

KIC 005080636

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})
005080636-01	OBS	1843.01	4.194494	134.135691	669.1	1.818	40.0	47.9	0.52	3706	1.61	26.31
005080636-02	OBS	1843.02	6.355975	137.488266	178.8	1.615	9.9	10.0	0.52	3706	0.69	15.11
005080636-03	OBS	No	0.530677	131.731841	106.2	1.127	9.4	17.4	0.52	3706	0.55	414.18

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
005080636-01	OBS	PC	1.00	0	0	0	0	CENT_KIC_POS
005080636-02	OBS	PC	0.97	0	0	0	0	CENT_KIC_POS
005080636-03	OBS	FP	0.00	1	0	0	0	LPP_DV—MOD_NONUNIQ_ALT—CENT_KIC_POS

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

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

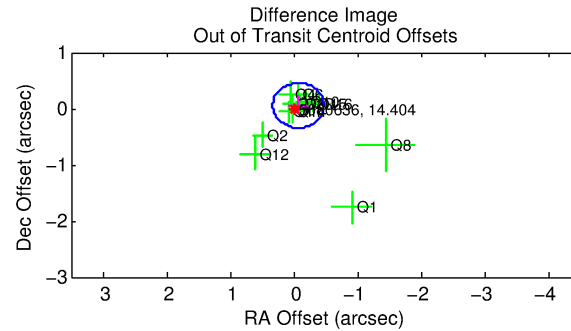
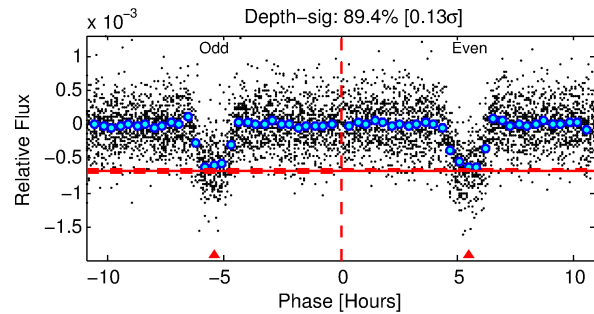
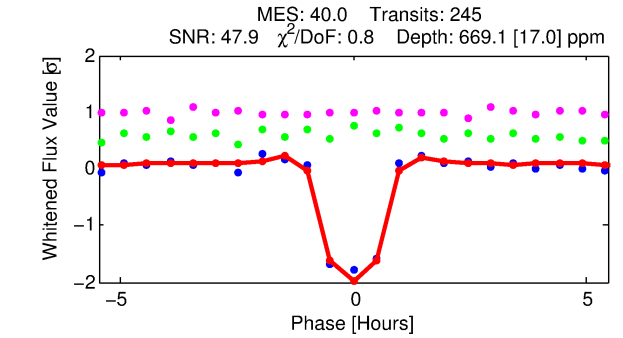
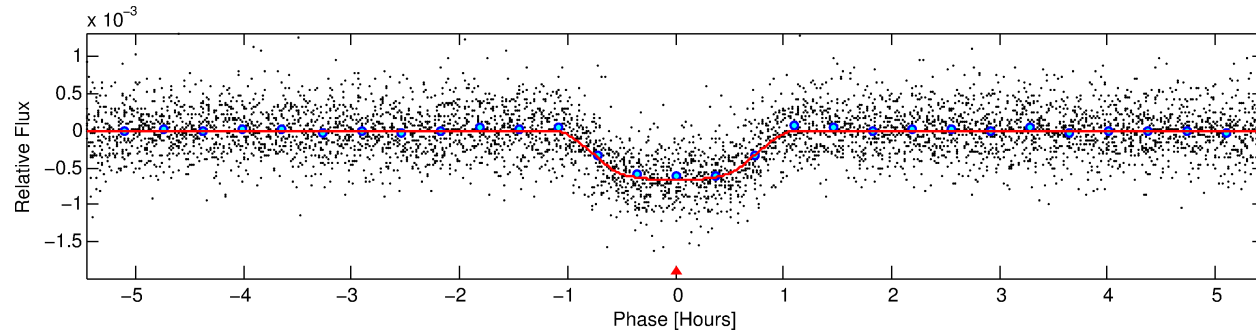
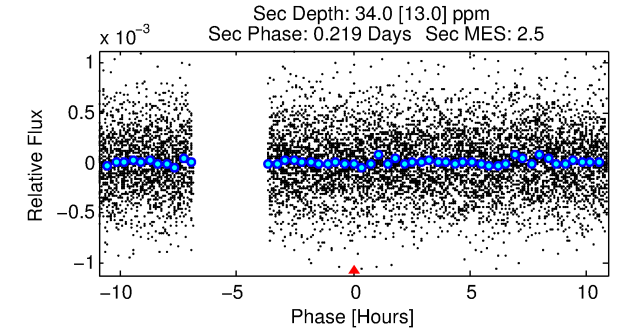
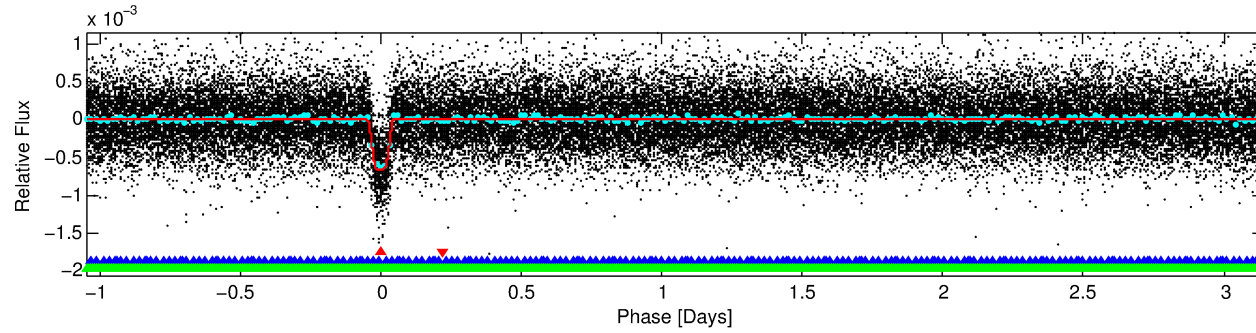
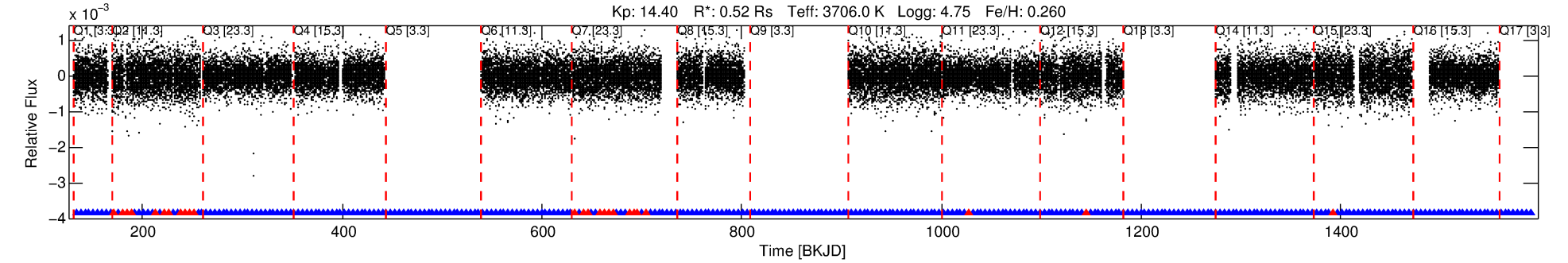
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 005080636-01

No Significant Match Found

DV One-Page Summary

KIC: 5080636 Candidate: 1 of 3 Period: 4.194 d
KOI: K01843.01 Corr: 0.988



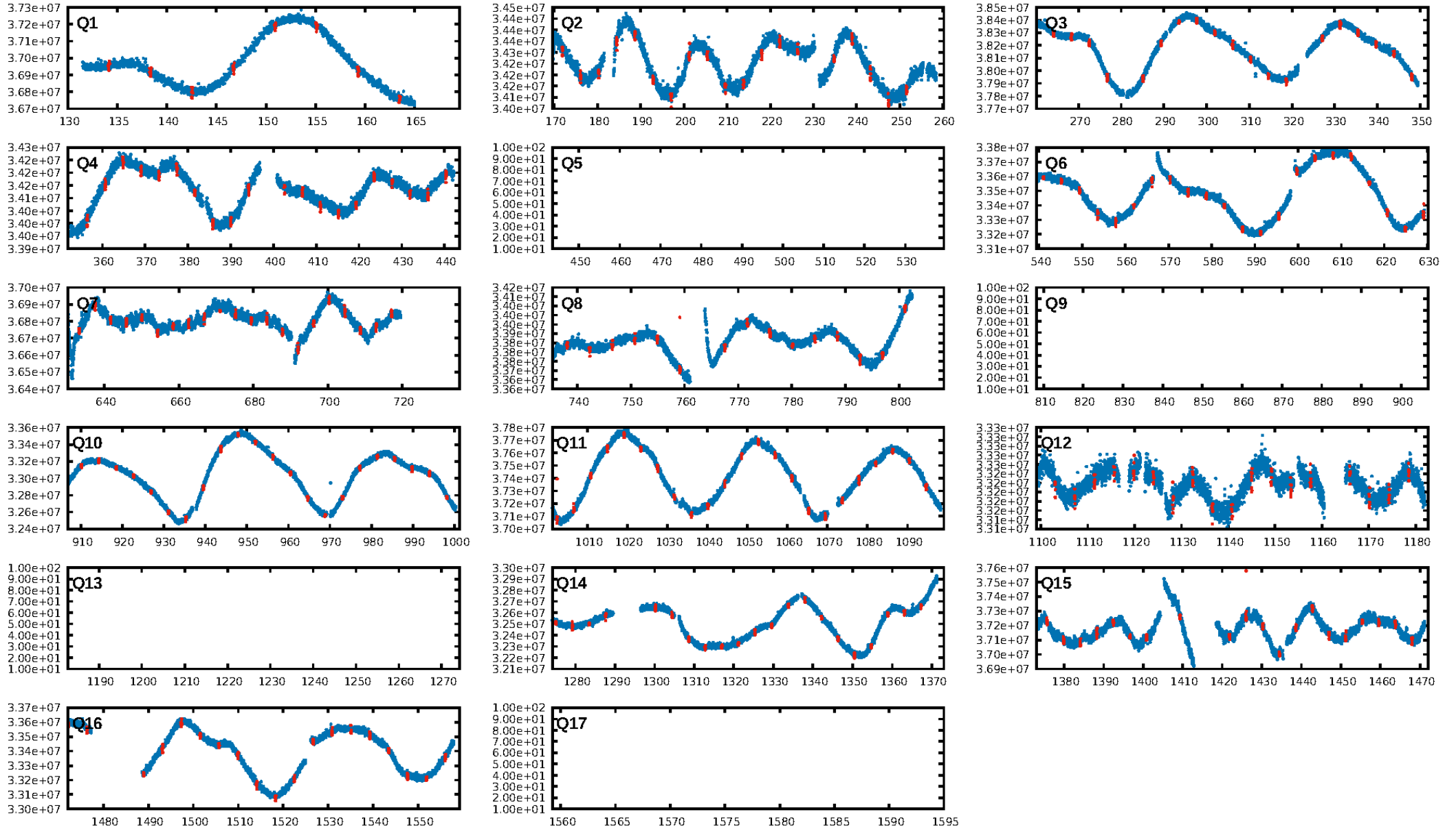
DV Fit Results:

Period = 4.19449 [0.00000] d
Epoch = 134.1357 [0.0007] BKJD
Rp/R* = 0.0283 [0.0033]
a/R* = 9.29 [4.19]
b = 0.88 [0.12]
Seff = 26.31 [3.21]
Teff = 577 [18] K
Rp = 1.61 [0.22] Re
a = 0.0418 [0.0023] AU
Ag = 12.64 [5.73] [2.03σ]
Teffp = 1683 [193] K [5.71σ]

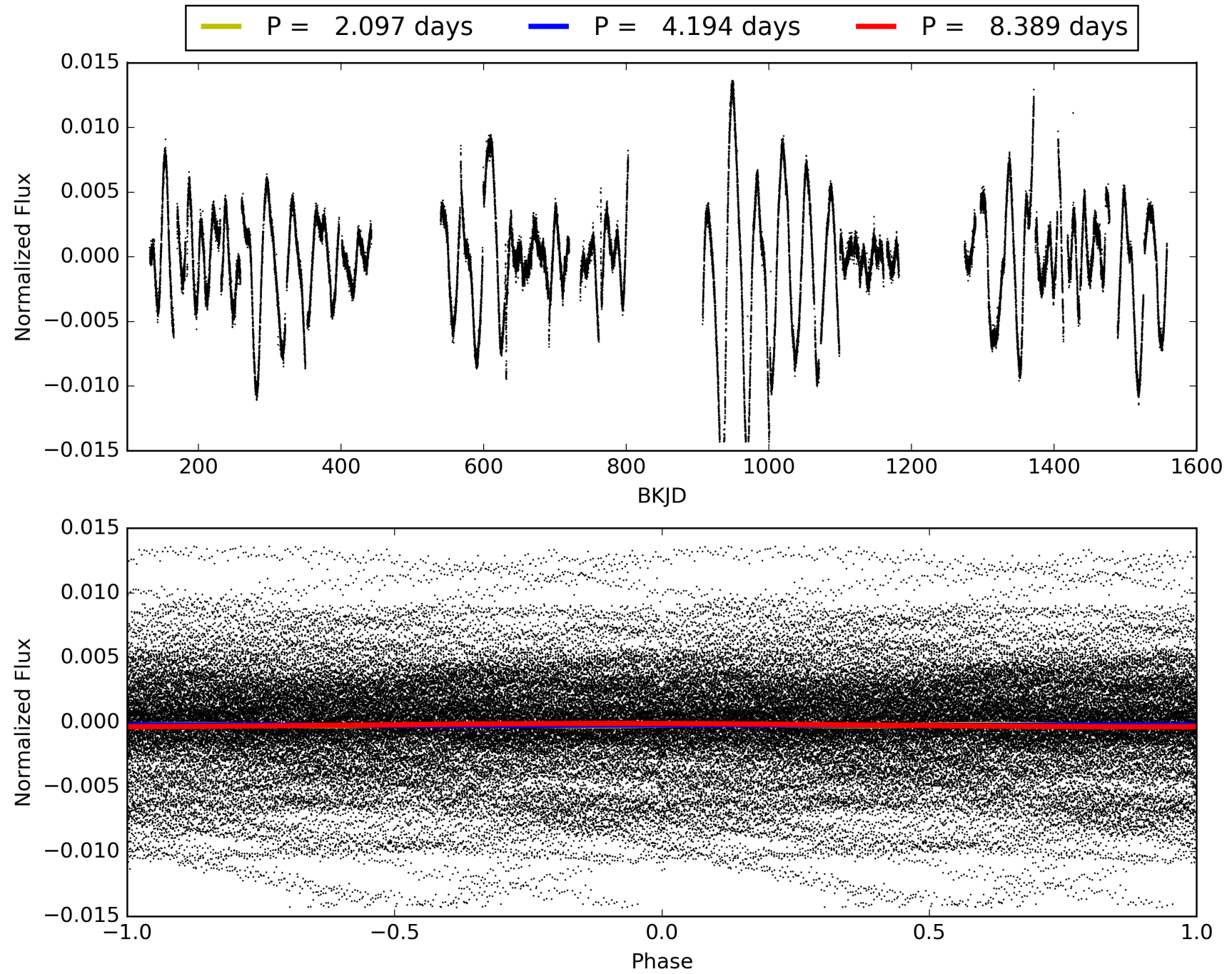
DV Diagnostic Results:

ShortPeriod-sig: 100.0% [41.10σ]
LongPeriod-sig: 100.0% [21.33σ]
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: 2.04e-300
RollingBand-fgt: 0.89 [212/237]
GhostDiagnostic-chr: 5.021
Centroid-sig: 79.9%
Centroid-so: 0.247 arcsec [0.95σ]
OotOffset-rm: 0.090 arcsec [0.68σ]
KicOffset-rm: 0.585 arcsec [3.05σ]
OotOffset-st: 4/4/4/1 [13]
KicOffset-st: 4/4/4/1 [13]
DiffImageQuality-fgm: 1.00 [13/13]
DiffImageOverlap-fno: 0.00 [0/13]

