

KIC 011240948

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})
011240948-01	OBS	7425.01	3.401941	134.645880	459.0	0.718	46.5	75.9	2.17	7094	5.51	4396.73
011240948-02	OBS	No	3.401974	134.522753	29.3	9.156	12.6	7.6	2.17	7094	1.37	4396.67
011240948-03	OBS	No	91.271380	135.162425	48.9	2.788	7.6	2.2	2.17	7094	1.53	54.74

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
011240948-01	OBS	FP	0.14	0	1	0	0	HAS_SEC_TCE
011240948-02	OBS	FP	0.00	1	1	0	0	IS_SEC_TCE
011240948-03	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_TRACKER—LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_POS_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT

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 011240948-01

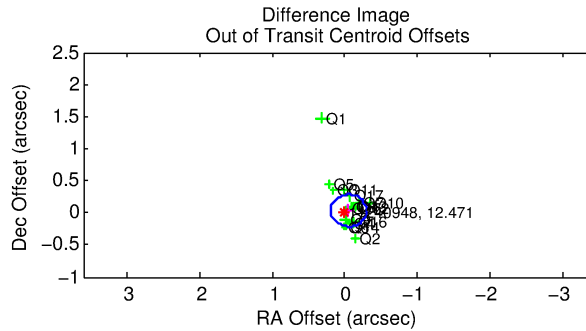
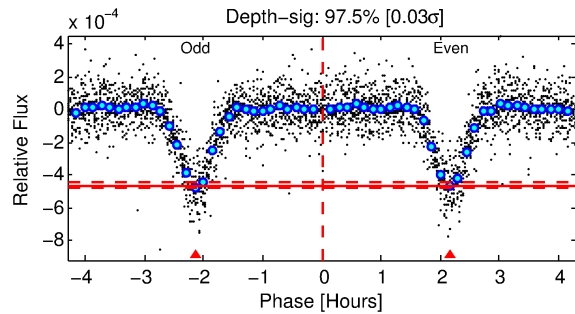
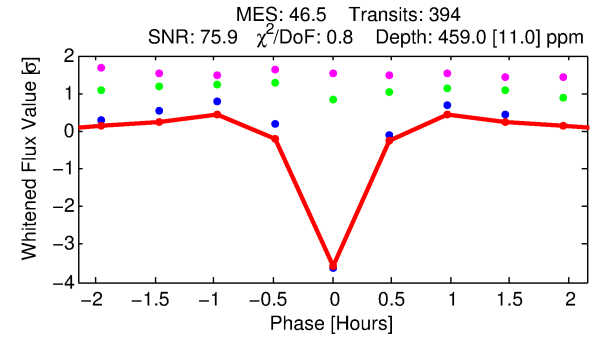
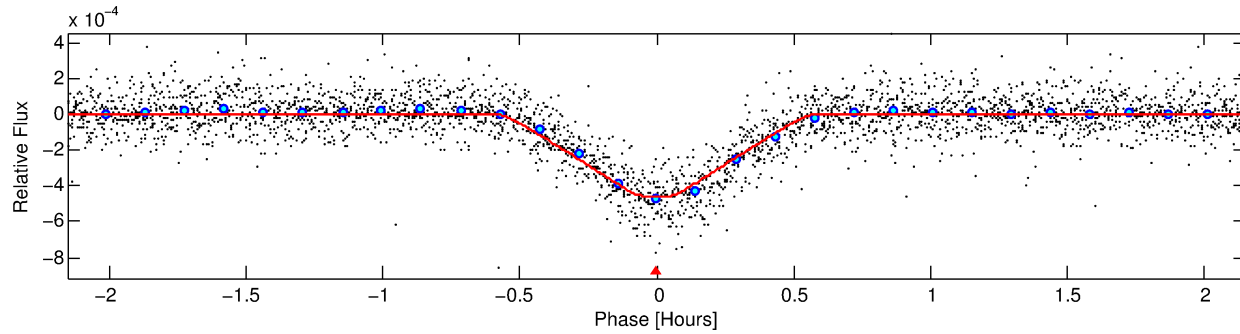
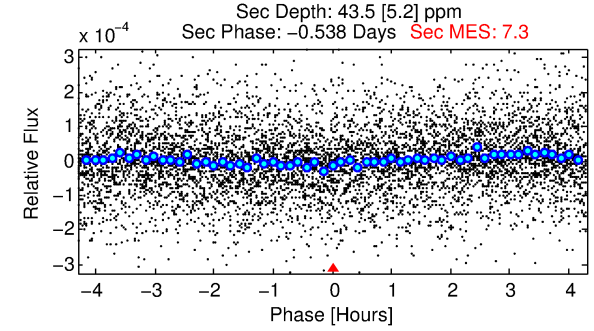
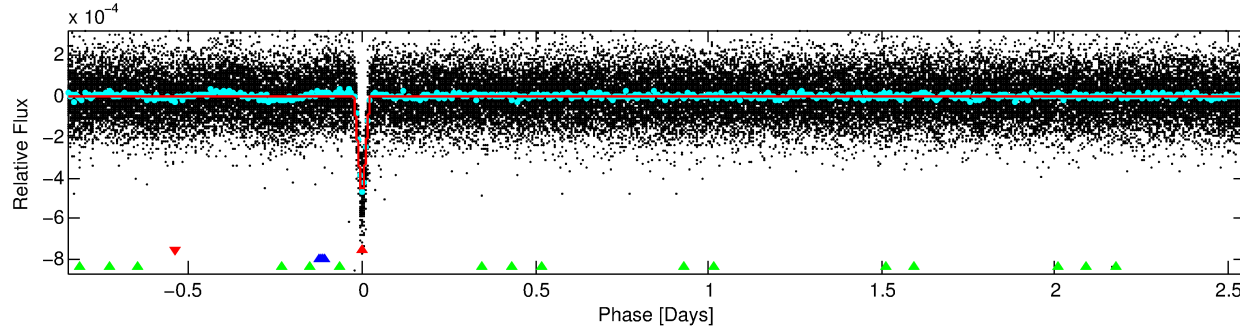
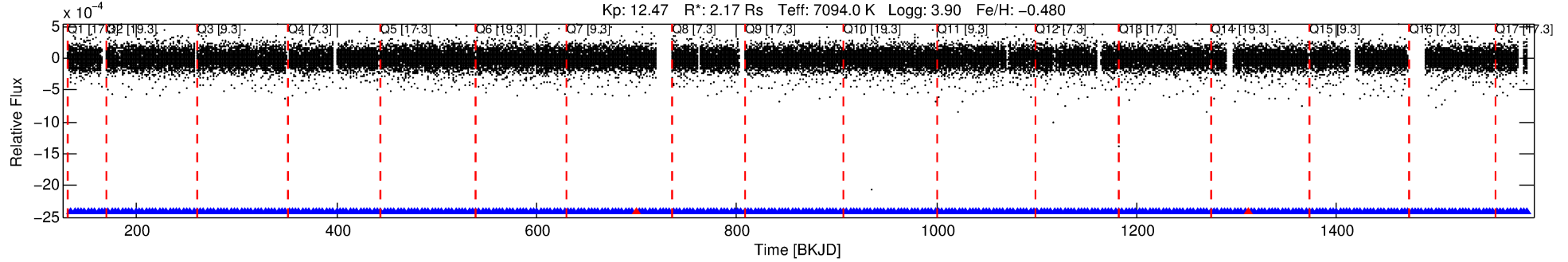
No Significant Match Found

DV One-Page Summary

KIC: 11240948 Candidate: 1 of 3 Period: 3.402 d

KOI: K07425 Corr: No Ephemeris Match

Kp: 12.47 R*: 2.17 Rs Teff: 7094.0 K Logg: 3.90 Fe/H: -0.480



DV Fit Results:

Period = 3.40194 [0.00000] d
Epoch = 134.6459 [0.0002] BKJD
Rp/R* = 0.0233 [0.0017]
a/R* = 17.65 [7.22]
b = 0.90 [0.09]
Seff = 4396.73 [2159.60]
Teq = 2076 [255] K
Rp = 5.51 [1.75] Re
a = 0.0493 [0.0146] AU
Ag = 1.92 [0.97] [0.94σ]
Teffp = 3777 [216] K [5.09σ]

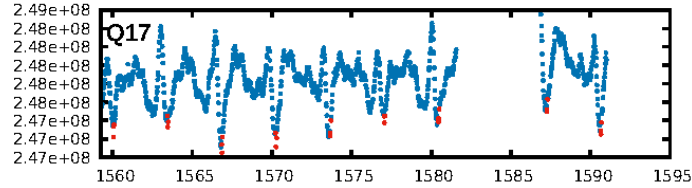
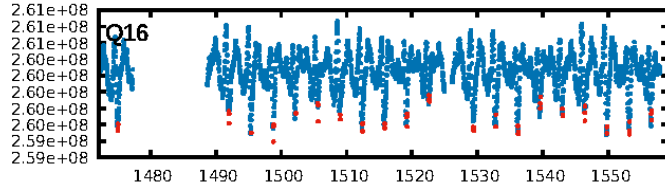
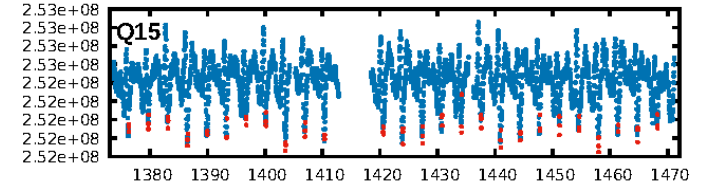
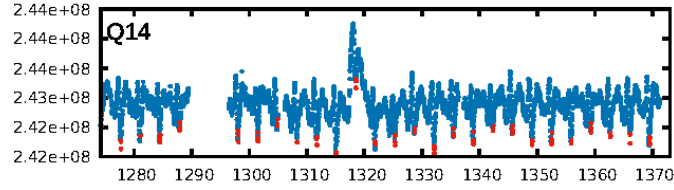
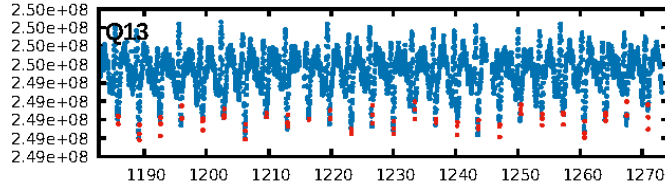
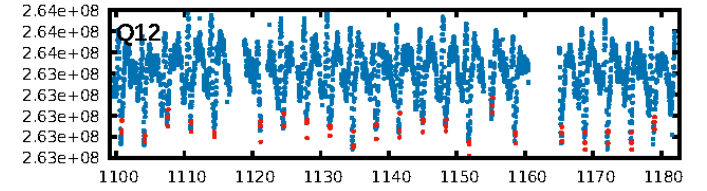
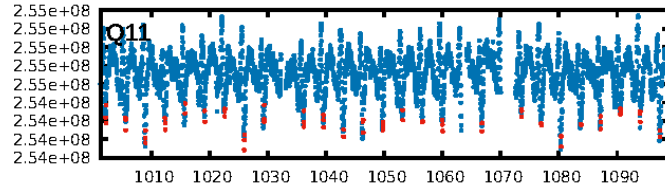
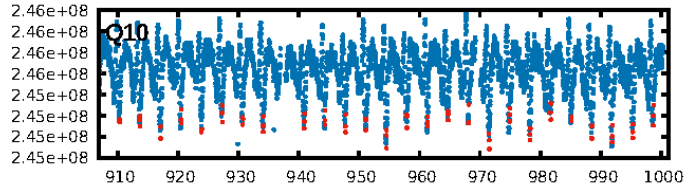
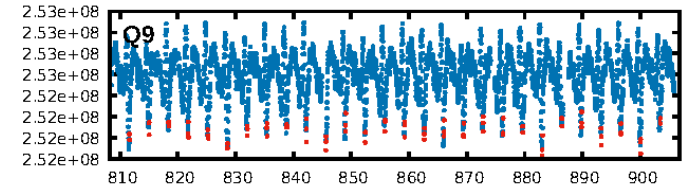
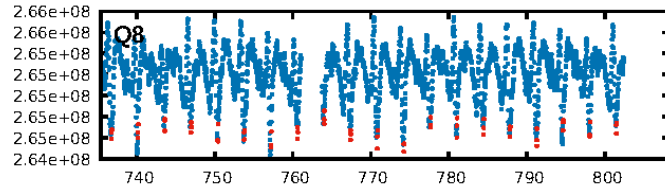
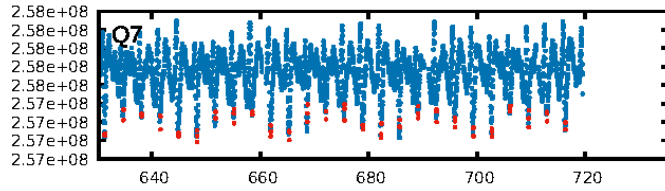
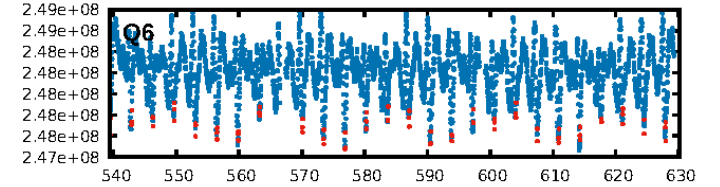
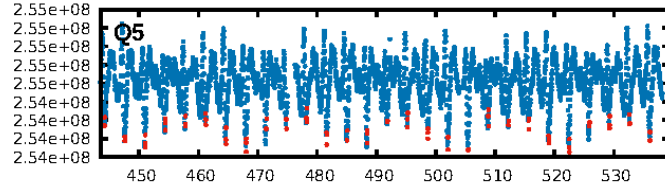
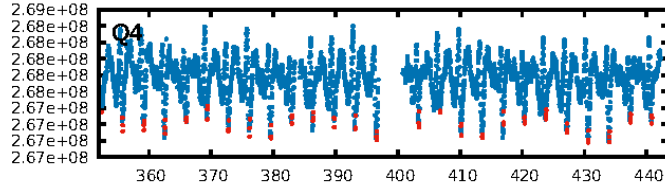
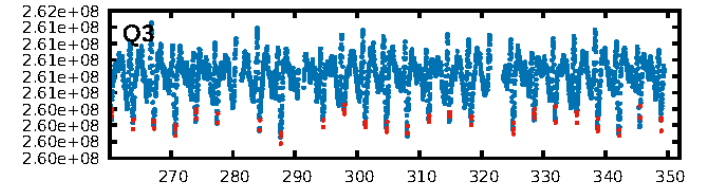
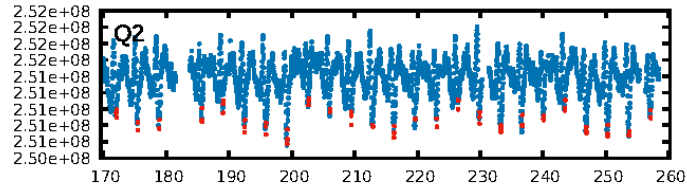
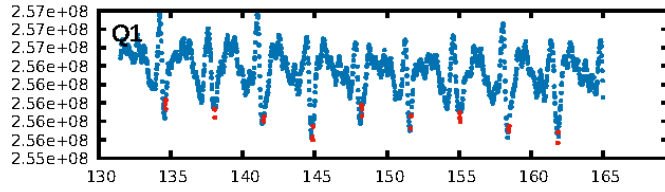
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: 0.0% [0.00σ]
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: 0.00e+00
RollingBand-fgt: 0.99 [374/376]
GhostDiagnostic-chr: 16.21
Centroid-sig: 33.1%
Centroid-so: 0.054 arcsec [0.50σ]
OotOffset-rm: 0.059 arcsec [0.71σ]
OotOffset-st: 4/4/4/5 [17]
KicOffset-rm: 0.079 arcsec [0.63σ]
KicOffset-st: 4/4/4/5 [17]
DiffImageQuality-fgm: 1.00 [17/17]
DiffImageOverlap-fno: 0.00 [0/17]

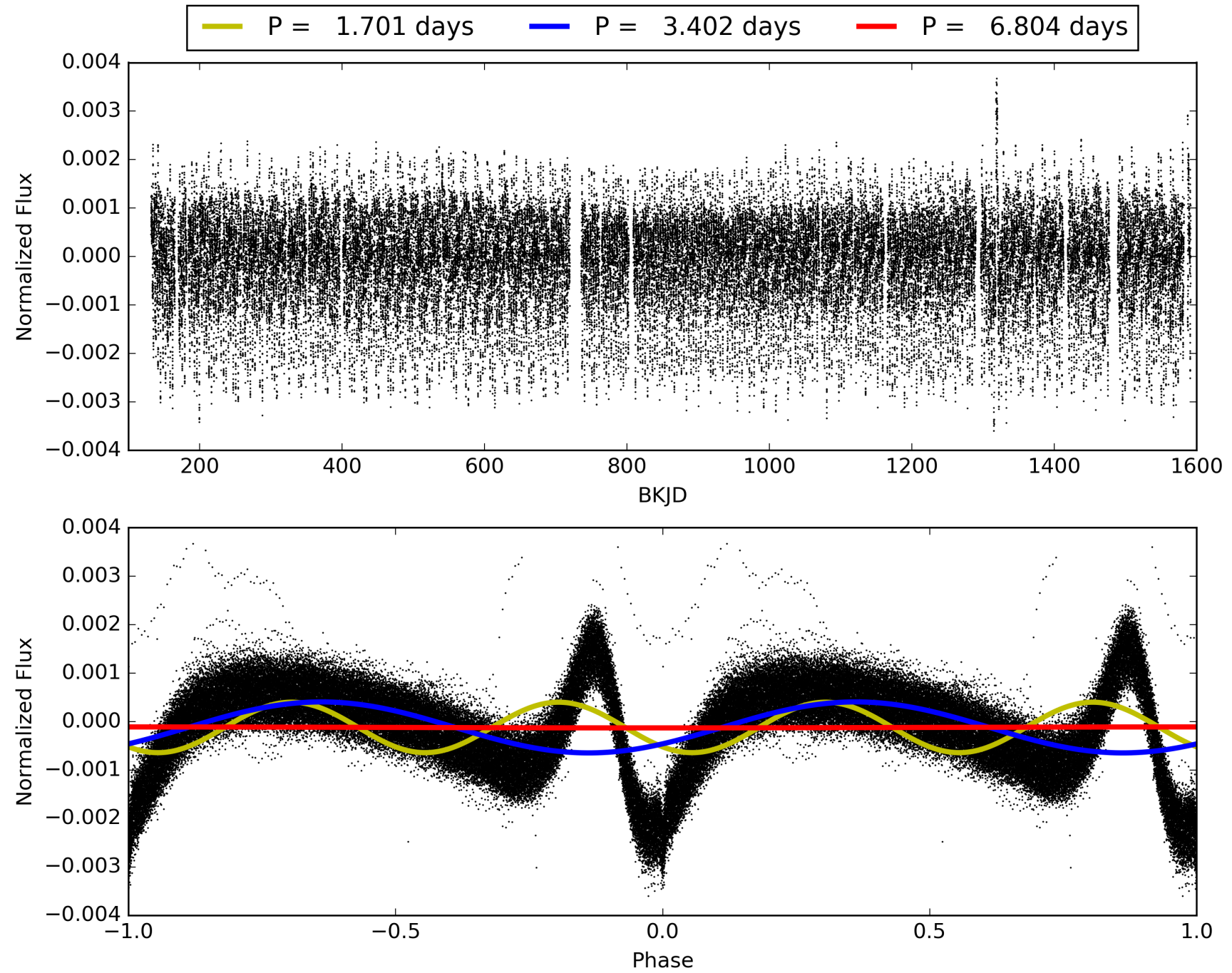
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 29-Jan-2016 21:14:53 Z

