

KIC 008103917

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})
008103917-01	OBS	No	0.990740	131.637484	24.4	3.606	12.2	10.3	1.69	7360	0.96	14651.07
008103917-02	OBS	No	0.660500	131.623439	23.8	3.347	8.4	9.3	1.69	7360	0.97	25156.60
008103917-03	OBS	No	2.970643	132.314714	48.7	7.500	10.1	-1.0	1.69	7360	1.19	3388.56

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
008103917-01	OBS	FP	0.00	1	0	0	0	LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT
008103917-02	OBS	FP	0.00	1	0	0	0	LPP_DV—LPP_ALT
008103917-03	OBS	FP	0.00	1	0	1	0	INDIV_TRANS_RUBBLE_SKYE_ZUMA—TRANS_GAPPED—LPP_DV—LPP_ALT—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—CENT_NOFITS—HALO_GHOST

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

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

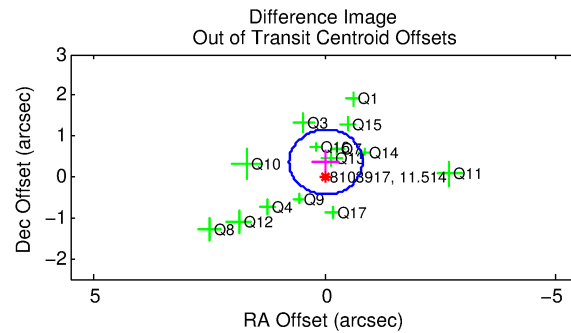
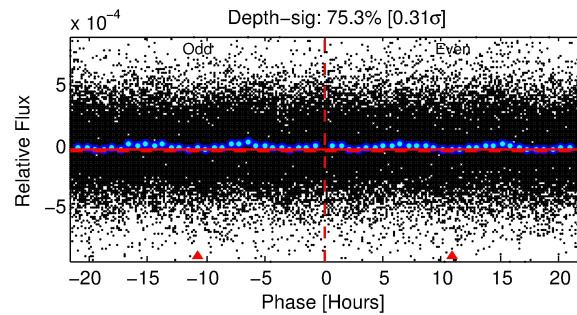
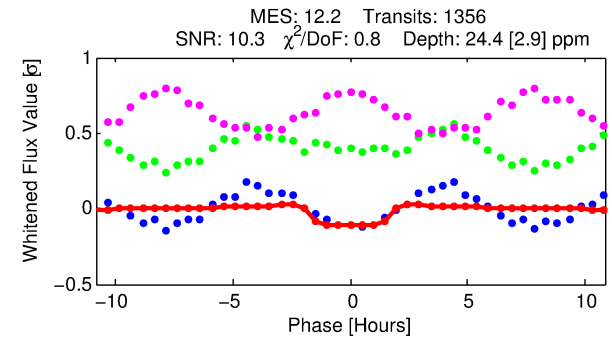
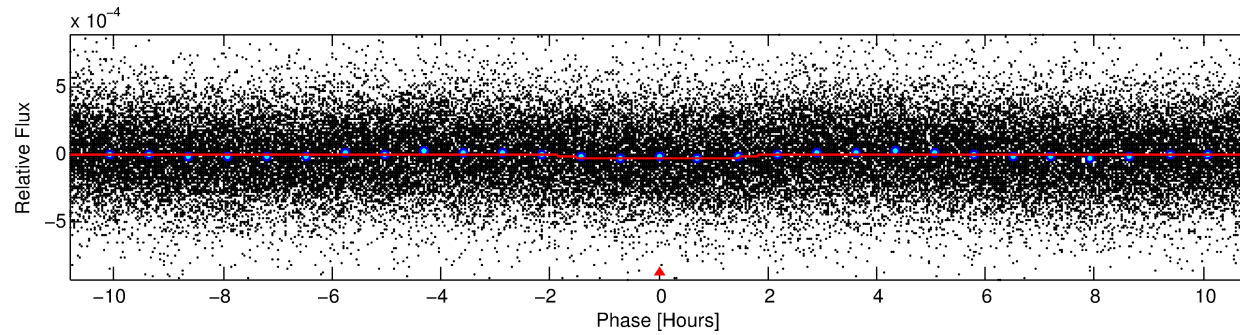
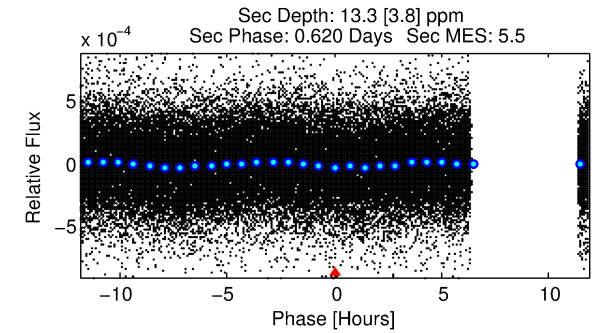
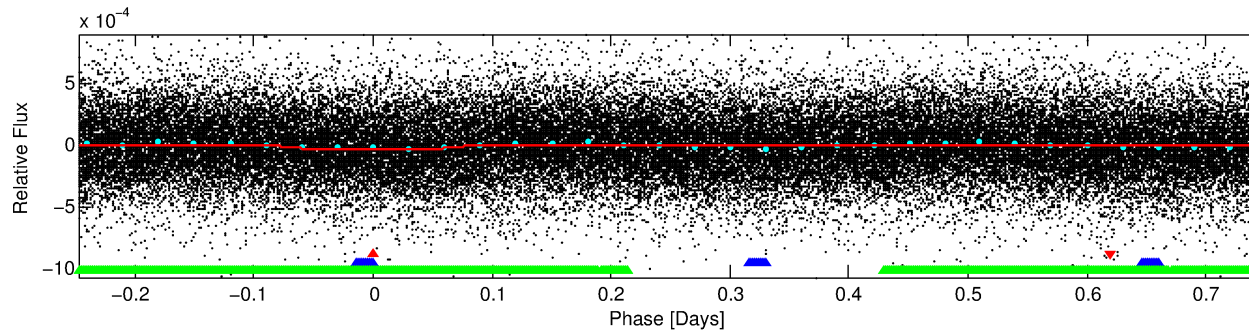
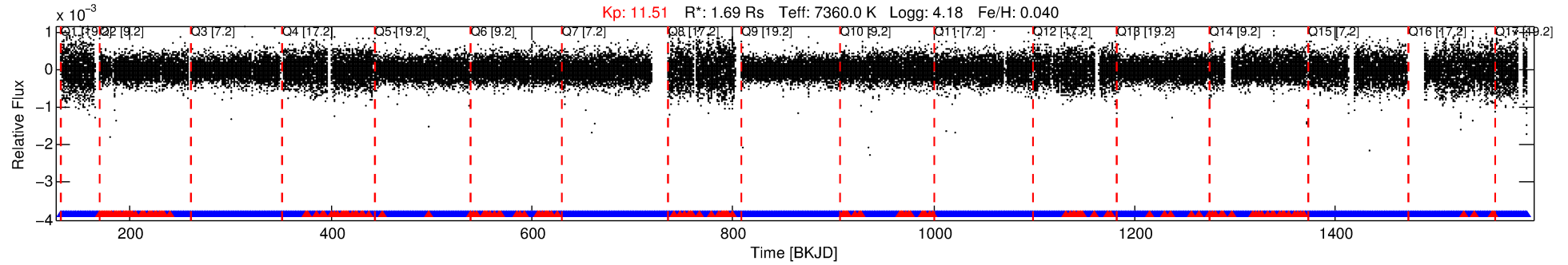
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 008103917-01

No Significant Match Found

DV One-Page Summary

KIC: 8103917 Candidate: 1 of 3 Period: 0.991 d



DV Fit Results:

Period = 0.99074 [0.00001] d
Epoch = 131.6375 [0.0038] BKJD
Rp/R* = 0.0052 [0.0022]
a/R* = 1.34 [1.65]
b = 0.89 [0.63]
Seff = 14651.07 [6182.82]
Teq = 2805 [296] K
Rp = 0.96 [0.53] Re
a = 0.0226 [0.0062] AU
Ag = 4.06 [3.95] [0.77σ]
Teffp = 6156 [1411] K [2.32σ]

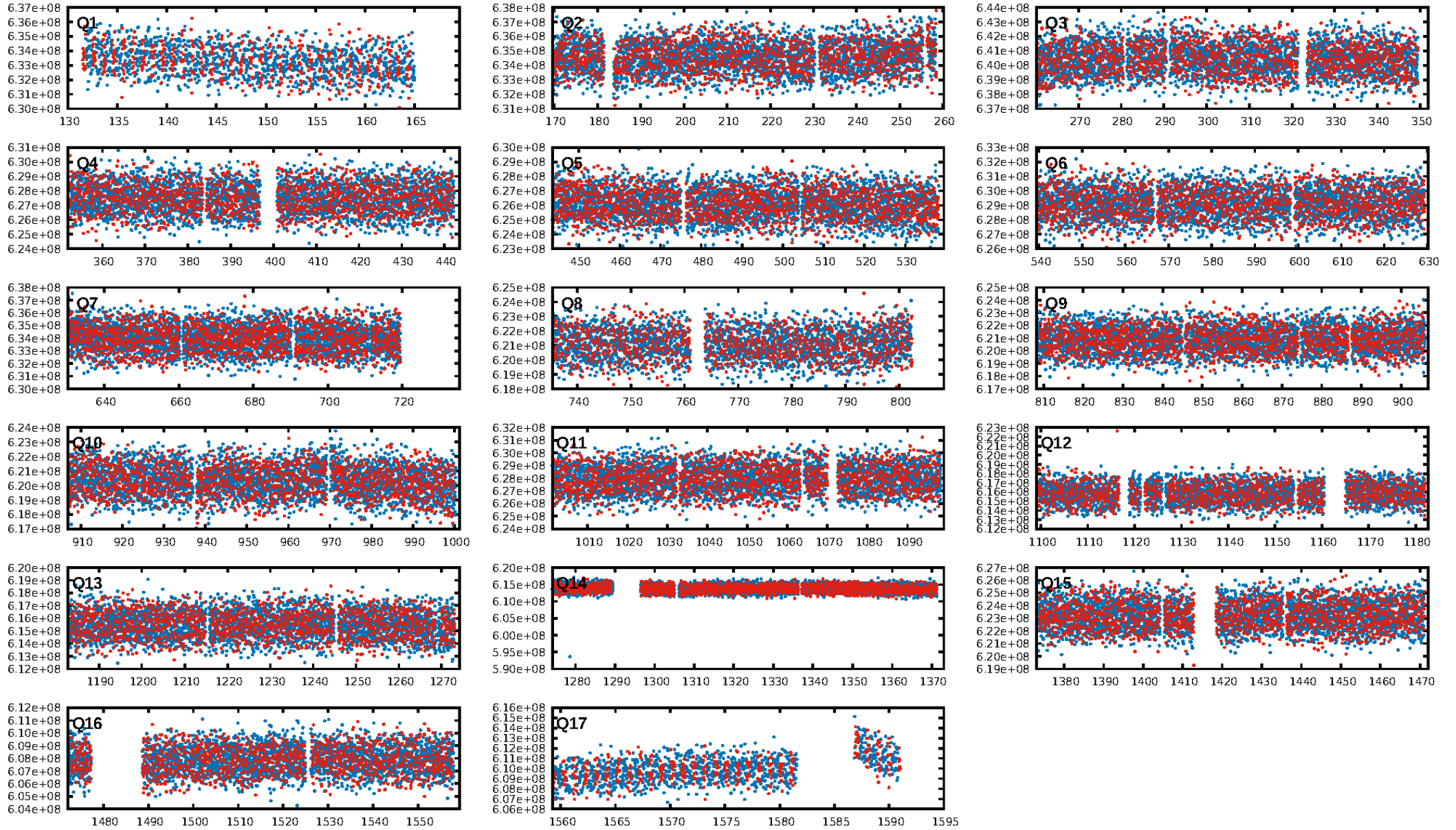
DV Diagnostic Results:

ShortPeriod-sig: 89.3% [1.61σ]
LongPeriod-sig: 100.0% [5.71σ]
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: 2.88e-20
RollingBand-fgt: 0.87 [1124/1294]
GhostDiagnostic-chr: 2.556
Centroid-sig: N/A
Centroid-so: N/A
OotOffset-rm: 0.365 arcsec [1.38σ]
KicOffset-rm: 0.262 arcsec [1.01σ]
OotOffset-st: 2/4/4/4 [14]
KicOffset-st: 2/4/4/4 [14]
DiffImageQuality-fgm: 0.79 [11/14]
DiffImageOverlap-fno: 0.00 [0/17]

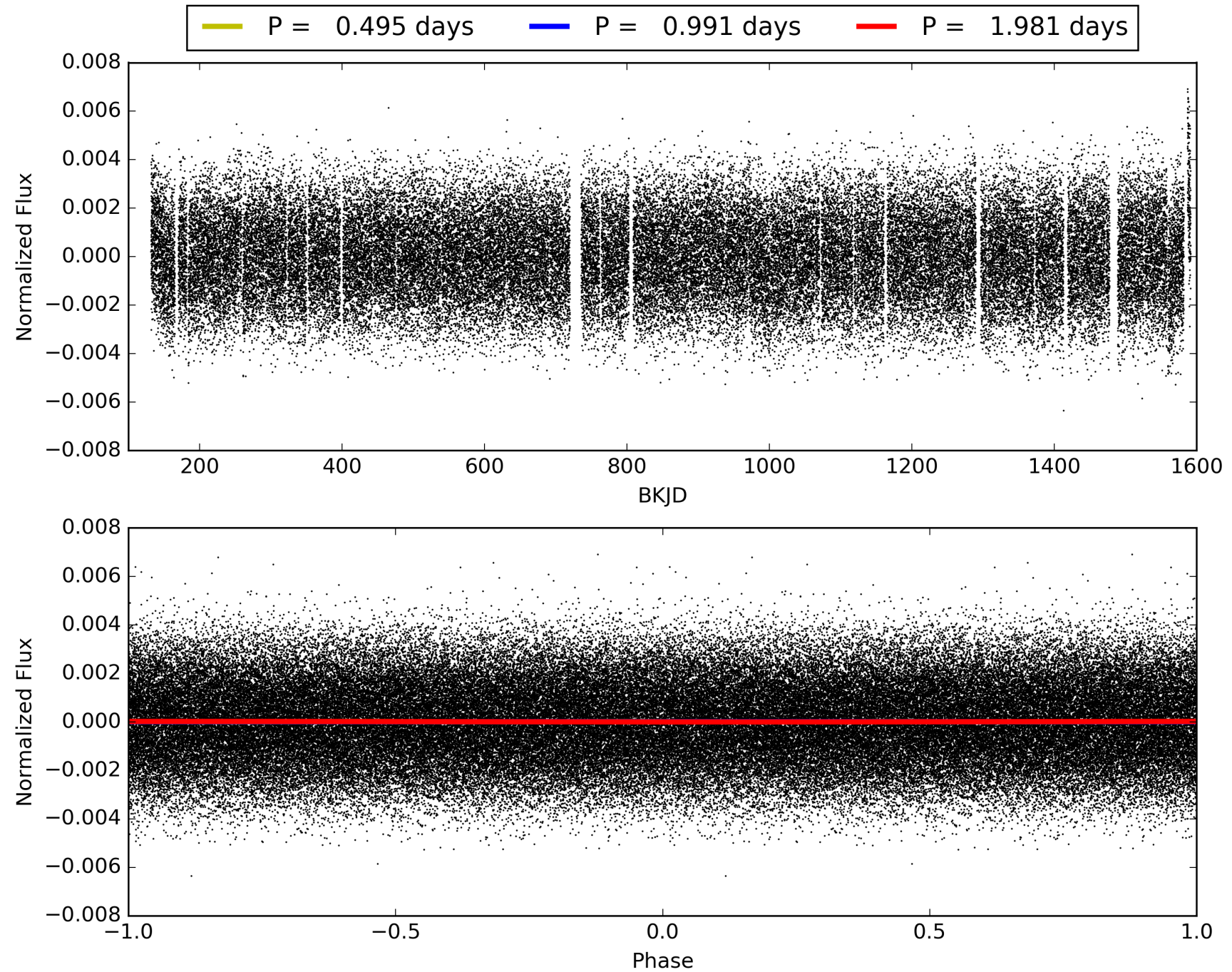
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 30-Jan-2016 02:19:25 Z