TCE 005080636-01, PDC Light Curves

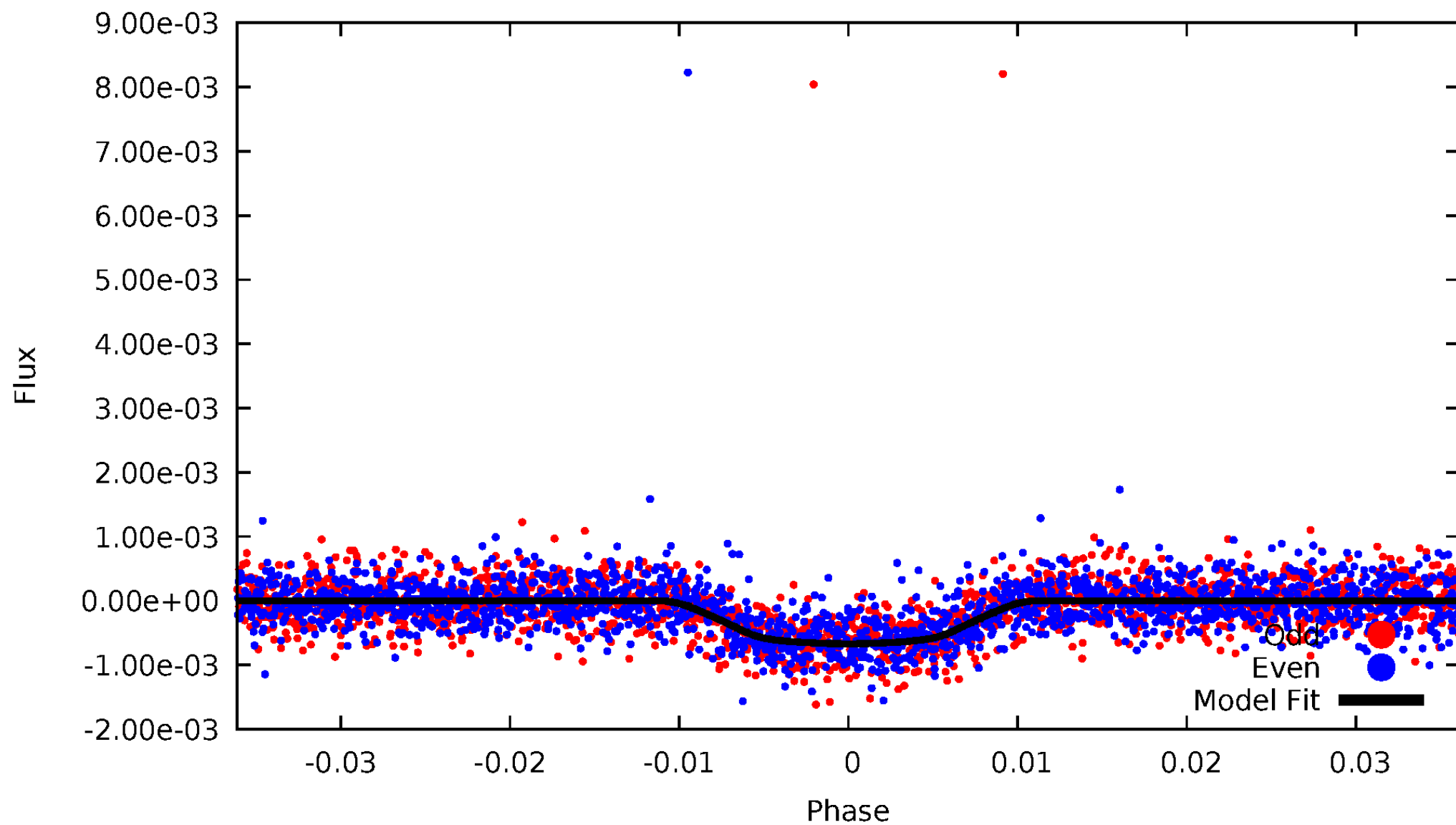


TCE 005080636-01



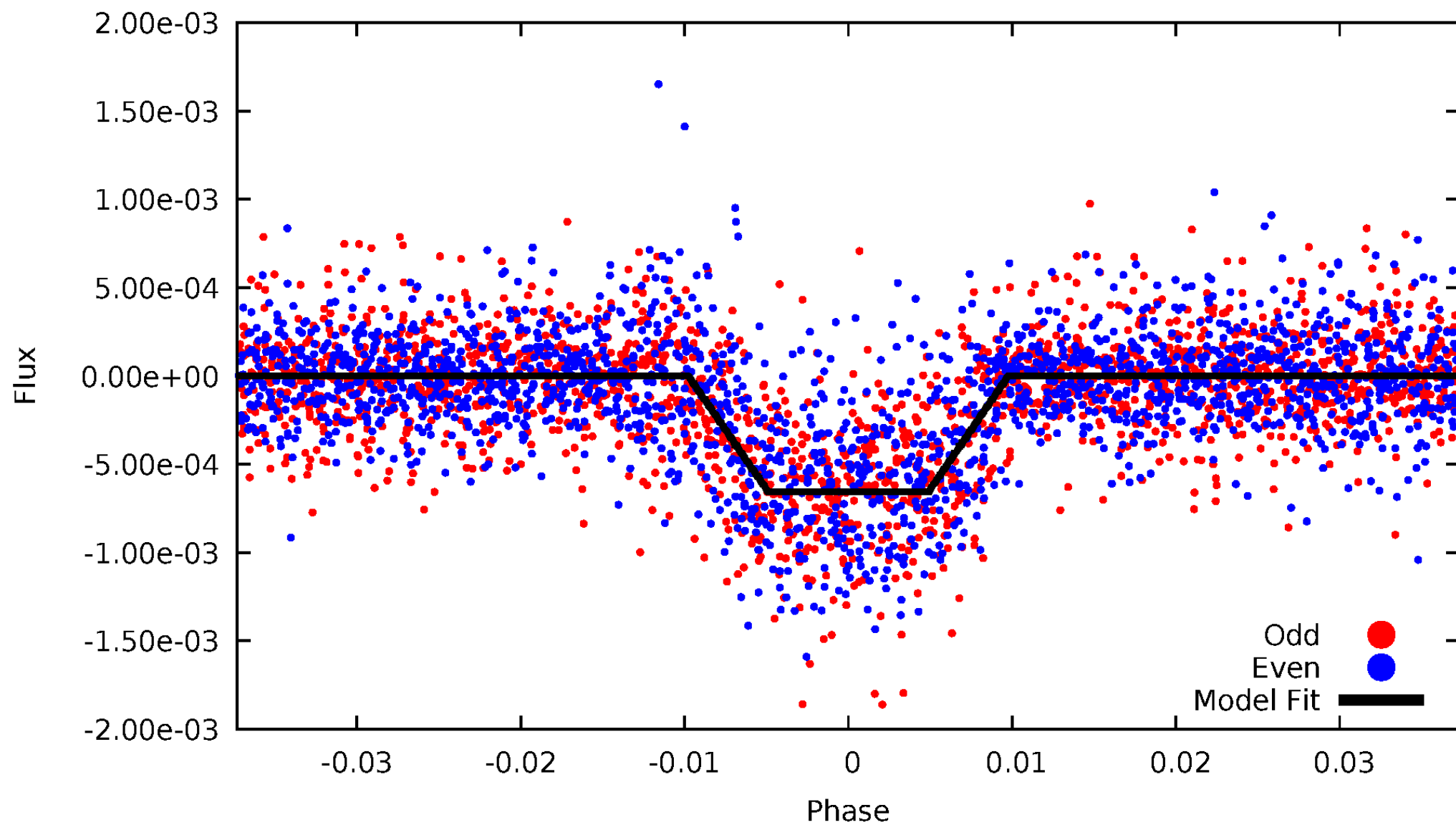
DV Odd/Even

TCE 005080636-01



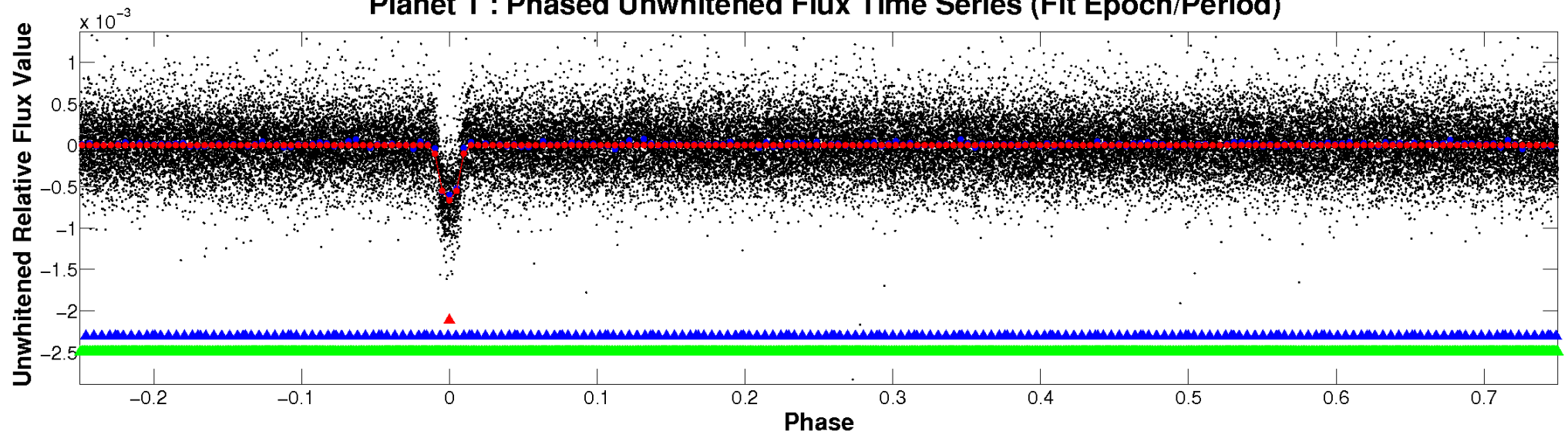
ALT Odd/Even

TCE 005080636-01

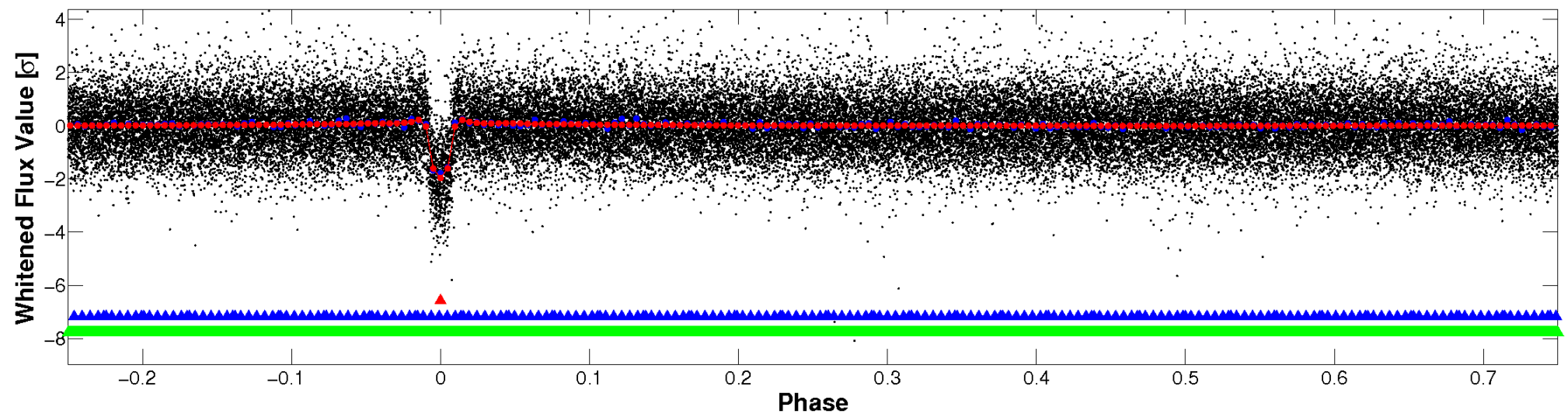


Non-Whitened Vs. Whitened Light Curve

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

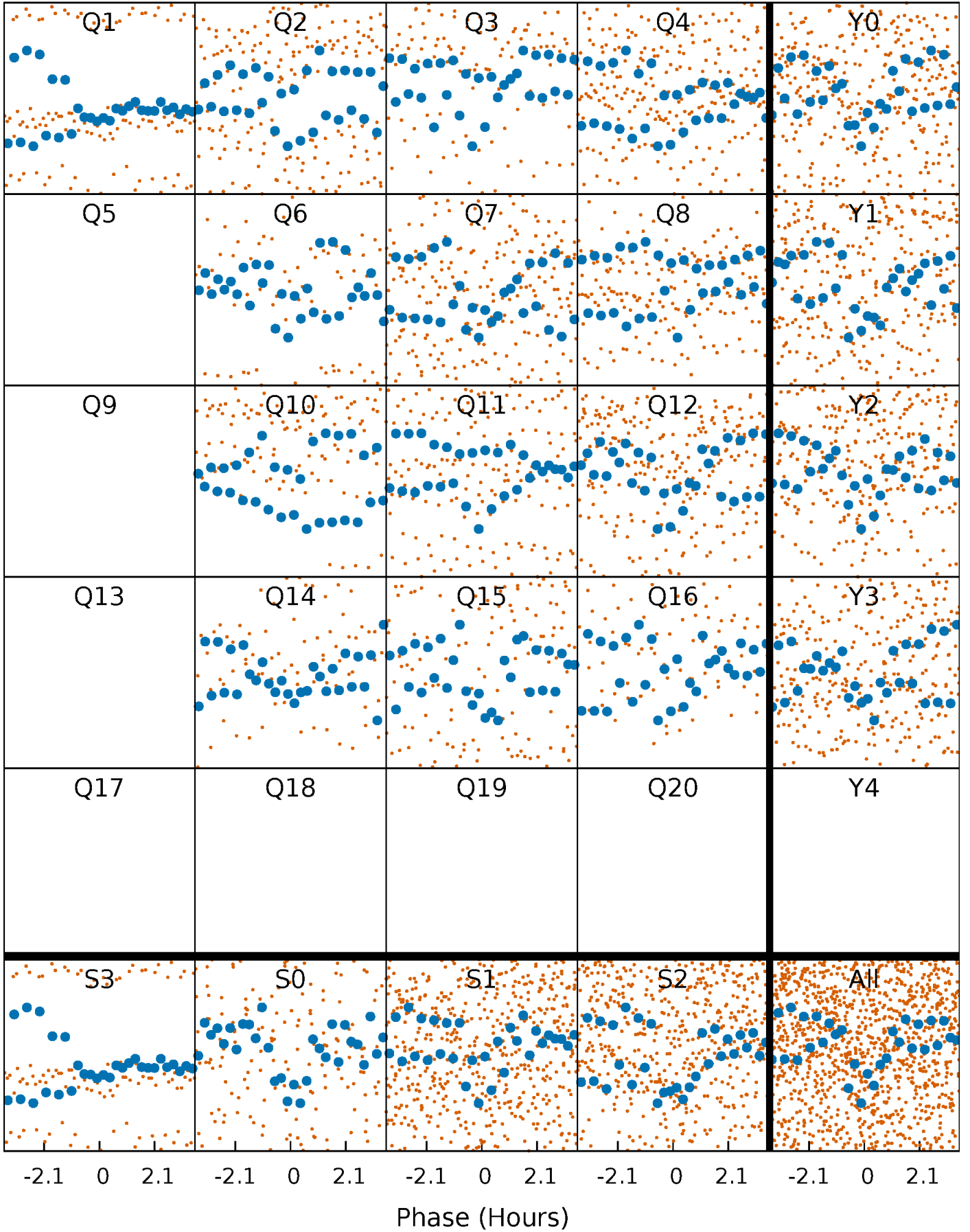


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



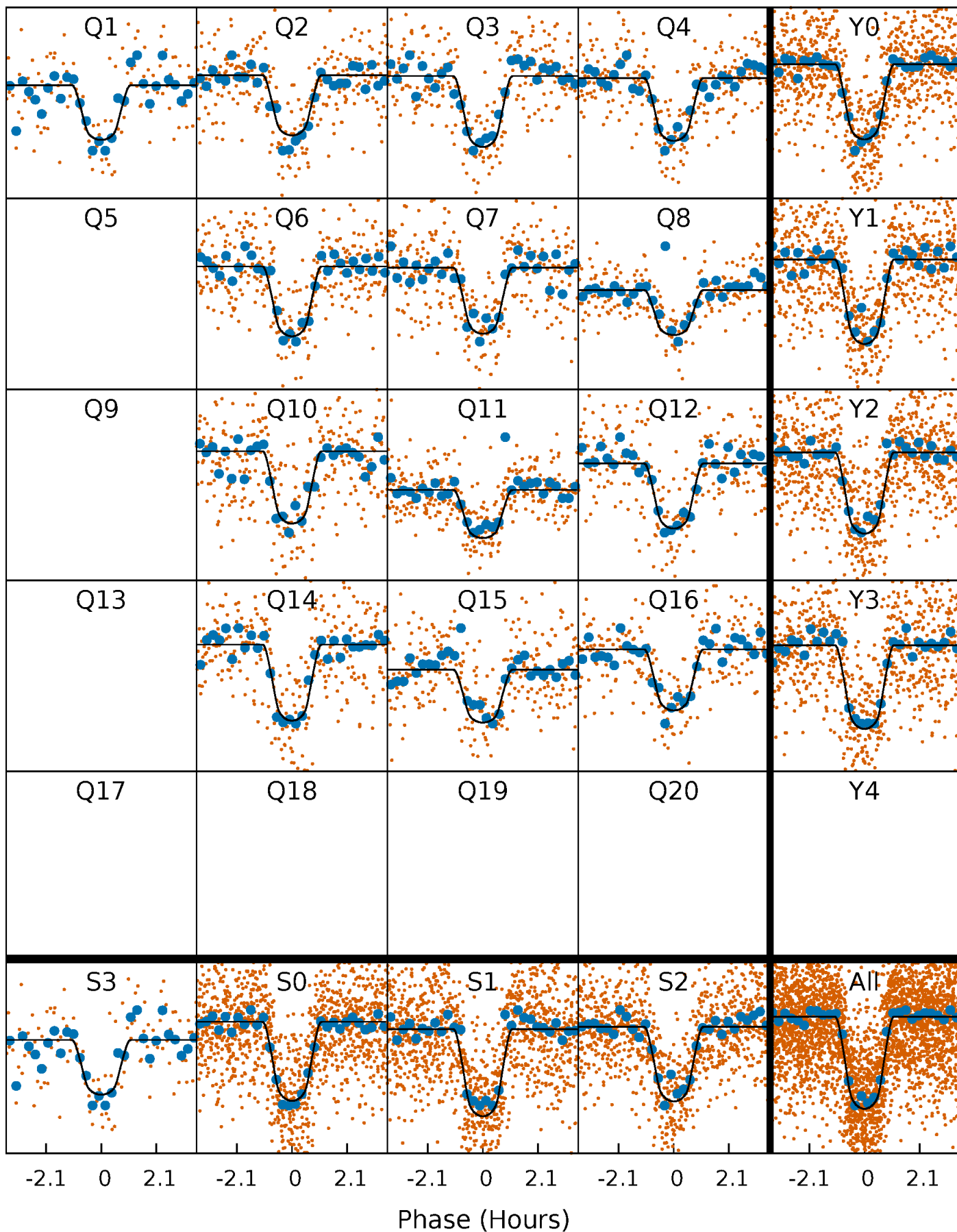
PDC Quarter-Phased Transit Curves

TCE 005080636-01 P= 4.194494 Days $T_0=134.135691$ (BKJD)



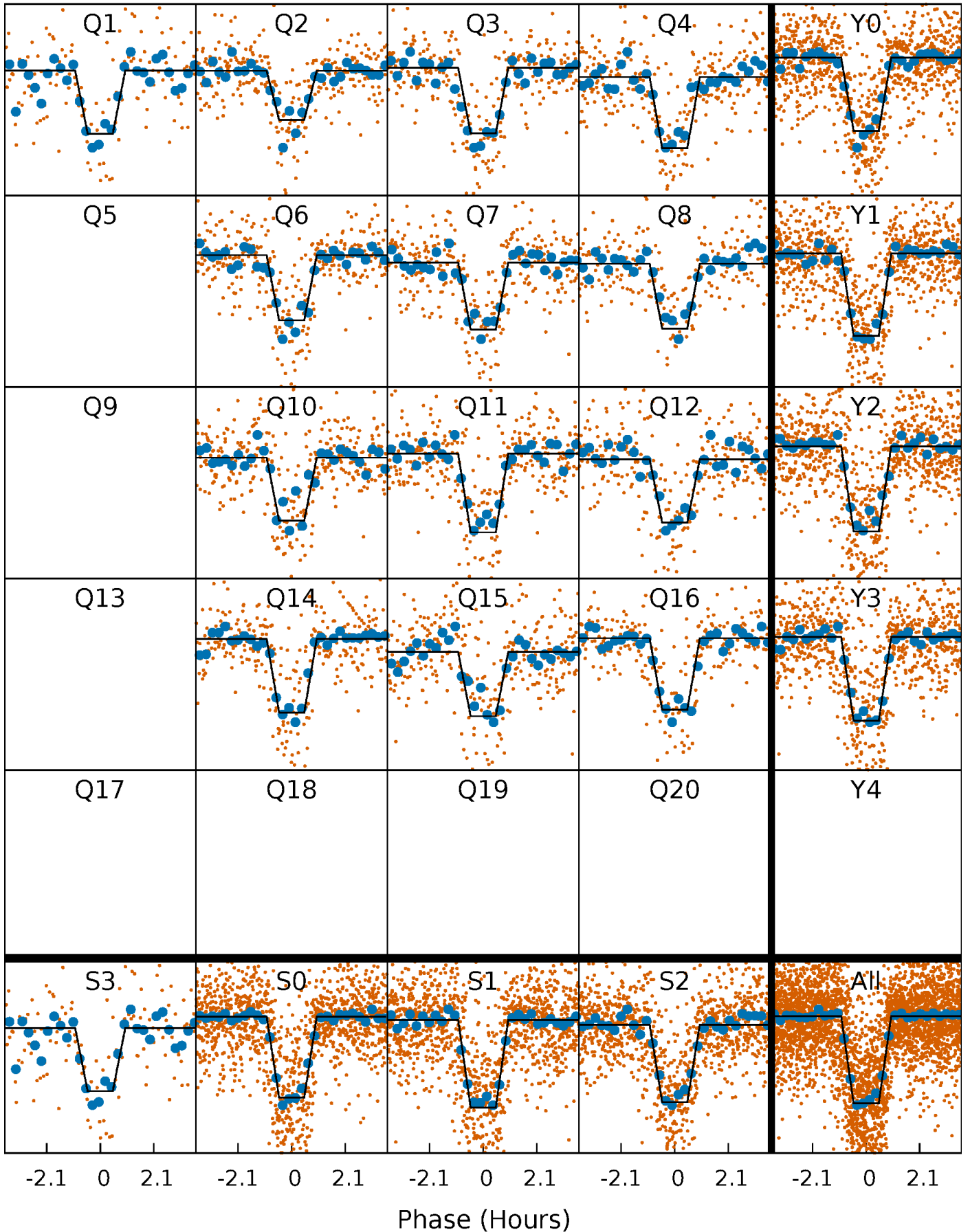
DV Quarter-Phased Transit Curves

TCE 005080636-01 P= 4.194494 Days $T_0=134.135691$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

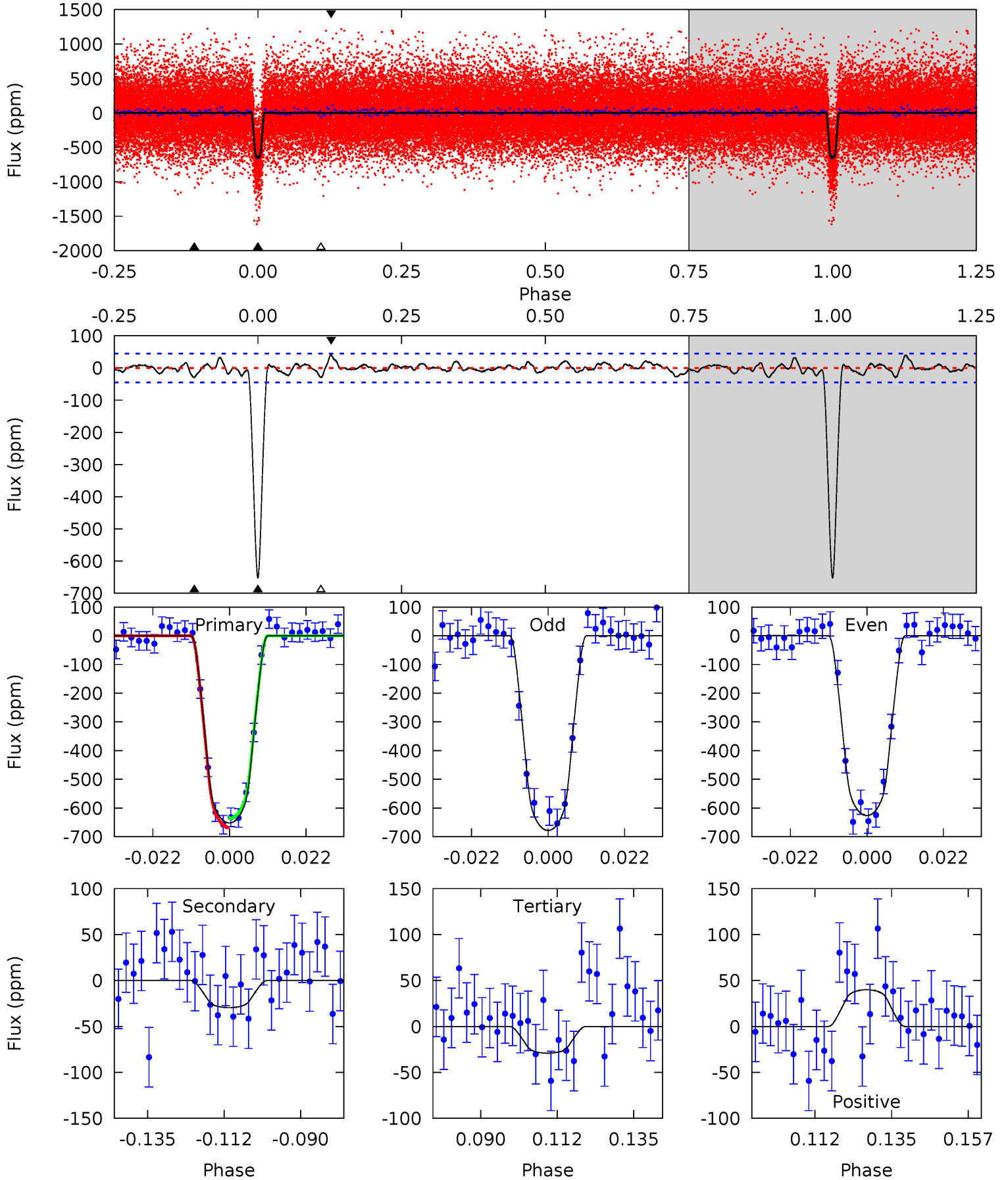
TCE 005080636-01 P= 4.194481 Days $T_0=134.137734$ (BKJD)



DV Model-Shift Uniqueness Test

005080636-01, P = 4.194494 Days, E = 129.941197 Days

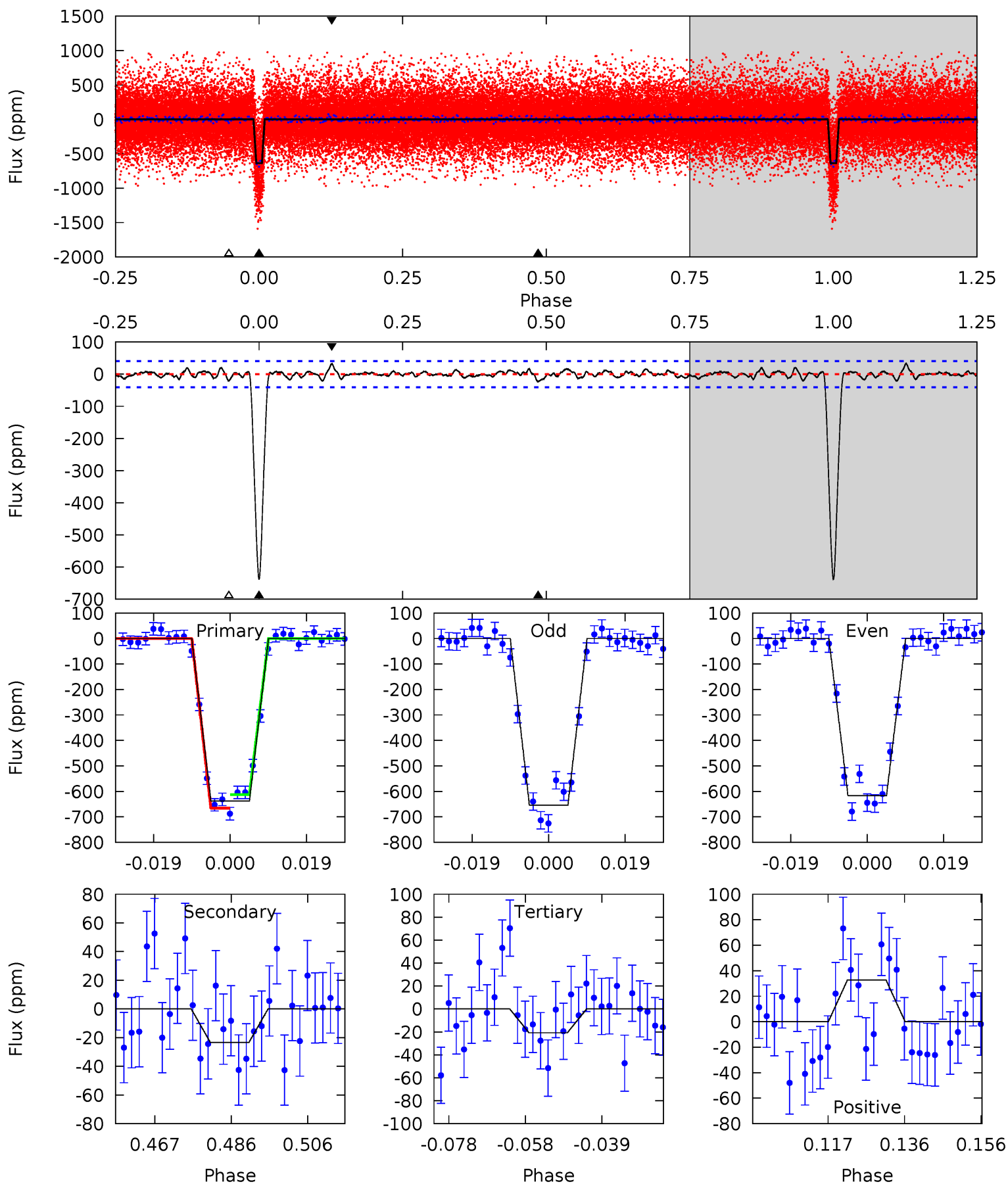
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
70.9	3.22	3.17	4.34	4.87	2.28	1.17	67.7	66.6	0.05	-1.12	2.82	0.96	0.06	1.72



Alt Model-Shift Uniqueness Test

005080636-01, P = 4.194481 Days, E = 129.943253 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
76.7	2.81	2.49	3.95	4.90	2.34	0.91	74.2	72.7	0.32	-1.13	2.25	0.97	0.05	3.21



Stellar Parameters For KIC 005080636

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	$M(M_{\odot})$	p_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	3706^{+73}_{-92}	$4.747^{+0.033}_{-0.033}$	$0.260^{+0.150}_{-0.150}$	$0.522^{+0.032}_{-0.039}$	$0.555^{+0.027}_{-0.044}$	$5.504^{+0.890}_{-0.695}$
	+2%/-2%	+1%/-1%	+58%/-58%	+6%/-7%	+5%/-8%	+16%/-13%
Source	SPE70	SPE60	SPE70	DSEP		

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

Secondary Eclipse Parameters for KIC 005080636-01 / KOI 1843.01

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	-30 ± 9	$1.60^{+0.21}_{-0.19}$	806^{+20}_{-22}	2335^{+122}_{-117}	11^{+5}_{-4}
Alt.	-23 ± 8	$1.47^{+0.18}_{-0.19}$	807^{+22}_{-22}	2324^{+122}_{-141}	10^{+5}_{-4}

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

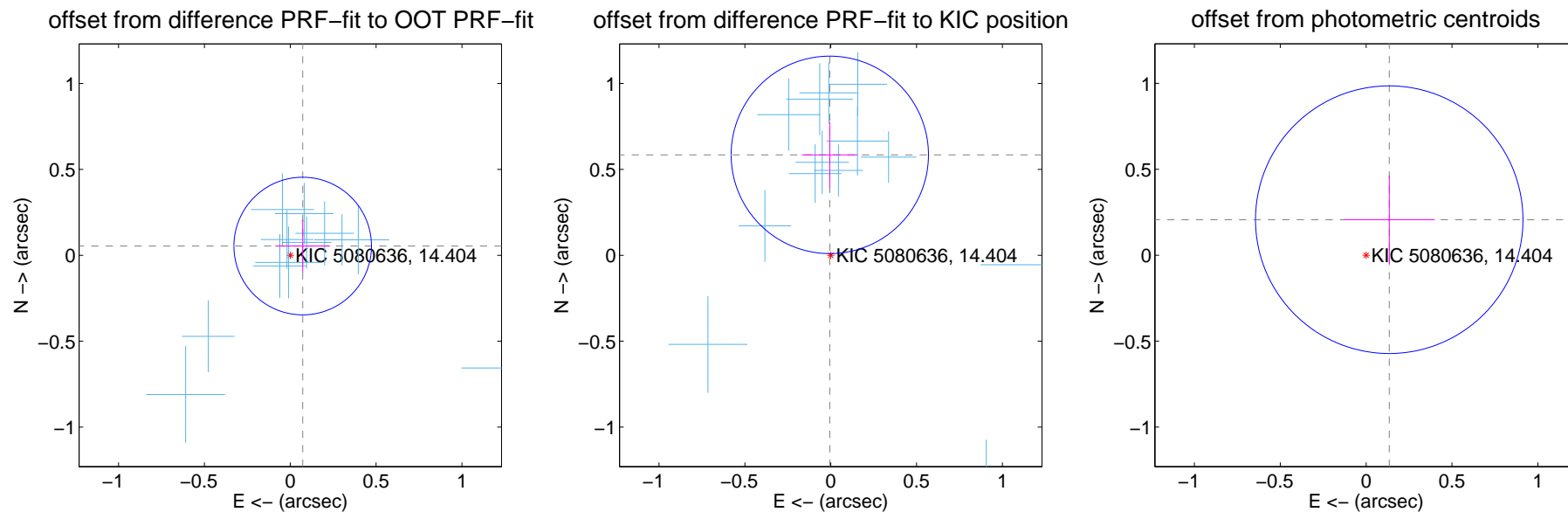
DV Centroid Data

Supplemental centroid analysis for 005080636-01. Kepler magnitude: 14.40. Transit SNR 47.89

There are 13 quarters with good PRF difference image offsets

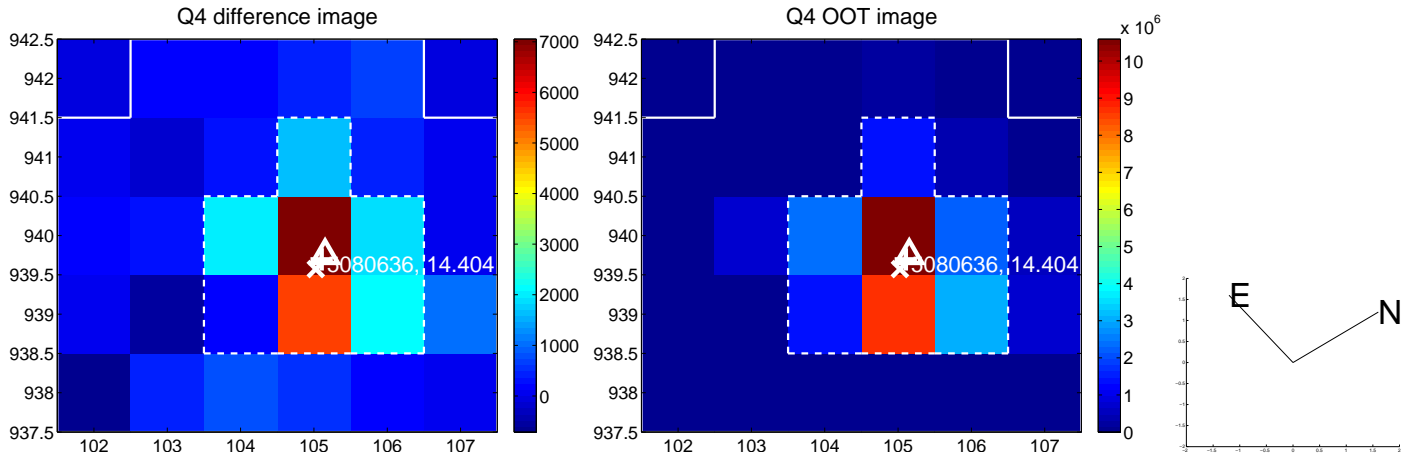
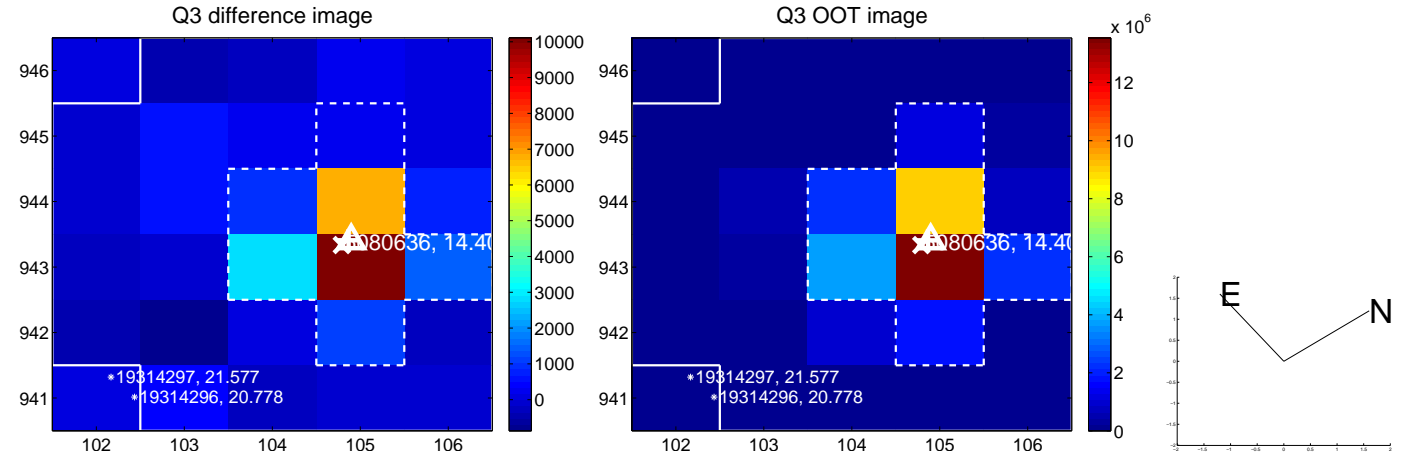
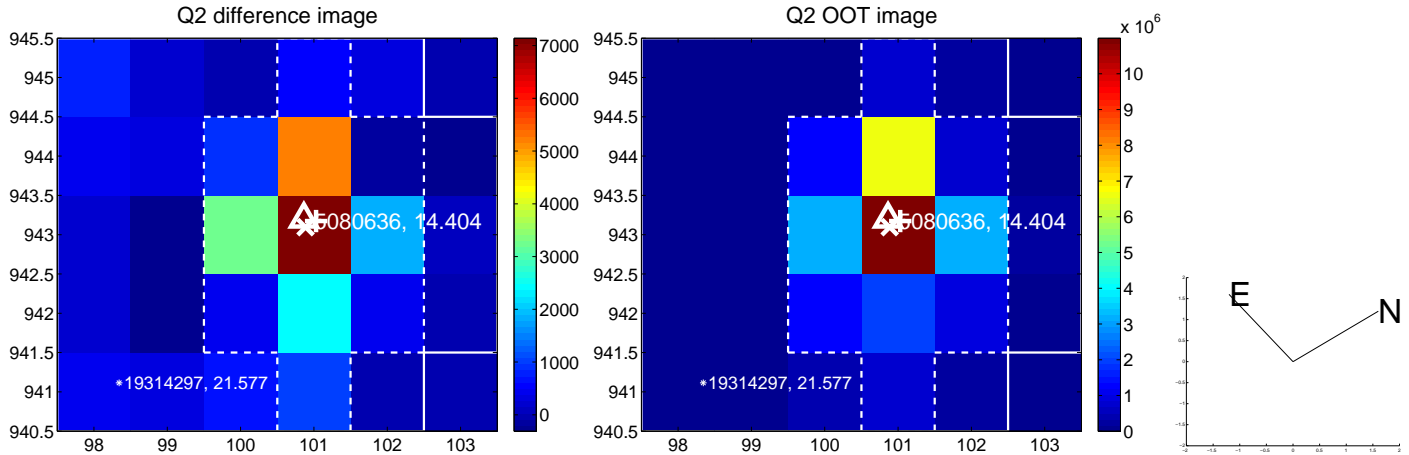
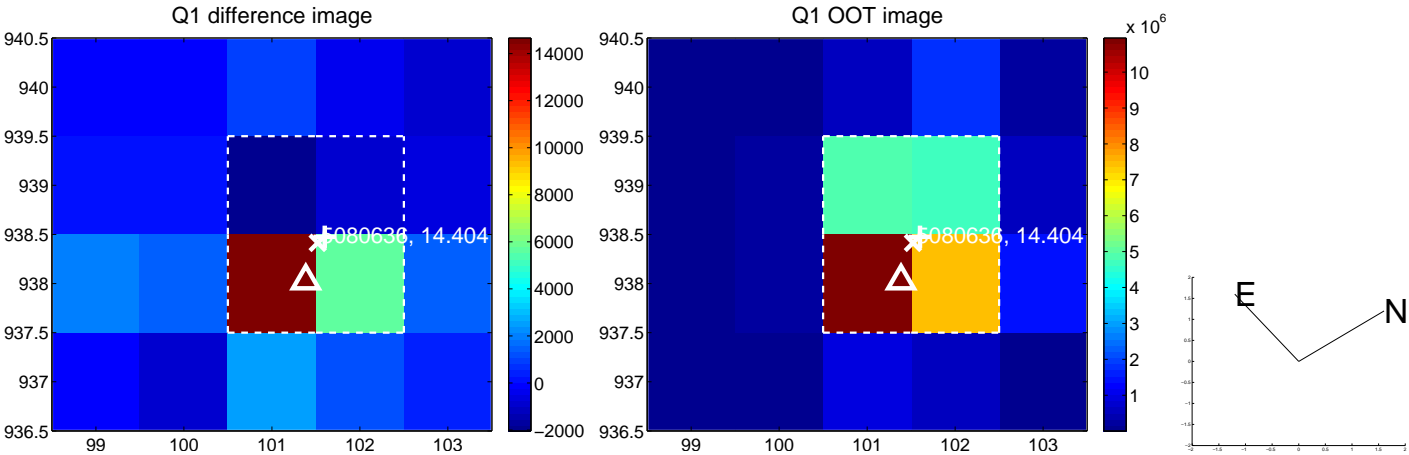
The direct PRF centroid is offset from the target star catalog position by about 0.62 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.090 ± 0.134	0.68	-0.072 ± 0.159	0.054 ± 0.154
PRF-fit source offset from KIC position	0.585 ± 0.192	3.05	0.005 ± 0.162	0.585 ± 0.191
photometric centroid source offset	0.25 ± 0.26	0.95	-0.13 ± 0.26	0.21 ± 0.26