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

TCE 011240948-01, PDC Light Curves

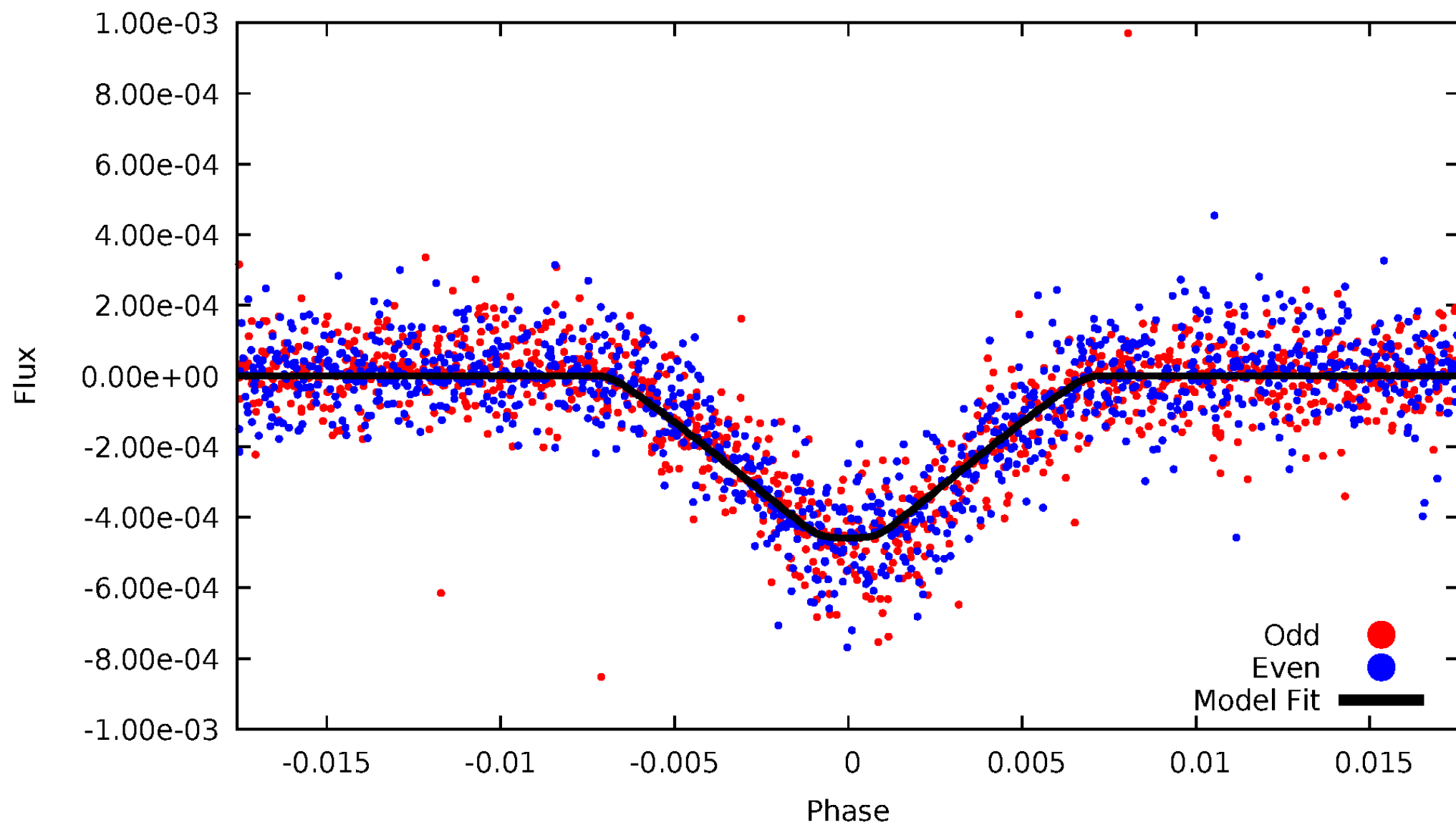


TCE 011240948-01



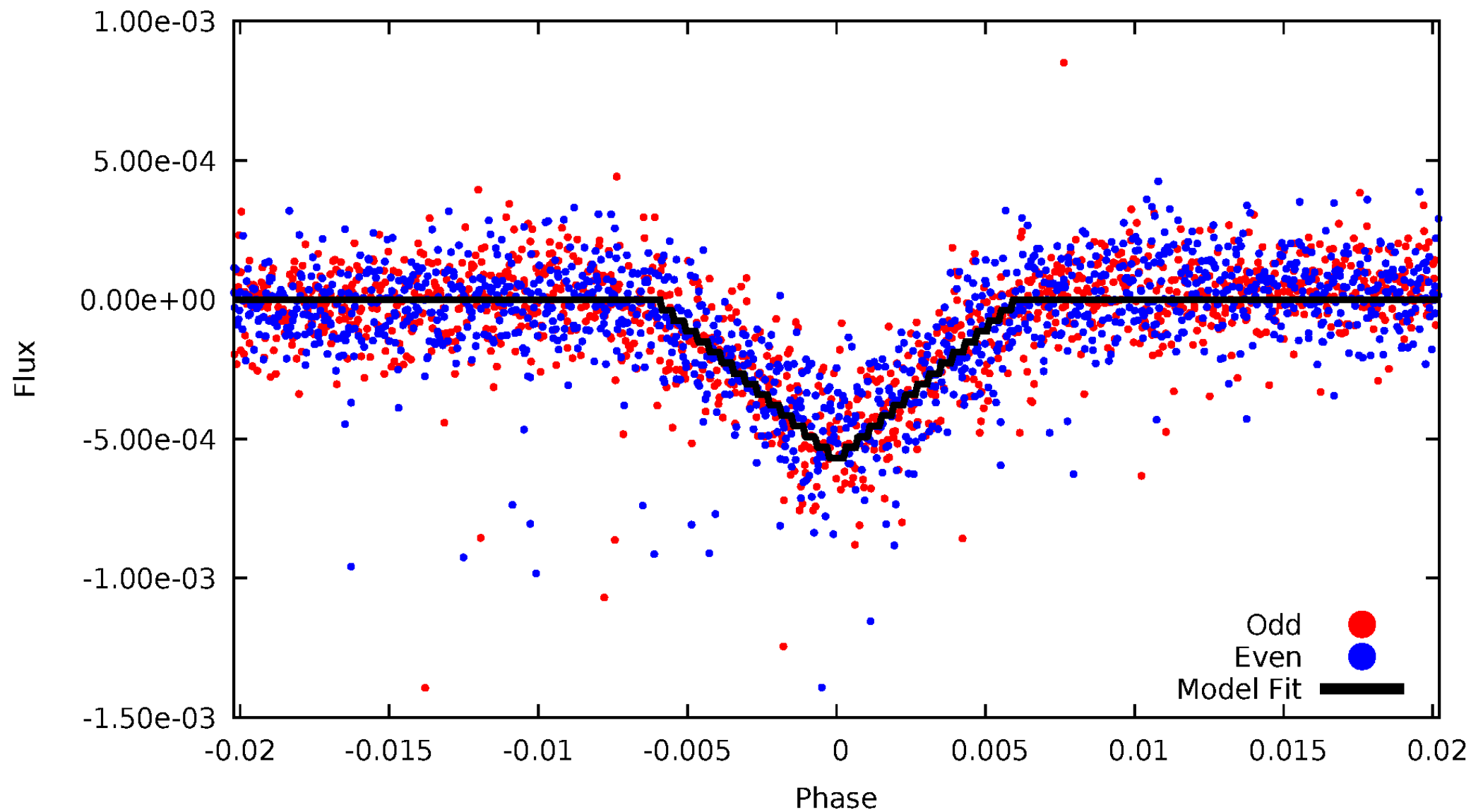
DV Odd/Even

TCE 011240948-01



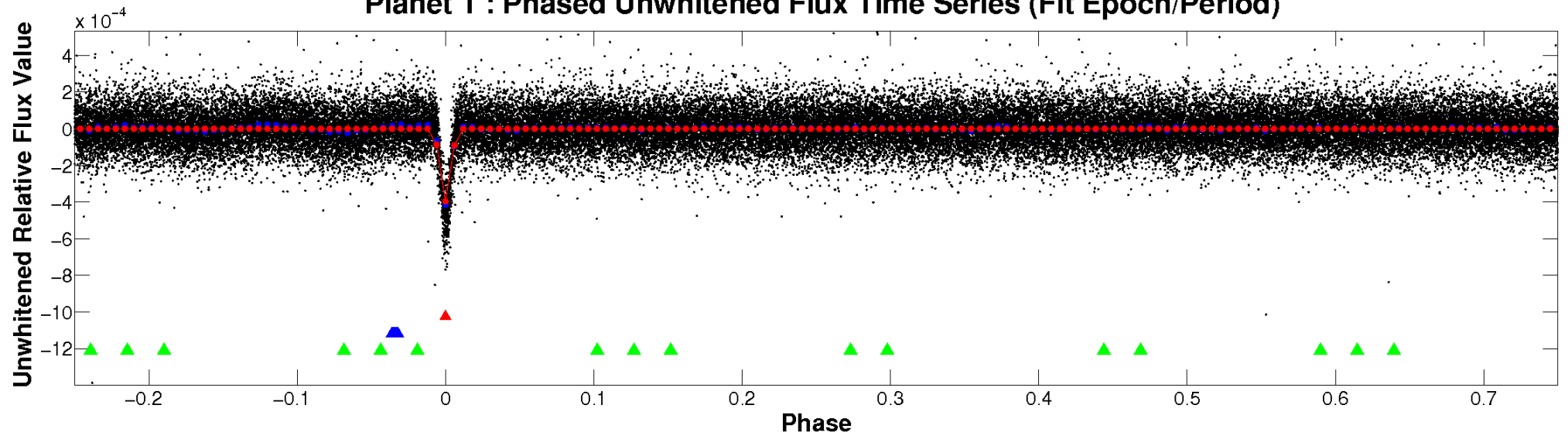
ALT Odd/Even

TCE 011240948-01

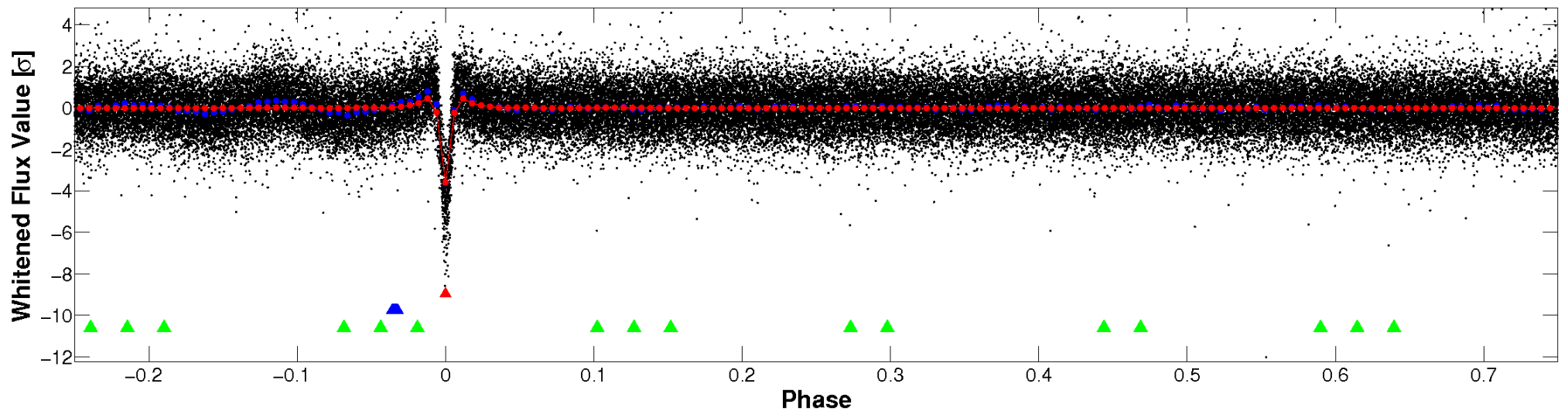


Non-Whitened Vs. Whitened Light Curve

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

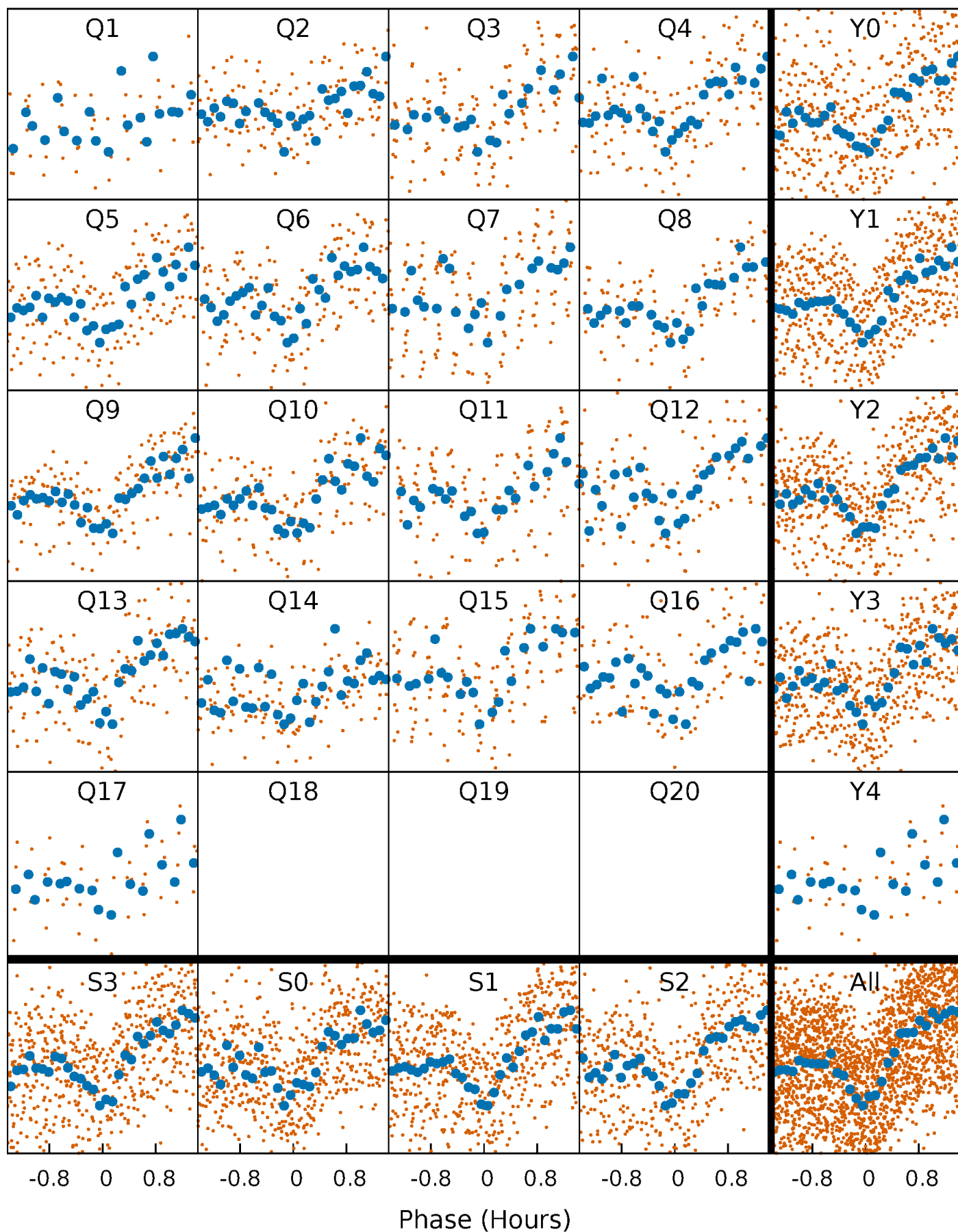


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



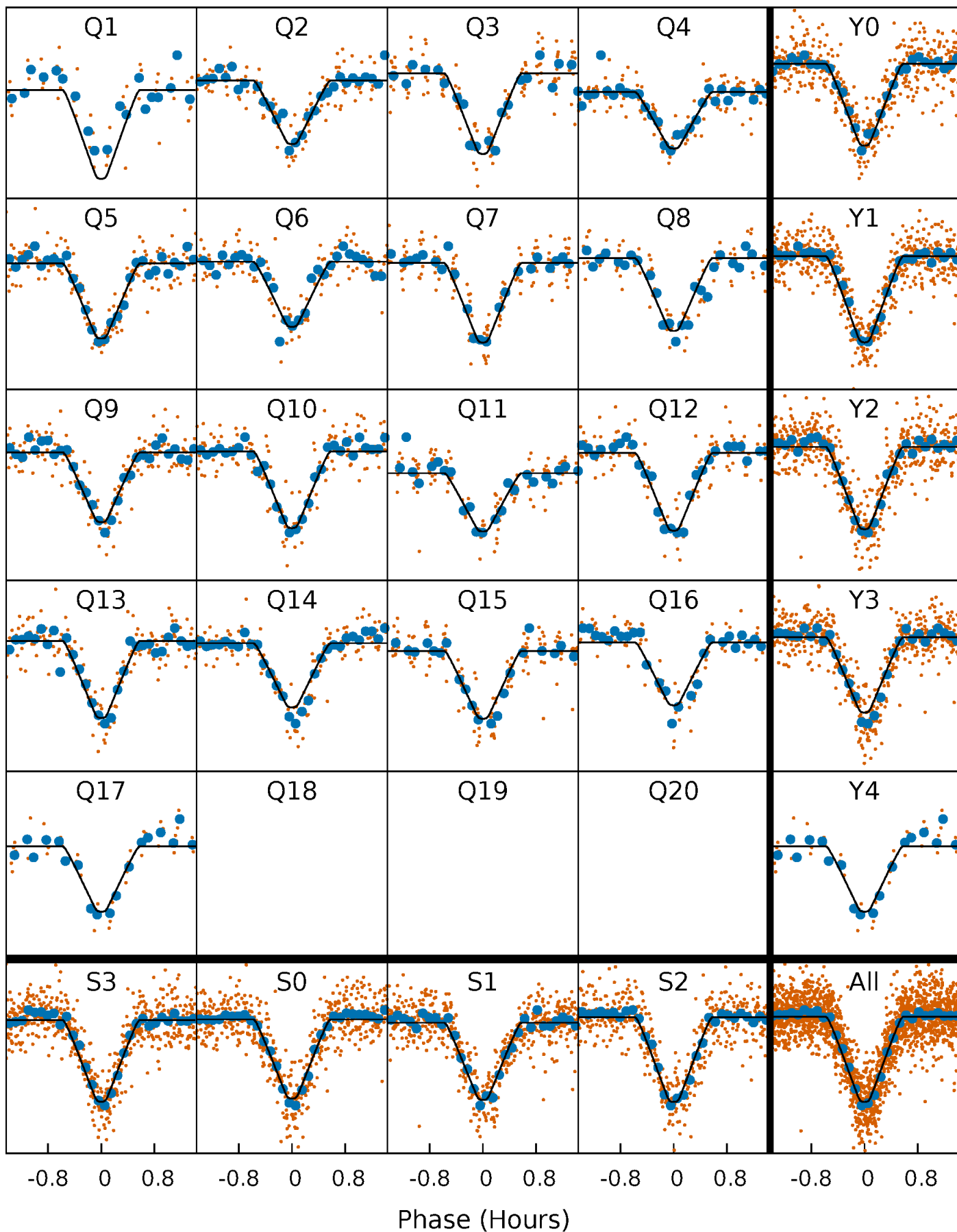
PDC Quarter-Phased Transit Curves

TCE 011240948-01 P= 3.401941 Days $T_0=134.645880$ (BKJD)



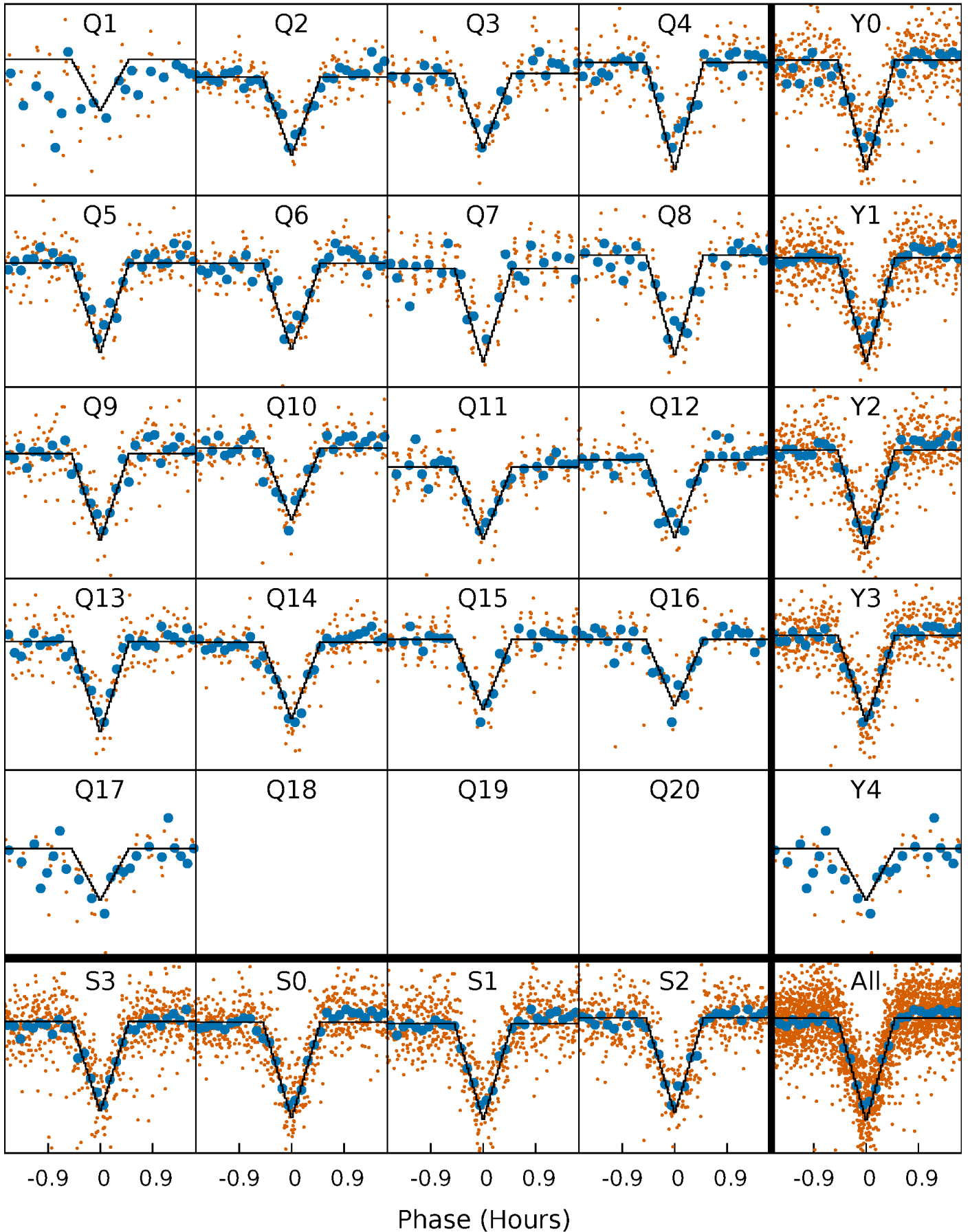
DV Quarter-Phased Transit Curves

TCE 011240948-01 P= 3.401941 Days $T_0=134.645880$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

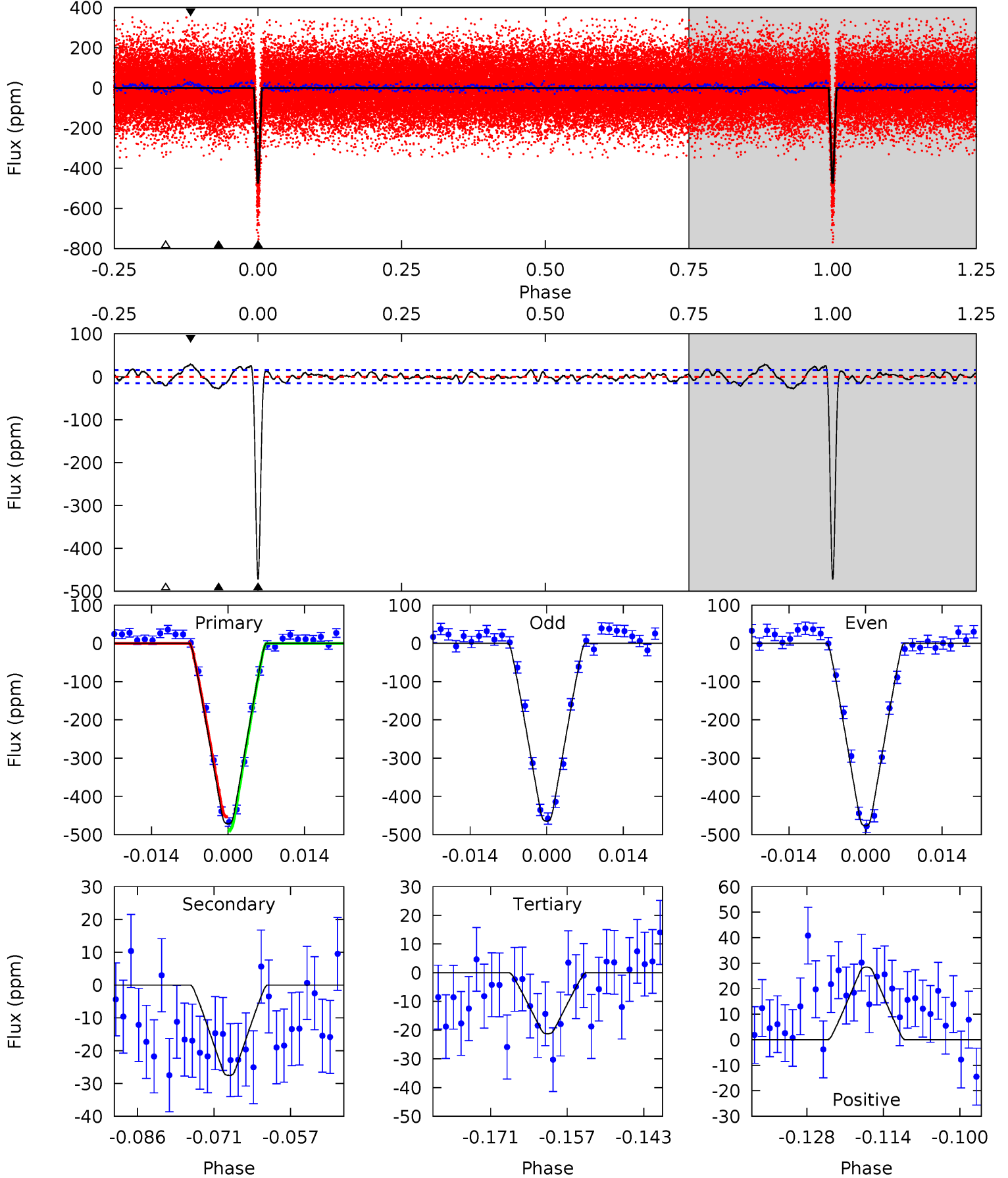
TCE 011240948-01 P= 3.401948 Days $T_0=134.644635$ (BKJD)



DV Model-Shift Uniqueness Test

011240948-01, P = 3.401941 Days, E = 131.243939 Days

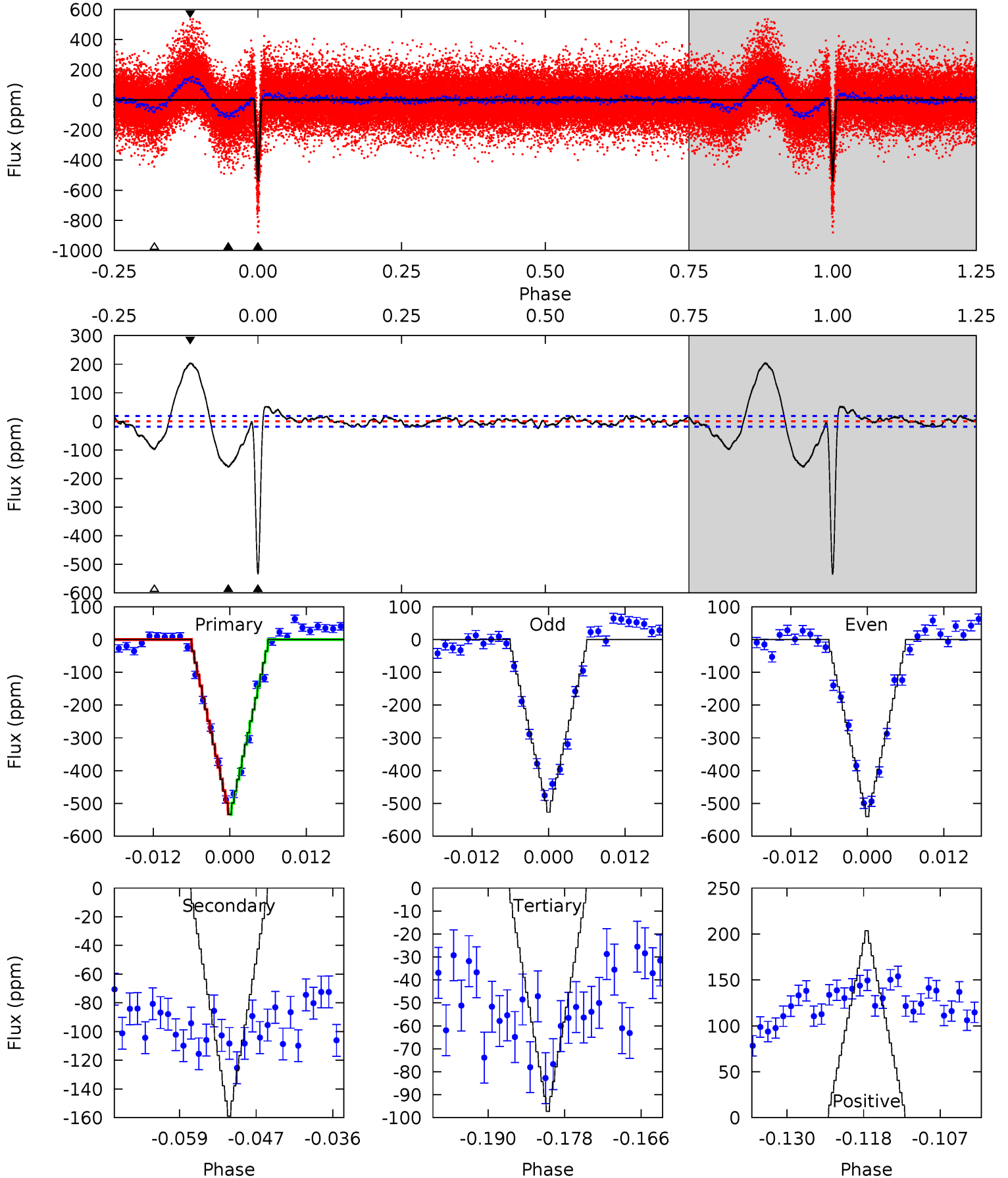
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
154.4	9.03	6.96	9.32	4.96	2.45	2.62	147.5	145.1	2.07	-0.30	1.99	1.02	0.06	5.67



Alt Model-Shift Uniqueness Test

011240948-01, P = 3.401948 Days, E = 131.242687 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
141.0	42.0	25.7	53.8	4.99	2.52	12.4	115.3	87.2	16.3	-11.8	1.75	1.04	0.28	0.41



Stellar Parameters For KIC 011240948

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	$M(M_{\odot})$	p_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	7094^{+193}_{-236}	$3.905^{+0.277}_{-0.092}$	$-0.480^{+0.300}_{-0.250}$	$2.170^{+0.449}_{-0.673}$	$1.379^{+0.193}_{-0.236}$	$0.190^{+0.344}_{-0.069}$
	+3%/-3%	+7%/-2%	+62%/-52%	+21%/-31%	+14%/-17%	+181%/-36%
Source	PHO1	FLK73	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 011240948-01 / KOI 7425.01

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	-28 ± 3	$5.25^{+0.79}_{-0.87}$	2831^{+174}_{-231}	3584^{+178}_{-152}	$1.350^{+0.553}_{-0.328}$
Alt.	-159 ± 4	$5.41^{+0.84}_{-0.89}$	2830^{+200}_{-216}	5139^{+217}_{-222}	$7.319^{+2.974}_{-1.710}$

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 $A_{obs} \gg 1.0$

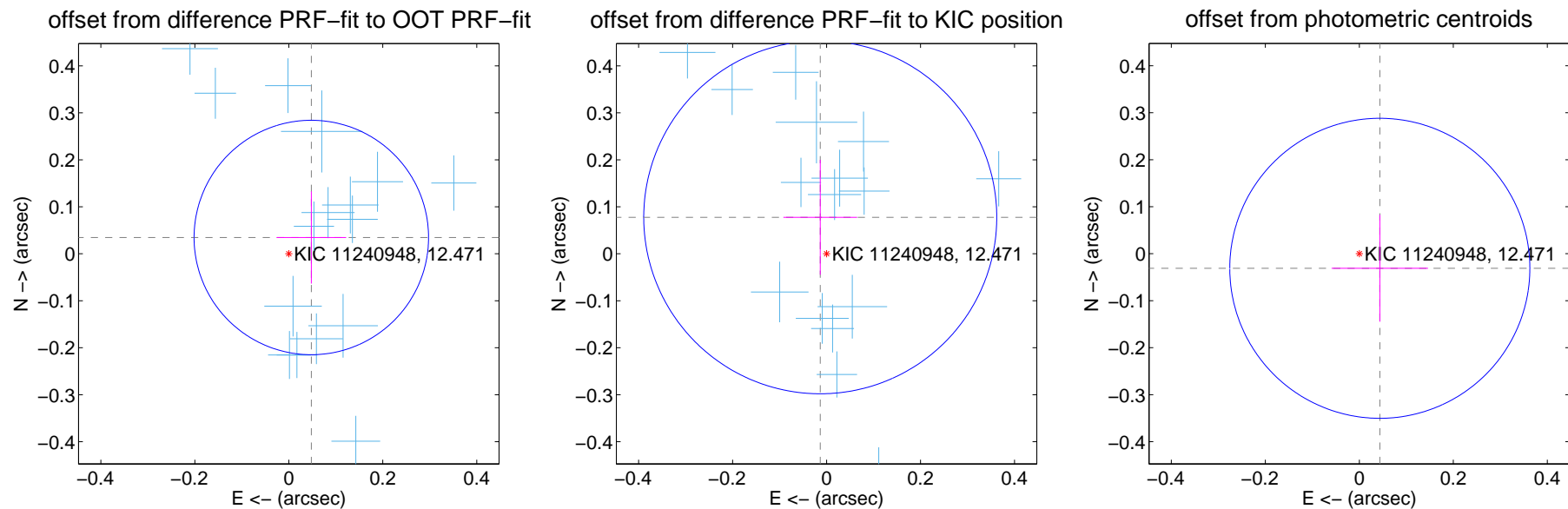
DV Centroid Data

Supplemental centroid analysis for 011240948-01. Kepler magnitude: 12.47. Transit SNR 75.87

There are 17 quarters with good PRF difference image offsets

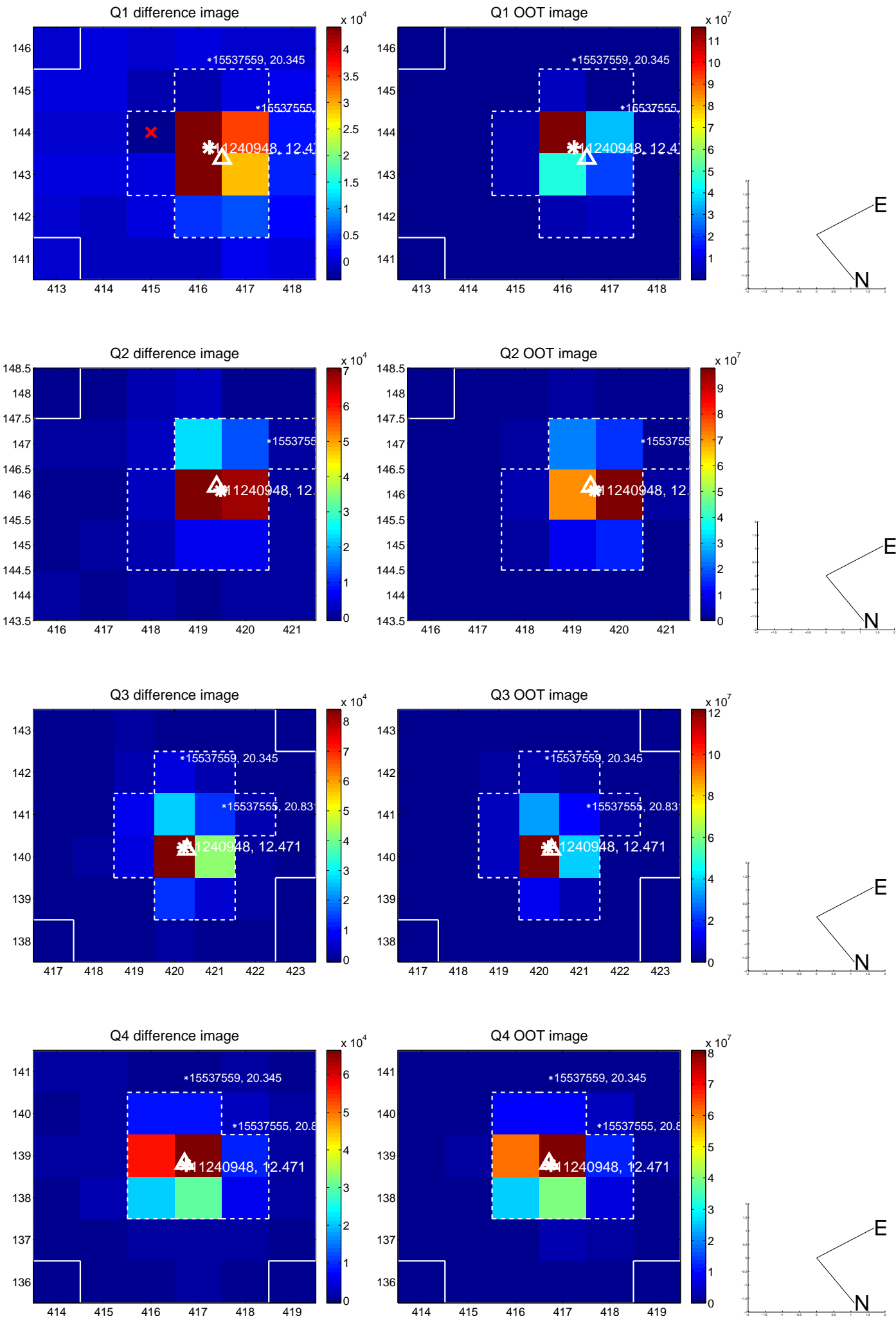
The direct PRF centroid is offset from the target star catalog position by about 0.09 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.059 ± 0.083	0.71	-0.048 ± 0.074	0.035 ± 0.098
PRF-fit source offset from KIC position	0.079 ± 0.125	0.63	0.013 ± 0.078	0.078 ± 0.122
photometric centroid source offset	0.05 ± 0.11	0.50	-0.04 ± 0.10	-0.03 ± 0.11

