

KIC 011867733

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})
011867733-01	OBS	8294.01	384.354254	298.906325	707.1	3.723	11.1	11.2	0.99	5903	3.04	1.00
011867733-02	OBS	No	370.630062	326.353600	613.3	4.503	9.3	9.9	0.99	5903	2.91	1.05
011867733-03	OBS	No	384.363715	271.411145	439.6	4.590	8.1	8.5	0.99	5903	2.27	1.00

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
011867733-01	OBS	FP	0.00	0	1	0	0	HAS_SEC_TCE
011867733-02	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_MARSHALL—MOD_POS_ALT
011867733-03	OBS	FP	0.00	1	1	0	0	IS_SEC_TCE—CENT_FEW_MEAS

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

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

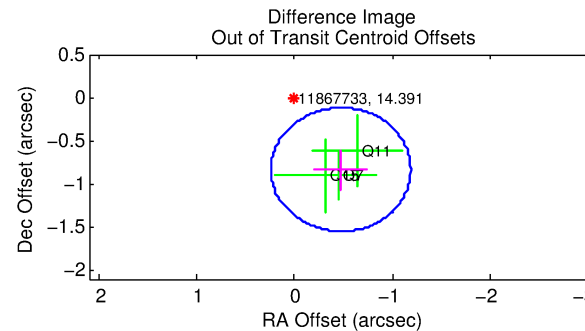
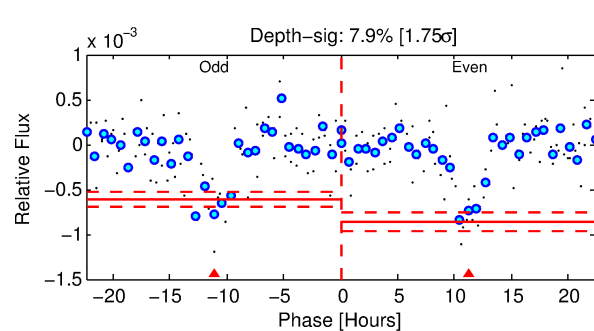
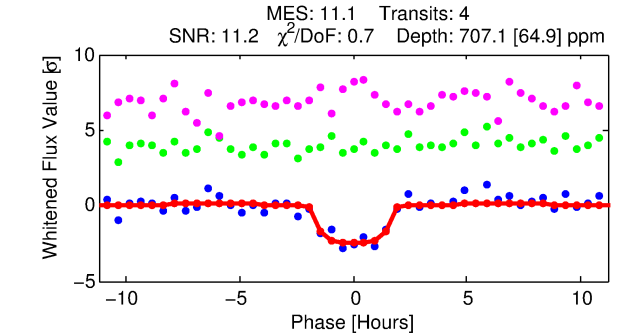
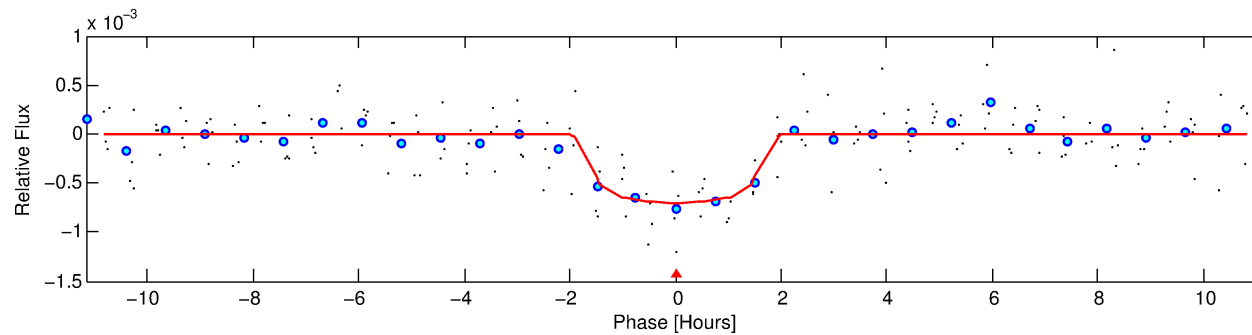
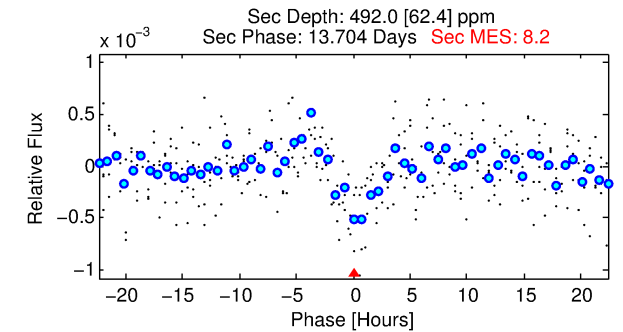
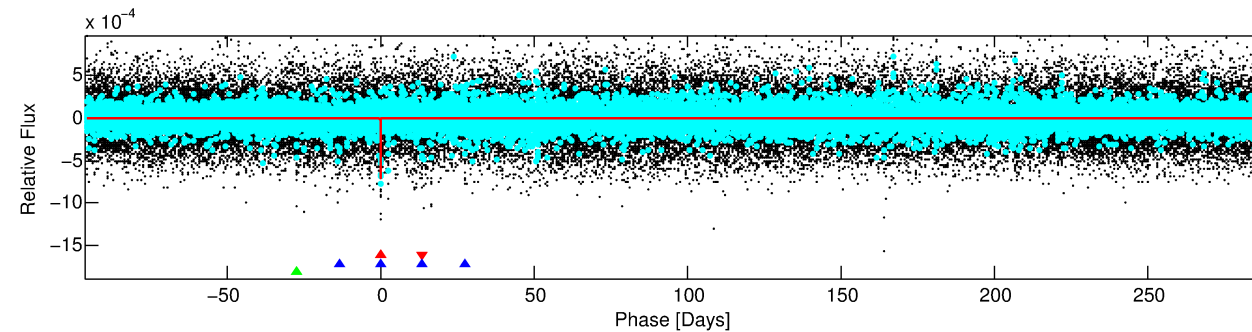
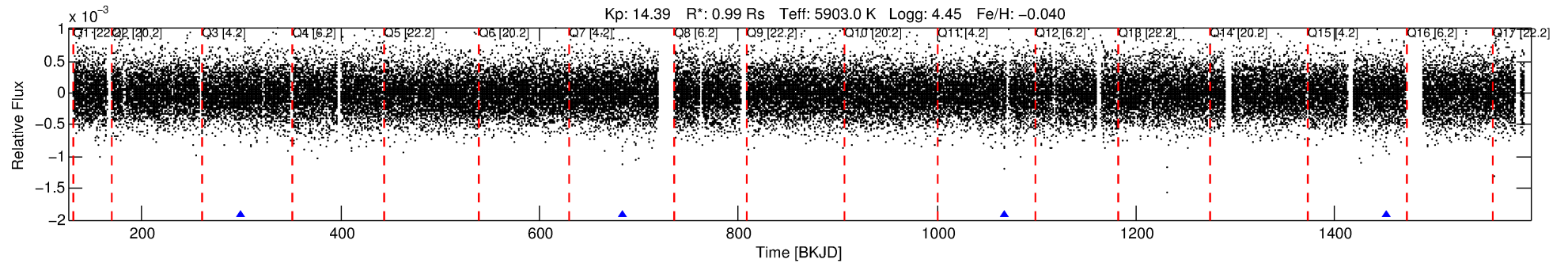
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 011867733-01

No Significant Match Found

DV One-Page Summary

KIC: 11867733 Candidate: 1 of 3 Period: 384.354 d



DV Fit Results:

Period = 384.35425 [0.00352] d
Epoch = 298.9063 [0.0066] BKJD
Rp/R* = 0.0281 [0.0064]
a/R* = 437.65 [466.15]
b = 0.87 [0.31]
Seff = 1.00 [0.39]
Teff = 255 [25] K
Rp = 3.04 [1.13] Re
a = 1.0362 [0.2583] AU
Ag = 31353.48 [18771.38] [1.67σ]
Teffp = 5248 [644] K [7.74σ]

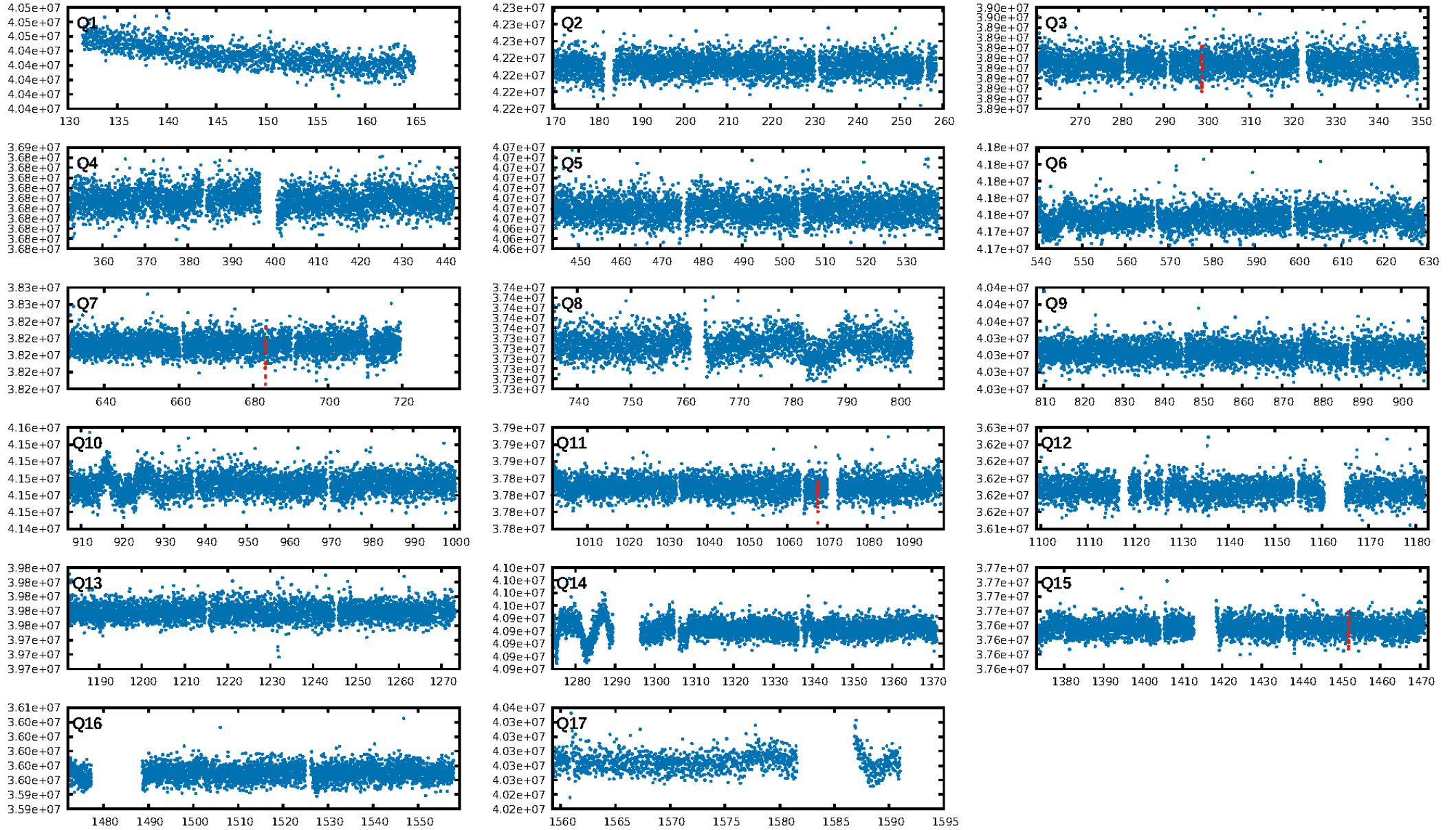
DV Diagnostic Results:

ShortPeriod-sig: 100.0% [56.37σ]
LongPeriod-sig: 3.1% [0.04σ]
ModelChiSquare2-sig: 19.0%
ModelChiSquareGof-sig: 98.7%
Bootstrap-pfa: 4.78e-17
RollingBand-fgt: 1.00 [4/4]
GhostDiagnostic-chr: -2.626
Centroid-sig: 72.2%
Centroid-so: 0.762 arcsec [0.76σ]
OotOffset-rm: 0.959 arcsec [4.02σ]
KicOffset-rm: 0.730 arcsec [3.10σ]
OotOffset-st: 0/3/0/0 [3]
KicOffset-st: 0/3/0/0 [3]
DiffImageQuality-fgm: 1.00 [3/3]
DiffImageOverlap-fno: 0.75 [3/4]

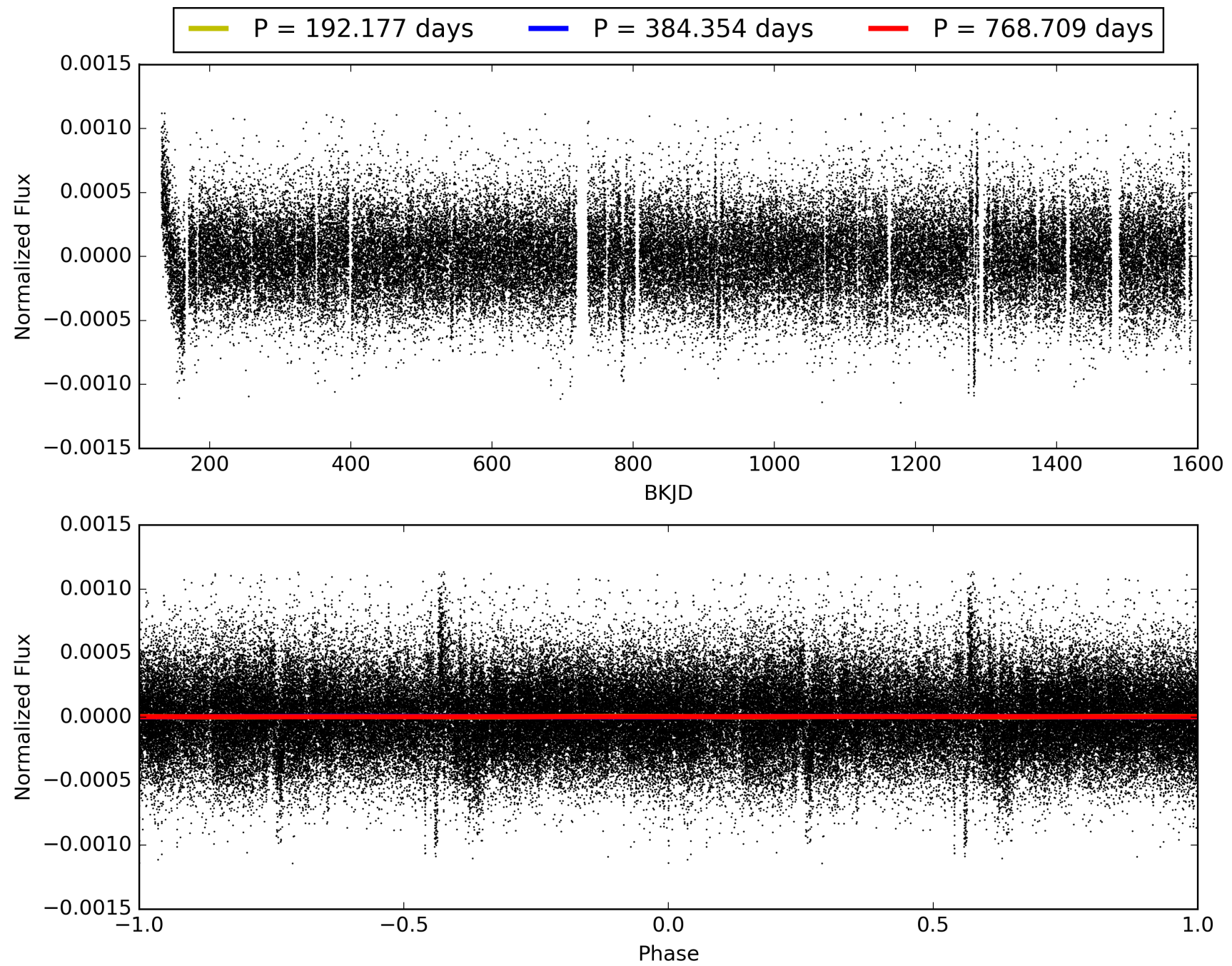
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 29-Jan-2016 03:03:07 Z