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

TCE 008103917-01, PDC Light Curves

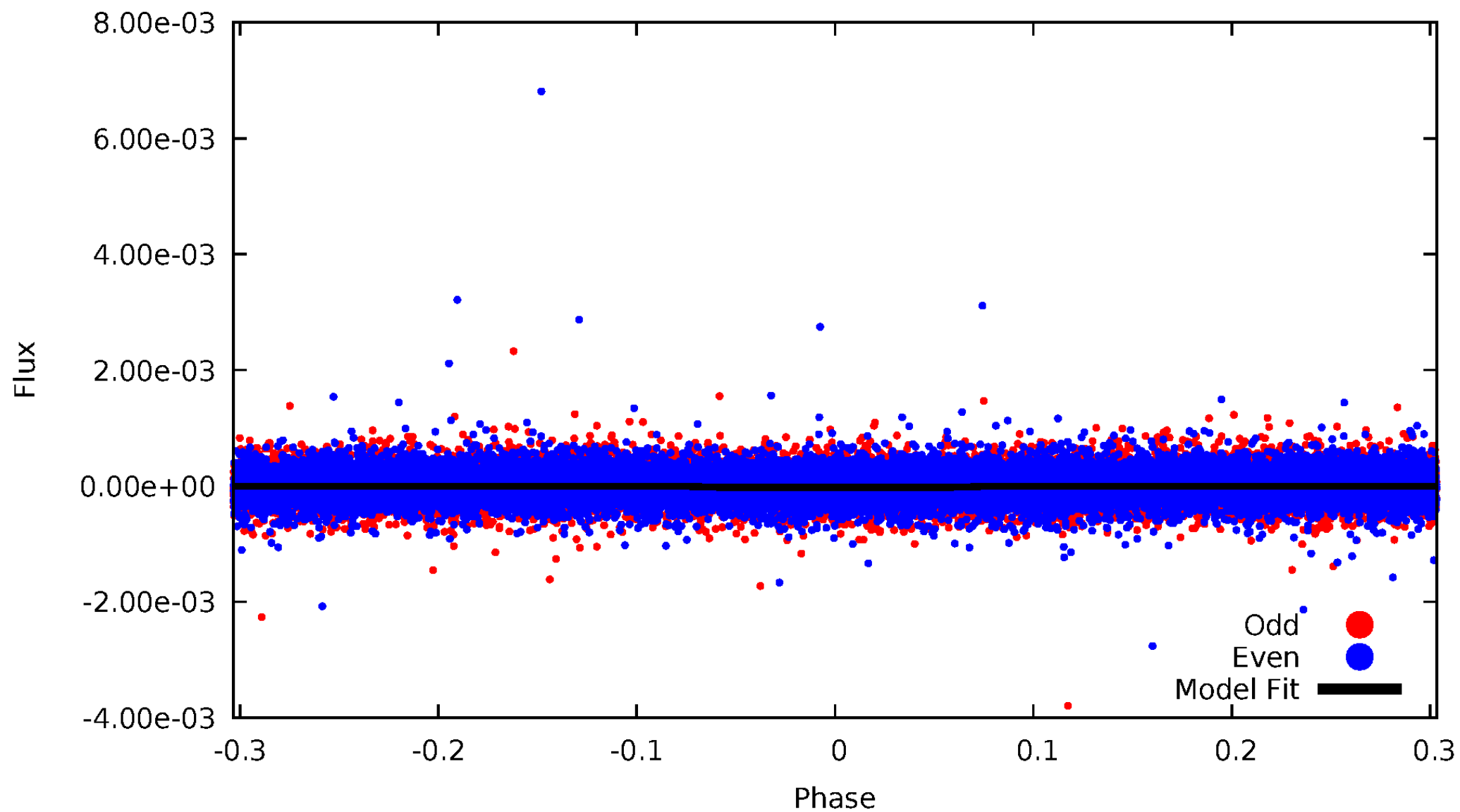


TCE 008103917-01



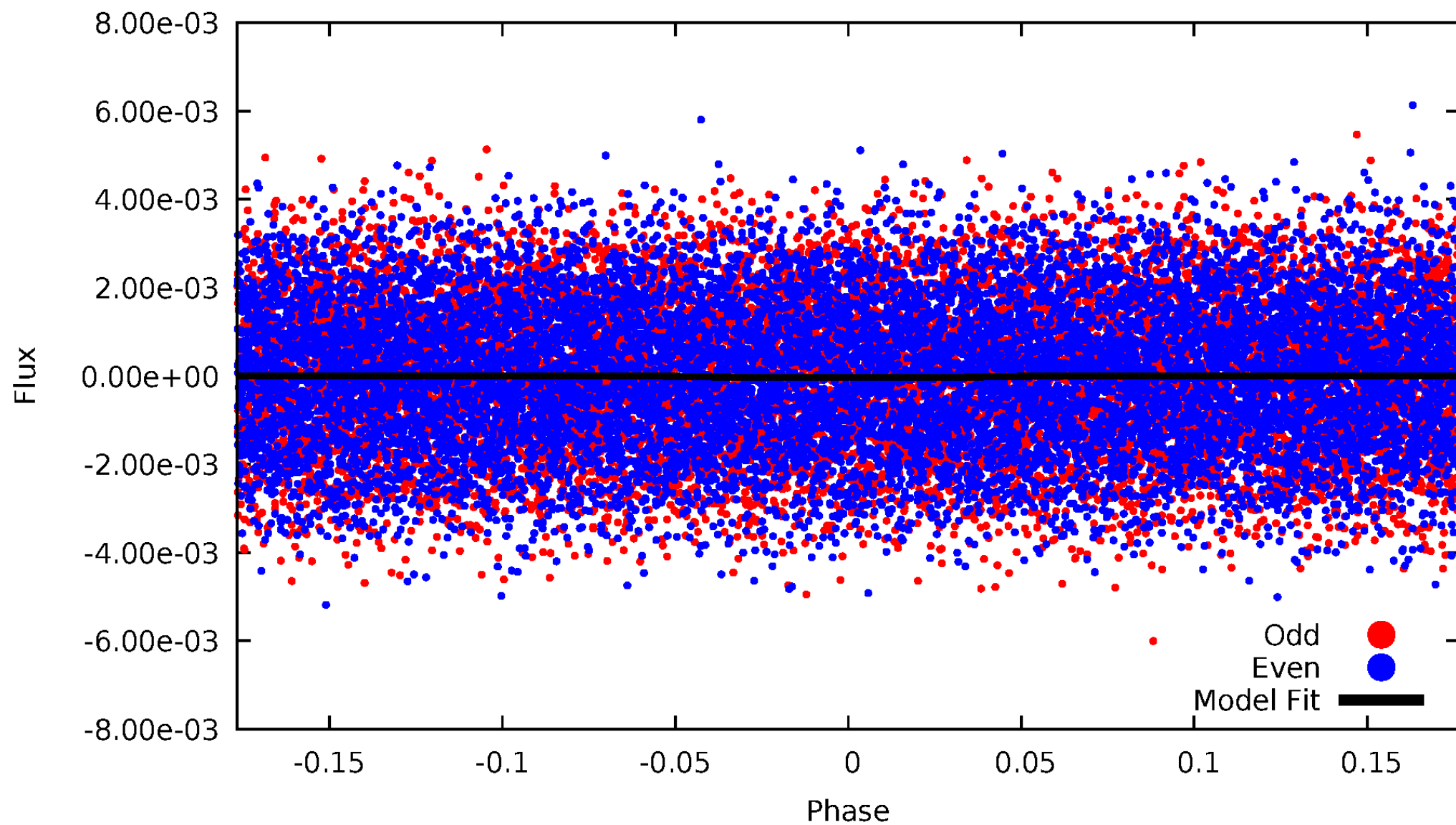
DV Odd/Even

TCE 008103917-01



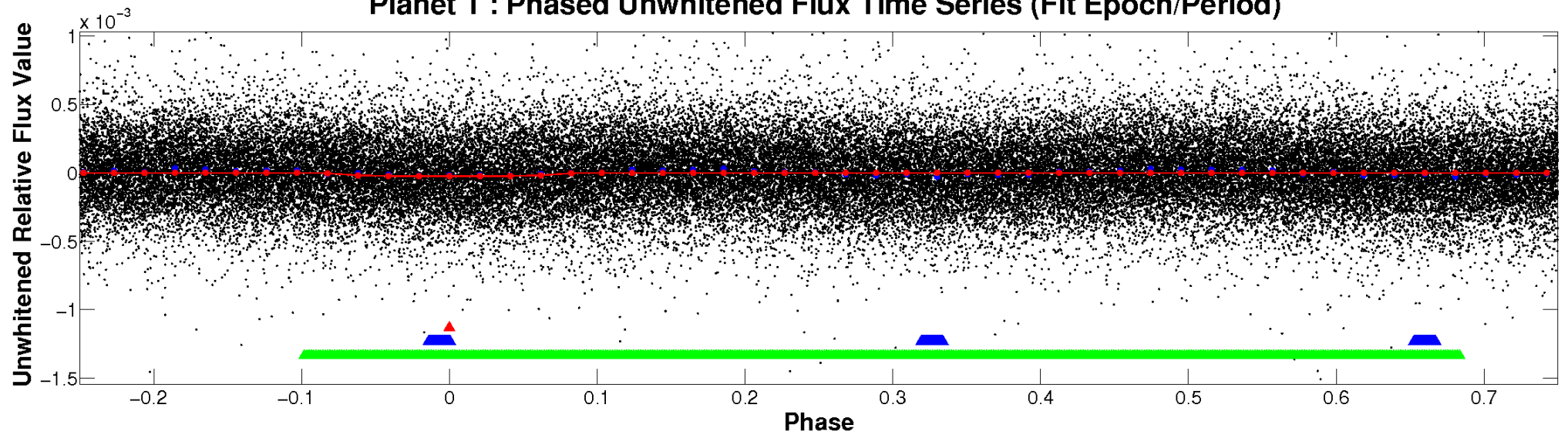
ALT Odd/Even

TCE 008103917-01

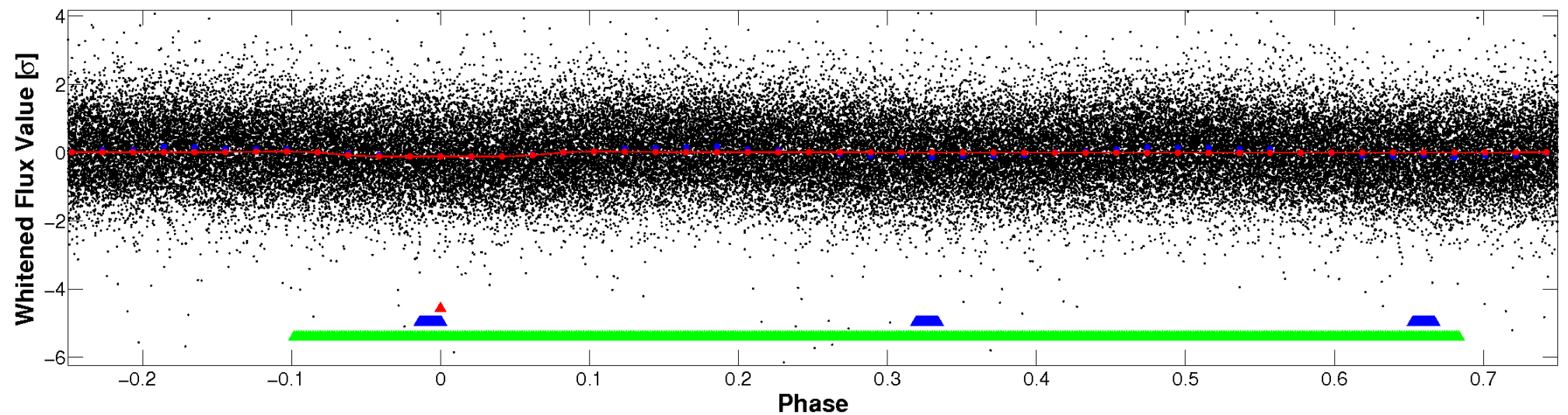


Non-Whitened Vs. Whitened Light Curve

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

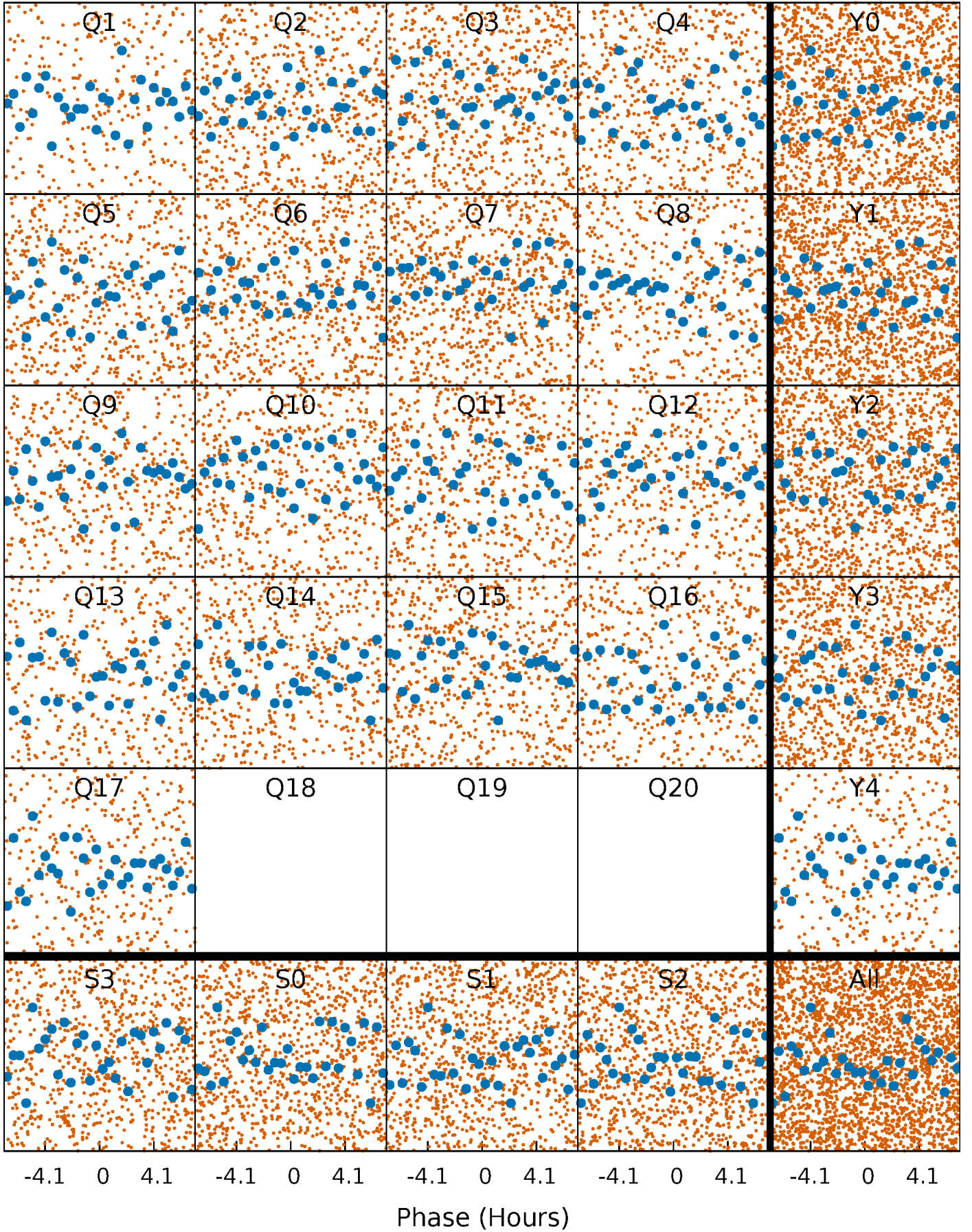


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



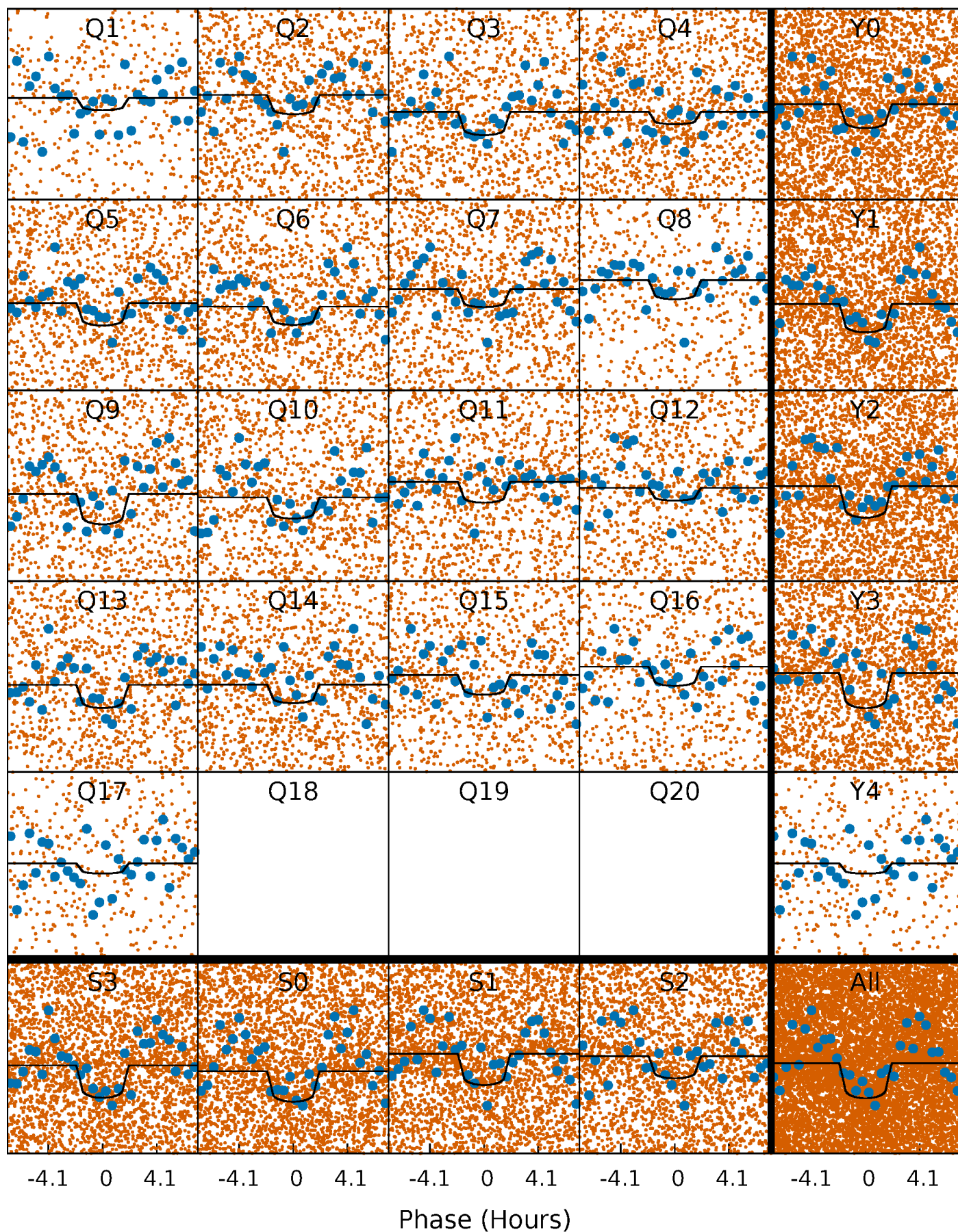
PDC Quarter-Phased Transit Curves

TCE 008103917-01 P= 0.990740 Days $T_0=131.637484$ (BKJD)



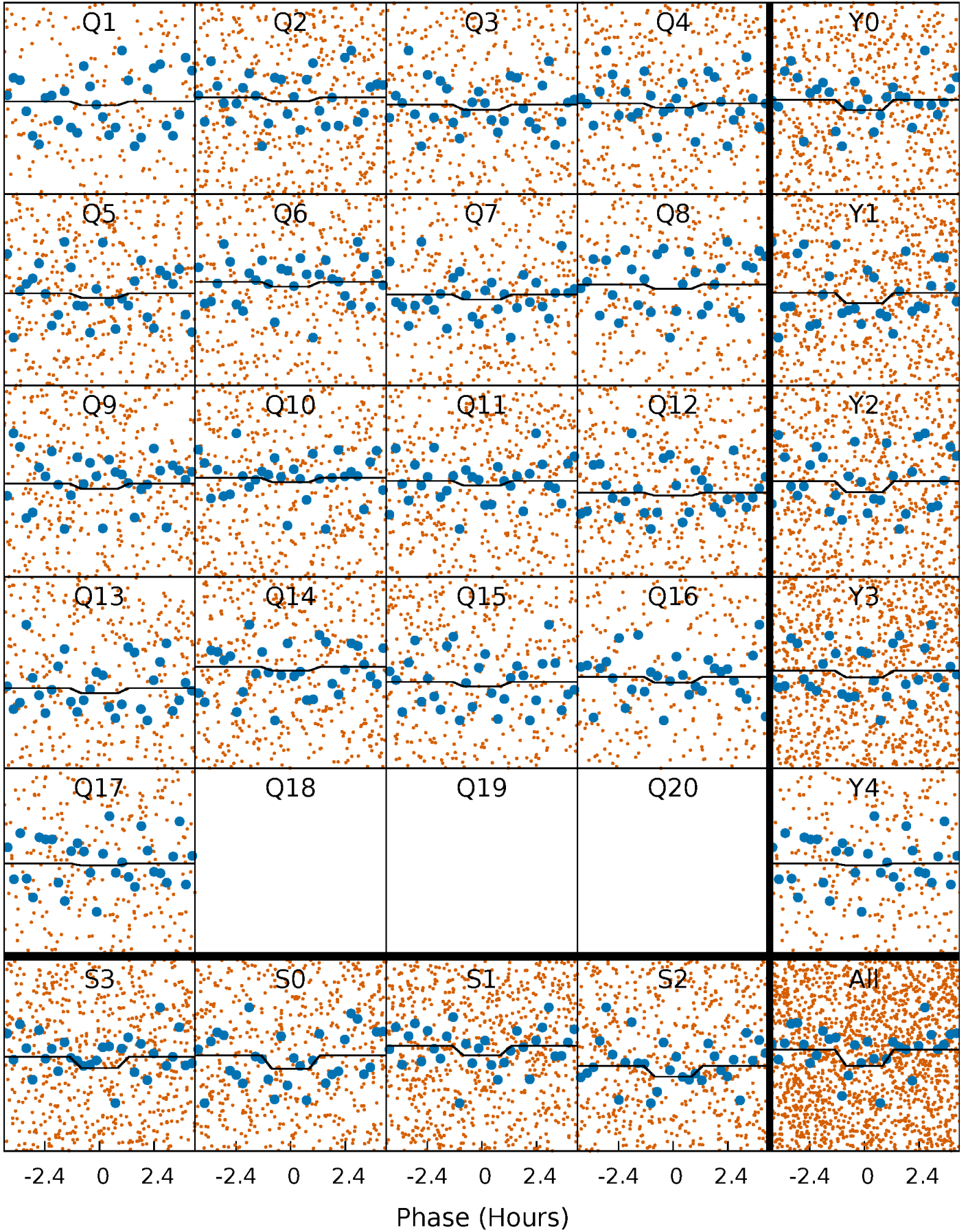
DV Quarter-Phased Transit Curves

TCE 008103917-01 P= 0.990740 Days $T_0=131.637484$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

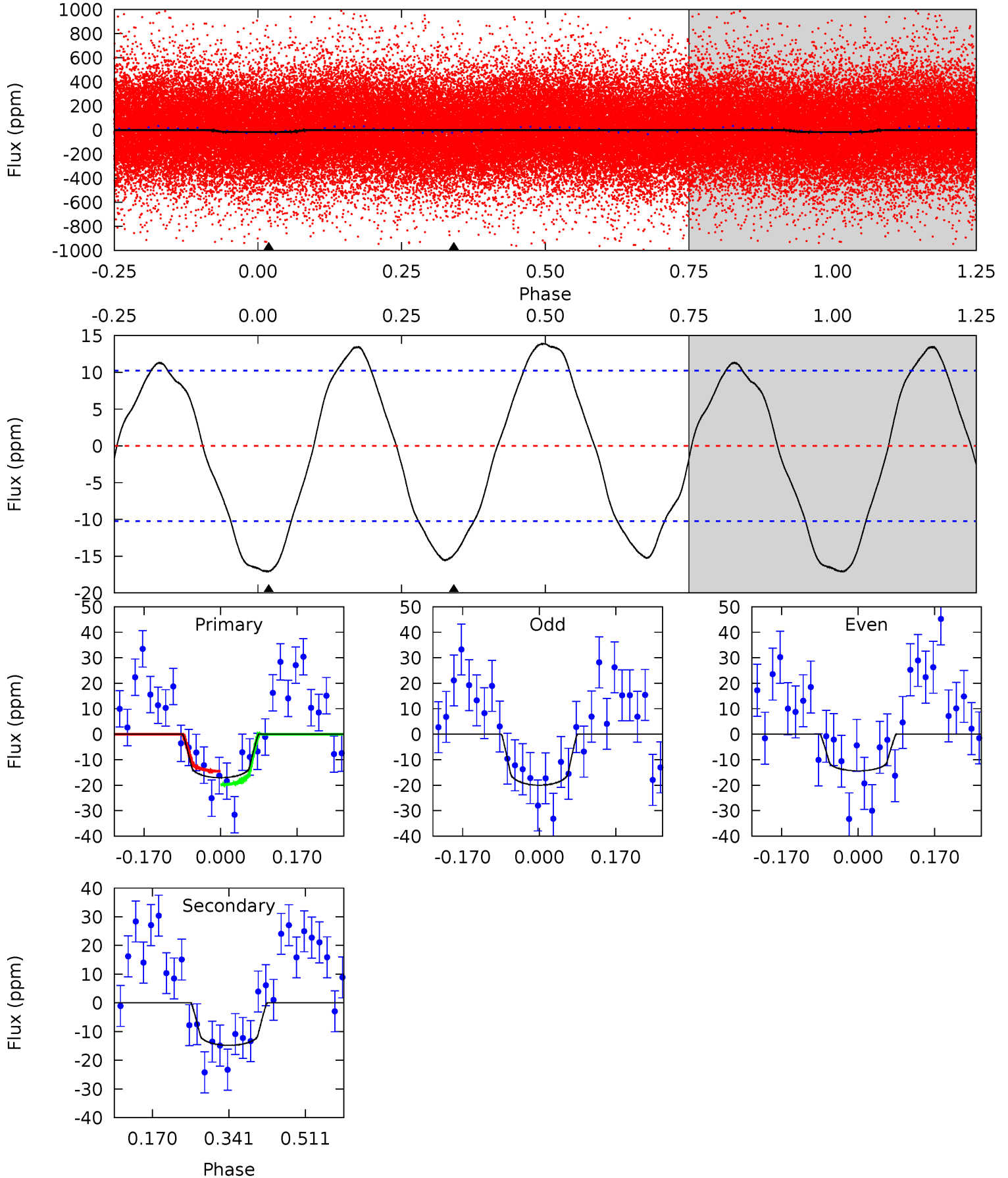
TCE 008103917-01 P= 0.990778 Days $T_0=131.617296$ (BKJD)



DV Model-Shift Uniqueness Test

008103917-01, P = 0.990740 Days, E = 130.646744 Days

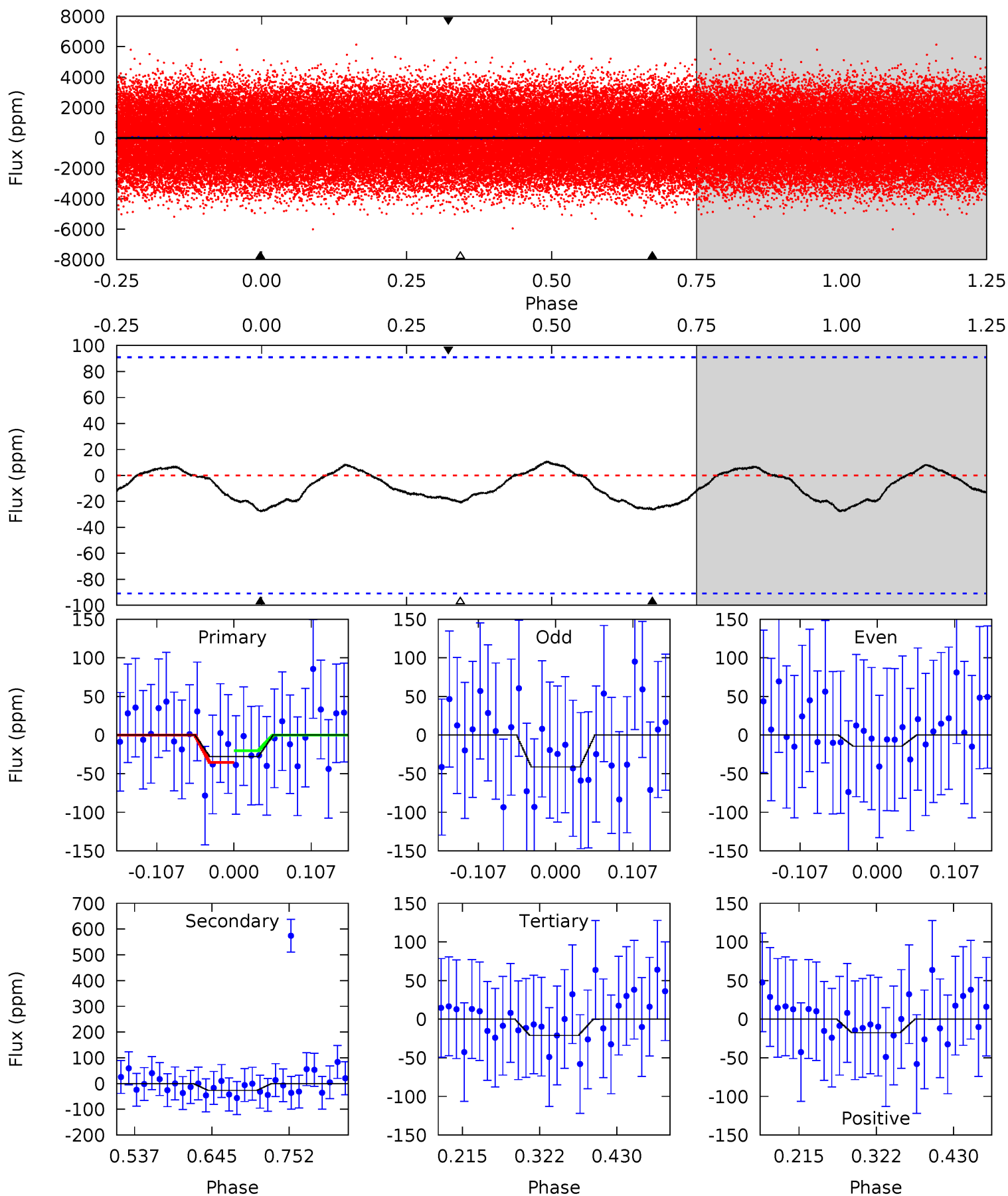
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
7.43	6.44	0	0	4.45	1.37	4.16	7.43	7.43	6.44	6.44	1.22	1.07	0.45	1.15



Alt Model-Shift Uniqueness Test

008103917-01, P = 0.990778 Days, E = 130.626518 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
1.39	1.33	1.05	-0.87	4.55	1.61	0.46	0.34	2.26	0.28	2.21	0.67	0.98	0.28	0.38



Stellar Parameters For KIC 008103917

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	7360^{+203}_{-348}	$4.179^{+0.090}_{-0.195}$	$0.040^{+0.200}_{-0.350}$	$1.687^{+0.581}_{-0.291}$	$1.569^{+0.232}_{-0.211}$	$0.460^{+0.230}_{-0.245}$
	+3%/-5%	+2%/-5%	+500%/-875%	+34%/-17%	+15%/-13%	+50%/-53%
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 008103917-01 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	-15 ± 2	$1.00^{+0.47}_{-0.43}$	3955^{+305}_{-250}	6021^{+2575}_{-1031}	$4.121^{+9.340}_{-2.177}$
Alt.	-27 ± 20	$0.99^{+0.43}_{-0.42}$	3947^{+301}_{-238}	7144^{+2946}_{-2356}	$7.160^{+13.532}_{-5.653}$

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 $A_{obs} \gg 1.0$

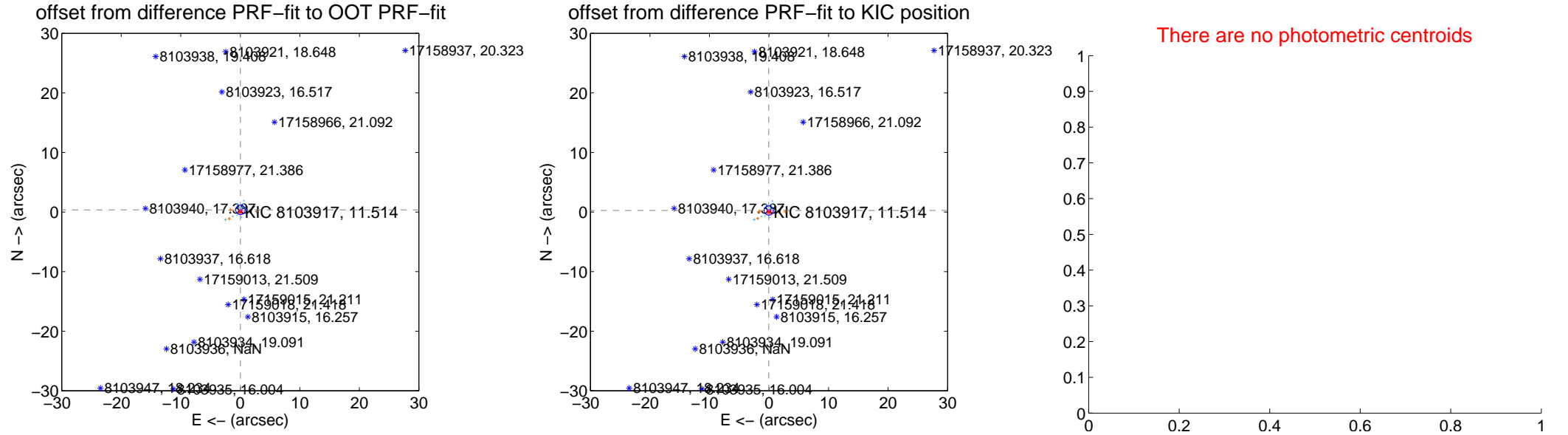
DV Centroid Data

Supplemental centroid analysis for 008103917-01. **Kepler magnitude: 11.51.** Transit SNR 10.28

There are 11 quarters with good PRF difference image offsets

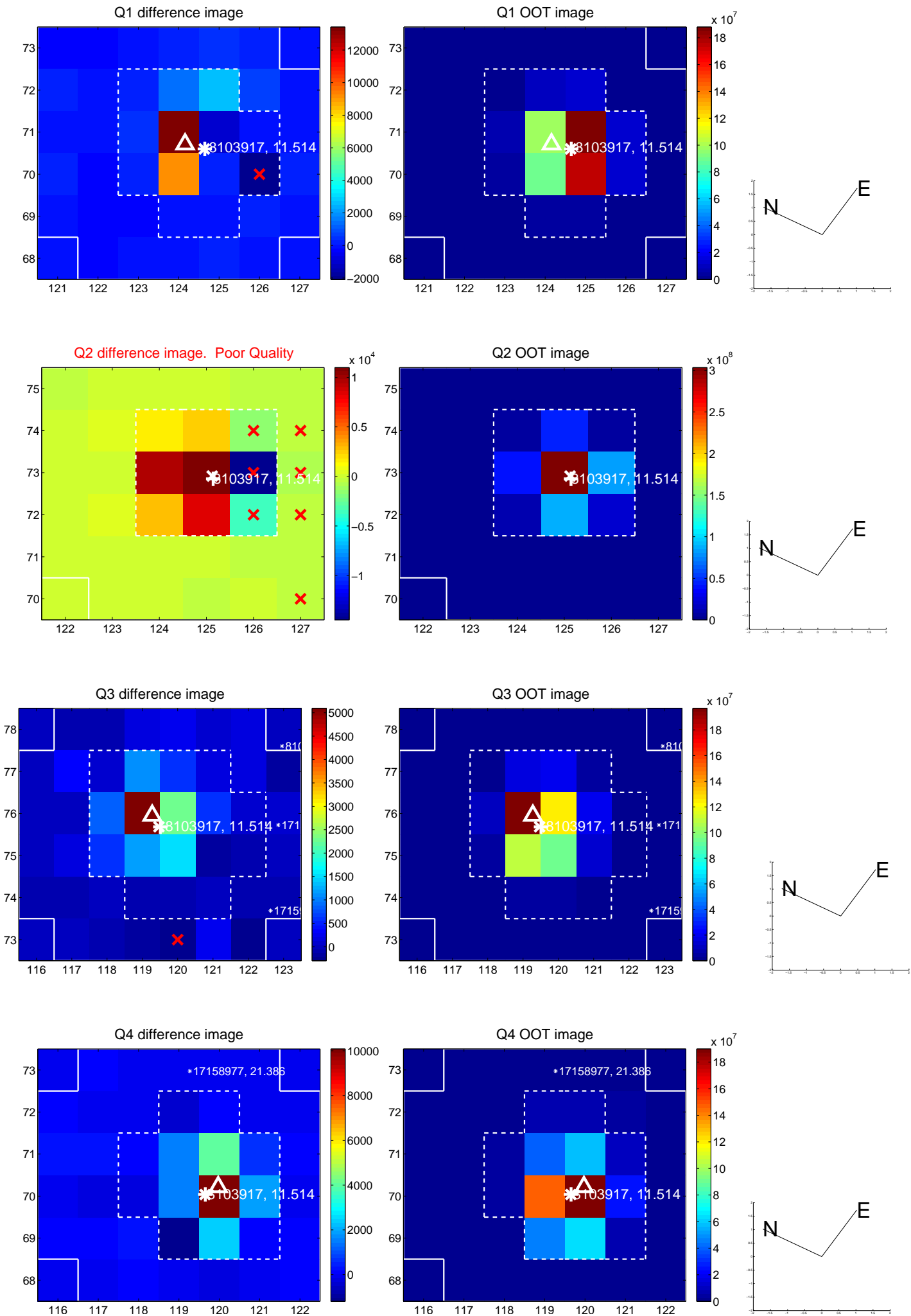
The direct PRF centroid is offset from the target star catalog position by about 0.07 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.365 ± 0.264	1.38	-0.023 ± 0.284	0.364 ± 0.264
PRF-fit source offset from KIC position	0.262 ± 0.260	1.01	0.045 ± 0.291	0.258 ± 0.259
photometric centroid source offset	—	—	—	—