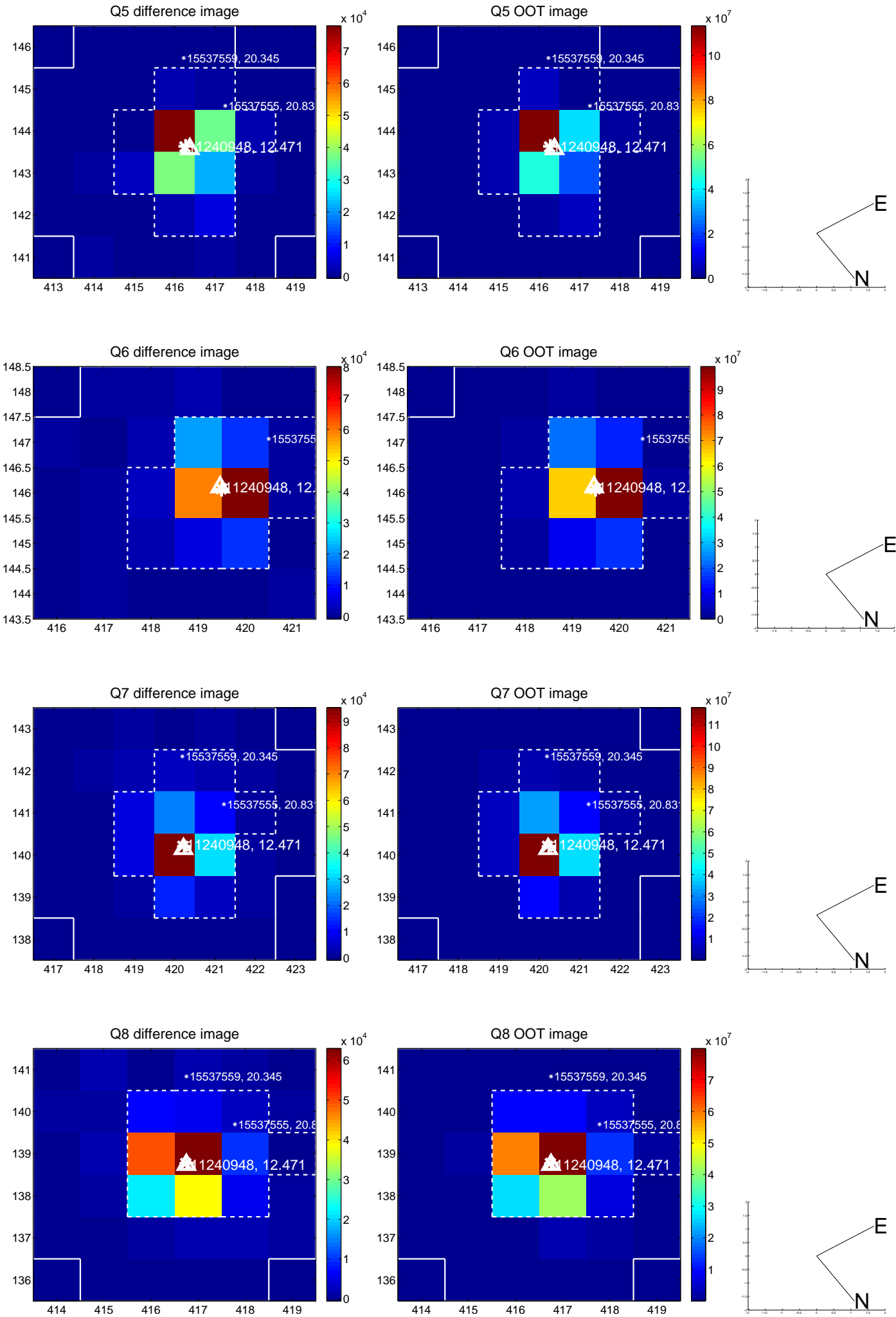


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses:** good quarterly centroid offsets; **Vermillion crosses:** bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

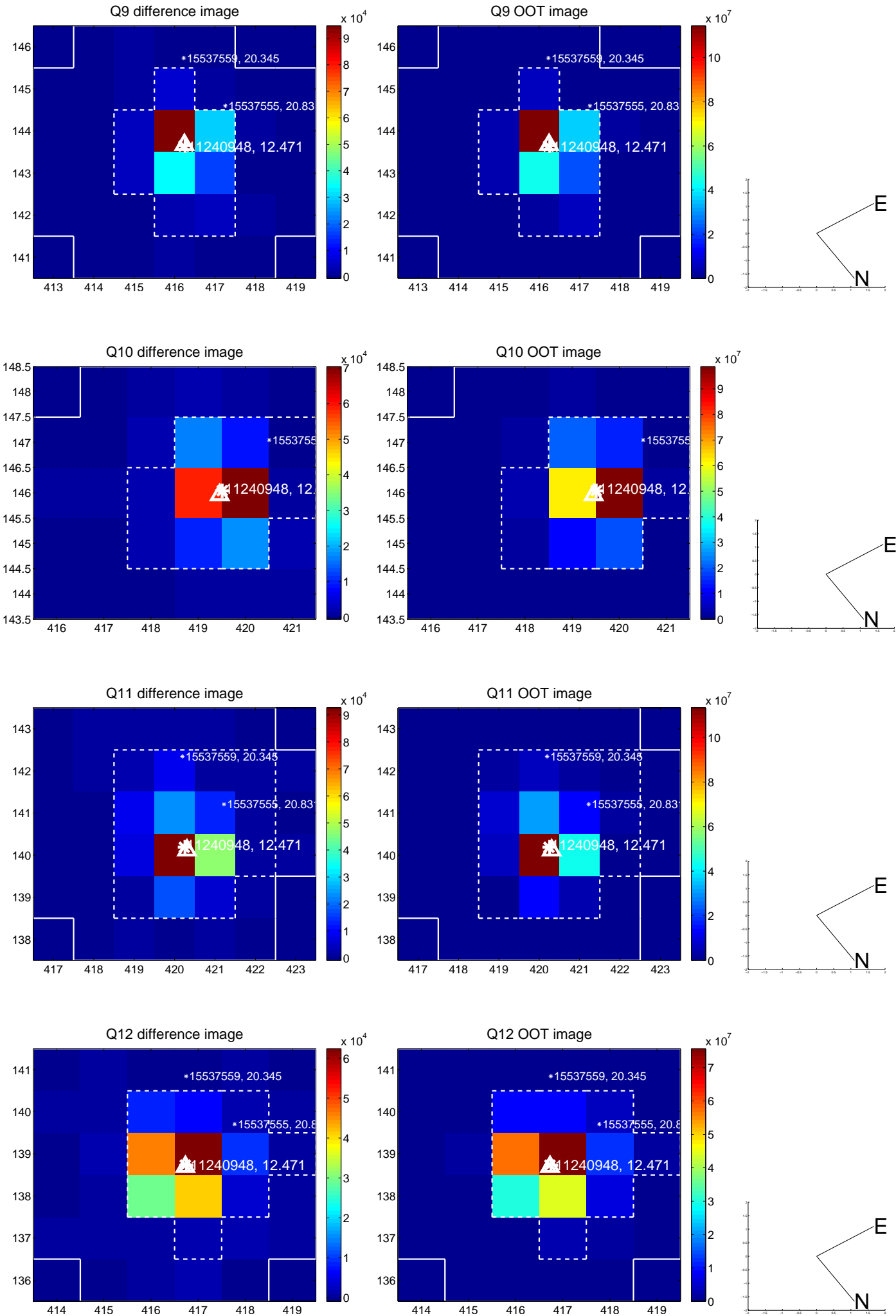
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



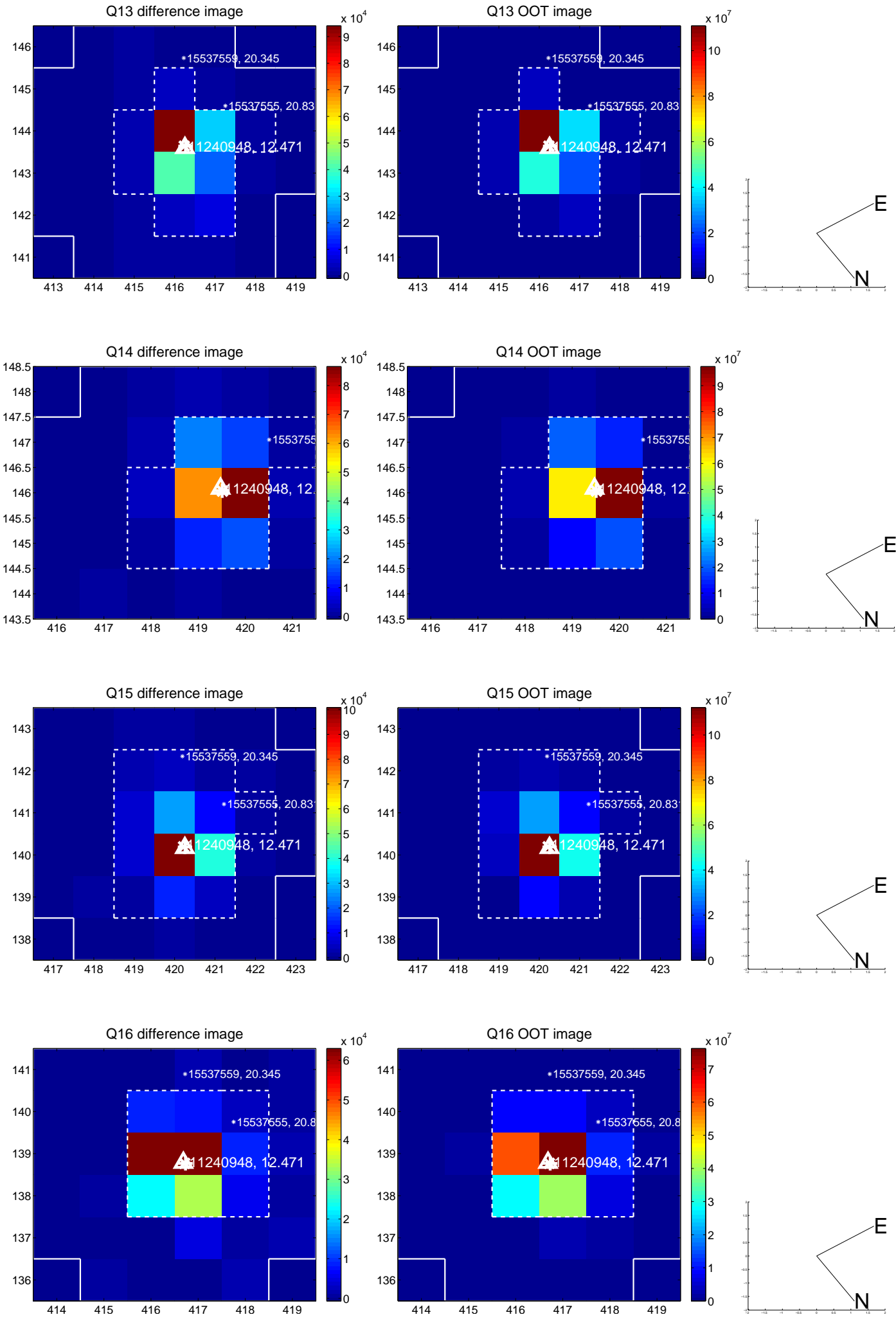
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



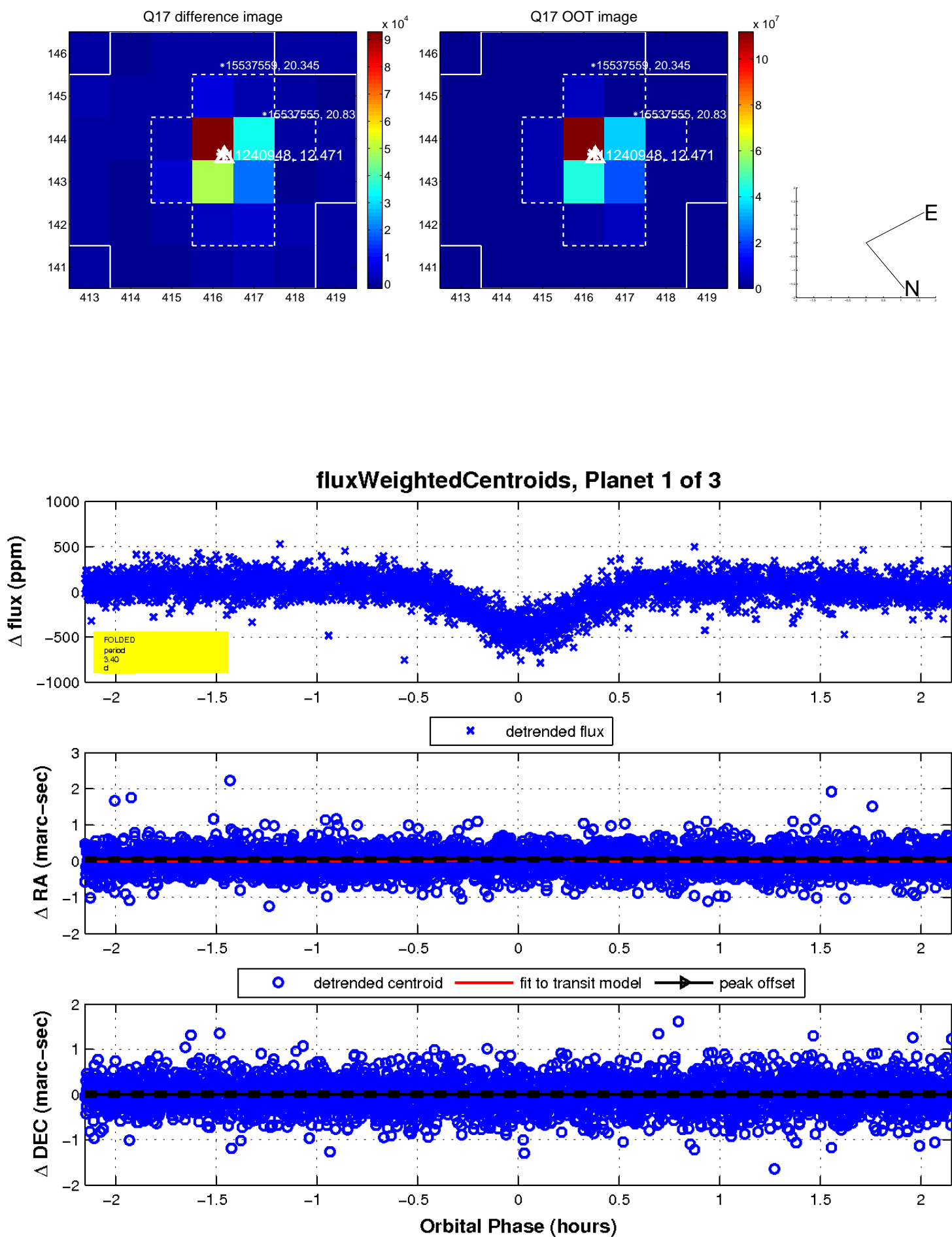
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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

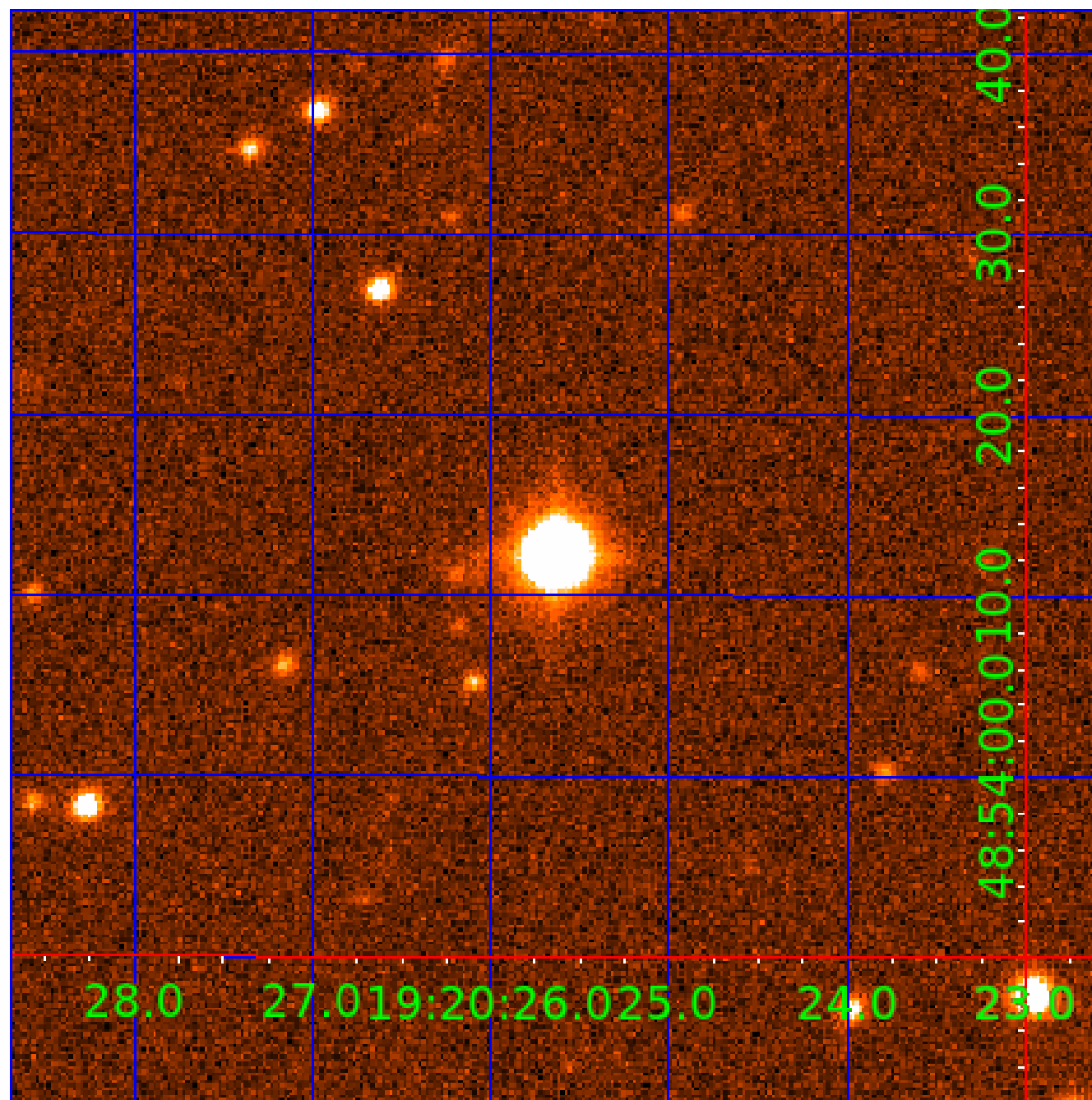


white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



UKIRT Image

Declination



KIC 011240948

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})
011240948-01	OBS	7425.01	3.401941	134.645880	459.0	0.718	46.5	75.9	2.17	7094	5.51	4396.73
011240948-02	OBS	No	3.401974	134.522753	29.3	9.156	12.6	7.6	2.17	7094	1.37	4396.67
011240948-03	OBS	No	91.271380	135.162425	48.9	2.788	7.6	2.2	2.17	7094	1.53	54.74

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
011240948-01	OBS	FP	0.14	0	1	0	0	HAS_SEC_TCE
011240948-02	OBS	FP	0.00	1	1	0	0	IS_SEC_TCE
011240948-03	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_TRACKER—LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_POS_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT

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.

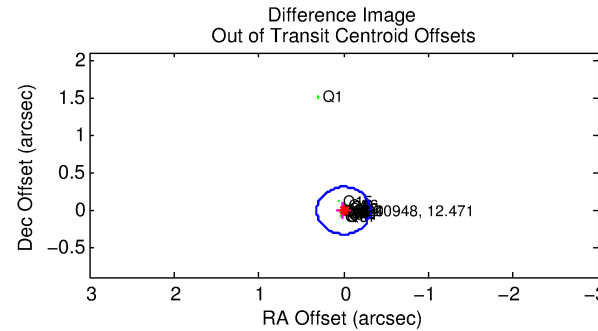
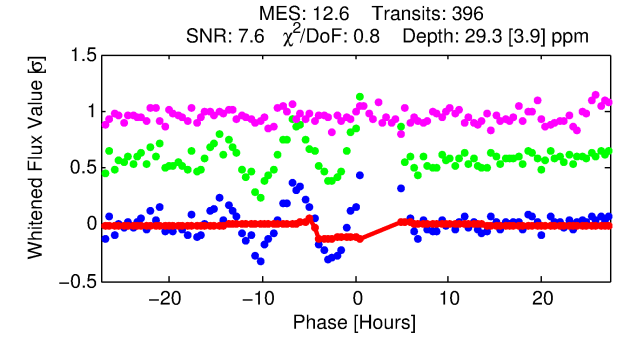
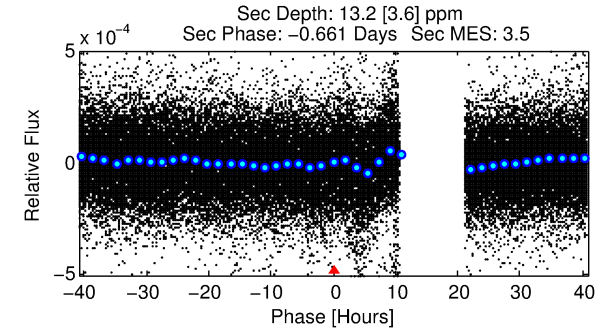
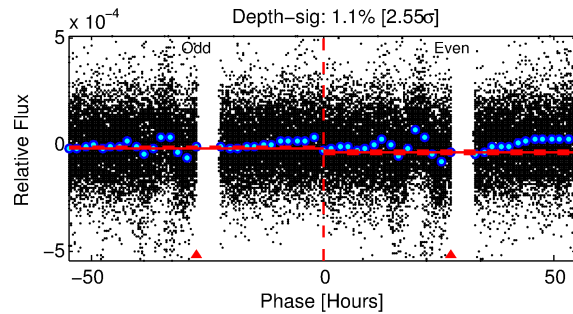
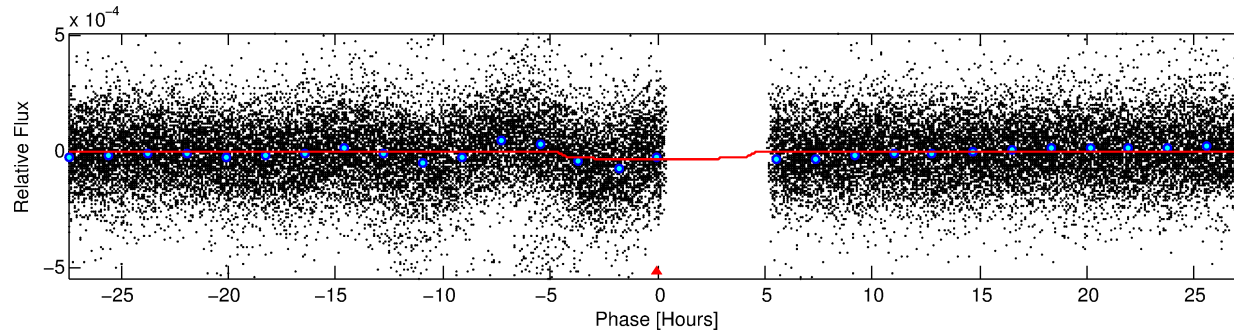
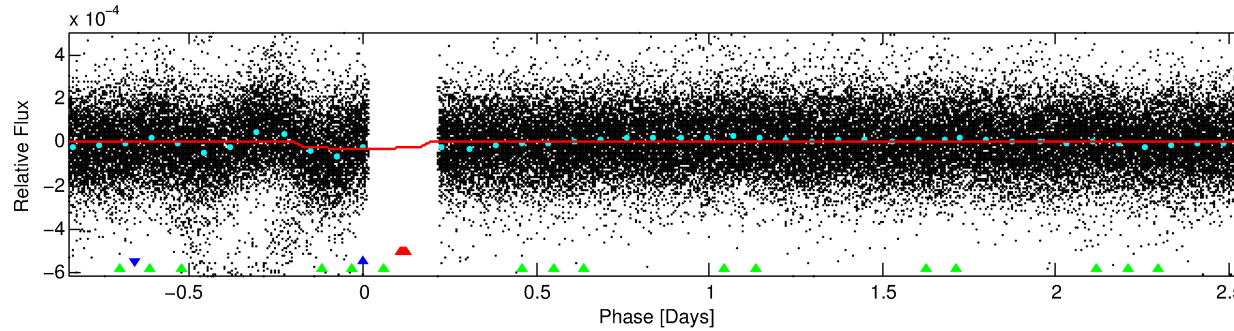
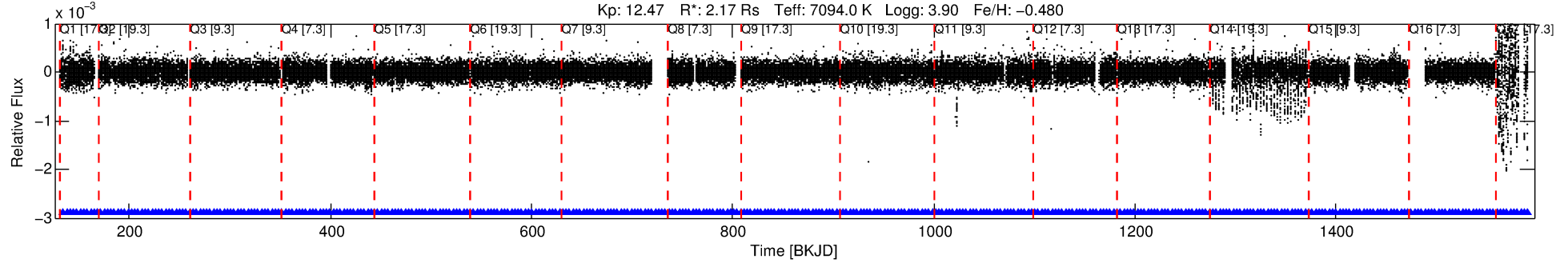
Ephemeris Match Information For 011240948-02

No Significant Match Found

DV One-Page Summary

KIC: 11240948 Candidate: 2 of 3 Period: 3.402 d
KOI: K07425 Corr: No Ephemeris Match

Kp: 12.47 R*: 2.17 Rs Teff: 7094.0 K Logg: 3.90 Fe/H: -0.480



DV Fit Results:

Period = 3.40197 [0.00004] d
Epoch = 134.5228 [0.0247] BKJD
Rp/R* = 0.0058 [0.0013]
a/R* = 1.57 [1.20]
b = 0.90 [0.28]
Seff = 4396.67 [2159.57]
Teq = 2076 [255] K
Rp = 1.37 [0.53] Re
a = 0.0493 [0.0146] AU
Ag = 9.46 [6.73] [1.26σ]
Teffp = 5630 [771] K [4.38σ]

