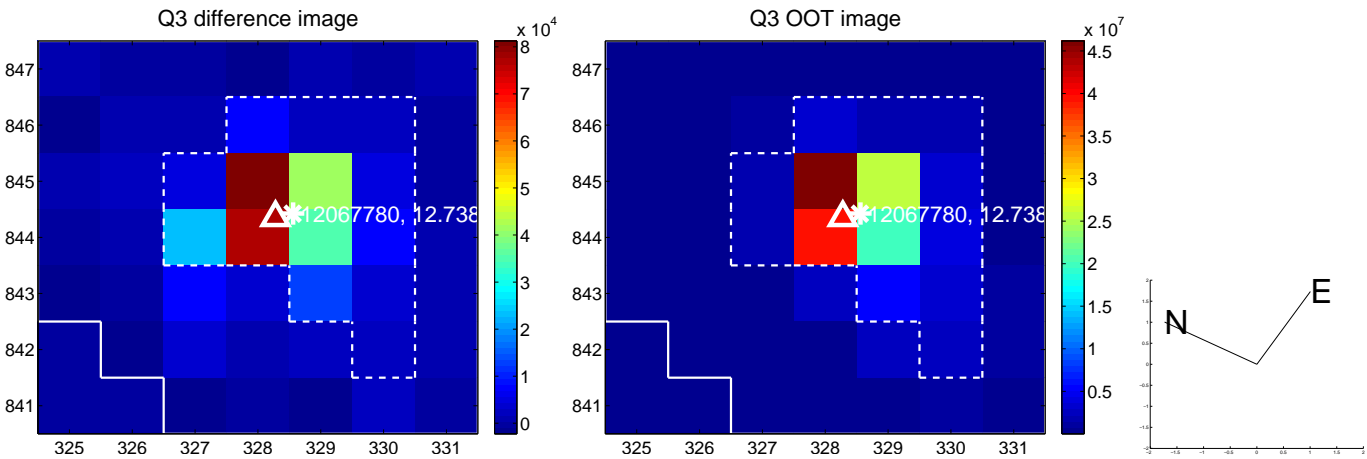
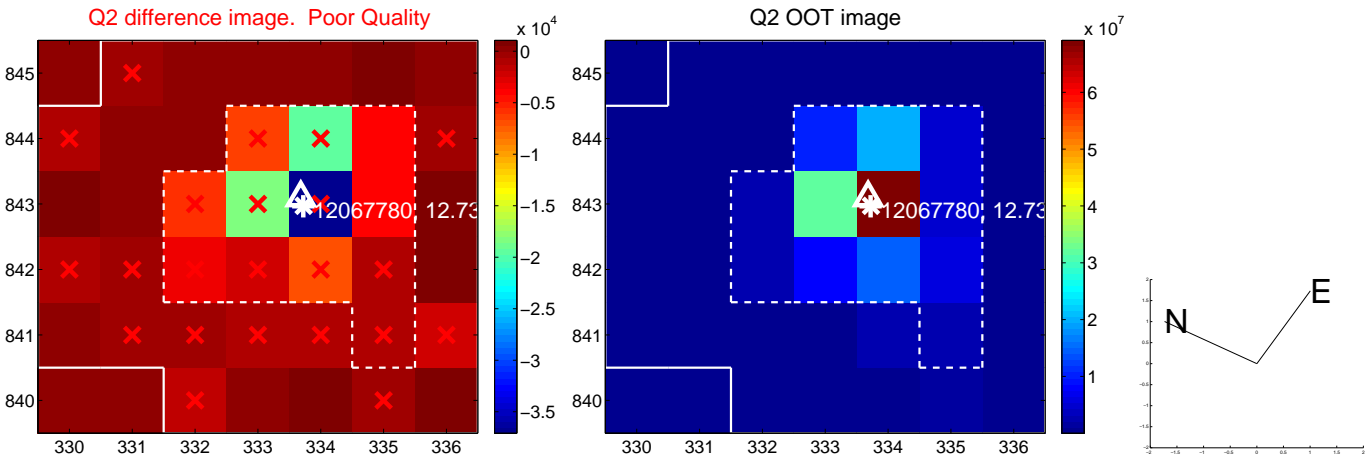
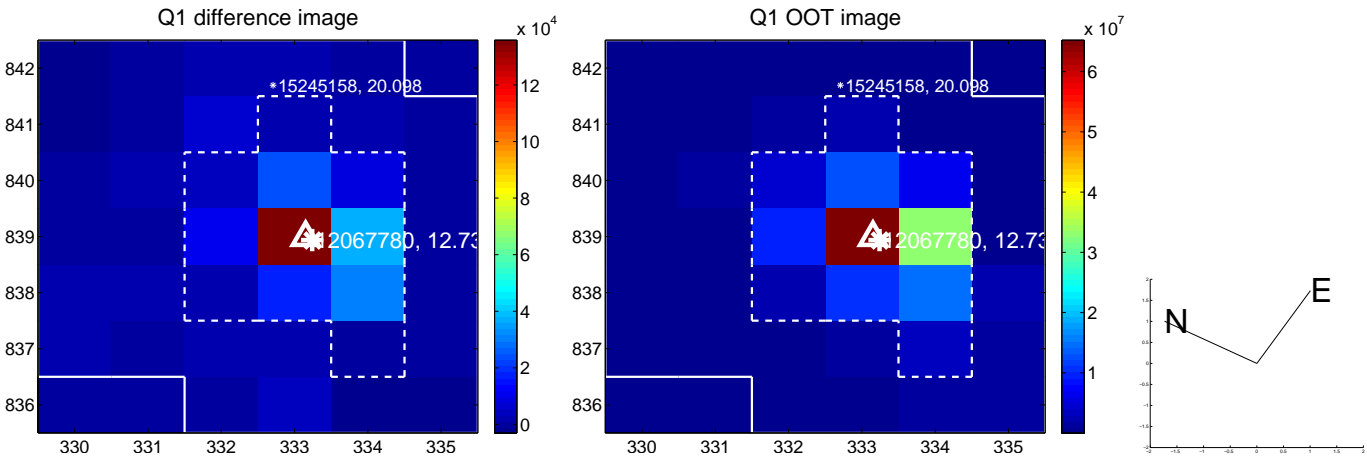
The direct PRF centroid is offset from the target star catalog position