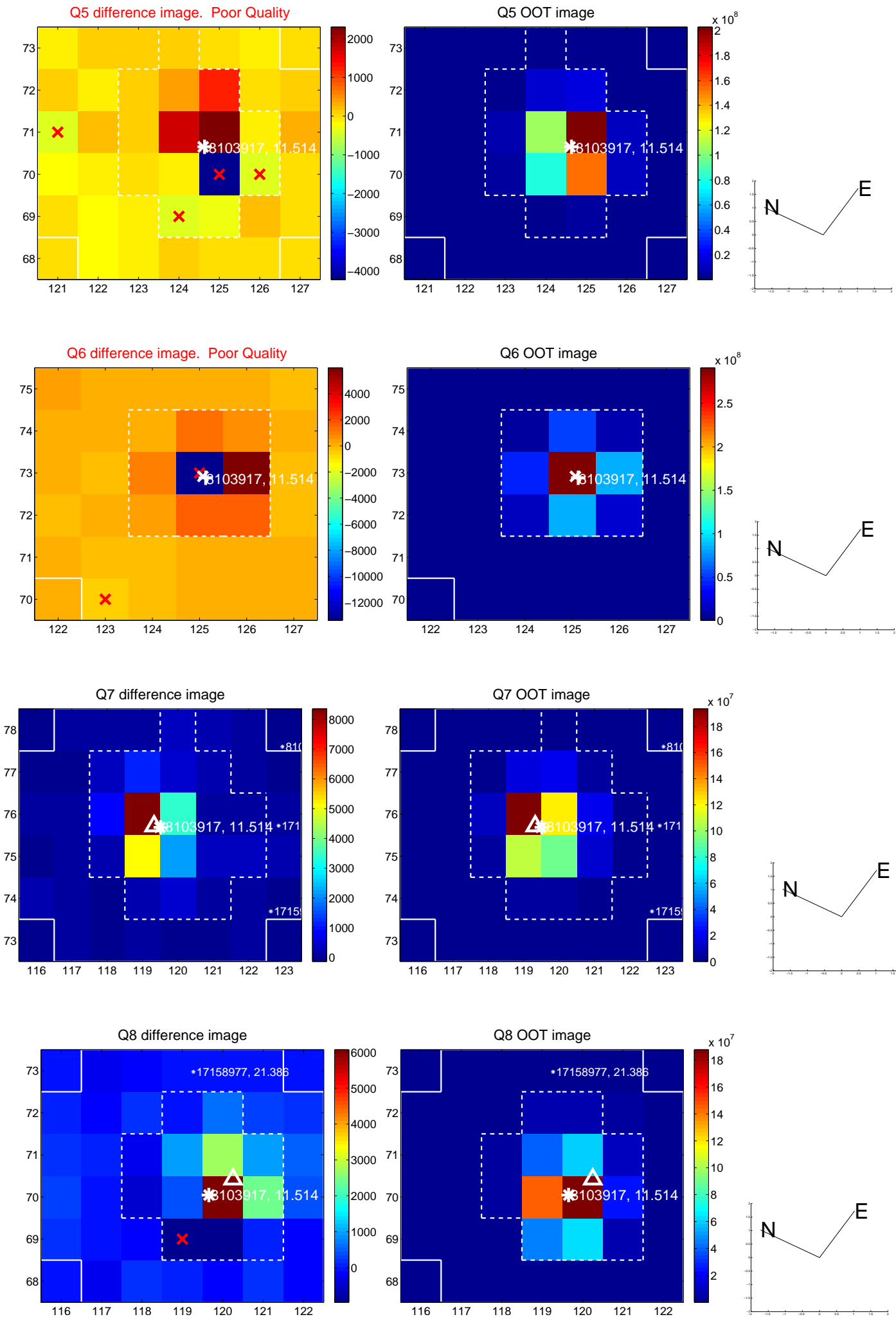


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets;** magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

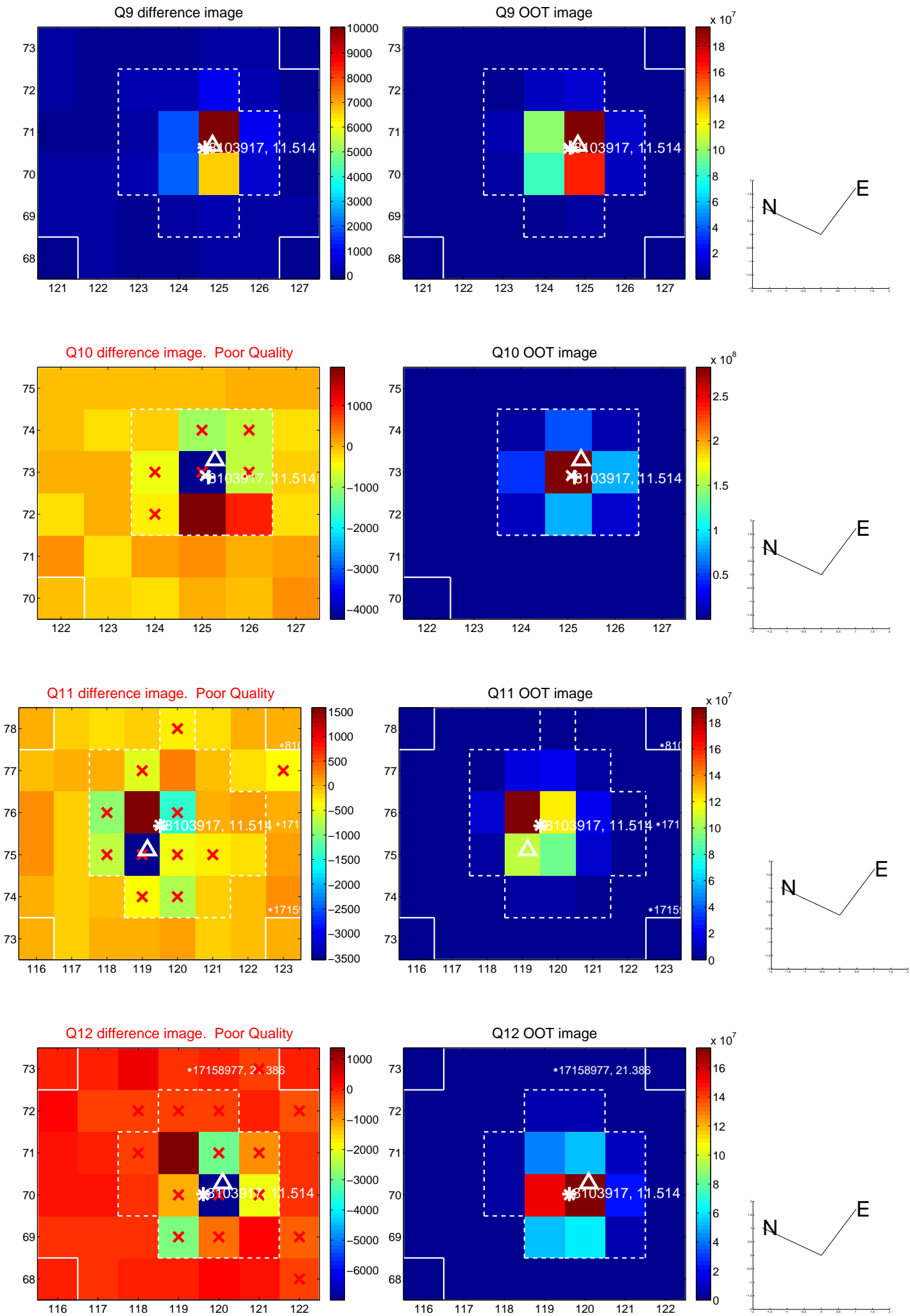
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



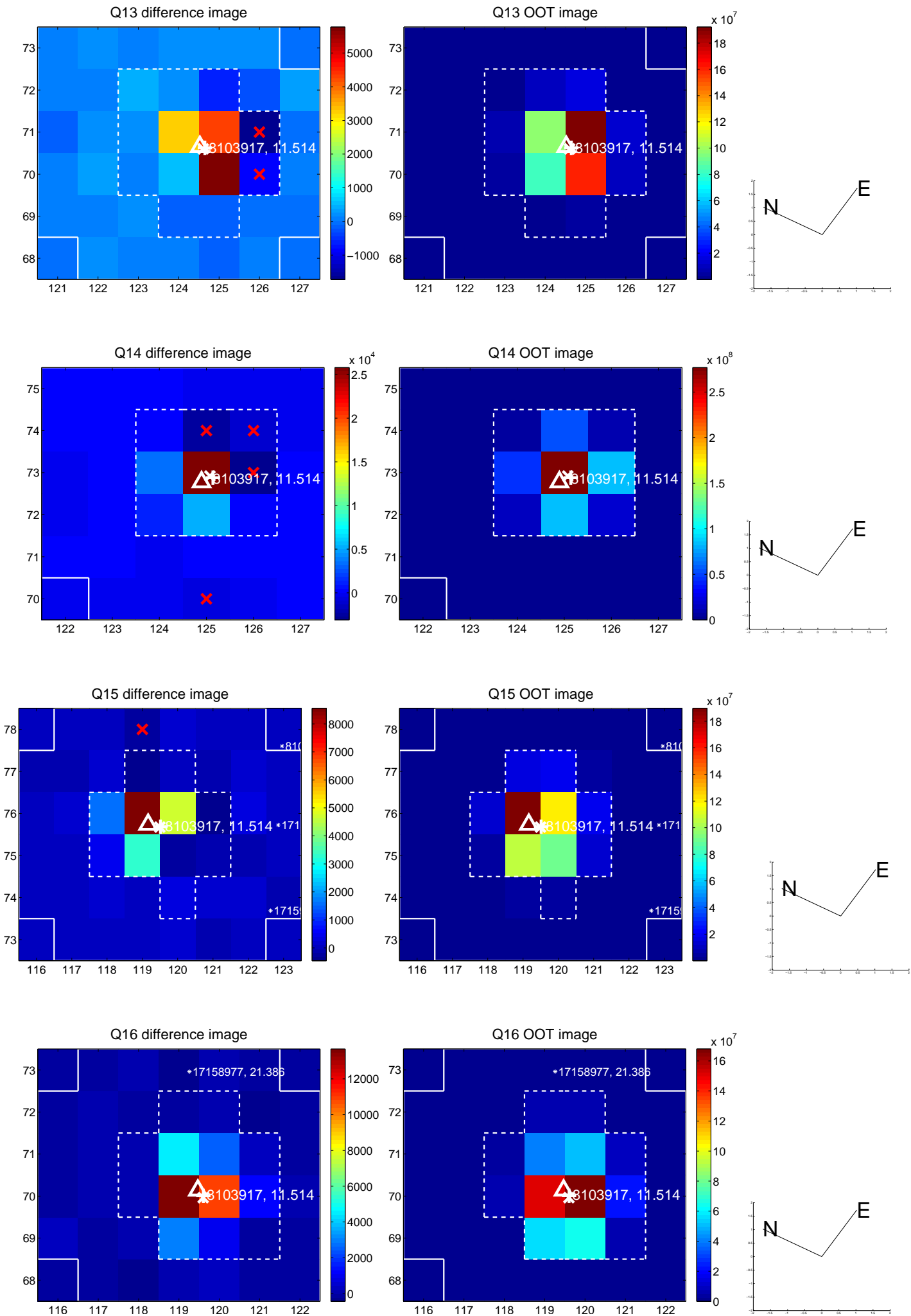
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



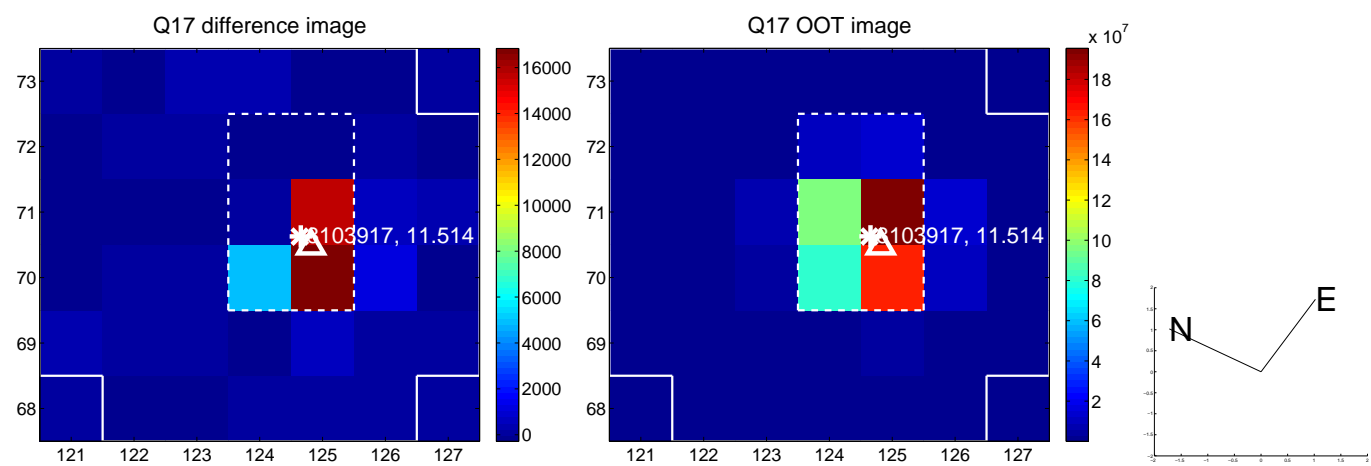
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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



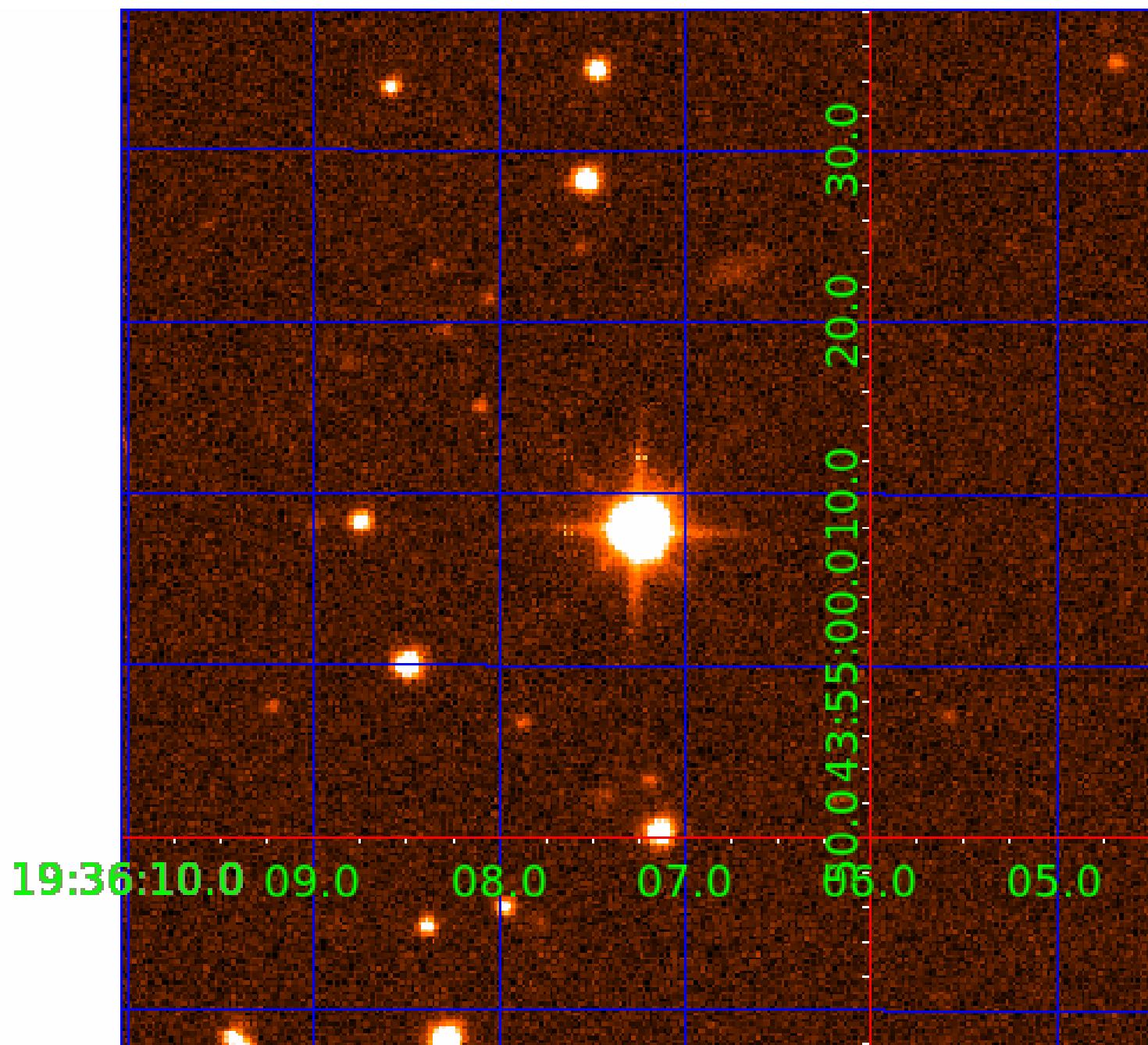
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



folded centroid time series figure for this object.

UKIRT Image

Declination



KIC 008103917

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})
008103917-01	OBS	No	0.990740	131.637484	24.4	3.606	12.2	10.3	1.69	7360	0.96	14651.07
008103917-02	OBS	No	0.660500	131.623439	23.8	3.347	8.4	9.3	1.69	7360	0.97	25156.60
008103917-03	OBS	No	2.970643	132.314714	48.7	7.500	10.1	-1.0	1.69	7360	1.19	3388.56

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
008103917-01	OBS	FP	0.00	1	0	0	0	LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT
008103917-02	OBS	FP	0.00	1	0	0	0	LPP_DV—LPP_ALT
008103917-03	OBS	FP	0.00	1	0	1	0	INDIV_TRANS_RUBBLE_SKYE_ZUMA—TRANS_GAPPED—LPP_DV—LPP_ALT—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—CENT_NOFITS—HALO_GHOST

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

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

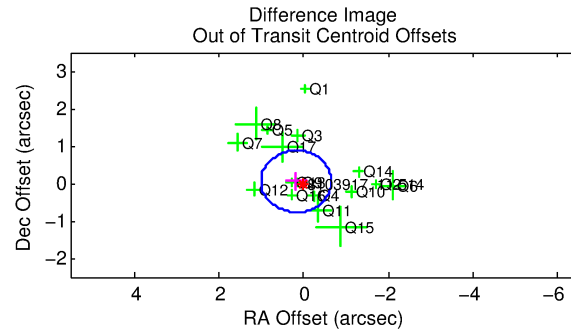
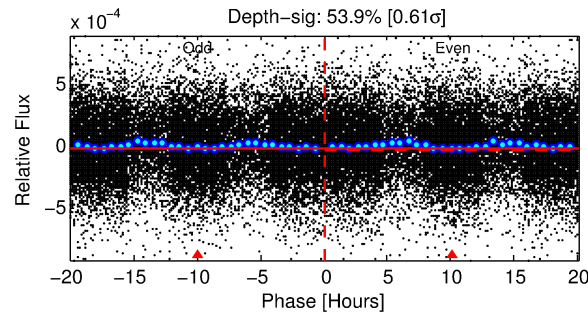
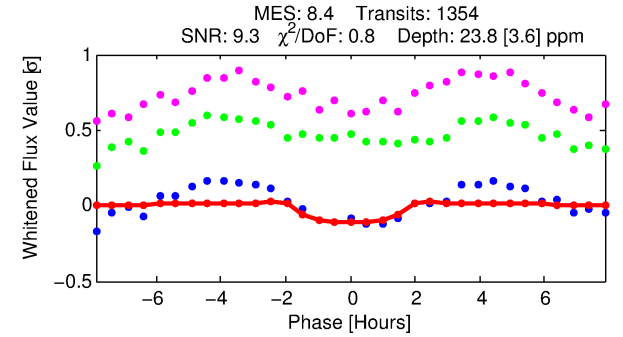
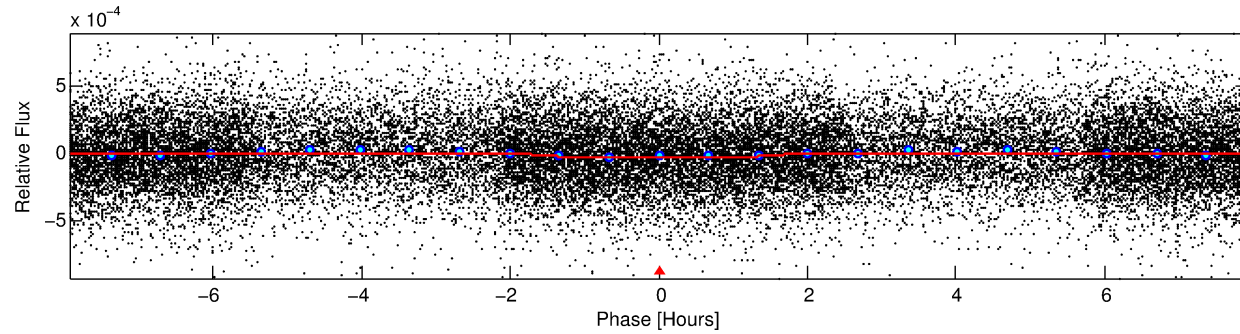
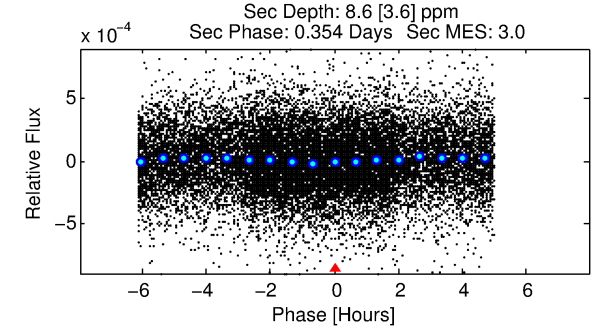
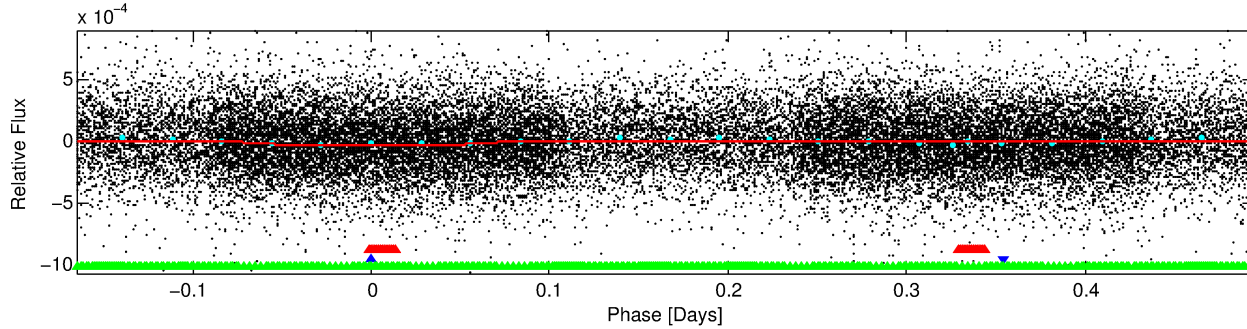
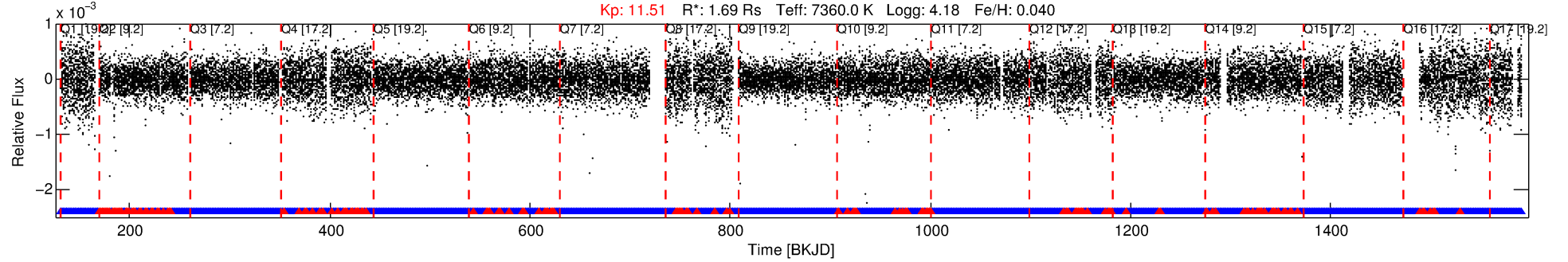
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 008103917-02

No Significant Match Found

DV One-Page Summary

KIC: 8103917 Candidate: 2 of 3 Period: 0.661 d



DV Fit Results:

Period = 0.66050 [0.00001] d
Epoch = 131.6234 [0.0041] BKJD
Rp/R* = 0.0053 [0.0027]
a/R* = 1.13 [0.79]
b = 0.92 [0.54]
Seff = 25156.60 [10616.20]
Teff = 3211 [339] K
Rp = 0.97 [0.60] Re
a = 0.0172 [0.0047] AU
Ag = 1.49 [1.73] [0.28 σ]
Teffp = 5486 [1526] K [1.45 σ]

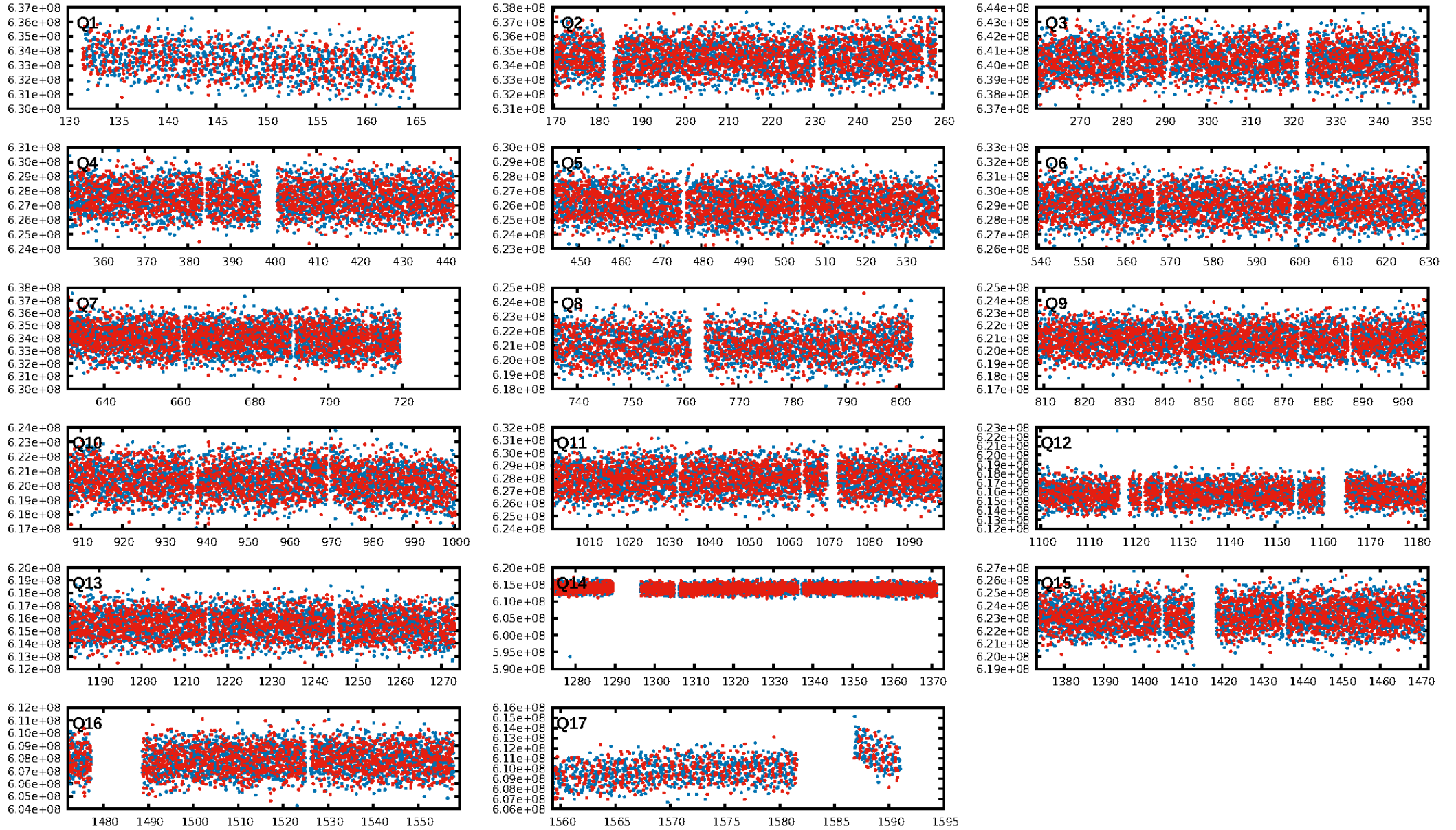
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: 89.3% [1.61 σ]
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: 1.85e-11
RollingBand-fgt: 0.87 [1131/1293]
GhostDiagnostic-chr: 3.778
Centroid-sig: N/A
Centroid-so: N/A
OotOffset-rm: 0.180 arcsec [0.65 σ]
KicOffset-rm: 0.257 arcsec [1.21 σ]
OotOffset-st: 4/4/4/5 [17]
KicOffset-st: 4/4/4/5 [17]
DiffImageQuality-fgm: 0.94 [16/17]
DiffImageOverlap-fno: 0.00 [0/17]

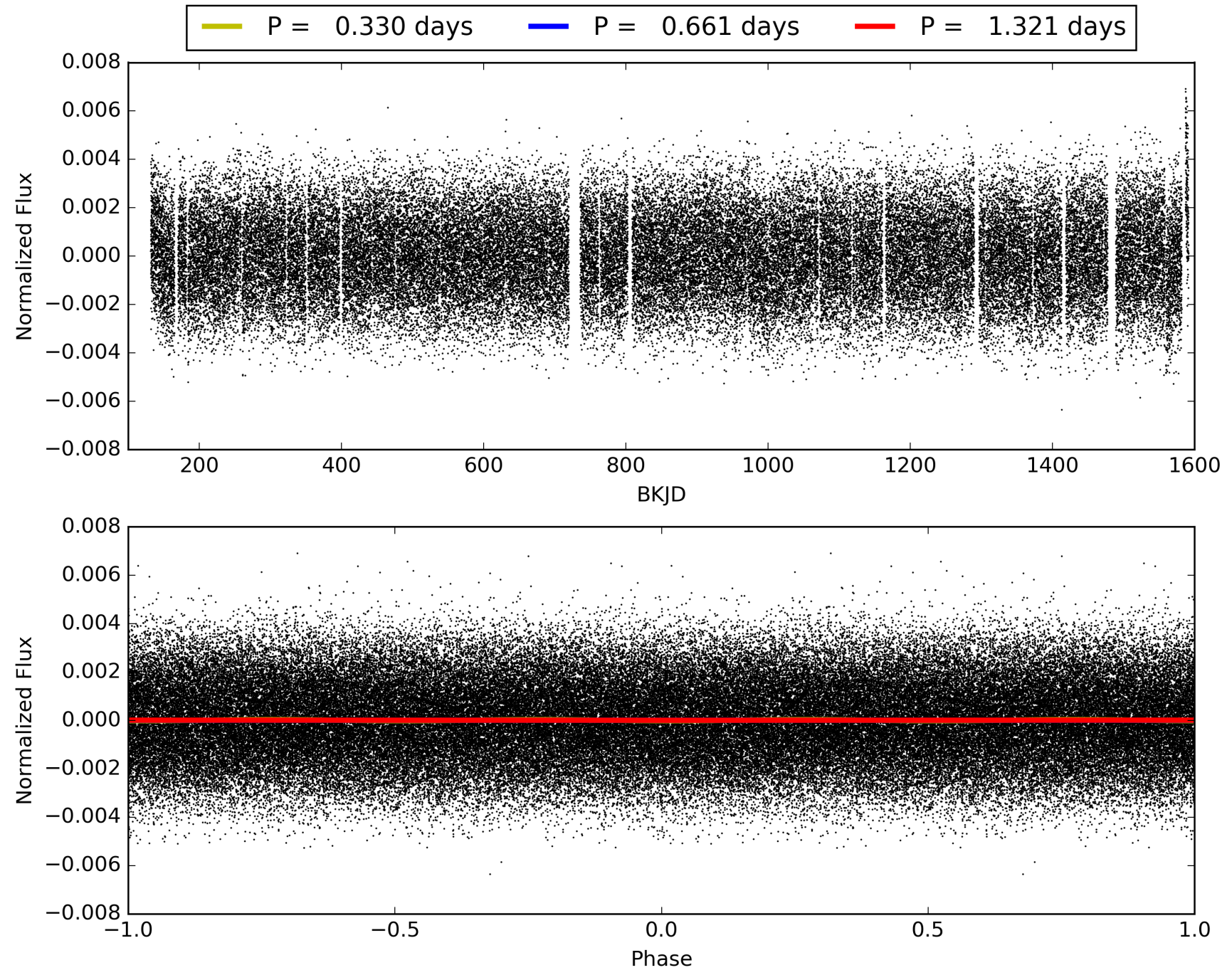
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 30-Jan-2016 02:19:38 Z

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

TCE 008103917-02, PDC Light Curves

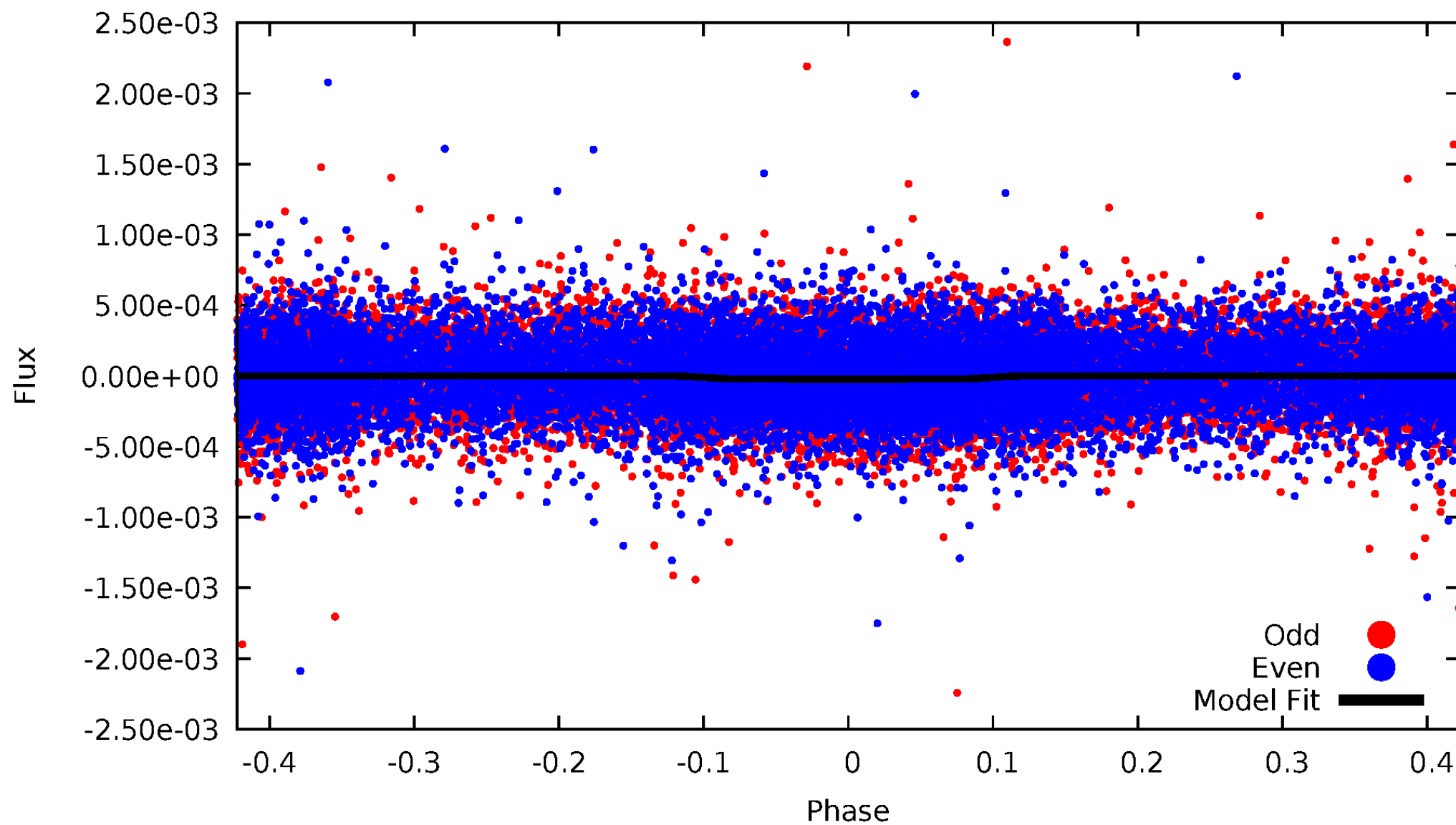


TCE 008103917-02



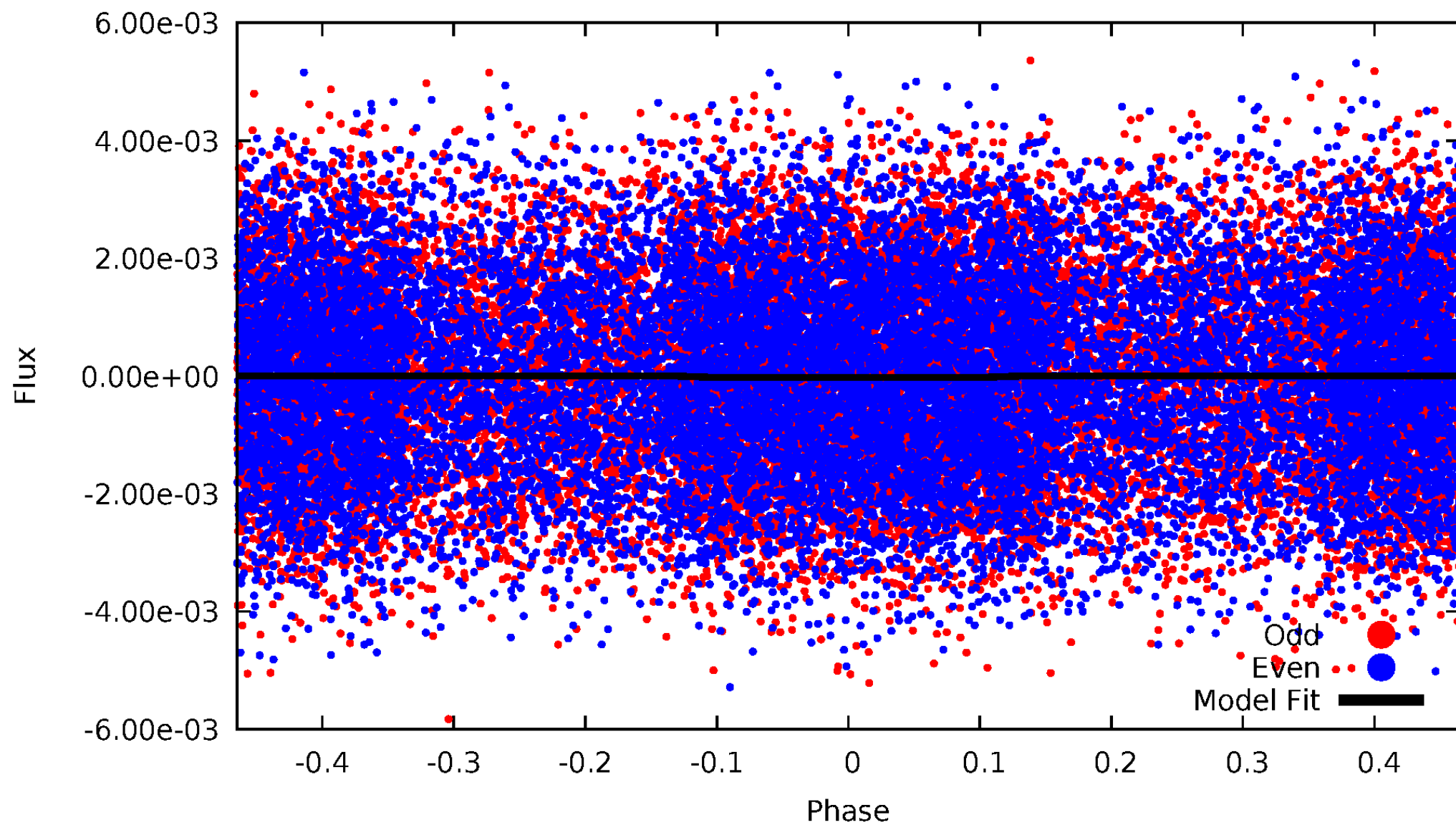
DV Odd/Even

TCE 008103917-02



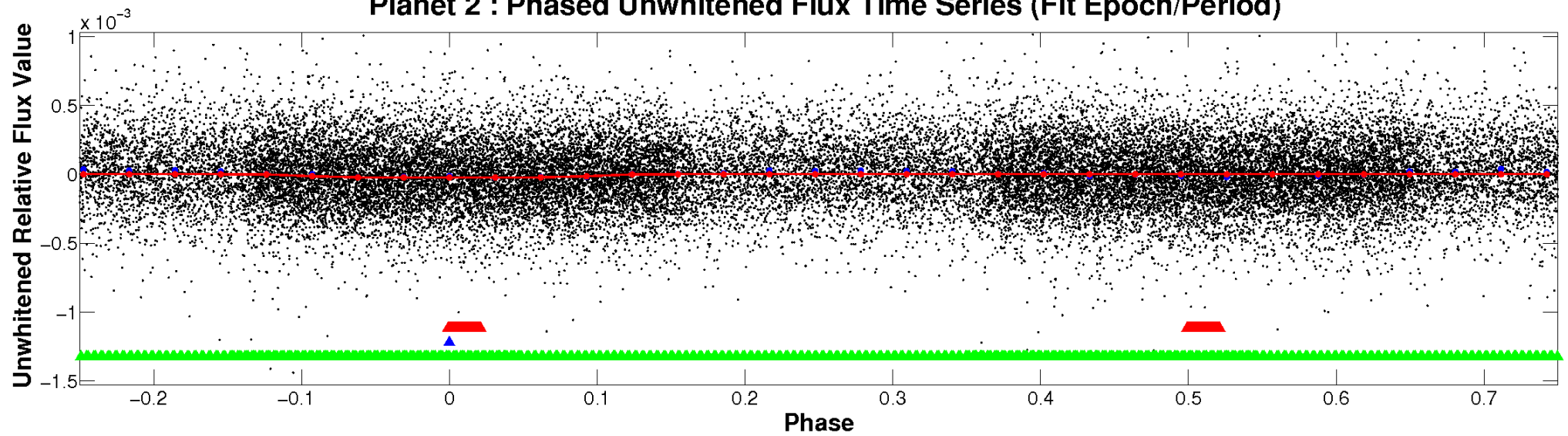
ALT Odd/Even

TCE 008103917-02

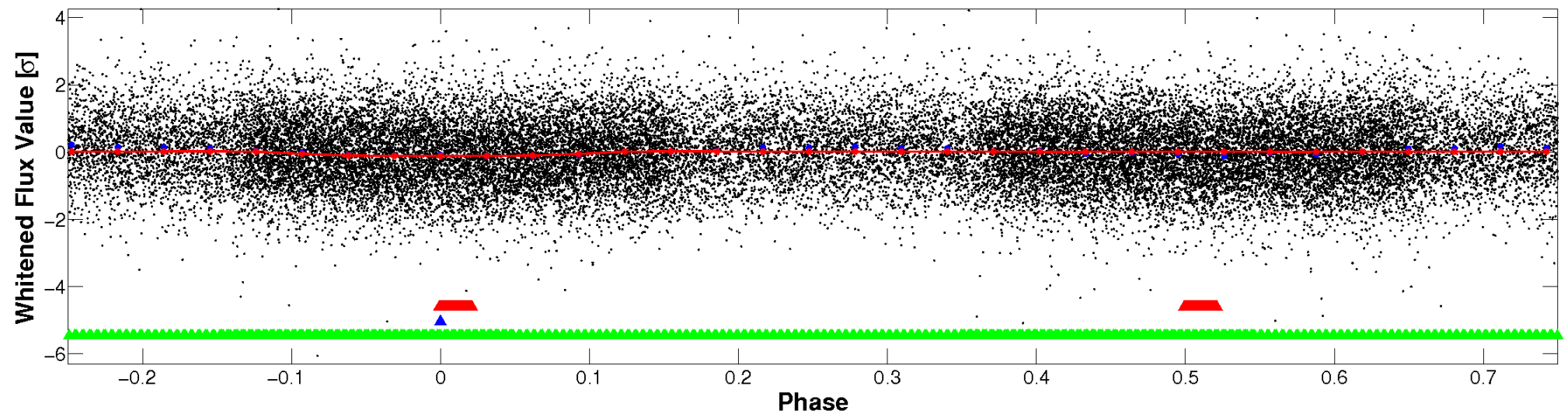


Non-Whitened Vs. Whitened Light Curve

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

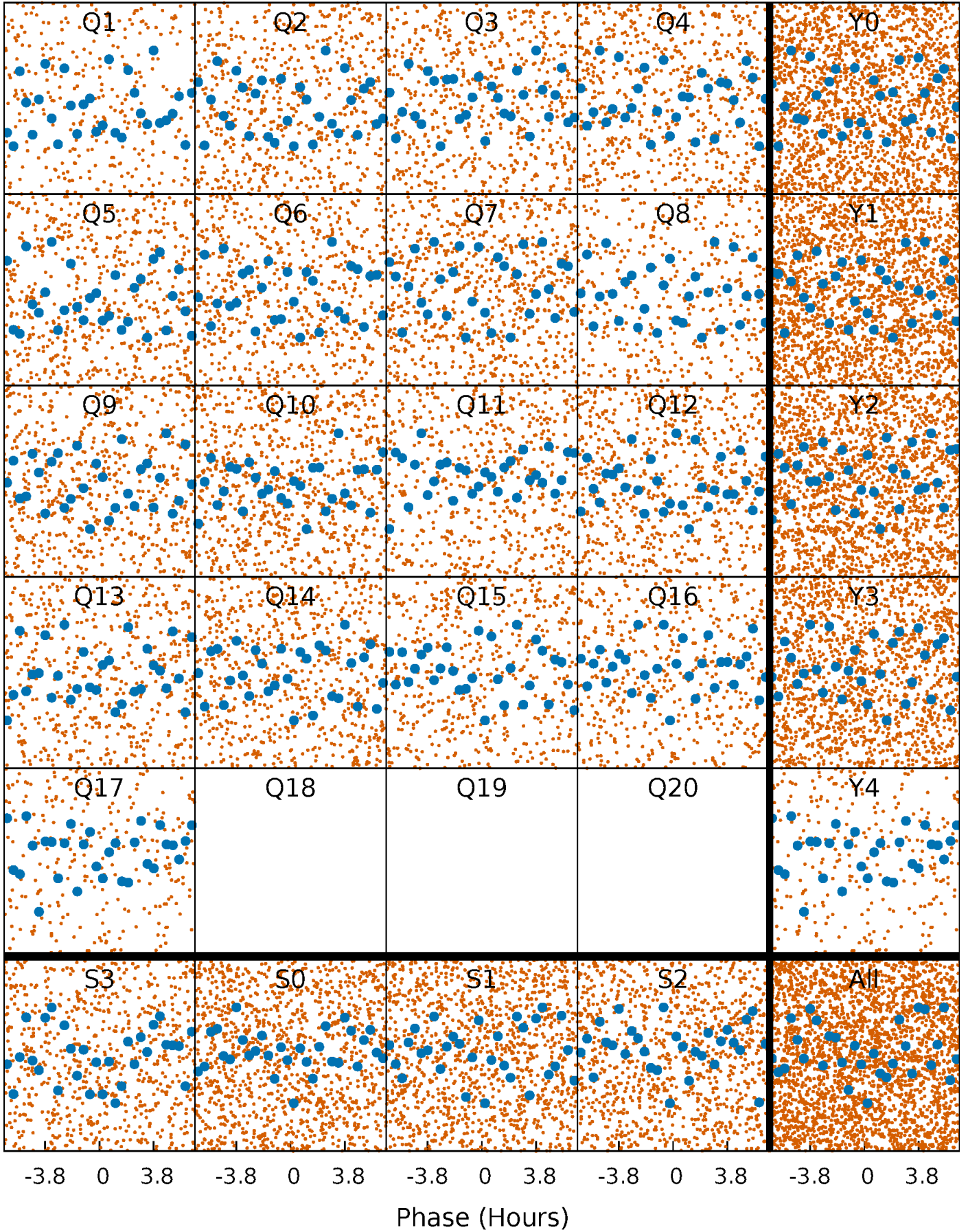


Planet 2 : Phased Whitened Flux Time Series (Fit Epoch/Period)



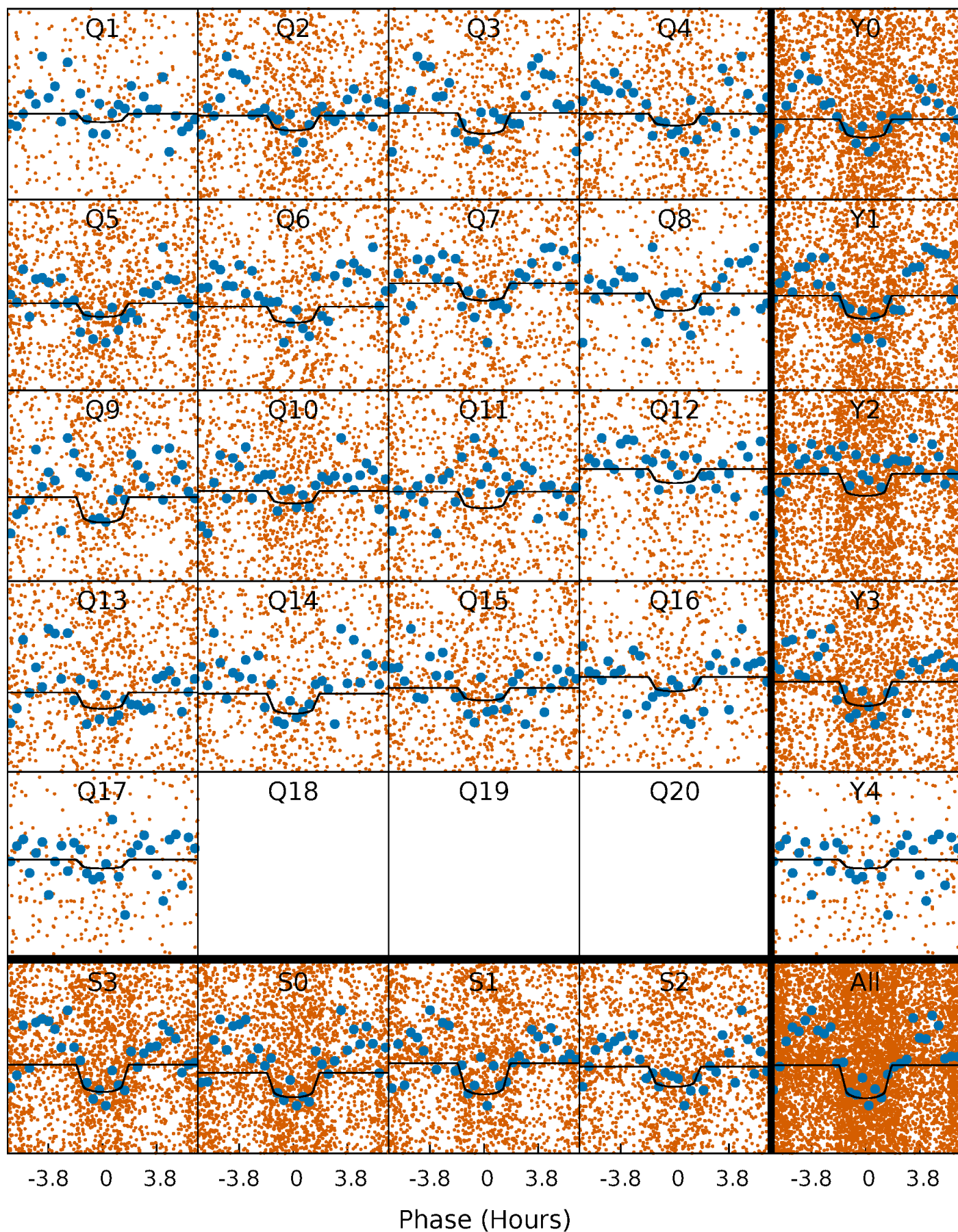
PDC Quarter-Phased Transit Curves

TCE 008103917-02 P= 0.660500 Days $T_0=131.623439$ (BKJD)