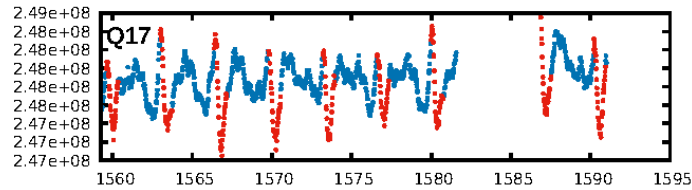
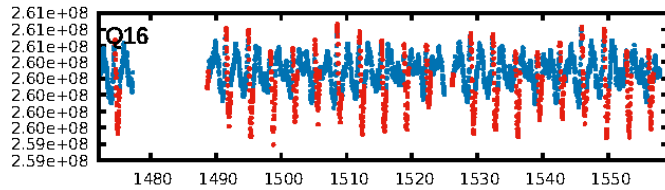
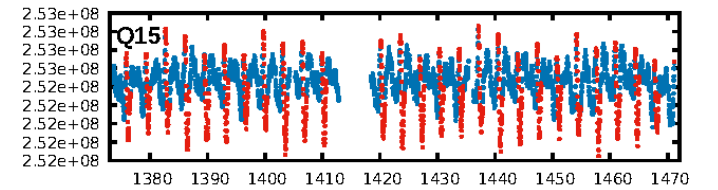
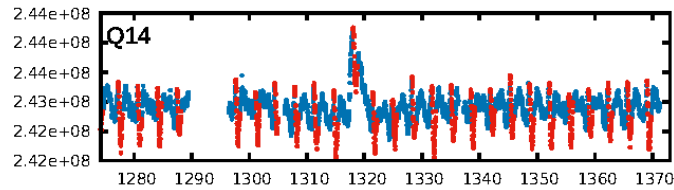
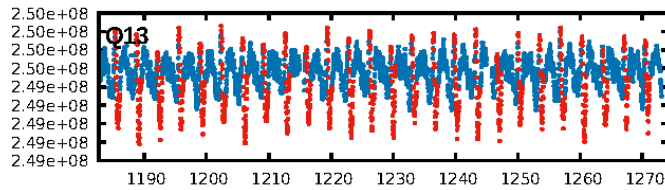
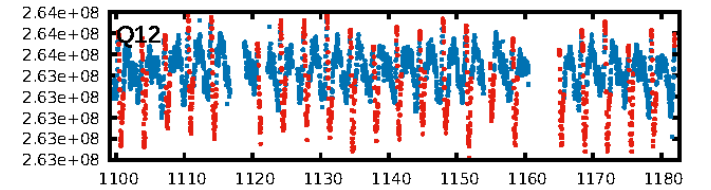
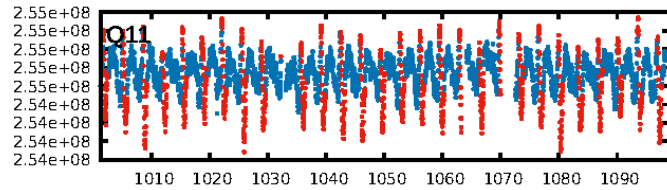
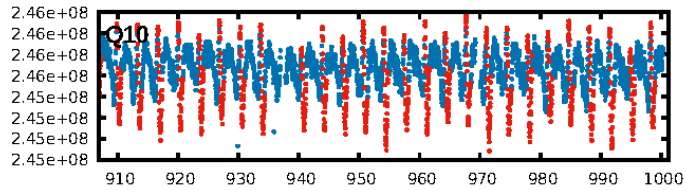
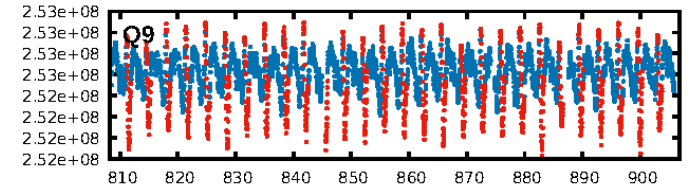
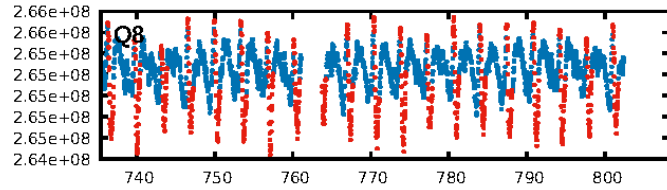
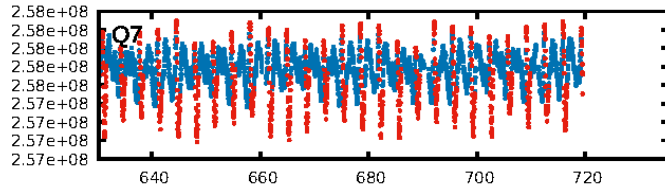
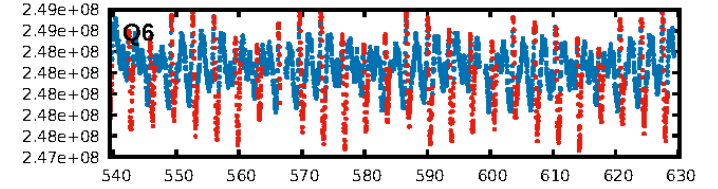
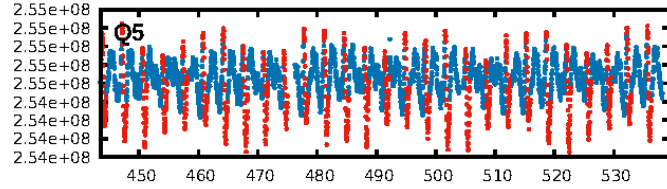
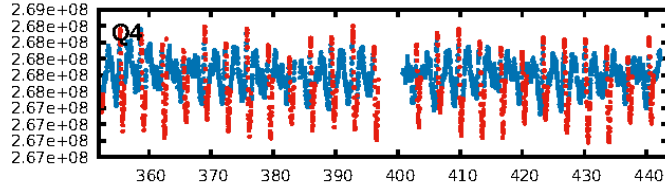
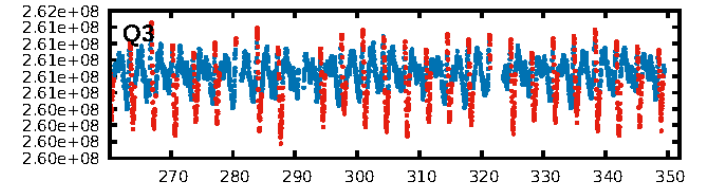
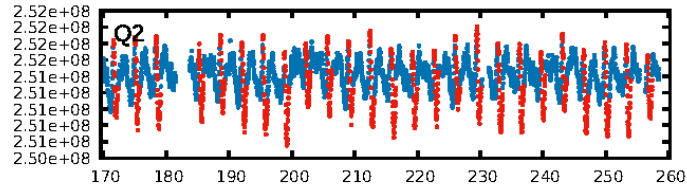
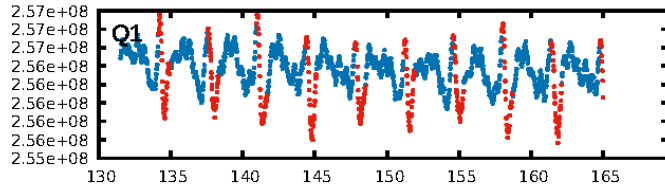
DV Diagnostic Results:

ShortPeriod-sig: 0.0% [0.00σ]
LongPeriod-sig: 100.0% [220.34σ]
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: 7.99e-26
RollingBand-fgt: 1.00 [377/377]
GhostDiagnostic-chr: 0.9752
Centroid-sig: 0.0%
Centroid-so: 1.174 arcsec [2.20σ]
OotOffset-rm: 0.013 arcsec [0.12σ]
OotOffset-st: 4/4/4/5 [17]
KicOffset-rm: 0.062 arcsec [0.77σ]
KicOffset-st: 4/4/4/5 [17]
DiffImageQuality-fgm: 1.00 [17/17]
DiffImageOverlap-fno: 0.00 [0/17]

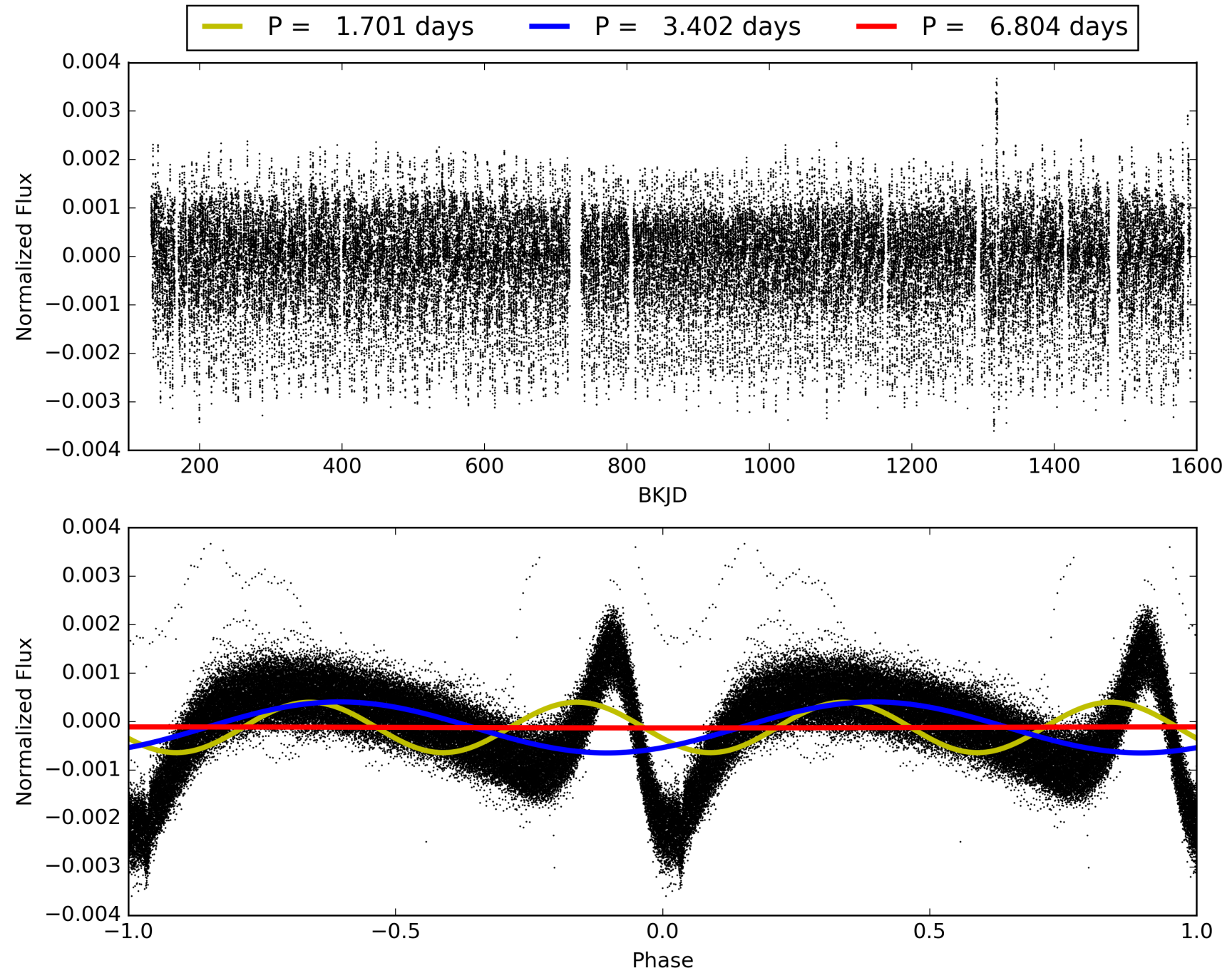
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 29-Jan-2016 21:15:01 Z

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

TCE 011240948-02, PDC Light Curves

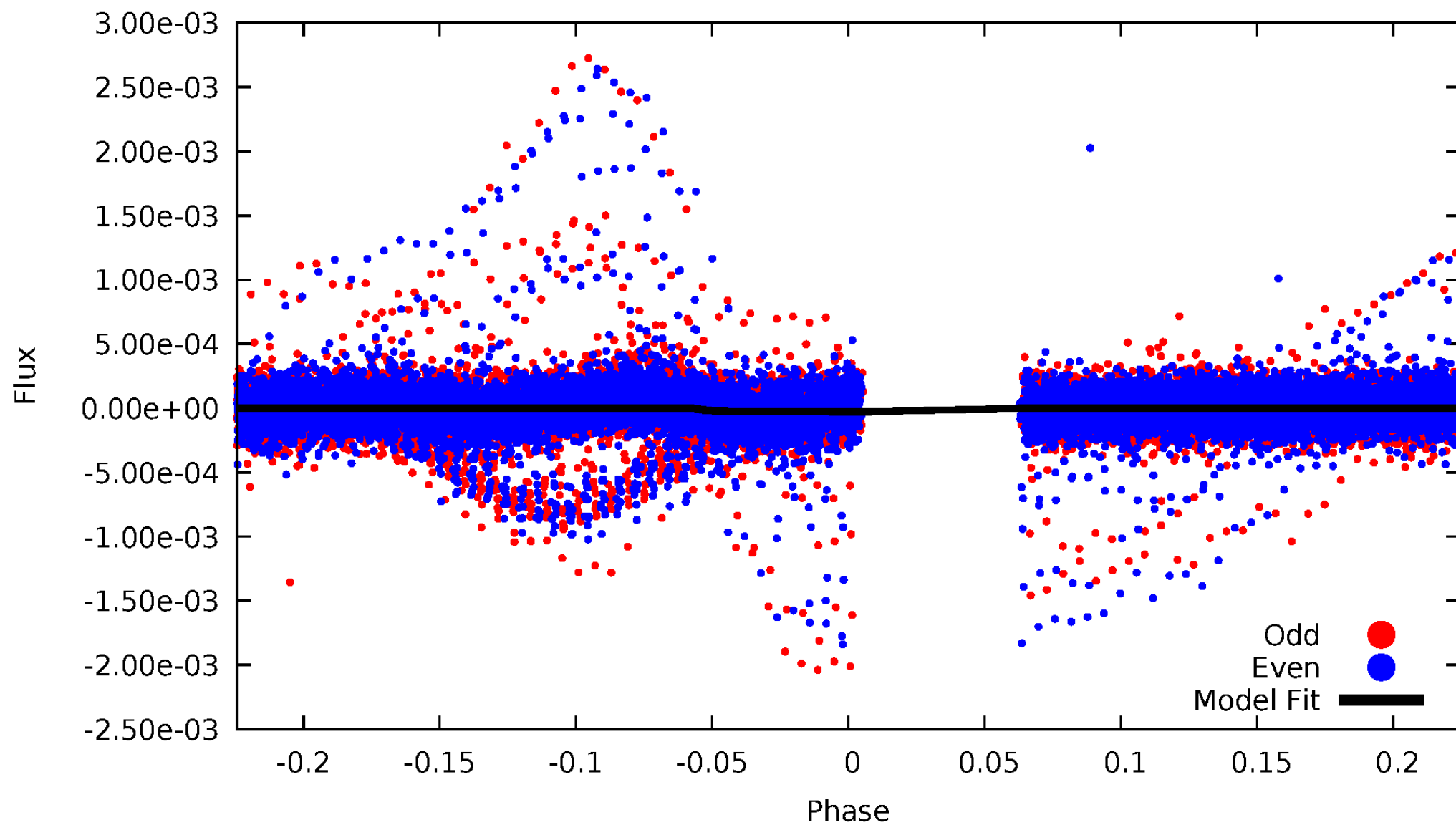


TCE 011240948-02



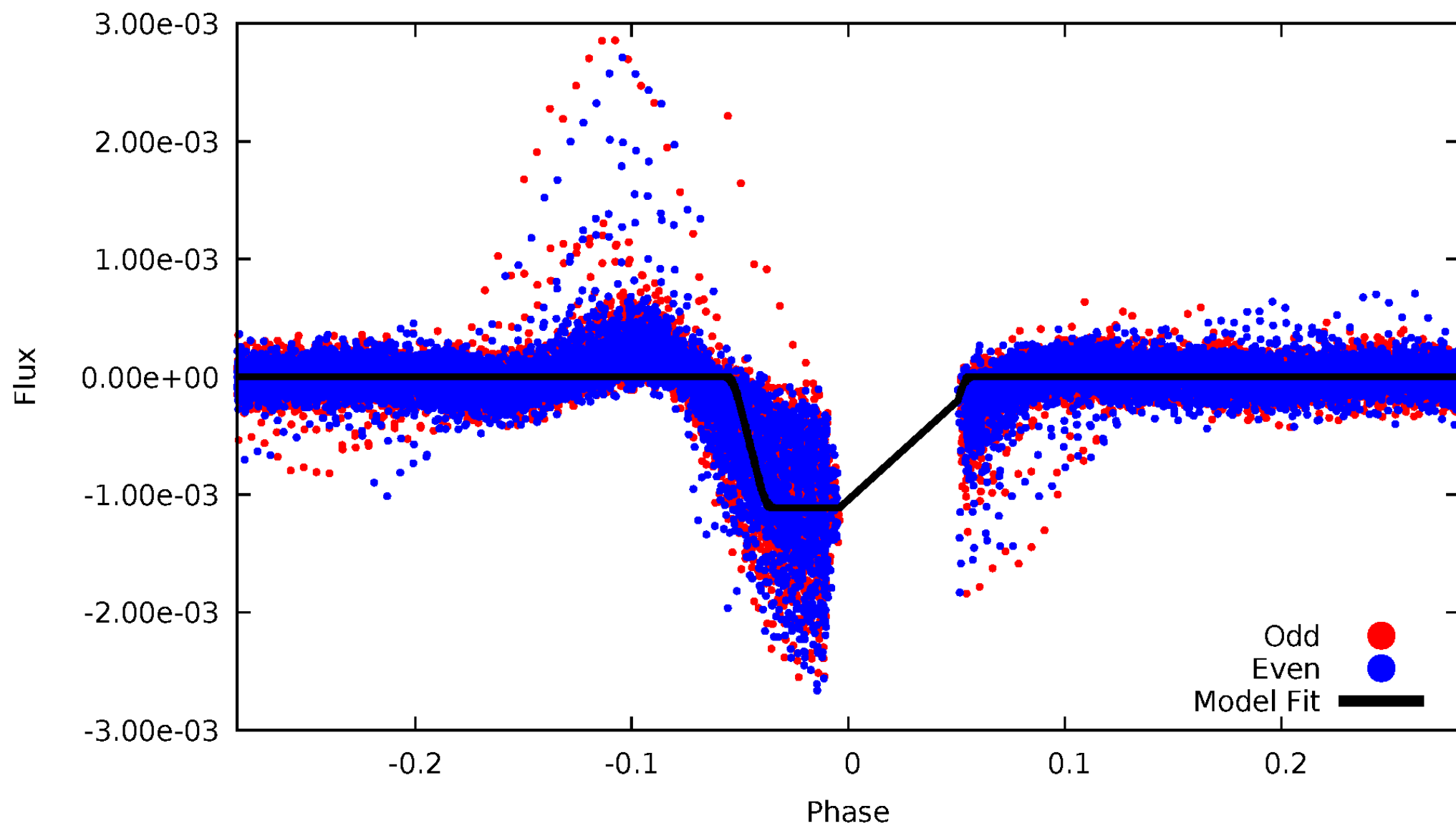
DV Odd/Even

TCE 011240948-02



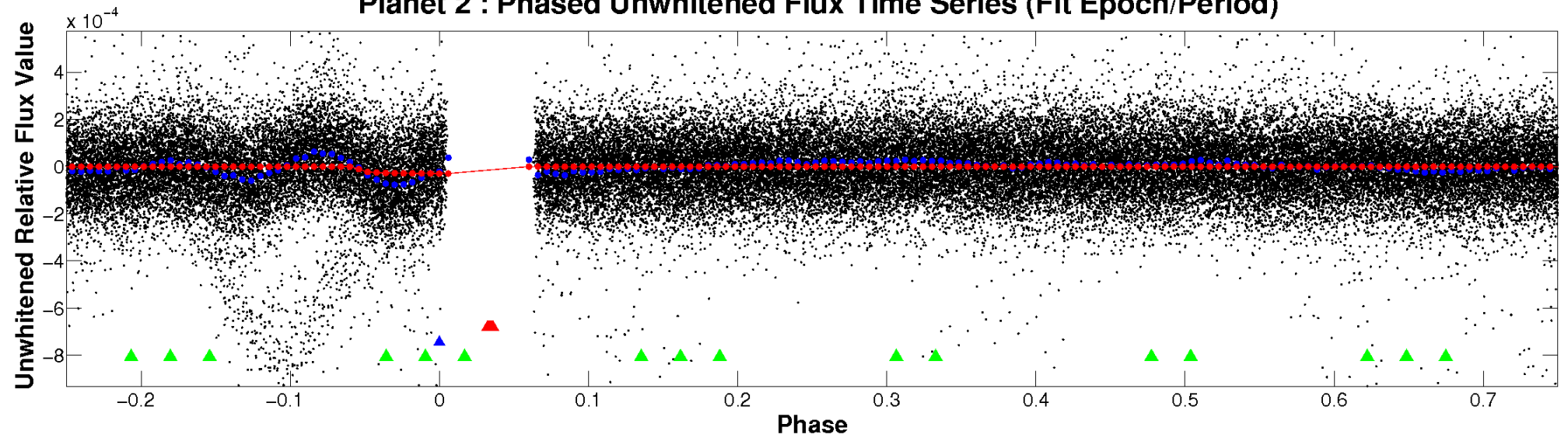
ALT Odd/Even

TCE 011240948-02

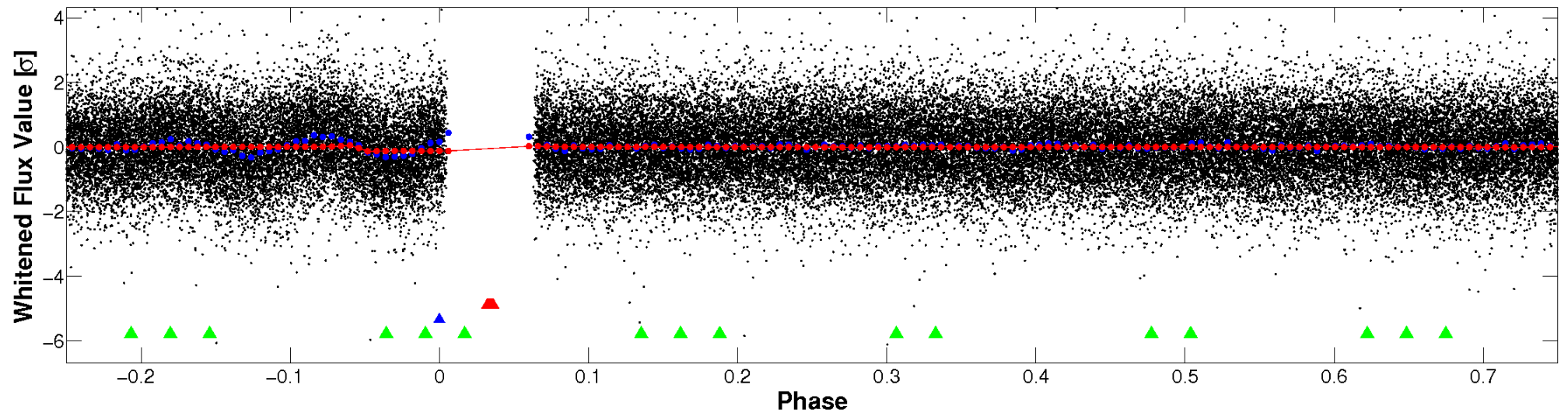


Non-Whitened Vs. Whitened Light Curve

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

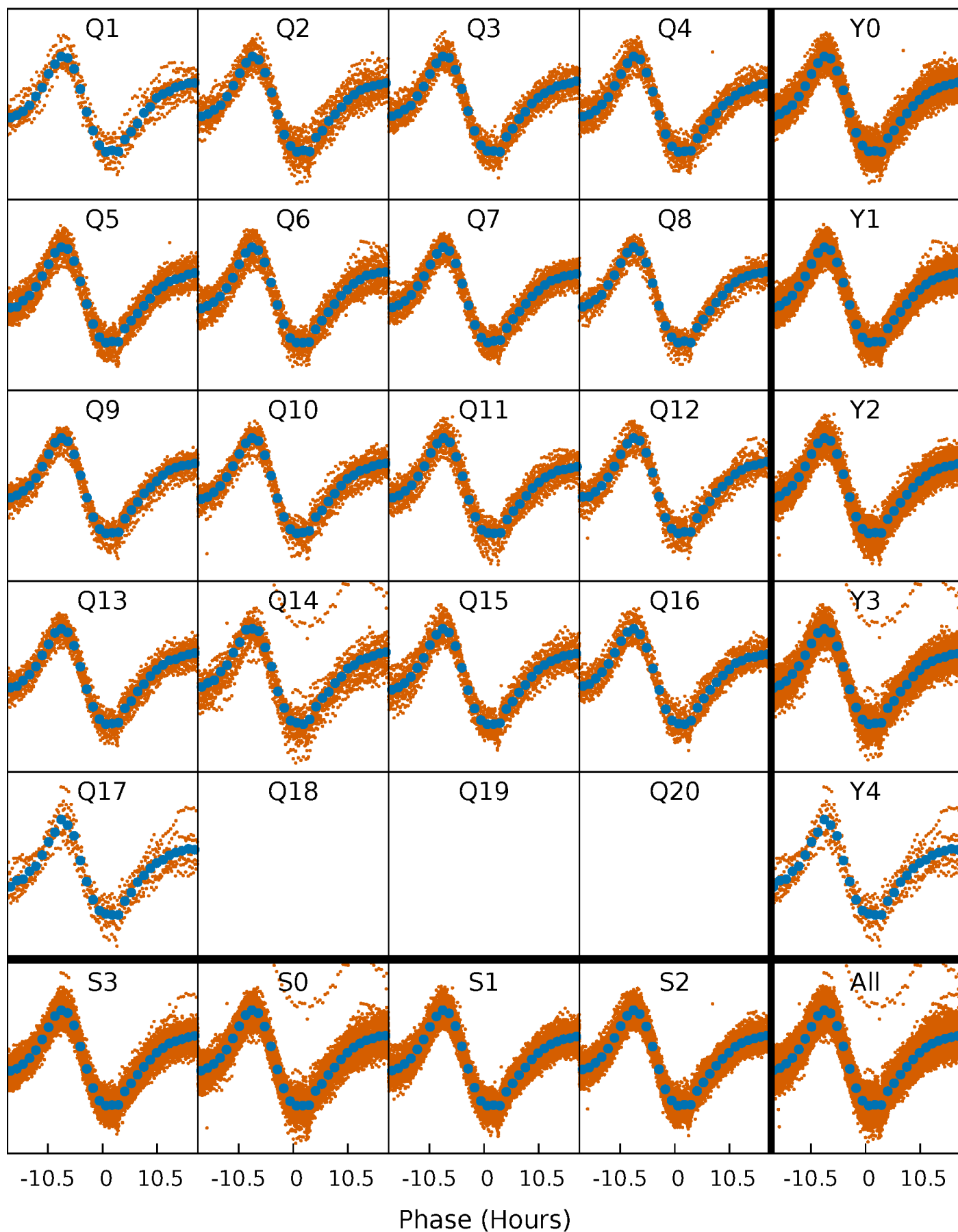


Planet 2 : Phased Whitened Flux Time Series (Fit Epoch/Period)



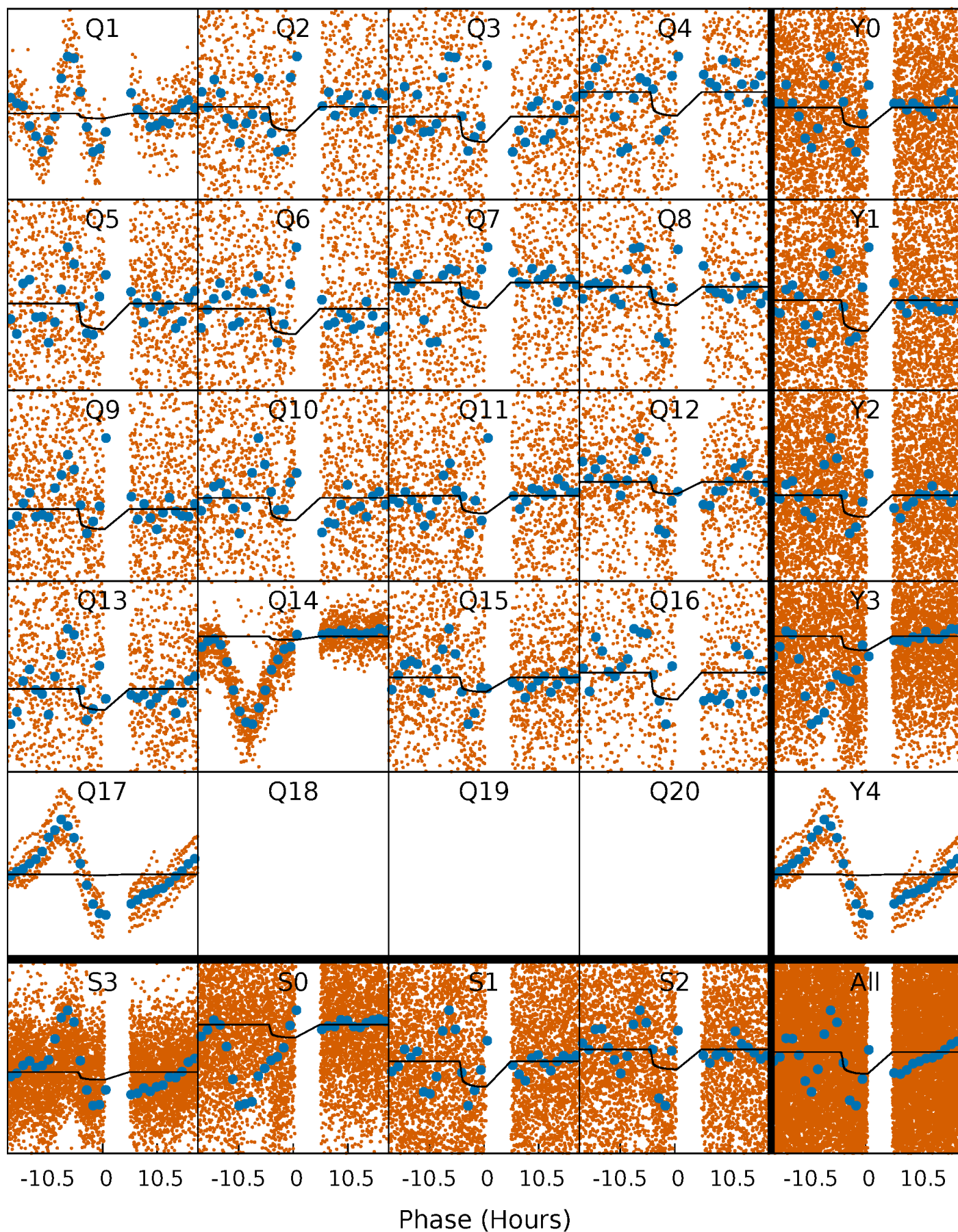
PDC Quarter-Phased Transit Curves

TCE 011240948-02 P= 3.401974 Days $T_0=134.522753$ (BKJD)