by about 0.14 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.155 ± 0.474	0.33	0.110 ± 0.191	0.110 ± 0.680
PRF-fit source offset from KIC position	0.119 ± 0.596	0.20	0.067 ± 0.197	0.098 ± 0.736
photometric centroid source offset	0.31 ± 0.15	2.04	-0.27 ± 0.15	0.13 ± 0.16

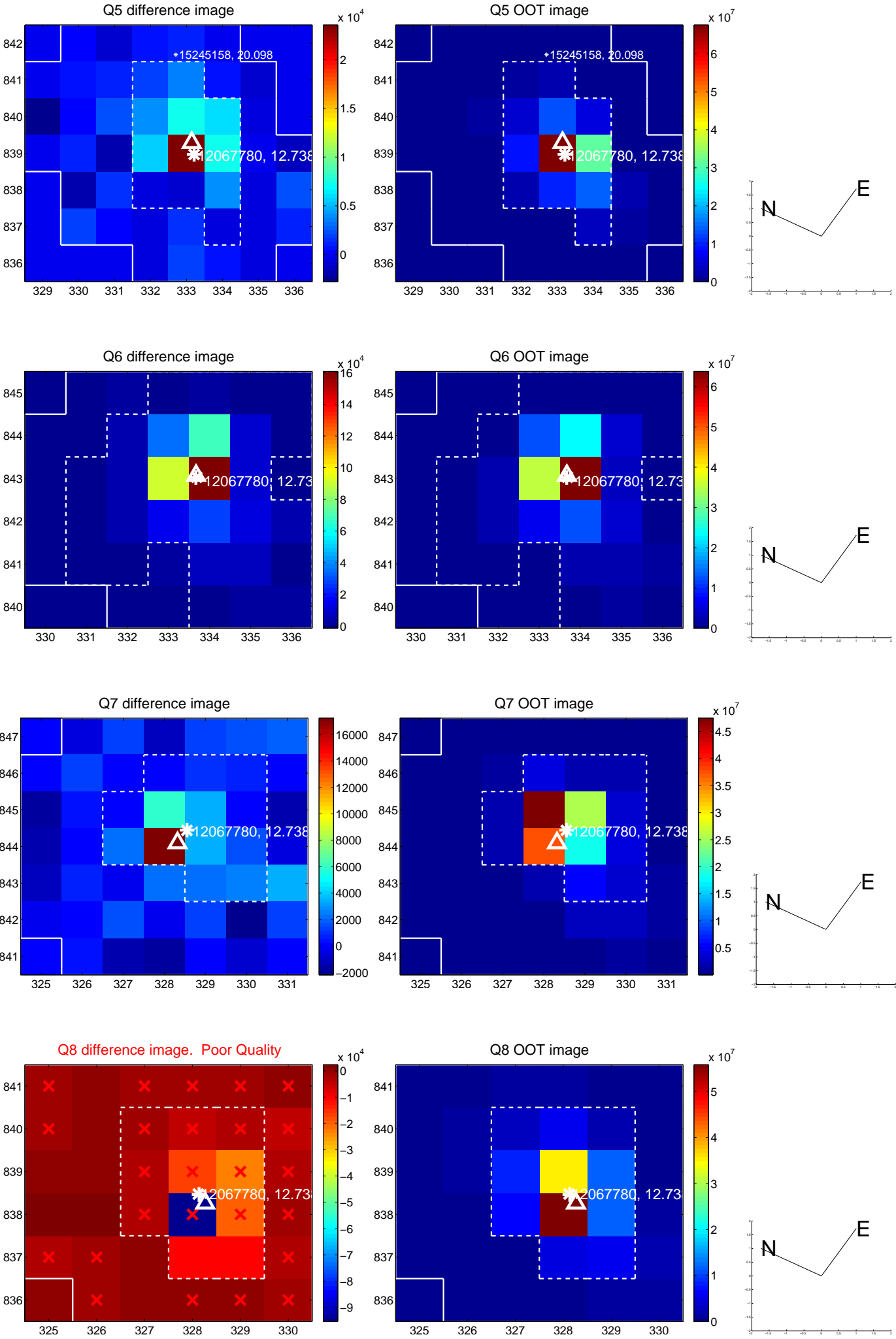


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses:** good