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

TCE 011867733-01, PDC Light Curves

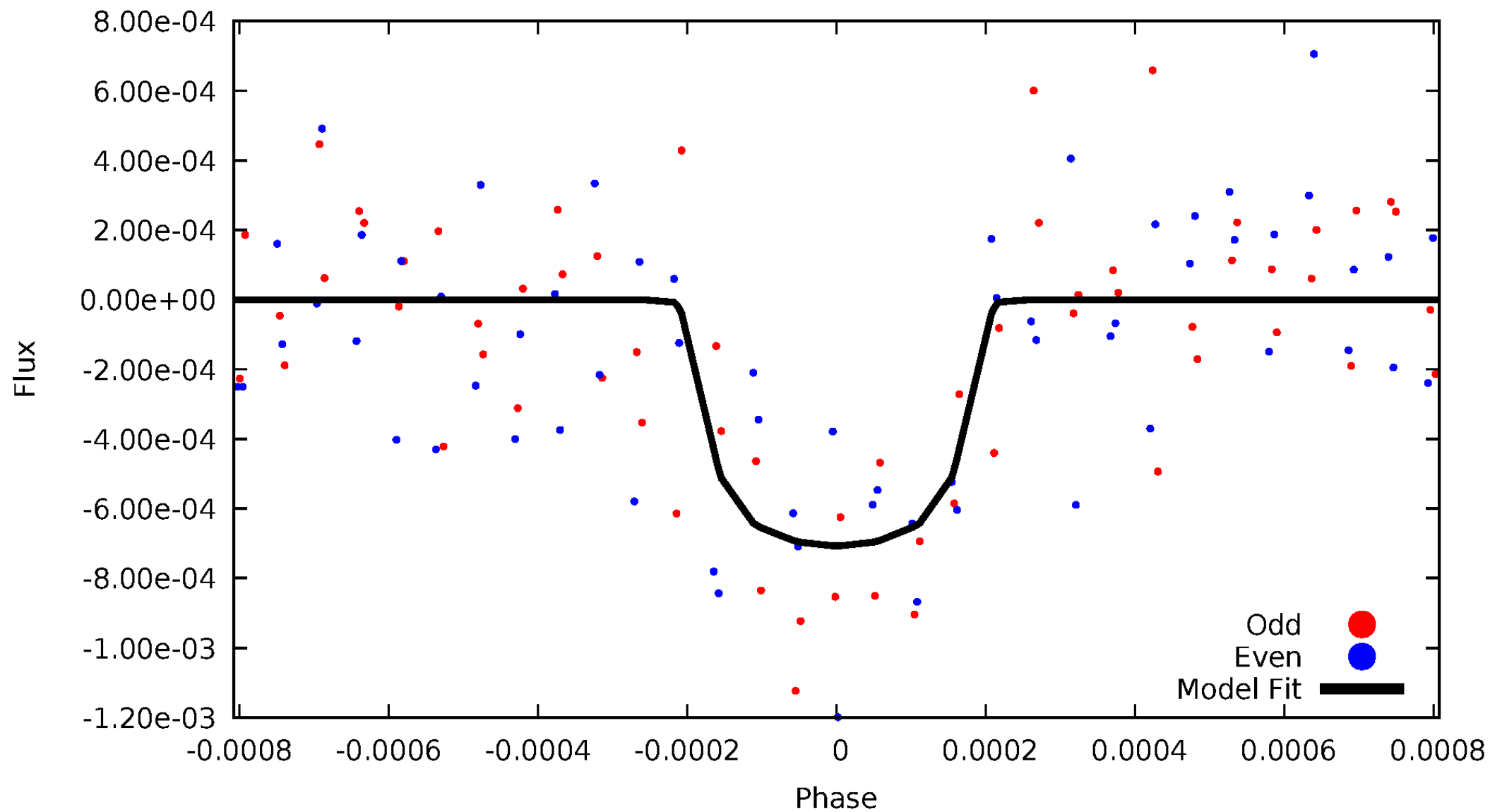


TCE 011867733-01



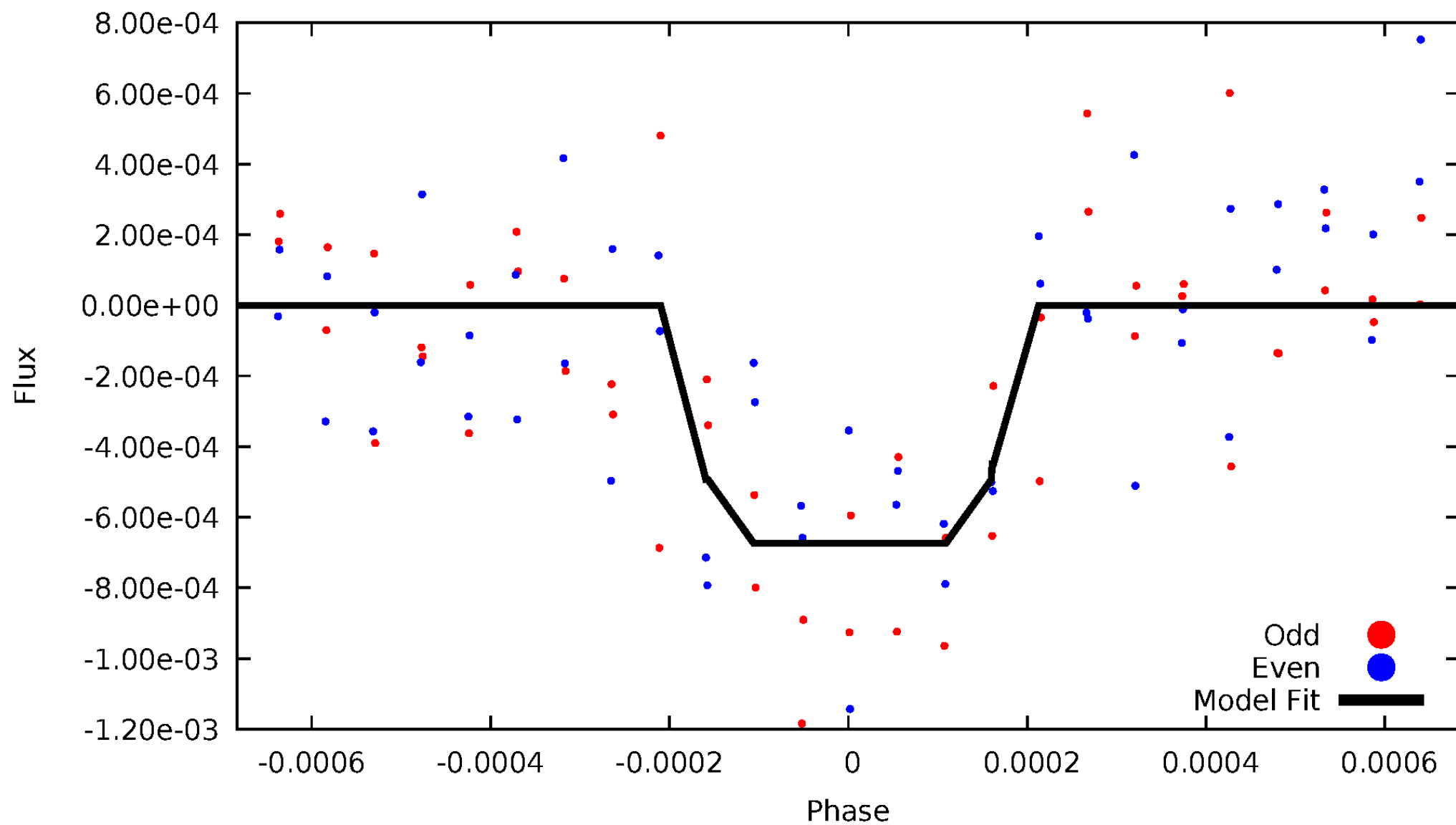
DV Odd/Even

TCE 011867733-01



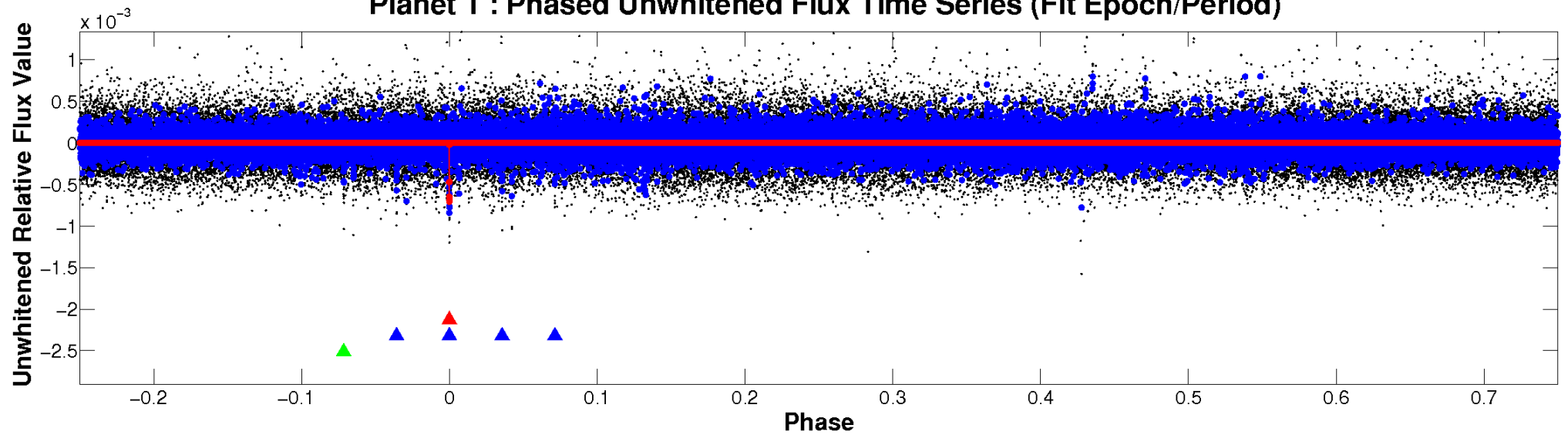
ALT Odd/Even

TCE 011867733-01

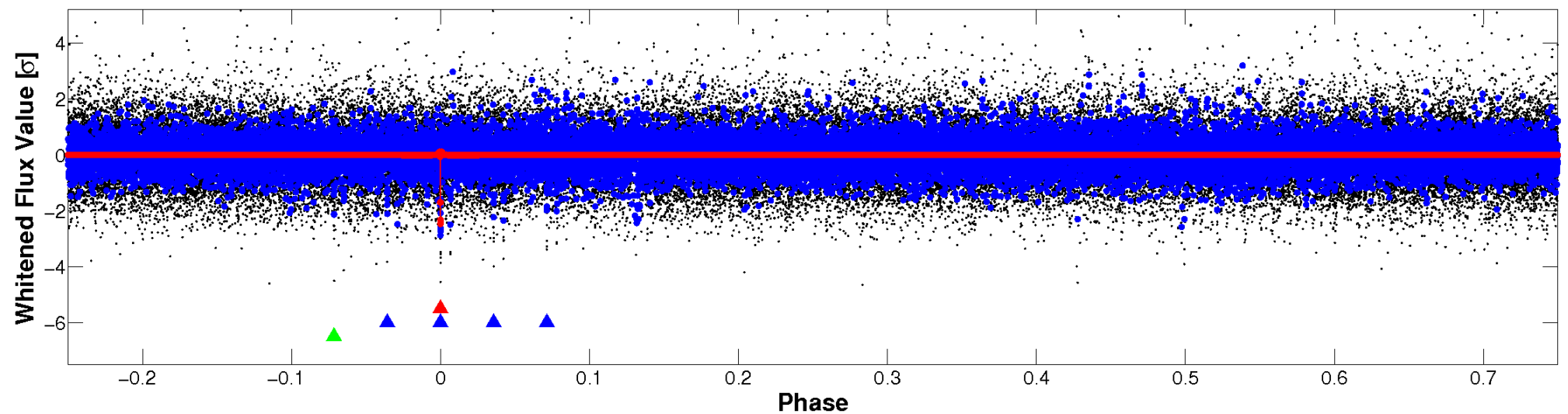


Non-Whitened Vs. Whitened Light Curve

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

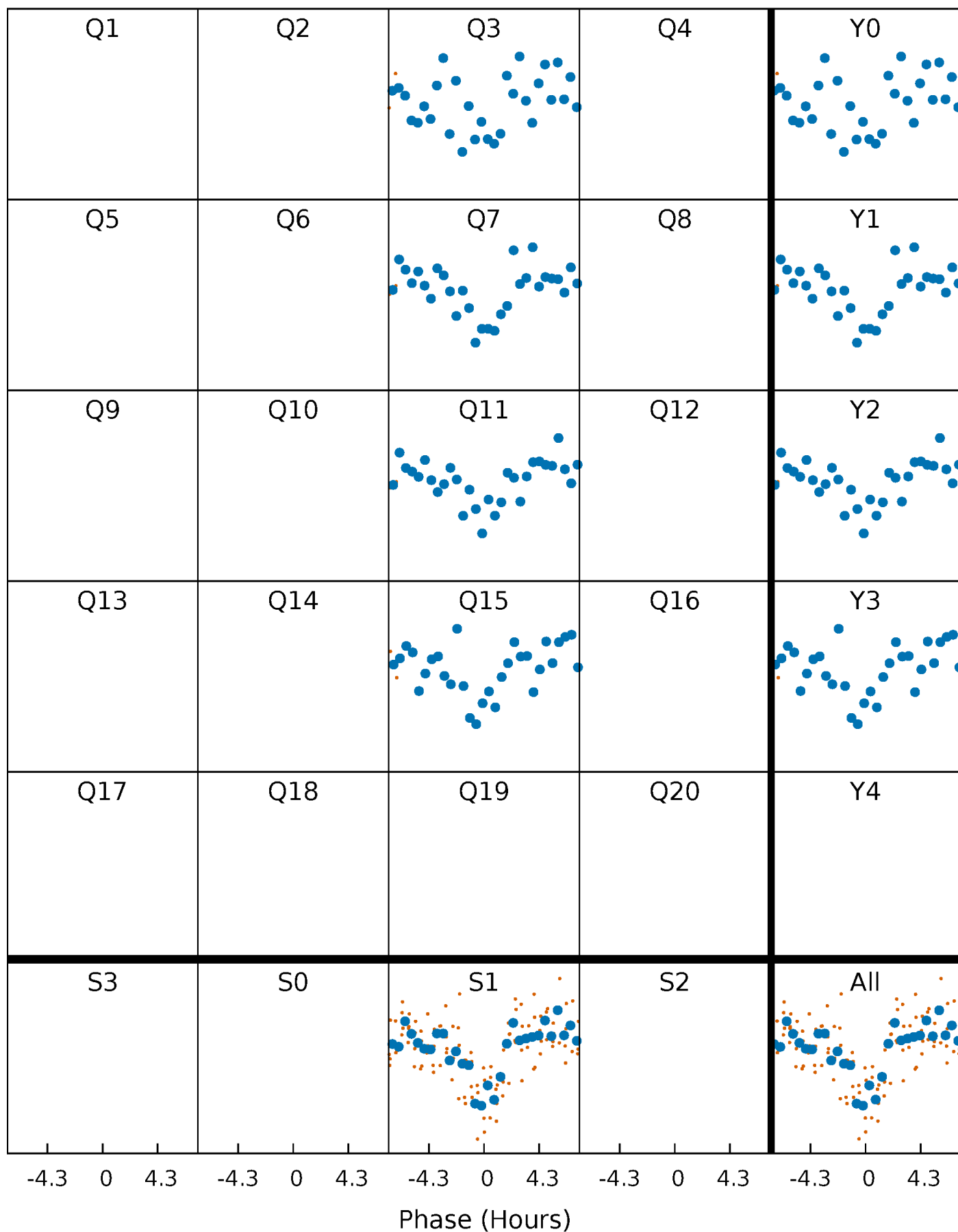


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



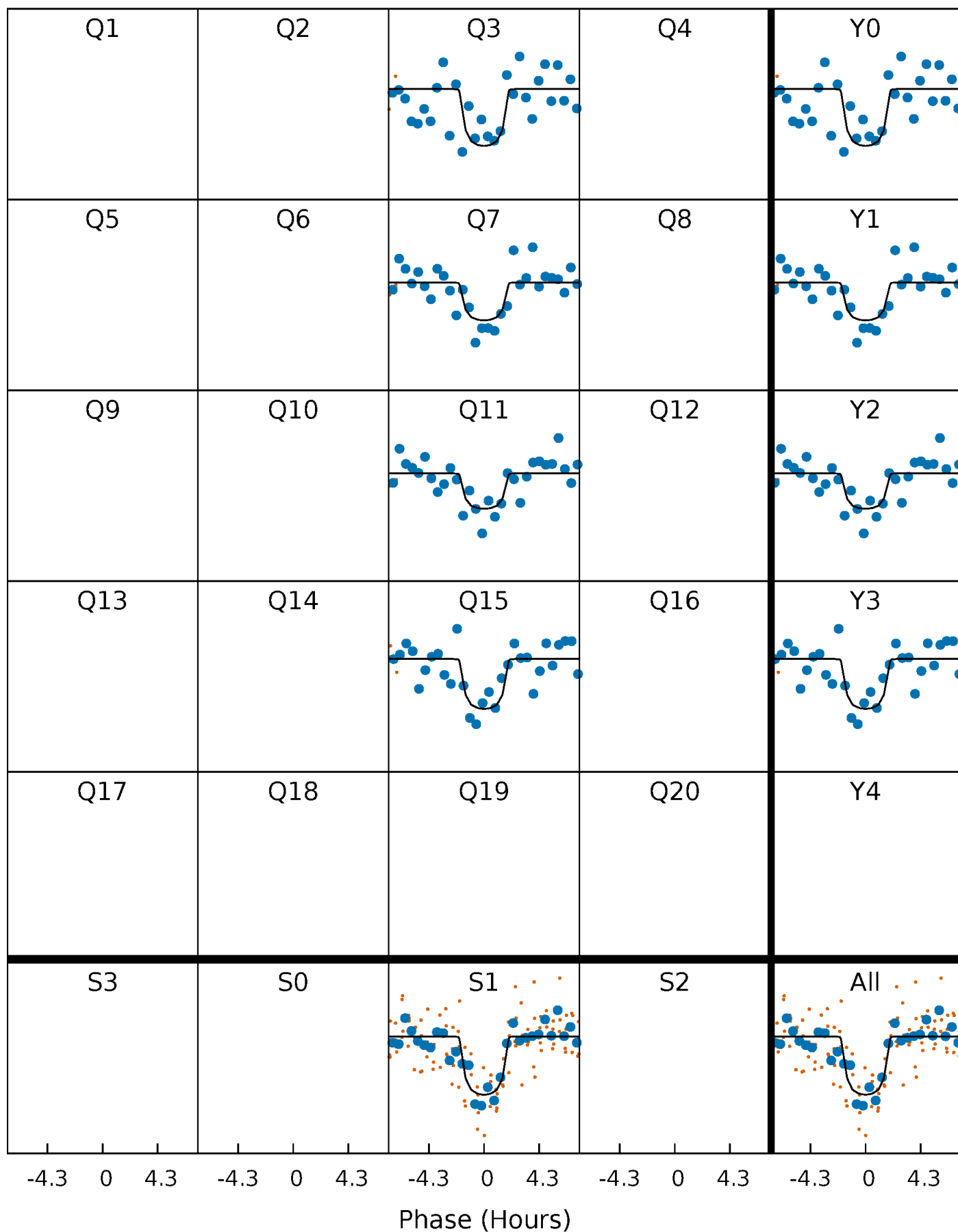
PDC Quarter-Phased Transit Curves

TCE 011867733-01 P=384.354254 Days $T_0=298.906325$ (BKJD)



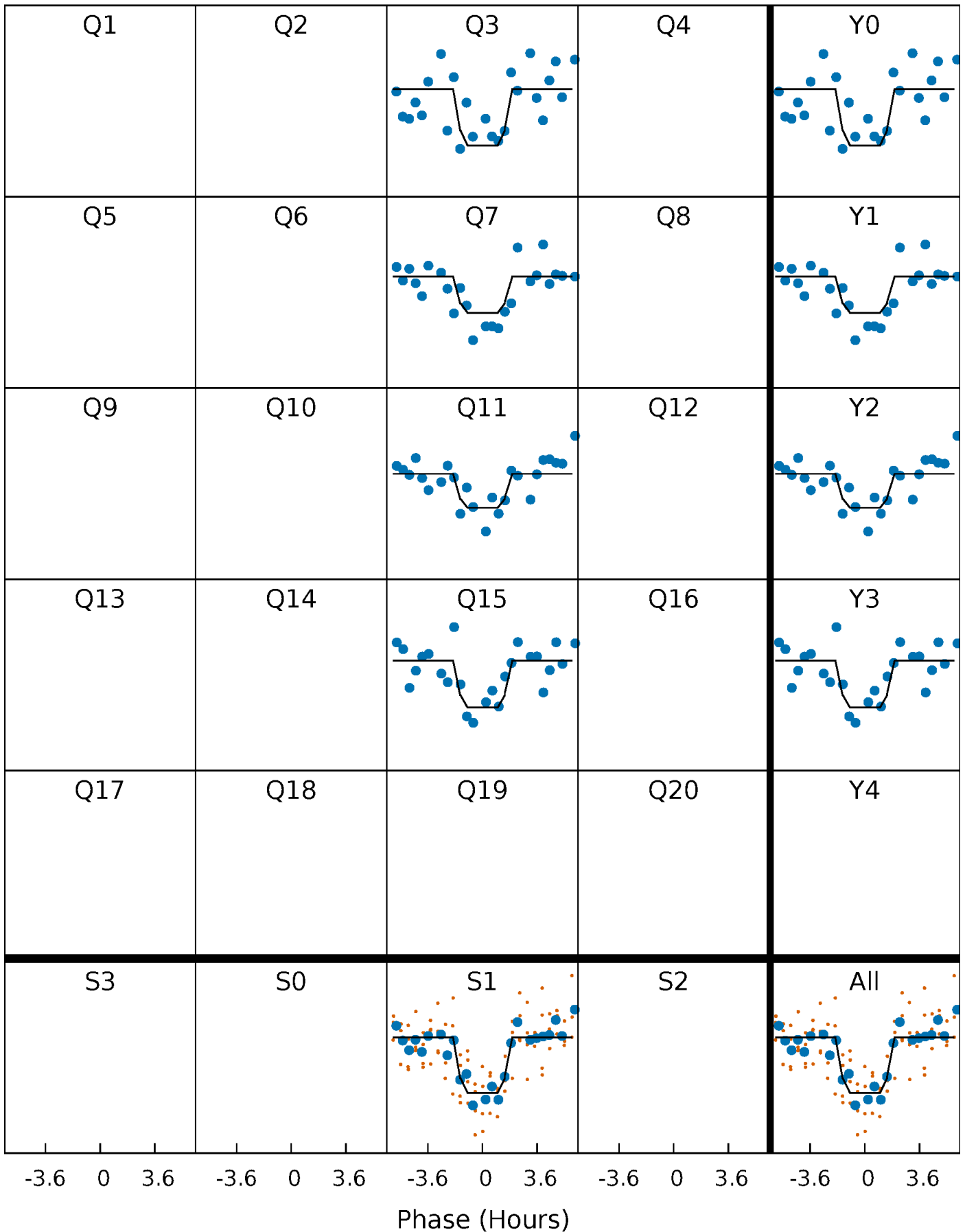
DV Quarter-Phased Transit Curves

TCE 011867733-01 $P=384.354254$ Days $T_0=298.906325$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

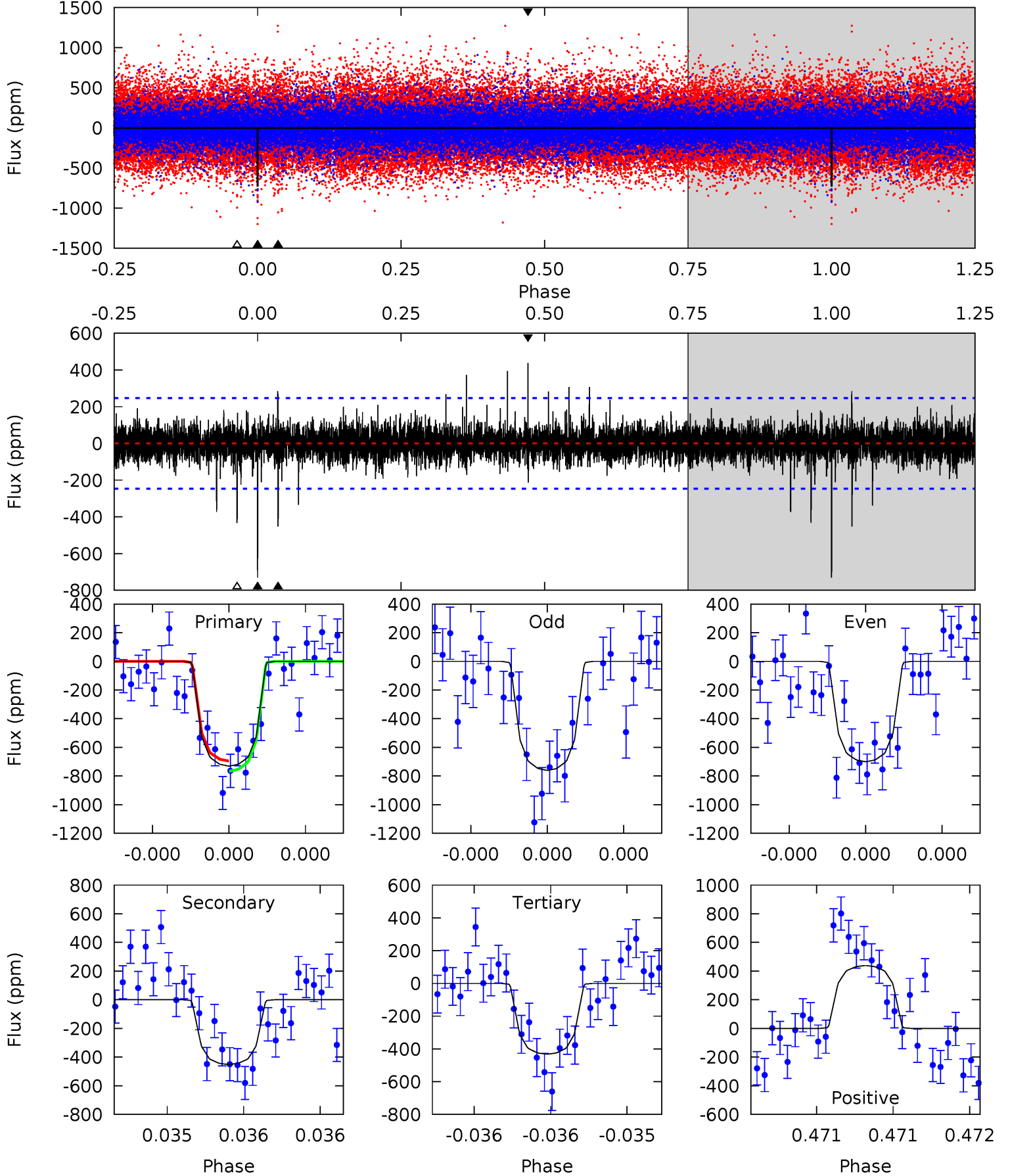
TCE 011867733-01 P=384.355264 Days $T_0=298.904245$ (BKJD)



DV Model-Shift Uniqueness Test

011867733-01, P = 384.354254 Days, E = 298.906325 Days

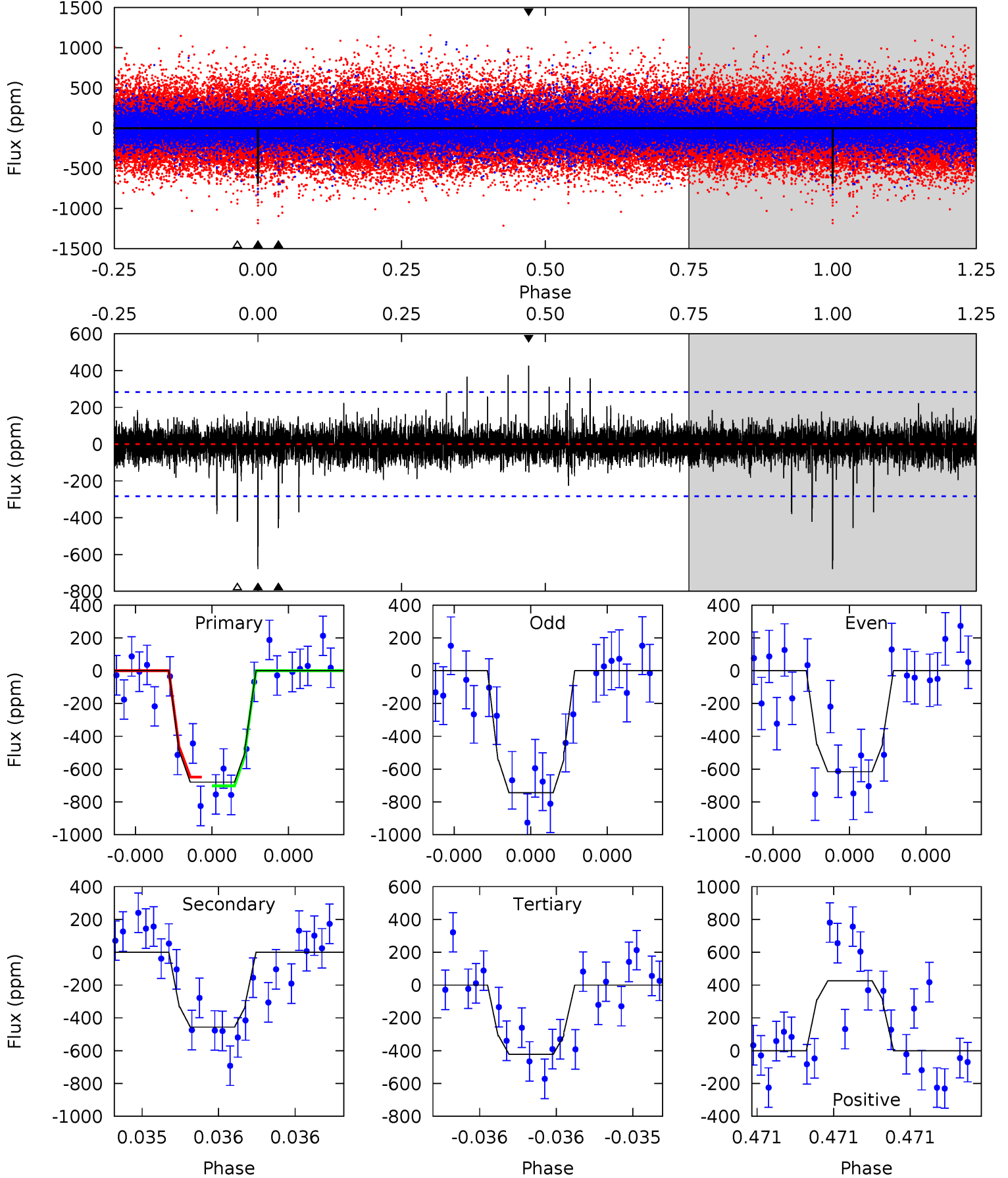
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
16.6	10.2	9.80	9.95	5.60	3.52	1.31	6.76	6.61	0.44	0.29	0.69	0.97	0.38	0.81



Alt Model-Shift Uniqueness Test

011867733-01, P = 384.355264 Days, E = 298.904245 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
13.5	9.05	8.37	8.46	5.62	3.56	1.12	5.11	5.02	0.68	0.59	1.27	1.01	0.39	0.52



Stellar Parameters For KIC 011867733

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	5903^{+158}_{-193}	$4.445^{+0.067}_{-0.202}$	$-0.040^{+0.250}_{-0.300}$	$0.994^{+0.291}_{-0.125}$	$1.005^{+0.127}_{-0.127}$	$1.441^{+0.524}_{-0.742}$
	+3%/-3%	+2%/-5%	+625%/-750%	+29%/-13%	+13%/-13%	+36%/-51%
Source	PHO1	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 011867733-01 / KOI 8294.01

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	-451 ± 44	$3.19^{+0.82}_{-0.78}$	363^{+27}_{-19}	5179^{+706}_{-474}	25730^{+20107}_{-9546}
Alt.	-456 ± 50	$2.93^{+0.83}_{-0.73}$	364^{+24}_{-19}	5388^{+795}_{-537}	31288^{+24098}_{-12209}

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 $A_{obs} \gg 1.0$

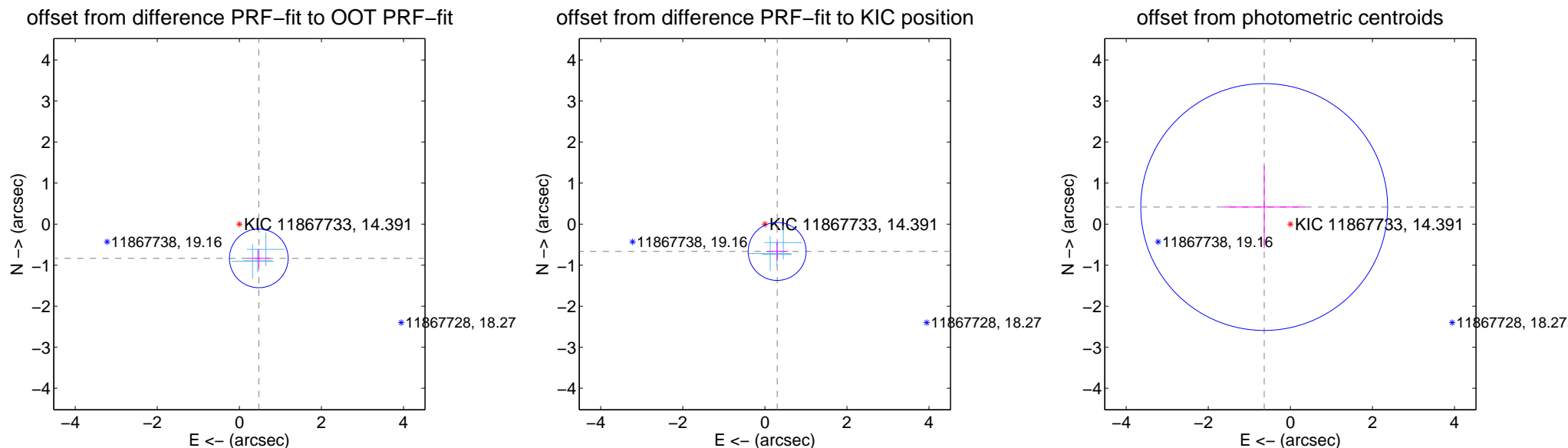
DV Centroid Data

Supplemental centroid analysis for 011867733-01. Kepler magnitude: 14.39. Transit SNR 11.18

There are 3 quarters with good PRF difference image offsets

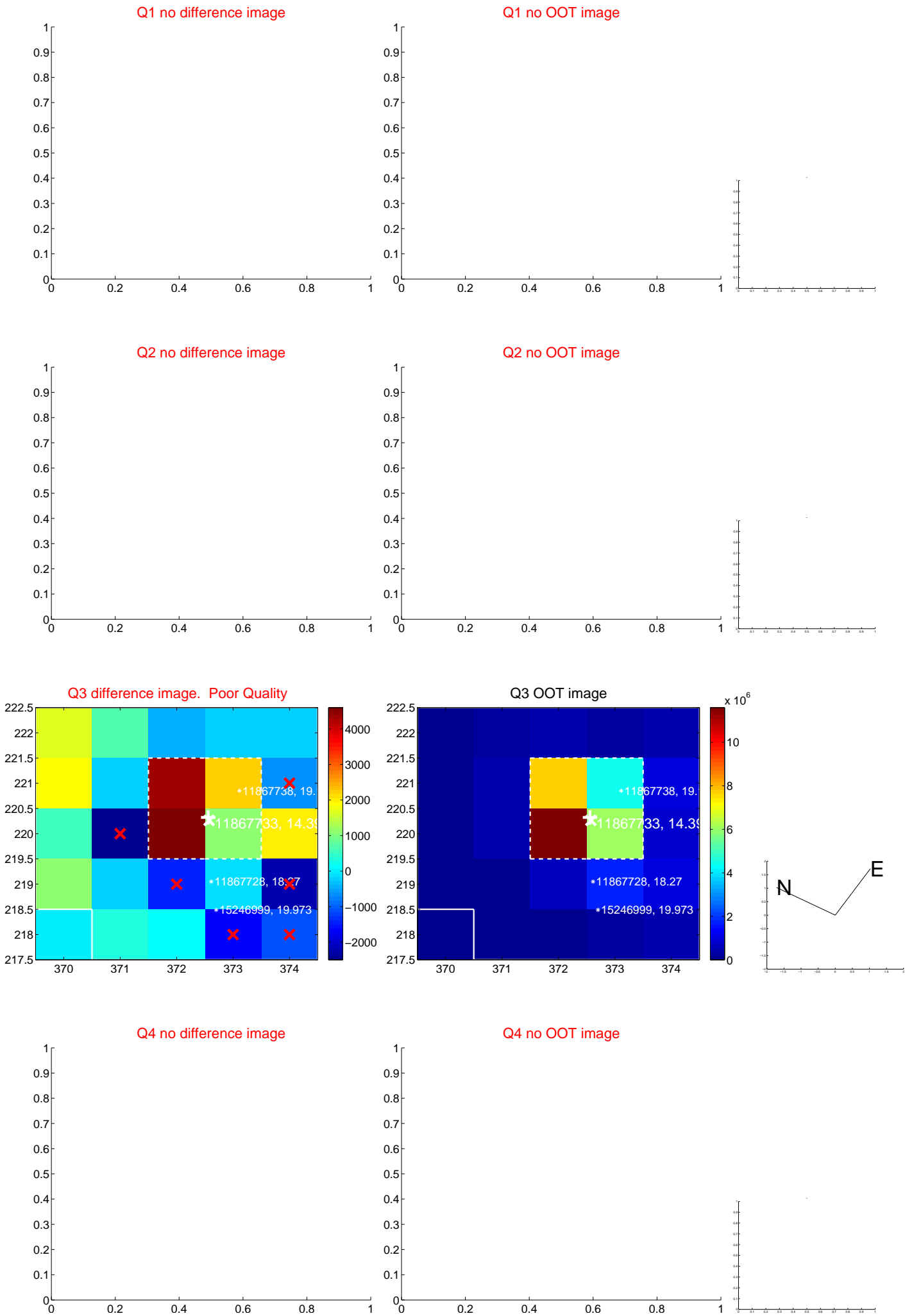
The direct PRF centroid is offset from the target star catalog position by about 0.27 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.959 ± 0.238	4.02	-0.473 ± 0.268	-0.834 ± 0.228
PRF-fit source offset from KIC position	0.730 ± 0.235	3.10	-0.300 ± 0.268	-0.665 ± 0.228
photometric centroid source offset	0.76 ± 1.00	0.76	0.64 ± 1.00	0.42 ± 1.00