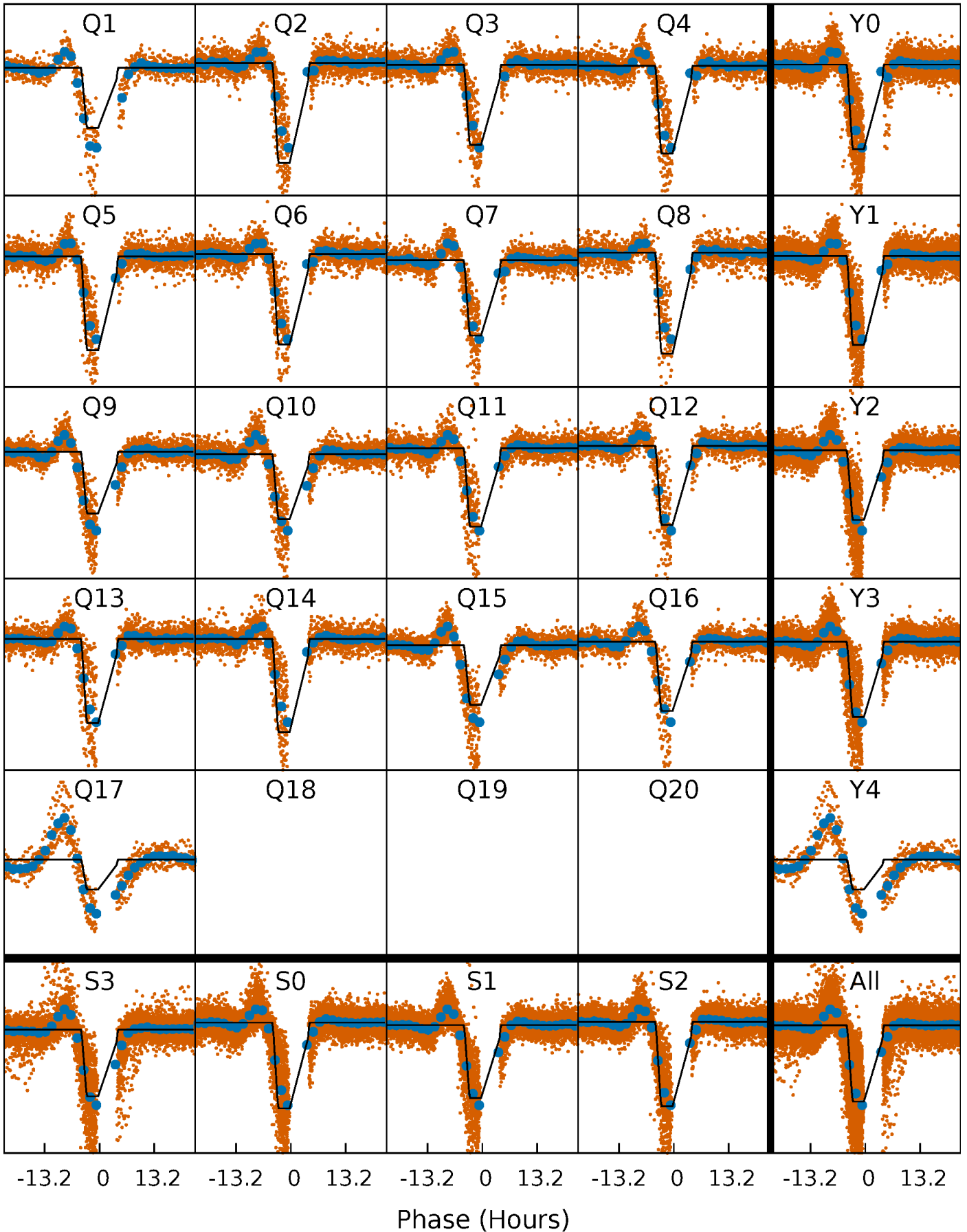
DV Quarter-Phased Transit Curves

TCE 011240948-02 P= 3.401974 Days $T_0=134.522753$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

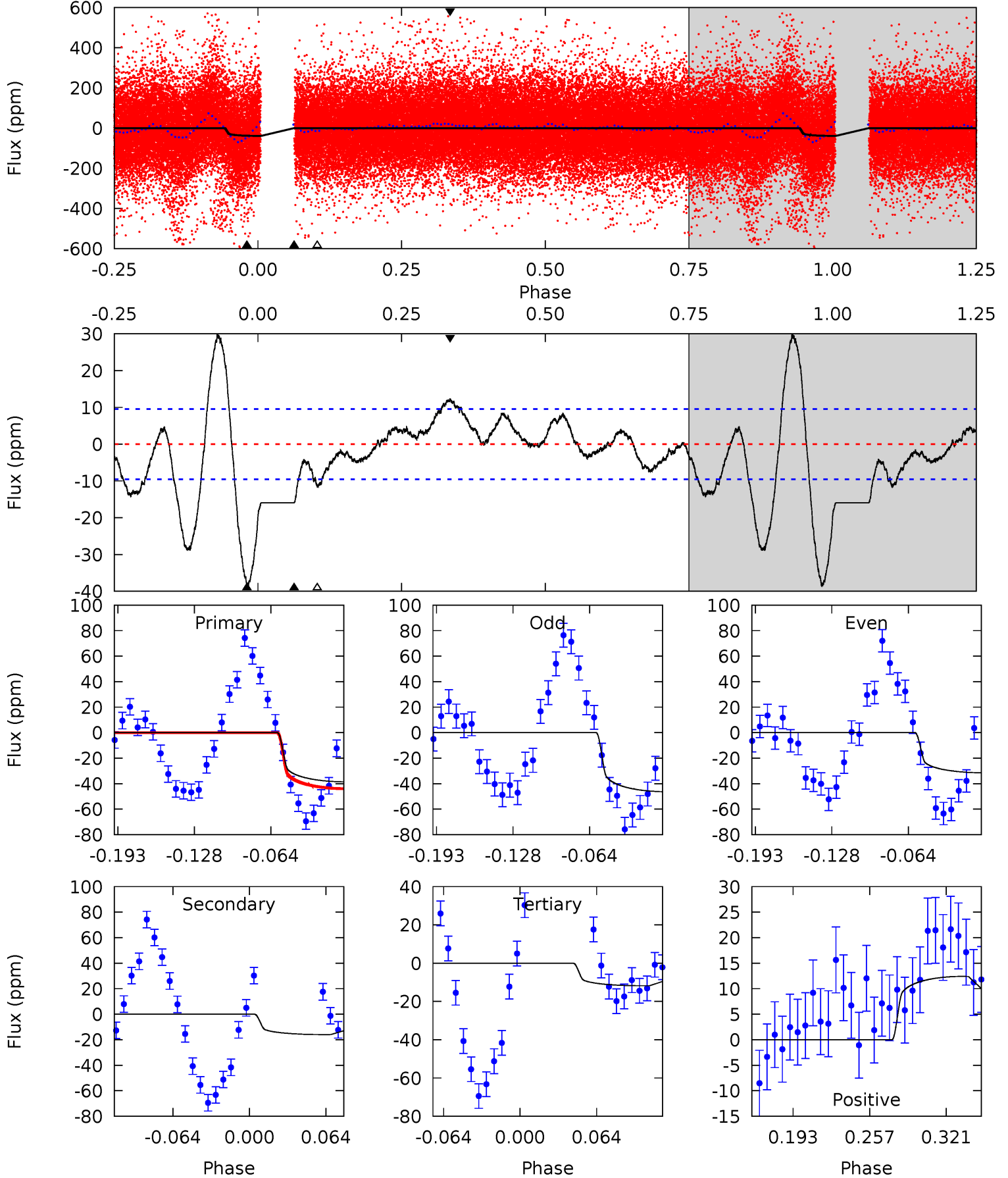
TCE 011240948-02 P= 3.401997 Days $T_0=134.554834$ (BKJD)



DV Model-Shift Uniqueness Test

011240948-02, P = 3.401974 Days, E = 131.120779 Days

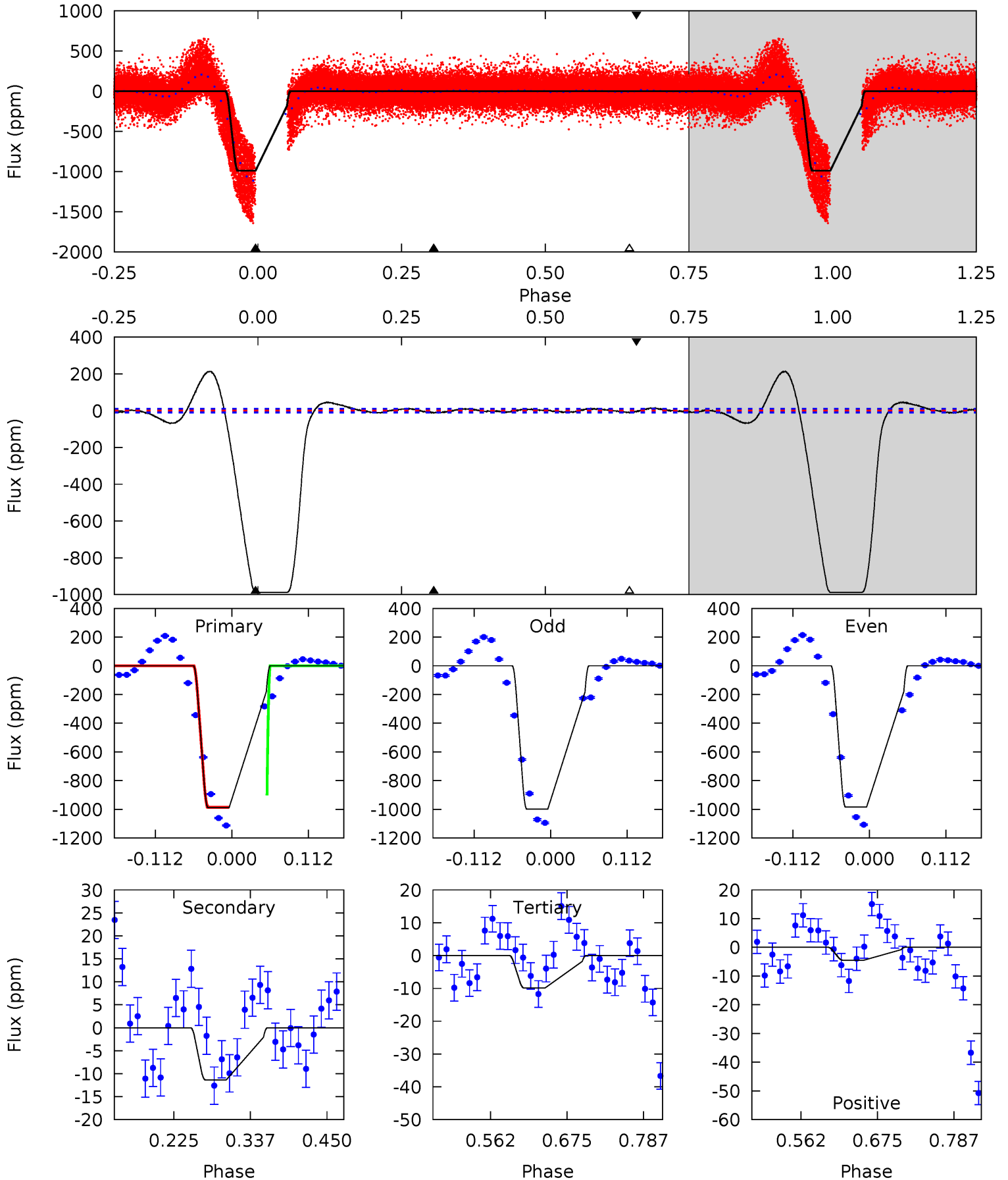
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
18.8	7.78	5.75	6.05	4.66	1.85	2.80	13.1	12.8	2.03	1.74	3.61	1.43	0.44	2.05



Alt Model-Shift Uniqueness Test

011240948-02, P = 3.401997 Days, E = 131.152837 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
439.6	5.04	4.40	-1.99	4.54	1.59	9.38	435.2	441.6	0.65	7.04	3.13	1.04	0.18	8.42



Stellar Parameters For KIC 011240948

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	$M(M_{\odot})$	p_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	7094^{+193}_{-236}	$3.905^{+0.277}_{-0.092}$	$-0.480^{+0.300}_{-0.250}$	$2.170^{+0.449}_{-0.673}$	$1.379^{+0.193}_{-0.236}$	$0.190^{+0.344}_{-0.069}$
	+3%/-3%	+7%/-2%	+62%/-52%	+21%/-31%	+14%/-17%	+181%/-36%
Source	PHO1	FLK73	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 011240948-02 / KOI

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	-16 ± 2	$1.29^{+0.35}_{-0.35}$	2820^{+185}_{-237}	5810^{+823}_{-599}	13^{+10}_{-5}
Alt.	-11 ± 2	$7.65^{+1.00}_{-1.30}$	2837^{+187}_{-222}	-2308^{+4732}_{-351}	$0.260^{+0.121}_{-0.068}$

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 $A_{obs} \gg 1.0$

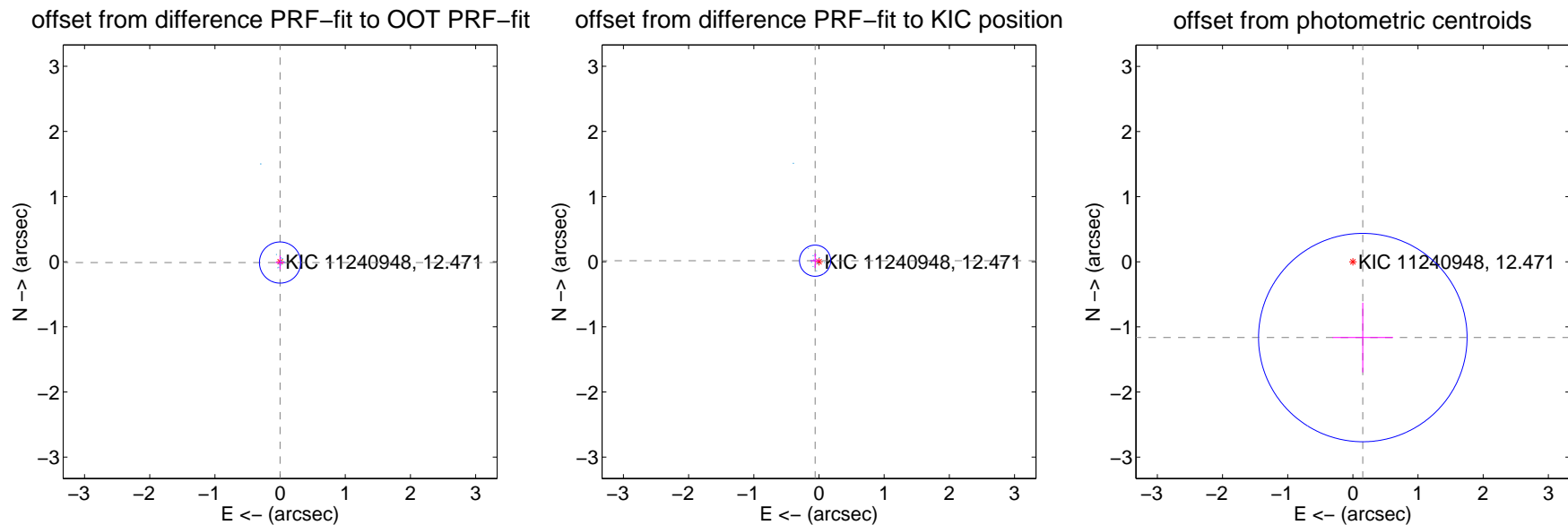
DV Centroid Data

Supplemental centroid analysis for 011240948-02. Kepler magnitude: 12.47. Transit SNR 7.58

There are 17 quarters with good PRF difference image offsets

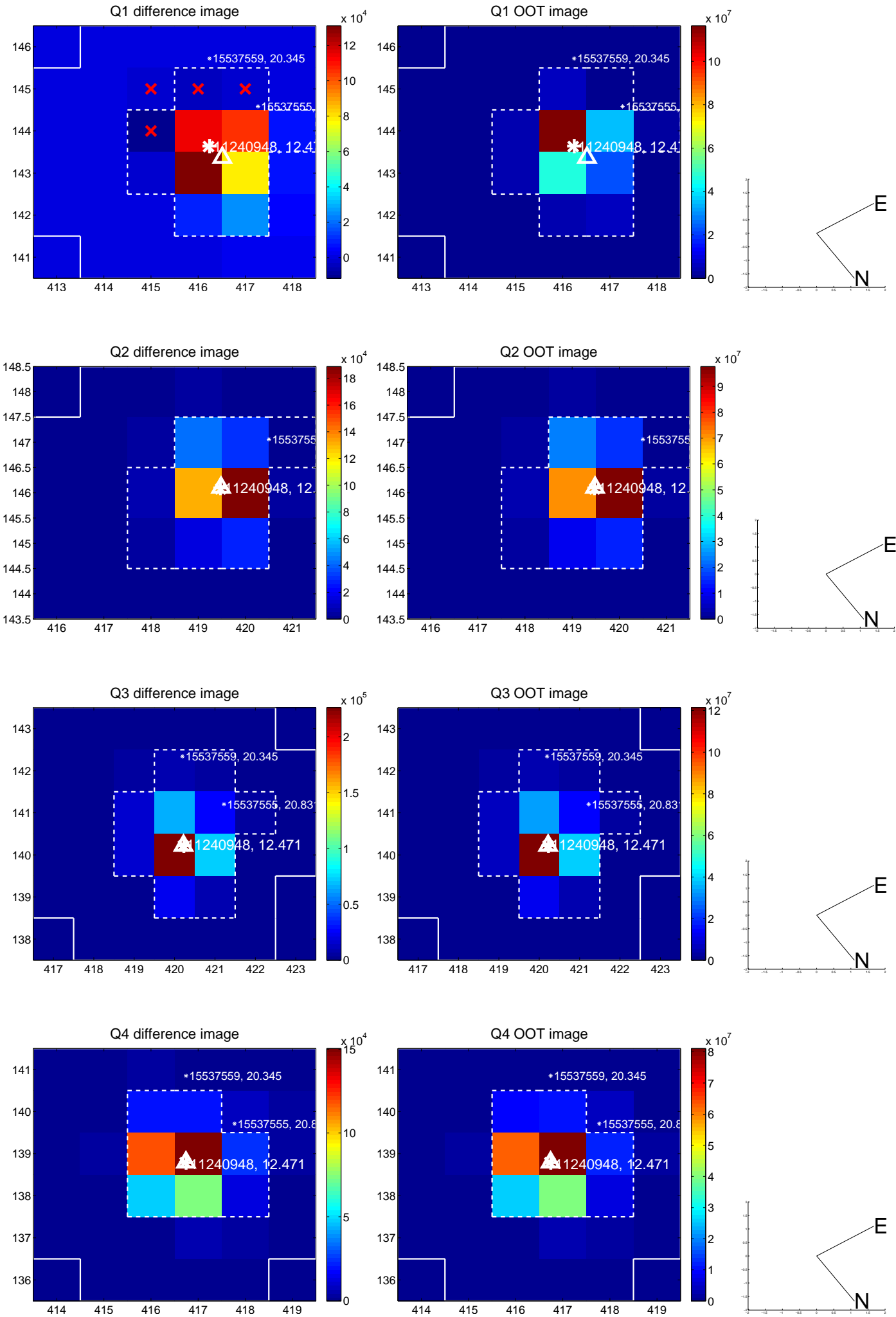
The direct PRF centroid is offset from the target star catalog position by about 0.09 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.013 ± 0.105	0.12	0.001 ± 0.069	-0.013 ± 0.106
PRF-fit source offset from KIC position	0.062 ± 0.080	0.77	0.060 ± 0.071	0.015 ± 0.112
photometric centroid source offset	1.17 ± 0.53	2.20	-0.15 ± 0.46	-1.16 ± 0.53

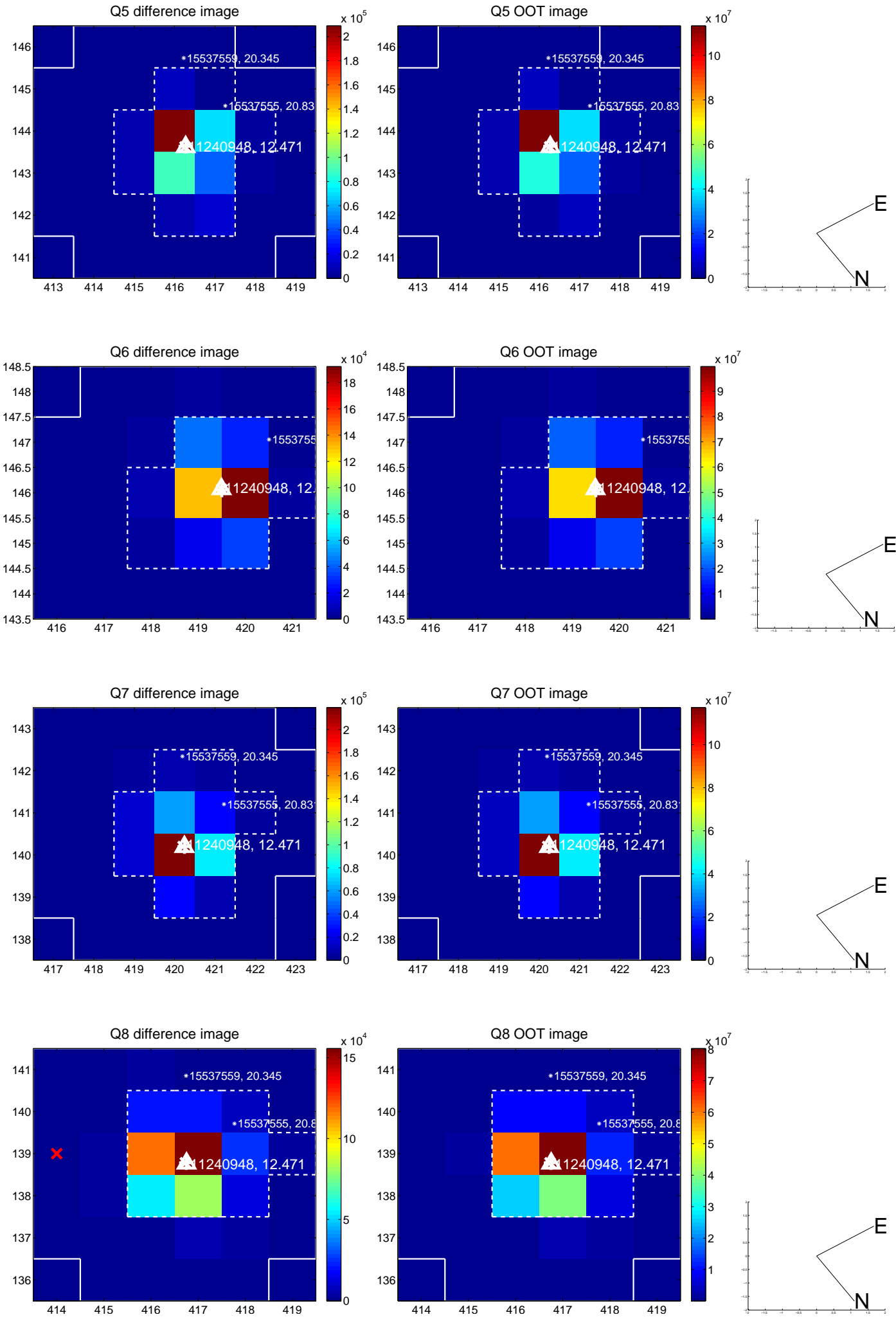


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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

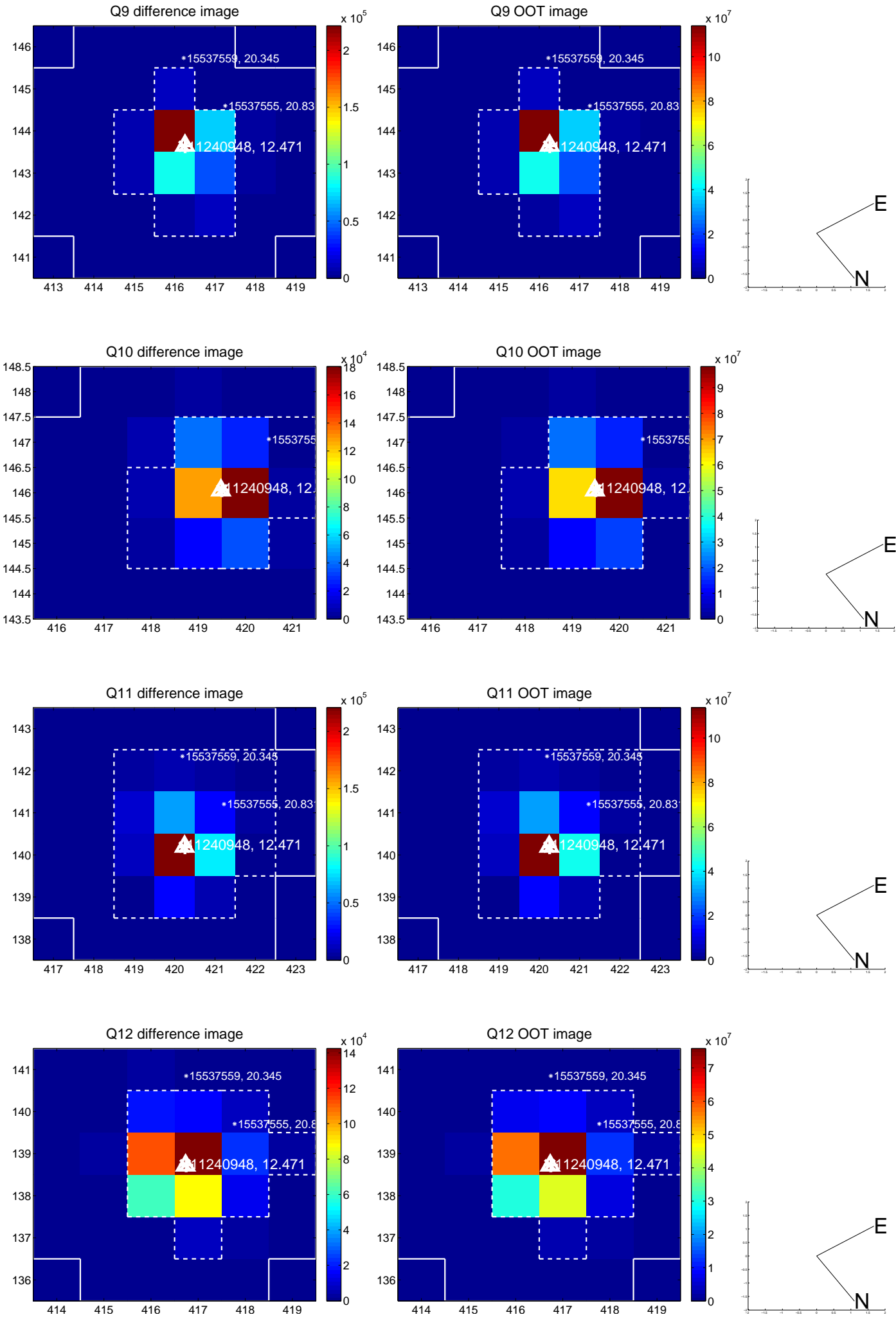
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



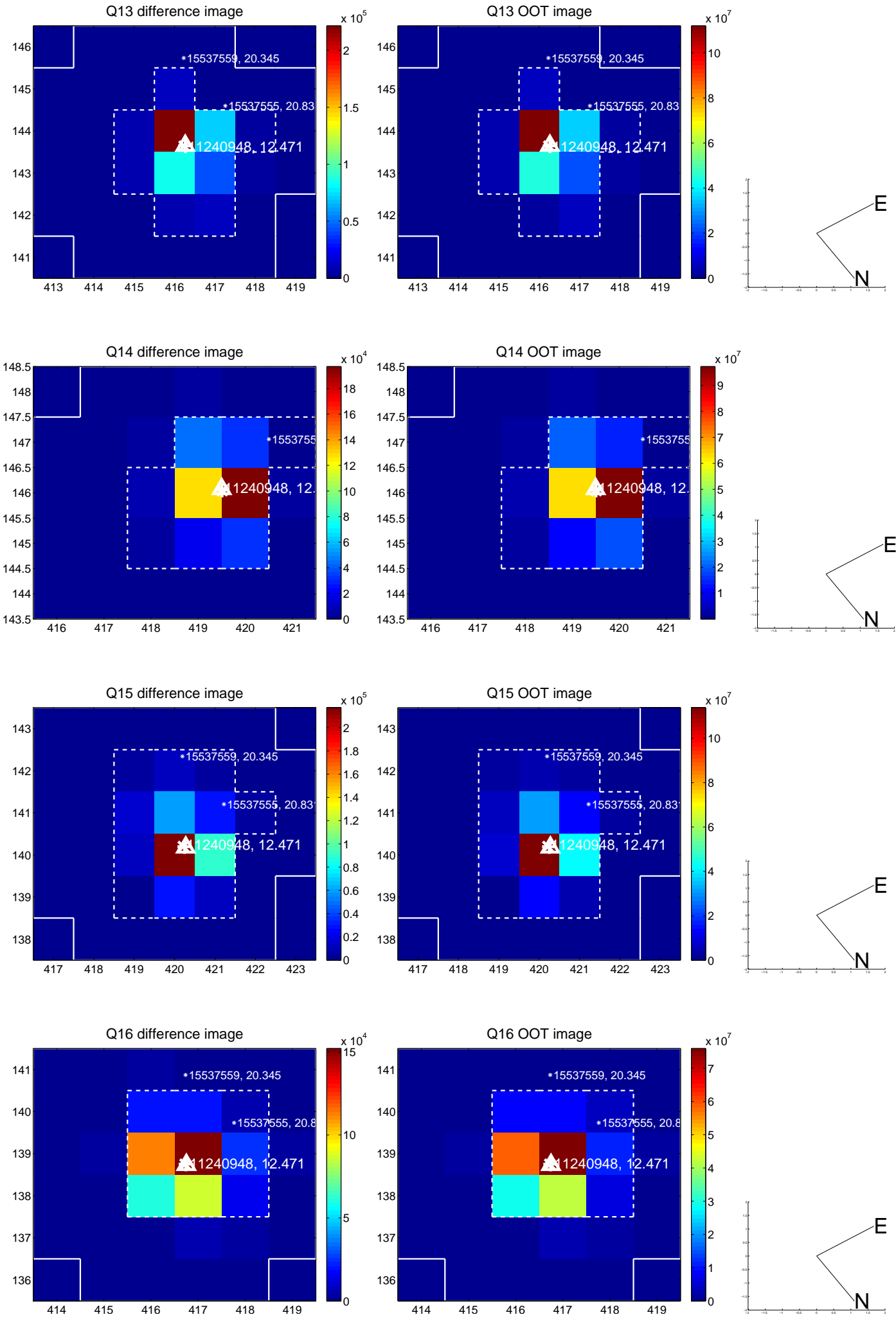
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