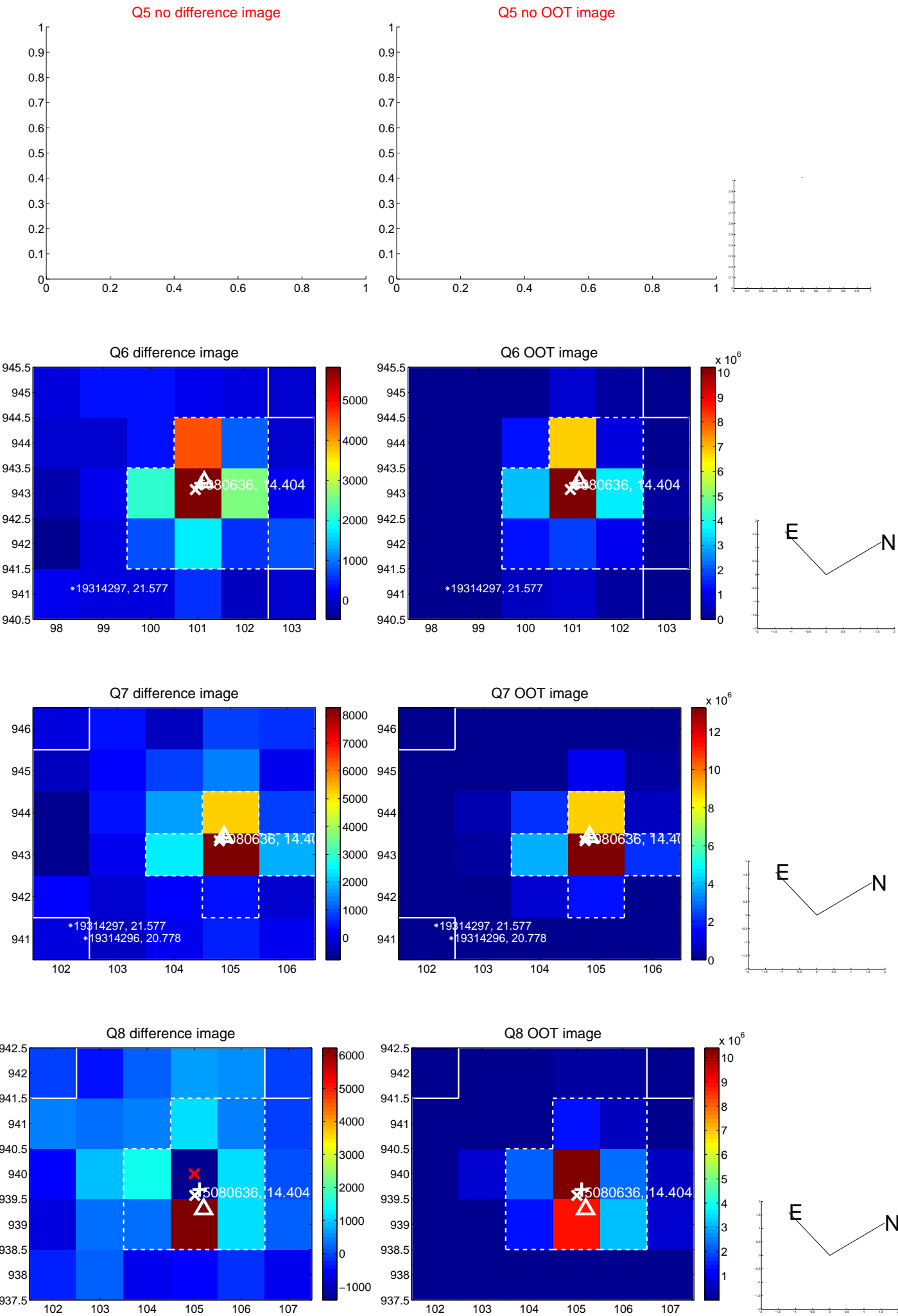


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses:** good quarterly centroid offsets; **Vermillion crosses:** bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

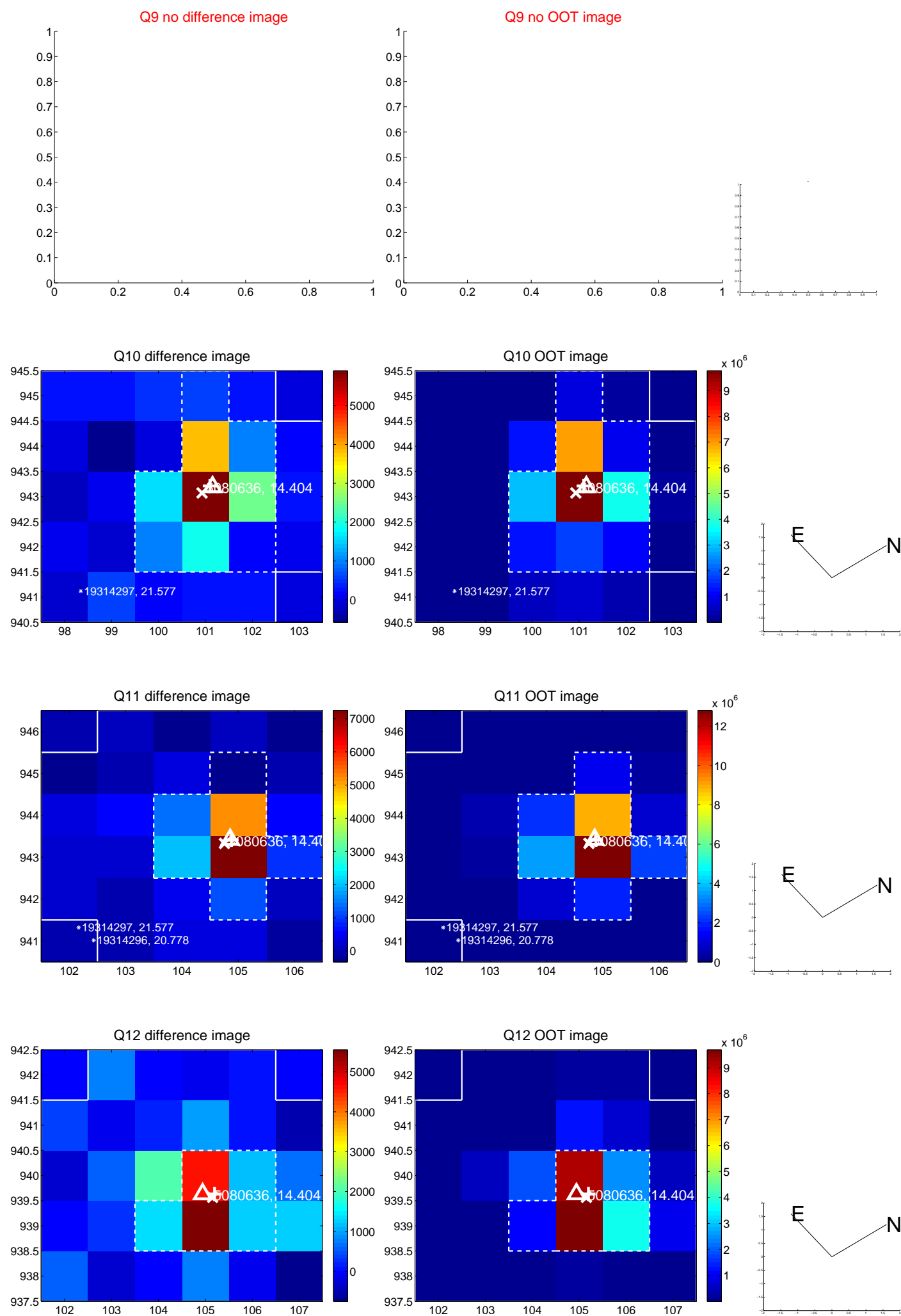
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



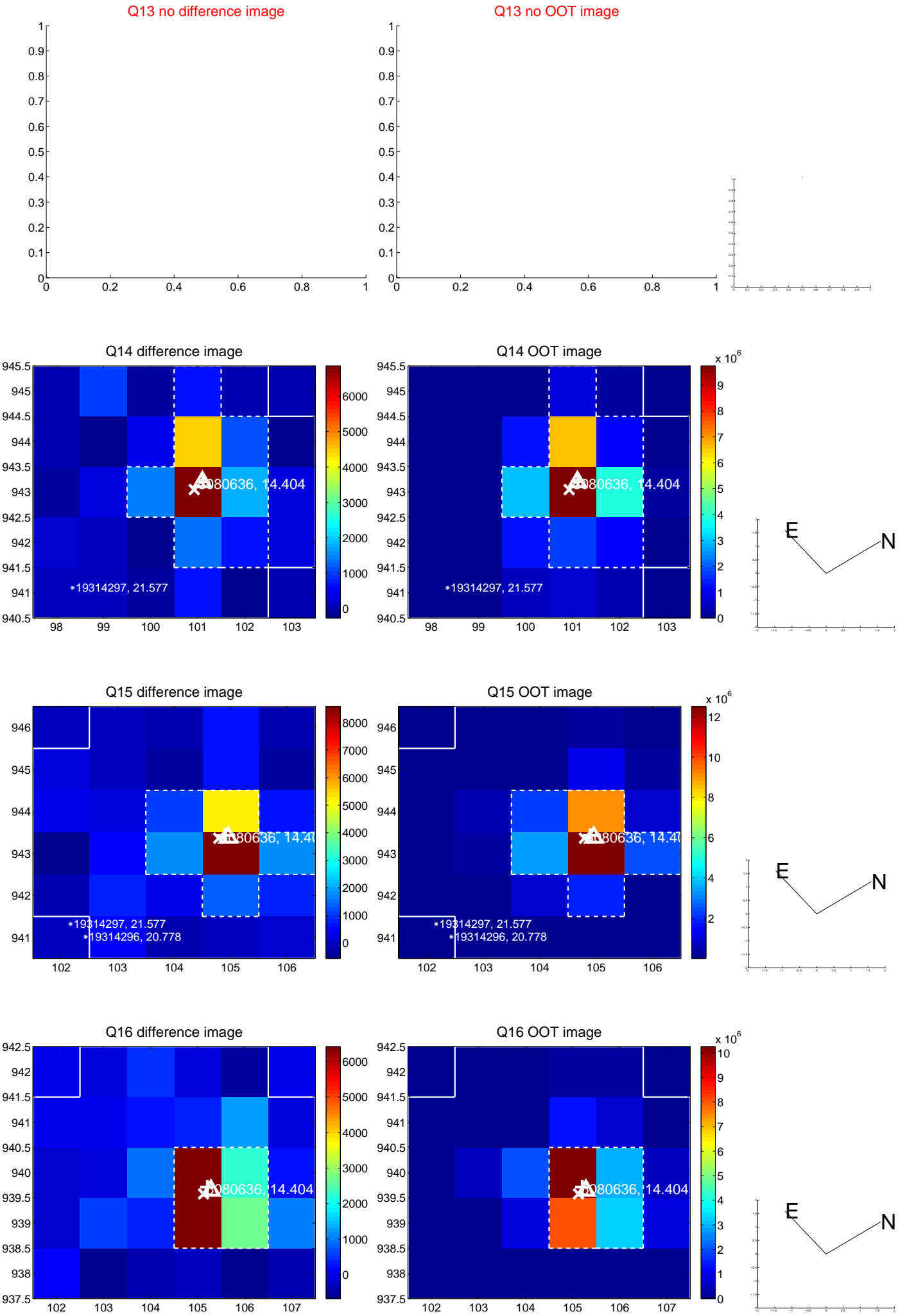
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



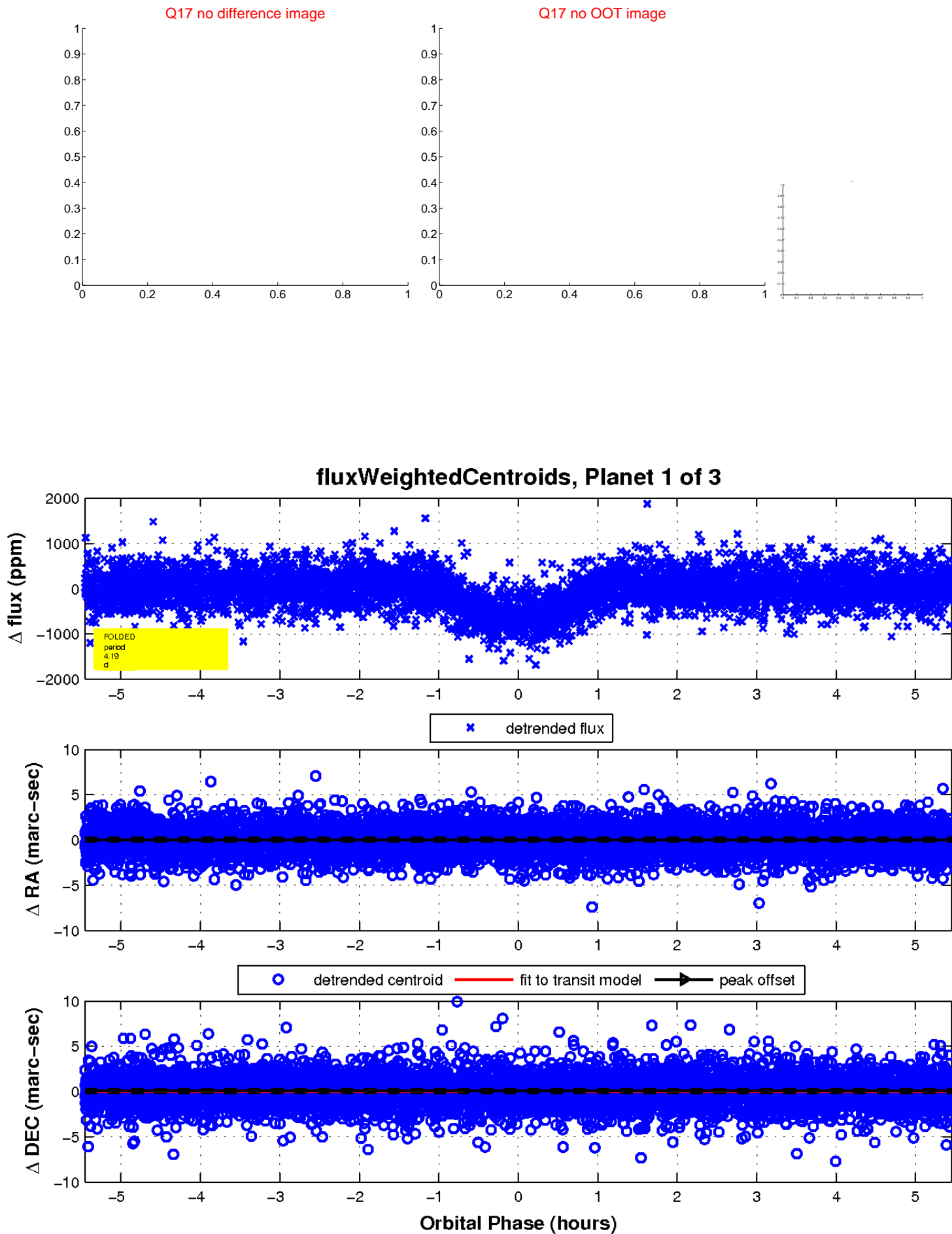
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value



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

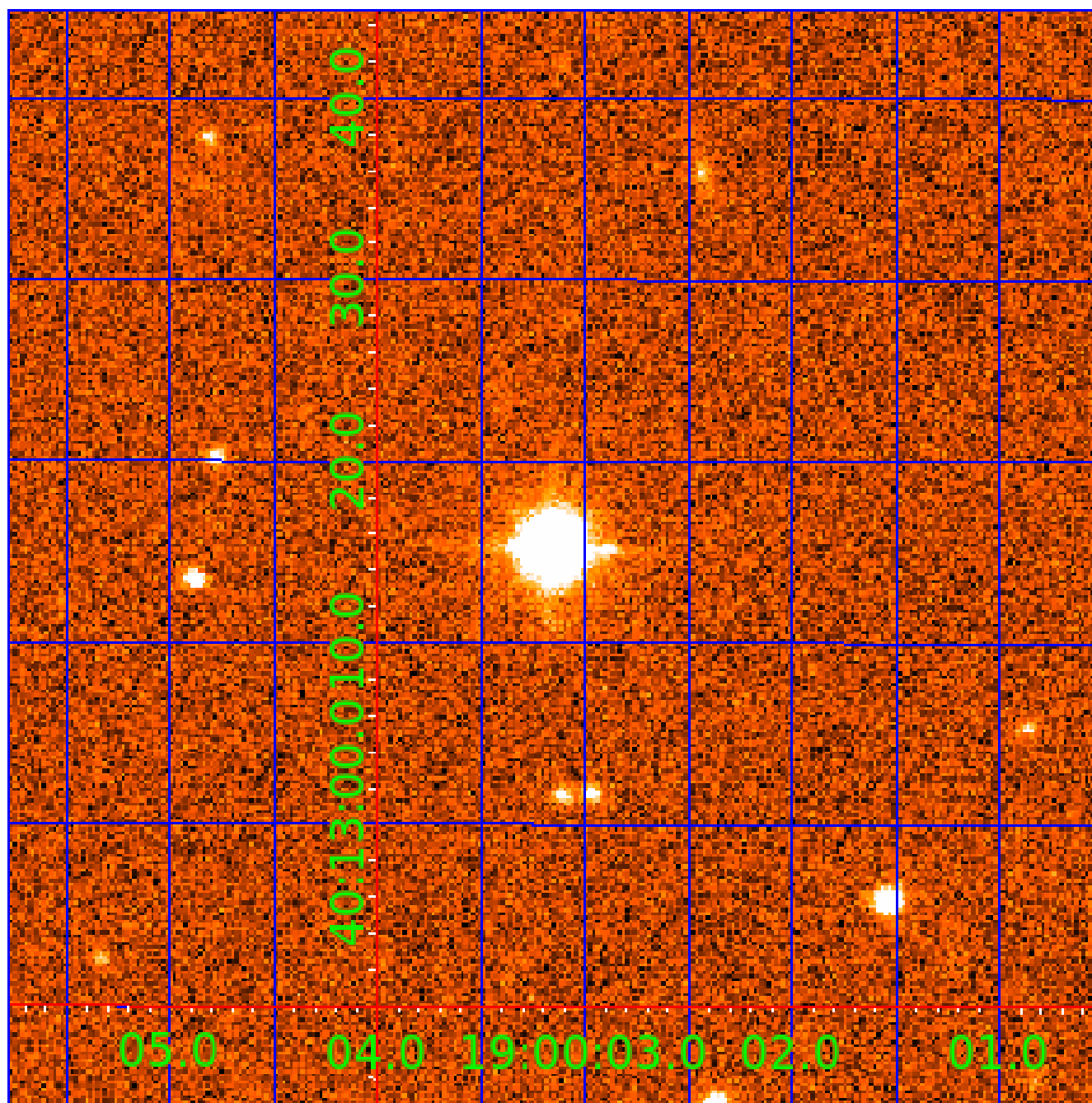


white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



UKIRT Image

Declination



KIC 005080636

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})
005080636-01	OBS	1843.01	4.194494	134.135691	669.1	1.818	40.0	47.9	0.52	3706	1.61	26.31
005080636-02	OBS	1843.02	6.355975	137.488266	178.8	1.615	9.9	10.0	0.52	3706	0.69	15.11
005080636-03	OBS	No	0.530677	131.731841	106.2	1.127	9.4	17.4	0.52	3706	0.55	414.18

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
005080636-01	OBS	PC	1.00	0	0	0	0	CENT_KIC_POS
005080636-02	OBS	PC	0.97	0	0	0	0	CENT_KIC_POS
005080636-03	OBS	FP	0.00	1	0	0	0	LPP_DV—MOD_NONUNIQ_ALT—CENT_KIC_POS

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.

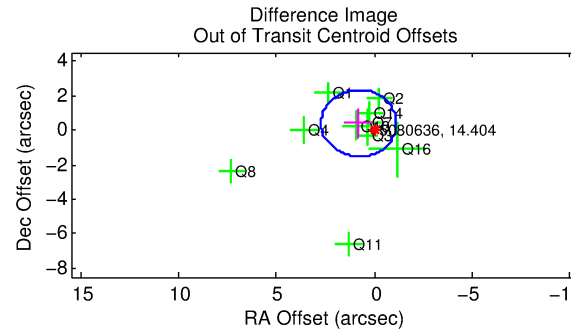
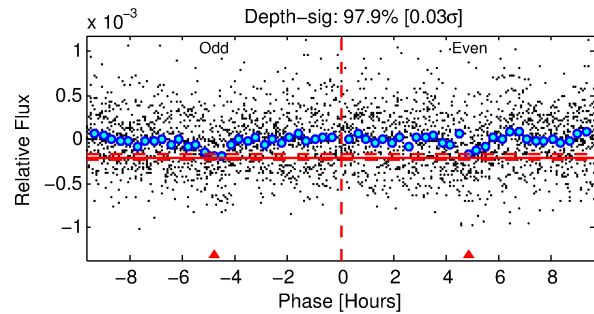
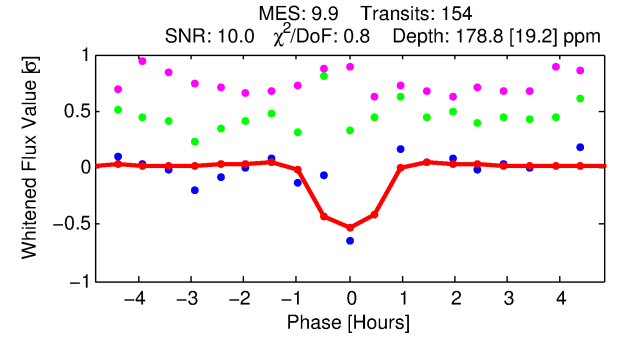
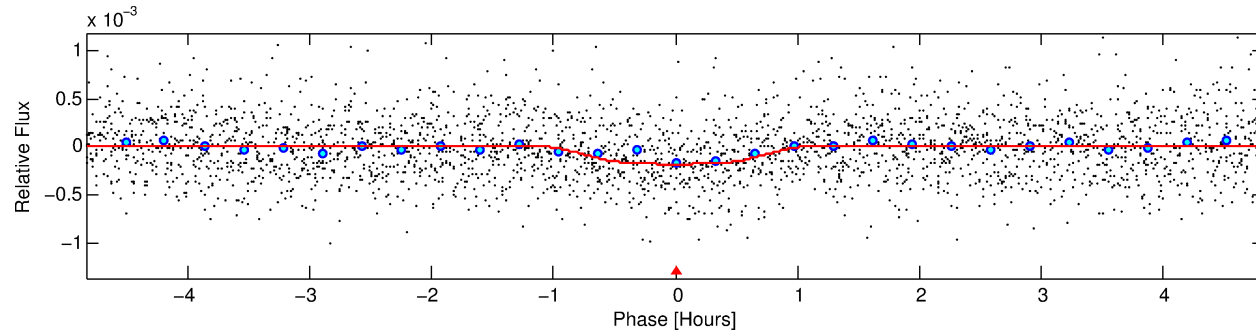
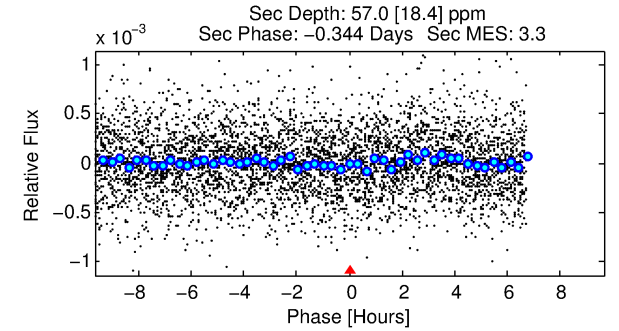
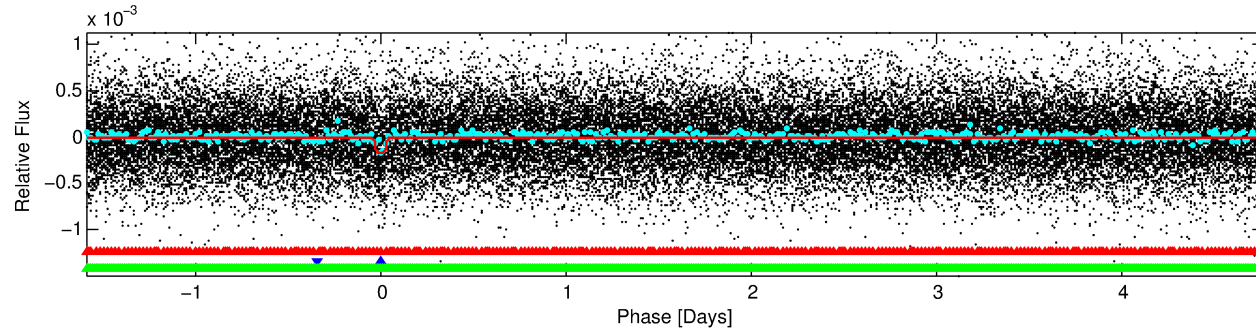
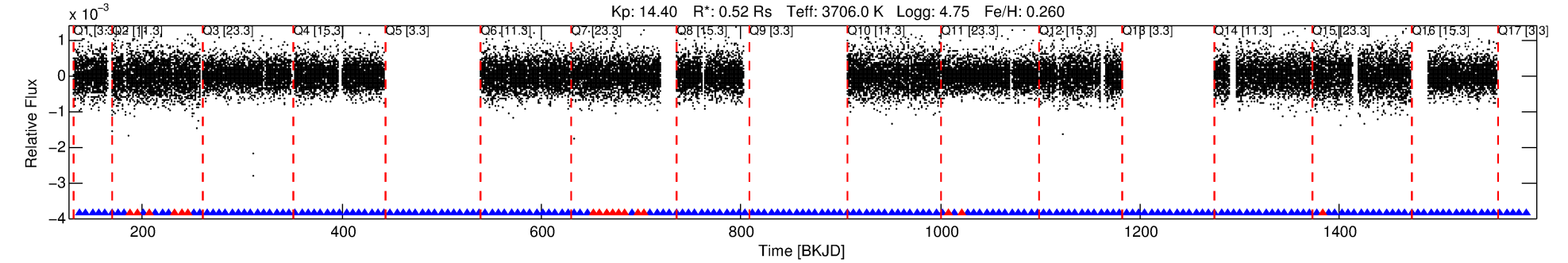
Ephemeris Match Information For 005080636-02

No Significant Match Found

DV One-Page Summary

KIC: 5080636 Candidate: 2 of 3 Period: 6.356 d

KOI: K01843.02 Corr: 0.862



DV Fit Results:

Period = 6.35598 [0.00003] d
Epoch = 137.4883 [0.0033] BKJD
Rp/R* = 0.0121 [0.0172]
a/R* = 29.18 [151.36]
b = 0.29 [16.68]
Seff = 15.11 [1.85]
Teq = 503 [15] K
Rp = 0.69 [0.98] Re
a = 0.0552 [0.0031] AU
Ag = 200.62 [573.44] [0.35 σ]
Teffp = 2926 [2091] K [1.16 σ]