quarterly centroid offsets; **Vermillion crosses:** bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

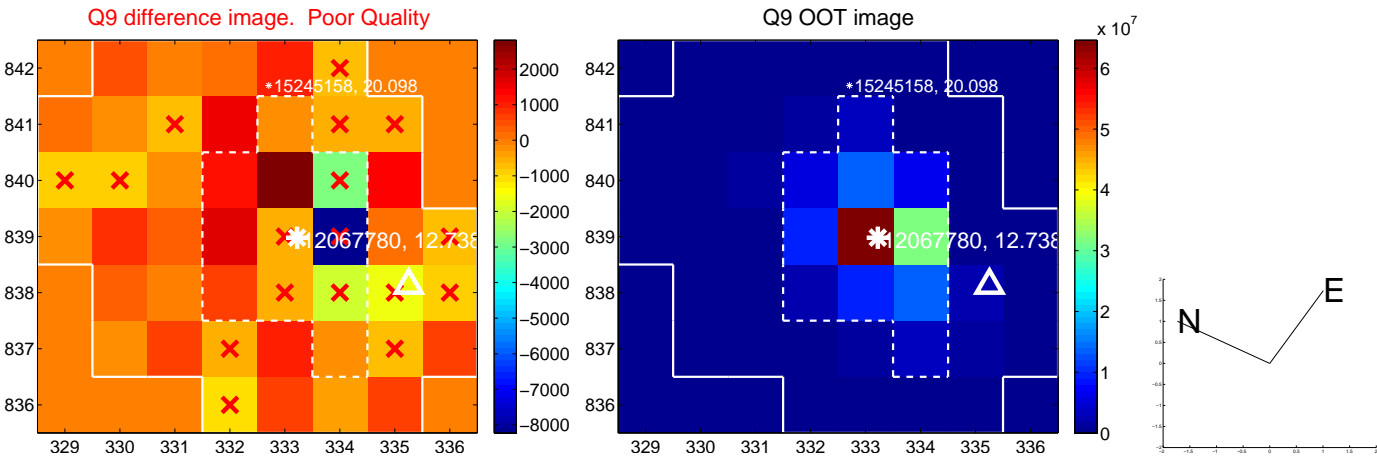
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