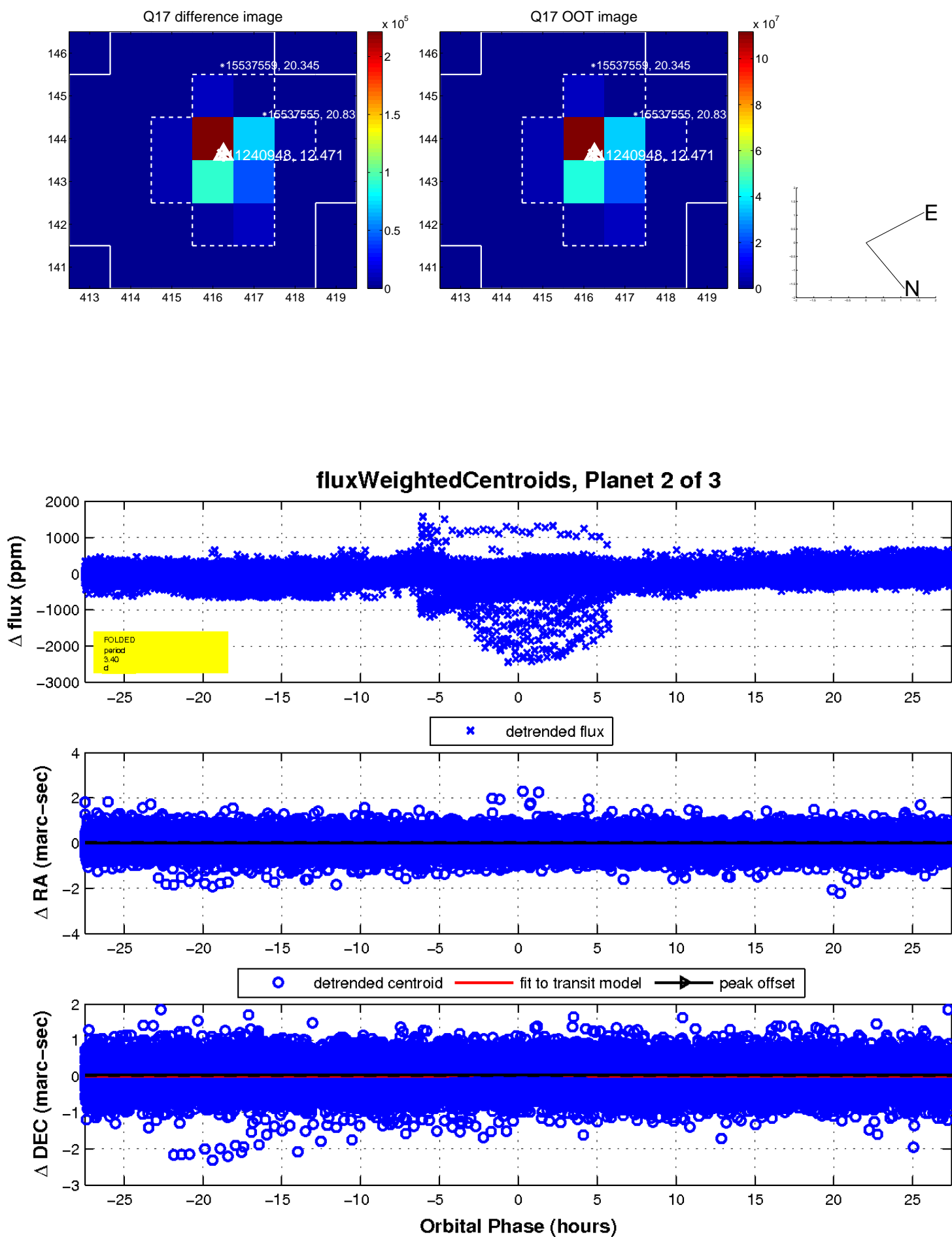
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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

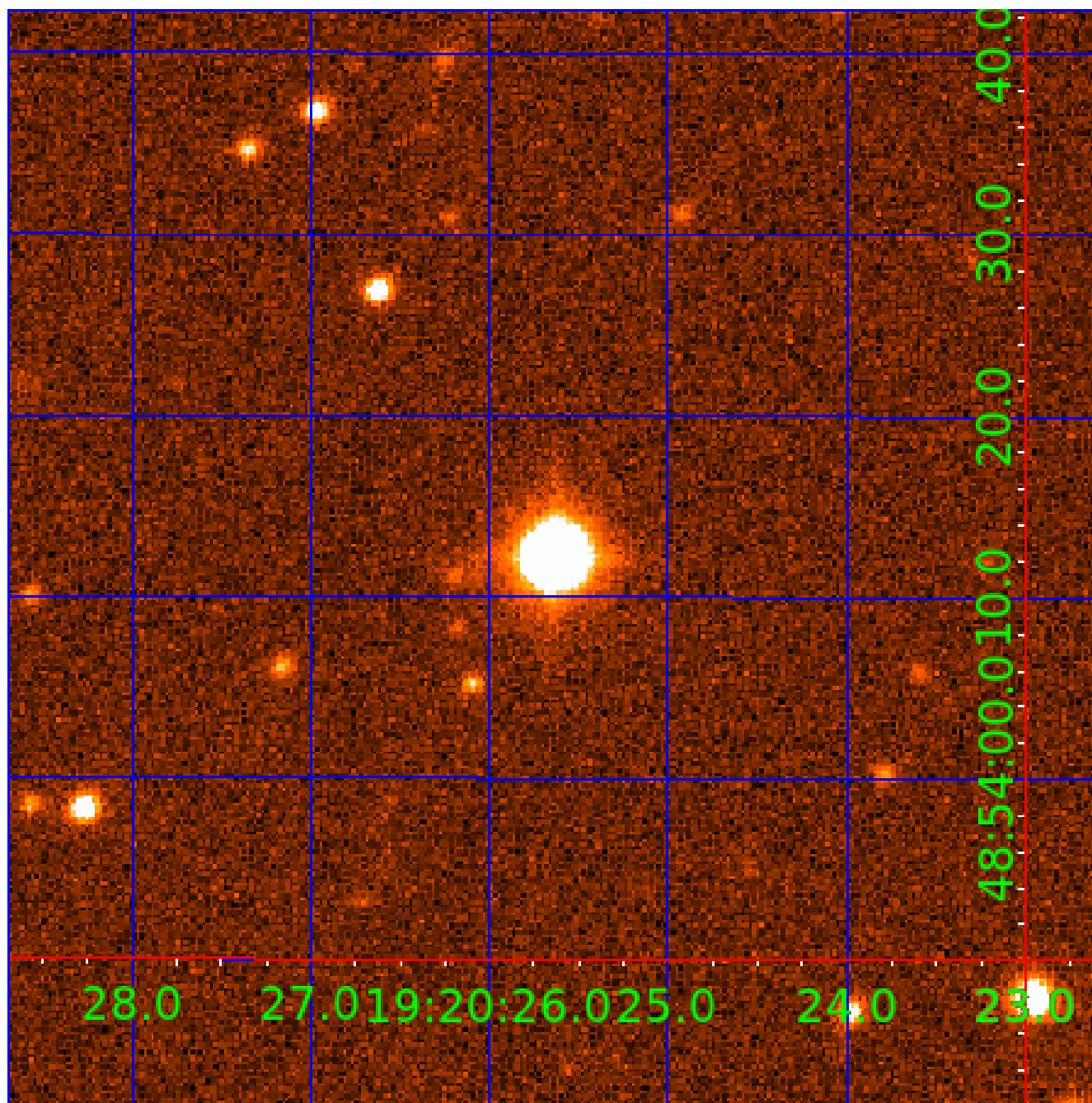


white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



UKIRT Image

Declination



KIC 011240948

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})
011240948-01	OBS	7425.01	3.401941	134.645880	459.0	0.718	46.5	75.9	2.17	7094	5.51	4396.73
011240948-02	OBS	No	3.401974	134.522753	29.3	9.156	12.6	7.6	2.17	7094	1.37	4396.67
011240948-03	OBS	No	91.271380	135.162425	48.9	2.788	7.6	2.2	2.17	7094	1.53	54.74

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
011240948-01	OBS	FP	0.14	0	1	0	0	HAS_SEC_TCE
011240948-02	OBS	FP	0.00	1	1	0	0	IS_SEC_TCE
011240948-03	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_TRACKER—LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_POS_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT

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 011240948-03

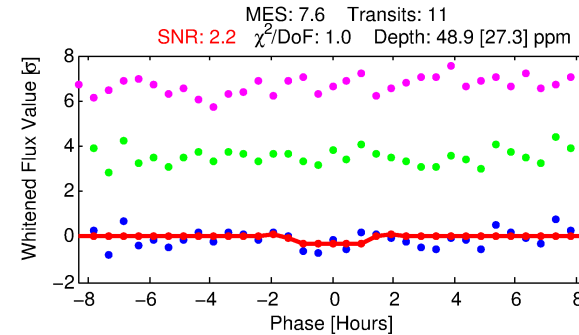
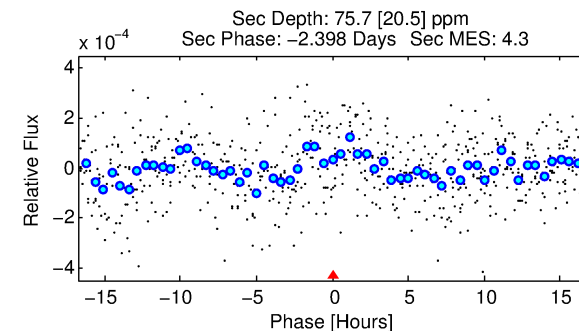
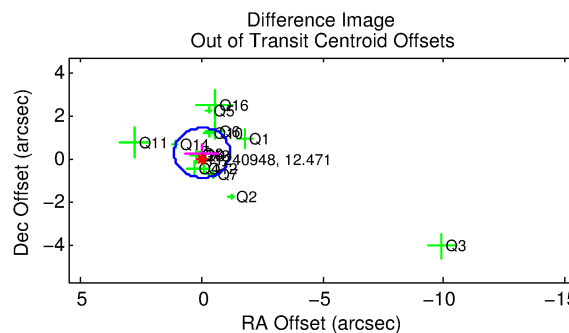
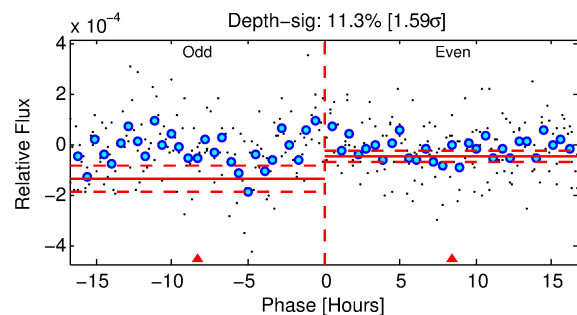
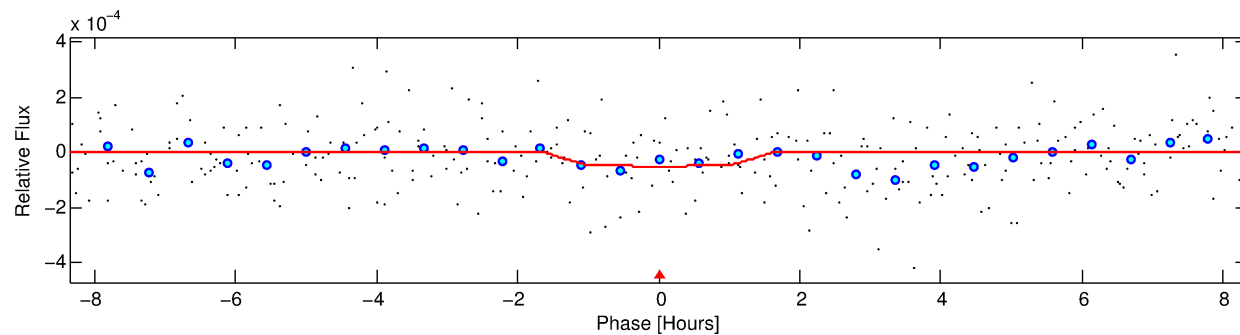
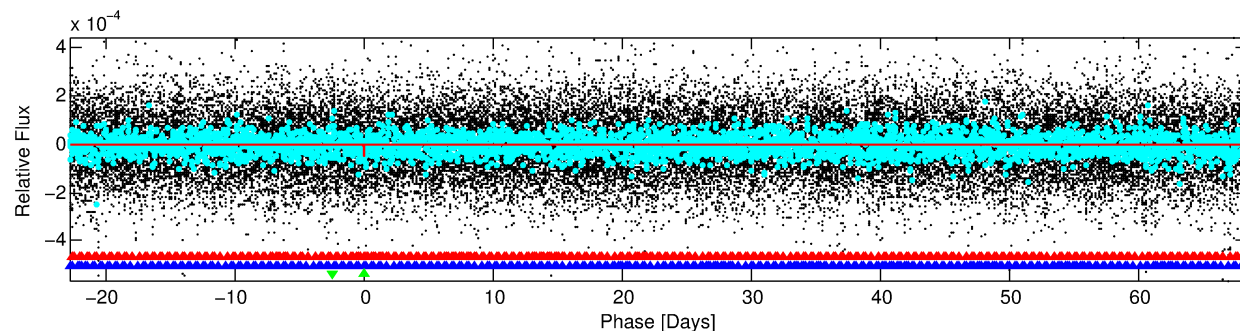
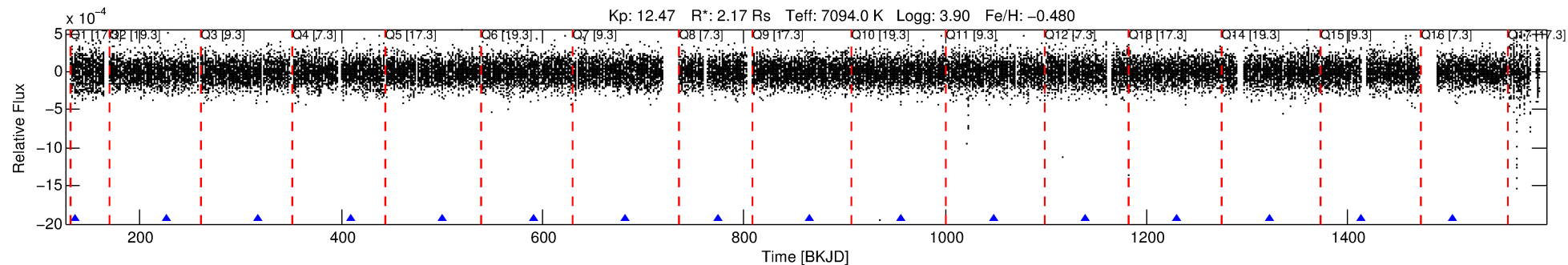
No Significant Match Found

DV One-Page Summary

KIC: 11240948 Candidate: 3 of 3 Period: 91.271 d

KOI: K07425 Corr: No Ephemeris Match

Kp: 12.47 R*: 2.17 Rs Teff: 7094.0 K Logg: 3.90 Fe/H: -0.480



DV Fit Results:

Period = 91.27138 [0.00231] d
Epoch = 135.1624 [0.0209] BKJD
Rp/R* = 0.0065 [0.0343]
a/R* = 251.10 [7474.92]
b = 0.07 [410.13]
Seff = 54.74 [26.89]
Teq = 694 [85] K
Rp = 1.53 [8.13] Re
a = 0.4418 [0.1310] AU
Ag = 3453.35 [36593.78] [0.09σ]
Teffp = 8221 [21758] K [0.35σ]

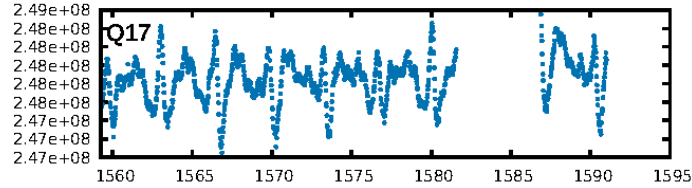
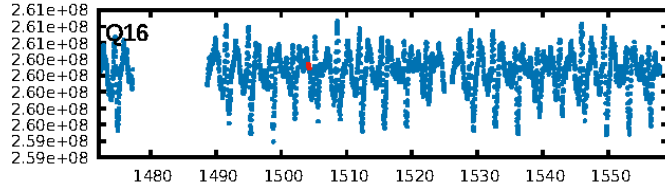
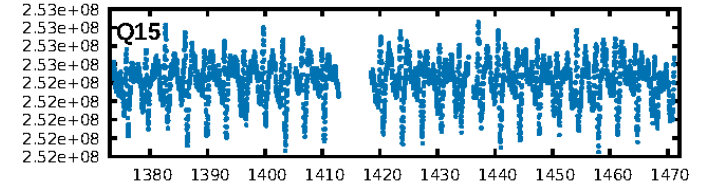
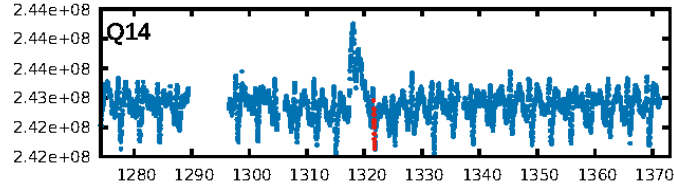
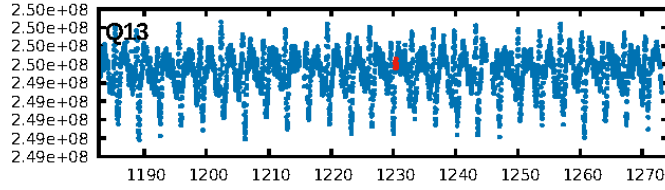
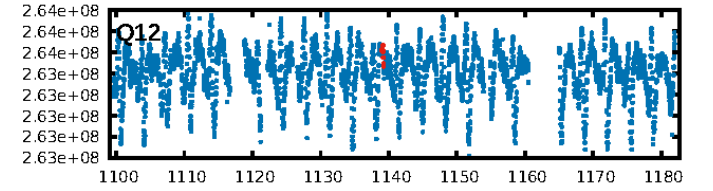
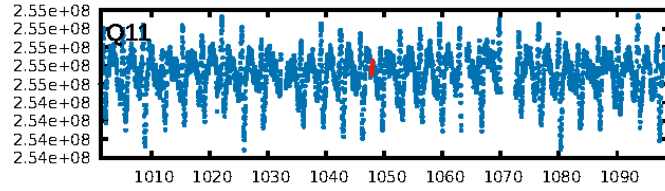
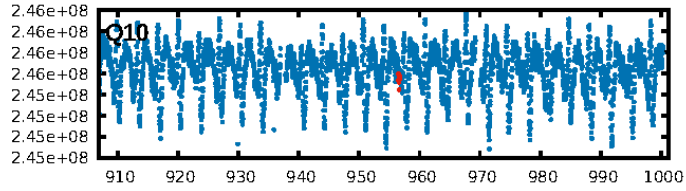
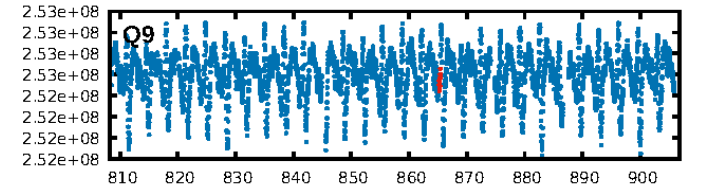
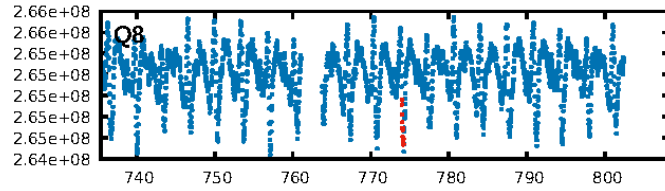
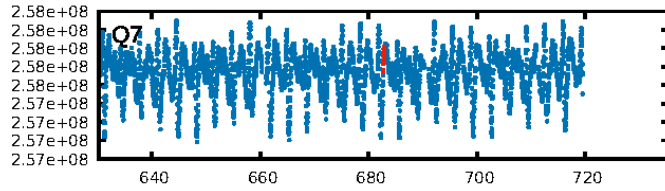
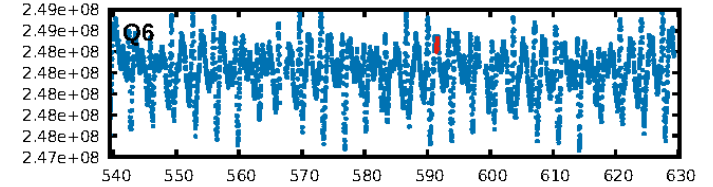
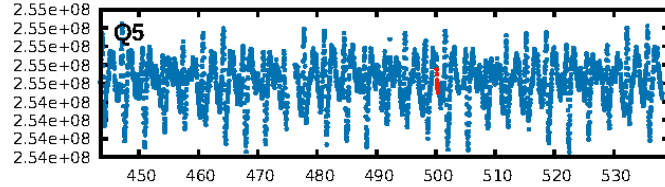
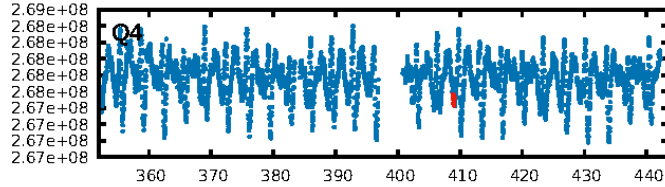
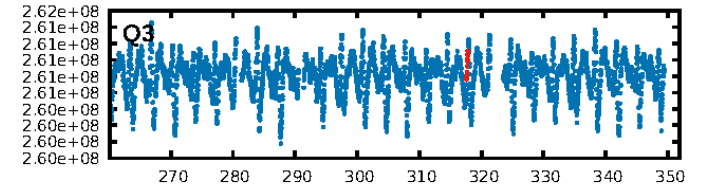
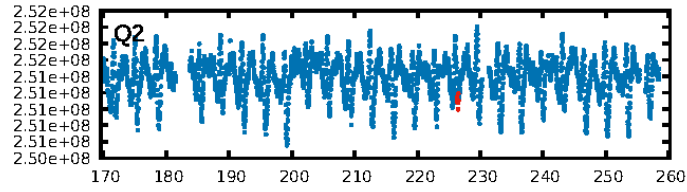
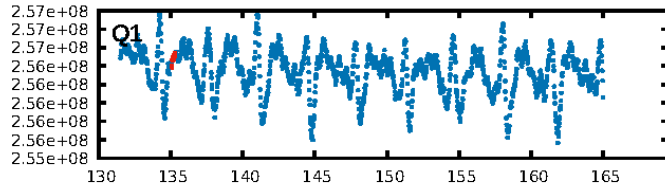
DV Diagnostic Results:

ShortPeriod-sig: 100.0% [220.34σ]
LongPeriod-sig: N/A
ModelChiSquare2-sig: 14.3%
ModelChiSquareGof-sig: 99.9%
Bootstrap-pfa: 2.97e-10
RollingBand-fgt: 1.00 [10/10]
GhostDiagnostic-chr: 0.4009
Centroid-sig: 95.8%
Centroid-so: 0.421 arcsec [0.18σ]
OotOffset-rm: 0.288 arcsec [0.74σ]
OotOffset-st: 4/3/4/4 [15]
KicOffset-rm: 0.337 arcsec [0.62σ]
KicOffset-st: 4/3/4/4 [15]
DiffImageQuality-fgm: 0.60 [9/15]
DiffImageOverlap-fno: 0.73 [11/15]

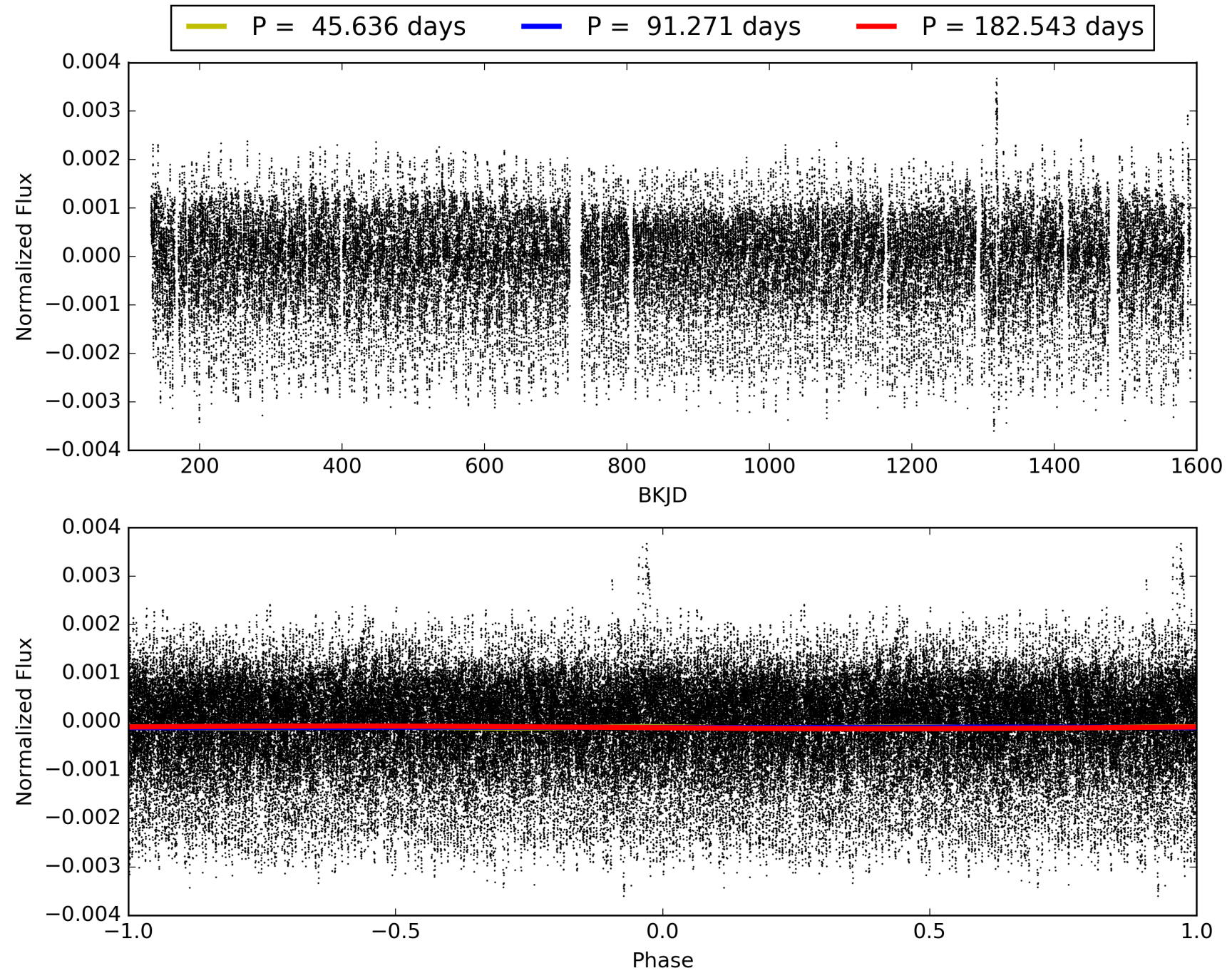
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 29-Jan-2016 21:15:12 Z