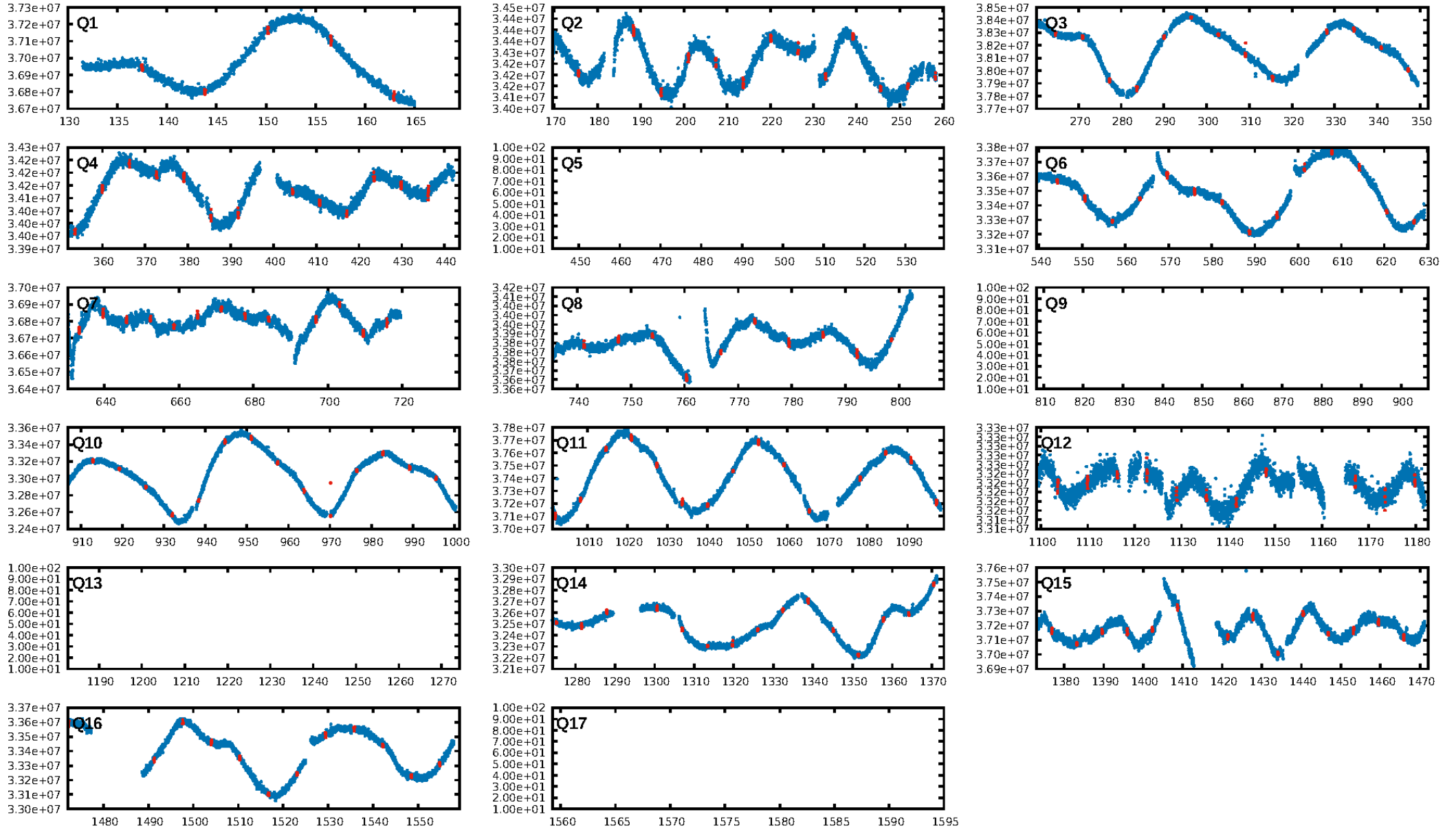
DV Diagnostic Results:

ShortPeriod-sig: 100.0% [21.33 σ]
LongPeriod-sig: N/A
ModelChiSquare2-sig: 99.9%
ModelChiSquareGof-sig: 100.0%
Bootstrap-pfa: 3.34e-20
RollingBand-fgt: 0.89 [132/149]
GhostDiagnostic-chr: 2.035
Centroid-sig: 2.0%
Centroid-so: 1.579 arcsec [1.32 σ]
OotOffset-rm: 0.889 arcsec [1.39 σ]
KicOffset-rm: 1.215 arcsec [1.83 σ]
OotOffset-st: 3/3/3/1 [10]
KicOffset-st: 3/3/3/1 [10]
DiffImageQuality-fgm: 0.60 [6/10]
DiffImageOverlap-fno: 0.00 [0/13]

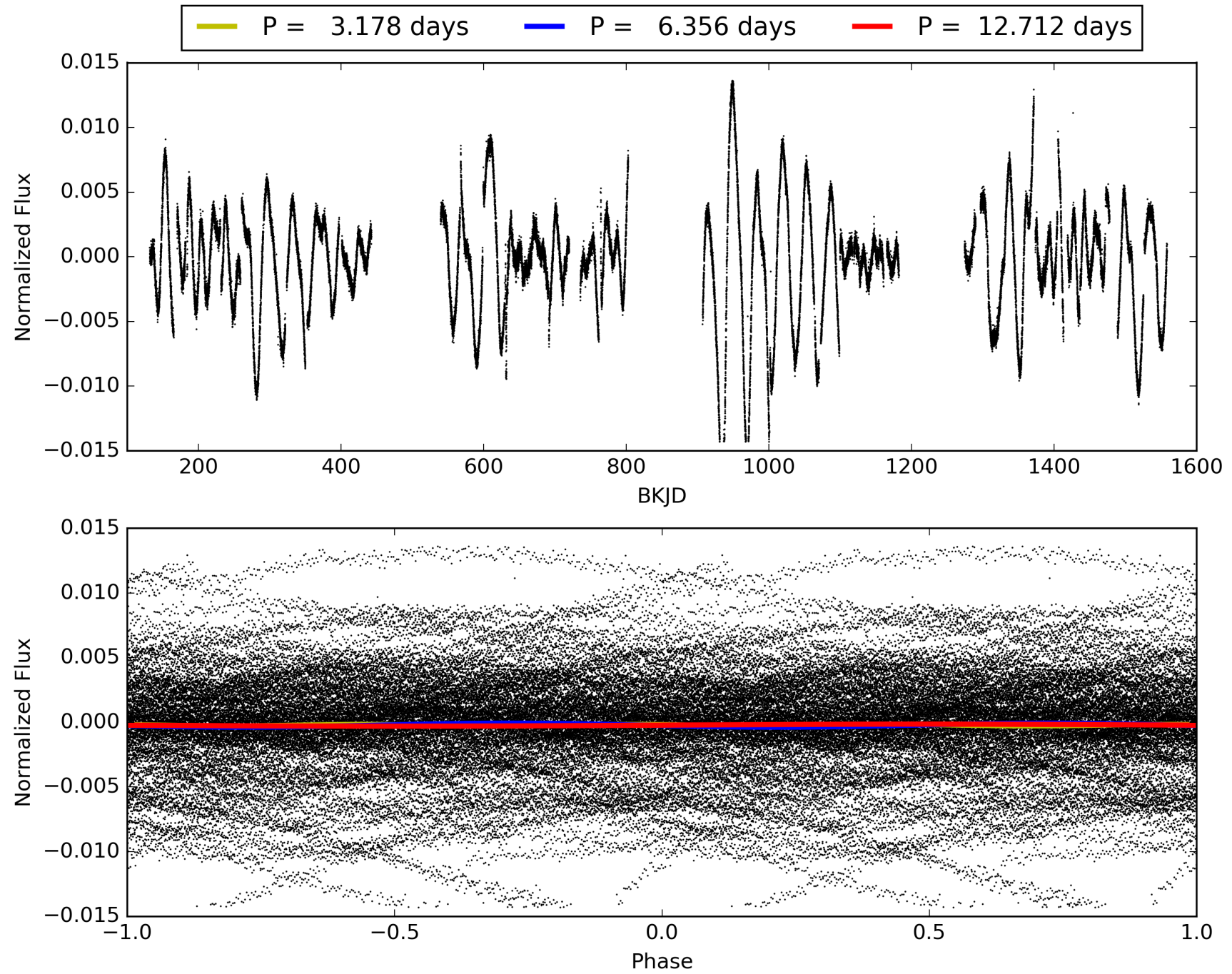
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 01-Feb-2016 17:31:49 Z

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

TCE 005080636-02, PDC Light Curves

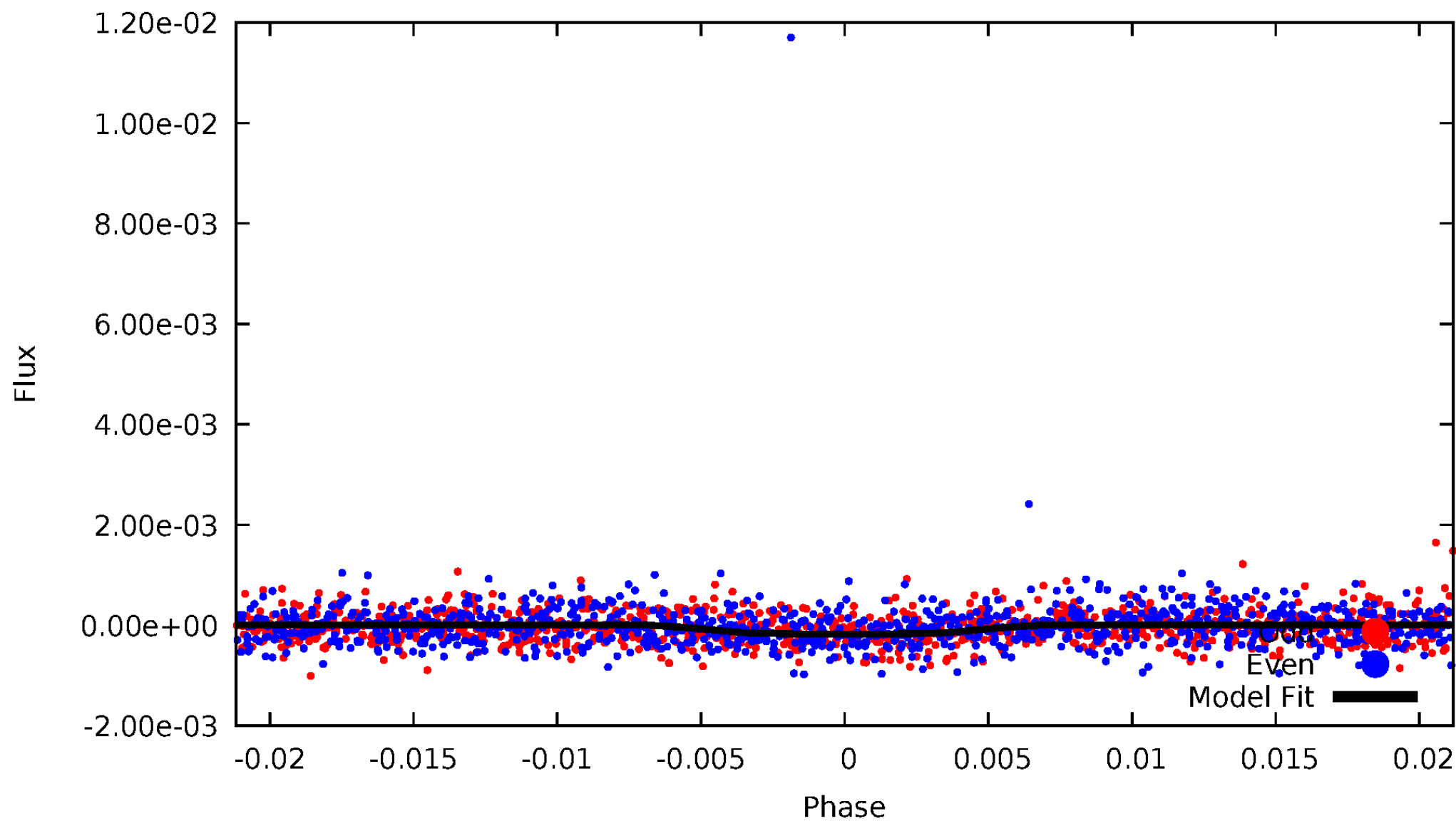


TCE 005080636-02



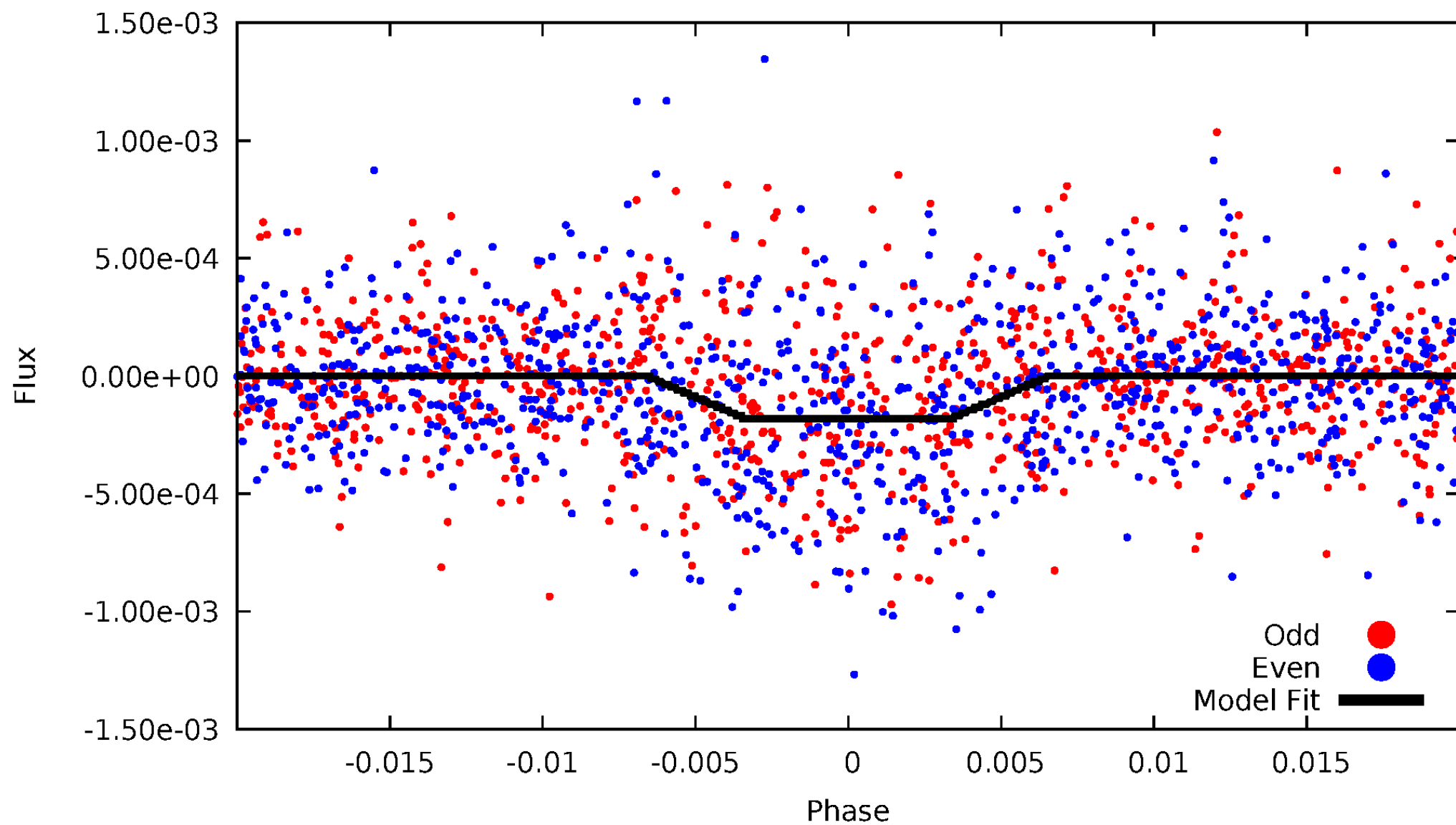
DV Odd/Even

TCE 005080636-02



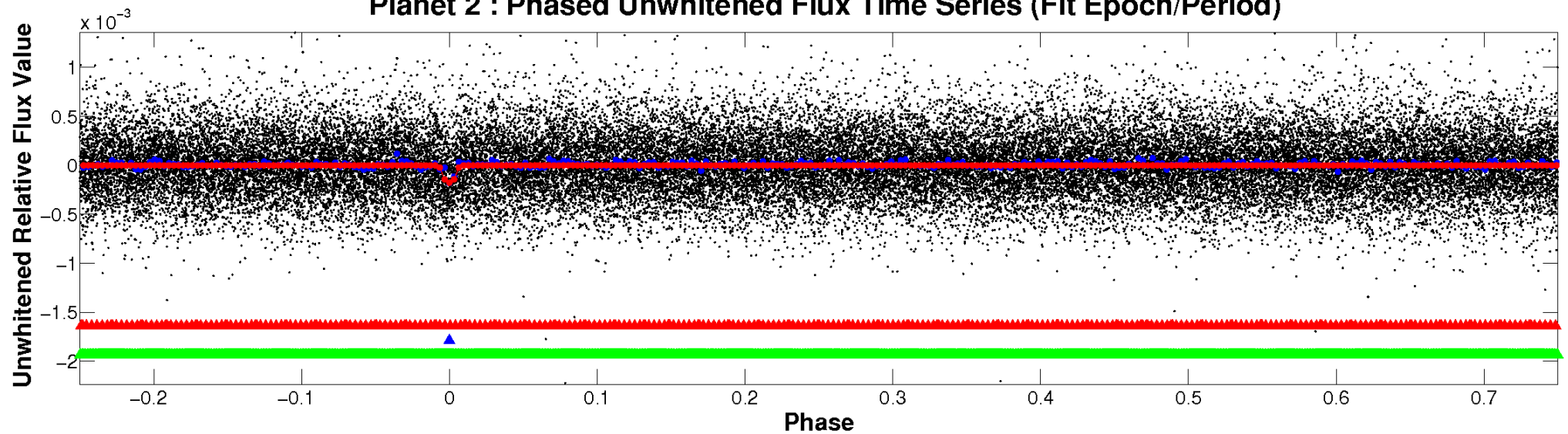
ALT Odd/Even

TCE 005080636-02

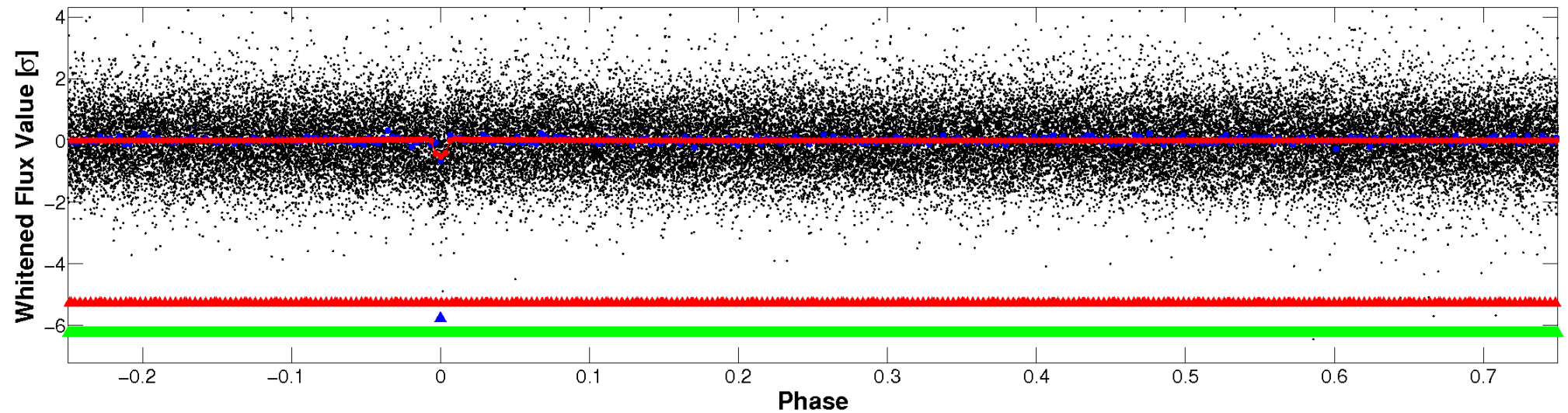


Non-Whitened Vs. Whitened Light Curve

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

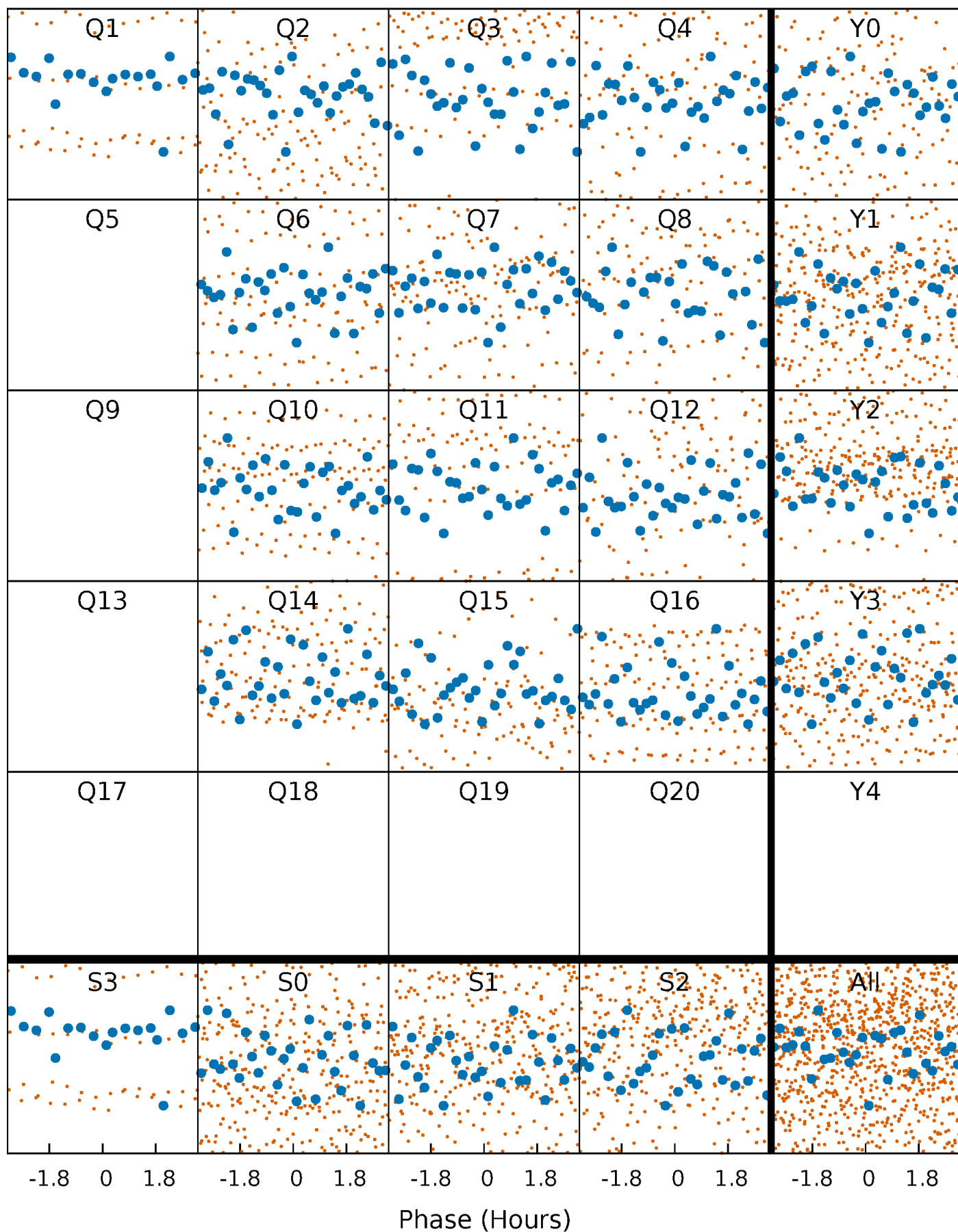


Planet 2 : Phased Whitened Flux Time Series (Fit Epoch/Period)



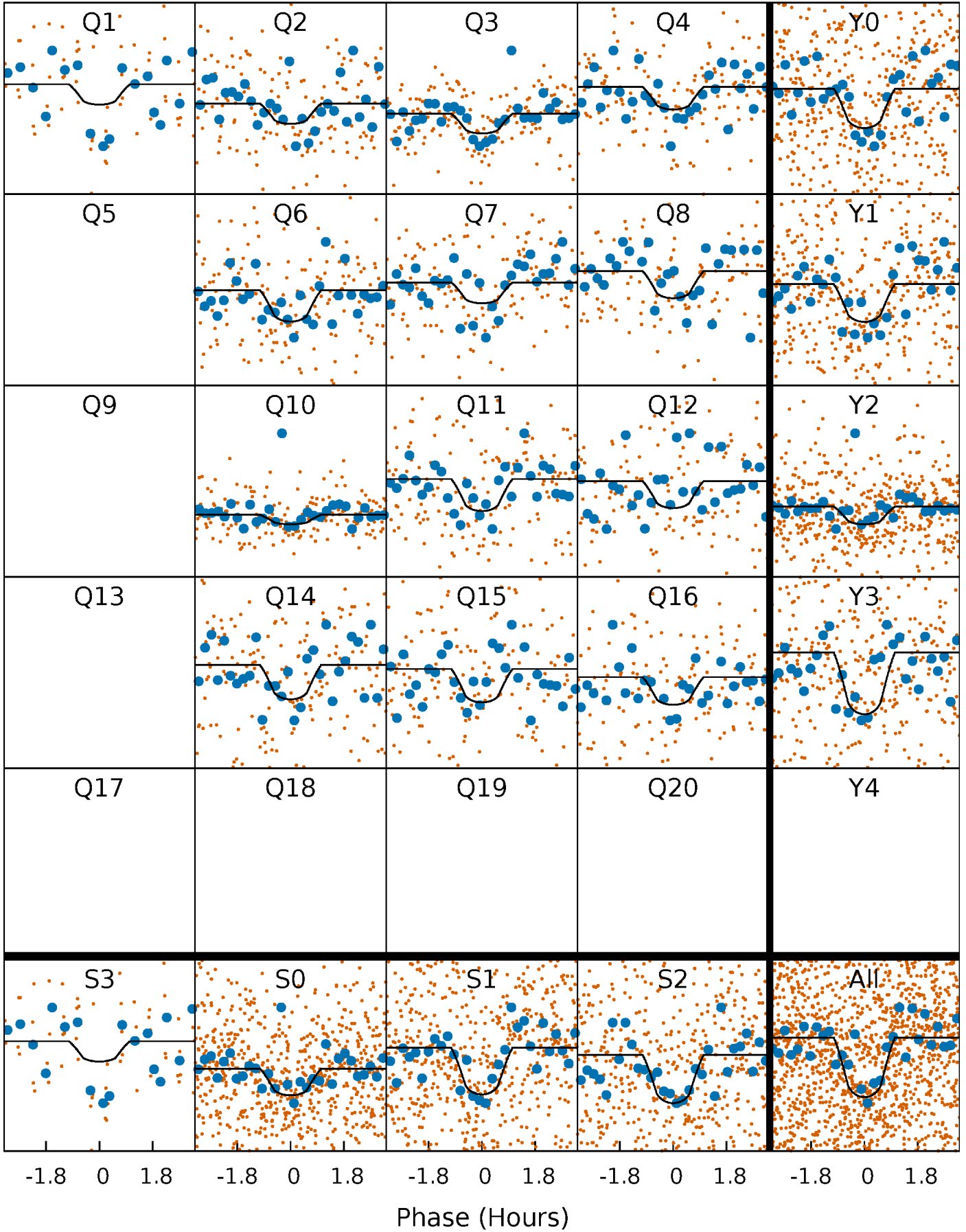
PDC Quarter-Phased Transit Curves

TCE 005080636-02 P= 6.355975 Days $T_0=137.488266$ (BKJD)



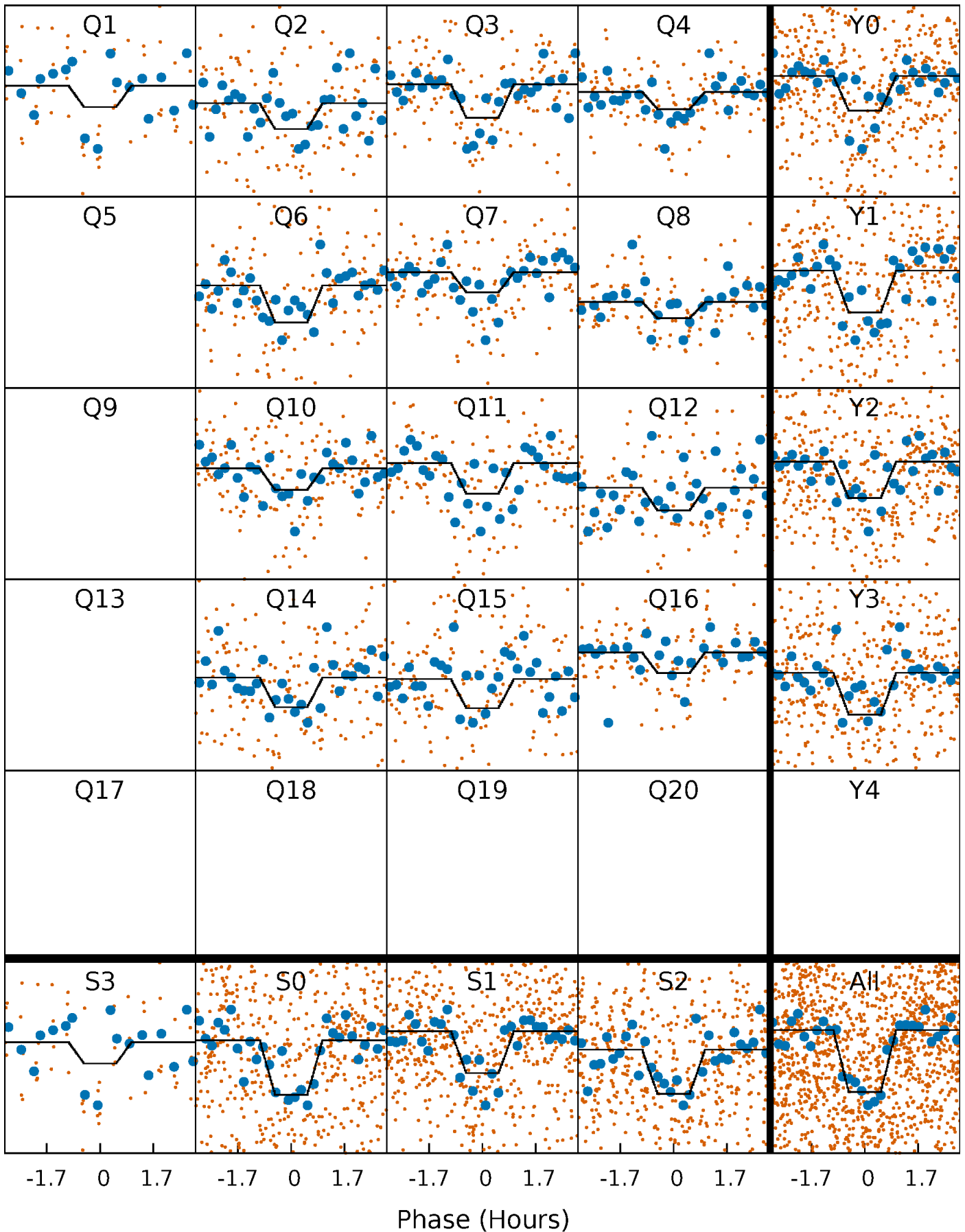
DV Quarter-Phased Transit Curves

TCE 005080636-02 P= 6.355975 Days $T_0=137.488266$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