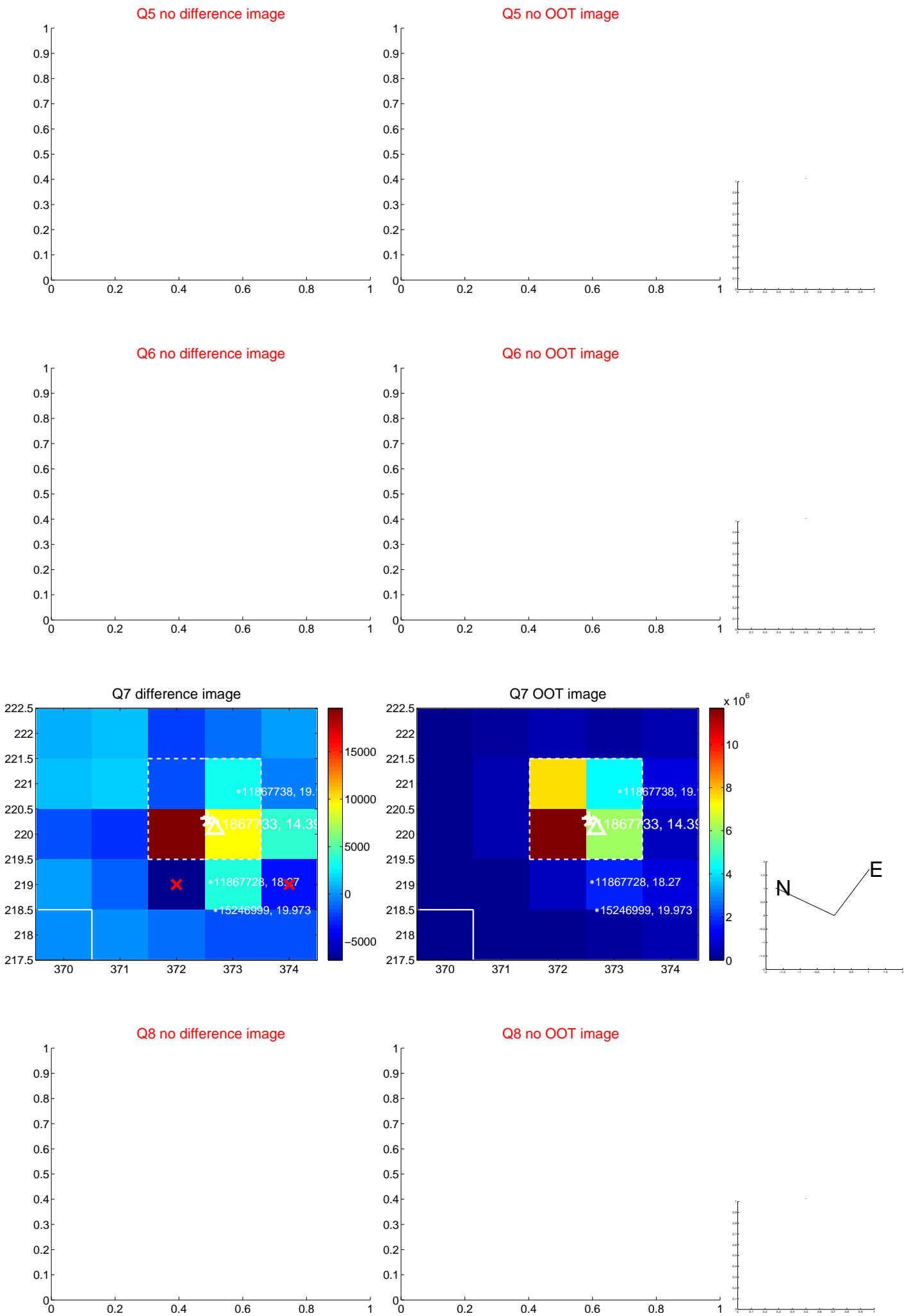


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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

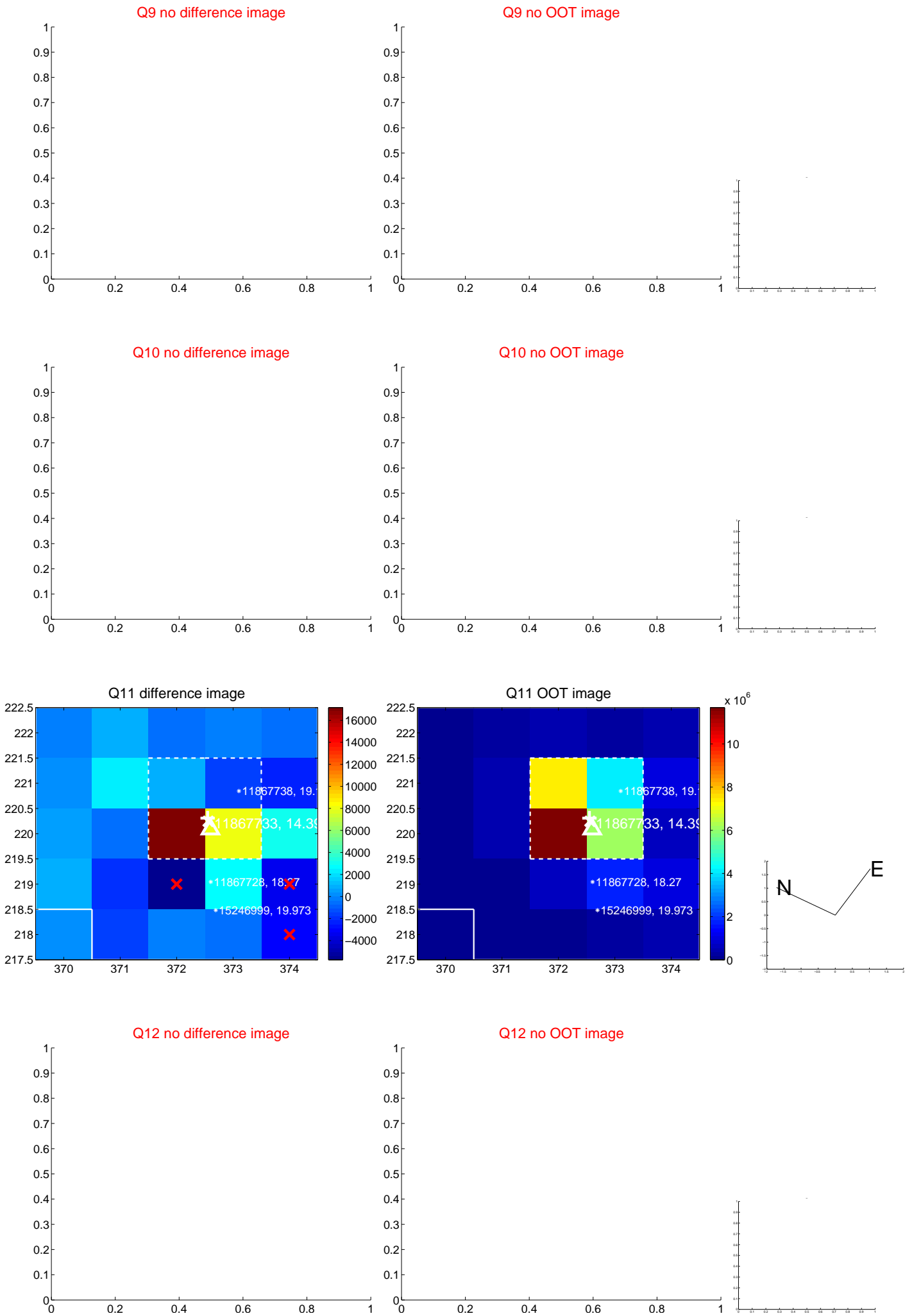
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



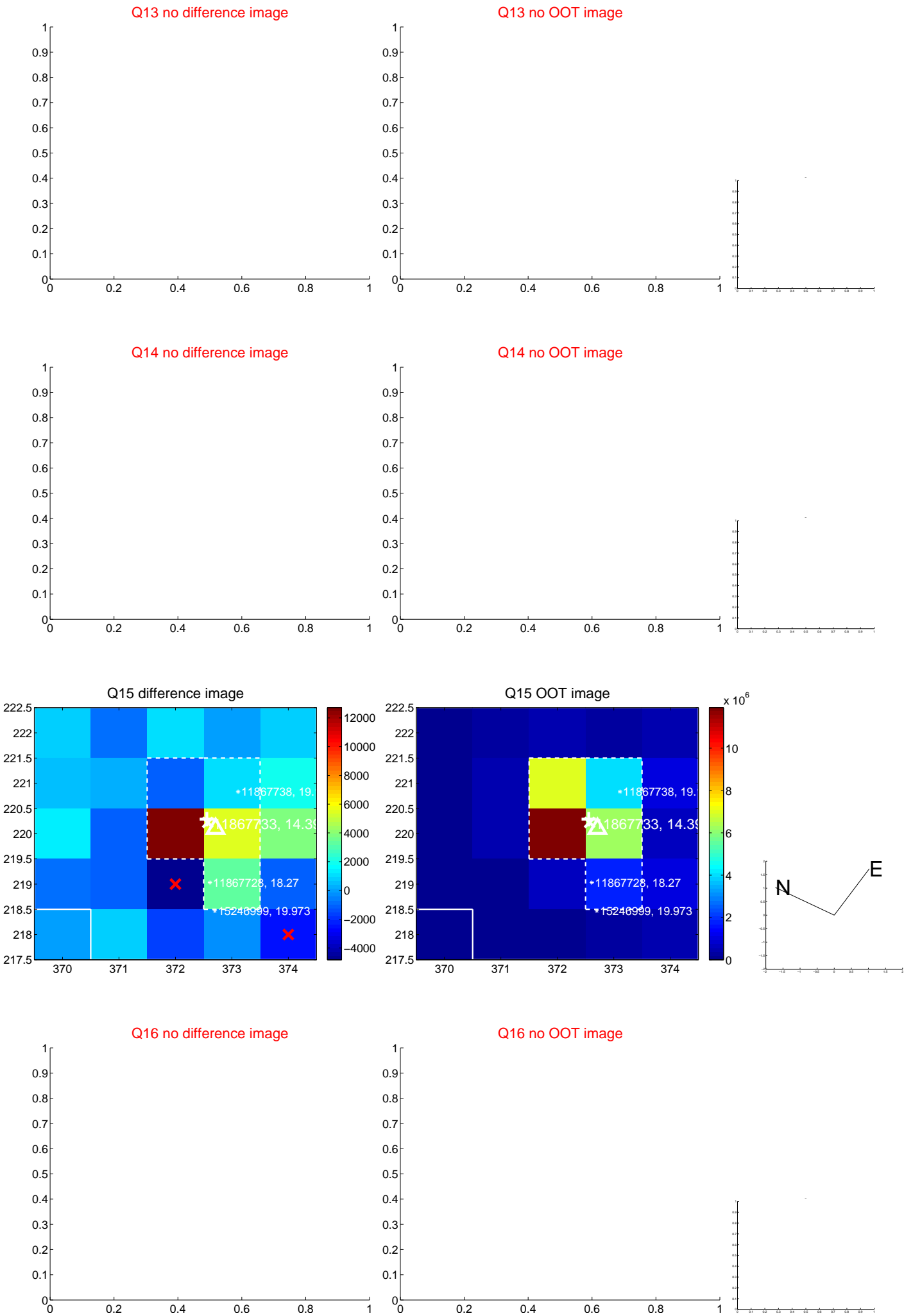
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



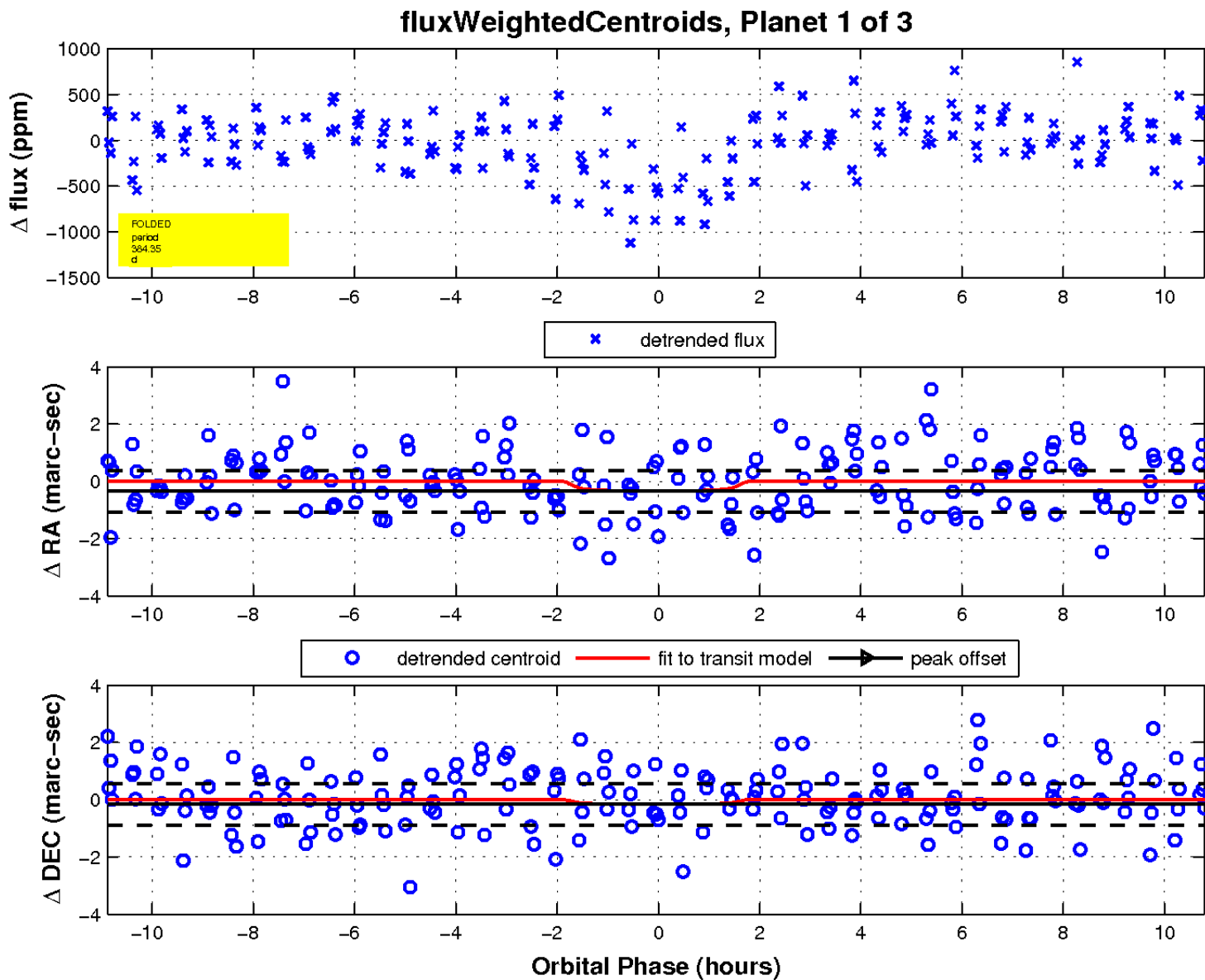
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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

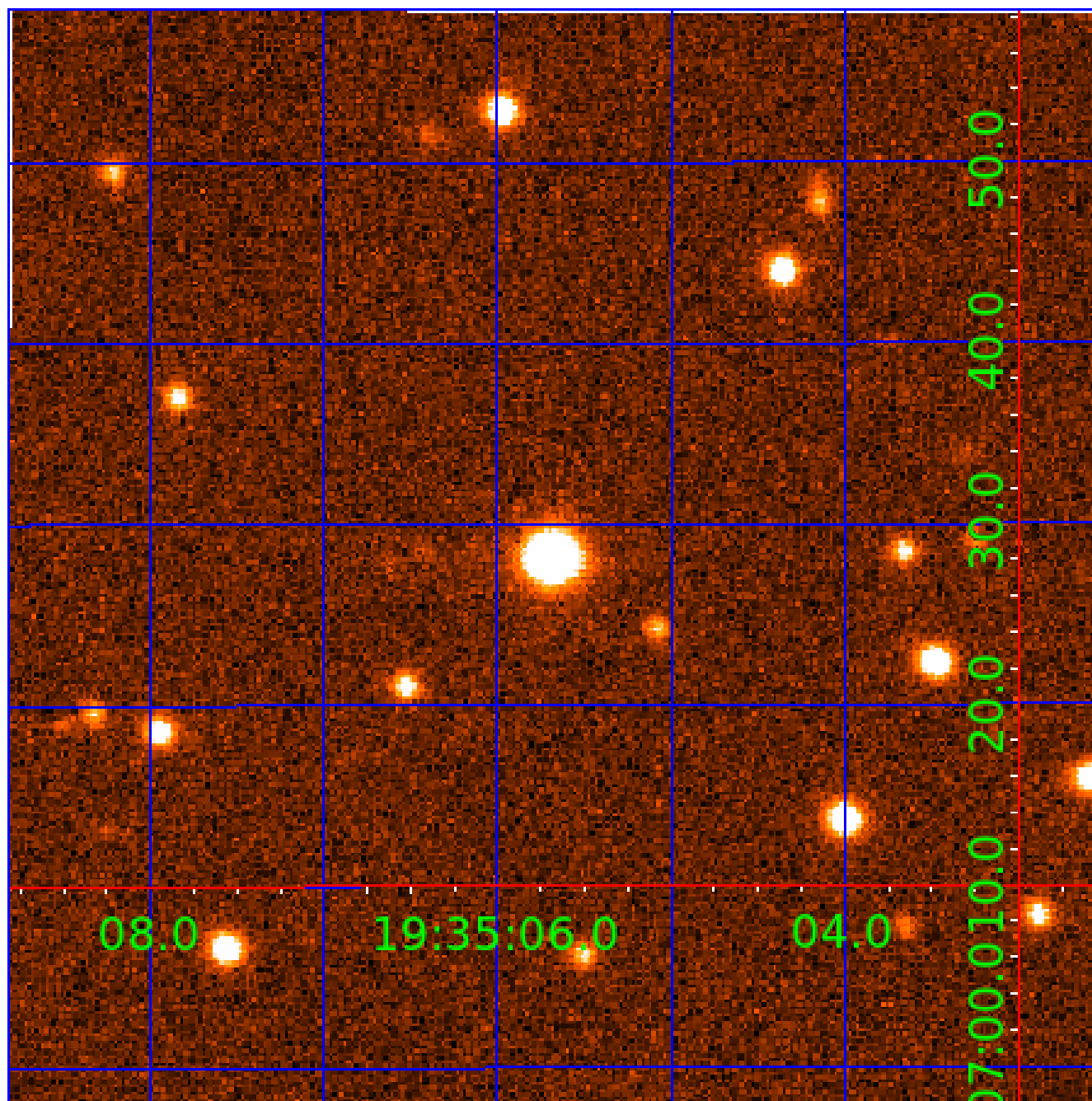


white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



UKIRT Image

Declination



KIC 011867733

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})
011867733-01	OBS	8294.01	384.354254	298.906325	707.1	3.723	11.1	11.2	0.99	5903	3.04	1.00
011867733-02	OBS	No	370.630062	326.353600	613.3	4.503	9.3	9.9	0.99	5903	2.91	1.05
011867733-03	OBS	No	384.363715	271.411145	439.6	4.590	8.1	8.5	0.99	5903	2.27	1.00

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
011867733-01	OBS	FP	0.00	0	1	0	0	HAS_SEC_TCE
011867733-02	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_MARSHALL—MOD_POS_ALT
011867733-03	OBS	FP	0.00	1	1	0	0	IS_SEC_TCE—CENT_FEW_MEAS

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

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

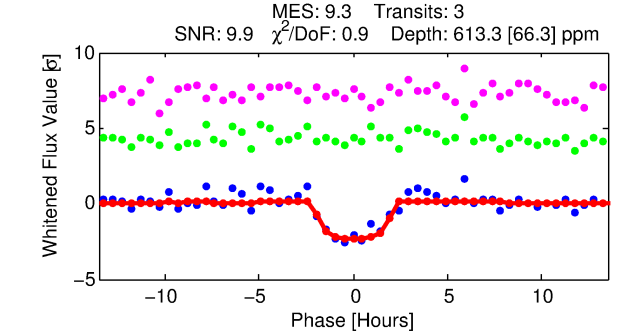
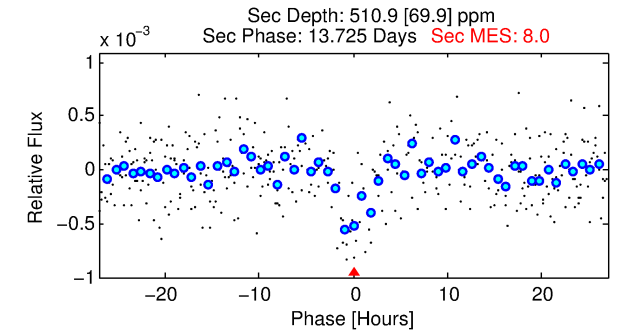
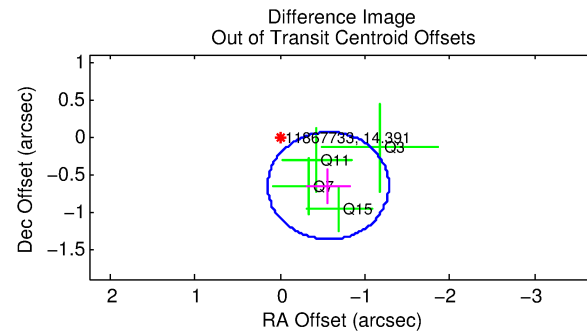
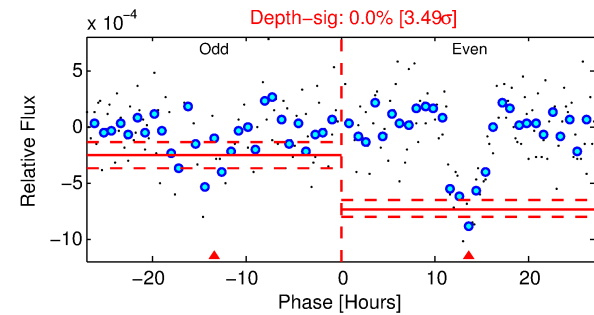
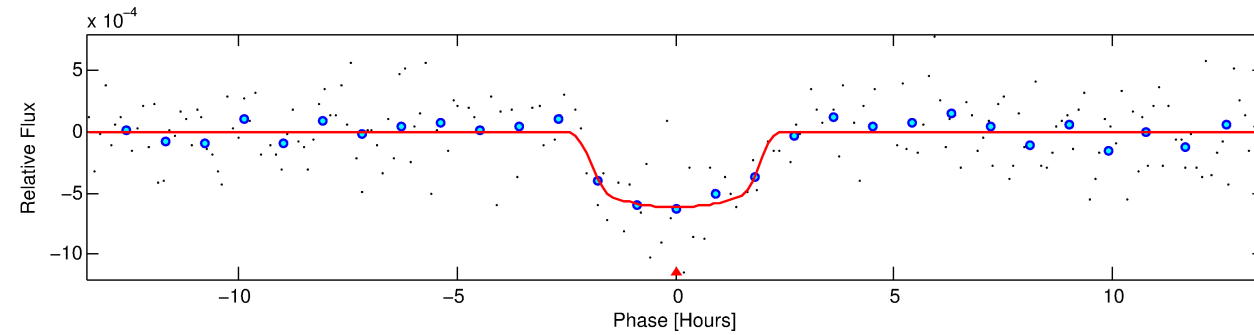
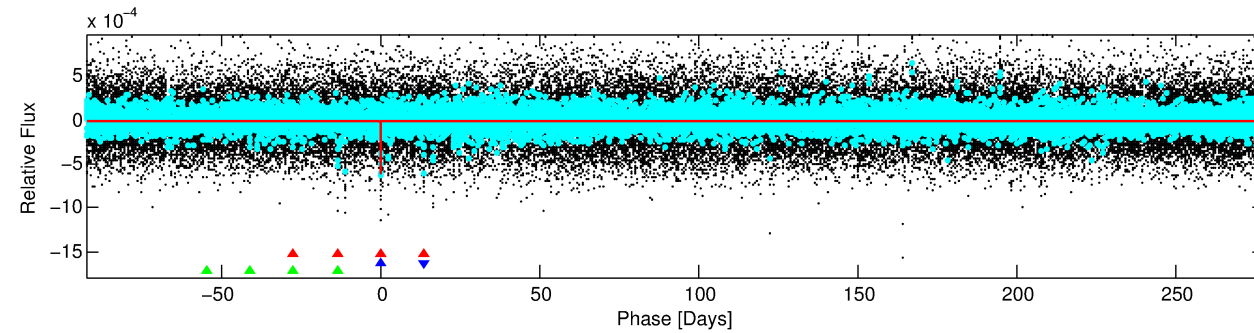
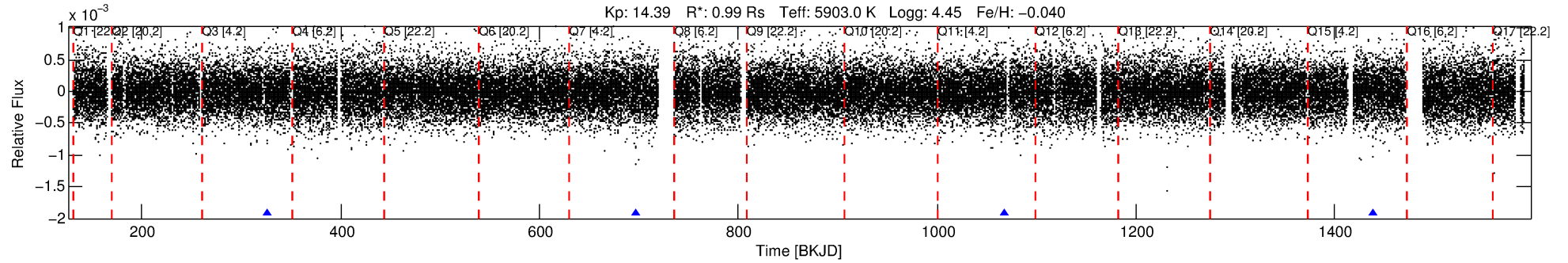
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 011867733-02

No Significant Match Found

DV One-Page Summary

KIC: 11867733 Candidate: 2 of 3 Period: 370.630 d



DV Fit Results:

Period = 370.63006 [0.00406] d
Epoch = 326.3536 [0.0084] BKJD
Rp/R* = 0.0268 [0.0056]
a/R* = 314.62 [294.93]
b = 0.90 [0.21]
Seff = 1.05 [0.41]
Teff = 258 [25] K
Rp = 2.91 [1.05] Re
a = 1.0114 [0.2521] AU
Ag = 34019.52 [19477.62] [1.75σ]
Teffp = 5421 [622] K [8.29σ]