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

TCE 011240948-03, PDC Light Curves

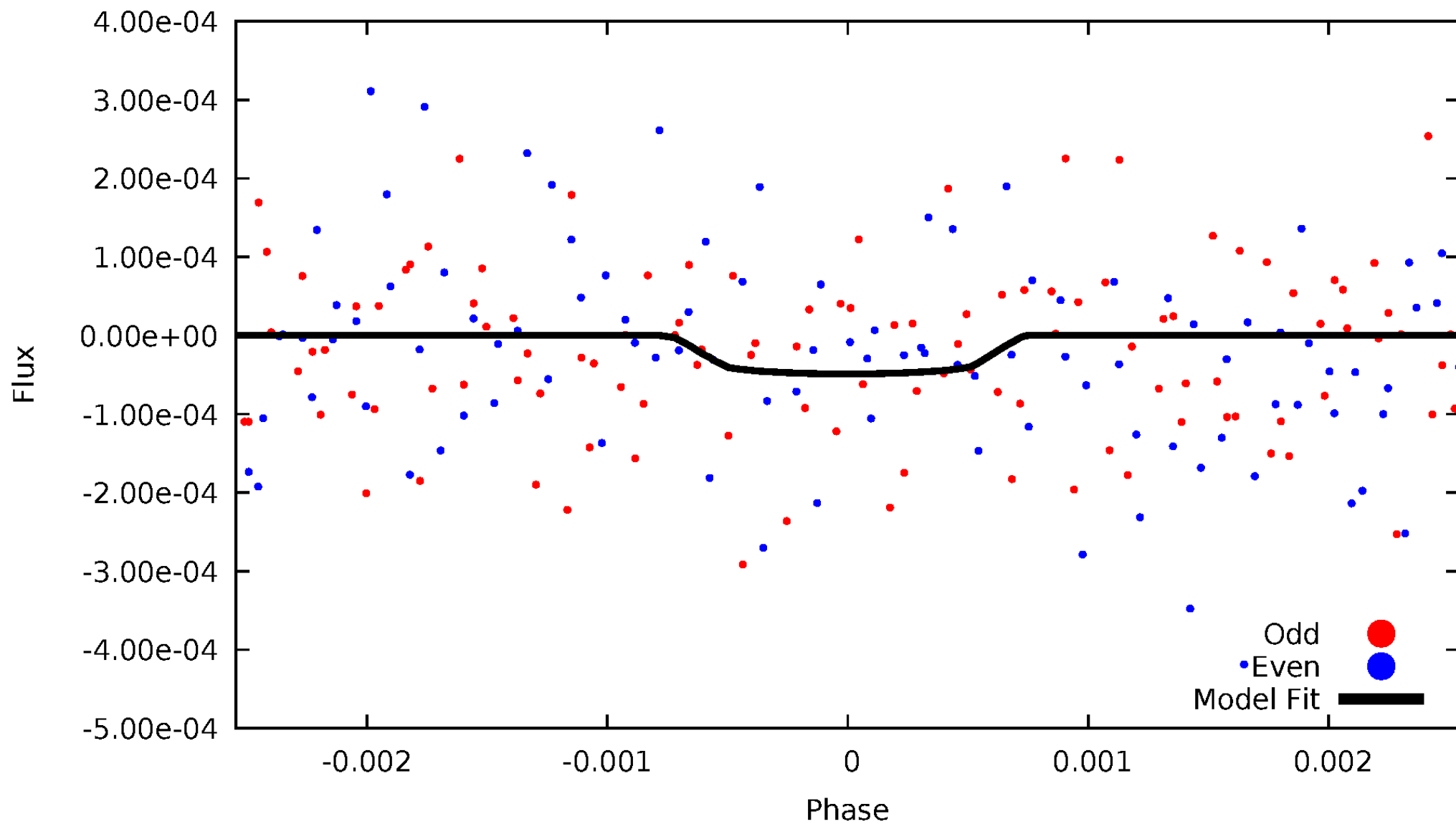


TCE 011240948-03



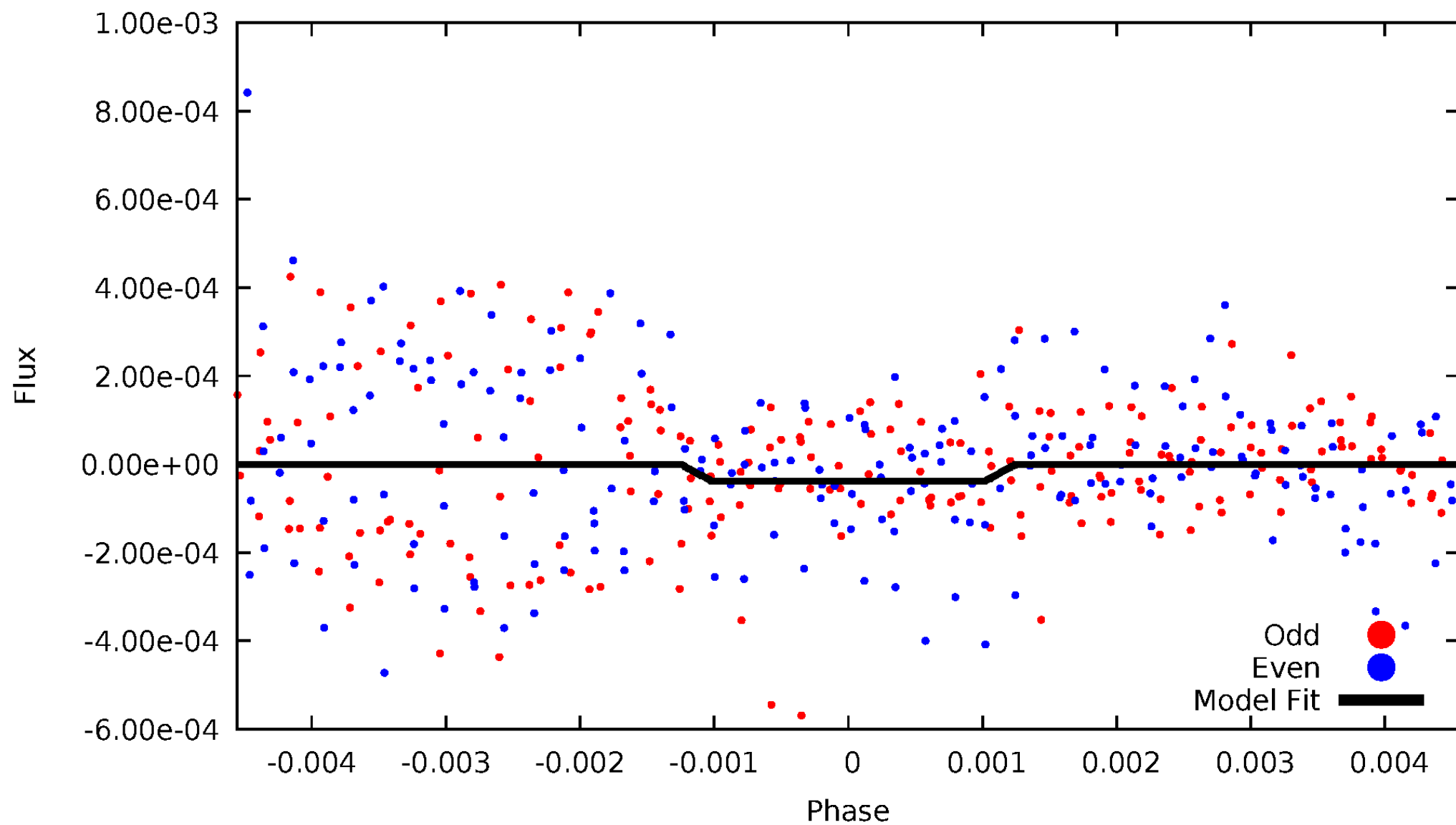
DV Odd/Even

TCE 011240948-03

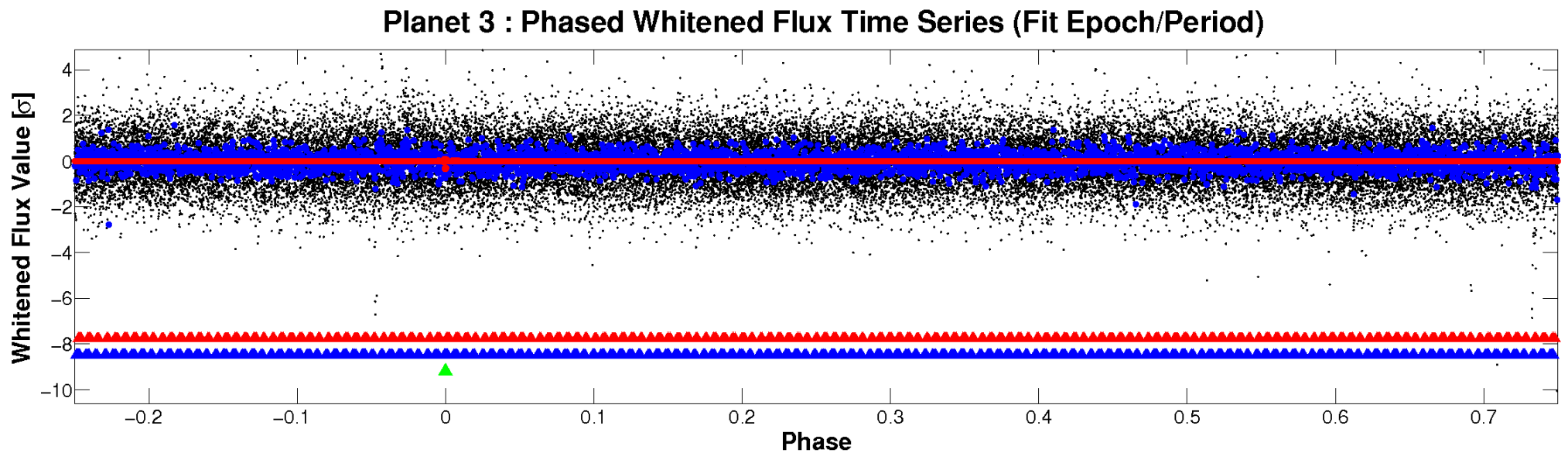
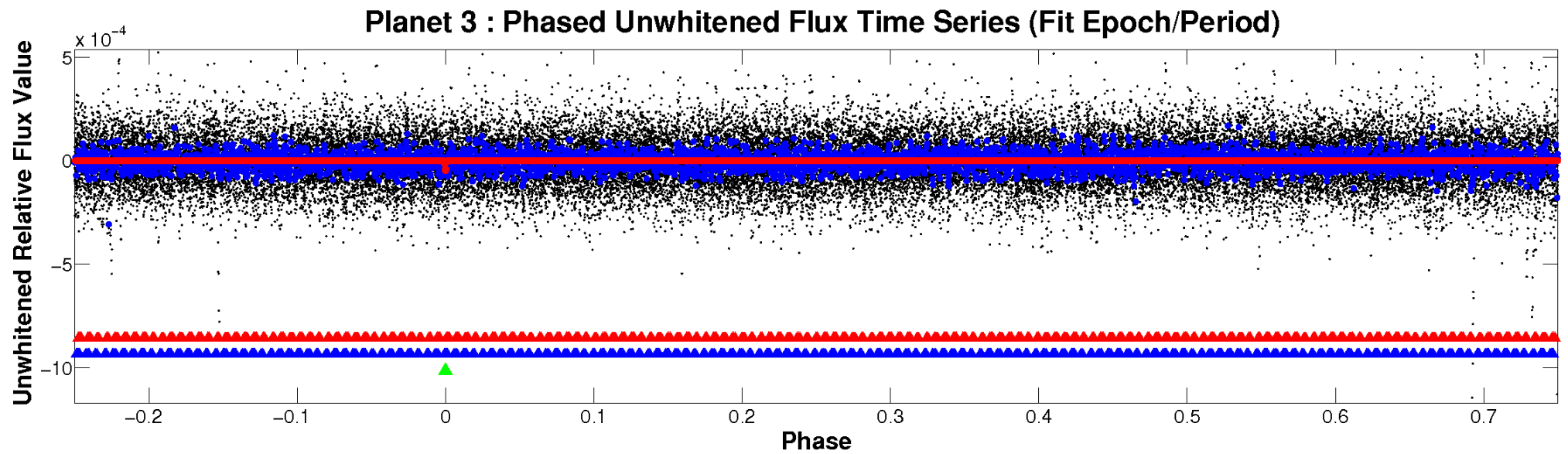


ALT Odd/Even

TCE 011240948-03

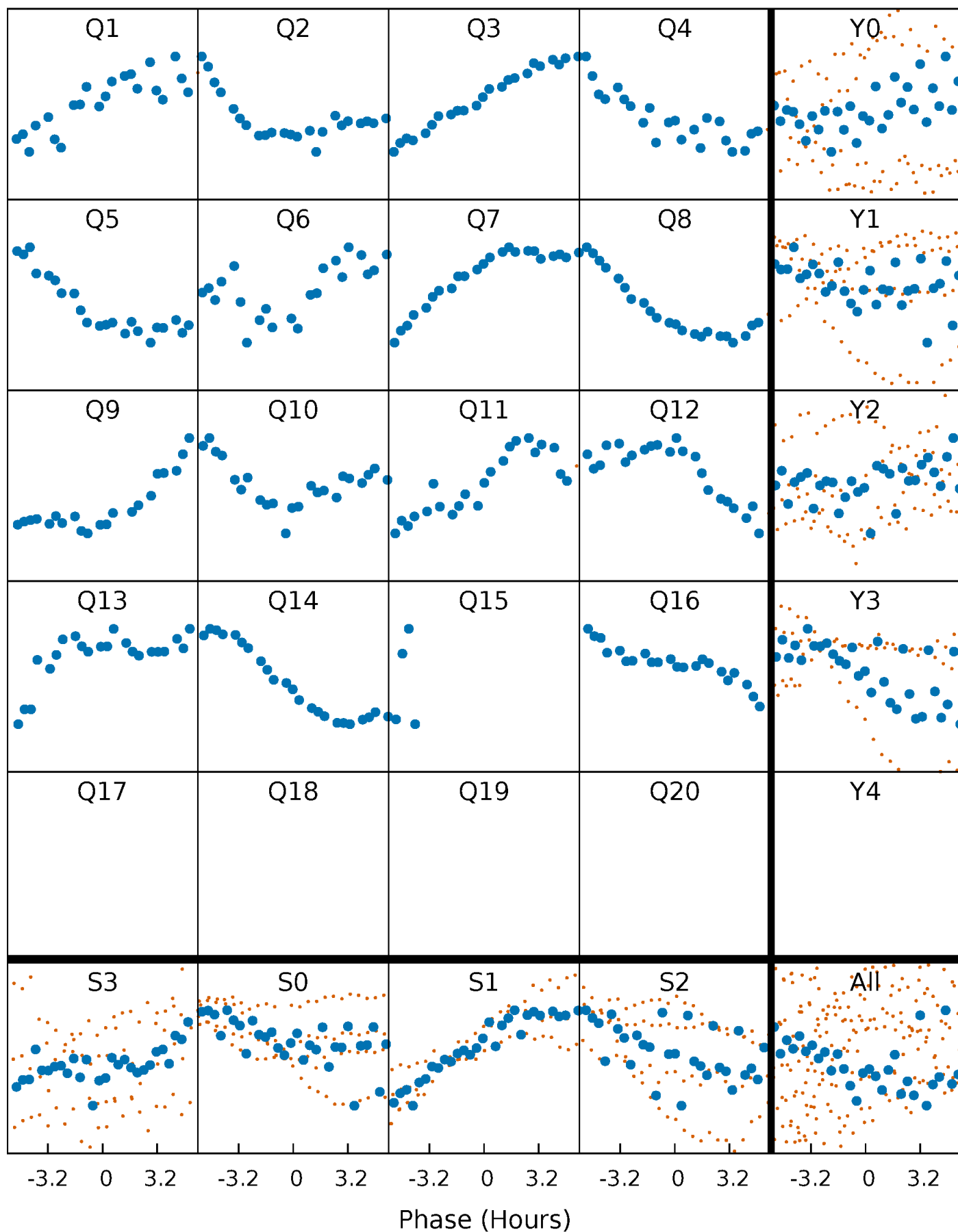


Non-Whitened Vs. Whitened Light Curve



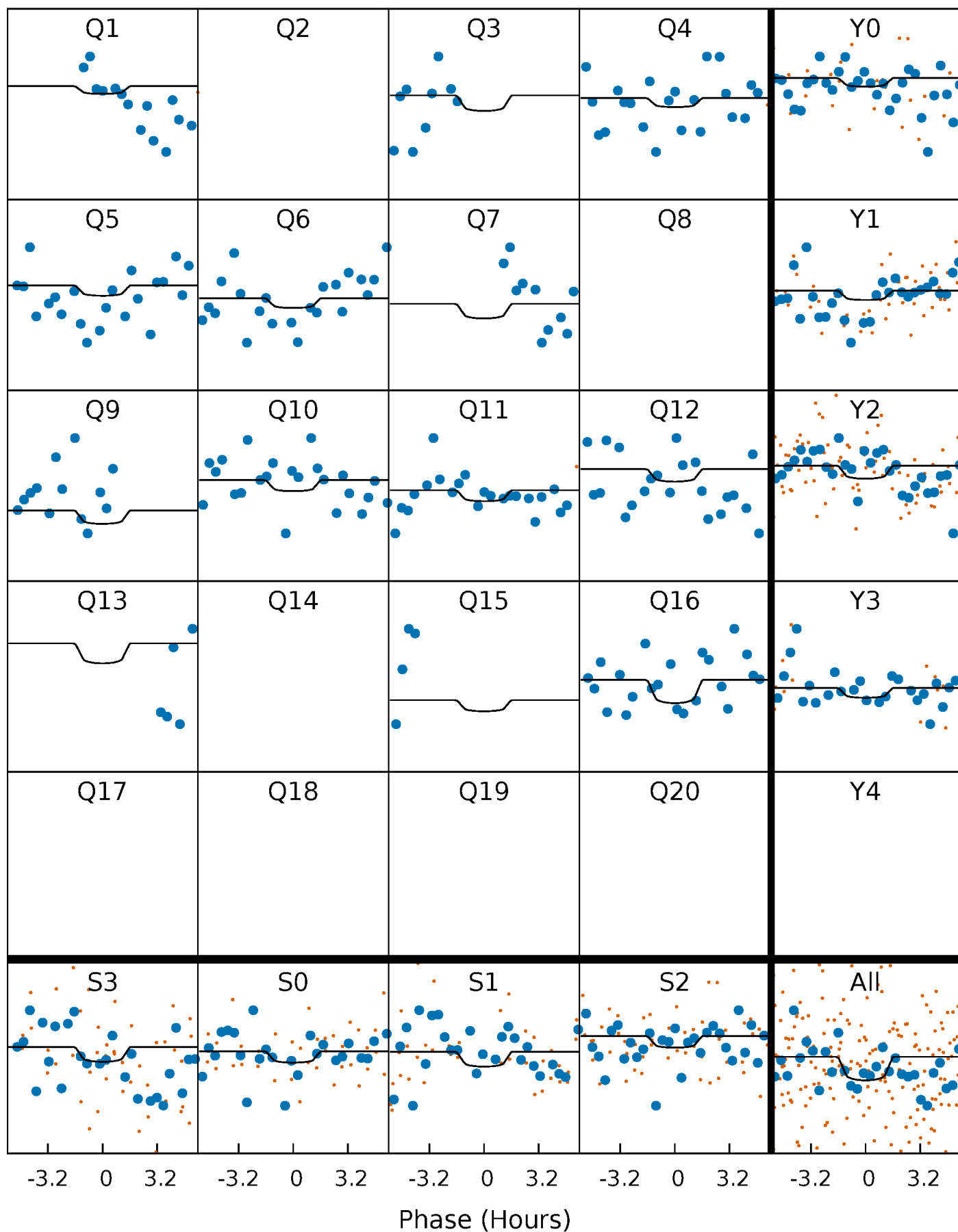
PDC Quarter-Phased Transit Curves

TCE 011240948-03 P= 91.271380 Days $T_0=135.162425$ (BKJD)



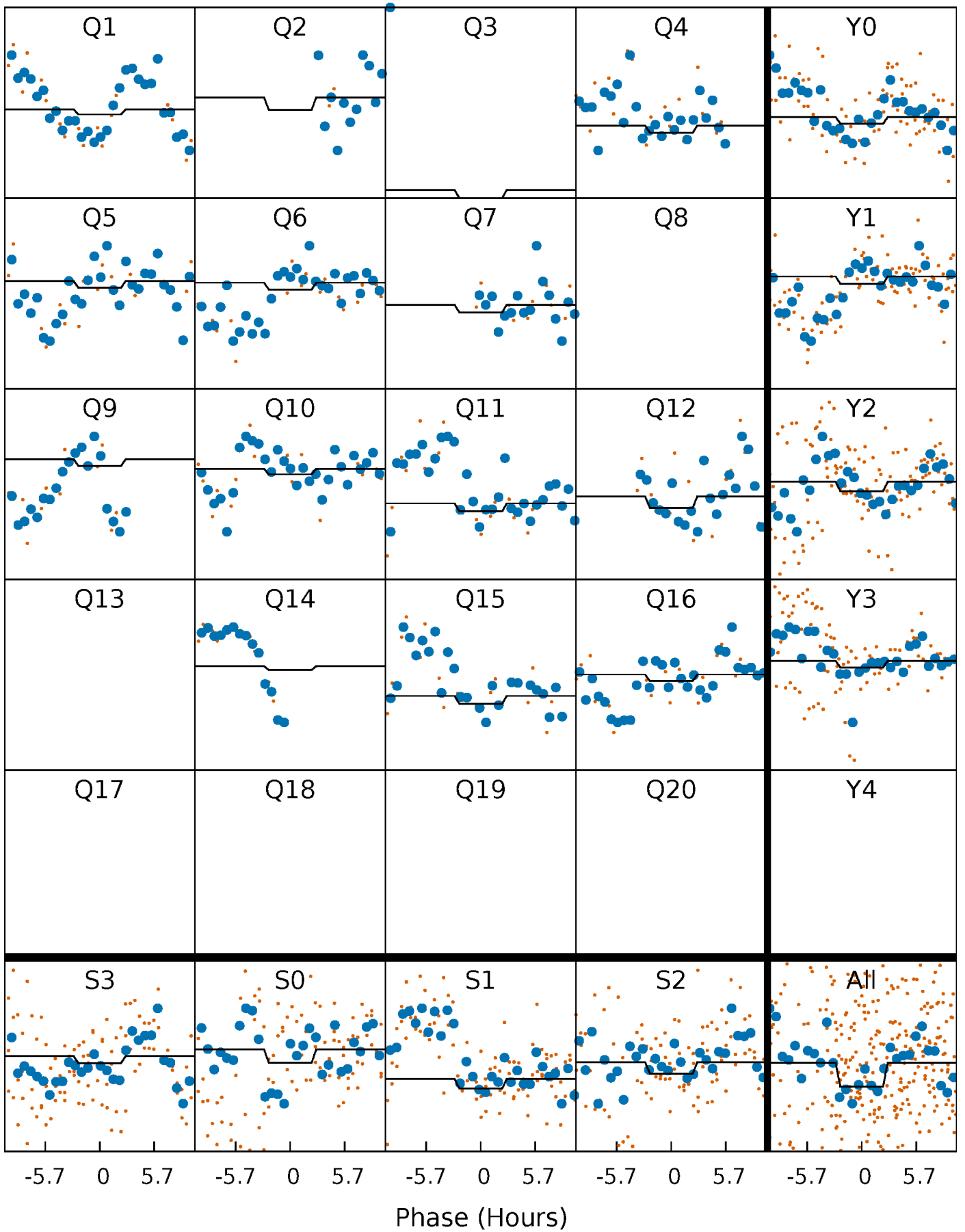
DV Quarter-Phased Transit Curves

TCE 011240948-03 P= 91.271380 Days $T_0=135.162425$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

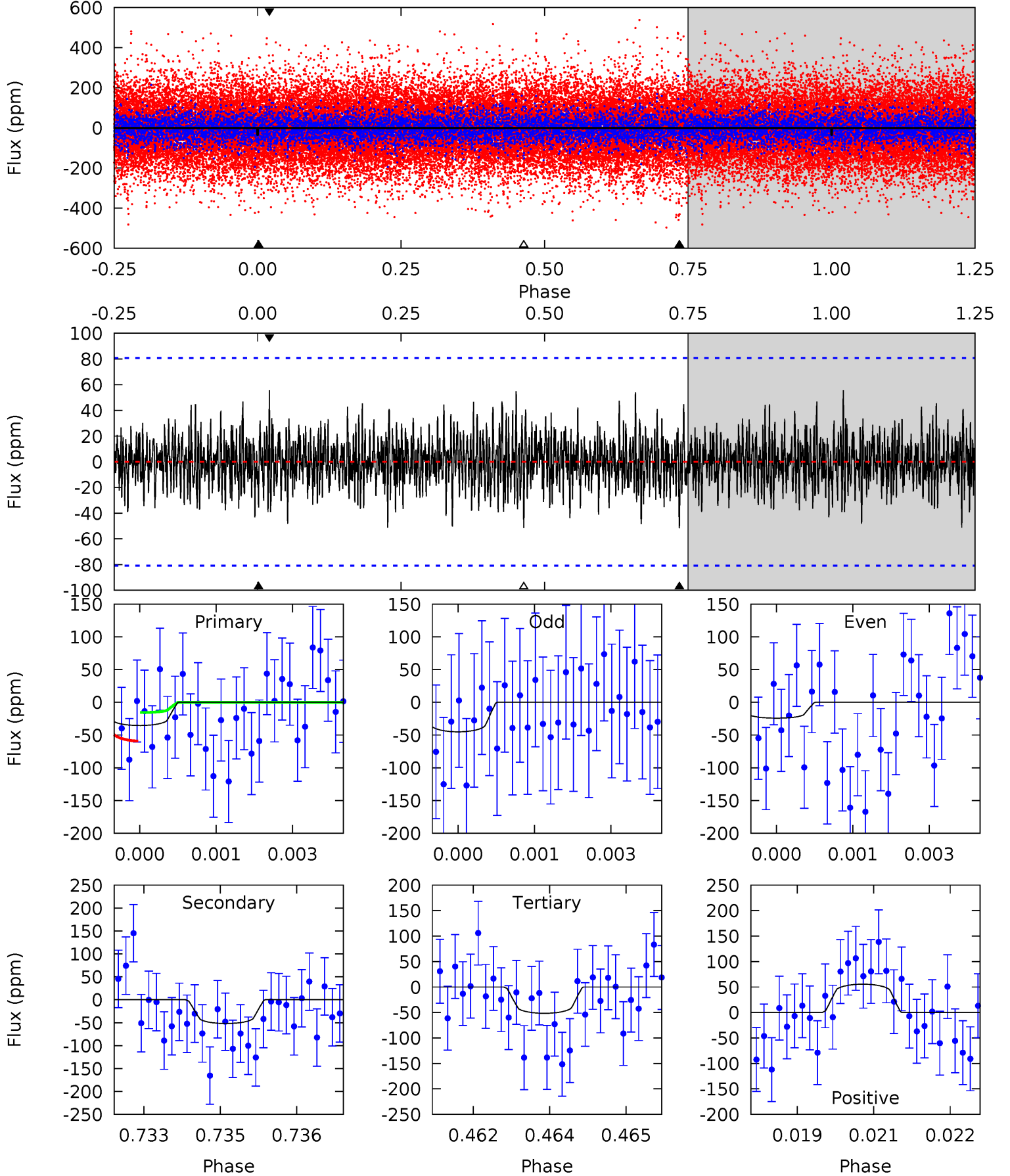
TCE 011240948-03 P= 91.200122 Days $T_0=135.649442$ (BKJD)



DV Model-Shift Uniqueness Test

011240948-03, P = 91.271380 Days, E = 43.891045 Days

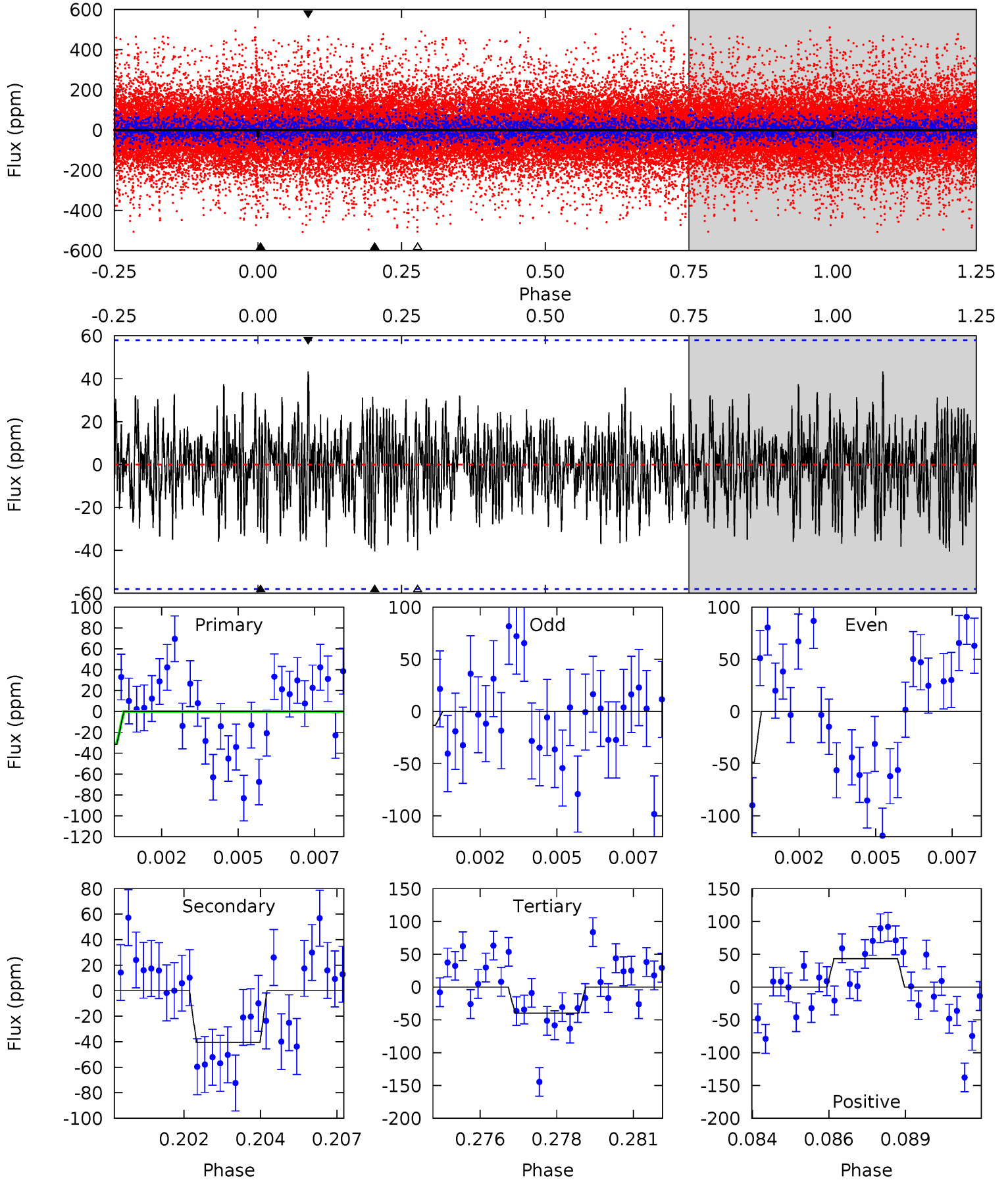
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
2.36	3.45	3.44	3.70	5.38	3.18	1.07	-1.07	-1.34	0.01	-0.25	0.69	3.65	0.52	1.45