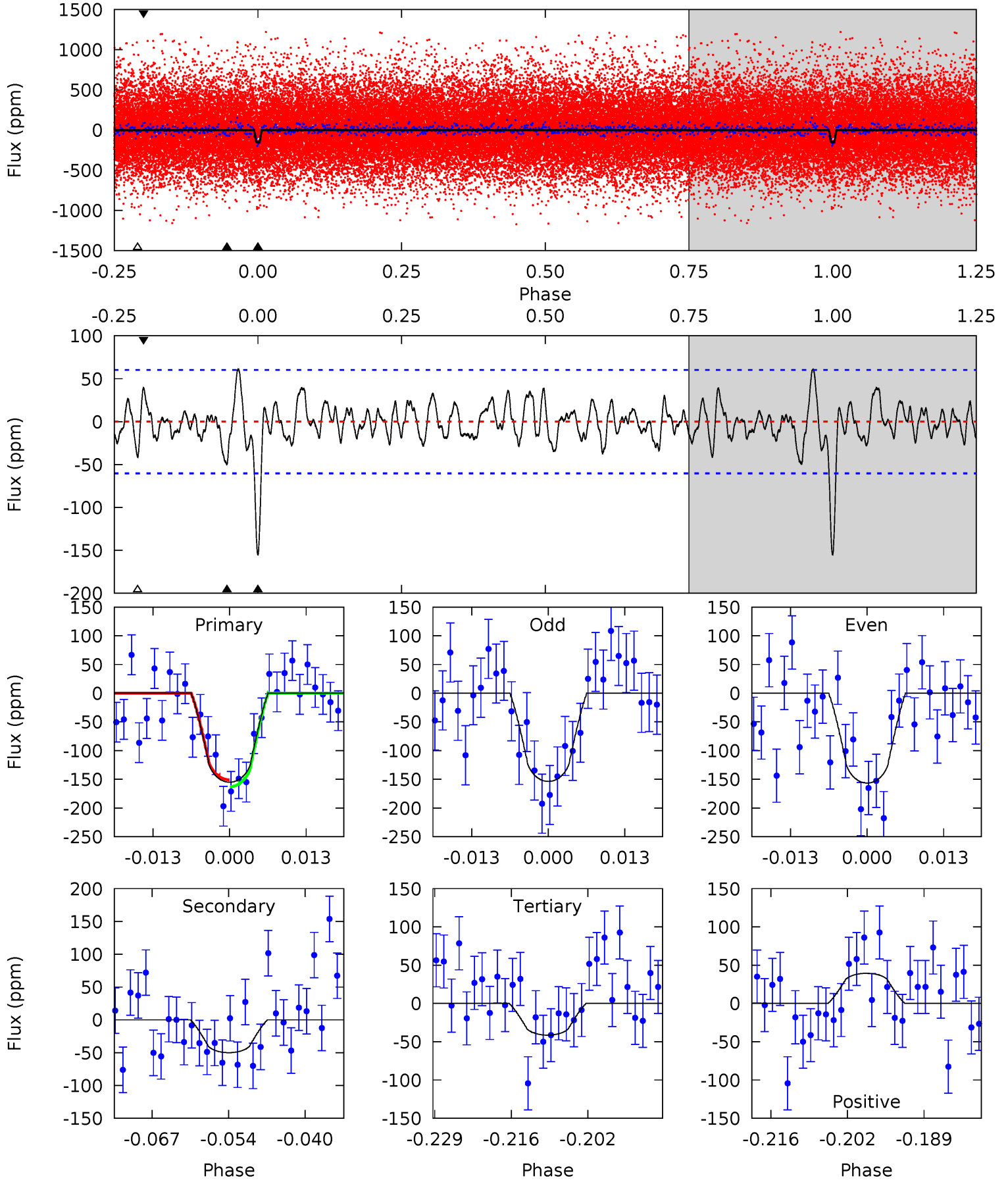
TCE 005080636-02 P= 6.355853 Days $T_0=137.500401$ (BKJD)



DV Model-Shift Uniqueness Test

005080636-02, P = 6.355975 Days, E = 131.132291 Days

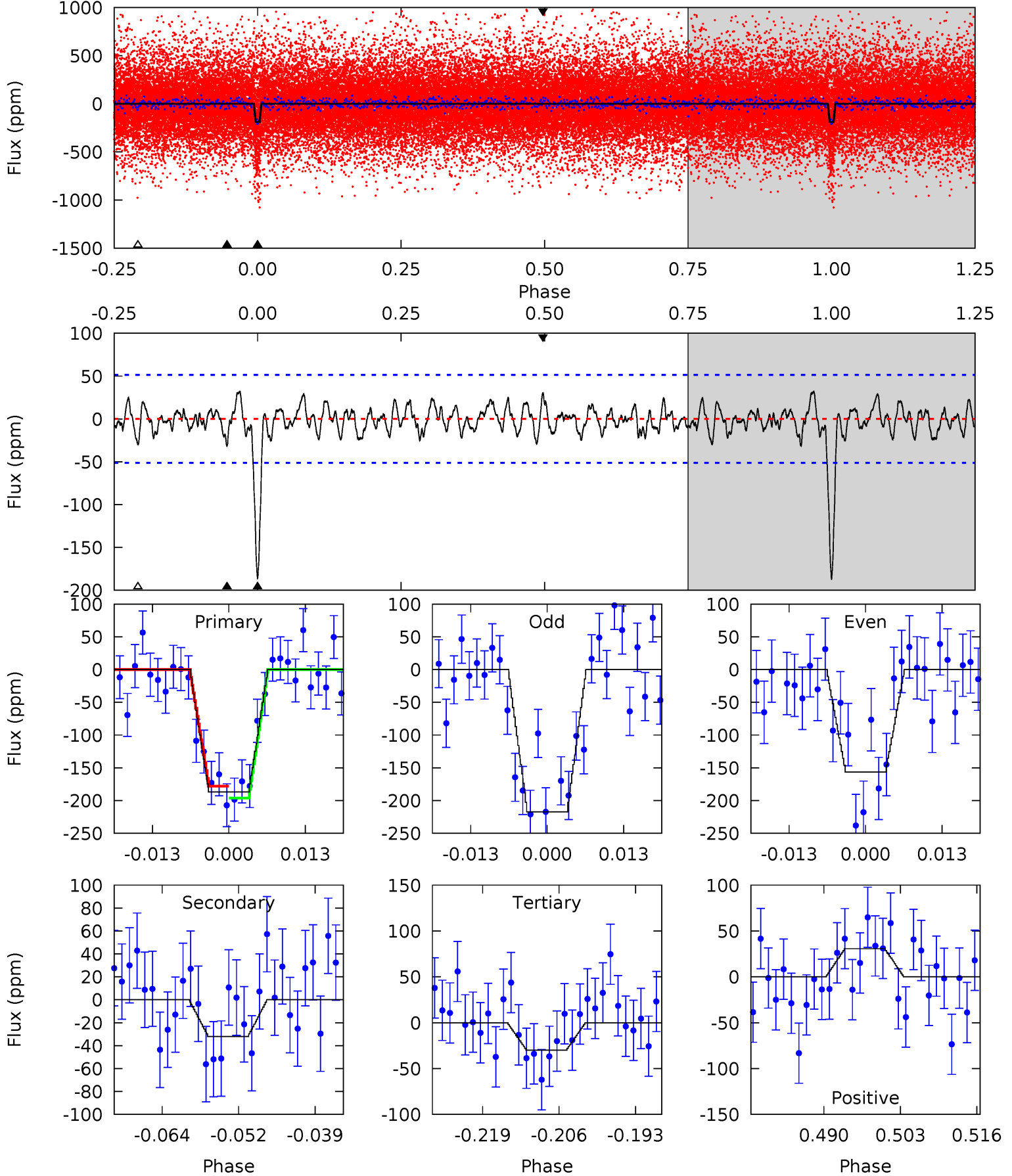
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
12.8	4.13	3.42	3.25	4.97	2.47	1.42	9.39	9.56	0.71	0.88	0.12	0.77	0.28	0.50



Alt Model-Shift Uniqueness Test

005080636-02, P = 6.355853 Days, E = 131.144548 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
18.1	3.10	2.90	2.97	4.98	2.49	1.17	15.2	15.1	0.19	0.12	2.96	1.03	0.15	0.88



Stellar Parameters For KIC 005080636

	$T_{\text{eff}} (K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M (M_{\odot})$	$p_{\star} (g \cdot \text{cm}^{-3})$
	3706^{+73}_{-92}	$4.747^{+0.033}_{-0.033}$	$0.260^{+0.150}_{-0.150}$	$0.522^{+0.032}_{-0.039}$	$0.555^{+0.027}_{-0.044}$	$5.504^{+0.890}_{-0.695}$
	+2%/-2%	+1%/-1%	+58%/-58%	+6%/-7%	+5%/-8%	+16%/-13%
Source	SPE70	SPE60	SPE70	DSEP		

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

Secondary Eclipse Parameters for KIC 005080636-02 / KOI 1843.02

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	A_{obs}
DV	-50 ± 12	$1.01^{+0.85}_{-0.65}$	702^{+19}_{-20}	2820^{+1027}_{-437}	81^{+596}_{-58}
Alt.	-32 ± 10	$1.04^{+0.79}_{-0.69}$	701^{+18}_{-19}	2631^{+945}_{-378}	50^{+363}_{-36}

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

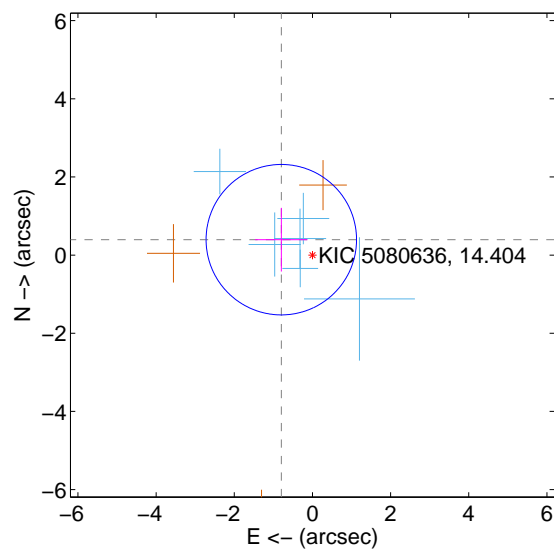
Supplemental centroid analysis for 005080636-02. Kepler magnitude: 14.40. Transit SNR 10.01

There are 6 quarters with good PRF difference image offsets

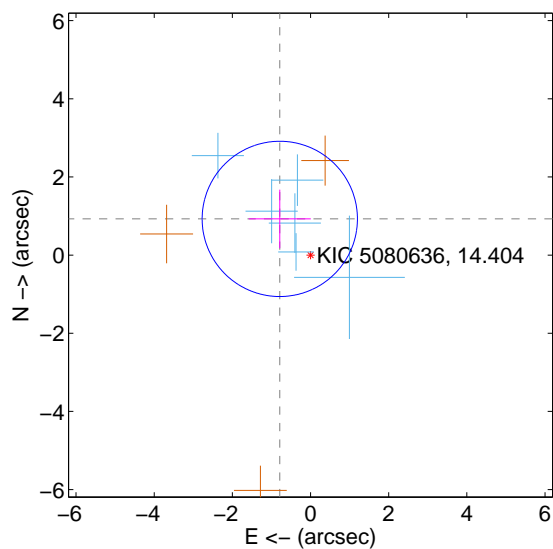
The direct PRF centroid is offset from the target star catalog position by about 0.59 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.889 ± 0.642	1.39	0.797 ± 0.670	0.394 ± 0.815
PRF-fit source offset from KIC position	1.215 ± 0.662	1.83	0.786 ± 0.794	0.926 ± 0.748
photometric centroid source offset	1.58 ± 1.19	1.32	0.07 ± 1.25	-1.58 ± 1.19

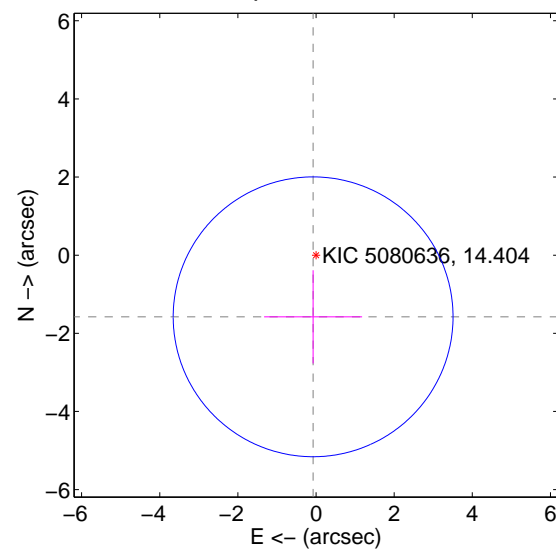
offset from difference PRF-fit to OOT PRF-fit



offset from difference PRF-fit to KIC position

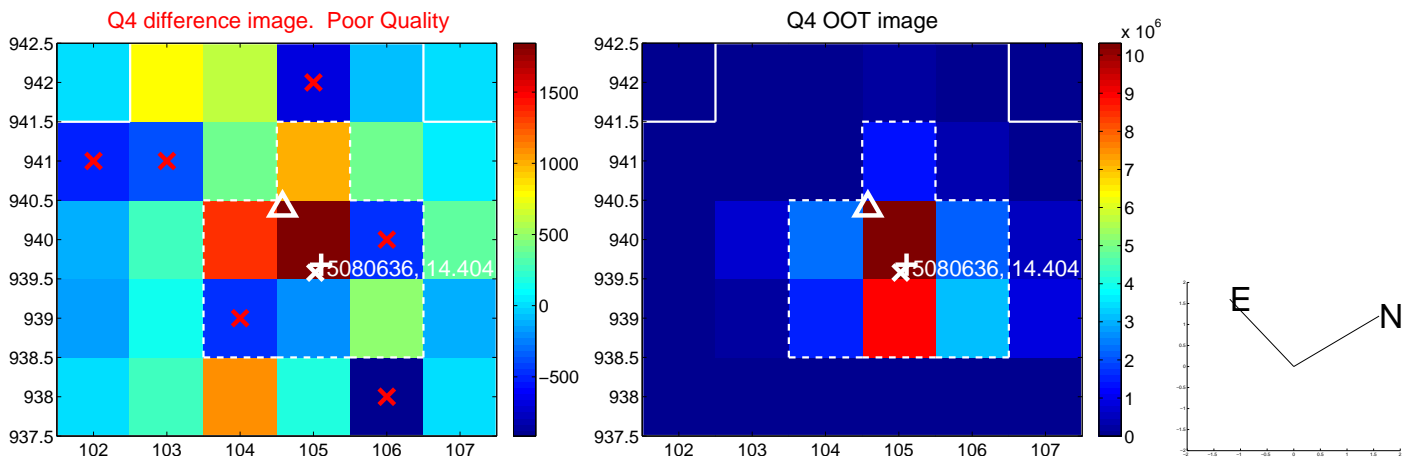
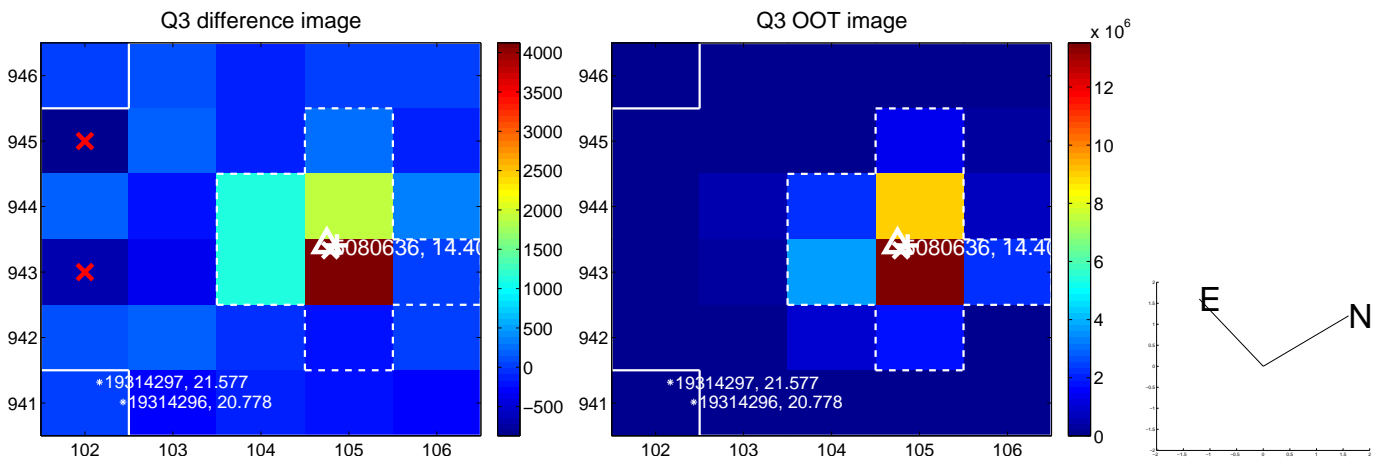
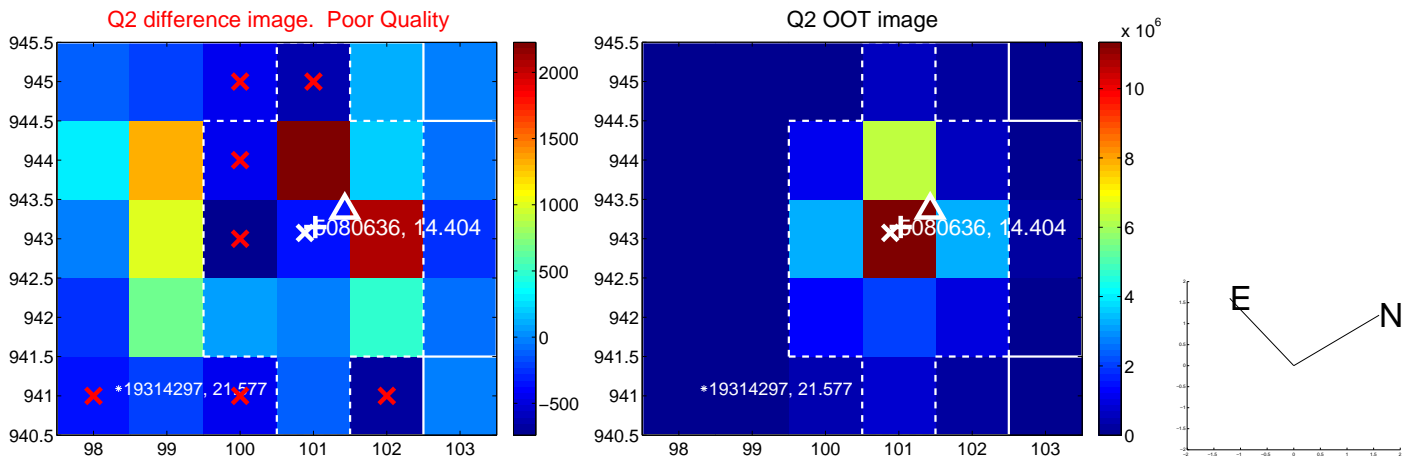
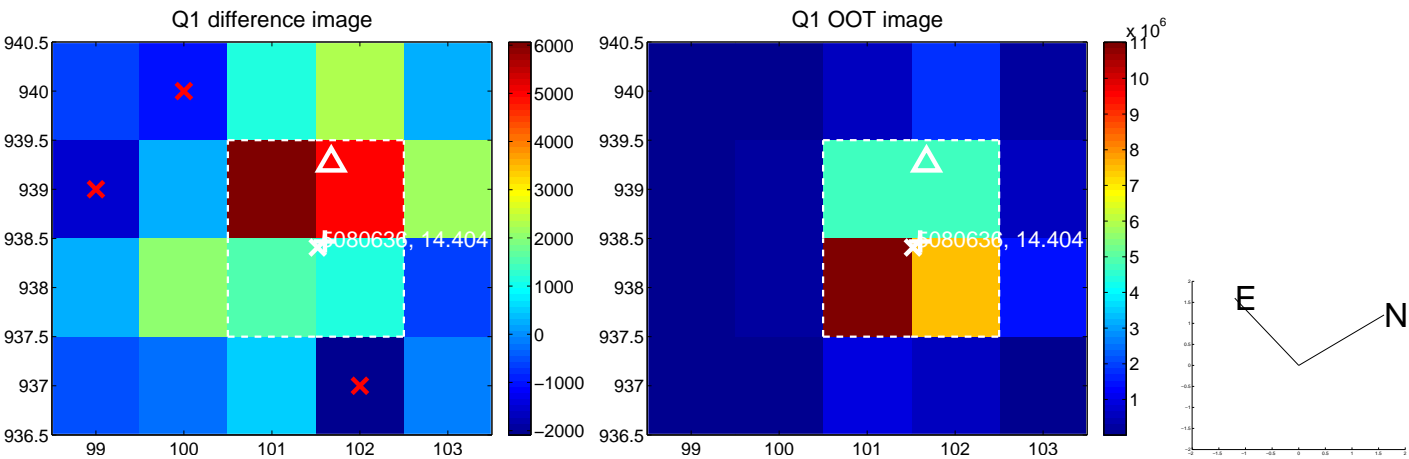


offset from photometric centroids

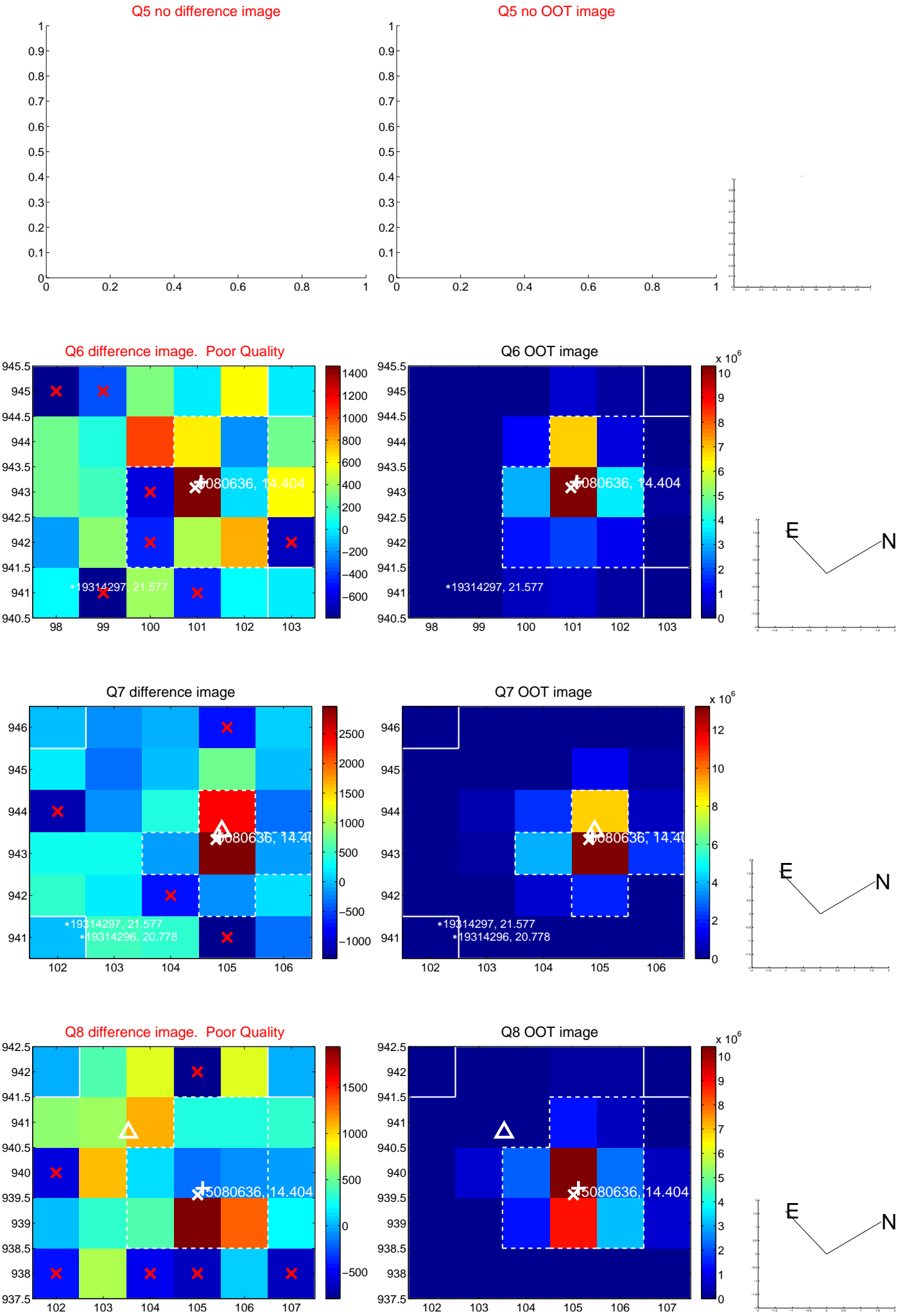


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets**; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

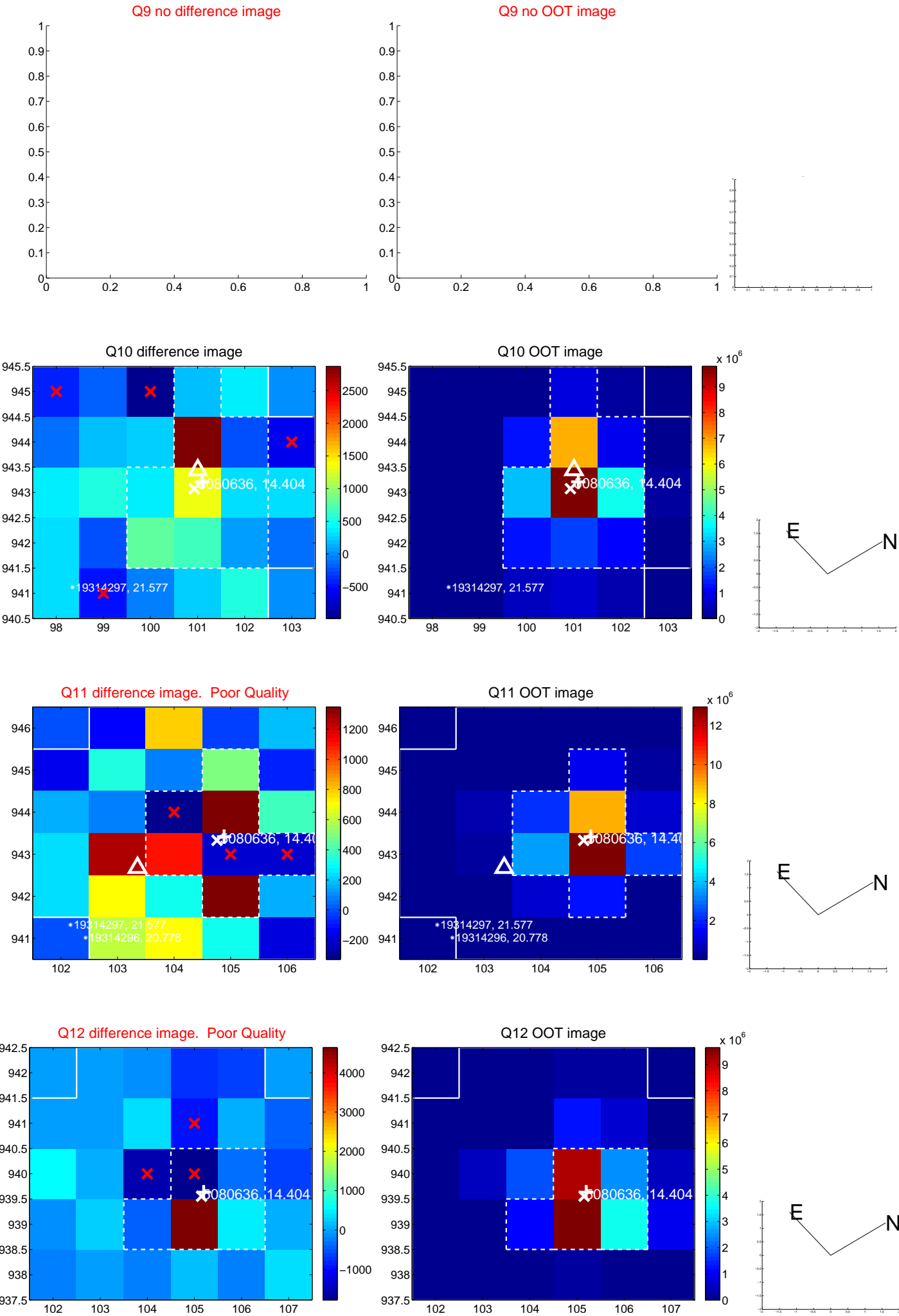
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