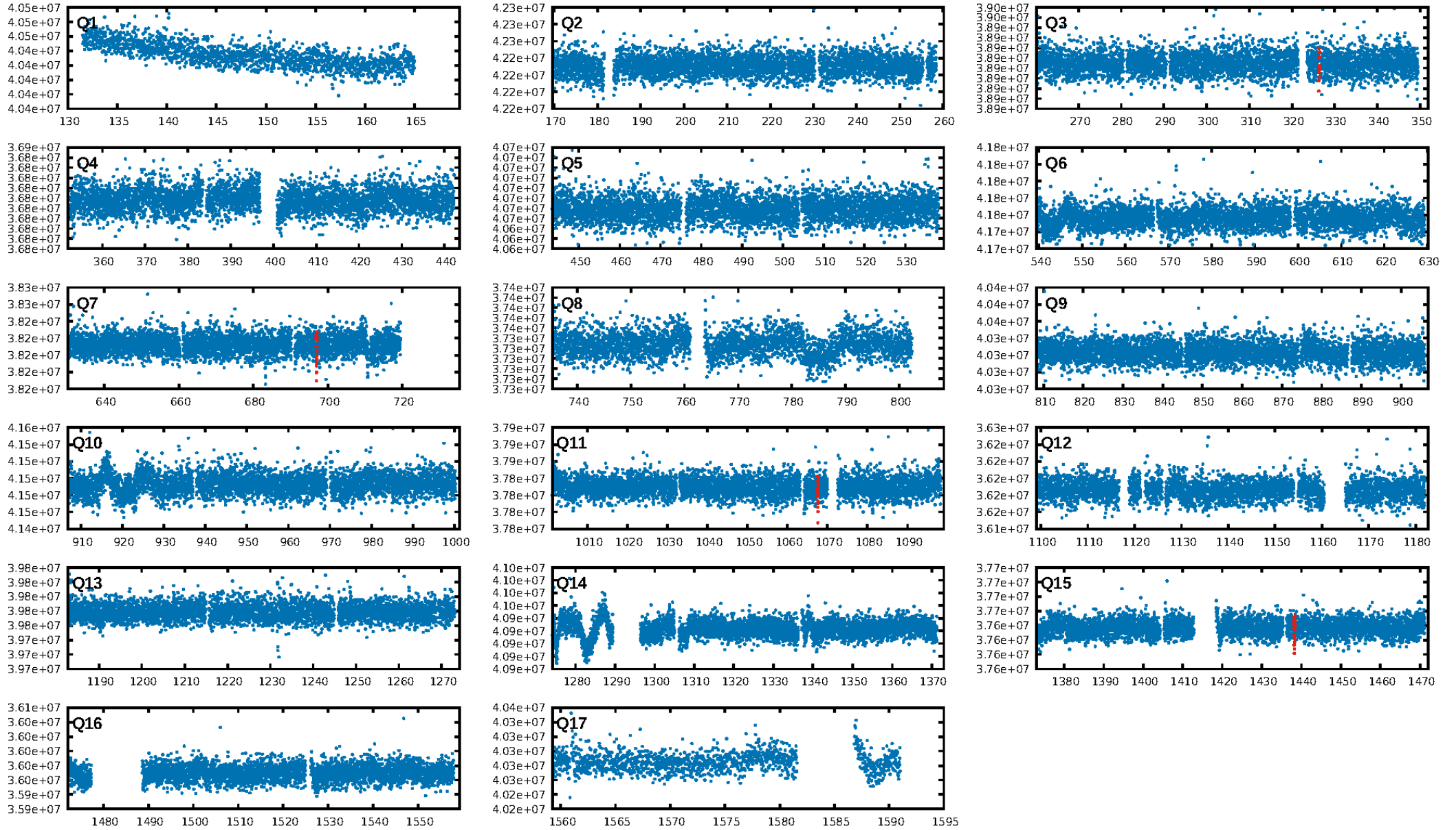
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: 100.0% [56.37σ]
ModelChiSquare2-sig: 1.6%
ModelChiSquareGof-sig: 95.1%
Bootstrap-pfa: 6.97e-17
RollingBand-fgt: 1.00 [3/3]
GhostDiagnostic-chr: -1.562
Centroid-sig: 35.2%
Centroid-so: 1.219 arcsec [1.10σ]
OotOffset-rm: 0.869 arcsec [3.65σ]
KicOffset-rm: 0.625 arcsec [2.63σ]
OotOffset-st: 0/4/0/0 [4]
KicOffset-st: 0/4/0/0 [4]
DiffImageQuality-fgm: 1.00 [4/4]
DiffImageOverlap-fno: 0.75 [3/4]

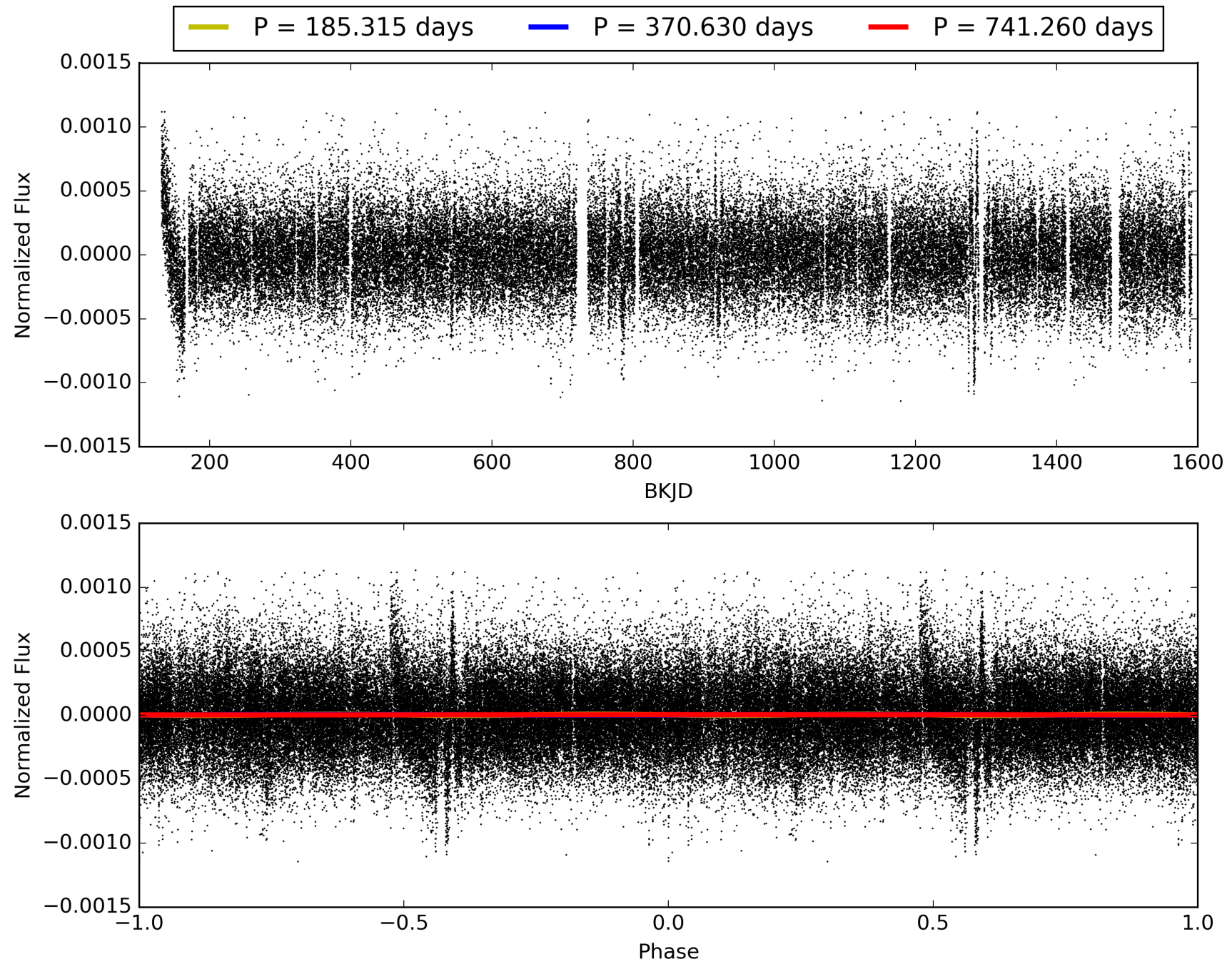
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 29-Jan-2016 03:03:22 Z

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

TCE 011867733-02, PDC Light Curves

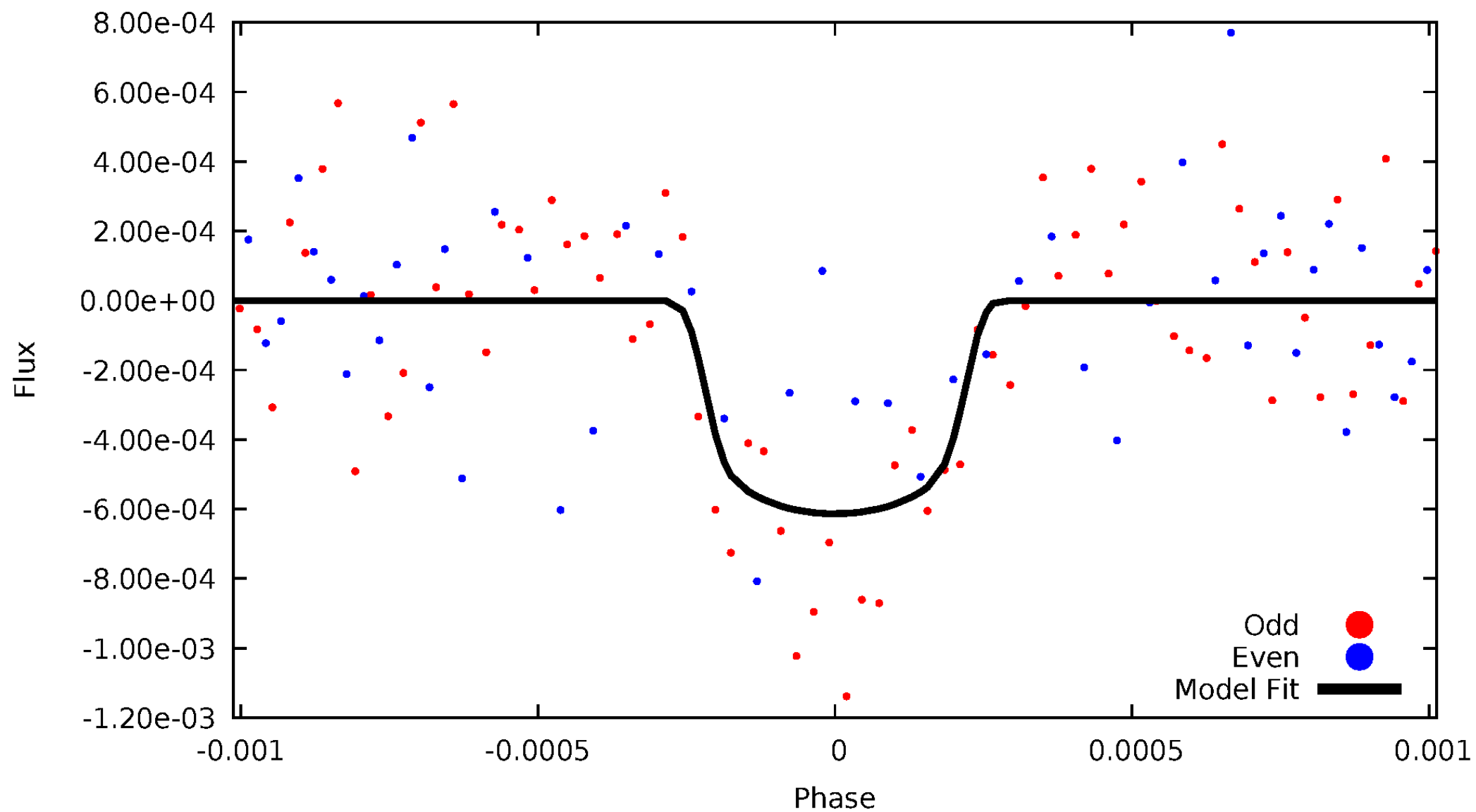


TCE 011867733-02



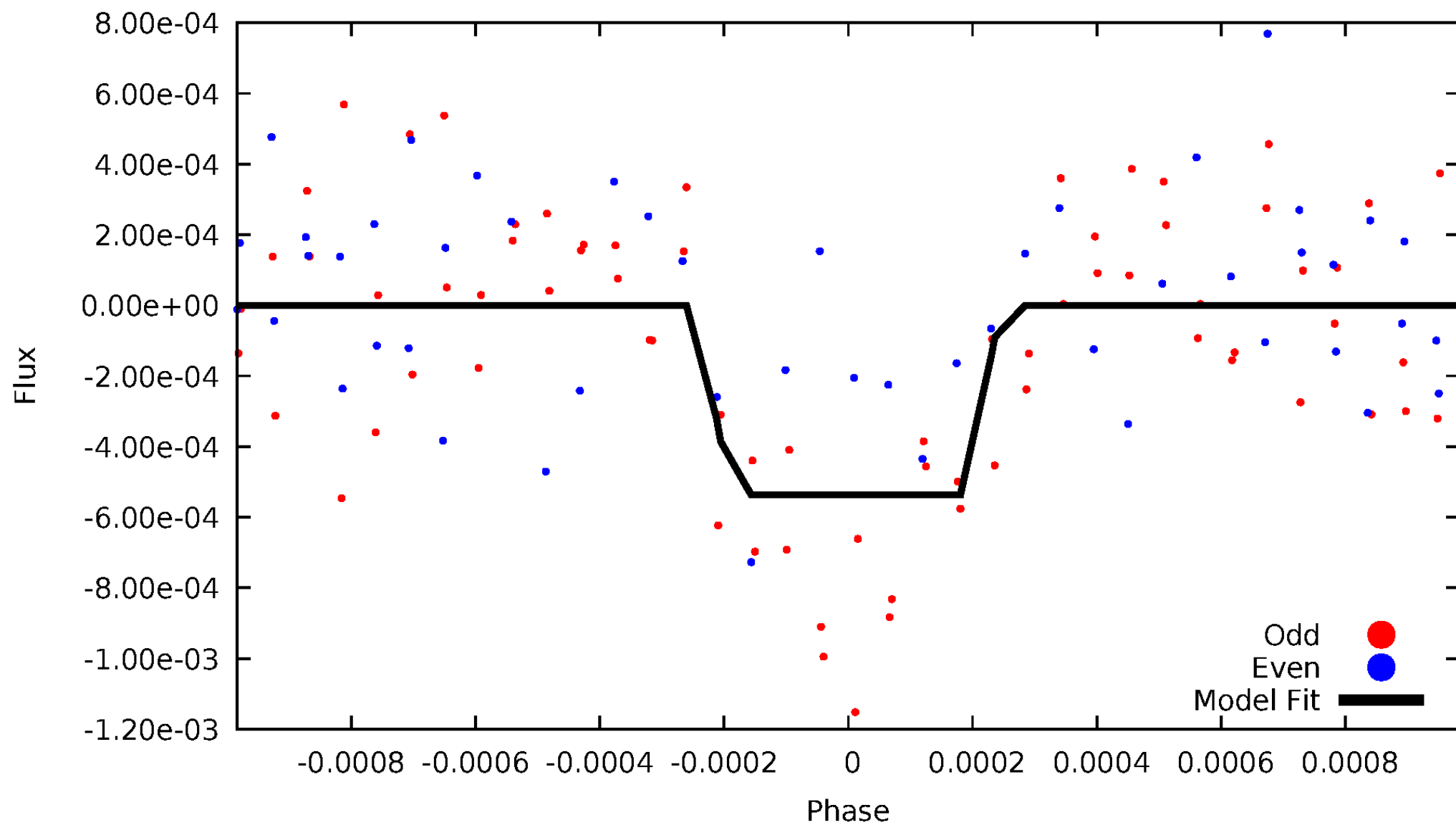
DV Odd/Even

TCE 011867733-02



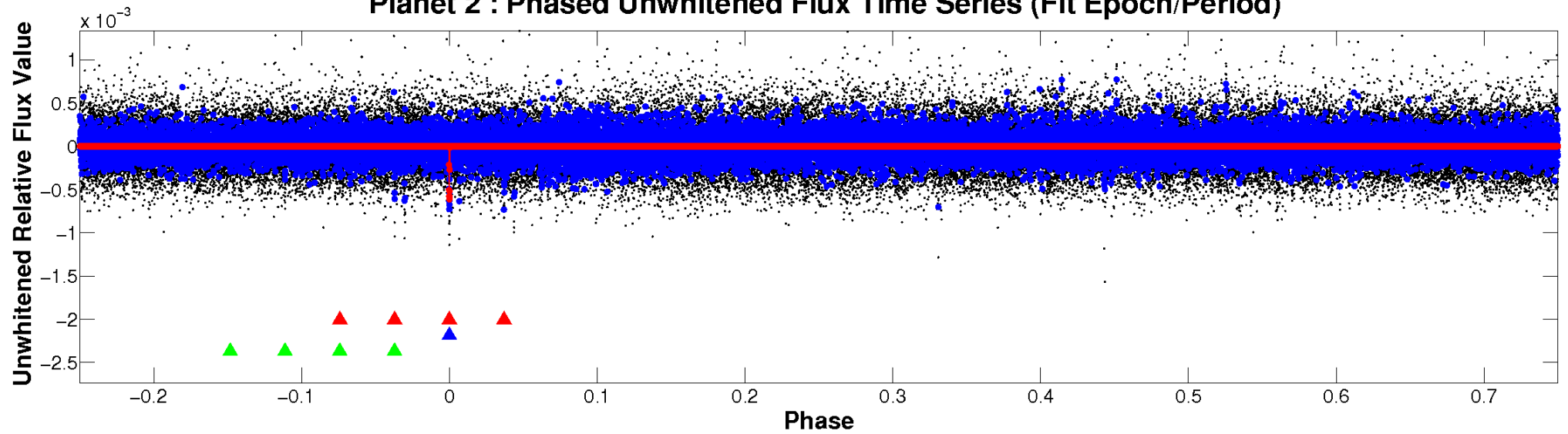
ALT Odd/Even

TCE 011867733-02

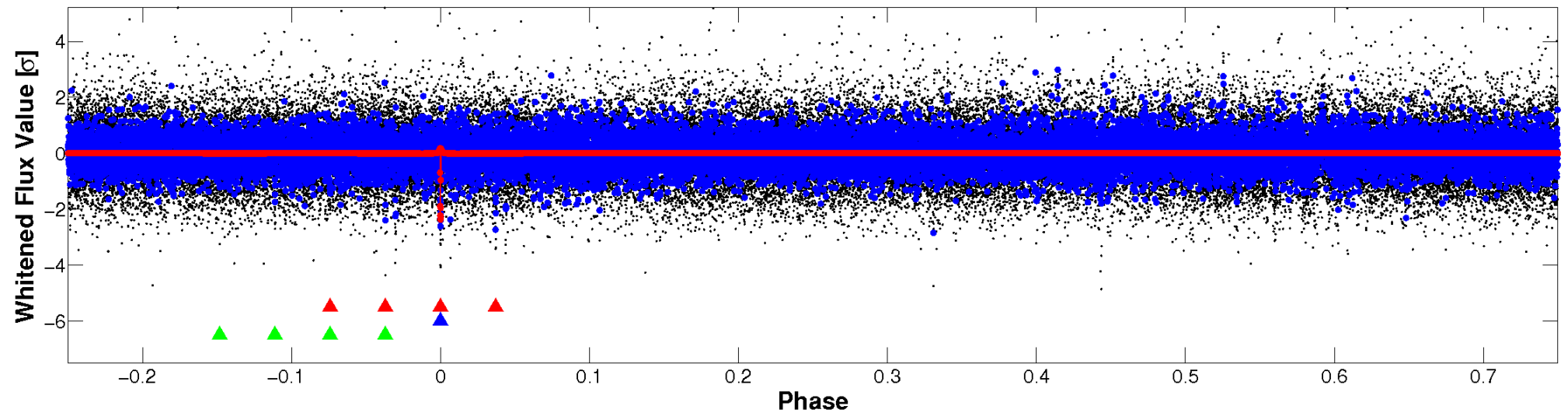


Non-Whitened Vs. Whitened Light Curve

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

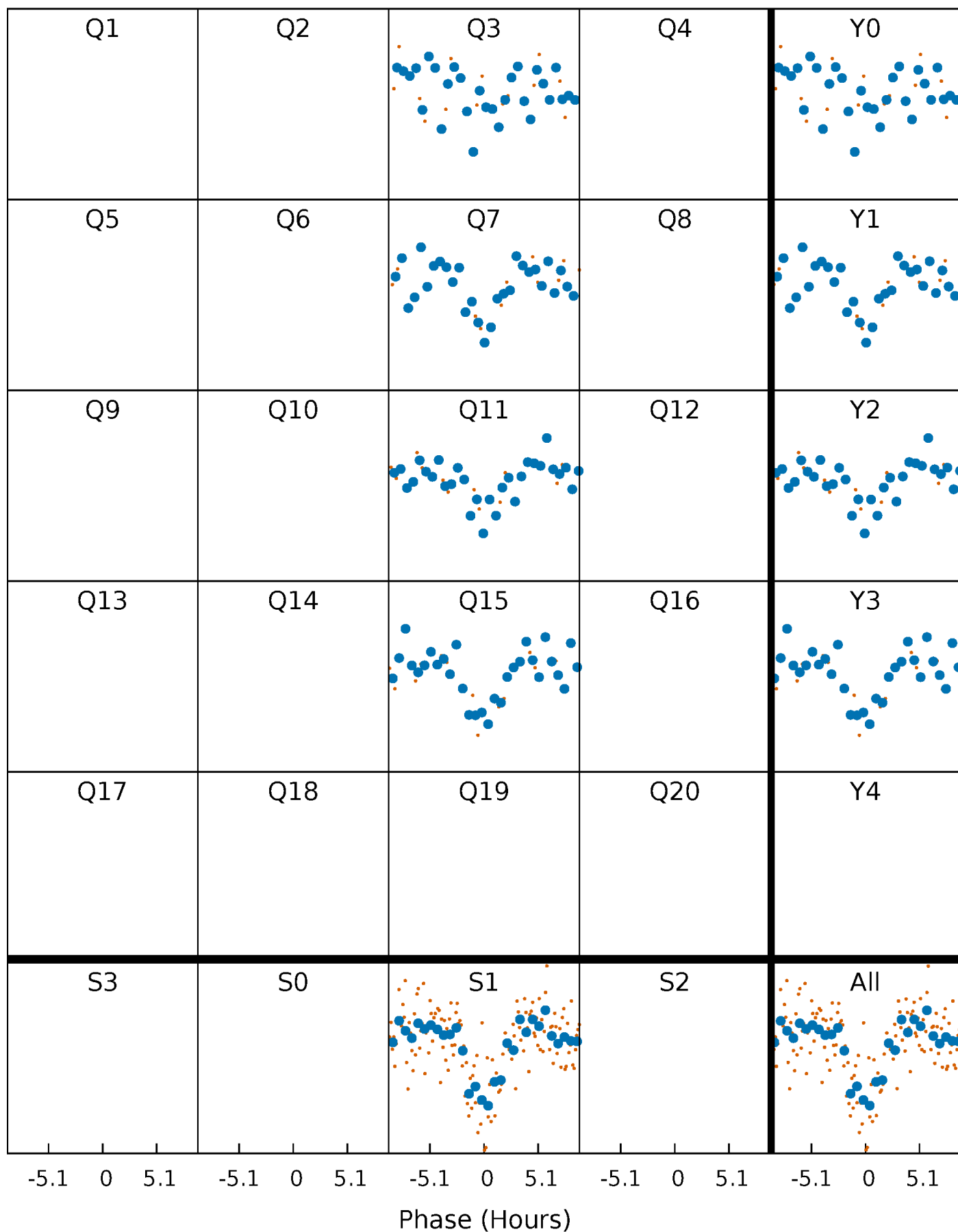


Planet 2 : Phased Whitened Flux Time Series (Fit Epoch/Period)



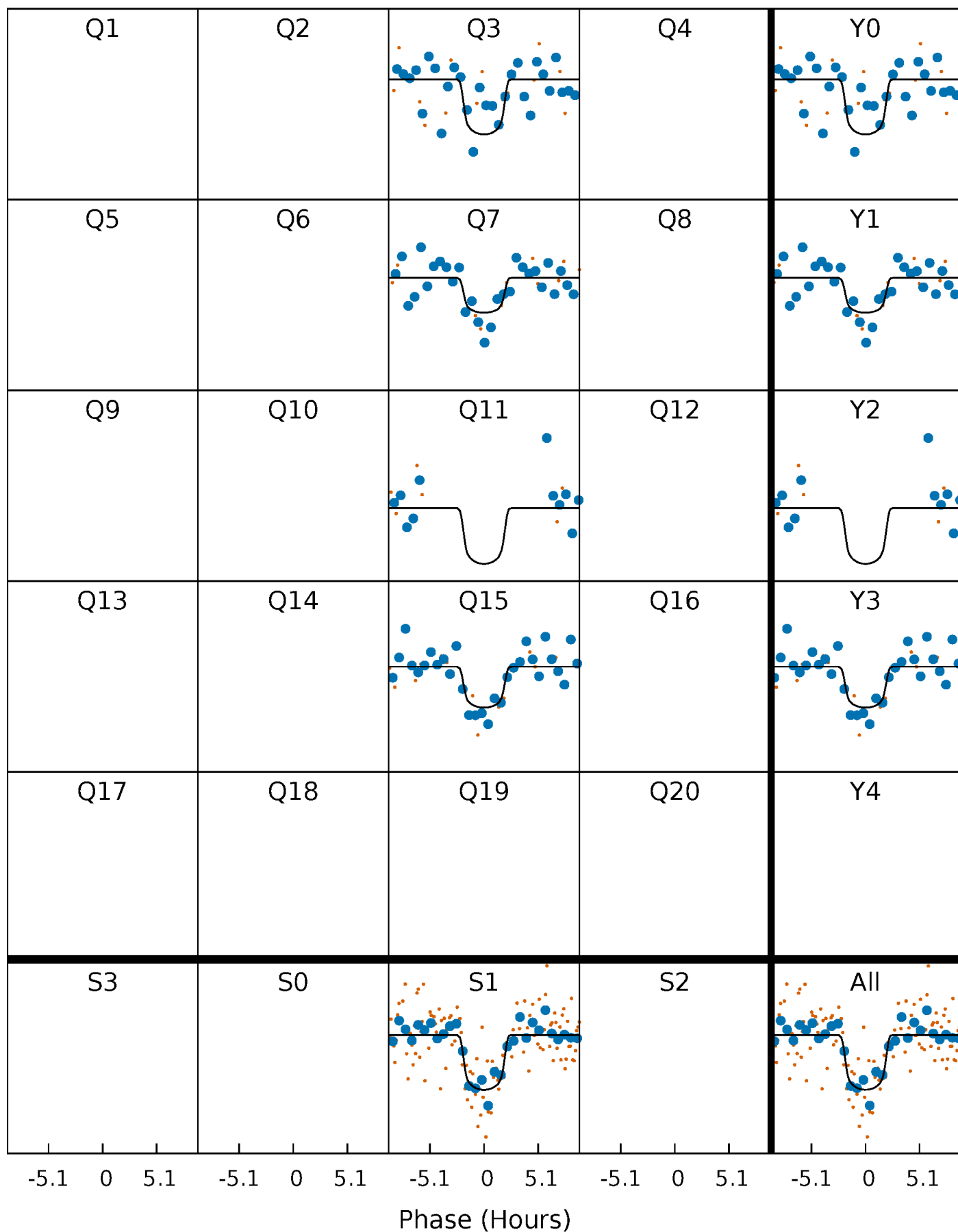
PDC Quarter-Phased Transit Curves

TCE 011867733-02 $P=370.630062$ Days $T_0=326.353600$ (BKJD)