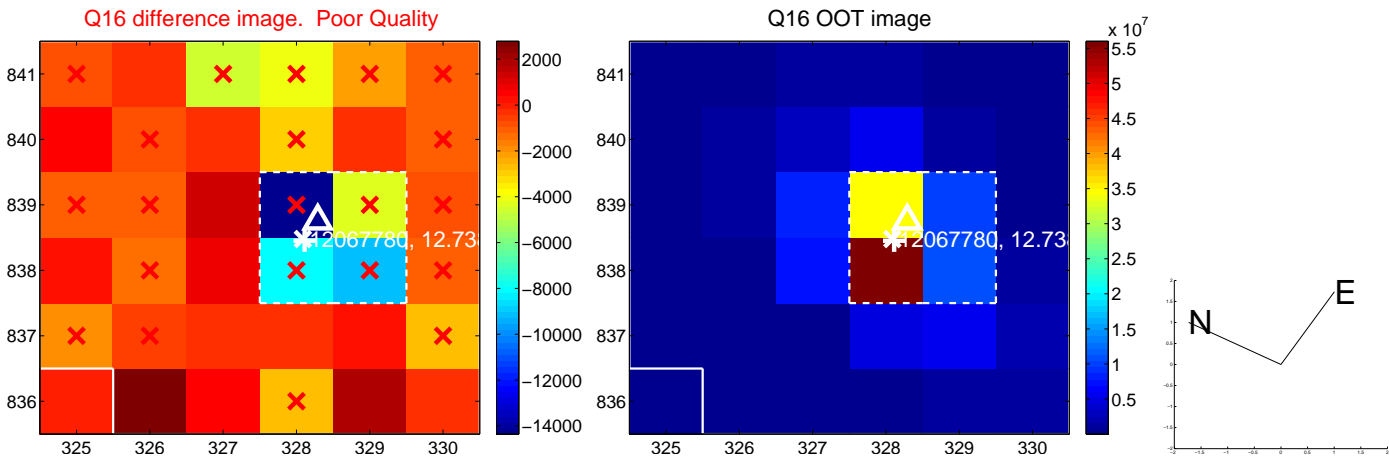
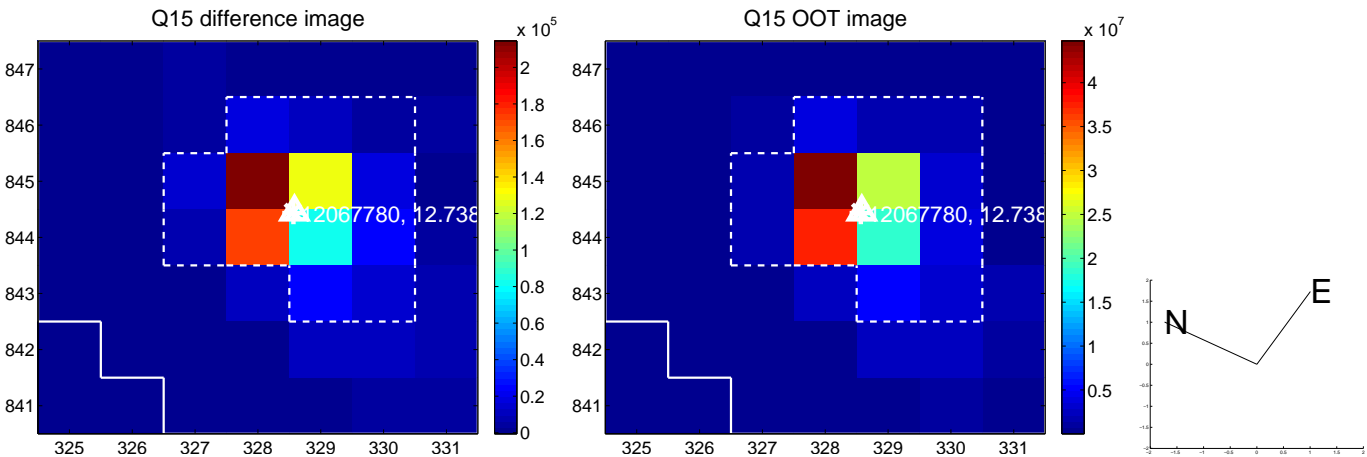
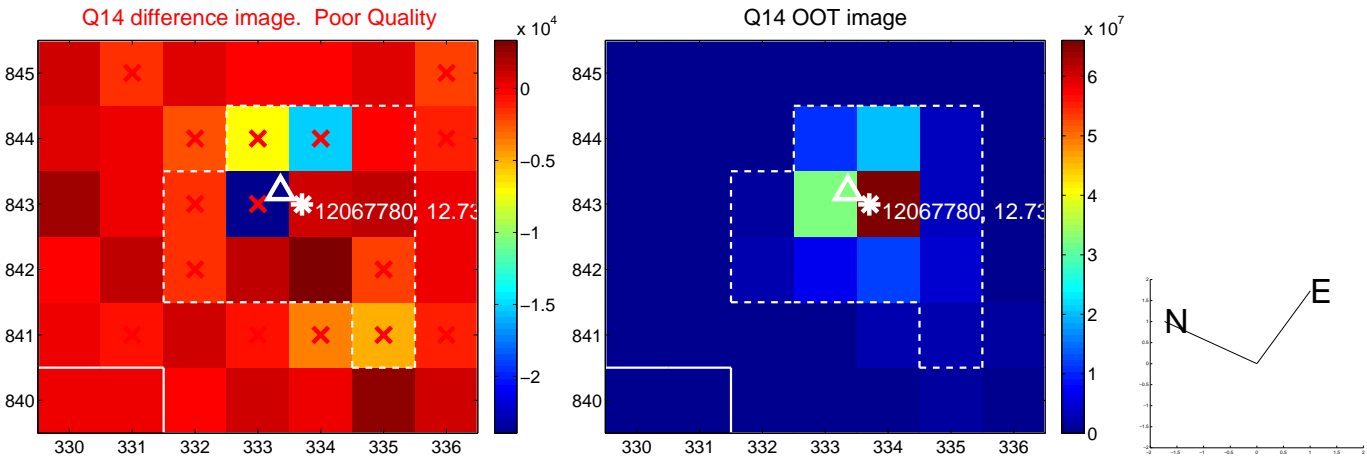
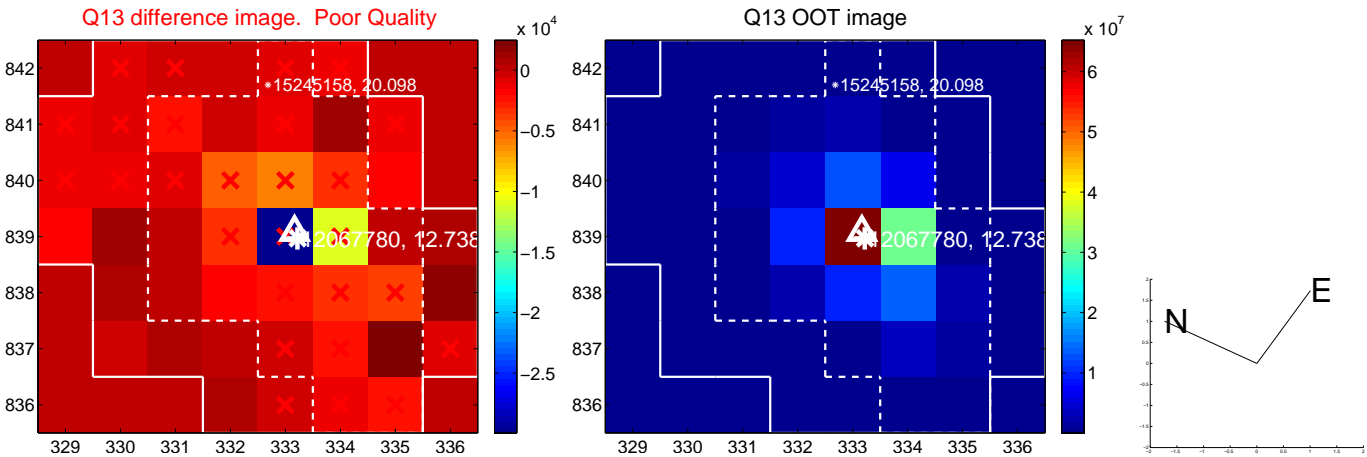