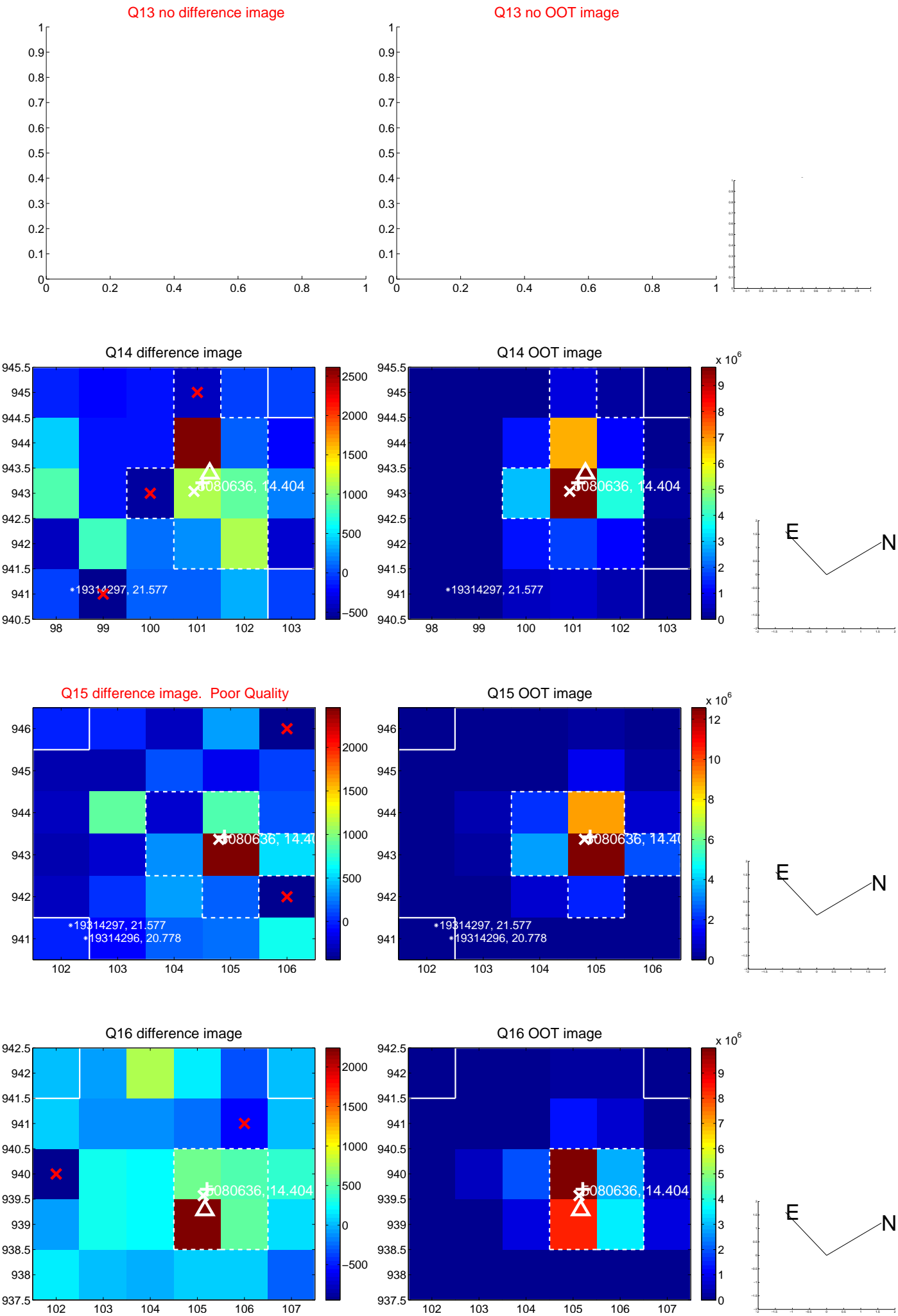
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



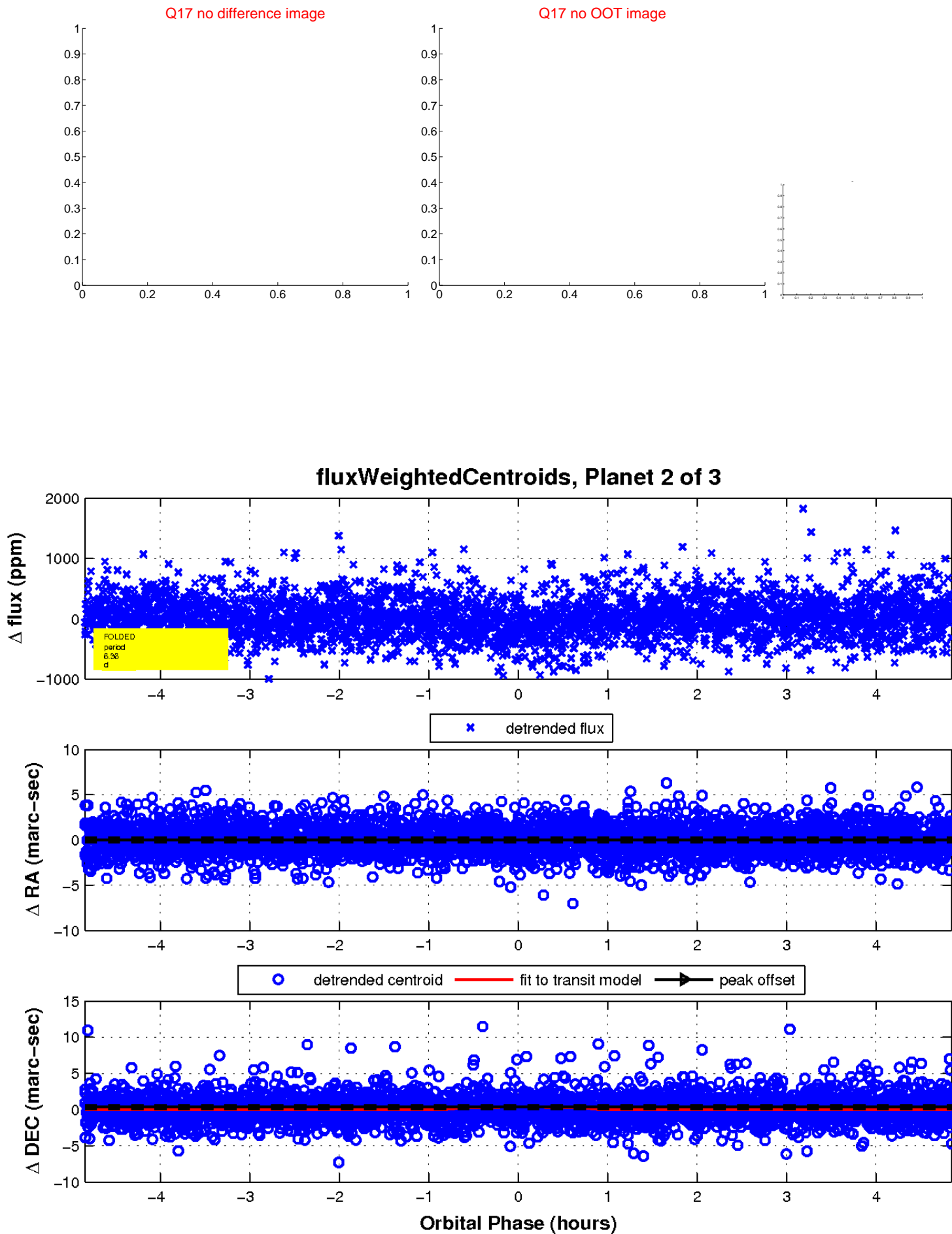
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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

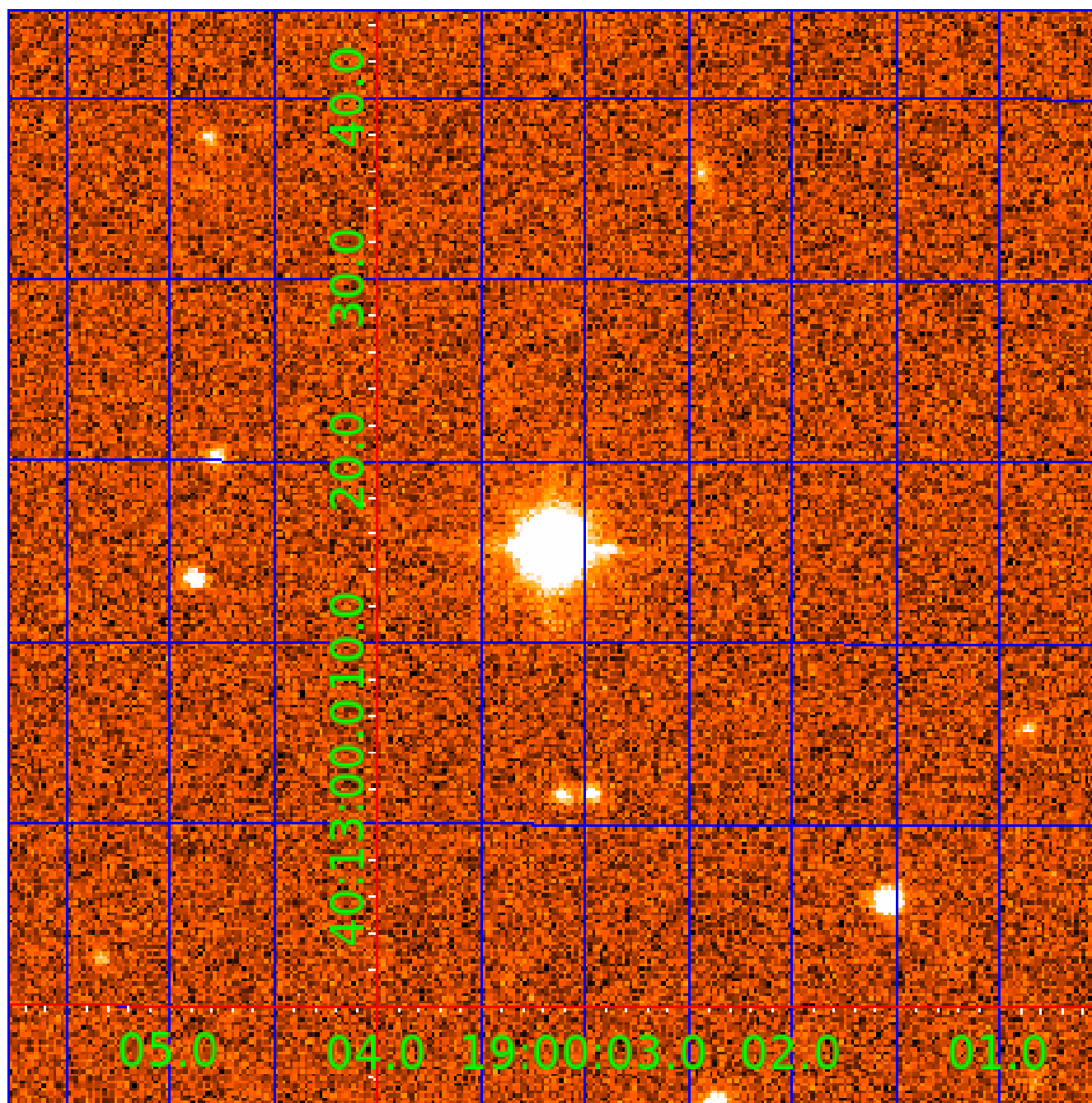


white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



UKIRT Image

Declination



KIC 005080636

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})
005080636-01	OBS	1843.01	4.194494	134.135691	669.1	1.818	40.0	47.9	0.52	3706	1.61	26.31
005080636-02	OBS	1843.02	6.355975	137.488266	178.8	1.615	9.9	10.0	0.52	3706	0.69	15.11
005080636-03	OBS	No	0.530677	131.731841	106.2	1.127	9.4	17.4	0.52	3706	0.55	414.18

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
005080636-01	OBS	PC	1.00	0	0	0	0	CENT_KIC_POS
005080636-02	OBS	PC	0.97	0	0	0	0	CENT_KIC_POS
005080636-03	OBS	FP	0.00	1	0	0	0	LPP_DV—MOD_NONUNIQ_ALT—CENT_KIC_POS

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.

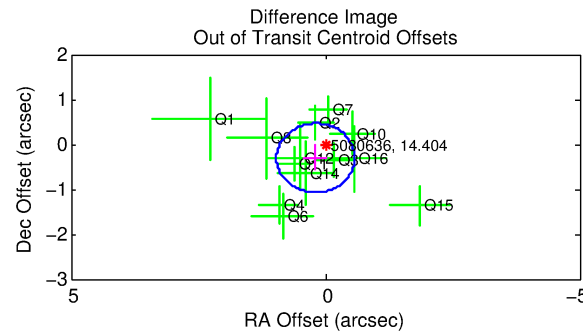
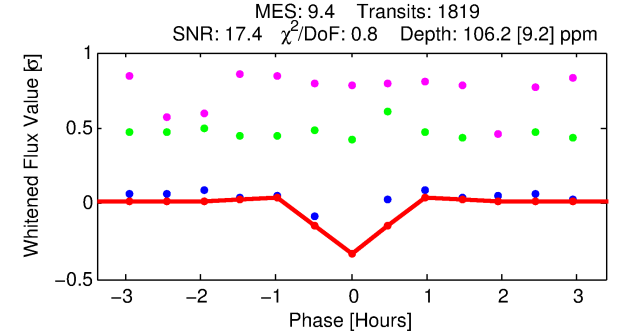
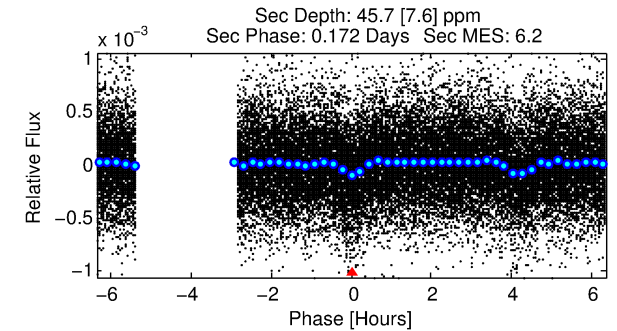
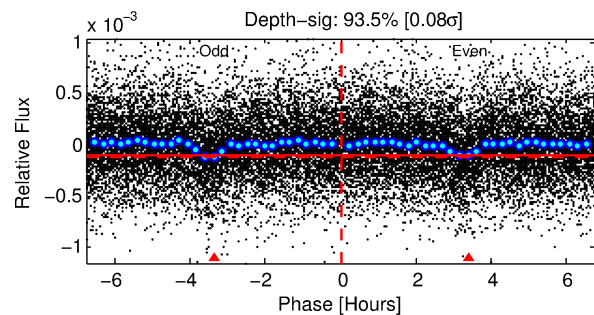
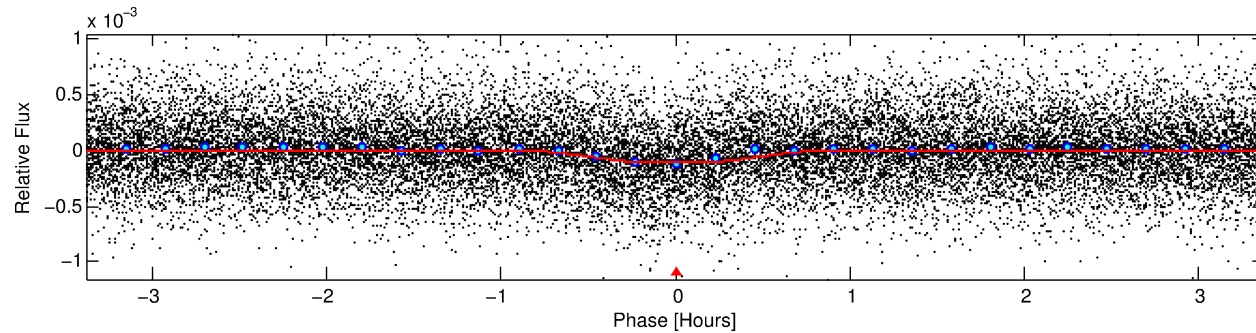
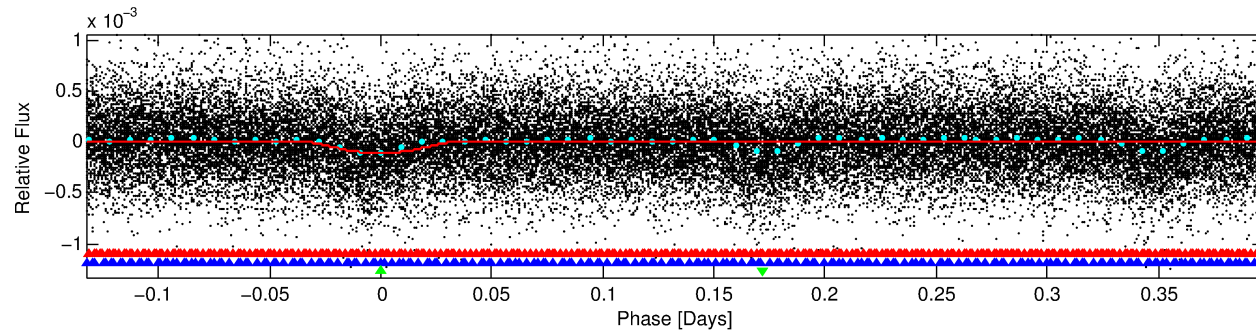
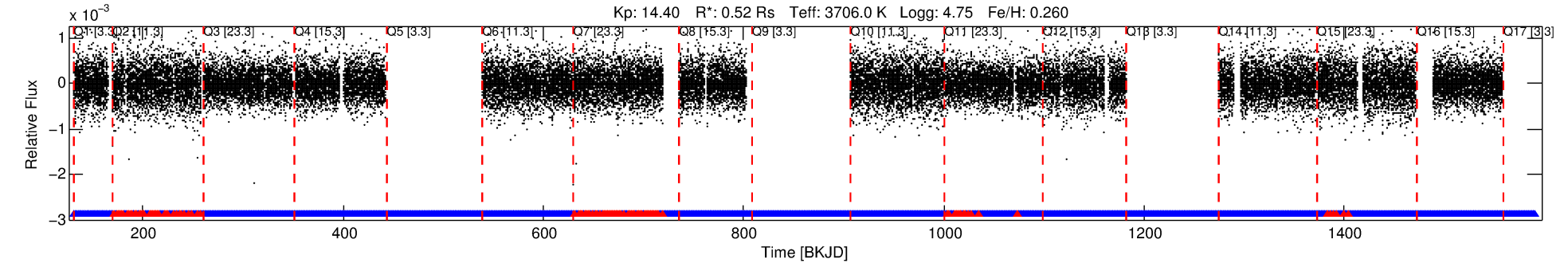
Ephemeris Match Information For 005080636-03

No Significant Match Found

DV One-Page Summary

KIC: 5080636 Candidate: 3 of 3 Period: 0.531 d
KOI: K01843 Corr: No Ephemeris Match

Kp: 14.40 R*: 0.52 Rs Teff: 3706.0 K Logg: 4.75 Fe/H: 0.260



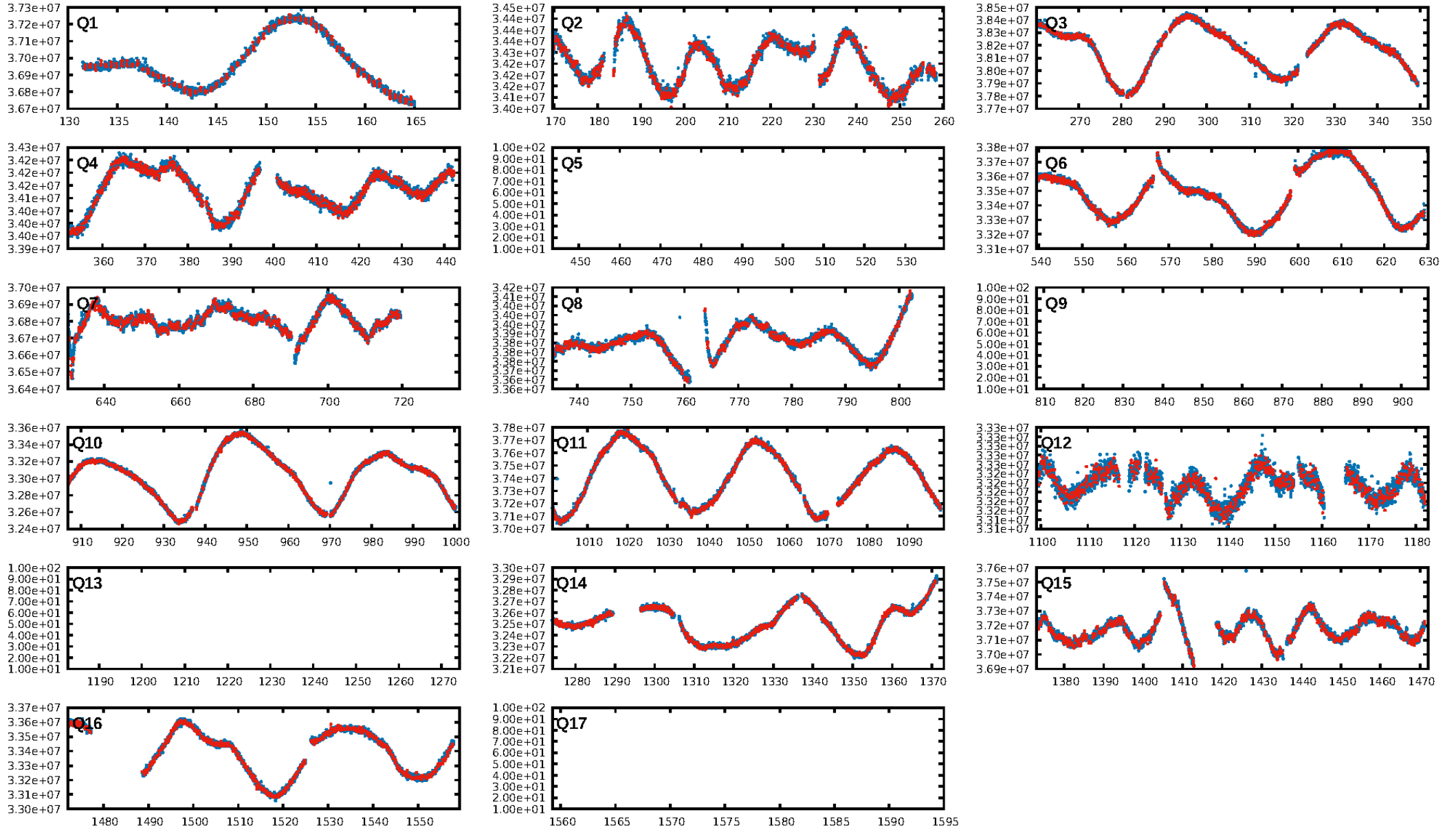
DV Fit Results:

Period = 0.53068 [0.00001] d
Epoch = 131.7318 [0.0010] BKJD
Rp/R* = 0.0097 [0.0044]
a/R* = 3.18 [4.86]
b = 0.53 [2.36]
Seff = 414.18 [50.57]
Teff = 1150 [35] K
Rp = 0.55 [0.26] Re
a = 0.0105 [0.0006] AU
Ag = 9.17 [8.58] [0.95σ]
Teffp = 3095 [726] K [2.68σ]

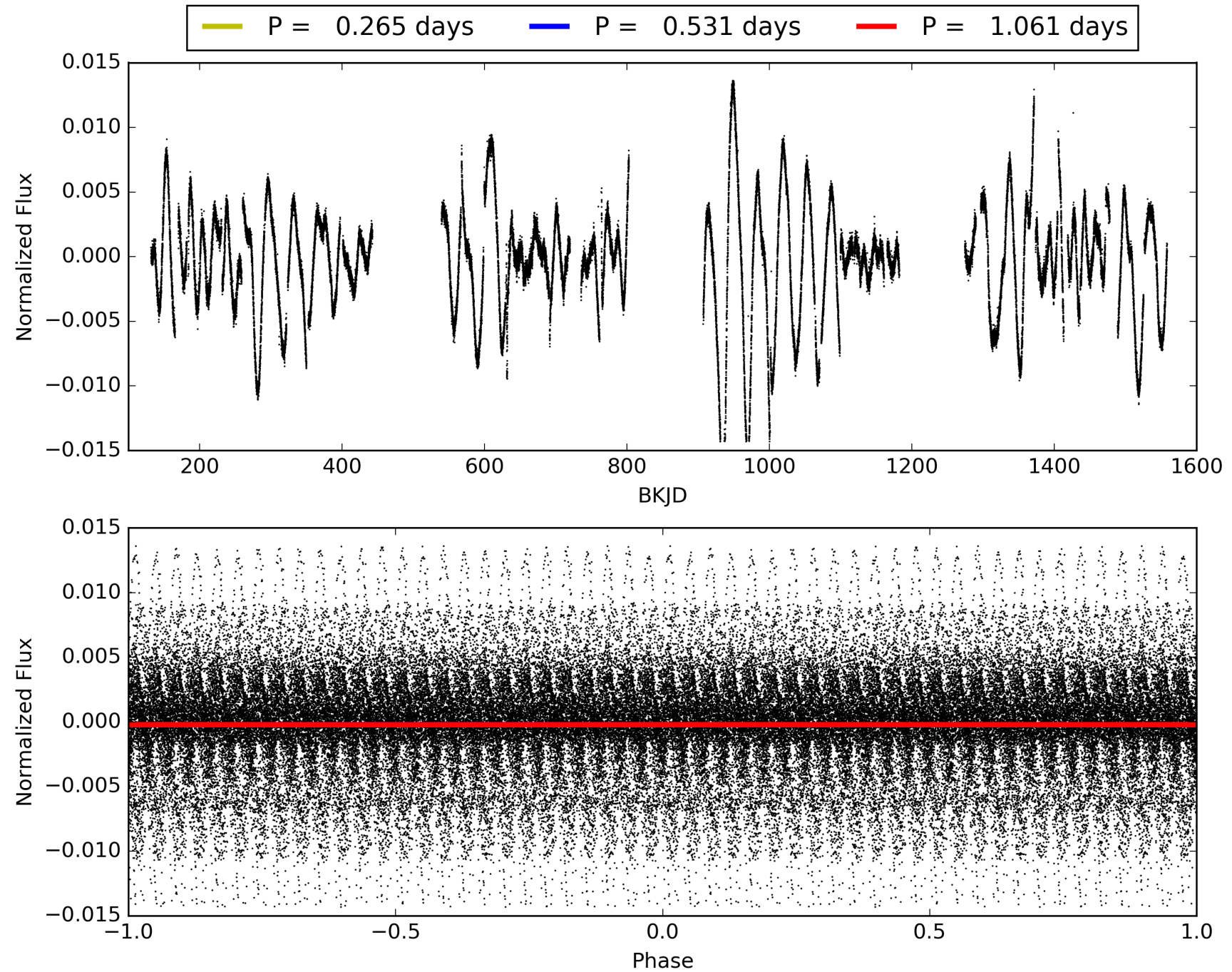
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: 100.0% [41.10σ]
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: 1.55e-19
RollingBand-fgt: 0.92 [1611/1760]
GhostDiagnostic-chr: 7.165
Centroid-sig: 2.1%
Centroid-so: 0.790 arcsec [1.14σ]
OotOffset-rm: 0.363 arcsec [1.42σ]
KicOffset-rm: 0.374 arcsec [1.29σ]
OotOffset-st: 4/4/4/1 [13]
KicOffset-st: 4/4/4/1 [13]
DiffImageQuality-fgm: 0.92 [12/13]
DiffImageOverlap-fno: 1.00 [13/13]