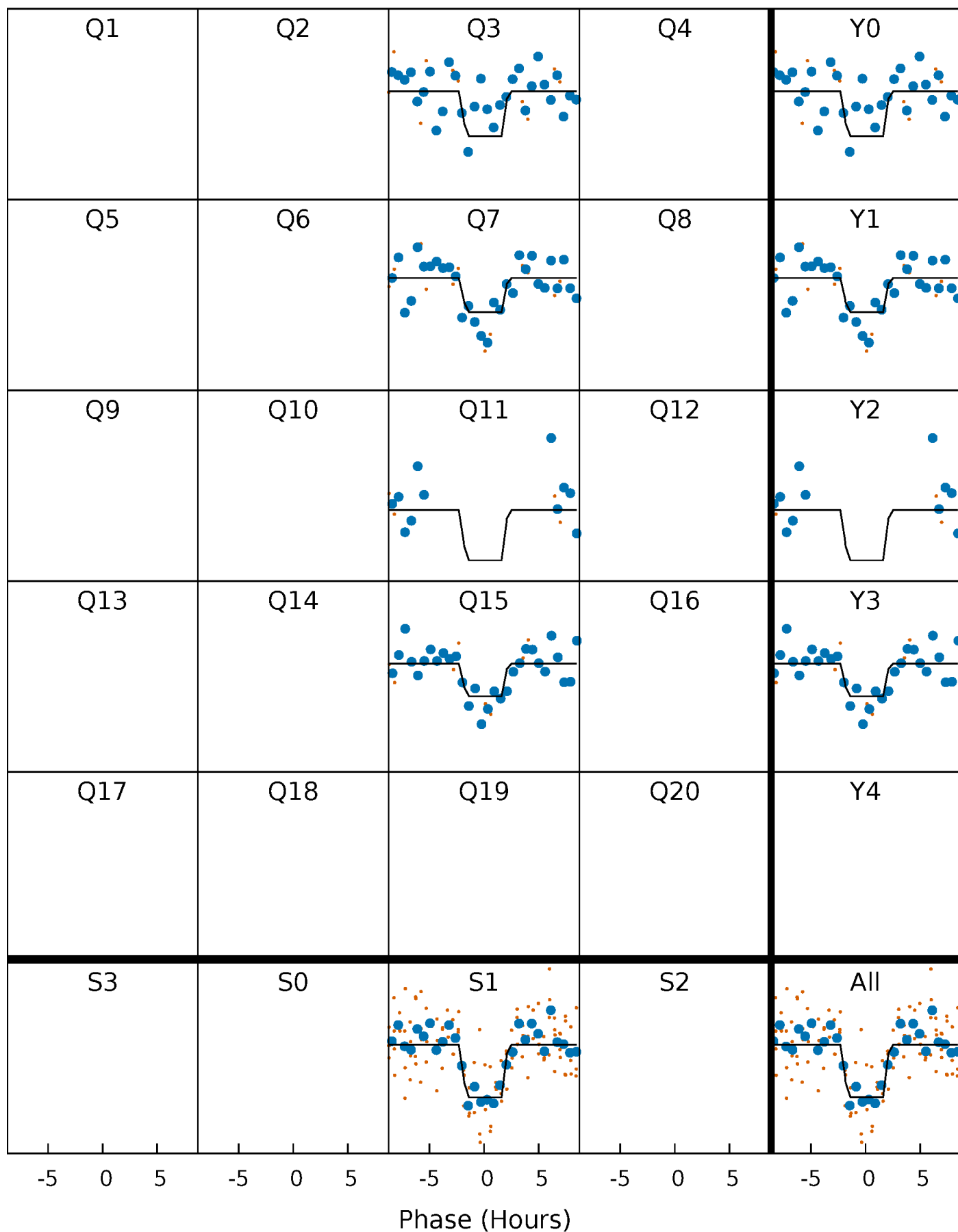
DV Quarter-Phased Transit Curves

TCE 011867733-02 $P=370.630062$ Days $T_0=326.353600$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

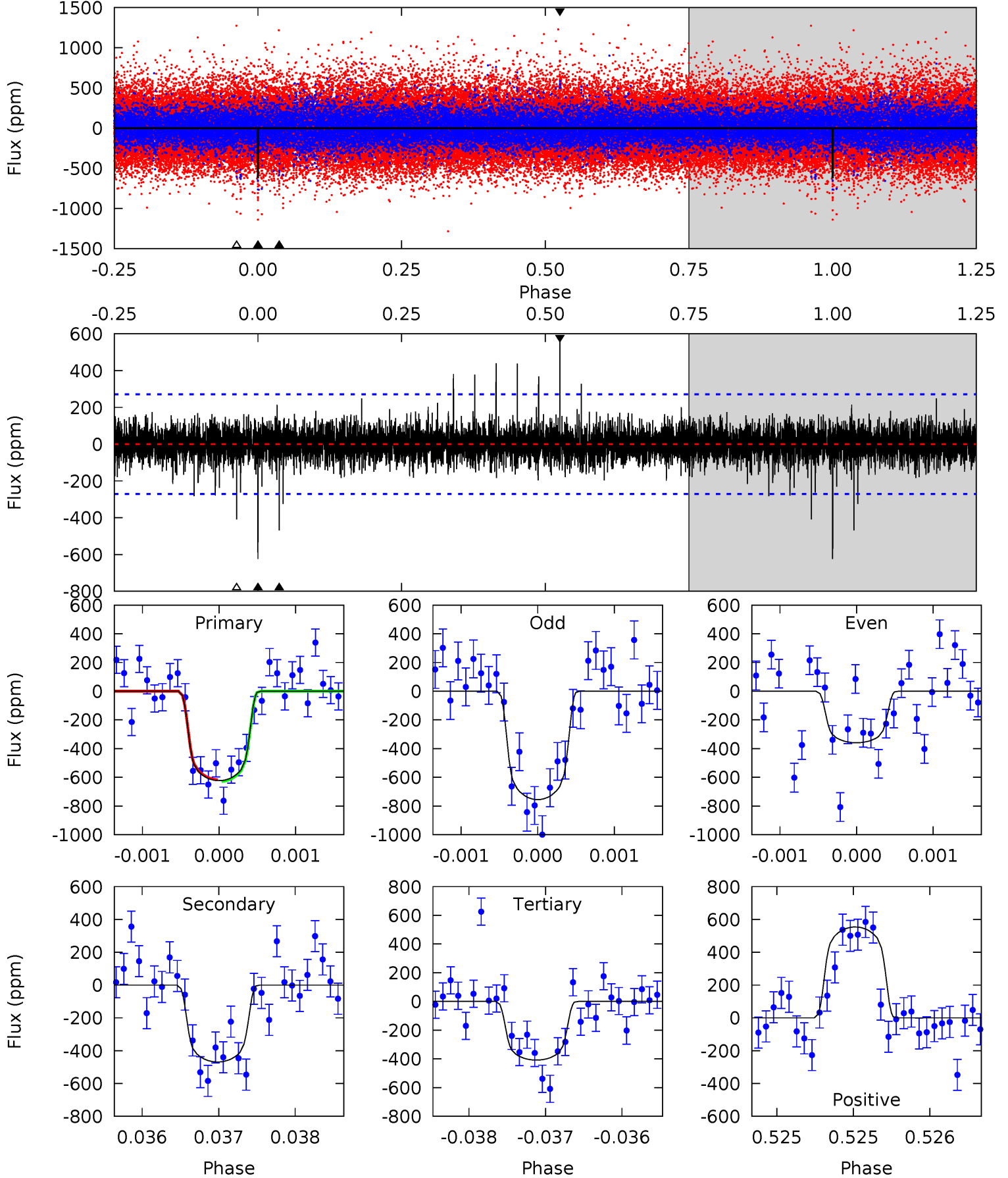
TCE 011867733-02 P=370.623911 Days $T_0=326.362859$ (BKJD)



DV Model-Shift Uniqueness Test

011867733-02, P = 370.630062 Days, E = 326.353600 Days

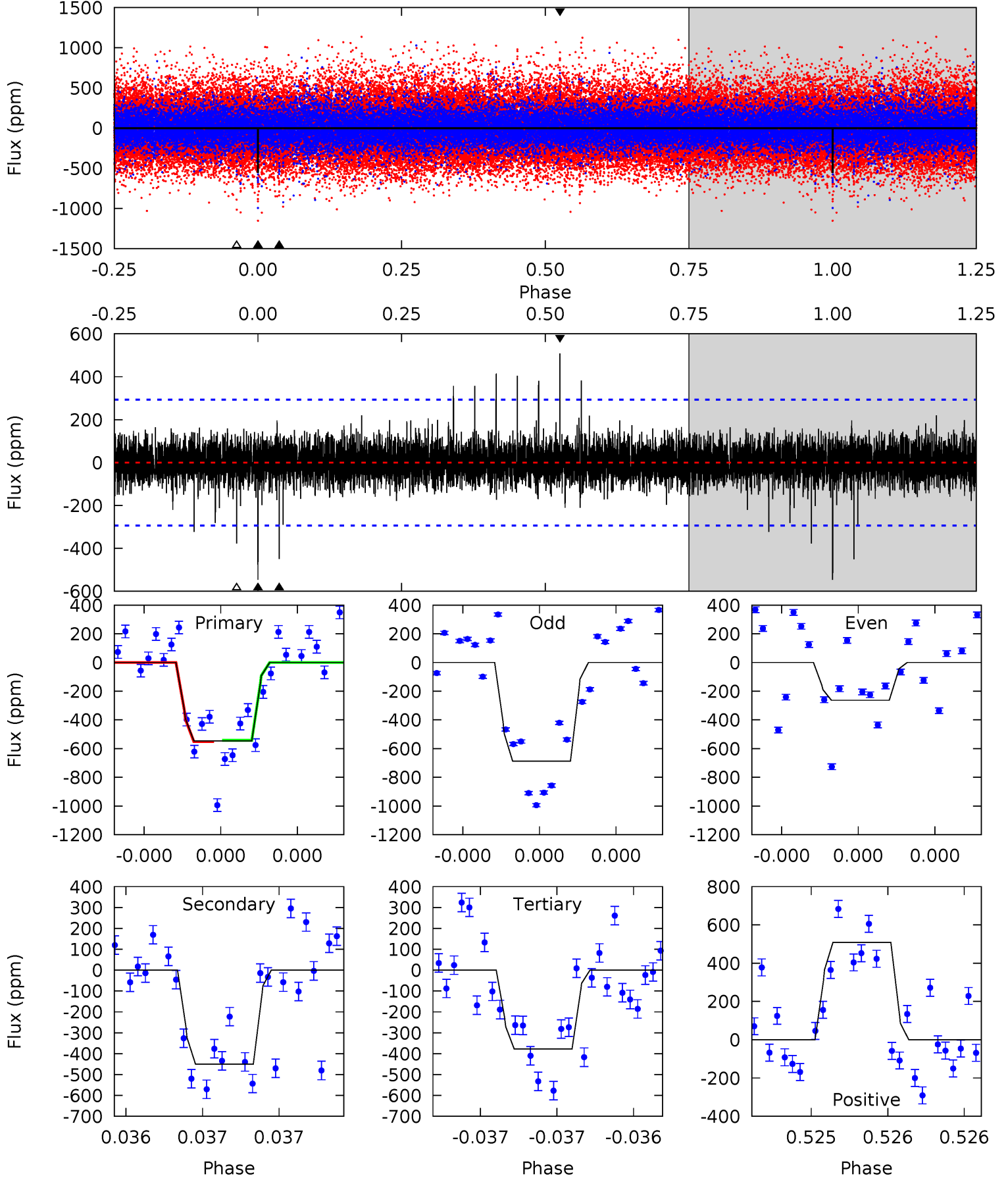
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
12.8	9.62	8.38	11.4	5.56	3.46	1.28	4.41	1.42	1.24	-1.75	3.79	0.83	0.47	0.12



Alt Model-Shift Uniqueness Test

011867733-02, P = 370.623911 Days, E = 326.362859 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
10.4	8.58	7.20	9.71	5.59	3.51	1.11	3.22	0.72	1.38	-1.12	3.81	0.84	0.48	0.09



Stellar Parameters For KIC 011867733

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	5903^{+158}_{-193}	$4.445^{+0.067}_{-0.202}$	$-0.040^{+0.250}_{-0.300}$	$0.994^{+0.291}_{-0.125}$	$1.005^{+0.127}_{-0.127}$	$1.441^{+0.524}_{-0.742}$
	+3%/-3%	+2%/-5%	+625%/-750%	+29%/-13%	+13%/-13%	+36%/-51%
Source	PHO1	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 011867733-02 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	A_{obs}
DV	-469 ± 49	$3.05^{+0.80}_{-0.76}$	369^{+28}_{-21}	5361^{+693}_{-498}	28605^{+19929}_{-11336}
Alt.	-450 ± 52	$2.62^{+0.70}_{-0.71}$	368^{+25}_{-20}	5659^{+943}_{-544}	37320^{+30918}_{-15101}

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

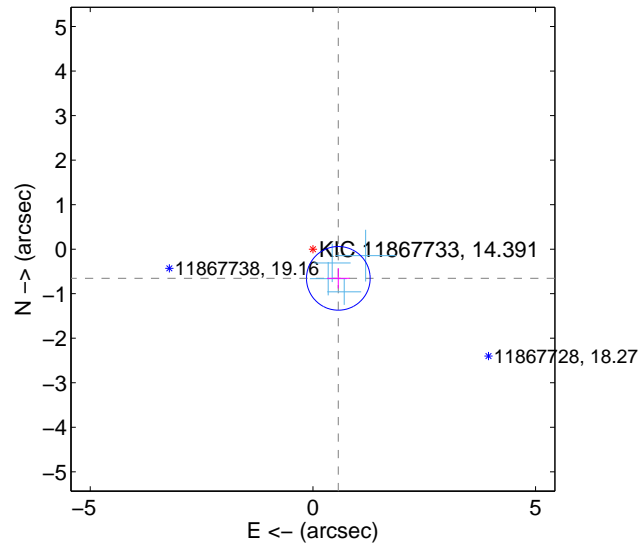
Supplemental centroid analysis for 011867733-02. Kepler magnitude: 14.39. Transit SNR 9.93

There are 4 quarters with good PRF difference image offsets

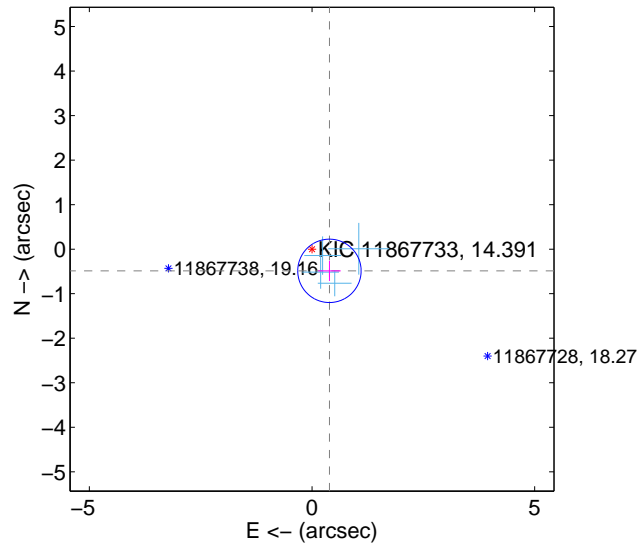
The direct PRF centroid is offset from the target star catalog position by about 0.27 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.869 ± 0.238	3.65	-0.571 ± 0.253	-0.655 ± 0.226
PRF-fit source offset from KIC position	0.625 ± 0.237	2.63	-0.391 ± 0.253	-0.487 ± 0.226
photometric centroid source offset	1.22 ± 1.10	1.10	0.84 ± 1.15	0.89 ± 1.06

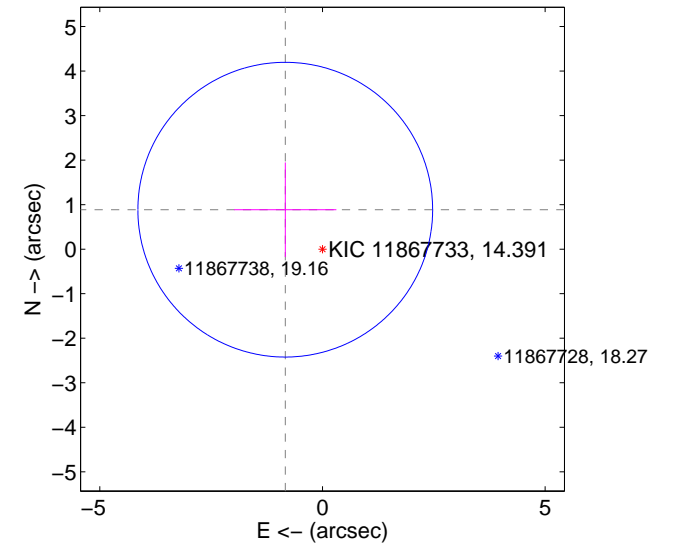
offset from difference PRF-fit to OOT PRF-fit



offset from difference PRF-fit to KIC position

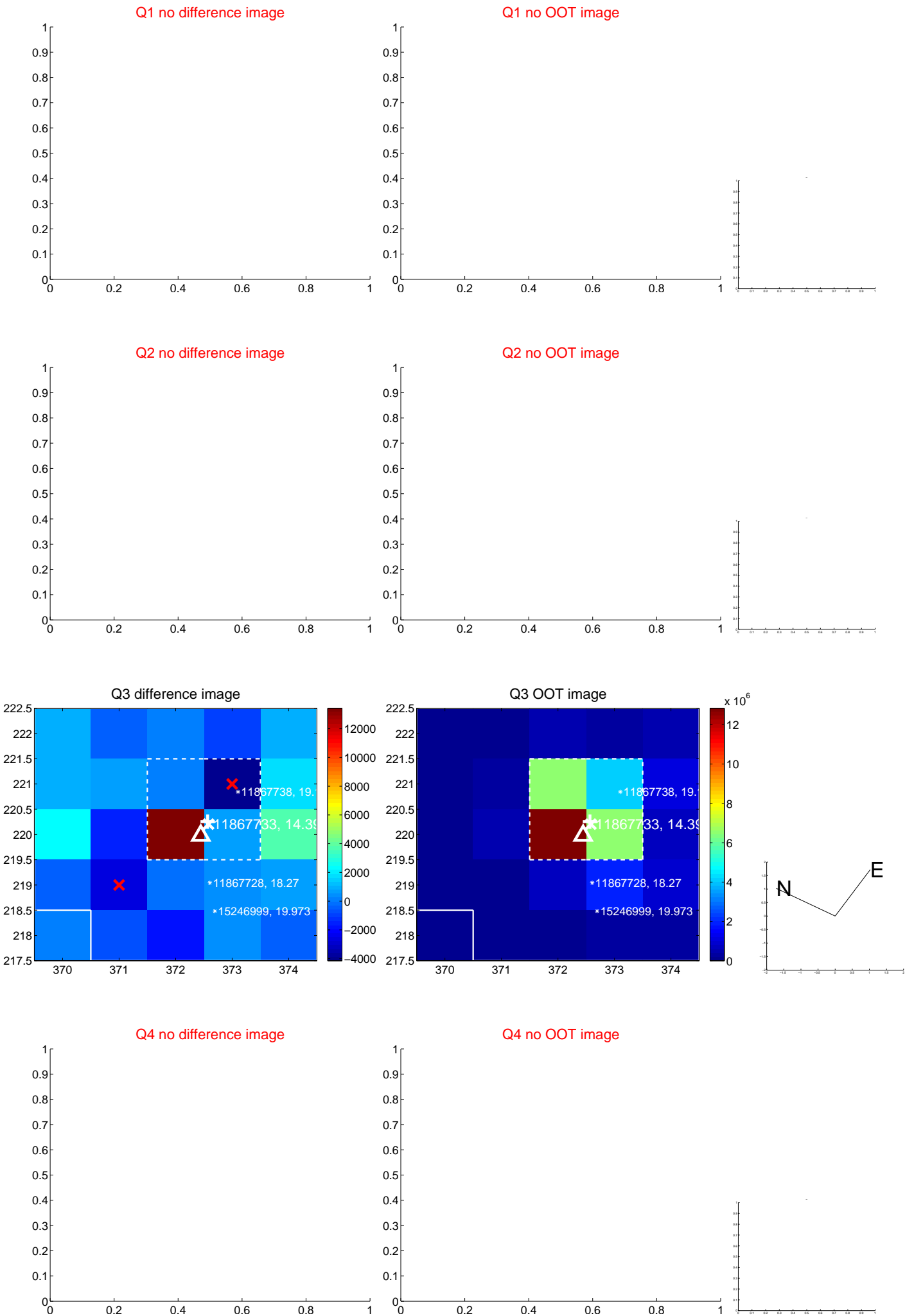


offset from photometric centroids

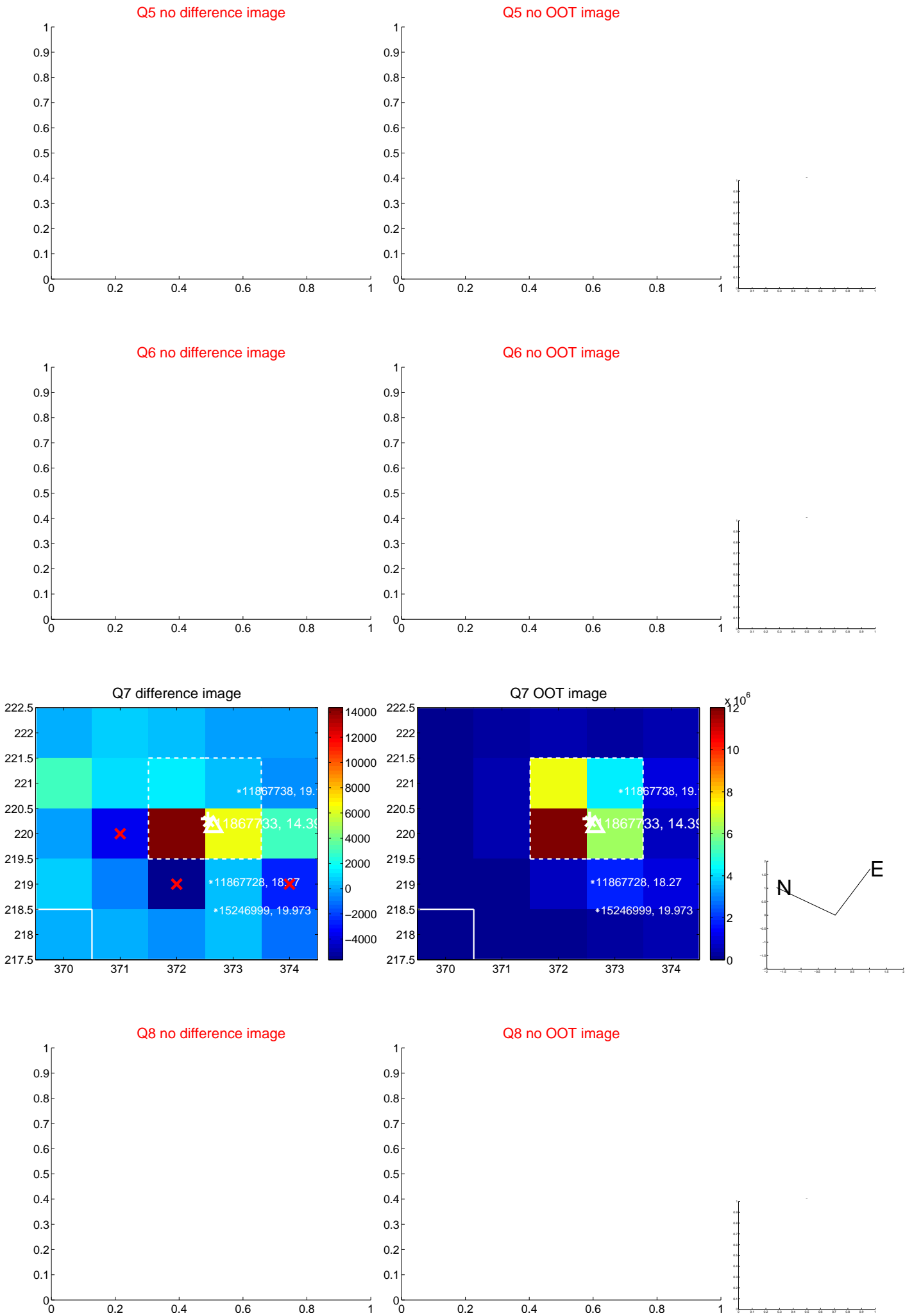


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets**; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

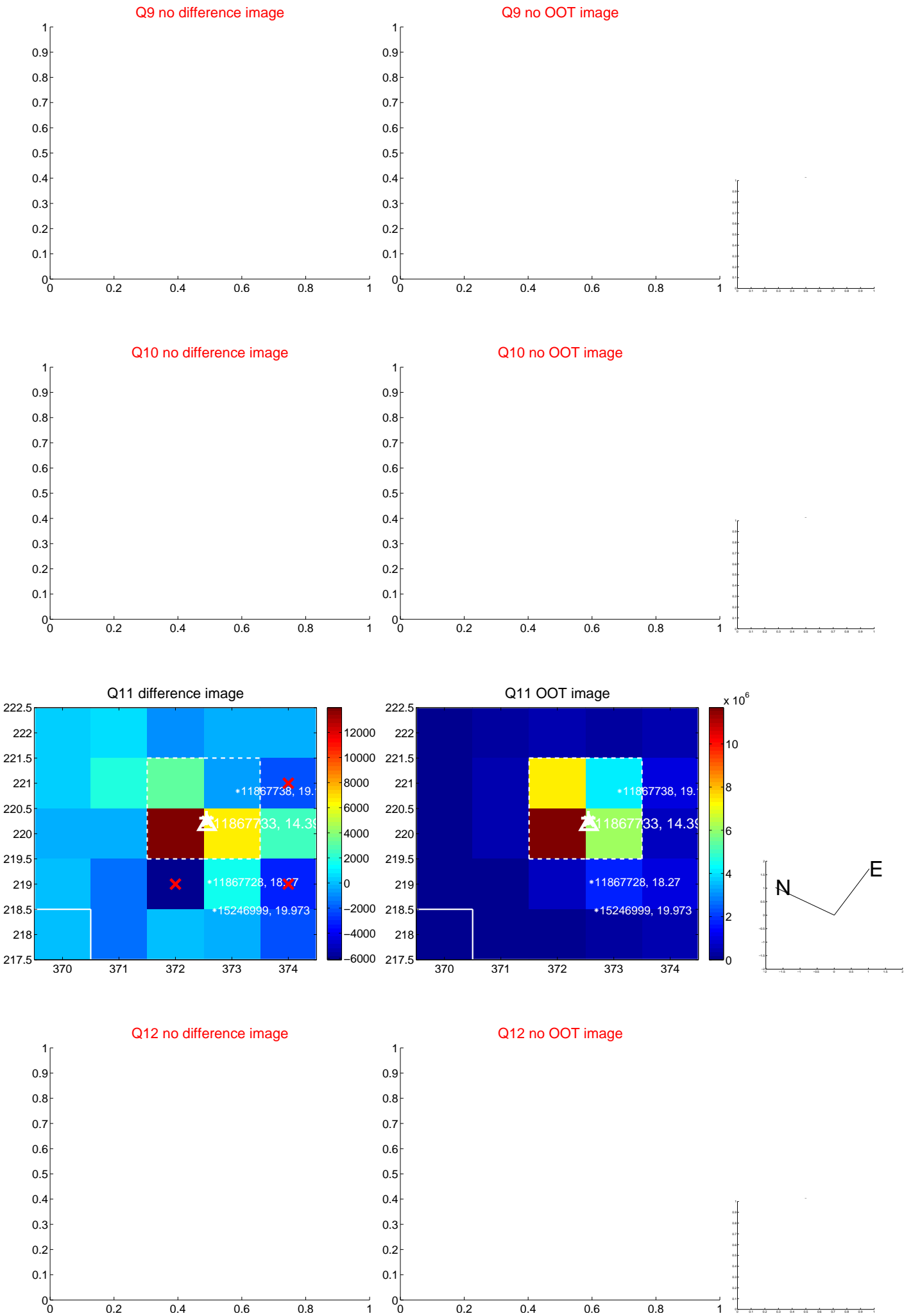
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