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



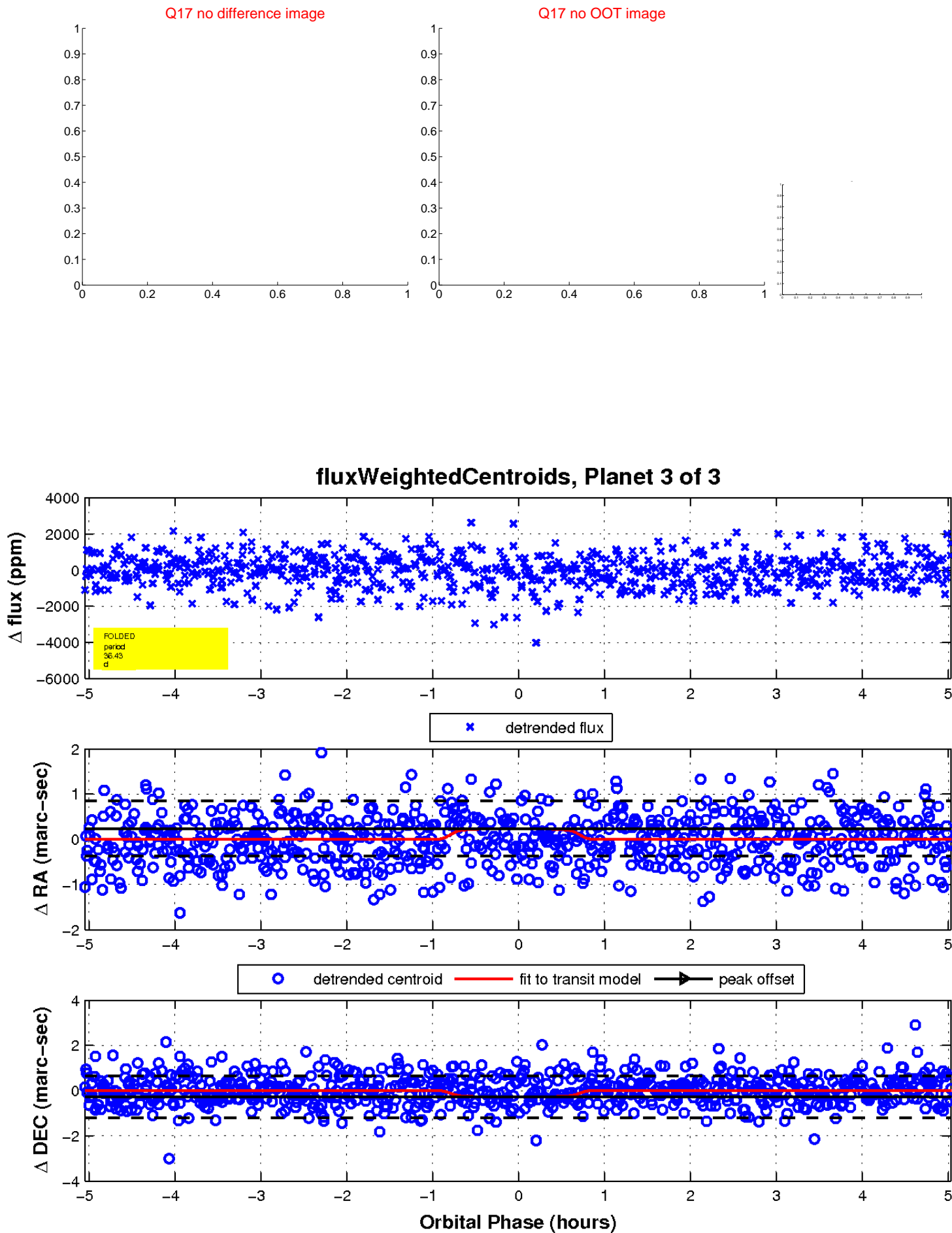
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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.



Declination