TCE 005080636-03, PDC Light Curves

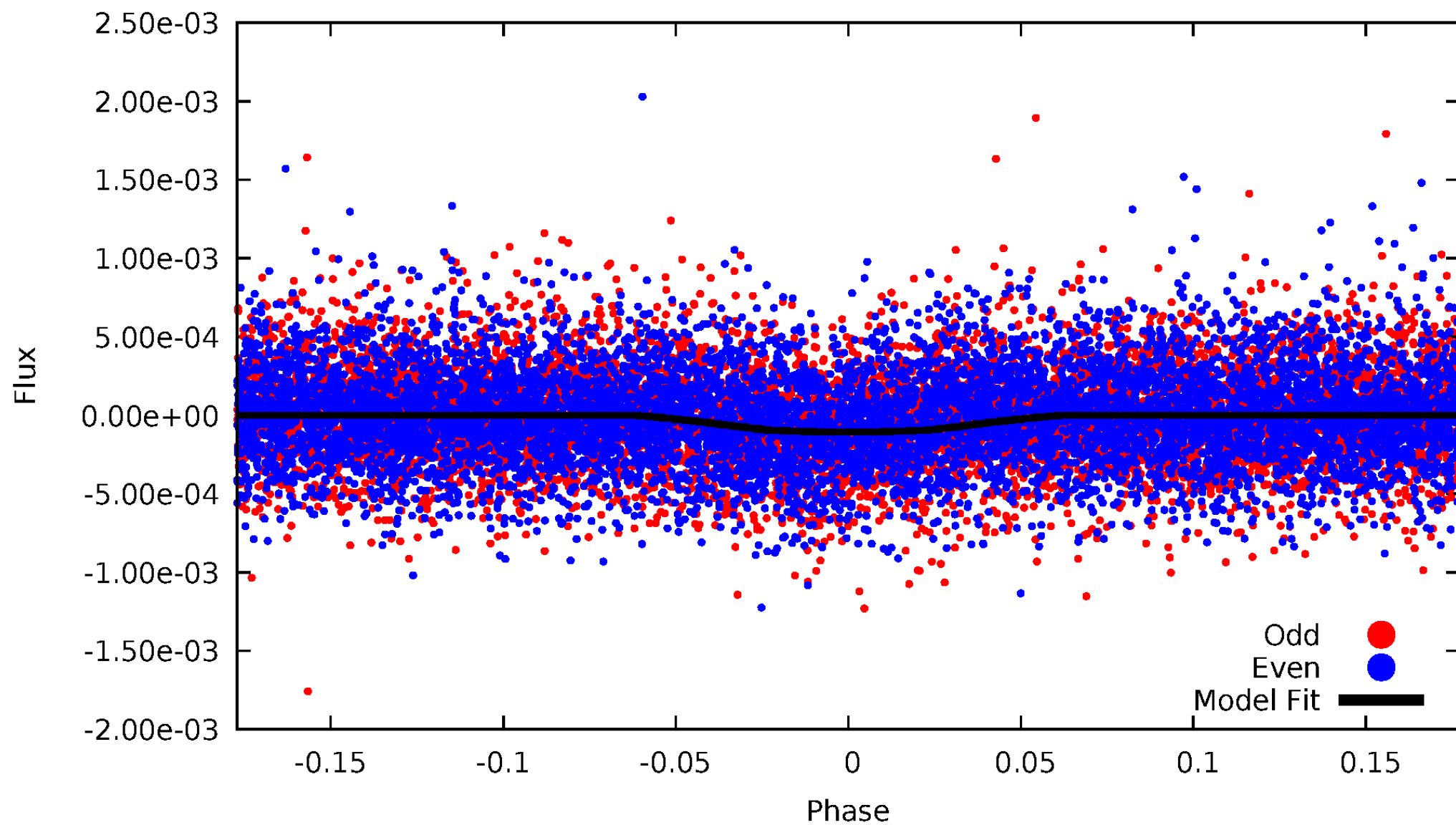


TCE 005080636-03



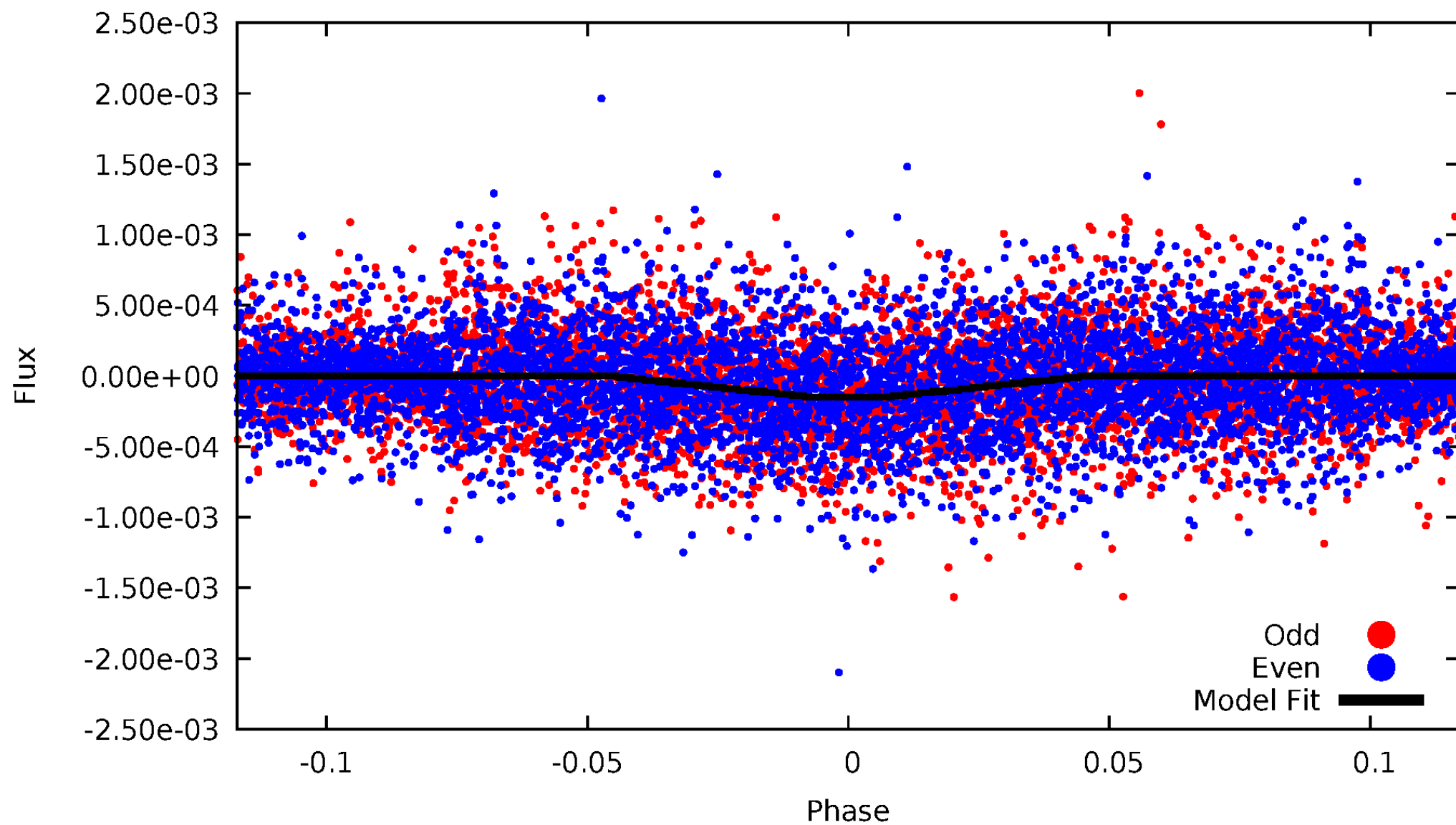
DV Odd/Even

TCE 005080636-03

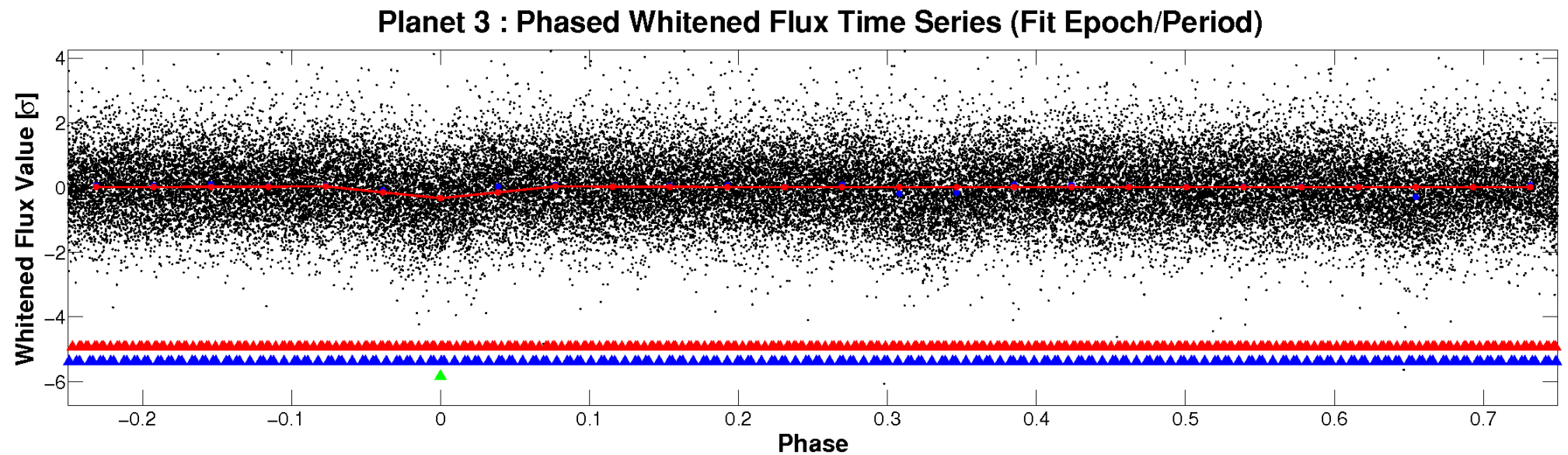
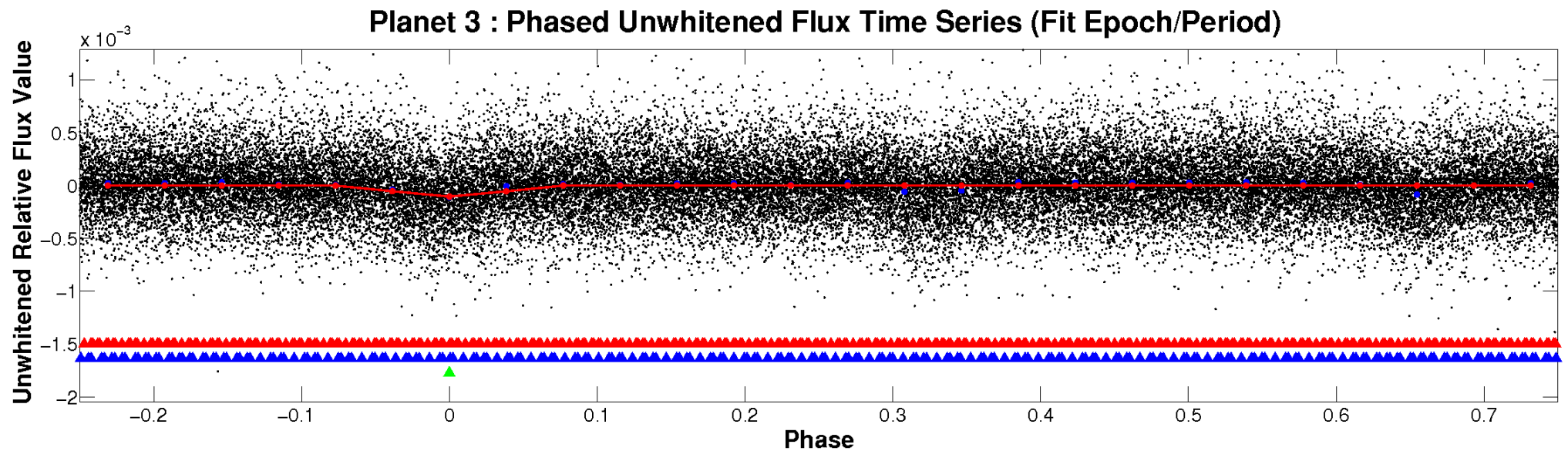


ALT Odd/Even

TCE 005080636-03

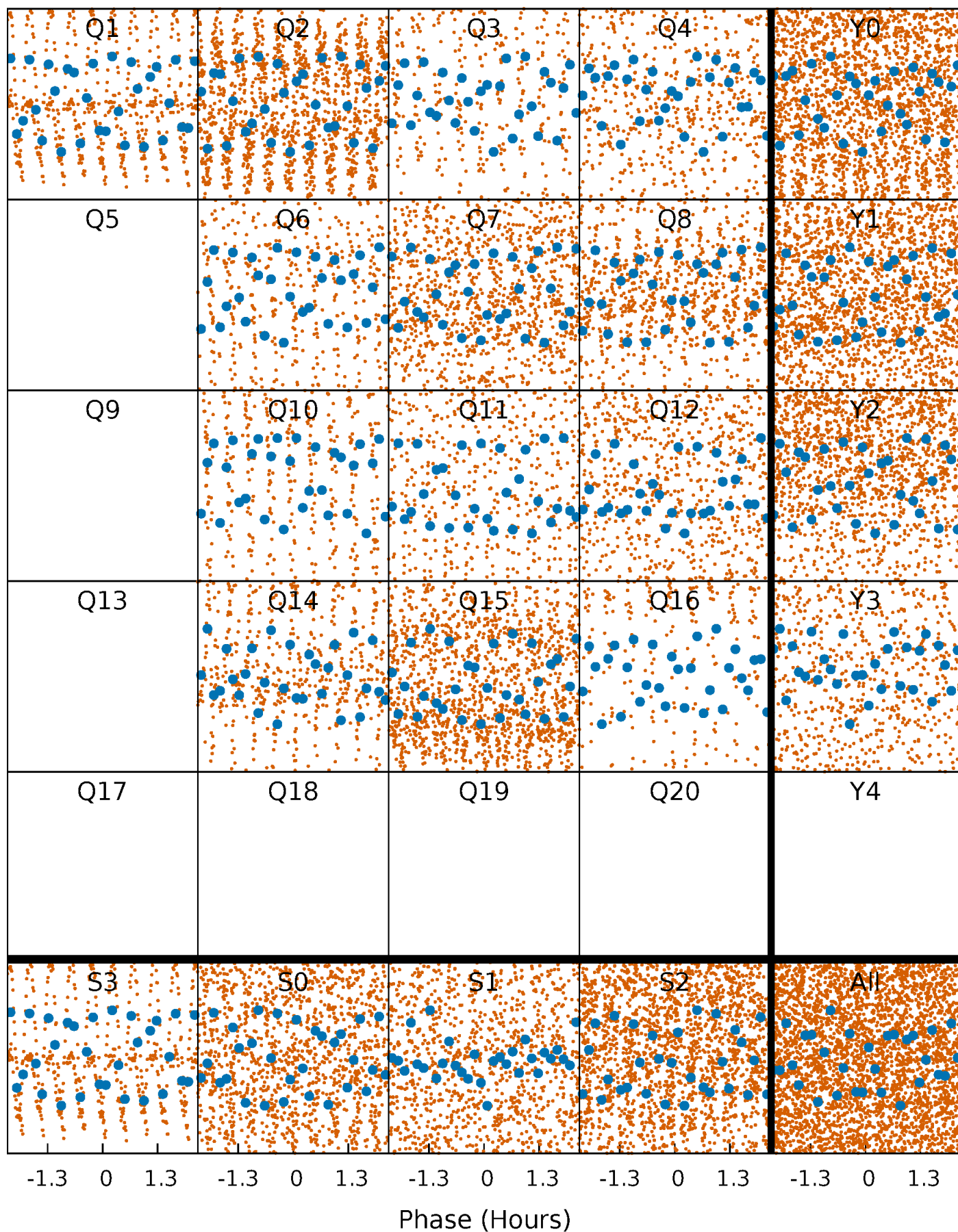


Non-Whitened Vs. Whitened Light Curve



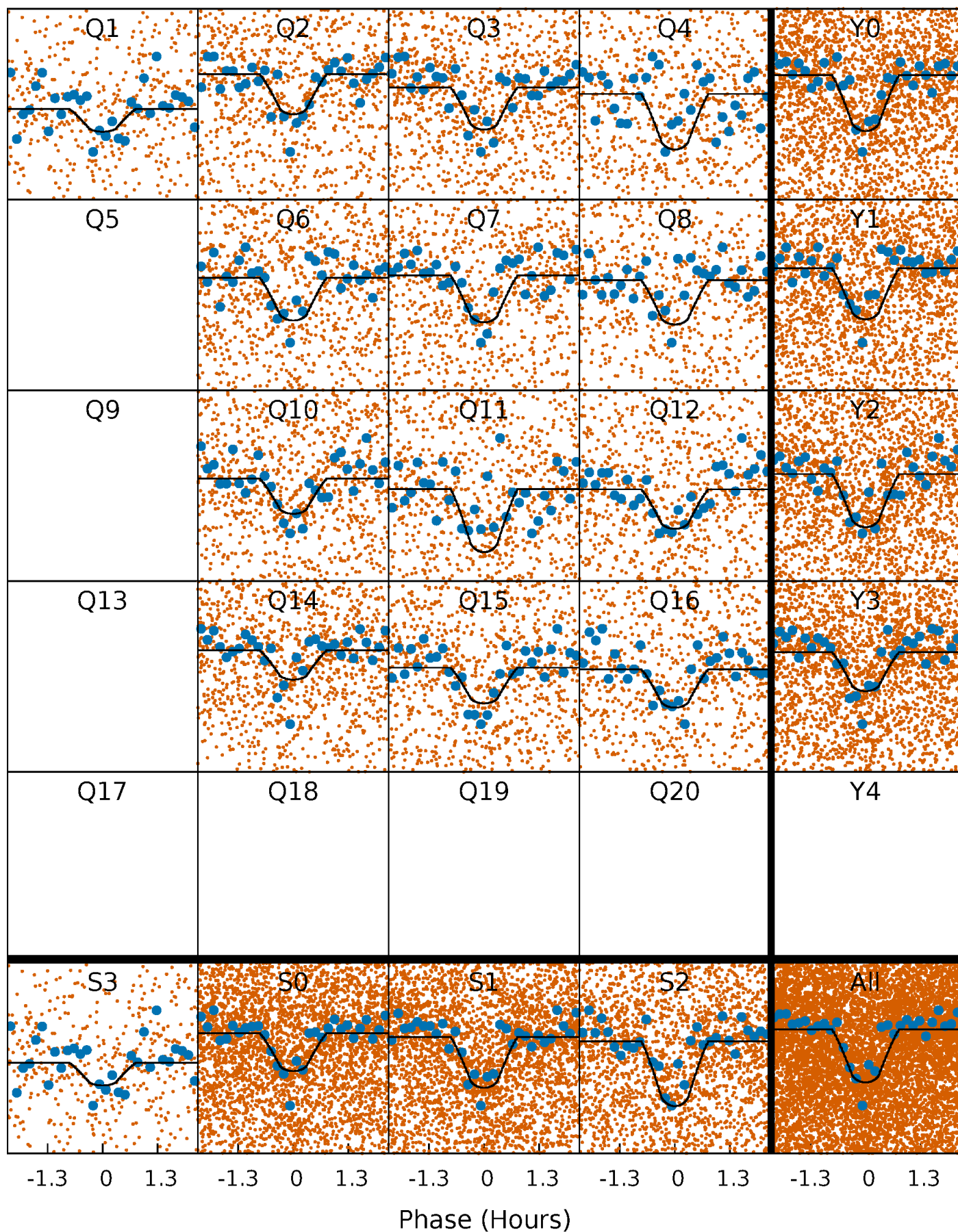
PDC Quarter-Phased Transit Curves

TCE 005080636-03 P= 0.530677 Days $T_0=131.731841$ (BKJD)



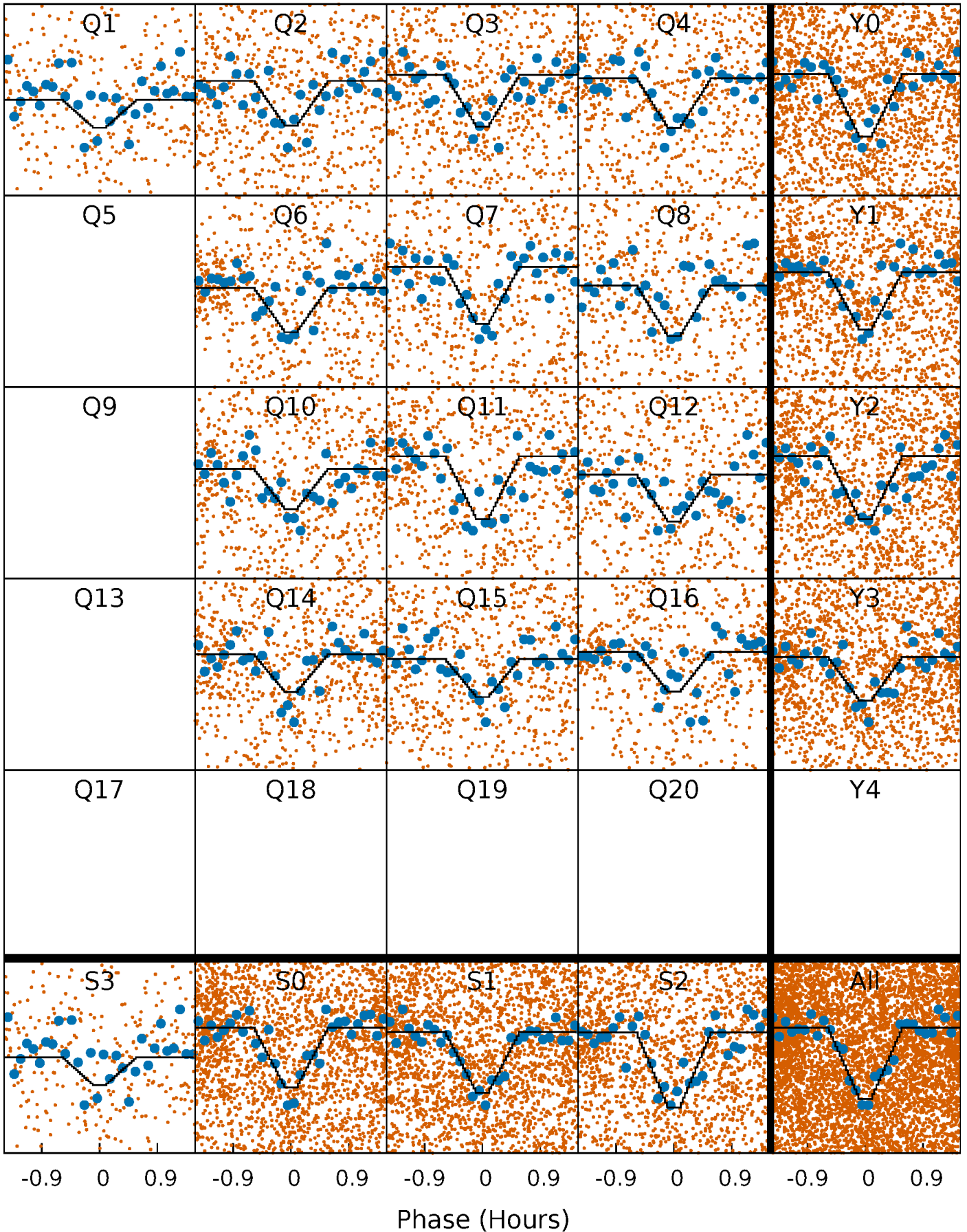
DV Quarter-Phased Transit Curves

TCE 005080636-03 P= 0.530677 Days $T_0=131.731841$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

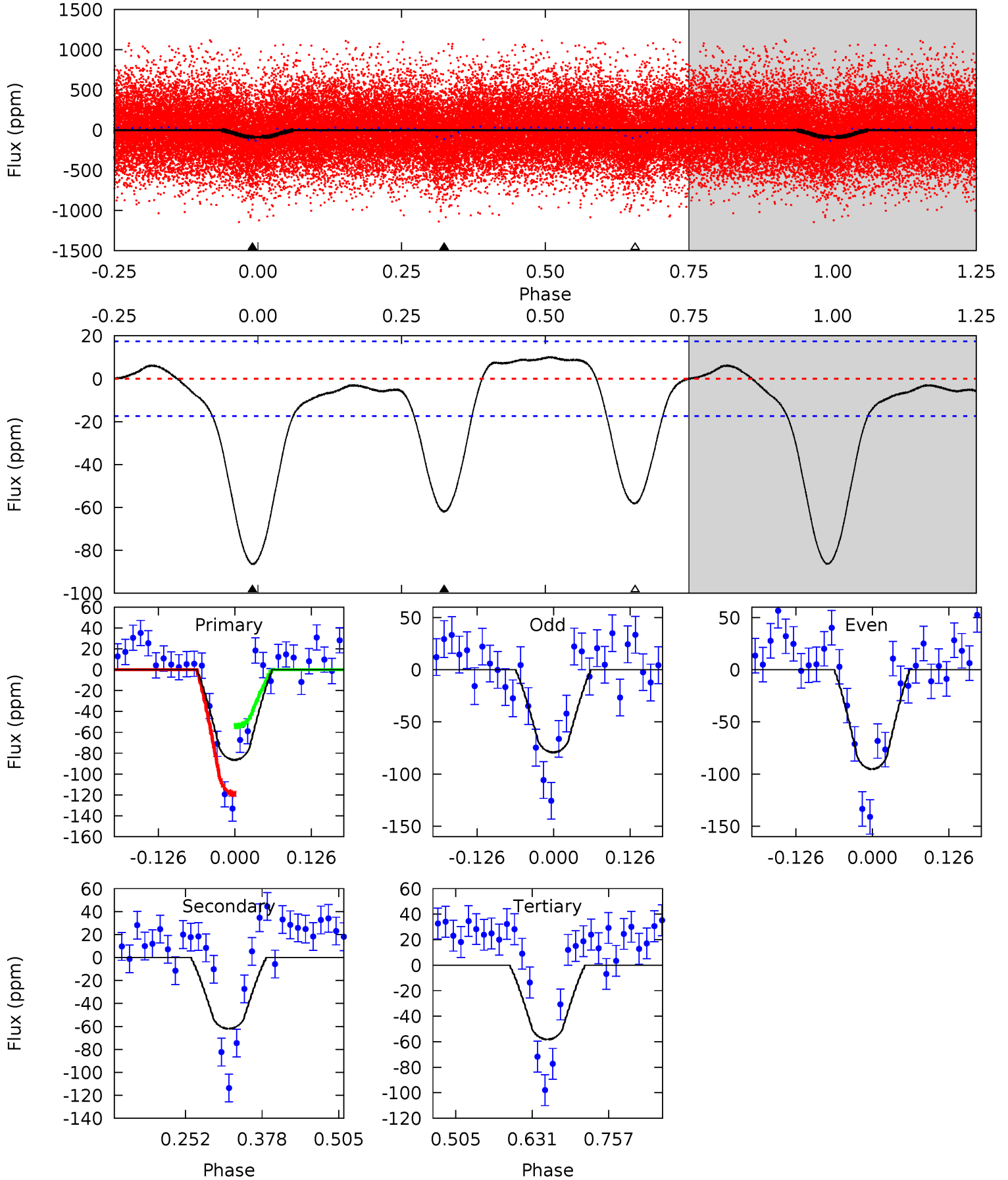
TCE 005080636-03 P= 0.530673 Days $T_0=131.731777$ (BKJD)



DV Model-Shift Uniqueness Test

005080636-03, P = 0.530677 Days, E = 131.201164 Days

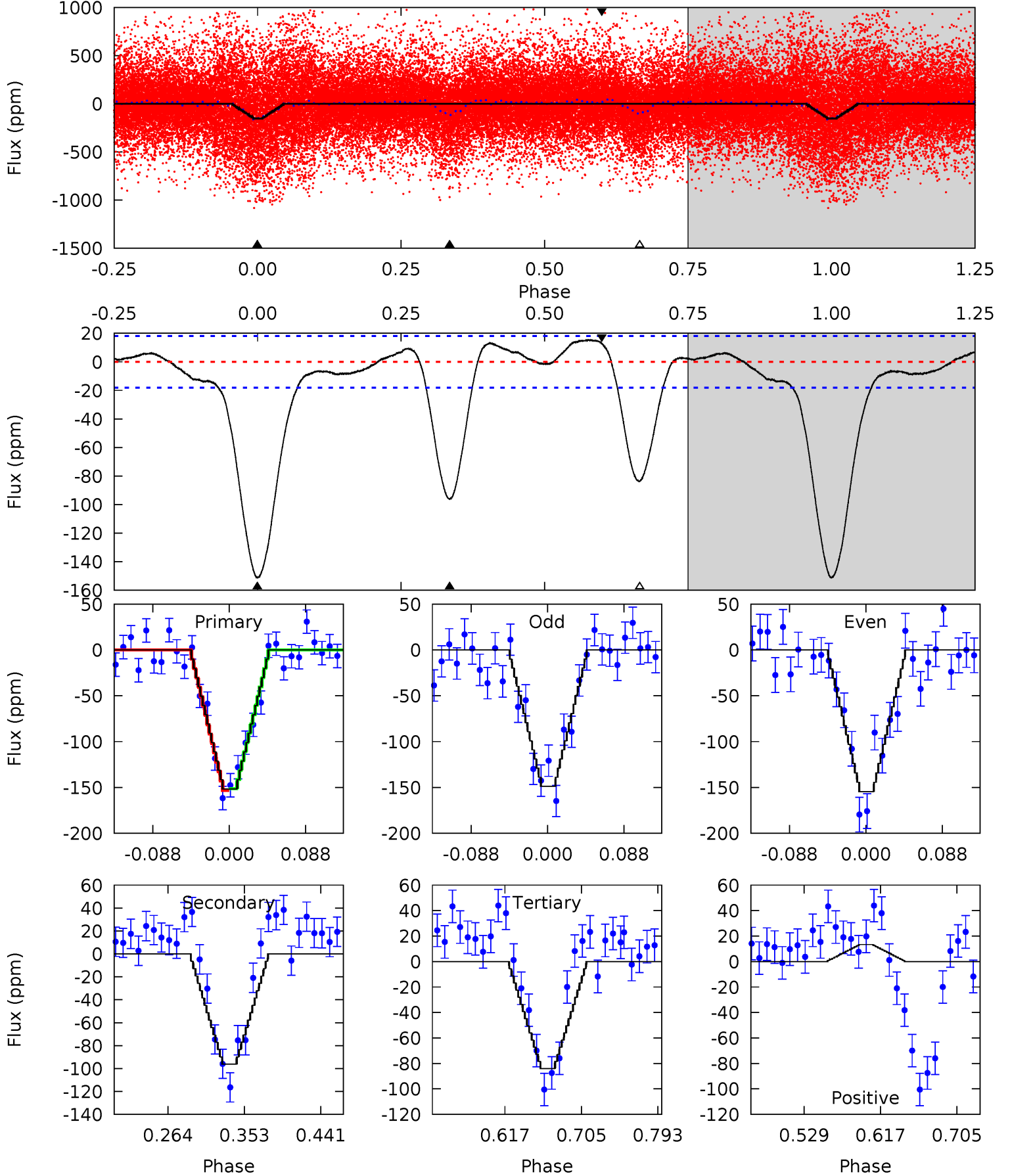
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
22.4	16.1	15.1	0	4.52	1.53	5.04	7.33	22.4	0.99	16.1	2.09	1.10	0.11	8.41