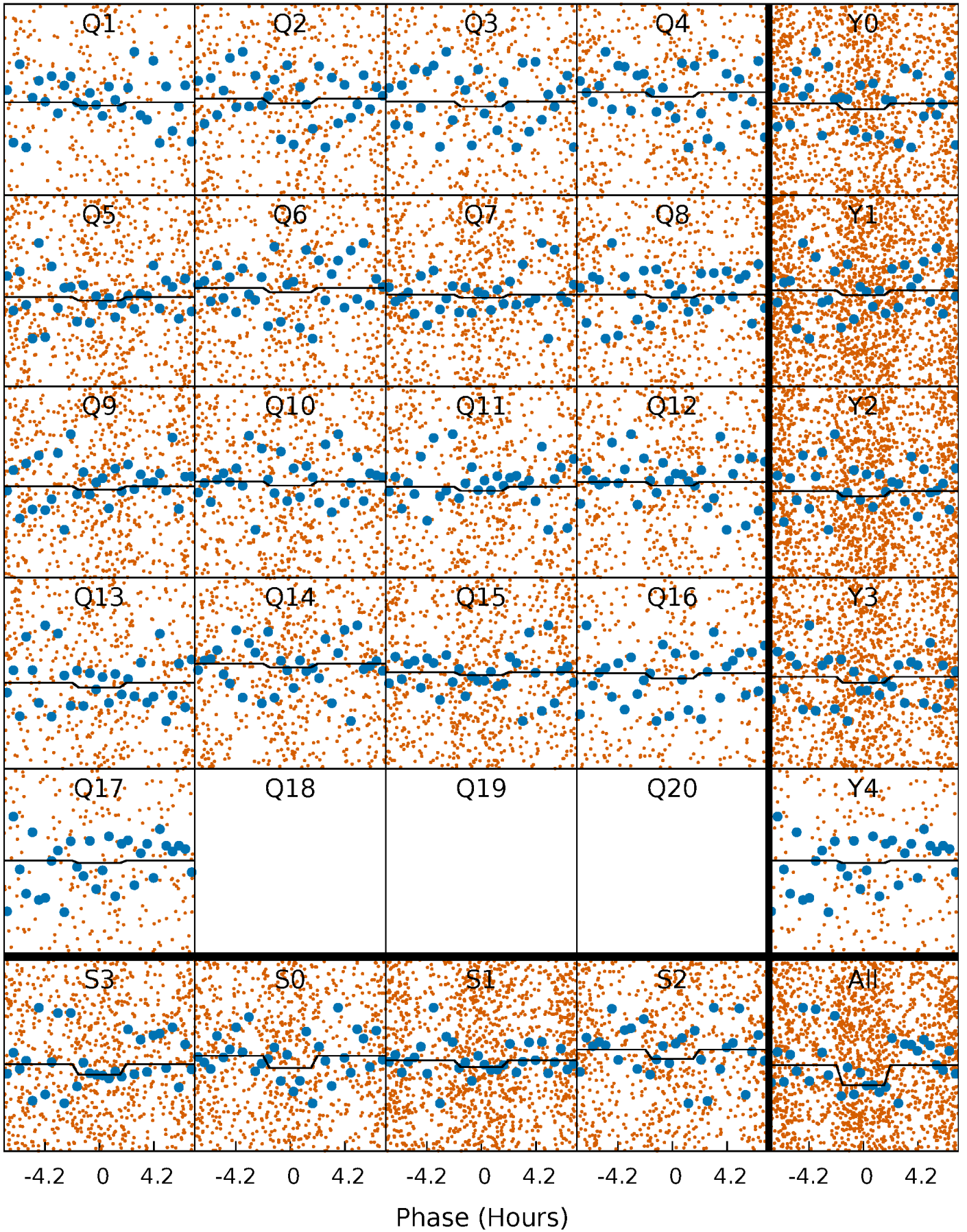
DV Quarter-Phased Transit Curves

TCE 008103917-02 P= 0.660500 Days $T_0=131.623439$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

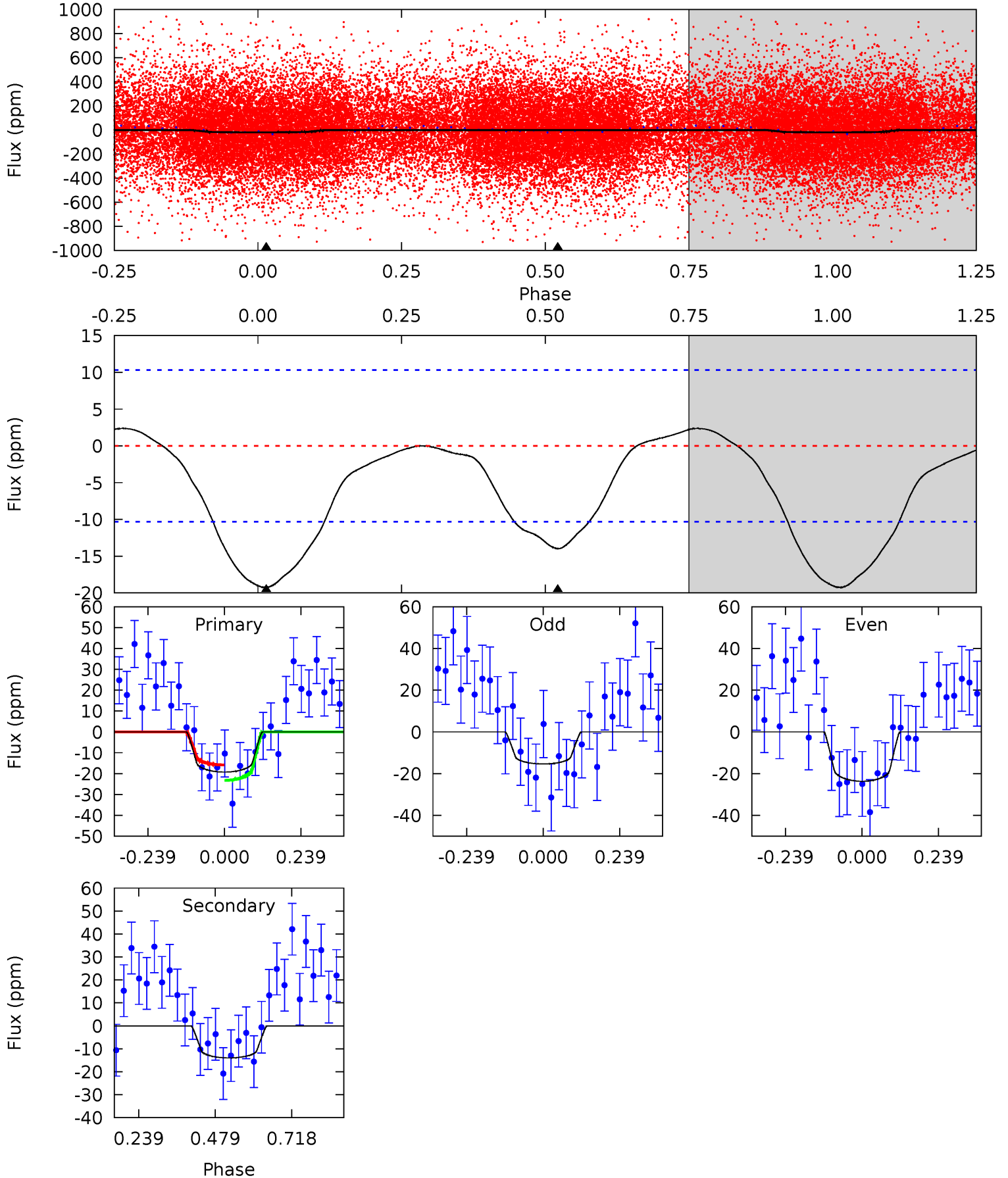
TCE 008103917-02 P= 0.660503 Days $T_0=131.619681$ (BKJD)



DV Model-Shift Uniqueness Test

008103917-02, P = 0.660500 Days, E = 131.623439 Days

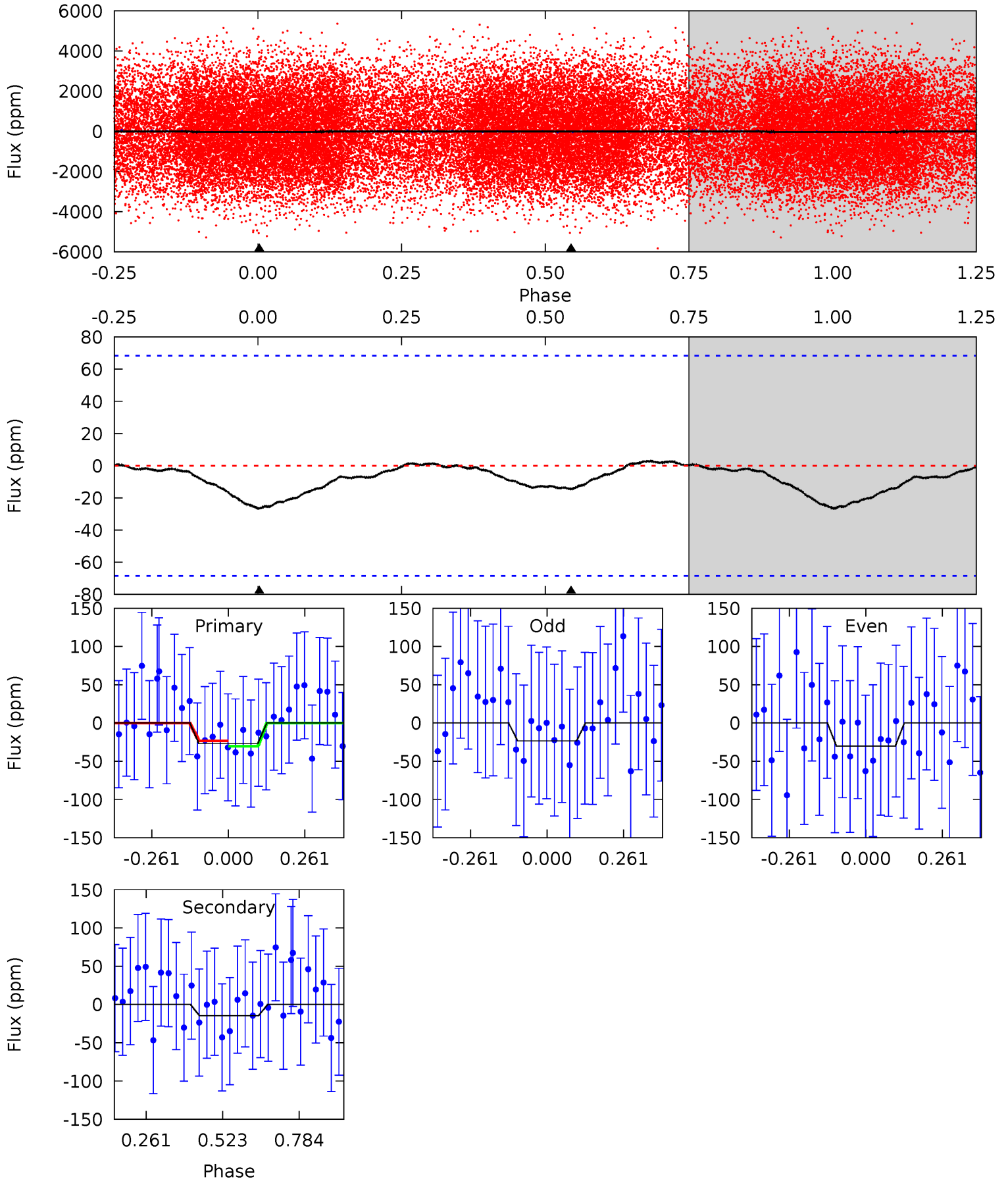
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
8.18	5.94	0	0	4.38	1.18	0.55	8.18	8.18	5.94	5.94	1.78	1.04	0.11	1.59



Alt Model-Shift Uniqueness Test

008103917-02, P = 0.660503 Days, E = 131.619681 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
1.71	0.94	0	0	4.36	1.12	0.10	1.71	1.71	0.94	0.94	0.22	1.27	0.11	0.22



Stellar Parameters For KIC 008103917

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	7360^{+203}_{-348}	$4.179^{+0.090}_{-0.195}$	$0.040^{+0.200}_{-0.350}$	$1.687^{+0.581}_{-0.291}$	$1.569^{+0.232}_{-0.211}$	$0.460^{+0.230}_{-0.245}$
	+3%/-5%	+2%/-5%	+500%/-875%	+34%/-17%	+15%/-13%	+50%/-53%
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 008103917-02 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	-14 ± 2	$1.02^{+0.54}_{-0.49}$	4518^{+359}_{-270}	5798^{+2943}_{-1262}	$2.173^{+6.293}_{-1.268}$
Alt.	-15 ± 16	$0.99^{+0.56}_{-0.51}$	4525^{+339}_{-279}	5752^{+3549}_{-10060}	$2.016^{+8.282}_{-2.197}$

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 $A_{obs} \gg 1.0$

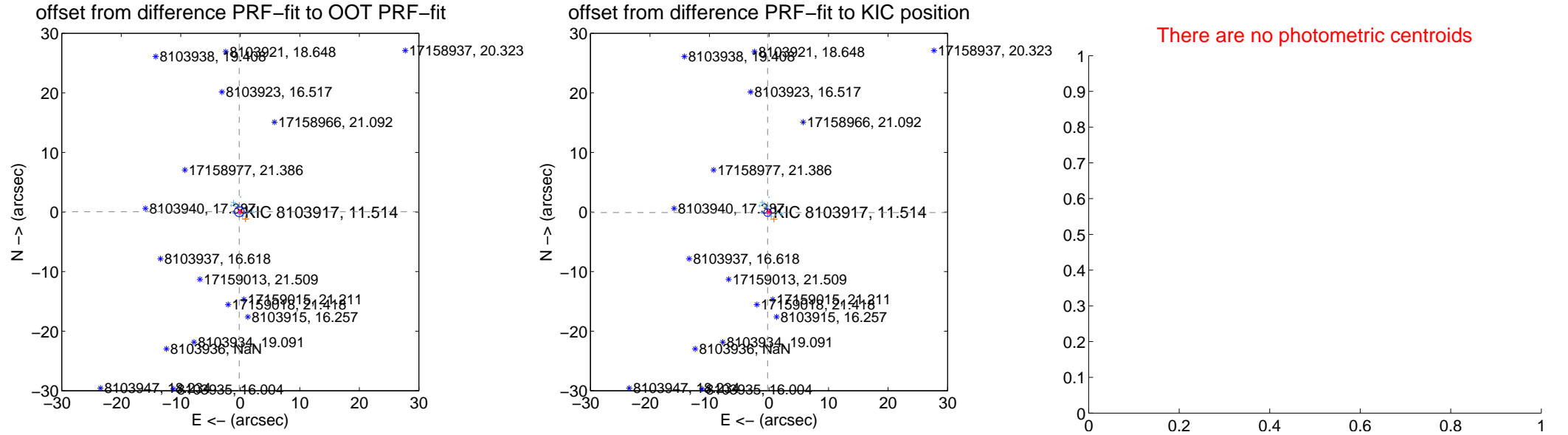
DV Centroid Data

Supplemental centroid analysis for 008103917-02. **Kepler magnitude: 11.51.** Transit SNR 9.33

There are 16 quarters with good PRF difference image offsets

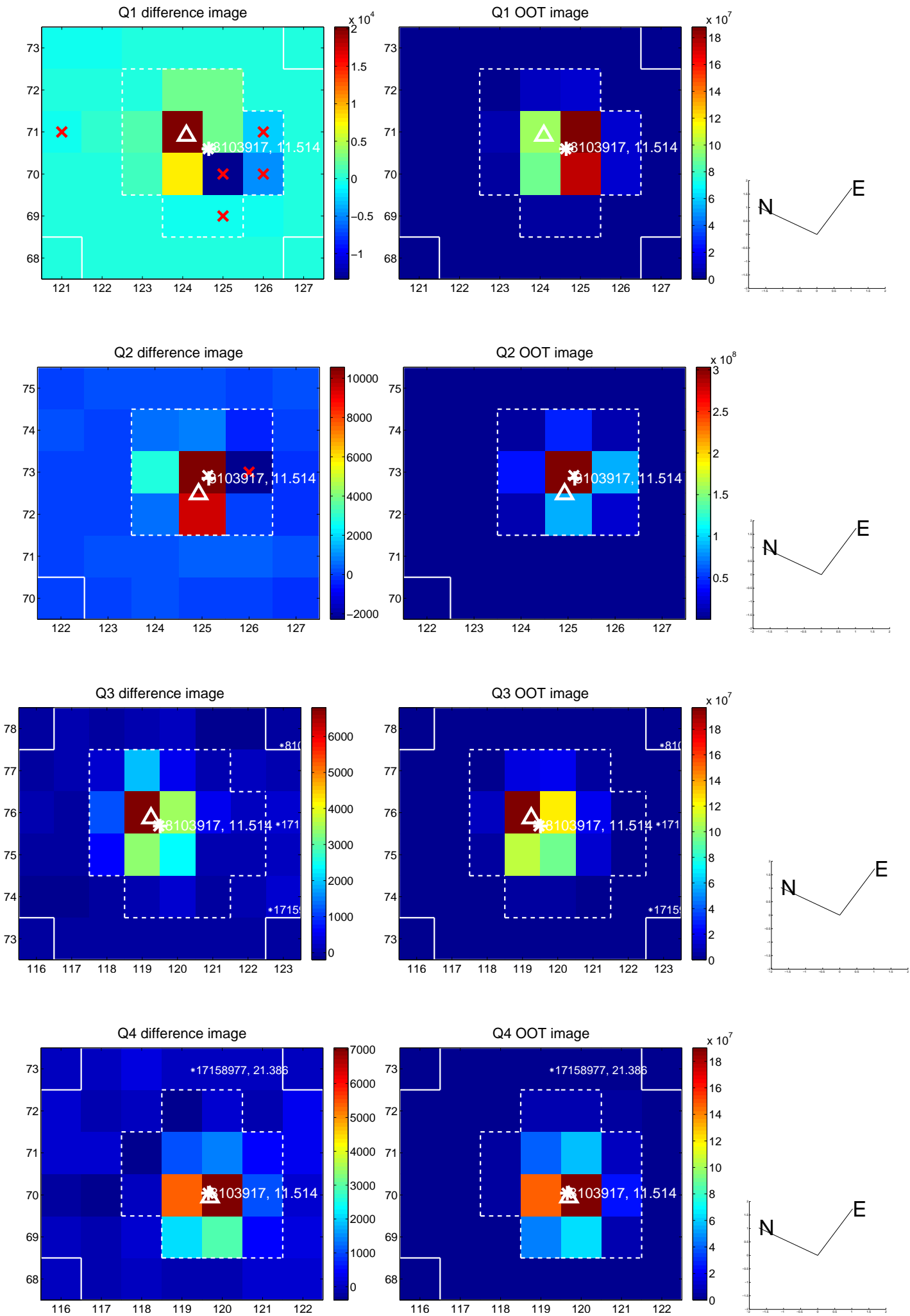
The direct PRF centroid is offset from the target star catalog position by about 0.07 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.180 ± 0.275	0.65	0.172 ± 0.248	0.052 ± 0.233
PRF-fit source offset from KIC position	0.257 ± 0.213	1.21	0.238 ± 0.256	-0.096 ± 0.249
photometric centroid source offset	—	—	—	—

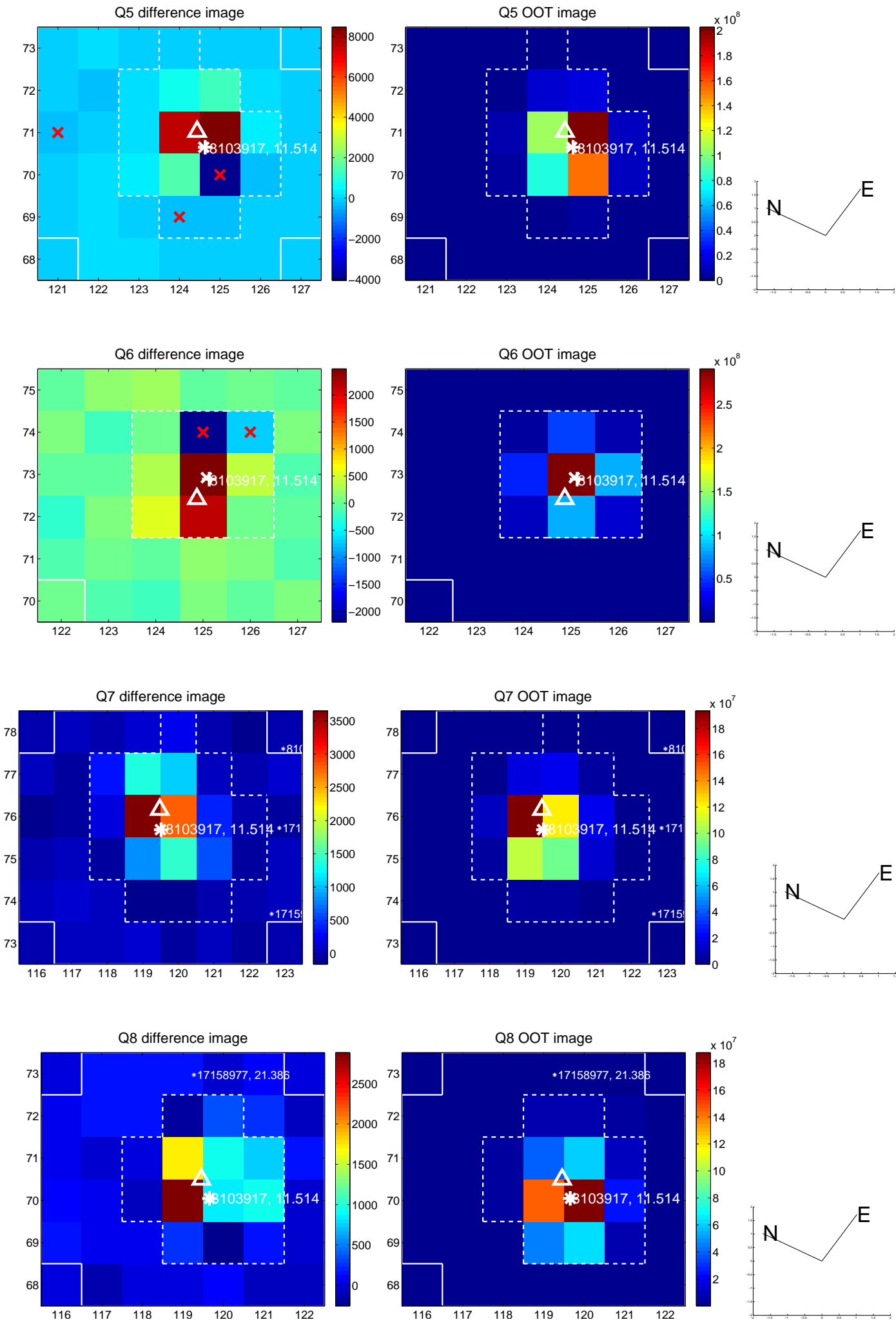


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets;** magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

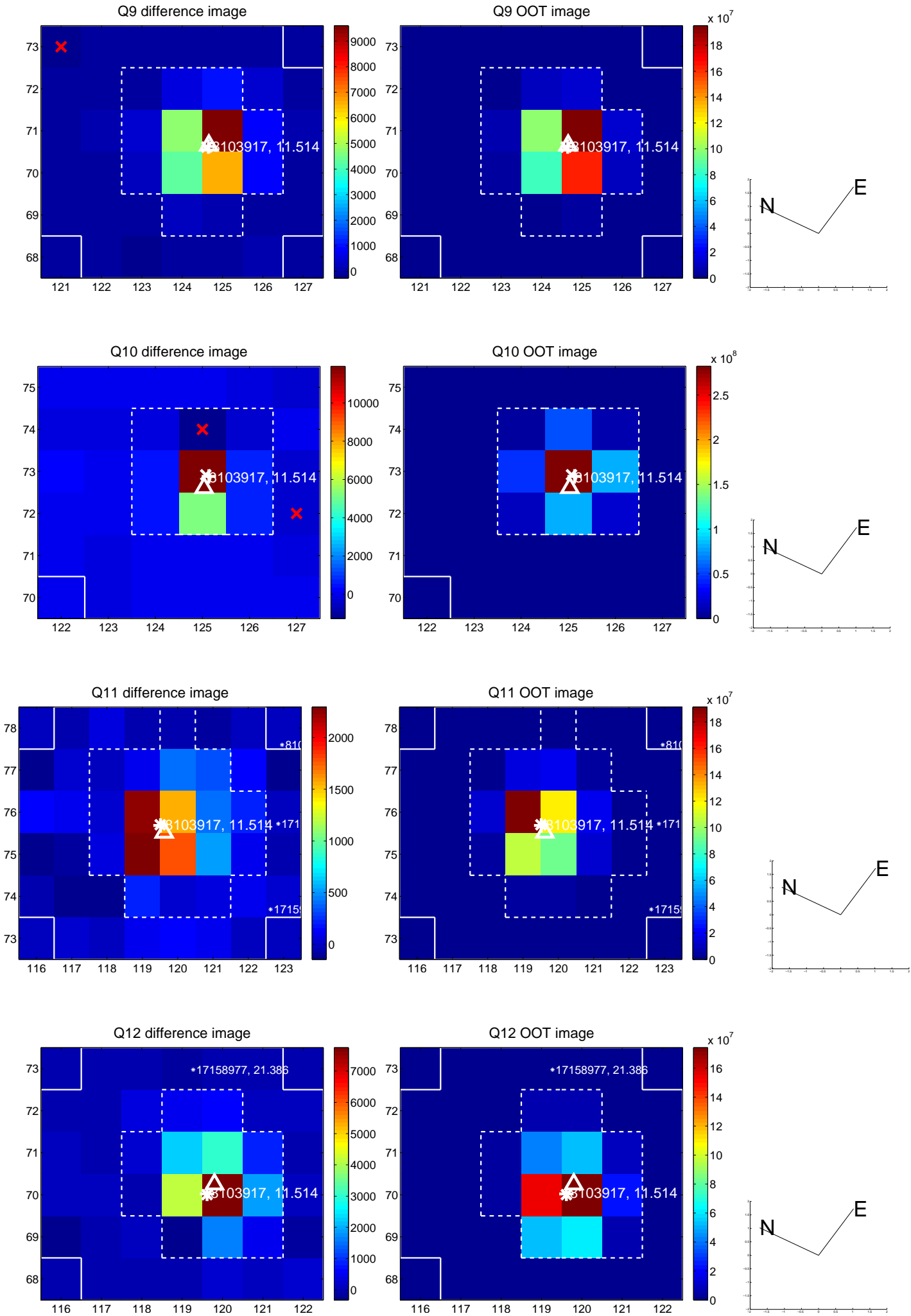
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