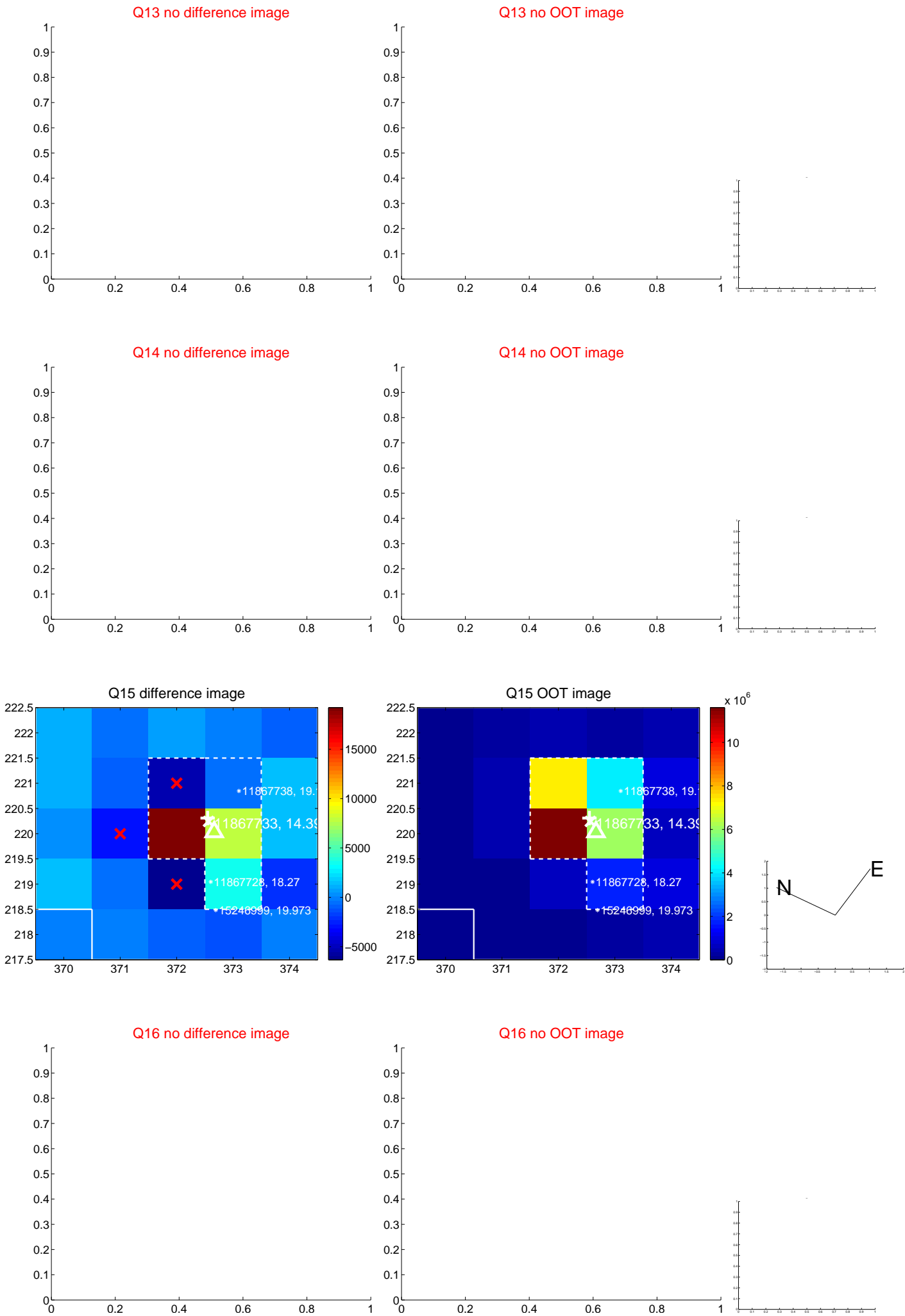
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



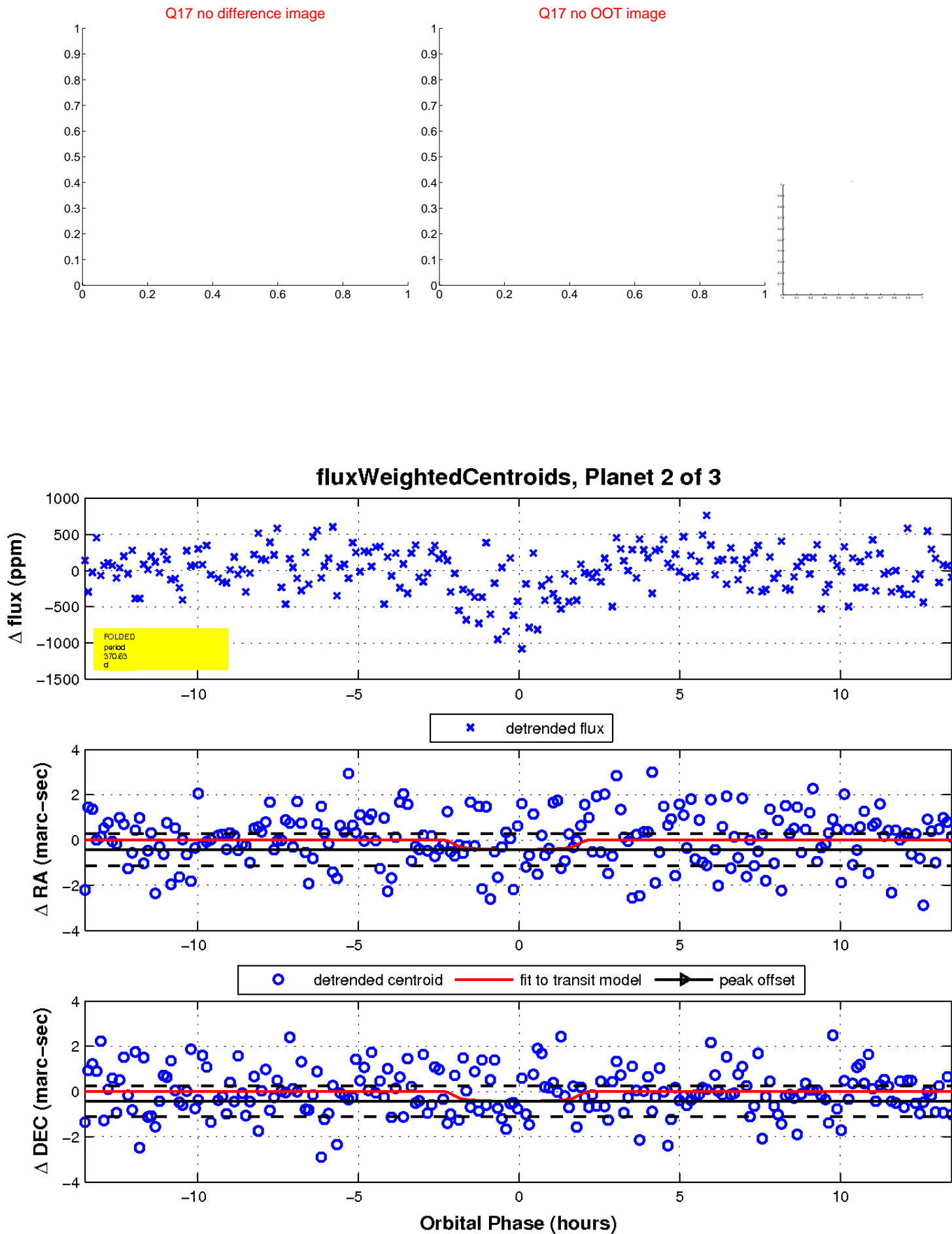
white ×: KIC target position; +: OOT centroid; △: difference centroid. red ✕: large negative pixel value.



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

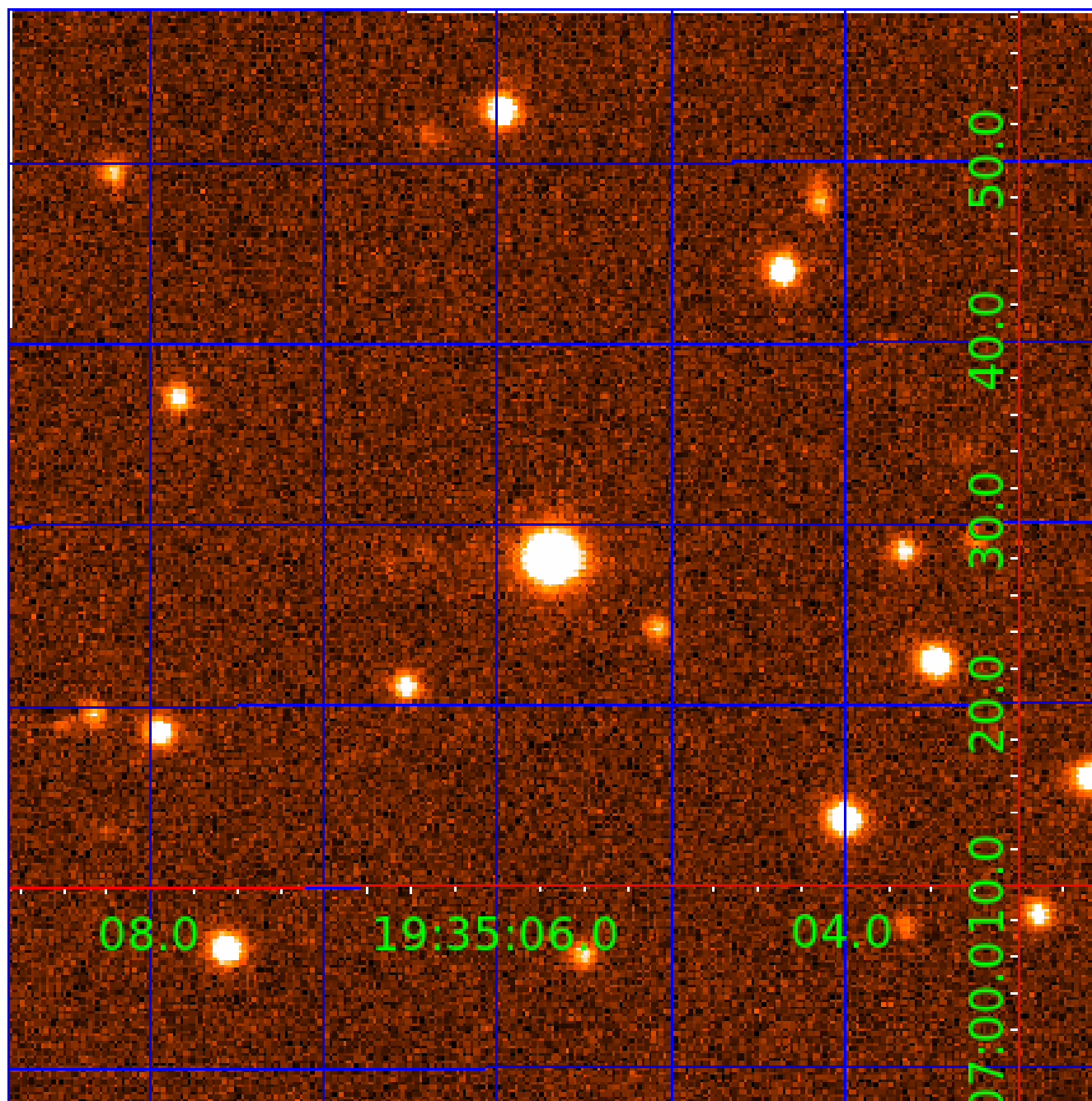


white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



UKIRT Image

Declination



KIC 011867733

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})
011867733-01	OBS	8294.01	384.354254	298.906325	707.1	3.723	11.1	11.2	0.99	5903	3.04	1.00
011867733-02	OBS	No	370.630062	326.353600	613.3	4.503	9.3	9.9	0.99	5903	2.91	1.05
011867733-03	OBS	No	384.363715	271.411145	439.6	4.590	8.1	8.5	0.99	5903	2.27	1.00

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
011867733-01	OBS	FP	0.00	0	1	0	0	HAS_SEC_TCE
011867733-02	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_MARSHALL—MOD_POS_ALT
011867733-03	OBS	FP	0.00	1	1	0	0	IS_SEC_TCE—CENT_FEW_MEAS

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

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

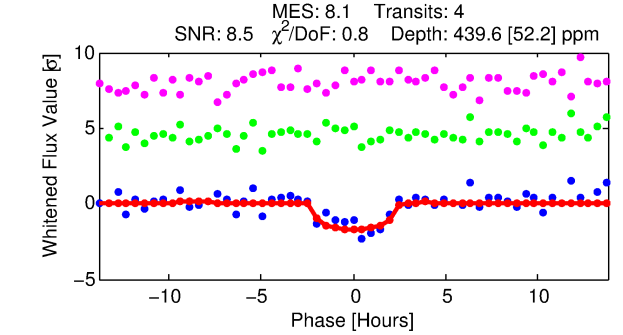
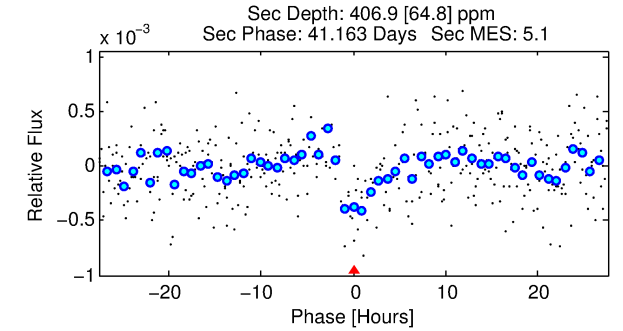
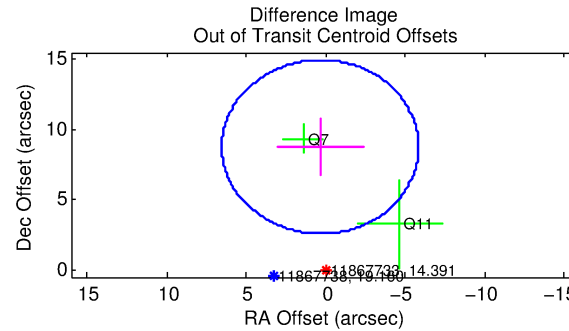
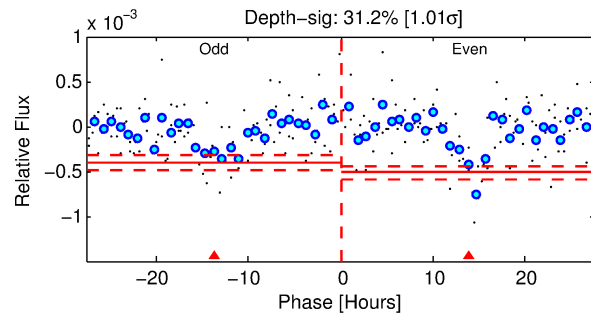
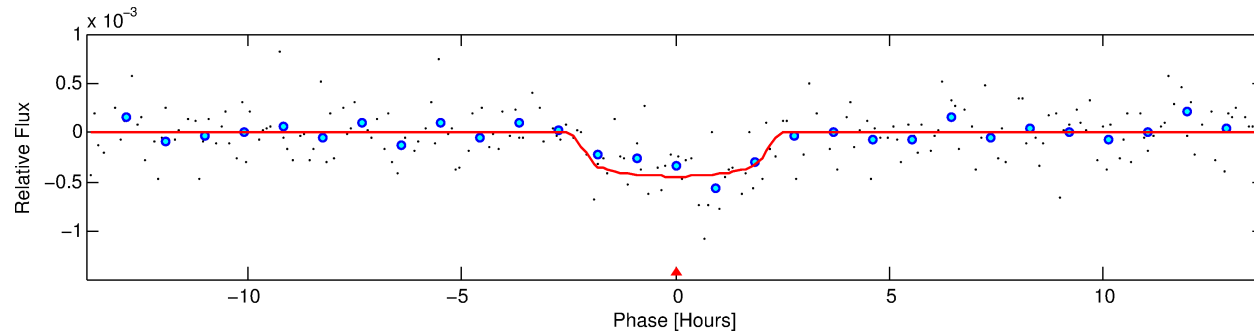
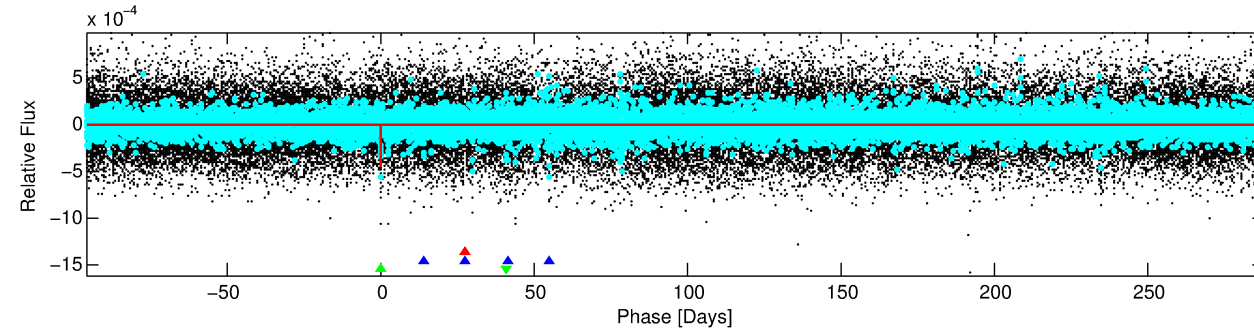
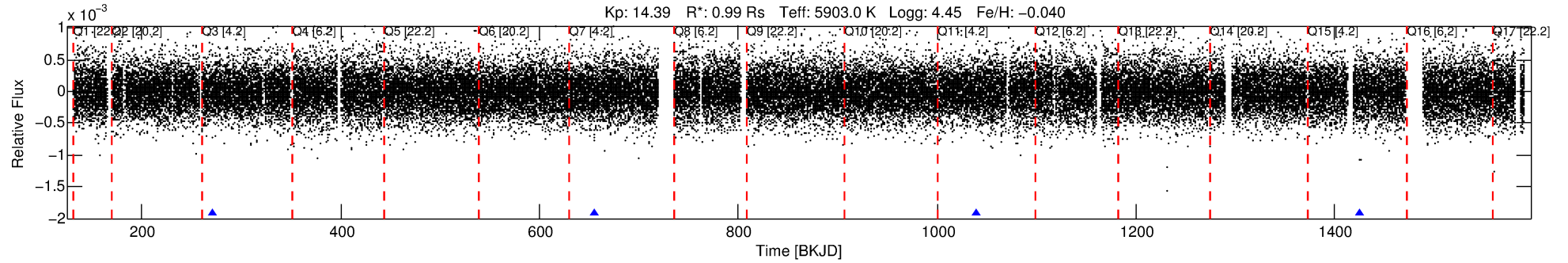
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 011867733-03

No Significant Match Found

DV One-Page Summary

KIC: 11867733 Candidate: 3 of 3 Period: 384.364 d



DV Fit Results:

Period = 384.36372 [0.00476] d
Epoch = 271.4111 [0.0091] BKJD
Rp/R* = 0.0210 [0.0301]
a/R* = 434.39 [2913.14]
b = 0.76 [3.73]
Seff = 1.00 [0.39]
Teff = 255 [25] K
Rp = 2.27 [3.33] Re
a = 1.0362 [0.2583] AU
Ag = 46472.41 [134820.18] [0.34 σ]
Teffp = 5790 [4170] K [1.33 σ]

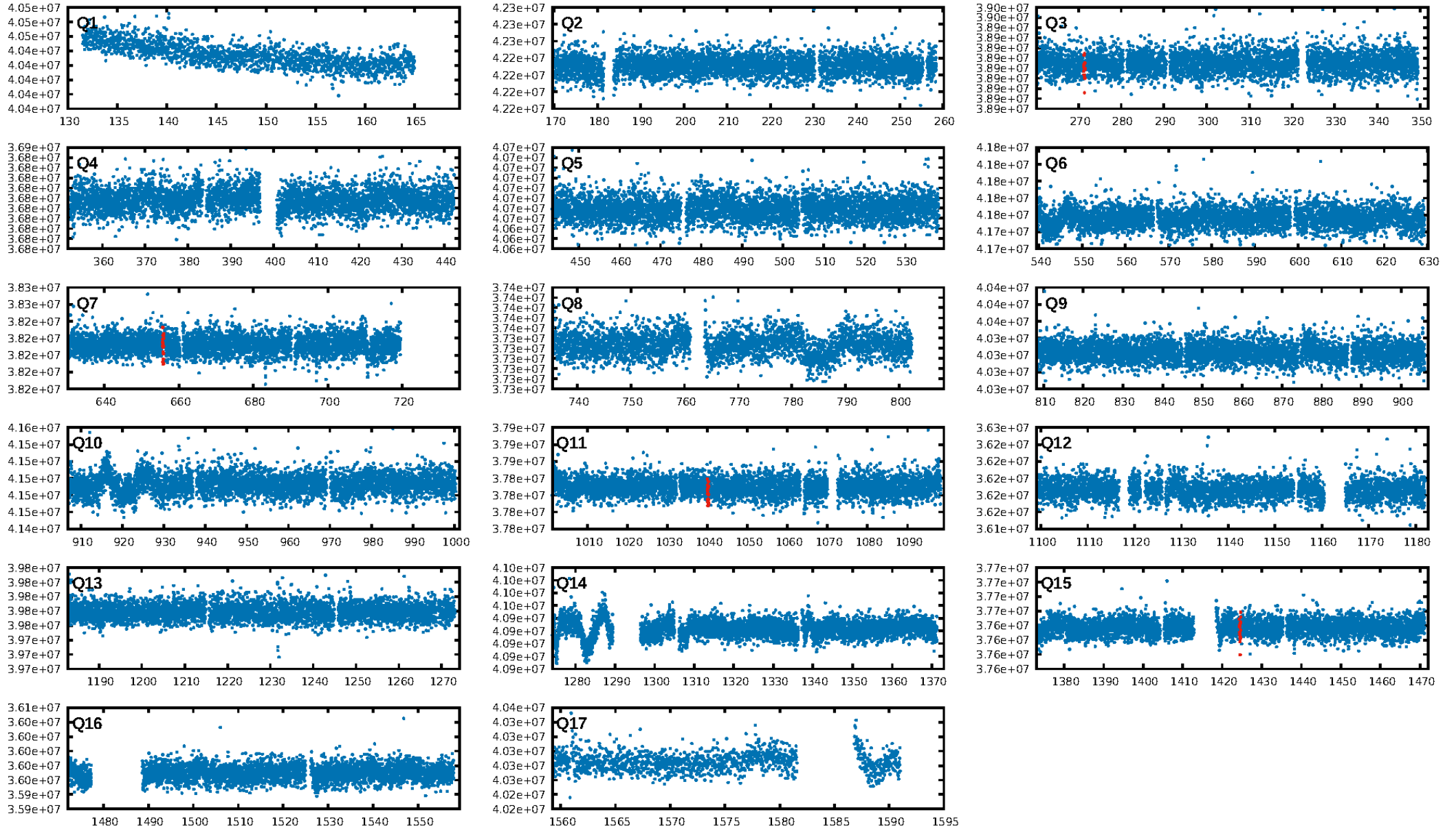
DV Diagnostic Results:

ShortPeriod-sig: 3.1% [0.04 σ]
LongPeriod-sig: N/A
ModelChiSquare2-sig: 94.0%
ModelChiSquareGof-sig: 100.0%
Bootstrap-pfa: 2.59e-12
RollingBand-fgt: 1.00 [4/4]
GhostDiagnostic-chr: -47.04
Centroid-sig: 17.2%
Centroid-so: 2.166 arcsec [1.48 σ]
OotOffset-rm: 8.769 arcsec [4.25 σ]
KicOffset-rm: 8.940 arcsec [2.91 σ]
OotOffset-st: 0/2/0/0 [2]
KicOffset-st: 0/2/0/0 [2]
DiffImageQuality-fgm: 0.00 [0/2]
DiffImageOverlap-fno: 1.00 [3/3]

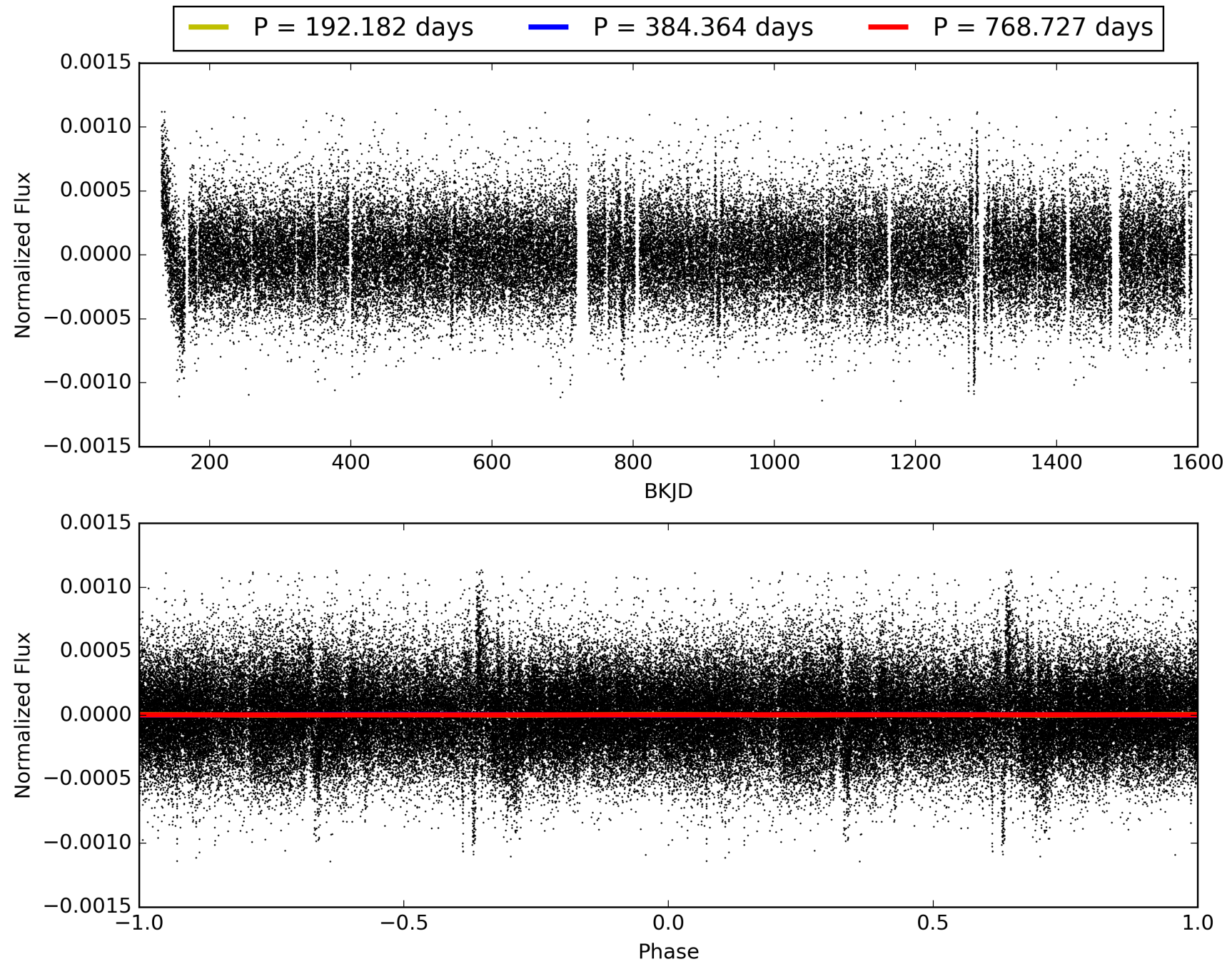
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 29-Jan-2016 03:03:36 Z