Alt Model-Shift Uniqueness Test

011240948-03, P = 91.200122 Days, E = 44.449320 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
2.88	3.69	3.63	3.95	5.29	3.03	1.23	-0.76	-1.08	0.06	-0.26	1.62	3.55	0.52	0.11



Stellar Parameters For KIC 011240948

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (g \cdot \text{cm}^{-3})$
	7094^{+193}_{-236}	$3.905^{+0.277}_{-0.092}$	$-0.480^{+0.300}_{-0.250}$	$2.170^{+0.449}_{-0.673}$	$1.379^{+0.193}_{-0.236}$	$0.190^{+0.344}_{-0.069}$
	+3%/-3%	+7%/-2%	+62%/-52%	+21%/-31%	+14%/-17%	+181%/-36%
Source	PHO1	FLK73	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 011240948-03 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	-52 ± 15	$5.76^{+5.78}_{-4.06}$	945^{+60}_{-79}	4034^{+2878}_{-860}	175^{+1976}_{-136}
Alt.	-40 ± 11	$5.72^{+5.85}_{-3.73}$	943^{+62}_{-75}	3840^{+2049}_{-794}	127^{+888}_{-98}

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 $A_{obs} \gg 1.0$

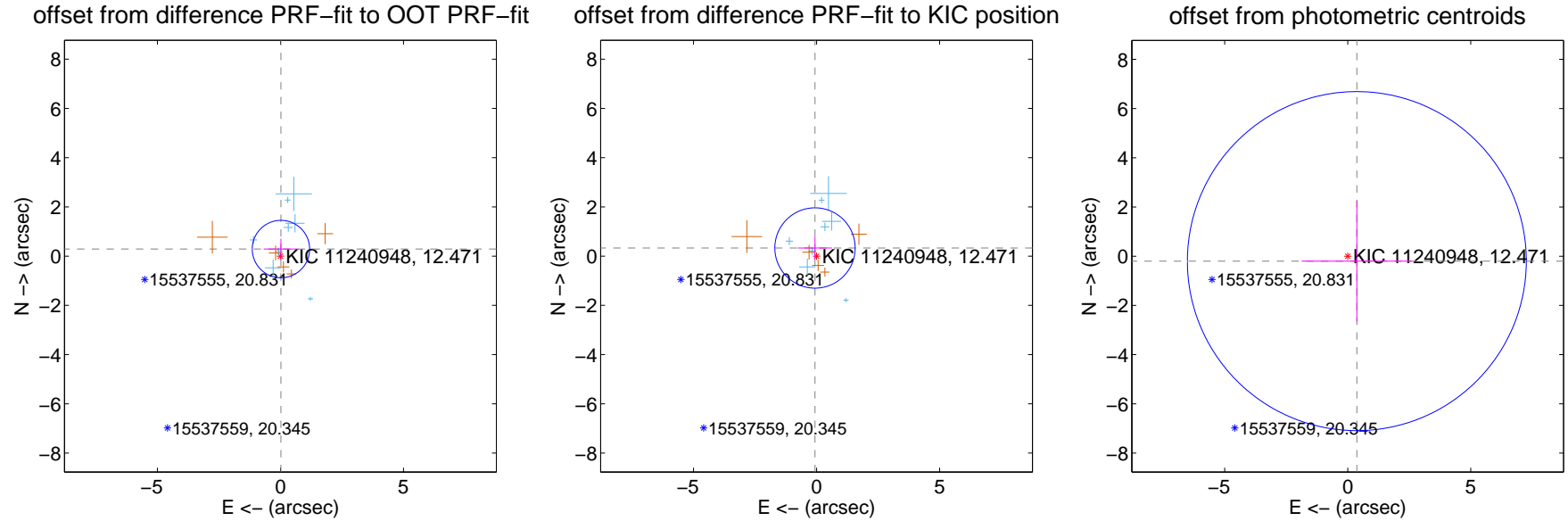
DV Centroid Data

Supplemental centroid analysis for 011240948-03. Kepler magnitude: 12.47. Transit SNR 2.19

There are 9 quarters with good PRF difference image offsets

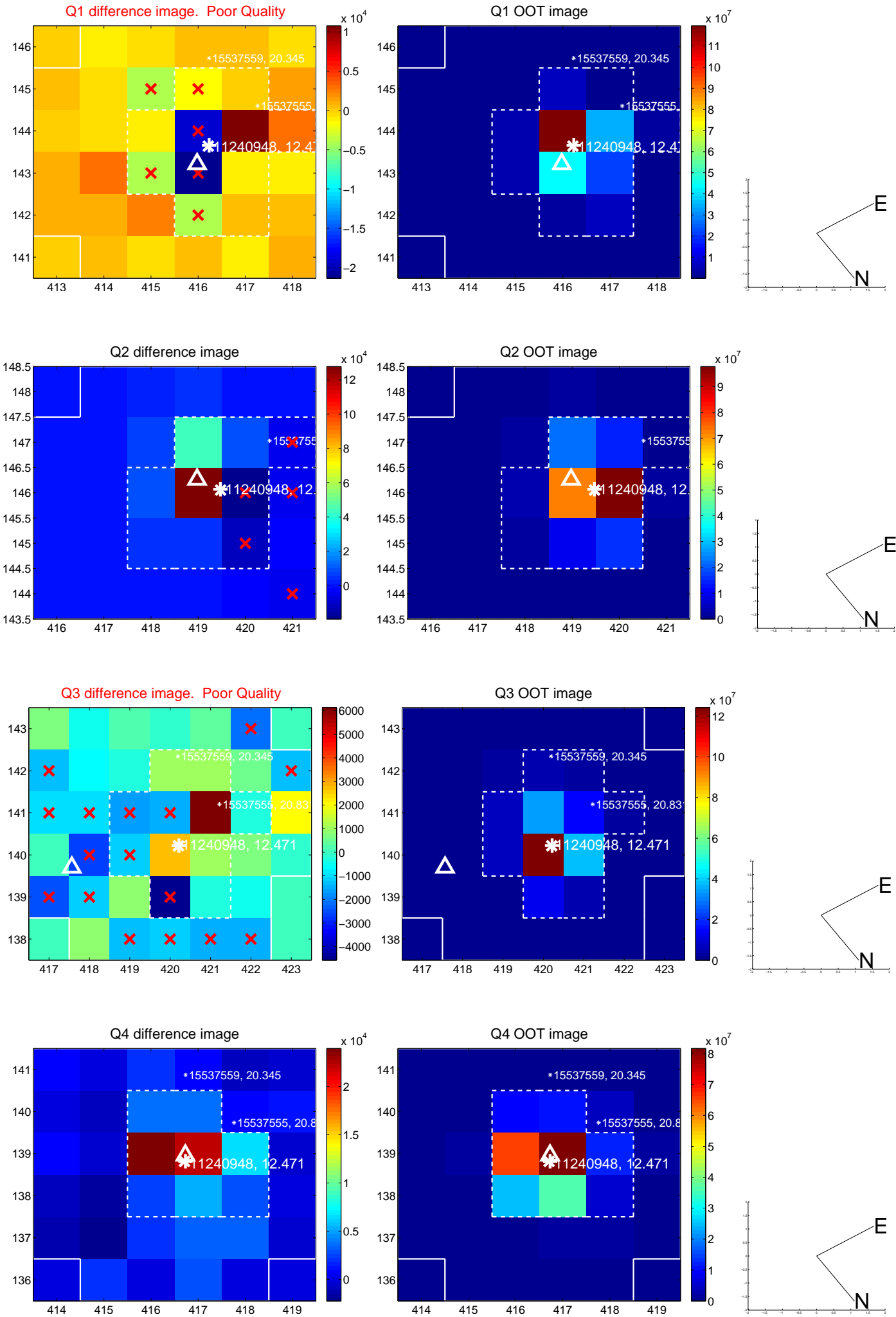
The direct PRF centroid is offset from the target star catalog position by about 0.06 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.288 ± 0.389	0.74	-0.020 ± 0.703	0.287 ± 0.419
PRF-fit source offset from KIC position	0.337 ± 0.544	0.62	0.064 ± 0.694	0.331 ± 0.457
photometric centroid source offset	0.42 ± 2.30	0.18	-0.37 ± 2.25	-0.20 ± 2.46

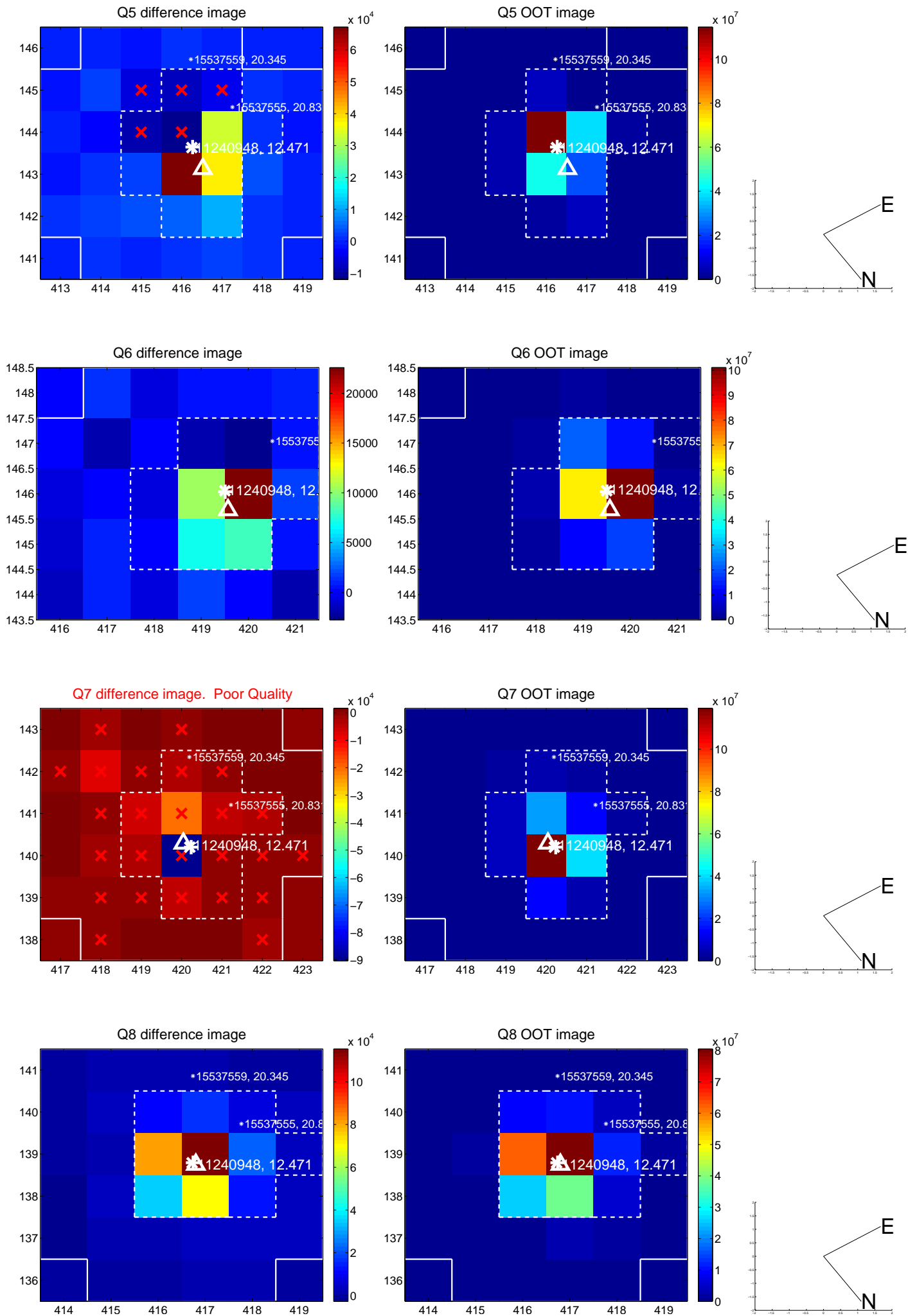


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets**; **Vermillion crosses: bad quarterly centroid offsets**; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

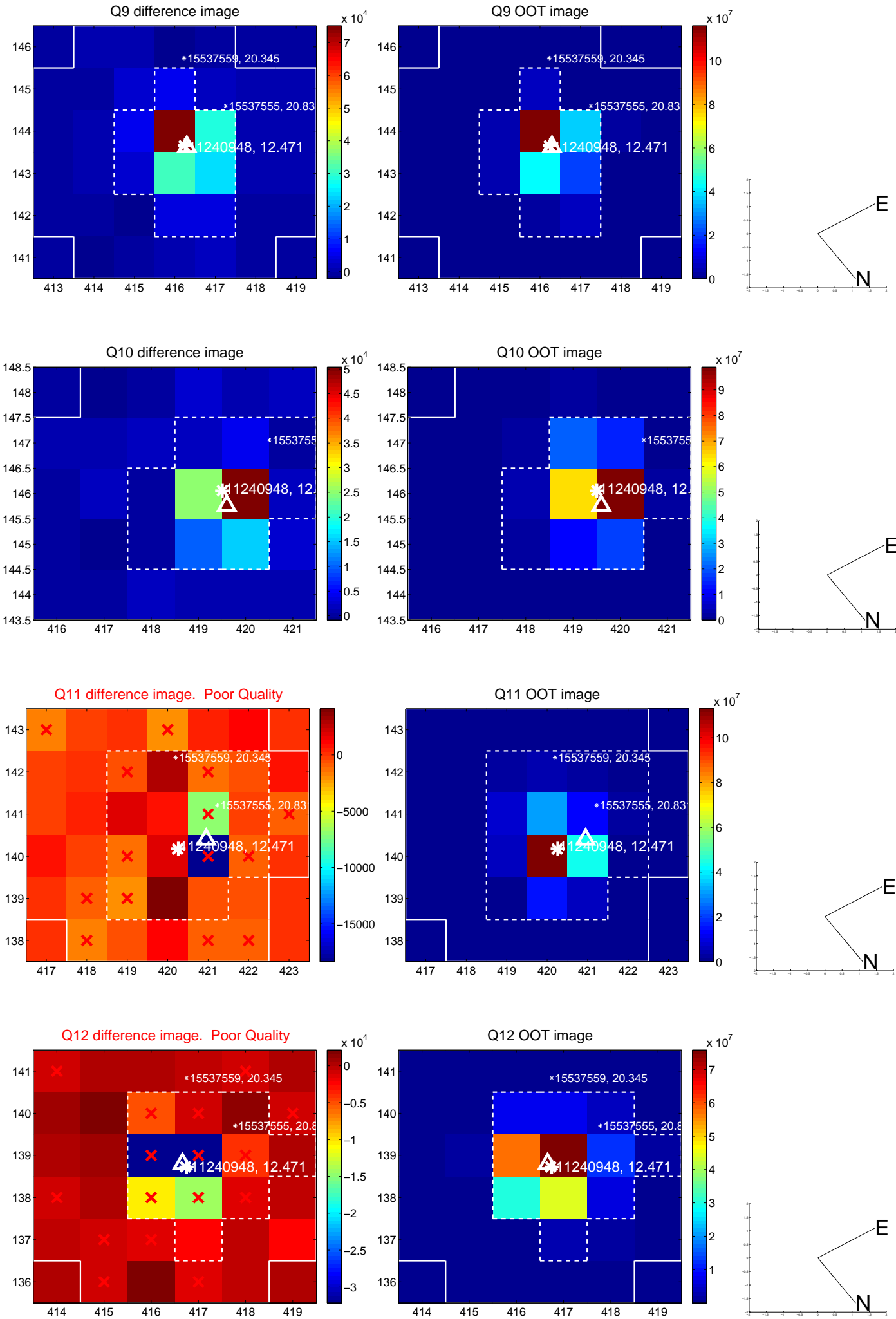
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



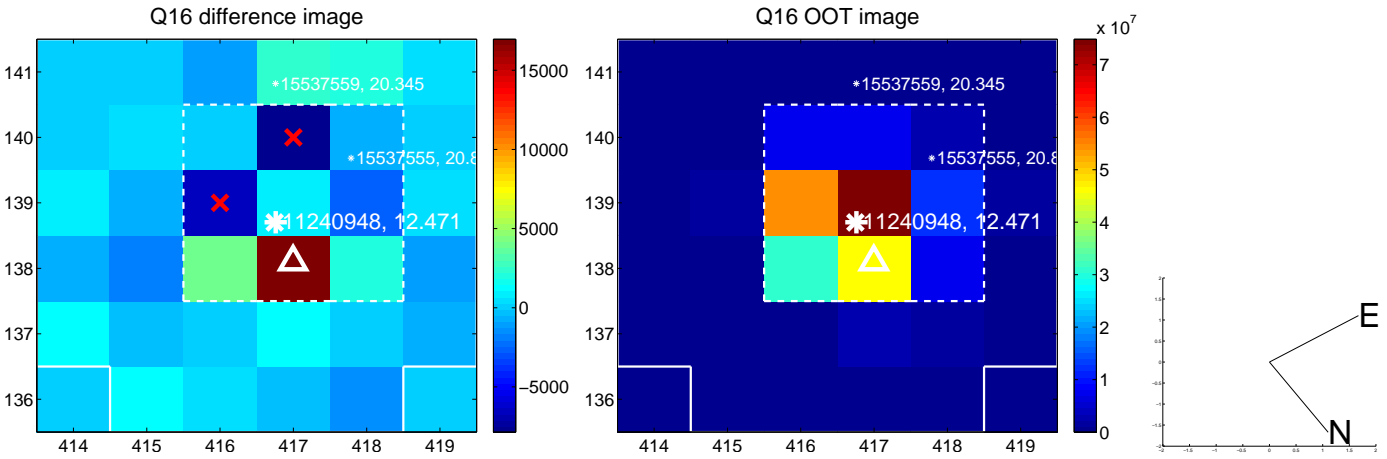
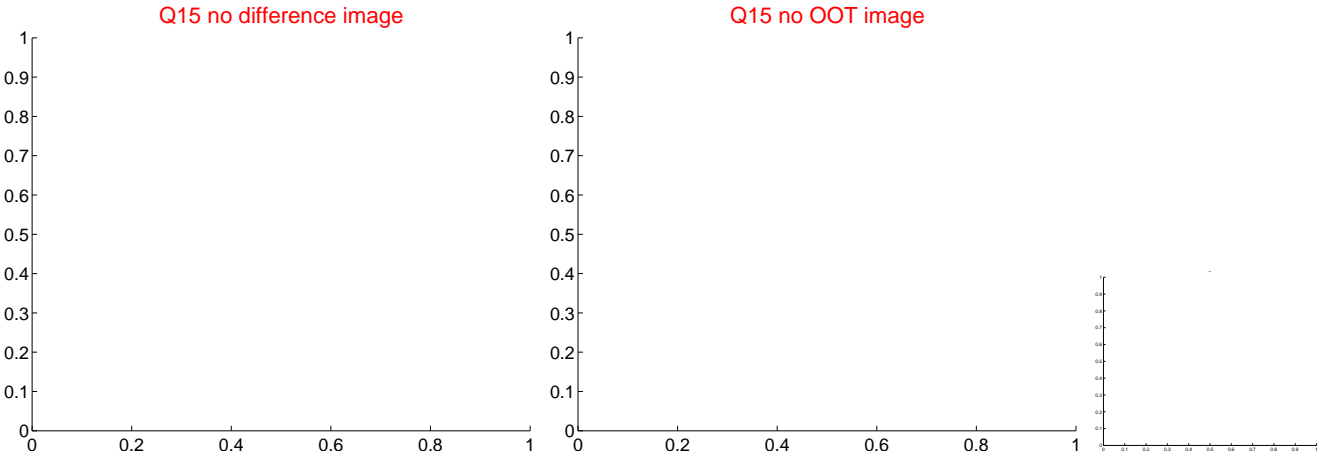
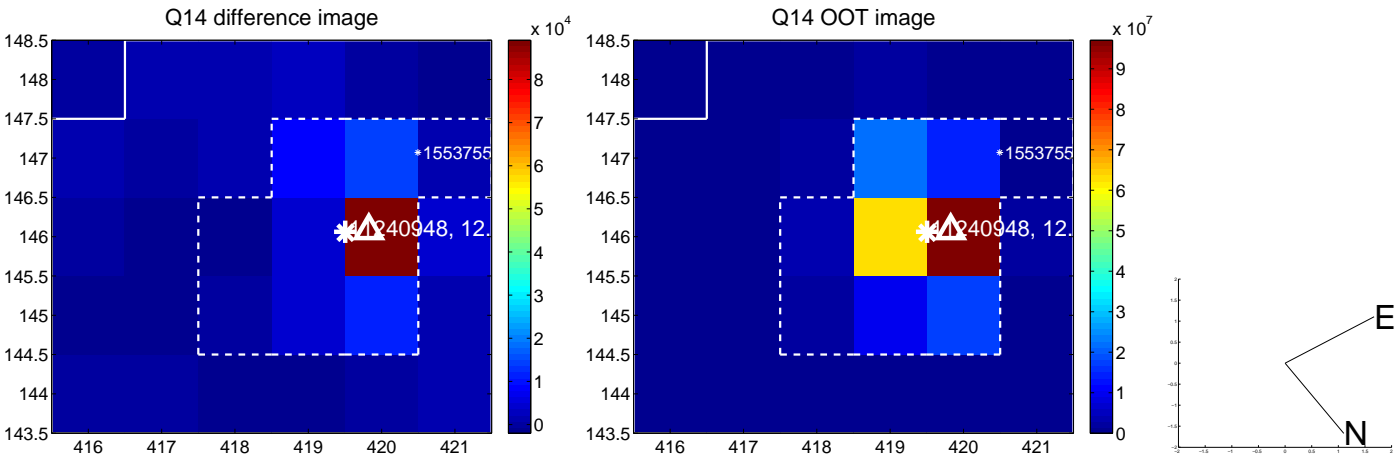
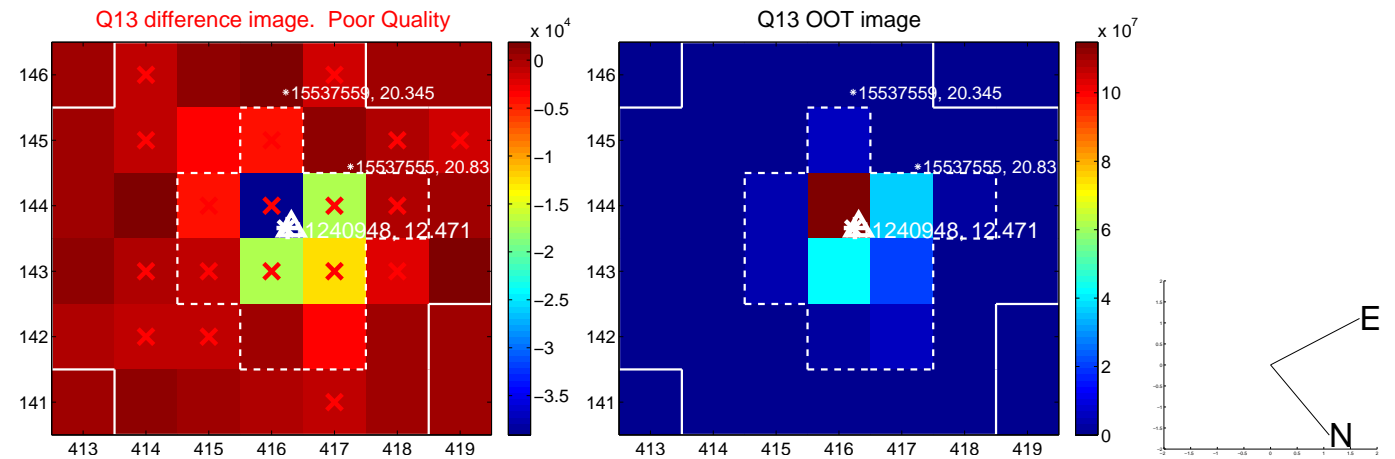
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



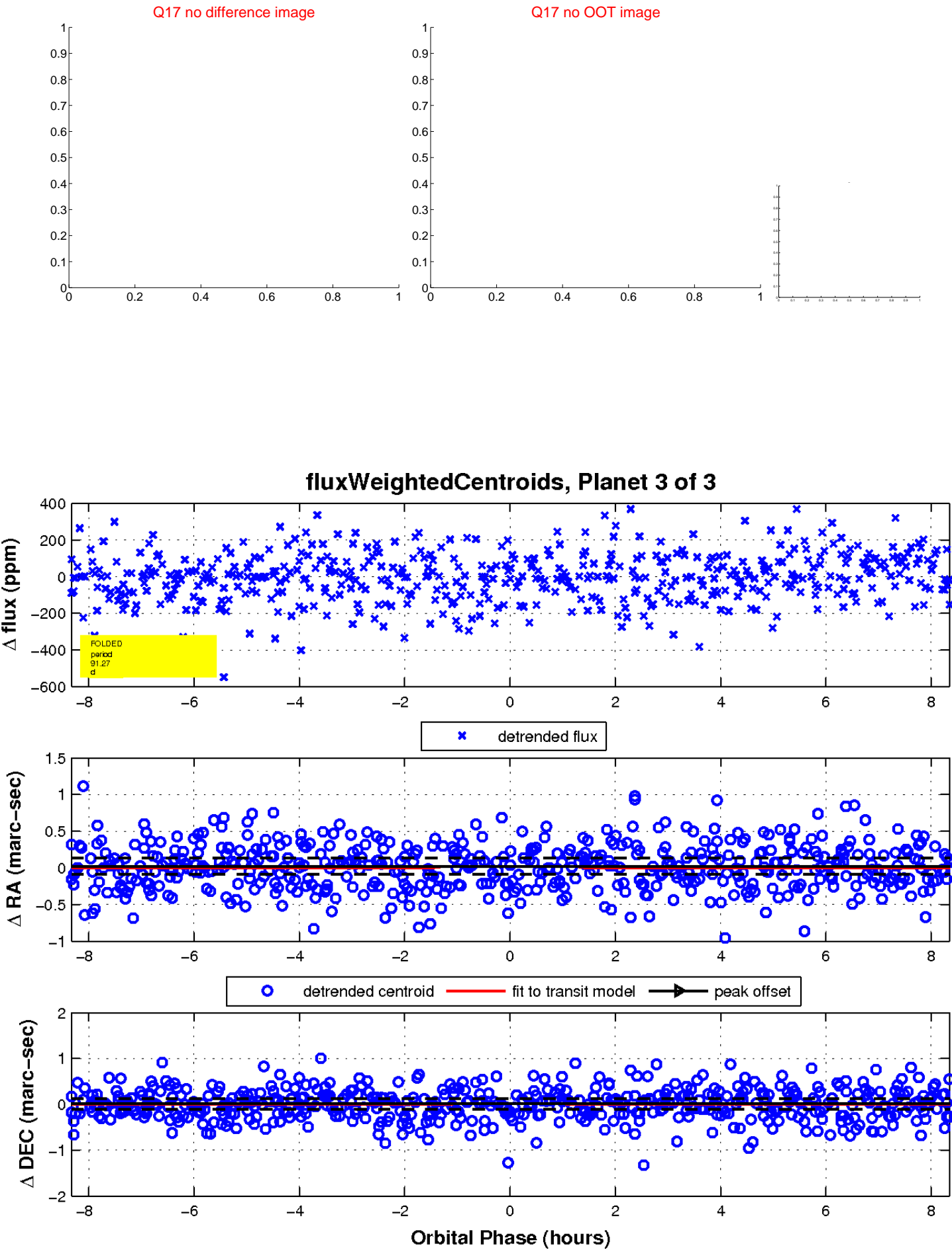
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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