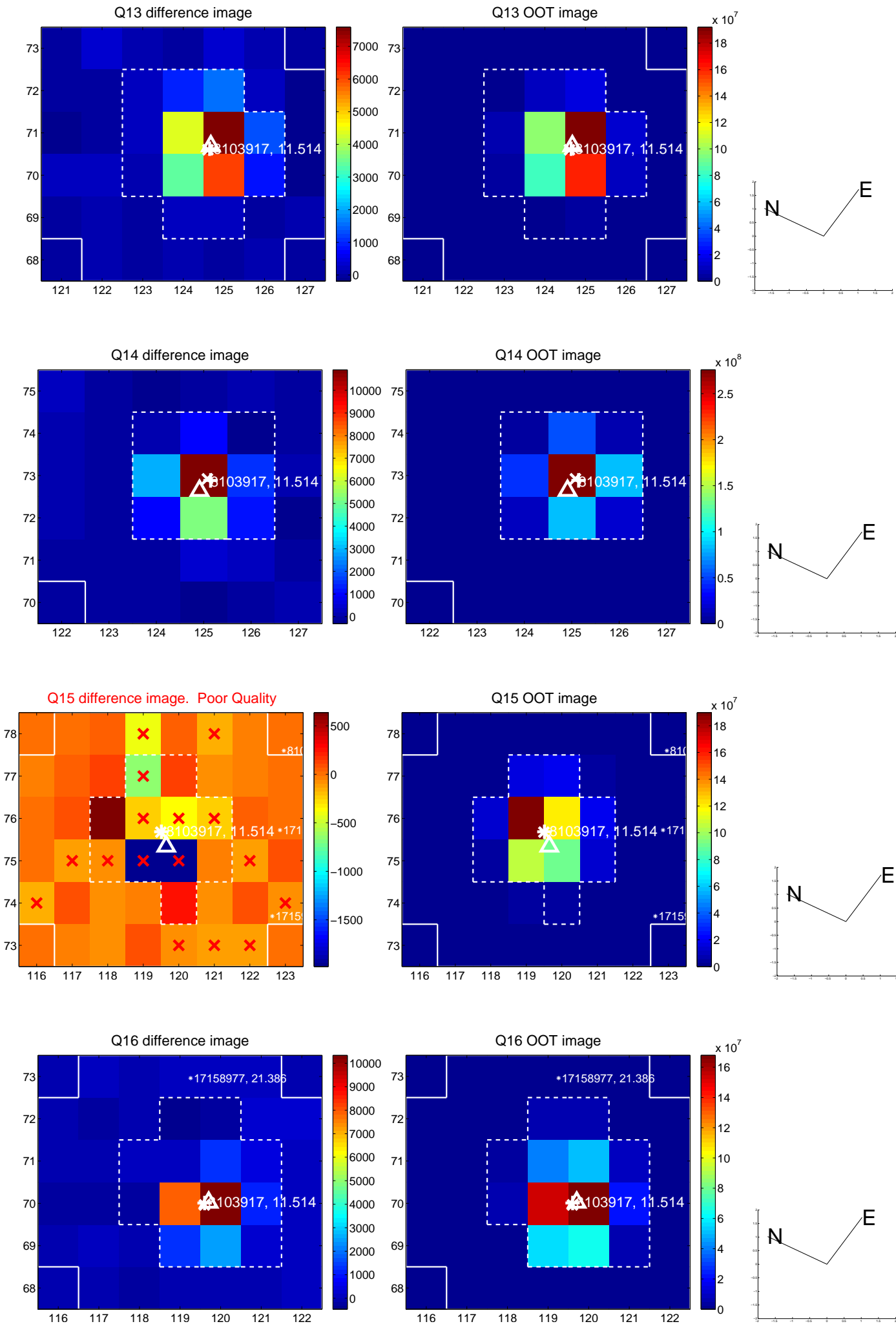
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



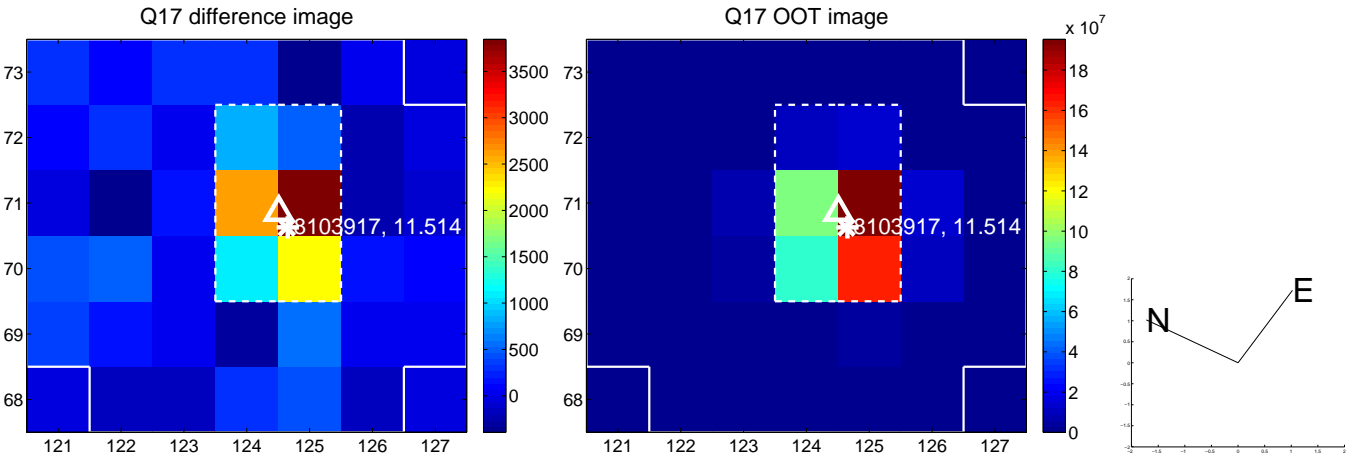
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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



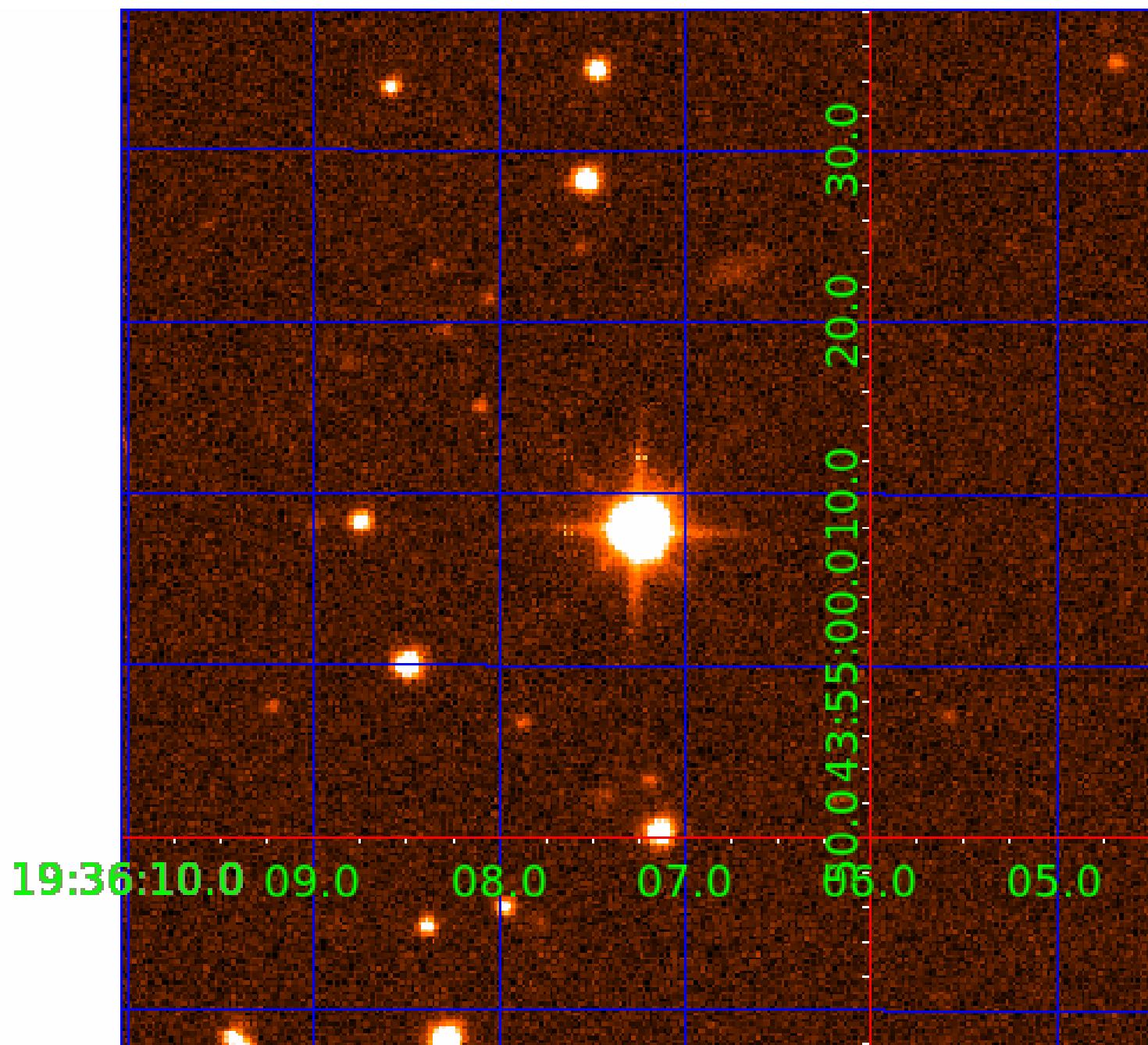
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



folded centroid time series figure for this object.

UKIRT Image

Declination



KIC 008103917

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})
008103917-01	OBS	No	0.990740	131.637484	24.4	3.606	12.2	10.3	1.69	7360	0.96	14651.07
008103917-02	OBS	No	0.660500	131.623439	23.8	3.347	8.4	9.3	1.69	7360	0.97	25156.60
008103917-03	OBS	No	2.970643	132.314714	48.7	7.500	10.1	-1.0	1.69	7360	1.19	3388.56

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
008103917-01	OBS	FP	0.00	1	0	0	0	LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT
008103917-02	OBS	FP	0.00	1	0	0	0	LPP_DV—LPP_ALT
008103917-03	OBS	FP	0.00	1	0	1	0	INDIV_TRANS_RUBBLE_SKYE_ZUMA—TRANS_GAPPED—LPP_DV—LPP_ALT—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—CENT_NOFITS—HALO_GHOST

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

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

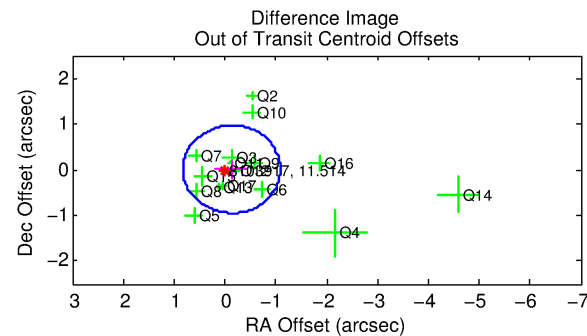
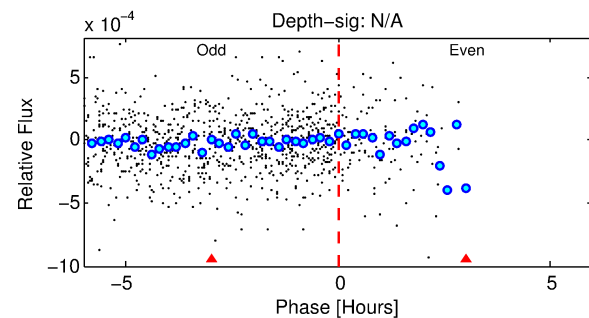
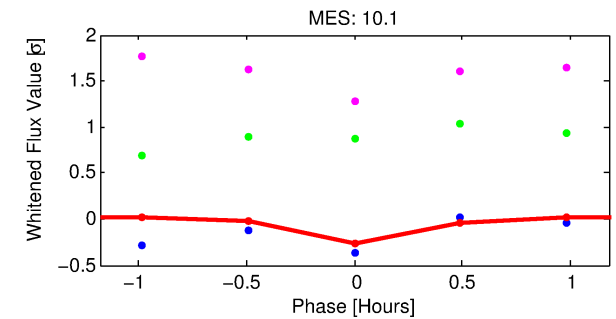
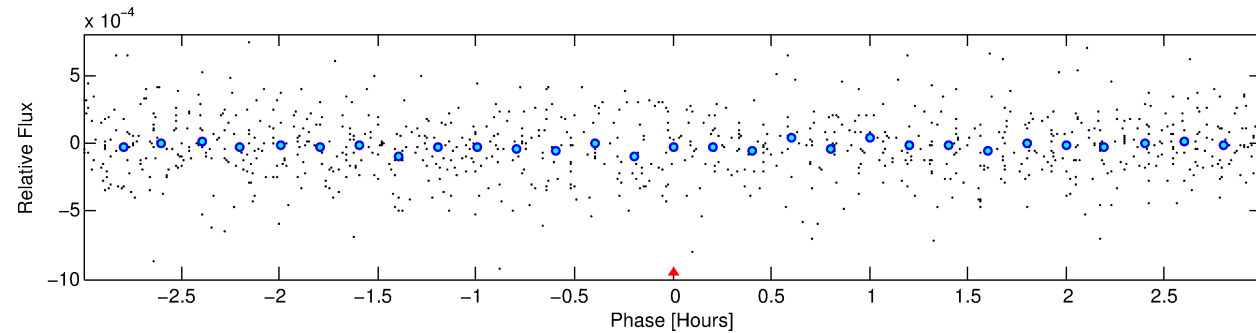
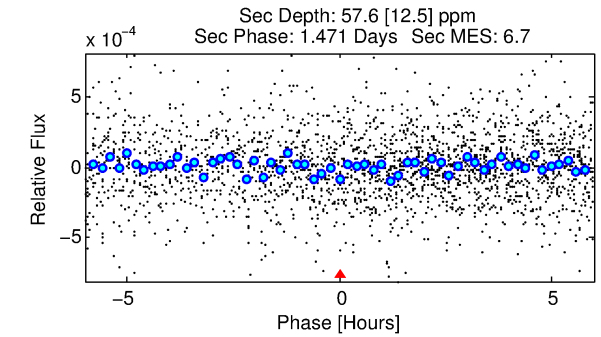
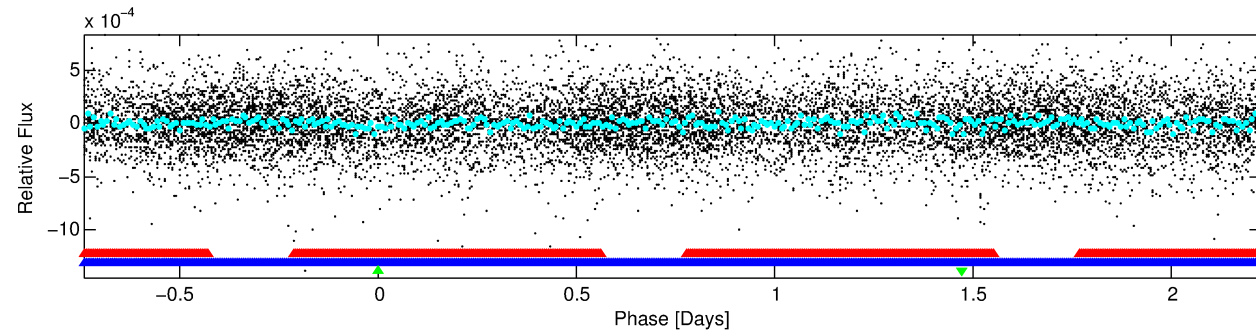
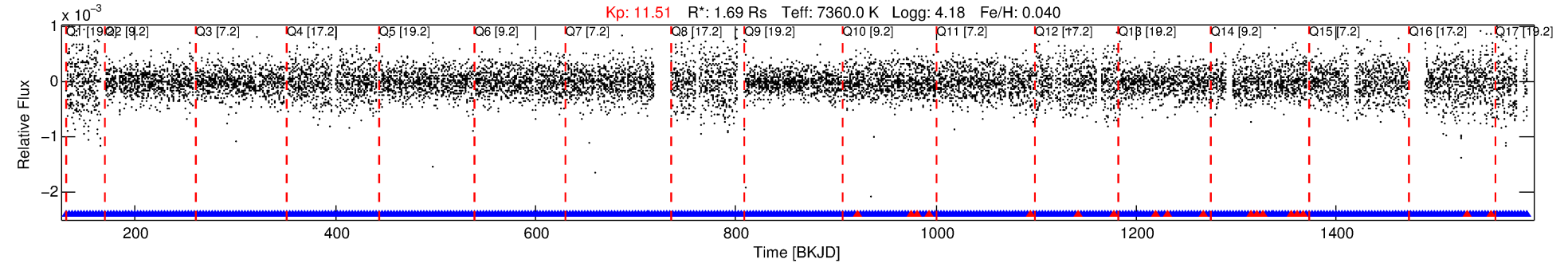
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 008103917-03

No Significant Match Found

DV One-Page Summary

KIC: 8103917 Candidate: 3 of 3 Period: 2.971 d



TPS TCE Results:

Period = 2.97064 d
Epoch = 132.3147 BKJD

DV fit results are unavailable

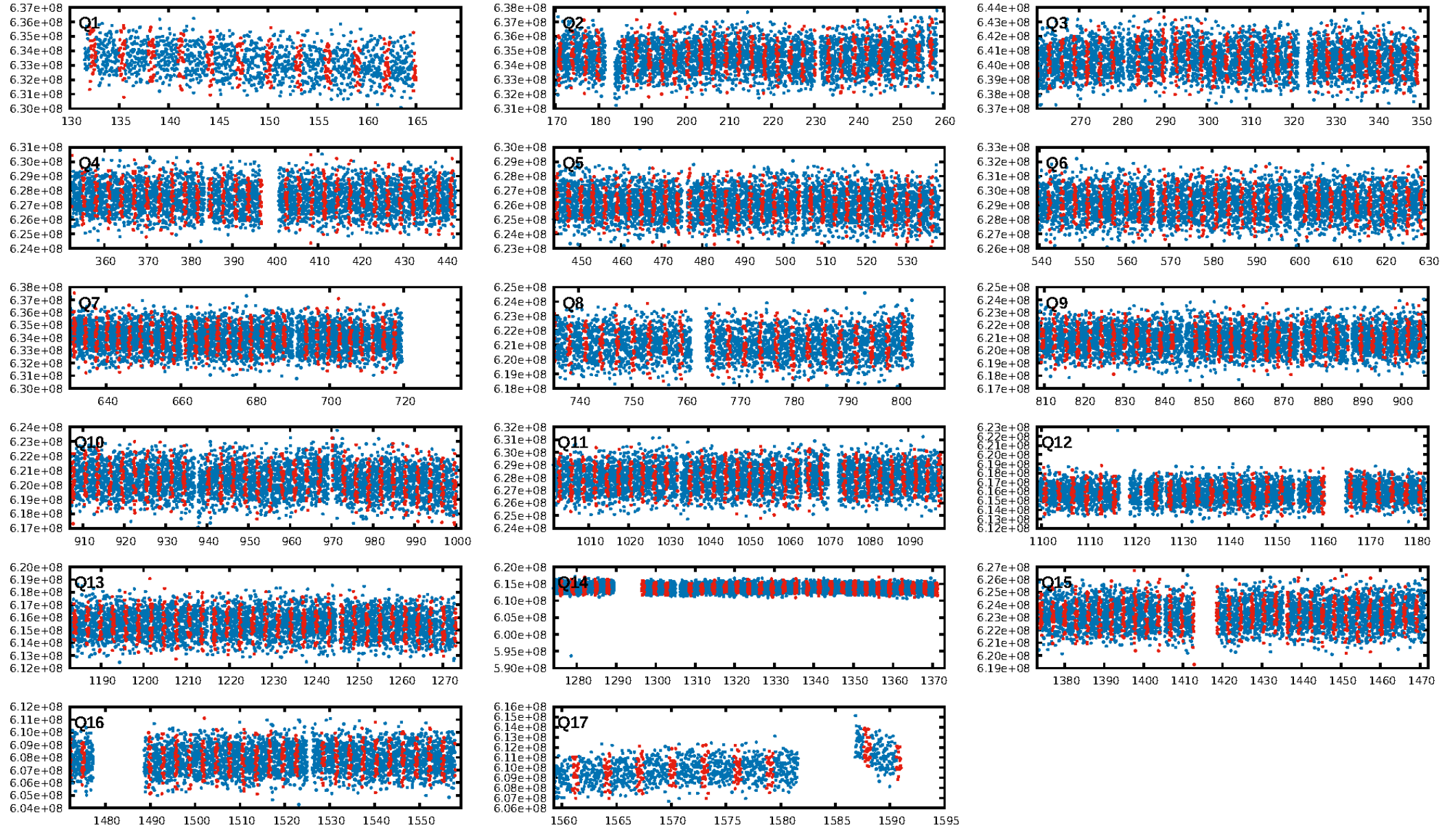
DV Diagnostic Results:

ShortPeriod-sig: 100.0% [5.71σ]
LongPeriod-sig: N/A
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: 3.24e-17
RollingBand-fgt: 0.79 [69/87]
GhostDiagnostic-chr: 0.1631
Centroid-sig: N/A
Centroid-so: N/A
OotOffset-rm: 0.131 arcsec [0.41σ]
KicOffset-rm: 0.114 arcsec [0.33σ]
OotOffset-st: 4/4/4 [16]
KicOffset-st: 4/4/4 [16]
DiffImageQuality-fgm: 0.38 [6/16]
DiffImageOverlap-fno: 0.18 [3/17]

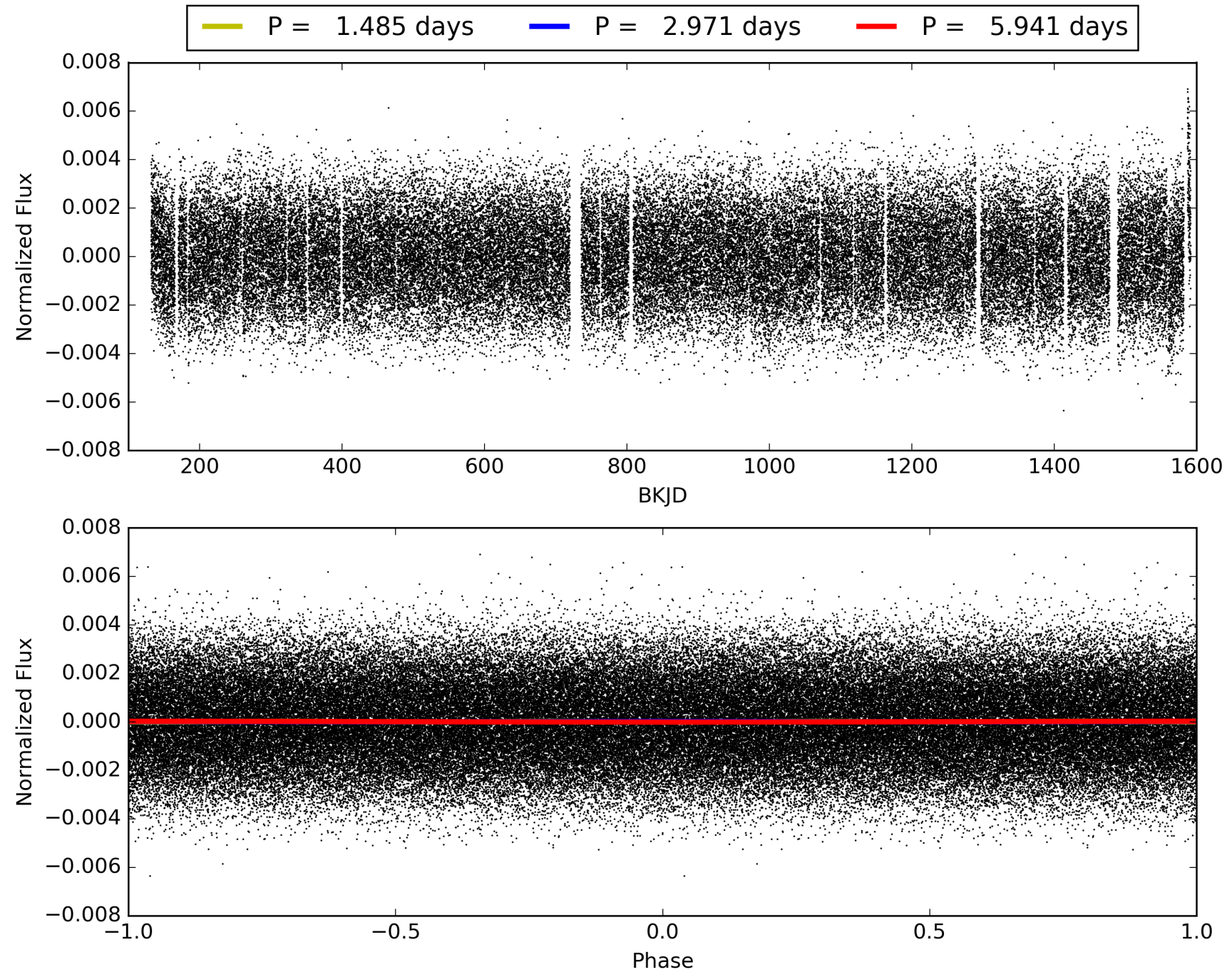
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 30-Jan-2016 02:19:45 Z