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

TCE 011867733-03, PDC Light Curves

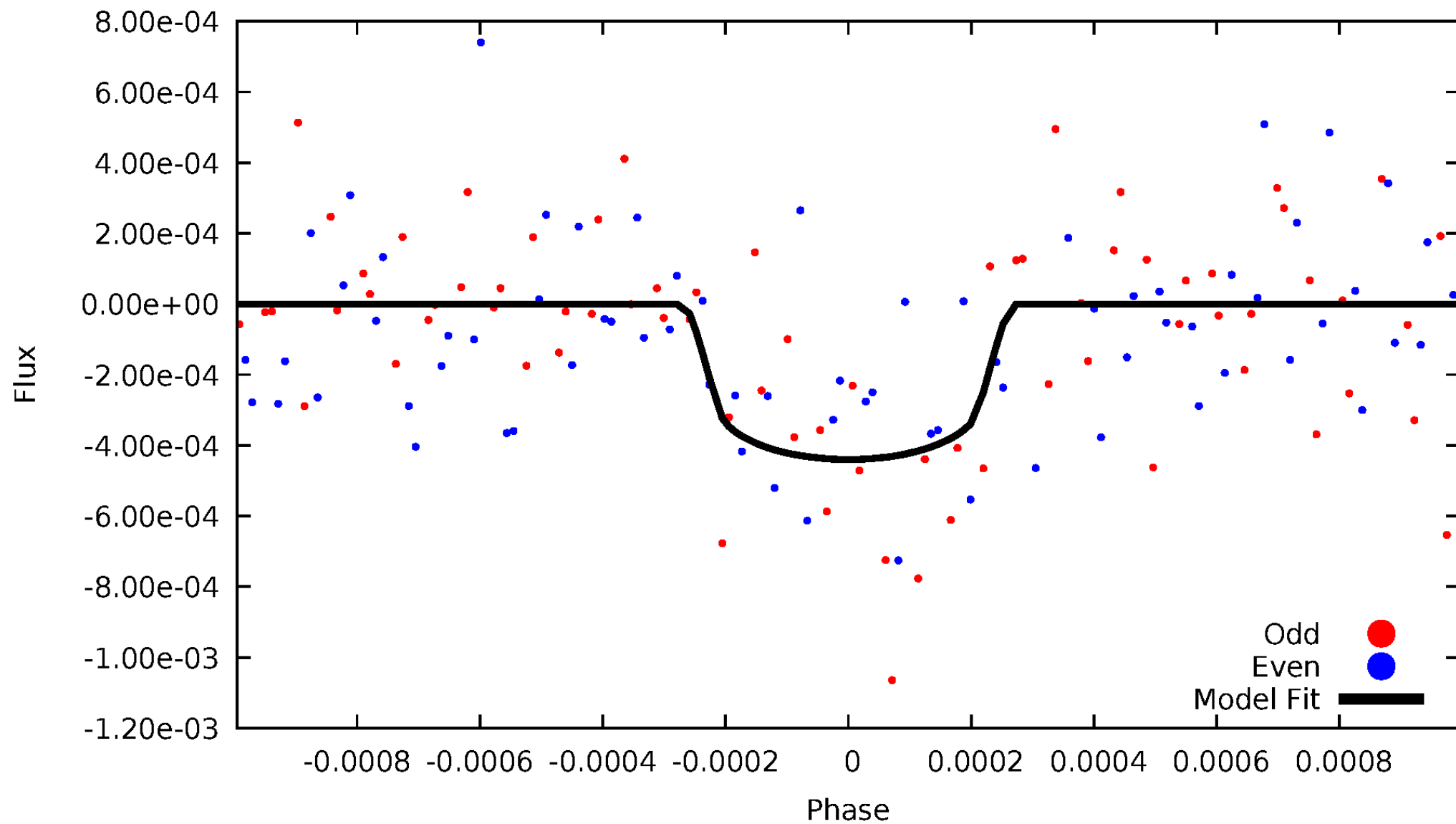


TCE 011867733-03



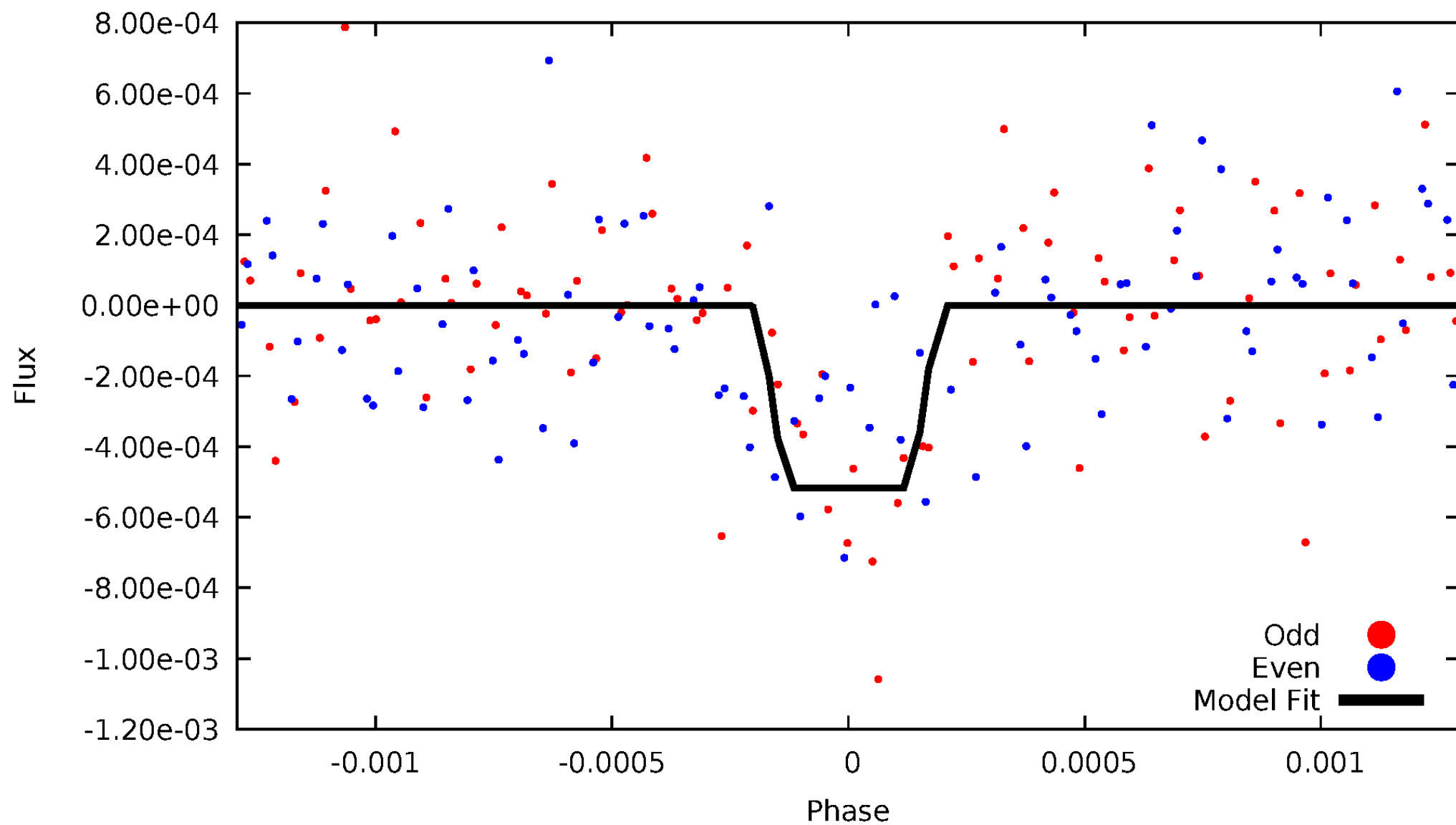
DV Odd/Even

TCE 011867733-03

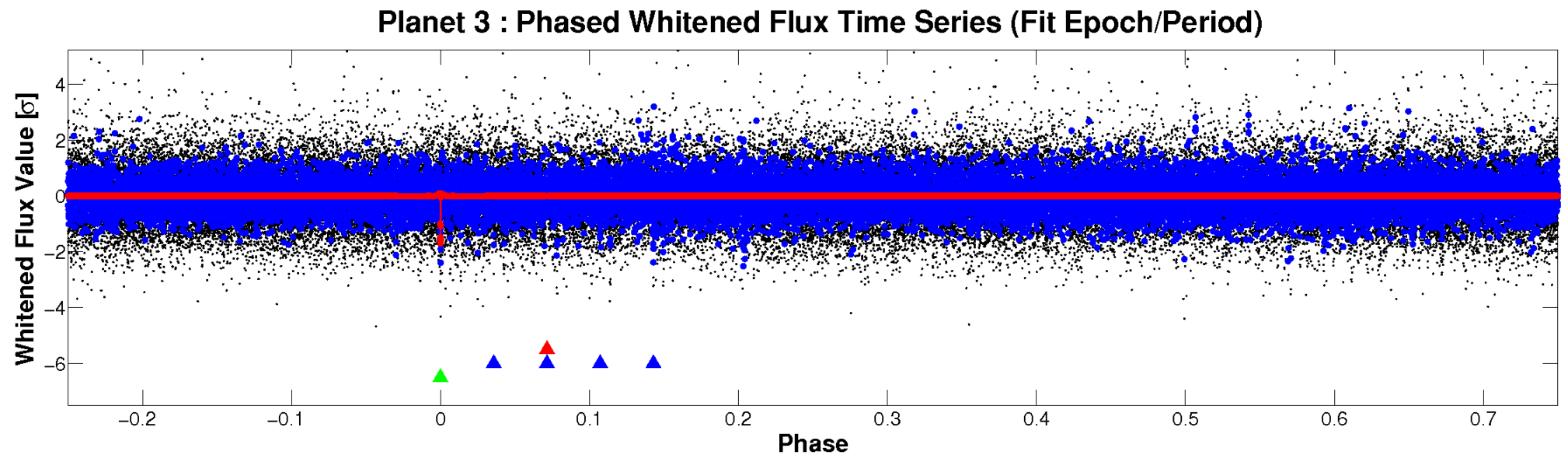
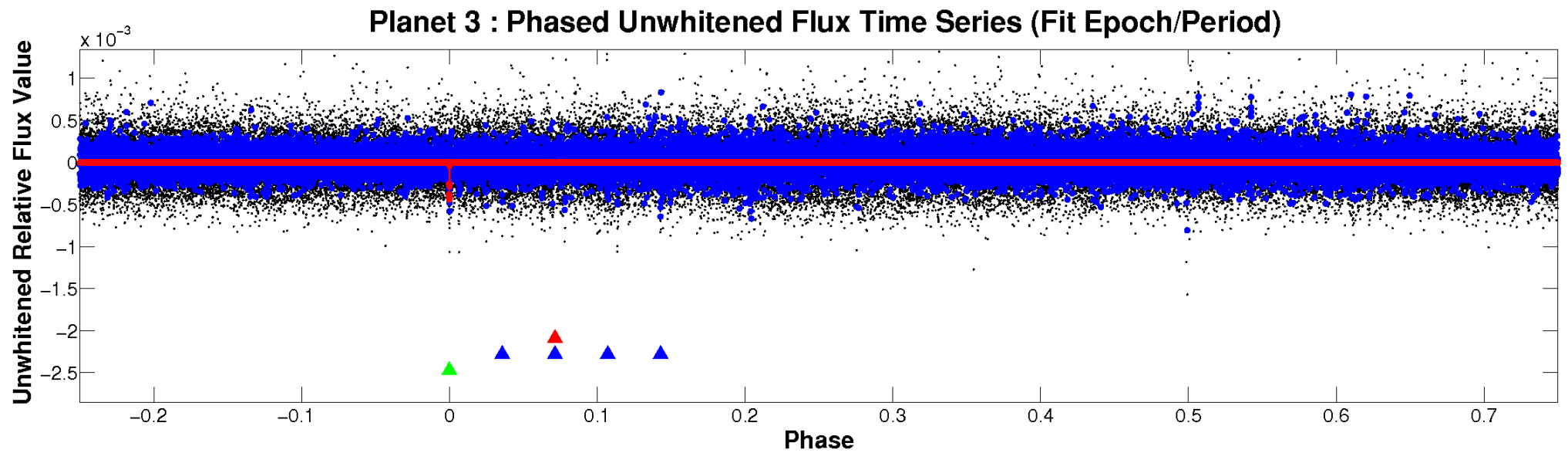


ALT Odd/Even

TCE 011867733-03

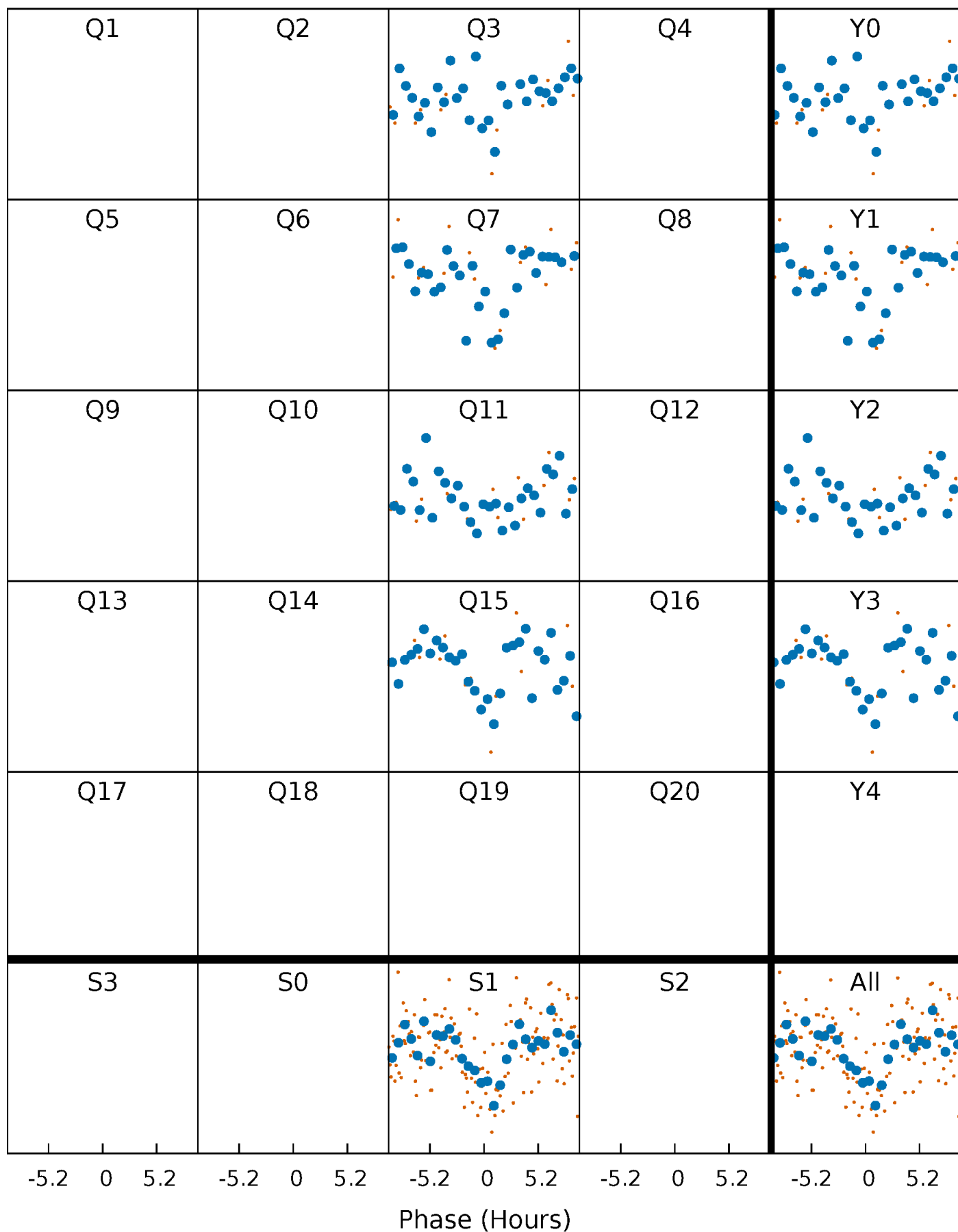


Non-Whitened Vs. Whitened Light Curve



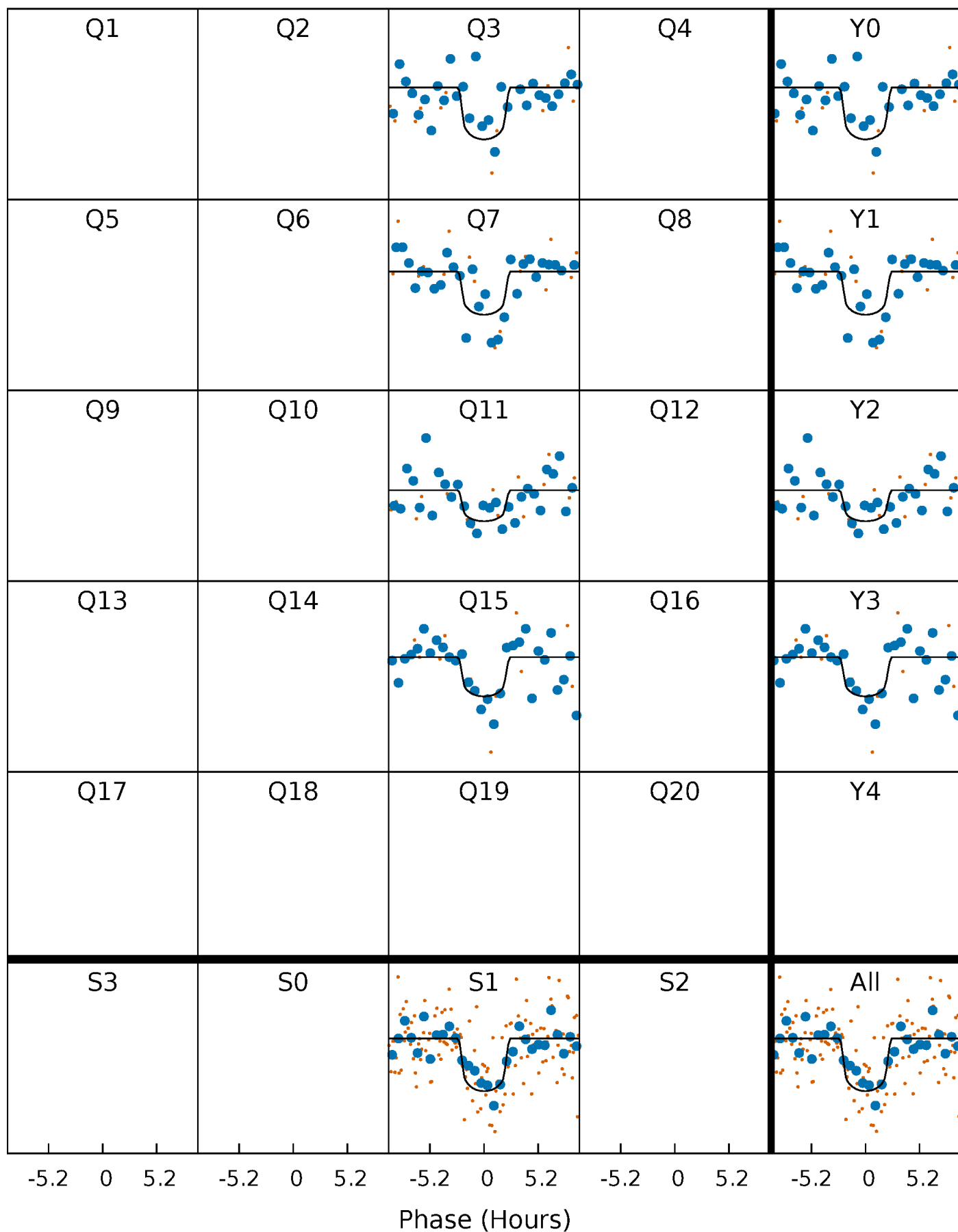
PDC Quarter-Phased Transit Curves

TCE 011867733-03 $P=384.363715$ Days $T_0=271.411145$ (BKJD)



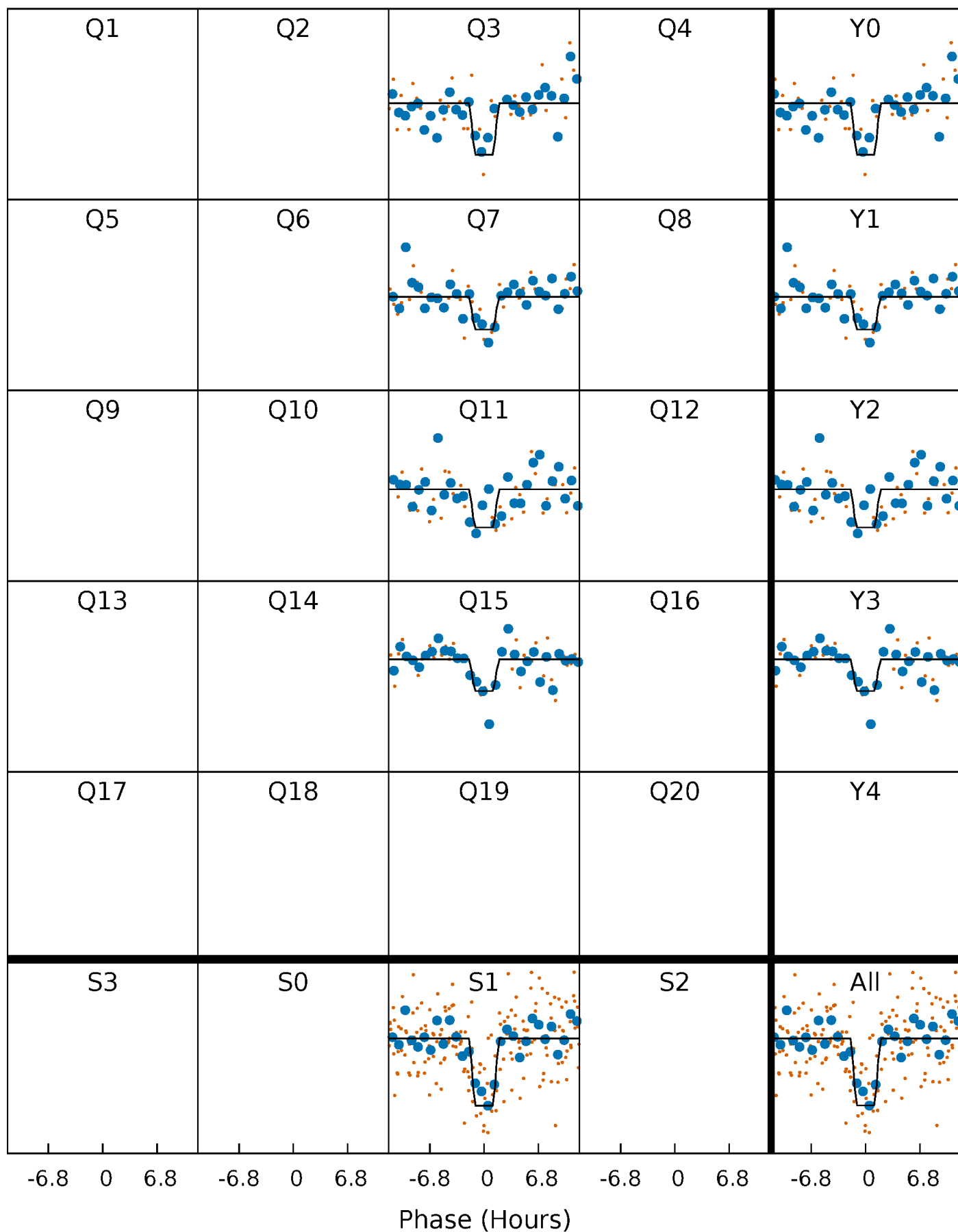
DV Quarter-Phased Transit Curves

TCE 011867733-03 $P=384.363715$ Days $T_0=271.411145$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

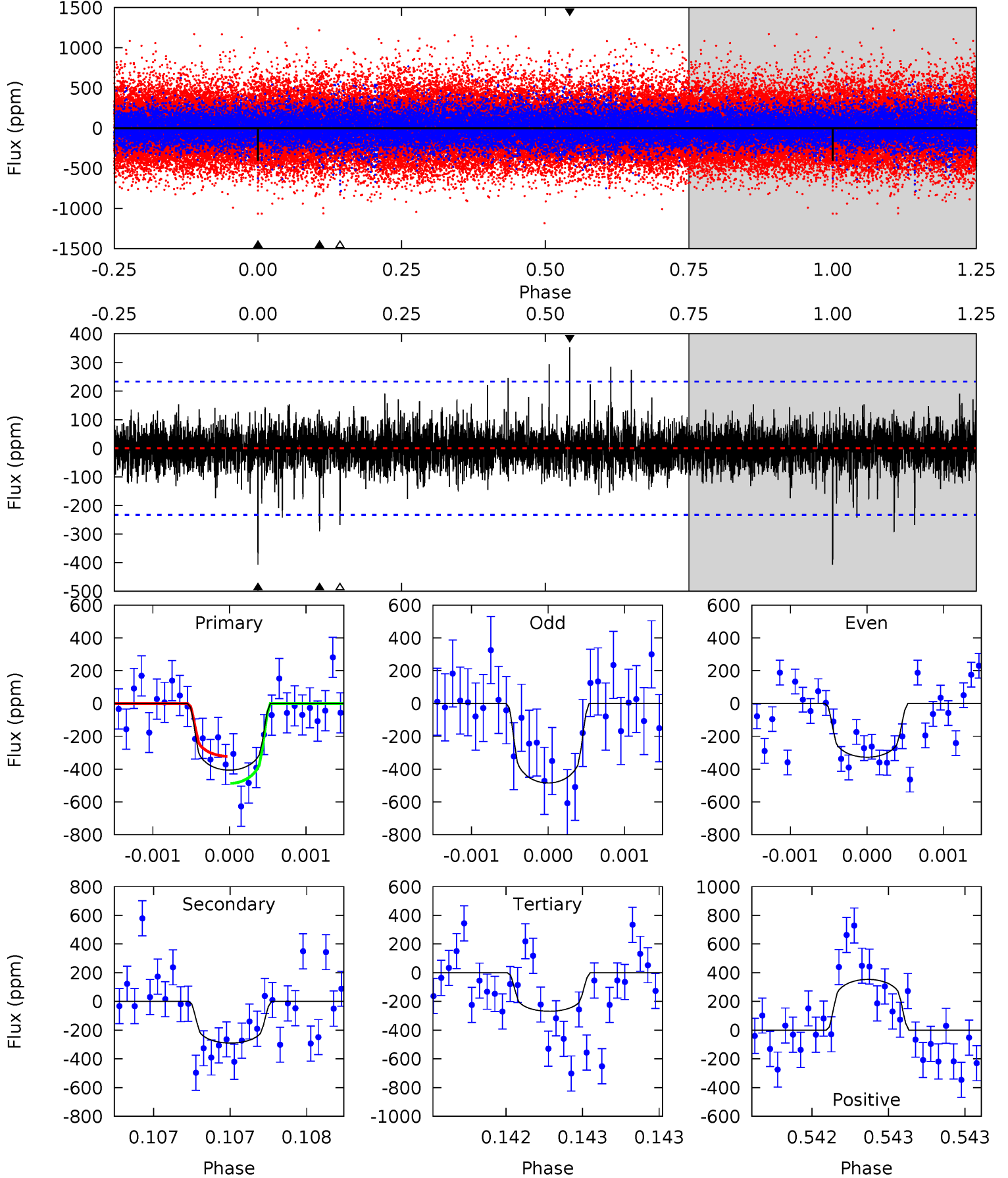
TCE 011867733-03 P=384.353191 Days $T_0=271.445682$ (BKJD)