Alt Model-Shift Uniqueness Test

005080636-03, P = 0.530673 Days, E = 131.201104 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
38.4	24.4	21.3	3.39	4.59	1.71	5.45	17.1	35.0	3.08	21.0	0.75	0.98	0.09	0.23



Stellar Parameters For KIC 005080636

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	$M(M_{\odot})$	p_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	3706^{+73}_{-92}	$4.747^{+0.033}_{-0.033}$	$0.260^{+0.150}_{-0.150}$	$0.522^{+0.032}_{-0.039}$	$0.555^{+0.027}_{-0.044}$	$5.504^{+0.890}_{-0.695}$
	+2%/-2%	+1%/-1%	+58%/-58%	+6%/-7%	+5%/-8%	+16%/-13%
Source	SPE70	SPE60	SPE70	DSEP		

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

Secondary Eclipse Parameters for KIC 005080636-03 / KOI

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	-62 ± 4	$0.56^{+0.25}_{-0.26}$	1607^{+41}_{-47}	3408^{+825}_{-362}	12^{+28}_{-6}
Alt.	-96 ± 4	$0.69^{+0.27}_{-0.25}$	1605^{+42}_{-43}	3450^{+613}_{-346}	12^{+19}_{-6}

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

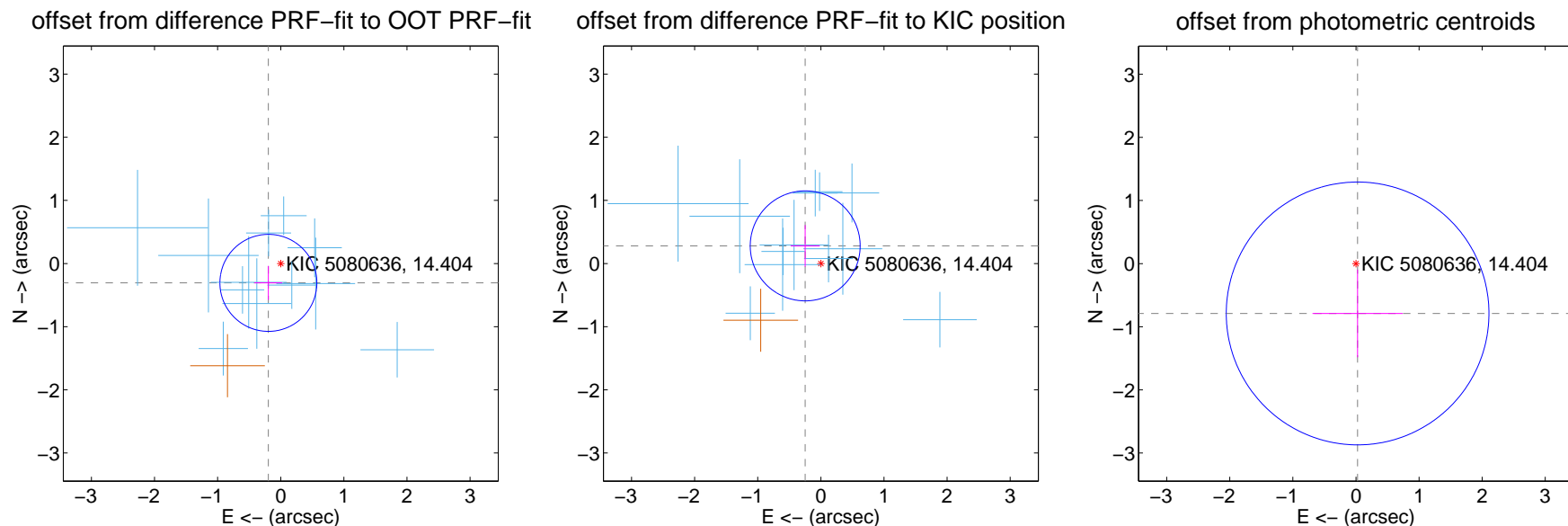
DV Centroid Data

Supplemental centroid analysis for 005080636-03. Kepler magnitude: 14.40. Transit SNR 17.43

There are 12 quarters with good PRF difference image offsets

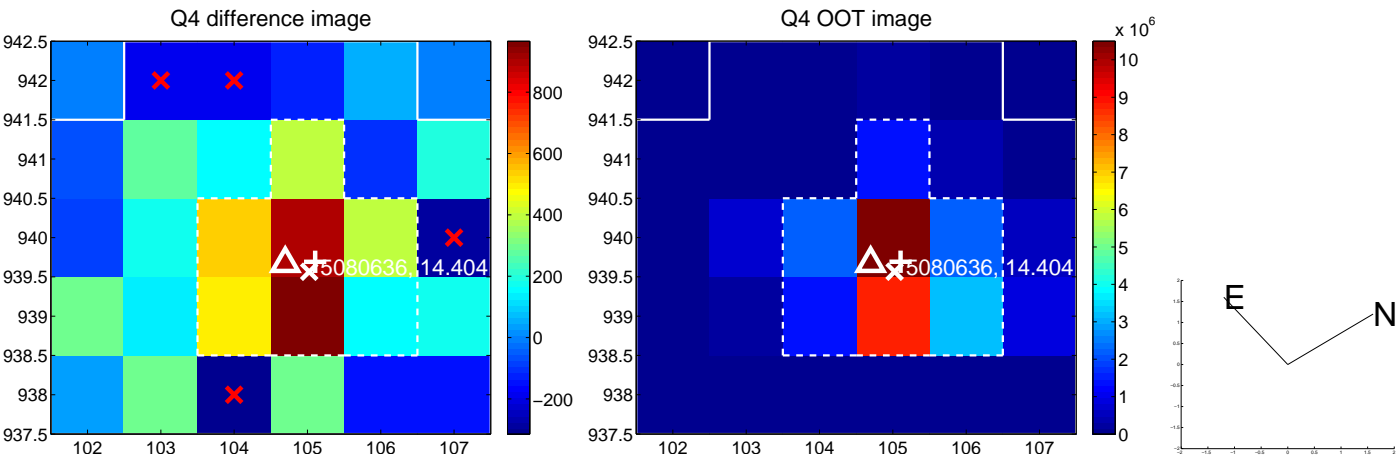
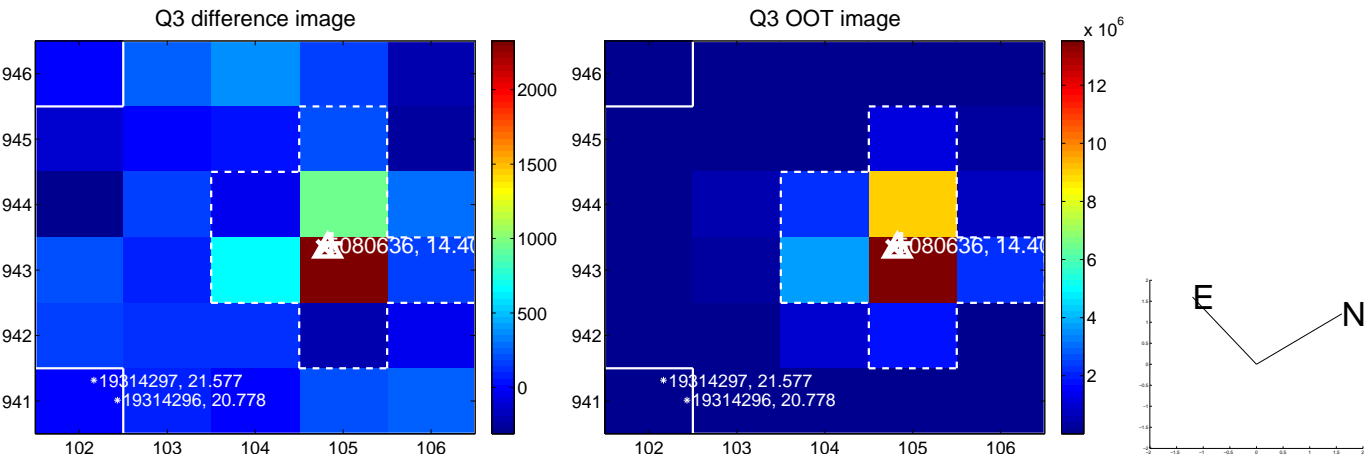
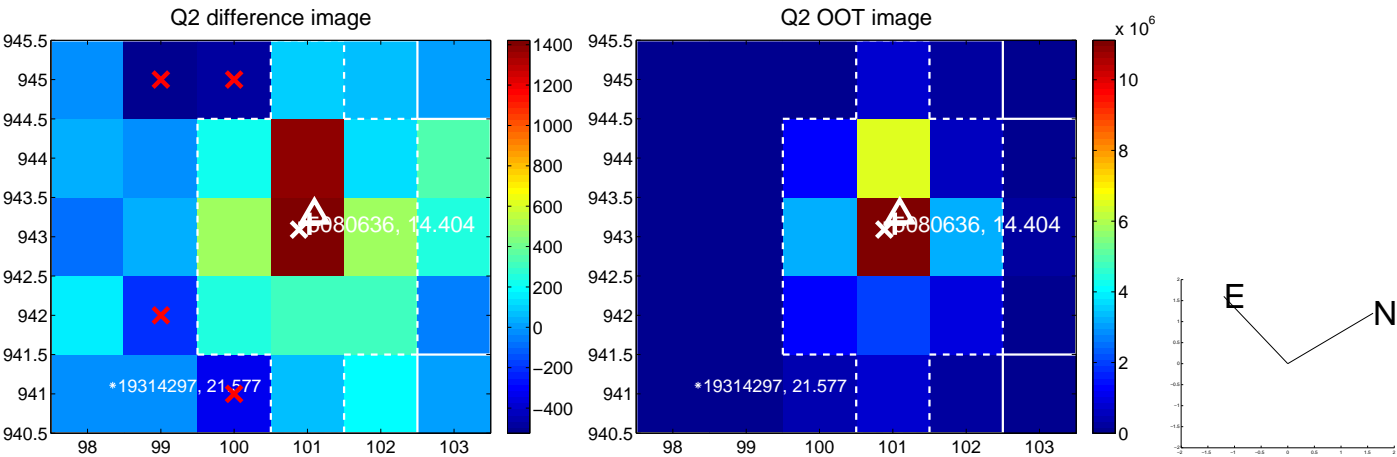
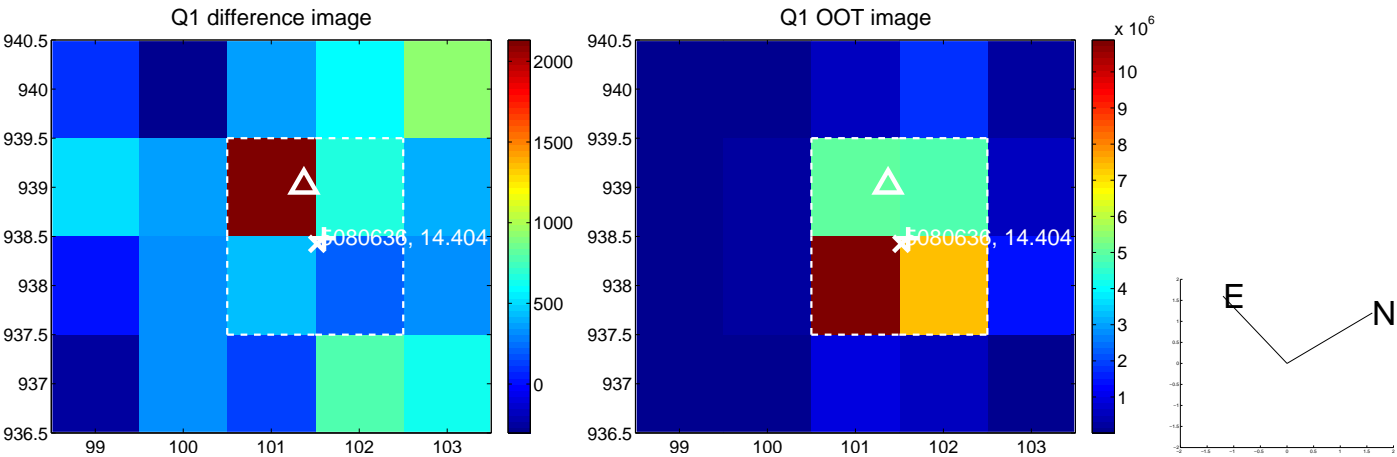
The direct PRF centroid is offset from the target star catalog position by about 0.59 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.363 ± 0.256	1.42	0.196 ± 0.221	-0.306 ± 0.269
PRF-fit source offset from KIC position	0.374 ± 0.290	1.29	0.248 ± 0.230	0.280 ± 0.330
photometric centroid source offset	0.79 ± 0.69	1.14	-0.03 ± 0.71	-0.79 ± 0.69

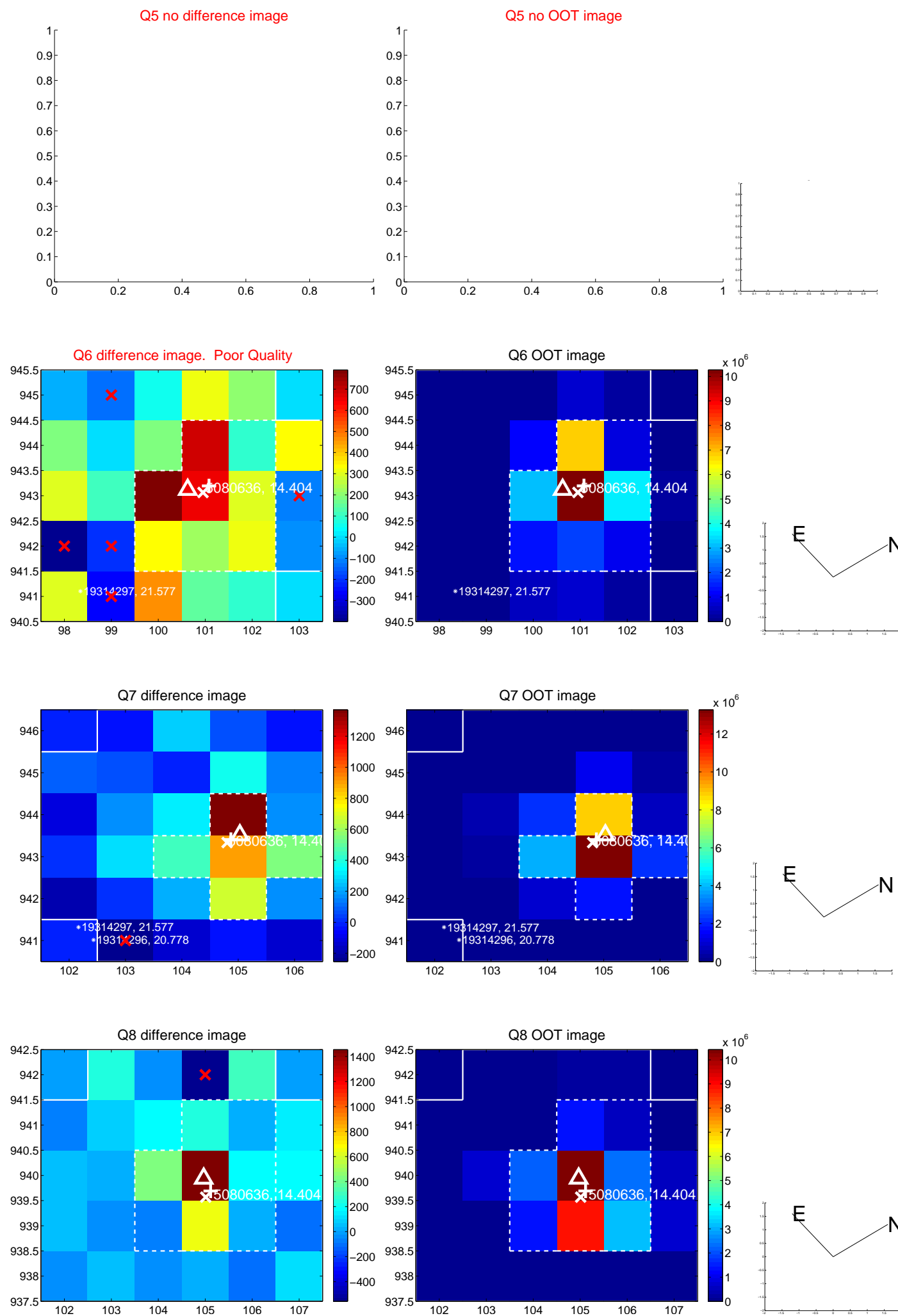


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses:** good quarterly centroid offsets; **Vermillion crosses:** bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

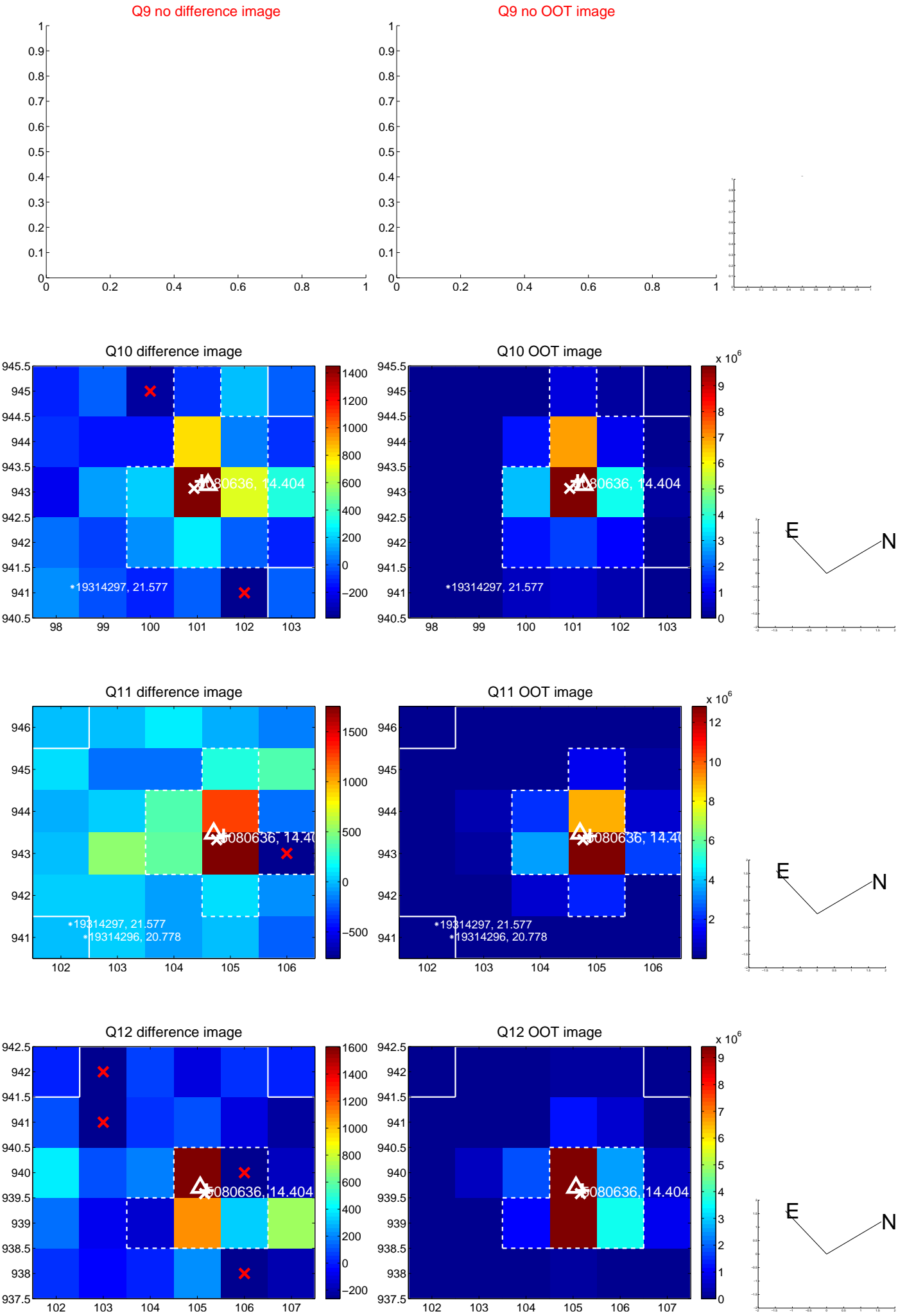
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



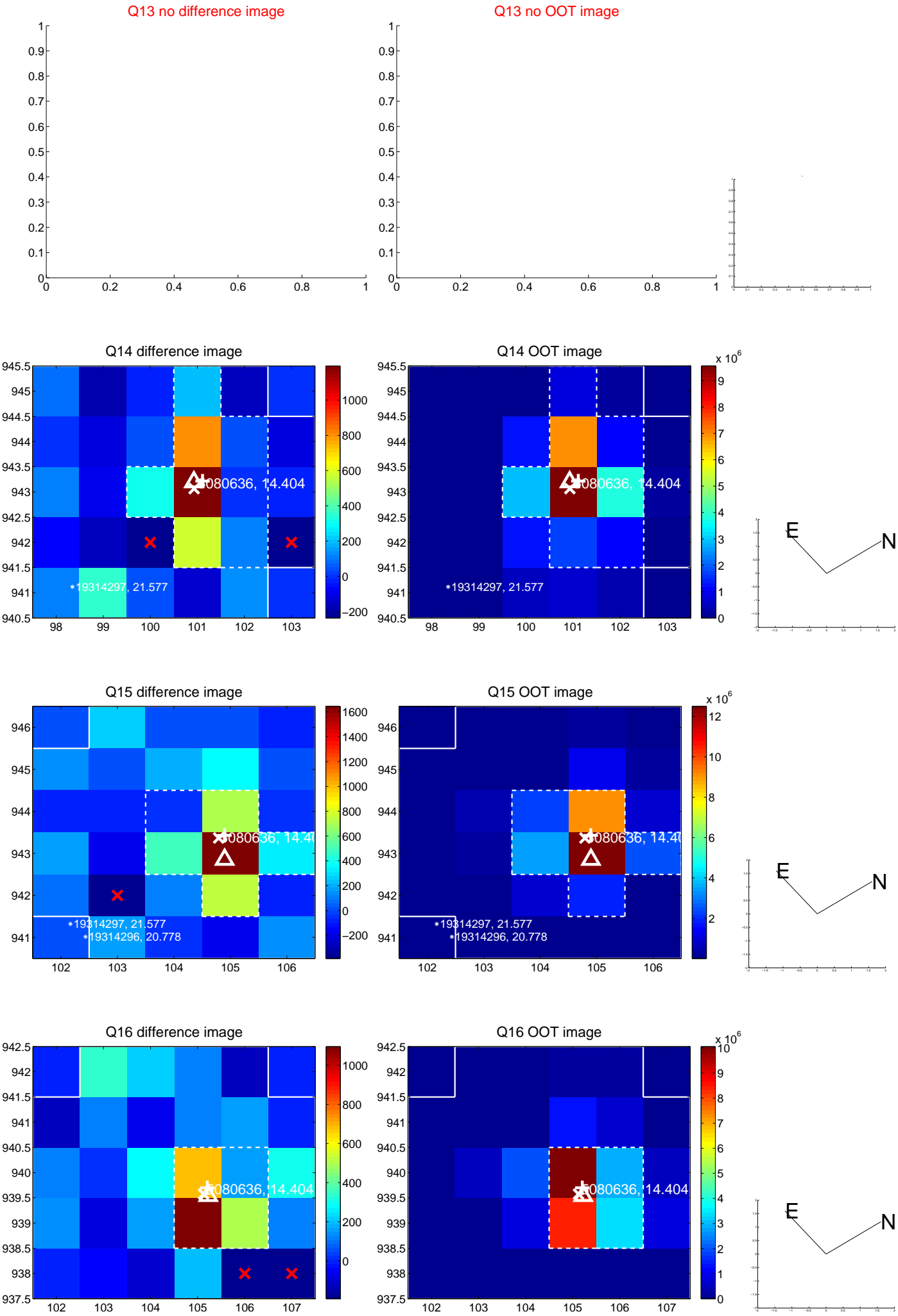
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value



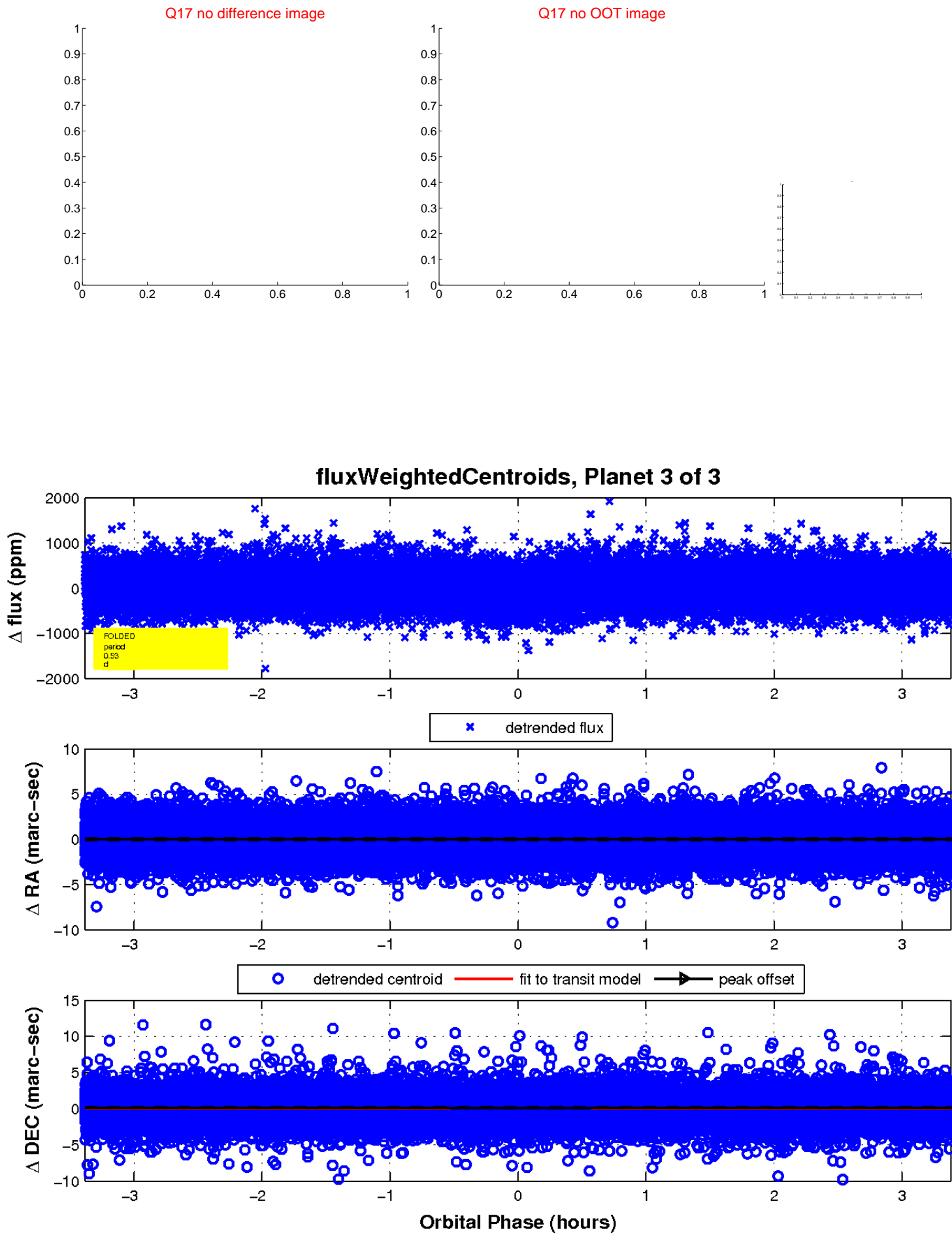
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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