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

TCE 008103917-03, PDC Light Curves

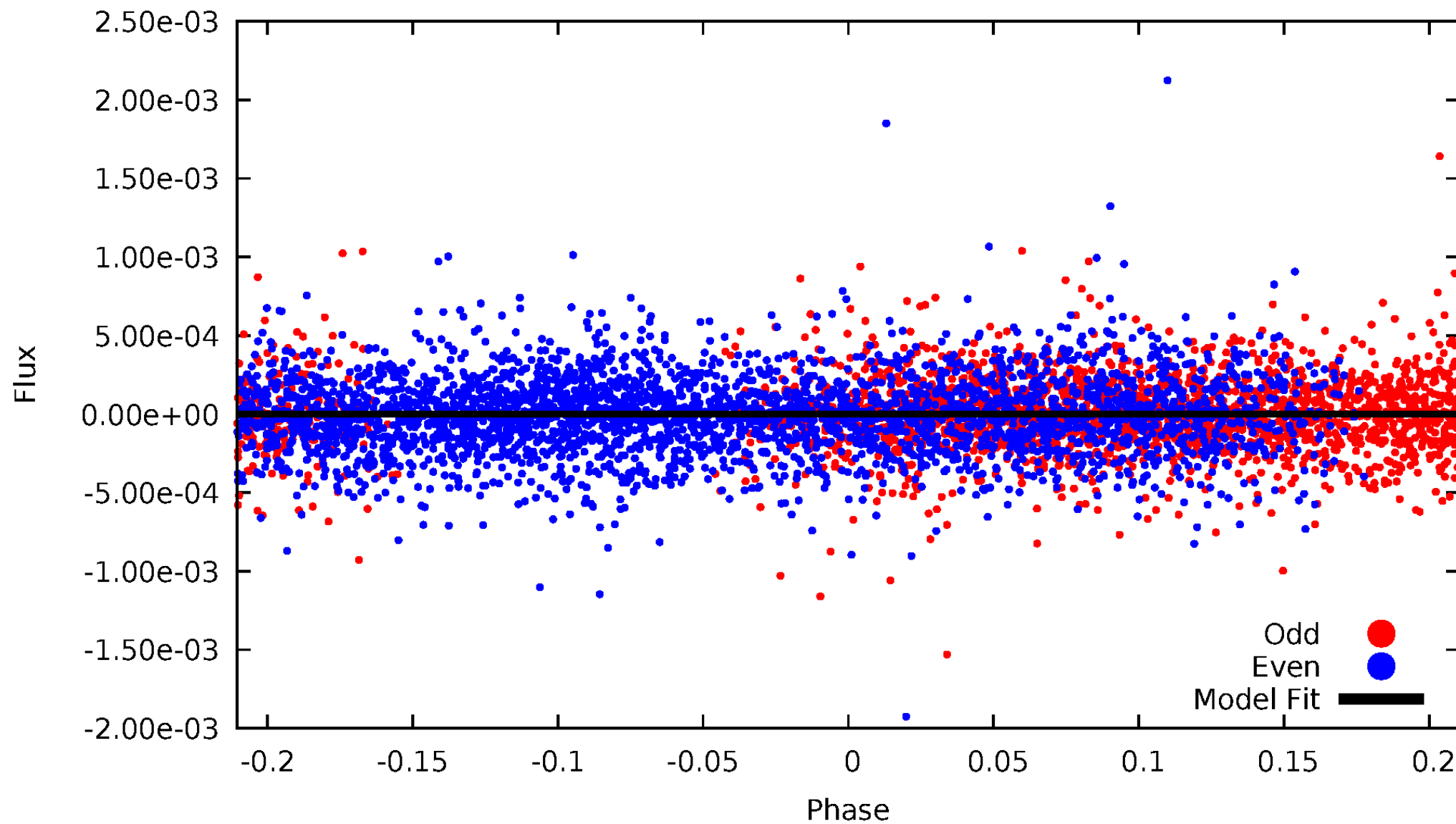


TCE 008103917-03



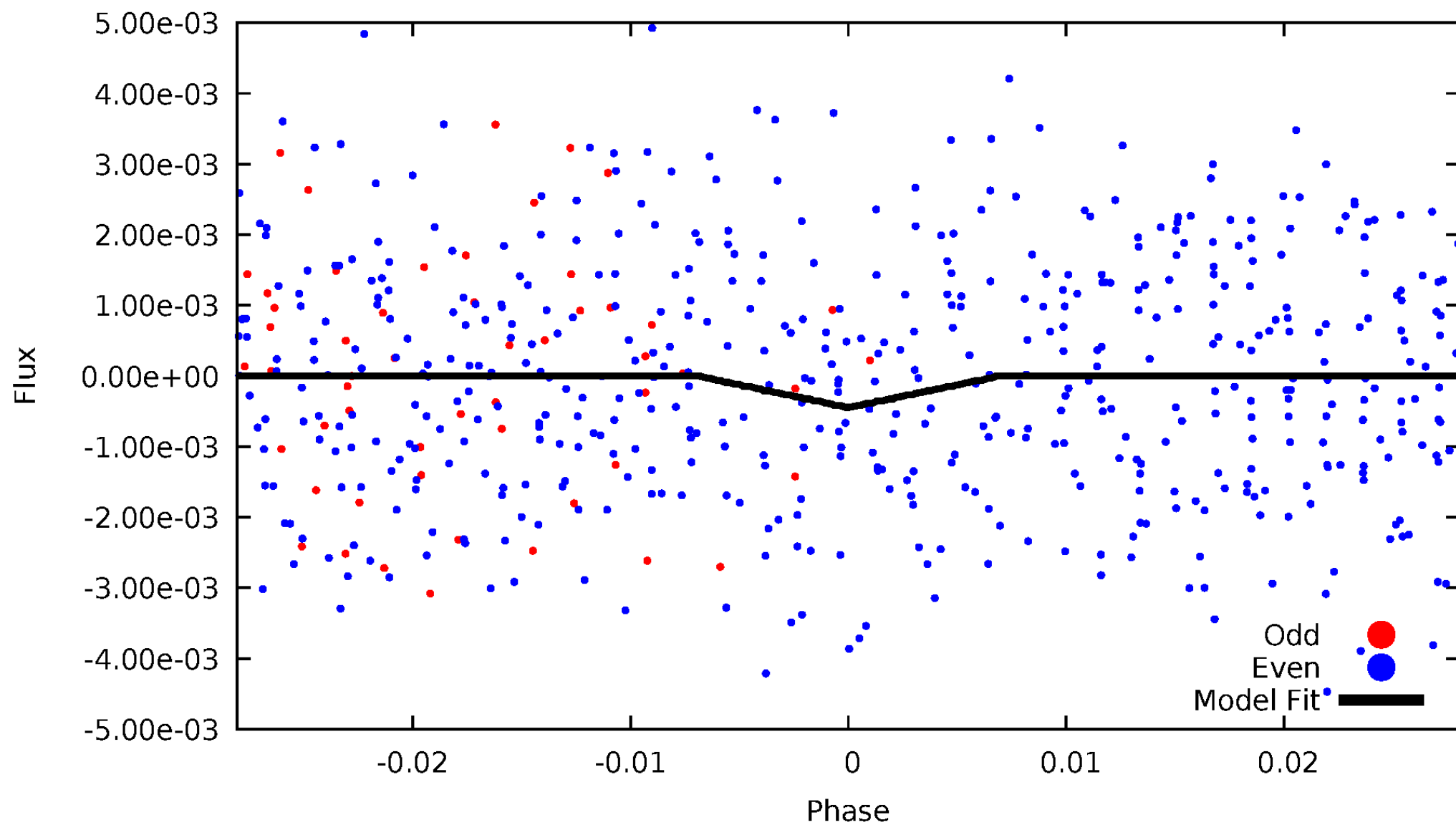
DV Odd/Even

TCE 008103917-03

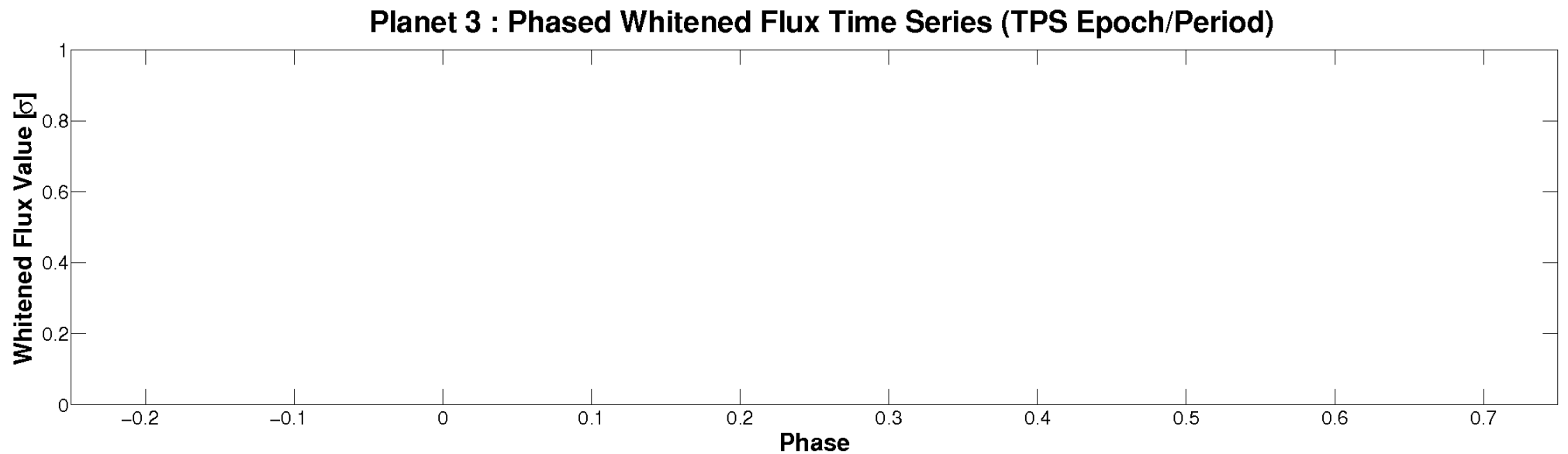
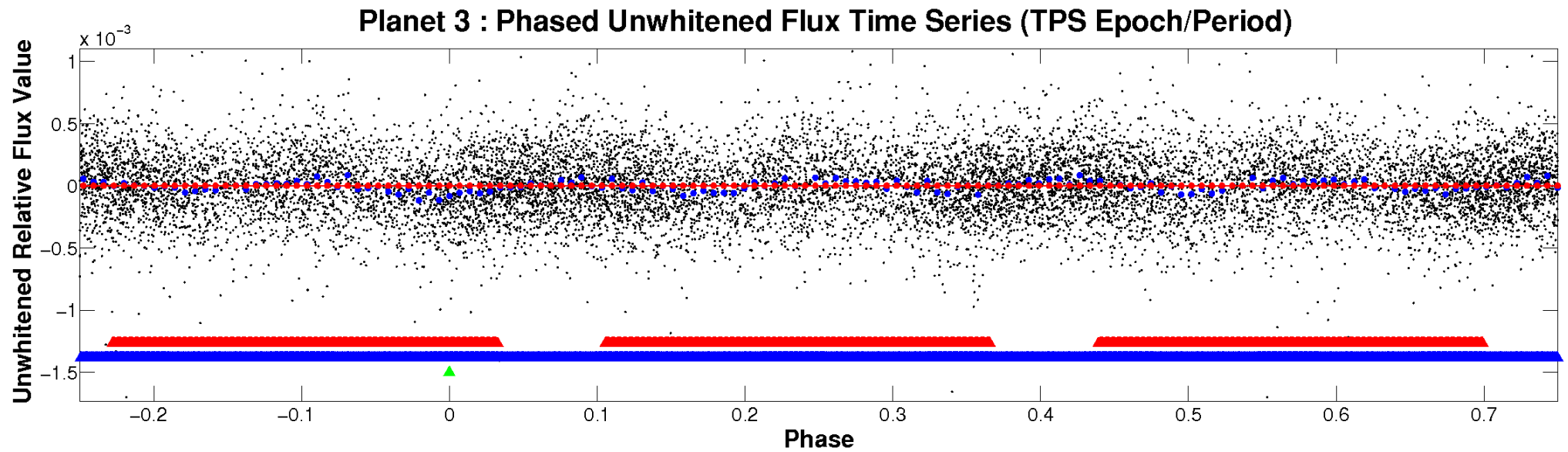


ALT Odd/Even

TCE 008103917-03

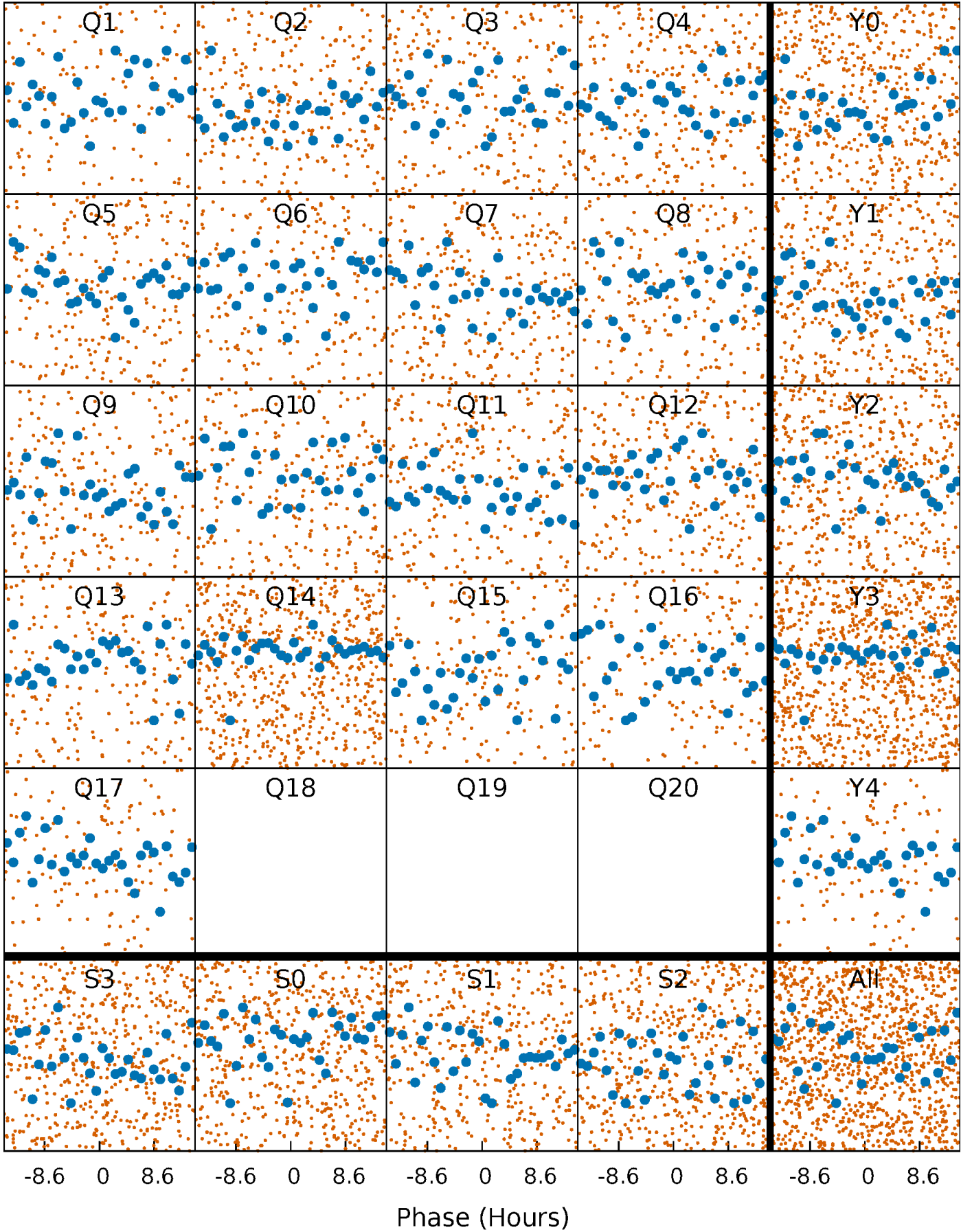


Non-Whitened Vs. Whitened Light Curve



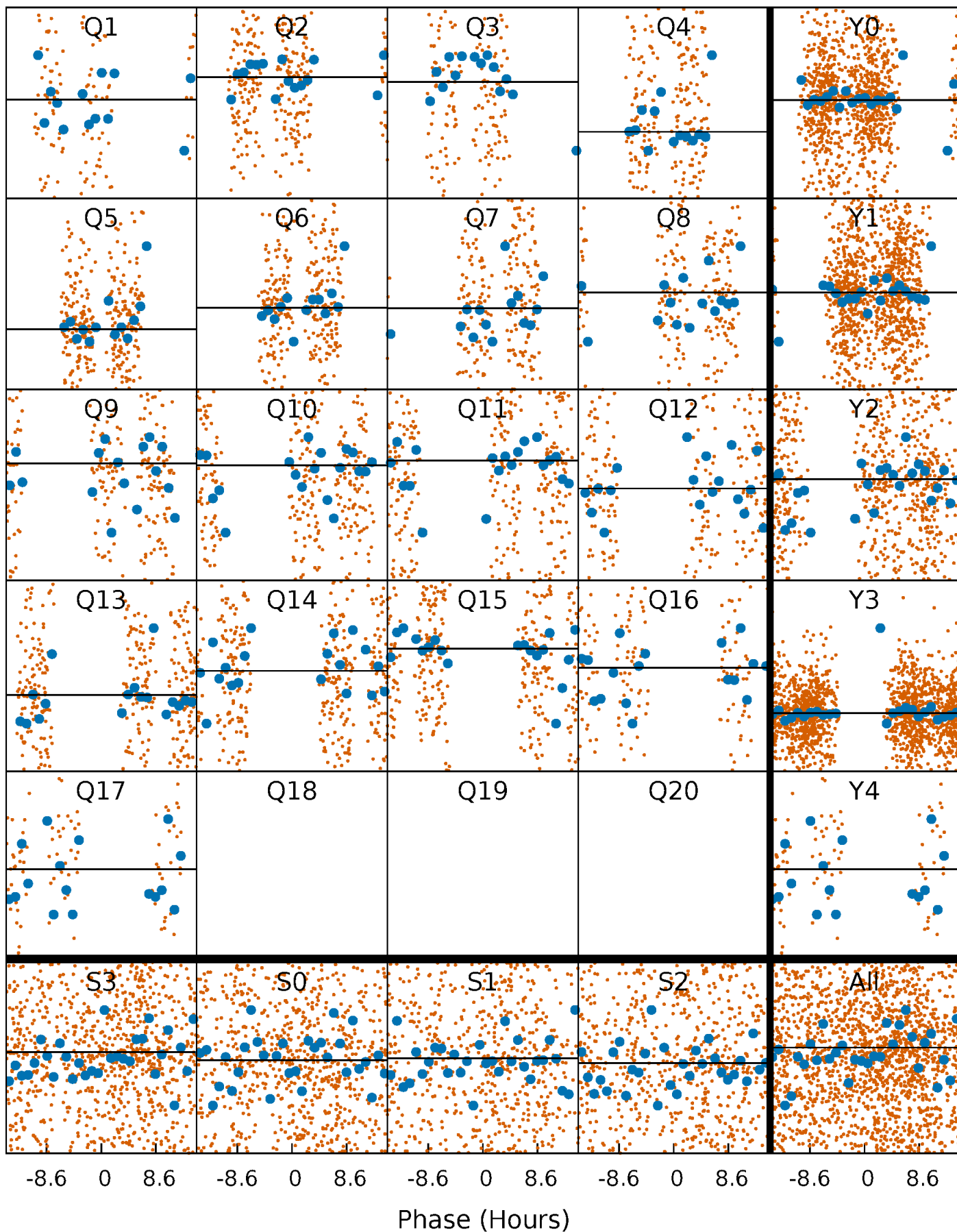
PDC Quarter-Phased Transit Curves

TCE 008103917-03 P= 2.970643 Days $T_0=132.314714$ (BKJD)



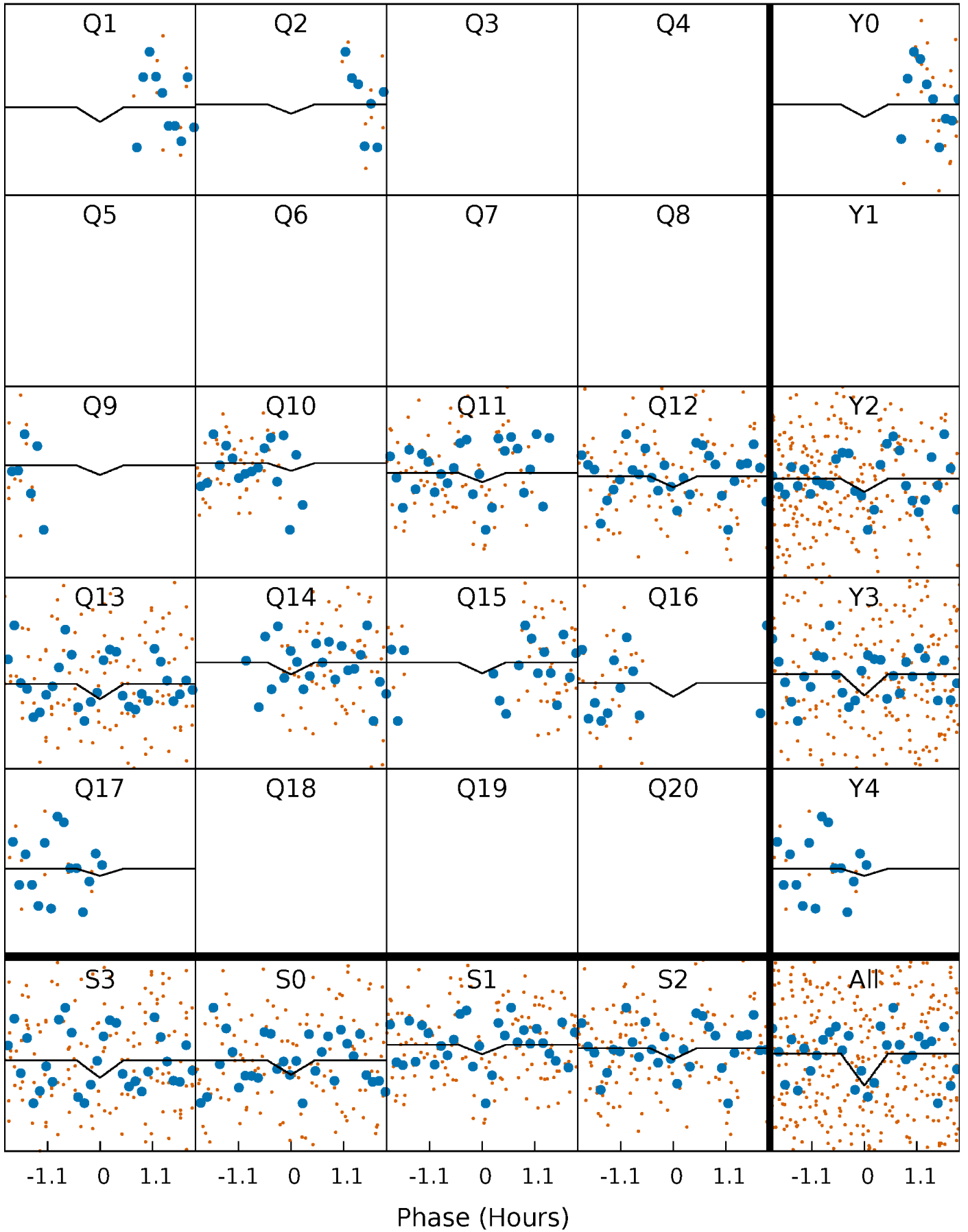
DV Quarter-Phased Transit Curves

TCE 008103917-03 P= 2.970643 Days $T_0=132.314714$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

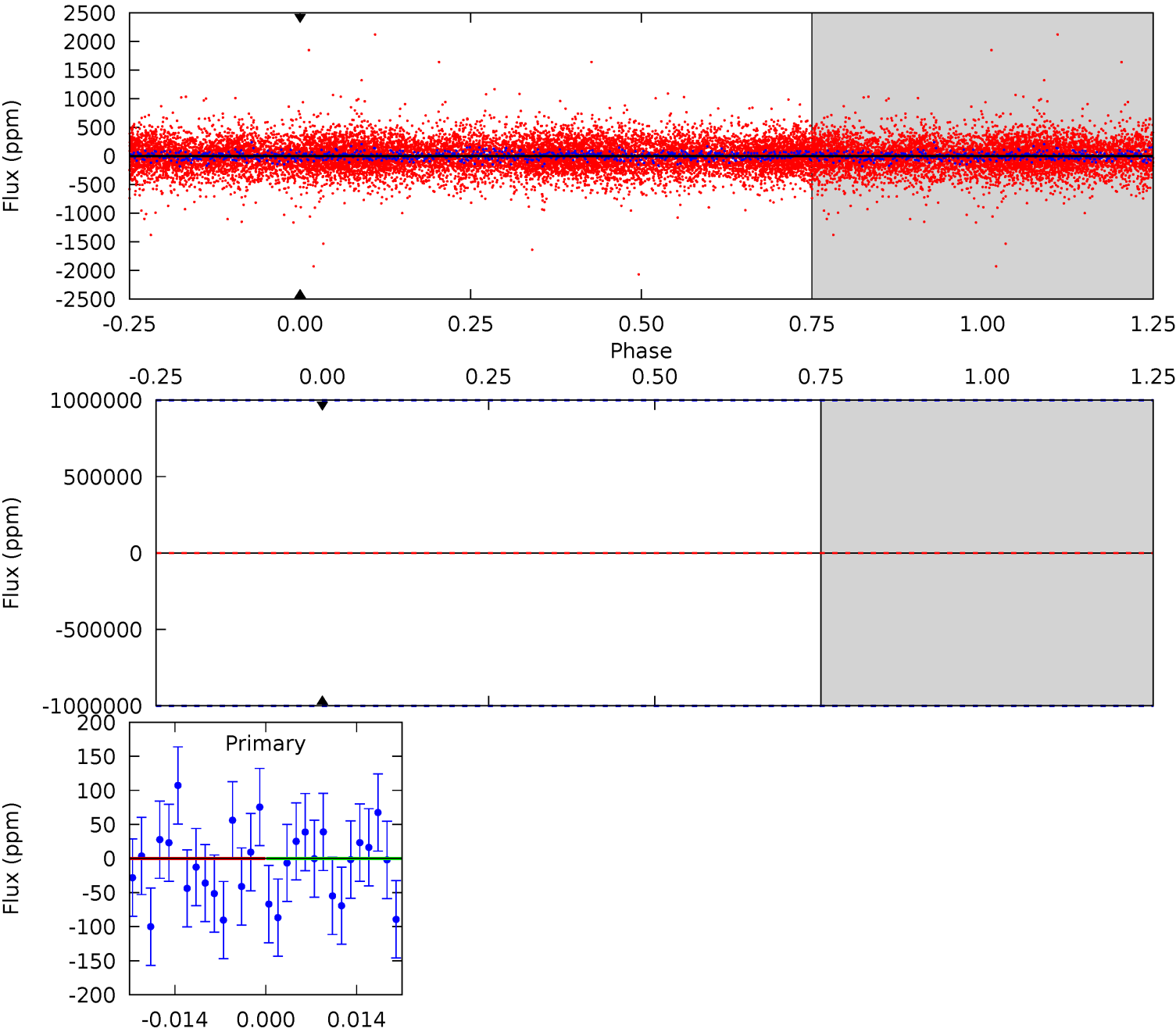
TCE 008103917-03 P= 2.970643 Days $T_0=131.850643$ (BKJD)