DV Model-Shift Uniqueness Test

011867733-03, P = 384.363715 Days, E = 271.411145 Days

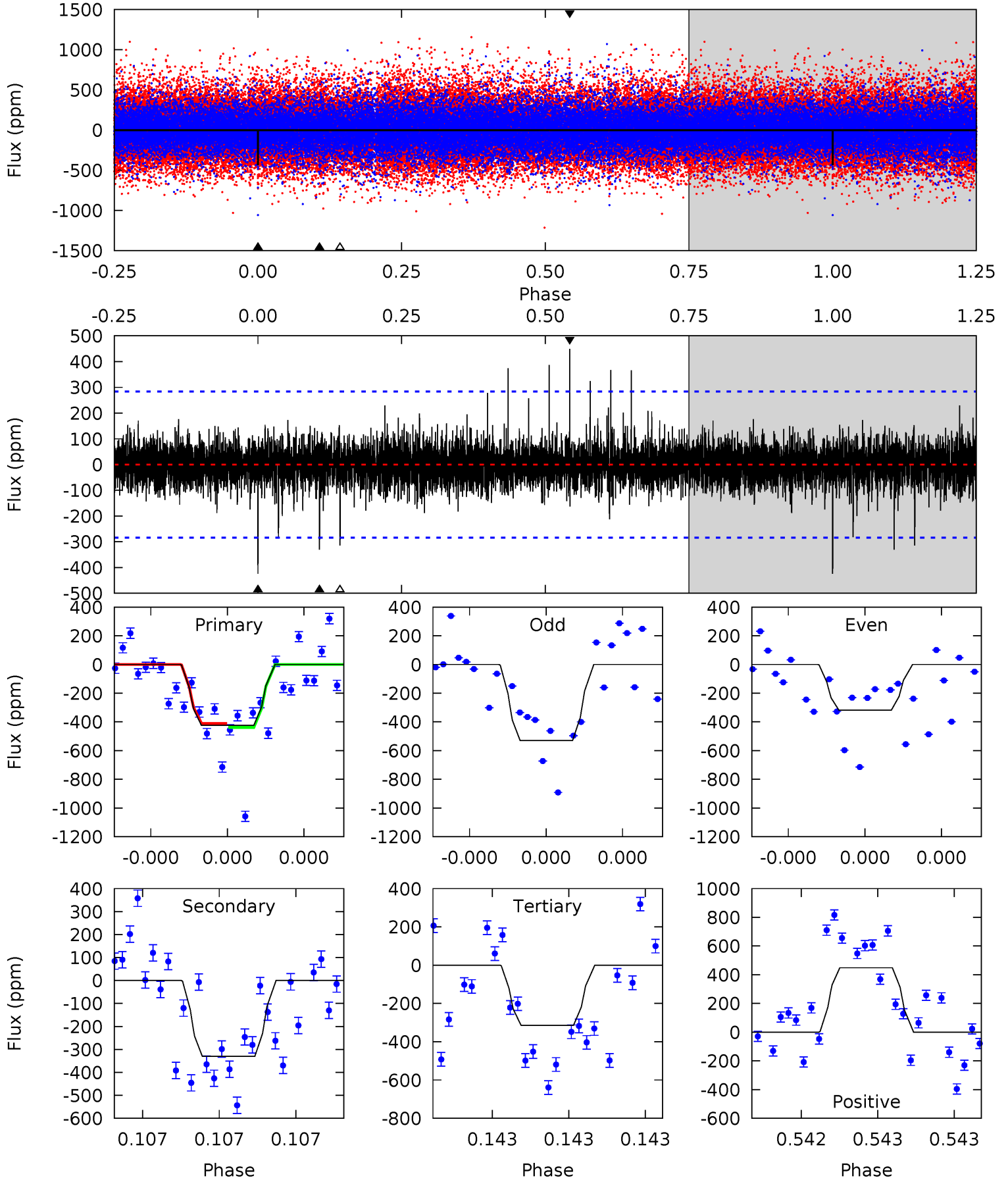
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
9.71	6.93	6.41	8.45	5.57	3.48	1.21	3.30	1.26	0.51	-1.53	1.88	0.96	0.47	1.98



Alt Model-Shift Uniqueness Test

011867733-03, P = 384.353191 Days, E = 271.445682 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
8.43	6.57	6.24	8.92	5.64	3.58	1.12	2.19	-0.49	0.33	-2.35	2.14	1.00	0.51	0.28



Stellar Parameters For KIC 011867733

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$\rho_{\star} (\text{g}\cdot\text{cm}^{-3})$
	5903^{+158}_{-193}	$4.445^{+0.067}_{-0.202}$	$-0.040^{+0.250}_{-0.300}$	$0.994^{+0.291}_{-0.125}$	$1.005^{+0.127}_{-0.127}$	$1.441^{+0.524}_{-0.742}$
	+3%/-3%	+2%/-5%	+625%/-750%	+29%/-13%	+13%/-13%	+36%/-51%
Source	PHO1	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 011867733-03 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	-290 ± 42	$3.63^{+3.21}_{-2.22}$	363^{+26}_{-18}	4462^{+2456}_{-899}	12214^{+75085}_{-8681}
Alt.	-331 ± 50	$3.62^{+3.10}_{-2.47}$	363^{+27}_{-18}	4602^{+3508}_{-945}	$14573^{+130835}_{-10409}$

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 $A_{obs} \gg 1.0$

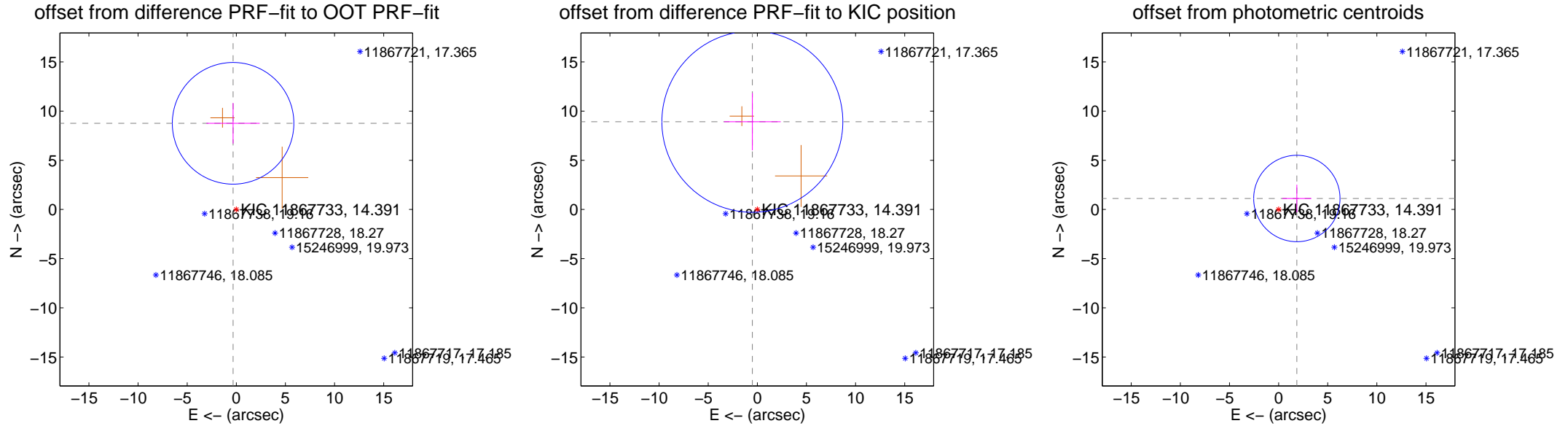
DV Centroid Data

Supplemental centroid analysis for 011867733-03. Kepler magnitude: 14.39. Transit SNR 8.47

There are 0 quarters with good PRF difference image offsets

The direct PRF centroid is offset from the target star catalog position by about 0.27 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	8.769 \pm 2.062	4.25	0.328 \pm 2.714	8.763 \pm 2.061
PRF-fit source offset from KIC position	8.940 \pm 3.070	2.91	0.506 \pm 2.891	8.925 \pm 2.911
photometric centroid source offset	2.17 \pm 1.46	1.48	-1.86 \pm 1.49	1.12 \pm 1.41

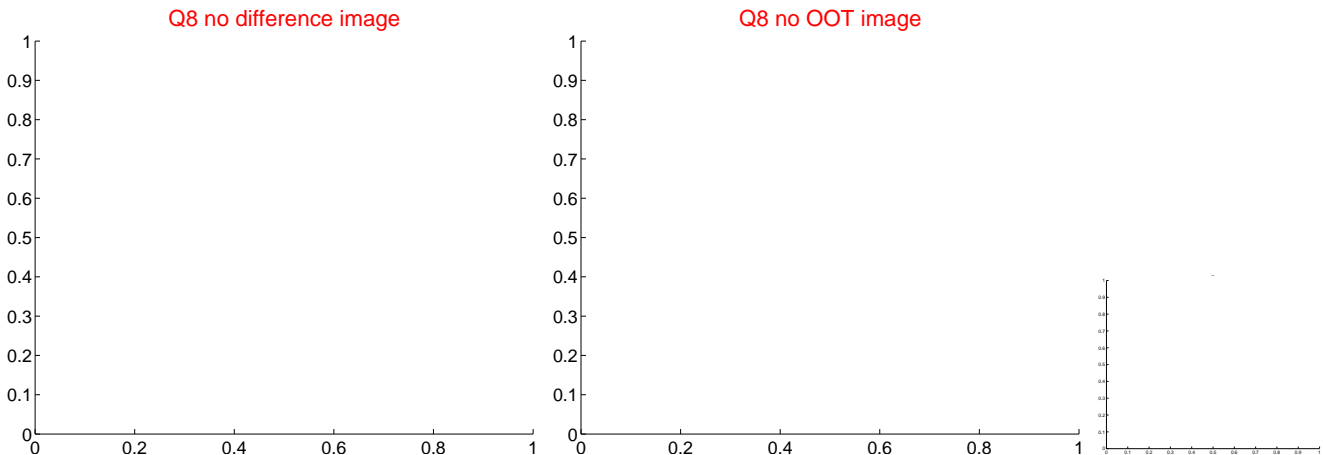
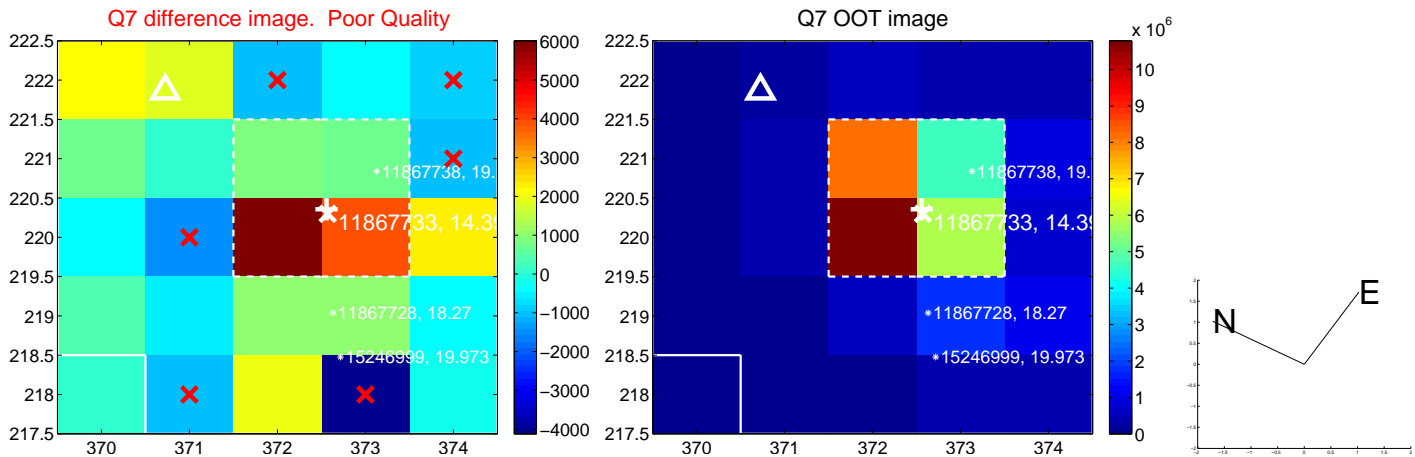
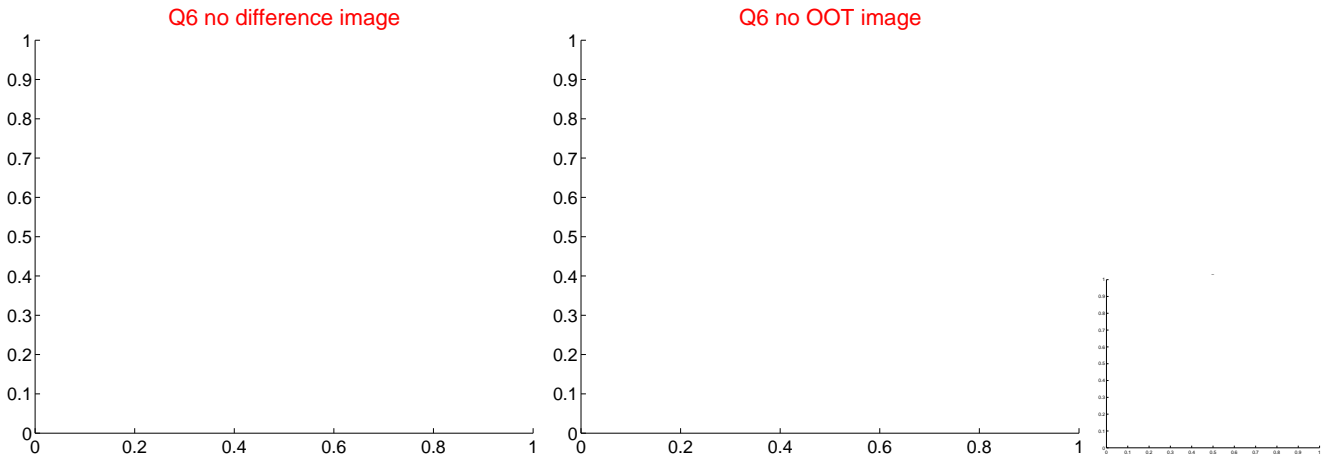
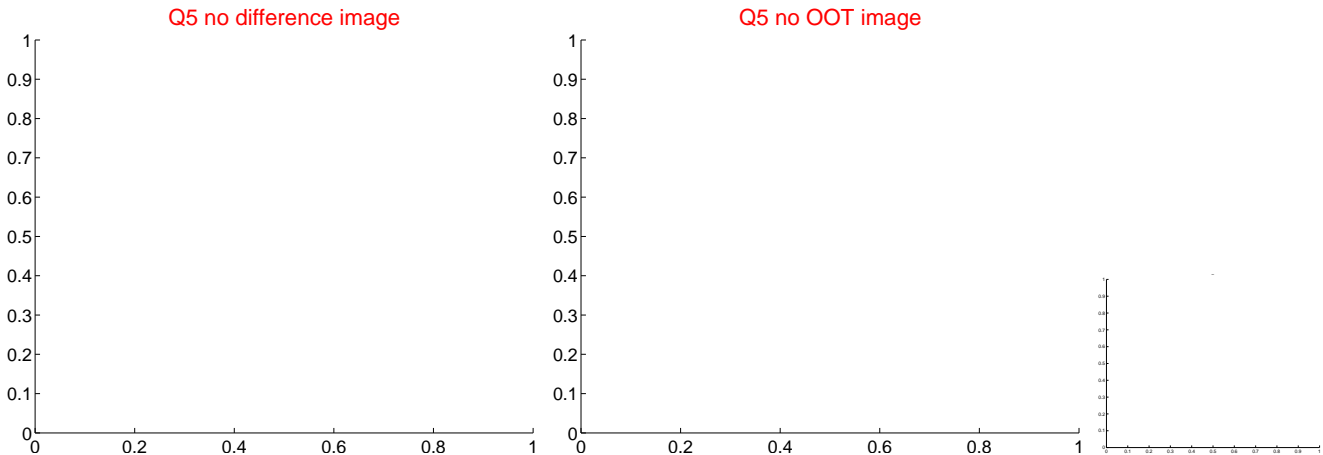


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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

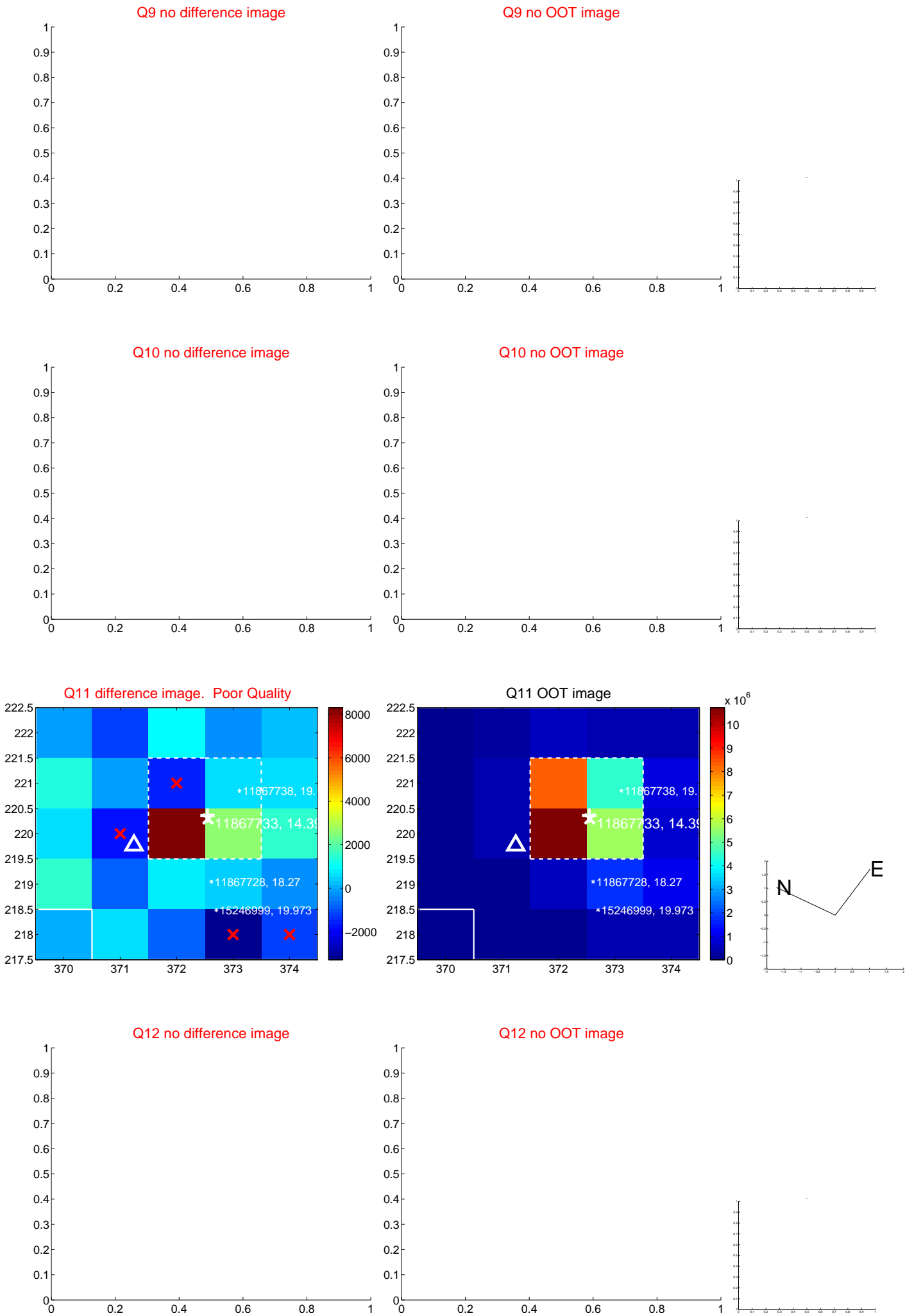
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



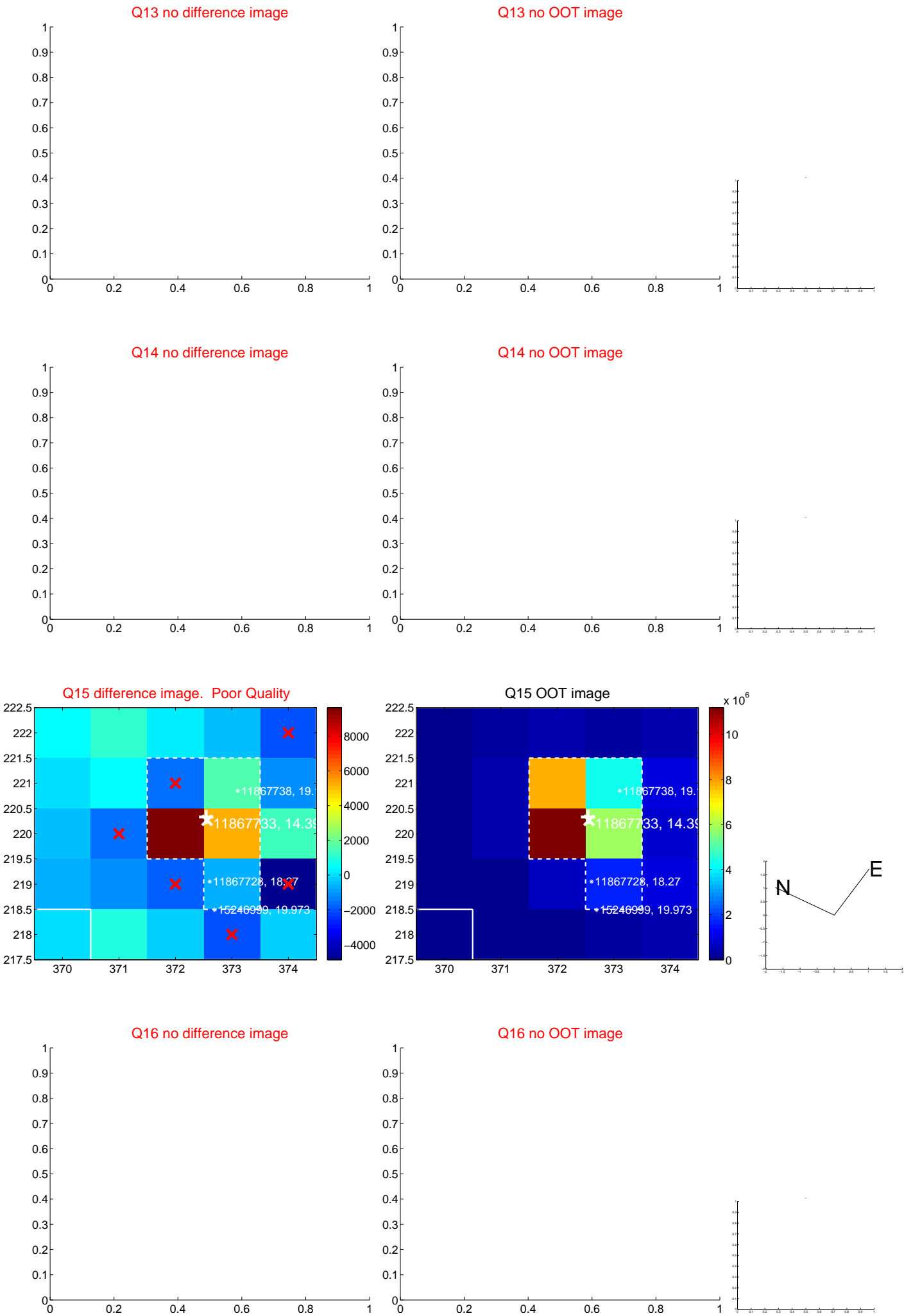
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value



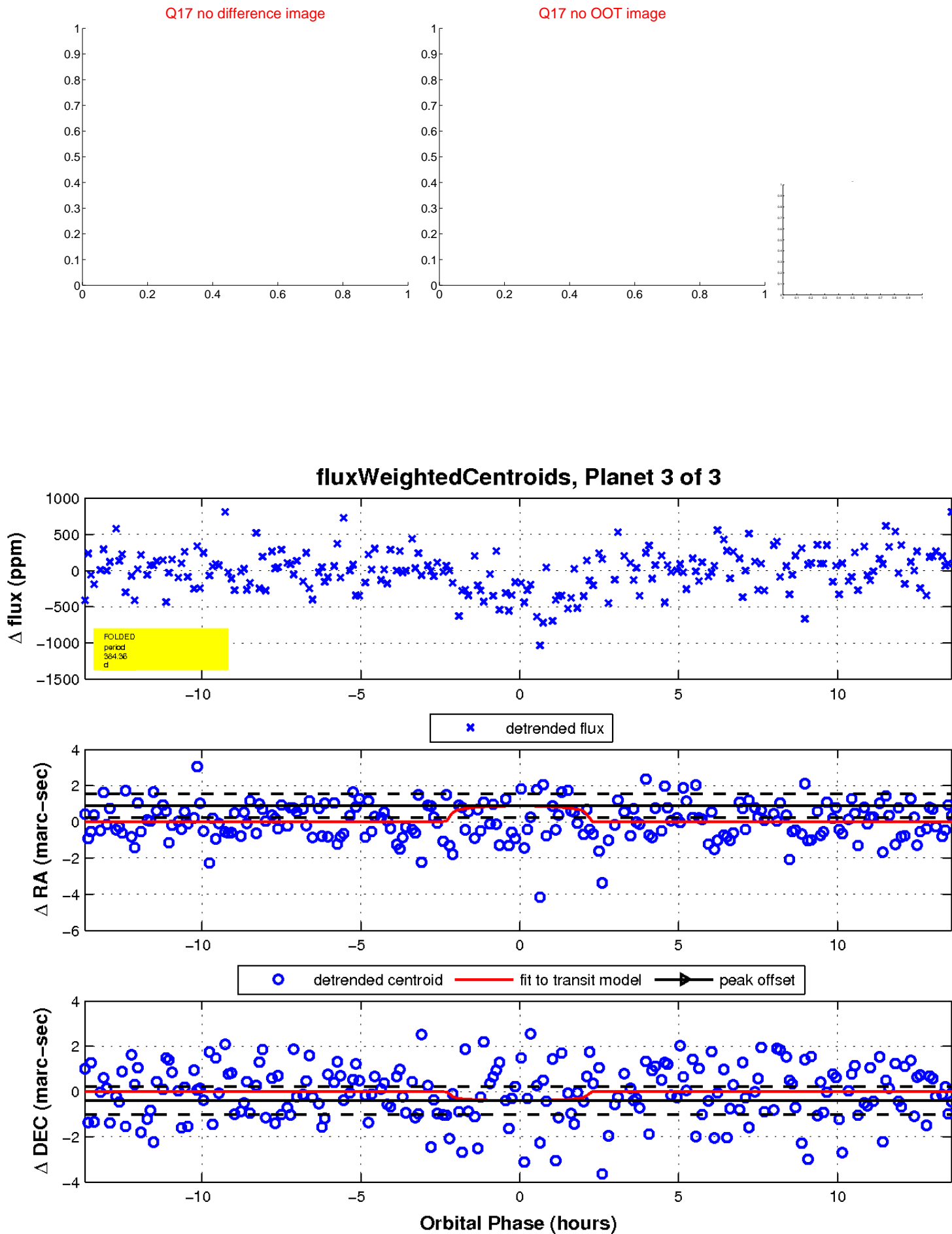
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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