DV Model-Shift Uniqueness Test

008103917-03, P = 2.970643 Days, E = 129.344071 Days

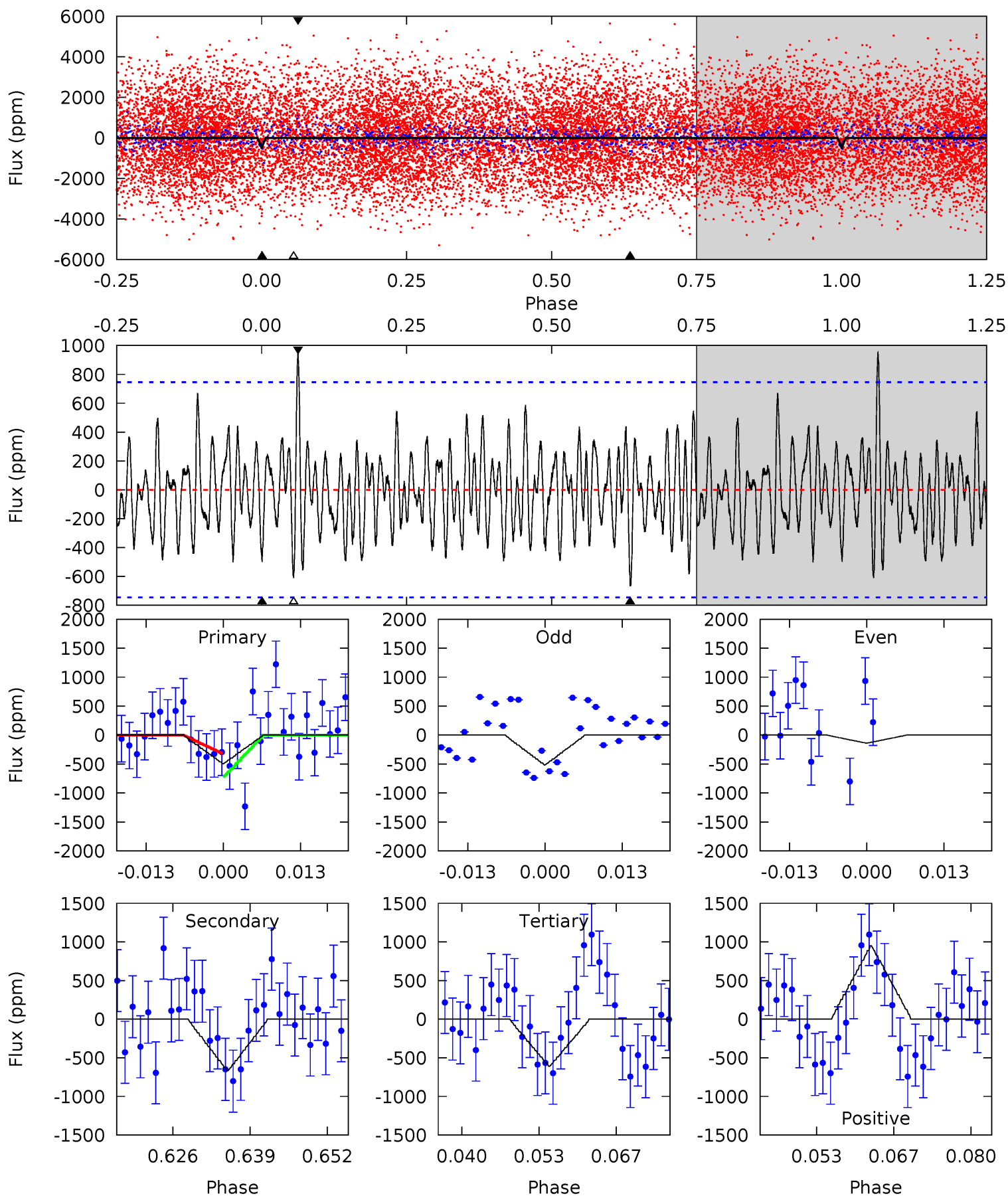
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
0	0	0	0	1.00	1.00	1.00	0	0	0	0	0	0	0	0



Alt Model-Shift Uniqueness Test

008103917-03, P = 2.970643 Days, E = 131.850643 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
3.30	4.46	4.08	6.34	4.97	2.48	1.61	-0.78	-3.04	0.38	-1.89	0.50	0.89	0.59	1.35



Stellar Parameters For KIC 008103917

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	7360^{+203}_{-348}	$4.179^{+0.090}_{-0.195}$	$0.040^{+0.200}_{-0.350}$	$1.687^{+0.581}_{-0.291}$	$1.569^{+0.232}_{-0.211}$	$0.460^{+0.230}_{-0.245}$
	+3%/-5%	+2%/-5%	+500%/-875%	+34%/-17%	+15%/-13%	+50%/-53%
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 008103917-03 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	A_{obs}
DV	0 ± 1000000	$13.45^{+14.00}_{-9.73}$	2745^{+213}_{-166}	-5681^{+46891}_{-29537}	$-11.873^{+1220.950}_{-1074.885}$
Alt.	-668 ± 150	$13.98^{+15.49}_{-9.57}$	2756^{+211}_{-176}	4393^{+3310}_{-1146}	$3.989^{+35.376}_{-3.126}$

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

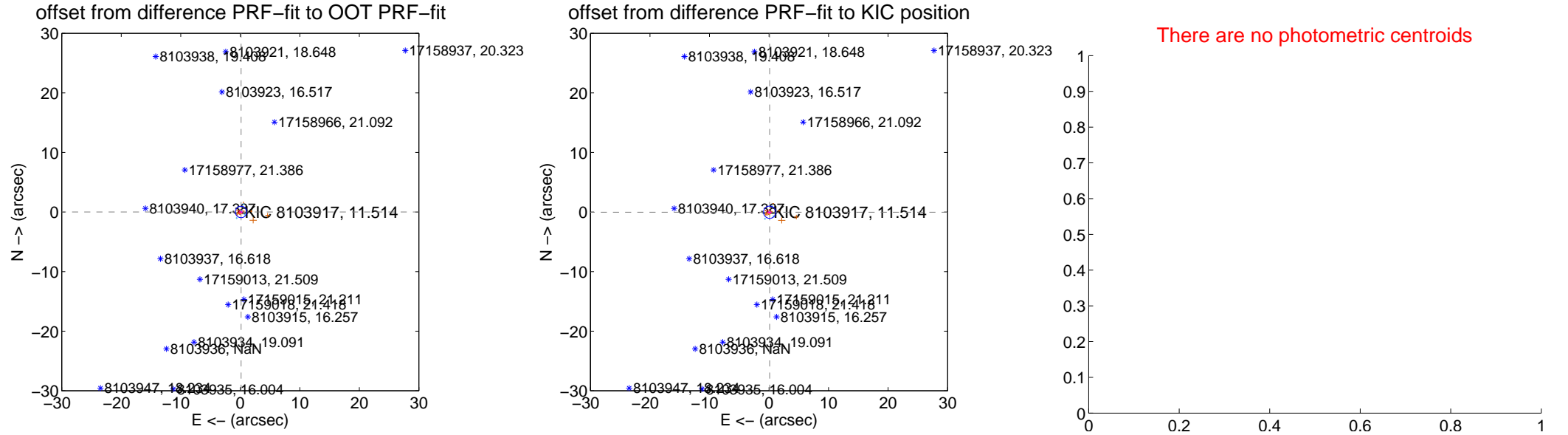
DV Centroid Data

Supplemental centroid analysis for 008103917-03. **Kepler magnitude: 11.51.** Transit SNR -1.00

There are 6 quarters with good PRF difference image offsets

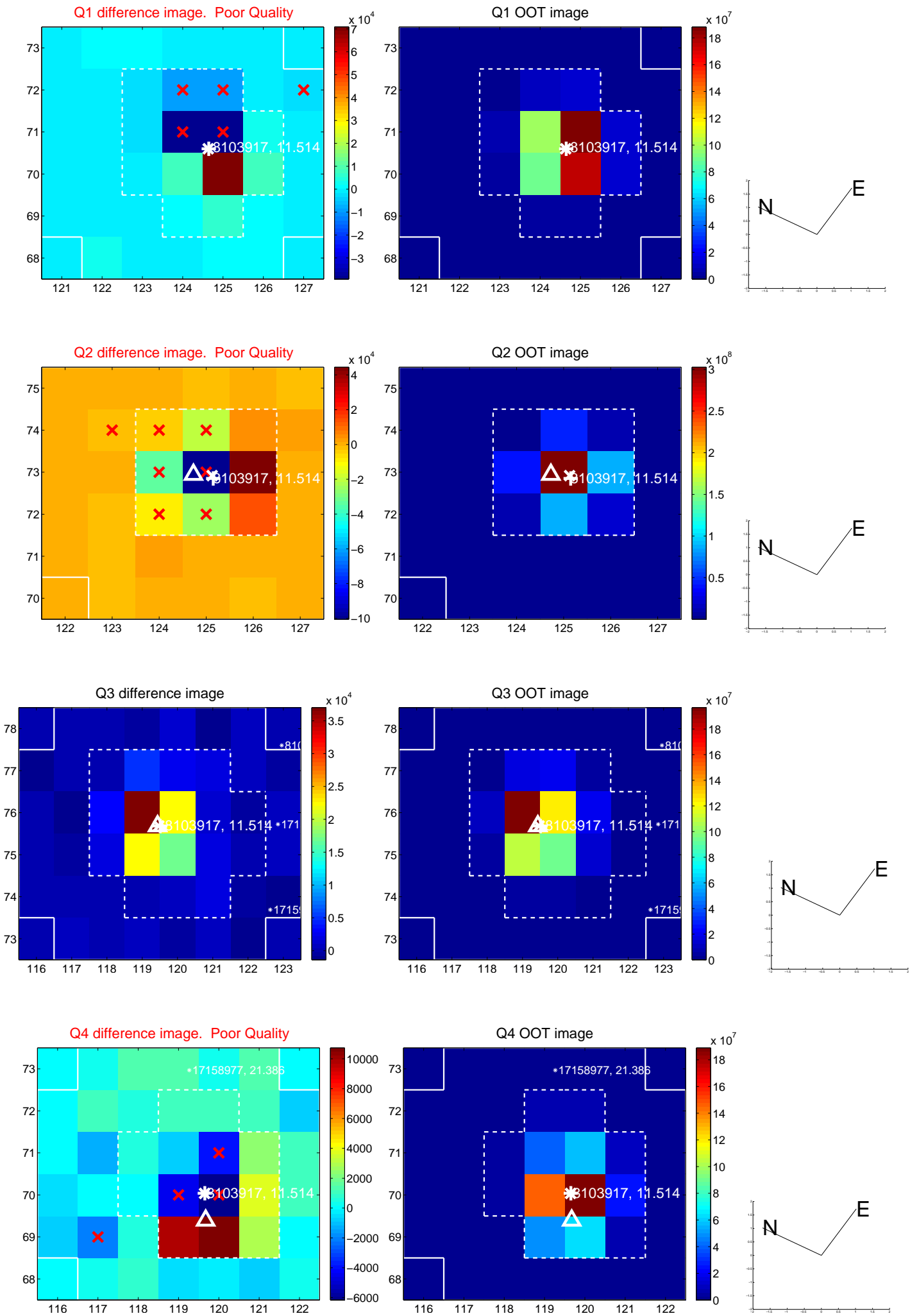
The direct PRF centroid is offset from the target star catalog position by about 0.07 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.131 ± 0.320	0.41	-0.131 ± 0.323	0.010 ± 0.186
PRF-fit source offset from KIC position	0.114 ± 0.343	0.33	-0.110 ± 0.342	-0.032 ± 0.182
photometric centroid source offset	—	—	—	—

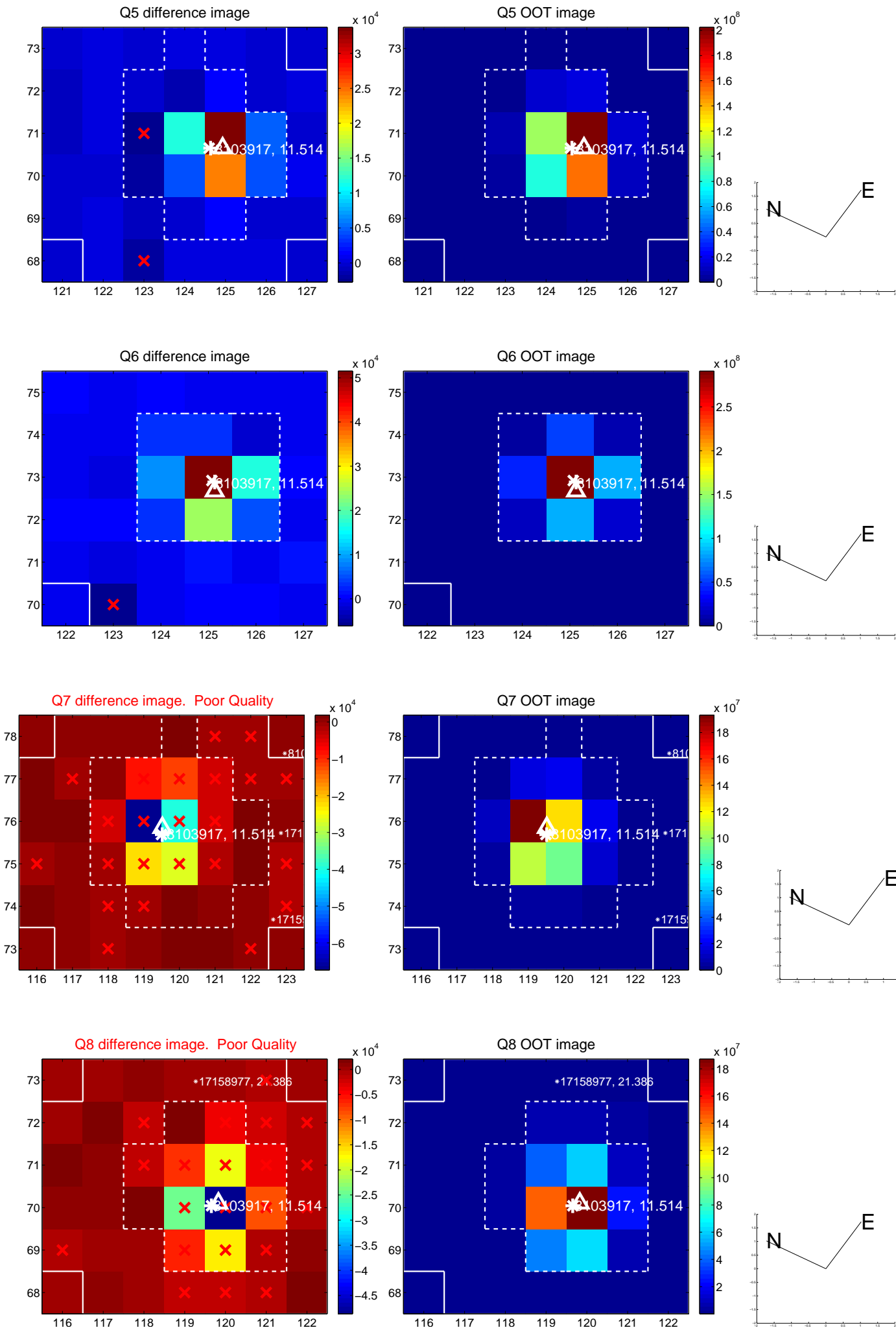


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets;** magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

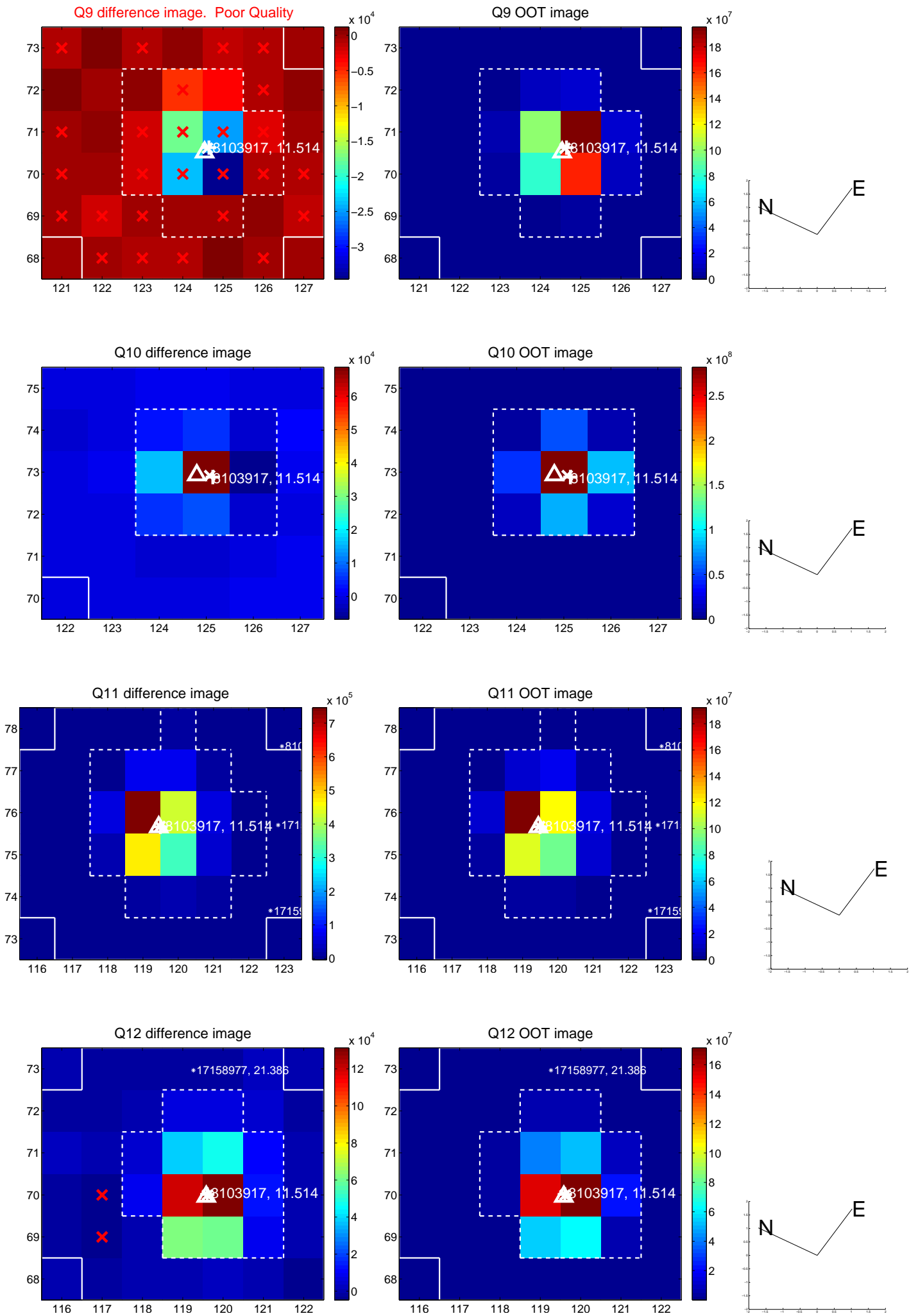
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



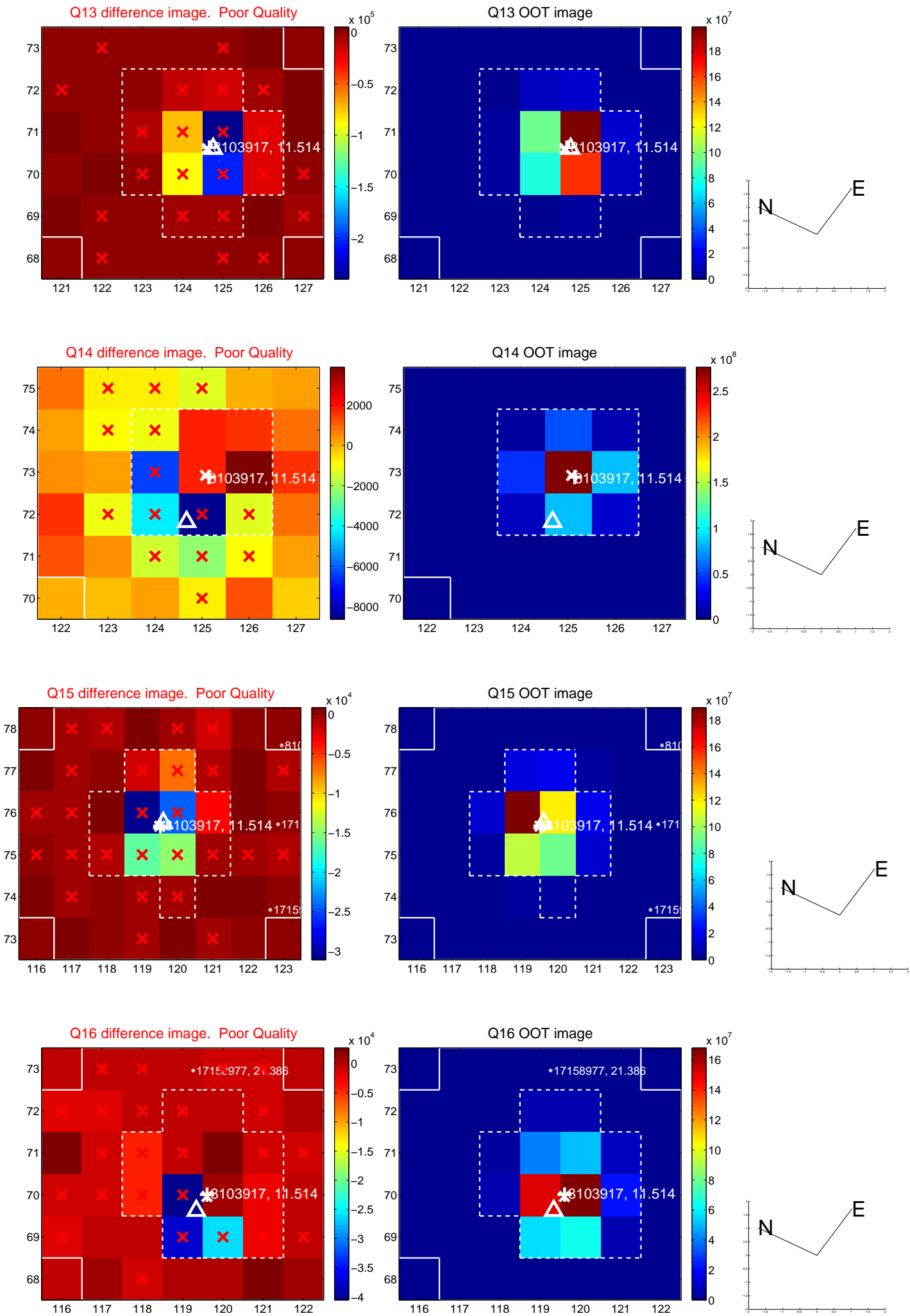
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



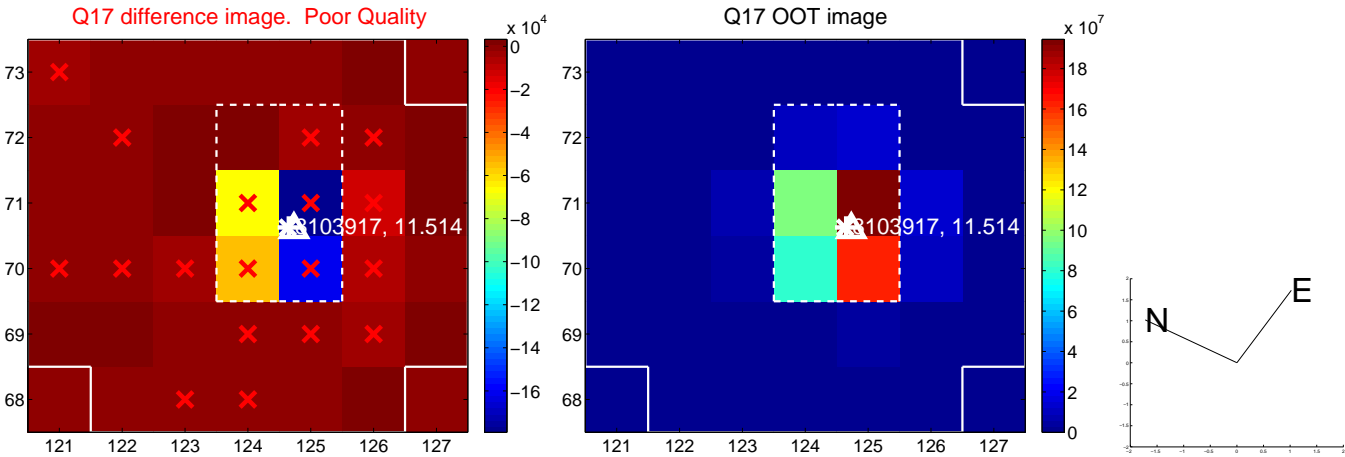
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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

